

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

650-050-11
ENVIRONMENTAL MANAGEMENT
09/15

1. PROJECT DESCRIPTION AND PURPOSE AND NEED

a. Project Information

County: Seminole County
Project Name: SR 46 WIDENING SR 415 TO CR 426 SEMINOLE COUNTY
Project Limits: SR 415 to CR 426
Project Numbers:

4972	240216-4-28-01	TCSP-045-U
ETDM (if applicable)	Financial Management	Federal-Aid

Project Location Map Documentation:

- [\[8 - SR 46 Location Map_Segments\]](#)

b. Proposed Improvements:

SR 46 is an east-west arterial highway that extends from US 441 in Mount Dora (Lake County) to US 1 in Mims (Brevard County). The limits of the PD&E Study extend from east of SR 415 (MP 3.660) in unincorporated Seminole County to CR 426 (MP 11.047) in Geneva, Florida, an unincorporated census-designated place (see **Figure 1.1**). The length of the project is approximately 7.4 miles. SR 46 serves as a major evacuation route for residents of south Volusia, north Brevard and eastern Seminole Counties. The closest evacuation routes to SR 46 on I-95 are SR 44, 25 miles to the north and SR 50, eight miles to the south. Within the project limits, SR 46 is a two-lane rural principal arterial comprised of one 12-foot lane in each direction with six-foot shoulders (four-foot paved). Stormwater sheet flows off the roadway into roadside ditches.

Bridge No. 770094 spans Lake Jesup/St. Johns River within the project limits. The bridge was constructed in 2009 and is 3,740 feet long. The bridge typical section consists of one 12-foot travel lane in each direction and 10-foot shoulders. The existing roadway is centered within 100 feet of right-of-way for most of the length of the project. However, the right-of-way widens to approximately 127 feet on the north side of SR 46, extending approximately 3,200 feet west of the bridge. The existing right-of-way varies at both bridge approaches.

There are two signalized intersections within the project limits; one at SR 415 and another at CR 426. The four-laning of SR 46 from Mellonville Road to east of SR 415 is under construction as of November 2017.

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



Figure 1.1 - Project Location Map

Construction of the Recommended Alternative will require acquisition of approximately 30.1 acres of adjacent property for roadway construction, 33 acres for stormwater management and 35.7 acres for floodplain compensation.

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

650-050-11
ENVIRONMENTAL MANAGEMENT
09/15

For the purpose of the study, the SR 46 widening project was subdivided into four segments. **Figure 1.2** shows the limits of each segment as described below:

- Segment 1 - SR 46 from 415 to the western terminus of Lake Jesup Bridge
- Segment 2 - The Lake Jesup Bridge (which carries SR 46 over Lake Jesup)
- Segment 3 - SR 46 from the eastern terminus of Lake Jesup Bridge to Hart Road
- Segment 4 - SR 46 from Hart Road to CR 426

