

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION  
**TYPE 2 CATEGORICAL EXCLUSION DETERMINATION FORM**

**1. GENERAL INFORMATION**

County: Polk County  
Project Name: SR 33 PD&E Study  
Project Limits: From Old Combee Road to North of Tomkow Road  
Project Numbers: ETDM #13188    FM No. 430185-1-22-01    N/A  
ETDM                      Financial Management              Federal Aid

**2. PROJECT DESCRIPTION**

**a. Purpose and Need:** The primary purpose of this project is to increase the capacity of SR 33 from Old Combee Road to North of Tomkow Road in order to achieve an acceptable Level of Service (LOS) through the design year 2036. In addition, there is a need to improve the I-4 interchange due to substandard vertical clearance over SR 33 and substandard roadway profile geometry of I-4 approaching the SR 33 bridges. The need for the project is based on the following issues:

**PRIMARY CRITERIA**

***Capacity***

This project provides increased capacity along SR 33 to meet the projected future travel demand. The existing roadway LOS along SR 33 ranges from “B” to “E” with volumes ranging from 5,900 to 12,400 AADT. The Polk County Transportation Planning Organization’s 2035 Financially Feasible Long Range Transportation Planning model was used to develop future traffic volumes. With the planned future growth in this area these volumes are expected to increase to 22,600 to 34,500 AADT by 2036 amounting to a roadway LOS “E” or “F”. The proposed widening to four lanes will allow SR 33 to meet future travel demand at an acceptable LOS “D” or better and continue to serve as an important regional arterial. Transportation Systems Management & Operations type improvements will not adequately address future travel demand needs.

**SECONDARY CRITERIA**

***Safety***

The crash history along SR 33 within the study limits was reviewed from 2007 through 2011. A total of 93 crashes occurred which included four fatalities, 48 injury crashes and 41 property damage only crashes. The actual crash rate of 0.989 crashes per million vehicle miles of travel is higher than the statewide average for similar roadways of 0.876 crashes per million vehicle miles of travel. More than half of the crashes occurred within the influence of the I-4/SR 33 interchange. Many of the crashes on SR 33 are types that are associated with congestion and the proposed widening of SR 33. Reconstruction of the I-4/SR 33 interchange and addition of turn lanes at intersections is expected to improve safety along the corridor.

***Emergency Evacuation***

SR 33 is designated as a hurricane evacuation route by the Florida Division of Emergency Management. The proposed enhancement will increase the capacity of traffic that can be evacuated during an emergency event and improve emergency response times. The capacity improvement will also enhance accessibility to other evacuation routes like Interstate 4.

### ***Area Wide Network/System Linkage***

The project will improve the functional viability of SR 33 as a local and regional travel alternative to Interstate 4. SR 33 provides connectivity to University Boulevard, a committed new four lane road serving the planned Williams DRI, Polk Commerce Center DRI, and future Polytechnic University campus. University Boulevard and SR 33 will be the most direct link between these new residential and commercial centers and north and central Lakeland.

### ***Growth Management Planning***

Traffic on SR 33 is expected to increase due to projected population and employment growth both along the corridor and in the region. Population in the project area is expected to increase from 37,945 in 2007 to 79,659 in 2035 and employment is expected to increase from 8,771 to 41,131 over the same time frame.

### ***Modal Interrelationships***

This project includes provisions for multimodal interface with transit through the typical section that will allow for bus stop shelter pads along both sides of SR 33 within the project limits. The proposed improvements include bicycle lane accommodations (paved shoulders), a sidewalk along the west side of SR 33 and a 12-foot-wide shared use path along the east side of the roadway. The resulting multimodal improvements will help to improve multimodal connections between neighborhoods immediately adjacent to the project and destinations nearby.

**b. Proposed Improvements:** FDOT proposes to widen SR 33 to a four-lane divided suburban roadway with a raised median, paved shoulders, a five foot sidewalk along the west side of the road and a 12-foot-wide shared use path along the east side of the road from Old Combee Road to University Boulevard and a five foot sidewalk from University Boulevard to the end of the project.

**c. Project Planning Consistency:** Table 1 summarizes the planning consistency for SR 33 from Old Combee Road to North of Tomkow Road with the FDOT State Transportation Improvement Program (STIP) for fiscal years 2014-2018 and the Polk Transportation Planning Organization's (TPO) Transportation Improvement Program (TIP) for fiscal years 2014-2018. The planning consistency package and concurrence letters from the Polk TPO are included in the Appendix.



**Table 1 – TIP and STIP Consistency**

Phase	Currently Approved TIP	Currently Approved STIP	TIP/STIP \$	TIP/STIP Fiscal Year	Comments
<b>Segment 1 – SR 33 from Old Combee Road to University Boulevard – 3.3 miles</b>					
PE (Final Design)	Y	Y	\$7,350,000	2014	The project can be found in Polk TPO's TIP (page 2-2) and in the current STIP. PE (Final Design) funding is included for both Segments 1 and 2.
Right of Way	N	N	\$0	N/A	No mainline ROW is required for SR 33 from Old Combee Road to University Boulevard. The Polk 2035 Mobility Vision Plan was amended to include ROW for the mainline improvements only in FY 2016-2020; however, ROW is only needed for the interchange improvement in Segment 2. District Planning staff will coordinate the required LRTP amendment to correctly reflect ROW funding for the interchange improvement only (Segment 2).
Construction	N	N	\$0	N/A	Construction is not currently funded in FDOT's Tentative Five-Year Work Program (FY 2015-2019). The Polk 2035 Mobility Vision Plan was amended to add construction in FY 2021-2025 at an estimated cost of \$77.24 million for the mainline only (excludes the interchange, see Segment 2 below).
<b>Segment 2 – SR 33 from University Boulevard to North of Tomkow Road – 1.01 miles</b>					
PE (Final Design)	Y	Y	\$7,350,000	2014	The project can be found in Polk TPO's TIP (page 2-2) and in the current STIP. PE (Final Design) funding is included for both Segments 1 and 2.
Right of Way	N	N	\$0	2019	The Polk 2035 Mobility Vision Plan was amended to include ROW for the mainline improvements only in FY 2016-2020. ROW is only needed for the interchange improvement. District Planning staff will coordinate the required LRTP amendment to correctly reflect ROW funding for the interchange improvement only. ROW is outside the current window of the STIP. FM #430185-3 is for the I-4 interchange improvement for ROW/CST phases only and PE (Final Design) is covered under FM# 430185-2 for both segments 1 and 2.
Construction	N	N	\$0	N/A	Construction is not currently funded in FDOT's Tentative Five-Year Work Program (FY 2015-2019) nor has construction funding been allocated to the I-4 interchange improvements in the Polk TPO 2035 Mobility Vision Plan. It is anticipated that funding will ultimately come from the 2040 SIS CFP.

## Project Funding

The project is currently funded for the preliminary engineering and right-of-way phases using a combination of state and federal funding sources. The construction phase is not currently funded in FDOT's Adopted Five-Year Work Program. Documentation of funding for this project can be found in the adopted Polk TPO's 2013/14 to 2017/18 TIP, the FDOT STIP for Fiscal Years (FY) 2014-2017, and the Polk TPO's 2035 Mobility Vision Plan. Right-of-way is currently funded in FDOT's Tentative Five-Year Work Program in FY 2019. The TIP and STIP will be updated to include this funding in October of 2014 subsequent to adoption of the Five-Year Work Program. The Polk 2035 Mobility Vision Plan was amended to include right-of-way funding in FY 2016-2020 for the mainline. Although construction is not yet funded in FDOT's Tentative Five-Year Work Program, the Polk 2035 Mobility Vision Plan was amended to include construction in FY 2021-2025. Based on recent guidance provided by FHWA dated January 2013, Planning Consistency Requirements have been met for this project as the next phase for the entire PD&E Study project limits is reflected in the STIP/TIP, i.e. design. This project is also funded in the TPO's 2035 LRTP Cost Feasible Plan (CFP) with the exception of right-of-way and construction for the I-4/SR 33 interchange. District One Planning Office staff will coordinate the needed LRTP amendments when appropriate. Table 2 summarizes the planned implementation schedule of this project.

**Table 2 - Funding Summary**

<b>Phase</b>	<b>Time Frame (Fiscal Year)</b>	<b>Estimated Cost</b>	<b>Funding Source</b>
<b>Preliminary Engineering (Final Design)</b>	2014**	\$7,350,000	State and Federal
<b>Right-of-Way</b>	2019**	\$4,900,000	State and Federal
<b>Construction</b>	2021-2025*	\$66,000,000***	State and Federal
<b>TOTAL</b>	-	<b>\$78,250,000</b>	-

Sources: Adopted Polk TPO 2013/14-2017/18 TIP, Approved FDOT STIP, \*Adopted Polk TPO 2035 Mobility Vision Plan, \*\*FDOT's Five-Year Work Program, \*\*\*SR 33 PD&E Study estimates.

**3. CLASS OF ACTION**

a. Class of Action:

Type 2 Categorical Exclusion

b. Other Actions:

- Section 4(f) Evaluation
- Section 106 Consultation
- Endangered Species Biological Assessment

c. Public Involvement:

- 1.  A public hearing is not required, therefore, approval of this Type 2 Categorical Exclusion constitutes acceptance of the location and design concepts of this project.
- 2.  A public hearing was held on 2/27/2014 and a transcript is included. Approval of this determination constitutes location and design concept acceptance for this project.  
 An opportunity for a public hearing was afforded and a certification of opportunity is included. Approval of this determination constitutes acceptance of the location and design concepts for this project.
- 3.  A public hearing will be held and the public hearing transcript will be provided at a later date. Approval of this determination DOES NOT constitute acceptance of the project's location and design concepts.  
 An opportunity for a public hearing will be afforded and a certification of opportunity will be provided at a later date. Approval of this determination DOES NOT constitute acceptance of the project's location and design concepts

d. Cooperating Agency:

COE  USCG  FWS  EPA  NMFS  NONE

**4. REVIEWERS' SIGNATURES**

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

  
Antone Sherrard, FDOT Project Manager

Date 6/15/14

  
Gwen G. Pipkin, FDOT Environmental Administrator

Date 6/15/14

**5. FHWA CONCURRENCE**

  
(For) Division Administrator of Designee

Date 6/27/2014

## 6. IMPACT EVALUATION

### Impact Determination\*

Topical Categories	Sig	Not Sig	None	No Inv	Basis for Decision*
<b>A. SOCIAL &amp; ECONOMIC</b>					
1. Land Use Changes	[ ]	[X]	[ ]	[ ]	See Attachment A.1
2. Community Cohesion	[ ]	[ ]	[ ]	[X]	
3. Relocation Potential	[ ]	[ ]	[X]	[ ]	See Attachment A.2
4. Community Services	[ ]	[ ]	[X]	[ ]	See Attachment A.3
5. Nondiscrimination Considerations	[ ]	[ ]	[X]	[ ]	See Attachment A.4
6. Controversy Potential	[ ]	[X]	[ ]	[ ]	See Attachment A.5
7. Scenic Highways	[ ]	[ ]	[ ]	[X]	
8. Farmlands	[ ]	[ ]	[ ]	[X]	
<b>B. CULTURAL</b>					
1. Section 4(f)	[ ]	[ ]	[X]	[ ]	See Attachment B.1
2. Historic Sites/Districts	[ ]	[ ]	[X]	[ ]	See Attachment B.2
3. Archaeological Sites	[ ]	[ ]	[X]	[ ]	See Attachment B.3
4. Recreation Areas	[ ]	[ ]	[X]	[ ]	See Attachment B.4
<b>C. NATURAL</b>					
1. Wetlands	[ ]	[X]	[ ]	[ ]	See Attachment C.1
2. Aquatic Preserves	[ ]	[ ]	[ ]	[X]	
3. Water Quality	[ ]	[X]	[ ]	[ ]	See Attachment C.2
4. Outstanding FL Waters	[ ]	[ ]	[ ]	[X]	
5. Wild and Scenic Rivers	[ ]	[ ]	[ ]	[X]	
6. Floodplains	[ ]	[X]	[ ]	[ ]	See Attachment C.3
7. Coastal Zone Consistency	[ ]	[ ]	[X]	[ ]	See Attachment C.4
8. Coastal Barrier Resources	[ ]	[ ]	[ ]	[X]	
9. Wildlife and Habitat	[ ]	[X]	[ ]	[ ]	See Attachment C.5
10. Essential Fish Habitat	[ ]	[ ]	[ ]	[X]	
<b>D. PHYSICAL</b>					
1. Noise	[ ]	[X]	[ ]	[ ]	See Attachment D.1
2. Air Quality	[ ]	[X]	[ ]	[ ]	See Attachment D.2
3. Construction	[ ]	[X]	[ ]	[ ]	See Attachment D.3
4. Contamination	[ ]	[X]	[ ]	[ ]	See Attachment D.4
5. Aesthetic Effects	[ ]	[X]	[ ]	[ ]	See Attachment D.5
6. Bicycles and Pedestrians	[ ]	[X]	[ ]	[ ]	See Attachment D.6
7. Utilities and Railroads	[ ]	[X]	[ ]	[ ]	See Attachment D.7
8. Navigation	[ ]	[ ]	[ ]	[X]	

a. [X] FHWA has determined that the project is EXEMPT from a USCG Permit in accordance with 23 CFR 650, Subpart H.

b. [ ] Coordination with the USCG is necessary.

\*Impact Determination: Sig = Significant; Not Sig = Not significant; None = Issue present, no impact; No Inv = Issue absent, no involvement. Basis of decision is documented in the referenced attachment(s).

### E. PERMITS REQUIRED

1. Southwest Florida Water Management District (SWFWMD) – Environmental Resource Permit (ERP)
2. U.S. Environmental Protection Agency (USEPA) – National Pollution Discharge Prevention and Elimination System (NPDES) General Permit
3. U.S. Army Corps of Engineers (ACOE) – CWA Section 404 Dredge and Fill Permit

## 7. COMMITMENTS

The Florida Department of Transportation (FDOT) makes the following commitments:

1. Eastern indigo snake: The standard FDOT Construction Precautions for the eastern indigo snake will be adhered to during construction of the project.
2. Sand Skink: If Pond 1 becomes a preferred alternative, the FDOT will commit to a coverboard survey of this pond site before construction begins.
3. Florida sandhill crane: The FDOT will re-survey appropriate habitats for the Florida sandhill crane prior to permitting and construction of the project. Additionally, coordination with FWC will be initiated, as appropriate.
4. Bald eagle: Given the possibility of new nests being identified by the FWC during yearly surveys, the FDOT will commit to re-surveying the project area prior to construction. If any active nests within the 660-foot protection zone are identified, the FDOT will act in accordance with the BGEPA (16 U.S.C. 668-668d), as amended, the MBTA (16 U.S.C. 703-712) and Chapter 68A-16.002, FS.
5. Gopher tortoise: Due to the presence of gopher tortoise habitat within the project footprint and observed burrows adjacent to the existing roadway, a gopher tortoise survey in appropriate habitat within construction limits (including roadway footprint and stormwater management sites) will be performed prior to construction. FDOT will secure any relocation permits needed for this species during the design and construction phases of the project.
6. Protected plants: If protected plant species are observed within the proposed impact areas during the design and permitting phase, coordination will be initiated with the FDACS or other appropriate agency to allow for relocation to adjacent habitat or other suitable protected lands, prior to construction.
7. Impacts to wetlands within the project footprint may be unavoidable, and require mitigation. Compensatory mitigation for wetland impacts associated with this project will be compensated for pursuant to Part IV, § 373, F.S. and 33 U.S.C. 1344.
8. FDOT is committed to the construction of Noise Barrier 1 (west of Wood Circle West to Lake Luther Road) and Noise Barrier 4 (adjacent to Spanish Oaks, Cambry and Snow Wood subdivisions), as identified in the Noise Study Report, contingent upon the following:
  - Detailed noise analysis during the final design process supports the need for, and the feasibility and reasonableness of, providing the barriers as abatement;

- The detailed analysis demonstrates that the cost of the noise barriers will not exceed the cost reasonable limit;
  - The residents/property owners benefitted by the noise barriers desire that a noise barrier be constructed; and
  - All safety and engineering conflicts or issues related to construction of the noise barriers are resolved.
9. FDOT will coordinate with the City of Lakeland regarding roadway crosswalk material, hardscape design at the I-4/SR 33 interchange and other aesthetic considerations during the design phase of the project.
  10. FDOT will coordinate with Lakeland Area Mass Transit during the design phase regarding accommodations for future bus shelters and connections to the proposed sidewalk and shared-use path.
  11. FDOT will coordinate with the Southwest Florida Water Management District (SWFWMD) to ensure that the most current FEMA floodplain boundaries are used when calculating floodplain impacts during the design phase of the project.

## **8. RECOMMENDATIONS**

Based on engineering and economic factors, FDOT recommends the pavement saving alternative as the build alternative for the mainline roadway widening to meet the documented purpose and need for the project. The pavement saving typical section is proposed for the entire project corridor. This alternative is estimated to cost approximately \$2.8 million less than the full reconstruction alternative. The pavement saving alternative involves maintaining the existing two-lane roadway as the two future southbound lanes and constructing the two future northbound lanes to the east of the existing roadway. The proposed mainline improvements can be constructed within the existing 200 feet of right-of-way.

FDOT recommends the diamond interchange alternative over the diverging diamond alternative for the I-4/SR 33 interchange improvement. The crossover movements associated with the diverging diamond interchange require a dramatic reduction in speed from the SR 33 mainline to the crossover curves which causes concern for vehicle safety through the interchange. Additionally, the diamond interchange operates better during the off peak period because traffic on the SR 33 mainline will always have to be stopped in one direction with the diverging diamond interchange, even when there is no traffic on the ramps. Right-of-way will need to be acquired for the interchange improvements.

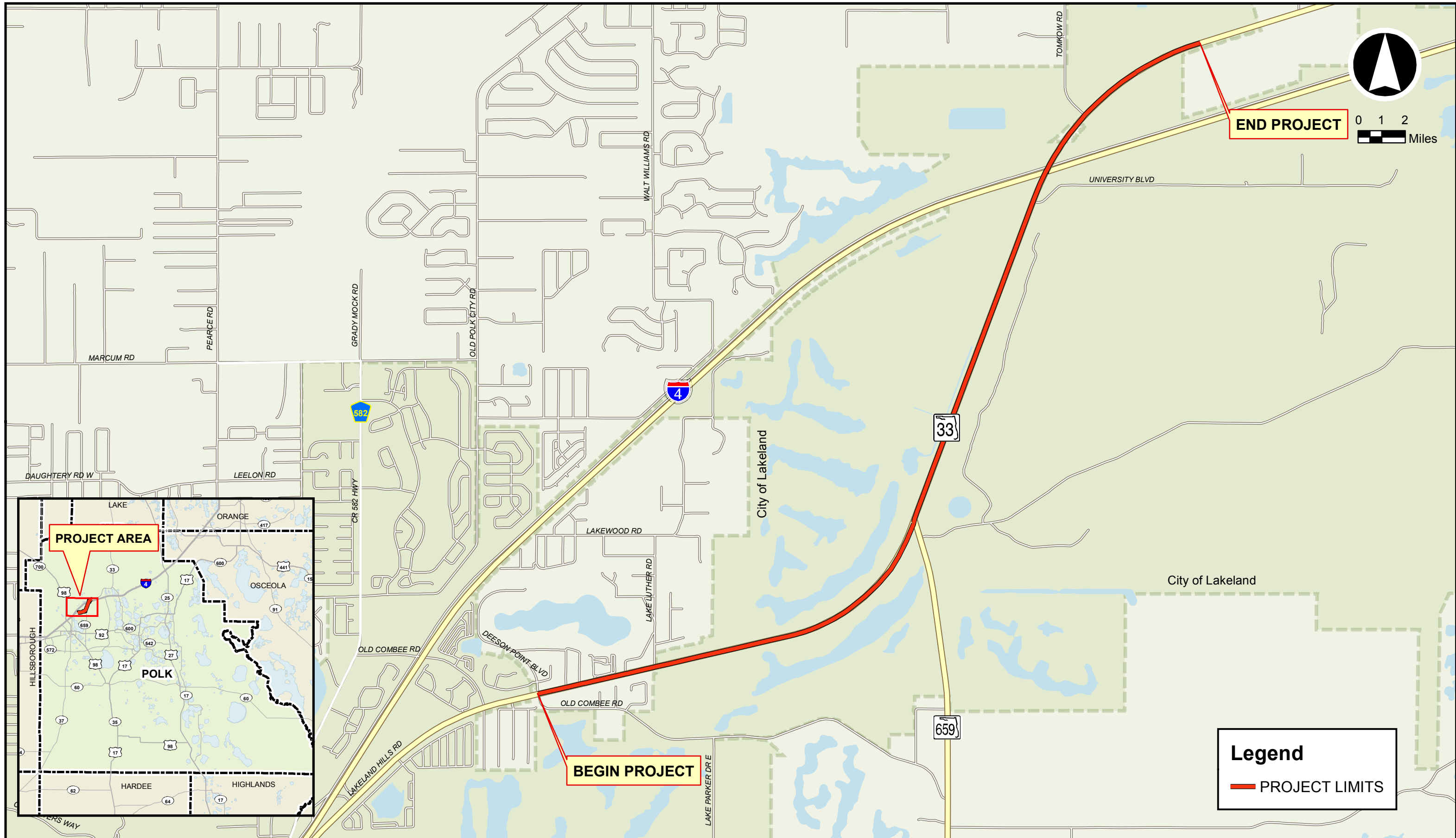
## **ATTACHMENT 1 – PROJECT DESCRIPTION**

### **A. Existing Conditions**

State Road (SR) 33 is an urban minor arterial roadway that begins in the City of Lakeland at US 92 and extends north into Lake County to SR 50. The limits of this PD&E Study include the portion of SR 33 from Old Combee Road to North of Tomkow Road, including the I-4 interchange, a distance of 4.3 miles. The logical termini for this project were determined as part of the Efficient Transportation Decision Making (ETDM) planning screen in coordination with the Federal Highway Administration (FHWA). The southern terminus was determined by the limits of the recent widening of SR 33 which ends at Old Combee Road. The northern terminus north of Tomkow Road was determined based on the projected traffic for SR 33 and the influence of the I-4 interchange on SR 33. The location and limits of this study are shown in the Project Location Map as Figure 1.

Through the study limits, the existing SR 33 typical section is a two-lane undivided rural roadway located within 200 feet of right-of-way. The existing roadway consists of two 12-foot travel lanes and five-foot paved outside shoulders. Stormwater is collected in swales along the outside of the roadway. The existing posted speeds vary from 45 mph to 60 mph. Currently, no bicycle lanes or sidewalks exist on SR 33 within the project limits, other than a segment of sidewalk along the west side of SR 33 adjacent to the Bridgewater development.

Existing land use is a mix of single and multi-family residential from the beginning of the project to University Boulevard and commercial/industrial from University Boulevard to north of Tomkow Road. The City of Lakeland Year 2030 Future Land-Use Map shows the planned land use for this corridor as a mix of single and multi-family residential west of University Boulevard and commercial/industrial from University Boulevard to north of Tomkow Road.





## B. Proposed Improvements

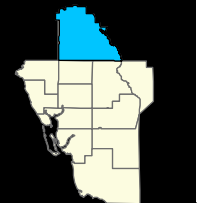
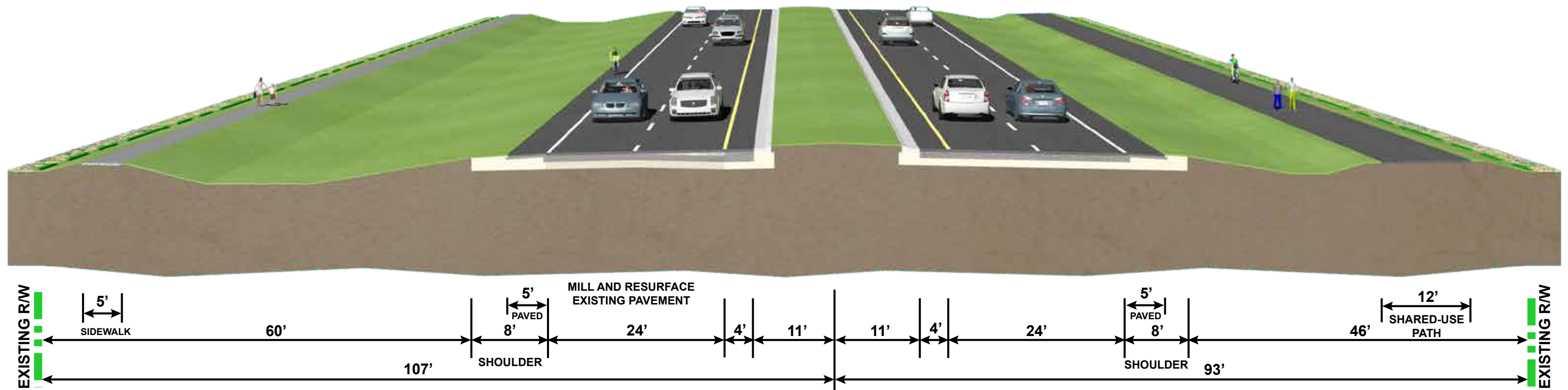
The need for the proposed widening of SR 33 is supported by the traffic analysis that was conducted as part of the PD&E Study. According to the Design Traffic Technical Memorandum (November 2013), in the design year of 2036, the existing two-lane SR 33 is projected to operate at a Level of Service (LOS) E or F without improvements. Additionally, many of the unsignalized intersections, including the I-4 on and off ramps, are expected to operate at unacceptable levels of service without improvements to SR 33. As documented in the design traffic report, the proposed widening of SR 33 from two to four lanes will improve the level of service to the minimum acceptable LOS D, or better, through the design year 2036.

In addition to the proposed road widening, Improvements to the SR 33 interchange with I-4 are also required. Currently, I-4 crosses over SR 33 with two parallel, three-lane bridges. There are deficiencies with the existing interchange. First, the existing vertical clearance over SR 33 does not meet the minimum required 16 feet 6 inches of clearance and is as low as 14 feet 9 inches. Maintaining this substandard vertical clearance would require the approval of a design exception. Second, the pier footings have less than the minimum required depth of cover of 3 feet with cover depths as shallow as 1.892 feet. The horizontal clearance between the center pier and the intermediate piers will not accommodate the future four-lane roadway. Finally, the existing k values for the crest and sag vertical curves on I-4 approaching SR 33 are appropriate for 55 mph and 60 mph design speeds, but not for the 70 mph design speed required for the interstate. Reconstruction of the interchange with an increased vertical profile of I-4 over SR 33 and improved I-4 roadway profile geometry to meet 70 mph design speed is proposed. Through coordination with FDOT Central Office and FHWA, it was determined that the I-4/SR 33 interchange analysis would be documented in a Non-Interchange Access Request (Non-IAR) per the 2013 Interchange Access Request User's Guide, Section 1.5.5. An *Interchange Operational Analysis Report (IOAR) Not Requiring FHWA Approval* was prepared to document the interchange alternatives analysis process and is included in Appendix D of the SR 33 PD&E Study Preliminary Engineering Report (PER).

The proposed roadway typical section for the SR 33 project is a suburban typical section that would include two 12-foot travel lanes in each direction separated by a 30-foot median. The proposed improvements also include a four-foot inside paved shoulder and a five-foot outside paved shoulder in each direction. An open drainage system will collect stormwater runoff and convey it to linear swales. A 12-foot-wide shared-use path is proposed along the east side of the road from the beginning of the project to University Boulevard. A five-foot sidewalk is planned along the west side of the road throughout the project limits and along the east side of the road from University Boulevard to north of Tomkow Road. This typical section can be constructed within the existing 200 feet of right-of-way. The design speed for this typical section is 55 miles per hour. Figure 2 shows the proposed pavement saving typical section.

The proposed stormwater treatment system will consist of linear swales within the existing road right-of-way and some ponds in the infield areas of the I-4 interchange. Right-of-way impacts for the project will be limited to the interchange area.

### SUBURBAN PAVEMENT SAVING ALTERNATIVE



Florida Department of Transportation  
District 1

**State Road 33 PD&E Study**  
from Old Combee Road  
to North of Tomkow Road  
Polk County, Florida  
Financial Project ID: 430185-1-22-01  
Federal Aid Project No: TBD

## PROPOSED PAVEMENT SAVING TYPICAL SECTION

Figure  
2

## **ATTACHMENT A – SOCIAL AND ECONOMIC IMPACTS**

### **A.1 LAND USE CHANGES**

The widening of SR 33 is located within the City of Lakeland and unincorporated Polk County. Existing land use is a mix of single and multi-family residential from the beginning of the project to University Boulevard and commercial/industrial from University Boulevard to north of Tomkow Road. The City of Lakeland Year 2030 Future Land-Use Map shows the planned land use for this corridor as a mix of single and multi-family residential west of University Boulevard and commercial/industrial from University Boulevard to north of Tomkow Road. The preferred alternative will not adversely affect the future land uses within the project limits.

In a letter from the Polk Transportation Planning Organization (TPO) dated April 24, 2014, the Board stated that the preferred improvement is consistent with their Long Range Transportation Plan. The concurrency letter is included in the Appendix.

### **A.2 RELOCATION POTENTIAL**

The preferred alternative will not result in any residential or business displacements, but it will require the acquisition of right-of-way in the I-4 interchange area. FDOT will carry out a right-of-way acquisition and relocation program in accordance with Florida Statute 339.09 and the Uniform Relocation and Real Property Acquisition Policies Act of 1970 (Public Law 91-646, as amended by Public Law 100-17). FDOT produced brochures that describe in detail the Department's relocation assistance program and right-of-way acquisition program called "Your Relocation: Residential", "Your Relocation: Business, Farms and Nonprofit Organizations", "Your Relocation: Signs", and "The Real Estate Acquisition Process." Each of these brochures were made available and distributed as needed at the public information workshop and the public hearing, and were made available upon request to any interested person.

### **A.3 COMMUNITY SERVICES**

Community service facilities near the SR 33 corridor include a park-and-ride lot, a golf course (which is currently closed until further notice) and Lakeland Fire Station #6. The project will not impact these facilities. The addition of the raised median will affect how people can access properties, but existing social resources will not be impacted by these improvements.

### **A.4 NON-DISCRIMINATION CONSIDERATIONS**

This project has been developed without regard to race, color, national origin, age, sex, religion, disability, or family status. Title VI states that no person shall, on the grounds of race, color, religion, sex, national origin, marital status, handicap or family status, be excluded from participation in, or be denied the benefits of, or be otherwise subject to discrimination under any program of the federal, state or local government.

The preferred alternative does not result in any disproportionate adverse impacts to any distinct minority, ethnic, elderly or handicapped groups and/or low-income households. Title VI information was made available at the public workshop and public hearing for the project.

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations, signed by the President on February 11, 1994, directs federal agencies to take appropriate and necessary steps to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. This project is not expected to have any adverse or disproportionate impacts on minority or low-income households.

## **A.5 CONTROVERSY POTENTIAL**

A Public Involvement Plan was developed and approved on June 26, 2012. The PIP was implemented in compliance with Part 1, Chapter 11 of the FDOT PD&E Manual; Florida Statute 339.155; Executive Orders 11990 and 11988; Council on Environmental Quality Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (NEPA) and 23 CFR 771.

The Advance Notification Package was submitted to the Florida State Clearinghouse on April 11, 2011 and through the Environmental Screening Tool to the Environmental Technical Advisory Team as part of the Efficient Transportation Decision Making process.

An Alternatives Workshop was held on September 24, 2013 at the Believer's Fellowship Word of Faith Church located at 5240 North Socrum Loop Road in Lakeland, Florida. The meeting was conducted as an informal open house from 5:00 PM to 7:00 PM. An informational project video ran continuously during the open house in a separate room. As attendees entered the workshop, they were asked to sign in and were given a project information handout, comment form, and copy of the most recent SR 33 newsletter. The workshop was held in an open house format with members of the study team available to answer questions and discuss the project one-on-one with attendees. Four comment forms were received and included comments related to noise, wetland impacts, a drainage issue and general comments from the City of Lakeland. None of the comment expressed opposition to the project.

The Public Hearing was held on Thursday, February 27, 2014 at the Peggy Brown Building, which is located at 215 South Lake Avenue, Lakeland, Florida. Based on those attendees who signed the sign-in form, 25 citizens and one elected official attended this hearing. The purpose of this hearing was to present to the public the proposed improvements and obtain comments prior to finalizing the recommendations. The format of this hearing was an open house to informally answer questions and receive comments, followed by a formal presentation and video at 6:30 p.m. In addition, visual displays were available for review. The hearing provided an overview of the proposed alternative and the costs and impacts of the proposed improvement. In addition, an opportunity for the public to make

formal statements or ask questions regarding the study was provided. One citizen gave public comments at the hearing and is generally opposed to the project because she believes that the widened roadway will just bring in more traffic, noise and pollution. Four comment forms were received and included input on noise, general support for the project, a request for an improvement to a neighborhood connection to SR 33 and general opposition to the project from the same person who made the oral statement at the public hearing. The Transcript Certification Package with the public hearing transcript is part of this submittal to FHWA.

## **ATTACHMENT B – CULTURAL IMPACTS**

### **B.1 SECTION 4(F) LANDS**

The project was examined for potential Section 4(f) resources in accordance with Section 4(f) of the Department of Transportation Act of 1966 (Title 49, U.S.C. Section 1653 (f), amended and recodified in Title 49, U.S.C. Section 303, in 1983). A Section 4(f) Determination of Applicability (DOA) was prepared for the Tenoroc Fish Management Area (FMA). The Section 4(f) DOA was submitted to FHWA on October 14, 2013.

The Tenoroc FMA is a Section 4(f) resource located east of the SR 33 project corridor. No new right-of-way would be needed from the Tenoroc FMA for the preferred improvements to SR 33. FHWA found that there would be no Section 4(f) use of the Tenoroc FMA as documented in an e-mail dated November 18, 2013. The Section 4(f) DOA response e-mail from FHWA is included in the Appendix.

### **B.2 HISTORIC SITES/DISTRICTS**

A *Cultural Resource Assessment Survey* (CRAS), conducted in accordance with procedures outlined in 36 CFR Part 800, including literature review and field survey, was prepared for the project. As a result of the assessment, 50 resources were documented within the Area of Potential Effect (APE). These included 32 previously recorded historic structures, 16 newly recorded historic resources, one previously recorded resource group, and one newly recorded resource group; none were recommended eligible for inclusion in the NRHP. No NRHP-eligible or listed resources were identified within the SR 33 APE.

The CRAS was submitted to FHWA on September 25, 2013 for review and transmittal to SHPO. FHWA and SHPO concurred with the findings and recommendations in a letter received November 12, 2013. The FHWA and SHPO concurrence letter is included in the Appendix.

### **B.3 ARCHAEOLOGICAL SITES**

A *Cultural Resource Assessment Survey* (CRAS), conducted in accordance with procedures outlined in 36 CFR Part 800, including literature review and field survey, was prepared for the project. A total of 82 shovel tests were conducted within the Area of Potential Effect (APE). None of the shovel tests yielded cultural material.

The CRAS was submitted to FHWA on September 25, 2013 for review and transmittal to SHPO. FHWA and SHPO concurred with the findings and recommendations in a letter received November 12, 2013. The FHWA and SHPO concurrence letter is included in the Appendix.

## **B.4 RECREATION AREAS**

There is one recreational area adjacent to the SR 33 corridor; the Tenoroc Fish Management Area (FMA). This is a 7,444-acre facility that is located east of SR 33, south of University Boulevard and is bisected by SR 659. The Tenoroc FMA is made up primarily of previously mined lands that have been converted to water-filled pits that remained after strip mining operations were terminated. Recreational fishing accounts for approximately 86% of the annual public use at the Tenoroc FMA. Other recreational uses include hiking, horseback riding, bird watching, picnicking, and biking. The Florida Trail Association helps maintain a six-mile section of the Florida Trail, which runs through the Tenoroc FMA. There are also approximately 20 miles of equestrian trails that are used by several local riding clubs. The Ridge Audubon Society conducts annual bird counts and FFWCC-sanctioned fishing derbies are held at Picnic Lake and Derby Lake. A major regional shooting range was built on the Tenoroc FMA by the FFWCC. Limited hunting opportunities are also provided for doves, alligators and feral hogs.

A Section 4(f) Determination of Applicability was prepared for this facility. FHWA determined that the Tenoroc FMA is a Section 4(f) resource. The proposed improvements to SR 33 will not result in any direct or indirect impacts to the Tenoroc FMA or use of the Tenoroc FMA.

## ATTACHMENT C – NATURAL ENVIRONMENT

### C.1 WETLANDS

A *Wetland Evaluation Report* (WER) was prepared in accordance with Executive Order 11990, Protection of Wetlands, dated May 23, 1977, and US Department of Transportation Order 56601A, Preservation of the Nation's Wetlands, dated August 24, 1978. The purpose of the wetlands evaluation was to consider avoidance, protection, preservation and enhancement of wetlands to the fullest extent practicable.

The preferred alternative will be constructed primarily within the existing FDOT right-of-way. Improvements are required to the I-4/SR 33 interchange that will require acquisition of additional right-of-way. The preferred alternative may impact 17.8 acres of wetlands. Based on the findings of the WER, it was determined that:

1. The proposed project will have no significant short-term or long-term adverse impacts to wetlands;
2. There is no practical alternative to the proposed construction in wetlands
3. All practicable measures have been taken to minimize harm to wetlands.

The Uniform Mitigation Assessment Methodology (UMAM) was utilized to determine the functional losses associated with the unavoidable impacts to wetlands and surface waters. All affected wetlands within the project area are of moderate to low quality. Functional losses resulting from the project were calculated to be 8.2 functional units. Wetland impacts which will result from the construction of this project will be mitigated pursuant to Section 373.4137, F.S. to satisfy all mitigation requirements of Part IV. Chapter 373, F.S. and 33 U.S.C. s.1344.

The use of a mitigation bank to offset adverse impacts resulting from a project is the preferred mitigation option of the USACOE. The project must fall within the service area of an approved mitigation bank. Currently, there is only one mitigation bank with both state and federal approvals, whose service area includes the project corridor (Withlacoochee River Basin) – Green Swamp Mitigation Bank (GSMB). A second mitigation bank (Withlacoochee Wetland Mitigation Bank) with the same service area has already been granted state approval, and is awaiting federal approval. The current cost of a state/federal credit at each of these mitigation banks is \$180,000 per UMAM credit. It is anticipated that mitigation will be available within the Withlacoochee River Basin at the time of design and permitting.

The WER was submitted to the Florida Fish and Wildlife Conservation Commission (FFWCC), the National Marine Fisheries Service (NMFS) and the US Army Corps of Engineers (USACOE). FFWCC responded in a letter dated November 18, 2013 that they concurred with the findings of the WER. The NMFS indicated through an e-mail dated October 22, 2013 that there are no NMFS Essential Fish



Habitat concerns on the project. USACOE did not provide any input on their review of the WER. The FFWCC letter and NMFS e-mail are included in the Appendix.

## **C.2 WATER QUALITY**

The project is located entirely within the Withlacoochee River sub-basin of the Orange Hammock River Watershed as defined by the SWFWMD. Although the project lies entirely within the Withlacoochee River sub-basin, SR 33 currently outfalls to three different sub-basins within the project limits: Lake Deeson, Withlacoochee River, and Saddle Creek. Lake Deeson is a closed basin located north of SR 33 near Old Combee road. The general flow pattern within the Withlacoochee River basin is north towards the Withlacoochee River. Saddle Creek is located south of SR 33, and the general flow pattern for this basin is south towards the Peace River.

The proposed stormwater facility design will include, at a minimum, the water quantity requirements for water quality impacts as required by SWFWMD in Chapter 40D-4, F.A.C..

## **C.3 FLOODPLAINS**

A *Location Hydraulics Report* (LHR) was prepared for this project. This project will impact the 100-year floodplain through longitudinal impacts resulting from filling the floodplain areas associated with isolated wetlands, wetland systems, and depression areas and transverse impacts resulting from the extension and replacement of the existing cross drain culverts. The preferred improvements will impact approximately 5.1 acre-feet of floodplain.

It has been determined that there is no regulatory floodway involvement within the project limits and that the project will not support base floodplain development that is incompatible with existing floodplain management programs. The floodplain encroachments associated with this project are classified as minimal and there is not expected to be any change in the flood risk as a result of this project. The following floodplain statement applies to this project:

*The proposed cross drains will perform hydraulically in a manner equal to or greater than the existing condition, and backwater surface elevations are not expected to increase. As a result, there will be no significant change in flood risk, and there will not be a significant change in the potential for interruption or termination of emergency service or in emergency evacuation routes. Therefore, it has been determined that this encroachment is not significant.*

## **C.4 WILDLIFE AND HABITAT**

An *Endangered Species Biological Assessment* (ESBA) was prepared for this project as part of the interagency coordination required under Section 7 of the Endangered Species Act (ESA) of 1973, as amended, state threatened and endangered species regulations (Ch. 379.2291, Florida Statutes (FS) and Ch. 68A-27, Florida Administrative Code (FAC) and per the requirements of Part 2, Chapter 27 of the FDOT PD&E Manual. The purpose of this evaluation was to document current environmental

conditions along the corridor and potential impacts to wildlife, habitat, or listed species; evaluate the project area's current potential to support species listed as endangered, threatened or of special concern; identify current permitting and regulatory agency coordination requirements for the project; and request comments from regulatory agencies with jurisdiction over the study.

The proposed project corridor falls within the designated USFWS Consultation Areas (CA) for five federally-listed wildlife species. Wildlife consultation areas include the Audubon's crested caracara, Everglades snail kite, Florida scrub jay, sand skink, and blue-tailed mole skink. The latter two species are incorporated into a singular consultation area defined as the "Skink Consultation Area" by USFWS. In addition to the USFWS Consultation Areas described above, the project corridor is located within the Core Foraging Area (CFA) of six wood stork colonies.

FDOT determined that the proposed widening of SR 33 will have "No Effect" on the Florida grasshopper sparrow (*Ammodramus savannarum floridanus*) and Florida bonneted bat (*Eumops floridanus*). The project will also have "No Effect" on the state-listed Florida burrowing owl (*Athene cunicularia floridana*), Florida sandhill crane (*Grus canadensis pratensis*), southeastern American kestrel (*Falco sparverius paulus*), gopher tortoise (*Gopherus polyphemus*), Florida mouse (*Podomys floridanus*), gopher frog (*Lithobates capito*), Florida pine snake (*Pituophis melanoleucus mugitus*), Sherman's fox squirrel (*Sciurus niger shermani*) or any stated listed plants or wading birds.

The proposed project "May Affect, But is Not Likely to Adversely Affect" Audubon's crested caracara (*Polyborus plancus audubonii*), Everglades snail kite (*Rostrhamus sociabilis plumbeus*), Florida scrub-jay (*Aphelocoma coerulescens*), wood stork (*Mycteria americana*), eastern indigo snake (*Drymarchon corais couperi*), sand skink (*Neoseps reynoldsi*) and blue-tailed mole skink (*Eumeces egregius lividus*), and numerous federally listed plant species that could occur within the project corridor.

The ESBA was submitted to the US Fish and Wildlife Service and they have indicated their concurrence with these findings in a letter dated November 14, 2013. The effect determination for the state-listed species was concurred with by the FFWCC in a letter dated December 12, 2013. The FFWCC's concurrence is further clarified in an e-mail dated December 16, 2013. This correspondence is included in the Appendix.

## ATTACHMENT D – PHYSICAL IMPACTS

### D.1 NOISE

The traffic noise analysis was performed following FDOT procedures that comply with Title 23 Code of Federal Regulations (CFR), Part 772, Procedures for Abatement of Highway Traffic Noise and Construction Noise. The evaluation uses methodologies established by FDOT and documented in the PD&E Manual, Part 2, Chapter 17 (May 2011). The prediction of existing and future traffic noise levels with and without the roadway improvements was performed using FHWA's Traffic Noise Model (TNM Version 2.5).

The 63 evaluated noise-sensitive sites comprised 62 residences (located within the Grey Moss Manor Subdivision, Lake Deeson Village Mobile Home Park, Deeson Manor Subdivision, Landings Apartments, Spanish Oaks Subdivision, Cambry Subdivision, Snow Wood Subdivision, and residences east of I-4) and the pool at the Landings Apartments.

The results of the analysis indicate that existing (2012) exterior traffic noise levels range from 47.6 to 62.6 dB(A), levels that do not approach, meet, or exceed the Noise Abatement Criteria (NAC). In the future (2036) with the improvements (Build) traffic noise levels are predicted to approach, meet, or exceed the NAC at 37 receptors. Notably, when compared to the existing condition, traffic noise levels are not predicted to increase more than 10 dB(A) above existing conditions at any of the evaluated sites. As such, the project would not substantially increase traffic noise (i.e., increase traffic noise 15 dB(A) or more).

Noise abatement measures were evaluated for 37 noise sensitive sites that are predicted to experience future traffic noise levels that would approach, meet, or exceed the Noise Abatement Criterion (NAC) with the proposed improvements. Four noise barriers were considered:

1. Sites 2-20 and 26-27 - Residences located within the Grey Moss Subdivision and Lake Deeson Village Mobile Home Park;
2. Site 31 - The swimming pool at the Landings Apartments;
3. Sites 32b, 33b, 34b, and 35b - Residences at the Landings Apartments; and
4. Sites 47-57 - Residences located within the Cambry and Snow Wood subdivisions.

Of four noise barriers considered, Barrier 1 and Barrier 4 were found to meet the noise design reduction goal of 7 dB(A). Table 3 summarizes the assessment of feasibility and cost reasonableness for the two barriers.

**Table 3 – Noise Feasibility and Cost Reasonableness Summary**

Noise Barrier # and Location	Range of Barrier Heights and Lengths Evaluated (ft)	Range of Number of Impacted Receptors and Insertion Loss (dB(A))			Range of Number of Benefited Receptors			Total Estimated Cost	Cost Per Benefited Receptor	Cost Reasonable Yes/No
		5 dB(A)	6 dB(A)	7 dB(A) or >	Impact-ed	Other*	Total			
1 – Grey Moss Subd. And Lake Deeson	Heights 8'-22' Lengths 1,149' – 1,339'	5-8	1-2	7-16	15-21	1-3	16-24	\$276K to \$789K	\$17K - \$33K	Yes
4 – Cambry and Snow Wood Subd.	Heights 8'-22' Lengths 1,081 – 1,345'	1-5	0-0	4-10	9-11	0-2	9-13	\$259K to \$782K	\$29K - \$60K	Yes for 8'-14' barrier No for 16'-22' barrier

FDOT is committed to the construction of noise barriers at the locations above contingent upon the following conditions:

- Detailed noise analysis during the final design process supports the need for, and the feasibility and reasonableness of, providing the barriers as abatement.
- The detailed analysis demonstrates that the cost of the noise barrier will not exceed the cost reasonable criterion.
- The residents/property owners benefitted by a noise barrier desire that a noise barrier be constructed.
- All safety and engineering conflicts or issues related to construction of a noise barrier are resolved.

Land uses adjacent to SR 33 are identified on the FDOT listing of noise- and vibration-sensitive sites (e.g., residential use). Construction of the proposed roadway improvements is not expected to have any significant noise or vibration impact. If sensitive land uses develop adjacent to the roadway prior to construction, increased potential for noise or vibration impacts could result. It is anticipated that the application of the *FDOT Standard Specifications for Road and Bridge Construction* will minimize or eliminate potential construction noise and vibration impacts. However, should unanticipated noise or vibration issues arise during the construction process, the Project Engineer, in coordination with the District Noise Specialist and the Contractor, will investigate additional methods of controlling these impacts.

Land uses such as residences, auditoriums, hotels/motels, libraries, recreational areas, and parks are considered incompatible with highway noise levels that exceed the NAC. To reduce the possibility of additional traffic noise-related impacts, noise level contours were developed for the future improved roadway facility. These noise contours delineate the extent of the predicted traffic noise impact area from the improved roadway's edge-of-travel lane for activity categories of land use. Local officials will be provided a copy of the Final Noise Study Report to promote compatibility between any future land development in the project area.

The Noise Study Report (NSR) for this project is available for review at the FDOT District 1 Office, located at 801 N. Broadway Avenue, Bartow, Florida 33830.

## **D.2 AIR QUALITY**

The project is located in an area that has been designated as attainment for all of the National Ambient Air Quality Standards established by the Clean Air Act of 1990 and subsequent amendments; therefore, demonstration of conformity with a state implementation plan is not required for this project.

Construction activities may cause minor short-term air quality effects in the form of dust from earthwork and unpaved roads and smoke from open burning. These effects will be minimized by adherence to all state and local regulations and to the latest edition of the FDOT Standard Specifications for Road and Bridge Construction.

This document does not incorporate an analysis of the GHG emissions or climate change effects of each of the alternatives because the potential change in GHG emissions is very small in the context of the affected environment. Because of the insignificance of the GHG impacts, those local impacts will not be meaningful to a decision on the environmentally preferable alternative or to a choice among alternatives. For these reasons, no alternatives-level GHG analysis has been performed for this project.

## **D.3 CONSTRUCTION**

Construction activities for the preferred alternative may cause minor short-term air quality, noise, water quality, traffic congestion and visual impacts for residents and travelers within the immediate vicinity of the project.

Noise and vibration impacts will be from heavy equipment and construction activities. This will be minimized by adherence to noise control measures found in the most current edition of the FDOT 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 Standard Specifications for Road and Bridge Construction, "Prevention, Control, and Abatement of Erosion and Water Pollution," and through the use of best management practices.

Traffic will be maintained during construction so as to minimize delays through the construction zone. This will include the use of detours, signage and information provided to the local news media to notify the public of road closures or any other construction related activities that could create delays to the traveling public.

## **D.4 CONTAMINATION**

A Level I contamination evaluation was conducted and documented in a *Contamination Screening Evaluation Report* (CSER) for this project. The environmental screening has resulted in identification of seven sites that may present the potential for petroleum contamination or hazardous materials. Two of these sites have been given a “Medium” ranking and five sites have been given a “Low” ranking for contamination potential. The two Medium ranked sites are:

- Saddle Creek Phosphate Mine – Reclaimed Strip Mine located along the east side of SR 33 north of SR 659
- Lakeland Water Utilities Lift Station located north of SR 33 and SR 659

The preferred alternative will not require the acquisition of right-of-way from either of these two potential contamination sites.

## **D.5 AESTHETIC EFFECTS**

There is residential development primarily south of SR 659 on SR 33 that is likely to have an interest in the visual appearance of the road. The City of Lakeland is interested in aesthetic features for the I-4/SR 33 interchange because the City considers it a gateway into the City. Specific aesthetic and landscaping features will be determined during the design phase of the project. With the addition of sidewalk and shared use path along the corridor, the preferred alternative is not expected to have an adverse impact on aesthetics along the project corridor.

## **D.6 BICYCLES AND PEDESTRIANS**

There are no continuous sidewalks or other pedestrian features along SR 33. There are short segments of intermittent sidewalk. The preferred improvement will include paved shoulders that can be used by bicyclists and a continuous sidewalk along the west side of the road. A 12-foot wide shared use path will be provided along the east side of SR 33 from Old Combee Road to University Boulevard and a five-foot wide sidewalk will be provided on the east side from University Boulevard to the north end of the project.

There are currently no transit services provided along this section of SR 33. There are plans to extend transit service along this segment of SR 33 in the future when Florida Polytechnic University opens. The PD&E Study included coordination with Lakeland Area Mass Transit regarding accommodations for future transit bus stops along SR 33.

## **D.7 UTILITIES AND RAILROADS**

Overhead and buried utilities are located along both sides of SR 33. Plan sheets were provided to the eight utility owners along the corridor and a request for markups on the plan sheets showing utility

locations and sizes. Existing utilities include overhead and buried power lines, cable and fiber optic lines. In addition both the City of Lakeland and Florida Gas Transmission have gas lines within the SR 33 right-of-way. Florida Gas Transmission also has a high pressure gas line within an easement along I-4 and within the I-4 interchange area at SR 33. Relocation of some utilities will be required with the preferred alternative. Further coordination with utility owners will be required during the design phase.

No railroad facilities exist within the project.

# **APPENDIX**

Planning Consistency Package  
Polk TPO Concurrency Letter  
ETDM Summary Report  
Section 4(f) DOA Response from FHWA  
Concurrence Letter from FHWA/SHPO  
Concurrence Letters from USFWS and FFWCC  
Concurrence Letters from FFWCC and NMFS  
Noise Study Report (NSR)



# Planning Consistency Package

**Planning Requirements for Environmental Document Approvals with Segmented Implementation Page 1 of 2**

<b>Document Information:</b>		
<b>Date:</b> <u>4/21/2014</u>	<b>Document Type:</b> <u>Type 2 CE</u>	<b>Document Status:</b> <u>Draft</u>
<b>Project Name:</b> <u>State Road 33 Project Development &amp; Environment Study (Total 4.3 Miles)</u>	<b>FM #:</b> <u>430185-1-22-01</u>	
<b>Project Limits:</b> <u>Old Combee Road to North of Tomkow Road</u>	<b>ETDM #:</b> <u>13188</u>	
<b>Are the limits consistent with the plans?</b>	Y - The study is consistent with the <i>Cost Affordable Plan of the Polk County TPO's 2035 Mobility Vision Plan (LRTP)</i> , and is included in the Capital Improvements Plan and Transportation Elements of the City of Lakeland's 2020 Comprehensive Plan.	
<b>Identify MPO(s) (if applicable):</b> <u>Polk TPO</u>	<b>PD&amp;E FAP#</b> <u>N/A</u>	

<b>Segment Information:</b> <u>Widen SR 33 from two to four lanes</u>
<b>PD&amp;E Seg 1 Limits:</b> <u>SR 33 from Old Combee Road to University Boulevard (3.3 Miles)</u> <b>FM #:</b> <u>430185-2</u>

<b>Currently Adopted CFP-LRTP</b>	<b>COMMENTS</b>
<b>Yes</b>	The proposed widening of the SR 33 mainline is consistent with the Polk County TPO's 2035 Long Range Transportation Plan (Mobility Vision Plan) (Cost Affordable Plan, amended February 14, 2013, attached) and Polk County TPO's Transportation Improvement Program (TIP, p. 2-2).

PHASE	Currently Approved TIP	Currently Approved STIP	TIP/STIP \$	TIP/STIP FY	COMMENTS
PE (Final Design)	Y	Y	\$7,350,000	2014	The project can be found in Polk TPO's TIP (page 2-2) and in the current STIP. PE (Final Design) funding is included for both Segments 1 and 2.
R/W	N/A	N/A	\$0	N/A	<b>No mainline right-of-way (ROW) is required for SR 33 from Old Combee Road to University BLVD..</b> The Polk 2035 Mobility Vision Plan was amended to include ROW for the mainline improvements only in FY 2016-2020; however, ROW is only needed for the interchange improvement, segment 2. District Planning staff will coordinate the required LRTP amendment to correctly reflect ROW funding for the interchange improvement only (Segment 2).
Construction	N	N	\$0	N/A	Construction is not currently funded in FDOT's Tentative Five-Year Work Program (FY 2015-2019).The Polk TPO 2035 Mobility Vision Plan was amended February 14, 2014 to add construction in FY 2021-2025 at an estimated cost of \$77.24M for the main line only (excludes the interchange, see segment 2 below).

<b>Segment Information:</b> <u>Widen SR 33 from two to four lanes, interchange improvements</u>
<b>PD&amp;E Seg 2 Limits:</b> <u>University Boulevard to North of Tomkow Road (1 Mile)</u> <b>FM #:</b> <u>430185-2, 430185-3</u>

<b>Currently Adopted CFP-LRTP</b>	<b>COMMENTS</b>				
<b>MPO YES</b>	The proposed widening of the SR 33 and the associated I-4 interchange improvements are consistent with the Polk County TPO's 2035 Long Range Transportation Plan (Mobility Vision Plan) (Cost Affordable Plan, amended February 14, 2013, attached) and Polk County TPO's Transportation Improvement Program (TIP, p. 2-2).				
PHASE	Currently Approved TIP	Currently Approved STIP	TIP/STIP \$	TIP/STIP FY	COMMENTS
PE (Final Design)	Y	Y	\$7,350,000	2014	The project can be found in Polk TPO's TIP (page 2-2) and in the current STIP. PE (Final Design) funding is included for both Segments 1 and 2.

R/W	N	N	\$0	2019	The Polk 2035 Mobility Vision Plan was amended to include right-of-way (ROW) for the mainline improvements only in FY 2016-2020. ROW is only needed for the interchange improvement, not for the mainline widening. District Planning staff will coordinate the required LRTP amendment to correctly reflect ROW funding for the interchange improvement only. RW is outside the current window of the STIP. <b>FM # 430185-3 is for the I-4 interchange improvement for ROW/CST phases only and PE (Final Design) is covered under FM# 430185-2 for both segments 1 &amp; 2.</b>
Construction	N	N	\$0	N/A	Construction is not currently funded in FDOT's Tentative Five-Year Work Program (FY 2015-2019), nor has construction funding been allocated to the I-4 interchange improvements in the Polk TPO 2035 Mobility Vision Plan. It is anticipated that funding will ultimately come from the 2040 SIS CFP.

FDOT Preparer's Name: ANTONE N. SHEBBARD

Date: 6-12-14 Phone #: 863.519.2304

Preparer's Signature: Antone N. Sheppard

Email: antone.sheppard@dot.state.fl.us

\*Attach: LRTP, TIP, STIP pages

# SR 33 PD&E Study from Old Combee Road to N. of Tomkow Road

## Polk County

FPID 430185-1-22-01

### Planning Consistency

Table 1-1 summarizes planning consistency for SR33 from Old Combee Road to north of Tomkow Road with the FDOT State Transportation Improvement Program (STIP) for fiscal years 2014-2017 and the Polk County Transportation Planning Organization's (TPO) Transportation Improvement Program (TIP) for fiscal years 2014-2018 (See attachments).

#### FDOT

- The full PD&E project limits are included in the approved FDOT STIP document for preliminary engineering in fiscal year 2014 (see attached STIP pages).

#### Polk County TPO

- The widening of SR 33 from two to four lanes from Old Combee Road to north of Tomkow Road is included in the Cost Feasible Plan (CFP) of the Polk County TPO's 2035 Mobility Vision Plan. PD&E and design funding for the I-4 @ SR 33 interchange is also included in the TPO's LRTP CFP; however, right-of-way and construction funding for the Interchange improvements is currently not included in the LRTP CFP.
- The project is included in the Polk TPO's TIP for fiscal year 2014 – 2018 on page 2-2 (see attached).

#### City of Lakeland

- The project is included in the Capital Improvements Plan and Transportation Element of the City of Lakeland's 2020 Comprehensive Plan.
- A 12-foot-wide shared-use path along the east side of SR 33 between Old Combee Road and University Boulevard is included in the City of Lakeland's Citywide Pathways Plan.

**Table 1-1**  
**STIP/TIP Consistency**

Phase	Currently Approved TIP	Currently Approved STIP	TIP/STIP	TIP/STIP Fiscal Year	Comments
PE (Final Design)	Y	Y	\$7,350,000	2014	The project can be found in Polk TPO's TIP (page 2-2) and in the current STIP.

Phase	Currently Approved TIP	Currently Approved STIP	TIP/STIP	TIP/STIP Fiscal Year	Comments
Right-of-Way	N	N	\$0	N/A	Right-of-way (ROW) for the I-4 @ SR 33 interchange is funded in FDOT's Tentative Five-Year Work Program in FY 2019. No mainline ROW is required for SR 33. The TIP and STIP will be updated to include this funding in October 2014 subsequent to the adoption of the Five-Year Work Program. The Polk 2035 Mobility Vision Plan was amended to include ROW for the mainline improvements only in FY 2016-2020. The Department will coordinate the required LRTP amendment to correctly reflect ROW funding for the interchange improvement only.
Construction	N	N	\$0	N/A	Construction is not currently funded in FDOT's Tentative Five-Year Work Program (FY 2015-2019). The Polk 2035 Mobility Vision Plan was amended to add construction in FY 2021-2025 for the main line.

## Project Funding

The project is currently funded for the preliminary engineering and right-of-way phases using a combination of state and federal funding sources. The construction phase is not currently funded in FDOT's Adopted Five-Year Work Program. Documentation of funding for this project can be found in the adopted Polk TPO's Fiscal Years (FY) 2014-2018 TIP, the FDOT STIP for FY 2014-2017, and the Polk TPO's 2035 Mobility Vision Plan. Right-of-way is currently funded in FDOT's Tentative Five-Year Work Program in FY 2019. The TIP and STIP will be updated to include this funding in October of 2014 subsequent to adoption of the Five-Year Work Program. The Polk 2035 Mobility Vision Plan was amended to include right-of-way funding in FY 2016-2020 for the SR 33 mainline. Although construction is not yet funded in FDOT's Adopted Five-Year Work Program, the Polk 2035 Mobility Vision Plan was amended to include construction in FY 2021-2025. Based on recent guidance provided by FHWA dated January 2013, Planning Consistency Requirements have been met for this project as the next phase for the entire PD&E project limits is reflected in the STIP/TIP, i.e. design. This project is also funded in the TPO's 2035 LRTP CFP with the exception of right-of-way and construction for the I-4 @ SR 33 Interchange. District One Planning Office staff will coordinate the needed LRTP amendments when appropriate. Table 1-2 summarizes the planned implementation schedule of this project.

