

6. IMPACT EVALUATION

Topical Categories	S i g n	M i n	N o n	N o n e v	REMARKS
A. SOCIAL IMPACTS					
1. Land Use Changes	[]	[]	[x]	[]	<u>See Attachment A</u>
2. Community Cohesion	[]	[]	[x]	[]	<u>See Attachment A</u>
3. Relocation Potential	[]	[x]	[]	[]	<u>See Attachment A</u>
4. Community Services	[]	[]	[x]	[]	<u>See Attachment A</u>
5. Title VI Considerations	[]	[]	[x]	[]	<u>See Attachment A</u>
6. Controversy Potential	[]	[]	[x]	[]	<u>See Attachment A</u>
7. Utilities and Railroads	[]	[x]	[]	[]	<u>See Attachment A</u>
B. CULTURAL IMPACTS					
1. Section 4(f) Lands	[]	[]	[x]	[]	<u>See Attachment A</u>
2. Historic Sites / District	[]	[]	[x]	[]	<u>SHPO concurrence letter dated 6-4-02</u>
3. Archaeological Sites	[]	[]	[x]	[]	<u>See Attachment A</u>
4. Recreation Areas	[]	[]	[x]	[]	<u>See Attachment A</u>
C. NATURAL ENVIRONMENT					
1. Wetlands	[]	[x]	[]	[]	<u>See Attachment A</u>
2. Aquatic Preserves	[]	[]	[]	[x]	
3. Water Quality	[]	[]	[x]	[]	<u>WQIE dated 5-21-2003</u>
4. Outstanding Florida Waters	[]	[x]	[]	[]	<u>See Attachment A</u>
5. Wild and Scenic Rivers	[]	[]	[]	[x]	
6. Floodplains	[]	[x]	[]	[]	<u>See Attachment A</u>
7. Coastal Zone Consistency	[]	[]	[x]	[]	<u>See Attachment A</u>
8. Coastal Barrier Islands	[]	[]	[]	[x]	
9. Wildlife and Habitat	[]	[x]	[]	[]	<u>USFWS concurrence letter dated 10-16-03</u>
10. Farmlands	[]	[]	[]	[x]	
D. PHYSICAL IMPACTS					
1. Noise	[]	[x]	[]	[]	<u>See Attachment A</u>
2. Air	[]	[]	[x]	[]	<u>See Attachment A</u>
3. Construction	[]	[x]	[]	[]	<u>See Attachment A</u>
4. Contamination	[]	[x]	[]	[]	<u>See Attachment A</u>
5. Navigation	[]	[]	[]	[x]	
a. [X]	Federal Highway Administration (FHWA) has determined that a Coast Guard permit IS NOT required in accordance with 23 CFR 650, Subpart H.				
b. []	FHWA has determined that a Coast Guard permit IS required in accordance with 23 CFR 650, Subpart H.				
E. PERMITS REQUIRED					

Southwest Florida Water Management District (SWFWMD)
 United States Army Corps of Engineers (USACE)
 Florida Department of Environmental Protection (FDEP)

7. WETLANDS FINDING

Based upon the considerations noted herein, it is determined that there is no practicable alternative to the proposed construction in wetlands and that the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use.

8. COMMITMENTS AND RECOMMENDATIONS

The Florida Department of Transportation (FDOT) is committed to the following measures:

1. As a result of coordination during the PD&E Study, the FDOT has committed to coordinate with the Citrus County School Transportation Department during this project's design and construction phases in order to allow the schools to adjust any bus routes or stops to minimize their delay during construction.
2. To assure the protection of the Eastern indigo snake during construction, the FDOT will incorporate the "Construction Precautions for the Eastern Indigo Snake" guidelines into the final project design and will require that the construction contractor abide strictly to the guidelines during construction. The guidelines include the following:
 - A. To minimize impacts to individual Eastern indigo snakes encountered during construction, a special provision will be included in the construction contract to advise the contractor of the potential presence of this species and its protected status:
 - (1) If an Eastern indigo snake is sighted during construction, the contractor will be required to cease all operation(s) which may cause harm to the snake;
 - (2) If the snake does not move away from the construction area, the contractor will contact a state or federal biologist to capture and relocate the snake to suitable habitat, either adjacent to the project corridor or off site to an acceptable donor site;
 - (3) If an Eastern indigo snake is killed or found dead within the construction area, the snake should be frozen and the Jacksonville United States Fish and Wildlife Service (USFWS) Field Office, (904) 232-2580, via the FDOT Modal Planning and Development Office, will be notified immediately at (813) 975-6457; and
 - (4) In addition, educational signs with pictures shall be posted throughout the project prior to initiation of construction.
3. Any impacted wetland supporting hydrology appropriate for forage during the nesting period, which also occurs within a wood stork Core Foraging Area (CFA), shall be mitigated for within that CFA. Since this effort is directed by a recent change to USFWS policy, the FDOT commits to coordinating with the USFWS to assure all mitigation measures are followed accordingly.
4. To guard against any potential manatee attempts to cross under US 19 at the Bicentennial Park drainage culvert, the FDOT will require the construction contractor to implement manatee construction precaution guidelines in this area.

Suitable habitat for the manatee is located within the limits of this project and the Water Management District permit contains specific conditions in regard to manatee protection. The contractor will be held responsible for any manatees harmed, harassed, or killed as a result of project construction.

Take the following precautions to protect the manatee:

- (1) Advise construction personnel of the manatees, of its endangered status, and of the need to any actions that would jeopardize the existence of manatees.
- (2) Advise all work crews that there are civil and criminal penalties for harming, harassing, or killing manatees.
- (3) Instruct appropriate work shift personnel in the appearance, habits, biology, migratory patterns, and preservation of the manatee. At least one of these trained personnel shall be on-site during construction activities to maintain a constant surveillance for manatees, assure the cessation of activities (such as dredging, excessive turbidity, and construction barge activity) that may endanger manatees, and assure that uninhibited passage for the animal is provided. Instruct all work crews associated with the project of manatees and the need to avoid collisions with manatees.
- (4) Post signs in the waterway to safeguard manatees in the project area. Specific warning sign and design placement is a condition of the Water Management District.

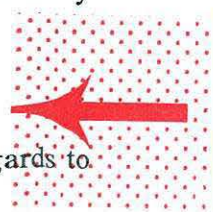
The contractor shall abide by the following permit conditions:

- (1) Reporting of manatee activity is required:
 - Post the Manatee Hotline Number (1-800-342-5367) at on-site telephones to be used for information or help in dealing with manatee problems. Telephone reports must be made immediately to the Florida Marine Patrol (Manatee Hotline Number) and the USFWS (Vero Beach – South Florida Field Office: 561-562-3909) in the event of any injury, collision with, or killing of manatees.
 - Keep a log detailing sightings, collisions or other contact with manatees as events occur during construction. When work is completed, forward this data to FDEP, Marine Research Institute, Office of Protected Species Research, 100 Eighth Avenue, SE, St. Petersburg, FL 33701-5095; and the USFWS, 6620 South Point Drive, South, Suite 310, Jacksonville, FL 32216-0758 Attn: Bob Turner.
- (2) Operate all vessels associated with the project at “no wake/idle” speed at all times.
- (3) Cease all construction activity in open water when a manatee is sighted within 300 feet (ft) of the project area. Construction may not resume until the manatee has departed the area.
- (4) No construction debris shall be disposed of into the water.

Recommendations

To minimize the impacts of this project on local residents and business owners, and optimize the effectiveness of the improvements, the following recommendations were made during the PD&E Study process:

1. Conventional lighting should be evaluated in Segment 1 for feasibility during the design phase.
2. During the design phase, coordination should be on going with local governments with regards to landscape opportunities along the project corridor.
3. During the design phase, coordination should continue with the City of Crystal River regarding bicycle accommodations within the city limits. No provisions for bicyclists were developed for the Recommended Alternative in Segment 5 due to significant right-of-way (ROW) impacts that would result. However, alternative bike routes can be accommodated with minor upgrades to existing side streets, incorporating the proposed pedestrian overpass at the Crystal River bike path.



