FINAL

WETLAND EVALUATION AND BIOLOGICAL ASSESSMENT REPORT

US 301 (SR 43)

from SR 60 (Adamo Drive) to I-4 (SR 400)

Project Development and Environment Study

FDOT

WPI Segment No. 430050-1

March 2018

Final Wetland Evaluation and Biological Assessment Report

US 301 (SR 43)

Project Development and Environment Study
From State Road 60 to I-4 (SR 400)
Hillsborough County, Florida

Work Program Item Segment Number: 430050-1

ETDM Number: 3097

This roadway capacity improvement project involves widening US 301 from the existing four-lane divided arterial roadway to a divided six-lane arterial roadway to accommodate future travel demand in the study area. The study limits extend from the intersection with State Road 60 to south of the I-4/US 301 ramps in Hillsborough County. The total project length is 3.3 miles.

Florida Department of Transportation

District Seven

Prepared By:

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Tampa, Florida

March 2018

EXECUTIVE SUMMARY

The Florida Department of Transportation (FDOT), District Seven determined alternative roadway improvements that were considered in a Project Development and Environment (PD&E) Study for US 301 (SR 43) in Hillsborough County. The study limits are from SR 60 (Adamo Drive) to south of the I-4 (SR 400)/US 301 ramps, in Hillsborough County, a distance of approximately 3.3 miles. The purpose of the PD&E Study is to document the need for additional capacity within the study corridor and to evaluate the costs and impacts associated with providing this additional capacity. Federal funds are not planned to be used for the project, so it has been conducted in accordance with the PD&E Manual, Part 1, Chapter 10, which addresses non-federal projects.

The PD&E study documented the need for the improvements, as well as the procedures used to develop and evaluate various improvements including elements such as proposed typical sections, preliminary horizontal alignments, and intersection enhancement alternatives. The social, physical, and natural environmental effects and costs of these improvements are identified. The alternatives are evaluated and compared based on a variety of parameters using a matrix format. This process will identify the alternative that will best balance the benefits (such as improved traffic operations and safety) with the impacts (such as environmental effects and construction costs).

The project was evaluated through the FDOT's Efficient Transportation Decision Making (ETDM) process. This project is designated as ETDM project #3097. An ETDM *Final Programming Screen Summary Report* was published on January 9, 2013 containing comments from the Environmental Technical Advisory Team (ETAT) on the project's effects on various natural, physical and social resources.

This PD&E Study satisfies all applicable state and federal requirements, including the National Environmental Policy Act (NEPA), for this project.

This *Final Wetland Evaluation and Biological Assessment Report* (WEBAR) was prepared as part of this PD&E Study. This report summarizes the possible impacts to wetlands, federally and state protected species, and protected habitats. Identification of measures to avoid, minimize, and mitigate for any potential impacts is also discussed.

Wetlands

Pursuant to Presidential Executive Order 11990 entitled "Protection of Wetlands," (May 23, 1977) the United States Department of Transportation (USDOT) developed a policy, Preservation of the Nation's Wetlands (USDOT Order 5660.1A), dated August 24, 1978. In conjunction with this policy, as well as Part 2, Chapter 18 - Wetlands of the FDOT PD&E Manual, two project alternatives were assessed to determine potential wetland impacts associated with construction of each alternative.

On May 1 and 14, 2013, 6.54 acres of surface waters were identified and mapped along the project corridor. No wetlands were identified within the project ROW. Surface waters proposed for impact consist primarily of ditches that are located within the existing ROW. They have been previously disturbed by roadway construction, maintenance activities, and the invasion of nuisance and exotic species. A description of the dominant floral species, soil types, land use, and other pertinent remarks are provided in subsequent sections of this report. As no wetlands were identified within the project ROW, the Uniform Mitigation Assessment Methodology (UMAM) analysis was not necessary. Final determination of jurisdictional boundaries, in addition to mitigation requirements will be coordinated between the FDOT and permitting agencies during the final design stage of the project.

The results of this PD&E study indicate there are no practicable alternatives to the anticipated impacts due to the need to increase roadway capacity and safety considerations. Furthermore, all wetland impacts have been avoided and minimized to the greatest degree possible, and have been limited to those areas of previous disturbance and are required to meet minimum safety requirements.

Protected Species and Habitat

This project was evaluated for impacts to wildlife and habitat resources, including protected species, in accordance with 50 Code of Federal Regulations (CFR) Part 402 of the Endangered Species Act (ESA) of 1973, as amended, Chapters 5B- 40: *Preservation of Native Flora of Florida* and 68A-27 Florida Administrative Code (FAC) *Rules Relating to Endangered or Threatened Species*, and *Part 2, Chapter 27 - Wildlife and Habitat Impacts* of the FDOT *PD&E Manual*.

Field surveys and database searches for protected species were conducted in 2013. One federally protected species, the wood stork (*Mycteria americana*), was determined to be present or have a high likelihood for using project habitats. The bald eagle (*Haliaeetus leucocephalus*), which receives protection under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA), and the osprey (*Pandion haliaetus*), which receives protection under the

MBTA, also have the potential to occur within the project area. The FDOT has detailed commitments to protect the federally-threatened eastern indigo snake (*Drymarchon corais couperi*), and state-threatened gopher tortoise (*Gopherus polyphemus*) which were both determined to have a low probability of occurrence within project habitats. One state-listed wildlife species, described below, was observed during field surveys.

The **wood stork** is designated as threatened by the U.S. Fish and Wildlife Service (USFWS). The project corridor is located within the Core Foraging Area (CFA) of six documented wood stork colonies. No wood storks were observed during field reviews; however, suitable foraging habitat exists within roadside ditches along the corridor. A foraging habitat assessment procedure may be required to quantify impacts to suitable foraging habitat. However, because loss of these areas will either be mitigated or replaced, the project "may affect but is not likely to adversely affect" this species.

The **eastern indigo snake** is designated as threatened by the USFWS. This species typically inhabits a variety of natural areas including forested uplands and wetlands as well as wet and dry prairies. There is limited suitable habitat for this species near the highly urbanized project corridor and the FDOT will commit to the precaution measures described later in this report. Therefore, the project "may affect but is not likely to adversely affect" this species.

The **Florida sandhill crane** (*Grus canadensis pratensis*) is listed as threatened by the Florida Fish and Wildlife Conservation Commission (FWC). Adult sandhill cranes were observed in one area of the project corridor. Current FWC protection measures provide protection for nesting sandhill cranes; no construction activities may occur within 125 meters of nest sites during the breeding season (January through August).

The **gopher tortoise** is listed as threatened by the FWC and is a candidate species for listing by the USFWS. Gopher tortoises thrive in xeric areas with sandy soils and open canopy with low groundcover. This habitat is largely absent from the project area. The FDOT will commit to conducting comprehensive surveys for gopher tortoises and their burrows during the project's final design phase. Until field surveys indicate otherwise, it has been determined that the project "may affect but is not likely to affect" the gopher tortoise.

In addition to faunal surveys, appropriate habitats were surveyed for protected flora**.** No federal or state-listed plant species were observed within the project area. This project proposes minimal impacts to undisturbed natural habitat and the FDOT is committed to coordination with the Florida Department of Agricultural and Consumer Services (FDACS) if protected plant species are observed within the proposed impact areas during the design phase; therefore, based on the results of the floral surveys, the project is not anticipated to adversely affect protected plant species.

Commitments to protect these species and habitat are provided and detailed in this report. These commitments include but are not limited to protection measures employed during design and construction phases. Standard operating measures such as providing compensatory mitigation measures for impacts to foraging habitat and resurveying of suitable habitat areas prior to construction will also provide protection for species and habitat. If protected species are identified, coordination with the USFWS, FWC and/or the FDACS - Division of Plant Industry (DPI) will be initiated to determine permit requirements or modifications to construction activities that may be required.

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1.0 INTRODUCTION

1.1 PROJECT DESCRIPTION

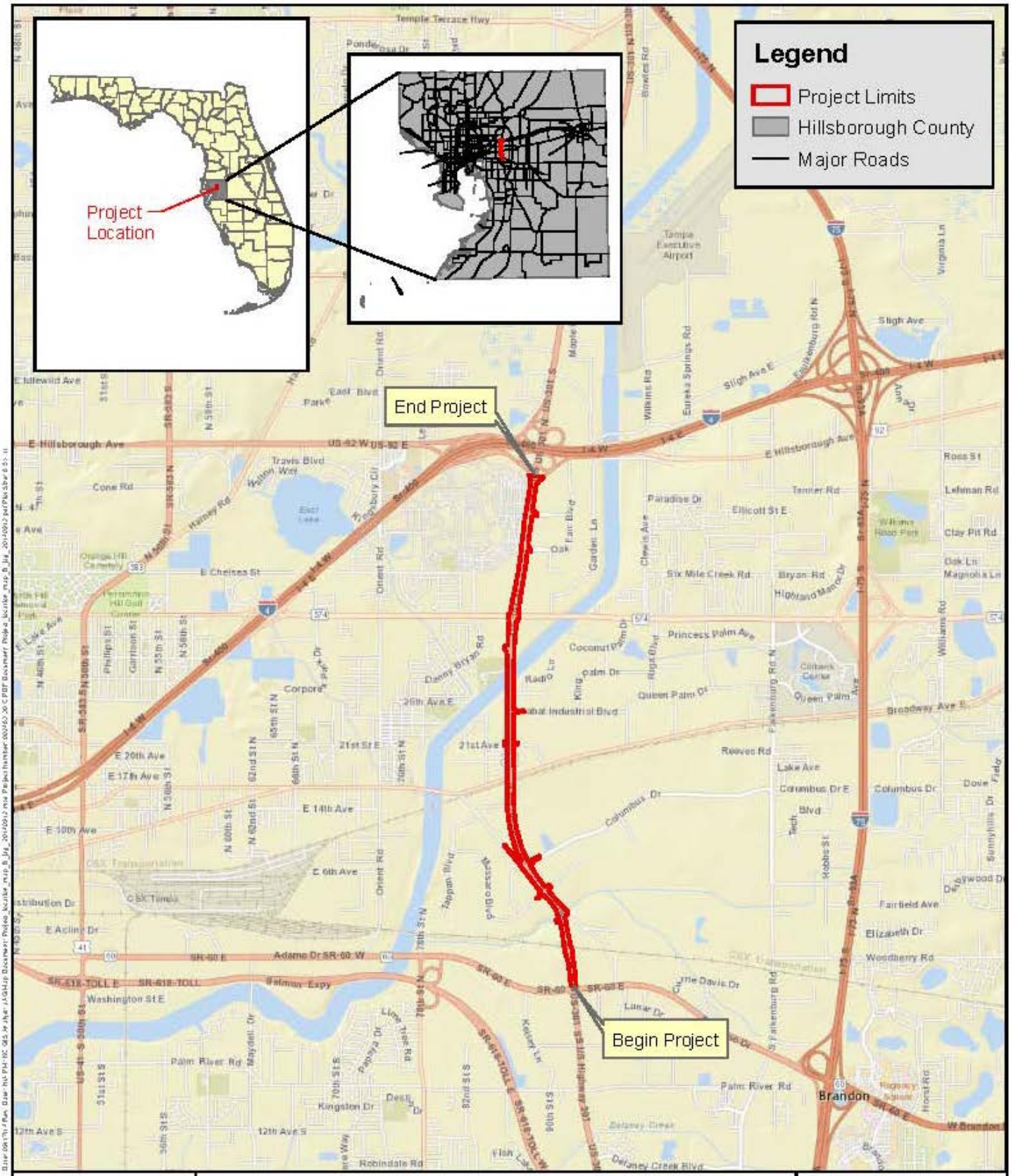
The Florida Department of Transportation (FDOT) conducted a Project Development and Environment (PD&E) study to evaluate the proposed widening of US 301 (SR 43) to six lanes from SR 60 (Adamo Drive) to the southern end of the eastbound I-4 (SR 400) on- and off-ramps in Hillsborough County. The total project length is approximately 3.3 miles, and is illustrated in **Figure 1-1.** An aerial map is provided in **Figure 1-2**. The purpose of this PD&E study is to document the need for additional capacity within the study corridor and to evaluate the costs and impacts associated with providing this additional capacity. Federal funds are not planned to be used for this project, so it has been conducted in accordance with the PD&E Manual, Part 1, Chapter 10, which addresses non-federal projects.

The proposed action involves widening US 301 from the existing four-lane divided roadway to a six-lane divided roadway. This improvement is necessary to provide additional capacity to accommodate the future travel demand that will be generated by the projected population and employment growth in eastern Hillsborough County. US 301 is a major north-south roadway that traverses all of Hillsborough County and provides connectivity to many of Florida's major roadways including SR 60, Lee Roy Selmon Expressway and I-4. This roadway is a vital link in the regional transportation network and also serves as an emergency evacuation route.

US 301 is functionally classified as an "Urban Other Principal Arterial" and has a posted speed limit of 50 miles per hour (mph) within the majority of the project limits. The posted speed limit is reduced to 45 mph approaching SR 60 and at the approaching on-ramp to eastbound I-4. Throughout most of the study corridor, US 301 exists as a four-lane divided roadway; however, three through lanes are provided in both the northbound and southbound directions in the vicinity of the intersection with SR 574 (Dr. Martin Luther King, Jr. Boulevard).

The existing right-of-way (ROW) width ranges from 160 feet to 306 feet; however, a majority of the study corridor has a ROW width of 200 feet. Sidewalks as well as roadside ditches, where stormwater runoff is collected, were recently constructed along both the east and west sides of US 301 from SR 574 northward to I-4. Other sections of sidewalks exist intermittently from SR 60 to SR 574.

There are also seven bridges located within the project limits. Two bridges are located over the CSX Railroad's S-Line while two others are located over the CSX Railroad's A-Line and CR 574 (Broadway Avenue). There are also two bridges that cross over the Tampa Bypass Canal and one box culvert that crosses Bruce Creek.


Legend
Project Limits
Hillsborough County
Major Roads
Project Location
End Project
Begin Project
Figure 1-1 - Property Location Map
FPID #: 430050-1-22-01
US 301 (SR 43) PD&E Study from SR 60 (Adamo Drive) to I-4 (SR 400)
Hillsborough County, Florida
Feet
0
4,000
8,000
12,000
Data Source:
-Hillsborough County Property Appraiser
Imagery Source:
-ESRI World Street Map
Coordinate System:
NAD 1983 Florida
State Plane West
N

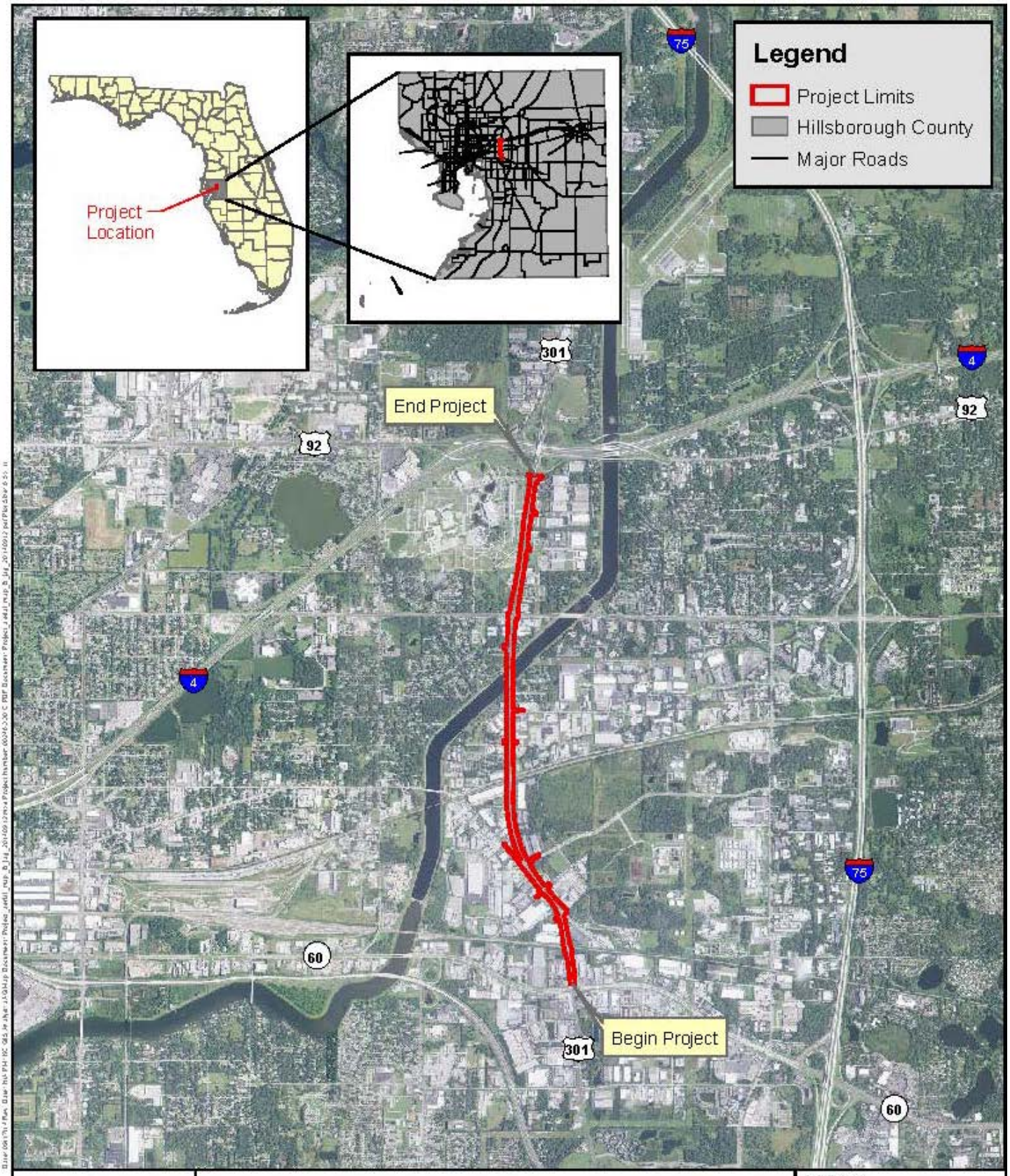


Figure 1-2 - Project Aerial Map

FPID #: 430050-1-22-01
US 301 (SR 43) PD&E Study from SR 60 (Adamo Drive) to I-4 (SR 400)
Hillsborough County, Florida

0 4,000 8,000 12,000 Feet

Data Source:
-Hillsborough County Property Appraiser
Imagery Source:
-USDA 2013 Aerial

Coordinate System:
NAD 1983 Florida
State Plane West

N

The project was evaluated through the FDOT's Efficient Transportation Decision Making (ETDM) process. This project is designated as ETDM project #3097. An ETDM *Final Programming Screen Summary Report* was published on January 9, 2013 containing comments from the Environmental Technical Advisory Team (ETAT) on the project's effects on various natural, physical and social resources.

1.2 PURPOSE AND NEED

The purpose of this project is to relieve congestion on this portion of US 301 in unincorporated Hillsborough County. US 301 is a major north-south roadway facility in close proximity to the City of Tampa, which travels from the Sarasota-Bradenton-Venice Metropolitan Statistical Area across the state to the Jacksonville Metropolitan Statistical Area. US 301 serves regional travel and connects residential centers in the Brandon and South Shore area with employment centers along the I-75 Corridor. It provides regional connectivity with I-75, the Lee Roy Selmon Crosstown Expressway, and I-4. US 301 has been designated by Hillsborough County Emergency Management as an emergency evacuation route. In addition to increasing capacity, this project will add or enhance the multi-modal facilities in this corridor.

The need for this widening project is based on the congestion and the current failing level of service of this segment of US 301. Between SR 60 and I-4, I-75 and US 301 are parallel facilities. Like US 301, I-75 between SR 60 and I-4 is operating at a failing level of service according to the 2011 Hillsborough County Level of Service Report; this segment of I-75 ranges from 25-33% over capacity. Addition of capacity on US 301 will help ease congestion for this overburdened roadway.

According to the March 2011 Hillsborough County Automobile Level of Service Report, US 301 between State Road 60 and I-4 is currently operating at 102% of capacity. This yields a failing level of service grade of "F". The most recent version of the Tampa Bay Regional Planning Model (TBRPM) uses 2010 base year data, which shows a level of service of C for the SR 60 to I-4 segment of US 301. The TBRPM projects this segment to have a failing LOS by 2035. The 2035 traffic volumes projected by the model show deficiencies and a failing level of service for the US 301 Corridor.

The proposed widening of this US 301 segment will also have positive socio-economic impacts. The Hillsborough County City-County Planning Commission's 2040 Long Range Transportation Plan socioeconomic projections (July 2014) contains both population and employment projections. These projections show Hillsborough County's population growing from 1,229,226 to 1,815,964 (a 48% increase) between 2010 and 2040. Employment is projected to grow from 711,400 to 1,112,059 (a 56% increase) between 2010 and 2040, mostly within the urban service area. Based

on projected population growth, the existing infrastructure would result in failing levels of service in the future.

Several Strategic Intermodal Systems (SIS) facilities are in close proximity to US 301, including: the Port of Tampa, the Tampa Intercity Greyhound Bus Terminal, and the Port of Manatee. Emerging SIS facilities in the area include: the Tampa Amtrak Station, and the Tampa CSX Intermodal Terminal. As this project is constructed and congestion is decreased, travel to intermodal facilities will become faster and easier. Additionally, this improvement is envisioned to include multi-modal improvements, including sidewalks, bicycle lanes, and transit accommodations. Currently, the Hillsborough Area Regional Transit (HART) system does not have buses running on this section of US 301.

Safety within the US 301 corridor is projected to improve with an increase in capacity and a reduction in congestion, thereby decreasing potential conflict with other vehicles. The US 301 corridor between SR 60 and I-4 had 535 crashes from 2008-2013. Most occurred at the intersections along the corridor and were the result of rear end collisions. The addition and enhancement of multi-modal facilities will increase pedestrian and bicyclist safety along the corridor.

1.3 PURPOSE OF REPORT

This *Final Wetlands Evaluation and Biological Assessment Report* (*WEBAR*) is one of several documents prepared as part of this PD&E Study. This report documents wetlands and protected species within the project corridor. Pursuant to Presidential Executive Order 11990 entitled "Protection of Wetlands," the U.S. Department of Transportation (USDOT) has developed a policy, Preservation of the Nation's Wetlands (USDOT Order 5660.1A), dated August 24, 1978. In conjunction with this policy, as well as *Part 2, Chapter 18 – Wetlands* of the FDOT *PD&E Manual*, two project alternatives were assessed to determine potential wetland impacts associated with construction of each alternative.

This report also documents existing wildlife resources and assesses existing habitat types found within the project area for potential occurrences of federal and state-listed protected plant and animal species in accordance with *Part 2, Chapter 27 - Wildlife and Habitat Impacts* of the FDOT *PD&E Manual*. Potential impacts to protected species and Critical Habitat (CH) that may support these species are also addressed in this report.

1.4 EXISTING FACILITY AND PROPOSED IMPROVEMENTS

Within the project limits, US 301 currently has a 4-lane divided rural typical section as shown in **Figure 1-3**. The existing roadway generally has twelve-foot travel lanes, four-foot paved outside shoulders, five-foot sidewalks and a 40-foot grassed median.

The posted speed is 50 miles per hour (mph) within the majority of the project limits. The majority of the existing ROW is 200 feet wide but portions vary from 160 to 306 feet wide. Proposed Alternatives 1 and 2 both employ the same typical section. The suburban typical section for both alternatives is shown in **Figure 1-4** and the urban typical section for both alternatives is shown in **Figure 1-5**. Figures 1-4 and 1-5 also include an overlay of the existing typical section at the top. Both alternatives include widening to six lanes within the existing ROW, as well as bicycle and pedestrian facilities. The main difference in the proposed alternatives is that Alternative 2 includes construction of new bridges over the CSX Railroad "S" and "A" lines as opposed to widening of the existing bridges with Alternative 1. A "No-Build" Alternative was also considered. The proposed project is not funded in FDOT's current 5-year Adopted Work Program for either ROW acquisition or construction.

Figure 1-3 Existing Typical Section

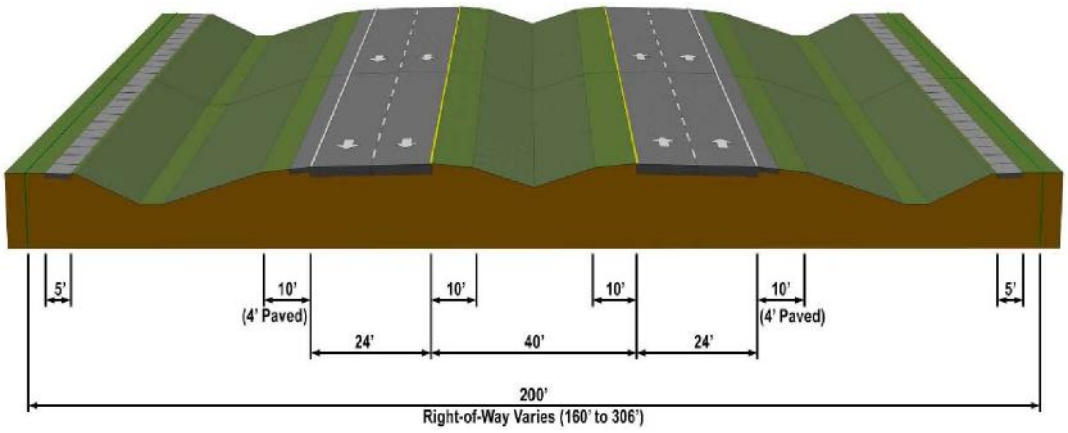
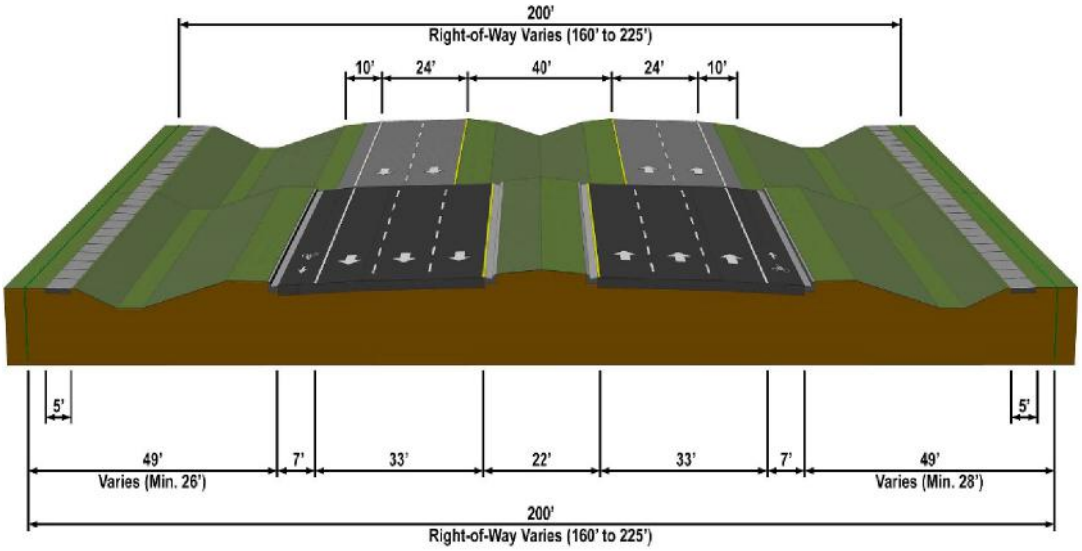
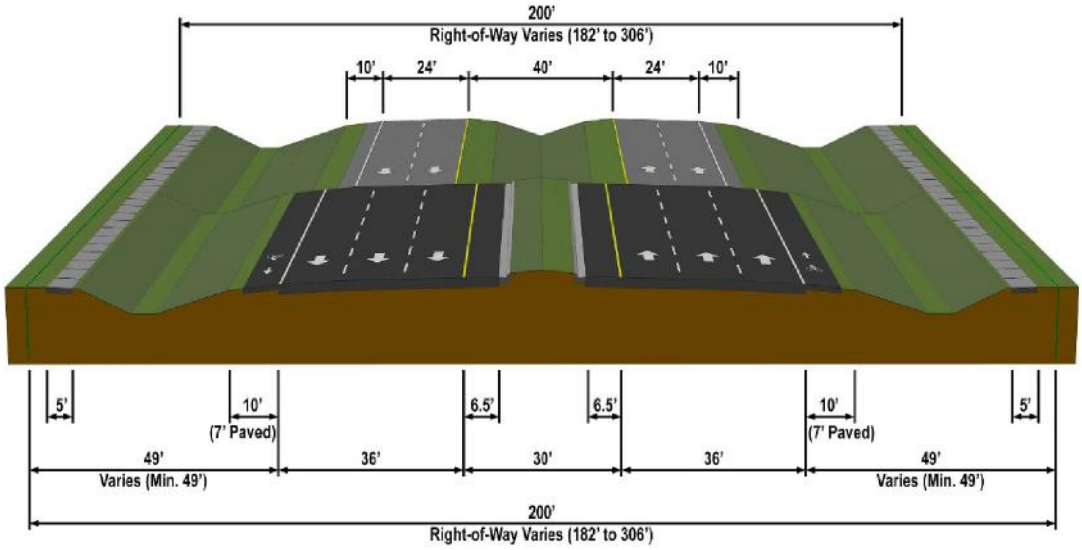


Figure 1-4 Suburban Typical Section – Alternatives 1 & 2



Sta. 101+00 to Sta. 181+00

Figure 1-5 Urban Typical Section – Alternatives 1 & 2



Sta. 181+00 to Sta. 262+00

2.0 EXISTING ENVIRONMENTAL CONDITIONS

2.1 EXISTING LAND USE

Existing land use along the project corridor was determined utilizing a variety of resources including the National Wetlands Inventory (NWI), U.S Geological Survey (USGS) topographical maps, aerial photographs (2011), land use mapping from the Southwest Florida Water Management District (SWFWMD, 2011), and field-verification during wetland and habitat reviews. **Figure 2-1** depicts the overview of existing land use types for the project corridor. Land use along the majority of the corridor is dominated by commercial/industrial land uses interspersed with small areas of undeveloped areas, and a mobile home residential area.

Most upland habitats adjacent to the project corridor have been developed as commercial and retail facilities or industrial infrastructure. Upland habitats that have not been developed consist of remnant patches of live oaks. Although undeveloped at the time of surveys, most of these areas are not considered high quality for wildlife due to their proximity to the roadway and adjacent development. Descriptions of upland and wetland communities are provided in **Sections 2.1.2** and **2.1.3**. **Table 2-1** provides a summary of land use cover types and prevalence within 200-feet of the project centerline; this analysis is based on land use data obtained from the SWFWMD.

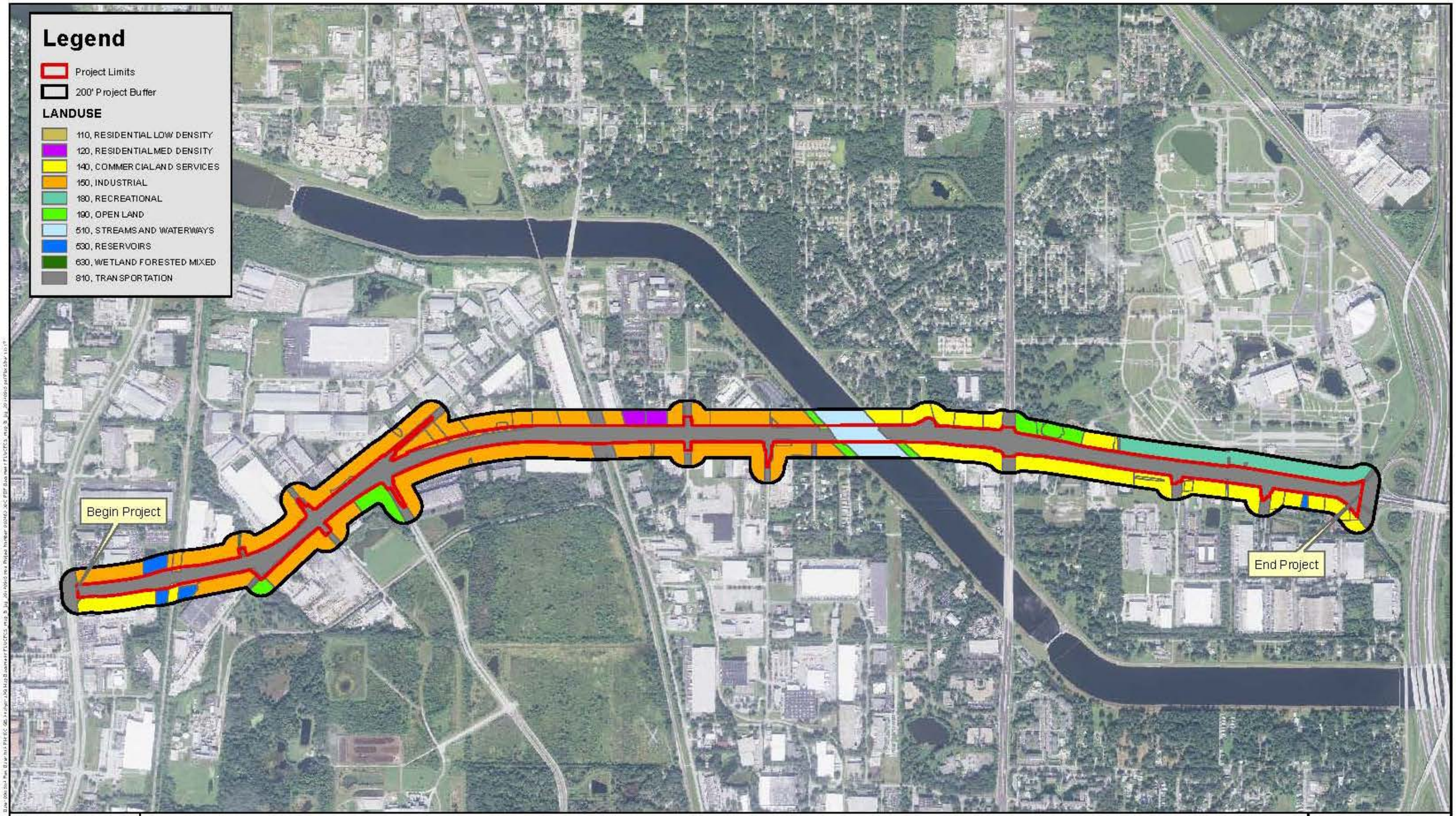


Figure 2-1 - Existing FLUCFCS Overview Map

FPID: 430050-1-22-01
US 301 (SR 43) PD&E Study from SR 60 (Adamo Drive) to I-4 (SR 400)
Hillsborough County, Florida

0 1,100 2,200 3,300 Feet

Data Source:
-2009 SWFWMD FLUCFCS
Imagery Source:
-2010 Microsoft

Coordinate System:
NAD 1983 Florida
State Plane West

Table 2-1 Existing Land Use/Land Cover (FLUCFCS)

FLUCFCS Code		Description	Acres	Percent Cover
100: Urban & Built-Up	141	RETAIL SALES AND SERVICES	0.78	0.94%
	142	WHOLESALE SALES AND SERVICES	0.80	0.96%
	145	TOURIST SERVICES	0.02	0.03%
	150	INDUSTRIAL	0.02	0.02%
	190	OPEN LAND	0.05	0.06%
		Total	**1.67**	**2.01%**
400: Upland Forest	427	LIVE OAK	0.03	0.03%
		Total	**0.03**	**0.03%**
500: Water	512	CHANNELIZED RIVER, STREAM, WATERWAY	6.50	7.82%
	534	RESERVOIRS LESS THAN 10 ACRES	0.03	0.04%
		Total	**6.54**	**7.86%**
700: Barren Lands	747	DIKES AND LEVEES	0.10	0.13%
		Total	**0.10**	0.13%
800: Transportation, Communication & Utilities	812	RAILROADS	0.20	0.24%
	814	ROADS AND HIGHWAYS	74.61	89.73%
		Total	**74.81**	**89.97%**
		Total	**83.15**	**100.00**

2.1.1 Natural and Biological Features

Riverine systems provide travel corridors for wildlife through developed areas such as those that exist along the project corridor and undeveloped habitats. Additionally, these riverine systems provide habitats and foraging areas for wetland dependent species.

