ADMINISTRATIVE ACTION
TYPE 2 CATEGORICAL EXCLUSION

Florida Department of Transportation

SR 826/PALMETTO EXPY FROM US-1/S. DIXIE HWY TO SR 836/DOLPHIN XWAY

District: FDOT District 6

County: Miami-Dade County

ETDM Number: 14308

Financial Management Number: 432639-1-22-01

Federal-Aid Project Number: D617-027-B

Project Manager: Maria Isabel Perdomo

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by the Florida Department of Transportation (FDOT) pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated December 14, 2016 and executed by the Federal Highway Administration and FDOT. Submitted pursuant 49 U.S.C. § 303.

This action has been determined to be a Categorical Exclusion which meets the definition contained in 40 CFR 1508.4, and, based on past experience with similar actions and this analysis, does not involve significant environmental impacts. Signature below constitutes Location and Design Concept Acceptance:

Director of the Office of Environmental Management
Florida Department of Transportation

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This document was prepared in accordance with the FDOT PD&E Manual.

This project has been developed without regard to race, color or national origin, age, sex, religion, disability or family status (Title VI of the Civil Rights Act of 1964, as amended).

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1. Project Information

1.1 Project Description

The Florida Department of Transportation (FDOT) District Six is conducting a Project Development and Environment (PD&E) Study for SR 826 (Palmetto Expressway) from US 1 (SR 5) to SR 836 (Dolphin Expressway), a distance of approximately seven miles (see Figure 1-1). The PD&E Study is proposing corridor improvements that will add highway and interchange capacity with the implementation of an express lanes system and interchange improvements. The project is located in Miami-Dade County, Florida and is contained within unincorporated Miami-Dade.

The PD&E Study evaluated the following potential types of improvements:

- Implementation of dynamically priced express lanes.
- Access and ramp connections to and from the express lanes (ingress and egress access points).
- Interchange improvements - Modification of existing entrance and exit ramps serving the interchanges within the project limits.
- Intersection improvements - Widening and turn lane modifications along the cross streets to facilitate the ramp modifications and improve the access and operation of the corridors upstream and downstream from the interchanges.

SR 826, between US 1 and SR 874 (Don Shula Expressway), consists primarily of six travel lanes (three lanes in each direction). Between SR 874 and SR 836, the corridor consists primarily of ten travel lanes (five lanes in each direction) and two undesignated High Occupancy Vehicle (HOV) lanes (one in each direction). This segment of SR 826 is functionally classified as an Urban Other Freeway/Expressway and has a posted speed limit of 55 miles per hour. The access management classification for this corridor is Class 1.2, Freeway in an existing urbanized area with limited access.

There are ten existing interchanges within the project limits. Eight of the ten interchanges provide connection to arterial/collector facilities. The other two are major system-to-system interchanges (SR 826 with SR 874 and SR 826 with SR 836). These system-to-system interchanges provide a connection between major expressways, which services and distributes traffic originating from or destined to the north, south, east, and west portions of Miami-Dade County.

1.2 Purpose and Need

The overall goals and objectives of this PD&E Study are described below:

- Evaluate the implementation of an express lanes system that will improve safety, capacity, operations, regional express lane network connectivity, expressway/interchange access, mobility and emergency evacuation.
- Identify the appropriate express lanes typical section that, combined with strategic ingress and egress locations, will service the users of the area and achieve the Purpose and Need.
- Provide relief from existing and projected traffic congestion.
- Improve the safety of the SR 826 mainline corridor by addressing speed differentials and lane weaving deficiencies between interchanges.
- Support the optimal operations of the existing roadway network.
- Maintain consistency with the current SR 826 Express Lanes Project, from SR 836 to I-75, and local projects.
- Once a conceptual alternative is selected, the improvements will be prioritized based on the area needs (short-term vs. long-term), logical segmentation and funding.

The need for this project is to add capacity to the SR 826 corridor to meet future transportation demand, improve travel time reliability and to provide long-term mobility options. Other considerations for the Purpose and Need of this project include safety, system linkage, freight movement and emergency evacuation. The primary and secondary needs for the project are discussed in further detail below.

Capacity

The project traverses four of the six transportation planning areas (Central, Northwest, South, and West) as identified within the Miami-Dade Transportation Planning Organization (TPO) 2040 Long Range Transportation Plan (LRTP). The greatest population and employment growth between the years 2010 and 2040 within Miami-Dade County is expected to occur within the South transportation planning area. Population within this area is projected to increase by 49.6% while employment is projected to increase by 64.5%. The other three transportation planning areas are also anticipated to grow modestly between this same period. Population within Central is projected to increase by 27.9% and employment by 32.5%. Population within Northwest is projected to increase by 20% and employment by 41.9%. Population within West is projected to increase by 12.5% and employment by 42.5%. The projected growth in the area will result in a significant increase in travel demand and further deteriorate the conditions of the already congested SR 826 corridor.

Safety

According to the FDOT Crash Analysis Reporting System (CARS) there were a total of 2,531 crashes along the corridor within the project limits between the years 2011 and 2013, of which 1,522 (60.1%) were rear-end crashes and 259 (10.2%) were fixed object crashes. These types of crashes can be attributed to the heavy levels of congestion and operational weaving conditions within the project area. The majority of the total crashes occurred between milepost 5.7 and 6.8 (between SW 24th Street and north of Flagler Street), resulting in 811 injuries and one fatality.

Safety along the corridor will be enhanced with the construction of the express lanes. Implementing express lanes will improve mobility, reduce congestion and provide additional travel options along the corridor. Diverting some of the future traffic volumes from the general use lanes to the express lanes, will help increase gaps along the general use lanes providing more space for vehicles entering SR 826. The express lanes will also help reduce tailgating and improve traffic flow while separating long distance trips from local trips. Separating these trips will reduce weaving and sideswipe crashes. The express lanes will also create added capacity helping the corridor to operate more efficiently during emergency evacuation events.

System Linkage

SR 826 connects southern Miami-Dade County to northern Miami-Dade County and serves as a feeder route to the County's busiest east-west transportation corridor, SR 836. The SR 826 corridor provides system-level connections to I-75, Florida's Turnpike, SR 874, and I-95. In addition, SR 826 is designated as a Strategic Intermodal System (SIS) facility. The section of SR 826 from US 1 to SR 836 serves the major western Miami-Dade County growth areas along SW 8th Street, SW 40th Street and the Dadeland South area. The corridor also provides access to Miami International Airport north and east of SR 836 and to the Dadeland Mall at SW 88th Street. This SR 826 southern segment (from US 1 to SR 836) is the final segment of a larger express lanes project for the SR 826 corridor. The northern segment, which extends from SR 836 to I-75, is already under construction. When complete, this regional system will greatly improve capacity, safety, connectivity and peak-hour travel times.

Freight

SR 826 is an integral component of the regional freight network carrying over 10,000 trucks a day according to the 2014 Miami-Dade County Freight Plan Update. The addition of express lanes along SR 826 would create a more efficient roadway network, improving traffic flow in the general use lanes. While trucks are not allowed in express lanes, the enhanced traffic conditions along SR 826 would aid in the movement and delivery of freight.

Emergency Evacuation

In accordance with the Miami-Dade's Comprehensive Development Master Plan, SR 826 is listed as a local evacuation route in Miami-Dade County. This corridor is critical in facilitating traffic movement during emergency evacuation periods as it connects to other major arterials and highways of the state evacuation route network. Increasing the capacity of the SR 826 corridor will reduce evacuation times needed for residents of Miami-Dade County during emergency and hurricane evacuations.

1.3 Planning Consistency

SR 826/Palmetto Expressway Express Lanes from US 1/South Dixie Highway to SR 836/Dolphin Expressway is identified in the Miami-Dade Metropolitan Planning Organization (MPO) 2040 LRTP as a partially funded project. This project is additionally included within the FDOT 2010/2011 - 2015/2016 Work Program, the FDOT 2015/2016 - 2018/2019 Statewide Transportation Improvement Program (STIP), and the Miami-Dade MPO 2016/2017 - 2020/2021 Transportation Improvement Program (TIP) with funding allocated for the Transportation Planning/PD&E phase; no other future phases [Preliminary Engineering, Right-of-Way, or Construction] nor future year funding is indicated. During future project phases, FDOT will coordinate with Miami-Dade County and the Miami-Dade MPO, respectively, to ensure that the project is consistent with the local government comprehensive plan(s) and that required project funding is identified in the TIP, LRTP, STIP, and Work Program. A copy of the Planning Consistency documentation is included as ***Attachment A***.

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2. Environmental Analysis Summary

Issues/Resources	Significant Impacts?* Yes	No	Enhance	NoInv
3. Social and Economic				
1. Social	☐	☒	☐	☐
2. Economic	☐	☒	☐	☐
3. Land Use Changes	☐	☒	☐	☐
4. Mobility	☐	☒	☐	☐
5. Aesthetic Effects	☐	☒	☐	☐
6. Relocation Potential	☐	☐	☐	☐
7. Farmland Resources	☐	☐	☐	☒
4. Cultural Resources				
1. Section 106 of the National Historic Preservation Act	☐	☒	☐	☐
2. Section 4(f) of the USDOT Act of 1966	☐	☒	☐	☐
3. Section 6(f) of the Land and Water Conservation Fund	☐	☒	☐	☐
4. Other Protected Public Lands	☐	☐	☐	☒
5. Natural Resources				
1. Protected Species and Habitat	☐	☒	☐	☐
2. Wetlands and Other Surface Waters	☐	☒	☐	☐
3. Essential Fish Habitat (EFH)	☐	☒	☐	☐
4. Floodplains	☐	☒	☐	☐
5. Sole Source Aquifer	☐	☒	☐	☐
6. Water Quality and Stormwater	☐	☒	☐	☐
7. Aquatic Preserves	☐	☐	☐	☒
8. Outstanding Florida Waters	☐	☐	☐	☒
9. Wild and Scenic Rivers	☐	☐	☐	☒
10. Coastal Barrier Resources	☐	☐	☐	☒
6. Physical Resources				
1. Highway Traffic Noise	☐	☒	☐	☐
2. Air Quality	☐	☒	☐	☐
3. Contamination	☐	☒	☐	☐
4. Utilities and Railroads	☐	☐	☐	☒
5. Construction	☐	☒	☐	☐

USCG Permit

☒ A USCG Permit IS NOT required.

☐ A USCG Permit IS required.

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

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3. Social and Economic

The project will not have significant social and economic impacts. Below is a summary of the evaluation performed.

3.1 Social

Part 2, Chapter 4 (Sociocultural Effects Evaluation) of the FDOT PD&E Manual was used to evaluate the following section.

For additional information on the following, please refer to the Sociocultural Effects Evaluation (SCE) report completed for this project located in the State-Wide Environmental Project Tracker (SWEPT) project file at the FDOT District Six offices in Miami, Florida.

The SCE Study Area incorporates an area that extends a quarter of a mile from the centerline of SR 826 from US 1 (SR 5) to SR 836 (Dolphin Expressway).

Community effects are mixed with benefits generally offsetting negative effects. The Build Alternatives are expected to reduce congestion, improve access to local business and activity centers, and spur economic development. The integrity of existing communities will be maintained and impacts to community cohesion are anticipated to be minimal. Noise and relocation impacts are among the most significant negative project effects.

Community Description

This segment of SR 826 is located in northern Miami-Dade County. The SCE study area is urbanized supporting a wide range of land uses. Community focal points along the corridor including schools, parks, hospitals, shopping centers, and transportation hubs. Major attractors along the corridor include Dadeland Mall, Tropical Park, and Miami International Airport.

While not as racially diverse as Miami-Dade as a whole, the SCE study area supports a similar minority population percentage (87.54 percent). Several differences between the study and county populations were noted. The single most predominant difference between local and county populations is the size of the African American community. African American residents make up 1.94 percent of the population within the SCE study area, while 17.97 percent of Miami-Dade County residents are African American. Additionally, the study area has a larger white population (81.75 percent) and higher median age (44) when compared to Miami-Dade County proportionately (75.60 percent and 40 years old respectively) (***Table 3-1***).

Evaluation Criteria	**SCE Study Area**	**Miami-Dade County**	**Florida**
Total Population	28,773	2,702,602	20,278,447
Percent White	91.83%	75.60%	75.67%
Percent Black	1.94%	17.97%	16.13%
Percent Asian	3.43%	1.58%	2.68%
Percent Other*	2.79%	4.84%	5.52%
Percent Hispanic (regardless of race)	81.75%	67.45%	24.73%
Percent Minority **	87.54%	86.26%	45.14%
Percent Under the Age of 18	15.71%	20.47%	20.28%

Percent Age 65 or Older	18.14%	15.33%	19.36%
Median Age	44	40	42
*Population includes persons identified as American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, Some Other Race, Two or More Races. ** Combines Race and Ethnicity to identify the total population that is a member of either a racial or ethnic minority.			

Table 3 - 1: Demographic Comparison, Total Population

Table 3-2 highlights a reduced concentration of poverty within the SCE study area where 13.87 percent of the population lives below the poverty line, which is less than both Miami Dade (19.0 percent) and the state of Florida (15.5 percent). This coincides with the study area having a higher median household income ($51,256) than both Miami-Dade County and the State.

Evaluation Criteria	**SCE Study Area**	**Miami-Dade County**	**Florida**
Median Household Income	$51,256	$46,338	50,883
Percent of the Population Below the Poverty Line	13.87%	19.0%	15.5%

Table 3 - 2: Demographic Comparison, Income

Community Cohesion

Of the three build alternatives, none involve neighborhood division or social isolation including impacts to existing access ways and routes. SR 826 is an existing facility; thus, the neighborhoods that abut the corridor should experience minimal change. The implementation of Alternative 3 may impact the pedestrian bridge over SR 826 near SW 35th Street. Each of the build alternatives have relocation impacts on both residential and commercial properties, with residential properties containing most of the parcels that involve potential relocations. However, those relocations occur at the edges of established neighborhoods and incorporate relatively small number of properties when compared to the neighborhood overall.

Community outreach, and relocation assistance programs are being implemented to mitigate potentially negative community effects. To date, targeted public outreach efforts beyond the public workshops have focused on the engagement of public officials. Limited English Proficient (LEP) populations, primarily Spanish speakers, are present. Accommodation including translation services are provided to support participation by LEP groups. The integrity of existing communities will be maintained and impacts to community cohesion are anticipated to be minimal.

Safety and Emergency Response/Evacuation

To determine the number of crashes occurring along the corridor the FDOT CARS was used. Between the three-year period of January 1, 2011 to December 31, 2013 a total of 2,531 occurred along the project corridor of which 1,522 (60.1 percent) were rear end crashes and 259 (10.2 percent) were fixed object crashes. These types of crashes can be attributed to the heavy levels of congestion and weaving, merging, diverging, and other lane changing maneuvers within the project area. The majority (547) of the total crashes between 2011 and 2013 occurred between milepost 5.7 and 6.8 (roughly north of SW 24th Street and north of SE 8th Street), resulting in 811 injuries and one fatality.

Each of the build alternatives (Alternatives 1, 2, and 3) would have a positive impact on safety and emergency response. By diverting some of the future traffic volume off the general use lanes, the express lanes will help increase gaps providing more space for vehicles entering SR 826/Palmetto Expressway to safely merge, reducing weaving and

sideswipe crashes. Express lanes would provide consistent traffic flow during peak traffic periods shortening emergency response service times.
In regard to emergency evacuations, SR 826 is designated as an emergency evacuation route by the Florida Division of Emergency Management. The added capacity of the roadway will enhance emergency evacuation.

Special Designations
One census tract (Census Tract 83.04) within the quarter mile study area qualifies as an Opportunity Zone. These zones were established by congress in the Tax Cuts and Jobs Act of 2017 as a tax incentive for reinvestment in low income communities. Qualified Opportunity Zones retain their designation for 10 years. Within each zone, investors can defer taxes on financial gains, so long as the gain is reinvested in a Qualified Opportunity Fund. Opportunity Zones are expected to spur public-private partnerships in disadvantaged communities.

The build alternatives (Alternatives 1, 2, and 3) would represent a public investment in transportation infrastructure in an area targeted for economic redevelopment, an action supportive of the purpose of the Opportunity Zone.

3.2 Economic

For additional information on the following, please refer to the SCE report completed for this project located in the SWEPT project file at the FDOT District Six offices in Miami, Florida.

Business Access and Activity
Based on figures produced by the US Census Bureau reported in the Longitudinal Employer-Household Dynamics database, the SCE study area currently supports 28,255 jobs (***Table 3-3***). The Accommodations and Food Services; Retail Trade; Professional, Scientific, and Technical Services; and Health Care and Social Assistance support the greatest share of the job market.

NAICS Industry Sector	**Year 2015**	
	Count	**Share**
Agriculture, Forestry, Fishing, and Hunting	0	0.0%
Mining, Quarrying, and Oil and Gas Extraction	0	0.0%
Utilities	0	0.0%
Construction	877	3.1%
Manufacturing	470	1.7%
Wholesale Trade	1256	4.4%
Retail Trade	9,191	32.5%
Transportation and Warehousing	438	1.5%
Information	102	0.4%
Finance and Insurance	1920	6.8%
Real Estate and Rental and Leasing	367	1.3%
Professional, Scientific, and Technical Services	3,878	13.7%
Management of Companies and Enterprises	425	1.5%

Administration & Support, Waste Management and Remediation	1,419	5.0%
Educational Services	904	3.2%
Health Care and Social Assistance	3,483	12.3%
Arts, Entertainment, and Recreation	34	0.1%
Accommodation and Food Services	2,613	9.2%
Other Services (excluding Public Administration)	687	2.4%
Public Administration	191	0.7%

Table 3 - 3: SCE Study Area Jobs by NAICS Industry Sector

The express lanes proposed for SR 826 are a part of a larger system throughout Southeast Florida that either are in operation, under construction, or in the planning and design phase. This includes two other sections of SR 826: 1) SR 93/I-75 to west of NW 17 Avenue and 2) West Flagler Street to north of NW 154 Street and along I-75 from SR 826/Palmetto Expressway to NW 170 Street in Miami-Dade County.

The above mentioned roadways along with the express lanes planned/operating along I-595, I-95, Turnpike Mainline, I-75, and the Sawgrass Expressway complete a network of connected roadways. The express lanes will improve access to the industry sectors noted, thereby supporting the economic development of the area and region.

Traffic volumes on arterial roadways traversed by the project will not be changed significantly by any build alternative. Therefore, traffic-based businesses such as retail trade are not expected to be negatively affected. Additionally, no existing business will be bypassed by the build alternatives.

Tax Base

While occurring mostly in existing ROW all three build alternatives require both residential and commercial relocations as well as parcel impacts. Alternative 1 would need 36 parcels (24 potential relocations), Alternative 2 would need 53 parcels (25 potential relocations), and Alternative 3 would need 54 parcels (30 potential relocations). Some tax revenue will be lost from these effected parcels.

3.3 Land Use Changes

Existing Land Use

Existing land use was assessed through review of current zoning map information. GIS shapefiles were downloaded from the Florida Geographic Data Library and compared to the SCE study area. ***Table 3-4*** reports total area by zoning description found within the study area. The predominant land use present is residential (51.28 percent) followed by Retail/Office (14.15 percent) and Public/Semi-Public (11.57 percent). ***Figure 3-1*** shows the location of each zoning district.

