

ADMINISTRATIVE ACTION
TYPE 2 CATEGORICAL EXCLUSION

Florida Department of Transportation

MALABAR RD FROM ST JOHNS HERITAGE PKWY TO MINTON RD

District: FDOT District 5

County: Brevard County

ETDM Number: 14396

Financial Management Number: 437210-1-28-01

Federal-Aid Project Number: D519-067-B

Project Manager: David Graeber

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 the Florida Department of Transportation (FDOT) pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding (MOU) dated May 26, 2022 and executed by the Federal Highway Administration and FDOT.

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 supported by this analysis, does not involve significant environmental impacts.

Signature below constitutes Location and Design Concept Acceptance:

Director Office of Environmental Management
Florida Department of Transportation

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This document was prepared in accordance with the FDOT PD&E Manual.

This project has been developed without regard to race, color or national origin, age, sex, religion, disability or family status (Title VI of the Civil Rights Act of 1964, as amended).

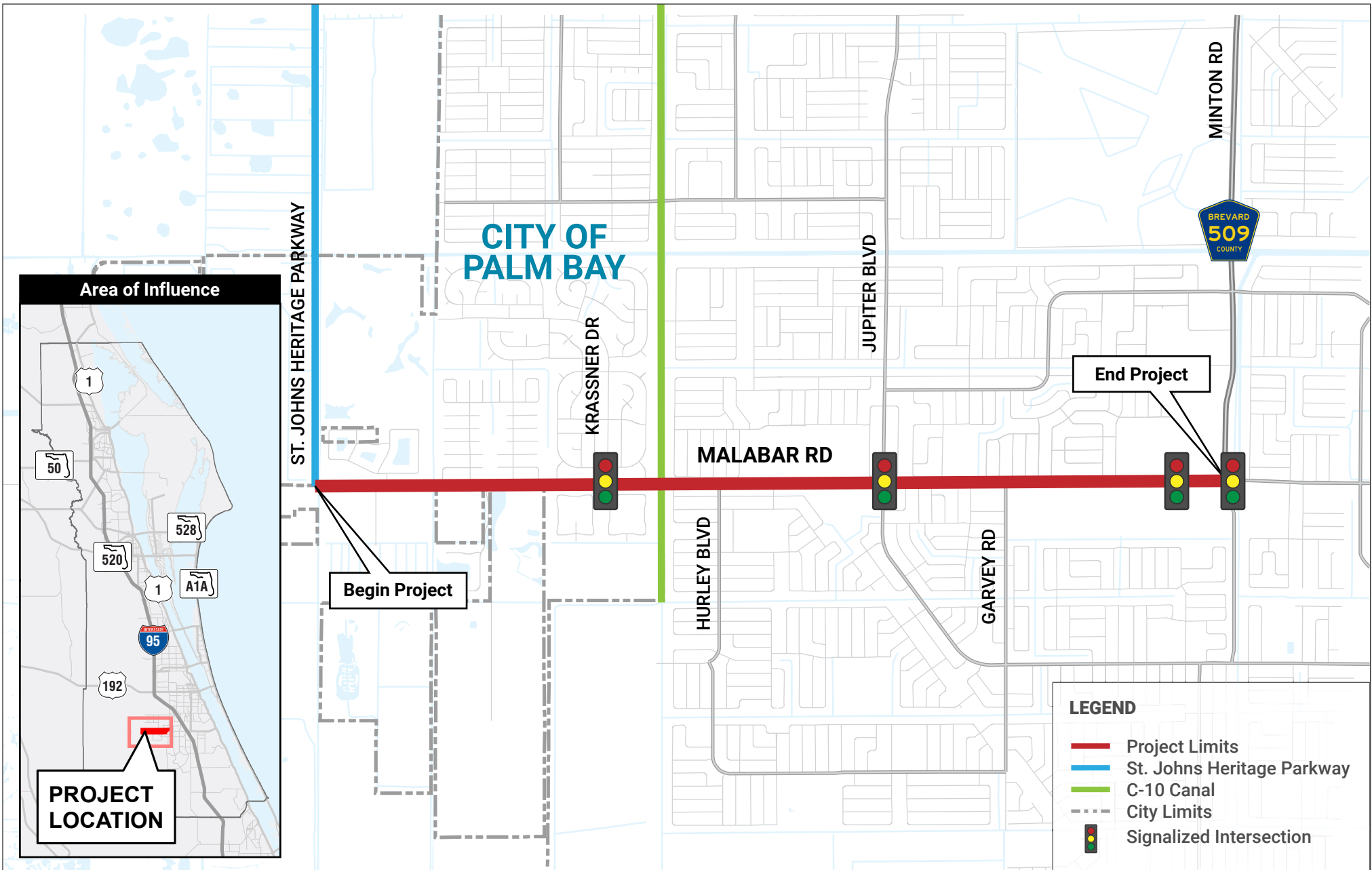
On 09/18/2019 the State of Florida determined that this project is consistent with the Florida Coastal Zone Management Program.

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Malabar Road PD&E Study

FPID: 437210-1-28-01

STUDY ROADWAY

FIGURE 1

1. Project Information

1.1 Project Description

The Malabar Road Project Development and Environment (PD&E) Study evaluated capacity, safety, and multi-modal improvements on Malabar Road from St. Johns Heritage Parkway to Minton Road, a distance of approximately four miles, in the City of Palm Bay and Brevard County, Florida. Malabar Road is an east-west regional roadway connecting western Brevard County/City of Palm Bay to US 1 in Malabar. The roadway's maintaining jurisdiction is Brevard County at its western edge, before transitioning to the City of Palm Bay for several miles, and then becoming a state road (S.R. 514) between I-95 and US 1. Malabar Road has an existing diamond interchange with I-95. Within the study area, Malabar Road is an urban minor arterial. The study area is shown in **Figure 1**.

Malabar Road within the project limits is a two-lane roadway. The section from St. Johns Heritage Parkway to Garvey Road is undivided, whereas the section from Garvey Road to Minton Road has median turn lanes. An 8' sidewalk is present on Malabar Road's north side for the entirety of the project limits. Minimal sidewalk is present on the south side. No on road bicycle facilities are present along the study limit's length.

There are currently four signalized intersections and numerous unsignalized intersections along the study corridor. The four signalized intersections are located at Krassner Drive/Bending Branch Lane, Jupiter Boulevard, the Plaza Shopping Center, and Minton Road as shown in **Figure 1**.

This roadway is unique due to the surrounding canal system that is operated/maintained by the Melbourne-Tillman Water Control District (MTWCD). Malabar Road within the project limits crosses over four canals (C-7, C-8, C-9, and C-10). Canal C-20 runs parallel to Malabar Road on the north side from Canal C-10 (250' west of Bavarian Avenue) to approximately 0.30 miles west of Minton Road. Within the project limits, there is one roadway bridge over Canal C-10 and three pedestrian bridges over Canals C-8, C-9, and C-10 for the north side sidewalk.

The proposed improvements will widen Malabar Road from two to four lanes from the St. Johns Heritage Parkway to Minton Road. The preferred alternative's typical section along the study corridor will include two 11' lanes in each direction, a 22' wide median, a 10' shared-use path on the north side, and an 8' sidewalk on the south side. The intersections at St. Johns Heritage Parkway, Krassner Drive/Bending Branch Lane, Hurley Boulevard, and Maywood Avenue/Daffodil Drive are proposed as roundabouts while Jupiter Boulevard, the Plaza Shopping Center, and Minton Road are proposed to remain signalized. Existing typical sections are provided in **Section 2.2.1** and proposed typical sections are provided in **Section 1.5.2** of the project's Preliminary Engineering Report (PER).

1.2 Purpose and Need

The purpose of this project is to provide additional capacity improvements to relieve existing congestion and accommodate projected future traffic demand. It is also to address current corridor and intersection safety issues. The need for these improvements is described in this section.

Transportation Demand/Capacity

The existing (2020) traffic analysis shows the four signalized intersections and 13 unsignalized intersections operated with an overall Level of Service (LOS) of E or better and no overcapacity movements. Even though the intersections were operating acceptably, the existing traffic analysis for the segments shows multiple segments of the Malabar Road corridor

operated worse than the City standard of LOS C, with traffic volumes ranging from 7,200 to 16,000 Annual Average Daily Traffic (AADT). As population and employment growth are expected to continue in western Palm Bay, the east-west traffic volumes along Malabar Road are anticipated to increase. This will ultimately lead to unacceptable segment and intersection operations.

In the future 2050 no-build condition, three of the four signalized intersections and 12 of the 15 unsignalized intersections are anticipated to operate at LOS F or with a volume-to-capacity (V/C) ratio greater than 1.0 in either the AM or PM peak hour based on the traffic analysis performed. Two additional unsignalized intersections were added in the future 2050 no-build condition, thus the reason for the increase to 15 total unsignalized intersections. Most segments of Malabar Road are projected to function unacceptably as a two-lane roadway, with traffic volumes ranging from 16,000 to 28,000 AADT.

Table 1 provides the traffic summary for the existing and future no-build conditions.

Table 1: Malabar Road Existing 2020 and No-Build 2050 AADT and LOS

Malabar Road Segment	No. of Lanes	2020 AADT	2020 LOS ¹	2050 AADT	2050 LOS ¹
St. Johns Heritage Parkway to Krassner Dr./Bending Branch Ln.	2	7,200	D	16,000	E
Krassner Dr./Bending Branch Ln. to Jupiter Blvd.	2	11,000	B	21,000	F
Jupiter Blvd. to Plaza Shopping Center	2	16,000	E	28,000	E
Plaza Shopping Center to Minton Rd.	2 ²	16,000	F ³	28,000	F ³

¹ Displayed LOS is for worst peak hour (AM/PM) and peak direction (EB/WB).

² In the EB direction, a second through lane is added at the Minton Road intersection. There are two through lanes in the WB direction, but the outside lane drops just west of the Plaza Shopping Center intersection. Thus, this segment of Malabar Road functions as a two-lane facility.

³ This is likely due to the relatively short length of segment between signalized intersections and the relatively high control delay of the adjacent signalized intersections.

The western Palm Bay area is anticipated to experience over 30 percent population growth, and between 5 percent to over 300 percent traffic growth, in the next 30 years, leading to increased travel on facilities west of I-95 and south of US 192[1]. The St. Johns Heritage Parkway is providing a "beltway" facility to accommodate the forecasted increase in traffic in western Palm Bay. The St. Johns Heritage Parkway is already constructed from Malabar Road to US 192, and a study is being performed for the extension of the Parkway from Babcock Street north to Malabar Road.

Malabar Road is one of three primary east-west roadways connecting to the Parkway and is the only one of those roadways that has an interchange with I-95. Malabar Road from Minton Road to Corporate Circle is four lanes and the section from Corporate Circle to I-95 is six lanes. Malabar Road from the St. Johns Heritage Parkway to Minton Road is the only two-lane section west of I-95.

A PD&E study was completed in 2021 for Malabar Road from Babcock Street to US 1 with a preferred alternative to widen from two to four lanes. Design and right-of-way for the Babcock Street to US 1 project is planned in the Space Coast Transportation Planning Organization's (SCPTO) 2045 Long Range Transportation Plan (LRTP) Cost Feasible Plan for the 2026 to 2030 time period and construction is planned for the 2031 to 2035 time period.

[1] Based on City of Palm Bay traffic analysis.

Safety

Crash records from 2016 to 2020 were obtained for Malabar Road from 900' west of the St. Johns Heritage Parkway to 1/4 mile east of Minton Road. There were a total of 642 reported crashes during this period, 202 (32 percent) resulted in at least one injury. There were no reported fatal crashes along the study corridor during the five-year period. As displayed in **Figure 2**, the crashes per year along the corridor generally increased between 2016 (123 crashes) and 2019 (137 crashes). The 2020 crash data saw a decrease to 113 crashes, likely due to decreases in traffic volumes related to the COVID-19 pandemic. While the overall total crashes decreased in 2020, the total number of injury crashes was the second highest behind 2017. This could be attributed to higher travel speeds along the corridor due to the lower volume, which leads to more severe crashes. It is important to note the traffic counts for this project were performed in January 2020, prior to the beginning of the pandemic restrictions in March 2020.

The highest crash type observed was rear end, comprising 54 percent of the total crashes. Left turn (14 percent) and sideswipe crashes (12 percent) were the second and third highest crash types.

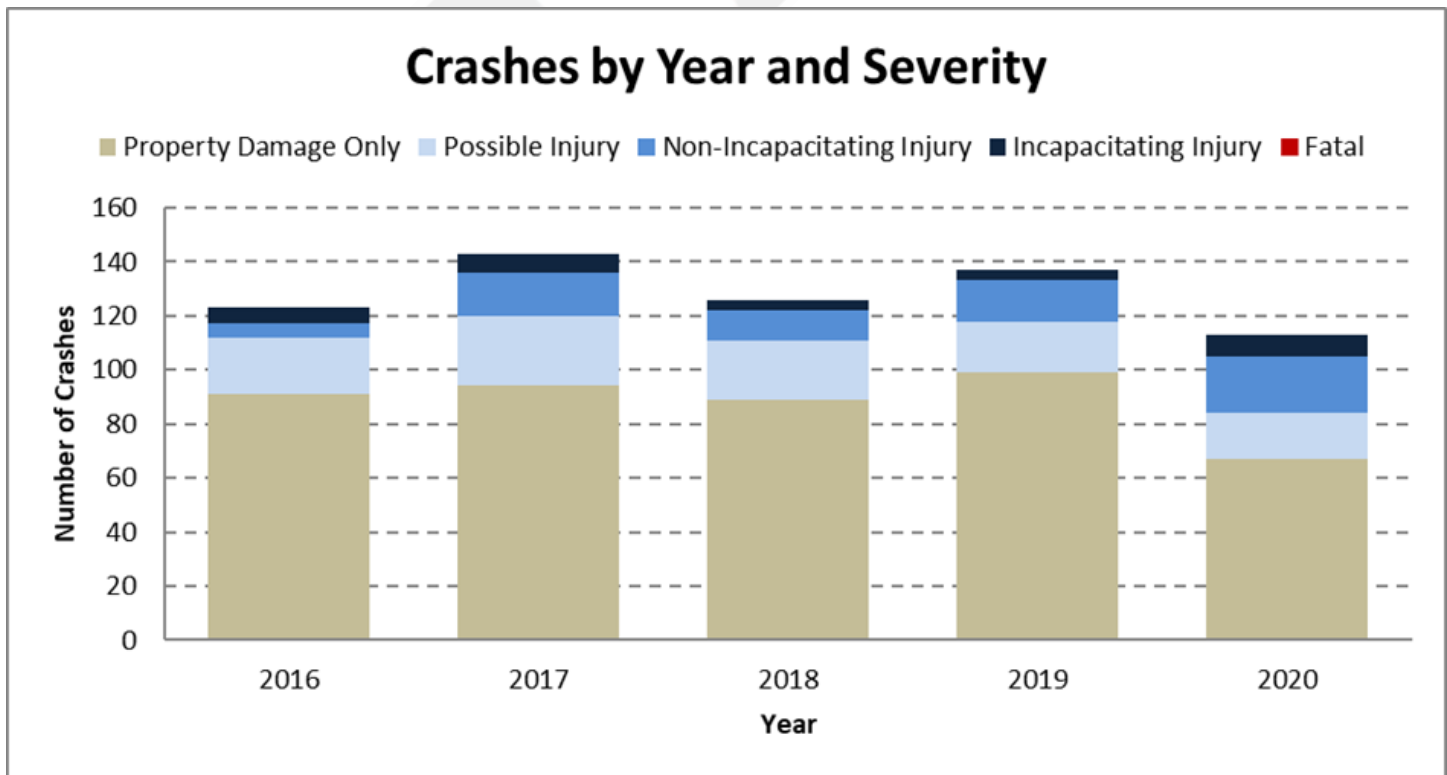


Figure 2: Crashes per Year (Corridor Wide)

Three existing signalized intersections at Jupiter Boulevard, the Plaza Shopping Center, and Minton Road were the highest crash locations along the study corridor, accounting for 330 of the 642 total reported crashes (51 percent). The four highest crash unsignalized intersections are St. Johns Heritage Parkway, Hurley Boulevard, Hillock Avenue, and Maywood Avenue/Daffodil Drive accounting for 90 total crashes (14 percent). Two high crash segments from 0.05 miles east of Jupiter Boulevard to 0.05 west of Santa Rosa Avenue (1,400 feet in length) and from 0.05 miles east of Maywood Avenue/Daffodil Drive to 0.05 west of the Plaza Shopping Center (1,175 feet in length) accounted for 61 total crashes (10 percent). A crash rate analysis was performed on the 2016 to 2018 crash data because average crash rates were not available for 2019 and 2020. Only one segment of Malabar Road, between Jupiter Boulevard and the Plaza Shopping Center, had a higher than average crash rate for one year of analysis. While the segments had low safety ratios, the three signalized intersections at Jupiter Boulevard, the Plaza Shopping Center, and Minton Road each had higher crash rates than statewide or districtwide averages for similar roadways in at least two of the three analysis years.