One major stream system, The Tampa Bypass Canal/Six Mile Creek (Tampa Bypass Canal) intersects the project corridor. As the name implies, this historical creek has been dredged and is currently operated and maintained by the SWFWMD. The U.S. Army Corps of Engineers

(USACE) also has interest in this canal under Chapter 33 U.S. Code (U.S.C.) Section 408. See Section 3.4 for more information. This portion of the canal occurs in the Hillsborough River Watershed, a watershed which is 379.9 square miles of which 48% lies within Hillsborough County. This is not classified as an Outstanding Florida Water (OFW).

The Tampa Bypass Canal is bordered by a park (Florida Land Use, Cover and Forms Classification System [FLUCFCS] 185) on the northern border of the stream bank to the west of the US 301 roadway and dikes and levees (FLUCFCS 787) on the southern stream bank to the east of the US 301 roadway. The park and dikes and levees system occur outside of the project footprint.

Elevations identified along the project corridor range from about 9.5 ft. North American Vertical Datum of 1988 (NAVD88) to about 55.79 ft.

2.1.2 Upland Vegetation Communities

The major upland vegetation communities within and directly adjacent to the project corridor are discussed in this section. These communities are classified according to the FLUCFCS (FDOT, 1999). During the field review, upland community types were visually inspected to verify community boundaries, dominant vegetation, and for the presence or potential for occurrence of threatened and endangered species. Upland habitat in the project area, as a whole, is generally disturbed and/or has been developed for urban/commercial or residential purposes.

Live Oak (FLUCFCS 427)

Often referred to as upland temperate hammock, this forest community is one in which live oak is either pure or predominant. The principle associates of this cover type include sweetgum, magnolia, holly, and laurel oak. This community is common along the upper banks of Florida's lakes and streams.

2.1.3 Wetlands and Surface Water Features

In accordance with Executive Order 11990, "Protection of Wetlands" (May 1977), the proposed project has been evaluated for potential effects to wetlands. Wetland locations and boundaries were identified and approximated using aerial interpretation and field reconnaissance in the spring of 2013. Wetland boundaries were visually approximated using the USACE "Corps of Engineers' Wetlands Delineation Manual, Technical Report Y-87-10" (1987) and "Interim Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Atlantic and Gulf Coastal Plain Region" (2008) and the Florida Department of Environmental Protection's (FDEP) "Delineation of the Landward Extent of Wetlands and Surface Waters" (1995) (Chapter 62-340,

Florida Administrative Code [FAC]). Maps depicting all of the jurisdictional surface water features and FLUCFCS codes within the project ROW are provided in **Appendix A**.

2.1.3.1 Methodology

A variety of resources including U.S. Fish and Wildlife Service (USFWS) NWI data, National Resources Conservation Services (NRCS) soils data, SWFWMD aerial photographs (2013), and field surveys were employed to identify the wetland and surface water communities that occur within the study area. All wetlands and surface water features within and immediately adjacent to the project corridor were mapped on a scale of 1" = 200' aerial photographs (2013), assigned a unique identification number and categorized in accordance with the SWFWMD FLUCFCS designation and NWI designation. These codes include whether each site is a wetland (WL) or surface water (SW). Wetlands and surface waters were labeled numerically and in sequence beginning at the southern end to the northern end and the eastern side to the western side.

To assist in the proper determination/classification of surface waters and wetlands, data sources were examined including historic aerial photography, permitted stormwater management facilities, and the SWFWMD Environmental Resource Permit (ERP) boundaries on the SWFWMD E-Permitting District Permit Mapping system. Shallow swales identified within the project corridor were primarily composed of mowed bahia grass (Paspalum notatum) and this type of system was not mapped during field surveys and was not evaluated for potential impacts.

Historic hydric soil locations may be employed to distinguish ditches excavated in uplands, which are generally considered surface waters, from ditches excavated in wetlands, which may be classified as wetlands. It has been determined that there have been extensive influential external factors on historic hydric soils. Such factors include but are not limited to: ditching and channelization of waterways, addition of drainage structures, placement of overburden/fill material over historical hydric soils for construction activities, and long-term accumulation of roadway runoff degrading soil quality. Historic hydric soils therefore, are not considered to be a reliable distinguishing feature between wetlands and surface waters at this particularly urban, developed site.

Based on this analysis, it was determined that only surface waters occur within the project ROW and are proposed for impact. None of these surface waters appear to have been part of a previously-permitted facility based on the SWFWMD E-Permitting District Permit Mapping system. It is therefore presumed that the linear roadside ditches were created prior to initiation of the statewide ERP process in 1984. Similarly, permits were not identified for the existing canals in the project limits.

A detailed description of this community type is provided below. Representative photographs of surface water features are provided in **Appendix B**.

2.1.3.2 Surface Waters

Thirty-three (33) man-made, linear roadside ditches are located along the corridor. The roadside ditch features are associated with the stormwater management facilities currently in place to serve US 301 and adjacent roadways. Water regimes of the roadside ditches generally consist of intermittent and seasonal flooding. In addition, one named creek, Bruce Creek, and two canals, the Tampa Bypass Canal and an unnamed drainage canal, are also within the corridor. Bruce Creek and the unnamed drainage canal were identified as having somewhat more consistent water regimes, with standing water present throughout the year. The Tampa Bypass Canal, constructed in the 1960's and 1970's, is regulated by the SWFWMD for flood control. All of these features have been labeled as "surface waters" (SW). All surface waters are in the Streams and Waterways category, and all appear to be jurisdictional with the SWFWMD. All surface waters identified within the existing ROW and acreage for each is provided in **Table 2-2.**

Table 2-2 ROW Total Surface Water Acreages

Wet ID	FLUCFCS	Additional Description	Total ROW Acreage
Jurisdictional Surface Waters			
SW1	**512**	**Linear roadside ditch**	**0.32**
SW2	**512**	**Bruce Creek (east side)**	**0.06**
SW3	**512**	**Linear roadside ditch**	**0.31**
SW4	**512**	**Linear roadside ditch**	**0.12**
SW5	**512**	**Linear roadside ditch**	**0.4**
SW6	**512**	**Linear roadside ditch**	**0.12**
SW7	**512**	**Linear roadside ditch**	**0.22**

Wet ID	FLUCFCS	Additional Description	Total ROW Acreage
Jurisdictional Surface Waters			
SW8	**512**	**Linear roadside ditch**	**0.04**
SW9	**512**	**Linear roadside ditch**	**0.01**
SW10	**512**	**Linear roadside ditch**	**0.03**
SW11	**512**	**Linear roadside ditch**	**0.01**
SW12	**512**	**Linear roadside ditch**	**0.06**
SW13	**512**	**Linear roadside ditch**	**0.04**
SW14	**512**	**Tampa Bypass Canal**	**3.04**
SW15	**512**	**Linear roadside ditch**	**0.02**
SW16	**512**	**Linear roadside ditch**	**0.08**
SW17	**512**	**Linear roadside ditch**	**0.03**
SW18	**512**	**Linear roadside ditch**	**0.03**
SW19	**512**	**Unnamed drainage ditch to Bypass Canal (east side)**	**0.02**
SW20	**534**	**Linear roadside ditch**	**< 0.01**
SW21	**512**	**Linear roadside ditch**	**< 0.01**
SW22	**512**	**Linear roadside ditch**	**0.3**
SW23	**512**	**Linear roadside ditch**	**0.04**

Wet ID	FLUCFCS	Additional Description	Total ROW Acreage
Jurisdictional Surface Waters			
SW24	**534**	**Linear roadside ditch**	**< 0.01**
SW25	**512**	**Unnamed drainage ditch to Bypass Canal (west side)**	**0.04**
SW26	**512**	**Linear roadside ditch**	**0.23**
SW27	**512**	**Linear roadside ditch**	**0.26**
SW28	**512**	**Linear roadside ditch**	**0.05**
SW29	**512**	**Linear roadside ditch**	**0.21**
SW30	**512**	**Linear roadside ditch**	**0.05**
SW31	**512**	**Linear roadside ditch**	**0.05**
SW32	**512**	**Linear roadside ditch**	**0.02**
SW33	**512**	**Linear roadside ditch**	**0.05**
SW34	**512**	**Linear roadside ditch**	**0.01**
SW35	**512**	**Linear roadside ditch**	**0.04**
SW36	**512**	**Linear roadside ditch**	**0.03**
SW37	**512**	**Linear roadside ditch**	**0.13**
SW38	**512**	**Bruce Creek (west side)**	**0.06**
	Total		**6.54**

2.1.3.3 Additional Drainage Features

A variety of non-wetland, man-made swales are located along the corridor. These features also tend to be associated with the stormwater management system currently in place to serves US 301 and adjacent roadways. These drainage features are man-made conveyances constructed within upland soil mapping units and do not support a dominance of wetland vegetation. Water regimes generally consist of intermittent flooding. Dominant vegetation is turf grasses, and mowing of these areas is conducted on a routine basis.

2.2 SOILS

Review of the U.S. Department of Agriculture (USDA) NRCS soil survey for Hillsborough (HIL) County, Florida (SSURGO) (2013) identified eight soil types within the project corridor. Dominant soil types identified along the corridor and their identification numbers include Arents, nearly level (HIL #4); Basinger, Holopaw and Samsula soils, depressional (HIL #5); Felda fine sand (HIL #15); Malabar fine sand (HIL #27); Myakka fine sand (HIL#29); Myakka-Urban land complex (HIL #32), Pomello fine sand, 0 to 5 percent slopes (HIL #41), and Saint John's fine sand (HIL #16). According to the Florida Association of Environmental Soil Scientists' (FAESS), *Hydric Soils of Florida Handbook* (2007), the most common hydric soil types found within the project corridor include the following: Basinger, Holopaw and Samsula soils, depressional (HIL #5); Felda fine sand (HIL #15); Malabar fine sand (HIL #27); Myakka fine sand (HIL#29); Myakka-Urban land complex (HIL #32), and Saint John's fine sand (HIL #46). All of these state-listed hydric soils are also federally-listed with hydric classifications obtained from the NRCS website in September 2014.

Although a soil may be listed as hydric based on hydric soil criteria, nullifying factors include the inclusion of other non-hydric soil types, drainage activities and landscape position. Hydric soil identifications will be finalized during the permitting stage of this project.

The NRCS soils map for the project corridor is presented in **Figure 2-2**. Detailed descriptions of the dominant soil types follow.

- **Arents (HIL #4)** – This soil consists of nearly level, heterogeneous soil material. This material has been excavated, reworked, and reshaped by earthmoving equipment. Arents are near urban centers, phosphate mining operations, major highways, and sanitary landfills.
- **Basinger, Holopaw, and Samsula soils, depressional (HIL #5)** – This soil is nearly level and very poorly drained. They are in swamps and depressions on flatwoods. Generally, Basinger soil is along the exterior of swamps or in shallow depressions.

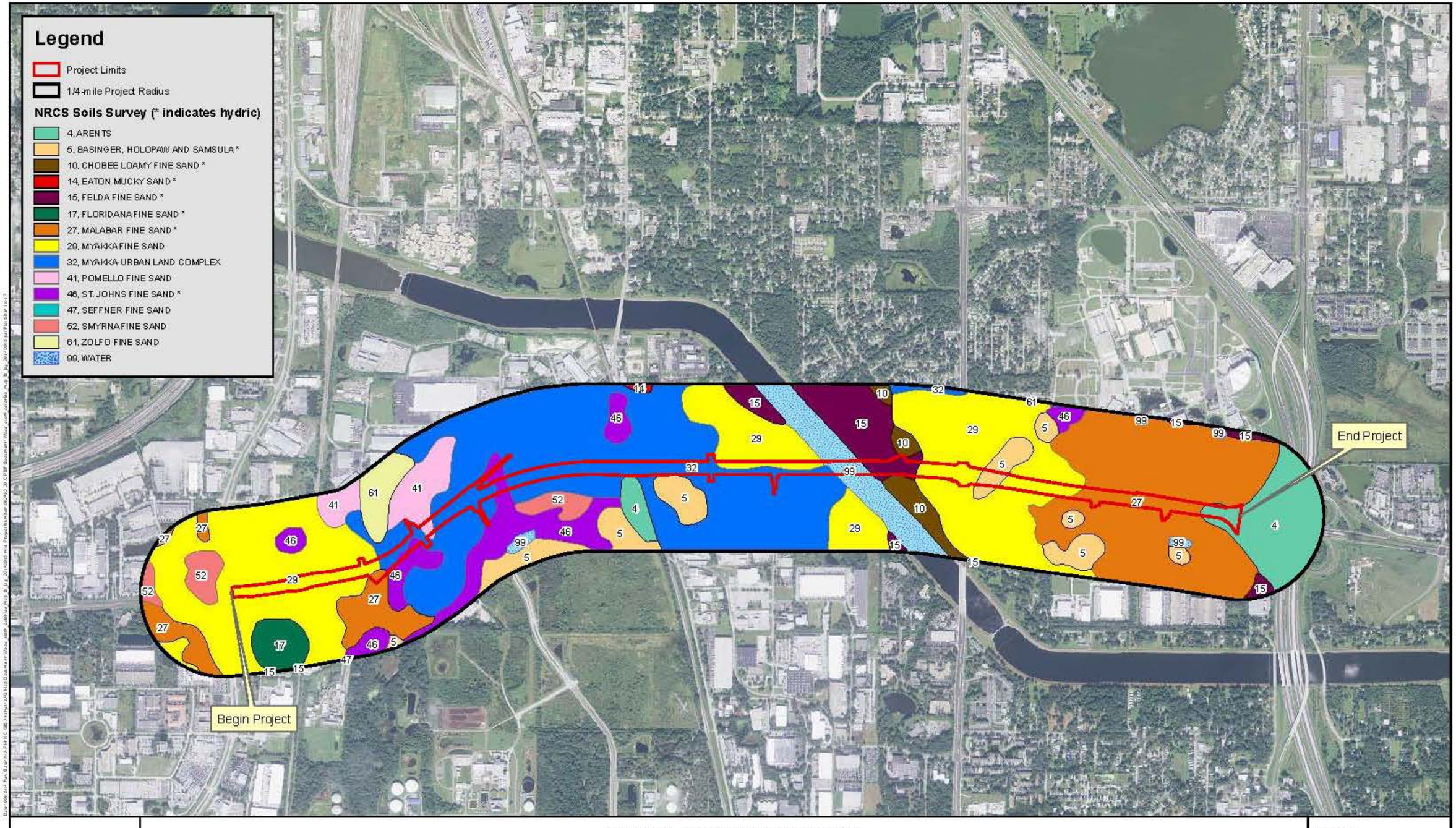


Figure 2-2 - NRCS Soils Overview Map

FPID: 430050-1-22-01
US 301 (SR 43) PD&E Study from SR 60 (Adamo Drive) to I-4 (SR 400)
Hillsborough County, Florida

0 1,400 2,800 4,200 Feet

Data Source:
-NRCS
Imagery Source:
-2010 Microsoft

Coordinate System:
NAD 1983 Florida
State Plane West

N

Holopaw and Samula soils are in the interior area of the swamps or deeper depressions. Undrained areas are frequently ponded for very long periods. A seasonal high water table is within 10 inches of the surface. The slope is less than 2 percent.

- **Felda fine sand (HIL #15) -** The Felda series consists of deep, poorly drained soils, these soils formed in stratified sandy and loamy alluvium and marine sediment. They are on flood plains and on flatwoods. A seasonal high water table is within 10 inches of the surface for 2 to 6 months during most years. Depressions are often ponded during wet periods. The soil is nearly level and poorly drained; slope is less than 2 percent.
- **Malabar fine sand (HIL #27)** – The Malabar series consists of deep, poorly drained soils. These soils formed in sandy and loamy marine sediment. They are on broad, low-lying flats and in shallow depressions. A seasonal high water table is typically within 10 inches of the soil surface for 2 to 6 months. Depressions are subject to ponding during wet periods. This soil is nearly level and poorly drained; the slope is less than 2 percent.
- **Myakka fine sand (HIL #29)** – The Myakka series consists of deep, poorly drained and very poorly drained soils. These soils formed in sandy marine sediment. They are on broad plains on flatwoods and in tidal areas. A seasonal high water table in within 10 inches of the soil surface for 1 to 4 months during most years. This soil is nearly level and poorly drained; the slope is less than 2 percent.
- **Saint John's fine sand (HIL #46)** – The Saint John's series consists of deep, poorly drained soils. These soils formed in sandy marine sediment. They are on broad, low-lying plains on flatwoods. A seasonal high water table is within 15 inches of the soil surface for 2 to 6 months during most years. This soil is nearly level and poorly drained; the slope is less than 2 percent.

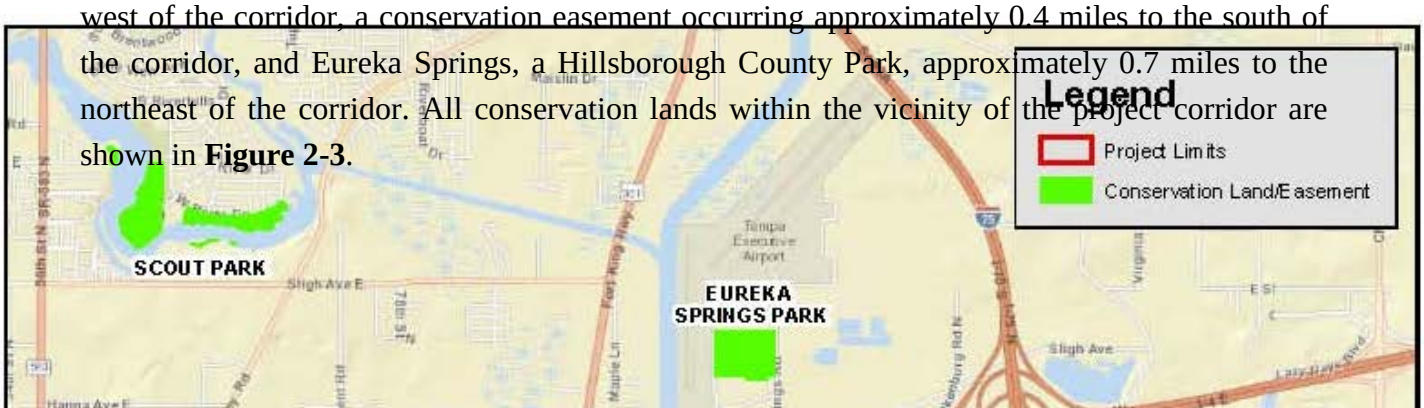
2.3 SIGNIFICANT WATERS AND PROTECTION AREAS

2.3.1 OFWs

There are no waterways or waterbodies classified as OFWs within or immediately adjacent to the project corridor.

2.3.2 Protection Areas

No protected areas are located within or immediately adjacent to the project corridor. The nearest conservation lands consist of a conservation easement occurring approximately 0.33 miles to the west of the corridor, a conservation easement occurring approximately 0.4 miles to the south of the corridor, and Eureka Springs, a Hillsborough County Park, approximately 0.7 miles to the northeast of the corridor. All conservation lands within the vicinity of the project corridor are shown in **Figure 2-3**.



2.3.3 Essential Fish Habitat

In accordance with the Magnuson-Stevens Fishery Conservation and Management Act of 1996 (50 CFR Section 600.920), as amended through January 12, 2007 and as administered by the National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS), federal agencies must consult with NMFS regarding any of their actions authorized, funded, or undertaken, or proposed to be authorized, funded, or undertaken that may adversely affect Essential Fish Habitat (EFH). EFH is defined in the Magnuson-Stevens Act as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity". The word "fish" includes finfish, mollusks, crustaceans, and all other forms of marine animal and plant life other than marine mammals and birds.

During the initial agency coordination and data collection for this project through ETDM, NMFS commented on September 24, 2012 that their staff conducted a site inspection of the project area on September 21, 2012, to assess potential concerns related to living marine resources within the mouth of the Palm River, and in McKay Bay, and Hillsborough Bay. Their conclusion was that the lands adjacent to the proposed project are principally industrial and commercial properties and it does not appear that the project will directly impact any NMFS trust resources. However, the road crosses the Tampa Bypass Canal which becomes the Palm River further downstream. The Palm River empties to McKay Bay and Hillsborough Bay. The mouth of the Palm River, McKay Bay, and Hillsborough Bay contain estuarine habitats (e.g. seagrass, salt marsh, mangrove) used by federally-managed fish species and their prey. Increased use of the road could result in an increase in the amount of sediment, oil and grease, metals, and other pollutants reaching downstream estuarine habitats utilized by marine fishery resources. Therefore, NMFS recommends that stormwater treatment systems be upgraded to prevent degraded water from reaching estuarine habitats within the mouth of the Palm River, and in McKay Bay, and Hillsborough Bay. In addition, best management practices (BMP) should be employed during road construction to prevent siltation of these habitats.

Since this project does not directly affect EFH resources, a detailed EFH assessment is not required. However, the following provides a summary of the water quality considerations that have been evaluated for this project, which are anticipated to have an effect on the downstream estuarine and marine habitats.

Degradation of water quality resulting from construction of the project or excess pollutant loading of stormwater runoff from the project has the potential to adversely affect wetlands and EFH in the Palm River and downstream in McKay and Hillsborough Bays. Impacts to water quality from construction activities will be avoided and minimized through the use of BMPs.

BMPs generally include phased construction, turbidity screens, silt fences, hay bales, cofferdams, and other construction techniques approved by the regulatory agencies.

As part of the project, stormwater treatment will be provided within roadside ditches and existing, off-site stormwater management facilities. The proposed stormwater facility design will include, at a minimum, the water quantity requirements for water quality impacts as required by the SWFWMD in Rules 40D-4, 40D-40, and 40D-41, FAC.

3.0 WETLAND IMPACTS

3.1 DESIGN ALTERNATIVES

Total acreage for jurisdictional surface waters within the ROW is 6.54 acres. No wetlands were identified within the project ROW. All of the improvements to the US 301 roadway are proposed to occur within the existing ROW and will impact only surface waters.

Both alternatives will impact the entire ROW; therefore, proposed impacts to surface waters for both alternatives are the same. At this stage, a preferred alternative has not been selected. Both alternatives will result in a total of 6.54 acres of impact to jurisdictional surface waters (**Table 31**). The surface waters proposed for impact generally consist of roadside ditches that are of limited habitat value and contain moderate to high coverage of nuisance and exotic species. The crossing over the Tampa Bypass Canal has been heavily impacted by past human activities (such as channelization).

Conceptual design plans for the project are provided in **Appendix C.**

Table 3-1 Jurisdictional Surface Water Impacts

		Impact Area (acres)		
Side	**Wet ID**	**Alternative 1**	**Alternative 2**	**No Build**
Right/East	SW1	0.32	0.32	0.00
	SW2	0.06	0.06	0.00
	SW3	0.31	0.31	0.00
	SW4	0.12	0.12	0.00
	SW5	0.40	0.40	0.00
	SW6	0.12	0.12	0.00
	SW7	0.22	0.22	0.00
	SW8	0.04	0.04	0.00
	SW9	0.01	0.01	0.00
	SW10	0.03	0.03	0.00
	SW11	0.01	0.01	0.00
	SW12	0.06	0.06	0.00
	SW13	0.04	0.04	0.00
	SW14	3.04	3.04	0.00
	SW15	0.02	0.02	0.00
	SW16	0.08	0.08	0.00
	SW17	0.03	0.03	0.00
	SW18	0.03	0.03	0.00
	SW19	0.02	0.02	0.00
	SW20	< 0.01	< 0.01	0.00

		Impact Area (acres)		
Side	**Wet ID**	**Alternative 1**	**Alternative 2**	**No Build**

Left/West	SW21	< 0.01	< 0.01	0.00
	SW22	0.30	0.30	0.00
	SW23	0.04	0.04	0.00
	SW24	< 0.01	< 0.01	0.00
	SW25	0.04	0.04	0.00
	SW26	0.23	0.23	0.00
	SW27	0.26	0.26	0.00
	SW28	0.05	0.05	0.00
	SW29	0.21	0.21	0.00
	SW30	0.05	0.05	0.00
	SW31	0.05	0.05	0.00
	SW32	0.02	0.02	0.00
	SW33	0.05	0.05	0.00
	SW34	0.01	0.01	0.00
	SW35	0.04	0.04	0.00
	SW36	0.03	0.03	0.00
	SW37	0.13	0.13	0.00
	SW38	0.06	0.06	0.00
	Total	**6.54**	**6.54**	**0.00**

3.2 RESULTS OF UNIFORM MITIGATION ASSESSMENT METHOD (UMAM) ANALYSIS

Because no wetlands are proposed to be impacted, UMAM analysis was not necessary for this study. While it is presumed that the surface waters will be considered as jurisdictional systems by the SWFWMD, wetland mitigation is not expected. However, during final design and permitting, the USACE will evaluate some of these systems as providing suitable foraging habitat (SFH) for the wood stork (*Mycteria americana*). Based on our field reviews, all of the identified surface waters provide SFH with the exception of the Tampa Bypass Canal. Therefore, 3.5 acres of surface waters may require some mitigation for wood stork SFH impacts.

3.3 WETLAND IMPACT MITIGATION

Project constraints and ROW limits provide no practicable alternatives that would result in complete avoidance of impacts to the surface waters. Whenever possible, permanent impacts will be limited to the smallest degree possible through design modification. Temporary impacts, if any, to the surface waters will be conducted utilizing BMPs and FDOT's "*Standard Specifications for Road and Bridge Construction*".

At this time, compensation for wetland impacts is not anticipated as no wetlands would be impacted by the proposed project. Should compensation for surface waters be needed to address wood stork suitable foraging habitat impacts, it will be addressed pursuant to Chapter 373.4137,

Florida Statutes (F.S.) in order to satisfy all mitigation requirements of Part IV, Chapter 373, F.S. and 33 U.S.C. 1344. Section 5.1 explains the possible need for surface water mitigation.

Chapter 373.4137 allows for the use of the FDOT Mitigation Inventory Program and credit purchase from mitigation banks. Several other options for mitigation of wetland impacts exist for FDOT and include wetland creation, restoration, and/or preservation within the project watershed, which is the Hillsborough River watershed. Mitigation options will be investigated further during the final design phase of the project.

3.4 COORDINATION WITH THE PERMITTING AGENCIES

This project was evaluated through the FDOT's ETDM process (ETDM project #3097). An ETDM *Final Programming Screen Summary Report* was published on January 9, 2013, containing comments from the ETAT on the project's effects on various natural, physical, and social resources. Relevant sections of this report are included in **Appendix D**, as well as agency concurrences received upon their review of the draft WEBAR document.

Environmental permits, coordination and authorizations will likely be required for this project from the following agencies:

- USACE – Section 404 Wetland Dredge and Fill Permit – Section 408 Permit for works in flood control facilities
- USFWS – Endangered Species Act (ESA) Section 7 Informal Consultation for impacts to wood stork suitable foraging habitat
- SWFWMD – ERP
- FDEP – National Pollutant Discharge Elimination System (NPDES) Permit

4.0 PROTECTED SPECIES AND HABITAT

The project corridor was assessed for the presence of suitable habitat for federal- and/or state-listed protected species in accordance with 50 Code of Federal Regulation (CFR) Part 402 of the ESA of 1973, as amended, Chapters 5B-40 and 68A-27 FAC, and Part 2, Chapter 27 - Wildlife and Habitat Impacts of the FDOT PD&E Manual.

4.1 METHODOLOGY

Literature reviews, agency data base searches, and preliminary field reviews of potential habitat areas were conducted to identify state and federally protected species occurring or potentially occurring within the project area. The Hillsborough County Soil Survey and recent aerial photographs (2011) were reviewed to determine habitat types occurring within and adjacent to the project corridor. Information sources and databases include the following:

- USFWS Databases
- Florida Natural Areas Inventory (FNAI)
- Florida Fish and Wildlife Conservation Commission (FWC) Databases
- Hillsborough County Soil Survey
- FWC - Eagle Nest Locator for Hillsborough County (2012-2013 nesting season data) (1-mile radius)
- FWC - Waterbird Colony Locator (1999) (1-mile radius)
- FWC - Strategic Habitat Conservation Areas (SHCA) (1994) (10-mile radius)
- USFWS - CH for Threatened and Endangered Species
- USFWS - Wood Stork Rookeries Core Foraging Areas (CFA) (15.0-mile radius)

Figure 4-1 provides results of field observations as well as historic species occurrence results from the database searches, based on a 1-mile radius from the project corridor. **Figure 4-2** depicts the 15-mile wood stork CFA's that overlap the corridor.