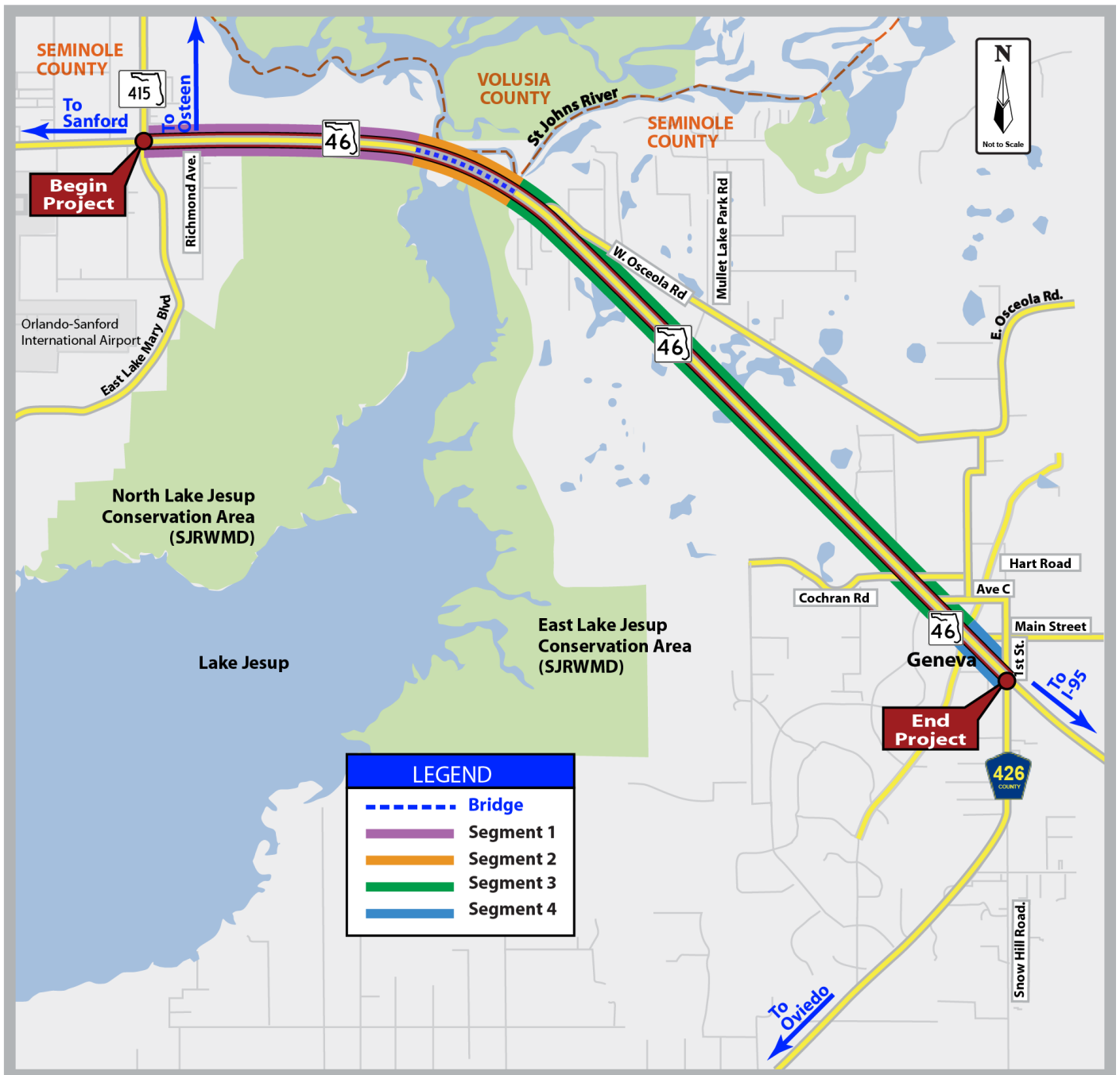


Figure 1.2 - Project Segments

Proposed Roadway Improvements

The Recommended Alternative consists of the following improvements for each Segment and is presented in Appendix A of the *Preliminary Engineering Report* (February 2018):

Segment 1 improvements consist of widening the existing two-lane rural roadway to a four-lane suburban roadway section from SR 415 to the west end of the Lake Jesup Bridge. The proposed widening will occur primarily on the south side of SR 46 specifically to avoid the Bergmann Tract mitigation bank located north of SR 46. Initially, widening to the north is required at SR 415 to tie into the ongoing widening west of SR 415. A transition to the north, just west of Old Geneva Road, is necessary to tie into the proposed new bridge that will be constructed on the north side of the existing bridge.

The proposed suburban typical section for this segment consists of two 12-foot travel lanes in each direction with four-foot inside shoulders and 6.5-foot outside shoulders. The travel lanes are separated by a 22-foot median. A 12-foot shared use path is proposed on the north side of the roadway. A five-foot sidewalk is proposed on the south side. The sidewalk and path are separated from the travel lanes by a grassed median. The total width of the proposed right-of-way is 148 feet. The proposed typical section is illustrated in **Figure 1.3**.