ATTACHMENT 1 - PROJECT DESCRIPTION

- A. Existing Conditions:** The PD&E Study limits encompass the portion of US 19 from south of US 98 to North Dunnellon Road (CR 488) in western Citrus County (Sections 1, 12, 13, 24, and 25 of Township 20 South, Range 17 East; Sections 3, 10, 15, 22, 26, 27, 34, and 35 of Township 19 South, Range 17 East; Sections 5, 6, 8, 17, 20, 21, 22, 27, 28, and 34 of Township 18 South, Range 17 East; Sections 30 and 31 of Township 17 South, Range 17 East; and Section 25 of Township 17 South, Range 16 East). The total length of the Study is approximately 18.8 mi. US 19 is primarily a north/south rural principal arterial which follows the West Coast of Florida. Within the project limits, US 19 is part of the National Highway System (NHS) and the Florida Intrastate Highway System (FIHS). The facility serves as a major evacuation route for residents in Citrus County.
- B. Recommended Improvements:** For the purposes of evaluating improvement alternatives, the project was divided into six segments based on the existing and future land use, projected traffic volumes for the design year 2025, existing typical sections and available existing ROW. The project segments are as follows:

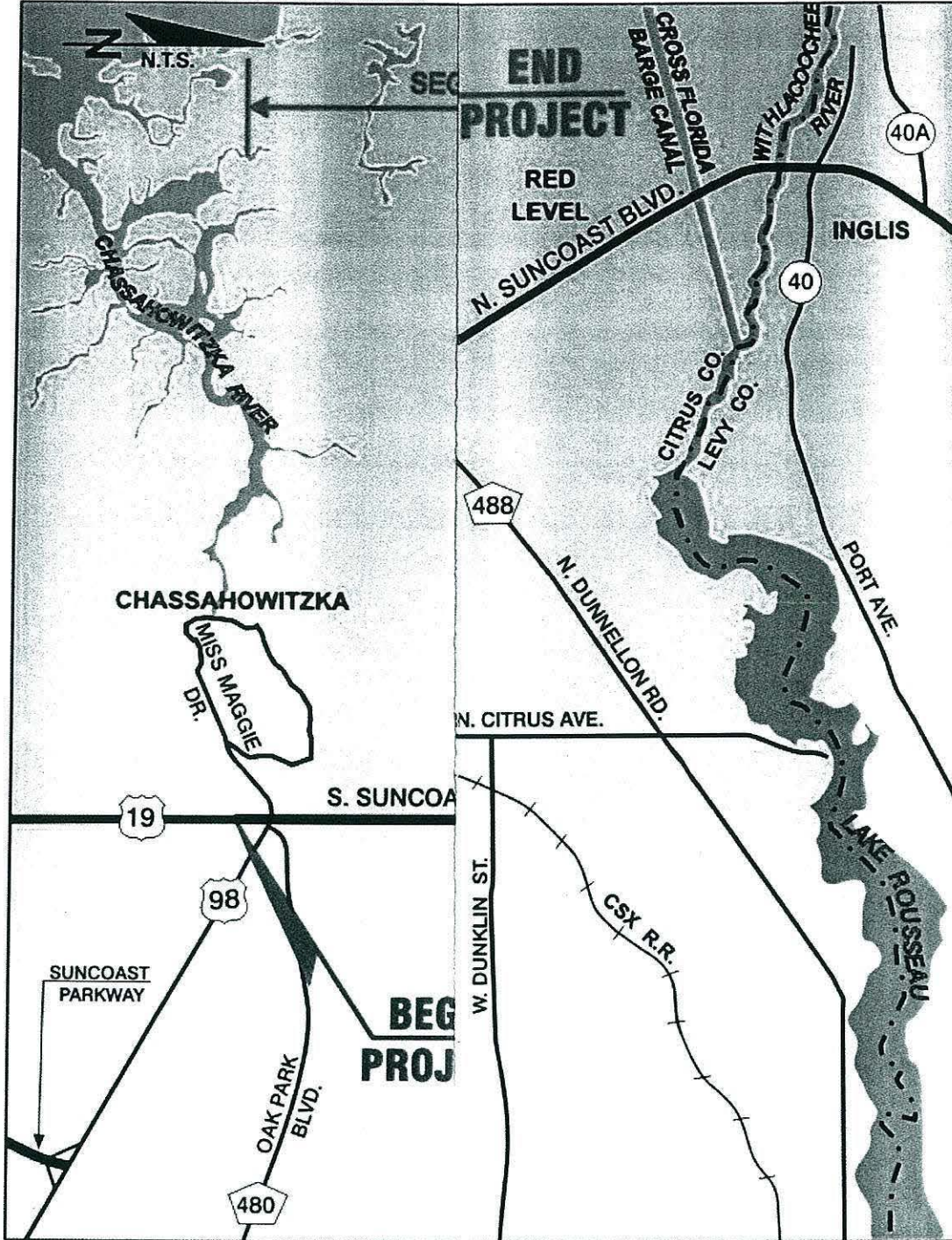
Segment 1: South of US 98 to West Green Acres Street; 4.86 mi
Segment 2: West Green Acres Street to West Jump Court; 2.07 mi
Segment 3: West Jump Court to West Fort Island Trail (CR 44); 4.65 mi
Segment 4: West Fort Island Trail (CR 44) to NE 1st Terrace; 0.86 mi
Segment 5: NE 1st Terrace to Turkey Oak Drive; 2.05 mi
Segment 6: Turkey Oak Drive to North Dunnellon Road (CR 488); 4.31 mi

Segment 1: The Recommended Alternative in Segment 1 widens the existing 4-lane rural roadway to a 6-lane divided rural roadway (Figure 2) with 12-ft travel lanes and 5-ft paved shoulders. A 12-ft multi-use path and 5-ft sidewalk are provided along the existing western and eastern ROW lines, respectively. Additional features include guardrail in the median and a pedestrian overpass over US 19 just south of US 98. The proposed design speed is 70 miles per hour (mph). With the exception of stormwater management facilities (SMF), the improvements fit within existing ROW.

Segment 2: The Recommended Alternative in Segment 2 includes two urban typical sections, as shown in Figures 3 and 4. The proposed roadway includes three travel lanes, which vary in width from 11-ft to 12-ft, and a 4-ft bicycle lane in each direction. The raised median varies in width from 20-ft to 30-ft. Sidewalks, 5-ft in width are included in each direction; however, a 12-ft multi-use path is included on the west side south of West Yulee Drive. A best-fit alignment was selected to allow the improvements to fit within the existing ROW, with the exception of SMF, corner clips, and turn lanes. The proposed design speed is 50 mph.

Segment 3: The Recommended Alternative for Segment 3 is a 6-lane divided urban roadway with a 30-ft raised median on a centered alignment (Figure 4). This typical section contains three 12-ft travel lanes, a 4-ft bicycle lane, and 5-ft sidewalks in each direction. With the exception of SMF, the improvements fit within existing ROW. The proposed design speed is 50 mph.

Segment 4: The Recommended Alternative for Segment 4 consists of reconstructing the existing two-way, left-turn lane to a 17-ft raised median (Figure 5). This alternative also includes milling and resurfacing of the existing roadway to allow for three 12-ft travel lanes in each direction. A multi-use path, 12 ft in width, is proposed in each direction to accommodate pedestrians and bicyclists. At SE Kings Bay Drive, bicyclists using the multi-use path on the east side of US 19 will cross over to the west side. The multi-use path on the west side of US 19 will continue to NE 1st Terrace since



**US 19 (SR 55)
PD&E STUDY**

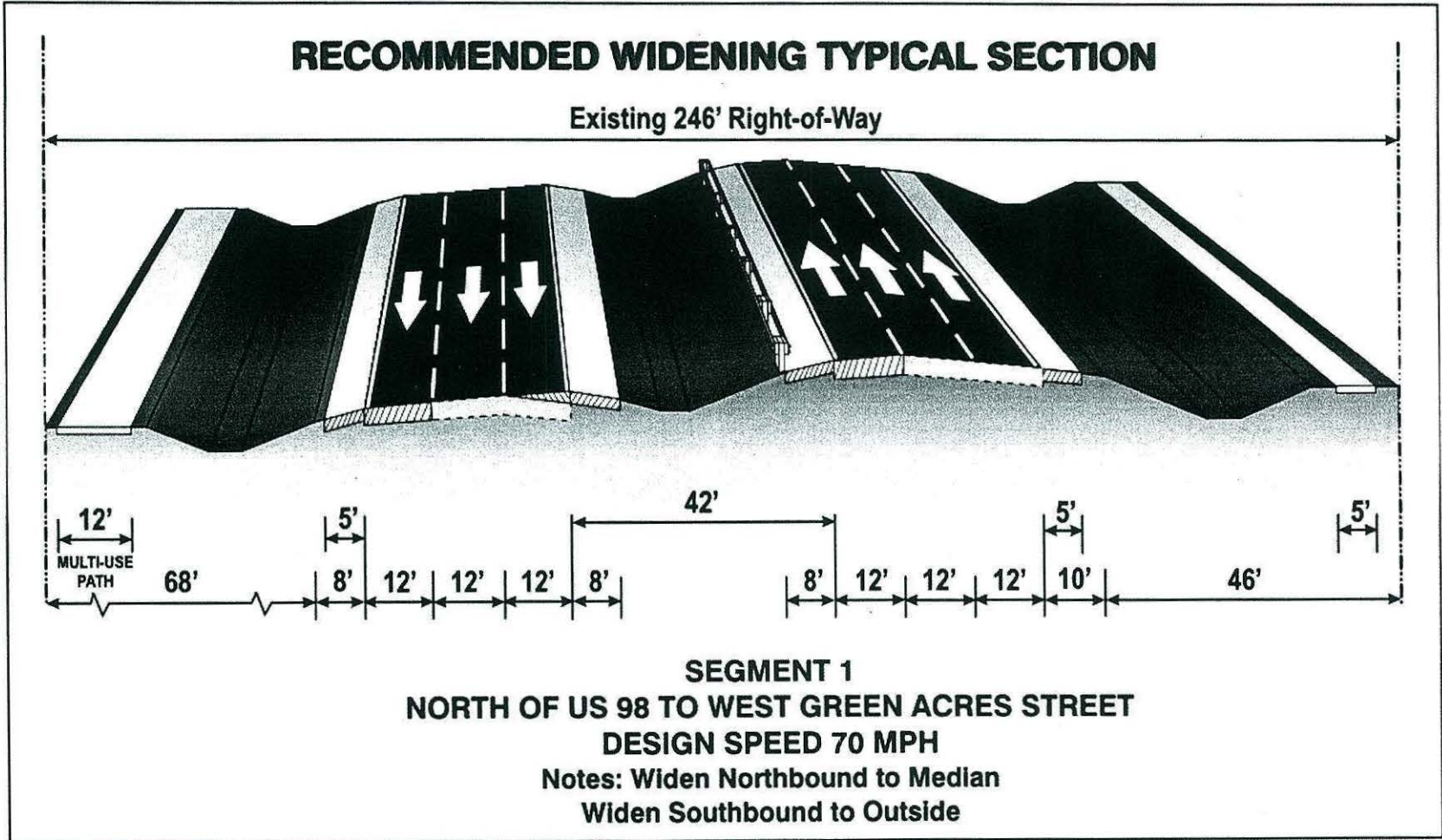
1.5 m South of US 98 to CR 488
Citrus County, Florida