1.3 Planning Consistency

The next phase of project development, the final design phase, is currently funded in fiscal year (FY) 2024 as shown on page 2,381 of the FDOT FY 2023/24-2026/27 State Transportation Improvement Program (STIP) and page A-16 of the SCTPO FY 2024-2028 Transportation Improvement Program (TIP). The City of Palm Bay has allocated \$7M in local funding for the final design phase as shown in rows 197 and 198 of Exhibit A in Resolution 2022-18 of the Capital Improvement Plan (CIP). Resolution #24-10 amended the SCTPO LRTP to include the design phase for this project. The SCTPO's 2045 LRTP Cost Feasible Plan documents the right-of-way and construction phases for the project. The right-of-way phase is planned in the 2026 to 2030 time period with a mix of local and state funds. The construction phase is planned in the 2031 to 2035 time period utilizing local funding. A summary of the planning consistency is shown in the table below.

Currently Adopted LRTP-CFP	COMMENTS			
Yes	See Amendment Five; Resolution #24-10 of the Space Coast TPO 2045 LRTP, amended 12/15/2023: https://www.spacecoasttpo.com/what-we-do/planning/core-work-products/long-range-transportation-plan . Design is the only future phase that is funded. The right-of-way phase is planned in the 2026 to 2030 time period with a mix of local and state funds. The construction phase is planned in the 2031 to 2035 time period utilizing local funding.			
	Currently Approved	\$	FY	COMMENTS
PE (Final Design)				
TIP	Y	\$10.039M	2024	PD&E Study is funded with local funding and expected to finish Summer 2025. Design for project is fully funded with a mix of local/TPO funding which can be found on page A-16 of the Space Coast TPO FY 24 - 28 TIP (adopted July 13, 2023, Amendment 2 December 14, 2023).
STIP	Y	\$10.039M	2024	PD&E Study is funded with local funding and expected to finish Summer 2025. Design for project is fully funded with a mix of local/TPO funding which can be found on page 2,381 of the FDOT STIP FY 2023/24-2026/27.
R/W				
TIP	N			Right-of-way for project is currently unfunded.
STIP	N			Right-of-way for project is currently unfunded.
Construction				
TIP	N			Construction for project is currently unfunded.
STIP	N			Construction for project is currently unfunded.

2. Environmental Analysis Summary

Issues/Resources	Significant Impacts?*			
	Yes	No	Enhance	NoInv
3. Social and Economic				
1. Social	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Economic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Land Use Changes	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Mobility	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Aesthetic Effects	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Relocation Potential	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Farmland Resources	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Cultural Resources				
1. Section 106 of the National Historic Preservation Act	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Section 4(f) of the USDOT Act of 1966, as amended	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Section 6(f) of the Land and Water Conservation Fund	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Recreational Areas and Protected Lands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Natural Resources				
1. Protected Species and Habitat	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Wetlands and Other Surface Waters	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Essential Fish Habitat (EFH)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Floodplains	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Sole Source Aquifer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Water Resources	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Aquatic Preserves	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Outstanding Florida Waters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9. Wild and Scenic Rivers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10. Coastal Barrier Resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Physical Resources				
1. Highway Traffic Noise	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Air Quality	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Contamination	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Utilities and Railroads	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Construction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

USCG Permit

- A USCG Permit IS NOT required.
- A USCG Permit IS required.

* **Impact Determination:** Yes = Significant; No = No Significant Impact; Enhance = Enhancement; NoInv = Issue absent, no involvement. Basis of decision is documented in the following sections.

3. Social and Economic

The project will not have significant social and economic impacts. Below is a summary of the evaluation performed.

3.1 Social

Figure 3(attached) shows the community features along the study corridor such as law enforcement, City of Palm Bay Public Works Department, United States Postal Service (USPS), churches, and fire stations. Fred Poppe Regional Park is located on the study corridor's western end north of Malabar Road, the Palm Bay Public Works Department is located on Malabar Road's south side just west of Jupiter Boulevard, and Palm Bay City Hall is located on Malabar Road's south side just east of Minton Road. There are no anticipated impacts to these community features.

Based on the Environmental Screening Tool's (EST) Sociocultural Data Report (SDR) (located within the Community Coordination section of the EST), there are 434 households with a population of 1,309 residents identified within 500-foot buffer along the project corridor. Approximately 90 percent of households are single family dwelling units while approximately 10 percent are multifamily units. The median income is slightly over \$50,000 (both in the project area and countywide) with over 17 percent of the households below poverty level, as compared to an average of 11 percent of households below the poverty level in Brevard County. Minority population comprises approximately 47 percent of the total population adjacent to the study corridor. Countywide, minority populations comprise approximately 25 percent of the total population. As this is an existing roadway, there are no anticipated negative impacts to community cohesion or characteristics. The roadway widening will reduce future congestion and ultimately improve quality of life and emergency response to communities along the study corridor.

The Malabar Road widening from the St. Johns Heritage Parkway to Minton Road will require additional right-of-way, however, as discussed in this report's Relocation Potential section, there is only one single family residential relocation and no business relocations. This relocation is discussed in further detail in that section of this document.

While there is limited potential for the adverse effects, proactive measures for affected communities were taken related to alternative selection, impact analysis, and mitigation in the form of public meetings and numerous presentations informing the public of the project.

3.2 Economic

The potential widening of Malabar Road will support ongoing and future residential and commercial development in the study area. The Circle K at Jupiter Boulevard has been recently rebuilt, there is a proposed grocery store at the Garvey Road intersection and a new Publix at St. John's Heritage Parkway intersection. Malabar Road's western end is currently undergoing extensive new residential development with supporting commercial development. Some of the new developments planned and starting construction are shown in **Table 2** and **Figure 4**(attached):

Table 2: New Developments in Study Area (as of November 2023)

Development	Program	Status
St. Johns Preserve (Phases 1 & 2)	Single-Family Detached Housing - 620 DU Multifamily Housing - 304 DU	Under Construction

Palm Vista Everlands (Phase 1)	Single-Family Detached Housing - 162 DU	Under Construction
Chaparral (Phases 1-3)	Single-Family Detached Housing - 568 DU Single-Family Attached Housing - 270 DU Multifamily Housing - 75 DU	Under Construction
Brentwood Lakes (Phases 3 & 4)	Single-Family Detached Housing - 256 DU	Complete
Avery Springs	Single-Family Detached Housing - 140 DU	Complete
Stellar Casitas	Multifamily Housing - 266 DU	Under Review
Malabar Springs (Phase 1)	Single-Family Detached Housing - 879 DU	Under Review
Three Forks Development	Single-Family Detached Housing - 376 DU Multifamily Housing - 288 DU Campground/RV Park - 150 Spaces Shopping Center - 278,784 SF	Under Review
Palm Vista Medley at Everlands	Single-Family Detached Housing - 638 DU	Under Construction
Everlands West	Single-Family Detached Housing - 364 DU Single-Family Attached Housing - 102 DU Multifamily Housing - 168 DU Senior Adult Housing - Single-Family - 995 DU Senior Adult Housing - Multifamily - 784 DU	Under Review
Heritage Square Commercial	Shopping Center - 11,900 SF Supermarket - 48,400 SF Gas Station w/ Convenience - 16 Fueling Positions Fast-Food Restaurant w/ Drive-Tru - 4,200 SF Medical-Dental Office - 5,000 SF	Under Construction

3.3 Land Use Changes

The widening of Malabar Road is compatible with community development goals and the City and County comprehensive plans. Additionally, several projects in the City of Palm Bay's comprehensive plan require the widening of Malabar Road. The existing (**Figure 5**) and future (**Figure 6**) land use maps are attached.

The existing land use types within the project corridor are residential, commercial, agricultural, open land, industrial, and recreational land uses. The corridor primarily consists of single-family residential land use. Most of the residential units located along Malabar Road are medium and low density. There are also many vacant residential parcels within the area. Public land use (USPS) is located near the intersection of Malabar Road and Jupiter Boulevard. The northwest and southwest quadrants of the Malabar Road and Minton Road intersection contain retail land use.

The future land uses around the study corridor continue to support the existing land use. Future land use categories surrounding the project corridor include single family residential, multi-family residential, commercial, institutional, and recreational land uses.

Agriculture land uses are shown on the existing land use map north of Malabar Road just east of Maywood Avenue, and at the west end of the Malabar Road study corridor. On the future land use map, the area north of Malabar Road just west of Minton Road is identified for commercial redevelopment and the areas at the western end of the study corridor are identified for single-family residential redevelopment.

The attached existing and future land use maps show east of Canal C-10 the current land use is not expected to change from the current single family residential. However, west of Canal C-10, much of the existing vacant land is expected to become single-family residential with some multi-family residential, especially south of Malabar Road. See the Economic section for more detail on these changes.

The Malabar Road widening will impact land use changes by supporting future residential and commercial development, and potential stormwater pond locations will be located on vacant parcels or coordinated with any future development plans.

3.4 Mobility

The widening of Malabar Road has the potential to enhance transit access and add Americans with Disabilities Act (ADA) compliant bicycle and pedestrian facilities where none exist today. From the SDR, approximately 13 percent of the population is over the age of 65 and approximately 15 percent of people have a disability (from the populations identified within 500-foot buffer along the study corridor). As discussed in the Social section, approximately 17 percent of the population living near the study corridor is below the poverty level. Providing improved multi-modal facilities for non-motorized users will enhance the quality of life of the residents living and working near the study corridor.

As shown in the attached Trail and Transit Facilities Map (**Figure 7**), Space Coast Area Transit operates Routes 20 Heritage-West Melbourne and 23 West Palm Bay with 16 total transit stops (six eastbound and 10 westbound) within the Malabar Road study corridor. Space Coast Area Transit Route 20 connects Heritage and West Melbourne and Route 23 provides service to the West Palm Bay area. Route 20 operates along the entire corridor and Route 23 operates between Jupiter Boulevard and Minton Road. Both routes operate from approximately 6:30 AM to 8:30 PM on weekdays and 7:30 AM to 5:30 PM on Saturdays with hour long headways. The eastbound bus stop in front of the Madalyn Landing Apartments is the only stop with a bus shelter. In addition to Routes 20 and 23, Route 22 South Palm Bay operates in the northbound direction along Minton Road and has a stop with a shelter across from the Winn Dixie plaza. Route 22 stops at Malabar Road for transfers to Routes 20 and 23, and also has a direct transfer with Route 23 at the Hammock Landing transfer point.

The SCTPO has identified one Showcase Trail, the St. Johns River Eco-Heritage Trail, within the Malabar Road study corridor (as shown in **Figure 7** (attached)). There is an existing section of the trail constructed along the St. Johns Heritage Parkway from Emerson Drive to Malabar Road. A future planned section will extend to the north, connecting to the Brevard Zoo Linear Trail. A future planned section will also extend south and connect to an existing section of the trail, which proceeds southward to the Indian River County Line. The St. Johns River Eco-Heritage Trail is part of the Brevard and Indian River Counties Regional Trail, providing the region with access to over 100 miles of connected paved and unpaved trails.

Two local trails run through the project corridor as shown in **Figure 7** (attached). One local trail runs east-west along Malabar Road from St. John Heritage Parkway to west of Minton Road. Another local trail is on the south side of Malabar Road adjacent to City of Palm Bay Public Works Department's west side. The trail starts from Walpole Road and ends at Malabar Road.

The future four-lane roadway will provide a 10' shared-use path on the north side and an 8' sidewalk on the south side connecting to the aforementioned trails within the study corridor. Existing transit stop access will be enhanced as part of the four-lane widening and the sidewalk/trail improvements. Malabar Road within the study limits was identified as a

Priority Corridor for bicycle and pedestrian facility improvements in the 2019 Bicycle & Pedestrian Master Plan.

Addressing future capacity constraints, the 2050 build operational evaluation shows all intersections are anticipated to perform at LOS E or better with no V/C ratios greater than 1.0 in either the AM or PM peak hour. Additionally, seven of the eight Malabar Road segments are anticipated to operate at LOS C or better future build condition.

The SCTPO has funded Intelligent Transportation System (ITS) improvements for the Malabar Road corridor to enhance communication between signals and add closed circuit television (CCTV) for incident management. FDOT is currently designing the ITS system and funding for construction is anticipated in one of the upcoming fiscal years.

The Malabar Road widening will enhance mobility for all roadway users (vehicles, pedestrians, bicyclists, transit) within the study limits.

3.5 Aesthetic Effects

The preferred alternative follows an existing roadway corridor and would not introduce any unusual elements into the surrounding viewshed. The addition of the shared-use path between Canal C-20 and Malabar Road will enhance the viewshed for pedestrians and bicyclists. Overall, aesthetic effects would be minimal.

3.6 Relocation Potential

The Malabar Road preferred alternative is anticipated to impact 108 parcels and requires approximately 39 acres of right-of-way for the combined roadway and stormwater pond impacts, as shown in **Table 3**. The City of Palm Bay already owns 33 of these parcels, and only three of the 108 parcels currently have dwelling units. Of the three parcels with dwelling units, the dwelling unit on the first parcel is occupied (per the date of this report) and the City of Palm Bay owns the second and third parcels. There are no business relocations needed for this project.

Table 3: Right-of-Way Needs

Limits	Parcels Impacted	Right-of-Way Acreage	Pond + Floodplain Compensation Areas Acreage	Total Right-of-Way Acreage
St. Johns Heritage Parkway to Minton Road	108	15.1	23.9	39.0

A Conceptual Stage Relocation Plan has been prepared and included in the project file. This report found there is adequate existing housing in the three zip codes serving the Malabar Road study corridor. The plan also noted there are no business signs needing relocation but several signs to residential communities and the Fred Poppe Regional Park sign would require relocation.

In order to minimize the unavoidable effects of Right of Way acquisition and displacement of people, a Right of Way and Relocation Assistance Program will be carried out in accordance with Florida Statute 421.55, Relocation of displaced persons, and the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 91-646 as amended by Public Law 100-17).

3.7 Farmland Resources

The Farmland Conversion Impact Rating was completed in January 2022 and forwarded to Natural Resources Conservation Service (NRCS) for review. The total assessment points assigned were 65.4, 48.4 points were assigned by NRCS for the relative value of the farmland and an additional 17 points were assigned for the site assessment criteria. The 17 points for the site assessment were broken down by percent of site being farmed (8 points), availability of farm support services (5 points), on-farm investments (3 points), and compatibility with existing agricultural use (1 point). The NRCS concluded the Farmland Protection Policy Act (FPPA) review and confirmed that their review was complete via email on 4/18/22.

As discussed in the Land Use Changes section, the future land use map shows all of the existing agricultural land adjacent to Malabar Road being redeveloped to either residential, commercial, or industrial land uses. The closest agricultural lands on the future land use map are approximately one mile south of Malabar Road (currently a cattle farm).

The email correspondence and the Farmland Conversion Impact Rating are attached.

4. Cultural Resources

The project will not have significant impacts to cultural resources. Below is a summary of the evaluation performed.

4.1 Section 106 of the National Historic Preservation Act

A Cultural Resource Assessment Survey (CRAS), conducted in accordance with 36 CFR Part 800, was performed for the project, and the resources listed below were identified within the project Area of Potential Effect (APE). FDOT found that these resources do not meet the eligibility criteria for inclusion in the National Register of Historic Places (NRHP), and State Historic Preservation Officer (SHPO) concurred with this determination on 08/02/2021. Therefore, FDOT, in consultation with SHPO, has determined that the proposed project will result in No Historic Properties Affected.

The Malabar Road study area had never been comprehensively surveyed. The CRAS was conducted in four separate steps, and the original CRAS (approved August 2, 2021, updated October 2023) and each of the three addenda are located in the project file. The SHPO concurrence letters for the original CRAS and three addenda are attached.

The initial work was for the existing and proposed roadway widening right-of-way. The APE was defined from approximately 984 feet west of the St. Johns Heritage Parkway to the intersection with Minton Road. The APE was extended to the back of side property lines of parcels adjacent to the right-of-way, or a distance of no more than 328 feet (100 meters) from the right-of-way line. The archaeological survey was conducted within the existing and proposed right-of-way. The historic structure survey was conducted within the entire APE.

The archaeological survey consisted of the excavation of 30 shovel tests and pedestrian survey with the archaeological APE. One previously recorded archaeological site, 8BR00025, is located within the overall APE, but outside the archaeological APE and outside the project limits. No artifacts were recovered during the archaeological survey, and no archaeological sites or occurrences were identified within the archaeological APE. The CRAS recommended no further archaeological surveys for this project and the SHPO concurred with this recommendation on August 2, 2021.

The architectural survey resulted in the identification and evaluation of eight historic resources within the Malabar Road APE. There was one previously recorded linear resource (8BR03535; Melbourne-Tillman Canal No. 20) which was determined ineligible for the NRHP by SHPO in 2017. The other resources were judged to be ineligible for the NRHP due to the lack of significant historic associations and architectural and/or engineering distinction. SHPO also concurred with this recommendation.