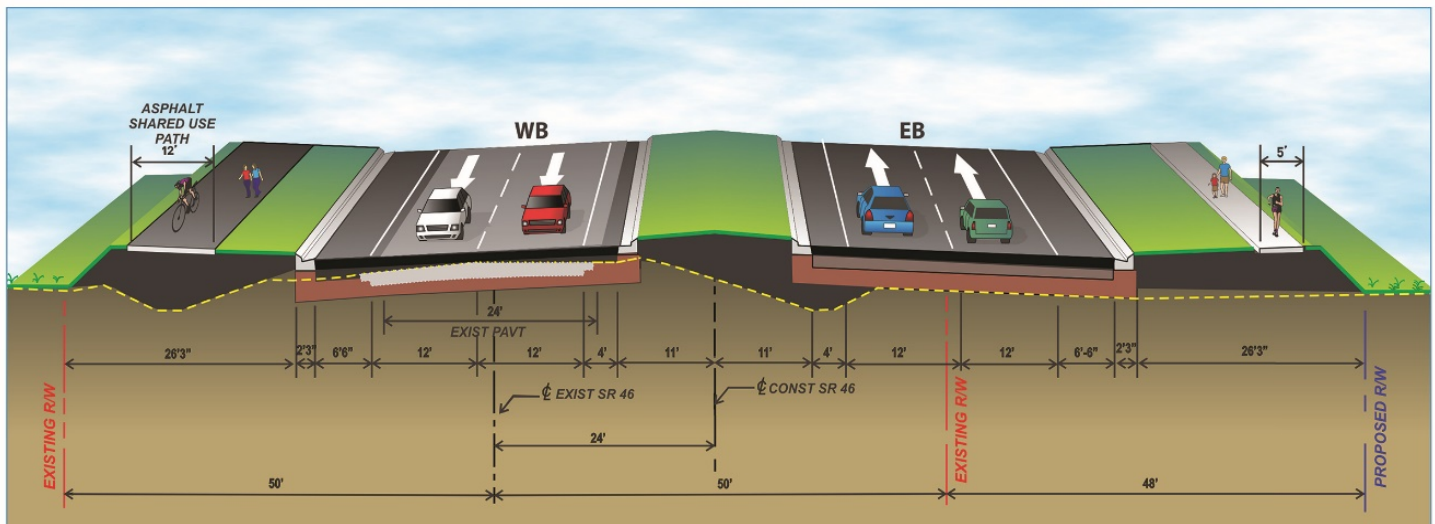


Figure 1.3 - Suburban Typical Section - Widen to the South (SR 415 to the west end of Lake Jesup Bridge)

Segment 2 improvements consist of construction of a new, two-lane bridge over Lake Jesup, parallel to, and north of, the existing bridge. The proposed bridge would be of similar design and approximate length as the existing bridge. The

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

650-050-11
 ENVIRONMENTAL MANAGEMENT
 09/15

existing bridge will provide the future eastbound lanes. The proposed westbound lanes will be constructed on the previous alignment of the old bridge and causeway that was removed for construction of the existing bridge. The proposed typical section for the parallel bridges is shown in **Figure 1.4**.

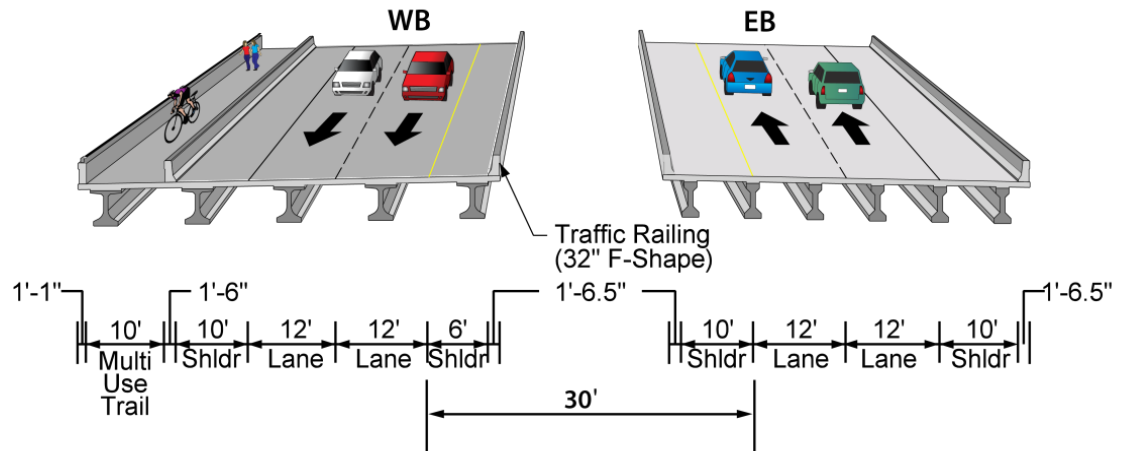


Figure 1.4 - Bridge Typical Section

The proposed new bridge will provide two 12-foot westbound travel lanes, a 10-foot wide outside shoulder and 6-foot inside shoulder. In addition, a 10-foot wide shared use path, separated by a barrier will be provided on the new bridge. The existing bridge will be restriped to provide two 12-foot eastbound travel lanes with 10-foot shoulders on both sides.