PROJECT LOCATION MAP

EG NO: 405822 1
1852 007 P



FIGURE 1



LEGEND

- Proposed Widening
- Asphalt Overbuild
- Existing Pavement



US 19 (SR 55)

PD&E STUDY

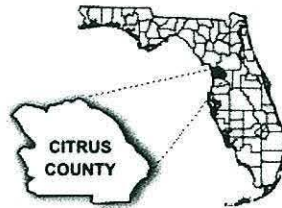
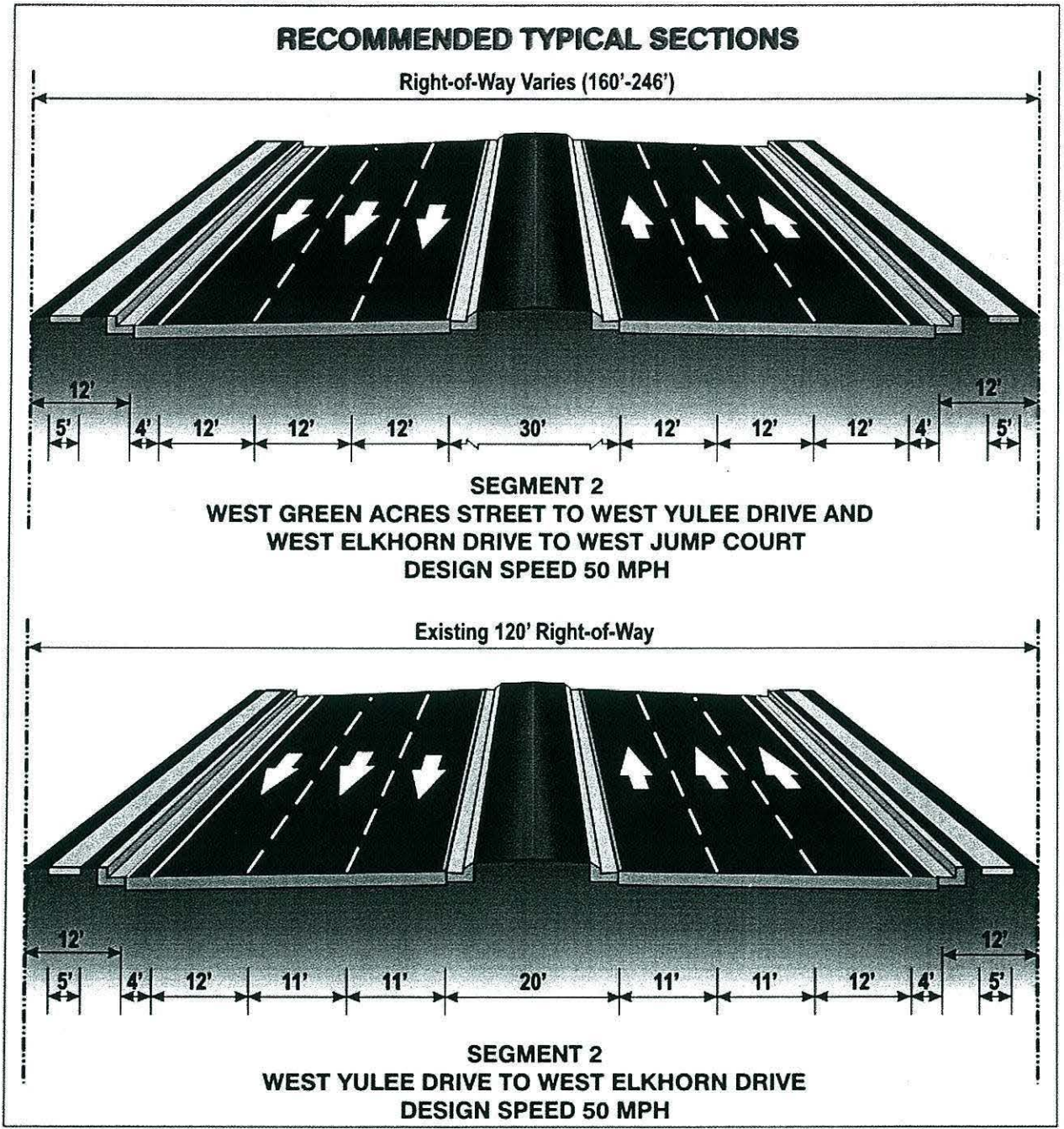
From South of US 98 to CR 488
 Citrus County, Florida



RECOMMENDED WIDENING TYPICAL SECTION

WPI SEG NO: 405822.1
 FAP: 1852.007 P

FIGURE 2



US 19 (SR 55) PD&E STUDY

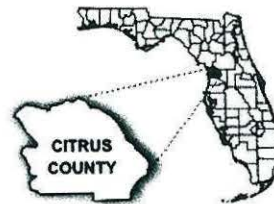
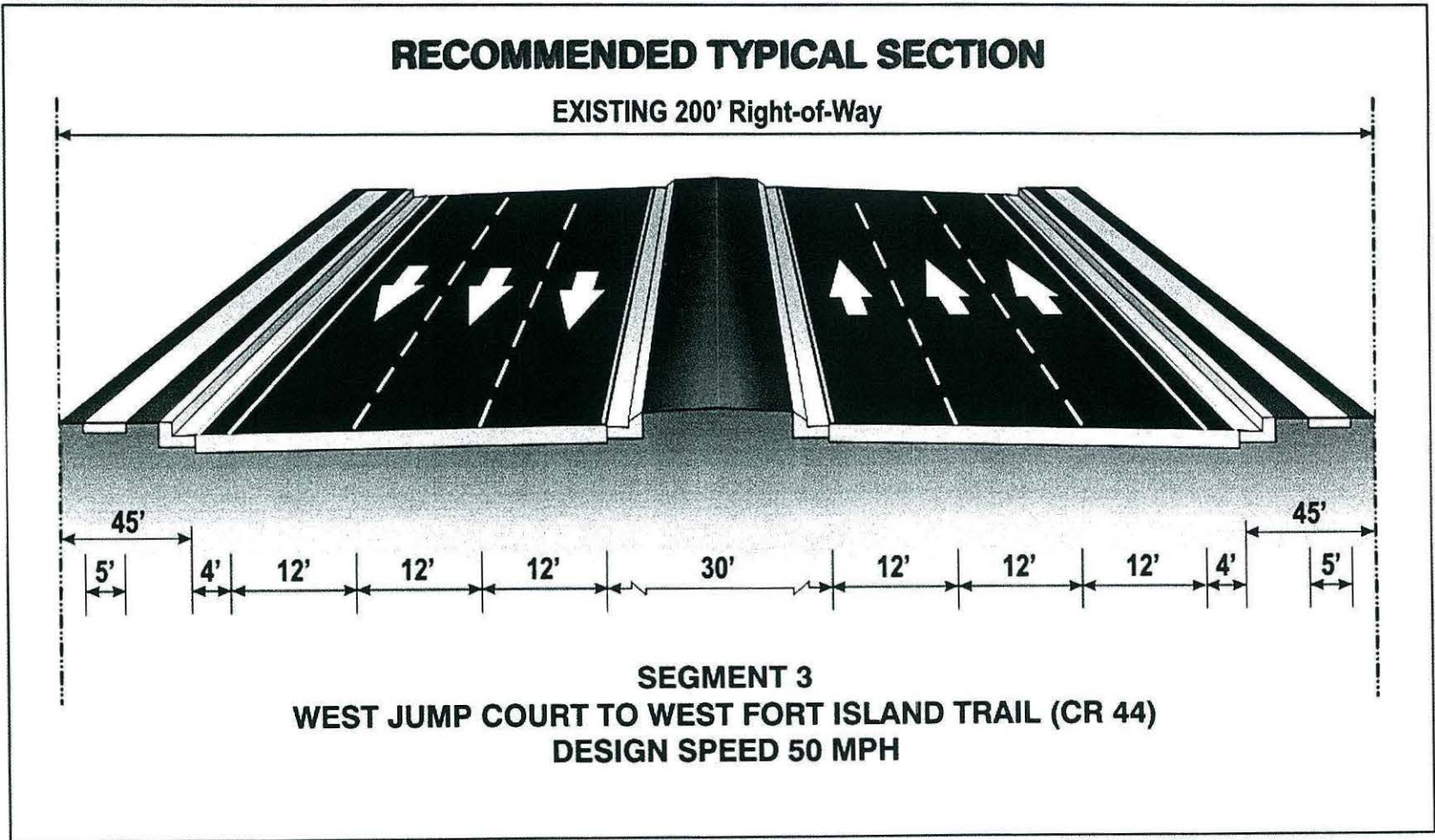
From South of US 98 to CR 488
Citrus County, Florida