The second step was to prepare a Technical Memorandum for the stormwater ponds, swales and floodplain compensation areas (FPCA). This included one FPCA, four stormwater pond locations and five swale locations totaling 52.42 acres. The APE included the proposed FPCA, pond and swale footprints plus a 100-foot buffer. The archaeological survey was conducted within the proposed footprints and the architectural history survey included the entire APE. No archaeological sites, features, or occurrences were identified during archaeological survey and no further survey was recommended. SHPO concurred with this recommendation on February 22, 2022.

The architectural survey for the Pond Technical Memorandum identified and evaluated one newly recorded historic resource within the ponds APE. This resource is Melbourne-Tillman Canal No. 8 (8BR04375) which was recommended as ineligible for the NRHP due to the lack of significant historic associations and architectural distinction. SHPO concurred

with this recommendation.

The third step was to prepare an addendum to the stormwater ponds Technical Memorandum focused on the proposed C-20 Alt. 1 pond location. During the original pond analysis as discussed in the second step, the C-20 Alt. 1 pond location was located adjacent to Malabar Road. Based on additional drainage analysis, the C-20 Alt. 1 pond location was moved further south within the same parcel. The APE for this additional analysis was defined to include the revised proposed C-20 Alt. 1 pond footprint, totaling 7.04 acres. The archaeological survey consisted of the excavation of three shovel tests within the APE. No archaeological sites, features, or occurrences were identified during archaeological survey and no further survey was recommended. SHPO concurred with this recommendation on November 1, 2022.

The fourth step was to prepare an addendum to the stormwater ponds Technical Memorandum focused on the proposed C-7 Alt. 3 pond location and FPCA. Towards the end of the project, the City approved a residential development in the proposed C-7 Alt. 2 and FPCA location. An additional drainage analysis was performed to identify a third alternative pond site and FPCA location in the southwest corner of the Malabar Road/St. Johns Heritage Parkway intersection. The APE for this additional analysis was defined to include the proposed C-7 Alt. 3 pond and FPCA footprint, totaling 5.52 acres. The archaeological survey consisted of the excavation of nine shovel tests within the APE. No archaeological sites, features, or occurrences were identified during archaeological survey and no further survey was recommended. SHPO concurred with this recommendation on August 1, 2023.

The proposed construction will have no effect on cultural resources listed or eligible for listing in the NRHP. These documents were also provided to the Muscogee Creek Nation on 7/15/24 and no comments received.

4.2 Section 4(f) of the USDOT Act of 1966, as amended

The following evaluation was conducted pursuant to Section 4(f) of the U.S. Department of Transportation Act of 1966, as amended, and 23 CFR Part 774.

Fred Poppe Regional Park (maintained by the City of Palm Bay) is located approximately 1,500' north of Malabar Road with access via Championship Circle NW, which intersects Malabar Road approximately 2,500' east of St. Johns Heritage Parkway. No impacts are anticipated for this recreational facility and a Section 4(f) No Use Determination form is attached.

4.3 Section 6(f) of the Land and Water Conservation Fund Act of 1965

There are no properties in the project area that are protected pursuant to Section 6(f) of the Land and Water Conservation Fund of 1965.

4.4 Recreational Areas and Protected Lands

There are no other protected public lands in the project area.

5. Natural Resources

The project will not have significant impacts to natural resources. Below is a summary of the evaluation performed:

5.1 Protected Species and Habitat

The following evaluation was conducted pursuant to Section 7 of the Endangered Species Act of 1973 as amended as well as other applicable federal and state laws protecting wildlife and habitat.

The original Natural Resources Evaluation (NRE) was prepared in Fall 2021 and the U.S. Fish and Wildlife Service (USFWS) found the proposed action is not likely to adversely affect any federally listed species or designated critical habitat on December 17, 2021. The Florida Fish and Wildlife Conservation Commission (FWC) concurred with the determination of effect and stated support for the project implementation measures and commitments for protected species on December 29, 2021. Both concurrence letters are attached.

Since being approved by the USFWS and the FWC, changes have been made to the preferred concepts, including the locations of the proposed stormwater management facilities. Thus an NRE Addendum was prepared to supplement the 2021 NRE and document impacts to natural resources and update effect determinations as a result of the design changes. The NRE Addendum was approved by FDOT Office of Environmental Management (OEM) in August 2024. The USFWS and FWC concurred with the determination of effect and stated support for the project implementation measures and commitments for protected species in September 2024. Both concurrence letters are attached.

The summary in this section is reflective of the NRE Addendum. A total of 40 protected species have the potential to occur in the Malabar Road study area, according to the information obtained during the preliminary data collection. These include three (3) reptile, 15 avian, two (2) mammal, one (1) insect, and 19 plant species shown in Table 4.

Table 4: Potentially Occurring Listed Species

Common Name	Scientific Name	Status
Reptiles		
Eastern indigo snake	<i>Drymarchon couperi</i>	FT
Florida pine snake	<i>Pituophis melanoleucus</i>	ST
Gopher tortoise	<i>Gopherus polyphemus</i>	ST
Birds		
Audubon's crested caracara	<i>Polyborus plancus audubonii</i>	FT
Bald eagle	<i>Haliaeetus leucocephalus</i>	BGEPA / MBTA
Eastern black rail	<i>Laterallus jamaicensis jamaicensis</i>	FT
Everglade snail kite	<i>Rostrhamus sociabilis plumbeus</i>	FE
Florida burrowing owl	<i>Athene cunicularia floridana</i>	ST
Florida grasshopper sparrow	<i>Ammodramus savannarum floridanus</i>	FE
Florida sandhill crane	<i>Antigone canadensis pratensis</i>	ST
Florida scrub-jay	<i>Aphelocoma coerulescens</i>	FT
Little blue heron	<i>Egretta caerulea</i>	ST
Red-cockaded woodpecker	<i>Dryobates borealis</i>	FE

Reddish egret	<i>Egretta rufescens</i>	ST
Roseate spoonbill	<i>Platalea ajaja</i>	ST
Southeastern American kestrel	<i>Falco sparverius Paulus</i>	ST
Tricolored heron	<i>Egretta tricolor</i>	ST
Wood stork	<i>Mycteria americana</i>	FT
Mammals		
Florida black bear	<i>Ursus americanus floridanus</i>	M
Tricolored bat	<i>Perimyotis subflavus</i>	C
Insects		
Monarch butterfly	<i>Danaus Plexippus</i>	C
Plants		
Blue-flowered butterwort	<i>Deeringothamnus pulchellus</i>	ST
Carter's werea	<i>Warea carteri</i>	FE
Celestial lily	<i>Nemastylis floridana</i>	SE
Coastal vervain	<i>Glandularia maritima</i>	SE
Cut-throat grass	<i>Panicum abscissum</i>	SE
Florida beargrass	<i>Nolina atopocarpa</i>	ST
Giant Orchid	<i>Pteroglossaspis ecristata</i>	ST
Large-flowered rosemary	<i>Conradina grandiflora</i>	ST
Lewton's polygala	<i>Polygala lewtonii</i>	FE
Many-flowered grass pink	<i>Calopogon multiflorus</i>	ST
Nodding pinweed	<i>Lechea cernua</i>	ST
Plume polypody	<i>Polypodium plumula</i>	SE
Redmargin Zephyrlily	<i>Zephranthes simpsonii</i>	ST
Sand butterfly pea	<i>Centrosema Arenicola</i>	SE
Short-leaved rosemary	<i>Conradina brevifolia</i>	FE
Small's flax	<i>Linum carteri var. smallii</i>	SE
Swamp plume polypody	<i>Polypodium ptilodon</i>	SE
Widespread polypody	<i>Polypodium dispersum</i>	SE
Yellow-flowered butterwort	<i>Pinguicula lutea</i>	SE

FE = Federally Endangered; FT = Federally Threatened

SE = State Endangered; ST = State Threatened

M = Managed; C = Candidate

BGEPA = Bald and Golden Eagle Protection Act; MBTA = Migratory Bird Treaty Act

Federally Listed Species and Designated Critical Habitat

The study area is located within or partially within the USFWS Consultation Area (CA) of the Audubon's crested caracara, Everglade snail kite, Florida grasshopper sparrow, Florida scrub-jay, and red-cockaded woodpecker. Portions of the study area also fall within seven wood stork Core Foraging Areas (CFA), which include suitable foraging areas important to the reproductive success of known wood stork nesting colonies. The existing habitats in the study area may also support other federally protected species including the eastern indigo snake, the eastern black rail, tricolored bat, and monarch butterfly (both the tricolored bat and monarch butterfly are candidate species). **Figure 8** displays the protected species

and habitats map for the study.

Audubon's Crested Caracara

The Audubon's Crested Caracara is listed by the USFWS as threatened due to habitat loss and population declines. A species-specific caracara survey was conducted from January through April 2020 in accordance with the caracara survey methodology developed by Morrison (2001), supplemental information established by the USFWS (2004a), and additional survey guidance prepared by the USFWS (2015, 2016). Prior to the start of the survey, biologists conducted site visits of the proposed project area to determine the best vantage points to observe caracara activity along the roadways and up to 1,500 meters from the project boundaries. Based on the preliminary field analysis, an Audubon's Caracara Survey Methodology for the Malabar Road PD&E Study was developed and submitted to the USFWS on December 9, 2019, (**Appendix E, NRE**), that was subsequently approved on December 11, 2019. Surveys were conducted by qualified biologists at least 15 minutes prior to sunrise for at least three hours per survey block. Biologists spent the entire three-hour survey session in the bed of a pick-up truck observing and recording caracara activity with the assistance of binoculars and a Nikon PROSTAFF 5 scope with 16-48 power. A total of eight survey sessions were conducted for each survey block. The survey map depicting the overall project area, survey blocks, and 1,500-meter buffer; data sheets; caracara activity maps; and photographs are included in **Appendix F of the NRE**.

Adult and juvenile caracara were observed on multiple days of the survey including observations of adults within the proposed C-7 Alt 3 pond site. Caracara activity included foraging in the pastures and along the roadsides, perching on trees and power poles, traveling over and between pastures, and demonstrating mating behavior, such as pairs perching together, preening, and sharing food was observed. Nesting activity was documented on several occasions (**Appendix F, NRE**), resulting in the positive identification of two caracara nests along the north side of Malabar Road (**Figure 9**). The nests range from approximately 1,041 meters to approximately 1,105 meters from proposed project activities, which are within the USFWS's 1,500-meter nest protection zone for crested caracara (USFWS, 2015). As a result, the proposed project "may affect" the crested caracara and further consultation with the USFWS is warranted.

The Standard Local Operating Procedures for Endangered Species (SLOPES) for Audubon's crested caracara (**Appendix G, NRE**) and the USFWS Guidelines provide a series of recommended restrictions for activities in the primary and secondary zones both during nesting season and outside nesting season. These recommendations are the basis for the USFWS's concurrence determination. In evaluating impacts to the caracara, the USFWS defines a primary zone as 300 meters (985 feet) and a secondary zone as 1,500 meters (4,921 feet). Projects within 1,500 meters of a nest that can avoid adverse impacts and/or implement conservation measures would provide a "may affect, but not likely to adversely affect" determination. If impacts are considered adverse and conservation measures cannot be implemented, the project "may affect, and is likely to adversely affect" the caracara and formal consultation is required. Mitigation to offset proposed impacts to caracara habitat will be discussed during formal consultation with the USFWS under section 7 of the Endangered Species Act (ESA).

The Guidelines and SLOPES flowchart were utilized to determine the impacts on the caracara as a result of the preferred alternative. The survey identified two caracara nests located within 1,500 meters of the preferred alternative; and therefore, avoidance or implementation of conservation measures must be utilized to ensure the project is not likely to adversely affect the caracara. Both strategies will be utilized to eliminate adverse effects to the caracara. To avoid and minimize impacts to caracara foraging habitat, the preferred pond site (C8 and C9 Atl. 1) was chosen to eliminate impacts to suitable habitat within 1,500 meters from the nests. Conservation measures will be implemented for areas within the protection zone where avoidance was not practicable. The SLOPES flowchart followed the sequence which concluded with conservation measures and construction activities proposed outside nesting season in order to obtain a not likely to

adversely affect determination.

The Guidelines identify conservation measures that help reduce the impact of a project on the caracara and are compatible with caracara survival. The conservation measures are defined below along with project-specific measures and conditions in **bold text**.

Audubon's Crested Caracara Conservation Measures

- Management Zones - In evaluating project impacts to the caracara, the USFWS defines a primary zone as 300 m (985 feet), and a secondary zone as 1,500 m (4,920 feet) outward from the nest tree. Protection of the primary zone is very important particularly during the nesting season and must be maintained in order to provide conditions for successful reproduction. **The preferred alternative will not impact the primary zone.**
- Secondary Zone - This zone is generally defined as the foraging territory in which the nest site is located. This secondary zone is used by caracaras for the collection of nest material, roosting, and feeding. This amount of suitable habitat contiguous to the nest site may be required to maintain the ecologic function of the nesting territory. Conservation measures for this zone are directed at maintaining the foraging capacity of the area.
 - Maintain pasture, grassland, and wetlands that are necessary for caracara foraging. **The impacts within the secondary protection zone are primarily located within the existing roadway and disturbed right-of-way. Construction activities that extend beyond the existing right-of-way to accommodate the roundabout at Malabar Road and St. Johns Heritage Parkway impact approximately 3.01 acres of land which is dominated by dense Brazilian pepper (*Schinus terebinthifolia*) and provides no suitable foraging habitat. Construction activities associated with Pond C-7 Alt 3 and the adjacent FPC site will impact approximately 5.75 acres of caracara habitat. Based on the location of the nests, current conditions including road traffic, farming activities and activities associated with the school, do not appear to affect life history requirements of the caracara. Construction activities including clearing have commenced for the St. Johns Preserve, a single-family home subdivision located just west of St. Johns Heritage Parkway and north of Malabar Road. This development is located between the nests and proposed project impacts, thus limiting utilization to the east where the roadway construction activities occur. The disturbance from the surrounding land uses and construction of the previously mentioned development have not inhibited nesting activity, therefore it is unlikely that disturbance from the construction of the preferred alternative would have an adverse effect. Based on observations in the field, including documented flight activity, caracara are utilizing the large tracts of suitable habitat located to the north, west and south of the nest. Most of these lands are part of the Three Forks Conservation Area and provide optimal caracara nesting and foraging habitat. Foraging capacity will not decrease as a result of the preferred alternative.**
 - Limit use of chemicals toxic to wildlife, including pesticides, fertilizers, or herbicides, as they may impact the caracara through its food supply. **Due to the nature of the project, use of pesticides, fertilizers, or herbicides are not anticipated.**
 - Non-nesting Season (May to October) - Impacts during the active nesting season can be avoided by timing of activities near the nest site. **Construction activities associated with the Malabar Road and St. Johns Heritage Parkway intersection occur within the secondary protection zone and will be conducted during the non-nesting season.**

The addition of the C-7 Alt 3 pond site and adjacent FPC will not impact the primary zone. The pond site and FPC will impact approximately 5.75 acres of caracara habitat within the 1,500-meter nest protection zone. Based on the distance of the proposed construction activities from the nest; existing disturbances which do not appear to affect caracara nesting; lack of caracara utilization due to unsuitable foraging habitat within the proposed construction footprint; remaining foraging capacity; implementation of conservation measures, including constructing outside of nesting season as described above, the preferred alternative "**may affect, but is not likely to adversely affect**" the Audubon's crested caracara. Final

impacts to caracara foraging and nesting habitat may change as a result of a species-specific survey and will be calculated in design following the completion of the survey, however the project is anticipated to maintain an effect determination of **"may affect, but not likely to adversely affect"** for the caracara.

Everglade Snail Kite

USFWS Everglade snail kite CA is located over the entire project. The Everglade snail kite is classified as endangered due to a "very small population and increasingly limited amount of fresh marsh with sufficient water to ensure an adequate supply of snails" (Bureau of Sport Fisheries and Wildlife, 1973, p. 120). The USFWS has designated critical habitat for snail kites, which consists mostly of marshes near south Florida. The Everglade snail kite is a non-migratory subspecies only found in Florida, particularly near large watersheds (e.g., Everglades, Lake Okeechobee) and the shallow vegetated edges of lakes that support apple snail, the primary component of the snail kite's diet. The corridor is highly developed and lacks the marshes and large waterbodies suited for snails and snail kites. No critical habitat for the snail kite occurs within the project corridor. No suitable habitat and no individuals were observed during the field surveys; therefore, the preferred alternative will have **"no effect"** on the Everglade snail kite.