Based on the results of database searches, preliminary field reviews and review of aerial photographs and soil surveys, field survey methods for specific habitat types and lists of target species were developed. Additionally, environmental concerns expressed by the ETAT members in the ETDM *Final Programming Screen Summary Report* were considered when identifying target species and survey methods. Field reviews consisted of vehicular surveys, roadside observations

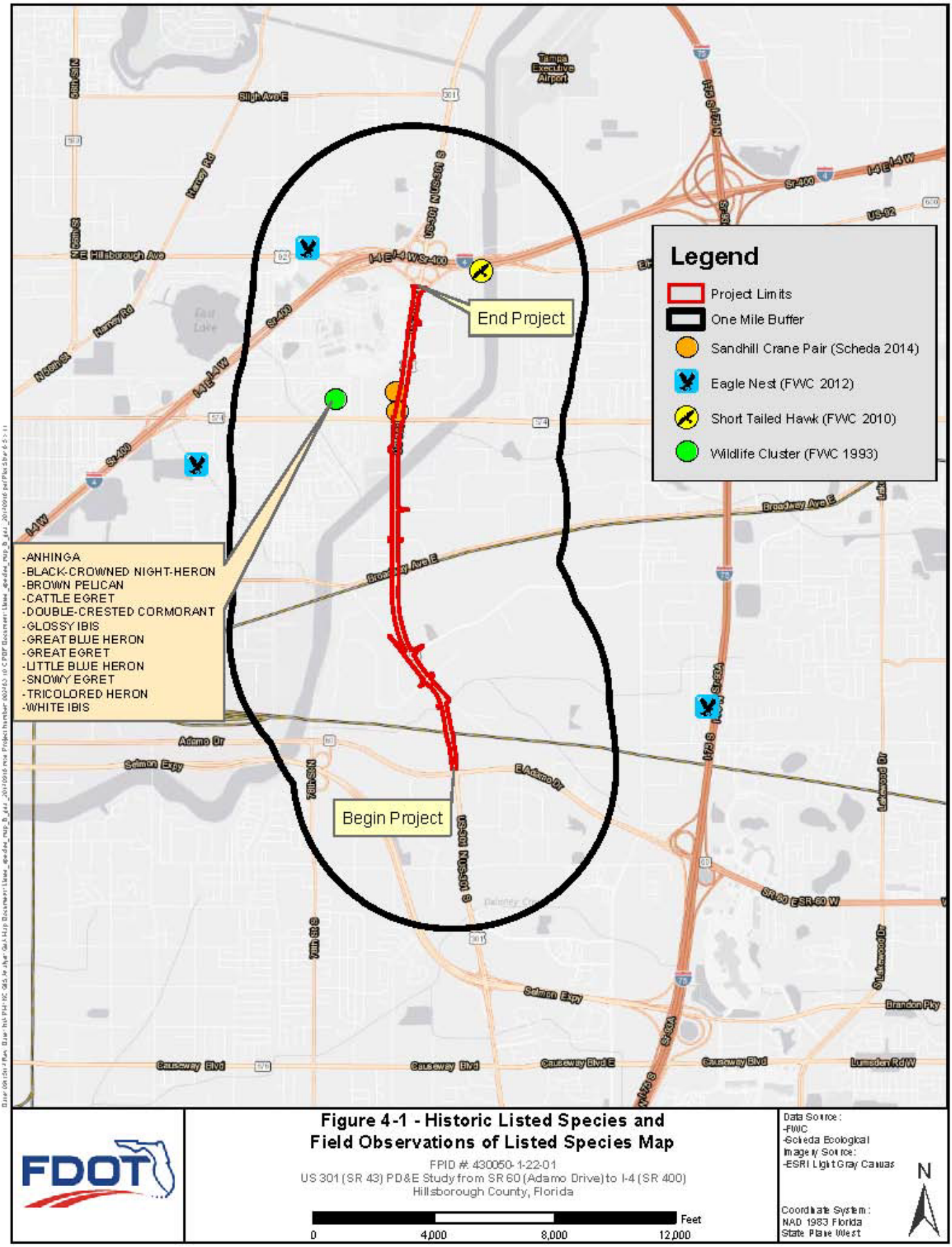
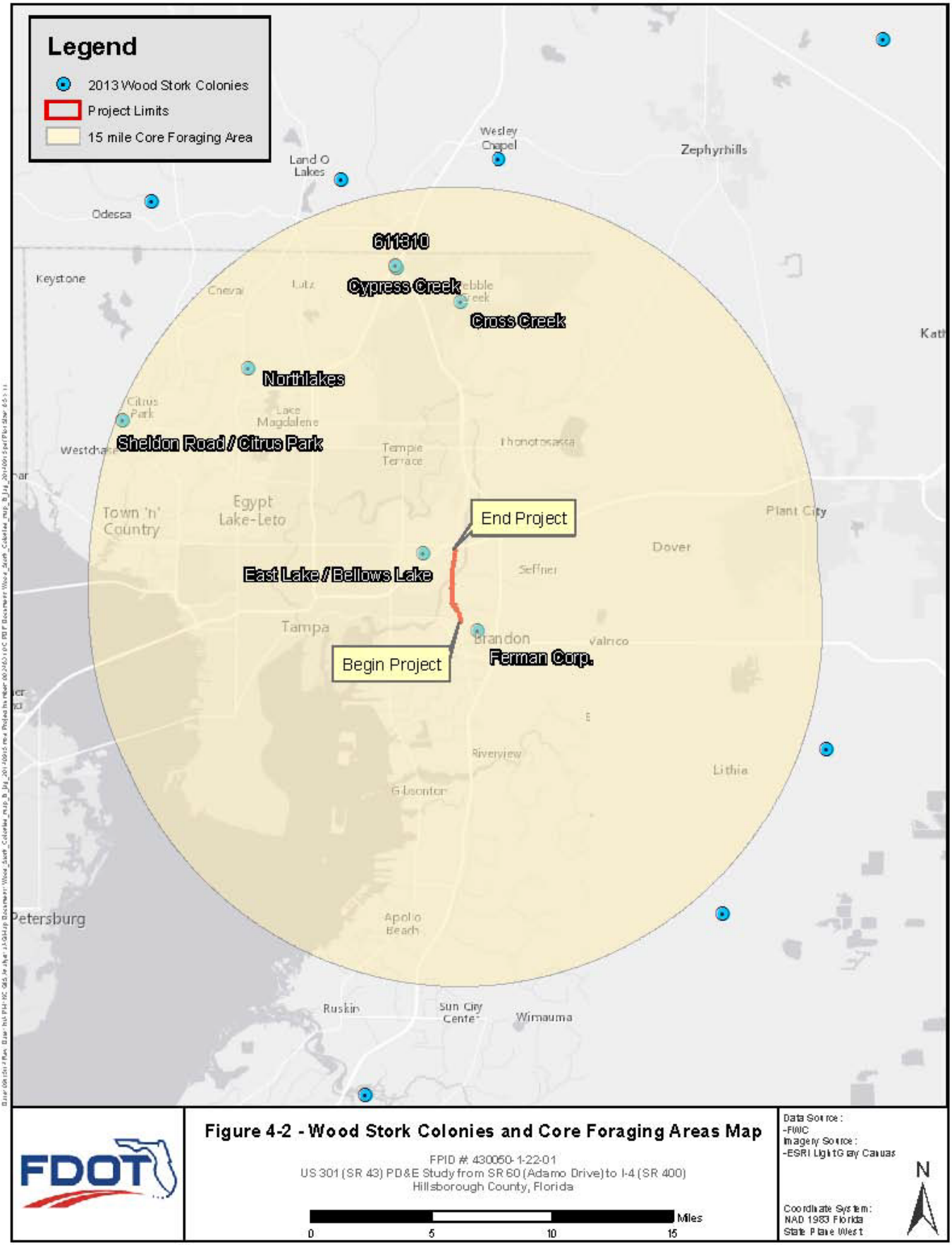


Figure 4-1 - Historic Listed Species and Field Observations of Listed Species Map

FPID #: 430050-1-22-01
US 301 (SR 43) PD&E Study from SR 60 (Adamo Drive) to I-4 (SR 400)
Hillsborough County, Florida

Data Source:
-FWC
-Scheda Ecological
Imagery Source:
-ESRI Light Gray Canvas

Coordinate System:
NAD 1983 Florida State Plane West


Legend
2013 Wood Stork Colonies
Project Limits
15 mile Core Foraging Area
611310
Cypress Creek
Cross Creek
Northlakes
Sheldon Road / Citrus Park
East Lake / Bellows Lake
End Project
Begin Project
Ferman Corp.
Wesley Chapel
Zephyrhills
Land O Lakes
Odessa
Keystone
Lutz
Citrus Park
Lake Magdalene
Temple Terrace
Egypt Lake-Leto
Town 'n' Country
Plant City
Dover
Seffner
Tampa
Brandon
Valrico
Riverview
Lithia
Gibsonton
Apollo Beach
Ruskin
Sun City Center
Wimauma
Petersburg
Figure 4-2 - Wood Stork Colonies and Core Foraging Areas Map
FPID #: 430050-1-22-01
US 301 (SR 43) PD&E Study from SR 60 (Adamo Drive) to I-4 (SR 400)
Hillsborough County, Florida
Miles
0
5
10
15
Data Source:
-FWC
Imagery Source:
-ESRI Light Gray Canvas
Coordinate System:
NAD 1983 Florida
State Plane West
N

and detailed pedestrian surveys through natural areas and altered habitats with the potential to support protected species. In the absence of physical evidence of a protected species, evaluation of the appropriate habitat was conducted to determine the likelihood of a species being present.

Surveys were performed May 1, May 2, and May 14, 2013. Surveys took place within the existing ROW of US 301, with visual observations conducted on adjacent lands. Any observations of protected plant and wildlife species or indicators of their presence (i.e., vocalizations, tracks, scat, burrows, etc.) within or immediately adjacent to the study area were documented. Observed protected species occurrences are depicted on **Figure 4-1**.

Based on the above methods, a list of potentially occurring protected species was developed, and each species was assigned a low, moderate or high likelihood for occurrence within habitats found on the project corridor. If a species or species indicator was observed during field reviews it is identified as present. **Table 4-1** lists the federal and state protected wildlife species with the potential to occur within the project corridor, based on potential availability of suitable habitat and known ranges. **Table 4-2** provides the same information for federal and state protected plant species. Definitions for likelihood of occurrence are provided below:

Low - Species with a low likelihood of occurrence within the project corridor are defined as those species that are known to occur in Hillsborough County or the bio-region, but preferred habitat is limited on the project corridor, or the species is rare or has been extirpated.

Moderate - Species with a moderate likelihood for occurrence are those species known to occur in Hillsborough or nearby counties, and for which suitable habitat is well represented on the project corridor, but no observations or positive indications exist to verify their presence.

High - Species with a high likelihood for occurrence are suspected within the project corridor based on known ranges and existence of sufficient preferred habitat on the corridor; are known to occur adjacent to the corridor; or have been previously observed or documented in the vicinity.

Table 4-1 Potentially Occurring and Observed Listed Wildlife Species

Species	Common Name	FWC	USFWS	Habitat	Habitat Occurrence in Relation to Project Footprint	Probability of Species Presence or Occurrence
AMPHIBIANS						
Rana capito	Gopher frog	SSC (1,2)	-	Associated with gopher tortoise burrows, high-dry sandy areas	Near	Low
REPTILES						
Drymarchon corais couperi	Eastern indigo snake		T	Hydric hammock, palustrine, sandhill scrub, upland pine forest, mangrove swamp	Near	Low
Gopherus polyphemus	Gopher tortoise	T	T (1)	Old field, sandhill, scrub, xeric hammock, ruderal, dry prairie, pine flatwood	Contiguous	Low
Lampropeltis extenuata	Short-tailed snake	T	-	Longleaf pine-turkey oak, upland hammock, sand pine scrub	Near	Low
Pituophis melanoleucus mugitus	Pine Snake	SSC (2)	-	Sandhill, scrubby flatwoods, xeric hammock, pine flatwoods, ruderal	Contiguous	Low
BIRDS						
Aramus guarana	Limpkin	SSC (1)	-	Floodplain swamp, floodplain marsh, rivers, streams, sloughs, lakes	Contiguous	High
Egretta caerulea	Little blue heron	SSC (1,4)	-	Estuarine, lacustrine, riverine, tidal marsh, tidal swamp	Contiguous	High
Egretta thula	Snowy egret	SSC (1)	-	Estuarine, lacustrine, riverine, tidal marsh, tidal swamp	Contiguous	High
Egretta tricolor	Tricolored heron	SSC (1,4)	-	Estuarine, lacustrine, riverine, tidal marsh, tidal swamp	Contiguous	High

Species	Common Name	FWC	USFWS	Habitat	Habitat Occurrence in Relation to Project Footprint	Probability of Species Presence or Occurrence
BIRDS (Continued)						
Eudocimus albus	White ibis	SSC (2)	-	Estuarine, lacustrine, riverine, tidal marsh, tidal swamp	Contiguous	High
Falco sparverius paulus	Southeastern American kestrel	T	-	Sandhill, mesic flatwoods, ruderal, dry prairie	Near	Low
Grus canadensis pratensis	Florida sandhill crane	T	-	Basin marsh, depression marsh, dry prairies, marl prairie, pastures	Contiguous	High/Observed
Haliaeetus leucocephalus	Bald eagle		-2	Estuarine, lacustrine, riverine, tidal marsh, tidal swamp	Contiguous	Low
Mycteria americana	Wood stork		T	Estuarine tidal swamps/marshes, lacustrine, seepage stream, ditches, ruderal	Contiguous	High
Pandion haliaetus	Osprey	SSC (5)	-	Open water; areas of cypress, mangrove, pine and swamp hardwoods for nesting	Contiguous	Medium
Platalea ajaia	Roseate spoonbill	T	-	Estuarine, lacustrine, riverine, tidal marsh, tidal swamp	Contiguous	High

Species	Common Name	FWC	USFWS	Habitat	Habitat Occurrence in Relation to Project Footprint	Probability of Species Presence or Occurrence
MAMMALS						
Podomys floridanus	Florida mouse	SSC	-	xeric uplands, sand pine scrub, coastal scrub, scrubby flatwoods, longleaf pine-turkey oak, south Florida slash pine-turkey oak, upland hammock, live oak hammock, drier pine flatwoods	Contiguous	Low
Trichechus manatus latirostris	West Indian Manatee	-	E	Coastal, estuarine, some riverine, sheltered bays, coves, canals	Contiguous*	Low

Sources: 1. USFWS - U.S. Fish and Wildlife Service status, Official lists of Threatened and Endangered species, 50 CFR 17.11 updated on 6/3/2014.
Accessed through Legal Information Institute. http://www.law.cornell.edu/cfr/text/50/17.11
[ranking: E - endangered, T - threatened] [X - not present on Federal lists]

USFWS Notations:

(1) The Gopher Tortoise is afforded Federal protection where ever found west of Mobile and Tombigbedd Rivers in AL, MS, LA.
(2) The Bald Eagle is afforded federal protection through the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA).

FWC Notations:

(1) Has a significant vulnerability to habitat modification, environmental alteration, human disturbance, or human exploitation which, in the foreseeable future may result in becoming a threatened species unless appropriate protective/management techniques are initiated/maintained;
(2) May already meet certain criteria for designation as a threatened species but for which conclusive data are limited or lacking;
(3) May occupy such an unusually vital or essential ecological niche that should it decline significantly in numbers or distribution other species would be adversely affected to a significant degree.
(4) Has not sufficiently recovered from past population depletion, and
(5) The osprey is afforded status in Florida as a State Species of Special Concern (only in Monroe County) (FWC)

* The Tampa Bypass Canal contains a weir precluding manatee access from Tampa Bay and Palm River.

Table 4-2 Potentially Occurring and Observed Listed Plant Species

Species	Common Name	FDACS - DPI	USFWS	Hillsborough County	Habitat	Probability of Presence or Occurrence
Asclepias curtissii	Curtiss Milkweed	E	E	E	scrub, scrubby flatwoods	Low
Asplenium auritum	Auricled spleenwort	E	E	E	dry hammocks, scrub, flatwoods	Low
Bonamia grandiflora	Florida bonamia	E	T	E	sand pine scrub with evergreen scrub oaks	Low
Centrosema arenicola	Sand butterfly pea	E	-	E	mixed woodlands, pine thickets	Low
Chionanthus pygmaeus	Pygmy fringe tree	E	E	E	scrub, high pineland, dry hammocks, transitional habitats	Low
Chrysopsis floridana	Florida golden aster	E	E	E	sand pine scrub with evergreen scrub oaks	Low
Erigonium floridarium / Eriogonum longifolium	Scrub buckwheat	T	T	E	scrub and sanhills, turkey oak barrens	Low
Glandularia tampensis	Tampa vervain	E	-	E	remnants of live oak (*Q. virginiana*), grassy openings	Low
Lechea cernua	Nodding pinweed	T	-	E	scrub, scrubby flatwoods	Low
Lechea divaricata	Spreading pinweed	-	-	E	flatwoods	Low
Ophioglossum palmatum	Hand fern	E	-	E	hammocks and cypress swamps; epiphytic, usually on cabbage palm (*Sabal palmetto*)	Low
Polygala lewtonii	Scrub milkwort	E	E	E		Low
Schwalbea americana	Chaff-seed	-	E	E	open hammocks and flatwoods	Low

Species	Common Name	FDACS - DPI	USFWS	Hillsborough County	Habitat	Probability of Presence or Occurrence
Zephyranthes simpsonii	Rain lily	T	-	E	wet pinelands and pastures, wet roadsides	Low
Andropogon arctatus	Pinewoods bluestem	T	-	T	dry to wet flatwoods and sand pine scrub	Low
Pteroglossaspis ecristata	Giant orchid	T	-	T	sandhill, scrub, pine flatwoods, pine rocklands	Low
Sarracenia rubra	Red pitcher plant	T	-	T	openings in thickets along spring-fed streams, wet prairies, bogs	Low

Sources:

1. FNAI - Florida Natural Areas Inventory; Matrix of habitats and distribution by county of rare/endangered species in Florida, published April, 1990
2. FDACS. Notes on Florida's Endangered and Threatened Plants. 2010. Patti J Anderson and Richard E Weaver.
3. FWS Species Reports, Listings and Occurrences for Florida http://ecos.fws.gov/tess_public/pub/stateListingAndOccurrenceIndividual.jsp?state=FL
4. FWS Endangered Species Search

http://ecos.fws.gov/tess_public/countySearch!speciesByCountyReport.action?fips=12057

5. Habitats described by: Hansen, B.F. and Wunderlin, R.P. 2003. Guide to the vascular plants of Florida. University Press of Florida. Gainesville.
6. Hillsborough County listed species http://www.hillsboroughcounty.org/DocumentCenter/Home/View/2288

4.2 SURVEY RESULTS

Land use along the corridor is dominated by commercial and industrial facilities. Relatively little undeveloped land exists along the project corridor and, where it does, is isolated from other natural areas. Undeveloped lands provide habitat to many wildlife and plant species, some of which are protected, while the more developed areas provide limited habitat value.

Florida sandhill cranes (*Grus canadensis prantensis*), a state-listed species, were observed near offsite wetlands to the west of US 301 in the northern portion of the corridor (**Figure 4-1**). No state or federally-listed plant species were observed. Descriptions are provided below for those species which have been observed along the project corridor or have high potential to occur within habitats identified on the corridor.

4.3 FEDERALLY PROTECTED SPECIES

Federally protected wildlife species which have been identified as having a high probability for occurrence in the vicinity of the corridor include the wood stork. The eastern indigo snake (*Drymarchon corais couperi*) was identified as having a low probability for occurrence near the project area. No federally-listed plant species were observed or are documented for the corridor.

4.3.1 Wood Stork

The wood stork is listed as threatened by the USFWS. Wood storks are known to use freshwater marshes, swamps, lagoons, ponds, flooded fields, depressions in marshes and brackish wetlands, open pine-cypress wetlands, and man-made wetlands (i.e., ditches, canals, and stormwater retention ponds). Wood storks are typically colonial nesters and construct their nests in medium to tall trees located within wetlands or on islands. Wood storks are known to forage a large distance, up to 40 miles, from the colony. No wood storks were observed during field surveys.

For central Florida, the USFWS has defined the CFA for a wood stork colony as the area within a 15-mile radius from the colony location. The project corridor is located within, completely or in part, the CFA of six wood stork colonies (**Figure 4-2**). Suitable foraging habitat (SFH) is provided by many of the roadside ditches along the corridor. As defined by the USFWS, SFH includes wetlands and surface waters which have areas of water that are relatively calm, uncluttered by dense thickets of aquatic vegetation, and have permanent or seasonal water depth between 2 and 15 inches. Suitable foraging habitat within the project corridor will be reevaluated during final permitting of the project as vegetative structure of wetlands will change over time and as a result of surface water management systems maintenance activities.

UMAM will be used to calculate functional loss for unavoidable surface water impacts and impacts will be mitigated as appropriate, if needed. As per the May 2010 Wood Stork Key criteria: (a) the

project is more than 2,500 feet from a colony site; (b) the project impacts SFH; (c) the project impacts are estimated to be greater than 0.5 acre; (d) the project impacts to SFH are within the CFA of a colony site; and (e) the project will provide SFH compensation within the Service Area of a USFWS-approved wetland mitigation bank or wood stork conservation bank within the CFA. As a result, the project may affect, but is not likely to adversely affect the wood stork.

4.3.2 Eastern Indigo Snake

Eastern indigo snakes are large, black, non-venomous snakes which are distributed throughout the southeastern United States. The eastern indigo snake occurs in a wide variety of habitats, including forested uplands and wetlands as well as wet and dry prairies. This species feeds on snakes, frogs, salamanders, toads, small mammals, birds and young turtles. Eastern indigo snakes are listed as threatened by the USFWS.

No individuals were observed during the field surveys, and there are minimal areas of suitable habitat for this species within and adjacent to the project corridor. The probability of occurrence for this species within the corridor is therefore low.

Pursuant to the August 2013 Eastern Indigo Snake Effect Determination Key: (a) the project is not located in open water or salt marsh; (b) the Standard Construction Precautions for the Eastern Indigo Snake will be implemented (**Appendix E)** to ensure protection when the species is most likely to be affected; (c) there are gopher tortoise (*Gopherus polyphemus*) burrow, holes, cavities, or other refugia where a snake could be buried or trapped and injured during project activities; (d) the project will impact less than 25 acres of xeric habitat supporting less than 25 potential occupied gopher tortoise burrows; and (e) any permit will be conditioned such that (1) all gopher tortoise burrows, active or inactive, will be evacuated prior to site manipulation in the vicinity of the burrows; (2) if an indigo snake is encountered, the snake must be allowed to vacate the area prior to additional site manipulation in the vicinity; (3) the permittee must inspect all holes, cavities, and snake refugia other than gopher tortoise burrows each morning before planned site manipulation of a particular area, and, if occupied by an indigo snake, no work will commence until the snake has vacated the vicinity of proposed work. It is therefore anticipated that this project may affect, but is not likely to adversely affect the eastern indigo snake.

4.4 STATE-PROTECTED SPECIES

State-listed wildlife species which have been identified as having a high probability for occurrence in the vicinity of the corridor include the Florida sandhill crane and several species of wetland-dependent birds. The gopher tortoise was identified as having a low probability of occurrence but a gopher tortoise survey may be necessary as explained in Section 5.2. No state-listed plant species were observed or recorded in the project area.

4.4.1 Gopher Tortoise

Gopher tortoises reach reproductive maturity at 16-21 years of age. Gopher tortoises nest in late April to mid-July. Preferred habitats include xeric areas with sandy soils and open canopy with low groundcover. The gopher tortoise feeds primarily on new shoots of grasses and broad-leaf herbs, but may also consume mushrooms, fleshy fruits and some animal matter.

The gopher tortoise is listed by the FWC as threatened, and is currently a candidate for listing by the USFWS. No individuals or burrows were observed during preliminary field surveys of appropriate habitat. Comprehensive surveys for tortoises and their burrows will be conducted during the final design phase of the project. Per FWC requirements, gopher tortoise burrows located within 25 feet of proposed impact areas must be excavated and tortoises relocated to an approved recipient site. Commensal species that may utilize the burrows, such as the gopher frog (*Rana capito*) and Florida mouse (*Podomys floridanus*) will also be relocated if encountered.

Unless the future gopher tortoise surveys undertaken prior to the project's construction phase determine otherwise, it has been determined that the project may affect, but is not likely to adversely affect the gopher tortoise.

4.4.2 Florida Sandhill Crane

The Florida sandhill crane is a large wading bird listed as threatened by the FWC. The range of this Florida subspecies extends from southeastern Georgia through peninsular Florida. The Florida sandhill crane subspecies is non-migratory and becomes a permanent resident wherever it nests. This bird inhabits freshwater marshes, prairies, low-lying improved pastures, and shallow flooded open areas. It typically nests from January to June in the shallow waters of lakes, ponds, and open marshes where maidencane, arrowhead, and pickerelweed are present.

Several adult sandhill cranes were observed within the project area during field surveys (**Figure 4-1**). Potential foraging habitat is present within the project limits; however, minimal nesting habitat exists due to the lack of wetlands present. Some potentially suitable nesting habitat occurs on the western side of the corridor on the Florida State Fairgrounds property. Given the lack of nesting habitat within the proposed project alternative concept alignments and the abundance of foraging habitat adjacent to the project, it is anticipated that the project will not adversely affect the Florida sandhill crane.

4.4.3 Wetland-Dependent Avian Species

This category includes state-listed wetland-dependent avian species that have a potential to occur on the project corridor. This includes: limpkin (*Aramus guarana*), little blue heron (*Egretta*

caerulea), roseate spoonbill (*Ajaia ajaia*), snowy egret (*Egretta thula*), tricolored heron (*Egretta tricolor*), and white ibis (*Eudocimus albus*). These species are listed as species of special concern by the FWC.

No wetland-dependent bird species were observed during field surveys, and a search of the Florida Atlas of Breeding Sites for Herons and their Allies showed that the nearest recorded wading bird rookery (Atlas #611308) is located 4.0 miles to the northwest of the project corridor. At this distance from the project site, it is not believed that construction within the proposed area will impact the aforementioned bird rookery.

Wetlands and surface waters that provide foraging potential for the wetland dependent avian species include ditches/swales, ponds, and riverine systems. Any required mitigation for the wood stork will also address these species. The project therefore may affect, but is not likely to adversely affect these wetland-dependent avian species.

4.5 PROTECTED, NON-LISTED SPECIES

4.5.1 Osprey

The osprey (*Pandion haliaeetus*) is protected under the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-712) and state-protected by Chapter 68A of the FAC. Ospreys inhabit areas near the coast, lakes, rivers, or swamps in Florida and feed on fish. Ospreys are known to nest on tall trees and manmade structures such as nesting platforms, utility poles, and channel markers. Ospreys require nest sites in open surroundings for easy approaches that are safe from ground predators such as raccoons.

Field surveys included searches for osprey nests however no ospreys or nests were identified. Because no nests were found and the FDOT will adhere to the MBTA during construction, it is anticipated that this project will have no effect on the osprey.

4.5.2 Bald Eagle

The bald eagle (*Haliaeetus leucocephalus*) is no longer listed as a federally-threatened species but is protected under the Bald and Golden Eagle Protection Act (BGEPA) (16 USC 668-668d), as amended, and the MBTA (16 USC 703-712). The USFWS will still regulate activities if an active eagle nest is within 660 feet of a proposed activity. Bald eagles are also no longer listed by the FWC but monitoring may be required pursuant to the FWC Eagle Management Guidelines.

The bald eagle prefers riparian habitat associated with coastal areas, lake shores, and rivers. It nests near water bodies which provide a dependable source of food. Data obtained from the 2012-2013

FWC Eagle Nest Locator Database indicate that the nearest bald eagle nest to the project corridor is nest HL055 (**Figure 4-1**). This nest was last surveyed in 2013 and was active at that time but is well beyond 660 feet from the project limits. Bald eagle nests are considered to be active for five consecutive years of no documented nesting activity. After five years they are considered to be abandoned and protection measures no longer apply. Given that the FDOT will adhere to the BGEPA and MBTA during construction should the species be involved with the project; this project is anticipated to have no effect on the bald eagle.

4.6 CRITICAL HABITAT

The project corridor was assessed for CH designated by Congress in 17 CFR 35.1532. Review of the USFWS' available GIS data for CH resulted in the identification of no CH within the project area.

5.0 CONCLUSIONS AND COMMITMENTS

5.1 WETLANDS

Alternatives for the US 301 from SR 60 to I-4 project provide for widening to occur within the current ROW limits along US 301. Surface waters determined as jurisdictional consist of primarily roadside ditches, excavated within historic hydric soils as well as non-hydric soils, which maintain hydrology sufficient to support wetland vegetation. Due to external factors ultimately related to the initial construction of the US 301 roadway, historic hydric soils were not used to distinguish ditches considered as surface waters from ditches considered as wetlands. Additional man-made swales that support primarily turf grasses and are regularly mowed and maintained are also found within the ROW.

Surface waters proposed for impact generally are of limited habitat value, and support moderate to high coverage of nuisance and exotic species. Impacts are proposed only to jurisdictional surface waters. A total of 6.54 acres of surface waters are potentially affected by both Alternative 1 and Alternative 2 which both propose impacts to the entire existing ROW.

The following measures to address surface water impacts for this project are likely to be employed as the project is implemented:

- Practicable measures to avoid or minimize surface water impacts will be addressed during final design for the project.
- Best Management Practices will be incorporated during construction to minimize surface water impacts to any off-site wetlands and surface waters that are affected by the proposed project.
- While not currently anticipated to be required, unavoidable surface water impacts will be mitigated pursuant to S. 373.4137 F.S. to satisfy all mitigation requirements of Part IV, Chapter 373 F.S. and 33 U.S.C.s 1344 which includes purchase of mitigation bank credits or use of the FDOT wetland mitigation inventory program.

5.2 PROTECTED SPECIES AND HABITAT

The project may affect but is not likely to adversely affect federally and state protected wildlife species. Federally-listed species which may be affected but are not likely to be adversely affected by the project include the wood stork and eastern indigo snake. The project is anticipated to have no effect on the West Indian manatee (*Trichechus manatus latirostris*) because the Tampa Bypass Canal contains a weir which precludes manatee access from Tampa Bay and the Palm River. State protected species which may but are not likely to be adversely affected by the project include the gopher tortoise and its commensal species, Florida sandhill crane, and wetland dependent avian species. The project is anticipated to have no effect on the

short-tailed snake (*Lampropeltis extenuata*), pine snake (*Pituophis melanoleucus mugitus*), and southeastern American kestrel (*Falco sparverius paulus*) due to lack of appropriate habitat. The project is anticipated to have no effect on the osprey and bald eagle which are both offered federal protection however remain non-listed species.

Multiple avenues of protection will be employed to negate and minimize any potential affects to these species. Some of the measures employed will include detailed surveys and agency coordination during the project design phase, best management practices during construction, adherence to FDOT's "*Standard Specification for Road and Bridge Construction*," relocation of potentially affected gopher tortoises and commensal species, and utilization of standard construction precautions for species such as the eastern indigo snake.

Based upon findings of the preliminary data collection, general corridor surveys, and coordination with the USFWS and FWC, the FDOT has made the following project commitments:

1. Gopher tortoise: Surveys for potentially affected gopher tortoise burrows will be conducted prior to construction, and permits to relocate tortoises and commensals as appropriate will be obtained from the FWC.

2. Eastern indigo snake: The standard FDOT Construction Precautions for the Eastern Indigo Snake (**Appendix E**) will be adhered to during construction of the project.

3. Osprey: Surveys to update locations of active osprey nest sites will be conducted prior to construction, and permits will be acquired if impacts during construction are unavoidable. Coordination with FWC will take place, and a replacement nesting structure will be located in the immediate vicinity as appropriate.

4. Wood stork: Impacts to potential wood stork suitable foraging habitat will be evaluated during the design phase, and mitigation for unavoidable impacts will be provided as appropriate.

5. Bald eagle: Should a bald eagle nest be built prior to or during construction within 660 feet of the construction limits, further coordination will occur with the FWC and/or USFWS as appropriate.

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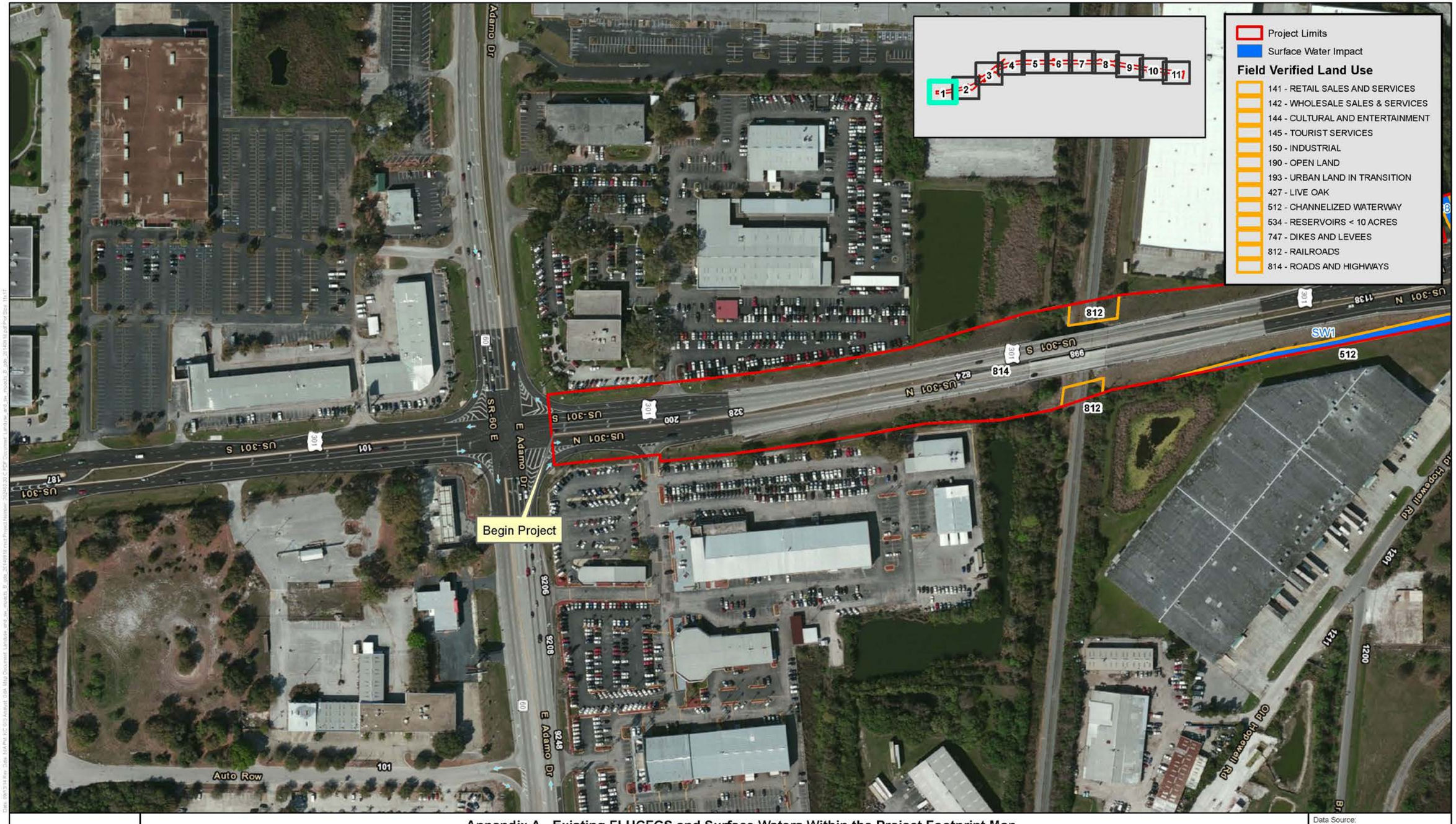
APPENDIX A

Existing FLUCFCS and Surface Waters within the Project Footprint Map



Appendix A - Existing FLUCFCS and Surface Waters Within the Project Footprint Map

FPID: 430050-1-22-01
US 301 (SR 43) PD&E Study from SR 60 (Adamo Drive) to I-4 (SR 400)
Hillsborough County, Florida

Feet
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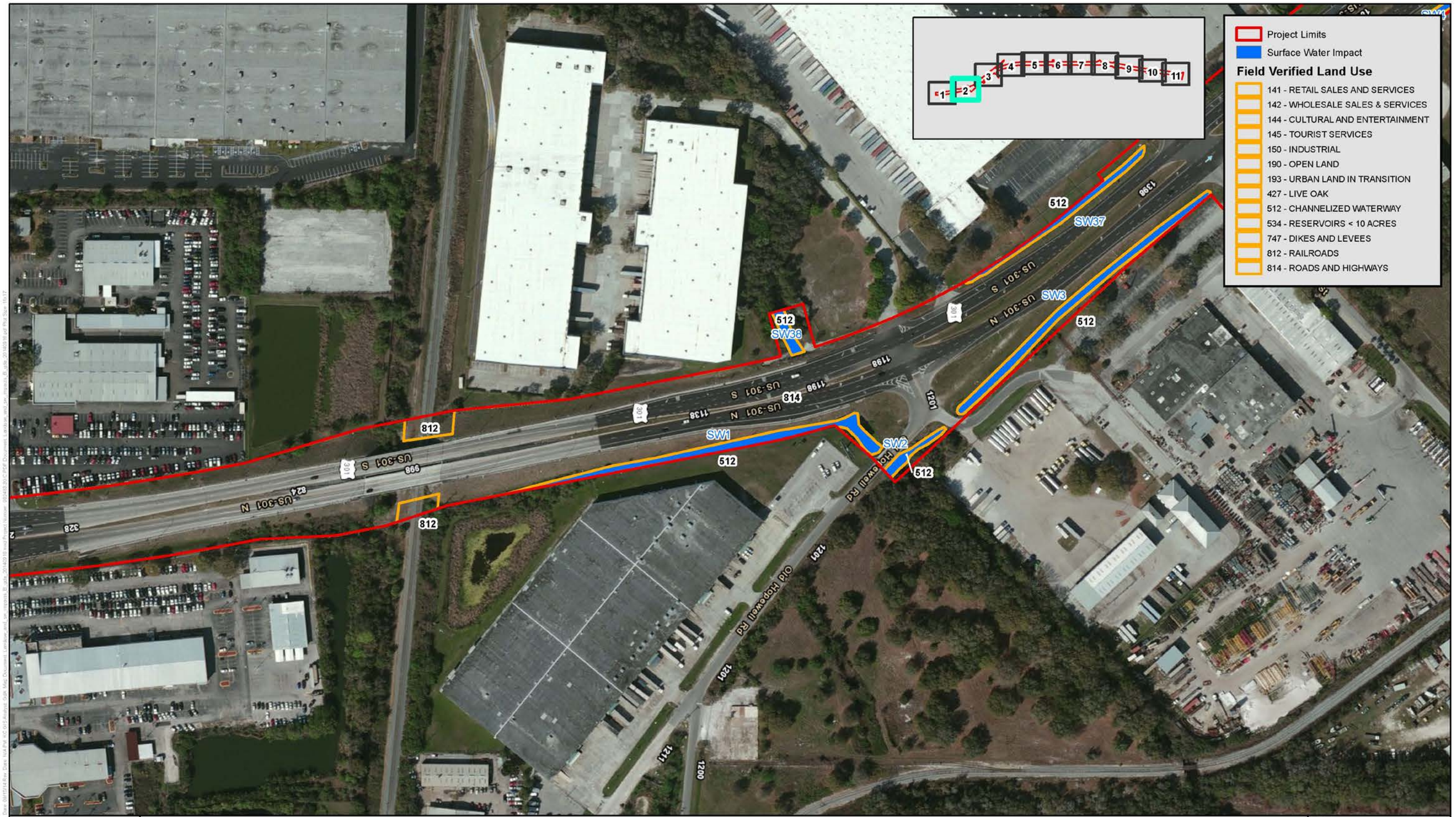

