

WETLAND EVALUATION REPORT And BIOLOGICAL ASSESSMENT

Work Program Item Number: 257862 1 Federal Aid Project Number: 0295-005

Park Road/Sam Allen Road From I-4 to Alexander St. Extension Hillsborough County, Florida

This project evaluates adding through lanes on Park Road from I-4 to Sam Allen Road and Sam Allen Road from Park Road to the proposed Alexander St. extension.

The approximate length of the project is 2.5 miles.

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1.0 INTRODUCTION

The Florida Department of Transportation (FDOT) conducted a Project Development and Environment (PD&E) Study for the improvement of Park Road from I-4 to Sam Allen Road and for Sam Allen Road from Park Road to the proposed Alexander Street extension in Hillsborough County, Florida. The total project length is approximately 2.5 miles.

The objective of the PD&E Study is to provide documented information and analyses which will help the FDOT and the Federal Highway Administration (FHWA) reach a decision on the type, design and location of the necessary improvements along Park Road and Sam Allen Road to accommodate the future traffic demand in a safe and efficient manner. The PD&E Study satisfies the requirements of the National Environmental Policy Act (NEPA) and other federal and state requirements in order to qualify the future design, right of way acquisition, and construction phases of the project for federal funding and implementation.

This Wetland Evaluation Report and Biological Assessment are among the various independent reports prepared to collect data related to the potential impacts associated with the Build and No-Build Alternatives. The data obtained has been used to determine the location and design of the proposed facility improvements.

This report documents the information necessary to confirm the need for this project and develops and evaluates various improvement alternatives as they relate to the transportation facility. Information relating to the engineering and environmental characteristics essential for alignment criteria was set and alternatives were developed. Comparison of alternatives is based on a variety of parameters using a matrix format. The design year of the analysis is Year 2028. The No-Build Alternative is considered a viable alternative throughout the PD&E Study.

1.1 Purpose

This report identifies the current and future deficiencies that should be expected along Park Road and Sam Allen Road if the existing geometric characteristic are maintained, and presents feasible improvement alternatives that will meet future traffic demands. This report documents the natural environmental effects which will be shown at the Public Hearing.

1.2 Project Description

Park Road and Sam Allen Road are local roads which act as a connector between the east side of Plant City and SR 39. This route is used by trucks traveling between Plant City and Zephyrhills to the north. The location and limits of the project are shown in Figure 1-1. The project is located partly in the City of Plant City, including Park Road and Sam Allen Road from Park Road to about 6/10 mile west of Park Road. The remaining section of Sam Allen Road west to SR 39 is in unincorporated Hillsborough County.

The existing roadways are two lane rural roads with four foot paved shoulders. Sam Allen Road was extended from SR 39 to Wilder Road as a two lane road in 1993, to allow for traffic to take this route around Plant City to SR 39.

The proposed project is intended to ensure that the capacity of road will be sufficient through the design year, 2028.

2.0 NEED FOR IMPROVEMENT

Park Road from I-4 to Sam Allen Road and Sam Allen Road from SR 39 to Park Road are two-lane rural roadways.

2.1 Deficiencies

A PD&E Study was completed on SR 39 from I-4 to US 301, with FHWA approval received on

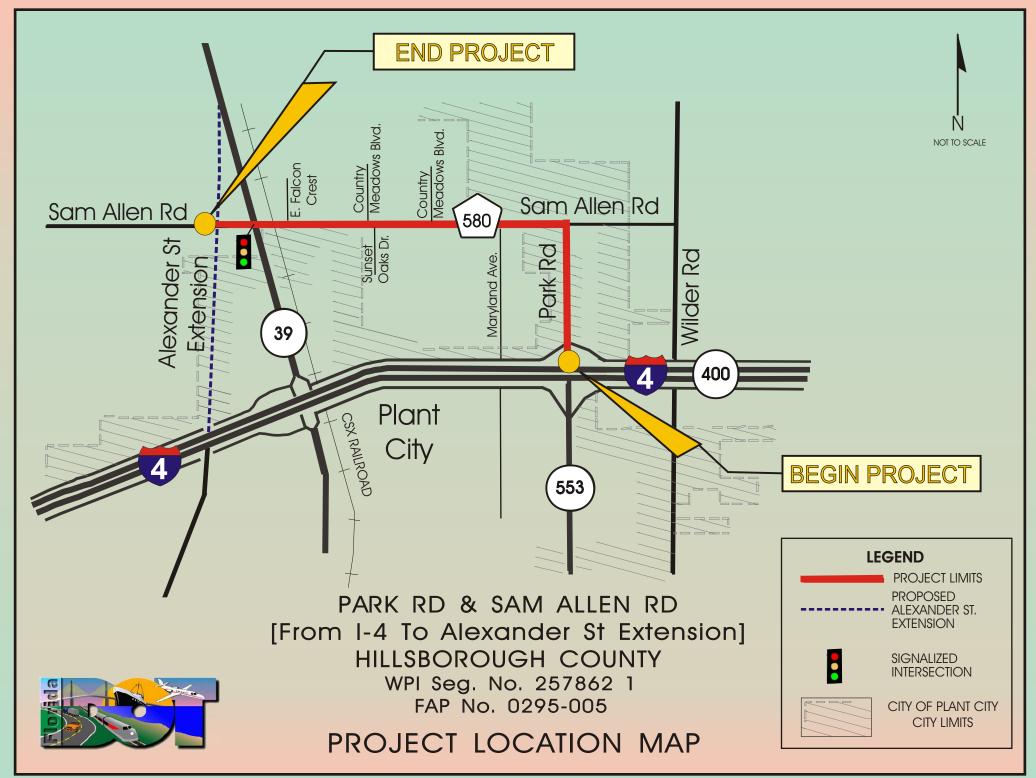


Figure 1-1

November 17, 2000. The Study recommended widening SR 39 from two lanes to four lanes. That Study (WPI Seg. No. 255099 1 and No. 256298 1) also recommended a new alignment for SR 39 to the west of the existing SR 39 by extending Alexander Street north.

The traffic volume for 2002 along Park Road was 8,300 vehicles per day (vpd), Sam Allen Road 2002 volume was 6,600 vpd. The projected traffic volume for the year 2028 is 17,700 vpd for Park Road and 14,100 vpd for Sam Allen Road. These projected traffic volumes are over the AADT limit of 13,100 vpd for two lane roads classified as "Transitioning into Urbanized", with a minimum desired Level of Service "C".

To accommodate the expected continued growth in traffic, these roads will require four travel lanes, two in each direction. For a more detailed explanation of traffic volumes and analysis, see Section 6 of this report, which summarizes the Traffic Technical Memorandum for this PD&E Study.

2.2 Consistency with Transportation Plans

The Hillsborough County Metropolitan Planning Organization (MPO) has the responsibility of developing a Long Range Transportation Plan (LRTP) for the county to serve the needs of the metropolitan area over the next 20 to 25 years. The adopted 2025 LRTP has identified these sections of Park Road and Sam Allen Road to be improved from two lanes to four lanes. The proposed improvements are consistent with the Hillsborough County Local Government Comprehensive Plan, the Hillsborough County MPO's Long Range Transportation Plan, and the City of Plant City's Local Government Comprehensive Plan.