Florida Grasshopper Sparrow

USFWS Florida grasshopper sparrow CA is located over the entire project. The Florida grasshopper sparrow was listed as endangered because of habitat loss and degradation resulting from conversion of native vegetation to improved pasture and agriculture (51 FR 27492). The Florida grasshopper sparrow is a subspecies of grasshopper sparrow that is endemic to the dry prairie region of central and south Florida. This subspecies is extremely habitat specific and relies on fire every two or three years to maintain its habitat (USFWS, 1999). The primary habitat consists of large (>50 hectares), treeless (less than one tree per acre), and relatively poorly drained prairies dominated by saw palmetto and dwarf oaks (Delany et al., 1985). It is known to occur only in Highlands, Okeechobee, Osceola, and Polk counties (Robertson & Woolfenden, 1992; Delany, 1996) and has been extirpated from Collier and Hendry counties (USFWS, 1999). Even though the study area is within the Florida grasshopper sparrow CA, it is outside the USFWS's current range for this species. No suitable habitat or individuals were observed during the field surveys. The preferred alternative will have **"no effect"** on the Florida grasshopper sparrow.

Florida Scrub-Jay

USFWS Florida scrub-jay CA is located over the entire project. The scrub-jay is classified as threatened due to habitat loss, degradation, and fragmentation (USFWS, 1987). They only occur on ancient dune ecosystems and scrub habitats of peninsular Florida. The USFWS and FWC have documented occurrences of the scrub-jay east of Minton Road, outside the proposed project limits. These populations are surveyed yearly as part of the City Palm Bay's Habitat Conservation Plan (HCP) and Incidental Take Permit (ITP). According to the HCP, no scrub-jay occurrences have been documented within the proposed project area. As part of the Efficient Transportation Decision Making (ETDM) Summary Report, the USFWS recommended a scrub-jay survey in areas of suitable habitat due to the proximity of documented occurrences.

Areas of suitable habitat were surveyed in accordance with the Florida Scrub-Jay Survey Guidelines and Protocols (USFWS, 2007). Using GIS, call-stations were established on a 200 meter grid in potential scrub-jay habitat in and adjacent to the limits of construction. Those call-stations were transferred to a Trimble GPS with sub-meter accuracy so that biologists could determine in the field whether or not the GIS-based call-stations were suitable for the survey. The GIS-based call-station was moved in the field if the topography or density of vegetation would impede a biologist's ability to visually observe a scrub-jay. The geographic coordinates and corresponding land use and cover and scrub-jay habitat class have been provided in **Table 3-2 of the NRE**.

Surveys were conducted on calm, clear days about one hour after sunrise in March and April of 2020. Florida scrub-jay vocalizations, including the territorial scolds and the female "hiccup," were broadcast through a JBL speaker for one minute in each cardinal direction. The scrub-jay vocalizations were acquired from the Macaulay Library at the Cornell Lab of Ornithology. If accipiters or other scrub-jay predators were observed near a call station, the survey was temporarily suspended until the accipiters or predators cleared the area. Biologists did not observe Florida scrub-jays nor hear an auditory response to the broadcasts from scrub-jays. The survey station location map, scrub-jay survey data sheets, and scrub-jay habitat assessment sheets with photographs are provided in **Appendix H of the NRE**. Based on the scrub-jay survey results as well as the current site conditions and limits of proposed impacts, the preferred alternative "**may affect, but are not likely to adversely affect**" the Florida scrub-jay.

Red-Cockaded Woodpecker

The USFWS red-cockaded woodpecker (RCW) CA only covers the eastern project terminus near the intersection of Malabar Road and Minton Road, and includes less than 0.08 miles of the project. The RCW is listed by the USFWS as endangered due to habitat loss, degradation and fragmentation (35 FR 16047). The species is still widely distributed throughout the state, but the largest populations occur on federally managed lands in the panhandle (USFWS, 1999). RCW habitat consists of pine stands or pine-dominated forests with little to no understory and numerous old growth pines, particularly longleaf pines. It excavates cavities in the living part of pine trees, typically choosing trees greater than 80 years old. No critical habitat has been designated for the RCW.

No RCW habitat was observed in the study area. While there are areas within the study corridor that contain longleaf pine and pine dominated forests, the trees are too young and located in habitats not suitable for red-cockaded woodpeckers. No RCWs or suitable habitat were observed. The preferred alternative will have "**no effect**" on the red-cockaded woodpecker.

Tricolored Bat

The tricolored bat is a candidate species proposed for federal listing. It is Florida's smallest bat and distinguished by its unique tricolored fur and pink forearms that contrast their black wings. This wide-ranging species is found throughout the central and eastern United States, and portions of Canada, Mexico, and Central America. Typically hibernating in caves and mines during the winter, tricolored bats in the southern U.S. have an increased utilization of culverts as hibernacula, with shorter hibernation durations and increased winter activity. The tricolored bat is mostly associated with forested habitats and requires habitat suitable for roosting, foraging, and commuting between winter and summer habitats. Roosting singly or in small groups, the tricolored bat prefers to roost in caves, tree foliage, tree cavities, Spanish moss, and man-made structures such as buildings and culverts. They form summer colonies in forested habitats, utilizing cavities, bark, and foliage. The maternity season in Florida is May 1 through July 15. They forage most commonly over water courses and along forest edges.

Suitable roosting and foraging habitat was observed within the proposed project area; however, the project corridor is mostly developed. While the proposed project will impact suitable roosting and foraging habitat, offsite habitat will remain including the adjacent Shingle Creek corridor which provides abundant habitat for roosting, foraging, and connectivity between habitats. The City of Palm Bay will continue consultation with the USFWS regarding the tricolored bat listing status and potential impacts to this species during the design and permitting phase as needed. If the listing status of the tri-colored bat is elevated by USFWS to threatened or endangered and the preferred alternative is located within the consultation area during the design and permitting phase of the proposed project, the City of Palm Bay commits to re-initiating consultation with the USFWS to determine the appropriate survey methodology and to address USFWS regulations regarding the protection of the tri-colored bat.

Wood Stork

The wood stork is listed by the USFWS as threatened. Wood storks are associated with freshwater and estuarine wetlands that are used for nesting, roosting, and foraging. Nesting typically occurs in medium to tall trees that occur in stands located in swamps or islands surrounded by open water. Preferred foraging habitat includes wetlands with a mosaic of submerged and/or emergent aquatic vegetation and shallow open-water areas. Particularly attractive feeding sites are depressions in marshes or swamps where fish become concentrated during periods of receding water levels.

According to the USFWS's North Florida Ecological Service Office, the habitats within 15 miles of a wood stork breeding colony are considered to be wood stork CFAs. Portions of the study area fall within the CFA of seven wood stork breeding colonies: Deseret Ranch, Grange Island, Grant Farm Island, Kemper Ranch, Micco North, Micco South, and US 192 East. Wood storks were observed flying over and foraging within the study area. Ecologists observed Suitable Foraging Habitat (SFH) throughout the study area including roadside ditches and canals, and areas within proposed pond site locations. Previously, 0.69 acres of direct impacts to SFH were anticipated from the proposed project. As a result of the change in the preferred pond sites, the preferred alternative will now impact 0.85 acres of SFH. According to the Wood Stork Effect Determination Key for Central and North Peninsular Florida (**Appendix B, NRE Addendum**), the proposed project will result in the following sequential determination: A-B-C-D-E (1) = "**may affect, but is not likely to adversely affect**" the wood stork. Unavoidable impacts greater than 0.5 acres will be offset at a USFWS-approved mitigation bank within the appropriate CFA to satisfy the elements detailed in the key to ensure that the proposed project does not adversely affect the wood stork. Currently, there are banks with available credits to satisfy the mitigation requirements.

Eastern Black Rail

The eastern black rail is listed by the USFWS as threatened due to habitat loss, destruction, and modification; sea level rise and tidal flooding; and incompatible land management. They are wetland-dependent birds and are primarily associated with herbaceous, persistent emergent plant cover. They require dense overhead perennial herbaceous cover with underlying moist to saturated soils with or adjacent to very shallow water. Suitable eastern black rail habitat is present within the proposed pond sites for the project. No eastern black rails were observed during the field reviews and according to FNAI, no individuals have been documented in the project area. Based on the best available information, there is a low probability of occurrence of the eastern black rail within the project area.

Technical assistance for the species was provided by the USFWS on July 7, 2024 and is included in **Appendix D** of the **NRE Addendum**. The technical assistance included confirmation by USFWS that deferring species-specific surveys until the design phase of the project was acceptable. Based on this technical assistance, the Department has committed to conducting a species-specific survey in accordance with the current USFWS survey protocol during the design phase of the project. Additionally, unavoidable wetland impacts will be mitigated to prevent loss of wetland functions and values. Based on this information, the proposed project "**may affect**" the eastern black rail. Following the completion of the survey in the design phase, the Department will re-initiate consultation with the USFWS under Section 7 of the ESA.

Monarch Butterfly

The monarch butterfly is a candidate species proposed for federal listing. In many regions, monarchs breed year-round, including Florida. During breeding season they lay their eggs on their obligate milkweed host plant (primarily *Asclepias* spp.). Milkweed and flowering plants are needed for monarch habitat. No individuals were observed during the field reviews, however flowering plants and habitat suitable to support milkweed species were observed. Consultation with USFWS under Section 7 of the ESA is not required for candidate species, like the monarch butterfly. The City of Palm Bay will continue consultation with the USFWS regarding the monarch butterfly listing status and potential impacts to this

species during the design and permitting phase as needed. The City of Palm Bay commits to re-initiating consultation with the USFWS to determine the avoidance and minimization measures for protection of the monarch butterfly.

Eastern Indigo Snake

The eastern indigo snake is listed by the USFWS as threatened due to over-collecting for the pet trade as well as habitat loss and fragmentation (USFWS, 1999.) The eastern indigo snake is widely distributed throughout central and south Florida. They occur in a broad range of habitats, from scrub and sandhill to wet prairies and mangrove swamps. Indigo snakes are most closely associated with habitats occupied by gopher tortoises whose burrows provide refugia from cold or desiccating conditions (USFWS, 1999). No critical habitat has been designated for the eastern indigo snake.

Suitable habitat for the indigo snake was observed within the study area, including proposed pond site locations. No indigo snakes were observed during the field reviews. Suitable habitat for the gopher tortoise was observed; however, no gopher tortoise burrows were identified within the proposed project limits. A 100% gopher tortoise survey was not conducted during this PD&E Study, but will be required before construction activities commence. To address any potential effects to the eastern indigo snake, all potentially occupied gopher tortoise burrows within the limits of construction will be excavated and the *Standard Protection Measures for the Indigo Snake* (USFWS, 2013; **Appendix J, NRE**) will be implemented during construction activities. As a result, the proposed alternatives "**may affect, but are not likely to adversely affect**" the eastern indigo snake. This effect determination was made using the following sequence from the *Eastern Indigo Snake Effect Determination Key* (**Appendix J, NRE**): A-B-C-D-E.

Federally Protected Plant Species

According to the Florida Natural Areas Inventory (FNAI) and USFWS, three federally protected plants have the potential to occur within the study area (**Table 3-1, NRE**). These species are listed as Endangered and include Carter's warea (*Warea carteri*), Lewton's polygala (*Polygala lewtonii*) and short-leaved rosemary (*Conradina brevifolia*). These species are restricted to sandy habitats maintained by periodic fire, such as scrub, high pine, and sandhill. Limited habitat occurs within the project footprint. Due to development and the agricultural nature of non-developed areas within and adjacent to the study area, these species are unlikely to occur within the project area. Ecologists did not observe federally protected plants during the field surveys. The FNAI database listed no Elemental Occurrences of protected plants within the study area. Environmental Technical Advisory Team (ETAT) comments from the USFWS state that surveys for federally listed plant species will be conducted by a trained botanist. Additional surveys for listed plant species will be conducted during design and permitting. Due to no protected plants being observed during the field surveys, the proposed project "**may affect, but is not likely to adversely affect**" federally protected plants.

State-Listed Species

Florida Burrowing Owl

The FWC listed the Florida burrowing owl as threatened due to loss of native habitat, dependence on altered habitat, and lack of regulatory protections (FWC, 2013a). The burrowing owl is a non-migratory, year-round breeding resident of Florida, and maintains home ranges and territories while nesting. Burrowing owls inhabit upland areas that are sparsely vegetated. Natural habitats include dry prairie and sandhill, but they will make use of ruderal areas such as pastures, airports, parks, and road rights-of-way because much of their native habitat has been altered or converted to other uses.

Ecologists did not observe burrowing owls during the general wildlife and species-specific surveys of the project area. Suitable habitat was observed throughout the study area including proposed pond site locations. Burrowing owls usually dig their own burrows but are known to utilize gopher tortoise burrows and armadillo burrows as well. Gopher tortoise

burrows and mammal burrows were observed within the study area. If burrowing owls are observed onsite, coordination with the FWC will occur to discuss avoidance, minimization, and permitting options. Avoidance measures that eliminate the need for FWC incidental take permitting include: avoiding acts that kill or injure burrowing owls or eggs; maintaining a minimum 10-foot buffer during non-breeding season (July 11-February 14) and a minimum 33-foot buffer during breeding season (February 15 - July 10) around the entrance of Potentially Occupied Burrows (POB); and ensuring that the project does not impact 50% or greater of foraging habitat within a 1,970-foot radius of a POB. Pre-construction surveys will be conducted to adhere to the components of the Imperiled Species Management Plan (ISMP) and permitting guidelines; therefore, "**No adverse effect is anticipated**" for the burrowing owl resulting from the proposed project.

Florida Pine Snake

The Florida pine snake is listed by the FWC as threatened due to habitat loss, fragmentation, and degradation to upland habitats from development and fire suppression (FWC, 2013b). They inhabit areas that feature well-drained sandy soils with a moderate to open canopy (Franz 1992, Ernst and Ernst 2003). Preferred habitats include sandhill and former sandhill, including old fields and pastures, sand pine scrub, and scrubby flatwoods. The pine snake often coexists with gopher tortoise and pocket gophers, spending the majority of its time underground.

No pine snakes were observed during the field surveys. Minimal suitable habitat was observed within the project corridor, and mostly occurs within the proposed pond site locations. Gopher tortoise, mammal burrows and pocket gopher mounds were observed. All gopher tortoise burrows within the construction limits will be excavated. Current FWC guidelines for the relocation of the Florida pine snake state that any incidentally captured pine snake will be released on-site or allowed to escape unharmed if habitat will remain post-development. "**No adverse effect is anticipated**" for the Florida pine snake resulting from the proposed project since suitable habitat will remain and current guidelines for relocating commensal species will be followed.

Florida Sandhill Crane

The FWC listed the Florida sandhill crane as threatened due to the loss and degradation to nesting and foraging habitat from development and hydrologic alteration to their potential nesting habitat (FWC, 2013c). It is widely distributed throughout most of peninsular Florida. Sandhill cranes rely on shallow marshes for roosting and nesting and open upland and wetland habitats for foraging (Wood and Nesbitt 2001).

Florida sandhill cranes were observed on multiple occasions throughout the study area during the general wildlife and species specific surveys. Nesting and roosting habitats are limited within the project corridor due to the lack of wetlands. The marshes and wet prairies adjacent to the study area provide potential nesting and roosting habitat for the sandhill crane. The pastures and other open uplands, including the roadway right-of-way, provide foraging habitat. Ecologists observed sandhill cranes, including juveniles, foraging in these areas and roadside ditches during numerous field surveys. Avoidance measures that eliminate the need for FWC take permitting include: avoid impacts to natural wetlands used for breeding, feeding, or sheltering; avoid activities within 400 feet of an active nest; and avoid land used conversion within 1,500 feet of the nest site until after young are capable of sustained flight. Due to the lack of wetland impacts and suitable nesting habitat within 400 feet of the project limits, "**No adverse effect is anticipated**" for the Florida sandhill crane resulting from the preferred alternative.

Gopher Tortoise

The gopher tortoise is listed as threatened by the FWC. They occur in the southeastern Coastal Plain from Louisiana to South Carolina; the largest portion of the total population is located in Florida (FWC 2012). Gopher tortoises require well-drained, sandy soils for burrowing and nest construction, with an open canopy and an abundance of herbaceous groundcover, particularly broadleaf grasses, wiregrass (*Aristida stricta*), legumes and fruits for foraging. Gopher tortoises

can be found in most types of upland communities including disturbed areas and pastures.

Suitable gopher tortoise habitat was observed within the study area, including proposed pond site locations. A 100% gopher tortoise survey was not conducted. Gopher tortoise burrows were observed within the study area, but not within the proposed project limits. No gopher tortoises were observed during the field surveys. A permit may be necessary from the FWC if tortoises are present within any permanent or temporary construction area. Based on the information provided above, **"no adverse effect is anticipated"** for the gopher tortoise.

Southeastern American Kestrel

The southeastern American kestrel is listed by the FWC as threatened due to habitat loss, degradation and fragmentation, as well as lack of regulatory protection (FWC 2013d). The southeastern American kestrel is the only non-migratory, permanent resident kestrel in Florida. However, the seasonal occurrence of a migratory subspecies of the northern American kestrel (*Falco sparverius sparverius*) occurs from September through March in Florida. Confident identification of southeastern American kestrels can only be made during the portion of the breeding season when migratory species are not present (FWC, 2013d). The southeastern American kestrel is a secondary cavity nester, preferring habitats of sandhill and open pine savannah maintained by fire. They can be found in open pine habitats, woodland edges, prairies, pastures, and other agricultural lands.