The new bridge will be offset from the existing bridge approximately 14 feet north. As shown in Figure 1.4, the proposed typical section for the two bridges, this offset will provide a total of 30 feet between eastbound and west bound travel lanes. Accordingly, the proposed new bridge will align with the roadway typical sections at both bridge approaches.

Segment 3 consists of the expansion of a two-lane rural roadway to a four-lane suburban roadway segment from the east end of the Lake Jesup Bridge to Hart Road. In order to minimize the impacts to the natural, physical and social environments within this segment, both the Suburban Widen to the South (**Figure 1.5**) and Suburban Widen to the North (**Figure 1.6**) typical sections will be used. The combination of these typical sections for the Recommended Alternative is referred to as the "Suburban Best Fit Alternative" in the *Preliminary Engineering Report* prepared for this project. Both of these suburban typical sections require 148 feet of right-of-way.

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

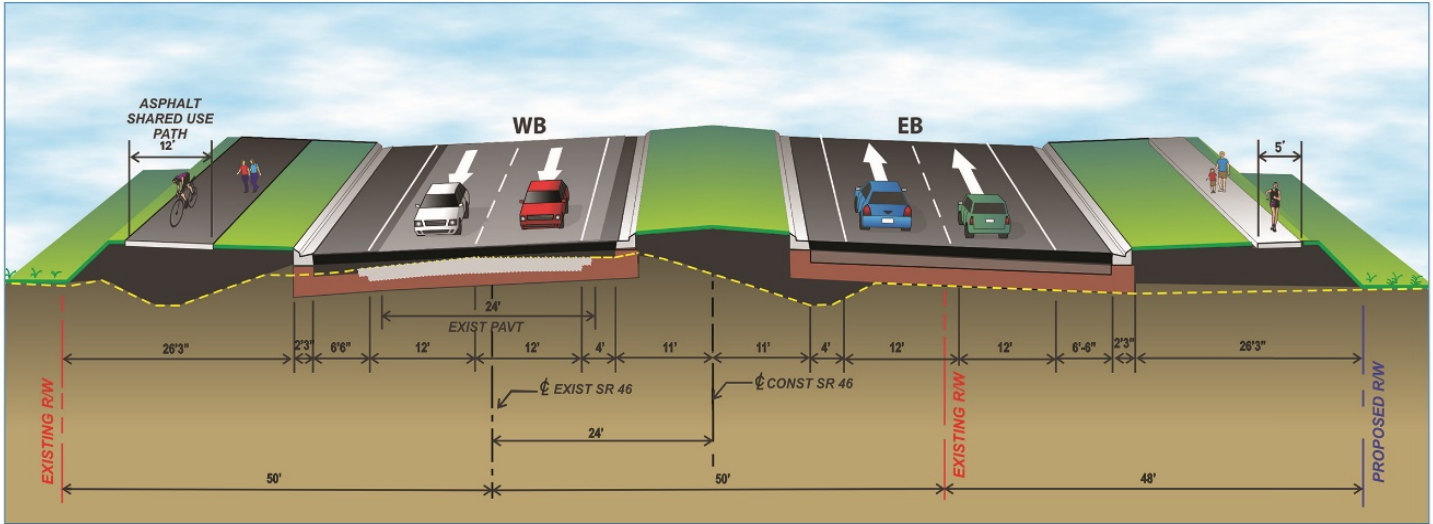


Figure 1.5 - Suburban Typical Section (Widen to the South)