RECOMMENDED TYPICAL SECTION

WPI SEG NO: 405822.1
FAP: 1852.007.P

FIGURE 3



US 19 (SR 55)
PD&E STUDY

From South of US 98 to CR 488
Citrus County, Florida

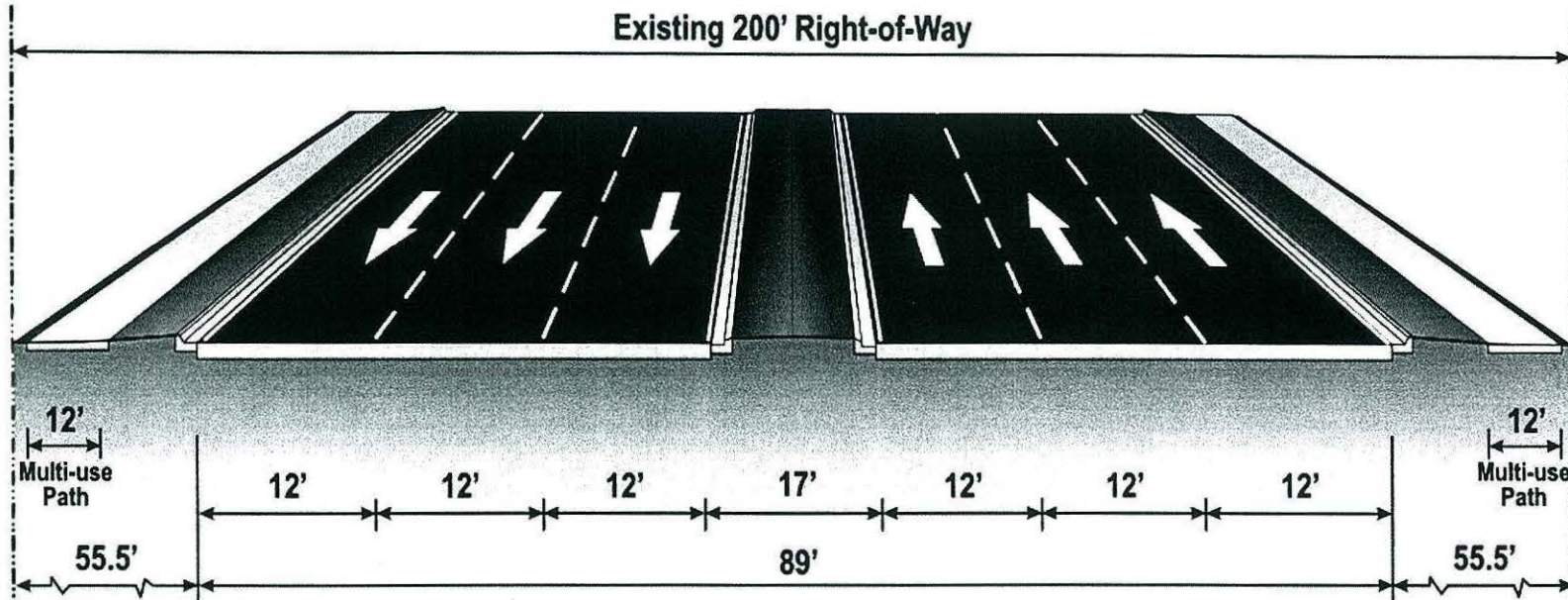


RECOMMENDED TYPICAL SECTION

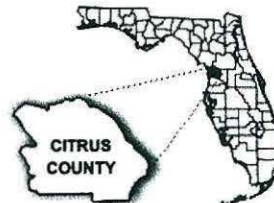
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FAP: 1852 007 P

FIGURE 4

RECOMMENDED TYPICAL SECTION



SEGMENT 4
WEST FORT ISLAND TRAIL (CR 44) TO NE 1ST TERRACE
DESIGN SPEED 40 MPH



US 19 (SR 55)
PD&E STUDY

From South of US 98 to CR 488
Citrus County, Florida



RECOMMENDED TYPICAL SECTION

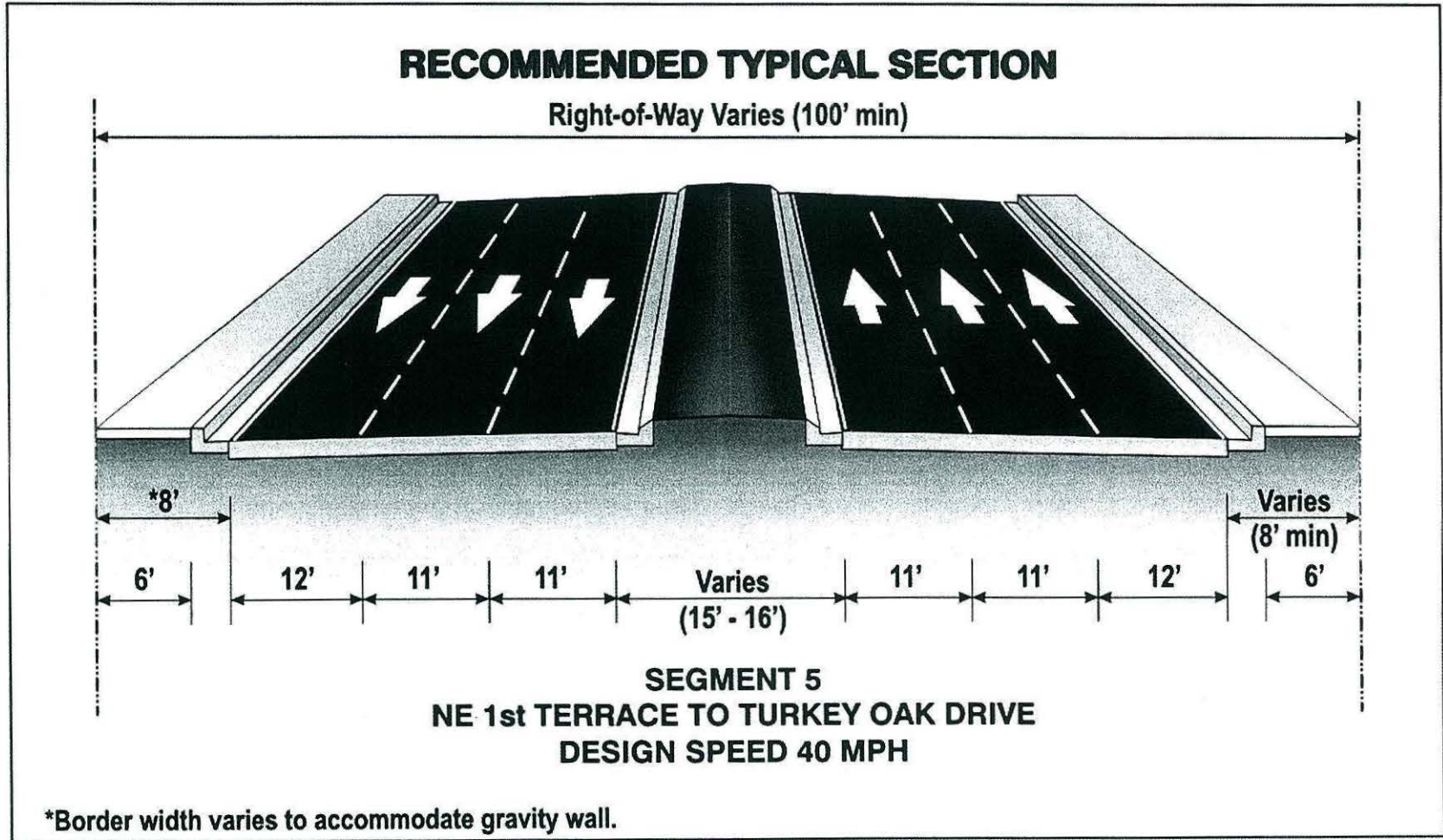
WPI SEG NO: 405822 1
FAP: 1852 007 P

FIGURE 5

it can be accommodated within the existing ROW. The proposed improvements fit within existing ROW. The proposed design speed is 40 mph.