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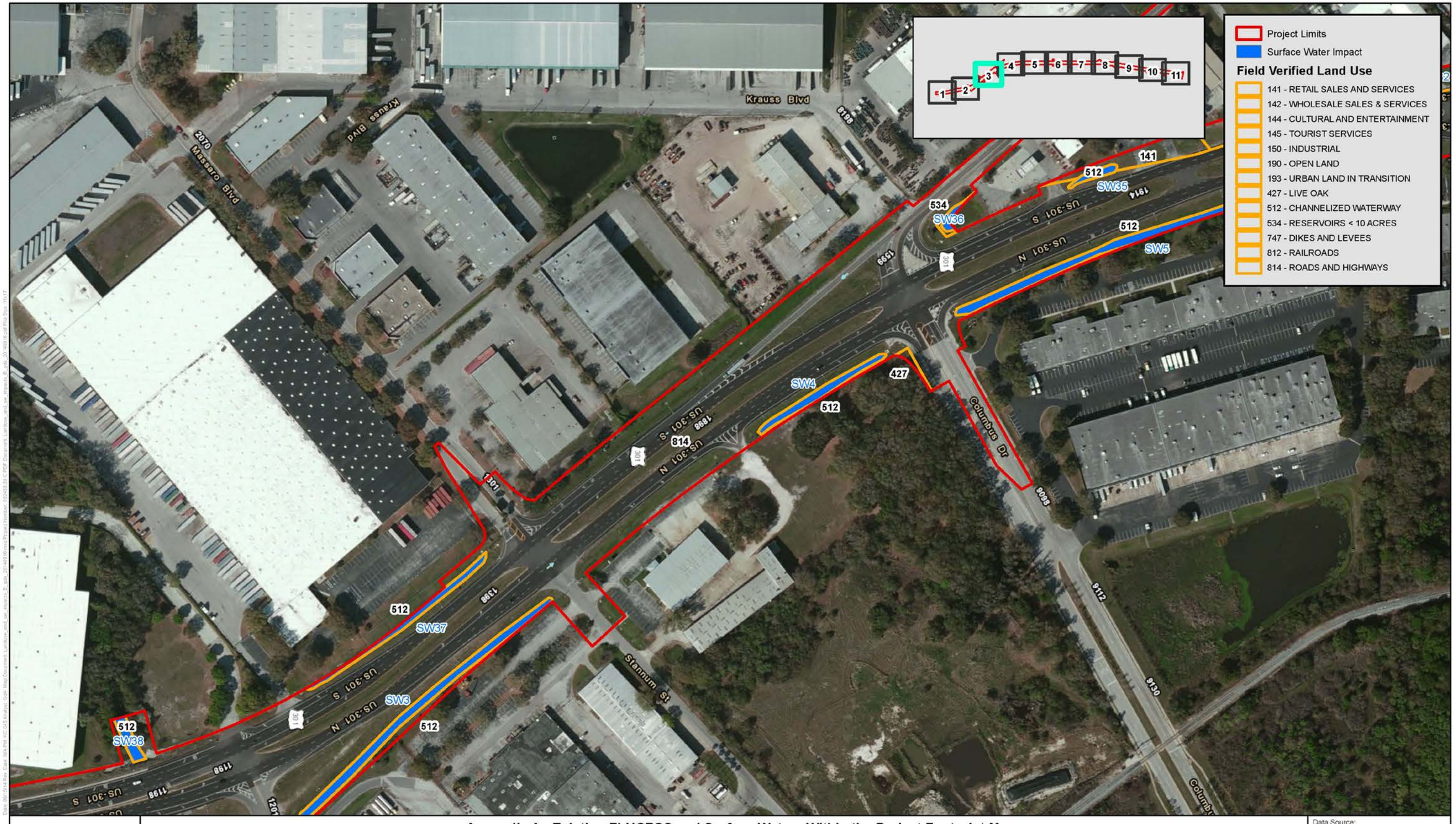

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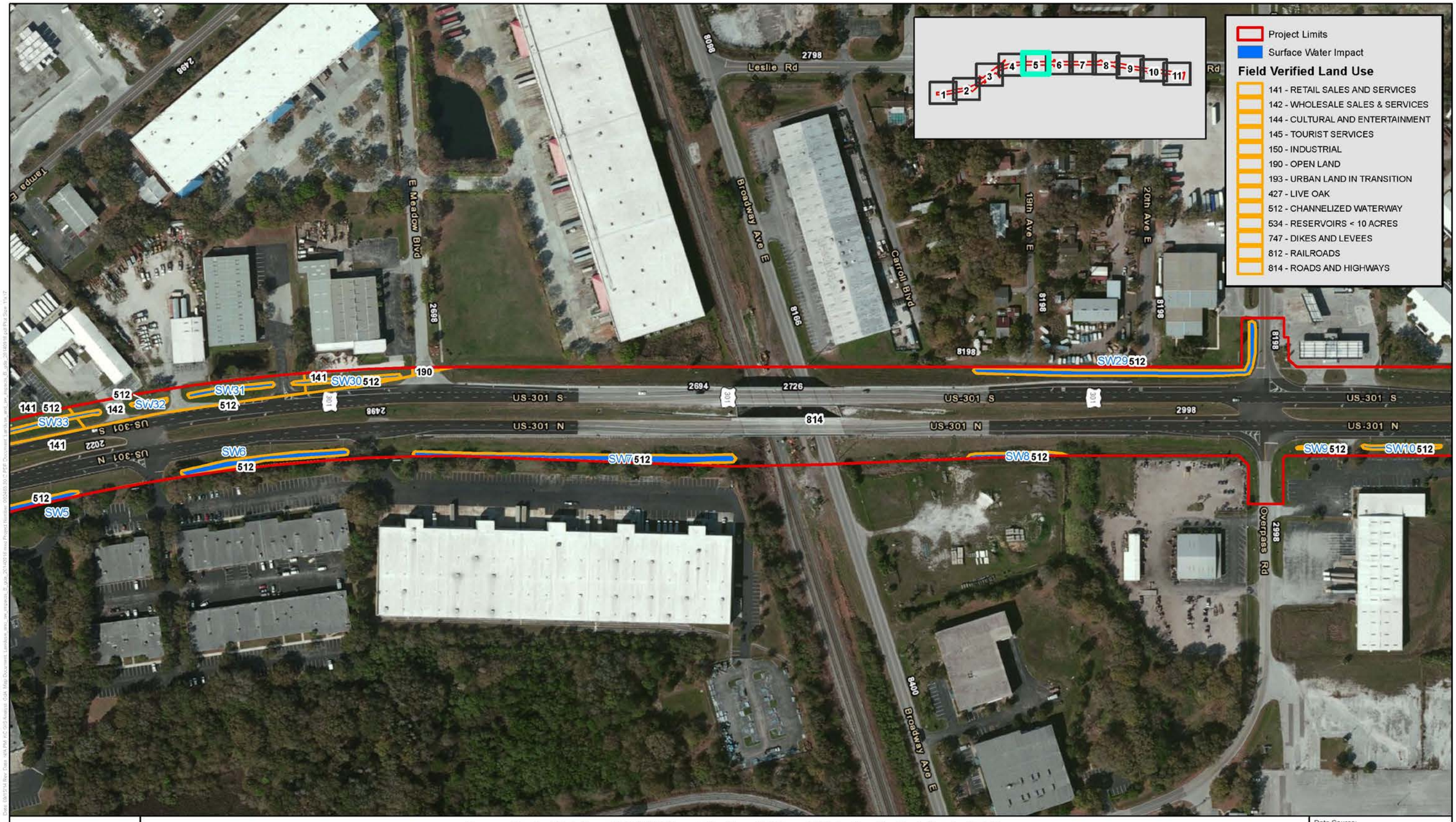

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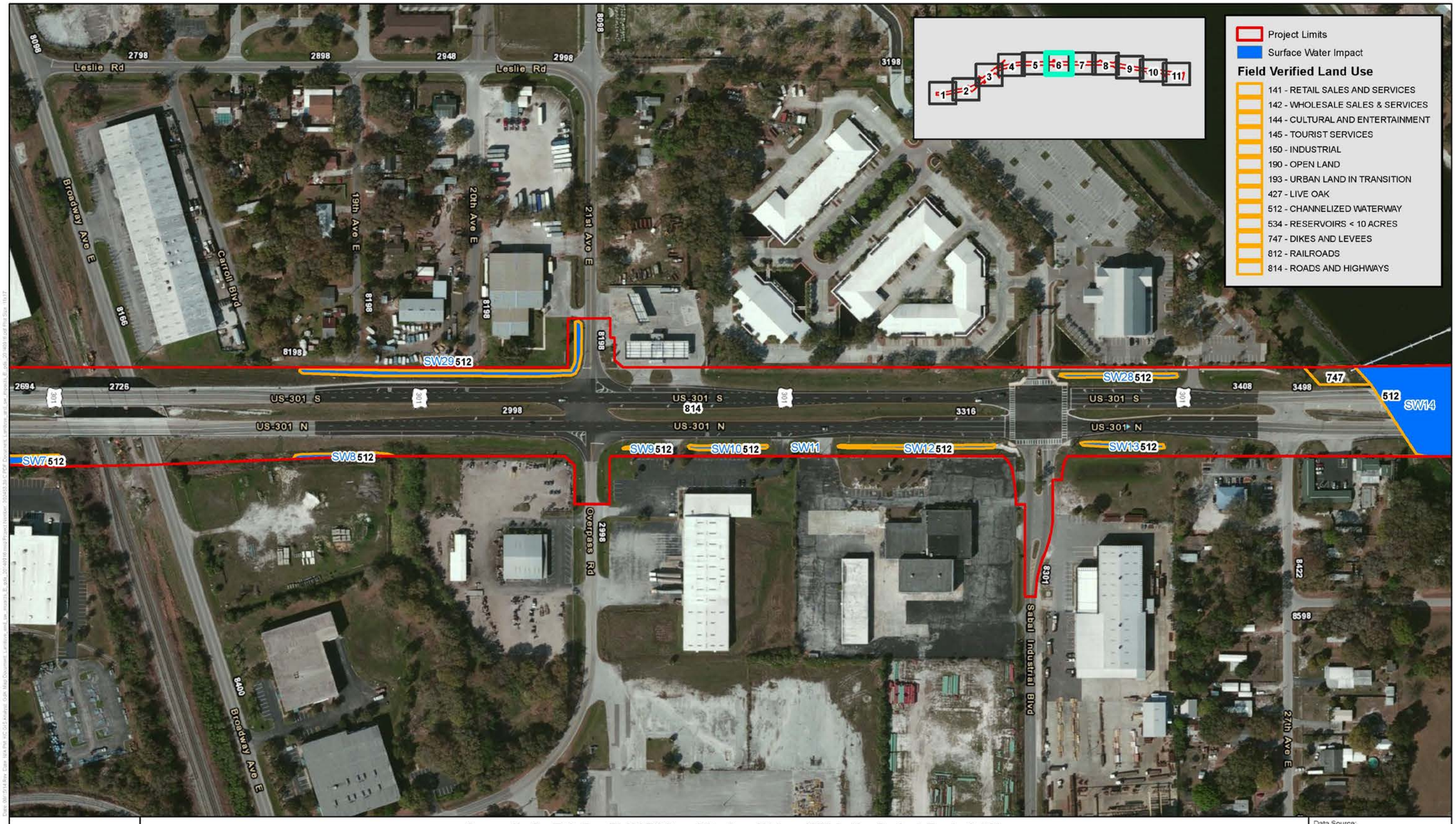

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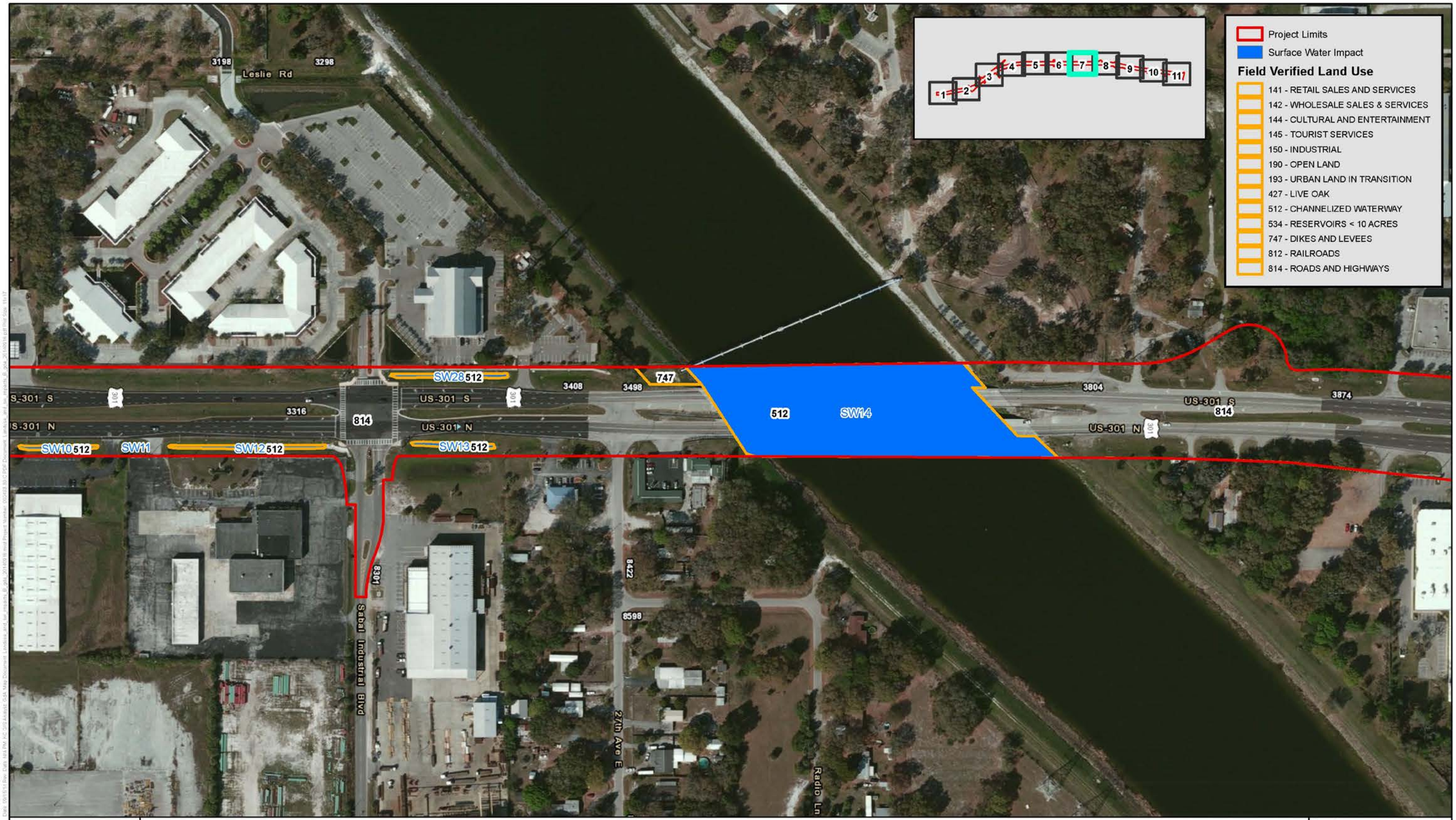

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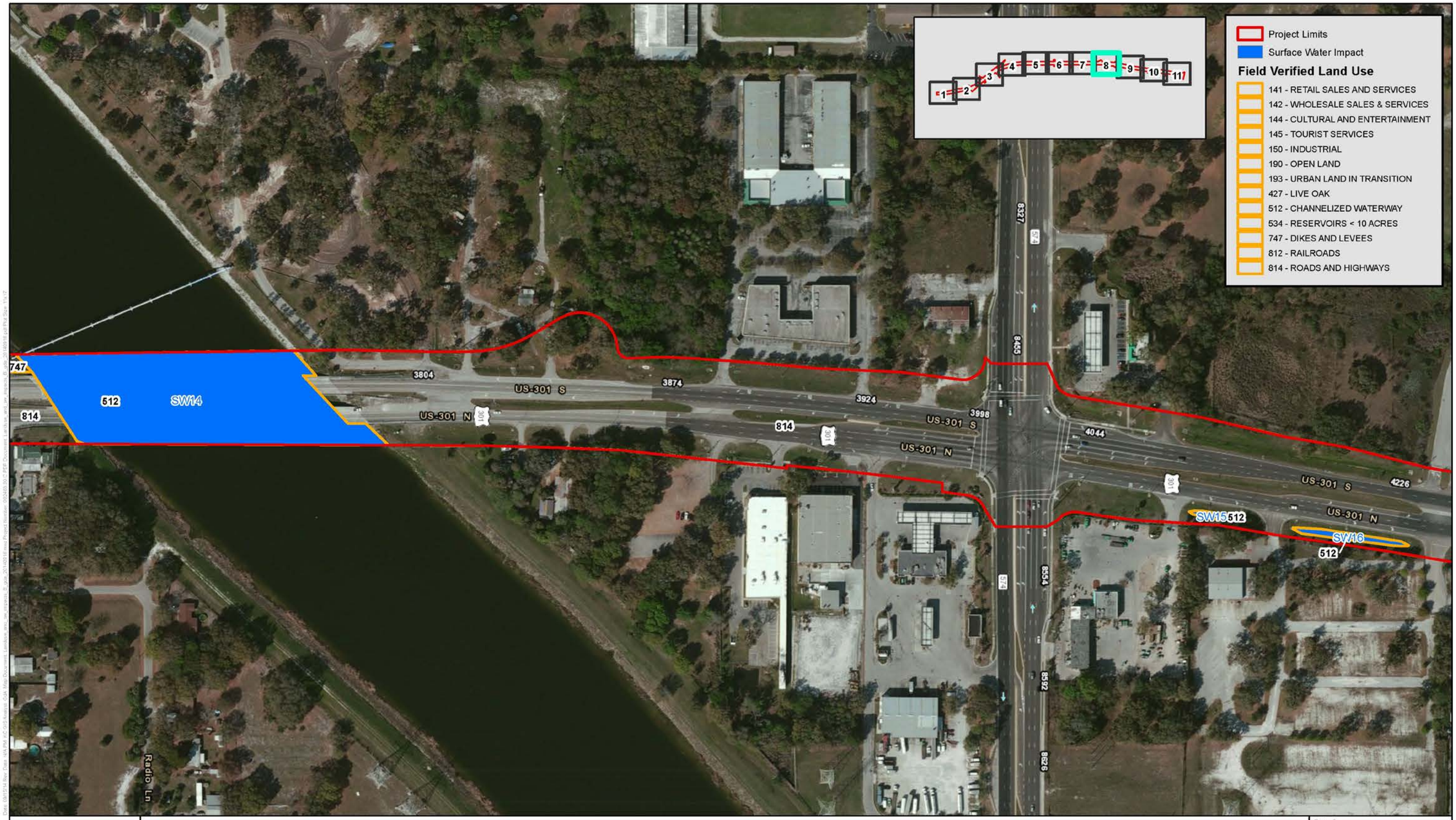

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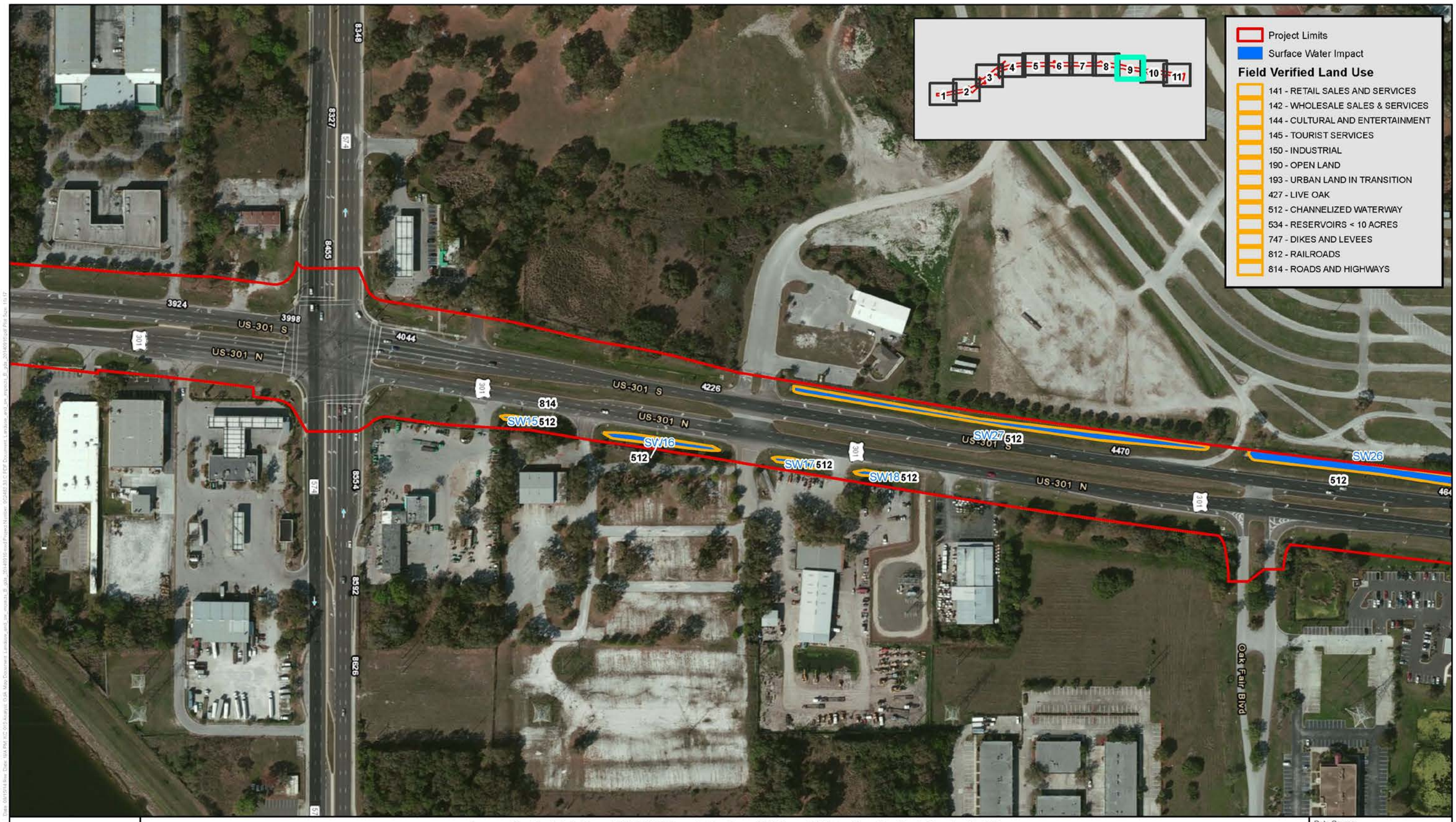

Appendix A - Existing FLUCFCS and Surface Waters Within the Project Footprint Map

Page 9 of 11

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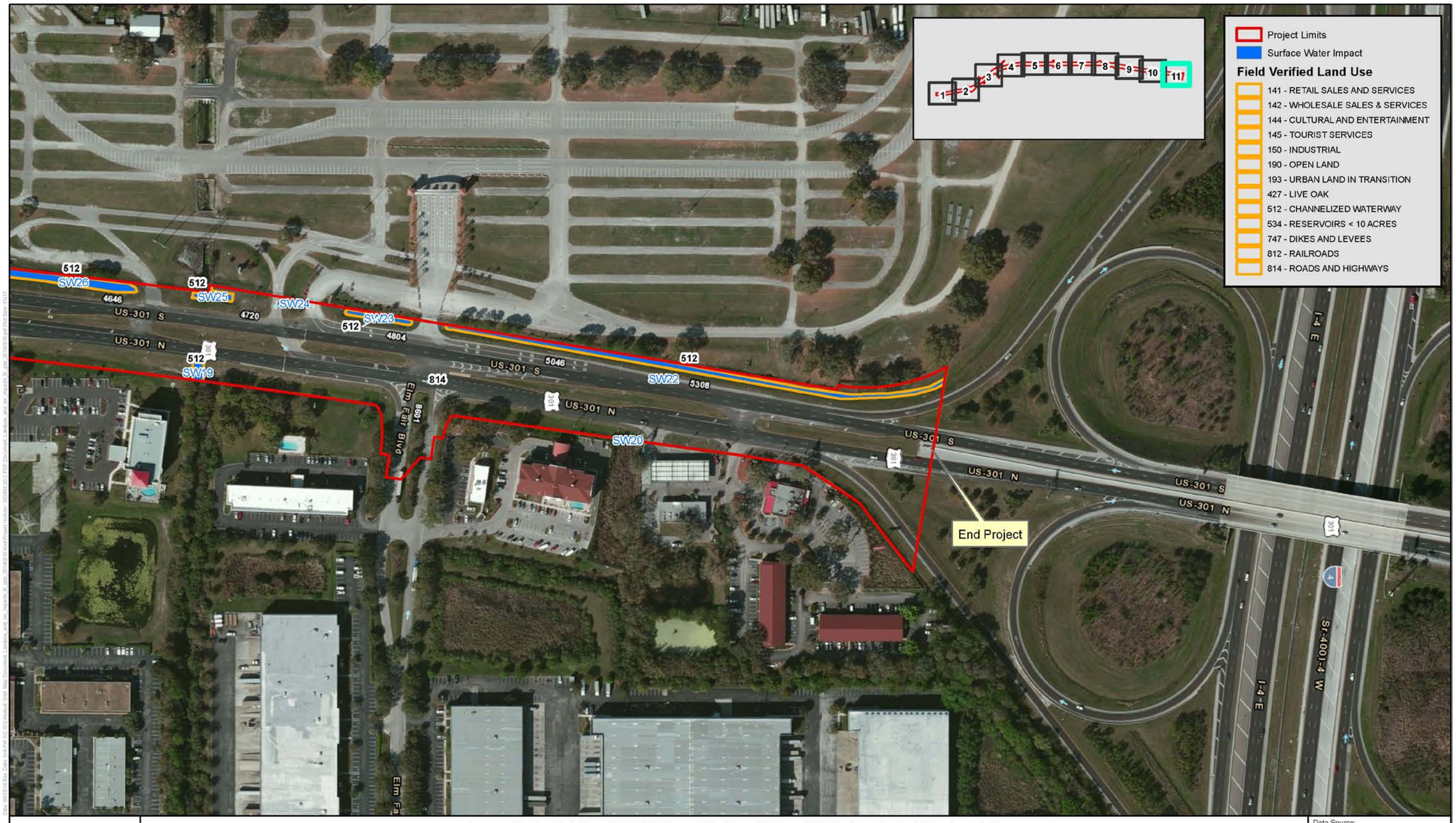

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NAD 1983 Florida
State Plane West

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APPENDIX B

Representative Photographs

Photo 1. Typical surface water with nuisance exotic vegetation

Photo 2. Typical surface water with recent maintenance

Photo 3. Tampa Bypass Canal looking northeast from US 301

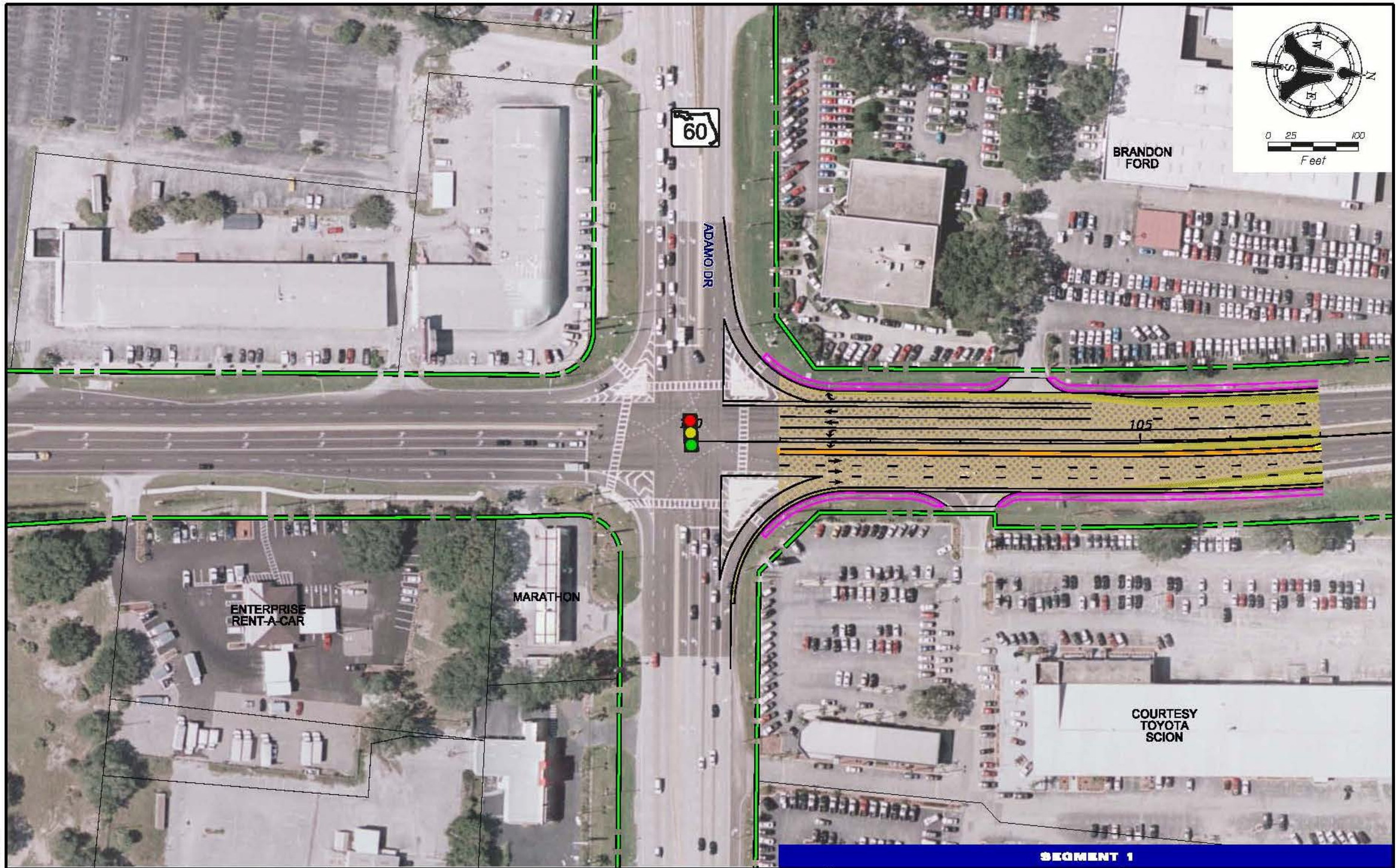
Photo 4. US 301 roadway over the Tampa Bypass Canal

Photo 5. Typical surface water with nuisance exotic vegetation

Photo 6. Live oak area

APPENDIX C

Conceptual Design Plans



SEGMENT 1

6/20/2014

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In Association with:
Adams Traffic, Inc.
Analytic Engineering, Inc.
Archaeological Consultants, Inc.
I.F. Rooks & Associates,Inc.
Kil Environmental Sciences, Inc.
Metegar Campo & Associates, Corp.
Omni Communications, LLC
Rummel, Klepper & Kahl, LLP
Schiele Ecological Associates, Inc.
Tierra, Inc.

110
BASELINE & STATIONS
EXISTING R.O.W.
PROPOSED R.O.W.
MILLING & OVERLAY
PROPOSED PAVEMENT
PROPOSED BRIDGE
PROPOSED SIDEWALK
TRAFFIC SIGNAL
PAVEMENT REMOVED

AERIALS FLOWN IN 10/2012

US 301 (SR 43) PD&E STUDY

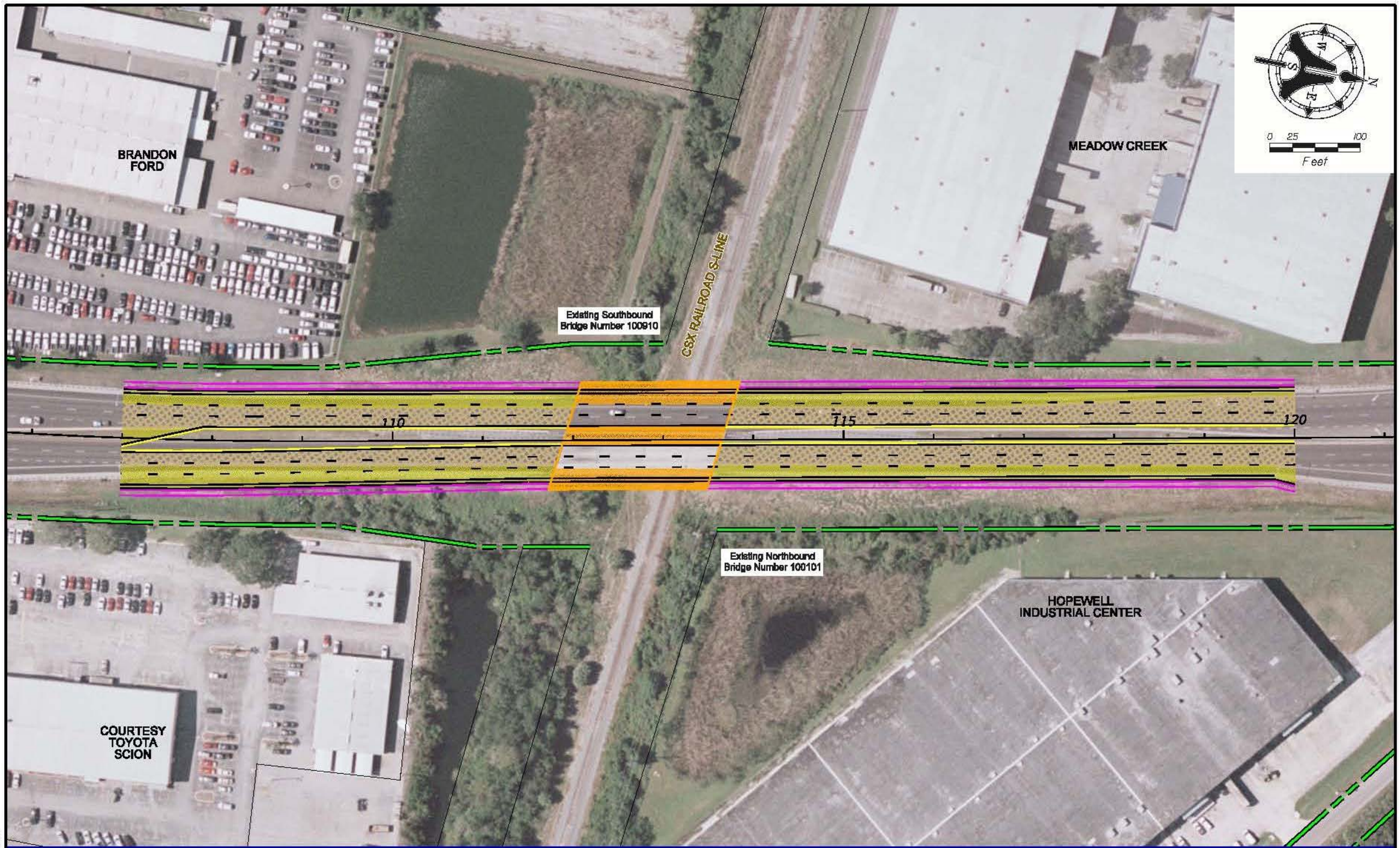
FROM SR 60 (ADAMO DRIVE) TO I-4 (SR 400)

COUNTY: HILLSBOROUGH COUNTY
WORK PROGRAM SEGMENT NO. 430060-1

FDOT

PLAN SHEET ALTERNATIVE 1

SHEET: 1



6/20/2014

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110 BASELINE & STATIONS
EXISTING R.O.W.
PROPOSED R.O.W.
MILLING & OVERLAY
PROPOSED PAVEMENT
PROPOSED BRIDGE
PROPOSED SIDEWALK
TRAFFIC SIGNAL
PAVEMENT REMOVED

AERIALS FLOWN IN 10/2012

US 301 (SR 43) PD&E STUDY

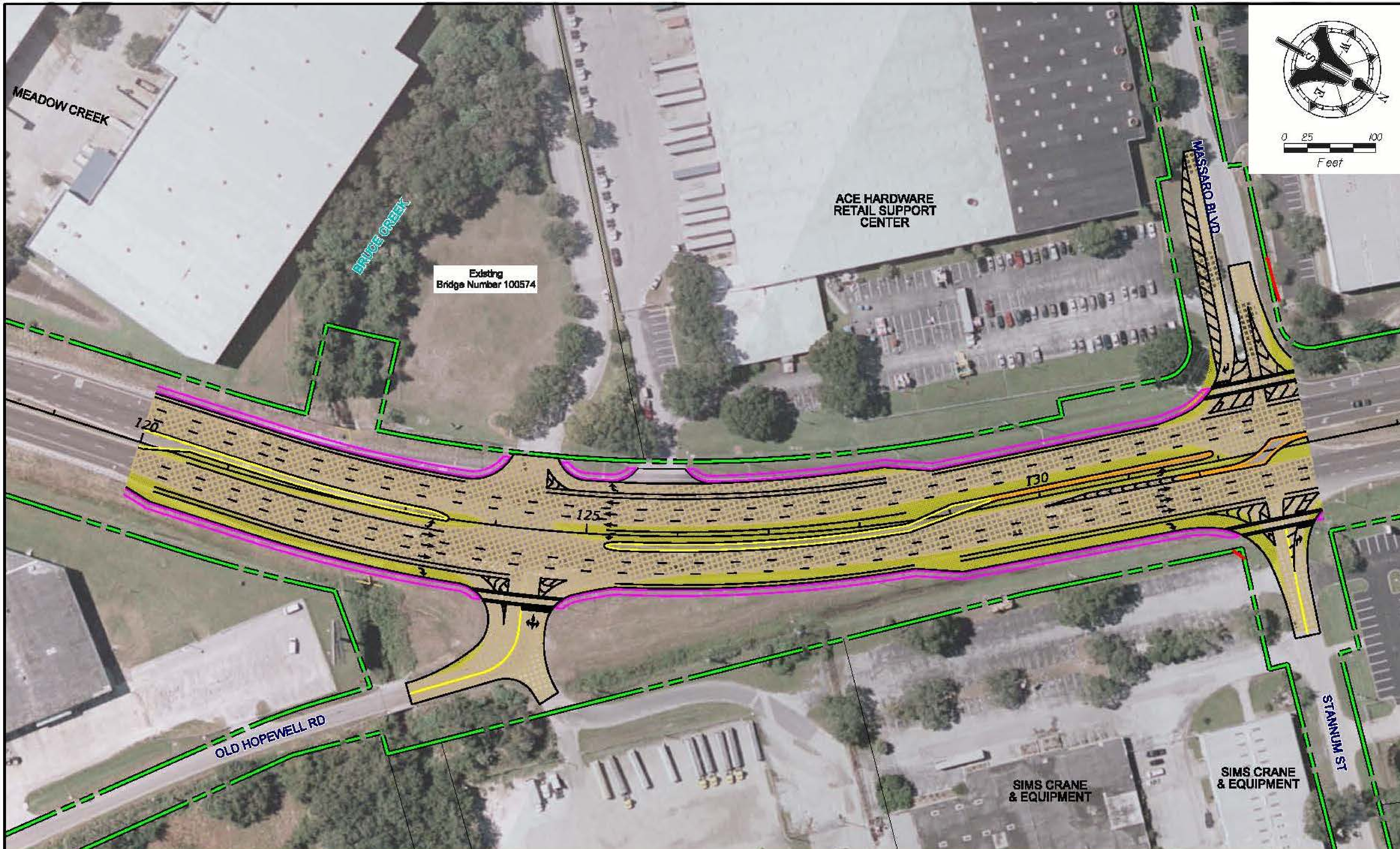
FROM SR 60 (ADAMO DRIVE) TO I-4 (SR 400)

COUNTY: HILLSBOROUGH COUNTY
WORK PROGRAM SEGMENT NO. 430060-1

FDOT

PLAN SHEET ALTERNATIVE 1

SHEET: 2



6/20/2014

SEGMENT 1

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AERIALS FLOWN IN 10/2012

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EXISTING R.O.W.
PROPOSED R.O.W.
MILLING & OVERLAY
PROPOSED PAVEMENT
PROPOSED BRIDGE
PROPOSED SIDEWALK
TRAFFIC SIGNAL
PAVEMENT REMOVED

US 301 (SR 43) PD&E STUDY

FROM SR 60 (ADAMO DRIVE) TO I-4 (SR 400)

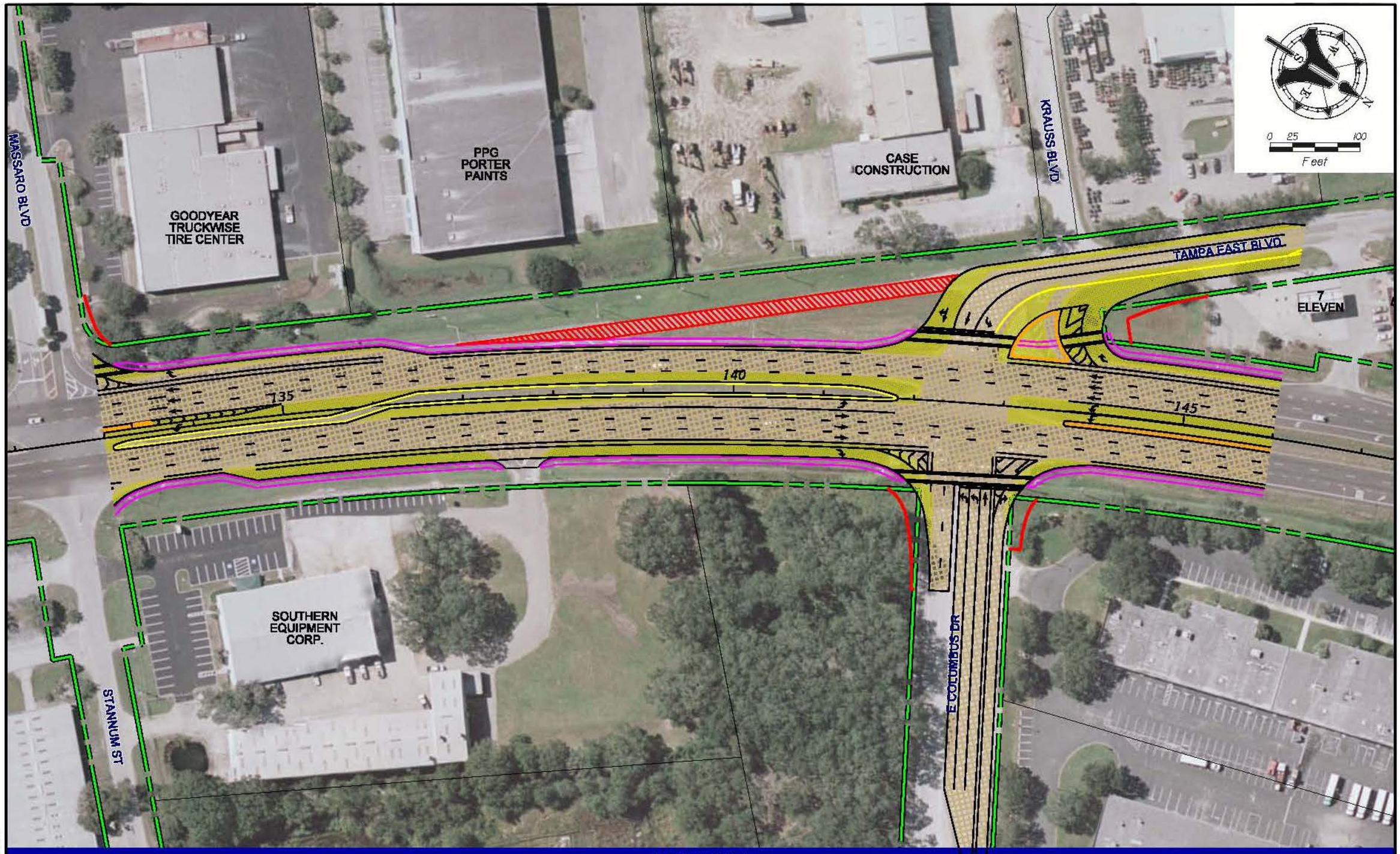
COUNTY:
HILLSBOROUGH COUNTY

WORK PROGRAM SEGMENT
NO. 430050-1

FDOT

PLAN SHEET
ALTERNATIVE 1

SHEET:
3



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EXISTING R.O.W.
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PROPOSED PAVEMENT
PROPOSED BRIDGE
PROPOSED SIDEWALK

AERIALS FLOWN IN 10/2012
TRAFFIC SIGNAL
PAVEMENT REMOVED

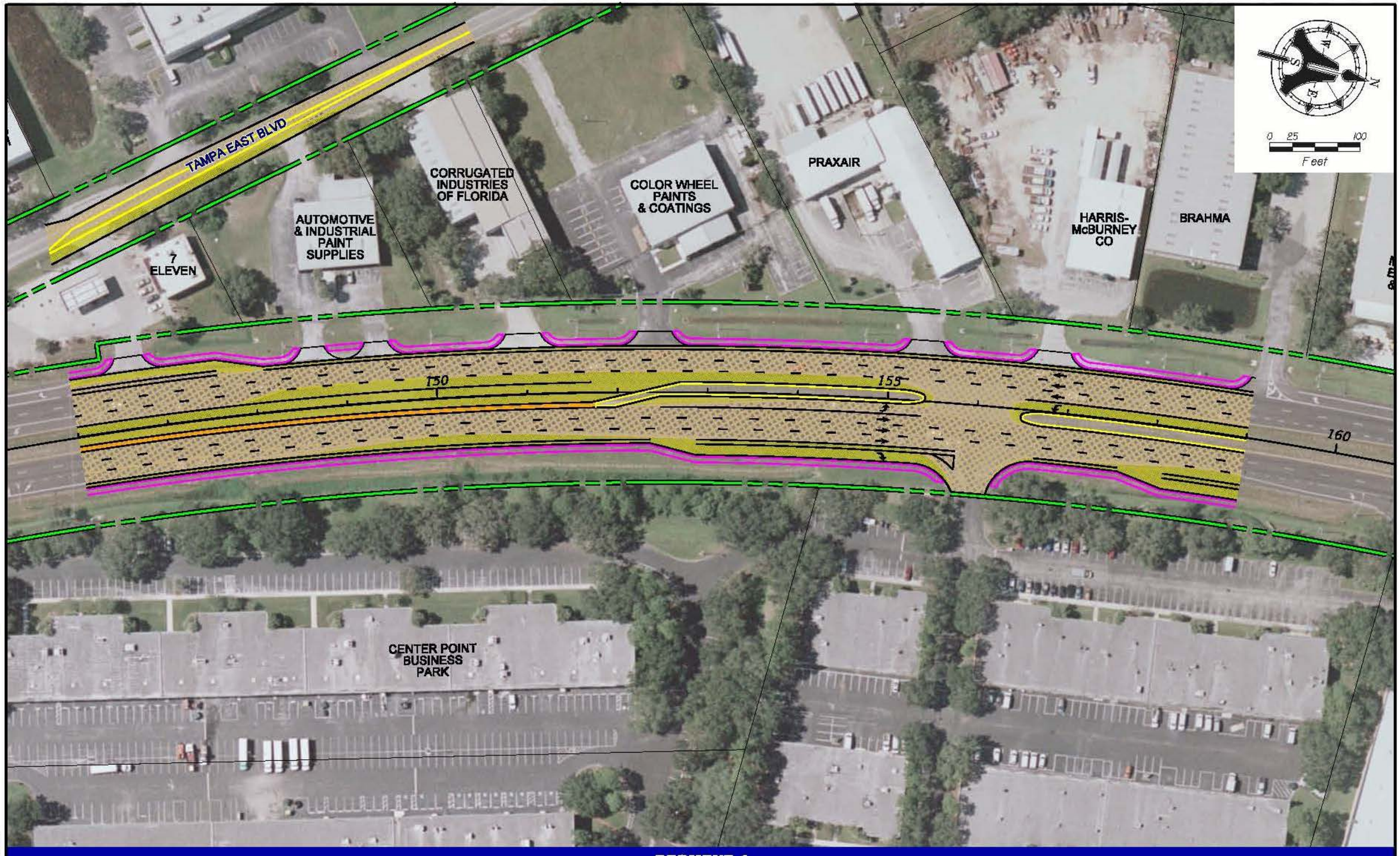
US 301 (SR 43) PD&E STUDY

FROM SR 90 (ADAMO DRIVE) TO I-4 (SR 400)

COUNTY: HILLSBOROUGH COUNTY
WORK PROGRAM SEGMENT NO. 430060-1

FDOT

PLAN SHEET ALTERNATIVE 1



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EXISTING R.O.W.
PROPOSED R.O.W.
MILLING & OVERLAY
PROPOSED PAVEMENT
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TRAFFIC SIGNAL
PAVEMENT REMOVED

AERIALS FLOWN IN 10/2012

US 301 (SR 43) PD&E STUDY

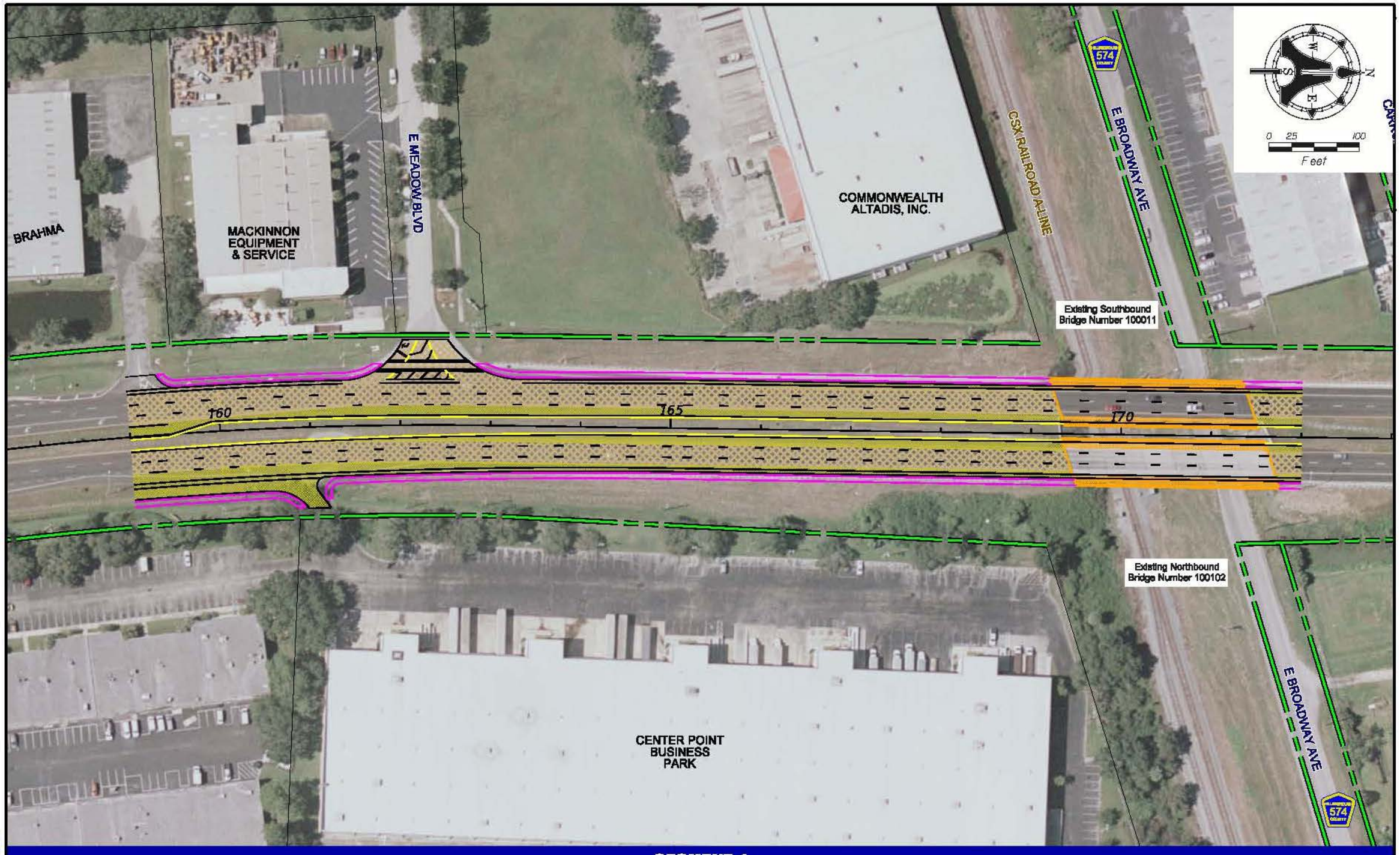
FROM SR 90 (ADAMO DRIVE) TO I-4 (SR 400)

COUNTY: HILLSBOROUGH COUNTY
WORK PROGRAM SEGMENT NO. 430060-1

FDOT

PLAN SHEET ALTERNATIVE 1

SHEET: 5



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US 301 (SR 43) PD&E STUDY

FROM SR 60 (ADAMO DRIVE) TO I-4 (SR 400)

COUNTY: HILLSBOROUGH COUNTY
WORK PROGRAM SEGMENT NO. 430050-1

FDOT

PLAN SHEET ALTERNATIVE 1

SHEET: 6

CARROLL BLVD

E 19TH AVE

20TH AVE E

21ST AVE EAST

CHAMPION TRAILERS

AIRGAS DRY ICE

BP

N

W

E

S

0 25 100

Feet

175

180

185

E BROADWAY AVE

574

BOBCAT COMPACT EQUIPMENT RENTAL

OVERPASS RD

SEGMENT 1

SEGMENT 2

6/20/2014

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US 301 (SR 43) PD&E STUDY

FROM SR 60 (ADAMO DRIVE) TO I-4 (SR 400)

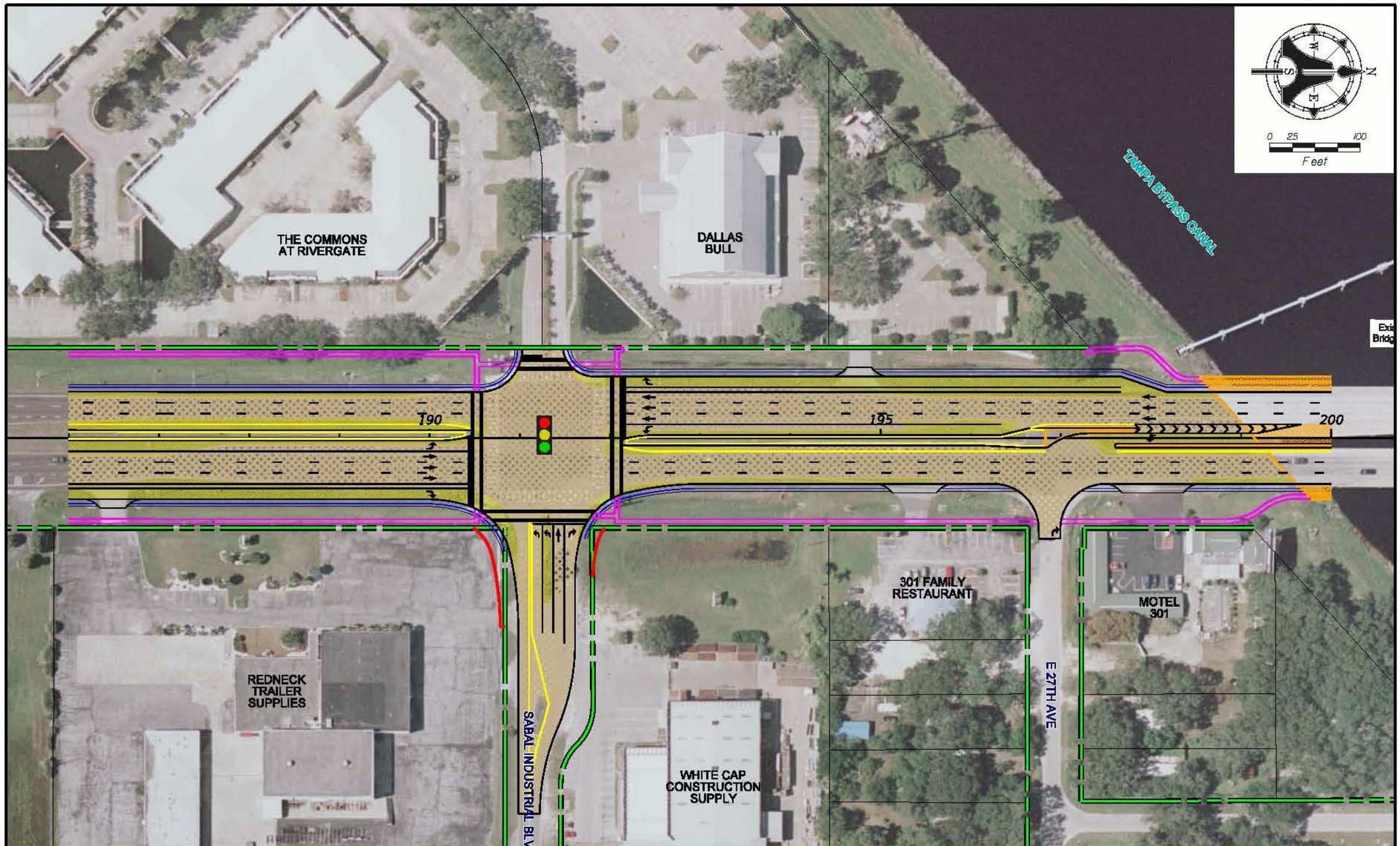
COUNTY: HILLSBOROUGH COUNTY

WORK PROGRAM SEGMENT NO. 430060-1

FDOT

PLAN SHEET ALTERNATIVE 1

SHEET: 7



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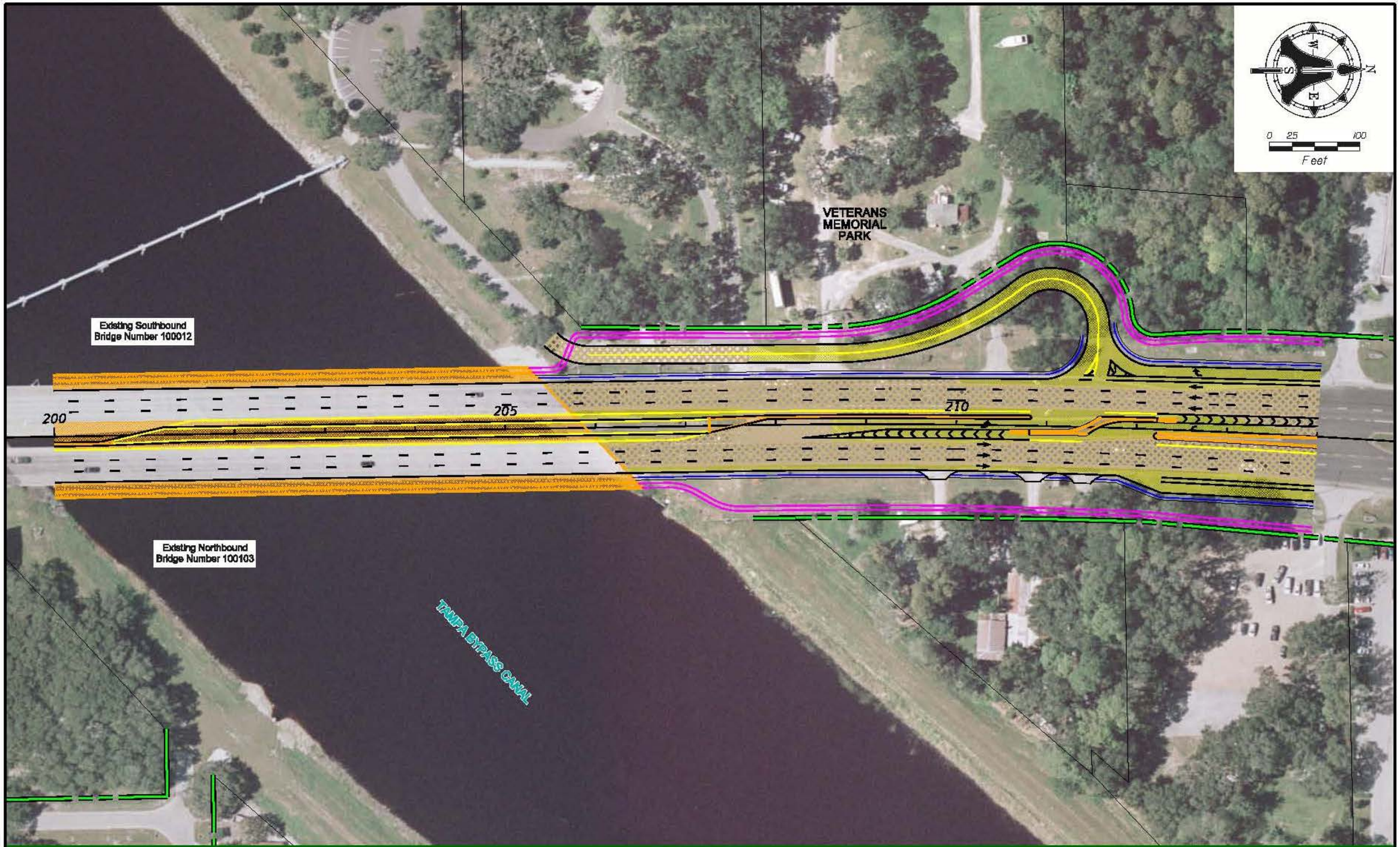
US 301 (SR 43) PD&E STUDY

FROM SR 60 (ADAMO DRIVE) TO I-4 (SR 400)

COUNTY: HILLSBOROUGH COUNTY
WORK PROGRAM SEGMENT NO. 430050-1

FDOT

PLAN SHEET ALTERNATIVE 1



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US 301 (SR 43) PD&E STUDY

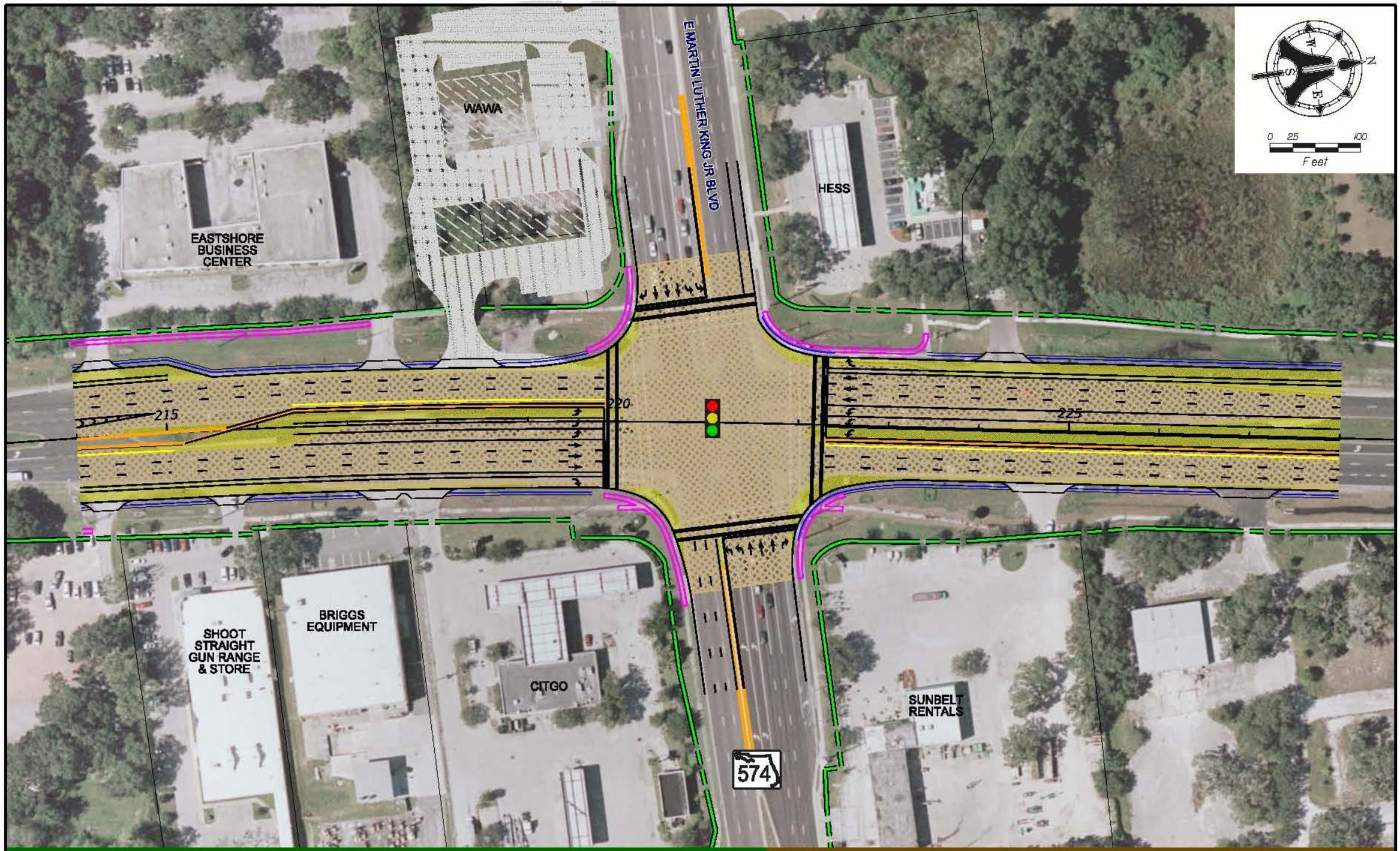
FROM SR 60 (ADAMO DRIVE) TO I-4 (SR 400)

COUNTY: HILLSBOROUGH COUNTY
WORK PROGRAM SEGMENT NO. 430060-1

FDOT

PLAN SHEET
ALTERNATIVE 1

SHEET: 9



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US 301 (SR 43) PD&E STUDY

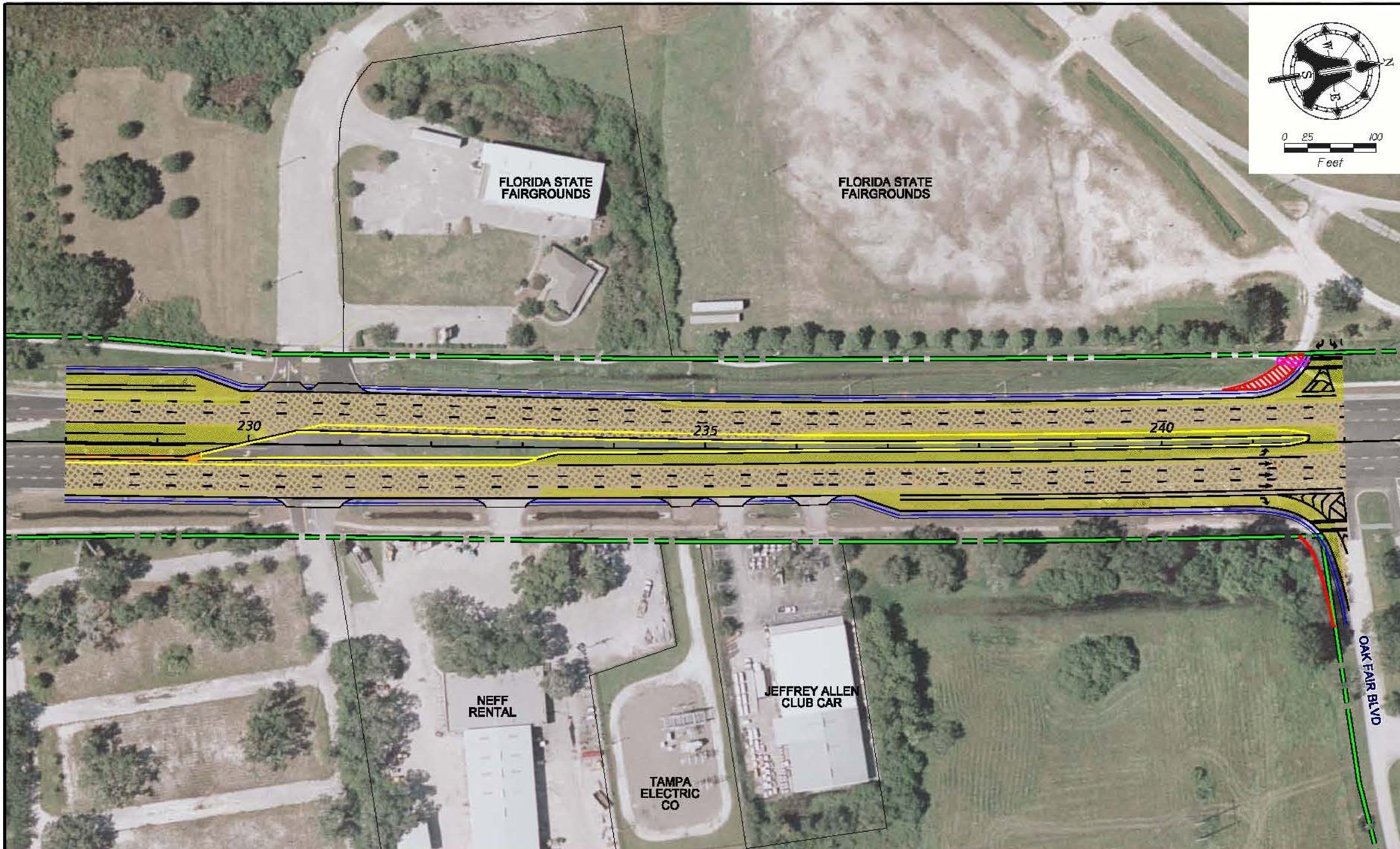
FROM SR 60 (ADAMO DRIVE) TO I-4 (SR 400)