2.3 Social/Economic Demands

According to population projections from Hillsborough County and the regional traffic model developed by FDOT's Planning Department, travel demand is expected to continue to grow in this area, doubling from present volumes by the design year. Much of the land in the area is undeveloped, with some low lying wet areas. Currently, there are Mobile Home Parks on Sam Allen Road east of SR 39, which are being expanded on land adjacent to Sam Allen, and other residences. Park Road is mostly vacant land at present, with a new car dealership business recently constructed just north of I-4. The future land use of this area is planned to be mostly residential on Sam Allen

Road and commercial on Park Road.

3.0 EXISTING ROADWAY CHARCTERISTICS

3.1 Functional Classification

Park Road and Sam Allen Road are local roads, not on the State system. Classifications of other

important roads in the study area are:

S.R. 39: Rural Principal Arterial

US 92: Urban Principal Arterial

I-4: Urban Principal Arterial (Interstate)

S.R. 553 (Park Rd. south of I-4): Urban Minor Arterial

3.2 Typical Sections

Throughout the project limits, Park and Sam Allen Roads are currently 2-lane rural roadways with

12 ft. wide lines, 4 ft. paved shoulders, and drainage ditches. The existing Typical Sections are

shown in Figures 3-1 and 3-2.

3.3 Right of Way

The existing Right of Way (ROW) width was obtained from Redi-Maps, Plat books and ROW maps

dated July 2003 completed for the Alexander St. extension (Design project WPI 255585 1). A ROW

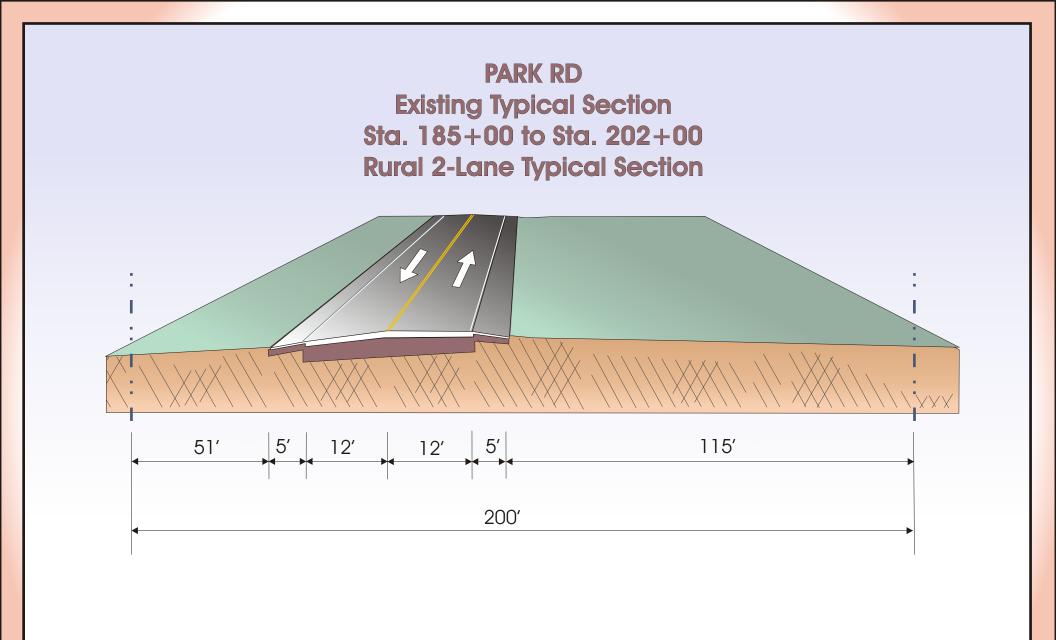
Control Survey was completed in 2003, establishing baselines for Sam Allen and Park Roads. The

existing ROW is approximately 200 feet for Park Road. Sam Allen Road ROW width varies

between 120 and 150 feet east of SR 39. Maintained ROW on Sam Allen west of SR 39 is 50 feet

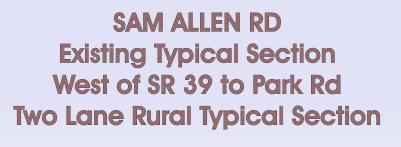
in width, according to the maps for WPI 255585 1.

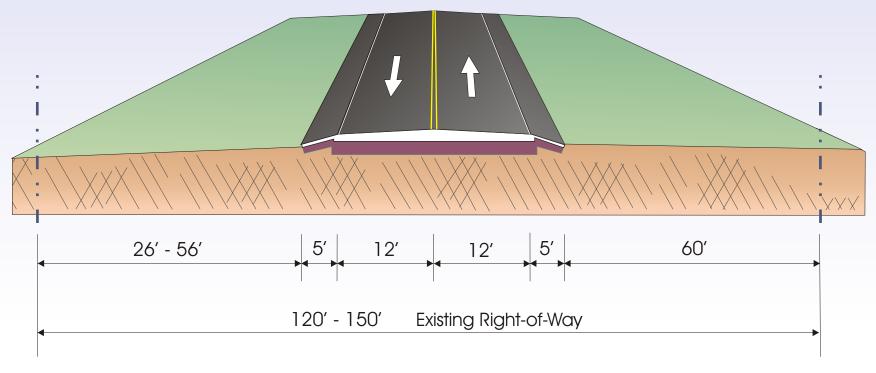
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PARK RD / SAM ALLEN RD From I-4 to Alexander St Extension







PARK RD / SAM ALLEN RD From I-4 to Alexander St Extension

4.0 STUDY ALTERNATIVES

At the beginning of the Study, detailed information was collected, documented, and evaluated on the environmental, socioeconomic, land use, archaeological, and historical features for the area. This information was then used to develop the conceptual design and alternatives analysis for the project. Because of the businesses and mobile home parks on the north side of Sam Allen Road, the alternative typical sections requiring ROW were aligned to acquire any ROW needed from the south side of the road.

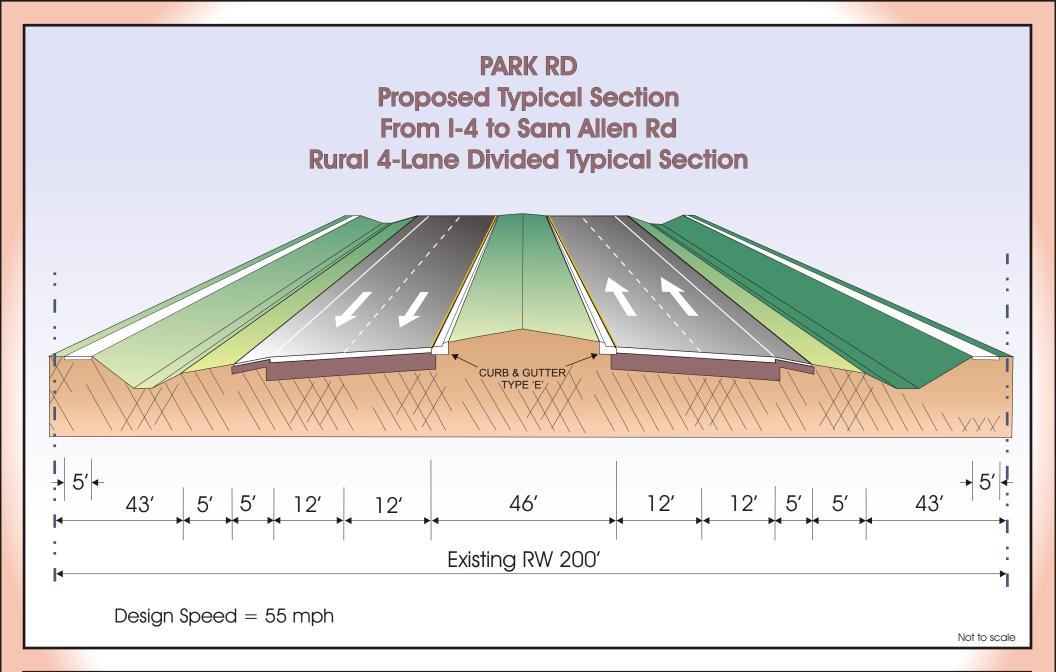
4.1 Park Road Alternative

Park Road has an existing ROW width of 200 feet, which allows the existing four lane rural typical section just north of I-4 to be extended to Sam Allen Road. This was the only alternative considered for Park Road. This typical section for Park Road has 12-ft travel lanes, 5-ft paved shoulders, a 46-ft wide depressed grass median, and open roadside ditches on both sides for drainage. Five-foot sidewalks will be provided adjacent to the ROW line. The proposed design speed for this typical section is 55 mph (See Figure 4-1).