Segment 5: The Recommended Alternative for Segment 5 is a 6-lane divided urban roadway with a 16-ft raised median from NE 1st Terrace to Turkey Oak Drive, which utilizes a best-fit alignment, as shown in Figure 6. The median width may be reduced to 15 ft to accommodate a gravity wall where needed. This typical section contains two 11-ft travel lanes and one 12-ft outside travel lane, as well as 6-ft sidewalks in each direction. No provisions for bicyclists were developed in this segment due to significant ROW impacts that would result. The proposed design speed is 40 mph. Additional ROW will be required for roadway improvements for a portion of this segment, as well as SMF.

Segment 6: The Recommended Alternative for Segment 6 consists of Transportation System Management (TSM) improvements. The improvements include turn lane improvements at the North Dunnellon Road (CR 488) intersection, including adding a signal, if warranted. Signal upgrades are also proposed at Seven Rivers Community Hospital and West Powerline Street.



US 19 (SR 55) PD&E STUDY

From South of US 98 to CR 488
Citrus County, Florida



RECOMMENDED TYPICAL SECTION

WPI SEG NO: 405822 1
FAP: 1852 007 P

FIGURE 6

ATTACHMENT A – SOCIAL IMPACTS

A-1. Land Use Changes

The existing land uses adjacent to the US 19 corridor consist of residential, commercial, public/semi-public (including community facilities), conservation, and open areas containing upland forests and wetlands in both rural and urban settings. There are also limited industrial, transportation, and extractive uses. There are nine residential developments throughout the study area. Commercial uses include several gas stations, restaurants, hotels, shopping centers, mobile home manufacturers and retailers, auto repair shops, private medical facilities, banks, automotive dealerships, marine retailers, and various other businesses. Public recreational facilities include Crystal River bike path, Bicentennial Park, and Creative Playground. Conservation areas, preserves, and refuges include Homosassa Tract (Homosassa Wildlife Management Area) of the Withlacoochee State Forest, Chassahowitzka National Wildlife Refuge, Homosassa Springs State Wildlife Park, and Crystal River State Buffer Preserve. There is one industrial use, Homosassa Industrial Park. The Crystal River Airport is a transportation use and the Crystal River Quarries, Inc., Red Level Mine, is an extractive use.

The designated land uses on the Citrus County Comprehensive Plan 1995 -2020 (Citrus County Department of Development Services, Division of Community Development; December 1999, amended November 18, 2003) 2020 Future Land Use Map indicate that future land uses will show an increase in residential, commercial, industrial, transportation, communication, utility, public/semi-public, recreation, and open space. In addition, the Florida Power Complex – Crystal River Power Plant has a substantial amount of acreage designated for future expansion or additions to the power plant.

According to the Citrus County Comprehensive Plan, the 2020 Future Land Use Map does not depict any “Low Intensity Coastal Lakes” future land use designations adjacent to the projects proposed ROW nor even nearby. Conservation land use needs cannot be projected since additions are based on factors other than increase in population. The determination of land to be purchased for conservation purposes is based on the objectives of an agency’s acquisition program.

The improvements to US 19, from south of US 98 to Turkey Oak Drive, are consistent with the Citrus County Comprehensive Plan. Improvements north of Turkey Oaks Drive are limited to intersection improvements at CR 488 and signal upgrade. Any ROW acquisition that may be required to construct the proposed improvements is not likely to affect the area land use patterns.

US 19 is within the Planned Service Area (PSA) for Citrus County. The Citrus County Comprehensive Plan states, “PSA’s represent designated areas where regional utility service (sewer and water) is available or will be available by the year 2020. Development is encouraged in the PSA because of the availability or future availability of infrastructure to accommodate future development. The PSA has proven to be an effective tool to promote compact urban development through provision of public services and facilities and encouragement of higher density and intensity of land use.”

The City of Crystal River Comprehensive Plan (adopted March 1998, amended March 31, 2003) indicates that there will be a small increase in residential, commercial, and public/semi-public land uses and a decrease in vacant/other use. There is no forecast for an increase in land for industrial, educational, transportation/communication/utilities or wetland uses. Expanding US 19 to six lanes is consistent with the Comprehensive Plan.

A-2. Community Cohesion

Since the proposed project involves the widening of an existing facility with minimal expected ROW acquisition, no splitting or isolation of neighborhoods or any particular ethnic group will occur. The project is not anticipated to harm elderly persons, handicapped individuals, non-drivers and transit-dependent individuals, or minorities.

The US 19 project has recommended improvements that will enhance community cohesiveness. These improvements include adding, enhancing, and providing connectivity of sidewalks from US 98 to Turkey Oak Drive. The proposed roadway improvements will in most cases accommodate bicyclists by providing either a 4-ft undesignated bike lane or a 5-ft paved shoulder. The only exception will be in Segment 5 where, due to ROW constraints, no bicycle accommodations are included, but a route along side roads could be used in conjunction with the Crystal River bike path. There are also plans for two pedestrian overpasses. The first overpass is at the intersection of US 19 and US 98, providing a connection for bicyclists traveling from the Suncoast Parkway Trail via US 98 to the multi-use path at US 19. This multi-use path, 12 ft in width, will run adjacent to US 19 on the west side along Segment 1 and will continue north through part of Segment 2 providing connectivity to the Homosassa Tract (Homosassa Wildlife Management Area) of the Withlacoochee State Forest, Chassahowitzka National Wildlife Refuge, and the Homosassa Springs State Wildlife Park. There will also be 10-ft multi-use paths on each side of US 19 throughout Segment 4. The second pedestrian overpass will connect the Crystal River bike path over US 19 in downtown Crystal River. This will allow bicyclists, pedestrians, and children from the four area schools to safely cross US 19.

This project has been developed to comply with Executive Order 12898, Environmental Justice, issued on February 11, 1994. The proposed improvements are considered to have a beneficial effect on community cohesiveness. It is anticipated that the proposed improvements will not impact community cohesiveness.

A-3. Relocation Potential

The proposed improvements require no residential relocations and may require 21 business relocations and 1 non-profit organization relocation for roadway construction only. The relocations that will result from construction of the stormwater management facilities will be determined in the Design Phase. In order to minimize the unavoidable effects of ROW acquisition and displacement of people, the FDOT will carry out a ROW and relocation program in accordance with Florida Statute 339.09 and the Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970 (Public Law 91-646 as amended by Public Law 100-17).

The FDOT provides advance notification of impending ROW acquisition. Before acquiring ROW, all properties are appraised on the basis of comparable sales and land use values in the area. Owners of property to be acquired will be offered and paid fair market value for their property rights.

No person lawfully occupying real property will be required to move without at least 90 days written notice of the intended vacation date and no occupant of a residential property will be required to move until decent, safe, and sanitary replacement housing is made available. "Made available" means the affected person has either by himself obtained and has the right of possession of replacement housing, or that the FDOT has offered the relocatee decent, safe, and sanitary housing which is within his financial means and available for immediate occupancy.

At least one relocation specialist is assigned to each highway project to carry out the relocation assistance and payments program. A relocation specialist will contact each person to be relocated to determine individual needs and desires and to provide information, answer questions, and give help in finding replacement property. Relocation services and payments are provided without regard to race, color, religion, sex, or national origin.

All tenants and owner-occupant displacees will receive an explanation regarding all options available to them, such as: (1) varying methods of claiming reimbursement for moving expenses; (2) rental of replacement housing, either private or publicly subsidized; (3) purchase of replacement housing; and (4) moving owner-occupied housing to another location.

Financial assistance is available to the eligible relocatee to:

1. Reimburse the relocatee for the actual reasonable costs of moving from homes, businesses, and farm operations acquired for a highway project;
2. Make up the difference, if any, between the amount paid for the acquired dwelling and the cost of comparable decent, safe, and sanitary dwelling available on the private market;
3. Provide reimbursement of expenses incidental to the purchase of replacement dwelling; and
4. Make payment for eligible increased interest cost resulting from having to get another mortgage at a higher interest rate. Replacement housing payments, increased interest payments, and closing costs are limited to a \$22,500 combined total.

A displaced tenant may be eligible to receive a payment, not to exceed \$5,250, to rent a replacement dwelling or room, or to use as a down payment, including closing costs, on the purchase of a replacement dwelling. The brochures which describe in detail the FDOT's relocation assistance program and ROW acquisition program are, "*Your Relocation: Residential*", "*Your Relocation: Businesses, Farms and Nonprofit Organizations*", "*Your Relocations: Signs*", and "*The Real Estate Acquisition Process*". All of these brochures are distributed at all public hearings and made available upon request to any interested persons.

A-4. Community Services

In Segment 1 there are two churches and the US Coast Guard Auxiliary, Homosassa Flotilla 15-04, located within the study area.

In Segment 2 there are two churches, the Wilder-Foundation Funeral Home, Stage Stand Cemetery, and Homosassa Volunteer Fire Department Station No. 91. There are also two public facilities: the United States Post Office and Homosassa Springs Chamber of Commerce.

Segment 3 has three churches and the Strickland Funeral Home within the study area. Public facilities and other neighborhood gathering places within the study area include Veterans of Foreign War Hall, Moose Lodge, and Florida National Guard Armory.

There is one church and the Boys and Girls Club of Citrus County with in Segment 4.

