Natural Resources Evaluation

Tampa Interstate Study
Supplemental Environmental Impact Statement

I-275 from Howard Frankland Bridge to
North of Dr. Martin Luther King, Jr. Boulevard
and
I-4 from I-275 to East of 50th Street with New Alignment from I-4 South to the Existing Selmon Expressway and Improvements to the Selmon Expressway from the Kennedy Boulevard Overpass East to Maydell Drive
Work Program Segment # 258337-2

Segments 1A and 2A

April 2018

ADDENDUM

Date: May 29, 2020

Name of Document: Natural Resources Evaluation – Segments 1A and 2A

Project: Tampa Interstate Study
Supplemental Environmental Impact Study
I-275 from North of the Howard Frankland Bridge to North of Rome Avenue and SR 60/Memorial Highway/Eisenhower Boulevard from I 275 to South of Cypress Street
[Work Program Item Segment Number 258337-2]

Location: Hillsborough County, Florida

This addendum sheet has been prepared for the above referenced project to serve as a notification of a change to the build project concept examined in the April 2018 Natural Resources Evaluation since the document was approved by agencies with jurisdiction and published on the Federal Highway Administration website.

The conceptual design of the Recommended Locally Preferred Alternative (presented at the project public hearing held on February 25 and 27, 2020) was refined based on coordination with the City of Tampa, public comments received on the Draft Supplemental Environmental Impact Statement during the comment period for the public hearing, and as revealed through the Supplemental Interchange Modification Report (SIMR) process. The conceptual design refinements include widening of Reo Street, re-alignment of Lemon Street, and modified Downtown Tampa connections. The specific refinements, along with corresponding exhibits, are presented below. The Recommended Locally Preferred Alternative, as modified by the conceptual refinements, is identified now as the Preferred Alternative.

Reo Street Widening – Reo Street is proposed to be widened from Executive Drive to Cypress Street to accommodate a revised typical section. The proposed typical section includes two southbound lanes, a two-way left turn lane, and a single northbound lane. The second southbound lane will provide traffic capacity to the adjacent commercial properties, the new southbound I-275 entrance ramp and the thru-connection to W. Kennedy Boulevard. The two-way left turn lane will provide left-turn access to adjacent commercial properties on both sides of Reo Street without contributing to congestion in the through lanes. A southbound Reo Street right turn lane to Executive Drive and the southbound I-275 entrance ramp is added. Widening on Cypress Street at the intersection with Reo Street will accommodate an additional left turn lane from westbound Cypress Street to southbound Reo Street and a single right turn lane from eastbound Cypress Street to southbound Reo Street. Additionally, a shared use path is proposed along the west side of Reo Street providing connectivity from the proposed shared-use path across the Howard Frankland Bridge to Cypress Point Park. The roadway widening and shared-use path create impacts to four additional and one previously identified commercial properties, including some parking impacts. However, the widening does not impact Cypress Point Park. The City of Tampa will acquire the four additional right of way takings north of Gray Street and intends to extend the shared-use path through the Cypress Point Park.

Lemon Street Re-alignment – The proposed concept design included within the draft SEIS has southbound I-275 on bridge structure over Lemon Street between Occident Street and West Shore Boulevard. A hydroplaning analysis on I-275 in this area determined that traffic within the express lanes would be prone to hydroplaning due to all general use and express lanes sloping toward the median. In order to mitigate this safety concern, Lemon Street is proposed to be shifted to the north side of I-275 so that I-275 between Occident Street and West Shore Boulevard can be constructed on roadway embankment and retaining wall. This allows for longitudinal trench drain to be positioned within the buffer between the general use lanes and the express lanes, thereby capturing the stormwater runoff from the general use roadway before it enters the express lanes which mitigates the hydroplaning issue. The proposed re-alignment of Lemon Street to the north side of I-275 impacts the adjacent commercial property. It is anticipated that the commercial property access from Lemon Street will need to be reconfigured or possibly relocated to Occident Street. FDOT owns the vacant parcel to the west of this commercial property which could be used to mitigate the impacts.

Downtown Tampa Connections – FDOT agreed to work with the City of Tampa to achieve their mission of enhancing the street grid in Downtown Tampa and improving the safe movement of pedestrians and bicyclists, particularly near ramp connections. As such, the following changes in ramp connections are proposed as part of the Preferred Alternative:

- Northbound I-275 general use traffic will exit exclusively to Tampa Street without direct connection to Ashley Drive. This will require the ramp bridge to be widened to two lanes with the ramp terminus at Tampa Street to provide two eastbound lanes to Scott Street and triple right turns to Tampa Street.
- To facilitate the northbound general use ramp improvements described above, the ramp bridge from Ashley Drive to northbound I-275 will need to be reconstructed.
- The northbound express lane ramp connection to Ashley Drive will tie into the existing ramp pavement, eliminating the need to widen the ramp bridge over Laurel Street.

The following local street improvements are also proposed as part of the Preferred Alternative:

- A new intersection of Ashley Drive at Fortune Street will be created, and Fortune Street will be connected to the Harrison Street/Tampa Street intersection completing this street grid connection.
- The northbound Ashley Drive bridge/grade separation over the southbound ramp will be removed.
- Through a reversing S-curve, Laurel Street will be connected to Fortune Street completing this street grid connection.
- A northbound Ashley Drive connection to Laurel Street/Fortune Street S-curve will be made.
- Minor widening of Scott Street is anticipated.

The Downtown Tampa Connections conceptual design refinements are located entirely outside the limits of Segments 1A and 2A and are not addressed further in this document. Additional information for the Downtown Tampa Connections is included in the Final Preliminary Engineering Report for the Tampa Interstate Study Supplemental Environmental Impact Study – Segments 2B, 3A, and 3B (prepared under separate cover).

No additional residential or business relocations are anticipated as a result of these conceptual design refinements; however, four more parcels are affected at the Reo Street Widening. Overall, anticipated impacts of the Preferred Alternative remain consistent with those of the Recommended Locally Preferred Alternative.

EXECUTIVE SUMMARY

The proposed study area for the Tampa Interstate Study (TIS) Supplemental Environmental Impact Statement (SEIS) is located in the City of Tampa in Hillsborough County, Florida. The study is a supplement to the 1996 TIS Final Environmental Impact Statement (FEIS). The Federal Highway Administration (FHWA) issued the Records of Decision (ROD) for the 1996 TIS FEIS in 1997 and 1999. The Florida Department of Transportation (FDOT) and FHWA are conducting this study based on a proposed design change that includes a new alternative not previously considered, as well as modified alternatives presented in the 1996 TIS FEIS to accommodate tolled express lanes and other capacity and mobility improvement alternatives, some of which are being considered by others in separate studies.

The study area comprises approximately 11 miles of Interstate 275 (I-275) and I-4, an approximate 4.4-mile segment of the Selmon Expressway, and an approximate 0.8-mile segment of the I-4/Selmon Expressway Connector (also known as the Crosstown Connector). The proposed improvements would involve the reconstruction/widening of I-275 from east of Howard Frankland Bridge (HFB) to north of State Road (SR) 574 (Dr. Martin Luther King (MLK) Jr. Boulevard), and I-4 from I-275 to east of 50th Street. The proposed improvements are located in the 1996 TIS FEIS Segments 1A, 2A, 2B, 3A, 3B and 3C. This report covers Segments 1A and 2A. Segments 2B, 3A, and 3B are covered in a separate report and Segment 3C has already been built.

The alternatives considered in this Natural Resources Evaluation (NRE) include a No Further Action Alternative, the 1996 TIS FEIS Long-Term Preferred Alternative (LTPA), and the 2018 Express Lane Alternatives (Non-Tolled and Tolled). Three design options that provide direct connections to the 2018 Express Lane Alternatives at Himes Avenue and MacDill Avenue are also evaluated.

This NRE documents the proposed study area's protected species involvement, wetland and surface waters involvement, and potential impacts to Essential Fish Habitat (EFH).

Protected Species

No Further Action Alternative and 1996 TIS FEIS LTPA

The No Further Action Alternative and 1996 TIS FEIS LTPA consider the same general footprint of potential impacts. The 1996 TIS FEIS concluded that the study area is highly urbanized and does not provide suitable habitat for wildlife, with the exception of species tolerant of disturbed habitats. The 1996 TIS FEIS concluded that "no listed species would be affected by the proposed project" and that the project "will not affect or modify any critical habitat". However, as the alternatives will impact surface waters and regulations have changed since 1996, the determinations for these alternatives have been updated as indicated in **Table ES-1** below. Because of limited habitat, only five species were considered as potentially occurring in Segment 2A; those species are indicated with an asterisk (*) and have the same effect determination as the Segment 1A 1996 FEIS LTPA.

2018 Express Lane Alternatives (Non-Tolled and Tolled)

The two 2018 Express Lane Alternatives (Non-Tolled and Tolled) have the same alignment but with one option being tolled. The tolling of the alternative does not result in additional impacts. In Segment 1A, these build alternatives include a longer portion of the HFB causeway and a shift of the causeway alignment to the north which results in impacts to seagrass and wetlands that were not considered in the 1996 TIS FEIS LTPA. Because of limited habitat in Segment 2A, only five species were considered as potentially occurring in Segment 2A; those species are indicated with an asterisk (*) and have the same effect determinations as the Segment 1A 2018 Express Lane Alternatives. Please refer to **Table ES-1** below for the species considered as having potential involvement with the 2018 Express Lane Alternatives.

Table ES-1 Protected Species Potentially Occurring in the Study Area with Effect Determinations

Scientific Name	Common Name	Federal Status	State Status	Effect Determination No Further Action Alt. & 1996 FEIS LTPA	Effect Determination 2018 Express Lane Alternatives
Acipenser oxyrinchus desotoi	Gulf Sturgeon	FT	FT	No Effect	MANLAA
Pristis pectinata	Smalltooth Sawfish	FE	FE	No Effect	MANLAA
Charadrius melodus	Piping Plover	FT	FT	No Effect	MANLAA
**Aphelocoma coerulescens*	Florida Scrub-Jay	FT	FT	No Effect	No Effect
Calidris canutus rufa	Rufa Red Knot	FT	FT	MANLAA	MANLAA
Mycteria americana	Wood Stork	FT	FT	MANLAA	MANLAA
Platalea ajaja	Roseate Spoonbill	-	ST	No Adverse Effect	No Adverse Effect
Egretta caerulea	Little Blue Heron	-	ST	No Adverse Effect	No Adverse Effect
Egretta rufescens	Reddish Egret	-	ST	No Adverse Effect	No Adverse Effect
Egretta tricolor	Tricolored Heron	-	ST	No Adverse Effect	No Adverse Effect
Sternula antillarum	Least Tern	-	ST	No Adverse Effect	No Adverse Effect
Haematopus palliates	American Oystercatcher	-	ST	No Effect	No Adverse Effect
Grus canadensis pratensis	Florida Sandhill Crane	-	ST	No Adverse Effect	No Adverse Effect
Rynchops niger	Black Skimmer	-	ST	No Effect	No Adverse Effect
Athene cunicularia floridana	Florida Burrowing Owl	-	ST	No Adverse Effect	No Adverse Effect
**Haliaeetus leucocephalus*	Bald Eagle	MBTA+	-	-	-
**Pandion haliaetus*	Osprey	MBTA	-	-	-
**Drymarchon couperi*	Eastern Indigo Snake	FT	FT	MANLAA	MANLAA
Eretmochelys imbricata	Hawksbill Sea Turtle	FE	FE	No Effect	MANLAA
Chelonia mydas	Atlantic Green Sea Turtle	FT	FT	No Effect	MANLAA
Caretta caretta	Loggerhead Sea Turtle	FT	FT	No Effect	MANLAA
Lepidochelys kempii	Kemp's Ridley Sea Turtle	FE	FE	No Effect	MANLAA
**Gopherus polyphemus*	Gopher Tortoise	C	ST	No Adverse Effect	No Adverse Effect
Trichechus manatus	West Indian Manatee	FT	FT	No Effect	MANLAA

Legend: FE - Federally-Designated Endangered; FT-Federally-Designated Threatened; ST – State-Designated Threatened; C-Candidate; MBTA- Migratory Bird Treaty Act; MANLAA-may affect, not likely to adversely affect. +-Also protected under the-Bald Eagle and Golden Eagle Protection Act (BGEPA);
*-Also Potentially Occurring in Segment 2A with same Effect Determination as given in the corresponding Segment 1A alternative.

Design Options

The three design options at Himes Avenue and MacDill Avenue are located within a heavily urbanized area of Segment 2A. These options will have no impacts to Critical Habitat and will have no effect on threatened and endangered species or their habitats.

Wetlands and Surface Waters

No Further Action Alternative and 1996 TIS FEIS LTPA

The 1996 TIS FEIS concluded that there would be no impacts to wetlands within segments 1A or 2A. The 1996 TIS FEIS identified seven surface waters (man-made basins or ditches) that would incur impacts totaling 9.0 acres (ac). The No Further Action Alternative includes the outer general lanes at I-275 and SR 60 as approved under the ROD of 1997. Thus, the impacts considered for the No Further Action Alternative include only those west of the interchange, not approved previously under the ROD. This reduces the remaining impacts to 4.5 ac to man-made basins and ponds. The 1996 TIS FEIS LTPA would result in equivalent impacts of 4.5 ac to man-made basins and ponds.

2018 Express Lanes Build Alternative (Non-Tolled and Tolled)

The two 2018 Express Lanes Alternatives (non-tolled and tolled) include a longer portion of the HFB causeway and a northerly shift in the alignment at the causeway which results in mangrove, seagrass, saltwater marsh and surface water habitat not considered in the 1996 TIS FEIS. Updates to the anticipated impact acreages are provided in **Table ES-2** below. The habitats that will be impacted are classified with both the Florida Land Use, Cover and Forms Classification System (FLUCCS) and the United States Fish and Wildlife Service (USFWS) wetland classification codes. Updated wetland and surface water locations can be found in **Appendix A**.

Table ES-2 Potential Wetland and Surface Water Impacts in TIS SEIS Segment 1A and 2A 2018 Express Lane Alternatives

FLUCCS Code	FLUCCS Description	USFWS Code	USFWS Description	Acreage in Study Area
510	Streams and Waterways	R2UB	Riverine, Unconsolidated Bottom	0.37
530	Reservoirs	PUBx	Palustrine, Unconsolidated Bottom, Excavated	6.54
540	Bays and Estuaries	E1UB/E1OW	Estuarine, Subtidal, Unconsolidated Bottom/Open Water	7.43
612	Mangrove Swamps	E2SS3P	Estuarine, Tidal, Scrub-Shrub, Broad-Leaved Evergreen, Irregularly Flooded	6.61
642	Saltwater Marsh	E2EM1P	Estuarine, Tidal, Emergent, Persistent, Irregularly Flooded	0.27
911	Seagrass	E2AB3M	Estuarine, Tidal, Aquatic Bed, Rooted Vascular, Irregularly Flooded	13.47
TOTAL				**34.69**

Design Options

The three proposed design options at Himes Avenue and MacDill Avenue are located in heavily urbanized areas in Segment 2A and will have no seagrass, wetland, or surface water impacts.

Essential Fish Habitat

EFH impacts will not occur in the No Further Action Alternative (Segment 1A or 2A), the 1996 TIS FEIS LTPA (Segment 1A or 2A), or within Segment 2A of the 2018 Express Lane Alternative as no impacts to marine or estuarine environments will occur with these alternatives.

EFH impacts may occur in the Segment 1A 2018 Express Lane Alternatives due to impacts to seagrass and wetlands. Mitigation for 13.47 ac of seagrass impacts is proposed to be provided through utilization of credits at the Old Tampa Bay Water Quality Improvement Project located at the eastern end of the Courtney Campbell Causeway (CCC) and other seagrass mitigation in the Tampa Bay region as needed. The 6.61 ac of mangrove wetlands and 0.27 ac of saltwater marsh wetland will be mitigated via the use of the FDOT Mitigation Plan with Southwest Florida Water Management District (SWFWMD) in accordance with 373.4137, Florida Statutes (FS) or through the use of mitigation bank credits. These options and any others proposed during design and permitting will compensate for impacts to seagrasses and wetlands. Additional compensation for impacts to EFH, if required, will be further coordinated with the National Marine Fisheries Service (NMFS), USFWS, and other appropriate agencies. Impacts to EFH are anticipated to be more than minimal but less than substantial for Segment 1A.

Stormwater Management Facilities (SMFs)

In addition to the alternatives proposed, seven proposed SMFs in Segment 1A were evaluated. Segment 2A has no SMFs proposed. All of the SMFs are in the highly urbanized corridor of I-275. None of the ponds have the potential for wetland or EFH impact; impacts to existing SMFs and ditches may occur in four of the ponds (SMF 3, SMF 8, SMF 10 and SMF 11). Potential listed species involvement consists of wetland-dependent avian species that may utilize these man-made ditches and ponds, including the wood stork, Florida sandhill crane, and state-listed wading birds. There is no adverse effect anticipated to state-listed wading birds from the proposed SMFs; the SMFs may affect, not likely to adversely affect the wood stork. Gopher tortoises and the Eastern indigo snake have the potential to occur in the partially paved lot of SMF 12. SMF 12 may affect, not likely to adversely affect the Eastern indigo snake, and there is no adverse effect anticipated to the gopher tortoise. SMF 5 and SMF 14 are developed sites with no potential habitat for listed species.

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Acronyms

AC	Acres
BGEPA	Bald and Golden Eagle Protection Act
BMP	Best Management Practices
CBD	Central Business District
CCC	Courtney Campbell Causeway
CFA	Core Foraging Area
CFR	Code of Federal Regulations
EFH	Essential Fish Habitat
EIS	Environmental Impact Statement
EOP	Edge of Pavement
EPC	United States Environmental Protection Commission
ERP	Environmental Resource Permit
ESA	Endangered Species Act
FAC	Florida Administrative Code
FDEP	Florida Department of Environmental Protection
FDOT	Florida Department of Transportation
FEIS	Final Environmental Impact Statement
FHWA	Federal Highway Administration
FL	Functional Loss
FLUCCS	Florida Land Use, Cover and Forms Classification System
FNAI	Florida Natural Areas Inventory
FMC	Fishery Management Councils
FMP	Fishery Management Plans
FS	Florida Statute
FWC	Florida Fish and Wildlife Conservation Commission
GIS	Geographic Information Systems
HFB	Howard Frankland Bridge
HOV	High Occupancy Vehicle
I	Interstate
LTPA	Long-Term Preferred Alternative
LRTP	Long Range Transportation Plan
MANLAA	May Affect, Not Likely to Adversely Affect
MBTA	Migratory Bird Treaty Act
MLK	Martin Luther King
MPO	Metropolitan Planning Organization
MSFCMA	Magnuson-Stevens Fishery Conservation and Management Act
MWWP	Marine Wildlife Watch Plan
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service

NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRE	Natural Resources Evaluation
NWI	National Wetlands Inventory
OSW	Other Surface Waters
PD&E	Project Development and Environment
ROD	Record of Decision
ROW	Right-of-Way
SAV	Submerged Aquatic Vegetation
SEIS	Supplemental Environmental Impact Statement
SFH	Suitable Foraging Habitat
SMF	Stormwater Management Facility
SR	State Road
SWFWMD	Southwest Florida Water Management District
SWPPP	Stormwater Pollution Prevention Plan
TBARTA	Tampa Bay Area Regional Transportation Authority
TBX	Tampa Bay Express
TIA	Tampa International Airport
TIS	Tampa Interstate Study
TIP	Transportation Improvement Program
UMAM	Uniform Mitigation Assessment Methodology
USACE	United States Army Corps of Engineers
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WPISN	Work Program Item Segment Number

1. INTRODUCTION

The Federal Highway Administration (FHWA) and Florida Department of Transportation (FDOT) have initiated the environmental review process for the Tampa Interstate Study (TIS) Project in Tampa, Hillsborough County, Florida. The study is a supplement to the 1996 Final Environmental Impact Statement (FEIS). FHWA issued the Records of Decision (ROD) in 1997 and 1999. FDOT and FHWA are conducting this study based on a proposed design change that includes a new alternative not previously considered, as well as modified alternatives presented in the 1996 TIS FEIS to accommodate tolled or non-tolled express lanes and other capacity and mobility improvement alternatives, some of which are being considered by FDOT in separate studies. FDOT, in coordination with FHWA, will prepare a Supplemental Environmental Impact Statement (SEIS) in accordance with the National Environmental Policy Act (NEPA) and other regulatory requirements.

1.1 Purpose of the Report

This Natural Resources Evaluation (NRE) documents existing wildlife resources and habitat types found within the study area for potential occurrences of and effects to federally-listed and state-listed protected plant and animal species and their suitable habitat in accordance with *Part 2, Chapter 16 - Protected Species and Habitat* of the FDOT Project Development and Environment (PD&E) Manual (June 2017).