Zoning Description	Acres	Percent
Acreage Not Zoned for Agriculture	11.12	0.44%
Agricultural	0.95	0.04%
Centrally Assessed	17.53	0.70%
Industrial	85.35	3.39%
Institutional	96.62	3.84%
Parcels with No Values	15.75	0.63%
Public/Semi-Public	291.27	11.57%
Recreation	18.88	0.75%
Residential	1291.03	51.28%
Retail/Office	356.12	14.15%
Vacant Nonresidential	70.80	2.81%
Vacant Residential	261.27	10.38%
Water	0.92	0.04%

Table 3 - 4: SCE Study Area Generalized Land Use

Occurring well within the Miami-Dade urban growth boundary, SR 826, a limited access expressway, is consistent with the character and intensity of surrounding development. Other than the localized effects of potential relocations for the three build alternatives, this project is not expected to affect the current or future land use of the area. Potential relocations make up less than half of 1 percent of the land use identified in Table 6.4. Therefore, the acreage per zoning classification is not expected to significantly change. Furthermore, no impacts to recreation and open space are expected by any build alternative.

3.4 Mobility

This section identifies potential project effects on mobility and accessibility in the study area with emphasis on non-driving population groups (i.e., elderly, young, disabled, and low-income individuals). Changes to existing travel patterns, traffic circulation, or accessibility were assessed. The effects of tolling on low-income populations were considered based on the inclusion of the Express Lanes considered in each alternative.

Accessibility and Connectivity

The proposed corridor improvements will enhance the movement of people within the area. Mobility will be enhanced by Alternatives 2 and 3 by connecting the express lanes system to the US 1 Busway Corridor. This connection will support BRT with buses being able to use the express lanes at no cost. FDOT is proposing to allocate a portion of the collected tolls to support the BRT regional express bus service operations on the corridor. The proposed interchange improvements will add the needed capacity to improve the operations in and out of the freeway system, and provide the opportunity to enhance the local bus service operations by adding routes and/or improving the existing ones. The study area is currently served by 28 bus routes and Metrorail.

The crossing roadway improvements, at selected locations, will improve the bicycle and pedestrian facilities. For example, SW 72nd Street (Sunset Drive) in Alternatives 2 and 3 will now include bicycle lanes in both directions. Additionally, the transportation-disadvantaged would experience better connectivity and accessibility to essential services (employment centers, support services, etc.) through route improvements. Due to SR 826 being an existing facility, no changes to connectivity are expected between residential and non-residential areas via the roadway network.

Traffic Circulation

Should no changes be made by the year 2045, traffic is expected to increase by 37 percent, with 27 locations along the interstate operating at an unacceptable LOS. The proposed improvements will redistribute traffic between the express lanes and the general use lanes maximizing throughput of the corridor and optimize operations. The following summarizes the results of the traffic analysis for the three Build Alternatives.

The freeway analysis for Alternative 1 shows that 13 locations northbound and 11 locations southbound will operate at an unacceptable LOS by the year 2045. The ramp junction analysis shows four locations northbound and four locations southbound will operate at an unacceptable LOS. Similar analysis for Alternative 2 shows that six locations northbound and nine locations southbound will operate at an unacceptable LOS by the year 2045. The ramp junction analysis shows one location northbound and three locations southbound will operate at an unacceptable LOS. Finally, the freeway analysis for Alternative 3 shows that 11 locations northbound and 12 locations southbound will operate at an unacceptable LOS by the year 2045. The ramp junction analysis shows four locations northbound and four locations southbound will operate at an unacceptable LOS.

Widening and turn lane modifications along the cross streets will add capacity to local intersections and improve the access and operation of the corridors upstream and downstream from the interchanges. Overall, the proposed improvements will reduce the delay at each intersection improving the flow of traffic and the number of vehicles being processed.

Tolling Effects

SR 826 is an existing facility that is a part of Florida's turnpike system. The express lanes proposed for the three build alternatives all would involve variable tolled pricing otherwise known as congestion pricing. Congestion pricing bases the amount tolled on the congestion level of the adjacent lanes (non-variable priced lanes). Any motorists who choose to travel in the express lanes could experience an economic impact. Based on a current proposal from the FDOT, a portion of the revenue collected will go to support regional BRT service along the corridor.

Generally, more reliant on transit, than higher income populations, low income transit users will benefit from express lanes as travel times along the corridor and the connecting side streets will be reduced. Furthermore, transit users will not need to pay to use the express lanes due to an agreement between the transit agencies and FDOT. Residents that choose to drive in the general use lanes on SR 826 will benefit from reduced delay and improved travel times along the SR 826 corridor.

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3.5 Aesthetic Effects

Part 2, Chapter 5 (Aesthetic Effects) of the FDOT PD&E Manual was used to evaluate the following section.

Viewshed
Impacts of views/vistas from/of SR 826 are anticipated to be limited as the roadway is an existing facility. Alternatives 1 and 2 involve widening the roadway, at grade with new ramp configurations for the proposed express lanes. Alternative 3 is likely to create a larger viewshed impact as it involves a second and third level elevated express lane bridge system in the middle of the roadway. This raised structure will also require a new ramp network and configuration.

The SR 826 corridor is approximately seven miles and is urbanized supporting a wide range of land uses at varying densities. Development along the corridor incorporates larger structures such as Mall of the Americas, Dadeland Mall, and several large office buildings. These larger buildings along with transportation infrastructure including rail lines, bridges, and roadways all contribute to the existing visual character of the area where large built elements are not uncommon. Other than the retail/office structures, residential parcels make up approximately 62 percent of the land use within a quarter mile of the project. As an existing structure these residences are unlikely to experience viewshed effects, unless Alternative 3 is chosen as the Locally Preferred Alternative (LPA). However, if constructed, the elevated express lanes still fit the character of the existing facility.

Continued public coordination is recommended to identify context sensitive design solutions that lessen the visual impact of each alternative. Based on the potential for contention related to project aesthetics, the degree of effect is deemed Moderate.

3.6 Relocation Potential

The conceptual design plans presented for all three alternatives are shown in ***Appendix A*** of the SCE. The conceptual design plans identify several areas of expanded right-of-way. Affected parcels and their corresponding land use are identified in ***Appendix C***of the SCE**.** A summary of the effected parcels per each build alternative is shown below in ***Table 3-5***.

Alternative	Partial Impact	Potential Relocation	Area (sq. ft.)
1	12	24	309,938
2	28	25	386,092
3	24	30	507,647

Table 3 - 5: Summary of Right of Way Impacts

Of the three build alternatives, Alternative 3 requires the largest number of affected parcels (54) with 30 potential relocations and 24 partial takings. Of the 30 potential relocations, 23 are single family homes (5.17 acres) and seven are

commercial properties (4.64 acres). The seven potential commercial relocations involve the following: Maribelle Day Spa; two service stations [Chevron and Shell]; one retail building that includes a Gym Source, Allstate, Kendall Bait and Tackle, and a framing store; Gulliver Preparatory School (private high school), and two office buildings. Alternative 3 is the only build alternative that impacts the high school. The 24 partial relocations impact an array of land uses that are presented in the above referenced appendix. In total Alternative 3 impacts 11.65 acres.

Impacting a similar number of parcels (53) Alternative 2 would result in 25 potential relocations (6.86 acres) and 28 partial takings (2.00 acres), totaling 8.86 acres. Single family homes are impacted the most (5.11 acres) representing 21 of the relocations. The four potential commercial relocations involve Maribelle Day Spa, two service stations [Chevron and Shell], and an automotive store [Palmetto Tires and Mt. Professional Window Tint and More]. Comparable to Alternative 3 there is a large range of land use classifications for the 28 partial takings. In total Alternative 2 impacts 8.86 acres.

Resulting in the fewest number of parcel impacts than any of the build alternatives, Alternative 1 effects 36 parcels, of which 24 result in potential relocations and 12 would require a partial taking. 4.49 acres or 20 single family home parcels would be needed. Concerning commercial businesses, Maribelle Day Spa, two service stations [Chevron and Shell], and an automotive building [Palmetto Tires and Mt. Professional Window Tint and More] would be impacted. In total Alternative 1 impacts 7.12 acres.

While the overall degree of effect for this issue is substantial, vacant residential properties make up just over 10 percent or 261 acres of the corridor giving those affected the opportunity to relocate in their neighborhood. Additionally, just under 3 percent (70) acres of vacant non-residential property is available for purchase. To minimize the unavoidable effects of ROW acquisition and displacement of people, the FDOT will carry out a ROW and Relocation Assistance Program in accordance with Florida Statute 421.55, Relocation of displaced persons, and the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 91-646 as amended by Public Law 100-17.

A Conceptual Stage Relocation Plan has been developed as part of the PD&E Study. A copy of the report is available in the SWEPT project file at the FDOT District Six offices in Miami, Florida.

3.7 Farmland Resources

This project is not subject to the provisions of the Farmland Protection Policy Act of 1981.

In accordance with the Farmland Protection Policy Act of 1984 and the FDOT XE "FDOT" PD&E XE "PD&E" Manual, Part 2, Chapter 6 - Farmlands, this project was reviewed for involvement with farmlands. No farmlands were determined to exist along the project corridor; therefore, no impacts to farmlands will occur as a result of the proposed roadway improvements.

4. Cultural Resources

The project will not have significant impacts to cultural resources. Below is a summary of the evaluation performed.

4.1 Section 106 of the National Historic Preservation Act

A Cultural Resource Assessment Survey (CRAS), conducted in accordance with 36 CFR Part 800, was performed for the project, and the resources listed below were identified within the project Area of Potential Effect (APE). FDOT found that these resources do not meet the eligibility criteria for inclusion in the National Register, and State Historic Preservation Officer (SHPO) has concurred with this evaluation. Therefore, FDOT, in consultation with SHPO, has determined that the proposed project will result in **No Historic Properties Affected**.

Part 2, Chapter 8 (Archaeological and Historical Resources) of the FDOT PD&E Manual was used to evaluate the following section.

The project was screened through the ETDM Process (ETDM Project #14308). An ETDM Summary Report was published on March 31, 2017 and re-published on March 13, 2018. The FDOT District 6 and the Florida Department of State reviewed the project and listed the degree of effect as 'Moderate' for Historic and Archeological Sites for all Build Alternatives for the following reasons:

"1) the presence of NRHP-eligible and NRHP-potentially eligible resources within close proximity to the project,
2) the potential presence of unrecorded archaeological and/or historic resources within the project vicinity, and
3) the fact that no comprehensive cultural resource assessment survey has been conducted along the project corridor."

A Cultural Resource Assessment Survey (CRAS) was conducted for the proposed project in accordance with Stipulation VII of the Section 106 Programmatic Agreement among the Federal Highway Administration (FHWA), the Advisory Council on Historic Preservation (ACHP), the Florida Division of Historical Resources (FDHR), the State Historic Preservation Officer (SHPO), and the FDOT Regarding Implementation of the Federal-Aid Highway Program in Florida (Section 106 Programmatic Agreement, effective March 2016, amended June 7, 2017).

A Research Design was prepared to establish the Area of Potential Effect (APE) used throughout the project corridor. The APE was determined by considering the type of improvements being proposed, the character of the project corridor, and the potential effects these improvements could have on cultural resources. Based on this, the archaeological resources APE consists of the footprint of any subsurface activities proposed within and extending outside of the existing ROW, as well as the footprint of newly proposed ROW. The historic resources APE consists of the footprint of all proposed improvements and proposed ROW, adjacent parcels for a distance of up to 150 feet from the proposed at-grade improvements and proposed ROW, and a distance of 250 feet from the proposed elevated improvements. Any proposed elevated improvements range in height from 40-68 feet. The APE established in the Research Design was reviewed and accepted by FDOT. Additionally, the Research Design identified any previously recorded cultural resources, areas with the potential for containing unrecorded cultural resources, and preliminary archaeological site potential zones.

No newly recorded archaeological sites were identified within the archaeological APE. One previously recorded archaeological site within the archaeological APE was previously monitored and found to have been destroyed by development. Two 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 at-grade roadways, elevated highways, sidewalks, driveways, parking lots and other hardscape; landscaping; canals, berms, storm sewer, and other drainage and water management features; buried and overhead utilities, including electric, sewer, water, fiber optic cable, Intelligent Transportation Systems (ITS), signalization, and lighting; and existing buildings and structures. The pedestrian survey and subsurface testing 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 416 historic resources within the historic resource APE. The historic resources consist of 378 buildings, fourteen linear resources, twelve bridges, ten resource groups, and two cemeteries. Of the identified historic resources, 26 are previously recorded and 390 are newly recorded. Additionally, the field survey revealed that eight previously recorded resources plotted within the APE have been demolished or otherwise removed.

Three previously recorded historic resources are considered eligible for listing in the National Register: Fairholm House (8DA2892), FEC Railway (8DA10107), and CSX Railroad (8DA10753). These three resources were not previously evaluated by SHPO within the current APE. Fourteen previously recorded resources have been determined by SHPO to be ineligible for listing in the National Register. Nine historic linear resources were not previously recorded within the current APE. Evaluations of National Register eligibility were made for all extant historic resources as part of this study.

Four newly recorded historic resources are considered eligible for the National Register: Miami Memorial Park (8DA17261), Sunset Montessori School (8DA17305), South Miami Lutheran Church (8DA17315), and 780 Tamiami Canal Road (8DA17609). Three hundred and eighty-six of the 390 newly recorded historic resources exhibit common architecture and design types found throughout South Florida, and they have no known associations with significant people or events. Furthermore, several of these resources exhibit modifications that affect their historic physical integrity. Therefore, these 386 newly recorded historic resources are considered ineligible for listing in the National Register either individually or as part of a historic district.

The CRAS was submitted to SHPO on September 27, 2019. The document is currently under review. Final concurrence of the findings of the CRAS is pending completion.

For additional information regarding cultural and historical resources, please refer to the CRAS report completed for this project located in the SWEPT project file.

4.2 Section 4(f) of the USDOT Act of 1966, as amended

The following evaluation was conducted pursuant to PART 774-PARKS, RECREATION AREAS, WILDLIFE AND WATERFOWL REFUGES, AND HISTORIC SITES (SECTION 4(f)).

In compliance with the Department of Transportation Act of 1966 [Title 49, U.S. Code, Section 1653(f)], as amended, and in accordance with the FDOT XE "FDOT" PD&E XE "PD&E" Manual, Part 2, Chapter 7 - Section 4(f) Evaluations, the study corridor was evaluated for potential Section 4(f) involvement. The provisions of Section 4(f) apply to any significant publicly-owned parks, recreation areas, or wildlife and waterfowl refuges; historic and archaeological sites; and properties which represent public multiple-use land holdings. For additional information on Section 4(f) resources, please refer to the Section 4(f) Determination of Applicability prepared for this project located in the SWEPT project file at the FDOT District

Six offices in Miami, Florida.

Section 4(f): Recreation

The project was screened through the ETDM Process (ETDM Project #14308). An ETDM Summary Report was published on March 31, 2017 and re-published on March 13, 2018. The FDOT District 6 reviewed the project and listed the degree of effect as 'Substantial' for Section 4(f) potential for all Build Alternatives for the following reasons:

"1) the presence of previously recorded and the potential presence of unrecorded archaeological and/or historic resources [which will need to be reevaluated/evaluated for NRHP-eligibility] within close proximity to the project,
2) the fact that no comprehensive cultural resource assessment survey has been conducted along the project corridor,
3) anticipated impacts on two of the four identified parks as a result of right-of-way acquisition, and
4) temporary impacts on access to and/or modified access to as well as impacts on enjoyment of existing public recreational features as a result of the project."

Four publicly-owned parks are adjacent to the project corridor: Tropical Park, Humble Mini Park, Veterans Wayside Park, and South Dade Trail Mini Park.

Tropical Park lies adjacent to the preferred project alternative proposed in the PD&E study. The Miami-Dade County owned park supports a variety of recreational uses such as picnicking, individual and team sporting activities, equestrian activities, fishing, biking, walking/jogging and paddle boarding. Concept plans for the proposed alternatives show no modification to the local roadway network in the area of the park's entrances and no incorporation of the park into the right-of-way. No change in access, either temporary or permanent, is expected to result from the proposed action. FDOT will not stage materials or make temporary use of the park during construction. Additionally, no indirect use of the park would occur. Each project alternative would expand the transportation right-of-way along the project corridor. However, no alternative would incorporate areas within Tropical Park. No direct impacts to the park would occur. See ***Attachment B*** for the section 4(f) documentation supporting the above finding.

Humble Mini Park lies adjacent to the preferred project alternative proposed in the PD&E study. The Miami-Dade County owned property functions as a public park that supports passive use of a public green space. Concept plans for the proposed alternatives show no modification to SW 39th Terrace in the area of the park's entrance and no incorporation of the park into the right-of-way. No change in access, either temporary or permanent, is expected to result from the proposed action. FDOT will not stage materials or make temporary use of the park during construction. Additionally, no indirect use of the park would occur. Each project alternative would expand the transportation right-of-way along the project corridor. However, no alternative would incorporate areas within Humble Mini Park. No direct impacts to the park would occur. See ***Attachment B*** for the section 4(f) documentation supporting the above finding.

Veterans Wayside Park lies adjacent to the preferred alternative in the PD&E Study. The Village of Pinecrest-owned property functions as a passive 4.5 acre park with a freshwater lake, picnic tables, and open recreation areas. The concept plans for the project design alternatives show no widening of the roads towards the park (US 1 / South Dixie Highway, Killian Drive, SW 79th Avenue, and SW 110th Street) and no incorporation of the park, or portions thereof, into the transportation right-of-way. No direct impacts to the park would occur. No change in access, either temporary or permanent, is expected to result from the proposed action. As a commitment, FDOT will not stage materials or make temporary use of the park during construction. Additionally, no indirect use of the park would occur. The western portion of Veterans Wayside Park is adjacent to US 1 / South Dixie Highway northbound lanes and currently exposed to traffic noise levels. The project improvements along US 1 / South Dixie Highway are not anticipated to result in a substantial increase in traffic noise levels (i.e., 15 dB(A)) above existing conditions in this park. Please reference the Noise Study Report (NSR) in the SWEPT file for additional information relating to noise impacts.

South Dade Trail Mini Park lies adjacent to the preferred alternative in the PD&E Study. The Miami-Dade County-owned property includes open landscaped green space that supports passive recreational use. The concept plans for the project design alternatives show no widening of the roads towards the park (US 1 / South Dixie Highway, Killian Drive, and SW 80th Avenue) and no incorporation of the park, or portions thereof, into the transportation right-of-way. No direct impacts to the park would occur. No change in access, either temporary or permanent, is expected to result from the proposed action. As a commitment, FDOT will not stage materials or make temporary use of the park during construction. Additionally, no indirect use of the park would occur. The eastern portion of South Dade Trail Mini Park is adjacent to US 1 / South Dixie Highway southbound lanes and currently exposed to traffic noise levels. The project improvements along US 1 / South Dixie Highway are not anticipated to result in a substantial increase in traffic noise levels (i.e., 15 dB(A)) above existing conditions in this park. Please reference the NSR in the SWEPT file for additional information relating to noise impacts.

A determination of no-use was made by the FDOT for Tropical Park and Humble Mini Park. The Section 4(f) no use determination forms were completed and approved by Office of Environmental Management (OEM) on 4/22/19 (
Attachment B
). A no-use form for Veterans Wayside Park and South Dade Trail Mini Park has been submitted to the FDOT. A determination is pending. A copy of the signed forms for Tropical and Humble Mini Park have been appended to the environmental document and uploaded to the project file in SWEPT. Section 4(f): Historical and Archaeological

Part 2, Chapter 8 (Archaeological and Historical Resources) of the FDOT PD&E Manual was used to evaluate the following section.

A CRAS was conducted for the proposed project in accordance with Stipulation VII of the Section 106 Programmatic Agreement as discussed in ***Section 4.1***, above. The CRAS identified three previously recorded historic resources which are considered eligible for listing in the National Register: Fairholm House (8DA2892), FEC Railway (8DA10107), and CSX Railroad (8DA10753). In addition, four newly recorded historic resources are considered eligible for the National Register: Miami Memorial Park (8DA17261), Sunset Montessori School (8DA17305), South Miami Lutheran Church (8DA17315), and 780 Tamiami Canal Road (8DA17609) (see ***Section 4.1***, above).