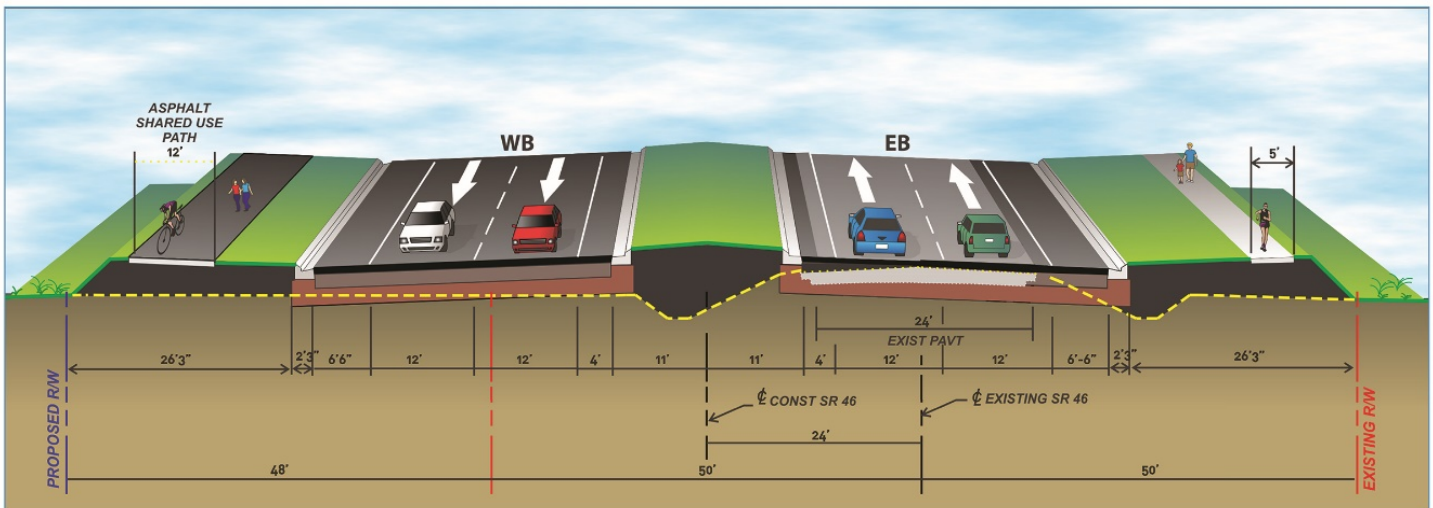


Figure 1.6 - Suburban Typical Section (Widen to the North)

Segment 4 consists of the expansion of a two-lane rural roadway to a four-lane urban roadway segment between Hart Road and CR 426. The proposed urban section only requires 100 feet of right-of-way and is proposed in Segment 4 to minimize impacts to the commercial properties in downtown Geneva. **Figure 1.7** illustrates the proposed urban typical section.

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

650-050-11
ENVIRONMENTAL MANAGEMENT
09/15



Figure 1.7 - Urban Typical Section (Centered Widening)

The proposed urban typical section provides two 11-foot lanes in each direction separated by a 19.5-foot median. Seven-foot buffered bike lanes will be provided on both sides of the roadway. Six-foot sidewalks are proposed on both sides of the road.

Proposed Drainage Improvements

SR 46 is located within the jurisdiction of the St. Johns River Water Management District (SJRWMD). The project limits lie within the Middle St. Johns River Basin of which Lake Jesup is a tributary. The Middle St. Johns River Basin is considered an open basin that discharges to the St. Johns River. However, the Florida Department of Environmental Protection (FDEP) has adopted total maximum daily loads (TMDL) for both nitrogen and phosphorus for any basin discharging to the St. Johns River above Lake Monroe, Lake Jesup near the St. Johns River, and the St. Johns River above Lake Jesup. Also, 100-year floodplains are found within the project limits with the majority being located around the bridge over Lake Jesup.

Stormwater and floodplain compensation ponds have been designed to provide water quality treatment, quantity (attenuation) and compensation for any loss of floodplain volumes. Pond site locations for the Recommended Alternative were determined by evaluating the potential environmental impacts of pond site alternatives. This evaluation is documented in the *Pond Siting Report* (April 2014) published separately for this project. Pond site recommendations were based on pond sizes and locations determined from preliminary calculations, reasonable engineering judgment, and assumptions.

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

650-050-11
ENVIRONMENTAL MANAGEMENT
09/15

c. Purpose and Need:

The purpose of this project is to evaluate alternatives to increase capacity of SR 46 within the project limits to improve both the existing and projected future Levels of Service (LOS) and to evaluate the profile grade elevation of the roadway to ensure it is above flood elevation.

System Linkage

The western project terminus connects to SR 415, which is a four lane divided facility. East Lake Mary Boulevard is a four-lane divided facility that intersects SR 46 at SR 415 and provides a direct connection to the Orlando-Sanford International Airport and the Seminole County Expressway (SR 417). Four-laning of SR 46 from Mellonville Road to SR 415 is under construction as of June 2017. CR 426 at the eastern terminus of the project provides a direct connection to the City of Oviedo, a large residential suburb of Orlando. CR 426 is policy-constrained to two-lanes by Seminole County.