Ecologists observed suitable habitat throughout the study area, including proposed pond site locations. Kestrels were observed on multiple occasions at multiple locations. Some of the observations occurred during the winter and spring when the migratory subspecies could be present. Activities within the 492 feet (150 meter) buffer of an active nest are considered to cause take. Pre-construction surveys will be conducted to adhere to the components of the ISMP; therefore, **"No adverse effect is anticipated"** for the southeastern American kestrel resulting from the proposed project.

Imperiled Wading Birds

Four wading birds have the potential to occur in the study area. These species are the little blue heron, reddish egret, roseate spoonbill, and tricolored heron. All four are listed by the FWC as threatened due to the loss and degradation of habitat, particularly from hydrologic alterations to their essential foraging areas (FWC, 2013e). Little blue herons, roseate spoonbills and tricolored herons are widely distributed throughout peninsular Florida. Reddish egrets are found almost exclusively in coastal areas (Greenlaw, 2014). Wading birds depend on healthy wetlands and vegetated areas suitable for resting and breeding which are near foraging areas (FWC, 2013e). They forage in freshwater, brackish, and saltwater habitats. They tend to nest in multi-species colonies of a variety of woody vegetation types including cypress, willow, maple, black mangrove, and cabbage palm (FNAI, 2001).

Ecologists observed suitable foraging with minimal nesting habitat for wading birds throughout the study area, including proposed pond sites. Little blue herons and roseate spoonbills were observed. These observations include fly-overs and foraging in roadside ditches, existing ponds, and drainage ditches in adjacent pastures. No wading bird rookeries are located within the project area. Due to the lack of wetlands within the project limits, potential nesting habitat only occurs in habitats adjacent to the project. No nesting activity was observed during the field reviews. An updated wildlife survey for wading birds may be warranted prior to construction, since wading birds can build new nests each year. Additional components of the ISMP include the Species Action Plans. Specifically, Action 8, among others, identified in A Species Action Plan for Six Imperiled Wading Birds: Little Blue Heron (*Egretta caerulea*), Reddish Egret (*Egretta rufescens*), Roseate Spoonbill (*Platalea ajaja*), Snowy Egret (*Egretta thula*), Tricolored Heron (*Egretta tricolor*), White Ibis (*Eudocimus albus*) (FWC 2013) addresses coordination between the FWC and other state agencies to promote water quality in stormwater retention facilities. As the FWC is a commenting agency under the Statewide Environmental Resource Permit Program, inclusion of a stormwater management system will provide a net benefit to water quality that

will have a carryover benefit to state listed wading birds that will be addressed during permitting. **"No adverse effect is anticipated"** for wading birds resulting from the proposed project.

State Listed Plant Species

Through regulation by the Florida Department of Agriculture and Consumer Services (FDACS) Division of Plant Industry, Florida protects plant species native to the state that are endangered, threatened, or commercially exploited. The Florida Regulated Plant Index includes all plants listed as endangered, threatened, or commercially exploited as defined in Chapter 5B-40.0055, F.A.C. According to the FNAI and FDACS, 16 state protected plant species have the potential to occur in the study area (**Table 3-1, NRE**). However, the FNAI database listed no Elemental Occurrences of protected plants within the study area. Many of these plant species occur in open sandy habitats maintained by periodic fire, such as high pine, turkey oak barrens, sandhill, and xeric scrub. These habitats were rarely observed within the study area, but especially limited within the project footprint. Other state listed species prefer mesic and wetland habitats which are limited within the study area. Due to the agricultural nature within and adjacent to the study area, these species are unlikely to occur within the project footprint. Ecologists did not observe state listed plants during the field surveys. Additional surveys for listed plant species will be conducted during design and permitting. **"No adverse effect is anticipated"** for state listed plant species resulting from the proposed project.

Other Protected Species

Bald Eagle

The bald eagle was removed from the ESA in 2007 and Florida's Endangered and Threatened Species list in 2008; however, it remains protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. The bald eagle is a member of the Accipitridae family. Bald eagles tend to nest in the tops of very tall trees that provide unobstructed lines of sight to nearby habitats, particularly lakes and other open waters. Because eagles are piscivorous (fish-eating) raptors, nearly all eagles' nests occur within 1.8 miles of water (Wood et al., 1989). No critical habitat has been designated for the bald eagle.

According to the FWC's Eagle Nest locator, which maintains the location of known eagles' nests in the state, no nests are located within the study area. The nearest eagle's nest (Nest BE010) is located over 3.5 miles from the project area. Suitable habitat for the bald eagle was observed throughout the study area. Several bald eagles were observed during the field reviews. No nests were observed and no effects are anticipated.

Florida Black Bear

The Florida black bear was removed from Florida's Endangered and Threatened Species list in 2012; however, it remains protected under Chapter 68A-4.009 F.A.C., Florida Black Bear Conservation Plan. The study area is located in the occasional range of the Central Bear Management Unit (BMU).

The black bear requires large amounts of space for its home range and a variety of forested habitats, including flatwoods, swamps, scrub oak ridges, bayheads, and hammocks. Self-sustaining populations of bears are generally found on large tracks of contiguous forests with understories of berry producing shrubs or trees. These types of habitats are limited within and adjacent to the study area and are restricted to the western terminus of the project. Roadkill data, nuisance incidence data, and telemetry data published by FWC provide evidence that the Ocala/St. Johns subpopulation as well as the core population of the Central BMU do not commonly utilize the study area habitats. The FWC data shows no occurrences along the Malabar Road corridor. The closest data points include 4 reports of nuisance bears between one to two miles away from Malabar Road occurring in 1990, 2012 and 2013. No effects on the Florida Black Bear are anticipated for this

project.

5.2 Wetlands and Other Surface Waters

The following evaluation was conducted pursuant to Presidential Executive Order 11990 of 1977 as amended, Protection of Wetlands and the USDOT Order 5660.1A, Preservation of the Nation's Wetlands.

Ecologists performed a wetland evaluation of the study area. The wetland evaluation relied on literature reviews and field surveys to identify the location, extent, and functional value of wetlands in the study area; the potential direct, indirect, or cumulative effects of the project's actions to those wetlands; and available mitigation options to satisfy permit requirements from regulatory agencies. This wetland evaluation was performed in accordance with the Federal Highway Administration Technical Advisory T6640.8A regarding the preservation of wetlands.

The study methodology included GIS analysis, ETAT comments review, agency coordination, agency database searches, and field surveys. Ecologists familiar with Florida's natural plant communities conducted a wetland evaluation to identify wetland vegetation, wetland hydrology, and hydrologic indicators to determine the presence of wetlands and other surface waters as part of the Malabar Road Study. A formal wetland delineation to determine jurisdictional boundaries was not performed; however, the general limits of wetlands and other surface waters were identified in the field using the criteria established in Rule 62-340, F.A.C, and the United States Army Corps of Engineers (USACE) Wetland Delineation Manual (USACE, 1987) and Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (USACE, 2010). Additionally, wetland boundaries were identified by existing environmental permits throughout the corridor. The wetland limits have not been reviewed by the St. Johns River Water Management District (SJRWMD), Florida Department of Environmental Protection (FDEP), or USACE. Wetlands and surface waters were classified per the Florida Land Use Cover and Forms Classification System (FLUCFCS) (FDOT, 1999) and the Classification of Wetlands and Deepwater Habitats of the United States (NWI) (Cowardin et al. 1979). The Uniform Mitigation Assessment Method (UMAM) was utilized, per Chapter 62-345, F.A.C, for the functional assessment of wetlands within the Malabar Road Study.

Wetland and Surface Water Impacts

The following subsection examines the proposed direct, indirect, and cumulative effects of the proposed project alternatives on wetlands and other surface waters.

Direct Impacts

The preferred alternative will result in 1.35 acres of direct wetland impacts, 4.12 acres of direct impacts to other surface waters, and 0.11 acres of secondary impacts (**Table 1, NRE Addendum**).

Indirect Impacts

The preferred alternative may create indirect impacts to other surface waters (OSWs); however, these impacts are not considered adverse. Indirect impacts may be addressed by UMAM and offset by mitigation during the design and permitting phase if needed to address any adverse impacts incurred during the final design.

Cumulative Impacts

Cumulative impacts can result from incremental but collectively significant impacts within the basin over time. Cumulative impacts are not anticipated as a result of the proposed project because the project does not incur adverse impacts to

wetlands or OSWs. In order to provide reasonable assurances that the project will not cause unacceptable cumulative impacts, mitigation for adverse impacts will be provided within the same drainage basin pursuant to Section 373.4137, F.S.

Avoidance and Minimization

The preferred alternative was designed to avoid and minimize wetlands, OSWs, and protected species habitat impacts to the greatest extent practicable. This was accomplished by utilizing the existing right-of-way when practicable. Pond and floodplain compensation sites were selected to minimize impacts to wetlands. Additionally, the Audubon's crested caracara occupies habitat within the corridor. Pond site locations were adjusted based on the results of the 2020 caracara survey to avoid impacts to caracara nesting habitat. Additionally, the selected design team may offer to change the proposed typical section and/or drainage design so long as it meets design and permitting criteria.

Wetland Assessment

Wetlands and OSWs with potential to be affected by the proposed project were identified within the Malabar Road study area, as show in **Figure 10**. The wetland assessment was conducted in accordance with the UMAM, as described in Chapter 62-345, F.A.C. The UMAM is the state-wide methodology for determining the functional value provided by wetlands and other surface waters and the amount of mitigation required to offset adverse impacts to those areas for regulatory permits. A majority of the impacted OSWs are considered upland cut components of the existing manmade drainage system; and therefore, these OSWs were not included in the wetland assessment as mitigation is not anticipated. One impacted surface water (OSW 22) is wetland cut and has therefore been included in the assessment. The results of the UMAM assessment are provided in **Table 4-3 of the NRE**.

Conceptual Mitigation

Adverse wetland and other surface water impacts which will result from the construction of this project will be mitigated pursuant to Section 373.4137, F.S., to satisfy all mitigation requirements of Part IV of Chapter 373, F.S., and U.S.C. 1344. Compensatory mitigation for this project will be completed through the use of mitigation banks and any other mitigation options that satisfy state and federal requirements.

5.3 Essential Fish Habitat (EFH)

There is no Essential Fish Habitat (EFH) in the project area.

5.4 Floodplains

Floodplain impacts resulting from the project were evaluated pursuant to Executive Order 11988 of 1977, Floodplain Management.

A Location Hydraulics Report (LHR) was completed in October 2023 and is included in the project file.

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) (discussed in **Section 3.5 in the LHR**), portions of the project intersect Zone AE of the 100-year floodplain at the project limit's western end. These areas are associated with the Three Forks Conservation Area and Canal C-8 and have a 1 percent probability of flooding every year. The established flood water elevation is 20.0 feet NAVD. There are no federally regulated floodways within the project limits.

The MTWCD has a watershed model that includes the canals along the project. Additionally, a Stormwater Management Model (SWMM) was developed for the Canal C-1 by SJRWMD and the MTWCD. Canal C-1 is a main outfall canal for MTWCD and flows to the east approximately 1 mile north of Malabar Road. It collects water from Canals C-7, C-8, C-9, C-10, and C-20 (via C-10) and outfalls into the Indian River Lagoon. Results of this model were also utilized for data collection.

One initial preferred FPCA (Alternative 1 on **Figure 11**) was identified for the project, consisting of an offsite scraped down area adjacent to the floodplain. The initial preferred FPCA was located adjacent to Basin C-7 Pond Alternative 2 but as noted above, the City approved a residential development on the parcel where the pond/FPCA alternative was located. Thus, an additional floodplain analysis was performed to identify and recommend an FPCA (Alternative 2 on **Figure 11**) adjacent to Basin C-7 Pond Alternative 3 west of the St. Johns Heritage Parkway south of Malabar Road on a City owned parcel. During the design phase, it is recommended that alternative approaches to traditional FPCAs be considered, including creating a floodplain model or modifying the existing model(s) with the proposed improvement to demonstrate no increase in the 100-year floodplain elevation. Floodplain compensation may also be provided within the stormwater management ponds.

An existing double 96" culvert under Malabar Road at Station 62+80 provides conveyance for MTWCD Canal C-7. The existing culvert's length is approximately 120 feet. This culvert is proposed to be extended 35 feet to the north and 39 feet to the south for a total proposed length of 194 feet. The extension will use the same configuration and diameter (double 96") as the existing culvert to accommodate the proposed roundabout. A preliminary hydraulic analysis was conducted for this culvert indicating the double 96" diameter pipes to be adequate for Canal C-7 flows and proposed roadway improvements.

An existing 8' x 6' concrete box culvert under Malabar Road at Station 89+18 provides conveyance for MTWCD Canal C-8. The existing culvert's length is approximately 45'. This culvert is proposed to be extended 30' to the north and 27' to the south for a total proposed length of 102'. The extension will use the same dimensions as the existing culvert to accommodate the proposed roadway improvements, including the proposed shared-use path on Malabar Road's north side. A preliminary hydraulic analysis was conducted for this culvert indicating the 8' x 6' dimensions to be adequate for Canal C-8 flows and proposed roadway improvements.

An existing 54" culvert under Malabar Road at Station 115+71 provides conveyance for MTWCD Canal C-9. The existing culvert's length is approximately 44'. This culvert is proposed to be extended 35' to the north and 23' to the south for a total proposed length of 102'. The extension will use the same diameter (54") as the existing pipe to accommodate the proposed roadway improvements, including the proposed shared-use path on Malabar Road's north side. A preliminary hydraulic analysis was conducted for this culvert indicating the 54" diameter to be adequate for Canal C-9 flows and proposed roadway improvements.

The MTWCD does not allow multi-barrel pipes, thus the piping either needs to be single barrel or a box culvert. A preliminary hydraulic sizing analysis determined that single 8' x 6' box culverts would be needed at crossings under Hoffer Avenue, Hurley Boulevard, Hillcrest Avenue, across from the western Palm Bay Public Works driveway, the driveway for the Methodist Church (~500' west of Jupiter Boulevard), and Jupiter Boulevard.

It should also be noted that coordination with MTWCD indicated that flooding occurs around Belvedere Road during large storm events, where Canal C-20 overtops into nearby streets and yards. A review of the MTWCD data indicates that two of the downstream culverts (located at the entrances to the Hoyle property (Sta. 210+00) and Cox property (Sta. 213+50))

are undersized (only 48" diameter) relative to the upstream culverts, which is likely contributing to the overtopping. It is recommended to replace these two undersized culverts with 66" diameter culverts to alleviate some of the flooding concern.

An existing 58" x 36" elliptical culvert underneath Maywood Avenue (approximately Station 245+40) provides conveyance for MTWCD Canal C-20. The existing culvert's length is approximately 158'. The culvert is proposed to be extended 154' to the west for a total proposed length of 312'. A hydraulic analysis was not performed on this culvert since it serves as a side drain to Malabar Road; however, due to the extension and known flooding issues in this area, a replacement culvert is proposed with a 54" diameter which has approximately the same cross sectional area as the next downstream culvert. During the design phase, hydraulic modeling should be performed for all culverts within Canal C-20.

It was concluded that the project will impact approximately 1.41 ac-ft of floodplain based on the proposed roadway alignment and an additional 0.50 ac-ft for the recommended preferred pond alternative (total of 1.91 ac-ft). These impacts are minimal compared to the overall extent of the floodplain, therefore, it was determined that the floodplain encroachment is classified as "minimal". Minimal encroachments on a floodplain occur when there is a floodplain involvement, but the impacts on human life, transportation facilities, and natural and beneficial floodplain values are not significant and can be resolved with minimal efforts.

As concluded in the *Location Hydraulics Report*, the following floodplain statement is a slightly modified version of statement Number 4 in the FDOT PD&E Manual (Part 2, Chapter 13 "Floodplains"), tailored for this project:

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

The floodplain impact area map is shown in **Figure 11**.

5.5 Sole Source Aquifer

There is no Sole Source Aquifer associated with this project.

5.6 Water Resources

A Pond Siting Report (PSR) was completed in October 2023 and is included in the project file.

There are a total of five preferred pond alternatives and three supplemental swales. Three preferred ponds will be newly constructed, offsite wet detention ponds. One preferred pond site is located within an existing City of Palm Bay-owned parcel that has a small amount of additional capacity available. The final preferred pond site for Basin C-10 is a system of dry linear swales located adjacent to Malabar Road that will utilize remnant parcels created by the widening of Malabar Road. A supplemental linear swale in Basin C-20 will also utilize remnant parcels and will supplement the treatment and attenuation volume provided in the wet detention pond for Basin C-20.