COUNTY: HILLSBOROUGH COUNTY
WORK PROGRAM SEGMENT NO. 430060-1

FDOT

PLAN SHEET ALTERNATIVE 1

SHEET: 10



6/20/2014

SEGMENT 3

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PAVEMENT REMOVED

AERIALS FLOWN IN 10/2012

US 301 (SR 43) PD&E STUDY

FROM SR 60 (ADAMO DRIVE) TO I-4 (SR 400)

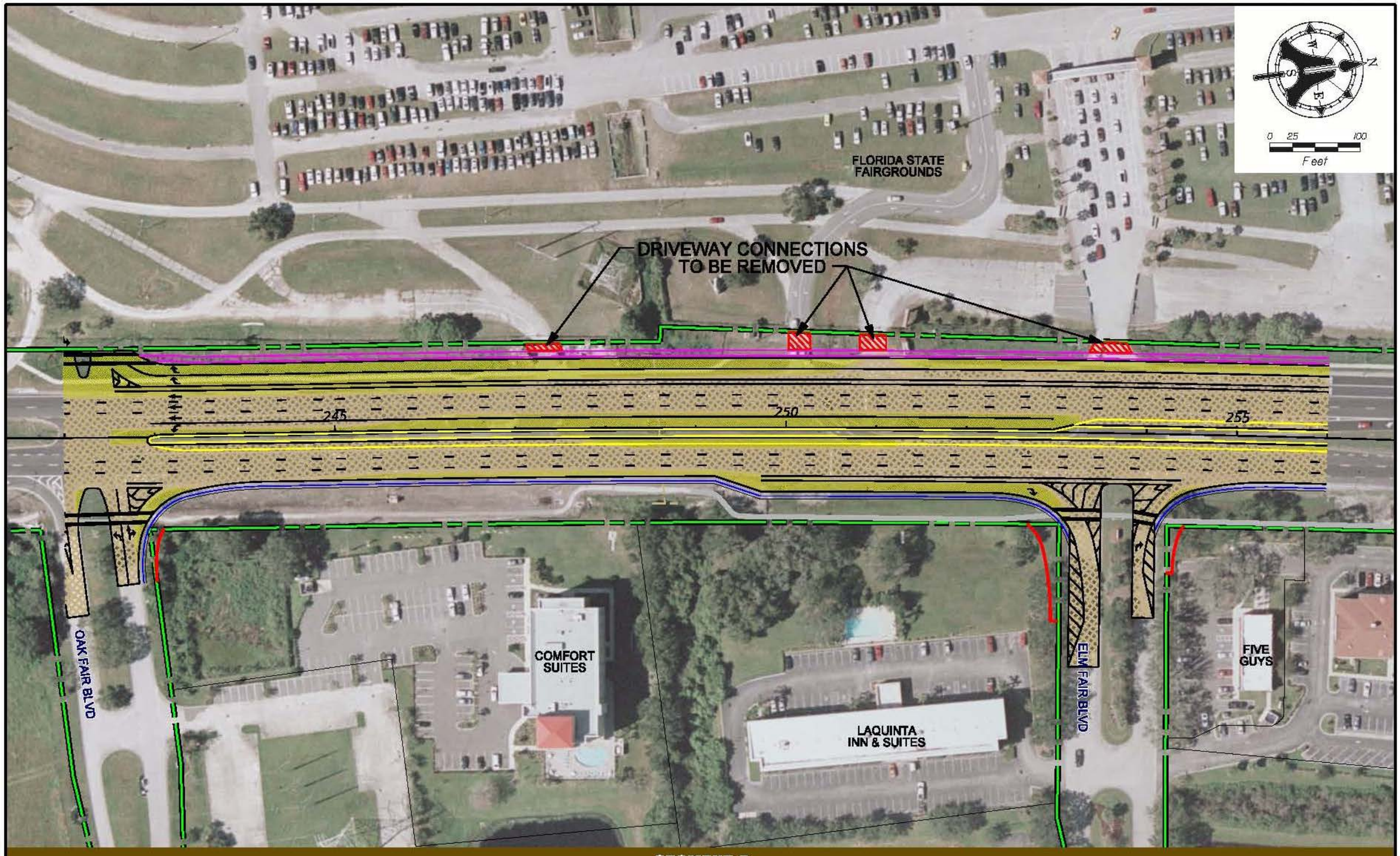
COUNTY: HILLSBOROUGH COUNTY

WORK PROGRAM SEGMENT NO. 430050-1

FDOT

PLAN SHEET ALTERNATIVE 1

SHEET: 11



SEGMENT 3

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US 301 (SR 43) PD&E STUDY

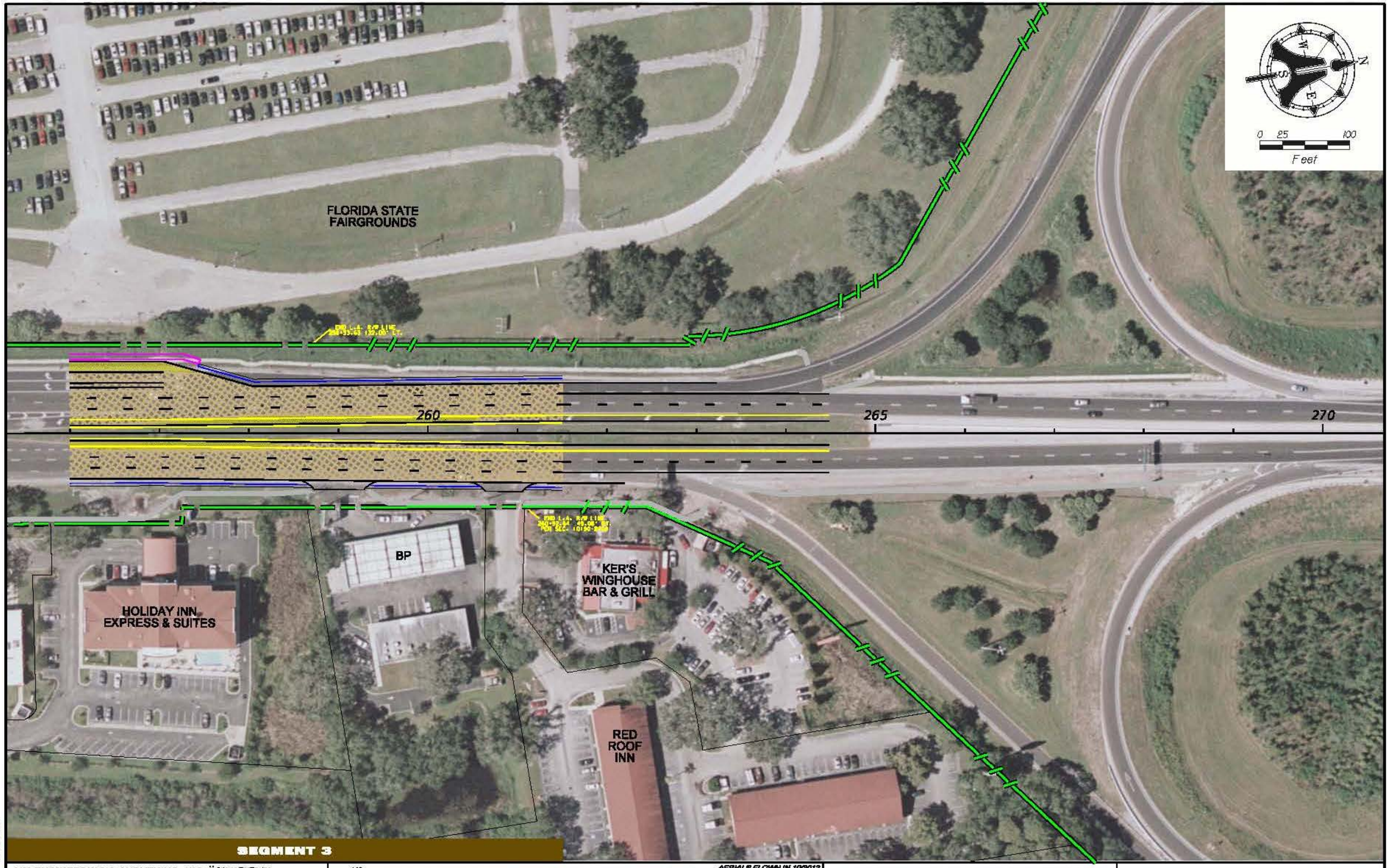
FROM SR 60 (ADAMO DRIVE) TO I-4 (SR 400)

COUNTY: HILLSBOROUGH COUNTY
WORK PROGRAM SEGMENT NO. 430060-1

FDOT

PLAN SHEET ALTERNATIVE 1

SHEET: 12



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FDOT

PLAN SHEET ALTERNATIVE 1

SHEET: 13

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AERIALS FLOWN IN 10/2012

US 301 (SR 43) PD&E STUDY

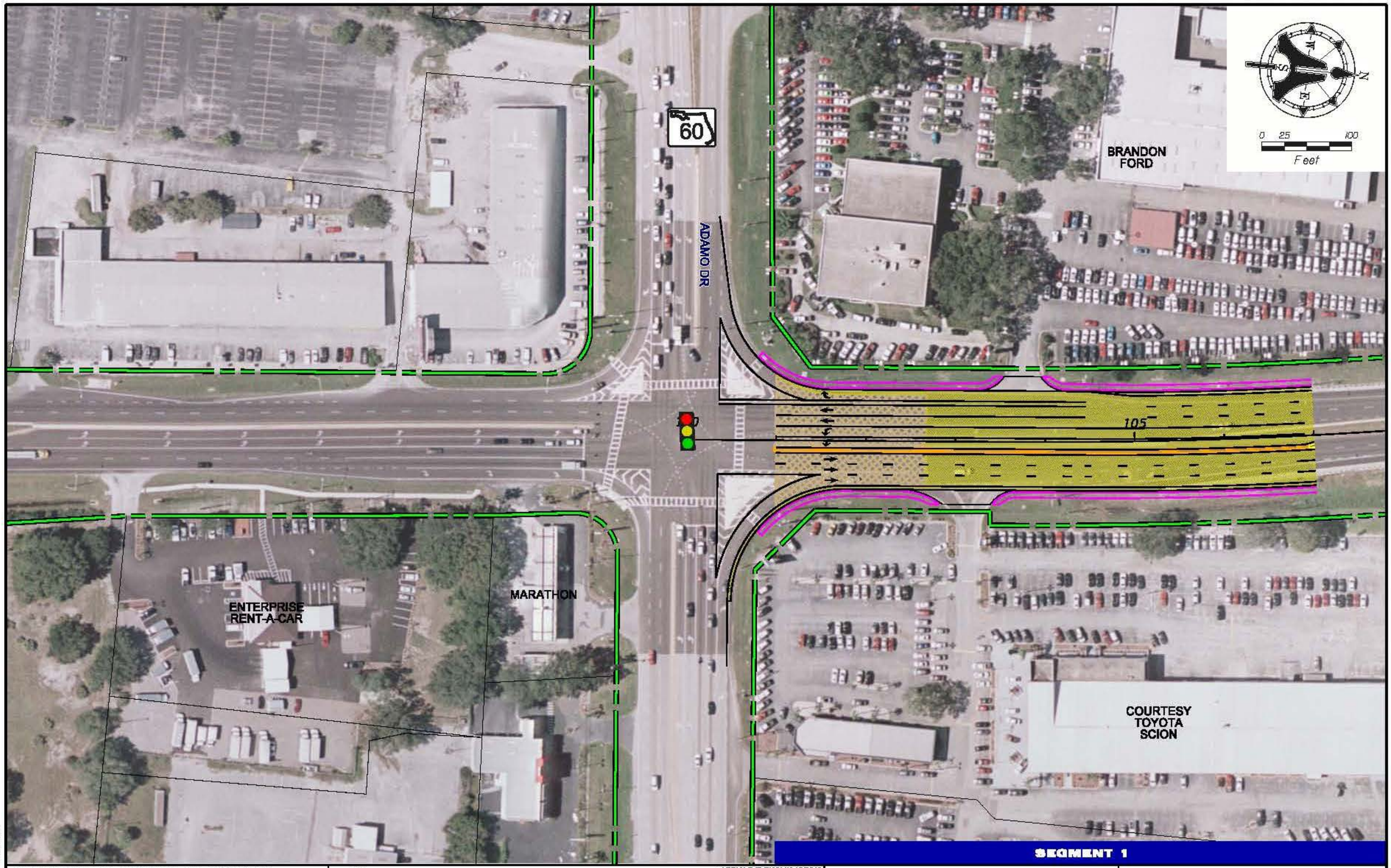
FROM SR 60 (ADAMO DRIVE) TO I-4 (SR 408)

COUNTY: HILLSBOROUGH COUNTY
WORK PROGRAM SEGMENT NO. 430060-1

FDOT

PLAN SHEET ALTERNATIVE 1

SHEET: 14



SEGMENT 1

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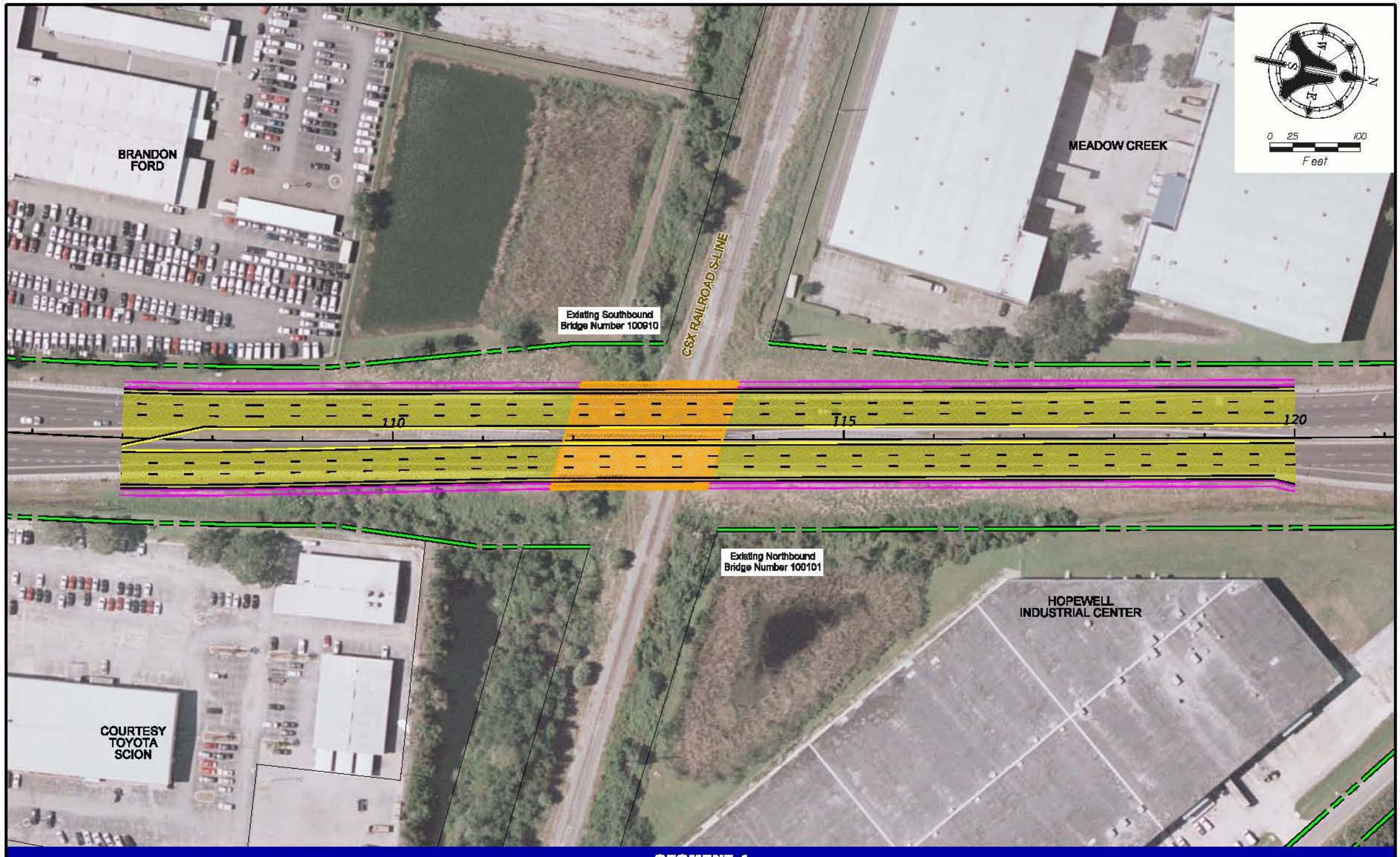
FROM SR 60 (ADAMO DRIVE) TO I-4 (SR 400)

COUNTY: HILLSBOROUGH COUNTY
WORK PROGRAM SEGMENT NO. 430060-1

FDOT

PLAN SHEET ALTERNATIVE 2

SHEET: 1



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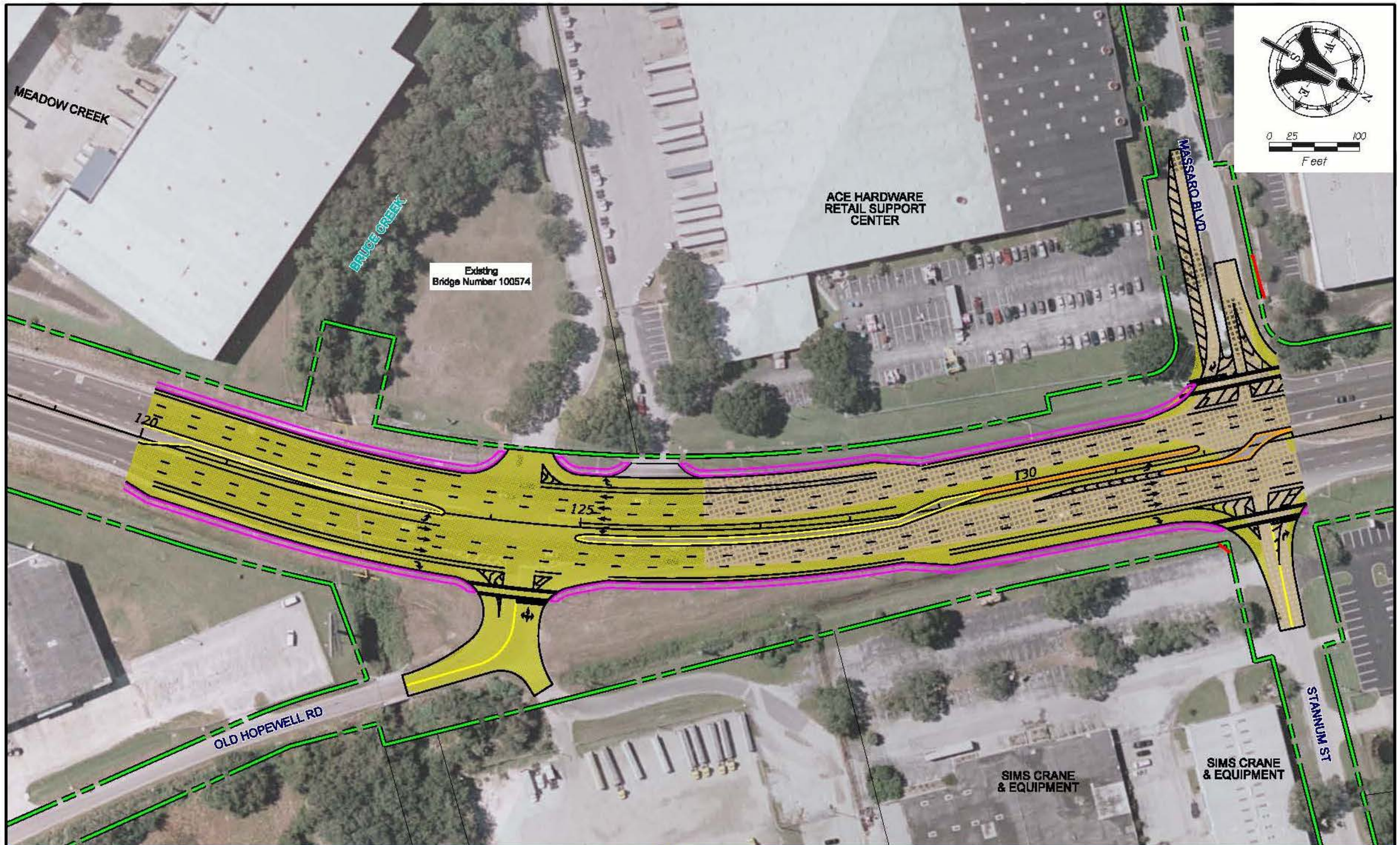
PLAN SHEET ALTERNATIVE 2



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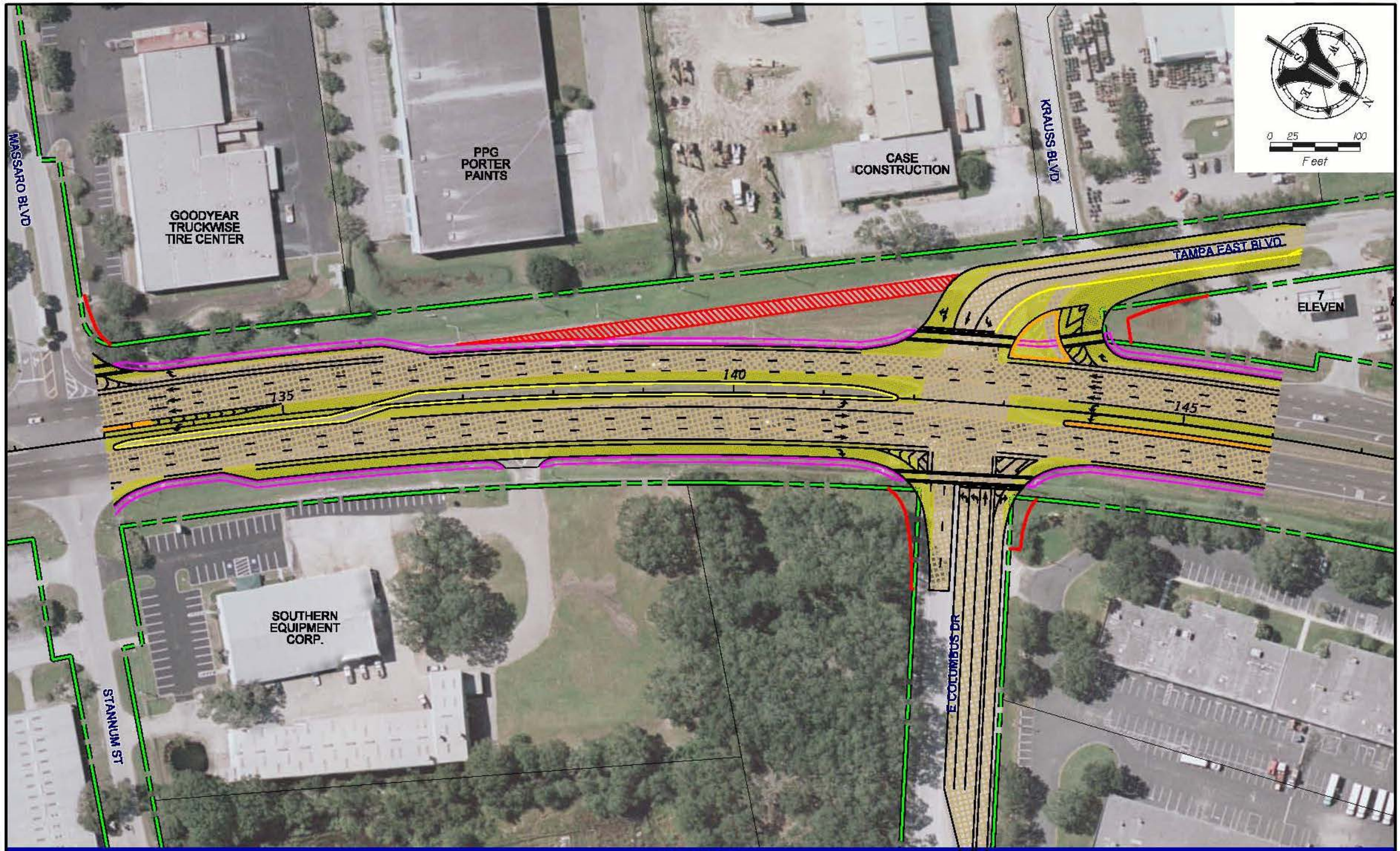
PLAN SHEET
ALTERNATIVE 2

SHEET: 3



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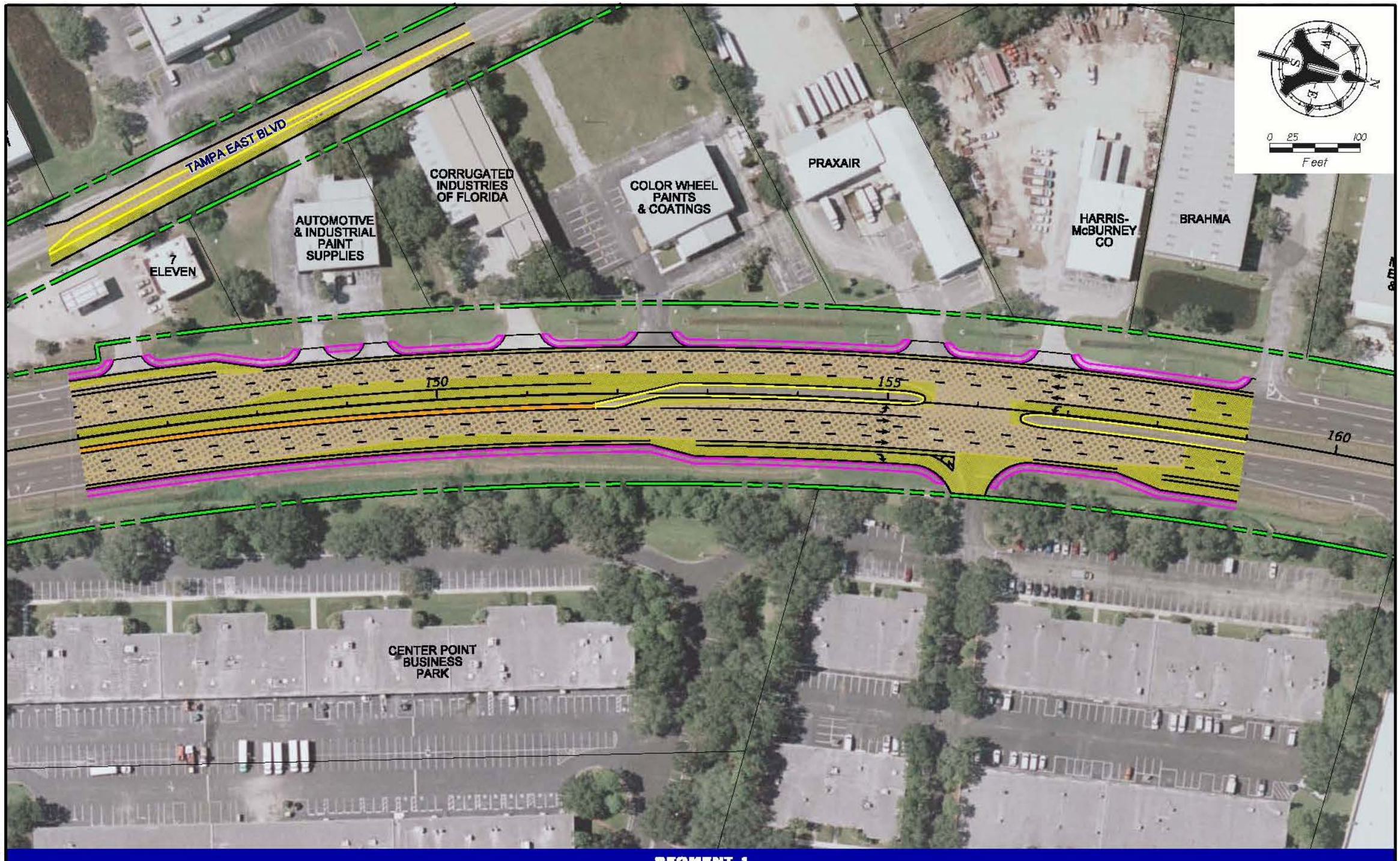
PLAN SHEET ALTERNATIVE 2

SHEET: 4



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BASELINE & STATIONS
EXISTING R.O.W.
PROPOSED R.O.W.
MILLING & OVERLAY
PROPOSED PAVEMENT
PROPOSED BRIDGE
PROPOSED SIDEWALK
TRAFFIC SIGNAL
PAVEMENT REMOVED

AERIALS FLOWN IN 10/2012

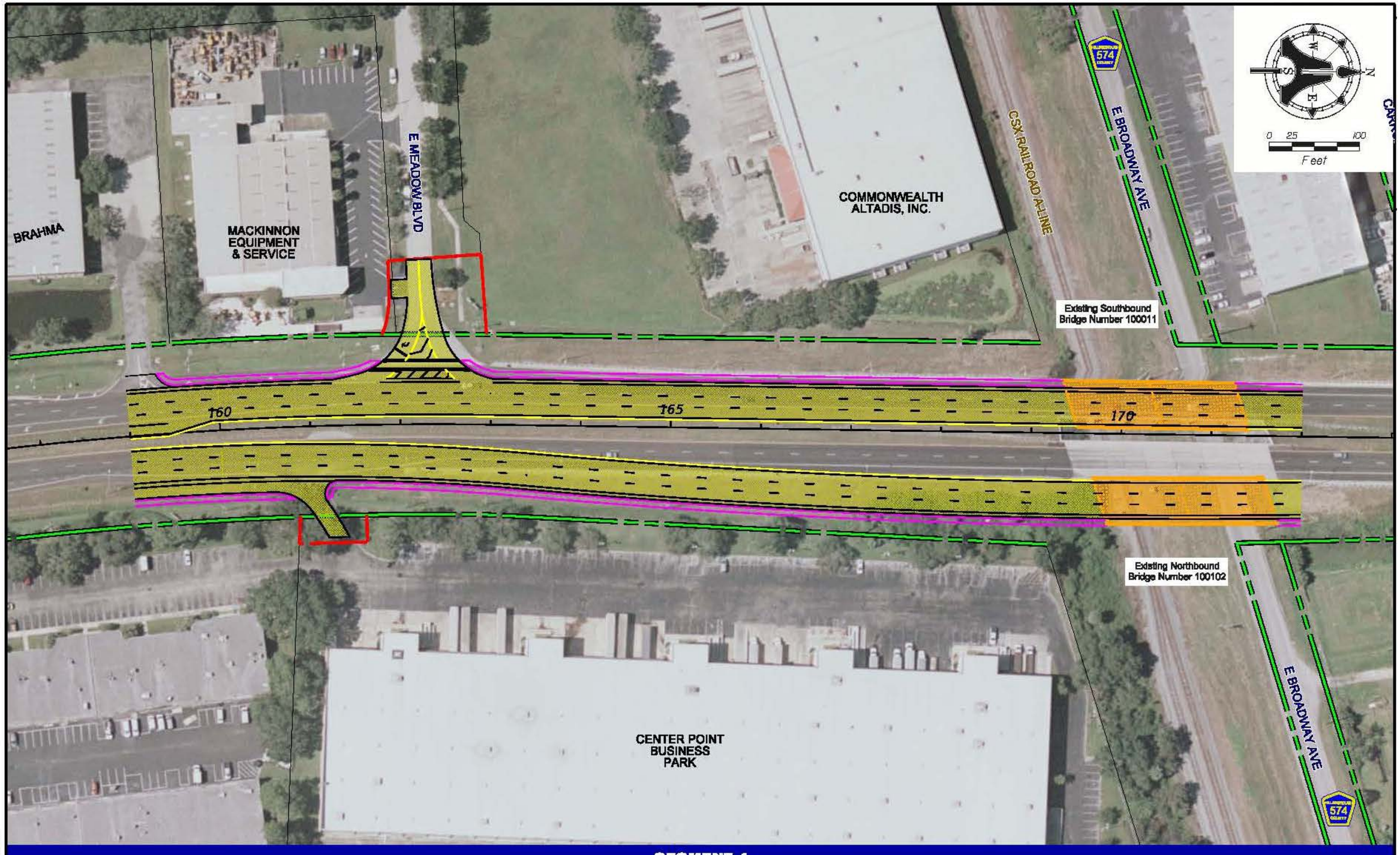
US 301 (SR 43) PD&E STUDY

FROM SR 60 (ADAMO DRIVE) TO I-4 (SR 400)

COUNTY: HILLSBOROUGH COUNTY
WORK PROGRAM SEGMENT NO. 430060-1

FDOT

PLAN SHEET ALTERNATIVE 2



SEGMENT 1

6/20/2014

AIM ENGINEERING & SURVEYING, INC.
3802 CORPOREX PARK DRIVE, SUITE 225
TAMPA, FLORIDA 33619
TEL: (813) 627-4144
FAX: (813) 664-1899 WWW.AIMENGR.COM

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Archaeological Consultants, Inc.
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Kbi Environmental Sciences, Inc.
Kisinger Campo & Associates, Corp.
Omni Communications, LLC
Rummel, Klepper & Kahl, LLP
Schiefa Ecological Associates, Inc.
Tierra, Inc.