**Table 1-2  
Funding Summary**

<b>Phase</b>	<b>Estimated Cost</b>	<b>Time Frame (Fiscal Year)</b>	<b>Funding Source</b>
<b>Preliminary Engineering (Final Design)</b>	\$7,350,000	2014**	State and Federal
<b>Right-of-Way</b>	\$4,900,000	2019**	State and Federal
<b>Construction</b>	\$66,000,000***	2021-2025*	State and Federal
<b>TOTAL</b>	<b>\$78,250,000</b>		

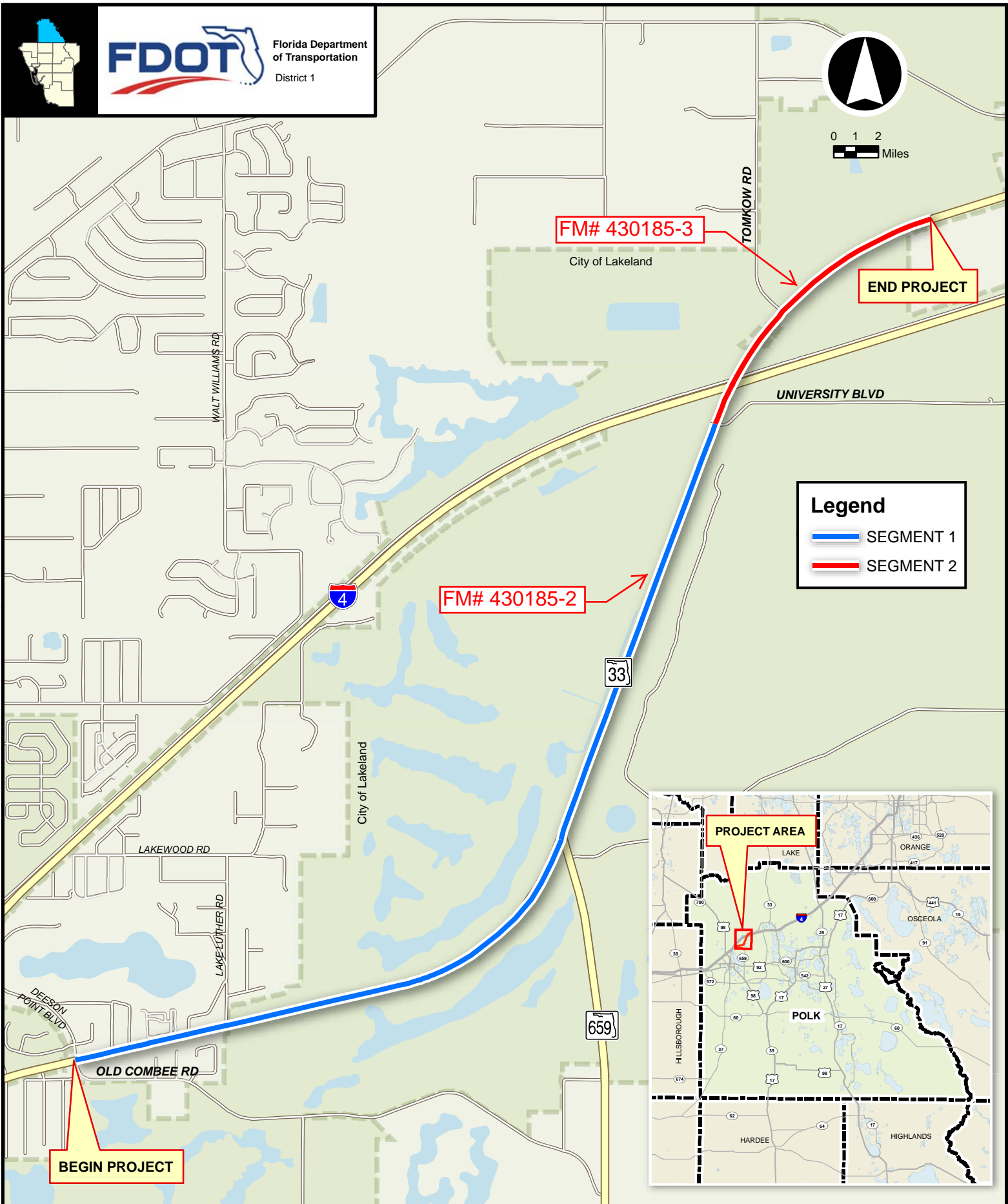
Sources: Adopted Polk TPO 2013/14-2017/18 TIP, Approved FDOT STIP, \*Adopted Polk TPO 2035 Mobility Vision Plan, \*\*FDOT's Five-Year Work Program, \*\*\*SR 33 PD&E Study estimates.



Florida Department of Transportation  
District 1

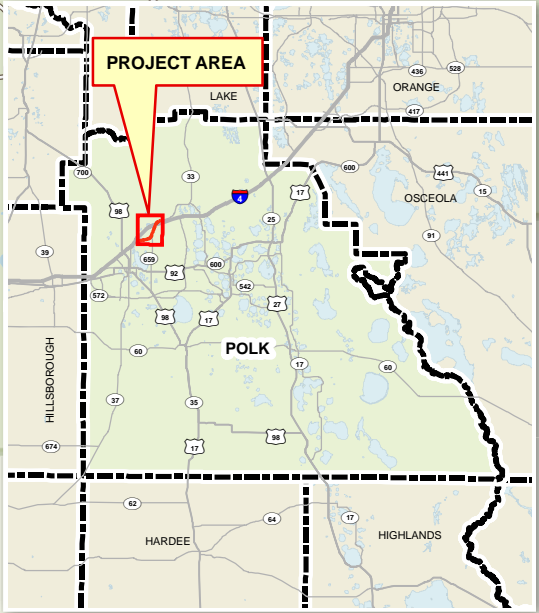


0 1 2  
Miles



**Legend**

- SEGMENT 1
- SEGMENT 2



**State Road 33 PD&E Study**

from Old Combee Road  
to North of Tomkow Road  
Polk County, Florida  
Financial Project ID: 430185-1-22-01  
Federal Project No: N/A

**PROJECT LOCATION MAP  
WITH SEGMENTS**

**Figure  
1**

Effective Date: 04/02/2014

Florida Department of Transportation

Run: 04/02/2014 13.53.55

**Current STIP**[View Current STIP Phase Grouping Crosswalk](#)

POLK TPO

Item Segment: 430185 1

Fund	<2014	2014	2015	2016	2017	>2017	All Years
<b>HIGHWAYS</b>							
Item Number: 430185 1 District: 01	Project Description: SR 33 FROM OLD COMBEE RD TO N OF TOMKOW RD County: POLK					*NON-SIS*	Type of Work: PD&E/EMO STUDY
Roadway ID: 16070000	Beginning Section: 4.993 Ending Section: 8.714			Project Length: 3.721 Lanes Existing/Improved/Added: 2/ 2/ 0			
<b>P D &amp; E / MANAGED BY FDOT</b>							
DDR -DISTRICT DEDICATED REVENUE	1,499,425	0	0	0	0	0	1,499,425
DIH -STATE IN-HOUSE PRODUCT SUPPORT	19,911	49,605	0	0	0	0	69,516
<b>Item 430185 1 Totals:</b>	<b>1,519,336</b>	<b>49,605</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,568,941</b>
<b>Project Total:</b>	<b>1,519,336</b>	<b>49,605</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,568,941</b>
<b>District 01 Totals:</b>	<b>1,519,336</b>	<b>49,605</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,568,941</b>
<b>Grand Total</b>	<b>1,519,336</b>	<b>49,605</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,568,941</b>



Effective Date: 04/02/2014

Florida Department of Transportation

Run: 04/02/2014 13.52.17

**Current STIP**[View Current STIP Phase Grouping Crosswalk](#)

POLK TPO

Item Segment: 430185 2

Fund	<2014	2014	2015	2016	2017	>2017	All Years	
<b>HIGHWAYS</b>								
Item Number: 430185 2 District: 01	Project Description: SR 33 FROM OLD COMBEE RD TO N OF TOMKOW RD County: POLK	*NON-SIS*				Type of Work: PRELIMINARY ENGINEERING		
Roadway ID: 16070000	Beginning Section: 4.993 Ending Section: 8.714	Project Length: 3.721		Lanes Existing/Improved/Added: 2/ 2/ 0				
PRELIMINARY ENGINEERING / MANAGED BY FDOT								
ACSU -ADVANCE CONSTRUCTION (SU)	0	343,749	0	0	0	0	343,749	
SA -STP, ANY AREA	0	1,599,824	0	0	0	0	1,599,824	
SU -STP, URBAN AREAS > 200K	0	5,406,427	0	0	0	0	5,406,427	
<b>Item 430185 2 Totals:</b>	<b>0</b>	<b>7,350,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7,350,000</b>	
<b>Project Total:</b>	<b>0</b>	<b>7,350,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7,350,000</b>	
<b>District 01 Totals:</b>	<b>0</b>	<b>7,350,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7,350,000</b>	
<b>Grand Total</b>	<b>0</b>	<b>7,350,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7,350,000</b>	

**4301852**

**SR 33**

**Non-SIS**



**Work Summary:** WIDEN ROAD      **From:** FROM OLD COMBEE ROAD  
**To:** TO N OF TOMKOW ROAD

**Lead Agency:** FDOT

Phase	Fund Source	2013/14	2014/15	2015/16	2016/17	2017/18	Total
PE (32)	SU	5,406,427	0	0	0	0	<b>5,406,427</b>
PE (32)	SA	1,599,824	0	0	0	0	<b>1,599,824</b>
PE (32)	ACSU	343,749	0	0	0	0	<b>343,749</b>
<b>Total</b>		<b>7,350,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7,350,000</b>

**Prior Year Cost:**  
**Future Year Cost:**  
**Total Project Cost:** 7,350,000  
**LRTP:** 8-5  
**Project Description:** Design (PE)

S1 - fdot - BlueZone Mainframe Display

File Edit Session Options Transfer View Script Help

Connect: FDOT\_Session Attention PA1 PA2 Reset PF01 PF02 PF03 PF04 PF05 PF06 PF07 PF08 PF09 PF10 PF11 PF12 System Request

WP04 D Display Item\_Seg\_def Phase\_Est Phase\_Sum

FDOT- Work Program Administration 04-03-2014  
 Item Segment Phase 09:57:16  
 Requested Version: G1 Include Candidates: N (Y/N) MORE: - +  
 Item/Segment: 430185 3 Status: 000 CANDIDATE LINE ITEM Old Item Nbr: \_\_\_\_\_  
 Desc: I-4 @ SR 33 INTERCHANGE MODIFICATION  
 Trans System: 03 INTRASTATE STATE HIGHWAY Man Dist: 01 Box Item: N  
 Begin Search At Phase: \_ \_ FP Seq: \_ \_ Project Total: 5,128,289

Ver	Phase	FP	Seq	Year	Fund	Pgm	PDC	Total	All	Dstr	Bud	Apr	St
							Amount	Amount	Typ	Typ/Area	Dist	Cat	
G1	4 B	01	01	2019	SU	00	133,734	133,734	1	T X15	01		2
	4 1	01	01	2019	SU	00	171,944	171,944	1	T X15	01		2
	4 3	01	01	2019	SU	00	1,819,258	1,819,258	1	T X15	01		2
				2020	SU	00	2,728,887	2,728,887	1	T X15	01		2
	4 5	01	01	2019	SU	00	1,194	1,194	1	T X15	01		2
	4 9	01	01	2019	DIOH	00	119,363	119,363	1	G OH	01		2
				2020	DIOH	00	153,909	153,909	1	G OH	01		2

AAA250-I: Successfully displayed.  
 F1=Help F3=Exit F7=Bkwd F8=Frwd F15=Logoff

S1 Ready (1) LTIP9I5M 9:57:31 4/3/2014 NUM 01.012

ID/ FPM	Project Details				P&E				Project Engineering				ROW				Construction				Total		
	Facility	From	To	No. of Existing Lanes	Project Type	Cost <sup>1</sup> (PDC)	Funding Source	VOE	Projected Cost <sup>2</sup> (PDC)	Cost <sup>1</sup> (PDC)	Funding Source	VOE	Projected Cost <sup>2</sup> (PDC)	Cost <sup>1</sup> (PDC)	Funding Source	VOE	Projected Cost <sup>2</sup> (PDC)	Funding Source	VOE	Projected Cost <sup>2</sup> (PDC)	Unfunded Needs <sup>3</sup>		
STATE ROADWAYS																							
N/A					CONGESTION MGMT PROJECTS																		
N/A					CONGESTION MGMT PROJECTS																		
N/A					CONGESTION MGMT PROJECTS																		
N/A					CONGESTION MGMT PROJECTS																		
N/A					CONGESTION MGMT PROJECTS																		
N/A					CONGESTION MGMT PROJECTS																		
39	I-4	@VIA EXPRESS RAMPS			RAMPS	0.16	SIS	UNFUNDED	0.29	0.46	SIS	UNFUNDED	0.06	0.00	SIS	UNFUNDED	0.00	3.17	SIS	UNFUNDED	7.15	0.00	8.32
348	I-4	@COUNTY LINE RD			INTERCHANGE	4.48	SIS	UNFUNDED	8.31	13.44	SIS	UNFUNDED	24.97	0.00	SIS	UNFUNDED	0.00	89.62	SIS	UNFUNDED	201.82	0.00	288.05
349	I-4	@WILLIAMS DR			INTERCHANGE	3.98	SIS	UNFUNDED	6.84	10.75	SIS	UNFUNDED	19.95	0.00	SIS	UNFUNDED	0.00	71.66	SIS	UNFUNDED	161.38	0.00	187.95
891	SR 93	I-4 EB RAMPS	OLD COMBER/ DESSON POINTE	2	ROADWAY WIDENING	0.34	SIS	COMMITTED	0.00	1.02		COMMITTED	0.00		COMMITTED	0.00	6.81		COMMITTED	0.00	0.00	0.00	6.81
898	SR 93	OLD COMBER ROAD	N. OF TOMKROW ROAD	2	ROADWAY WIDENING	2.60	OA	COMMITTED	0.00	7.35	OTHER	COMMITTED	0.00	5.50	OTHER	2016-2020	7.99	20.56	OTHER	COMMITTED	31.40	0.00	31.40
<p>**This project also includes the P&amp;E and Design phases for the Interchange 4 at SR 93 Interchange. Future funding for ROW and CST of the interchange will ultimately be allocated from FDOT's 55 Cost-Flexible Plan.</p>																							

Legend:   = COST AFFORDABLE PROJECT   = PARTIALLY FUNDED PROJECT   = UNFUNDED NEED

TABLE 8-1: FUNDED AND UNFUNDED ROAD AND HIGHWAY CAPACITY PROJECTS

Adapted



April 24, 2014

Mr. Billy Hattaway, P.E., District Secretary  
Florida Department of Transportation  
Post Office Box 1249, MS 1-36  
Bartow, FL 33831

**RE: POLK TPO ENDORSEMENT OF STATE ROAD 33 PROJECT DEVELOPMENT AND ENVIRONMENTAL (PD&E) STUDY**

Dear Secretary Hattaway:

At their meeting on April 10, 2014, the Polk Transportation Planning Organization (TPO) Board endorsed the Project Development and Environmental (PD&E) Study's preferred alternative for the widening of State Road 33 from Old Combee Road to north of Tomkow Road as consistent with Polk County's Adopted *2035 Mobility Vision Plan (MVP)*. In evaluating the consistency of the preferred alternative with the *2035 MVP*, the TPO considered the Goals, Objectives and Policies, as well as the project definition, such as the termini and number of lanes, contained in the *2035 MVP*.

Exit 38 Interchange

The need for improving the Exit 38 interchange along with widening of State Road 33 has been, and will continue to be, a high priority of the Polk TPO. Significant increases in automobile and truck traffic are anticipated on State Road 33 and at Exit 38 as a result of nearby development activity associated with the Bridgewater and Williams developments of regional impact (DRI) and the opening of Florida Polytechnic University. The referenced PD&E study includes the reconstruction of the Exit 38 interchange of State Road 33 at Interstate 4. The Department's Work Program also includes funding for the design of this interchange as part of the State Road 33 widening. However, right-of-way and construction phases for the interchange are currently unfunded in FDOT's Work Program, as well as the 2040 Strategic Intermodal System (SIS) Cost-Feasible Plan. It is our understanding FDOT plans to program the right-of-way and construction of the interchange separately from the State Road 33 widening project and that FDOT's Strategic Intermodal System (SIS) funds would likely be used fund these phases. Therefore, the TPO requests the Department to consider adding funding in the 2040 SIS Plan to construct the needed interchange improvements at Exit 38. If possible, the funding should be programmed to more closely coincide with the implementation of the widening of State Road 33.

Letter to Secretary Hattaway  
April 24, 2014  
Page Two

The Polk TPO looks forward to coordinating with FDOT in the development of future project phases of State Road 33. If you have any questions regarding the TPO's action, please contact Ryan Kordek with TPO staff at (863) 534-6558.

Sincerely,



Commissioner George Lindsey, III  
Polk TPO Chairman

GL:RK

cc: TPO Board

Chris Smith, FDOT1  
Tony Sherrard, FDOT1  
Lawrence Massey, FDOT1  
Lori Carlton, FDOT1  
Rick Lilyquist, City of Lakeland  
Chuck Barmby, City of Lakeland

# Polk TPO Concurrency Letter





April 24, 2014

Mr. Billy Hattaway, P.E., District Secretary  
Florida Department of Transportation  
Post Office Box 1249, MS 1-36  
Bartow, FL 33831

**RE: POLK TPO ENDORSEMENT OF STATE ROAD 33 PROJECT DEVELOPMENT AND ENVIRONMENTAL (PD&E) STUDY**

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Letter to Secretary Hattaway  
April 24, 2014  
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Sincerely,



Commissioner George Lindsey, III  
Polk TPO Chairman

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Lawrence Massey, FDOT1  
Lori Carlton, FDOT1  
Rick Lilyquist, City of Lakeland  
Chuck Barmby, City of Lakeland

# ETDM Summary Report

# ETDM Summary Report

Project #13188 - State Road 33: from Old Combee Road to north of Tomkow Road

Preliminary Programming Screen - Published on 09/07/2011

Generated by Scott Swearngen (on behalf of FDOT District 1)

Printed on: 10/25/2011

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## Introduction to Programming Screen Summary Report

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

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

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

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



**#13188 State Road 33: from Old Combee Road to north of Tomkow Road**

<b>District</b>	District 1	<b>Phase</b>	Programming Screen
<b>County</b>	Polk	<b>From</b>	north of Tomkow Road
<b>Planning Organization</b>	FDOT District 1	<b>To</b>	Old Combee Road
<b>Plan ID</b>		<b>Financial Management No.</b>	43018512201
<b>Federal Involvement</b>	Potential Future Federal Funding		
<b>Contact Information</b>	Name: Gwen Pipkin Phone: (863) 519-2375 ext. 2375 E-mail: gwen.pipkin@dot.state.fl.us		

**Snapshot Data From: Programming Screen Summary Report Re-published on 09/07/2011 by Scott Swarengen**

**Overview**

		Evaluation of Direct Effects																				
		Natural							Cultural				Community									
Legend		Air Quality	Coastal and Marine	Contaminated Sites	Farmlands	Floodplains	Infrastructure	Navigation	Special Designations	Water Quality and Quantity	Wetlands	Wildlife and Habitat	Historic and Archaeological Sites	Recreation Areas	Section 4(f) Potential	Aesthetics	Economic	Land Use	Mobility	Relocation	Social	Secondary and Cumulative Effects
N/A	N/A / No Involvement																					
0	None (after 12/5/2005)																					
1	Enhanced																					
2	Minimal (after 12/5/2005)																					
3	Moderate																					
4	Substantial																					
5	Dispute Resolution (Programming)																					
<b>ETAT Review Period: 04/14/2011 - 05/29/2011. Re-Published: 09/07/2011</b>																						
<b>Alternative #1</b>		2	0	2	2	2	2	N/A	2	3	3	3	3	1	2	3	1	2	1	2	3	2
<b>From Old Combee Road to north of Tomkow Road</b>																						

**Project Description Data**

**Description Statement**

This capacity improvement project involves the widening of State Road 33 (SR 33) from Old Combee Road/Deeson Pointe Boulevard (milepost 4.993) to north of Tomkow Road (milepost 8.714), in Lakeland, from two lanes to four lanes. SR 33 is a two lane facility with a functional classification of "urban minor arterial." The project is approximately 3.7 miles and will require approximately 155 feet of right-of-way. (See typical section for four lane divided suburban arterial in the "A1 Typical Roadway Sections" document on the ETDM Library on the EST website.) The project is listed in the Polk Transportation Planning Organization's 2035 Cost Affordable LRTP and is displayed as a committed improvement in the City of Lakeland Comprehensive Plan.

**Summary of Public Comments not available at this time**

**Consistency**

- Consistency with Air Quality Conformity is unknown.
- CONSISTENT with Coastal Zone Management Program.
- Consistent with Local Government Comp Plan.
- Consistent with MPO Goals and Objectives.

**Potential Lead Agencies**

- FL Department of Transportation

**Exempted Agencies**

Agency Name	Justification	Date
US Coast Guard	No navigable waterways in the vicinity of project.	04/06/2011
Federal Transit Administration	No transit facilities being considered as part of this project.	04/06/2011
Federal Rail Administration	No rail facilities being considered as part of this project.	04/06/2011

**Community Desired Features**

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

**Purpose and Need**

**Purpose and Need Statement**

Consistency with Transportation Plan Goals and Objectives

The proposed project is consistent with the City of Lakeland's Comprehensive Plan and the Polk Transportation Planning Organization's (TPO) 2035 Long Range Transportation Plan (LRTP). The project is contained within a section of SR 33 identified as a four-lane improvement need and identified as cost feasible in the currently adopted 2035 LRTP. The project is also considered a committed improvement in the City of Lakeland Comprehensive Plan's Transportation and Capital Improvement Elements.

**Purpose and Need Statement**

**Purpose**

The capacity improvement project on SR 33 will enhance the connectivity of the local and regional roadway network, provide needed capacity to meet growing travel demand in northeast Lakeland, support population and employment growth in the area, enhance local and regional multimodal connectivity, and augment an existing emergency evacuation route. The purpose of the project is to identify reasonable alternatives that minimize environmental impacts and implementation costs and respond to public and stakeholder input to the maximum extent practical.

The need for the project is based on the following criteria:

- > Area Wide Network/System Linkage - Improve the functional viability of SR 33 as a local and regional travel alternative to Interstate 4 and provide connectivity between central Lakeland and emerging developments in the northeast.
- > Growth Management Planning - Improve multimodal access to emerging population and employment centers in northeast Lakeland.?
- > Modal Interrelationships - Support future multimodal needs by providing bus pullouts and shelter pads; enhanced pedestrian accessibility and safety, and enhanced bicycle access and mobility.
- > Emergency Evacuation - Increase the volume of residents that can be evacuated during an emergency event.
- > Capacity and Travel Demand - Provide additional roadway capacity on SR 33 to reduce anticipated delays caused by peak hour traffic congestion.

**Need**

Area Wide Network/System Linkage - The project will improve the functional viability of SR 33 as a local and regional travel alternative to Interstate 4. SR 33 provides connectivity to University Boulevard, a committed new four lane road serving the planned Williams DRI, Polk Commerce Center DRI, and future USF Polytechnic campus. University Boulevard and SR 33 will be the most direct link between these new residential and commercial centers and north and central Lakeland.

Growth Management Planning - Traffic on SR 33 is expected to increase due to projected population and employment growth both along the corridor and in the region. The table below shows the Polk Transportation Planning Organization's 2035 population and employment forecast for the adjacent traffic analysis zones. The adjacent TAZs account for growth related to the Williams DRI and USF Polytechnic campus, but not the Polk Commerce Center DRI, which will further contribute to traffic growth in the corridor.

**EXISTING AND FUTURE POPULATION AND EMPLOYMENT GROWTH (2006 TO 2035)**

2006 2035 Growth  
Population 9,022 19,989 10,967  
Employment 1,910 5,917 4,007

Modal Interrelationships - This project includes provisions for multimodal interface with transit through the addition of bus pullouts and shelter pads

along both sides of SR 33 within the project limits. (These are included as specific payment items in the Bridgewater DRI Development Agreement.) The Polk LRTP shows an unfunded transit need along the SR 33 corridor within the project limits. The proposed improvements are anticipated to include bicycle lanes and sidewalks along both sides of the roadway. The resulting multimodal improvements will help to improve multimodal connections between neighborhoods immediately adjacent to the project and destinations nearby.

Emergency Evacuation - SR 33 is designated as a hurricane evacuation route by the Florida Division of Emergency Management. The proposed enhancement will increase the capacity of traffic that can be evacuated during an emergency event and improve emergency response times. The capacity improvement will also enhance accessibility to other evacuation routes like Interstate 4.

Capacity/Transportation Demand - This project provides increased capacity along SR 33 to meet the projected future travel demand. The existing roadway LOS along SR 33 is acceptable (LOS "C") with volumes around 10,000 AADT based on FDOT 2009 traffic counts. However, with the planned future growth in this area these volumes are expected to rise to approximately 15,400 AADT by 2035 amounting to a roadway LOS "D." While LOS "D" is acceptable, the roadway will experience moderate delays during peak travel conditions. The proposed widening to four lanes will allow SR 33 to meet future travel demand and continue to serve as an important regional arterial.

**Purpose and Need Reviews**

Agency	Acknowledgment	Review Date
FL Department of Environmental Protection	Understood	05/26/2011
FL Department of State	Understood	05/27/2011
FL Fish and Wildlife Conservation Commission	Understood	05/18/2011
Federal Highway Administration	Not Understood	06/02/2011

**Comments:** FHWA has reviewed the Purpose and Need statement for the proposed capacity improvements to SR 33 in Polk County. Consistency:

The project summary states "The project is contained within a section of SR 33 identified as a four-lane improvement need and identified as cost feasible in the currently adopted 2035 LRTP." There are three segments to SR33 identified in the plan.

Which section of SR 33 is this project located within?

Please note that the project must be consistent within the STIP and TIP prior to FHWA signing environmental documents.

No public comments are included in the Advance Notice document.

Has this project been presented to local residents?

Purpose:

The purpose of this project is to increase capacity and functionality of SR 33 as described in the first sentence of the Purpose statement. The second sentence under the "Purpose" heading should be removed.

Please provide reasoning for the southern terminus for this project.

Need:

The proposed widening provides LOS improvements for projected needs but additional alternatives and information which might remedy the projected LOS should be explored before determining a plan of action. The current LOS in the area is "C" and the projected LOS "D" in 2035 is an acceptable LOS therefore need based on LOS is not proven. If the need for the project is based modeling assumptions for future traffic in 2035, then the data to support those models should be clearly documented and based on the most recent information (including the current economic situation that typically shows reduced population growth and VMT).

Please provide project LOS after additional lanes.

What alternatives, including multi-modal, have been considered in addition to the 'no build' and widening options (for example; traffic management techniques, turning lanes, adding bike paths, adding bus routes and associated pull offs and shelters)?

Please identify data and model used to predict traffic volumes on existing SR 33.

Please identify the assumptions used for the traffic projections, including whether they are consistent with the low, medium or high ranges of the Bureau of Economic and Business Research (BEBR) population growth projections.

Does the projected LOS consider the reduction from 4 to 2 lanes between Lakeland Harbor Blvd and Deep Forest Ct?

No safety related need is identified in the current Purpose and Need Statement which might justify the project. ETDM GIS analysis identified 3 fatalities over 2 years (2005-2007) within 200 feet of the project area.

If safety is a justification for providing extra lanes then please provide additional accident data and how projected improvements would change the current conditions.

Though enhancement to existing facilities is reasonable it does not define a Need for the project.

Please identify or better define specific needs in order to identify the best alternative(s) to meet those needs.

National Marine Fisheries Service	Understood	04/25/2011
Natural Resources Conservation Service	Understood	04/18/2011
Southwest Florida Water Management District	Understood	05/26/2011
US Army Corps of Engineers	Understood	05/27/2011

US Environmental Protection Agency	Understood	06/07/2011
US Fish and Wildlife Service	Understood	04/25/2011
<b>The following organizations were notified but did not submit a review of the Purpose and Need statement:</b>		
<ul style="list-style-type: none"><li>- FL Department of Agriculture and Consumer Services</li><li>- FL Department of Community Affairs</li><li>- National Park Service</li><li>- Seminole Tribe of Florida</li></ul>		



**Alternative #1**

**Alternative Description**

<b>From:</b>	Old Combee Road	<b>To:</b>	north of Tomkow Road
<b>Type:</b>	Widening	<b>Status:</b>	ETAT Review Complete
<b>Total Length:</b>	3.97 mi.	<b>Cost:</b>	
<b>Modes:</b>	Roadway	<b>SIS:</b>	N

**Segment Description(s)**

Location and Length							
Segment No.	Name	Beginning Location	Ending Location	Length (mi.)	Roadway Id	BMP	EMP

3.97

Jurisdiction and Class			
Segment No.	Jurisdiction	Urban Service Area	Functional Class

Base Conditions				
Segment No.	Year	AADT	Lanes	Config

Interim Plan				
Segment No.	Year	AADT	Lanes	Config

Needs Plan				
Segment No.	Year	AADT	Lanes	Config

Cost Feasible Plan				
Segment No.	Year	AADT	Lanes	Config

**Funding Sources**

No funding sources found.

**Project Effects Overview**

Issue	Degree of Effect	Organization	Date Reviewed
<b>Natural</b>			
Air Quality	0 None	US Environmental Protection Agency	06/07/2011
Coastal and Marine	0 None	Southwest Florida Water Management District	05/26/2011
Coastal and Marine	N/A N/A / No Involvement	National Marine Fisheries Service	04/25/2011
Contaminated Sites	0 None	US Environmental Protection Agency	06/07/2011
Contaminated Sites	0 None	FL Department of Environmental Protection	05/26/2011
Contaminated Sites	2 Minimal	Southwest Florida Water Management District	05/26/2011
Farmlands	2 Minimal	Natural Resources Conservation Service	04/18/2011
Floodplains	2 Minimal	US Environmental Protection Agency	06/07/2011
Floodplains	2 Minimal	Southwest Florida Water Management District	05/26/2011
Infrastructure	2 Minimal	Southwest Florida Water Management District	05/26/2011
Navigation	0 None	US Army Corps of Engineers	08/02/2011
Special Designations	0 None	US Environmental Protection Agency	06/07/2011
Special Designations	2 Minimal	Southwest Florida Water Management District	05/26/2011
Water Quality and Quantity	3 Moderate	US Environmental Protection Agency	06/07/2011
Water Quality and Quantity	2 Minimal	FL Department of Environmental Protection	05/26/2011
Water Quality and Quantity	3 Moderate	Southwest Florida Water Management District	05/26/2011
Wetlands	3 Moderate	US Environmental Protection Agency	06/07/2011
Wetlands	3 Moderate	Federal Highway Administration	06/02/2011
Wetlands	3 Moderate	US Army Corps of Engineers	05/27/2011

Wetlands	2	Minimal	FL Department of Environmental Protection	05/26/2011
Wetlands	3	Moderate	Southwest Florida Water Management District	05/26/2011
Wetlands	N/A	N/A / No Involvement	National Marine Fisheries Service	04/25/2011
Wetlands	3	Moderate	US Fish and Wildlife Service	04/25/2011
Wildlife and Habitat	3	Moderate	Southwest Florida Water Management District	05/26/2011
Wildlife and Habitat	3	Moderate	FL Fish and Wildlife Conservation Commission	05/18/2011
Wildlife and Habitat	3	Moderate	US Fish and Wildlife Service	04/25/2011
<b>Cultural</b>				
Historic and Archaeological Sites	3	Moderate	FL Department of State	05/27/2011
Historic and Archaeological Sites	0	None	Southwest Florida Water Management District	05/26/2011
Historic and Archaeological Sites	3	Moderate	Seminole Tribe of Florida	04/25/2011
Recreation Areas	0	None	US Environmental Protection Agency	06/07/2011
Recreation Areas	1	Enhanced	FL Department of Environmental Protection	05/26/2011
Recreation Areas	0	None	Southwest Florida Water Management District	05/26/2011
Section 4(f) Potential	2	Minimal	Federal Highway Administration	06/02/2011
<b>Community</b>				
Aesthetics	2	Minimal	Federal Highway Administration	06/02/2011
Aesthetics	3	Moderate	FDOT District 1	06/02/2011
Economic	1	Enhanced	FDOT District 1	06/02/2011
Land Use	2	Minimal	Federal Highway Administration	06/02/2011
Land Use	2	Minimal	FDOT District 1	06/02/2011
Mobility	1	Enhanced	FDOT District 1	06/02/2011
Mobility	1	Enhanced	FL Department of Environmental Protection	05/26/2011
Relocation	3	Moderate	Federal Highway Administration	06/02/2011
Relocation	0	None	FDOT District 1	06/02/2011
Social	0	None	US Environmental Protection Agency	06/07/2011
Social	3	Moderate	Federal Highway Administration	06/02/2011
Social	2	Minimal	FDOT District 1	06/02/2011
<b>Secondary and Cumulative</b>				
Secondary and Cumulative Effects	3	Moderate	Southwest Florida Water Management District	05/26/2011

**ETAT Reviews and Coordinator Summary: Natural Issues**

**Coordinator Summary: Air Quality Issue**

2 Minimal assigned 08/10/2011 by FDOT District 1

**Comments:** The USEPA did not identify any air quality issues associated with this project.

Polk County is not within a designated Air Quality Non-Attainment Area or Maintenance Area for any of the four pollutants - nitrogen oxides, ozone, carbon monoxide, and small particulate matter - specified by the USEPA in National Ambient Air Quality Standards. According to the EST GIS analysis results, however, the project is located within an area identified as noncompliant with 2006-2008 and 2007-2009 ozone standards established by the USEPA and, therefore, considered a 'presumptive nonattainment area' for ozone.

Overall, the project is not expected to result in adverse effects to air quality. Because temporary impacts to air quality may occur during road construction as a result of fugitive dust and exhaust emissions, a Summary DOE of Minimal has been assigned to the Air Quality issue.

Commitments and Responses: An Air Quality Report will not be required for this project.

Technical Study: None.

**ETAT Reviews: Air Quality Issue: 1 found**

0 None assigned 06/07/2011 by Maher Budeir, US Environmental Protection Agency

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**Coordination Document:** No Selection  
**Dispute Information:** N/A  
**Identified Resources and Level of Importance:** None found.  
**Comments on Effects to Resources:** None found.  
**Coordinator Feedback:** None

The following organization(s) were expected to but did not submit a review of the Air Quality issue for this alternative: Federal Highway Administration

#### Coordinator Summary: Coastal and Marine Issue

0 None assigned 08/10/2011 by FDOT District 1

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**Comments:** The NMFS conducted a site inspection of the project study area on 22 April 2011 to assess potential concerns to living estuarine and marine resources. The NMFS reported that it does not appear that the project will result in any direct or indirect impacts to NMFS trust resources.  
**Coordination Document:** No Involvement.

The SWFWMD did not identify any coastal or marine issues associated with this project. **Coordination Document:** No Involvement.

The project is not located within a coastal area; therefore, it is not anticipated to affect marine resources. For this reason, a Summary DOE of None has been assigned to the Coastal and Marine issue.

**Commitments and Responses:** An Essential Fish Habitat (EFH) Assessment will not be included in the scoping recommendations for this project.

**Technical Study:** None.

#### ETAT Reviews: Coastal and Marine Issue: 2 found

0 None assigned 05/26/2011 by Hank Higginbotham, Southwest Florida Water Management District

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**Coordination Document:** No Involvement  
**Dispute Information:** N/A  
**Identified Resources and Level of Importance:** None found.  
**Comments on Effects to Resources:** None found.  
**Coordinator Feedback:** None

N/A N/A / No Involvement assigned 04/25/2011 by David A. Rydene, National Marine Fisheries Service

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**Coordination Document:** No Involvement  
**Dispute Information:** N/A  
**Identified Resources and Level of Importance:** None.  
**Comments on Effects to Resources:** NOAA's National Marine Fisheries Service (NMFS) has reviewed the information contained in the Environmental Screening Tool for ETDM Project # 13188. The Florida Department of Transportation District 1 proposes widening US 33 from Old Combee Road to north of Tomkow Road in Polk County, Florida. The road would be widened from two lanes to four lanes

NMFS staff conducted a site inspection of the project area on April 22, 2011, to assess potential concerns regarding living aquatic resources. It does not appear that there will be any direct or indirect impacts to NMFS trust resources. Since the resources affected are not ones for which NMFS is responsible, we have no comment to provide regarding the project's impacts.

**Coordinator Feedback:** None

The following organization(s) were expected to but did not submit a review of the Coastal and Marine issue for this alternative: Federal Highway Administration

#### Coordinator Summary: Contaminated Sites Issue

2 Minimal assigned 08/10/2011 by FDOT District 1

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**Comments:** The FDEP did not identify any contamination issues associated with this project.

The SWFWMD reported that while no potentially contaminated sites were observed within the immediate project vicinity during the field assessment conducted on 18 April 2011, the 500-foot project buffer contains multiple onsite sewage treatment facilities (including septic tanks and drain fields). The project is also located within a phosphate mining reclamation area. The SWFWMD stated that there may be unreported contamination sources within the 100-foot to 500-foot project buffers due to the former mining activities within the area. **Coordination Document:** Permit Required.

The USEPA did not identify any contamination issues associated with this project.

According to the EST GIS analysis results, there are no Brownfield locations, hazardous waste sites, National Priority List sites, nuclear sites, RCRA-regulated facilities, Superfund hazardous waste sites, or Toxic Release Inventory sites located within the 200-foot buffer of this project. In addition, the Onsite Sewage Treatment and Disposal Systems reported through the EST GIS analysis results within the project's 500-foot buffer consist of permitted residential and commercial septic tanks. Based on the fact that the project study area is located within a former phosphate mining region, however, a Contamination Screening Evaluation is recommended for this project. As a result, a Summary DOE of Minimal has been assigned to the Contaminated Sites issue.

**Commitments and Responses:** Preparation of a Contamination Screening Evaluation Report will be included in the scoping recommendations for this project.

**ETAT Reviews: Contaminated Sites Issue: 3 found**

0 None assigned 06/07/2011 by Maher Budeir, US Environmental Protection Agency

**Coordination Document:** No Selection  
**Dispute Information:**N/A  
**Identified Resources and Level of Importance:** None found.  
**Comments on Effects to Resources:** None found.  
**Coordinator Feedback:** None

0 None assigned 05/26/2011 by Lauren P. Milligan, FL Department of Environmental Protection

**Coordination Document:** No Selection  
**Dispute Information:**N/A  
**Identified Resources and Level of Importance:** None found.  
**Comments on Effects to Resources:** None found.  
**Coordinator Feedback:** None

2 Minimal assigned 05/26/2011 by Hank Higginbotham, Southwest Florida Water Management District

**Coordination Document:** Permit Required  
**Dispute Information:**N/A  
**Identified Resources and Level of Importance:** No potentially contaminated sites were observed on the day of the onsite visit (18APR2011). However, there are multiple onsite sewage treatment facilities (including septic tanks and drain fields) located within 500 feet of the project, and the project area is reclaimed from former phosphate mining activities. There may be additional, unrecorded contaminated sites within the 100-foot to 500-foot buffers for the project.

The project is located in former mining areas and it is possible that there are very local patches of increased vulnerability due to the past disturbance and removal of overburden materials composing the intermediate and surficial aquifers. The project area may be in a Karst area, according to the District publication: "Development of Proposed Environmental Resource Permit Criteria for Sensitive Karst Areas," SWRF, LLC, September 2007.

Regionally, the pollution potential of the Floridan Aquifer is moderate as indicated by DRASTIC scores between 138 and 140 within the 100-foot to 500-foot buffer area. The pollution potential of the intact intermediate aquifer is lower, with DRASTIC scores ranging between 93 and 95; however, the material composing the intermediate aquifer may be absent in some local areas within 500 feet of the project. The DRASTIC score for the intact surficial aquifer is the highest of the three aquifers at approximately 186. Where present, this aquifer system would be the most vulnerable to pollution; however, it may be locally absent within the 500-foot buffer area. The regional DRASTIC scores are consistent with the regional FAVA vulnerability response.

Within 100 - 500 feet of the project, the recharge rate to the Floridan is estimated at 1- 10 inches/year.

**Comments on Effects to Resources:** If encountered and disturbed during construction, contaminated soils or other materials could result in surface and/or groundwater pollution. Because of the proximity of Lake Deeson the pollution vulnerability of the Floridan Aquifer, the pollution potential of project construction activities may be high as a result of contamination entering surface or ground water from untreated or under-treated stormwater runoff or the interception of contaminated soils.

**Additional Comments (optional):** The SWFWMD has assigned a Degree of Effect based on their opinion of the potential of this project to result in increased coordination or effort associated with the SWFWMD's regulatory interests and obligations.

To minimize groundwater and surface water pollution potential, it may be helpful to:

1. Confirm the presence or absence of existing potable supply wells, both public and domestic, and identify precisely all potential sources of contamination within the path of construction or in proximity of the proposed surface water management systems;
2. Avoid known contaminated sites where possible in the selection of the project alignment and stormwater runoff facilities;
3. Thoroughly evaluate potential stormwater treatment facility sites for the presence of contamination and eliminate contaminated sites as possible pond sites; and
4. Design and construct stormwater treatment facilities to prevent physical disturbance and water quality impacts to the Floridan Aquifer.

**Coordinator Feedback:** None

The following organization(s) were expected to but did not submit a review of the Contaminated Sites issue for this alternative: Federal Highway Administration

**Coordinator Summary: Farmlands Issue**

2 Minimal assigned 08/10/2011 by FDOT District 1

**Comments:** The NRCS commented that no Prime Farmland soils occur within any of the project buffer widths based on the EST GIS analysis results. The NRCS reported, however, that Unique Farmland soils exist within the project area; the amounts range from 12.6 acres within the 100-foot project buffer to 55.4 acres within the 500-foot buffer. The NRCS indicated that while impacts to Farmlands of Unique Importance are restricted to the extreme southwestern part of the project, this area has been converted to residential uses since the soil survey was originally published. As such, the impact to important farmlands is negligible.

According to the EST GIS analysis results, 24.8 acres (12.72%) of Farmland of Unique Importance are located within the 200-foot project buffer. Consistent with the City of Lakeland's Comprehensive Plan and the Polk Transportation Planning Organization's (TPO) 2035 Long Range Transportation Plan (LRTP), the project occurs within an area characterized by open spaces and agricultural land, low to medium density residences, and light industry, with a growing residential and mixed use character. Future land use plans call for increased residential, industrial, and mixed use

developments in the area. For these reasons, a Summary DOE of Minimal has been assigned to the Farmlands issue.

Commitments and Responses: A Farmlands Assessment will not be required for this project.

Technical Study: None.

#### ETAT Reviews: Farmlands Issue: 1 found

2 Minimal assigned 04/18/2011 by Rick Allen Robbins, Natural Resources Conservation Service

**Coordination Document:** No Selection

**Dispute Information:**N/A

**Identified Resources and Level of Importance:** The USDA-NRCS considers soil map units with important soil properties for agricultural uses to be Prime Farmland. In addition, the USDA-NRCS considers any soils with important soil properties and have significant acreages that are used in the production of commodity crops (such as, cotton, citrus, row crops, specialty crops, nuts, etc.) to be considered as Farmlands of Unique Importance. Nationally, there has been a reduction in the overall amount of Prime and Unique Farmlands through conversion to non-farm uses. This trend has the possibility of impacting the nation's food supply and exporting capabilities.

**Comments on Effects to Resources:** Conducting GIS analysis of Prime Farmland (using USDA-NRCS data) and Important (Unique) Farmland Analysis (using 2010 SSURGO data) has resulted in the determination that there are no Prime Farmland Soils at any buffer width. However, there are Unique Farmland soils at all buffer widths within the Project Area. The amounts range from 12.6 acres at the 100' buffer width and 55.4 acres at the 500' buffer width. The impact to Farmlands of Unique Importance is restricted to the extreme southwestern part of the project. This area has been converted to residential uses since the soil survey was originally published. In this circumstance, the impact to important farmlands is negligible. Therefore, we are assigning a Minimal Degree of Impact for this project.

**CLC Commitments and Recommendations: Coordinator Feedback:** None

The following organization(s) were expected to but did not submit a review of the Farmlands issue for this alternative: Federal Highway Administration

#### Coordinator Summary: Floodplains Issue

2 Minimal assigned 08/10/2011 by FDOT District 1

**Comments:** The SWFWMD commented that approximately 0.019 acre of DFIRM Flood Zone A occurs within the project's 100-foot buffer; this small area extends along the eastern right-of-way of SR 33 and is occupied by a forested wetland of good quality. The SWFWMD also noted that 1.7 acres of Flood Zone A occur within the 200-foot project buffer; the remainder of the project area occurs within Flood Zone X. The SWFWMD additionally mentioned that the project crosses a ditch (approximately 500 feet south of Village Lakes Boulevard) that connects two artificial ponds located east and west of SR 33. The SWFWMD further noted that the addition of fill to this ditch may require floodplain compensation if floodplain stage is altered. Coordination Document: Permit Required.

The USEPA reported that while approximately 1.7 acres of Hazardous Flood Zone is located within the 200-foot project buffer, impact on the floodplain is likely to be minimal. The USEPA indicated that impacts can be minimized by increasing drainage efficiency and coordinating with other agencies to avoid and mitigate.

According to the EST GIS analysis results, only 1.7 acres (0.84%) of the project's 200-foot buffer is located within FEMA Flood Zone A (an area within the 100-year floodplain for which base flood elevations have not been determined). The remaining 193.7 acres (99.16%) of the project's 200-foot buffer occurs within FEMA Flood Zone X (an area determined to be outside of the 100- and 500-year floodplains). Based on the foregoing, a Summary DOE of Minimal has been assigned to the Floodplains issue.

Commitments and Responses: A Floodplains Assessment will be included in the scoping recommendations for this project.

Technical Study: Floodplains Assessment.

#### ETAT Reviews: Floodplains Issue: 2 found

2 Minimal assigned 06/07/2011 by Maher Budeir, US Environmental Protection Agency

**Coordination Document:** No Selection

**Dispute Information:**N/A

**Identified Resources and Level of Importance:** Less than two acres in the 200-foot buffer zone.

**Comments on Effects to Resources:** About 1.7 acres of Hazardous Flood Zone is identified to be within the 200 foot buffer. Impact on the floodplain is likely, but is minimal. This impact can be minimized by increasing drainage efficiency and coordinating with other agencies to avoid and mitigate the impact. Areas that will be filled in should be carefully designed to minimize impacts on adjacent properties.

**Coordinator Feedback:** None

2 Minimal assigned 05/26/2011 by Hank Higginbotham, Southwest Florida Water Management District

**Coordination Document:** Permit Required

**Dispute Information:**N/A

**Identified Resources and Level of Importance:** Approximately 0.019 acre of DFIRM Zone A occurs within the 100-foot project buffer. This small area extends along the eastern ROW of SR 33 for an approximate length of 400 feet commencing at a point located 191 feet south of the SR 33/Tomkow Rd intersection. This area is occupied by a forested wetland that is of good quality. The remainder of the project appears to be located in Zone X. Within the 200-foot buffer, the area expands to 1.7 acres.

It should be noted that there is potential for the project to affect several other areas of historic basin storage that may require compensation but have not been identified on the FEMA flood plain maps or the map updates. One such area may be the ditch passing under SR-33 at a point 507 feet

southwest of the SR-33/Village Lakes Blvd intersection. This ditch connects two artificial ponds that are located on the east and west sides of SR 33.

**Comments on Effects to Resources:** If the project were to result in fill placed within a floodplain or historic basin storage area, there would be the potential to raise the floodplain stage or to prolong the duration of flooding.

**Additional Comments (optional):** The SWFWMD has assigned a Degree of Effect based on their opinion of the potential of this project to result in increased coordination or effort associated with the SWFWMD's regulatory interests and obligations.

If recent, reliable data indicate that floodplain impacts will occur, such impacts can be reduced or eliminated by providing compensation for lost floodplain storage.

For those improvements that may affect the existing cross drainage facilities, a bridge hydraulics report should be prepared and submitted with the Environmental Resource Permit application.

In the future, Polk County and the SWFWMD may update the FEMA Flood Insurance Rate Maps (FIRMs) using limited hydraulic and hydrologic modeling and approximate methods using recent land cover data. These data may be useful in the design of the project.

**Coordinator Feedback:** None

The following organization(s) were expected to but did not submit a review of the Floodplains issue for this alternative: FL Department of Environmental Protection, Federal Highway Administration

**Coordinator Summary: Infrastructure Issue**

2 Minimal assigned 08/10/2011 by FDOT District 1

**Comments:** The SWFWMD reported that two groundwater sampling wells are located within the 200-foot project buffer; three National Geodetic Survey Benchmarks are also located near the proposed project. The SWFWMD recommends that FDOT contact the SWFWMD Hydrologic Data Section in the Brooksville Office to discuss potential impacts to the data collection sites as the disruption of data collection can adversely affect the quality of long term analysis. Coordination Document: To Be Determined: Further Coordination Required.

According to the EST GIS analysis results, the following infrastructure-related features are present within the 500-foot project buffer: one FDEM fire station, one limited use drinking water well, and 466.4 linear feet of railway (railroad siding). USEPA Water Quality Data Monitoring Stations were only identified within the 5,280-foot project buffer. While a limited number of infrastructure-related features are located within the immediate project vicinity, due to agency concerns regarding potential impacts to data collection sites, a Summary DOE of Minimal has been assigned to the Infrastructure issue.

Commitments and Responses: None.

Technical Study: None.

**ETAT Reviews: Infrastructure Issue: 1 found**

2 Minimal assigned 05/26/2011 by Hank Higginbotham, Southwest Florida Water Management District

**Coordination Document:** To Be Determined: Further Coordination Required

**Dispute Information:** N/A

**Identified Resources and Level of Importance:** Two groundwater sampling wells (Site IDs: 17568 and 17567) are located within 200-feet of the proposed alternative. Additional infrastructure information is provided below:

SITE_ID	SITE_NAME	SITE_TYPE1	SITE_PRI_1	SITE_STATUS
17622	SADDLE CREEK	WT Atmospheric Rainfall		Inactive
17569	WILLIAMS POND	CLAY MONITOR SURF		Groundwater Well Inactive
17623	I-4 DEEP WELL	NR POLK CITY		Groundwater Well Inactive
17567	COMBEE ROAD	DEEP		Groundwater Well Active
17674	LAKELAND HILLS	DEEP NR LAKELAND		Groundwater Well Inactive
17568	STATE ROAD 33-COMBEE ROAD	SHALLOW		Groundwater Well Active

The following NGS Benchmarks are located near this proposed SR-33 widening project:

- [http://www.ngs.noaa.gov/cgi-bin/ds\\_mark.prl?PidBox=AK1542](http://www.ngs.noaa.gov/cgi-bin/ds_mark.prl?PidBox=AK1542)
- [http://www.ngs.noaa.gov/cgi-bin/ds\\_mark.prl?PidBox=AK1540](http://www.ngs.noaa.gov/cgi-bin/ds_mark.prl?PidBox=AK1540)
- [http://www.ngs.noaa.gov/cgi-bin/ds\\_mark.prl?PidBox=AK1541](http://www.ngs.noaa.gov/cgi-bin/ds_mark.prl?PidBox=AK1541)

**Comments on Effects to Resources:** Disruption of data collection can adversely affect the quality of long term analysis.

**Additional Comments (optional):** The FDOT is encouraged to contact the District's Hydrologic Data Section in the Brooksville headquarters to discuss potential impacts to the District's data collection sites.

**Coordinator Feedback:** None

The following organization(s) were expected to but did not submit a review of the Infrastructure issue for this alternative: Federal Highway Administration

**Coordinator Summary: Navigation Issue**

N/A N/A / No Involvement assigned 08/10/2011 by FDOT District 1

**Comments:** The USACE did not identify any navigable waterways within the project study area. The USACE stated that the study should ensure navigation will remain unaffected in case an important factor was overlooked. Coordination Document: PD&E Support Document as per PD&E Manual.

The project does not cross any navigable waterways. For this reason, a Summary DOE of N/A / No Involvement has been assigned to the Navigation issue.



Commitments and Responses: A Navigation Study, Bridge Questionnaire, and USCG Bridge Permit will not be required for this project.

Technical Study: None.  
Permit: None.

#### ETAT Reviews: Navigation Issue: 1 found

0 None assigned 08/02/2011 by Garrett Lips, US Army Corps of Engineers

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

**Dispute Information:**N/A

**Identified Resources and Level of Importance:** The EST identified no navigable waterways or marine facilities so the degree of effect should be none for navigation; however, the study should ensure navigation will remain unaffected if the EST overlooked an important factor.

The EST also identified approximately less than 10 acres of NWI wetlands within 200 feet of the roadway corridor, and approximately 28 acres of wetlands within 500 feet of the roadway. The Corps expects the study and design to implement alternatives and design configurations that avoid wetlands to the extent practical. The Corps recommends the FDOT to study not only alternatives that achieve the project purpose and are feasible but also recommend FDOT to consider a design with the smallest environmental footprint from the onset of the study and not to propose overly aggressive sprawling roadway configurations in anticipation of future changes to water quality requirements, for instance. We recommend modest roadway designs with only the minimum, yet safe, travel lane widths and recommend the maximum use of barriers in lieu of wide shoulders or medians, and retaining walls in areas of wetlands to reduce the overall roadway footprint. The Corps agrees with the FHWA project concept of "every day counts" and supports the process to accelerate project delivery and to maximize protection of the environment.

CERP projects: The EST did not identify any CERP project within the area of the proposed project.

**Comments on Effects to Resources:** The Corps recommends avoidance of all wetlands and waters where practicable alternatives exist. The impacts must implement measures to minimize impacts to the extent practical. However, if unavoidable impacts are anticipated, the Corps recommends the FDOT to follow the most current regulations regarding compensatory mitigation. Currently, the hierarchy preference is for mitigation bank credit purchase.

**CLC Commitments and Recommendations: Coordinator Feedback:** None

The following organization(s) were expected to but did not submit a review of the Navigation issue for this alternative: Federal Highway Administration

#### Coordinator Summary: Special Designations Issue

2 Minimal assigned 08/10/2011 by FDOT District 1

**Comments:** The SWFWMD reported that the 7,000-acre FWC Tenoroc Fish Management Area occurs approximately 300 feet south of the project, and the northernmost portion of the project (0.02 mile) is located within the Green Swamp Area of Critical State Concern; the area to potentially be affected, however, is located on the extreme edge of the Area of Critical State Concern. The SWFWMD stated that project effects to these resources are expected to be minimal as SR 33 is an existing roadway and the proposed impact areas have previously been disturbed by development. Coordination Document: Permit Required.

The USEPA did not identify any issues associated with resources of special designation for this project.

According to the EST GIS analysis results, the Green Swamp Area of Critical State Concern is the only resource of special designation reported within the 200-foot project buffer. Avoidance and minimization will be addressed during the project's design and permitting phase, and best management practices will be implemented during project construction activities. In addition, the project study area is located within a previously disturbed region of the Green Swamp along its southern boundary. Therefore, a Summary DOE of Minimal has been assigned to the Special Designations issue.

Commitments and Responses: None.

Technical Study: None.

#### ETAT Reviews: Special Designations Issue: 2 found

0 None assigned 06/07/2011 by Maher Budeir, US Environmental Protection Agency

**Coordination Document:** No Selection

**Dispute Information:**N/A

**Identified Resources and Level of Importance:** None found.

**Comments on Effects to Resources:** None found.

**Coordinator Feedback:** None

2 Minimal assigned 05/26/2011 by Hank Higginbotham, Southwest Florida Water Management District

**Coordination Document:** Permit Required

**Dispute Information:**N/A

**Identified Resources and Level of Importance:** The 7,000-acre FFWCC Tenoroc Fish Management Area is located 307 feet south of the project in the vicinity of the Old Combee Rd/Deeson Pointe Blvd intersection. The main entrance to the facility is located off CR-33A/CR-659 and is accessed from I-4 Exit 38 (SR33).

Approximately 0.02 mile of the project at the north terminus is located in the Green Swamp Area of Critical Concern. Within this 0.02-mile length, land use/cover includes the northern tip of a 9-acre forested wetland, a driveway into a parking lot, mowed SR 33 ROW and a 0.9-acre disturbed upland forested area.

Most of the project is located within the Withlacoochee Environmental Management Area. Less than 1% of the project (at the west terminus) is located within the Charlotte Harbor Environmental Management Area.

The proposed site is located within an area previously identified as a Sensitive Karst Area (see "Development of Proposed Environmental Resource Permit Criteria for Sensitive Karst Areas" by SWRF, L.L.C. (fka Storm Water Resources of Florida, L.C.) by the Southwest Florida Water Management District, 9/2007)

**Comments on Effects to Resources:** Effects are expected to be minimal. SR-33 is an existing facility; the very small area of impact is already disturbed, and the affected area is located on the extreme edge of the Area of Critical Concern.

**Additional Comments (optional):** The SWFWMD has assigned a Degree of Effect based on their opinion of the potential of this project to result in increased coordination or effort associated with the SWFWMD's regulatory and proprietary interests and obligations.

**Coordinator Feedback:** None

The following organization(s) were expected to but did not submit a review of the Special Designations issue for this alternative: FL Department of Agriculture and Consumer Services, Federal Highway Administration

### Coordinator Summary: Water Quality and Quantity Issue

**3** *Moderate* assigned 08/10/2011 by FDOT District 1

**Comments:** The FDEP commented that the project is located within the hydrologic boundaries of the Green Swamp Area of Critical State Concern and that the watershed conditions in the project area are generally good. The FDEP reported that stormwater runoff from the road surface may alter adjacent wetlands and surface waters through increased pollutant loading; therefore, every effort should be made to maximize the treatment of stormwater runoff to prevent ground and surface water contamination. The FDEP recommends that the PD&E study include an evaluation of existing stormwater treatment adequacy and details on future stormwater treatment facilities. Coordination Document: Permit Required.

The SWFWMD reported that the project is located within three impaired basins: Lake Deeson (WBID 1449A), Saddle Creek (WBID 1497), and Lake Tenoroc (WBID 1497C). The SWFWMD noted that the existing swale system associated with SR 33 appears to provide both attenuation and water quality treatment for stormwater runoff; however, the existing culverts need maintenance. Within the project's 200-foot buffer, the SWFWMD identified a stormwater management system that may belong to Arbor Glenn Apartments and a stormwater ditch that drains to Lakeland Harbor Mobile Home Park. The SWFWMD commented that any impacts to the existing stormwater management system will require storage compensation. The SWFWMD also stated that localized patches of increased vulnerability to the three aquifers (Floridan, intermediate, and surficial) may exist due to the former mining activities in the area. The SWFWMD recommends that:

- FDOT refer to the Peace River watershed study to confirm watershed boundaries and obtain the latest topographic information;
- Stormwater ponds be designed as shallow as practical and that geotechnical evaluations be conducted within potential pond sites in order to determine the potential for sinkhole development;
- A pre-application meeting be conducted prior to submittal of the ERP application (Note: an existing pre-application file (#398253) is being maintained at the SWFWMD Brooksville Service Office); and
- FDOT refer to 1) the list of Environmental Resource Permits located within the project's 200-foot buffer and 2) specific studies containing useful water quality and hydrologic information that can be accessed through the SWFWMD's online library during future phases of project development.

Coordination Document: Permit Required.

The USEPA indicated that the project has the potential to increase impervious surface in the area, which will impact the water flow and water quality in the Saddle Creek basin (which includes Lake Gibson, Lake Parker, and Lake Crago); the Green Swamp (Withlacoochee River basin); and several unnamed ponds and ditches. The USEPA stated that stormwater treatment should be optimized to minimize the impact of runoff.

There are no Outstanding Florida Waters or Aquatic Preserves located within the project's 200-foot buffer. While the project will be designed to meet state water quality and quantity standards, a Summary DOE of Moderate has been assigned to the Water Quality and Quantity issue due to the presence of impaired waters within the project study area.

Commitments and Responses: A Water Quality Impact Evaluation (WQIE), per FDOT guidance, will be included in the scoping recommendations for this project.

Technical Study: Water Quality Impact Evaluation (WQIE).

Permit: Environmental Resource Permit.

### ETAT Reviews: Water Quality and Quantity Issue: 3 found

**3** *Moderate* assigned 06/07/2011 by Maher Budeir, US Environmental Protection Agency

**Coordination Document:** No Selection

**Dispute Information:** N/A

**Identified Resources and Level of Importance:** The Project area impacts the Saddle Creek basin, which also includes Lake Gibson, Lake Parker, Lake Crago, the Green Swamp (Withlacoochee River basin), and several unnamed ponds and ditches.

**Comments on Effects to Resources:** The proposed widening will significantly increase the impervious area, therefore will impact the water flow and water quality. Stormwater treatment should be optimized to minimize the impact of runoff on the water bodies listed above. The moderate degree of effect is assigned based on the scale of the project and the potential level of impact.

**Coordinator Feedback:** None

**2** *Minimal* assigned 05/26/2011 by Lauren P. Milligan, FL Department of Environmental Protection

**Coordination Document:** Permit Required

**Dispute Information:** N/A

**Identified Resources and Level of Importance:** The proposed project is within the hydrologic boundaries of the Green Swamp. The watershed conditions in the project area are generally good. Stormwater runoff from the road surface may alter adjacent wetlands and surface waters through



increased pollutant loading. Increased runoff carrying oils, greases, metals, sediment, and other pollutants from the increased impervious surface will be of concern. Natural resource impacts within and adjacent to the proposed road right-of-way will likely include alteration of the existing surface water hydrology and natural drainage patterns, and reduction in flood attenuation capacity of area creeks, ditches, and sloughs as a result of increased impervious surface within the watershed.