In most cases, the pond site with the lowest estimated cost and least impact to the environment was selected as the preferred site, and an effort was made to utilize parcels already owned by the City of Palm Bay or other public agencies. One exception is the preferred pond for Basin C-8 and C-9, which has a slightly higher cost than the other alternative for

this basin. The more expensive pond was selected because it is located on a City owned parcel and the City expressed their desire to utilize this parcel as the preferred pond site for Basins C-8 and C-9.

Proposed ponds (wet detention and dry retention) and linear swale systems will provide water quality treatment and water quantity attenuation for the project, following guidelines by the SJRWMD and the City of Palm Bay. The required treatment and attenuation volume for the project is anticipated to be 12.93 ac-ft and the proposed stormwater systems will provide a total of 24.61 ac-ft of treatment and attenuation volume.

The project traverses Waterbody ID (WBID) 3090 - Melbourne-Tillman (C-1) Canal, which is not impaired for nutrients according to the current FDEP 303(d) list of impaired water bodies. However, Canal C-1 eventually outfalls to the Indian River Lagoon, which is impaired for both Total Phosphorus and Total Nitrogen and is subject to a Total Maximum Daily Load (TMDL). As a conservative measure, nutrient loading analysis was performed on all basins to show there will be no adverse effects to the downstream waters. All analysis was performed using BMPTRAINS 2020 software, developed by the University of Central Florida Stormwater Management Academy. Using the BMPTRAINS 2020 software is a recognized Innovative and Integrative Best Management Practices (BMPs) for Surface and Groundwater Protection. All of the preferred pond sites showed a reduction in Phosphorus loading when compared with pre-development conditions. The three proposed wet detention ponds did not meet Nitrogen removal; however, the dry swale for Basin C-10 West & East provides enough Nitrogen removal so that when considered as a whole, the project has a net reduction in Nitrogen loading. Therefore, this project meets the requirements for both Phosphorus and Nitrogen removal.

Environmental Look Arouds (ELAs) provide a unique opportunity to team up with regional stakeholders to explore watershed wide stormwater needs and alternative permitting approaches for the project. Discussion of ELA opportunities occurred several times throughout the course of this study, including two stakeholder meetings held on August 5, 2020 and March 31, 2021 for the purpose of discussing the location and intent of various stormwater pond alternatives, coordinating with the MTWCD, and seeking pond site approval from the City of Palm Bay. There are also several ongoing FDOT, Brevard County, and City of Palm Bay roadway projects in the area near Malabar Road that should be further evaluated during the Malabar Road design phase for joint-use opportunities. Two water quality projects, the Save Our Indian River Lagoon (SOIRL) Project and the SJRWMD C-10 Reservoir Project, were also identified and discussed with Brevard County and the SJRWMD, but it was determined that neither of these projects would be feasible for regional stormwater management.

Please refer to the project's Pond Siting Report and Water Quality Impact Evaluation (WQIE) Checklist located in the project file for more detail.

As authorized by the CWA, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources discharges from construction activities. The Environmental Protection Agency (EPA) has delegated its authority to implement the NPDES program to the FDEP. Based on potential impacts to at least one acre of land, it is anticipated that a NPDES permit will be required for the proposed project.

5.7 Aquatic Preserves

There are no aquatic preserves in the project area.

5.8 Outstanding Florida Waters

There are no Outstanding Florida Waters (OFW) in the project area.

5.9 Wild and Scenic Rivers

There are no designated Wild and Scenic Rivers or other protected rivers in the project area.

5.10 Coastal Barrier Resources

There are no Coastal Barrier Resources in the project area.

DRAFT

6. Physical Resources

The project will not have significant impacts to physical resources. Below is a summary of the evaluation performed for these resources.

6.1 Highway Traffic Noise

The following evaluation was conducted pursuant to 23 CFR 772 Procedures for Abatement of Highway Traffic Noise and Construction Noise, and Section 335.17, F.S., State highway construction; means of noise abatement.

A Noise Study Report (NSR) was completed in October 2021 and revised October 2023 and is included in the project file. A total of 354 noise sensitive sites were analyzed for project noise impacts. The analysis determined that the preferred alternative increases traffic noise levels throughout the project corridor by an average of 3.2 dB(A). While none of the noise increases are considered substantial (i.e., 15 or more decibels over existing levels), project noise levels are predicted to meet or exceed the FHWA Noise Abatement Criteria (NAC) at five receptors.

To mitigate these impacts, two noise barriers were considered as an abatement measure. One barrier was analyzed for the two impacted residences represented by receptor 7-9. This receptor is located on the southern right-of-way of Malabar Road spanning from Ware Avenue to just east of Santa Rosa Avenue. However, none of the dimension options meet the cost-reasonableness requirement; hence the barrier is not considered cost-reasonable. The second analyzed barrier is for three benches at the Madalyn Landing Apartments represented by the 7-12 receptors. The noise barrier would require openings at Garvey Road and the apartment entrance to allow access to Malabar Road. The western-most bench cannot be benefited from a noise barrier due to the Garvey Road access. The two eastern benches benefit from a noise barrier, but to be cost-reasonable, a minimum of 213 people must utilize the two benches for one hour every day of the year. Since this is an unrealistic expectation, the barrier is not considered cost-reasonable. Neither barrier meets the FDOT cost-reasonableness criterion.

Based on the existing land use within the limits of this project, construction of the proposed roadway improvements may have temporary noise and vibration impacts. It is anticipated that the application of the **FDOT Standard Specifications for Road and Bridge Construction** will minimize or eliminate most of the potential construction noise and vibration impacts. However, should unanticipated noise or vibration issues arise during the construction process, the Project Manager, in concert with the City's Noise Specialist and the Contractor, will investigate additional methods of controlling these impacts.

6.2 Air Quality

This project is not expected to create adverse impacts on air quality because the project area is in attainment for all National Ambient Air Quality Standards (NAAQS) and because the project is expected to improve the Level of Service (LOS) and reduce delay and congestion on all facilities within the study area.

Construction activities may cause short-term air quality impacts in the form of dust from earthwork and unpaved roads. These impacts will be minimized by adherence to applicable state regulations and to applicable FDOT Standard Specifications for Road and Bridge Construction.

6.3 Contamination

The Contamination Screening Evaluation Report (CSER) (completed June 2023 and included in the project file) has identified 21 sites which may have some risk of contamination impacts to this project. Using the FDOT Risk Ratings, 12 Low Risk sites (**Table 5**) and 9 Medium Risk sites (**Table 6**) have been identified. In addition to the sites, each of the preferred alternative pond sites were reviewed for risk potential. Seven pond sites have low risk potential and one pond site has a medium risk potential, as shown in **Table 7**. Level II Impact to Construction Assessments may be required for the Medium Risk sites along Malabar Road. The potential contamination sites are shown in **Figure 12**.

Table 5: Low Risk Contamination Sites from Level 1 CSER

Site Number	Site Name	Site Address	Risk Potential
4	Biarritz Disaster Debris Management Site	1224 - 1228 Biarritz Street	Low
5	City of Palm Bay - Public Works	1050 Malabar Road	Low
8	O'Reilly Auto Parts	235 Malabar Road	Low
9	Autozone	260 Malabar Road	Low
10	Coastal Biosystem	270 Malabar Road	Low
11	Sun Clean Dry Cleaners	190 Malabar Road #123	Low
12	Winn-Dixie Store #2230	190 Malabar Road	Low
13	Bennett Auto Supply	142 Malabar Road	Low
15	SPILLS Site	Malabar Road & Minton Road	Low
18	Lubrication Specialist Inc.	6369 Minton Road	Low
19	Construction Yard	120 Malabar Road	Low
20	Palm Bay City Hall	120 Malabar Road	Low

Table 6: Medium Risk Contamination Sites from Level 1 CSER

Site Number	Site Name	Site Address	Risk Potential
1	Cattle Pen	Malabar Road	Medium
2	Agricultural Barn	2200 Malabar Road	Medium
3	Cattle Pen	Malabar Road	Medium
6	Circle K #2726513	900 Malabar Road	Medium
7	Malabar Cove	3 NW Malabar Road	Medium
14	Bob Youtzy Landclearing	201 Malabar Road	Medium
16	7-Eleven Food Store #32756	6405 Minton Road	Medium
17	Cumberland Farms	105 Malabar Road / 6375 Minton Road	Medium
21	Historical Citrus	N/A	Medium

Table 7: Preferred Alternative Pond Site Risk Potential from Level 1 CSER

Pond Name	Location	Risk Potential	Relevant Site Number
C-7 Alt. 3	Station 53+80 - 55+53 Right	Low	N/A

C-7 Alt. 3 FPCA	Station 53+80 - 55+53 Right	Low	N/A
C-8 & C-9 Combined	Station 102+00 - 104+40 Left	Low	N/A
C-10 East (Swale 1)	Station 145+00 - 155+00 Right	Low	N/A
C-10 East (Swale 2)	Station 155+70 - 166+20 Right	Low	N/A
C-10 East (Swale 3)	Station 169+15 - 175+45 Right	Low	N/A
C-20 Supplemental Swale	Station 198+45 - 201+00 Right Station 204+40 - 208+70 Right	Low	N/A
C-20 Alt. 1	Station 229+00 - 231+85 Right	Medium	21

The low risk sites are all but two sites adjacent to Malabar Road. These 10 sites adjacent to Malabar Road contain the City of Palm Bay Public Works Department and City Hall, three auto supply/repair businesses, a grocery store, a dry cleaners, construction yard, a bio-medical transportation company, and a SPILLS site at the Malabar Road and Minton Road intersection. With the exception of the Palm Bay Public Works Department, all low risk sites are located less than one-half mile from the project's eastern terminus in the more developed area near the Malabar Road and Minton Road intersection.

The medium risk sites includes two cattle pens plus an agricultural barn. One cattle pen is located approximately one-half mile west of the project's eastern terminus at the Malabar Road and St. Johns Heritage Parkway and will not be impacted by this project. The agricultural barn is located where the project proposes a stormwater retention pond and floodplain compensating storage area. The CSER describes this location to have had a residence and barn with adjacent citrus grove. These structures do not remain and the site is currently vacant with overgrown vegetation. The other cattle pen is located on Malabar Road's south side just east of the Thunderbird Ave. intersection. This site was identified in a 1943 aerial but not present afterwards and is currently overgrown vegetation. Approximately 16 feet of additional right-of-way will be needed for the preferred alternative at this location. There are three gas stations with medium risk rating. The Circle K is located in the southwest corner of Malabar Road and Jupiter Boulevard. The Circle K was rebuilt in 2019 and during the site plan approval process, property adjacent to Malabar Road was donated to the City of Palm Bay. The roadway widening proposed at this location is entirely within property the City of Palm Bay currently owns. The other two gas stations are located east of Minton Road on the north and south sides of Malabar Road (outside the study corridor). The Malabar Cove is a documented arsenic groundwater contamination plume. This has been shown as the C-20 Alternative 2 pond but this is not a preferred pond site. The widening in this area will be to the south.

As noted in the project's Preliminary Engineering Report, two pond site changes occurred after the preferred pond sites were selected (C-7 and C-20) thus the contamination evaluation was updated to account for these preferred pond site changes. The preferred C-7 Alternative 3 pond site and FPCA now has low risk potential (was previously medium risk). The preferred C-20 Alternative 1 pond site has medium risk potential and a Level II Impact to Construction Assessments (ICA) was performed due to its historical citrus grove/agricultural land use. Based on the Level II ICA findings, C-20 Alternative 1 pond construction activities should not require special handling, characterization, and disposal provisions.

6.4 Utilities and Railroads

A Utility Assessment Package (UAP) was completed in October 2023 and is included in the project file. Nine Utility Agency/Owners (UAO) have been identified within the study area through the Sunshine 811 Design Ticket and utility coordination efforts. Based on information provided by the UAOs, the existing utilities identified on the project were evaluated and potential utility impacts due to the preferred alternative were quantified. From Sta. 181+66 to 202+90 within

the Canal C-20 relocation area, there is only 4 feet between proposed back of the shared-use path to the front of the retaining wall on the south side of Canal C-20. For this reason, the overhead utility poles on the north side of Malabar Road are proposed to be relocated to the south side of Malabar Road in this section. **Table 8** outlines the preferred alternative potential utility impacts and associated relocation costs.

Mitigation measures would be taken during the project's design phase to minimize impacts to the existing utilities to the fullest extent possible. If impacts are unavoidable, design alternatives would be reviewed to allow for relocation of impacted facilities in a manner that minimizes cost to the UAO and disruption to their customers.

Since relocations of facilities located in easements would likely be eligible for reimbursement, measures will be taken to avoid impacting facilities identified in lands of compensable interest. Utility companies that have been identified as having potential easements are listed in the project's UAP. Utility coordination will be performed during the project's design phase to clearly identify all project utility easements and potential reimbursable relocations.

Table 8: Potential Utility Impacts

Utility Company	Description
AT&T Distribution	Multiple buried, overhead and other lines on both the north and south sides of Malabar Road
Bright House Networks, LLC	Existing overhead and buried CATV on north and south side of Malabar Road
City of Palm Bay Utilities Department	Existing 16" sewer force main south of Malabar Road Approximately 1,200 ft of existing 8" sanitary sewer runs parallel to the south side of Malabar Road. west of Minton Road Existing 16" - 20" water on north side of Malabar Road
Crown Castle Fiber	Two 1.5" HDPE Conduits cross Malabar Road near STA. 175+50
Florida Power and Light-Distribution	Poles in easement impacts throughout the project. Primarily runs that branch off north and south of Malabar
Florida Power and Light-Transmission	No reimbursable impacts anticipated
Hotwire Communications	No reimbursable impacts anticipated
Uniti Fiber LLC	No reimbursable impacts anticipated

6.5 Construction

The Malabar Road four lane widening will be a complex construction project due to the drainage features/canals along the study corridor, especially near the Jupiter Boulevard intersection. Also, some of the existing roadway is centered in the new construction, so utilizing the existing two-lane roadway for maintenance of traffic (MOT) may not be feasible in some sections. The Transportation Management Plan for the four-lane widening is detailed below:

- Phase I: Two caracara nests are present just west of Heritage High School, west of the St. Johns Heritage Parkway. Before construction begins on the western end of the corridor, a caracara survey will be conducted to determine if the nests are still present and their level of activity. If the nests are still present, construction within 1,500 meters of the nests (likely at the Malabar Road at St. Johns Heritage Parkway intersection) will need to occur between May and

October. Install temporary pavement to Jupiter Boulevard's west side over the box culvert to accommodate a lane shift to the west. This allows for the new box culvert's partial installation. Once the first half is completed, rebuild the roadway (without the curb) over the box culvert's new portion with temporary pavement to allow for the Jupiter Boulevard traffic shift to the east. Complete installation of the new box culvert's remaining portion. Rebuild Jupiter Boulevard's remaining portion over the culvert, including curb and gutters and sidewalks. While maintaining traffic on existing roadway, install drainage on Malabar Road's north side, including adjusted drainage ditch with walls, and any pipe extensions called for in the plans. A NPDES will be required before constructing these drainage improvements. Add temporary pavement as needed to allow for roadway restriping, to allow traffic to be shifted to Malabar Road's north side, creating two lanes of bi-directional traffic in the next phase. Access to driveways and businesses will always be maintained during all phases. The proposed bridge will require phased construction to maintain existing travel lanes on Malabar Road during construction. Phase I also includes the construction of the proposed bridge's southern portion with existing traffic maintained on the existing bridge.

- Phase II: Install MOT devices, restripe, and shift traffic to the pavement's northern part. Close south side sidewalk, where present, and detour pedestrian to the north side sidewalk. Construct the proposed eastbound lanes, outside curb and gutter and proposed south side sidewalk. Construct inside curb and gutter where possible, but do not construct any inside curb and gutter where right turns will be obstructed when bi-directional traffic is shifted to new roadway in the next phase. Install temporary pavement if needed. Do not construct curb and gutter/separators in roundabout envelopes including center circles as these will be constructed in a later phase. Temporary pavement will be placed in roundabout envelopes where curb and gutter/separators and inner circle were not constructed to allow for smoother traffic flow through the roundabout envelope in the next phase. Construct half of the roundabout's north-south legs at a time and construct temporary pavement if needed to allow for two-way traffic access.
- Phase III: Adjust MOT devices, add temporary striping, and shift bi-directional traffic to newly constructed section of roadway and newly constructed southern portion of the proposed bridge. The existing bridge will be demolished. Construct WB sections of proposed roadway, curb and gutter, and sidewalk. This includes the construction of the proposed bridge's northern portion.
- Phase IV: Temporary restripe for final lane configurations. Relocate MOT devices. Remove temporary pavement and complete construction of curb and gutter/traffic separators and round about inner circles during overnight lane closures.
- Phase V: Remove MOT devices. Place final striping.

Figure 13-1 through **Figure 13-12**(attached)show the Phase II and III typical sections.

7. Engineering Analysis Support

The engineering analysis supporting this environmental document is contained within the Malabar Road PD&E Preliminary Engineering Report.

