

SELMON
EXPRESSWAY

South Selmon PD&E Study

**Project Environmental
Impact Report**

June 2021

PROJECT ENVIRONMENTAL IMPACT REPORT SUMMARY

1.0 Project Description and Purpose and Need:

a. Project Information:

Project Name: South Selmon Project Development and Environment (PD&E) Study

Project Limits: Himes Avenue to the Beginning of the Six-lane Section Near Whiting Street

County: Hillsborough County

ETDM Number (If applicable): Not Applicable

Tampa Hillsborough Expressway Authority Number: HI-0112

Project Manager: Robert Frey, Tampa Hillsborough Expressway Authority

b. Proposed Improvements:

The Tampa Hillsborough Expressway Authority (THEA) conducted a Project Development and Environment (PD&E) Study to evaluate capacity improvements along the Selmon Expressway [State Road (SR) 618] in Hillsborough County, Florida. The project limits extend from Himes Avenue to the beginning of the six-lane section near Whiting Street, approximately 4.5 miles. Capacity improvements evaluated included widening inside to the median, adding inside paved shoulders, and adding lanes by widening to the outside or constructing elevated lanes along the median. The improvements would be accommodated within existing right-of-way (ROW).

c. Purpose and Need:

The primary purposes of the South Selmon PD&E Study were to reduce congestion and improve safety along the corridor. Bottlenecks occur regularly at on- and off- ramp locations even though the existing capacity of the mainline currently meets demand, and there is a high frequency of crashes within the project limits. An additional goal of this study was how to address transportation demand, which is expected to increase and contribute to congestion and safety issues and do so within existing THEA ROW.

2.0 Environmental Analysis

Issues/Resources	Substantial Impacts? ¹				Supporting Information ²
	Yes	No	Enhance	No Inv	
A. SOCIAL and ECONOMIC					
1. Social	[]	[✓]	[]	[]	Section 4.3.2
2. Economic	[]	[]	[✓]	[]	Section 4.3.3
3. Land Use Changes	[]	[✓]	[]	[]	Section 4.3.1
4. Mobility	[]	[]	[✓]	[]	Section 4.3.4
5. Aesthetic Effects	[]	[]	[✓]	[]	Section 4.3.5
6. Relocation Potential	[]	[]	[]	[✓]	Not Present
B. CULTURAL					
1. Historic Sites/Districts	[]	[✓]	[]	[]	Section 4.4.1
2. Archaeological Sites	[]	[✓]	[]	[]	Section 4.4.2
3. Recreational Areas and Protected Lands	[]	[✓]	[]	[]	Section 4.4.3
C. NATURAL					
1. Wetlands and Other Surface Waters	[]	[✓]	[]	[]	Section 4.5.1
2. Aquatic Preserves and Outstanding FL Waters	[]	[]	[]	[✓]	Not Present
3. Water Resources	[]	[✓]	[]	[]	Section 4.5.2 and Attachment A
4. Wild and Scenic Rivers	[]	[]	[]	[✓]	Not Present
5. Floodplains	[]	[✓]	[]	[]	Section 4.5.3
6. Coastal Barrier Resources	[]	[]	[]	[✓]	Not Present
7. Protected Species and Habitat	[]	[✓]	[]	[]	Section 4.5.4
8. Essential Fish Habitat	[]	[✓]	[]	[]	Section 4.5.5
D. PHYSICAL					
1. Highway Traffic Noise	[✓]	[]	[]	[]	Section 4.6.1
2. Air Quality	[]	[✓]	[]	[]	Section 4.6.2
3. Contamination	[]	[✓]	[]	[]	Section 4.6.3
4. Utilities and Railroads	[]	[✓]	[]	[]	Section 4.6.4
5. Construction	[]	[✓]	[]	[]	Section 4.6.5
6. Bicycles and Pedestrians	[]	[]	[✓]	[]	Section 4.6.6
7. Navigation	[]	[✓]	[]	[]	Section 4.6.7

Notes:

¹ Substantial Impacts?: Yes = Substantial Impact; No = No Substantial Impact; Enhance = Enhancement; No Inv = Issue absent, no involvement.

² Supporting information is documented in the referenced section below.

3.0 Anticipated Permits

Agency	Permit Type	Concurrent Coordination
U.S. Coast Guard (USCG)	Section 9 – Bridge Permit	U.S. Army Corps of Engineers (USACE)
Port Tampa Bay	Standard Work Permit	
USACE	Section 404 – Nationwide Permit (NWP) #14 or NWP#15	U.S. Department of Interior of U.S. Department of Interior Fish and Wildlife Service (USFWS) and National Marine Fisheries Services (NMFS)
	Section 10 / Section 408	USCG and Port Tampa Bay
Southwest Florida Water Management District (SWFWMD)	Environmental Resource Permit	
Florida Department of Environmental Protection (FDEP)	National Pollutant Discharge Elimination System	
Hillsborough County Environmental Protection Commission (EPC)	Miscellaneous Impacts in Wetlands	City of Tampa

4.0 Engineering Analysis

Because future traffic (2046) shows a need for eight lanes, two build alternatives (Alternative 2 and 6) were further developed and refined based on study analysis results. Alternative 6 provides the same outside widening footprint as in Alternative 2. However, Alternative 6 was developed to provide an interim 6-lane condition and an ultimate 8-lane condition. The engineering analysis is contained in the Preliminary Engineering Report (PER).

5.0 Commitments

a. Cultural Resources

If prehistoric or historic artifacts, such as pottery or ceramics, projectile points, dugout canoes, metal implements, historic building materials, or any other physical remains that could be associated with Native American, early European, or American settlement are encountered at any time within the project area, construction activities involving subsurface disturbance in the vicinity of the discovery will cease. The Florida Department of State, Division of Historical Resources, Compliance Review Section will be contacted. The subsurface construction activities will not resume without verbal and/or written authorization. In the event that unmarked human remains are encountered during construction activities, all work will stop immediately, and the proper authorities notified in accordance with Section 872.05, Florida Statutes.

b. Natural Resources

To protect listed wildlife, wildlife habitat, plants, wetlands, and other surface waters, THEA will abide by standard resource protection measures in addition to the following commitments:

- THEA will require the construction contractor to adhere to the most current NMFS Construction Special Provisions - Gulf Sturgeon Protection Guidelines for the protection of the Gulf Sturgeon.
- THEA will require that the construction contractor adhere to the most current NMFS's Sea Turtle and Smalltooth Sawfish Construction Conditions during project construction.
- THEA will implement the USACE Standard Manatee Conditions for In-Water Work (most current version). These guidelines will be incorporated as part of the final project design. Additional special conditions for manatees will be addressed during construction and include the following:
 - 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. Existing slow speed or no wake zones will apply to work boats and barges associated with construction.
 - The spacing between the bridge pilings will be at least 60 inches to allow for manatee movement in between the pilings. If a minimum of 60-inch spacing is not provided between piles, further coordination will be conducted with the USFWS.
 - Any culverts larger than eight inches and less than eight feet in diameter will be grated to prevent manatee entrapment.
- THEA will implement a Marine Wildlife Watch Plan (MWWP) for the Florida manatee during project construction to eliminate the possibility of construction-related manatee injury or death. These guidelines will be incorporated into the final project design.
- THEA will coordinate with the NMFS, USFWS, and/or USACE regarding potential impacts associated with pile driving activities needed for bridge construction over the Hillsborough River.
 - The size/style of piles, quantity of piles, number of piles driven per day, number of strikes per pile, and other information needed to determine potential hydroacoustic impacts to marine wildlife is currently unknown.
 - THEA will inform the construction contractor of the requirement to use a ramp-up procedure during the installation of piles. This procedure allows for a gradual increase in noise level to give sensitive species ample time to flee prior to initiation of full noise levels. This approach can reduce the likelihood of secondary or sub-lethal effects from sound impulses associated with pile driving.
- No nighttime in-water work will be performed. In-water work will be conducted from official sunrise until official sunset times.

c. Highway Traffic Noise

Based on the traffic noise analysis, few locations along the proposed project improvements for both Alternative 2 and 6 met the federal and state criteria for noise walls. However, for the preferred alternative (Alternative 6), THEA has committed to building walls the entire length of the project on both sides of the roadway.

d. Contamination

- For those locations with a risk ranking of MEDIUM and HIGH, Level II field screening should be considered during future project implementation phases.
- Additional information may become available or site-specific conditions may change from the time the Contamination Screening Evaluation Report (CSER) was prepared and should be considered prior to proceeding with roadway construction.

6. Preferred Alternative

Based on the public input received at the Alternatives Update Virtual Meeting and the results of the alternatives analysis, THEA has identified Alternative 6 as the Preferred Alternative. Alternative 6 was selected as the Preferred Alternative because it is the most cost feasible in the short-term; adds needed capacity and addresses traffic congestion well into the future; focuses near-term construction to the outside and minimizes future reconstruction; and provides walls for the full length of the project on both sides of the roadway.

In the interim phase, the Preferred Alternative would provide for a 6-lane section by widening to the outside and therefore would not require inside bridge widening at all overpass locations. Alternative 6 in the ultimate phase would be able to accommodate a future 8 lane section without outside widening. The roadway typical section in the interim phase for Alternative 6 consists of three 12-foot lanes in each direction with 18-foot inside shoulders and five-foot outside shoulders.

7. Approved for Public Availability

(Before public hearing when a public hearing is required)



Tampa Hillsborough Expressway Authority
Robert Frey, Director of Planning and Innovation

2 13 21
Date



Tampa Hillsborough Expressway Authority
Joseph Waggoner, CEO

2 13 21
Date

8.0 Public Involvement

1. A public hearing is not required.
2. A public hearing was held on February 25, 2021. The draft PEIR was publicly available, and comments were allowed to be submitted to the contact below until March 8, 2021.

Contact Information: Communications Department
Tampa Hillsborough Expressway Authority
1104 East Twiggs Street
Suite 300
Tampa, Florida 33602
info@selmonstudies.com

3. A public hearing was held on and the transcript is available.
4. An opportunity for a public hearing was afforded and was documented.

9.0 Approval of Final Document

This project has been developed without regard to race, color, national origin, age, sex, religion, disability, or family status.

The final PEIR reflects consideration of the PD&E Study and the Public Hearing.

Tampa Hillsborough Expressway Authority
Joe Waggoner, CEO

____ / ____ / ____
Date

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Attachment A: Water Quality Impact Evaluation (WQIE)

1.0 Introduction

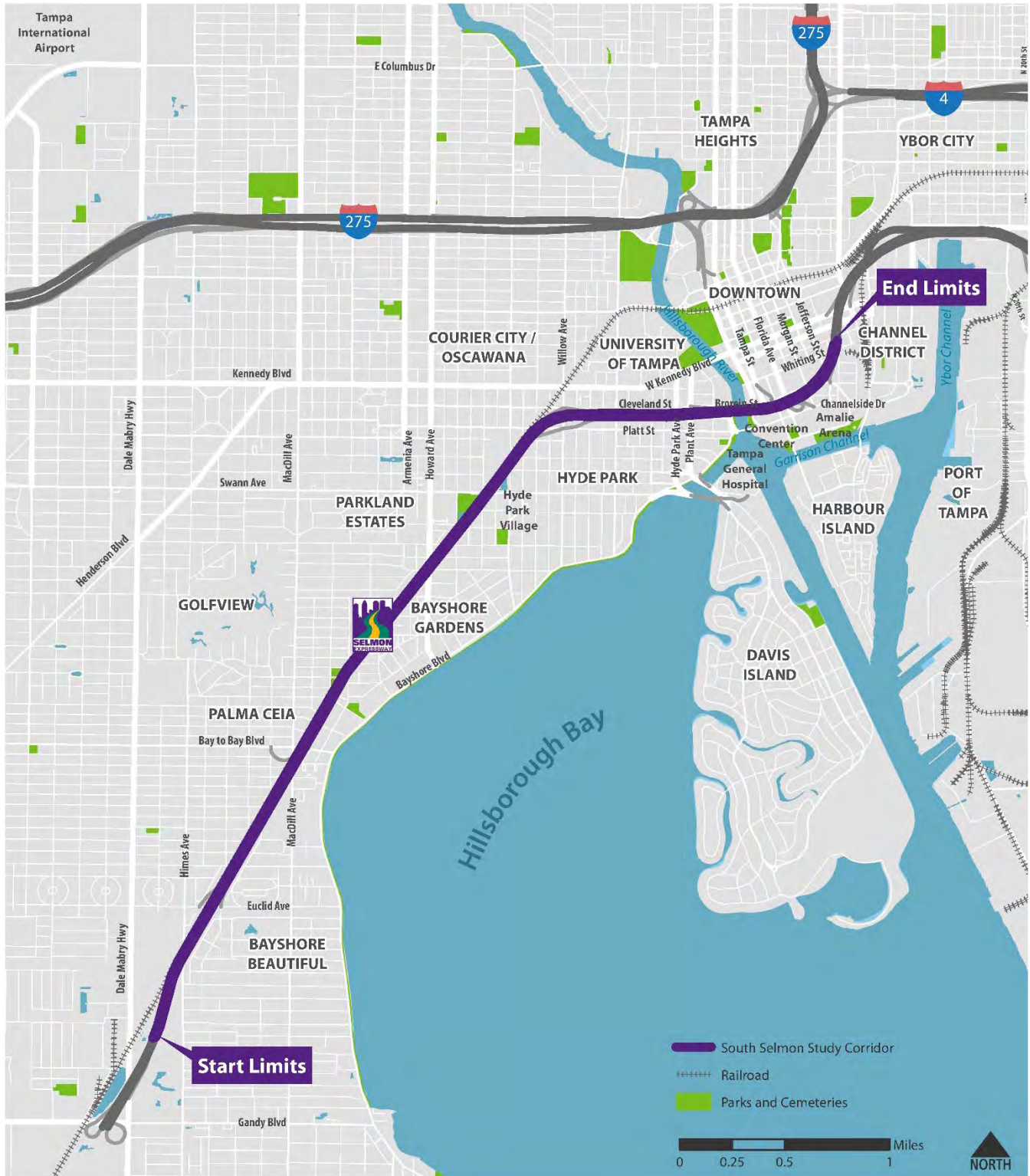
The purpose of this Project Environmental Impact Report (PEIR) is to document the environmental analyses performed to support decisions related to project alternatives. In addition, it summarizes existing conditions, documents the purpose of and need for the project, and documents other data related to preliminary design concepts. These preliminary design concepts establish the functional or conceptual requirements that will be the starting point for the final design phase. This PEIR was prepared using the Florida Department of Transportation (FDOT) Project Development and Environment (PD&E) Manual, Part 1 Chapter 10.

1.1. Project Description

The Tampa Hillsborough Expressway Authority (THEA) conducted a PD&E Study to evaluate capacity improvements along the Selmon Expressway [State Road (SR) 618] in Hillsborough County, Florida. The project limits extend from the eastern project limit of the Selmon Expressway West Extension Project to the beginning of the six-lane section near Whiting Street, a distance of approximately 4.5 miles, as shown in **Figure 1**. Capacity improvements evaluated included widening inside to the median, adding inside paved shoulders, and adding lanes by widening to the outside or constructing elevated lanes along the median. The ability of technology to improve efficiency and capacity was also evaluated. The improvements would be accommodated within existing right-of-way (ROW).

The Selmon Expressway is a limited access, tolled facility providing east-west connectivity from Interstate 75 (I-75) to downtown Tampa and United States Highway 92 (US 92). The Selmon Expressway within the project limits currently consists of two 12-foot wide travel lanes in each direction separated by a 38-foot paved median with a concrete barrier wall. The outside shoulders are eight feet wide and contain either shoulder gutter with guardrail or shoulder gutter with barrier wall. The facility is elevated through downtown Tampa and includes structures over the Hillsborough River and multiple roadway facilities.

Figure 1: Project Location



2.0 Purpose and Need

The primary purposes of the South Selmon PD&E Study were to reduce congestion and improve safety along the corridor. Bottlenecks occur regularly at on- and off- ramp locations even though the existing capacity of the mainline currently meets demand, and there is a high frequency of crashes within the project limits. An additional goal of this project was to address transportation demand, which is expected to increase and contribute to congestion and safety issues.

The on- and off- ramps experience frequent bottlenecks backing up onto the mainline due to deficient acceleration/deceleration lanes. Successive on- ramps, as well as off- ramps that split into multiple lanes, contribute to congestion and add safety conflict points. Successive on- ramps include Morgan Street and Tampa Street. Off- ramps that split into multiple lanes past the exit include Brorein Street, Channelside Drive/Florida Avenue, Plant Avenue, Willow Avenue, and Bay-to-Bay Boulevard. Additionally, periodic off- ramp closures at the downtown exits create bottlenecks.

Over the five year period from 2013 to 2017, a total of 237 crashes occurred on the Selmon Expressway mainline or its ramps. The merge and weave areas on Selmon Expressway create safety conflict points. The proposed improvements would need to be coordinated with the South Selmon Safety Project, which recently paved the median and constructed median barrier walls from Himes Avenue to South Boulevard. In addition to crashes on the Selmon Expressway, several intersection points at the on- and off- ramps experience frequent crashes that can cause backups onto the mainline. High-crash locations include the eastbound off- ramp to Channelside Drive and Morgan Street and the eastbound and westbound off- ramps to Willow Avenue (*THEA: Arterial Safety Analysis March 2019*).

While the existing capacity meets current demand, future transportation demand is expected to exceed the existing capacity and increase the existing congestion and safety issues. Traffic along this portion of the Selmon Expressway has nearly doubled in the last 10 years (*THEA: 2017 Traffic and Revenue Report*). The existing Level of Service (LOS) is C from the eastern project limit to Willow Avenue and it is projected to fail by 2033. The existing LOS is D from Willow Avenue to Whiting Street (northern project limit), and it is projected to fail by 2025. The University of Florida Bureau of Economic and Business Research (BEER) estimates the 2019 population of Hillsborough County (County) at 1.47 million and the medium 2045 projection for population growth at 1.96 million, an increase of 33 percent.

This facility is vital to accommodating the economic and social demands of the region as population and employment opportunities in the region grow. The Selmon Expressway provides regional connectivity between several densely populated areas and regional attractors, including Pinellas County and St. Petersburg via the Gandy Boulevard Bridge, MacDill Air Force Base, Downtown Tampa, Port Tampa Bay, and Brandon. It also serves as an Alternative to Interstate 4 (I-4), I-75, and Interstate 275 (I-275) during road closures and is a critical corridor for hurricane evacuations.