**Comments on Effects to Resources:** Every effort should be made to maximize the treatment of stormwater runoff from the proposed road project to prevent ground and surface water contamination. Stormwater treatment should be designed to maintain the natural predevelopment hydroperiod and water quality, as well as to protect the natural functions of adjacent wetlands. We recommend that the PD&E study include an evaluation of existing stormwater treatment adequacy and details on the future stormwater treatment facilities. Retro-fitting of stormwater conveyance systems would help reduce impacts to water quality.

**Coordinator Feedback:** None

**3** Moderate assigned 05/26/2011 by Hank Higginbotham, Southwest Florida Water Management District

**Coordination Document:** Permit Required

**Dispute Information:**N/A

**Identified Resources and Level of Importance:** The south terminus of the project occupies a drainage divide between the Withlacoochee River Watershed and the Peace River Watershed. The extreme end of the south terminus is located in the Peace River Basin, specifically the Saddle Creek basin (WBID 1497) which also includes Lake Gibson (WBID 1497D), Lake Parker (WBID 1497B) and Lake Crago (WBID 1497D1). The remainder of the project occupies the Orange Hammock Drain basin (WBID 1449) which contributes flows to the Green Swamp, thence the Withlacoochee River. Also included in the Withlacoochee Basin is the Lake Deeson drainage basin (WBID 1449A), a closed system located within 600 feet of the project. Other waterbodies within the 500-foot buffer area include several unnamed ponds and ditches.

Surface waterbodies within the project area include: Lake Deeson; Lake Tenoroc and the other ponds on the Tenoroc Fish Management Area which is located 307 feet south of the project; numerous artificial ponds remaining after mining ceased; golf course ponds, and stormwater ponds. Two of the larger artificial ponds are connected under SR 33 by means of a ditch located at a point 507 feet southwest of the SR 33/Village Lakes Blvd intersection. The ditch is approximately 992 feet in length and there is a small weir structure across the ditch at approximately 300 feet northwest of SR 33.

The November 02, 2010 Verified List of Impaired Waters includes the following TMDL information relevant to the District's permitting interests for this project: Lake Deeson basin (WBID 1449A) is impaired for nutrients.

The January 15, 2010 Verified List of Impaired Waters includes the following TMDL information relevant to the District's permitting interests for this project:

Saddle Creek basin (WBID 1497) is impaired for nutrients, coliform bacteria and dissolved oxygen;

Lake Tenoroc basin (WBID 1497C) is impaired for nutrients.

During site visits on 08/11/2010 and 04/18/11, culverts were observed across and near the proposed project. Based on the field reconnaissance, the existing swale system seems to be providing both attenuation and water quality treatment of the runoff from the SR-33. However, the culverts that were observed need maintenance. Erosion and sediment were observed in and at the culverts. The culverts seem to have been modified in the past and may need more modification due to the proposed expansion to four lanes.

At the Melody Lane and Old Combee Road Intersection, an RCP culvert is located across SR-33. Also, a Stormwater Management System that possibly belongs to the Arbor Glenn Apartments is located within the 200 foot proposed segment buffer corridor north of SR-33. To the South, within the 200 foot buffer, a stormwater ditch is located that drains into Lakeland Harbor Mobile Home Park. Provisions must be made in terms of storage compensation should the proposed project affect the stormwater pond.

The proposed alternative is located within 200-feet of several existing Environmental Resource Permits, as follows:

7112.005 - COL East West Road Permit Modification (City of Lakeland)  
2832.001 - FDOT SR 33 Widening I-4 to Old Combee Road (Florida Department of Transportation)  
19706.000 - THE ATRIUM APARTMENT HOMES (Parke 33-Ph II LLC & Courtyd Etc)  
7065.000 - DOT-PARK & RIDE LOT, SR 33 & I-4 (Florida Dept Of Transportation)  
2832.000 - DOT-S.R. 33 (Florida Dept Of Transportation)  
10752.000 - LAKE DEESON WOODS (North Oaks Partnership)  
25559.000 - LAKELAND-FIRE STATION 6 (City Of Lakeland Facilities & Const Mgmt)  
21375.002 - FIRST PARK AT BRIDGEWATER PHASE 1 (Fr Development Services Inc)  
21375.008 - GATEWAY LAKELAND COMMERCIAL PARK (I-433 Venture LLC)  
21375.003 - THE VILLAGES @ BRIDGEWATER-REVISED SWM (View Properties Inc & Board Of Trustees-Internal Imp Trust Fund)  
20706.000 - WARNOCK CR 33 WAREHOUSES (Capstone Holdings)  
21375.014 - VILLAGES AT BRIDGEWATER PH 2 (Bridgewater Lakeland Developers)  
21375.022 - VILLAGES AT BRIDGEWATER (Villages At Bridgewater Community Association Inc.)  
21375.001 - BRIDGEWATER PH I (Bridgewater Lakeland Developers)  
11896.038 - DOT I-4 WIDENING SECTIONS 3-4 AND 5 (FDOT District One)  
21607.000 - LAKELAND CITY OF-NE WATER TRANSMISSION (City Of Lakeland Water Utilities Water Administration)  
21375.013 - VILLAGES AT BRIDGEWATER PH I-409 UNITS (Bridgewater Lakeland Developers)  
21375.004 - THE VILLAGES @ BRIDGEWATER-PHS I (Bridgewater Lakeland Developers)  
21607.001 - LAKELAND CITY OF-NE WATER TRANSMISSION (City Of Lakeland Water Utilities Water Administration)  
21375.020 - VILLAGES AT BRIDGEWATER - PH I (Bridgewater Lakeland Dev Llc &)  
33549.000 - STATE ROAD 33 SELF STORAGE (33 Self Storage LLC)  
25789.001 - SPANISH OAKS (Spanish Oaks Of Central FL LLC)  
34389.001 USF Polytechnic Campus  
7112.004 East West Road Borrow Areas  
7112.006 Williams/USFP Stockpile Area  
2832.001 FDOT SR 33 Widening I-4 to Old Combee Road  
16851.000 Polk Co. - Lake Deeson Water Management Plan

Hydrogeologically, the project area is characterized by a three-aquifer system that includes the Floridan Aquifer, an intermediate aquifer and the surficial aquifer. The project is located in former mining areas and it is possible that there are localized patches of increased vulnerability due to the past removal of overburden materials composing the intermediate and surficial aquifers. The project area may be in a Karst area, according to the District publication: "Development of Proposed Environmental Resource Permit Criteria for Sensitive Karst Areas," SWRF, LLC, September 2007.

**Comments on Effects to Resources:** Impacts associated with the project may include: increased runoff volumes and decreased runoff quality in discharges to Lake Deeson which receives untreated runoff from its immediate medium density residential watershed and from SR 33. Filling within the floodplain or historic basin storage areas may cause or contribute to increased flood stages or durations on Lake Deeson. The project has the potential to result in groundwater contamination from stormwater runoff due to the karstic nature of the project area and the hydrologic disturbances resulting from past mining activity.

**Additional Comments (optional):** The SWFWMD has assigned a Degree of Effect based on their opinion of the potential of this project to result in increased coordination or effort associated with the SWFWMD's regulatory and proprietary interests and obligations.

According to the "EPA drainage basins" and information from the District and FDEP, Lake Deeson is located in the Withlacoochee River Basin; however, the Polk Water Atlas locates Lake Deeson in the Peace River Basin. Refer to the Peace River watershed study to confirm the watershed boundaries, and latest topographic (LiDAR) information.

Due to the potential for contamination of surface waters and the Floridan Aquifer, it is recommended that the stormwater facilities be designed as shallow as practical and that geotechnical evaluations of specific pond sites be conducted to determine the potential for sinkhole development and direct entry of runoff to the Floridan Aquifer. Discharge from the project's facilities shall not cause or contribute to reduced water quality in Lake Deeson.

Water quality data are available for Lake Deeson from EPA, Polk County Department of Natural Resources and the District. Stage data for Lake Deeson area available from the District's Lake Deeson stage data collection site located at 2806'45.10"N 08155'53.50".

The District will require that stormwater management systems that discharge directly or indirectly into waters not meeting standards, including impaired waters, provide a net improvement condition in the water body in terms of the pollutants that contribute to the water body's impairment. A higher level of treatment may be necessary to assure that permitted facilities meet that requirement (refer to Section 3.3.1.4 of the District's Basis of Review).

Hydrologic and meteorological data are available from four District data collection sites in the general project vicinity which are listed below:

SWFWMD ID #116 LAKE DEESON STAGE;  
SWFWMD ID #398 LAKE GIBSON RAINFALL;  
SWFWMD ID #910 COMBEE ROAD DEEP WELL; and  
SWFWMD ID #1570 SR 33/COMBEE ROAD SHALLOW WELL.

In addition, specific studies that contain useful water quality and hydrologic information have been done by FDEP, the SWFWMD and the USGS. These reports can be accessed through the District's Library at <http://www15.swfwmd.state.fl.us/dbtw-wpd/mywebqbe/librarybasic.htm>. Type in the water body of interest, click on "Submit query" then click on the pull-down menu in the upper left and select "Record Display - Web." Publications of particular relevance include:

Gates, M.T. 2009. Hydrogeologic investigation of the upper Peace River in Polk County, FL. SWFWMD. Brooksville, FL.  
Metz, P.A. 2009. Hydrologic conditions that influence streamflow losses in a karst region of the upper Peace River Polk County, FL. USGS. Reston, VA.  
Keith & Schnars, Inc. 2003. Saddle Creek watershed management program: Task II Watershed management plan, vols. 1 & 2. SWFWMD. Brooksville, FL.  
Spechler, R.M., and Kroening, S.E., 2007. Hydrology of Polk County, Florida: U.S. Geological Survey Scientific Investigations Report 2006-5320. USGS. Reston, VA.114 p.

Projects of the SWFWMD that may be helpful in the PD&E and design phase of the project include:

1. Project K075 - Polk County Watershed Management Plan-Saddle Creek
2. Project K081 - Auburndale-Tenoroc Wetland Improvement Phase Two, and
3. Project N122 - Stormwater Improvements-Flood Protection for Polk County.

The FDOT is encouraged to contact the District's Resource Projects Engineering Section in the Brooksville headquarters to discuss the above referenced projects.

If this project's proprietary authorizations qualify as a project of Heightened Public Concern, additional steps will be required during the review process and prior to ERP approvals.

If this project will require the acquisition of new right-of-way areas, the current rule for eminent domain noticing is 40D-1.603(9), FAC and requires the applicant to provide the noticing to the affected property owners. Additionally, any issued permit may include special conditions prohibiting construction until the FDOT provides evidence of ownership and control.

The District has assigned a pre-application file (PA #398253) for the purpose of tracking its participation in the ETDM review of this project. Previous pre-application files for this SR-33 project include PA #8259, PA #9161 and PA #397628. Pre-application files are maintained at the District's Bartow Service Office. Please refer to the pre-application file when contacting District regulatory staff regarding this project.

**Coordinator Feedback:** None

The following organization(s) were expected to but did not submit a review of the Water Quality and Quantity issue for this alternative: Federal Highway Administration

### Coordinator Summary: Wetlands Issue

**3** Moderate assigned 08/10/2011 by FDOT District 1

**Comments:** The FDEP reported that there are 38.8 acres of lacustrine wetlands and 28.8 acres of palustrine wetlands within the 500-foot project buffer according to National Wetlands Inventory data. The FDEP stated that the project will likely require an Environmental Resource Permit from the

SWFWMD. Coordination Document: Permit Required.

The FHWA reported that the project may result in approximately 8.8 acres of wetland impacts as indicated through SWFWMD data of the EST GIS analysis results. The FHWA stated that avoidance of these potential impacts should be maximized and mitigation of impacts will be necessary. Coordination Document: To Be Determined: Further Coordination Required.

The FWS noted that wetlands are present within the project study area. The FWS stated that unavoidable impacts should be offset through mitigation that fully compensates for the loss of wetland resources. Coordination Document: To Be Determined: Further Coordination Required.

The NMFS restated comments provided for the Coastal and Marine issue.

The SWFWMD commented that 3.3 acres of wetlands could potentially be impacted within the 100-foot project buffer; these wetlands are concentrated primarily near the northern project terminus within a cypress wetland system located along both sides of SR 33. The SWFWMD stated that while the wetland system located on the east side is of good quality, the portion located along the west side of SR 33 has been disturbed by logging and dredging activities. The SWFWMD noted that encroachment into the 200-foot project buffer will increase potential wetland impacts to 9.0 acres (of which 8.0 acres are associated with the cypress wetland system). The SWFWMD additionally reported 0.1 acre of other wetlands within the 100-foot project buffer; these wetlands consist of a herbaceous system located near the intersection of SR 33 and Village Lakes Boulevard and a mixed shrub/forested system located at the intersection of SR 33 and Huron Way. The SWFWMD noted that if construction activities are expanded into the 200-foot project buffer, impacts to these wetland systems will increase to 1.0 acre. The SWFWMD further noted that the project study area is located within the Withlacoochee River and Peace River basins if mitigation within the same basins is necessary. Coordination Document: Permit Required.

The USACE reported that there are less than 10.0 acres of wetlands within the 200-foot project buffer and approximately 28.0 acres of wetlands within the 500-foot project buffer according to National Wetlands Inventory data. The USACE did not identify any CERP projects within the area. The USACE noted that purchase of credits from a mitigation bank is currently the preferred method of achieving compensatory wetland mitigation for unavoidable impacts; avoidance and/or minimization measures must be implemented to the extent practical. Coordination Document: PD&E Support Document as per PD&E Manual.

The USEPA identified over 15.0 acres of wetlands within the 200-foot project buffer and over 60.0 acres within the 500-foot project buffer. The USEPA noted that while impacts to wetlands near the southern terminus of the proposed project may be completely avoided, impacts near the northern terminus may be more difficult to avoid. The USEPA stated that unavoidable impacts should be fully mitigated.

According to the National Wetlands Inventory database, 3.7 acres (1%) of lacustrine wetlands and 4.5 acres (2.29%) of palustrine wetlands are present within the 200-foot project buffer. The FDOT will 1) incorporate avoidance and minimization measures to the greatest extent practicable into the project design, 2) fully mitigate unavoidable adverse wetland impacts as part of the permitting process, and 3) utilize best management practices during project construction. Due to agency concerns of potential adverse wetland impacts resulting from the proposed roadway expansion and the issues associated with providing compensatory wetland mitigation (especially for forested wetlands), however, a Summary DOE of Moderate has been assigned to the Wetlands issue.

Commitments and Responses: Preparation of a Wetlands Evaluation Report will be included in the scoping recommendations for this project.

Technical Study: Wetlands Evaluation Report.

Permit(s): Environmental Resource Permit. / USACE Dredge and Fill Permit.

#### ETAT Reviews: Wetlands Issue: 7 found

**3** Moderate assigned 06/07/2011 by Maher Budeir, US Environmental Protection Agency

**Coordination Document:** No Selection

**Dispute Information:** N/A

**Identified Resources and Level of Importance:** Base on EST data, over 15 acres of wetlands within the 200 acre buffer, and over 60 acres within the 500 foot buffer.

**Comments on Effects to Resources:** Impact on wetlands varies geographically in the different areas of the project. Impact near the south side of the proposed project may be completely avoided, but impact on wetlands near the northern side may be more difficult to avoid. Unavoidable impact should be fully mitigated.

**Coordinator Feedback:** None

**3** Moderate assigned 06/02/2011 by Joseph Sullivan, Federal Highway Administration

**Coordination Document:** To Be Determined: Further Coordination Required

**Dispute Information:** N/A

**Identified Resources and Level of Importance:** Wetlands provide water treatment, flood attenuation, and wildlife habitat and should and can be avoided during construction if appropriate planning measures are provided.

**Comments on Effects to Resources:** Approximately 8.8 acres of wetland impacts are shown in GIS analysis of SWFWMD polygons. Avoidance of these potential impacts should be maximized and mitigation of impacts will be necessary.

**CLC Commitments and Recommendations: Coordinator Feedback:** None

**3** Moderate assigned 05/27/2011 by Garrett Lips, US Army Corps of Engineers

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

**Dispute Information:** N/A

**Identified Resources and Level of Importance:** The EST identified no navigable waterways or marine facilities so the degree of effect should be none for navigation; however, the study should ensure navigation will remain unaffected if the EST overlooked an important factor.

The EST also identified approximately less than 10 acres of NWI wetlands within 200 feet of the roadway corridor, and approximately 28 acres of wetlands within 500 feet of the roadway. The Corps expects the study and design to implement alternatives and design configurations that avoid

wetlands to the extent practical. The Corps recommends the FDOT to study not only alternatives that achieve the project purpose and are feasible but also recommend FDOT to consider a design with the smallest environmental footprint from the onset of the study and not to propose overly aggressive sprawling roadway configurations in anticipation of future changes to water quality requirements, for instance. We recommend modest roadway designs with only the minimum, yet safe, travel lane widths and recommend the maximum use of barriers in lieu of wide shoulders or medians, and retaining walls in areas of wetlands to reduce the overall roadway footprint. The Corps agrees with the FHWA project concept of "every day counts" and supports the process to accelerate project delivery and to maximize protection of the environment.

CERP projects: The EST did not identify any CERP project within the area of the proposed project.

**Comments on Effects to Resources:** The Corps recommends avoidance of all wetlands and waters where practicable alternatives exist. The impacts must implement measures to minimize impacts to the extent practical. However, if unavoidable impacts are anticipated, the Corps recommends the FDOT to follow the most current regulations regarding compensatory mitigation. Currently, the hierarchy preference is for mitigation bank credit purchase.

**Coordinator Feedback:** None

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**2** Minimal assigned 05/26/2011 by Lauren P. Milligan, FL Department of Environmental Protection

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**Coordination Document:** Permit Required

**Dispute Information:**N/A

**Identified Resources and Level of Importance:** The National Wetlands Inventory GIS report indicates that there are 38.8 acres of lacustrine and 28.8 acres of palustrine wetlands within the 500-ft. project buffer zone.

**Comments on Effects to Resources:** The proposed project will likely require an environmental resource permit (ERP) from the Southwest Florida Water Management District. The ERP applicant will be required to eliminate or reduce the proposed wetland resource impacts of highway construction to the greatest extent practicable:

- Minimization should emphasize avoidance-oriented corridor alignments, wetland fill reductions via pile bridging and steep/vertically retained side slopes, and median width reductions within safety limits.
- Wetlands should not be displaced by the installation of stormwater conveyance and treatment swales; compensatory treatment in adjacent uplands is the preferred alternative.
- After avoidance and minimization have been exhausted, mitigation must be proposed to offset the adverse impacts of the project to existing wetland functions and values. Significant attention is given to forested wetland systems, which are difficult to mitigate.
- The cumulative impacts of concurrent and future transportation improvement projects in the vicinity of the subject project should also be addressed.

**Coordinator Feedback:** None

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**3** Moderate assigned 05/26/2011 by Hank Higginbotham, Southwest Florida Water Management District

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**Coordination Document:** Permit Required

**Dispute Information:**N/A

**Identified Resources and Level of Importance:** Project impacts extending into the 100-foot buffer area have the potential of adversely affecting approximately 3.3 acres of wetland. The most significant areas of wetland that may be affected are located near the north terminus. Here, 3.2 acres of potentially affected wetlands consist of a portion of a 9-acre cypress community on the project's east side that is connected by means of two culverts (one is 24" diameter pipe and the other is 3' x 5' box) to a former cypress community on the west side of the road. The east cypress community is of good quality with reliable physical evidence of appropriate hydroperiods. The west cypress system has been disturbed by dredging and is now a wet prairie/marsh/shrub wetland with most of the cypress trees having been logged out, fallen or standing dead. Expanding project impacts into the 200-foot buffer area increases the acres of wetland potentially affected to a total of 9.0 acres of which 8.0 acres are the wetlands at the north terminus. Of the 9 acres, 4.9 acres of impact potentially would occur to the 9-acre east wetland, representing approximately 40% of this good quality system.

Within the 100-foot buffer area, the other wetlands that would be potentially affected by the project total approximately 0.1 acre and include portions of two small shrub/herbaceous systems on the west side of SR 33 just north of the SR 33/Village Lakes Blvd intersection and a mixed shrub/forested system located on the west side of Huron Way at SR 33. Expanding project impacts into the 200-foot buffer area increases the acres of potential impact to these smaller wetlands to a total of 1.0 acre.

Listed Species (FWC, November 2010, Florida's Endangered and Threatened Species) that are known or expected to utilize the wetlands within 200 feet of the project include: American alligator (SSC), Florida sandhill crane (ST), limpkin (SSC), little blue heron (SSC), snowy egret (SSC), tricolored heron (SSC), white ibis (SSC) and wood stork (FE).

**Comments on Effects to Resources:** The most significant impacts would occur to the good quality cypress community located at the north terminus where between 17% and 40% of the wetland could be adversely affected. Impacts to this, and the other, wetlands may include: the further reduction of wetland functions and values relating to wildlife habitat, including known habitat for Listed Species; and the elimination and/or reduction of the water storage function provided by the affected wetlands.

**Additional Comments (optional):** The SWFWMD has assigned a Degree of Effect based on an opinion of the potential of this project to result in increased coordination or effort associated with the SWFWMD's regulatory interests and obligations.

Wetland impacts can be eliminated or reduced by:

1. Adjusting the alignment and cross section to minimize disturbance to wetlands;
2. Implementing strict controls over sediment transport off site during construction;
3. Restricting the staging area and the movement of vehicles and equipment to non-wetland areas;
4. Giving preference to already-disturbed upland locations versus wetland locations for project facilities;
5. Leaving as much native vegetation, as feasible, intact along the right-of-way; and
6. Selecting treatment pond sites outside of wetlands.

Except as provided in Section 3.2.2.1 of the ERP Basis of Review, adequate and appropriate wetland mitigation activities will be required for unavoidable wetland and surface water impacts associated with the project. The project mitigation needs may be addressed in the FDOT Mitigation Program (Chapter 373.4137, F.S.) which requires the submittal of anticipated wetland and surface water impact information to the SWFWMD. This information is utilized to evaluate mitigation options, followed by nomination and multi-agency approval of the preferred options. These mitigation options typically include enhancement of wetland and upland habitats within existing public lands, public land acquisition followed by habitat improvements, and the purchase of private mitigation bank credits. The SWFWMD may choose to exclude a project in whole or in part if the SWFWMD is unable to identify mitigation that would offset wetland and surface water impacts of the project. Under this scenario, the SWFWMD will coordinate



with the FDOT on which impacts can be appropriately mitigated through the program as opposed to separate mitigation conducted independently. Depending on the quantity and quality of the proposed wetland impacts, the SWFWMD may propose purchasing credits from a mitigation bank and/or pursue and propose alternative locations for mitigation. For ERP purposes of mitigating any adverse wetland impacts within the same drainage basin, the project polygon is located within the Withlacoochee River Basin and the Peace River Basin. The SWFWMD requests that the FDOT continue to collaborate on the potential wetland impacts as this project proceeds into future phases, and include the associated impacts on FDOT's annual inventory.

If this project will require the acquisition of new right-of-way areas, the current rule for eminent domain noticing is 40D-1.603(9), FAC and requires the applicant to provide the noticing to the affected property owners. Additionally, any issued permit may include special conditions prohibiting construction until the FDOT provides evidence of ownership and control.

The District has assigned a pre-application file (PA #398253) for the purpose of tracking its participation in the ETDM review of this project. Previous pre-application files for this SR-33 project include PA #8259, PA #9161 and PA #397628. Pre-application files are maintained at the District's Bartow Service Office. Please refer to the pre-application files when contacting District regulatory staff regarding this project.

**Coordinator Feedback:** None

**N/A** N/A / No Involvement assigned 04/25/2011 by David A. Rydene, National Marine Fisheries Service

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**Coordination Document:** No Involvement

**Dispute Information:**N/A

**Identified Resources and Level of Importance:** None.

**Comments on Effects to Resources:** NOAA's National Marine Fisheries Service (NMFS) has reviewed the information contained in the Environmental Screening Tool for ETDM Project # 13188. The Florida Department of Transportation District 1 proposes widening US 33 from Old Combee Road to north of Tomkow Road in Polk County, Florida. The road would be widened from two lanes to four lanes

NMFS staff conducted a site inspection of the project area on April 22, 2011, to assess potential concerns regarding living aquatic resources. It does not appear that there will be any direct or indirect impacts to NMFS trust resources. Since the resources affected are not ones for which NMFS is responsible, we have no comment to provide regarding the project's impacts.

**Coordinator Feedback:** None

**3** Moderate assigned 04/25/2011 by John Wrublik, US Fish and Wildlife Service

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**Coordination Document:** To Be Determined: Further Coordination Required

**Dispute Information:**N/A

**Identified Resources and Level of Importance:** Wetlands

**Comments on Effects to Resources:** Wetlands provide important habitat for fish and wildlife. Information provided in the Environmental Screening Tool indicates that wetlands are found within the project area. The Service recommends that these valuable resources be avoided to the greatest extent practicable. If impacts to wetlands are unavoidable, the Service recommends the FDOT provide mitigation that fully compensates for the loss of wetland resources.

**CLC Commitments and Recommendations:** **Coordinator Feedback:** None

### Coordinator Summary: Wildlife and Habitat Issue

**3** Moderate assigned 08/10/2011 by FDOT District 1

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**Comments:** The FWC evaluated the 500-foot project buffer for the presence of wildlife and habitat resources and noted that the project is located within a rural area that has undergone recent suburban development. The FWC identified the following habitat types within the 500-foot buffer: Freshwater Marsh, Wet Prairie, Shrub Swamp, Cypress Swamp, Hardwood Swamp, Mixed Wetland Forest, Grassland, Extractive, Dry Prairie, Pinelands, Hardwood Hammock, Sand Pine Scrub, Xeric Oak Scrub, Mixed Hardwood-Pine Forest, and Shrub and Brushland. The FWC also commented that the project study area is located approximately 300 feet north of the Tenoroc Fish Management Area; within FWS Consultation Areas for the Florida scrub-jay, crested caracara, and snail kite; and within the Core Foraging Area (CFA) of six wood stork rookeries. The FWC further noted that the primary wildlife issues associated with this project consist of potential adverse effects to a moderate number of listed species, potential loss of valuable wetland habitat, potential loss of one of the last remnants of the Lakeland Ridge, and potential water quality degradation resulting from additional stormwater runoff. Coordination Document: To Be Determined: Further Coordination Required.

The FWS reviewed its GIS database for recorded locations of federally listed threatened and endangered species on or adjacent to the project study area and stated that the project corridor is located within the CFA of three active wood stork nesting colonies. To minimize adverse effects to the wood stork, the FWS recommends that any lost foraging habitat resulting from the project be replaced within the CFA of the affected colony. The FWS also stated that for projects that impact five or more acres of wood stork foraging habitat, a functional assessment must be conducted using the FWS' Wood Stork Foraging Analysis Methodology on the foraging habitat to be impacted and the foraging habitat provided as mitigation. The FWS recommends that the FDOT prepare a Biological Assessment during the project's PD&E phase. Coordination Document: To Be Determined: Further Coordination Required.

The SWFWMD reported that native upland habitats comprise 48.0 acres of the 100-foot project buffer and 96.0 acres of the 200-foot project buffer; however, the overall quality of this habitat is medium to poor due to excessive fragmentation. The SWFWMD noted that there is a 5-acre parcel of high-quality xeric oak/sand pine habitat located adjacent to SR 33 at Lake Luther Drive and a moderate-quality xeric community located within a power easement that crosses SR 33 near the same intersection; these communities have a high potential to serve as habitat for the gopher tortoise. The SWFWMD recommends that impacts to these xeric habitats be avoided to the greatest extent practicable. The SWFWMD additionally reported that the project is located within FWS Consultation Areas for the Florida scrub-jay, crested caracara, and snail kite; however, habitat for all but the scrub-jay is extremely limited within the 200-foot project buffer. Coordination Document: Permit Required.

According to the EST GIS analysis results, the project's 200-foot buffer (corridor) is located within FWS Consultation Areas for the Florida scrub-jay, crested caracara, and snail kite although suitable habitat for these species within the project corridor is fragmented and considered low quality. The project study area is also located within the Greater Charlotte Harbor and Withlacoochee River Ecosystem Management Areas, within the CFA of six active nesting wood stork colonies, and within the Green Swamp Florida Forever Board of Trustees (BOT) Project. Due to agency concerns of potential

adverse impacts to suitable listed species' habitat and the need for Section 7 Consultation with the FWS, a Summary DOE of Moderate has been assigned to the Wildlife and Habitat issue.

Commitments and Responses: Preparation of an Endangered Species Biological Assessment will be included in the scoping recommendations for this project.

Technical Study: Endangered Species Biological Assessment (ESBA).

### ETAT Reviews: Wildlife and Habitat Issue: 3 found

**3** Moderate assigned 05/26/2011 by Hank Higginbotham, Southwest Florida Water Management District

**Coordination Document:** Permit Required

**Dispute Information:**N/A

**Identified Resources and Level of Importance:** According to the District's 2009 land use data, native upland land cover types not occupied by industrial, residential or utility land uses total 48 acres and 96 acres of the areas within the 100-foot and 200-foot buffer areas, respectively. Overall, the quality of the habitat within the 200-foot buffer is medium to poor in terms of upland wildlife species as a result of the fragmentation of available habitat into very small parcels. One high quality parcel of xeric scrub oak/sand pine community is the five-acre parcel located in the northeast quadrant of the SR 33/Lake Luther Dr intersection. There is also moderate quality xeric habitat on the electrical line ROW that crosses SR 33 0.25 mile east of Lake Luther Dr.

The entire 200-foot buffer area is included within the Consultation Areas for three Listed Species, the Florida scrub jay, crested caracara and snail kite. Habitat for all but the Florida scrub jay is extremely limited within the 200-foot buffer. Scrub jay habitat is available on the five-acre parcel located in the northeast quadrant of the SR 33/Lake Luther Dr intersection.

In view of the geographical range of the project area and the type and quality of the upland habitats available in the project's 100-foot to 200-foot buffer areas, the following Listed Species have been observed or can be expected to be present: blue-tailed mole skink (FT), Florida pine snake (SSC), Florida sand skink (FT), gopher tortoise (ST), eastern indigo snake (FT), burrowing owl (SSC), southeast American kestrel (ST), Florida sandhill crane (ST), Florida scrub jay (FT), Florida mouse (SSC) and Sherman's fox squirrel (SSC).

**Comments on Effects to Resources:** This project has the potential to result in adverse impacts to remaining parcels of scrub oak/sand pine habitat that have a high potential to be utilized by Listed Species, particularly gopher tortoise. The five-acre parcel located in the northeast quadrant of the SR 33/Lake Luther Dr intersection is of good quality and it represents a remnant of habitat that formerly was extensive in the area. The loss or disturbance of this parcel should be avoided. That parcel and the other small areas of xeric habitat, such as on the power line ROW provide important habitat for gopher tortoise, a Listed Species known to be present in the vicinity of the project.

**Additional Comments (optional):** The SWFWMD has assigned a Degree of Effect based on an opinion of the potential of this project to result in increased coordination or effort associated with the SWFWMD's regulatory interests and obligations.

Upland wildlife habitat impacts can be eliminated or reduced by:

1. Restricting the staging area and the movement of vehicles and equipment to areas that are already highly disturbed;
2. Consider leaving intact the quality native habitats, particularly the scrub oak/sand pine areas, along the right-of-way;
3. Consider upland enhancement as a mitigation option; and
4. Selecting treatment pond sites out of the scrub oak/sand pine habitat areas.

It is recommended that the FDOT prepare an Endangered Species Biological Assessment (ESBA) and that FDOT consult with the US Fish and Wildlife Service and Florida Fish and Wildlife Conservation Commission to try to eliminate/reduce impacts to Listed Species.

It should be noted that the Florida Fish and Wildlife Conservation Commission revised rules for listing imperiled species. The biological status reviews on these species are now completed. The final reports and recommendations will be presented to the Commission at the June 8/9 meeting in St. Augustine. Until a final review of each species is completed, the existing legal status of species is as listed in the November 2010 publication entitled "Florida's Endangered and Threatened Species." FDOT is encouraged to coordinate with the FFWCC on the status of the species blue-tailed mole skink (FT), Florida pine snake (SSC), Florida sand skink (FT), gopher tortoise (ST), eastern indigo snake (FT), burrowing owl (SSC), southeast American kestrel (ST), Florida sandhill crane (ST), Florida scrub jay (FT), Florida mouse (SSC) and Sherman's fox squirrel (SSC).

**Coordinator Feedback:** None

**3** Moderate assigned 05/18/2011 by Scott Sanders, FL Fish and Wildlife Conservation Commission

**Coordination Document:** To Be Determined: Further Coordination Required

**Dispute Information:**N/A

**Identified Resources and Level of Importance:** The Habitat Conservation Scientific Services Section of the Florida Fish and Wildlife Conservation Commission (FWC) has coordinated an agency review of ETDM #13188, Polk County, and provides the following comments related to potential effects to fish and wildlife resources on this Programming Phase project.

The Project Description Summary states that this project involves widening SR 33 from 2 to 4 lanes between Old Combee Road/Deeson Pointe Boulevard and a point north of Tomkow Road, a distance of approximately 3.7 miles. This project extends the proposed four-lane section of SR 33, reviewed as ETDM #13025 in September 2010, further northward through the project limits.

The project area was evaluated for potential fish, wildlife, and habitat resources within 500 feet of the proposed alignment. Our assessment reveals that the project area is a rural landscape on the outskirts of Lakeland that is rapidly undergoing suburban development. The 2003 FWC Habitat and Landcover Grid describes 27.63% of the assessment area as High Impact Urban or Low Impact Urban, but much of the remaining area has been developed in the years subsequent to that classification. Wetland or aquatic land cover types in the assessment area include Freshwater Marsh and Wet Prairie, Shrub Swamp, Cypress Swamp, Hardwood Swamp, Mixed Wetland Forest and Open Water. The mostly remnant upland land cover types include Grassland, Extractive (phosphate mined land), Dry Prairie, Pinelands, Hardwood Hammocks and Forests, Sand Pine Scrub, Xeric Oak Scrub, Mixed Hardwood-Pine Forest, and Shrub and Brushland.

Based on range and preferred habitat type, the following species listed by the Federal Endangered Species Act and the State of Florida as Federally

Endangered (FE), Federally Threatened (FT), State-Threatened (ST), or State Species of Special Concern (SSC) may occur along the project area: gopher frog (SSC), gopher tortoise (ST), Eastern indigo snake (FT), Florida pine snake (SSC), American alligator (FT), limpkin (SSC), snowy egret (SSC), little blue heron (SSC), tricolored heron (SSC), white ibis (SSC), Florida sandhill crane (ST), wood stork (FE), burrowing owl (SSC), Audubon's crested caracara (FT), Southeastern American kestrel (ST), Sherman's fox squirrel (SSC), and Florida mouse (SSC).

The GIS analysis revealed several specific characteristics associated with lands along the project alignment that provide an indication of potential habitat quality or sensitivity that will require field studies to verify the presence or absence of listed wildlife species and the quality of wildlife habitat resources. The Bridgewater Tract of the FWC's Tenoroc Fish Management Area is southeast of this project, and the northeast corner of Tenoroc is approximately 300 feet from the intersection of SR 33 and Old Combee Road. On the FWC's ranking of Potential Habitat Richness, 30.82% of the assessment area is ranked at medium or moderately high, and 2.22% of the area has a high or medium classification for FWC's Strategic Habitat Conservation Areas priority ranking. The project site is within the U.S. Fish and Wildlife Service Consultation Areas for Scrub Jay, Crested Caracara, and Snail Kite, and is within the core foraging area of six wood stork rookeries.

Primary wildlife issues associated with this project include: potential adverse effects to a moderate number of species listed by the Federal Endangered Species Act as Endangered or Threatened, or by the State of Florida as Threatened or Species of Special Concern; potential loss of valuable wetland habitat, particularly the cypress and hardwood swamp adjacent to the road between the Interstate-4 ramps and Tomkow Road; potential loss of one of the last remnants of the Lakeland Ridge, a xeric oak scrub on the north side of SR 33 that extends 0.2 miles east from Lake Luther Road; and potential water quality degradation as a result of additional stormwater runoff from the expanded roadway surface draining into area water bodies, including wetlands and lakes in the Tenoroc Fish Management Area. We recommend further coordination with our agency to develop site-specific stormwater management measures for this project. For technical assistance and coordination on the Tenoroc Fish Management Area, please contact Mr. Danon Moxley of our Division of Freshwater Fisheries Management at (863) 648-3200, very early in the planning process for the Project Development and Environment (PD&E) Study.

**Comments on Effects to Resources:** Based on the project information provided, we believe the direct and indirect effects of this project could be moderate, provided wetland and scrub habitat losses are minimized, and stormwater management measures are implemented to protect both the hydrology and quality of receiving wetlands and lakes.

**Additional Comments (optional):** We recommend that the PD&E Study address natural resources by including the following measures for conserving fish and wildlife and habitat resources that may occur within and adjacent to the project area. Plant community mapping and wildlife surveys for the occurrence of wildlife species listed by the Federal Endangered Species Act as Endangered or Threatened, or by the State of Florida as Threatened or Species of Special Concern should be performed, both along the Right-of-way and within sites proposed for Drainage Retention Areas. Based on the survey results, a plan should be developed to address direct, indirect, and cumulative effects of the project on wildlife and habitat resources, including listed species. Avoidance, minimization, and mitigation measures should also be formulated and implemented. If gopher tortoises are present within any permanent or temporary construction area, a permit should be obtained from the FWC. Drainage Retention Areas and equipment staging areas should be located in previously disturbed sites to avoid habitat destruction or degradation. A compensatory mitigation plan should include the replacement of any wetland, upland, or aquatic habitat lost as a result of the project. This could be achieved by purchasing land, or securing conservation easements over lands adjacent to existing public lands, and by habitat restoration. Replacement habitat for mitigation should be type for type, as productive, and equal to or of higher functional value. We recommend land acquisition and restoration of appropriate tracts adjacent to existing public lands near the project area, or tracts placed under conservation easement or located adjacent to large areas of jurisdictional wetlands that currently serve as regional core habitat areas. Please notify us immediately if the design, extent, or footprint of the current project is modified, as we may choose to provide additional comments and/or recommendations.

We appreciate the opportunity to provide input on highway design and the conservation of fish and wildlife resources. Please contact Brian Barnett at (850) 528-6316 or email [brian\\_barnett@urscorp.com](mailto:brian_barnett@urscorp.com) to initiate the process for further overall coordination on this project.

**Coordinator Feedback:** None

**3** Moderate assigned 04/25/2011 by John Wrublik, US Fish and Wildlife Service

**Coordination Document:** To Be Determined: Further Coordination Required

**Dispute Information:** N/A

**Identified Resources and Level of Importance:** Federally-listed species and fish and wildlife resources

**Comments on Effects to Resources:** Federally listed species - The Service has reviewed our Geographic Information Systems (GIS) database for recorded locations of federally listed threatened and endangered species on or adjacent to the project study area. The GIS database is a compilation of data received from several sources.

Wood Stork

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

For projects that impact 5 or more acres of wood stork foraging habitat, the Service requires a functional assessment be conducted using our "Wood Stork Foraging Analysis Methodology"(Methodology) on the foraging habitat to be impacted and the foraging habitat provided as mitigation. The Methodology can found in the Service's letter and effect determination key to the U.S. Army Corps of Engineers dated May 18, 2010 (Service Federal Activity Code Number 41420-2007-FA-1494, available upon request).

The Service believes that the following federally listed species have the potential to occur in or near the project site: wood stork, Florida scrub-jay (*Aphelocoma coerulescens*), and eastern indigo snake (*Drymarchon corais couperi*), as well as the federally protected plants listed at the following link: [http://www.fws.gov/verobeach/images/pdflibrary/Polk County3.pdf](http://www.fws.gov/verobeach/images/pdflibrary/Polk%20County3.pdf). Accordingly, the Service recommends that the Florida Department of Transportation (FDOT) prepare a Biological Assessment for the project (as required by 50 CFR 402.12) during the FDOT's Project Development and Environment

process.

Fish and Wildlife Resources - Wetlands provide important habitat for fish and wildlife. Information provided in the Environmental Screening Tool indicates that wetlands are found within the project area. The Service recommends that these valuable resources be avoided to the greatest extent practicable. If impacts to wetlands are unavoidable, the Service recommends the FDOT provide mitigation that fully compensates for the loss of wetland resources.

**CLC Commitments and Recommendations: Coordinator Feedback:** None

The following organization(s) were expected to but did not submit a review of the Wildlife and Habitat issue for this alternative: Federal Highway Administration

#### ETAT Reviews and Coordinator Summary: Cultural Issues

#### Coordinator Summary: Historic and Archaeological Sites Issue

**3** *Moderate* assigned 08/10/2011 by FDOT District 1

**Comments:** No review was submitted by the FHWA or the Miccosukee Tribe of Indians. The FDOS noted that many cultural resource surveys have been conducted within a 100 foot buffer of the project corridor but none were specifically conducted for the current project. They also note that no significant historic sites and no archaeological sites were identified within a 500 foot buffer of the project corridor. However, there are five bridges located within the project corridor. No National Register of Historic Places (National Register) -eligible or listed sites were identified within a half mile of the project corridor. According to FDOS, there is a potential for archaeological sites within the project corridor. They recommended that a Cultural Resource Assessment Survey (CRAS) be conducted to locate and assess any cultural resources that may be present.

The Seminole Tribe of Florida noted the absence of a systematic cultural resource assessment survey of the project corridor and requested a survey be conducted in order to determine effects to archaeological sites. The STOF-THPO asked to review the results of the CRAS before commenting on possible effects to archaeological sites within the project corridor

A review of the Florida Master Site File (FMSF) GIS data revealed that 10 previous surveys intersect the project corridor. A cultural resource reconnaissance survey conducted in January 2011 overlaps with the western end of the project corridor between Old Combee Road and the eastern boundary of Lake Deeson Village. No comprehensive archeological or historic resource survey of the project corridor has been completed.

The FMSF listed no archaeological sites, six previously recorded historic resources, and one historic resource group within 500 feet of the project corridor. The resource group is the post-WW II era Lake Deeson Village trailer park (8PO7495) located at 5210 SR 33 in Lakeland. The six previously recorded historic resources and the resource group were evaluated by the SHPO as ineligible for inclusion in the National Register of Historic Places (National Register) on February 24, 2011.

A review of the Polk property appraiser data revealed a total of 83 parcels adjacent to the project corridor, 4 of which had historic build dates.

A review of the City of Lakeland Archaeological Site Potential map indicates that the project corridor is located within an area that was not identified as having a high archaeological potential.

An analysis of the 1849 General Land Office plat map and surveyors' notes illustrates this area as predominantly 3rd rate pine interspersed with ponds. The plat maps also illustrate an unnamed road within or adjacent to the project corridor which the surveyors' notes refer to as "old road". No other features suggestive of any type of settlement or encampment are illustrated. The historic aerials depict the area around the project corridor as covered with lakes, ponds, and wetlands interspersed with higher ground, consistent with the ponds and pineland illustrated in the historic plats and referred to in the surveyors' notes. According to the soil map, most of the project corridor is located in excessively to moderately well drained soils, with a few areas of poorly drained soils.

Based on this analysis, a Summary DOE of Moderate has been assigned to the Historic and Archaeological Sites issue.

**Commitments and Responses:** A comprehensive archaeological and historic resource survey has not been completed for the project corridor. Therefore, preparation of a Cultural Resource Assessment Survey (CRAS), as per the PD&E Manual, is recommended. This survey will serve to verify the location, integrity, and eligibility of previously unrecorded historical resources that have recently reached the 50 year historic threshold, as well as confirm the low archaeological potential of the unsurveyed area of the corridor suggested by this analysis. Because the City of Lakeland is included in the current DOS list of Certified Local Governments, coordination Office is recommended to identify any local resources or areas of concern.

**Section 4(f) Potential Impacts to Cultural Resources:** Based on the results of this analysis, there are no known Section 4(f) impacts to cultural resources.

#### ETAT Reviews: Historic and Archaeological Sites Issue: 3 found

**3** *Moderate* assigned 05/27/2011 by Alyssa McManus, FL Department of State

**Coordination Document:** No Selection

**Dispute Information:** N/A

**Identified Resources and Level of Importance:** There are no identified historic sites of significance identified within the project corridor. No National Register eligible or listed sites are identified within a 1/2 mile of the project corridor.

There are five bridges located within the project corridor.

**Comments on Effects to Resources:** While there have been many cultural resource surveys within the 100 ft. buffer of this project, none was specifically conducted for his particular project. The 'drive it' feature of the EST shows some structures which appear to be over 50 years of age. These buildings will need to be identified and evaluated to determine eligibility for the National Register, and to determine effects to significant resources, should they be identified.

The bridges that will be replaced as part of this project should be documented for evaluation if they are over 50 years of age. A Florida Master Site File



bridge form is available online and will be a good preliminary document to determine these bridges' historical significance.

While there are no identified archaeological sites identified within a 500' buffer of this project corridor, they possibly exist within the areas of this project where the ground will be disturbed. Judgemental subsurface testing should be done to determine the absence or presence of cultural material.

Since potentially significant archaeological sites may be present, it is the request of this office that the project site be subjected to a professional cultural resource survey. The purpose of this survey will be to locate and assess any cultural resources that may be present. The resultant survey shall conform to the specification set forth in Chapter 1A-46, Florida Administrative Code, and will need to be forwarded to the Division of Historical Resources in order to complete the reviewing process for this proposed project and its impacts. The results of the analysis will determine if significant cultural resources would be disturbed by this development. In addition, if significant remains are located, the data described in the report and the consultant's conclusions will assist this office in determining measures that must be taken to avoid, minimize, or mitigate adverse impacts to archaeological sites and historical properties listed, or eligible for listing in the NRHP, or otherwise significant. The Division of Historical Resources does not maintain a list of professional consultants who are qualified to work in the State of Florida and/or who meet The Secretary of the Interior's Historic Preservation Professional Standards [Volume 62, Number 119, page 33707 (June 20, 1997)], ("Professional Qualifications"), or as amended in the future. However, the American Cultural Resources Association (ACRA) maintains a listing of professional consultants (<http://acra-crm.org/index.cfm>). In addition, the Register of Professional Archaeologists (RPA) maintains a membership directory for locating professional archaeologists as well as other professional preservation consultants (<http://www.rpanet.org/>). Many qualified historic preservation/cultural resource management professionals are not members of these organizations, and omission from the directories does not imply that someone does not meet the Secretary's Standards or that the resultant work would not be acceptable.

**Additional Comments (optional):** after the survey is complete, this office will be able to determine the impact the project will have on cultural resources.

**Coordinator Feedback:** None

0 None assigned 05/26/2011 by Hank Higginbotham, Southwest Florida Water Management District

**Coordination Document:** No Involvement

**Dispute Information:**N/A

**Identified Resources and Level of Importance:** None found.

**Comments on Effects to Resources:** None found.

**Coordinator Feedback:** None

3 Moderate assigned 04/25/2011 by Elliott York, Seminole Tribe of Florida

**Coordination Document:** No Selection

**Dispute Information:**N/A

**Identified Resources and Level of Importance:** Due to the presence of several archaeological sites and absence of a systematic Cultural Resources Assessment Survey (CRAS) for the project corridor, the STOF-THPO would like to request a CRAS be conducted in order to determine effects, if any, to archaeological sites within the project area.

**Comments on Effects to Resources:** The STOF-THPO would like to review a CRAS before commenting on possible effects to archaeological sites in the project area.

**Coordinator Feedback:** None

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

**Coordinator Summary: Recreation Areas Issue**

1 Enhanced assigned 08/10/2011 by FDOT District 1

**Comments:** The FDEP commented that the project is within 500 feet of the Tenoroc Fish Management Area and located within the Green Swamp Florida Forever Board of Trustees (BOT) Project area. The FDEP also reported that the project will 1) provide an opportunity for a much needed trail connection between Lakeland's urban core and the 29-mile General James A. Van Fleet State Trail (which is a key component of the Florida Greenways and Trails System) and 2) complement a number of other pathway projects currently being constructed in the area. The FDEP additionally stated that the Office of Greenways and Trails should be contacted for further information/assistance and noted support for the project by the City of Lakeland's Planning and Zoning Board. Coordination Document: To Be Determined: Further Coordination Required.

The SWFWMD did not identify any issues or potential project effects related to recreation areas/features. Coordination Document: No Involvement.

The USEPA did not identify any issues or potential project effects related to recreation areas/features.

Based on the EST GIS Analysis results, the project is approximately 300 feet north of the Tenoroc Fish Management Area and located within the Green Swamp Florida Forever BOT Project area. Other recreational features that exist in the area are as follows: Golf Club/Course at Bridgewater, Lakeland RV Resort, and recreational trails. According to the City of Lakeland's Comprehensive Plan, the future land use vision of the project area calls for increased residential, industrial, and mixed use developments. The sidewalks and dedicated bicycle lanes (or off-road multi-use trail) to be included in the SR 33 widening will not only support the growth expected along the corridor and provide a connection between Lakeland's urban core and the 29-mile General James A. Van Fleet State Trail, but complement the notable number of recreational features within the vicinity of the project. For these reasons, a Summary DOE of Enhanced has been assigned to the Recreation Areas issue.

**Commitments and Responses:** A Section 4(f) Determination of Applicability will be included in the scoping recommendations for this project to confirm that potential impacts to features providing recreational opportunities will be minimized to the greatest extent practicable.

Technical Study: Section 4(f) Determination of Applicability.

**ETAT Reviews: Recreation Areas Issue: 3 found**

0 None assigned 06/07/2011 by Maher Budeir, US Environmental Protection Agency

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**Coordination Document:** No Selection

**Dispute Information:**N/A

**Identified Resources and Level of Importance:** None found.

**Comments on Effects to Resources:** None found.

**Coordinator Feedback:** None

1 Enhanced assigned 05/26/2011 by Lauren P. Milligan, FL Department of Environmental Protection

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**Coordination Document:** To Be Determined: Further Coordination Required

**Dispute Information:**N/A

**Identified Resources and Level of Importance:** The project is within 500 ft. of the Tenoroc Fish Management Area - co-managed by the Florida Fish and Wildlife Conservation Commission and the DEP's Bureau of Mining and Minerals Regulation. The project is also located within the Green Swamp Florida Forever BOT Project area.

**Comments on Effects to Resources:** The DEP's Office of Greenways and Trails reports that the project provides an opportunity for a much needed trail connection between Lakeland's urban core and the 29-mile General James A. Van Fleet State Trail, which is a key component of the Florida Greenways and Trails System.

-- 12-foot pathways are currently being constructed as part of the East-West Road (University Boulevard) project between SR 33 and SR 570 (Polk Parkway) that is scheduled for completion in early 2012.

-- A multi-use trail is envisioned to be incorporated into the SR 33 design north of SR 659 (Combee Road), thereby providing a connection between Tenoroc Fish Management Area and E-W Road corridors that directly connect with the Van Fleet State Trail.

-- The SR 33 project corridor also parallels a trail corridor that is located on the south side of Long Lake. Given the 200-ft. right-of-way width on SR 33 and existing/planned residential units in the area, a trail could be constructed within the SR 33 design south of SR 659. In fact, the City of Lakeland's Planning and Zoning Board has explicitly requested that a trail be accommodated in a site plan for a utility facility proposed at Maggiore Boulevard/Huron Way.

-- It should also be noted that the City's four-lane improvement on SR 33 adjacent to the PD&E project limits (West of Old Combee/Deeson Point to Interstate 4 at Exit 33) includes sidewalks and dedicated bicycle lanes. Since SR 33 within the project area currently has a 60-mph posted speed limit, a transition from an on-road to off-road facility would certainly be appreciated.

For further information and assistance, please contact Ms. Marsha Connell in the Office of Greenways and Trails at (850) 245-2052.

**Coordinator Feedback:** None

0 None assigned 05/26/2011 by Hank Higginbotham, Southwest Florida Water Management District

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**Coordination Document:** No Involvement

**Dispute Information:**N/A

**Identified Resources and Level of Importance:** None found.

**Comments on Effects to Resources:** None found.

**Coordinator Feedback:** None

The following organization(s) were expected to but did not submit a review of the Recreation Areas issue for this alternative: Federal Highway Administration, National Park Service

#### Coordinator Summary: Section 4(f) Potential Issue

2 Minimal assigned 08/10/2011 by FDOT District 1

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**Comments:** The FHWA reported that while at least 8 previous cultural resource surveys have been conducted on or near the project area, per the EST GIS analysis results, portions of the project area were not covered. The FHWA stated that a Cultural Resource Assessment Survey (CRAS) or documentation of a recently conducted CRAS within the project area will be needed. Coordination Document: To Be Determined: Further Coordination Required.

Based on the EST GIS Analysis results, the project is approximately 300 feet north of the Tenoroc Fish Management Area and located within the Green Swamp Florida Forever BOT Project area. Other features that exist which may potentially be protected under the auspices of Section 4(f) include: Golf Club/Course at Bridgewater, Lakeland RV Resort, recreational trails, FDOT RCI bridges, and cultural field survey areas. According to the City of Lakeland's Comprehensive Plan, the future land use vision of the project area calls for increased residential, industrial, and mixed use developments. The sidewalks and dedicated bicycle lanes (or off-road multi-use trail) to be included in the SR 33 widening will not only support the growth expected along the corridor and provide a connection between Lakeland's urban core and the 29-mile General James A. Van Fleet State Trail, but complement the notable number of recreational features within the vicinity of the project. A Section 4(f) DOA, specifically for resources related to recreational and wildlife management uses, will be developed during the Project Development phase and formal Section 4(f) designation will be provided (as necessary), by FHWA, for those Section 4(f) properties bordering the project area of potential effect. A separate Section 4(f) DOA (as part of the Section 106 process) will be developed for those historic, archaeological, and/or tribal resources that have been found to have an "adverse effect" from the proposed project through findings of the CRAS. Due to the fact that the proposed improvements are expected to fit within the existing roadway right-of-way, a Summary DOE of Minimal has been assigned to the Section 4(f) issue.

Commitments and Responses: A Section 4(f) Determination of Applicability will be included in the scoping recommendations for this project to confirm that potential impacts to recreational features and identified historic and archaeological resources will be minimized to the greatest extent practicable.

Technical Study: Section 4(f) Determination of Applicability.

#### ETAT Reviews: Section 4(f) Potential Issue: 1 found

2 Minimal assigned 06/02/2011 by Joseph Sullivan, Federal Highway Administration

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**Coordination Document:** To Be Determined: Further Coordination Required

**Dispute Information:**N/A

**Identified Resources and Level of Importance:** At least 8 previous cultural resource surveys have been conducted on or near the project area. Per GIS analysis, portions of the project area were not covered by documented surveys. A CRAS will be needed for the project area or please provide documentation of recent CRAS conducted within the project area.

**Comments on Effects to Resources:** At least 8 previous cultural resource surveys have been conducted on or near the project area. Per GIS analysis, portions of the project area were not covered by documented surveys. A CRAS will be needed for the project area or please provide documentation of recent CRAS conducted within the project area.

**CLC Commitments and Recommendations: Coordinator Feedback:** None

#### ETAT Reviews and Coordinator Summary: Community Issues

##### Coordinator Summary: Aesthetics Issue

**3** *Moderate* assigned 08/10/2011 by FDOT District 1

**Comments:** FDOT noted that the current aesthetic character along the majority of the roadway is a combination of rural and suburban with a mix of natural environment, recreation and residential neighborhoods; however, this character intensifies near the Interstate 4 interchange with business park, light industrial and warehouse-type land uses. For these reasons along with the potential for noise and vibration related impacts anticipated during construction, the presence of community natural resources in the area, and the location of growing residential areas within close proximity, the FDOT recommended an overall project impact degree of effect of moderate. Coordination Document: None.

FHWA stated that there do not appear to be significant changes to current aesthetic conditions. Coordination Document: None.

In the vicinity of the project, SR 33, in part, serves traffic entering and exiting Interstate 4 and in route from the Polk Parkway. The aesthetic character of the area continues to change from rural to suburban residential and mixed-use. There are however growing residential areas and community natural resources within close proximity. Because of this situation coupled with the potential for noise and vibration related impacts anticipated during construction, a Summary DOE of Moderate has been assigned to the Aesthetic issue.

Commitments and Responses: Public outreach regarding project effects and general design concepts related to corridor aesthetics will be conducted during project development.

Technical Study: None.

##### ETAT Reviews: Aesthetics Issue: 2 found

**2** *Minimal* assigned 06/02/2011 by Joseph Sullivan, Federal Highway Administration

**Coordination Document:** No Selection

**Dispute Information:**N/A

**Identified Resources and Level of Importance:** No significant changes to current aesthetic conditions.

**Comments on Effects to Resources:** No significant changes to current aesthetic conditions.

**CLC Commitments and Recommendations: Coordinator Feedback:** None

**3** *Moderate* assigned 06/02/2011 by Scott Swearingen, FDOT District 1

**Coordination Document:** No Selection

**Dispute Information:**N/A

**Identified Resources and Level of Importance:** 100-Foot Buffer:

Residential Areas - 16.8 acres

Office of Greenways and Trails (OGT) Multi-Use Trails Priorities (High)

500-Foot Buffer:

Residential Areas - 110.0 acres

Mobile Home and RV Parks - Oakridge MHP

FNAI Managed Lands - Tenoroc Fish Management Area

Quarter-Mile (1,320-Foot) Buffer:

Residential Areas - 354.7 acres

Mobile Home and RV Parks - Lakeland RV Resort

**Comments on Effects to Resources:** The project area is characterized by open spaces and agricultural land, low to medium density residences, and light industry, with a growing residential and mixed use character. Almost 320 acres within the quarter-mile buffer are designated as conservation land and the Tenoroc Fish Management Area is located within the 500-foot buffer. Within the 100-foot buffer exists an area identified by the Florida Office of Greenways and Trails as a "high" priority multi-use trail as well as the Golf Club at Bridgewater.

The current aesthetic character along the majority of the roadway is a combination of rural and suburban with a mix of natural environment, recreation and residential neighborhoods. This character intensifies near the Interstate 4 interchange with business park, light industrial and warehouse-type land uses. Potential project impacts on community aesthetics, including noise and vibration related impacts (during construction), are anticipated to be moderate due to the nearby presence of community natural resources, the existing land use scale and character along the roadway, and the location of growing residential areas within close proximity to the project.

**CLC Commitments and Recommendations:** Potential project impacts on community aesthetics appear to be moderate. Continued public outreach during project development should solicit opinions and preferences from residents regarding project effects and general design concepts related to corridor aesthetics. **Coordinator Feedback:** None

##### Coordinator Summary: Economic Issue

1 *Enhanced* assigned 08/10/2011 by FDOT District 1

**Comments:** FDOT stated that area residents and businesses are expected to benefit from this project with improved capacity and accessibility. The project enhances the local network and regional connectivity along this section of State Road 33. As future growth occurs within this area of Lakeland, State Road 33 will be able to better accommodate local and shorter-distance regional trips as an alternative to Interstate 4. Coordination Document: None.

The project has the potential to benefit both residents and businesses with improved capacity and accessibility. It enhances both the local network and regional connectivity of State Road 33. Therefore, a Summary DOE of Enhanced has been assigned to the Economic issue.

Commitments and Responses: Public outreach will be conducted to solicit input from residents and businesses which rely on State Road 33 for access.

Technical Study: None.

#### ETAT Reviews: Economic Issue: 1 found

1 *Enhanced* assigned 06/02/2011 by Scott Swearingen, FDOT District 1

**Coordination Document:** No Selection

**Dispute Information:** N/A

**Identified Resources and Level of Importance:** 100-Foot Buffer:

Residential Areas - 16.8 acres

Commercial Areas - 2.2 acres

Industrial Areas - 7.8 acres

Florida Forever BOT Project - Green Swamp, 36.4 acres

500-Foot Buffer:

Residential Areas - 110.0 acres

Commercial Areas - 8.7 acres

Industrial Areas - 42.2 acres

Bridgewater DRI - 163.5 acres

Future land use:

Residential Area: 220.0 acres

Mixed Use/Urban Village Area: 109.0 acres

Conservation Area: 72.2 acres

Polk County Transit - Bus Route 52

Quarter-Mile (1,320-Foot) Buffer:

Residential Areas - 354.7 acres

Commercial Areas - 25.0 acres

Industrial Areas - 113.7 acres

Bridgewater DRI - 489.2 acres

Future land use:

Residential Area: 509.4 acres

Mixed Use/Urban Village Area: 334.9 acres

Conservation Area: 319.6 acres

Florida Forever BOT Project - Green Swamp, 641.32 acres

One-Mile (5,280-Foot) Buffer:

Residential Areas - 1316.0 acres

Bridgewater DRI - 1140.9 acres

Lake Gibson E Daughtery Road PUD - 15.6 acres

Airport - Lake Gibson

**Comments on Effects to Resources:** State Road 33 in the vicinity of the project area provides access to downtown Lakeland, Interstate 4, and the Polk Parkway (via Interstate 4). The project area consists primarily of currently undeveloped lands, including around 640 acres of the Green Swamp Florida Forever BOT Project within the quarter-mile buffer. Future land use plans call for increased residential, industrial, and mixed use developments in the area at low to medium densities. There are few commercial properties in the project area but a substantial amount of industrial/warehousing space - including the Haverty's distribution center - within the Business Park adjacent to the west side of State Road 33, south of I-4. The project provides greater mobility and accessibility to the existing distribution and planned industrial uses in the corridor.

