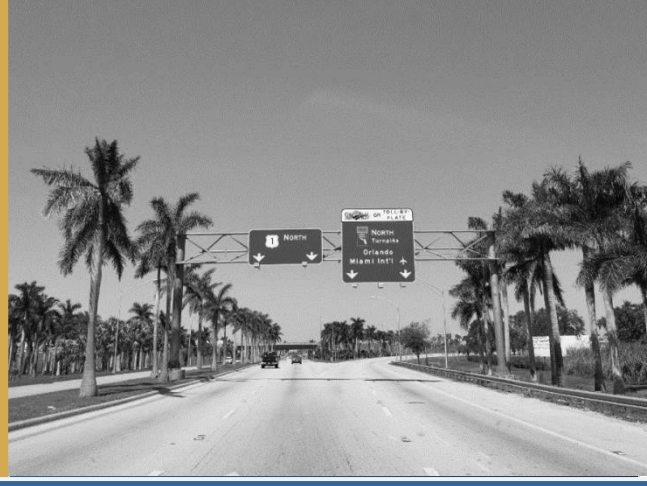

State Environmental Impact Report

Florida's Turnpike (SR 821) Widening
Project Development and Environment (PD&E) Study
From US 1 (South of Palm Drive) to Campbell Drive | Miami Dade County, Florida

FM No. 439545-1-22-01

Florida Department of Transportation
Florida's Turnpike Enterprise
P.O. Box 613069 | Ocoee, FL 34761

November, 2021

State Environmental Impact Report

Miami-Dade County, Florida
FM No: 439545-1-22-01| ETDM No: 14322

Prepared for:
Florida's Turnpike Enterprise
Florida's Turnpike Mile Post 263
Building 5315
Ocoee, Florida 34761

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November 2021

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Section 1

Project Information

1.1 Project Description

The Turnpike Extension (SR 821) is a Strategic Intermodal System (SIS) limited access toll highway connecting the Florida Keys, the City of Florida City, and the City of Homestead with the greater Miami-Dade County region. The Turnpike Extension is the primary evacuation route connecting with the Florida Turnpike (SR 91) near the Miami-Dade/Broward County line.

The Project Development and Environment (PD&E) Study evaluates the southern three (3) miles of the Turnpike Extension within Miami-Dade County and the two (2) local municipalities which are the City of Florida City and the City of Homestead. The PD&E study limits are from US 1 (south of Palm Drive) to Campbell Drive/SW 312nd Street. Turnpike milepost (MP) 0.00 is located at US 1 and MP 3.0 is located at the Campbell Drive interchange. **Figure 1-1** Project location Map.

The proposed improvements include widening the existing four (4) lane expressway and bridges to six (6) lanes between US 1 and Campbell Drive; improving the US 1 interchange with a new ramp over Palm Drive, adding a partial interchange at Lucy Street, converting the taper ramps to parallel ramps at the Campbell Drive interchange and providing auxiliary lanes between Campbell Drive and Lucy Street. Bridge widening and/or minor improvements are proposed at Lucy Street, SW 162nd Avenue, and C-103 Canal and Campbell Drive. Two (2) new ramp bridges are proposed over the US 1 northbound lanes and over Palm Drive.

The project's purpose and need, and potential effects were screened through the Efficient Transportation Decision Making (ETDM) process as project #14322 and, documented in the ETDM Programming Screen Report dated June 28, 2017.

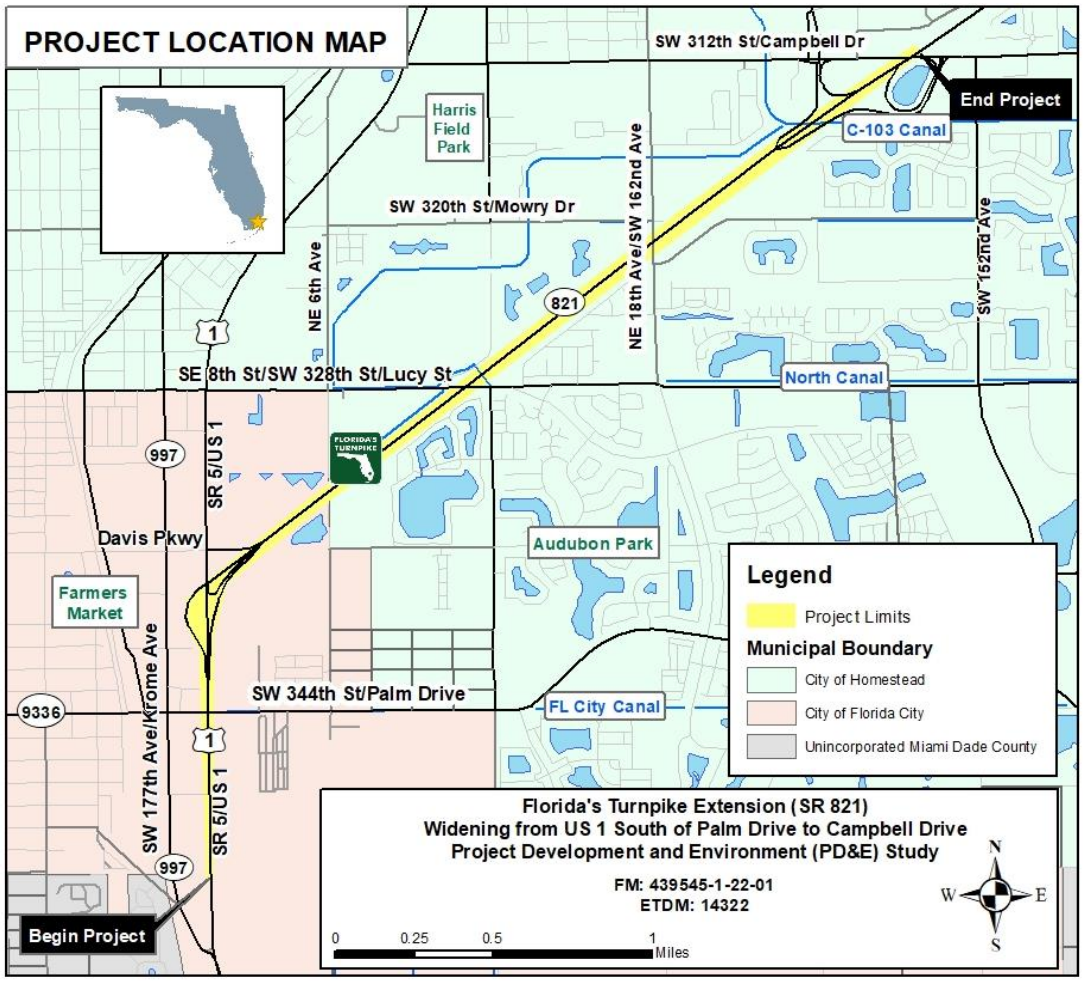


Figure 1-1 Project Location Map

Project Background

Several studies conducted during the previous decade by Florida Department of Transportation (FDOT) District 6 and the Miami-Dade Transportation Planning Organization (MDTPO) documented the need for improved operations at Palm Drive and US 1. The MDTPO report, *Evacuation Planning Assessment for the US 1 and SW 344th Street [Palm Drive] Intersection Area*, dated June 2012, identified several major alternatives to address traffic operations at the US 1 interchange and Palm Drive intersection.

There are several related projects within the vicinity of the study area. In 2015, FDOT District 6 completed a PD&E study for SR 997/Krome Avenue Truck By-Pass from South of Flagler Avenue to SW 296th Street. The truck by-pass study resulted in several widening, reconstruction and intersection improvement projects listed below:

- FM 435462-1-52-01 Campbell Drive Design-Build
- FM 423372-2 Turnpike Widening from SW 288th Street to SW 216th Street

- FM 405575-6-52-01 Campbell Drive from Krome Avenue to US 1
- FM 405575-7-52-01 Davis Parkway from Krome Avenue to US 1
- FM 405575-8-52-01 Palm Drive from Krome Avenue to US 1
- SW 344th Street/Palm Drive from US 1 to SW 172nd Avenue Canal Culverting and Roadway Widening Design
- Project No. 20040558 SW 328th Street/Lucy Street Widening Project from US 1 to SW 162nd Avenue
- FM 440423-1-52-01 & 440423-2-52-01 – State Road No. 821 (Homestead Extension of Florida's Turnpike) Resurfacing and Safety Improvements from MP 0.000 to MP 9.200
- FM 441812-1-52-01 – SR 5/US 1/South Dixie Highway from Card Sound Road to South of 336 Street.

Existing Conditions

Florida's Turnpike is part of the Strategic Intermodal System (SIS) and is a tolled facility but has no existing tolling facilities within the project limits. The portion of Florida's Turnpike being evaluated is primarily oriented southwest to northeast. The existing 4 to 6-lane mainline typical section has a 64 to 88-foot median, with paved outside and median shoulders, and continuous guardrail along the southbound median shoulder. The posted speed limit is 65 Miles Per Hour (MPH) and the existing right-of-way width is generally 300 feet and widens to accommodate the interchanges.

US 1 Interchange Exit 1 (MP 0.436 – 0.538)

The US 1 interchange is the southern terminus of, and the gateway to, the Turnpike tollway system and does not have a typical interchange layout as the tollway system interfaces with the US 1 arterial system. At the interchange area, US 1 is a 4 to 6-lane, SIS, divided highway facility. US 1 is also listed on the Department of Defense Strategic Highway Network (STRAHNET) due to its connectivity with the Naval Air Station in Key West.

Campbell Drive Interchange Exit 2 (MP 2.617 to 3.055)

The Campbell Drive interchange is a full interchange providing for all movements to and from the Turnpike facility. Existing ramp connections to the Turnpike are taper-type connections.

Several different roadway sections are also present within the project limits and described below.

US 1 (SR 5) (Dixie Highway) (NE 1st Avenue)

US 1 is a 4 to 6-lane divided north-south facility with varying lane widths from 11 to 12 feet. South of Palm Drive, curb and gutter and sidewalk are provided along both sides of the roadway. North of Palm Drive outside 10-foot shoulders (4 feet paved) are provided. No sidewalks are provided north along US 1 between Palm Drive and Davis Parkway. US 1 will become a SIS facility and ownership will be transferred to FDOT as part of the SR 997 (Krome Avenue) Truck By-Pass

PD&E Study. South of Florida's Turnpike, US 1 remains an FDOT SHS and SIS, as well as a STRAHNET facility for the Department of Defense.

Palm Drive (SW 344 Street)

Palm Drive, owned and maintained by Florida City east of US 1, is a 4-lane divided facility east of US 1. West of US 1, it is also known as SR 9336 and owned and maintained by FDOT. In this area the roadway is a 6-lane divided urban facility. Posted speed limit in the eastbound direction is 40 MPH and 30 MPH in the westbound direction. Lane widths are generally 11 feet within the study area. West of US 1 the eastbound outside thru lane becomes a drop right turn lane to southbound US 1. The inside thru lane becomes a left turn lane to northbound US 1. Sidewalk exists only along the southside of Palm Drive, west of US 1. Florida City is currently constructing improvements along Palm Drive east of US 1. These improvements include widening the roadway to provide a 6-lane divided facility. A 6-foot sidewalk and 5-foot bike lane will be provided along the south side of the roadway and a 12-foot shared use path along the north side.

Lucy Street (SW 328th Street)

Lucy Street, owned and maintained by Miami-Dade County, is a 4-lane, east-west divided roadway with a posted speed limit of 40 MPH. The arterial does not currently provide access to the Turnpike. The roadway provides two 11-foot thru lanes, 16-foot median, 4-foot bike lanes, and a 5-foot sidewalk.

Davis Parkway (SW 336 Street) (NE 7 Street)

Davis Parkway, in the westbound direction, originates from the southbound Exit 1 off-ramp from the Turnpike. Davis Parkway provides a combined through and westbound to southbound left turn lane, and one right turn lane east of the US 1 intersection. West of US 1 in the eastbound direction, one right turn and one left turn lane is provided.

Proposed Improvements

The proposed improvements for the project are the following:

- **Turnpike Widening:** The Turnpike tollway section, from milepost 0.54 to milepost 2.60, will be widened with one (1) additional lane in each direction to provide a six (6)-lane divided highway. The additional lanes will be constructed in the median and all six (6) lanes are general toll lanes. Express lanes were not recommended in this section of the Turnpike. Between the Lucy Street and Campbell Drive interchanges proposed outside widening will provide an auxiliary lane in the north and southbound directions.

- **US 1 Interchange:** The US 1 interchange is modified to include a new tolled ramp over Palm Drive with one (1) lane northbound and one (1) lane southbound. A new southbound US 1 right turn lane to Palm Drive that is located west of the southbound off-ramp between the limited access right of way line is proposed. The existing on- and off-ramps at US 1 will remain available to local traffic with minor improvements. The Davis Parkway southbound off-ramp will be converted from a one (1)-lane taper ramp to a two (2)-lane parallel off-ramp configuration.

- **Lucy Street Interchange:** A new partial interchange that provides local access to/from Lucy Street via a single lane northbound on-ramp and a single lane southbound off-ramp.

- **Campbell Drive Interchange:** The Campbell Drive northbound off-ramp, northbound loop on-ramp, southbound off-ramp and southbound on-ramp will be converted from a taper ramp to a parallel ramp configuration and auxiliary lanes (northbound and southbound) will be provided between Campbell Drive and Lucy Street.

The proposed improvements include widening most of the existing bridges along the Turnpike mainline, all of which can be accomplished by widening to the inside, outside or both. Widening will provide one (1) additional lane as well as accommodate auxiliary lane improvements from Lucy Street to Campbell Drive in both directions. In addition, the preferred alternative includes two new bridge ramps over US 1 and over Palm Drive as discussed above. The Preferred Alternative (Alternative B) concept plans (roll plot) are included as **Appendix A.**

Alternatives Considered

Two (2) primary build alternatives referred to as Alternative A and Alternative B were evaluated. Both alternatives accommodate the Turnpike mainline widening alternative, the Lucy Street interchange and Campbell Drive ramp improvements. The recommended alternative, is Alternative B.

- **Alternative A (US 1 Interchange Direct Connect):** Mainline widening alternative with a new tolled direct connect reliever ramp over Palm Drive. The existing on- and off-ramps at US 1 will remain available to local traffic with minor improvements.

- **Alternative B (US 1 Interchange Direct Connect Plus):** This alternative includes Alternative A improvements plus an extended single right turn lane to Palm Drive.

Major components of Alternatives A and B:

- **Turnpike Mainline Widening:**

  The Turnpike, within the project limits, will be widened with one (1) additional lane in each direction to provide a 6-lane divided highway. The additional lanes will be constructed in the median and all six (6) lanes will be general toll lanes. Between the Campbell Drive and Lucy Street interchanges proposed outside widening will provide an auxiliary lane in the north and southbound directions.

  The Campbell Drive northbound off-ramp, northbound loop on-ramp, southbound off-ramp and southbound on-ramp will be converted from a taper ramp to a parallel ramp configuration, and a southbound auxiliary lane will be provided from the Campbell Drive on-ramp to the Lucy Street off-ramp.

  The Davis Parkway southbound off-ramp will be converted from a one-lane taper ramp to a two-lane parallel ramp configuration.

- **Lucy Street Interchange:**

A new partial interchange that provides local access to/from Lucy Street via a single lane northbound on-ramp and a single lane southbound off-ramp.

The details of Alternative A and B are discussed further below.

Alternative A (US 1 Interchange Alternative A Direct Connect)

Alternative A features a two-lane, two-way grade-separated ramp connecting directly from the centerline of US 1 to the centerline of the Turnpike. One (1) lane in each direction will be elevated on retained earth embankment with bridge structures over Palm Drive and over the US 1 northbound travel lanes. The Direct Connect is proposed to be a static tolled on/off-ramp option for Turnpike motorists.

Northbound US 1 has three (3) lanes with one inside lane entering the direct connect ramp. The two (2) other lanes continue at-grade to the Palm Drive intersection. At the intersection, the northbound US 1 approach has one (1) U-turn lane, one (1) left turn lane, two (2) through lanes and one (1) shared through-right lane. North of Palm Drive, US 1 northbound has three (3) through lanes. The outside lane diverges to enter the northbound Turnpike on-ramp, the center lane is a choice lane (ramp or northbound US 1) and the median lane continues north on US 1.

Southbound US 1 has three (3) southbound through lanes, south of Davis Parkway. South of Davis Parkway, a southbound left turn lane serves a single lane on-ramp to northbound Turnpike Extension. The US 1 southbound approach at Palm Drive has dual right turn lanes, three (3) through lanes and dual left turn lanes. A raised 4-foot traffic separator is located between the through and left turn movements to prevent weaving. South of Palm Drive, the three (3) southbound through lanes merge to two (2) lanes which allows the southbound direct connect off-ramp lane to become the median (third) southbound US 1 lane. The outside southbound US 1 through lane becomes a drop right turn lane approximately 750 feet south of where the direct connect ramp lane joins US 1 at-grade.

Alternative B – (US 1 Interchange Alternative B Direct Connect Plus)

Alternative B has the identical features of Alternative A with the following additions:

- One southbound US 1 single lane right turn roadway begins just south of Davis Parkway and extends to Palm Drive. This single lane is located between the existing southbound off-ramp and the limited access right-of-way line.

- The existing Turnpike southbound US 1 off-ramp widens to two (2) lanes on the approach to Palm Drive to provide access the dual right turns and access the US 1 southbound through traffic lanes.

- An additional southbound traffic separator is provided between the right turn lanes and through lanes at Palm Drive.

Alternatives Analysis

Viable alternatives evaluated under this PD&E study were based on a number of previously prepared reports and technical memoranda that screened concepts to be advanced for further study as discussed below.

The US 1(SR 5) / SR 821 interchange analysis process had several iterations of concept development, from high- to sketch-level concepts through refined alternatives development for engineering and environmental assessment. Eight (8) high- and ten (10) sketch-level concepts were initially screened and four (4) concepts were eventually advanced for a comprehensive analysis considering the purpose and need, existing conditions, safety, evacuation needs, environmental effects, constructability, cost and adjacent projects either under study, design or construction. Two (2) project concept alternatives, as well as the No-Action alternative, were advanced into this PD&E Study for further engineering and environmental analysis.

Based on the previously prepared *Lucy Street Feasibility Study*, the partial interchange concept was also advanced for inclusion in this study.

The Campbell Drive interchange underwent analysis in a previous PD&E Study (FM 423372-1), completed in 2014 and the ramp improvements identified in that memorandum have been included in the analyses performed as a part of this PD&E study.

A Value Engineering (VE) and Cost Risk Analysis was performed during this study. Two (2) of the recommendations were incorporated into the PD&E study, eight (8) were deferred to final design and the remaining eight (8) were not found to offer value to the project.

At the time of preparation of this report, there were several planned improvements in the design or construction phases under separate projects that were incorporated as existing conditions in this study. Those improvements consist of the following:

- Palm Drive widening to a 6-lane divided facility east of US 1 (City of Florida City project).
- Addition of a southbound right turn lane at the intersection of US 1 and Palm Drive (FDOT D6 FPID 405575-8-52-01).
- Widening of Davis Parkway west of US 1 and the addition of turn lanes on the north and west leg of the Davis Parkway / US 1 intersection (FDOT D6 FPID 405575-7).
- Lucy Street (SW 328th Street) widening to an urban 4-lane divided roadway from US 1 to SW 162nd Avenue (Miami-Dade County Public Works Project Number 20040556).
- Turnpike mainline milling and resurfacing with minor widening and slope regrading, lighting and ITS improvements (FDOT FPID's 440423-1-52-01 and 440423-2-52-01).

Each of the Build Alternatives, the Transportation Systems Management and Operations (TSM&O) alternative and the No Build alternative were compared in an evaluation matrix (below) with common criteria pertinent to the study and presented to the public at the Public Information meeting in January of 2020. This evaluation matrix (**Table 1-1**), together with public and agency input, assisted with the identification of the preferred alternative, Alternative B. The Preferred Alternative was selected based on efforts to minimize social, economic, cultural, natural, physical, and right-of-way (ROW) impacts. The detailed evaluation of alternatives is documented in the Preliminary

Engineering Report. This SEIR documents the social, economic, cultural, natural, and physical impacts of the Preferred Alternative.

Table 1-1 Evaluation Matrix

Criteria / Objective		Project Alternatives			
		A	**B**	**TSM&O**	**No Build**
Traffic/ LOS/ Safety	Improve Traffic Operations and Safety for Roadway users	**Yes**	**Yes**	**Minimally**	**No**
	Improve Freeway LOS	**Yes**	**Yes**	**Minimally**	**No**
	Improve Emergency & Evacuation capability	**Yes**	**Yes**	**Minimally**	**No**
	Provide additional Access Opportunities	**Yes**	**Yes**	**No**	**No**
Right-of-Way	Minimize Right-of-Way Impacts	17 parcels (15.233 Ac)	17 parcels (15.264 Ac)	0 parcels	0 parcels
Environmental Impacts	Minimize Cultural (Recreational Areas, Historic, Archaeological Sites) impacts	**No impact**	**No impact**	**No impact**	**No impact**
	Minimize Physical (Contamination, Noise, Air) effects	**Yes (C, N, A)**	**Yes (C, N, A)**	**Yes (N, A) Maybe (C)**	**No (N, A)**
	Minimize Natural (Species & Wetlands) effects	**Yes, effects mitigated**	**Yes, effects mitigated**	**No impact**	**No impact**
	Enhance Social (Public, Community & Businesses) effects	**Yes**	**Yes**	**Maybe**	**No**
Other Factors	Enrich Community Livability	**Yes**	**Yes**	**Maybe**	**No**
	Improve Regional Mobility	**Yes**	**Yes**	**Maybe**	**No**
	Compatible with Adjacent Projects	**Yes**	**Yes**	**Yes**	**No**

Legend: **Yes = Positive effect** **Maybe = potentially positive effect** **No = negative effect**
C=Contamination **N= Noise** **A=Air**

Preferred Alternative Typical Sections

The Turnpike mainline typical section will be generally widened to the inside to include six (6), 12-foot travel lanes which are all general toll lanes and shown in **Figure 1-2**.

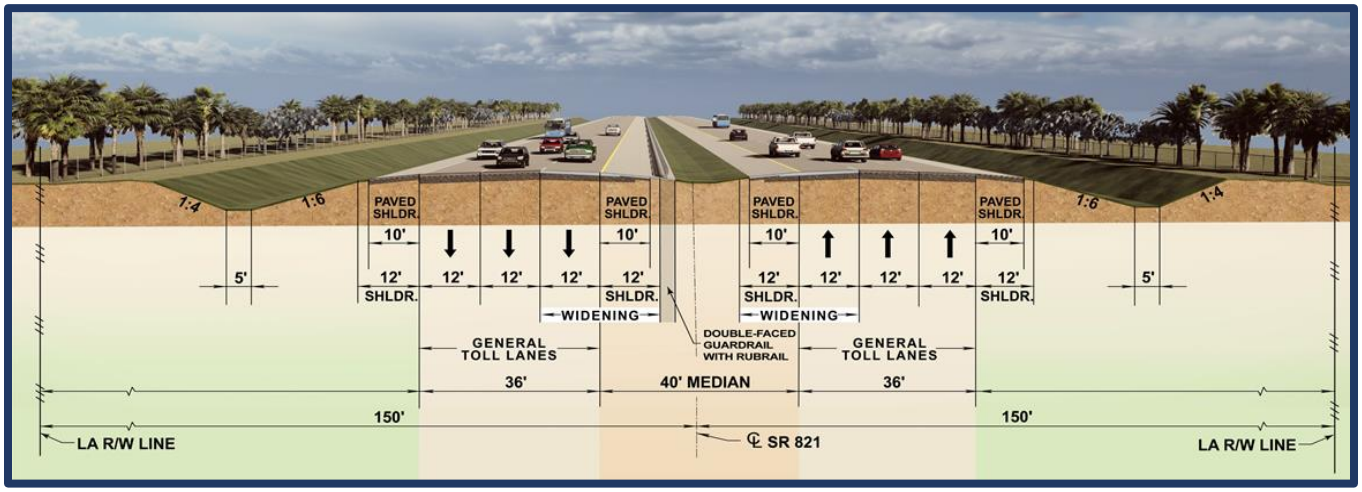


Figure 1-2 Proposed Turnpike Typical Section

Between the new Lucy Street partial interchange and the Campbell Drive interchange, the mainline will also be widened to the outside to provide a 12-foot auxiliary lane in each direction.

To accommodate the Preferred Alternative, most of the existing bridges will be widened along the Turnpike mainline. The Preferred Alternative will widen the existing bridges to the inside adding one (1) additional lane. Also, some of the bridges will be widened to the outside to accommodate auxiliary lane improvements.

The proposed Florida's Turnpike Ramp Bridge South (**Figure 1-3)** over Palm Drive is a three (3) span, steel girder (plate girder), non-skewed structure. Superstructure framing is comprised of ten (10) steel I-girders (plate girders) for all spans. Total out-to-out bridge width is 58-feet 8-inches, carries two (2) 15-foot lanes of traffic with one lane in each direction. The bridge provides traffic railing, a 6-foot inside and 6-foot outside shoulders with traffic separated by a 2-foot median traffic railing.

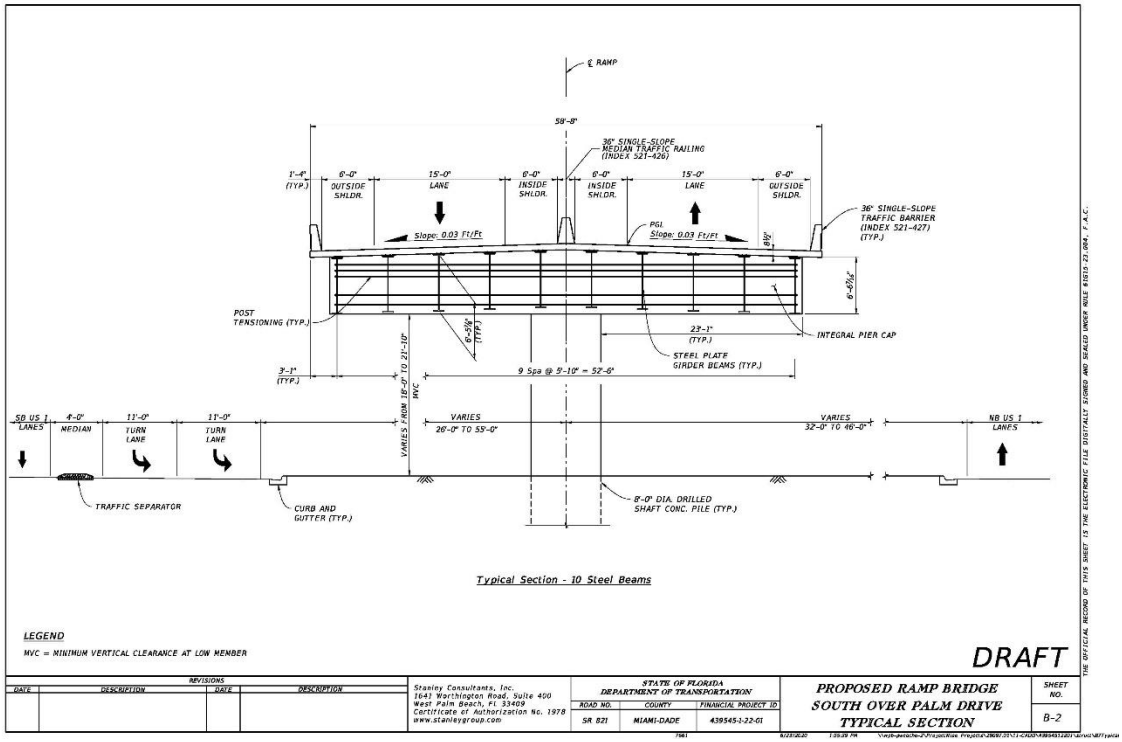


Figure 1-3 Proposed Ramp Bridge South Typical Section

The proposed Florida's Turnpike Ramp Bridge North (**Figure 1-4)** over US 1 is a two-span, steel girder (plate girder), curved structure with radial substructure support. The curvature of the bridge is 1649-feet. Superstructure framing is comprised of ten (10) steel I-girders (plate girders) for all spans. Total out-to-out bridge width is 58-feet 8-inches, carries two (2) 15-foot lanes of traffic with one lane in each direction. The bridge provides traffic railing, a 6-foot inside and 6-foot outside shoulders with traffic separated by a 2-foot median traffic railing.

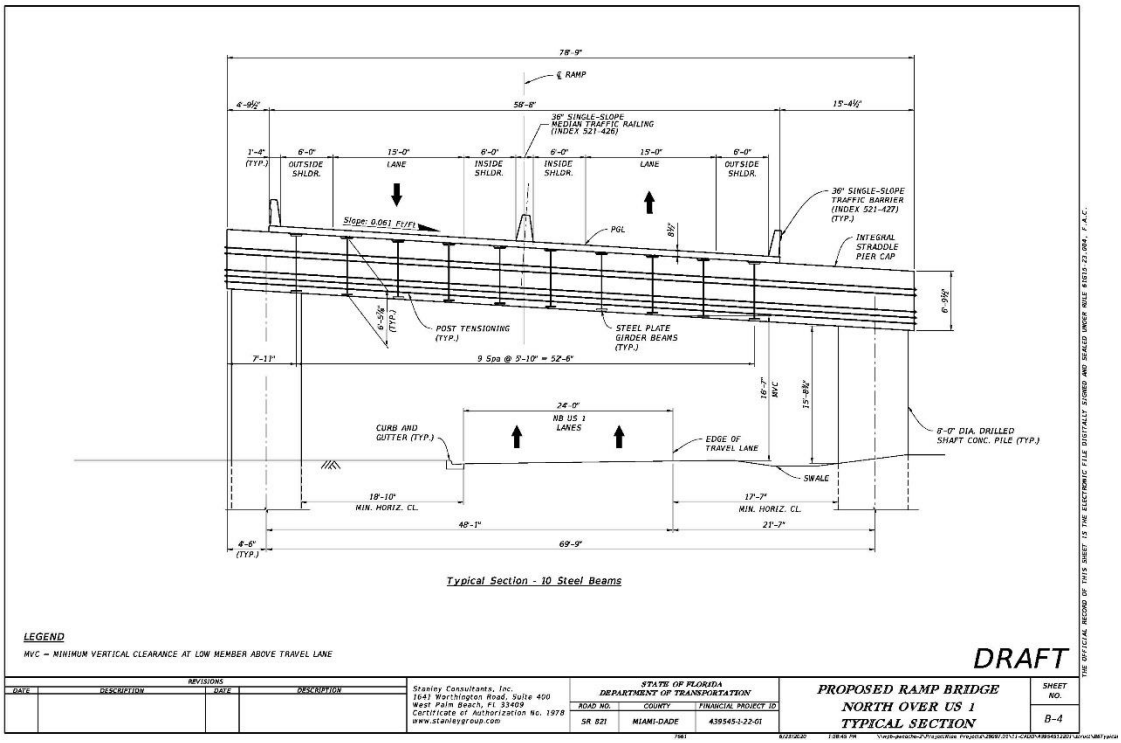


Figure 1-4 Proposed Ramp Bridge North Typical Section

Preferred Alternative Access Management

There are no proposed changes to the access management roadway classifications within the project limits.

The preferred alternative requires modifications to the existing median openings along US 1 south of Palm Drive. The full median openings located approximately 630 feet and 1,350 feet south of Palm Drive will be closed and replaced with a northbound, Texas U-turn, as a mitigation strategy. The full median opening located approximately 2,000 feet south of Palm Drive will be modified to a northbound directional opening. A new southbound left turn lane is provided at the existing median opening located approximately 3,400 feet south of Palm Drive to accommodate U-Turn movements. These access revisions can be found in the Preferred Alternative Concept Plans in **Appendix A**. Several local streets connect to US 1 providing a local access circulation network to Krome Avenue and Palm Drive, there are no proposed access changes to this network.

1.2 Purpose and Need

The purpose of the project is to enhance traffic operations and safety, accommodate future travel demand, enhance regional mobility, and enhance evacuation/emergency response.

Traffic Operations and Future Travel Demand

The existing four (4)-lane divided tollway experiences congestion in the typical am/pm peak hour and during the heavy inbound peak periods when traffic is heading south to the Florida Keys. The traffic operations continue to deteriorate through the Design Year 2045 dropping to Level of Service (LOS) F.

Existing traffic volumes on the Turnpike north of the US 1 interchange for year 2016 is 39,800 AADT. By year 2045 the freeway segment is expected to increase to 75,300 AADT. Without improvement, traffic congestion is anticipated to increase, and the freeway segment will decline to LOS F by year 2045. The ramp merge/diverge operations decline to LOS F without ramp improvements.

The existing traffic at the US 1 interchange experiences substantial delay and queueing as a result of the existing signalized intersection at US 1 and Palm Drive which is located within 450 feet of the Turnpike on- and off-ramps. The southbound off-ramps to US 1 and West Davis Parkway experience repetitive queueing that backs up over one mile into the highspeed travel lanes. Without improvements, the off-ramps to US 1 will operate at LOS F with extensive queues extending into the highspeed freeway lanes.

Safety

Safety and crash analyses were evaluated for the Turnpike freeway segment, ramps, and adjacent arterial roadways located at the interchanges. Both the Turnpike freeway and US 1 segments within the study area appear on the FDOT High Crash Locations list for the period 2011-2015. Additionally, the intersections of US 1 at Palm Drive and US 1 at Davis Parkway appear on the High Crash Locations list. The Department's High Crash Location list is composed of intersections and segments that experience higher crash rates than the statewide or districtwide average for similar intersections and roadway segments, which identifies a need for roadway and safety improvements to reduce crashes.

On the Turnpike freeway segment, 43 percent (%) of the crashes were run-off-road type and 19% rear-end crashes. The highest frequency of crashes occurred in July during the weekend days. At the US 1 interchange, 56% were run-off-road and 31% rear-end crashes.

Along US 1 from south of Krome Avenue to the Palm Drive intersection, 35% were rear-end and 18% sideswipe crashes, with 3% pedestrian and 2% bicycle crashes. There was one fatality on US 1.

Regional Mobility

The City of Homestead identified the need for improved regional mobility with additional Turnpike access between the US 1 and Campbell Drive interchanges. The US 1 interchange is in Florida City and the Campbell Drive interchange is at the northern boundary of the City of Homestead, with a distance of over 3 miles between interchanges. This segment of the Turnpike lacks intermediate access points to / from the Turnpike system for local residents and businesses. The Lucy Street interchange was incorporated into this PD&E Study.

Emergency Evacuation and Response

This project area is in storm surge planning zones A, B, and C which are at greatest risk for storm surge events during hurricanes, and the study segment of Florida's Turnpike is the only direct evacuation route for the region. The Turnpike Extension has been classified as an emergency

evacuation route by the Florida Division of Emergency Management. Widening the Turnpike, improving ramp operations, and the intersection at Palm Drive and US 1 will decrease emergency response times and will expedite evacuation for residents and visitors in Miami-Dade County and Monroe County (FL Keys).

1.3 Planning Consistency

The project is consistent with local planning agency plans as noted below:

- FDOT State Transportation Improvement Plan (STIP) and the MDTPO Transportation Improvement Plan (TIP) list the project as FM 439545-2 Widen HEFT with $7.3M for preliminary engineering in years 2021-23, and approximately $134M for construction beyond year 2024.
- MDTPO 2045 Long Range Transportation Plan (LRTP) lists the project as widening with US 1 interchange improvements with $89.8 million identified for this Priority IV project. The Lucy Street interchange is identified as a new interchange under Private and Developer Projects.
- City of Homestead Evaluation and Appraisal Report (EAR)-Based Amendments to the Homestead Comprehensive Plan, Goals, Objectives and Policies (2011), states that the project; meets Objective 3 of their plan to enhance regional access; satisfies Policy 3.6 to coordinate with FDOT and Miami-Dade County to consider the feasibility of a proposed interchange at Lucy Street and the Turnpike; and, satisfies Policy 5.6 regarding Krome Avenue, US-1, Turnpike, SW 312th Street, SW 328th Street, and SW 344th Street to be improved according to the Schedule of Capital Improvements (updated annually).

  Pages from the STIP/TIP website and MDTPO LRTP documenting the above are included in **Appendix B**.

Currently Adopted CFP-LRTP	**COMMENTS**
Yes	(If N, then provide detail on how implementation and fiscal constraint will be achieved)

PHASE	**Currently Approved TIP**	**Currently Approved STIP**	**TIP/STIP $**	**TIP/STIP FY**	**COMMENTS** If phase completed, note as such otherwise provide comments describing status and activities needed to achieve consistency
PE (Final Design)	Yes	Yes	**$** 2.2M	>2021	
ROW	Yes	Yes	**$** 16.3M	_____	ROW phase to be funded
Construction	Yes	Yes	**$** 134.2M	>2024	

Section 2

Environmental Analysis Summary

2.1 Environmental Analysis Summary

Issues/Resources	*Substantial Impacts? Yes	No	Enhance	No Inv
3. Social and Economic				
1. Social	☐	☒	☐	☐
2. Economic	☐	☒	☐	☐
3. Land Use Changes	☐	☐	☐	☒
4. Mobility	☐	☐	☒	☐
5. Aesthetic Effects	☐	☒	☐	☐
6. Relocation Potential	☐	☒	☐	☐
4. Cultural Resources				
1. Historic Sites/Districts	☐	☐	☐	☒
2. Archaeological Sites	☐	☐	☐	☒
3. Recreational Areas and Protected Lands	☐	☐	☐	☒
5. Natural Resources				
1. Wetlands and Other Surface Waters	☐	☒	☐	☐
2. Aquatic Preserves and Outstanding Florida Waters	☐	☐	☐	☒
3. Water Resources	☐	☒	☐	☐
4. Wild and Scenic Rivers	☐	☐	☐	☒
5. Floodplains	☐	☒	☐	☐
6. Coastal Barrier Resources	☐	☐	☐	☒
7. Protected Species and Habitat	☐	☒	☐	☐
8. Essential Fish Habitat (EFH)	☐	☐	☐	☒
6. Physical Resources				
1. Highway Traffic Noise	☐	☒	☐	☐
2. Air Quality	☐	☒	☐	☐
3. Contamination	☐	☒	☐	☐
4. Utilities and Railroads	☐	☒	☐	☐
5. Construction	☐	☒	☐	☐
6. Bicycles and Pedestrians	☐	☐	☒	☐
7. Navigation	☐	☐	☐	☒

* Impact Determination: Yes = Substantial Impact; No = No Substantial Impact; Enhance = Enhancement; NoInv= Issue absent, no involvement. Basis of decision is documented in the referenced attachment(s)..

Section 3

Social and Economic

3.1 Social

This project has been developed without regard to race, color, national origin, age, sex, religion, disability, or family status. Furthermore, the project is not anticipated to negatively affect community resources important to elderly persons, low-income persons, disabled individuals, non-drivers, transit dependent individuals, or minorities. The improvements will not create disproportionally high or adverse effects on low-income, disadvantaged, minority or other special populations.

The demographic information presented in this section was provided from the ETDM #14322 Environmental Screening Tool (EST) data report prepared in June of 2017 and provided as **Appendix C**.

The percentage of the population identifying as minorities include; 24.78% as Black or African American Alone, 55.59% as Hispanic or Latino of Any Race and 5.35% as Some Other Race Alone. Of the population within the 500-foot buffer, 12.4% speak English not well or not at all.

COMMUNITY COHESION

The project improvements are expected to reduce traffic congestion and improve regional mobility, enhance sidewalk and bicycle lanes networks as well as provide a new access to the Turnpike at Lucy Street. Barriers to social or community interactions, within or between neighborhoods, are anticipated to be reduced since travel time (motorized and non-motorized) will likely decrease due to the proposed project elements.

Because the project alignment is along the existing facility and within the L/A ROW, social relationships or movement within the existing communities are not substantially impacted. Existing neighborhoods will not be divided and the improvements will not isolate a portion of an ethnic group or neighborhood, or separate residences from community services/facilities. Within the 500-foot study area buffer there are:

- Four (4) school or group care facilities; Campbell Drive K-8 Center, the Center for International Education, Beauty School of America, and Everglades Preparatory Academy.

- One (1) other community facility; the Salvation Army Family Store and Donation Center (453 N. Krome Ave.).
- Four (4) Religious Centers; Core Community Church, Gateway Church of Christ, Kingdom Hall of Jehovah's Witnesses, Iglesia Cristiana El Deseado de las Naciones
- Three (3) recreation Centers; Dunwoodie Park (neighborhood park), the Biscayne-Everglades Greenway Corridor and the Mowry Trail Corridor.
- There are no medical facilities within the 500-foot study buffer area.

None of the resources will be directly impacted and additional details for each can be found in the Sociocultural Effects Technical Memorandum prepared for this study. Social resources that support community cohesion listed above and within the 500-foot study area buffer are depicted on **Figure 3-1.**

Based on the analysis above, the impact for social resources has been rated "no substantial impact".

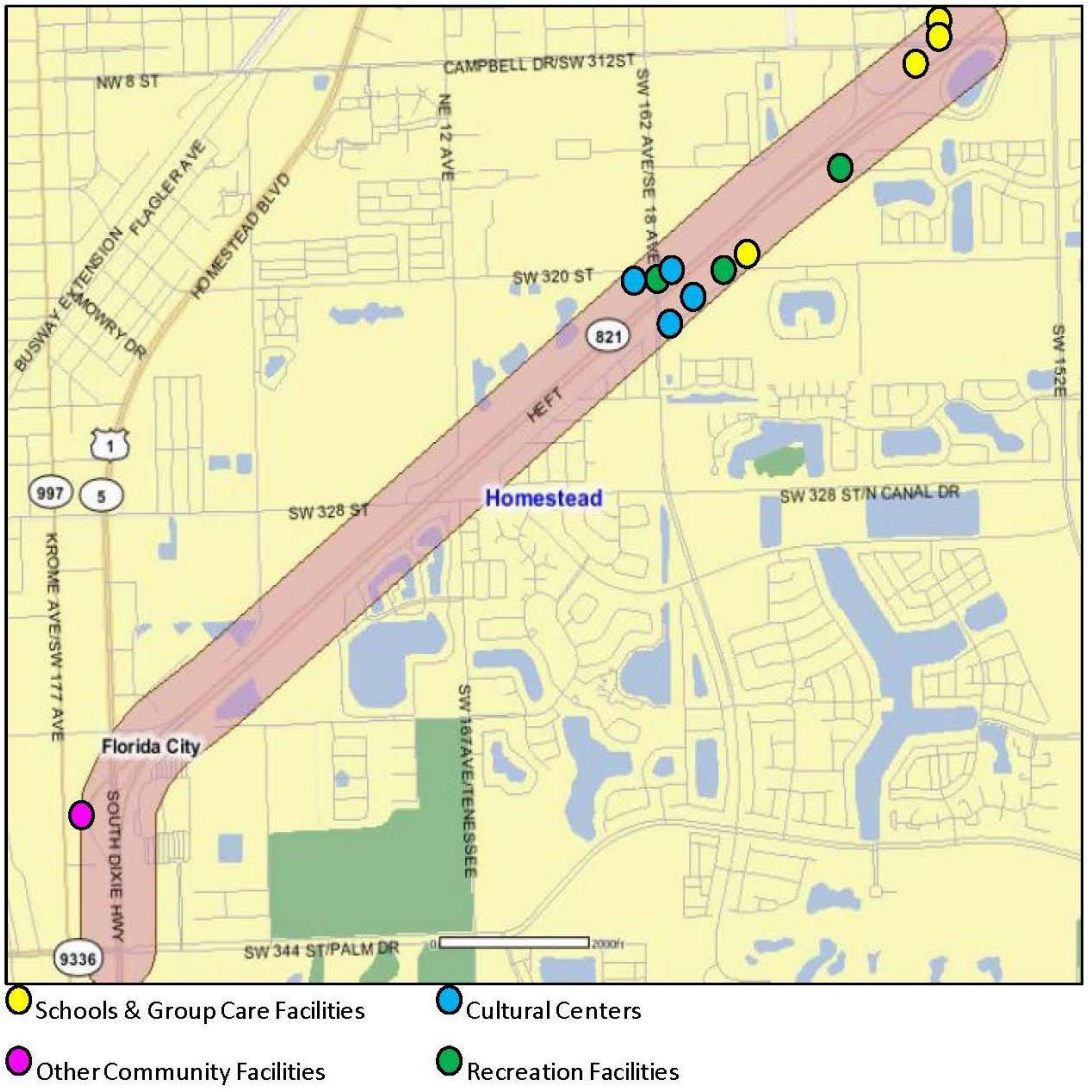


Figure 3-1 Community Facilities within 500-foot Buffer

3.2 Economic

The initial construction phase of the project may hinder traffic operations causing more congestion, particularly at the US 1 interchange. This additional traffic congestion during the construction stages could have short-term adverse impacts to local businesses. However, reduced congestion, easier access to the region, enhanced access to local business through the provision of additional U-turn locations and signage opportunities will encourage business and employment opportunities overall and in the long term. Additional lanes on the Turnpike will provide increased mobility / less congestion for nearby communities and tourists visiting Homestead/Florida City and the Florida Keys. A new interchange at Lucy Street will provide additional routes and less congestion for travelers desiring to access the area and local businesses.

On the segment of US 1 south of Palm Drive, local businesses that rely on "pass-by-traffic" have raised concerns that the project's mobility improvements, particularly due to the tolled, grade separated ramp over Palm Drive and directional access changes, will direct traffic through the area without affording an opportunity for motorists to stop and patronize their businesses before continuing to the Florida Keys. The project team worked to address local business concerns related to this by proposing enhanced signage directing motorists to local services and, specifically, offering a new sign on the southbound Turnpike mainline to alert drivers of the last exit for local services for the next 23 miles. U-turn locations, in both the northbound and southbound directions, will also offer travelers access to local businesses. Despite these proposed operational enhancements, the business community believes the improvements will adversely affect economic viability and has continued to express opposition to the grade separated ramp bridge over the Palm Drive intersection and the u-turn maneuvers. However, support was expressed for the proposed partial interchange at Lucy Street and the Turnpike mainline widening. Public outreach meetings with the local business community are documented in Section 12, Public Involvement.

Enhanced mobility and easier access of people and goods encourage economic vitality and should have an overall positive economic effect on these areas, however, the community maintains a negative perception of the improvements.

Based on the analysis above, the impact for economic resources has been rated "no substantial impact".

3.3 Land Use Changes

No land use changes are anticipated as a result of the proposed improvements. Potential right-of-way acquisition to accommodate the proposed improvements is already zoned for transportation uses along US 1 and at the Lucy Street interchange area. The existing and future land use maps, **Figure 3-2 and Figure 3-3**, are included here. The impact for land use changes has been rated "no involvement".

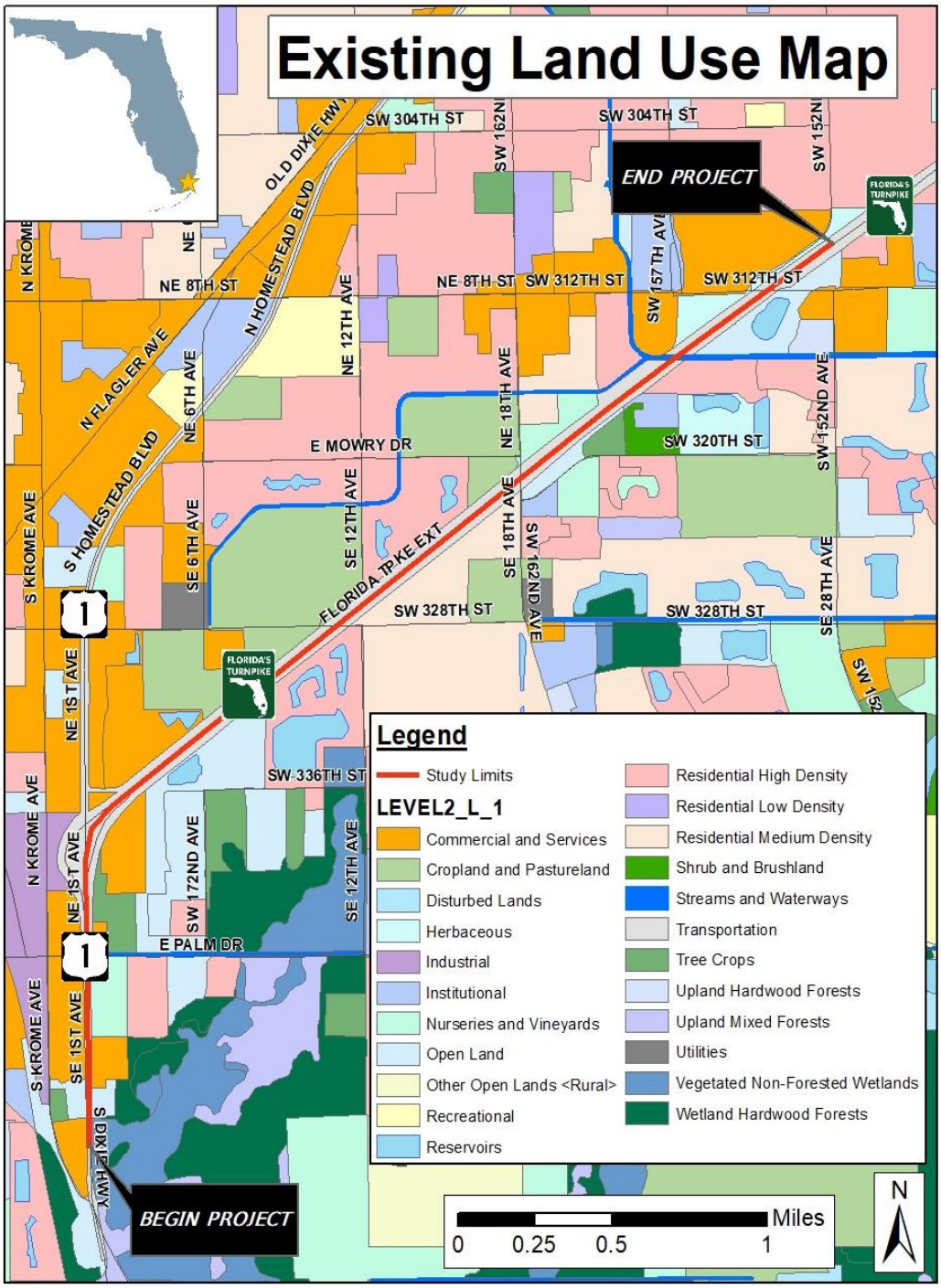


Figure 3-2 Existing Land Use Map

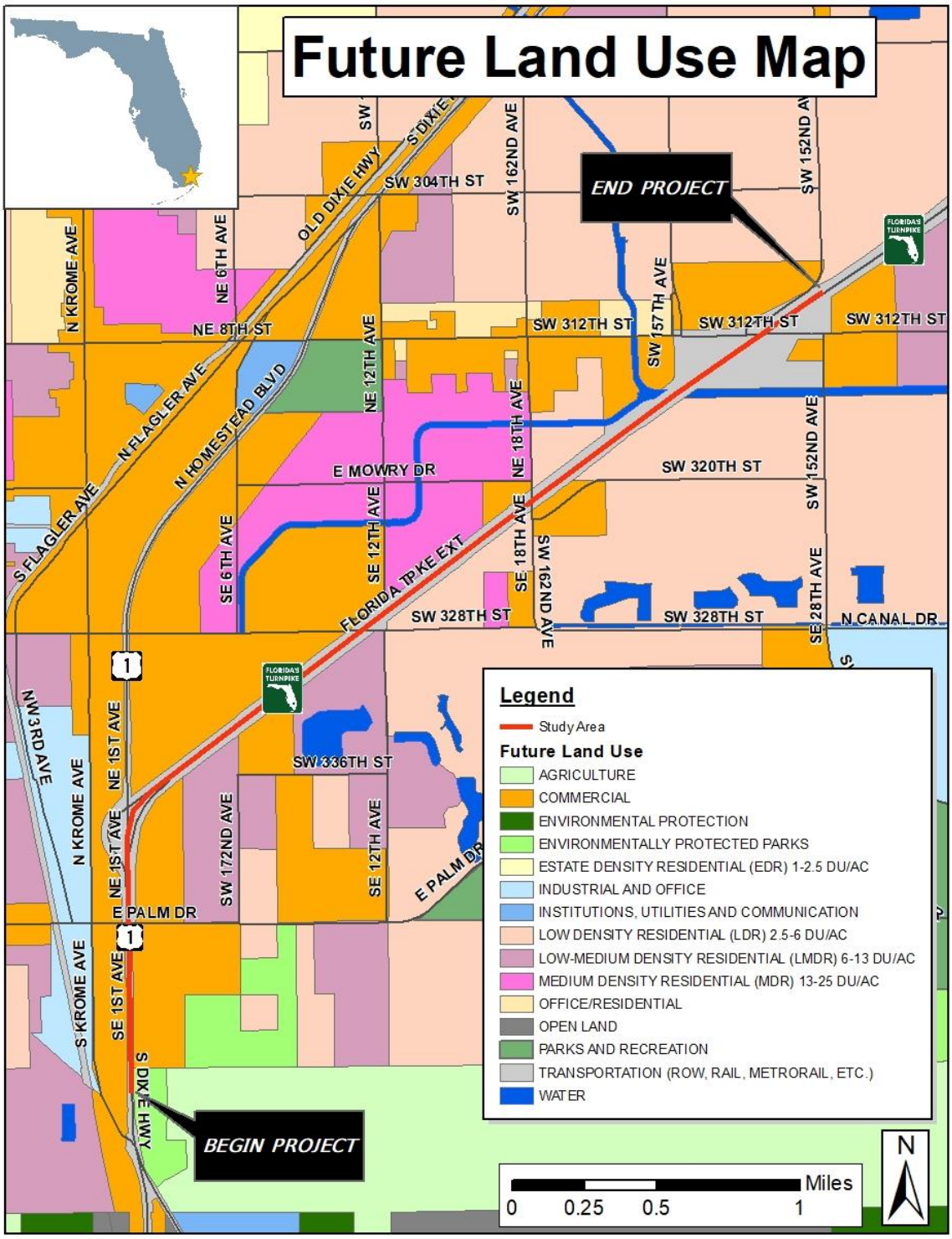


Figure 3-3 Future Land Use Map

3.4 Mobility

Mobility will be enhanced with the addition of travel lanes along the mainline Turnpike as well as emergency evacuation and response times for the surrounding communities and emergency services will be improved.

Two transportation disadvantaged service providers (Miami-Dade Transit Agency and LogistiCare Solutions, LLC) operate within the project area mainly on local and arterial streets. The proposed improvements will not adversely affect the South Dade TransitWay Corridor, located parallel to US 1 and anticipated to be operational by 2022. Nine (9) Miami-Dade Metrobus transit stops occur within areas of proposed improvements along US 1 and Palm Drive. Adjustments to eight (8) of these stops will need to be coordinated with the Miami -Dade Transit during the final design phase of the project and have been identified in the Preliminary Engineering Report May, 2021, prepared for this project.

Accessibility is expected to be improved through proposed pedestrian, bicycle and transit improvements on US 1, Palm Drive and other area roadways within the project limits. A more contiguous sidewalk network, improved crosswalks and bicycle facilities proposed within the project limits offer additional choices for transportation modes. Details of the multi-modal facilities are depicted in the Preferred Alternative Concept Plans in **Appendix A** of this document.

Increased mobility and additional multimodal choices in the area should result in less congested roadways, easier access to transit facilities and for the transit services. Also, with the additional travel lanes on the mainline, and a new partial interchange at Lucy Street will improve traffic circulation and the overall mobility of the region.

Based on the analysis above, the impact mobility has been rated “enhance”.

3.5 Aesthetic Effects

Transportation projects can impact the aesthetic qualities of adjacent communities through the reduction, or addition, of landscaping as well as the addition of structural elements such as bridges or noise walls. A Landscape Aesthetic Assessment Technical Memorandum, September 2020, was prepared for this project and is summarized below. Additional details are found in that supporting document as well as the Preferred Alternative Concept Plans in Appendix A.

For the purpose of the Landscape Aesthetic Assessment, the limits of the project were divided into three distinct areas to analyze their existing context, the design and, aesthetic considerations that will form the landscape approach for each area. US 1 (Sta. 38+00.00 to Sta. 80+00.00); US 1 Interchange and Turnpike on/off-ramps; and Turnpike mainline (Sta. 3535+00.00 to Sta. 3680+00.00).

The section of US 1 from Sta. 38+00.00 to Sta. 80+00.00 is the southernmost section of the project and represents a primary gateway to the Florida Keys and the Everglades. For the most part, the corridor is a commercial thoroughfare with tracts of undeveloped land with billboards and signs along both sides. Most of medians and ramp areas are planted with large and small palms. A gateway electronic sign reinforces Florida City’s character as the last stop on the mainland north of the Florida Keys

FDOT D6 and local municipalities view the interchanges as gateways to the communities and have invested significantly in roadway beautification on their respective facilities. Florida’s Turnpike Enterprise (FTE), in response to the MDTPO Transportation Aesthetics Review Committee, has identified the US 1 interchange as a Major Gateway and has installed a landscape project reflecting this.

The proposed ramp bridge over Palm Drive will impact the existing landscape assets which could be relocated in coordination with the corresponding jurisdictional agencies prior to construction. The ramps' MSE walls provide opportunities for aesthetic enhancements to reinforce the corridor's gateway character. Decorative hardscape elements under the ramp will be evaluated during the final design phase of project development.

The US 1 and Turnpike interchange area, on/off-ramps and medians are extensively landscaped with a variety of palms and trees. The proposed roadway improvements in this area will impact the existing landscape features which could be relocated prior to construction.

The MSE walls in this section provide additional opportunities for aesthetic enhancements. The infield and areas along the proposed north bridge also provide opportunities for landscape enhancement and large tree planting.

The last section of the project is Sta. 3535+00.00 to Sta. 3680+00.00 along Florida's Turnpike mainline. FTE has invested in enhancing the character of this corridor by planting palm trees along both sides of the right-of-way south of Lucy Street.

North of Lucy Street the corridor is mostly grassed with very few trees on either side of the right-of-way. In the median, there are groups of sabal palms and some sporadic Royals palms.

The widening will affect the landscape elements south of Lucy Street. The trees impacted by roadway improvements could be relocated prior to construction.

This section of the corridor provides opportunities to build on the existing landscape aesthetic theme by utilizing palms and canopy trees along both sides of the corridor's right-of-way.

Aesthetic effects and treatments for potential noise barriers will be addressed and inserted here when that information has been determined.

The viewshed along the Turnpike is not expected to be affected by the addition of travel lanes on an existing main highway corridor. The viewshed at the US 1 interchange will be modified to include a new proposed ramp bridge over Palm Drive for the new on- and off-ramps. The viewshed at Lucy Street will be modified to include the new on- and off-ramps on both sides of the Turnpike that will be on a Mechanically Stabilized Earth (MSE) wall and embankment. The widening of the existing Turnpike from four (4) lanes to six (6), addition of the ramp bridges and partial interchange is not expected to be perceived as inconsistent with the character of the community.

Based on the analysis above, the impact for aesthetic effects has been rated "no substantial impact".

3.6 Relocation Potential

The Preferred Alternative will require right-of-way for the proposed improvements. Relocation potentials due to Alternative B have been minimized and are identified on the eastside of US 1 south of Palm Drive and at the proposed Lucy Street interchange. FDOT will implement a *Right-of-Way Acquisition and Relocation Program* in accordance with Florida Statute 339.09 and the *Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970* (Public Law 91-646 as amended by Public Law 100-17). In accordance with Chapter 4.3.3 of the FDOT PD&E Manual, a Conceptual Stage Relocation Plan (CSRP), May 2020, was prepared as a supporting document to the study.

No acquisition of residential parcels will be required. There is one (1) business and one (1) landlord business relocation at parcel #7 on **Figure 3-4**, Speedway Service Station, due to the proposed improvements at the US 1 interchange. **Figure 3-4** and **Figure 3-5** depict the US 1 portion of the project. There are no relocations at the Lucy Street partial interchange but seven (7) parcels will be affected as shown on **Figure 3-6**. No acquisition of public parcels will be required.

During the public information meeting and public hearing and posted on the project's website, FTE provided a video titled "Florida Right of Way" to explain the ROW acquisition process.

Based on the analysis above, the impact for relocation potential has been rated "no substantial impact".

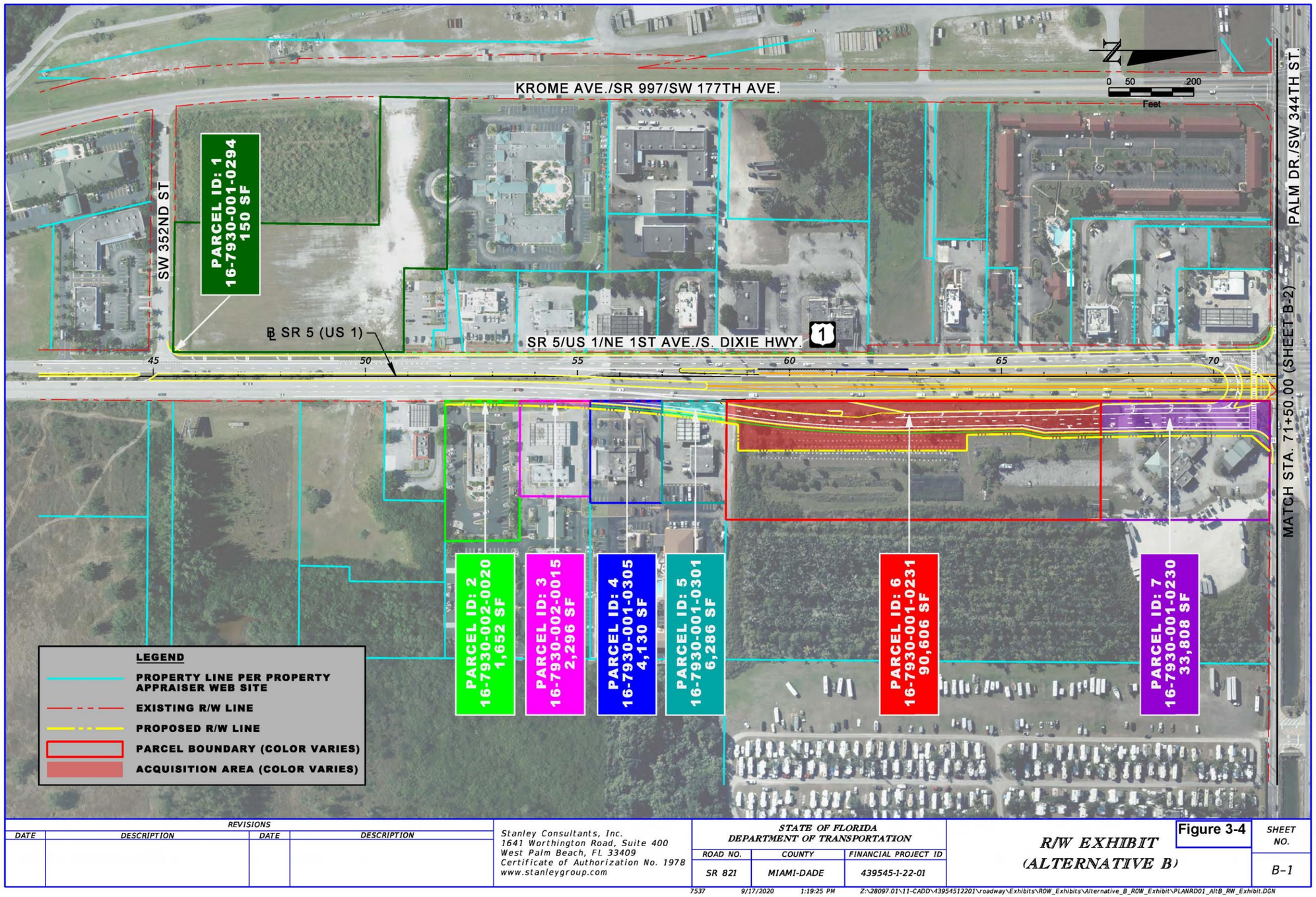


Figure 3-4 Potential Right of Way Acquisition; US 1

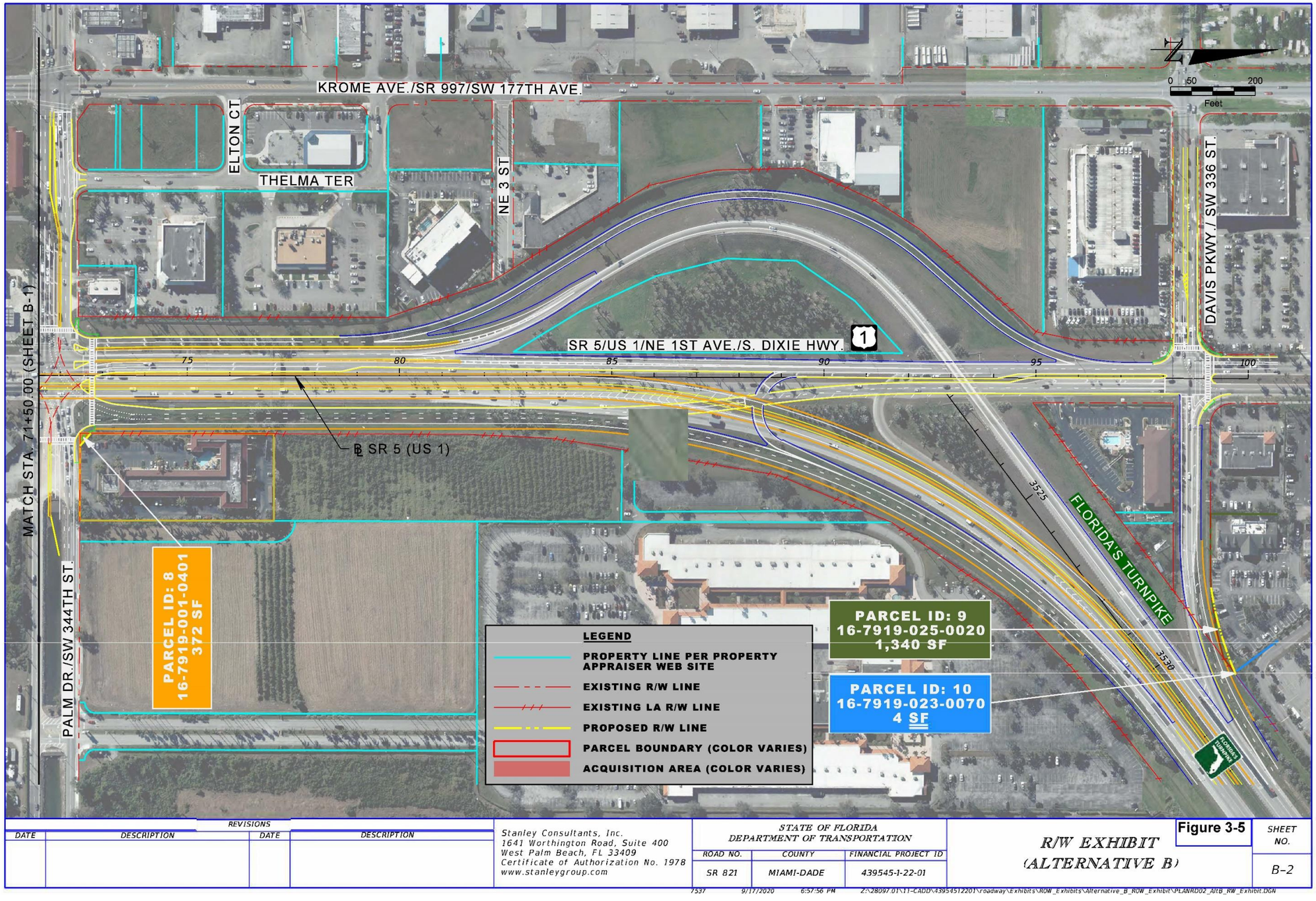


Figure 3-5 Potential Right of Way Acquisition; US 1 (continued)

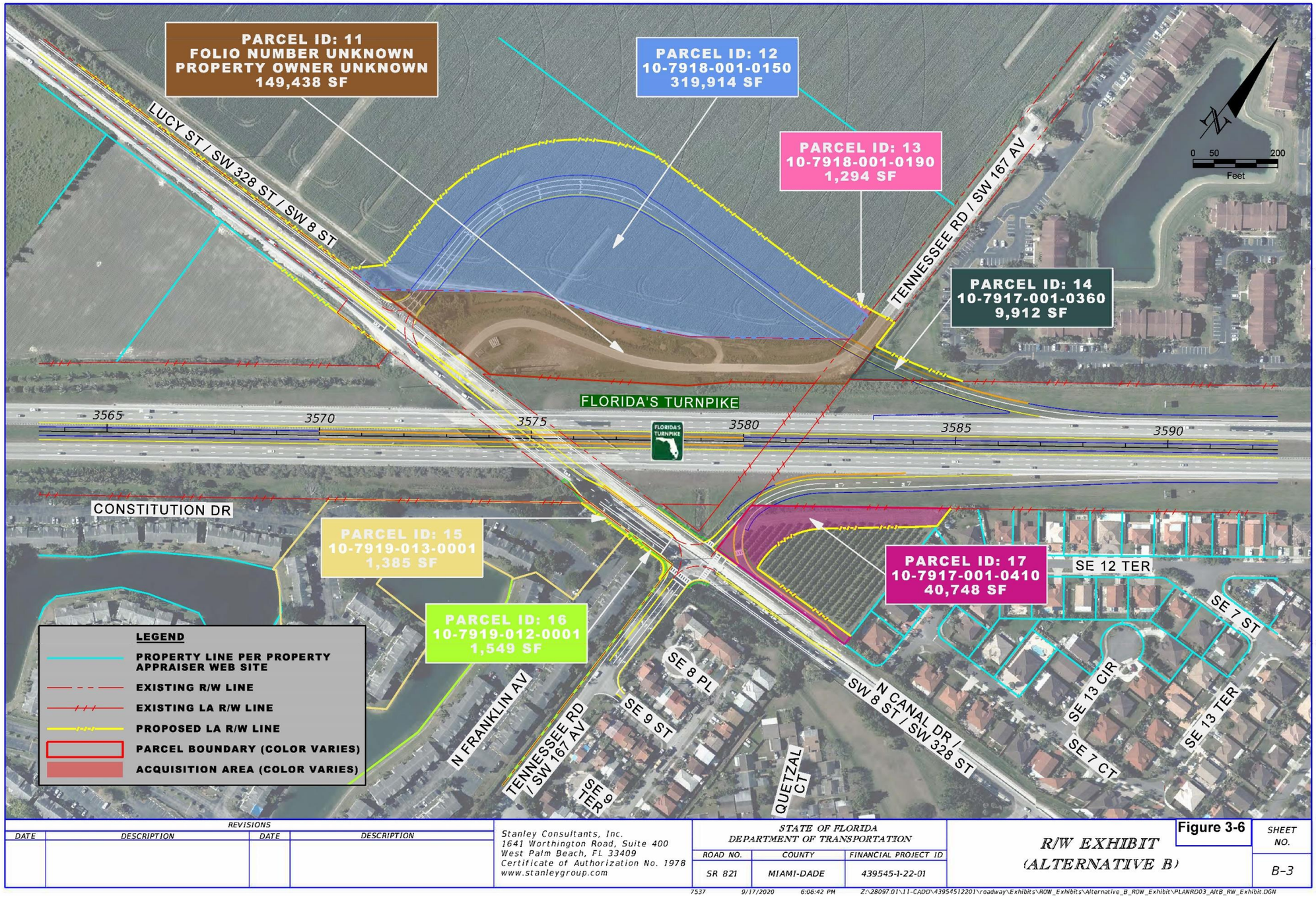


Figure 3-6 Potential Right of Way Acquisition; Lucy Street Interchange

Section 4

Cultural Resources

4.1 Florida Historical Resources Act (FHRA), Chapter 267, Florida Statutes (F.S.).

A Cultural Resource Assessment Survey (CRAS) was conducted for the project. The objective of the CRAS was to identify cultural resources within the project Area of Potential Effect (APE) and assess their eligibility for listing in the National Register according to the criteria set forth in 36 Code of Federal Regulations (CFR) Section 60.4.

No archaeological sites were identified within the archaeological APE. Eight (8) shovel tests excavated within the archaeological APE yielded no archaeological material. Subsurface testing was not feasible within the rest of the archaeological APE due to the presence of existing pavement, canals, ditches, berms, buildings, hardscape, landscaping, active construction zones, and buried utilities and drainage systems. The pedestrian survey of the archaeological APE confirmed the developed nature of the project corridor and a low potential for finding intact archaeological sites.

The historic resources survey resulted in the identification of a total of four (4) historic resources. Of the four (4) resources, two (2) have been previously recorded and two (2) are newly recorded. The two (2) previously recorded resources include: US-1/Dixie Highway (8DA9990) and the C-103 (Mowry) Canal (8DA15002). Portions of US-1/Dixie Highway (8DA9990) which comprise the entire segment within the current project APE were determined ineligible for inclusion in the National Register by SHPO on June 27, 2005 and September 10, 2014. The finding has not changed as a result of this study and the FMSF form for this resource was not updated. The C-103 (Mowry) Canal was recorded northwest of the project area in 2016 and SHPO determined it ineligible for inclusion on the National Register on November 28, 2017. The segment of the canal within the current project APE is considered ineligible for listing in the National Register due to common engineering techniques and lack of historical associations.

The two (2) newly recorded resources (8DA16043 and 8DA17113) include one (1) canal and one (1) standing structure, both of which are considered National Register-ineligible. The Florida City

Canal (8DA16043) has been covered and converted to a culvert and is no longer visible within the current project APE. It is considered ineligible for inclusion in the National Register. The standing structure, 402 NE 1st Avenue (8DA17113), exhibits common style and construction techniques, does not retain its historic appearance, and has undergone extensive alterations. As a result, it is considered ineligible for listing in the National Register.

The State Historic Preservation Officer (SHPO) provided concurrence with these findings as indicated in the CRAS document October 9, 2020 and the concurrence letter is included as **Appendix D**.

Based on the analysis above, the impact for historical resources has been rated "no involvement" and the impact for archaeological sites has been rated "no involvement".

4.2 Section 6(f) of the Land and Water Conservation Fund Act of 1965

There are no Section 6(f) properties impacted by the proposed improvements.

Based on the above, the impact for Section 6(f) properties has been rated "no involvement".

4.3 Recreational Areas and Protected Lands

There are no protected lands within the project limits or that are indirectly impacted by the proposed improvements. There are two (2) recreational trails (Biscayne-Everglades Greenway Corridor, Mowry Trail Corridor) and one (1) neighborhood park (Dunwoodie Park) within the 500-foot project buffer that will not be impacted by the project. These facilities are listed in Section 3.1 and shown on **Figure 3-1, Community Facilities**.

Based on the analysis above, the impact for recreational areas and protected lands has been rated "no involvement".

Section 5

Natural Resources

5.1 Wetlands and Other Surface Waters

The Wetland and Surface Water evaluation performed for this project identified three (3) natural wetland areas and two (2) types of surface waters, i.e. stormwater swales and other surface waters. Natural wetlands, stormwater swale wetlands and other surface water including features are shown in **Table 5-1**. The locations of these features are depicted on aerial maps in **Figure 5-1.**

The impacts consist of approximately 9.78 acres impacts (due to re-grading) to SW-1 through SW-11 and approximately 2.0 acres (due to dredge and fill) in OSW-2 and 0.32 acres of fill in OSW-7. Impacts are within the existing right-of-way and will be replaced by the stormwater treatment and/or conveyance in the proposed design alternative. In addition, the project will be designed to address and mitigate impacts from stormwater runoff through compliance with stormwater management plans and applicable regulatory requirements.

There will be no direct impacts to the natural wetlands (emergent and forested wetlands).

Per the January 16, 2020 interagency meeting with the South Florida Water Management (SFWMD) and US Army Corps of Engineers (USACE), permits are anticipated from the USACE and SFWMD. In this meeting, both agencies confirmed that mitigation will not be required for impacts to SW-1 to SW-11 and OSW-7. The stormwater swales will be replaced in-kind. It is anticipated that a Nationwide (NW) permit will be obtained for OSW-2 but will require no mitigation. Meeting minutes from the January 16, 2020 meeting are included as **Appendix E**.

Indirect impacts to hydrological and water quality are not anticipated as result of the project because the proposed improvements are to an existing facility. Furthermore, stormwater management standards have increased since the roadway facility was constructed. The project will result in

overall water quality improvements in the project corridor to meet the new standards. There will be no direct impacts to the natural wetlands (emergent and forested wetlands).

Cumulative impacts are defined as the direct and indirect effects of the proposed project under consideration. There are no jurisdictional wetlands that will be impacted within the study area. The stormwater swales will be replaced, and the other surface waters will not be cumulatively impacted. Therefore, no cumulative impacts are associated with this project.

The FDOT is committed to the following measures to address wetland impacts for this project:

- Minimization of wetland and surface water impacts will be evaluated further during the design phase of the project;
- Coordination with the appropriate regulatory agencies will be conducted throughout the design phase;
- FDOT's Standard Specifications for Road and Bridge Construction will be adhered to during the construction phase of the project. This includes the proper use of BMP's to control turbidity, erosion, and sedimentation; and
- A Stormwater Management Plan will be developed.

Based on the above, the impact for wetlands and other surface waters has been rated "no substantial impact".

Table 5-1 Stormwater Management/Drainage Features and Surface Waters

ID No.	Size (ac)	FLUCCS Code	FLUCCS Description	USFWS Code	USFWS Description
NATURAL WETLANDS					
EW-1	123.52	641 643	Freshwater Marsh Wet Prairie	PEM1Ad	Palustrine, Emergent Persistent, Temporarily Flooded, Partially Drained/Ditched
FW-1	20.14	630	Mixed Wetland Hardwoods	PFO1Ad	Palustrine, Forested, Broad-Leaved Deciduous, Temporary Flooded, Partially Drained/Ditched
FW-2	122.58	630	Mixed Wetland Hardwoods	PFO1Ad	Palustrine, Forested, Broad-Leaved Deciduous, Temporary Flooded, Partially Drained/Ditched
STORMWATER SWALES HAVING HYDROPHYTIC VEGETATION					
SW-1	1.79*	510	Streams and Waterways	PEM1A	Palustrine, Emergent Persistent, Temporarily Flooded
SW-2	0.57*	510	Streams and Waterways	PEM1A	Palustrine, Emergent Persistent, Temporarily Flooded
SW-3	0.34*	510	Streams and Waterways	PEM1A	Palustrine, Emergent Persistent, Temporarily Flooded
SW-4	0.87*	510	Streams and Waterways	PEM1A	Palustrine, Emergent Persistent, Temporarily Flooded
SW-5	0.51*	510	Streams and Waterways	PEM1A	Palustrine, Emergent Persistent, Temporarily Flooded

ID No.	Size (ac)	FLUCCS Code	FLUCCS Description	USFWS Code	USFWS Description
SW-6	0.22*	510	Streams and Waterways	PEM1A	Palustrine, Emergent Persistent, Temporarily Flooded
SW-7	1.50*	510	Streams and Waterways	PEM1A	Palustrine, Emergent Persistent, Temporarily Flooded
SW-8	1.60*	510	Streams and Waterways	PEM1A	Palustrine, Emergent Persistent, Temporarily Flooded
SW-9	0.45*	510	Streams and Waterways	PEM1A	Palustrine, Emergent Persistent, Temporarily Flooded
SW-10	0.48*	510	Streams and Waterways	PEM1A	Palustrine, Emergent Persistent, Temporarily Flooded
SW-11	1.45*	510	Streams and Waterways	PEM1A	Palustrine, Emergent Persistent, Temporarily Flooded
OTHER SURFACE WATERS					
OSW-1	5.04	534	Reservoirs less than ten (10) acres	PUBHx	Palustrine, Unconsolidated Bottom, Permanently Flooded, Excavated
OSW-2	2.00*	510	Streams and Waterways	R2UBHx	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Excavated
OSW-3	1.57	510	Streams and Waterways	R2UBHx	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Excavated
OSW-4	1.77	534	Reservoirs less than ten (10) acres	PUBHx	Palustrine, Unconsolidated Bottom, Permanently Flooded, Excavated
OSW-5	1.34	534	Reservoirs less than ten (10) acres	PUBHx	Palustrine, Unconsolidated Bottom, Permanently Flooded, Excavated
OSW-6	1.74	534	Reservoirs less than ten (10) acres	PUBHx	Palustrine, Unconsolidated Bottom, Permanently Flooded, Excavated
OSW-7	0.32*	510	Streams and Waterways	R5UBFx	Riverine, Unknown Perennial, Unconsolidated Bottom, Semi-permanently Flooded, Excavated
0SW-8	4.31	510	Streams and Waterways	R2UBHx	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Excavated
OSW-9	2.28	534	Reservoirs less than ten (10) acres	PUBHx	Palustrine, Unconsolidated Bottom, Permanently Flooded, Excavated
OSW-10	2.76	534	Reservoirs less than ten (10) acres	PUBHx	Palustrine, Unconsolidated Bottom, Permanently Flooded, Excavated
OSW-11	2.92	534	Reservoirs less than ten (10) acres	PUBHx	Palustrine, Unconsolidated Bottom, Permanently Flooded, Excavated
0SW-12	2.01	534	Reservoirs less than ten (10) acres	PUBHx	Palustrine, Unconsolidated Bottom, Permanently Flooded, Excavated

*Indicates impacted acreage.