3.0 Alternatives

In addition to the No-Build Alternative, five preliminary alternative configurations (Alternatives 1 through 5) were considered for the PD&E Study.

3.1. Development of Build Alternatives

The process for developing the Build Alternatives included four steps to develop, screen, and refine alternatives. The following describes the process for developing the Build Alternatives during this study.

STEP 1 – IDENTIFY PRELIMINARY ALTERNATIVES. Five preliminary alternatives (shown in **Figure 2**) were initially developed based on the purpose and need for the project and an understanding of the existing conditions and constraints along the corridor. The alternatives were developed to limit the need to expand beyond the existing ROW and to avoid impacting adjacent properties and the CSX railroad while maintaining the same access at existing ramp locations. Alternatives initially identified are described below:

<p>Alternative 1 Widen bridges to the inside and restripe the existing lanes and inside paved shoulders to accommodate six lanes. No outside widening is proposed.</p>	<p>Alternative 2 Widen bridges to the inside, widen roadway and bridges 9-feet to the outside directions and restripe the existing lanes and inside paved shoulders to accommodate an eight-lane section.</p>	<p>Alternative 3 Maintain the four-lane at-grade typical section and add two elevated limited access lanes (one in each direction) in the median.</p>	<p>Alternative 4 Maintain the four-lane at-grade typical section and add four elevated limited access lanes (two in each direction) in the median.</p>	<p>Alternative 5 Widen bridges to the inside and restripe the existing lanes and inside paved shoulders to accommodate six lanes at grade; add four elevated limited access lanes (two in each direction) in the median.</p>
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Figure 2: Preliminary Alternatives



STEP 2 – SCREEN PRELIMINARY ALTERNATIVES. Based on a preliminary evaluation of future traffic needs for 2046 and an evaluation of costs, Alternatives 3, 4 and 5 were eliminated from consideration (as shown in **Figure 3**). Because future traffic (2046) shows a need for 8-lanes, Alternative 1 was modified and a new alternative, Alternative 6, was developed to provide an interim 6-lane condition and an ultimate 8-lane condition. In the interim or near-term phase, Alternative 1 widens to the inside first and Alternative 6 widens to the outside first.

Figure 3: Preliminary Alternatives – Initial Screening



STEP 3 – SECONDARY SCREENING. Following further analysis, Alternative 1 was eliminated (as shown in **Figure 4**) because it would require demolition of interim improvements and significant reconstruction to widen to the outside in the ultimate phase.

Figure 4: Preliminary Alternatives – Secondary Screening



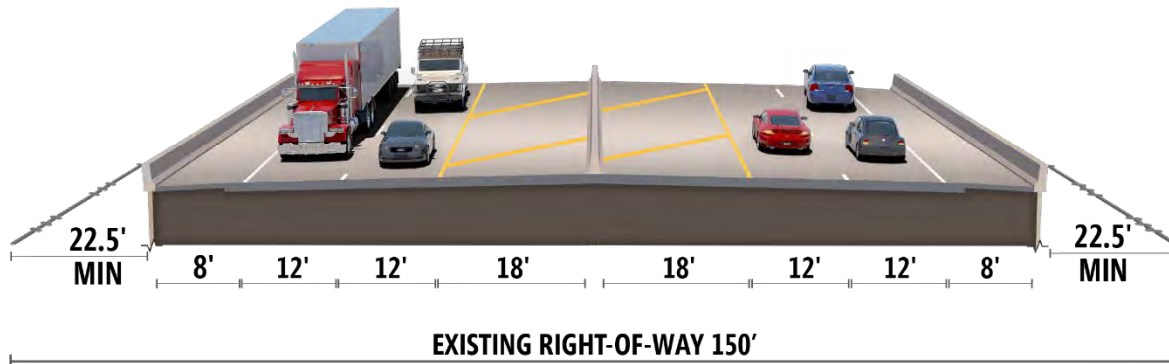
STEP 4 – REFINE ALTERNATIVES. The two remaining build alternatives (Alternatives 2 and 6) were further developed and refined based on study analysis results. Details on each alternative are provided in the following sections.

3.2. No-Build Alternative

The No-Build Alternative would maintain the existing configuration along the study corridor. Within the study limits, the existing typical section of the Selmon Expressway consists of two 12-foot wide travel lanes in each direction separated by a 38-foot paved median with a concrete barrier wall. The inside shoulders are 18 feet wide which is a recent improvement from the South Selmon Safety Project. The outside shoulders are eight feet wide and contain either shoulder gutter with guardrail or shoulder gutter with barrier wall. **Figure 5** shows the existing typical section. The facility is elevated through downtown Tampa and includes structures over Hillsborough River and multiple roadway facilities.

The No-Build Alternative considers what would happen in the future if the proposed project is not built. It includes the routine maintenance improvements of the existing roadway and assumes no improvements beyond any other currently programmed, committed and funded roadway projects. While the No Build Alternative does not meet the project needs, it provides a baseline condition against which to compare and measure the effects of all the Build Alternatives.

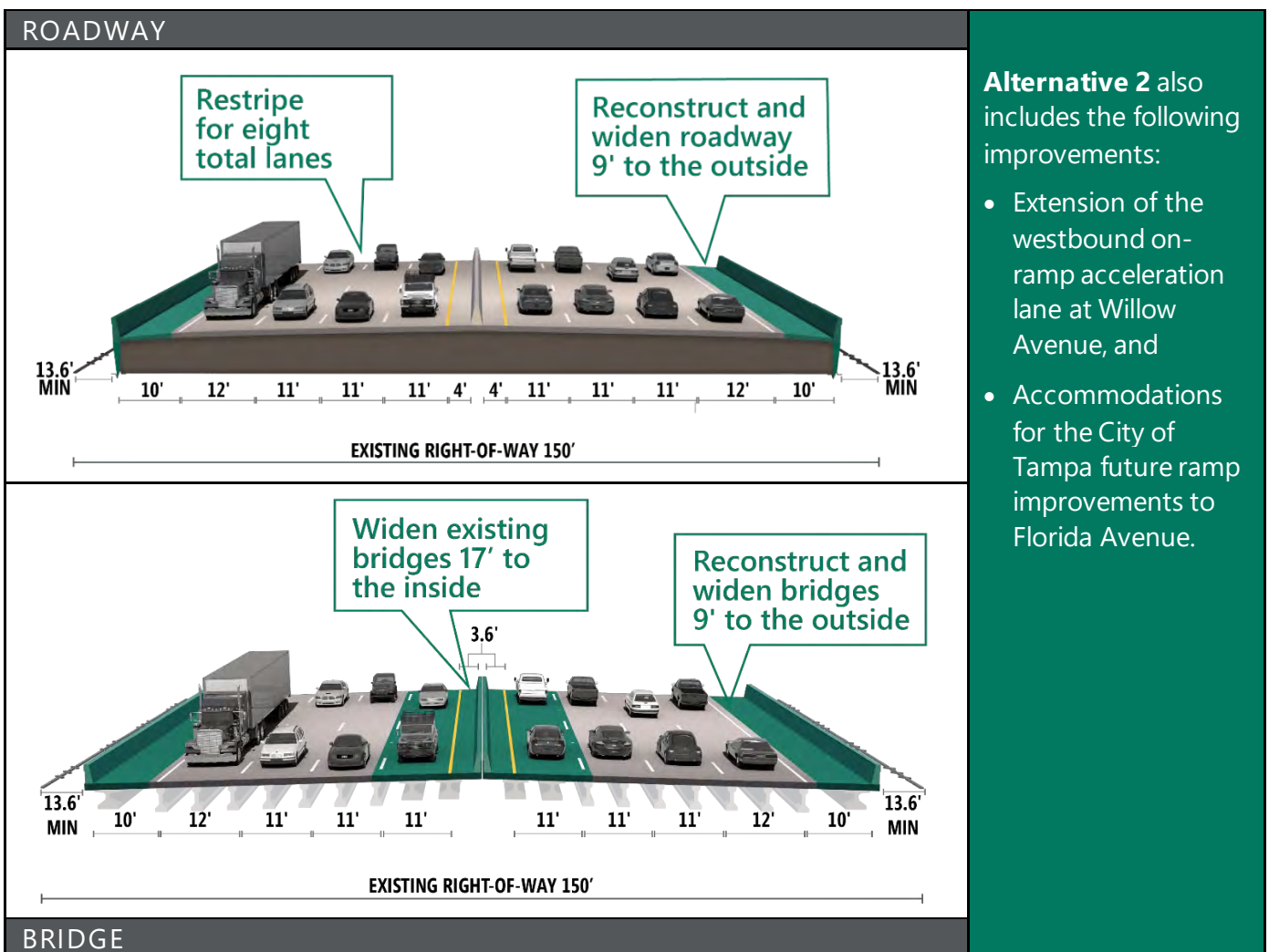
Figure 5: Existing Typical Section



3.3. Alternative 2 – Eight lanes at-grade with outside widening

Alternative 2 proposes to utilize the improvements provided by the South Selmon Safety Project by restriping the existing lanes and inside paved shoulders and widening 9-feet to the outside in both directions to accommodate an eight-lane section. The typical section for Alternative 2 consists of three 11-foot lanes and one 12-foot outside lane in each direction with four-foot inside shoulders and 10-foot outside shoulders (see **Figure 6**). The existing outside barrier wall would be removed and a new retaining wall with barrier would be constructed in order to accommodate the 10-foot outside shoulder. The existing median barrier wall would remain. Alternative 2 requires inside and outside widening of the existing bridges along the corridor to match the proposed roadway section.

Figure 6: Alternative 2 – Roadway and Bridge



3.4. Alternative 6 – Six lanes at-grade with outside widening

Alternative 6 was developed to provide the same outside widening footprint as shown in Alternative 2 (widening 9-feet to the outside in both directions). In the interim phase (**Figure 7**), Alternative 6 provides for a 6 lane section by widening to the outside and therefore does not require inside bridge widening at all overpass locations. Alternative 6 in the ultimate phase (**Figure 8**) would be able to accommodate a future 8-lane section without outside widening. The roadway typical section in the interim phase for Alternative 6 consists of three 12-foot lanes in each direction with 18-foot inside shoulders (utilizing improvements provided by the South Selmon Safety Project) and five-foot outside shoulders. The existing outside barrier wall would be removed and a new retaining wall with barrier would be constructed in order to accommodate the outside widening. The existing median barrier wall would remain. Existing bridges along the corridor would be widened to the outside to the same extent as shown in Alternative 2. Unless it is required to maintain ingress and egress at the interchanges, all overpass bridges would not be widened to the inside during the interim phase and would maintain the existing 4-foot inside shoulder. Bridges that require both inside and outside widening would provide a 10-foot minimum inside shoulder (Himes, Euclid, El Prado, and Platt).

Figure 7: Alternative 6 – Interim Roadway and Bridge

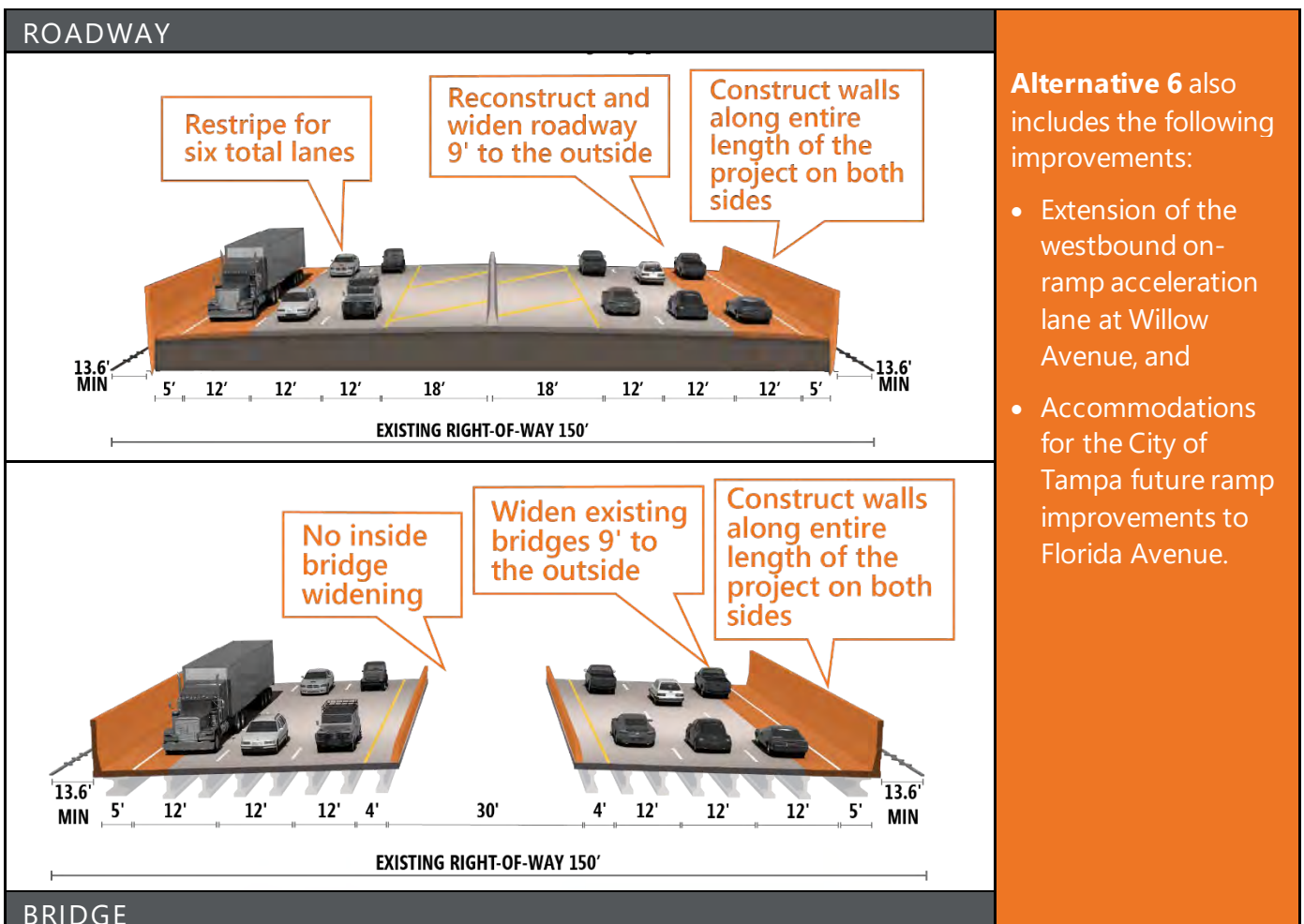
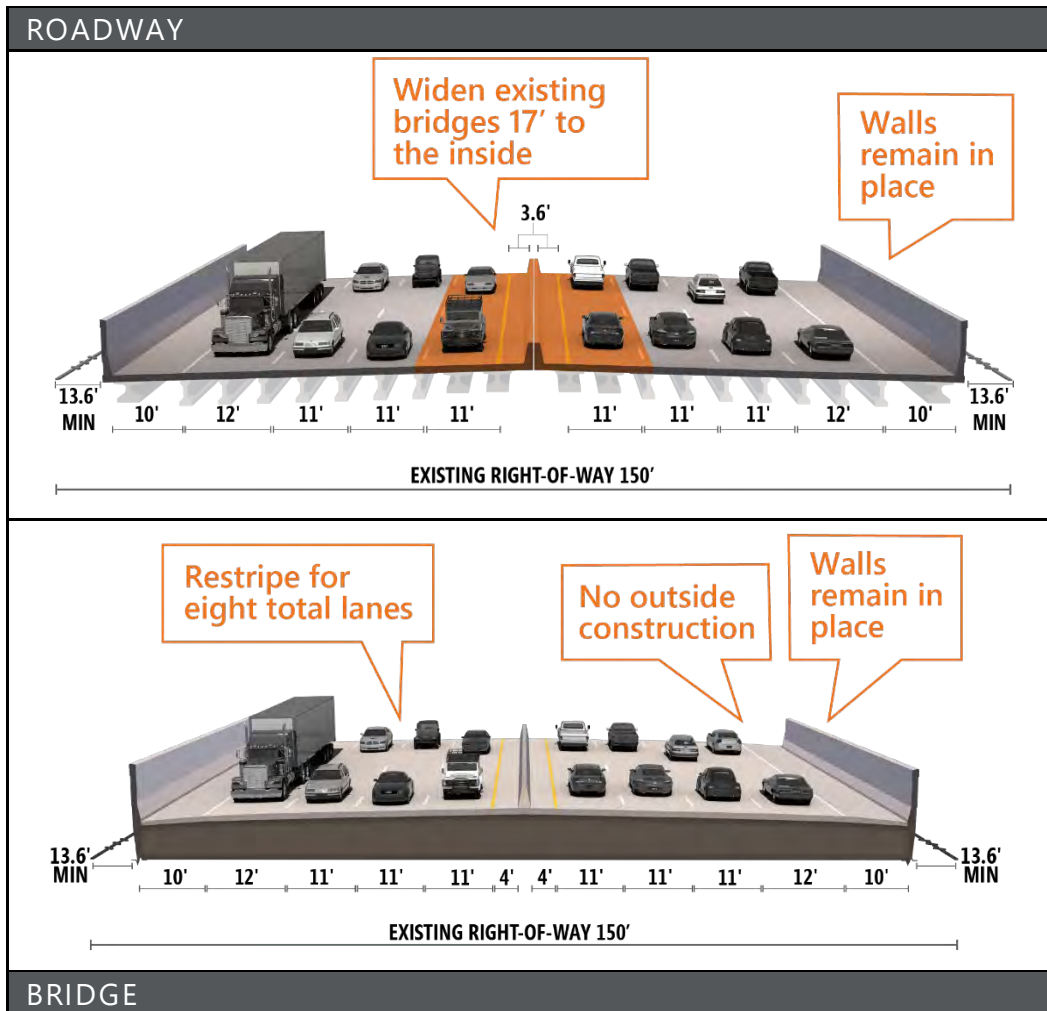


Figure 8: Alternative 6 – Ultimate Bridge and Roadway



- Alternative 6** also includes the following improvements:
- Extension of the westbound on-ramp acceleration lane at Willow Avenue, and
 - Accommodations for the City of Tampa future ramp improvements to Florida Avenue.

3.5. Engineering Analysis

As described above, because future traffic (2046) shows a need for 8-lanes, two build alternatives (Alternative 2 and 6) were further developed and refined based on study analysis results. Alternative 6 provides the same outside widening footprint as in Alternative 2. However, Alternative 6 was developed to provide an interim 6-lane condition and an ultimate 8-lane condition. The engineering analysis is contained in the Preliminary Engineering Report (PER).