This report also documents the potential impacts to wetlands and surface waters for the proposed alternatives of the TIS SEIS Segments 1A and 2A in accordance with Part 2, Chapter 9 – Wetlands and Other Surface Waters of the FDOT PD&E Manual (June 2017)

An Essential Fish Habitat (EFH) Assessment is included as part of this report in accordance with *Part 2, Chapter 17 – Essential Fish Habitat* of the FDOT PD&E Manual (June 2017) and the requirements of the Magnuson-Stevens Fishery Conservation and Management Act of 1976 (MSFCMA), as amended through October 11, 1996 and reauthorized in 2007. The EFH assesses waters and substrate necessary to fish for spawning, breeding, feeding, and development to maturity. The EFH Assessment is only relevant to Segment 1A.

1.2 Location of the TIS SEIS Project

The proposed TIS SEIS Project is located in the City of Tampa in Hillsborough County, Florida. The study area comprises approximately 11 miles of Interstate (I)-275 and I-4, an approximate 4.4-mile segment of the Selmon Expressway, and an approximate 0.8-mile segment of the I-4/Selmon Expressway Connector (previously known as the Crosstown Connector). The proposed improvements would involve the reconstruction/widening of I-275 from east of Howard Frankland Bridge (HFB) to North of State Road (SR) 574 (Dr. Martin Luther King [MLK] Jr. Boulevard), and I-4 from I-275 to east of 50th Street. The proposed improvements are located in the 1996 TIS FEIS Segments 1A, 2A, 2B, 3A, and 3B (see **Figure 1-1**). Segment 3C is not being considered in the TIS SEIS because it has been constructed. This report considers only Segments 1A and 2A. Segments 2B, 3A, and 3B are considered in separate reports.

1.3 Background of the TIS SEIS Project

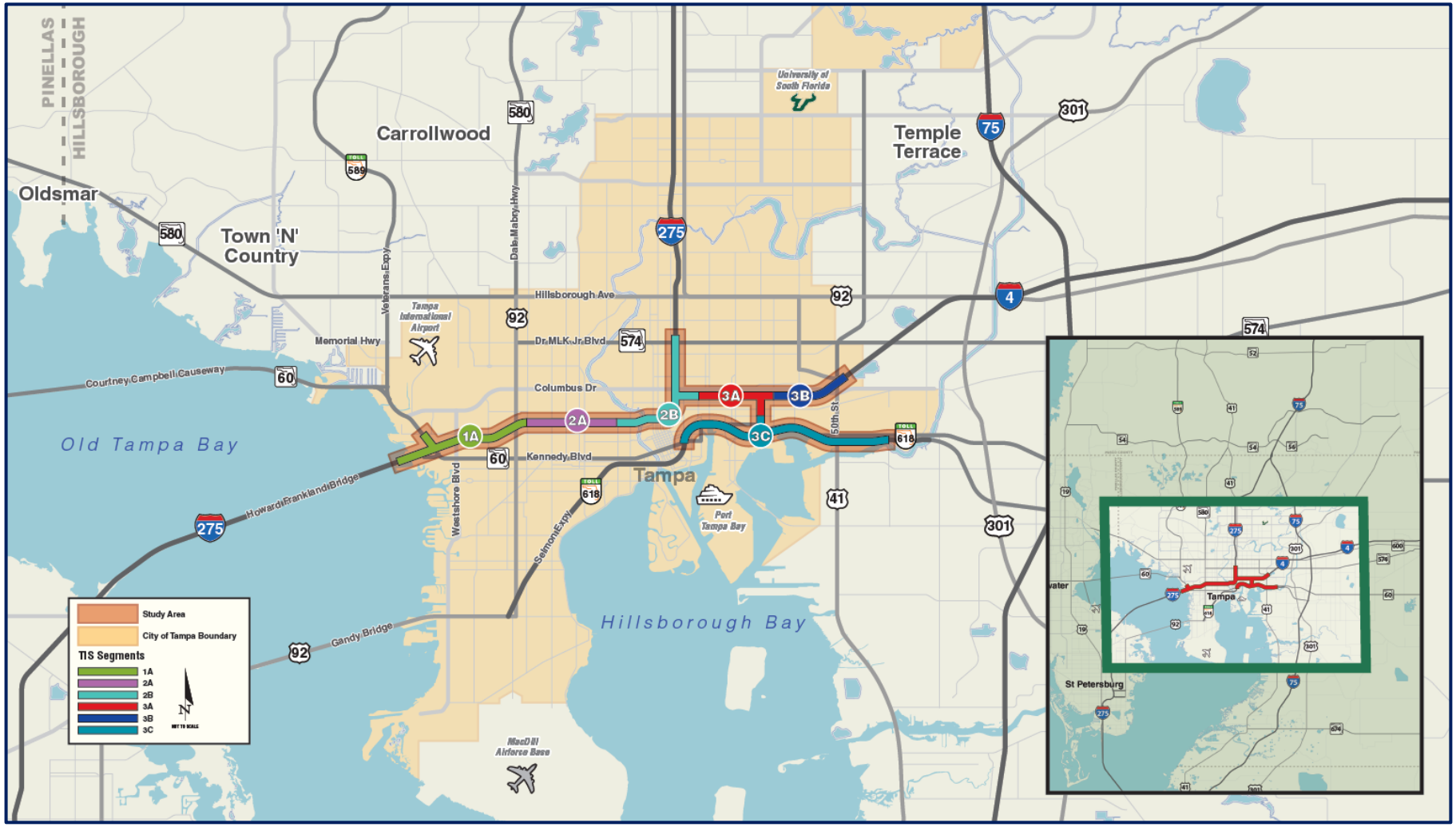
The TIS Project has been under consideration for many years. The Tampa Interstate system is the cornerstone of the Tampa Bay Region's surface transportation system, and improvements to the system have been a priority to the State since the 1980's. The proposed improvements to the interstate system are found in the Hillsborough

Metropolitan Planning Organization's (MPO) *2035 Long Range Transportation Plan for Hillsborough County* (LRTP) (2009) and the *Imagine 2040: Hillsborough Long Range Transportation Plan* (2014).

1.4 Purpose of the TIS SEIS Project

In the 1996 TIS FEIS, the purpose for the proposed action was: "…to upgrade the safety and efficiency of the existing I-275 and I-4 corridors that service the Tampa urban area while maintaining access to the surrounding community."

The current SEIS Purpose is consistent with the 1996 TIS FEIS Purpose and expands upon the originally identified purpose and need to include congestion relief that improves accessibility, mobility, travel times, system linkages, and multimodal connections, while supporting regional economic development goals and enhancing quality of life for Tampa Bay residents and visitors.



SOURCE: FDOT 1996
Note: Segment 3C has been constructed and is not included in this SEIS.

Figure 1-1 Tampa Interstate Study SEIS Project Study Area

In 1983, FDOT began to identify potential improvements to the Tampa Interstate system, which was constructed in the early 1960's. These improvements included potential short-term safety solutions and design changes, and long-term high-occupancy vehicle (HOV) related improvements to accommodate growing traffic volumes and congestion. The 1983 study considered all transportation needs within the study area, including concurrent highway, rail, and/or transit improvements.

Using the 1983 study as a documented base, FDOT began Phase I of the TIS in 1987. The purpose of the Phase I study was to produce a Master Plan to identify alternatives and make recommendations regarding the preferred type and location of multi-lane improvements, potential HOV facilities, transit facilities, traffic management techniques, and traffic surveillance and control systems. Based on the work performed, FDOT published the *TIS Master Plan Report* in 1989. The Hillsborough County MPO adopted the Tampa Interstate Master Plan Concept into the 2010 LRTP in November 1989.

Following completion of the *TIS Master Plan Report*, FHWA, in cooperation with FDOT, began the preparation of an Environmental Impact Statement (EIS) and the supporting documentation necessary for state and federal approvals and subsequent funding of the *TIS Master Plan Report* concepts. The EIS evaluated impacts associated with a Selected Alternative, a Long-Term Preferred Alternative (LTPA), and a No-Action Alternative; addressed agency and citizen concerns; and identified ways to minimize impacts.

FHWA approved the EIS in November 1996, issued the ROD for the 1996 TIS FEIS in 1997, and an amended ROD in June 1999. The 1997 and 1999 RODs are the documents that have governed the development of all improvements to I-275 and I-4 providing a roadway system that includes general use lanes and separated express lanes in each direction, as well as a future transit corridor. The intent of the FHWA and the FDOT is to ultimately construct the LPTA as funding becomes available through the Hillsborough County MPO. Since issuance of the 1997 and 1999 RODs, FDOT has taken several major steps to advance the Project to full implementation. The TIS Project has been re-evaluated several times to advance various elements of the project, many of which FDOT has already constructed including portions of Segment 1A, Segment 2A, Segment 3A, Segment 3B, and Segment 3C. The following describes the projects that FDOT has constructed.

- **I-275 Widening Southbound and Remainder of Northbound from east of SR 60 to Downtown Tampa** – Corridor length: 4.2 miles, Construction Cost: $217.3 million, Start: July 2012 – Completion: Fall 2016. Reconstruction and roadway widening. Improvements included: providing four through lanes in each direction, flattening the profile of the roadway at bridges over the crossroads, aesthetic treatments, improved interchanges, and increased median width for future improvements.
- **I-275 Northbound from Himes Avenue to the Hillsborough River** – Corridor Length: 2 miles, Construction Cost: $109 million, Start: August 2007 – Completion: Spring 2010. Reconstruction of a 3-lane roadway into a 4-lane roadway primarily south of the existing alignment. Improvements also included: providing an increased median width reserved for future transportation needs, new bridges with improved height clearances, shoulder-mounted 8-foot noise walls near densely developed residential areas, aesthetic treatments, and improved lighting and drainage.

SOURCE: FDOT 2000-2015

Notes: Green line represents Tampa Bay Express (TBX) Sections 4, 5, and 6, referred to as Segments1A, 2A, and part of 2B in the 1996 TIS FEIS; Grey line comprises part of TBX Section 5, referred to as Segment 2A in the 1996 TIS FEIS; Dark blue line comprises part of TBX Section 6, referred to as part of Segment 2B in the 1996 TIS FEIS; the light blue line comprises part of TBX Section 6, referred to as Segment 3A and 3C in the 1996 TIS FEIS; the turquoise line comprises part of TBX Section 6, referred to as part of Segment 3B and Segment 3C in the 1996 TIS FEIS.

Figure 1-2 Tampa Interstate Study Completed Improvement Projects

- **I-4/I-275 Interchange Operational Improvements (Downtown Tampa Interchange)** - Corridor Length: 2.7 miles, Construction Cost: $81 million, Start: October 2002 – Completion: December 2006. Capacity and safety improvements to the Downtown Tampa Interchange, which widened both interstates to four lanes in each direction. Improvements also included: extending the Ashley Street entrance ramp, providing a local auxiliary exit ramp system, improving weaving movements related to the I-275 southbound to I-4 eastbound flyover ramp, shoulder-mounted 8-foot noise walls near densely developed residential areas, landscaping within infield area and aesthetic treatments.

- **I-4 from West of 14th Street to East of 50th Street** – Corridor Length: 3.2 miles, Construction Cost: $185 million, Start: February 2004 – Completion: Fall 2007. Reconstruction of a 4-lane roadway into a 6-lane roadway (three lanes in each direction with auxiliary lanes) to tie into the Downtown Tampa Interchange improvement project completed in December 2006. Improvements also included: providing an increased median width reserved for future transportation needs, new bridges with improved height clearances, shoulder-mounted 8-foot noise walls near densely developed residential areas, aesthetic treatments, and improved lighting and drainage.

- **I-4/Lee Roy Selmon Expressway Interchange** – Corridor Length: 1 mile, Construction Cost: $425 million, Start: March 2010 – Completion: Spring 2014. Construction of a new north-south toll interchange, which connects I-4 with the Lee Roy Selmon Expressway (SR 618). The elevated roadway with an all-electronic toll collection system links these two, major east-west corridors, and provides "truck-only" lanes for direct access to the Port Tampa Bay to reduce heavy truck traffic from local roads in Ybor City. Aesthetic treatments were also included in this project.

In 2011, FDOT released the *Florida Transportation Vision for the 21st Century*. The vision focused on innovative financing alternatives, advancing projects, and accommodating economic growth. While the 1996 TIS FEIS always included express lanes along the region's interstates, tolling was not a consideration at the time. As a result of the 2011 Vision, FDOT initiated a master plan study in 2012 to determine the feasibility of dynamically tolling the proposed express lanes on the interstate. FDOT's 2015 *Tampa Bay Express (TBX) Master Plan*, which included the TIS Project limits, established a system-wide framework for implementation of dynamically-tolled express lanes within the Tampa Bay Region. As part of the development of the *TBX Master Plan*, FDOT conducted extensive outreach, beginning with focus groups, to better understand public perceptions of the express lanes concept.

Due to funding constraints for the implementation of the ultimate capacity improvements envisioned in the *TBX Master Plan* for the Tampa Bay Region, FDOT identified a series of express lane projects in the five-year work program that could be advanced. FDOT could build each of these smaller-scale projects within a five-year window. FDOT considers these shorter-term improvements the "Starter Projects." The Hillsborough County MPO formally added the Starter Projects to the fiscally-constrained Transportation Improvement Program (TIP) in 2015. The Tampa Bay Regional Transportation Authority (TBARTA) also included the Starter Projects in the *2015 Regional Transportation Master Plan Update*.

2. DEFINITION OF ALTERNATIVES CONSIDERED

The alternatives that will be evaluated in the TIS SEIS are described in the following sections.

2.1 No Further Action Alternative

Portions of the Selected Alternative in the 1996 TIS FEIS have been constructed, so the No-Action Alternative that was evaluated in previous studies is no longer applicable. Therefore, a new No Further Action Alternative

will be evaluated for comparison to the 1996 TIS FEIS LTPA and a 2018 Express Lane Alternative. The No Further Action Alternative is defined as the existing transportation system plus projects included in the Hillsborough MPO's *Imagine 2040: Hillsborough Long Range Transportation Plan*. In Segment 1A, the No Further Action Alternative includes construction of the general use lanes (outer roadways) within the I-275/SR 60 Interchange, which was approved under the 1999 ROD. Within the TIS SEIS study area, the remainder of the Imagine 2040 projects have already been built. This alternative provides a baseline against which the Build alternatives can be compared.

2.2 1996 TIS FEIS LTPA (Non-Tolled)

Proposed improvements of the 1996 TIS FEIS LTPA consist of a four-roadway system (general use lanes that provide local access and non-tolled express lanes in each direction of travel) on I-275 throughout the study limits and the preservation of a HOV/Transitway corridor within the interstate alignment. Proposed interchange improvements include:

- a fully directional interchange for the I-275 connection to the SR 60/Veterans Expressway;
- modifications to the existing Westshore Boulevard, Lois Avenue, and Dale Mabry Highway interchanges;
- split interchange ramps remaining at Howard and Armenia Avenues;
- a new west bank Central Business District (CBD) interchange with ramps to and from the west on I-275 at North Boulevard;
- a fully directional interchange for the I-4/I-275 connection;
- removal of the existing ramps to and from the north at Floribraska Avenue;
- a full interchange at Dr. MLK, Jr. Boulevard;
- reconfiguration of the split interchange at Columbus Drive and 50th Street;
- removal of the interchange ramps at 40th Street;
- a new directional freeway-to-freeway interchange with the proposed I-4/Selmon Expressway Connector on I-4 near 31st Street; and
- a new Ybor City/east side CBD split interchange on I-4 at 14th and 15th Streets (with extension of the ramps at 14th and 15th Streets as parallel frontage roads to 21st and 22nd Streets to replace the existing access from I-4 to these streets).

Other new non-interstate improvements include the following:

- the removal of the 19th Street overpass and the maintenance of the 26th Street overpass;
- the extension of Sherrill Street from Memorial Highway (SR 60) and Kennedy Boulevard under I-275 to Cypress Street;
- the extension of Trask Street under I-275;
- a Lemon Street Connector to Westshore Boulevard from Occident Street;
- park-n-ride lots to provide access to HOV lanes located at the Florida State Fairgrounds, Yukon Street, Sinclair Hills Road, and SR 56;
- overpass width to accommodate pedestrian and bicycle facilities on cross street; and
- a multi-modal terminal/parking garage at the northern end of the Marion Street.

The TIS FEIS LTPA has been reevaluated numerous times throughout the past 20 years as the various segments of interstate have been constructed. Therefore, this alternative consists of the original impacts, as updated by the approved re-evaluations.

2.3 2018 Express Lane Alternative (Tolled or Non-Tolled Build Alternative)

Improvements identified for the segments that will be evaluated in the TIS SEIS include major components of the 1996 TIS FEIS LTPA. There are areas where the design has changed in alignment and configuration. The TIS segments that will be evaluated in the SEIS and the design differences from the 1996 TIS FEIS LTPA are described in the following sections. **Figure 1-1** shows the TIS SEIS segments**.**

1A – I-275 from Howard Frankland Bridge/Kennedy Boulevard ramps and just north of Cypress Street on Memorial Highway (SR 60) to East of Himes Avenue: The general use lanes (outer roadways) in this section were included in the 1996 TIS FEIS and approved by the 1997 ROD. The design changes would involve the use of tolled or non-tolled express lanes and access changes between general and express lanes; expansion of I-275 from HFB to south of SR 60 to accommodate express lanes along I-275; and local street changes, including relocation of Lemon Street, the extension of Occident Street, modified Trask Street ramp connections, replacement of the Executive Drive to southbound I-275 ramp connection, and extension of Sherrill Street with a new I-275 Reo Street interchange that would provide a connection between Kennedy Boulevard, Reo Street, and I-275. Additional Right-of-Way (ROW) would be needed to accommodate express lanes near the SR 60 interchange south to and from I-275, a new toll ramp into Tampa International Airport (TIA), the addition of general use lanes west of Westshore Boulevard, and expansion of the corridor for future transit use west of SR 60. No acquisitions would occur in in historic districts.

2A – I-275 from East of Himes Avenue to East of Rome Avenue: The general use and express lanes in this section were included in the 1996 TIS FEIS and approved in the 1997 and 1999 ROD. The outer roadway (general use lanes) has already been constructed with I-275 improvements. The work in this section includes adding express lanes in the median. However, the design changes include express lane access options (described in Section 2.4) for providing direct connect ramps from express lanes to the Westshore Business District.

2.4 Design Options for the 2018 Express Lane Alternative

Several design options are being considered as part of the Build Alternatives. They are described below.

2.4.1 Himes/MacDill Express Lane Access Options (Segment 2A)

Three express lane direct connect interchange design options are being considered at Himes Avenue and MacDill Avenue in the West Tampa area in Segment 2A. They represent both tolled and non-tolled options for managed lanes.

- **Option A - Express Lane Interchange South Side at Himes Avenue and North Side at MacDill Avenue:** Option A would provide a split express lane interchange with entrance and exit express lane ramp connections on the south (west) side of Himes Avenue and the north (east) entrance and exit express lane ramp connections being provided for at MacDill Avenue. Direct express lane ramps would be constructed within the I-275 median area and tie into the local streets between the northbound and southbound I-275 bridges. This option would not require additional ROW.
- **Option B - Full Express Lanes Interchange at Himes Avenue:** Option B would provide a full express lane interchange at Himes Avenue. Like Option A, this option would have direct express lane ramps constructed within the I-275 median area and tie into the local street between the northbound and southbound I-275

bridges. Option B would require the reconstruction of the I-275 bridges over Himes Avenue and widening along Himes Avenue. The widening along Himes Avenue would require additional ROW along the east side from north of Cypress Avenue to north of Spruce Street.

- **Option C - Express Lanes Interchange South Side at MacDill Avenue and North Side at Himes Avenue (via fly-over ramps):** Option C would provide a split express lane interchange with the south (west) connections at MacDill Avenue and the north (east) connections at Himes Avenue. This option would have direct express lane ramps constructed within the I-275 median area to the south (west) and north (east) sides of MacDill Avenue with ramps that tie to MacDill Avenue between the northbound and southbound I-275 bridges. The express lane ramp connections to Himes Avenue would be to the north (east) side of Himes Avenue and connect outside of the I-275 mainline via fly-over ramps. The southbound I-275 direct express lane ramp connection to Himes Avenue would result in an interruption of Green Street through traffic between Himes Avenue and MacDill Avenue. The traffic interruption on Green Street would require a change in access for abutting properties and may result in additional ROW to provide access to undeveloped parcels along Green Street. Option C would also require additional ROW along the south side of I-275 near Matanzas Avenue.

3. EXISTING ENVIRONMENTAL CONDITIONS

3.1 Existing Land Use

A desktop and document review was conducted for the entire study area using the Southwest Florida Water Management District (SWFWMD) land use database and current aerials. Field evaluations were conducted at wetland and seagrass areas to better define the land use boundaries in these areas using the FDOT Florida Land Use, Cover and Forms Classification System (FLUCCS). The field boundaries were combined with the SWFWMD FLUCCS boundaries to evaluate the habitat types found within the study area. Where delineation data was available, those field-determined lines were used to calculate anticipated impact; in all other areas, the SWFWMD data boundary was utilized.

Existing land use and potential impacts to natural environments were evaluated by utilizing the proposed outermost limit of the alignment (edge of pavement (EOP), retaining wall, sea wall) with a 15-foot buffer to account for side slopes, construction areas, and other potential construction impacts. For the seagrass areas only, a 30- foot buffer was added to the EOP to account for riprapped slope, work zones, or other potential construction impacts.