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8. Permits

The following environmental permits are anticipated for this project:

State Permit(s)

DEP or WMD Environmental Resource Permit (ERP)
DEP National Pollutant Discharge Elimination System Permit
FWC Gopher Tortoise Relocation Permit
State 404 Permit

Status

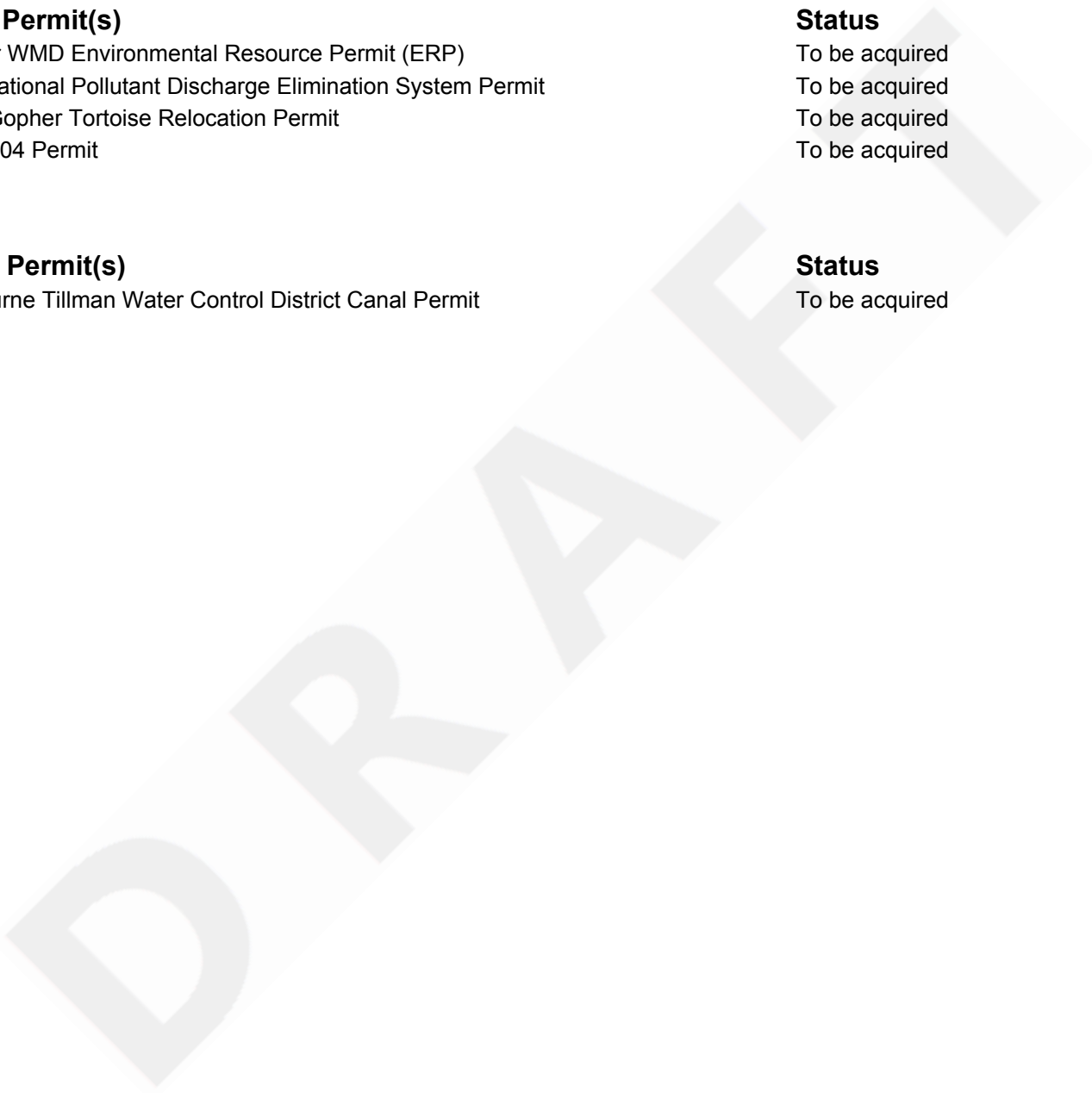
To be acquired
To be acquired
To be acquired
To be acquired

Local Permit(s)

Melbourne Tillman Water Control District Canal Permit

Status

To be acquired



9. Public Involvement

The following is a summary of public involvement activities conducted for this project:

Summary of Activities Other than the Public Hearing

A Public Involvement Plan was completed January 2020 and is included in the project file.

Project Kick-Off Letter

To announce the project's start, and in place of a project kick-off meeting, letters were emailed to elected and appointed officials, and newsletters were mailed to those whose property lies, in whole or part, within at least 300 feet on either side of each project alternative, as well as other local citizens who may be impacted by the construction of this project. The project kick-off letter described the PD&E study process, the project purpose and need, and the project schedule. Agency websites included the names and contact information for elected and appointed officials. The Kick-Off Letter was mailed in February 2020.

Project Update Meetings

Various agency meetings were conducted to give a project update presentation and collect comments. Project update presentations were provided to the following agencies on the following days:

1. City of Palm Bay, Melbourne-Tillman Water Control District (MTWCD), and FDOT - project kick-off meeting - In-person meeting conducted at the Public Works Green Modular Conference Room on 11/18/2019;
2. City of Palm Bay, MTWCD, and Brevard County - design review meeting - Conducted virtually via Microsoft Teams on 4/17/2020;
3. City of Palm Bay, Brevard County, and MTWCD - access management meeting - Conducted virtually via Microsoft Teams on 7/22/2020
4. City of Palm Bay, MTWCD, Brevard County, SCTPO, and FDOT - public meeting comments review meeting - Conducted virtually via Microsoft Teams on 10/20/2020;
5. SCTPO Citizen Advisory Committee - Presented in-person at the Center of Collaboration on 10/5/2020;
6. SCTPO Technical Advisory Committee - Presented in-person at the Center of Collaboration on 10/5/2020;
7. SCTPO Governing Board - Presented in-person at the Center of Collaboration on 10/8/2020;
8. SCTPO Bicycle and Pedestrian Technical Advisory Committee - Presented virtually via GoToWebinar on 10/26/2020;
9. City of Palm Bay, MTWCD, and Brevard County - Discussion of preferred pond sites - Conducted virtually via Microsoft Teams on 3/31/2021;
10. City of Palm Bay and SCTPO - Discussion of final design funding options - Conducted virtually via Microsoft Teams on 4/8/2021;
11. FDOT - Review comments on draft PER - Conducted virtually via Microsoft Teams on 5/4/2022;
12. City of Palm Bay and MTWCD - Review changes to Canal C-20 retaining wall - Conducted virtually via Microsoft Teams on 6/28/2022;
13. City of Palm Bay and FDOT - Environmental Look Around Meeting - Conducted virtually via Microsoft Teams on 10/11/2022;
14. City of Palm Bay and SJRWMD - Environmental Look Around Meeting - Conducted virtually via Microsoft Teams on 12/9/2022; and

15. On-Site Property Owner Representative (Tony Masone) - Regarding Pond C-7 relocation - Conducted in-person on 4/26/2023.
16. City of Palm Bay City Council - Presented in-person on 3/7/2024;
17. SCTPO Technical Advisory Committee/Citizen's Advisory Committee - Presented in-person at the Center of Collaboration on 7/8/2024; and
18. SCTPO Governing Board - Presented in-person at the Center of Collaboration on 7/11/2024.

Alternatives Public Workshop

To announce the September 24, 2020 Alternatives Public Meeting and solicit participation, the following notifications were sent to potential attendees or published on the following dates:

1. Invitation letters emailed to 49 elected and appointed officials - 08/25/2020;
2. Press release submitted to City of Palm Bay contacts distribution list - 09/01/2020;
3. Newsletters mailed to 1,134 property owners and interested persons - 09/09/2020;
4. Display advertisement published in Florida Today - 09/11/2020;
5. Notification posted in the Florida Administrative Register (FAR) Ad - 09/14/2020; and
6. Notification posted to the public notices section of the City of Palm Bay's Website - 09/15/20.

The Alternatives Public Meeting was a virtual public meeting held on Thursday, September 24, 2020 at 5:30 p.m. using GoToWebinar. Three days prior to the virtual public meeting, the public meeting displays and handout were posted in City Hall's Community Meeting Room A and on the project website for public review. Attendees were invited to register for the virtual public meeting using the registration link on the project website. The virtual public meeting started at 5:30 p.m. with the City's consultant project manager describing the project background and where to view the meeting materials and providing an overview of the two concept alternatives. The City's consultant public involvement coordinator provided an overview of the different ways to submit a comment or question during and after the webinar, and other options available to hear/view the webinar. A recorded narrated presentation began at 6:00 p.m.

During the meeting, attendees could submit comments or questions by typing them into the GoToWebinar's questions box on the control panel. If attendees called in to the meeting or were watching the meeting through the City's website, they could submit comments after the meeting using printed public comment forms available at City Hall. Questions and comments could be submitted by mail, email or deposited into a comment box at City Hall's Community Meeting Room A, or by digital comment forms on the project website. The comment period officially closed on October 5, 2020; however, comments received after this date were also included in the public record. There were seventy-eight (78) registrants for the public meeting, of which forty-one (41) attended. Eight (8) comments were received during the public comment period from Tuesday, September 22, 2020 to Monday, October 5, 2020. All public comments were responded to in writing, and the following summarizes the comments received:

- Two of the comments specifically noted support of the project and two additional comments supported the traffic signal alternative as opposed to roundabouts. Responses to the traffic signal vs roundabout comments focused on the benefits of roundabouts in this specific context.
- Four comments asked various questions related to proposed pedestrian/bicycle facilities along the study corridor. Responses to these comments focused on the various pedestrian/bicycle alternatives assessed and the design criteria needing to be met for the corridor.
- Two comments asked various right-of-way questions, one specifically regarding the impacts to Canal C-20. Responses focused on needing to legally determine right-of-way during the design phase and noting that specific drainage

features will be coordinated with the MTWCD during the design phase.

The project's

Comments and Coordination Report

includes a package of meeting sign-in sheets, the presentation, copies of public comment forms, a list of meeting materials provided on the project website, and the

Alternatives Public Meeting Summary

which

contains the comments received and the written response to the comments.

Transit Coordination

During alternatives development, Space Coast Area Transit was contacted to verify existing transit stops along the Malabar Road study corridor and provide guidance on any potential future transit stops. Space Coast Area Transit confirmed the existing transit stops along the corridor and also noted at the present time there are no plans for the addition of any new bus stop locations in the near future. However, with the development going on the area, Space Coast Area Transit may get requests for new stops to be installed once the new subdivisions along the corridor are constructed. This email correspondence took place January 28, 2021 through February 1, 2021. During development of the preferred alternative, a meeting was held with Space Coast Area Transit on September 23, 2021 to review the proposed bus stop locations.

Date of Public Hearing:

Summary of Public Hearing

Section to be updated after Public Hearing (tentatively scheduled for November 14, 2024).

10. Commitments Summary

1. The City of Palm Bay will conduct a species-specific survey for the Audubon's crested caracara per USFWS protocol during the design and permitting phase of the proposed project.
2. The City of Palm Bay will avoid construction within 1,500 meters of caracara nests during nesting season by avoiding construction activities from November 1st to April 30th for areas within 1,500 meters of the potential nests.
3. The most recent version of the USFWS Standard Protection Measures for the Eastern Indigo Snake will be utilized by the City of Palm Bay during construction.
4. The City of Palm Bay will provide appropriate mitigation for impacts to wood stork SFH, per the Wood Stork Effect Determination Key (USFWS, 2008).
5. The City of Palm Bay commits to reinitiating consultation during design and permitting with USFWS for the eastern black rail and providing the information necessary to determine the type, degree, and extent of impacts to listed species potentially adversely impacted by the proposed project. The City of Palm Bay will develop mitigation measures in consultation with the USFWS to offset unavoidable impacts. Completion of consultation and documentation of the project's compliance with the avoidance, minimization and mitigation requirements for the impacted resources will be provided by the City of Palm Bay in a subsequent project reevaluation prior to each segment.
6. If the monarch butterfly is listed by the USFWS as Threatened or Endangered and the project may affect the species, the City of Palm Bay commits to re-initiating consultation with USFWS to determine appropriate avoidance and minimization measures for protection of the newly listed species.
7. If the tricolored bat is listed by the USFWS as Threatened or Endangered and the project may affect the species, the City of Palm Bay commits to re-initiating consultation with USFWS to determine appropriate avoidance and minimization measures for protection of the newly listed species.
8. The City of Palm Bay is committed to analyzing traffic noise impacts at all nearby noise-sensitive land uses. All currently vacant lots with active building permits have been included in this analysis. If a future noise-sensitive land use receives a building permit before the project's Date of Public Knowledge, they will be assessed for traffic noise impacts during the project's final design phase of development.

11. Technical Materials

The following technical materials have been prepared to support this Environmental Document and are included in the Project File.

Malabar Road Conceptual Stage Relocation Plan
Cultural Resources Assessment Survey (CRAS) Ponds Addendum #1
Cultural Resources Assessment Survey (CRAS) Ponds Addendum #2
Cultural Resources Assessment Survey (CRAS) Pond C-7 Alt.3 Addendum
Cultural Resources Assessment Survey (CRAS)
Fred Poppe Regional Park Section 4(f) Resource Form
Malabar Road Location Hydraulics Report
Malabar Road Water Quality Impact Evaluation Checklist
Malabar Road Pond Siting Report (PSR)
Natural Resources Evaluation (NRE)
Malabar Road NRE Addendum
Malabar Road Utilities Assessment Package (UAP)
Malabar Road Noise Study Report (NSR)
Malabar Road Contamination Screening Evaluation Report (CSER)
Malabar Road PD&E Preliminary Engineering Report
Malabar Road PD&E Geotechnical Report
Project Traffic Analysis Report
Malabar Road Public Involvement Plan

Attachments

Planning Consistency

Project Plan Consistency Documentation

Social and Economic

Figure 3 Community Features Map

Figure 5 Existing Land Use Map

Figure 6 Future Land Use Map

Malabar Road USDA Farmland Conversion Impact Rating Form

NRCS Correspondence

Figure 4 New Developments Map

Figure 7 Trail and Transit Facilities Map

Cultural Resources

SHPO Concurrence Letter

SHPO Concurrence Letter - Ponds Addendum #1

SHPO Concurrence Letter - Pond C-7 Alt. 3 Addendum

SHPO Concurrence Letter - Ponds Addendum #2

Fred Poppe Regional Park Section 4(f) Resource Form

Natural Resources

United States Fish and Wildlife Service (USFWS) Natural Resource Evaluation (NRE) Concurrence Letter - Digital Signature

Figure 8 Protected Species and Habitat Map

Figure 9 Caracara Survey Nest Locations and Impacts Map

Figure 10 Wetlands Map

Figure 11 Floodplains Map

FWC Species Concurrence Letter

USFWS NRE Addendum Species Concurrence Letter

FWC NRE Addendum Species Concurrence Letter

Physical Resources

Figure 13 MOT Phase II and III Typical Sections

Figure 12 Potential Contamination Site Map

Planning Consistency Appendix

Contents:

Project Plan Consistency Documentation

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2045 Long Range Transportation Plan

15.0 LRTP Amendments

Amendment Five

Due to funding being advanced, SR 524 Widening project has been updated to reflect the funding change in Table 11.2: Other Arterial (State/Federal Funds) Projects of the LRTP.

The amendment also includes a minor administrative update to Malabar Road Widening Project to reflect a funding change in Table 11.4 Mixed Funding Projects of the LRTP. The changes below do not impact the cost feasibility of current or future projects.