The proposed improvements will have no adverse effects on the National Register eligibility of these resources. The FDOT has determined that there will be no Section 4(f) involvement with any of these resources. The CRAS was submitted to SHPO on September 27, 2019. The document is currently under review. Final concurrence of the findings of the CRAS is pending completion.

For additional information regarding cultural and historical resources, please refer to the CRAS report completed for this project located in the SWEPT project file at the FDOT District Six offices in Miami, Florida.

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

The following evaluation was conducted pursuant to Section 6(f) of the land and water conservation fund of 1965.

State and local governments often obtain grants through the Land and Water Conservation Fund Act (LWCFA) (16 U.S.C. 4601-4 et seq., 36 CFR 59) to acquire or make improvements to parks and recreational areas. Section 6(f) of this Act

prohibits the conversion of property acquired or developed with these grants to a non-recreational purpose without the approval of the National Park Service (NPS). The project team coordinated with the NPS and received a listing of all LWCFA [Section 6(f)] sites within Miami-Dade County. The listing was provided by Ms. Sally Grate on July 26, 2019. Per review of the NPS listing, no LWCFA resources were found to exist within the project study area.

4.4 Other Protected Public Lands

There are no other protected public lands in the project area.

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5. Natural Resources

The project will not have significant impacts to natural resources. Below is a summary of the evaluation performed:

5.1 Protected Species and Habitat

The following evaluation was conducted pursuant to Section 7 of the Endangered Species Act of 1973 as amended as well as other applicable federal and state laws protecting wildlife and habitat.

For additional information on the following, please refer to the Natural Resources Evaluation (NRE) report completed for this project, which is located in the SWEPT project file at the FDOT District Six offices in Miami, Florida.

Protected Species and Habitat

The project study area was evaluated for potential occurrences of federally listed and state listed plant and animal species in accordance with Section 7 of the Endangered Species Act (ESA) of 1973, as amended; the Fish and Wildlife Conservation Act; the Migratory Bird Treaty Act (MBTA); Part 2, Chapter 16 (Protected Species and Habitat) of the FDOT PD&E Manual; and Chapters 5B-40 and 68A-27, F.A.C. Field reviews were conducted on November 13th, 14th, 15th, and 16th, 2018 and December 10th and 13th, 2018. A Florida bonneted bat survey was also conducted. The project study area was also evaluated for the occurrence of federally-designated Critical Habitat as defined by Congress in 50 C.F.R. 17. Based on this evaluation, it was determined that state-designated Critical Habitat for the West Indian manatee (*Trichechus manatus*) is present within the limits of the Build Alternatives. The project is also located within the US Fish and Wildlife Service (FWS) Consultation Areas for the Everglade snail kite (*Rostrhamus sociabilis plumbeus*), American Crocodile (*Crocodylus acutus*), and the Florida bonneted bat (*Eumops floridanus)*. It is important to note that all federally listed species are also considered state listed species.

The project was screened through the ETDM Process (ETDM Project #14308). An ETDM Summary Report was published on March 31, 2017 and re-published on March 13, 2018. During this time, the FWS and Florida Fish and Wildlife Conservation Commission (FWC) commented on potential effects of the project to wildlife and habitat resources. The FWS indicated that the project may contain suitable wood stork (*Mycteria americana*) foraging habitat. Both the FWC and FWS also indicated that the West Indian manatee (a federally listed species) may occur within or adjacent to the project study area. The FWS further indicated that the following federally listed species have potential to utilize habitats within the project study area: eastern indigo snake (*Drymarchon corais couperi*) and the Florida bonneted bat.

Species Occurrence and Effect Determinations

A total of six federally listed animal species, four state-listed animal species, and three state-listed plant species were identified as potentially occurring within the limits of the viable Build Alternatives. Additionally, while not state or federally listed under the ESA, the bald eagle (*Haliaeetus leucocephalus*) and osprey (*Pandion haliaetus*) were included in the protected species analysis due to the regulatory protections associated with these species. ***Table 5-1*** and ***Table 5-2*** provides a summary of the federally listed and state-listed animal and plant species with potential to occur within the limits of the viable Build Alternatives, along with their corresponding effect determinations.

Common Name	Scientific Name	Federal Status	State Status	Occurrence Potential	Effect Determination
Mammals					
Florida Bonneted Bat	*Eumops floridanus*	E	FE	Low	May affect, not likely to adversely affect
West Indian Manatee(1)	*Trichechus manatus*	T	FT	High	May affect, not likely to adversely affect
Reptiles					
American Crocodile	*Crocodylus acutus*	T	FT	Low	No effect
Eastern Indigo Snake	*Drymarchon corais couperi*	T	FT	Low	No effect
Birds					
Bald Eagle(2)	*Haliaeetus leucocephalus*	NL	NL	Moderate	N/A
Osprey(2)	*Pandion haliaetus*	NL	NL	High	N/A
Everglade Snail Kite	*Rostrhamus sociabilis plumbeus*	E	FE	Low	No effect
Wood Stork	*Mycteria americana*	T	FT	Moderate	May affect, not likely to adversely affect
Little Blue Heron	*Egretta caerulea*	NL	ST	Moderate	No effect anticipated
Reddish Egret	*Egretta rufescens*	NL	ST	Low	No effect anticipated
Roseate Spoonbill	*Platalea ajaja*	NL	ST	Low	No effect anticipated
Southeastern American Kestrel	*Falco sparverius paulus*	NL	ST	High	No effect anticipated

Table 5 - 1: Listed/Protected Wildlife Species, Designation, and Potential for Occurrence

Federal Status: E = Endangered, T = Threatened, NL = Not Listed

State Status: FE = Federally-designated endangered, FT = Federally-designated threatened, NL = Not Listed, ST = State threatened.

1 The West Indian manatee, including the Florida manatee subspecies, is also federally-protected by the *Marine Mammal Protection Act*.

2 The bald eagle and osprey are not listed by the FWS or FWC but still federally-protected by the *Bald and Golden Eagle Protection Act* and the *Migratory Bird Treaty Act*.

Table 5-2 below provides the occurrence probability for federal and state listed/protected plant species. Although none of the federally listed plant species listed below have a potential to naturally occur in the project area due to lack of suitable habitat, they are included because they are mentioned in the FWS' IPaC resource list (FWS 2019) generated for this project. The state listed plant species were identified based on review of the FNAI database. All existing state-listed specimens have been planted. Therefore, their occurrence potential has been listed as 'High'.

Common Name	Scientific Name	Federal Status	State Status	Occurrence Potential	Effect Determination

West Indian mahogany	Swietenia mahagoni	NL	T	High	No effect (planted as part of landscaping along roadway)
Florida royal palm	Roystonea regia	NL	E	High	No effect (planted as part of landscaping along roadway)
Simpson's stopper	*Myrcianthes fragrans*	NL	T	High	No effect (planted as part of landscaping along roadway)
Carter's small-flowered Flax	*Linum carteri carteri*	E	FE	Low	No effect
Florida brickell-bush	*Brickellia mosieri*	E	FE	Low	No effect

Table 5 - 2: Listed/Protected Plant Species, Designation, and Potential for Occurrence

Federal Status: E = Endangered, NL = Not Listed
State Status: FE = Federally-designated endangered, T = State threatened, E = State endangered.

A discussion of potential impacts to each of the species listed in the above tables (***Table 5-1*** and ***Table 5-2***) is included in the NRE, a companion document for this project. The discussion includes characterizations of each species and potential impacts resulting from each of the proposed viable build alternatives. Conservation and/or minimization of impacts measures are also included in the discussion of the NRE. The resulting effect determinations of these discussions for each of these species is included in the tables above. A copy of the NRE has been appended to the environmental document and uploaded to the project file in SWEPT.

The FDOT submitted an ESA Section 7 Consultation/Concurrence letter to the FWS on September 18, 2019 (***Attachment C***) to request written concurrence on the effects to critical habitat. A copy of the NRE was appended to that letter for FWS review. FWS concurred with the effect determinations and concluded that the proposed action is not likely to adversely affect any federally listed species or designated critical habitat protected by the ESA on September 24, 2019 (***Attachment D***).

Designated Habitats

Critical Habitats

Critical habitat is a specific, federally-designated, geographic area that is essential for the conservation of a threatened or endangered species that may require special management and protection. Critical habitat may include an area that is not currently occupied by the species, but that will be needed for its recovery. An area is designated as critical habitat after the FWS publishes a proposed federal regulation in the Federal Register and then receives public comments on the proposal. The final boundaries of the critical habitat areas are also published in the Federal Register.

Critical Habitat for the West Indian manatee exists within the proposed limits of the Build Alternatives [C-3 (Coral Gables Canal), C-4 (Tamiami Canal), North Line, and Loop Canal]. As discussed above, in-water work for each of these waterways with the exception of the Loop Canal is anticipated to occur as a result of this project. Bridge replacements, bridge removals, bridge widenings, culvert replacements, and culvert installations will take place throughout the project corridor. Although construction will occur within the limits of these features, no adverse impacts to the limits of these waterways are anticipated to occur. For the portions of the waterways that will be culverted, the culverts will be greater than 8 feet in diameter and air risers will be installed every 100-150 feet along the culverted sections to maintain water/air quality. Manatee exclusion devices/grates will not be necessary due to the size of the culverts. Although the proposed alternatives will result in minor impacts to the overall critical habitat area within the project corridor, these impacts will not

inhibit manatee movement. Therefore, no long term adverse impacts to these waterways (i.e. Critical Habitat) will occur as a result of this project.

In addition, Critical Habitat for Carter's small-flowered flax (Linum carteri carteri) and Florida brickell-bush (*Brickellia mosieri*) occurs within close proximity of the proposed project (***Figure 5-1***), however these locations are outside the limits of the proposed project and will not be impacted.

The FDOT submitted an ESA Section 7 Consultation/Concurrence letter to the FWS on September 18, 2019 (***Attachment C***) to request written concurrence on the effects to critical habitat. A copy of the NRE was appended to that letter for FWS review. FWS concurred with the effect determinations and concluded that the proposed action is not likely to adversely affect any federally listed species or designated critical habitat protected by the ESA on September 24, 2019 (***Attachment D***).

Strategic Habitat Conservation Areas

Strategic Habitat Conservation Areas (SHCA) are defined as regions not in public ownership, which are recommended for protection in order to maintain biological diversity. These SHCA designations are intended to indicate that the existing land use should be maintained in order to conserve state-wide biodiversity. According to the FWC, SHCAs were mapped state-wide in association with the FWC's Closing the Gaps in Florida's Wildlife Habitat Conservation System report (Cox et al., 1994).

There are no SHCAs within close proximity to the project corridor. As such, no impacts are anticipated as a result of the proposed project.

5.2 Wetlands and Other Surface Waters

The following evaluation was conducted pursuant to Presidential Executive Order 11990 of 1977 as amended, Protection of Wetlands and the USDOT Order 5660.1A, Preservation of the Nation's Wetlands.

In accordance with Presidential Executive Order 11990 entitled "Protection of Wetlands" and United States Department of Transportation Order 5660.1A, "Preservation of the Nation's Wetlands" and Part 2, Chapter 9 (Wetlands and Other Surface Waters) of the FDOT PD&E Manual, the project study area was reviewed to identify, quantify, and map wetland communities that are located within the proposed project boundaries. In order to protect, preserve, and enhance wetlands to the fullest extent possible, the FDOT has assessed wetlands that may be affected by proposed roadway improvements.

Wetland/surface water habitats were delineated and assessed on November 13th, 14th, 15th, and 18th, 2018 and December 10th and 13th, 2018 in accordance with the State of Florida Wetlands Delineation Manual (Chapter 62-340, F.A.C.) and the guidelines found within the Regional Supplement to the US Army Core of Engineers (USACE) Wetlands Delineation Manual: Atlantic and Gulf Coastal Plain Region (USACE 2010). No viable wetland habitat was observed within the limits of the project study area; however, surface water habitats were identified, delineated, and assessed.

Surface Waters and Stormwater Drainage Features

The existing surface waters and stormwater drainage retention areas within the study area vary in terms of habitat value, quality, level of intrusion by exotic/invasive (undesirable) vegetative species, and degree of geographical isolation. Field

investigations identified three South Florida Water Management District (SFWMD) -owned canals, one Miami Dade County-owned canal, six surface water features, twelve stormwater detention/retention features, and nine drainage conveyance features (see *Figure 5-2* for individual surface water locations). Individual surface water habitats located within the project study area, by Florida Land Use, Cover and Forms Classification System (FLUCFCS) code and FWS classification, are summarized in *Table 5-3*. Descriptions of each are also provided below.

Name	Acres in Study Area	FLUCFCS Code	FLUCFCS Description	FWS Wetland Classification
SF01	0.22	510	Streams and Waterways	PEM1A/h
SF02	0.03	510	Streams and Waterways	PEM1A/h
SF03	0.04	510	Streams and Waterways	PEM1A/h
SF04	1.41	530	Reservoirs	PUBHx
SF05	0.35	530	Reservoirs	PUBHx
SF06	1.11	530	Reservoirs	PUBHx
SF07	2.19	530	Reservoirs	PUBHx
SF08	0.25	530	Reservoirs	PUBHx
SF09	0.87	530	Reservoirs	PUBHx
SF10	0.87	510	Streams and Waterways	PEM1A/h
SF11	0.12	530	Reservoirs	PUBHx
SF12	0.12	510	Streams and Waterways	PEM1A/h
SF13	0.50	510	Streams and Waterways	PEM1A/h
SF14	1.29	530	Reservoirs	PUBHx
SF15	0.17	530	Reservoirs	PUBHx
SF16	0.05	510	Streams and Waterways	PEM1A/h
SF17	0.02	510	Streams and Waterways	PEM1A/h
SF18	0.22	530	Reservoirs	PUBHx
SF19	2.44	530	Reservoirs	PUBHx
SF20	0.64	530	Reservoirs	PUBHx
SF21	1.35	530	Reservoirs	PUBHx
SF22	7.57	530	Reservoirs	PUBHx
SF23	1.28	530	Reservoirs	PUBHx
SF24	2.97	530	Reservoirs	PUBHx
SF25	0.00	530	Reservoirs	PUBHx
SF26	1.52	530	Reservoirs	PUBHx
SF27	0.63	530	Reservoirs	PUBHx
Snapper Creek Canal (C-2)	2.87	510	Streams and Waterways	R2UBHx / R5UBH
Coral Gables Canal (C -3)	12.80	510	Streams and Waterways	R2UBHx
Tamiami Canal (C-4)	3.49	510	Streams and Waterways	R2UBHx
North Line Canal	2.82	510	Streams and Waterways	R2UBHx

Table 5 - 3: Summary of Individual Surface Waters

PEM1A/h - palustrine, emergent, persistent, temporarily flooded/permanently flooded
PUBHx - palustrine, unconsolidated bottom, permanently flooded, excavated
R2UBHx - riverine, lower perennial, unconsolidated bottom, permanently flooded, excavated
R5UBHx - riverine, unknown perennial, unconsolidated bottom, permanently flooded, excavated

5.3 Essential Fish Habitat (EFH)

Part 2, Chapter 17 (Essential Fish Habitat) of the FDOT PD&E Manual was used to evaluate the following section.

The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) (MSFCMA), as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), established procedures designed to identify, conserve, and enhance Essential Fish Habitat (EFH) for those species regulated under a federal fisheries management plan (FMP). Section 305(b)(2) of the MSFCMA requires federal action agencies to consult with National Oceanographic Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS) on all actions or proposed actions, authorized, funded, or undertaken by the agency, that may adversely affect EFH. EFH is defined in the MSFCMA as "...those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity."

Coordination with NMFS has occurred through the ETDM Screening Tool and through direct conversations with staff. The ETDM response stated that the proposed project would not impact areas that support NMFS trust resources. Therefore, no action is required pursuant to the EFH requirements of the Magnuson-Stevens Act.

5.4 Floodplains

Floodplain impacts resulting from the project were evaluated pursuant to Executive Order 11988 of 1977, Floodplain Management.

Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) were obtained to evaluate the floodplains located within or adjacent to the PD&E study limits (***Figure 5-3***).

Flood hazard areas listed on the FIRMs are identified as a Special Flood Hazard Area (SFHA). A SFHA is defined as the area that will be inundated by a flood event having a 1-percent chance of being equaled or exceeded in any given year. The 1-percent annual chance flood is also referred to as the base flood or 100-year flood. SFHAs are labeled as Zone A, Zone AO, Zone AH (shaded in red in ***Figure 5-3***) , Zones A1-A30, Zone AE, Zone A99, Zone AR, Zone AR/AE, Zone AR/AO, Zone AR/A1-A30, Zone AR/A, Zone V, Zone VE, and Zones V1-V30. Moderate flood hazard areas, labeled Zone X (shaded in orange in ***Figure 5-3***) are also shown on the FIRM, and are the areas between the limits of the base flood and the 0.2-percent-annual-chance (or 500-year) flood. The areas of minimal flood hazard, which are the areas outside the SFHA and higher than the elevation of the 0.2-percent-annual-chance flood, are labeled Zone X (unshaded in ***Figure 5-3***).

FIRM Community Panel Numbers 12086C0462L, 12086C0466L, 12086C0454L, 12086C0452L, 12086C0289L, and 12086C0287L indicate that while much of the project limits are within Zone X (areas determined to be outside of the 0.2% annual chance floodplain), portions of the project are located within Zone AH (flood depths of 1 to 3 feet with Base Flood

elevations determined). From the beginning of the project at the southern terminus at US-1 to the interchange with SR 874, the project is located within Zone X. From the interchange with SR 874 to the Bird Road (SW 40th Street) interchange, portions of the project are located within Zone AH with Base Flood elevations at 10 feet NGVD and 8 feet NGVD. From the Bird Road (SW 40th Street) interchange to the Coral Way (SW 24th Street) interchange, the project is located within Zone AH with a Base Flood elevation of 21feet NGVD. From the Coral Way (SW 24th Street) interchange to the northern terminus of the project at the SR-836 interchange, some of the infield areas within the various interchanges are located within Zone AH with Base Flood elevations at 7 feet NGVD and 8 feet NGVD. The encroachments due to the roadway improvements will be longitudinal since the flood zone is within the existing right-of-way and parallel with the existing alignment.

Protection of floodplains and floodways is required by Executive Order 11988, "Floodplain Management", USDOT Order 5650.2, "Floodplain Management and Protection", and Federal-Aid Policy Guide 23 CFR 650A. Per chapter 13 (Floodplains) of the FDOT PD&E Manual , "*the intent of these regulations is to avoid or minimize highway encroachments with the 100 year (base) floodplain, where practicable, and to avoid supporting land use development which is incompatible with floodplain values. Where encroachment is unavoidable, the regulations require the Department to take appropriate measures to minimize impacts*". Location hydraulic studies are required by the Federal-Aid Policy Guide 23 CFR 650A Sec. 650.111. The magnitude of the study reflects the level of significance for floodplain encroachment as determined in the Class of Action Determination from the ETDM Programming Screen. For the SR 826/Palmetto Expressway Express Lanes PD&E Study, the level of significance for floodplain encroachments is "*minimal encroachments*", reflective of projects with floodplain involvement, but the impacts on human life, transportation facilities, and natural and beneficial floodplain values are not significant and can be resolved with minimal efforts. Normally, these minimal efforts to address the impacts will consist of applying the Department's drainage design standards and following the Water Management District's procedures to achieve results that will not increase or significantly change the floodplain elevations and/or limits. For projects where the level of significance for the floodplain encroachment is "*minimal encroachment*", the findings of the review of the alternative may consist of documentation in the project file. A Location Hydraulics Memorandum was prepared for the project which serves such purpose. A copy of the Location Hydraulics Memorandum is located in the SWEPT file at FDOT offices.