The following main engineering features were considered in the development and analysis of Alternatives 2 and 6.

3.5.1. Traffic Operations and Safety

The future travel demand of the Selmon Expressway within the project limits was documented in the Project Traffic Analysis Report (PTAR). The PTAR summarizes the traffic analysis performed for Existing Year 2019, Opening Year 2026, Interim Year 2036, and Design Year 2046. The No Build Alternative and Alternatives 2 and 6 were analyzed in the traffic simulation model, VISSIM, for the design year (2046). Density, speed, total volume processed, and travel times were the measures of effectiveness (MOEs) extracted for the mainline. Delay and maximum queue output were extracted for the intersections within the study area. Network-wide MOEs were also extracted from each model. Alternatives 2 and 6 generally show better results than the No Build Alternative.

The results of the operational analysis show that Alternative 6 and Alternative 2 are expected to reduce the combined AM and PM peak-period total delay by 2418 and 1424 hours, respectively. Additional operational benefit is expected if improvements were to be made at the intersection terminals and along the interchange arterials that would allow the arterials to absorb and deliver traffic to the Selmon Expressway in a more efficient manner.

A Highway Safety Manual (HSM) Predictive Crash Analysis was conducted to compare the anticipated number of crashes between the No Build Alternative and Alternative 6 within the study period. The results show that there would be an anticipated reduction in crashes of approximately 17 percent over the length of the study period by implementing Alternative 6. This reduction is most likely due to the increased capacity, wider inside and outside shoulder widths, and other safety improvements along the corridor under Alternative 6.

Under Alternative 6, the Selmon Expressway corridor is expected to experience reductions in possible injury and property damage only type crashes of approximately 22 and 18 percent, respectively. Alternative 6 is also expected to reduce the number of total multiple vehicle crashes along the Selmon Expressway by over 29 percent. This is most likely due to the additional lane in each direction of travel and larger shoulders. These features may allow vehicles more opportunities to avoid crashes that would result in sideswipes or rear-end collisions.

Additionally, the No Build Alternative and Alternative 6 crash rates were compared to the critical crash rates for each year and the average of all years in the project's design life. The critical crash rate is similar between the No Build Alternative and Alternative 6 for all years. The crash rate for the No Build Alternative is expected to be less than the critical crash rate until 2035, at which point it becomes

greater than the critical crash rate. The overall crash rate for the average of all years in the project’s design life for the No Build Alternative also shows the crash rate exceeding the critical crash rate. Alternative 6 shows crash rates less than the critical crash rate for each year and the average of all years in the project’s design life. The severity rate, based on a scale from the Minnesota Department of Transportation Traffic Safety Fundamentals Handbook, is also predicted to be lower for Alternative 6 than for the No Build Alternative for each year and the average of all years in the project’s design life.

3.5.2. Interchanges

Within the project limits, there are eight arterial roadways with access to or from the Selmon Expressway as summarized in **Table 1**. The interchange types within the project limits are anticipated to remain the same. Both Alternatives 2 and 6 widen the roadway and bridges nine feet to the outside. As such, the modifications needed at interchange ramp locations would be the same for each alternative. Alternatives 2 and 6 assume the following improvements to interchange ramps:

- Extension of the westbound on- ramp acceleration lane at Willow Avenue, and
- Accommodations for future ramp improvements to Florida Avenue as part of THEA’s Whiting Street PD&E Study.

Table 1: Interchanges

Interchange	Milepost of Crossroad	Interchange Type	Description
Euclid Avenue	1.245	Partial Diamond	Provides eastbound ingress and westbound egress (exit 2)
Bay to Bay Boulevard	2.121	Trumpet	Provides eastbound ingress and westbound egress (exit 3)
Willow Avenue	4.140	Diamond	Provides eastbound and westbound ingress and egress (exit 4)
Plant Avenue	4.747	Partial Diamond	Provides eastbound ingress and westbound egress (exit 5)
Tampa Street	5.109	Partial Trumpet	Provides westbound ingress only
Florida Avenue	5.218	Partial Cloverleaf Interchange	Provides eastbound egress (exit 6a)
Morgan Street (Downtown Tampa)	5.332	Direct Connect	Provides eastbound egress and westbound ingress and egress (exit 6b and 7)
North Jefferson Street	5.456	Partial Diamond	Provides eastbound ingress only

Source: Florida Department of Transportation Straight Line Diagram

3.5.3. Railings and Walls

The existing guardrail and barrier wall on the outside of the Selmon Expressway would be removed as a result of the proposed widening in Alternatives 2 and 6. Both Alternatives assume barrier walls on the outside of the proposed shoulders as roadside protection. Additionally, due to the 13.6 feet width remaining between the outside of the proposed widening and the ROW, retaining walls are also

assumed below the proposed barrier walls. Most of the project limits are accepting offsite runoff so the remaining space between the barrier/retaining wall was assumed to be utilized for drainage and maintenance purposes.

All existing bridges within the project limits with the exception of the downtown viaduct bridge have sub-standard traffic railings on the inside and outside. The build alternatives assume removal and replacement of the inside and outside traffic railings on all bridges to meet current safety requirements. Alternative 2 proposes widening all bridges within the project limits; therefore, the widened bridge would include a new railing on both the inside and outside. Alternative 6 widens all bridges to the outside but only widens bridges to the inside where necessary to maintain ingress and egress at the interchanges during the interim phase. However, the bridge railings would be replaced during the interim phase on the inside regardless of widening. A 3.5 feet wide section of existing bridge on the inside was assumed to be removed and reconstructed to properly tie in the new railing to the bridge deck.

As summarized in Section 4.6.1, a highway traffic noise analysis was performed as part of this study and few locations along the proposed project improvements for both Alternative 2 and 6 met the federal and state criteria for noise walls. However, for Alternative 6, THEA has committed to building walls the entire length of the project on both sides of the roadway. These walls would be mounted on top of the proposed outside barrier walls, except for the noise walls located along the eastbound Willow Avenue off ramp where the ROW opens up and allows space for ground mounted noise walls.

3.5.4. Structures and Bridges

All bridges through the corridor were load rated to see if the existing bridges could be widened or would need to be replaced or strengthened per FDOT Structures Design Guidelines Figure 7.1.1-1 "Widening/Rehabilitation Load Rating Flow Chart". Existing beams and girders were rated to include the final proposed condition, including the barrier replacement and addition of a wall on the outside of the bridge. Note that the assumption of lightweight concrete for barriers and walls was used to minimize additional loads on the existing bridges. Normal weight concrete would be used on the roadway portion. Deck replacement was also considered for the load rating based on the current condition of the deck as noted in the Inspection Reports. Based on the Inspection Reports and discussions with THEA, only two bridge decks were slated for replacement: Bridge 100308 over Himes Avenue and Bridge 100314 over MacDill Avenue and Bay-to-Bay Boulevard. These bridges were also rated for the final condition using an eight-inch composite lightweight concrete deck to minimize additional dead load on existing beams. Following the FDOT guidelines, all existing bridges were able to be widened with two design variations. For detailed calculations and results, refer to the Bridge Report.

Because Alternative 2 and Alternative 6 have the same widening limits, the only difference from a bridge load rating perspective is that the inside exterior beams would remain in Alternative 6 in the interim phase. The load rating took this into consideration, ensuring that existing inside exterior beams would also be able to handle the Alternative 6 interim conditions. Note that for bridge widening, new beams were laid out such that no existing beam tributary area is increased.

Span 4 through Span 8 of the Viaduct Segment 1 cross the Hillsborough River. Substructure and foundation located in the Hillsborough River shall be designed for vessel collision. Both Alternatives 2 and 6 would widen to the outside to the same extents over the Hillsborough River. The difference between the two alternatives is that Alternative 2 would also widen to the inside whereas the inside bridge widening for Alternative 6 over the river would not occur until the ultimate phase of construction.

3.6 Preferred Alternative

Based on the public input received at the Alternatives Update Virtual Meeting (discussed in Section 7.2) and the results of the alternatives analysis, THEA has identified Alternative 6 as the Preferred Alternative. Alternative 6 was selected as the Preferred Alternative because it is the most cost feasible in the short-term; adds needed capacity and addresses traffic congestion well into the future; focuses near-term construction to the outside and minimizes future reconstruction; and provides walls for the full length of the project on both sides of the roadway.

In the interim phase, the Preferred Alternative provides for a 6-lane section by widening to the outside and therefore does not require inside bridge widening at all overpass locations. Alternative 6 in the ultimate phase would be able to accommodate a future 8 lane section without outside widening. The roadway typical section in the interim phase for Alternative 6 consists of three 12-foot lanes in each direction with 18-foot inside shoulders and five-foot outside shoulders.

Following identification of Alternative 6 as the Preferred Alternative, further refinements were made to the design concept including improvements to the ramps at Euclid Avenue, Willow Avenue, and Plant Avenue. Pond locations were also identified along with proposed bridge improvements. Proposed pond locations are within the existing THEA ROW. However, pond locations would be evaluated in the final project design phase for social and economic, cultural, natural, and physical environmental issues/resources.

4.0 Environmental Analysis

An analysis of the social and economic, cultural, natural, and physical environmental issues/resources was performed as part of the PD&E study, as described in this section. The purpose of this analysis was to determine the effects associated with the proposed project alternatives, Alternatives 2 and 6. This analysis was conducted utilizing information obtained from comments made by various regulatory agencies in response to the Advance Notification provided for the proposed project and studies of the social and economic, cultural, natural and physical environment performed for the proposed project. As existing conditions remain unchanged, no impacts to any resources result from the No-Build Alternative and it is not evaluated in the following sections.

4.1. Resources not present within the Study Area

As the following resources are not present within the Study Area, these resources were not considered in this PEIR:

- Relocation Potential
- Aquatic Preserves and Outstanding Florida Waters
- Wild and Scenic Rivers
- Coastal Barrier Resources

4.2. Summary of Potential Environmental Impacts

The proposed project improvements to the Selmon Expressway would result in **no substantial** impacts to social and economic resources, and would **enhance** mobility conditions along the South Selmon Expressway and adjacent neighborhoods, bicycle and pedestrian accommodations at the Euclid Avenue and Willow Avenue ramp terminals, and aesthetics along local roadways that cross under the Selmon Expressway. The project would **not directly impact** historic properties and it was determined that the project would **not have an adverse effect** on historic and archaeological resources. However, it is recommended that during construction for the project within the Fort Brooke site (8HI00013), ground disturbance that goes beyond the depth of one meter (3.3 ft) shall be monitored by a qualified archaeologist. In addition, with the exception of highway traffic noise and contamination, the proposed project would result in **no substantial** physical effects.

Since both build alternatives evaluated, Alternatives 2 and 6, would have the same outside widening footprint, they would both result in the same potential impacts to natural resources. *De minimis* impacts would be expected to unvegetated substrate within the Hillsborough River due to installation of pilings. Mangrove shading could occur as a result of bridge widening associated with both of the proposed alternatives; however, seagrasses are not present. Approximately 0.05 acres of mangrove impact could occur due to shading. Measures required to be implemented per construction procedure, standard specifications, or other agency requirements, issued in a later project phase, are listed in the Natural Resource Evaluation (NRE) Report as well as **Chapter 8.0** below.

Based on the results of the highway traffic noise analysis, with the proposed alternatives, a total of up to 624 properties would be impacted by traffic noise. Noise barriers were considered as an abatement measure. Few locations along the proposed project improvements for both Alternative 2 and 6 met the federal and state criteria for noise walls. However, for the preferred alternative (Alternative 6), THEA has committed to building walls the entire length of the project on both sides of the roadway.

As a result of the Level I Contamination Screening, 156 sites were determined as having the potential for contamination concern. Of the 156 sites investigated, eight were HIGH ranked sites and four were MEDIUM ranked sites. For those locations with a risk ranking of MEDIUM and HIGH, Level II field screening should be considered during future project implementation phases. These sites were determined to have potential contaminants which may impact the proposed construction.

Environmental commitments related to cultural and natural resources, highway traffic noise and contamination are discussed in **Chapter 8.0** below.

4.3. Sociocultural Resources

4.3.1. Land Use

The proposed project is located in the City of Tampa (City) and intersects the Central Business District (CBD) and historic Hyde Park Urban Village. The City is urbanized and built out along the Selmon Expressway corridor. Existing land use is shown in **Figure 9**. Within the CBD from East Jackson Street to the river, the adjacent land use is primarily commercial, light industrial, institutional, and public/semi-public. Notably, the Tampa Convention Center, Amalie Arena, and associated parking are within this area. West of the Hillsborough River to West Platt Street, land use continues to be primarily commercial, light industrial, institutional, and public/semi-public with few residential areas. South of West Platt Street, land use along Selmon Expressway is primarily residential with commercial and institutional uses near major roads. In addition, three public parks are located adjacent to Selmon Expressway: Hyde Park on Swann Avenue, Palma Ceia Park at San Miguel Street, and Himes Avenue Sports Complex.

Future land use adjacent to the Selmon Expressway is planned to remain similar to the existing uses based on the City's Future Land Use (**Figure 10**) and Vision Map from the Imagine 2040: Tampa Comprehensive Plan. With the exceptions of Downtown Tampa and Britton Plaza near the southern terminus, the Vision Map shows land use adjacent to Selmon Expressway as Established, which means that no significant change in current development pattern is planned and only some infill is anticipated. The Hyde Park Urban Village Neighborhood Plan also does not plan for significant growth.

The proposed project improvements to the Selmon Expressway would be accommodated within existing ROW, and therefore **no impacts** to land use are anticipated.

4.3.2. Social

Between 2010 and 2019, the population in the City increased by 18.9 percent from 335,709 to 399,700 persons. Similarly, the population in the County increased between 2010 to 2019 by 19.7 percent from 1,229,226 to 1,471,968 persons. The Bureau of Economic and Business Research (BEBR) medium

Figure 9: Existing Land Use

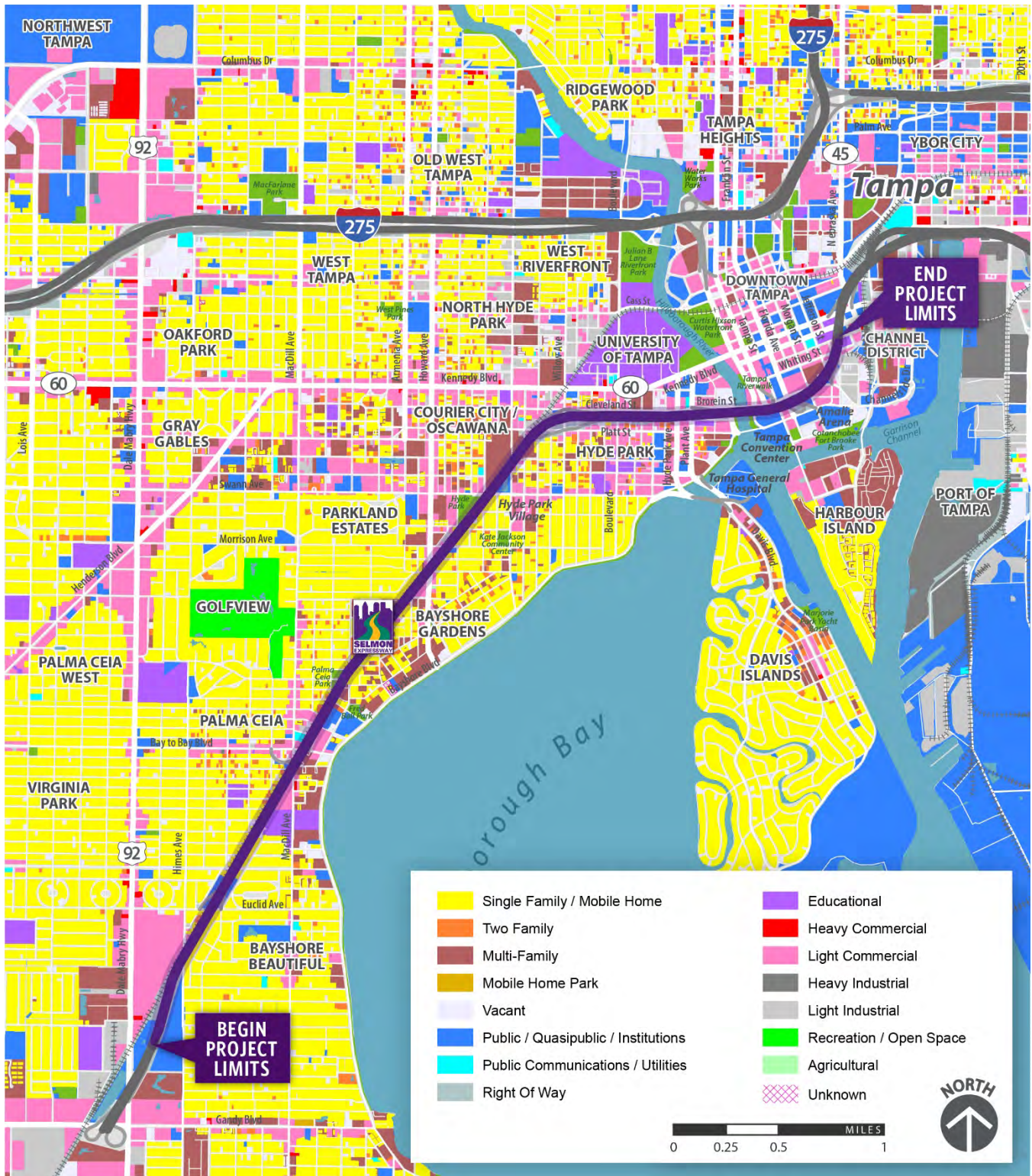


Figure 10: Future Land Use



population estimate for the County in 2045 is 1,959,200 persons, a total increase of 33 percent from 2019 which translates into an average annual growth rate of approximately 1.27 percent. Thus, the population in the County is expected to continue to grow.

Recent growth in the project area has been higher than the City or County. The project intersects 25 census block groups, referred to as the demographic study area. The most recent available data at this level is American Community Survey (ACS) 2019 Five-Year Estimates. The population of the study area grew from 17,859 persons in 2010 to 27,318 persons in 2019, an increase of 53 percent. The CBD is planned for the highest population density and continued growth.

The study area does not include any census block groups with high minority concentration (high is defined as greater than 50 percent in the Council on Environmental Quality’s *Environmental Justice Guidance under the National Environmental Policy Act*). It also has an overall lower poverty rate and a higher median income than the County and City as shown in **Table 2**. However, three census tracts (Tracts 49, 50, and 51.01) have a higher rate of poverty than the County and City, which indicates the potential for low-income areas. Most of the study area population is able to speak English with only two census block groups with over one percent not able to speak English at all. **Table 2** displays the demographic characteristics of the study area compared to the City and County.