Table 3-1 provides a summary of the existing land use within the study area of the TIS SEIS Segments 1A and 2A.

Table 3-1 Existing Land Use within the TIS SEIS Segments 1A and 2A Study Area

Land Use Type	FLUCCS Code	Acreage within NRE Study Area	Percent of Total Acreage
Residential (High Density)	130	1.32	0.44
Commercial Properties	140	25.58	8.56
Open Land	190	22.67	7.59
Streams and Waterways (Ditches)	510	0.37	0.12
Reservoirs (Man-Made Ponds)	530	6.54	2.19

Land Use Type	FLUCCS Code	Acreage within NRE Study Area	Percent of Total Acreage
Bays/Estuaries	540	7.43	2.49
Mangrove Swamps	612	6.61	2.21
Saltwater Marsh	642	0.27	0.09
Seagrass	911	13.47	4.51
Beach	710	0.02	<0.01
Transportation	810	214.41	71.75
Utilities	830	0.13	0.04
TOTAL		**298.82**	**100**

The majority of land use in the NRE Study Area is Transportation and Utilities (71.79%) and urban developed or undeveloped land (16.59%). The remaining land use is comprised of Seagrass (4.51%), Bays and Estuaries (2.49%), Reservoirs (man-made ponds) and man-made ditches (2.31 %), Mangrove and Saltwater Marsh wetlands (2.30%), and Beach land (less than 0.01%). No natural upland land uses are within the study area.

3.2 Natural and Biological Features

A variety of resources including the National Wetlands Inventory (NWI) maps, Natural Resources Conservation Service (NRCS) Soil Surveys for Hillsborough County, U.S. Geological Survey (USGS) topographical maps, SWFWMD FLUCCS data, and aerial photographs were utilized to identify the wetland and upland communities that occur within the study area. Field reviews were also conducted in July and August 2016 and on December 18, 2017 to verify information from these resources as well as make any necessary adjustments. Segment 2A is entirely comprised of upland, developed land use codes; there are no natural habitat types identified in Segment 2A. The descriptions of natural communities below are applicable only to Segment 1A.

3.3 Upland Communities

There are no natural upland communities identified within the study area.

3.4 Wetland and Surface Water Communities

Wetland, seagrass, and surface water communities are located within the study area, primarily adjacent to the HFB causeway. The area surrounding the causeway is comprised of seagrass (FLUCCS 911), mangrove (FLUCCS 612), and salt marsh (FLUCCS 642). Stormwater linear ponds and waterways (FLUCCS 510) and man-made reservoirs/permitted stormwater management facilities (SMFs) (FLUCCS 530) are also included in the review of natural areas as they may provide limited habitat for some wildlife. Detailed information on the impact acreages of the wetland and surface water communities within the study area are provided in Section 5 and are shown on the FLUCCS Map provided in **Appendix A**. These communities are only within Segment 1A. There are no wetland or surface water communities identified in Segment 2A. Habitats identified in Segment 1A are described below.

3.4.1 Surface Waters

Streams and Waterways [FLUCCS 510; RUBx (Riverine, Unconsolidated Bottom, Excavated)]

This category includes rivers, creeks, canals, roadside ditches and other linear waterbodies. The 510 designation

is given to the linear storm water pond located in the northeast quadrant of the I-275 and SR 60 interchange and adjacent to the I-275 North ramp to Kennedy Boulevard.

Reservoirs [FLUCCS 530; PUBx (Palustrine, Unconsolidated Bottom, Excavated)]

Reservoirs are described as water impoundments that are used for irrigation, flood control, municipal and rural water supplies, recreation and hydro-electric power generation. The reservoirs within the study area are SMFs located within the interchanges and adjacent to the existing roadways. These SMFs are located between the Kennedy Boulevard/I-275 southbound ramp and I-275 North; between the Kennedy Boulevard/I-75 southbound ramp and the I-275 northbound ramp to Kennedy Boulevard; within the northwest, northeast, and southwest quadrants of the I-275 and SR 60 interchange; adjacent to I-275 North and North Clark Avenue; adjacent to I-275 North and West Carmen Street; adjacent to the I-275 and Dale Mabry Highway Interchange; at I-275 North and Himes Avenue; and adjacent to I-275 North at MacDill Avenue.

Bays and Estuaries [FLUCCS 540; E1OW/UB (Estuarine, Subtidal, Open Water/Unconsolidated Bottom)]

Bays are bodies of water that are partially enclosed by land that is directly open or connected to the ocean. Estuaries are partly enclosed bodies of water along a coast where one or more streams or rivers enter and result in a mix of freshwater and saltwater. The HFB causeway is located within Old Tampa Bay and associated estuaries are located north and south of the causeway.

3.4.2 Wetlands

Saltwater Marshes [FLUCCS 642; E2EM1P (Estuarine, Tidal, Emergent, Persistent, Irregularly Flooded)]

Saltwater marshes are intertidal areas colonized by grasses and other salt-tolerant plants. The dominant plants in these systems are typically emergent, herbaceous species, although shrubs can also be locally abundant. The saltwater marshes are interspersed among mangroves systems and within the shoreline areas and are found in the vicinity of the HFB Causeway.

Mangrove [FLUCCS 612; E2SS3P (Estuarine, Tidal, Scrub-Shrub, Broad-Leaved Evergreen, Irregularly Flooded)]

Mangrove swamps are a coastal, hardwood community composed primarily of red mangroves (*Rhizophora mangle*) and black mangroves (*Avicennia germinans*). The major associates in this area include white mangroves (*Laguncularia racemosa*), buttonwoods (*Conocarpus erectus*), sea myrtle (*Baccharis halimifolia*), and marsh elder (*Iva frutescens*). Mangroves are located adjacent to and in the vicinity of the HFB Causeway.

3.5 Submerged Aquatic Vegetation (SAV) Communities

Seagrass [FLUCCS 911; E2AB3M (Estuarine, Tidal, Aquatic Bed, Rooted Vascular, Irregularly Exposed)]

Seagrasses are submerged flowering plants found in shallow, sheltered coastal systems anchored in the mud or sand bottoms. Seagrass beds are located on both the north and south side of the HFB causeway. The seagrasses were identified in field reviews conducted in July-August 2016 as being primarily shoal grass (*Halodule wrightii*) with some turtle grass (*Thallasia testudinum*) and manatee grass (*Syringodium filiforme*).

3.6 Beach Communities

Beaches Other than Swimming Beaches (FLUCCS 710)

Beaches are constantly affected by wave and tidal action. They are also subject to water and wind erosion.

There is a small area (0.01 acre (ac) classified as beach within the project limits located on the south side of I-275 North-Kennedy Blvd Ramp from the HFB causeway.

4. PROTECTED SPECIES AND HABITAT

4.1 Methodology

The study area was assessed for the presence of suitable habitat for federally-listed and state-listed species and U.S. Fish and Wildlife Service (USFWS) Critical Habitat in accordance with 50 Code of Federal Regulations (CFR) Part 402 of the Endangered Species Act (ESA) of 1973, as amended, Chapters 5B-40: Preservation of Native Flora of Florida and 68A-27 Florida Administrative Code (FAC) Rules Relating to Endangered or Threatened Species, the Migratory Bird Treaty Act (MBTA) of 1918 and Part 2, Chapter 16 - *Protected Species and Habitat* of the FDOT PD&E Manual (June 2017).

The study area was evaluated for potential federally-listed and state-listed species as well as other protected species that may exist within the study area. The following resources were utilized for this assessment:

- FDOT FLUCCS, 3rd edition 1999
- SWFWMD Land Use Data (2013-2014)
- Aerial derived photographs (2016)
- Florida Natural Areas Inventory (FNAI), Hillsborough County, Florida
- Florida Fish and Wildlife Conservation Commission (FWC) Bald Eagle Nest locator website
- Wood Stork Colony Location Database (USFWS)
- *NRE for the HFB Replacement (I-275/SR 93) (Work Program Item Segment Number (WPISN 422799-1),* October 2017
- *Protected Species Technical Memorandum for the Design Change and ROW Authorization Re-evaluation for the 1996 TIS FEIS and Northwest Hillsborough Expressway (June 2016)*

Most of the study area for Segments 1A and 2A is comprised of highly developed land uses which are anticipated to have minimal to no habitat value for protected species, with potential habitat limited primarily to existing SMFs, roadside ditches, and undeveloped open land within an urbanized setting. However, the 2018 Express Lane Alternatives in Segment 1A include an expansion of the study area at the HFB causeway. This area has wetland, seagrass, and surface water habitats with the potential to provide suitable habitat for protected species. Details on habitats types within the study area are provided in Section 3 of this report.

This study includes information presented in the NRE for the HFB Replacement (October 2017). Although the HFB NRE focused on the replacement of the northbound bridge structure, information about the habitats and protected species anticipated to occur within the area surrounding the bridge was used to enhance the desktop study of the portion of the HFB causeway included in the current study limits.

The evaluated species for the study area are discussed below. The updated list of potential species was preliminarily identified with a data search of the FNAI biodiversity matrix conducted in March and April 2016. The species with the potential to occur in the study area based on habitat types present are listed in **Table 4-1** below with the likelihood of occurrence rated as low, moderate, high, or none. A low rating indicates that the species is known to occur in Hillsborough County, preferred habitat is not present or is limited in the study area, and/or the species is unlikely based on what is known about its habits or life history. A moderate rating indicates the species is known to occur in Hillsborough County, suitable habitat for that species is present in the study area, but the species has not been observed in past studies or documented on the database. Species with a moderate rating may require Standard Construction Precautions during construction. Standard Construction Precautions

anticipated to be implemented for Segment 1A and/or Segment 2A are provided in **Appendix C.** A high rating indicates the species occurs in Hillsborough County, is suspected within the study area based on known ranges and existence of sufficient preferred habitat in the study area, and has been previously observed or documented in the vicinity. A high rating also is assigned if the project is located within a consultation area for the species and suitable habitat exists in the study area for the species.

Table 4-1 Potentially Occurring Listed Wildlife Species in Segments 1A and 2A*

SPECIES	COMMON NAME	STATE LISTING (FWC)	FEDERAL LISTING (USFWS)	HABITAT	PROBABILITY OF PRESENCE OR OCCURRENCE
FISH					
Acipenser oxyrinchus desotoi	Gulf Sturgeon	FT	FT	Marine/Estuarine primarily spawn in freshwater rivers	Moderate
Pristis pectinata	Smalltooth Sawfish	FE	FE	Marine/Estuarine	Moderate
BIRDS					
Charadrius melodus	Piping Plover	FT	FT	Open, sandy beaches and tidal mudflats and sandflats	High
**Aphelocoma coerulescens*	Florida Scrub-Jay	FT	FT	Scrub and scrubby flatwoods with well-drained soils	None
Calidris canutus rufa	Rufa Red Knot	FT	FT	Coastal marine and estuarine habitats with large areas of exposed intertidal sediments.	Low
Mycteria americana	Wood Stork	FT	FT	Estuarine tidal swamps/marshes, lacustrine, seepage stream, ditches, ruderal	High
Platalea ajaja	Roseate Spoonbill	ST	--	Marine, estuarine, palustrine, mangroves	High
Egretta caerulea	Little Blue Heron	ST	--	Estuarine, lacustrine, riverine, tidal marsh, tidal swamp	High
Egretta rufescens	Reddish Egret	ST	--	Tidal Marsh, unconsolidated substrate, mangrove island, barren sands, mudflats, estuarine	High
Egretta tricolor	Tricolored Heron	ST	--	Estuarine, lacustrine, riverine, tidal marsh, tidal swamp	High
Sternula antillarum	Least Tern	ST	_	Coastal areas throughout Florida; uses artificial surfaces for nesting (rooftops) or well-drained sand or gravel, clear natural areas	Low
Athene cunicularia floridana	Florida Burrowing Owl	ST	_	Dry prairies, open grassland	Low
Haematopus palliates	American Oystercatcher	ST	_	Beach dune, exposed marine and estuarine substrate, mudflat, beach, sandbar	High
Rynchops niger	Black Skimmer	ST	_	Beach dune, tidal marsh, beaches, sand dunes, large lakes	High
Grus canadensis pratensis	Florida Sandhill Crane	ST	_	Dry prairies, freshwater marshes, wet prairies	Low
**Haliaeetus leucocephalus*	Bald Eagle	_	MBTA+	Estuarine, lacustrine, riverine, tidal marsh, tidal swamp	Moderate

SPECIES	COMMON NAME	STATE LISTING (FWC)	FEDERAL LISTING (USFWS)	HABITAT	PROBABILITY OF PRESENCE OR OCCURRENCE
**Pandion haliaetus*	Osprey	_	MBTA	Estuarine, ponds, rivers	Moderate
REPTILES					
**Drymarchon couperi*	Eastern indigo Snake	FT	FT	Various upland and some wetland habitats, associated with gopher tortoise burrows	Low
Eretmochelys imbricata	Hawksbill Sea Turtle	FE	FE	Marine/Nesting on beaches	Moderate
Chelonia mydas	Atlantic Green Sea Turtle	FT	FT	Marine/Nesting on beaches	Moderate
Caretta caretta	Loggerhead Sea Turtle	FT	FT	Marine/Nesting on beaches	Moderate
Lepidochelys kempii	Kemp's Ridley Sea Turtle	FE	FE	Marine/Nesting on beaches	Moderate
**Gopherus polyphemus*	Gopher Tortoise	ST	C	Xeric upland habitats, roadside grassed areas adjacent to natural habitats	Moderate
MAMMALS					
Trichechus manatus	West Indian Manatee	FT	FT	Alluvial stream, blackwater stream, spring-fed stream, estuarine, marine	High

*The majority of species are only potentially occurring in Segment 1A. An * is provided beside those species with the potential to also occur in Segment 2A.
MBTA - No longer listed but protected under Migratory Birds Program per the Migratory Bird Treaty Act
+Protected under the Bald and Golden Eagle Protection Act (BGEPA)
FE - Federally-Designated Endangered; FT-Federally-Designated Threatened; ST – State-Designated Threatened; C-Candidate Species

4.2 Federally-Listed Species

In November 2010, the FWC established an imperiled species rule which states that all species listed by the USFWS and National Marine Fisheries Service (NMFS) that occur in Florida are also included on the Florida Endangered and Threatened Species List as Federally-designated Endangered, Federally-designated Threatened, Federally-designated Due to Similarity of Appearance, or Federally-designated Non-Essential Experimental population species. Thus, all federally-listed species evaluated below are also state-listed species protected by the FWC.

4.2.1 Gulf Sturgeon

The Gulf sturgeon (*Acipenser oxyrinchus desotoi*) is federally-listed as threatened. The sturgeon forages in the Gulf of Mexico and spawns in most coastal rivers, specifically in northern Florida. This species is more common in Gulf waters and rivers near the Panhandle over to Mississippi, but has been seen as far south as Florida Bay. No USFWS Critical Habitat is documented within the study area. The FDOT will commit to watching for this species during construction of the project and adhere to the *Construction Special Conditions for the Protection of the Gulf Sturgeon* (NMFS, USFWS) (**Appendix C**). The No Further Action Alternative, design options, and the 1996 TIS FEIS LTPA for Segment 1A will have no effect on the gulf sturgeon as these alternatives did not include impacts to Old Tampa Bay or the seagrass communities adjacent to the causeway. The Segment 1A 2018 Express Lane Alternatives may affect, not likely to adversely affect the gulf sturgeon. Segment 2A has no habitat suitable for this species; therefore, segment 2A alternatives will have no effect on the Gulf sturgeon.

4.2.2 Smalltooth Sawfish

The smalltooth sawfish (*Pristis pectinata*) is federally-listed as endangered. Smalltooth sawfish normally inhabit shallow, tropical coastal waters and estuarine habitats such as seagrass beds, mangroves, and inshore bars. They can be found in sheltered bays, estuaries, and mouths of rivers; some sawfish are even known to go upstream into fresh water in larger riverine systems. This species was historically found throughout most of the Gulf of Mexico and the Atlantic Ocean, but is now confined to peninsular Florida and only relatively common in areas of south Florida near the Everglades. The NMFS has designated coastal waters near Fort Myers and the Everglades as Critical Habitat for the smalltooth sawfish. No Critical Habitat is located near the study area. The smalltooth sawfish was not observed in the area, and the data as to its occurrence in the area are inconclusive. The Segment 1A No Further Action Alternative, 1996 TIS FEIS LTPA, and design options will have no effect on the smalltooth sawfish as these alternatives do not include impacts to Tampa Bay. With implementation of the NMFS's *Sea Turtle and Smalltooth Sawfish Construction Conditions* during construction, the Segment 1A 2018 Express Lane Alternatives may affect, not likely to adversely affect the smalltooth sawfish. Segment 2A has no habitat suitable for this species; therefore, segment 2A alternatives will have no effect on the smalltooth sawfish.

4.2.3 Piping Plover

The piping plover (*Charadrius melodus*) is federally-listed as threatened. This species is found on open, sandy beaches as well as tidalflats and mudflats. They are found on both the Atlantic and Gulf coasts, but are more common on the Gulf coast. This project is located within the USFWS Consultation Area for the piping plover, but no USFWS Critical Habitat is identified within the project study limits.

Sandy beach habitat is limited in the study area, with only 0.02 ac present in the project limit evaluated. This area could be avoided entirely with adjustments made during design. During design and permitting, the limited beach area will be evaluated for suitable for piping plover nesting in areas to be impacted and appropriate coordination will be initiated if needed. However, no permanent impacts to this species are anticipated at the time of this

evaluation with the proposed alignment and buffer. Therefore, the Segment 1A project alternatives may affect, not likely to adversely affect the piping plover. Segment 2A has no habitat suitable for this species; therefore, the Segment 2A alternatives will have no effect on the piping plover.

4.2.4 Florida Scrub-Jay

The Florida scrub-jay (*Aphelocoma coerulescens*) is an endemic species and is federally-listed as threatened. Scrub-jays are limited to patches of sand pine scrub, xeric oak scrub, and scrubby flatwoods occurring on well-drained, sandy ridges.

The study area is located within the USFWS Consultation Area for the Florida scrub-jay but suitable habitat does not exist within or adjacent to the study area; therefore, the Segment 1A and Segment 2A project alternatives will have no effect on the Florida scrub-jay.

4.2.5 Rufa Red Knot

The Rufa red knot (*Calidris canutus rufa*) is federally-listed as threatened. This species is a medium-sized shorebird that breeds and nests in dry, slightly elevated tundra locations, often on slopes with little vegetation. The species migrates annually between its breeding grounds in the Canadian Arctic and several wintering regions, including the Southwest U.S., the northwest Gulf of Mexico, northern Brazil, and Tierra del Fuego at the southern tip of South America. During both the spring and fall migrations, groups of red knots can be found along the coastal and inland U.S. migration corridors from Argentina to Canada. It is found primarily in intertidal, marine habitats, especially near estuaries and bays. Optimal nonbreeding habitat is close to feeding areas, protected from predators, has sufficient exposed feeding grounds at highest tide, and is free from excessive human disturbance. Critical habitat has not been established for the Rufa red knot.

The study area has limited areas that are free from human activity with major roadways, ramps, and developments adjacent to the study area. However, suboptimal areas for foraging do occur in the study area. The Segment 1A No Further Action, 1996 TIS FEIS LTPA, and 2018 Express Lane Alternatives may affect, not likely to adversely affect the Rufa red knot. Segment 2A has no habitat suitable for this species; therefore, the alternatives within Segment 2A will have no effect on the Rufa red knot.

4.2.6 Wood Stork

Wood storks (*Mycteria americana*) are federally-listed as threatened. Wood storks utilize freshwater and estuarine habitats for nesting, foraging, and roosting. Wood storks are typically colonial nesters and construct their nests in medium to tall trees located within inundated forested wetlands including cypress swamps, mixed hardwood swamps, mangroves, and sloughs. No rookeries or breeding colonies are located in the study area. However, fifteen miles is the Core Foraging Area (CFA) radius for wood stork colonies in central Florida. As defined by the USFWS, suitable foraging habitat (SFH) for wood storks includes wetlands and surface waters which have areas of water that are relatively calm, uncluttered by dense thickets of aquatic vegetation, and have permanent or seasonal depths between 2 and 15 inches.

Eight wood stork colonies are located within the 15.0-mile CFA from the project study area, and wood storks have been documented foraging and wading in the study area near the HFB. Because the study area is within eight CFAs, compensation of any impacted habitat within the study area that is SFH for this species will be further evaluated during design and permitting to determine appropriate compensation for the loss of SFH. Wetlands and surface waters that meet the criteria of SFH are expected to include the saltwater marshes, mangroves, estuarine environments, herbaceous ditches/swales, and shallow ponds. SFH within SMFs that may be impacted are likely to be relocated in-kind within Segment 1A. The FDOT will coordinate with the US Army Corps of Engineers (USACE) and USFWS to determine the quantity of the SFH impacts and to evaluate the appropriate

compensation required. With appropriate mitigation provided, all alternatives within Segment 1A may affect, not likely to adversely affect the wood stork. Although within CFA, there is no SFH for the wood stork in Segment 2A; therefore, the alternatives within Segment 2A are anticipated to have no effect to the wood stork.