Per the Location Hydraulics Memorandum, the project will result in only minimal encroachments to floodplains. These encroachments will be constrained to the limits described above. Encroachments resulting from the construction of the project will be fully compensated within the proposed drainage systems to ensure there will be no increase or significant change to flood elevations and/or limits. For additional information, please see the Location Hydraulics Memorandum in the SWEPT file at FDOT offices.

The proposed drainage systems will perform hydraulically in a manner equal to or greater than the existing systems, and floodplain surface elevations are not expected to increase. Thus, there will be no significant adverse impacts on natural and beneficial floodplain values. There will be no significant change in flood risk, and there will not be a significant change in the potential for interruption or termination of emergency service or emergency evacuation routes. Therefore, it has been determined that this encroachment is not significant.

5.5 Sole Source Aquifer

Biscayne Aquifer

The project was screened through the ETDM Process (ETDM Project #14308). An ETDM Summary Report was published on March 31, 2017 and re-published on March 13, 2018. For the issue of Water Quality and Quantity, the U.S.

Environmental Protection Agency's (EPA) degree of effect was determined to be 'Moderate' (reviewed by EPA on January 29, 2017 by Ms. Kim Gates). The comments from the EPA included the following:

"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, the USEPA designated the Biscayne aquifer as a Sole Source Aquifer. The project corridor overlies the Biscayne aquifer, a SSA-designated area, and the project involves "widening or addition of lanes to an existing highway, replacement or rehabilitation/reconstruction of bridges." In addition, the Purpose & Need identified the project as a federal action. Therefore, the project needs to be reviewed by the USEPA Region 4's Ground Water/Drinking Water Branch prior to the commitment of federal funding.
The project corridor is also located in the Wellfield Protection Area for the Alexander Orr Wellfield and may be subject to stringent wellfield protection measures that restrict development and regulate land uses, as specified in Section 24-43 (4), (4)(c), (5), and (10) of the Miami-Dade County Code. The USEPA encourages FDOT's coordination with the Miami-Dade County Department of Environmental Resources Management to ensure protection of potable water supply wells. Because surface water bodies in the project vicinity are in direct communication with the surficial Biscayne aquifer and the increased impervious surfaces of the project will generate additional stormwater runoff that could impact the aquifer and Biscayne Bay, the USEPA encourages utilization of treatment and attenuation facilities. 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. Appropriate stormwater treatment systems and best management practices must be employed during construction, and throughout the operational life of the facility, to protect surface waters and prevent impacts to groundwater. To this end, the USEPA also recommends evaluating Low- Impact Development (LID) stormwater management practices during PD&E. Various resources on LID practices are available."
The project limits lie within the boundaries of the Biscayne Sole Source Aquifer. In accordance with the Sole Source Aquifer Program, authorized by Section 1424(e) of the Safe Drinking Water Act of 1974.

The project study area was evaluated for contamination concerns. These concerns were assessed in the contamination screening contamination report (CSER) as part of this study. The contamination concerns are summarized in ***Section 6.3*** of this document. In summary, no underground plumes or monitoring wells will be affected by the proposed project. However, if dewatering activities are performed, sites with groundwater contaminated sites that are located within the radius of influence will be affected. All necessary precautions and BMPs pertaining to construction will be followed to prevent adverse impacts to the underlying sole source aquifer.

Additionally, for all Build Alternatives, the proposed stormwater management facilities (SMF) will be constructed first, treating stormwater as the roadway is constructed. Water quality will be accomplished using a combination of wet and dry detention volumes as required by SFWMD. Drainage inlets will also have inlet protections to prevent silt or debris discharges during construction. After construction is completed, the SMFs will continue to treat stormwater discharges from the newly constructed roadway. The SFWMD and FDOT stormwater quality and quantity criteria are anticipated to be met with construction of the new stormwater management system. Therefore, water quality impacts to downstream receiving waters are not anticipated to occur.

The proposed project is not anticipated to have negative impacts to the Biscayne Aquifer system, which is the sole source of potable water for most of southeastern Florida. The FDOT requested the EPA's concurrence that no adverse impacts to the Biscayne Aquifer are anticipated as a result of the proposed project. The written request included the EPA's Sole Source Aquifer Checklist and the Water Quality Impact Evaluation Checklist. The Sole Source Aquifer package was

submitted to the EPA on September 24, 2019. EPA concurrence is pending.

5.6 Water Quality and Stormwater

Part 2, Chapter 11 (Water Quality and Stormwater) of the FDOT PD&E Manual was used to evaluate the following section.

The project is located in Miami-Dade County, Florida, contained within unincorporated Miami-Dade, and is within the jurisdictional boundary of the SFWMD, USACE, and Miami-Dade Regulatory and Economic Resources (DRER). Please see ***Section 5.6.2*** for information on existing and proposed stormwater management facilities.

Per the Water Quality Impact Evaluation (WQIE), water quality impacts resulting from erosion and sedimentation during construction activities will be controlled in accordance with the latest edition of FDOT's *Standard Specifications for Road and Bridge Construction* and through the use of BMPs, including temporary erosion control measures. Temporary erosion control measures will consist of inlet protection system, sediment barriers and floating turbidity barriers. These measures will be included in the Stormwater Pollution Prevention Plan (SWPPP), a component of the engineering design plans for the project. These measures will be implemented, as needed, by the awarded contractor prior to and during construction. Therefore, it is not anticipated that there will be any significant impact downstream of the construction area due to sedimentation or water quality degradation during construction.

Existing Drainage Conditions
The existing drainage system is subdivided into 21 systems. Each of these systems consist of a combination of stormwater inlets, wet/dry retention areas, swales, ditches, and French drains with existing overflow outfalls to local canals. Portions of the corridor experience flooding for the 25-year and 100-year storm events.

For details on the existing drainage conditions please refer to the PER, which is in the SWEPT project file at the FDOT District Six offices in Miami, Florida.

Proposed Drainage Conditions
SFWMD has established criteria for water quality, depending on the proposed type of stormwater treatment facility. All proposed stormwater management facilities will provide the necessary water quality treatment volume and limit the post-development peak discharge rate into C-100A Canal, C-2/Snapper Creek Canal, C-3/Coral Gables Canal, C-4/ Tamiami Canal, Coral Gables Ditch, North Line Canal, Lake Patricia, and Tropical Park Lake to the pre-development peak discharge rate. Water quality treatment, discharge attenuation and floodplain compensation are provided via existing and proposed dry/wet retention ponds and French Drains.

Based on the conceptual drainage design evaluation for the proposed roadway and interchange improvements, the stormwater management facilities required to meet FDOT drainage criteria, as well as SFWMD/DRER permit criteria, can be fully accommodated within the existing and proposed right-of-way, with no additional offsite right-of-way acquisition due solely for drainage purposes. The project will meet stormwater quality and water quality requirements and criteria.

For details on the proposed drainage conditions please refer to the PER, which is in the SWEPT project file at the FDOT District Six offices in Miami, Florida.

5.7 Aquatic Preserves

There are no aquatic preserves in the project area.

5.8 Outstanding Florida Waters

There are no Outstanding Florida Waters (OFW) in the project area.

5.9 Wild and Scenic Rivers

There are no designated Wild and Scenic Rivers in the project area.

5.10 Coastal Barrier Resources

There are no Coastal Barrier Resources in the project area.

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6. Physical Resources

The project will not have significant impacts to physical resources. Below is a summary of the evaluation performed for these resources.

6.1 Highway Traffic Noise

The following evaluation was conducted pursuant to 23 CFR 772 and Section 335.17, F.S., Procedures for Abatement of Highway Traffic Noise and Construction Noise.

A traffic noise study was performed in accordance with 23 CFR 772, Procedures for Abatement of Highway Traffic Noise and Construction Noise, the FDOT's PD&E Manual, Part 2, Chapter 18, Highway Traffic Noise, and FDOT's Traffic Noise Modeling and Analysis Practitioners Handbook.

Per the NSR, design year (2045) traffic noise levels for the Build Alternative will approach, meet, or exceed the noise assessment criteria (NAC) at 824 residences and 12 special land use sites within the project limits. In accordance with FHWA and FDOT policies, the feasibility and reasonableness of noise barriers were considered for those impacted noise sensitive sites.

Noise barriers were not considered a feasible abatement option at 56 impacted residences within NSAs 7, 28, 29, 44, 47, 65, 66, 67 and eight special land use sites within NSAs 26, 48, 56, 69, 72, 75, 79, and 93. Noise barriers at these locations would restrict access to these sites and/or other properties, would require additional ROW to be acquired, or represents an isolated impacted residence.

Noise barriers were evaluated for 768 of 824 residences and four of the 12 special land use sites that approach, meet, or exceed the NAC. Twenty-five separate common noise environments (CNEs) were used to assess noise barriers at these locations. The results of the noise barrier analysis for each of these CNEs are summarized in ***Table 6-1***. Of the 25 CNEs presented in ***Table 6-1***, noise barriers are recommended for further consideration during the project's design phase and for public input at 14 locations. Noise barriers are not recommended for further consideration at 11 locations. The locations and limits of the noise barriers (both recommended and not recommended) are depicted in ***Attachment E*** and presented in ***Table 6-1***.

The 14 CNEs where noise barriers are recommended include: S2-1W, S2-2E, S2-2W, S4-1E, S5-1E, S5-1W, S6-1E, S6-1W, S7-1E, S7-1W, S8-1E, S8-1SW, S8-2SW, and S9-1E. Noise barriers at six of the 14 CNEs were determined to be preliminarily feasible and cost reasonable for the noise sensitive sites (i.e., S2-1W, S2-2E, S2-2W, S4-1E, S5-1E, and S8-2SW). The cost per benefited receptor site at these six conceptual
noise barrier design locations are within FDOT's noise barrier cost criteria of equal to or less than $42,000 per benefited receptor site and they will meet FDOT's noise reduction reasonableness criteria of 7 dB(A) at one or more impacted sites.

Noise barriers at eight of the 14 CNEs where noise barriers have been recommended for further consideration represent replacement noise barriers (i.e., S5-1W, S6-1E, S6-1W, S7-1E, S7-1W, S8-1E, S8-1SW, and S9-1E). At these locations, the existing noise barriers or segments of the existing noise barriers, would be physically impacted by the proposed improvements and be required to be removed. The conceptual designs of these replacement noise barriers would be, at a

minimum, an in-kind replacement or optimized to maximize the amount of noise reduction at the impacted residences in order to maintain the FDOT's previous noise commitments. In addition, the recommended conceptual noise barrier designs will meet the minimum noise reduction design goal of 7 dB(A) for at least one impacted residence. Since these are replacement noise barriers, the reasonable cost criteria of equal to or less than $42,000 per benefited receptor site is not applicable since these barriers.

The recommended noise barriers at these 14 CNEs are expected to reduce traffic noise by at least 5 dB(A) at 720 residences including 310 of the 824 impacted residences along the project corridor. The estimated cost of the recommended noise barriers is $15,646,200. Additional noise barrier analysis will be performed during the project's design phase when more detailed project design information is available. It is during the project's design phase that final decisions regarding noise barrier length and height are made and an engineering constructability review is conducted to confirm that the noise barrier is feasible and support for noise barriers from the benefited noise sensitive sites is determined. Note that any of the 14-foot tall shoulder mounted noise barriers recommended for construction on a retaining or MSE wall will need approval in writing by the State Structures Design Engineer in accordance with FDOT's noise policy.

Noise barriers were not found to be feasible or cost reasonable at 11 CNEs. Seven of the 11 CNEs represent residential areas (i.e., S1-1W, S2-1E, S3-1E, S3-2E, S3-1W, S4-1W, and S9-1W) and the remaining four represent non-residential/special land use sites (i.e., S1-SDTMP, S1-VMP, S4-2W, and S5-2W). The cost to construct noise barriers at these seven residential areas would exceed FDOT's reasonable cost criteria of equal to or less than $42,000 per benefited receptor site or the optimal conceptual noise barrier design did not meet the minimum noise reduction design goal of 7 dB(A) for at least one impacted residence. The high cost of providing noise abatement at these locations is attributed to the low number of benefited residences related to the low density of residences in these areas especially between Snapper Creek Expressway and SW 56th Street. Also, the effectiveness of noise barriers is limited for providing noise abatement to the impacted residences (i.e., patios) associated with the high-rise residential buildings (i.e., up to nine floors) in the vicinity of Kendall Drive and SR 836. The patios are above the maximum height of a noise barrier (i.e., 22 feet). Based on the noise analysis performed to date, there appears to be no apparent solutions available to mitigate the noise impacts at 514 of the 824 impacted residences or at 12 special land use sites along the project corridor. Therefore, impacts to these and other noise sensitive sites along the project corridor are an unavoidable consequence of the project. For additional noise information, please see the NSR in the SWEPT file at FDOT offices.

Noise and Vibration

During construction of the project, there is the potential for noise impacts to be substantially greater than those resulting from normal traffic operations because heavy equipment is typically used to build roadways. In addition, construction activities may result in vibration impacts. Therefore, early identification of potential noise/vibration sensitive sites along the project corridor is important in minimizing noise and vibration impacts. The project area does include residential, commercial, and institutional land uses. Construction related noise and vibration impacts to these sites will be minimized by adherence to the controls listed in the latest edition of the FDOT's Standard Specifications for Road and Bridge Construction. A reassessment of the project corridor for additional sites particularly sensitive to construction noise and/or vibration will be performed during the final design phase to ensure that impacts to such sites are minimized.

6.2 Air Quality

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 not change the Level of Service (LOS) and reduce delay and congestion on all facilities within the study area.

The project is located in Miami-Dade County, an area currently designated as being in attainment for meeting the Environmental Protection Agency's National Ambient Air Quality Standards for six air pollutants - ozone (O3), nitrogen dioxide (NO2), particulate matter [one for "coarse" particles (PM10) and one for "fine" particles (PM2.5)], sulfur dioxide (SO2), carbon monoxide (CO), and lead (Pb).

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.

This project has been determined to generate minimal air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special mobile source air toxic (MSAT) concerns. As such, this project will not result in changes in traffic volumes, vehicle mix, basic project location, or any other factor that would cause a meaningful increase in MSAT impacts of the project from that of the No-Build alternative.

Moreover, Environmental Protection Agency (EPA) regulations for vehicle engines and fuels will cause overall MSAT emissions to decline significantly over the next several decades. Based on regulations now in effect, an analysis of national trends with EPA's MOVES2014 model forecasts a combined reduction of over 90 percent in the total annual emissions rate for the priority MSAT from 2010 to 2050 while vehicle-miles of travel are projected to increase by over 45 percent (Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents, Federal Highway Administration, October 12, 2016). This will both reduce the background level of MSAT as well as the possibility of even minor MSAT emissions from this project.

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 improve the 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 the FDOT Standard Specifications for Road and Bridge Construction.

For additional information, please refer to the Air Quality Technical Memorandum (AQTM) completed for this project, which is in the SWEPT project file at the FDOT District Six offices in Miami, Florida.

6.3 Contamination

A contamination screening evaluation was performed to evaluate the potential presence of contaminated sites within project corridor. A Contamination Screening Evaluation Report (CSER) was prepared pursuant to the FHWA XE "FHWA" 's Technical Advisory T 6640.8A and in accordance with the FDOT XE "FDOT" PD&E XE "PD&E" Manual, Part 2, Chapter 20 - Contamination.

A review of all available data occurred, including agency file reviews at the FDEP XE "FDEP" , and U.S Environmental Protection Agency (USEPA). Public file review summaries were provided by Environmental Data Resources, Inc. In addition, aerial photographs from 1963 to 2017 were reviewed for the project corridor and a site reconnaissance was performed on May 31, 2019 to further evaluate the potential for environmental contamination. The field reconnaissance also served to confirm current business address listings and site conditions.

After a review of all available data, such as regulatory agency file reviews, database reports, historic and current aerial photography, and a site reconnaissance, contamination of soil and groundwater has been documented at several locations near the project corridor. A total of 23 sites of potential contamination concern were identified along the project corridor. Of these, four sites are rated as "High risk", seven sites are rated as "Medium risk", and twelve sites are rated as "Low risk" (***Figure 6-1*** and ***Table 6-2***). Remaining sites identified in the above-referenced sources are not considered to pose potential contamination concerns due to the current regulatory status of the site and/or the distance from the project corridor.

The FDOT Planning and Environmental Management Office (PLEMO) will utilize the information contained in this report to determine the need for additional investigation during the design phase of the Project. The Level II Contamination Assessment investigation may be conducted prior to any right-of-way acquisition and/or during the design phase, should any become necessary. Based on the findings of updated future review and Level II investigation, the design engineers may be instructed to avoid the areas of concern or to include special provisions with the plans to require that the construction activities performed in the areas of concern be performed or supervised by a contamination assessment and remediation contractor specified by the FDOT.

It must be recognized that the possibility exists that some contaminated substances, petroleum products, or environmental contamination not identified during this assessment may exist on or in the immediate vicinity of the project. This is because regulatory agency records are not always complete; not all leaks, spills, and discharges are reported; not all USTs and ASTs are registered. It is unknown if any registered substances were illegally dumped or were deposited during past construction activities.

If construction dewatering will be necessary during construction, a Water Use Permit from SFWMD may be required. The contractor will be held responsible for ensuring compliance with any necessary dewatering permit(s). The dewatering plan will need to consider the radius of influence of any dewatering activity on nearby contamination plumes to avoid potential contamination plume exacerbation. The status of the sites will be updated accordingly at each future design phase. All permits will be obtained in accordance with Federal, State, and local laws and regulations and in coordination with the District Contamination Impact Coordinator (DCIC). For more information regarding contamination, please refer to the CSER, which can be found in the SWEPT database at the FDOT District 6 office.

6.4 Utilities and Railroads

Part 2, Chapter 21 (Utilities and Railroads) of the FDOT PD&E Manual was used to evaluate the following section.

Utilities

Utility Agency Owners (UAOs) located in the vicinity of the SR 826/ Palmetto Expressway Corridor were contacted and requested to provide information regarding their utility facilities within the project area. Existing UAOs and contact information are provided in ***Table 6-3***.

Utility Agency/Owner	Facility	Contact Information	
AT&T - Florida	Telephone	Steve Low 9101 SW 24th Street Miami, FL 33165	305-222-8745 Office 305-221-0974 Fax 305-987-7351 Cell sl4504@att.com
Atlantic Broadband	Cable TV	Pete Freytag 1681 Kennedy Causeway North Bay Village, FL 33141	305-861-8069 x-5208 Office 305-865-9845 Fax 786.251.5989 Cell pfreytag@atlanticbb.com
CenturyLink / Level 3 Communications (Formerly Qwest Communications)	Fiber Optic	Mike Fitzgerald 5908 Hampton Oak Parkway, Suite A Tampa, FL 33610	813-630-2605 Mike.fitzgerald@centurylink.com
Comcast Cable	Cable TV & Fiber	Leonard Maxwell-Newbold 2601 SW 145th Ave. Miramar, FL 33027	954-447-8405 Office 954-447-8445 Fax 954-444-5113 Cell Leonard_Maxwell-Newbold@cable.comcast.com
Crown Castle Fiber	Fiber	Danny Haskett 1601 NW 136 Ave. Suite A-200 Sunrise, FL 33323	786-610-7073 Office 786-246-7827 Cell danny.haskett@crowncastle.com
Crown Castle NG	Fiber	David Antol 2000 Corporate Dr. Canonsburg, PA 15317	724-416-2180 1-888-632-0931 Opt. 2 David.Antol@crowncastle.com
Fiberlight, LLC.	Fiber Optic	Wayne Kramer 602 South Military Trail Deerfield Beach, FL 33442	754-227-4345 Office 954-596-2569 Fax 561-951-6307 Cell wayne.kramer@fiberlight.com
Florida City Gas	Natural Gas	Maria Paula Lopez 4045 NW 97 Ave. Doral, FL 33178	305-835-3638 Office 786-332-8913 Cell maria.lopez@nexteraenergy.com
Florida Department of Transportation D6 ITS	Fiber Optic	Thomas Miller	305-470-5757 305-206-2600 thomas.miller@sunguide.com
Florida Gas Transmission	Natural Gas	Joe Sanchez 2405 Lucien Way Suite 200 Maitland, FL 32751	407-838-7171 Office 407-838-7101 Fax 407-808-4607 Cell joseph.e.sanchez@energytransfer.com
Florida Power & Light Distribution	Electric	Angel Vargas 4200 W. Flagler Street Miami, FL 33134	305-442-5129 Office 305-442-5123 Fax 305-495-9253 Cell angel.vargas@fpl.com
Florida Power & Light Transmission	Electric	Michael Foley 700 Universe Blvd TS4/JW Juno Beach, FL 33408	561-904-3640 Office 561-523-9896 Cell Michael.Foley@fpl.com

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Hotwire Communications	Fiber, Telephone, Cable TV, Coax	Walter Sancho-Davila 10360 USA Today Way Miramar, FL 33025	954 248-7396 Cell 954-241-1263 Fax walter.sancho-davila@hotwirecommunication.com
MCI / Verizon	Communications / Fiber Optic	Attn : Investigations MCI - Verizon Business 2400 N. Glenville Dr. Richardson, TX 75082	972-729-6322 Investigations@Verizon.com
Miami-Dade Enterprise Technology Services Dept.	Fiber Optic	Frank Dopico	305-275-7813 Office 786- 208-5658 Cell Frank.Dopico@miamidade.gov
Miami-Dade County Public Works	Traffic/ Street Lights	Octavio Vidal	305-412-0891 Ext. 201 786-345-0986 octavio.vidal@miamidade.gov
Miami-Dade Expressway Authority	Electric & Fiber	John Reese	305-637-3277 Ext. 2144 jreese@mdx-way.com
Miami-Dade Water & Sewer	Water & Sewer	Patrick Chong 3501 NW 46 ST Miami, FL. 33142	786-552-4416 Office PCHON@miamidade.gov
Redflex Traffic Systems, Inc.	Traffic Control / Street Lights	Ross Duke	480-299-3834 rduke@redflex.com
Suburban Propane	Propane	Dmitri Pressman 3800 NW 59 Street Miami, FL 33142	305-635-4427 dpressman@suburbanpropane.com
Univision Network	Not Available	Pierre Jaspar 9405 NW 41st Street Miami, FL 33178	305-421-2703 pjaspar@univision.net

Table 6 - 3: Utility Agency Owners

Railroad Crossing

There are no at-grade railroad crossings within the study limits. SR 826 overpasses the following rail lines within the project limits.

CSX mainline Class I
-Location: Railroad under SR 826, just south of SR 874 junction
-Crossing No.: 631076X
-Owner: CSXT
-Tracks: Single
-RR Type: Freight

Miami-Dade County Metrorail Green and Orange Lines

-Location: Railroad under SR 826 Northbound on-ramp from US 1
-Crossing No.: N/A
-Owner: Miami-Dade Transit
-Tracks: Dual
-RR Type: Commuter

6.5 Construction

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 the FDOT Standard Specifications for Road and Bridge Construction.

Construction activities will be controlled in accordance with the latest edition of the *FDOT's Standard Specifications for Road and Bridge Construction* (see Technical Materials) and through the use of BMPs.

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 the FDOT Standard Specifications for Road and Bridge Construction.

Construction noise and vibration impacts to the project corridor will be minimized by adherence to the controls listed in the latest edition of the FDOT's *Standard Specifications for Road and Bridge Construction*. According to Section 335.02 of the Florida Statutes, the FDOT is exempt from compliance with local ordinances. However, it is the FDOT's policy is to follow the requirements of local ordinances to the extent that is considered reasonable. Also, the contractor will be instructed to coordinate with the project engineer and the Department Noise Specialist should unanticipated noise or vibration issues arise during project construction.

Water quality effects resulting from erosion and sedimentation will be controlled in accordance with the FDOT's latest edition of Standard Specifications for Road and Bridge Construction and through the use of BMPs.
Maintenance of traffic and sequence of construction will be planned and scheduled to minimize traffic delays throughout the project. Signs will be used to provide notice of access to local businesses and other pertinent information to the traveling public. All provisions of the FDOT's latest edition of Standard Specifications for Road and Bridge Construction will be followed.

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7. Engineering Analysis Support

The engineering analysis supporting this environmental document is contained within the .

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8. Permits

The following environmental permits are anticipated for this project:

Permits Comments
A review of existing permits was conducted to obtain background information for the project corridor. A list of these permits is provided below:

SFWMD ERP 13-01782-P (SR 826 / SW 24th Street interchange improvements)
SFWMD ERP 13-02686-P (SR 826 from SR 874 to north of SW 33rd Street - Section 2)
SFWMD 13-02339-P (SR 826 / SW 8th Street interchange improvements)
SFWMD ERP 13-04284-P (SR 826 / SR 836 interchange improvements)
SFWMD ERP 13-00791-S (SR 826 from US-1 to north of SW 72nd Street)

Both the USACE and SFWMD regulate impacts to wetlands and surface waters within the project study area. Other resource agencies, including the NMFS, USEPA, and FWS, and FWC, review and comment on wetland permit applications. In addition, the FDEP regulates stormwater discharges from construction sites and the DRER regulates county canal rights-of-way. The complexity of the permitting process will depend greatly on the degree of the impact to jurisdictional areas. The following permits are anticipated to be required for this project:

PermitIssuing Agency
Section 404 Wetland Dredge and Fill Permit USACE
Environmental Resource Permit (ERP) SFWMD
Right-of-Way Occupancy Permits (MOD) SFWMD
Water Use Permits (for construction dewatering) SFWMD
National Pollutant Discharge Elimination System (NPDES) FDEP
Miami-Dade County Class III Right-of-Way Permits DRER

The USACE requires an Individual Section 404 Dredge and Fill Permit if it is determined that more than 1/2-acre of wetlands/surface waters will be impacted. An individual permit will require compliance with the 404(b)(1) guidelines, including verification that all impacts have first been eliminated to the greatest extent practicable, that unavoidable impacts have been reduced to the greatest extent practicable, and lastly that unavoidable impacts have been mitigated. A Section 404 Dredge and Fill Permit will be required from the USACE for this project.

The SFWMD requires an ERP when construction of any project results in the modification or creation of a water management system or results in impacts to wetlands or waters of the state. Although ERPs exist for portions of the corridor, it is anticipated that a new Individual ERP will be required for this entire project. It is also anticipated that a Right-of-Way Occupancy Permit for work within the SFWMD's right-of-way of the C-100A, C-2, and C-4 canals will be required per coordination with the districts right-of-way department. A separate permit (modification) will be required for each waterway. A Water Use Permit for construction dewatering may also be required from the SFWMD. A need for this permit will be determined during the final design phase of the project.

Under the FDEP's delegated authority to administer the NPDES program, construction sites that will result in greater than one acre of disturbance must file for and obtain either coverage under an appropriate generic permit or an individual permit for point source discharges of stormwater to waters of the United States. A major component of the NPDES permit

is the development of a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP identifies potential sources of pollution that may reasonably be expected to affect the quality of stormwater discharges from the site and discusses good engineering practices (i.e., BMPs) that will be used to reduce the pollutants. This permit will be required for the implementation of any of the viable Build Alternatives.

A Class III Right-of-Way permit will be required from the Miami-Dade County DRER for work within the Coral Gables and North Line canal rights-of-way. Per coordination with Miami-Dade County DRER Water Control, a separate Class III application is required for each bridge crossing as well as for each culverted canal section.

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9. Public Involvement

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

Summary of Activities Other than the Public Hearing

A public involvement plan was developed and is being implemented for the SR 826 (Palmetto Expressway) PD&E Study from US 1 (Dixie Highway) to SR 836 (Dolphin Expressway) in Miami-Dade County. The Public Involvement Plan (PIP) is a companion document to this PD&E study. The PIP is a working document which will be updated and amended throughout the project development process to incorporate the latest public involvement policies and techniques as they evolve during the life of the project. The PIP outlines the public involvement approach and activities required to be undertaken with the project, including lists of the contact persons, such as citizens, private groups (residential/business), officials, agencies, stakeholders, and media, and the means used to involve them in the process.

Public information meetings began in the winter of 2017 and have continued throughout the study process. Exhibits and project information has been and will continue to be provided for public review and comment at each meeting. Exhibit and project information is also available on the project website at http://www.palmettoexpresslanes.com. FDOT representatives have been and will be available at each meeting to discuss the project and answer questions, as well as members of the consultant team.

Elected Officials/Agencies/Stakeholders Briefings - Briefings have been held with the following Elected Officials/Agencies/Stakeholders prior to the Kick-Off Meetings:

City of Doral
City of South Miami
Village of Pinecrest
Commissioner Rebecca Sosa's Special Project Liaison, District 6
Commissioner Xavier L. Suarez's Aid, District 7

9.1 Public Kick-Off Meetings

Kick-Off Meetings - Both Elected Officials/Agency and Public were held in December 2017 in Miami-Dade County. The purpose of these meetings was to provide the officials and the community a forum through which to learn about the improvements being studied as well as the PD&E process in general, and to provide FDOT with initial concerns to consider in the study. Information including numerous exhibits were provided for public review. A project newsletter describing the PD&E study was distributed to meeting attendees.

Additional outreach included distributing Public Kick-Off Meeting notices at the following locations:

Florida International University
Florida Medical College
Dolphin Mall
Mall of Americas
Dadeland Mall

Miami International Mall
Flagami NET Office
Versailles Gardens II Condominium
Flagler Corporate Center
The Greenery Mall Administrative Office
The Honorable Rebeca Sosa's Office
The Honorable Xavier L. Suarez's Office
The Honorable Jose "Pepe" Diaz's Office
West Dade Regional Library
South Miami Branch Library
Kendall Branch Library
Village of Pinecrest
Alpha & Omega Church
City of Sweetwater
City of South Miami
Village of Pinecrest
Pinecrest Gardens

The following is a summary of the items discussed in the meeting:

PD&E Study Process
Project Study Area
Needs of the Project
No-Build Alternative Conditions
Existing Conditions
South Florida Express Lanes
PD&E Study Milestone Schedule
The Kick off meetings were held on Tuesday, December 5, 2017 at the West Dade Regional Library, Auditorium 1, 9445 Coral Way, Miami, Florida 33165. A total of four written comments were received at these meetings. Approximately 29 people attended these meetings.

The following are the primary topics of comments provided at the meetings:

Noise level concerns [from SW 28th Street to SW 24th Street (Coral Way)]
Project schedule
Traffic concerns along SR 826 and at interchanges

Elected Officials/Agencies/Stakeholders Briefings - Briefings were held with the following Elected Officials/Agencies/Stakeholders prior to the Alternatives Public Workshop:

City of Doral
City of South Miami
Village of Pinecrest
Commissioner Jose Diaz, District 12

9.2 Alternatives Public Workshop

Alternatives Public Workshop - An Alternatives Public Workshops was held in March 2019 in Miami-Dade County. The purpose of this workshop was to present alternative highway improvement concepts. Exhibits presenting project information were provided for review. A project newsletter with information on the PD&E study to date was distributed to all attendees.

Alternative Public Workshop notices were distributed at the following locations:

Florida International University
Florida Medical College
Dolphin Mall
Mall of Americas
Dadeland Mall
Miami International Mall
Flagami NET Office
Versailles Gardens II Condominium
Flagler Corporate Center
The Greenery Mall Administrative Office
The Honorable Rebeca Sosa's Office
The Honorable Xavier L. Suarez's Office
The Honorable Jose "Pepe" Diaz's Office
West Dade Regional Library
South Miami Branch Library
Kendall Branch Library
Village of Pinecrest
Alpha & Omega Church
City of Sweetwater
City of South Miami
Village of Pinecrest
Pinecrest Gardens

The following is a summary of the items discussed in the workshop: PD&E Study Process

Project Study Area
Needs of the Project
Existing Conditions
No-Build Alternative Conditions
South Florida Express Lanes
Milestone Project Schedule
Alternatives
Roadway Typical Sections
Evaluation Matrix
Environmental Features

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The workshop was held on Thursday, March 7, 2019 at the West Dade Regional Library, Auditorium 1, 9445 Coral Way, Miami, Florida 33165. A total of eight written comments were received at this workshop. Approximately 45 people attended the meeting.

The following includes the primary topic of comments provided at the workshop:

Interest in Express Lanes
Intersection Timing Plans
Noise Walls
Transit Improvements
The ROW Process

9.3 Public Hearing

Public Hearing - A Public Hearing is tentatively scheduled for Fall 2019. The purpose of this hearing will be to present to the public the preferred alternative and seek public input. Numerous exhibits detailing the project will be provided for public review. A project newsletter describing the PD&E study to date will be distributed to all the attendees.

[This section will be completed after the Public Hearing]

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10. Project Commitments

1. Part 2, Chapter 22 (Commitments) of the FDOT PD&E Manual was used to evaluate the following section.

   1. Prior to commencing construction activities, the FDOT is committed to re-surveying the project corridor for features that could serve as potential roosting habitat and signs of the Florida bonneted bat. If any signs of the Florida bonneted bat are observed, the FDOT is committed to reinitiating consultation with the FWS to determine the appropriate course of action.

   2. During the construction phase of this project, the FDOT's contractor will adhere to the most recent version of the Florida Fish and Wildlife Conservation Commission's Standard Manatee Conditions for In-Water Work to minimize the potential for adverse effects.

   3. During the construction phase of this project, the FDOT's contractor will employ the most recent version of the U.S. Fish and Wildlife Service's Standard Protection Measures for the Eastern Indigo Snake to minimize the potential for adverse effects.

   4. In compliance with the applicable provisions of Chapters 83-365 of the Laws of Florida designating portions of Sunset Drive as a State Historic Highway, any trees to be removed will be replaced and/or relocated with a similar type tree of equivalent size within the limits of the designated historic highway section of Sunset Drive. The tree disposition plan will be developed during final design phase of the project.

   5. Four publicly-owned parks exist adjacent to the project corridor: Tropical Park, Humble Mini Park, Veterans Wayside Park, and South Dade Trail Mini Park. FDOT's contractor will not stage materials or make temporary use of these parks during construction.

   6. Construction noise and vibration impacts to the project corridor will be minimized by adherence to the controls listed in the latest edition of the FDOT's Standard Specifications for Road and Bridge Construction.

   7. FDOT will continue to coordinate with Miami-Dade Expressway Authority (MDX) the approach and process to modify the connections to and from SR 874 and SR 836 in and out of SR 826.

   8. FDOT will continue to coordinate with MDT the approach and process to connect the SR 826 express lanes system to the US 1 Busway Corridor. The coordination will also include discussing strategies to enforce the use of the bus only lanes and the access in and out of the express lanes system.

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11. Technical Materials

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

Section 4(f) Determination of Applicability
Sole Source Aquifer Coordination Letter
Species Concurrence Letter
Location Hydraulics Report
Natural Resources Evaluation (NRE)
Noise Study Report (NSR)
Air Quality Technical Memorandum
CONTAMINATION SCREENING EVALUATION REPORT

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Attachments

Project Information
Project Map

Planning Consistency
432639-1-22-01 Planning Consistency Package 8-15-19
Project Plan Consistency Documentation

Social and Economic
Land Use Map

Natural Resources
Correspondence
Wetlands Map
Floodplains Map

Physical Resources
Noise Map
Other Supporting Documentation regarding Contamination
Potential Contamination Site Map

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Planning Consistency Appendix

Contents:

432639-1-22-01 Planning Consistency Package 8-15-19

Project Plan Consistency Documentation

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MIAMI-DADE TRANSPORTATION PLANNING ORGANIZATION
TRANSPORTATION IMPROVEMENT PROGRAM
PRIMARY STATE HIGHWAYS AND INTERMODAL

TRANSPORTATION PLANNING

TPO Project No:	DT4326391
LRTP Ref:	5-5
County:	MIAMI-DADE
Roadway ID:	87260000
Lanes Exist:	6
Lanes Improved:	
Lanes Added:	
Project Length:	7.224
District:	6

Project Description: **SR 826/PALMETTO EXPRESSWAY** **FROM US 1/S DIXIE HWY** **TO SR 836/DOLPHIN EXPRESSWAY**

Type of Work: **TRANSPORTATION PLANNING** SIS or Non-SIS: **Yes**

Extra Description:

PHASE :

Funding Source	Proposed Funding (in $000s) <2019	2018 - 2019	2019 - 2020	2020 - 2021	2021 - 2022	2022 - 2023	>2023	All Years
ACNP	5,288	0	0	0	0	0	0	5,288
DIH	37	10	0	0	0	0	0	47
DIS	1,637	0	0	0	0	0	0	1,637
DS	770	0	0	0	0	0	0	770
PROJECT DEVELOPMENT AND ENVIRONMENTAL Total	**7,732**	**10**	**0**	**0**	**0**	**0**	**0**	**7,742**

RESPONSIBLE AGENCY: **FDOT**

Item Segment TOTAL ALL Years ALL Phases: $7,742

Item Number: 432639 **Item TOTAL ALL Years ALL Phases ALL Segments: $16,681**

TPO Project No:	DT4326392
LRTP Ref:	5-5
County:	MIAMI-DADE
Roadway ID:	
Lanes Exist:	
Lanes Improved:	
Lanes Added:	
Project Length:	10.812
District:	6

Project Description: **SR 7/SR 933/US 441** **FROM SW 8 ST/TAMIAMI TRAIL** **TO GGI PARK AND RIDE LOT**

Type of Work: **TRANSPORTATION PLANNING** SIS or Non-SIS: **No**

Extra Description:

PHASE :

Funding Source	Proposed Funding (in $000s) <2019	2018 - 2019	2019 - 2020	2020 - 2021	2021 - 2022	2022 - 2023	>2023	All Years
	851	0	0	0	0	0	0	851
PROJECT DEVELOPMENT AND ENVIRONMENTAL Total	**851**	**0**	**0**	**0**	**0**	**0**	**0**	**851**

RESPONSIBLE AGENCY: **FDOT**

Item Segment TOTAL ALL Years ALL Phases: $851

Item Number: 432639 **Item TOTAL ALL Years ALL Phases ALL Segments: $16,681**

Effective Date: 07/01/2018 | **Florida Department of Transportation** | **Run: 08/01/2019 15.37.46**

Approved STIP

View Approved STIP Phase Grouping Crosswalk

Item Segment: 432639 1

Fund	<2019	2019	2020	2021	2022	>2022	All Years
HIGHWAYS							
Item Number: 427647 1	Project Description: SR 90/SW 7 STREET FROM SW 2ND AVENUE TO SW 5 AVENUE						*NON-SIS*
District: 06	County: MIAMI-DADE	Type of Work: PD&E/EMO STUDY			Project Length: .628		
P D & E / MANAGED BY FDOT							
-TOTAL OUTSIDE YEARS	4,492	0	0	0	0	0	4,492
Item 427647 1 Totals:	**4,492**	**0**	**0**	**0**	**0**	**0**	**4,492**
Item Number: 432639 1	Project Description: SR 826/PALMETTO EXPY FROM US-1/S. DIXIE HWY TO SR 836/DOLPHIN XWAY						*SIS*
District: 06	County: MIAMI-DADE	Type of Work: TRANSPORTATION PLANNING			Project Length: 7.224		
P D & E / MANAGED BY FDOT							
ACNP -ADVANCE CONSTRUCTION NHPP	5,288,117	0	0	0	0	0	5,288,117
DIH -STATE IN-HOUSE PRODUCT SUPPORT	24,180	21,182	0	0	0	0	45,362
DIS -STRATEGIC INTERMODAL SYSTEM	1,636,850	0	0	0	0	0	1,636,850
DS -STATE PRIMARY HIGHWAYS & PTO	769,732	0	0	0	0	0	769,732
Item 432639 1 Totals:	**7,718,879**	**21,182**	**0**	**0**	**0**	**0**	**7,740,061**
Item Number: 432639 6	Project Description: SR 90/SW 8 ST/SW 7 ST FROM SR 9/SW 27 AVENUE TO BRICKELL AVENUE						*NON-SIS*
District: 06	County: MIAMI-DADE	Type of Work: PD&E/EMO STUDY			Project Length: 2.970		
P D & E / MANAGED BY FDOT							
ACNP -ADVANCE CONSTRUCTION NHPP	1,864,278	0	0	0	0	0	1,864,278
DIH -STATE IN-HOUSE PRODUCT SUPPORT	49,563	3,436	0	0	0	0	52,999
DS -STATE PRIMARY HIGHWAYS & PTO	70,348	5,872	0	0	0	0	76,220
NHPP -IM, BRDG REPL, NATNL HWY-MAP21	1,664,885	0	0	0	0	0	1,664,885
PRELIMINARY ENGINEERING / MANAGED BY FDOT							
DDR -DISTRICT DEDICATED REVENUE	0	0	3,300,000	0	0	0	3,300,000
DIH -STATE IN-HOUSE PRODUCT SUPPORT	0	0	300,000	0	0	0	300,000
Item 432639 6 Totals:	**3,649,074**	**9,308**	**3,600,000**	**0**	**0**	**0**	**7,258,382**
Item Number: 436479 1	Project Description: SR 934/NW 74 ST. FROM E. OF SR 826/PALMETTO EXPWY TO E. OF NW 69 AVE.						*SIS*

Table 6-10 | Partially Funded Projects (Values in Millions YOE $)

MAP ID	Project	Limits From	Limits To	Description	Total Capital Cost Funded via TIP	Total Capital Cost (2013 $)	Project Costs Funded via 2040 Plan	
1	Beach Connection (Baylink)	Miami Downtown Terminal	Miami Beach Convention Center	Premium transit service		$532.132	$161.273	
2	Douglas Rd Corridor BRT(SW 27/37 Ave) Dedicated Lanes	US-1	Miami Intermodal Center (MIC)	Full bus rapid transit		$166.400	$36.378	
3	Golden Glades Multimodal Terminal (Phase 2)			Park-and-Ride facility with 1,800 space garage		$45.000	$6.075	
4	I-95	South of SR 836/I-395	Broward County Line	Operational and capacity improvements	$13.035		$13.035	
5	I-95	US-1	South of SR 836/I-395	Operational and capacity improvements	$10.200		$10.200	
6	MDX Connect 4 Express	Central Miami-Dade County	North Miami-Dade County	New expressway connecting SR-836 (Dolphin), SR- 112 , SR-924, and SR-826 (Palmetto)	$7.300	$150.000	$323.800	
7	MDX SR-924/Gratigny Parkway East Extension	NW 32 Ave	I-95	New expressway extension of SR-924 East to I-95	$0.240	$477.000	$296.500	
8	MDX SR-836 (Dolphin) SouthWest Extension***	Western Terminus of SR-836 (Dolphin)	SW 136 St	Extend SR-836 from NW 137 Ave to the Southwest Kendall area	$7.490	$808.000	$681.900	
9	Miami Intermodal Center (MIC)			NW 42 Ave (LeJeune) Strip	$0.012			
10	NW 36th /NW 41 St	SR-821 (HEFT)	NW 42 Ave (LeJeune)	Redesign NW 36 St/41 St as a superarterial express street		$397.051	$509.504	
11	SR-826 (Palmetto)	West Flagler St	NW 154 St	Operational and capacity improvements			$2.080	
12	SR-826 (Palmetto)	US-1/S Dixie Highway	SR-836 (Dolphin)	Managed lanes	$7.150			
13	SR-826 (Palmetto)	East of NW 67 Ave	East of NW 57 Ave	Capacity and operational improvements	$5.500			
14	SR-826 (Palmetto)	West of NW 32 Ave	East of NW 27 Ave	Capacity and operational improvements	$6.900			
15	SW 117 Ave/SW 152 St (Coral Reef) Grade Separation			Grade separate SW 117 Ave over SW 152 St (Coral Reef)		$39.705	$7.060	
16	SW 7 St/ SW 8 St	Brickell Ave	SW 27 Ave	Operational and capacity improvements		$0.278	$0.093	
17	SW 88 St (Kendall)/SW 127 Ave Grade Separation			Grade separate SW 88 St (Kendall) over SW 127 Ave.		$39.705	$7.060	
18	Town of Indian Creek Bridge			Reconstruct bridge	$1.515	$13.860		
19	Tria-Rail Coastal Link	Miami	Pompano	Tri-Rail service	$5.566			
20	US-1 Managed Lanes***	SW 344 St (Palm)	Dadeland South Metrorail Station	Add 2 /1 reversible new managed lanes within the ROW of the Busway	$1.809	$367.000	$139.700	

Bolded phase funds are included in the 2015/2019 Miami-Dade TIP
** denotes portions of phase values are included in both the TIP and 2040 Plan*
*** denotes Operations and Maintenance is funded via MDT system efficiencies*
****Project would require amendment of the Miami-Dade County Comprehensive Plan Development Master Plan*

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Attachment A

Planning Consistency Documentation

Table 6-10 | Partially Funded Projects (Values in Millions YOE $)

MAP ID	Project	Limits From	Limits To	Description	Total Capital Cost Funded via TIP	Total Capital Cost (2013 $)	Project Costs Funded via 2040 Plan	
1	Beach Connection (Baylink)	Miami Downtown Terminal	Miami Beach Convention Center	Premium transit service		$532.132	$161.273	
2	Douglas Rd Corridor BRT(SW 27/37 Ave) Dedicated Lanes	US-1	Miami Intermodal Center (MIC)	Full bus rapid transit		$166.400	$36.378	
3	Golden Glades Multimodal Terminal (Phase 2)			Park-and-Ride facility with 1,800 space garage		$45.000	$6.075	
4	I-95	South of SR 836/I-395	Broward County Line	Operational and capacity improvements	$13.035		$13.035	
5	I-95	US-1	South of SR 836/I-395	Operational and capacity improvements	$10.200		$10.200	
6	MDX Connect 4 Express	Central Miami-Dade County	North Miami-Dade County	New expressway connecting SR-836 (Dolphin), SR- 112 , SR-924, and SR-826 (Palmetto)	$7.300	$150.000	$323.800	
7	MDX SR-924/Gratigny Parkway East Extension	NW 32 Ave	I-95	New expressway extension of SR-924 East to I-95	$0.240	$477.000	$296.500	
8	MDX SR-836 (Dolphin) SouthWest Extension***	Western Terminus of SR-836 (Dolphin)	SW 136 St	Extend SR-836 from NW 137 Ave to the Southwest Kendall area	$7.490	$808.000	$681.900	
9	Miami Intermodal Center (MIC)			NW 42 Ave (LeJeune) Strip	$0.012			
10	NW 36th /NW 41 St	SR-821 (HEFT)	NW 42 Ave (LeJeune)	Redesign NW 36 St/41 St as a superarterial express street		$397.051	$509.504	
11	SR-826 (Palmetto)	West Flagler St	NW 154 St	Operational and capacity improvements			$2.080	
12	SR-826 (Palmetto)	US-1/S Dixie Highway	SR-836 (Dolphin)	Managed lanes	$7.150			
13	SR-826 (Palmetto)	East of NW 67 Ave	East of NW 57 Ave	Capacity and operational improvements	$5.500			
14	SR-826 (Palmetto)	West of NW 32 Ave	East of NW 27 Ave	Capacity and operational improvements	$6.900			
15	SW 117 Ave/SW 152 St (Coral Reef) Grade Separation			Grade separate SW 117 Ave over SW 152 St (Coral Reef)		$39.705	$7.060	
16	SW 7 St/ SW 8 St	Brickell Ave	SW 27 Ave	Operational and capacity improvements		$0.278	$0.093	
17	SW 88 St (Kendall)/SW 127 Ave Grade Separation			Grade separate SW 88 St (Kendall) over SW 127 Ave.		$39.705	$7.060	
18	Town of Indian Creek Bridge			Reconstruct bridge	$1.515	$13.860		
19	Tria-Rail Coastal Link	Miami	Pompano	Tri-Rail service	$5.566			
20	US-1 Managed Lanes***	SW 344 St (Palm)	Dadeland South Metrorail Station	Add 2 /1 reversible new managed lanes within the ROW of the Busway	$1.809	$367.000	$139.700	

Bolded phase funds are included in the 2015/2019 Miami-Dade TIP
** denotes portions of phase values are included in both the TIP and 2040 Plan*
*** denotes Operations and Maintenance is funded via MDT system efficiencies*
****Project would require amendment of the Miami-Dade County Comprehensive Plan Development Master Plan*

Effective Date: 09/11/2019 **Florida Department of Transportation** **Run: 09/11/2019 16.01.50**

Current STIP

View Current STIP Phase Grouping Crosswalk

Item Segment: 432639 1

Fund	<2019	2019	2020	2021	2022	>2022	All Years
HIGHWAYS							
Item Number: 432639 1 Project Description: SR 826/PALMETTO EXPY FROM US-1/S. DIXIE HWY TO SR 836/DOLPHIN XWAY *SIS*							
District: 06 County: MIAMI-DADE Type of Work: PRELIM ENG FOR FUTURE CAPACITY Project Length: 7.224							
P D & E / MANAGED BY FDOT							
ACNP -ADVANCE CONSTRUCTION NHPP	504,612	1,486,278	151,267	0	0	0	2,142,157
DIH -STATE IN-HOUSE PRODUCT SUPPORT	24,430	27,067	8,512	0	0	0	60,009
DIS -STRATEGIC INTERMODAL SYSTEM	1,636,850	0	0	0	0	0	1,636,850
DS -STATE PRIMARY HIGHWAYS & PTO	776,863	0	0	0	0	0	776,863
GFSA -GF STPBG ANY AREA	0	0	311,533	0	0	0	311,533
NHPP -IM, BRDG REPL, NATNL HWY-MAP21	4,783,505	0	0	0	0	0	4,783,505
PRELIMINARY ENGINEERING / MANAGED BY FDOT							
DS -STATE PRIMARY HIGHWAYS & PTO	1,062	0	0	0	0	0	1,062
LFB -LOCAL FUNDS BUDGET	0	0	11,000,000	0	0	0	11,000,000
Item 432639 1 Totals:	**7,727,322**	**1,513,345**	**11,471,312**	**0**	**0**	**0**	**20,711,979**
Project Total:	**7,727,322**	**1,513,345**	**11,471,312**	**0**	**0**	**0**	**20,711,979**
District 06 Totals:	**7,727,322**	**1,513,345**	**11,471,312**	**0**	**0**	**0**	**20,711,979**

Grand Total	**7,727,322**	**1,513,345**	**11,471,312**	**0**	**0**	**0**	**20,711,979**

HIGHWAYS

TPO Project No:	DT4326391
LRTP Ref:	5-5
County:	MIAMI-DADE
Roadway ID:	
Lanes Exist:	
Lanes Improved:	
Lanes Added:	
Project Length:	7.224
District:	6

Project Description: **SR 826/PALMETTO EXPRESSWAY FROM US 1/S DIXIE HWY TO SR 836/DOLPHIN EXPRESSWAY**

Type of Work: **PRELIMINARY ENGINEERING**

SIS or Non-SIS: **Yes**

Extra Description:

PHASE :	Funding Source	Proposed Funding (in $000s) <2020	2019 - 2020	2020 - 2021	2021 - 2022	2022 - 2023	2023 - 2024	>2024	All Years
		0	5,500	0	0	0	0	0	5,500
	ACSA	500	0	0	0	0	0	0	500
PRELIMINARY ENGINEERING	**Total**	**500**	**5,500**	**0**	**0**	**0**	**0**	**0**	**6,000**
	ACNP	2,023	0	0	0	0	0	0	2,023
	DIH	46	0	0	0	0	0	0	46
	DIS	1,637	0	0	0	0	0	0	1,637
	DS	777	0	0	0	0	0	0	777
	NHPP	3,265	0	0	0	0	0	0	3,265
PROJECT DEVELOPMENT AND ENVIRONMENTAL	**Total**	**7,748**	**0**	**0**	**0**	**0**	**0**	**0**	**7,748**

RESPONSIBLE AGENCY: **FDOT**

Item Segment TOTAL ALL Years ALL Phases: $13,748

Item Number: 432639 **Item TOTAL ALL Years ALL Phases ALL Segments: $22,925**

TPO Project No:	DT4326396
LRTP Ref:	5-5
County:	MIAMI-DADE
Roadway ID:	
Lanes Exist:	
Lanes Improved:	
Lanes Added:	
Project Length:	2.970
District:	6

Project Description: **SR 90/SW 8 ST/SW 7 ST FROM SR 9/SW 27 AVE TO BRICKELL AVE**

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

SIS or Non-SIS: **No**

Extra Description:

PHASE :	Funding Source	Proposed Funding (in $000s) <2020	2019 - 2020	2020 - 2021	2021 - 2022	2022 - 2023	2023 - 2024	>2024	All Years
	DDR	0	3,300	0	0	0	0	0	3,300
	DIH	0	0	300	0	0	0	0	300
	DS	13	0	0	0	0	0	0	13
PRELIMINARY ENGINEERING	**Total**	**13**	**3,300**	**300**	**0**	**0**	**0**	**0**	**3,613**
	ACNP	1,692	0	0	0	0	0	0	1,692
	DIH	69	0	0	0	0	0	0	69
	DS	96	0	0	0	0	0	0	96

Social and Economic Appendix

Contents:

Land Use Map

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Figure 3 - 1: Project Corridor Land Use (1 of 8)

Figure 3 – 1: Project Corridor Land Use (2 of 8)

Figure 3 – 1: Project Corridor Land Use (3 of 8)

Figure 3 – 1: Project Corridor Land Use (4 of 8)

Figure 3 – 1: Project Corridor Land Use (5 of 8)

Figure 3 – 1: Project Corridor Land Use (6 of 8)

Figure 3 – 1: Project Corridor Land Use (7 of 8)

Figure 3 – 1: Project Corridor Land Use (8 of 8)

Natural Resources Appendix

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Correspondence

Wetlands Map

Floodplains Map

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Attachment C

ESA Section 7 Consultation/Concurrence Request Letter

Florida Department of Transportation

RON DESANTIS
GOVERNOR

1000 NW 111th Avenue
Miami, FL 33172-5800

KEVIN J. THIBAULT, P.E.
SECRETARY

September 18, 2019

Mr. John Wrublik
South Florida Ecological Services Office
United States Fish and Wildlife Service
1339 20th Street
Vero Beach, Florida 32960

RE: Project Description: SR 826 / Palmetto Expressway Express Lanes
FDOT FM No.: 432369-1
County: Miami-Dade
Subject: USFWS Request for Concurrence

Dear Mr. Wrublik:

The Florida Department of Transportation (FDOT) District Six, is conducting a Project Development and Environment (PD&E) Study for the proposed improvements to SR 826 / Palmetto Expressway express lanes in Miami-Dade County, Florida (see Location Map – ***Attachment 1***). The study is evaluating corridor improvements that will add highway and interchange capacity with the implementation of an express lanes system and interchange improvements. The project study area consists of SR 826 / Palmetto Expressway from US 1 (SR 5) to SR 836 (Dolphin Expressway), a distance of approximately seven miles. The project corridor is the same across all Build Alternatives. However, Alternative 1 does not include work south of SW 88th Street (Kendall Drive). The project has been determined to be a Type 2 Categorical Exclusion.

The proposed project will evaluate the following potential types of improvements:

- Implementation of dynamically priced express lanes.
- Access and ramp connections to and from the express lanes (ingress and egress access points).
- Interchange improvements – Modification of existing entrance and exit ramps serving the interchanges within the project limits.
- Intersection improvements – Widening and turn lane modifications along the cross streets to facilitate the ramp modifications and improve the access and operation of the corridors upstream and downstream from the interchanges.

In accordance with Section 7 of the Endangered Species Act, as amended, impacts to threatened and endangered species have been evaluated. The potential impacts have been considered and analyzed in the Natural Resource Evaluation (NRE) Report. A copy of this report is enclosed with this letter. Information on listed species and their habitats was obtained through the Efficient Transportation Decision Making (ETDM) Planning and Programming Screening (ETDM # 14308), the Advance Notification process, and through conversations and coordination with the U.S. Fish and Wildlife Service (USFWS) and the Florida Fish and Wildlife Conservation Commission (FWC). The Programming Screen Summary Report was published on March 31, 2017.

The proposed right-of-way has been evaluated for potential impacts to individual Federally listed species and habitats which may be affected by the proposed project. Based on the location of the roadway and the types of habitats affected, the Federally listed species evaluated in the NRE are shown in ***Table 1***:

Table 1: Species Listed as Threatened or Endangered by the USFWS with the Potential to Occur within the Project Area

Species	Federal Status	State Status	Effects Determination
Eumops Floridanus (Florida Bonneted Bat)	E	FE	MANLAA
Trichechus manatus[1] (West Indian Manatee)	T	FT	MANLAA
Crocodylus acutus (American Crocodile)	T	FT	No Effect
Drymarchon corais couperi (Eastern Indigo Snake)	T	FT	No Effect
Rostrhamus sociabilis plumbeus (Everglade Snail Kite)	E	FE	No Effect
Mycteria americana (Wood Stork)	T	FT	MANLAA

Federal Status: E = Endangered, T = Threatened
State Status: FE = Federally-designated endangered, FT = Federally-designated threatened
Effects Determination: MANLAA = "may affect but is not likely to adversely affect"
[1] The West Indian manatee, including the Florida manatee subspecies, is also federally-protected by the Marine Mammal Protection Act.

During field investigations conducted on November 13th, 14th, 15th, and 16th, 2018 and December 10th and 13th, 2018 no evidence of the occurrence of any of these species was found. Limited or no suitable habitat for any of these species occurs in the project area.

1. The Florida bonneted bat (*Eumops floridanus*) is listed as endangered by FWC and USFWS. Foraging occurs in a variety of habitats including semitropical forests with tropical hardwood, pineland, and mangrove habitats, as well as man-made areas such as golf courses and neighborhoods. Natural roosts have been discovered in urban and suburban areas, including tree cavities, rock crevices, and foliage. Florida bonneted bats have also been found nesting in artificial structures such as buildings and bridges.

   The project corridor is essentially built out, therefore limited marginal habitat is present for this species within the project corridor. This project consists of replacing 7 bridges, demolishing (removing) 7 bridges, and widening 18 bridges (24 other bridges will remain in place). All bridges within the project corridor were inspected for individuals and signs of bats (staining and / or guano). No individuals or signs of bats were found during the field reviews and no individuals have been documented within the immediate vicinity of the project study area.

   Landscaped trees exist throughout the entire project corridor. Each tree was inspected for individuals and signs of bats. The field inspection identified several landscaped trees, palms, and snags in which cavities and crevices were observed. Each of these cavities/crevices were inspected using a pole mounted lighted camera. However, no evidence (staining and / or guano) of bats was observed.

   Therefore, the FDOT has determined that the Build Alternatives "May Affect Not Likely to Adversely Affect" the FBB.

   Prior to commencing construction activities, the FDOT is committed to re-surveying the project corridor for features that could serve as potential roosting habitat and signs of the FBB. If any signs of the FBB are observed, the FDOT is committed to reinitiating consultation with the USFWS to determine the appropriate course of action.

2. The West Indian manatee (*Trichechus manatus*) is listed as endangered by both the USFWS and the FWC. The species inhabits coastal waters, bays, rivers, and occasionally lakes. Manatees require warm-water refugia such as springs or cooling effluent during cold weather. The Build Alternatives contain some suitable habitat for this species consisting of surface water canals.

   In-water work is anticipated to occur as a result of this project. Bridge replacements, bridge removals, bridge widenings, culvert replacements, piling removals and installations, and culvert installations will take place throughout the project corridor. The above work is proposed for all three viable build alternatives. However,

Alternative 1 does not include work south of SW 88th Street (Kendall Drive). Therefore, this alterative does not include work within the C-100A Canal.

Although no manatees were observed during the field reviews, this project exists upstream of salinity control structures within waterways where manatees have been observed. In addition, federally-listed critical habitat exists within the project limits for the West Indian manatee within the C-3 Canal (Coral Gables Canal), C-4 Canal (Tamiami Canal), and the North Line Canal. The proposed alternatives will result in minor impacts to the overall critical habitat area within the project corridor, however, these impacts will not inhibit manatee movement.

Minor impacts to West Indian manatee potential foraging is anticipated to occur during in-water work. However, in-water work will not inhibit manatee movement between foraging areas. In addition, the installation of culverts will result in the alteration of canal substrate within the area of the culvert , which may result in minor impacts to overall potential foraging area.

To increase the protection of this species during construction, the FDOT will adhere to the most current version of the Standard Manatee Conditions for In-Water Work and the latest edition of FDOT Standard Specifications for Road and Bridge Construction. Therefore, regardless of the Build Alternative, the FDOT has concluded that the determination for the West Indian Manatee is "May Affect, Not Likely to Adversely Affect".

3. The American Crocodile (*Crocodylus acutus*) is federally listed as threatened by both the USFWS and the FWC due to human activities and coastal development. American crocodiles inhabit brackish or saltwater, and can be found in ponds, coves, canals, and creeks in mangrove swamps in southern Florida. The Build Alternatives contain very little suitable habitat for this species; no nests have been documented within one mile of the project study area and none were observed during the field reviews. The project area is also highly urbanized and far from known crocodile habitat making it unlikely that the project will affect crocodile nesting areas. However, the project area is within the American crocodile consultation area.

   Although there is a very low probability of occurrence for the American Crocodile, construction activities could affect the American crocodile's behavior, causing them to avoid the areas of proposed construction. Such impacts would be minimal and localized to the construction area, temporary (lasting only for the duration of construction), and are not expected to jeopardize the continued existence of the American crocodile.

No net loss of functions and values to wetlands and other surface waters that may provide suitable habitat for this species will occur. Unavoidable impacts to the existing stormwater features are anticipated to be compensated through construction of the new stormwater system. The project area is highly urbanized and far enough north from known crocodile habitat that it is unlikely to affect crocodile nesting areas. Therefore, the FDOT has determined that the proposed project, regardless of the Build Alternative, will have "No Effect" on the American crocodile.

The contractor will be advised of state and local law regarding the harassment of crocodiles prior to the commencement of and during construction activities. Best Management Practices (BMPs) would be implemented in accordance with the latest edition of FDOT Standard Specifications for Road and Bridge Construction in order to satisfy permit requirements and minimize potential impacts from construction activities.

4. The eastern indigo snake (*Drymarchon corais couperi*) is listed as threatened by both The USFWS and the FWC due to extensive habitat loss and population declines. Generally, this species lives and hunts in a wide variety of habitats and their territories can cover large areas. Preferred Florida habitats include dry glades areas, tropical hammocks, fields and some flatwoods areas, disturbed areas and mangrove swamps as well as upland and even urban habitats. The eastern indigo snake may also seek shelter in gopher tortoise burrows to escape hot or cold ambient temperatures within its range. Quality suitable habitat is not present within the project study area and this species has not been documented within or adjacent to the project corridor. In addition, no eastern indigo snakes were observed during the field reviews.

   To increase protection of this species during construction, the FDOT will adhere to the most current version of the Standard Protection Measures for the Eastern Indigo Snake. FDOT has determined that implementation of the Build Alternatives will have "No effect " on the eastern indigo snake.

5. The Everglade snail kite (*Rostrhamus sociabilis plumbeus*): is federally listed as endangered by both The USFWS and the FWC due to habitat degradation and loss, primarily from development and alteration of shallow freshwater wetlands throughout the south and central regions of Florida. This species prefers large open freshwater marshes and shallow lakes with emergent vegetation and is highly dependent upon apple snails (*Pomacea paludosa*) caught at the surface of the water as its food source. No suitable habitat is present for the Everglade snail kite within the project corridor and none were observed during field reviews. However, the project area is within the snail kite consultation area. Temporary foraging impacts are expected to occur during construction, however, no permanent adverse impacts are anticipated

to occur as a result of the project. Therefore, it is anticipated that implementation of the Build Alternatives will have "No effect" on the Everglade snail kite.

6. The wood stork (*Mycteria americana*) is federally listed as threatened by both The USFWS and the FWC due to a decline in breeding populations. This opportunistic wading bird utilizes various open hydric pine-cypress habitats, herbaceous marshes, and man-made wetlands and canals. A specialized method of feeding, commonly referred to as groping, limits its foraging ability to shallow waters with dense concentrations of small fish. As defined by the FWS, suitable wood stork foraging habitat includes wetlands and surface waters with relatively calm water, uncluttered by dense thickets of aquatic vegetation, and have permanent or seasonal water depths between 2 and 15 inches. Portions of existing wet retention ponds/swales within the project corridor offer marginal foraging habitat for the wood stork after heavy rain events. However, these features exist within the infields and medians of a heavily traveled highway.

   The USFWS has defined an area with a radius of 18.6 miles (30 kilometers) from nesting wood stork colonies as the Core Foraging Area (CFA) for those colonies. The project falls within the CFA of four active nesting wood stork colonies. Marginal suitable foraging habitat is present within the limits of the Build Alternatives; however, this species has not been documented within or adjacent to the project study area, and none were observed during the field reviews. The Build Alternatives would result in impacts to surface waters that may be considered suitable wood stork foraging habitat; however, these surface waters are excavated conveyance features associated with the SR 826 stormwater management system, and in-kind replacement will be provided for impacts to these features. In accordance with the USFWS South Florida Programmatic Concurrence (FWS 2010), all three of the proposed viable build alternatives will impact suitable foraging habitat at locations greater than 0.47 miles from an active colony site. In addition, project impacts to suitable foraging habitat within the CFA of a colony site will exceed 0.5 acres in size. Impacts to suitable wood stork foraging habitat will be replaced in-kind or mitigated through the purchase of wetland credits from a "Service-approved" wetland mitigation bank. Compensation will replace any lost potential foraging habitat equal to in value, or higher than that of impacted wetlands. Based on this information, it is anticipated that implementation of any Build Alternative "May Affect, but is Not Likely to Adversely Affect" the wood stork.

On behalf of the Florida Highway Administration (FHWA), the FDOT is seeking USFWS concurrence for the effects determinations above for the above-listed species. If you have any questions or require further information, please call me at (305) 470-5221. Thank you for your continued assistance.

Sincerely,

Steven Craig James
District Environmental Manager

Attachments:
1. Location Map

CC: Raul Quintela, FDOT
Shannon Kelley, FDOT

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Attachment 1

Location Map

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NOT TO SCALE
N
NW 36th St
DORAL
NW 25th St
NW 87th Ave
VIRGINIA GARDENS
MIAMI SPRINGS
HIALEAH
PROJECT LIMIT
969
836
NW 12th St
MIAMI
968
Flagler St
SWEETWATER
SW 8th St
41
90
WEST MIAMI
953
SW 24th St/Coral Way
CORAL GABLES
UNINCOPORATED MIAMI-DADE
826
959
976
SW 40th St/Bird Rd
985
973
SW 56th St/Miller Dr
5
874
SOUTH MIAMI
986
SW 72nd St/Sunset Dr
1
Snapper Creek Expwy
878
SW 88th St
Dixie Hwy
94
PINECREST
SW 104th St
PROJECT LIMIT
990
SW 112th St/Killian Dr
LEGEND
Study Area
Study Interchange
Interchange

Figure 5 - 2: Individual Surface Water Locations (1 of 8)

Figure 5 - 2: Individual Surface Water Locations (2 of 8)

Figure 5 - 2: Individual Surface Water Locations (3 of 8)

Figure 5 - 2: Individual Surface Water Locations (4 of 8)

Figure 5 - 2: Individual Surface Water Locations (5 of 8)

Figure 5 - 2: Individual Surface Water Locations (6 of 8)

Figure 5 - 2: Individual Surface Water Locations (7 of 8)

Figure 5 - 2: Individual Surface Water Locations (8 of 8)

Figure 5 - 3: Floodplains Map (1 of 8)

Figure 5 – 3: Floodplains Map (2 of 8)

Figure 5 – 3: Floodplains Map (3 of 8)

Figure 5 – 3: Floodplains Map (4 of 8)

Figure 5 – 3: Floodplains Map (5 of 8)

Figure 5 – 3: Floodplains Map (6 of 8)

Figure 5 – 3: Floodplains Map (7 of 8)

Figure 5 – 3: Floodplains Map (8 of 8)

Physical Resources Appendix

Contents:

Noise Map

Other Supporting Documentation regarding Contamination

Potential Contamination Site Map

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Table 6 - 1: Noise Barrier Evaluation Summary and Recommendations (1 of 4)

Noise Sensitive Area Name / Number	Common Noise Environment (CNE) Identification Number	Conceptual Noise Barrier Design Number (Type)	Height (feet)	Length (feet)	Begin Station Number	End Station Number	Number of Impacted Receptor Sites	Number of Impacted/ Benefited Receptor Sites	Number of Benefited Receptor Sites/ Not Impacted	Total Number of Benefited Receptor Sites	Average Noise Reduction for all Benefited Receptor Sites dB(A)	Maximum Noise Reduction for all Benefited Receptor Sites dB(A)	Cost ($30 per square foot)	Average Cost/Site Benefited	Does Optimal Barrier Design Meet FDOT's Reasonable Noise Abatement Criteria of $42,000 per Benefited Receptor Site and 7.0 dB(A) Noise Reduction Design Goal?	Noise Barrier Recommended for Further Consideration and Public Input?	Comments
Noise Study Segment 1 (SR 826 from North of SW 116th Street to SW 104th Street - See Appendix G Sheet 1)																	
Silver Palm Plantation and Killian Green Estates - West of US 1 between Killian Parkway and 104th Street / NSA 5	S1-1W	GM-CD3 (Ground Mounted Noise Barrier)	18	850	1033+50	1042+00	3	3	8	11	7.2	9.2	$459,000	$41,727	YES	NO	Represents the optimal conceptual noise barrier design at this location but is not recommended for further consideration and public input during the project's design phase. The additional construction costs associated with utility relocations (i.e., overhead electric) and drainage modifications to accommodate the noise barrier at this location would result in an exceedance of the Reasonableness Cost Criteria.
South Dade Trail Mini Park - West of US 1 between Killian Parkway and 104th Street / NSA 4	S1-1SDTMP	SDTMP-CD3 (Ground Mounted Noise Barrier)	22	450	1033+50	1038+00	Special Land Use	--	--	--	5.0	5.0	$297,000	--	NO	NO	The conceptual design does not meet either FDOT's 7.0 dB(A) Noise Reduction Design Goal or the Reasonableness Cost Criteria for special land uses. A noise barrier is not recommended for further consideration or public input during the project's design phase.
Veterans Wayside Park - East of US 1 and North of Killian Parkway / NSA 6	S1-VMP	VWP-CD1 (Ground Mounted Noise Barrier)	18	700	1034+00	1041+00	Special Land Use	--	--	--	7.3	14.9	$378,000	--	NO (Usage of park less than required to be cost reasonable)	NO	The conceptual design meets FDOT's 7.0 dB(A) Noise Reduction Design Goal, but does not meet the Reasonableness Cost Criteria for special land uses. A noise barrier is not recommended for further consideration or public input during the project's design phase at this location.
Noise Study Segment 2 (SR 826 from SW 104 Street to Snapper Creek Expressway - See Appendix G Sheet 1)																	
Pearl Dadeland and Toscano Condos - East of SR 826 between 104th Street and Snapper Creek Expressway / NSA 29	S2-1E	GM-CD1 (Ground Mounted Noise Barrier	16	660	44+00	2001+30	94	0	5	5	6.2	7.5	$316,800	$63,360	NO	NO	Represents the lowest cost conceptual noise barrier design; The conceptual design meets FDOT's 7.0 dB(A) Noise Reduction Design Goal, but does not meet the Reasonableness Cost Criteria. A noise barrier is not recommended for further consideration or public input during the project's design phase at this location.
Woodside Kendall Condos, Colony Apartments, Ken Dade Condos, and Summit Tower of Dadeland - West of SR 826 between 104th Street and Snapper Creek Expressway / NSAs 21, 22 and 23	S2-1W	SM-CD2 (Shoulder Mounted Noise Barrier)	8	300	20+00	23+00	55	51	81	132	9.9	13.7	$870,000	$6,591	YES	YES	Represents the optimal conceptual noise barrier design and is recommended for further consideration and public input during the project's design phase; Note that any of the 14-foot-tall shoulder mounted noise barriers to be constructed on a retaining wall will need approval in writing by the State Structures Design Engineer in accordance with FDOT's noise policy.
			14	1,900	23+00	42+00											
Village at Dadeland and Dadeland Park - East of SR 826 between 104th Street and Snapper Creek Expressway / NSA 36 and NSA 37	S2-2E	SM-CD2 (Shoulder Mounted Noise Barrier)	8	100	2013+00	2014+00	41	41	9	50	8.8	11.9	$426,000	$8,520	YES	YES	Represents the optimal conceptual noise barrier design and is recommended for further consideration and public input during the project's design phase; Note that any of the 14-foot-tall shoulder mounted noise barriers to be constructed on a retaining wall will need approval in writing by the State Structures Design Engineer in accordance with FDOT's noise policy.
			14	900	2014+00	2025+00											
			8	100	2025+00	2026+00											
Paradise at Dadeland Condos, Kings Creek South Condos and The Village at Kings Creek Condos - West of SR 826 between 104th Street and Snapper Creek Expressway / NSAs 30, 34, and 35	S2-2W	SM-CD2 Segment 1 of 2 (Shoulder Mounted Noise Barrier)	14	1,200	2003+00	2015+00	158	60	59	119	7	9.5	$1,260,000	$10,588	YES	YES	Represents the optimal conceptual noise barrier design and is recommended for further consideration and public input during the project's design phase. Note that any of the 14-foot-tall shoulder mounted noise barriers to be constructed on a retaining wall will need approval in writing by the State Structures Design Engineer in accordance with FDOT's noise policy.
			8	100	2015+00	2016+00											
			14	900	2016+00	2025+00											
			8	200	2025+00	2027+00											
		SM-CD2 Segment 2 of 2 (Shoulder Mounted Noise Barrier)	8	400	2000+00	2004+00											
			14	500	2004+00	2009+00											

Table 6 - 1: Noise Barrier Evaluation Summary and Recommendations (2 of 4)

Noise Sensitive Area Name / Number	Common Noise Environment (CNE) Identification Number	Conceptual Noise Barrier Design Number (Type)	Height (feet)	Length (feet)	Begin Station Number	End Station Number	Number of Impacted Receptor Sites	Number of Impacted/ Benefited Receptor Sites	Number of Benefited Receptor Sites/ Not Impacted	Total Number of Benefited Receptor Sites	Average Noise Reduction for all Benefited Receptor Sites dB(A)	Maximum Noise Reduction for all Benefited Receptor Sites dB(A)	Cost ($30 per square foot)	Average Cost/Site Benefited	Does Optimal Barrier Design Meet FDOT's Reasonable Noise Abatement Criteria of $42,000 per Benefited Receptor Site and 7.0 dB(A) Noise Reduction Design Goal?	Noise Barrier Recommended for Further Consideration and Public Input?	Comments
Noise Study Segment 3 (Snapper Creek Expressway to SW 72nd Street/Sunset Drive - See Appendix G Sheet 2)																	
Andrews Estates - East of SR 826 between Snapper Creek Expressway and SW 72nd Street / NSA 39	S3-1E	SM-CD4 (Shoulder Mounted Noise Barrier)	14	1,050	2026+50	2037+00	3	3	5	8	7.3	10.4	$441,000	$55,125	NO	NO	Represents the lowest cost conceptual noise barrier design; The conceptual design meets FDOT's 7.0 dB(A) Noise Reduction Design Goal, but does not meet the Reasonableness Cost Criteria. A noise barrier is not recommended for further consideration or public input during the project's design phase at this location.
Windsor Estates - East of SR 826 between Snapper Creek Expressway and SW 72nd Street / NSA 39	S3-2E	GM-CD1 (Ground Mounted Noise Barrier)	14	700	2040+00	2047+00	3	3	0	3	8.9	9.8	$294,000	$98,000	NO	NO	Represents the lowest cost conceptual noise barrier design; The conceptual design meets FDOT's 7.0 dB(A) Noise Reduction Design Goal, but does not meet the Reasonableness Cost Criteria. A noise barrier is not recommended for further consideration or public input during the project's design phase at this location.
Kendall Creek Grove and Jennings Estates - West of SR 826 between Snapper Creek Expressway and SW 72nd Street / NSA 38	S3-1W	SM-CD2 (Shoulder Mounted Noise Barrier)	14	2,670	2028+50	2054+20	13	8	12	20	6.6	7.9	$1,121,400	$56,070	NO	NO	Represents the lowest cost conceptual noise barrier design; The conceptual design meets FDOT's 7.0 dB(A) Noise Reduction Design Goal, but does not meet the Reasonableness Cost Criteria. A noise barrier is not recommended for further consideration or public input during the project's design phase at this location.
Noise Study Segment 4 (SW 72nd Street/Sunset Drive to SW 56th Street/Miller Road - See Appendix G Sheet 2)																	
Residential Subdivision 1 - East of SR 826 and North of SW 72nd Street / NSA 46	S4-1E	SM-CD1 (Shoulder Mounted Noise Barrier)	8	4,820	2058+00	2106+00	33	20	8	28	6.9	10.1	$1,156,800	$41,314	YES	YES	Represents the optimal conceptual noise barrier design and is recommended for further consideration and public input during the project's design phase.
Green Tree Estates - West of SR 826 and North of SW 72nd Street / NSA 52	S4-1W	SM-CD1 (Shoulder Mounted Noise Barrier)	8	2,000	2057+00	2077+00	7	7	2	9	6.6	7.9	$480,000	$53,333	NO	NO	Represents the lowest cost conceptual noise barrier design; The conceptual design meets FDOT's 7.0 dB(A) Noise Reduction Design Goal, but does not meet the Reasonableness Cost Criteria. A noise barrier is not recommended for further consideration or public input during the project's design phase at this location.
Miami Memorial Park Cemetery - West of SR 826 and North of SW 72nd Street / NSA 53	S4 - 2W	MMPC-CD1 (Ground Mounted)	18	3,200	2073+00	2105+00	Special Land Use	--	--	--	7.9	12.7	$1,728,000	---	NO (Usage of cemetery less than required to be cost reasonable)	NO	The conceptual design meets FDOT's 7.0 dB(A) Noise Reduction Design Goal, but does not meet the Reasonableness Cost Criteria for special uses. A noise barrier is not recommended for further consideration or public input during the project's design phase at this location.
Noise Study Segment 5 (SW 56th Street/Miller Road to SW 40th Street/Bird Road - See Appendix G Sheets 2 and 3)																	
Lakewood Villas, Miller Lake, and Lakeview Gardens (East Side) - North of 56th Street and Between SR 826 and SR 874 / NSA 57	S5-1E	SM-CD3 Segment 1 of 2 (Shoulder Mounted Noise Barrier)	14	1,300	2109+00	2122+00	29	6	54	60	6.9	12.0	$894,000	$14,900	YES	YES	Represents the optimal conceptual noise barrier design and is recommended for further consideration and public input during the project's design phase; Note that any of the 14-foot-tall shoulder mounted noise barriers to be constructed on a retaining wall will need approval in writing by the State Structures Design Engineer in accordance with FDOT's noise policy.
		SM-CD3 Segment 2 of 2 (Shoulder Mounted Noise Barrier)	8	400	2106+00	2110+00											
			14	600	2110+00	2116+00											
Lakewood Villas, Miller Lake, and Lakeview Gardens (West Side) - North of 56th Street and Between SR 826 and SR 874 / NSA 57	S5-1W	SM-CD2 (Shoulder Mounted Noise Barrier	14	950	113+00 (SR 874)	50+50 (SR 874)	29	10	39	49	6.5	9.5	$1,311,000	Not Applicable-Replacement Noise Barrier	Meets Noise Reduction Goal; Reasonable Cost Criteria Not Applicable	YES	Represents the optimal conceptual noise barrier design and is recommended for further consideration and public input in the project's design phase; Represents an in-kind replacement noise barrier; Note that any of the 14-foot-tall shoulder mounted noise barriers to be constructed on a retaining wall will need approval in writing by the State Structures Design Engineer in accordance with FDOT's noise policy.
			8	300	50+50 (SR 874)	53+50 (SR 874)											
			14	2,000	53+50 (SR 874)	73+50 (SR 874)											
Tropical Park - West of SR 826 and North of SW 56th Street / NSA 64	S5-2W	TP-CD1 Segment 1 of 2 (Shoulder Mounted Noise Barrier)	8	3,850	50+00	90+00	Special Land Use	--	--	--	7.6	11.1	$2,166,000	---	NO (Usage of park less than required to be cost reasonable)	NO	The conceptual design meets FDOT's 7.0 dB(A) Noise Reduction Design Goal, but does not meet the Reasonableness Cost Criteria for special uses. A noise barrier is not recommended for further consideration or public input during the project's design phase at this location.
		TP-CD1 Segment 2 of 2 (Shoulder Mounted Noise Barrier)	18	2,300	90+00	113+00											

Table 6 - 1: Noise Barrier Evaluation Summary and Recommendations (4 of 4)

Noise Sensitive Area Name / Number	Common Noise Environment (CNE) Identification Number	Conceptual Noise Barrier Design Number (Type)	Height (feet)	Length (feet)	Begin Station Number	End Station Number	Number of Impacted Receptor Sites	Number of Impacted/ Benefited Receptor Sites	Number of Benefited Receptor Sites/ Not Impacted	Total Number of Benefited Receptor Sites	Average Noise Reduction for all Benefited Receptor Sites dB(A)	Maximum Noise Reduction for all Benefited Receptor Sites dB(A)	Cost ($30 per square foot)	Average Cost/Site Benefited	Does Optimal Barrier Design Meet FDOT's Reasonable Noise Abatement Criteria of $42,000 per Benefited Receptor Site and 7.0 dB(A) Noise Reduction Design Goal?	Noise Barrier Recommended for Further Consideration and Public Input?	Comments
Noise Study Segment 6 (SW 40th Street/Bird Road - SW 24th Street/Coral Way - See Appendix G Sheet 3)																	
Central Miami Subdivision - East of SR 826 Between SW 40th Street and SW 24th Street / NSA 70	S6-1E	SM-CD2 (Shoulder Mounted Noise Barrier)	14	5,180	116+00	168+00	53	45	0	45	10.5	14.3	$2,175,600	Not Applicable-Replacement Noise Barrier	Meets Noise Reduction Goal; Reasonable Cost Criteria Not Applicable	*YES*	Represents the optimal conceptual noise barrier design and is recommended for further consideration and public input in the project's design phase; Replaces existing barrier with 14-foot-tall barrier; Note that any of the 14-foot-tall shoulder mounted noise barriers to be constructed on a retaining wall will need approval in writing by the State Structures Design Engineer per FDOT's noise policy.
Baker Way Manor, Sunrise Manor and Coral Way - West of SR 826 between SW 24th St and SW 40th Street / NSA 72	S6-1W	SM-CD2 (Shoulder Mounted Noise Barrier)	14	4,000	127+00	167+00	35	32	8	40	7.4	9.9	$1,680,000	Not Applicable-Replacement Noise Barrier	Meets Noise Reduction Goal; Reasonable Cost Criteria Not Applicable	*YES*	Represents the optimal conceptual noise barrier design and is recommended for further consideration and public input in the project's design phase; Replaces existing barrier with 14- foot-tall barrier; Note that any of the 14-foot-tall shoulder mounted noise barriers to be constructed on a retaining wall will need approval in writing by the State Structures Design Engineer per FDOT's noise policy.
Noise Study Segment 7 (SW 24th Street/Coral Way - SW 8th Street/Tamiami Trail - See Appendix G Sheets 3 and 4)																	
Hardwood Village and Miami Gateway Communities - East of SR 826 between SW 24th Street and SW 8th Street / NSA 74	S7-1E	SM-CD2 (Replacement Shoulder Mounted Noise Barrier)	14	4,470	172+00	217+50	59	59	4	63	7.6	11.2	$1,877,400	Not Applicable-Replacement Noise Barrier	Meets Noise Reduction Goal; Reasonable Cost Criteria Not Applicable	YES	Represents the optimal conceptual noise barrier design and is recommended for further consideration and public input in the project's design phase; Replaces existing barrier with 14-foot-tall barrier; Note that any of the 14-foot-tall shoulder mounted noise barriers to be constructed on a retaining wall will need approval in writing by the State Structures Design Engineer in accordance with FDOT's noise policy.
Coral Way Plaza and Miracle Manor Communities - West of SR 826 between SW 24th Street and SW 8th Street / NSA 76	S7-1W	Existing Shoulder Mounted Noise Barrier Segment to Remain	12	1,175	198+00	215+50	N/A										
		SM-CD2 (Replacement Shoulder Mounted Noise Barrier)	14	2,040	177+50	198+00	24	22	8	30	7.7	11.2	$856,800	Not Applicable-Replacement Noise Barrier	Meets Noise Reduction Goal; Reasonable Cost Criteria Not Applicable	YES	Represents the optimal conceptual noise barrier design and is recommended for further consideration and public input in the project's design phase; Replaces existing barrier with 14-foot-tall barrier; Note that any of the 14-foot-tall shoulder mounted noise barriers to be constructed on a retaining wall will need approval in writing by the State Structures Design Engineer in accordance with FDOT's noise policy.
Noise Study Segment 8 (SW 8th Street/Tamiami Trail to Flagler Street - See Appendix G Sheet 4)																	
Flagami East - East of SR 826 and North of SW 8th Street / NSA 88	S8-1E	SM-CD3 (Replacement Shoulder Mounted Noise Barrier)	14	2,040	227+00	2246+00	36	30	8	38	6.6	8.2	$1,000,800	Not Applicable-Replacement Noise Barrier	Meets Noise Reduction Goal; Reasonable Cost Criteria Not Applicable	*YES*	Represents the optimal conceptual noise barrier design and is recommended for further consideration and public input in the project's design phase; Replaces existing barrier with an 8-foot and 14-foot-tall barrier; Note that any of the 14-foot-tall shoulder mounted noise barriers to be constructed on a retaining wall will need approval in writing by the State Structures Design Engineer per FDOT's noise policy
			8	600	2246+00	2252+00											
Flagami West - West of SR 826 and North of SW 8th Street / NSA 90	S8-1SW	SM-CD2 (Replacement Shoulder Mounted Noise Barrier)	14	1,700	231+00	2248+00	21	20	3	23	7.8	9.8	$714,000	Not Applicable-Replacement Noise Barrier	Meets Noise Reduction Goal; Reasonable Cost Criteria Not Applicable	*YES*	Represents the optimal conceptual noise barrier design and is recommended for further consideration and public input in the project's design phase; Replaces existing barrier with 14-foot-tall barrier; Note that any of the 14-foot-tall shoulder mounted noise barriers to be constructed on a retaining wall will need approval in writing by the State Structures Design Engineer per FDOT's noise policy.
Flagami West - West of SR 826 and North of SW 8th Street / NSA 90 and NSA 91	S8-2SW	SM-CD2 (Ground Mounted Noise Barrier)	14	2,270	1873+00	224+50	16	16	25	41	8.6	10.5	$953,400	$23,254	YES	*YES*	Represents the optimal conceptual noise barrier design and is recommended for further consideration and public input in the project's design phase; Note that any of the 14-foot-tall shoulder mounted noise barriers to be constructed on a retaining wall will need approval in writing by the State Structures Design Engineer per FDOT's noise policy.

Table 6 - 1: Noise Barrier Evaluation Summary and Recommendations (4 of 4)

Noise Sensitive Area Name / Number	Common Noise Environment (CNE) Identification Number	Conceptual Noise Barrier Design Number (Type)	Height (feet)	Length (feet)	Begin Station Number	End Station Number	Number of Impacted Receptor Sites	Number of Impacted/ Benefited Receptor Sites	Number of Benefited Receptor Sites/ Not Impacted	Total Number of Benefited Receptor Sites	Average Noise Reduction for all Benefited Receptor Sites dB(A)	Maximum Noise Reduction for all Benefited Receptor Sites dB(A)	Cost ($30 per square foot)	Average Cost/Site Benefited	Does Optimal Barrier Design Meet FDOT's Reasonable Noise Abatement Criteria of $42,000 per Benefited Receptor Site and 7.0 dB(A) Noise Reduction Design Goal?	Noise Barrier Recommended for Further Consideration and Public Input?	Comments
Noise Study Segment 9 (Flagler Street to SR 836 - See Appendix G Sheet 4)																	
Winona Park Subdivision - East of SR 826 Between W Flagler Street and SR 836 / NSA 99	S9-1E	Existing Shoulder Mounted Noise Barrier Segment to Remain	12	1175	2251+00	2262+00	N/A										
		SM-CD3 (Replacement Shoulder Mounted Noise Barrier)	14	1,120	2262+00	2273+00	7	6	4	10	10.8	15.3	$470,400	Not Applicable- Replacement Barrier	Meets Noise Reduction Goal; Reasonable Cost Criteria Not Applicable	YES	Represents the optimal conceptual noise barrier design and is recommended for further consideration and public input in the project's design phase; Replaces existing barrier with 14-foot-tall barrier; Note that any of the 14-foot-tall shoulder mounted noise barriers to be constructed on a retaining wall will need approval in writing by the State Structures Design Engineer per FDOT's noise policy.
Royal Palm Apartments - West of SR 826 Between W Flagler Street and SR 836 / NSA 100	S9-1W	Segment 1 of 2 (Shoulder Mounted Noise Barrier)	14	1,500	2270+00	3285+00	100	24	18	42	5.5	6.2	$1,491,000	$35,500	NO	NO	Represents the lowest cost conceptual noise barrier design; The conceptual design meets the Reasonableness Cost Criteria but does not meet FDOT's 7.0 dB(A) Noise Reduction Design Goal. A noise barrier is not recommended for further consideration or public input during the project's design phase at this location.
		Segment 2 of 2 (Shoulder Mounted Noise Barrier)		2,050	2270+00	12+00 (Ramp - SR 836 to SR 826)											

Table 6 - 2: Potential Contaminated Sites in the Vicinity of the PD&E Study

Site ID	Property Description	Facility ID	Environmental Compliance Agency	Regulated Storage Tanks	Distance from Project	Contamination Concern/ Regulatory Status	Risk Rating	Alternative Risk Rating		
								A1	A2	A3
L1	Amoco - Suniland 11675 S Dixie Highway Miami, FL 33156	8506127	FDEP	No	125 feet east	Historic petroleum contamination. SRCO approved in October 2018.	LOW	LOW	LOW	LOW
L2	Kendall Toyota 10943 S Dixie Highway Miami, FL 33156	9046819	FDEP	Yes	300 feet east	NFA approved in July 2011. No regulatory files indicating type of contamination available.	LOW	LOW	LOW	LOW
L3	Super Care Car Wash 9650 S Dixie Highway Kendall FL 33156	8504345	FDEP	No	400 feet east	Historic petroleum contamination. NFA approved in January 1998.	LOW	LOW	LOW	LOW
L4	Frasse Helen F Estate 7601 SW 76th Avenue, Miami, FL 33143	9202815	FDEP	No	250 feet east	NREQ status approved in October 2005.	LOW	LOW	LOW	LOW
L5	Pamsco Transport Fuel Spill Highway 826, Miami, FL 33143	9802998	FDEP	No	Along the Corridor	Historic soil contamination on site. No records available indicating type of groundwater contamination.	LOW	LOW	LOW	LOW

Site ID	Property Description	Facility ID	Environmental Compliance Agency	Regulated Storage Tanks	Distance from Project	Contamination Concern/ Regulatory Status	Risk Rating	Alternative Risk Rating		
								A1	A2	A3
L6	Tolco Inc 4550 SW 75th Avenue, Miami FL 33155	9101569	FDEP	No	260 feet east	Historic discharge occurred at the site. No additional information available regarding cleanup.	LOW	LOW	LOW	LOW
L7	Camilo Muebles Inc 4400 SW 75th Avenue, Miami, FL 33155	8622877	FDEP	No	350 feet east	Historic petroleum contamination. NFA approved in July 1993.	LOW	LOW	LOW	LOW
L8	Epperson Crane Service Inc Jack 4300 SW 75th Avenue, Miami, FL 33155	8942952	FDEP	No	300 feet east	Historic petroleum contamination. SRCO approved in February 2007.	LOW	LOW	LOW	LOW
L9	Alcazar - Tio Pepe 7701 SW 40th Street Miami, FL 33155	9047482	FDEP	No	300 feet west	EDI application submitted for the site. No additional regulatory files indicating type of contamination available.	LOW	LOW	LOW	LOW

Site ID	Property Description	Facility ID	Environmental Compliance Agency	Regulated Storage Tanks	Distance from Project	Contamination Concern/ Regulatory Status	Risk Rating	Alternative Risk Rating		
								A1	A2	A3
L10	Sunshine #201 7798 SW 24th Street, FL 33155	8506212	FDEP	Yes	350 feet west	Multiple discharges reported at the site for PAH and TRPH contamination. Site awaiting SRCO approval.	LOW	LOW	LOW	LOW
L11	Barnett Bank of S-FL-Midway 7760 W Flagler Street Miami, FL 33144	8736978	DERM	No	350 feet east	Historic petroleum contamination. NFA approved in August 2007.	LOW	LOW	LOW	LOW
L12	Miami International Airport Ash Landfill Perimeter Road and NW 72nd Avenue Miami	56827	FDEP	No	1100 feet north of 836 E extension	Vinyl chloride exceedance reported in 2017. All other CoCs reported having concentrations under MCLs.	LOW	LOW	LOW	LOW
M1	Marios Finest Dry Cleaners and Shirt Salon 12117 South Dixie Highway Miami, FL	9500300/ ERIC_4315	DERM	No	175 feet east	TCE and cis-1,2 DCE contamination in groundwater and soil was contaminated with VOH. RAP operated during 1992. Post RAP, DERM	MEDIUM	NO	MEDIUM	MEDIUM

Site ID	Property Description	Facility ID	Environmental Compliance Agency	Regulated Storage Tanks	Distance from Project	Contamination Concern/ Regulatory Status	Risk Rating	Alternative Risk Rating		
								A1	A2	A3
						requested additional assessments.				
M2	Suniland Dry Cleaners 11723 South Dixie Highway Miami, FL 33156	9501329/ ERIC_4388	FDEP	No	150 feet east	Historical PCE and cis-DCE contamination at the site. Remediation conducted at the site during 1996. Existing contamination at the site.	MEDIUM	NO	MEDIUM	MEDIUM
M3	Perlmutter Petroleum 10601 S Dixie Highway Miami, FL 33156	8505104	FDEP	No	150 feet east	Historical PAH and TRPH contamination. Most recent assessment did not indicate presence of CoCs. Additional assessments planned for the site.	MEDIUM	NO	MEDIUM	MEDIUM
M4	7-Eleven Store #37580 10345 S Dixie Hwy, Miami, FL 33156	8505459	FDEP	Yes	120 feet east	PAH contamination in soil between 0-4 feet and TRPH, PAH and BTEX	MEDIUM	NO	MEDIUM	MEDIUM

Site ID	Property Description	Facility ID	Environmental Compliance Agency	Regulated Storage Tanks	Distance from Project	Contamination Concern/ Regulatory Status	Risk Rating	Alternative Risk Rating		
								A1	A2	A3
						contamination in groundwater.				
M5	Dryclean USA #11121 7420 SW 88th Street Miami FL 33156	9502314/ ERIC_4432	FDEP	No	400 feet east	Historic tetrachloroethene contamination in soil. Currently quarterly monitoring being conducted.	MEDIUM	NO	MEDIUM	MEDIUM
M6	Chevron #202666 7625 SW 40th Street Miami, FL - 33155	8504531	FDEP	Yes	400 feet east	Benzene contamination existing at the site. Contamination plume contained within the site.	MEDIUM	MEDIUM	MEDIUM	MEDIUM
M7	Chevron #47667 - Tonys 780 NW 72nd Avenue Miami, FL 33126	8506267	FDEP	No	500 feet south of 836 E extension	Free product found at the site. No assessments conducted at the site.	MEDIUM	MEDIUM	MEDIUM	MEDIUM
H1	Sunshine 262 10401 S Dixie Hwy, Miami, FL 33156	8504621	FDEP	Yes	100 feet east	TRPH and BTEX/MTBE contamination in soil and groundwater. Limited scope remedial action plan	HIGH	NO	HIGH	HIGH

Site ID	Property Description	Facility ID	Environmental Compliance Agency	Regulated Storage Tanks	Distance from Project	Contamination Concern/ Regulatory Status	Risk Rating	Alternative Risk Rating		
								A1	A2	A3
						to be implemented at the site.				
H2	FL Gasoline Station 10045 S Dixie Hwy, Miami, FL 33156	8735575	FDEP	No	150 feet east	PAH contamination present in soil at 2-feet and in shallow groundwater. Lead contamination also present in groundwater. Remedial action plan pending to be implemented at the site.	HIGH	NO	HIGH	HIGH
H3	Last Detail Inc 9790 S Dixie Hwy, Miami FL 33156	884224	FDEP	No	150 feet east	TRPH contamination present in soil. TRPH, BTEX and lead contamination present in groundwater. Pilot test study for remedial action plan is pending to be implemented.	HIGH	NO	HIGH	HIGH

Site ID	Property Description	Facility ID	Environmental Compliance Agency	Regulated Storage Tanks	Distance from Project	Contamination Concern/ Regulatory Status	Risk Rating	Alternative Risk Rating		
								A1	A2	A3
H4	Bridgestone Aircraft – Former (Thompson @ Corp) 7775 NW 12th Street Miami, FL - 33126	9100886	FDEP	No	450 feet west	Discharge reported in 1995. Cleanup activities planned but not performed yet to meet the groundwater petroleum cleanup criteria.	HIGH	HIGH	HIGH	HIGH

Figure 6 - 1: Potential Contamination Concerns (1 of 9)

Figure 6 -1: Potential Contamination Concerns (2 of 9)

Figure 6 -1: Potential Contamination Concerns (3 of 9)

Figure 6 -1: Potential Contamination Concerns (4 of 9)

Figure 6 -1: Potential Contamination Concerns (5 of 9)

Figure 6 -1: Potential Contamination Concerns (6 of 9)

Figure 6 -1: Potential Contamination Concerns (7 of 9)

Figure 6 -1: Potential Contamination Concerns (8 of 9)

Figure 6 -1: Potential Contamination Concerns (9 of 9)