4.2 Sam Allen Road Alternatives

A number of alternative four-lane typical sections were considered for Sam Allen Road. Because of the businesses and mobile home parks on the north side of Sam Allen Road, the alternative typical sections requiring ROW were aligned to acquire any ROW needed from the south side of the road.

• <u>Urban Typical Section:</u> This was considered even though the area is relatively undeveloped because of the limited existing ROW width, 120-150 feet. An urban typical would require only 106 feet of ROW. This typical section has two 12-foot travel lanes and four-foot bicycle lanes on each side of a 22-foot wide raised median, with type "E" median curb. Five-foot sidewalks are provided for pedestrians. The stormwater is collected with curb and gutter, using underground pipes to carry the runoff water to stormwater ponds. This typical section



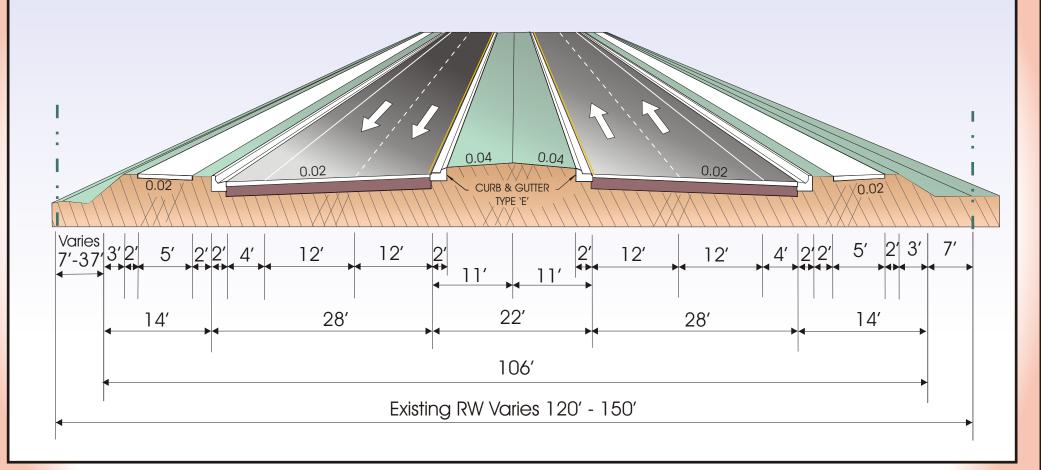


PARK RD / SAM ALLEN RD From I-4 to Alexander St Extension PD&E STUDY

has a maximum design speed of 45 mph (See Figure 4-2).

- Rural Typical Section: A rural typical section fits with the area's current state of development and a design speed of 55 mph. This typical section is 188 feet wide, requiring 38-68 feet of additional ROW on Sam Allen Road from SR 39 to Park Road. This typical section has two 12-foot travel lanes and five-foot outside paved shoulders on each side of a 46-foot wide depressed median. Stormwater is conveyed to ponds by ditches. Five-foot sidewalks are provided adjacent to the ROW line (See Figure 4-3).
- <u>Suburban Typical Section</u>: The suburban typical section proposed initially had a border width of 30 feet and a median width of 30 feet, resulting in a required ROW width of 148 feet. This typical requires ROW along Sam Allen Road from SR 39 east for one mile, where the existing ROW is only 120 feet wide. This typical section has two 12-foot travel lanes and five-foot outside paved shoulders on each side of a 30-foot wide raised median. Stormwater is conveyed to ponds by ditches. Four foot paved inside shoulders separate the inside travel lanes from the type "E" median curb. Five-foot sidewalks are provided adjacent to the ROW line. The proposed design speed for this typical section is 50 mph (See Figure 4-4).
- Modified Suburban Typical Section: After discussion with the Design Department, the border width for the suburban typical was reduced to 23 feet and the median width was reduced to 26 feet, avoiding the need for ROW on Sam Allen Road mentioned above. The reduced border width will require a design variance. This typical section has two 12-foot travel lanes and five-foot outside paved shoulders on each side of a 26-foot wide raised median. Five-foot sidewalks are provided adjacent to the ROW line. Four foot paved inside shoulders separate the inside travel lanes from the type "E" median curb. Swales are used to collect stormwater. Because the swales are not large enough to convey stormwater to ponds, an underground pipe system is used. The proposed design speed for this typical section is 50 mph. This typical will fit within the existing 120-150 ft of ROW, except where the alignment has been shifted south at SR 39 (See Figure 4-5).

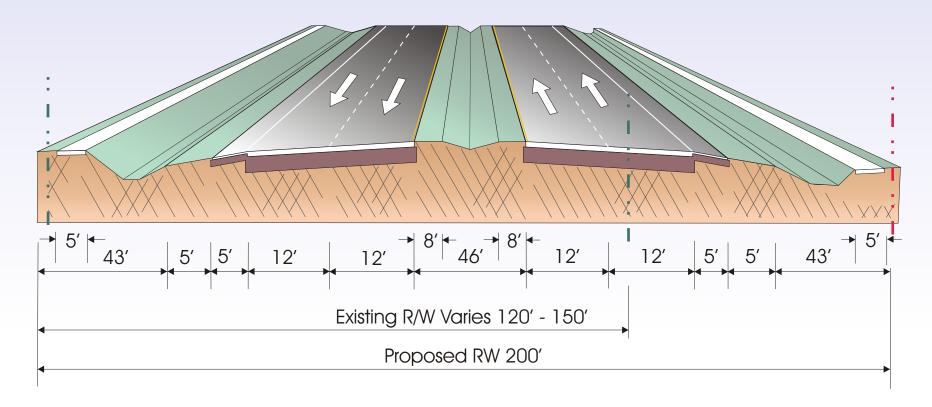
Proposed SAM ALLEN RD From SR 39 to Park Rd Urban 4-Lane Divided Typical Section





PARK RD / SAM ALLEN RD From I-4 to Alexander St Extension PD&E STUDY WPI SEG 257862 1 FAP NO 0295-005