Segment 5 has eight churches and the Crystal River Cemetery. There is one private and four public schools located within 1 mi of the study area. Public facilities and other neighborhood gathering places include: Crystal River City Hall, Citrus County Health Department, Crystal River Chamber of Commerce, and Big Brothers and Big Sisters. The Crystal River Fire Department and the Sheriff's Station are located in downtown Crystal River.

The Seven Rivers Community Hospital is in Segment 6.

There are also numerous privately-owned medical and dental facilities, as well as several eye clinics, throughout the project corridor.

It is anticipated that there will be no disruption to community facilities.

A-5. Title VI Considerations

This project has been developed in accordance with the Civil Rights Act of 1964, as amended by the Civil Rights Act of 1968. A Public Hearing was held on November 3, 2003. The project is not expected to impact any distinct minority, ethnic, elderly, or handicapped groups.

Along with Title VI of the Civil Rights Act, Executive Order 12898 (Environmental Justice) ensures that minority and/or low-income households are neither disproportionately adversely impacted by major transportation projects, nor denied reasonable access to them by excessive costs or physical barriers (Environmental Protection Agency [EPA], 1994). The project does not have an adverse or disproportionate impact on minority or low-income households.

A-6. Controversy Potential

A comprehensive Public Involvement Program has been completed for this project. This program is in compliance with the FDOT's PD&E Manual; Section 339.155, Florida Statutes (F.S.); Executive Orders 11990 and 11988; Council on Environmental Quality Regulations for implementing the procedural provisions of the National Environmental Policy Act; and 23 CFR 771.

The FDOT has issued two newsletters to elected officials, agencies, and property owners within 300 ft of the centerline of proposed alternatives. An Alternatives Public Workshop was conducted on January 16, 2003, at the Florida National Guard Armory. A Public Hearing was held on November 3, 2003, from 4:30 p.m. to 7:30 p.m. at the National Guard Armory, 8551 West Venable Street, Crystal River, Florida. The hearing was also held in accordance with Department Rule 14.97.005 of the Florida Administrative Code, Review and Modification of Access Classifications. The Access Management Reclassification changed the classification code of US 19 in Crystal River from West Fort Island Trail to Northwest 7th Street to Access Class 3. This reclassification was also consistent with the Citrus County US 19 Access Management Action Plan.

As a result of early and continued coordination with the public and agencies to date, there has been minimal controversy associated with the proposed improvements.

A-7. Utilities and Railroads

Several utility companies, including Sprint Florida, Inc. (Telephone), BellSouth Communications, Level 3 Communications, Williams Communications, LLC, Homosassa Special Water District, City of Crystal River Utilities, Citrus County Utilities, Ozello Water Association, Progress Energy (formerly Florida Power Corporation), Withlacoochee River Electric Corporation, Central Florida Gas, and Bright House (formerly Time Warner Communications), have facilities within the US 19 ROW.

Since the proposed improvements will require the relocation of some utilities, the project is expected to have minimal impacts to utilities.

There is one operational at-grade railroad crossing within the project limits at West Powerline Street within Segment 6. The railroad is owned and maintained by Progress Energy (Florida Power). All train traffic is freight, primarily coal for the Crystal River Power Plant. The crossing has an estimated frequency of two trains per day with an approximate travel speed of 10 mph. TSM improvements are proposed for this portion of Segment 6. No impacts to the railroad are anticipated.

ATTACHMENT B – CULTURAL IMPACTS

B-1. Section 4(f) Lands

In accordance with Section 4(f) of the Department of Transportation Act of 1966 (Title 49, USC, Section 1653 (f), amended and recodified in Title 49, USC, Section 303, in 1983), the project was examined for possible Section 4(f) properties.

The Homosassa Springs Wildlife State Park main entrance and visitors center are adjacent to US 19 on the west side, just south of West Halls River Road. There is also a west entrance to the wildlife park on Fish Bowl Drive. The park is owned and operated by the FDEP, Division of Recreation and Parks.

The Homosassa Tract (Homosassa Wildlife Management Area) of the Withlacoochee State Forest trailhead is located west of US 19. The Homosassa Tract can be accessed by two entrances off of US 19, on the west side. The first entrance is Burnt Bridge Road, north of US 98, and the second entrance, Hog Pond Road, located approximately 2 mi south of Homosassa. The tract is owned and operated by Florida Department of Agriculture and Consumer Services, Division of Forestry.

The Chassahowitzka National Wildlife Refuge Maintenance Facility is adjacent to US 19 on the west side, just north of US 98. The refuge is owned and operated by the United States Department of Interior, USFWS.

The Bicentennial Park/Creative Playground is located on the southeast corner of US 19 and NW 2nd Avenue. Both parks can be accessed directly from US 19 at NW 2nd Avenue. The park is owned and operated by the City of Crystal River.

The Crystal River State Buffer Preserve is located west of US 19. A large portion of the Crystal River State Buffer Preserve is accessible only by watercraft. On the mainland portion the Visitor Center, EcoWalk Trail, and the multi-use trail can be accessed from State Park Drive or Curtis Tool Road. The Churchhouse Hammock trail can be accessed from US 19. The entrance to Churchhouse Hammock does not grant entrance to any other part of the park. The park is owned and operated by the FDEP, Division of Recreation and Parks, Bureau of Land Aquatic Resource Management.

The Recommended Alternative will not require the acquisition of any ROW from any of the above parks. Additionally, the Recommended Alternative will not impair or diminish their activities, features, or attributes that qualify them as Section 4(f) properties for protection. Therefore, the Recommended Alternative will have no involvement with these Section 4(f) protected properties.

B-2. Historic Sites/District

In accordance with the National Historic Preservation Act of 1966, as amended, and Chapters 253 and 267, F.S., a Cultural Resource Assessment Survey (CRAS) was conducted to assess the potential for impacts to any historical resources within the project study area. The CRAS included background research and a field survey coordinated with the State Historic Preservation Officer (SHPO). The CRAS included the roadway alignment alternatives and did not include proposed stormwater retention/mitigation areas. These areas will be surveyed during future design of individual US 19 segments.

The historical/architectural background research, including a review of the Florida Master Site File (FMSF) and the National Register of Historic Places (NRHP), indicated that seven historic

structures (8CI400, -401, -458, -459, -460, -461, and -487) and one historic cemetery (8CI938) were recorded previously within the project's Area of Potential Effect (APE). None is listed or considered potentially eligible for listing in the NRHP. As a result of field survey conducted in December 2001 and January 2002, the 7 previously recorded historic structures, 1 previously recorded historic cemetery, and 17 newly recorded historic structures (8CI1092 through 8CI1108) were evaluated. Most include residential and commercial properties built during the 1920s through 1950s. Architectural styles include Mediterranean Revival, Frame Vernacular, Masonry Vernacular, and Bungalow. None of the buildings is distinguished by their architectural features, nor are they known to be associated with significant events or with the lives of persons significant in the past. By these criteria, none appears eligible for listing in the NRHP, either individually or as part of a historic district. The historic cemetery is not considered NRHP-eligible.

The CRAS was submitted to the FHWA and SHPO on May 14, 2002. The SHPO responded in a letter dated June 4, 2002, concurring with the evaluation that the historic cemetery and none of the historic structures, except for the Old Jail/Pump House of Crystal River (8CI487), are eligible for listing in the NRHP. This Spanish Revival style building is considered by the SHPO to be potentially eligible for listing in the NRHP within the context of community planning and development. Through the application of the Criteria of Adverse Effect, the FHWA in consultation with SHPO determined that the location of 8CI487 and the presence of vegetative cover between the historic building and US 19 are such to ensure that the project will have no adverse effect on this resource. Based on the fact that no additional historical sites or properties are expected to be encountered during subsequent project development, the FHWA has determined that no other NRHP-listed or eligible properties would be impacted.

B-3. Archaeological Sites

In accordance with the National Historic Preservation Act of 1966, as amended, and Chapters 253 and 267, F.S., a CRAS was conducted to assess the potential for impacts to any historical resources within the project study area. The CRAS included background research and a field survey coordinated with the SHPO. The CRAS included the roadway alignment alternatives and did not include proposed stormwater retention/mitigation areas. These areas will be surveyed during future design of individual US 19 segments.

Archaeological background research, including a review of the FMSF and the NRHP, indicated that six archaeological sites (8CI133, 8CI139, 8CI140, 8CI141, 8CI142, and 8CI158) were recorded previously within the project's APE. As a result of field surveys, conducted in December 2001 and January 2002, two new (8CI1091 and 8CI1110) and four previously recorded (8CI133, 8CI139, 8CI140, and 8CI158) archaeological sites were identified and evaluated. The locations of two other previously recorded archaeological sites (8CI141 and 8CI142) could not be verified. In addition, one archaeological occurrence was found. The newly and previously recorded archaeological sites are lithic and artifact scatters. All are considered to have limited research potential, and thus, do not appear to be potentially eligible for listing in the NRHP. None of the archaeological sites are listed or considered potentially eligible for listing in the NRHP.