Cost Feasible Project No.	FM #	Facility	From	To	Phase	Year	Amount
T2.6	4379831	SR 524 Widening	Friday Road	Industry Road	PE	FY 2025	\$7,402,342
T4.11	4372101	Malabar Road Widening	St. John's Heritage Parkway	Minton Road	PE	FY 2024	\$10,039,000

TABLE 11.4: MIXED FUNDING PROJECTS in millions YOY \$s

Table ID	FACILITY	FROM	TO	PROJECT	SOURCE	2021-2025				2026-2030				2031-2035				2036-2040				2041-2045				2021-2045 TOTAL
						PLN/PD&E	PE	ROW	CAP/CST	PD&E	PE	ROW	CST	PD&E	PE	ROW	CST	PD&E	PE	ROW	CST	PD&E	PE	ROW	CST	
T4.1	Babcock St.	South of Micco Rd./Deer Run Rd.	Malabar Rd.	Add Lanes and Reconstruct	LF		\$ 1.50																	\$ 1.50		
					TMA (SU)		\$ 0.93																	\$ 0.93		
					TRIP, TRWR		\$ 1.47																	\$ 1.47		
T4.2	Transit and Transportation Disadvantaged Projects				DPTO																			\$ 14.31		
					FTA																			\$ 37.19		
					LF																			\$ 19.13		
T4.3	Aviation Projects				DDR, DPTO																			\$ 19.51		
					FAA																			\$ 28.64		
					LF																			\$ 14.04		
T4.4	Seaport, Spaceport, Rail, and Freight Projects				DIS, DPTO, GMR, SIWR																			\$ 280.17		
					PORT																			\$ 3.60		
					LF																			\$ 266.73		
T4.5	Space Coast TPO SU/TALU Reserves				TMA (SU)																			\$ 14.33		
					TALU																			\$ 1.68		
T4.6	Brevard-Space Coast TPO Planning Studies				DPTO, DU	\$ 0.97																		\$ 0.97		
					LF	\$ 0.11																		\$ 0.11		
T4.7	Brevard-Space Coast TPO UPWP				PL	\$ 3.61																		\$ 3.61		
					TMA (SU)	\$ 2.22																		\$ 2.22		
T4.8	US 192	Coastal Ln.	Wickham Rd.	Widen to 6 Lanes	Melbourne Impact Fee					\$ 0.64	\$ 2.56													\$ 3.20		
					Other Arterial																			\$ 52.74		
T4.9	US 192	St. Johns Heritage Pkwy.	Coastal Ln.	Widen to 6 Lanes/Interchange Improvements	Melbourne Impact Fee					\$ 0.25	\$ 0.99													\$ 1.23		
					Other Arterial																			\$ 17.05		
T4.10	Hollywood Blvd.	Palm Bay Rd.	US 192	Widen to 4 Lanes	TMA (SU)																			\$ 2.99		
					Brevard County Impact Fee																			\$ 33.23		
					TMA (SU)		\$ 0.18																	\$ 1.68		
					ACSU		\$ 1.94																	\$ 0.29		
					CARU/CARL		\$ 0.29																	\$ 0.15		
					TALT		\$ 0.15																	\$ 0.48		
					TALU		\$ 0.48																	\$ 7.00		
					Palm Bay Impact Fee		\$ 7.00																	\$ 21.92		
T4.11	Malabar Rd.	St. Johns Heritage Pkwy.	Minton Rd.	Widen to 4 Lanes	TMA (SU)		\$ 0.18																	\$ 0.18		
					ACSU		\$ 1.94																	\$ 1.94		
					CARU/CARL		\$ 0.29																	\$ 0.29		
					TALT		\$ 0.15																	\$ 0.15		
					TALU		\$ 0.48																	\$ 0.48		
					Palm Bay Impact Fee		\$ 7.00																	\$ 7.00		
																								\$ 30.32		
																								\$ 40.51		
																								\$ 77.83		
SUBTOTAL - Other Arterial						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 69.80		
SUBTOTAL - Misc. State/Federal						\$ 4.57	\$ 3.85	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 391.84	
SUBTOTAL - TMA (SU)						\$ 2.22	\$ 1.11	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 22.15	
SUBTOTAL - TALU						\$ -	\$ 0.48	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2.16
SUBTOTAL - Local Impact Fees						\$ -	\$ 7.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 115.49
SUBTOTAL - Misc. Local Funds						\$ 0.11	\$ 1.50	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 301.50
TABLE 11.4 SUBTOTAL						\$ 6.90	\$ 13.94	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 902.94	
TABLE 11.4 TOTAL						\$720.16				\$72.47				\$40.51				\$17.05				\$52.74				\$ 902.94

Phase	Fund Source	2024	2025	2026	2027	2028	Total
Proj# 4269054 ST JOHNS HERITAGE PKWY/ELLIS RD FROM JOHN RODES TO WICKHAM ROAD					Length: 1.7 MI		*SIS*
Type of Work: ADD LANES & RECONSTRUCT					Lead Agency: MANAGED BY FDOT		
					LRTP#: Page 33, Goal 2		
Description: Goes with Project Nos 426905-2 (Brevard County LAP Project); Goes with Project Nos. 4269051 (PD&E Phase) and 4269053 (New Interchange)							
ROW	LF	1,760,764	0	0	0	0	1,760,764
ROW	SA	7,883,493	625,620	0	0	0	8,509,113
ROW	GFSU	1,016,876	0	0	0	0	1,016,876
ROW	SU	9,009,354	2,269,339	0	0	0	11,278,693
ROW	CM	4,575,530	1,256,211	0	0	0	5,831,741
ROW	ACCM	2,531,101	0	0	0	0	2,531,101
ROW	ACSA	576,000	0	0	0	0	576,000
ROW	TRWR	0	165,136	0	0	0	165,136
ROW	TRIP	0	1,669,958	0	0	0	1,669,958
ROW	CIGP	0	757,496	0	0	0	757,496
Total		27,353,118	6,743,760	0	0	0	34,096,878
<i>Prior Years Cost</i>		<i>5,002,829</i>	<i>Future Years Cost</i>		<i>Total Project Cost</i>		<i>39,099,707</i>

Phase	Fund Source	2024	2025	2026	2027	2028	Total
Proj# 4372101 MALABAR RD FROM ST JOHN'S HERITAGE PKWY TO MINTON RD					Length: 3.970 MI		*Non-SIS*
Type of Work: PD&E/EMO STUDY					Lead Agency: CITY OF PALM BAY		*RSP*
					LRTP#: PAGE 172		
Description: Off State Highway System							
PE	TALT	0	147,385	0	0	0	147,385
PE	SU	0	180,969	0	0	0	180,969
PE	ACSU	0	1,942,634	0	0	0	1,942,634
PE	LF	0	7,000,000	0	0	0	7,000,000
PE	CARU	0	292,012	0	0	0	292,012
PE	TALU	0	476,000	0	0	0	476,000
Total		0	10,039,000	0	0	0	10,039,000
<i>Prior Years Cost</i>		<i>1,374,667</i>	<i>Future Years Cost</i>		<i>Total Project Cost</i>		<i>11,413,667</i>

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HIGHWAYS

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ITEM NUMBER:437210 1 PROJECT DESCRIPTION:MALABAR RD FROM ST JOHNS HERITAGE PKWY TO MINTON RD *NON-SIS*
DISTRICT:05 COUNTY:BREVARD PROJECT LENGTH: 3.970MI TYPE OF WORK:PD&E/EMO STUDY

FUND CODE	LESS THAN 2024	2024	2025	2026	2027	GREATER THAN 2027	ALL YEARS
FEDERAL PROJECT NUMBER: <N/A>							
PHASE: PRELIMINARY ENGINEERING / RESPONSIBLE AGENCY: MANAGED BY CITY OF PALM BAY							
ACSU	0	1,900,875	0	0	0	0	1,900,875
CARU	0	292,012	0	0	0	0	292,012
GFSU	0	302,553	0	0	0	0	302,553
LF	0	7,064,000	0	0	0	0	7,064,000
SU	0	3,560	0	0	0	0	3,560
TALU	0	476,000	0	0	0	0	476,000
TOTAL <N/A>	0	10,039,000	0	0	0	0	10,039,000

FEDERAL PROJECT NUMBER: D519 067 B

PHASE: P D & E / RESPONSIBLE AGENCY: MANAGED BY CITY OF PALM BAY							
SU	822,472	0	0	0	0	0	822,472
TRIP	533,500	0	0	0	0	0	533,500
PHASE: P D & E / RESPONSIBLE AGENCY: MANAGED BY FDOT							
SU	9,786	8,909	0	0	0	0	18,695
TOTAL D519 067 B	1,365,758	8,909	0	0	0	0	1,374,667
TOTAL 437210 1	1,365,758	10,047,909	0	0	0	0	11,413,667
TOTAL Project:	1,365,758	10,047,909	0	0	0	0	11,413,667

ITEM NUMBER:437343 1 PROJECT DESCRIPTION:SR 406/MAX BREWER MEMORIAL PKWY-FWCC DRIVEWAY TO MERRITT ISLAND REFUGE *NON-SIS*
DISTRICT:05 COUNTY:BREVARD PROJECT LENGTH: .515MI TYPE OF WORK:RESURFACING

FUND CODE	LESS THAN 2024	2024	2025	2026	2027	GREATER THAN 2027	ALL YEARS
FEDERAL PROJECT NUMBER: <N/A>							
PHASE: PRELIMINARY ENGINEERING / RESPONSIBLE AGENCY: MANAGED BY FDOT							
DC	1,609	0	0	0	0	0	1,609
DDR	155,174	0	0	0	0	0	155,174
DIH	24,375	0	0	0	0	0	24,375
DS	4,424	0	0	0	0	0	4,424

City of Palm Bay, Florida

Budget Amendment Request Form

Requesting Department/Division Public Works
City Council Approval Date 02/17/2022

Fund #/Name	Account #	Project #	Account Name	Revenue	Expense
197/TIFF	197-0000-392-1001		Undesignated Fund Balance	2,500,000	
197/TIFF	197-7050-541-6303	22PW01	Road Projects		2,500,000
198/TIFF	198-0000-392-1001		Undesignated Fund Balance	4,500,000	
198/TIFF	198-7050-541-6303	22PW01	Road Projects		4,500,000
TOTAL				7,000,000	7,000,000

Justification for Budget Amendment Request

Transferring TIF funds as outlined in the Legislative Memo to acquire funds for the design of Malabar Road widening from Minton Rd. The current balance in TIF-32907 is approximately \$3,200,000. The current balance in TIF-32908 is approximately \$5,300,000.

Supporting Documentation Attached

Yes
 No

Justification, if "No" →

Signature/Approval Requirements

Authorized Department Designee

Digitally signed by
 Suzanne Sherman
 Date: 2022.02.16
 10:31:40 -05'00'

Budget Office Representative

Budget Office Use Only:

Budget Amendment #
 Budget Amendment Date
 Prepared By

H.T.E. Entry Date
 Entered By
 Date Journalized



LEGISLATIVE MEMORANDUM

TO: Honorable Mayor and Members of the City Council

FROM: Suzanne Sherman, City Manager

THRU: Larry Wojciechowski, Finance Director

DATE: 4/21/2022

RE: Resolution 2022-18, amending Resolution 2021-53, as amended, adopting the Five-Year Capital Improvements Program for Fiscal Years 2021-2022 through 2025-2026 (second amendment).

The following is a summary of the revisions to the Capital Improvements Program/CIP in FY 2022:

First Capital Improvement Programs (CIP) Amendment Correction

1. Public Works Department – Item #2 - Correct account number reflected on the FY 2022 First CIP Amendment Summary from 461-7084-541-6310 to 461-7084-541-6309 - **Net Impact \$0.**

Budget Amendment #2 Modifications

1. Community and Economic Development Department – Appropriate current CDBG funding allocations and previous CDBG fiscal year awards as follows: Palm Bay Senior Center (20CD01), \$143,807; Demolition of Old Fire Station 1 (21CD02), \$82,273; Public Works Drainage Project/Land Acquisition (22CD01), \$499,431; and to capital accounts 6201/Buildings \$200,000, 6403/Light Vehicles \$12,400 and 6405/Fire Apparatus \$256,740; approved by City Council 7/15/2021 – **CIP Impact \$1,194,651.**

2. Community and Economic Development Department – Appropriate FY 20-21 HOME Disbursement Agreement funds to CHDO – Community Housing Initiative Project (22CD07), \$737,327 and to capital account 6403/Light Vehicles \$3,100; approved by City Council 7/15/2021 – **CIP Impact \$740,427.**

3. Public Works Department – Purchase air compressor for the Fleet Service Division; approved by City Council 02/17/2022 – **CIP Impact \$17,500.**

4. Public Works Department – Purchase new Diesel Laptop Diagnostic Kit; approved by City Council 02/17/2022 – **CIP Impact \$12,455.**

5. Fire Department - FY 2022 Budget True-Ups; attach project number to the Brush Truck purchase for Station 6 (22FD01) – **Net Impact \$0.**

6. Parks/Facilities Departments – FY 2022 Budget True-Ups; Transfer unspent funds, rolled over from FY 2021, from the old Parks & Recreation Department (40) to the Parks & Facilities Department (45) - **Net Impact \$0.**

7. Police Department – Appropriate funds from the CDBG-MIT CFHP grant award to the Roof Replacement & Shutter Installation Project (20PD01) \$224,473; CDBG-MIT CFHP Police Department Main Station Project (21PD01) \$379,778 and CDBG-MIT CFHP Police Department Sub Station Project (21PD02) \$80,187; approved by City Council 01/06/2022 – **CIP Impact \$684,438.**

8. Police Department - Utilize Impact Fees Nexus 32905 funding for the purchase of a Police Outreach Vehicle; approved by City Council 12/16/2021 – **CIP Impact \$59,870.**

9. Public Works Department - Appropriate additional funding to the Unit 48 Road Paving project (21GO13), \$1,000,000, and the Emerson Road Paving project (22GO04), \$600,000, to supplement the increase cost of asphaltic concrete material; approved by City Council 03/18/2021 - **\$1,600,000.**

10. Public Works Department - Appropriate additional funding to the Driskell Heights Road Paving project (22GO01), \$138,766, and the Farview Subdivision Road Paving project (22GO03), \$102,150; due to project bids coming in over budget; approved by City Council 01/20/2022 - **\$240,916.**

11. Public Works Department - Appropriate additional funding to the NE Area Misc Road Paving project (22GO06) \$1,100,000, and the CC 1-10 Road Paving project (22GO07) \$1,350,000; to supplement the increase cost of asphaltic concrete material and the addition of overlay streets; approved by City Council 02/06/2020 - **\$2,450,000.**

12. Public Works Department – Utilize Transportation Impact Fees Nexus 32907, \$2,500,000, and Nexus 32908, \$4,500,000, for the design of the Malabar Road Widening Project (22PW01); approved by City Council 02/17/2021 - **\$7,000,000.**

13. Public Works Department – Utilize Transportation Impact Fees Nexus 32909 to acquire additional Right-of-Way (ROW) for widening of the St. Johns Heritage Parkway Intersection and Babcock Street Project (21PW06); approved by City Council 02/17/2021 - **\$568,000.**

14. Public Works Department – Open the Emerson at Glencove Widening Project (22PW04) to construct left turn lanes at the intersection of Emerson and Glencove; approved by City Council 03/03/2022 – **\$158,000.**

15. Public Works Department - Establish budgets for the following G.O. Road Bond Program projects - **Total \$ 26,500,000.**

- Unit 13 Road Paving Project (22GO08) - \$3,400,000
- Unit 14 Road Paving Project (22GO09) - \$2,600,000
- Unit 22 Road Paving Project (22GO10) - \$2,700,000
- Unit 30 & Madden Road Paving Project (22GO11) - \$13,000,000
- Unit 37 Road Paving Project (22GO12) - \$2,700,000
- Unit 57 Road Paving Project (22GO13) - \$2,100,000

16. Unfunded Capital Expenditures - City Council approved unfunded capital expenditures from the 12/16/2021 and 01/06/2022 RCM Agendas, as outlined in Exhibit B – **Total CIP Impact (All Funds) \$4,554,066.**

Budget Transfers: Transfer of Funds Between Capital Projects/Accounts

City of Palm Bay, Florida
Resolution 2022-18

Exhibit 'A'

Utilities Department

Fund	Department Division Account	Project Number	Capital Improvements Program Summary	FY 2022 Adopted CIP Budget	FY 2021 to FY 2022 Rollovers	FY 2022 Amendments	New Project TOTAL	TOTAL FY 2022
Utilities Operating								
421	8011-536-6201	20BD01	Building E Construction	1,590,800	148,707		1,739,507	1,739,507
421	8012-536-6401	N/A	New Forklift for Warehouse	35,000			35,000	35,000
421	8013-536-6407	22WS03	Upgrade Microsoft SQL Software	6,939			6,939	6,939
421	8013-536-6407	22WS06	1 Terabyte Server Storage	8,000			8,000	8,000
421	8014-536-6201	20WS05	NR Aggregate Storage Facility		10,000		10,000	10,000
421	8014-536-6301	20WS02	Security Camera Repl/Upgr		63,099		63,099	63,099
421	8014-536-6403	N/A	Vehicle & Equipment Replacement	49,000	31,263	(153)	80,110	80,110
421	8016-536-6403	N/A	Add'l Field Service Rep / Vehicle	24,245		153	24,398	24,398
421	8020-533-6201	20WS05	NR Aggregate Storage Facility		10,000		10,000	10,000
421	8020-533-6322	N/A	Meter Services - New Installations	485,000			485,000	485,000
421	8020-533-6324	20WS03	Cedra Side Meter Removal		45,000		45,000	45,000
421	8020-533-6401	N/A	Mobile Pump Package (6-inch)	42,000			42,000	42,000
421	8020-533-6401	N/A	Valve Insertion Equipment	125,000			125,000	125,000
421	8020-533-6401	N/A	Vehicle & Equipment Replacement	25,000			25,000	25,000
421	8020-533-6403	N/A	Vehicle & Equipment Replacement	150,000	41,492		191,492	191,492
421	8020-533-6404	N/A	Vehicle & Equipment Replacement	80,000			80,000	80,000
421	8023-533-6221	22WS02	SRWTP Cover for Antiscalant & