DRAFT
STATE ENVIRONMENTAL IMPACT REPORT

PROJECT DEVELOPMENT AND ENVIRONMENT STUDY
STATE ROAD 60 GRADE SEPARATION OVER CSX RAILROAD
Polk County, Florida

Financial Project ID: 436559-1-22-01

Prepared for:

Florida Department of Transportation
District One
801 North Broadway Avenue
Bartow, Florida 33831

October 2016

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801 North Broadway Avenue
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Prepared by:

Atkins North America
600 North Broadway Avenue
Suite 310
Bartow, Florida 33830

October 2016

Florida Department of Transportation
STATE ENVIRONMENTAL IMPACT REPORT

1. GENERAL INFORMATION

Project Name: State Road (SR) 60 Grade Separation over CSX Railroad
Project Development and Environment Study

Project Limits: 3,900 feet west of CSX Railroad crossing #625419N to 2,700 feet east of CSX Railroad crossing #625419N (1.25 mile)

County: Polk

ETDM Project Number: None

Financial Project ID: 436559-1-22-01

2. PROJECT DESCRIPTION

A. EXISTING

The Florida Department of Transportation (FDOT) is conducting a Project Development and Environment (PD&E) study to evaluate costs and impacts of constructing a new overpass to carry State Road (SR) 60 over the CSX Railroad (milepost 25.544, crossing #625419N) approximately eleven (11) miles east of Bartow and four (4) miles west of Lake Wales in Polk County, Florida. The project location map (**Figure 1**) illustrates the location and limits of the study. The Design and permitting phase is overlapping with the PD&E phase to facilitate a quicker delivery process.

The PD&E study limits are SR 60 from 3,900 feet (ft) west of CSX Railroad crossing #625419N to 2,700 ft east of CSX Railroad crossing #625419N, a distance of 6,600 ft (1.25 miles). The project is located within Section 01, Township 30 South, Range 26 East, and Section 6, Township 30 South, Range 27 East, within the Eloise United States Geological Survey (USGS) 7.5-minute (1:24,000) quad map and the USGS "Fort Pierce" 1 x 2 degree (1:250,000) topographic map.

SR 60 is a four-lane divided rural roadway within the study area as shown in **Figure 2**. Two 12-ft lanes, an 8-ft inside shoulder and a 10-ft outside shoulder (5-ft paved) are provided in each direction, separated by a 40-ft depressed, grassed median. SR 60 is carried over the Peace Creek Drainage Canal on two bridges; eastbound (EB) bridge number 160133 and westbound (WB) bridge number 160045 (**Figure 3**). Exclusive right turn lanes are provided at the median openings serving C&J Trucking, Peterson Industries and the former International Paper property. No sidewalks are present. Bicyclists are accommodated on the 5-ft paved outside shoulders. The existing westbound roadway is crowned in the center, whereas the eastbound roadway slopes to the outside. The typical existing controlled access right-of-way (ROW) width varies, typically 182 ft wide; however, some wider areas exist throughout the study area, up to 232 ft wide. In the existing

Figure 1: Project Location Map

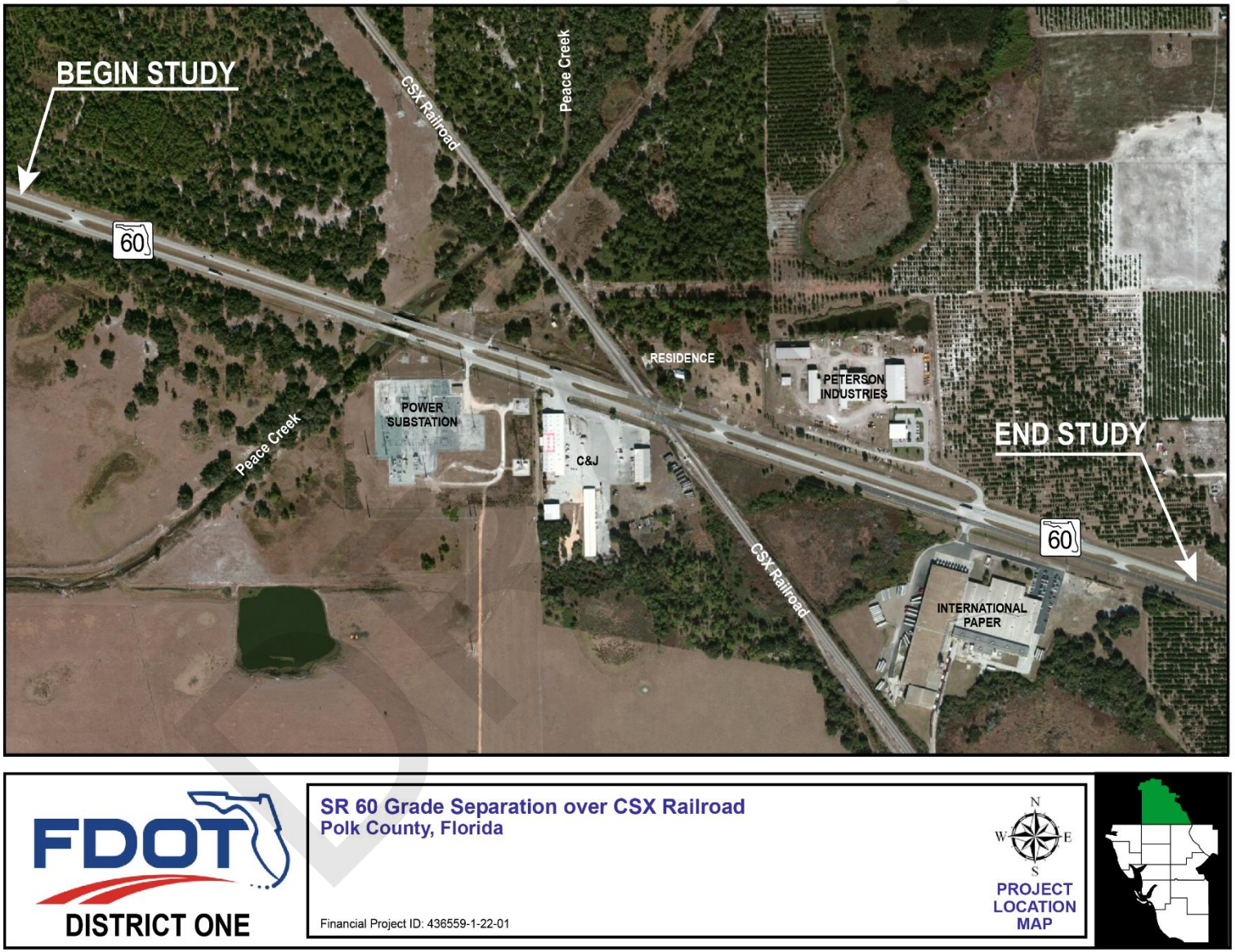
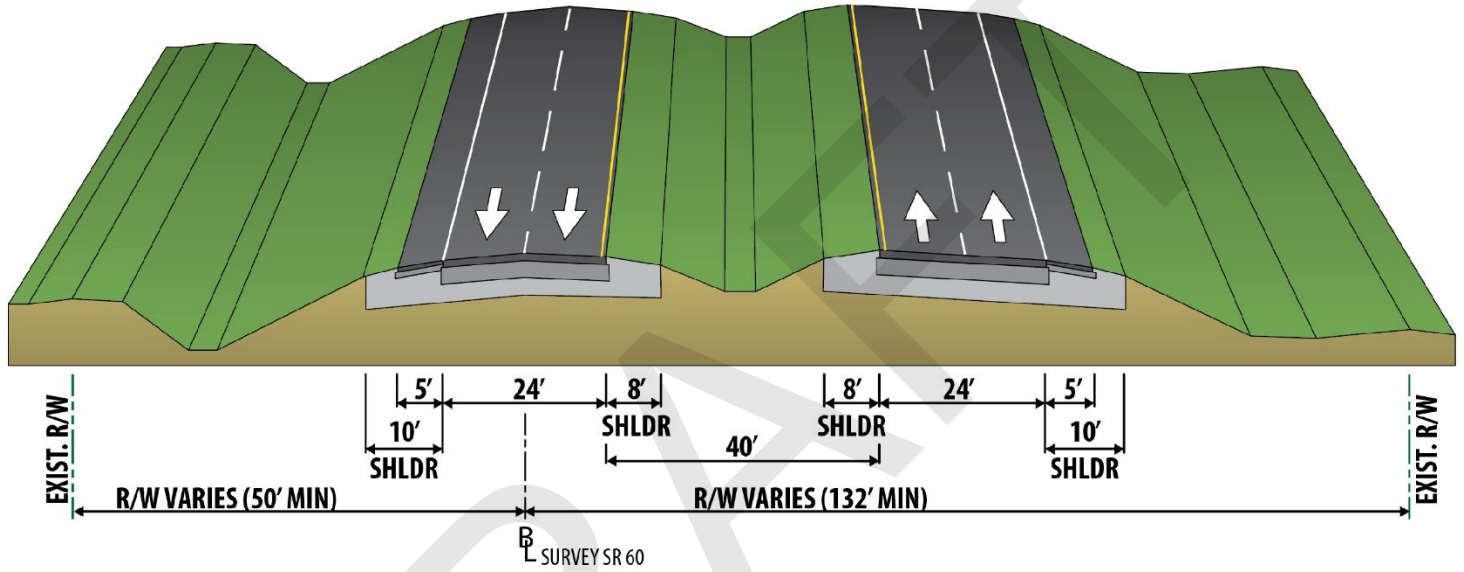


Figure 2: Existing SR 60 Mainline Roadway Typical Section



FDOT
DISTRICT ONE

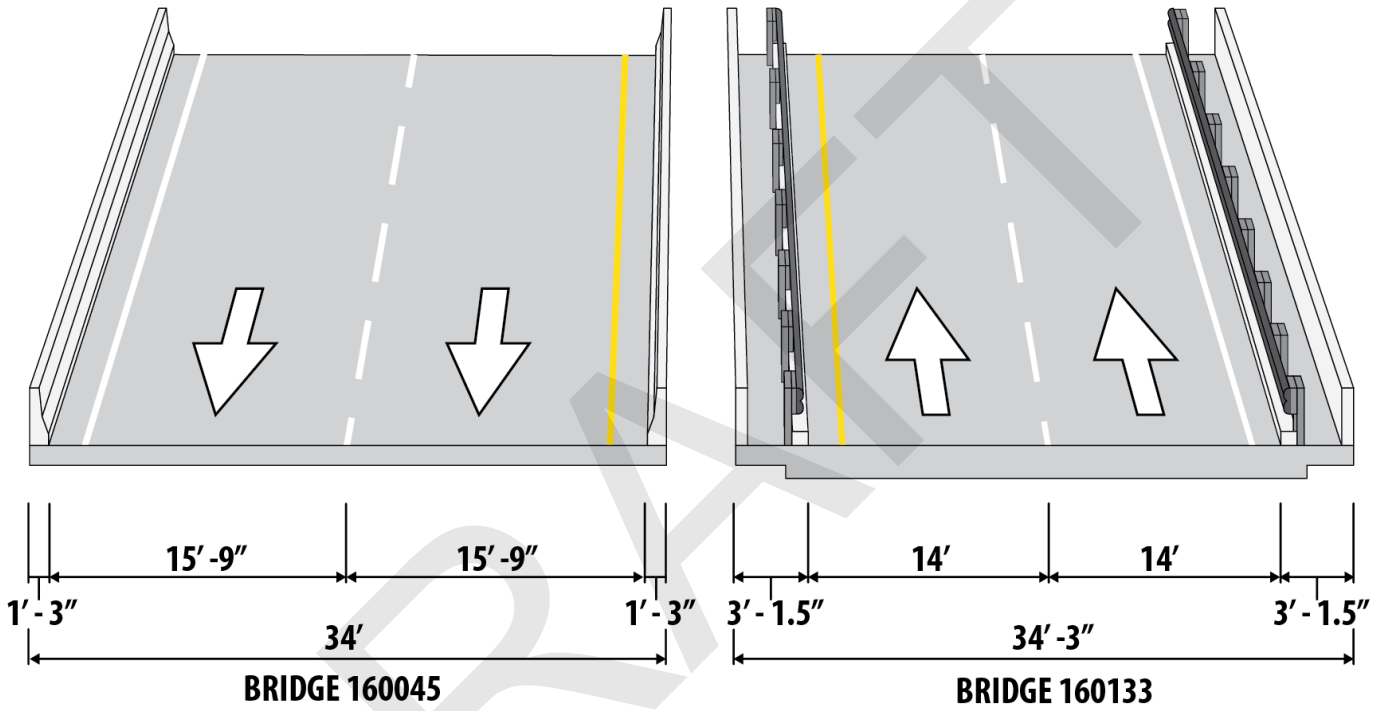
SR 60 Grade Seperation over CSX Railroad
Polk County, Florida

Financial Project ID's: 436559-1-22-01

N
W
E
S

Exisitng Typical Section

Figure 3: Existing Roadway Typical Section for the WB and EB bridges over the Peace Creek Drainage Canal

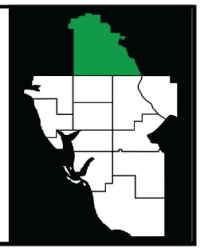


FDOT
DISTRICT ONE

SR 60 Grade Separation over CSX Railroad
Polk County, Florida

Financial Project ID: 436559-1-22-01

Existing Bridge Typical Section



condition, the stormwater runoff from the roadway sheet flows offsite and into roadside ditches to the Peace Creek Drainage Canal.

SR 60 is part of the State Highway System (SHS) and Strategic Intermodal System (SIS) and has a Functional Classification of Rural Principal Arterial - Other. There are no grade separations along the project. The facility's access management classification is Access Class 3, Restrictive. In addition, the entire length of SR 60 within Polk County has been designated as a hurricane evacuation route by the Florida State Emergency Response Team (SERT), and is identified as an evacuation route in the Polk County Comprehensive Plan. Existing land uses in the project area consist of transportation (highway and railroad right-of-way/ROW), agricultural (passive and active); vacant (residential and non-residential), public/semi-public utility ROW, light commercial, light industrial and limited single-family residential. There are no connecting roads within the project area, but access to SR 60 from adjacent properties is currently provided by driveway connections.

B. PURPOSE AND NEED

The purpose of the project is to replace the existing SR 60 at-grade railroad crossing with a grade separation. The need for the project is not based on the need for additional capacity. It is based on improving safety; to provide a grade separation of the railroad crossing to separate vehicle traffic from the train traffic. The project will also reduce travel delays by removing the need to stop traffic for trains. The purpose of the PD&E study is to provide documented environmental and engineering analyses to assist the FDOT in reaching a decision on the location and conceptual design of the new railroad overpass and associated improvements in order to accommodate future traffic demand in a safe and efficient manner. This PD&E study satisfies the FDOT requirements and follows the process outlined in the FDOT *Project Development and Environment Manual, Part 1 Chapter 10: State, Local, or Privately Funded Projects.*

This PD&E study documents the need for the improvements and presents the procedures utilized to develop and evaluate the overpass concept. Information relating to the engineering, environmental, and social characteristics essential for development of the railroad overpass concept was collected. Design criteria were established and a preliminary alternative was developed. The evaluation of the overpass concept was based on a variety of parameters utilizing a matrix format. This process identifies the Recommended Alternative that minimizes the socio-cultural, economic, natural, and physical impacts while providing the necessary future transportation improvements. The study also solicits input from the community and users of the facility. The design year for the analysis is 2040.

C. PROPOSED IMPROVEMENTS

The project is a 1.25-mile-long segment of SR 60 that includes elevating the SR 60 roadway over the existing CSX railroad at-grade crossing. The roadway will be elevated using permanent retaining walls (i.e. MSE walls). Three new pairs of SR 60 bridge structures are proposed over the

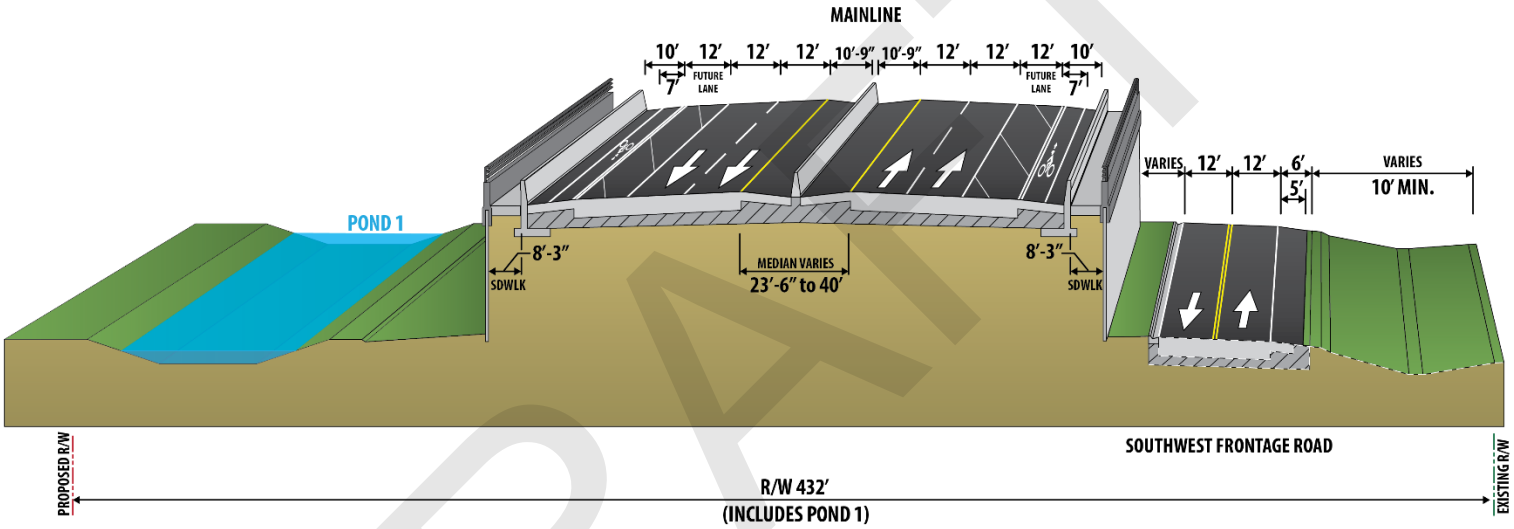
existing CSX railroad, over an existing underground petroleum pipeline, over a proposed frontage road, and over the Peace Creek Drainage Canal. The existing eastbound SR 60 bridge over the Peace Creek Drainage Canal will be rehabilitated and reused for frontage road access and the westbound bridge will be removed. Sidewalks, bicycle lanes, and three new frontage roads will be included in the improvements. Two off-site stormwater management facilities (SMFs) are proposed.

The proposed SR 60 typical section is a four-lane divided rural roadway with a 23.5-ft median that varies from 23.5 ft to 40 ft, which includes two 10-ft 9-inch paved inside shoulders and a center barrier wall. Two 12-ft travel lanes, 12-ft of additional pavement for a future lane, and a 10-ft flush outside paved shoulders are provided in each direction. Bicyclists will be accommodated on 7-ft buffered bike lanes within the outside 10-ft paved shoulder in each direction. An 8-ft 3-inch sidewalk, barrier-separated from the shoulder, is also provided in each direction. The travel lanes are on embankment with mechanically stabilized earth (MSE) walls approaching the bridges over the railroad. The proposed design speed for this typical section is 70 mph. A frontage road is required on the south side, west of the railroad tracks, which will utilize the existing eastbound roadway pavement. Another frontage road is required on the north side, east of the railroad tracks, which will utilize new pavement. A driveway is provided on the north side to provide access to adjacent parcels, as shown in the Concept Plans. ROW acquisition will be required to accommodate the driveways. These typical sections require between 267 ft and 432 ft of ROW, with ROW being acquired on both sides of SR 60 (predominantly on the north side). The proposed typical sections for the Recommended Alternative are shown in **Figures 3a-3d.** The proposed improvements will require a total of 6.0 acres of new ROW along the SR 60 mainline.

Two off-site stormwater management facilities (ponds) are needed. Pond 1, on the north side of SR 60 west of the Peace Creek Drainage Canal, will require approximately 2.93 acres of new ROW that will be obtained via a land swap with a private land owner for comparable acreage of land owned by FDOT (a former borrow pit). Pond 3 is approximately 3.79 acres on the north side of SR 60 east of the CSX railroad and will not require ROW acquisition as it is located on a parcel already owned by FDOT. A minor amount (0.03 acre) of drainage easements will be needed for pond inflow/ outfall facilities and maintenance ingress/egress to the ponds. The project will affect eleven (11) parcels, but will not require any business or residential relocations.

Three new pairs of SR 60 bridge structures are proposed over the existing CSX railroad, over an existing underground petroleum pipeline, over a proposed frontage road, and over the Peace Creek Drainage Canal. The existing eastbound SR 60 bridge over the Peace Creek Drainage Canal will be rehabilitated and reused for frontage road access and the westbound bridge will be removed. While the purpose and need for this project is not to add capacity, an ultimate six-lane facility for the bridge structures was evaluated in order to accommodate future widening along SR 60, eliminate the future need to reconstruct the bridges and minimize the potential for multiple ROW acquisitions from the same property owners. A graphic providing an overview of the proposed improvements is provided as **Figure 4**.

Figure 3a: Proposed Roadway Typical Section West of the Peace Creek Drainage Canal



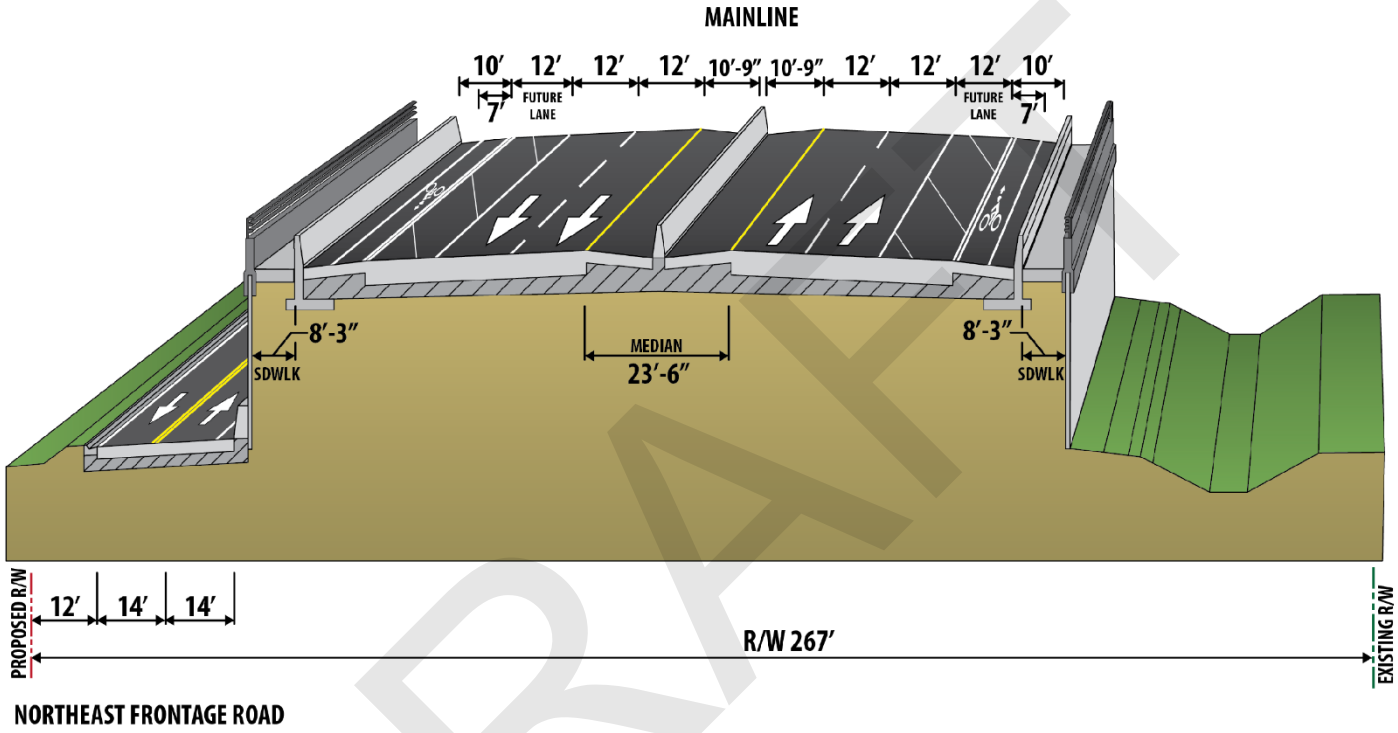
FDOT DISTRICT ONE

SR 60 Grade Separation over CSX Railroad
Polk County, Florida

Financial Project ID: 436559-1-22-01

Proposed Typical Section

Figure 3b: Proposed Roadway Typical Section East of the CSX Railroad



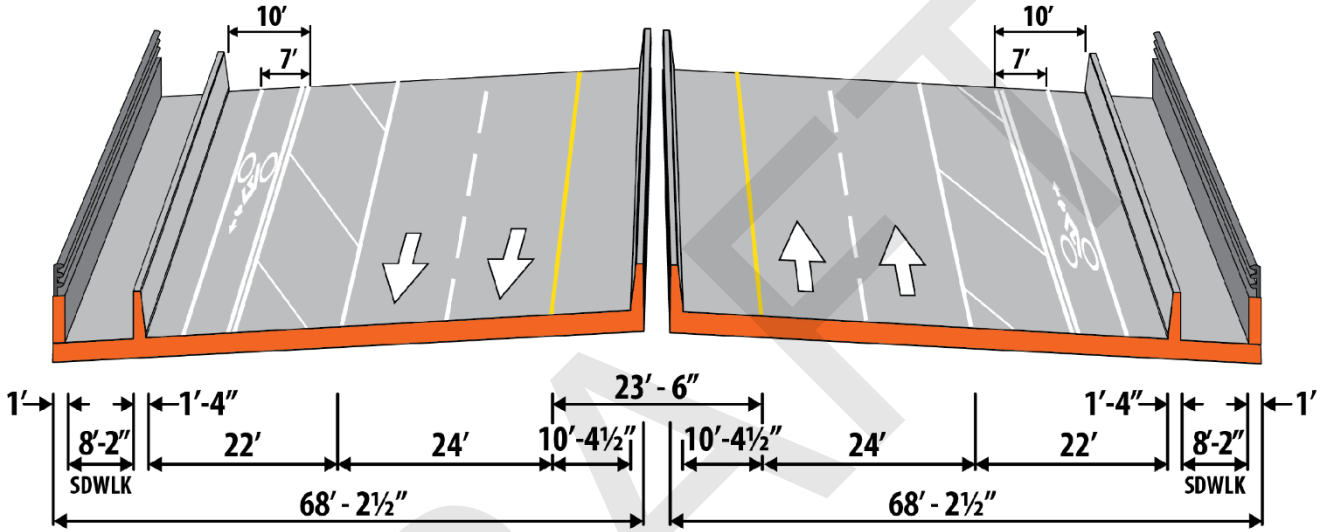
FDOT DISTRICT ONE

SR 60 Grade Separation over CSX Railroad
Polk County, Florida

Financial Project ID: 436559-1-22-01

Proposed Typical Section

Figure 3c: Proposed SR 60 Bridge Typical Section



FDOT DISTRICT ONE

SR 60 Grade Separation over CSX Railroad
Polk County, Florida

Financial Project ID: 436559-1-22-01

Proposed Bridge Typical Section

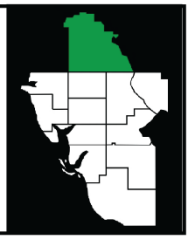


Figure 3d: Frontage Road Bridge Typical Sections

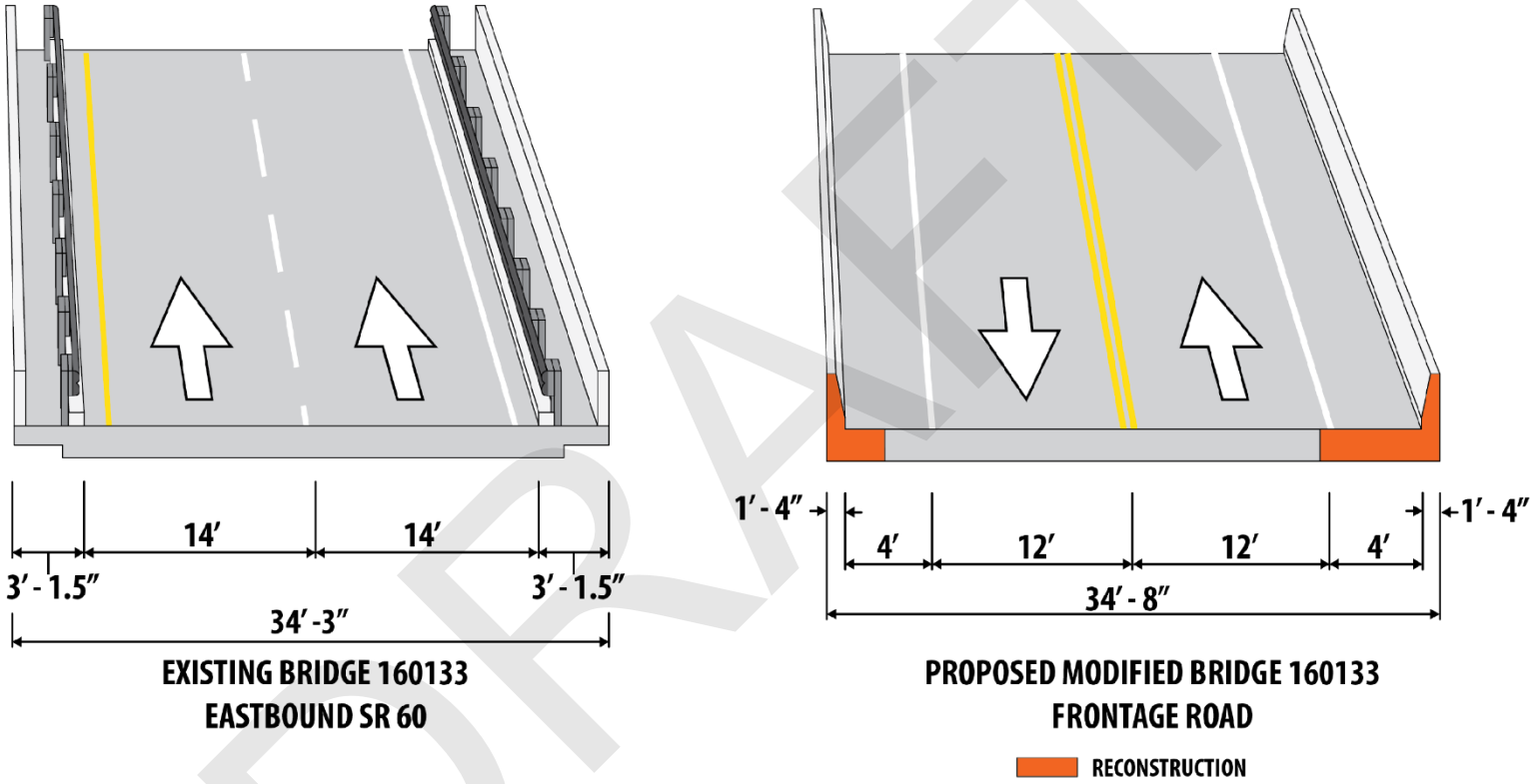
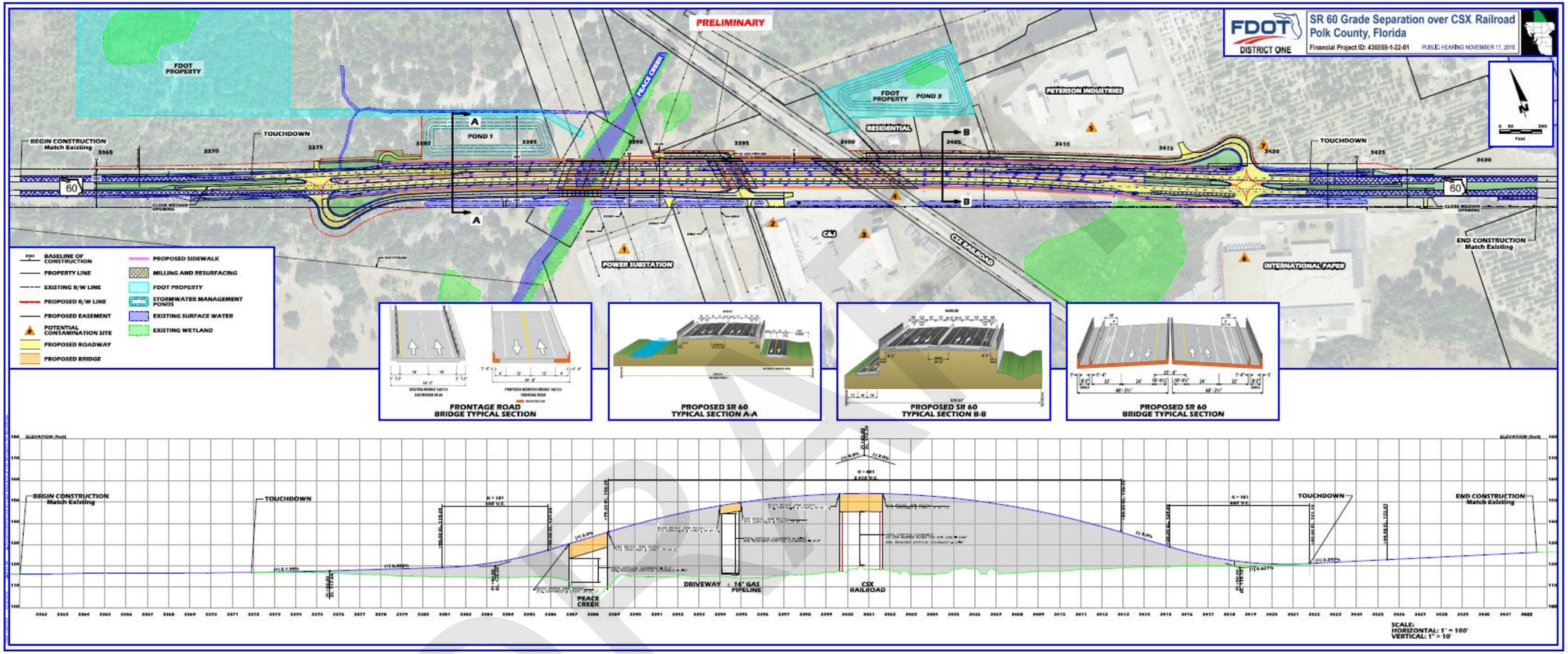


Figure 4: Proposed SR 60 at CSX Railroad Improvements (including stormwater ponds)



D. PROJECT PLANNING CONSISTENCY

Currently Adopted CFP-LRTP	COMMENTS
Y	This project is shown as a Tier I "Committed" project within the 2014-2018 timeframe in the Cost Feasible Plan of the Polk Transportation Planning Organization's (TPO) Momentum 2040 Long Range Transportation Plan (LRTP) as adopted December 10, 2015.

PHASE	Currently Approved TIP	Currently Approved STIP	TIP/STIP $	TIP/STIP FY	COMMENTS
PE (Final Design)	Y	Y	TIP: $70,000 STIP: $134,477	TIP: <2017 STIP: <2017, 2017	State funds
ROW	Y	Y	TIP: $21,189 STIP: $155,666	TIP: <2017, 2017 STIP: <2017, 2017	State funds
CST	N	N	TIP: N/A STIP: N/A	TIP: N/A STIP: N/A	State funds

Applicable LRTP/TIP/STIP pages are included in Appendix A.

3. IMPACT EVALUATION

*Topical Categories	Substantial Impacts? Yes	No	Enhance	NoInv	Basis for Decision**
A. SOCIAL AND ECONOMIC					
1 Social	[ ]	[X]	[ ]	[ ]	See Attachment A.1
2. Economic	[ ]	[ ]	[X]	[ ]	See Attachment A.2
3. Land Use Changes	[ ]	[X]	[ ]	[ ]	See Attachment A.3
4. Mobility	[ ]	[ ]	[X]	[ ]	See Attachment A.4
5. Aesthetic Effects	[ ]	[X]	[ ]	[ ]	See Attachment A.5
6. Relocation Potential	[ ]	[X]	[ ]	[ ]	See Attachment A.6
B. CULTURAL					
1. Historic Sites/Districts	[ ]	[X]	[ ]	[ ]	See Attachment B.1
2. Archaeological Sites	[ ]	[X]	[ ]	[ ]	See Attachment B.2
3. Recreation Areas	[ ]	[ ]	[ ]	[X]	None Present
C. NATURAL					
1. Wetlands & Other Surface Waters	[ ]	[X]	[ ]	[ ]	See Attachment C.1
2. Aquatic Preserves & Outstanding FL Waters	[ ]	[ ]	[ ]	[X]	None Present
3. Water Quality	[ ]	[X]	[ ]	[ ]	See Attachment C.3
4. Wild and Scenic Rivers	[ ]	[ ]	[ ]	[X]	None Present
5. Drainage and Floodplains	[ ]	[X]	[ ]	[ ]	See Attachment C.5
6. Coastal Barrier Resources	[ ]	[ ]	[ ]	[X]	None Present
7. Protected Species and Habitat	[ ]	[X]	[ ]	[ ]	See Attachment C.7
8. Essential Fish Habitat	[ ]	[ ]	[ ]	[X]	None Present
D. PHYSICAL					
1. Highway Traffic Noise	[ ]	[X]	[ ]	[ ]	See Attachment D.1
2. Air Quality	[ ]	[ ]	[X]	[ ]	See Attachment D.2
3. Contamination	[ ]	[X]	[ ]	[ ]	See Attachment D.3
4. Utilities and Railroads	[ ]	[X]	[ ]	[ ]	See Attachment D.4
5. Construction	[ ]	[X]	[ ]	[ ]	See Attachment D.5
6. Bicycles and Pedestrians	[ ]	[ ]	[X]	[ ]	See Attachment D.6
7. Navigation	[ ]	[ ]	[ ]	[X]	Not Applicable

*__Topical Categories:__ Yes = Substantial Impact; No = No substantial impact; Enhance = Enhancement; NoInv = Issue absent, no involvement.

**Basis of decision is documented in the referenced attachment(s).

4. ANTICIPATED PERMITS

X Individual Dredge and Fill Permit - USACE
 Nationwide Permit - USACE
 Bridge Permit - USCG
X Environmental Resource Permit - Southwest Florida Water Management District (SWFWMD)
X Other - Florida Fish and Wildlife Conservation Commission (FWC) Gopher Tortoise Relocation Permit
X Other - Florida Department of Environmental Protection (FDEP) Generic Permit for Stormwater Discharge from Large and Small Construction Activities

5. ENGINEERING ANALYSIS

Only one grade separation/overpass alternative was evaluated. The engineering analysis is documented in the Preliminary Engineering Analysis (dated October 2016) and the Phase II Design plans (dated September 2016), prepared under separate cover.

6. COMMITMENTS

FDOT has made the following commitments:

1) The USFWS' August 2013 *Standard Protection Measures for the Eastern Indigo Snake* will be adhered to throughout project construction.

2) Due to the presence of active gopher tortoise burrows within and adjacent to the project footprint, a gopher tortoise survey within construction limits (including roadway footprint, construction staging areas, and stormwater management ponds) will be performed prior to construction commencement per FWC's *Gopher Tortoise Permitting Guidelines*. The FDOT will secure an FWC relocation permit and relocate gopher tortoises to an approved long-term, recipient site prior to construction. If present, commensal species will be handled in accordance with the FWC's *Gopher Tortoise Permitting Guidelines*.

3) The FDOT commits to resurvey the project area for Sherman's fox squirrels, bald eagles, ospreys, Florida sandhill cranes and Southeastern American kestrels prior to construction commencement. If active nests are observed, the FDOT will coordinate with FWC and USFWS (as necessary) to secure proper permits concerning these species.

4) Level II testing identified soil, immediately adjacent to the east of the CSX Railway corridor that exhibits elevated levels of arsenic and polycyclic aromatic hydrocarbons. The contaminant concentrations are above their respective Residential Direct Exposure Soil Cleanup Target Levels, but below the Commercial/Industrial Soil Cleanup Target Levels (Table II of Chapter 62-777, Florida Administrative Code). As such, soil in this

area will be marked in the Final Design Plans as "contaminated." Soil from this marked area will either remain within the project limits or be properly transported for disposal at an appropriately licensed facility.

7. FDOT SELECTED ALTERNATIVE

As discussed in Section 5.1 of the Preliminary Engineering Report (PER) document, the No-Build Alternative has been evaluated. This alternative would not construct the SR 60 grade separation and would leave the existing roadway in its current configuration. Although, the No-Build Alternative option fails to fulfill the project's purpose and need to improve safety or reduce travel delay at the railroad crossing, it remains a viable alternative throughout the PD&E study.

While the Build Alternative (SR 60 grade separation) has costs associated with design, ROW acquisition, and construction, it would result in a four-lane facility that meets established Level of Service (LOS) standards while safely accommodating expected future traffic growth. Therefore, the Build Alternative has been selected as the Recommended Alternative. Following the Public Hearing and once approved by the FDOT, the Recommended Alternative may become the Preferred Alternative.

8. APPROVED FOR PUBLIC AVAILABILITY (BEFORE PUBLIC HEARING)

Marlon J. Bigiarma — 10/25/2016.

District Environmental Manager — Date

9. A PUBLIC HEARING WAS HELD ON ____ /____ /____

Date

10. APPROVAL OF FINAL DOCUMENT (AFTER PUBLIC HEARING)

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

The final SEIR reflects consideration of the PD&E study and the public hearing.

_____ ____ /____ /____

FDOT District One Secretary or Designee — Date

ATTACHMENT A
SOCIAL AND ECONOMIC IMPACTS

A.1. Social

Community Cohesion

The Recommended Alternative generally involves the reconstruction of SR 60 within existing FDOT ROW. The minimal amount of ROW acquisition required for frontage road and driveway construction results from the need to maintain the existing access to adjacent properties from SR 60. This project does not adversely affect existing neighborhoods or cause splitting or isolation of any neighborhoods. The Recommended Alternative is not anticipated to adversely impact elderly persons, handicapped individuals, non-drivers and transit-dependent individuals, or minorities. Therefore, this project is being developed without regard to race, color, national origin, age, sex, religion, disability or family status. It is expected that the Recommended Alternative will have no substantial impacts to community cohesion.

Community Services

Community services typically serve the needs of the surrounding area and provide a focal point for adjacent neighborhoods and communities. Community services include churches, cemeteries, schools, parks, recreational facilities, and public buildings and facilities. There are no cultural centers, parks, recreational facilities, fire/emergency medical services (EMS)/police stations, or medical facilities in the vicinity of the project. Access will be maintained along SR 60 during construction, particularly for Florida Highway Patrol, Polk County Sheriff's and fire/EMS vehicles. Therefore, it is expected that the Recommended Alternative will not result in substantial impacts to community services.

Title VI Considerations

In February 1994, the President of the United States issued Executive Order 12898 (Environmental Justice) requiring federal agencies to analyze and address, as appropriate, disproportionately high adverse human health and environmental effects of federal actions on ethnic and cultural minority populations and low income populations, when such analysis is required by the National Environmental Policy Act of 1969 (NEPA). An adverse effect on minority and/or low-income populations occurs when: (1) the adverse effect occurs primarily to a minority and/or low-income population; or, (2) the adverse effect suffered by the minority and/or low-income population is more severe or greater in magnitude than the adverse effect suffered by the non-minority and/or non-low-income populations. An evaluation of environmental, public health and interrelated social and economic effects of proposed projects on minority and/or low-income populations is required. All proposed projects should include measures to avoid, minimize, and/or mitigate disproportionately high and adverse impacts and provide off-setting benefits and opportunities to enhance communities, neighborhoods, and individuals affected by these activities.

The 17 Environmental Justice criteria identified in Executive Order 12898 are: (1) air pollution; (2) noise; (3) water pollution; (4) soil contamination; (5) destruction of manmade resources; (6) destruction of natural resources; (7) diminution of aesthetic values; (8) detriment to community cohesion; (9) diminution of economic viability; (10) detriment to facilities access - public and private; (11) detriment to services access - public and private; (12) vibration; (13) diminution of employment opportunities; (14) displacement; (15) traffic congestion and impairment to mobility; (16) exclusion, isolation, or separation; and, (17) diminution of US Department of Transportation (USDOT) benefits.

In addition to compliance with Executive Order 12898, any proposed federal project must comply with the provisions of Title VI of the Civil Rights Act of 1964, as amended by Title VIII of the Civil Rights Act of 1968. Title VI and related nondiscrimination regulations provide that no person shall, on the grounds of race, color, religion, sex, national origin, marital status, disability, or family composition be excluded from participation in, be denied the benefits of, or be otherwise subject to discrimination under any program of the federal, state, or local government. Title VIII guarantees each person equal opportunity in housing.

In August 2000, the President of the United States issued Executive Order 13166 (*Improving Access to Service for Persons with Limited English Proficiency*), to clarify Title VI of the Civil Rights Act of 1964. Its purpose was to ensure accessibility to programs and services to eligible persons who are not proficient in the English language.

The Sociocultural Data Report (SDR) function of the FDOT's Efficient Transportation Decision-Making (ETDM) Environmental Screening Tool (EST) was used in compiling demographic data for the area in the vicinity of the SR 60 project area. The SDR reflects the approximation of the population based on the block groups encompassing the project area and the surrounding area. For this study, a 750-ft buffer was used to include the SR 60 mainline and the pond sites evaluated. Within this buffer, using the 2014 American Communities Survey (ACS) data, the SDR identified 7 households with a population of approximately 20 people. The median family income is approximately $58,750, but the population reported below the poverty level is approximately 30.0%. However, no households reported as receiving public assistance income. The median age is approximately 46, with persons 65 and over comprising approximately 15.0% of the local population. The minority population makes up approximately 30.0% of the total population and is comprised mainly of African American ethnicity. There were two individuals (15.38%) between the ages of 20 and 64 that reported a disability. There are two individuals (10.53%) that speak English "not well" or "not at all". Limited English Proficiency (LEP) measures were not implemented for this project based on the small number of residents identified and the localized nature of the project impacts to the SR 60 ROW and immediately adjacent area.

The purpose of this project is to provide enhancements to the mobility and safety for vehicle traffic on SR 60 and trains using the CSX railroad (regardless of status or classification). Therefore, FDOT does

not anticipate that the proposed project will result in any disproportionate adverse impacts to any minority, ethnic, elderly or handicapped groups, and/or low-income populations in accordance with the provisions of ***Executive Order 12898*** and ***FHWA Order 6640.23a***. No further Environmental Justice analysis is required. Title VI information was made available at the Public Hearing (discussed on the following page).

This project has been developed in accordance with Title VI of the Civil Rights Act of 1964, as amended by Title VIII of the Civil Rights Act of 1968, and in accordance with Executive Order 12898 (*Environmental Justice*). This project has been developed without regard to race, color, national origin, age, sex, religion, disability, or family status.

Controversy Potential

FDOT conducted a Public Involvement Program for this project's PD&E study. The program is in compliance with the FDOT *Project Development and Environment Manual*, Section 339.155, Florida Statutes; 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.

On January 22, 2015, FDOT project manager Amy Setchell gave a PowerPoint presentation to the Polk Transportation Planning Organization (TPO) Technical Advisory Committee (TAC) about the initiation of the PD&E study.

In April 2015, the district mailed a newsletter to property owners and sent e-mails to elected and appointed officials about the study. The newsletter included a project location map, proposed typical section and FDOT work program schedule.

On December 3, 2015 and December 10, 2015, Ms. Setchell presented a PowerPoint show to the TAC and TPO board, respectively. She provided an update on the study's progress and announced an upcoming meeting with project stakeholders.

The district held a stakeholders meeting from 5 p.m. to 7 p.m. on Tuesday, December 15, 2015 at Polk State College Advanced Technology Center in Bartow. FDOT mailed a newsletter to property owners and sent e-mails to elected and appointed officials inviting them to the meeting. Five people attended the meeting to review preliminary design plans and discuss the project with department representatives. FDOT did not receive any written comments or e-mail comments during the comment period ending December 28, 2015.

FDOT will hold a public hearing on November 17, 2016, at Polk State College Advanced Technology Center in Bartow.

This section will be completed after the Public Hearing.

A.2. Economic

SR 60 is a SIS facility. The SIS serves as backbone of Florida's highway transportation network, which consists of nearly 4,400 miles of roadways. This mileage represents only 3% of the total state roadway mileage, but is responsible for 54% of all traffic and 70% of all truck traffic on the State Highway System. These significant corridors connect all of Florida's economic regions including economic markets beyond Florida. Within the State, they facilitate the movement of passengers and goods between the major airports, seaports, rail facilities, and notable intermodal hubs. The nearby CSX Integrated Logistics Center (ILC) in Winter Haven (approximately 3.25 miles northwest of the project location) is one of those hubs and SR 60 provides the vital transportation link to this facility necessary to ensure the efficient movement of goods and services. The mining industry, fruit industry, cattle industry, sugar industry, logging industry, sod industry and other goods and services via the trucking industry, all utilize this corridor to move their products, goods or services. By facilitating a more efficient movement of both rail and vehicular traffic, a net economic **enhancement** is expected from the Recommended Alternative.

A.3. Land Use Changes

Existing Land Use

The project is approximately four miles west of Lake Wales in Polk County, Florida. A review of the Polk County 2030 Comprehensive Plan Generalized 2007 Existing Land Use Map, the Efficient Transportation Decision-Making (ETDM) Environmental Screening Tool (EST) available on-line aerials and recent field surveys indicate that the existing land uses in the project area consist of transportation (highway and railroad right-of-way/ROW), agricultural (passive and active); vacant (residential and non-residential), public/semi-public utility ROW, light commercial, light industrial and limited single-family residential.

Future Land Use

A review of Polk County's 2030 Comprehensive Plan Future Land Use Map shows that the area will consist of mostly Agricultural/Rural Residential, Industrial, Institutional (public/semi-public utility ROW), and Commercial Enclave.

Changes in Land Use Patterns

As discussed previously in Section 2(C), the project will acquire a minor amount of new ROW. This acquisition will not result in changes in adjacent land uses beyond that which is already allowable or subject to revision under Polk County's planning/zoning/land development requirements and guidelines. There are no anticipated effects on the area's character resulting from the Recommended Alternative, as the project supports the land use vision depicted within the Polk County 2030 Comprehensive Plan Generalized Future Land Use Map. The project is also

consistent with the Polk TPO's Momentum 2040 (LRTP) plan, as a subset of the Comprehensive Plan. The Recommended Alternative is **not** expected to result in **substantial** changes in land use.

A.4. Mobility

The CSX railroad offers service to Amtrak trains from stops in South Florida reporting to the Winter Haven terminal and locations beyond. However, there are currently no fixed bus or other transit routes within the corridor. The Polk County 2030 Comprehensive Plan identifies the project as a "Transit Corridor" (primarily for trucking) and a "Future Sidewalk Priority". Paved shoulders functioning as undesignated bike lanes provide some utility for bicyclists. The existing rural cross-section does not include sidewalks. Through the typical section proposed for the grade improvement, bicyclists will be accommodated by the outside 10-ft paved shoulder in each direction. Sidewalks, 8-ft 3-in wide (8-ft 2-in on the bridges) are proposed in each direction throughout the project. As discussed previously under Section A.2., by facilitating a more efficient movement of both rail and vehicular traffic, as well as providing limited enhancements to bicycle and pedestrian facilities, a net **enhancement** to mobility is expected.

A.5. Aesthetic Effects

The proposed reconstruction of SR 60 to a grade-separated roadway where none currently exists, a northerly shift in the SR 60 alignment, and the construction of frontage roads and driveways, will result in minor aesthetic impacts to the surrounding area. The SR 60 bridge over the CSX railroad will have approximate minimum vertical clearances of 23-ft 6-in over the CSX Railroad, 26-ft 3 in over the proposed Frontage Road, 16-ft 6 in over the Kinder Morgan gas line and 11-ft 7-in over the Peace Creek Drainage Canal. However, based on the relatively undeveloped/vacant and industrial land uses adjacent to the project limits, these impacts have been determined as **not substantial**.

A.6. Relocation Potential

These typical sections require between 267 ft and 432 ft of ROW, with ROW being acquired on both sides of SR 60 (predominantly on the north side). The proposed roadway improvements will require additional ROW acquisition along the north side of SR 60 to accommodate the ultimate six-lane roadway, frontage road, and driveways. Additional ROW is also required along the south side of SR 60 to accommodate the frontage road connection to serve business parcels west of the CSX railroad. The proposed improvements will require a total of 6.0 acres of new ROW along the SR 60 mainline. Two off-site stormwater management facilities (ponds) are also needed. Pond 1, on the north side of SR 60 west of the Peace Creek Drainage Canal, will require approximately 2.93 acres of new ROW. This ROW will be obtained via a land swap with a private land owner for comparable acreage of land owned by FDOT (a former borrow pit). Pond 3 is approximately 3.79 acres on the north side of SR 60 east of the CSX railroad and will not require ROW acquisition, as it is located on a parcel already owned by FDOT. A minor amount (0.03 acre) of

drainage easements will be needed for pond inflow/outfall facilities and maintenance ingress/ egress to the ponds.

Five existing median openings are proposed for closure, and a new full median opening is proposed at the location of the frontage road connection to the west of Pond 1. Proposed changes to median openings are illustrated in the project plans. In compliance with Section 335.199 F.S. (*Transportation projects modifying access to adjacent property*), this change was presented on the concepts shown at the Public Hearing.

The project will affect eleven (11) parcels, but will not require any business or residential relocations. As a result, a *Conceptual Stage Relocation Plan* was not prepared in accordance with the provisions set forth in 49 CFR, Part 24.4 of the Uniform Relocation Assistance and Acquisition Act of 1970, since no residential or business relocations are anticipated for this project, and access is maintained to all parcels. The FDOT will carry out a Right of Way and Relocation Program in accordance with Florida Statute 339.09 and the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 91-646 as amended by Public Law 100-17). The brochures that describe in detail the FDOT's Relocation Assistance Program and Right of Way acquisition program are "*Residential Relocation Under the Florida Relocation Assistance Program*", "*Relocation Assistance Business, Farms and Non-profit Organizations*", "*Sign Relocation Under the Florida Relocation Assistance Program*", "*Mobile Home Relocation Assistance*", and "*Relocation Assistance Program Personal Property Moves*". All of these brochures were made available at the Public Hearing and upon request to any interested persons. Therefore, although there are no residential or business relocations, this section considers ROW acquisition and the impacts with this acquisition are **not** expected to be **substantial**.

ATTACHMENT B
CULTURAL IMPACTS

B.1. Historic Sites/Districts

In accordance with Chapter 267 F.S. and FDOT procedures, the study team conducted a *Cultural Resource Assessment Survey* (CRAS) *Technical Memorandum* to locate and identify any historic resources, including sites and/or districts, occurring within the project area of potential effect (APE) and to assess their significance in terms of their potential eligibility for listing in the National Register of Historic Places (NRHP). The historical area of potential effects (APE) for this project was originally defined as the SR 60 ROW, three proposed pond locations and buildings on adjacent parcels to SR 60. This APE also included a 500-ft radius around the intersection of SR 60 and the CSX railroad (former Seaboard Airline Railroad) for potential visual impacts from the proposed elevated overpass. Although this is a state-funded project, a US Army Corps of Engineers permit could be required for impacts to the Peace Creek Drainage Canal and associated wetlands. Therefore, the CRAS was prepared in accordance with Section 106 of the National Historic Preservation Act, and Chapter 267, F.S.

As a result of historical field survey, seven historic resources were recorded within the APE. Three of these are previously-recorded resources, including one building (8PO7422) and segments of two linear resources, the Seaboard Airline Railroad (8PO7117), and the Peace Creek Drainage Canal (8PO5391). In addition, four resources were newly-identified and recorded, including an Industrial Vernacular building (8PO7974), two bridges (8PO7971 and 8PO7972), and a segment of one linear resource, SR 60 (8PO7973). Furthermore, field survey revealed that the previously-recorded building resource group (Clark Cattle Ranch; 8PO6888) and its four associated buildings (8PO6971 through 8PO6974) have been demolished.

The State Historic Preservation Officer (SHPO) previously determined in 2011 that the Frame Vernacular building at 4336 SR 60 (8PO7422) is ineligible for the NRHP. Based on field survey, 8PO7422 has not been altered in any substantial way since its last survey and remains ineligible for the NRHP; thus, an updated Florida Master Site File form was not completed. Segments of the Peace Creek Drainage Canal (8PO5391) and the former Seaboard Airline Railroad (8PO7117) within the project APE were recorded in updated FMSF forms. However, these segments are small sections of linear resources that extend beyond the project area. As such, field survey revealed insufficient information to consider the potential NRHP eligibility of these resources. The four newly identified and recorded resources (8PO7971 through 8PO7974) are all typical examples of architecture and engineering without known significant historical associations and are therefore, not considered eligible for the NRHP.

The CRAS was sent to the SHPO for approval on December 5, 2014. SHPO concurrence with the finding that this project will have no effect on historic resources that are listed or potentially eligible for listing in the NRHP was provided on December 29, 2014.

Another CRAS was performed within the APE for three additional areas related to the SR 60 at CSX railroad grade separation in January 2016. This work was conducted to update the prior 2014 CRAS to account for minor revisions to the project limits and ingress/infall and egress/outfall facilities that were added. The results of this CRAS determined that there were no archaeological sites recorded within or adjacent to the revised APE and no new historic structures. The FDOT submitted a CRAS *Technical Memorandum Addendum* with the evaluation that these revisions to the SR 60 grade separation over the CSX railroad will have no effect on any resources listed or considered eligible for listing in the NRHP. SHPO provided their concurrence with this evaluation on February 18, 2016.

In October 2016, another CRAS *Technical Memorandum Addendum* was completed to address a new stormwater pond alternative (Pond 1) and proposed improvements to an inflow ditch for Pond 3. The historical APE is defined as the area contained within the two new project areas (ponds and ditch). This survey was similarly performed to locate and identify any historic structures located within the APE to assess site significance in terms of eligibility for listing in the NRHP. As a result of field work conducted, no historic resources were discovered. Thus, no sites listed or eligible for listing in the NRHP will be impacted by this project. Coordination with the SHPO is on-going for these two additional areas.

The Recommended Alternative is **not** expected to result in **substantial** impacts to historical resources.

B.2. Archaeological Sites

As discussed in the previous section, the study team conducted a *Cultural Resource Assessment Survey* (CRAS) *Technical Memorandum* in 2014, with additional updates conducted in January 2016 and October 2016. As part of these efforts, surveys were performed to locate and identify any prehistoric and historic period archaeological sites occurring within the project APE and to assess their significance in terms of their potential eligibility for listing in the NRHP. The archaeological APE for this project is defined as the SR 60 ROW, proposed pond locations as well as ingress/infall and egress/outfall areas.

Background research and a review of the FMSF and the NRHP indicated that one archaeological site had been recorded within one mile of the project corridor, but none is contained within the archaeological APE. The site location predictive model for the region indicated a low to moderate potential for archaeological sites within the study corridor. As a result of field work conducted, no historic or prehistoric archaeological sites were found within the APE, nor were any historic resources discovered.

Based on the previous and pending SHPO coordination discussed in the previous, no impacts to any prehistoric and historic period archaeological sites listed, eligible or potentially eligible for listing are expected from this project.

The Recommended Alternative is **not** expected to result in **substantial** impacts to archaeological resources.

ATTACHMENT C
NATURAL ENVIRONMENT

C.1. Wetlands and Other Surface Waters

Pursuant to Presidential Executive Order 11990 entitled "*Protection of Wetlands*," the United States Department of Transportation (USDOT) has developed a policy, (DOT Order 5660.1A), *Preservation of the Nation's Wetlands*, dated August 24, 1978, which requires all federally funded or permitted highway projects to protect wetlands to the fullest extent possible. In accordance with this policy, as well as Part 2, Chapter 18 (Wetlands and Other Surface Waters) of the FDOT *Project Development and Environment* Manual, the study area was evaluated for wetlands and surface waters that have potential involvement with the proposed improvements. As part of the original PD&E effort, a *General Wildlife and Wetlands Technical Memorandum* (dated February 2015) was completed. This document was subsequently updated/superseded by the Design-phase wetland evaluation conducted within the *Wetland Evaluation Report*, dated October 2016, prepared under separate cover for this study.

Wetland delineation and functional analyses (as per Chapters 62-340 and 62.345, Florida Administrative Code/F.A.C.) have been conducted. Habitat type descriptions have been field-verified using the *Florida Land Use, Cover and Forms Classification System* (FLUCFCS) *Handbook* (FDOT, January 1999) and the USFWS' *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et. al. 1979).

Preliminary wetland and surface water impact acreage, habitat types, estimated functional assessments and wetland mitigation requirements are provided for federally-jurisdictional wetlands in **Table 1** below.

Table 1: Preliminary impacts and mitigation requirements for federally-jurisdictional wetlands

Wetland ID	Impact Type*	Wetland Type Impacted	UMAM Score (Delta)	Acres Impacted	Credits Needed	Mitigation Cost Per Credit	Mitigation Cost**
WL 2377 L	direct	Herb.	0.43	0.03	0.01	$ 135,000	$ 1,350
WL 2380 L	direct	Herb.	0.43	0.25	0.11	$ 135,000	$ 14,850
WL 2413 R	direct	Herb.	0.43	0.26	0.11	$ 135,000	$ 14,850
SMF E WL 1	direct	Shrub	0.33	0.09	0.03	$ 175,000	$ 5,250
SW 2392 L	direct	Herb.	0.23	0.01	0.00	$ 135,000	$ -
SW 2399 L	direct	Herb.	0.33	0.30	0.10	$ 135,000	$ 13,500
SW 2419 L	direct	Herb.	0.30	0.01	0.00	$ 135,000	$ -
SMF E SW 1 (PCDC/Pond 3 Outfall)	direct	Herb.	0.40	0.01	0.00	$ 135,000	$ -
SW 1 (PCDC/Bridge Location)	direct	Herb.	0.50	0.18	0.09	$ 135,000	$ 12,150
			Total federal impacts and functional loss:	1.14	0.45		
						ESTIMATED FEDERAL WETLAND, SURFACE WATER, SFH IMPACTS MITIGATION COST	**$ 61,950**

*Wetland mitigation credits are available from in-basin wetland mitigation banks, and costs were estimated based on UMAM scores and current cost per-credit for herbaceous wetland credits from Boran Ranch Mitigation Bank ($135,000 per credit) and forested credits from Peace River Mitigation Bank ($175,000). UMAM scores have not been reviewed by agencies as of the public hearing date. Note that the purchase of federal mitigation credits is expected to satisfy the state-required mitigation.

Preliminary wetland and surface water impact acreage, habitat types, estimated functional assessments and wetland mitigation requirements are provided for state-jurisdictional wetlands in **Table 2** below.

Table 2: Preliminary impacts and mitigation requirements for state-jurisdictional wetlands

Wetland ID	Impact Type*	Wetland Type Impacted	UMAM Score (Delta)	Acres Impacted	Credits Needed	Mitigation Cost Per Credit	Mitigation Cost**
WL 2413 R	direct	Herb.	0.43	0.26	0.11	$ 135,000	$ 14,850
WL 2413 R	secondary	Shrub	0.07	0.19	0.01	$ 175,000	$ 1,750
SW 1 (PCDC/Bridge Location)	direct	Herb.	0.50	0.18	0.09	$ 135,000	$ 12,150
Total state impacts and functional loss:				0.63	0.21		
						ESTIMATED STATE WETLAND MITIGATION COST	**$ 28,750**

*****Wetland mitigation credits are available from in-basin wetland mitigation banks, and costs were estimated based on UMAM scores and current cost per-credit for herbaceous wetland credits from Boran Ranch Mitigation Bank ($135,000 per credit) and forested credits from Peace River Mitigation Bank ($175,000). UMAM scores have not been reviewed by agencies as of the public hearing date. Note that the purchase of federal mitigation credits is expected to satisfy the state-required mitigation.

All figures shown in Tables 1 and 2 will be reviewed and verified as appropriate with the environmental permitting agencies (Southwest Florida Water Management District/SWFWMD and US Army Corps of Engineers/USACE) during the upcoming environmental permitting process.

Based on the proposed impact footprint shown for the Recommended Alternative, there is no practicable alternative to construction in wetlands. The proposed project will have no significant short-term or long-term adverse impacts to wetlands. Measures to minimize and avoid these impacts to the greatest extent practicable have been implemented in the project design, and will be implemented through adherence to the FDOT's *Standard Specifications for Road and Bridge Construction* and applicable agency permit conditions during project construction.

Mitigation

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 of Chapter 373, F.S., and 33 U.S.C. §1344. Specific mitigation requirements will be developed during the upcoming environmental permitting phase of the project. The project is within the geographic service areas of two mitigation banks, the Boran Ranch and Peace River mitigation banks.

The proposed project was evaluated for potential wetland impacts in accordance with Executive Order 11990, Protection of Wetlands. Based upon the above considerations, it is determined that there is no practicable alternative to the proposed construction in wetlands and the proposed action includes all practicable measures to minimize impacts to wetlands which may result from such use. The Recommended Alternative is **not** expected to result in **substantial** impacts to wetlands or surface waters.

C.3. Water Quality

A *Drainage Design Concept Report* (dated January 2015) and a *Location Hydraulics Report* (dated January 2015) were prepared for this study. These documents were subsequently updated/ superseded by the *Alternative Pond Siting Memorandum* (dated October 2015). These documents evaluated the existing local and regional water flow patterns and presented the Recommended Alternative's proposed stormwater management facilities. The existing drainage patterns were determined using U.S. Geological Service (USGS) quadrangle maps, SWFWMD LiDAR elevations, field review, FDOT survey from previous Resurface, Restoration, and Rehabilitation (RRR) projects, FDOT drainage maps for SR 60 and updated survey.

In the existing condition, the stormwater runoff from the roadway sheet-flows offsite and into roadside ditches to the Peace Creek Drainage Canal (PCDC) without receiving any formal treatment. There is one cross drain just east of the CSX Railroad and two bridges located at the PCDC within the study limits. The existing cross drain has been identified and is shown in the PER document and the project plans. A cross drain analysis was determined not to be commensurate with the original PD&E study effort, as the length of the cross drain will be approximately the same as the existing, and much of the FDOT roadway runoff will be diverted to the SMFs, instead of to this existing cross drain. A cross drain analysis and *Bridge Hydraulics Report* have been prepared as part of the final design.

Although the construction of the overpass will be striped as a four-lane typical mimicking the present conditions, the SMFs have been evaluated for an ultimate six-lane configuration. In the proposed condition drainage concept, roadway runoff will be piped or conveyed in ditches to two SMFs where the water will be treated and attenuated. Stormwater runoff from the roadway on the proposed bridge decks will drain to inlets at the bridge approach and then be conveyed to the respective stormwater ponds. Stormwater runoff from the sidewalk on the proposed bridge decks will drain directly into the PCDC through slots in the parapet. The frontage road bridge (bridge number 160133) will continue to maintain scuppers and deck runoff will drain directly into the PCDC. Stormwater west of the CSX overpass will be collected in roadside swales west of the PCDC bridges and routed to a new SMF (Pond 1, approximately 2.93 acres on the north side of SR 60 west of the PCDC). Stormwater east of the CSX overpass will likewise be collected in roadside swales and discharged to a new SMF (Pond 3, approximately 3.79 acres on a vacant parcel already owned by FDOT on the north side of SR 60 east of the CSX railroad). A minor amount (0.03 acre) of drainage easements will be needed for pond inflow/outfall facilities and maintenance ingress/egress to the ponds. The SMFs have sufficient capacity to provide water quality and water quantity for the proposed project. Due to the soils present and the seasonal high groundwater table (SHGWT) both SMFs will be proposed as wet detention.

The FDEP has classified the PCDC as an impaired waterbody (WBID 1539). The impairments in the PCDC are for Biochemical Oxygen Demand, Historic Chlorophyll-A, and Dissolved Oxygen. The SMFs within this project will demonstrate a net improvement to mitigate for the

environmental impairments. Both basins are considered open basins and neither is considered an Outstanding Florida Water (OFW).

A *Water Quality Impact Evaluation* (WQIE), dated December 2014, has also been prepared under separate cover for this study.

The Recommended Alternative's stormwater management facilities have been developed in accordance with the water quality and quantity requirements of the SWFWMD under Rule 40D-4, F.A.C. Further coordination between the FDOT and SWFWMD will continue during the upcoming environmental permitting and construction phases. The Recommended Alternative is **not** expected to result in **substantial** impacts to water quality.

C.5. Drainage and Floodplains

A *Location Hydraulic Report*, dated January 2015, was completed in accordance with 23 CFR 650 Subpart A, Section 650.111. This document was updated/superseded by the *Final Bridge Hydraulics Report* (BHR), dated July 2016. These reports utilized the National Flood Insurance Program maps to determine highway location encroachments. These reports evaluated risks associated with the implementation of the project, impacts on natural and beneficial floodplain values, the support of incompatible floodplain development, and measures to minimize floodplain impacts. Local, state, and federal water resources and floodplain management agencies were consulted to determine that the proposed project is consistent with existing floodplain management programs.

The project impacts the PCDC and falls within the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) community panel 120261 0545 G. This FIRM panel became effective November 19, 2003. No changes to the FIRM have been made since 2003 according to the local FEMA office. The roadway falls within Zone X, areas within the 500-year floodplain. The roadside ditches and the proposed SMF locations fall in Zone AE, areas within the 100-year floodplain with a base flood elevation of 113 NGVD 29, or 112.081 NAVD 88.

The SWFWMD is also conducting a study of this watershed with an Interconnected Pond Routing (ICPR) model of the PCDC. The PCDC ICPR watershed model is currently being reviewed by FEMA and after review, may be adopted into the updated Flood Insurance Study (FIS) and FIRM. The model is based off the 100-year, 5-day event where the existing FIRM is based off the 100-year, 24-hour event. This model has been reviewed during the design phase for the PCDC Bridge configuration to demonstrate a no change condition for the 100-year and lesser events for the SWFWMD.

The proposed improvements within Basin 1 and Basin 3 have less than 0.2 acres of floodplain impact. This volume (cup for cup) will be compensated with the regrading of the outfall ditch. The amount of floodplain within the project is minimal and will be compensated for in the

reconstruction of the outfall ditches. The construction of this project will not affect the 100-year flood stage; therefore have no adverse effect on the floodplain.

The PCDC is classified as a FEMA floodway in the Flood Insurance Study (FIS) for Polk County effective September 28, 2012 (FEMA FIS Polk County, Florida, Table 7, Page 62 and 63). There are two existing bridges within the project limits over the PCDC. The westbound bridge is considered functionally obsolete and will be removed during construction. The eastbound bridge is still within its design life and will be repurposed as the frontage road with the northern alignment shift. The new bridge will be constructed to carry the mainline traffic over the PCDC. The PCDC is not navigable; therefore, the horizontal clearance provided shall be consistent with debris conveyance needs, and structure economics. A FEMA "no-rise" certification (BHR Appendix M) has been completed as part of project the design phase.

Based on the information collected during this study, the proposed improvement can be categorized as a Type 4 project (i.e., projects on existing alignment involving replacement of existing drainage structures with no record of drainage problems).

The proposed structure will perform hydraulically in a manner equal to or greater than the existing structure, and backwater surface elevations are not expected to increase. Project design has avoided or offset floodplain encroachments within the project corridor to the maximum extent practicable. As a result, there will be no substantial adverse impacts on natural and beneficial floodplain values. There will be no substantial change in flood risk, and there will not be a substantial change in the potential for interruption or termination of emergency service or emergency evacuation routes.

The Recommended Alternative is **not** expected to result in **substantial** impacts to existing drainage patterns or floodplains.

C.7. Protected Species and Habitat

This project was evaluated for potential impacts to wildlife and habitat resources, including protected species in accordance with 50 CFR Part 402 of the Endangered Species Act of 1973, as amended; 50 CFR 17 (federal animal list); 379.2291 F.S., Endangered and Threatened Species Act; Chapter 68A-27.003 F.A.C. (Endangered and Threatened species list); 68A-27.005 F.A.C. (Species of Special Concern list), and Chapter 27 of the FDOT's *Project Development and Environment Manual*, Protected Species and Habitat.

Literature reviews, agency database searches, GIS analyses, aerial photography, NRCS soils data for Polk County, land use maps from SWFWMD, and a Florida Natural Areas Inventory (FNAI) standard data report were reviewed prior to site visits. Field reviews of potential habitat were conducted to identify threatened or endangered species occurring or potentially occurring in the project area. Site visits by qualified biologists occurred in November and December 2014; April, June, July, and August 2015; and January, February, March, and April 2016.

As part of the original PD&E effort, a *General Wildlife and Wetlands Technical Memorandum* (dated February 2015) was completed. The FDOT submitted a letter presenting the FDOT's preliminary effects determinations for federally-listed species involvement with the proposed project to the U.S. Fish and Wildlife Service (USFWS) on February 4, 2015. In this letter, the FDOT proposed "*may affect, not likely to adversely affect*" determinations for the eastern indigo snake, wood stork, bald eagle, and listed plant species. "*No effect*" determinations were presented the sand skink, blue-tailed mole skink, Audubon's crested caracara (*Polyborus plancus audubonii*), Florida scrub jay (*Aphelocoma coerulescens*), Florida grasshopper sparrow (*Ammodramus savannarum floridanus*) and the Everglade snail kite (*Rostrhamus sociabilis plumbeus*). There is no designated critical habitat for any species within or adjacent to the project vicinity. However, due to the lack of a federal nexus (e.g., funding or permitting) at the time, the USFWS was unable to provide concurrence with the determinations provided. The Florida Fish and Wildlife Conservation Commission (FWC) was also copied on this letter. The FWC provided a response letter dated February 16, 2015 concurring with the effects determinations provided and stating support for several wildlife-related commitments regarding resurveys for various species and habitat mitigation as appropriate. Based on a review of updated survey information provided by the FDOT, the FWC issued a letter dated February 23, 2016 reiterating their previous comments.

Due to updates in project design and more detailed field survey efforts conducted, revisions to the original effects determinations were made for several species. The full details of all observations for federal and state species within and adjacent to the project can be found in the *Endangered Species Biological Assessment* (ESBA), dated September 2016, prepared under separate cover for this study. The updated anticipated effects determinations for various federal and state-listed/protected species are summarized in the **Tables 3-5** on the next page. These updated effects determinations will be reviewed with the USFWS and FWC as needed during the upcoming environmental permitting process.

Based upon the findings of the protected species and habitat evaluations completed, the FDOT will adhere to the following commitments below (discussed previously in Section 6 of this document).

1) The USFWS' August 2013 *Standard Protection Measures for the Eastern Indigo Snake* will be adhered to throughout project construction.

2) Due to the presence of active gopher tortoise burrows within and adjacent to the project footprint, a gopher tortoise survey within construction limits (including roadway footprint, construction staging areas, and stormwater management ponds) will be performed prior to construction commencement per FWC's *Gopher Tortoise Permitting Guidelines*. The FDOT will secure an FWC relocation permit and relocate gopher tortoises to an approved long-term, recipient site prior to construction. If present, commensal species will be handled in accordance with the FWC's *Gopher Tortoise Permitting Guidelines.*

Table 3: Anticipated Effects Determination Summary for Federal-Listed Species

Federal Listed Species	No Effect	May Affect, Not Likely To Adversely Affect
American Alligator, FT-S/A (*Alligator mississippiensis*)		X
Eastern Indigo Snake, FT (*Drymarchon couperi*)		X
Sand Skink, FT (*Neoseps reynoldsi*)	X	
Blue-tailed Mole Skink, FT (*Eumeces egregious lividus*)	X	
Florida Scrub Jay, FT (*Aphelocoma coerulescens*)	X	
Audubon's Crested Caracara, FT (*Polyborus plancus audubonii*)		X
Wood Stork, FT (*Mycteria americana*)		X
Everglade Snail Kite , FE (*Rostrhamus sociabilis plumeus*)	X	

Table 4: Anticipated Effects Determination Summary for State-Listed Species

State Listed Species	No Effect	May Affect, Not Likely To Adversely Affect
Gopher Frog, SSC (*Rana capito*)		X
Gopher Tortoise, ST (*Gopherus polyphemus*)		X
Florida Pine Snake, SSC (*Pituophis melanoleucus mugitus*)		X
Limpkin, SSC (*Aramus guarauna*)		X
Florida Burrowing Owl (*Athene cunicularia floridana*)	X	
Little Blue Heron, SSC (*Egretta caerulea*)		X
Tricolored Heron, SSC (*Egretta tricolor*)		X
White Ibis, SSC (*Eudocimus albus*)		X
Southeastern American Kestrel, ST (*Falco sparverius paulus*)		X
Florida Sandhill Crane, ST (*Grus canadensis pratensis*)		X
Florida Mouse, SSC (*Podomus floridanus*)		X
Sherman's Fox Squirrel, SSC (*Sciurus niger shermani*)		X
Sand Butterfly Pea, SE (*Centrosema arenicola*)	X	
Spoon-leaved sundew, ST (*Drosera intermedia*)	X	
Florida Spiny-pod, ST (*Matelea floridana*)	X	
Yellow Fringeless Orchid, SE (*Platanthera intergra*)	X	

Table 5: Anticipated Effects Determination Summary for Other Species

Other Species	No Effect	May Affect, Not Likely To Adversely Affect
Bald Eagle (*Haliaeetus leucocephalus*)		X
Osprey (*Pandion haliaetus*)		X

3) The FDOT commits to resurvey the project area for Sherman's fox squirrels, bald eagles, ospreys, Florida sandhill cranes and Southeastern American kestrels prior to construction commencement. If active nests are observed, the FDOT will coordinate with FWC and USFWS (as necessary) to secure proper permits concerning these species.

Through adherence to these commitments, the Recommended Alternative is **not** expected to result in **substantial** impacts to protected species or their habitats.

ATTACHMENT D
PHYSICAL ENVIRONMENT

D.1. Highway Traffic Noise

A traffic noise study was performed in accordance with the Code of Federal Regulations Title 23 Part 772 (23 CFR 772), *Procedures for Abatement of Highway Traffic Noise and Construction Noise* and Florida Statute 335.17, *State Highway Construction; Means of Noise Abatement,* following methodology and policy established by FDOT in the *Project Development and Environment Manual*, Part 2, Chapter 17. The purpose of the noise study is to identify noise sensitive sites that would be impacted with the proposed project and evaluate abatement measures at impacted noise sensitive sites if applicable.. As part of the original PD&E study a *Draft Noise Study Report* (NSR) (dated January 2015) was prepared under separate cover for this project. This document has now been updated/superseded by the Design-phase NSR (dated October 2016)

The project is considered a Type I project as defined in 23 CFR 772 because the proposed grade separation will alter the noise propagation path between SR 60 and noise sensitive sites (i.e., residences). As required by 23 CFR 772, predicted noise levels were produced using the FHWA Traffic Noise Model (TNM), version 2.5.

Noise Analysis Results

For the Recommended Alternative, which includes a grade separation between SR 60 and the CSX railroad, exterior noise levels are not predicted to approach, meet or exceed the Noise Abatement Criteria (NAC) for design year (2040) build conditions at any noise sensitive sites identified adjacent to the project. Compared to existing conditions, traffic noise levels for design year (2040) build conditions at two residential sites located within a duplex north of the proposed grade separation over the CSX railroad are predicted to decrease between 2.1 and 2.6 dB(A). For the grade separated (i.e., build) condition, the line-of-sight from the residences to the vehicles on SR 60 would be partially blocked (since the travel lanes are proposed for the inner portions of the structure) resulting in the noise level decreases. Therefore, traffic noise levels at these residences are not predicted to substantially increase (increase by 15 dB(A) or greater above existing conditions) as a direct result of the transportation improvement project.

Noise Abatement Considerations

Noise abatement measures were not considered at the residential noise sensitive sites identified adjacent to SR 60 because the predicted noise levels do not approach, meet or exceed the NAC of 67 dB(A) for Activity Category B, nor are they expected to substantially increase above existing conditions as a direct result of the transportation improvement project. Therefore, the FDOT does not recommend the construction of noise barriers in conjunction with the SR 60 Grade Separation over CSX railroad project.

Date of Public Knowledge

Most property adjacent to SR 60 is undeveloped. Notably, there was no ongoing construction observed during the land use field review performed (October 11, 2016) that would indicate the probability of additional noise sensitive sites receiving a building permit prior to the project's Date of Public Knowledge. The date that the State Environmental Impact Report is approved will be the Date of Public Knowledge.

The Recommended Alternative is **not** expected to result in **substantial** impacts associated with highway traffic noise.

D.2. Air Quality

The United States Environmental Protection Agency (EPA) has established National Ambient Air Quality Standards (NAAQS) for six pollutants: ozone, nitrogen dioxide, particulate matter, sulfur dioxide, carbon monoxide and lead. The vast majority of Florida, including Polk County, is designated as in attainment of the NAAQS for these six pollutants. A preliminary, non-quantitative evaluation of air quality considerations was completed and is documented in the *Air Quality Technical Memorandum* prepared under separate cover.

The Transportation Conformity Rule (CFR Title 40, Part 93, Subpart A) may apply to projects in areas designated as nonattainment for ozone, nitrogen dioxide or particulate matter. This portion of SR 60 is located in an area that is designated as "in attainment" of the NAAQS for ozone, nitrogen dioxide or particulate matter. Therefore, the Transportation Conformity Rule does not apply to the Recommended Alternative.

This document does not incorporate an analysis of the greenhouse gas (GHG) emissions or climate change effects for the grade separation alternative because no federal GHG standards have been set, and 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.

Construction activities for the project may have short-term air quality for those residents and travelers within the immediate vicinity of the project. The air quality effect will be temporary and will primarily be in the form of emissions from diesel-powered construction equipment and dust from embankment and haul road areas. Air pollution associated with the creation of airborne particles will be effectively controlled through the use of watering or the application of other controlled materials in accordance with FDOT's *Standard Specifications for Road and Bridge Construction*.

As discussed previously in this document, the need for the project is not based on the need for additional capacity. It is based on improving safety; to provide a grade separation of the railroad crossing to separate vehicle traffic from the train traffic. The project will also reduce travel delays by removing the need to stop traffic for trains, which will in turn reduce the concentrated discharge of exhaust emissions from these vehicles. Reducing vehicle exhaust emissions will serve to have a net **enhancement** for air quality.

D.3. Contamination

A contamination screening was performed using the ETDM EST in accordance with the FDOT *Project Development and Environment Manual*, Part 2, Chapter 22 to determine potential contamination concerns from properties or operations located within and the vicinity of the SR 60 project area. Level I and Level 2 contamination screenings of the project corridor were conducted to determine the potential for contamination of the ROW from adjacent properties, rail and business operations. A *Final Contamination Screening Technical Memorandum* (dated March 2015), a *Final Level 1 Contamination Screening Report Evaluation Report Technical Memorandum* (dated October 2015), a *Final Level 2 Field Screening Report* (dated January 2016), and a *Draft Contamination Screening Evaluation Letter Report* (dated October 2016) have been prepared under separate cover for this project. The full detail of sites evaluated and observations noted are provided in these documents and are not repeated here.

The *Final Contamination Screening Technical Memorandum* documented a High ranking for one site (near the CSX Railroad as discussed below), a Medium ranking for no (SR 60 mainline) sites, a Low ranking for six sites, and a No ranking for one site. Additionally, this document provided a No ranking for two pond sites and a Medium ranking for one pond site (i.e., no longer under consideration as part of the Recommended Alternative). During the field investigations, Tierra performed four soil borings immediately adjacent to the CSX railroad ROW (at Site 4). Soil samples from all the borings were laboratory analyzed for arsenic, polynuclear aromatic hydrocarbons (PAHs), and total recoverable petroleum hydrocarbons (TRPH). The Benzo(a)pyrene concentrations exceeded the Commercial/Industrial SCTL at two borings. The Benzo(a)pyrene equivalents concentrations exceeded the Commercial/Industrial SCTL one boring location, and it also exceeded the Residential SCTL at a second boring location. The concentration of arsenic exceeded the Residential SCTL, but not the Commercial/Industrial SCTL, at SB- 9. The concentrations of the semi-volatile compound phenol were also detected in SB-8 and SB-9 at levels that exceeded its Leachability SCTL. The field investigations confirmed that PAHs and arsenic are concerns where sampled at Site 4. The final risk ranking for Site 4 remains High.

The *Final Level 1 Contamination Screening Report Evaluation Report Technical Memorandum* was completed to document potential contamination involvement with ingress/egress easements (Easement #1) for a prior pond location considered on the west side of the Peace Creek Drainage Canal, as well as an ingress/egress easement (Easement #2) and outfall ditch/lateral canal for Pond 3. Easement #1 was assigned an initial risk ranking of No, while Easement #2 and the outfall

ditch/lateral canal were both assigned initial risk rankings of Medium. Easement #2 was given a Medium ranking due to historic herbicide use, possible buried debris, and the current and historic use of the adjacent Petersen Industries print building and hazardous materials storage area. The outfall ditch/lateral canal was given a Medium ranking due to the current and historic use of a buried petroleum pipeline. This report recommended Level 2 field screening to determine if environmental impacts exist at both Medium sites.

The *Final Level 2 Field Screening Report* was subsequently completed to document the results Level 2 field screenings/borings conducted at Easement #1, Easement #2 and the outfall ditch/ lateral canal. Based on the field screening results, Easement #1 was assigned a final risk ranking of No, while the potential contamination involvement rankings for Easement #2 and the outfall ditch/lateral canal were both downgraded from Medium to final risk rankings of Low.

The *Draft Contamination Screening Evaluation Letter Report* evaluated potential contamination involvement with Pond 1, west of the Peace Creek Drainage Canal and an outfall ditch from Pond 3 north to the PCDC. Based on the Level 2 field screening results conducted for this contamination screening evaluation, no SCTL exceedances or buried debris was identified at Pond 1 or the Pond 3 outfall ditch. Pond 1 was assigned a final risk ranking of No, and the Pond 3 outfall ditch was assigned a final risk ranking of Low.

For the sites investigated for potential contamination involvement associated with the project study area, the following final risk rankings have been applied: four (4) sites ranked No, nine (9) sites ranked Low, one (1) site ranked Medium (no longer under consideration as part of the Recommended Alternative) and one (1) site ranked High (discussed in the next paragraph).

As discussed previously in Commitments Section 6 of this document, Level II testing identified soil, immediately adjacent to the east of the CSX Railway corridor that exhibits elevated levels of arsenic and polycyclic aromatic hydrocarbons. The contaminant concentrations are above their respective Residential Direct Exposure Soil Cleanup Target Levels, but below the Commercial/ Industrial Soil Cleanup Target Levels (Table II of Chapter 62-777, F.A.C). As such, soil in this area will be marked in the Final Design Plans as "contaminated." Soil from this marked area will either remain within the project limits or be properly transported for disposal at an appropriately licensed facility.

The SR 60 bridges over the CSX Railroad and Peace Creek Drainage Canal were inspected and tested for Asbestos-Containing Materials (ACM) and heavy metals as defined in FDOT procedures. The results of this evaluation are documented in the *Draft NESHAP Asbestos Survey Report and Screening for Metals-Based Coatings*, dated January 2015. No ACM was identified in any of the samples taken. However, it should be noted that suspect materials, other than those identified during the survey could exist within the structures in areas not accessible to the inspector at the time of the survey. Should suspect materials other than those which were identified during

this survey be uncovered during the renovation/demolition process, those materials should be assumed to be ACM until sampling and analysis can confirm or refute their asbestos content.

Steel surfaces with suspected metals-based paints and/or protective coatings were observed on one (1) of the bridge structures during the survey, the SR 60 westbound over the Peace Creek Drainage Canal bridge structure (bridge number 160045). The gray coating was observed on three (3) steel mounting plates used to attach the handrails to the guardrails. One (1) composite paint chip sample was collected from the three (3) mounting plates for laboratory analysis. The composite sample was analyzed for total metals concentrations, and tested positive for the presence of metals. Based on the EPA definition of lead base paint (LBP), laboratory analytical results for the composite paint chip sample do not meet the definition of LBP. Based on the presence of metals in the coatings, any renovation activities which could result in exposure to workers, such as sand blasting should be performed in accordance with Occupational Safety and Health Administration (OSHA) regulations to protect workers. Based on the total concentrations of the metals, the paint waste itself potentially could be deemed a hazardous waste. Ultimately, the method used to remove the paint has an impact on the outcome of the waste determination (i.e. sandblasting verses solvent based paint removers). Wastes generated from coating removal during construction will be tested to determine if it is classified as hazardous waste. All wastes generated during construction activities will be properly disposed of.

The majority of the proposed improvements will occur within the existing SR 60 ROW, which occurs in a generally rural/undeveloped area of Polk County. Improvements within the existing ROW are expected to avoid most of the potential contamination involvement from adjacent/off-site properties. Based on the precautionary measures identified for the one High-ranked site near the CSX railroad, and the metal-containing paint on the SR 60 westbound bridge (bridge number160045) over the Peace Creek Drainage Canal, the level of effects is **not** expected to be **substantial**.

D.4. Utilities and Railroads

Utilities

In order to evaluate potential surface and subsurface utility conflicts associated with the proposed project, information was collected concerning the location and characteristics of the existing utilities within the study area. A list of the utility providers in the vicinity of the project was obtained by calling Call Sunshine (1-800-432-4770, design ticket #303403695). Base maps were sent to utility providers in accordance with Part 2, Chapter 10 of the FDOT *Project Development and Environment Manual* with a request to provide information on the location and type of any facilities owned, leased, maintained, or planned. Utility providers and contacts are included in **Table 6** on the next page. Maps that were returned by each utility provider, showing specific locations of each utility, are included in the project files. Utilities are included on the concept plans in Appendix A of the PER.

A more specific discussion of the utilities in the vicinity of the project follows. There is a Florida Power and Light (FP&L) electrical substation along the south side of SR 60, just east of the Peace Creek Drainage Canal. There are two sets of Duke Energy overhead high-voltage electrical distribution lines crossing SR 60 perpendicular to the east end of the Peace Creek Drainage Canal bridges and two additional sets of overhead electrical lines crossing SR 60 just east of the Peace Creek Drainage Canal (between the substation driveway and the cellular tower to the east). The proposed roadway profile in this area may conflict with the vertical/sag safety buffer height of these electric lines, and the lines may need to be raised. Coordination with Duke Energy is on-going. A 16-in. gas line crosses SR 60 west of the railroad tracks. A bridge has been provided over the gas line to prevent any impacts, including over-compaction of the soil around the gas line. The bridge also allows future ease of maintenance for the gas line.

The FDOT's coordination with potentially affected utility owners will continue as necessary throughout the future project Design and Construction phases. Project design will seek to avoid and minimize impacts to existing utilities to the extent feasible within FDOT's right-of-way (ROW). Any unavoidable relocation of utilities will be done in accordance with the respective ROW/easement agreements for all applicable parties.

Table 6: Utilities Within and Adjacent to the SR 60 at CSX Railroad Grade Separation Project Area

Utility Provider	Contact	Utility and Location*
Florida Public Utilities Company (formerly known as Central Florida Gas)	Tim O'Conner (863) 292-2933 toconnor@chpk.com	3-inch steel Gas Main, north side of SR 60, east end of project
Kinder Morgan/ Central Florida Pipeline	Mark Clark (813) 781-1718 mark clark@kindermorgan.com	16-inch gas transmission. Easement information provided in February 2016. Forwarded to Kim Strickland.
Comcast Cablevision	Gary Hill 239-252-8260 gary_hill@cable.comcast.com	No active facilities in area
Florida Gas Trans – Lakeland	Joseph E Sanchez (407) 838-7171 Joseph.E.Sanchez@energytransfer.com	Approx 160 ft from proposed SW frontage road ROW line to FGT 8-inch steel GM. GM parallel to CSX south of SR 60.
Duke Energy (Distribution)	Mark Manner 863-678-4476 Mark.Manner@duke-energy.com	12.47 kV OH line, south side of SR 60
Duke Energy (Transmission)	Scott VanVelzon UC Synergetic 20525 Amberfield Drive, Suite 201 Land O'Lakes, FL 34638-4381 (813) 909-1241 Svanvelzor@ucseng.com	Multiple 69 kV to 230 kV OH lines. Easement information provided 2/11/16 and 8/17/16.

Table 6: Utilities Within and Adjacent to the SR 60 at CSX Railroad Grade Separation Project Area

Utility Provider	Contact	Utility and Location*
Frontier (formerly known as Verizon)	Fred Valdes 863-688-9714 fred.n.valdes@ftr.com	Buried telephone and fiber optic on north side of SR 60.
Level 3 Communications	Mark Mathis 813-464-2947 Mark.mathis@level3.com	No active facilities in area
Verizon Business (formerly known as MCI)	John McNeil 863-965-6438 john.mcneil@verizon.com (Investigations@ verizon.com)	No Conflict (Buried fiber optic lines parallel to RR tracks and within RR ROW)

*Utility update as of October 19, 2016.

The Recommended Alternative is expected to require the relocation of several existing utilities within the project corridor. However, these relocations are **not** expected to result in **substantial** impacts.

Railroads

The CSX Railroad crosses SR 60 within the project limits. The purpose of the Recommended Alternative is to provide a grade-separated overpass for SR 60 over the existing CSX Railroad. USDOT Crossing Inventory information indicates there are 10 trains crossing each day, with a typical speed of 74 to 79 mph. The CSX railroad at this location is currently one set of tracks, but widens to two separate tracks north of the project (just south of Old Bartow-Lake Wales Road) and just south of SR 60. Based on this track configuration and the recent CSX ILC construction, the FDOT expects that these will become two separate tracks at a future time. The Recommended Alternative has been designed to accommodate a future two-track configuration with the full required 23.5-ft minimum vertical clearance.

The Recommended Alternative is expected to result in minor impacts to the CSX railroad corridor during construction within the project corridor. The FDOT will continue to coordinate further with CSX during the project Design and Construction phases to ensure that associated impacts/service disruption is **not substantial**. Ultimately, this project was requested by CSX and will serve as a net enhancement to rail service by minimizing potential train delays and train/vehicle conflicts.

D.5. Construction

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

The air quality effect will be temporary and will primarily be in the form of emissions from diesel-powered construction equipment and dust from construction activities. Air pollution associated with the creation of airborne particles will be effectively controlled through the use of watering or the application of other control materials in accordance with FDOT's *Standard Specifications for Road and Bridge Construction*.

Water quality effects resulting from erosion and sedimentation during construction will be controlled in accordance with FDOT's *Standard Specifications for Road and Bridge Construction*, implementation of regulatory permit conditions and through the use of industry-standard Best Management Practices (BMPs).

Short term construction-related wetland impacts will be minimized during project construction by adherence to FDOT's *Standard Specifications for Road and Bridge Construction* Measures and applicable agency permit conditions. These specifications include, but are not limited to the use of siltation barriers, dewatering structures, and containment devices that will be implemented for controlling turbid water discharges outside of construction limits.

Maintenance of Traffic (MOT) and sequencing of construction will be planned and scheduled to minimize traffic delays throughout the project. Signs will be used to provide notice of road closures and other pertinent information to the traveling public. The local news media will be notified in advance of construction-related activities so that motorists, residents, and business persons can make accommodations. All provisions of FDOT's *Standard Specifications for Road and Bridge Construction* will be followed.

Construction of the project may require excavation of unsuitable material (muck), placement of embankments, and use of materials, such as limerock, asphaltic concrete, and Portland cement concrete. Demucking, if needed, will be controlled by Section 120 of FDOT's *Standard Specifications for Road and Bridge Construction.* The removal of structures and debris will be in accordance with state regulatory agencies permitting this operation. The contractor is responsible for his methods of controlling pollution on haul roads and in areas used for disposal of waste materials from the project. Temporary erosion control features, as specified in FDOT's *Standard Specifications for Road and Bridge Construction*, could consist of temporary grassing, sodding, mulching, sandbagging, slope drains, sediment basins, sediment checks, artificial coverings, and berms.

For the residents living in the project area, some of the materials stored for the project may be displeasing visually; however, this will be a temporary condition and should pose no substantial, long term problem. Therefore, construction impacts are **not** expected to be **substantial**.

D.6. Bicycles and Pedestrians

Currently, there are no dedicated bicycle or pedestrian facilities along this portion of SR 60. However, the existing at-grade portion of SR 60 includes 5-ft outside paved shoulders in both the eastbound and westbound directions which provide some utility for bicyclists. The Recommended Alternative will result in improved accommodations for bicyclists with the addition of 10-ft outside paved shoulders in both directions throughout the project. The Polk County Comprehensive Plan identifies SR 60 in the study area as a "Future Sidewalk Priorities" facility. Sidewalks, 8-ft 3-in wide (8-ft 2-in on the bridges) are proposed in each direction throughout the project. This analysis for the proposed bicycle and pedestrian facilities is documented in the PER.

The at-grade crossing of the railroad tracks, which can be dangerous for bicyclists and pedestrians, will be removed. As discussed previously under Section A.4., by facilitating a more efficient movement of both rail and vehicular traffic, as well as providing limited enhancements to bicycle and pedestrian facilities, a net **enhancement** is expected.

APPENDIX A
LRTP/TIP/STIP PLANNING CONSISTENCY EXCERPTS

MOMENTUM 2040

2040 Cost-Feasible Highway Network

Legend

Tier I - Committed Highway Network 2014 - 2018

- Committed/Under Construction - Highways
- Committed/Under Construction - Intersection/Interchanges

Tier II + III - Cost-Feasible Highways 2019 - 2040

- New Road
- Road Widening
- Intersection/Interchange Improvement

Tier IV - Illustrative Projects or Partially Funded through 2040

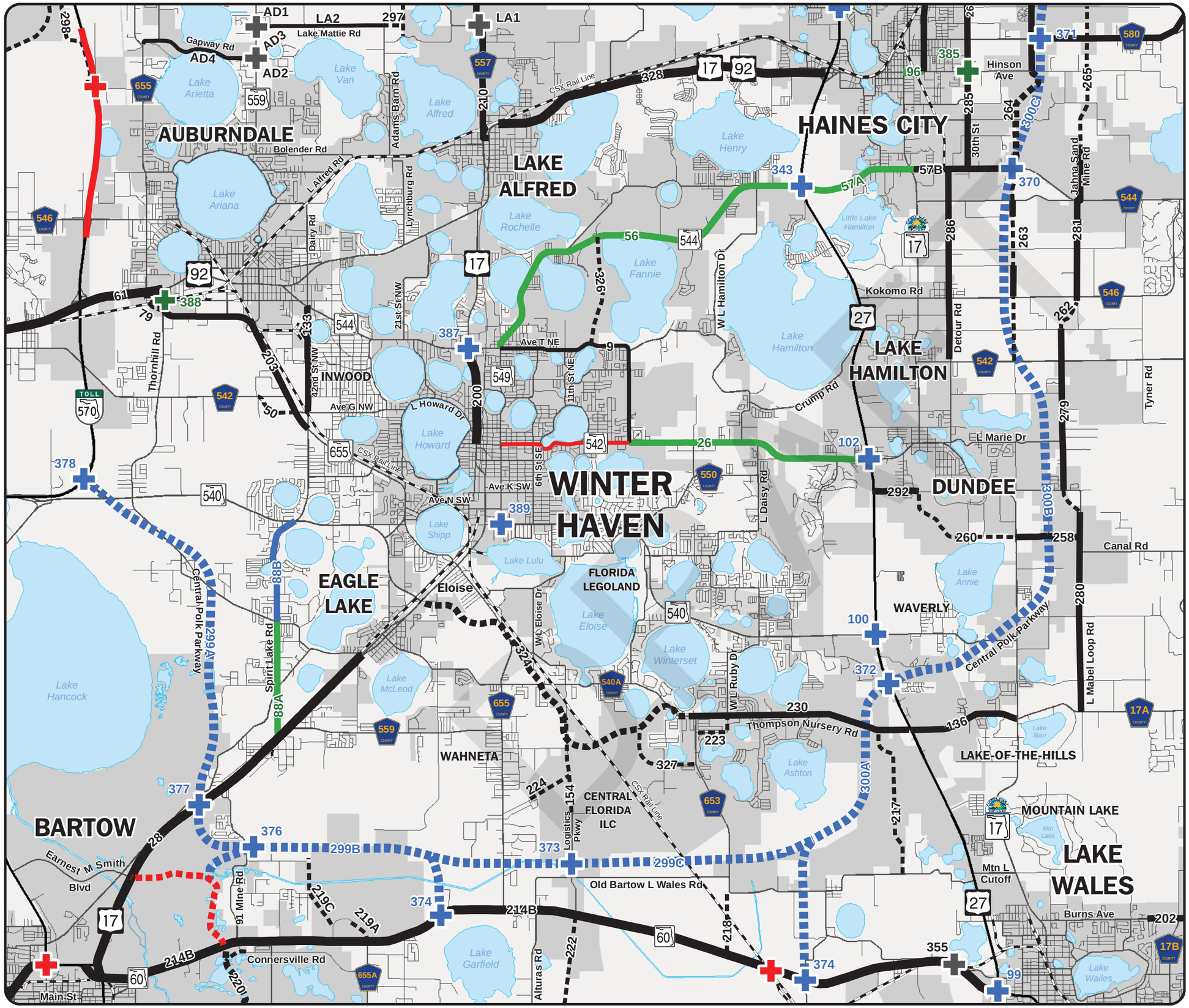
- New Road
- Road Widening
- Intersection/Interchange Improvement

Tier V - Unfunded Needs 2019 - 2040

- New Road
- Road Widening
- Intersection/Interchange Improvement

Polk Transportation Planning Organization

ADOPTED
December 10, 2015



MOMENTUM 2040

2040 Cost-Feasible Highway Network Winter Haven Area

Legend

Tier I - Committed Highway Network 2014 - 2018

Road Widening	New Roads
2 to 3/4 Lanes	2 Lanes
4 to 6 Lanes	4 Lanes

Intersection/Interchange Improvement

Tier II + III - Cost-Feasible Highways 2019 - 2040

Road Widening	New Roads
2 to 4 Lanes	2 Lanes
4 to 6 Lanes	6 Lanes
6 to 10 Lanes	

Intersection/Interchange Improvement

Tier IV - Illustrative Projects or Partially Funded through 2040

Road Widening	New Roads
2 to 4 Lanes	6 Lanes
4 to 6 Lanes	

Intersection/Interchange Improvement

Tier V & VI - Unfunded Needs 2019 - 2040

Road Widening	New Roads
2 to 3/4 Lanes	2 Lanes
4 to 6 Lanes	4 Lanes

Intersection/Interchange Improvement

Polk Transportation Planning Organization

ADOPTED
December 10, 2015

4365591 **SR60 GRADE SEPARATION OVER CSX RAILROAD** **Non-SIS**

Work Summary: RAIL CAPACITY PROJECT **From:**

To:

Lead Agency: Managed by FDOT **Length:** .000

Phase	Fund Source	2015/16	2016/17	2017/18	2018/19	2019/20	Total
RRU	DPTO	0	500,000	0	0	0	**500,000**
ENV	TRIP	0	0	75,000	0	0	**75,000**
CST 62	DPTO	0	0	24,739,633	0	0	**24,739,633**
CST 62	TRIP	0	0	2,300,000	0	0	**2,300,000**
Total		**0**	**500,000**	**27,114,633**	**0**	**0**	**27,614,633**

Prior Year Cost: 4,579,737
Future Year Cost:
Total Project Cost: 32,194,370
LRTP: 3-9
Project Description:

Transportation Improvement Program
2016/17 - 2020/21

This document is available online at www.polktpo.com. For information regarding this document, please contact Mrs. Xiomara Meeks, Senior Transportation Planner, xiomarameeks@polk-county.net.

This report was prepared as a cooperative effort of the US Department of Transportation (USDOT), Federal Highway Administration (FHWA), Florida Department of Transportation (FDOT), and the Polk Transportation Planning Organization as a requirement of 23 Code of Federal Regulations (CFR) Part 540 Sections 320, 324, 326, 328, 330 and 332 (Transportation Improvement Program) and 339.175(6) and (8), Florida Statues (FS). This document does not necessarily reflect the official views or policies of the USDOT.

Polk Transportation Planning Organization

2017-2021 TIP Adopted June 9, 2016

DDR -DISTRICT DEDICATED REVENUE	450,000	0	300,000	0	0	0	0	750,000
LF -LOCAL FUNDS	450,000	0	300,000	0	0	0	0	750,000
Item 438879 1 Totals:	**900,000**	**0**	**600,000**	**0**	**0**	**0**	**0**	**1,500,000**
Project Total:	**900,000**	**0**	**600,000**	**0**	**0**	**0**	**0**	**1,500,000**

Fund	<2017	2017	2018	2019	2020	2021	>2021	All Years
Item Number: 438921 1 Project Description: LAKE WALES MUNICIPAL ARPT CONSTRUCT RUNWAY REHABILITATION/EXTENSION *NON-SIS*								
District: 01 County: POLK Type of Work: AVIATION PRESERVATION PROJECT Project Length: .000								
CAPITAL / RESPONSIBLE AGENCY NOT AVAILABLE								
DDR -DISTRICT DEDICATED REVENUE	488,000	460,402	1,000,000	228,241	0	0	0	2,176,643
FAA -FEDERAL AVIATION ADMIN	0	1,087,232	0	0	0	0	0	1,087,232
LF -LOCAL FUNDS	122,000	115,101	250,000	57,060	0	0	0	544,161
Item 438921 1 Totals:	**610,000**	**1,662,735**	**1,250,000**	**285,301**	**0**	**0**	**0**	**3,808,036**
Project Total:	**610,000**	**1,662,735**	**1,250,000**	**285,301**	**0**	**0**	**0**	**3,808,036**

Fund	<2017	2017	2018	2019	2020	2021	>2021	All Years
Item Number: 438975 1 Project Description: WINTER HAVEN MUNICIPAL ARPT TAXIWAY E & F CONSTRUCTION *NON-SIS*								
District: 01 County: POLK Type of Work: AVIATION PRESERVATION PROJECT Project Length: .000								
CAPITAL / RESPONSIBLE AGENCY NOT AVAILABLE								
DDR -DISTRICT DEDICATED REVENUE	0	248,000	0	0	0	0	0	248,000
FAA -FEDERAL AVIATION ADMIN	0	4,464,000	0	0	0	0	0	4,464,000
LF -LOCAL FUNDS	0	248,000	0	0	0	0	0	248,000
Item 438975 1 Totals:	**0**	**4,960,000**	**0**	**0**	**0**	**0**	**0**	**4,960,000**
Project Total:	**0**	**4,960,000**	**0**	**0**	**0**	**0**	**0**	**4,960,000**

Fund	<2017	2017	2018	2019	2020	2021	>2021	All Years
FLP: RAIL								
Item Number: 436559 1 Project Description: SR60 GRADE SEPARATION OVER CSX RAILROAD *SIS*								
District: 01 County: POLK Type of Work: RAIL CAPACITY PROJECT Project Length: .000								
PRELIMINARY ENGINEERING / MANAGED BY FDOT								
DIH -STATE IN-HOUSE PRODUCT SUPPORT	70,000	0	0	0	0	0	0	70,000
RIGHT OF WAY / MANAGED BY FDOT								
DIH -STATE IN-HOUSE PRODUCT SUPPORT	1,189	20,000	0	0	0	0	0	21,189
Item 436559 1 Totals:	**71,189**	**20,000**	**0**	**0**	**0**	**0**	**0**	**91,189**
Project Total:	**71,189**	**20,000**	**0**	**0**	**0**	**0**	**0**	**91,189**

Fund	<2017	2017	2018	2019	2020	2021	>2021	All Years
Item Number: 436560 1 Project Description: RECKER HIGHWAY CONSTRUCT A BRIDGE SPANNING THE CSX RR TRACK IN POLK CO *SIS*								
District: 01 County: POLK Type of Work: RAIL CAPACITY PROJECT Project Length: .000								
P D & E / MANAGED BY FDOT								
DIH -STATE IN-HOUSE PRODUCT SUPPORT	10,000	0	0	0	0	0	0	10,000
PRELIMINARY ENGINEERING / MANAGED BY FDOT								
DIH -STATE IN-HOUSE PRODUCT SUPPORT	7,000	0	0	0	0	0	0	7,000
RIGHT OF WAY / MANAGED BY FDOT								
DIH -STATE IN-HOUSE PRODUCT SUPPORT	0	0	0	0	153,024	0	0	153,024
Item 436560 1 Totals:	**17,000**	**0**	**0**	**0**	**153,024**	**0**	**0**	**170,024**
Project Total:	**17,000**	**0**	**0**	**0**	**153,024**	**0**	**0**	**170,024**

Fund	<2017	2017	2018	2019	2020	2021	>2021	All Years

Item Number: 436990 1 Project Description: LAKELAND LINDER REG APT MRO HANGER *NON-SIS*								
District: 01 County: POLK Type of Work: AVIATION REVENUE/OPERATIONAL Project Length: .000								
CAPITAL / RESPONSIBLE AGENCY NOT AVAILABLE								
DDR -DISTRICT DEDICATED REVENUE	3,767,062	0	0	0	0	0	0	3,767,062
DPTO -STATE - PTO	0	372,938	0	0	0	0	0	372,938
LF -LOCAL FUNDS	3,767,062	372,938	0	0	0	0	0	4,140,000
Item 436990 1 Totals:	**7,534,124**	**745,876**	**0**	**0**	**0**	**0**	**0**	**8,280,000**
Project Total:	**7,534,124**	**745,876**	**0**	**0**	**0**	**0**	**0**	**8,280,000**

Fund	<2017	2017	2018	2019	2020	2021	>2021	All Years
Item Number: 437059 1 Project Description: BARTOW MUNICIPAL APT INSTALL NEW AND RELOCATE EXISTING RAIL LINES *NON-SIS*								
District: 01 County: POLK Type of Work: AVIATION REVENUE/OPERATIONAL Project Length: .000								
Extra Description: INSTALL NEW AND RELOCATE EXISTING RAIL LINES								
CAPITAL / RESPONSIBLE AGENCY NOT AVAILABLE								
DPTO -STATE - PTO	0	0	0	0	600,000	0	0	600,000
LF -LOCAL FUNDS	0	0	0	0	600,000	0	0	600,000
Item 437059 1 Totals:	**0**	**0**	**0**	**0**	**1,200,000**	**0**	**0**	**1,200,000**
Project Total:	**0**	**0**	**0**	**0**	**1,200,000**	**0**	**0**	**1,200,000**

Fund	<2017	2017	2018	2019	2020	2021	>2021	All Years
Item Number: 438836 1 Project Description: LAKELAND LINDER REG ARPT SITE PREP/UTILITY INSTALL @ INTERMODAL CENTER *NON-SIS*								
District: 01 County: POLK Type of Work: AVIATION CAPACITY PROJECT Project Length: .000								
CAPITAL / RESPONSIBLE AGENCY NOT AVAILABLE								
DDR -DISTRICT DEDICATED REVENUE	623,773	0	0	1,100,000	0	1,800,000	0	3,523,773
DPTO -STATE - PTO	994,427	100,000	0	200,000	1,400,000	232,050	0	2,926,477
LF -LOCAL FUNDS	1,618,200	100,000	0	1,300,000	1,400,000	2,032,050	0	6,450,250
Item 438836 1 Totals:	**3,236,400**	**200,000**	**0**	**2,600,000**	**2,800,000**	**4,064,100**	**0**	**12,900,500**
Project Total:	**3,236,400**	**200,000**	**0**	**2,600,000**	**2,800,000**	**4,064,100**	**0**	**12,900,500**

Fund	<2017	2017	2018	2019	2020	2021	>2021	All Years
FLORIDA RAIL ENTERPRISE								
Item Number: 436559 1 Project Description: SR60 GRADE SEPARATION OVER CSX RAILROAD *SIS*								
District: 01 County: POLK Type of Work: RAIL CAPACITY PROJECT Project Length: .000								
PRELIMINARY ENGINEERING / MANAGED BY FDOT								
DPTO -STATE - PTO	2,968,756	0	0	0	0	0	0	2,968,756
DS -STATE PRIMARY HIGHWAYS & PTO	394,306	0	0	0	0	0	0	394,306
RIGHT OF WAY / MANAGED BY FDOT								
TRIP -TRANS REGIONAL INCENTIVE PROGM	0	843,085	0	0	0	0	0	843,085
RAILROAD & UTILITIES / MANAGED BY FDOT								
TRIP -TRANS REGIONAL INCENTIVE PROGM	0	30,000	470,000	0	0	0	0	500,000
CONSTRUCTION / MANAGED BY FDOT								
TRIP -TRANS REGIONAL INCENTIVE PROGM	0	0	0	30,639,633	0	0	0	30,639,633
ENVIRONMENTAL / MANAGED BY FDOT								
DPTO -STATE - PTO	25,000	0	0	0	0	0	0	25,000
TRIP -TRANS REGIONAL INCENTIVE PROGM	0	0	75,000	0	0	0	0	75,000
Item 436559 1 Totals:	**3,388,062**	**873,085**	**545,000**	**30,639,633**	**0**	**0**	**0**	**35,445,780**
Project Total:	**3,388,062**	**873,085**	**545,000**	**30,639,633**	**0**	**0**	**0**	**35,445,780**

Fund	<2017	2017	2018	2019	2020	2021	>2021	All Years
Item Number: 436560 1 Project Description: RECKER HIGHWAY CONSTRUCT A BRIDGE SPANNING THE CSX RR TRACK IN POLK CO *SIS*								
District: 01 County: POLK Type of Work: RAIL CAPACITY PROJECT Project Length: .000								

Web Application

Federal Aid Management Office James Jobe - Manager

STIP Project Detail and Summaries On-Line Report

Selection Criteria	
Current STIP **County/MPO Area:**(Select a County) **Related Items Shown**	**Detail Report** **Financial Project:**436559 _

TRANSIT

Item Number: 436559 1 **Project Description:** SR60 GRADE SEPARATION OVER CSX RAILROAD

District: 01 **County:** POLK **Type of Work:** RAIL CAPACITY PROJECT **Project Length:** 1.196MI

		Fiscal Year						
Phase / Responsible Agency		**<2017**	**2017**	**2018**	**2019**	**2020**	**>2020**	**All Years**
PRELIMINARY ENGINEERING / MANAGED BY FDOT								
Fund Code:	DIH - STATE IN-HOUSE PRODUCT SUPPORT	30,366	87,345					**117,711**
	DS - STATE PRIMARY HIGHWAYS & PTO	16,766						**16,766**
	Phase: PRELIMINARY ENGINEERING Totals	**47,132**	**87,345**					**134,477**
RIGHT OF WAY / MANAGED BY FDOT								
Fund Code:	DIH - STATE IN-HOUSE PRODUCT SUPPORT	1,189	20,000					**21,189**
	Item: 436559 1 Totals	**48,321**	**107,345**					**155,666**
	Project Totals	**48,321**	**107,345**					**155,666**
	Totals	**48,321**	**107,345**					**155,666**

FLORIDA RAIL ENTERPRISE

Item Number: 436559 1 **Project Description:** SR60 GRADE SEPARATION OVER CSX RAILROAD

District: 01 **County:** POLK **Type of Work:** RAIL CAPACITY PROJECT **Project Length:** 1.196MI

		Fiscal Year						
Phase / Responsible Agency		**<2017**	**2017**	**2018**	**2019**	**2020**	**>2020**	**All Years**
CONSTRUCTION / MANAGED BY FDOT								
Fund Code:	TRIP - TRANS REGIONAL INCENTIVE PROGM				30,639,633			**30,639,633**
ENVIRONMENTAL / MANAGED BY FDOT								
Fund Code:	TRIP - TRANS REGIONAL INCENTIVE PROGM			75,000				**75,000**
PRELIMINARY ENGINEERING / MANAGED BY FDOT								
Fund Code:	DPTO - STATE - PTO	2,968,756						**2,968,756**
	DS - STATE PRIMARY HIGHWAYS & PTO	394,306						**394,306**
	TRIP - TRANS REGIONAL INCENTIVE PROGM		34,979					**34,979**
	Phase: PRELIMINARY ENGINEERING Totals	**3,363,062**	**34,979**					**3,398,041**
RIGHT OF WAY / MANAGED BY FDOT								
Fund Code:	TRIP - TRANS REGIONAL INCENTIVE PROGM		1,305,000					**1,305,000**
RAILROAD & UTILITIES / MANAGED BY FDOT								
Fund Code:	TRIP - TRANS REGIONAL INCENTIVE PROGM		30,000	600,000				**630,000**
	Item: 436559 1 Totals	**3,363,062**	**1,369,979**	**675,000**	**30,639,633**			**36,047,674**
	Project Totals	**3,363,062**	**1,369,979**	**675,000**	**30,639,633**			**36,047,674**
	FLORIDA RAIL ENTERPRISE Totals	**3,363,062**	**1,369,979**	**675,000**	**30,639,633**			**36,047,674**
	Grand Total	**3,411,383**	**1,477,324**	**675,000**	**30,639,633**			**36,203,340**

32399. For additional information please e-mail questions or comments to:
(James Jobe: james.jobe@dot.state.fl.us or call 850-414-4448)

Office Home: Office of Work Program

Florida Department of Transportation
Consistent, Predictable, Repeatable