4.2.7 Sea Turtles

Sea turtles have the potential to be in the study area near the HFB in Segment 1A. Sea turtles with the potential to exist within the study area include the loggerhead (*Caretta caretta*), green turtle (*Chelonia mydas*) Kemp's Ridley (*Lepidochelys kempii*) and the Hawksbill sea turtle (*Eretmochelys imbricate*). The green sea turtle and loggerhead are both federally-listed as threatened. The Kemp's Ridley sea turtle and Hawksbill sea turtle are federally-listed as endangered. These turtles are found in the Gulf of Mexico and coastal waters of Florida. However, nesting beaches for any of the sea turtle species are not located within or near the study area. Therefore, potential involvement is limited to swimming turtles. The FDOT will implement the NMFS's *Sea Turtle and Smalltooth Sawfish Construction Conditions* and *Manatee and Sea Turtle Watch Program Guidelines* (**Appendix C**) during construction. With these provisions in place, the Segment 1A 2018 Express Lane Alternatives may affect, not likely to adversely affect sea turtles. The Segment 1A No Further Action Alternative, 1996 TIS FEIS LTPA, and design options as well as all alternatives within Segment 2A will have no effect on sea turtles as there is no suitable habitat for the sea turtles impacted in those alternatives.

4.2.8 Eastern Indigo Snake

Eastern indigo snakes (*Drymarchon couperi*) are federally-listed as threatened. No individuals were observed during the field reviews, and minimal to no areas of suitable habitat for this species occurs within and adjacent to the study area. To assure the protection of this species during construction, the FDOT will implement the USFWS *Standard Protection Measures for the Eastern Indigo Snake* (**Appendix C**). All alternatives in Segment 1A and 2A may affect, not likely to adversely affect the Eastern indigo snake.

4.2.9 West Indian Manatee

The West Indian (Florida) manatee (*Trichechus manatus*) is federally-listed as threatened. West Indian manatees utilize coastal waters, bays, estuaries, rivers and occasionally lakes. Portions of the project are located within the USFWS Consultation Area for the West Indian manatee. The USFWS Consultation Area is extensive and covers the entire Hillsborough coastline, and manatees have been documented in the bay adjacent to the HFB causeway.

The *Standard Manatee Conditions for In-Water Work* (**Appendix C**) will be implemented and these guidelines will be utilized when the project is constructed. The most current provisions will be followed during construction. The Segment 1A No Further Action Alternative, TIS FEIS LTPA, and design options will have no effect on the manatee. The Segment 1A 2018 Express Lane Alternatives may affect, not likely to adversely affect the West Indian manatee. There is no suitable habitat for the manatee in Segment 2A; therefore, the alternatives for Segment 2A will have no effect on the West Indian manatee.

4.3 State-Listed Species

All federally designated species are considered protected by State. Species which are not federally-listed but are state-listed with the potential to occur in the study area are described below.

4.3.1 Wetland-Dependent Avian Species

State-listed species which were identified in the vicinity of the study area or which have the potential to occur include a variety of wetland dependent avian species including the Florida sandhill crane (*Grus canadensis pratensis*), least tern (*Sternula antillarum*), American oystercatcher (*Haematopus palliates*), black skimmer (*Rynchops niger*), roseate spoonbill (*Platalea ajaja*), little blue heron (*Egretta caerulea*), reddish egret (*Egretta rufescens*) and tricolored heron (*Egretta tricolor*). These species are all state-listed as threatened. Nesting occurs in a variety of habitats from freshwater forested wetlands to mangrove islands, with the majority of the listed species utilizing larger trees.

Wetlands and surface waters that provide foraging potential for these species include freshwater marshes, saltwater marshes, herbaceous ditches/swales, tidal flats, shallow estuarine waters, ponds and riverine systems. Potential foraging habitat is located within the shallow estuarine, mangrove, and saltmarsh habitat adjacent to the HFB causeway and existing SMFs which will either be replaced or modified as part of the design. However, nesting locations are not located within the study area. While foraging areas utilized by these species may be temporarily affected by this project, there will be no permanent impacts to nesting areas or rookeries. There is no adverse effect anticipated to the wetland-dependent avian species as a result of any of the alternatives proposed for Segment 1A, with the exception of the American oystercatcher and black skimmer. There is no effect anticipated to the American oystercatcher or black skimmer from the No Further Action Alternative or the 1996 FEIS LTPA as there is no suitable habitat impacted by these alternatives. There is no adverse effect anticipated on the American oystercatcher and black skimmer from the 2018 Express Lane Alternative. There is no suitable habitat for any of the wetland-dependent avian species in Segment 2A; therefore, Segment 2A is anticipated to have no effect on wetland-dependent avian species.

4.3.1 Florida Burrowing Owl

The Florida burrowing owl (*Athene cunicularia floridana*) is a state-listed threatened species. Burrowing owls live in open treeless areas such as native prairies, golf courses, agricultural fields, and vacant lots. Suitable habitat may exist within the project study area for this species although it is anticipated to be minimal and marginal. No burrowing owls are documented in the study area. However, more extensive surveys are recommended during design, particularly in pond locations, to determine if this species is within the areas to be impacted as a result of this project. For the Segment 1A alternatives, there is no adverse effect anticipated to the Florida burrowing owl with these precautions in place. No suitable habitat is found in Segment 2A for this species; therefore, there is no effect anticipated for this species in the alternatives for Segment 2A.

4.3.2 Gopher Tortoise

The gopher tortoise is a state-listed threatened species, and is currently a candidate for federal listing. No gopher tortoise burrows were documented within the project; however, 100 percent surveys were not conducted. During design and prior to construction, the FDOT will conduct the appropriate gopher tortoise survey, coordinate with the FWC to permit and relocate gopher tortoises located in the study area if needed, and provide compensation as required through that permitting process. With the appropriate permitting and relocation effort, there is no adverse effect anticipated to the gopher tortoise from any of the proposed alternatives in Segment 1A or 2A.

4.4 Other Protected Wildlife Species

4.4.1 Bald Eagle

Although the bald eagle is no longer federally-listed and afforded protection by the ESA of 1973; protection for

the species is provided through the Migratory Birds Program per the MBTA and Bald and Golden Eagle Protection Act (BGEPA). Bald eagles are also no longer state-listed. Bald eagles most commonly inhabit areas near the coast, bays, rivers, lakes or other open bodies of water. They nest in tall trees, typically live pines, which usually have open views to their surroundings. Eagles are also known to utilize artificial structures and other types of tall trees for nesting. There are no documented nests within 660 feet of the study area according to the FWC Eagle Nest Locator. No nests were identified within the study areas during field reviews. Pre-construction surveys should be conducted for the bald eagle.

The USFWS determined that construction activities greater than 660 feet away from bald eagle nests have no documented negative effects that would halt construction activities during the nesting season, as outlined in the USFWS's Bald Eagle Monitoring Guidelines (2007). Monitoring of construction and nesting activities is therefore no longer warranted for projects involving construction beyond 660 feet of an active bald eagle nest during nesting season. Nesting season in Florida is from October 1 through May 15, although nesting may occur earlier or later than this period, especially in areas of south Florida. The USFWS Monitoring Guidelines shall be followed if any nests are observed within the project's limits of construction; however, no nesting trees or other potential nesting sites are located within 660 feet of the project study limits.

4.4.2 Osprey

The osprey (*Pandion haliaetus*) is not federally-listed or state-listed but is protected under the MBTA. As such, its nests are afforded protection. Surveys for osprey nests will be conducted prior to construction. If nests are found, proper coordination and permitting with the FWC will be conducted.

4.5 Protected Plant Species

The project is located within an urbanized area of the City of Tampa, Hillsborough County. Natural communities are limited within the study area, and no protected plant species have been identified within the study area and none are anticipated to exist; therefore, there is no effect anticipated for protected plant species.

4.6 Critical Habitat

The study area was assessed for Critical Habitat designated by Congress in 17 CFR 35.1532. Review of the USFWS's available Geographic Information Systems (GIS) data indicates there is no Critical Habitat within the project limits or surrounding areas; therefore, the proposed project will have no involvement with Critical Habitat.

4.7 Agency Coordination

The FDOT requested concurrence from the FHWA on the TIS SEIS Preliminary Alternatives Screening Technical Memorandum provided for review between December 4, 2017 and January 3, 2018. The Technical Memorandum outlined the early steps to screen alternatives from the TIS SEIS. As a part of the request, FDOT District Seven distributed the Technical Memorandum to all the cooperating and participating agencies for their review. Agencies who received the memorandum included the Federal Rail Administration, the Federal Aviation Administration, the Florida Department of State, the USACE, the U.S. Coast Guard, the National Park Service, the NMFS, the US Environmental Protection Agency (USEPA), and the USFWS. Comments received from the agencies are provided in **Appendix B.**

The USFWS determined that the project alternatives would have minimal effect on wildlife or protected species and commented specifically on two federally-listed species, the Eastern indigo snake and the wood stork. Although the USFWS determined it was unlikely for the Eastern indigo snake to be within the study area, they

recommended the use of standard construction conditions and special provisions to assure the protection of the species. They also recommended complete gopher tortoise surveys to facilitate the use of the USACE Key for the Eastern indigo snake. For the wood stork, they recommended SFH be avoided or minimized to the extent possible and that mitigation for unavoidable impacts be coordinated with the USFWS. The USFWS also stated that if it is determined the project will affect federally listed species and/or their habitat, the Department will initiate informal consultation with FWS during the Project Development process.

The NMFS concluded that the TIS SEIS Alternatives Screening Evaluation (dated November 2017) adequately described the methodology used to determine which of the five (5) alternatives under consideration meet the project's purpose and need criteria. NMFS also finds that the alternatives selected for further study are reasonable in terms of fulfilling the project's purpose and need requirements.

5. WETLAND AND SURFACE WATER EVALUATION

5.1 Methodology

Pursuant to Presidential Executive Order 11990 entitled Protection of Wetlands, (May 1977) the U.S. Department of Transportation (USDOT) has developed a policy, Preservation of the Nation's Wetlands (USDOT Order 5660.1A), dated August 24, 1978, which requires all federally-funded highway projects to protect wetlands to the fullest extent possible. In accordance with this policy, as well as Part 2, Chapter 9 – Wetlands and Other Surface Waters of the FDOT PD&E Manual (June 2017) the study area was evaluated for potential impacts to wetlands and surface waters.

Preliminary seagrass and wetland boundaries were recorded during field ground-truthing efforts in July-August 2016 and additional wetland boundaries were recorded on December 18, 2017. Agency-verified boundaries will be recorded during additional field ground-truthing efforts during the permitting phase of the project. Preliminary boundaries were accomplished by implementing the State of Florida wetland delineation methodology Chapter 62-340, FAC, and the USACE methodology in accordance with the USACE Wetland Delineation Manual (1987) and 2010 Regional Supplement. Wetland functional assessments were performed on each wetland type based on the state and federal Uniform Mitigation Assessment Method (UMAM).

Wetland area estimates within the project study area and the existing ROW were developed using GIS technology. Wetland type descriptions are based on the FLUCCS Handbook (FDOT, January 1999) and the USFWS Classification of Wetlands and Deepwater Habitats of the United States. Six wetland or surface water community types were identified in the study area. The location of the wetlands and surface waters are shown on the FLUCCS map (**Appendix A**).

The impacts are described below by alternative.

5.2 Impact Evaluation

5.2.1 No Further Action Alternative

The No Further Action Alternative would result in the same impacts as anticipated with the 1996 TIS FEIS LTPA as this is the design approved and studied under the 1996 TIS FEIS and subsequent reevaluations and the 1997 ROD. The 1996 TIS FEIS estimated 9.0 ac of surface water impacts from the filling or modification of seven man-made SMFs. The function of the impacted ponds was proposed to be replaced by SMFs to be built as part of the project, and no mitigation was proposed for these impacts. No wetland or seagrass impacts were proposed. However, the No Further Action Alternative presumes the construction of the general outer lanes of the I-275

and SR 60 Interchange as approved in the ROD of 1997. The impacts remaining, removing consideration of the already approved work, is 4.5 ac to existing SMFs west of the I-275 and SR 60 Interchange.

5.2.2 Build Alternatives

The Build alternatives include the 1996 TIS FEIS LTPA, the 2018 Express Lane Alternatives (non-tolled and tolled), and the design options. The non-tolled and tolled alternatives options for the 2018 Express Lane Alternative have equivalent footprints, and, therefore, equivalent wetland, seagrass, and surface water impact. Thus, impacts for both options (non-tolled and tolled) are presented as the 2018 Express Lane Alternatives and are not broken down into separate categories.

Wetland and surface water impacts were evaluated for the No Further Action Alternative, the 1996 TIS FEIS LTPA, and the 2018 Express Lane Alternatives in Segment 1A. A summary of the wetland and surface water impacts for Segment 1A is provided in **Table 5-2** below. No wetlands or surface waters are located in the area proposed for construction in Segment 2A. The design options in Segment 2A at Himes Avenue and MacDill Avenue also result in no wetland, seagrass, or surface water impacts and are not considered further in the wetland impact analysis

Table 5-2 Potential Wetland and Surface Water Impacts of the Segment 1A Alternatives

Wetland, Seagrass, or Surface Water Habitat	No Further Action Alternative Ac of Impact	1996 TIS FEIS Long-Term Preferred Alternative (Ac of Impact)	Tolled or Non-Tolled 2018 Express Lane Alternatives (Ac of Impact)
Streams & Waterways (510)	0.00	0.00	0.37
Reservoirs (530)	4.50	4.50	6.54
Bays/Estuaries (540)	0.00	0.00	7.43
Mangrove Swamps (612)	0.00	0.00	6.61
Saltwater Marshes (642)	0.00	0.00	0.27
Seagrass (911)	0.00	0.00	13.47
TOTAL IMPACTS	4.50	4.50	34.69

1996 TIS FEIS Long-Term Preferred Alternative

The 1996 TIS FEIS concluded that there would be approximately 9.0 ac of surface water impacts from the filling or modification of seven man-made SMFs identified in the 1996 TIS FEIS. The function of the impacted ponds was proposed to be replaced by SMFs to be built as part of the project, and no mitigation was proposed for these impacts. No wetland or seagrass impacts were proposed. The footprint of this alternative has not changed; however, the construction of the I-275 and SR 60 interchange outer lanes has been approved under the 1997 ROD. Impacts remaining for the 1996 TIS FEIS LTPA, to the west of the approved I-275 and SR 60 Interchange , include 4.5 ac of impact to existing man-made ponds.

2018 Express Lane Alternatives (Tolled or Non-Tolled)

The 2018 Express Lane Alternatives include improvements being made on the HFB causeway that were not previously considered in the 1996 TIS FEIS as well as shifting the alignment of the causeway area north of the 1996 TIS FEIS LTPA. The 2018 Express Lane Alternatives propose a widened footprint at the HFB causeway. Because the limit of construction has not yet been determined, the impacts presented include a 15-foot buffer

in wetland areas and a 30-foot buffer in seagrass areas from the outermost edge of construction currently proposed (edge of pavement, retaining wall, or seawall). The buffer is to account for slopes, riprap, construction work zones, turbidity zones or other impacts that would extend beyond the designed edge of alignment.

With the widened footprint, impacts include 7.43 ac to bays and estuaries, 0.37 ac to streams and waterways (roadside ditches), 6.54 ac of impact to SMFs (man-made ponds), 6.61 ac of impact to mangrove swamps, 0.27 ac of impacts to saltwater marshes, and 13.47 ac of seagrass. In total, the 2018 Express Lane Alternative is anticipated to result in 14.34 ac of surface water impacts, 6.88 ac of wetland impacts, and 13.47 ac of seagrass impacts.

The 2018 Tolled Express Lanes Alternative is a tolled alternative of the same alignment. The impacts for this alternative will be the same as that provided above for the non-tolled alternative.

Design Options

The three design options are being constructed in highly urbanized areas in the vicinity of Himes Avenue and MacDill Avenue in Segment 2A. No wetland, seagrass, or surface water impacts are anticipated as a result of the design options.

5.3 Avoidance, Minimization, and Mitigation

During the design process, further efforts will be made to reduce the footprint within seagrass, wetlands or surface waters to the greatest extent practicable. Retention walls are proposed in mangrove areas to minimize side slopes. Express lanes are proposed in median areas between existing roadways to avoid impacts to adjacent wetlands or surface waters where feasible. Erosion and Sediment controls and other best management practices (BMPs) will be implemented to contain impacts to the study area and minimize impacts to adjacent areas.

Mitigation for seagrass impacts is proposed to be provided through the recently permitted Old Tampa Bay Water Quality Improvement Project and other seagrass mitigation in the Tampa Bay region as needed. The Old Tampa Bay Water Quality Improvement Project consists of constructing a 229-foot bridged cut in the Courtney Campbell Causeway (CCC) near its eastern approach to increase flushing in the adjacent seagrass area on the north side of CCC. This is anticipated to result in ecological improvements to the seagrass community and to provide nearly 20 UMAM-based seagrass credits. This mitigation project was approved by both the SWFWMD (Environmental Resource Permit (ERP) 43000920.017 issued 9/6/2017) and the USACE (SAJ-2106-02935 (SP-TLO) issued 12/28/2017). The construction of this mitigation project is underway, with completion scheduled for December 2018. Monitoring for success criteria will follow construction completion. Mangrove, salt water marsh, or other surface water compensation or mitigation will be provided through purchase of mitigation bank credits or through the FDOT Mitigation Program in accordance with chapter 373.4137 (FS). This chapter of the Statute states in part that, “mitigation for the impact of transportation projects proposed by the Department of Transportation can be more effectively achieved by regional, long-range mitigation planning rather than on a project-by-project basis. It is the intent of the Legislature that mitigation to offset the adverse effects of these transportation projects be funded by the Department of Transportation and be carried out by the use of mitigation banks and any other mitigation options that satisfy state and federal requirements in a manner that promotes efficiency, timeliness in project delivery, and cost-effectiveness.”

5.4 Wetland Functional Analysis (UMAM)

In February 2004, the Florida Department of Environmental Protection (FDEP) adopted 373.414 (18) FS into rule via 62-345 (FAC) to develop and adopt a statewide UMAM to determine the amount of mitigation required to offset impacts to wetlands and other surface waters. UMAM is a standardized procedure for assessing the

functions (expressed as a percentage compared to a natural, undisturbed wetland) provided by wetlands and other surface waters, and the amount those functions are reduced or lost by a proposed impact. This amount the functions are reduced or lost is referred to as Functional Loss (FL). Once it is determined that mitigation is necessary, the UMAM methodology is also used to quantify the amount of mitigation necessary to offset the FL of the impact. This can be expressed in acres or as credits from a mitigation bank or regional mitigation provider.

UMAM is applied by the utilization of an assessment matrix, which analyzes three variables for wetlands and surface waters (i.e., indicators of wetland/other surface waters function):

- Location and Landscape
- Water Environment
- Vegetative Community Structure

Each variable yields an overall UMAM score for a wetland ranging from 0 to 10, based on the level of functions to fish and wildlife. For purposes of providing guidance, descriptions are given for four general categories of scores: Optimal (10), Moderate (7), Minimal (4), and Not Present (0). Areas of open water habitat such as Streams and Waterways (5100) and ditches are considered Surface Waters or Other Surface Waters (OSWs). Mitigation may be required for surface water impacts, but generally is not required to offset the loss of OSWs (ditches and SMFs) as these are typically replaced in-kind; therefore, OSWs are not included in the UMAM assessment.

UMAM values were determined for mangrove wetlands, saltwater marsh, and seagrass identified within the proposed study area. These representative UMAM scores will be re-evaluated at the time of final design and permitting based on the specific areas proposed for impact. Final UMAM scores will be prepared in conjunction with the regulatory agencies during the permitting process. The preliminary UMAM scores are summarized in **Table 5-4**. UMAM scoring forms supporting these scores are provided in **Appendix D**.

Table 5-4 Summary of Estimated UMAM Scores

Habitat Type	Habitat Area (ac)	UMAM Delta	Preliminary Estimate of FL
Seagrass (911)	13.47	0.86	11.58
Saltwater Marsh (642)	0.27	0.76	0.21
Mangrove (612)	6.61	0.80	5.29

5.5 Coordination with Regulatory Agencies

An Agency Coordination and Pubic Involvement Plan for the TIS SEIS was provided for review to agencies between July 26, 2017 and August 25, 2017. This document provided an approach for coordinating agencies that the FHWA and FDOT will undertake during the environmental review process for the TIS SEIS. A key focus of the document was to facilitate an understanding with the governmental agencies regarding the study process, key milestones, and decision points. The plan also solicited feedback on the potential environmental consequences of the project. The USACE was included in the review as was NMFS and USFWS. The USACE had no comments in regard to specific locations but recommended continued avoidance and minimization efforts, and stated mitigation would be necessary if effects to resources would be unavoidable. The summary of comments from the agencies is provided in **Appendix B**.

The USACE and the SWFWMD regulate wetlands and surface waters within the study area. Other agencies,

including the USFWS, NMFS, USEPA, and the FWC, review and comment on the wetland permit applications. In addition, the FDEP, through a delegation from USEPA, regulates stormwater discharges from the construction sites. It is currently anticipated that the following permits will be required for this project.

PERMITS	ISSUING AGENCY
Section 404 Dredge/Fill Permit	USACE
ERP	SWFWMD
National Pollutant Discharge Elimination System (NPDES) Permit	FDEP
Standard Work Permit	Port Tampa Bay
Sovereign Submerged Lands Easement (if applicable)	Port Tampa Bay

5.6 Indirect and Cumulative Effects

Indirect impacts are caused by the action but occur later in time or farther removed in distance but are still reasonably foreseeable. The area has been urbanized with 91 percent of the TIS SEIS study area being developed. The causeway and roadway network is well established. Therefore, the project is not anticipated to stimulate growth or other development in the area but will provide more efficient and safe transportation. Indirect impacts may occur to adjacent seagrass and wetland areas from the causeway and roadway/ramps reducing the buffer area. An appropriate buffer will be considered during design/permitting and secondary impact calculations will be completed using UMAM to address any loss of wetland function. BMPs will be utilized to reduce or avoid indirect impacts from construction activities.

Cumulative impacts are those that result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions. The project is the addition of express lanes and improvements to an existing major roadway system. It is not a new facility or one that will require substantial new ROW. Stormwater pond locations are within existing ponds or developed properties. The surrounding areas are already developed with existing access; access to areas suitable for development remains the same before and after the project. The project will impact seagrass and mangroves in the study area. However, the seagrass impacts will be mitigated nearby at the CCC or suitable mitigation banks; thus, the seagrass resource impacted will be replaced within the Tampa Bay area and not taken out of basin. Cumulative impacts are therefore not anticipated.

6. ESSENTIAL FISH HABITAT

An EFH Assessment is included in this report in accordance with Part 2, Chapter 17- Essential Fish Habitat of the FDOT PD&E Manual and the requirements of the MSFCMA of 1996. The NMFS has jurisdiction over EFH and will review the EFH analysis for compliance with MSFCMA and to determine appropriate compensation for loss of EFH. EFH includes all types of aquatic habitat, such as open waters, wetlands, seagrasses, and substrate, necessary to fish for spawning, breeding, feeding, and development to maturity.

6.1 Magnuson-Stevens Act

The MSFCMA created conservation and management standards established through the Fishery Management Councils (FMCs) to implement the national standards in the Fishery Management Plans (FMP). The 1996 amendments to the MSFCMA set forth a number of mandates for the NMFS, eight regional FMCs, and other federal agencies to identify and protect important marine and anadromous fish habitat. The FMC's with assistance from NMFS, are required to identify and delineate EFH for all managed species. Federal agencies that

fund, permit, or carry out activities that may adversely impact EFH are required to consult with the NMFS regarding the potential effects of their actions on EFH and to respond in writing to NMFS's recommendations.

6.2 EFH Involvement

The objective of the EFH Assessment is to describe how the actions associated with the proposed widening of the HFB causeway may affect EFH designated by the NMFS and Gulf Coast FMC within Old Tampa Bay estuarine systems. Land development activities may adversely affect EFH either directly or indirectly (e.g., loss of prey items), and this activity, either site specific or habitat-wide, is to be identified and evaluated individually and cumulatively. In response to the EFH assessment, NMFS and the FMC may provide recommendations and/or comments to the responsible federal permitting agency. The information provided by the NMFS is considered by the permitting agency, and may be included in the recommendations as part of the USACE Section 404 permit conditions.

According to the National Oceanic and Atmospheric Administration (NOAA) guidelines for EFH (1998), EFH assessments must include:

- A description of the proposed action;
- An analysis of the effects, including cumulative effects, of the action on EFH, the managed species, and associated species by life history stage;
- The federal agency's reviews regarding the effects of the action on EFH; and
- Proposed mitigation if applicable.

The sections below include the description of the proposed activity, EFH existing conditions, analysis of effects, and the federal agency's reviews regarding those effects on the EFH.

6.3 Existing Conditions

Estuarine and mangrove habitats are located along the HFB causeway (I-275). As per the SWFWMD FLUCCS maps and field reviews conducted in July-August 2016 and December 2017, seagrass, open water, and mangroves habitats are present in the study area. These areas are shown on the map provided in **Appendix A.**

6.4 Field Surveys

Qualitative seagrass and wetland surveys were conducted during field ground-truthing efforts in July-August 2016 (seagrass and wetlands) and December 18, 2017 (wetlands only) to field verify the SWFWMD 2013-2014 wetland land use boundaries and to establish the presence/absence of previously mapped seagrass beds as provided by the SWFWMD 2016 seagrass data. Seagrass beds located in the study area were categorized as FLUCCS 9116 (Seagrass-Continuous) and FLUCCS 9113 (Seagrass-Discontinuous/Patchy). The seagrass boundaries were mapped using a combination of field surveyed lines and SWFWMD data; these boundaries are shown on the FLUCCS map provided in **Appendix A.**

Additional seagrass surveys will be necessary during the design and permitting phase of the project.

6.5 Results

Seagrasses and marine algae interspersed with bare sand patches were identified within the study area. The seagrass species observed were identified as being primarily shoal grass (*Halodule wrightii*) with some turtle grass (*Thallasia testudinum*) and manatee grass (*Syringodium filiforme*). Mangrove wetlands and salt marshes are also

located in the study area.

The following species with FMPs are known to exist in Tampa Bay in marine and estuarine habitats. Information on the life cycles and habitat preferences of the species are provided below. The FMPs for these species are related to commercial and recreational fishing limits and regulations. As the project impacts will have no relevance to the topics or criteria of the FMPs, specifics for the FMPs beyond species information is not detailed below.

Red Drum (*Sciaenops ocellatus*) is found throughout Florida estuaries within the Gulf of Mexico in primarily euryhaline waters. Adults are common in Tampa Bay and juveniles are common to abundant. Red drum is estuarine dependent. After hatching, larvae are carried into the shallow water of bays and estuaries with the tide. Once in an estuarine area they seek the shelter of grassy covers, tidal flats and lagoons for protection. Juveniles prefer shallow, protected, open waters of estuary covers and secondary bays with depths up to 3.0 meters. Adults are found in littoral and shallow nearshore waters off beaches and off shore in depths from 40 to 70 meters (130 to 230 feet).

Pink Shrimp (*Farfantepenaeus duorarum*) distribution is associated with seagrasses in general, and shoal grass in particular. They are distributed throughout the west coast of Florida and are common as juveniles in the Tampa Bay area. The juveniles occur in oligohaline to euhaline estuaries and bays. They seek the shelter of dense seagrasses with smaller juveniles preferring shoal grass and the adults preferring the refuge of turtle grass. Adults inhabit deep offshore marine waters commonly nine to 44 meters (145 feet) deep and inhabit substrates including shell-sand, sand, coral-mud and mud.

Stone Crab (*Minippe mercenaria*) is listed as common in Tampa Bay at all life stages. All life stages are marine to estuarine. Adults are usually found in deeper waters of estuaries or in inshore waters of the Gulf of Mexico. They burrow under rock ledges, coral heads or grass clumps, and at times in grass flats. Adults have been found to inhabit waters ranging in depth from five to 54 meters (177 feet). Juveniles are found in estuaries near pilings, rocks, and grass beds utilizing available cover and burrows. Migration tends to be short-ranged and along shore from 1.6 to 8.0 kilometers (1 to 5 miles). Females migrate from grass flats to deeper waters to avoid especially high or low temperatures.

Spiny Lobster (*Panulirus argus*) occurs throughout the Caribbean Sea, along the shelf waters of the southeastern United States north to North Carolina, in Bermuda, and south to Brazil and the Gulf of Mexico. They are found from just below the water surface to depths of 500 meters (1,650 feet). The spawning season occurs from April through September in the southeastern U.S. and throughout the year in the Caribbean and the Florida Keys on offshore reefs. Adults move along shore and offshore seasonally. Caribbean spiny lobsters migrate to deeper water in order to evade the stresses of the cold and turbid waters.

Coastal Migratory Pelagics EFH consists of Gulf of Mexico waters and substrates extending from the U.S./Mexico border to the boundary between the areas covered by the Gulf of Mexico FMC and the South Atlantic FMC from estuarine waters out to depths of 100 fathoms (600 feet). Cero (*Scomberomorus regalis*), cobia (*Rachycentron canadum*), king mackerel (*Scomberomorus cavalla*), little tunny (*Euthynnus alletteratus*), and Spanish mackerel (*Scomberomorus maculates*) are species managed by the South Atlantic FMC. Spanish mackerel is known to occur within or near the study area. Spanish mackerel are prevalent throughout Florida waters inshore, offshore and nearshore. The species is frequently found over grass beds and reefs. Spanish mackerel are migratory fish that swim to the north in the spring and return to southern waters when the temperatures drop below 70 degrees Fahrenheit.

Reef Fish EFH consists of Gulf of Mexico waters and substrates extending from the U.S./Mexico border to the

boundary between the areas covered by the Gulf of Mexico FMC and the South Atlantic FMC from estuarine waters out to depths of 100 fathoms (600 feet). The Gulf of Mexico reef fish primarily consists of grouper and snapper species. Gray Snapper (*Lutjanus griseus*) is a tropical, marine reef fish that occur from the U.S. mid-Atlantic south to Rio de Janeiro, Brazil. Juveniles are common to inshore waters throughout Florida, and adults are found in areas of moderate to high relief on the continental shelf. Spawning occurs during summer (June–September) in offshore waters around reefs, wrecks, and other bottom structures. Adult gray snapper are nocturnal predators that forage away from their reef habitats. Juveniles feed diurnally among seagrass beds and feed primarily on penaeid shrimp and crabs. Adult gray snappers feed on fish (largely grunts), shrimp, and crabs.

6.6 Analysis of Effect on EFH

During past consultation with NMFS for projects in Old Tampa Bay, the study area includes EFH. EFH is present in the open waters of Old Tampa Bay, the estuarine water column, salt marshes, mangroves, and SAV, including seagrasses.

Impacts to the water column would result from the displacement of the water column for fill used in the causeway expansion. Based on the wetland and seagrass surveys conducted in July-August 2016 and the wetland survey conducted in December 2017, approximately 13.47 ac of seagrass and 6.61 ac of mangrove wetlands will be impacted with the construction of the 2018 Express Lane Alternatives. Because the limit of construction is not yet known, the estimated impact acreages include a 30-foot buffer extended from the outermost edge of the alignment (EOP, seawall or retaining wall) in seagrass areas and a 15-foot buffer in wetland areas. These buffers are to account for slopes, riprap, erosion/turbidity controls, effects of seawall on adjacent seagrass, and other construction impacts. Seagrass coverage may change prior to implementation of this project as seagrass coverage is known to change over time in Tampa Bay. Final seagrass impacts will be determined in conjunction with the permit submittal and approval process. Temporary impacts may also result depending on how the project is constructed.

Degradation of water quality resulting from construction of the project or excess pollutant loading of stormwater runoff from the project has the potential to adversely affect project waters. Impacts to water quality from construction activities will be avoided and minimized through the use of BMPs. BMPs generally include phased construction, turbidity screens, silt fences, hay bales, cofferdams, and other construction techniques approved by the regulatory agencies. Seagrasses will be delineated, and buoys, turbidity barriers or other methods may be used during construction to delineate locations of seagrasses in the field.

6.7 Compensation for EFH Impacts

Mitigation for 13.47 ac of seagrass proposed to be provided includes use of the Old Tampa Bay Water Quality Improvement Project or other seagrass mitigation in the Tampa Bay region as needed. Mangrove and salt marsh mitigation will be mitigated through the purchase of mitigation credits at a mitigation bank and/or via the use of the FDOT Mitigation Plan with SWFWMD in accordance with 373.4137 Florida Statute (FS). These options, and any others proposed during design and permitting, will compensate for impacts to seagrasses and mangroves. It is anticipated that the mitigation provided will provide sufficient compensation for EFH impacts. However, additional compensation for impacts to EFH, if required, will be further coordinated with the NMFS, USFWS, and other appropriate agencies.

With mitigation provided for loss of seagrass and wetland impacts, the impacts to EFH are anticipated to be more than minimal but less than substantial for this project.

7. EVALUATION OF PROPOSED SMF

7.1 Proposed SMFs Alternative Analysis

Seven SMFs are currently under consideration for Segment 1A. No additional SMFs are proposed in Segment 2A. An ecological assessment to identify the potential presence and utilization of habitat by federally-listed or state-listed wildlife and jurisdictional wetlands and/or surface waters within the proposed SMF alternatives was conducted on February 28, 2018. The SMF sites were evaluated using aerial reviews and pedestrian surveys to determine the potential impacts to jurisdictional wetlands and listed species. The SMF locations are provided on the FLUCCS Map in **Appendix A**. The proposed SMFs are not within marine or estuarine habitat; therefore, there will be no impacts to EFH.

SMF 3

SMF 3 consists of three areas, referred to as cells. The southern cell of SMF 3 is located between the I-275 North/Kennedy Boulevard ramp and Bay Center Drive. The site is comprised of a swale that runs parallel to the ramp with an upland border of Brazilian pepper (*Schinus terebinthifolius*), cabbage palm (*Sabal palmetto*), and a maintained grassed shoulder. The swale has moist soil but no standing water and appears to be seasonally inundated due to a dead vegetation mat. Vegetation in the swale includes sweetscent (*Pluchea odorata*) and marsh pennywort (*Hydrocotyle umbellatae*). The eastern cell of SMF 3 is located at the merger of the I-275 North/Kennedy Boulevard Ramp and the I-275 South/Kennedy Boulevard ramp. This area is partially vegetated with transitional upland species such as live oak (*Quercus virginiana*), Brazilian pepper, and cabbage palm and on its eastern-most side is a roadside shoulder with maintained grass. The western cell of SMF 3 is an existing SMF located between the I-275 North/Kennedy Ramp and I-275 North. The existing SMF is surrounded by grassy upland.

No listed species or critical habitat were observed in SMF 3. The western cell of SMF 3 could potentially be used by state-listed wetland-dependent avian species or wood storks although its location surrounded by interstate ramps and roadways may limit that use. Any effect to these listed species would be temporary as the proposed SMF will provide similar habitat to the existing SMF but in a new configuration. Therefore, there is no adverse effect anticipated from SMF 3 on listed species. Impacts to surface waters from the construction of SMF 3 will also be temporary as the proposed SMF site will replace the functions of the existing swales, ditches, and SMF.

SMF 5

SMF 5 is proposed to be located south of Executive Drive, west of Reo Street, and north of the I-275 on-ramp from SR 60. The site is proposed in an area that is currently paved parking lot and a commercial building. There is a commercial property to the west of the site and an unoccupied building on the south boundary of the pond site. No wetlands or surface waters are located within the proposed site.

No listed species or critical habitat was observed. No effect to listed species or their habitats is anticipated at this site. There is no wetland or surface water involvement.

SMF 8

SMF 8 is proposed to be located in the northwest quadrant of the I-275 and SR 60 interchange. The site is located on the existing on-ramps to I-275 south from the TIA-I-275 Connector and SR 60. The western border of the site

is an upland vegetated with live oaks and a dry, paved drainage feature that runs alongside the TIA-I-275 Connector. The median area between the TIA-I-275 Connector and the SR 60/I-275 southbound ramp holds standing water vegetated with invasive cattails (*Typha sp.*). The eastern border of SMF 8 is roadway shoulder adjacent to a roadside ditch.

The site could potentially be used by state-listed wetland-dependent avian species or wood storks, although its location surrounded by interstate ramps and roadways may limit this use. Any effect to these listed species would be temporary as the SMF will replace any wildlife foraging functions the median or roadside ditches may have. Therefore, SMF 8 has no adverse effects anticipated on listed species. Impacts to surface waters will also be temporary as the site will provide similar functions to the ditches.

SMF 10

SMF 10 is an existing SMF in the southwest quadrant of the I-275 and SR 60 interchange. There is also an associated roadside ditch within the site. Bordering the site to the south is a low-lying upland area dominated by Brazilian pepper and slash pine (*Pinus elliottii*). The southeast portion of SMF 10 has a shallow swale vegetated with exotic, invasive Mexican primrose willow (*Ludwigia octovalvis*) but with no standing water at the time of the field review; it is likely seasonally inundated. The area bordering the SMF is primarily grassy slopes.

The site could potentially be used by state-listed wetland-dependent avian species or wood storks although its location may limit this use. Any effect to these listed species would be temporary as the SMF will replace any wildlife foraging functions the swale or roadside ditch may have. Therefore, SMF 10 has no adverse effects anticipated on listed species. Impacts to surface waters will also be temporary as the site will retain the same function as provided by the existing SMF.

SMF 11

SMF 11 is located in the northeast quadrant of the I-275 and SR 60 interchange, sloping off the frontage road onto a grassed shoulder and swale with drainage grate.

No listed species or critical habitat was observed. No effect to listed species or their habitats is anticipated at this site. The site will impact the swale. However, any impacts to the swale will be temporary as the SMF will replace any lost functions.

SMF 12

SMF 12 is a property located in the northeast quadrant of the I-275 and SR 60 interchange. The site is bounded to the west and south by the East Frontage Road, to the east by North Sherrill Street, and to the north by West Lemon Street. It is a developed site with a paved lot used for parking, a commercial complex, and landscaping. One partially paved lot was inaccessible for review due to a fenced perimeter. This lot has a low potential for gopher tortoise presence due to urbanized surroundings.

No listed species or critical habitat was observed. Potentially suitable habitat was noted in a fenced area currently inaccessible for field review. This SMF may incur impacts to the gopher tortoise, and a survey is recommended to confirm the absence of tortoises and/or the need for relocation if potentially-occupied burrows were located within the SMF. With the survey prior to construction, with the associated coordination and permitting required in the event tortoise burrows are observed on-site, there is no adverse effect anticipated from SMF 12 to the gopher tortoises. No wetlands or surface waters will be impacted.

SMF 14

SMF 14 is located north of Lemon Street and west of North Occident Street. The site is an upland with live oak, cabbage palm, and exotic invasive white leadtree (*Leucaena leucocephala*). The east portion of the site is fenced and not maintained; the west portion is open and mowed.

No listed species or critical habitat was observed. SMF 14 will have no effect on listed species. No wetlands or surface waters are present.

7.2 Summary of SMF Analysis

The seven SMFs were rated for potential involvement with wetlands or surface waters and for potential involvement with protected species.

SMFs were rated as none, low, moderate, high for involvement with wetlands or surface waters. A rating of "none" indicates that there were no surface waters or wetlands of any type within the pond site. A rating of "low" indicates that 25 percent or less of the site is comprised of surface waters of wetlands, including man-made basins or ditches. A moderate rating indicates that surface waters or wetlands occupy between 25 and 75 percent of the site, and a high rating indicates that surface waters or wetland occupy greater than 75 percent of the site.

For listed species involvement, a rating of none indicates that the site has no potential of usage by wildlife; a low rating indicates that the preferred habitat for listed species is not present or is limited on the site, and/or listed species are unlikely based on what is known about the habits or life history of potential species in the area. A moderate rating indicates the site has suitable habitat for listed species, Standard Construction Precautions may be required during construction, further surveys are needed to determine the presence of listed species, or compensation for a species may be required. A high rating indicates the habitat is optimal for protected species.

Table 7-1 Summary of Proposed SMF Potential Wetland and Protected Species Involvement

SMF ID	Size of SMF (ac)	Description of Site	Potential Involvement with Wetlands or Surface Waters	Potential Involvement with Protected Species
3	2.19	Consists of 3 cells: 1) A swale that runs parallel to the I-275 North-Kennedy Blvd Ramp with upland border of Brazilian pepper, cabbage palm and maintained grassy shoulder; 2) a roadside shoulder with maintained grass and transitional upland; 3) an existing wet detention pond with an adjacent ditch	Moderate (Swale and Reservoir)	Moderate
5	0.67	Commercial building and paved parking lot adjacent to unoccupied building	None	None

SMF ID	Size of SMF (ac)	Description of Site	Potential Involvement with Wetlands or Surface Waters	Potential Involvement with Protected Species
8	2.40	Central portion is exit and entrance ramps to/from I-275 with median wet ditch; western portion has dry, paved drainage feature along a frontage road; eastern side is vegetated roadside shoulder.	Low	Low
10	4.70	Existing wet detention pond in southwest quadrant of the I-275/SR 60 interchange	High (SMF)	Low
11	0.64	Property adjacent to Frontage Road; grassy shoulder with drainage grate and swale	Low (Swale)	Low
12	3.81	East of I-275 Northbound ramp in I-275/SR 60 Interchange; partially paved lot and paved parking lot for commercial complex on the property	None	Moderate
14	2.16	Unpaved grass lot used for parking	None	None

Wetland and surface water involvement for the proposed SMFs is limited to impacts to existing man-made swales, ditches, and ponds in SMF 3, SMF 8, SMF 10, and SMF 11. There are no wetlands within any of the SMF sites proposed. It is anticipated that the newly created pond sites will replace the functions of the SMFs, roadside ditches, and swales being impacted. Wetland mitigation is not proposed for the impacts to these other surface waters.

The sites are in the highly urbanized corridor of I-275, mostly within interchanges or between roads and ramps. Potential listed species involvement in SMF 3, SMF 8, SMF 10, and SMF 11 consists of wetland-dependent avian species that may utilize the man-made swales, ditches, and ponds for foraging, including the wood stork, Florida sandhill crane, and state-listed wading birds. The location of the ponds within roadways and ramps likely limits wildlife usage of the SMFs. If the impacted SMFs and surface waters are determined to be SFH for wood storks, and are not being replaced or relocated in-kind, appropriate compensation of the SFH will be determined during the permitting of the project. Assuming impacts to SFH are compensated within the same CFA, the SMFs may affect, not likely to adversely affect the wood stork.

Gopher tortoises and the Eastern indigo snake have the potential to occur in the partially paved lot of SMF 12. This lot was not accessible during field reviews for definitive confirmation of presence or absence of gopher tortoises. Current regulations require that 100% survey and relocation activities be conducted by a FWC Authorized Gopher Tortoise Agent. A formal 100% gopher tortoise survey will be conducted according to current guidelines published by the FWC. If gopher tortoises are present, a relocation permit from the FWC will be obtained before disturbance of any burrows (including activities within 25 feet of a gopher tortoise burrow). With these measures in place, there is no adverse effect anticipated on the gopher tortoise.

8. CONCLUSIONS AND COMMITMENTS

8.1 Protected Species and Habitat

No Further Action Alternative and 1996 TIS FEIS LTPA

The No Further Action Alternative and 1996 TIS FEIS are anticipated to have the same impacts to habitats and, thus, the same effect determinations. The 1996 TIS FEIS concluded that "no listed species would be affected by the proposed project" and that the project "will not affect or modify any critical habitat". However, as the alternatives will impact surface waters in Segment 1A and regulations have changed, the effect determinations for these alternatives has been updated in Segment 1A to may affect, not likely to adversely affect the wood stork, Rufa red knot, and Eastern indigo snake. There is no adverse effect anticipated to state-listed wetland dependent avian species, the gopher tortoise, or Florida burrowing owl from these alternatives. Segment 2A effect determinations were updated to include may affect, not likely to adversely affect the Eastern indigo snake, and there is no adverse effect anticipated to the gopher tortoise.

2018 Express Lane Alternatives (Non-Tolled and Tolled)

The 2018 Express Lane Alternatives (Non-Tolled and Tolled) are the same alignment with one option being tolled; thus, the effect determinations will be the same for both the non-tolled and tolled alternatives. These build alternatives include a longer segment of the HFB causeway and a shift of the causeway alignment to the north which results in impacts to seagrass and wetlands that were not considered in the 1996 TIS FEIS LTPA. For the 2018 Express Lane Alternatives in Segment 1A, the following species presented in **Table 8-1** were considered as having potential involvement with the project. Species that have the potential to occur in Segment 2A are noted with an asterisk (*) beside the scientific name.

Table 8-1 Potential Protected Species Status, Involvement, and Effect Determination Summary 2018 Express Lane Alternatives

Scientific Name	Common Name	Federal Status	State Status	Probability of Involvement	Effect Determination Build Alternatives
Acipenser oxyrinchus desotoi	Gulf Sturgeon	FT	FT	Moderate	MANLAA
Pristis pectinata	Smalltooth Sawfish	FE	FE	Moderate	MANLAA
Scientific Name	**Common Name**	**Federal Status**	**State Status**	**Probability of Involvement**	**Effect Determinations Build Alternatives**
Charadrius melodus	Piping Plover	FT	FT	High	MANLAA
**Aphelocoma coerulescens*	Florida Scrub-Jay	FT	FT	None	No Effect
Calidris canutus rufa	Rufa Red Knot	FT	FT	Low	MANLAA
Mycteria americana	Wood Stork	FT	FT	High	MANLAA
Platalea ajaja	Roseate Spoonbill	-	ST	High	No Adverse Effect
Egretta caerulea	Little Blue Heron	-	ST	High	No Adverse Effect
Egretta rufescens	Reddish Egret	-	ST	High	No Adverse Effect
Egretta tricolor	Tricolored Heron	-	ST	High	No Adverse Effect
Sternula antillarum	Least Tern	-	ST	Low	No Adverse Effect
Athene cunicularia floridana	Florida Burrowing Owl	-	ST	Low	No Adverse Effect
Haematopus palliates	American Oystercatcher	-	ST	High	No Adverse Effect

Rynchops niger	Black Skimmer	-	ST	High	No Adverse Effect
Grus canadensis pratensis	Florida Sandhill Crane	-	ST	Low	No Adverse Effect
**Haliaeetus leucocephalus*	Bald Eagle	MBTA+	-	Moderate	-
**Pandion haliaetus*	Osprey	MBTA	-	Moderate	-
**Drymarchon couperi*	Eastern Indigo Snake	FT	FT	Low	MANLAA
Eretmochelys imbricata	Hawksbill Sea Turtle	FE	FE	Moderate	MANLAA
Chelonia mydas	Atlantic Green Sea Turtle	FT	FT	Moderate	MANLAA
Caretta caretta	Loggerhead Sea Turtle	FT	FT	Moderate	MANLAA
Lepidochelys kempii	Kemp's Ridley Sea Turtle	FE	FE	Moderate	MANLAA
Gopherus polyphemus	Gopher Tortoise	C	ST	Moderate	No Adverse Effect
Trichechus manatus	West Indian Manatee	FT	FT	High	MANLAA

Migratory Bird Treaty Act (MBTA); +Bald and Golden Eagle Protection Act (BGEPA); *- Also potentially occurring in Segment 2A.
FE - Federally-Designated Endangered; FT-Federally-Designated Threatened; ST – State-Designated Threatened; C-Candidate Species;
MANLAA-May Affect, Not Likely to Adversely Affect

Design Options

The design options are located within a heavily urbanized area at Himes Avenue and Macdill Avenue in Segment 2A and will have no adverse impacts to Critical Habitat or threatened and endangered species.

SMF

In addition to the alternatives proposed, seven proposed SMFs in Segment 1A were evaluated. Segment 2A has no SMFs proposed. All of the SMFs are in the highly urbanized corridor of I-275. The locations of the SMFs are shown on the FLUCCS map included in **Appendix A.** Potential listed species involvement in SMF 3, SMF 8, SMF 10, and SMF 11 consists of wetland-dependent avian species that may utilize the man-made ditches and ponds for foraging, including the wood stork, Florida sandhill crane, and state-listed wading birds. Involvement with listed species is likely limited by the location of the ponds within roadways and ramps. Gopher tortoises and the Eastern indigo snake have the potential to occur in the partially paved lot of SMF 12. This lot was not accessible during field reviews for definitive confirmation of presence or absence of gopher tortoises. SMF 5 and SMF 14 are developed sites with no potential habitat for listed species.

8.2 Wetland, Seagrass, and Surface Water Communities

No Further Action Alternative and 1996 TIS FEIS LTPA

The 1996 TIS FEIS concluded that there would be approximately 9.0 ac of surface water impacts from the modification or filling of seven man-made SMF identified in the 1996 TIS FEIS. The function of the impacted ponds was proposed to be replaced by SMFs to be built as part of the project, and no mitigation was proposed for these impacts. No wetland or seagrass impacts were proposed in Segment 1A or 2A. The footprint of this alternative has not changed; however, the impacts from the construction of the I-275 and SR 60 as well as impacts east of the interchange are considered approved under the 1997 ROD. Therefore, the impacts remaining under consideration for the SEIS are the remaining 4.5 ac of impact west of the interchange. The TIS FEIS LTPA will have no increased adverse impact to wetlands and surface waters compared to the No Further Action Alternative.

Tolled Express Lanes Build Alternative

The 2018 Express Lane Alternative includes improvements being made on the HFB causeway that were not previously considered in the No Further Action Alternative or the 1996 TIS FEIS LTPA. Impacts include 13.47 ac to seagrass, 7.43 ac to bays and estuaries, 6.61 ac to mangrove swamps, 6.54 to SMFs (man-made basins), 0.37 ac to streams and waterways (roadside ditches), and 0.27 to saltwater marsh. Because the limit of construction has not yet been determined, the impacts presented were estimated using a 15-foot buffer in wetland areas and a 30-foot buffer in seagrass areas from the outermost edge of construction currently proposed (EOP, retaining wall, or seawall). The buffer is to account for impacts beyond the outer edge of the alignment such as slopes, riprap, construction work zones, turbidity zones, or other impacts.

In total, the 2018 Express Lane Alternative is anticipated to result in 14.34 ac of surface water impacts, 6.88 ac of wetland impacts, and 13.47 ac of seagrass impacts.

The Tolled Express Lanes Alternative is a tolled alternative of the same alignment. The impacts for this alternative will be the same as that provided above for the non-tolled alternative.

Design Options

The three design options are being constructed in highly urbanized areas in the vicinity of Himes Avenue and MacDill Avenue in Segment 2A. No additional wetland, seagrass, or surface water impacts are anticipated as a result of the design options.

SMFs

Wetland and surface water involvement for the proposed SMFs in Segment 1A are limited to impacts to existing man-made swales, ditches, and ponds in SMF 3, SMF 8, SMF 10, and SMF 11. There are no wetlands within any of the SMF sites proposed. SMF 5 and SMF 14 have no wetlands or surface waters within the proposed sites.

Table 8-2 Potential Wetland and Surface Water Impacts Summary for Segment 1A Alternatives

Wetland, Seagrass, or Surface Water Habitat	No Further Action Alternative	1996 TIS FEIS Long-Term Preferred Alternative	Tolled or Non-Tolled 2018 Express Lane Alternatives
Streams & Waterways (510)	0.00	0.00	0.37
Reservoirs (530)	4.50	4.50	6.54
Bays/Estuaries (540)	0.00	0.00	7.43
Mangrove Swamps (612)	0.00	0.00	6.61
Saltwater Marshes (642)	0.00	0.00	0.27
Seagrass (911)	0.00	0.00	13.47
TOTAL IMPACTS	4.50	4.50	34.69

8.3 Implementation Measures

- The FDOT will conduct benthic surveys during the seagrass growing season (June-September) to support the permit approval process.
- The FDOT will conduct a survey for gopher tortoises and coordinate with the FWC as appropriate based on the results of the survey.

- Erosion and sediment controls and other BMPs will be implemented prior to construction, and maintained during and after construction, to prevent adverse impacts to adjacent water resources and properties.
- No dredging is proposed for this project. If dredging is required, Section 7 Consultation will be re-initiated with the USFWS for the manatee.

8.4 Commitments

- The FDOT will incorporate the *Construction Special Provisions Gulf Sturgeon Protection Guidelines* (NMFS/USFWS).
- The FDOT will incorporate the *Standard Protection Measures for the Eastern Indigo Snake* (USFWS) during construction.
- The FDOT will incorporate the *Standard Manatee Conditions for In-Water Work* (FWC) during construction.
- The FDOT will incorporate the *Sea Turtle and Smalltooth Sawfish Construction Conditions* (NMFS) during construction.
- No nighttime in-water work will be performed. In-water work can be conducted from official sunrise until official sunset times.
- Special conditions for manatees will be addressed during construction and include the following:
    - Two dedicated (minimum one primary), experienced manatee observers will be present when in-water work is performed. Primary observers should have experience observing manatees in the wild on construction projects similar to this one.
    - All siltation barriers or coffer dams should be checked at least twice a day, in the morning and in the evening, for manatees that may become entangled or entrapped at the site.
    - Barges will be equipped with fender systems that provide a minimum standoff distance of four feet between wharves, bulkheads and vessels moored together to prevent crushing manatees. All existing slow speed or no wake zones will apply to all work boats and barges associated with construction.
    - Although culverts are unlikely for this project, culverts larger than eight inches and less than eight feet in diameter in areas potentially accessible by manatees will be grated to prevent manatee entrapment.

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APPENDIX A

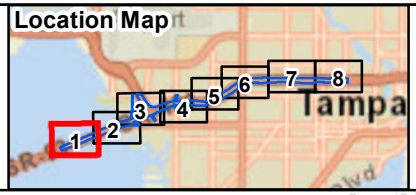
Florida Land Use Cover and Forms Classification (FLUCCS) Map

FLUCCS	Description
130	RESIDENTIAL HIGH DENSITY
140	COMMERCIAL AND SERVICES
170	INSTITUTIONAL
180	RECREATIONAL
190	OPEN LAND
434	HARDWOOD CONIFER MIXED
510	STREAMS AND WATERWAYS
530	RESERVOIRS
540	BAYS AND ESTUARIES
612	MANGROVE SWAMPS
642	SALTWATER MARSHES
710	BEACHES OTHER THAN SWIMMING BEACHES
810	TRANSPORTATION
830	UTILITIES

FLUCCS (Florida Land Use, Cover and Form Classification System) Source: SWFWMD, 2013-2014; Seagrass Data: SWFWMD 2016;
Aerial Source: ESRI, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, SGS, AeroGRID, IGN, and the GIS User Community. 2016

FDOT

Location Map



TIS SEIS Segments 1A and 2A
Florida Land Use, Cover and Forms Classification System (FLUCCS) Map

MAP 1 of 8

N

0 200 400 800

Feet

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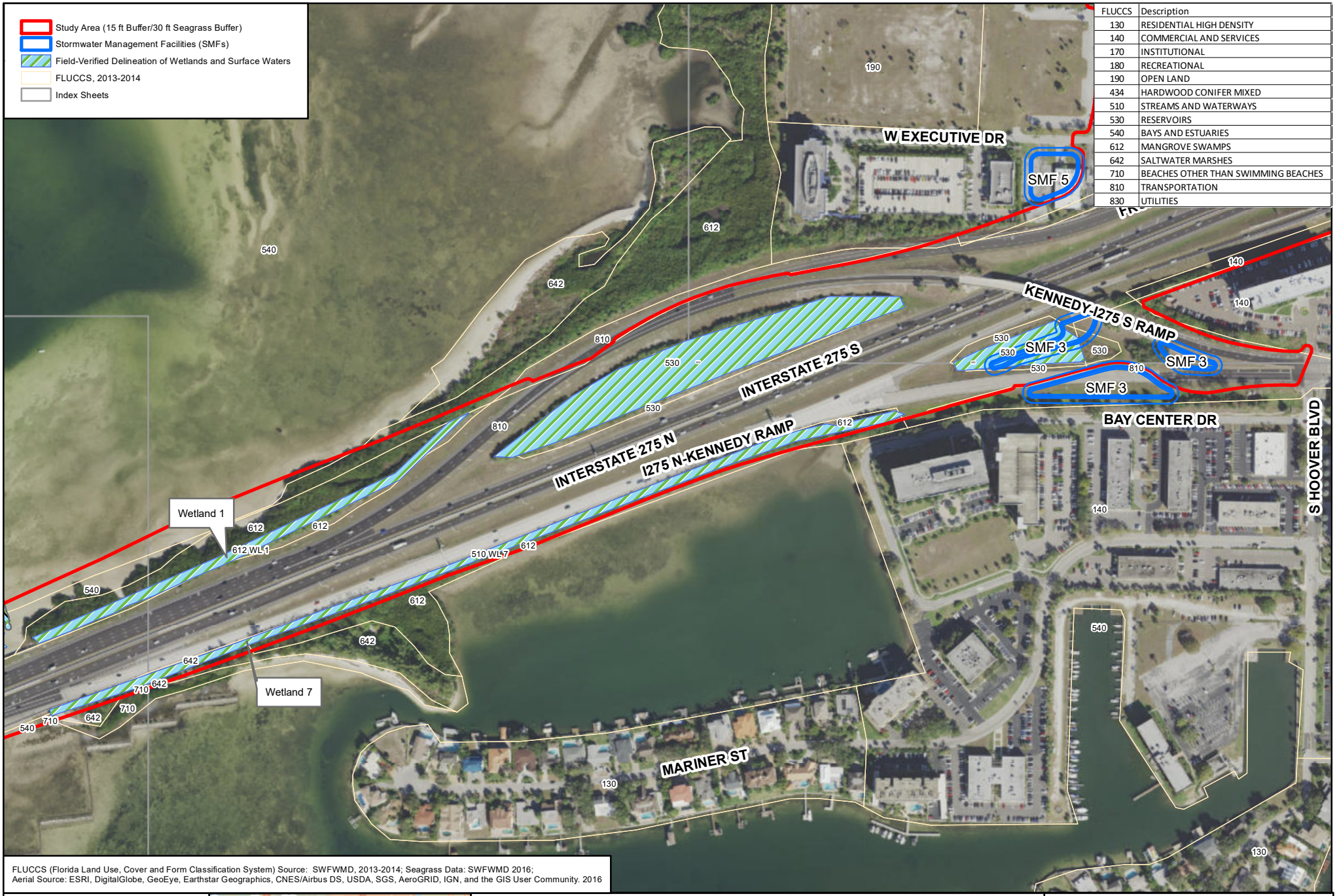
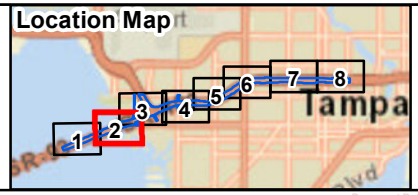


FLUCCS (Florida Land Use, Cover and Form Classification System) Source: SWFWMD, 2013-2014; Seagrass Data: SWFWMD 2016;
Aerial Source: ESRI, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, SGS, AeroGRID, IGN, and the GIS User Community. 2016

FDOT

Location Map



TIS SEIS Segments 1A and 2A
Florida Land Use, Cover and Forms Classification System (FLUCCS) Map

MAP 2 of 8

N

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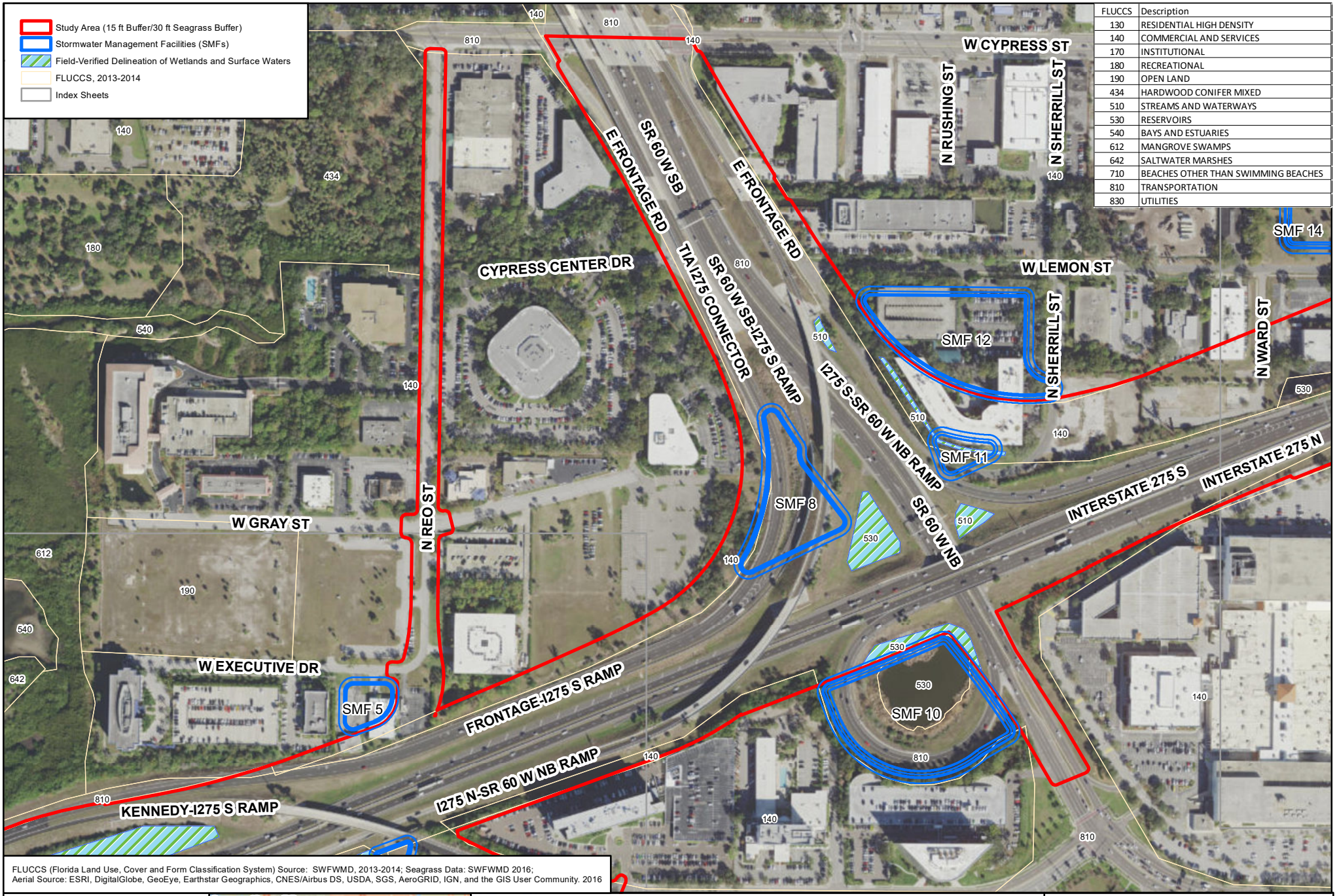
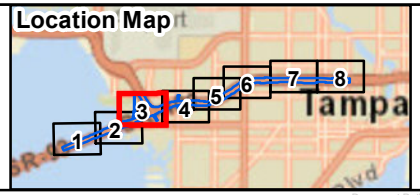
Feet