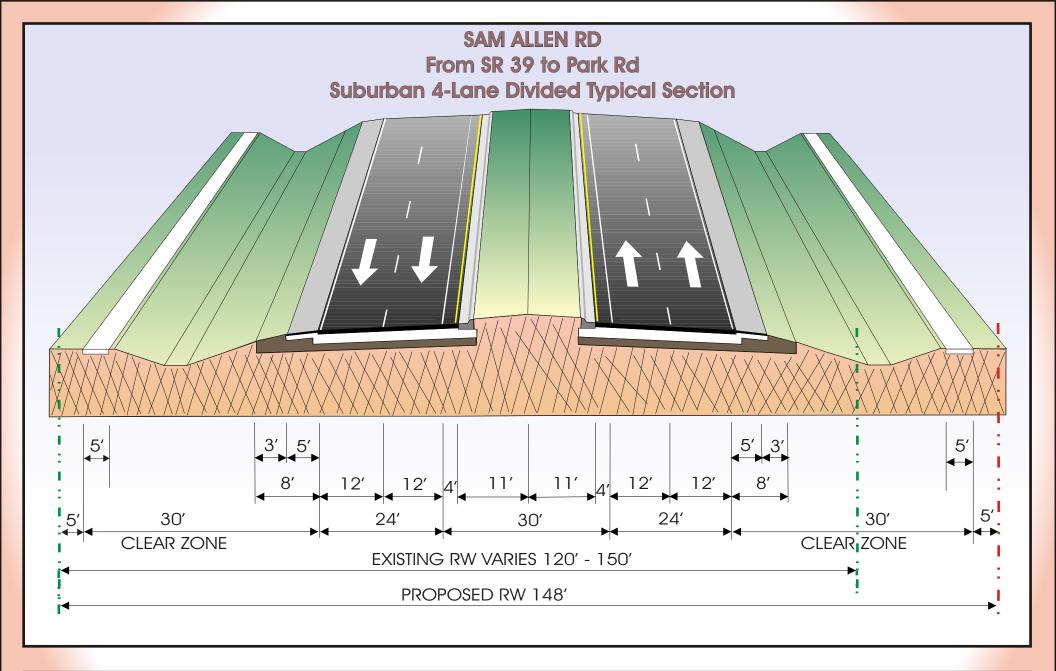
Proposed SAM ALLEN RD From SR 39 to Park Rd Rural 4-Lane Divided Typical Section



Design Speed = 55 mph

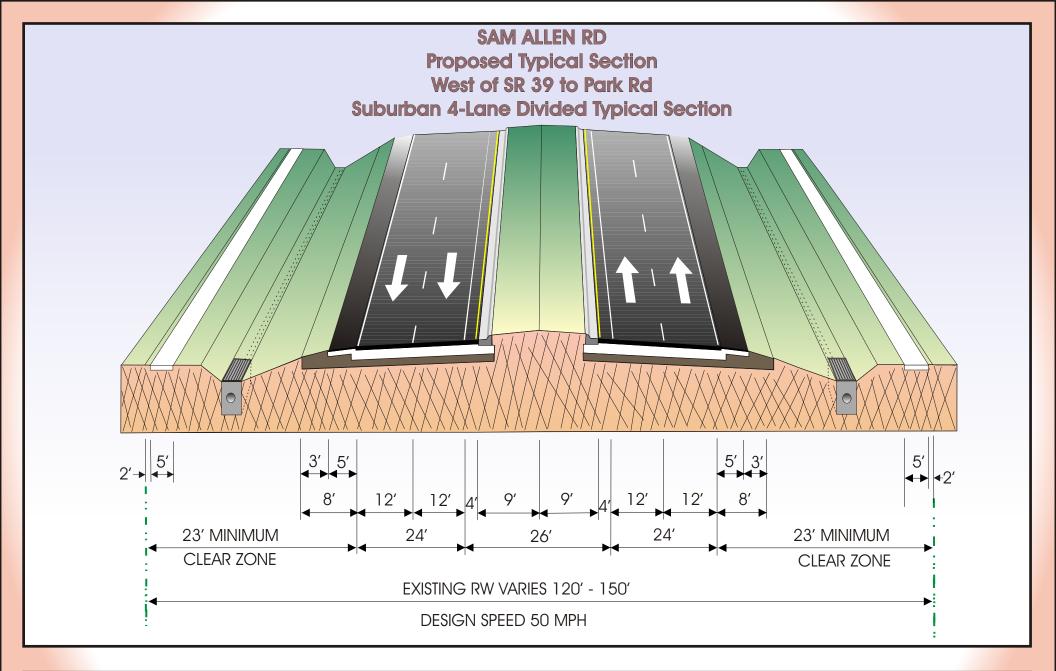


PARK RD / SAM ALLEN RD From I-4 to Alexander St Extension PD&E STUDY





PARK RD / SAM ALLEN RD From I-4 to Alexander St Extension PD&E STUDY





PARK RD / SAM ALLEN RD From I-4 to Alexander St Extension PD&E STUDY

4.3 Recommended Alternative

The Recommended Alternative is a four lane divided typical section for both Park Road and Sam Allen Road. The realignment of the intersection of Park Road and Sam Allen Road is being considered as part of this Study. This realignment would replace the existing T-intersection with a curve between the two roads, so that traffic between Park Road and Sam Allen Road would become through traffic, with a T-intersection designed for Sam Allen Road east of the intersection. The intersection realignment is considered as the ultimate design, with widening Park Road and Sam Allen Road to four lanes as a T-intersection being an interim solution.

Park Road's proposed typical section is rural, with two 12-foot travel lanes and five foot paved shoulders on each side of a 46 foot wide depressed median. Ditches are used to convey stormwater to ponds. Five-foot sidewalks are added adjacent to the ROW line (See Figure 4-1).

After a thorough analysis of the viable Alternatives, including environmental and social impacts, costs of construction and ROW, the modified suburban typical has been selected as the Recommended Alternative for Sam Allen Road.

Sam Allen's proposed typical is a modified suburban section with two 12-foot travel lanes, and a four-foot bicycle lane each side of a 26 foot wide raised median. Five-foot sidewalks are added adjacent to the ROW line. Four foot paved inside shoulders separate the inside travel lanes from the type "E" median curb. Swales are used to collect stormwater. Because the swales are not large enough to convey stormwater to the ponds, an underground pipe system is to be used (See Figure 4-5).

This alternative was chosen as the Recommended Alternative because it had the least overall community impacts, considering residents and businesses, historical sites, community facilities. While the urban typical for Sam Allen Road required no additional ROW, safety was also a consideration, and curbs should not be used next to travel lanes with a design speed of 50 mph or greater. The modified suburban typical also had the lowest total cost, including R/W and construction costs, of any of the viable alternatives.

4.4 Proposed Typical Section

The roadway typical section for the Recommended Alternative for Park Road is shown on Figure 4-1. The roadway typical section for the Recommended Alternative for Sam Allen Road is shown on Figure 4-2.

4.5 No Build Alternative

The No-Build Alternative consists of canceling the project or postponing improvements beyond the Design Year 2028. Certain advantages and disadvantages would be associated with the implementation of the No-Build Alternative.

The advantages of the No-Build Alternative include:

No new construction costs.
No temporary disruption to traffic due to construction activities.
No ROW acquisitions.
No business and residential relocations.

The disadvantages of the No-Build Alternative include:

Unacceptable levels of service on the existing roadway network.
Increased traffic congestion causing increased road user costs due to travel delay.
Deterioration of air quality caused by traffic congestion.
Further deterioration of the existing safety deficiencies due to the traffic increases; increase
of economic losses due to increase in vehicle collisions.
Increased roadway maintenance costs.
No improved stormwater management via stormwater attenuation and treatment.

Postponement of the project may jeopardize its future economic feasibility due to escalation of construction and ROW costs. During the time that the project's development is delayed, land

development could occur that would escalate land values and increase potential business damages.

The No-Build Alternative will remain under consideration throughout the alternatives evaluation process and Public Hearing stage.