Table 2: Demographic Characteristics

Geography	% Growth 2010-2019	2019 Population	Median Household Income*	Percent Below Poverty*	Percent Minority*
Study Area	53%	27,318	\$101,164	11.9%	11.9%
Tampa	18.9%	399,700	\$53,833	18.6%	34.6%
Hillsborough County	19.7%	1,471,968	\$58,884	13.5%	25.9%

Sources: BEBR, Census American Community Survey 2019 5-Year Estimates, <https://www.census.gov/quickfacts/fact/table/tampacityflorida/PST045218>, <https://www.census.gov/quickfacts/fact/table/hillsboroughcountyflorida,US/PST045219>

Community facilities located in the project area include schools, emergency services, parks, community centers, and religious facilities as shown in **Figure 11** and listed in **Table 3**.

The Selmon Expressway is vital to accommodating the social demands of the region as population in the region grows. **No substantial** impacts to the social environment are anticipated.

Figure 11: Community Facilities



Table 3: Community Facilities

Map ID	Name	Type
1	Rampello K-8 Magnet School	School
2	Tampa Convention Center	Civic Center
3	Downtown Ribbon of Green	Park and Recreational Facilities
4	Tony Janus Park	Park and Recreational Facilities
5	St Johns Parish Day Middle School	School
6	Heart of Adoptions Tampa	Social Service Facilities
7	Hyde Park United Methodist Church	Religious Centers
8	Lighthouse for the Blind and Low Vision	Social Service Facilities
9	Swann Pond Park	Park and Recreational Facilities
10	Hyde Park and Playground	Park and Recreational Facilities
11	VFW Post 4321	Community Centers
12	Palma Ceia Park and Playground	Park and Recreational Facilities
13	Tampa Presbyterian Community	Assisted Housing
14	Academy of the Holy Names	School
15	YMCA South Tampa Family Center	Community Centers
16	Himes Avenue Complex	Park and Recreational Facilities

Source: Florida Department of Transportation, Environmental Screening Tool. Accessed April 23, 2020.

4.3.3. Economic

The project traverses the CBD, which houses the highest density of employment and population in the Tampa Bay Metropolitan Area (Imagine 2040 Tampa Comprehensive Plan).

The Selmon Expressway is vital to accommodating the economic demands of the region as employment opportunities in the region grow. Due to the proposed improvements, the project is anticipated to **enhance** the economic environment.

4.3.4. Mobility

The primary purposes of the South Selmon PD&E Study are to reduce congestion and improve safety along the corridor. The Selmon Expressway provides regional connectivity between several densely populated areas and regional attractors, serves as an alternative to I-4, I-75, and I-275 during road

closures and is a critical corridor for hurricane evacuations. For these reasons, the project is anticipated to **enhance** mobility conditions.

4.3.5. Aesthetics

As previously stated, the Selmon Expressway is a limited access, tolled facility providing east-west connectivity from I-75 to downtown Tampa and US 92. It currently consists of two 12-foot wide travel lanes in each direction separated by a 38-foot paved median with a concrete barrier wall. The outside shoulders are eight feet wide and contain either shoulder gutter with guardrail or shoulder gutter with barrier wall. The facility is elevated through Downtown Tampa and includes structures over the Hillsborough River and multiple roadway facilities. The City is urbanized and built out along the Selmon Expressway corridor. Between East Jackson Street and the river and between the river and West Platt Street, the adjacent land use is primarily commercial, institutional and public/semi-public. South of West Platt Street, land use along Selmon Expressway is primarily residential with commercial and institutional uses near major roads. The majority of the Selmon Expressway corridor has trees on both sides either within the ROW or on adjacent parcels.

Residents, employees, visitors to businesses and community facilities, motorists, and pedestrians are all viewers who may be sensitive to the aesthetic changes associated with the proposed project. The following aesthetic improvements along local roadways that cross under the Selmon Expressway are proposed as part of the Preferred Alternative:

- Under-bridge wall mounted LED decorative lighting;
- Landscaping at the Euclid Avenue, Willow Avenue and Hyde Park/Plant Avenue interchanges
- Texture on the faces of proposed walls; and
- Cleaning and sealing the existing vertical wall and sloping concrete bridge abutments.

Therefore, the project is anticipated to **enhance** the aesthetics in the project area.

4.4. Cultural Resources

4.4.1. Historic Sites/Districts

A Cultural Resource Assessment Survey (CRAS) Report was prepared as part of the PD&E Study. The purpose of the CRAS is to locate, identify, and aerially delimit any archaeological sites and historic resources (e.g., structures, buildings, bridges, cemeteries, linear resources, historic districts) located within the project Area of Potential Effect (APE) and to assess their significance in terms of the criteria of eligibility for listing in the National Register of Historic Places (NRHP). The CRAS was conducted in accordance with Section 106 of the National Historic Preservation Act (NHPA) of 1966 (Pub. L. 89-665, as amended), as implemented by 36 CFR Part 800 (Protection of Historic Properties, revised January 2001); the National Environmental Policy Act of 1969 (Pub. L. 91-190); Chapter 267, Florida Statutes (F.S.), revised; and Part 2, Chapter 8 (Archaeological and Historic Resources) of the FDOT's PD&E Manual (revised 2020).

The historical resources APE, as requested by THEA, was defined as parcels 100 feet (ft) from the existing edge of ROW. Background research of the Florida Master Site File (FMSF), the NRHP, and the City of Tampa database indicated that 73 historic resources were previously recorded within the APE. These include 68 buildings, the Brorein Street Bridge (8HI11540), the NRHP-Listed Hyde Park Historic District (8HI01050), the Seaboard Coast Line/CSX Railroad (8HI11519), and the Platt Street Bridge Historic District (8HI09729) and contributing resource Tony Jannus Park (8HI09728). Of these previously recorded resources, 63 buildings have not been evaluated by the State Historic Preservation Office (SHPO); four were determined ineligible (8HI03055, 8HI08048, 8HI09702, and 8HI09703); and five have been evaluated by the SHPO as eligible for listing in the NRHP. A review of relevant historic United States Geographical Survey (USGS) quadrangle maps, historic aerial photographs, and the Hillsborough County property appraiser's website data revealed the potential for 105 new historic resources 45 years of age or older (constructed in or prior to 1974) within the APE.

The historical/ architectural fieldwork was conducted between December 5, 2019 and January 16, 2020. Historical/architectural field survey resulted in the identification of 163 historic resources within the APE. The 163 historic resources include 58 that were previously recorded and 105 that are newly identified (8HI14725 through 8HI14827; 8HI14919, and 8HI14920). This total includes 155 buildings, two building complex resource groups (8HI14919 & 8HI14789), one bridge (8HI11540), one linear resource (8HI11519); three designated historic landscapes (8HI09729, 8HI09728, & 8HI14920); and one historic district (8HI01050). Of these, 152 appear ineligible for individual listing in the NRHP. These resources are common examples of their respective architectural and engineering styles without significant historical associations; therefore, none appear eligible for listing in the NRHP, either individually or as part of a historic district. Field survey also revealed that 16 previously recorded historic resources are no longer extant.

Of the 163 historic resources, 11 are NRHP-listed, eligible, or appear eligible for listing in the NRHP. Research and field survey indicated that six historic resources not evaluated by the SHPO appear eligible for listing in the NRHP. These include three previously recorded resources, the Peter O. Knight Cottage (8HI10007), 115 S Fielding Avenue (8HI01661), and the Seybold Bakery/1501 W Horatio Street (8HI01759) that have not been evaluated by SHPO, but are considered Local Historic Landmarks by the City of Tampa. Two newly identified resources appear individually eligible for listing in the NRHP: the Boulevard Building at 2907 W Bay to Bay Blvd (8HI14774), and 3501 S Drexel Ave (8HI14745). In addition, a segment of the Seaboard Coast Line/CSX Railroad resource group (8HI11519) runs through the historic APE that has not been evaluated by the SHPO. The segment within the APE appears eligible for listing in the NRHP. A total of five previously recorded historic resources within the historic APE are listed or were determined individually eligible for listing in the NRHP.

A review of the project alternatives resulted in the overall conclusion that the proposed undertaking for Alternative 2 and Alternative 6 would remain within the existing ROW and would not result in the removal or destruction of any listed or eligible historic properties. The proposed alternatives would not directly impact or alter the existing features to any of the 11 significant resources; therefore, Alternative 2 and Alternative 6 would have **no substantial** impacts on the historic resources. The CRAS was

provided to the Florida Department of State Division of Historic Resources (FDOS DHR) for concurrence on November 18, 2020. The CRAS was updated in April 2021 as a result of comments received from the FDOS DHR and resubmitted to DHR for concurrence.

4.4.2. Archaeological Sites

An archaeological survey was performed as part of the CRAS to locate, identify, and aerially delimit any archaeological sites within the project APE and to assess their significance in terms of the criteria of eligibility for listing in the NRHP. The archaeological APE consisted of the existing ROW.

The initial review of the FMSF and NRHP listings for the proposed project indicated that three previously recorded archaeological sites (8HI00013, 8HI00537, and 8HI00966) are located within the APE, with another 16 archaeological sites recorded within 0.5 mile. 8HI00013 is the location of Fort Brooke, a Seminole War Era fortification that has been determined eligible for listing in the NRHP by the SHPO. 8HI00537 was recorded as an Archaic lithic scatter and has not been evaluated by the SHPO. 8HI00966 was considered to be a historic home site that had been extensively disturbed and also has not been evaluated by the SHPO. The background research suggested a variable probability for archaeological site occurrence within the project APE.

As stated above, the historical/ architectural fieldwork was conducted between December 5, 2019 and January 16, 2020. The archaeological investigations consisted of surface reconnaissance combined with systematic and judgmental subsurface testing. Sixty-six shovel tests were excavated within the APE, of which two were positive, resulting in the recording of 8HI14875, a Middle/Late Archaic lithic scatter. It is considered ineligible for listing in the NRHP due to the low artifact density and diversity, lack of culturally diagnostic artifacts, and low research potential. No evidence of the previously recorded 8HI00013, 8HI00537, or 8HI00996 was uncovered within the APE. Almost all of the shovel tests exhibited fill and disturbed soils up to a meter (3.3 ft) in depth, suggesting that the sites, as contained within the APE, have been highly altered or destroyed.

Based on the available information and subsurface testing, it appears as if the proposed undertaking within the APE would have **no substantial** impacts on the NRHP-eligible Fort Brooke site (8HI00013). However, it is recommended that during construction for the project within the Fort Brooke site (8HI00013), ground disturbance that goes beyond the depth of one meter (3.3 ft) shall be monitored by a qualified archaeologist. As no evidence of 8HI00537 or 8HI00996 was uncovered within the APE, an assessment as to their NRHP eligibility cannot be made other than to say that there is insufficient information to make a determination. Commitments are discussed in the CRAS as well as **Chapter 8.0** below. The CRAS was provided to the FDOS DHR for concurrence on November 18, 2020. The CRAS was updated in April 2021 as a result of comments received from the FDOS DHR and resubmitted to DHR for concurrence.

4.4.3. Recreational Areas

Six public parks and recreational facilities are located adjacent to the Selmon Expressway within the project limits, as shown in **Table 4**.

The project alternatives would be accommodated within existing ROW. Therefore, **no impacts** to recreational areas are anticipated as a result of the proposed project.

Table 4: Recreational Areas

Name	Type
Swann Pond Park	Nature Park/Water Access
Hyde Park and Playground	Neighborhood Park/Mixed Use Recreation
Palm Ceia Park and Playground	Neighborhood Park/Mixed Use Recreation
Downtown Ribbon of Green	Nature Park/Dock-Pier
Tony Janus Park	Nature Park/Water Access
Himes Avenue Complex	Neighborhood Park/Athletic

Source: http://www.fla-etat.org/est/metadata/gc_parksbnd.htm

4.5. Natural Resources

An NRE Report was prepared as a component of the PD&E Study to evaluate **Protected Species and Habitat, Wetlands and Other Surface Waters, and Essential Fish Habitat**. The NRE complies with Section 7(a) of the Endangered Species Act (ESA) of 1973, as amended. The proposed project was evaluated for potential impacts to federal and State of Florida (state) endangered or threatened fish, wildlife, or plants (listed species) and habitat of such species that has been designated as critical habitat under Section 7(a) of the ESA. This evaluation was performed in accordance with Part 2, Chapter 16 Protected Species and Habitat of the FDOT PD&E Manual (July 1, 2020). The methodology used to complete the NRE included federal and state agency database searches and coordination, review of U.S. Department of Interior Fish and Wildlife Service (USFWS) Consultation Areas, review of the Florida Natural Areas Inventory (FNAI) Biodiversity Matrix (November 2019), and the USFWS Information, Planning, & Consultation System (IPaC) Resource List (May 2020) generated for the proposed project in combination with Geographic Information System (GIS) analysis and field surveys.

4.5.1. Wetlands and Other Surface Waters

The wetlands and surface waters evaluation was performed in accordance with the FDOT PD&E Manual, Part 2, Chapter 9 - Wetlands and Other Surface Waters. Wetlands and other surface waters were identified, and potential impacts estimated based on the proposed alternatives and probable construction techniques considered at the time of this review. Other surface waters included the channelized Hillsborough River north of the Garrison and Seddon Channels. Wetlands included

mangrove habitat along a segment of the Hillsborough River shoreline, as shown on **Figure 12**. Seagrasses were not present.

De minimis impacts would be expected to unvegetated substrate within the Hillsborough River due to installation of pilings. Mangrove shading could occur as a result of bridge widening associated with both of the proposed alternatives. Approximately 0.05 acres of mangrove impact could occur due to shading, as shown in **Figure 12**.

Potential impacts were evaluated based on existing habitat conditions at the time of the NRE using the Uniform Mitigation Assessment Method (UMAM) (Chapter 62-345, F.A.C.). Based on the UMAM analysis, the proposed project could have a total UMAM functional loss of 0.01.

Mangrove mitigation evaluated as part of the NRE included onsite mitigation and mitigation banks. Final mitigation requirements would be determined during permitting based on the preferred alternative and using the UMAM scoring of impacts at that time. The proposed project would be permitted pursuant to Section 373.4137 F.S., to satisfy mitigation requirements in accordance with Part (4) of Chapter 373, F.S. and 33 USC §1344.

Measures required to be implemented per construction procedure, standard specifications, or other agency requirements, issued in a later project phase, and project commitments are discussed in the NRE Report as well as **Chapter 8.0** below. Therefore, **no substantial impacts** to wetlands or other surface waters are anticipated as a result of the proposed project.

4.5.2. Water Resources

The water resources within the project area include the Hillsborough River and the waterbodies listed in **Table 5**, as identified by the Florida Department of Environmental Protection (FDEP). These water resources are shown on the FDEP Waterbody Identification (WBID) map provided in Appendix A of the Pond Siting Report (PSR). These basins drain to Old Tampa Bay designated as WBID 1558E and 15842A2.

Table 5: Water Resources

Receiving Waterbody Name	FDEP Group Number / Name	WBID(s) Numbers	Classification (I,II,III,IIIL,IV,V)	Verified Impaired	TMDL	Pollutants of concern
Rattlesnake Ditch	1 / Tampa Bay	1640	III	Yes	No	Nutrients
Direct Runoff to Bay	1 / Tampa Bay	1609	III	Yes	No	Nutrients
Hillsborough River	2 / Tampa Bay Tributaries	1443E	III	Yes	Yes	Fecal Coliforms; Iron
Ybor City Drain	1 / Tampa Bay	1584A1	III	Yes	No	Fecal Coliforms

Notes: WBID: Waterbody Identification; TMDL: Total maximum daily load

Figure 12: Wetlands and Other Surface Waters Map



Water Quality

Two separate water quality requirements affect the proposed project. These criteria are referred to as the presumptive water quality treatment requirement and the net nutrient improvement requirement. The Southwest Florida Water Management District (SWFWMD) presumptive requirement states that either 0.5 or 1.0 inch of runoff, for dry retention or wet detention ponds, respectively, must be stored and treated from any added impervious area. This treatment volume is required for each project basin, but compensatory treatment is possible due to the entire project draining to the same ultimate outfall (Hillsborough Bay). In addition, equivalent treatment provided in existing stormwater management facilities shall be replaced if impacted or eliminated by the roadway improvements.

Dry retention or wet detention ponds treatment volume must be able to recover within a prescribed time. For dry retention facilities, the treatment volume shall recover via percolation within 72 hours, with only the volume available after 36 hours counted for water quantity storage volumes. For wet detention facilities, no more than one-half of the treatment volume shall recover within the first 60 hours via a bleeder device. Side slopes must be no steeper than a 1V:4H slope, unless a fence is provided for public safety. The pond peak stages must be designed for the 25-year, 24-hour design storm event.

Additionally, no net increase in nutrient loading (e.g. nitrogen and phosphorus) is required by SWFWMD and the FDEP for nutrient-impaired basins. A review of the FDEP 2019 Final Verified Lists for Group 1 Basins only shows only WBID 1584A1 (Ybor City Drain) as the only impaired basin for fecal coliforms. However, based on the SWFWMD pre-application meeting the District considers WBID 1640 (Rattlesnake Ditch)-Direct Runoff to Tampa Bay impaired for nutrients and demonstration of no net increase in nitrogen and phosphorus is required.

This approach requires current and proposed nutrient loadings, specifically total nitrogen and phosphorus, to be estimated. A net reduction in nutrient loading must be shown using appropriate methods, such as the BMP Trains water quality modeling software. This approach is independent of the presumptive water quality requirement, but the treatment capacity of any stormwater management facilities, or other best management practices (BMPs), can be counted towards meeting both water quality requirements.

South Selmon Safety Project

The recent median safety improvements removed some treatment functions from the grassed median swales. To account for this loss, the analysis assumed that these swales provided treatment for 0.25 inches of runoff over the pavement that contributed to these median swales. For impervious area that did not drain to these median swales, no formal water quality treatment was performed; however, there remains informal treatment from the ditches along either side of the Selmon Expressway. Compensatory water quality treatment was estimated for this project within two stormwater management facilities labeled Pond 9 and 10 in the Willow Avenue interchange infields, both of which are within the Spanishtown Creek basin.

Since no water quality treatment was performed for most of the safety improvement project area, the additional pavement that was left untreated must be taken into account for this project due to added travel lanes.

Net Nutrient Improvement

To demonstrate a net improvement in nutrient loading, a BMP Trains (2020 Version) model was created. A Net Improvement analysis was performed to determine the annual loadings from the existing condition and the proposed condition of the Selmon Expressway. The stormwater management facilities that are currently proposed to meet the presumptive treatment and attenuation criteria were also added to the proposed condition model to determine what nutrient reduction they provide. The results of this analysis are summarized in **Table 6**. For detailed information on the analysis, refer to the PSR prepared as part of this study.

With the current proposed stormwater management facilities, net nutrient improvement is met across the project limits.

Table 6: Estimated Nutrient Loading due to Proposed Improvements

Nutrient	Existing Condition Loading (kg/yr)	Proposed Condition Loading (kg/yr)	Proposed Condition Loading with Pond Treatment (kg/yr)
Total Nitrogen	394.0	465.3	393.9
Total Phosphorus	51.1	60.8	48.7

Stormwater

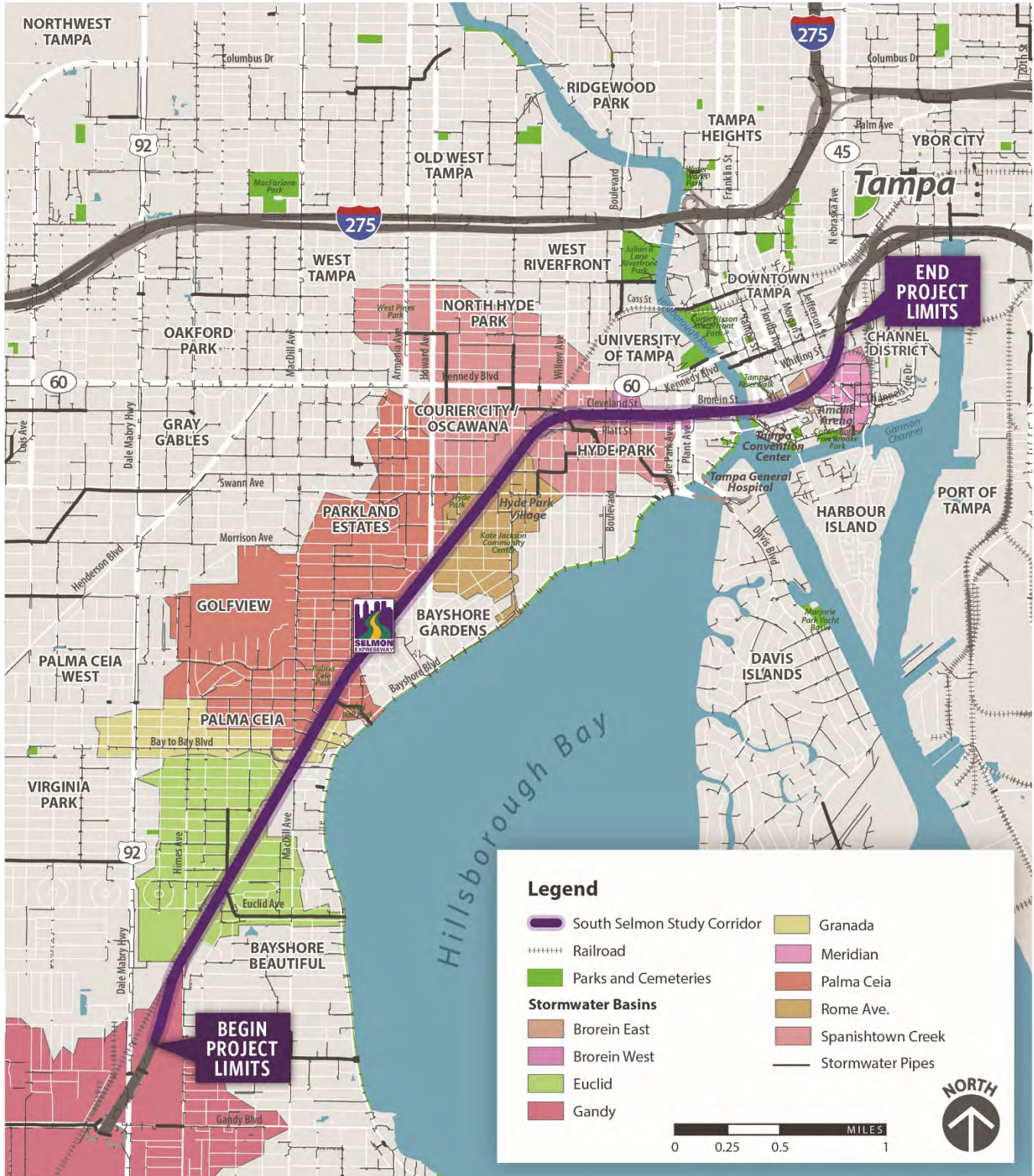
The Selmon Expressway within the project limits crosses nine stormwater basins, which are subdivided based on the basin’s outfall into the Hillsborough River or Hillsborough Bay. The stormwater basin names used are based on the naming convention of the City of Tampa, which manages the stormwater infrastructure GIS geodatabase. An overview of these basins and the stormwater infrastructure within them is shown in **Figure 13**.

General information about each of these basins is summarized in **Table 7**.

Table 7: Existing Basin Information

Basin Number	Basin Name	Begin Station	End Station	Basin Length (ft.)	Outfall Size
1	Gandy	77+22	99+50	2,228	4’x10’ Concrete Box Culvert (CBC)
2	Euclid	99+50	127+63	2,813	2 x 4’x5’ CBC
3	Granada	127+63	163+90	3,627	54”
4	Palma Ceia	163+90	217+55	5,365	2 x 60” & 8’x4’ CBC
5	Rome Ave	217+55	244+04	2,649	38”x60”
6	Spanishtown Creek	244+04	507+50	3,578	2 x 7’x5.4’ CBC
7	Brorein West	507+50	551+50	2,968	36”
-	Hillsborough River Bridge	551+50	554+60	310	-
8	Brorein East	554+60	572+50	1,790	42”
9	Meridian	572+50	584+17	1,167	8’x5’ CBC

Figure 13: Stormwater Network and Basins



Much of the Selmon Expressway runoff enters storm sewer systems owned by the City of Tampa before discharging into Hillsborough Bay. Since most of the Selmon Expressway runoff first enters a separate storm sewer system attenuation must be met to assure no downstream impacts occur. Attenuation of stormwater runoff is not required for those basins with outfalls that drain directly into tidally controlled water bodies. The stormwater management approaches considered in this study aim to make use of all available ROW within each basin to provide the required treatment and attenuation volumes. Compensatory treatment was evaluated where traditional stormwater management approaches were not possible.

Runoff from the Selmon Expressway must be attenuated such that the post-development discharge rate is less than or equal to the discharge rate in the existing condition. The design storm event for this discharge rate is the 100-year, 24-hour storm event due to the existing flooding problem in the City systems. Also, SWFWMD requires that any historic

Required attenuation volumes were estimated for each basin for the 100-year, 24-hour design storm event. Any impacts to existing ditches that provide some form of attenuation storage would be replaced. Proposed stormwater management solutions to meet all regulatory criteria include the following approaches:

- **Shifting basin limits**
 - Basin divides along the Selmon Expressway would be modified to reduce runoff volumes and prevent the need for additional stormwater management facilities
- **Wet Detention/Dry Retention Stormwater Management Facilities**
 - Conventional ponds would be used in any available open spaces within the THEA ROW
 - Due to high groundwater tables, most facilities were designed as wet detention ponds
- **Underground stormwater vault systems**
 - One alternative in the Palma Ceia basin includes an underground stormwater vault system
 - Due to high groundwater tables, this system is designed to be closed and separate from the groundwater. Therefore, only attenuation would be provided
- **Modifying existing stormwater ponds**
 - Three stormwater ponds within THEA ROW are proposed to be expanded to provide necessary treatment and attenuation volumes
- **New/Expanded Outfall**
 - Reduce the need for additional stormwater management facilities
 - Reduce the stresses on existing over-capacity outfalls
- **Compensatory treatment**
 - In some basins without the ROW for any form of water quality treatment, compensatory treatment would be utilized.

storage, such as depressional areas with some volume of storage below the 100-year, 24-hour storm event, be replaced or mitigated. However, there are no depressional storage areas along the corridor as the existing ditches are conveyance or attenuation systems.

The proposed stormwater management system is to be designed for the ultimate 8 lane section of the Selmon Expressway. Therefore, the anticipated ponds and drainage system modifications are the same for Alternative 2 and 6. Per a conversation with the City of Tampa, all outfalls within the project limits are to be considered undersized. Additional storage volume was provided, where feasible, to improve the existing flooding conditions. An overview of the proposed stormwater management facilities is presented in **Table 8**.

Using a combination of the stormwater management approaches listed above, treatment and attenuation requirements can be met within the existing THEA ROW.

The Palma Ceia basin (Basin 4) has significant stormwater management needs and limited available ROW. Therefore, three alternatives were investigated for this basin that included underground storage, creating a new/expanded outfall, and a conventional pond site. The conventional pond would require additional ROW to be purchased and the outfall modification would require coordination with the City of Tampa on expanding or replacing the existing outfall within their ROW. For the purposes of this study, both the underground vault system and the outfall expansion alternatives were determined to be feasible solutions that satisfy the stormwater management needs in the Palma Ceia basin. The final stormwater management alternative will be determined after further coordination with the City of Tampa.

A Water Quality Impact Evaluation (WQIE) was completed for the project to comply with the Clean Water Act and the Safe Drinking Water Act (see Attachment A). The results of the WQIE confirm that the proposed stormwater facility design will include the minimum water quantity requirements for water quality impacts. With the implementation of the proposed treatment and attenuation, the proposed project would have **no substantial** impacts on Water Resources. For detailed information of the proposed stormwater management approach in each basin, refer to the PSR prepared as part of this study.

4.5.3. Floodplains

Nearly all of the project falls within Federal Emergency Management Agency's (FEMA) Zone X, which is outside the 100-year floodplain. A small portion of the bridge over the Hillsborough River is within Zone AE, which has a 100-year floodplain elevation of 10 feet (North American Vertical Datum). The bridge over the Hillsborough River and approach sections of the Selmon Expressway are well above the floodplain elevation. The project area is covered by five Hillsborough County FEMA FIRM maps (effective on August 28, 2008) for community number 12057, panels C0344H, C0342H, C0361H, C0353H and C0354H. It is noted that the FEMA floodplain elevation is based on a hurricane storm surge event.

Table 8: Provided Treatment and Attenuation Volumes in Ponds

Basin	Pond Name	Treatment Volume Required (ac-ft)	Treatment Volume Provided (ac-ft)	Attenuation Volume Required (ac-ft)	Attenuation Volume Provided (ac-ft)
<i>Gandy</i>	Pond 1 (existing pond)	0.10 ¹	0.10 ¹	0.77 ²	0.77 ²
<i>Euclid</i>	Pond EC - 1		0.04		0.15
	Pond EC - 2		0.09		0.44
	Pond EC - 3	0.21	0.09	1.33	0.40
	Pond EC - 4		0.02		0.19
	Pond EC - 5		0.02		0.16
<i>Granada</i>	-	0.17	-	0.00	-
<i>Palma Ceia</i>	PC-1		0.04		0.02
	PC-2		0.04		0.03
	Stormwater Management Alternative	0.33	-	1.18	1.34 ³
<i>Rome Ave.</i>	Swann Pond Expansion	0.25	0.22	0.45	0.49
<i>Spanishtown Creek</i>	Pond SC-1	0.35 ⁶	0.19	0.75	0.83
<i>Brorein West</i>	Pond BW-1		1.08		2.87
	Pond BW-2	0.79 ⁶	0.37	2.83 ⁴	0.53
	Pond BW-3		0.16		0.07
<i>Hillsborough River Bridge</i>	-	0.03	-	-	-
<i>Brorein East</i>	-	0.12	-	-	-
<i>Meridian R.R.</i>	Pond M-1	0.03	0.04	0.02	0.05
Totals		2.28	2.40	3.73 (7.33)⁵	7.57

¹Additional treatment volume available in existing Pond-1; no additional treatment volume required

²ICPR3 model results show negligible impact due to increase in runoff; no additional attenuation volume required

³Multiple alternatives available to account for increase in runoff from Palma Ceia basin; refer to the *Pond Siting Report*. Option 2 attenuation volume is shown

⁴Outfall drains directly to Hillsborough Bay; no additional attenuation volume required, but excess is provided to prevent pipe surcharge

⁵Number in parenthesis includes attenuation volume that is not required from a regulatory perspective, such as that within the Brorein West and Gandy basins

⁶Includes twice the existing treatment volume of Pond 9 and Pond 10, due to proposed conversion from dry to wet ponds

Preliminary FEMA information is also available within this corridor. These preliminary maps show similar flooding extents along the Selmon Expressway. At the bridge over the Hillsborough River, the Zone AE floodplain elevation is set at 11 or 12 feet (NAVD), for the west and east sides, respectively. Additionally, a new 500-year floodplain is shown surrounding the Selmon Expressway and Dale Mabry Highway interchange but does not encroach upon the travel lanes.

Minimal floodplain encroachment is anticipated for Alternatives 2 and 6. Refer to the Location Hydraulics Report for more information on floodplain involvement for the various alternatives.

4.5.4. Protected Species and Habitat

As summarized in the NRE, federal-listed and protected species, state-listed wildlife, and state-listed plants were reviewed for their potential to occur within the study area. Measures required to be implemented per construction procedure, standard specifications, or other agency requirements, issued in a later project phase, and project commitments are discussed in the NRE Report as well as **Chapter 8.0** below. With the implementation of the proposed implementation measures and commitments, **no substantial impacts** to protected species or habitat are anticipated as a result of the proposed project.

Federal Wildlife

Nine federal species listed by the USFWS potentially occur within the study area. Federal-listed species reviewed included fishes (Gulf sturgeon, smalltooth sawfish), reptiles (loggerhead, green and Kemp's ridley sea turtles), birds (wood stork, piping plover, rufa red knot), and mammals (Florida manatee). None were observed during preliminary field survey performed on September 16, 2019.

The study area was evaluated for Critical Habitat as defined by Congress 50 CFR § 17.94 and CFR § 226. Neither USFWS nor National Oceanic and Atmospheric Administration (NOAA) Fisheries designated critical habitat was present. Therefore, the proposed project would not result in the destruction or adverse modification of critical habitat.

Federal effects determinations were based on existing conditions, anticipated project impacts, agency guidelines, and THEA implementation measures and commitments. Due to mangrove shading and piling installation, the proposed project would be expected to result in the effects determinations listed in **Table 9** for federal-listed species.

Migratory birds and their habitat, including the non-listed, but federally protected bald eagle and osprey were present within the study area. Both receive protection through the Migratory Bird Treaty Act (MBTA) (16 U.S.C. §§ 703-712).

No osprey nests were observed. If an active nest is discovered, it will be afforded protection in accordance with the MBTA and Chapter 68A-16.003 of the F.A.C.; therefore, the project would not impact the osprey.

Table 9: Project Effect Determinations for Federal-Listed Species

Scientific Name	Common Name	Federal Listing	Project Effect Determination
<i>Acipenser oxyrinchus desotoi</i>	Gulf Sturgeon	Threatened	<i>May affect, not likely to adversely affect</i>
<i>Pristis pectinata</i>	Smalltooth sawfish	Endangered	<i>May affect, not likely to adversely affect</i>
<i>Caretta</i>	Loggerhead sea turtle	Threatened	<i>No effect</i>
<i>Calidris canutus rufa</i>	Rufa red knot	Threatened	<i>No effect</i>
<i>Charadrius melodus</i>	Piping plover	Threatened	<i>No effect</i>
<i>Chelonia mydas</i>	Green sea turtle	Threatened	<i>No effect</i>
<i>Lepidochelys kempii</i>	Kemp’s ridley sea turtle	Endangered	<i>No effect</i>
<i>Mycteria americana</i>	Wood stork	Threatened	<i>No effect</i>
<i>Trichechus manatus latirostris</i>	Florida manatee	Threatened	<i>May affect, not likely to adversely affect</i>

A bald eagle nest was identified within the study area. This project will be consistent with the Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. 668-668d), as amended. Due to location, nest disturbance could be unavoidable as a result of construction. This nest will be resurveyed during permitting and design to determine the activity status and if deemed inactive, a survey will be conducted to confirm a replacement nest has not been built within 660 feet of the project ROW. THEA will coordinate with the USFWS in accordance with the National Bald Eagle Management Guidelines (2007) and relevant federal laws. The project will be consistent with the provisions codified by these federal laws.

State Wildlife

Six state listed wildlife managed by the Florida Fish and Wildlife Conservation Commission (FWC) could potentially occur within the study area. Likelihood of occurrence was based on presence of suitable habitat as defined in Florida’s Imperiled Species Management Plan, as amended (2018), and listing status was in accordance with Florida’s Endangered and Threatened Species List (FWC 2018).

State protected species reviewed included one reptile (gopher tortoise), two wading birds (little blue heron, tricolored heron), and three shorebirds (American oystercatcher, black skimmer, least tern). None were observed during preliminary field survey performed on September 16, 2019. Based on existing conditions, anticipated project impacts, agency guidelines, and THEA implementation measures and commitments, the proposed project would be expected to result in the effects determinations listed in **Table 10** for state listed wildlife.

Table 10: Project Effect Determinations for State-Listed Species

Scientific Name	Common Name	State Listing	Project Effect Determination
<i>Gopherus polyphemus</i>	Gopher tortoise	Threatened	No adverse effect anticipated
<i>Egretta caerulea</i>	Little blue heron	Threatened	No adverse effect anticipated
<i>Egretta tricolor</i>	Tricolored heron	Threatened	No adverse effect anticipated
<i>Haematopus palliatus</i>	American oystercatcher	Threatened	No effect anticipated
<i>Rynchops niger</i>	Black skimmer	Threatened	No effect anticipated
<i>Sternula antillarum</i>	Least tern	Threatened	No effect anticipated

Plants

Given the hardened and developed conditions within this densely urban corridor, listed plants would not be expected. A determination of **no effect** would be anticipated for federal and state listed plants.

4.5.5. Essential Fish Habitat

The NRE complies with the requirements of the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) of 1996 and is in agreement with the FDOT PD&E Manual - Part 2, Chapter 17 - Essential Fish Habitat (EFH).

The proposed alternatives would extend the area of shading over the Hillsborough River; however, no seagrasses were present. Installation of pilings would likely be necessary within the Hillsborough River to support the widened bridge structure. Although piling number and location would vary based on the preferred alternative, installation of pilings would occur within unconsolidated mud bottom within the Hillsborough River. Impacts associated with pilings in other surface waters would be *de minimis*.

Mangrove habitat shading would occur to construct the Selmon Expressway Bridge over the Hillsborough River. Shading impacts would vary based on the final design, but shading could occur over approximately 0.05 acres of mangroves, as shown in **Figure 12**. Mangrove impacts that result from construction of the proposed project would be mitigated pursuant to the requirements set forth in Section 373.4137, F.S. in accordance with Part (4) of Chapter 373, F.S. and 33 USC §1344.

Based on existing conditions, anticipated project impacts, agency guidelines, and THEA implementation measures and commitments, the proposed project would have **no substantial** impact on EFH. Measures required to be implemented per construction procedure, standard specifications, or other agency requirements, issued in a later project phase, and project commitments are discussed in the NRE Report as well as **Chapter 8.0** below.

4.6. Physical Effects

4.6.1. Highway Traffic Noise

A highway traffic noise analysis was performed in compliance with the requirements of the Code of Federal Regulations (23 CFR 772)—Procedures for Abatement of Highway Traffic Noise and Construction Noise (July 13, 2010) using methodologies outlined in Part 2, Chapter 18 Highway Traffic Noise of the FDOT PD&E Manual (July 1, 2020). This section summarizes the results of the traffic noise analysis, which is discussed in detail in the Noise Study Report (NSR). For the purpose of evaluating traffic noise, the FHWA established Noise Abatement Criteria (NAC). As shown in **Table 11**, these criteria vary according to a properties' activity category (i.e. land use). For comparative purposes, typical noise levels for common indoor and outdoor activities are provided in **Table 12**. FHWA regulations also state that a traffic noise impact is predicted to occur when predicted traffic noise levels with a proposed improvement are considered substantial when compared to existing levels. The FDOT considers that a substantial increase in highway traffic noise occurs when traffic noise levels are predicted to increase 15 dB(A) or more above existing conditions as a direct result of a transportation improvement project. Therefore, for the traffic noise analysis, impacted receptors (i.e., properties) are defined as receptors with a future design year, build alternative traffic noise level that is predicted to approach, meet, or exceed the NAC for its respective activity category, or will experience an increase in noise levels of 15 dB(A) or more in the design year when compared to an existing noise level.

A noise sensitive land use review was performed for the project on March 20, 2020. As a result, a total of 1,015 properties for which the existing land use has a FHWA/FDOT established NAC were evaluated within 21 Common Noise Environments (CNEs). CNEs are groups of properties within the same area that have the same land use (e.g., the residences within a subdivision or abutting subdivisions). The 1,015 properties are comprised of 1,009 residences, two active sports areas, one park, and three schools.

The FHWA Traffic Noise Model (TNM) is used to predict worst-case highway traffic noise for both existing conditions and future conditions both with and without proposed alternatives. The predictions are made at discrete representative locations on the properties for which there are NAC. These TNM-modeled locations are referred to as "receptors". With the exception of two of the 21 CNEs, traffic noise is predicted to exceed the NAC at one or more properties within each CNE for the existing condition (year 2019), and for future conditions (year 2046) both without (No Build) and with the proposed alternatives. The two CNEs for which traffic noise impacts are not predicted consist of two of the three schools assessed and do not contain residential properties. When compared to existing levels, the maximum increase in future traffic noise levels with the No Build Alternative is 1.2 decibels on the "A"-weighted scale (dB(A)) and the maximum increase with the proposed alternatives is 4.4 dB(A). These levels of traffic noise increase can be described as being undetectable (1.2 dB(A)) to not readily detectable (4.4 dB(A)) in an ambient (i.e., outdoor) environment. Based on the results of the analysis, with the proposed alternatives, a total of up to 624 properties would be impacted by traffic noise.

Table 11: FHWA Noise Abatement Criteria

Activity Category	Description of Activity Category	Activity Leq(h) ¹ (dB(A))	
		FHWA	FDOT
A	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.	57 (Exterior)	56 (Exterior)
B²	Residential	67 (Exterior)	66 (Exterior)
C²	Active sports areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreational areas, Section 4(f) sites, schools, television studios, trails and trail crossings.	67 (Exterior)	66 (Exterior)
D	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.	52 (Interior)	51 (Interior)
E²	Hotels, motels, offices, restaurants/bars and other developed lands, properties or activities not included in A-D or F.	72 (Exterior)	71 (Exterior)
F	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical) and warehousing.	--	--
G	Undeveloped lands that are not permitted.	--	--

Sources: Table 1 of 23 CFR Part 772 and Table 18.1 of Chapter 18 of the FDOT’s PD&E Manual (dated July 1, 2020).

¹ The Leq(h) activity criteria values are for impact determination only. The values are not design standards for noise abatement measures.

² Includes undeveloped lands permitted for this activity category.

Note: FDOT defines that a substantial traffic noise increase occurs when the existing noise level is predicted to be exceeded by 15 decibels or more as a result of the transportation improvement project. When this occurs, there is a requirement to consider noise abatement.

Table 12: Typical Sound Levels

Common Outdoor Activities	Sound Level dB(A)	Common Indoor Activities
Jet flyover (at 1,000 feet) →	110	← Rock band
Gas lawnmower (at 3 feet) →	100	
Diesel truck (at 50 feet at 50 mph) →	90	← Food blender (at 3 feet)
Noisy urban area (daytime) →	80	← Garbage disposal (at 3 feet)
Gas lawnmower (at 100 feet) →	70	← Vacuum cleaner (at 10 feet)
Commercial area →		← Normal speech (at 3 feet)
Heavy traffic (at 300 feet) →	60	
Quiet urban (daytime) →	50	← Large business office
Quiet urban (nighttime) →	40	← Dishwasher (in next room)
Quiet suburban (nighttime) →		← Theater, large conference room (background)
Quiet rural (nighttime) →	30	← Library
		← Bedroom (at night), concert hall (background)
	20	
		← Broadcast/recording studio
	10	
	0	

Source: California Dept. of Transportation Technical Noise Supplement, Nov. 2009, Page 2-21.

Traffic management measures, modifications to the roadway alignment, and buffer zones were considered as potential traffic noise abatement measures for the impacted properties, but the measures would not be both feasible and reasonable methods of reducing/eliminating predicted impacts with the proposed alternatives. Noise barriers were also considered as an abatement measure.

The most common noise abatement measure is providing a noise barrier. Noise barriers have the potential to reduce traffic noise levels by interrupting the sound path between the motor vehicles on the roadway (i.e., the source of the sound) and the noise sensitive land uses adjacent to the roadway. Based on FDOT's Noise Policy, for a noise barrier to be considered a potential abatement measure, the barrier must meet acoustic and cost requirements.

Minimum Noise Reduction Requirements

The FDOT has two acoustic requirements to consider a noise abatement method both a feasible and reasonable measure when evaluating the level of reduction in traffic noise. First, to be considered acoustically feasible, a barrier must provide at least a 5 dB(A) reduction in traffic noise for two or more impacted receptors. If a noise abatement measure was determined to be not feasible, it was not considered any further.

The FDOT's second acoustic requirement, which indicates a noise barrier is acoustically reasonable, is that a noise barrier must provide at least a 7 dB(A) reduction for at least one impacted receptor. A reduction of 7 dB(A) is the FDOT's noise reduction design goal for all properties impacted by traffic noise with a roadway improvement project. If a noise abatement measure was determined to be not acoustically reasonable, it was not considered any further.

Notably, following FDOT's methodologies, if a noise abatement measure was determined to be not acoustically feasible or reasonable, it was not considered any further.

Cost Effective Criteria

Based on FDOT's Noise Policy, at a cost of \$30 per square foot, a noise barrier should not cost more than \$42,000 per benefited noise sensitive receptor (a benefited receptor is a receptor that would have at least a 5 dB(A) reduction in highway traffic noise from a mitigation measure). For special use locations (e.g., parks and active sport areas), the cost of a noise barrier should not be more than \$995,935 per person-hour per square foot (dollars/person-ft²). If the estimated cost to construct a noise barrier is greater than these cost-effective criteria, a noise barrier is not considered to be a cost reasonable abatement measure. If a noise abatement measure was determined to be not cost reasonable, it was not considered any further.

Noise Analysis Results

Following FDOT safety requirements, noise barriers on bridges and retaining structures were limited to a height of 8 feet, traffic railing/noise barrier combinations were limited to a maximum height of 14 feet, and where evaluated, ground mounted barriers at the ROW were limited to a height of 22 feet. Based on the results of a noise barrier-specific evaluation, barriers that have been determined to be both a feasible and reasonable traffic noise abatement method for some of the impacted properties within the CNEs are listed in **Table 13** (the barrier locations are depicted on aerials in the appendices of the NSR).

Table 13: CNEs with Potential Noise Barriers

Alt.	CNE	Area	Number of Impacted Properties ^a	Number of Benefited Properties		Estimated Barrier Cost ^b	Cost Per Benefited Property ^b
				Impacted	Not Impacted		
2	E6	Bay to Bay Boulevard to West Watrous Avenue	84	46	7	\$761,100	\$14,360
	E8	West Swann Avenue to South Willow Avenue	22	7	12	\$519,240	\$27,328
6	E6	Bay to Bay Blvd to West Watrous Avenue	72	39	12	\$626,700	\$12,288
	E8	West Swann Avenue to South Willow Avenue	13	5	19	\$660,780	\$27,533

^a With the proposed alternatives, there would be up to 624 total impacted properties.

^b The total barrier cost and cost per benefited property listed are for the most cost-effective barrier when considering the impacted properties that would be benefited by a noise barrier.

In summary, traffic noise is predicted to exceed the NAC at noise-sensitive receptors within the project area due to existing traffic conditions, as well as future traffic conditions (year 2046) both without (No Build) and with the proposed alternatives. As a result, **substantial impacts** to noise-sensitive receptors exist under existing conditions and would continue in the No Build conditions, as well as a result of Alternatives 2 and 6. Less than eight percent of the impacted properties would be benefited by the noise barriers determined to be both a feasible and reasonable with Alternatives 2 and 6. Noise barriers would provide minimal noise reduction to the majority of the impacted properties due to limitations on the heights of the barriers with both of the project alternatives. However, for the preferred alternative (Alternative 6), THEA has committed to building walls the entire length of the project on both sides of the roadway.

4.6.2. Air Quality

The proposed project is located in Hillsborough County, Florida, an area currently designated by the U.S. Environmental Protection Agency (EPA) as being an attainment area for all of the pollutants for which there are National Ambient Air Quality Standards (NAAQS)—carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO2), ozone (O3), particulate matter, and sulfur dioxide (SO2).

The project alternatives were subjected to FDOT’s CO screening model (CO Florida 2012) which makes various conservative worst-case assumptions related to site conditions, meteorology, and traffic. The project alternatives (No-Build and build Alternatives 2 and 6), were evaluated for the design year of the proposed project. With and without the build alternative, the intersection forecasted to have the highest approach traffic volume is the Willow Avenue and Cleveland Street intersection. The evaluation results for this intersection can also be presumed to be worst-case.

Based on the results, the highest predicted CO one- and eight-hour concentrations would not exceed the NAAQS for this pollutant regardless of alternative. Therefore, the project “passes” the screening test and would have **no substantial** impacts on the air quality in the area. Additionally, because the project is expected to improve the LOS on the Selmon Expressway which would reduce delay and congestion, it is anticipated that the project would reduce air pollutant emissions within the study area.

4.6.3. Contamination

A Level I Contamination Screening Evaluation Report (CSER) was prepared using the FDOT PD&E Manual, Chapter 20 reporting format and standard environmental assessment practices of reviewing records of regulatory agencies, site reconnaissance, literature review and when necessary, personal interviews of individuals and business owners within the limits of the project.

For the Level I Contamination Screening, the project study area included the limits of the mainline project and an approximate 500 foot wide buffer extending beyond the mainline boundary as per the PD&E Manual. A Level I Contamination Screening of the project study area was conducted to determine the potential for contamination of the corridor ROW from adjacent properties and business operations. Sites were ranked using FDOT’s hazardous materials ranking system.

The contamination screening included the following tasks:

- A regulatory review of governmental databases and for permits and or violations associated with environmental issues;
- Obtaining and evaluating historical aerial photographs (1995 to 2019); topographic maps and soil surveys in an effort to determine potential contamination problem areas;
- Conducting site visits for all potential contamination sites; and
- Determining potential contamination and assigning a risk level for each site within the project limits.

One hundred and fifty-six sites were determined as having the potential for contamination concern. Of the 156 sites investigated, the following risk rankings have been applied: eight HIGH ranked sites, four MEDIUM ranked sites, 144 LOW ranked sites, and zero NO ranked sites for potential contamination.

Table 14 summarizes the number of sites per risk ranking.

Table 14: Number of Sites per Risk Ranking

NO	LOW	MEDIUM	HIGH
0	144	4	8

For sites ranked NO or LOW for potential contamination, no further action is required at this time. Sites ranked NO were determined to not have a potential contamination impact to the project at this time. Sites ranked LOW are sites/facilities that would have the potential to impact the study area, but based on select variables have been determined to have low risk to the project at this time. Variables that may change the risk rankings include a facility’s non-compliance to environmental regulations, new discharges to the soil or groundwater, substantial design changes, and modifications to current permits. Should any of these variables change, additional assessment of the facilities would be conducted.

Figure 14 shows only the location of the MEDIUM and HIGH ranked sites along the project corridor. In addition, details regarding these MEDIUM and HIGH ranked sites are provided in **Table 15**. For those locations with a risk ranking of MEDIUM and HIGH, Level II field screening should be considered during future project implementation phases. These sites have been determined to have potential contaminants which may impact the proposed construction. A soil and groundwater sampling plan is likely to be developed for each site. The sampling plan should provide sufficient detail as to the number of soil and groundwater samples to be obtained and the specific analytical tests to be performed. A site location sketch for each facility showing all proposed boring locations and groundwater monitoring wells is likely to be prepared also. With the implementation of a Level II field screening, as needed, and any resulting implementation measures, **no substantial impacts** are anticipated due to the disturbance of contamination as a result of the proposed project.

Additional information may become available or site-specific conditions may change from the time the CSER was prepared and should be considered prior to proceeding with roadway construction.

Figure 14: Sites of Potential Contamination Concern Ranked Medium and High



Table 15: Potential Contamination Sites Ranked MEDIUM and HIGH

Site No. ¹	Site Name	Address	EDR Database	Approximate Distance from ROW	Details	Risk Ranking
2	Tampa City Convention Center	209 South Franklin Street	FL LUST	TP*	Multiple Leaking Underground Storage Tank (LUST) occurrences in 1998, in 2005, and in 2009. Cleanup and site assessment are ongoing.	HIGH
17	South Howard Auto Service	1207 South Howard Avenue	FL LUST, FL UST, Hist Auto	95 ft	Gas station from 1939 to 2012. Discharge on 6/27/90. Contaminated monitoring well reported. Cleanup ongoing. 3 USTs removed. 4 USTs closed in place. The latest FDEP documents include an email to property owner dated 9/30/19 attempting to schedule monitoring well installation on 10/7/19.	HIGH
19	Equipment Sales Corp/Magic Cleaners	2101 Morrison Ave	FL PriorityCleaners, FL Drycleaners, Hist Cleaner	111 ft	Drycleaning plants, except rugs facility in 1989. Site rehabilitation completed in 2015. Letter submitted in 2018 stated site is eligible for state-administered cleanup. More information is needed on the cleanup status.	HIGH
31	Other Side Antique Shop	3004 Barcelona St	RCRA NonGen, FINDS, ECHO, FL RESP Party	155 ft	Multiple violations in 1990 due to hazardous waste disposal; deemed compliant in 1996. During site reconnaissance, the site was a vacant parcel adjacent to an op-warehouse structure. Two unrecognizable GARBRO storage tanks were within the ROW. It is unknown if and what was stored in the tanks. Further investigation is needed to	MEDIUM

¹ Sites are numbered based on the order they appear in the EDR, which is based on distance from the ROW.

* TP – Target Property. Term used by EDR, Inc. to indicate the site address overlays with the project corridor/is located within the ROW boundary.

Site No. 1	Site Name	Address	EDR Database	Approximate Distance from ROW	Details	Risk Ranking
					understand the level of potential contamination conditions.	
36	Texaco #210/McNatts Cleaners	3102 S MacDill Ave	FL LUST, FL UST, Hist Cleaner	167 ft	Closed gas station, currently a dry cleaners. Facility cleanup status is ongoing.	HIGH
48	Thompson Aggregate Materials Co	1302 W Kennedy Blvd	FL LUST, FL UST	203 ft	Closed gas station with a discharge in 1991. Facility cleanup status ongoing. During site reconnaissance, this site was a Public Storage Facility.	HIGH
58	St Johns Cleaners Inc./Palma Ceia Village Shopping Center	3225 South MacDill Avenue	FL Priority Cleaners, Hist Cleaner	236 ft	Drycleaning 1991 to 2008. Ongoing cleanup. The most recent FDEP documents include a potable well survey which indicates that zero potable wells are located within ½ mile of the site. During site reconnaissance, the site is a UPS store.	HIGH
68	Coin Laundry/ Circle K #4303/Quality Laundry	1015 South Howard Ave	HDR Hist Cleaner, RCRA-VSQG, FINDS, ECHO	270 ft	Laundries self-service from 1969 to 1993 and prior to that a Circle K #4303. Two discharges occurred in 1988 and in 1990. Cleanup status ongoing. During site reconnaissance, the site was Ciccio Water Restaurant.	HIGH
71	Smith & Porton Inc./Prestige Taxi	901 East Platt St	Hist Auto	278 ft	Gasoline station from 1934 to 1993. Discharge occurred in 1991. Cleanup status ongoing. During site reconnaissance, the site was Boca Tampa Restaurant with multiple monitoring wells located within the ROW.	HIGH

Site No. 1	Site Name	Address	EDR Database	Approximate Distance from ROW	Details	Risk Ranking
96	7-Eleven Store #4042/Sunoco Service Station #08925687	1001 South Howard Ave	FL LUST, FL UST, RCRA-SQG, FINDS, ECHO, Hist Auto	356 ft	Discharge in 1988. Cleanup status ongoing.	MEDIUM
100	Lutheran Ministries of Florida Inc	140 North Channelside	FL SITE INV SITES, FL RESP Party	363 ft	Contamination above applicable standards or criteria exists offsite in 2006. More information is needed to determine the level of potential contamination conditions.	MEDIUM
156 2	EPC Old Landfill #156	4210 S Dale Mabry Hwy Tampa, FL 33611	Old Landfill	200 ft	EPC Old Landfill in the 1950s and 1960s. Currently Lowe's.	MEDIUM

Source: Environmental Data Resources, Inc. Environmental Data Report (EDR), September 19, 2019; EPC Solid & Hazardous Waste Division

² This site was not included in the EDR; however, it was identified by the Environmental Protection Commission (EPC) Solid & Hazardous Waste Division of Hillsborough County. Therefore, it was evaluated in this CSER.

4.6.4. Utilities and Railroads

Utilities

There are thirteen Utility Agency Owners (UAOs) within the project limits. All were contacted for green lines, future builds and easement documents were requested. All utilities are in permitted ROW unless otherwise noted.

The UAOs and their facilities are summarized in **Table 16**. The table specifically notes the locations where utilities cross the Selmon Expressway or are parallel to and within the ROW of the Selmon Expressway.

Both Alternatives 2 and 6 would have utility impacts as a result of the proposed improvements. The extent of the necessary utility adjustments are unknown at this phase of study. However, **no substantial impacts** to utilities are anticipated as a result of the proposed project.

Table 16: Utilities

Utility Agency	Contact	Description of Facilities	Selmon Expressway Crossing / Parallel Locations
AT&T	Slade Hutchinson (813) 888-8300 shutchinson@sdt-1.com	4" duct	In railroad right-of-way (US DOT easement for CSX right-of-way)
CenturyLink	Xan Rypkema (720) 888-1089 NationalRelo@centurylink.com	1" - 2" BFOCs / HDPE BFOCs, aerial and direct buried cables	<u>Crossings:</u> Himes Ave, S. Blvd, Plant Ave, and Ashley Dr S, Franklin St <u>Parallel:</u> Hillsborough River Bridge
Charter Communications	Paul Perrini (813) 684-6100 Paul.perrini@charter.com	CATV-OFOC	<u>Crossings:</u> Himes Ave, Euclid Ave, S. Blvd, Jefferson St
City of Tampa - Wastewater	Robert Kezler (813) 274-8936 Wastewater_UtilityNotify@tampagov.net	Pipes include 8" – 24" VCP, 12" CAS, 60" RCP, 48" DIP FM, 48" PCCP	<u>Crossings:</u> Euclid Ave, Barcelona St, Orleans Ave, Willow Ave, S Blvd, Hyde Park Ave, Plant Ave, Franklin St, Brorein St, Whiting St, Leona St, Horatio St, Barcelona St, Bayshore Dr, Ashley Dr, Florida Ave <u>Parallel:</u> Ashley Dr – Florida Ave,
City of Tampa - Water	Rynaldo Deshauteurs (813) 274-7221 WaterUtilityCoordination@tampagov.net	Pipes vary in size and include: DIP, Enamel, HDPE, RCP, and steel casings	<u>Crossings:</u> Himes Ave, El Prado Blvd, San Carlos, Mississippi Ave, Watrous Ave, Howard Ave, Morrison Ave, Swann Ave, Horatio St, Platt St, S. Blvd, Fielding Ave, Magnolia Ave, Cedar Ave, Hyde Park Ave, Plant Ave, Bayshore Blvd, Ashley Dr, Tampa St, Franklin St, Florida Ave, Morgan St, Cumberland Ave, Jefferson St, Pinley St, Whiting St <u>Parallel:</u> MacDill Ave to Bay to Bay Blvd, Carolina to Mississippi Ave, De Leon to Horatio St, Franklin St to Morgan St,
CrownCastle	Danny Haskett (786) 610-7073 Danny.haskett@crowncastle.com	BFOC	<u>Crossing:</u> Plant Ave
Fiberlight	Tim Green (813) 877-7183 Tim.green@fiberlight.com	1.25" – 1.5" HDPE BFOC	<u>Crossing:</u> Hyde St, Plant Ave, Florida Ave <u>Parallel:</u> Hillsborough River
Frontier	Randy James randall.james@ftr.com	Conduits have copper and fiber cables	<u>Crossings:</u> Himes Ave, Euclid Ave, El Prado Blvd, Macdill Ave,

Utility Agency	Contact	Description of Facilities	Selmon Expressway Crossing / Parallel Locations
			Morrison Ave, Swann Ave, Edison Ave, S Blvd, Hyde Park Ave, Plant Ave, Ashley Dr, Florida Ave, Morgan St
MCI	Andy Cole (813) 207-7959 ColeA@bv.com	Two 2" HDPE by Dir. Bore	<u>Crossings:</u> Howard Ave and Plant Ave
T-Mobile	Jon Baker (321) 280-9596 Jon.baker@sprint.com	BFOC	<u>Crossings:</u> Whiting St
TECO – Distribution	Heather Lovett (813) 275-3433 csadmin@tecoenergy.com	13KV BE/OE line	<u>Crossings:</u> Euclid Ave, Macdill Ave, Barcelona, Howard Ave, Swann Ave, De Leon St, Horatio St, Platt St, Hyde Park Ave, Tampa St, Morgan St, Whiting St
TECO – Transmission	Heather Lovett (813) 275-3433 csadmin@tecoenergy.com	Trans Steel Poles with OE 69kV, OE 138 kV, or BE 69 kV	<u>Crossings:</u> Himes Ave, MacDill Ave, De Leon St, Cleveland St, Whiting St
TECO Peoples Gas	James Hamilton (813) 275-3732 jkhamilton@tecoenergy.com	4" – 8" CS GM, 6" PE GM, 12" HP CS GM	<u>Crossings:</u> Himes Ave, El Prado Blvd, Bay to Bay Blvd, Howard Ave, Morrison Ave, Willow Ave, Delaware Ave, Hyde Park Ave, Ashley Dr, Franklin St
Uniti Fiber	David Woods (813) 539-1180 David.woods@uniti.com	Three 1.25" conduits with FOC underground	<u>Crossings:</u> Swann Ave and S. Blvd
Verizon Business / MCI	James Barra (813) 928-9881 James.barra1@verizonwireless.com	Intermedia 48 BFOC MFS 72 BFOC	<u>Crossings:</u> Hyde Park Ave, Brorein St, Plant Ave (proposed), Florida Ave (proposed) and Ashley Dr

Abbreviations: BFOC – Buried Fiber Optic Cable, CAS – Conventional Activated Sludge System, CS – Coated Steel, DIP – Direct In-line Pump, GM – Gas Main, HDPE – High Density Polyethylene, HP – High Profile Main, PCCP – Pre-stressed Concrete Cylinder Pipe, PE – Polyethylene, RCP – Reinforced Concrete Pressure, VCP – Vitriified Clay Pipe

Railroad Crossings

CSX operates an active rail line running parallel to the Selmon Expressway. This rail line runs southwest to service Port Tampa and includes a spur that services several shipyards north of Port Tampa. The Selmon Expressway does not cross the railroad within the project area; however, three of the cross streets with access to Selmon Expressway cross the railroad, as discussed below. East of the project area near the Selmon Expressway and US 41 interchange, CSX operates an intermodal logistics yard, which is

surrounded by other distribution centers. It should be noted that the spur line adjacent to Whiting Street and Ardent Mills will be removed as part of the Whiting Street Extension.

The railroad crosses Euclid Avenue approximately 45 feet east of the edge of the Selmon Expressway overpass at a slight northeast skew. The railroad crosses Bay to Bay Boulevard approximately 30 feet east of the edge of the Selmon Expressway overpass at a slight northeast skew. Both the Euclid Avenue and Bay to Bay Boulevard crossings include crossing signs, pavement markings, gates, and a cantilever with flashing lights. The Willow Avenue railroad crossing is approximately 700 feet north of the Selmon Expressway at the signalized intersection with Kennedy Boulevard. The railroad crosses the intersection at a diagonal. The crossing includes gates and crossing signs with flashing lights in all directions and pavement markings in all directions except for northbound. **Table 17** lists the cross-street name, crossing number and the type of traffic controls currently in place.

Table 17: Cross Street Railroad Crossings

Facility Name	Crossing Number	Traffic Controls
Euclid Avenue	626344	Crossing Signs, Pavement Markings, Cantilever with Flashing Lights, Gates
Bay to Bay Boulevard	626341	Crossing Signs, Pavement Markings, Cantilever with Flashing Lights, Gates
Willow Avenue	626304	Traffic Light, Gates, Crossing Signs with Flashing Lights, Pavement Markings (except in NB direction)

Source: Florida Department of Transportation Roadway Characteristic Inventory, 2020.

Alternatives 2 and 6 would both widen the Selmon Expressway to the outside to the same extent, with the proposed retaining wall on the westbound side coming within 26 feet from the nearest rail from Himes Avenue to Swann Avenue. North of Swann Avenue, the horizontal clearance from the proposed retaining wall on the westbound side to the nearest rail would be reduced to 13.5 feet to accommodate a westbound acceleration lane at the Willow Avenue on ramp.

There are two ramp structures within the project limits that cross over the railroad – the westbound off ramps to Euclid Avenue and Bay to Bay Boulevard. While these structures are to remain in place, the railing on each side is assumed to be replaced with new railing that meets current safety standards for both alternatives. A portion of the work to replace the railing on each of these bridge structures would occur outside of the Selmon Expressway ROW and within the adjacent CSX ROW. Close coordination with CSX will be required during construction to replace the railings while safely maintaining all modes of transportation. **No substantial impacts** to railroads are anticipated as a result of the proposed project.

4.6.5. Construction

Transportation Management Plan

Alternatives 2 and 6 propose widening to the outside, as such, the first phase of construction would begin on the outside for either alternative. Once the outside construction is completed, the traffic

would be shifted to the outside to allow work on the inside. Alternative 2 proposes widening all bridges within the project limits to the inside. Unless it is required to maintain ingress and egress at the interchanges, all overpass bridges would not be widened to the inside for Alternative 6. Therefore, the second phase of construction would last longer for Alternative 2 as compared to Alternative 6. Two lanes of traffic would be maintained during construction for all phases. As a result, **no substantial impacts** are anticipated as a result of construction of the proposed project.

Constructability

The outside widening for Alternatives 2 and 6 would leave 13.6 feet of space between the outside of proposed retaining wall to the ROW line for most of the project limits. There are a few locations listed in **Table 18** where adjacent to ramps and auxiliary lanes where the distance between the outside of proposed retaining wall and the ROW is less than 13.6 feet. These distances are the same for Alternative 2 and 6.

Table 18: Right-of-Way Constraints

Station Range	Direction	Adjacent Feature	Minimum Distance from outside of proposed wall to ROW
120+07.64 – 123+65.31	Eastbound	Euclid Avenue EB on ramp acceleration lane	2 feet
251+69.70 – 499+86.17	Westbound	Willow Avenue WB on ramp acceleration lane	2.5 feet
252+56.22 – 497+80.11	Eastbound	Willow Avenue EB off ramp deceleration lane	6.9 feet
163+92.10 – 170+09.60	Eastbound	Bay to Bay Boulevard EB on ramp acceleration lane	7.2 feet

All construction is anticipated to be completed within the THEA ROW. Consideration would be given to the corridor’s constraints with a focus on minimizing impacts and maintaining traffic during construction. As a result, **no substantial impacts** are anticipated as a result of construction of the proposed project.

4.6.6. Bicycles and Pedestrians

There are no pedestrian or bicycle accommodations along the South Selmon Expressway as it is a Limited Access facility. Both Alternatives 2 and 6 would allow the existing pedestrian and bicycle facilities along local roadways that cross under and connect to the Selmon Expressway to remain in place. Proposed bridge piers would be placed such that sidewalk and bike lane connections can be maintained.

As part of the refinements made to the project for the Preferred Alternative and in coordination with the City of Tampa, pedestrian and bicycle accommodations were considered with the improvements shown at the Euclid Avenue and Willow Avenue ramp terminals.

There is a sidewalk on the north side of Euclid Avenue that stops at each ramp terminal and does not continue underneath the Selmon Expressway. An existing mid-block pedestrian crossing signal just east of Lynwood Avenue and the Selmon eastbound on ramp allows for pedestrians to cross and utilize the sidewalk on the south side of Euclid Avenue to cross under the Selmon Expressway. The Preferred Alternative proposes to signalize each ramp terminal on Euclid Avenue as well as connect the sidewalk on the north side of Euclid with a new sidewalk that runs underneath the Selmon Expressway. The mid-block pedestrian crossing east of Lynwood Avenue would be removed and the pedestrian movements would be accompanied within the new signal at Euclid Avenue and Lynwood Avenue/Selmon eastbound on ramp. Euclid Avenue currently accommodates bicycle traffic with shared use lanes in each direction. The Preferred Alternative proposes to restripe the roadway between the westbound off ramp and eastbound on ramp terminals to provide dedicated bike lanes in each direction.

The other location where pedestrian and bicycle improvements were incorporated into the Preferred Alternative design is at the Willow Avenue and Cleveland Avenue intersection. As part of the westbound Willow Avenue off ramp terminal being relocated to the Willow Avenue and Cleveland Street intersection, the vehicle and pedestrian signals would be replaced. The alignment of the crosswalks at the intersection would be improved and new American with Disabilities Act (ADA) curb ramps would be constructed. A sidewalk on the south side of Cleveland Street between Willow Avenue and Delaware Avenue would be constructed to provide pedestrian connectivity. Additionally, green pavement markings would be added to the east leg of the intersection to provide a bike box for cyclists to get priority through the signal to head west on Cleveland Street.

These pedestrian and bicycle improvements are in line with the Hillsborough County Vision Zero policy which establishes a goal of reducing traffic fatalities and serious injuries to zero. The Preferred Alternative design at Euclid Avenue and Willow Avenue proposes new or improved traffic signals, new or improved pedestrian signals, improved sidewalk connectivity and updated pavement markings directing all modes of transportation, thus improving the overall safety and operation of these roadways.

Therefore, the project is anticipated to **enhance** bicycle and pedestrian accommodations

4.6.7. Navigation

As stated above, the Selmon Expressway is elevated through downtown Tampa and includes structures over the Hillsborough River. The waterway is subject to tidal influence and is considered a navigable water of the United States.

A Section 9 U.S. Coast Guard (USCG) Bridge Permit would be required for the proposed project. The purpose of this permit is to preserve the public right of navigation, prevent interference with interstate and foreign commerce, and provide for the reasonable needs of navigation. The proposed alternatives meet the minimum USCG vertical and horizontal clearance guidelines for this waterway. Therefore, **no substantial impacts** to navigation are anticipated as a result of the proposed project.

5.0 Anticipated Permits and Permit Conditions

Coordination with the relevant regulatory agencies, including the USCG, U.S. Army Corps of Engineers (USACE), FDEP, and SWFWMD, would be anticipated to construct the proposed project. The permits that would be expected for the proposed project are listed in **Table 19**.

Table 19: Anticipated Permits

Agency	Permit Type	Concurrent Coordination
USCG	Section 9 – Bridge Permit	USACE
Port Tampa Bay	Standard Work Permit	
USACE	Section 404 – Nationwide Permit (NWP) #14 or NWP#15 Section 10 / Section 408	USFWS and NMFS USCG and Port Tampa Bay
SWFWMD	Environmental Resource Permit	
FDEP	National Pollutant Discharge Elimination System	
EPC	Miscellaneous Impacts in Wetlands	City of Tampa

6.0 Coordination and Consultation

Through the Advance Notification (AN) process, THEA informed numerous federal, state, and local agencies of the PD&E study and its scope. An AN package was prepared in accordance with the FDOT PD&E Manual, Part 1, Chapter 3, as applicable.

The federal, state, and local agencies having a concern in this project due to jurisdictional review are identified in **Table 20**. These agencies were contacted by THEA through the AN process in May 2020. The study was conducted utilizing information obtained from comments made by various regulatory agencies in response to the AN. A summary of the agency comments as a result of the AN is provide in **Table 21**.

Table 20. Advanced Notification Agencies

Federal Agencies
USACE – Jacksonville District
USCG – Permits Division
NMFS, Habitat Conservation Division
U.S. Department of Interior – USFWS
State Agencies
FDEP – ETAT Representative
FDEP – State Clearinghouse
FDOS DHR
FFWC – ETAT Representative
Regional Agencies
SWFWMD – Environmental Resources Bureau Regulation Division
EPC of Hillsborough County
City of Tampa – Mobility Division
Port Tampa Bay

Table 21. Advanced Notification Agency Responses

Federal Agencies	Issues/Response
USACE	Pre-Application meeting should be requested once there is a proposed design plan. Required Permits: Section 404 – NWP#14 or NWP#15; and Section 10 / Section 408.
USCG	A USCG bridge permit will be required for modifications (widening) to the bridge crossing the Hillsborough River. The existing navigational clearance over the Hillsborough River must not be encroached upon by the proposed widening project.
NMFS	NMFS principal concern is the widening of the bridge over the Hillsborough River. Shoreline mangroves at this location might experience minor shading impacts due to the bridge widening, which should be addressed in the Essential Fish Habitat Assessment. In terms of the Endangered Species Act (ESA), there is a potential for bridge construction activities, including in-water pile driving, to affect ESA-listed species under NMFS's purview (smalltooth sawfish and green, loggerhead, and Kemp's ridley sea turtles).
USFWS	At the time of the notification, did not have any species concern. Once the PD&E has been completed the USFWS would like to review all documents.
State Agencies	Issues/Response
FDEP	Advance Notification acknowledged. No comments.
FDEP – State Clearinghouse	Based on the information submitted and minimal project impacts, the State has no objections to the proposed project and, therefore, it is consistent with the Florida Coastal Management Program (FCMP). Final concurrence of the project's consistency with the FCMP would be determined during any environmental permitting processes, in accordance with Section 373.428, Florida Statutes.
FDOS - DHR	As part of the Section 106 process, a CRAS specific to this project that identifies and evaluates cultural and historical resources within the area of potential effects needs to be provided to DHR. <i>(The CRAS was updated in April 2021 as a result of comments received from the FDOS DHR and resubmitted to DHR for concurrence.)</i>
FFWC	No comments, recommendations, or objections related to state-listed species and their habitat or other fish and wildlife resources. The liability to not impact or cause "take" of listed species, migratory wildlife, and other regulated species of wildlife is the responsibility of THEA for this project. If listed species are observed onsite in the future, FFWC staff are available to provide decision support information or assist in obtaining the appropriate permits.