Capacity

The Florida Department of Transportation (FDOT) has classified the segment of SR 46 between SR 415 and Richmond Avenue as an urban principal arterial with an LOS standard of D. East of Richmond Avenue, SR 46 is classified as a rural principal arterial with an LOS standard of C. Existing average annual daily traffic (AADT) volumes along SR 46 result in LOS D conditions on SR 46 from Osceola Road to Woodridge Drive. Increasing traffic volumes as identified in the *Design Traffic Technical Memorandum* (May 2012) are projected to result in capacity and over capacity conditions by the Design Year (2035). The *Traffic Forecast Update Memo* (February 2017) verified that capacity conditions would be met in a new Design Year of 2045. Providing additional capacity on SR 46 within the project limits will ensure that future projected traffic can be accommodated safely and efficiently.

Safety

Crash records for the project corridor between just east of SR 415 and CR 426 from January 1, 2006 through May 31, 2012 were compiled and analyzed (the crash data does not include the intersection of SR 46 and SR 415 since improvements to this intersection are included in the SR 46 widening project from Mellonville Road to SR 415). One hundred sixty-seven crashes were recorded during this time period on SR 46 from SR 415 to CR 426. The statewide annual crash rate for facilities similar to SR 46 (two lane rural roadways) is 0.525 crashes per million vehicle miles travelled (C/MVM). The segment of SR 46 from SR 415 to CR 426 experienced a crash rate of 1.006 C/MVM, almost two times the statewide average.

In addition to crash rates higher than the statewide average, there have been six fatalities and 90 injuries during the analysis period. The majority of crashes occurred during daylight hours. Detailed information regarding crash data can be found in in Section 3.5 of the *SR 46 Design Traffic Technical Memorandum* (May 2012) published separately.

According to the ETDM Summary Report published on 09/20/2010, portions of SR 46 were completely inundated by high water resulting in the closure of this road within the study limits during hurricane season. SR 46 serves as a major evacuation route for Northern Brevard and Southern Volusia Counties. The potential for flooding along SR46 was evaluated within the study limits. This evaluation indicated that there is no history of flooding between SR 415 and CR 426. The flooding occurred in the past east of CR 426 near the County line. The project was screened via ETDM in 2005.

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

650-050-11
 ENVIRONMENTAL MANAGEMENT
 09/15

At that time, the project limits extended to the County line. Since then, the County has raised the profile grade above the flood elevation in this area.

d. Project Planning Consistency:

Currently Adopted CFP-LRTP	COMMENTS
Yes	This project is listed in the 2040 LRTP for MetroPlan Orlando and is included in the most recently adopted Cost Feasible Plan. The project is also included in the Seminole County Comprehensive Plan and is ranked number 17 on MetroPlan Orlando's "Orlando Urban Area FY 2022/23 - 2039/40 Prioritized Project List", adopted on July 12, 2017. Design of the Recommended Alternative is funded under FM No. 240216-8-52-01.

PHASE	Currently Approved TIP	Currently Approved STIP	TIP/STIP \$	TIP/STIP FY	COMMENTS
PE (Final Design)	Y	Y	\$5.205M	2021/2022	
R/W	N	N	\$N/A	N/A	
Construction	N	N	\$N/A	N/A	

** Include pages from current TIP/STIP/LRTP*

Project Plan Consistency Documentation:

- [\[3 - SR 46 Planning Consistency Pages\]](#)

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

650-050-11
ENVIRONMENTAL MANAGEMENT
09/15

F. ANTICIPATED PERMITS

SJRWMD - Environmental Resource Permit (ERP) for stormwater facilities

FDEP - National Pollutant Discharge Elimination System (NPDES)