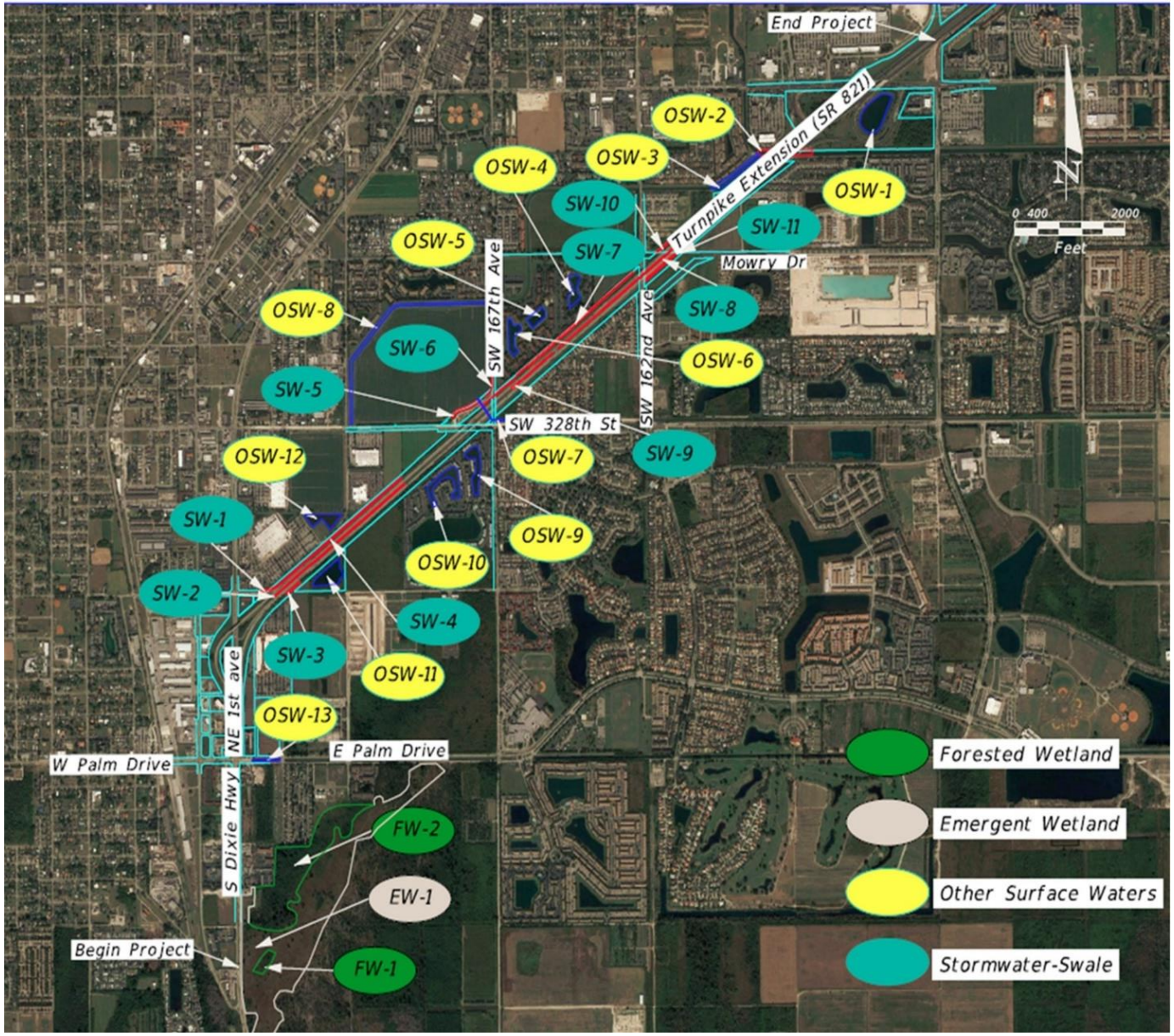


Figure 5-1 Wetlands and Surface Water Locations

5.2 Aquatic Preserves and Outstanding FL Waters

There are no aquatic preserves or outstanding Florida waters within the project limits.

Based on the above, the impact for aquatic preserves and outstanding Florida waters has been rated "no involvement".

5.3 Water Resources

Water quality (treatment) and water quantity (attenuation) criteria are based on SFWMD and FDOT stormwater regulations.

The project does not discharge to any water bodies impaired for nutrients or to any Outstanding Florida Waters. The volume of water quality required for the project is 2.5 times the additional impervious area. In addition, all previously permitted water quality that is impacted by the proposed improvements should be replaced. Any discharge to Miami-Dade County canals and C-103 Canal are to meet historical pre-condition discharges rates for the 25-yr/3-day event. Also, the existing right of way discharging to the C-103S and C-103N will meet historical pre-condition discharges rates for the 25-yr/3-day event. **Table 5.2** summarizes the allowable discharge information.

Table 5-2 Drainage Basin Criteria

Basin	Outfall	Allowable Discharge	Storm Event
1	Groundwater Table	Zero offsite. Self-contained system discharges to groundwater table.	FDOT 10y1hr, 10y/8hr, 10y/24hr, 100yr/1hr,100yr/8hr, 100yr/24hr and SFWMD 100yr/72hr
2	Florida City Canal	Pre-condition discharge rate (existing and new ROW)	25-yr/3-day
3	C-103S	Pre-condition discharge rate (exist. ROW) Allowable discharge formula (new ROW)	25-yr/3-day 10-yr/3-day
4	C-103S	Pre-condition discharge rate (exist. ROW) Allowable discharge formula (new ROW)	25-yr/3-day 10-yr/3-day
5S	C-103	Pre-condition discharge rate	25-yr/3-day
	X-103S	(exist./new ROW) Pre-condition discharge rate (exist. ROW) Allowable discharge formula (new ROW)	25-yr/3-day 10-yr/3-day
5N	C-103	Pre-condition discharge rate (exist./new ROW)	25-yr/3-day

The new ROW areas of the project discharging to the C-103S and C-103N Canals will meet the allowable discharge formula (frequency is the 10-yr/3-day event) that is published in the SFWMD Permit Applicant's Handbook Volume II.

Based on the above, the impact for water resources has been rated "no substantial impact".

5.4 Wild and Scenic Rivers

There are no designated wild and scenic rivers within the project limits.

Based on the above, the impact for wild and scenic rivers has been rated "no involvement".

5.5 Floodplains

Floodplain impacts resulting from the project were evaluated pursuant to Executive Order 11988 of 1977, Floodplain Management, U.S. Department of Transportation Order 5650.2, Floodplain Management Protection, and Federal-Aid Policy Guide 23 CFR 650A. The intent of these regulations is to avoid or minimize highway encroachments within the 100-year (base) floodplains, and to avoid supporting land use development that is incompatible with floodplain values. Floodplain impact details are included in the Pond Siting Report, May 2021, prepared as a supporting document to this study.

Based on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for the cities of Florida City and Homestead, Miami Dade County, community panel number (s) 12086C0730L and 12086C0727L, dated September 2009, base flood elevations have been determined for the project. The major waterways crossing the project limits include the C-103 Canal (a.k.a. Mowry Canal). In addition, there are two culverts that carry stormwater runoff through the project. These include a 7-foot x 3-foot box culvert north of Palm Drive and a 60" culvert north of Lucy Street. There are no regulated floodway(s) within the project limits and there are no flooding issues of the existing facilities.

The proposed widening improvements for the Preferred Alternative have minimal longitudinal encroachments into the base floodplain at the following locations and depicted on **Figure 5-2, Figure 5-3,** and **Figure 5-4**.

1. South of Palm Drive where the northbound US 1 lanes are being realigned. This area is in Zone AE with a base flood elevation of 7 feet NGVD (**Figure 5-2**).
2. South of Davis Parkway where the southbound US 1 right turn lane is proposed. This area is in Zone AH with a base flood elevation of 8 feet NGVD (**Figure 5-3**).
3. At the proposed Lucy Street interchange on-ramp, near the ramp terminal. This area is in Zone AH with a base flood elevation of 7 feet NGVD (**Figure 5-4**).
4. At the proposed Lucy Street interchange off-ramp. This area is in Zone AE with a flood elevation of 8 feet NGVD (Figure 5-4).

FEMA Base Flood Plain Delineations (Ref. National Flood Hazard Layer, Google Earth KMZ file)

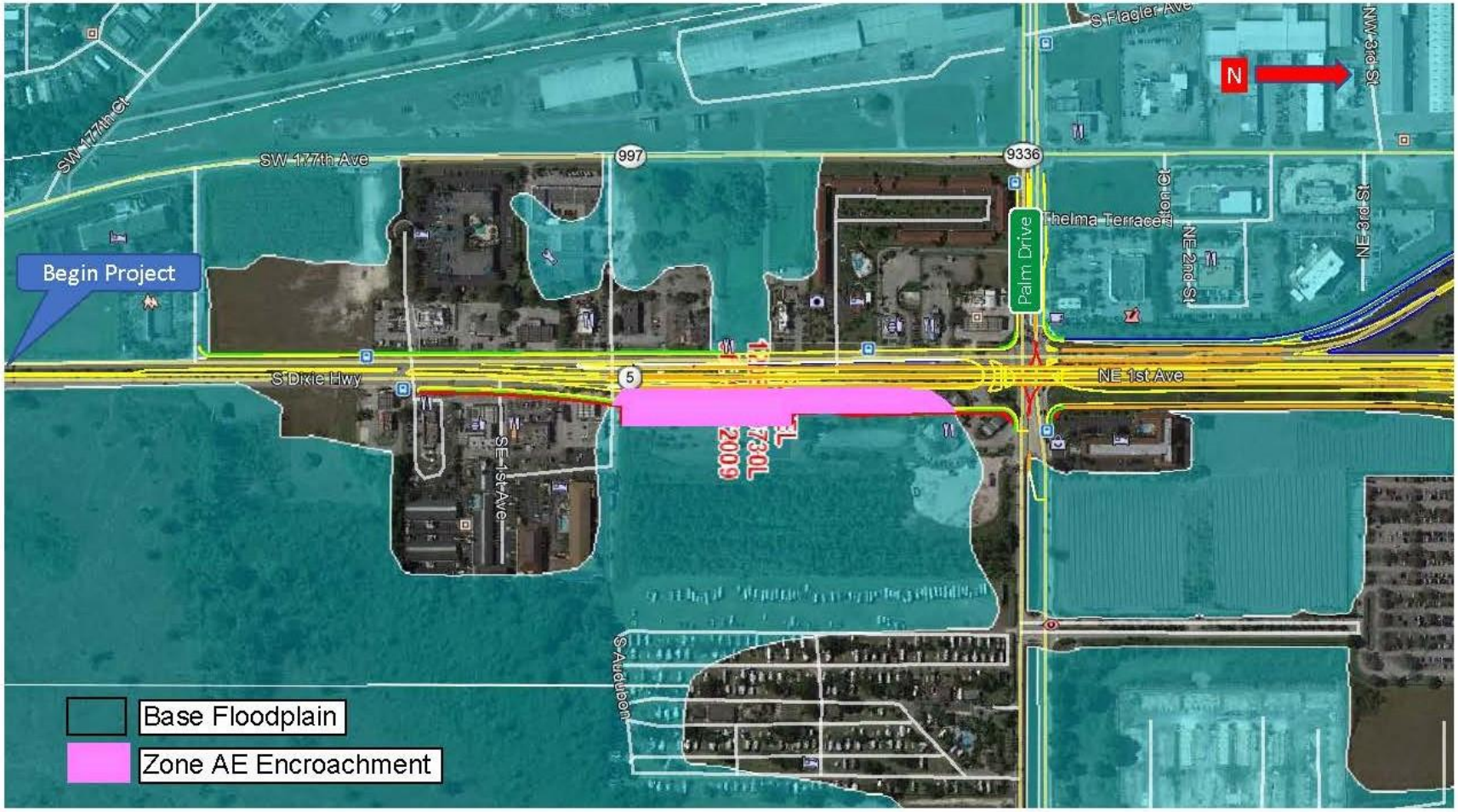


Figure 5-2 Base Floodplain Encroachment

Figure 5-3 Base Floodplain Encroachment

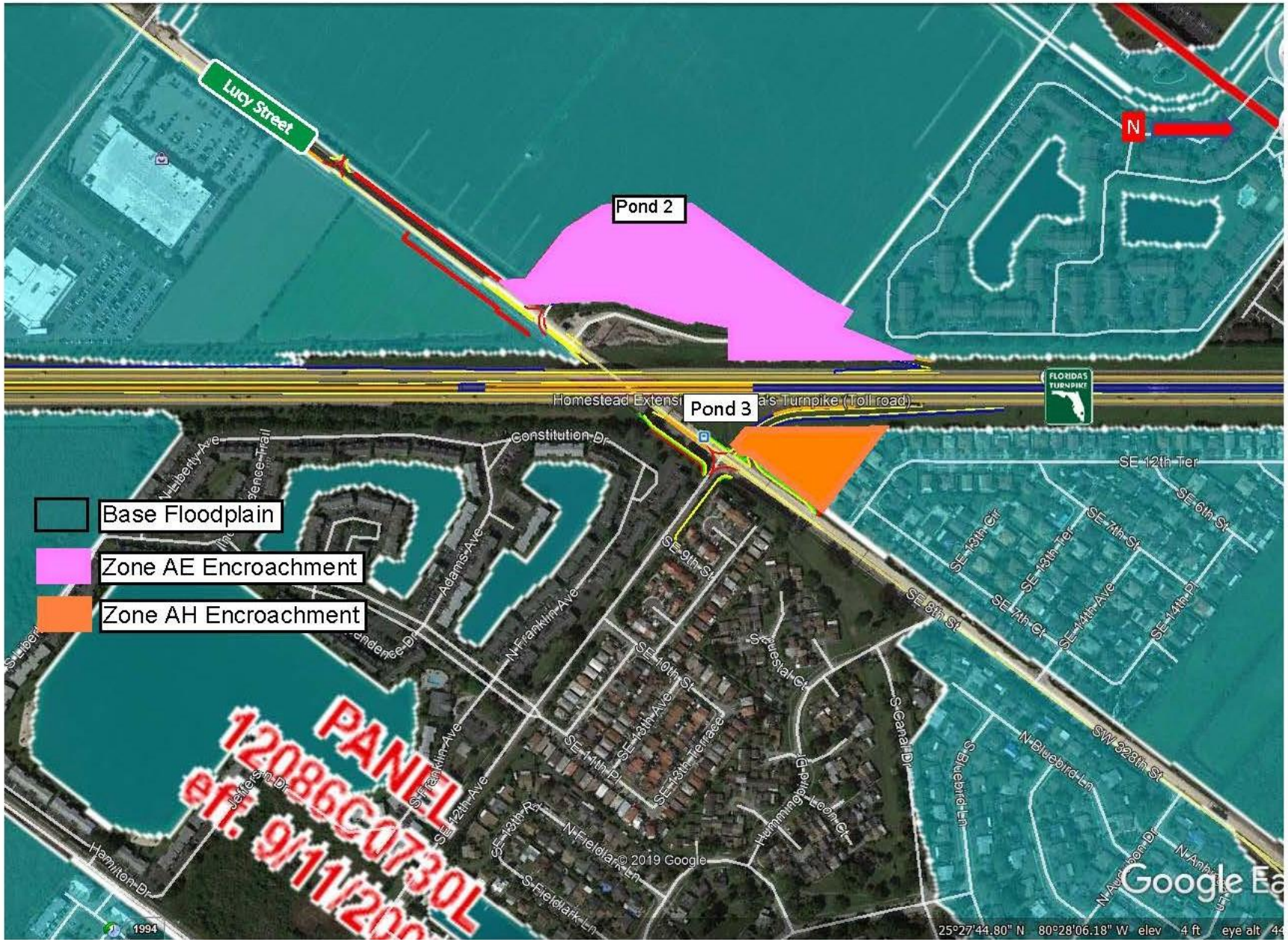


Figure 5-4 Base Floodplain Encroachment

Practical alternatives were evaluated that minimize floodplain impacts. These include widening towards the median along the Turnpike and optimizing the proposed Lucy Street interchange ramp geometry to reduce the overall interchange footprint. The floodplain encroachments that cannot be avoided can be compensated by excavating the ponds at the US 1 interchange, constructing infield ponds at the Lucy Street interchange and widening the roadside swales along the Turnpike.

This project will have no adverse impact to the area's water quality. Stormwater treatment of the additional impervious areas will be treated as required by the SFWMD Environmental Resource Permit (ERP).

Based on the above, the impact for floodplains has been rated "no substantial impact".

5.6 Coastal Barrier Resources

The Coastal Barrier Resources Act of 1982 (CBRA) and the Coastal Barrier Improvement Act of 1990 (CBIA) are not applicable to this project since there is no federal funding.

Based on the above, the impact for coastal barrier resources has been rated "no involvement".

5.7 Protected Species and Habitat

A Protected Species and Habitat evaluation was conducted in accordance with Section 7(c) of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 et seq.). A Natural Resources Evaluation (NRE), December 2020, was prepared per Part 2 Chapter 16 of the FDOT PD&E Manual. Based on literature reviews, agency database searches, and habitat field reviews, **Table 5-3** provides a summary of the listed species and corresponding determination of effects (DOE). The potential of occurrence was ranked as low, moderate, or high and based on land cover / use, the presence or absence of quality suitable habitats and critical habitat within the project limits. Additional details of each listed species are found in the NRE.

The project study area is located within the USFWS Consultation Area for the following species:

- American Crocodile (*Crocodylus acutus*)
- Everglade Snail Kite (*Rostrhamus sociabilis plumbeus*)
- Florida Bonneted Bat (*Eumops floridanus*)
- Wood Stork (*Mycteria americana*)

Since the above species fall within the Consultation Area, impacts to these species was assessed and technical assistance with the USFWS was conducted. Meeting minutes from the June 25, 2020 USFWS Technical Assistance meeting, indicating concurrence of all DOE, are included as **Appendix F.**

Table 5-3 Federal and State-Listed Species with the Potential to Occur within the Project Corridor and Federal Effects Determination

Common Name	Scientific Name	Federal Status	State Status	Occurrence Potential	Observed	Federal Effects Determination	State Effects Determination
MAMMALS							
Florida Bonneted Bat	*Eumops floridanus*	E	FE	Low	No	May Affect Not Likely to Adversely Affect – P if BMPs used and survey reports are submitted. Programmatic concurrence.	No Adverse Effect Anticipated
West Indian manatee	*Trichechus manatus*	T	FT[1]	Low	No	May Affect Not Likely to Adversely Affect	No Adverse Effect Anticipated
BIRDS							
Everglade Snail Kite	*Rostrhamus sociabilis plumbeus*	E	FE	Low	No	No effect	No Effect Anticipated
Florida Grasshopper Sparrow	*Ammodramus savannarum floridanus*	E	FE	Low	No	No effect	No Effect Anticipated
Wood Stork	*Mycteria americana*	T	FT	Moderate	No	Not Likely to Adversely Affect	No Adverse Effect Anticipated
Least Tern	*Sterna antillarum*	NL	ST	Low	No	NA	No Effect Anticipated
Little Blue Heron	*Egretta caerulea*	NL	ST	Moderate	No	NA	No Adverse Effect Anticipated
Tricolored Heron	*Egretta tricolor*	NL	ST	Moderate	No	NA	No Adverse Effect Anticipated
Reddish Egret	*Egretta rufescens*	NL	ST	Low	No	NA	No Effect Anticipated
Black Skimmer	*Rynchops niger*	NL	ST	Low	No	NA	No Effect Anticipated
Burrowing Owl	*Athene cunicularia*	NL	ST	Low	No	NA	No Effect Anticipated
REPTILES							
American Crocodile	*Crocodylus acutus*	T	FT	Low	No	No effect	No Effect Anticipated
American Alligator	*Alligator mississippiensis*	SA (T)	FT (S/A)	Low	No	No effect	No Effect Anticipated

Common Name	Scientific Name	Federal Status	State Status	Occurrence Potential	Observed	Federal Effects Determination	State Effects Determination
Eastern Indigo Snake	*Drymarchon corais couperi*	T	FT	Low	No	Not Likely to Adversely Affect	No Adverse Effect Anticipated
Gopher Tortoise	*Gopherus polyphemus*	NL	ST	Low	No	NA	No Effect Anticipated
INSECTS							
Miami Tiger Beetle	*Cicindelidia floridana*	E	FE	Low	No	No effect	No Effect Anticipated

LEGEND

E = Endangered
T = Threatened
FE – Federally designated Endangered
FT – Federally designated Threatened
NL = Not Listed
ST = State designated Threatened
SA = Similar Appearance
FT (S/A) – Federally designated Threatened due to Similarity of Appearance

No direct impacts to any of the listed species are anticipated as a result of this project. The project is within the core foraging area (CFA) of one known wood stork colony (Grossman Ridge West). Federally designated Critical Habitat, as defined by the U.S. Congress in 50 CFR 17, was determined to be non-existent in the study area. As detailed in the NRE, the following conditions / commitments are summarized and to be implemented during subsequent design and / or construction phases:

- The study area falls within the Consultation Area for the bonneted bat. The Florida Bonneted Bat Consultation Key was used to evaluate potential effects. Based on the Consultation Key, the federal determination of "May Adversely Not Likely to Adversely Affect – P if BMPs used and survey reports are submitted. Programmatic concurrence" has been made for the bonneted bat. A limited roost survey will be conducted during design and prior to construction.
- The US Army Corps of Engineers and the State of Florida Effect Determination Key for the Manatee in Florida was used to evaluate potential effects to the manatee. Based on the determination key, the federal determination of "May Affect Not Likely to Adversely Affect" has been made and no further consultation with the Service is necessary. The state determination for this species is "No Adverse Effect Anticipated". Standard Manatee Conditions for In-water activities to be implemented during construction.
- The project corridor is within one active CFA, the Grossman Ridge West, but no wood storks were observed during the field surveys. The shallow surface waters within the study area are man-made swales, ponds, and stormwater detention areas that provide some opportunistic foraging habitat. The potential for this species to occur is "Moderate". The Wood Stork Determination Key, South Florida, dated May 18, 2010, was used to evaluate potential effects to the Wood Stork. The federal determination of "Not Likely to Adversely Affect" has been made for the wood stork. The state determination for this species is "No Adverse Effect Anticipated". Swales may approach the threshold depth for foraging habitat and will be reevaluated as the design progresses on an as-needed basis. No loss of

foraging areas is anticipated from the improvements and creation of in-kind drainage features will be sufficient to off-set any potentially lost foraging habitat.

- Per the USFWS's 2017 update of the Eastern indigo snake programmatic effect determination key, since the project is not located in open water or salt marsh, any required permits for this project will include USFWS's most current guidance for Standard Protection Measures for the Eastern Indigo Snake during site preparation and project construction (included in USACE permit No. SAJ-2014-01584). The USFWS' Standard Protection Measures for the Eastern Indigo Snake will be implemented during construction.
- Potential habitat exists within the remnant pine rocklands (near the Campbell Drive Interchange) for the Miami Tiger Beetle. The potential for this species to occur in the remnant pine rockland is considered "Low". A federal determination of "No effect" and a state determination of "No Effect Anticipated" has been made for this species. At this time, no work is anticipated in the pine rocklands but a 25-ft buffer will be in place between the pine rocklands and construction activities.

Based on the above, the impact for protected species and habitat has been rated "no substantial impact".

5.8 Essential Fish Habitat (EFH)

There is no involvement with, or adverse effect on Essential Fish Habitat (EFH) as the project area does not contain areas that support EFH or National Oceanic and Atmospheric Administration (NOAA) trust fishery resources; therefore, no EFH assessment or further consultation with National Marine Fisheries Service (NMFS) will be required.

Based on the above, the impact for EFH has been rated "no involvement".

Section 6

Physical Resources

6.1 Highway Traffic Noise

A separate Noise Study Report, September 2021, was performed and prepared in accordance with Code of Federal Regulations, Title 23, Part 772 (23 CFR 772) Procedures for Abatement of Highway Traffic Noise and Construction Noise using methodology established in Part 2, Chapter 18 of the Florida Department of Transportation (FDOT) PD&E Manual (January 14, 2019), and FDOT's Traffic Noise Modeling and Analysis Practitioners Handbook. Predicted noise levels were produced using the Federal Highway Administration (FHWA) Traffic Noise Model (TNM), version 2.5.

Noise levels developed for this analysis are expressed in decibels (dB) using an "A"-scale [dB(A)] weighting. This scale most closely approximates the response characteristics of the human ear. All noise levels are reported as hourly equivalent noise levels (L_{Aeq1h}). The L_{Aeq1h} is defined as the equivalent steady-state sound level that, in a given hourly period, contains the same acoustic energy as the time-varying sound level for the same hourly period. Use of the dB(A) and L_{Aeq1h} metrics to evaluate traffic noise is consistent with 23 CFR 772. A land use review will be performed during the design phase to identify all noise sensitive sites that may have received a building permit subsequent to the noise study but prior to the project's Date of Public Knowledge. The date that the State Environmental Impact Report is approved by FTE will be the Date of Public Knowledge. If the review identifies noise sensitive sites that have been permitted prior to the Date of Public Knowledge, then those sensitive sites will be evaluated for traffic noise impacts and abatement considerations.

Noise levels at 282 residences and two special use receptors, are predicted to approach or exceed the NAC for the year 2045 Build Alternative. No noise sensitive sites are expected to experience a substantial increase in traffic noise compared to existing conditions.

Noise barriers were evaluated for the impacted sites listed above. The noise barrier analysis

performed to date indicates that noise barriers could potentially provide reasonable and feasible noise abatement for 247 of the 282 impacted residences, as well as providing a benefit to 164 non-impacted residences. The special use analysis determined that noise abatement was not feasible and reasonable for any of the two impacted special use receptors. Noise barrier locations determined to be reasonable and feasible are summarized in the table below.

Table 6-1 Potentially Feasible and Reasonable Noise Barriers

Noise Sensitive Area	Number of Impacted Residences	Approx. Begin / End Station	Prelim. Height (ft.) / Length (ft.)	Prelim. Location
Lakeshore Condominiums – Southern End (CNE NB03)	33	3553+50 to 3562+50	22 / 900	ROW
Tennessee Estates (CNE NB04)	86	3580+00 to 3612+80	22 / 3,300	ROW
Monterey Pointe / Colony Lakes Apartments (CNE SB04)	160	3582+10 to 3586+10; 3585+20 to 3605+20; 3602+70 to 3610+70	14 / 400 22 / 2,200 14 / 800	Shoulder ROW Shoulder

FTE is committed to the construction of feasible and reasonable noise abatement measures. Three potentially feasible and reasonable noise barrier systems have been identified in the table above. Additional details on the noise barriers and their locations can be found in the project aerials in Appendix D of the Noise Study Report, and are contingent upon the following conditions:

- Final recommendations on the construction of abatement measures are determined during the project's final design and through the public involvement process;
- Detailed noise analyses during the final design process support the need, feasibility and reasonableness of providing abatement;
- Cost analysis indicates that the cost of the noise barrier(s) will not exceed the cost reasonable criterion;
- Community input supporting types, heights, and locations of the noise barrier(s) is provided to FTE; and
- Safety and engineering aspects have been reviewed and any conflicts or issues resolved.

A land use review will be performed during the design phase to identify all noise sensitive sites that may have received a building permit subsequent to the noise study but prior to the project's Date of Public Knowledge. The date that the State Environmental Impact Report is approved by FTE will be the Date of Public Knowledge. If the review identifies noise sensitive sites that have been permitted prior to the Date of Public Knowledge, then those sensitive sites will be evaluated for traffic noise impacts and abatement considerations.

Based on the above analysis, the impact for highway traffic noise has been rated "no substantial

impact".

6.2 Air Quality

An Air Quality Technical Memorandum, August 2020, was prepared for this project following procedures documented in Part 2, Chapter 19 (Air Quality) of the Florida Department of Transportation (FDOT) PD&E Manual (January 14, 2019). Based on the results from the screening model, the highest project-related CO one- and eight-hour concentrations are not predicted to reach or exceed the one- or eight-hour NAAQS for this pollutant. As such, the project "passes" the screening model and no further analysis is required. This project is not expected to create adverse impacts on air quality because the project area is in attainment for all National Ambient Air Quality Standards (NAAQS) and because the project is expected to operate at an acceptable Level of Service (LOS) and reduce delay and congestion on all facilities within the study area.

Construction activities may cause short-term air quality impacts in the form of dust from earthwork and unpaved roads. These impacts will be minimized by adherence to applicable state regulations and to applicable FDOT Standard Specifications for Road and Bridge Construction.

Based on the above analysis, the impact for air quality has been rated "no substantial impact".

6.3 Contamination

A Contamination Screening Evaluation Report (CSER) dated September 2020 was prepared in accordance with Part 2, Chapter 22, of the FDOT PD&E Manual (FDOT, 2019). The CSER identified sixteen (16) sites within the screening area that have the potential to impact the project.

Risk ratings were assigned to parcels based on historical uses, contamination type and history and proximity to the proposed improvements. Various adjacent agricultural areas, assumed to have been subject to pesticide application, were deemed as No Risk. The potential contamination concerns were identified through several different methodologies. One (1) High Risk, one (1) Medium Risk and twelve (12) Low Risk potentially contaminated sites were identified. Two (2) sites were determined to be No Risk. The sixteen (16) sites identified within the screening area that were determined to have the potential to impact the project are shown in **Table 6-2** and on **Figure 6-1** with the risk rating color-coded as noted in the legend.

A Level II Contamination Assessment is recommended for any areas that have proposed dewatering or subsurface work activities (e.g. pole foundations, drainage features) occurring adjacent to or at any of these sites. If any dewatering activities are identified in design, particularly on US 1 south of Palm Drive where existing French drains are present, the appropriate permitting and local agency coordination activities should take place. A Level II Contamination Assessment is recommended for the one Medium and one High ranked site.

Based on the above analysis, the impact for contamination has been rated "no substantial impact".

Table 6-2 Contaminated Sites Ranking

Map ID	Site Name	Site address	Risk/Database(s)	Risk Rating
1	Emergency Spill site-Triple A Linen Inc.	S Dixie HWY @ SW 350th Street Homestead, FL 33035	LUST	Low
2	Sunshine #06	505 SE 1st Street Florida City, FL 33034	FL LUST, FL UST	Low
3	ATJ Corporation	413 SE 1st Street Florida City, FL 33034	EDR Hist Auto, FL DEP	Low
4	Jams Group US LLC	380 SE 1st Ave Homestead, FL 33034	FL LUST, FL UST, FL AST	Low
5	Speedway #6892	311 SE 1st Ave Florida City, FL 33034	FL UST, FL LUST	Low
6	Patches	335 S Krome Ave Florida City, FL 33034	FL DEP, Miami-Dade Co. GTO	No
7	Gateway Village	11 SE 1st Ave Florida City, FL	FL LUST, FL UST	Low
8	Park Royal Inn	100 US HWY 1 Florida City, FL 33034	AST, FL DEP	Low
9	Shell-Gateway	10 SE 1st Ave Homestead, FL 33034	FL LUST, FL UST, FL CLEANUP SITES, FL DWM CONTAM	High
10	Sun Kwik #1- Just Oil	237 N Krome Ave Florida City, FL 33034	Fl Enforcement, FL Miami-Dade Co. HWS, FL LUST, FL UST, FL Miami-Dade Co. SPILL, FL Cleanup Sites, FL DWM CONTAM	Medium
11	City of Florida City	SW Corner of Krome Ave and Davis Parkway Florida City, FL 33034	FL SWF/LF	No
12	Murphy USA #5738	33517 S Dixie Hwy Florida City, FL 33034	FL LUST, FL UST, FL Enforcement	Low
13	WAL-MART SUPERCENTER #2727	33501 S Dixie Hwy Florida City, FL 33034	RCRA-SQG, FL Tier 2	Low
14	BJ'S WHOLESALE CLUB, INC. DBA BJ'S CLUB (Yates Homestead LLC)	650 SE 8th Street Homestead, FL 33030	FL Miami-Dade Co. GTO, FL Tier 2, LUST, AST	Low
15	Dade County School - Campbell Drive	30700 SW 157th Ave Homestead, FL 33033	FL LUST, FL UST	Low
16	Agricultural Areas	Various	NA	Low

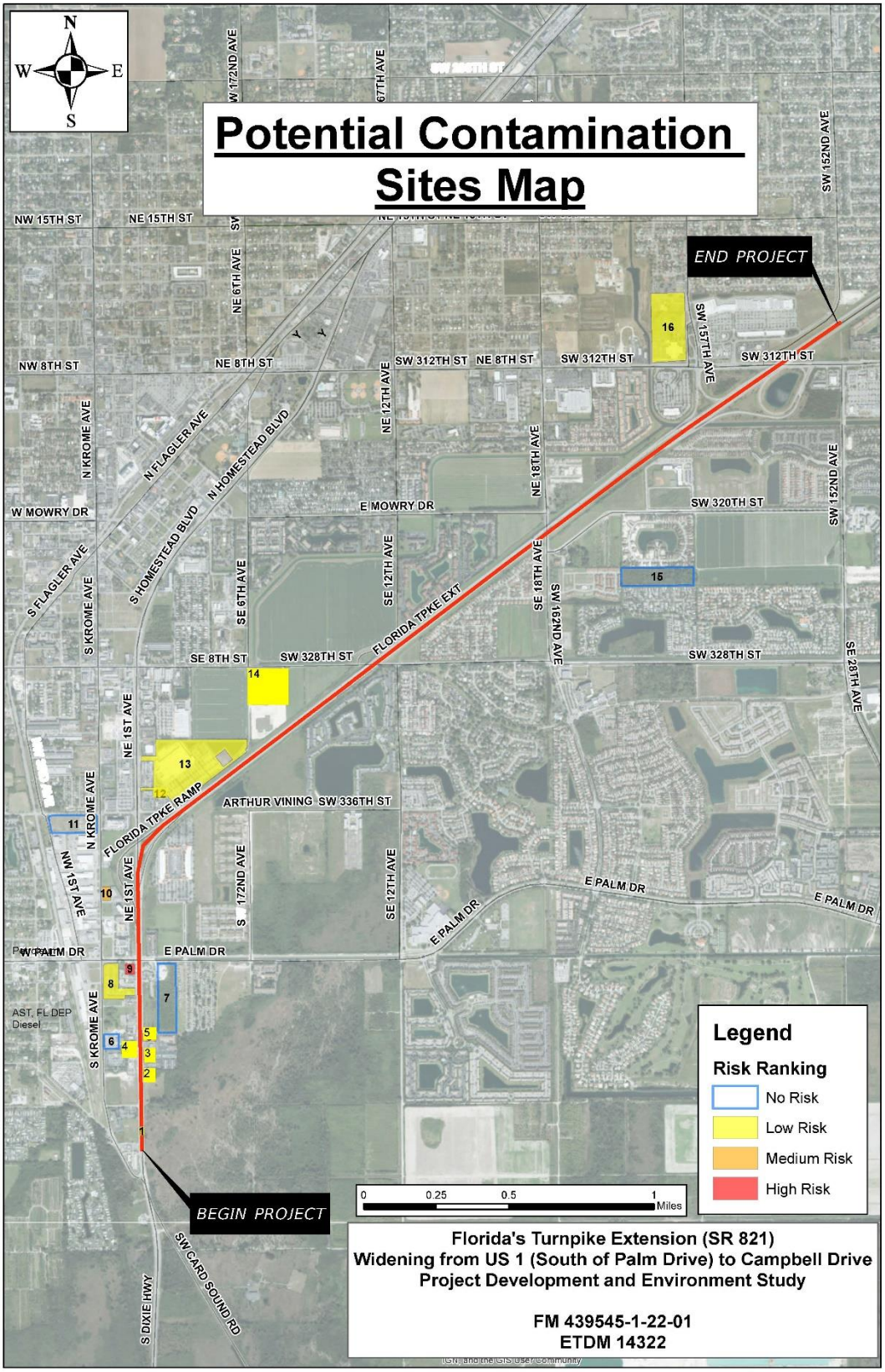


Figure 6-1 Potential Contamination Sites Map

6.4 Utilities and Railroads

A Utility Assessment Package Technical Memorandum, August 2020, was prepared to document the existing or planned utilities in accordance with FDOT PD&E Manual, Part 2, Chapter 21 (FDOT 2019). A list of the existing Utility Agencies/Owners (UAOs) was obtained by contacting Sunshine 811. A field review was also conducted to further identify any designated existing facilities in the project corridor. Thirteen (13) UAOs were identified.

The anticipated utility impacts are concentrated along SR 5 (US 1) and the associated local side streets. The anticipated impacts to utility facilities resulting from the preferred alternative are itemized by location in Table 6-3 along with estimated relocation costs. The total combined estimated cost for all relocations is $11,545,000. The estimated impacts are based on the data provided by the UAO and represent conservative estimates. Actual utility impacts will be verified during the design phase, when a detailed survey and subsurface utility information is available. It is anticipated the municipal water and wastewater providers may request a Utility Work by Highway Contractor Agreement (UWHCA). There is no railroad involvement within the project area.

Based on the above, the impact for utilities and railroads has been rated "no substantial impact".

Table 6-3 Potential Utility Impacts for Preferred Alternative

Utility Agency Owner	Utility Type	Station	General Location	Size	Impact	Estimated Cost
US Highway 1						
AT&T Florida	BT	45+00 to 71+30	East side	Not Provided	Roadway Construction	$460,000
AT&T Florida	MH	46+20	East side	Not Provided	Roadway Construction	$125,000
AT&T Florida	MH	71+05	East side	6x12x17	Roadway Construction	$125,000
AT&T Florida	BT	71+05 to 73+10	East side	6-4"	Roadway Construction	$200,000
AT&T Florida	MH	73+05	East side	30"x48"	Roadway Construction	$125,000
AT&T Florida	MH	73+10	East side	30"x48"	Roadway Construction	$125,000
AT&T Florida	BT	73+80 to 100+00	East side	1-4"	Roadway Construction	$460,000
City of Florida City W&WW	WM	43+00 to 45+12	West side	12" DIP	Roadway Construction	$15,000
City of Florida City W&WW	WM	72+25 to 86+00	East side	12" DIP	Roadway Construction	$75,000
City of Florida City W&WW	WM	95+05 to 100+00	West side	12" DIP	Roadway Construction	$50,000
City of Florida City W&WW	WM	96+80 to 100+00	East side	12" DIP	Roadway Construction	$30,000
City of Florida City W&WW	WM	45+12	Crossing	16" DIP	Roadway Construction	$10,000

Table 6-3 (Continued)

Utility Agency Owner	Utility Type	Station	General Location	Size	Impact	Estimated Cost
City of Florida City W&WW	WM	55+05	Crossing	16” DIP	Roadway Construction	$10,000
City of Florida City W&WW	WM	51+90 to 71+06	West side	16” DIP	Roadway Construction	$350,000
City of Florida City W&WW	FM	50+00 to 69+50	West side	8” DIP	Roadway Construction	$120,000
City of Florida City W&WW	FM	52+10 to 70+20	East side	8” PVC	Roadway Construction	$110,000
City of Florida City W&WW	FM	62+10 to 71+40	West side	10” PVC	Roadway Construction	$65,000
City of Florida City W&WW	FM	97+10 to 100+00	East side	8” PVC	Roadway Construction	$20,000
City of Florida City W&WW	WM	45+12	West side	Valve	Roadway Construction	$5,000
City of Florida City W&WW	WM	45+12	East side	(3) Valves	Roadway Construction	$15,000
City of Florida City W&WW	WM	51+90	East side	Valve	Roadway Construction	$5,000
City of Florida City W&WW	WM	53+75	East side	Valve	Roadway Construction	$5,000
City of Florida City W&WW	WM	55+10	East side	(4) Valves	Roadway Construction	$20,000
City of Florida City W&WW	WM	55+10	West side	(2) Valves	Roadway Construction	$10,000
City of Florida City W&WW	WM	58+20	East side	Valve	Roadway Construction	$5,000
City of Florida City W&WW	WM	58+80	East side	Valve	Roadway Construction	$5,000
City of Florida City W&WW	WM	71+00	East side	Valve	Roadway Construction	$5,000
City of Florida City W&WW	WM	71+00	West side	(3) Valves	Roadway Construction	$15,000
City of Florida City W&WW	WM	99+00	East side	(4) Valves	Roadway Construction	$20,000
City of Florida City W&WW	WM	99+00	West side	(4) Valves	Roadway Construction	$20,000
City of Florida City W&WW	FM	50+00	West side	MH	Roadway Construction	$100,000
City of Florida City W&WW	FM	52+10	East side	MH	Roadway Construction	$100,000
City of Florida City W&WW	FM	52+10	West side	MH	Roadway Construction	$100,000
City of Florida City W&WW	FM	53+80	West side	MH	Roadway Construction	$100,000
City of Florida City W&WW	FM	54+30	East side	MH	Roadway Construction	$100,000
City of Florida City W&WW	FM	56+45	West side	MH	Roadway Construction	$100,000
City of Florida City W&WW	FM	57+00	East side	MH	Roadway Construction	$100,000

Table 6-3 (Continued)

Utility Agency Owner	Utility Type	Station	General Location	Size	Impact	Estimated Cost
City of Florida City W&WW	FM	58+10	West side	MH	Roadway Construction	$100,000
City of Florida City W&WW	FM	58+45	East side	MH	Roadway Construction	$100,000
City of Florida City W&WW	FM	59+50	East side	MH	Roadway Construction	$100,000
City of Florida City W&WW	FM	62+05	West side	MH	Roadway Construction	$100,000
City of Florida City W&WW	FM	62+30	West side	MH	Roadway Construction	$100,000
City of Florida City W&WW	FM	62+30	East side	(2) MH	Roadway Construction	$200,000
City of Florida City W&WW	FM	65+40	West side	MH	Roadway Construction	$100,000
City of Florida City W&WW	FM	66+00	East side	MH	Roadway Construction	$100,000
City of Florida City W&WW	FM	66+70	East side	MH	Roadway Construction	$100,000
City of Florida City W&WW	FM	69+50	West side	MH	Roadway Construction	$100,000
City of Florida City W&WW	FM	70+20	East side	MH	Roadway Construction	$100,000
City of Florida City W&WW	FM	71+70	East side	MH	Roadway Construction	$100,000
City of Florida City W&WW	FM	97+10	East side	MH	Roadway Construction	$100,000
City of Florida City W&WW	FM	60+10	East side	MH	Roadway Construction	$100,000
City of Florida City W&WW	WM	63+10	East side	FH	Roadway Construction	$50,000
City of Florida City W&WW	WM	66+60	East side	FH	Roadway Construction	$50,000
City of Florida City W&WW	WM	97+00	East side	FH	Roadway Construction	$50,000
Comcast	BTV	51+80 to 53+75	East side	Not Provided	Roadway Construction	$20,000
Comcast	OTV	53+75 to 57+60	East side	Not Provided	Roadway Construction	$40,000
Comcast	OTV	98+20 to 100+00	East side	Not Provided	Roadway Construction	$20,000
Florida City Gas	GM	51+80 to 70+75	West side	2” PE	Roadway Construction	$115,000
Florida City Gas	GM	98+30 to 100+00	East side	2” PE	Roadway Construction	$15,000
FP&L Distribution	BE	43+00 to 72+70	West side	(2) 6” PVC (23kv)	Roadway Construction	$725,000
FP&L Distribution	OE	50+75 to 57+60	East side	23kv	Roadway Construction	$45,000

Table 6-3 (Continued)

Utility Agency Owner	Utility Type	Station	General Location	Size	Impact	Estimated Cost
FP&L Distribution	OE	71+25	Crossing US 1	23kv	Roadway Construction	$15,000
FP&L Distribution	BE	72+70	Crossing US 1	(2) 6" PVC (23kv)	Roadway Construction	$25,000
FP&L Distribution	OE	98+80	Crossing US 1	23kv	Roadway Construction	$15,000
Palm Drive						
AT&T Florida	BT	US 1	South side east of US 1	4-4"	Roadway Construction	$300,000
AT&T Florida	BT	US 1	South side west of US 1	Not Provided	Roadway Construction	$150,000
AT&T Florida	BT	US 1	North side west of US 1	1-4"	Roadway Construction	$150,000
AT&T Florida	HH	US 1	North side west of US 1	30"x48"	Roadway Construction	$50,000
Comcast	OTV	US 1	South side west of US 1	Not Provided	Roadway Construction	$30,000
Comcast	OTV	US 1	South side crossing US 1	Not Provided	Roadway Construction	$30,000
Comcast	OTV	US 1	South side east of US 1	Not Provided	Roadway Construction	$30,000
Florida City W&WW	FM	US 1	South side west of US 1	10" PVC	Roadway Construction	$75,000
Florida City W&WW	WM	US 1	North side West of US 1	16" DIP	Roadway Construction	$125,000
Florida City W&WW	FM	US 1	South side crossing US 1	12" DIP	Roadway Construction	$100,000
Florida City W&WW	WM	US 1	North side east of US 1	16" DIP	Roadway Construction	$125,000
Florida City W&WW	WM	US 1	South side east of US 1	12" DIP	Roadway Construction	$100,000
Florida City W&WW	FM	US 1	South side east of US 1	12" DIP	Roadway Construction	$100,000
FP&L Distribution	OE	US 1	South side west of US 1	23kv	Roadway Construction	$75,000
FP&L Distribution	OE	US 1	South side crossing US 1	23kv	Roadway Construction	$75,000
FP&L Distribution	OE	US 1	South side east of US 1	23kv	Roadway Construction	$75,000
FP&L Distribution	BE	US 1	North side east of US 1	23kv	Roadway Construction	$50,000

Table 6-3 (Continued)

Utility Agency Owner	Utility Type	Station	General Location	Size	Impact	Estimated Cost
Turnpike Extension						
AT&T Florida	BT	US 1	West side of the mainline	Not Provided	Roadway Construction	$25,000
City of Homestead Electric	OE	3613+20 to 3615+70	Crossing SR 821	138kv	Bridge Construction	$600,000
FP&L Transmission	OE	3614+80 to 3616+45	Crossing SR 821	138kv	Roadway Construction	$600,000
City of Homestead Electric	BE	3619+20 to 3623+75	Crossing SR 821	Not Provided	Roadway Construction	$100,000
City of Homestead Electric	BE	3664+60 to 3667+60	Crossing SR 821	Not Provided	Bridge Construction	$75,000
City of Homestead Electric	BE	3681+70 to 3682+60	Crossing SR 821	Not Provided	Roadway Construction	$30,000
Comcast	BTV	3613+50 RT to 3615+75 LT	Crossing SR 821	Not Provided	Roadway Construction	$30,000
Florida City W&WW	WM	3525+00 to 3533+20	North side	12” DIP	Roadway Construction	$60,000
Florida City W&WW	WM	3529+75 to 3547+80	South side	12” DIP	Roadway Construction	$130,000
Florida Gas Transmission	GM	3614+50 RT to 3617+25 LT	Crossing SR 821	6”	Roadway Construction	$15,000
FP&L Distribution	BE	3530+00 LT to 3534+00 RT	Crossing SR 821	23kv	Roadway Construction	$100,000
Lucy Street (SW 328 Street)						
FP&L Distribution	BE	3530+00 LT to 3534+00 RT	Crossing SR 821	23kv	Roadway Construction	$100,000
City of Homestead Electric	OE	3575+ 50 to 3578+20	Crossing SR 821	138kv	Bridge Construction	$1,000,000
City of Homestead Electric	BE	3574+ 90 to 3578+20	Crossing SR 821	Not Provided	Bridge Construction	$100,000

Table 6-3 (Continued)

Utility Agency Owner	Utility Type	Station	General Location	Size	Impact	Estimated Cost
City of Homestead Electric	BE	3580+50 to 3582+50	Crossing SR 821	Not Provided	Roadway Construction	$50,000
Comcast	BTV	3580+50 RT to 3582+50 LT	Crossing SR 821	Not Provided	Roadway Construction	$30,000
FP&L Distribution	BE	3572+50 LT to 3576+50 RT	Crossing SR 821	23kv	Bridge Construction	$100,000
AT&T Florida	BT	3574+50 RT to 3576+20 LT	Crossing SR 821	4-4"	Roadway Construction	$40,000
AT&T Florida	BT	SW 176th Avenue	South side of Lucy Street	(3) Cabinets	Roadway Construction	$450,000
FP&L Distribution	BE	Lucy Street	Crossing SR 821	23kv	Roadway Construction	$100,000
FP&L Distribution	OE	SW 167 Avenue	East side of SW 167 Ave	23kv	Roadway Construction	$60,000
Comcast	BTV	SW 167 Avenue	East side of SW 167 Ave	Not Provided	Roadway Construction	$30,000
Davis Parkway / NE 17th St.						
AT&T Florida	BT	US 1	South side west of US 1	Not Provided	Roadway Construction	$40,000
Comcast	OTV	US 1	North side west of US 1	Not Provided	Roadway Construction	$25,000
Comcast	OTV	US 1	North side crossing US 1	Not Provided	Roadway Construction	$25,000
Comcast	OTV	US 1	North side east of US 1	Not Provided	Roadway Construction	$25,000
FP&L Distribution	OE	US 1	North side east & west of US 1	Not Provided	Roadway Construction	$25,000

6.5 Construction

The construction activities associated with the proposed improvements will result in temporary air, noise, vibration, visual impacts, water quality, traffic flow, and for those residents and travelers within the immediate vicinity of the project.

Air quality impacts will be temporary and primarily be in the form of exhaust emissions from trucks and construction equipment as well as fugitive dust from construction sites. Air pollution associated with the creation of airborne particles will be effectively controlled using watering or the

application of other control materials in accordance with FDOT's *Standard Specifications for Road and Bridge Construction*.

Noise and vibration impacts may be generated by heavy equipment and construction activities such as pile driving and vibratory compaction of embankments. Noise control measures will be implemented as set forth in the FDOT's *Standard Specifications for Road and Bridge Construction.* Adherence to local construction noise and/or construction vibration ordinances by the construction contractor will also be required where applicable.

Visual impacts associated with the storage of construction materials and establishment of temporary construction facilities will occur but are temporary and short term. Long term visual impacts due to proposed structures are deemed not substantial as the structures proposed are in character with the existing freeway facility.

Water quality impacts resulting from erosion and sedimentation will be controlled in accordance with FDOT's *Standard Specifications for Road and Bridge Construction* and using Best Management Practices (BMPs). Temporary erosion control features as specified in the FDOT's *Standard Specifications for Road and Bridge Construction*, Section 104, will be utilized.

Maintenance of traffic and sequence of construction will be planned and scheduled to minimize traffic delays during project construction. Signs will be used as appropriate to provide notice of road closures and other pertinent information to the traveling public. The local news media will be notified in advance of road closings and other construction-related activities which could inconvenience the community so that motorists, residents, and businesspersons can plan travel routes in advance. Access to all businesses and residences will be maintained to the extent practical through controlled construction scheduling.

Based on the above analysis, the impact for construction has been rated "no substantial impact".

6.6 Bicycles and Pedestrians

The preferred alternative maintains the existing bicycle and pedestrian corridors currently in place. Pedestrian enhancements include new sidewalk proposed along the west side of US 1 to extend to SW 352 Street. Existing sidewalk impacted by the reconstruction of northbound US 1 south of Palm Drive will be replaced along the new roadway. Improved pedestrian crosswalks with median refuges will be provided at the US 1 intersection with Palm Drive. Sidewalk impacted by the Lucy Street interchange construction (by others) will also be replaced and enhanced crosswalks provided.

Bicycle enhancements include providing a bike lane along southbound US 1 south of Palm Drive and along northbound US 1 south of Palm Drive within the reconstruction limits. Bike lanes impacted by the Lucy Street interchange will be replaced and bike keyholes will be provided between the proposed right turn lane and the through lanes at the northbound on-ramp location.

No pedestrian or bicycle facilities or enhancements are provided along US 1 between Palm Drive and Davis Parkway as this is within limited access right-of-way.

Based on the above analysis, the impact for bicycles and pedestrians has been rated "enhance".

6.7 Navigation

There are no navigable waterways within the project limits, thus this is not applicable to the project.

Based on the above, the impact for navigation has been rated “no involvement”.

Section 7

Permits

7.1 Permits

The following environmental permits are anticipated for this project:

- South Florida Water Management District (SFWMD) – ERP Permit
- SFWMD Right of Way Occupancy Permit
- Florida Department of Environmental Protection (FDEP) – NPDES
- USACOE Section 404 Dredge and Fill Permit (for work within other surface waters)
- USACOE Section 408 Review (for work within the C-103 Canal)
- A Class III permit from Miami-Dade County (for any work the occurs within County canal right-of-way, Florida City Canal).
- Water Use (WU) permit will be determined during the design phase. If dewatering is required, a WU permit is required from SFWMD and FDEP.

Section 8

Engineering Analysis Support

8.1 Engineering Analysis Support

The engineering analysis supporting this environmental document is contained within the Preliminary Engineering Report dated September 2021.

Section 9

Project Commitments

9.1 Project Commitments

1. FTE is committed to the construction of feasible and reasonable noise abatement measures. Three potentially feasible and reasonable noise barrier systems have been identified for this project. Final recommendations on the construction of abatement measures and detailed noise / cost analyses will be performed during the final design process to support the need, feasibility and reasonableness of providing abatement. Community input regarding type, height and locations of the final barriers will be solicited from area stakeholders.

2. During the design phase, a Level II Contamination Assessment will be conducted for locations with risk ratings of "medium" or "high", if the identified contamination concerns have the potential to impact the existing and / or proposed project right-of-way. As noted in the Pond Siting Report, results of the Level I CSER will be considered during the design phase with respect to proposed drainage features.

3. Air pollution associated with the creation of airborne particles will be controlled using watering or the application of other control materials in accordance with FDOT's Standard Specifications for Road and Bridge Construction.

4. All applicable best management practices (BMPs)contained in the latest editions of the FDOT Standard Specifications for Road and Bridge Construction and the Construction Project Administration Manual will be adhered to during construction of the planned improvements.

5. Minimization of wetland and surface water impacts will be evaluated further during the design phase of the project to the extent possible, i.e. changes in the typical section to avoid and minimize wetland impacts and use of BMPs to avoid and minimize impacts to water quality.

6. Coordination with the appropriate regulatory agencies will be conducted throughout the design phase for permitting; FDOT's Standard Specifications for Road and Bridge Construction will be adhered to during the construction phase of the project.

7. A Stormwater Management Plan will be developed to provide conveyance and treatment for stormwater runoff from impervious surfaces.

8. Conduct a limited roost survey for Florida Bonneted Bat during design.

9. Standard Manatee Conditions for In-water activities to be implemented during construction.

10. The USFWS Standard Protection Measures for the Eastern Indigo Snake will be implemented to ensure no adverse impacts to the species occur during construction.

11. A 25-foot buffer between the pine rocklands and construction activities should be noted in the plans for the Miami Tiger Beetle.

12. Miami-Dade Transit stops needing adjustment will be coordinated with the Miami -Dade Transit Authority during the final design phase of the project.

Section 10

FDOT Selected Alternative

10.1 FDOT Selected Alternative

Based on the engineering, environmental and Value Engineering study analysis and results, Alternative B was determined to best satisfy the project's purpose and need while minimizing adverse impacts. Alternative B is the FDOT Selected Alternative and is further detailed in the Turnpike Widening Project and Development Study, from US 1 (South of Palm Drive) to Campbell Drive Preliminary Engineering Report dated September 2021.

The Florida Department of Transportation, Florida's Turnpike Enterprise, has reviewed and evaluated the comments received at the July 20, 2021 public hearing. Alternative B, as described at the public hearing, was designed to: alleviate traffic congestion by giving motorists more options for travel; improve safety; improve accessibility; and enhance emergency evacuation and response. While FDOT's Selected Alternative meets the transportation needs of the State Highway System and minimizes environmental impacts, the community's feedback is also very important in the final project decision. For this reason, the Department has suspended activity to further develop the Turnpike ramp over the Palm Drive and US 1 intersection. The following is a summary of major elements of the Selected Alternative:

- **Turnpike Widening:** From the Turnpike terminus north to Campbell Drive, the mainline will be widened, toward the median, with one (1) additional lane in each direction to provide a 6-lane, general toll lane, divided highway. Between the Campbell Drive and Lucy Street interchanges, widening is also proposed to the outside to provide an auxiliary lane in the north and southbound directions.

- **US 1 Interchange Area and Ramps:** The US 1 interchange area presented with Alternative B included a new tolled ramp over Palm Drive with one (1) lane northbound and one (1) lane southbound. This element of the Preferred Alternative will not be implemented at this time and the interchange area will remain in its existing condition. However, other previously proposed elements are desired and will be implemented. A new one-lane, southbound US 1 right turn roadway is proposed to Palm Drive and located west of the existing southbound off-ramp and adjacent to the limited access (L/A) ROW line. The existing on- and off-ramps at US 1 and the Davis Parkway southbound off-ramp will remain available to local traffic with minor improvements.
- **Lucy Street Interchange:** A new partial interchange on the Turnpike mainline at Lucy Street, located between approximate MP 1.6 and 1.8, provides local access to and from the north.
- **Campbell Drive Interchange:** The Campbell Drive existing ramps will be converted from taper ramps to parallel ramp configuration, and auxiliary lanes (northbound and southbound) will be provided between Campbell Drive and Lucy Street.
- **Structures:** A number of the existing bridges will be widened along the Turnpike mainline. In addition, two (2) new bridge ramps over US 1 and over Palm Drive are proposed. Existing bridges will be widened to accommodate one (1) additional lane and, in places, auxiliary lanes. A summary of the Preferred Alternative bridge elements is below:
    - Proposed Ramp Bridge South – Florida's Turnpike Southbound/Northbound (SB/NB) over Palm Drive; the Department has suspended further development of this element until locally supported. This intersection will remain at-grade in its existing condition but may include minor improvements such as channelization and / or lengthening of turn lanes to address operational issues.
    - Proposed Ramp Bridge North – Florida's Turnpike SB/NB over US 1, the Department has suspended further development of this element until locally supported.
    - Turnpike Mainline over US 1 - Bridge BR 870191, does not require modifications to accommodate the Preferred Alternative.
- Turnpike Mainline over Lucy Street - Bridges BR 870399 NB and BR 870192 SB, will be widened to the inside.
- Turnpike Mainline over SW 162nd Avenue - Bridges BR 870400 NB and BR 870193 SB, will be widened to the inside and outside. Additional, close coordination with Florida Gas Transmission regarding the 6-inch pipeline (along the east side of SW 162nd Avenue and crossing the Turnpike at approximately STA. 3614+50 RT and 3617+25 LT) will be required during final design.
- Turnpike Mainline over C-103 Canal - Bridge BR 870389 NB will be widened to the outside.

- Turnpike Mainline over Campbell Drive - Bridges BR 870390 NB and BR 870179 SB, will be widened to the outside.
- Proposed MSE Walls
    - MSE walls previously proposed and located south and north of the Ramp Bridge South and north of the Ramp Bridge North will not be implemented until such a time that local support for the ramp bridges is obtained. MSE walls are still required along the new on- and off-ramps at Lucy Street, along the southbound bridge at SW 162nd Avenue, and along both sides of the bridges at Campbell Drive.
- Other infrastructure improvements including stormwater, intersection improvements, access management and multimodal accommodations are also included in the Preferred Alternative.

Section 11

Approved for Public Availability

11.1 Approved for Public Availability (prior to Public Hearing)

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

Environmental or Project Development Manager

6/22/2021

Date:

Section 12

Public Involvement

12.1 Public Involvement

The following is a summary of public involvement activities conducted for this project:

Coordination meetings were conducted throughout the PD&E process with the Miami-Dade Transportation Planning Organization, Florida City, City of Homestead, FDOT District Six, Miami-Dade County Transportation and Public Works, Miami-Dade County Emergency Management, FHP, Police, Board of County Commissioners, South Dade Chamber of Commerce and Economic Development Organization and representatives.

A Public Information Meeting for the Florida's Turnpike (SR 821) Widening Project Development and Environment (PD&E) Study from US 1 south of Palm Drive to Campbell Drive in Miami-Dade County was conducted on Tuesday, January 21, 2020, from 5:30 pm to 7:30 pm at the Phichol Williams Community Center, in Homestead, Florida. The purpose of the meeting was to give interested persons an opportunity to review project information, ask questions and provide comments concerning the conceptual design, and potential social, economic and environmental effects of the proposed improvements. One hundred and fourteen (114) people signed in. Also attending were seventeen (17) Turnpike staff members and 9 project consultants.

Eight (8) written comment forms were received during the public meeting. An additional seventeen (17) comments were received by email within the 10-day comment period after the public meeting. Most of the comments were in opposition to the ramp over Palm Drive due to their concern for potential economic impacts to local businesses and jobs. Subsequent to the public meeting, the alternative was revised to emphasize access opportunities for the businesses and the Value Engineering study was conducted which resulted in further revisions to the Preferred Alternative.

As a result of the concept revisions, additional smaller, virtual meetings with stakeholders were conducted prior to the Public Hearing to obtain additional feedback. Below is a summary of the

meetings. Meeting minutes of each are included in the Public Involvement Summary Report prepared as a supporting document to this study:

- March 3, 2021: Miami-Dade TPO Staff update; three TPO staff members attended. No concerns were noted and it was suggested to meet with the TPO committees prior to the public hearing to gain additional feedback.
- March 12, 2021, City of Homestead Public Works and Engineering staff; two members of the City attended the meeting. No concerns were noted regarding the project and support was expressed for the Lucy Street Interchange.

The projects Public Hearing was held on Tuesday July 20, 2021. The hearing was conducted as an open house from 5:30 p.m. to 6:00 p.m. followed by a formal presentation at 6:00 p.m. and public comment period. This presentation was conducted remotely from the FTE Headquarters at Turkey Lake in a hybrid meeting format (in-person and virtual). The in-person venue was held at the Homestead-Miami Speedway Champions Club and online attendance was via the project website, www.TurnpikeSouthMiamiDade.com. This format allowed for compliance with FDOT and local government social distancing guidelines due to the COVID-19 pandemic. The verbal public comment period continued until approximately 7:33 p.m. and the hearing was officially closed at approximately 7:35 p.m.

The purpose of the meeting was to provide project information on the recommended alternative which included the displays that described the proposed improvements. Information on the study process, study area, purpose and need, and other project information including social, environmental, and economic resources was on display as well. Those attending online had access to the same information on the project website as part of the virtual public hearing library.

A comment period took place during the public hearing. Stakeholders were given the opportunity to make verbal comments online and at the in-person venue. At the in-person venue, stakeholders could comment at the microphone or record their comments with the court reporter. Online, stakeholders were given the opportunity to make verbal comments that were recorded. Comment forms were made available for stakeholders to provide written comments and were informed they may continue to provide comments following the public hearing through the close of the comment period at the project website, by email to the FTE project manager, or by U.S. Mail.

A total of 133 persons attended the public hearing, with 84 attending in-person and 49 attending virtually. Of the 133 persons in attendance, 17 were elected officials (10 in-person and 7 virtual) and five were county and city staff (2 in-person and 3 virtual).

A total of 76 persons provided comments regarding the project including 13 elected and appointed officials. The overwhelming majority of the opposition was specifically directed to the ramp bridge over the US 1 and Palm Drive intersection. Four business owners wrote letters of opposition to Governor Ron DeSantis regarding the ramp bridge. Of the 46 public comments received in opposition to the ramp bridge after the public hearing, 28 appeared to be from owners and employees of area businesses. Other major elements of the project including the partial interchange at Lucy Street, mainline Turnpike widening and Campbell Drive ramp improvements, received support from the majority of participants and comments. A total of nine persons provided comments in support of the overall project.

Public Involvement:

1. [ ] A public hearing is not required.
2. [ ] A public hearing will be held July 20, 2021. This draft document is publicly available and comments can be submitted to FDOT from June 28, 2021 until July 30, 2021.

   District Contact Information: Rax Jung, Ph.D., P.E.
   Project Development Engineer
   Florida's Turnpike Enterprise
   PO Box 613069
   Ocoee, FL 34761-3069
   Phone: (407) 264-3870
   Email: Rax.jung@dot.state.fl.us
3. [X] A public hearing was held on July 20, 2021 and the transcript is available.
4. [ ] An opportunity for a public hearing was afforded and was documented (insert date).

Section 13

Approval of Final Document

13.1 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 SEIR reflects consideration of the PD&E Study and the public hearing.

12/15/2021

District Secretary or Designee Date
Florida's Turnpike Enterprise
(See **Appendix G** for Delegation Letter)

Section 14

Technical Materials

14.1 Technical Materials

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

NOTE: materials to be chosen from list of technical documents associated with the project and loaded into the SWEPT system.

The list below are the supporting documents as listed in the Preliminary Engineering Report.

- Air Quality Technical Memorandum
- Bridge Analysis Technical Memorandum
- Campbell Drive Feasibility Study Technical Memorandum
- Contamination Screening Evaluation Report
- Cultural Resource Assessment Survey Report
- Geotechnical Services - Memo Report
- Interchange Alternatives Analysis Technical Memorandum
- ITS Technical Memorandum and Master Signing Plan
- Landscape Aesthetic Assessment Technical Memorandum
- Location Hydraulics Report
- Lucy Street Feasibility Study Technical Memorandum
- Natural Resources Evaluation Report
- Noise Study Report
- Pond Siting Report
- Preliminary Engineering Report

- Public Involvement Summary Report
- Safety Technical Memorandum
- Sociocultural Effects Technical Memorandum
- Conceptual Stage Relocation Plan
- Utility Assessment Package Technical Memorandum
- Toll Site Technical Memorandum
- Typical Section Analysis Technical Memorandum
- Traffic Documentation
    - Traffic Technical Memorandum
    - Project Traffic Analysis Report
    - Turnpike Extension Widening from South of Palm Drive to Campbell Drive: Build Alternative B Evaluation

Appendix A

Preferred Alternative Concept Plans

COMPONENTS OF CONTRACT PLANS SET

CONCEPT PLANS

INDEX OF CONCEPT PLANS

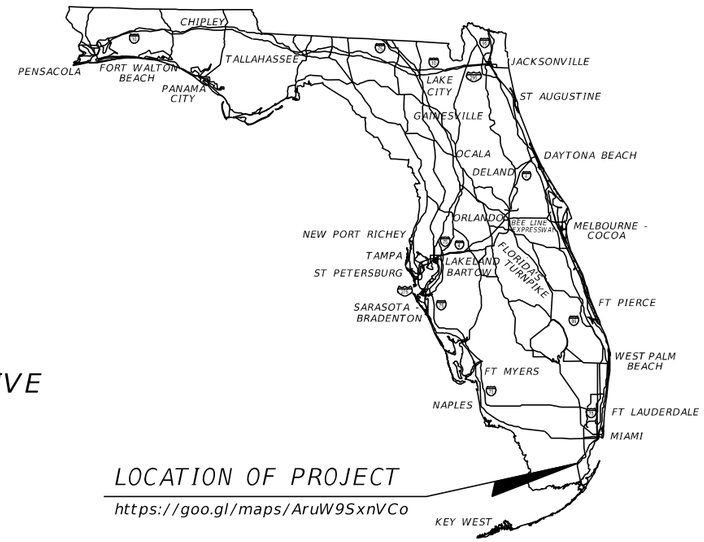
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

CONTRACT PLANS

FINANCIAL PROJECT ID 439545-1-22-01

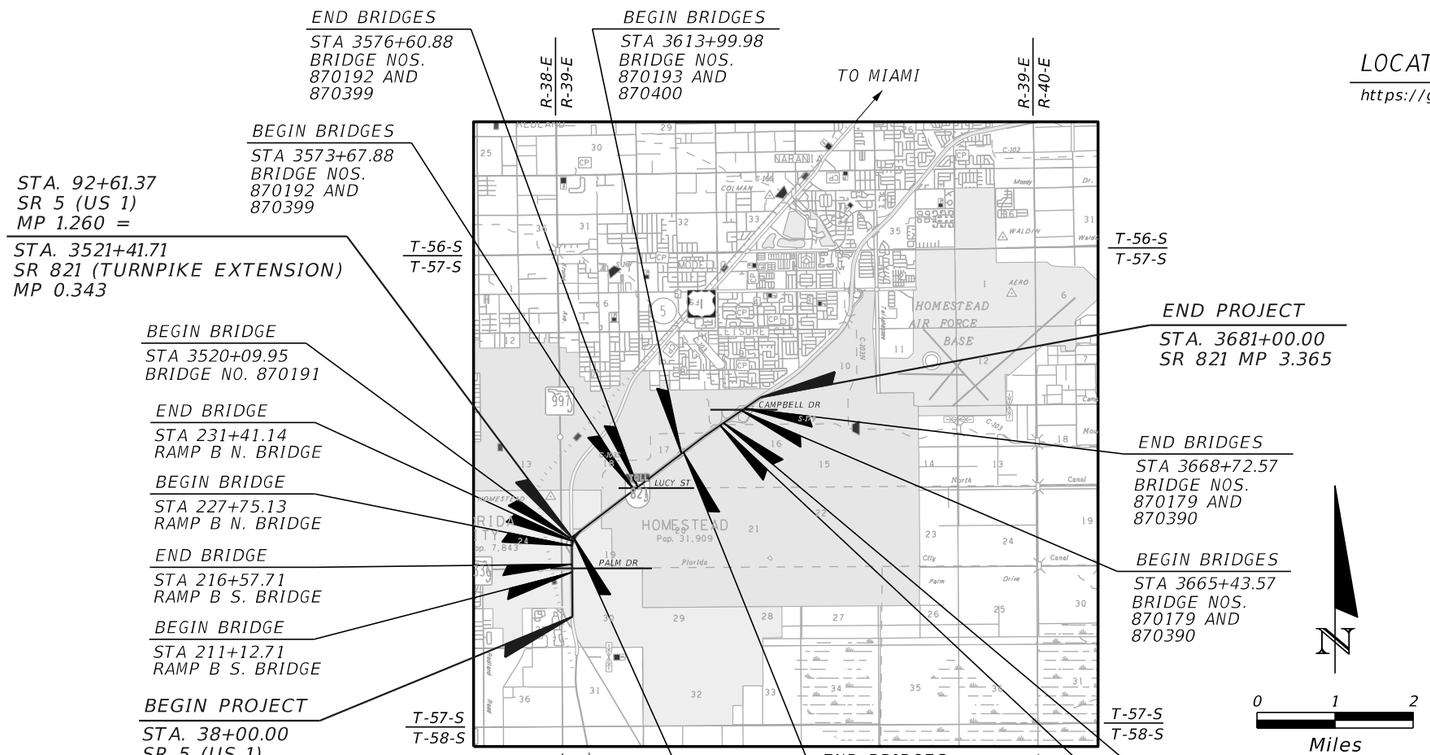
MIAMI-DADE COUNTY (874710)

TURNPIKE EXTENSION (SR 821) WIDENING
FROM SR 5/US 1 (SOUTH OF PALM DRIVE) TO CAMPBELL DRIVE



LOCATION OF PROJECT

https://goo.gl/maps/AruW9SxnVCo



PLANS PREPARED BY:

STANLEY CONSULTANTS, INC.
1641 WORTHINGTON ROAD, SUITE 400
WEST PALM BEACH, FL 33409
VENDOR NO. VF-421320758-001
CONTRACT NO. C9X28

NOTE: THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION.

CONCEPT PLANS
ALTERNATIVE B
SEPTEMBER, 2021

CONCEPT PLANS ENGINEER OF RECORD: CYNTHIA J. KENDRICK, P.E

P.E. NO.: 47633

FDOT PROJECT MANAGER: RAX JUNG, P.E.
GEC PROJECT MANAGER: JAZLYN HEYWOOD, P.E.

CONCEPT PLANS SUBJECT TO REVISION

SHEET NO. 1

GOVERNING STANDARD PLANS:

Florida Department of Transportation, FY2021-22 Standard Plans for Road and Bridge Construction and applicable Interim Revisions (IRs).

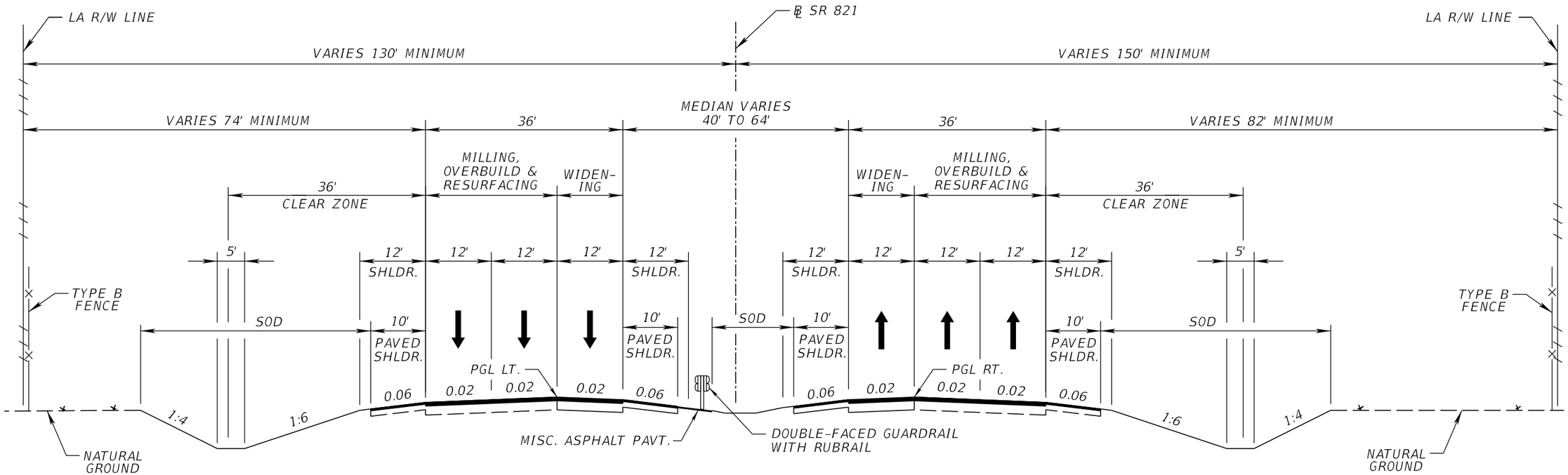
Standard Plans for Road Construction and associated IRs are available at the following website: http://www.fdot.gov/design/standardplans

APPLICABLE IRs:

GOVERNING STANDARD SPECIFICATIONS:

Florida Department of Transportation, July 2021 Standard Specifications for Road and Bridge Construction at the following website: http://www.fdot.gov/programmanagement/Implemented/SpecBooks

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



TYPICAL SECTION
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ESTIMATED DESIGN YEAR = 2045 AADT = 108,600
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DESIGN HOUR T = 3.0%
DESIGN SPEED = 65 MPH
POSTED SPEED = 65 MPH

CONCEPT PLANS SUBJECT TO REVISION

ALTERNATIVE B

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CYNTHIA J. KENDRICK, P.E.
P.E. LICENSE NO. 47633
STANLEY CONSULTANTS, INC.
1641 WORTHINGTON ROAD, SUITE 400
WEST PALM BEACH, FL 33409

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

TYPICAL SECTION

SHEET NO. 2

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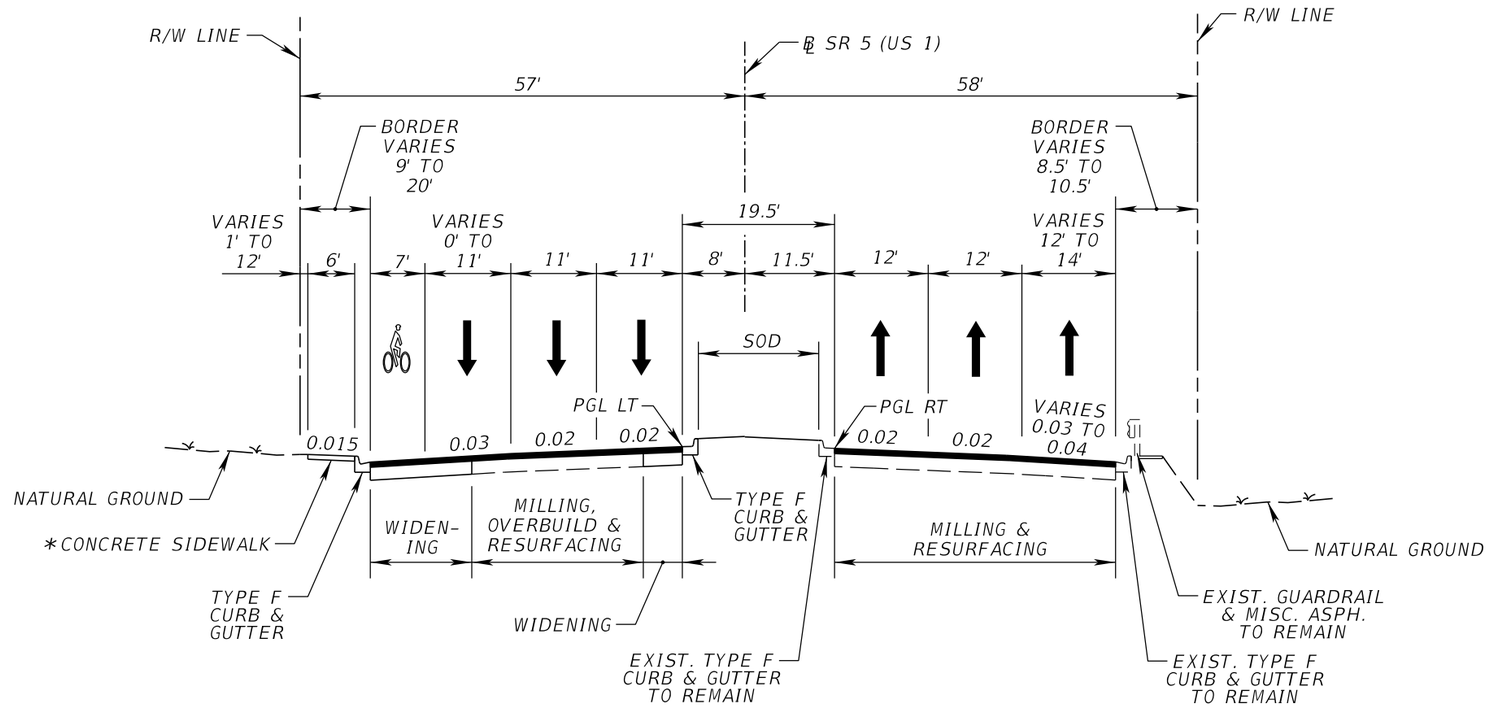

*CONCRETE SIDEWALK ONLY FROM STA. 45+00.00 TO STA. 52+00.00

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DESIGN HOUR T = 5.0%
DESIGN SPEED = 45 MPH
POSTED SPEED = 45 MPH

CONCEPT PLANS SUBJECT TO REVISION

ALTERNATIVE B

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CYNTHIA J. KENDRICK, P.E.
P.E. LICENSE NO. 47633
STANLEY CONSULTANTS, INC.
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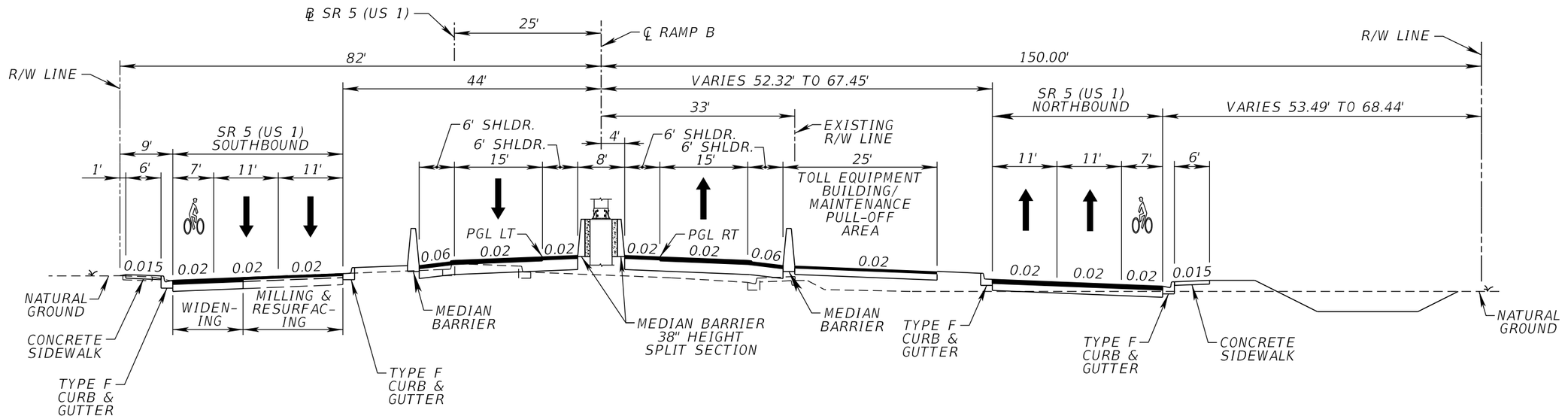
WEST PALM BEACH, FL 33409

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

TYPICAL SECTION

SHEET NO. 3



TOLLING FACILITY
RAMP B
RAMP B STA. 201+28.50 TO STA. 202+83.50
SR 5 (US 1) STA. 59+28.50 (MP 0.629) TO STA. 60+83.50 (MP 0.658)

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DESIGN SPEED = 45 MPH
POSTED SPEED = 45 MPH

CONCEPT PLANS
SUBJECT TO
REVISION

ALTERNATIVE B

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CYNTHIA J. KENDRICK, P.E.
P.E. LICENSE NO. 47633
STANLEY CONSULTANTS, INC.
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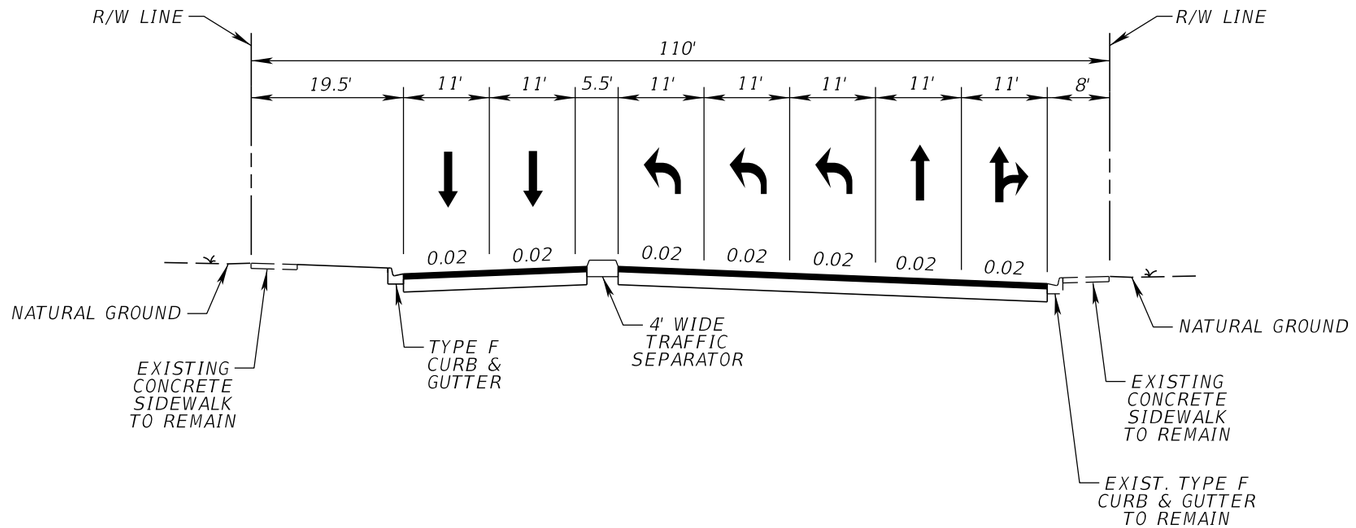
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

TYPICAL SECTION

SHEET NO. 4



PALM DRIVE
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DESIGN SPEED 40 MPH

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POSTED SPEED = 40 MPH EASTBOUND

CONCEPT PLANS SUBJECT TO REVISION

ALTERNATIVE B

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

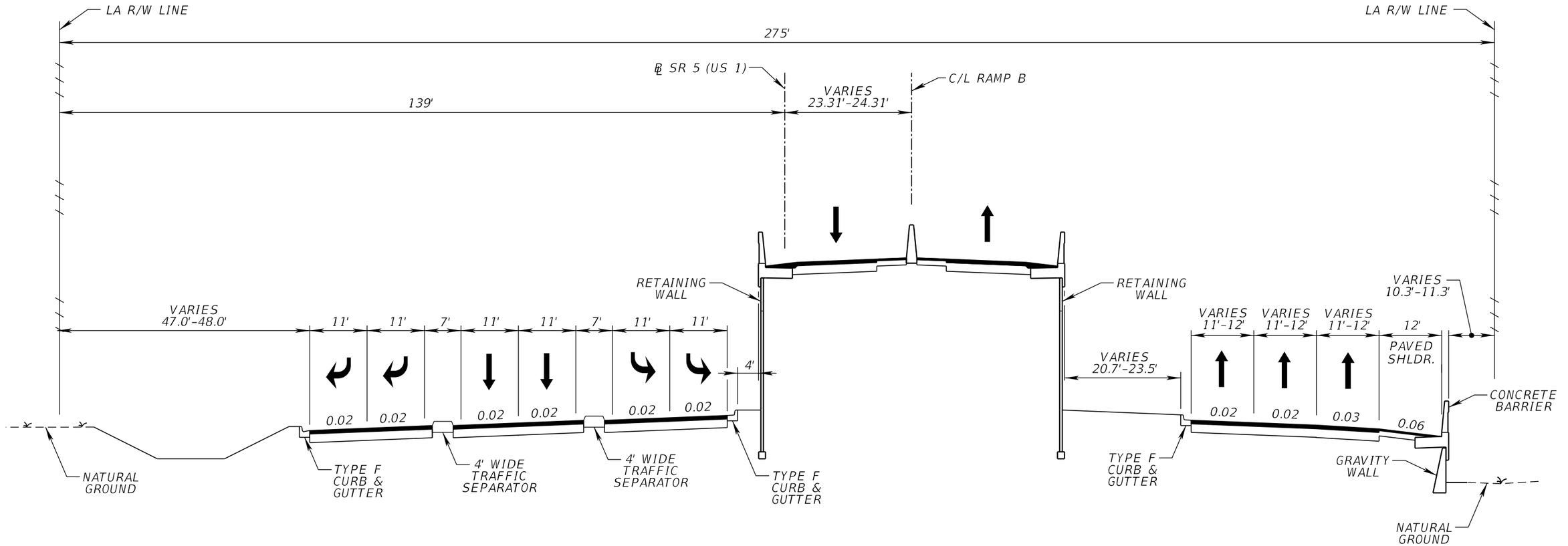
CYNTHIA J. KENDRICK, P.E.
P.E. LICENSE NO. 47633
STANLEY CONSULTANTS, INC.
1641 WORTHINGTON ROAD, SUITE 400
WEST PALM BEACH, FL 33409

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

TYPICAL SECTION

SHEET NO. 5



SR 5 (US 1)
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ESTIMATED DESIGN YEAR = 2045 AADT = 28,400
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DESIGN HOUR T = 5.0%
DESIGN SPEED = 45 MPH
POSTED SPEED = 45 MPH

CONCEPT PLANS SUBJECT TO REVISION

ALTERNATIVE B

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CYNTHIA J. KENDRICK, P.E.
P.E. LICENSE NO. 47633
STANLEY CONSULTANTS, INC.
1641 WORTHINGTON ROAD, SUITE 400
WEST PALM BEACH, FL 33409

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

TYPICAL SECTION

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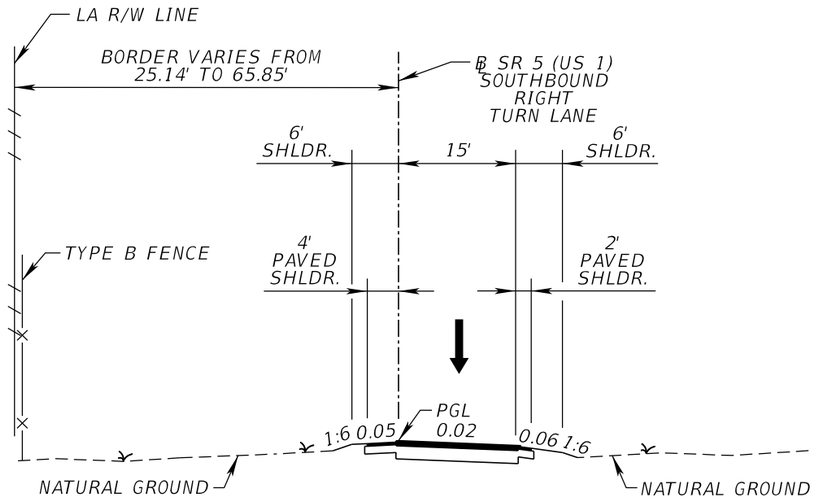

SR 5 (US 1)
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DESIGN HOUR T = 3.0%
DESIGN SPEED = 35 MPH
POSTED SPEED = 35 MPH

CONCEPT PLANS SUBJECT TO REVISION

ALTERNATIVE B

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CYNTHIA J. KENDRICK, P.E.
P.E. LICENSE NO. 47633
STANLEY CONSULTANTS, INC.
1641 WORTHINGTON ROAD, SUITE 400
WEST PALM BEACH, FL 33409

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

TYPICAL SECTION

SHEET NO. 7

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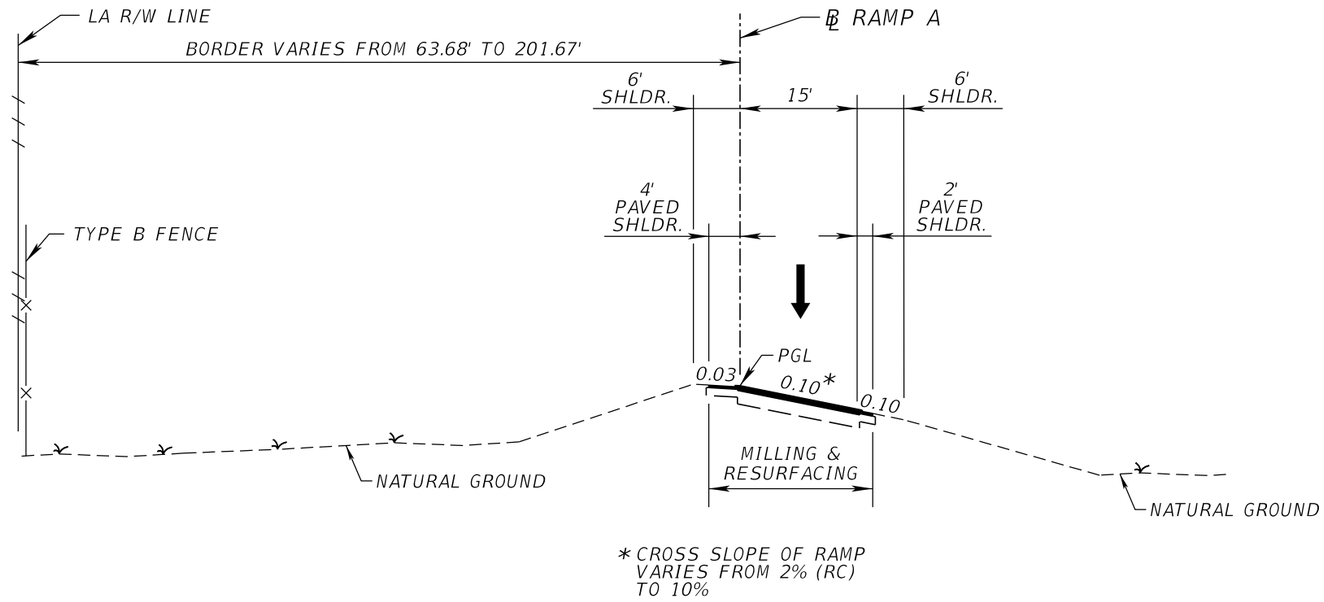

TURNPIKE EXTENSION (SR 821)
RAMP A
STA. 600+00.00 TO STA. 624+54.88
DESIGN SPEED = 30 MPH/40 MPH

CURRENT YEAR = 2016 AADT = 11,800
ESTIMATED OPENING YEAR = 2025 AADT = 22,900
ESTIMATED DESIGN YEAR = 2045 AADT = 37,800
K = 8.5% D = 58.1% T = 5.6% (24 HOUR)
DESIGN HOUR T = 3.0%
DESIGN SPEED = 30 MPH/40MPH
POSTED SPEED = 35 MPH

CONCEPT PLANS SUBJECT TO REVISION

ALTERNATIVE B

REVISIONS			
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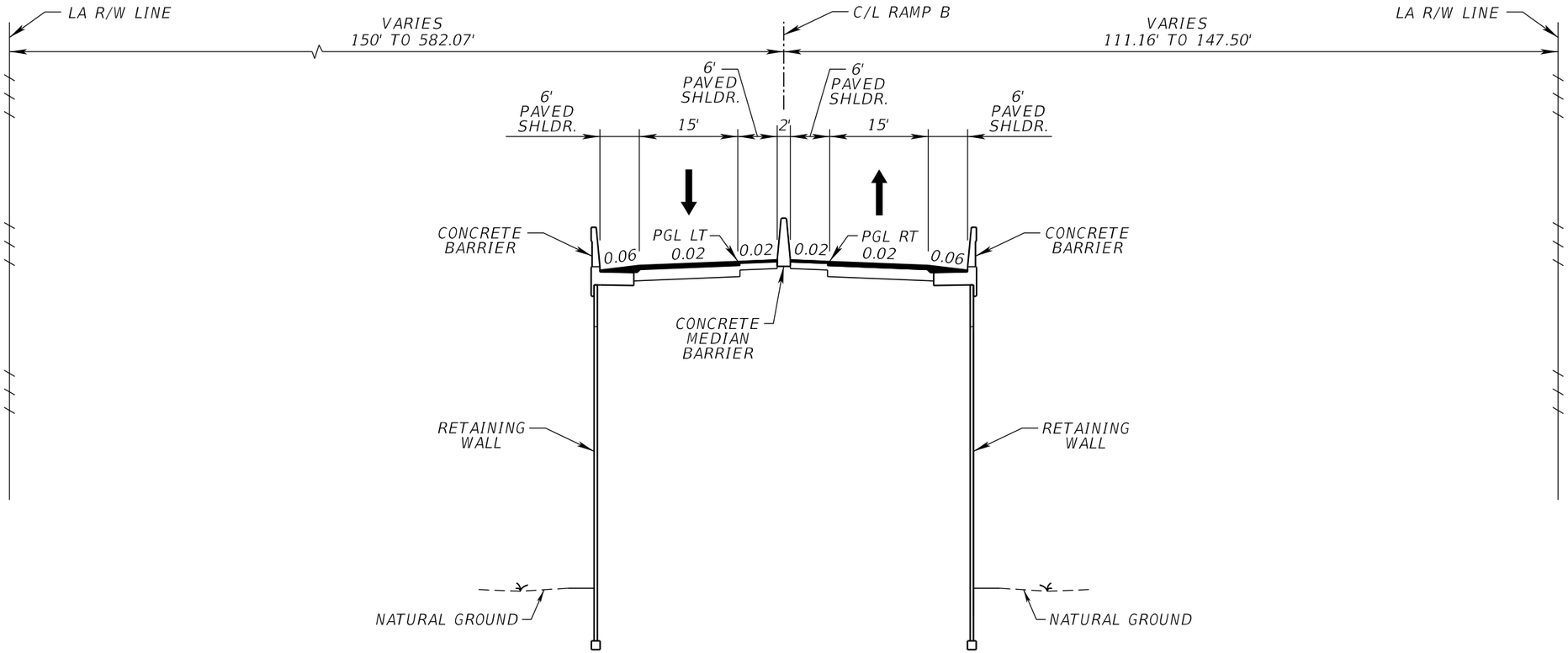
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

TYPICAL SECTION

SHEET NO. 8



TURNPIKE EXTENSION (SR 821)
RAMP B
STA. 202+83.50 TO STA. 242+35.89
DESIGN SPEED = 45 MPH/50 MPH

CURRENT YEAR = 2016 AADT = N/A (NEW RAMP)
ESTIMATED OPENING YEAR = 2025 AADT = 20,900
ESTIMATED DESIGN YEAR = 2045 AADT = 26,900
K = 8.5% D = 58.1% T = 5.6% (24 HOUR)
DESIGN HOUR T = 3.0%
DESIGN SPEED = 45 MPH/50 MPH
POSTED SPEED = 45 MPH

CONCEPT PLANS SUBJECT TO REVISION

ALTERNATIVE B

REVISIONS			
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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

TYPICAL SECTION

SHEET NO. 9

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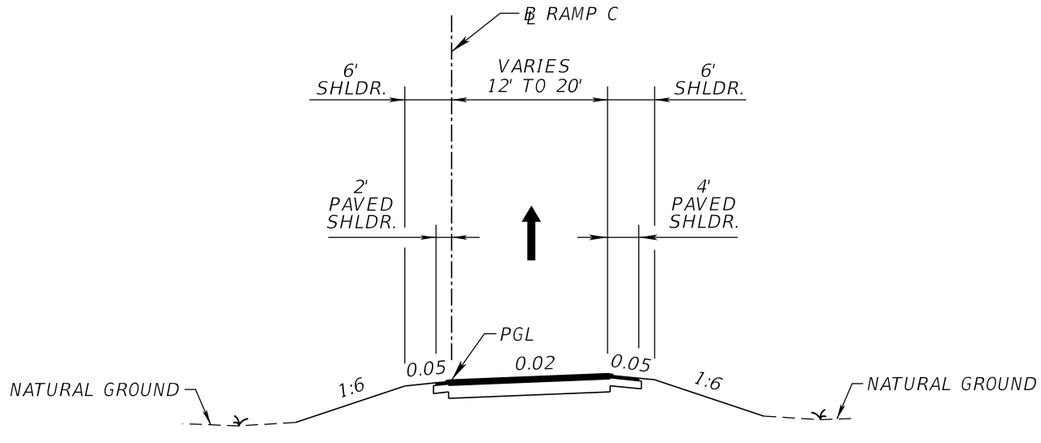

TURNPIKE EXTENSION (SR 821)
RAMP C
STA. 10+00.00 TO STA. 13+97.63
DESIGN SPEED = 25 MPH

CURRENT YEAR = 2016 AADT = 11,800
ESTIMATED OPENING YEAR = 2025 AADT = 19,300
ESTIMATED DESIGN YEAR = 2045 AADT = 28,400
K = 8.5% D = 58.1% T = 5.6% (24 HOUR)
DESIGN HOUR T = 3.0%
DESIGN SPEED = 25 MPH
POSTED SPEED = N/A

CONCEPT PLANS SUBJECT TO REVISION

ALTERNATIVE B

REVISIONS			
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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

TYPICAL SECTION

SHEET NO. 10

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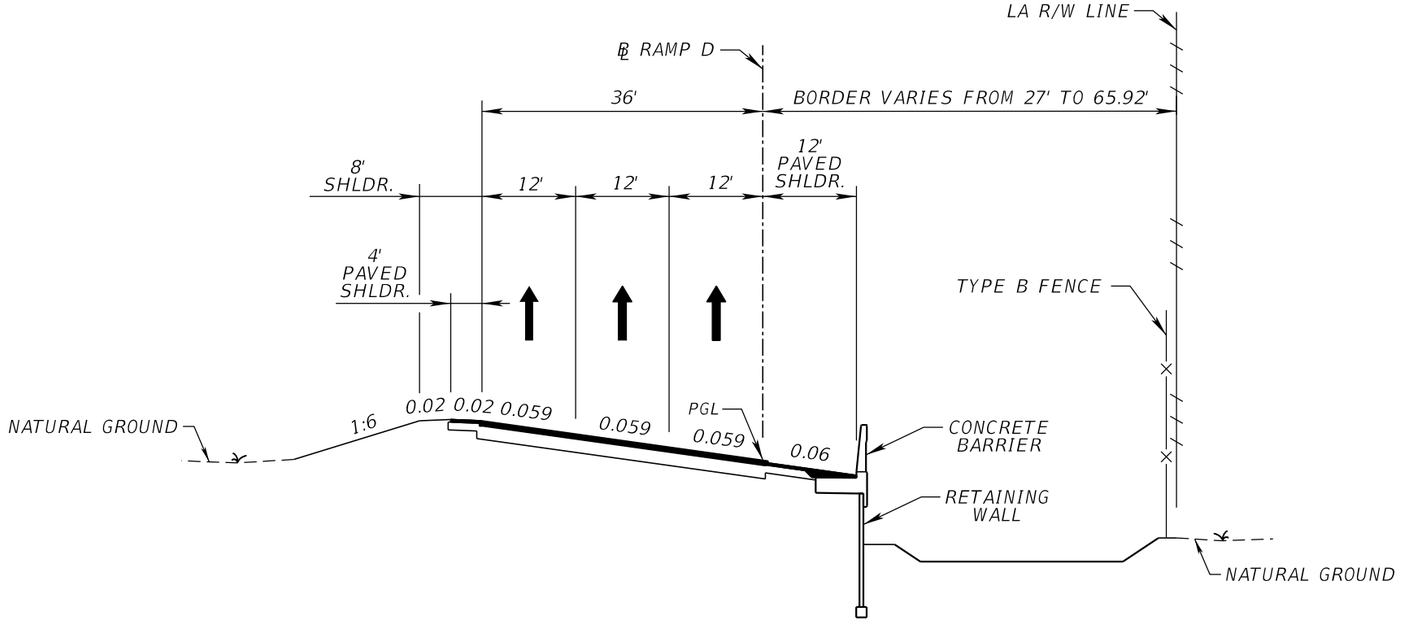

TURNPIKE EXTENSION (SR 821)
RAMP D
STA. 60+00.00 TO STA. 75+37.49
DESIGN SPEED = 50 MPH

CURRENT YEAR = 2016 AADT = 14,000
ESTIMATED OPENING YEAR = 2025 AADT = 16,700
ESTIMATED DESIGN YEAR = 2045 AADT = 24,100
K = 8.5% D = 58.1% T = 5.6% (24 HOUR)
DESIGN HOUR T = 3.0%
DESIGN SPEED = 50 MPH
POSTED SPEED = 45 MPH

CONCEPT PLANS SUBJECT TO REVISION

ALTERNATIVE B

REVISIONS			
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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

TYPICAL SECTION

SHEET NO. 11

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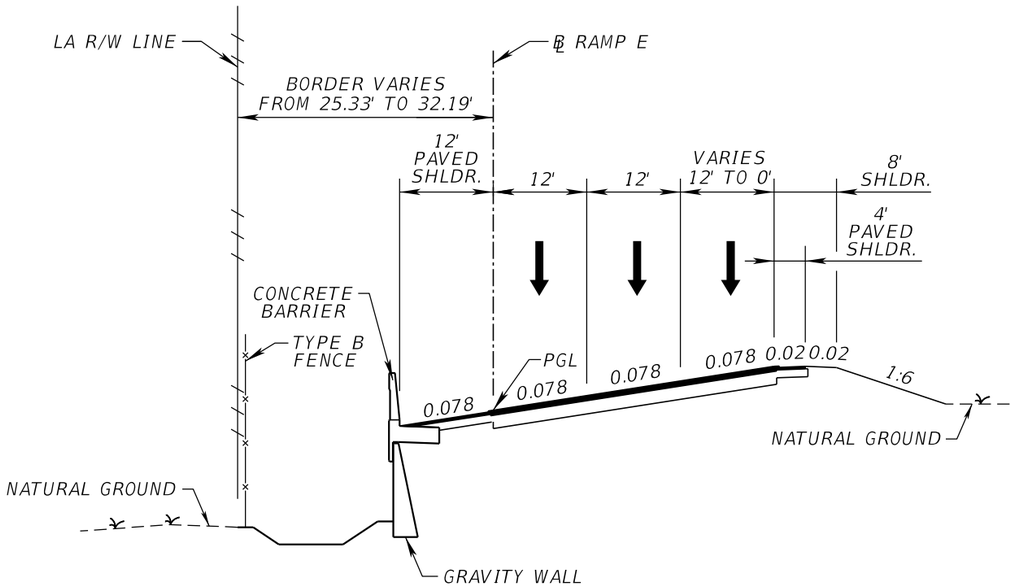

TURNPIKE EXTENSION (SR 821)
RAMP E
STA. 21+00.00 TO STA. 31+83.32
DESIGN SPEED = 40 MPH

CURRENT YEAR = 2016 AADT = 5,900
ESTIMATED OPENING YEAR = 2025 AADT = 4,400
ESTIMATED DESIGN YEAR = 2045 AADT = 6,300
K = 8.5% D = 58.1% T = 5.6% (24 HOUR)
DESIGN HOUR T = 3.0%
DESIGN SPEED = 40 MPH
POSTED SPEED = 35 MPH

CONCEPT PLANS
SUBJECT TO
REVISION

ALTERNATIVE B

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CYNTHIA J. KENDRICK, P.E.
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WEST PALM BEACH, FL 33409

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

TYPICAL SECTION

SHEET NO. 12

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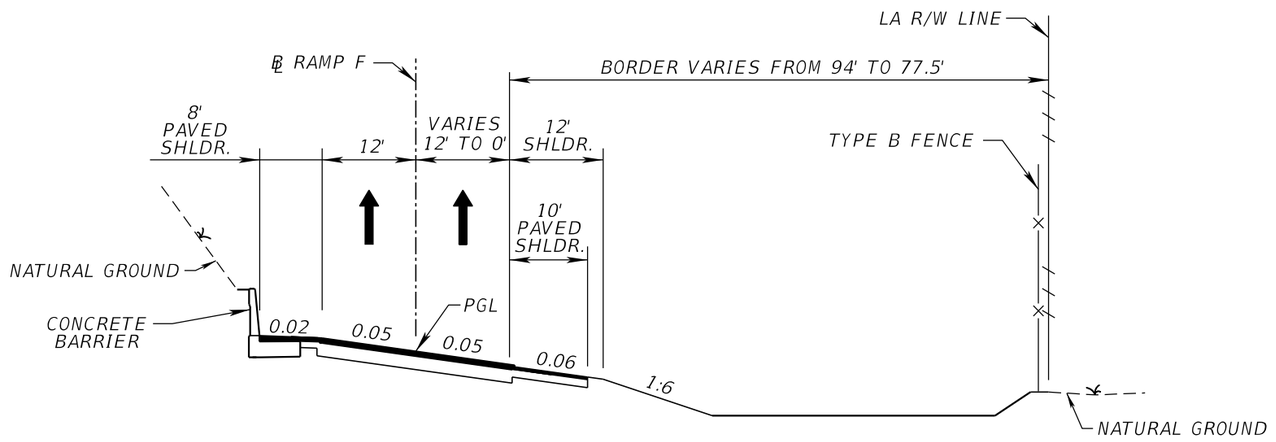

TURNPIKE EXTENSION (SR 821)
RAMP F
STA. 100+00.00 TO STA. 115+57.11
DESIGN SPEED = 30 MPH/50 MPH

CURRENT YEAR = 2016 AADT = N/A (NEW RAMP)
ESTIMATED OPENING YEAR = 2025 AADT = 5,400
ESTIMATED DESIGN YEAR = 2045 AADT = 11,300
K = 8.5% D = 56.35% T = 5.6% (24 HOUR)
DESIGN HOUR T = 3.0%
DESIGN SPEED = 30 MPH/50 MPH
POSTED SPEED = 45 MPH

CONCEPT PLANS SUBJECT TO REVISION

ALTERNATIVE B

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CYNTHIA J. KENDRICK, P.E.
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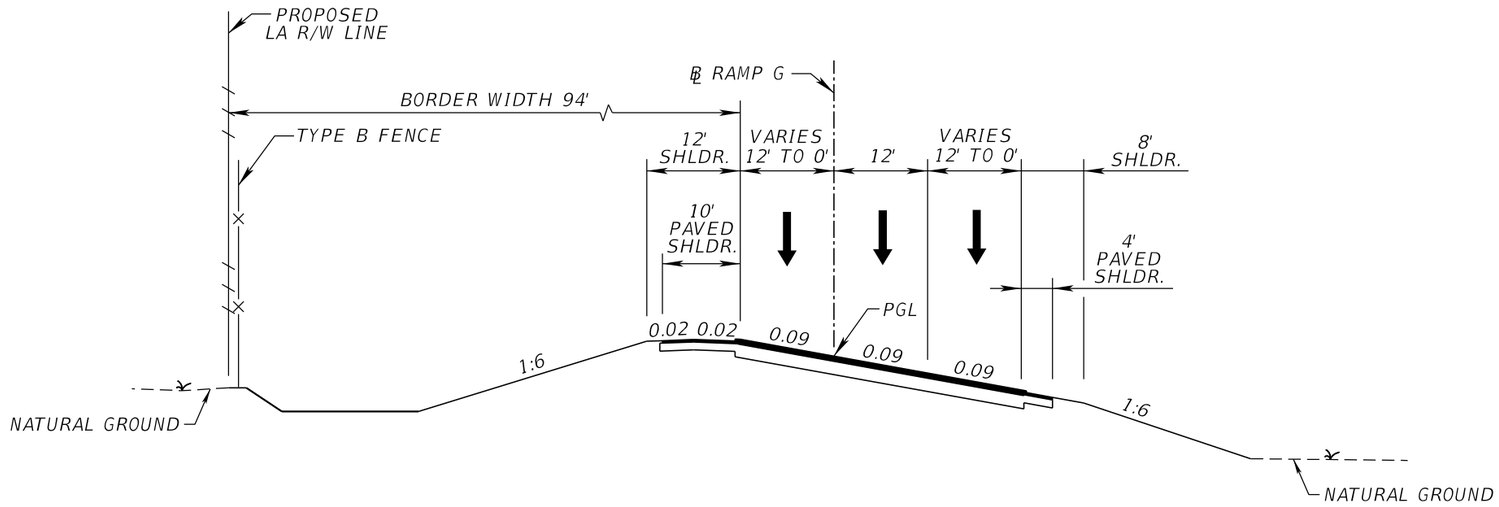
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

TYPICAL SECTION

SHEET NO. 13



TURNPIKE EXTENSION (SR 821)
RAMP G
STA. 200+00.00 TO STA. 220+00.00
DESIGN SPEED = 30 MPH/50 MPH

CURRENT YEAR = 2016 AADT = N/A (NEW RAMP)
ESTIMATED OPENING YEAR = 2025 AADT = 5,400
ESTIMATED DESIGN YEAR = 2045 AADT = 11,300
K = 9.5% D = 51.61% T = 5.6% (24 HOUR)
DESIGN HOUR T = 3.0%
DESIGN SPEED = 30 MPH/50 MPH
POSTED SPEED = 45 MPH

CONCEPT PLANS SUBJECT TO REVISION

ALTERNATIVE B

REVISIONS			
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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

TYPICAL SECTION

SHEET NO. 14

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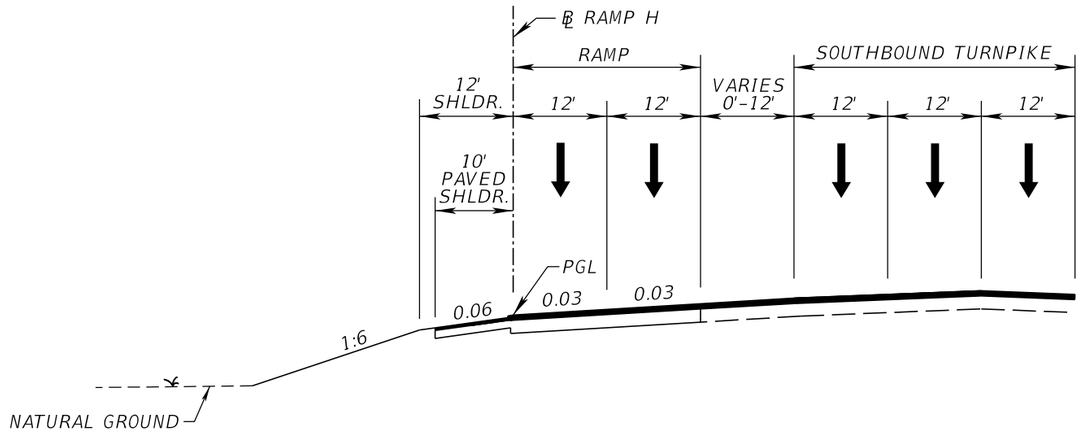

TURNPIKE EXTENSION (SR 821)
RAMP H
STA. 300+00.00 TO STA. 302+31.18
DESIGN SPEED = 30 MPH

CURRENT YEAR = 2016 AADT = 12,250
ESTIMATED OPENING YEAR = 2025 AADT = 13,250
ESTIMATED DESIGN YEAR = 2045 AADT = 18,000
K = 9.5% D = 51.61% T = 5.6% (24 HOUR)
DESIGN HOUR T = 3.0%
DESIGN SPEED = 30 MPH
POSTED SPEED = 25 MPH

CONCEPT PLANS SUBJECT TO REVISION

ALTERNATIVE B

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

TYPICAL SECTION

SHEET NO. 15

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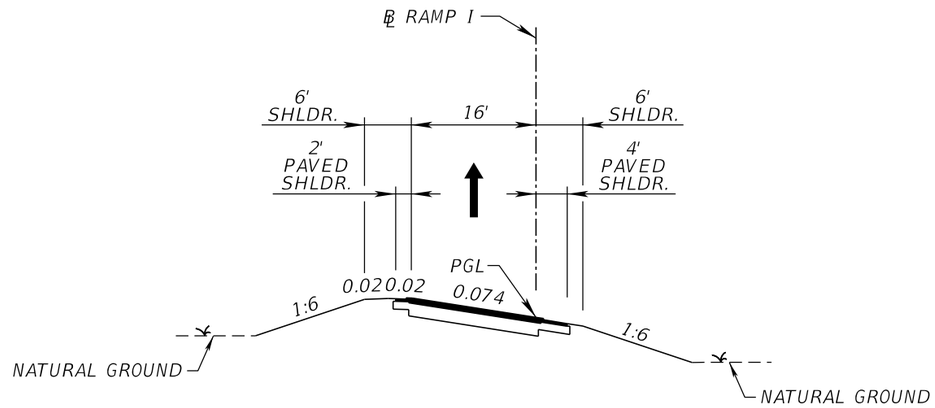

TURNPIKE EXTENSION (SR 821)
RAMP I
STA. 400+00.00 TO STA. 403+13.87
DESIGN SPEED = 30 MPH

CURRENT YEAR = 2016 AADT = 825
ESTIMATED OPENING YEAR = 2025 AADT = 1,175
ESTIMATED DESIGN YEAR = 2045 AADT = 2,700
K = 8.5% D = 56.35% T = 5.6% (24 HOUR)
DESIGN HOUR T = 3.0%
DESIGN SPEED = 30 MPH
POSTED SPEED = 25 MPH

CONCEPT PLANS SUBJECT TO REVISION

ALTERNATIVE B

REVISIONS			
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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

TYPICAL SECTION

SHEET NO. 16

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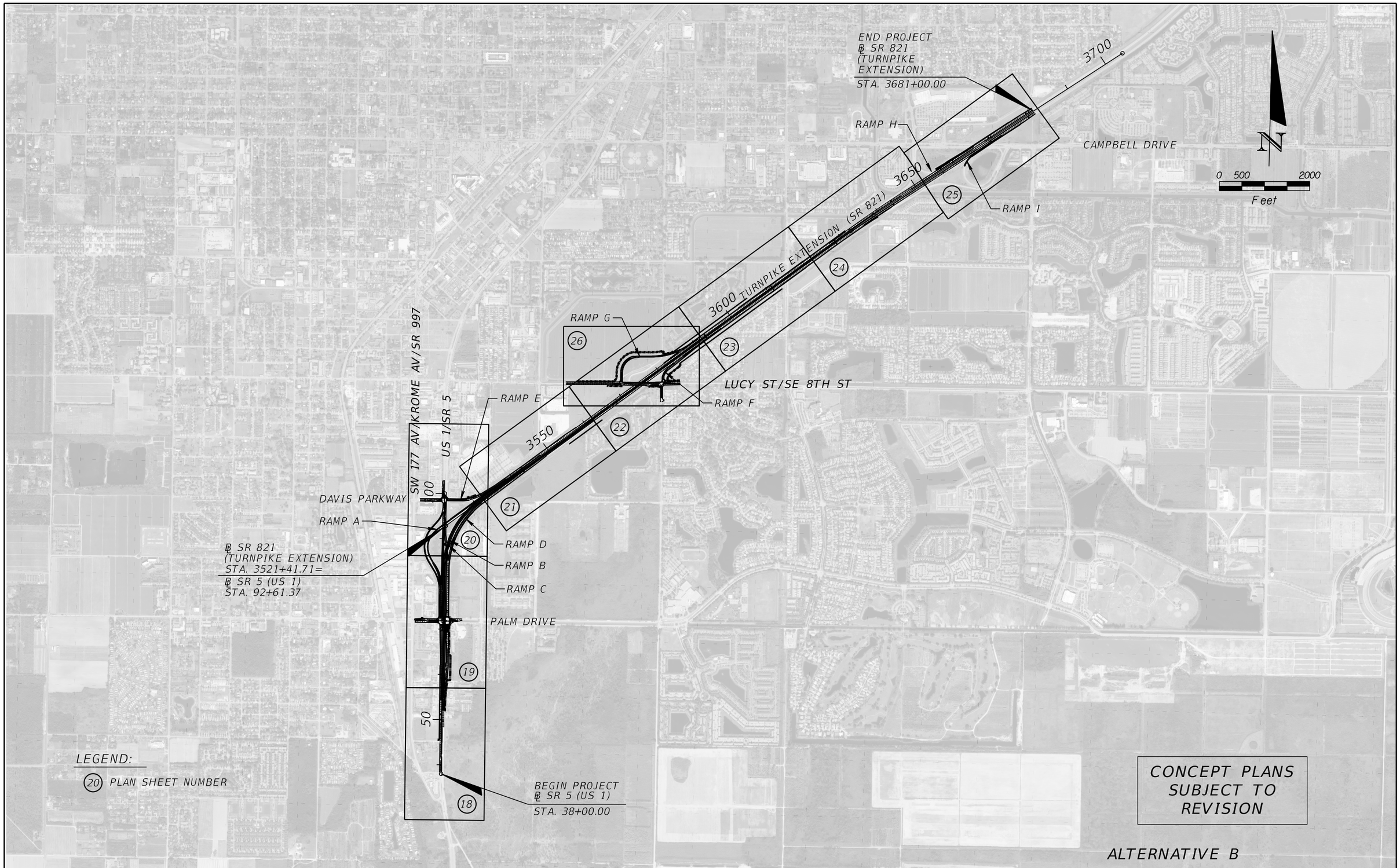

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

CONCEPT PLAN LAYOUT

SHEET NO. 17

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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CYNTHIA J. KENDRICK, P.E.
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WEST PALM BEACH, FL 33409

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

CONCEPT ROADWAY PLAN

SHEET NO. 18

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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CYNTHIA J. KENDRICK, P.E.
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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

CONCEPT ROADWAY PLAN

SHEET NO. 19

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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

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STATE OF FLORIDA
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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

CONCEPT ROADWAY PLAN

SHEET NO. 20

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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CYNTHIA J. KENDRICK, P.E.
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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

CONCEPT ROADWAY PLAN

SHEET NO. 21

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PROPOSED LA R/W LINE

PROPOSED LA R/W LINE

PROPOSED LA R/W LINE

PROPOSED LA R/W LINE

PROPOSED LA R/W LINE

205

℄ RAMP G

RAMP G

210

END BRIDGE NOS. 870192 & 870399
STA. 3576+60.88

LA R/W LINE

SW 167TH AVE.

215

220

TURNPIKE EXTENSION (SR 821)

N

0 50 200
Feet

MATCHLINE STA. 3562+00.00

3565 3570 3575 3580 3585 3590

MATCHLINE STA. 3592+00.00

110

105

℄ SR 821
(TURNPIKE EXTENSION)

R/W LINE

LA R/W LINE

CONSTITUTION DR.

BEGIN BRIDGE NOS. 870192 & 870399
STA. 3573+67.88

LA R/W LINE

RAMP F

℄ RAMP F

100

R/W LINE

PROPOSED LA R/W LINE

SE 12TH TERRACE

PROPOSED LA R/W LINE

N FRANKLIN AVE.

ADAMS AVE

SW 167TH AVE.

SE 9TH ST.

SE 13TH RD.

LUCY ST/SE 8TH ST

SE 13TH CT.

SE 13TH TERRACE

SE 7TH CT.

INDEPENDENCE DR.

SE 10TH ST.

CONCEPT PLANS SUBJECT TO REVISION

ALTERNATIVE B

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

CONCEPT ROADWAY PLAN

SHEET NO. 22

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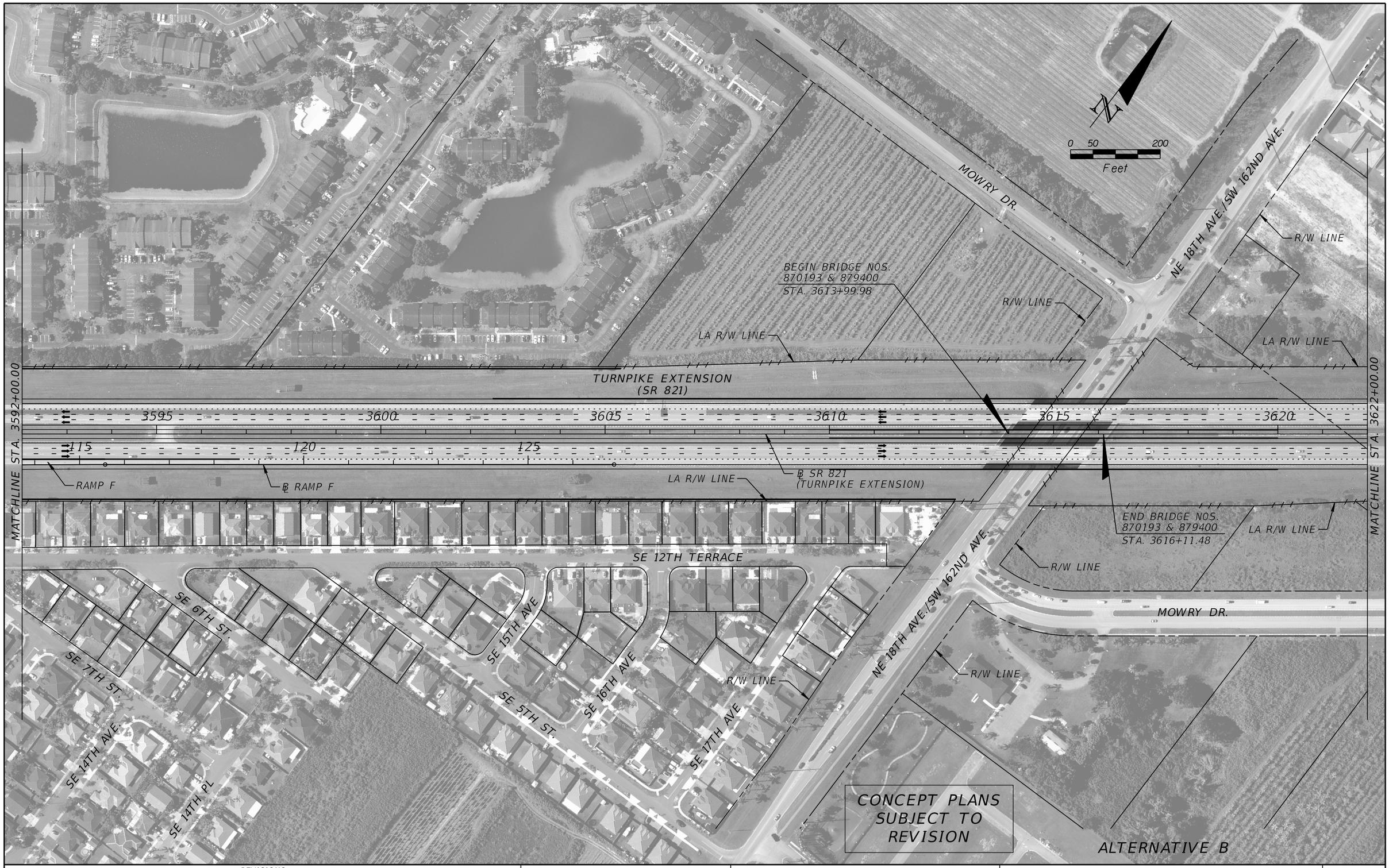

REVISIONS			
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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

CONCEPT ROADWAY PLAN

SHEET NO. 23

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

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DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

CONCEPT ROADWAY PLAN

SHEET NO. 24

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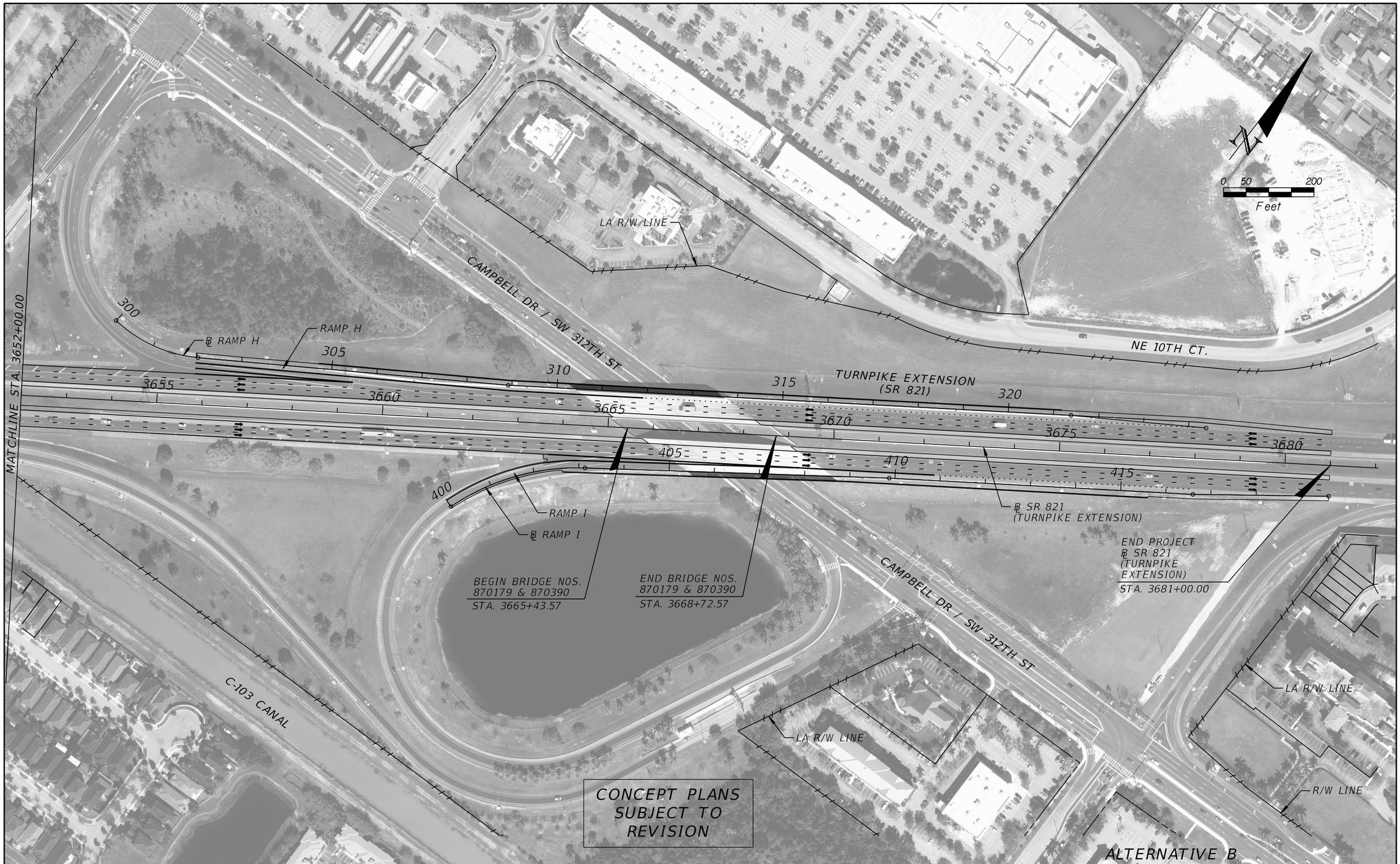

REVISIONS			
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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

CONCEPT ROADWAY PLAN

SHEET NO. 25

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CYNTHIA J. KENDRICK, P.E.
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STATE OF FLORIDA
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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

CONCEPT ROADWAY PLAN

SHEET NO. 26

TURNPIKE EXTENSION (SR 821)

CURVE DATA BLSR821
PI STA. = 3635+72.49
Δ = 3° 03' 56" (RT)
D = 0° 30' 00"
T = 306.62
L = 613.10
R = 11,459.16
PC STA. = 3632+65.87
PT STA. = 3638+78.97
e = NC

SR 5 (US 1) SOUTHBOUND RIGHT TURN LANE

CURVE DATA BLSR5SBRT1
PI STA. = 502+84.95
Δ = 31° 22' 44" (LT)
D = 7° 09' 43"
T = 224.71
L = 438.13
R = 800.00
PC STA. = 500+60.24
PT STA. = 504+98.37
e = RC

CURVE DATA BLSR5SBRT2
PI STA. = 512+22.86
Δ = 72° 47' 33" (RT)
D = 9° 02' 14"
T = 467.36
L = 805.48
R = 634.00
PC STA. = 507+55.49
PT STA. = 515+60.97
e = RC

CURVE DATA BLSR5SBRT3
PI STA. = 519+37.11
Δ = 41° 16' 11" (LT)
D = 11° 27' 33"
T = 188.28
L = 360.15
R = 500.00
PC STA. = 517+48.82
PT STA. = 521+08.97
e = 0.026

RAMP A

CURVE DATA BLRAMPA1
PI STA. = 603+12.73
Δ = 31° 07' 41" (LT)
D = 7° 45' 49"
T = 205.55
L = 400.95
R = 738.00
PC STA. = 601+07.18
PT STA. = 605+08.13
e = NC

CURVE DATA BLRAMPA2
PI STA. = 607+33.00
Δ = 11° 18' 24" (RT)
D = 6° 26' 29"
T = 88.05
L = 175.53
R = 889.48
PC STA. = 606+44.95
PT STA. = 608+20.48
e = 0.100

CURVE DATA BLRAMPA3
PI STA. = 610+77.84
Δ = 59° 35' 57" (RT)
D = 12° 45' 00"
T = 257.36
L = 467.45
R = 449.38
PC STA. = 608+20.48
PT STA. = 612+87.93
e = 0.100

CURVE DATA BLRAMPA4
PI STA. = 613+90.55
Δ = 13° 14' 28" (RT)
D = 6° 28' 48"
T = 102.63
L = 204.34
R = 884.21
PC STA. = 612+87.93
PT STA. = 614+92.26
e = 0.100

RAMP B

CURVE DATA BLRAMPB1
PI STA. = 234+76.15
Δ = 53° 14' 30" (RT)
D = 3° 13' 41"
T = 889.66
L = 1,649.41
R = 1,775.00
PC STA. = 225+86.48
PT STA. = 242+35.89
e = 0.061

RAMP C

CURVE DATA BLRAMPC1
PI STA. = 13+73.41
Δ = 155° 48' 55" (LT)
D = 71° 37' 11"
T = 373.41
L = 217.56
R = 80.00
PC STA. = 10+00.00
PT STA. = 12+17.56

RAMP D

CURVE DATA BLRAMPD1
PI STA. = 67+45.65
Δ = 53° 14' 30" (RT)
D = 3° 05' 49"
T = 927.25
L = 1,719.10
R = 1,850.00
PC STA. = 58+18.40
PT STA. = 75+37.49
e = 0.059

RAMP E

CURVE DATA BLRAMPE1
PI STA. = 26+14.89
Δ = 31° 55' 55" (LT)
D = 6° 59' 45"
T = 234.32
L = 456.44
R = 819.00
PC STA. = 23+80.57
PT STA. = 28+37.01
e = 0.078

RAMP F

CURVE DATA RAMPF1
PI STA. = 102+51.43
Δ = 45° 12' 39" (RT)
D = 20° 02' 01"
T = 119.08
L = 225.68
R = 286.00
PC STA. = 101+32.35
PT STA. = 103+58.02
e = 0.050

CURVE DATA RAMPF2
PI STA. = 111+82.00
Δ = 1° 56' 58" (RT)
D = 0° 15' 35"
T = 375.18
L = 750.28
R = 22,050.00
PC STA. = 108+06.82
PT STA. = 115+57.11
e = NC

RAMP G

CURVE DATA RAMPG1
PI STA. = 205+99.94
Δ = 88° 10' 51" (RT)
D = 16° 22' 13"
T = 339.06
L = 538.67
R = 350.00
PC STA. = 202+60.88
PT STA. = 207+99.55
e = 0.090

CURVE DATA RAMPG2
PI STA. = 215+88.72
Δ = 36° 04' 15" (LT)
D = 4° 00' 04"
T = 466.26
L = 901.52
R = 1,432.00
PC STA. = 211+22.46
PT STA. = 220+23.98
e = 0.072

RAMP H

CURVE DATA BLRAMPH1
PI STA. = 301+05.41
Δ = 38° 43' 07" (LT)
D = 19° 05' 55"
T = 105.41
L = 202.73
R = 300.00
PC STA. = 300+00.00
PT STA. = 302+02.73
e = 0.095

RAMP I

CURVE DATA BLRAMPI1
PI STA. = 401+62.30
Δ = 35° 58' 00" (RT)
D = 11° 27' 33"
T = 162.30
L = 313.87
R = 500.00
PC STA. = 400+00.00
PT STA. = 403+13.87
e = 0.074

CONCEPT PLANS SUBJECT TO REVISION

ALTERNATIVE B

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

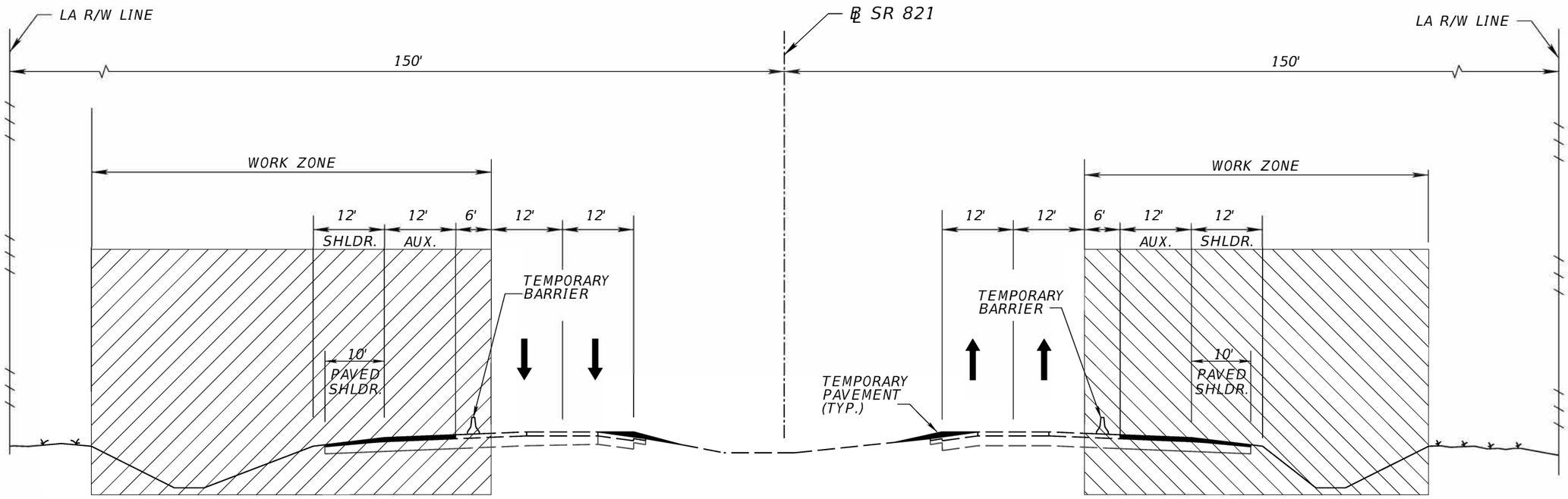
CYNTHIA J. KENDRICK, P.E.
P.E. LICENSE NO. 47633
STANLEY CONSULTANTS, INC.
1641 WORTHINGTON ROAD, SUITE 400
WEST PALM BEACH, FL 33409

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

PROJECT GEOMETRY

SHEET NO. 27



PHASE 1
OUTSIDE WIDENING
TURNPIKE EXTENSION (SR-821)

PHASE 1

1. PLACE TEMPORARY WORK SIGNS, BARRICADES, CHANNELIZING DEVICES, AND PCMS NECESSARY TO SHIFT TRAFFIC LANES TO THE INSIDE EXISTING SHOULDER AND CONSTRUCT WIDENING AS SHOWN IN THE SECTION PHASE AND FOLLOWING THE MUTCD AND FDOT STANDARD PLANS INDICES.

2. PLACE TEMPORARY WORK SIGNS BARRICADES, CHANNELIZING DEVICES, AND PCMS NECESSARY TO MILL, OVERBUILD AND RESURFACE.

3. CONSTRUCT SW 328 ST/LUCY ST MAINLINE RAMPS, EMBANKMENTS, AND DRAINAGE.

4. INSTALL DRAINAGE FEATURES (PIPES, INLETS, AND CULVERTS) AND RECONSTRUCT SWALES.

5. CONSTRUCT IMPROVEMENTS ON SW 328 ST/LUCY STREET.

6. CONSTRUCT MAINLINE SOUTHBOUND EXIT RAMP TO SW 366 ST/DAVIS PARKWAY. INSTALL SIGNALIZATION, PAVEMENT MARKINGS AND SIGNAGE ON INTERSECTION OF SR 5/US 1 AND SW 366 ST/DAVIS PARKWAY. SHIFT TRAFFIC TO NEW RAMP.

7. CONSTRUCT SOUTHBOUND US 1/SR 5 RIGHT TURN LANE RAMP TO SW 344 ST/PALM DR. CONSTRUCT RIGHT TURN LANE RAMP WIDENING AND WALL ON EXISTING MAINLINE SOUTHBOUND OFF-RAMP TO SR 5/US 1 AND TIE INTO SW 344 ST/PALM DR.

8. CONSTRUCT NORTHBOUND SR 5/US 1 FROM SOUTH OF SW 344 ST/PALM DR. TO SW 366 ST/DAVIS PARKWAY AND BRIDGE FLYOVER CONNECTOR.

9. CONSTRUCT OVERHEAD SPAN AND OVERHEAD SIGNAL STRUCTURES.

10. INSTALL SIGNALIZATION, PAVEMENT MARKINGS, AND SIGNAGE. SHIFT NORTHBOUND TRAFFIC TO NEW ALIGNMENT. CONSTRUCT DRAINAGE AND SWALES.

11. CONSTRUCT NORTHBOUND MAINLINE RAMP AND WALL FROM SR 5/US 1 AND SW 344 ST/PALM DR. SHIFT NORTHBOUND MAINLINE RAMP TRAFFIC TO NEW ALIGNMENT.

CONCEPT PLANS SUBJECT TO REVISION

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

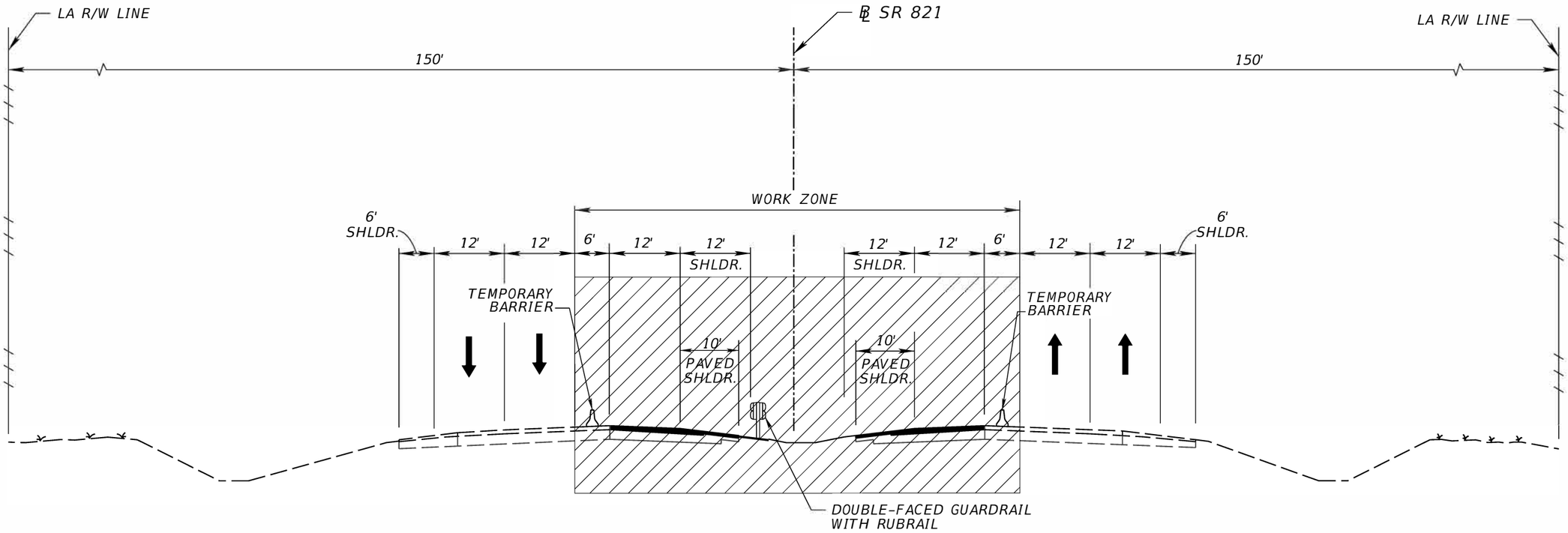
RONALD LEE SPENCER, P.E.
P.E. NO.: 39141
BMA CONSULTING ENGINEERING, INC
18503 PINES BLVD, SUITE 210 PEMBROKE PINES, FL 33029

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

TEMPORARY TRAFFIC CONTROL PLAN

SHEET NO. 28



PHASE 2
INSIDE WIDENING
TURNPIKE EXTENSION (SR-821)

PHASE 2

1. PLACE TEMPORARY WORK SIGNS, BARRICADES, CHANNELIZING DEVICES, AND PCMS NECESSARY TO SHIFT TRAFFIC LANES TO THE OUTSIDE EXISTING LANE AND SHOULDER AND CONSTRUCT WIDENING TO THE INSIDE AS SHOWN IN THE SECTION PHASE AND FOLLOWING THE MUTCD AND FDOT STANDARD PLANS INDICES.

2. PLACE TEMPORARY WORK SIGNS BARRICADES, CHANNELIZING DEVICES AND PCMS NECESSARY WIDEN INTO THE MEDIAN.

3. OPEN AUXILIARY LANES TO SW 328 ST/LUCY ST MAINLINE RAMPS.

4. INSTALL DRAINAGE FEATURES (PIPES, INLETS, AND CULVERTS) AND RECONSTRUCT SWALES IN THE MEDIAN.

5. INSTALL MEDIAN GUARDRAIL.

6. CONSTRUCT NEW MEDIAN, DRAINAGE AND SWALES ON SR 5/US 1. CONSTRUCT MAINLINE NORTHBOUND ON-RAMP AND SOUTHBOUND OFF-RAMP TO SR 5/US-1. CONSTRUCT TURNPIKE RAMP BRIDGE OVER PALM DRIVE.

7. INSTALL PAVEMENT MARKINGS AND SIGNAGE. SHIFT NORTHBOUND AND SOUTHBOUND TRAFFIC TO NEW ALIGNMENT.

CONCEPT PLANS SUBJECT TO REVISION

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

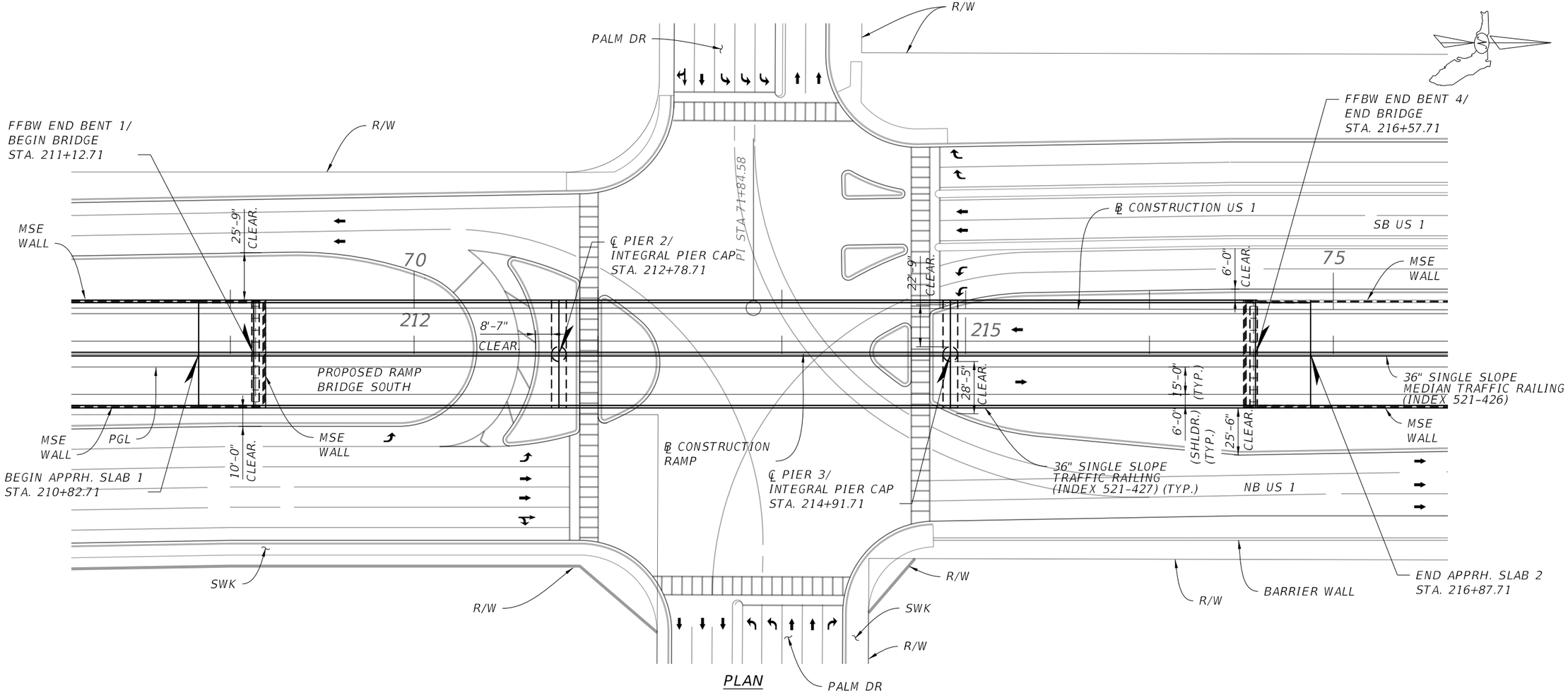
RONALD LEE SPENCER, P.E.
P.E. NO.: 39141
BMA CONSULTING ENGINEERING, INC
18503 PINES BLVD, SUITE 210 PEMBROKE PINES, FL 33029

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

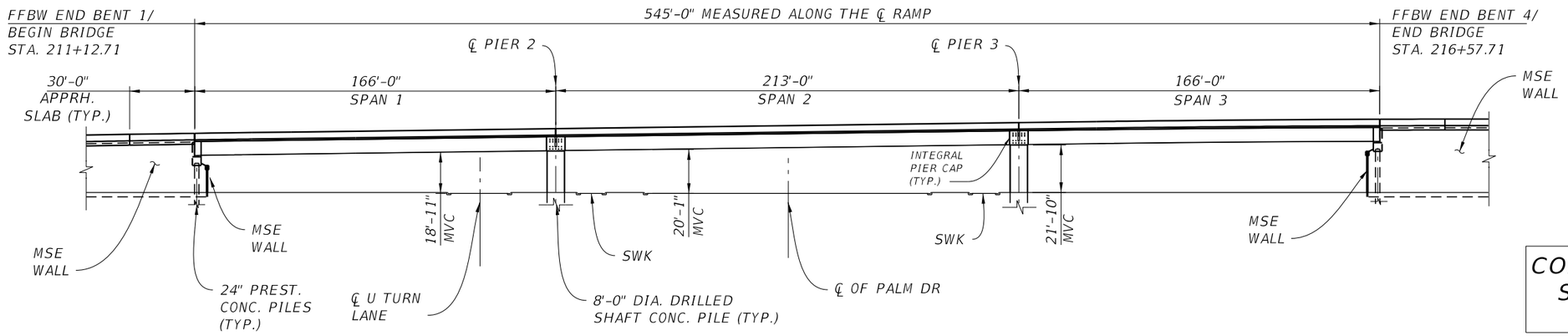
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

TEMPORARY TRAFFIC CONTROL PLAN

SHEET NO. 29



PLAN



ELEVATION

LEGEND

MVC = MINIMUM VERTICAL CLEARANCE AT LOW MEMBER

CONCEPT PLANS SUBJECT TO REVISION

ALTERNATIVE B

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

LUIS SANTANA, P.E.
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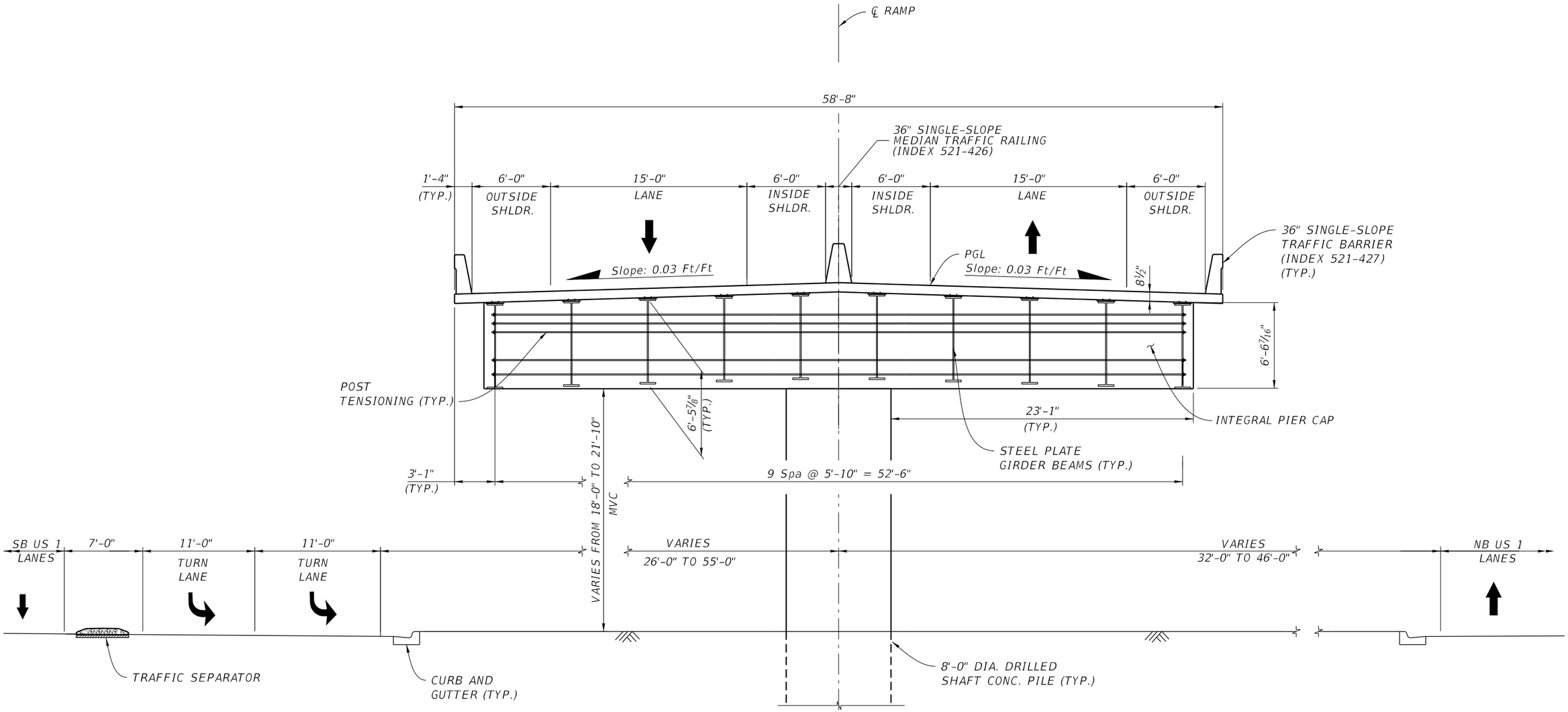
STANLEY CONSULTANTS, INC.
1641 WORTHINGTON ROAD, SUITE 400
WEST PALM BEACH, FL 33409

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

STRUCTURE PLANS
PROPOSED RAMP BRIDGE SOUTH OVER PALM DRIVE
PLAN AND ELEVATION

SHEET NO. B-1



Typical Section - 10 Steel Beams

LEGEND

MVC = MINIMUM VERTICAL CLEARANCE AT LOW MEMBER

CONCEPT PLANS
SUBJECT TO
REVISION

ALTERNATIVE B

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

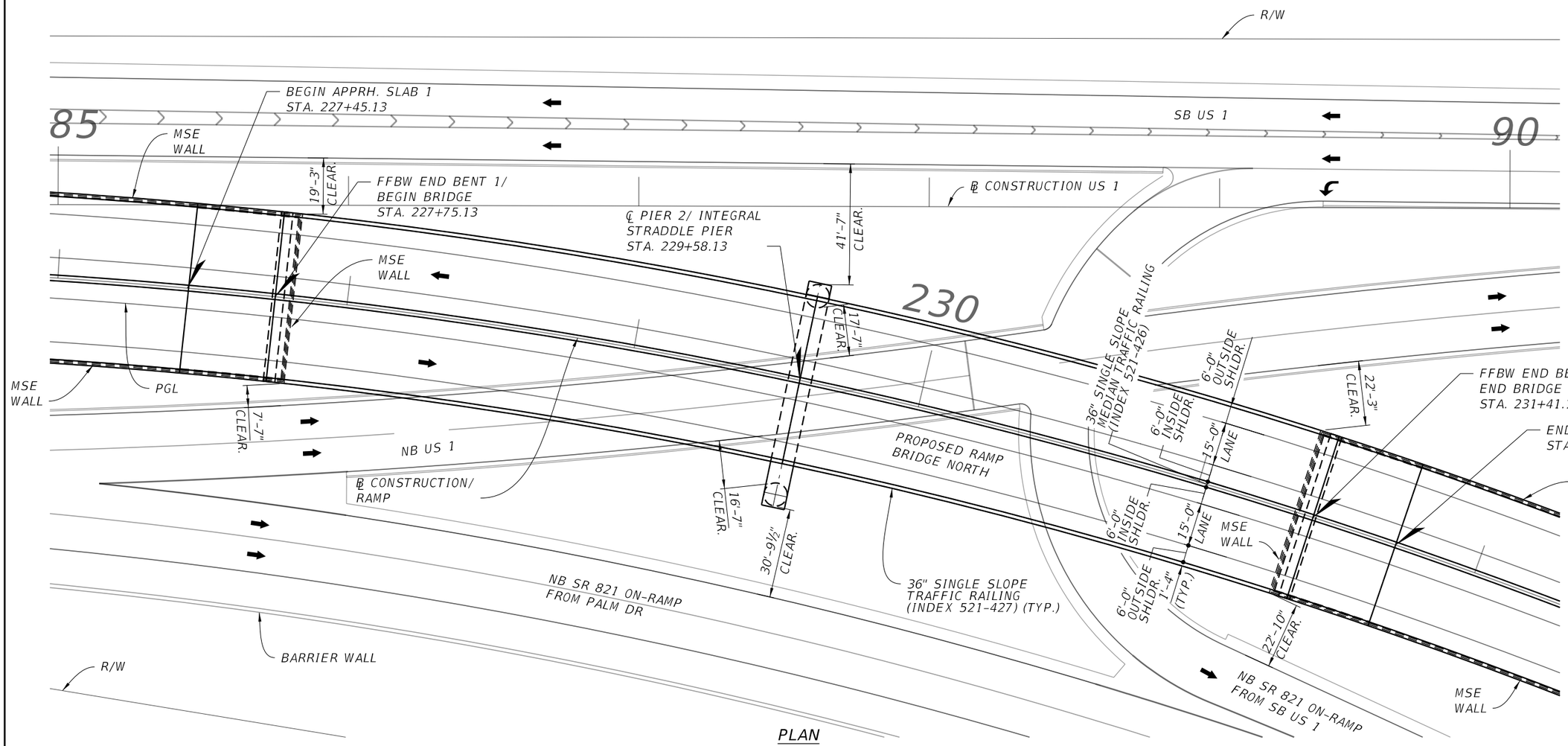
LUIS SANTANA, P.E.
P.E. LICENSE NO. 76363
STANLEY CONSULTANTS, INC.
1641 WORTHINGTON ROAD, SUITE 400
WEST PALM BEACH, FL 33409