4.6 Alignments and Right Of Way Needs

The Recommended Alternative, a four-lane rural typical section, fits inside the existing ROW. However, some ROW will be required on the south side of Sam Allen Road on either side of SR 39 to continue four lanes through the intersection. This will require approximately 1.6 acres, land which is currently undeveloped. The optional realignment of the intersection of Park and Sam Allen Roads will require about 5 acres on the southwest corner of the intersection. The proposed ROW is shown on the plan sheets in Appendix B.

5.0 ENVIRONMENTAL CHARACTERISTICS

5.1 Land Use Data

Much of the land in the area is undeveloped, with some low lying wet areas. Currently, there are Mobile Home Parks on Sam Allen Road east of SR 39, which are being expanded on land adjacent to Sam Allen, and other residences. Park Road is mostly vacant land at present, with a new car dealership business recently constructed just north of I-4. The future land use of this area is planned to be mostly residential on Sam Allen Road and commercial on Park Road.

Maps of the planned land usage from the Hillsborough County MPO are shown in Figure 5-1, Figure 5-1A.

Plant City Future Land Use Map Legend Service Area Boundaries Tampa Service Area Urban Service Area Other 547 FAIRWAY CT Jurisdiction Boundaries Roads Parcels E. SAM ALLEN RD. Plant City Future Land Use COMMERCIAL (20 DU/ACRE, FAR.35) DOWNTOWN CORE RESIDENTIAL - 20 (20 DU/ACRE, FAR.35) N. PARK RD. INDUSTRIAL (FAR.50) RESIDENTIAL - 6 (6 DU/ACRE, FAR.25) RESIDENTIAL - 12 (12 DU/ACRE, FAR.35) MAJOR PUBLIC / SEMI PUBLIC RESIDENTIAL - 4 (4 DU/ACRE) MAJOR RECREATION AND OPEN SPACE MIXED USE - RESIDENTIAL/COMMERCIAL (160 ACRE MINIMUM) MIXED USE -RESIDENTIAL/COMMERCIAL/INDUSTRIAL IA E.N PARK RO RAMP (1000 ACRE MINIMUM) TRANSITIONAL AREA (DUE TO ANNEXATION) WATER Other Jurisdiction BAY PINELLAS COUNTY PLANT CITY TAMPA TEMPLE TERRACE Other



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PARK RD / SAM ALLEN RD From I-4 to Alexander St Extension PD&E STUDY

Hillsborough County Future Land Use Map Legend SHADY, GROVE LN KEBS LN Service Area Boundaries CYPRESS DR Tampa Service Area Urban Service Area SKYCREST LN MAGNOLIA HILL DR Jurisdiction Boundaries Roads N EDGEWATER DR Parcels County Future Land Use AGRICULTURAL-1/10 (.25 FAR) COUNTRY MEADOWS BLVD AGRICULTURAL/MINING-1/20 (.25 FAR) AGRICULTURAL/RURAL-1/5 (.25 FAR) SUNSET KEY AGRICULTURAL ESTATE-1/2.5 (.25 FAR) CITRUS PARK VILLAGE (See Plan SubArea COMMUNITY MIXED USE-12 (.50 FAR) HEAVY INDUSTRIAL (.50 FAR) LIGHT INDUSTRIAL (.50 FAR) LIGHT INDUSTRIAL PLANNED (.50 FAR) NATURAL PRESERVATION NEIGHBORHOOD MIXED USE-4 (3) (.35 FAR) OFFICE COMMERCIAL-20 (.75 FAR) BENDING OAK DR PUBLIC/QUASI-PUBLIC RESIDENTIAL-1 (.25 FAR) RESIDENTIAL-2 (.25 FAR) RESIDENTIAL PLANNED-2 (.35 FAR) RESIDENTIAL-4 (.25 FAR) RESIDENTIAL-6 (.25 FAR) RESIDENTIAL-9 (.35 FAR) RESIDENTIAL-12 (.35 FAR) RESIDENTIAL-16 (.35 FAR) RESIDENTIAL-20 (.35 FAR) RESEARCH CORPORATE PARK (1.0 FAR) REGIONAL MIXED USE-35 (2.0 FAR) SUBURBAN MIXED USE-6 (.35 FAR) URBAN MIXED USE-20 (1.0 FAR) WATER Not Tagged Not Tagged Other PINELLAS COUNTY PLANT CITY TAMPA TEMPLE TERRACE WILDER PARK DR



PARK RD / SAM ALLEN RD From I-4 to Alexander St Extension PD&E STUDY

6.0 WETLANDS

In accordance with Executive Order 11990, "Protection of Wetlands" (May 1977), the proposed project has been evaluated for potential impacts to wetlands. Preliminary wetland determinations were based on information from the US Geological Survey 7.5 minute series Plant City East and Plant City West Topographic Maps, Soil Conservation Service's *Soil Survey of Hillsborough County*, U.S. Fish and Wildlife Service's (USFWS) National Wetlands Inventory Maps, and aerial photography. Wetland locations and boundaries were identified and delineated in March of 2003. Habitat mapping on the aerials with the wetlands locations are included in Appendix B.

6.1 Wetland Impacts

A total of eleven wetland habitats and five other surface water areas have been identified along the project corridor which may be impacted by the proposed improvements. All wetlands affected by the project have been grouped and classified according to the USFWS's Classification of Wetlands and Deepwater Habitats of the United States (Cowardin et.al., 1979). The observed wetland plant list and USFWS classification are presented in Appendix A.

Initial field reconnaissance revealed areas that have been previously dehydrated and/or heavily disturbed by current land uses. Implementation of the proposed project will potentially impact an estimated 1.32 acres of wetlands for the mainline construction. An additional 0.05 acres of wetland impacts will occur with curve option and 0.5 acres of wetland impacts will occur from SMF/FPC selection. There will approximately 0.17 acres of impacts to other surface waters. The project's impact on wetlands is considered minor since the wetland encroachments will occur in areas that were impacted previously as a result of the original road construction and the small acreages impacted. Typical vegetation observed in the forested communities includes laurel oak, red maple, water oak, sweetgum, sugarberry, bays, sabal palm, and live oak. The understory vegetation consists of elderberry, baccharis, smartweed, and Virginia creeper. The remaining impacts will be to isolated depressional wetlands and created water conveyance system (ditches, swales) adjacent to the facility. The typical plant assemblages include arrowhead, pickerelweed, cattail, primrose willow, bulrush, spikerush, pennywort, maidencane, and star rush. Table 1 quantifies the wetland impacts and is classified as emergent and forested. Table 2 quantifies the potential intersection improvement

impacts. Other Surface Waters, the proposed Stormwater Management Facilities (SMF), and the Floodplain Compensatory sites (FPC) are shown in Table 3.

Table 1 Wetland Impact Areas

	Classification			
Area Location	Emergent (PEM)	Riverine (R2UB)	Forested (PFO)	Total Acres
Park Road	0	0.07	0.02	0.09
Sam Allen Road	0.28	0.05	0.90	1.23

Table 2 Park Road / Sam Allen Road Intersection Impacts

	Classification	
Area Location	Riverine (R2UB)	Total Acres
Intersection Curve	0.05	0.05

 Table 3
 Surface Waters and Proposed Stormwater Facilities / Floodplain Compensation

	Classific		
Area Location	Open Water (PUB)	Emergent (PEM)	Total Acres
Surface Waters	0.17	0	0.17
SMF/FPC	0	0.5	0.5

6.2 Functional Analysis

The Wetland Rapid Assessment Procedure (WRAP) analyses were conducted to assess wetland functions and values for the representative wetlands within the study corridor utilizing Technical Publication REG-001. The final rating is expressed numerically with a number between 0 and 1, with 1 representing the highest quality wetland; 0 reflecting low quality.

Five WRAPs were performed on representative wetland types. The scores ranged from 0.43 to 0.75. The lowest score was received by a maintained county mitigation site near the corner of SR 39 and Sam Allen Road. The highest score was achieved by a fairly unaltered forested area contiguous to a large natural area. The WRAP data sheets are included in Appendix A.

6.3 Coordination with Permitting Agencies

Environmental permits or Authorization will be required from the following agencies:

- * U.S. Army Corps of Engineers (ACOE)
- * Southwest Florida Water Management District (SWFWMD)
- * Florida Department of Environmental Protection (FDEP)
- * Environmental Protection Commission of Hillsborough County (EPC)

6.4 Wetland Impact Mitigation

There are no practical alternatives to this construction in wetlands. All practicable measures will be used to reduce harm to wetlands. Short term construction related impacts will be minimized by the adherence to FDOT's "Standard Specifications for Road and Bridge Construction".

There are several options available for FDOT to compensate for the anticipated wetland impacts. FDOT may participate in a public or private mitigation bank provided wetland credits are available for use on this project during the permitting and final design phase. Another option would be to create, restore, enhance, or preserve wetlands in the project's watershed. Depending on the type or combination of types employed, the offsetting ratios will vary considerably. Adhering to SWFWMD's Environmental Resource Permitting Information Manual, mitigation ratio guidelines will be 2:1 to 5:1 (created/restored) for forested impacts and 1.5:1 to 4:1 for non-forested impacts. The estimated ratio for enhancement will range from 4:1 to 20:1 and the ratio for wetland

preservation will be in the range of 10:1 to 60:1.

Another option available to the FDOT District Seven would be to utilize Chapter 373.4137 of the Florida Statutes. This legislation allows the Department to offset wetland impacts with a monetary payment through the Department of Environmental Protection to the Southwest Florida Water Management District. The Water Management District will then provide a regional wetland mitigation plan on an annual basis to be approved by the Florida State Legislature, which will include mitigation for specific FDOT project impacts.

Depending on the funding sources and the entity which constructs the facility, the above options will be explored and utilized during the permitting negotiations.

7.0 FLOOD ZONES

In accordance with the Federal Emergency Management Agency Flood Insurance Rate Maps for Hillsborough County, the flood zone boundaries have been evaluated for impacts to floodplains. A clarification of the flood designations is below:

ZONE EXPLANATION

- A Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
- A1 A30 Areas of 100-year flood; base flood elevations and flood hazard factors determined.
- Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood.
- C Areas of minimal flooding.
- X Areas determined to be outside 500-year floodplain.

Portions of the study area are located within the Zone A floodplain limits as shown on the Federal Insurance Rate Maps (Panel Numbers 120112 0290 C, 120112 0290 D). The proposed improvements would impact the floodplain transversely on Sam Allen Road.

Project Area 1: Park Road, from I-4 north to Sam Allen Road lies within Zone C-Areas of minimal flooding (no shading).

Project Area 2: Sam Allen Road, from Maryland Avenue east to Wilder Road also lies within Zone C.

Project Area 3: Sam Allen Road, from Maryland Avenue west 1500' lies within Zone B – Areas between the limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)

Project Area 4: Sam Allen Road, from Project Area 3 west to SR 39 lies within A3 (Panel 0290 C) and AE (Panel 0270 D). Base flood elevations have been determined, ranging from 108 to 106 (flowing from south to north) within the project area. This flood plain is a part of East Canal, which is a tributary of Itchepackesassa Creek to the north.

Project Area 5: Sam Allen Road, from SR 39 west 4000' lies mostly in Zone X, Areas determined to be outside 500-year floodplain. The remainder, approximately 1400', lies within Zone A, Areas of 100-year flood; base flood elevations not determined.

The project will not support base floodplain development that is incompatible with existing floodplain management programs. It is anticipated that compensating storage ponds will be required to offset the floodplain encroachment impacts.

The proposed structures will perform hydraulically in a manner equal to or greater than existing structures and backwater surface elevations are not expected to increase. There will be no significant adverse impacts on the natural and beneficial floodplain values or any significant change in flood risks or damage. There will be no significant change in the potential for interruption or

termination of emergency service evacuation routes. Therefore, it has been determined that this encroachment is not significant.

8.0 WILDLIFE AND HABITAT

Suitable habitat for federally listed species was investigated for presence or absence by FDOT staff. The project corridor was mapped adhering to Florida Land Use, Cover and Forms Classification System (FDOT 1999). The aerials along with the classification legend are contained in Appendix B. Surveys were then conducted in each habitat type for species known to occur or utilize the classified habitats. These surveys were performed in March through August of 2003 and February through March of 2004. In addition, random surveys were performed along the corridor throughout the duration of the study to obtain data on resident and transient species.

8.1 Federally Listed Species

No federally threatened or endangered floral species were observed or are known to occur within the project corridor. The entire corridor was surveyed on numerous occasions, strongly indicating the absence of these species. Faunal species federally classified as threatened or endangered that are present or have the potential to be present include the bald eagle, wood stork, and eastern indigo snake. A list of potential threatened or endangered animal species in the Park Road / Sam Allen Road corridor is found in Table 4.

8.1.1 Bald Eagle

The bald eagle (<u>Haliaeetus leucocephalus</u>) is a threatened species with a preferred habitat that is primarily riparian, either associated with the coast or with lake and river shores, usually nesting along open bodies of water where they feed. No bald eagles or bald eagle nests were observed in

 Table 4
 Potential Threatened and Endangered Species

Birds			
Common Name Scientific Name		FFWCC	USFWS
Bald eagle	Haliaeetus leucocephalus	T	T
Burrowing owl	Speotyto cunicularia	SSC	
Florida sandhill crane	Grus canadensis pratensis	T	
Florida scrub jay	Aphelocoma coerulescens	T	T
Limpkin	Aramus guarauna	SSC	
Little blue heron	Egretta caerulea	SSC	
Red-cockaded woodpecker	Picoides borealis	T	Е
Southeastern American kestrel	Falco sparverius paulus	T	
Snowy egret	Egretta thula	SSC	
Tricolored heron	Egretta tricolor	SSC	
White ibis	Eudocimus albus	SSC	
Wood stork	Mycteria americana	Е	Е
Amphibians and Reptiles			
American alligator	Alligator mississippiensis	SSC	T (S/A)
Eastern indigo snake	Drymarchon corais couperi	T	T
Gopher frog	Rana capito	SSC	
Gopher tortoise	Gopherus polyphemus	SSC	
Short-tailed snake	Stilosoma extenuatum	T	
Mam			
Florida mouse	Podomys floridanus	SSC	
Sherman's fox squirrel	Sciurus niger shermani	SSC	

List of species having the potential to occur in the Park Road / Sam Allen Road corridor which are considered endangered (E), threatened (T), threatened/similarity of appearance [T(S/A)], or species of special concern (SSC), by the Florida Fish and Wildlife Conservation Commission (FFWCC) and/or the US Fish and Wildlife Service (USFWS).

the project corridor. The closest active nest (HL-28) is located roughly 3 miles north of the study corridor; east of SR 39, north of Knights Griffin Road.

The project is not expected to impact any existing foraging areas or any potential nesting trees in or adjacent to the corridor. Therefore, the proposed improvements are not anticipated to impact any foraging or nesting habitats of the bald eagle.