US Army Corps of Engineers (ACOE) - Nationwide Permit

FFWCC - Bald Eagle Disturbance Permit

FFWCC - Gopher Tortoise Relocation Permit

4. COMMITMENTS - ADDITIONAL INFORMATION

- Options to minimize habitat impacts west and near the Lake Jesup Bridge as well as opportunities to improve habitat connectivity in those locations during permitting and design will be investigated.
- Roadway design and construction should not compromise the ability to access and manage conservation lands effectively.
- An osprey nest survey prior to construction will be conducted and all necessary permits will be obtained for nest removal, as necessary.
- Any culverts larger than eight inches in diameter will be grated to prevent manatee entrapment. The spacing between the bridge pilings will be at least 60 inches apart to allow for manatee movement in between the pilings.
- Barges will be equipped with fender systems that provide a minimum standoff distance of four feet between wharves, bulkheads and vessels moored together to prevent crushing manatees between the barges or between the barge and work site. All existing slow speed or no wake zones will apply to all work boats and barges associated with the construction.
- Consultation with USFWS will be initiated for the Florida manatee if dredging is deemed necessary for construction. There will be no blasting in manatee sensitive areas.
- Field surveys for gopher tortoise, Florida sandhill crane, and Florida burrowing owl will be accomplished prior to construction.
- Subsequent crested caracara surveys will be conducted during the design phase. If at that time survey reveals additional nests, then consultation with USFWS will be reinitiated.
- Inclusion of bat friendly structural components within or adjacent to the bridge during design and construction will be considered. Bat exclusions will be provided during construction as needed.
- Eagle nest surveys and agency coordination will be conducted during the design phase to determine whether a disturbance permit is necessary.
- Implementation of integrating wildlife-friendly components within culverts for small and meso-sized wildlife will be evaluated.
- The most recent USFWS *Standard Protection Measures for the Eastern Indigo Snake* will be adhered to during the construction of the proposed project.
- Coordination during design with the Mullet Lake Water Association regarding location of existing facilities will occur.

5. PUBLIC INVOLVEMENT

1. A public hearing is not required.
2. A public hearing will be held N/A. This draft document is publicly available and comments can be submitted to FDOT until N/A.
District Contact Information: N/A.
3. A public hearing was held on 11/14/2017 and the transcript is available.
 - [\[4 - Public Hearing Certification\]](#)
 - [\[5 - SR 46 Public Hearing Transcript_112517\]](#)
4. An opportunity for a public hearing was afforded and was documented N/A .

6. DISTRICT DETERMINATION

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

650-050-11
ENVIRONMENTAL MANAGEMENT
09/15

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

Mary McGehee
FDOT Project Manager

June 6, 2018
Date

William G. Walsh
FDOT Environmental Manager or Designee

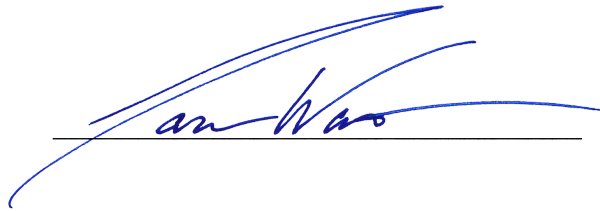
June 6, 2018
Date

7. OFFICE OF ENVIRONMENTAL MANAGEMENT CONCURRENCE

This action has been determined to be a Categorical Exclusion which meets the definition contained in 40 CFR 1508.4, and, based on past experience with similar actions and this analysis, does not involve significant environmental impacts.

Signature below constitutes Location and Design Concept Acceptance:

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by the Florida Department of Transportation (FDOT) pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated 12/14/2016 and executed by the Federal Highway Administration and FDOT.



June 27, 2018

Jason Watts
Director of the Office of Environmental Management or Designee

Date

8. SUPPORTING INFORMATION

- 1 [24021642801-CE2-D5-Final_PER_Full_June2018_s-s-2018-0618.pdf](#)
- 2 [24021642801-CE2-D5-FWS_FWC_bald_eagle_coordination_emails-2017-0914.pdf](#)
- 3 [24021642801-CE2-D5-SR_46_Planning_Consistency_Pages-2018-0105.pdf](#)
- 4 [24021642801-CE2-D5-Approved_Public_Hearing_Certification__SR_46_WIDE-2018-0112.pdf](#)
- 5 [24021642801-CE2-D5-SR_46_Public_Hearing_Transcript_112517-2017-1125.pdf](#)
- 6 [24021642801-CE2-D5-SHPO_Concurrence_Letter-2014-0415.pdf](#)
- 7 [24021642801-CE2-D5-USFWS_Consultation_and_Concurrence_Letters-2017-0810.pdf](#)
- 8 [24021642801-CE2-D5-Fig_1.1_Project_Location_Map-2017-0918.png](#)
- 9 [24021642801-CE2-D5-supporting_doc_v5_062518-2018-0621.pdf](#)