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

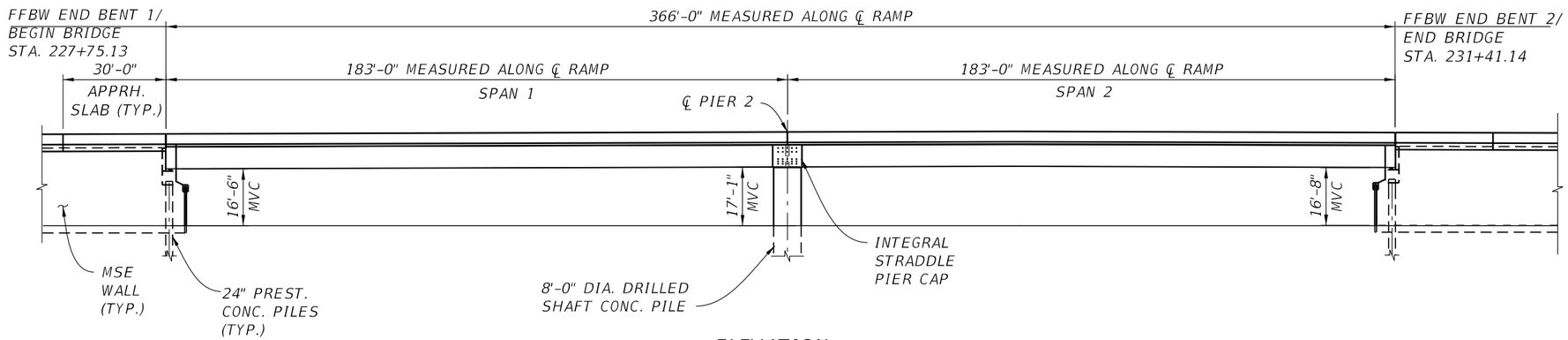
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

STRUCTURE PLANS
PROPOSED RAMP BRIDGE
SOUTH OVER PALM DRIVE
TYPICAL SECTION

SHEET NO. B-2



PLAN



ELEVATION

LEGEND

MVC = MINIMUM VERTICAL CLEARANCE AT LOW MEMBER ABOVE TRAVEL LANE

CONCEPT PLANS
SUBJECT TO
REVISION

ALTERNATIVE B

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

LUIS SANTANA, P.E.
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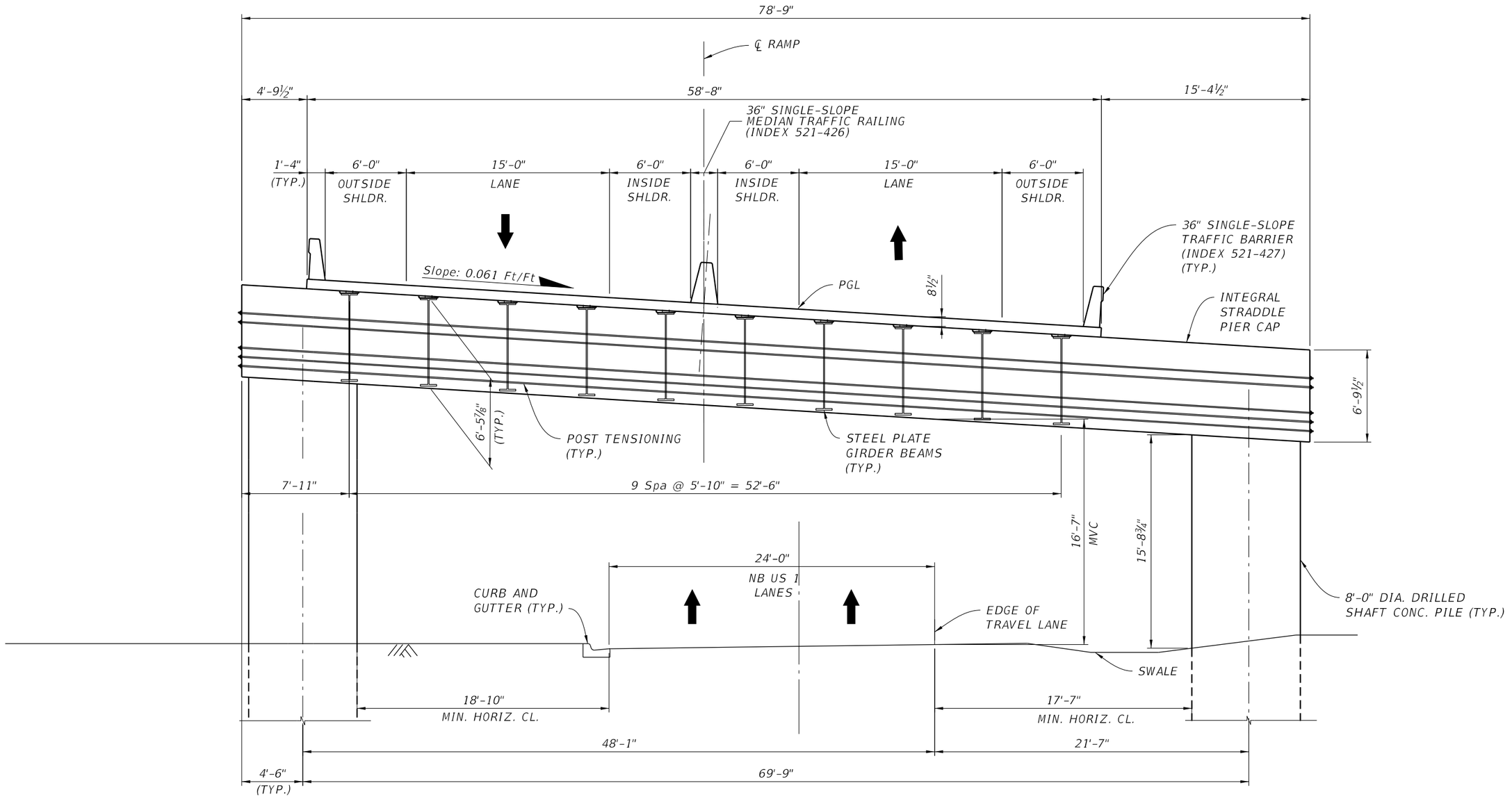
STANLEY CONSULTANTS, INC.
1641 WORTHINGTON ROAD, SUITE 400
WEST PALM BEACH, FL 33409

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

STRUCTURE PLANS
PROPOSED RAMP BRIDGE NORTH OVER US 1
PLAN AND ELEVATION

SHEET NO. B-3



Typical Section - 10 Steel Beams

LEGEND

MVC = MINIMUM VERTICAL CLEARANCE AT LOW MEMBER ABOVE TRAVEL LANE

CONCEPT PLANS
SUBJECT TO
REVISION

ALTERNATIVE B

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

LUIS SANTANA, P.E.
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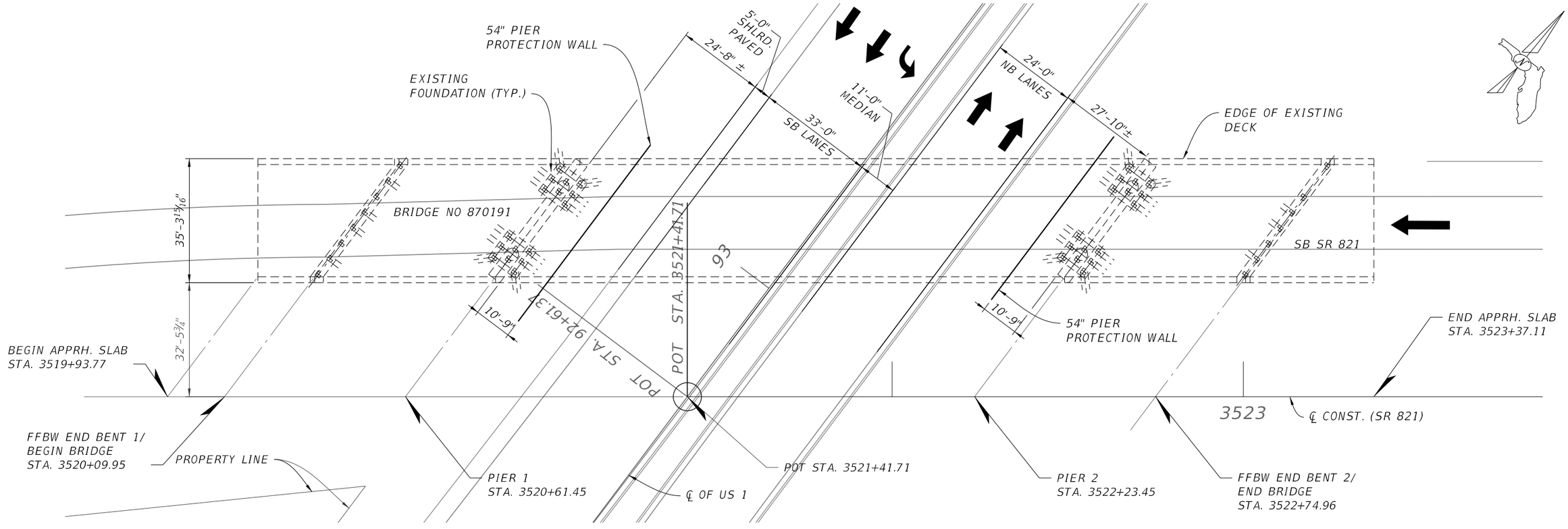
STANLEY CONSULTANTS, INC.
1641 WORTHINGTON ROAD, SUITE 400
WEST PALM BEACH, FL 33409

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

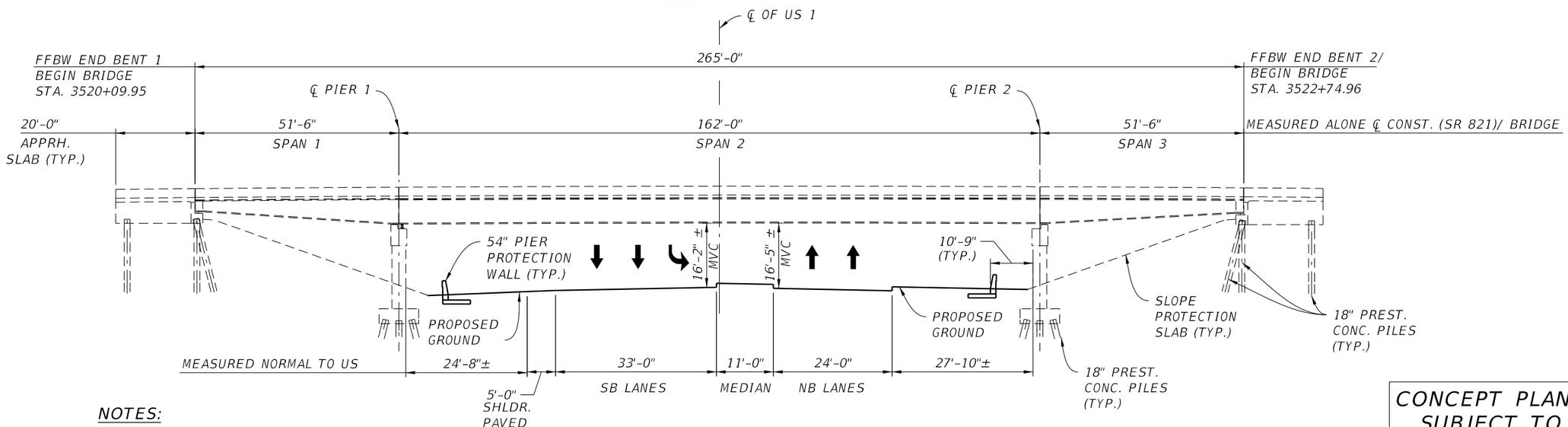
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

STRUCTURE PLANS
PROPOSED RAMP BRIDGE
NORTH OVER US 1
TYPICAL SECTION

SHEET NO. B-4



PLAN



ELEVATION

LEGEND

NEW CONSTRUCTION

EXISTING STRUCTURE

NOTES:

1. EXISTING TRAFFIC RAILING RETROFIT IS INCLUDED AS PART OF FDOT PROJECT FPID 440423-1-52-01

CONCEPT PLANS SUBJECT TO REVISION

ALTERNATIVE B

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

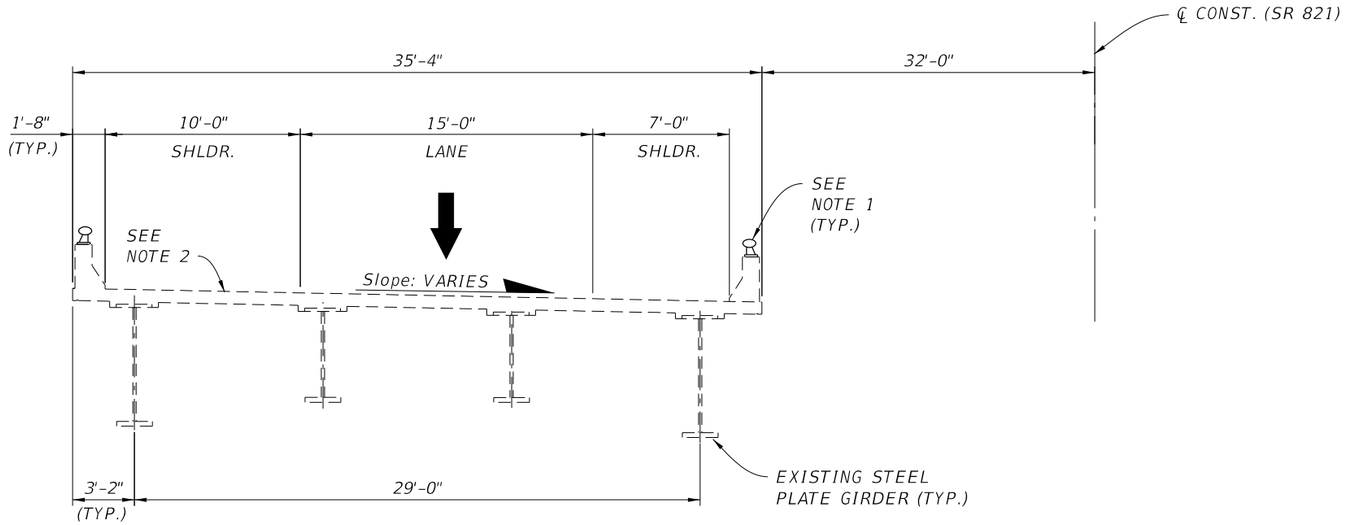
LUIS SANTANA, P.E.
P.E. LICENSE NO. 76363
STANLEY CONSULTANTS, INC.
1641 WORTHINGTON ROAD, SUITE 400
WEST PALM BEACH, FL 33409

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

STRUCTURE PLANS
FLORIDA'S TURNPIKE
SOUTHBOUND OFF-RAMP OVER US 1
PLAN AND ELEVATION

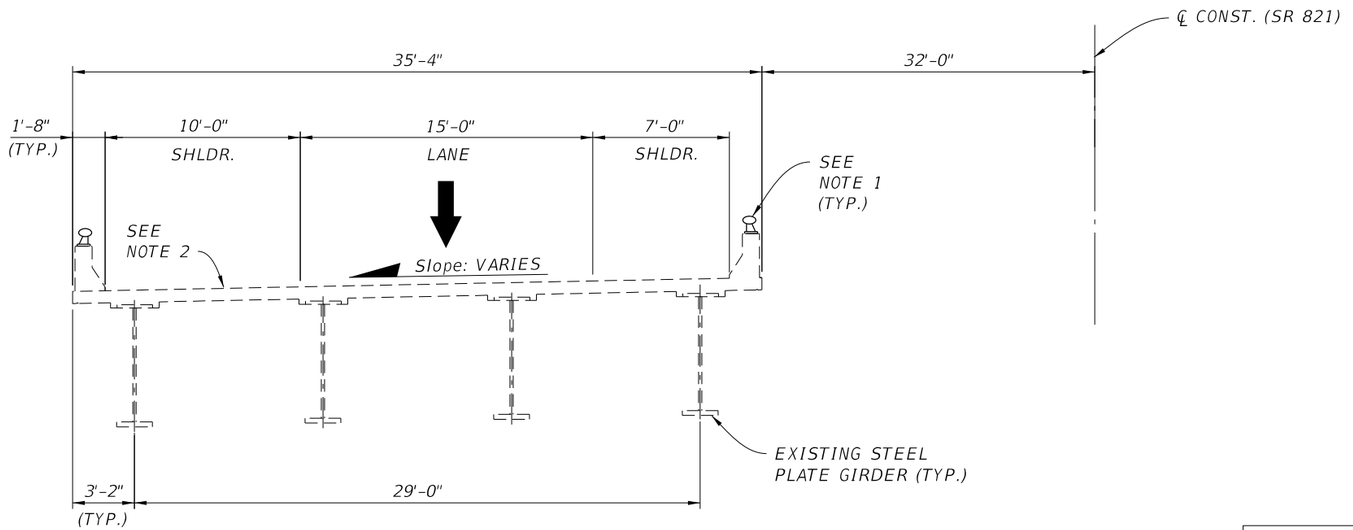
SHEET NO. B-5



SOUTHBOUND TYPICAL - SPAN 1

(SPAN 3 IS SIMILAR. SEE NOTE 2)

BRIDGE NO 870191



SOUTHBOUND TYPICAL - SPAN 2

BRIDGE NO 870191

NOTES:

1. EXISTING TRAFFIC RAILING RETROFIT IS INCLUDED AS PART OF FDOT PROJECT FPID 440423-1-52-01
2. SUPERELEVATION ON BRIDGE VAIRES FROM SLOPING LEFT TO SLOPING RIGHT.

CONCEPT PLANS SUBJECT TO REVISION

ALTERNATIVE B

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

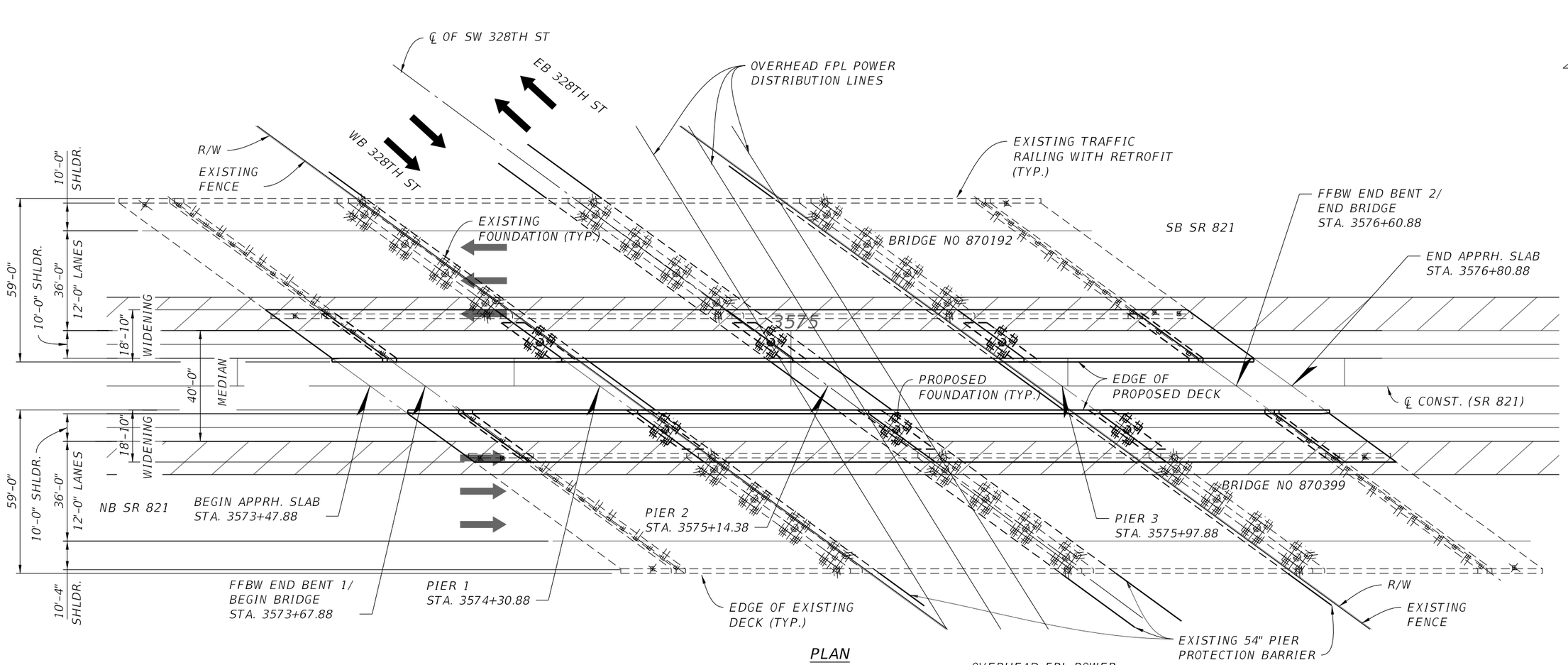
LUIS SANTANA, P.E.
P.E. LICENSE NO. 76363
STANLEY CONSULTANTS, INC.
1641 WORTHINGTON ROAD, SUITE 400
WEST PALM BEACH, FL 33409

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

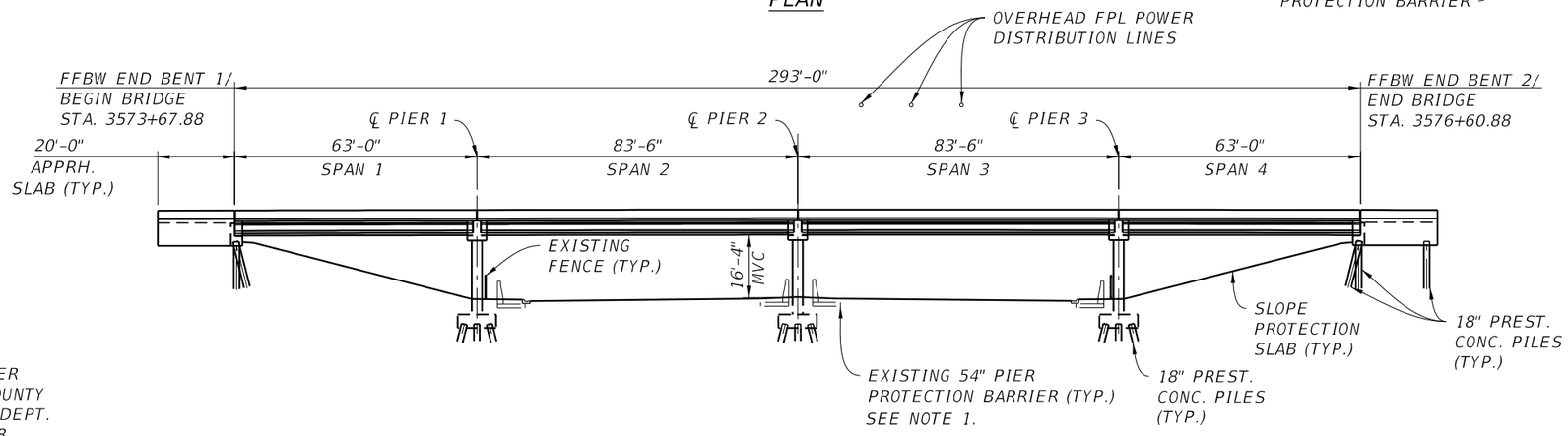
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

STRUCTURE PLANS
FLORIDA'S TURNPIKE
SB OFF-RAMP OVER US 1
TYPICAL SECTION

SHEET NO. B-6



PLAN



ELEVATION

LEGEND

NEW CONSTRUCTION

EXISTING STRUCTURE

NOTE:

1. EXISTING 54" PIER PROTECTION BARRIER IS INCLUDED AS PART OF MIAMI-DADE COUNTY PUBLIC WORKS AND WASTE MANAGEMENT DEPT. HIGHWAY DIVISION PROJECT NO. 20040558.

2. EXISTING TRAFFIC RAILING RETROFIT IS INCLUDED AS PART OF FDOT PROJECT FPID 440423-1-52-01

CONCEPT PLANS SUBJECT TO REVISION

ALTERNATIVE B

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

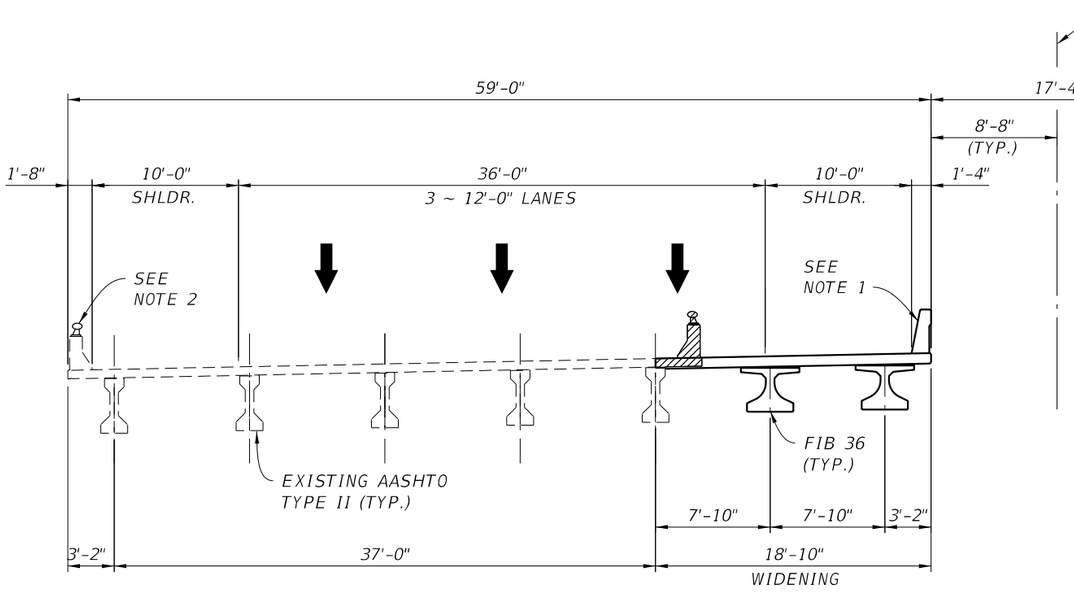
LUIS SANTANA, P.E.
P.E. LICENSE NO. 76363
STANLEY CONSULTANTS, INC.
1641 WORTHINGTON ROAD, SUITE 400
WEST PALM BEACH, FL 33409

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

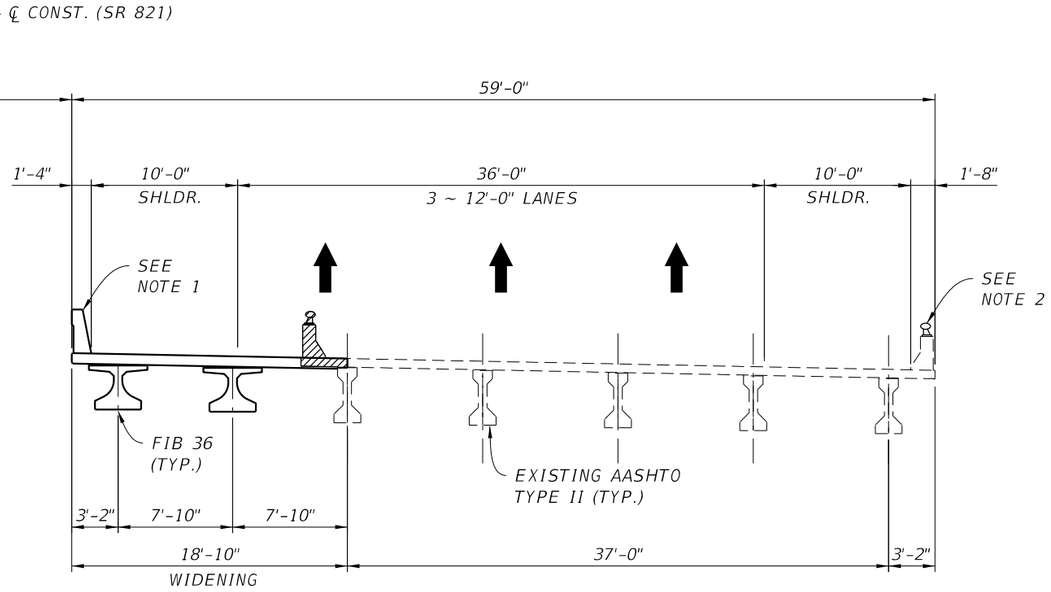
STRUCTURE PLANS
FLORIDA'S TURNPIKE
OVER SW 328TH ST
PLAN AND ELEVATION

SHEET NO. B-7



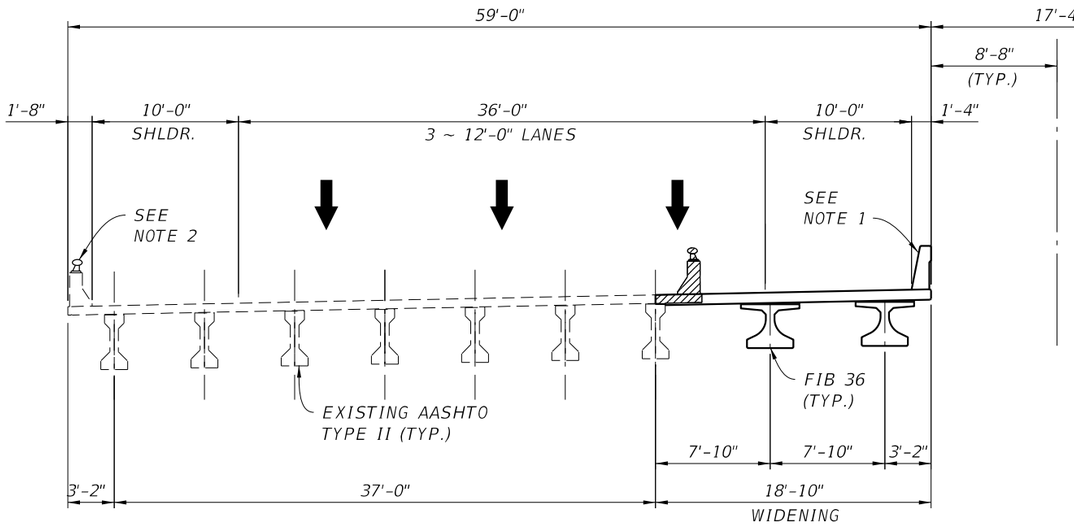
SOUTHBOUND TYPICAL - SPAN 1 & 4

BRIDGE NO 870192



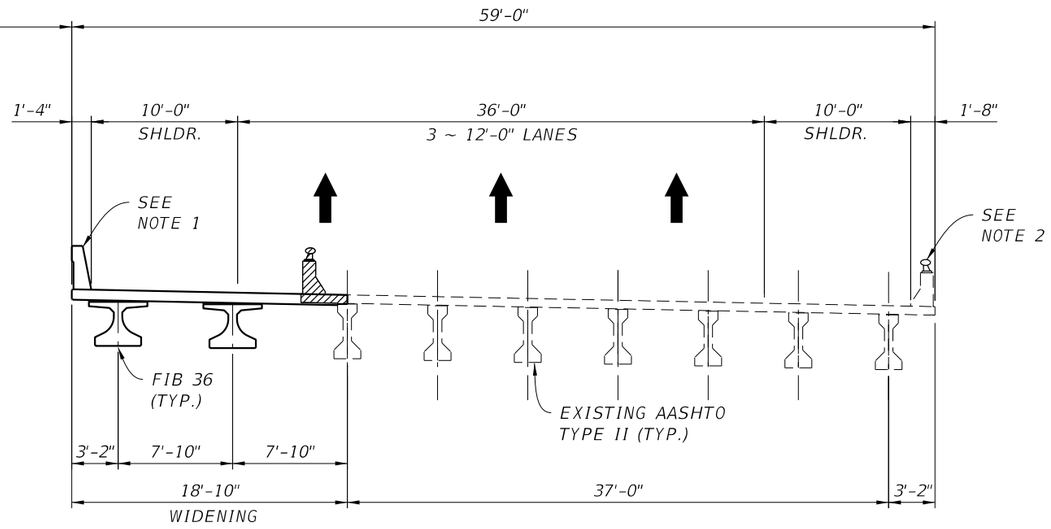
NORTHBOUND TYPICAL - SPAN 1 & 4

BRIDGE NO 870399



SOUTHBOUND TYPICAL - SPAN 2 & 3

BRIDGE NO 870192



NORTHBOUND TYPICAL - SPAN 2 & 3

BRIDGE NO 870399

LEGEND:

▨ EXISTING STRUCTURE REMOVAL

NOTES:

1. 36" SINGLE SLOPE TRAFFIC RAILING (INDEX 521-427)
2. EXISTING TRAFFIC RAILING RETROFIT IS INCLUDED AS PART OF FDOT PROJECT FPID 440423-1-52-01

CONCEPT PLANS SUBJECT TO REVISION

ALTERNATIVE B

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

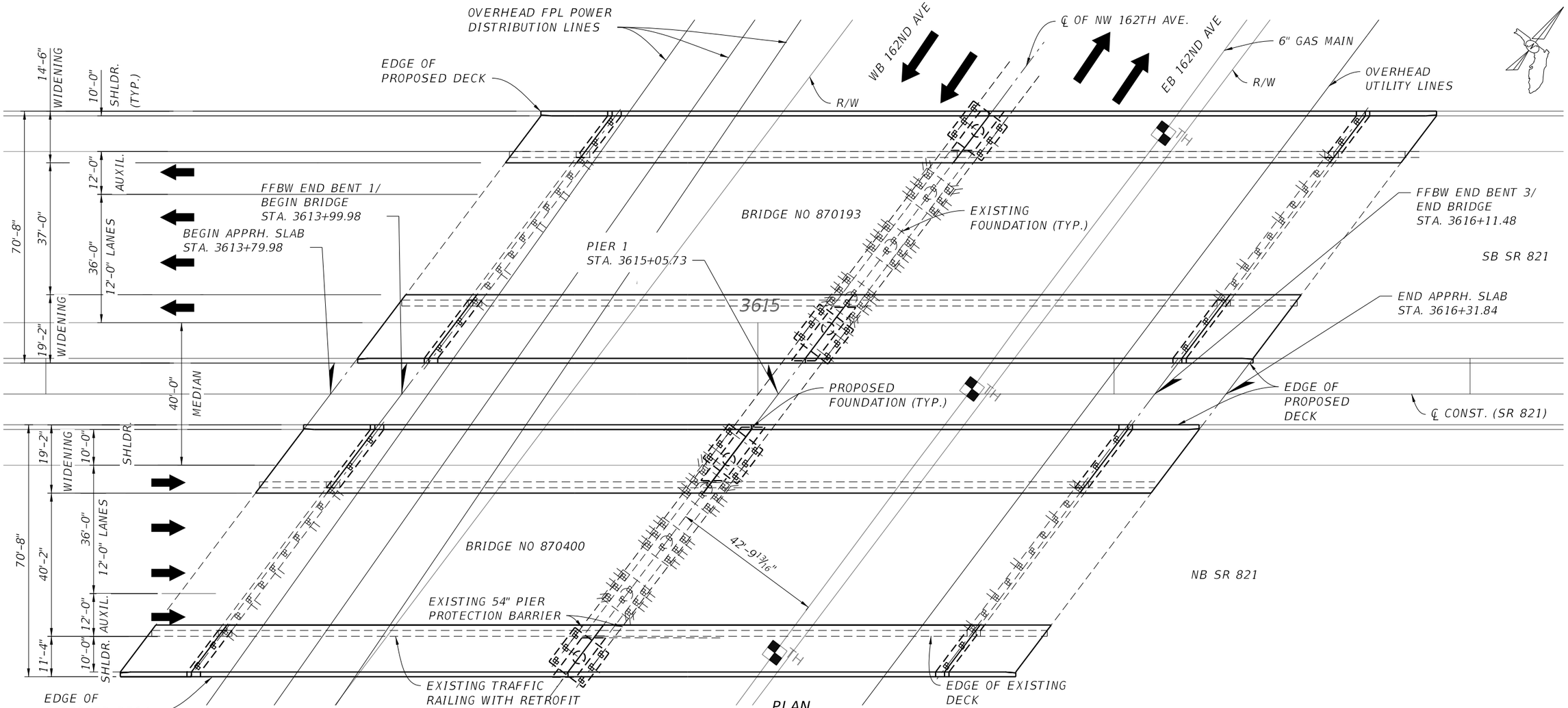
LUIS SANTANA, P.E.
P.E. LICENSE NO. 76363
STANLEY CONSULTANTS, INC.
1641 WORTHINGTON ROAD, SUITE 400
WEST PALM BEACH, FL 33409

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

STRUCTURE PLANS
FLORIDA'S TURNPIKE
OVER SW 328TH ST (LUCY ST)
TYPICAL SECTION

SHEET NO. B-8



LEGEND

NEW CONSTRUCTION

EXISTING STRUCTURE

NOTE:

1. EXISTING 54" PIER PROTECTION BARRIER IS INCLUDED AS PART OF FDOT PROJECT FPID 440423-1-52-01.

CONCEPT PLANS SUBJECT TO REVISION

ALTERNATIVE B

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

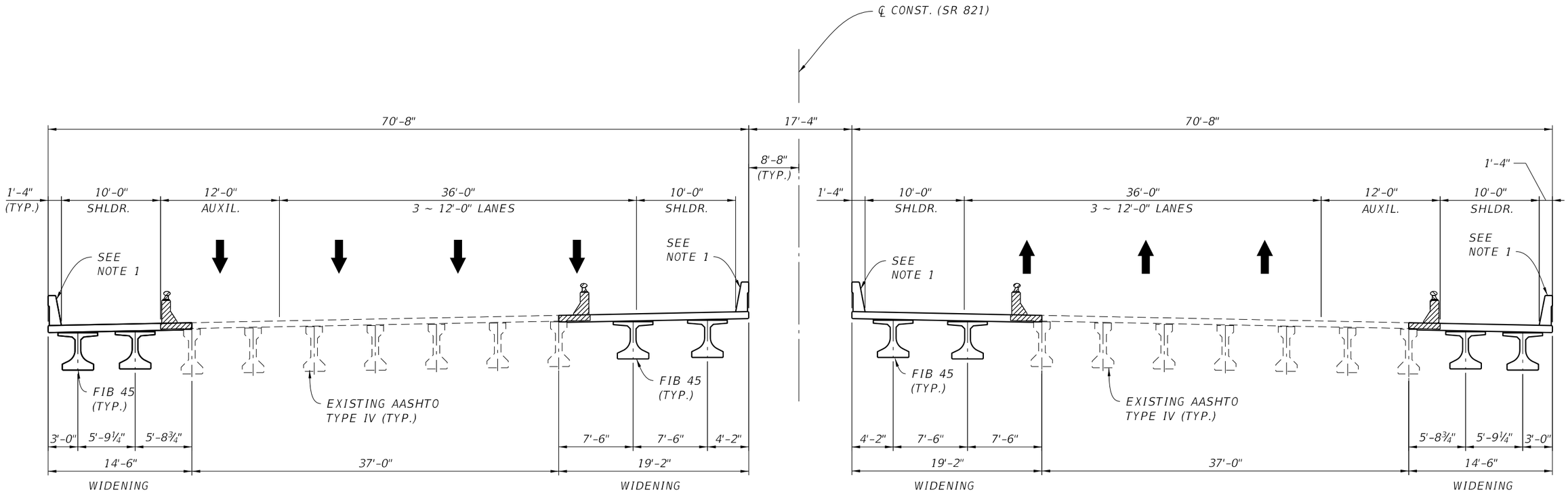
LUIS SANTANA, P.E.
P.E. LICENSE NO. 76363
STANLEY CONSULTANTS, INC.
1641 WORTHINGTON ROAD, SUITE 400
WEST PALM BEACH, FL 33409

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

STRUCTURE PLANS
FLORIDA'S TURNPIKE
OVER 162ND AVE
PLAN VIEW

SHEET NO. B-9



SOUTHBOUND TYPICAL

BRIDGE NO 870193

NORTHBOUND TYPICAL

BRIDGE NO 870400

LEGEND:

▨ EXISTING STRUCTURE REMOVAL

NOTES:

1. 36" SINGLE SLOPE TRAFFIC RAILING (INDEX 521-427)

CONCEPT PLANS SUBJECT TO REVISION

ALTERNATIVE B

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

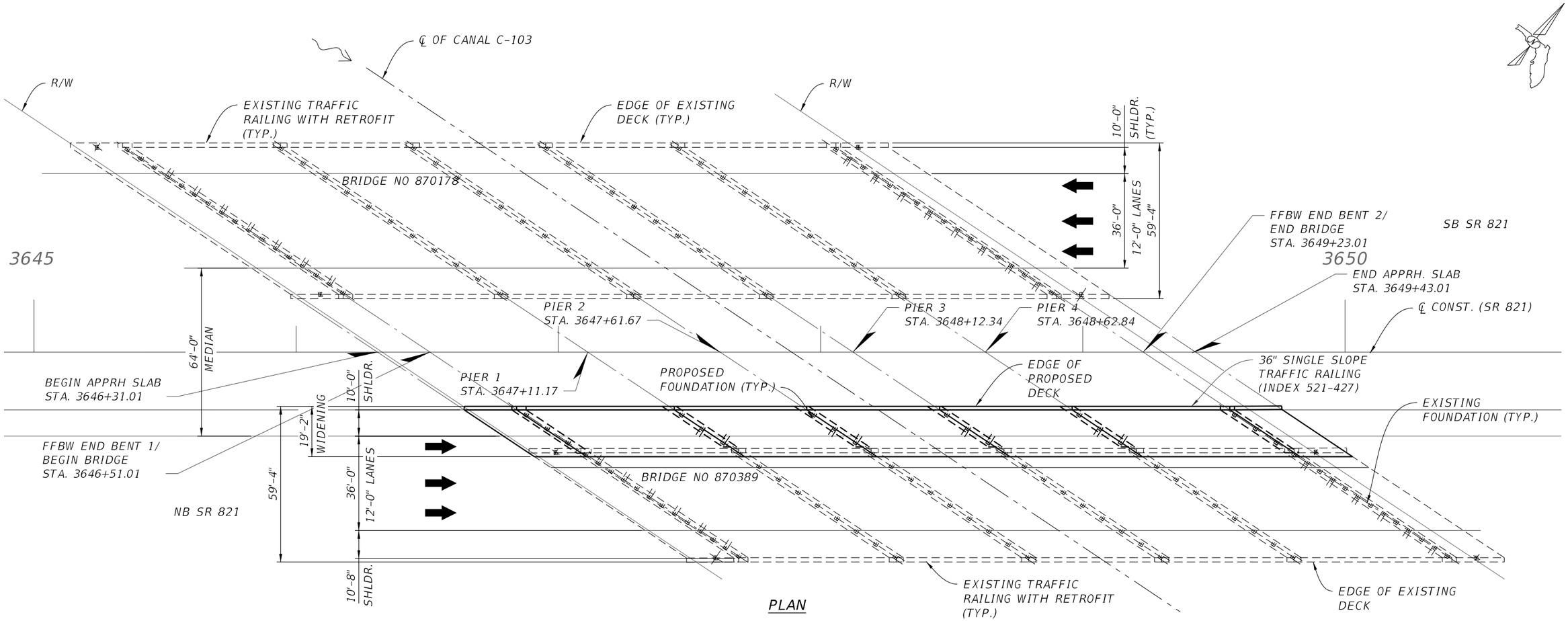
LUIS SANTANA, P.E.
P.E. LICENSE NO. 76363
STANLEY CONSULTANTS, INC.
1641 WORTHINGTON ROAD, SUITE 400
WEST PALM BEACH, FL 33409

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

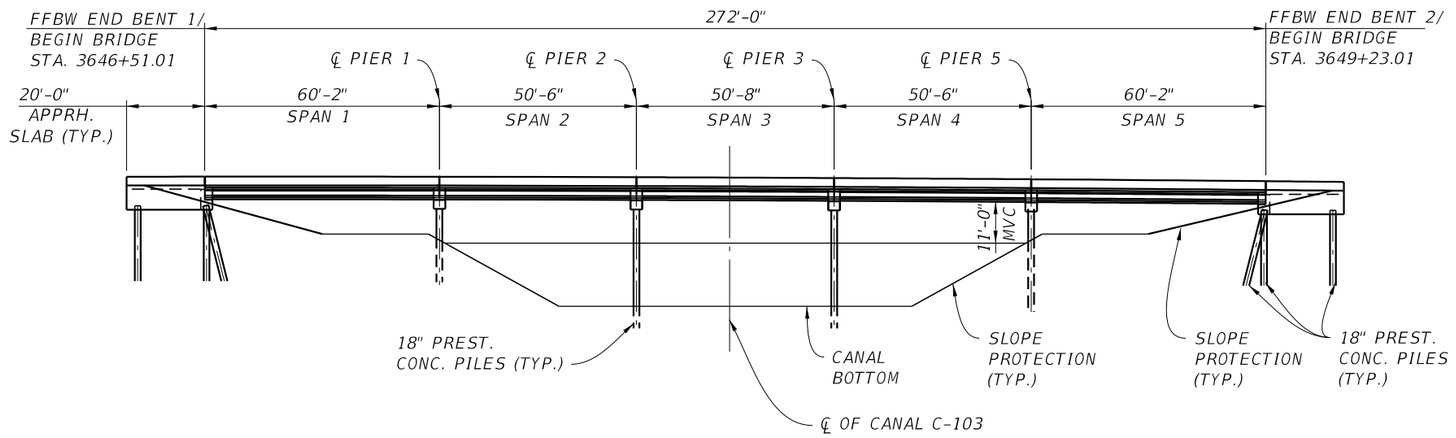
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

STRUCTURE PLANS
FLORIDA'S TURNPIKE
OVER 162ND AVE (FARM LIFE RD)
TYPICAL SECTION

SHEET NO. B-10



PLAN



ELEVATION

LEGEND

NEW CONSTRUCTION

EXISTING STRUCTURE

CONCEPT PLANS SUBJECT TO REVISION

ALTERNATIVE B

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

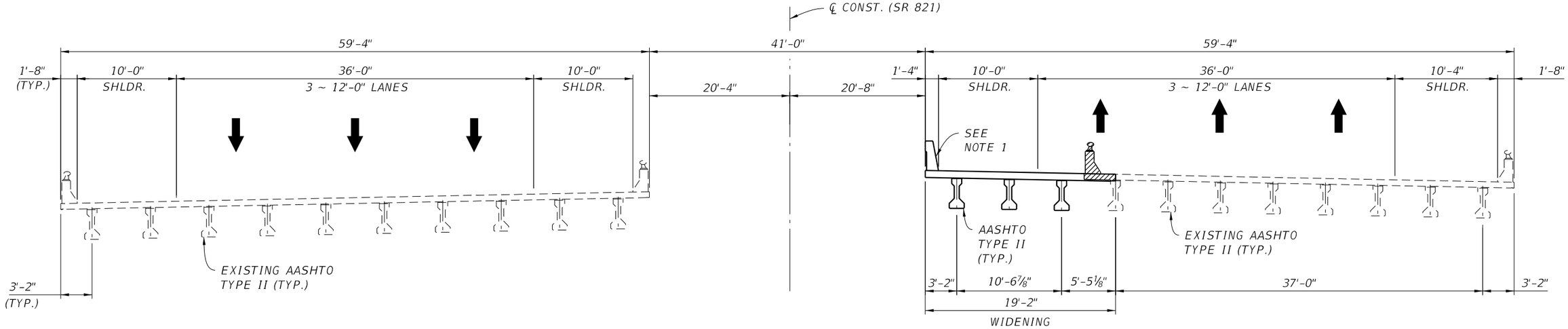
LUIS SANTANA, P.E.
P.E. LICENSE NO. 76363
STANLEY CONSULTANTS, INC.
1641 WORTHINGTON ROAD, SUITE 400
WEST PALM BEACH, FL 33409

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

STRUCTURE PLANS FLORIDA'S TURNPIKE OVER C-103 CANAL PLAN AND ELEVATION

SHEET NO. B-11

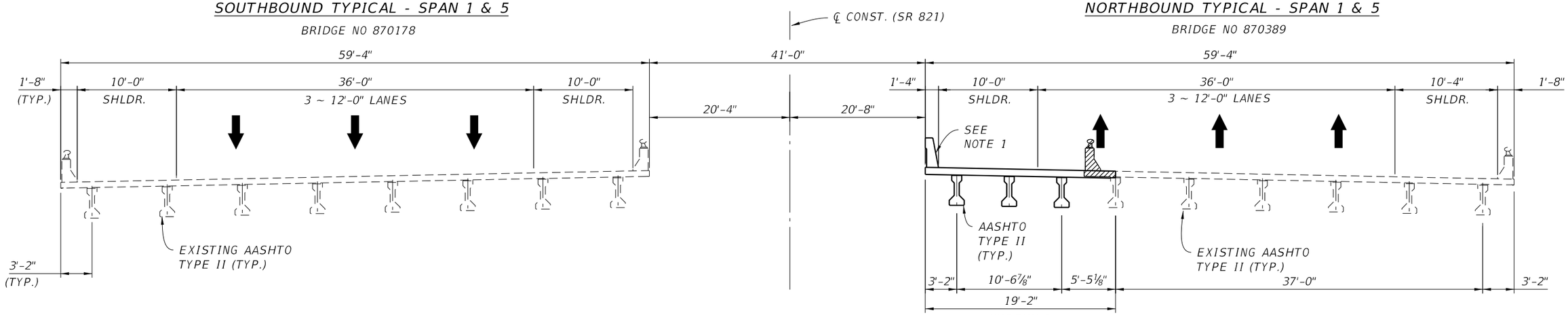


SOUTHBOUND TYPICAL - SPAN 1 & 5

BRIDGE NO 870178

NORTHBOUND TYPICAL - SPAN 1 & 5

BRIDGE NO 870389

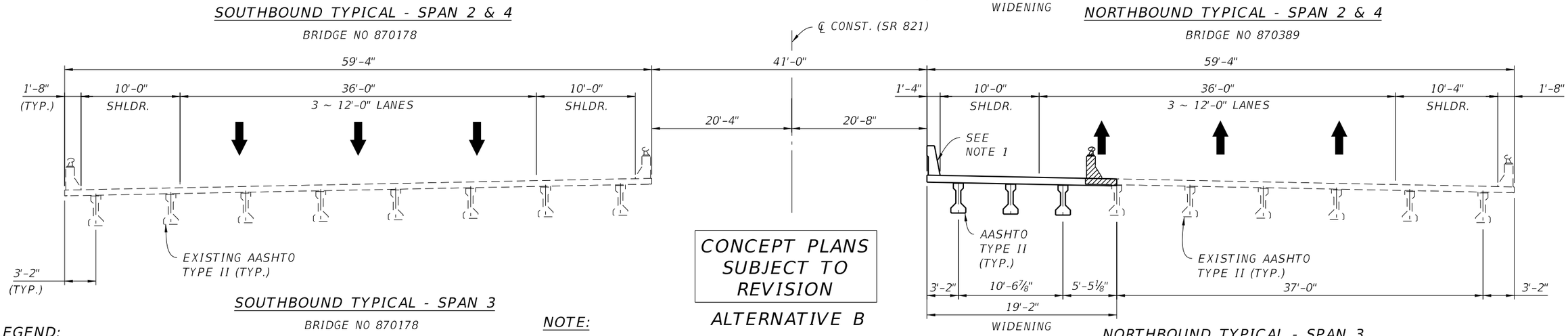


SOUTHBOUND TYPICAL - SPAN 2 & 4

BRIDGE NO 870178

NORTHBOUND TYPICAL - SPAN 2 & 4

BRIDGE NO 870389



SOUTHBOUND TYPICAL - SPAN 3

BRIDGE NO 870178

NORTHBOUND TYPICAL - SPAN 3

BRIDGE NO 870389

CONCEPT PLANS SUBJECT TO REVISION

ALTERNATIVE B

LEGEND:

EXISTING STRUCTURE REMOVAL

NOTE:

1. 36" SINGLE SLOPE TRAFFIC RAILING (INDEX 521-427)

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

LUIS SANTANA, P.E.
P.E. LICENSE NO. 76363
STANLEY CONSULTANTS, INC.
1641 WORTHINGTON ROAD, SUITE 400
WEST PALM BEACH, FL 33409

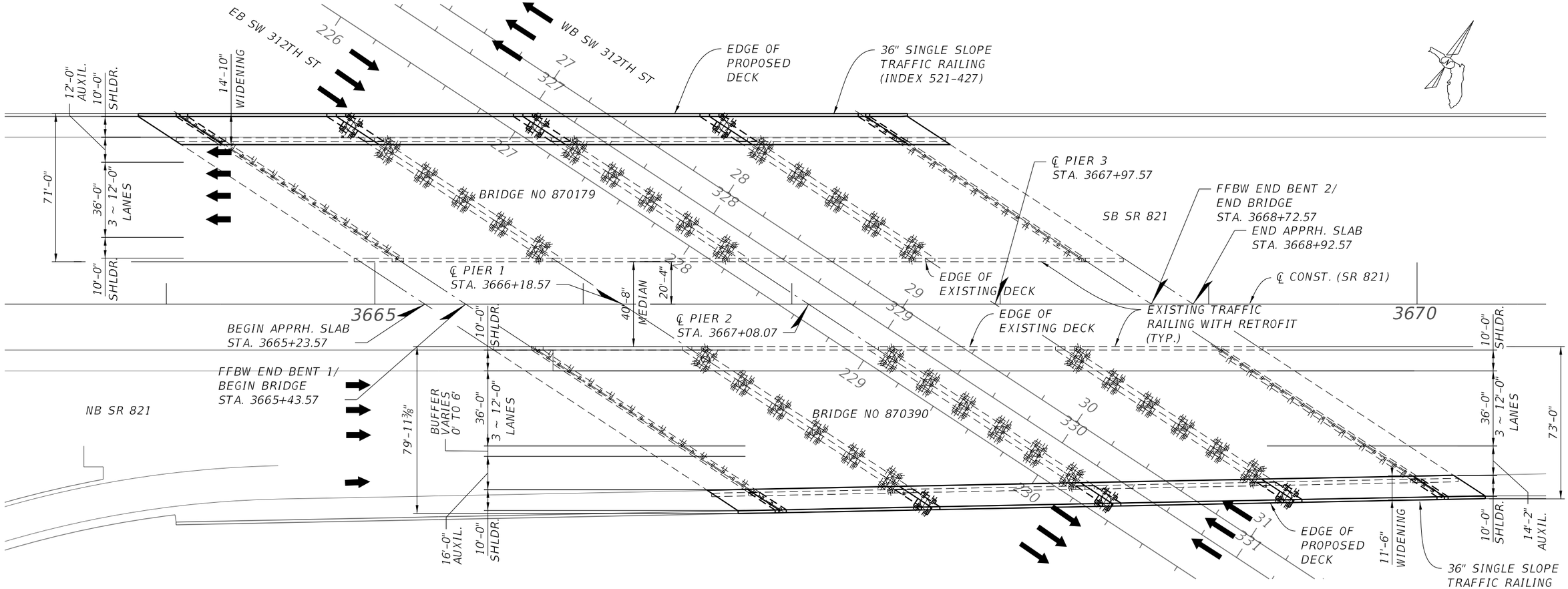
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

STRUCTURE PLANS
FLORIDA'S TURNPIKE
OVER CANAL C-103
TYPICAL SECTION

SHEET NO.

B-12

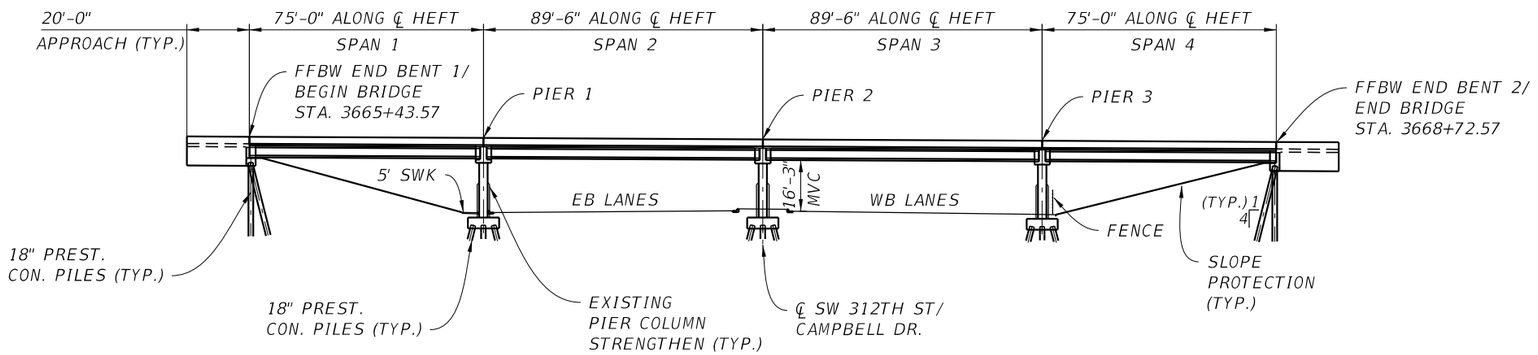


PLAN

LEGEND

NEW CONSTRUCTION

EXISTING STRUCTURE



ELEVATION

NOTE:

1. EXISTING TRAFFIC RAILING RETROFIT IS INCLUDED AS PART FDOT PROJECT FPID 435462-1-52-01

CONCEPT PLANS SUBJECT TO REVISION

ALTERNATIVE B

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

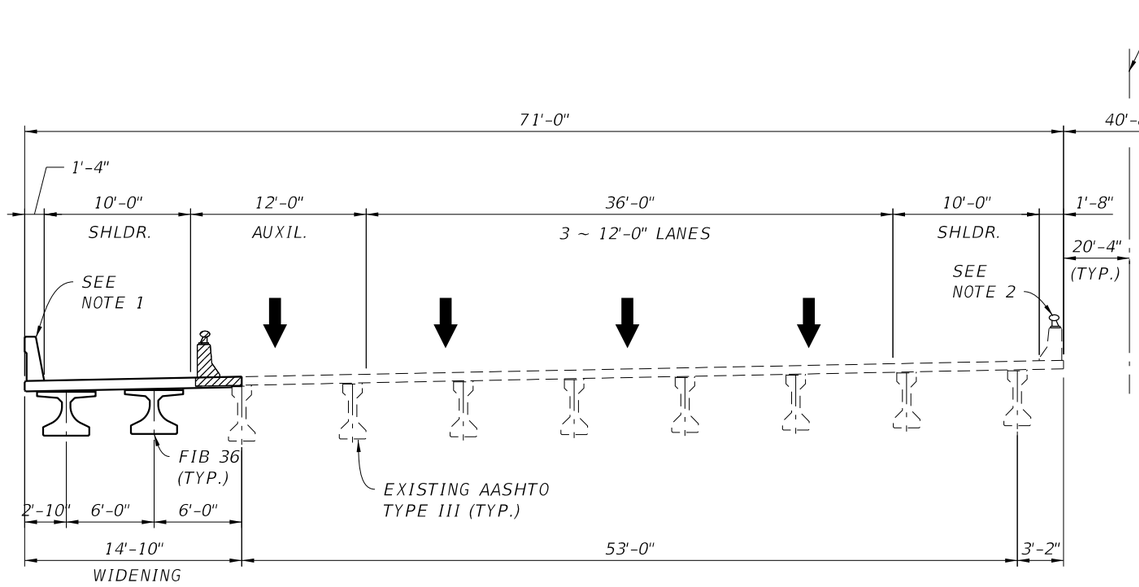
LUIS SANTANA, P.E.
P.E. LICENSE NO. 76363
STANLEY CONSULTANTS, INC.
1641 WORTHINGTON ROAD, SUITE 400
WEST PALM BEACH, FL 33409

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

STRUCTURE PLANS
FLORIDA'S TURNPIKE OVER SW 312TH ST
PLAN VIEW

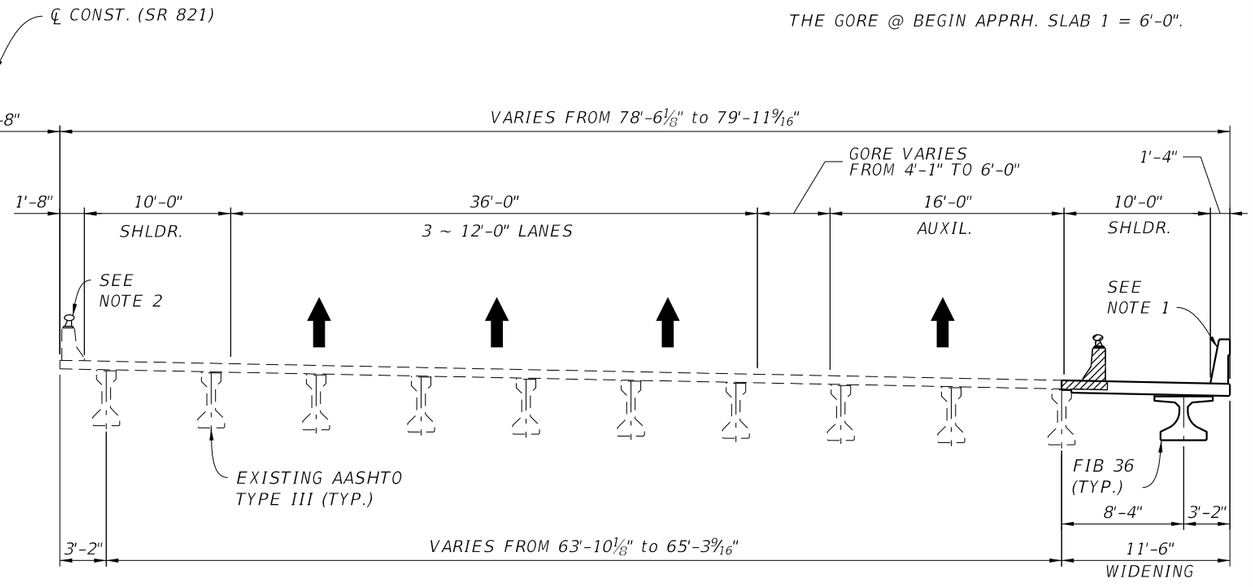
SHEET NO. B-13



SOUTHBOUND TYPICAL - SPAN 1

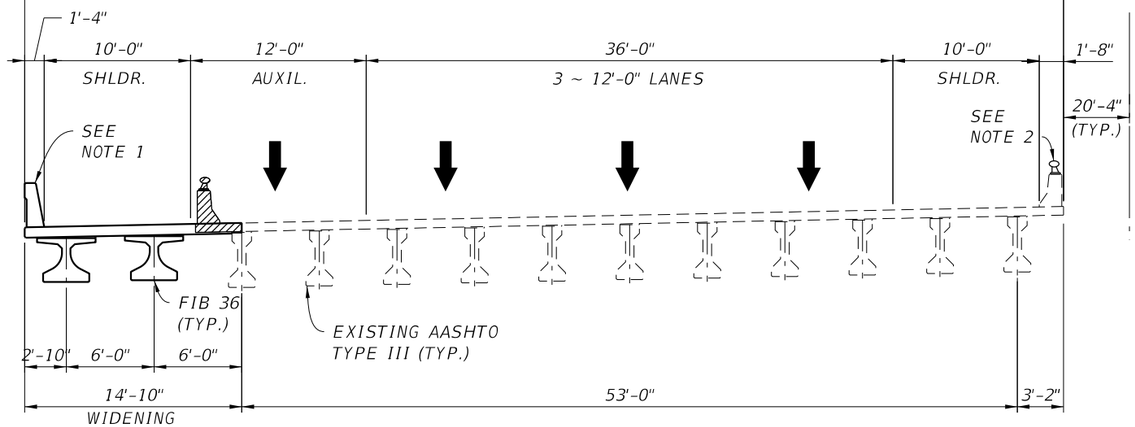
BRIDGE NO 870179

THE GORE @ BEGIN APPRH. SLAB 1 = 6'-0".



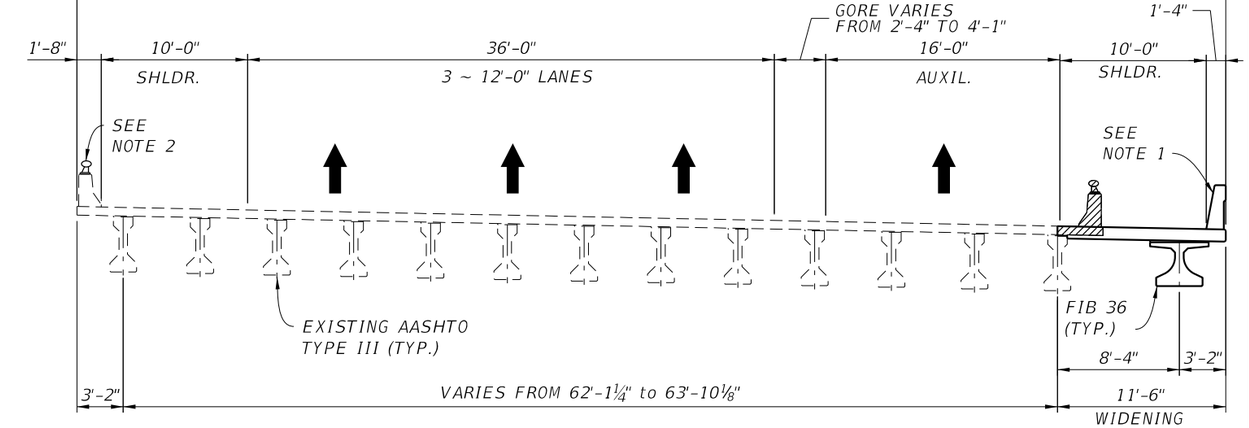
NORTHBOUND TYPICAL - SPAN 1

BRIDGE NO 870390



SOUTHBOUND TYPICAL - SPAN 2

BRIDGE NO 870179



NORTHBOUND TYPICAL - SPAN 2

BRIDGE NO 870390

LEGEND:

▨ EXISTING STRUCTURE REMOVAL

NOTE:

1. 36" SINGLE SLOPE TRAFFIC RAILING (INDEX 521-427)
2. EXISTING TRAFFIC RAILING RETROFIT IS INCLUDED AS PART FDOT PROJECT FPID 435462-1-52-01

CONCEPT PLANS SUBJECT TO REVISION

ALTERNATIVE B

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

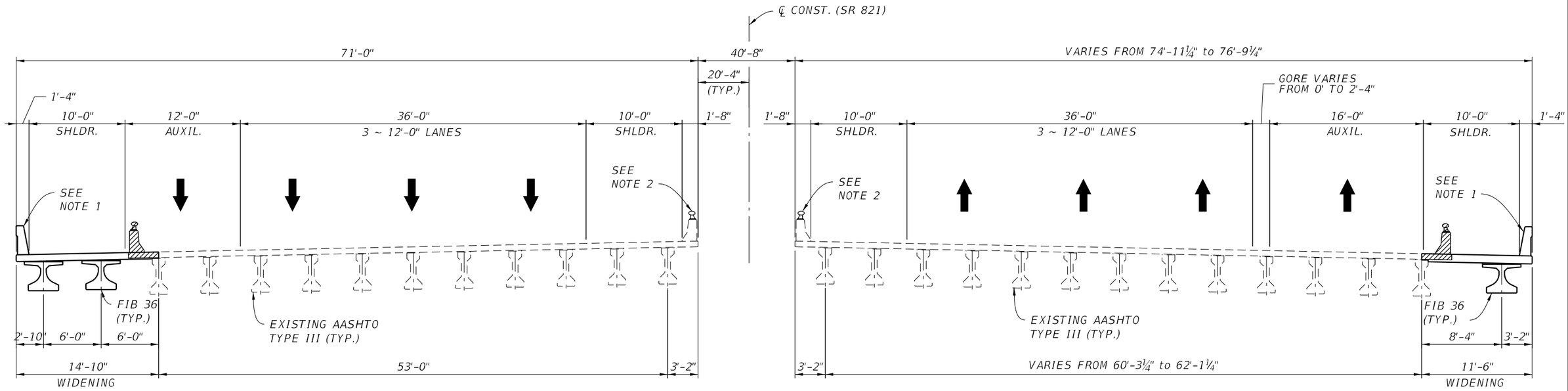
LUIS SANTANA, P.E.
P.E. LICENSE NO. 76363
STANLEY CONSULTANTS, INC.
1641 WORTHINGTON ROAD, SUITE 400
WEST PALM BEACH, FL 33409

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

STRUCTURE PLANS
FLORIDA'S TURNPIKE OVER SW 312TH ST (CAMPBELL DR)
TYPICAL SECTION (SHEET 1 OF 2)

SHEET NO. B-14

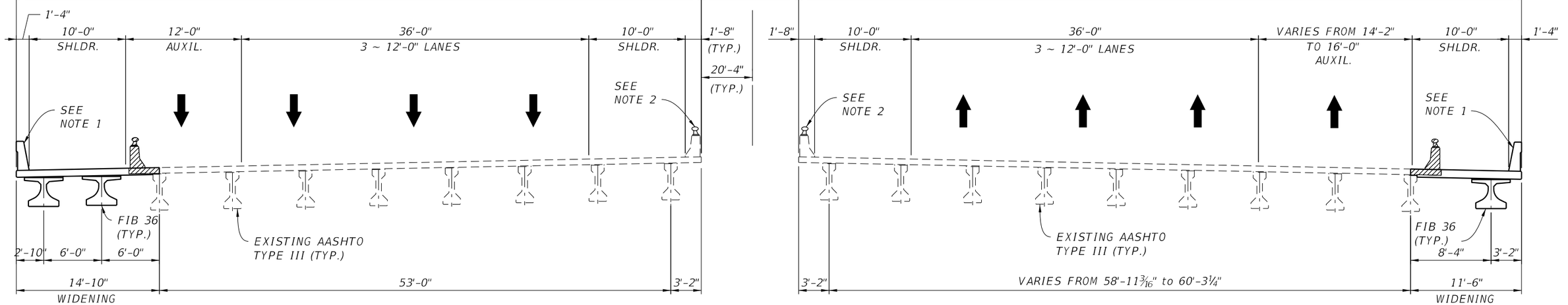


SOUTHBOUND TYPICAL - SPAN 3

BRIDGE NO 870179

NORTHBOUND TYPICAL - SPAN 3

BRIDGE NO 870390



SOUTHBOUND TYPICAL - SPAN 4

BRIDGE NO 870179

NORTHBOUND TYPICAL - SPAN 4

BRIDGE NO 870390

LEGEND:

▨ EXISTING STRUCTURE REMOVAL

NOTE:

1. 36" SINGLE SLOPE TRAFFIC RAILING (INDEX 521-427)
2. EXISTING TRAFFIC RAILING RETROFIT IS INCLUDED AS PART OF fDOT PROJECT FPID 435462-1-52-01.

CONCEPT PLANS SUBJECT TO REVISION

ALTERNATIVE B

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

LUIS SANTANA, P.E.
P.E. LICENSE NO. 76363
STANLEY CONSULTANTS, INC.
1641 WORTHINGTON ROAD, SUITE 400
WEST PALM BEACH, FL 33409

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

STRUCTURE PLANS
FLORIDA'S TURNPIKE OVER SW 312TH ST (CAMPBELL DR)
TYPICAL SECTION (SHEET 2 OF 2)

SHEET NO. B-15

Appendix B

Planning Consistency Documentation

TURNPIKE

TPO Project No:	TP4395451
LRTP Ref.:	07-38
County:	MIAMI-DADE
Roadway ID:	
Lanes Exist:	
Lanes Improved:	
Lanes Added:	
Project Length:	3.508
District:	6

Project Description: **PD&E FOR WIDEN HEFT** **FROM US 1/SOUTH OF PALM DR** **TO CAMPBELL DR (MP 0-2)**

Type of Work: **PD&E/EMO STUDY**

PHASE :	Funding Source	Proposed Funding (in $000s) <2021	2020 - 2021	2021 - 2022	2022 - 2023	2023 - 2024	2024 - 2025	>2025	All Years
		6	0	0	0	0	0	0	6
CONSTRUCTION	**Total**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**6**
		2,270	0	0	0	0	0	0	2,270
PROJECT DEVELOPMENT AND ENVIRONMENTAL	**Total**	**2,270**	**0**	**0**	**0**	**0**	**0**	**0**	**2,270**

RESPONSIBLE AGENCY: **FDOT**

Item Segment TOTAL ALL Years ALL Phases: $2,276

Item Number: 439545 **Item TOTAL ALL Years ALL Phases All Segments: $143,776**

TPO Project No:	TP4395452
LRTP Ref.:	07-38
County:	MIAMI-DADE
Roadway ID:	
Lanes Exist:	
Lanes Improved:	
Lanes Added:	
Project Length:	3.508
District:	6

Project Description: **WIDEN HEFT (SR 821) - US 1/SOUTH OF PALM DR TO CAMPBELL DR (MP 0-2)(4-6 LNS)**

Type of Work: **ADD LANES & RECONSTRUCT**

PHASE :	Funding Source	Proposed Funding (in $000s) <2021	2020 - 2021	2021 - 2022	2022 - 2023	2023 - 2024	2024 - 2025	>2025	All Years
	PKBD	0	0	0	0	0	0	132,046	132,046
	PKYI	0	0	0	0	22	0	2,180	2,202

***Project is not funded in LRTP and will require a LRTP amendment.

***Project was funded in a previous TIP.

From: Evans, Bill
To: Alian, Morteza
Cc: Piche, Cassie
Subject: RE: Quick Call
Date: Thursday, February 4, 2021 11:53:33 AM

***** EXTERNAL EMAIL - Use caution and verify authenticity before trusting any contents. *****

ızo - Manager

STIP Project Detail and Summaries Online Report

Selection Criteria	
Approved STIP	**Detail Report**
Financial Project:439545 _	**Related Items Shown**

TURNPIKE

Item Number: 439545 1 **Project Description:** PD&E FOR WIDEN HEFT FROM US-1/SOUTH OF PALM DR TO CAMPBELL DR (MP 0-2)
District: 06 **County:** MIAMI-DADE **Type of Work:** PD&E/EMO STUDY **Project Length:** 3.508MI

		Fiscal Year						
Phase / Responsible Agency		**<2021**	**2021**	**2022**	**2023**	**2024**	**>2024**	**All Years**
CONSTRUCTION / MANAGED BY FDOT								
Fund Code:	PKYI - TURNPIKE IMPROVEMENT	8,218						**8,218**
P D & E / MANAGED BY FDOT								
Fund Code:	PKYI - TURNPIKE IMPROVEMENT	2,451,949	6,213					**2,458,162**
	Item: 439545 1 Totals	**2,460,167**	**6,213**					**2,466,380**

Item Number: 439545 2 **Project Description:** WIDEN HEFT(SR821) US-1/SOUTH OF PALM DR TO CAMPBELL DR(MP0-2)(4-6LNS)
District: 06 **County:** MIAMI-DADE **Type of Work:** ADD LANES & RECONSTRUCT **Project Length:** 3.508MI

		Fiscal Year						
Phase / Responsible Agency		**<2021**	**2021**	**2022**	**2023**	**2024**	**>2024**	**All Years**
CONSTRUCTION / MANAGED BY FDOT								
Fund Code:	PKBD - TURNPIKE MASTER BOND FUND						132,046,380	**132,046,380**
	PKYI - TURNPIKE IMPROVEMENT					22,220	2,180,000	**2,202,220**
	Phase: CONSTRUCTION Totals					**22,220**	**134,226,380**	**134,248,600**
PRELIMINARY ENGINEERING / MANAGED BY FDOT								
Fund Code:	PKYI - TURNPIKE IMPROVEMENT			6,852,265	400,000			**7,252,265**
	Item: 439545 2 Totals			**6,852,265**	**400,000**	**22,220**	**134,226,380**	**141,500,865**
	Project Totals	**2,460,167**	**6,213**	**6,852,265**	**400,000**	**22,220**	**134,226,380**	**143,967,245**
	TURNPIKE Totals	**2,460,167**	**6,213**	**6,852,265**	**400,000**	**22,220**	**134,226,380**	**143,967,245**
	Grand Total	**2,460,167**	**6,213**	**6,852,265**	**400,000**	**22,220**	**134,226,380**	**143,967,245**

STIP Project Detail and Summaries Online Report

Selection Criteria	
Current STIP	**Detail Report**
Financial Project:439545 _	**Related Items Shown**

TURNPIKE

Item Number: 439545 1 **Project Description:** PD&E FOR WIDEN HEFT FROM US-1/SOUTH OF PALM DR TO CAMPBELL DR (MP 0-2)
District: 06 **County:** MIAMI-DADE **Type of Work:** PD&E/EMO STUDY **Project Length:** 3.508MI

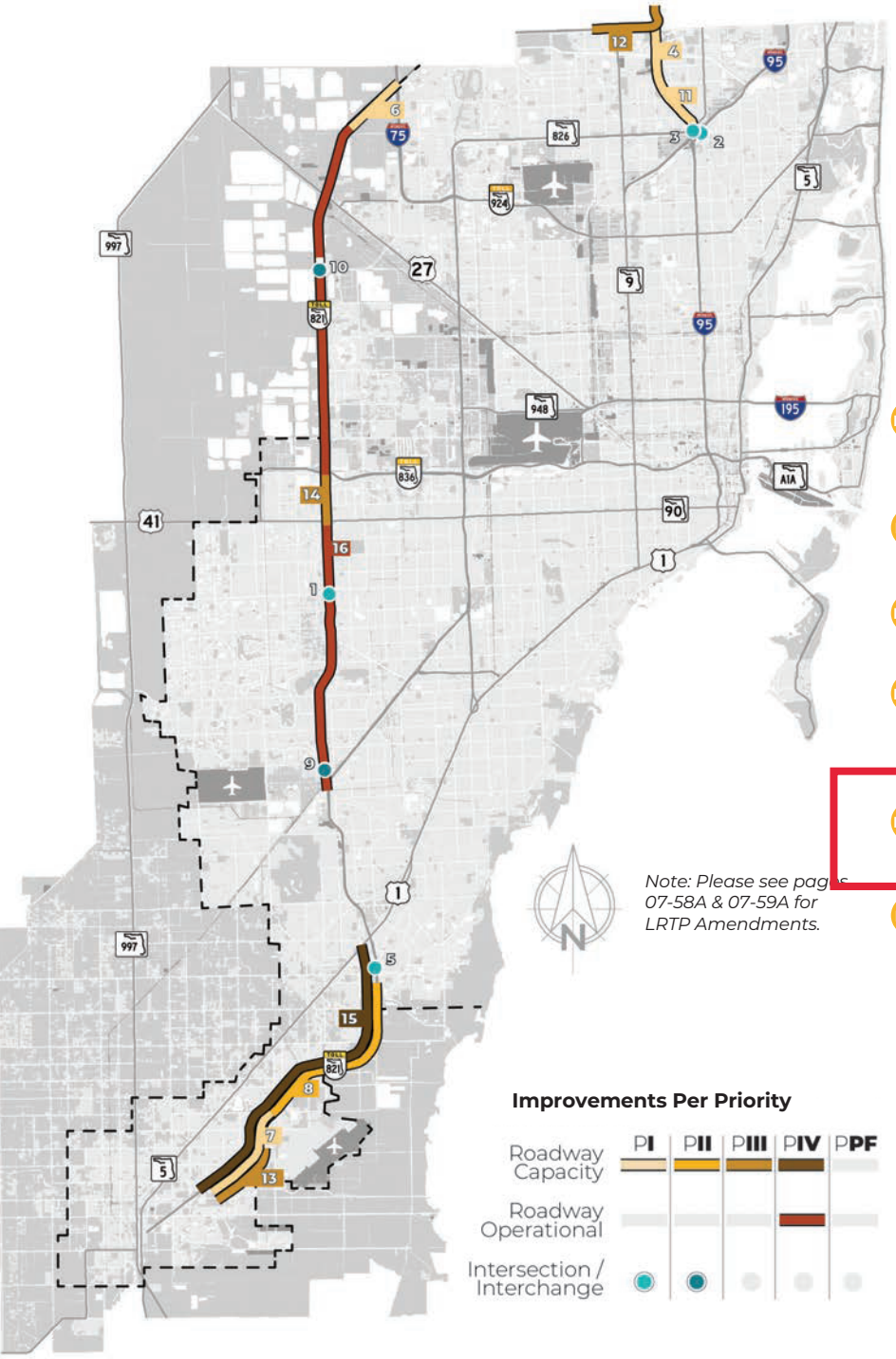
		Fiscal Year						
Phase / Responsible Agency		**<2021**	**2021**	**2022**	**2023**	**2024**	**>2024**	**All Years**
CONSTRUCTION / MANAGED BY FDOT								
Fund Code:	PKYI - TURNPIKE IMPROVEMENT	13,339						**13,339**
P D & E / MANAGED BY FDOT								
Fund Code:	PKYI - TURNPIKE IMPROVEMENT	2,539,839	263,900					**2,803,739**
	Item: 439545 1 Totals	**2,553,178**	**263,900**					**2,817,078**

Item Number: 439545 2 **Project Description:** WIDEN HEFT(SR821) US-1/SOUTH OF PALM DR TO CAMPBELL DR(MP0-2)(4-6LNS)
District: 06 **County:** MIAMI-DADE **Type of Work:** ADD LANES & RECONSTRUCT **Project Length:** 3.508MI

		Fiscal Year						
Phase / Responsible Agency		**<2021**	**2021**	**2022**	**2023**	**2024**	**>2024**	**All Years**
CONSTRUCTION / MANAGED BY FDOT								
Fund Code:	PKBD - TURNPIKE MASTER BOND FUND						130,515,804	**130,515,804**
	PKYI - TURNPIKE IMPROVEMENT					21,660	2,180,000	**2,201,660**
	Phase: CONSTRUCTION Totals					**21,660**	**132,695,804**	**132,717,464**
PRELIMINARY ENGINEERING / MANAGED BY FDOT								
Fund Code:	PKYI - TURNPIKE IMPROVEMENT			6,852,265	400,000			**7,252,265**
	Item: 439545 2 Totals			**6,852,265**	**400,000**	**21,660**	**132,695,804**	**139,969,729**
	Project Totals	**2,553,178**	**263,900**	**6,852,265**	**400,000**	**21,660**	**132,695,804**	**142,786,807**
	TURNPIKE Totals	**2,553,178**	**263,900**	**6,852,265**	**400,000**	**21,660**	**132,695,804**	**142,786,807**
	Grand Total	**2,553,178**	**263,900**	**6,852,265**	**400,000**	**21,660**	**132,695,804**	**142,786,807**

Bill Evans, PE, AICP
Florida PD&E Leader
ARCADIS US, Inc.
T. +1 561 697 7001 | M. + 1 561 352 5662
william.evans@arcadis.com

-----Original Appointment-----
From: Alian, Morteza <AlianMorteza@stanleygroup.com>
Sent: Thursday, February 4, 2021 11:25 AM
To: Evans, Bill
Subject: Accepted: Quick Call
When: Thursday, February 4, 2021 11:30 AM-12:00 PM (UTC-05:00) Eastern Time (US & Canada).
Where: Microsoft Teams Meeting



Note: Please see pages 07-58A & 07-59A for LRTP Amendments.

TABLE 7-4: FLORIDA'S TURNPIKE ENTERPRISE (FTE) PROJECTS (CONTINUED)

	MAP ID	FACILITY	LIMITS FROM	LIMITS TO	DESCRIPTION	TOTAL PROJECT COSTS (2018 $)
PRIORITY III						
PM3	11	Southern Turnpike Mainline (SR 91)	MP 0X - Golden Glades/I-95 (SR 9)/SR 826 (Palmetto Expy)	MP 47 - Turnpike Extension (SR 821)	Widen from 6 to 8 lanes Includes interchange improvements: MP 2X - NW 199 St/NE 203 St (Ives Dairy Rd)/Dolphin Ctr County Line Rd	$312.984
PM1	12	Southern Turnpike Mainline (SR 91)	MP 47 - Turnpike Extension (SR 821) (Spur)		Interchange improvement Associated FPN: 406095-1	$77.459
PM3	13	Turnpike Extension (SR 821)	MP 2 - SW 312 St (Campbell Dr	MP 5 - SW 288 St (Biscayne Dr)	Widen from 4 to 6 lanes	$37.462
PM3	14	Turnpike Extension (SR 821)	MP 25 - SW 8 St (Tamiami Trail/ SR 90/US 41)	MP 27 - NW 12 St	Auxiliary lanes	$17.600
PRIORITY IV						
PM3	15	Turnpike Extension (SR 821)	MP 0 - US 1 (South Dixie Hwy/SR 5)	MP 2 - SW 312 St (Campbell Dr)	Widen from 4 to 6 lanes Includes interchange improvement: MP 0 - US 1 (South Dixie Hwy/SR 5)	$89.829
PM1	16	Turnpike Extension (SR 821)	MP 17 - SR 874 (Don Shula Expy)	MP 39 - I-75 (SR 93)	TSM&O improvements	$121.000

Values in Millions YOE $
YOE: Year of Expenditure

			PRIORITY I: 2020-2025				PRIORITY II: 2026-2030				PRIORITY III: 2031-2035				PRIORITY IV: 2036-2045			
	2020-2024 TIP FUNDING	PROJECT COST FUNDED IN 2045 LRTP (YOE $)	PRE-ENG	ROW	CON/DB	O&M*	PRE-ENG	ROW	CON/DB	O&M*	PE/PDE	ROW	CST	O&M*	PE/PDE	ROW	CST	O&M*
		$456.931					$67.964	$6.727	$87.118				$295.122					
		$120.061									$10.915		$109.146					
		$110.853									$58.066		$52.787					
		$27.280									$2.480		$24.800					
	$7.275	$169.243	**$7.252**		**$0.023**												$169.243	
		$230.941									$17.050		$105.894		$22.550		$85.447	

* O&M costs for FTE facilities are reflected in FTE revenue projections. (See page 06-09)

BOLD PHASE FUNDS ARE INCLUDED IN THE 2019/2020 TIP
Italics denotes portions of phase values included in both the TIP and 2045 Plan

FACILITY	LIMITS FROM	LIMITS TO	DESCRIPTION
NW 137 Ave	NW 25 St	NW 42 St	New 4 lane roadway
NW 154 St	NW 87 Ave	NW 107 Ave	New 2 lane road construction
South Dade Transitway Park-and-Ride at SR 994 (Qual Roost Dr) (184 St Station) - SMART Terminal	South Dade Transitway & SW 184 St (Eureka Dr)	South Dade Transitway & SW 184 St (Eureka Dr)	Transit Oriented Development (TOD)
South Dade Transitway Park-and-Ride at SW 200 St (Caribbean Blvd/ 200 St Station)- SMART Terminal	South Dade Transitway & SW 200 St (Caribbean Blvd)	South Dade Transitway & SW 200 St (Caribbean Blvd)	Developer to build: Phase 1- 116 surface parking spaces; Phase 2- 150 space parking garage
SW 104 St (Killian Pkwy)*	SW 167 Ave	SW 177 Ave	New 2 lane road construction
SW 104 St (Killian Pkwy)	SW 160 Ave	SW 167 Ave	New 4 lane/Widen to 4 lanes
SW 157 Ave*	SW 184 St (Eureka Dr)	SW 216 St (Hainlin Mill Dr)	New 2 lane road construction
SW 184 St (Eureka Dr)	SW 157 Ave	SW 147 Ave	Add 2 lanes and reconstruct
Turnpike Extension (SR 821)	MP 1 - SW 328 St/Lucy St		New interchange

*Project does not comply with the CDMP.

PROJECT	LIMITS FROM	LIMITS TO	DESCRIPTION	PURPOSE AND NEED STATEMENT
Miami Executive Airport Park-and-Ride - SMART Terminal	Miami Executive Airport vicinity	Miami Executive Airport vicinity	MDX to construct a Park-and-Ride facility with 75 surface parking spaces to serve the SW Miami Dade Express (Route D) and other local routes	Improve access to and convenience of transit. Provide park-and-ride capacity for existing and new customers. Help reduce traffic congestion and support economic vitality. Support new SMART Plan BERT and proposed Express Bus services.
I-75/Miami Gardens Int	Turnpike (HEFT)	NW 170 St	Modify Interchange	Need for the improvements is based on a combination of geometric and operational deficiencies, urban planning objectives and the interaction with other planned facility improvements impacting the proposed project area. The existing I-75 facility has significant deficiencies. The purpose of this PD&E study is to address the capacity and safety issues associated with the I-75, SR-826, SR-924 interchange System to system movements between I-75, SR-826 and SR-924 produce excessive congestion contributing to unsafe speed differentials and, deficient weaving distances on the corridor. The study will examine modifications to this interchange and address extant and future capacity demand throughout the segment by analyzing the use of additional auxiliary traffic lanes from the Palmetto interchange to north of the HEFT interchange. The provision for a managed lane component will increase the overall safety and efficiency of the corridor by addressing deficient speed differential and Level of Service (LOS)/capacity issues.
I-95	US 1 to Broward County line	Managed Lanes /Capacity/ Operations	Ultimate Plan Study	The purpose of the project is to evaluate geometric deficiencies, high crash locations, and recurring congestion points; and to provide improvement recommendations.
Turnpike Extension/SR 821	MP 0 - US 1	MP 2 - SW 312 St /Campbell Dr	Widen from 4 to 6 lanes Includes interchange improvement: MP 0 - US 1	Widen facility and improve interchange to address capacity and safety deficiencies: The project widens a segment of the Turnpike Extension / SR 821 between south of Palm Dr and Campbell Dr. The widening will increase the number of travel lanes from four to six. The project will also improve the interchange / intersections at Palm Dr/ US 1.
Turnpike Extension/SR 821	MP 17 - Don Shula Expwy/SR 874	MP 39 - I-75	TSM&O improvements	Improve facility to address capacity and safety deficiencies: The project introduces TSM&O improvements along a segment of the Turnpike Extension/SR 821 between Don Shula Expressway / SR 874 and I-75.
SR 924 Gratigny Parkway West Extension	SR 826 (Palmetto Expy)/I-75	SR-821 (HEFT)	New Extension of SR 924 Gratigny Parkway West to HEFT, including access ramps to: west to SR 924, and I-75 north	The proposed project would extend the SR 924/Gratigny Parkway to the west to connect with the HEFT. The purpose is to improve access and meet east/west mobility needs for commuters and freight traffic. This extension would alleviate existing and future local traffic congestion by providing improved access to the integrated expressway network of SR 826, I-75, SR 924, and the HEFT Provide direct connection between I-75, the HEFT, SR 924 (Gratigny) and SR 826 (Palmetto). Serve east-west mobility needs in northern MiamiDade County. Population growth of 286% and employment growth of 405% by the year 2035. Future planned developments for industrial and business generating freight traffic with better roadway system interconnection. Alleviate traffic congestion and provide additional transportation capacity.

Appendix C

ETDM #14322 Environmental Screening Tool Data Report
June 28, 2017

Florida Department of Transportation

RICK SCOTT
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

RACHEL D. CONE
INTERIM SECRETARY

ETDM Summary Report

Project #14322 - HEFT (SR 821) Widening US 1 South of Palm Drive to Campbell Drive

Preliminary Programming Screen - Published on 06/28/2017

Generated by Rax Jung (on behalf of Florida's Turnpike Enterprise)

Printed on: 6/28/2017

Table of Contents

Introduction to Programming Screen Summary Report

The Programming Screen Summary Report shown below is a read-only version of information contained in the Programming Screen Summary Report generated by the ETDM Coordinator for the selected project after completion of the ETAT Programming Screen review. The purpose of the Programming Screen Summary Report is to summarize the results of the ETAT Programming Screen review of the project; provide details concerning agency comments about potential effects to natural, cultural, and community resources; and provide additional documentation of activities related to the Programming Phase for the project. Available information for a Programming Screen Summary Report includes:

- Screening Summary Report chart
- Project Description information (including a summary description of the project, a summary of public comments on the project, and community-desired features identified during public involvement activities)
- Purpose and Need information (including the Purpose and Need Statement and the results of agency reviews of the project Purpose and Need)
- Alternative-specific information, consisting of descriptions of each alternative and associated road segments; an overview of ETAT Programming Screen reviews for each alternative; and agency comments concerning potential effects and degree of effect, by issue, to natural, cultural, and community resources.
- Project Scope information, consisting of general project recommendations resulting from the ETAT Programming Screen review, permits, and technical studies required (if any)
- Class of Action determined for the project
- Dispute Resolution Activity Log (if any)

The legend for the Degree of Effect chart is provided in an appendix to the report.

For complete documentation of the project record, also see the GIS Analysis Results Report published on the same date as the Programming Screen Summary Report.

#14322 HEFT (SR 821) Widening US 1 South of Palm Drive to Campbell Drive

District: District 6
County: Miami-Dade
Planning Organization: Florida's Turnpike Enterprise
Plan ID: Not Available
Federal Involvement: Other Federal Permit

Phase: Programming Screen
From: US 1, Just south of Palm Drive
To: Campbell Drive
Financial Management No.: 439545-1

Contact Information: Brian Ribaric (407) 264-3095 brian.ribaric@dot.state.fl.us
Snapshot Data From: Programming Screen Summary Report Published on 06/28/2017 by Rax Jung
Issues and Categories are reflective of what was in place at the time of the screening event.

	Social and Economic							Cultural			Natural					Physical					
	Land Use Changes	Social	Relocation Potential	Farmlands	Aesthetic Effects	Economic	Mobility	Section 4(f) Potential	Historic and Archaeological Sites	Recreation Areas	Wetlands and Surface Waters	Water Quality and Quantity	Floodplains	Wildlife and Habitat	Coastal and Marine	Noise	Air Quality	Contamination	Infrastructure	Navigation	Special Designations
Alternative #1 From: US 1, Just south of Palm Drive To: Campbell Drive *Published: 06/28/2017 Reviewed from 03/15/2017 to 04/29/2017)*	1	3	2	0	2	1	1	N/A	2	0	3	4	2	3	0	2	2	2	2	N/A	3

Purpose and Need

Purpose and Need

The purpose of the Homestead Extension of Florida's Turnpike (HEFT) (SR 821) widening from US 1 south of Palm Drive to Campbell Drive is to provide additional capacity on this main expressway. This portion of the expressway passes through Homestead and Florida City and leads to the Florida Keys, a major tourist destination. Additionally, this widening project will satisfy increasing traffic demands and improve evacuation and response times for surrounding communities.

Currently, this roadway is a four-lane divided highway servicing nearby communities and through traffic visiting the Florida Keys. Traffic volumes have been increasing over the past several years and are expected to continue to increase. Traffic growth from 1998-2011 was 7.7 percent per year on the southern portion of the HEFT. Per the Florida's Turnpike Enterprise (FTE) Planning Department, traffic numbers within the study area of the HEFT will increase beyond the capacity of the roadway. Additionally, proposed housing and commercial developments near the study area, i.e. Florida City Commons Development of Regional Impact (DRI), will contribute traffic to the areas roadways generating a need for sufficient roadways. A lack of improvements would cause traffic congestion and a likely increase in crashes. Lastly, HEFT has been classified as an emergency evacuation route by the Florida Division of Emergency Management. Therefore, widening of HEFT will decrease emergency response times and will expedite evacuation for surrounding communities in Miami-Dade County and Monroe County (FL Keys) residents/visitors.

Project Description

The HEFT is a southern extension (47 miles) of Florida's Turnpike and is a limited access facility that extends from the Florida's Turnpike Mainline (SR 91) to the municipalities of western Miami-Dade County. The HEFT originates at the Florida's Turnpike Mainline, four miles north of the Golden Glades interchange, and terminates at US 1 in Florida City. HEFT has a design speed of 65 miles per hour. This roadway provides regional mobility within Miami-Dade County and it is a part of the Strategic Intermodal System (SIS). The SIS includes Florida's important transportation facilities that support the state's economy and mobility.

The study area currently consists of a four-lane divided expressway with a 64-foot-wide grass median. The right of way (R/W) width varies slightly but is generally 300 feet. The southern terminus of the project is at US 1 (Milepost (MP) 0) and the northern terminus is Campbell Drive (MP 2). Just south of the Palm Drive/US 1/HEFT interchange is the continuation of US 1 and the beginning of Card Sound Road, both of which are main corridors leading to/from the Florida Keys.

There are two alternatives being considered: alternative 1, which consists of three general use lanes in each direction, and alternative 2, which consists of two general use lanes and one express lane in each direction. The interchange/intersection at Palm Drive/US 1/HEFT will also be evaluated. The improvements will facilitate traffic demands at the US 1 and Palm Drive intersection especially to/from the Florida Keys. Additionally, at MP 0, a two-lane southbound ramp from the HEFT to southbound US 1 is being considered as part of the interchange improvements. Lastly, stormwater management facilities will be evaluated along with improvements to bridges within the study area.

Summary of Public Comments

Summary of Public Comments is not available at this time.

Planning Consistency Status

Potential Lead Agencies

- FL Department of Transportation

Exempted Agencies

Agency Name	Justification	Date
Federal Transit Administration	FTA has requested to be exempt from reviewing any non-transit projects.	02/21/2017

Community Desired Features

No desired features have been entered into the database. This does not necessarily imply that none have been identified.

User Defined Communities Within 500 Feet

No user defined communities were found within a 500 ft. buffer distance for this project.

Census Places Within 500 Feet

- Florida City
- Homestead

Purpose and Need Reviews

FL Department of Agriculture and Consumer Services

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	04/19/2017	Steve Bohl (Steve.Bohl@freshfromflorida.com)	No Purpose and Need comments found.

FL Department of Economic Opportunity

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	04/28/2017	Matt Preston (matt.preston@deo.myflorida.com)	No Purpose and Need comments found.

FL Department of Environmental Protection

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	04/28/2017	Suzanne Ray (plan.review@dep.state.fl.us)	No Purpose and Need comments found.

FL Department of State

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	04/04/2017	Daniel McClarnon (daniel.mcclarnon@dos.myflorida.com)	No Purpose and Need comments found.

FL Fish and Wildlife Conservation Commission

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	04/24/2017	Jennifer Goff (jennifer.goff@MyFWC.com)	No Purpose and Need comments found.

National Marine Fisheries Service

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	03/20/2017	Brandon Howard (Brandon.Howard@noaa.gov)	None

National Park Service

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	04/12/2017	Anita Barnett (anita_barnett@nps.gov)	No Purpose and Need comments found.

Natural Resources Conservation Service

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	04/07/2017	Rick Robbins (rick.a.robbins@fl.usda.gov)	No Purpose and Need comments found.

South Florida Water Management District

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	04/26/2017	Mindy Parrott	No Purpose and Need comments found.

		(mparrott@sfwmd.gov)	

US Army Corps of Engineers

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	04/14/2017	Tarrie Ostrofsky (Tarrie.L.Ostrofsky@usace.army.mil)	The Corps understands the purpose and need for this project.

US Coast Guard

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	03/16/2017	Randall Overton (randall.d.overton@uscg.mil)	No Coast Guard Involvement

US Environmental Protection Agency

Acknowledgment	Date Reviewed	Reviewer	Comments
Not Understood	04/29/2017	Kim Gates (gates.kim@epa.gov)	The USEPA understands the purpose of the project - widening of the HEFT to six lanes. However, stating that "traffic numbers within the study area of the HEFT will increase beyond the capacity of the roadway" does not demonstrate need without supporting data and analysis. According to the PD&E Manual (Part 2, Chapter 4), "the need should consist of a factual, objective description of the specific transportation problem supported by data and analysis. Detailed analysis supporting the need should be referenced in the purpose and need discussion." And, for capacity improvement projects, "[d]iscuss the capacity of the existing facility, its existing and anticipated LOS, and any operational deficiencies of the facility." Please provide current and projected Annual Average Daily Traffic (AADT) data and a Level of Service (LOS) analysis of the existing and projected traffic volumes, including the year in which the existing facility will reach LOS F without improvement, in the ETDM Summary Report. Furthermore, the purpose and need "should be based on articulated planning factors and developed through a planning process pursuant to applicable federal law" and the PD&E Manual identifies "transportation planning data developed for MPO/TPO LRTPs [as] the primary source of information used to establish the purpose and need." However, the project is not in the Miami-Dade MPO 2040 LRTP (http://www.miamidade2040lrtp.com/). Please address this inconsistency in the ETDM Summary Report.

US Fish and Wildlife Service

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	03/16/2017	John Wrublik (john_wrublik@fws.gov)	No Purpose and Need comments found.

The following organizations were notified but did not submit a review of the Purpose and Need:

- FDOT Office of Environmental Management
- Miami-Dade Expressway Authority
- Seminole Tribe of Florida

Alternative #1

Alternative Description

Name	From	To	Type	Status	Total Length	Cost	Modes	SIS
Alternative was not named.	US 1, Just south of Palm Drive	Campbell Drive	Widening	ETAT Review Complete	? mi.		Roadway	Y

Segment Description(s)

Location and Length

Segment Record	Segment Name	Facility Name	Beginning Location	Ending Location	Length (mi.)	Roadway Id	BMP	EMP
S-001	Alternative 1	Alternative 1			3.143	Digitized		

Jurisdiction and Class

Segment Record	Segment Name	Jurisdiction	Urban Service Area	Functional Class
S-001	Alternative 1			

Base Conditions

Segment Record	Segment Name	Year	AADT	Lanes	Config
S-001	Alternative 1				

Interim Plan

Segment Record	Segment Name	Year	AADT	Lanes	Config
S-001	Alternative 1				

Needs Plan

Segment Record	Segment Name	Year	AADT	Lanes	Config
S-001	Alternative 1				

Cost Feasible Plan

Segment Record	Segment Name	Year	AADT	Lanes	Config
S-001	Alternative 1				

Funding Sources

No funding sources found.

Project Effects Overview for Alternative #1

Issue	Degree of Effect	Organization	Date Reviewed
Social and Economic			
Land Use Changes	1 Enhanced	FL Department of Economic Opportunity	04/28/2017
Social	4 Substantial	US Environmental Protection Agency	04/29/2017
Farmlands	0 None	Natural Resources Conservation Service	04/07/2017
Economic	1 Enhanced	FL Department of Economic Opportunity	04/28/2017
Cultural			
Historic and Archaeological Sites	2 Minimal	FL Department of State	04/04/2017
Recreation Areas	0 None	FL Department of Environmental Protection	04/28/2017
Recreation Areas	0 None	South Florida Water Management District	04/26/2017
Recreation Areas	0 None	National Park Service	04/19/2017
Natural			
Wetlands and Surface Waters	3 Moderate	US Environmental Protection Agency	04/29/2017
Wetlands and Surface Waters	2 Minimal	FL Department of Environmental Protection	04/28/2017

Wetlands and Surface Waters	2 Minimal	South Florida Water Management District	04/26/2017
Wetlands and Surface Waters	3 Moderate	US Army Corps of Engineers	04/14/2017
Wetlands and Surface Waters	0 None	National Marine Fisheries Service	03/20/2017
Wetlands and Surface Waters	2 Minimal	US Fish and Wildlife Service	03/16/2017
Water Quality and Quantity	4 Substantial	US Environmental Protection Agency	04/29/2017
Water Quality and Quantity	0 None	FL Department of Environmental Protection	04/28/2017
Water Quality and Quantity	2 Minimal	South Florida Water Management District	04/26/2017
Floodplains	2 Minimal	South Florida Water Management District	04/26/2017
Wildlife and Habitat	2 Minimal	FL Fish and Wildlife Conservation Commission	04/24/2017
Wildlife and Habitat	0 None	FL Department of Agriculture and Consumer Services	04/19/2017
Wildlife and Habitat	3 Moderate	US Fish and Wildlife Service	03/16/2017
Coastal and Marine	0 None	South Florida Water Management District	04/26/2017
Coastal and Marine	0 None	National Marine Fisheries Service	03/20/2017
Physical			
Air Quality	2 Minimal	US Environmental Protection Agency	04/29/2017
Contamination	3 Moderate	US Environmental Protection Agency	04/29/2017
Contamination	2 Minimal	FL Department of Environmental Protection	04/28/2017
Contamination	2 Minimal	South Florida Water Management District	04/26/2017
Navigation	N/A N/A / No Involvement	US Army Corps of Engineers	04/14/2017
Navigation	N/A N/A / No Involvement	US Coast Guard	03/16/2017
Special Designations			
Special Designations	3 Moderate	US Environmental Protection Agency	04/29/2017
Special Designations	0 None	South Florida Water Management District	04/26/2017

ETAT Reviews and Coordinator Summary: Social and Economic

Land Use Changes

Project Effects

Coordinator Summary Degree of Effect: 1 *Enhanced* assigned 06/12/2017 by Florida's Turnpike Enterprise

Comments:

The Florida Department of Economic Opportunity (FDEO) stated that the proposed improvements are consistent with the development goals and the Comprehensive Plan of the City of Homestead. The Future Transportation Map for the City includes the entire proposed project. The Future Land Use Map includes the following categories surrounding the project: light commercial, medium density residential, low density residential, technology mixed, and planned urban neighborhood. The project is not included in the Turnpike Five-year Work Program and therefore should be added for future planning.

Degree of Effect: 1 *Enhanced* assigned 04/28/2017 by Matt Preston, FL Department of Economic Opportunity

Coordination Document: No Involvement

Direct Effects

Identified Resources and Level of Importance:

Comprehensive Plan(s) Reviewed:
Homestead Comprehensive Plan, with EAR Based Amendments,adopted June 7, 2011.

Comments on Effects to Resources:

Compatibility with Community Development Goals and Comprehensive Plan:
The project is compatible with the City's development goals and consistent with its comprehensive plan.

The City of Homestead aims to provide a safe, convenient, and efficient multi-modal transportation system for its residents and visitors by building necessary transportation improvements and coordinating with Miami-Dade County and the State of Florida on their proposed projects. The proposed project is included in the City's comprehensive plan (widening of the Turnpike to 6 lanes through the City) and would improve the flow of traffic along this major roadway. Additionally, the proposed project supports the city's safety goals as the Turnpike corridor serves as a Primary Emergency Evacuation Route.

The project is incorporated into the City of Homestead's Comprehensive Plan, Transportation Element. Objective 3: Enhance Regional Access aims to promote traffic and transit improvements which enhance regional access to and from other parts of Miami-Dade County. Policy 3.6 under the previously mentioned Objective calls for the coordination with FDOT and Miami-Dade County to evaluate and consider the feasibility of a proposed interchange at Lucy Street and the Turnpike. Additionally, under Objective 6: Coordinate with Other Transportation Entities, Policy 6.1 calls for ensuring that the primary arterial connections between the City of Homestead and other urban centers in Miami-Dade County are adequate to accommodate future growth through the year 2030. Additionally, Policy 6.5 calls for continued coordination and planning with the County's Emergency Management office in order to provide safe and efficient hurricane or disaster evacuation for residents of the City of Homestead, Florida City, and neighboring Monroe County.

Future Transportation Map:
The 2030 Future Transportation Map incorporated into the City's Comprehensive Plan Transportation Element shows The Florida Turnpike as a six (6) lane facility, designated as a long-term improvement (2030) with a full interchange located at Campbell Drive/312th Street, and a new Turnpike Interchange at SW 328th Street.

The project, as proposed, calls for the expansion of the Florida Turnpike from a divided 4-lane thoroughfare to a divided 6-lane thoroughfare with three travel lanes in each direction. Interchange, bridge, and stormwater facility improvements are also proposed in association with this project, which is consistent with the City's Future Transportation Map.

Land Uses:
Future Land Use Map categories surrounding the project include:

LCU - Light Commercial Use
MRU - Medium Density Residential Use
LRU - Low Density Residential Use
TMU - Technology Mixed Use
PUN - Planned Urban Neighborhood

Parks:
The project is located in close proximity to the following parks: Audubon Park and Mayor Roscoe Warren Municipal Park. FDOT should analyze potential impacts to this 4(f) resource.

Area of Critical State Concern (ACSC), Coastal High Hazard Area (CHHA), and Military Bases:
The project is not located within an Area of Critical State Concern, or the CHHA; nor does it encroach on any military bases.

Other Planning-Related Items:
The project is within a mile of the Homestead Air Reserve Base. The increased capacity would potentially enhance mobility for trips to and from the base station. Additionally, a hospital and several shopping centers indicated as trip generators are immediately adjacent to the Campbell Drive and Mowery Drive interchanges near this project.

Contact Information:
David Hennis (City of Homestead) - Phone Number: (305) 224-4524.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

CLC Recommendations:

Indirect Effects
Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Social

Project Effects

Coordinator Summary Degree of Effect: 3 *Moderate* assigned 06/27/2017 by Florida's Turnpike Enterprise

Comments:
The US Environmental Protection Agency (USEPA) stated that the proposed project may adversely affect minority, low-income, or other special populations. A Public Involvement Plan (PIP) consistent with the Project Development and Environment (PD&E) Manual, Part 1, Chapter 11 will be prepared and implemented for this proposed project. Due to the presence of persons with limited English proficiency within the study area, the public involvement process will include *Improving Access to Services for Persons with Limited English Proficiency*. The proposed project will be constructed within existing right-of-way and therefore right-of-way acquisition of parcels is not anticipated. A Sociocultural Effects Technical Memorandum will be completed according to the PD&E Manual, Part 2, Chapter 4. Based on the comments from the USEPA, the 1/4-mile buffer distance has been applied to the Environmental Screening Tool (EST) review. The results of this review are:

Within the 1/4-mile buffer distance from the proposed widening corridor, there are approximately 28.1 acres of public land. There is one existing recreational trail: East Coast Greenway - Dade Corridor, and four proposed recreational trails: Biscayne-Everglades Greenway Corridor, Mowry Trail, Krome Trail Road ROW Corridor, and the South Dade Trail. There is one neighborhood park/playground within the 1/4-mile buffer: Dunwoodie Park. There are two religious centers within the 1/4 mile buffer: Gate Way Church of Christ and Kingdom Hall of Jehovah's Witnesses. There are two schools within the 1/4 mile buffer: Campbell Drive Middle School and Beauty Schools of America - Homestead. Impacts to community resources are not anticipated, but will be confirmed during the PD&E phase.

According to the 2010 Census data, there are 15 Census Block Groups within the 1/4 mile project buffer. Within these 15 block groups, the housing vacancy rate is approximately 15 percent. Only two of the census block groups (120860110071 and 120860114012) contain a majority white alone population. One census block group (120860113004) contains a majority Black or African American alone population (63.6%). In the remaining 12 census block groups, the percent Hispanic or Latino of any race is comparable to the white alone population, with neither population comprising more than 50% of the total population.

During the PD&E phase, public outreach will be conducted to solicit input and ensure that both the social and transportation needs of the community are addressed. A Sociocultural Effects Evaluation, and Noise Study will be conducted during the PD&E phase to evaluate potential effects to adjoining communities and methods to avoid and minimize these effects. Mitigation will be considered if impacts are unavoidable.

Degree of Effect: 4 *Substantial* assigned 04/29/2017 by Kim Gates, US Environmental Protection Agency

Coordination Document: PD&E Support Document As Per PD&E Manual
Coordination Document Comments:
Sociocultural Effects (SCE) Evaluation Technical Memorandum (PD&E Manual, Part 2, Chapter 9; FDOT's Sociocultural Effects Evaluation Handbook)

Direct Effects
Identified Resources and Level of Importance:

A social impact can be defined as any action or activity that affects how people live, work, play, relate to one another, organize to meet their needs, and function as individuals and/or society. In particular, transportation actions can impact community cohesion, goals, and mobility, as well as the everyday quality of life of its citizens.

Historically, minority, disadvantaged, low-mobility, and low-income populations were underrepresented in transportation project planning processes due to inadequate opportunities for involvement. However, federal laws enacted since 1964 now protect the civil rights of these populations. The federal government has also established policies to ensure transportation agencies take action to overcome potential linguistic, institutional, cultural, economic, historical, or other barriers that may have impeded the public's ability to understand the information provided and become involved in the decision-making process. These policies include, but are not limited to:

Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations [February 11, 1994];

USDOT Order 5610.2: Department of Transportation Actions to Address Environmental Justice in Minority Populations and Low-Income Populations [April 1997]; and

USDOT Order 6640.23: FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations [December 1998].

Comments on Effects to Resources:

It is not clear why a 500-foot buffer area was used in the Preliminary Environmental Discussion Comments Report (PED) to assess the potential social impacts of the project. The FDOT PD&E Manual (Part 2, Chapter 9) prescribes use of a 1/4-mile buffer in urban areas, and the project is located in the U.S. Census-designated Miami Urbanized Area (https://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua56602_miami_fl/DC10UA56602.pdf). Moreover, the Sociocultural Effects Evaluation Handbook (page 6-11) states that the "1/4 Mile buffer is the preferred buffer for SCE evaluations to allow for the inclusion of community facilities and address connectivity." Please provide an explanation in the ETDM Summary Report for this apparent deviation from FDOT policy and indicate whether the Sociocultural Effects Evaluation mentioned in the PED will be consistent with the PD&E Manual and FDOT's Sociocultural Effects Evaluation Handbook.

The PD&E Manual (in Part 1, Chapter 3) also specifies that the PED should consider "the community demographics (e.g., age, income, minority populations), underserved populations/environmental justice concerns, community cohesion, safety/emergency response, community character, community goals, and describe potential involvement with them as appropriate." However, insufficient information was provided in the PED to characterize minority, disadvantaged, low-income, and other special populations that will be impacted by the project.

Utilizing the prescribed 1/4 -mile buffer and EJSCREEN* (http://www2.epa.gov/ejscreen), the USEPA identified the following populations of concern along the project corridor:

Approximate Total Population = 5,108
Minority Population = 76% [State Average = 43%]
Low Income Population = 60% [State Average = 38%]
Linguistically Isolated Population = 16% [State Average = 7%]
Population with Less than High School Education = 23% [State Average = 14%]
Population Under 5 Years of Age = 9% [State Average = 6%]
Population Over 64 Years of Age = 9% [State Average = 18%]

As a result, it appears that the project will have disproportionately high and adverse human health or environmental effects on minority, low-income, and other special populations.

Due to the presence of statistically significant linguistically-isolated and less educated populations, the USEPA recommends complying with Executive Order 13166, *Improving Access to Services for Persons with Limited English Proficiency* (https://www.fhwa.dot.gov/civilrights/programs/lep.cfm), as described in the Federal Highway Administration's *How to Engage Low-Literacy and Limited-English-Proficiency Populations in Transportation Decisionmaking* (www.fhwa.dot.gov/planning/publications/low-limited/). Please confirm in the ETDM Summary Report whether LEP considerations will be included in the public involvement process.

Moreover, please discuss the public involvement process in the ETDM Summary Report. The only reference to public involvement in

the project documentation is the statement in the Purpose and Need that "[a] public information meeting and a public hearing is [*sic*] planned for this project. The exact dates have not been determined at this time." No information was provided regarding development and implementation of a Public Involvement Plan (PIP) consistent with the PD&E Manual (Part 1, Chapter 11) and FDOT's Public Involvement Handbook (http://www.fdot.gov/environment/pubs/public_involvement/PI Handbook_July 2015.pdf). Consequently, the USEPA was not able to determine if FTE will provide affected communities with the tools to understand technically complex issues (e.g., summary reports and background explanations in plain language) and opportunities for meaningful participation in the project development process. Please address this discrepancy in the ETDM Summary Report.

* Although use of EJSCREEN is discussed in USEPA policy (https://www.epa.gov/sites/production/files/2016-05/documents/052216_ej_2020_strategic_plan_final_0.pdf), it is a pre-decisional screening tool. It was not designed to be the basis for agency decision-making or determinations regarding the existence or absence of EJ concerns, nor should it be used to identify or label an area as an "EJ Community." Rather, EJSCREEN highlights locations that may be candidates for further review and/or outreach. EJSCREEN data needs to be supported by community-specific demographic information and local knowledge. [https://www.epa.gov/sites/production/files/2015-05/documents/ejscreen_technical_document_20150505.pdf]

Recommended Avoidance, Minimization, and Mitigation Opportunities:

The USEPA endorses conducting a Sociocultural Effects Evaluation to better define the demographics of the affected communities, to identify current community concerns and preferences, and to determine the most appropriate public involvement activities for incorporation in the updated Public Involvement Plan.

We also support the noise study mentioned in the PED. Some of the homes along the HEFT are less than 100 feet from the roadway and it is not evident that noise abatement measures are in place.

To ensure that all interested parties and community concerns are identified, the USEPA recommends conducting outreach to key interest groups, such as civic and business associations, neighborhood/homeowner associations, the management companies for the Colony Lakes Apartments (TRG Management, http://trgmanagementcompany.com/property/colony-lakes-apartments/) and Monterey Pointe Apartments (Cornerstone Residential Management, http://theapartmentcorner.com/communities/monterey-pointe/), and other active special interest groups, in addition to the City of Homestead's elected officials (http://ci.homestead.fl.us/index.aspx?NID=89). Neighborhood and community associations in the project corridor include Atlantis at the Oasis Neighborhood Association (registered with the Florida Secretary of State as a not-for-profit corporation, FE/EIN #20-3618391), Lakeshore Community Association (http://lakeshorecommunity.info/), and the East Homestead Community Development District (http://www.easthomesteadcdd.com/).

Additional Comments (optional):

Sociocultural Effects (SCE) Evaluation Technical Memorandum (PD&E Manual, Part 2, Chapter 9; FDOT's Sociocultural Effects Evaluation Handbook)

CLC Recommendations:

Indirect Effects
Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Relocation Potential

Project Effects

Coordinator Summary Degree of Effect: 2 *Minimal* assigned 06/12/2017 by Florida's Turnpike Enterprise

Comments:
No Environmental Technical Advisory Team (ETAT) reviews were submitted for this issue. The proposed project is being conducted

entirely within existing Florida Department of Transportation (FDOT) right-of-way and therefore, no acquisition of parcels will be required.

None found

Farmlands

Project Effects

Coordinator Summary Degree of Effect: 0 *None* assigned 06/27/2017 by Florida's Turnpike Enterprise

Comments:
While the project may have lands classified as Farmland of Unique Importance, this project is being completed without a federal agency or financial or technical assistance from a federal agency. The documentation for this project is a State Environmental Impact Report (SEIR). Pursuant to Part 2, Chapter6 of the Project Development and Environment (PD&E) Manual, the project is not subject to the provisions of the Farmland Protection Policy Act of 1981, 7 CFR Part 658. Additionally, the project is being conducted within existing right-of-way. If the project footprint extends beyond the current right-of-way, Florida's Turnpike Enterprise will provide Geographic Information Systems (GIS) shapefiles to the Natural Resources Conservation Service (NRCS) showing the Farmlands with Unique Importance that would be impacted by the project.

Degree of Effect: 0 *None* assigned 04/07/2017 by Rick Allen Robbins, Natural Resources Conservation Service

Coordination Document: To Be Determined: Further Coordination Required
Coordination Document Comments:
If this project extends beyond the current right of way footprint, the GIS analysis data indicates that between60and63 percent of the total project area is classified as Farmland of Unique Importance. The Farmland Protection Policy Act (FPPA) (PL 97-98; 7 U.S.C. 4201 et seq.) was enacted to protect the amount of open farmland which has substantially decreased as a result of land use changes. It states that Federal programs which contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses will be minimized. Agencies are also to consider alternative actions and ensure that their programs are compatible with state and local government programs.

Environmental assessments must be prepared for actions which may adversely affect such unique geographic characteristics as prime farmlands. The regulations apply to construction activities, development grants and loans, and certain Federal land management decisions that contribute either directly or indirectly to loss of farmland**.**
A Farmland Protection Policy Act form (AD-1006) may be required for this project. Please refer to the link below for more information:
https://www.nrcs.usda.gov/wps/portal/nrcs/detail/fl/soils/?cid=stelprdb1101661

Direct Effects

Identified Resources and Level of Importance:

The USDA-NRCS considers soil map units with important soil properties for agricultural uses to be Prime Farmland (Important Farmland soils). Prime Farmland (as defined in ETDM) is classified in several different categories based on specific criteria. **Prime Farmland** must meet specific soil-related criteria, as defined by the USDA-Natural Resources Conservation Service. **Farmland of Unique Importance** is based on the ability of the soil to grow very specific crops, such as citrus, vegetables, sugar cane, and other high-value specialty crops. It is also based on the extent that a soil is used for these crops within a specific county. Therefore, a soil in one county may be Unique Farmland, but not in an adjacent county. **Farmland of Local Importance** is classified as being important to the local entities (counties) and worthy of special consideration. Locally Important Farmland soils were designated by local governance (Soil and Water Conservation Districts).

Nationally, there has been a reduction in the overall amount of Prime, Locally Important, and Unique Farmlands through conversion to non-farm uses. This trend has the possibility of impacting the nation's food supply and exporting capabilities.

Comments on Effects to Resources:

Conducting GIS analysis of Prime Farmland (using USDA-NRCS data) and Important Farmland Analysis (using 2008 SFWMD data and 2015 SSURGO data) has resulted in the determination that there are soils designated as Farmland of Unique Importance at all buffer widths within the Project footprint. In addition, there are areas currently used for agricultural production at the 200 and 500 foot buffer widths.

At the 100 foot buffer width, there are47.97 acres of Farmland of Unique Importance. At the 200 foot buffer width, there are96.15 acres of Prime Farmland. At the 500 foot buffer width, there are242.62 acres of Prime Farmland.

Land used for agricultural production (SFWMD Ag Lands 2008-*row crops)* ranges from0.87 acre at the 200 foot buffer width to 25.93 acres at the 500 foot buffer width. There is no agricultural land within the 100 foot buffer width.

More importantly,land in agricultural use (primarily row crops) thatalso classifies as Prime Farmlandranges from0.87 acres at the 200 foot buffer width to25.93 acres at the 500 foot buffer width. This combination of Important Farmland that is agricultural production amounts to approximatelyless than 1to 6.5% of the Project footprint (depending on buffer width).

Under normal circumstances, this project would rate out as having Moderate Degree of Effect to Important Farmland soils. However, since this is a Widening Project we have downgraded the Effect to Minimal. If this project extends beyond the existing ROW, we will change the Degree of Effect accordingly.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

An *important* note concerning soils classified as Prime, Unique, or Locally Important Farmland:

It is important to remember that when agricultural lands that support commodity and other types ofagricultural cropsintersect any type of Important Farmland (Prime, Unique, or Local), there will be a net loss of an important agricultural and national resource.

Once these important farmland soils have been truncated, heavily modified, or filled upon, theinherent soil properties that made these soils productive (and worthy of these farmland designations) will be lost. Even with land use designation shifts from rural to urban, the future needs and requirements of society as a whole should always be considered. The change in land use designations are temporal when based on scales of human and geologic time.

Additional Comments (optional):

If this project extends beyond the current right of way footprint, the GIS analysis data indicates that between60and63 percent of the total project area is classified as Farmland of Unique Importance. The Farmland Protection Policy Act (FPPA) (PL 97-98; 7 U.S.C. 4201 et seq.) was enacted to protect the amount of open farmland which has substantially decreased as a result of land use changes. It states that Federal programs which contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses will be minimized. Agencies are also to consider alternative actions and ensure that their programs are compatible with state and local government programs.

Environmental assessments must be prepared for actions which may adversely affect such unique geographic characteristics as prime farmlands. The regulations apply to construction activities, development grants and loans, and certain Federal land management decisions that contribute either directly or indirectly to loss of farmland**.**
A Farmland Protection Policy Act form (AD-1006) may be required for this project. Please refer to the link below for more information:
https://www.nrcs.usda.gov/wps/portal/nrcs/detail/fl/soils/?cid=stelprdb1101661

CLC Recommendations:

Indirect Effects
Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Aesthetic Effects

Project Effects

Coordinator Summary Degree of Effect: 2 *Minimal* assigned 06/12/2017 by Florida's Turnpike Enterprise

Comments:

No Environmental Technical Advisory Team (ETAT) reviews were submitted for this issue. The project is not likely to create any adverse impacts to aesthetics. Noise walls may be considered and will be evaluated in the Project Development and Environment (PD&E) Study. Public involvement will solicit public opinion on project effects, and general design concepts related to aesthetics.

None found

Economic

Project Effects

Coordinator Summary Degree of Effect: 1 *Enhanced* assigned 06/12/2017 by Florida's Turnpike Enterprise

Comments:

The project is expected to improve travel times and reduce congestion within the corridor, which may promote local development. Additionally, the construction of the project will promote job growth within the area.

Degree of Effect: 1 *Enhanced* assigned 04/28/2017 by Matt Preston, FL Department of Economic Opportunity

Coordination Document: No Involvement

Direct Effects

Identified Resources and Level of Importance:

Comprehensive Plan(s) Reviewed:
Homestead Comprehensive Plan, with EAR Based Amendments,adopted June 7, 2011.

Comments on Effects to Resources:

The project *is not* located within a Rural Area of Opportunity.

In the short-term, quicker travel times and less congestion along the corridor have the potential to enhance development opportunities in the area, as shorter commute times may spur increased land development. Existing County policies encourage greater development intensities and investments in transit facilities in the urban centers along the corridor and the addition of the express lanes may provide additional incentives for attracting new retail, office, and residential development, particularly near the Palm Drive/US 1/HEFT interchange. It is anticipated that these benefits will be minimized through continued induced demand effects.

The initial construction phase of the project would generate jobs. The congestion alleviation has the potential to add jobs in the near -term as a selling point to firms or development projects along the corridor, but the benefits of reduced congestion would likely decrease over time.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Mobility

Project Effects

Coordinator Summary Degree of Effect: 1 *Enhanced* assigned 06/12/2017 by Florida's Turnpike Enterprise

Comments:

No Environmental Technical Advisory Team (ETAT) reviews were submitted for this issue. The project will provide additional travel lanes on a main highway corridor within the City of Homestead. It is anticipated that emergency evacuation and response times for the surrounding communities and emergency services will be improved; thus, enhancing mobility in the project area. Additionally, the potential improvements may stimulate economic activity surrounding the project.

None found

ETAT Reviews and Coordinator Summary: Cultural

Section 4(f) Potential

Project Effects

Coordinator Summary Degree of Effect: N/A *N/A / No Involvement* assigned 06/12/2017 by Florida's Turnpike Enterprise

Comments:

The Florida Department of Economic Opportunity (FDEO) commented under the Land Use Changes section that two parks, Audubon Park and Mayor Roscoe Warren Municipal Park, are in close proximity to the proposed project. FDEO stated that impacts to these 4(f) resources should be analyzed. Section 4(f) is not applicable on state funded projects, however effects to recreational facilities will be evaluated in the PD&E Study.

None found

Historic and Archaeological Sites

Project Effects

Coordinator Summary Degree of Effect: 2 *Minimal* assigned 06/12/2017 by Florida's Turnpike Enterprise

Comments:

A Cultural Resources Assessment Survey (CRAS) will be prepared and coordinated with the State Historic Preservation Officer (SHPO).

Degree of Effect: 2 *Minimal* assigned 04/04/2017 by Daniel McClarnon, FL Department of State

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Our office will review once a Cultural Resource Assessment Survey is completed and submitted.

Comments on Effects to Resources:

see above

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

The following organization(s) were expected to but did not submit a review of the Historic and Archaeological Sites issue for this alternative: Seminole Tribe of Florida

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Recreation Areas

Project Effects

Coordinator Summary Degree of Effect: 0 *None* assigned 06/12/2017 by Florida's Turnpike Enterprise

Comments:
Within the 1/4-mile buffer distance from the proposed widening corridor, there are approximately 28.1 acres of public land. There is one existing recreational trail: East Coast Greenway - Dade Corridor, and four proposed recreational trails: Biscayne-Everglades Greenway Corridor, Mowry Trail, Krome Trail Road Row Corridor, and the South Dade Trail. There is one neighborhood park/playground: Dunwoodie Park. Impacts to these facilities are not anticipated, but will be confirmed during the Project Development and Environment (PD&E) phase.

Degree of Effect: 0 *None* assigned 04/28/2017 by Suzanne E. Ray, FL Department of Environmental Protection

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 0 *None* assigned 04/26/2017 by Mindy Parrott, South Florida Water Management District

Coordination Document: No Involvement

Direct Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:
There are no effects on SFWMD recreation areas, coastal resources or areas with special designations.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 0 *None* assigned 04/19/2017 by Anita Barnett, National Park Service

Coordination Document: No Involvement

Direct Effects
Identified Resources and Level of Importance:
Land and Water Conservation Fund sites can not be used as staging areas.

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

CLC Recommendations:

Indirect Effects
Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

ETAT Reviews and Coordinator Summary: Natural

Wetlands and Surface Waters

Project Effects

Coordinator Summary Degree of Effect: 3 *Moderate* assigned 06/27/2017 by Florida's Turnpike Enterprise

Comments:
During the Project Development and Environment (PD&E) phase, a wetland evaluation will be prepared and documented in a Natural Resource Evaluation (NRE) report in accordance with Part 2, Chapter9 of the PD&E Manual to determine the potential adverse impacts to wetlands. All necessary measures will be taken to avoid and/or minimize impacts to wetlands to the greatest extent practicable during project design. Should avoidance and/or minimization not be practicable, a mitigation plan will be prepared. Florida's Turnpike Enterprise will continue to coordinate with the US Army Corps of Engineers (USACE), US Fish and Wildlife (USFWS), Florida Fish and Wildlife Conservation Commission (FWC), and the South Florida Water Management District (SFWMD) during the PD&E and design phases of the project.

Degree of Effect: 3 *Moderate* assigned 04/29/2017 by Kim Gates, US Environmental Protection Agency

Coordination Document: PD&E Support Document As Per PD&E Manual
Coordination Document Comments:
Water Quality Impact Evaluation (PD&E Manual, Part 2, Chapter 20), and
Wetlands Evaluation Report (PD&E Manual, Part 2, Chapter 18).

Direct Effects
Identified Resources and Level of Importance:

Wetlands and other surface waters provide important and beneficial functions, including providing essential fish and wildlife habitat, buffering water quality impacts, storing floodwaters, and maintaining surface water flow during dry periods. However, "[a]s development increased and more paved areas covered the land, stormwater runoff became the primary source of pollution to surface waters in Florida" (http://www.swfwmd.state.fl.us/publications/files/stormwater_systems.pdf). The most common contaminants in highway runoff are heavy metals, inorganic salts, volatile organics, petroleum hydrocarbons, bacteria, pesticides/herbicides, and suspended solids that accumulate on the road surface as a result of regular highway operation and maintenance activities.

Various federal, state, and local laws have been enacted to protect surface water resources. The Clean Water Act (CWA) established the basic structure for regulating discharges of pollutants into the waters of the United States (which include wetlands) and provides statutory authority for various regulatory programs. CWA Section 402 requires permitting of all municipal, industrial and commercial facilities that discharge wastewater or stormwater directly from a point source into a surface water of the United States. These

National Pollutant Discharge Elimination System (NPDES) permits are written to ensure receiving waters will achieve Water Quality Standards established pursuant to CWA Section 303(c). In October 2000, the USEPA delegated authority to the Florida Department of Environmental Protection (FDEP) to implement the NPDES permitting program, which includes Municipal Separate Storm Sewer System (MS4) permits.

A separate type of permit is required to dispose of dredged or fill material in the nation's waters, including wetlands. Authorized by CWA Section 404, this permit program is administered by the U.S. Army Corps of Engineers, subject to and using the Section 404(b)(1) Guidelines developed by the USEPA in coordination with the Corps and codified in 40 CFR Part 230 (https://www.epa.gov/cwa-404/section-404b1-guidelines-40-cfr-230).

Comments on Effects to Resources:

The EST reported 14.83 acres of palustrine wetlands and 4.88 acres of riverine wetlands in the 500-foot buffer. Based on information in the U.S. Fish & Wildlife Service's National Wetlands Inventory (https://www.fws.gov/wetlands/), palustrine wetlands in the project corridor are associated with the following surface water features:

- one freshwater pond across the HEFT from the Walmart Supercenter, 33501 S Dixie Hwy, in Florida City (3.84 acres);
- one freshwater pond next to the Walmart Supercenter in Florida City (2.59 acres);
- two freshwater ponds in the Lakeshore Community (2.80 and 3.49 acres);
- two freshwater ponds in the Monterey Pointe Apartments (1.38 and 2.35 acres);
- one freshwater pond in the Colony Lakes Apartments (2.81 acres); and
- one freshwater pond in the southeast quadrant of the HEFT/Campbell Drive interchange (5.96 acres).

The riverine wetlands are associated with the Florida City Canal, North Canal, and the Mowry (C-103) Canal system.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

In general, the USEPA encourages the sequential avoidance, minimization, and mitigation of impacts on surface and ground waters in the project vicinity to the extent practicable. Stormwater runoff and its potential impact on water quality should be properly evaluated and addressed during PD&E. Consistent with the Miami-Dade County Phase I MS4 Permit, appropriate stormwater treatment systems and best management practices must be employed during construction (i.e., temporary BMPs) and post-construction (i.e., permanent BMPs during the operational life of the facility) to protect surface waters and prevent impacts to groundwater.

Additional Comments (optional):

Water Quality Impact Evaluation (PD&E Manual, Part 2, Chapter 20), and
Wetlands Evaluation Report (PD&E Manual, Part 2, Chapter 18).

CLC Recommendations:

Indirect Effects
Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 04/28/2017 by Suzanne E. Ray, FL Department of Environmental Protection
Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

The EST tool indicates that there are 15 acres of palustrine and 5 acres of riverine wetlands within the 500-foot project buffer.

Comments on Effects to Resources:
The proposed project may require an environmental resource permit (ERP) from the South Florida Water Management District for stormwater management. If any wetlands are affected, the ERP applicant will be required to eliminate or reduce the proposed wetland resource impacts of construction to the greatest extent practicable.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

CLC Recommendations:

Indirect Effects
Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 04/26/2017 by Mindy Parrott, South Florida Water Management District

Coordination Document: Permit Required
Coordination Document Comments:
An ERP and perhaps a Right of Way permit will be required. See comments under Water Quality and Quantity. A pre-application meeting is highly recommended.

Direct Effects
Identified Resources and Level of Importance:
Wetlands and surface waters

Comments on Effects to Resources:

Based on aerial photography, it does not appear that there are wetlands within the HEFT right of way in the project area. However, there may be wetlands associated with canals, or on adjacent properties. It is unclear if any impacts are proposed.

At the time of application for an Environmental Resource Permit, wetland and surface water impacts will be evaluated. Impacts to wetlands and surface waters must meet the criteria in Section 10 ofApplicant's Handbook Volume I, including Elimination and Reduction as well as mitigation.

If work is conducted in surface waters accessible to manatees (perhaps the C-103 canal) Manatee Conditions for in-water work must be followed and any outfalls must include grates to prevent manatee entrapment.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):
An ERP and perhaps a Right of Way permit will be required. See comments under Water Quality and Quantity. A pre-application meeting is highly recommended.

CLC Recommendations:

Indirect Effects
Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 3 *Moderate* assigned 04/14/2017 by Tarrie L Ostrofsky, US Army Corps of Engineers

Coordination Document: Permit Required
Coordination Document Comments:
Given the information provided, it is unclear as to the acreage of waters of the United States within the project limits. Therefore, the permitting mechanism is unclear. However, it is anticipated that the project would require a Section 404 permit, and the project may be evaluated under the Individual Permit process, or potentially the SAJ-92.

Direct Effects
Identified Resources and Level of Importance:

According to the information provided, the National Wetlands Inventory GIS identifiedapproximately 15 acres of palustrine wetlands and 5 acres of riverine wetlands within the 500-foot project buffer. The South Florida Water Management District GIS data did not show any wetlands within the project buffer. The information also indicates that a wetlands evaluation would be conducted to determine potential adverse impacts to wetlands. Given the above information, and assuming that the National Wetlands Inventory information is accurate, the effects to resources would be moderate. However, upon review of the wetlands evaluation, this determination may be modified.

Comments on Effects to Resources:
The direct effects on resources would include direct fill where roadway widening would occur. This would potentially affect hydrology, as well. If wetlands are located immediately adjacent to the roadway, the quality may be somewhat lower than resources further away from roadways, developed areas, etc.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Avoidance measures may include minimal widths of widened roadway to avoid impacts to resources, placement of stormwater management structuresand staging activities outside of aquatic resources, use of best management practices, etc. Minimization efforts may also include minimal widths of roadway to reduce impacts to aquatic resources, use of best management practices, minimal removal of vegetation and replacement shortly after removal, etc. If impacts to aquatic resources would still be proposed, compensatory mitigation opportunities should be evaluated.
According to a search of the Regulatory In-Lieu Fee and Bank Information Tracking System (RIBITS), the proposed project is within the service area of the FP&L Everglades Phase II Mitigation Bank, which utilizes the WATER assessment methodology, and the ILF-ENP-Hole-in-the-Donut in-lieu fee project, which utilizes the UMAM. The FDOT would need to evaluate the use of the federal mitigation bank first, then the in-lieu fee project, in accordance with the Mitigation Rule. If the FDOT proposes to utilize permittee responsible mitigation, justification as to why permittee responsible mitigation is the environmentally preferred method to offset impacts to aquatic resources.

Additional Comments (optional):
Given the information provided, it is unclear as to the acreage of waters of the United States within the project limits. Therefore, the permitting mechanism is unclear. However, it is anticipated that the project would require a Section 404 permit, and the project may be evaluated under the Individual Permit process, or potentially the SAJ-92.

CLC Recommendations:

Indirect Effects
Identified Resources and Level of Importance:

According to the information provided, the National Wetlands Inventory GIS identifiedapproximately 15 acres of palustrine wetlands and 5 acres of riverine wetlands within the 500-foot project buffer. The South Florida Water Management District GIS data did not show any wetlands within the project buffer. The information also indicates that a wetlands evaluation would be conducted to determine potential adverse impacts to wetlands. Given the above information, and assuming that the National Wetlands Inventory information is accurate, the indirect effects to resources would be moderate. However, upon review of the wetlands evaluation, this

determination may be modified.

Comments on Effects to Resources:
Indirect effects may involve hydrology changes to aquatic resources located outside of direct fill locations, sedimentation of adjacent aquatic resources due to erosion, increased water temperatures of received waters if vegetation is removed within the project limits, where the vegetation was providing shading of waters, etc.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Avoidance measures may includeno removal of vegetation, use of best management practices, clear identification of wetland boundaries to ensure work does not occur within those areas, staging in upland areas at an appropriate distance from aquatic resources, etc.Minimization measures may include minimal widthsand area of construction limits, minimal removal of vegetation and replacement shortly after removal,use of best management practices,etc. If indirectimpacts would still be proposed, the FDOT would need to evaluate potential mitigation opportunities to fully offset impacts to aquatic resources. According to a search of the RIBITS database, the proposed project is within the service area of the FP&L Everglades Phase II Mitigation Bank, which utilizes the WATER assessment methodology, and the ILF-ENP-Hole-in-the-Donut in-lieu fee project, which utilizes the UMAM. The FDOT would need to evaluate the use of the federal mitigation bank first, then the in-lieu fee project, in accordance with the Mitigation Rule. If the FDOT proposes to utilize permittee responsible mitigation, justification as to why permittee responsible mitigation is the environmentally preferred method to offset ndirectimpacts to aquatic resources.

Degree of Effect: 0 *None* assigned 03/20/2017 by Brandon Howard, National Marine Fisheries Service

Coordination Document: No Involvement

Direct Effects
Identified Resources and Level of Importance:
None

Comments on Effects to Resources:
None

Recommended Avoidance, Minimization, and Mitigation Opportunities:
Magnuson-Stevens Act: Based on the project location, information provided in the ETDM website, and GIS-based analysis of impacts, NOAA's National Marine Fisheries Service (NMFS) concludes the proposed work would not directly impact areas that support essential fish habitat (EFH) or NOAA trust fishery resources. NMFS has no comments or recommendations to provide pursuant to the EFH requirements of the Magnuson-Stevens Fishery Conservation and Management Act (P.L. 104-297); and this project will not require an EFH Assessment. Further consultation on this matter is not necessary unless future modifications are proposed and you believe that the proposed action may result in adverse impacts to EFH.

Endangered Species Act: We are not aware of any threatened or endangered species or critical habitat under the purview of NMFS that occur within the project area. However, it should be noted that a "no effect" determination must be made by the action agency and the reasoning underlying the determination should be documented in a project file. Please coordinate closely with the U.S. Fish and Wildlife Service for other species listed under the Endangered Species Act that may require consultation.

Fish and Wildlife Coordination Act: Based on the project location, information provided in the ETDM website, and GIS-based analysis of impacts, NOAA's National Marine Fisheries Service (NMFS) concludes the proposed work would not directly impact wetlands areas that support NOAA trust fishery resources. NMFS has no comments or recommendations to provide pursuant to the Fish and Wildlife Coordination Act.

Additional Comments (optional):

CLC Recommendations:

Indirect Effects
Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 03/16/2017 by John Wrublik, US Fish and Wildlife Service

Coordination Document: To Be Determined: Further Coordination Required

Direct Effects
Identified Resources and Level of Importance:
Wetlands

Comments on Effects to Resources:
Wetlands provide important habitat for fish and wildlife. Wetlands may occur within and near the project site. We recommend that these valuable resources be avoided to the greatest extent practicable. If impacts to these wetlands are unavoidable, we recommend the FDOT provide mitigation that fully compensates for the loss of important resources.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

CLC Recommendations:

Indirect Effects
Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Water Quality and Quantity

Project Effects

Coordinator Summary Degree of Effect: 4 *Substantial* assigned 06/12/2017 by Florida's Turnpike Enterprise

Comments:
The Project Development and Environment (PD&E) Study will include a Water Quality Impact Evaluation in accordance with Part 2, Chapter 20 of the PD&E Manual, which will identify potential effects on the surface and groundwater resources, identify the impaired waters and other water body classifications (Class I, II, III, Outstanding Florida Water (OFW), etc.) that could be affected by this project. In addition, a pond siting evaluation will be conducted to identify alternatives for stormwater management and treatment. The effects on water quality and means to avoid, minimize and mitigate impacts will be evaluated during the study based on the project specific effects from the alternatives developed during the study. Florida's Turnpike Enterprise will continue to coordinate with the US Environmental Protection Agency (USEPA), South Florida Water Management District (SFWMD), and Florida Department of Environmental Protection (FDEP) during the PD&E and Design phases of the project.

Degree of Effect: 4 *Substantial* assigned 04/29/2017 by Kim Gates, US Environmental Protection Agency

Coordination Document: PD&E Support Document As Per PD&E Manual
Coordination Document Comments:
Water Quality Impact Evaluation (PD&E Manual, Part 2, Chapter 20)

Direct Effects
Identified Resources and Level of Importance:

"Untreated stormwater runoff is now considered the state's leading source of pollution" (http://www.broward.org/WATERMATTERS/Pages/waterquality.aspx). Stormwater from impervious surfaces in urban environments, including roadways, conveys contaminants to surface water bodies, wetlands, and groundwater. The most common pollutants in

highway runoff are heavy metals, inorganic salts, volatile organics, petroleum hydrocarbons, bacteria, pesticides/herbicides, and suspended solids that accumulate on the road surface as a result of regular highway operation and maintenance activities.

The principal law governing pollution of the nation's surface waters is the Federal Water Pollution Control Act, or Clean Water Act. Prior to 1987, surface water protection programs were primarily directed at point source pollution (i.e., wastes discharged from discrete sources, such as pipes from manufacturing facilities and wastewater treatment plants). Recognizing the need to address nonpoint source pollution, including stormwater, the U.S. Congress revised the Clean Water Act in 1987. The USEPA responded to this legislation by implementing the Municipal Separate Storm Sewer System (MS4) permitting program via the Phase I (1990) and Phase II (1999) stormwater regulations. In October 2000, the USEPA delegated authority to the Florida Department of Environmental Protection (FDEP) to implement the MS4 programs.

Phase I MS4 operators are required to develop and implement comprehensive Stormwater Management Programs (SWMPs) that include pollution prevention measures, treatment or removal techniques, monitoring, use of legal authority, and other appropriate means to control the quality of stormwater discharged from the MS4. As co-permittees on Miami-Dade County's MS4 permit, Florida's Turnpike Enterprise (FTE) is required to reduce the discharge of pollutants in stormwater to the maximum extent practicable (https://www.epa.gov/npdes/stormwater-discharges-transportation-sources#overview). The minimum requirements that all FDOT Districts and FTE must maintain under their individual Stormwater Management Programs are outlined in the FDOT Statewide Stormwater Management Plan dated September 2012 (http://www.fdot.gov/maintenance/FDOTStormWaterMgmtPlan2012.pdf).

In addition to the delegated NPDES program, the State administers its own Environmental Resource Permitting (ERP) program for activities involving the alteration of surface water flows (http://www.dep.state.fl.us/WATER/wetlands/erp/index.htm). The ERP program is implemented by the Florida Department of Environmental Protection and the five Water Management Districts.

Comments on Effects to Resources:

Consistent with FDOT's PD&E Manual (Part 1, Chapter 3), the Preliminary Environmental Discussion Comments Report (PED) should include "a brief description of existing stormwater treatment, additional treatment which may be required and the possible options for treatment." The PD&E Manual (in Part 2, Chapter 20) also specifies inclusion of the following surface water information in the PED:

- Identification of surface waterbody to which the stormwater ultimately discharges;
- Any special designations of receiving waterbodies (Outstanding Florida Water (OFW), Aquatic Preserve, etc.);
- Whether the project is within a permitted MS4;
- Waterbody Identification Number(s) (WBIDs) in which the project is located, and associated FDEP Group Number and Name;
- Water Management District (WMD) in which the project is located;
- Water Control District (if applicable);
- Waterbody Class (e.g., Class I, II, III, etc.);
- Listing status (i.e., whether the WBID is identified as impaired, has a TMDL and/or is in a BMAP or RAP);
- The appropriate numeric nutrient criteria waterbody classification and related numeric nutrient limits (e.g., TMDL, Lakes, Spring Vents, Streams, Estuaries, etc.) if applicable; and
- If project discharges to a waterbody identified as impaired, identify the pollutant(s) of concern, numeric criteria or TMDL (whichever applies).

However, information about the current stormwater management system was not provided and, aside from wetlands acreage in the vicinity, the description of surface waters was limited to the statement that "The North Canal is the only impaired waterbody located within the 500-foot project buffer and is impaired for dissolved oxygen." The HEFT crossing of Mowry (C-103) Canal was not mentioned nor was the canal's discharge into Biscayne Bay.

Pursuant to the *Agency Operating and Funding Agreement for Continuing Participation in the Efficient Transportation Decision Making and Transportation Project Development Processes between United States Environmental Protection Agency and Federal Highway Administration and Florida Department of Transportation* (AOFA), January 23, 2015, the USEPA serves as a member of FDOT's Environmental Technical Advisory Teams (ETATs) and participates by reviewing and commenting on resources within its purview. The AOFA requires the USEPA to provide "focused comments and actionable recommendations." Therefore, if adequate information is not provided in project documentation, then we attempt to fulfill our obligation by conducting extensive online searches. Many of these searches, however, do not produce enough information for "focused comments and actionable recommendations."

The USEPA has expressed concern about the lack of stormwater information in documentation for other projects, and we have been

told by more than one district office that this information cannot be provided until a more detailed design is available (i.e., after PD&E). However, as a co-permittee on Miami-Dade County's MS4 permit, Florida's Turnpike Enterprise must "Maintain an up-to-date inventory of the structural controls and roadway stormwater collection structures" and "Provide an inventory of all known major outfalls covered by the permit and a map depicting the location of the major outfalls" (http://www.dep.state.fl.us/water/stormwater/npdes/docs/MS4_Permit_Resource_Manual.pdf). Please discuss the current stormwater management system in the ETDM Summary Report and provide the surface water information specified in the PD&E Manual.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

In general, the USEPA encourages avoidance, minimization, and mitigation of impacts on surface and ground waters in the project vicinity to the extent practicable. Stormwater runoff and its potential impact on water quality should be properly evaluated and addressed during the PD&E phase. Consistent with the Miami-Dade County MS4 permit, appropriate stormwater treatment systems and best management practices must be employed during construction and post-construction (i.e., during the operational life of the facility) to protect surface waters and prevent impacts to groundwater.

The USEPA also recommends evaluating Low-Impact Development (LID) stormwater management practices during PD&E. Various resources on LID practices are available, including:

- NCHRP Report 565: Evaluation of Best Management Practices for Highway Runoff Control (2006), http://www.trb.org/Main/Blurbs/158397.aspx,, which includes three additional documents: User's Guide for BMP/LID Selection (Guidelines Manual), Appendices to the User's Guide for BMP/LID Selection, and Low-Impact Development Design Manual for Highway Runoff Control (LID Design Manual);

- SFWMD's Best Management Practices for South Florida Urban Stormwater Management Systems, April 2002, http://www.sfwmd.gov/portal/page/portal/xrepository/sfwmd_repository_pdf/bmp_manual.pdf; and

- the USEPA's Urban Runoff Information Resources web page, https://www.epa.gov/polluted-runoff-nonpoint-source-pollution/urban-runoff-additional-resources.

Additional Comments (optional):

Water Quality Impact Evaluation (PD&E Manual, Part 2, Chapter 20)

CLC Recommendations:

Indirect Effects
Identified Resources and Level of Importance:

Biscayne Bay is a State-designated Outstanding Florida Water and Aquatic Preserve, as well as home to the Biscayne National Park (also an OFW). Stormwater runoff, which typically contains heavy metals, inorganic salts, volatile organics, petroleum hydrocarbons, bacteria, pesticides/herbicides, and suspended solids, poses one of the greatest threats to the bay's water quality. The primary source of stormwater discharge to Biscayne Bay is the South Florida Water Management District's system of canals, levees, and control structures.

The Homestead Extension of Florida's Turnpike (HEFT) crosses the Mowry (C-103) Canal, which discharges to Biscayne Bay and Biscayne National Park north of Convoy Point (http://my.sfwmd.gov/portal/page/portal/pg_grp_sfwmd_sfer/portlet_prevreport/2005/volume1/appendices/V1_App12-1.pdf). "Mowry Canal is of special interest to Biscayne National Park because its annual discharge is generally the greatest of the three major water management canals that discharge into southern Biscayne Bay" (https://www.nps.gov/ever/learn/nature/upload/SFRC-83-06.pdf). "Canal inflow is the primary mechanism for pollutant delivery to the bay . . . Mowry Canal and Princeton Canal represent the largest source of nitrate loading to Biscayne Bay and have the highest flow-weighted mean concentrations of all canals discharging into Biscayne Bay" (https://parkplanning.nps.gov/document.cfm?parkID=353&projectID=11168&documentID=65801).

Comments on Effects to Resources:
Same as Direct Effects

Recommended Avoidance, Minimization, and Mitigation Opportunities:
Same as Direct Effects

Degree of Effect: 0 *None* assigned 04/28/2017 by Suzanne E. Ray, FL Department of Environmental Protection

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects
Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

CLC Recommendations:

Indirect Effects
Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 04/26/2017 by Mindy Parrott, South Florida Water Management District

Coordination Document: Permit Required
Coordination Document Comments:
An Environmental Resource Permit is required. There is potential to modify theexisting permit for HEFT, Permit13-040001-P.

A modification to existing Right of Way Occupancy Permits 5009 and 12967 may be required if widening of the bridges over the C-103 canal is needed.

Direct Effects
Identified Resources and Level of Importance:
Surface water quality and flood protection

Comments on Effects to Resources:
The Minimal degree of effect is chosen based on the project design meeting the stormwater water quality and quantity criteria of the Environmental Resource Permit Applicant's Handbook Vols. I & II, including requirements for Impaired Waters and floodplain compensation, if necessary.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

An Environmental Resource Permit is required. There is potential to modify theexisting permit for HEFT, Permit13-040001-P.

A modification to existing Right of Way Occupancy Permits 5009 and 12967 may be required if widening of the bridges over the C-103 canal is needed.

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Floodplains

Project Effects

Coordinator Summary Degree of Effect: 2 *Minimal* assigned 06/27/2017 by Florida's Turnpike Enterprise

Comments:
An analysis of the potential floodplain effects will be conducted in accordance with Part 2, Chapter 13, of the Project Development and Environment (PD&E) Manual. A Location Hydraulics Assessment will be performed during the PD&E phase to determine potential impacts to area floodplains.

Degree of Effect: 2 *Minimal* assigned 04/26/2017 by Mindy Parrott, South Florida Water Management District

Coordination Document: Permit Required
Coordination Document Comments:
An Environmental Resource Permit is required. There is potential to modify theexisting permit for HEFT, Permit13-040001-P.

A modification to existing Right of Way Occupancy Permits 5009 and 12967 may be required if widening of the bridges over the C-103 canal is needed.

Direct Effects
Identified Resources and Level of Importance:
Surface water quality and flood protection

Comments on Effects to Resources:
The Minimal degree of effect is chosen based on the project design meeting the stormwater water quality and quantity criteria of the Environmental Resource Permit Applicant's Handbook Vols. I & II, including requirements for Impaired Waters and floodplain compensation, if necessary.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

An Environmental Resource Permit is required. There is potential to modify theexisting permit for HEFT, Permit13-040001-P.

A modification to existing Right of Way Occupancy Permits 5009 and 12967 may be required if widening of the bridges over the C-103 canal is needed.

CLC Recommendations:

Indirect Effects
Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Wildlife and Habitat

Project Effects

Coordinator Summary Degree of Effect: 3 *Moderate* assigned 06/27/2017 by Florida's Turnpike Enterprise

Comments:
A Natural Resources Evaluation (NRE) report will be prepared in accordance with Part 2, Chapter16 of the Project Development and Environment (PD&E) Manual. Surveys will be conducted for the listed species potentially occurring within the study area and the effects on listed species will be evaluated. Avoidance, minimization and mitigation for unavoidable impacts will be assessed during the alternatives development to avoid and minimize effects on protected species. Coordination will continue in the PD&E and design phases with US Fish and Wildlife Service (USFWS) and Florida Fish and Wildlife Conservation Commission (FWC).

Degree of Effect: 2 *Minimal* assigned 04/24/2017 by Jennifer Goff, FL Fish and Wildlife Conservation Commission

Coordination Document: To Be Determined: Further Coordination Required

Direct Effects

Identified Resources and Level of Importance:

Florida Fish and Wildlife Conservation Commission (FWC) staff has reviewed ETDM #14322, Miami-Dade County, and provides the following comments related to potential effects to fish and wildlife resources of this Programming Phase project.

The Project Description states that this project involves widening of the Homestead Extension of Florida's Turnpike (HEFT) from four to six divided lanes between US 1 south of Palm Drive and Campbell Drive, a distance of 3.143 miles. The Palm Drive/US 1/HEFT interchange will be evaluated, including widening the southbound ramp from HEFT to US 1 from one to two lanes. Stormwater management facility improvements will also be evaluated as part of the project.

An assessment of the project area was performed on lands within 500 feet of the proposed project to determine potential impacts to habitat which supports listed species and other fish and wildlife resources. Our inventory included a review of aerial and ground-level photography, various wildlife observation and landcover data bases, along with coordination with FWC biologists and other State and Federal agencies. A GIS analysis was performed using the Florida Department of Transportation's (FDOT) Environmental Screening Tool to determine the potential quality and extent of upland and wetland habitat, and other wildlife and fisheries resource information. We have reviewed the Preliminary Environmental Discussion Comments Report provided by the FDOT, and offer the following comments and recommendations.

Our assessment reveals that most of the land cover in the project area is man-altered, including High and Low Intensity Urban (42.97%, 171.44 acres), Transportation (41.84%, 166.92 acres), Agriculture (8.25%, 32.88 acres), Cultural-Lacustrine (man-made lakes - 3.73%, 14.86 acres), and Cultural-Riverine (canals - 0.90%, 3.59 acres). Natural land cover consists of a tiny patch of herbaceous wetland (0.02%, 0.07 acres) and an area in the infield of the HEFT/Campbell Drive Interchange classified as Palmetto Prairie (3.73%, 14.86 acres) which contains a small remnant of the increasingly rare Pine Rockland community, which provides the most valuable wildlife habitat in the project area.

Based on range and preferred habitat type, the following species listed by the Federal Endangered Species Act and the State of Florida as Federally Endangered (FE), Federally Threatened (FT), State-Threatened (ST), or State Species of Special Concern (SSC) have the potential to occur in the project area: American alligator (FT based on similarity of appearance to American crocodile), Eastern indigo snake (FT), Everglade snail kite (FE), wood stork (FT), Florida bonneted bat (FE), Florida burrowing owl (ST), least tern (ST), little blue heron (ST), tricolored heron (ST), and roseate spoonbill (ST).

The project is within the U.S. Fish and Wildlife Service Consultation Areas for American Crocodile, Snail Kite, and Bonneted Bat, and within the Critical Foraging Area of a wood stork colony.

Comments on Effects to Resources:
Primary wildlife issues associated with this project include: potential adverse effects to a moderate number of species listed by the Federal Endangered Species Act as Endangered or Threatened, or by the State of Florida as Threatened or Species of Special Concern; and potential for water quality impacts during construction. Based on the project information provided, we believe that direct and indirect effects of this project on wildlife resources could be minimal because of the relatively low habitat quality of the lands involved, and provided the expansion of the HEFT is confined to the existing right-of-way to the greatest degree possible. Best Management Practices should be included in the project design to avoid water quality degradation..

Recommended Avoidance, Minimization, and Mitigation Opportunities:

We recommend that the Project Development and Environment Study address natural resources by including the following measures for conserving fish and wildlife and habitat resources that may occur within and adjacent to the project area.

1. Plant community mapping and wildlife surveys for the occurrence of wildlife species listed by the Federal Endangered Species Act as Endangered or Threatened, or by the State of Florida as Threatened or Species of Special Concern should be performed. Basic guidance for conducting wildlife surveys may be found in the FWC's Florida Wildlife Conservation Guide at: http://myfwc.com/conservation/value/fwcg/.

2. Based on the survey results, a plan should be developed to address direct, indirect, and cumulative effects of the project on wildlife and habitat resources, including listed species. Avoidance, minimization, and mitigation measures should also be formulated and implemented. Equipment staging areas and DRAs should be located in previously disturbed sites to avoid habitat destruction or degradation. The plan should address specific habitat needs which are biologically compatible with the recovery of the target species. For guidance in this effort, FWC's Species Action Plans should be consulted at: http://myfwc.com/wildlifehabitats/imperiled/species-action-plans/.

3. A compensatory mitigation plan should include the replacement of any wetland, upland, or aquatic habitat functional values for listed species which are lost as a result of the project. Replacement habitat for mitigation should be type for type, as productive, and equal to or of higher functional value. Please notify us immediately if the design, extent, or footprint of the current project is modified, as we may choose to provide additional comments and/or recommendations.

We appreciate the opportunity to provide input on highway design and the conservation of fish and wildlife resources. Please contact Brian Barnett at (772) 579-9746 or email
brian.barnett@MyFWC.com
to initiate the process for further overall coordination on this project.

Additional Comments (optional):

CLC Recommendations:

Indirect Effects
Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 0 *None* assigned 04/19/2017 by Steve Bohl, FL Department of Agriculture and Consumer Services

Coordination Document: No Involvement

Direct Effects
Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

CLC Recommendations:

Indirect Effects
Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 3 *Moderate* assigned 03/16/2017 by John Wrublik, US Fish and Wildlife Service

Coordination Document: To Be Determined: Further Coordination Required

Direct Effects

Identified Resources and Level of Importance:

Federally listed species and Fish and Wildlife Resources

Comments on Effects to Resources:

Federally-listed species -

The Service has reviewed our Geographic Information Systems (GIS) database for recorded locations of Federally listed threatened and endangered species on or adjacent to the project study area. The GIS database is a compilation of data received from several sources. Based on review of our GIS database, the Service notes that the following Federally listed species may occur in or near the project area.

Wood Stork

The project corridor is located in the Core Foraging Areas (CFA)(within 18.6 miles) of one active nesting colony of the endangered wood stork (*Mycteria americana*). The Service believes that the loss of wetlands within a CFA due to an action could result in the loss of foraging habitat for the wood stork. To minimize adverse effects to the wood stork, we recommend that any lost foraging habitat resulting from the project be replaced within the CFA of the affected nesting colony. Moreover, wetlands provided as mitigation should adequately replace the wetland functions lost as a result of the action. The Service does not consider the preservation of wetlands, by itself, as adequate compensation for impacts to wood stork foraging habitat, because the habitat lost is not replaced. Accordingly, any wetland mitigation plan proposed should include a restoration, enhancement, or creation component. In some cases, the Service accepts wetlands compensation located outside the CFA of the affected wood stork nesting colony. Specifically, wetland credits purchased from a "Service Approved" mitigation bank located outside of the CFA would be acceptable to the Service, provided that the impacted wetlands occur within the permitted service area of the bank.

For projects that impact 5 or more acres of wood stork foraging habitat, the Service requires a functional assessment be conducted using our "Wood Stork Foraging Analysis Methodology" (Methodology) on the foraging habitat to be impacted and the foraging habitat provided as mitigation. The Methodology can be found at: http://www.fws.gov/verobeach/ListedSpeciesBirds.html .
Pine Rockland Species

The project may affect pine rocklands, an imperiled vegetation type that provides habitat for the Miami tiger beetle (*Cicindelidia floridana*) and Federally listed plants. If suitable habitat for these species occurs in or near the project footprint, we recommend that the FDOT conduct surveys to determine the status of these species.

The Service believes that the following federally listed species have the potential to occur in or near the project site: eastern indigo snake (*Drymarchon couperi = Drymarchon corais couperi*), wood stork, Miami tiger beetle, West indian manatee, (*Trichechus mamatus*) and Federally listed plants (http://www.fws.gov/verobeach/Listed Species Plants.html).Accordingly, the Service recommends that the Florida Department of Transportation (FDOT) prepare a Biological Assessment for the project (as required by 50 CFR 402.12) during the FDOT's Project Development and Environment process.

Fish and Wildlife Resources -

Wetlands provide important habitat for fish and wildlife. Wetlands may occur within and near the project site. We recommend that these valuable resources be avoided to the greatest extent practicable. If impacts to these wetlands are unavoidable, we recommend the FDOT provide mitigation that fully compensates for the loss of important resources.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Coastal and Marine

Project Effects

Coordinator Summary Degree of Effect: 0 *None* assigned 06/28/2017 by Florida's Turnpike Enterprise

Comments:
The project will have no involvement with National Marine Fisheries Services (NMFS) trust resources.A Coastal Zone Consistency Determination is not required. Project is not subject to a consistency review as required by **15 CFR 930.** Coordination will continue in the Project Development and Environment (PD&E) and design phases with US Fish and Wildlife Service (USFWS) and Florida Fish and Wildlife Conservation Commission (FWC).

Degree of Effect: 0 *None* assigned 04/26/2017 by Mindy Parrott, South Florida Water Management District

Coordination Document: No Involvement

Direct Effects
Identified Resources and Level of Importance:

Comments on Effects to Resources:
There are no effects on SFWMD recreation areas, coastal resources or areas with special designations.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

CLC Recommendations:

Indirect Effects
Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 0 *None* assigned 03/20/2017 by Brandon Howard, National Marine Fisheries Service

Coordination Document: No Involvement

Direct Effects
Identified Resources and Level of Importance:
None

Comments on Effects to Resources:
None

Recommended Avoidance, Minimization, and Mitigation Opportunities:
Magnuson-Stevens Act: Based on the project location, information provided in the ETDM website, and GIS-based analysis of impacts, NOAA's National Marine Fisheries Service (NMFS) concludes the proposed work would not directly impact areas that support essential fish habitat (EFH) or NOAA trust fishery resources. NMFS has no comments or recommendations to provide pursuant to the EFH requirements of the Magnuson-Stevens Fishery Conservation and Management Act (P.L. 104-297); and this project will not require an EFH Assessment. Further consultation on this matter is not necessary unless future modifications are proposed and you believe that the proposed action may result in adverse impacts to EFH.

Endangered Species Act: We are not aware of any threatened or endangered species or critical habitat under the purview of NMFS that occur within the project area. However, it should be noted that a "no effect" determination must be made by the action agency

and the reasoning underlying the determination should be documented in a project file. Please coordinate closely with the U.S. Fish and Wildlife Service for other species listed under the Endangered Species Act that may require consultation.

Fish and Wildlife Coordination Act: Based on the project location, information provided in the ETDM website, and GIS-based analysis of impacts, NOAA's National Marine Fisheries Service (NMFS) concludes the proposed work would not directly impact wetlands areas that support NOAA trust fishery resources. NMFS has no comments or recommendations to provide pursuant to the Fish and Wildlife Coordination Act.

Additional Comments (optional):

CLC Recommendations:

Indirect Effects
Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

ETAT Reviews and Coordinator Summary: Physical

Noise

Project Effects

Coordinator Summary Degree of Effect: 2 *Minimal* assigned 06/12/2017 by Florida's Turnpike Enterprise

Comments:
No Environmental Technical Advisory Team (ETAT) reviews were submitted for this issue. A noise study will be conducted as part of the Project Development and Environment (PD&E) study to identify noise sensitive sites and to determine eligibility for noise abatement measures.

None found

Air Quality

Project Effects

Coordinator Summary Degree of Effect: 2 *Minimal* assigned 06/27/2017 by Florida's Turnpike Enterprise

Comments:
An air quality screening evaluation will be conducted in accordance with Part 2, Chapter 19 of the Project Development and Environment (PD&E) Manual.

Degree of Effect: 2 *Minimal* assigned 04/29/2017 by Kim Gates, US Environmental Protection Agency

Coordination Document: PD&E Support Document As Per PD&E Manual
Coordination Document Comments:
Air Quality Technical Memorandum (PD&E Manual, Part 2, Chapter 16)

Direct Effects
Identified Resources and Level of Importance:

Resource: Air quality that complies with standards established by the USEPA pursuant to the federal Clean Air Act.

Level of Importance: To protect public health and welfare nationwide, the USEPA has established National Ambient Air Quality Standards (NAAQS) for six "criteria pollutants": particulate matter, ozone, sulfur dioxide, nitrogen dioxide, carbon monoxide, and lead. States are required to adopt enforceable plans to achieve and maintain air quality that meets these standards.

Comments on Effects to Resources:

The project area is currently in attainment with the National Ambient Air Quality Standards. Although the USEPA does not anticipate emissions of criteria pollutants from the project being significant enough to impact the area's attainment status, the Preliminary Environmental Discussion Comments Report (PED) indicated that an Air Quality Screening Analysis will be conducted during PD&E.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

Air Quality Technical Memorandum (PD&E Manual, Part 2, Chapter 16)

CLC Recommendations:

Indirect Effects
Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Contamination

Project Effects

Coordinator Summary Degree of Effect: 2 *Minimal* assigned 06/27/2017 by Florida's Turnpike Enterprise

Comments:
The Florida Department of Environmental Protection (FDEP) has identified seven Petroleum Contamination Monitoring Sites and four Storage Tank Contamination Monitoring sites as facilities of concern within a 500-foot buffer of the project. A contamination screening evaluation will be conducted per Part 2, Chapter 20, of the Project Development and Environment (PD&E) Manual.

Degree of Effect: 3 *Moderate* assigned 04/29/2017 by Kim Gates, US Environmental Protection Agency

Coordination Document: PD&E Support Document As Per PD&E Manual
Coordination Document Comments:
Contamination Screening Evaluation Report (PD&E Manual, Part 2, Chapter 22)

Direct Effects
Identified Resources and Level of Importance:

"Contamination in soil, groundwater, surface water and structures may have the following impacts to an FDOT project: i) human exposure, ii) potential or actual human health concerns, iii) exacerbation of the contamination by FDOT construction activities, iv) design modifications or special construction provisions for work within contaminated areas, and v) requirements for the proper handling and disposal of contaminated material." FDOT defines 'Contamination' as: "The presence of any regulated material or chemical contained within the soil, surface water or groundwater on or adjacent to FDOT property, or proposed property, that may require assessment, remediation, or special handling, or that has a potential for liability. These materials would include, but not be limited to, those substances normally referred to as petroleum or petroleum products, solvents, organic and inorganic substances, metals, hazardous materials or substances." [Source: FDOT PD&E Manual, Part 2, Chapter 22 Contamination]

Major federal laws govern the remediation of contaminated sites, including the Resource Conservation and Recovery Act of 1976 (RCRA), as amended; and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended, which includes the Small Business Liability Relief and Brownfields Revitalization Act (Brownfields).

Comments on Effects to Resources:

The EST reports RCRA-regulated facilities in several categories: Hazardous Waste (HW) Facilities; Large Quantity Generators (LQGs) of Hazardous Waste; Treaters, Storers, and Disposers (TSDs) of Hazardous Waste; and USEPA RCRA-Regulated Facilities. According to the EST, the following populations of facilities that generate, treat, store, or dispose of hazardous waste are located in the 500-foot buffer area of the project:

HW Facilities = 1
LQGs = 0
TSDs = 0
USEPA RCRA-Regulated Facilities = 1

The same facility is listed in the HW Facilities and USEPA RCRA-Regulated Facilities categories: Shell Oil Co. (USEPA RCRA ID #FLD984173872) located at 10 SE 1st Avenue in Florida City ((http://webapps.dep.state.fl.us/DepNexus/public/electronic-documents/FLD984173872/gis-facility!search). This facility is also a State-designated Petroleum Contamination Monitoring (PCM) and Storage Tank Contamination Monitoring (STCM) site (http://webapps.dep.state.fl.us/DepNexus/public/electronic-documents/8506213/gis-facility!search) with a history of petroleum releases. Site assessment and cleanup of these releases - reported in 1985, 1994, 1998, 2003, and 2005 - is ongoing. Moreover, even though FDEP's Map Direct: Contamination Locator (http://ca.dep.state.fl.us/mapdirect/?focus=contamlocator) identifies the facility's RCRA status as closed, it is an operating service station.

Utilizing FDEP's Map Direct: Contamination Locator, the USEPA identified the following four additional State-designated PCM and STCM sites in the project corridor:

Sunkwik #1 - Just Oil, 237 N Krome Ave, Florida City 33034
Petroleum discharge reported in February 1991 (http://webapps.dep.state.fl.us/DepNexus/public/electronic-documents/8622180/gis-facility!search)
Remedial action (Monitored Natural Attenuation) is ongoing (https://fldeploc.dep.state.fl.us/www_RCRA/Reports/clm_results_docs.asp?facid=8622180&sdn=STCM)

Murphy USA #5738, 33517 S Dixie Hwy, Florida City 33034
Petroleum discharge reported in September 2010; No Further Action status approved in October 2013 (http://webapps.dep.state.fl.us/DepNexus/public/electronic-documents/9802395/gis-facility!search)

Smith & Sons George W, 320 St & 162nd Ave, Homestead 33030
No petroleum discharges reported (http://webapps.dep.state.fl.us/DepNexus/public/electronic-documents/8504722/gis-facility!search)

Florida's Turnpike BER 09-21-41714Z, SB FL Turnpike @ MM 2X, Miami 33033
No documents available online (http://webapps.dep.state.fl.us/DepNexus/public/electronic-documents/9811594/gis-facility!search)

Based on information in the USEPA's NEPassist tool (https://www.epa.gov/nepa/nepassist), no federal Superfund sites or Brownfields sites where federal grant monies have been expended are located within one mile of the project. The nearest Superfund site, Homestead Air Force Base (https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0404746), is approximately 1.7 miles from the HEFT interchange at SW 312th St/Campbell Drive. The closest Brownfields site, Wynwood West (https://iaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?pgm_sys_id_in=13516&pgm_sys_acrnm_in=ACRES), is more than 20 miles away.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

In general, impacts to potentially contaminated sites should be avoided or minimized to the extent practicable. If encountered and disturbed during construction, any contaminated site could result in surface and/or groundwater water pollution. In addition, while the project footprint may not directly impact contaminated sites, proposed stormwater management systems and other project construction activities should avoid these areas.

Additional Comments (optional):

Contamination Screening Evaluation Report (PD&E Manual, Part 2, Chapter 22)

CLC Recommendations:

Indirect Effects
Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 04/28/2017 by Suzanne E. Ray, FL Department of Environmental Protection

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects
Identified Resources and Level of Importance:

The EST tool indicates that there are 7 Petroleum Contamination Monitoring Sites and 4 Storage Tank Contamination Monitoring sites within the 500-foot buffer.

Comments on Effects to Resources:
The Contamination Screening Evaluations should outline specific procedures that would be followed by the applicant in the event that drums, wastes, tanks or potentially contaminated soils are encountered during construction. In the event contamination is detected during construction, the Department and the County should be notified, and the FDOT may need to address the problem through additional assessment and remediation activities.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

CLC Recommendations:

Indirect Effects
Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 04/26/2017 by Mindy Parrott, South Florida Water Management District

Coordination Document: To Be Determined: Further Coordination Required
Coordination Document Comments:
If dewatering is needed, and the activity does not qualify for a no- notice permit in 40E-2.061, a consumptive use permit for dewatering from SFWMD will be required.

Direct Effects
Identified Resources and Level of Importance:
Groundwater aquiferand surface waters

Comments on Effects to Resources:
If construction dewatering is required,measures must be taken to prevent migration of contaminant plumes.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):
If dewatering is needed, and the activity does not qualify for a no- notice permit in 40E-2.061, a consumptive use permit for

dewatering from SFWMD will be required.

CLC Recommendations:

Indirect Effects
Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Infrastructure

Project Effects

Coordinator Summary Degree of Effect: 2 *Minimal* assigned 06/12/2017 by Florida's Turnpike Enterprise

Comments:
No Environmental Technical Advisory Team (ETAT) reviews were submitted for this issue. The proposed project is being conducted entirely within existing Florida Department of Transportation (FDOT) right-of-way and therefore, there will be no negative impacts to infrastructure.

None found

Navigation

Project Effects

Coordinator Summary Degree of Effect: N/A *N/A / No Involvement* assigned 06/12/2017 by Florida's Turnpike Enterprise

Comments:
The project will not affect any navigable waterways. Therefore, the project will have no effect on navigation. The US Coast Guard (USCG) and US Army Corps of Engineers (USACE) have also confirmed no involvement with the project.

Degree of Effect: N/A *N/A / No Involvement* assigned 04/14/2017 by Tarrie L Ostrofsky, US Army Corps of Engineers

Coordination Document: No Involvement

Direct Effects
Identified Resources and Level of Importance:
According to the information provided, the FDOT's analysis of GIS data did not identify any navigable waterways within the project buffer. There are no anticipated impacts to navigable waterways from the project.

Comments on Effects to Resources:
N/A

Recommended Avoidance, Minimization, and Mitigation Opportunities:
N/A

Additional Comments (optional):

CLC Recommendations:

Indirect Effects
Identified Resources and Level of Importance:
N/A

Comments on Effects to Resources:
N/A

Recommended Avoidance, Minimization, and Mitigation Opportunities:

N/A

Degree of Effect: N/A *N/A / No Involvement* assigned 03/16/2017 by Randall D Overton, US Coast Guard

Coordination Document: No Involvement

Direct Effects
Identified Resources and Level of Importance:
No Coast Guard Involvement

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

CLC Recommendations:

Indirect Effects
Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

ETAT Reviews and Coordinator Summary: Special Designations

Special Designations

Project Effects

Coordinator Summary Degree of Effect: 3 *Moderate* assigned 06/12/2017 by Florida's Turnpike Enterprise

Comments:
The US Environmental Protection Agency (USEPA) stated that the Biscayne aquifer underlies the project, which is a Sole Source Aquifer. Federal funding will not be used for this project and therefore this project may not need to be reviewed by the USEPA's Region 4's Ground Water/Drinking Water Branch. USEPA also commented that the project crosses the Mowry Canal (C-103), which discharges into Biscayne Bay, an Outstanding Florida Water (OFW). The project does not impact any aquatic preserves or wild scenic rivers. Stormwater information will be developed further during the Project Development and Environment (PD&E) and design phases of this project. Effects, if any, to OFWs will be evaluated during the PD&E process.

Degree of Effect: 3 *Moderate* assigned 04/29/2017 by Kim Gates, US Environmental Protection Agency

Coordination Document: PD&E Support Document As Per PD&E Manual
Coordination Document Comments:
Water Quality Impact Evaluation (PD&E Manual, Part 2, Chapter 20)

Direct Effects
Identified Resources and Level of Importance:

The PD&E Manual (Part I, Chapter 3) defines the Special Designations category as comprised of Outstanding Florida Waters (Rule 62-302.700, F.A.C.), Aquatic Preserves (Rule 62-302.700(2)(f), F.A.C.), Scenic Highways (PD&E Manual, Part 2, Chapter 29), and Wild & Scenic Rivers (Rule 62-302.700(2)(d), F.A.C.). In addition, the *Agency Operating and Funding Agreement for Continuing Participation in the Efficient Transportation Decision Making and Transportation Project Development Processes between United States Environmental Protection Agency and Federal Highway Administration and Florida Department of Transportation*, January 23, 2015, identifies Sole Source Aquifers as Special Designations under the USEPA's purview. The Sole Source Aquifer Protection Program is authorized by Section 1424(e) of the Safe Drinking Water Act of 1974.

The Biscayne aquifer, which underlies Miami-Dade, Broward, and part of Palm Beach counties, supplies virtually all of the potable water needs for almost 6 million residents in southeastern Florida, including the Florida Keys. Consistent with the Safe Drinking Water Act, which defines a Sole Source Aquifer as an underground water source that supplies at least 50% of the drinking water to the overlying area (http://water.epa.gov/infrastructure/drinkingwater/sourcewater/protection/solesourceaquifer.cfm), the USEPA designated the Biscayne aquifer as a Sole Source Aquifer (44 Federal Register 58797, October 11, 1979).

Once an area is designated as a Sole Source Aquifer (SSA), no commitments of federal financial assistance may be made to projects that the USEPA determines could contaminate the aquifer and create a significant hazard to public health. To ensure compliance with SDWA requirements, FDOT, FHWA, and the USEPA executed a Sole Source Aquifer Memorandum of Understanding (MOU) that identifies the types of proposed projects to be forwarded to the USEPA for evaluation and comment. The MOU, executed in January 1999, also memorializes FDOT's commitment to designing federal-aid projects in SSA-designated areas in a manner that will prevent the introduction of contaminants in quantities or concentrations that could create a significant hazard to public health, or which may require a public water system to install additional treatment to prevent such adverse effect (http://www.fdot.gov/environment/pubs/SSA MOU.pdf).

Pursuant to the MOU (see Attachment C, http://www.fdot.gov/environment/pubs/SSA MOU Attachments.pdf), the following types of projects will be referred to the USEPA Region 4's Ground Water/Drinking Water Branch for review and comment prior to the commitment of federal funding:

1. All projects for which an EIS or EA/FONSI will be prepared.
2. Projects which have the potential to contaminate the aquifer, such as a new or stage construction involving extensive grading, widening or addition of lanes to an existing highway, replacement or rehabilitation/reconstruction of bridges over the Volusia-Floridan or Biscayne Aquifers or their designated recharge zones, and public rest areas which include domestic wastewater facilities which do not discharge to a central wastewater collection system.
3. All other projects which FHWA determines may be reasonably expected to contaminate the designated SSAs.

Comments on Effects to Resources:

Project funding was not addressed in available documentation, so the USEPA could not determine if federal monies will be used. Because the project involves "widening or addition of lanes to an existing highway, replacement or rehabilitation/reconstruction of bridges," it needs to be reviewed by the USEPA Region 4's Ground Water/Drinking Water Branch if federal funding is used. We recommend including the following information in the review request:

1. Location of project and name of Sole Source Aquifer.
2. Project description and federal funding source.
3. Is there any increase in impervious surface? If so, what is the area?
4. Describe how stormwater is currently treated along the project corridor.
5. How will stormwater be treated during construction and throughout the life of the project?
6. Are there any underground storage tanks present or to be installed? Include details of such tanks.
7. Will there be any liquid or solid waste generated? If so, how will it be disposed of?
8. What is the depth of excavation?
9. Are there any wells in the area that may provide contaminants with direct access to the aquifer and how close are they to the project?
10. Are there any hazardous waste sites in the project area? In particular, are there any sites with groundwater plumes and monitoring wells that may be disturbed? Include details.
11. Are there any deep pilings that may provide access to the aquifer?
12. Are Best Management Practices planned to address any possible risks or concerns? Include details.
13. Does the project include improvements that may be beneficial to the aquifer?
14. Any other information that could be helpful in determining if this project could impact the aquifer.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

"The [Biscayne] aquifer is extremely porous and the water table is very close to the surface of the ground, making it vulnerable to pollution. Pollutants that are discharged onto the ground or that occur in surface waters can contaminate the groundwater and be

drawn into wells that supply drinking water." [http://www.miamidade.gov/environment/wellfields.asp] The USEPA encourages the sequential avoidance, minimization, and mitigation of impacts on surface and ground waters in the project vicinity to the extent practicable.

Additional Comments (optional):

Water Quality Impact Evaluation (PD&E Manual, Part 2, Chapter 20)

CLC Recommendations:

Indirect Effects
Identified Resources and Level of Importance:

Biscayne Bay is a State-designated Outstanding Florida Water and Aquatic Preserve, as well as home to the Biscayne National Park (also an OFW). Stormwater runoff, which typically contains heavy metals, inorganic salts, volatile organics, petroleum hydrocarbons, bacteria, pesticides/herbicides, and suspended solids, poses one of the greatest threats to the bay's water quality. The primary source of stormwater discharge to Biscayne Bay is the South Florida Water Management District's system of canals, levees, and control structures.

The Homestead Extension of Florida's Turnpike (HEFT) crosses the Mowry (C-103) Canal, which discharges to Biscayne National Park north of Convoy Point (http://my.sfwmd.gov/portal/page/portal/pg_grp_sfwmd_sfer/portlet_prevreport/2005/volume1/appendices/V1_App12-1.pdf). The discharge site is located in the Biscayne Bay Coastal Wetlands Project (http://141.232.10.32/pm/projects/proj_28_biscayne_bay.aspx), which is a component of the Comprehensive Everglades Restoration Plan (CERP) - the largest ecosystem restoration program in the history of Florida.

Comments on Effects to Resources:

As discussed in FDOT's PD&E Manual (Part 2, Chapter 20), the Preliminary Environmental Discussion Comments Report (PED) should include the following surface water information:

- Identification of surface waterbody to which the stormwater ultimately discharges;
- Any special designations of receiving waterbodies (Outstanding Florida Water (OFW), Aquatic Preserve, etc.);
- Whether the project is within a permitted MS4;
- Waterbody Identification Number(s) (WBIDs) in which the project is located, and associated FDEP Group Number and Name;
- Water Management District (WMD) in which the project is located;
- Water Control District (if applicable);
- Waterbody Class (e.g., Class I, II, III, etc.);
- Listing status (i.e., whether the WBID is identified as impaired, has a TMDL and/or is in a BMAP or RAP);
- The appropriate numeric nutrient criteria waterbody classification and related numeric nutrient limits (e.g., TMDL, Lakes, Spring Vents, Streams, Estuaries, etc.) if applicable; and
- If project discharges to a waterbody identified as impaired, identify the pollutant(s) of concern, numeric criteria or TMDL (whichever applies).

However, receiving waters for stormwater discharges were not identified and, aside from wetlands acreage in the project vicinity, the description of surface waters was limited to the statement that "The North Canal is the only impaired waterbody located within the 500-foot project buffer and is impaired for dissolved oxygen." The roadway crossing of Mowry (C-103) Canal was not mentioned nor was potential stormwater drainage to Biscayne Bay.

Pursuant to the *Agency Operating and Funding Agreement for Continuing Participation in the Efficient Transportation Decision Making and Transportation Project Development Processes between United States Environmental Protection Agency and Federal Highway Administration and Florida Department of Transportation* (AOFA), January 23, 2015, the USEPA serves as a member of FDOT's Environmental Technical Advisory Teams (ETATs) and participates by reviewing and commenting on resources within its purview. The AOFA requires the USEPA to provide "focused comments and actionable recommendations." Therefore, if adequate information is not provided in project documentation, then we attempt to fulfill our obligation by conducting extensive online searches. Many of these searches, however, do not produce enough information for "focused comments and actionable recommendations."

The USEPA has expressed concern about the lack of stormwater information in documentation for other projects, and we have been

told by more than one district office that this information cannot be provided until a more detailed design is available (i.e., after PD&E). However, as a co-permittee on Miami-Dade County's MS4 permit, Florida's Turnpike Enterprise must "Maintain an up-to-date inventory of the structural controls and roadway stormwater collection structures" and "Provide an inventory of all known major outfalls covered by the permit and a map depicting the location of the major outfalls" (http://www.dep.state.fl.us/water/stormwater/npdes/docs/MS4_Permit_Resource_Manual.pdf). Therefore, the USEPA does not understand why this information is not readily available. Please discuss the current stormwater management system in the ETDM Summary Report and identify the receiving waters for stormwater discharges.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

In general, the USEPA encourages avoidance, minimization, and mitigation of impacts on surface and ground waters in the project vicinity to the extent practicable. Stormwater runoff and its potential impact on water quality should be properly evaluated and addressed during the PD&E phase. Consistent with the Miami-Dade County MS4 permit, appropriate stormwater treatment systems and best management practices must be employed during construction and post-construction (i.e., during the operational life of the facility) to protect surface waters and prevent impacts to groundwater.

Degree of Effect: 0 *None* assigned 04/26/2017 by Mindy Parrott, South Florida Water Management District

Coordination Document: No Involvement

Direct Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

There are no effects on SFWMD recreation areas, coastal resources or areas with special designations.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Eliminated Alternatives

There are no eliminated alternatives for this project.

Project Scope

General Project Recommendations

There are no general project recommendations identified for this project in the EST.

Anticipated Permits

Permit	Type	Conditions	Assigned By	Date
Environmental Resource Permit	FDEP		Florida's Turnpike Enterprise	02/21/17
Section 404 Individual Permit	USACE		Florida's Turnpike Enterprise	02/21/17
NPDES General Permit	FDEP		Florida's Turnpike Enterprise	02/21/17

Anticipated Technical Studies

Technical Study Name	Type	Conditions	Assigned By	Date
Location Hydraulics Report	ENGINEERING		Florida's Turnpike Enterprise	02/21/2017
Drainage/Pond Siting Report	ENGINEERING		Florida's Turnpike Enterprise	02/21/2017
Geotechnical Report	ENGINEERING		Florida's Turnpike Enterprise	02/21/2017
Bridge Hydraulic Report	ENGINEERING		Florida's Turnpike Enterprise	02/21/2017
Noise Study Report	ENVIRONMENTAL		Florida's Turnpike Enterprise	02/21/2017
Air Quality Report	ENVIRONMENTAL		Florida's Turnpike Enterprise	02/21/2017
Contamination Screening Evaluation Report	ENVIRONMENTAL		Florida's Turnpike Enterprise	02/21/2017
Conceptual Stage Relocation Plan	ENVIRONMENTAL		Florida's Turnpike Enterprise	02/21/2017
Sociocultural Effects Evaluation	Other		Florida's Turnpike Enterprise	02/21/2017
Preliminary Engineering Report	ENGINEERING		Florida's Turnpike Enterprise	02/21/2017
Water Quality Impact Evaluation (WQIE)	ENVIRONMENTAL		Florida's Turnpike Enterprise	02/21/2017
Cultural Resource Assessment Survey	ENVIRONMENTAL		Florida's Turnpike Enterprise	02/21/2017
Utility Assessment Technical Memorandum	ENGINEERING		Florida's Turnpike Enterprise	02/21/2017
Bridge Analysis Report	ENGINEERING		Florida's Turnpike Enterprise	06/12/2017
Natural Resources Evaluation (NRE)	ENVIRONMENTAL		Florida's Turnpike Enterprise	02/21/2017
ITS Technical Memorandum	ENGINEERING		Florida's Turnpike Enterprise	06/12/2017

Dispute Resolution Activity Log

There are no dispute actions identified for this project in the EST.

Appendices

Preliminary Environmental Discussion Comments

Social and Economic

Land Use Changes

Project Level

Comments:

The proposed HEFT (SR 821) Widening project is located within Florida Department of Transportation (FDOT) right-of-way (R/W). At the 500-foot buffer distance, using the FDOT District 6 Generalized Land Use layer, the primary existing land use is Retail/Office (approximately 12 percent of the buffer area). The next highest land uses within the 500-foot buffer are, Agricultural (approximately 11 percent of the buffer area), Residential (approximately 11 percent of the buffer area), Vacant Residential (approximately 6 percent of the buffer area), Acreage not Zoned for Agriculture (approximately 6 percent of the buffer area), Vacant Nonresidential (approximately 3 percent of the buffer area), Institutional (approximately 2 percent of the buffer area), Recreation (approximately 2 percent of the buffer area), and Public/Semi-Public (approximately 1 percent of the buffer area).

Comparing existing land use classifications to the Future Land Use 2008 Geographic Information System (GIS) data layer in the EST shows a shift in the predominant land use within the 500-foot buffer to Residential Medium (more than residential low and less than 13 dwelling units), which is approximately 35 percent of the buffer area. Other future land use classifications identified within the 500-foot buffer include, Industrial, Extractive, Transportation (approximately 33 percent of the buffer area); Commercial, Office, Tourism, Marina (approximately 31 percent of the buffer area); and Water Bodies (approximately 2 percent of the buffer area). This change in land use could be linked to the project being located near the boundary of the Villages of Homestead DRI, a mixed-use development which was originally approved in 1975 and contains the Homestead Miami Speedway, along with residential houses and apartment buildings.

Social

Project Level

Comments:

Within the 500-foot buffer distance from the HEFT Widening project, the predominant social features are recreational trails and one church. Within this buffer there are two proposed recreational trails (Biscayne-Everglades Greenway Corridor and Mowry Trail Corridor) and the Gate Way Church of Christ.

According to 2010 Census data, there are ten Census Block Groups within the 500-foot project buffer. Within these ten block groups the housing vacancy rate is approximately 20 percent. Eight of these ten block groups have a majority White Alone population and the other two block groups have a majority Hispanic or Latino of Any Race. All block groups are comprised of at least 40 percent Hispanic or Latino of Any Race.

A Sociocultural Effects Evaluation will be conducted during the PD&E phase to determine potential impacts to adjoining communities.

Relocation Potential

Project Level

Comments:

South Florida Water Management District Residential Areas 2008 GIS data shows that within the 500-foot project buffer, there is approximately 28 acres of Fixed Single Family Units, 36 acres of Multiple Dwelling Units - Low Rise, and 9 acres of High Density Under Construction. The proposed improvements include widening the existing four-lane HEFT to either three additional general-use lanes in each direction or two additional general use lanes and one express lane in each direction. Currently, FDOT owns enough R/W for this six-lane highway. It is anticipated that the proposed improvements would occur within the existing R/W and residential relocations will not be required.

A Conceptual Stage Relocation Plan will be prepared during the PD&E phase, if relocations are determined to be necessary.

Farmlands

Project Level

Comments:

Within the 500-foot project buffer there are approximately 243 acres of land classified as Farmland of Unique Importanceas identified in the Prime Farm Land GIS data. Within the buffer, there is also approximately 26 acres of land classified as Prime Farmland in Florida with Associated Level 3 Water Management District Land Use Descriptions.No impacts to farmlands are anticipated because of the proposed project.

Aesthetic Effects

Project Level

Comments:

Within the 500-foot project buffer there are existing residential areas with a total area of approximately 73 acres. Existing residential areas and future commercial and residential land use designations surrounding the proposed widening project indicate that residential and commercial land use will potentially increase in the future. However, because this proposed project includes widening an existing roadway, the proposed project is anticipated to have minimal change to the existing visual environment.

Economic

Project Level

Comments:

According to 2010 Census data the average Median Family Income (2009) for the ten block groups that make up the 500-foot buffer is $40,717, and there is a total of 6,786 households living below the poverty level. There is one Development of Regional Impact (DRI), Villages of Homestead (ADA No: 1976-001), within the 500-foot buffer. Additionally, there are four Planned Unit Developments (PUD) comprising 16.89 acres. Additional lanes on the HEFT will provide increased mobility for nearby communities and tourists visiting Homestead/Florida City and the Florida Keys. The enhanced mobility of people and goods should have a positive

economic effect on these areas.

Mobility

Project Level

Comments:

The 500-foot project buffer contains two Transportation Disadvantaged Service Providers (Miami-Dade Transit Agency and Logisticare Solutions, LLC), as well as two planned recreational trails (the Biscayne-Everglades Greenway Corridor and the Mowry Trail Corridor). Additionally, there are eight bus transit routes within the 500-foot project buffer servicing the community. The project location is not directly serviced by airports or railroads.

Cultural

Section 4(f) Potential

Project Level

Comments:

Section 4(f) is not applicable on state funded projects.

Historic and Archaeological Sites

Project Level

Comments:

The 500-foot project buffer contains two Florida Site File historic standing structures. The two historic standing structures were built in 1949 and 1950, and both have been determined not eligible for listing on National Register of Historic Places (NRHP). There is one Florida Site File Resource Group within the 500-foot buffer. The resource group is Highway US 1, however it has been determined ineligible for NRHP listing.

A Cultural Resources Assessment Survey (CRAS) will be conducted during the PD&E phase which will assess unrecorded resources within the Area of Potential Effects (APE) for the project.

Recreation Areas

Project Level

Comments:

GIS data provided in the Environmental Screening Tool (EST) show only two planned recreational trails (the Biscayne-Everglades Greenway Corridor and the Mowry Trail Corridor). There are no existing trails within the 500-foot project buffer. Additionally, there are no parks or other recreational areas within the project buffer. Both the Biscayne-Everglades Greenway Corridor and the Mowry Trail Corridor are planned to cross the Turnpike. The effects to these or other recreational areas will be determined during the PD&E phase.

Natural

Wetlands and Surface Waters

Project Level
Comments:
According to National Wetlands Inventory GIS data provided in the EST there are approximately 15 acres of palustrine wetlands and 5 acres of riverine wetlands within the 500-foot project buffer. The South Florida Water Management District GIS data did not show any wetlands within the project buffer. This proposed widening of the HEFT will minimize potential wetland impacts.

A wetlands evaluation will be conducted during the PD&E phase to determine if potential adverse impacts to wetlands will occur. Unavoidable impacts to wetlands and surface waters will require an Environmental Resource Permit from the South Florida Water Management District and a Section 404 of the Clean Water Act (CWA) Dredge and Fill Permit from the US Army Corps of Engineers.

Water Quality and Quantity

Project Level
Comments:
There is currently one Sole Source Aquifer in the State of Florida (Biscayne Aquifer). The North Canal is the only impaired waterbody located within the 500-foot project buffer and is impaired for dissolved oxygen.

Stormwater treatment and attenuation facilities will be evaluated in the PD&E phase to minimize adverse effects to the North Canal and the Biscayne Aquifer. A water quality impact evaluation will be conducted during the PD&E phase.

Floodplains

Project Level
Comments:
According to FEMA Flood Insurance Rate Maps 1996 GIS data provided in the EST there are approximately 399 acres that are within the 100-year floodplain inside the 500-foot project buffer. Approximately 178 acres are classified as a Special Flood Hazard Zone A (areas that are inundated by 100-year flooding, for which no Base Flood Elevations have been determined). Approximately 221 acres are classified as a Special Flood Hazard Zone AE (areas that are inundated by 100-year flooding, for which Base Flood Elevations have been determined). Although the project buffer contains areas within the 100-year floodplain, the HEFT, including the proposed additional lanes, is within Zone X (areas determined to be outside the 0.2% annual chance floodplain). Therefore, impacts to the base floodplain are not anticipated.

A Location Hydraulic Assessment will be performed during the PD&E phase to ensure potential impacts to floodplains will not occur.

Wildlife and Habitat

Project Level
Comments:
The 500-foot project buffer contains several Consultation Areas for federally-listed species. The project buffer is within the following Consultation Areas: American crocodile, snail kite, Florida bonneted bat and Miami-Dade Keys plants. The Florida panther consultation zone is

approximately 0.20 miles from the project study area. In addition to the consultation areas, the project lies within one wood stork Core Foraging Area (Grossman Ridge West). Additionally, the eastern indigo snake and the Miami Tiger Beetle have the potential to occur in the project buffer. State-listed species with potential to occur within the project buffer include the gopher tortoise and the burrowing owl.

Pine rockland, an imperiled habitat, may occur within the project buffer.

An Endangered Species Biological Assessment will be conducted during the PD&E phase to evaluate the potential species and habitat impacts from this project.

Coastal and Marine

Project Level
Comments:
According to National Oceanic and Atmospheric Administration (NOAA) Coastal Assessment Framework GIS data provided in the EST the project has land areas that are within one Coastal Drainage Area, the Biscayne Bay Estuarine Drainage Area. However due to the location of the project no adverse coastal and marine impacts are anticipated.

Physical

Noise

Project Level
Comments:
There are several residential and non-residential noise sensitive sites within the 500-foot project buffer that could be impacted by noise generated by the proposed improvements.

A noise study will be conducted during the PD&E phase to identify noise sensitive sites and to determine the eligibility for additional noise abatement measures.

Air Quality

Project Level
Comments:
Analysis of the GIS data provided in the EST shows that the project is located within the Southeast Florida Airshed. Miami-Dade County, Florida is an area that has been designated as attainment for ozone, nitrogen dioxide, particulate matter (2.5 microns in size and 10.0 microns in size), sulfur oxides, carbon monoxide, and lead. The project is located in an area which is designated attainment for all of the National Ambient Air Quality Standards under the criteria provided in the Clean Air Act. Therefore, the Clean Air Act conformity requirements do not apply to the project.

An Air Quality Screening Analysis will be conducted during the PD&E phase.

Contamination

Project Level

Comments:
Four Storage Tank Contamination Monitoring Sites are located within the 500-foot project buffer; two facilities are currently listed as "Closed" and two are listed as "Open". Seven Petroleum Contamination Monitoring Sites are located within the 500-foot buffer; five have a status of "work underway" and two have a status of "closed." Shell Oil Co., a Hazardous Waste Facility, is located within the 500-foot project buffer. Additionally, there is one Biomedical Waste facility (Walgreens #11481) located within the project buffer.

A contamination screening evaluation will be conducted as part of the PD&E phase to determine potential impacts to contamination sites.

Infrastructure
Project Level
Comments:
The Shell Oil Co. Hazardous Waste Facility is located within the 500-foot project buffer. The EST GIS data does not identify any other infrastructure within the 500-foot project buffer.

Navigation
Project Level
Comments:
Analysis of GIS data provided in the EST did not identify any navigable waterways within the project buffer. There are no anticipated impacts to navigable waterways from the project.

Within the 500-foot project buffer, there are four water drainage flowlines that intersect this project.

Special Designations

Special Designations: Outstanding Florida Waters
Project Level
Comments:
Analysis of the GIS data provided in the EST showed no areas designated as Outstanding Florida Waters in the project buffer.

Special Designations: Aquatic Preserves
Project Level
Comments:
Analysis of the GIS data provided in the EST showed no areas designated as Aquatic Preserves in the project buffer.

Special Designations: Scenic Highways
Project Level
Comments:
Analysis of the GIS data provided in the EST showed no Scenic Highways designated in the project buffer.

Special Designations: Wild and Scenic Rivers

Project Level

Comments:

Analysis of the GIS data provided in the EST showed no Wild and Scenic Rivers or river segments in the project buffer.

Advance Notification Comments

US Army Corps of Engineers Comment --

The Corps has reviewed the Advance Notification Package and provided comments regarding wetlands and navigation under the evaluation section of the ETDM site.

--Tarrie L Ostrofsky, 4/14/2017

No response

GIS Analyses

Since there are so many GIS Analyses available for Project #14322 - HEFT (SR 821) Widening US 1 South of Palm Drive to Campbell Drive, they have not been included in this ETDM Summary Report. GIS Analyses, however, are always available for this project on the Public ETDM Website. Please click on the link below (or copy this link into your Web Browser) in order to view detailed GIS tabular information for this project:

http://etdmpub.fla-etat.org/est/index.jsp?tpID=14322&startPageName=GIS%20Analysis%20Results

Special Note: Please be sure that when the GIS Analysis Results page loads, the **Programming Screen Summary Report Published on 06/28/2017 by Rax Jung Milestone** is selected. GIS Analyses snapshots have been taken for Project #14322 at various points throughout the project's life-cycle, so it is important that you view the correct snapshot.

Project Attachments

There are no attachments for this project.

Degree of Effect Legend

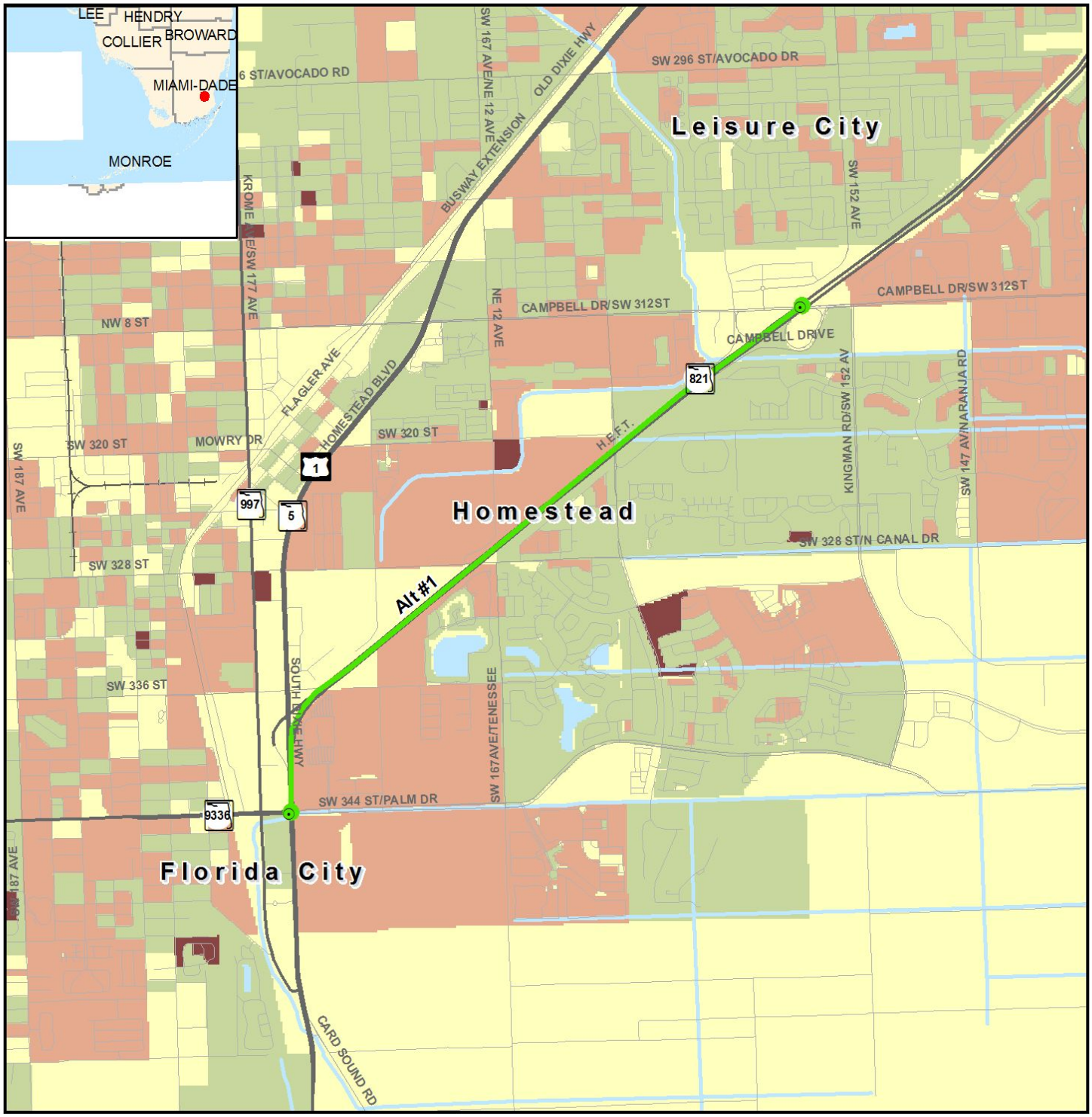
Color Code	Meaning	ETAT	Public Involvement
N/A	Not Applicable / No Involvement	There is no presence of the issue in relationship to the project, or the issue is irrelevant in relationship to the proposed transportation action.	
0	None (after 12/5/2005)	The issue is present, but the project will have no impact on the issue; project has no adverse effect on ETAT resources; permit issuance or consultation involves routine interaction with the agency. The *None* degree of effect is new as of 12/5/2005.	No community opposition to the planned project. No adverse effect on the community.
1	Enhanced	Project has positive effect on the ETAT resource or can reverse a previous adverse effect leading to environmental improvement.	Affected community supports the proposed project. Project has positive effect.
2	Minimal	Project has little adverse effect on ETAT resources. Permit issuance or consultation involves routine interaction with the agency. Low cost options are available to address concerns.	Minimum community opposition to the planned project. Minimum adverse effect on the community.
2	Minimal to None (assigned prior to 12/5/2005)	Project has little adverse effect on ETAT resources. Permit issuance or consultation involves routine interaction with the agency. Low cost options are available to address concerns.	Minimum community opposition to the planned project. Minimum adverse effect on the community.
3	Moderate	Agency resources are affected by the proposed project, but avoidance and minimization options are available and can be addressed during development with a moderated amount of agency involvement and moderate cost impact.	Project has adverse effect on elements of the affected community. Public Involvement is needed to seek alternatives more acceptable to the community. Moderate community interaction will be required during project development.

4	Substantial	The project has substantial adverse effects but ETAT understands the project need and will be able to seek avoidance and minimization or mitigation options during project development. Substantial interaction will be required during project development and permitting.	Project has substantial adverse effects on the community and faces substantial community opposition. Intensive community interaction with focused Public Involvement will be required during project development to address community concerns.
5	Potential Dispute (Planning Screen)	Project may not conform to agency statutory requirements and may not be permitted. Project modification or evaluation of alternatives is required before advancing to the LRTP Programming Screen.	Community strongly opposes the project. Project is not in conformity with local comprehensive plan and has severe negative impact on the affected community.
5	Dispute Resolution (Programming Screen)	Project does not conform to agency statutory requirements and will not be permitted. Dispute resolution is required before the project proceeds to programming.	Community strongly opposes the project. Project is not in conformity with local comprehensive plan and has severe negative impact on the affected community.
	No ETAT Consensus	ETAT members from different agencies assigned a different degree of effect to this project, and the ETDM coordinator has not assigned a summary degree of effect.	
	No ETAT Reviews	No ETAT members have reviewed the corresponding issue for this project, and the ETDM coordinator has not assigned a summary degree of effect.	

Project-Level Hardcopy Maps

14322 HEFT (SR 821) Widening US 1 South of Palm Drive to Campbell Drive

US 1, Just south of Palm Drive to Campbell Drive



Age Distribution Map

ETDM Alternative
ETDM Alternative Terminus
Major Road
Local Road or Trail

Median Age
0 - 18
18 - 30
30 - 65
> 65

Data Sources:
US Geological Survey
FL Department of Transportation
NAVTEQ
US Census Bureau (2010)

0 0.15 0.3 0.6 Miles

N

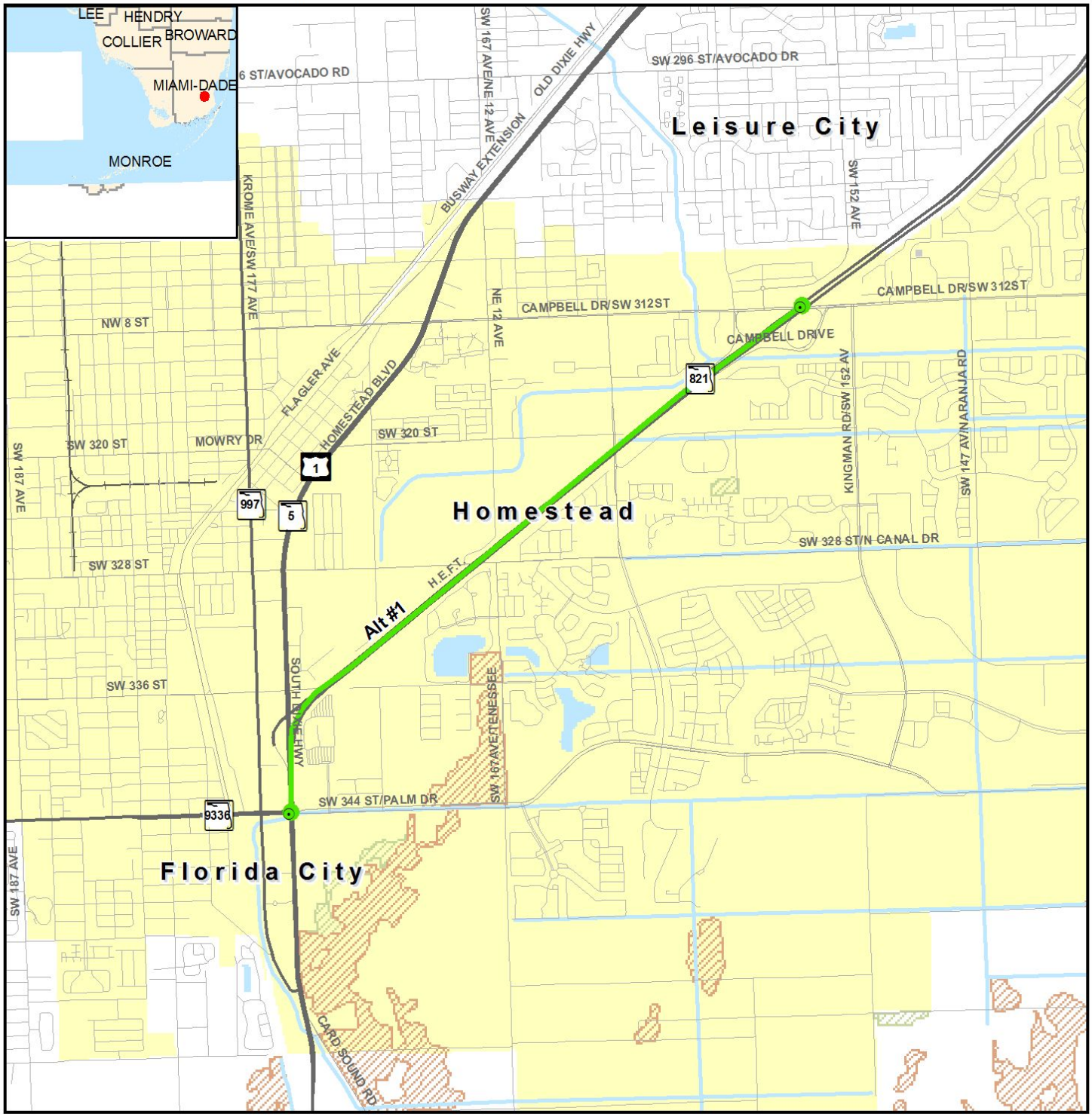
3/6/2017

etdm Environmental Screening Tool

FDOT

14322 HEFT (SR 821) Widening US 1 South of Palm Drive to Campbell Drive

US 1, Just south of Palm Drive to Campbell Drive



Coastal and Marine Map

- ETDM Alternative
- ETDM Alternative Terminus
- City Limits
- Navigable Water Way
- Swamp or Marsh
- Exposed Rocky Platform
- Sand Beach
- Gravel Beach/Riprap
- Exposed Tidal Flat
- Sheltered Tidal Flat
- Mixed Sand And Gravel Beach
- Sheltered Rock/Seawall/Vegetated
- Exposed Vertical Rocky Shore/Seawall
- Coastal Barrier Resource Area
- Continuous Seagrass
- Discontinuous Seagrass
- Aquatic Preserve
- Non-vegetated Wetland
- Vegetated Non-forested Wetland
- Wetland Forested Mixed
- Wetland Coniferous Forest
- Wetland Hardwood Forest

0 0.15 0.3 0.6 Miles

N

3/6/2017

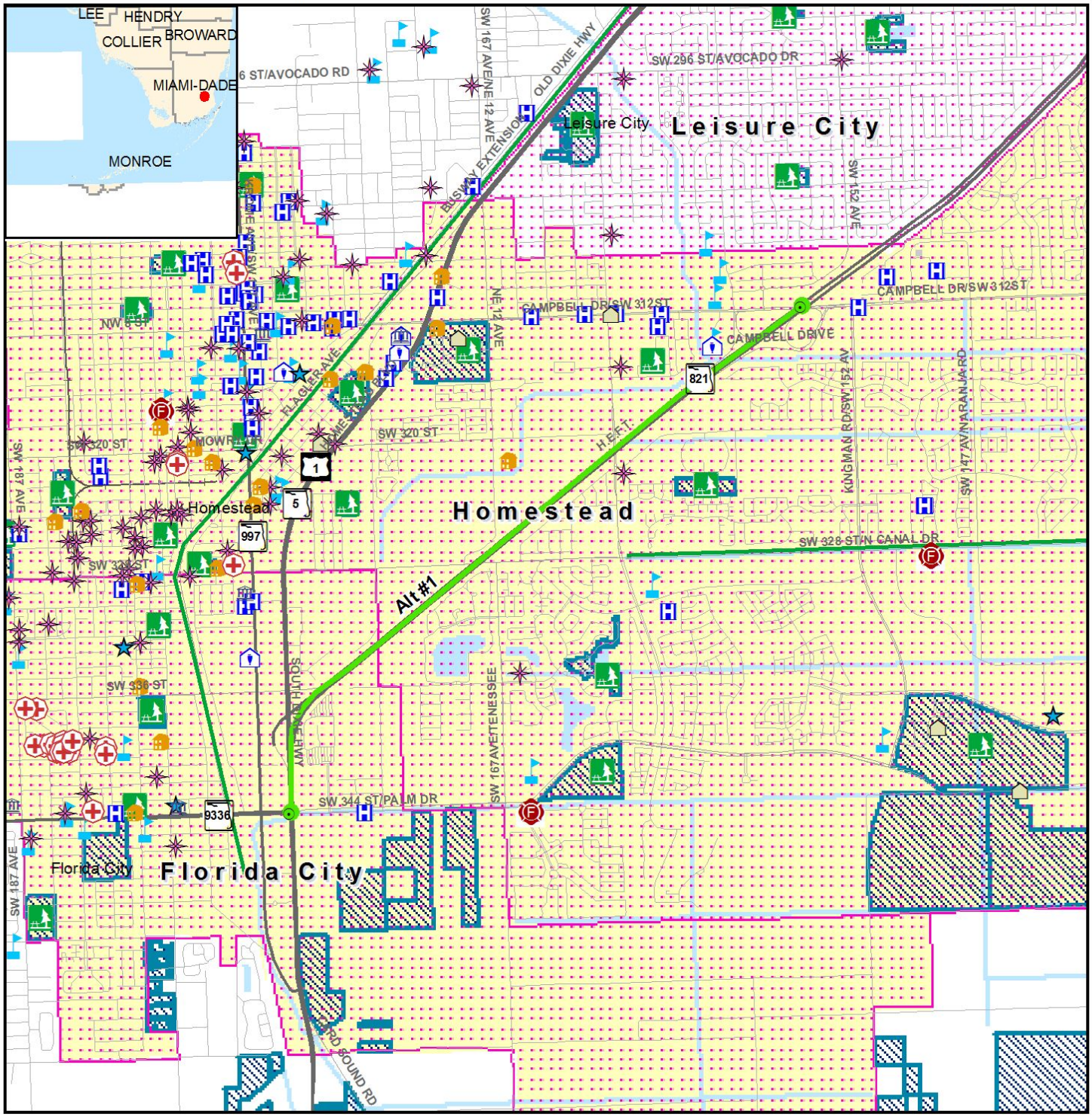
Data Sources: NAVTEQ; US Geological Survey; Florida Marine Research Institute; Florida Department of Transportation; Florida Department of Environmental Protection; National Oceanic and Atmospheric Association; Florida Water Management Districts

etdm Environmental Screening Tool

FDOT

14322 HEFT (SR 821) Widening US 1 South of Palm Drive to Campbell Drive

US 1, Just south of Palm Drive to Campbell Drive



Community Services Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail
- City Limits
- Government
- Civic Center
- Cemetery
- Social Service
- Community Center
- Law Enforcement
- Place of Worship
- Cultural Center
- Fire Station
- Health Care
- School
- Park
- Recreational Trail
- Community Boundary
- Conservation or Recreation Area

Data Sources:
US Geological Survey; FL Department of Transportation; NAVTEQ; FL Property Appraisers; FL Natural Areas Inventory

0 0.15 0.3 0.6 Miles

N

3/6/2017

etdm Environmental Screening Tool

FDOT

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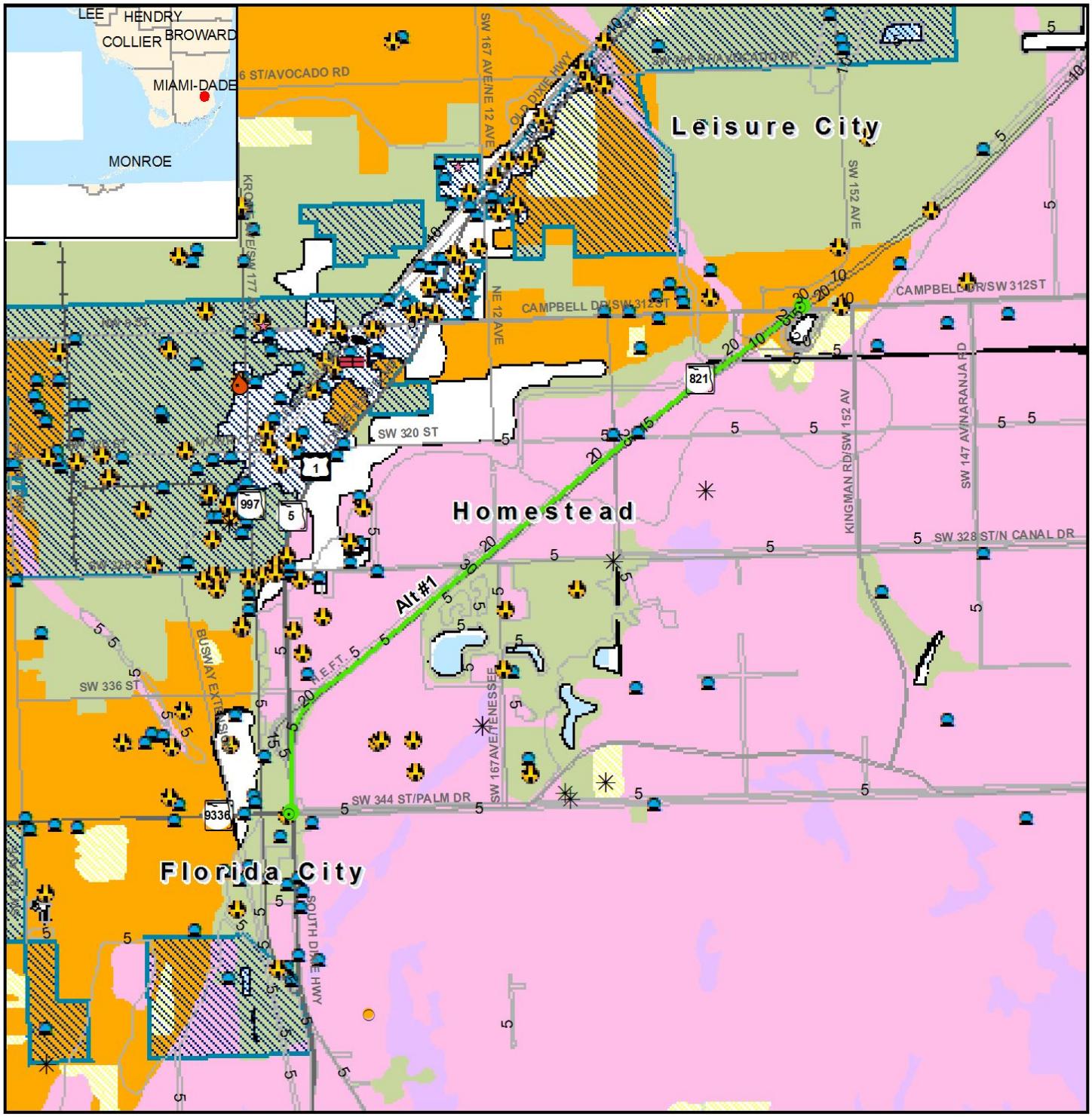
US 1, Just south of Palm Drive to Campbell Drive



Contamination Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail
- Toxic Release Inventory
- Dry Cleaning Facility
- Solid Waste Facility
- Hazardous Material Site
- Power Plant
- Superfund Site
- Nuclear Site
- FDEP Tanks
- 5 FT Contour
- NPL Remediation Site
- Brownfield Area

Soil Drainage

- Excessively Drained
- Well Drained
- Somewhat Excessively Drained
- Moderately Well Drained
- Somewhat Poorly Drained
- Poorly Drained
- Very Poorly Drained
- Unclassified

0 0.15 0.3 0.6 Miles

N

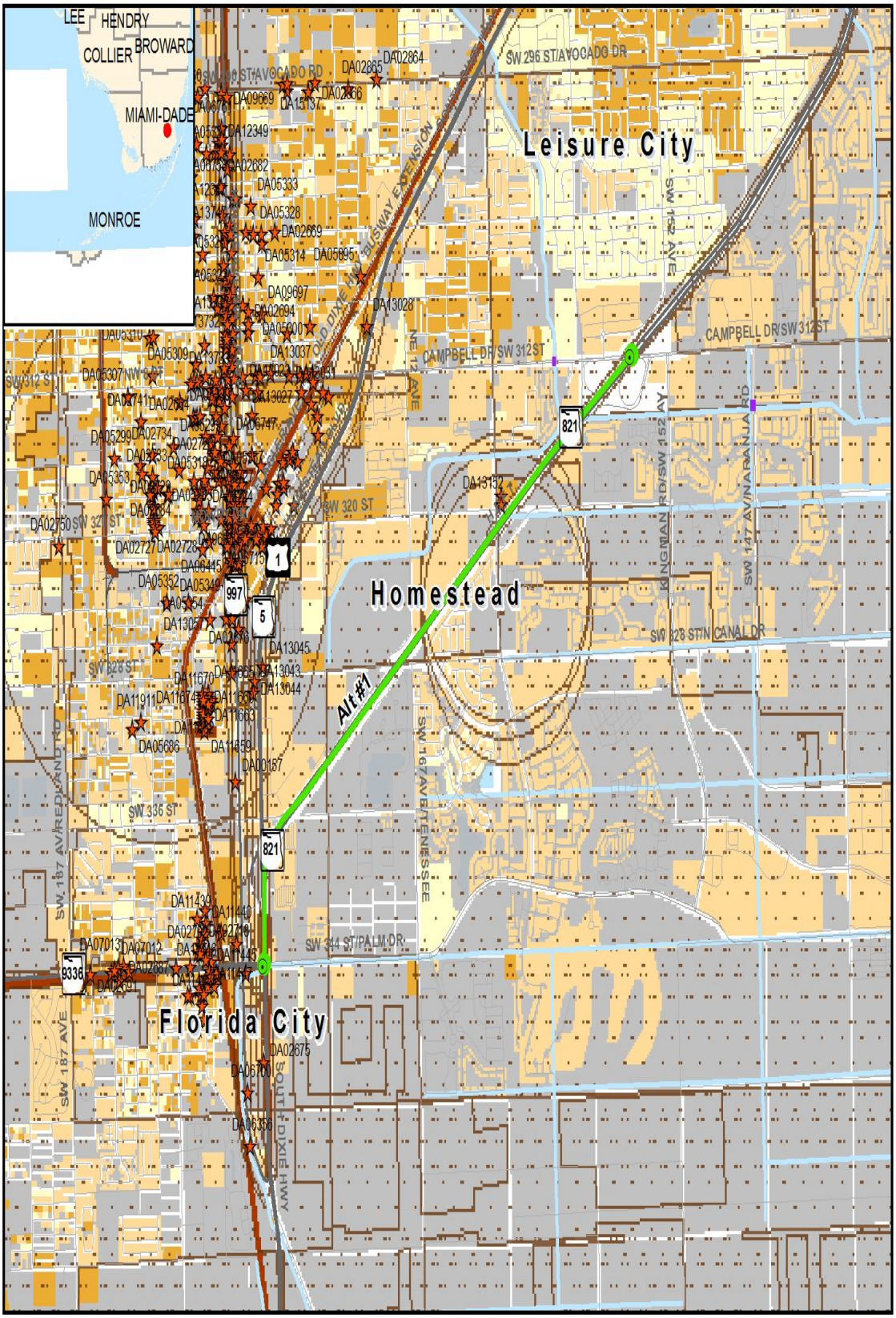
3/6/2017

Data Sources:NAVTEQ; US Geological Survey; FL Department of Transportation; FL Department of Environmental Protection; FL Water Management Districts; US Environmental Protection Agency; Natural Resource Conservation Service

etdm Environmental Screening Tool

FDOT

Cultural Resources Data Map



- ETDM Alternative
- Major Road
- Local Road or Trail
- Historic Structure
- Historic Bridge
- State Historic Highway
- Historic Cemetery
- Historic Resource Group
- Cultural Resource Field Survey Area
- ETDM Alternative

Year Built

- Pre 1970
- Post 1980
- 1970 - 1979
- Parcels w/ no values

N

0 0.125 0.25 0.5 Miles

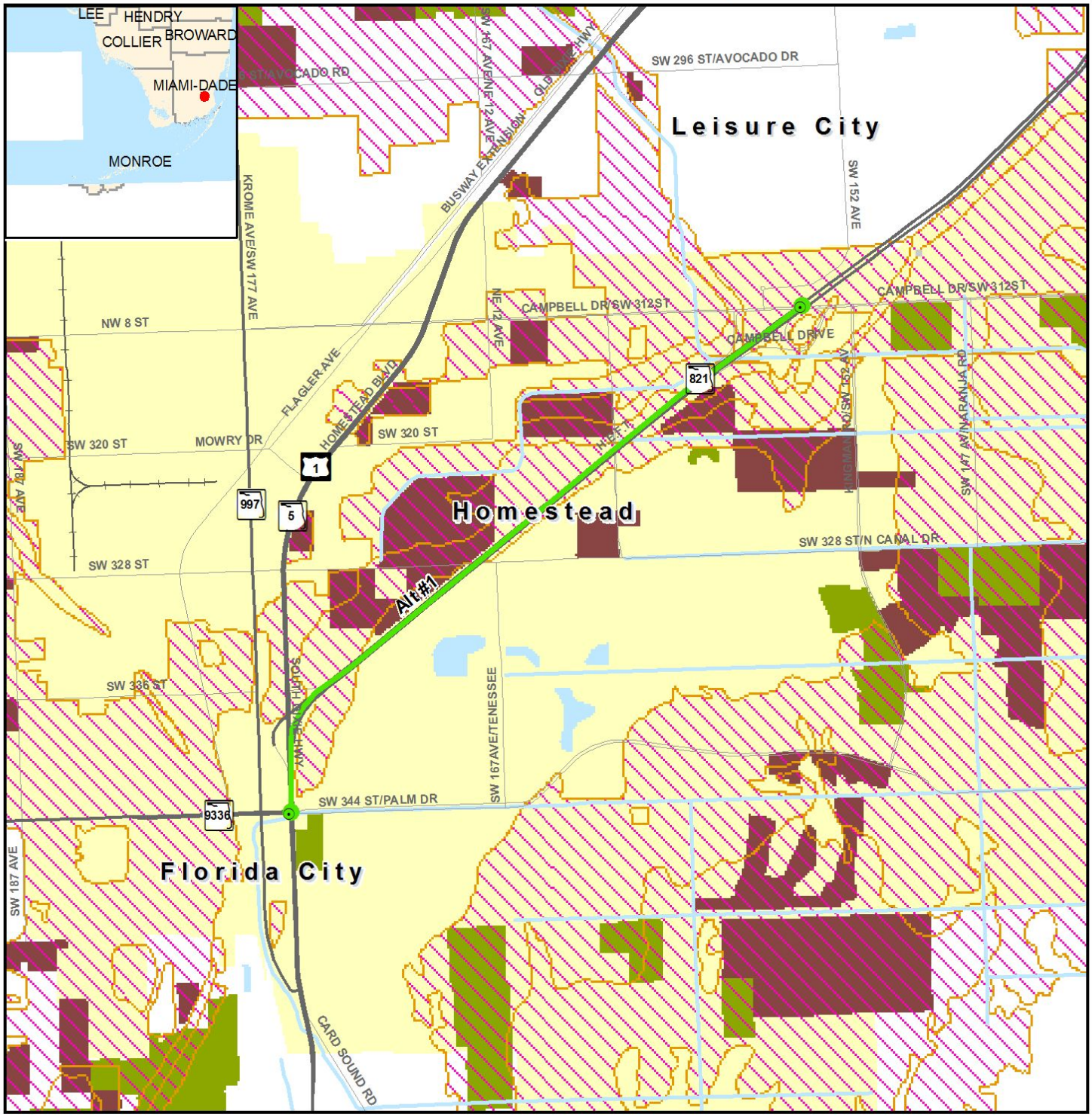
Data Sources:
NAVTEQ
US Geological Survey
Florida Department of Transportation
Florida Department of State,
Bureau of Archaeological Research

Note: Historic properties depicted on this map represent resources listed in the Florida Master Site File excluding archeological site locations, which, pursuant to Chapter 267.135, Florida Statutes, may be exempt from public record (Chapter 119.07, Florida Statutes). Absence of features on the map does not necessarily indicate an absence of resources in the project vicinity.

3/6/2017

14322 HEFT (SR 821) Widening US 1 South of Palm Drive to Campbell Drive

US 1, Just south of Palm Drive to Campbell Drive



Farmlands Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail
- City Limits
- Cropland/Pastureland
- Nurseries/Vineyards
- Specialty Farms
- Tree Crops
- Rural Open Lands
- Prime Farmland Soils

Data Sources:
NAVTEQ
Florida Water Management Districts
US Geological Survey
Natural Resources Conseration Services

0 0.15 0.3 0.6 Miles

N

3/6/2017

etdm Environmental Screening Tool

FDOT

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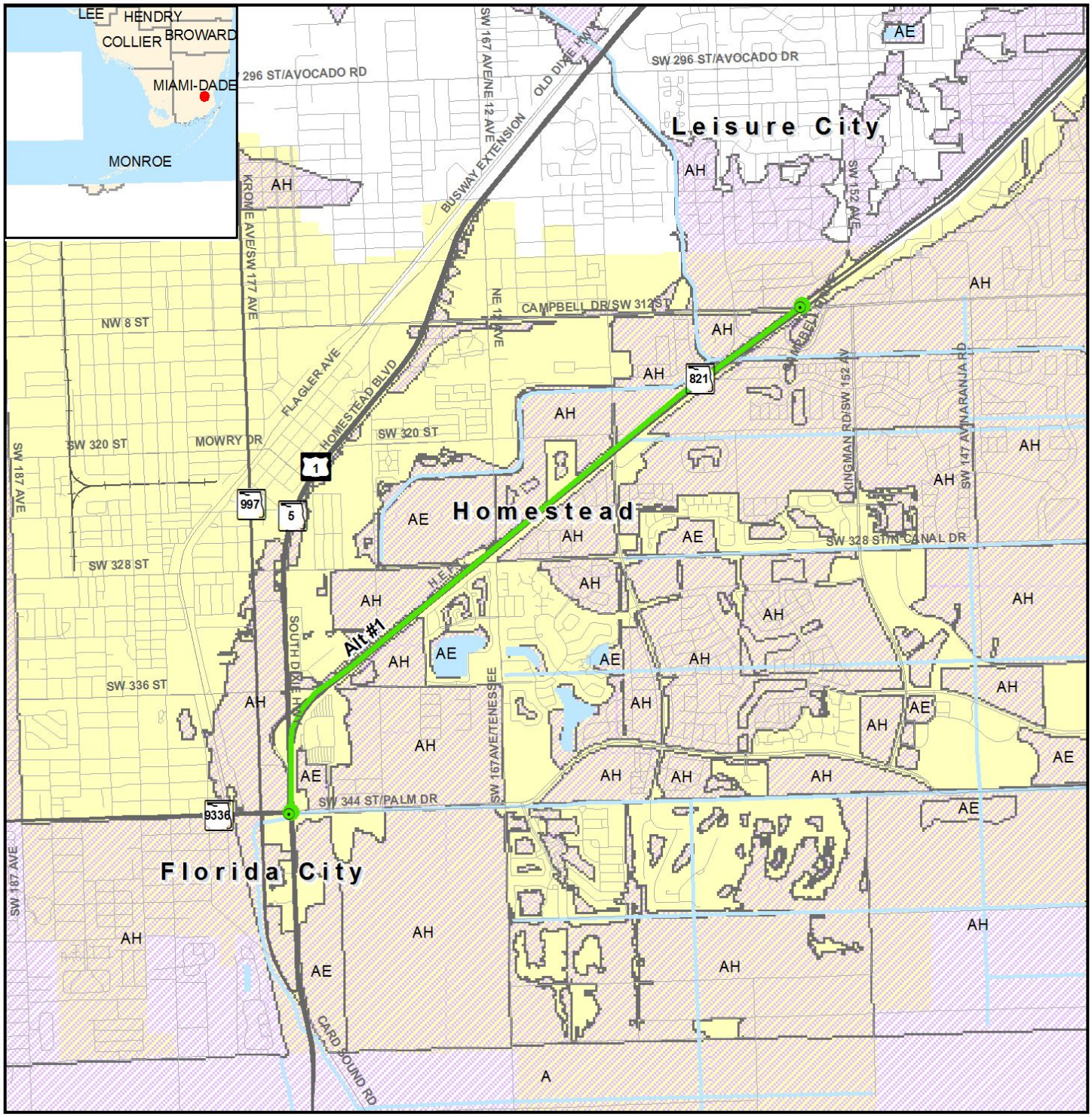
US 1, Just south of Palm Drive to Campbell Drive



Floodplains Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail
- City Limits
- Special Flood Hazard Area

Data Sources:
NAVTEQ
US Geological Survey
Federal Emergency Management Agency

0 0.2 0.4 0.8 Miles

N

3/6/2017

etdm Environmental Screening Tool

FDOT

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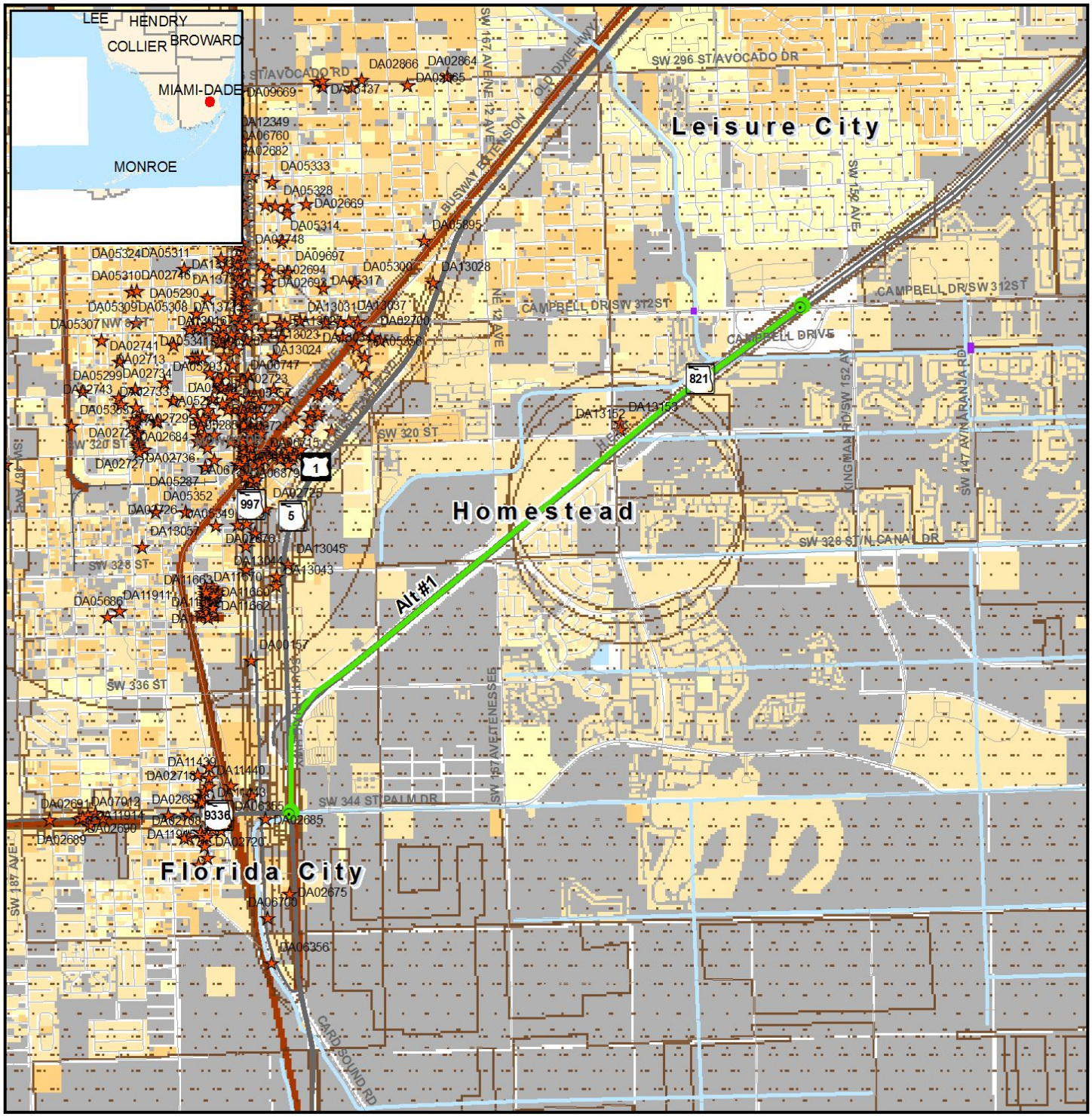
US 1, Just south of Palm Drive to Campbell Drive



Historic Resource Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail

Year Built
- Pre 1970
- Post 1980
- 1970 - 1979
- Parcels w/ no values

- Historic Structure
- Historic Bridge
- State Historic Highway
- Historic Cemetery
- Historic Resource Group
- Cultural Resource Field Survey Area

Data Sources:
NAVTEQ
US Geological Survey
Florida Department of Transportation
Florida Department of State,
Bureau of Archaeological Research

Note: Historic properties depicted on this map represent resources listed in the Florida Master Site File excluding archeological site locations, which, pursuant to Chapter 267.135, Florida Statutes, may be exempt from public record (Chapter 119.07, Florida Statutes). Absence of features on the map does not necessarily indicate an absence of resources in the project vicinity.

0 0.2 0.4 0.8 Miles

N

3/6/2017

etdm Environmental Screening Tool

FDOT

14322 HEFT (SR 821) Widening US 1 South of Palm Drive to Campbell Drive

US 1, Just south of Palm Drive to Campbell Drive

Hydrogeology Map

ETDM Alternative
ETDM Alternative Terminus
Major Road
Local Road or Trail
City Limits

Recharge Areas of the Floridan Aquifer
Discharge 1 to 5
Discharge > 5
Disharge < 1
Recharge 1 to 10
Recharge > 10
Recharge < 1

Surface Geology
Eocene
Miocene
Miocene/Pliocene
Oligocene
Oligocene/Miocene
Pleistocene
Holocene
Pleistocene/Holocene
Pliocene
Pliocene/Pleistocene

N

0 0.2 0.4 0.8 Miles

3/6/2017

Data Sources: NAVTEQ; US Geological Survey
Florida Department of Transportation
South West Florida Water Management District
Florida Geological Survey

etdm Environmental Screening Tool

FDOT

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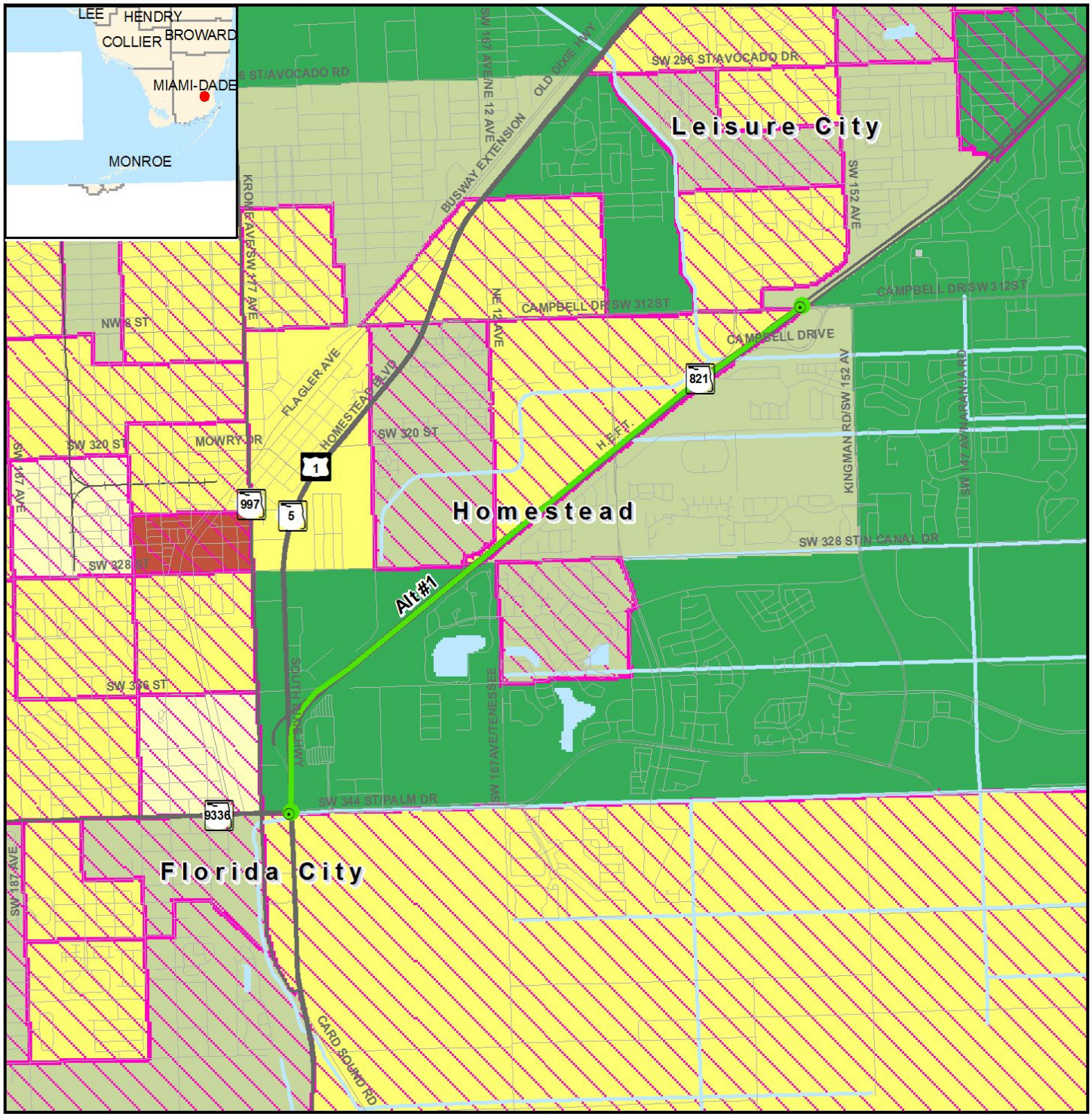
US 1, Just south of Palm Drive to Campbell Drive



Income Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail
- > 20% Below Poverty

Median Household Income

- 0 - 10,000
- 10,001 - 29,999
- 30,000 - 49,999
- 50,000 - 79,999
- 80,000 - 125,000
- > 125,000

Data Sources:
US Geological Survey
FL Department of Transportation
NAVTEQ
US Census Bureau (2010)

0 0.2 0.4 0.8 Miles

N

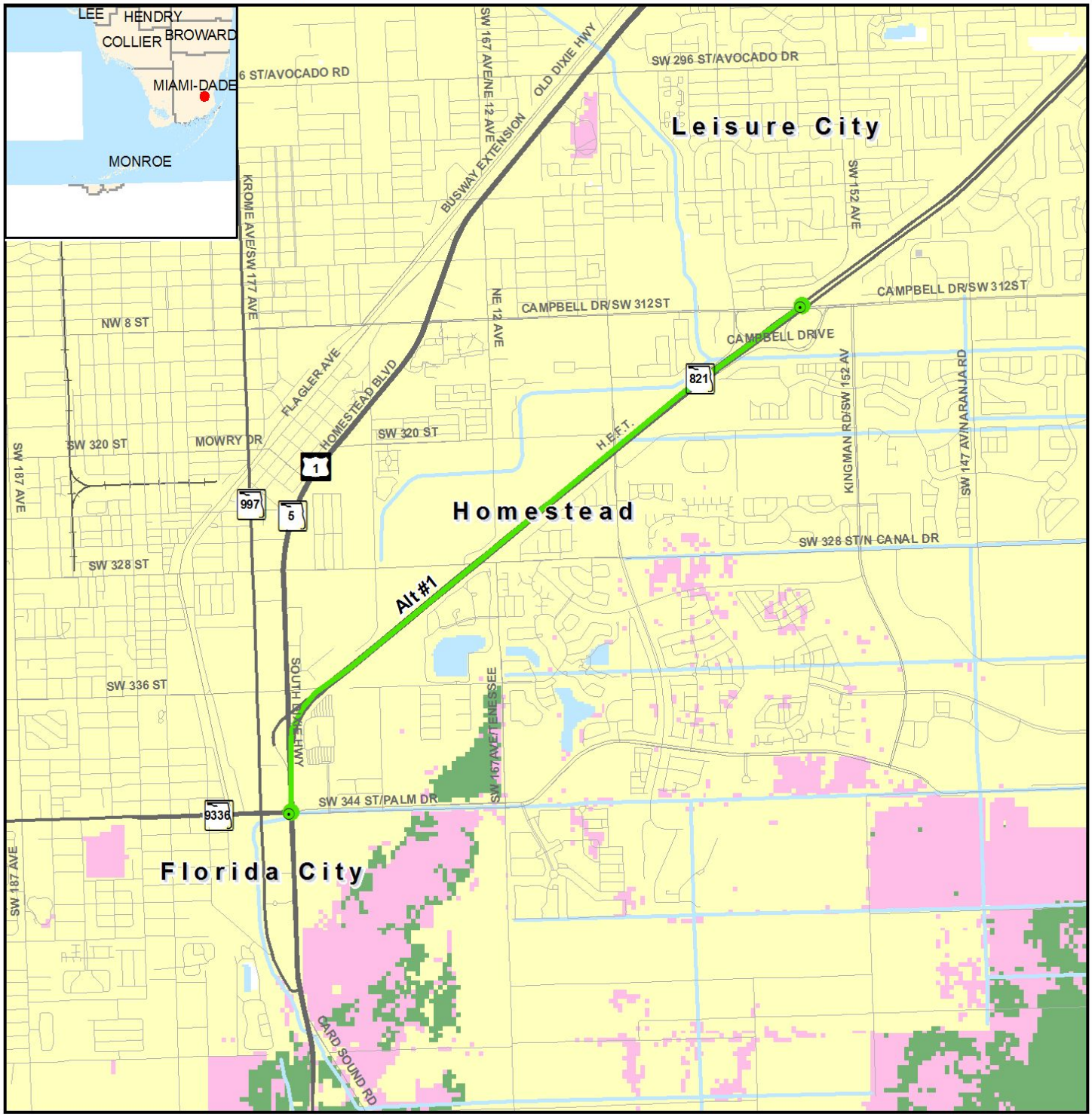
3/6/2017

etdm Environmental Screening Tool

FDOT

14322 HEFT (SR 821) Widening US 1 South of Palm Drive to Campbell Drive

US 1, Just south of Palm Drive to Campbell Drive



Integrated Wildlife Model Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail
- Low Habitat Quality
- Medium Habitat Quality
- High Habitat Quality

Data Sources:
NAVTEQ
US Geological Survey
Florida Department of Transportation
Florida Fish & Wildlife Conservation Commission

0 0.2 0.4 0.8 Miles

N

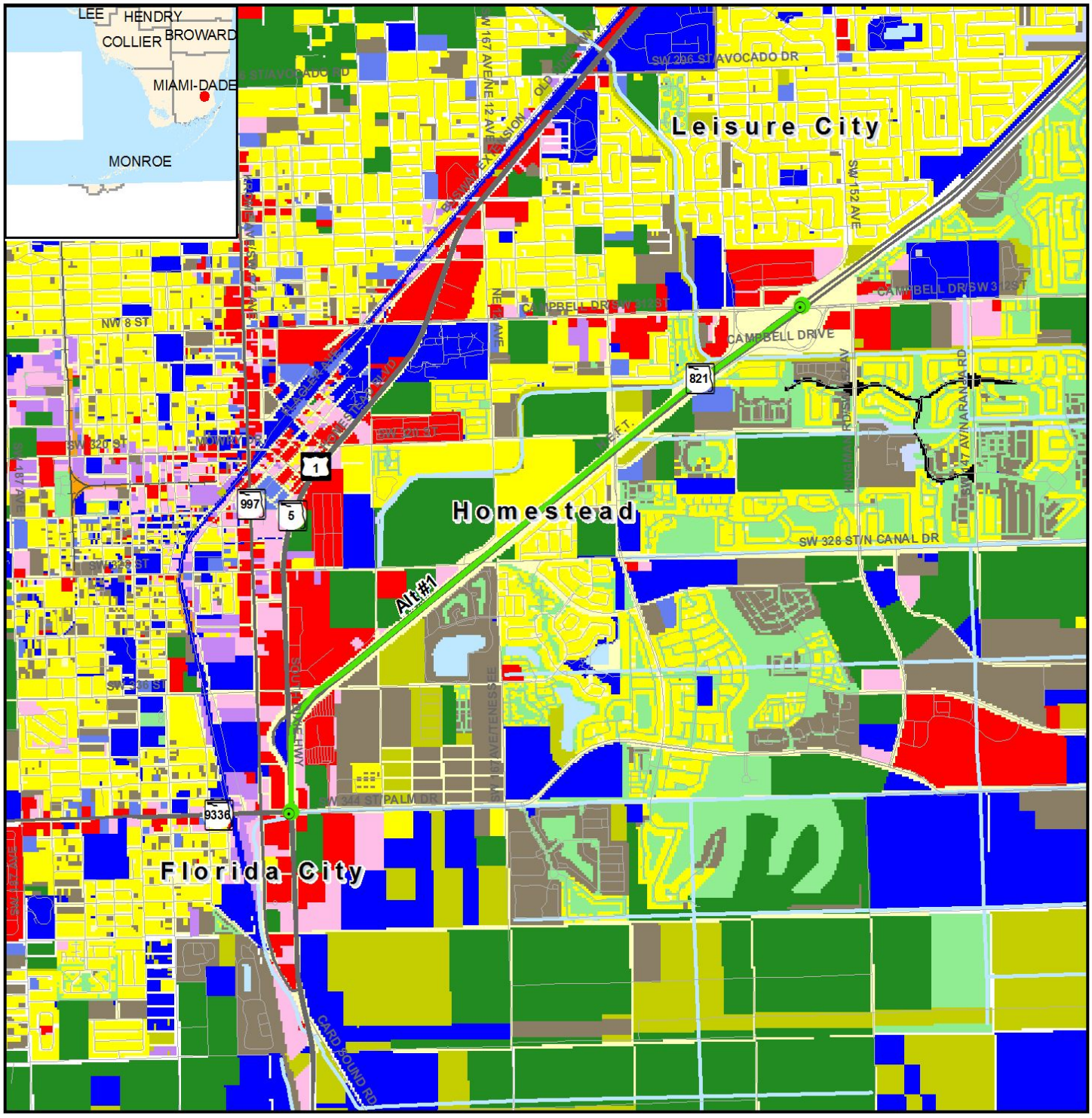
3/6/2017

etdm Environmental Screening Tool

FDOT

14322 HEFT (SR 821) Widening US 1 South of Palm Drive to Campbell Drive

US 1, Just south of Palm Drive to Campbell Drive



Land Use Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail
- Agricultural
- Industrial
- Institutional
- Mining
- Open (Not Agricultural)
- Other
- Public
- Right-of-Way
- Recreational
- Residential
- Retail/Office
- Vacant (Residential)
- Vacant (Nonresidential)
- Water
- No Data

Data Sources:
NAVTEQ
US Geological Survey
Florida Department of Revenue
Florida Department of Transportation
Florida County Property Appraiser Offices

0 0.2 0.4 0.8 Miles

N

3/6/2017

etdm Environmental Screening Tool

FDOT

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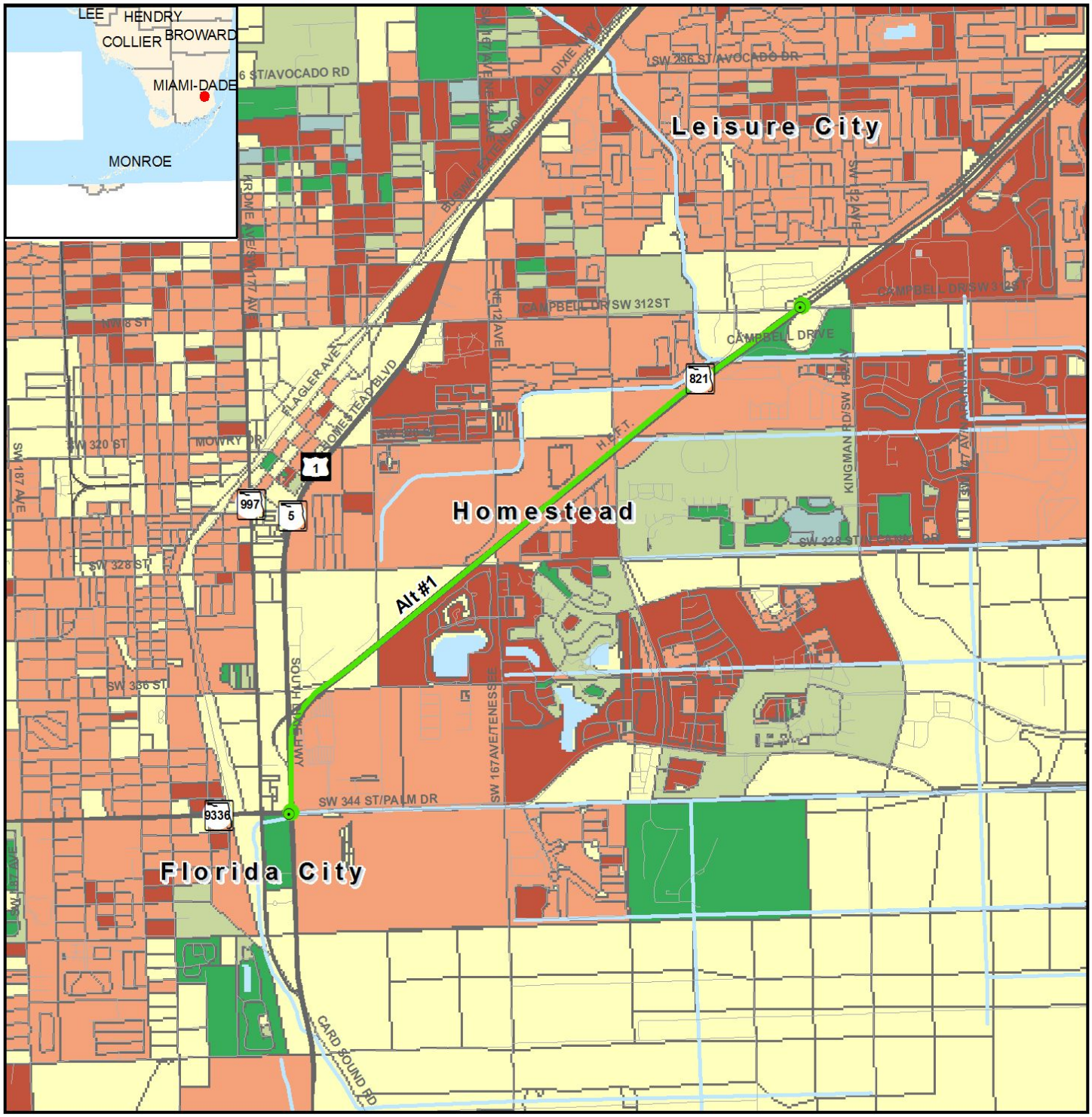
US 1, Just south of Palm Drive to Campbell Drive



Minority Population Map

ETDM Alternative
ETDM Alternative Terminus
Major Road
Local Road or Trail

Percent Minority Population (2010)

0 - 6
7 - 20
21 - 40
41 - 60
61 - 85
86 - 100

Data Sources:
US Geological Survey
FL Department of Transportation
NAVTEQ
US Census Bureau (2010)

0 0.2 0.4 0.8 Miles

N

3/6/2017

etdm Environmental Screening Tool

FDOT

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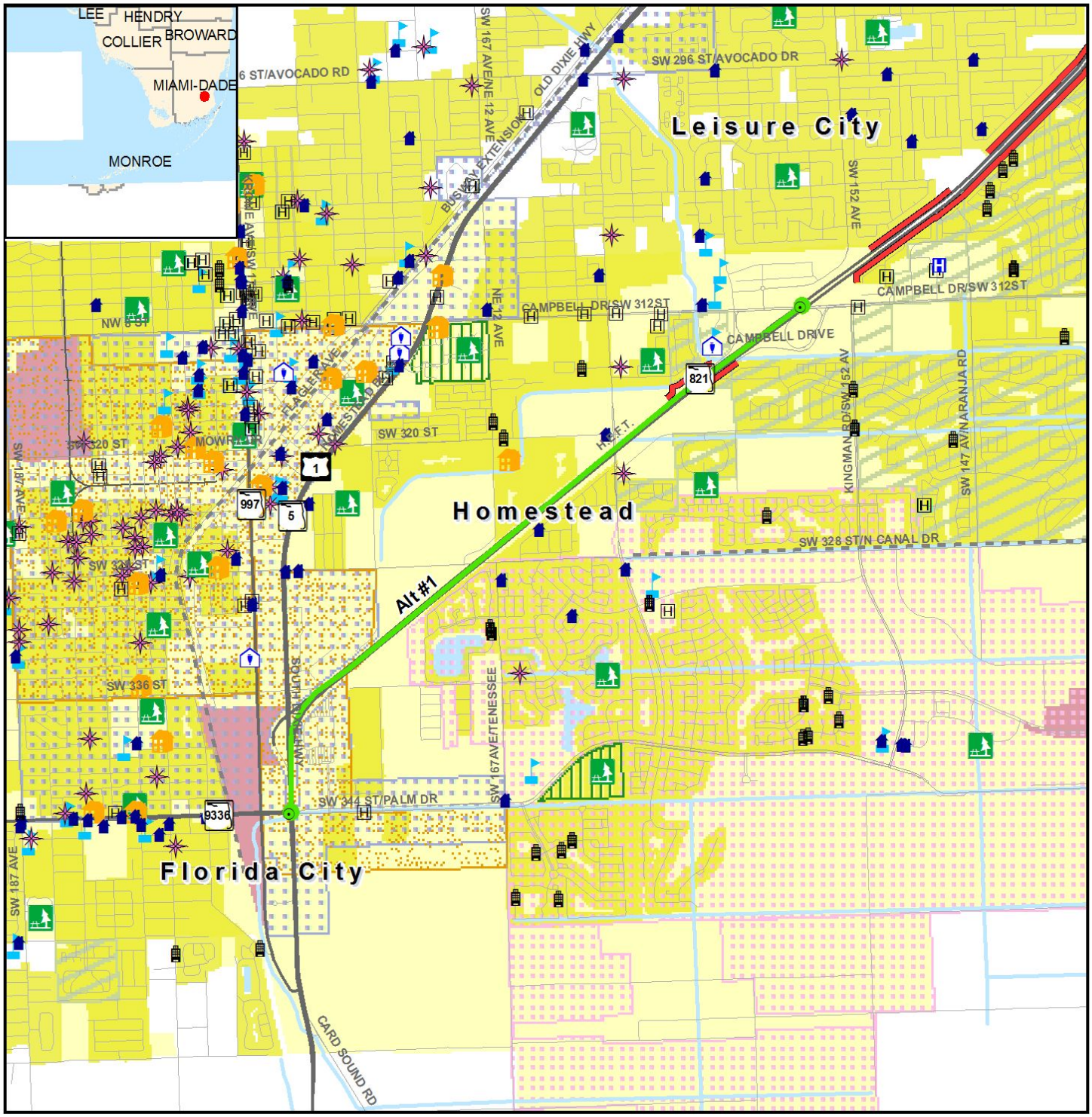
US 1, Just south of Palm Drive to Campbell Drive



Noise Map

- ETDM Alternative
- ETDM Alternative Terminus
- City Limits
- Noise Barriers
- Existing Trails
- Condo Owners Associations
- Hospitals
- Laser On-site
- Group Care Facilities
- Cemetery
- Community Center
- Cultural Center
- Health Care
- Park
- Place of Worship
- School
- Historic Cemetery
- Planned Unit Developments
- Wildlife Refuges
- National Parks
- National Park Projects
- Marine Sanctuaries
- Military Installations
- ETAT.LU_NW_INDUSTRIAL_13
- ETAT.LU_NW_RESIDENT_13
- HUD Renewal
- Nat'l Estuarine Reserves
- Enterprise Zones
- DRI

0 0.15 0.3 0.6 Miles

N

Data Sources:
GeoPlan Center, US Geological Survey, US Census Bureau, HUD, Florida DOT, US Fish and Wildlife, National Park Service, NOAA, National Estuarine Research, Enterprise Florida

etdm Environmental Screening Tool

FDOT

3/6/2017

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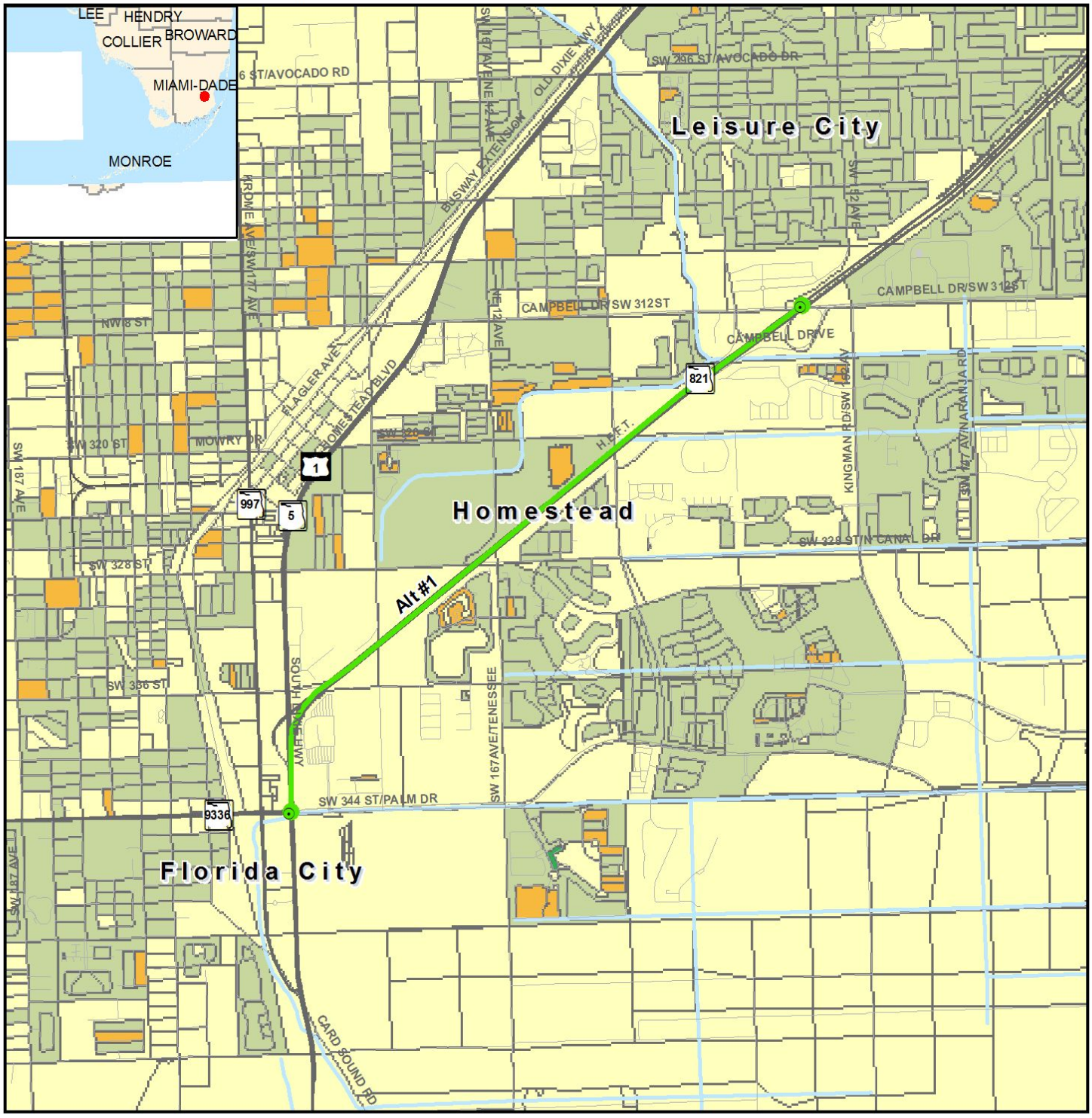
US 1, Just south of Palm Drive to Campbell Drive



Population Density Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail

Population Per Acre (2010)

0 - 4.9 | 5 - 29.9 | 30 - 99.9 | 100 - 349.9 | 350 - 800 | > 800

Data Sources:
US Geological Survey
FL Department of Transportation
NAVTEQ
US Census Bureau (2010)

0 0.2 0.4 0.8 Miles

N

3/6/2017

etdm Environmental Screening Tool

FDOT

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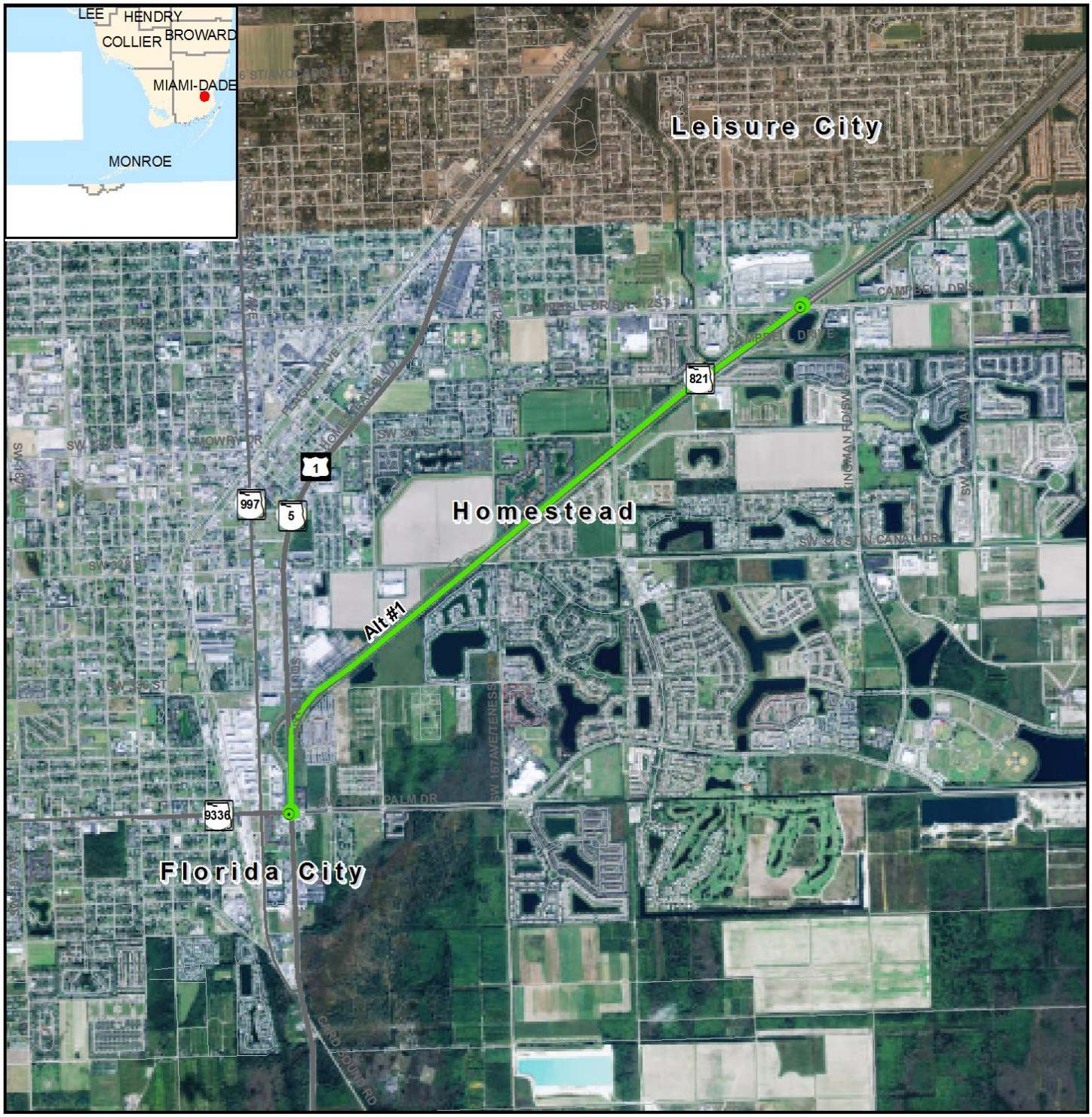
US 1, Just south of Palm Drive to Campbell Drive



Project Aerial Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail

Data Sources:
Highways - NAVTEQ
Digital Orthophotograph - ArcGIS Online

0 0.2 0.4 0.8 Miles

N

3/6/2017

etdm Environmental Screening Tool

FDOT

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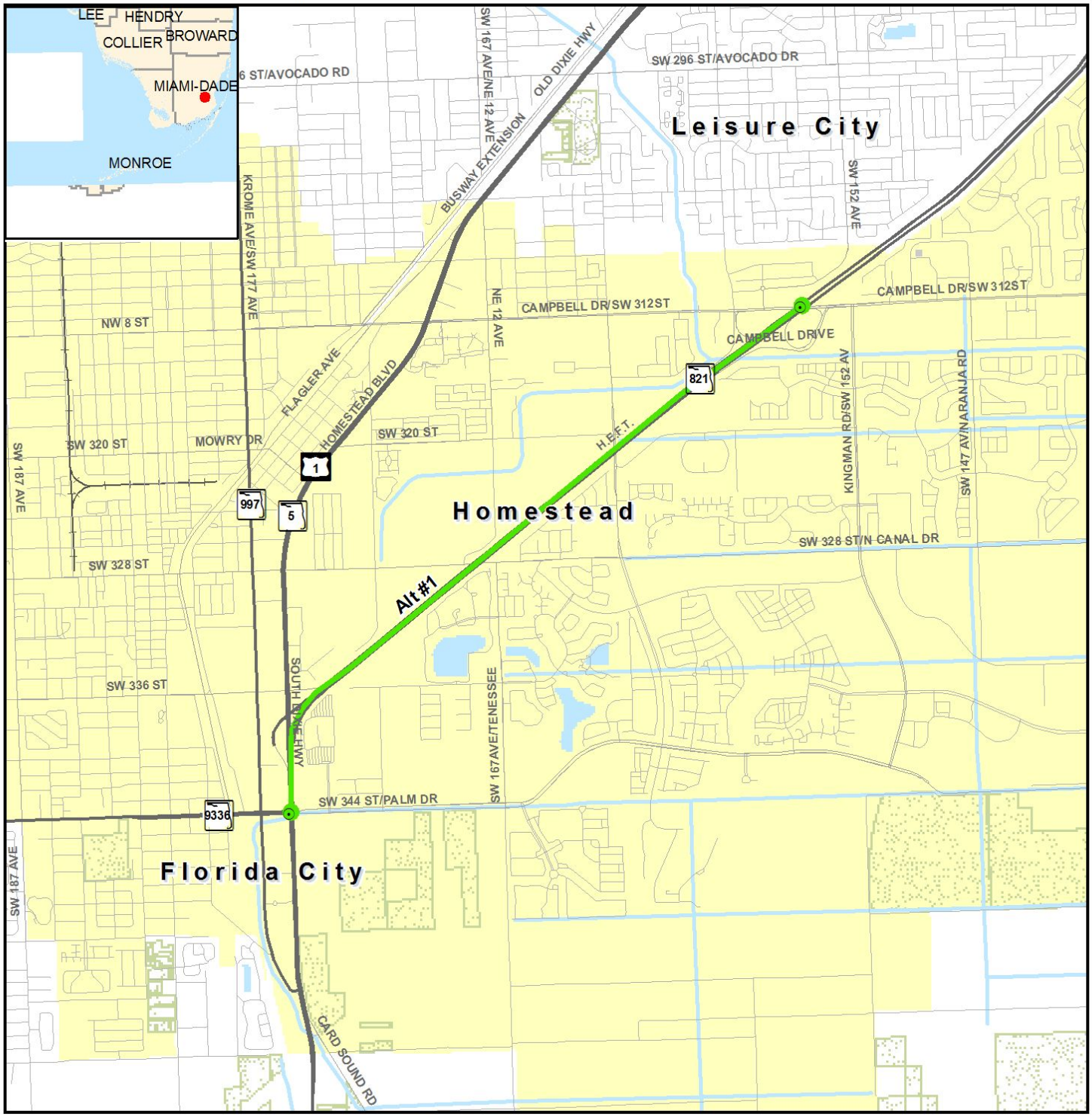
US 1, Just south of Palm Drive to Campbell Drive



Project Base Map

ETDM Alternative Terminus
Managed Conservation Lands
Alt #1
Local Road or Trail
Major Road
City Limits

Data Sources:
NAVTEQ
US Geological Survey
US Census Bureau
County Property Appraisers
Florida Natural Areas Inventory

0 0.15 0.3 0.6 Miles

N

3/6/2017

etdm Environmental Screening Tool

FDOT

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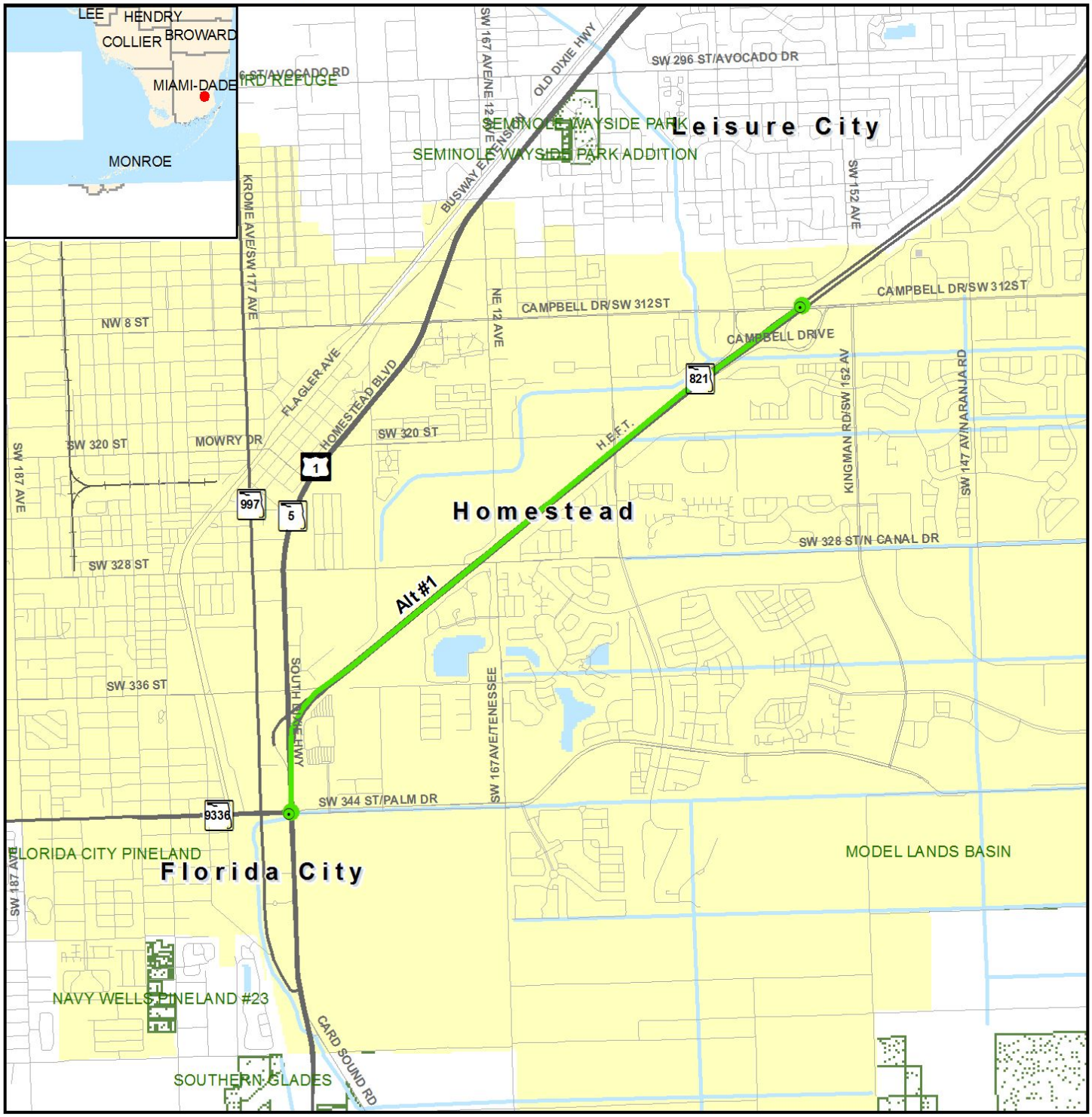
US 1, Just south of Palm Drive to Campbell Drive



Recreational Areas Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail
- City Limits
- Conservation or Recreation Area

Data Sources:
NAVTEQ
US Geological Survey
Florida Natural Areas Inventory

0 0.2 0.4 0.8 Miles

N

3/6/2017

etdm Environmental Screening Tool

FDOT

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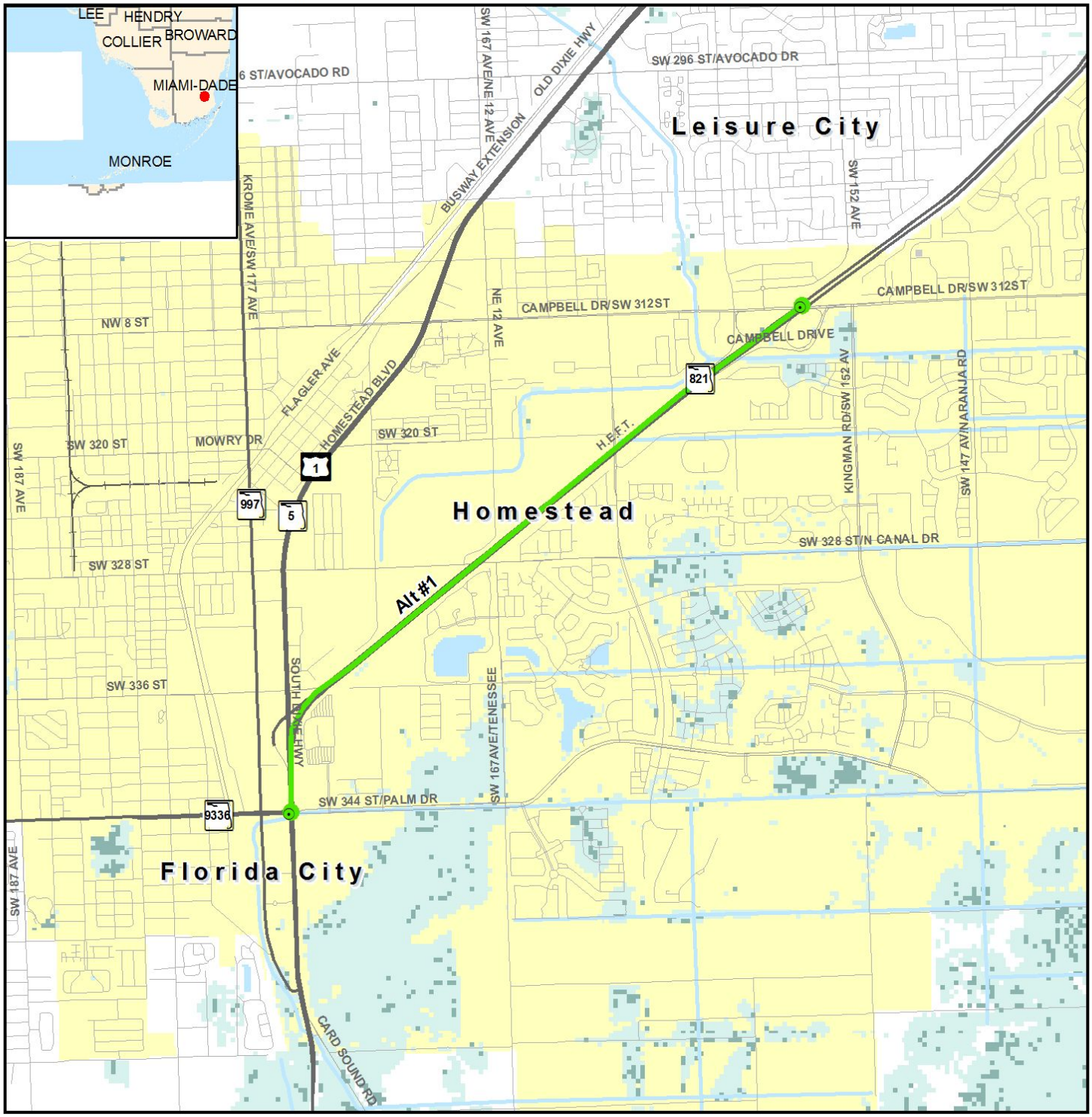

Species Potential Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail
- City Limits

Potential Habitat Richness

1 - 2 Species | 3 - 5 Species | 6 - 8 Species | 9 - 10 Species | 11 - 13 Species

Data Sources:
NAVTEQ
US Geological Survey
Florida Department of Transportation
Florida Fish & Wildlife Conservation Commission

0 0.2 0.4 0.8 Miles

N

3/6/2017

etdm Environmental Screening Tool

FDOT

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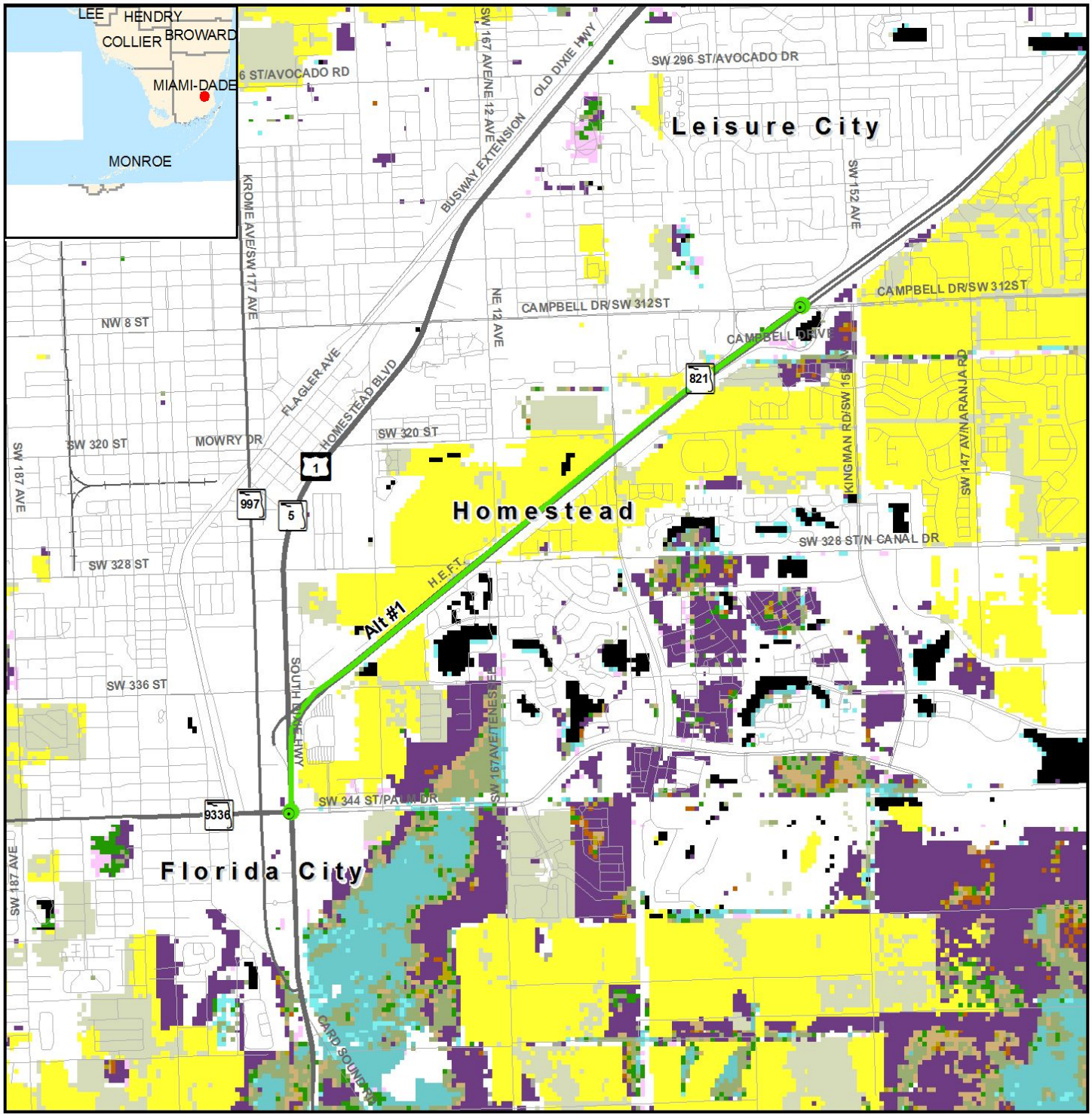

Vegetation Map

ETDM Alternative	Dry Prairie	Cattail Marsh	Bottomland Hardwood Forest	Bare Soil/Clearcut	Australian Pine
ETDM Alternative Terminus	Mixed Hardwood-pine Forest	Shrub Swamp	Salt Marsh	Improved Pasture	Melaleuca
Not Classified	Hardwood Hammocks and Forests	Bay Swamp	Mangrove Swamp	Unimproved Pasture	Brazilian Pepper
Coastal Strand	Pinelands	Cypress Swamp	Scrub Mangrove	Sugarcane	High Impact Urban
Sand/Beach	Cabbage Palm-live Oak Hammock	Cypress/Pine/Cabbage Palm	Tidal Flats	Citrus	Low Impact Urban
Xeric Oak Scrub	Tropical Hardwood Hammock	Mixed Wetland Forest	Open Water	Row and Field Crops	Extractive
Sand Pine Scrub	Freshwater Marsh and Wet Prairie	Hardwood Swamp	Shrub and Brushland	Other Agriculture	
Sandhill	Sawgrass Marsh	Hydric Hammock	Grassland	Exotic Plants	

0 0.2 0.4 0.8 Miles

N

Data Sources: NAVTEQ; Florida Department of Transportation; Florida Fish and Wildlife Conservation Commission

etdm Environmental Screening Tool

FDOT

3/6/2017

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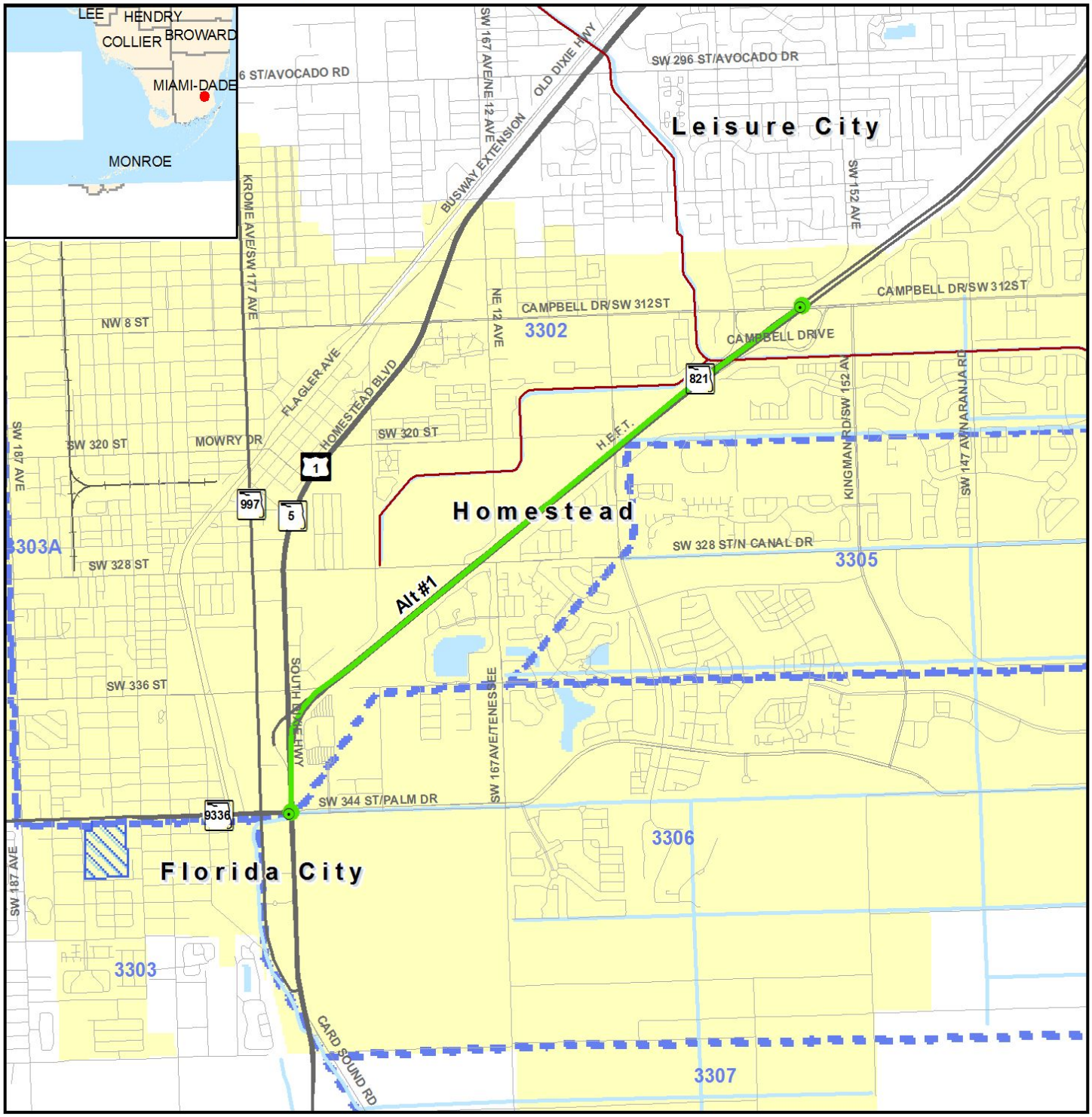
US 1, Just south of Palm Drive to Campbell Drive



Water Resource Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail
- City Limits
- 1st Magnitude Spring
- River, Stream or Canal
- Navigable Water Way
- SFWMD Canals
- Drainage Basin
- Outstanding Florida Water
- Surface Water Class I
- Surface Water Class II
- Water Body
- Swamp/Marsh

Data Sources:
NAVTEQ
US Geological Survey
Florida Department of Transportation
Florida Department of Environmental Protection
Florida Geological Survey
US Bureau of Transportation Statistics

0 0.2 0.4 0.8 Miles

N

3/6/2017

etdm Environmental Screening Tool

FDOT

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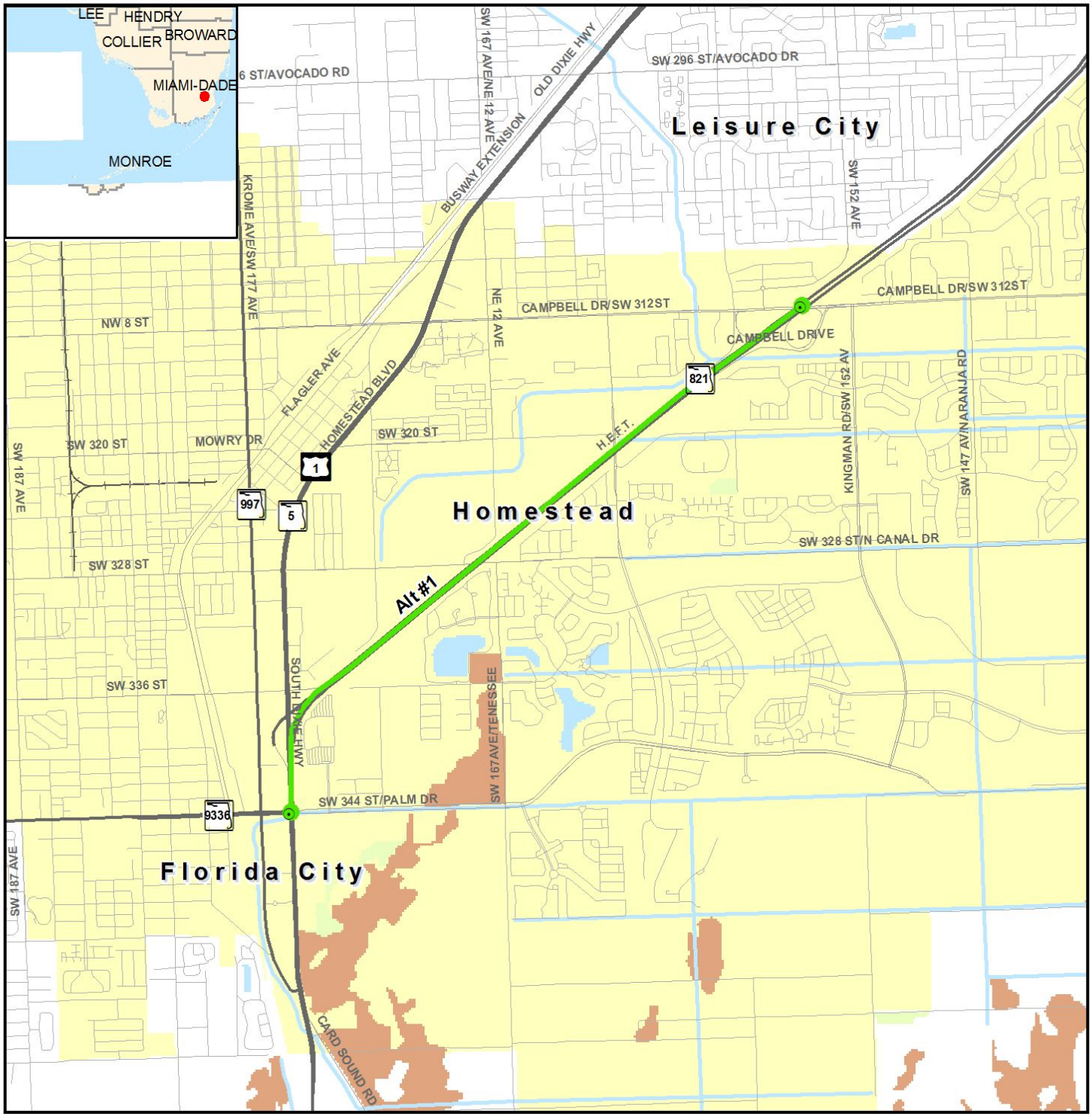
US 1, Just south of Palm Drive to Campbell Drive



Wetlands and Surface Waters Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail
- City Limits
- River, Stream or Canal
- Water Body
- Swamp/Marsh
- Non-vegetated Wetland
- Vegetated Non-forested Wetland
- Wetland Forested Mixed
- Wetland Coniferous Forest
- Wetland Hardwood Forest

Data Sources:
NAVTEQ
Florida Water Management Districts
US Geological Survey

0 0.2 0.4 0.8 Miles

N

3/6/2017

etdm Environmental Screening Tool

FDOT

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Appendix D

SHPO Concurrence Letter
October 9, 2020

FDOT

Florida Department of Transportation

RON DESANTIS
GOVERNOR

801 North Broadway Avenue
Bartow, FL 33830

KEVIN J. THIBAULT, P.E.
SECRETARY

September 11, 2020

Dr. Timothy Parsons, Director
Florida Division of Historical Resources
Department of State, R.A. Gray Building
500 South Bronough Street
Tallahassee, FL 32399-0250

Attn: Transportation Compliance Review Program

RE: **Cultural Resource Assessment Survey Report**
Turnpike Extension (SR 821) Widening PD&E Study
From US 1 (South of Palm Drive) to Campbell Drive
Miami-Dade County, Florida
FM No: 439545-1-22-01

Dear Dr. Parsons:

This Cultural Resource Assessment Survey (CRAS) is part of a Project Development and Environment (PD&E) Study initiated in December 2017 for Florida's Turnpike Enterprise (FTE) to develop and evaluate potential improvements at the southern end of the Florida's Turnpike Extension (SR 821). In 2017, Stanley Consultants engaged Janus Research to conduct a CRAS for the Turnpike Extension (SR 821) Widening PD&E Study from US 1 South of Palm Drive (milepost 0.00) to Campbell Drive (milepost 3.00) in Miami-Dade County, Florida (FM No. 439545-1). The proposed improvements include the widening of the existing four lane tollway and bridges to six lanes between US 1 and Campbell Drive; improving the US 1 interchange with a new ramp over Palm Drive, adding a new partial interchange at Lucy Street, and converting the taper type ramps to parallel type ramps at the Campbell Drive interchange. Bridge widening, shoulder widening, and/or bridge railing improvements are proposed at Lucy Street, SW 162nd Avenue, C-103 Canal and Campbell Drive.

The purpose of this CRAS was to locate and evaluate archaeological and historic resources within the area of potential effect (APE) and to assess their eligibility for inclusion in the *National Register of Historic Places* (National Register) according to the criteria set forth in 36 CFR Section 60.4. The archaeological APE was confined to the footprint of subsurface construction activity within the existing and proposed ROW. The APE for historic resources included parcels directly adjacent to the edge of the proposed project improvements for a distance of up to 200 feet.

This project is state-funded and this assessment complies with the revised Chapter 267, *Florida Statutes* (*F.S.*); and the standards embodied in the FDHR's *Cultural Resource Management Standards and Operational Manual* (February 2003), and Chapter 1A-46 (*Archaeological and Historical Report Standards and Guidelines*), Florida Administrative Code. In addition, this report was prepared in conformity with standards set forth in Part 2, Chapter 8 (Archaeological and Historical Resources) of the *FDOT Project Development and Environment Manual*. All

work also conforms to professional guidelines set forth in the Secretary of the Interior's Professional Qualification Standards (48 Federal Register [FR] 44716, as amended and annotated). Principal Investigators meet the Secretary of the Interior's Professional Qualification Standards (48 FR 44716) for archaeology, history, architecture, architectural history, or historic architecture.

Background research identified no previously recorded archaeological sites within the archaeological APE. The archaeological APE is entirely within areas of low archaeological site potential. Subsurface testing was conducted where feasible during the current survey, and no archaeological materials were recovered. The rest of the archaeological APE was within previously developed areas containing existing roadways, highways, berms, canals, ditches, buildings, hardscape, landscape, and underground drainage systems and utilities.

The historic resources survey identified four historic resources within the historic resource APE: two previously recorded historic linear resources (8DA9990 and 8DA15002), one newly recorded linear resource (8DA16043), and one newly recorded structure (8DA17113). The current survey also determined that one previously recorded structure, 17 Palm Drive (8DA2685), was no longer extant within the APE. US 1/Dixie Highway (8DA9990) was previously determined ineligible within the APE and an updated Florida Master Site File (FMSF) form was not completed as a part of this survey. The C-103 (Mowry) Canal (8DA15002) was previously determined ineligible outside of the APE. The segment within the APE exhibits common design and engineering methods and lacks any historical associations. As a result, it is considered National Register–ineligible. The segment of the newly recorded Florida City Canal (8DA16043) within the APE has been converted to a culvert and is no longer visible. It is considered National Register–ineligible as a result of this study. The newly recorded standing structure at 402 NE 1st Avenue (8DA17113) is considered National Register–ineligible due to its extensive alterations and common style. An updated FMSF form was completed for the C-103 (Mowry) Canal (8DA15002) and new FMSF forms were completed for the newly recorded resources (8DA16043 and 8DA17113)

Based on the results of this CRAS, there are no historic properties within the APE for the proposed improvements associated with the Turnpike Extension (SR 821) Widening PD&E Study. The CRAS Report is provided for your review and comment. If you have any questions or need assistance, please contact me at 407.264.3301 or via email at Philip.Stein@dot.state.fl.us. Thank you for your continued assistance on FTE projects.

Philip Stein
Environmental Administrator
Florida's Turnpike Enterprise

Enclosures *(via temporary digital submittal policy)*: PDF of signed transmittal letter, PDF of full CRAS report, collection of unflattened PDFs for the site file forms, collection of digital photographs associated with the historic resource site file forms, unflattened PDF version of the survey log, and a ZIP file containing the files making up the Shapefile for the survey area.

CC: Cassie Piche, Stanley Consultants
Kathleen S. Hoffman, Janus Research

The Florida State Historic Preservation Officer (SHPO) finds the attached Cultural Resources Assessment Survey Report complete and sufficient and ✓ concurs/ _____ does not concur with the recommendations and findings provided in this cover letter for SHPO/FDHR Project File Number 2020-5364. Or, the SHPO finds the attached document contains _____ insufficient information.

SHPO Comments:

Alissa Lotane, Deputy SHPO 10-9-2020

for Dr. Timothy Parsons, Director — Date
State Historic Preservation Officer
Florida Division of Historical Resources

Appendix E

SFWMD / USACE Interagency Meeting Minutes
January 16, 2020

Florida Department of Transportation

RON DESANTIS
GOVERNOR

Florida's Turnpike Enterprise
P.O. Box 613069, Ocoee, FL 34761
407-532-3999

KEVIN J. THIBAULT, P.E.
SECRETARY

Date: January 16, 2020

Place: SFWMD 3301 Gun Club Road, West Palm Beach, FL

Project/Purpose: FDOT/SFWMD/COE Interagency Meeting Minutes
FPID # 439545-1-22-01 Turnpike Extension Widening PD&E Study from US 1 South of Palm Drive to Campbell Drive, Miami-Dade County

Attendees:

Jesse Markle, PE – SFWMD
Caroline Hanes, PWS – SFWMD
Matt Bolton – SFWMD
Mark Tamblyn – USACE
Annemarie Hammond – FTE
Fred Gaines, PWS – FTE (Atkins)
Renaud Olivier, PE - Stanley
Millie Radsikhovsky – BMA
Nick Vitani, PG – SFWMD
Beverly Miller – SFWMD
Teri Swartz, PE – SFWMD
Cynthia Ovdenk - USACE
Jazlyn Heywood, PE – FTE (Atkins)
Bill Evans, PE – Arcadis
Linda Hess, PE – Stanley
Dylan Larson – Miller Legg

The meeting started at 10:30 with introductions. Attached to these minutes are the attendee list, meeting exhibits and meeting agenda.

ITEM	SUBJECT	DISCUSSION	ACTION
1	Project overview	The project team gave a project overview using the attached exhibits of the location map, proposed roadway typical section, drainage map, US 1 Interchange, Lucy Street Interchange and Campbell Drive Interchange plan aerials.	None
2	Drainage patterns	The project team explained the existing drainage patterns are from west to east and the project bisects or is adjacent to the Florida City Canal Basin, the North Canal Basin and the C-103 Basin.	None
3	Project outfall locations	The project team described the outfalls will be to the Florida City Canal, the C-103S Canal and the C-103 Canal. The existing outfall to the Florida City Canal will remain. The existing outfalls at the C-103S Canal and C-103 will remain. New connections to the C-103 or C-103S Canal are not anticipated.	None

ITEM	SUBJECT	DISCUSSION	ACTION
4	Existing permits	The project team described the relevant existing SFWMD permits along the project including: 13-04562-P (US 1 South of Palm Drive) 13-06529-P (Palm Drive/ SW 344 – US 1 to SW 172) 13-05167-S (Lucy Street/ SW 328 Street) 13-01181-P (Campbell Drive Interchange)	None
5	Work within SFWMD C-103 Right of Way	The project team explained work within the Right of Way will include widening the existing northbound bridge towards the median. The low member elevation will not be reduced. The team requested canal information including: The existing R/W Occupancy permit, the canal design cross section, canal stages, and low member design criteria.	Project team follow up for C-103 Canal information. Beverly Miller stated she would send info. to Fred Gaines.
6	Water Quality	The project team explained that the project will not discharge to any impaired water bodies or outstanding Florida waters. The project will provide water quality volume at 2.5" times the additional impervious area and replace any previously permitted water quality volume that is impacted by the project. The project will use any excess water quality volume available within the project area. SFWMD agreed with this approach.	None
7	Water Quantity	The project team described the project discharge to the Florida City Canal will meet historical pre-condition discharge rate as discussed with Miami-Dade County. The remaining project discharges to the C-103S and C-103 Canals and will meet historical pre-condition discharge rates for the existing right of way. Any new right of way will meet the allowable discharge formula established for these canals. SFWMD agreed with this approach.	None
8	Permits anticipated (ERP)	An Environmental Resource Permit (ERP) is required. SFWMD suggested a new ERP be submitted for the project.	None
9	Exfiltration Trench Design	Exfiltration trench will be designed to allow exfiltration throughout the storm event. A variable tailwater elevation boundary condition will be used. SFWMD agreed with this approach.	None

ITEM	SUBJECT	DISCUSSION	ACTION
10	Permits anticipated Right of Way Occupancy (SFWMD, C-103)	A Right of Way occupancy permit modification is required for work in/over the C-103 Canal.	None
11	Permits anticipated (Section 408)	The C-103 is a C&SF canal. A USACE Section 408 review is required. At this point in time, SFWMD estimated the current review time for this permit to be 2-4 months. Cynthia Ovdenk (USACE) requested to keep her informed with all coordination that occurs with USACE S408.	Reminder. USACE Section 404 permit must be in for the Section 408 to be reviewed.
12	Permits anticipated (Section 404)	A USACE Section 404 permit is required for dredge and fill activities. Dredge and fill activities are anticipated in the C-103 and the other surface waters along the project.	None
13	Permits anticipated NPDES (SWPPP)	A Stormwater Pollution Prevention Plan will be developed for the project.	None
14	Permits anticipated Dewatering (Miami-Dade County)	A Water Use permit will be determined during the design phase. If dewatering, a SFWMD Water Use permit is required. SFWMD stated if dewatering within 1/4 mile of a known contamination site, then a Class V permit from Miami-Dade County is also required and needed for the SFMWD WU permit. If dewatering beyond 1/4 mile of a known contamination site, then only a SFWMD WU permit is required. Dewatering < 1 year considered short term dewatering, otherwise it is considered long term dewatering.	None
15	Permits anticipated R/W Occupancy (Miami-Dade County)	A Class III permit from Miami-Dade County is anticipated if work occurs within county canal right of way. SFWMD reminded the team for proposed work outside FTE/FDOT right of way, then proof of ownership is required or a permit (i.e. Class III permit) before SFWMD ERP is issued / construction can commence.	Project team to confirm Miami Dade County right of way “extents” at the Palm Drive / US 1 intersection.
16	Environmental Wetlands	The only forested or emergent wetlands are located at the beginning of the project and outside of the concept limits. Some stormwater ditch impacts are anticipated. No forested or emergent wetland impacts are anticipated. Mitigation is not anticipated for this project. SFWMD and USACE agreed.	None

ITEM	SUBJECT	DISCUSSION	ACTION
17	Environmental Species	There is one (1) identified wood stork core forging area within 18.6 miles of the study area. There is also a Pine Rockland area identified within the Campbell Drive interchange which is home to the Miami Tiger Beetle. The concept limits do not include impacts to the pine rockland and no involvement is anticipated for species. The USACE requested being copied on all project correspondence with USFWS.	None
18	Environmental Contamination	There are five (5) gas stations located on US 1 south of Palm Drive. If dewatering occurs within a ¼ mile of known contamination a DERM Class V permit will be needed with Miami-Dade County.	Project team to identify in design if dewatering is needed.
19	Environmental Look Around (ELA) Questions	The project team initiated the ELA with Agency staff requesting their review of the five questions listed on the attached agenda. SFWMD mentioned to consider the re-use of stormwater from any wet ponds for irrigation purposes. SFWMD will provide a contact for the Homestead Field Office regarding potential fill material source.	Follow up with Agencies for responses, if any.

FDOT Interagency Meeting – January 16, 2020

10:30 to 11:15 AM: 439545-1 PD&E Widen HEFT (SR821) from US 1 south of Palm Drive to Campbell Drive (MP 0 to MP 2), Miami-Dade County.

Dylan Larson	Miller Legg	954 436 7100	dlarson@millerlegg.com
Jesse Markle	SFWMD	(561) 682-6274	JMARKLE@sfwmd.gov
Beverly Miller	SFWMD	561-682-6979	BMILLER@SFWMD.GOV
Matt Bolton	SFWMD		MBolton@SFWMD.gov
Nicholas Vitani	SFWMD	561-682-2133	NVitani@SFWMD.gov
Teri Swartz	SFWMD	561-682-2505	tswartz@sfwmd.gov
Ann Marie Hammond	TURNPIKE	via phone	
Jaclyn Heywood	turnpike / atkins	via phone	
Mark Tamblyn	USACOE	via phone	
Cynthia Ovdenk	USACOE	via phone	
Caroline Hanes	sfwmd	561-682-6856	chanes@sfwmd.gov

FDOT Interagency Meeting – January 16, 2020

10:30 to 11:15 AM: 439545-1 PD&E Widen HEFT (SR821) from US 1 south of Palm Drive to Campbell Drive (MP 0 to MP 2), Miami-Dade County.

Linda Hess	Stanley Consultants	561 584-8744	HessLinda@StanleyGroup.com
Jesse Mackie	SFWMD	(561) 682-6274	JMACKIE@SFWMD.GOV
Renaud Olivier	Stanley Consultants	561 689-7444	olivierrenaud@stanleygroup.com olivierrenard@stanleygroup.com
Millie Radziszewsky	BMA CE	954-744-4691	mradziszewsky@bma-ce.com
William T Evans	ARCADIS	561 352 5662	William.Evans@ARCADIS.com
Fred Gaines	Atkins (FTE)	407 264 3689	fred.gaines@dot.state.fl.us

MEETING AGENDA

SFWMD Meeting

PROJECT:	**TPK EXT Widening PD&E Study (FPID#: 439545-1-22-01)** **From US 1 S. of Palm Drive to Campbell Drive** Miami-Dade County
MEETING DATE:	January 16, 2020
MEETING TIME:	10:30 am – 11:15 am
LOCATION:	SFWMD 3301 Gun Club Road West Palm Beach, Florida 33406 Location: B-1 Richard Rogers Conf Rm
CONFERENCE CALL NUMBER:	**(561) 682-6800** (WPB Local Number) **(855) 682-6800** (Toll Free Nationwide)
ACCESS CODE:	994 769 479
CONSULTANT	Stanley Consultants, Inc
SUB-CONSULTANTS	Arcadis-US, Inc.; BMA Consulting Engineering, Inc.; GCME, Inc.; Glass Land Acquisition Service Specialist, Inc.; I.F. Rooks & Associates, INC.; Janus Research; Quest Corporation for America; Wantman group, Inc.; Bentley Architects & Engineers, Inc.; Sims Wilkerson Cartier Engineer
EOR ROADWAY	Cyndy Kendrick, PE
PROJECT MANAGER	Bill Evans, PE, AICP / Arcadis-US, Inc

1. **Introductions**
2. **Project Overview**
    a. Turnpike widening from 4 lanes to 6 lanes, improve US 1 interchange, add Lucy Street interchange and minor ramp improvements at Campbell Drive.
    b. Design funded for 2021/2022
3. **Drainage Approach**
    a. Drainage basins, flow patterns and outfall locations (canals)
    b. Existing Permits

Permit Number	Location
13-04562-P	US 1 south of Palm Drive for auxiliary lanes
13-06529-P	Palm Drive/ SW 344th Street
13-05167-S	Lucy Street/SW 328th Street
1301181-P	Campbell Drive Interchange – modify for this project

    c. Proposed drainage concept
        - Water quality
        - Water quantity

d. Permits anticipated

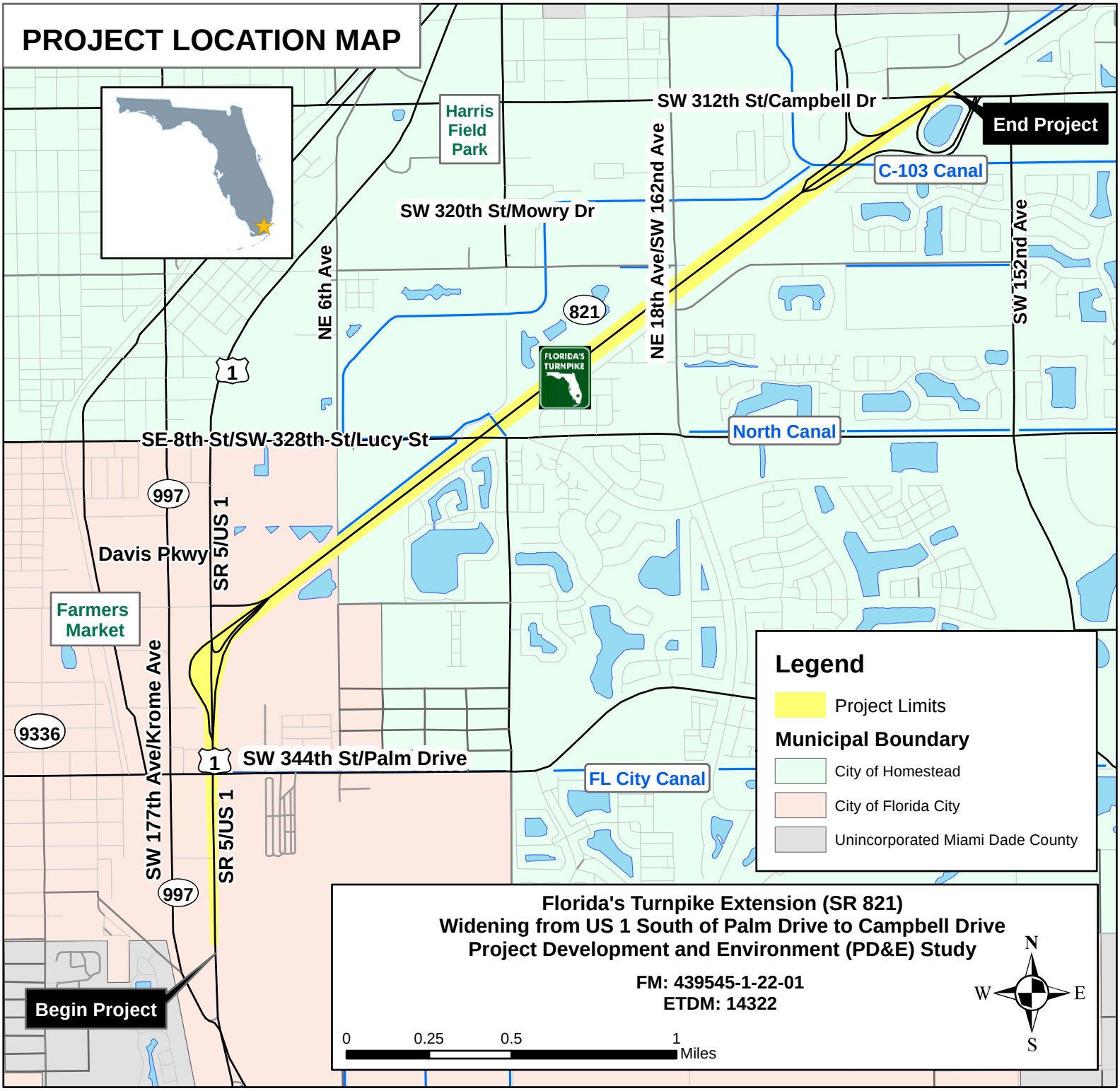
- SFWMD Permit Modification to ERP No. 1301181-P
- SFWMD R/W Occupancy Modification for work over/in the C-103
- USACE Section 404 Dredge and Fill in C-103 (SAJ 92 Permit Nationwide 14)
- USACE Section 408 for work in C-103
- NPDES (SWPPP)
- Dewatering (confirmed in design phase)

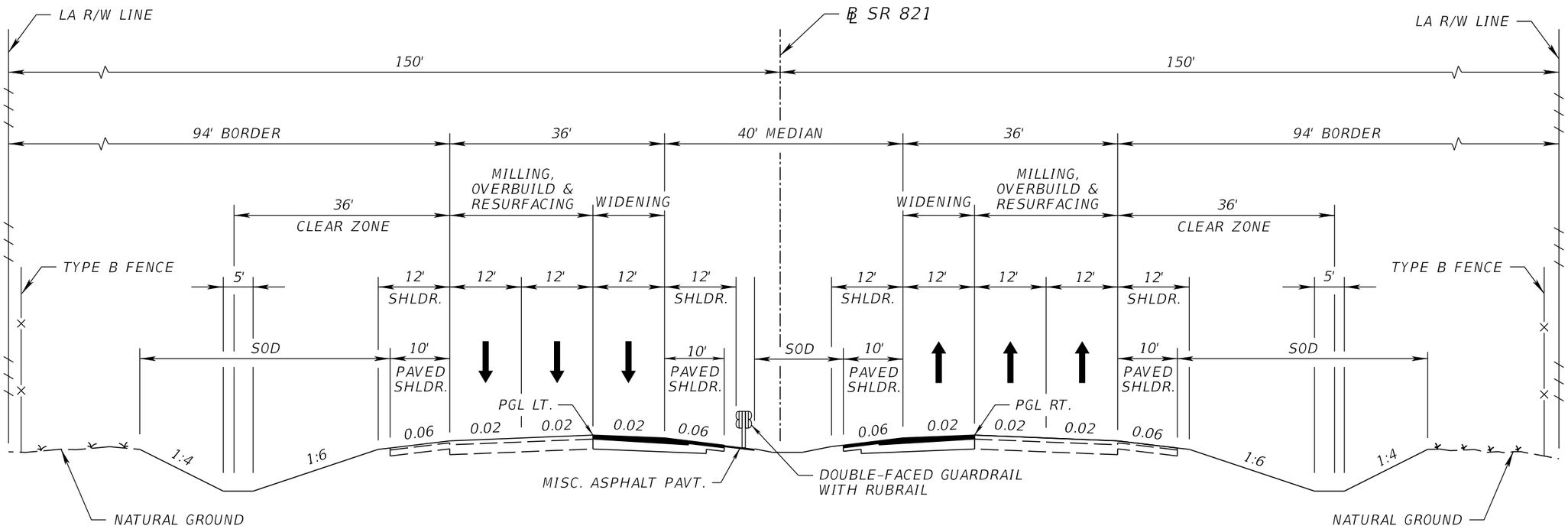
4. <u>Environment</u>

a. Contamination
b. Existing Wetlands and Other Surface Water Locations
c. Species

2. <u>Environmental Look Around Questions:</u>

A. Do you know of any wetlands near the project that can benefit from treated stormwater runoff (rehydration)?
B. Do you know of any areas near the project site that need water? For instance, re-use water for irrigation purposes?
C. Do you know of any regional stormwater treatment areas that the project could benefit from?
D. Do you know if there are any SFWMD lands that could be used to obtain select fill material for the project?
E. Do you know of any adjacent projects that could benefit from joint use water management facilities?


PROJECT LOCATION MAP
Harris Field Park
SW 312th St/Campbell Dr
End Project
C-103 Canal
SW 320th St/Mowry Dr
NE 6th Ave
NE 18th Ave/SW 162nd Ave
SW 152nd Ave
821
FLORIDA'S TURNPIKE
1
SE-8th-St/SW-328th-St/Lucy-St
North Canal
997
Davis Pkwy
SR 5/US 1
Farmers Market
9336
SW 177th Ave/Krome Ave
SW 344th St/Palm Drive
FL City Canal
Begin Project
Legend
Project Limits
Municipal Boundary
City of Homestead
City of Florida City
Unincorporated Miami Dade County
Florida's Turnpike Extension (SR 821)
Widening from US 1 South of Palm Drive to Campbell Drive
Project Development and Environment (PD&E) Study
FM: 439545-1-22-01
ETDM: 14322
0 0.25 0.5 1 Miles
N
W
E
S



TYPICAL SECTION (6 GU LANES)
SR 821 – INSIDE WIDENING – 1 IN/2 OUT
MP 0.538 TO MP 3.055

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = XX,XXX
ESTIMATED OPENING YEAR = 2025 AADT = XX,XXX
ESTIMATED DESIGN YEAR = 2045 AADT = XX,XXX
K = X.X% D = XX.X% T = X.X% (24 HOUR)
DESIGN HOUR T = X.X%
DESIGN SPEED = 65 MPH
POSTED SPEED = 65 MPH
NO DESIGN EXCEPTIONS/VARIATIONS NEEDED

DRAFT
2019-06-06

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

Stanley Consultants, Inc.
1641 Worthington Road, Suite 400
West Palm Beach, FL 33409
Certificate of Authorization No. 1978
www.stanleygroup.com

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI-DADE	439545-1-22-01

TYPICAL SECTION - ALT 3

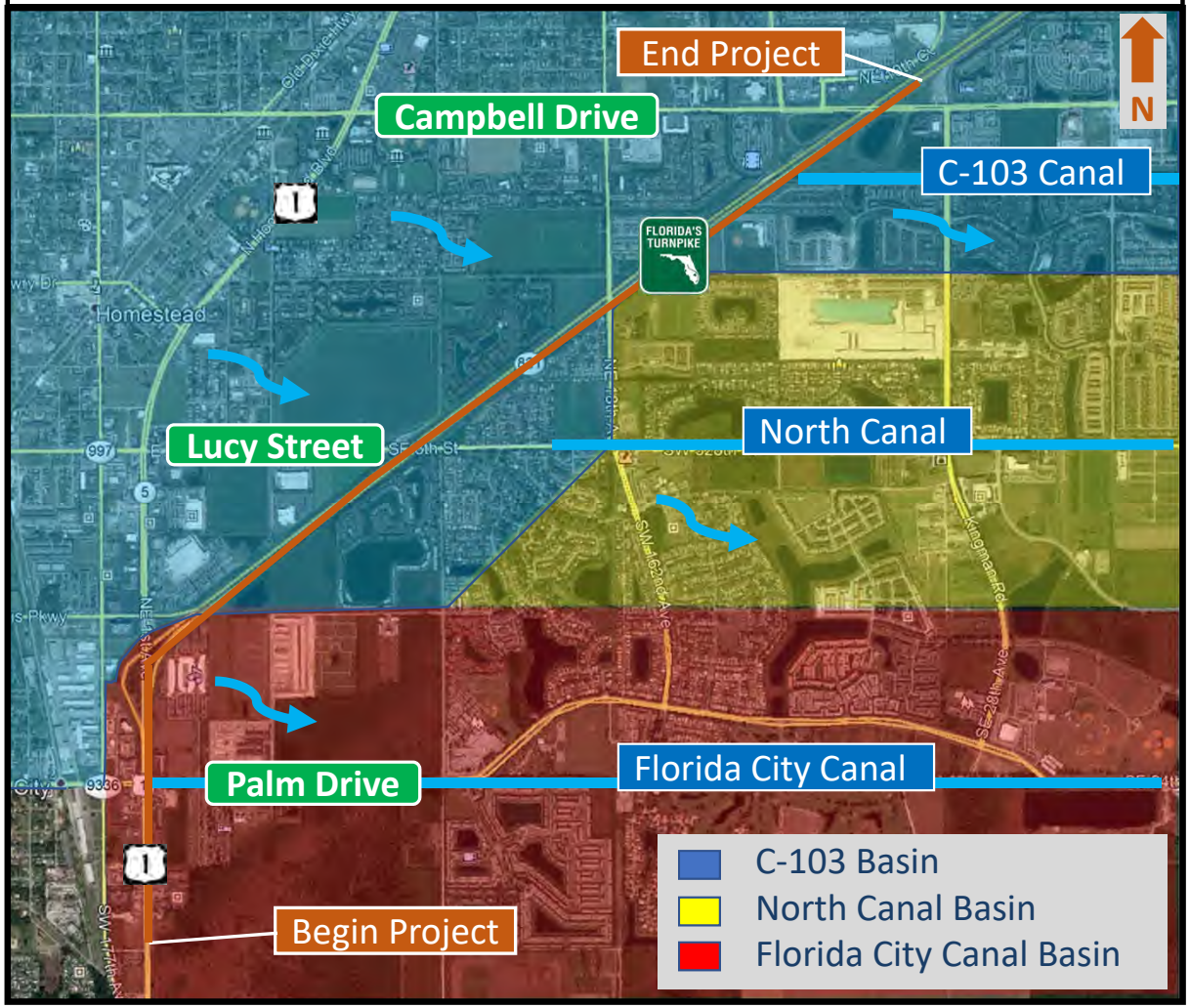
SHEET NO. 3

US 1 Interchange

Lucy Street Interchange

Campbell Drive Interchange

Florida's Turnpike Extension (from South of Palm Drive to Campbell Drive)
FPID 439545-1-22-01
Drainage Map



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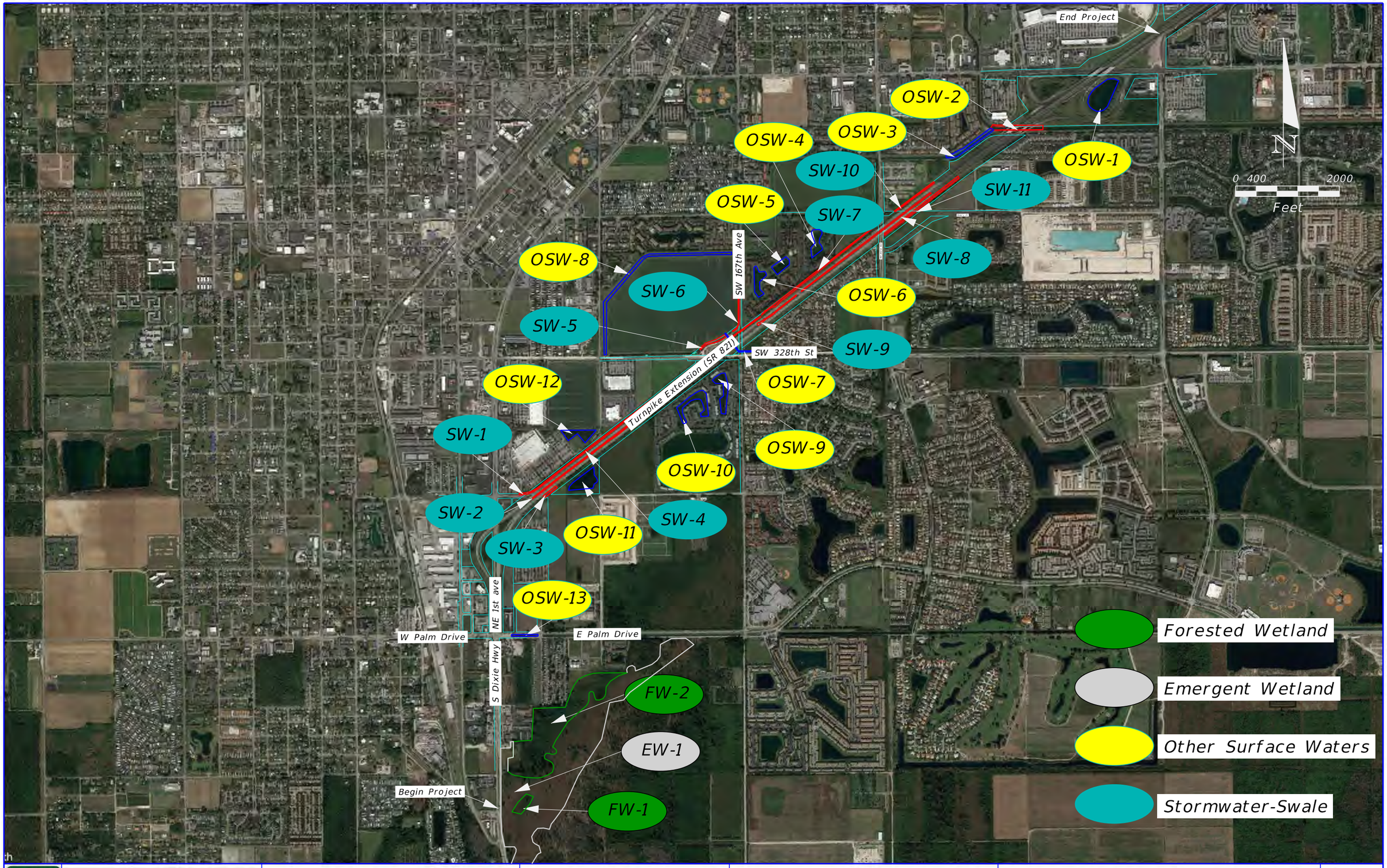

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FLORIDA'S TURNPIKE	NATURAL RESOURCES EVALUATION	TURNPIKE EXTENSION (SR821)	BMA CONSULTING ENGINEERING 18503 PINES BLVD, SUITE 210 PEMBROKE PINES, FL 33029	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			WETLANDS & SURFACE WATERS LOCATION	SHEET NO.
				ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
				SR 821	MIAMI DADE	439545-1-22-01		1 of 7

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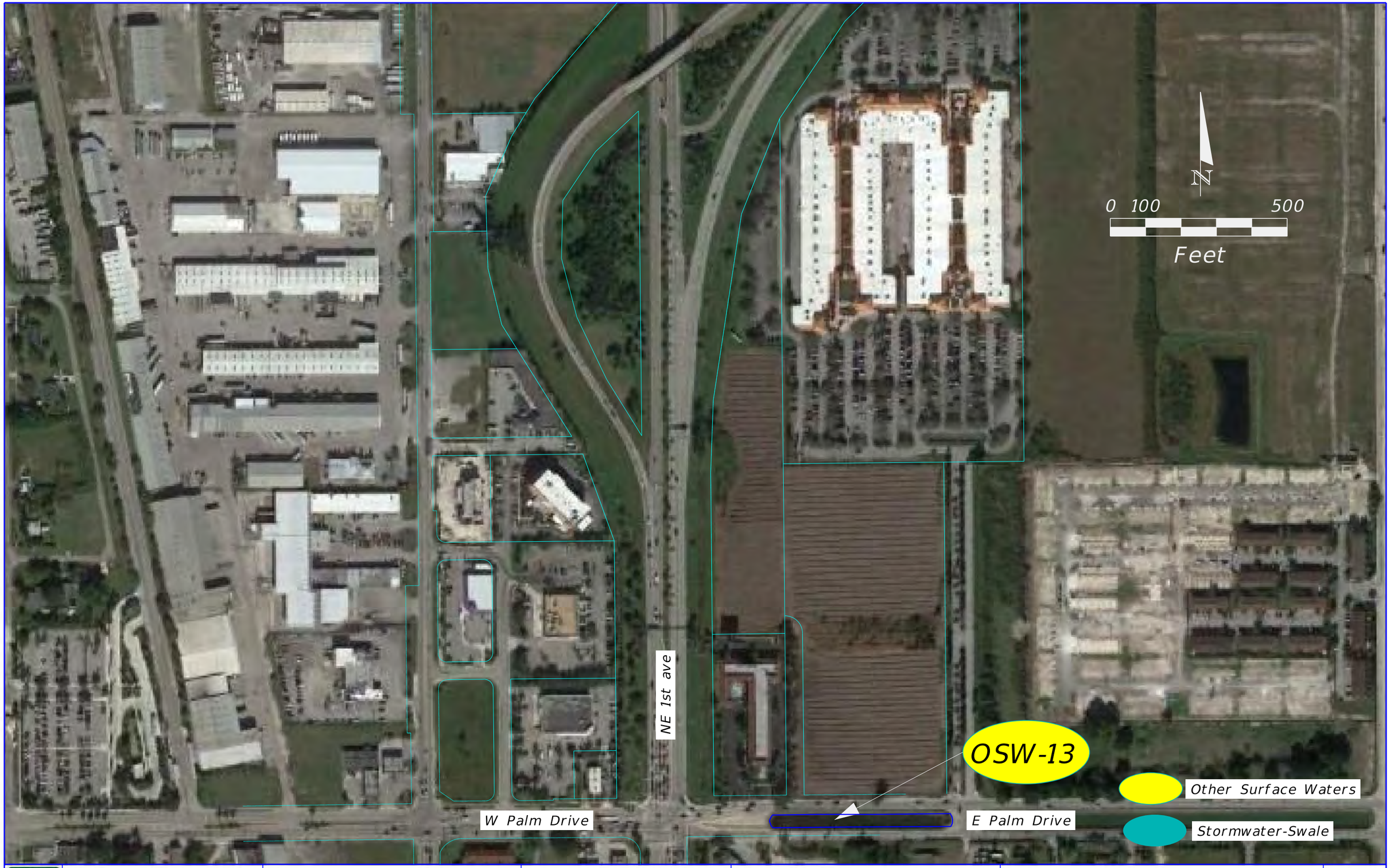

FLORIDA'S TURNPIKE

NATURAL RESOURCES EVALUATION

TURNPIKE EXTENSION (SR821)

BMA CONSULTING ENGINEERING
18503 PINES BLVD, SUITE 210
PEMBROKE PINES, FL 33029

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI DADE	439545-1-22-01

WETLANDS & SURFACE WATERS LOCATION

SHEET NO. 3 of 7

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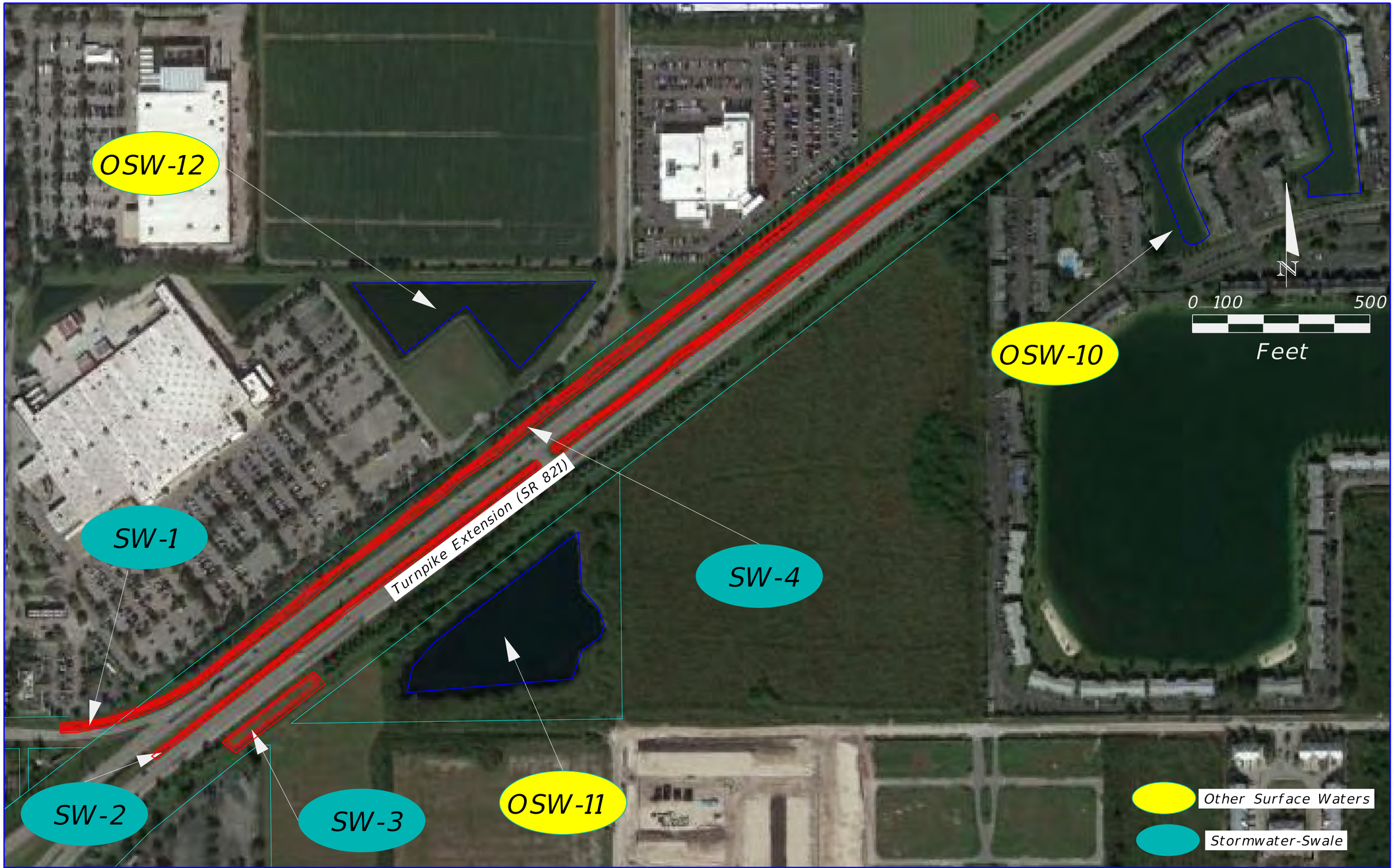

FLORIDA'S TURNPIKE

NATURAL RESOURCES EVALUATION

TURNPIKE EXTENSION (SR821)

BMA CONSULTING ENGINEERING
18503 PINES BLVD, SUITE 210
PEMBROKE PINES, FL 33029

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI DADE	439545-1-22-01

WETLANDS & SURFACE WATERS LOCATION

SHEET NO. 4 of 7

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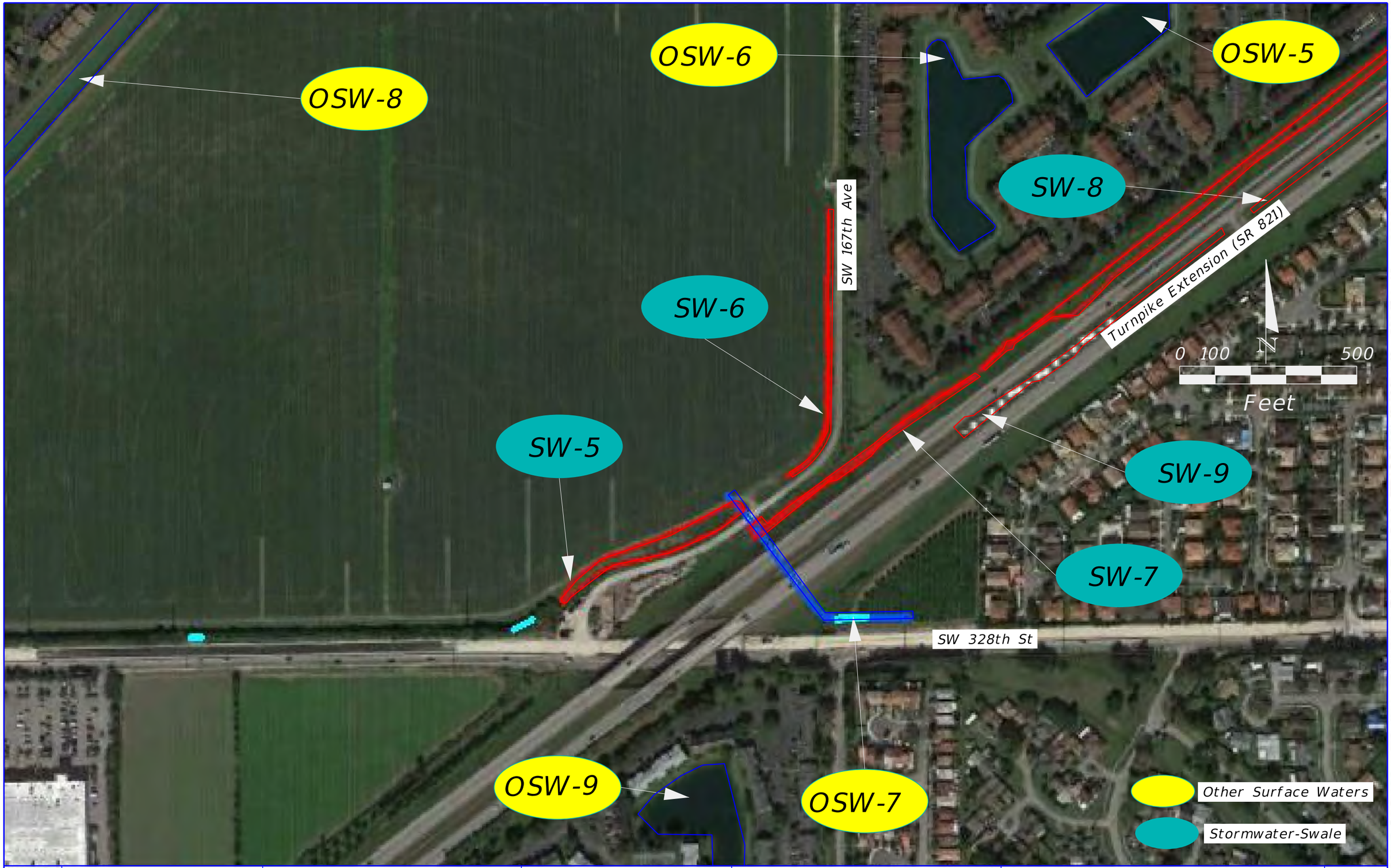

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FLORIDA'S TURNPIKE

NATURAL RESOURCES EVALUATION

TURNPIKE EXTENSION (SR821)

BMA CONSULTING ENGINEERING
18503 PINES BLVD, SUITE 210
PEMBROKE PINES, FL 33029

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI DADE	439545-1-22-01

WETLANDS & SURFACE WATERS LOCATION

SHEET NO. 5 of 7

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FLORIDA'S TURNPIKE	NATURAL RESOURCES EVALUATION	TURNPIKE EXTENSION (SR821)	BMA CONSULTING ENGINEERING 18503 PINES BLVD, SUITE 210 PEMBROKE PINES, FL 33029	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION ROAD NO. / COUNTY / FINANCIAL PROJECT ID SR 821 / MIAMI DADE / 439545-1-22-01	WETLANDS & SURFACE WATERS LOCATION	SHEET NO. 6 of 7

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End Project

Remnant
Pine Rockland Area

Turnpike Extension (SR 821)

OSW-2

OSW-3

OSW-1

0 100 500
Feet

Other Surface Waters

Stormwater-Swale

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FLORIDA'S TURNPIKE

NATURAL RESOURCES EVALUATION

TURNPIKE EXTENSION (SR821)

BMA CONSULTING ENGINEERING
18503 PINES BLVD, SUITE 210
PEMBROKE PINES, FL 33029

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI DADE	439545-1-22-01

WETLANDS & SURFACE WATERS LOCATION

SHEET NO. 7 of 7

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Appendix F

USFWS Technical Assistance Meeting Minutes
June 25, 2020

Florida Department of Transportation

RON DESANTIS
GOVERNOR

Florida's Turnpike Enterprise
P.O. Box 613069, Ocoee, FL 34761
407-532-3999

KEVIN J. THIBAULT, P.E.
SECRETARY

Meeting Notes
FDOT, Florida's Turnpike Enterprise/USFWS Technical Assistance

FPID 439545-1, Widen HEFT from US 1, south of Palm Drive to Campbell Drive PD&E
Miami-Dade County

Date: June 25, 2020 via MS TEAMS
Time: 9:00 – 9:30 AM

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1. **Introductions**
   - **USFWS Staff – John Wrublik**
   - **Turnpike Environmental Administrator – Philip Stein**
   - **Turnpike Permits Coordinator – Annemarie Hammond**
   - **Turnpike Project Manager – Jazlyn Heywood, PE (Atkins)**
   - **Turnpike Permits Coordinator – Fred Gaines, PWS (Atkins)**
   - **Turnpike Environmental Scientist – Doug Zang, AICP (Atkins)**
   - **Consultant Project Manager – Bill Evans, PE**
   - **Consultant Deputy Project Manager – Cassie Piche, PE**
   - **Consultant Environmental Scientist – Millie Radsikovsky**

2. **Project Overview**
   Turnpike provided a brief overview of the project and explained that the main focus of this project is to widen the Turnpike from US 1 to Campbell Drive within the median and provide improved intersection / interchange operations at Campbell Drive, Lucy Street and Palm Drive / US 1. Turnpike indicated that the project had been reviewed under ETDM Project #14322. Existing land uses are described and were briefly mentioned. The work proposed outside of the existing right of way is south of Palm Drive on commercial property parcels, and at Lucy St where existing agricultural land is present.

   The SFWMD C-103 Canal is included within the project limits. The proposed project concept includes 296.86 acres of wetlands/surface waters consisting of roadside ditches, infield ponds, seasonal swales and farm irrigation ditches with no anticipated wetlands impacts. All wetland / surface water areas will be addressed for storm water retention and erosion control measures. This preliminary coordination is to ensure that the USFWS agrees with the project approach to federal listed species and habitat thus far. There were no questions or follow up discussion.

3. **Florida Bonneted Bat (FBB)**
   Turnpike indicated that project area is within the urban consultation area for the FBB. Landscape areas with 30-40' tall palm trees exist along the corridor which could provide habitat for the FBB. Visual surveys of under-bridge areas did not note any presence of the FBB. Acoustic surveys are not planned at this time but limited presence/absence surveys in existing structures are suggested as sufficient since there are less than 5 acres of suitable habitat. If impacts were to change during the design phase, a formal determination and additional coordination with USFWS will be

performed at that time. USFWS agreed with the "may affect / not likely to adversely affect" determination suggested. There were no additional questions or follow up discussion.

4. **West Indian Manatee**
   Turnpike indicated that the SFWMD C-103 Canal is accessible to manatees as documented in USFWS's on-line information. Since the Standard Manatee Conditions for In-water Work will be implemented for a build alternative, USFWS agreed with the "may affect / not likely to adversely affect" determination suggested. There were no additional questions or follow up discussion.

5. **Everglade Snail Kite**
   Turnpike indicated that the Snail Kite habitat within the project area will not be impacted. USFWS agreed with the "no affect anticipated" determination suggested. There were no additional questions or follow up discussion.

6. **Florida Grasshopper Sparrow**
   Turnpike indicated that no suitable habitat for the Sparrow exists in the project area. USFWS agree with the "no affect anticipated" determination suggested. There were no additional questions or follow up discussion.

7. **Wood Stork**
   Turnpike indicated that less than 0.5 acres of suitable foraging habitat for the Wood Stork is impacted with the project build alternative concept. The project is within the CFA for one nesting colony. It was stated that some swales may approach the threshold depth for foraging habitat and will be reevaluated as the design progresses. Roadside swales and ditches providing CFA and any other CFA impacts will be replaced as required. Based on the USFWS Wood Stork determination key, a "not likely to adversely affect" determination was presented. USFWS agreed with this determination. There were no additional questions or follow up discussion.

8. **American Crocodile**
   Turnpike indicated that potential habitat for the Crocodile exists in the project area at the SFWMD C-103 Canal but habitat consists of steep, well maintained canal banks. Any occurrence of the Crocodile would be expected to be transient in nature. No observations have been noted. USFWS agreed with the "no affect anticipated" determination suggested. There were no additional questions or follow up discussion.

9. **American Alligator**
   Turnpike indicated that the Alligator was included on the list due to similarity to the American Crocodile, but no occurrences of the species have been noted and a "no affect" determination recommended. USFWS stated that consultation is not normally performed for this species and a formal determination is not needed. USFWS suggested that this species could be removed from the list for this project. There were no additional questions or follow up discussion.

10. **Eastern Indigo Snake**
    Turnpike indicated that potential habitat for the Indigo snake exists in the project area, specifically in the pine rocklands and neighboring agriculture fields. No observations of the species have been noted and Eastern Indigo Snake standard protection provisions will be included in the plans. Based on the USFWS Eastern Indigo Snake determination key, a "not likely to adversely affect" determination is recommended. USFWS agreed with this determination. There were no additional questions or follow up discussion.

11. **Miami Tiger Beetle**
    Turnpike indicated that potential habitat for the Tiger Beetle exists in the project area, specifically in the fenced pine rocklands within the Turnpike's Campbell Drive interchange. No formal surveys have been performed and opportunistic pedestrian surveys have not resulted in observance of the beetle. Currently, there is no work planned within the fenced pine rockland areas but standard exclusion/protection measures are anticipated to be included in the plans. USFWS agreed with the "no effect" determination suggested. There were no additional questions or follow up discussion.

12. **Anticipated Permits**
    Turnpike listed the anticipated permits for the project.
    - South Florida Water Management District (SWFMD) – ERP Permit
    - US Army Corps of Engineers Permit w/ Section 7 Consultation
    - SFWMD Right-of-way Permit for C-103 Canal
    - Florida Department of Environmental Protection (FDEP) – NPDES

    Turnpike stated that additional technical assistance requests may be anticipated as the design progresses for confirmation of determinations and necessary measures to be included in the plans. Standard Section 7 consultation with the USACE is expected as well as Sections 404 and 408.

    USFWS suggested that while there will be no further involvement from USFWS, that when coordinating with USACE, to inform them of the determination keys used and prior USFWS coordination / concurrence in order to help keep the process moving.

13. **Roundtable/Questions/Comments**

    There was no further discussion or comments from the attendees.

MEETING AGENDA AND EXHIBITS HAVE BEEN ATTACHED TO THESE MINUTES FOR REFERENCE.

FDOT, Florida's Turnpike Enterprise/USFWS Technical Assistance Meeting Agenda

FPID 439545-1, Widen HEFT from US 1, south of Palm Drive to Campbell Drive PD&E
Miami-Dade County

Date: June 25, 2020 via Microsoft Teams
Time: 9:00 – 10:00 AM

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1. **Introductions**

2. **Project Overview**
   - Current Alignment (map provided – Exhibit 1)
     - 3 miles along the Florida's Turnpike corridor, from US 1, south of Palm Drive to Campbell Drive in Miami-Dade County, Florida. The area to the east of the Turnpike is primarily residential land use with some commercial uses along the major arterials. The area west of the Turnpike is primarily commercial, agricultural with some residential land uses.
   - The following federally listed species have Consultation Areas that cover the project or the potential for occurrence within the project area (Exhibit 2)
     - Florida Bonneted Bat (*Eumops floridanus*)
     - West Indian Manatee (*Trichechus manatus*)
     - Everglade Snail Kite (*Rostrhamus sociabilis plumbeus*)
     - Florida Grasshopper Sparrow (*Ammodramus savannarum floridanus*)
     - Wood Stork (*Mycteria americana*)
     - America Crocodile (*Crocodylus acutus*)
     - American Alligator (*Alligator mississippiensis*)
     - Eastern Indigo Snake (*Drymarchon corais couperi*)
     - Miami Tiger Beetle (*Cicindelidia floridana*)
   - 296.86 acres of wetlands and surface waters within the project area (Exhibits 3)
     - Project area - 3 wetlands, 11 surface waters (stormwater swales with hydrophytic vegetation) and 12 other surface waters
     - 10.1 acres of surface water/other surface waters impact are primarily grassed maintained swales or steep bank ditches/canals with little or no littoral shelf and will be replaced with similar functioning drainage systems.
     - No impacts to wetlands

3. **Florida Bonneted Bat**
   - Within FBB South Florida Urban Area
   - Less than 5 acres of potential habitat within the project area (landscaped royal palm trees located in pond area at the southern project limits)
   - No observations within the project area and no documented occurrences within one mile
   - Determination based on Florida Bonneted Bat Consultation Key
   - Will conduct limited roost survey
   - ***May Affect Not Likely to Adversely Affect – P if BMPs used and survey reports are submitted. Programmatic concurrence.*** (Exhibit 4)

4. **West Indian Manatee**
    - Potential habitat exists along the SFWMD C-103 canal. The C-103 Canal is accessible by the Manatee (USFWS & SFWMD Central and Southern Florida Project Manatee Accessibility Map, September 2006)
    - No observations within the project area and no documented occurrences within one mile
    - Standard Manatee Conditions for In-water to be implemented during construction
    - ***May Affect Not Likely to Adversely Affect (MANLAA) anticipated***

5. **Everglade Snail Kite**
    - Large, open water lakes exist adjacent to the study area; however, these lakes lack the emergent vegetation required by the snail kite for nesting. These lakes will not be impacted.
    - No observations within the project area and no documented occurrences within one mile
    - ***No Effect anticipated***

6. **Florida Grasshopper Sparrow**
    - No potential habitat within the study area that meets the requirements of the Florida Grasshopper sparrows.
    - No observations within the project area and no documented occurrences within one mile
    - No impacts anticipated
    - ***No Effect anticipated***

7. **Wood Stork**
    - Less than 0.5 acres suitable habitat within the project area (SW-5)
    - Located within the 18.6 mile core foraging area (CFA) of one nesting colony
        - Grossman Ridge West CFA
    - Determination based on Wood Stork Determination Key, South Florida (05/18/2010)
    - ***Not Likely to Adversely Affect (NLAA) anticipated*** (Exhibit 5)

8. **American Crocodile**
    - Potential habitat exists within the SFWMD C-103 canal
    - No observations of individuals, nests or signs of this species within the project area and no documented occurrences within one mile
    - No impacts anticipated
    - ***No Effect anticipated***

9. **American Alligator**
    - Potential habitat exists within the SFWMD C-103 canal
    - No observations of individuals, nests or signs of this species within the project area and no documented occurrences within one mile
    - No impacts anticipated
    - ***No Effect anticipated***

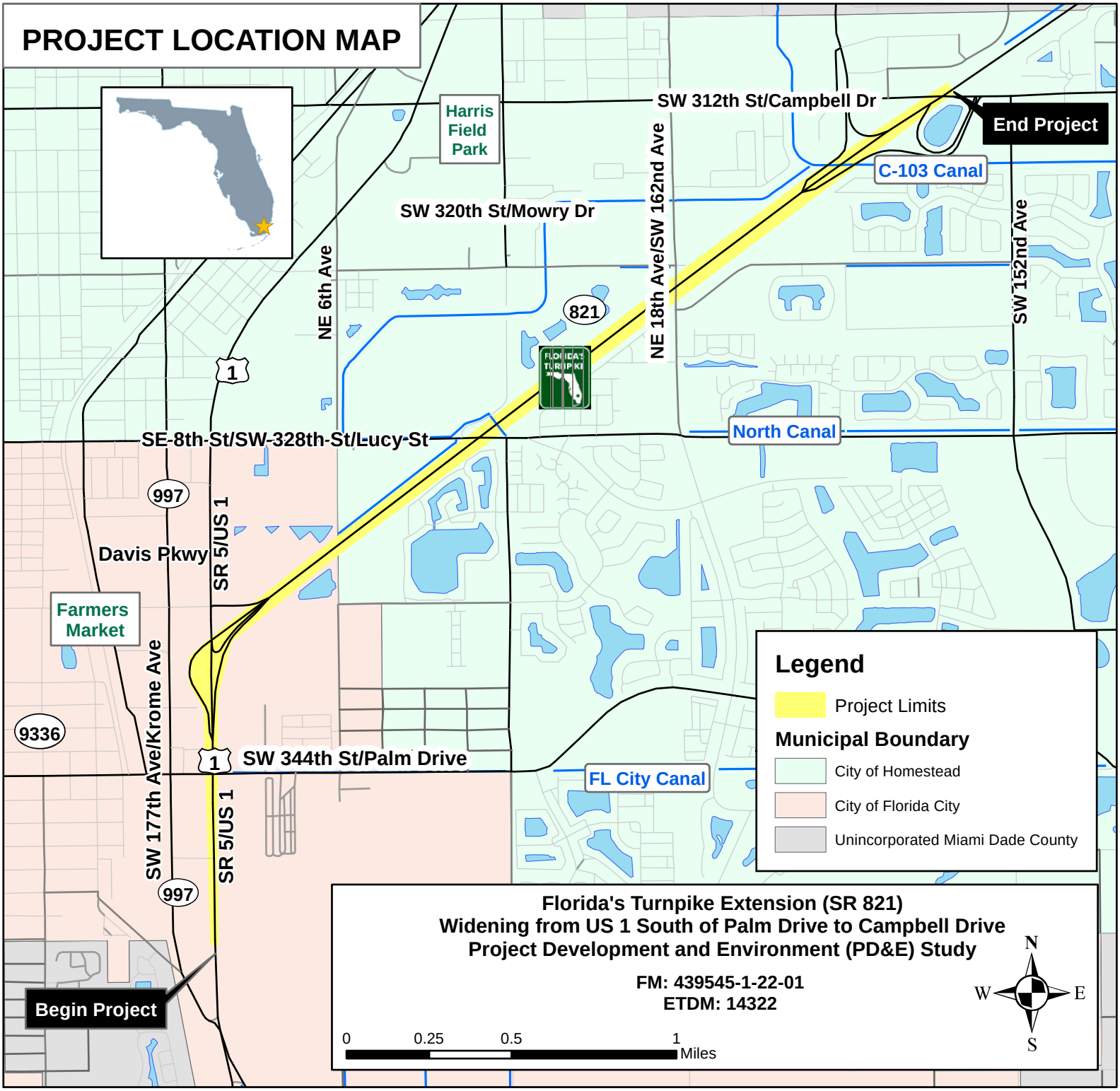
10. **Eastern Indigo Snake**
    - Potential habitat for the Eastern Indigo Snake within the project area is the remnant pine rocklands as defined by the Consultation Key for the Eastern Indigo Snake. Potential habitats include sandhill, scrub, pine flatwoods, pine rocklands, scrubby flatwoods, high pine, dry prairie, coastal prairie, mangrove swamps, tropical hardwood hammocks, hydric hammocks, edges of freshwater marshes, agricultural fields [including sugar cane fields and active, inactive, or abandoned citrus groves], and coastal dunes. These habitats are not found within the project area.
    - No observations within the project area and no documented occurrences within one mile
    - Determination based on Consultation Key for the Eastern Indigo Snake (Revised August 1, 2017)
    - Standard Protection Measures to be implemented during construction
    - ***Not Likely to Adversely Affect (NLAA) anticipated*** (Exhibit 6)

11. **Miami Tiger Beetle**
    - Potential habitat exists within the remnant pine rocklands near the Campbell Drive Interchange (Exhibit 7)
    - No observations within the project area and no documented occurrences within one mile
    - No work is proposed in the pine rocklands and the area is currently fenced. A 25-ft buffer between the pine rocklands and construction activities should be noted in the plans.
    - ETDM # 14322
    - ***No Effect anticipated***

12. Anticipated Permits
    - South Florida Water Management District (SWFMD) – ERP Permit
    - US Army Corps of Engineers Permit w/ Section 7 Consultation
    - SFWMD Right-of-way Permit
    - Florida Department of Environmental Protection (FDEP) – NPDES

13. Roundtable/Questions/Comments

EXHIBIT 1 – PROJECT CORRIDOR


PROJECT LOCATION MAP
Harris Field Park
SW 312th St/Campbell Dr
End Project
C-103 Canal
SW 320th St/Mowry Dr
NE 6th Ave
NE 18th Ave/SW 162nd Ave
SW 152nd Ave
821
1
SE-8th-St/SW-328th-St/Lucy-St
North Canal
997
Davis Pkwy
SR 5/US 1
Farmers Market
9336
SW 177th Ave/Krome Ave
1
SW 344th St/Palm Drive
FL City Canal
997
SR 5/US 1
Begin Project
Legend
Project Limits
Municipal Boundary
City of Homestead
City of Florida City
Unincorporated Miami Dade County
Florida's Turnpike Extension (SR 821)
Widening from US 1 South of Palm Drive to Campbell Drive
Project Development and Environment (PD&E) Study
FM: 439545-1-22-01
ETDM: 14322
0
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FLORIDA'S TURNPIKE (SR 821) WIDENING PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY

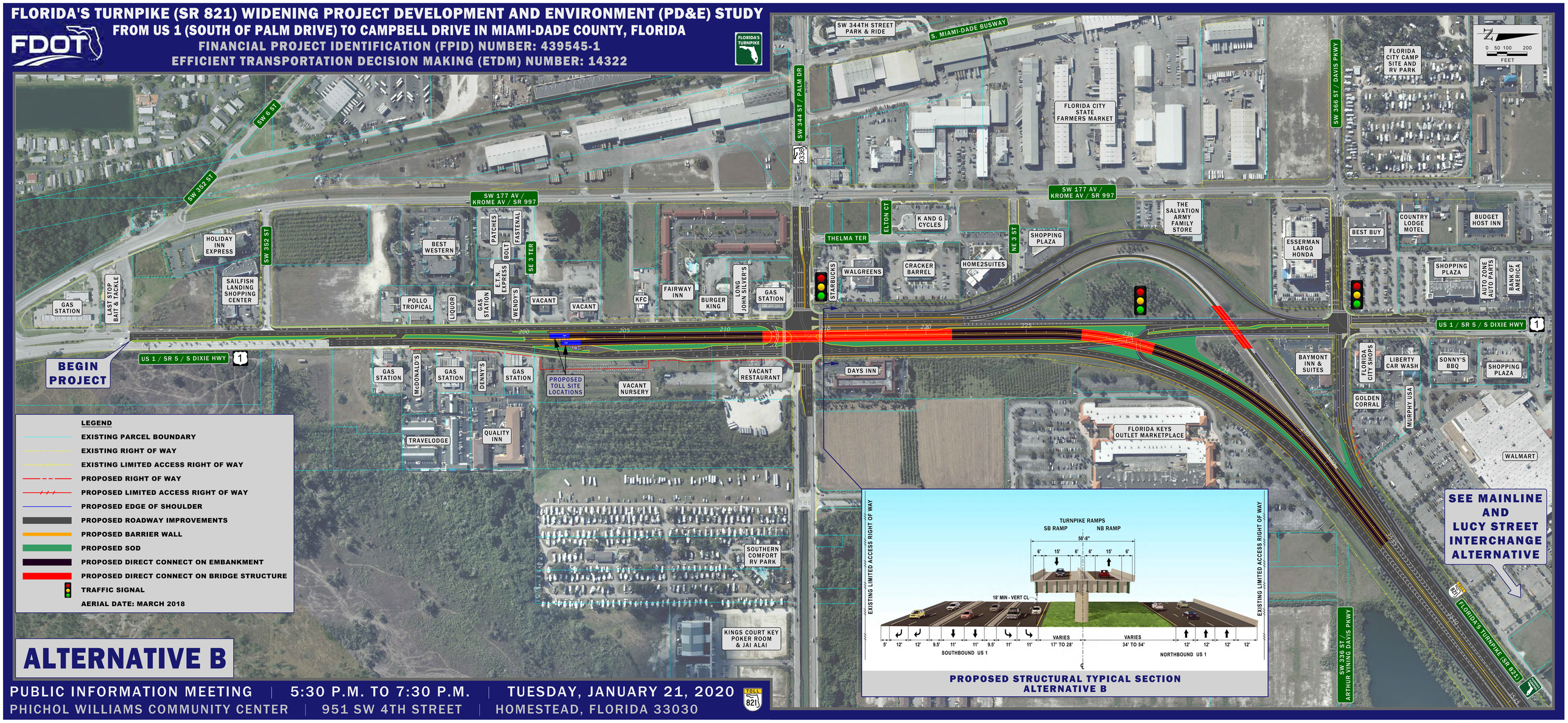
FROM US 1 (SOUTH OF PALM DRIVE) TO CAMPBELL DRIVE IN MIAMI-DADE COUNTY, FLORIDA

FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 439545-1

EFFICIENT TRANSPORTATION DECISION MAKING (ETDM) NUMBER: 14322

FDOT

FLORIDA'S TURNPIKE



LEGEND

- EXISTING PARCEL BOUNDARY
- EXISTING RIGHT OF WAY
- EXISTING LIMITED ACCESS RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- PROPOSED LIMITED ACCESS RIGHT OF WAY
- PROPOSED EDGE OF SHOULDER
- PROPOSED ROADWAY IMPROVEMENTS
- PROPOSED BARRIER WALL
- PROPOSED SOD
- PROPOSED DIRECT CONNECT ON EMBANKMENT
- PROPOSED DIRECT CONNECT ON BRIDGE STRUCTURE
- TRAFFIC SIGNAL
- AERIAL DATE: MARCH 2018

PROPOSED STRUCTURAL TYPICAL SECTION ALTERNATIVE B

ALTERNATIVE B

PUBLIC INFORMATION MEETING | 5:30 P.M. TO 7:30 P.M. | TUESDAY, JANUARY 21, 2020

PHICHOL WILLIAMS COMMUNITY CENTER | 951 SW 4TH STREET | HOMESTEAD, FLORIDA 33030

FLORIDA'S TURNPIKE (SR 821) WIDENING PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY

FROM US 1 (SOUTH OF PALM DRIVE) TO CAMPBELL DRIVE IN MIAMI-DADE COUNTY, FLORIDA

FINANCIAL PROJECT IDENTIFICATION (FPID) NUMBER: 439545-1

EFFICIENT TRANSPORTATION DECISION MAKING (ETDM) NUMBER: 14322

PROPOSED LUCY STREET INTERCHANGE
SEE ALTERNATIVE A AND ALTERNATIVE B
FLORIDA'S TURNPIKE (SR 821)
END PROJECT
WALMART
BJ'S
BJ'S WHOLESALE CLUB
KEITH PIERSON CHEVROLET
MONTEREY POINTE
COLONY LAKES APARTMENTS
GRANADA ESTATES
TROPICAL VILLAS
VILLA PORTIFINO WEST
PORTIFINO PLAZA
FLAGSHIP CINEMAS
SOUTH FLORIDA WATER MANAGEMENT DISTRICT
CAMPBELL DR JR HIGH SCHOOL
HOMESTEAD PAVILLION
LONGHORN STEAKHOUSE
OLIVE GARDEN
PANERA BREAD
SONIC
TD BANK
CONSTITUTION DR
LAKESHORE COMMUNITY
TENNESSEE ESTATES
MOWRY DR
SANTA BARBARA
EVERGLADES PREPARATORY ACADEMY
VANTANAS DEL SOL
BARBADOS AT OASIS
ATLANTIS AT OASIS
THE ISLES AT OASIS
CAPRI AT OASIS
CARIBBEAN ISLES
C-103 CANAL
REGIONS BANK
VALUE PLACE
CVS
WALGREENS
SHOPPING PLAZA
McDONALDS
SUNTRUST
OASIS PLAZA
HAMPTON INN & SUITES
COURTYARD BY MARRIOTT
LEGEND
EXISTING PARCEL BOUNDARY
EXISTING RIGHT OF WAY
EXISTING LIMITED ACCESS RIGHT OF WAY
PROPOSED RIGHT OF WAY
PROPOSED LIMITED ACCESS RIGHT OF WAY
PROPOSED EDGE OF SHOULDER
PROPOSED ROADWAY IMPROVEMENTS
PROPOSED BARRIER WALL
PROPOSED SOD
PROPOSED DIRECT CONNECT ON EMBANKMENT
PROPOSED BRIDGE STRUCTURE
TRAFFIC SIGNAL
AERIAL DATE: MARCH 2018
0 50 100 200
FEET

PROPOSED MAINLINE WIDENING TYPICAL SECTION FROM DAVIS PARKWAY TO CAMPBELL DRIVE

MAINLINE AND LUCY STREET INTERCHANGE ALTERNATIVE

PUBLIC INFORMATION MEETING | 5:30 P.M. TO 7:30 P.M. | TUESDAY, JANUARY 21, 2020

PHICHOL WILLIAMS COMMUNITY CENTER | 951 SW 4TH STREET | HOMESTEAD, FLORIDA 33030

EXHIBIT 2 – FEDERALLY LISTED SPECIES

Table 1 – Federally Listed Endangered Species with the Potential to Occur within the Project Corridor and Effects Determination

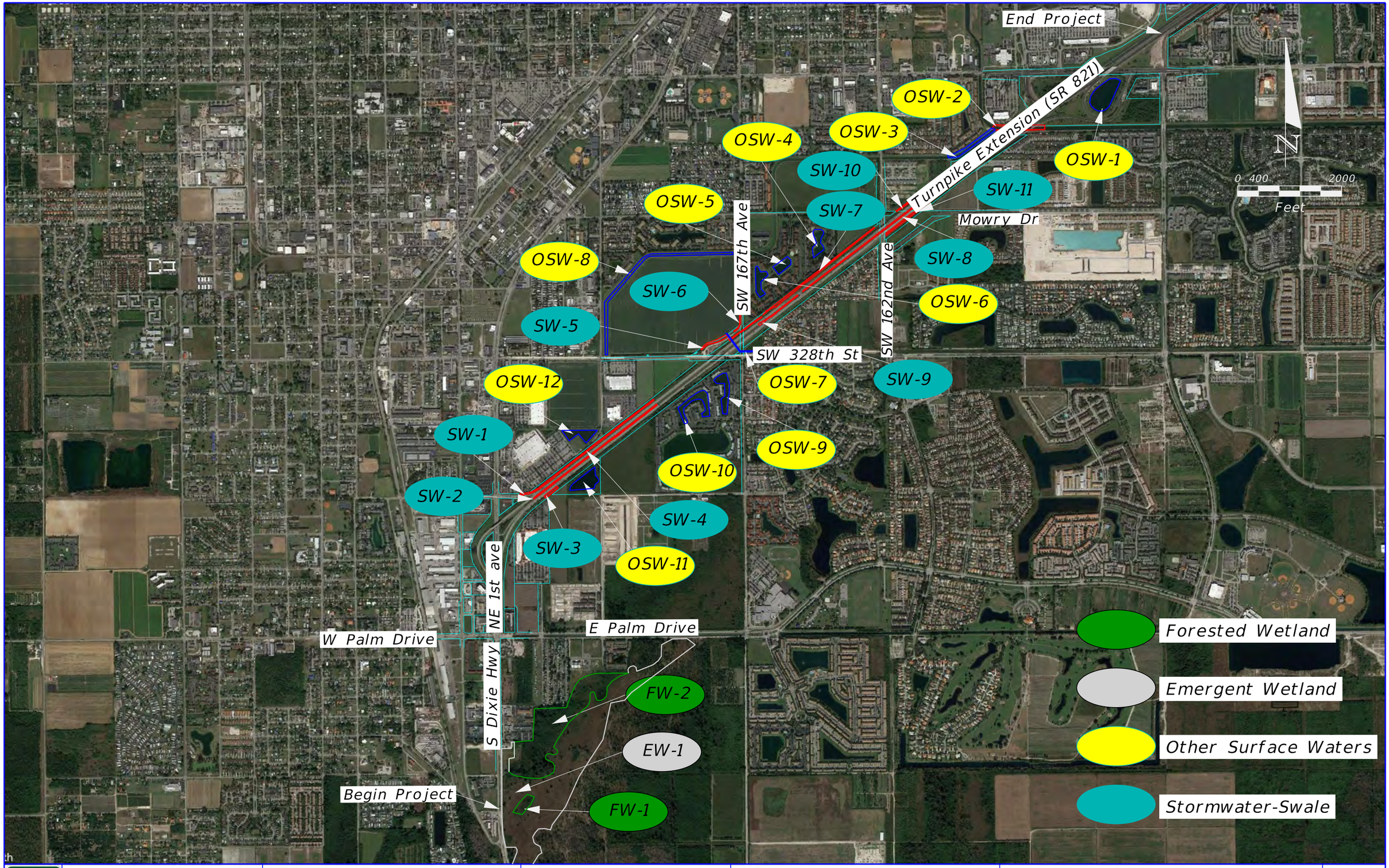
Common Name	Scientific Name	Federal Status	Occurrence Potential	Observed	Effects Determination
Florida Bonneted Bat	*Eumops floridanus*	E	Low	No	May Affect Not Likely to Adversely Affect – P if BMPs used and survey reports are submitted. Programmatic concurrence.
West Indian manatee	*Trichechus manatus*	T	Low	No	May Affect Not Likely to Adversely Affect (MANLAA) anticipated
Everglade Snail Kite	*Rostrhamus sociabilis plumbeus*	E	Low	No	No effect
Florida Grasshopper Sparrow	*Ammodramus savannarum floridanus*	E	Low	No	No effect
Wood Stork	*Mycteria americana*	T	Moderate	No	Not Likely to Adversely Affect (NLAA)
American Crocodile	*Crocodylus acutus*	T	Low	No	No effect
American Alligator	*Alligator mississippiensis*	T (SA)	Low	No	No effect
Eastern Indigo Snake	*Drymarchon corais couperi*	T	Low	No	Not Likely to Adversely Affect (NLAA)
Miami Tiger Beetle	*Cicindelidia floridana*	E	Low	No	No effect

TABLE LEGEND

E = Endangered **T = Threatened**

SSC = Species of Special Concern **SA = Similar Appearance**

EXHIBIT 3 – WETLANDS & SURFACE WATERS LOCATION MAP



FLORIDA'S TURNPIKE	NATURAL RESOURCES EVALUATION	TURNPIKE EXTENSION (SR821)	BMA CONSULTING ENGINEERING 18503 PINES BLVD, SUITE 210 PEMBROKE PINES, FL 33029	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			WETLANDS & SURFACE WATERS LOCATION	SHEET NO.
				ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
				SR 821	MIAMI DADE	439545-1-22-01		1 of 7

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FLORIDA'S TURNPIKE

NATURAL RESOURCES EVALUATION

TURNPIKE EXTENSION (SR821)

BMA CONSULTING ENGINEERING
18503 PINES BLVD, SUITE 210
PEMBROKE PINES, FL 33029

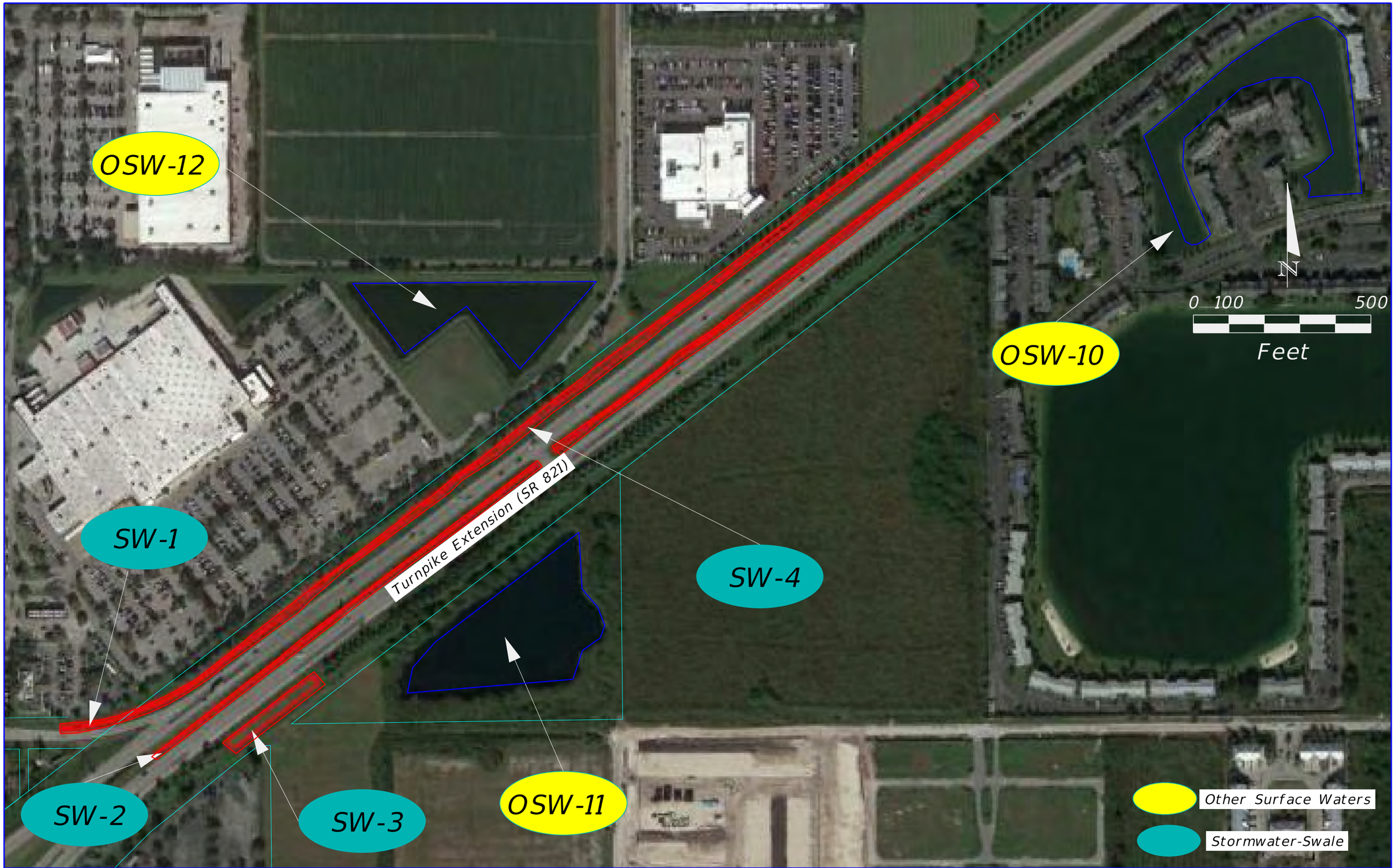
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI DADE	439545-1-22-01

WETLANDS & SURFACE WATERS LOCATION

SHEET NO. 2 of 7

FLORIDA'S TURNPIKE	NATURAL RESOURCES EVALUATION	TURNPIKE EXTENSION (SR821)	BMA CONSULTING ENGINEERING 18503 PINES BLVD, SUITE 210 PEMBROKE PINES, FL 33029	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION ROAD NO. / COUNTY / FINANCIAL PROJECT ID SR 821 / MIAMI DADE / 439545-1-22-01	WETLANDS & SURFACE WATERS LOCATION	SHEET NO. 3 of 7



FLORIDA'S TURNPIKE

NATURAL RESOURCES EVALUATION

TURNPIKE EXTENSION (SR821)

BMA CONSULTING ENGINEERING
18503 PINES BLVD, SUITE 210
PEMBROKE PINES, FL 33029

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI DADE	439545-1-22-01

WETLANDS & SURFACE WATERS LOCATION

SHEET NO. 4 of 7

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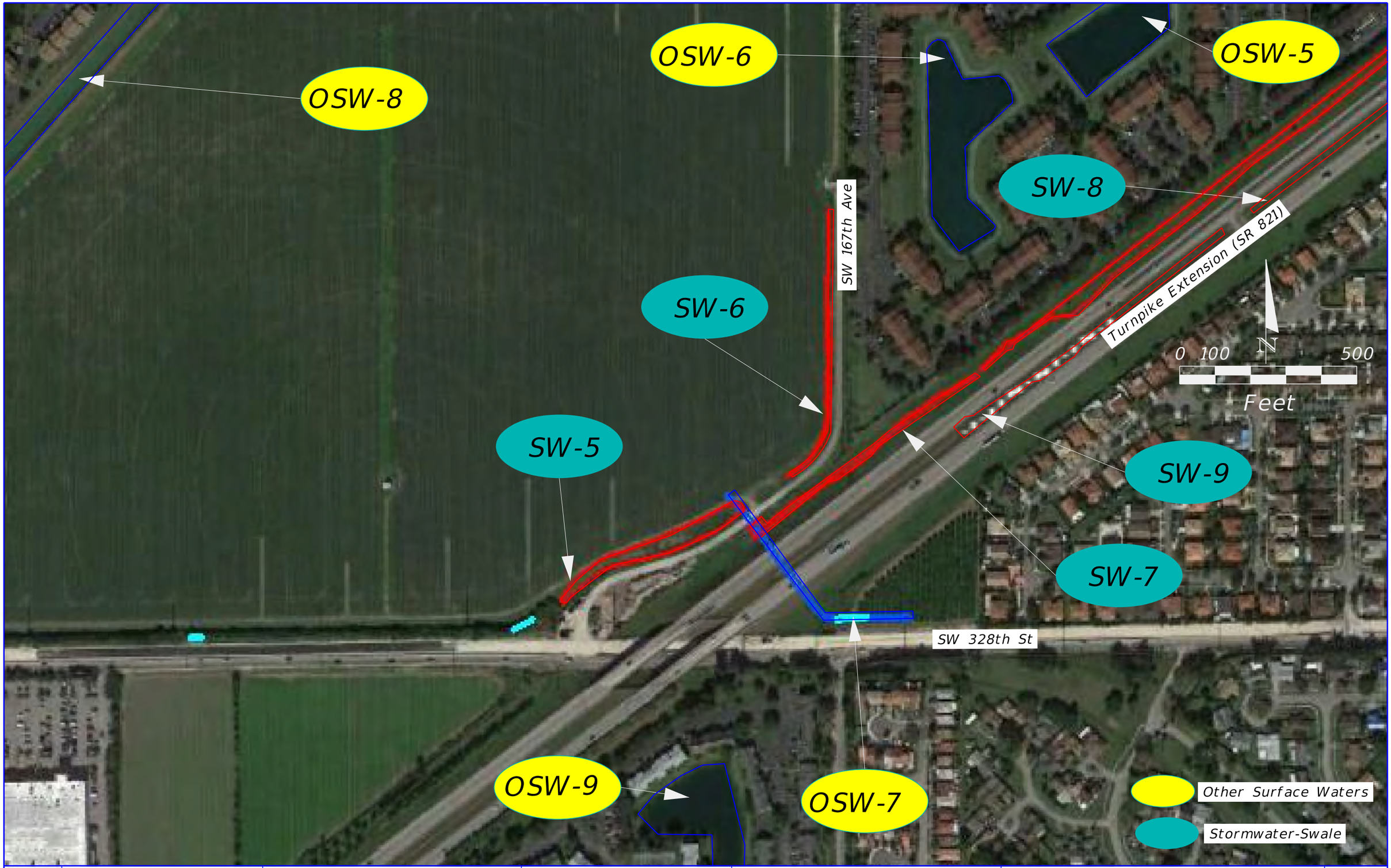

FLORIDA'S TURNPIKE

NATURAL RESOURCES EVALUATION

TURNPIKE EXTENSION (SR821)

BMA CONSULTING ENGINEERING
18503 PINES BLVD, SUITE 210
PEMBROKE PINES, FL 33029

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI DADE	439545-1-22-01

WETLANDS & SURFACE WATERS LOCATION

SHEET NO. 5 of 7

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FLORIDA'S TURNPIKE

NATURAL RESOURCES EVALUATION

TURNPIKE EXTENSION (SR821)

BMA CONSULTING ENGINEERING
18503 PINES BLVD, SUITE 210
PEMBROKE PINES, FL 33029

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI DADE	439545-1-22-01

WETLANDS & SURFACE WATERS LOCATION

SHEET NO. 6 of 7

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End Project

0 100 500

Feet

Remnant
Pine Rockland Area

Turnpike Extension (SR 821)

OSW-2

OSW-1

OSW-3

Other Surface Waters

Stormwater-Swale

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FLORIDA'S TURNPIKE

NATURAL RESOURCES EVALUATION

TURNPIKE EXTENSION (SR821)

BMA CONSULTING ENGINEERING
18503 PINES BLVD, SUITE 210
PEMBROKE PINES, FL 33029

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 821	MIAMI DADE	439545-1-22-01

WETLANDS & SURFACE WATERS LOCATION

SHEET NO. 7 of 7

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EXHIBIT 4 – FLORIDA BONNETED BAT KEY

Florida Bonneted Bat Consultation Key#

Use the following key to evaluate potential effects to the Florida bonneted bat (FBB) from the proposed project. Refer to the Glossary as needed.

1a. Proposed project or land use change is partially or wholly within the Consultation Area (Figure 1)..... **Go to 2**
1b. Proposed project or land use change is wholly outside of the Consultation Area (Figure 1)..... **No Effect**

2a. Potential FBB roosting habitat exists within the project area..... **Go to 3**
2b. No potential FBB roosting habitat exists within the project area..... **Go to 13**

3a. Project size/footprint* ≤ 5 acres (2 hectares)..... **Conduct Limited Roost Survey (Appendix C)** then Go to 4 **NOTE: LIMITED ROOST SURVEY HAS NOT BEEN CONDUCTED**
3b. Project size/footprint* > 5 acres (2 hectares)..... **Conduct Full Acoustic/Roost Surveys (Appendix B)** then **Go to 6**

4a. Results show FBB roosting is likely ..... **Go to 5**
4b. Results do not show FBB roosting is likely..... **MANLAA-P if BMPs (Appendix D) used and survey reports are submitted. Programmatic concurrence.**

5a. Project will affect roosting habitat..... **LAA+ Further consultation with the Service required.**
5b. Project will not affect roosting habitat..... **MANLAA-C with required BMPs (Appendix D). Further consultation with the Service required.**

6a. Results show some FBB activity..... **Go to 7**
6b. Results show no FBB activity..... **No Effect**

7a. Results show FBB roosting is likely..... **Go to 8**
7b. Results do not show FBB roosting is likely..... **Go to 10**

8a. Project will not affect roosting habitat..... **Go to 9**
8b. Project will affect roosting habitat..... **LAA+ Further consultation with the Service required.**

9a. Project will affect* > 50 acres (20 hectares) (wetlands and uplands) of foraging habitat..... **LAA+ Further consultation with the Service required.**
9b. Project will affect* ≤ 50 acres (20 hectares) (wetlands and uplands) of foraging habitat..... **MANLAA-C with required BMPs (Appendix D). Further consultation with the Service required.**

10a. Results show high FBB activity/use..... **Go to 11**
10b. Results do not show high FBB activity/use..... **Go to 12**

11a. Project will affect* > 50 acres (20 hectares) (wetlands and uplands) of FBB habitat (roosting and/or foraging)..... **LAA+ Further consultation with the Service required.**
11b. Project will affect* ≤ 50 acres (20 hectares) (wetlands and uplands) of FBB habitat (roosting and/or foraging)..... **MANLAA-C with required BMPs (Appendix D). Further consultation with the Service required.**

12a. Project will affect* > 50 acres (20 hectares) (wetlands and uplands) of FBB habitat..... **LAA+ Further consultation with the Service required.**
12b. Project will affect* ≤ 50 acres (20 hectares) (wetlands and uplands) of FBB habitat..... **MANLAA-P if BMPs (Appendix D) used and survey reports are submitted. Programmatic concurrence. 7**

13a. FBB foraging habitat exists within the project area and foraging habitat will be affect……..***Go to 14***

13b. FBB foraging habitat exists within the project area and foraging habitat will not be affected OR no FBB foraging habitat exists within the project area……..**No Effect**

14a. Project size* > 50 acres (20 hectares) (wetlands and uplands) ……..**Go to 15**

14b. Project size* ≤ 50 acres (20 hectares) (wetlands and uplands……. **MANLAA-P if BMPs (Appendix D) used. Programmatic concurrence.**

15a. Project is within 8 miles (12.9 kilometers) of high quality potential roosting areas^……**Conduct Full Acoustic Survey (Appendix B) and Go to 16**

15b. Project is not within 8 miles (12.9 kilometers) of high quality potential roosting area^……**MANLAA-P if BMPs (Appendix D) used. Programmatic concurrence.**

16a. Results show some FBB activity……..**Go to 17**

16b. Results show no FBB activity……..**No Effect**

17a. Results show high FBB activity/use……..**LAA+ Further consultation with the Service required.**

17b. Results do not show high FBB activity/use…….. **MANLAA-P if BMPs (Appendix D) used and survey reports submitted. Programmatic concurrence.**

If you are within the urban environment and you are renovating an existing artificial structure (with or without additional ground disturbing activities), these Guidelines do not apply. The Service is developing separate guidelines for consultation in these situations. Until the urban guidelines are complete, please contact the Service for additional guidance

*Includes wetlands and uplands that are going to be altered along with a 250- foot (76.2- meter) buffer around these areas if the parcel is larger than the altered area.

+Project modifications could change the LAA determinations in numbers 5, 8, 9, 11, 12, and 17 to MANLAA determinations.

^Determining if high quality potential roosting areas are within 8 mi (12.9 km) of a project is intended to be a desk-top exercise looking at most recent aerial imagery, not a field exercise.

EXHIBIT 5 - WOOD STORK KEY

WOOD STORK DETERMINATION KEY

South Florida (05/18/2010)

A. Project within 0.76 km (0.47 mile)[2] of an active colony site[3] "*may affect*[4]"

Project impacts Suitable Foraging Habitat (SFH) ~ at a location greater than 0.76 km (0.47 mile) from a colony site go to B"

NOTE: ACTIVE COLONY IS APPROXIMATELY 18.6 MILES AWAY

Project does not affect SFH……..."no effect1".

B. Project impact to SFH is less than 0.20 hectare (one-half acre)[6]……NLAA[1]"

Project impact to SFH is greater in scope than 0.20 hectare (one-half acre) ……go to C

C. Project impacts to SFH not within the CFA (29.9 km, 18.6 miles) of a colony site ……go to D

Project impacts to SFH within the CFA of a colony site ……. go to E

D. Project impacts to SFH have been avoided and minimized to the extent practicable; compensation (Service approved mitigation bank or as provided in accordance with Mitigation Rule 33 CFR Part 332) for unavoidable impacts is proposed in accordance with the CWA section 404(b)(1) guidelines; and habitat compensation replaces the foraging value matching the hydroperiod[7] of the wetlands affected and provides foraging value similar to, or higher than, that of impacted wetlands. See Enclosure 3 for a detailed discussion of the hydroperiod foraging values, an example, and further guidance[8]…….. NLAA[1]"

Project not as above…….. "*may affect*[4]"

E. Project provides SFH compensation in accordance with the CWA section 404(b)(1) guidelines and is not contrary to the HMG; habitat compensation is within the appropriate CFA or within the service area of a Service-approved mitigation bank; and habitat compensation replaces foraging value, consisting of wetland enhancement or restoration matching the hydroperiod[7] of the wetlands affected, and provides foraging value similar to, or higher than, that of impacted wetlands. See Enclosure 3 for a detailed discussion of the hydroperiod foraging values, an example, and further guidance[8] …… "NLAA[1]"

Project does not satisfy these elements "may affect[4]"

---

[1] With an outcome of "no effect" or "NLAA" as outlined in this key, and the project has less than 20.2 hectares (50 acres) of wetland impacts, the requirements of section 7 of the Act are fulfilled for the wood stork and no further action is required. For projects with greater than 20.2 hectares (50 acres) of wetland impacts, written concurrence of NLAA from the Service is necessary.

[2] Within the secondary zone (the average distance from the border of a colony to the limits of the secondary zone is 0.76 km (2,500 feet, or 0.47 mi).

[3] An active colony is defined as a colony that is currently being used for nesting by wood storks or has historically over the last 10 years been used for nesting by wood storks.

[4] Consultation may be concluded informally or formally depending on project impacts.

[5] Suitable foraging habitat (SFH) includes wetlands that typically have shallow-open water areas that are relatively calm and have a permanent or seasonal water depth between 5 to 38cm (2 to 15 inches) deep. Other shallow non-wetland water bodies are also SFH. SFH supports and concentrates, or is capable of supporting and concentrating small fish, frogs, and other aquatic prey. Examples of SFH include, but are not limited to freshwater marshes, small ponds, shallow, seasonally flooded roadside or agricultural ditches, seasonally flooded pastures, narrow tidal creeks or shallow tidal pools, managed impoundments, and depressions in cypress heads and swamp sloughs.

[6] On an individual basis, SFH impacts to wetlands less than 0.20 hectare (one-half acre) generally will not have a measurable effect on wood storks, although we request that the Corps require mitigation for these losses when appropriate. Wood storks are a wide-ranging species, and individually, habitat change from impacts to SFH less than one-half acre are not likely to adversely affect wood storks. However, collectively they may have an effect and therefore regular monitoring and reporting of these effects are important.

[7] Several researchers (Flemming et al. 1994; Ceilley and Bortone 2000) believe that the short hydroperiod wetlands provide a more important pre-nesting foraging food source and a greater early nestling survivor value for wood storks than the foraging base (grams of fish per square meter) than long hydroperiod wetlands provide. Although the short hydroperiod wetlands may provide less fish, these prey bases historically were more extensive and met the foraging needs of the pre-nesting storks and the early-age nestlings. Nest productivity may suffer as a result of the loss of short hydroperiod wetlands. We believe that most wetland fill and excavation impacts permitted in south Florida are in short hydroperiod wetlands. Therefore, we believe that it is especially important that impacts to these short hydroperiod wetlands within CFAs are avoided, minimized, and compensated for by enhancement/restoration of short hydroperiod wetlands.

[8] For this Key, the Service requires an analysis of foraging prey base losses and enhancements from the proposed action as shown in the examples in Enclosure 3 for projects with greater than 2.02 hectares (5 acres) of wetland impacts. For projects with less than 2.02 hectares (5 acres) of wetland impacts, an individual foraging prey base analysis is not necessary although type for type wetland compensation is still a requirement of the Key.

This Key does not apply to Comprehensive Everglades Restoration Plan projects, as they will require project-specific consultations with the Service.

EXHIBIT 6 – EASTERN INDIGO SNAKE KEY

Consultation Key for the Eastern Indigo Snake

Revised August 1, 2017

A. Project is not located in open water or salt marsh……go to B

Project is located solely in open water or salt marsh……**no effect**

B. Permit will be conditioned for use of the Service's most current guidance for Standard Protection Measures For The Eastern Indigo Snake (currently 2013) during site Preparation and project Construction……..go to C

Permit will not be conditioned as above for the eastern indigo snake, or is not known Whether an applicant intends to use these measures and consultation with the Service is Requested…… **may effect**

C. The project will impact less than 25 acres of eastern indigo snake habitat (e.g. sandhill, scrub, pine flatwoods, pine rocklands, scrubby flatwoods, high pine, dry prairie, coastal prairie, mangrove swamps, tropical hardwood hammocks, hydric hammocks, edges of freshwater marshes, agricultural fields [including sugar cane fields and active, inactive, or abandoned citrus groves], and coastal dunes) …… go to D

The project will impact 25 acres or more of eastern indigo snake habitat (e.g. sandhill, scrub, pine flatwoods, pine rocklands, scrubby flatwoods, high pine, dry prairie, coastal prairie, mangrove swamps, tropical hardwood hammocks, hydric hammocks, edges of freshwater marshes, agricultural fields [including sugar cane fields and active, inactive, or abandoned citrus groves], and coastal dunes) …… **May affect**

D. The project has no known holes, cavities, active or inactive gopher tortoise burrows, or Other underground refugia where a snake could be buried, trapped and/or injured during Project activities…… **NLAA**

The project has known holes, cavities, active or inactive gopher tortoise burrows, or Other underground refugia where a snake could be buried, trapped and/or Injured……go to E

E. Any permit will be conditioned such that all gopher tortoise burrows, active or inactive, Will be excavated prior to site manipulation in the vicinity of the burrow[1]. If an eastern Indigo snake is encountered, the snake must be allowed to vacate the area prior to additional site manipulation in the vicinity. Any permit will be conditioned such that holes, cavities, and snake refugia other than gopher tortoise burrows be inspected each morning before planned site manipulation of a particular area, and if occupied by an eastern indigo snake, no work will commence until the snake has vacated the vicinity of proposed work……**NLAA**[2]

Permit will not be conditioned as outlined above…… **may affect**

End Key

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[1] If excavating potentially occupied burrows, active or inactive, individuals must first obtain authorization via a Florida Fish and Wildlife Conservation Authorized Gopher Tortoise Agent permit. The excavation method selected should also minimize the potential for injury of an indigo snake. Application should follow the excavation guidance provided with the most current Gopher Tortoise Permitting Guidance found at http:/myfwc.com/gophertortoise

[2] Please note: If the proposed project will impact less than 25 acres of vegetated eastern indigo snake habitat (not urban/human-altered) completely surrounded by an urban development, and an eastern indigo snake has been observed on site, NLAA is not the appropriate conclusion. The Service recommend formal consultation for this situation because the expected increased value of the vegetated habitat within the individual's home range.

EXHIBIT 7 – REMNANT PINE ROCKLAND

Pine Rockland

Appendix G

Delegation Letter

From: Colon, Christina
To: Stults, Jennifer
Cc: Pinzon, Henry
Subject: FW: SEIR Approval Delegation
Date: Thursday, September 10, 2020 11:01:21 AM

I discussed with Nicola and we agree to delegate State Environmental Impact Report (SEIR) approvals to the Planning and Environmental Management Office (PLEMO) Administrator, Jennifer Stults.

Thanks,

Christina N. Colón, P.E.
Director of Transportation Development

Florida's Turnpike Enterprise
Florida Department of Transportation
Mile Post 263, Building 5315, Ocoee, FL 34761
Tel (407) 264-3603 / **Mobile** (407) 457-1024

From: Colon, Christina
Sent: Friday, September 4, 2020 3:46 PM
To: Liquori, Nicola <Nicola.Liquori@dot.state.fl.us>
Cc: Carrier, Denise <Denise.Carrier@dot.state.fl.us>
Subject: FW: SEIR Approval Delegation

Nicola,

Jennifer Stults and I discussed this topic today and she has provided details below. BLUF – For our PD&E projects, you are now able to delegate State Environmental Impact Report (SEIR) approvals to either me or Jennifer's role. We can explore other options if you prefer but CO would like it to be a managerial position at or above PLEMO Administrator. Currently, all District Secretaries except for District 1 have delegated these SEIR approvals to the PLEMO Administrators. Whoever you decide, CO has advised that the approver will need SWEPT (StateWide Environmental Project Tracker) credentials and some training to navigate the program. I'm told it can be done with very minimal training and not the 5-7 hr training they've been holding. Jennifer has already completed it so it would only apply to me or you.

Please let me know your preference and we'll proceed accordingly with CO on next steps for the SWEPT access and training. My understanding is they would like to get an assessment of who needs the setup/training within the next week or two so they can coordinate calendars and put together an efficient implementation plan.

Thanks,

Christina N. Colón, P.E.
Director of Transportation Development

Florida's Turnpike Enterprise
Florida Department of Transportation
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Tel (407) 264-3603 / **Mobile** (407) 457-1024

From: Stults, Jennifer <Jennifer.Stults@dot.state.fl.us>
Sent: Friday, September 4, 2020 12:48 PM
To: Colon, Christina <Christina.Colon@dot.state.fl.us>
Subject: SEIR Approval Delegation

Christina,

To follow up on our recent discussion, Central Office has advised that we are able to delegate State Environmental Impact Report (SEIR) approvals. Typically, District Secretaries have approved these documents, which are the state versions of a federal Project Development & Environment (PD&E) document. Currently, all District Secretaries except for District 1 have delegated these SEIR approvals to the PLEMO Administrators.

Part of this is also the move to electronic documents to improve efficiency and consistency statewide. The SEIR approvals will now take place within the SWEPT system, making it available to EDMS and other FDOT electronic document database systems. This should be helpful to Design and other subsequent phases who may need to access this information. Central Office has advised that the approver will need SWEPT credentials but can set this up with minimal training.

We have several options here: Turnpike Secretary/CEO Nicola Liquori retains approval authority, Secretary Liquori delegates authority to Transportation Development Director Christina Colon, or Secretary Liquori delegates authority to Planning and Environmental Management Office (PLEMO) Administrator Jennifer Stults. We can also explore other options if you prefer. I am happy to accept this delegation if that is the decision. I completed the training in November, 2016, with subsequent required courses in 2017 as part of NEPA Assignment. Can you let me know of any preference, and I will proceed accordingly with necessary approvals and working with Central Office to get this set up in SWEPT?

Thanks,

Jennifer A. Stults, AICP CTP, CPM, FCCM
Planning & Environmental Mgmt. Administrator

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