The CRAS was submitted to the FHWA and SHPO on May 14, 2002. The FHWA, after consultation with the SHPO, has determined that this project will have no adverse effect on NRHP properties.

B-4. Recreation Areas

There are several parks and recreation areas that are within or adjacent to the US 19 project corridor including: Homosassa Tract (Homosassa Wildlife Management Area) of the

Withlacoochee State Forest, Chassahowitzka National Wildlife Refuge, Crystal River bike path, Homosassa Springs Wildlife State Park, Bicentennial Park/Creative Playground, and Crystal River State Buffer Preserve. Many of these areas are also conservation areas, preserves, and/or refuges.

The existing Crystal River bike path is located north and south of US 19 between NE 2nd Avenue and North Citrus Avenue (CR 495) but does not have a marked crossing at US 19. These parcels were originally used as a transportation corridor for the railroad and are owned and operated by the City of Crystal River. The Recommended Alternative provides a pedestrian overpass that will connect the Crystal River bike path over US 19 in downtown Crystal River. This will allow bicyclists, pedestrians, and children from the four area schools to safely cross US 19.

The other park and recreational facilities located within or adjacent to the project corridor are discussed in Section B-1.

ATTACHMENT C – NATURAL ENVIRONMENT**C-1. Wetlands**

In accordance with Presidential Executive Order 11990, "*Protection of Wetlands*", and using assessment methodology, evaluation procedures, and document preparation guidance found in the FHWA's Technical Advisory T6640.8A, Title 23, Code of Federal Regulations, Part 777, and Part Two, Chapter 18 of the FDOT's PD&E Manual, Revised 10/01/91, consideration has been given to protect wetland resources. A separate Wetland Evaluation Report has been prepared for this project. The study objectives are to identify, delineate, analyze, and evaluate potential wetland impacts from the construction of the proposed alternative, to assess the function and value of the wetlands involved, and to recommend mitigation measures associated with these impacts.

An inventory of wetlands was performed within 300 ft on either side of the existing ROW. The inventory utilized the USFWS National Wetland Inventory Maps, United States Geological Survey (USGS) Quadrangle Maps, National Resource Conservation Service Citrus County Soil Survey, SWFWMD Land Use Maps, USFWS Classification of Wetlands and Deepwater Habitats of the United States, aerial photography, and ground-truthing.

A total of 66 wetland areas, 54 wetland ditches, and 5 open water areas were identified along the project corridor. Eight individual Florida Land Use, Cover and Forms Classification System (FLUCFCS) categories were identified in the study corridor. A description of all systems is included in the Wetland Evaluation Report.

Of the wetland and surface water systems identified, it is anticipated that 18 wetlands and 30 surface waters will be impacted. Impacts from roadway improvements will be confined to the roadside edges of the wetlands. No open water systems will be directly impacted. Acres of potential impact for the project are 5.64 acres (ac). If the ditch impacts are not considered, the impacts to wetlands are 4.9 ac. The proposed improvements to Segment 6 are not anticipated to result in any impacts to wetlands or surface water systems. No stormwater management facilities have been identified or evaluated for wetland impacts. However, these locations will be evaluated for wetland impacts as the project's design occurs.

In accordance with the FHWA policy as contained in 23 CFR 777.11, the full range of mitigation options are being considered in developing this project to avoid long-term and short-term adverse impacts to wetland resources and to avoid new construction in wetlands wherever there is a practicable alternative. Mitigation policies have been established by the FDEP, and the water management districts. Wetland impacts that will result from the construction of this project will be mitigated pursuant to S.373.4137 F.S. to satisfy all mitigation requirements of Part IV, Chapter 373, F.S. and 33 USC. 1344. Under Section 373.4137 F.S., mitigation of FDOT wetland impacts will be implemented by the appropriate water management district where the impacts occur.

C-3. Water Quality

A Water Quality Impact Evaluation (WQIE) has been completed for this project. The proposed stormwater facility design will include, at a minimum, the water quantity requirements for water quality impacts as required by the SWFWMD in Rule 40D-1, 40D-4, 40D-40, 40D-45, and 40D-400, Florida Administrative Code (F.A.C.). Therefore, no further water quality mitigation measures will be needed.

C-4. Outstanding Florida Waters

The project does not cross over any Outstanding Florida Waters (OFW) within its limits. All stormwater runoff in the study corridor drains to Kings Bay, Crystal River, Halls River, Homosassa River, and Chassahowitzka River, which are each classified as an OFW. The OFW designation requires a higher emphasis of minimizing direct wetland impacts and higher water quality treatment will be required and will be in accordance with the requirement as set forth by the EPA. Coordination will be conducted with SWFWMD regarding treatment requirements for each basin during the design phase. Impacts are expected to be minimal.

C-6. Floodplains

In accordance with Executive Order 11988, "*Floodplain Management*", United States Department of Transportation Order 5650.2, and Chapter 23, CFR 650A, impacts to floodplains from the proposed improvements are being considered. Portions of the study area are located within the floodplain limits shown on the Flood Insurance Rate Maps (FIRMs) [FIRMs: Community Panel Numbers 120063 0335B, 120063 0220B, 120063 0215C, 120063 0205C, 120063 0115B, 120340 0002B, 120340 0001B, 120063 0105B, 120063 0100B, and 120063 0085B] compiled by Federal Emergency Management Agency (FEMA). The project corridor has four segments that lie in a designated 100-year floodplain that are primarily from flooding effects from the Gulf of Mexico. The encroachment into the tidal floodplain is longitudinal; whereas the freshwater encroachments are transverse. The base floodplain encroachment is approximately 179.05 ac in size. There are no floodways within the project limits. Floodplain compensation for any freshwater encroachments may be required by SWFWMD.

Based on the information collected during the study, the proposed improvement can be categorized as a Category 4: Projects on existing alignment involving replacement of existing drainage structures with no record of drainage problems, as defined in Section 3.2.4 of the FDOT's Drainage Manual Volume 2A. This qualifies the project for a Level 2 Evaluation. The proposed structures will perform hydraulically in a manner equal to or greater than the existing structures, and backwater surface elevations are not expected to increase. As a result, 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 be no 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 considered minimal.

C-7. Coastal Zone Consistency

In accordance with Section 307 of the Coastal Zone Management Act and Chapter 15, CFR, Part 930, Federal Consistency with Approved Coastal Management Programs, this project was reviewed for Coastal Zone Consistency. The FDEP has indicated that, "the potential environmental impacts of the proposed roadway construction project will be addressed in the application for an Environmental Resource Permit (ERP) to be reviewed by the SWFWMD, pursuant to Chapter 253 and 373, F.S. Final agency action on the permit application will constitute the State of Florida's final consistency determination."

C-9. Wildlife and Habitat

This project has been evaluated for impacts to wildlife and habitat resources, including protected species, in accordance with 50 CFR, Part 402 and the Endangered Species Act of 1973, as amended and Part 2, Chapter 27 of the FDOT PD&E Manual. The USFWS, the Florida Fish and Wildlife Conservation Commission (FFWCC), the Florida Natural Areas Inventory (FNAI), the National Resource Conservation Service (NRCS), and the FDOT's "*Threatened & Endangered*

Species List" were all consulted to establish a list of threatened or endangered species potentially occurring within the project area.

Species-specific surveys were conducted for the gopher tortoise, short-tailed snake, red-cockaded woodpecker and Florida scrub jay. Field evaluations resulted in direct evidence of four state and/or federally protected species: the gopher tortoise, Sherman's fox squirrel, Florida black bear, and the pine lily.

According to the FNAI database, protected plant species occurring in the project vicinity are limited to state protected plants only. Seventeen species are identified by FNAI. During field evaluations, none of these protected plants were observed. However, the pine lily, also known as the Catesby's lily, was identified from two hydric areas near the eastern ROW limits. This lily is also protected by the state as an endangered species.

A small, isolated population of Florida black bear, known as the Chassowitzka population, occurs in the study area. Evidence of the Florida black bear was observed on the Homosassa Tract of the Withlacoochee State Forest. Although road mortality data indicate little threat to the bear in the study area, the FDOT commits to installing bear crossing signage to educate and warn motorists of bears entering the roadway to minimize or eliminate future road mortalities. Because of the low incidence of road mortality, the inability to fence the adjacent roadway, the lack of public lands on both sides of the road, and the high cost of construction, wildlife crossing structures were not considered feasible for this project. In addition, the project will result in impacts primarily to the existing ROW, which does not have significant suitable habitat for the black bear.

The FNAI identifies a manatee aggregation in Kings Bay. A dredged portion of Kings Bay is within the study area, representing the only open water or waterway within the study area. This portion is hydrologically connected by a ditch to a small springhead within the city park, Bicentennial Park. While the culverted ditch may be impacted, no impacts to Kings Bay are anticipated. However, in January 2003, two manatees passed over a water control structure and crossed under US 19 to enter Bicentennial Park during an unusually high tide. At least one manatee needed assistance returning to Kings Bay because of the ensuing low water levels. This may be the first time manatees crossed US 19 at this location. Due to the conceptual nature of design, it is not known at this time what types of drainage improvements will be needed at this ditch crossing. But any changes to the culvert should not have any effect on the manatee since the existing waterway under US 19 was not originally intended to be a conveyance for manatees. The proposed roadway improvements will not directly impact any open water habitat suitable for manatee. However, to guard against the highly unlikely event that manatees attempt to cross under US 19 at the Bicentennial Park culverted ditch, the FDOT will require the construction contractor to implement manatee construction precaution guidelines in this area. Therefore, the proposed project will have "no effect" on the Florida manatee.