FLUCCS (Florida Land Use, Cover and Form Classification System) Source: SWFWMD, 2013-2014; Seagrass Data: SWFWMD 2016;
Aerial Source: ESRI, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, SGS, AeroGRID, IGN, and the GIS User Community. 2016

FDOT

Location Map



TIS SEIS Segments 1A and 2A
Florida Land Use, Cover and Forms Classification System (FLUCCS) Map

MAP 3 of 8

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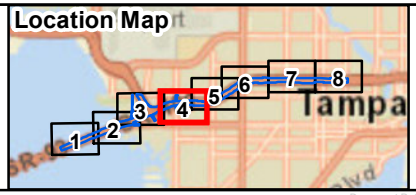
Feet

FLUCCS	Description
130	RESIDENTIAL HIGH DENSITY
140	COMMERCIAL AND SERVICES
170	INSTITUTIONAL
180	RECREATIONAL
190	OPEN LAND
434	HARDWOOD CONIFER MIXED
510	STREAMS AND WATERWAYS
530	RESERVOIRS
540	BAYS AND ESTUARIES
612	MANGROVE SWAMPS
642	SALTWATER MARSHES
710	BEACHES OTHER THAN SWIMMING BEACHES
810	TRANSPORTATION
830	UTILITIES

FLUCCS (Florida Land Use, Cover and Form Classification System) Source: SWFWMD, 2013-2014; Seagrass Data: SWFWMD 2016;
Aerial Source: ESRI, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, SGS, AeroGRID, IGN, and the GIS User Community. 2016

FDOT

Location Map



TIS SEIS Segments 1A and 2A
Florida Land Use, Cover and Forms Classification System (FLUCCS) Map

MAP 4 of 8

N

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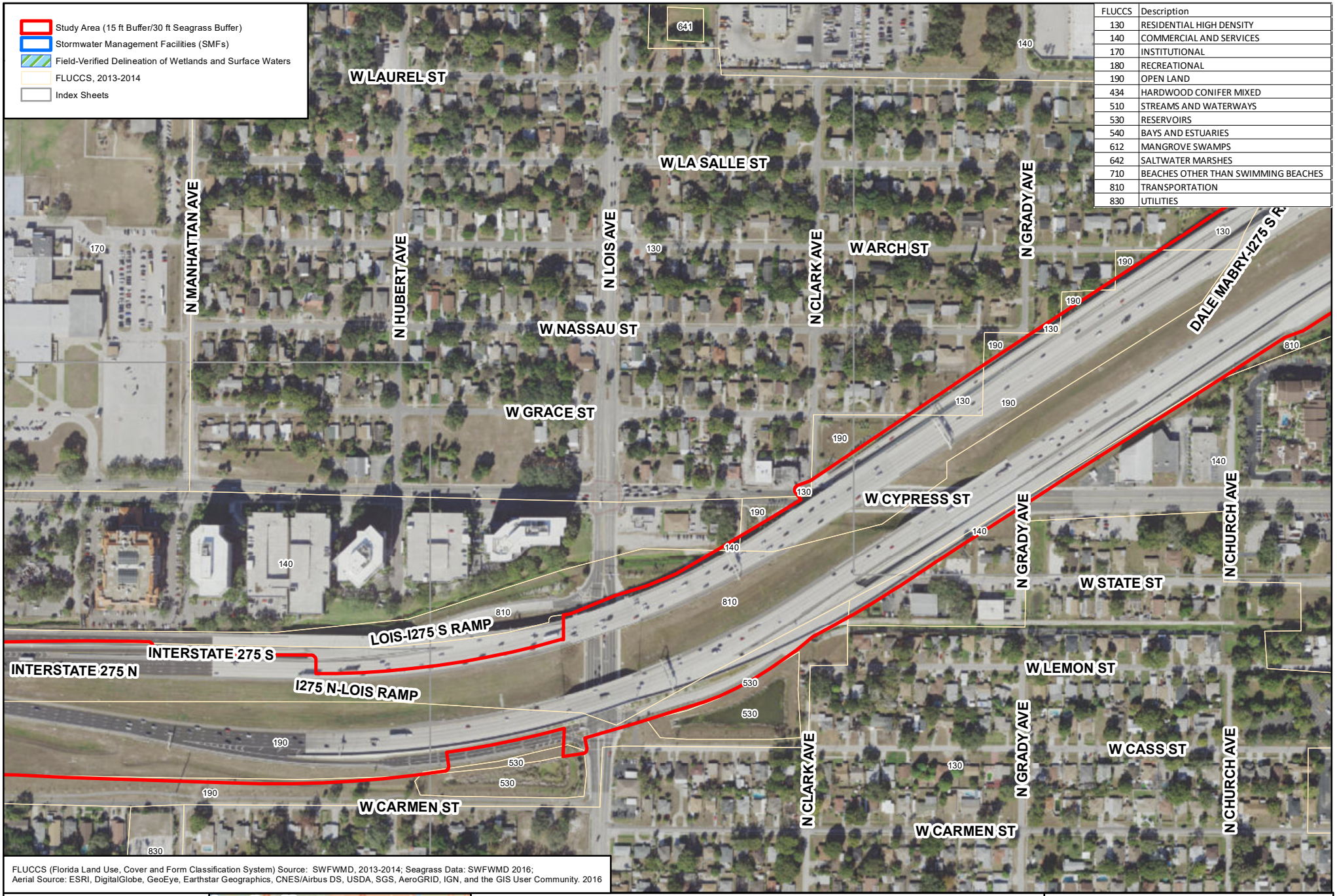
Feet



FLUCCS	Description
130	RESIDENTIAL HIGH DENSITY
140	COMMERCIAL AND SERVICES
170	INSTITUTIONAL
180	RECREATIONAL
190	OPEN LAND
434	HARDWOOD CONIFER MIXED
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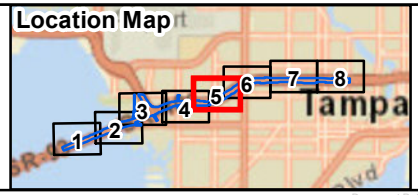
FLUCCS (Florida Land Use, Cover and Form Classification System) Source: SWFWMD, 2013-2014; Seagrass Data: SWFWMD 2016;
Aerial Source: ESRI, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, SGS, AeroGRID, IGN, and the GIS User Community. 2016

FDOT

Location Map



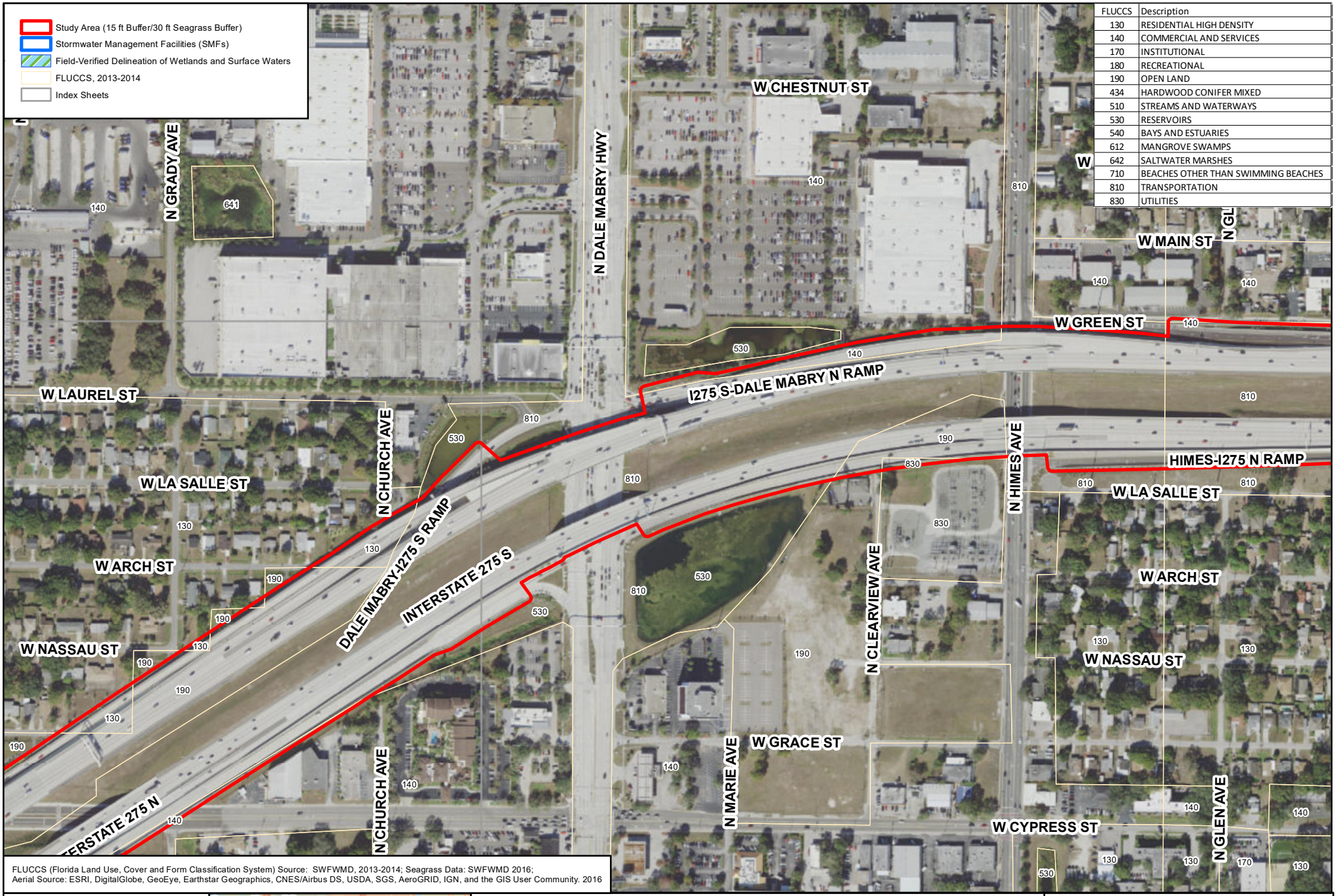
TIS SEIS Segments 1A and 2A
Florida Land Use, Cover and Forms Classification System (FLUCCS) Map

MAP 5 of 8

N

0 200 400 800

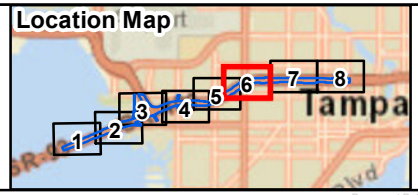
Feet



FLUCCS (Florida Land Use, Cover and Form Classification System) Source: SWFWMD, 2013-2014; Seagrass Data: SWFWMD 2016;
Aerial Source: ESRI, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, SGS, AeroGRID, IGN, and the GIS User Community. 2016

FDOT

Location Map



TIS SEIS Segments 1A and 2A
Florida Land Use, Cover and Forms Classification System (FLUCCS) Map

MAP 6 of 8

N

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Feet

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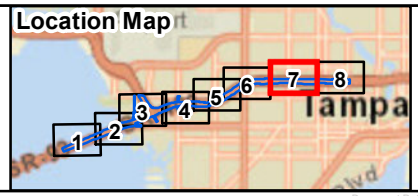
FLUCCS (Florida Land Use, Cover and Form Classification System) Source: SWFWMD, 2013-2014; Seagrass Data: SWFWMD 2016;
Aerial Source: ESRI, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, SGS, AeroGRID, IGN, and the GIS User Community. 2016

FDOT

Location Map



TIS SEIS Segments 1A and 2A
Florida Land Use, Cover and Forms Classification System (FLUCCS) Map

MAP 7 of 8

N

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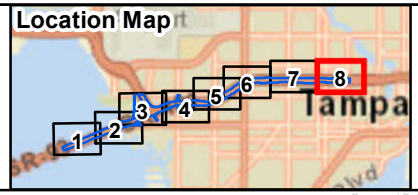
Feet

FLUCCS (Florida Land Use, Cover and Form Classification System) Source: SWFWMD, 2013-2014; Seagrass Data: SWFWMD 2016;
Aerial Source: ESRI, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, SGS, AeroGRID, IGN, and the GIS User Community. 2016

FDOT

Location Map



TIS SEIS Segments 1A and 2A
Florida Land Use, Cover and Forms Classification System (FLUCCS) Map

MAP 8 of 8

N

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Feet

APPENDIX B

Agency Coordination

Document Reviews and Responses

Event Details

Event: 258337-2 Tampa Interstate Study (TIS) SEIS - Agency Coordination and Public Involvement Plan
Managing Organization: FDOT District 7
Start Date: 07/26/2017
End Date: 08/25/2017
Description:

Please provide comments for the Agency Coordination and Public Involvement Plan for the Tampa Interstate Study (TIS)Supplemental Environmental Impact Statement (SEIS).

The proposed improvements would involve the reconstruction of I-275 from east of Howard Frankland Bridge to North of SR 574 (Martin Luther King Jr. Boulevard) and I-4 from I-275 to east of 50th Street.

Please feel free to forward the EST submittal to other staff members in your agency who are interested in reviewing this document.

Related Document Review Event(s):
Related ETDM Project(s): There are no ETDM projects related to this event.

Event Documents

Document (PDF)	Size	Description
TIS-SEIS Project Coordination and Public Involvement Plan	5.63 MB	This Project Coordination and Public Involvement Plan (Plan) establishes an approach for coordinating agency (Federal Lead, State Joint Lead, Cooperating, and Participating) outreach efforts that the FHWA and FDOT will undertake during the environmental review process for the TIS SEIS. A key focus of the Plan is to facilitate an understanding with the governmental agencies regarding the study process, key milestones, and decision points. It will also serve to solicit ideas, input, and comments on the study, as well as seek feedback on the potential transportation, social, and environmental consequences. The Plan describes the overall approach and coordination methods that the TIS Project Team will use to obtain agency insights and satisfy Federal coordination requirements of 23 CFR 139 during the environmental review process.

Document Reviews

TIS-SEIS Project Coordination and Public Involvement Plan

Official Reviews

Section(s)	Page(s)	Paragraph(s)	Global	Reviewing Organization	Comments	Reviewer Document	Response	Responding Organization
6.2	16	2	No	US Army Corps of Engineers	Wetlands: The information provided indicates that the 1996 TIS FEIS identified 15 wetlands that the TIS Project would affect. Additionally, the 2008 reevaluation for Section 3C identified nine additional wetlands that the TIS Project would affect, and one that the TIS Project would no longer affect. The information also includes that the wetlands consist of man-made brackish ponds, man-made freshwater ponds, man-made drainage channels, man-made herbaceous wetlands, scrub/shrub wetlands, and			

					forested wetlands. The U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) classification for wetlands found in the TIS Project study area include: E1UB3Lx, PUBHx, R2UBHx, PEMIFx, PEMIC, PF03/IA, PUBFx, and PSS3J. The document includes that avoidance of wetland impacts will be evaluated during the project evaluation process. The information also indicates that the TIS Project Team will avoid wetlands, if possible. However, given the locations of the wetlands, filling activities would be necessary to widen the existing roadway and construct new roadway. Therefore, if complete avoidance is not possible, minimization efforts would be evaluated. The document also includes that mitigation would be provided for unavoidable wetland impacts. According to a review of the Regulatory In-Lieu Fee and Bank Information Tracking System (RIBITS), there is one federally-approved mitigation bank (Tampa Bay Mitigation Bank) with a service area which encompasses the proposed roadway project. The Tampa Bay Mitigation Bank utilizes two functional assessment methods: WRAP for palustrine credits and EWRAP for estuarine credits. In accordance with the mitigation hierarchy, as identified within the 2008 Mitigation Rule, the use of a federally-approved mitigation bank should first be evaluated. Second, an in-lieu fee program; however, there are currently no in-lieu fee programs with service areas which encompass the project area. Finally, permittee-responsible mitigation may be evaluated; however, information must be provided which justifies how the permittee-responsible mitigation option would be the			

					environmentally preferred option to offset unavoidable impacts to waters of the United States. The Corps recommends that the RIBITS site be evaluated during the project evaluation, as the RIBITS database is updated regularly and would identify the current federally-approved mitigation options. The Corps also understands that an alternatives wetlands impact analysis will be prepared.			
			Yes	FL Department of State	SHPO staff have reviewed the Public Involvement Plan and Survey Methodology. At this time, we concur with the plan and methodology as presented. As the project evolves, there may need to be some adjustments in area of potential effect, depending on what alternative(s) move forward in the planning process.			
			Yes	National Marine Fisheries Service	NMFS staff has reviewed the Project Coordination and Public Involvement Plan for the Tampa Interstate Study (I-275 from Howard Frankland Bridge to north of Dr. Martin Luther King, Jr. Boulevard and I-4 from I-275 to east of 50th Street) and finds the plan acceptable.			
			Yes	US Fish and Wildlife Service	Please see the attached document for comments	20170825_fws_ltr_Tampa Interstate Study.pdf		

United States Department of the Interior

FISH AND WILDLIFE SERVICE

North Florida Field Office
7915 Baymeadows Way, Suite 200
Jacksonville, FL 32256-7517
Phone: 904.731.3336
Fax: 904.731.3045

August 25, 2017

Florida Department of Transportation
Efficient Transportation Decision Making (ETDM) Process
Environmental Technical Advisory Team (ETAT) Review
Project Name: Tampa Interstate Study (TIS) SEIS
District: District 7
County: Hillsborough
Planning Organization: FDOT District 7
Phase: Programming Screen
FWS # 2017-TA-0581

Purpose and Need:
The purpose of this project is to produce a Master Plan, conceptual design and environmental impact database for improvements to I-4, I-275 and I-75.

The need for the project is to improve travel, operational and safety issues on the road.

Fish and Wildlife Habitat

Degree of Effect: Minimal

The Environmental Screening Tool (EST) Geographic Information System (GIS) analysis identified the project as being located in an area where there is a mix of urban, commercial and residential developments. Species of concern that have the potential to occur in this area is the wood stork and the eastern indigo snake.

Dependent upon the alternative(s) selected, the proposed project is expected to result in minimal to moderate involvement with wildlife and habitat resources. If it is determined the project will affect federally listed species and/or their habitat, the Department will initiate informal consultation with FWS during the Project Development process.

Wood Stork *(Mycteria americana)*

The surrounding area is mainly a mix of urban, commercial and residential developments. The action area falls within a Core Foraging Area (CFA) of at least one nesting colony of the endangered wood stork (East Lake – Bellows Lake). Direct impacts should be avoided.

The Service has determined that the loss of wetlands within a CFA due to an action could result in the loss of foraging habitat for the wood stork. To minimize adverse effects to the wood stork and other

wetland dependent species, we recommend that impacts to suitable foraging habitat be avoided. If avoidance is not possible, minimization measure should be employed and best management practices to avoid further degradation of the site. Mitigation for wetland impacts should be discussed with USFWS and will require further coordination. Please refer to the North Florida Field Office website for WOST colony locations. http://www.fws.gov/northflorida

Eastern Indigo Snakes *(Drymarchon corais couperi)*

It is very unlikely that this species may occur in the highly developed area within the action area. The addition of a new roads and the widening of roads will likely increase the risks to this species from direct mortality and indirectly from habitat fragmentation and noise disturbance. Individual snakes may have large home ranges of 200 to 250 acres. Direct impacts from vehicles, loss and fragmentation of habitat would contribute to the further decline of this species. Implementing the current standard construction conditions and protection measures for EIS will reduce the direct risks to snakes during the construction phase but not the long term impacts from habitat fragmentation and loss of individuals from interactions with vehicles for the life of the facility. Complete surveys for gopher tortoise burrows (currently a federal candidate species, which may be listed as Threatened before construction begins) should be conducted. Protection guidelines can be found on the North Florida Ecological Services website: http://www.fws.gov/northflorida. Surveys for gopher tortoise burrows will also facilitate the use of the EIS Effect determination key utilized by the Army COE.

Coordination with the Office of Migratory birds will be needed for an eagle nest located within 200 feet of corridor.

Surveys for all federally listed plants found in Hillsborough County (the list can be found on our website northflorida.fws.gov) should be conducted by a trained botanist during the appropriate time of year.

Wetlands

Degree of Effect: Minimal

Wetlands provide important habitat for fish and wildlife. Best Management Practices (BMPs) should be used to prevent degradation of wetland and other aquatic resources from erosion, siltation, and nutrient discharges associated with the project site. We recommend that the project be designed to avoid these valuable resources to the greatest extent practicable. If impacts to wetlands are unavoidable, we recommend that the FDOT provides mitigation that fully compensates for the loss of wetland resources.