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AERIALS FLOWN IN 10/2012

US 301 (SR 43) PD&E STUDY

FROM SR 60 (ADAMO DRIVE) TO I-4 (SR 408)

COUNTY: HILLSBOROUGH COUNTY
WORK PROGRAM SEGMENT NO. 430060-1

FDOT

PLAN SHEET ALTERNATIVE 2

CARROLL BLVD
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21ST AVE EAST
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180
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E BROADWAY AVE
574
BOBCAT COMPACT EQUIPMENT RENTAL
OVERPASS RD

SEGMENT 1

SEGMENT 2

6/20/2014

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AERIALS FLOWN IN 10/2012

US 301 (SR 43) PD&E STUDY

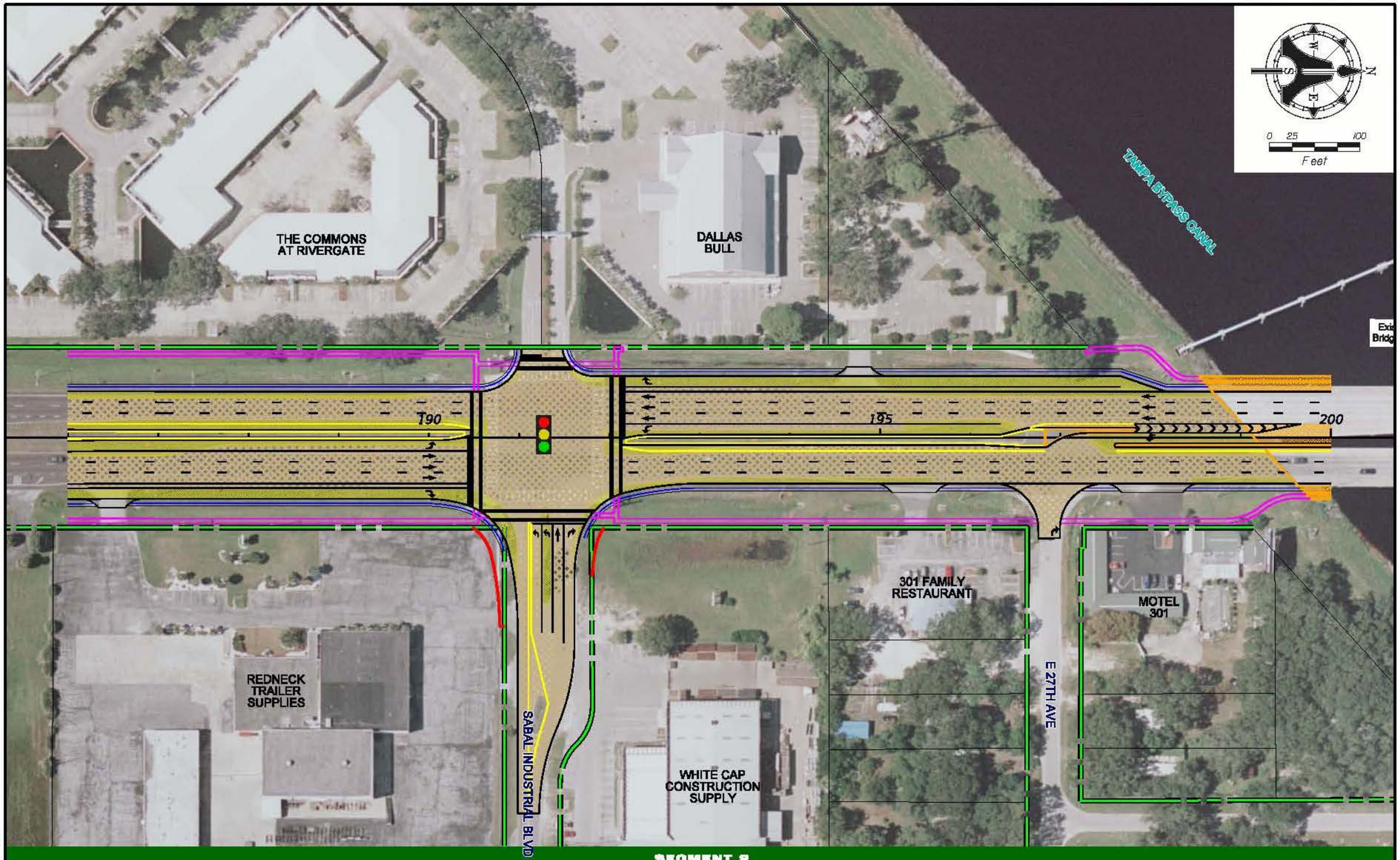
FROM SR 60 (ADAMO DRIVE) TO I-4 (SR 400)

COUNTY: HILLSBOROUGH COUNTY
WORK PROGRAM SEGMENT NO. 430060-1

FDOT

PLAN SHEET ALTERNATIVE 2

SHEET: 7



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Omni Communications, LLC
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AERIALS FLOWN IN 10/2012

US 301 (SR 43) PD&E STUDY

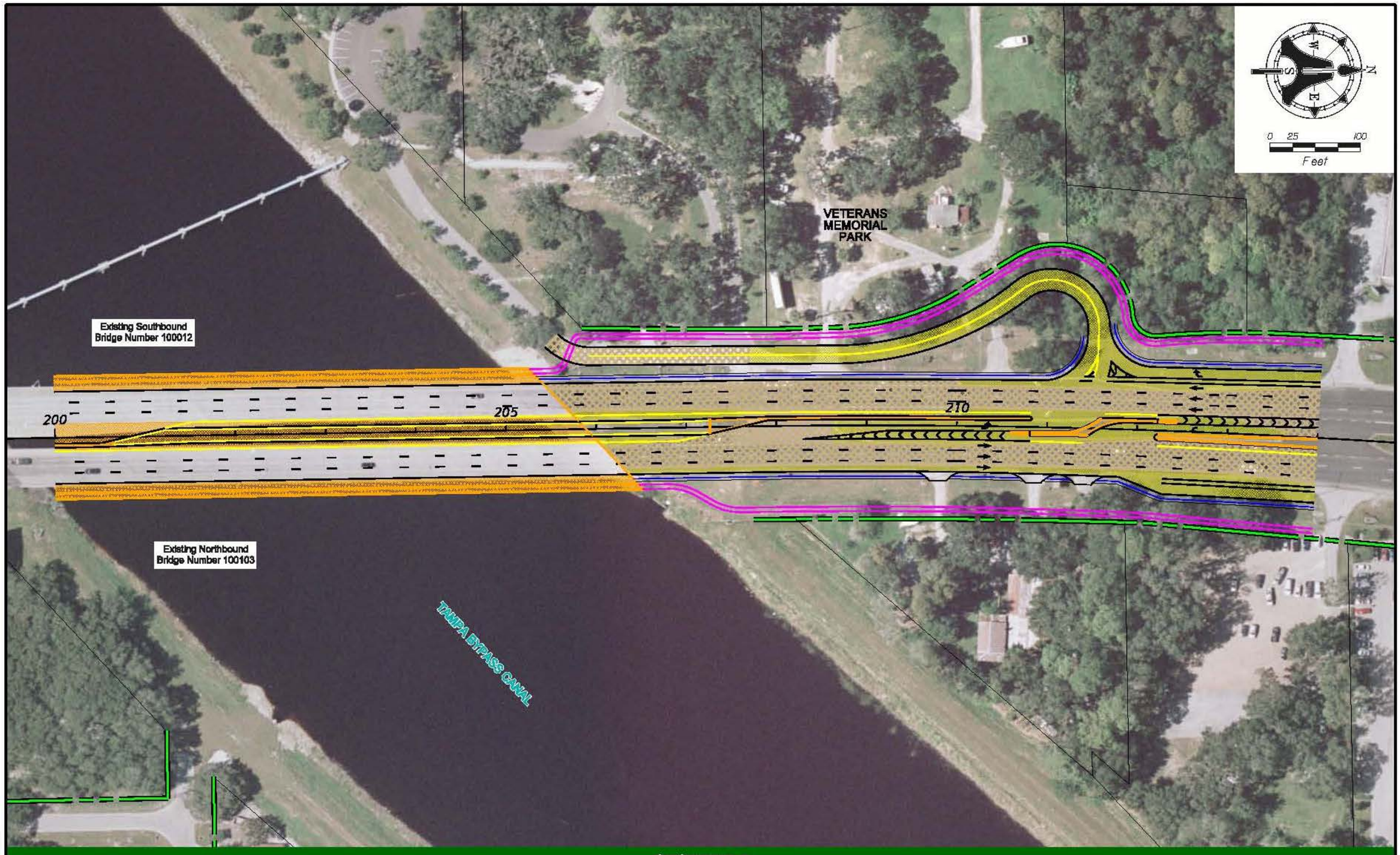
FROM SR 60 (ADAMO DRIVE) TO I-4 (SR 400)

COUNTY: HILLSBOROUGH COUNTY
WORK PROGRAM SEGMENT NO. 430060-1

FDOT

PLAN SHEET ALTERNATIVE 2

SHEET: 8



SEGMENT 2

6/20/2014

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AERIALS FLOWN IN 10/2012

US 301 (SR 43) PD&E STUDY

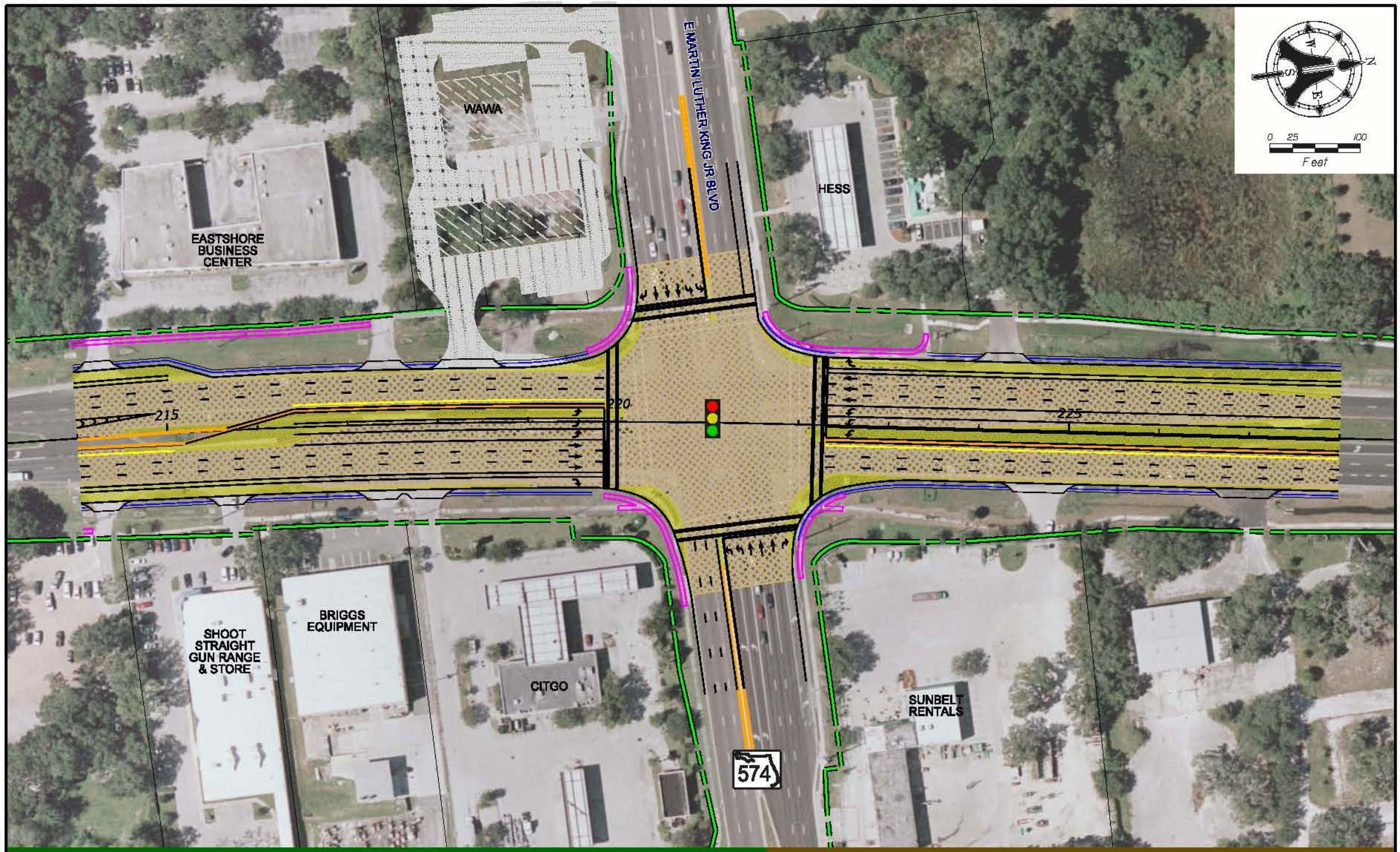
FROM SR 60 (ADAMO DRIVE) TO I-4 (SR 400)

COUNTY: HILLSBOROUGH COUNTY
WORK PROGRAM SEGMENT NO. 430060-1

FDOT

PLAN SHEET ALTERNATIVE 2

SHEET: 9



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Schoda Ecological Associates, Inc.
Tierra, Inc.

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AERIALS FLOWN IN 10/2012

US 301 (SR 43) PD&E STUDY

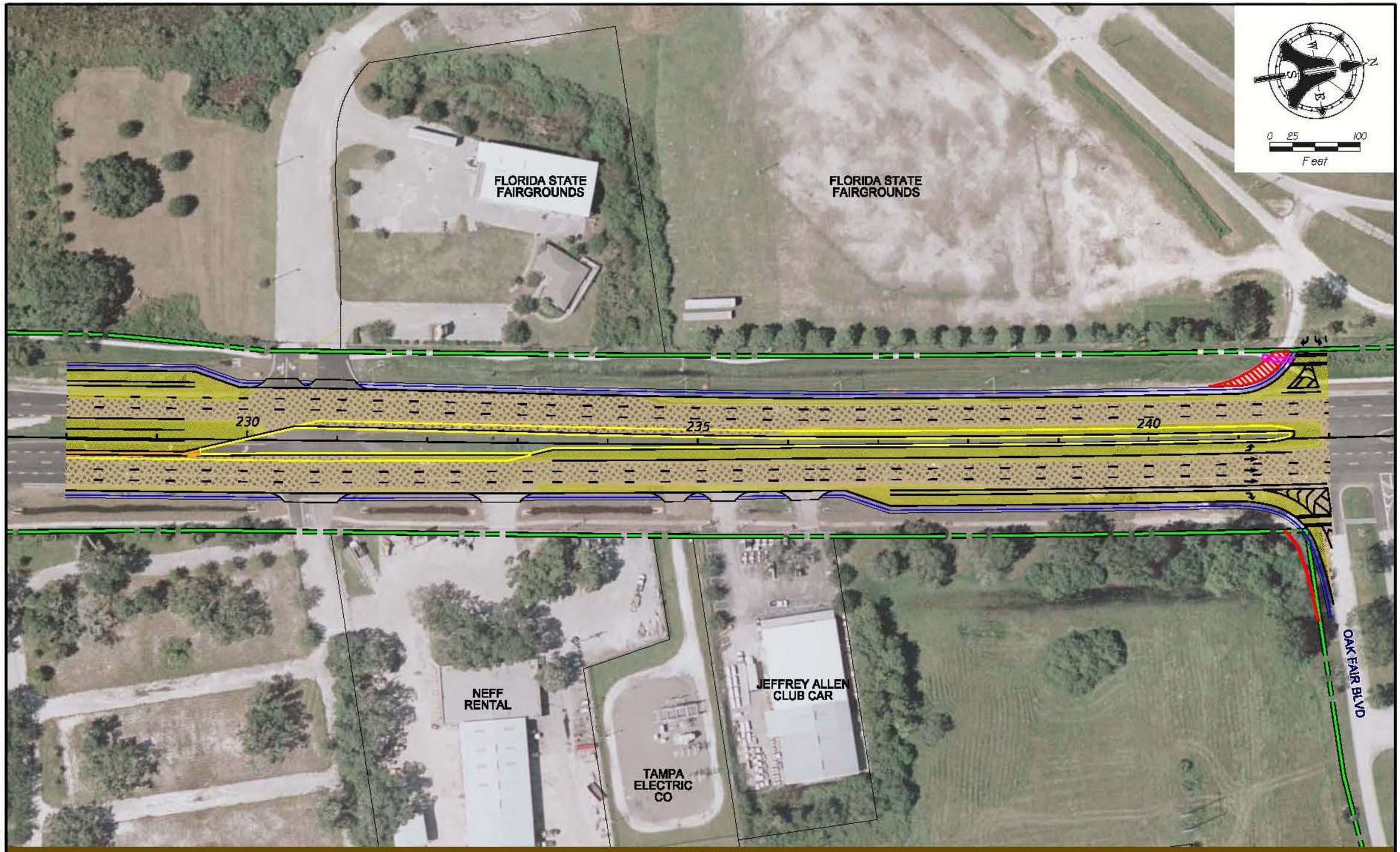
FROM SR 60 (ADAMO DRIVE) TO I-4 (SR 400)

COUNTY: HILLSBOROUGH COUNTY
WORK PROGRAM SEGMENT NO. 430060-1

FDOT

PLAN SHEET ALTERNATIVE 2

SHEET: 10



SEGMENT 3

6/20/2014

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AERIALS FLOWN IN 10/2012

US 301 (SR 43) PD&E STUDY

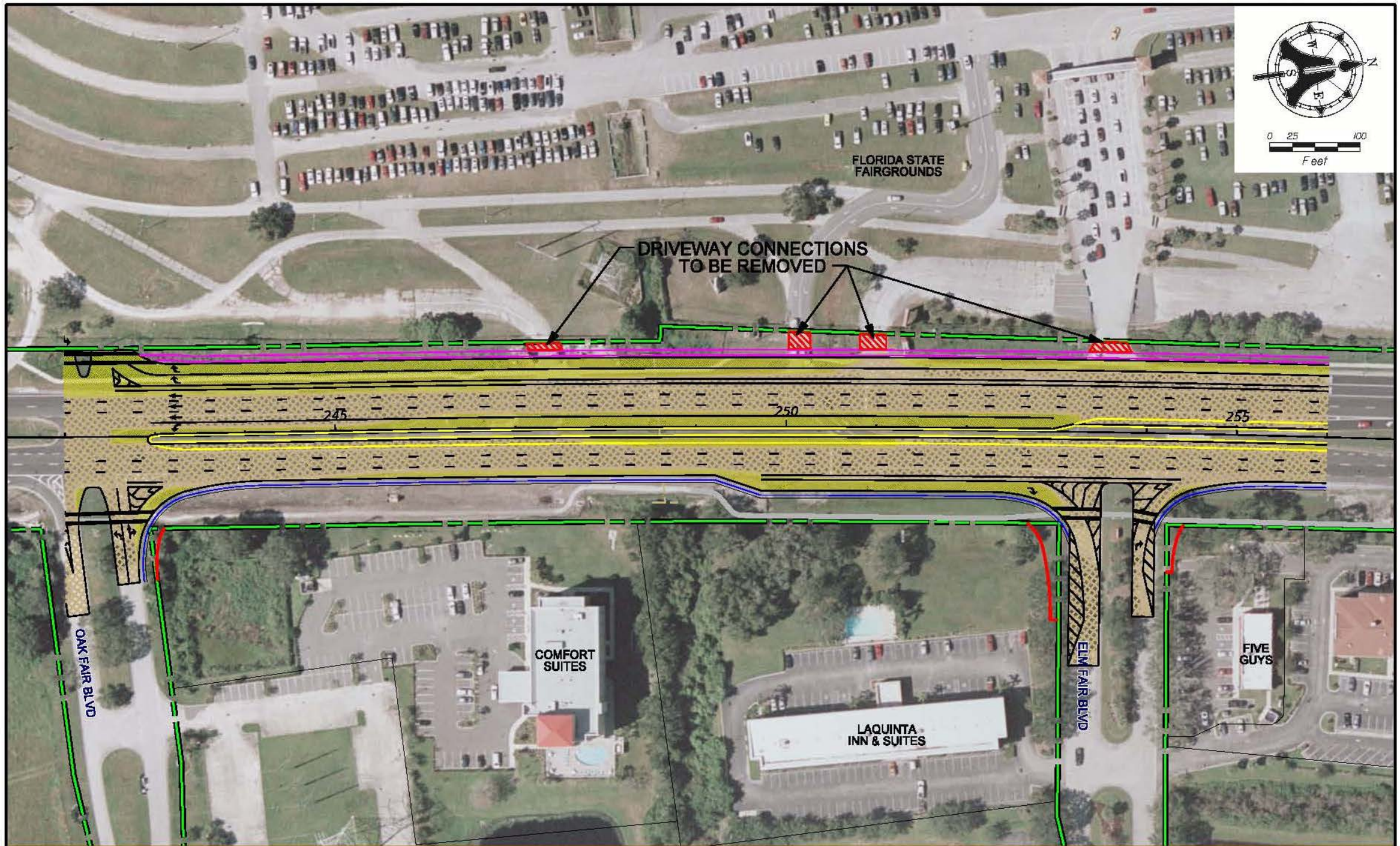
FROM SR 60 (ADAMO DRIVE) TO I-4 (SR 400)

COUNTY: HILLSBOROUGH COUNTY
WORK PROGRAM SEGMENT NO. 430060-1

FDOT

PLAN SHEET ALTERNATIVE 2

SHEET: 11



SEGMENT 3

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AERIALS FLOWN IN 10/2012

US 301 (SR 43) PD&E STUDY

FROM SR 60 (ADAMO DRIVE) TO I-4 (SR 408)

COUNTY: HILLSBOROUGH COUNTY
WORK PROGRAM SEGMENT NO. 430050-1

FDOT

PLAN SHEET ALTERNATIVE 2

FLORIDA STATE FAIRGROUNDS

HOLIDAY INN EXPRESS & SUITES

BP

KER'S WINGHOUSE BAR & GRILL

RED ROOF INN

260

265

270

0 25 100
Feet

SEGMENT 3

6/20/2014

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AERIALS FLOWN IN 10/2012

US 301 (SR 43) PD&E STUDY

FROM SR 56 (ADAMO DRIVE) TO I-4 (SR 400)

COUNTY: HILLSBOROUGH COUNTY
WORK PROGRAM SEGMENT NO. 430060-1

FDOT

PLAN SHEET ALTERNATIVE 2

SHEET: 13

6/20/2014

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KB Environmental Sciences, Inc.
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Omni Communications, LLC
Rummel, Klepper & Kahl, LLP
Scheda Ecological Associates, Inc.
Tierra, Inc.

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AERIALS FLOWN IN 10/2012

US 301 (SR 43) PD&E STUDY

FROM SR 60 (ADAMO DRIVE) TO I-4 (SR 400)

COUNTY: HILLSBOROUGH COUNTY

WORK PROGRAM SEGMENT NO. 430050-1

PLAN SHEET ALTERNATIVE 2

SHEET: 14

APPENDIX D

Agency Concurrences and ETDM Programming Screen Summary Report

United States Department of the Interior
U. S. FISH AND WILDLIFE SERVICE
7915 BAYMEADOWS WAY, SUITE 200
JACKSONVILLE, FLORIDA 32256-7517

IN REPLY REFER TO:

FWS Log No. 04EF1000-2016-I-0189

February 3, 2016

Nicole Selly
District 7 Environmental Specialist
Florida Department of Transportation
11201 N. McKinley Drive
Tampa, Florida 33612-6456

RE: US 301 (SR43) from SR 60 (Adam Drive) to I-4 (SR400) Project Development and Environment Study
Hillsborough County, Florida.
WPI No.: 430050-1

Dear Ms. Selly:

The U.S. Fish and Wildlife Service (Service) has completed its review of the Draft Wetland Evaluation and Biological Assessment Report (WEBAR) for the Project Development and Environment (PD&E) study to evaluate the proposed widening of US 301 (SR 43) to six lanes from SR 60 (Adamo Drive) to the southern end of the eastbound I-4 (SR 400) on- and off-ramps in Hillsborough County. Project goals are to document the need for additional capacity within the study corridor and to evaluate the costs and impacts associated with providing additional capacity for which federal permits will be needed. The Service provides the following comments in accordance with section 7 of the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 et seq.).

The Service received a request from the Florida Department of Transportation (FDOT) on January 11, 2016, for review of the draft WEBAR for the proposed project. The draft document includes determinations of "may affect, not likely to adversely affect" for the wood stork (*Mycteria americana*) and the eastern indigo snake (*Drymarchon couperi*) and a no effect determination for the West Indian Manatee (*Trichechus manatus*). The proposed project crosses the Tampa Bypass Canal which contains a weir that excludes manatees from accessing the canal,

consequently no direct impacts this species are expected. It is our understanding that wetland impacts to suitable wood stork foraging areas will be re-evaluated and compensation for unavoidable impacts will be provided within a Service approved mitigation or conservation bank during the permitting process. The Service has reviewed the information provided and FDOT's effects determinations for potential impacts to species listed under the Endangered Species Act and provide the following comments.

Eastern Indigo Snake (*Drymarchon couperi*)

A 'may affect, but not likely to adversely affect' determination for the eastern indigo snake was made due to the fact that suitable habitat present in the project area is minimal, eastern indigo snakes were not been observed during field surveys within the project study area, area of impact is less than 25 acres of xeric habitat supporting less than 25 occupied gopher tortoise burrows and FDOT's commitment to implementing the Service's Standard Protection Measures for the Indigo Snake during construction of the project. The Service would like to request that if or when an eastern indigo snake is observed at the project site that the Service is contacted within 24 hours before work continues at the project site. The proposed project is within a highly urbanized area where impacts to the species habitat have already taken place. Based on our review of the information provided, our records for eastern indigo snake observations, and FDOT's commitment to implement the Standard Protection Measures for the Eastern Indigo Snake the Service concurs with a 'may affect, but not likely to adversely affect' determination for the Eastern indigo snake.

Wood Stork (*Mycteria americana*)

Suitable foraging habitat (SFH) for woods storks is present within the proposed project study area. The draft WEBAR identified one (1) active colony sites within a 15-mile radius of the proposed project site, the project is more than 2,500 feet from a colony site, and estimated project impacts are greater than 0.5 acres of SFH. To reach a "may affect, not likely to adversely affect" determination for the wood stork, FDOT commits to re-initiating informal Section 7 consultation prior to construction and compensate for the loss of suitable foraging habitat within the core foraging areas (CFA). The Service recommends and prefers that mitigation for this species is "like-for-like" habitat within the same ecological CFA. The Service has reviewed the information provided and FDOT's commitments, as well as available observation and species presence data and concurs with a 'may affect, but not likely to adversely affect' determination for this species.

Thank you for considering the effects of your proposed project on fish and wildlife, and the ecosystems upon which they depend. Although this does not represent a biological opinion as described in Section 7 of the Act, it does fulfill the requirements of the Act. Should changes to

the proposed project occur or new information regarding fish and wildlife resources become available, further consultation with the Service should be initiated to assess any or further potential impacts. If you have any questions, please contact Lourdes Mena at (904)731-3119.

Sincerely,

Jay B. Herrington
Field Supervisor

Wetlands

Project Effect Comments

Coordinator Summary Degree of Effect: 3 *Moderate*
Response By: FDOT District 7 (01/07/2013)
Comments:

SWFWMD DOE: Moderate

USACE DOE: Minimal

USEPA DOE: Minimal

USFWS DOE: Minimal

NMFS DOE: Minimal

FDEP DOE: Minimal

FDOT Recommended DOE: **Moderate**

The Florida Department of Transportation (FDOT) has evaluated comments from the Southwest Florida Water Management District (SWFWMD), US Army Corps of Engineers (USACE), the US Environmental Protection Agency (USEPA), the US Fish and Wildlife Service (USFWS), the National Marine Fisheries Service (NMFS), and the Florida Department of Environmental Protection (FDEP) and recommends a Degree of Effect (DOE) of Moderate.

A review of the Geographic information system (GIS) analysis data indicates that the National Wetlands Inventory (NWI) lists 2.7 acres (3.32%) of Lacustrine wetlands and 1.3 acres (1.61%) of Palustrine wetlands within the 100-foot buffer distance, 5.4 acres (3.33%) of Lacustrine wetlands and 6.4 acres (3.91%) of Palustrine wetlands within the 200-foot buffer distance, and 13.6 acres (3.26%) of Lacustrine wetlands and 33.6 acres (8.03%) of Palustrine wetlands within the 500-foot buffer distance.

The SWFWMD noted that the widening of the bridge over the Tampa Bypass Canal will be the main area of impact. While the Bypass Canal is classified as surface water and offers a low habitat value to wildlife and wetland species, the bridge will result in shading impacts which will need to be accounted for during the permitting process. The remaining acreage of wetlands are sections of larger systems located within the vicinity of US-301, in a highly industrial community, or are roadside ditches currently being utilized for the conveyance of stormwater runoff. The SWFWMD also noted that the vegetated ditch and wetlands will need to be delineated, quantified, and labeled on the construction plans as part of the permit review. However, the expected permitting effort by FDOT should be straight forward and a normal effort is expected on the part of SWFWMDs regulatory staff. Wetland mitigation may be required to offset the potential impacts to the wetlands located within the proposed ROW. Additionally, the SWFWMD recommends a Wetlands Evaluation and Biological Assessment Report be prepared as part of this study.

The USACE noted that the main area of impact is the widening of the bridge over the Tampa Bypass Canal and the proposed project is located within the service area for the Tampa Bay Mitigation Bank and the Hillsborough River Mitigation Bank. Additionally, Adverse Navigation effects are not anticipated. The USACE recommends a summary of all aquatic resources and an evaluation of the potential presence of previously authorized mitigation sites that may be affected by the project be prepared, as well as utilizing mitigation bank credits to offset unavoidable aquatic resource impacts. USACE also noted that if no essential fish habitat impacts are proposed the project may qualify for the RGP-92, since the impact acreage is likely less than 5 acres.

The USEPA noted that the project area is highly urbanized and wetlands and natural habitat have been fragmented by development. the USEPA recommended a delineation of wetlands; functional analysis of wetlands to determine their value and function; an evaluation of stormwater pond sites to determine their impact on wetlands; avoidance and minimization strategies for wetlands; and mitigation plans to compensate for adverse impacts. It is further recommended that wetlands be avoided when designing the roadway widening project and stormwater treatment areas.

The USFWS noted that US 301 is highly urbanized and very little natural habitat remains in the project corridor. They also noted that the project crosses the Tampa Bypass Canal which becomes the Palm River further downstream. The Palm River empties to McKay Bay and Hillsborough Bay. The mouth of the Palm River, McKay Bay, and Hillsborough Bay contain estuarine habitats and submerged aquatic vegetation. The USFWS recommended that the roadway drainage system be upgraded to prevent run off from reaching estuarine habitats within the mouth of the Palm River, and in McKay Bay, and Hillsborough Bay ecosystems.

NMFS recommends that stormwater treatment systems be upgraded to prevent degraded water from reaching estuarine habitats within the mouth of the Palm River, and in McKay Bay, and Hillsborough Bay. In addition, best management practices should be employed during road construction to prevent siltation of these habitats.

The FDEP provided information on minimization, installation of stormwater conveyance and treatment swales, mitigation, and cumulative impacts was also included.

The FDOT will assess potential impacts to any existing wetlands and to take measures to minimize any project related impacts to these areas. The FDOT will also prepare a Wetland Evaluation / Biological Assessment Report (WEBAR) which identifies and assesses any existing natural habitats within the project area. This report should then be coordinated with the USFWS and FFWCC.

2 US Environmental Protection Agency (11/09/2012)

Wetlands Degree of Effect: Minimal
Reviewed By: Madolyn Sanchez
Coordination Document: To Be Determined: Further Coordination Required

Direct Effects

Identified Resources and Level of Importance:

Resources: Wetlands, wetlands habitat, water quality

Level of Importance: These resources are of a high level of importance in the State of Florida and within the project area. A minimal degree of effect is being assigned to this issue for the proposed project.

Comments on Effects to Resources:

A review of GIS analysis data (National Wetlands Inventory) in the EST for wetlands indicates that there are lacustrine and palustrine wetlands present along the proposed roadway project. There are

approximately 12 acres of wetlands within the 200-foot buffer distance and 47 acres of wetlands within the 500-foot buffer distance.

The project area is highly urbanized and wetlands and natural habitat have been fragmented by development. The project description states that this project will utilize existing right-of-way (ROW) for mainline improvements, but additional ROW is anticipated for ponds. The degree of direct wetlands impacts associated with the project will be dependent upon how much right-of-way will be needed in addition to stormwater treatment ponds and/or areas. Potential impacts include, but are not limited to, loss of wetlands function, loss of wildlife habitat, degradation of water quality in wetlands, and reduction in flood storage and capacity. Another issue of concern is increased stormwater runoff and the increase of pollutants into surface waters and wetlands as a result of the project and other point and nonpoint sources.

The PD&E study should focus on identifying wetlands areas to be potentially impacted by the project. The PD&E study should include a delineation of wetlands; functional analysis of wetlands to determine their value and function; an evaluation of stormwater pond sites to determine their impact on wetlands; avoidance and minimization strategies for wetlands; and mitigation plans to compensate for adverse impacts. It is recommended that wetlands be avoided when designing the roadway widening project and stormwater treatment areas.

Indirect and cumulative effects on wetlands should be evaluated to identify and quantify incremental and cumulative impacts on natural resources (wetlands) as a result of past, present, and reasonably foreseeable actions, including the proposed project and other land use actions.

Additional Comments (optional):

CLC Commitments and Recommendations:

---

2 FL Department of Environmental Protection (10/29/2012)

Wetlands Degree of Effect: Minimal
Reviewed By: Lauren P. Milligan
Coordination Document: Permit Required

Direct Effects

Identified Resources and Level of Importance:

The National Wetlands Inventory GIS report indicates that a total of 33.6 acres of palustrine and 13.6 acres of lacustrine wetlands occur within the 500-ft. project buffer zone.

Comments on Effects to Resources:

An Environmental Resource Permit (ERP) may be required from the Southwest Florida Water Management District - the ERP applicant will be required to eliminate or reduce the proposed wetland resource impacts of highway widening to the greatest extent practicable:
- Minimization should emphasize avoidance-oriented corridor alignments, wetland fill reductions via pile bridging and steep/vertically retained side slopes, and median width reductions within safety limits.