This project also enhances the local network and regional connectivity along this section of State Road 33. As future growth occurs within this area of Lakeland, State Road 33 will be able to better accommodate local and shorter-distance regional trips as an alternative to Interstate 4.

**CLC Commitments and Recommendations:** Area residents and businesses are expected to benefit from this project with improved capacity and accessibility; therefore, the recommended degree of effect is Enhanced. It is also recommended that additional public outreach be conducted to solicit input from residents and businesses which rely on State Road 33 for access. **Coordinator Feedback:** None

The following organization(s) were expected to but did not submit a review of the Economic issue for this alternative: Federal Highway Administration

#### Coordinator Summary: Land Use Issue

2 *Minimal* assigned 08/10/2011 by FDOT District 1

**Comments:** FDOT noted that the project area is characterized by open spaces and agricultural land, low to medium density residences, and light industry, with a growing residential and mixed use character. The project is consistent with the Lakeland Comprehensive Plan and is shown as a cost-feasible project in the Polk TPO 2035 LRTP. The project is also considered a committed improvement in the Lakeland Comprehensive Plan's

Transportation and Capital Improvement Elements. FDOT stated that impacts to adjacent land uses are anticipated to be minimal, although the increased presence of commuter and non-motorized traffic resulting from growth in residential and mixed use areas may create conflicts between truckers and commuters sharing the corridor. Coordination Document: None.

FHWA stated that if land use changes are proposed they should be identified in appropriate planning documents. Coordination Document: None.

The project area is growing as a suburban residential and mixed-use community. The proposed project improvements appear to be in sync with such growth patterns and trends; however, as motorized and non-motorized traffic increases as a result, so does the potential for conflicts among the various modes sharing the corridor. Also, the project is consistent with and included in all of the appropriate public planning documents. Land use impacts appear to be minimal; therefore, a Summary DOE of Minimal has been assigned to the Land Use issue.

Commitments and Responses: None.

Technical Study: None.

**ETAT Reviews: Land Use Issue: 2 found**

**2** Minimal assigned 06/02/2011 by Joseph Sullivan, Federal Highway Administration

**Coordination Document:** No Selection

**Dispute Information:**N/A

**Identified Resources and Level of Importance:** If land use changes are proposed they should be identified in appropriate planning documents.

**Comments on Effects to Resources:** If land use changes are proposed they should be identified in appropriate planning documents.

**CLC Commitments and Recommendations: Coordinator Feedback:** None

**2** Minimal assigned 06/02/2011 by Scott Swearingen, FDOT District 1

**Coordination Document:** No Selection

**Dispute Information:**N/A

**Identified Resources and Level of Importance:** City of Lakeland Comprehensive Plan  
Polk Transportation Planning Organization's 2035 Long Range Transportation Plan (LRTP)

100-Foot Buffer:

- Residential Areas - 16.8 acres
- Commercial Areas - 2.2 acres
- Industrial Areas - 7.8 acres

500-Foot Buffer:

- Residential Areas - 110.0 acres
- Commercial Areas - 8.7 acres
- Industrial Areas - 42.2 acres
- Transportation Areas (right-of-way) - 34.9 acres
- Mobile Home and RV Parks - Oakridge MHP
- FNAI Managed Lands - Tenoroc Fish Management Area
- Bridgewater DRI - 163.5 acres
- Future land use:
  - Residential Area - 220.0 acres
  - Mixed Use/Urban Village Area - 109.0 acres
  - Conservation Area - 72.2 acres

Quarter-Mile (1,320-Foot) Buffer:

- Residential Areas - 354.7 acres
- Commercial Areas - 25.0 acres
- Industrial Areas - 113.7 acres
- Bridgewater DRI - 489.2 acres
- Future land use:
  - Residential Area - 509.4 acres
  - Mixed Use/Urban Village Area - 334.9 acres
  - Conservation Area - 319.6 acres
  - Mobile Home and RV Parks - Lakeland RV Resort

**Comments on Effects to Resources:** The project area is characterized by open spaces and agricultural land, low to medium density residences, and light industry, with a growing residential and mixed use character. However, almost 320 acres within the quarter-mile buffer are designated as conservation land. Table 2 outlines the existing generalized land uses within the 500-foot project buffer. Agriculture is the dominant land use in the corridor, followed by residential uses and other open spaces.

Table 2. Generalized Land Use (500-Foot Buffer)

500-Foot Buffer

Description	Acres	Percent*
ACREAGE NOT ZONED FOR AGRICULTURE	56.7	11.35%
AGRICULTURAL	98.7	19.78%
INDUSTRIAL	13.6	2.72%
PARCELS WITH NO VALUES	11.8	2.37%
PUBLIC/SEMI-PUBLIC	2.0	0.39%
RECREATION	38.5	7.72%



RESIDENTIAL 60.7 12.16%  
RETAIL/OFFICE 9.4 1.89%  
ROW 1.5 0.3%  
VACANT NONRESIDENTIAL 43.0 8.62%  
VACANT RESIDENTIAL 2.8 0.56%

\*Percentages do not add to 100% due to the omission of the transportation right-of-way from the D1 generalized land use inventory  
EST - District 1 Generalized Land Use - analysis performed on 5/3/2011

The predominant future land use designations within the 500-foot buffer are Residential Medium, Mixed Use/Activity Center, and Residential Low. Within the quarter-mile buffer, however, the dominant designations are Mixed Use/Activity Center and Conservation.

The proposed project is consistent with the City of Lakeland's Comprehensive Plan and the Polk Transportation Planning Organization's (TPO) 2035 Long Range Transportation Plan (LRTP). The project is contained within a section of SR 33 identified as a four-lane improvement need and identified as cost feasible in the currently adopted 2035 LRTP. The project is also considered a committed improvement in the City of Lakeland Comprehensive Plan's Transportation and Capital Improvement Elements.

**CLC Commitments and Recommendations:** Impacts to adjacent land uses are anticipated to be minimal, although the increased presence of commuter and non-motorized traffic resulting from growth in residential and mixed use areas may create conflicts between truckers and commuters sharing the corridor. It is recommended that community outreach solicit input on potential effects to land uses in the corridor. **Coordinator Feedback:** None

The following organization(s) were expected to but did not submit a review of the Land Use issue for this alternative: FL Department of Community Affairs

### Coordinator Summary: Mobility Issue

1 Enhanced assigned 08/10/2011 by FDOT District 1

**Comments:** FDEP reported that the project provides an opportunity for a much needed trail connection between Lakeland's urban core and the 29-mile General James A. Van Fleet State Trail, which is a key component of the Florida Greenways and Trails System. They noted that a trail could be constructed within the SR 33 design south of SR 659, and that the City of Lakeland's Planning and Zoning Board has explicitly requested that a trail be accommodated in a site plan for a utility facility proposed at Maggiore Boulevard/Huron Way. Coordination Document: To Be Determined: Further Coordination Required.

FDOT stated that the resulting multimodal improvements from this project along SR 33 will help to improve multimodal connections between neighborhoods immediately adjacent to the project and destinations nearby. The project includes provisions for multimodal interface with transit through the addition of bus pullouts and shelter pads along both sides. Also, the proposed improvements are anticipated to include bicycle lanes and sidewalks along both sides of the roadway. Coordination Document: None.

The project is anticipated to provide mobility improvements for multiple transportation mode types, including vehicular, pedestrian, bicycle and transit, and will strengthen connections to other trails and recreational amenities. Therefore, a summary DOE of Enhanced has been assigned to the Mobility issue.

Commitments and Responses: Public outreach during project development in coordination with the Polk TPO should continue to solicit community opinions and preferences, targeting input from the transportation disadvantaged population, regarding the proposed capacity improvements and mobility options along this segment of State Road 33.

Technical Study: None.

### ETAT Reviews: Mobility Issue: 2 found

1 Enhanced assigned 06/02/2011 by Scott Swearngen, FDOT District 1

**Coordination Document:** No Selection

**Dispute Information:** N/A

**Identified Resources and Level of Importance:** Identified Resources:

City of Lakeland Comprehensive Plan

Polk Transportation Planning Organization's 2035 Long Range Transportation Plan (LRTP)

100-Foot Buffer:

Residential Areas - 16.8 acres

Lakeland Fire Department Station 6

Office of Greenways and Trails (OGT) Multi-Use Trails Priorities (High)

Crashes (2005-2007) - 90 (3 fatal)

500-Foot Buffer:

Residential Areas - 110.0 acres

Polk County Transit - Bus Route 52

Railroad Siding - 466 feet

Mobile Home and RV Parks - Oakridge MHP

Crashes (2005-2007) - 126 (4 fatal)

Quarter-Mile (1,320-Foot) Buffer:

Residential Areas - 354.7 acres

Mobile Home and RV Parks - Lakeland RV Resort

Railroad Siding - 3,599 feet

One-Mile (5,280-Foot) Buffer:  
Railroad Siding - 12,972 feet  
FDOH Group Care Facilities (7)  
Airport - Lake Gibson

**Comments on Effects to Resources:** This project widens State Road 33 from an existing two-lane to a planned four-lane facility utilizing a suburban typical section. It is located in northern Lakeland, with the majority of the project south of Interstate 4 and having an existing interchange with I-4 near the project's northeastern limit. It will extend the existing four-lane section of SR 33 further northward for an additional 3.7 miles approximately.

The proposed improvements to State Road 33 are intended to improve operational capacity to meet mobility needs and to improve the functional viability of this roadway as a local and regional travel alternative to Interstate 4. State Road 33 provides access to nearby areas facilities including the Polk Parkway and downtown Lakeland.

This project includes provisions for multimodal interface with transit through the addition of bus pullouts and shelter pads along both sides of SR 33 within the project limits. (These are included as specific payment items in the Bridgewater DRI Development Agreement.) The Polk LRTP shows an unfunded transit need along the SR 33 corridor within the project limits. The proposed improvements are anticipated to include bicycle lanes and sidewalks along both sides of the roadway. The resulting multimodal improvements will help to improve multimodal connections between neighborhoods immediately adjacent to the project and destinations nearby.

The project is consistent with the City of Lakeland's Comprehensive Plan and the Polk Transportation Planning Organization's (TPO) 2035 Long Range Transportation Plan (LRTP). The project is contained within a section of SR 33 identified as a four-lane improvement need and identified as cost feasible in the currently adopted 2035 LRTP. The project is also considered a committed improvement in the City of Lakeland Comprehensive Plan's Transportation and Capital Improvement Elements.

**CLC Commitments and Recommendations:** The project is anticipated to enhance mobility and accessibility for both motorized and non-motorized traffic; however, public outreach in coordination with the Polk TPO should continue to solicit community opinions and preferences, targeting input from the transportation disadvantaged population, regarding the proposed capacity improvements and mobility options along this segment of State Road 33.

**Coordinator Feedback:** None

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1 *Enhanced* assigned 05/26/2011 by Lauren P. Milligan, FL Department of Environmental Protection

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**Coordination Document:** To Be Determined: Further Coordination Required

**Dispute Information:** N/A

**Identified Resources and Level of Importance:** The project is within 500 ft. of the Tenoroc Fish Management Area - co-managed by the Florida Fish and Wildlife Conservation Commission and the DEP's Bureau of Mining and Minerals Regulation. The project is also located within the Green Swamp Florida Forever BOT Project area.

**Comments on Effects to Resources:** The DEP's Office of Greenways and Trails reports that the project provides an opportunity for a much needed trail connection between Lakeland's urban core and the 29-mile General James A. Van Fleet State Trail, which is a key component of the Florida Greenways and Trails System.

-- 12-foot pathways are currently being constructed as part of the East-West Road (University Boulevard) project between SR 33 and SR 570 (Polk Parkway) that is scheduled for completion in early 2012.

-- A multi-use trail is envisioned to be incorporated into the SR 33 design north of SR 659 (Combee Road), thereby providing a connection between Tenoroc Fish Management Area and E-W Road corridors that directly connect with the Van Fleet State Trail.

-- The SR 33 project corridor also parallels a trail corridor that is located on the south side of Long Lake. Given the 200-ft. right-of-way width on SR 33 and existing/planned residential units in the area, a trail could be constructed within the SR 33 design south of SR 659. In fact, the City of Lakeland's Planning and Zoning Board has explicitly requested that a trail be accommodated in a site plan for a utility facility proposed at Maggiore Boulevard/Huron Way.

-- It should also be noted that the City's four-lane improvement on SR 33 adjacent to the PD&E project limits (West of Old Combee/Deeson Point to Interstate 4 at Exit 33) includes sidewalks and dedicated bicycle lanes. Since SR 33 within the project area currently has a 60-mph posted speed limit, a transition from an on-road to off-road facility would certainly be appreciated.

For further information and assistance, please contact Ms. Marsha Connell in the Office of Greenways and Trails at (850) 245-2052.

**Coordinator Feedback:** None

The following organization(s) were expected to but did not submit a review of the Mobility issue for this alternative: Federal Highway Administration

#### Coordinator Summary: Relocation Issue

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2 *Minimal* assigned 09/07/2011 by FDOT District 1

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**Comments:** FDOT stated that the proposed improvements are expected to fit within the existing public rights-of-way, including the required stormwater treatment facilities and that there is no anticipated need to relocate households or businesses as a result of the project. Coordination Document: None.

FHWA expressed concerns with the existing right-of-way width being adequate to accommodate the project's planned improvements and, therefore, relocations of nearby residences may be necessary. FHWA requested that potential relocations be identified as early in the planning process as possible. Coordination Document: To Be Determined: Further Coordination Required.

The proposed improvements are expected to fit within the existing public rights-of-way, including the required stormwater treatment facilities. There do not appear to be any project-related relocation effects per this project. The FDOT has coordinated with the FHWA in assigning a Summary DOE. The FHWA stated that relocation impacts have not been identified and that further agency and public involvement may be necessary as the project proceeds forward. A summary DOE of Minimal has been assigned to the Relocation issue. If relocation impacts do arise, they should be noted as early in the project development process as possible.

Commitments and Responses: Any potential relocations of existing residents due to the project will be identified during project development.

Technical Study: None.

**ETAT Reviews: Relocation Issue: 2 found**

**3** *Moderate* assigned 06/02/2011 by Joseph Sullivan, Federal Highway Administration

**Coordination Document:** To Be Determined: Further Coordination Required

**Dispute Information:**N/A

**Identified Resources and Level of Importance:** Please ID potential relocations as early in the planning process as possible.

**Comments on Effects to Resources:** In some areas apparently less than 200 feet is available for project construction and associated needs. Due to the proximity of private residences to the project area relocations might be necessary and should be identified as early in the planning stages as possible.

**CLC Commitments and Recommendations: Coordinator Feedback:** None

**0** *None* assigned 06/02/2011 by Scott Swearingen, FDOT District 1

**Coordination Document:** No Selection

**Dispute Information:**N/A

**Identified Resources and Level of Importance:** 100-Foot Buffer:

Residential Areas - 16.8 acres

Lakeland Fire Department Station 6

Florida Forever BOT Project - Green Swamp, 36.4 acres

**Comments on Effects to Resources:** The project area is characterized by open spaces and agricultural land, low to medium density residences, and light industry, with a growing residential and mixed use character. The proposed improvements are expected to fit within the existing public rights-of-way, including the required stormwater treatment facilities. There is no anticipated need to relocate households or businesses as a result of the project.

**CLC Commitments and Recommendations:** There are no project-related relocation effects expected. The recommended degree of effect is None.

**Coordinator Feedback:** None

**Coordinator Summary: Social Issue**

**3** *Moderate* assigned 08/10/2011 by FDOT District 1

**Comments:** The FDOT noted numerous community facilities within the project study area. With regard to area demographics, the 500-foot and one-mile buffer areas contain a relatively low percentage of African-Americans (32.8%) and Hispanic persons. Also, the percentage of households without a car is relatively low as is the percentage of elderly persons (age 65+). The median family income is higher than the County average. These statistics indicate a high probability of an overall area population with limited transportation mobility capacity and/or options. Per the FDOT PD&E Manual, Part 1, Chapter 11, Section 11.2.4, public outreach activities targeting minority persons will not be required. This is due to the low percentage of minority persons in the study area. Regardless, FDOT recommended that measures be taken during public involvement to identify potential transportation disadvantaged groups, including the elderly, and ensure they are not disproportionately affected by the project. Coordination Document: None.

FHWA expressed concerns with the existing right-of-way width being adequate to accommodate the project's planned improvements and, therefore, relocations of nearby residences may be necessary. FHWA requested that potential relocations be identified as early in the planning process as possible. Coordination Document: To Be Determined: Further Coordination Required.

The USEPA noted both positive and negative impacts of the project. Positive impacts include better connectivity and accessibility for nearby communities. Negative impacts include general widening and potential increase in traffic volumes. Coordination Document: None.

The project is anticipated to improve capacity, circulation and mobility; however, this could lead to higher traffic volumes and an overall disruption to the social environment. The proposed improvements are expected to fit within the existing public rights-of-way, including the required stormwater treatment facilities. The demographic character of the project study area depicts a relatively less racially and ethnically diverse population that is younger, wealthier and with greater automobile access than Polk County as a whole. Per the FDOT PD&E Manual, Part 1, Chapter 11, Section 11.2.4, if the demographic data indicates that 5% or 1,000 persons or more in a project area speak a language other than English then Limited English Proficiency (LEP) accommodations should be required. Based on available U.S. Census data for the area, such accommodations will not be required for the project. Due to the high level of existing community facilities and residential populations in the area as well as the potential for increased traffic volumes, a summary DOE of Moderate has been assigned to the Social issue.

Commitments and Responses: Community outreach and input regarding the potential effects of this project should continue and measures should be taken during public involvement to identify potential transportation disadvantaged groups, including the elderly, and ensure they are not disproportionately affected by the project. Such outreach and involvement will be conducted during project development.

Technical Study: None.

**ETAT Reviews: Social Issue: 3 found**

**0** *None* assigned 06/07/2011 by Maher Budeir, US Environmental Protection Agency

**Coordination Document:** No Selection

**Dispute Information:**N/A

**Identified Resources and Level of Importance:** Over 18% of land within the 200 foot buffer is midium density residential.

**Comments on Effects to Resources:** Communities along the corridor will be impacted. The project is likely to positively impact some communities by providing better connectivity and accessibility. The general widening and potenal increase in volume of traffic will present a negative impact. Therefore the degree of effect of "none" is assigned. Further project details during the development and design can determine if the net social impact is positive.

**Coordinator Feedback:** None

**3** *Moderate* assigned 06/02/2011 by Joseph Sullivan, Federal Highway Administration

**Coordination Document:** To Be Determined: Further Coordination Required

**Dispute Information:**N/A



**Identified Resources and Level of Importance:** Please identify the proposed type and width of road way and number and location of potential or identified relocations that would be necessary.

**Comments on Effects to Resources:** In some areas apparently less than 200 feet is available for project construction and associated needs. Due to the proximity of private residences to the project area relocations might be necessary and should be identified as early in the planning stages as possible.

**CLC Commitments and Recommendations: Coordinator Feedback:** None

**2** Minimal assigned 06/02/2011 by Scott Swearingen, FDOT District 1

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**Coordination Document:** No Selection

**Dispute Information:** N/A

**Identified Resources and Level of Importance:** 100-Foot Buffer:

Residential Areas - 16.8 acres

Lakeland Fire Department Station 6

Office of Greenways and Trails (OGT) Multi-Use Trails Priorities (High)

Parcel Derived Park (1 golf course)

200-Foot Buffer:

Lakeland Motorsports Park

500-Foot Buffer:

Residential Areas - 110.0 acres

Mobile Home and RV Parks - Oakridge MHP

FNAI Managed Lands - Tenoroc Fish Management Area

Bridgewater DRI - 163.5 acres

Future land use:

Residential Area: 220.0 acres

Mixed Use/Urban Village Area: 109.0 acres

Conservation Area: 72.2 acres

Quarter-Mile (1,320-Foot) Buffer:

Residential Areas - 318.7 acres

Bridgewater DRI - 489.2 acres

Mobile Home and RV Parks - Lakeland RV Resort

TLC Family Church (Parcel Derived Religious Center)

One-Mile (5,280-Foot) Buffer:

Residential Areas - 1316.0 acres

Bridgewater DRI - 1140.9 acres

Parcel Derived Schools - School Board of Polk County

Lake Gibson E Daughtery Road PUD - 15.6 acres

Religious Centers, Parcel Derived or Geocoded (5)

Lake Deeson Boat Ramp

Other Parcel Derived Parks (2 golf courses)

Health Care Facilities, Parcel Derived or Geocoded (3)

FDOH Group Care Facilities (7)

Social Service Facilities, Parcel Derived or Geocoded (10)

Assisted Housing - Sterling Place

SHPO Historic Standing Structures - 6230 Lake Luther Road

Homeowners or Condominium Associations (2)

Florida Archaeological or Historic Sites (2) - 0.28 acres

USA International Speedway

Lakeland Drag Strip

Airport - Lake Gibson

**Comments on Effects to Resources:** Several community facilities exist within close proximity to the project. Facilities within the quarter-mile buffer include a city fire station, an area designated by the OGT as a "high priority" multi-use trail, the Tenoroc Fish Management Area, one religious center, two mobile home/RV parks, and the Lakeland Motorsports Park. There are about 319 acres of medium to high density residential uses within the quarter-mile buffer, or a little less than 23 percent of the total land area within the buffer. Additionally, almost 490 acres of land are planned for development as part of the Bridgewater DRI.

Numerous community facilities exist within the one-mile buffer as listed above.

Table 1 displays the demographic characteristics of the corridor within the 500-foot and one-mile buffers and compares these areas with parallel statistics for the City of Lakeland and Polk County. According to the US Census Bureau data, the one-mile buffer area contains a lower percentage of minority persons, including those claiming Hispanic ethnicity, which is relatively low at 4.7% (compared to 6.4% in Lakeland and 9.7% in all of Polk County). The percentages of persons over the age of 65 and under the age of 18 are similar in the one-mile buffer area to those measures for Polk County as a whole, but the project area appears to contain a generally younger than average population for the City of Lakeland. The percentage of households with no vehicular access is substantially lower than in Polk County or the City of Lakeland, while the project area's median income is notably higher.

Per the FDOT PD&E Manual, Part 1, Chapter 11, Section 11.2.4, if the demographic data indicates that 5% or 1,000 persons or more in a project area speak a language other than English then Limited English Proficiency (LEP) accommodations should be required. Based on the demographic information from the US Census Bureau data, LEP accommodations are not required for this project.

Table 1. Demographic Information

Demographic 500' Buffer 1 Mile Buffer Lakeland Polk County  
 White (Race) 91.9% 90.9% 73.5% 81.0%  
 African-American (Race) 4.4% 4.9% 21.3% 13.8%  
 "Other" \* (Race) 3.7% 4.2% 5.2% 5.2%  
 Hispanic (Ethnic Group) 2.8% 4.7% 6.4% 9.7%  
 Age 65+ 14.2% 17.5% 23.0% 18.3%  
 Under age 18 25.8% 24.4% 21.4% 24.4%  
 HH w/o car 3.6% 4.7% 10.8% 7.2%  
 Med. Family Income \$45,378 \$44,002 \$40,468 \$41,442  
 Source: US Census Bureau (2000 Data - Polk County)

\* "Other" includes Asian, Native American, Native Hawaiian & Other Pacific Islander Alone, & Other Race.

**CLC Commitments and Recommendations:** The potential impacts to the social environment are expected to be minimal. However, it is recommended that community outreach and input regarding the potential effects of this project continues. Measures should be taken during public involvement to identify potential transportation disadvantaged groups, including the elderly, and ensure they are not disproportionately affected by the project. **Coordinator Feedback:** None

The following organization(s) were expected to but did not submit a review of the Social issue for this alternative: FL Department of Community Affairs

**ETAT Reviews and Coordinator Summary: Secondary and Cumulative Issues**

**Coordinator Summary: Secondary and Cumulative Effects Issue**

2 Minimal assigned 09/07/2011 by FDOT District 1

**Comments:** The SWFWMD stated that the project may result in further loss and/or disturbance of breeding and foraging habitat for listed species and further fragmentation of remaining uplands. The SWFWMD noted that excessive habitat damage can be avoided by restricting construction equipment to previously disturbed areas. The SWFWMD also commented that the use of Low Impact Development techniques may assist in water quality treatment and water quantity management. The SWFWMD recommends that wetland impacts be eliminated or reduced by implementing strict controls over sediment transport offsite during construction and by restricting staging areas to uplands. Coordination Document: Permit Required.

According to the City of Lakeland's Comprehensive Plan, the future land use vision of the project area calls for increased residential, industrial, and mixed use developments. The purpose of this project is to improve the functional viability of SR 33 as a local and regional travel alternative to Interstate 4 to provide needed capacity to meet growing travel demand in northeast Lakeland and support increases in both population and employment in the area. This project is additionally anticipated to augment an existing emergency evacuation route. For these reasons, a Summary DOE of Minimal has been assigned to the Secondary and Cumulative Effects issue. The FDOT has coordinated with the SWFWMD in assigning a Summary DOE. The SWFWMD stated that their determination of any DOE is primarily based on the project's increased coordination & efforts with the FDOT during the future regulatory process (ERP). Therefore, the SWFWMD assigned their recommended DOE due to the increased permitting efforts of the project.

Commitments and Responses: None.

Technical Study: None.

**ETAT Reviews: Secondary and Cumulative Effects Issue: 1 found**

3 Moderate assigned 05/26/2011 by Hank Higginbotham, Southwest Florida Water Management District

**Coordination Document:** Permit Required

**Dispute Information:** N/A

**At-Risk Resource:** Wildlife and Habitat

**Comments on Effects:** The project's potential impacts on wildlife and habitat include the further elimination and/or disturbance of breeding and foraging areas for listed species and the further dissection and fragmentation of remaining uplands. Increased traffic and increased traffic lane width will increase the potential for wildlife fatalities on SR 33, particularly for gopher tortoises who utilize the remaining patches of suitable habitat adjacent to the project.

**Recommended Avoidance, Minimization, and Mitigation Measures:** Excessive habitat damage to remaining quality upland habitats can be eliminated by restricting construction equipment to other, disturbed areas.

**Recommended Actions to Improve At-Risk Resources:** The results from the recommended analysis of road kill potential, particularly of gopher tortoises, should be utilized to eliminate serious impacts to wildlife and habitats.

**At-Risk Resource:** Water Quality and Quantity

**Comments on Effects:** The surface water features in the project area have been adversely affected by past land uses, untreated runoff from roadways and agricultural lands, physical disturbances including excavation, ditching, and other activities. The project has the potential to continue to promote both physical and water quality impacts to these aquatic systems.

**Recommended Avoidance, Minimization, and Mitigation Measures:** Compliance with existing permit requirements, the successful use of erosion and sediment control BMPs, and compliance with applicable TMDL and MFL requirements will help assure that minimum water quality standards are met. Water quantity concerns will also be addressed during the ERP process. In general, limiting or otherwise offsetting encroachment on the ditches, channels, and floodplains in the area can reduce quantity concerns. For groundwater resources, ensure that spillages of petroleum products and other chemicals do not occur during construction, and that stormwater treatment ponds do not intrude into the limerock or penetrate confining material of the aquifer system, either directly or by sinkhole formation. Low impact development strategies may help with water quality treatment as well as water quantity management.

**Recommended Actions to Improve At-Risk Resources:** For surface water resources, reduce pollutant loads to the drainage features in the project area by treating stormwater runoff from currently untreated areas, by controlling erosion from the project site, by limiting activities in surface water, by protecting surface water from the ingress of grease and oils from equipment, and by considering restoration strategies at construction sites. Low impact development strategies may help to limit secondary and cumulative impacts.

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**At-Risk Resource:** Wetlands

**Comments on Effects:** Possible secondary and cumulative impacts to wetlands within the project include the further loss or reduction of the remaining wetlands.

**Recommended Avoidance, Minimization, and Mitigation Measures:** Wetland impacts can be eliminated or reduced by implementing strict controls over sediment transport off site during construction and by restricting the staging area and the movement of vehicles and equipment to non-wetland areas.

**Recommended Actions to Improve At-Risk Resources:** 1. Avoid impacts to wetlands wherever feasible;  
2. Increase the buffer area around existing wetlands as practicable;  
3. Reduce impacts by restoring or enhancing wetland acreage impacted previously by roadway construction.

**Coordinator Feedback:** None

**Eliminated Alternatives**

No eliminated alternatives present.

## Project Scope

### General Project Commitments

No General Project Commitments Found

### Required Permits

Permit Name	Type	Review Date
Dredge and Fill Permit	USACE	08/10/11
Environmental Resource Permit	State	08/10/11

### Required Technical Studies

Technical Study Name	Type	Review Date
Contamination Screening Evaluation Report	ENVIRONMENTAL	08/10/11
Endangered Species Biological Assessment	ENVIRONMENTAL	08/10/11
Wetlands Evaluation Report	ENVIRONMENTAL	08/10/11
Cultural Resource Assessment Survey Report	Other	08/10/11
Floodplains Assessment	Other	08/10/11
Section 4f Evaluation	ENVIRONMENTAL	08/10/11
<b>Conditions:</b> Section 4(f) Determination of Applicability		
Water Quality Impact Evaluation (WQIE)	ENVIRONMENTAL	08/10/11

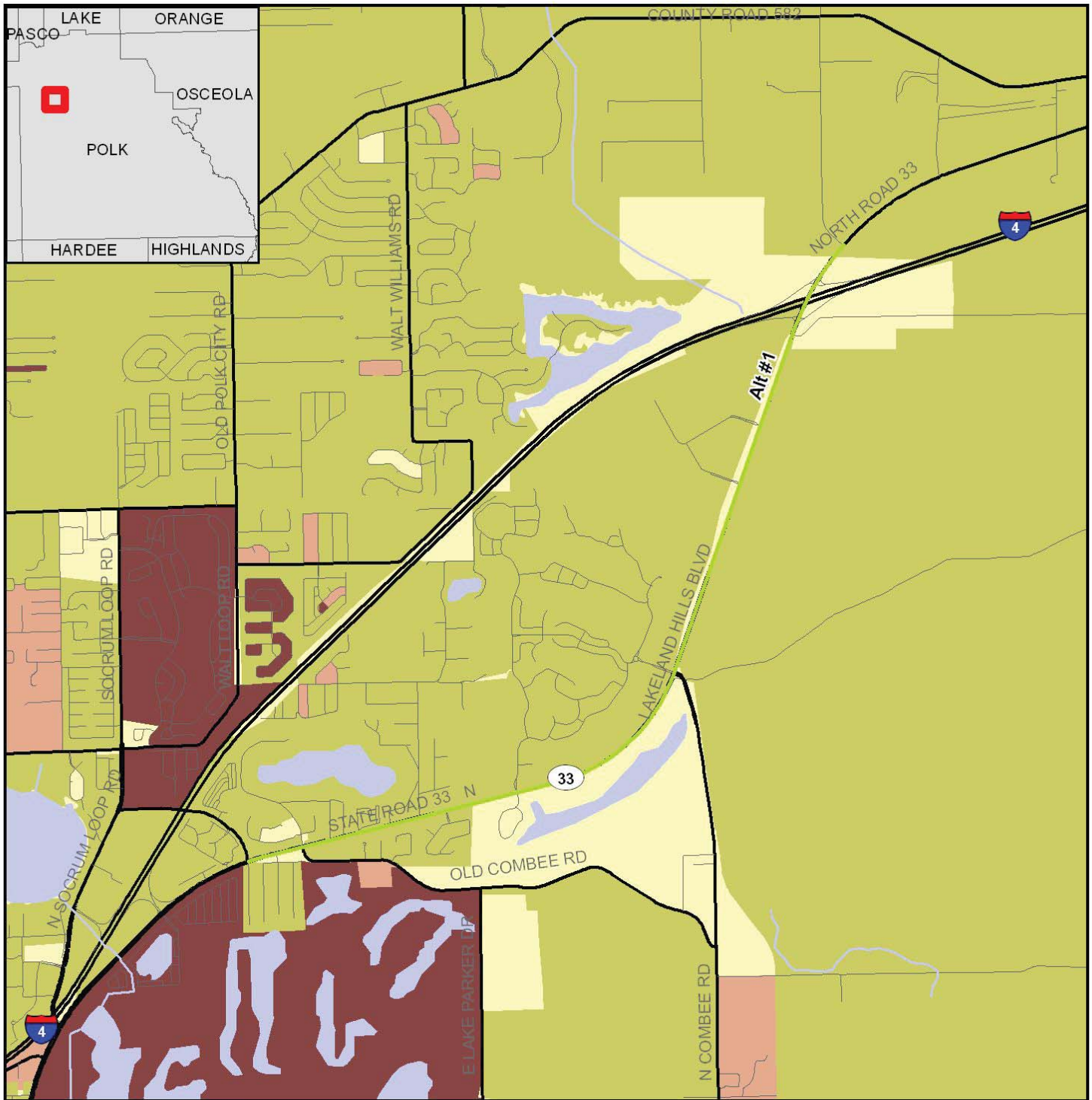
### Dispute Resolution Activity Log

No Dispute Actions Found.

# Project-Level Hardcopy Maps

# 13188 State Road 33: from Old Combee Road to north of Tomkow Road

north of Tomkow Road to Old Combee Road

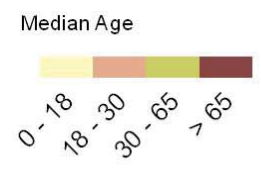


0 1 Miles



Data Sources:  
 US Geological Survey  
 FL Department of Transportation  
 Geographic Data Technology, Inc.  
 US Census Bureau

- ETDM Alternative Point
- ETDM Alternative Terminus
- ETDM Alternative Segment
- ▨ ETDM Alternative Polygon
- Major Road
- Local Road or Trail
- Railroad
- River, Stream or Canal
- Water Body



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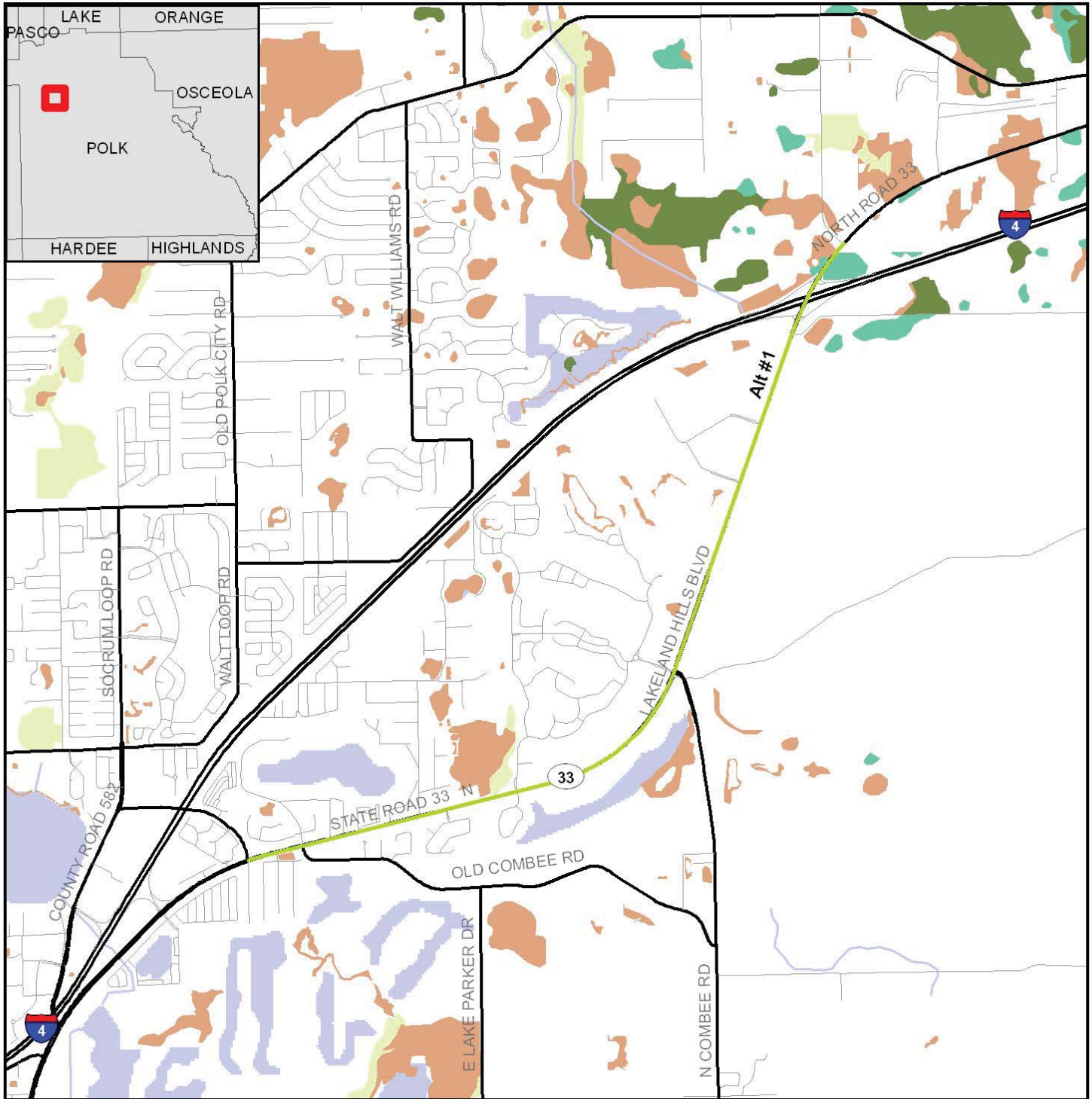
Map Generated on: 4/1/2011





# 13188 State Road 33: from Old Combee Road to north of Tomkow Road

north of Tomkow Road to Old Combee Road



0 0.6 Miles



- ### Coastal and Marine Resource Map
- |                           |                        |                               |                                      |
|---------------------------|------------------------|-------------------------------|--------------------------------------|
| ETDM Alternative Point    | River, Stream or Canal | Continuous Seagrass           | Gravel Beach/Riprap                  |
| ETDM Alternative Terminus | Water Body             | Discontinuous Seagrass        | Exposed Tidal Flat                   |
| ETDM Alternative Segment  | Aquatic Preserve       | Coastal Barrier Resource Area | Sheltered Tidal Flat                 |
| ETDM Alternative Polygon  | Navigable Water Way    | Swamp or Marsh                | Mixed Sand And Gravel Beach          |
| Major Road                | Exposed Rocky Platform | Sand Beach                    | Sheltered Rock/Seawall/Vegetated     |
| Local Road or Trail       |                        |                               | Exposed Vertical Rocky Shore/Seawall |

Data Sources: Geographic Data Technology, Inc.; US Geological Survey; Florida Marine Research Institute; Florida Department of Transportation; Florida Department of Environmental Protection; National Oceanic and Atmospheric Association; Florida Water Management Districts

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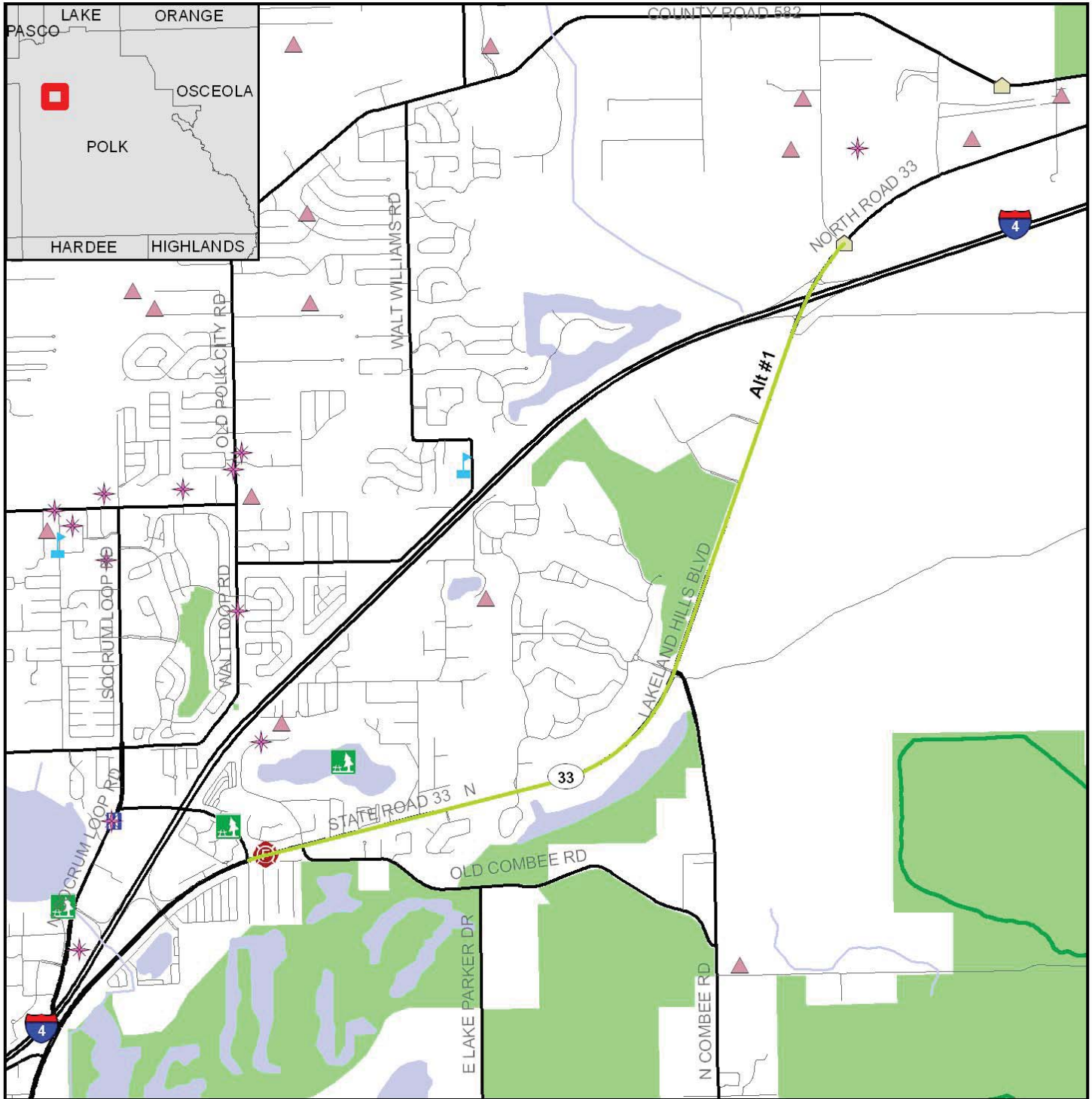
Map Generated on: 4/1/2011





# 13188 State Road 33: from Old Combee Road to north of Tomkow Road

north of Tomkow Road to Old Combee Road



0.00.09 Miles



- |                           |                  |                        |                                 |
|---------------------------|------------------|------------------------|---------------------------------|
| ETDM Alternative Point    | Cemetery         | Fire Station           | Major Road                      |
| ETDM Alternative Terminus | Social Service   | Health Care            | Local Road or Trail             |
| ETDM Alternative Segment  | Community Center | School                 | Railroad                        |
| ETDM Alternative Polygon  | Law Enforcement  | Park                   | Community Boundary              |
| Government                | Place of Worship | River, Stream or Canal | Water Body                      |
| Civic Center              | Cultural Center  | Recreational Trail     | Conservation or Recreation Area |

Data Sources:

US Geological Survey; FL Department of Transportation; Geographic Data Technology, Inc.; FL Property Appraisers; FL Natural Areas Inventory

**etdm**  
Efficient Transportation Decision Making

Environmental Screening Tool **est**

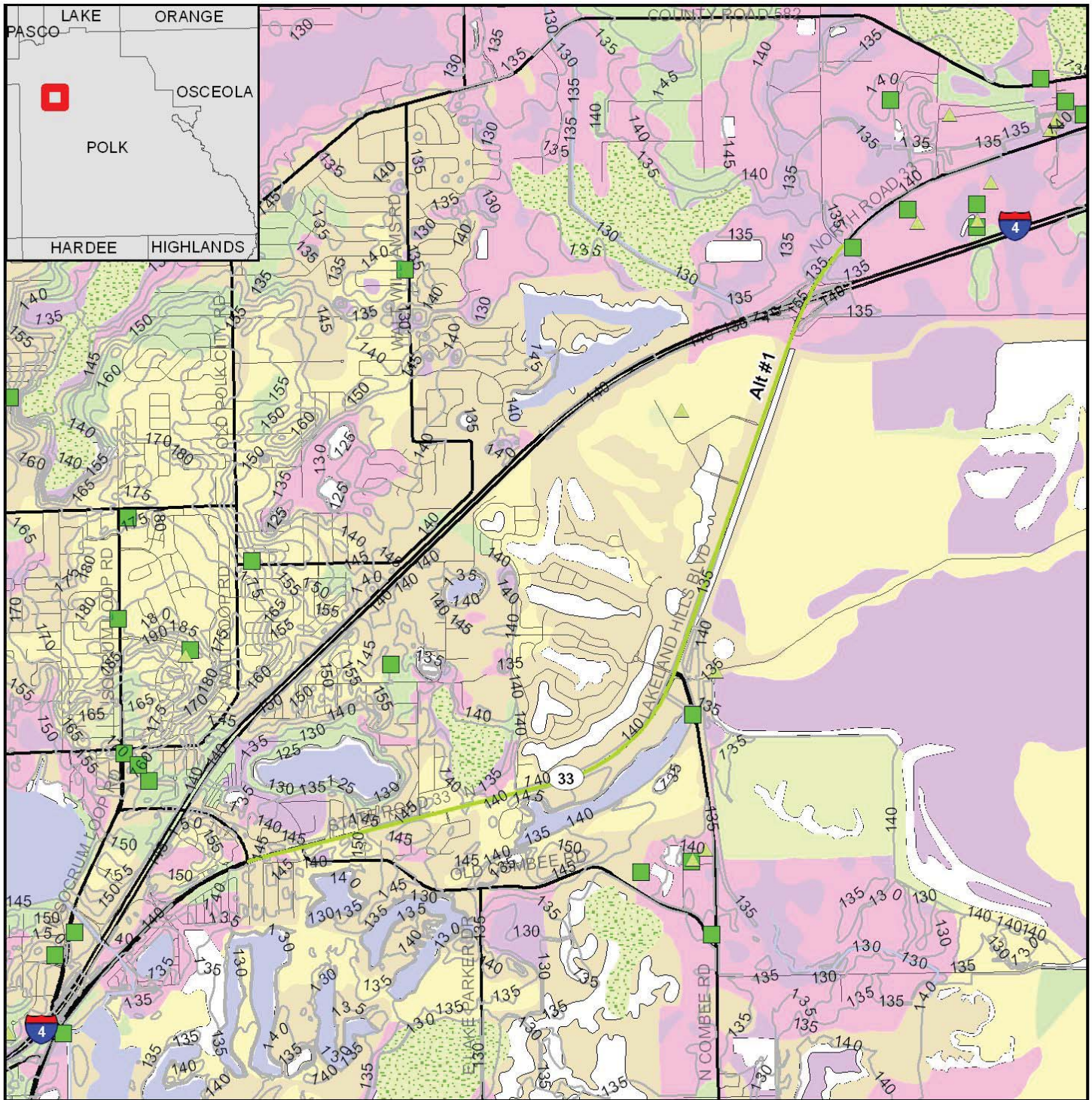
Map Generated on: 4/1/2011





# 13188 State Road 33: from Old Combee Road to north of Tomkow Road

north of Tomkow Road to Old Combee Road



0 0.7 Miles

## Potential Contamination Assessment Map



- ETDM Alternative Point
- ETDM Alternative Terminus
- ETDM Alternative Polygon
- ETDM Alternative Segment
- Major Road
- Local Road or Trail
- Railroad
- River, Stream or Canal
- Toxic Release Inventory
- Dry Cleaning Facility
- Solid Waste Facility
- NPL Remediation Site
- Hazardous Material Site
- Power Plant
- Superfund Site
- Nuclear Site
- FDEP Tanks
- Brownfield Area
- 5 FT Contour
- Water Body
- Swamp/Marsh

Data Sources:  
 Geographic Data Technology, Inc.; US Geological Survey; FL Department of Transportation; FL Department of Environmental Protection;  
 FL Water Management Districts; US Environmental Protection Agency; Natural Resource Conservation Service

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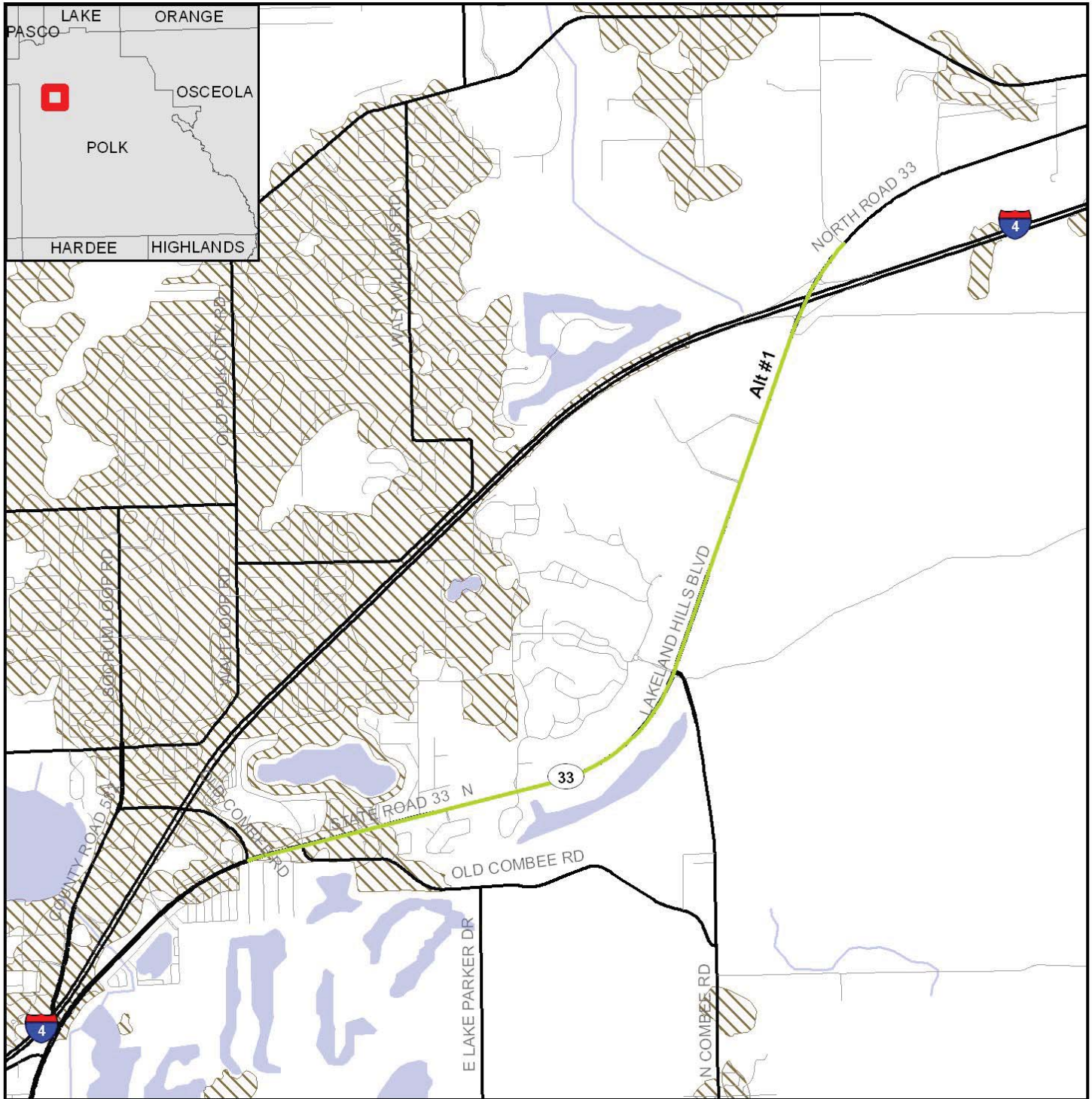
Map Generated on: 4/1/2011





# 13188 State Road 33: from Old Combee Road to north of Tomkow Road

north of Tomkow Road to Old Combee Road



0 0.7 Miles

## Farmlands Resource Map



- ETDM Alternative Point
- ETDM Alternative Terminus – Major Road
- ETDM Alternative Segment – Local Road or Trail
- ETDM Alternative Polygon
- River, Stream or Canal
- Water Body
- Prime Farmland Soils
- Cropland/Pastureland
- Nurseries/Vineyards
- Specialty Farms
- Tree Crops
- Rural Open Lands

Data Sources: Geographic Data Technology, Inc., Florida Water Management Districts, US Geological Survey, Natural Resources Conservation Services  
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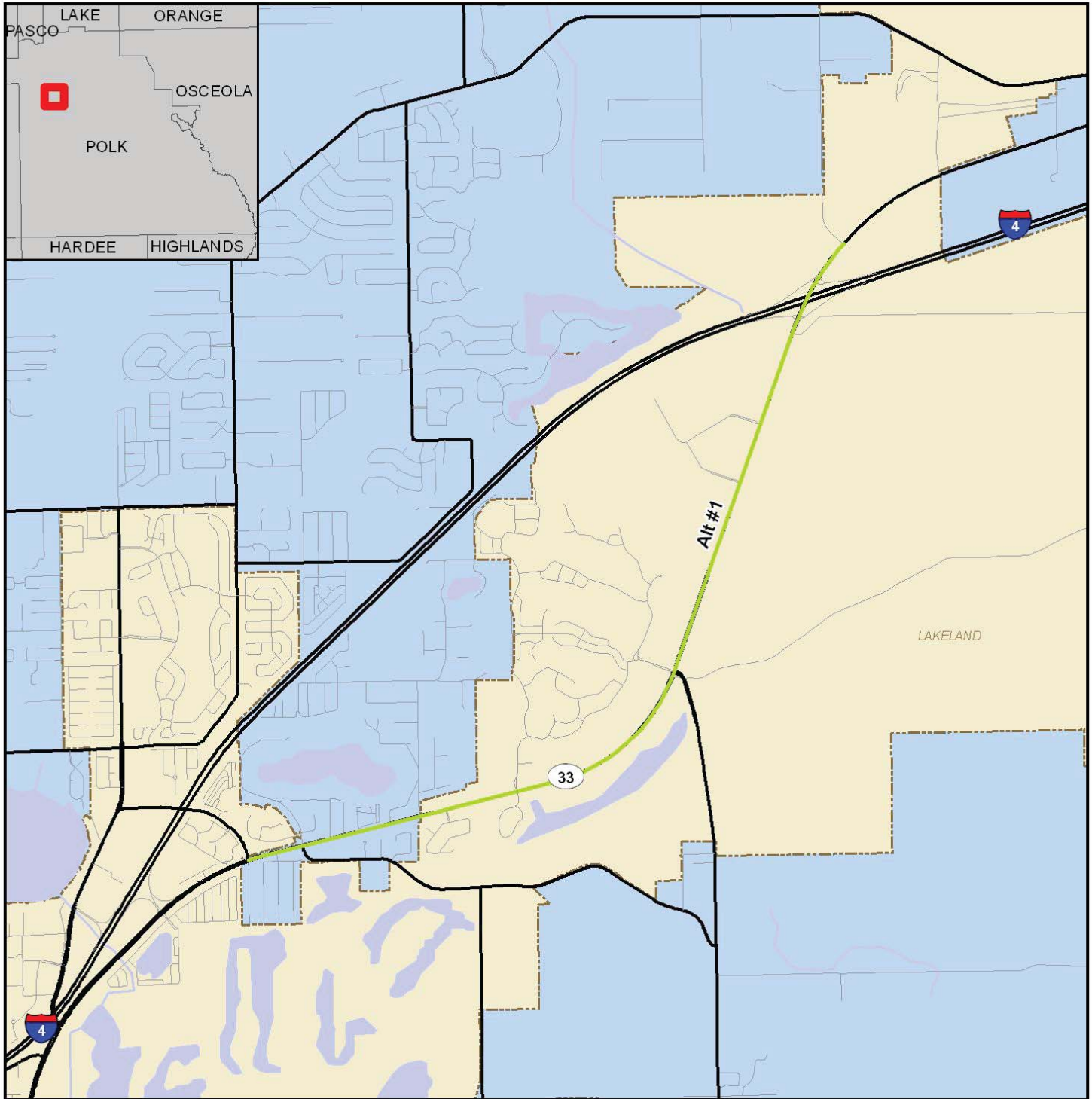
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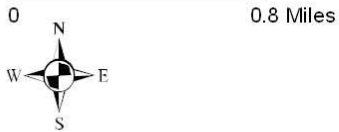


# 13188 State Road 33: from Old Combee Road to north of Tomkow Road

north of Tomkow Road to Old Combee Road



**Floodplain Resource Map**



- ETDM Alternative Point
- ETDM Alternative Terminus
- ETDM Alternative Segment
- ▨ ETDM Alternative Polygon
- Major Road
- Local Road or Trail
- Railroad
- River, Stream or Canal
- Water Body
- City Limits
- County Boundaries
- ▨ Special Flood Hazard Area

Data Sources:  
 Geographic Data Technology, Inc.  
 US Geological Survey  
 Federal Emergency Management Agency

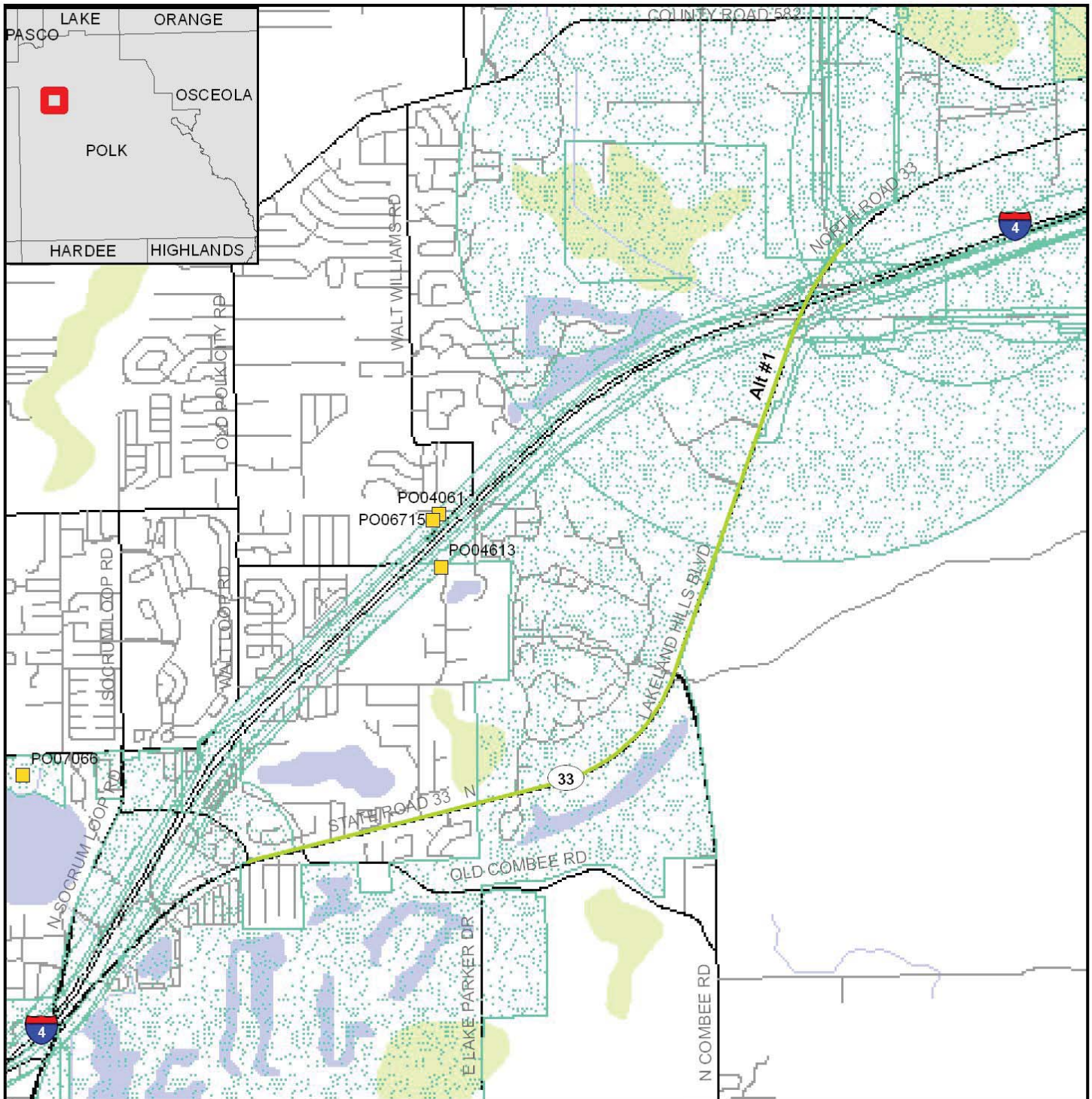
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# 13188 State Road 33: from Old Combee Road to north of Tomkow Road

north of Tomkow Road to Old Combee Road



## Historic Resources Map



Data Sources:  
 Geographic Data Technology, Inc.  
 US Geological Survey  
 Florida Department of Transportation  
 Florida Department of State,  
 Bureau of Archaeological Research

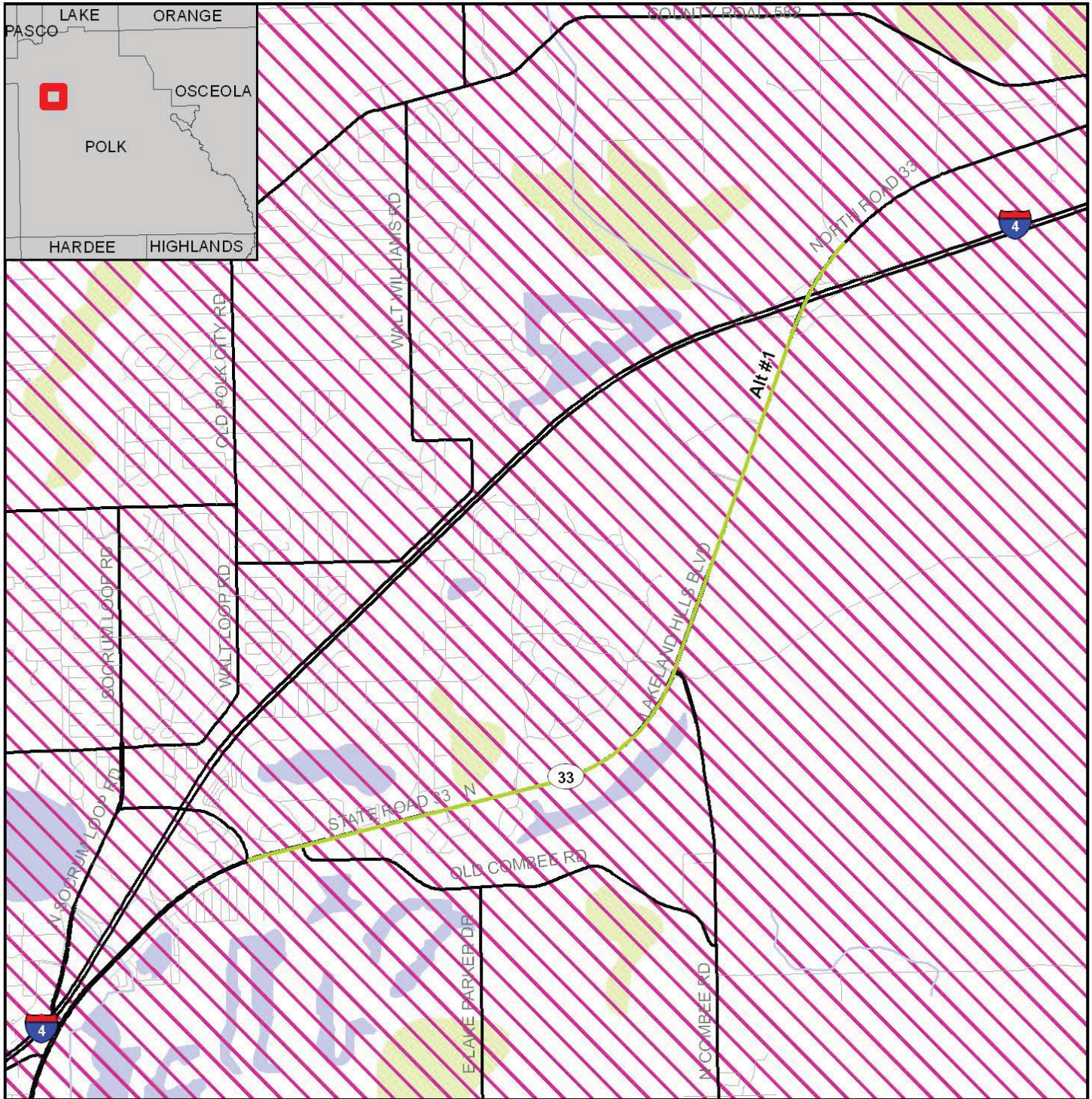
- ETDM Alternative Point
- ETDM Alternative Terminus
- ETDM Alternative Segment
- ETDM Alternative Polygon
- River, Stream or Canal
- Water Body
- Swamp/Marsh
- Major Road
- Local Road or Trail
- Railroad
- Historic Cemetery
- Historic Bridge
- Historic Resource Group
- Cultural Resource Field Survey Area
- State Historic Highway
- Historic Structure

Note: Historic properties depicted on this map represent resources listed in the Florida Master Site File excluding archeological site locations, which, pursuant to Chapter 267.135, Florida Statutes, may be exempt from public record (Chapter 119.07, Florida Statutes). Absence of features on the map does not necessarily indicate an absence of resources in the project vicinity.



# 13188 State Road 33: from Old Combee Road to north of Tomkow Road

north of Tomkow Road to Old Combee Road



## Hydrogeology Resource Map

0 0.5 Miles



- ETDM Alternative Point
- ETDM Alternative Terminus
- ETDM Alternative Segment
- ETDM Alternative Polygon
- Major Road
- Local Road or Trail
- River, Stream or Canal
- Water Body
- Swamp/Marsh

- Recharge Areas of the Floridan Aquifer**
- Discharge 1 TO 5
  - Discharge > 5
  - Discharge < 1
  - Recharge 1 TO 10
  - Recharge > 10
  - Recharge < 1

- Geological Epoch**
- Oligocene/Miocene
  - Pleistocene
  - Pleistocene & Holocene
  - Pliocene
  - Pliocene/Pleistocene
  - Eocene
  - Holocene
  - Miocene
  - Miocene/Pliocene
  - Oligocene

Data Sources: Geographic Data Technology, Inc.; US Geological Survey; Florida Department of Transportation; South West Florida Water Management District; Florida Geological Survey

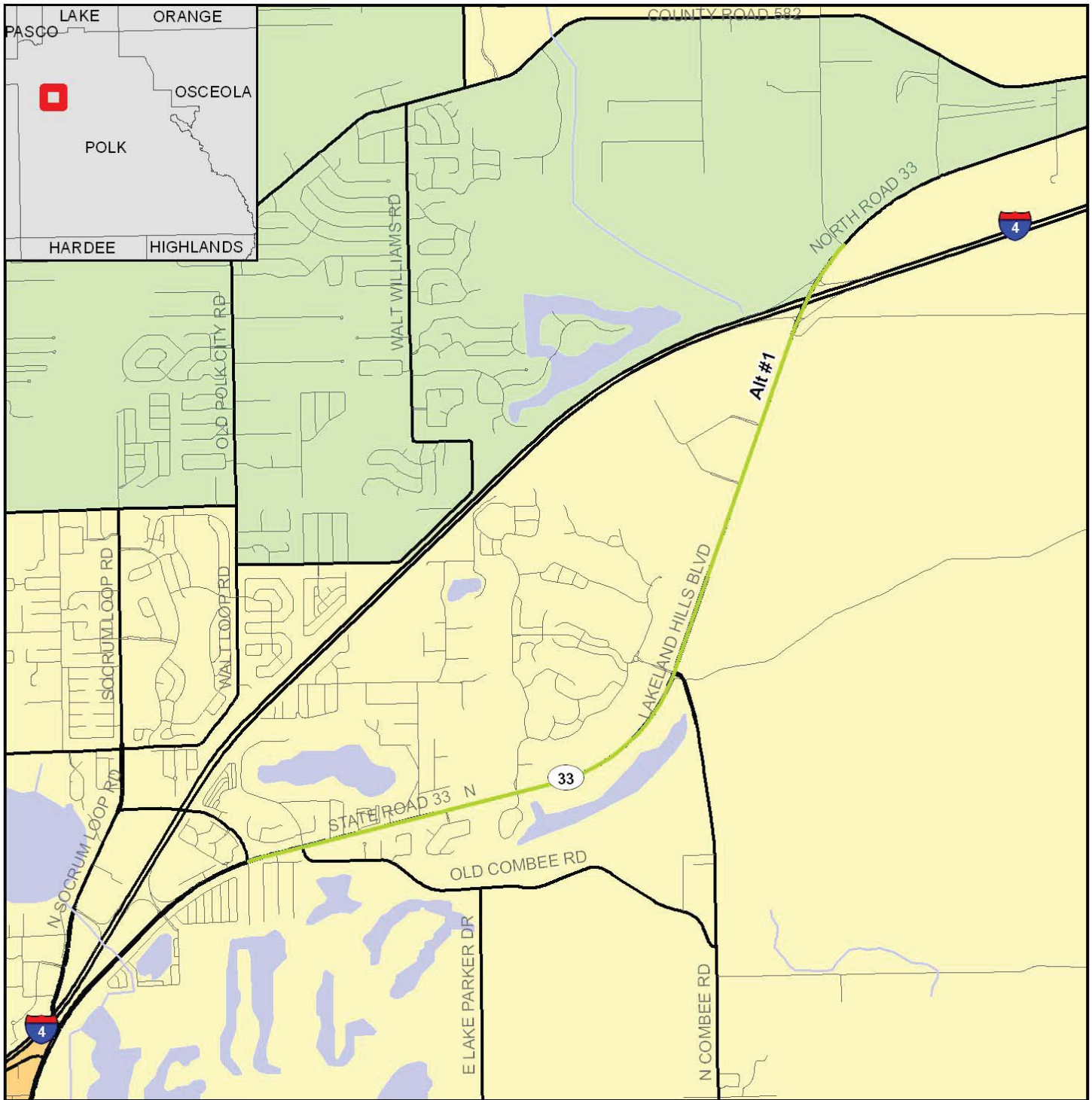
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# 13188 State Road 33: from Old Combee Road to north of Tomkow Road

north of Tomkow Road to Old Combee Road

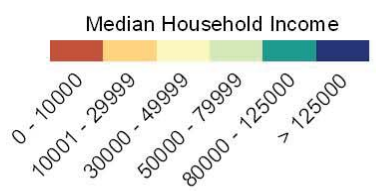


0 1 Miles



Data Sources:  
 US Geological Survey  
 FL Department of Transportation  
 Geographic Data Technology, Inc.  
 US Census Bureau

- ETDM Alternative Point
- ETDM Alternative Terminus
- ETDM Alternative Segment
- ETDM Alternative Polygon
- Major Road
- Local Road or Trail
- Railroad
- River, Stream or Canal
- > 20% Below Poverty
- Water Body



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Environmental Screening Tool **est**

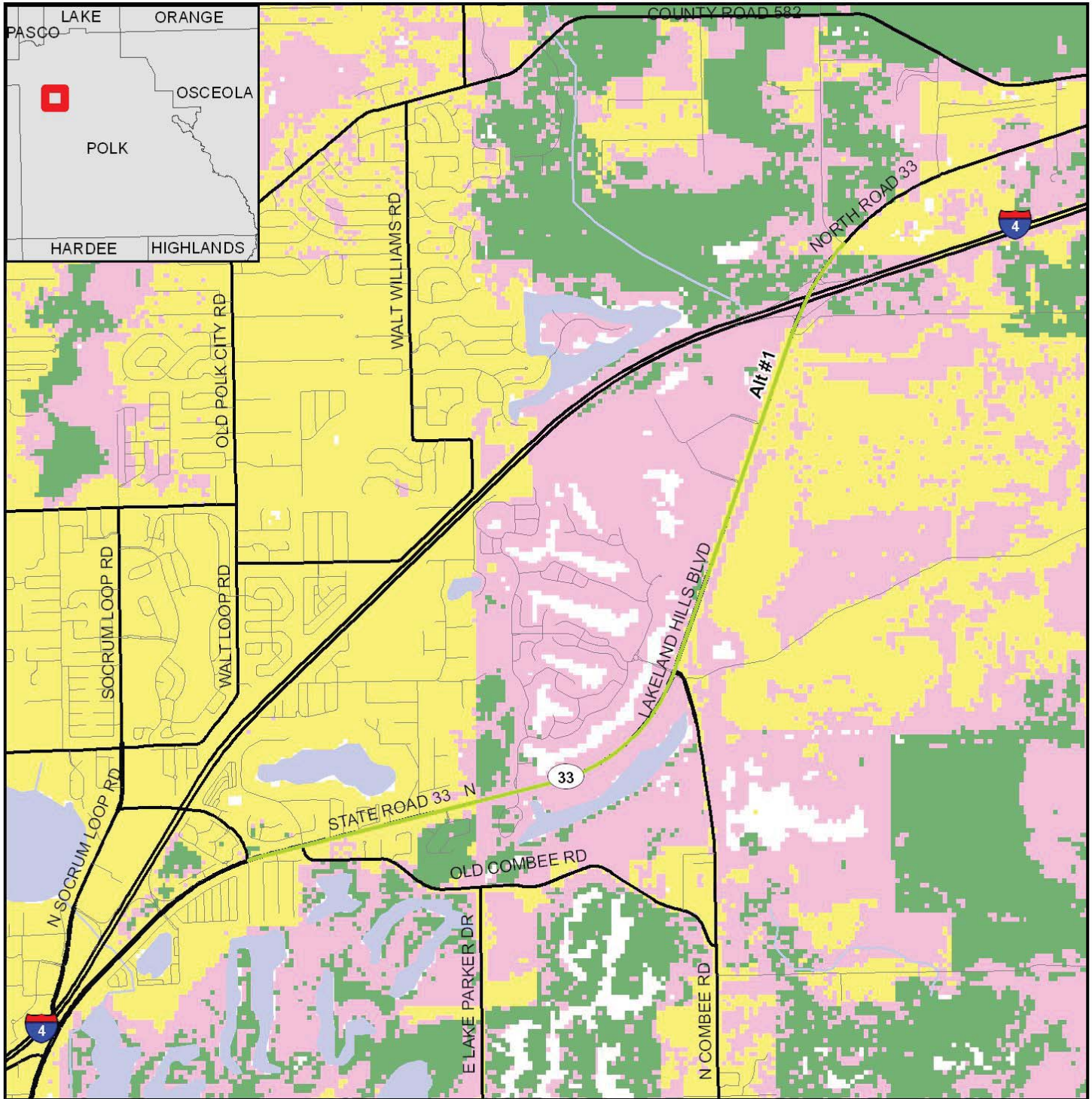
Map Generated on: 4/1/2011





# 13188 State Road 33: from Old Combee Road to north of Tomkow Road

north of Tomkow Road to Old Combee Road



**Integrated Wildlife Habitat Ranking System Map**

Data Sources:  
 Geographic Data Technology, Inc.  
 US Geological Survey  
 Florida Department of Transportation  
 Florida Fish & Wildlife Conservation Commission

- ETDM Alternative Point
- ETDM Alternative Terminus
- ETDM Alternative Segment
- ETDM Alternative Polygon
- Major Road
- Local Road or Trail
- Railroad
- River, Stream or Canal
- Water Body
- Low Habitat Quality
- Medium Habitat Quality
- High Habitat Quality

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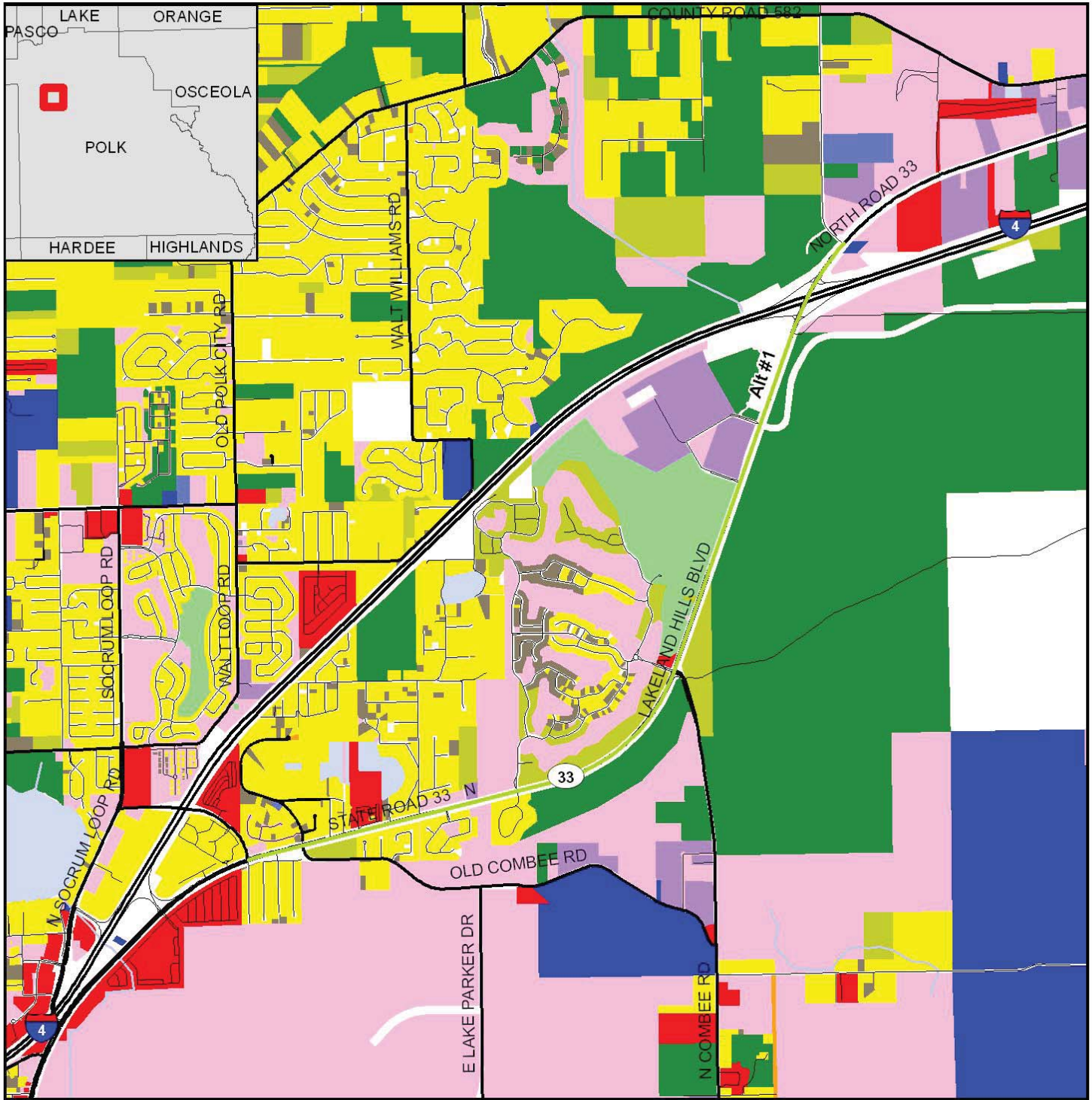
Map Generated on: 4/1/2011





# 13188 State Road 33: from Old Combee Road to north of Tomkow Road

north of Tomkow Road to Old Combee Road



0 0.25 Miles



Data Sources:  
 Geographic Data Technology, Inc.  
 US Geological Survey  
 Florida Department of Revenue  
 Florida Department of Transportation  
 Florida County Property Appraiser Offices

- |                           |                        |                         |                         |
|---------------------------|------------------------|-------------------------|-------------------------|
| ETDM Alternative Point    | Railroad               | Open (Not Agricultural) | Retail/Office           |
| ETDM Alternative Terminus | River, Stream or Canal | Other                   | Vacant (Residential)    |
| ETDM Alternative Segment  | Agricultural           | Public                  | Vacant (Nonresidential) |
| ETDM Alternative Polygon  | Industrial             | Right-of-Way            | Water                   |
| Major Road                | Institutional          | Recreational            | No Data                 |
| Local Road or Trail       | Mining                 | Residential             |                         |

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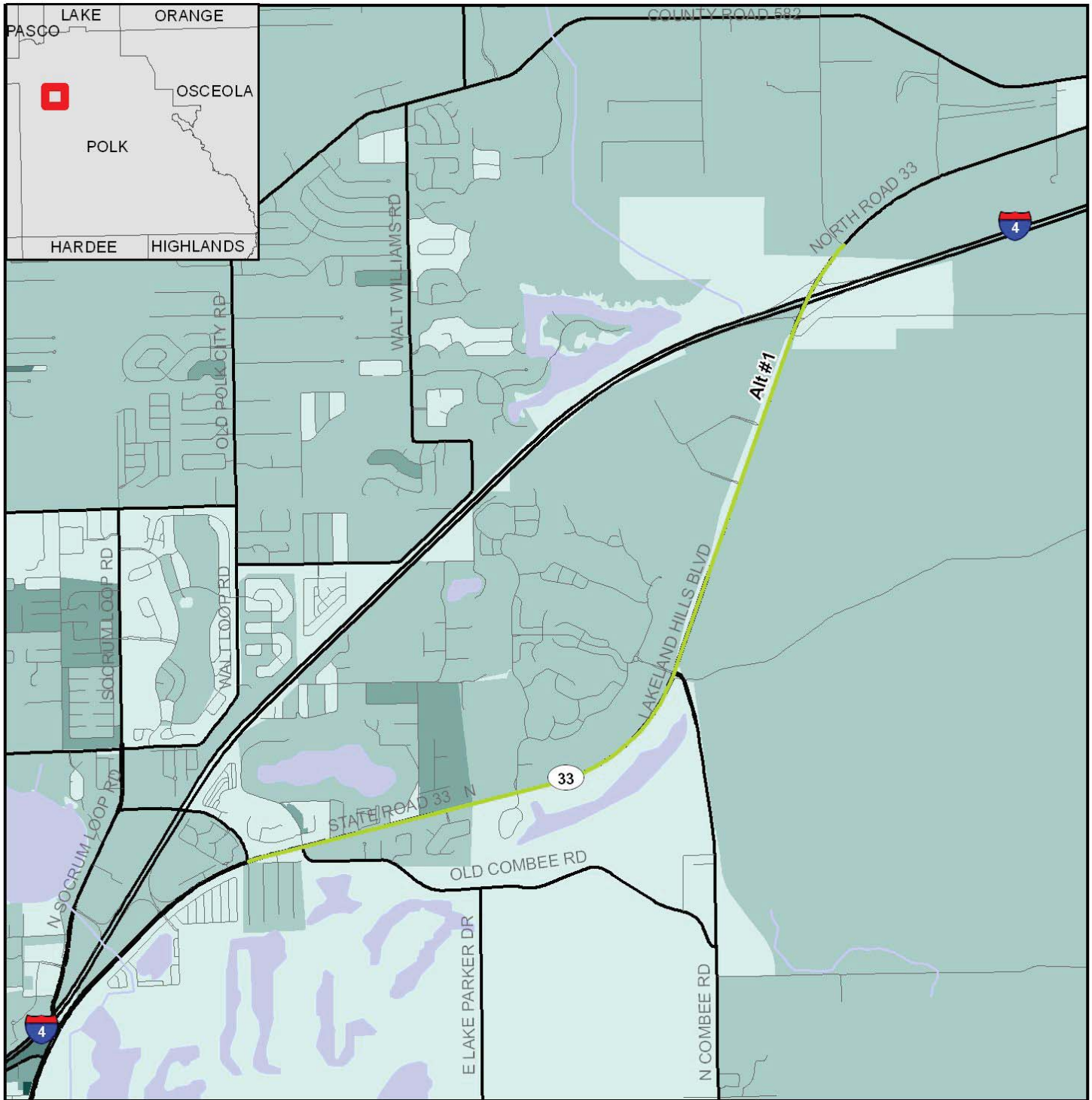


Map Generated on: 4/1/2011



# 13188 State Road 33: from Old Combee Road to north of Tomkow Road

north of Tomkow Road to Old Combee Road



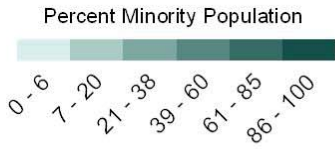
0 0.25 Miles



Data Sources:  
 US Geological Survey  
 FL Department of Transportation  
 Geographic Data Technology, Inc.  
 US Census Bureau

## Minority Population Distribution Map

- ETDM Alternative Point
- ETDM Alternative Terminus
- ETDM Alternative Segment
- ETDM Alternative Polygon
- Major Road
- Local Road or Trail
- Railroad
- River, Stream or Canal
- Water Body



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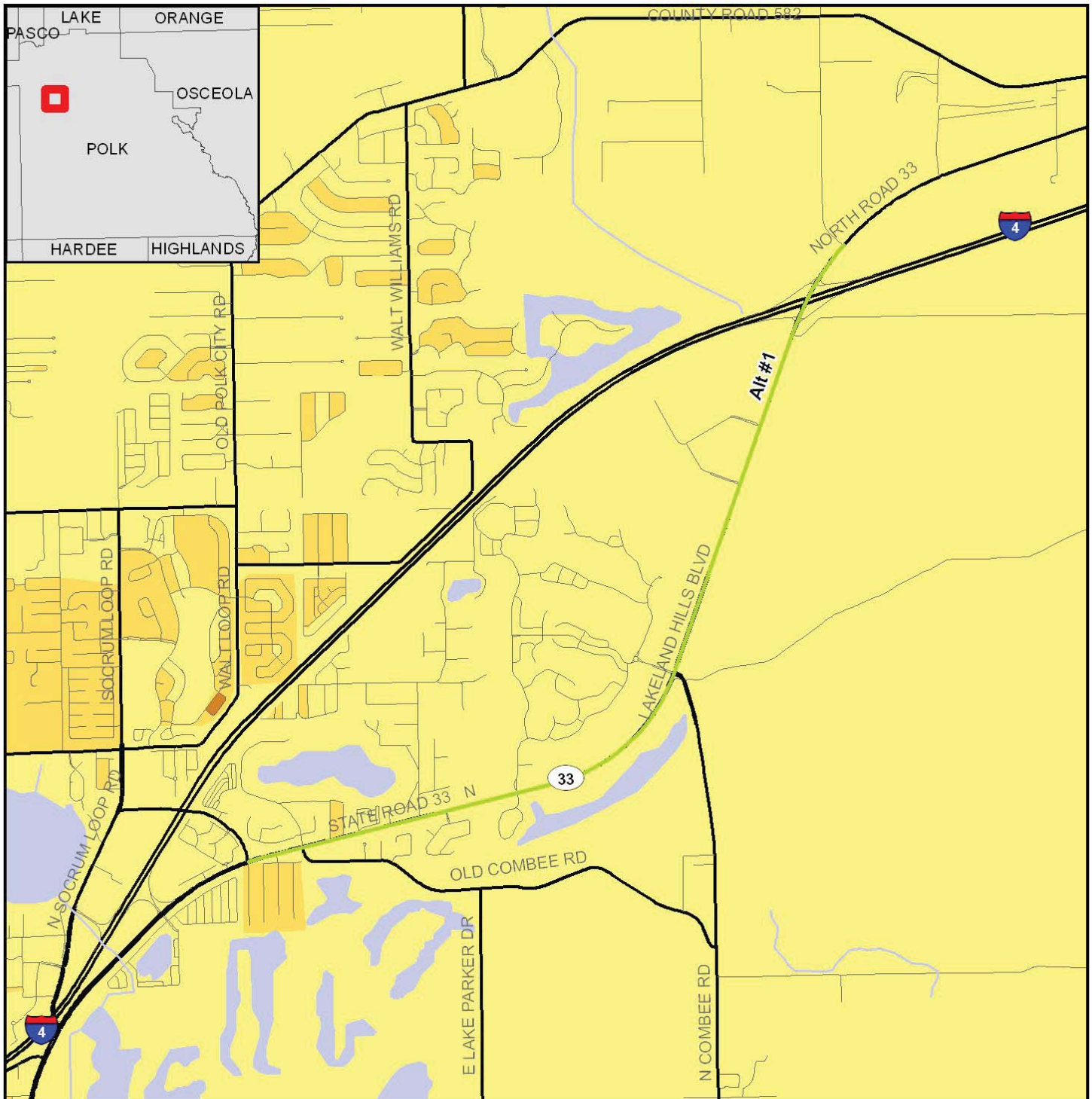


Map Generated on: 4/1/2011



# 13188 State Road 33: from Old Combee Road to north of Tomkow Road

north of Tomkow Road to Old Combee Road

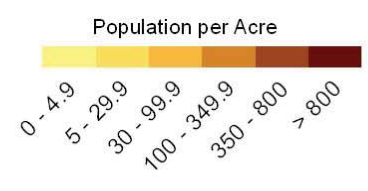


0 0.25 Miles



Data Sources:  
 US Geological Survey  
 FL Department of Transportation  
 Geographic Data Technology, Inc.  
 US Census Bureau

- ETDM Alternative Point
- ETDM Alternative Terminus
- ETDM Alternative Segment
- ETDM Alternative Polygon
- Major Road
- Local Road or Trail
- Railroad
- River, Stream or Canal
- Water Body



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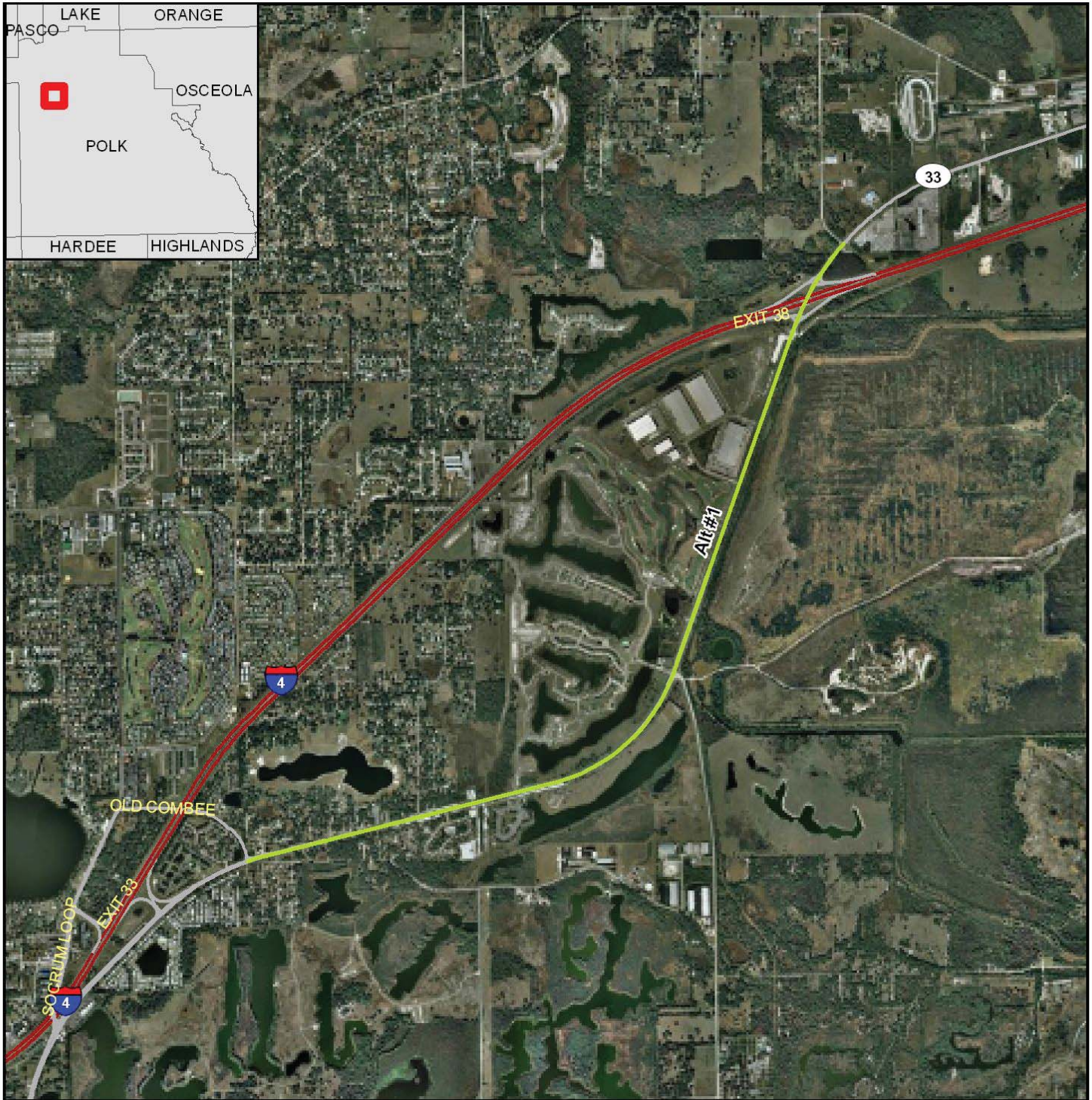


Map Generated on: 4/1/2011





# 13188 State Road 33: from Old Combee Road to north of Tomkow Road north of Tomkow Road to Old Combee Road



**Project Aerial Map**



- ETDM Alternative Point
- ETDM Alternative Terminus
- ETDM Alternative Segment
- ETDM Alternative Polygon
- Primary and Limited Access Highway
- Secondary, Unlimited Access Highway
- Other Highway Feature

Data Sources:  
 Highways - Geographic Data Technology, Inc.  
 Digital Orthophotograph - US Geological Survey

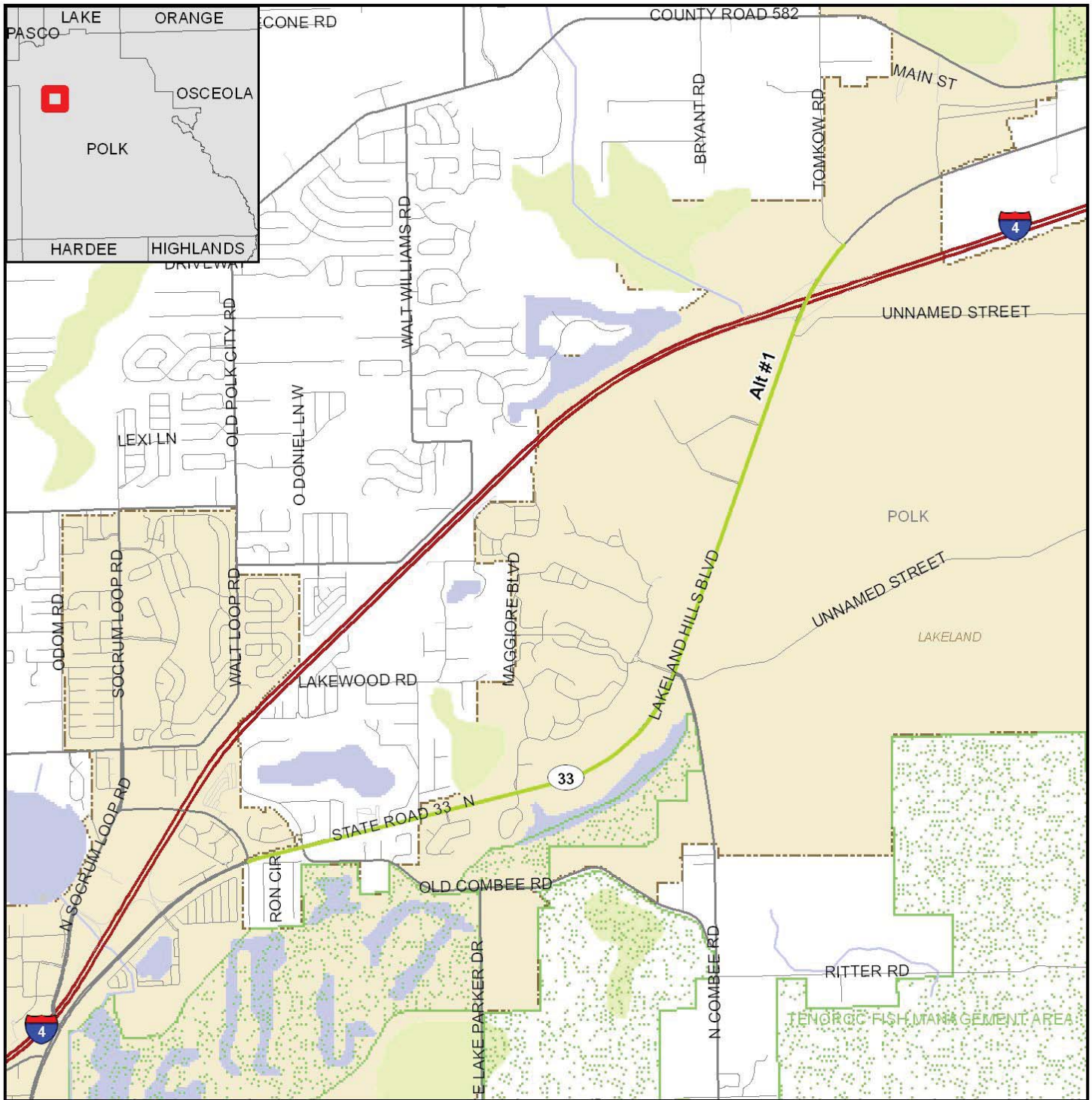
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# 13188 State Road 33: from Old Combee Road to north of Tomkow Road

north of Tomkow Road to Old Combee Road



**Project Location Map**

0 0.5 Miles



Data Sources:

- Geographic Data Technology, Inc.
- US Geological Survey
- US Census Bureau
- County Property Appraisers
- Florida Natural Areas Inventory

- |                           |                                     |                   |
|---------------------------|-------------------------------------|-------------------|
| ETDM Alternative Point    | Managed Conservation Lands          | Toll Road         |
| ETDM Alternative Terminus | Primary and Limited Access Highway  | Railroad          |
| ETDM Alternative Segment  | Secondary, Unlimited Access Highway | Airport           |
| ETDM Alternative Polygon  | Connecting Road                     | City Limits       |
| River, Stream or Canal    | Local Road or Trail                 | County Boundaries |
| Water Body                | Other Roadway Feature               |                   |
| Swamp/Marsh               |                                     |                   |

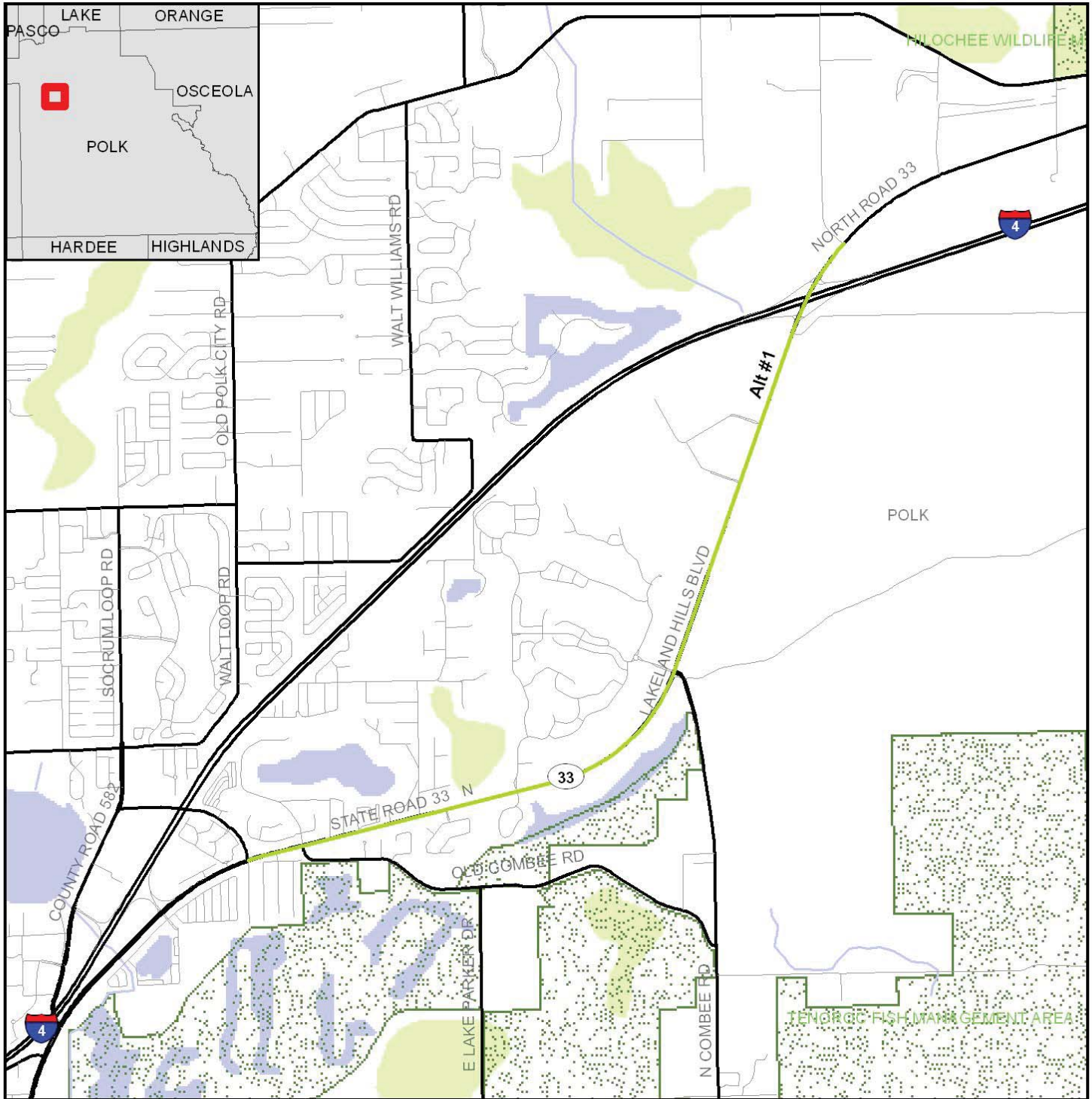
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# 13188 State Road 33: from Old Combee Road to north of Tomkow Road

north of Tomkow Road to Old Combee Road



0 1 Miles

Conservation and Recreation Area Map



Data Sources:  
 Geographic Data Technology, Inc.  
 US Geological Survey  
 Florida Natural Areas Inventory

- ETDM Alternative Point
- ETDM Alternative Segment
- ETDM Alternative Polygon
- ETDM Alternative Terminus
- River, Stream or Canal
- Water Body
- Swamp/Marsh
- Conservation or Recreation Area
- Major Road
- Local Road or Trail
- Railroad
- County Boundary

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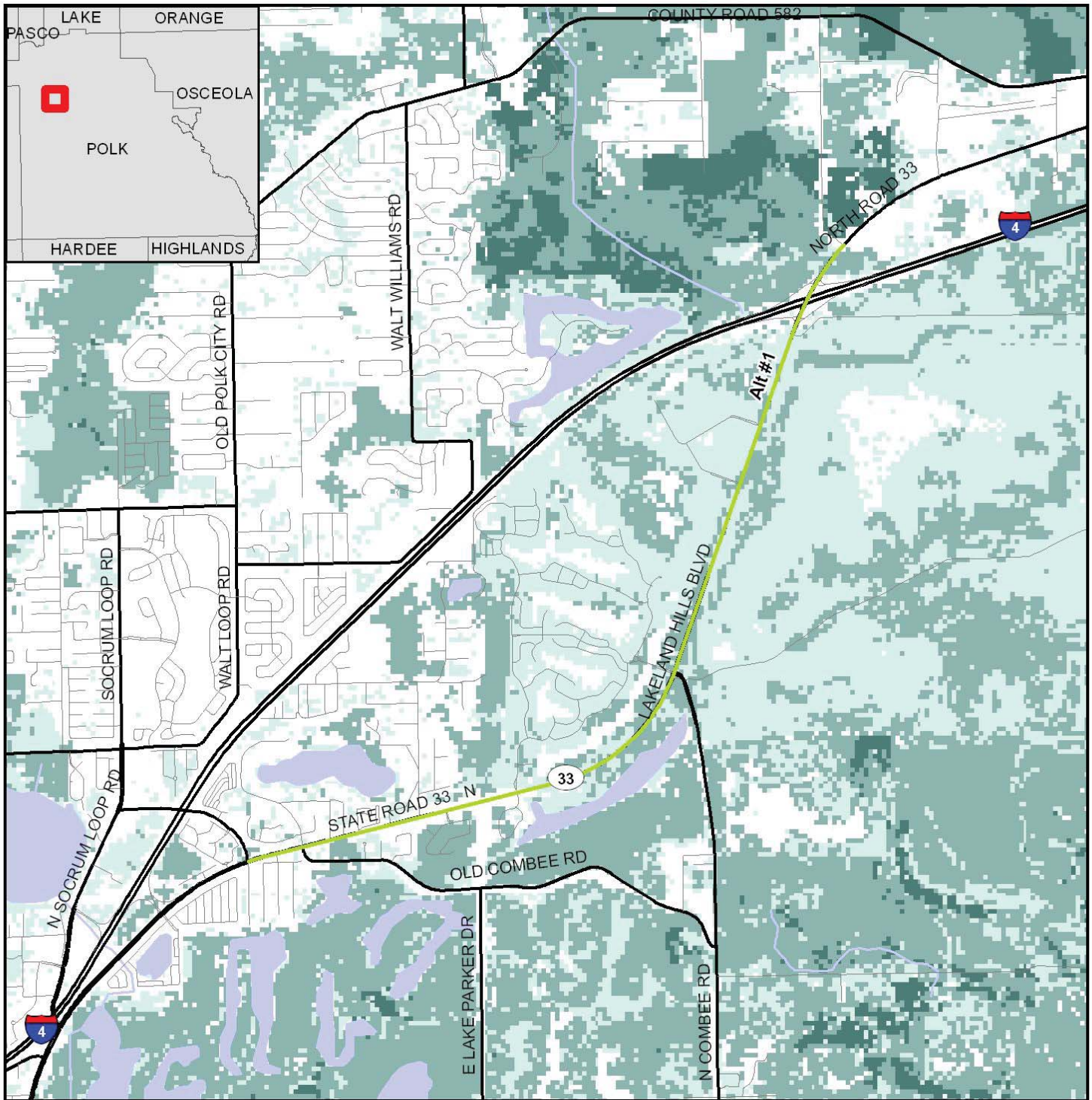
Map Generated on: 4/1/2011





# 13188 State Road 33: from Old Combee Road to north of Tomkow Road

north of Tomkow Road to Old Combee Road

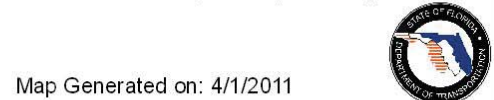


**Species Potential Habitat Model Map**

- |                           |                        |                                   |
|---------------------------|------------------------|-----------------------------------|
| ETDM Alternative Point    | Major Road             | <b>Potential Habitat Richness</b> |
| ETDM Alternative Terminus | Local Road or Trail    |                                   |
| ETDM Alternative Segment  | Railroad               |                                   |
| ETDM Alternative Polygon  | River, Stream or Canal |                                   |
| Water Body                |                        |                                   |
|                           |                        | 1 - 2 Species                     |
|                           |                        | 3 - 5 Species                     |
|                           |                        | 6 - 8 Species                     |
|                           |                        | 9 - 10 Species                    |
|                           |                        | 11 - 13 Species                   |

Data Sources:  
 Geographic Data Technology, Inc.  
 US Geological Survey  
 Florida Department of Transportation  
 Florida Fish & Wildlife Conservation Commission

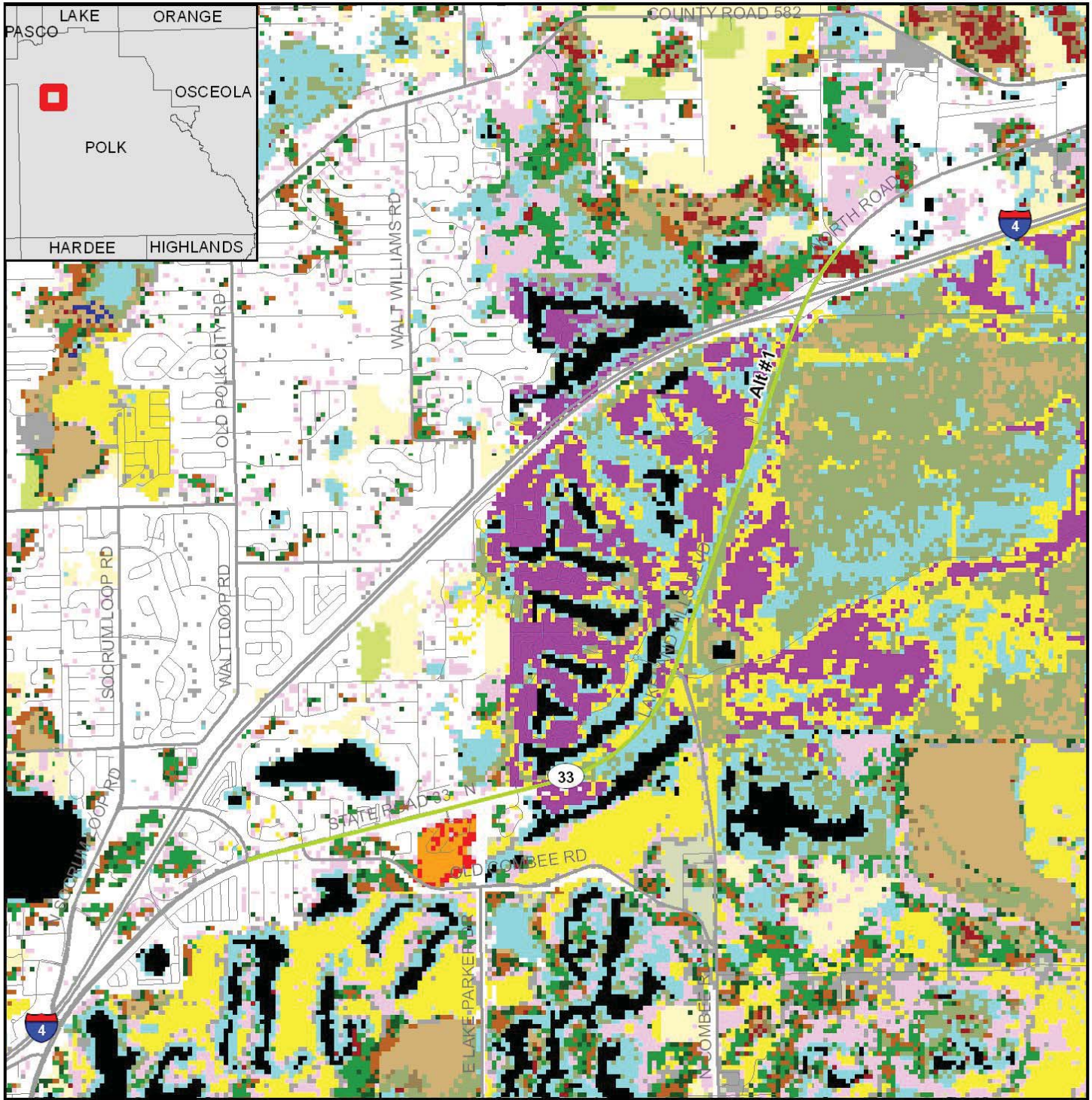
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# 13188 State Road 33: from Old Combee Road to north of Tomkow Road

## north of Tomkow Road to Old Combee Road



**Vegetation and Land Cover Map**

- |                           |                            |                                  |                            |                     |                     |                   |
|---------------------------|----------------------------|----------------------------------|----------------------------|---------------------|---------------------|-------------------|
| ETDM Alternative Polygon  | Not Classified             | Hardwood Hammocks and Forests    | Bay Swamp                  | Mangrove Swamp      | Unimproved Pasture  | Brazilian Pepper  |
| ETDM Alternative Segment  | Coastal Strand             | Pinelands                        | Cypress Swamp              | Scrub Mangrove      | Sugarcane           | High Impact Urban |
| ETDM Alternative Terminus | Sand/Beach                 | Cabbage Palm-live Oak Hammock    | Cypress/Pine/Cabbage Palm  | Tidal Flats         | Citrus              | Low Impact Urban  |
| ETDM Alternative Point    | Xeric Oak Scrub            | Tropical Hardwood Hammock        | Mixed Wetland Forest       | Open Water          | Row and Field Crops | Extractive        |
| Major Road                | Sand Pine Scrub            | Freshwater Marsh and Wet Prairie | Hardwood Swamp             | Shrub and Brushland | Other Agriculture   |                   |
| Local Road or Trail       | Sandhill                   | Sawgrass Marsh                   | Hydric Hammock             | Grassland           | Exotic Plants       |                   |
|                           | Dry Prairie                | Cattail Marsh                    | Bottomland Hardwood Forest | Bare Soil/Clearcut  | Australian Pine     |                   |
|                           | Mixed Hardwood-pine Forest | Shrub Swamp                      | Salt Marsh                 | Improved Pasture    | Melaleuca           |                   |

**Data Sources:**

Geographic Data Technology, Inc.; Florida Department of Transportation; Florida Fish and Wildlife Conservation Commission

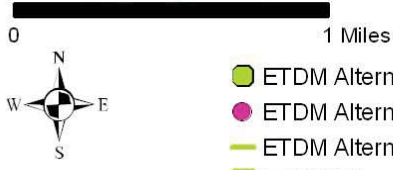
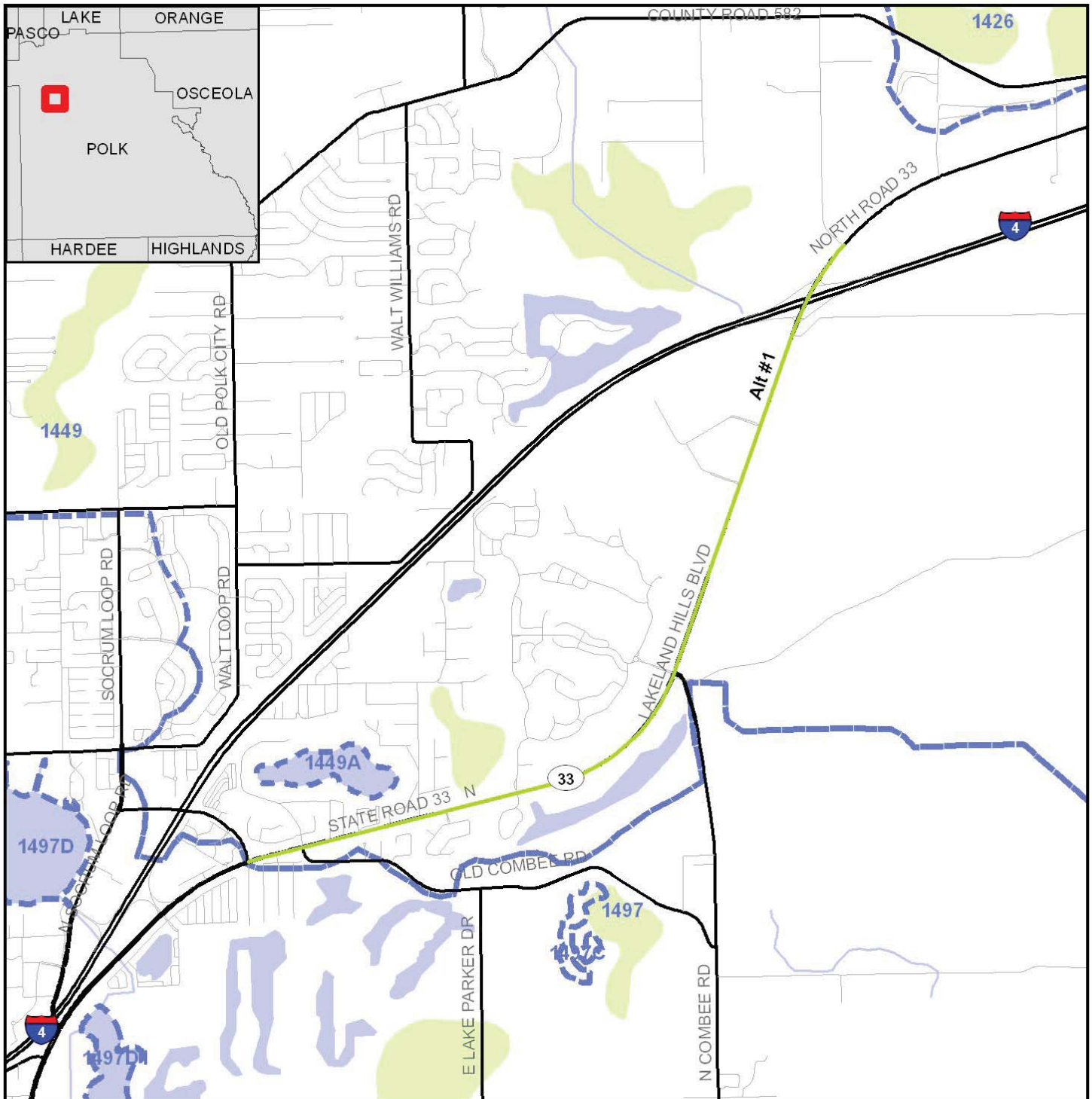
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# 13188 State Road 33: from Old Combee Road to north of Tomkow Road

north of Tomkow Road to Old Combee Road



Data Sources:

- Geographic Data Technology, Inc.
- US Geological Survey
- Florida Department of Transportation
- Florida Department of Environmental Protection
- Florida Geological Survey
- US Bureau of Transportation Statistics

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Efficient Transportation Decision Making



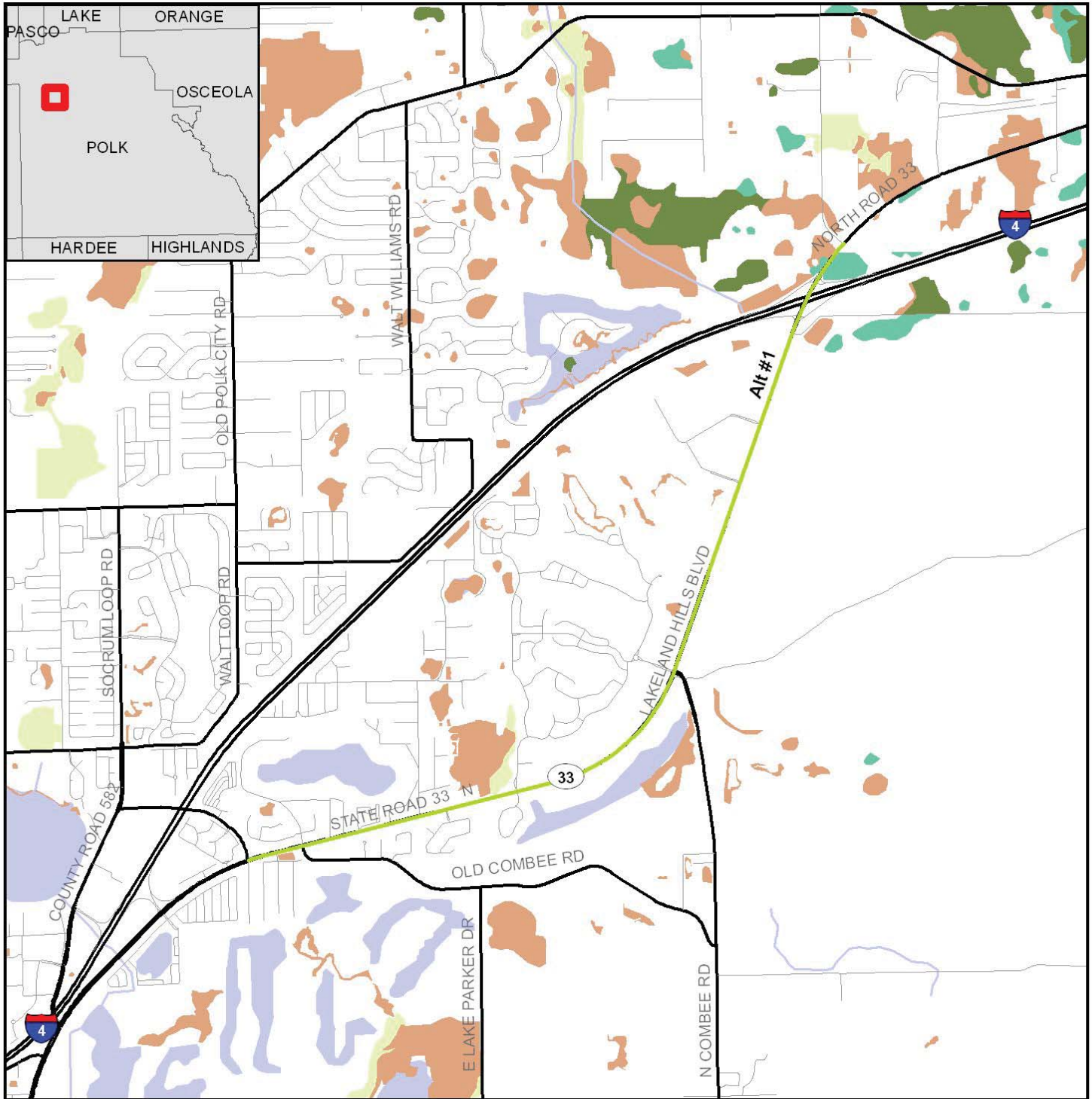
Environmental Screening Tool



Map Generated on: 4/1/2011

# 13188 State Road 33: from Old Combee Road to north of Tomkow Road

north of Tomkow Road to Old Combee Road



**Wetland Resource Map**

0 0.5 Miles



- ETDM Alternative Polygon
- ETDM Alternative Segment
- ETDM Alternative Point
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail
- River, Stream or Canal
- Water Body
- Non-vegetated Wetland
- Vegetated Non-forested Wetland
- Wetland Forested Mixed
- Wetland Coniferous Forest
- Wetland Hardwood Forest

Data Sources: Geographic Data Technology, Inc.; Florida Water Management Districts; US Geological Survey

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**Appendices**

**Degree of Effect Legend**

Legend			
Color Code	Meaning	ETAT	Public Involvement
N/A	Not Applicable / No Involvement	There is no presence of the issue in relationship to the project, or the issue is irrelevant in relationship to the proposed transportation action.	
0	None (after 12/5/2005)	The issue is present, but the project will have no impact on the issue; project has no adverse effect on ETAT resources; permit issuance or consultation involves routine interaction with the agency. The <i>None</i> degree of effect is new as of 12/5/2005.	No community opposition to the planned project. No adverse effect on the community.
1	Enhanced	Project has positive effect on the ETAT resource or can reverse a previous adverse effect leading to environmental improvement.	Affected community supports the proposed project. Project has positive effect.
2	Minimal	Project has little adverse effect on ETAT resources. Permit issuance or consultation involves routine interaction with the agency. Low cost options are available to address concerns.	Minimum community opposition to the planned project. Minimum adverse effect on the community.
2	Minimal to None (assigned prior to 12/5/2005)	Project has little adverse effect on ETAT resources. Permit issuance or consultation involves routine interaction with the agency. Low cost options are available to address concerns.	Minimum community opposition to the planned project. Minimum adverse effect on the community.
3	Moderate	Agency resources are affected by the proposed project, but avoidance and minimization options are available and can be addressed during development with a moderated amount of agency involvement and moderate cost impact.	Project has adverse effect on elements of the affected community. Public Involvement is needed to seek alternatives more acceptable to the community. Moderate community interaction will be required during project development.
4	Substantial	The project has substantial adverse effects but ETAT understands the project need and will be able to seek avoidance and minimization or mitigation options during project development. Substantial interaction will be required during project development and permitting.	Project has substantial adverse effects on the community and faces substantial community opposition. Intensive community interaction with focused Public Involvement will be required during project development to address community concerns.
5	Potential Dispute (Planning Screen)	Project may not conform to agency statutory requirements and may not be permitted. Project modification or evaluation of alternatives is required before advancing to the LRTP Programming Screen.	Community strongly opposes the project. Project is not in conformity with local comprehensive plan and has severe negative impact on the affected community.
5	Dispute Resolution (Programming Screen)	Project does not conform to agency statutory requirements and will not be permitted. Dispute resolution is required before the project proceeds to programming.	Community strongly opposes the project. Project is not in conformity with local comprehensive plan and has severe negative impact on the affected community.
	No ETAT Consensus	ETAT members from different agencies assigned a different degree of effect to this project, and the ETDM coordinator has not assigned a summary degree of effect.	
	No ETAT Reviews	No ETAT members have reviewed the corresponding issue for this project, and the ETDM coordinator has not assigned a summary degree of effect.	

**GIS Analyses**

Since there are so many GIS Analyses available for Project #13188 - State Road 33: from Old Combee Road to north of Tomkow Road, they have not been included in this ETDM Summary Report. GIS Analyses, however, are always available for this project on the Public ETDM Website. Please click on the link below (or copy this link into your Web Browser) in order to view detailed GIS tabular information for this project:

<http://etdmpub.fl-a-etat.org/est/index.jsp?tpID=13188&startPageName=GIS%20Analysis%20Results>

**Special Note:** Please be sure that when the GIS Analysis Results page loads, the **Programming Screen Summary Report Re-published on 09/07/2011 by Scott Swarengen Milestone** is selected. GIS Analyses snapshots have been taken for Project #13188 at various points throughout the project's life-cycle, so it is important that you view the correct snapshot.

# Section 4(f) DOA Response from FHWA

## David Dangel

---

**From:** Horwitz, Martin <Martin.Horwitz@dot.state.fl.us>  
**Sent:** Monday, November 18, 2013 10:27 AM  
**To:** David Dangel  
**Cc:** Sherrard, Antone N  
**Subject:** FW: SR 33 4(f) DOA and use

David,

Please see below for your records.

**Martin Horwitz**  
Environmental Project Manager

FDOT District 1  
801 N. Broadway Avenue  
P.O. Box 1249  
Bartow, Florida 33830  
(863)519-2805

---

**From:** Cathy.Kendall@dot.gov [mailto:Cathy.Kendall@dot.gov]  
**Sent:** Monday, November 18, 2013 10:12 AM  
**To:** Horwitz, Martin  
**Cc:** Benito.Cunill@dot.gov; Sherrard, Antone N; Pipkin, Gwen G  
**Subject:** RE: SR 33 4(f) DOA and use

Martin,

Thank you for the clarifications. FHWA concurs with the FDOT recommendation and finds that the Fish Management Area is a protected Section 4(f) resource, however, the proposed action (Alternative A-2) does not have a Section 4(f) use of this resource.

If you have any questions concerning this finding, please let me know.

Cathy Kendall, AICP  
Acting Director of Technical Services  
FHWA - FL, PR and VI  
545 John Knox Road, Suite 200  
Tallahassee, FL 32303  
(850) 553-2225  
[cathy.kendall@dot.gov](mailto:cathy.kendall@dot.gov)

---

**From:** Horwitz, Martin [<mailto:Martin.Horwitz@dot.state.fl.us>]  
**Sent:** Wednesday, November 13, 2013 8:34 AM  
**To:** Kendall, Cathy (FHWA)  
**Cc:** Cunill, Benito (FHWA); Sherrard, Antone N; Pipkin, Gwen G  
**Subject:** RE: SR 33 4(f) DOA and use

Good Morning Cathy,

In regards to your question regarding FWC considering if the Tenoroc FMA is a significant recreational area, they did provide an answer stating "it is significant". On the 9/30/2013 letter from FWC in the second paragraph and second sentence, the letter states "It is agreed the proposed strip is small in relation to the overall Tenoroc FMA, but it is significant in that the State's conservation land is to be held in perpetuity."

Also in regards to clarification of whether or not there will be a use of the property, there will be no Section 4(f) use or impact to the Tenoroc FMA. There was a "worst case" full buildout of SR 659 to accept a dual left turn lane from SR 33 (shown on Figure A-1 of DOA) but it is **not** being considered as mentioned in the report. Again this is no longer being considered and it was not shown as an alternative during the SR 33 9/24/2013 workshop. Figure A-2 of DOA shows the proposed intersection improvements which do not involve acquisition of ROW from Tenoroc FMA along SR 659 (aka N. Combee Rd.).

If you need any additional information, please contact me.

Thank you,

**Martin Horwitz**  
Environmental Project Manager

FDOT District 1  
801 N. Broadway Avenue  
P.O. Box 1249  
Bartow, Florida 33830  
(863)519-2805

---

**From:** [Cathy.Kendall@dot.gov](mailto:Cathy.Kendall@dot.gov) [<mailto:Cathy.Kendall@dot.gov>]  
**Sent:** Tuesday, November 12, 2013 6:44 PM  
**To:** Horwitz, Martin  
**Cc:** [Benito.Cunill@dot.gov](mailto:Benito.Cunill@dot.gov)  
**Subject:** SR 33 4(f) DOA and use

Hello Martin,

I have reviewed the Section 4(f) determination of applicability for the SR 33 project.

I found in the Appendix of the packet the letter from the Agency with jurisdiction for the property, but I see they did not answer as to whether or not they consider the property as a significant recreation area (they indicated that the impact to the property may be significant). I was also unclear on the recommendation in your cover letter that states that the project will not use the Tenorac FMA. From the maps that you provided in the packet, as well as the statement from the Agency with Jurisdiction, it seems that the project would take a strip of the Tenorac FMA and potentially constitute a Section 4(f) use.

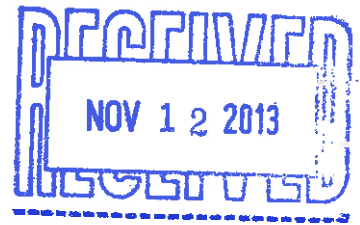
Can you provide any additional clarification?

Thanks,

**Cathy Kendall, AICP**  
**Acting Director of Technical Services**  
**FHWA - FL, PR and VI**  
**545 John Knox Road, Suite 200**

# Concurrence Letter from FHWA/SHPO





## Florida Department of Transportation

RICK SCOTT  
GOVERNOR

801 N. Broadway Avenue  
Bartow, Florida 33830

ANANTH PRASAD, P.E.  
SECRETARY

September 25, 2013

Mr. Joseph Sullivan  
Federal Highway Administration  
545 John Knox Road, Suite 200  
Tallahassee, FL 32303

RE: Cultural Resource Assessment Survey  
State Road 33 from Old Combee Road to North of Tomkow Road,  
Polk County, Florida  
Financial Project ID No.: 430185-1-22-01

RECEIVED  
BUREAU OF  
HISTORIC PRESERVATION  
2013 OCT 18 A 9:29

A Cultural Resource Assessment Survey (CRAS) was conducted for a portion of SR 33 from Old Combee Road to North of Tomkow Road in Polk County, as part of the Florida Department of Transportation's (FDOT) Project Development and Environment (PD&E) Study for proposed improvements to SR 33. The PD&E study is evaluating the widening of the existing two-lane undivided roadway to a four-lane divided roadway (**Figure 1 of CRAS**), a distance of approximately 4.3 miles; the reconstruction of the SR33/Interstate 4 interchange; and the addition of retention ponds. The archaeological area of potential effects (APE) for this project is defined as the existing and new right-of-way (ROW) including the eight proposed pond footprints and the historical APE was defined as the archaeological APE and the immediate view shed within a 328-foot buffer around the current right-of-way.

Enclosed you will find the following documents:

For FHWA:

- One original copy of the CRAS (September 2013)
- One CD containing the CRAS report and appendices

For State Historic Preservation Officer (SHPO):

- One original copy of the CRAS (September 2013)
- Thirty-two updated FMSF form (8PO7489-8PO7491, 8PO7495-8PO7524)
- Sixteen FMSF forms for historic resources (8PO7683-8PO7699)
- One Completed Survey Log
- One CD containing the CRAS report and appendices, FMSF forms and photos

The field work was conducted in accordance with the FDOT's PD&E Manual and the research plan and field methodology follow the Florida Division of Historical Resources standards and guidelines as described in the *Cultural Resource Management Standards and Operational Manual*. Historical background research, including a review of the National Register of Historic Places (NRHP), indicated the presence of 32 previously recorded historic buildings (8PO7489-8PO7491, 8PO7496-8PO7524) and one previously recorded resource group (8PO7495). FMSF forms were updated for these previously recorded resources. Sixteen FMSF forms were prepared for the newly identified buildings (8PO7683-

Mr. Joseph Sullivan, FHWA  
CRAS SR 33 from Old Combee Road  
To North of Tomkow Road, Polk County, Florida  
Financial Project ID No.: 430185-1-22-01  
September 25, 2013  
Page 2 of 3

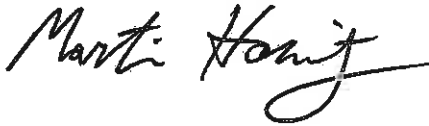
8PO7698) and one FMSF form was prepared for newly recorded resource group 8PO7699. None of the previously and newly recorded historic resources is considered potentially eligible for the NRHP, either individually or as part of a district.

The project area was deemed to have a variable potential for the discovery of prehistoric and historic archaeological sites. Background research indicated that no archaeological sites had been previously recorded in the APE. As a result of the current field survey, no historic or prehistoric archaeological sites were recorded.

This information is being provided in accordance with the provisions of the National Historic Preservation Act of 1966 (as amended), which are implemented by the procedures contained in 36 CFR, Part 800, as well as the provisions contained in the revised Chapter 267, *Florida Statutes*.

Please process the attached report and accompanying documentation and then forward a copy of the CRAS, the FMSF forms, and Survey Log to the SHPO for their concurrence. The second copy of the report and CD are for your files. If you have any questions, or if I may be of assistance, please contact me via email at [martin.horwitz@dot.state.fl.us](mailto:martin.horwitz@dot.state.fl.us) or by phone at (863) 519-2805.

Sincerely,

A handwritten signature in black ink that reads "Martin Horwitz". The signature is written in a cursive style with a long, sweeping underline.

Martin Horwitz  
Environmental Project Manager  
FDOT District 1

Mr. Joseph Sullivan, FHWA  
CRAS SR 33 from Old Combee Road  
To North of Tomkow Road, Polk County, Florida  
Financial Project ID No.: 430185-1-22-01  
September 25, 2013  
Page 3 of 3

The FHWA finds the attached Cultural Resources Assessment Report complete and sufficient and   A   approves/        does not approve the above recommendations and findings.

The FHWA requests the SHPO's opinion on the sufficiency of the attached report and the SHPO's opinion on the recommendations and findings contained in this cover letter and in the comment block below.

FHWA Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

*for*  
  *David Hawk*    
Mr. David Hawk  
Acting Division Administrator  
Florida Division  
Federal Highway Administration

  10-16-13    
Date

The Florida State Historic Preservation Officer finds the attached Cultural Resources Assessment Report complete and sufficient and   ✓   concurs/        does not concur with the recommendations and findings provided in this cover letter for SHPO/DHR Project File Number   2013-4713  .

*for*  
  *Robert F. Bendus*    
Mr. Robert F. Bendus, Director  
State Historic Preservation Officer  
Florida Division of Historical Resources

  11/5/13    
Date

# Concurrence Letters from USFWS and FFWCC



2011-CPA-0155

2011-I-0149

## Florida Department of Transportation

RICK SCOTT  
GOVERNOR

801 North Broadway Avenue  
Bartow, FL 33830

ANANTH PRASAD, P.E.  
SECRETARY

November 14, 2013

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

**RE: Transmittal of Endangered Species Biological Assessment**  
SR 33 PD&E Study  
From Old Combee Road to North of Tomkow Road  
FPID No. 430185-1-22-01  
Polk County, Florida

Dear Mr. Wrublik:

Please find enclosed the Endangered Species Biological Assessment (ESBA) prepared for the above referenced project. The Florida Department of Transportation (FDOT), on behalf of the Federal Highway Administration (FHWA), is currently conducting a Project Development and Environment (PD&E) Study to evaluate options for the proposed improvements to SR 33 from Old Combee Road to North of Tomkow Road. The PD&E Study will evaluate engineering and environmental data, which will aid in determining impacts, if any, associated with the proposed improvements. The proposed improvements are required to meet existing and projected traffic demands and safety needs. The total project length is approximately 4.3 miles and is located in the following sections:

Township 27 S, Range 24 E, Sections 10, 15, 21, 22, 28, 29, and 30

This ESBA was conducted in accordance with Section 7 of the Endangered Species Act of 1973 to assess potential effects on protected species and their habitats within the project study limits associated with the alternatives for the proposed improvement. As a result of the data collection effort, field review concluded the following for federally protected species:



U.S. Fish and Wildlife Service  
1339 20<sup>th</sup> Street  
Vero Beach, Florida 32960  
772-562-3909 Fax 772-562-4288

FWS Log No. 2011-CPA-0155

The proposed action is not likely to adversely affect resources protected by the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 et. seq.).

This fulfills the requirements of section 7 of the Act and further action is not required. If modifications are made to the project, if additional information involving potential effects to listed species becomes available, or if a new species is listed, reinitiation of consultation may be necessary.

Victoria A. Foster  
Larry Williams, Field Supervisor

11/29/13  
Date



# USFWS SFESO Concurrence Justification Form

Worksheet must be completed with Supervisor Approval Prior to sending concurrence.

Project Name: SR 33 from Old Combee Rd. to North of Tomkow Rd.	FWS Fed Activity #: 2011-CPA-0155
Project Location: Lakeland, Polk County, Florida	Lead Agency #: FHWA/FDOT
File Location: L: Project Planning/Activities/2011/polk/CPA 0155	Biologist:
Was GIS Check performed: <input checked="" type="checkbox"/> Yes Date: _____	<input type="checkbox"/> No If No, Why? (please give a brief explanation of why GIS was not needed below).

### Species Present in Project Area and Determination made by Action Agency

Species	Determination	Species	Determination
Audubon's Crested Caracara	MANLAA	Wood stork	MANLAA
Everglade snail kite	MANLAA	Florida bonneted bat	NA
Florida scrub-jay	MANLAA	Florida grasshopper sparrow	NA
eastern indigo snake	MANLAA	perforate reindeer lichen	NA
sand skink	MANLAA		
Blue-tailed mole skink	MANLAA		

### Justification for Concurrence (sticker recommended)

- Suitable caracara nesting habitat not found in or within 1000 feet of project footprint.

- Suitable snail kite habitat not found in or near project footprint.

- Call surveys for the scrub-jay based on the Service's protocol were conducted in March/April 2013, no scrub-jays observed in or near project footprint.

-to minimize impacts to the indigo snake the FDOT has agreed to follow the Standard Protection Measures for the Eastern Indigo Snake. U.S. Fish and Wildlife Service. 2004. Fish and Wildlife Service, South Florida Ecological Services Office; Vero Beach, Florida.

- Cover board surveys conducted for the sand skink based on the Service's protocol were conducted from April 9, 2013 to May 9, 2013, no sand skink tracts were observed.

\_project located in CFAs of 3 active wood stork nesting colonies. Project will result in loss of up to 12.19 providing 45.08 kilograms of forage biomass for the wood stork. The FDOT has agreed to offset the amount of wood stork forage biomass lost due to the project through the acquisition of adequate credits at either the Green Swamp Wetland Mitigation Bank or the Withlacoochee Wetland Mitigation Bank.

-suitable habitat for the Florida grasshopper sparrow does not occur in or near the project footprint, project not within geographic range of the Florida bonneted bat (according to FWC range map), reindeer lichen not found on project footprint during pedestrian surveys of site.

### Supervisor Questions/Notes

 Biologist Signature	11/19/2013 Date	 Supervisor Signature	11/29/13 Date
--	--------------------	--	------------------





December 12, 2013

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and Wildlife  
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Mr. Martin Horwitz  
Environmental Project Manager  
Florida Department of Transportation (FDOT) District One  
801 North Broadway Avenue  
Bartow, FL 33830  
[Martin.Horwitz@DOT.state.fl.us](mailto:Martin.Horwitz@DOT.state.fl.us)

Re: SR 33 multi-laning from Old Combee Road to north of Tomkow Road, Polk County, Endangered Species Biological Assessment

Dear Mr. Horwitz:

The Florida Fish and Wildlife Conservation Commission (FWC) staff has reviewed the Endangered Species Biological Assessment (ESBA) for the above-referenced project, prepared as part of the Project Development and Environment Study. The FWC reviewed this project in May 2011 as ETDM 13188. We provide the following comments and recommendations for your consideration in accordance with Chapter 379, Florida Statutes and Rule 68A-27, Florida Administrative Code (F.A.C.).

The project involves an evaluation of widening SR 33 from two lanes to four lanes from Old Combee Road to 1,500 feet north of Tomkow Road, a distance of approximately 4.3 miles. The project vicinity is a rural landscape on the outskirts of Lakeland that is rapidly undergoing suburban development.

The ESBA evaluated potential project impacts to 23 wildlife species classified under the Endangered Species Act as Federally Endangered (FE) or Threatened (FT), or by the State of Florida as Threatened (ST) or Species of Special Concern (SSC). Listed species were evaluated based on range and potential appropriate habitat or because the project is within a U.S. Fish and Wildlife Service (USFWS) Consultation Area. The ESBA included: Florida grasshopper sparrow (FE), wood stork (FE), Everglades snail kite (FE), Florida bonneted bat (FE), sand skink (FT), bluetail mole skink (FT), eastern indigo snake (FT), Florida scrub jay (FT), crested caracara (FT), gopher tortoise (ST), southeastern American kestrel (ST), Florida sandhill crane (ST), Florida burrowing owl (SSC), limpkin (SSC), snowy egret (SSC), little blue heron (SSC), tricolored heron (SSC), white ibis (SSC), roseate spoonbill (SSC), gopher frog (SSC), Florida pine snake (SSC), Sherman's fox squirrel (SSC), and Florida mouse (SSC).

Other species evaluated included the bald eagle, which was delisted by state and federal agencies, but this species remains protected under state rule in Section 68A-16.002, F.A.C. and by the federal Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d) and the Florida black bear, which was delisted by the FWC in June 2012. A conservation plan has been developed and approved by the FWC as guidance for further improvement of the conservation status of the bear.

Project materials state that project biologists made a finding of "may affect, but is not likely to adversely affect" for all of the federally listed species except the grasshopper sparrow and bonneted bat, which were classified as "no effect" due to lack of suitable



habitat. For the state-listed species and the black bear and bald eagle, the biologists made a determination of “no effect”. There is the potential for habitat for these species to be impacted, such as for the sandhill crane, the wading birds, and gopher tortoises and their commensals. For these animals, we recommend the determination be modified to reflect these potential impacts.

We support the project commitments for protected species, which include the following:

1. Should a bald eagle nest be built prior to or during construction within 660 feet of the construction limits, precautions will be followed based on the USFWS Bald Eagle Management Guidelines.
2. The standard Florida Department of Transportation (FDOT) Construction Precautions for the eastern Indigo Snake will be followed during construction.
3. Due to the presence of gopher tortoise habitat within and adjacent to the existing right-of-way, a gopher tortoise survey in appropriate habitat will be performed within construction limits prior to construction, and the FDOT will secure any necessary relocation permit from the FWC.

Please reference the FWC's Gopher Tortoise Permitting Guidelines (Revised April 2013 <http://www.myfwc.com/media/1410274/GTPermittingGuidelines.pdf>) for survey methodology and permitting guidance prior to any construction activity. Specific guidance in the permitting guidelines includes methods for avoiding impacts as well as options and state requirements for minimizing, mitigating, and permitting potential impacts of the proposed activities. Any commensal species observed during the burrow excavations should be relocated in accordance with Appendix 9 of the Gopher Tortoise Permitting Guidelines. To the maximum extent possible, the FWC also recommends that all staging and storage areas be sited to avoid impacts to gopher tortoise burrows and their habitat.

4. If Pond 1, which contains potential sand skink habitat, becomes the preferred alternative, the FDOT will commit to a coverboard survey of the pond site before construction begins.
5. The FDOT will re-survey appropriate habitats for Florida sandhill crane nests prior to permitting and construction of the project. The FWC recommends that breeding season (January – June) surveys be conducted in potential nesting habitat throughout the project area. If nests are identified, the FDOT should contact the FWC for consultation and review concerning conservation measures and, if needed, permitting and mitigation requirements pursuant to Rule 68A-27 F.A.C.

Thank you for the opportunity to review the ESBA for the SR 33 project in Polk County. If you need further assistance, please do not hesitate to contact Jane Chabre either by phone at (850) 410-5367 or at [FWCConservationPlanningServices@MyFWC.com](mailto:FWCConservationPlanningServices@MyFWC.com). If

you have specific technical questions regarding the content of this letter, contact Brian Barnett at (772) 579-9746 or email [brian.barnett@MyFWC.com](mailto:brian.barnett@MyFWC.com).

Sincerely,

A handwritten signature in blue ink that reads "Jennifer D. Goff". The signature is written in a cursive style.

Jennifer D. Goff  
Land Use Planning Program Administrator  
Office of Conservation Planning Services

jdg/bb

ENV 1-13-2  
SR 33 from Old Combee Rd to N of Tomkow Rd\_18339\_121213

---

**From:** Horwitz, Martin [mailto:Martin.Horwitz@dot.state.fl.us]  
**Sent:** Monday, December 16, 2013 1:48 PM  
**To:** Nathan Chambers  
**Cc:** David Dangel; Jason Houck; Robert Mrykalo; Sherrard, Antone N; Pipkin, Gwen G  
**Subject:** RE: SR 33 ESBA Comments from FWC

Nathan,

I spoke with FWC, Brian Barnett, in regards to FWC's letter. Brian stated that the letter should have stated that they recommend a determination of "may affect, but is not likely to adversely affect". He also stated this is a recommendation that doesn't need to be corrected for this project but should be noted for future ESBA's submitted. In regards to the gopher tortoise commitment, his comment was just for informational purposes and possible future change in wording for future ESBA's and so we don't need to revise the commitments. Lastly, a revised report is not required by FWC.

Therefore based on FWC's direction, I recommend revising the state-listed species determinations from "no effect" to "may affect, but is not likely to adversely affect" since the recommendation is in the SR 33 response letter. I would finalize the ESBA after the revisions to state-listed species determinations but it does not need to be resubmitted to FWC or USFWS.

In regards to the WER, go ahead and start preparing the final WER. I would like 1-hard copy and 1- CD of the report.

Thanks,

**Martin Horwitz**  
Environmental Project Manager

FDOT District 1  
801 N. Broadway Avenue  
P.O. Box 1249  
Bartow, Florida 33830  
(863)519-2805

---

**From:** Nathan Chambers [mailto:nchambers@inwoodinc.com]  
**Sent:** Friday, December 13, 2013 8:37 AM  
**To:** Horwitz, Martin  
**Cc:** David Dangel; Jason Houck; Robert Mrykalo  
**Subject:** SR 33 ESBA Comments from FWC

Martin,

The FWC requested minor changes to the ESBA in their recent letter. Specifically, they do not agree with the "no effect" determination for the sandhill crane, state-listed wading birds, and the gopher tortoise/commensals. Although they didn't specifically state this, I am assuming they are requesting a determination of "may affect, not likely to adversely affect," as there is potential for these species to occur in the project area.

They also requested that some more detailed language be added to the commitment regarding gopher tortoises (language contained in their response). Can you confirm that you are ok with making the requested changes, which don't substantially affect the project? Do we need to provide a revised report to the FWC requesting concurrence, or submit a letter response indicating that the changes will be incorporated? Alternatively, do we simply incorporate the changes and prepare and submit a final ESBA, including an Appendix with agency comments? Since the affected species are state-listed, I don't see a need to resubmit to USFWS, since we already have concurrence for federally listed species.

Also, in regards to the WER, we have received concurrence from NMFS and FWC. I'd like to prepare the final report, including an Appendix with Agency Comments. How many hard copies of the report do you want?

**Nathan E. Chambers**

ECOLOGIST

***INWOOD CONSULTING ENGINEERS***

3000 Dovera Dr., Suite 200, Oviedo, FL 32765

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# Concurrence Letters from FFWCC and NMFS



Florida Fish  
and Wildlife  
Conservation  
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November 18, 2013

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Mr. Martin Horwitz  
Environmental Project Manager  
Florida Department of Transportation (FDOT) District One  
801 North Broadway Avenue  
Bartow, FL 33830  
[Martin.Horwitz@DOT.state.fl.us](mailto:Martin.Horwitz@DOT.state.fl.us)

Re: SR 33 multi-laning from Old Combee Road to north of Tomkow Road, Polk County,  
Wetland Evaluation Report

Dear Mr. Horwitz:

The Florida Fish and Wildlife Conservation Commission staff has reviewed the Wetland Evaluation Report (WER) for the above-referenced project, prepared as part of the Project Development and Environment Study. We agree with the findings of the WER, and support the recommendations and commitments for the project.

If you need further assistance, please do not hesitate to contact Jane Chabre either by phone at (850) 410-5367 or at [FWCConservationPlanningServices@MyFWC.com](mailto:FWCConservationPlanningServices@MyFWC.com). If you have specific technical questions regarding the content of this letter, contact Brian Barnett at (772) 579-9746 or email at [brian.barnett@MyFWC.com](mailto:brian.barnett@MyFWC.com).

Sincerely,

A handwritten signature in blue ink that reads "Jennifer D. Goff".

Jennifer D. Goff  
Land Use Planning Program Administrator  
Office of Conservation Planning Services

jdg/bb  
ENV 1-13-2  
SR 33 from Old Combee Rd to N of Tomkow Rd\_18339\_111813

## Laura Clark

---

**From:** Horwitz, Martin <Martin.Horwitz@dot.state.fl.us>  
**Sent:** Tuesday, October 22, 2013 10:57 AM  
**To:** David Dangel  
**Cc:** Laura Clark; Sherrard, Antone N  
**Subject:** FW: NMFS response to SR 33 Wetland Evaluation Report

David,

Please see email below from NMFS for your records.

**Martin Horwitz**  
Environmental Project Manager

FDOT District 1  
801 N. Broadway Avenue  
P.O. Box 1249  
Bartow, Florida 33830  
(863)519-2805

**From:** David Rydene - NOAA Federal [mailto:david.rydene@noaa.gov]  
**Sent:** Tuesday, October 22, 2013 10:19 AM  
**To:** Horwitz, Martin  
**Subject:** NMFS response to SR 33 Wetland Evaluation Report

NMFS staff had reviewed the Wetland Evaluation Report (part of the PD&E Study) for the proposed widening and improvement of State Road 33 from Old Combee Road to North of Tomkow Road in Polk County, Florida (Financial Project Number 430185-1-22-01). It does not appear that there will be any direct or indirect impacts to NMFS trust resources. Since the resources affected are not ones for which NMFS is responsible, we have no comment to provide regarding the report.

--

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# Noise Study Report (NSR)

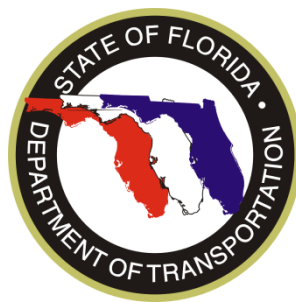


**SR 33**  
**Project Development and Environment Study**  
**Noise Study Report**

**From Old Combee Road to North of Tomkow Road**  
**Polk County, Florida**

Financial Project ID No: 430185-1-22-01

Florida Department of Transportation  
District One



April 29, 2014

## EXECUTIVE SUMMARY

The Florida Department of Transportation (FDOT), District One, is conducting a Project Development and Environment (PD&E) Study for the proposed widening of State Road (SR) 33 in Polk County. The limits of the project are from Old Combee Road to north of Tomkow Road. The recommended action would widen SR 33 from a two-lane undivided roadway to a four-lane divided roadway. Reconstruction of the SR 33 interchange with Interstate 4 (I-4) is also proposed. The interchange improvements would replace the I-4 bridges over SR 33 and reconstruct the segment of I-4 approaching the interchange.

The traffic noise analysis was performed following FDOT procedures that comply with Title 23 Code of Federal Regulations (CFR), Part 772, Procedures for Abatement of Highway Traffic Noise and Construction Noise. The evaluation used methodologies established by the FDOT that are documented in the PD&E Manual, Part 2, Chapter 17 (May 2011). The prediction of existing and future traffic noise levels with and without the roadway improvements was performed using the Federal Highway Administration's (FHWA's) Traffic Noise Model (TNM Version 2.5).

A total of 63 noise-sensitive sites were evaluated. The sites were comprised of 62 residences (located within the Grey Moss Manor subdivision, Lake Deeson Village Mobile Home Park, Deeson Manor subdivision, Landings Apartments, Spanish Oaks subdivision, Cambry subdivision, Snow Wood subdivision, and residences east of I-4) and a pool at the Landings Apartments.

The results of the analysis indicate that existing (2012) exterior traffic noise levels range from 47.6 to 62.6 dB(A), levels that do not approach, meet, or exceed the Noise Abatement Criteria (NAC). With the exception of one receptor for which the predicted level approaches the NAC, future (2036) noise levels without the proposed improvements (No-Build) also do not approach, meet, or exceed the NAC. In the future (2036) with the improvements (Build) traffic noise levels are predicted to approach, meet, or exceed the NAC at 37 receptors. Notably, when compared to the existing condition, traffic noise levels are not predicted to increase more than 10 dB(A) above existing conditions at any of the evaluated sites. As such, the project would not substantially increase traffic noise (i.e., increase traffic noise 15 dB(A) or more).

Noise abatement measures were considered for the 37 impacted receptors (36 residences and the pool). The measures were traffic management, alternative roadway alignments, and noise barriers. The results of the evaluation indicate that although feasible, traffic management and an alternative roadway alignment(s) are not reasonable methods of reducing predicted traffic noise impacts at the impacted receptors. The results of the analysis performed to evaluate noise barriers indicates that barriers would meet minimum noise reduction requirements and reduce traffic noise at least 5 dB(A) at 32 of the 37 impacted

receptors at a cost below the reasonable limit. The benefited residences are at the following two locations:

- Barrier 1: Residences located within the Grey Moss Subdivision and Lake Deeson Village Mobile Home Park from West of Wood Circle W. to Lake Luther Road (Sites 2-20, 26-27)
- Barrier 4: Residences located within the Cambry and Snow Wood Subdivisions (Sites 47-57)

### **Statement of Likelihood**

The FDOT is committed to the construction of noise barriers at the locations above contingent upon the following:

- Detailed noise analysis during the final design process supports the need for, and the feasibility and reasonableness of, providing the barriers as abatement;
- The detailed analysis demonstrates that the cost of the noise barriers will not exceed the cost reasonable limit;
- The residents/property owners benefitted by the noise barriers desire that a noise barrier be constructed; and
- All safety and engineering conflicts or issues related to construction of the noise barriers are resolved.

Land uses adjacent SR 33 are identified on the FDOT listing of noise- and vibration-sensitive sites (e.g., residential use). Construction of the proposed roadway improvements is not expected to have any significant noise or vibration impact. If sensitive land uses develop adjacent to the roadway prior to construction, increased potential for noise or vibration impacts could result. It is anticipated that the application of the ***FDOT Standard Specifications for Road and Bridge Construction*** will minimize or eliminate potential construction noise and vibration impacts. However, should unanticipated noise or vibration issues arise during the construction process, the Project Engineer, in coordination with the District Noise Specialist and the Contractor, will investigate additional methods of controlling these impacts.

Land uses such as residences, auditoriums, hotels/motels, libraries, recreational areas, and parks are considered incompatible with highway noise levels that exceed the NAC. To reduce the possibility of additional traffic noise-related impacts, noise level contours were developed for the future improved roadway facility. These noise contours delineate the extent of the predicted traffic noise impact area from the improved roadway's edge-of-travel lane for activity categories of land use. Local officials will be provided a copy of the Final Noise Study Report to promote compatibility between any future land development in the project area.

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## **1.0 Introduction**

### **1.1 Description of the Proposed Action**

The Florida Department of Transportation (FDOT), District One, is conducting a Project Development and Environment (PD&E) Study for the proposed widening of State Road (SR) 33 in Polk County. The limits of this project are from Old Combee Road to north of Tomkow Road, a distance of approximately 4.3 miles. The location of the project is shown on **Figure 1-1**.

The recommended action would widen SR 33 from a two-lane undivided roadway to a four-lane divided roadway. Reconstruction of the SR 33 interchange with Interstate 4 (I-4) is also proposed. The interchange improvements would replace the I-4 bridges over SR 33 and reconstruct the segment of I-4 approaching the interchange.

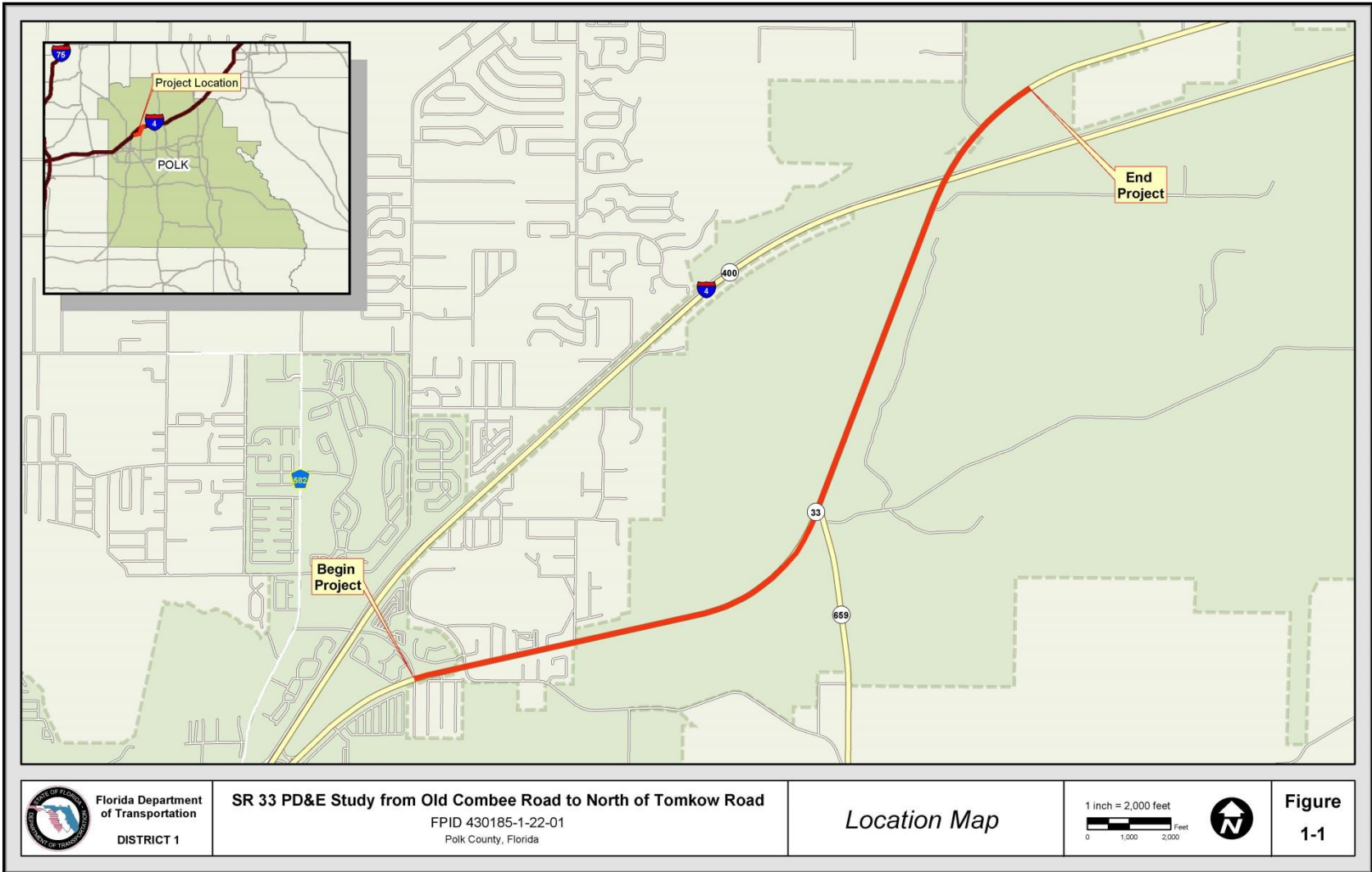
### **1.2 Project Purpose and Need**

#### **1.2.1 System Linkage**

SR 33 serves as a primary north-south connection between Lakeland and I-4. The project would improve the functional viability of SR 33 as a local and regional travel alternative to I-4. SR 33 provides connectivity to University Boulevard which serves the planned Williams Development of Regional Impact (DRI), Polk Commerce Center DRI and the future University of South Florida/Polytechnic campus. University Boulevard and SR 33 will serve as the most direct link between these new residential and commercial centers and north and central Lakeland.

#### **1.2.2 Capacity/Transportation Demand**

This project provides increased capacity along SR 33 to meet the project future travel demand. Forecasted traffic has been completed as part of the SR 33 PD&E Study. According to the *Design Traffic Technical Memorandum (AIM Engineering, November 2013)*, in the design year of 2036, the existing two-lane SR 33 is projected to operate at a Level of Service (LOS) E or F without improvements. Additionally, many of the unsignalized intersections, including the I-4 on and off ramps, are expected to operate at unacceptable levels of service without improvements to SR 33.



### 1.2.3 Roadway Deficiencies

As part of the project, improvements to the SR 33 interchange with I-4 are also proposed. Currently, I-4 crosses over SR 33 with two parallel bridges (three lanes each bridge). There are deficiencies with the existing interchange. First, the existing vertical clearance over SR 33 does not meet the minimum required 16.5 feet of clearance (the clearance is as low as 14.9 feet). Maintaining this substandard vertical clearance would require the approval of a design exception which would not be approved by the Federal Highway Administration (FHWA). Second, the pier footings have less than the minimum required depth of cover of three feet (cover depths are as shallow as 1.892 feet). The horizontal clearance between the center pier and the intermediate piers will not accommodate the future four lane roadway. Finally, the existing k-values (i.e., the rate of vertical curvature) for the crest and sag vertical curves on I-4 approaching SR 33 are appropriate for 55 mph and 60 mph design speeds, but not for the 70 mph design speed required for I-4.

### 1.3 Planning Consistency

Table 1-1 summarizes the project planning consistency with the FDOT State Transportation Improvement Plan (STIP) and the Polk County Transportation Planning Organization's (TPO) Transportation Improvement Program (TIP). A summary of the plans that were evaluated for consistency follows the table.

**Table 1-1  
STIP/TIP Consistency**

Phase	Currently Approved TIP	Currently Approved STIP	TIP / STIP	TIP/STIP Fiscal Year	Comments
PE (Final Design)	Y	Y	\$7,350,000	2014	Project can be found on page 287 of the FDOT "Current STIP" document and on page 13-2 of the Polk TPO FY 2013/14-2017/18 TIP.
R/W	N	N	\$0	N/A	All phases of SR 33 from Old Combee Road to Tomkow Road are included in the Cost Affordable Plan of the Polk TPO's 2035 Mobility Vision Plan.
Construction	N	N	\$0	N/A	All phases of SR 33 from Old Combee Road to Tomkow Road are included in the Cost Affordable Plan of the Polk TPO's 2035 Mobility Vision Plan.



## FDOT

- The project is included in the FDOT STIP on page 287 of the Current STIP document.

## Polk County Transportation Planning Organization (TPO)

- The widening of SR 33 from two to four lanes from Old Combee Road/Deeson Point Drive to Tomkow Road is included in the Cost Affordable section of Polk County TPO's 2035 Mobility Vision Plan.
- The project is included in the Polk TPO's FY 2013/14 – 2017/18 TIP on page 13-2.

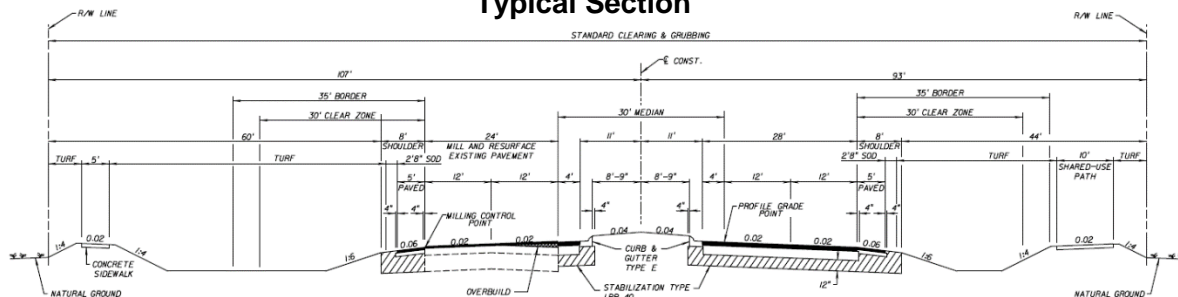
## City of Lakeland

- The project is included in the Capital Improvements Plan and Transportation Element of the City of Lakeland's 2020 Comprehensive Plan.
- A 12-foot-wide multi-use pathway along the south side of SR 33 between SR 659 (Combee Road) and University Boulevard is included in the City of Lakeland's Citywide Pathways Plan.

## 1.4 Typical Section Alternatives

The proposed roadway typical section for this project (**Figure 1-2**) is a suburban typical section that would provide two 12-foot travel lanes in each direction separated by a 30-foot median. The proposed improvements also include a four-foot inside paved shoulder and a five-foot outside paved shoulder in each direction. An open drainage system will collect stormwater runoff and convey it to off-site ponds and/or linear ponds. A 10-foot-wide multi-use path is proposed along the south side of the road between SR 659 (Combee Road) and University Boulevard. A five-foot sidewalk is planned along the north side of the road throughout the project limits and along the south side of the road from University Boulevard to north of Tomkow Road. This typical section can be constructed within the existing 200 feet of right-of-way. The design speed for this typical section is 55 miles per hour (mph).

**Figure 1-2  
Typical Section**



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## 2.0 Methodology

### 2.1 Evaluation Process

The traffic noise analysis for the SR 33 project was prepared in accordance with Title 23 CFR Part 772, Procedures for Abatement of Highway Traffic Noise and Construction Noise. Methodologies established by FDOT and documented in the PD&E Manual, Part 2, Chapter 17 (May 2011) were also used. The potential feasibility and reasonableness of providing noise barriers as an abatement measure for impacted non-residential land uses (e.g., active sports areas and parks) was determined following procedures in FDOT's publication, A Method to Determine Reasonableness and Feasibility of Noise Abatement at Special Use Locations.

The predicted noise levels presented in this report are expressed in dB(A). This scale most closely approximates the response characteristics of the human ear to traffic noise. All noise levels are reported as equivalent levels (Leq(h)), which is the hourly equivalent steady-state sound level that contains the same acoustic energy as a time-varying sound level over a period of one hour.

### 2.2 Noise Model

The prediction of existing and future traffic noise levels with and without the roadway improvements was performed using the FHWA's computer model for highway traffic noise prediction and analysis – TNM Version 2.5. The TNM propagates sound energy, in one-third octave bands, between highways and nearby receptors taking the intervening ground's acoustical characteristics/topography and rows of buildings into account.

### 2.3 Traffic Data

Noise levels are low when traffic volumes are low (LOS A or B) or when traffic is so congested that movement is slow (LOS D, E, or F). Generally, the maximum hourly noise level occurs between these two conditions; therefore, traffic volumes used in the SR 33 analysis reflect either the design LOS C volumes or the demand volumes (if forecast demand levels meet the LOS A or B criteria), whichever were less. The Existing (2012), Future No-Build (2036), and Future Build Year (2036) traffic data used in the analysis are presented in **Table 2-1**. As noted in Table 2-1, the posted speed limits were used in the analysis. Additional documentation related to the traffic data is provided in **Appendix B** of this NSR.

**Table 2-1  
Traffic Data for Noise Analysis**

Segment	Scenario	Total Peak Hour Peak Directional Volume		Peak Directional Volume by Vehicle Type					Off-Peak Directional Volume by Vehicle Type					Posted Speed (mph)
		LOS C	Demand	Cars	MT	HT	Buses	MC	Cars	MT	HT	Buses	MC	
Old Combee Rd to Lake Luther Rd <sup>1</sup>	Existing	840	<b>409</b>	385	7	13	1	3	308	6	11	1	3	45
	No-Build	<b>840</b>	1,720	790	15	27	1	7	790	15	27	1	7	45
	Build	1,910	<b>1,720</b>	1,620	30	55	1	14	1,305	24	44	1	11	50
Lake Luther Rd to N Combee Rd (SR 659) <sup>1</sup>	Existing	880	<b>294</b>	277	5	9	1	2	222	4	8	1	2	55
	No-Build	<b>880</b>	1,471	829	15	28	1	7	829	15	28	1	7	55
	Build	1,910	<b>1,471</b>	1,385	26	47	1	12	1,115	21	38	1	9	50
N Combee Rd (SR 659) to University Blvd <sup>2</sup>	Existing	880	<b>496</b>	457	12	22	1	4	367	10	18	1	3	60
	No-Build	<b>880</b>	1,690	810	22	40	1	7	810	22	40	1	7	60
	Build	1,910	<b>1,690</b>	1,557	42	76	1	14	1,255	33	61	1	11	50
University Blvd to EB I-4 On/Off-Ramps <sup>2</sup>	Existing	880	<b>524</b>	482	13	24	1	4	388	10	19	1	3	60
	No-Build	<b>880</b>	1,471	810	22	40	1	7	810	22	40	1	7	60
	Build	1,910	<b>1,471</b>	1,356	36	66	1	12	1,092	29	53	1	9	50
EB I-4 On/Off-Ramps to WB I-4 On/Off-Ramps <sup>2</sup>	Existing	880	<b>588</b>	542	14	26	1	5	436	12	21	1	4	60
	No-Build	<b>880</b>	1,361	810	22	40	1	7	810	22	40	1	7	60
	Build	1,910	<b>1,361</b>	1,255	33	61	1	11	1,010	27	49	1	9	50
WB I-4 On/Off-Ramps to Tomkow Rd <sup>2</sup>	Existing	880	<b>618</b>	569	15	28	1	5	459	12	22	1	4	60
	No-Build	<b>880</b>	1,127	810	22	40	1	7	810	22	40	1	7	60
	Build	1,910	<b>1,127</b>	1,038	28	51	1	9	836	22	41	1	7	50

<sup>1</sup> Medium Trucks (MT) = 1.75%, Heavy Truck (HT) = 3.21%, Buses = 0.04%, Motorcycles = 0.8%

<sup>2</sup> Medium Trucks (MT) = 2.46%, Heavy Truck (HT) = 4.5%, Buses = 0.04%, Motorcycles = 0.8%

Note: The total peak hour peak direction traffic data used in the analysis is denoted by bold and italic text.

Source: AIM Engineering, 2013.

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## 3.0 Traffic Noise Analysis

### 3.1 Noise Sensitive Sites

Noise-sensitive sites, and the receptors (i.e., locations for predicted traffic noise levels) at these sites, are properties and locations where frequent human use occurs. To evaluate traffic noise at these sites/receptors, the FHWA established Noise Abatement Criteria (NAC). As shown in **Table 3-1**, the criteria vary according to the properties' activity category. For comparative purposes, typical noise levels for common indoor and outdoor activities are provided in **Table 3-2**.

The location of the receptor at each noise-sensitive site is illustrated on the project aerials provided in **Appendix A**. The residences were evaluated as Activity Category "B" and the pool (a recreational area) was evaluated as Activity Category "C". For both categories, noise abatement measures were considered if future traffic noise with the proposed improvements was predicted to be 66 dB(A) or more or levels were predicted to increase 15 dB(A) or more with the improvements when compared to existing levels.

### 3.2 Measured Noise Levels

As previously stated, existing and future noise levels with and without the proposed improvements were modeled using the TNM. To verify the accuracy of the predictions, the computer model was validated using measured noise levels adjacent to the project corridor. Traffic data including motor vehicle volumes, vehicle mix, vehicle speeds, and meteorological conditions were recorded during each measurement period.

The field measurements were conducted in accordance with the FHWA's *Measurement of Highway-Related Noise*. The measurements were obtained using a Larson Davis Model 831, Type II integrating sound level meter (SLM). The SLM was calibrated before and after the measurement periods with a Larson Davis CAL200 calibrator.

The recorded traffic data were used as input for the TNM to determine if, given the topography and actual site conditions of the area, the computer model could "re-create" the measured levels with the existing roadway. Following FDOT guidelines, a noise prediction model is considered within the accepted level of accuracy if the measured and predicted noise levels are within a tolerance standard of three dB(A).

**Table 3-3** presents the field measurements and the validation results. As shown, the ability of the model to predict noise levels within the FDOT limits of plus or minus three dB(A) for the project was confirmed. Documentation in support of the validation is provided in **Appendix C** of this NSR.

**Table 3-1**  
**FHWA/FDOT Noise Abatement Criteria**  
**[Leq(h) Expressed in dB(A)]**

Activity Category	Description of Activity Category	Activity Leq(h) <sup>1</sup>	
		FHWA	FDOT
A	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.	57 (Exterior)	56 (Exterior)
B <sup>2</sup>	Residential	67 (Exterior)	66 (Exterior)
C <sup>2</sup>	Active sports areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreational areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.	67 (Exterior)	66 (Exterior)
D	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.	52 (Interior)	51 (Interior)
E <sup>2</sup>	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D or F.	72 (Exterior)	71 (Exterior)
F	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.	--	--
G	Undeveloped lands that are not permitted.	--	--

Sources: Table 1 of 23 CFR Part 772 and Table 17.1 of Chapter 17 of the FDOT's PD&E Manual (dated 5-24-11).

<sup>1</sup> The Leq(h) activity criteria values are for impact determination only, and are not design standards for noise abatement measures.

<sup>2</sup> Includes undeveloped lands permitted for this activity category.

*Note:* Noise abatement considerations are also warranted when a substantial noise increase is predicted to occur (i.e., when the predicted future traffic noise level with an improvement project is equal to or greater than 15 dB(A) when compared to the existing traffic noise level.



**Table 3-2  
Typical Noise Levels**

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

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

**Table 3-3  
Validation Data**

Location	Measurement Period	Modeled	Measured	Difference
SR 33 at Sunset Way (Northwest corner)	1	61.3	61.7	-0.4
	2	60.1	59.4	0.7
	3	62.0	60.9	1.1
SR 33 at Spanish Oaks (Southwest corner)	1	56.8	57.0	-0.2
	2	57.4	58.4	-1.0
	3	57.5	55.1	2.4

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### 3.3 Results of the Noise Analysis

**Table 3-4** presents the results of the traffic noise analysis for the proposed improvements. As shown, existing (2012) exterior traffic noise levels are predicted to range from 47.6 to 62.6 dB(A). These results indicate that existing traffic noise levels do not approach, meet, or exceed the NAC.

With the exception of one receptor for which the predicted level is 66.0 dB(A), future (2036) noise levels without the proposed improvements (No-Build) also do not approach, meet, or exceed the NAC.

In the future (2036) with the improvements (Build) traffic noise levels are predicted to approach, meet, or exceed the NAC at 37 receptors. Notably, when compared to the existing condition, traffic noise levels are not predicted to increase more than 10 dB(A) above existing conditions at any of the evaluated sites. As such, the project would not substantially increase traffic noise (i.e., increase traffic noise 15 dB(A) or more).

Noise abatement measures were evaluated for the following 37 noise sensitive sites that are predicted to experience future traffic noise levels that would approach, meet, or exceed the NAC with the proposed improvements:

- Sites 2-20 and 26-27 - Residences located within the Grey Moss Subdivision and Lake Deeson Village Mobile Home Park;
- Site 31 - The swimming pool at the Landings Apartments;
- Sites 32b, 33b, 34b, and 35b - Residences at the Landings Apartments; and
- Sites 47-57 - Residences located within the Cambry and Snow Wood subdivisions.

The results of the abatement evaluation are provided in the following section of this NSR.

**Table 3-4  
Predicted Traffic Noise Levels**

Receptor Id	Description	Activity Category	FDOT NAC	Existing (2012)	No-Build (2036)	Build (2036)	Increase over Existing	Approaches, Meets or Exceeds the NAC ?
Residences at the Grey Moss Subdivision - West of Wood Circle W. to East of Wood Circle E. - (Southbound SR 33 between Stations 1270 and 1277)								
1	Residential	B	66	55.1	58.7	64.8	10	--
2	Residential	B	66	58.2	61.8	68.4	10	Yes
3	Residential	B	66	59.5	63.1	68.6	9	Yes
4	Residential	B	66	59.6	63.2	68.5	9	Yes
Residences at Lake Deeson Village MH Park - (Southbound SR 33 between Stations 1277 and 1285)								
5	Residential	B	66	61.6	65.1	70.2	9	Yes
6	Residential	B	66	61.3	64.8	69.9	9	Yes
7	Residential	B	66	61.8	65.3	69.8	8	Yes
8	Residential	B	66	60.1	63.6	68.4	8	Yes
9	Residential	B	66	58.4	62.0	66.6	8	Yes
10	Residential	B	66	59.4	63.0	67.5	8	Yes
11	Residential	B	66	60.3	63.9	68.1	8	Yes
12	Residential	B	66	59.6	63.2	67.2	8	Yes
13	Residential	B	66	59.6	63.2	67.3	8	Yes
14	Residential	B	66	61.0	64.6	68.2	7	Yes
15	Residential	B	66	61.9	65.6	68.8	7	Yes
16	Residential	B	66	61.8	65.5	68.6	7	Yes
17	Residential	B	66	61.7	65.3	68.5	7	Yes
18	Residential	B	66	61.6	65.2	68.3	7	Yes
19	Residential	B	66	60.6	64.2	67.6	7	Yes
20	Residential	B	66	62.4	66.0	69.2	7	Yes
21	Residential	B	66	57.2	60.9	64.2	7	--
22	Residential	B	66	53.6	57.4	60.1	7	--
23	Residential	B	66	55.6	59.4	62.0	6	--
24	Residential	B	66	55.2	58.8	63.6	8	--
25	Residential	B	66	56.9	60.5	65.6	9	--
Residences between Sunset Way to Lake Luther Road - (Southbound SR 33 between Stations 1285 and 1293)								
26	Residential	B	66	62.1	65.9	68.1	6	Yes
27	Residential	B	66	60.6	65.0	66.3	6	Yes
Residences East of I-4 - (Northbound SR 33 between Stations 1489 and 1495)								
28	Residential	B	66	62.6	64.7	64.0	1	--
29	Residential	B	66	59.2	61.3	60.5	1	--
30	Residential	B	66	62.2	64.4	62.9	1	--
Residences and Pool Area at The Landings Apartments - (Northbound SR 33 between Stations 1308 and 1317)								
31	MF - Pool	C	66	56.5	61.7	66.0	10	Yes
32	Residential	B	66	55.5	60.6	65.8	10	--
32b	Residential - 2nd story	B	66	60.1	65.1	68.1	8	Yes
33	Residential	B	66	56.0	61.2	65.8	10	--
33b	Residential - 2nd story	B	66	60.1	65.1	68.1	8	Yes
34	Residential	B	66	55.9	61.1	65.7	10	--

Receptor Id	Description	Activity Category	FDOT NAC	Existing (2012)	No-Build (2036)	Build (2036)	Increase over Existing	Approaches, Meets or Exceeds the NAC ?
34b	Residential - 2nd story	B	66	60.0	65.1	68.0	8	Yes
35	Residential	B	66	55.4	60.5	65.7	10	--
35b	Residential - 2nd story	B	66	59.9	65.0	68.0	8	Yes
36	Residential	B	66	47.6	52.8	56.5	9	--
Residences at the Spanish Oaks Subdivision - (Northbound SR 33 between Stations 1292 and 1304)								
37	Residential	B	66	54.7	59.8	64.0	9	--
38	Residential	B	66	54.8	60.0	64.2	9	--
39	Residential	B	66	54.8	59.9	64.0	9	--
40	Residential	B	66	55.0	60.2	64.3	9	--
41	Residential	B	66	55.2	60.4	64.3	9	--
42	Residential	B	66	55.1	60.2	64.0	9	--
43	Residential	B	66	53.3	58.4	61.2	8	--
44	Residential	B	66	56.1	61.1	65.1	9	--
45	Residential	B	66	56.9	61.6	65.9	9	--
Residences at the Cambry Subdivision - (Northbound SR 33 between Stations 1285 and 1292)								
46	Residential	B	66	55.3	58.9	64.0	8	--
47	Residential	B	66	58.7	62.1	67.7	9	Yes
48	Residential	B	66	59.9	63.3	68.9	9	Yes
49	Residential	B	66	58.4	61.7	67.3	9	Yes
50	Residential	B	66	60.5	63.8	69.7	9	Yes
51	Residential	B	66	58.3	61.6	67.3	9	Yes
52	Residential	B	66	58.2	61.6	67.4	9	Yes
53	Residential	B	66	60.8	64.0	70.1	9	Yes
Residences at the Snow Wood Subdivision - (Northbound SR 33 between Stations 1277 and 1285)								
54	Residential	B	66	59.1	62.9	68.6	9	Yes
55	Residential	B	66	60.1	63.8	69.7	10	Yes
56	Residential	B	66	56.7	60.3	66.0	9	Yes
57	Residential	B	66	58.1	61.8	67.7	10	Yes
58	Residential	B	66	56.1	59.8	64.8	9	--
59	Residential	B	66	52.1	55.8	60.7	9	--

Notes: Receptor locations are illustrated on the project aerials in Appendix A of this report.  
Each residential receptor represents one residence.

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## 4.0 Evaluation of Abatement Alternatives

The traffic noise impact abatement measures considered for SR 33 were traffic management, alternative roadway alignment and noise barriers. The following discusses the feasibility (e.g., amount of noise reduction, engineering considerations, etc.) and cost reasonableness of these measures.

### 4.1 Traffic Management

Traffic management measures that limit motor vehicle speeds, reduce traffic volumes or prohibit truck traffic can be effective noise mitigation measures. However, these measures also negate a project's ability to accommodate forecast traffic volumes. For example, if the posted speed were reduced, the capacity of the roadway to handle the forecast motor vehicle demand would also be reduced. Therefore, reducing traffic speeds and/or the traffic volumes or fleet is inconsistent with the goal of improving the ability of the roadway to handle the forecast volumes. As such, traffic management measures were not considered a reasonable noise mitigation measure for the SR 33 project.

### 4.2 Alternative Roadway Alignment

The proposed improvements will follow the same alignment as the existing roadway and would not require any additional right-of-way (ROW) within the project corridor. Because noise sensitive sites are located on both sides of the roadway, shifting the alignment one way or the other would also shift the noise closer to some of the sites.

### 4.3 Noise Barriers

Noise barriers have the potential to reduce traffic noise levels by blocking the sound path between the motor vehicles on the roadway (the source) and the noise-sensitive sites adjacent to the roadway. However, in order to effectively reduce traffic noise, a noise barrier must be relatively long, continuous (without intermittent openings), and sufficiently tall. FDOT procedures require that a noise barrier provide at least the following noise reduction requirements at a cost below the reasonable limit:

- *Minimum Noise Reduction Requirements* - A barrier must provide at least a five dB(A) reduction in traffic noise for at least one impacted noise-sensitive receptor and also provide at least a seven dB(A) reduction (i.e., the FDOT's noise reduction design goal) for at least one additional impacted receptor.
- *Cost Effective Limit* – At a cost of \$30 per square foot, a barrier should not cost more than \$42,000 per benefited noise-sensitive receptor (a benefited receptor is a receptor that receives at least a five dB(A) reduction in noise from a mitigation measure). For



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special land uses, such as the pool area at the Landings Apartments, the cost of a barrier should not be more than \$995,935 per person-hour per square foot (dollars/person-hr/ft<sup>2</sup>).

After considering the amount of reduction that may be provided and the cost effectiveness of a noise barrier, additional factors are also considered. These factors address both the feasibility and reasonableness of a barrier as an abatement measure and include factors that relate to design and construction (i.e., given site-specific details, can a barrier actually be constructed), safety, access to and from adjacent properties, ROW requirements, maintenance, and impacts on utilities and drainage. The viewpoint of the impacted property owners, and renters if applicable, who may, or may not, desire a noise barrier is also a factor that is considered when evaluating noise barriers as an abatement measure.

The TNM was used to evaluate the ability of a noise barrier(s) to reduce traffic noise levels for the impacted noise sensitive sites adjacent to SR 33. The barriers were evaluated at heights from eight to 22 feet (in two-foot increments) and due to the project's limited amount of ROW and with the exception of a small area near the Lake Deeson Mobile Home Park, located on the ROW line.

The following provides the results of the noise barrier evaluation and discusses the potential amount of noise reduction and the cost effectiveness of providing barriers as an abatement measure for the impacted residences.

**Barrier 1: Residences located within the Grey Moss Subdivision and Lake Deeson Village Mobile Home Park (Sites 2-20, 26-27)**

Barrier 1 was considered for the 21 residences located in the area west of Wood Circle West to Lake Luther Road including the residences within the Lake Deeson Village Mobile Home Park. The predicted traffic noise levels at these properties with the improvements ranges from 66.3 to 70.2 dB(A). Several factors were considered in the evaluation of a noise barrier for these properties including:

- The cross streets that intersect SR 33 would not allow a continuous length of barrier,
- Some properties have direct access to/from SR 33 and the need for this access would not allow a continuous length of barrier (i.e., a barrier could not be constructed such that it was continuous from cross street to cross street), and
- The ROW is very limited with only one to two feet between the ROW and the proposed sidewalk.

Due to the limited ROW, a barrier was evaluated on the FDOT ROW line. The barrier was also evaluated in four segments to accommodate access to/from the properties and cross-streets. The length of the barrier was optimized using the TNM in an attempt to determine if at least the minimum noise reduction requirements (i.e., a minimum reduction of 5 dB(A) for at least one impacted property and a minimum reduction of 7 dB(A) for at least one additional impacted property) could be achieved.

The results of the evaluation are provided in **Table 4-1**. As shown, regardless of the height of the barrier, at least 15 of the impacted residences would benefit from a reduction in traffic noise of at least 5 dB(A), the noise reduction design goal of 7 dB(A) would be achieved at one or more of the benefitted receptors, and the cost per benefitted residence would be below the FDOT’s cost reasonable limit. Because Barrier 1 is predicted to provide the minimum required noise reduction at a cost below the cost reasonable limit, the barrier was evaluated further. The results of the evaluation are provided in **Table 4-2**.

**Table 4-1  
Barrier 1 – Residences Within the Grey Moss Subdivision and Lake Deeson Village  
Mobile Home Park**

Barrier Height/Length (ft)	Number of Impacted Receptors and Insertion Loss (dB(A))			Number of Benefitted Receptors			Total Estimated Cost	Cost Per Benefitted Receptor	Cost Reasonable Yes/No
	5	6	7 or >	Impacted	Other*	Total			
8 / 1,149	6	2	7	15	1	16	\$275,760	\$17,235	Yes
10 / 1,339	8	2	10	20	2	22	\$401,700	\$18,259	Yes
12 / 1,241	6	2	13	21	3	24	\$446,760	\$18,615	Yes
14 / 1,225	5	2	14	21	3	24	\$514,500	\$21,438	Yes
16 / 1,205	6	1	14	21	3	24	\$578,400	\$24,100	Yes
18 / 1,205	6	1	14	21	3	24	\$650,700	\$27,113	Yes
20 / 1,195	6	1	14	21	3	24	\$717,000	\$29,875	Yes
22 / 1,195	6	1	16	21	3	24	\$788,700	\$32,863	Yes

\* Other = Receptors determined to be unaffected by the project (traffic noise levels less than 66 dB(A)) but benefitted by the noise barrier.

**Barrier 2: The Landings Apartments Swimming Pool (Site 31)**

Barrier 2 was evaluated for the community swimming pool (Site 31) at the Landings Apartments. The predicted traffic noise level at this location with the proposed improvements is 66.0 dB(A). As previously stated, the FDOT’s “special land use” analysis methodologies were used to determine if a noise barrier could be considered a potential abatement measure for this property.

Due to the limited ROW, a barrier was evaluated on the FDOT ROW line at heights between eight and 22 feet in two-foot increments. Due to the distance of the pool from the roadway, the noise reduction design goal of 7 dB(A) could not be achieved at any of the evaluated barrier heights. Therefore, the barrier is not considered a reasonable noise abatement measure.

**Table 4-2  
Additional Considerations – Barrier 1**

Evaluation Criteria	Comment
1. Amount of noise reduction	Traffic noise from SR 33 would reduce a minimum of 5 dB(A) at all 21 affected receptors at barrier heights from 12 to 22 feet.
2. Safety	It is not anticipated that there will be any safety issues at this location. This item will be reviewed in greater detail during the design phase of the project.
3. Community desires	The desires of the property owners and renters (if applicable) will be solicited during the design phase of the project.
4. Accessibility	Accessibility constraints to residences are anticipated at this location and should be evaluated further during the design phase of this project.
5. Land use stability	The use of this property is not expected to change in the near future.
6. Local controls	Polk County's Land Development Code ( <i>Section 720 Landscaping and Buffering</i> ) identifies noise as a factor to consider when reviewing proposed general development plans. Additional information on these policies is provided in Appendix D.
7. Views of local officials with jurisdiction	The views of local officials will be solicited during the design phase as part of the ongoing public involvement process.
8. Constructability	It is anticipated that the barrier could be constructed using routine construction methods. This will be reviewed in greater detail during the design phase of the project.
9. Maintainability	There may be constraints for maintenance purposes due to limited ROW. This item will be reviewed in greater detail during the design phase of the project.
10. Aesthetics	The aesthetics of the noise barrier will be determined by the District in consultation with the property owners/renters during the design phase of the project.
11. ROW needs including access rights, easements for construction and/or maintenance, and additional land	Due to a limited ROW width, the noise barrier would need to be located on or very close to the ROW line.
12. Cost	The cost per benefited site does not exceed the reasonable limit at any of the evaluated heights.
13. Utilities	The noise barrier may conflict with above-ground power poles. Potential conflicts will be reviewed in greater detail during the design phase of the project.
14. Drainage	It is not anticipated that the barrier would impede/restrict drainage in the area. This should be reviewed in greater detail during the design phase of the project.
15. Special land use considerations	None.
16. Other environmental considerations	None.

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**Barrier 3: Residences at the Landings Apartments (Sites 32b, 33b, 34b, and 35b)**

Barrier 3 was considered for the four residences (second floor residences) located in the Landings Apartments that are predicted to be impacted with the proposed SR 33 improvements. The predicted traffic noise levels at these properties ranges from 66.0 to 68.1 dB(A).

Due to the limited ROW, a barrier was evaluated on the FDOT ROW line. The length of the barrier was optimized using the TNM to meet at least the minimum noise reduction requirements. Because the residences are located on the second floor and the outdoor use is located some distance from the roadway, the noise reduction design goal of 7 dB(A) could not be achieved at any of the evaluated barrier heights. Therefore, the barrier is not considered a reasonable noise abatement measure.

**Barrier 4: Residences located within the Cambry and Snow Wood Subdivisions (Sites 47-57)**

Barrier 4 was evaluated for the 11 residences located within the Cambry and Snow Wood subdivisions. The predicted traffic noise levels with the proposed improvements at these properties ranges from 66.0 to 70.1 dB(A).

Due to the limited ROW, a barrier was evaluated on the FDOT ROW line. The length of the barrier was optimized using the TNM in an attempt to meet the minimum noise reduction requirements (i.e., a minimum reduction of 5 dB(A) for at least one impacted property and a minimum reduction of 7 dB(A) for at least one additional impacted property).

The results of the evaluation are provided in **Table 4-3**. As shown, at barrier heights of 8 to 14 feet, at least 9 of the impacted residences would benefit from a reduction in traffic noise of 5 dB(A) or more. At these same heights, the noise reduction design goal of 7 dB(A) would be achieved at four or more of the properties and the cost of the barrier would be below the FDOT's cost reasonable limit. Because Barrier 4 is predicted to provide the minimum noise reduction requirements at a cost below the cost effective limit, the barrier was evaluated further. The results of the evaluation are provided in **Table 4-4**.

**Table 4-3  
Barrier 4 - Residences Within the Cambry and Snow Wood Subdivisions**

Barrier Height/ Length (ft)	Number of Impacted Receptors and Insertion Loss (dB(A))			Number of Benefited Receptors			Total Estimated Cost	Cost Per Benefited Receptor	Cost Reasonable Yes/No
	5	6	7 or >	Impacted	Other*	Total			
8 / 1,081	5	0	4	9	0	9	\$259,440	\$28,827	Yes
10 / 1,151	2	0	8	10	0	10	\$345,300	\$34,530	Yes
12 / 1,345	1	0	10	11	2	13	\$484,200	\$37,246	Yes
14 / 1,285	1	0	10	11	2	13	\$539,700	\$41,515	Yes
16 / 1,195	1	0	10	11	2	13	\$573,600	\$44,123	No
18 / 1,195	2	0	9	11	1	12	\$645,300	\$49,638	No
20 / 1,185	2	0	9	11	1	12	\$711,000	\$54,692	No
22 / 1,185	2	0	9	11	1	12	\$782,100	\$60,162	No

\* Other = Receptors determined to be unaffected by the project (traffic noise levels less than 66 dB(A)) but benefited by the noise barrier.



**Table 4-4  
Additional Considerations - Barrier 4**

Evaluation Criteria	Comment
1. Amount of noise reduction	Traffic noise from SR 33 would be reduced a minimum of 5 dB(A) at up to 11 of the impacted receptors at barrier heights ranging from of 8 to 14 feet.
2. Safety	It is not anticipated that there will be any safety issues at this location. This item will be reviewed in greater detail during the design phase of the project.
3. Community desires	The desires of the property owners and renters (if applicable) will be solicited during the design phase of the project.
4. Accessibility	It is not anticipated that there will be any accessibility constraints at this location.
5. Land use stability	The use of this property is not expected to change in the near future.
6. Local controls	Polk County's Land Development Code ( <i>Section 720 Landscaping and Buffering</i> ) identifies noise as a factor to consider when reviewing proposed general development plans. Additional information on these policies is provided in Appendix D.
7. Views of local officials with jurisdiction	The views of local officials will be solicited during the design phase as part of the ongoing public involvement process.
8. Constructability	It is anticipated that the barrier could be constructed using routine construction methods. This will be reviewed in greater detail during the design phase of the project.
9. Maintainability	There may be constraints for maintenance purposes due to limited ROW. This item will be reviewed in greater detail during the design phase of the project.
10. Aesthetics	The aesthetics of the noise barrier will be determined by the District in consultation with the property owners/renters during the design phase of the project.
11. ROW needs including access rights, easements for construction and/or maintenance, and additional land	Due to a limited ROW width, the noise barrier would need to be located on or as close to the right-of-way line as possible.
12. Cost	The cost of a barrier would be cost reasonable at heights of 8 to 14 feet.
13. Utilities	The noise barrier may conflict with above-ground power poles. Potential conflicts will be reviewed during the design phase of the project.
14. Drainage	It is not anticipated that the barrier would impede/restrict drainage in the area. This should be reviewed in greater detail during the design phase of the project.
15. Special land use considerations	None.
16. Other environmental considerations	None.

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## 5.0 Conclusions

As previously stated, future traffic noise levels with the proposed improvements are predicted to approach, meet, or exceed the NAC at 37 noise sensitive sites. These sites are predicted to experience future traffic noise levels with the proposed improvements to SR 33 that would range from 66.0 to 70.2 dB(A).

The results of the evaluation indicate that construction of noise barriers is a potentially reasonable and feasible noise abatement method to reduce the predicted traffic noise levels for up to 32 of the 37 impacted sites at the following locations:

- Barrier 1: Residences located within the Grey Moss Subdivision and Lake Deeson Village Mobile Home Park from West of Wood Circle W. to Lake Luther Road (Sites 2-20, 26-27)
- Barrier 4: Residences located within the Cambry and Snow Wood Subdivisions (Sites 47-57)

## 5.1 Statement of Likelihood

The FDOT is committed to the construction noise barriers at the locations above, contingent upon the following:

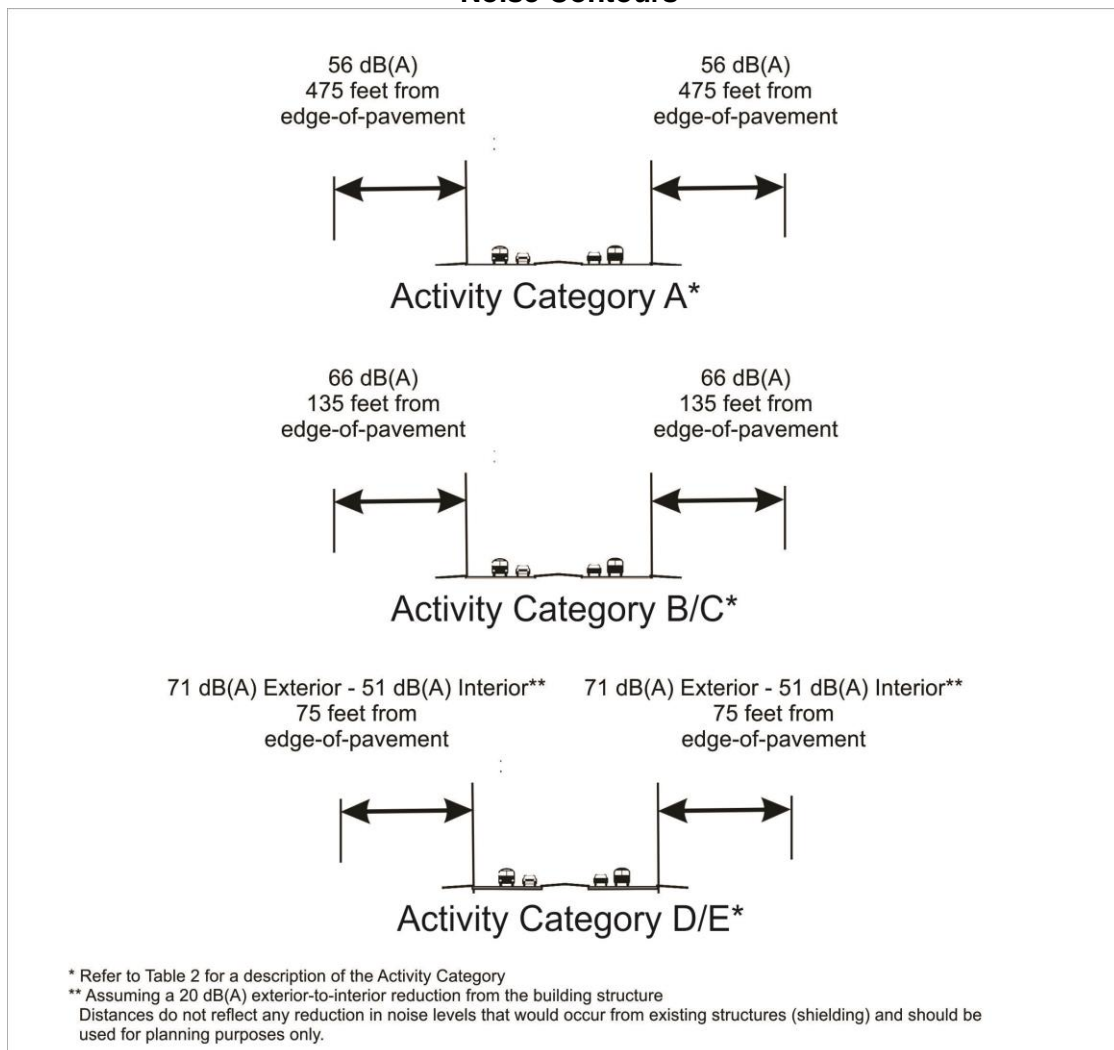
- Detailed noise analysis during the final design process supports the need for, and the feasibility and reasonableness of providing the barriers as abatement;
- The detailed analysis demonstrates that the cost of the noise barrier will not exceed the cost effective limit;
- The residents/property owners benefitted by the noise barrier desire that a noise barrier be constructed; and
- All safety and engineering conflicts or issues related to construction of a noise barrier are resolved.

## 6.0 Noise Contours

Land uses such as residences and recreational areas are considered incompatible with highway noise levels that approach or exceed the NAC. To reduce the possibility of additional traffic noise-related impacts, noise level contours were developed for the future improved roadway facility. These noise contours, shown in Figure 5-1, delineate the extent of the predicted traffic noise impact area from the improved roadway's edge-of-travel lane for each of the land use Activity Categories (Table 3-1).

Local officials will be provided a copy of the Final NSR to promote compatibility between any future land developments in this area.

**Figure 5-1  
Noise Contours**



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## 7.0 Construction Noise and Vibration

Land uses adjacent SR 33 are identified on the FDOT listing of noise- and vibration-sensitive sites (e.g., residential use). Construction of the proposed roadway improvements is not expected to have any significant noise or vibration impact. If sensitive land uses develop adjacent to the roadway prior to construction, increased potential for noise or vibration impacts could result. It is anticipated that the application of the ***FDOT Standard Specifications for Road and Bridge Construction*** will minimize or eliminate potential construction noise and vibration impacts. However, should unanticipated noise or vibration issues arise during the construction process, the Project Engineer, in coordination with the District Noise Specialist and the Contractor, will investigate additional methods of controlling these impacts.”

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## 8.0 References

Polk County, FL. Land Development Code. Chapter 7 – Site Development Standards.  
[http://www.polk-county.net/subpage.aspx?menu\\_id=226&id=492](http://www.polk-county.net/subpage.aspx?menu_id=226&id=492)

Federal Highway Administration. U.S. Department of Transportation. July 13, 2010. Title 23 CFR, Part 772. Procedures for Abatement of Highway Traffic Noise and Construction Noise.

Federal Highway Administration. February 2004. Traffic Noise Model, Version 2.5.

Federal Highway Administration. December 2011. Highway Traffic Noise: Analysis and Abatement Guidance.

Federal Highway Administration. May 1996. Measurement of Highway-Related Noise. FHWA-PD-96-046.

Florida Department of Transportation. May 24, 2011. Project Development and Environment Manual, Part 2, Chapter 17 – Noise.

Florida Department of Transportation. January 1, 2012. Plans Preparation Manual, Volume 1, Chapter 32 – Sound Barriers.

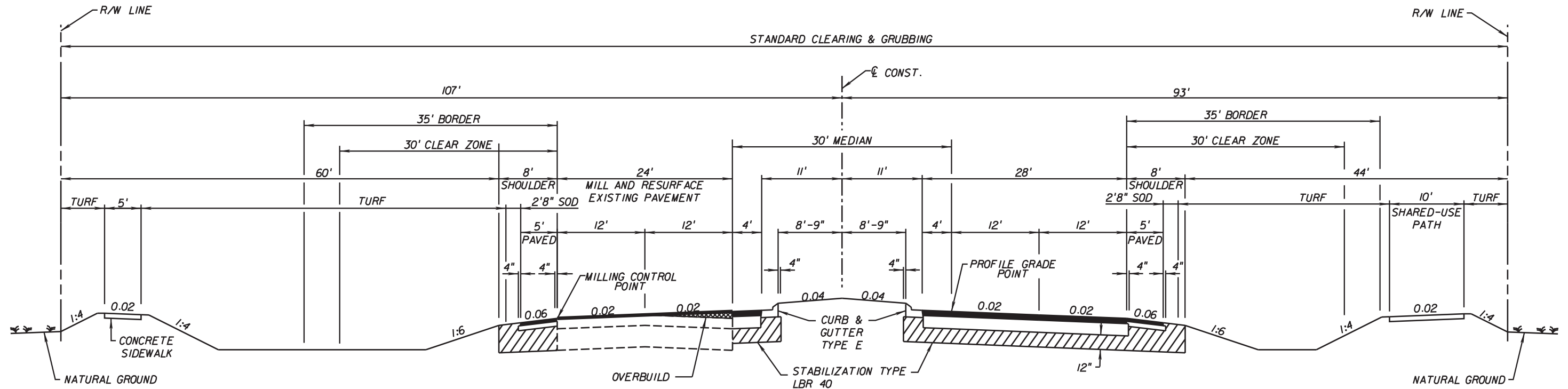
Florida Department of Transportation. July 22, 2009. A Method to Determine Reasonableness and Feasibility of Noise Abatement at Special Use Locations.



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## **APPENDIX A – PROJECT AERIALS**

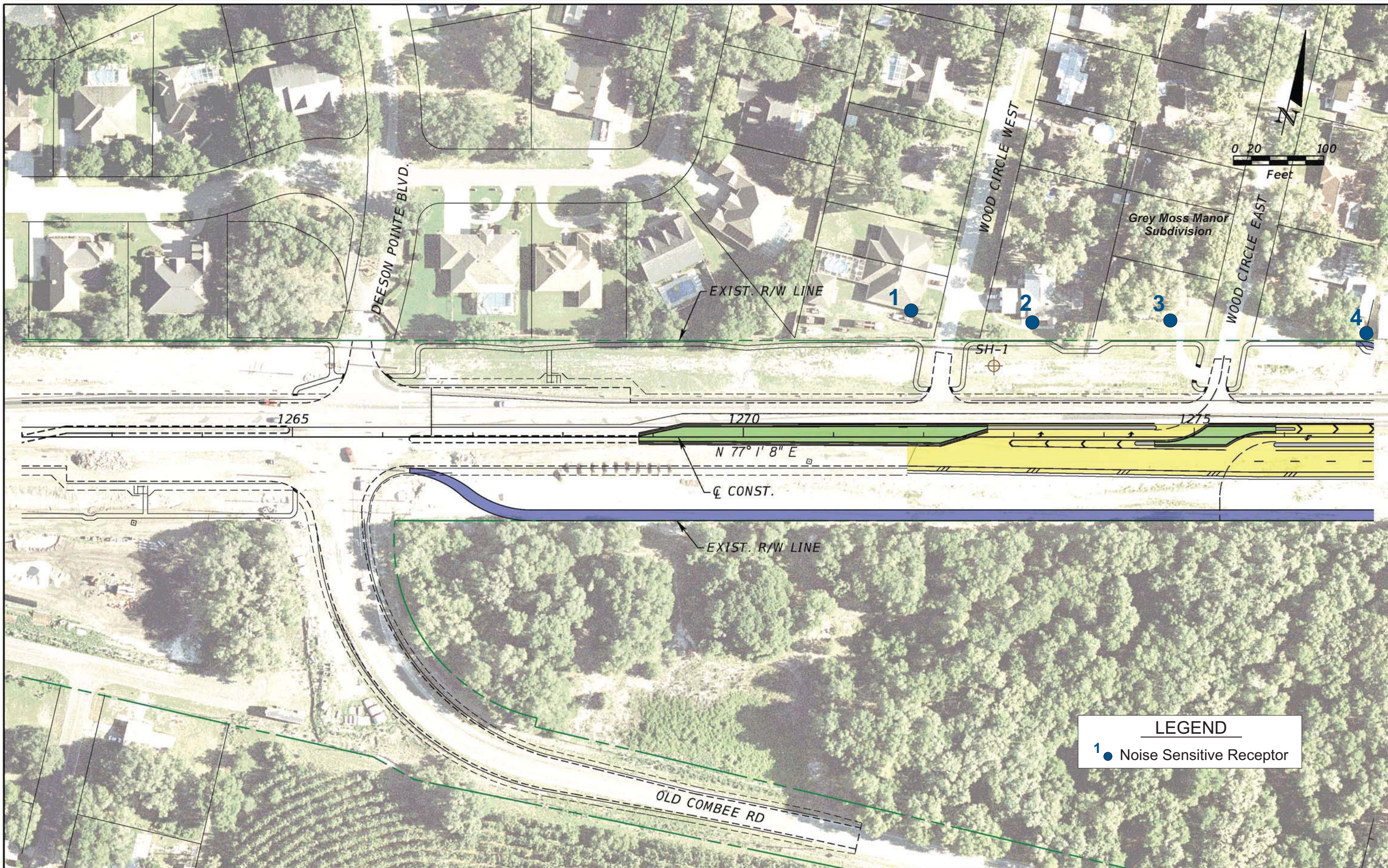
Note: See Plan Sheets 2-5 and 17 for the location of noise sensitive sites.



TYPICAL #2  
HIGH SPEED SUBURBAN  
55 MPH

REVISIONS				ENGINEER OF RECORD Mark D. Hales, PE PE No. 62430 Inwood Consulting Engineers, Inc. Certificate of Authorization No. 7074 3000 Dovera Drive, Suite 200, Oviedo, Florida 32765 P 407.971.8850	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.  1
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
					SR 33	POLK	430185-1-22-01	





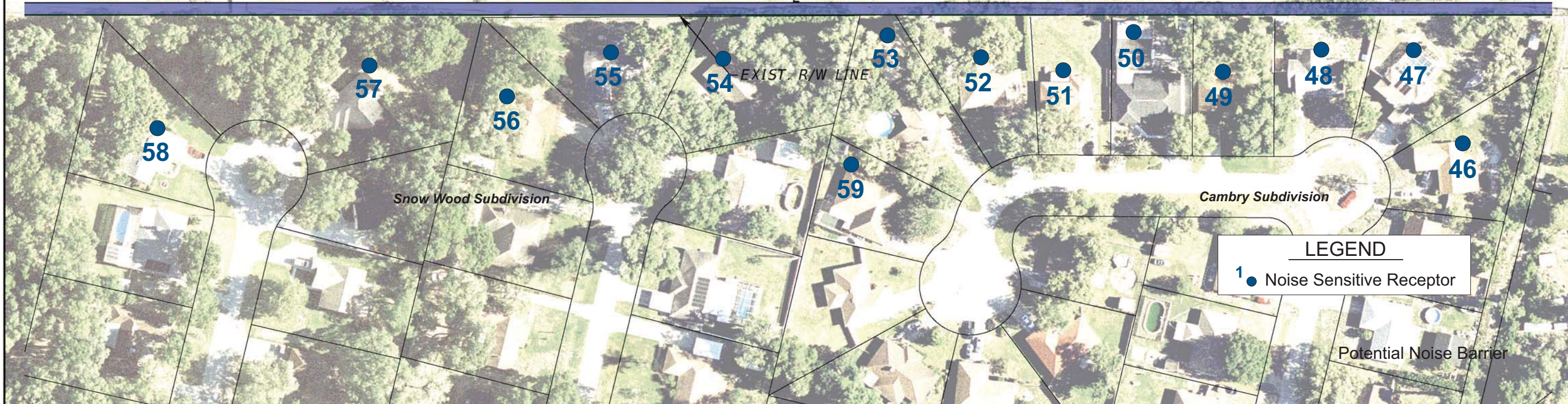
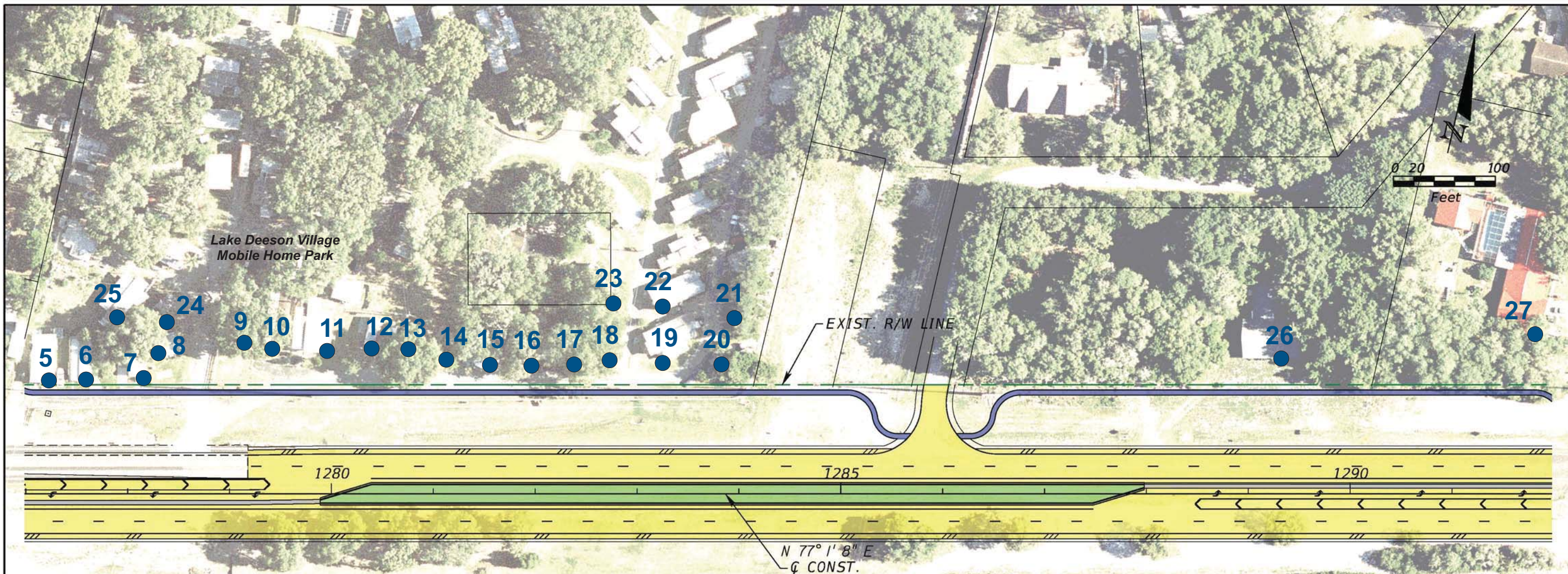
**LEGEND**

1 ● Noise Sensitive Receptor

REVISIONS		ENGINEER OF RECORD		STATE OF FLORIDA			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	DEPARTMENT OF TRANSPORTATION			
							<b>PLAN</b> <b>SAVE PAVT. ALTERNATIVE</b>
				ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
				SR 33	POLK	430185-1-22-01	2

ENGINEER OF RECORD  
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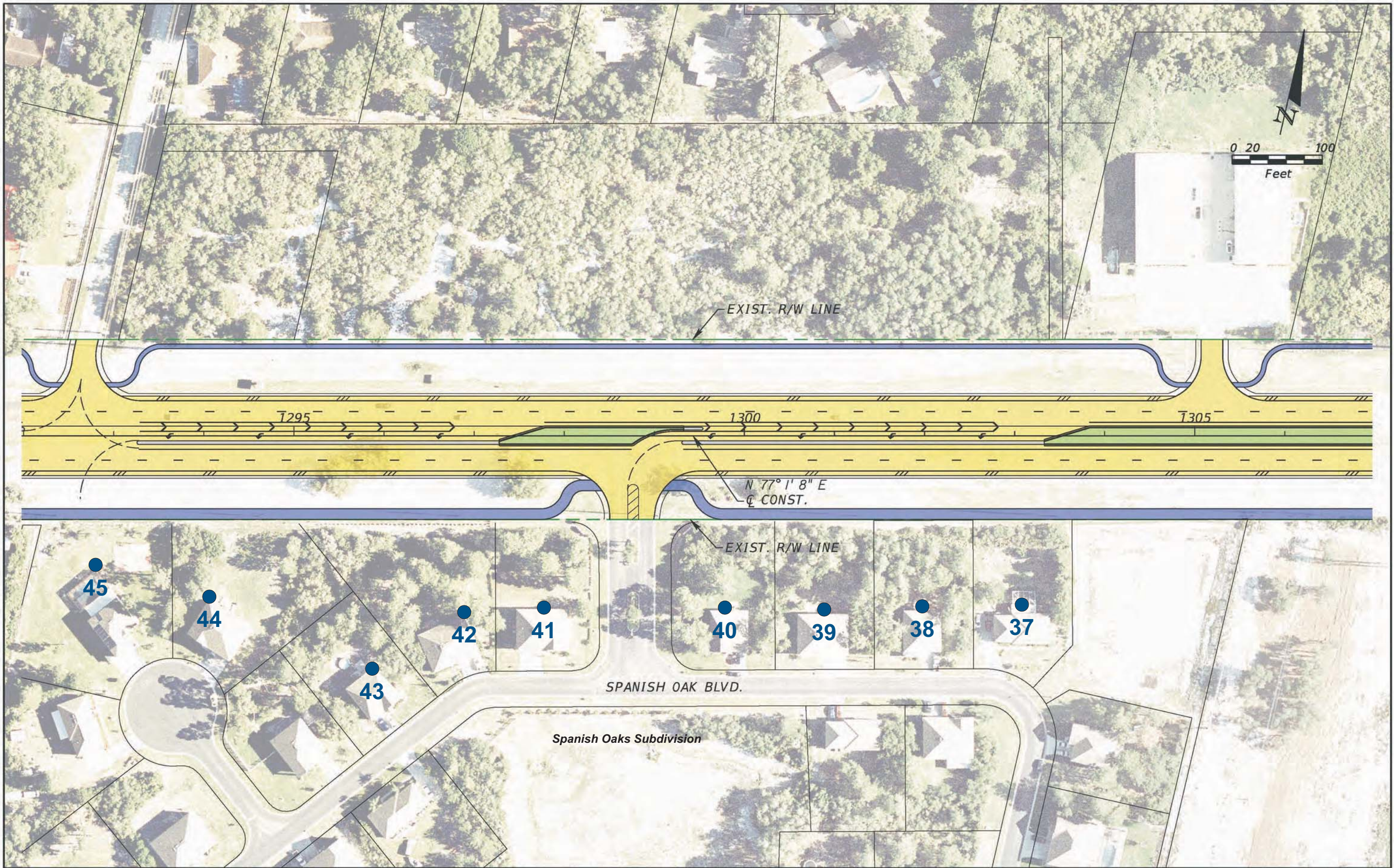




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DATE	DESCRIPTION	DATE	DESCRIPTION	Mark D. Hales, PE PE No. 62430 Inwood Consulting Engineers, Inc. Certificate of Authorization No. 7074 3000 Dovera Drive, Suite 200, Oviedo, Florida 32765 P 407.971.8850		DEPARTMENT OF TRANSPORTATION			
						ROAD NO.	COUNTY	FINANCIAL PROJECT ID	3
						SR 33	POLK	430185-1-22-01	

**PLAN**  
**SAVE PAVT. ALTERNATIVE**





REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

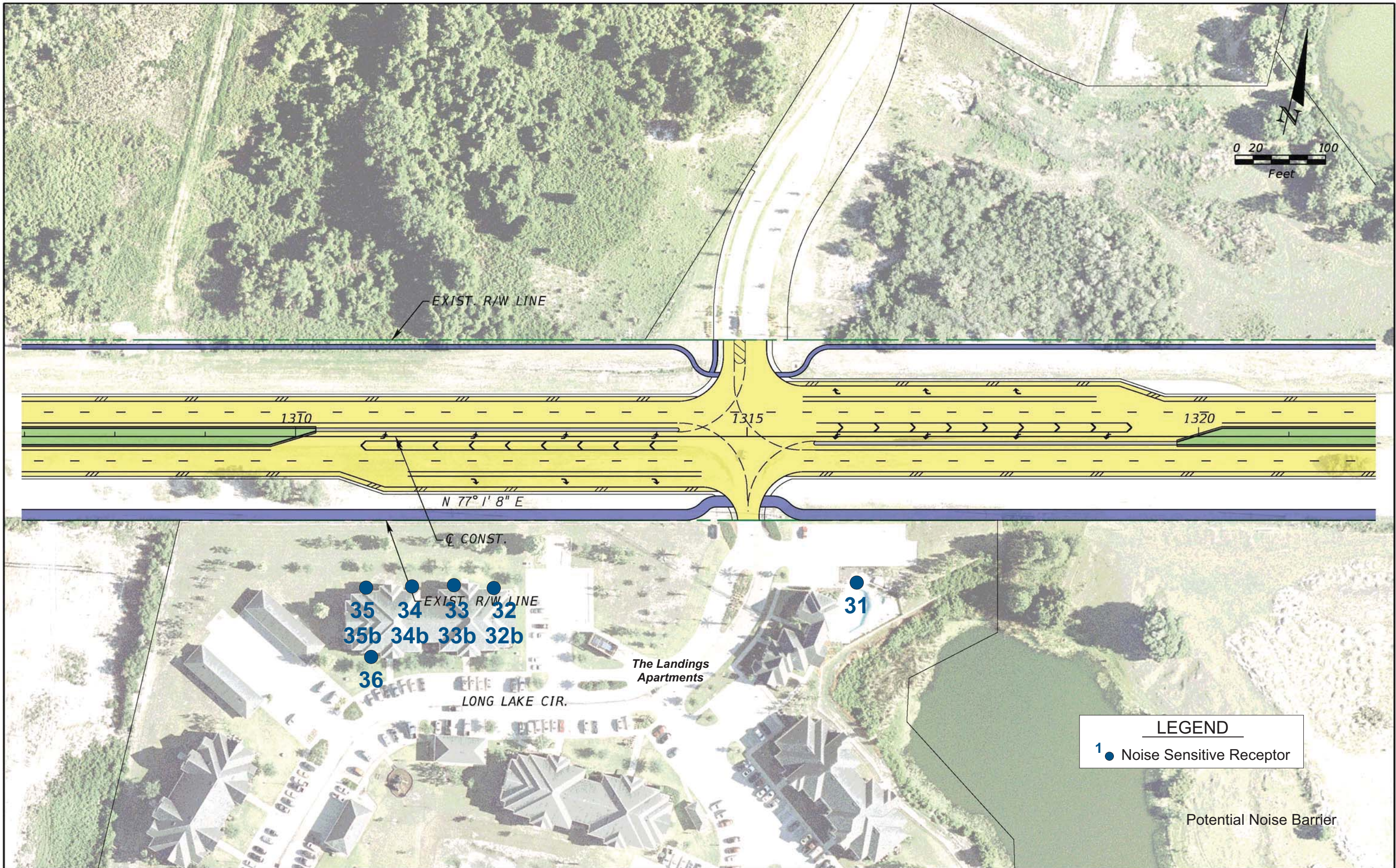
ENGINEER OF RECORD  
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 PE No. 62430  
 Inwood Consulting Engineers, Inc.  
 Certificate of Authorization No. 7074  
 3000 Dovera Drive, Suite 200, Oviedo, Florida 32765  
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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 33	POLK	430185-1-22-01

**PLAN**  
**SAVE PAVT. ALTERNATIVE**

SHEET NO.  
 4



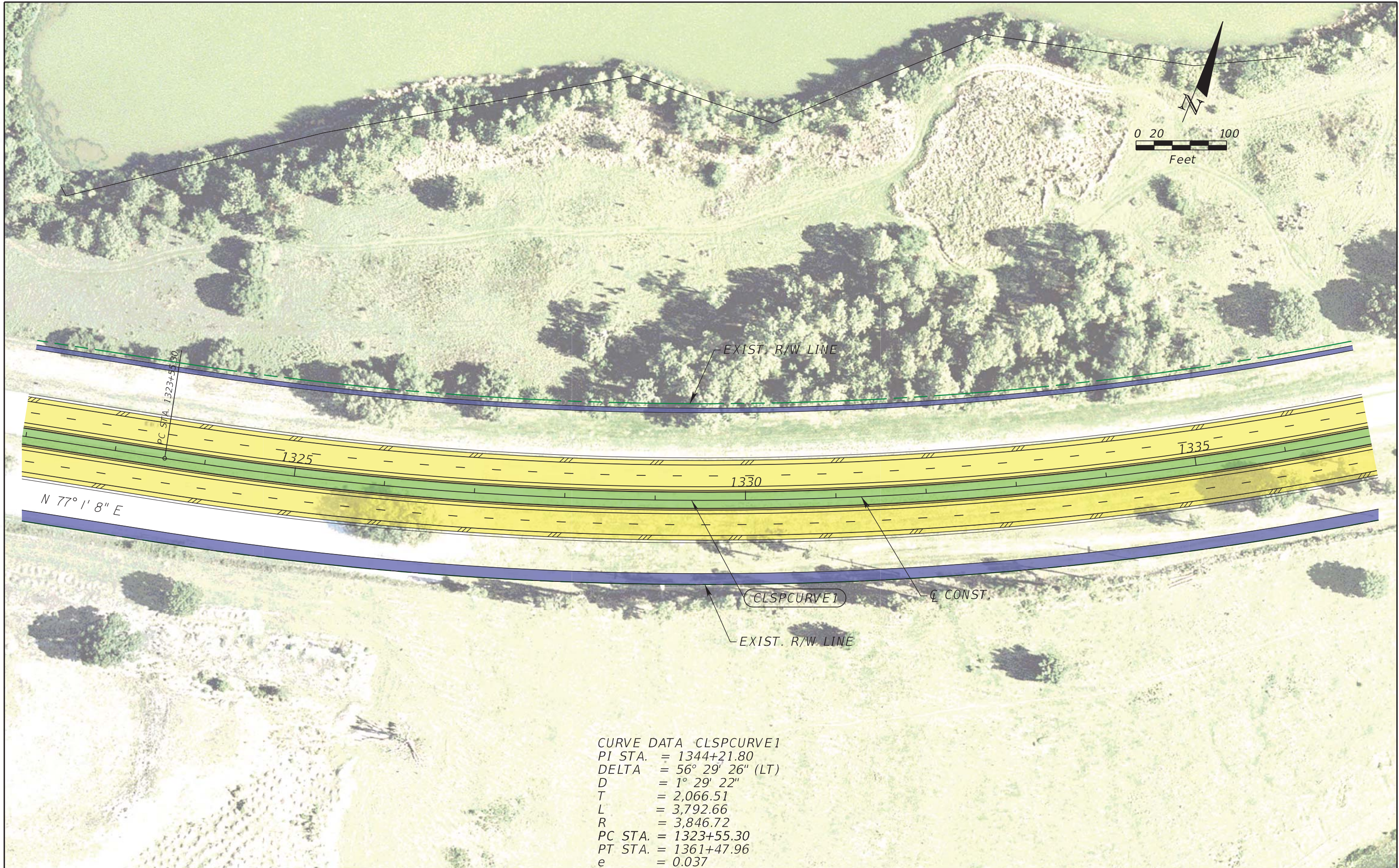


**LEGEND**  
 1 ● Noise Sensitive Receptor

Potential Noise Barrier

REVISIONS		REVISIONS		ENGINEER OF RECORD			STATE OF FLORIDA			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	Mark D. Hales, PE PE No. 62430 Inwood Consulting Engineers, Inc. Certificate of Authorization No. 7074 3000 Dovera Drive, Suite 200, Oviedo, Florida 32765 P 407.971.8850			DEPARTMENT OF TRANSPORTATION			
				ROAD NO.	COUNTY	FINANCIAL PROJECT ID	<b>PLAN</b> <b>SAVE PAVT. ALTERNATIVE</b>			5
				SR 33	POLK	430185-1-22-01				





CURVE DATA CLSPCURVE1  
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 DELTA = 56° 29' 26" (LT)  
 D = 1° 29' 22"  
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 L = 3,792.66  
 R = 3,846.72  
 PC STA. = 1323+55.30  
 PT STA. = 1361+47.96  
 e = 0.037

REVISIONS				ENGINEER OF RECORD		STATE OF FLORIDA			<b>PLAN</b> <b>SAVE PAVT. ALTERNATIVE</b>	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	Mark D. Hales, PE PE No. 62430 Inwood Consulting Engineers, Inc. Certificate of Authorization No. 7074 3000 Dovera Drive, Suite 200, Oviedo, Florida 32765 P 407.971.8850		DEPARTMENT OF TRANSPORTATION				
				ROAD NO.	COUNTY	FINANCIAL PROJECT ID				
				SR 33	POLK	430185-1-22-01			6	

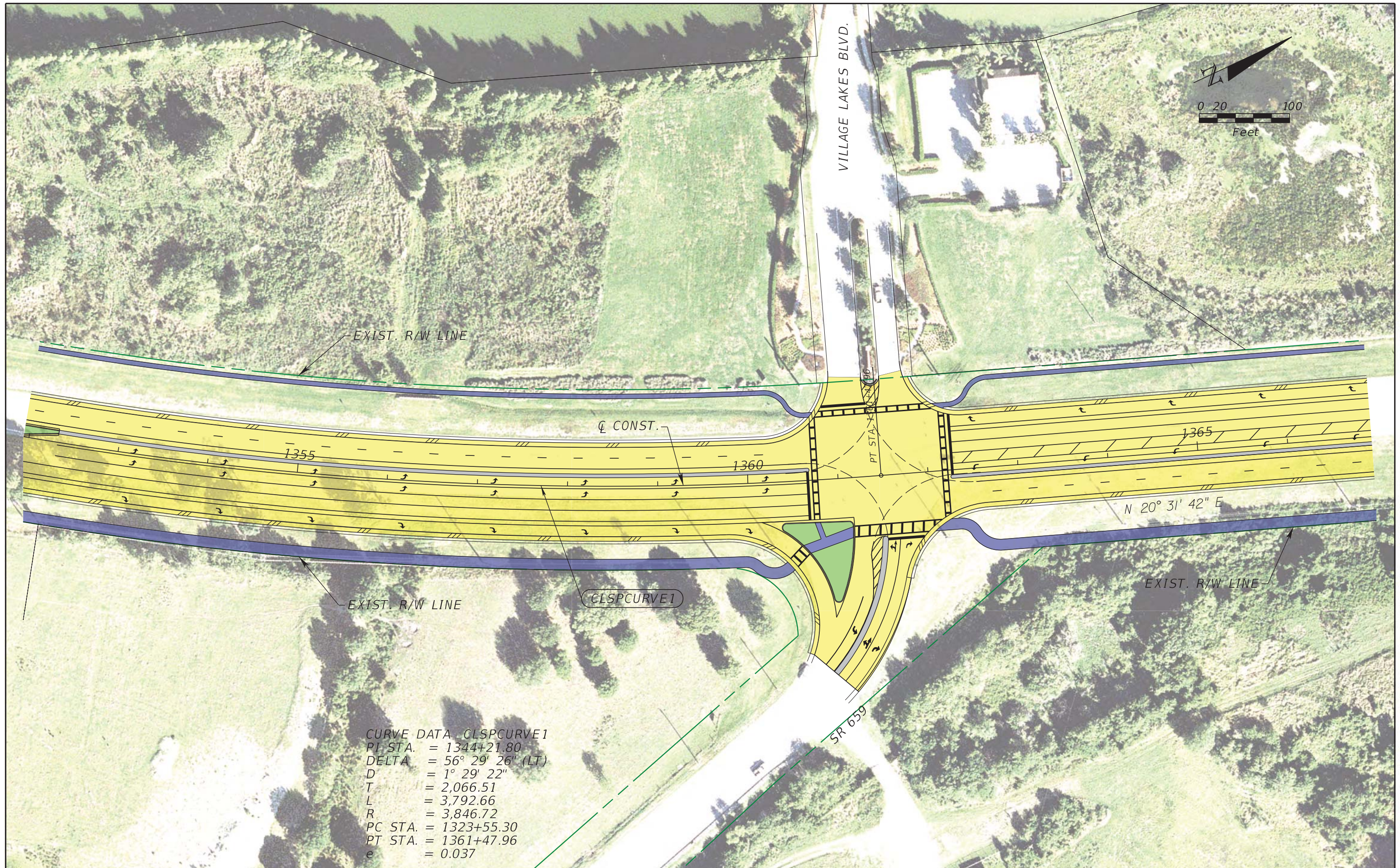
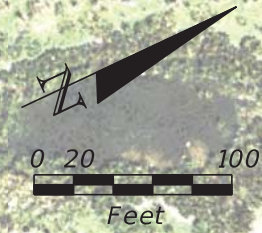




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 D = 1° 29' 22"  
 T = 2,066.51  
 L = 3,792.66  
 R = 3,846.72  
 PC STA. = 1323+55.30  
 PT STA. = 1361+47.96  
 e = 0.037

REVISIONS				ENGINEER OF RECORD Mark D. Hales, PE PE No. 62430 Inwood Consulting Engineers, Inc. Certificate of Authorization No. 7074 3000 Dovera Drive, Suite 200, Oviedo, Florida 32765 P 407.971.8850	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			PLAN SAVE PAVT. ALTERNATIVE	SHEET NO. 7
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					SR 33	POLK	430185-1-22-01		





CURVE DATA CLSPCURVE1  
 PI STA. = 1344+21.80  
 DELTA = 56° 29' 26" (LT)  
 D = 1° 29' 22"  
 T = 2,066.51  
 L = 3,792.66  
 R = 3,846.72  
 PC STA. = 1323+55.30  
 PT STA. = 1361+47.96  
 e = 0.037

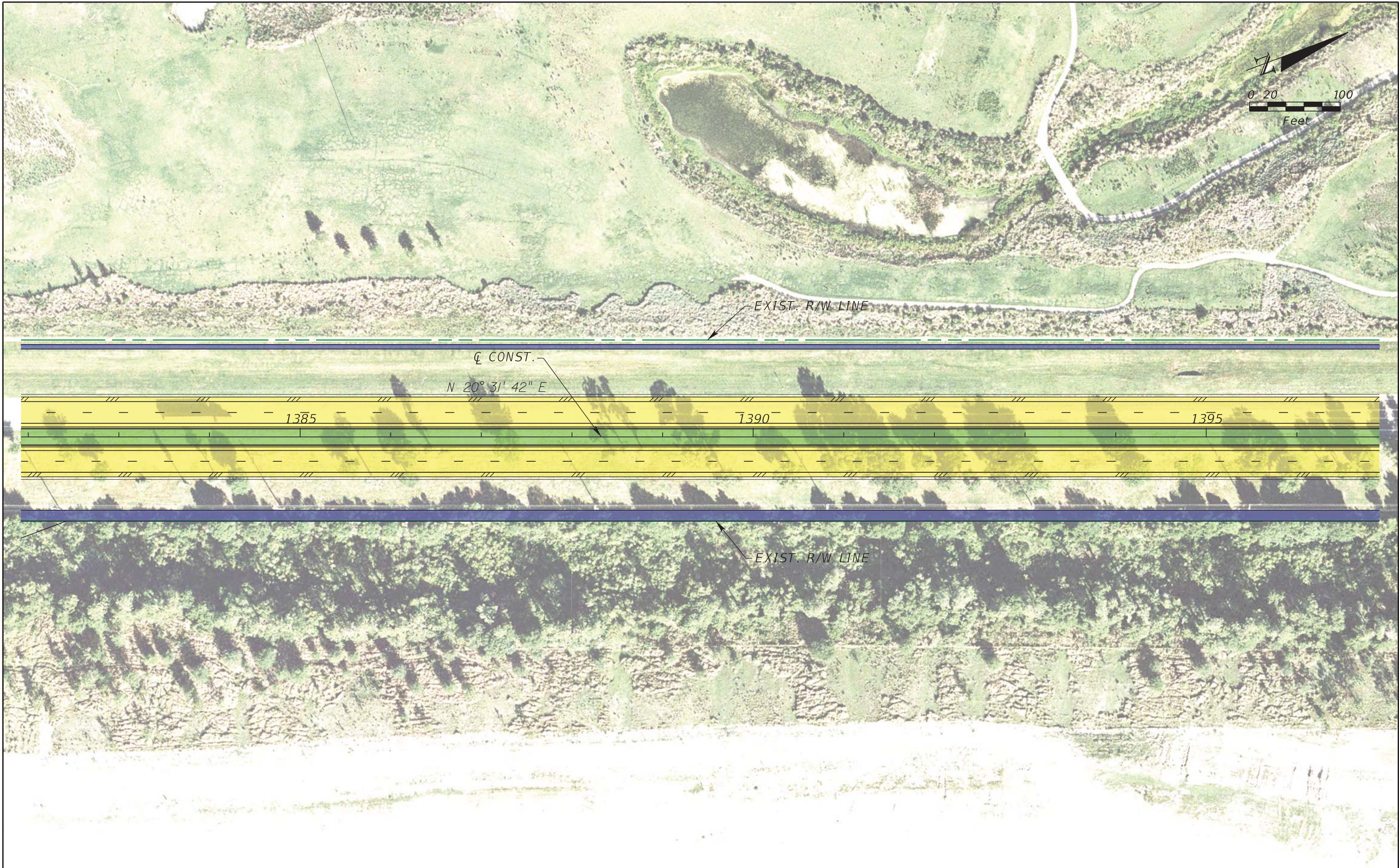
REVISIONS				ENGINEER OF RECORD Mark D. Hales, PE PE No. 62430 Inwood Consulting Engineers, Inc. Certificate of Authorization No. 7074 3000 Dovera Drive, Suite 200, Oviedo, Florida 32765 P 407.971.8850	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			PLAN SAVE PAVT. ALTERNATIVE	SHEET NO. 8
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					SR 33	POLK	430185-1-22-01		





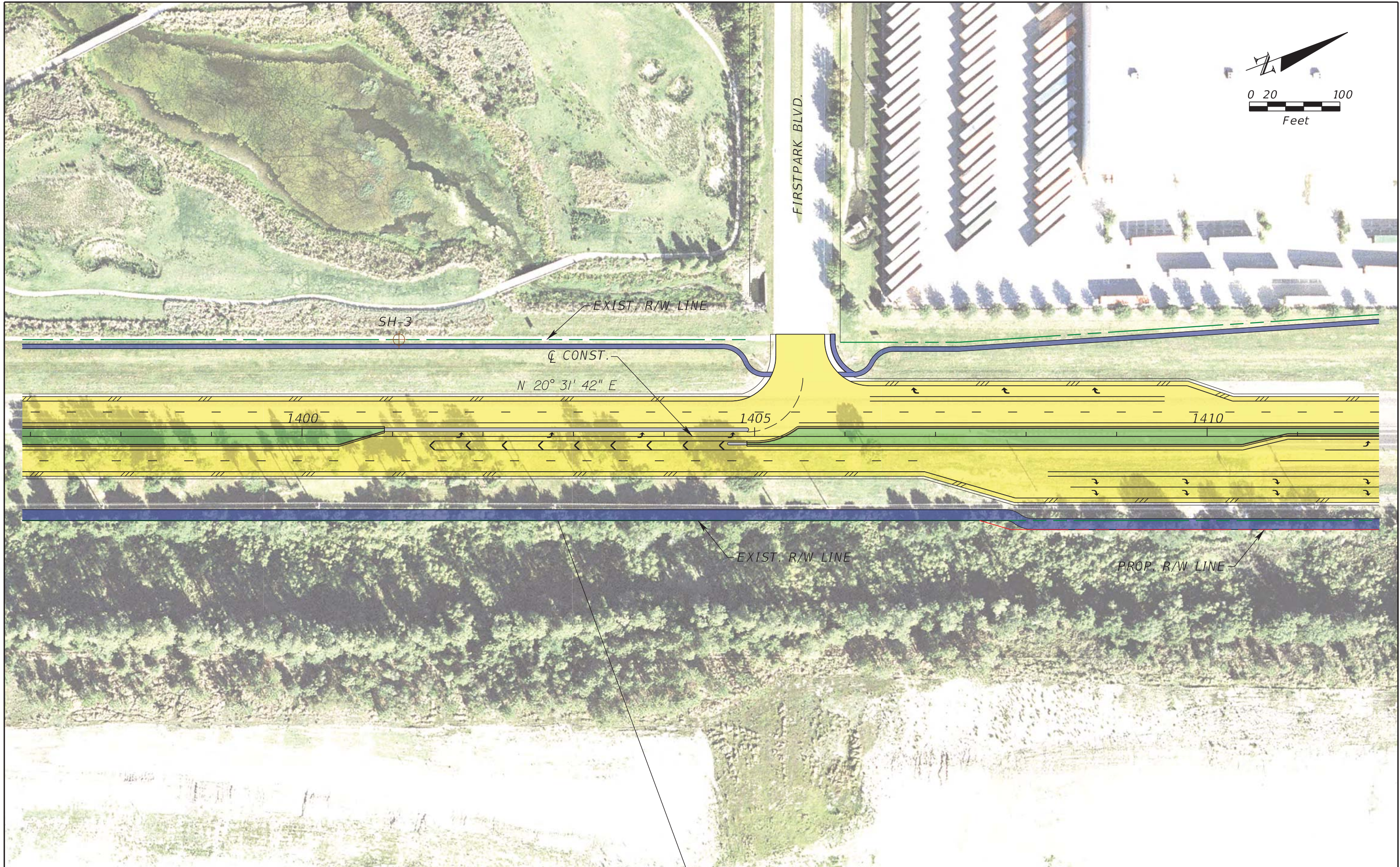
REVISIONS				ENGINEER OF RECORD Mark D. Hales, PE PE No. 62430 Inwood Consulting Engineers, Inc. Certificate of Authorization No. 7074 3000 Dovera Drive, Suite 200, Oviedo, Florida 32765 P 407.971.8850	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			PLAN SAVE PAVT. ALTERNATIVE	SHEET NO. 9
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					SR 33	POLK	430185-1-22-01		





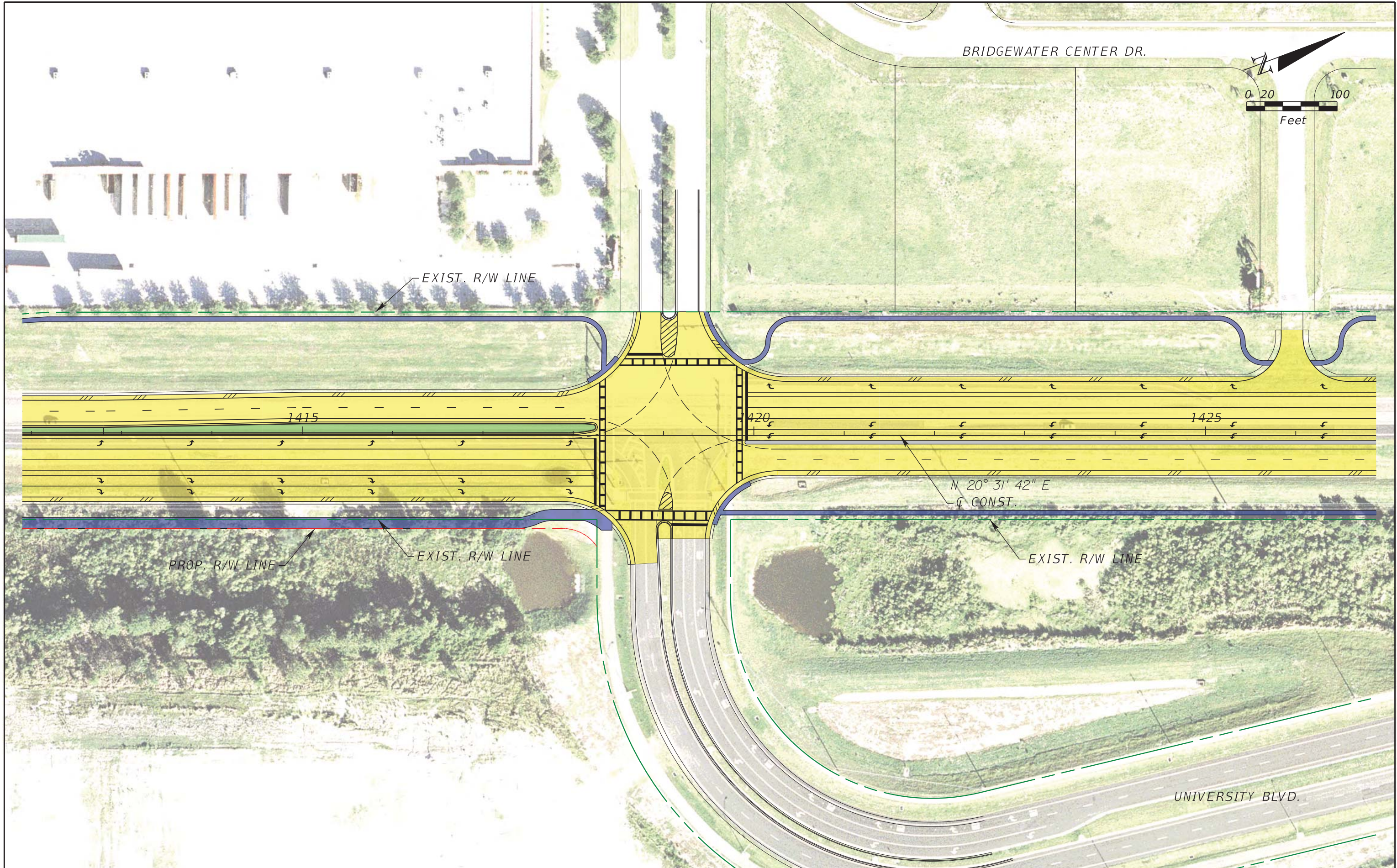
REVISIONS				ENGINEER OF RECORD Mark D. Hales, PE PE No. 62430 Inwood Consulting Engineers, Inc. Certificate of Authorization No. 7074 3000 Dovera Drive, Suite 200, Oviedo, Florida 32765 P 407.971.8850	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			PLAN SAVE PAVT. ALTERNATIVE	SHEET NO. 10
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					SR 33	POLK	430185-1-22-01		





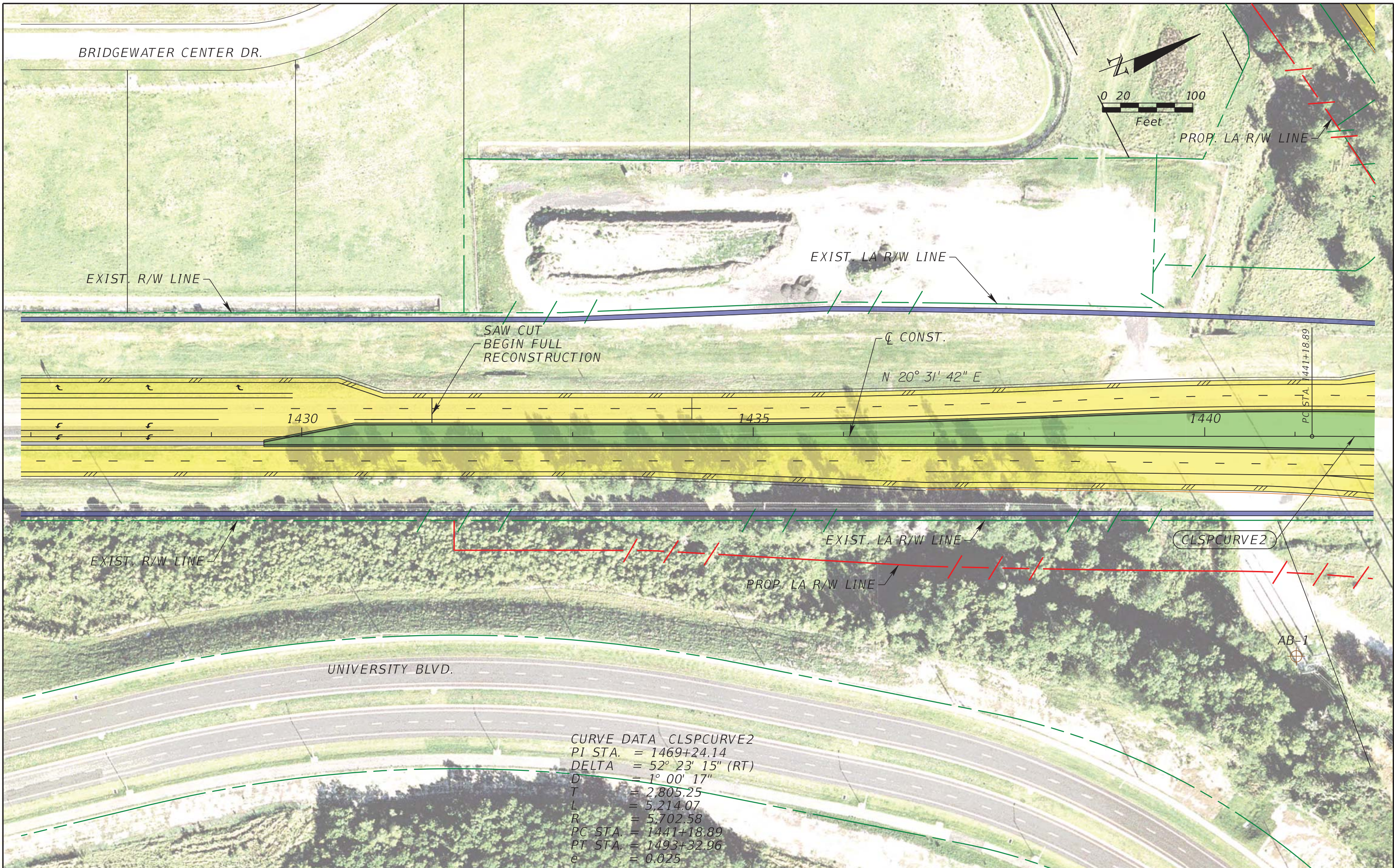
REVISIONS				ENGINEER OF RECORD Mark D. Hales, PE PE No. 62430 Inwood Consulting Engineers, Inc. Certificate of Authorization No. 7074 3000 Dovera Drive, Suite 200, Oviedo, Florida 32765 P 407.971.8850	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			PLAN SAVE PAVT. ALTERNATIVE	SHEET NO. 11
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					SR 33	POLK	430185-1-22-01		





REVISIONS				ENGINEER OF RECORD Mark D. Hales, PE PE No. 62430 Inwood Consulting Engineers, Inc. Certificate of Authorization No. 7074 3000 Dovera Drive, Suite 200, Oviedo, Florida 32765 P 407.971.8850	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			PLAN SAVE PAVT. ALTERNATIVE	SHEET NO. 12
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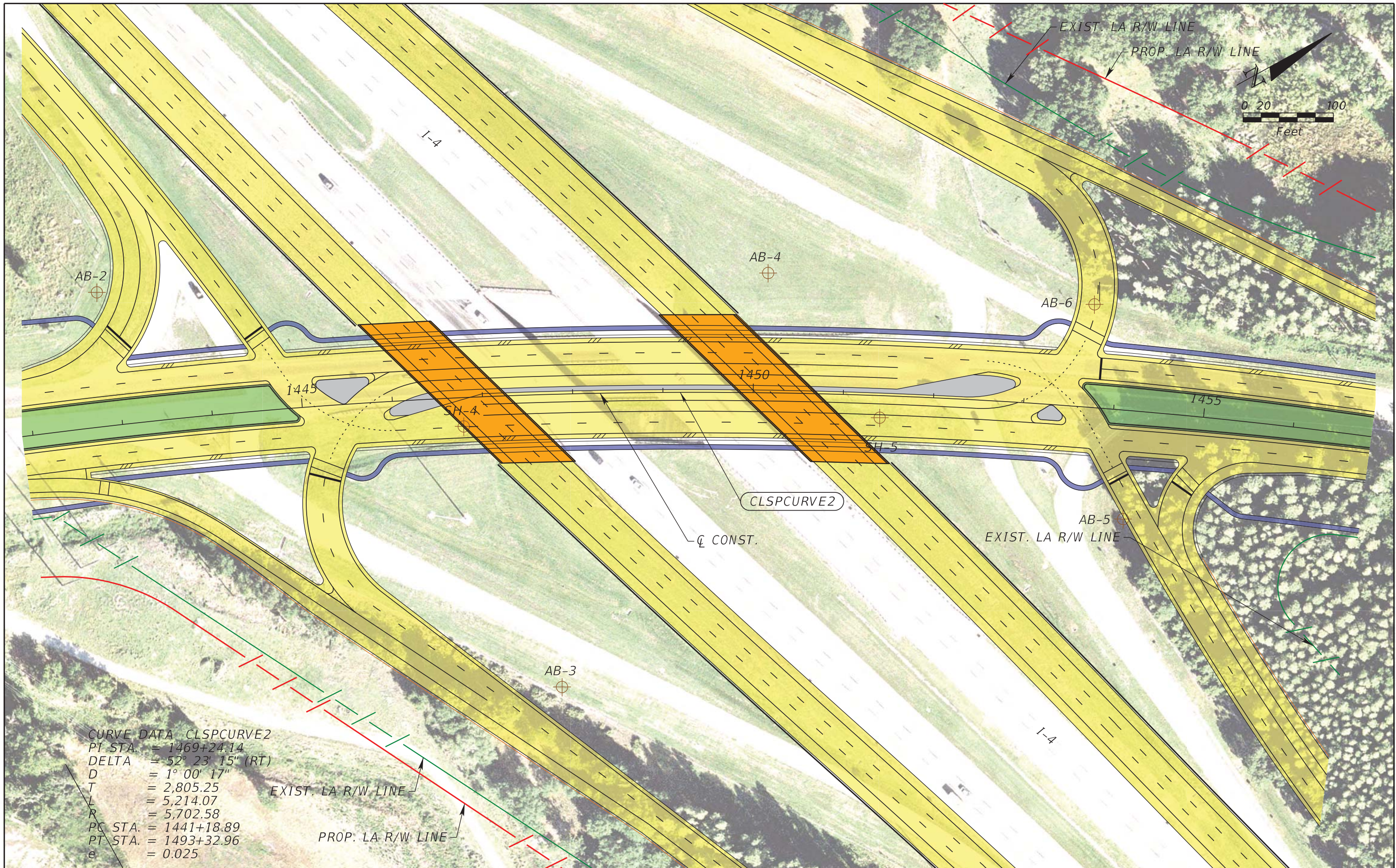




CURVE DATA CLSPCURVE2  
 PI STA. = 1469+24.14  
 DELTA = 52° 23' 15" (RT)  
 D = 1° 00' 17"  
 T = 2,805.25  
 L = 5,214.07  
 R = 5,702.58  
 PC STA. = 1441+18.89  
 PT STA. = 1493+32.96  
 e = 0.025

REVISIONS		ENGINEER OF RECORD		STATE OF FLORIDA			PLAN	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	DEPARTMENT OF TRANSPORTATION				
				ROAD NO.	COUNTY	FINANCIAL PROJECT ID	SAVE PAVT. ALTERNATIVE	13
				SR 33	POLK	430185-1-22-01		





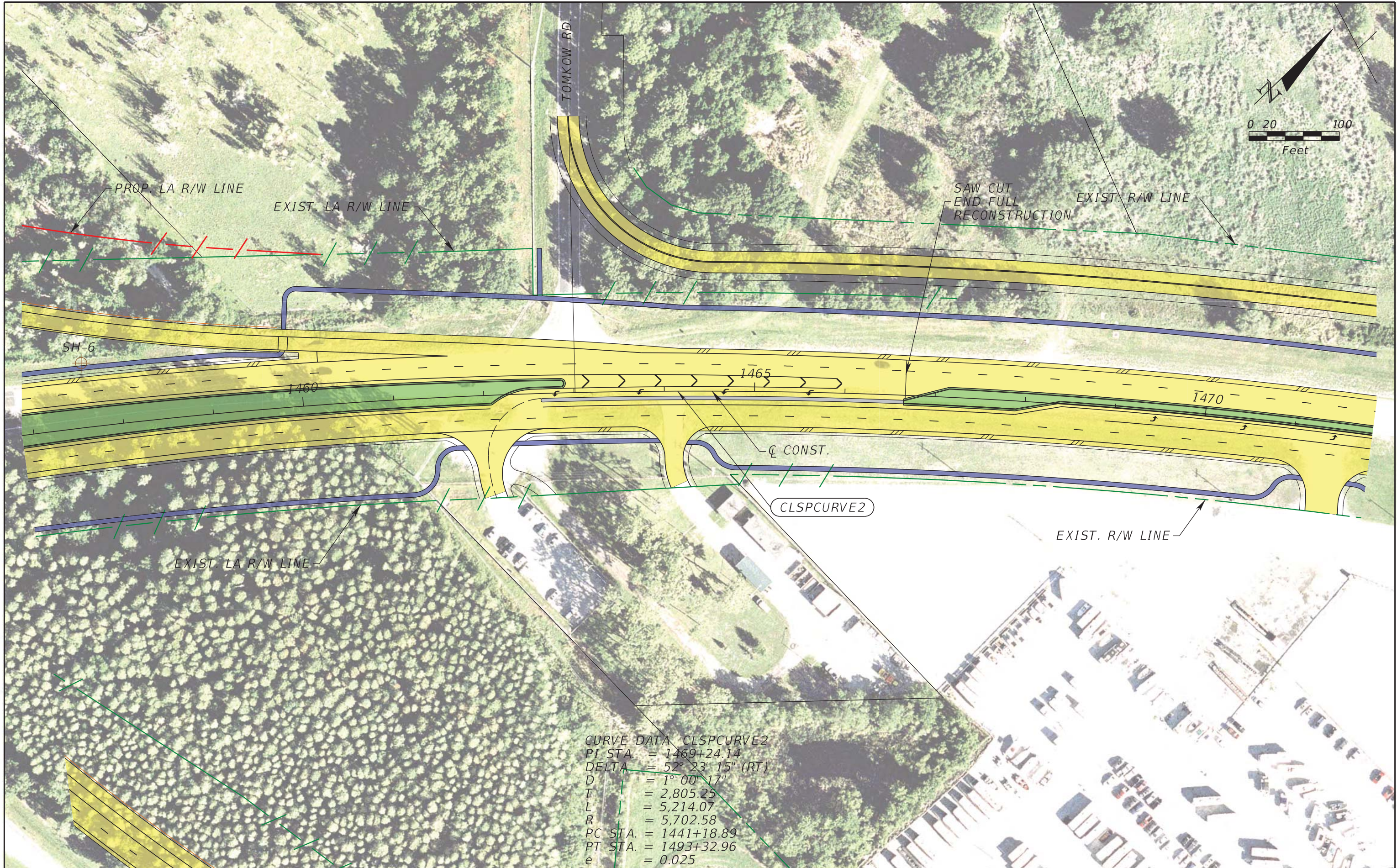
REVISIONS		ENGINEER OF RECORD		STATE OF FLORIDA			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	ROAD NO.	COUNTY	FINANCIAL PROJECT ID	
				SR 33	POLK	430185-1-22-01	14

Mark D. Hales, PE  
 PE No. 62430  
 Inwood Consulting Engineers, Inc.  
 Certificate of Authorization No. 7074  
 3000 Dovera Drive, Suite 200, Oviedo, Florida 32765  
 P 407.971.8850

DEPARTMENT OF TRANSPORTATION

**PLAN**  
**SAVE PAVT. ALTERNATIVE**





CURVE DATA CLSPCURVE2  
 PI STA. = 1469+24.14  
 DELTA = 52° 23' 15" (RT)  
 D = 1° 00' 17"  
 T = 2,805.25  
 L = 5,214.07  
 R = 5,702.58  
 PC STA. = 1441+18.89  
 PT STA. = 1493+32.96  
 e = 0.025

REVISIONS		ENGINEER OF RECORD		STATE OF FLORIDA			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	DEPARTMENT OF TRANSPORTATION			
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				SR 33	POLK	430185-1-22-01	

PLAN  
 SAVE PAVT. ALTERNATIVE

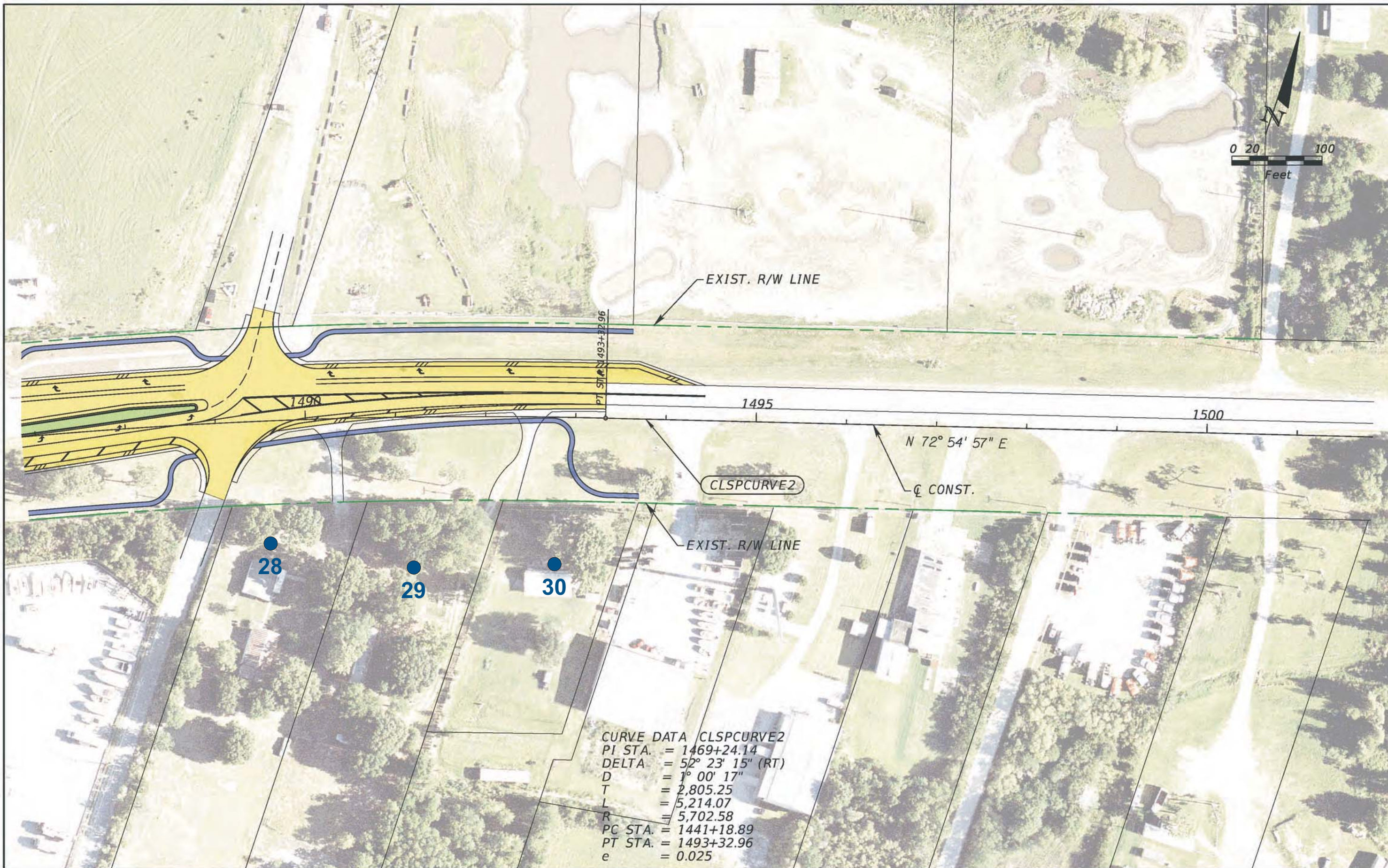




CURVE DATA CLSPCURVE2  
 PI STA. = 1469+24.14  
 DELTA = 52° 23' 15" (RT)  
 D = 1° 00' 17"  
 T = 2,805.25  
 L = 5,214.07  
 R = 5,702.58  
 PC STA. = 1441+18.89  
 PT STA. = 1493+32.96  
 e = 0.025

REVISIONS				ENGINEER OF RECORD Mark D. Hales, PE PE No. 62430 Inwood Consulting Engineers, Inc. Certificate of Authorization No. 7074 3000 Dovera Drive, Suite 200, Oviedo, Florida 32765 P 407.971.8850	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			PLAN SAVE PAVT. ALTERNATIVE	SHEET NO. 16
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					SR 33	POLK	430185-1-22-01		





CURVE DATA CLSPCURVE2  
 PI STA. = 1469+24.14  
 DELTA = 52° 23' 15" (RT)  
 D = 1° 00' 17"  
 T = 2,805.25  
 L = 5,214.07  
 R = 5,702.58  
 PC STA. = 1441+18.89  
 PT STA. = 1493+32.96  
 e = 0.025

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**ENGINEER OF RECORD**  
 Mark D. Hales, PE  
 PE No. 62430  
 Inwood Consulting Engineers, Inc.  
 Certificate of Authorization No. 7074  
 3000 Dovera Drive, Suite 200, Oviedo, Florida 32765  
 P 407.971.8850

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 33	POLK	430185-1-22-01

**PLAN**  
**SAVE PAVT. ALTERNATIVE**

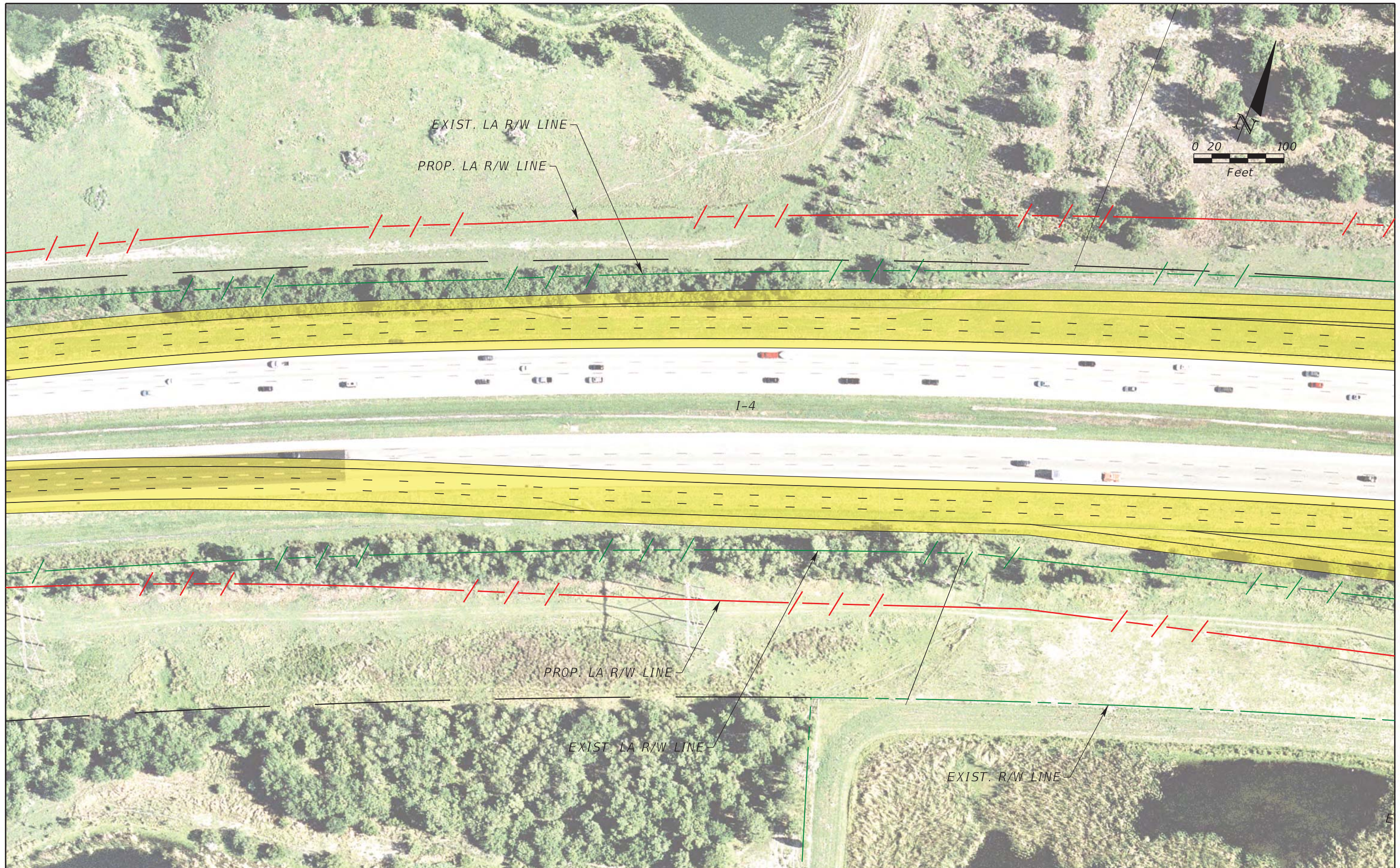
SHEET  
 NO.  
 17





REVISIONS				ENGINEER OF RECORD Mark D. Hales, PE PE No. 62430 Inwood Consulting Engineers, Inc. Certificate of Authorization No. 7074 3000 Dovera Drive, Suite 200, Oviedo, Florida 32765 P 407.971.8850	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			PLAN SAVE PAVT. ALTERNATIVE	SHEET NO. 18
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
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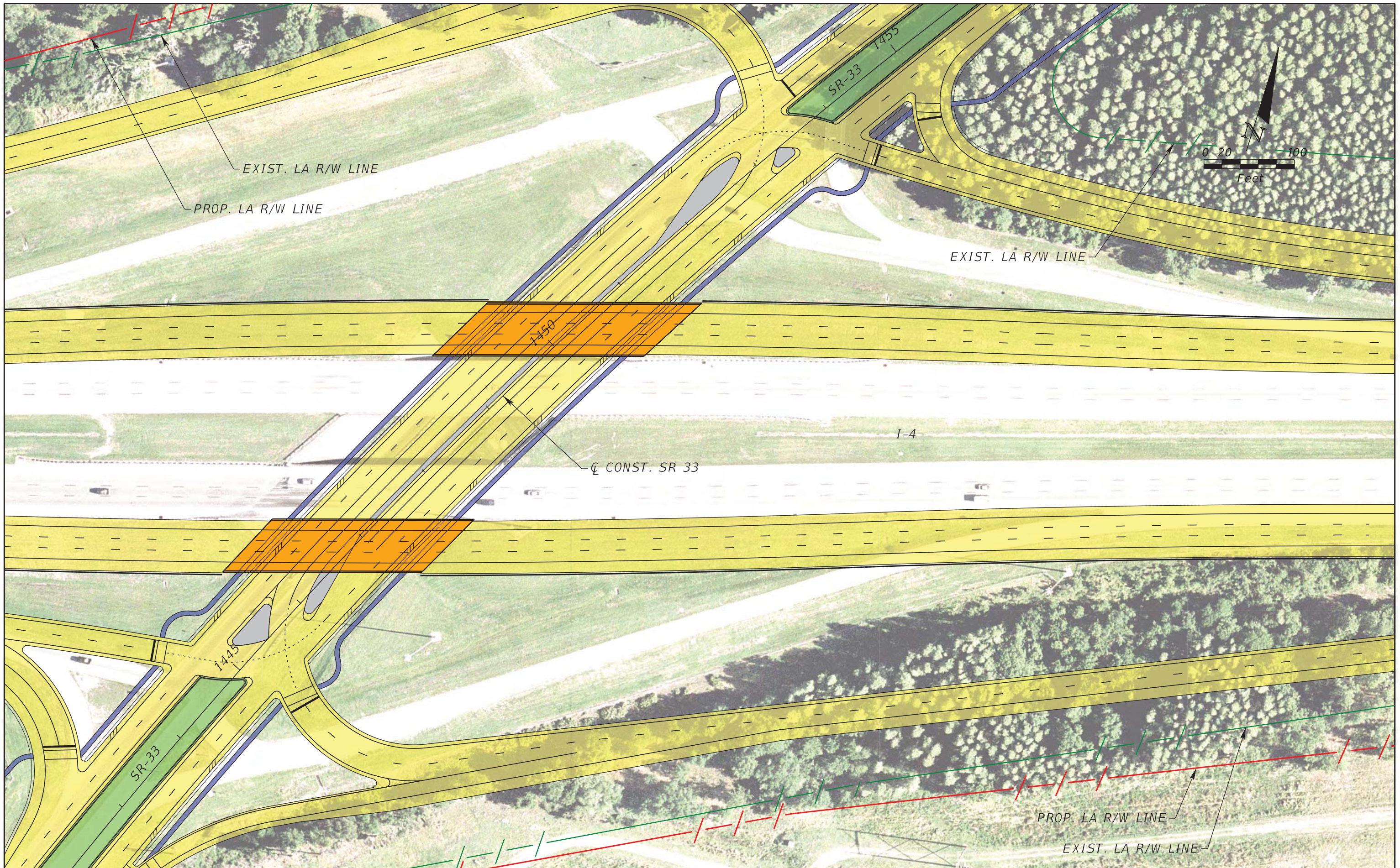
REVISIONS				ENGINEER OF RECORD Mark D. Hales, PE PE No. 62430 Inwood Consulting Engineers, Inc. Certificate of Authorization No. 7074 3000 Dovera Drive, Suite 200, Oviedo, Florida 32765 P 407.971.8850	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			PLAN SAVE. PAVT. ALTERNATIVE	SHEET NO. 19
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					33	POLK	430185-1-22-01		





REVISIONS		REVISIONS		ENGINEER OF RECORD Mark D. Hales, PE PE No. 62430 Inwood Consulting Engineers, Inc. Certificate of Authorization No. 7074 3000 Dovera Drive, Suite 200, Oviedo, Florida 32765 P 407.971.8850	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			PLAN SAVE PAVT. ALTERNATIVE	SHEET NO. 20
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					33	POLK	430185-1-22-01		

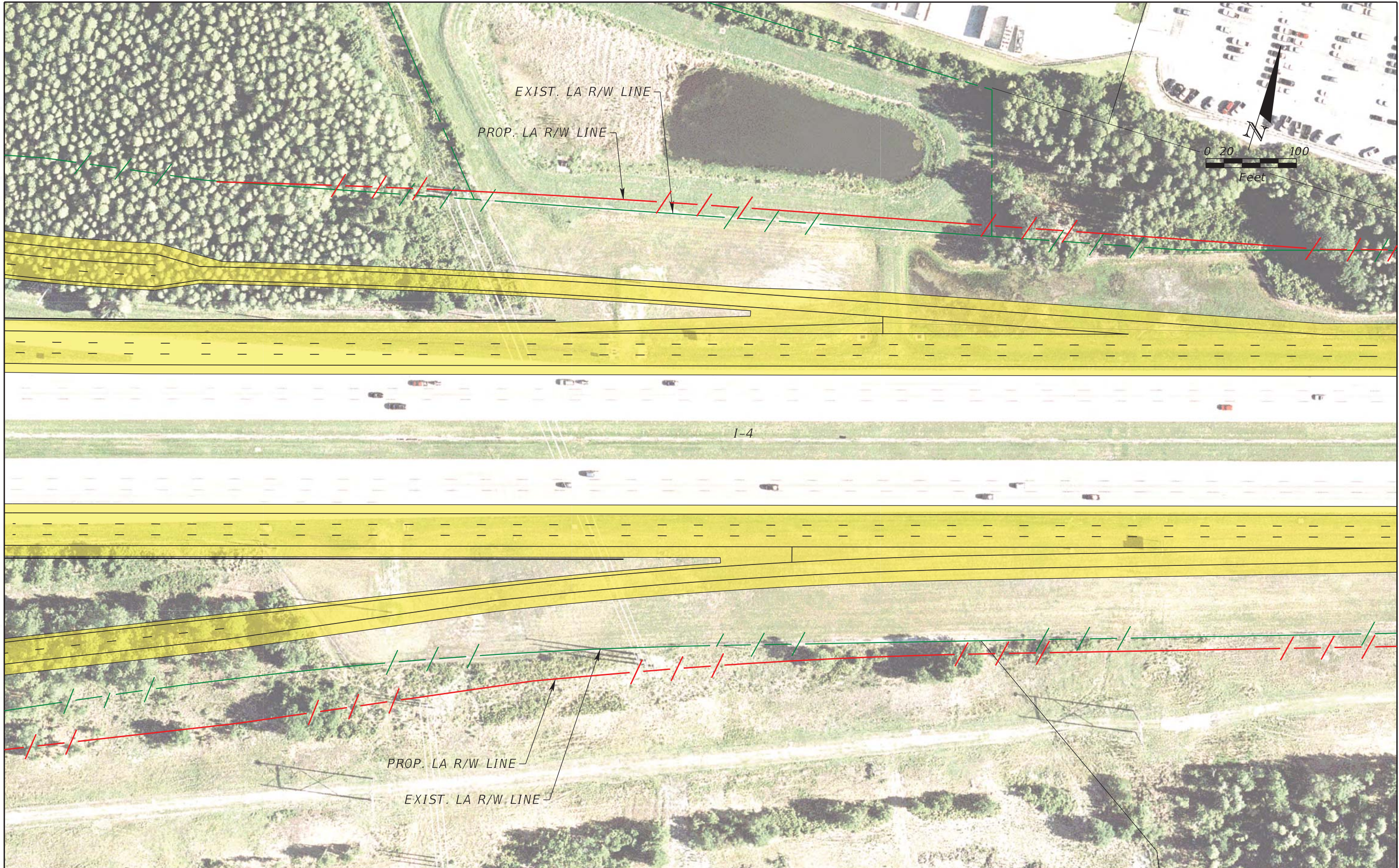




REVISIONS		ENGINEER OF RECORD		STATE OF FLORIDA			PLAN	SHEET NO.		
DATE	DESCRIPTION	DATE	DESCRIPTION	DEPARTMENT OF TRANSPORTATION						
				Mark D. Hales, PE PE No. 62430 Inwood Consulting Engineers, Inc. Certificate of Authorization No. 7074 3000 Dovera Drive, Suite 200, Oviedo, Florida 32765 P 407.971.8850			ROAD NO. 33	COUNTY POLK	FINANCIAL PROJECT ID 430185-1-22-01	21
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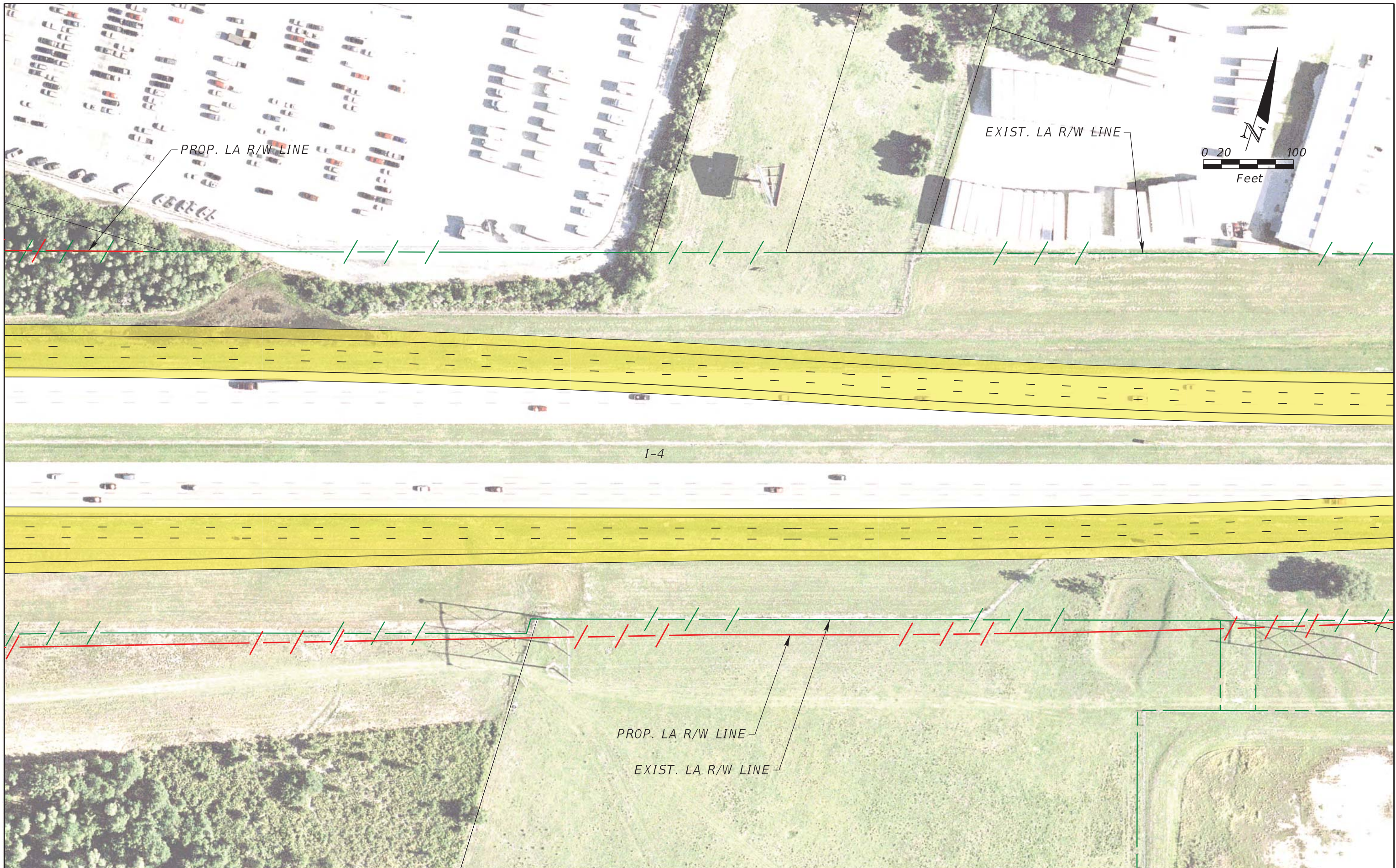
**PLAN**  
**SAVE PAVT. ALTERNATIVE**





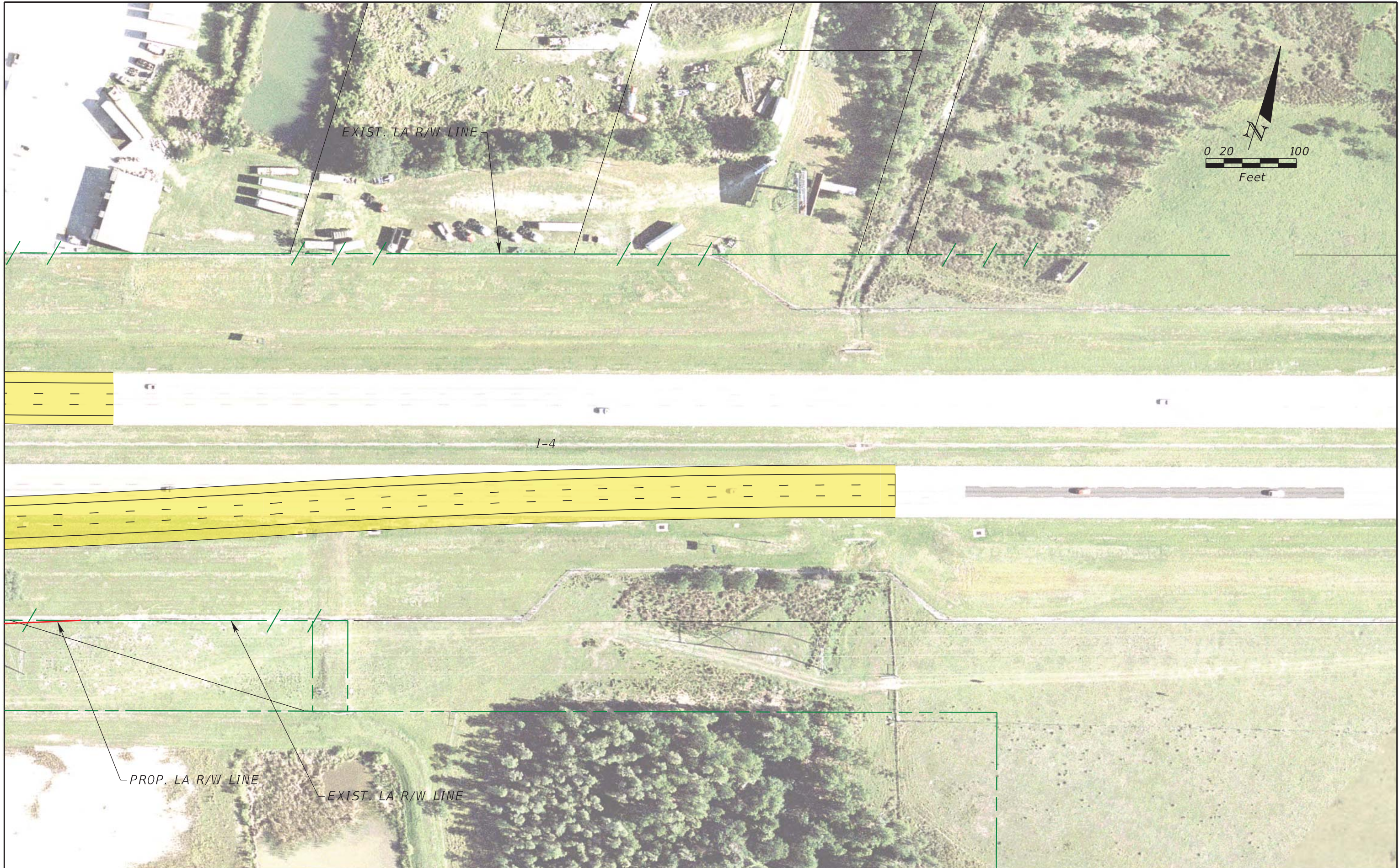
REVISIONS				ENGINEER OF RECORD Mark D. Hales, PE PE No. 62430 Inwood Consulting Engineers, Inc. Certificate of Authorization No. 7074 3000 Dovera Drive, Suite 200, Oviedo, Florida 32765 P 407.971.8850	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			PLAN SAVE PAVT. ALTERNATIVE	SHEET NO. 22
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					33	POLK	430185-1-22-01		





REVISIONS				ENGINEER OF RECORD Mark D. Hales, PE PE No. 62430 Inwood Consulting Engineers, Inc. Certificate of Authorization No. 7074 3000 Dovera Drive, Suite 200, Oviedo, Florida 32765 P 407.971.8850	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			PLAN SAVE PAVT. ALTERNATIVE	SHEET NO. 23
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					33	POLK	430185-1-22-01		





REVISIONS				ENGINEER OF RECORD Mark D. Hales, PE PE No. 62430 Inwood Consulting Engineers, Inc. Certificate of Authorization No. 7074 3000 Dovera Drive, Suite 200, Oviedo, Florida 32765 P 407.971.8850	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			PLAN SAVE PAVT. ALTERNATIVE	SHEET NO. 24
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
					33	POLK	430185-1-22-01		



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## APPENDIX B – TRAFFIC DATA



**TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT**  
**FDOT DISTRICT 1**


Federal Aid Number(s):	59-3216593
FPID Number(s):	430185-1-22-01
State/Federal Route No.:	SR 33
Road Name:	Lakeland Hills Blvd
Project Description:	PD&E Study - Old Combee Rd to North of Tomkow Rd
Segment Description:	Old Combee Rd to Lake Luther Rd
Section Number:	16070000
Mile Post To/From:	From MP 4.993 to MP 5.490

Existing Facility:		D =	<b>55.40%</b>	%
Year:	<b>2012</b>	T24 =	<b>13.00%</b>	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	<b>840</b>	Tpeak =	<b>5.00%</b>	% of Design Hour Volume
Demand Peak Hour Volume:	<b>409</b>	MT =	<b>1.75%</b>	% of Design Hour Volume
Posted Speed:	<b>45 mph</b>	HT =	<b>3.21%</b>	% of Design Hour Volume
		B =	<b>0.04%</b>	% of Design Hour Volume
		MC =	<b>0.80%</b>	% of Design Hour Volume

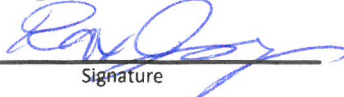
No Build Alternative (Design Year):		D =	<b>55.40%</b>	%
Year:	<b>2036</b>	T24 =	<b>13.00%</b>	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	<b>840</b>	Tpeak =	<b>5.00%</b>	% of Design Hour Volume
Demand Peak Hour Volume:	<b>1720</b>	MT =	<b>1.75%</b>	% of Design Hour Volume
Posted Speed:	<b>45 mph</b>	HT =	<b>3.21%</b>	% of Design Hour Volume
		B =	<b>0.04%</b>	% of Design Hour Volume
		MC =	<b>0.80%</b>	% of Design Hour Volume

Build Alternative (Design Year):		D =	<b>55.40%</b>	%
Year:	<b>2036</b>	T24 =	<b>13.00%</b>	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	<b>1910</b>	Tpeak =	<b>5.00%</b>	% of Design Hour Volume
Demand Peak Hour Volume:	<b>1720</b>	MT =	<b>1.75%</b>	% of Design Hour Volume
Posted Speed:	<b>50 mph</b>	HT =	<b>3.21%</b>	% of Design Hour Volume
		B =	<b>0.04%</b>	% of Design Hour Volume
		MC =	<b>0.80%</b>	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Gregory S. Root  Date: 1/14/14  
Print Name Signature

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

FDOT Reviewer: Rax Jung  Date: 1/32/14  
Print Name Signature

**TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT**  
**FDOT DISTRICT 1**

Federal Aid Number(s):	59-3216593
FPID Number(s):	430185-1-22-01
State/Federal Route No.:	SR 33
Road Name:	Lakeland Hills Blvd
Project Description:	PD&E Study - Old Combee Rd to North of Tomkow Rd
Segment Description:	Lake Luther Rd to N. Combee Rd (SR 659)
Section Number:	16070000
Mile Post To/From:	From MP 5.490 to MP 6.793

Existing Facility:		D =	<b>55.40%</b>	%
Year:	<b>2012</b>	T24 =	<b>13.00%</b>	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	<b>880</b>	Tpeak =	<b>5.00%</b>	% of Design Hour Volume
Demand Peak Hour Volume:	<b>294</b>	MT =	<b>1.75%</b>	% of Design Hour Volume
Posted Speed:	<b>55 mph</b>	HT =	<b>3.21%</b>	% of Design Hour Volume
		B =	<b>0.04%</b>	% of Design Hour Volume
		MC =	<b>0.80%</b>	% of Design Hour Volume

No Build Alternative (Design Year):		D =	<b>55.40%</b>	%
Year:	<b>2036</b>	T24 =	<b>13.00%</b>	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	<b>880</b>	Tpeak =	<b>5.00%</b>	% of Design Hour Volume
Demand Peak Hour Volume:	<b>1471</b>	MT =	<b>1.75%</b>	% of Design Hour Volume
Posted Speed:	<b>55 mph</b>	HT =	<b>3.21%</b>	% of Design Hour Volume
		B =	<b>0.04%</b>	% of Design Hour Volume
		MC =	<b>0.80%</b>	% of Design Hour Volume

Build Alternative (Design Year):		D =	<b>55.40%</b>	%
Year:	<b>2036</b>	T24 =	<b>13.00%</b>	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	<b>1910</b>	Tpeak =	<b>5.00%</b>	% of Design Hour Volume
Demand Peak Hour Volume:	<b>1471</b>	MT =	<b>1.75%</b>	% of Design Hour Volume
Posted Speed:	<b>50 mph</b>	HT =	<b>3.21%</b>	% of Design Hour Volume
		B =	<b>0.04%</b>	% of Design Hour Volume
		MC =	<b>0.80%</b>	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Gregory S. Root Gregory S. Root Date: 1/14/14  
Print Name Signature

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

FDOT Reviewer: Rax Jung Rax Jung Date: 1/22/14  
Print Name Signature



**TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT  
FDOT DISTRICT 1**

Federal Aid Number(s):	59-3216593
FPID Number(s):	430185-1-22-01
State/Federal Route No.:	SR 33
Road Name:	Lakeland Hills Blvd
Project Description:	PD&E Study - Old Combee Rd to North of Tomkow Rd
Segment Description:	N. Combee Rd to University Blvd
Section Number:	16070000
Mile Post To/From:	From MP 6.793 to MP 7.880

Existing Facility:		D =	<b>55.40%</b>	%
Year:	<b>2012</b>	T24 =	<b>13.00%</b>	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	<b>880</b>	Tpeak =	<b>7.00%</b>	% of Design Hour Volume
Demand Peak Hour Volume:	<b>496</b>	MT =	<b>2.46%</b>	% of Design Hour Volume
Posted Speed:	<b>60 mph</b>	HT =	<b>4.50%</b>	% of Design Hour Volume
		B =	<b>0.04%</b>	% of Design Hour Volume
		MC =	<b>0.80%</b>	% of Design Hour Volume

No Build Alternative (Design Year):		D =	<b>55.40%</b>	%
Year:	<b>2036</b>	T24 =	<b>13.00%</b>	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	<b>880</b>	Tpeak =	<b>7.00%</b>	% of Design Hour Volume
Demand Peak Hour Volume:	<b>1690</b>	MT =	<b>2.46%</b>	% of Design Hour Volume
Posted Speed:	<b>60 mph</b>	HT =	<b>4.50%</b>	% of Design Hour Volume
		B =	<b>0.04%</b>	% of Design Hour Volume
		MC =	<b>0.80%</b>	% of Design Hour Volume

Build Alternative (Design Year):		D =	<b>55.40%</b>	%
Year:	<b>2036</b>	T24 =	<b>13.00%</b>	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	<b>1910</b>	Tpeak =	<b>7.00%</b>	% of Design Hour Volume
Demand Peak Hour Volume:	<b>1690</b>	MT =	<b>2.46%</b>	% of Design Hour Volume
Posted Speed:	<b>50 mph</b>	HT =	<b>4.50%</b>	% of Design Hour Volume
		B =	<b>0.04%</b>	% of Design Hour Volume
		MC =	<b>0.80%</b>	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Gregory S. Root Gregory S. Root Date: 1/14/14  
Print Name Signature

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

FDOT Reviewer: Rax Jung Rax Jung Date: 1/15/14  
Print Name Signature

**TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT  
FDOT DISTRICT 1**

Federal Aid Number(s):	59-3216593
FPID Number(s):	430185-1-22-01
State/Federal Route No.:	SR 33
Road Name:	Lakeland Hills Blvd
Project Description:	PD&E Study - Old Combee Rd to North of Tomkow Rd
Segment Description:	University Blvd to EB I-4 On-/Off-Ramps
Section Number:	16070000
Mile Post To/From:	From MP 7.880 to MP 8.359

Existing Facility:		D =	<b>55.40%</b>	%
Year:	<b>2012</b>	T24 =	<b>13.00%</b>	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	<b>880</b>	Tpeak =	<b>7.00%</b>	% of Design Hour Volume
Demand Peak Hour Volume:	<b>524</b>	MT =	<b>2.46%</b>	% of Design Hour Volume
Posted Speed:	<b>60 mph</b>	HT =	<b>4.50%</b>	% of Design Hour Volume
		B =	<b>0.04%</b>	% of Design Hour Volume
		MC =	<b>0.80%</b>	% of Design Hour Volume

No Build Alternative (Design Year):		D =	<b>55.40%</b>	%
Year:	<b>2036</b>	T24 =	<b>13.00%</b>	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	<b>880</b>	Tpeak =	<b>7.00%</b>	% of Design Hour Volume
Demand Peak Hour Volume:	<b>1471</b>	MT =	<b>2.46%</b>	% of Design Hour Volume
Posted Speed:	<b>60 mph</b>	HT =	<b>4.50%</b>	% of Design Hour Volume
		B =	<b>0.04%</b>	% of Design Hour Volume
		MC =	<b>0.80%</b>	% of Design Hour Volume

Build Alternative (Design Year):		D =	<b>55.40%</b>	%
Year:	<b>2036</b>	T24 =	<b>13.00%</b>	% of 24 Hour Volume
LOS C Peak Hour Directional Volume:	<b>1910</b>	Tpeak =	<b>7.00%</b>	% of Design Hour Volume
Demand Peak Hour Volume:	<b>1471</b>	MT =	<b>2.46%</b>	% of Design Hour Volume
Posted Speed:	<b>50 mph</b>	HT =	<b>4.50%</b>	% of Design Hour Volume
		B =	<b>0.04%</b>	% of Design Hour Volume
		MC =	<b>0.80%</b>	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Gregory S. Root Gregory S. Root Date: 1/14/14  
Print Name Signature

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

FDOT Reviewer: Rex Jung Rex Jung Date: 1/22/14  
Print Name Signature



**TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT**  
**FDOT DISTRICT 1**

Federal Aid Number(s):	59-3216593
FPID Number(s):	430185-1-22-01
State/Federal Route No.:	SR 33
Road Name:	Lakeland Hills Blvd
Project Description:	PD&E Study - Old Combee Rd to North of Tomkow Rd
Segment Description:	EB I-4 On-/Off-Ramps to WB I-4 On-/Off-Ramps
Section Number:	16070000
Mile Post To/From:	From MP 8.359 to MP 8.513

<b>Existing Facility:</b>		D =	<b>55.40%</b>	%
		T24 =	<b>13.00%</b>	% of 24 Hour Volume
<b>Year:</b>	<b>2012</b>	Tpeak =	<b>7.00%</b>	% of Design Hour Volume
		MT =	<b>2.46%</b>	% of Design Hour Volume
<b>LOS C Peak Hour Directional Volume:</b>	<b>880</b>	HT =	<b>4.50%</b>	% of Design Hour Volume
<b>Demand Peak Hour Volume:</b>	<b>588</b>	B =	<b>0.04%</b>	% of Design Hour Volume
<b>Posted Speed:</b>	<b>60 mph</b>	MC =	<b>0.80%</b>	% of Design Hour Volume

<b>No Build Alternative (Design Year):</b>		D =	<b>55.40%</b>	%
		T24 =	<b>13.00%</b>	% of 24 Hour Volume
<b>Year:</b>	<b>2036</b>	Tpeak =	<b>7.00%</b>	% of Design Hour Volume
		MT =	<b>2.46%</b>	% of Design Hour Volume
<b>LOS C Peak Hour Directional Volume:</b>	<b>880</b>	HT =	<b>4.50%</b>	% of Design Hour Volume
<b>Demand Peak Hour Volume:</b>	<b>1361</b>	B =	<b>0.04%</b>	% of Design Hour Volume
<b>Posted Speed:</b>	<b>60 mph</b>	MC =	<b>0.80%</b>	% of Design Hour Volume

<b>Build Alternative (Design Year):</b>		D =	<b>55.40%</b>	%
		T24 =	<b>13.00%</b>	% of 24 Hour Volume
<b>Year:</b>	<b>2036</b>	Tpeak =	<b>7.00%</b>	% of Design Hour Volume
		MT =	<b>2.46%</b>	% of Design Hour Volume
<b>LOS C Peak Hour Directional Volume:</b>	<b>1910</b>	HT =	<b>4.50%</b>	% of Design Hour Volume
<b>Demand Peak Hour Volume:</b>	<b>1361</b>	B =	<b>0.04%</b>	% of Design Hour Volume
<b>Posted Speed:</b>	<b>50 mph</b>	MC =	<b>0.80%</b>	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Gregory S. Root Gregory S. Root Date: 1/14/14  
Print Name Signature

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

FDOT Reviewer: Rax Jung Rax Jung Date: 1/15/14  
Print Name Signature

**TRAFFIC DATA FOR NOISE STUDIES - SUMMARY OUTPUT**  
**FDOT DISTRICT 1**

Federal Aid Number(s):	59-3216593
FPID Number(s):	430185-1-22-01
State/Federal Route No.:	SR 33
Road Name:	Lakeland Hills Blvd
Project Description:	PD&E Study - Old Combee Rd to North of Tomkow Rd
Segment Description:	WB I-4 On-/Off-Ramps to Tomkow Rd
Section Number:	16070000
Mile Post To/From:	From MP 8.513 to MP 8.714

<b>Existing Facility:</b>		D =	<b>55.40%</b>	%
<b>Year:</b>	<b>2012</b>	T24 =	<b>13.00%</b>	% of 24 Hour Volume
<b>LOS C Peak Hour Directional Volume:</b>	<b>880</b>	Tpeak =	<b>7.00%</b>	% of Design Hour Volume
<b>Demand Peak Hour Volume:</b>	<b>618</b>	MT =	<b>2.46%</b>	% of Design Hour Volume
<b>Posted Speed:</b>	<b>60 mph</b>	HT =	<b>4.50%</b>	% of Design Hour Volume
		B =	<b>0.04%</b>	% of Design Hour Volume
		MC =	<b>0.80%</b>	% of Design Hour Volume

<b>No Build Alternative (Design Year):</b>		D =	<b>55.40%</b>	%
<b>Year:</b>	<b>2036</b>	T24 =	<b>13.00%</b>	% of 24 Hour Volume
<b>LOS C Peak Hour Directional Volume:</b>	<b>880</b>	Tpeak =	<b>7.00%</b>	% of Design Hour Volume
<b>Demand Peak Hour Volume:</b>	<b>1127</b>	MT =	<b>2.46%</b>	% of Design Hour Volume
<b>Posted Speed:</b>	<b>60 mph</b>	HT =	<b>4.50%</b>	% of Design Hour Volume
		B =	<b>0.04%</b>	% of Design Hour Volume
		MC =	<b>0.80%</b>	% of Design Hour Volume

<b>Build Alternative (Design Year):</b>		D =	<b>55.40%</b>	%
<b>Year:</b>	<b>2036</b>	T24 =	<b>13.00%</b>	% of 24 Hour Volume
<b>LOS C Peak Hour Directional Volume:</b>	<b>1910</b>	Tpeak =	<b>7.00%</b>	% of Design Hour Volume
<b>Demand Peak Hour Volume:</b>	<b>1127</b>	MT =	<b>2.46%</b>	% of Design Hour Volume
<b>Posted Speed:</b>	<b>50 mph</b>	HT =	<b>4.50%</b>	% of Design Hour Volume
		B =	<b>0.04%</b>	% of Design Hour Volume
		MC =	<b>0.80%</b>	% of Design Hour Volume

I certify that the above information is accurate and appropriate for use with the traffic noise analysis.

Prepared By: Gregory S. Root Gregory S. Root Date: 1/14/14  
Print Name Signature

I have reviewed and concur that the above information is appropriate for use with the traffic noise analysis.

FDOT Reviewer: Rex Jung Rex Jung Date: 1/22/14  
Print Name Signature



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## APPENDIX C – VALIDATION DOCUMENTATION

NOISE MEASUREMENT DATA SHEET

Measurements Taken By: Wayne Arner, Paola Pringle, & Lindsay Baumaister Date: 6/13/13  
 Time Study Started: 10:15 AM Time Study Ended: 11:00 PM

Project Identification:

Financial Project ID: 430185 1 22 0  
 Project Location: SR 33 PD&E – Old Combee Rd to E of Tomkow Rd  
Lakeland, Polk County, FL  
 Site Identification: Site 1 – SR 33 at Sunset Way South

Weather Conditions:

Sky: Clear X Partly Cloudy      Cloudy      Other       
 Temperature 83F Wind Speed 1 mph Wind Direction NW Humidity 88%

Equipment:

Sound Level Meter:

Type: Larson Davis 831 Serial Number(s): 1285  
 Did you check the battery? Yes X No       
 Calibration Readings: Start 113.98 End 114.07  
 Response Settings: Fast      Slow X  
 Weighting: A X Other     

Calibrator:

Type: Larson Davis CAL 200 Serial Number: 5592  
 Did you check the battery? Yes X No     

TRAFFIC DATA

Roadway Identification	SR 33 Westbound		SR 33 Eastbound	
Vehicle Type	Volume	Speed (mph)	Volume	Speed (mph)
Autos	240-216-240	45-49-49	162-138-228	45-49-43
Medium Trucks	12-18-0	46-41-0	1-6-6	46-45-47
Heavy Trucks	12-0-0	50-0-0	6-0-18	0-0-44
Buses	0-0-0	0-0-0	0-0-0	0-0-0
Motorcycles	0-6-0	0-0-0	0-0-0	0-0-0
Duration	Three 10-minute sample periods		Three 10-minute sample periods	
Note: Because traffic counts and speeds are collected manually, vehicle speeds may not have been obtained for all vehicle types.				

RESULTS [dB(A)]

LEQ 61.7/59.4/60.9 Lmax 100.9/95.2/97.1

Background Noise: Birds chirping, cicadas

Major Sources: SR 33 Unusual Events: Truck backup alarm, lawn mower, dog barking, helicopter



NOISE MEASUREMENT DATA SHEET

Measurements Taken By: Wayne Arner, Paola Pringle, & Lindsay Baumaister Date: 6/13/13  
 Time Study Started: 11:15 AM Time Study Ended: 11:58 PM

Project Identification:

Financial Project ID: 430185 1 22 0  
 Project Location: SR 33 PD&E – Old Combee Rd to E of Tomkow Rd  
Lakeland, Polk County, FL  
 Site Identification: Site 2 – SR 33 at Spanish Oaks

Weather Conditions:

Sky: Clear X Partly Cloudy      Cloudy      Other       
 Temperature 93F Wind Speed 3 mph Wind Direction WNW Humidity 52%

Equipment:

Sound Level Meter:

Type: Larson Davis 831 Serial Number(s): 1285  
 Did you check the battery? Yes X No       
 Calibration Readings: Start 114.13 End 114.22  
 Response Settings: Fast      Slow X  
 Weighting: A X Other     

Calibrator:

Type: Larson Davis CAL 200 Serial Number: 5592  
 Did you check the battery? Yes X No     

TRAFFIC DATA

Roadway Identification	SR 33 Westbound		SR 33 Eastbound	
Vehicle Type	Volume	Speed (mph)	Volume	Speed (mph)
Autos	180-222-174	51-48-52	120-198-156	52-49-53
Medium Trucks	12-0-6	44-0-45	0-6-0	0-24-0
Heavy Trucks	0-6-0	0-53-0	6-0-6	40-0-52
Buses	0-0-0	0-0-0	0-0-0	0-0-0
Motorcycles	0-6-0	0-0-0	0-6-0	0-0-0
Duration	Three 10-minute sample periods		Three 10-minute sample periods	
Note: Because traffic counts and speeds are collected manually, vehicle speeds may not have been obtained for all vehicle types.				

RESULTS [dB(A)]

LEQ 57.0/58.4/55.1 Lmax 89.1/98.7/97.3

Background Noise: Birds chirping, cicadas

Major Sources: SR 33

Unusual Events: Some activity on Shadow Ln, garbage truck leaving Spanish Oaks, siren nearby

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## **APPENDIX D – POLK COUNTY LAND DEVELOPMENT CODE**



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**POLK COUNTY, FL  
LAND DEVELOPMENT CODE  
CHAPTER 7 SITE DEVELOPMENT STANDARDS**

**Section 720 Landscaping and Buffering (Rev. 3/18/09 – Ord. 09-006; 12/04/03 Ord. 03-82; Rev. 06/08/04 Ord. 04-09;)**

***A. Purpose and Intent (Rev. 3/18/09 – Ord. 09-006)***

*Landscaping and buffering serves to benefit many functions of new development as well as to enhance the value of existing development. Landscaping reduces the drift of noise, airborne sediments, provides erosion control, mitigates the effects of heat islands and light pollution as well as promotes a successful economic perception by enhancing the visual quality and aesthetics of a community. The intent of this section is also to establish guidelines for landscape design, promote appropriate plant selection and maintenance, promote water conservation measures intended to reduce the need for supplemental irrigation beyond natural rainfall, and establish guidelines for mitigating potential conflicts between different land uses.*