Dependent upon the alternative(s) selected, the proposed project is expected to result in minimal to moderate involvement with wildlife and habitat resources. If it is determined the project will affect and federally listed species and/or their habitat, the Department will initiate consultation with FWS during the Project Development process.

Submitted by ETAT Member: Zakia Williams

APPENDIX C

Agency Wildlife Protection Plans

STANDARD PROTECTION MEASURES FOR THE EASTERN INDIGO SNAKE
U.S. Fish and Wildlife Service
August 12, 2013

The eastern indigo snake protection/education plan (Plan) below has been developed by the U.S. Fish and Wildlife Service (USFWS) in Florida for use by applicants and their construction personnel. At least **30 days prior** to any clearing/land alteration activities, the applicant shall notify the appropriate USFWS Field Office via e-mail that the Plan will be implemented as described below (North Florida Field Office: jaxregs@fws.gov; South Florida Field Office: verobeach@fws.gov; Panama City Field Office: panamacity@fws.gov). As long as the signatory of the e-mail certifies compliance with the below Plan (including use of the attached poster and brochure), no further written confirmation or "approval" from the USFWS is needed and the applicant may move forward with the project.

If the applicant decides to use an eastern indigo snake protection/education plan other than the approved Plan below, written confirmation or "approval" from the USFWS that the plan is adequate must be obtained. At least 30 days prior to any clearing/land alteration activities, the applicant shall submit their unique plan for review and approval. The USFWS will respond via e-mail, typically within 30 days of receiving the plan, either concurring that the plan is adequate or requesting additional information. A concurrence e-mail from the appropriate USFWS Field Office will fulfill approval requirements.

The Plan materials should consist of: 1) a combination of posters and pamphlets (see **Poster Information** section below); and 2) verbal educational instructions to construction personnel by supervisory or management personnel before any clearing/land alteration activities are initiated (see **Pre-Construction Activities** and **During Construction Activities** sections below).

POSTER INFORMATION

Posters with the following information shall be placed at strategic locations on the construction site and along any proposed access roads (a final poster for Plan compliance, to be printed on 11" x 17" or larger paper and laminated, is attached):

DESCRIPTION: The eastern indigo snake is one of the largest non-venomous snakes in North America, with individuals often reaching up to 8 feet in length. They derive their name from the glossy, blue-black color of their scales above and uniformly slate blue below. Frequently, they have orange to coral reddish coloration in the throat area, yet some specimens have been reported to only have cream coloration on the throat. These snakes are not typically aggressive and will attempt to crawl away when disturbed. Though indigo snakes rarely bite, they should NOT be handled.

SIMILAR SNAKES: The black racer is the only other solid black snake resembling the eastern indigo snake. However, black racers have a white or cream chin, thinner bodies, and WILL BITE if handled.

LIFE HISTORY: The eastern indigo snake occurs in a wide variety of terrestrial habitat types throughout Florida. Although they have a preference for uplands, they also utilize some wetlands

and agricultural areas. Eastern indigo snakes will often seek shelter inside gopher tortoise burrows and other below- and above-ground refugia, such as other animal burrows, stumps, roots, and debris piles. Females may lay from 4 - 12 white eggs as early as April through June, with young hatching in late July through October.

PROTECTION UNDER FEDERAL AND STATE LAW: The eastern indigo snake is classified as a Threatened species by both the USFWS and the Florida Fish and Wildlife Conservation Commission. "Taking" of eastern indigo snakes is prohibited by the Endangered Species Act without a permit. "Take" is defined by the USFWS as an attempt to kill, harm, harass, pursue, hunt, shoot, wound, trap, capture, collect, or engage in any such conduct. Penalties include a maximum fine of $25,000 for civil violations and up to $50,000 and/or imprisonment for criminal offenses, if convicted.

Only individuals currently authorized through an issued Incidental Take Statement in association with a USFWS Biological Opinion, or by a Section 10(a)(1)(A) permit issued by the USFWS, to handle an eastern indigo snake are allowed to do so.

IF YOU SEE A <u>LIVE</u> EASTERN INDIGO SNAKE ON THE SITE:

- Cease clearing activities and allow the live eastern indigo snake sufficient time to move away from the site without interference;
- Personnel must NOT attempt to touch or handle snake due to protected status.
- Take photographs of the snake, if possible, for identification and documentation purposes.
- Immediately notify supervisor or the applicant's designated agent, **and** the appropriate USFWS office, with the location information and condition of the snake.
- If the snake is located in a vicinity where continuation of the clearing or construction activities will cause harm to the snake, the activities must halt until such time that a representative of the USFWS returns the call (within one day) with further guidance as to when activities may resume.

IF YOU SEE A <u>DEAD</u> EASTERN INDIGO SNAKE ON THE SITE:

- Cease clearing activities and immediately notify supervisor or the applicant's designated agent, **and** the appropriate USFWS office, with the location information and condition of the snake.
- Take photographs of the snake, if possible, for identification and documentation purposes.
- Thoroughly soak the dead snake in water and then freeze the specimen. The appropriate wildlife agency will retrieve the dead snake.

Telephone numbers of USFWS Florida Field Offices to be contacted if a live or dead eastern indigo snake is encountered:

North Florida Field Office – (904) 731-3336
Panama City Field Office – (850) 769-0552
South Florida Field Office – (772) 562-3909

PRE-CONSTRUCTION ACTIVITIES

1. The applicant or designated agent will post educational posters in the construction office and throughout the construction site, including any access roads. The posters must be clearly visible to all construction staff. A sample poster is attached.

2. Prior to the onset of construction activities, the applicant/designated agent will conduct a meeting with all construction staff (annually for multi-year projects) to discuss identification of the snake, its protected status, what to do if a snake is observed within the project area, and applicable penalties that may be imposed if state and/or federal regulations are violated. An educational brochure including color photographs of the snake will be given to each staff member in attendance and additional copies will be provided to the construction superintendent to make available in the onsite construction office (a final brochure for Plan compliance, to be printed double-sided on 8.5" x 11" paper and then properly folded, is attached). Photos of eastern indigo snakes may be accessed on USFWS and/or FWC websites.

3. Construction staff will be informed that in the event that an eastern indigo snake (live or dead) is observed on the project site during construction activities, all such activities are to cease until the established procedures are implemented according to the Plan, which includes notification of the appropriate USFWS Field Office. The contact information for the USFWS is provided on the referenced posters and brochures.

DURING CONSTRUCTION ACTIVITIES

1. During initial site clearing activities, an onsite observer may be utilized to determine whether habitat conditions suggest a reasonable probability of an eastern indigo snake sighting (example: discovery of snake sheds, tracks, lots of refugia and cavities present in the area of clearing activities, and presence of gopher tortoises and burrows).

2. If an eastern indigo snake is discovered during gopher tortoise relocation activities (i.e. burrow excavation), the USFWS shall be contacted within one business day to obtain further guidance which may result in further project consultation.

3. Periodically during construction activities, the applicant's designated agent should visit the project area to observe the condition of the posters and Plan materials, and replace them as needed. Construction personnel should be reminded of the instructions (above) as to what is expected if any eastern indigo snakes are seen.

POST CONSTRUCTION ACTIVITIES

Whether or not eastern indigo snakes are observed during construction activities, a monitoring report should be submitted to the appropriate USFWS Field Office within 60 days of project completion. The report can be sent electronically to the appropriate USFWS e-mail address listed on page one of this Plan.

CONSTRUCTION SPECIAL PROVISIONS
GULF STURGEON PROTECTION GUIDELINES
(PURSUANT TO NMFS AND USFWS)

The Gulf sturgeon (*Acipenser oxyrinchus desotoi*) is listed under the Endangered Species Act as threatened. It is managed under the joint jurisdiction of the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS). Potential habitat for the Gulf sturgeon is located within the limits of this project.

The following special provisions will be incorporated into any construction contract where involvement with sturgeon may occur:

The FDOT has coordinated with the NMFS and USFWS early in the project development stage. The following provisions are intended to avoid/ protect known spawning habitats, nursery areas, feeding areas and thermal refuges.

1. The Florida Department of Transportation (FDOT) shall advise all FDOT project personnel and Contractor personnel on the project that there are civil and criminal penalties for harming, harassing or killing sturgeon. The FDOT and the Contractor will be held responsible for any sturgeon harmed, harassed, or killed as a result of the project activity.

2. The FDOT shall provide information to all FDOT and Contract personnel for identification of sturgeon.

3. Appropriate work shift personnel will be instructed in the appearance, habits, biology, migratory patterns, and preservation of sturgeon. At least one of these trained personnel will be on site during construction activities to maintain a constant surveillance for these species, assure the cessation of activities (such as dredging, excess turbidity, and construction barge activity), which may endanger these species, and assure that uninhibited passage for the animals is provided.

4. Post signs on site warning of the presence of sturgeon, of their endangered status and federal protection, and precautions needed.

5. Turbidity from construction activity will be adequately controlled to prevent degradation of the quality and transparency of the water. When sturgeon are present, turbidity curtains of appropriate dimension will be used to restrict the animals' access to the work area. Pollution booms or turbidity curtains should use tangle resistant or hemp rope when anchoring, or employ surface anchors' to prevent entangling sturgeon. Continuous surveillance will be maintained in order to free animals which may become trapped in silt or turbidity barriers.

6. No dredging of the river bottom will be conducted for barge access.

7. Drilled shaft pile construction will be used whenever prudent and feasible as determined by FDOT.

8. Care shall be taken in lowering equipment or material below the water surface and into the stream bed. These precautions will be taken to ensure no harm occurs to any sturgeon which may enter the construction area undetected.

9. Construction debris shall not be discarded into the water.

10. If the use of explosives is necessary, the following protection measures will be employed for projects in FDOT's District 3

    a. In riverine areas:
        - No blasting will occur in known spawning, staging, feeding, or nursery areas.
        - In-water explosive work should be avoided between the months of April to October.
        - If explosive work becomes necessary within the April to October time frame, a non-lethal "Fish Scare" charge will be detonated one minute prior to detonation of the underwater blast.

    b. In estuarine areas:
        - No blasting will occur in known spawning, staging, feeding, or nursery areas.
        - In-water explosive work should be avoided between the months of October to April.
        - If explosive work becomes necessary within the October to April time frame, a non-lethal "Fish Scare" charge will be detonated one minute prior to detonation of the underwater blast.

    c. In the event that a sturgeon is killed during blasting, the NMFS and the USFWS will be notified immediately.

    National Marine Fisheries Service
    by email at:
    takereport.nmfsser@noaa.gov

    US Fish and Wildlife Service
    1601 Balboa Ave.
    Panama City, Florida 32405
    Tel: (850) 769-0552

11. Any sturgeon carcass will be secured on site or held in a freezer until an agency representative arranges for its transport for analysis.

12. Following completion of the project, a report summarizing any involvement with sturgeon will be prepared for USFWS and NMFS.

STANDARD MANATEE CONDITIONS FOR IN-WATER WORK

2011

The permittee shall comply with the following conditions intended to protect manatees from direct project effects:

a. All personnel associated with the project shall be instructed about the presence of manatees and manatee speed zones, and the need to avoid collisions with and injury to manatees. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act, the Endangered Species Act, and the Florida Manatee Sanctuary Act.

b. All vessels associated with the construction project shall operate at "Idle Speed/No Wake" at all times while in the immediate area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.

c. Siltation or turbidity barriers shall be made of material in which manatees cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers must not impede manatee movement.

d. All on-site project personnel are responsible for observing water-related activities for the presence of manatee(s). All in-water operations, including vessels, must be shutdown if a manatee(s) comes within 50 feet of the operation. Activities will not resume until the manatee(s) has moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the manatee(s) has not reappeared within 50 feet of the operation. Animals must not be herded away or harassed into leaving.

e. Any collision with or injury to a manatee shall be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1-888-404-3922. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Jacksonville (1-904-731-3336) for north Florida or Vero Beach (1-772-562-3909) for south Florida, and to FWC at ImperiledSpecies@myFWC.com

f. Temporary signs concerning manatees shall be posted prior to and during all in-water project activities. All signs are to be removed by the permittee upon completion of the project. Temporary signs that have already been approved for this use by the FWC must be used. One sign which reads *Caution: Boaters* must be posted. A second sign measuring at least 8 ½" by 11" explaining the requirements for "Idle Speed/No Wake" and the shut down of in-water operations must be posted in a location prominently visible to all personnel engaged in water-related activities. These signs can be viewed at MyFWC.com/manatee. Questions concerning these signs can be sent to the email address listed above.

CAUTION: MANATEE HABITAT

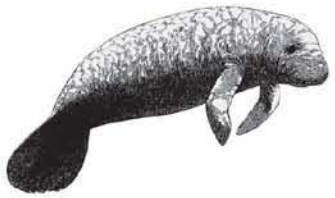
All project vessels

IDLE SPEED / NO WAKE

When a manatee is within 50 feet of work
all in-water activities must

SHUT DOWN

Report any collision with or injury to a manatee:



Wildlife Alert:

1-888-404-FWCC(3922)

cell *FWC or #FWC

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
263 13th Avenue South
St. Petersburg, FL 33701

SEA TURTLE AND SMALLTOOTH SAWFISH CONSTRUCTION CONDITIONS

The permittee shall comply with the following protected species construction conditions:

a. The permittee shall instruct all personnel associated with the project of the potential presence of these species and the need to avoid collisions with sea turtles and smalltooth sawfish. All construction personnel are responsible for observing water-related activities for the presence of these species.

b. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing sea turtles or smalltooth sawfish, which are protected under the Endangered Species Act of 1973.

c. Siltation barriers shall be made of material in which a sea turtle or smalltooth sawfish cannot become entangled, be properly secured, and be regularly monitored to avoid protected species entrapment. Barriers may not block sea turtle or smalltooth sawfish entry to or exit from designated critical habitat without prior agreement from the National Marine Fisheries Service's Protected Resources Division, St. Petersburg, Florida.

d. All vessels associated with the construction project shall operate at "no wake/idle" speeds at all times while in the construction area and while in water depths where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will preferentially follow deep-water routes (e.g., marked channels) whenever possible.

e. If a sea turtle or smalltooth sawfish is seen within 100 yards of the active daily construction/dredging operation or vessel movement, all appropriate precautions shall be implemented to ensure its protection. These precautions shall include cessation of operation of any moving equipment closer than 50 feet of a sea turtle or smalltooth sawfish. Operation of any mechanical construction equipment shall cease immediately if a sea turtle or smalltooth sawfish is seen within a 50-ft radius of the equipment. Activities may not resume until the protected species has departed the project area of its own volition.

f. Any collision with and/or injury to a sea turtle or smalltooth sawfish shall be reported immediately to the National Marine Fisheries Service's Protected Resources Division (727-824-5312) and the local authorized sea turtle stranding/rescue organization.

g. Any special construction conditions, required of your specific project, outside these general conditions, if applicable, will be addressed in the primary consultation.

Revised: March 23, 2006
O:\forms\Sea Turtle and Smalltooth Sawfish Construction Conditions.doc

APPENDIX D

UMAM

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
TIS SEIS Segment 1A (HFB Causeway)		Seagrass

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
911	E2AB3	Impact	

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
Tampa Bay	Class III	

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Seagrass bed is within Old Tampa Bay Adjacent to Howard Frankland Bridge Cswy.

Assessment area description

Within the assessment area there are three distinct seagrass beds (northwest, northeast and southeast corner) of the structure E bridge. The beds consist of *Halodule wrightii* and *Thalassia testudinum.* The density of grass varied but overall was medium to heavy thickness. The beds appear healthy and the overall water quality is good.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
HFB Causeway/I-275 S	

Functions	Mitigation for previous permit/other historic use
Provides habitat and feeding areas for a variety of marine species including essential fish habitat for juvenile fish. Seagrass beds are also important for water quality and sediment stabilization.	

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Shorebirds, juvenile fish, marine mammals	Manatee (*Trichechus manatus latirostrus*) (E)

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Some shorebirds observed

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
PB/DL	July and August 2016

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
TIS SEIS Segment 1A (HFB Causeway		Seagrass Bed
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Impact	PB/DL	July and August 2016

Scoring Guidance
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed

Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	w/o pres or current: 8	with: 0	The assessment area is part of a larger healthy seagrass bed that extends beyond the project limits. The adjacent upland area is limited to the Howard Frankland Bridge Causeway. The roadway (I-275) and bridge (Howard Frankland Bridge) limits some wildlife use.
.500(6)(b)Water Environment (n/a for uplands)	w/o pres or current: 9	with: 0	Tidal cycle and climate is appropriate for seagrass but water flow is affected by the neighboring navigational channel and bridge. Water depth is consistent with seagrass growth and there was no observed signs of hydrologic stress. Associated fish and invertebrate species is typical and the water visibility was normal.
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	w/o pres or current: 9	with: 0	Some but not all areas of seagrass with blades providing a canopy-type effect. Plant condition is generally good and regeneration appears normal. Overall density and quality varies from patchy to continuous. Epiphtic growth is normal; some algal growth.

Score = sum of above scores/30 (if uplands, divide by 20)	
current or w/o pres: 0.86	with: 0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres

Delta = [with-current]
-0.86

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
TIS SEIS Segment 1A (HFB Causeway)		Mangrove Habitat

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
612	E2F03	Impact	TBD

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
Old Tampa Bay	Class III	

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

North of I-275/Howard Frankland Bridge Causeway adjacent to Old Tampa Bay

Assessment area description

Mangrove shoreline and shoreline habitat adjacent to and north of the Howard Frankland Bridge Caueway/I-275

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
Old Tampa Bay	

Functions	Mitigation for previous permit/other historic use
Provides habitat and feeding areas	

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Shorebirds, small mammals and juvenile fish	Wood stork (E), potential foraging; state protected wading birds (T)-potential foraging

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Some shorebirds observed.

Additional relevant factors:

Causeway is artificial (fill) created for the original bridge construction. Mangrove habitat occurs along the the causeway.

Assessment conducted by:	Assessment date(s):
PB/DL	July/August 2016 and December 2017

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
TIS SEIS Segment 1A (HFB CSWY)		Mangrove
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Impact	PB/DL	July and August 2016 & December 2017

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

		w/o pres or current	with
.500(6)(a) Location and Landscape Support	Old Tampa Bay provides supporting habitat for the species that may utilize the shoreline. Mangroves are adjacent to and supported by Old Tampa Bay to the north and west of the area. However, the south and east boundaries are adjacent to an interstate (I-275) and is associated ramps.	8	0
.500(6)(b)Water Environment (n/a for uplands)	The assessment area is the shoreline immediately adjacent to Old Tampa Bay and to I-275. There are no impediments to the hydrology and the water quality within the bay is good. There were no obvious pollutants (oil/grease). The shoreline consists of appropriate vegetation and the vegetation appears healthy.	8	0
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	There is sparse Brazilian pepper in the area, but the majority of the assessment area are native species typical of a mangrove wetland. The plants are healthy and show no obvious signs of stress.	8	0

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.8	0

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = -.008

Delta = [with-current]
-0.8

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
TIS SEIS Segment 1A		Salt Marsh Areas

FLUCCs code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
642		Impact	

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
Old Tampa Bay	Class III	

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Shoreline is immediately adjacent to Old Tampa Bay

Assessment area description

Salt Marsh Areas

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
Old Tampa Bay and Interstate Roadways	

Functions	Mitigation for previous permit/other historic use
Provides habitat and feeding areas	

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
Shorebirds	Wood Stork (E), Foraging and Wading

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):

Some shorebirds observed

Additional relevant factors:

Assessment conducted by:	Assessment date(s):
PB/DL	July and August 2016 & December 2017

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
TIS SEIS Segment 1A		Salt Marsh
Impact or Mitigation	**Assessment conducted by:**	**Assessment date:**
Impact	PB/DL	July and August 2016 and December 2017

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

		w/o pres or current	with
.500(6)(a) Location and Landscape Support	Old Tampa Bay provides supporting habitat for the species that may utilize the shoreline. There are no observed exotic species within proximity of the assessment areas. Although wildlife is not restricted from the bay major interstates and development are prevalent on the eastern boundary of the salt marsh. Adjacent shorelines within the area are primarily developed with commercial businesses.	7	0
.500(6)(b)Water Environment (n/a for uplands)	The assessment area is the shoreline immediately adjacent to Old Tampa Bay. There are no impediments to the hydrology and the water quality within the bay is good. There were no obvious pollutants (oil/grease). The shoreline consists of appropriate vegetation and the vegetation appears healthy.	8	0
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	There is no observed nuisance/exotic species within the assessment area. The plants are healthy and show no obvious signs of stress.	8	0

Score = sum of above scores/30 (if uplands, divide by 20)	current or w/o pres	with
	0.76	0

Delta = [with-current]
-0.76

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

If mitigation
Time lag (t-factor) =
Risk factor =

For impact assessment areas
FL = delta x acres

For mitigation assessment areas
RFG = delta/(t-factor x risk) =