- Wetlands should not be displaced by the installation of stormwater conveyance and treatment swales; compensatory treatment in adjacent uplands is the preferred alternative.
- After avoidance and minimization have been exhausted, mitigation must be proposed to offset the adverse impacts of the project to existing wetland functions and values. Significant attention is given to forested wetland systems, which are difficult to mitigate.
- The cumulative impacts of concurrent and future transportation improvement projects in the vicinity of the subject project should also be addressed.

Additional Comments (optional):

CLC Commitments and Recommendations:

---

2 US Army Corps of Engineers (10/26/2012)

Wetlands Degree of Effect: Minimal
Reviewed By: Garett Lips
Coordination Document: Permit Required
Coordination Document Comments:

Adverse Navigation effects are not anticipated.

Provided no EFH impacts are proposed the project may quality for the RGP-92, since the impact acreage is likely less than 5 acres/mile

Direct Effects

Identified Resources and Level of Importance:

Widening US 301 from 4 lanes to 6 lanes has the potential to impact wetlands and surface waters located within the 200-foot buffer of the proposed route. The main area of impact is the widening of the bridge over the Tampa Bypass Canal. The Corps regulates waters of the United States and during the study a summary of all aquatic resources should be prepared. The study should include the acreage of each type of resource. Section 404 of the Clean Water Act presumes for non-water dependent projects that there are less environmentally damaging alternatives than placing fill in waters. The alternatives for the project should be developed in concert with the 404 (b)(1) Guidelines. Additionally, the specific criteria used to determine viable alternatives used in the study should be clearly identified.

The study should evaluate the potential presence of previously authorized mitigation sites that may be affected by the project. The Corps reserves the right to not review any project where impacts may occur in mitigation areas where a re-evaluation of the previous Corps authorization is required.

Comments on Effects to Resources:

Widening US 301 from 4 lanes to 6 lanes has the potential to impact wetlands and waters located within the 200-foot buffer of the proposed route. The main area of impact is the widening of the bridge over the Tampa Bypass Canal. The Bypass Canal offers a low habitat value to wildlife and wetland species.

The proposed project is located within the service area for the Tampa Bay Mitigation Bank and the Hillsborough River Mitigation Bank. The Corps recommends utilizing mitigation bank credits to offset unavoidable aquatic resource impacts.

Additional Comments (optional):

Adverse Navigation effects are not anticipated.

Provided no EFH impacts are proposed the project may quality for the RGP-92, since the impact acreage is likely less than 5 acres/mile

CLC Commitments and Recommendations:

---

2 National Marine Fisheries Service (09/24/2012)

Wetlands Degree of Effect: Minimal
Reviewed By: David A. Rydene
Coordination Document: No Selection

Direct Effects

Identified Resources and Level of Importance:

The mouth of the Palm River, McKay Bay, and Hillsborough Bay, which contain estuarine habitats used by federally-managed fish species and their prey.

Comments on Effects to Resources:

NOAA's National Marine Fisheries Service (NMFS) has reviewed the information contained in the Environmental Screening Tool for ETDM Project # 3097. The Florida Department of Transportation District Seven proposes widening US 301 from SR 60 to I-4 in Hillsborough County, Florida. The road would be widened from four lanes to six lanes.

NMFS staff conducted a site inspection of the project area on September 21, 2012, to assess potential concerns related to living marine resources within the mouth of the Palm River, and in McKay Bay, and Hillsborough Bay. The lands adjacent to the proposed project are principally industrial and commercial properties. It does not appear that the project will directly impact any NMFS trust resources. However, the road crosses the Tampa Bypass Canal which becomes the Palm River further downstream. The Palm River empties to McKay Bay and Hillsborough Bay. The mouth of the Palm River, McKay Bay, and Hillsborough Bay contain estuarine habitats (e.g. seagrass, salt marsh, mangrove) used by federally-managed fish species and their prey. Increased use of the road could result in an increase in the amount of sediment, oil and grease, metals, and other pollutants reaching downstream estuarine habitats utilized by marine fishery resources. Therefore, NMFS recommends that stormwater treatment systems be upgraded to prevent degraded water from reaching estuarine habitats within the mouth of the Palm River, and in McKay Bay, and Hillsborough Bay. In addition, best management practices should be employed during road construction to prevent siltation of these habitats.

Additional Comments (optional):

CLC Commitments and Recommendations:

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2 US Fish and Wildlife Service (10/25/2012)

Wetlands Degree of Effect: Minimal
Reviewed By: Jane Monaghan
Coordination Document: To Be Determined: Further Coordination Required

Direct Effects

Identified Resources and Level of Importance:

Riverine and estuarine ecosystems, including submerged aquatic vegetation.

Comments on Effects to Resources:

The project crosses the Tampa Bypass Canal which becomes the Palm River further downstream. The Palm River empties to McKay Bay and Hillsborough Bay. The mouth of the Palm River, McKay Bay, and Hillsborough Bay contain estuarine habitats and submerged aquatic vegetation. Increased use of the road could result in an increase in the amount of sediment, oil, grease, gas, trash and other contaminants. Stormwater treatment systems should be upgraded to prevent run off from reaching estuarine habitats within the mouth of the Palm River, and in McKay Bay, and Hillsborough Bay ecosystems.

This stretch of US 301 is highly urbanized and very little natural habitat remains in the project corridor. Given the commercial and industrial development already in place, it is unlikely that federally listed species, such as the eastern indigo snake are present. Direct impacts to fish and wildlife and their habitats have already taken place or are ongoing, such as roadkill and fragmentation. Indirect effects of increased traffic volumes include noise, increased emissions and increases in stormwater runoff and/or trash entering the waterways are likely occur.

Additional Comments (optional):

CLC Commitments and Recommendations:

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3 Southwest Florida Water Management District (10/24/2012)

Wetlands Degree of Effect: Moderate
Reviewed By: Hank Higginbotham
Coordination Document: Permit Required
Coordination Document Comments:

The SWFWMD has assigned a Degree of Effect based on the potential need for increased coordination or effort associated with the SWFWMDs proprietary or regulatory interests and obligations. For this project, a DOE of Moderate was assigned to this issue due to the fact the vegetated ditch and wetlands will need to be delineated, quantified, and labeled on the construction plans as part of the permit review. However, the expected permitting effort by FDOT should be straight forward and a normal effort is expected on the part of SWFWMDs regulatory staff. Wetland mitigation may be required to offset the potential impacts to the wetlands located within the proposed ROW. In addition, water quality will need to be addressed to offset the impacts to the existing vegetation.

The District will require a delineation of the landward extent of wetland and surface water features by a qualified environmental scientist, pursuant to Chapter 62-340, F.A.C. The District recommends that the FDOT submit a Formal Wetland Determination Petition prior to the ERP application submittal.

The majority of the surface water impacts will have a de minimis impact on fish and wildlife habitat. Therefore, wetland mitigation would not be required. Proposed wetland impacts and the impacts to the creeks will require an analysis utilizing the Uniform Mitigation Assessment Method (UMAM). The proposed US-301 widening project is located within the service area for the Tampa Bay Mitigation Bank and the Hillsborough River Mitigation Bank. Therefore, coordination with these mitigation banks may be needed during the permit application process if the proper type of mitigation credits is available. If not, other mitigation options will need to be assessed.

An Environmental Resource Permit (ERP) will be required for this project. However, the final determination of the type of permit will depend upon the final design configuration. **The SWFWMD concurs with FDOTs 09/13/12 Advance Notification (AN) package in regard to recommending the following Technical Studies:**

- **Wetlands Evaluation and Biological Assessment Report**

For ETDM #3097, the District has assigned a pre-application file **(PA #399564)** for the purpose of tracking its participation in the ETDM review of this project. File **PA #399564** is maintained at the Tampa Service Office of the SWFWMD. Please refer to this pre-application file whenever contacting District regulatory staff regarding this project.

Direct Effects

Identified Resources and Level of Importance:

US Hwy 301 from SR 60 to I-4 is a high use roadway surrounded by several industrial parks and buildings. Based upon a query of the Southwest Florida Water Management District (SWFWMD) ArcMap GIS there is approximately 6.90-acres of wetlands and surface waters located within the proposed 200-foot buffer for the roadway project. The majority (6.08-acres) of this acreage is associated with the potential widening of the bridge over the Tampa Bypass Canal. The remaining acreage of wetlands are sections of larger systems located within the vicinity of US-301, in a highly industrial community or are roadside ditches currently being utilized for the conveyance of stormwater runoff.

Comments on Effects to Resources:

Widening US 301 from 4 lanes to 6 lanes has the potential to impact wetlands and surface waters located within the 200-foot buffer of the proposed route. The main area of impact is the widening of the bridge over the Tampa Bypass Canal. While the Bypass Canal is classified as a surface water and offers a low habitat value to wildlife and wetland species, the bridge will result in shading impacts which will need to be accounted for during the permitting process.

There are several ERP permits with binding wetland lines delineating the wetlands and surface waters located within the defined 200-foot buffer of the proposed project area. The wetland limits as determined by these permits can be utilized during the permitting process if the permits are still valid. However, if the permits have expired then new wetland delineations will be required before or during the permitting process, which can lengthen the amount of time required for the review.

Impacts to the roadway ditches can be classified as temporary if they are going to be shifted during construction activities. However, if the ditches are proposed to be filled and piped, the impact will be

considered to be permanent. Both types of impacts will need to be accounted for during the permitting process along with the total acreage located within the project boundaries.

Additional Comments (optional):

The SWFWMD has assigned a Degree of Effect based on the potential need for increased coordination or effort associated with the SWFWMDs proprietary or regulatory interests and obligations. For this project, a DOE of Moderate was assigned to this issue due to the fact the vegetated ditch and wetlands will need to be delineated, quantified, and labeled on the construction plans as part of the permit review. However, the expected permitting effort by FDOT should be straight forward and a normal effort is expected on the part of SWFWMDs regulatory staff. Wetland mitigation may be required to offset the potential impacts to the wetlands located within the proposed ROW. In addition, water quality will need to be addressed to offset the impacts to the existing vegetation.

The District will require a delineation of the landward extent of wetland and surface water features by a qualified environmental scientist, pursuant to Chapter 62-340, F.A.C. The District recommends that the FDOT submit a Formal Wetland Determination Petition prior to the ERP application submittal.

The majority of the surface water impacts will have a de minimis impact on fish and wildlife habitat. Therefore, wetland mitigation would not be required. Proposed wetland impacts and the impacts to the creeks will require an analysis utilizing the Uniform Mitigation Assessment Method (UMAM). The proposed US-301 widening project is located within the service area for the Tampa Bay Mitigation Bank and the Hillsborough River Mitigation Bank. Therefore, coordination with these mitigation banks may be needed during the permit application process if the proper type of mitigation credits is available. If not, other mitigation options will need to be assessed.

An Environmental Resource Permit (ERP) will be required for this project. However, the final determination of the type of permit will depend upon the final design configuration. **The SWFWMD concurs with FDOTs 09/13/12 Advance Notification (AN) package in regard to recommending the following Technical Studies:**

- **Wetlands Evaluation and Biological Assessment Report**

For ETDM #3097, the District has assigned a pre-application file **(PA #399564)** for the purpose of tracking its participation in the ETDM review of this project. File **PA #399564** is maintained at the Tampa Service Office of the SWFWMD. Please refer to this pre-application file whenever contacting District regulatory staff regarding this project.

CLC Commitments and Recommendations:

The following organization(s) were expected to but did not submit comments for this alternative about potential direct effects in the Wetlands category: Not Available. Contact the ETDM Help Desk for assistance.

Wildlife and Habitat

Project Effect Comments

Coordinator Summary Degree of Effect: 2 *Minimal*
Response By: FDOT District 7 (01/07/2013)
Comments:

USFWS DOE: Minimal

FFWCC DOE: Minimal

SWFWMD DOE: Minimal

FDOT Recommended DOE: **Minimal**

The Florida Department of Transportation (FDOT) has evaluated comments from the US Fish and Wildlife Service (USFWS), the Florida Fish and Wildlife Conservation Commission (FFWCC), and the Southwest Florida Water Management District (SWFWMD) and recommends a Degree of Effect of Minimal.

A review of the Geographic information system (GIS) analysis data indicates that there are seven Woodstork Core Foraging Areas (CFA), one Scrub Jay Consultation Area, and one Ecosystem Management Area within the 100-foot buffer distance.

The USFWS noted that the proposed project roadway passes through the CFA of at least seven active nesting colonies of the endangered wood stork. The Service has determined that the loss of wetlands within a CFA due to an action could result in the loss of foraging habitat for the wood stork. To minimize adverse effects to the wood stork and other wetland dependent species, the Service recommends that impacts to suitable foraging habitat be avoided. Further notes include the description of the project as highly urbanized with very little natural habitat remaining in the project corridor. Given the commercial and industrial development already in place, it is unlikely that federally listed species, such as the eastern indigo snake are present. Direct impacts to fish and wildlife and their habitats have already taken place or are ongoing, such as roadkill and fragmentation.

The FFWCC noted the following species may occur along the project area: gopher frog, American alligator, Eastern indigo snake, Florida pine snake, short-tailed snake, gopher tortoise, Florida burrowing owl, Southeastern American kestrel, Florida sandhill crane, wood stork, limpkin, little blue heron, tricolored heron, snowy egret, white ibis, roseate spoonbill, Florida mouse, and Shermans fox squirrel. The project site is within the U.S. Fish and Wildlife Service Scrub Jay Consultation Area, and is within the core foraging area for seven wood stork colonies. Primary wildlife issues associated with this project include: potential adverse effects to a moderate number of species listed by the Federal Endangered Species Act as Endangered or Threatened, or the State of Florida as Threatened or Species of Special Concern; increased roadkills due to higher traffic levels and vehicle speed; and potential water quality degradation as a result of additional stormwater runoff from the expanded roadway surface draining into adjacent water bodies, including the Tampa Bypass Canal. Confining mainline construction activities to the existing cleared ROW as much as possible could reduce potential direct impacts to fish and wildlife resources. Siting DRAs in disturbed sites lacking natural vegetative communities could similarly minimize impacts.

SWFWMD noted that site is listed as a USFWS Ecological Service Area for the following Federally Listed Species: Piping Plover, Florida Scrub-Jay, Wood Stork, Red-Cockaded Woodpecker, Eastern Indigo Snake, and the Florida Golden Aster. The uplands located within the 1,320-foot buffer to the 5,280 foot buffer have the potential to provide habitat to Bald eagles, Florida Sandhill Cranes and gopher frogs. Additionally, the SWFWMD believes that future ERP permitting is expected to be routine with a required notification to Florida Fish and Wildlife Conservation Commission associated with the wetland impacts. The expected permitting effort by FDOT should be straight forward and a normal effort is expected on

the part of SWFWMDs regulatory staff. Excessive habitat damage can be eliminated by strictly limiting equipment to ROW and staging areas. Turbidity will be addressed in the ERP, and can be eliminated by the use and maintenance of effective control measures that are appropriate to the terrain involved.

The FDOT will prepare a Wetland Evaluation / Biological Assessment Report (WEBAR) which identifies and assesses any existing natural habitats within the project area. This report should then be coordinated with the USFWS and FFWCC.

2 Southwest Florida Water Management District (10/24/2012)

Wildlife and Habitat Degree of Effect: Minimal
Reviewed By: Hank Higginbotham
Coordination Document: Permit Required
Coordination Document Comments:

The SWFWMD has assigned a Degree of Effect (DOE) based on the potential need for increased coordination or effort associated with the SWFWMDs regulatory interests and obligations. For this project, a DOE of Minimal was assigned to this issue due to the present belief that future ERP permitting is expected to be routine with a required notification to Florida Fish and Wildlife Conservation Commission associated with the wetland impacts. The expected permitting effort by FDOT should be straight forward and a normal effort is expected on the part of SWFWMDs regulatory staff.

Excessive habitat damage can be eliminated by strictly limiting equipment to ROW and staging areas. Turbidity will be addressed in the ERP, and can be eliminated by the use and maintenance of effective control measures that are appropriate to the terrain involved.

The SWFWMD concurs with FDOTs 09/13/12 Advance Notification (AN) package in regard to recommending the following Technical Studies:

- **Wetlands Evaluation and Biological Assessment Report**

For ETDM #3097, the District has assigned a pre-application file **(PA #399564)** for the purpose of tracking its participation in the ETDM review of this project. File **PA #399564** is maintained at the Tampa Service Office of the SWFWMD. Please refer to this pre-application file whenever contacting District regulatory staff regarding this project.

Direct Effects

Identified Resources and Level of Importance:

Upland habitat in the project area as a whole is generally disturbed and/or converted for commercial or residential purposes. Within the 200-foot buffer, 83.22% of the area is listed as high impact urban, based upon the 2003 FFWCC Habitat and Land Cover Grid.

As analyzed on September 13, 2012, the buffers fall within the Consultation Area for the Scrub Jay and the Woodstork Core Foraging Area. The site is listed as a USFWS Ecological Service Area for the

following Federally Listed Species: Piping Plover, Florida Scrub-Jay, Wood Stork, Red-Cockaded Woodpecker, Eastern Indigo Snake, and the Florida Golden Aster. The uplands located within the 1,320-foot buffer to the 5,280 foot buffer have the potential to provide habitat to Bald eagles, Florida Sandhill Cranes and the gopher frogs.

Comments on Effects to Resources:

This project has the potential to eliminate the remnants of native upland and wetland habitat known to be used by Listed Species for breeding and foraging.

Additional Comments (optional):

The SWFWMD has assigned a Degree of Effect (DOE) based on the potential need for increased coordination or effort associated with the SWFWMDs regulatory interests and obligations. For this project, a DOE of Minimal was assigned to this issue due to the present belief that future ERP permitting is expected to be routine with a required notification to Florida Fish and Wildlife Conservation Commission associated with the wetland impacts. The expected permitting effort by FDOT should be straight forward and a normal effort is expected on the part of SWFWMDs regulatory staff.

Excessive habitat damage can be eliminated by strictly limiting equipment to ROW and staging areas. Turbidity will be addressed in the ERP, and can be eliminated by the use and maintenance of effective control measures that are appropriate to the terrain involved.

The SWFWMD concurs with FDOTs 09/13/12 Advance Notification (AN) package in regard to recommending the following Technical Studies:

- **Wetlands Evaluation and Biological Assessment Report**

For ETDM #3097, the District has assigned a pre-application file **(PA #399564)** for the purpose of tracking its participation in the ETDM review of this project. File **PA #399564** is maintained at the Tampa Service Office of the SWFWMD. Please refer to this pre-application file whenever contacting District regulatory staff regarding this project.

CLC Commitments and Recommendations:

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2 FL Fish and Wildlife Conservation Commission (10/25/2012)

Wildlife and Habitat Degree of Effect: Minimal
Reviewed By: Bonita Gorham
Coordination Document: PD&E Support Document As Per PD&E Manual
Coordination Document Comments:

Comments and Recommendations:

FWC recommends that the Project Development and Environment (PD&E) Study address natural resources by including the following measures for conserving fish and wildlife and habitat resources that may occur within and adjacent to the project area. Plant community mapping and wildlife surveys for the occurrence of wildlife species listed by the Federal Endangered Species Act as Endangered or Threatened, or by the State of Florida as Threatened or Species of Special Concern should be performed, both along

the ROW and within sites proposed for DRAs. Based on the survey results, a plan should be developed to address direct, indirect, and cumulative effects of the project on wildlife and habitat resources, including listed species. Avoidance, minimization, and mitigation measures should also be formulated and implemented. If gopher tortoises or nests of other ST or SSC species are present within any permanent or temporary construction area, a permit should be obtained from the FWC. DRAs and equipment staging areas should be located in previously disturbed sites to avoid habitat destruction or degradation. A compensatory mitigation plan should include the replacement of any wetland, upland, or aquatic habitat lost as a result of the project. This could be achieved by purchasing land, or securing conservation easements over lands adjacent to existing public lands, and by habitat restoration. Replacement habitat for mitigation should be type for type, as productive, and equal to or of higher functional value. Please notify us immediately if the design, extent, or footprint of the current project is modified, as we may choose to provide additional comments and/or recommendations.

We appreciate the opportunity to provide input on highway design and the conservation of fish and wildlife resources. Please contact Brian Barnett at (772) 579-9746 or email brian.barnett@MyFWC.com to initiate the process for further overall coordination on this project.

Direct Effects

Identified Resources and Level of Importance:

The Office of Conservation Planning Services of the Florida Fish and Wildlife Conservation Commission (FWC) has coordinated an agency review of ETDM #3097, Hillsborough County, and provides the following comments related to potential effects to fish and wildlife resources on this Programming Phase project.

Project Description:

This project involves enlarging a 3.3-mile section of US 301 from a four-lane divided highway to a six-lane divided highway, between SR 60 and I-4. The project is envisioned to include multi-modal improvements, including sidewalks, bicycle lanes, and transit accommodations. The project will utilize existing Right-of-way (ROW) for mainline improvements, but will need additional ROW for drainage retention areas (DRAs). Expansion of the existing bridges over the Tampa Bypass Canal will probably be required.

Wildlife and Habitat Resources:

The project area was evaluated for potential fish, wildlife, and habitat resources within 500 feet of the proposed alignment. Our assessment reveals that 87.69% of the project area is classified as High or Low Impact Urban (96.98% within 100 feet). Other landcover types in the assessment area include: Open Water (3.71%, 15.5 acres), Freshwater Marsh and Wet Prairie (2.12%, 8.9 acres), Dry Prairies (1.38%, 5.8 acres), Hardwood Hammocks and Forests (0.90%, 3.8 acres), Pinelands (0.80%, 3.3 acres), Mixed Hardwood-Pine Forests (0.80%, 3.3 acres), Improved Pasture (0.64%, 2.7 acres), Cypress Swamp (0.58%, 2.4 acres), Hardwood Swamp (0.42%, 1.8 acres), Shrub and Brushland (0.37%, 1.6 acres), Salt Marsh (0.21%, 0.9 acres), Shrub Swamp (0.21%, 0.9 acres), Grassland (0.11%, 0.4 acres), and Bare Soil (0.05%, 0.2 acres).

Based on range and preferred habitat type, the following species listed by the Federal Endangered Species Act and the State of Florida as Federally Endangered (FE), Federally Threatened (FT), State-Threatened (ST), or State Species of Special Concern (SSC) may occur along the project area: gopher

frog (SSC), American alligator (FT), Eastern indigo snake (FT), Florida pine snake (SSC), short-tailed snake (ST), gopher tortoise (ST), Florida burrowing owl (SSC), Southeastern American kestrel (SSC), Florida sandhill crane (ST), wood stork (FE), limpkin (SSC), little blue heron (SSC), tricolored heron (SSC), snowy egret (SSC), white ibis (SSC), roseate spoonbill (SSC), Florida mouse (SSC), and Shermans fox squirrel (SSC). The project site is within the U.S. Fish and Wildlife Service Scrub Jay Consultation Area, and is within the core foraging area for seven wood stork colonies.

Primary wildlife issues associated with this project include: potential adverse effects to a moderate number of species listed by the Federal Endangered Species Act as Endangered or Threatened, or the State of Florida as Threatened or Species of Special Concern; increased roadkills due to higher traffic levels and vehicle speed; and potential water quality degradation as a result of additional stormwater runoff from the expanded roadway surface draining into adjacent water bodies, including the Tampa Bypass Canal. Confining mainline construction activities to the existing cleared ROW as much as possible could reduce potential direct impacts to fish and wildlife resources. Siting DRAs in disturbed sites lacking natural vegetative communities could similarly minimize impacts.

Comments on Effects to Resources:

Based on the project information provided, we believe that the direct and indirect effects of this project could be minimal.

Additional Comments (optional):

Comments and Recommendations:

FWC recommends that the Project Development and Environment (PD&E) Study address natural resources by including the following measures for conserving fish and wildlife and habitat resources that may occur within and adjacent to the project area. Plant community mapping and wildlife surveys for the occurrence of wildlife species listed by the Federal Endangered Species Act as Endangered or Threatened, or by the State of Florida as Threatened or Species of Special Concern should be performed, both along the ROW and within sites proposed for DRAs. Based on the survey results, a plan should be developed to address direct, indirect, and cumulative effects of the project on wildlife and habitat resources, including listed species. Avoidance, minimization, and mitigation measures should also be formulated and implemented. If gopher tortoises or nests of other ST or SSC species are present within any permanent or temporary construction area, a permit should be obtained from the FWC. DRAs and equipment staging areas should be located in previously disturbed sites to avoid habitat destruction or degradation. A compensatory mitigation plan should include the replacement of any wetland, upland, or aquatic habitat lost as a result of the project. This could be achieved by purchasing land, or securing conservation easements over lands adjacent to existing public lands, and by habitat restoration. Replacement habitat for mitigation should be type for type, as productive, and equal to or of higher functional value. Please notify us immediately if the design, extent, or footprint of the current project is modified, as we may choose to provide additional comments and/or recommendations.

We appreciate the opportunity to provide input on highway design and the conservation of fish and wildlife resources. Please contact Brian Barnett at (772) 579-9746 or email brian.barnett@MyFWC.com to initiate the process for further overall coordination on this project.

CLC Commitments and Recommendations:

2 US Fish and Wildlife Service (10/25/2012)

Wildlife and Habitat Degree of Effect: Minimal
Reviewed By: Jane Monaghan
Coordination Document: To Be Determined: Further Coordination Required
Coordination Document Comments:

This stretch of US 301 is highly urbanized and very little natural habitat remains in the project corridor. Given the commercial and industrial development already in place, it is unlikely that federally listed species, such as the eastern indigo snake are present. Direct impacts to fish and wildlife and their habitats have already taken place or are ongoing, such as roadkill and fragmentation. Indirect effects of increased traffic volumes include noise, increased emissions and increases in stormwater runoff and/or trash entering the waterways are likely occur.

Direct Effects

Identified Resources and Level of Importance:

Federally listed species and the ecosystems upon which they depend.

Comments on Effects to Resources:

The purpose of this project is to relieve congestion on this portion of US 301 in unincorporated Hillsborough County. US 301 is a major north-south roadway facility in close proximity to the City of Tampa, and it travels from the Sarasota-Bradenton-Venice Metropolitan Statistical Area across the state to the Jacksonville Metropolitan Statistical Area. In addition to increasing capacity, this project will add or enhance the multi-modal facilities in this corridor. The need for this widening project is based on the congestion and the current failing level of service of this segment of US 301.

The proposal involves widening US 301 from four lanes to six lanes along a 3.3-mile stretch from I-4 south to SR 60 in Hillsborough County.

Wood Stork (*Mycteria americana*) The project corridor is approximately 3.3 miles long. The roadway passes through the Core Foraging Areas (CFA) of at least seven active nesting colonies of the endangered wood stork. The Service has determined that the loss of wetlands within a CFA due to an action could result in the loss of foraging habitat for the wood stork. To minimize adverse effects to the wood stork and other wetland dependent species, we recommend that impacts to suitable foraging habitat be avoided. The Service recommends reviewing the Wood Stork Effect Determination Key developed with the Army COE. Please refer to the North Florida Field Office website for WOST colony locations. http://www.fws.gov/northflorida

Additional Comments (optional):

This stretch of US 301 is highly urbanized and very little natural habitat remains in the project corridor. Given the commercial and industrial development already in place, it is unlikely that federally listed species, such as the eastern indigo snake are present. Direct impacts to fish and wildlife and their habitats have already taken place or are ongoing, such as roadkill and fragmentation. Indirect effects of increased traffic volumes include noise, increased emissions and increases in stormwater runoff and/or trash entering the waterways are likely occur.

CLC Commitments and Recommendations:

The following organization(s) were expected to but did not submit comments for this alternative about potential direct effects in the Wildlife and Habitat category: Not Available. Contact the ETDM Help Desk for assistance.

APPENDIX E

Standard Protection Measures for the Eastern Indigo Snake

STANDARD PROTECTION MEASURES FOR THE EASTERN INDIGO SNAKE
U.S. Fish and Wildlife Service

August 12, 2013

The eastern indigo snake protection/education plan (Plan) below has been developed by the U.S. Fish and Wildlife Service (USFWS) in Florida for use by applicants and their construction personnel. At least **30 days prior** to any clearing/land alteration activities, the applicant shall notify the appropriate USFWS Field Office via e-mail that the Plan will be implemented as described below (North Florida Field Office: jaxregs@fws.gov; South Florida Field Office: verobeach@fws.gov; Panama City Field Office: panamacity@fws.gov). As long as the signatory of the e-mail certifies compliance with the below Plan (including use of the attached poster and brochure), no further written confirmation or "approval" from the USFWS is needed and the applicant may move forward with the project.

If the applicant decides to use an eastern indigo snake protection/education plan other than the approved Plan below, written confirmation or "approval" from the USFWS that the plan is adequate must be obtained. At least 30 days prior to any clearing/land alteration activities, the applicant shall submit their unique plan for review and approval. The USFWS will respond via email, typically within 30 days of receiving the plan, either concurring that the plan is adequate or requesting additional information. A concurrence e-mail from the appropriate USFWS Field Office will fulfill approval requirements.

The Plan materials should consist of: 1) a combination of posters and pamphlets (see **Poster Information** section below); and 2) verbal educational instructions to construction personnel by supervisory or management personnel before any clearing/land alteration activities are initiated (see **Pre-Construction Activities** and **During Construction Activities** sections below).

POSTER INFORMATION

Posters with the following information shall be placed at strategic locations on the construction site and along any proposed access roads (a final poster for Plan compliance, to be printed on 11" x 17" or larger paper and laminated, is attached):

DESCRIPTION: The eastern indigo snake is one of the largest non-venomous snakes in North America, with individuals often reaching up to 8 feet in length. They derive their name from the glossy, blue-black color of their scales above and uniformly slate blue below. Frequently, they have orange to coral reddish coloration in the throat area, yet some specimens have been reported to only have cream coloration on the throat. These snakes are not typically aggressive and will attempt to crawl away when disturbed. Though indigo snakes rarely bite, they should NOT be handled.

SIMILAR SNAKES: The black racer is the only other solid black snake resembling the eastern indigo snake. However, black racers have a white or cream chin, thinner bodies, and WILL BITE if handled.

LIFE HISTORY: The eastern indigo snake occurs in a wide variety of terrestrial habitat types throughout Florida. Although they have a preference for uplands, they also utilize some wetlands

and agricultural areas. Eastern indigo snakes will often seek shelter inside gopher tortoise burrows and other below- and above-ground refugia, such as other animal burrows, stumps, roots, and debris piles. Females may lay from 4 - 12 white eggs as early as April through June, with young hatching in late July through October.

PROTECTION UNDER FEDERAL AND STATE LAW: The eastern indigo snake is classified as a Threatened species by both the USFWS and the Florida Fish and Wildlife Conservation Commission. "Taking" of eastern indigo snakes is prohibited by the Endangered Species Act without a permit. "Take" is defined by the USFWS as an attempt to kill, harm, harass, pursue, hunt, shoot, wound, trap, capture, collect, or engage in any such conduct. Penalties include a maximum fine of $25,000 for civil violations and up to $50,000 and/or imprisonment for criminal offenses, if convicted.

Only individuals currently authorized through an issued Incidental Take Statement in association with a USFWS Biological Opinion, or by a Section 10(a)(1)(A) permit issued by the USFWS, to handle an eastern indigo snake are allowed to do so.

IF YOU SEE A <u>LIVE</u> EASTERN INDIGO SNAKE ON THE SITE:

- Cease clearing activities and allow the live eastern indigo snake sufficient time to move away from the site without interference;
- Personnel must NOT attempt to touch or handle snake due to protected status.
- Take photographs of the snake, if possible, for identification and documentation purposes.
- Immediately notify supervisor or the applicant's designated agent, **and** the appropriate USFWS office, with the location information and condition of the snake.
- If the snake is located in a vicinity where continuation of the clearing or construction activities will cause harm to the snake, the activities must halt until such time that a representative of the USFWS returns the call (within one day) with further guidance as to when activities may resume.

IF YOU SEE A <u>DEAD</u> EASTERN INDIGO SNAKE ON THE SITE:

- Cease clearing activities and immediately notify supervisor or the applicant's designated agent, **and** the appropriate USFWS office, with the location information and condition of the snake.
- Take photographs of the snake, if possible, for identification and documentation purposes.
- Thoroughly soak the dead snake in water and then freeze the specimen. The appropriate wildlife agency will retrieve the dead snake.

Telephone numbers of USFWS Florida Field Offices to be contacted if a live or dead eastern indigo snake is encountered:

North Florida Field Office – (904) 731-3336
Panama City Field Office – (850) 769-0552
South Florida Field Office – (772) 562-3909

PRE-CONSTRUCTION ACTIVITIES

1. The applicant or designated agent will post educational posters in the construction office and throughout the construction site, including any access roads. The posters must be clearly visible to all construction staff. A sample poster is attached.

2. Prior to the onset of construction activities, the applicant/designated agent will conduct a meeting with all construction staff (annually for multi-year projects) to discuss identification of the snake, its protected status, what to do if a snake is observed within the project area, and applicable penalties that may be imposed if state and/or federal regulations are violated. An educational brochure including color photographs of the snake will be given to each staff member in attendance and additional copies will be provided to the construction superintendent to make available in the onsite construction office (a final brochure for Plan compliance, to be printed double-sided on 8.5" x 11" paper and then properly folded, is attached). Photos of eastern indigo snakes may be accessed on USFWS and/or FWC websites.

3. Construction staff will be informed that in the event that an eastern indigo snake (live or dead) is observed on the project site during construction activities, all such activities are to cease until the established procedures are implemented according to the Plan, which includes notification of the appropriate USFWS Field Office. The contact information for the USFWS is provided on the referenced posters and brochures.

DURING CONSTRUCTION ACTIVITIES

1. During initial site clearing activities, an onsite observer may be utilized to determine whether habitat conditions suggest a reasonable probability of an eastern indigo snake sighting (example: discovery of snake sheds, tracks, lots of refugia and cavities present in the area of clearing activities, and presence of gopher tortoises and burrows).

2. If an eastern indigo snake is discovered during gopher tortoise relocation activities (i.e. burrow excavation), the USFWS shall be contacted within one business day to obtain further guidance which may result in further project consultation.

3. Periodically during construction activities, the applicant's designated agent should visit the project area to observe the condition of the posters and Plan materials, and replace them as needed. Construction personnel should be reminded of the instructions (above) as to what is expected if any eastern indigo snakes are seen.

POST CONSTRUCTION ACTIVITIES

Whether or not eastern indigo snakes are observed during construction activities, a monitoring report should be submitted to the appropriate USFWS Field Office within 60 days of project completion. The report can be sent electronically to the appropriate USFWS e-mail address listed on page one of this Plan.