8.1.2 Wood Stork

The wood stork (<u>Mycteria americana</u>) is an endangered wading bird that utilizes freshwater and brackish wetlands. The wood stork primarily nests in cypress or mangrove swamps and forages in freshwater marshes, flooded pastures, and roadside ditches. The study area includes potential foraging areas. Wood storks have not been observed foraging in the project corridor, however there are suitable foraging areas along the corridor. No nesting areas will be impacted by the proposed improvements.

In Hillsborough County, the nearest documented wood stork rookery (# 611163) is roughly 13 miles west/northwest of the corridor along the Hillsborough River. The proposed improvements are not anticipated to reduce the available foraging or nesting habitats for this species after the wetland permitting and mitigation processes have been completed. All impacts to non-forested wetlands will be mitigated within the Core Foraging Area (CFA) of the above noted rookery. Therefore, this project is not expected to impact the wood stork, reduce the wood stork population level in the region, or reduce their foraging or nesting habitats.

8.1.3 Eastern Indigo Snake

The eastern indigo snake (<u>Drymarchon corais couperi</u>) is a threatened species that occurs throughout peninsular Florida. This species is actually characteristic of moist habitats, but inhabits sandy xeric habitats in conjunction with gopher tortoises (<u>Gopherus polyphemus</u>). In the drier habitats, the eastern indigo snake will occupy gopher tortoise burrows. The preferred habitats include pine flatwoods, xeric oak stands, palmetto scrub, and tropical hammocks.

No eastern indigo snakes were observed within the study area during any of the field surveys. The

prevalence of potential habitat within the corridor could potentially involve the eastern indigo snake. However, to minimize any impacts to individual eastern indigo snakes during construction, the following special provision will be included in the construction contract to advise the contractor of the potential presence of this species and its protected status:

- * If an eastern indigo snake is sighted during construction, the contractor will be required to cease all operation(s) which might cause harm to the snake.
- * If the snake does not move away from the construction area, a state or federal biologist will be contacted to capture and relocate the snake to suitable habitat either adjacent to the project area or off-site to an acceptable donor site.
- * If an eastern indigo snake is killed or found dead within the construction area, the snake should be frozen and the USFWS Jacksonville Field Office [(904) 232-2580] via the FDOT Modal Planning and Development office will be notified immediately at (813) 975-6457.
- * In addition, educational signs with pictures shall be posted throughout the project prior to initiation of construction.

Due to the condition of the surrounding area, the abundance of habitat in the project area, and the special provisions to protect transient individuals encountered during construction, the proposed project is not anticipated to affect the eastern indigo snake.

8.1.4 Florida Scrub Jay and Red-Cockaded Woodpecker

The proposed project does not impact any native oak scrub, scrubby flatwoods, or mature pine communities. During field reconnaissance, all mature pine trees were surveyed for cavities. No red-cockaded woodpecker (<u>Picoides borealis</u>) cavities were observed in the corridor. Neither species have a historical record of occupying this area. Therefore, the proposed improvements will not impact the Florida scrub jay (<u>Aphelocoma coerulescens</u>) or the red-cockaded woodpecker.

8.2 State Listed Species

Several state protected species have historic ranges or have the potential to be present in the corridor. The surveys conducted targeted the Sherman's fox squirrel, southeastern American kestrel, gopher tortoise, and burrowing owl.

8.2.1 Sherman's Fox Squirrel

Sherman's fox squirrels (<u>Sciurus niger shermani</u>) are known to occur in the project corridor. Fox squirrels have been observed northwest of the project area in the Hillsborough State Park and on portions of Two Rivers Ranch north of the proposed project. No fox squirrels were observed in the study corridor during any of the field reviews.

8.2.2 Southeastern American Kestrel

Southeastern American kestrel (<u>Falco sparverius paulus</u>) surveys were conducted along the project corridor. All snags within and adjacent to the right-of-way were surveyed for nesting cavities. No kestrel cavities or individuals were observed during the field surveys.

8.2.3 Gopher Tortoise

Gopher tortoises (<u>Gopherus polyphemus</u>) occur in well-drained to excessively drained sandy soils with an open canopy that provides ample herbaceous vegetation for foraging. The project corridor contains suitable conditions for this species to thrive. However, gopher tortoises or their burrows were not observed in the study area. Additional surveys will be conducted prior to the initiation of the construction phase to ensure that the species is not adversely impacted by the proposed project.

8.2.4 Burrowing Owl

The burrowing owl (Speotyto cunicularia) occupies similar habitats as the gopher tortoise often nesting in vacant lots in rapidly developing suburban areas. Suitable areas occur through out the corridor however no owl burrows were observed during the field surveys.

9.0 FEDERAL SPECIES INVOLVEMENT SUMMARY

The project has been evaluated for impacts on federally protected threatened and endangered species. A literature review was conducted to determine those possible threatened or endangered species which may inhabit the project area.

Based on the above results of the literature review and the field surveys conducted for the proposed roadway improvements, the Department has determined that no federally listed threatened or endangered species will be affected by the project. Furthermore, the proposed project is not located in an area designated as critical habitat by the U.S. Department of the Interior. Therefore, the Florida Department of Transportation on behalf of the Federal Highway Administration has determined that the proposed project will have "No Effect" on any federally protected threatened or endangered species.

The U.S. Fish and Wildlife Service concurred with this determination on January 11, 2005.

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Observed Wetland Plant List

Tr	rees
Common Name	Scientific Name
Black gum	Nyssa sylvatica
Cabbage palm	Sabal palmetto
Carolina Willow	Salix caroliniana
Laurel oak	Quercus laurifolia
Live oak	Quercus virginiana
Red maple	Acer rubrum
Sugarberry	Celtis laevigata
Swamp Bay	Persea palustris
Sweet bay	Magnolia virginiana
Sweetgum	Liquidambar styraciflua
Water oak	Quercus nigra
Sh	rubs
Common Name	Scientific Name
Carolina willow	Salix caroliniana
Elderberry	Sambucus canadensis
Groundsel tree	Baccharis halimifolia
Sparkleberry	Vaccinium spp.
Wax myrtle	Myrica cerifera
Emerge	nt Plants
Common Name	Scientific Name
Alligator weed	Alternanthera philoxeroides
Arrowhead	Sagittaria lancifolia
Cattail	Typha latifolia
Climbing hemp	Mikania scandens
Coinwort	Centella asiatica
Mexican seedbox	Ludwigia octovalis
Pennywort	Hydrocotyle spp.
Pepper vine	Ampelopsis arborea
Poison ivy	Toxicodendron radicans
Primrose willow	Ludwigia peruviana
Sedge	Carex sp.
Smartweed	Polygonum spp.
Soft bulrush	Juncus effusus
Soft-stem bulrush	Scirpus validus
Spikerush	Eleocharis sp.
Star rush	Rhynchospora colorata
Aquatic Bed/F	loating Vascular
Common Name	Scientific Name
Duckweed	Lemna sp.
Mosquito fern	Eichhornia crassipes
Water Hyacinth	Azolla caroliniana

USFWS Wetland Classification

Wetland Number 1	PFO1C
Wetland Number 1	PEM1F
Wetland Number 2	PFO1Ax
Wetland Number 3	R2UBHx
Wetland Number 4	PFO1A
Wetland Number 5	PFO1C
Wetland Number 6	R2UBHx
Wetland Number 7	PFO1/3C
Wetland Number 8	PFO3/1C
Wetland Number 9	R2UBHx
Wetland Number 10	R2UBHx
Wetland Number 11	R2UBHx