The Eastern indigo snake, Florida pine snake, and short-tailed snake are likely to be affected by construction activities. Standard protection guidelines for construction will be implemented for the Eastern indigo snake to avoid adverse impacts to this species. The FDOT will develop an education program for construction workers about the Florida pine snake and the short-tailed snake, which shall complement the indigo snake protection guidelines. Adverse impacts to the gopher tortoise and its commensals (gopher frog and Florida mouse) will be avoided by conducting gopher tortoise surveys during the design phase in areas that will be impacted. If it is determined that gopher tortoises will be affected, coordination with the FFWCC will occur in an effort to acquire permits, thereby minimizing effects to the gopher tortoise and the animals that share its burrow.

The FDOT will survey the construction area for cavity trees of the Southeastern American kestrel, nesting areas of the Florida sandhill crane, and burrows of the Florida burrowing owl just prior to construction. If these surveys result in positive findings, the FDOT will coordinate with the FFWCC to determine appropriate measures or mitigation to eliminate adverse impacts. A number of protected wading birds, including the roseate spoonbill, little blue heron, snowy egret, tricolored heron, and white ibis may utilize wetland areas for foraging. However, the FDOT will mitigate for any impacts to wetlands, and thus the affect to the species will be eliminated. Finally, two rookeries for wood storks are located within 18.6 mi of the project and thus the project is within the CFA of those rookeries. Any impacted wetland supporting hydrology appropriate for forage during the nesting period, which also occurs within a wood stork CFA, shall be mitigated for within that CFA. Since the effort is directed by a recent change to the USFWS policy, the FDOT commits to coordinate with the USFWS, assuring all mitigation measures are followed accordingly.

The assessment was documented in a Threatened and Endangered Species Evaluation which was submitted to the appropriate agencies for review and a determination of effect for the proposed US 19 widening. The USFWS gave clearance on October 16, 2003 which determined that, "the proposed action is not likely to adversely affect resources protected by the Endangered Species Act of 1973, as amended (16 USC 1531 et seq.). This fulfills the requirement of the act."

ATTACHMENT D – PHYSICAL IMPACTS**D-1. Noise**

In accordance with Chapter 23, CFR, Part 772, "Procedures for Abatement of Highway Traffic Noise and Construction Noise," and using methodology established by the Department in Part 2, Chapter 17, of the FDOT's PD&E Manual, an assessment of noise impacts was conducted for the proposed improvements and is documented in a Noise Study Report. The FHWA has established guidelines for the relationship between land use and design year noise levels. Residences, churches, motels, hospitals, parks and recreation areas are land use categories in Activity Category B with a Noise Abatement Criteria (NAC) level of 67 decibels on the A-weighted scale (dBA). Noise sensitive sites predicted to approach within 1 dBA of the NAC or exceed the NAC were identified. The Noise study was conducted utilizing the FHWA approved Traffic Noise Model (TNM), Version 2.1.

For the Build Alternative year 2025 traffic conditions, 33 residences, one outdoor congregational area (private facility used by residents of Sugarmill Manor), and one outdoor recreation area (Bicentennial Park) are predicted to experience noise levels that approach or exceed the NAC. The affected noise sensitive sites are located in Covered Wagon RV Park, a mobile home park located south of West Elkhorn Drive, Maine Street neighborhood, Imperial Gardens Mobile Home Park, Suncoast Mobile Home Park, single residences along the east side of US 19 throughout the corridor, and two apartments on the west side of US 19. Noise abatement measures were evaluated for affected noise sensitive sites. Abatement measures considered included traffic system management, alignment modifications, property acquisition, land use controls, and noise barriers. An evaluation of traffic system management techniques, alignment modifications, and property acquisition indicated that these abatement measures were not feasible or cost reasonable. Land use controls can be used by local planning officials to minimize development or redevelopment of noise sensitive land uses in proximity to US 19. A copy of the final Noise Study Report will be furnished to local officials to assist them in the development of compatible land uses for future development.

A noise barrier evaluation was also performed. Within the project limits, US 19 is characterized by numerous access drives and intersecting side streets. Access requirements for driveways and intersecting streets limit the length of a noise barrier. Consequently, noise barriers could not provide the minimum 5 dBA reduction at some locations. At other locations, a 5 dBA reduction could be achieved, but the number of benefited residences was small because of the gaps in the barriers needed to accommodate access to US 19. Because of the small number of benefited residences, noise barriers were not cost reasonable at locations where a 5 dBA could be achieved. Based on the noise barrier evaluation at representative areas, noise barriers were determined to not be a feasible and cost reasonable abatement measure for the 33 residences, one outdoor congregational area (private facility used by residents at Sugarmill Manor), and one outdoor recreation area (Bicentennial Park) with predicted noise levels that approach or exceed the NAC.

D-2. Air

In accordance with the National Environmental Policy Act and Part 2, Chapter 16 of the PD&E Manual (FDOT, 1999), an analysis was conducted to determine the effect proposed improvements would have on air quality. Based on FDOT's air quality screening test, COSCREEN98R2 (Revised September 2002), the project will not cause the National Ambient Air Quality Standards (NAAQS) for carbon monoxide to be exceeded. This project will not degrade air quality.

The project is located in an area that has been designated as attainment for all air quality standards under the criteria provided in the Clean Air Act Amendments of 1990. Therefore, conformity to the Transportation Conformity Rule (40 CFR Part 93, Subpart T) does not apply to this project.

D-3. Construction

Construction activities for the proposed project will have minimal, temporary, yet unavoidable air, water quality, traffic flow, visual, and noise impacts for those residents and travelers within the immediate vicinity of the project.

The air quality impacts will be minor and short-term in the form of dust from earthwork and emissions from the operation of heavy equipment associated with the project construction. These impacts will be minimized or controlled by adherence to all State and local regulations, the most current edition of the FDOT's Standard Specifications for Road and Bridge Construction, and any special provisions in the construction contract.

Water quality impacts resulting from erosion and sedimentation will be controlled in accordance with the most current edition of the FDOT's Standard Specifications for Road and Bridge Construction, "*Prevention, Control, and Abatement of Erosion and Water Pollution*", and through the use of Best Management Practices (BMP).

Maintenance of traffic and sequence of construction will be planned and scheduled to minimize traffic delays. Access of all businesses, residences, and recreational facilities will be maintained to the extent practical through controlled construction scheduling. Signage will be used, as appropriate, to provide pertinent information to the traveling public. The local news media will be notified in advance of road closings and other construction related activities, which could excessively inconvenience the community, so that motorists, residents, and business persons can plan travel routes accordingly. All provisions of the most current edition of the FDOT's Standard Specifications for Road and Bridge Construction will be followed.

Noise and vibrations impacts will be from the heavy equipment movement and construction activities such as pile driving and vibratory compaction of embankments. Noise control measures will include those contained in FDOT's Standard Specifications for Road and Bridge Construction in addition to those recommended in the Noise Impact section of the Preliminary Engineering Report. Using the FDOT's listing of vibration sensitive sites, residences were identified as potentially sensitive to vibration caused during construction. If during final design, it is determined that provisions to control vibration are necessary, the project's construction provisions can be modified as needed. Adherence to local construction noise and/or construction vibration ordinances by the contractor will also be required where applicable.

D-4. Contamination

In accordance with the FDOT policy and FHWA requirements, a contamination screening evaluation has been performed to evaluate potential impacts from contaminated sites to the project. A Contamination Screening Evaluation Report (CSER) has been prepared pursuant to the FHWA's Technical Advisory T 6640.8A and the FDOT's PD&E Manual, Part 2, Chapter 22. Risk rankings were assigned after reviewing data obtained from on-site reviews of the parcels, a review of historical land use, hazardous and petroleum regulatory site lists, city directory records, and other pertinent information.

Based upon the findings of the survey to date, 112 sites have been identified as having the potential for contamination to impact the project. These sites, located along the project corridor,

have the potential to involve petroleum contamination or hazardous materials as defined by the FDEP. All sites in the project corridor were evaluated to determine risk potential. Risk ratings were assigned to each site based on field reviews, land use, historical tenancy evaluations, and regulatory agency research. Of the 112 sites, 17 have been identified as having a "High" probability, 17 were identified as having a "Medium" probability, 42 were identified as having a "Low" probability, and 36 were identified as having a "No" probability.

Level II Contamination Assessments should be conducted during the design and/or construction phases for the 34 sites identified as "High" or "Medium" risk. Investigative work may include visual inspection, monitoring of ongoing cleanups, and possible subsurface investigations. At known contamination sites, estimated areas of contamination will be marked on design drawings. Prior to construction, any necessary cleanup plans will be developed. Actual cleanup will take place during construction if feasible.