Regional Agencies	Issues/Response
SWFWMD	<p>Environmental Resource permit may be required. However, the final determination of the type of permit will depend upon the final design configuration. Comments and degree of effect (DOE) were provided regarding the following resources: coastal and marine (DOE: minimal, permit required), contamination (DOE: moderate, further coordination required), floodplains (DOE: moderate, permit required), Historic and archaeological sites (DOE: none, permit required), Infrastructure (DOE: moderate, further coordination required), recreation areas (DOE: none, permit required), water quality and quantity (DOE: moderate, permit required), wetlands and surface waters (DOE: minimal, permit required), wildlife and habitat (DOE: minimal, permit required), and federal consistency (consistent with comments).</p>
Hillsborough County EPC	<p>Wetlands: no obvious significant wetlands other than the crossing of the Hillsborough River. Miscellaneous Impacts in Wetlands required.; Air quality: The most obvious method to reduce the impacts to neighboring properties is to minimize encroachment of new roadways toward these properties, so expansion inward toward the existing median should be encouraged where practical. If there is outward or elevated expansion, the design should consider elevated walls near the travel lanes, particularly near the residential portions of the corridors, to help minimize transportation impacts such as noise, rubber remnants from tire wear, and potentially some of the air pollutants; Waste: a number of sites, including two old landfills that may be impacted. In the event that the either or both of the identified old landfills may be impacted, staff with the EPC’s Waste Management Division should be contacted.</p>
City of Tampa – Mobility Division	<p>Additional coordination was conducted, as described in the Comments and Coordination Report for the proposed project.</p>
Port Tampa Bay	<p>Receipt of Advance Notification was not provided.</p>

7.0 Public Involvement

Several additional meetings were held over the course of the PD&E study to meet with public officials, agencies, public, and interested stakeholders. The PD&E Study was introduced to the public on Thursday March 5, 2020, during a Virtual Town Hall conducted by THEA to provide status updates on various other on-going THEA projects.

The meetings included scheduled public meetings, including the Alternatives Update Virtual Meeting and Public Hearing. In addition to these two scheduled public meetings, additional meetings were held with stakeholders, including elected and appointed officials, agency representatives, special interest groups, homeowners' associations, and individuals, as needed. Refer to the Comments and Coordination Report (CCR) for the proposed project for additional details regarding public outreach.

7.1. Public Involvement Program

A comprehensive Public Involvement Program (PIP) that focused on soliciting community participation was developed and implemented as part of the PD&E Study. The program was prepared in compliance with the FDOT PD&E Manual Part 1, Chapter 11 and approved by THEA in June 2019. The purpose of the PIP was to provide a guide for implementing stakeholder involvement for the study with an emphasis on the communities adjacent to the study area. The PIP was used as a blueprint for defining methods and tools to reach, educate, and engage all stakeholders in the decision-making process. The strategies outlined in the PIP were designed to be comprehensive, and to ensure stakeholders are provided multiple opportunities to be informed and engaged as the study progresses.

The primary goal of the PIP was to actively seek the participation of communities, agencies, individual interest groups, and the public throughout the PD&E process. The following information was included as part of the PIP:

- Identify stakeholders and target audiences;
- Anticipate issues and key messaging;
- Outline outreach methods;
- Detail public involvement activities;
- Establish comment management protocols; and
- Provide a structure for documenting the PIP and closing out the study.

7.2. Alternatives Update Virtual Meeting

THEA held an Alternatives Update Virtual Meeting on Thursday, September 10, 2020, at 6:30 p.m. for the PD&E Study. Due to the COVID-19 pandemic, the Alternatives Update was held virtually. Registration for the meeting and the meeting itself was held online.

The virtual meeting format consisted of an online presentation by THEA to present the alternatives identified to improve travel times, reduce congestion, improve safety, and enhance regional mobility. The virtual meeting participants were introduced to the interactive website that included all meeting materials (www.southselmonpde.com). One hundred thirty-two (132) citizens registered for the

workshop. The virtual workshop was attended by 62 citizens as well as THEA and consultant staff. Attendees were presented a slideshow consisting of:

- An overview of the PD&E Study.
- The need to improve the Selmon Expressway.
- The PD&E Study process to develop, screen and refine alternatives for additional evaluation.
- The five preliminary alternatives that were developed based on the project purpose and need were presented, as well as a new alternative, Alternative 6.
- The build alternatives under consideration (Alternatives 2 and 6).
- The evaluation criteria for the two alternatives under consideration, as compared to the no-build alternative.
- The PD&E Study resources and reports that are currently or will be available.
- The methods for the public to provide feedback on the alternatives under consideration, including a comment form, email address, and mail-in option .

After the presentation, the questions and answer portion of the workshop began. Citizens were able to submit questions real-time virtually in a chat on the online meeting platform and received responses during the workshop. Nineteen citizens submitted 45 questions during the virtual workshop.

A recording of the virtual meeting was posted in its entirety the next day, September 11, 2020, on the THEA website www.selmonstudies.com. The interactive website (www.southselmonpde.com) was available starting on September 10, 2020, and was accessible anywhere, anytime. This website contained the same information that was presented at the virtual meeting, including methods for the public to provide feedback on the alternatives under consideration.

Comments were accepted by THEA on the alternatives up to 5 pm on October 2, 2020. All comments received during this period were responded to and taken into consideration by THEA during the selection of the preferred alternative. During the 21-day comment period, 110 unique visitors viewed the online meeting.

Fifty-one (51) written comments were received at the meeting, online, or via email during the 21-day review period following the virtual meeting. Most comments received at the meeting, online, and those sent directly to THEA indicated their desire for the installation of noise walls as soon as possible. Additional comments inquired about the construction schedule, widening for the additional lanes, traffic volumes, proposed wall heights, and whether transit was being considered. Additional information regarding the Alternatives Virtual Meeting, including meeting materials, advertisements, notices, and public comments, can be found in the CCR.

7.3. Public Hearing

A Public Hearing was held on February 25, 2021, at 5:00 pm at the Tampa Convention Center. The purpose of the hearing was to provide interested persons with information on the Preferred Alternative and to allow the public the opportunity to comment. To accommodate those who were not able to

attend in public, all meeting materials were also posted virtually prior to the in-person hearing on www.southselmonpde.com.

Prior to the Public Hearing, THEA distributed a public notice postcard, letters to elected and appointed officials and agencies, newspaper ads, FAR ads, press releases, social media posts, project website. The first newspaper ad was published on January 31, 2021, and the second newspaper ad was published on which February 17, 2021. The newspaper ad also listed locations where the project documents would be displayed for review at least 21 days prior to the hearing, which included the project website. The full mailing list for this newsletter was updated on January 20, 2021. The public hearing notifications, including newspaper ads, postcard, press release, screenshots of the website public hearing announcements, project documents, mailing list, social media posts, and the FAR ad can be found in the CCR.

A total of 30 citizens signed in at the Public Hearing. Attendees were provided with sign-in card and hearing handout/comment form. The meeting began with an open house from 5:00 p.m. to 6:00 p.m., followed by opening remarks and an audiovisual presentation at 6:00 p.m. The audiovisual presentation discussed an overview of the project. These details included the PD&E Study process, a description of the Preferred Alternative and the estimated project costs and impacts.

During the comment period which lasted from February 4 to March 8, 2021, THEA received 90 comments from the public. Sixty percent (60%) of the comments were received via the southselmonpde.com comment form, 26 percent of comments were received via email, 13 percent of comments were received in person during the Public Hearing, and 1 percent via the THEA main office line.

Forty-six percent (46%) of the comments expressed opposition to the study, 23 percent mentioned noise walls, barriers, and/or noise pollution, 19 percent advocated for mass transit needs, 14 percent shared concerns that they would like to be considered such as tolls and structural disruption, 12 percent clarified improvements they would like to see in addition to the extension of the expressway, and 11 percent expressed apprehension around light and air pollution.

An analysis of comments using the provided mailing addressed was conducted to understand where commentors lived in relation to the study area. Many live directly adjacent to the corridor, but some commentors also live elsewhere in Hillsborough County.

7.4. Stakeholder Coordination Meetings

In addition to the Alternatives Update Virtual Meeting and Public Hearing, THEA held and/or participated in additional stakeholder coordination meetings throughout the project. These meetings included those with neighborhood associations, elected officials, and local agencies. Additional information regarding the stakeholder coordination meetings can be found in the CCR.

8.0 Implementation Measures and Commitments

8.1. Implementation Measures

Measures required to be implemented per construction procedure, standard specifications, or other agency requirements issued in a later project phase are listed below to help address project effects.

- Water quality impacts from construction will be avoided and minimized through the implementation of BMPs including, but not limited to, construction phasing, sediment barriers, floating turbidity curtains, silt fences, and other techniques identified during design and permitting by the regulatory agencies and later during construction by the selected contractor.
- If a gopher tortoise or a potentially occupied burrow is discovered in or within 25 feet of the project construction corridor during pre-construction gopher tortoise surveys, THEA will coordinate to secure an FWC Gopher Tortoise Relocation Permit.
- THEA will conduct a bald eagle nest survey during design and permitting and will coordinate with the USFWS to obtain a Bald Eagle Incidental Take Permit (i.e. Non-Purposeful Take) if impacts to the bald eagle nest cannot be avoided in accordance with the BGEPA and MBTA and the USFWS Bald Eagle Management Guidelines.
- Osprey nest surveys will be conducted during the permitting phase of the proposed project. If an osprey nest is identified, THEA will coordinate with the USFWS and/or the FWC depending on the activity status of the nest.

8.2. Commitments

8.2.1. Cultural Resources

- During construction for the project within the Fort Brooke site (8HI00013), ground disturbance that goes beyond the depth of one meter (3.3 ft) shall be monitored by a qualified archaeologist.
- If prehistoric or historic artifacts, such as pottery or ceramics, projectile points, dugout canoes, metal implements, historic building materials, or any other physical remains that could be associated with Native American, early European, or American settlement are encountered at any time within the project area, construction activities involving subsurface disturbance in the vicinity of the discovery will cease. The Florida Department of State, Division of Historical Resources, Compliance Review Section will be contacted. The subsurface construction activities will not resume without verbal and/or written authorization. In the event that unmarked human remains are encountered during construction activities, all work will stop immediately, and the proper authorities notified in accordance with Section 872.05, Florida Statutes.

8.2.2. Natural Resources

To protect listed wildlife, wildlife habitat, plants, wetlands, and other surface waters, THEA will abide by standard resource protection measures in addition to the following commitments:

- THEA will require the construction contractor to adhere to the most current NMFS's Construction Special Provisions - Gulf Sturgeon Protection Guidelines for the protection of the Gulf Sturgeon.
- THEA will require that the construction contractor to adhere to the most current NMFS's Sea Turtle and Smalltooth Sawfish Construction Conditions during project construction.
- THEA will implement the USACE Standard Manatee Conditions for In-Water Work (most current version). These guidelines will be incorporated as part of the final project design. Additional special conditions for manatees will be addressed during construction and include the following:
- 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. Existing slow speed or no wake zones will apply to work boats and barges associated with construction; and
- The spacing between the bridge pilings will be at least 60 inches to allow for manatee movement in between the pilings. If a minimum of 60-inch spacing is not provided between piles, further coordination will be conducted with the USFWS.
- Any culverts larger than eight inches and less than eight feet in diameter will be grated to prevent manatee entrapment.
- THEA will implement a Marine Wildlife Watch Plan (MWWP) for the Florida manatee during project construction to eliminate the possibility of construction-related manatee injury or death. These guidelines will be incorporated into the final project design.
- THEA will coordinate with the NMFS, USFWS, and/or USACE regarding potential impacts associated with pile driving activities needed for bridge construction over the Hillsborough River.
- The size/style of piles, quantity of piles, number of piles driven per day, number of strikes per pile, and other information needed to determine potential hydroacoustic impacts to marine wildlife is currently unknown.
- THEA will inform the construction contractor of the requirement to use a ramp-up procedure during the installation of piles. This procedure allows for a gradual increase in noise level to give sensitive species ample time to flee prior to initiation of full noise levels. This approach can reduce the likelihood of secondary or sub-lethal effects from sound impulses associated with pile driving.
- No nighttime in-water work will be performed. In-water work will be conducted from official sunrise until official sunset times.

8.2.3. Highway Traffic Noise

Based on the traffic noise analysis, few locations along the proposed project improvements for both Alternative 2 and 6 met the federal and state criteria for noise walls. However, for the preferred alternative (Alternative 6), THEA has committed to building walls the entire length of the project on both sides of the roadway.

8.2.4. Contamination

- For those locations with a risk ranking of MEDIUM and HIGH, Level II field screening should be considered during future project implementation phases.
- Additional information may become available or site-specific conditions may change from the time the CSER was prepared and should be considered prior to proceeding with roadway construction

9.0 Technical Materials

The following technical materials have been prepared to support this environmental document.

- Preliminary Engineering Report (PER)
- Project Traffic Analysis Report (PTAR)
- Location Hydraulics Report
- Pond Siting Report (PSR)
- Conceptual Design Plan Set (see PER Appendix)
- Typical Section Package (see PER Appendix)
- Geotechnical Report
- Noise Study Report (NSR)
- Air Quality Technical Memorandum
- Contamination Screening Evaluation Report (CSER)
- Water Quality Impact Evaluation (WQIE)
- Natural Resource Evaluation (NRE) Report
- Cultural Resource Assessment (CRAS) Report

Attachment A

Water Quality Impact Evaluation (WQIE)

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
WATER QUALITY IMPACT EVALUATION CHECKLIST

650-050-37
ENVIRONMENTAL
MANAGEMENT
10/17

PART 1: PROJECT INFORMATION

Project Name:	South Selmon Project Development and Environment (PD&E) Study
County:	Hillsborough
FM Number:	
Federal Aid Project No:	
Brief Project Description:	The project considers capacity improvements including widening inside to the median, adding inside paved shoulders, and adding lanes by widening to the outside or constructing elevated lanes along the median. The project limits extend from Himes Avenue to the beginning of the six-lane section near Whiting Street.

PART 2: DETERMINATION OF WQIE SCOPE

Does project discharge to surface or ground water? Yes No

Does project alter the drainage system? Yes No

Is the project located within a permitted MS4? Yes No

Name: _____

If the answers to the questions above are no, complete the applicable sections of Part 3 and 4, and then check Box A in Part 5.

PART 3: PROJECT BASIN AND RECEIVING WATER CHARACTERISTICS

Surface Water

Receiving water(s) names: Hillsborough River and Hillsborough Bay

Water Management District: Southwest Florida Water Management District (SWFWMD)

Environmental Look Around meeting date: 10/9/2020

Attach meeting minutes/notes to the checklist.

Water Control District Name (list all that apply): N/A

Groundwater

Sole Source Aquifer (SSA)? Yes No

Name _____

If yes, complete Part 5, D and complete SSA Checklist shown in Part 2, Chapter 11 of the PD&E Manual

Other Aquifer? Yes No

Name Floridan Aquifer

Springs vents? Yes No

Name _____

Well head protection area? Yes No

Name _____

Groundwater recharge? Yes No

Name Rates of recharge for the Floridan Aquifer vary from less than 1 inch to more than 20 inches per year, depending on local geologic and hydrologic conditions.

Notify District Drainage Engineer if karst conditions are expected or if a higher level of treatment may be needed due to a project being located within a WBID verified as Impaired in accordance with Chapter 62-303, F.A.C.

Date of notification: [Click here to enter a date.](#)

PART 4: WATER QUALITY CRITERIA

List all WBIDs and all parameters for which a WBID has been verified impaired, or has a TMDL in [Table 1](#). This information should be updated during each re-evaluation as required.

Note: If BMAP or RAP has been identified in [Table 1](#), [Table 2](#) must also be completed. Attach notes or minutes from all coordination meetings identified in [Table 2](#).

EST recommendations confirmed with agencies? Yes No

BMAP Stakeholders contacted: Yes No

TMDL program contacted: _____ Yes No

RAP Stakeholders contacted: Yes No

Regional water quality projects identified in the ELA Yes No

If yes, describe:

Potential direct effects associated with project construction and/or operation identified? Yes No

If yes, describe:

The Selmon Expressway within the project limits crosses nine stormwater basins, which are subdivided based on the basin's outfall into the Hillsborough River or Hillsborough Bay. Treatment volumes were estimated to meet the presumptive water quality criteria and impacts to the existing ditches as a result of the proposed

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated December 14, 2016 and executed by FHWA and FDOT.

Evaluator Name (print): G. Noemi Castillo	
Title: Project manager	
Signature: 	Date: 5/24/2021

roadway widening. The proposed stormwater management system for the design alternatives was designed for the ultimate 8-lane section of the Selmon Expressway (See Pond Siting Report for details). Therefore, the anticipated ponds and drainage system modifications are the same for Alternatives 2 and 6. The treatment volume was determined based on volume added due to added impervious area, and replacement of shoulder with travel lanes

Unique stormwater management approaches were used, which vary from basin to basin, due to the limited available right-of-way for stormwater management. Open spaces within the existing right-of-way that were feasible for stormwater management have been used to meet requirements. Compensatory treatment was used for some basins where traditional stormwater management approaches, such as with ponds, were not possible. Additionally, basin divides were changed in some areas to meet attenuation requirements in basins that did not have enough available storage.

Proposed stormwater management solutions to meet all regulatory criteria include the following approaches:

- Shifting basin limits
- Wet Detention/dry retention stormwater management facilities
- Underground stormwater vault systems
- Modifying existing stormwater ponds
- New/Expanded outfalls

Discuss any other relevant information related to water quality including Regulatory Agency Water Quality Requirements.

Two separate water quality requirements affect this project. These criteria are referred to as the presumptive water quality treatment requirement and the net nutrient improvement requirement. Presumptive water quality treatment requires either 0.5 or 1.0 inch of runoff from the added impervious area must be stored and treated. Additionally, the impervious area added from the widening of the inside shoulder as part of the South Selmon Safety Improvement project must also be treated, once the paved shoulder becomes repurposed as additional travel lanes. No net increase in nutrient loading across the project limits must also be demonstrated, as the project drains to a nutrient impaired waterway.

PART 5: WQIE DOCUMENTATION

- A. No involvement with water quality
- B. No water quality regulatory requirements apply.
- C. Water quality regulatory requirements apply to this project (provide Evaluator's information below). Water quality and stormwater issues will be mitigated through compliance with the design requirements of authorized regulatory agencies.
- D. EPA Ground/Drinking Water Branch review required. Yes No
Concurrence received? Yes No
- If Yes, Date of EPA Concurrence: [Click here to enter a date..](#)
Attach the concurrence letter

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* ONRW, OFW, Aquatic Preserve, Wild and Scenic River, Special Water, SWIM Area, Local Comp Plan, MS4 Area, Other

** Lakes, Spring vents, Streams, Estuaries

Note: If BMAP or RAP has been identified in [Table 1](#), [Table 2](#) must also be completed.