Classification of Wetlands and Deepwater Habitats of the United States (Legend)

SYSTEM								P – PALUS	Τŀ	RINE						
CLASS	R B	ROCK BOTTOM	U B	UNCONSOLID ATED BOTTOM	A B	AQUATIC BED	U S		M L	MOSS- LICHEN		EMERGEN T	S		F O	FORESTED
Subclass	1	Bedrock	1	Cobble Gravel	1	Algal	1	Cobble Gravel	1	Moss	1	Persistent		Broad Leaved Deciduous	1	Broad Leaved Deciduous
	2	Rubble	2	Sand	2	Aquatic Moss	2	Sand	2	Lichen		Non- persistent		Needle Leaved Deciduous	2	Needle Leaved Deciduous
			3	Mud	3	Rooted Vascular	3	Mud						Broad Leaved Evergreen	3	Broad Leaved Evergreen
			4	Organic	4	Floating Vascular	4	Organic						Needle Leaved Evergreen	4	Needle Leaved Evergreen
					5	Unknown Submergent	5	Vegetated					5	Dead	5	Dead
					6	Unknown Surface							6	Deciduous	6	Deciduous
													7	Evergreen	7	Evergreen

System			R - Rive	erine		
Subsystem	1 Tidal	2 Lower Perennial	3 Perennial	Upper	4 Intermittent	5 Unknown Perennial

	WETLAND LEGEND						
	WATER REGIME		SPECIAL MODIFIERS				
Α	Temporarily Flooded	h	Diked/Impounded				
В	Saturated	X	Excavated				
С	Seasonally Flooded						
F	Semipermanently Flooded						
Н	Permanently Flooded						

Florida Land Use, Cover and Forms Classification System (Legend)

CLASS	DEFINITIONS
110	Residential, Low Density
111	Fixed Single Family Units
112	Mobile Home Units
141	Retail Sales and Services
142	Wholesale sales and Services
148	Cemeteries
172	Religious
182	Golf Courses
186	Community Recreational Facilities
211	Improved Pasture
212	Unimproved Pasture
214	Row Crops
221	Citrus Groves
240	Nurseries and Vineyards
320	Shrub and Brushland
425	Temperate Hardwoods
427	Live Oak
510	Streams and Waterways
524	Lakes less than 10 acres (4 hectares)
531	Reservoirs larger than 500 acres (202 hectares)
534	Reservoirs less than 10 acres (4 hectares)
610	Wetland Hardwood Forests
617	Mixed Wetland Hardwoods
641	Freshwater Marshes
814	Roads and Highways

e plan	Project Number Project Description	Date	Evaluator	Wetland Type
	WPI Seg. No. Park Road / Sam 3 257862 1 Allen Road	/19/2003	Todd Mecklenborg	641
	Land Use Wildlife Utilization,	700 m	Welland Caropy (O/S)	WL Gmdever (GC)
	Mowed Field 1		NA	2
	Häbitat Support/Buffer J	rield Hydrology (HYD)	. WO lin	put & Tromb(WQ)
144	1 : 1	2		0.5
		WRAP Score . 0.43		
		Comments		
	WU - County Mitigation/Restoration Site			
	O/S -			
	GC -			T T
	BUFFER – road on two sides Agriculture field / lawn on others			-
	HYD –			
	· .	·		
4 -4.54	WQ – <u>land use</u> 50% road (1) 25% row crop(1) 25% improved pasture	<u>pre-treatme</u>	<u>nt</u> no treatment	

WPI Seg. No. 257862 1	Park Road / Sam Allen Road	3/19/2003	Todd Mecklenborg	5	610
Landfüse Mowed Field	#Wildlife Tutil	ization (WU) : 1	Wedand Canopy (O/S)	7.5	lover ((GC) 2
Eabitaty	Support/Buffer:	Field Hydrology (L	IVD)	Input & Tutunt (WQ 0.5	
		WRAP Score 0.47			
WU – County Mit	igation/Restoration Site				
O/S -					
GC –					
BUFFER – road Agric	on two sides culture field / lawn on ot	hers			
HYD -					
WQ - land use	50% road (1) 25% row crop(1) 25% improved pastui		atment no treatment		

Project Number Project Description Date Evaluator Wetland Wetland Sam Allen Road Sam S	Туре
Tand Use Upland Forest 2 2 2 2 Habitat Support/Buffer Micial Hydiology (HYD) Wy Input & Triting (WQ) 2 2 5 WEART Score 0.58 WU – large area, plenty of cover, minimum disturbance	19.рс
Upland Forest 2 2 2 2 Frature Support/Burier Field Hydrology (HYD) 2 2 2 5 WEAR' Score 0.58 WU – large area, plenty of cover, minimum disturbance	Mr. J
Habilat Support/Buffer [Field Hydrology (HYD)] WQ-liput & Trimit (WQ) 2 2 2 2.5 WEAR-Score 0.58 WU – large area, plenty of cover, minimum disturbance	
WRAP Score 0.58 Comments: WU – large area, plenty of cover, minimum disturbance	
WRAP Score 0.58 Comments: WU – large area, plenty of cover, minimum disturbance	
Comments WWW.AP Score 0.58 WU – large area, plenty of cover, minimum disturbance	
Comments WU – large area, plenty of cover, minimum disturbance	
Comments WU – large area, plenty of cover, minimum disturbance	
WU – large area, plenty of cover, minimum disturbance	
WU – large area, plenty of cover, minimum disturbance	
O/S – healthy stand, good canopy	
O/S – healthy stand, good canopy	
(表达) (2) [2] [2] [2] [2] [2] [2] [2] [2] [2] [2]	
GC —	
PULTED Discount II	
BUFFER – nice surrounding upland forest	
HYD	
	ļ
WQ – <u>land use</u> 25% road (1) <u>pre-treatment</u> 25% swale/ditch (1) 75% natural (3) 75% natural (3)	
75% natural (3) 75% natural (3)	
	:

Project Number	Project Description	.Date	Evaluator		Wetland Type
WPI Seg. No. 257862 1	Park Road / Sam Allen Road	3/19/2003	Todd Mecklenbor	g	534
LandUse		izahon (WU)	- Welland Canopy (O/S)		ndcver (GC)
Maintained Gras	s 1.	.5	NA) - 1 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1.5
			a 18. Francisco de 18. de		
Habitat S	uppont/Buffer 1	Field Hydrology (HYI 2	W	O Input & Transt (W 2	9)
	And the second s		n trans transport to the control of	properties and the second seco	
		WRAP Score 0.53			
		Comments			
WU –					
O/S -					
GC –					
GC –					
BUFFER -					
HYD –					
WQ - land use	Golf course (1.5) Residential (1.5) Road (1)	pre-treat	ment part of trea	atment (1.5)	

Project Number WPI Seg. No. 257862 1	Project Description Park Road / Sam Allen Road	Date 3/19/2003	Evaluator Todd Mecklenborg	Wetland 510
Land Use Forest	N AND WAR	ization (WP))	Wetland Canopy (O/S) 2	WL Gradever ((GC)
Habitat S	Support/Buffer 3	Field Hydrology (HY	D) we have the property of the	ut & Trumut (WQ)
		2		2.5
		WRAP Score		
		0.75		
		Comment		
WU				
O/S				
GC –				
BUFFER -			·	
HYD –				·
11. ₽ '				
VQ – <u>land use</u>	natural area / ditc	hed (2.5) <u>pre-tr</u>	eatment fairly natu	ral (2.5)

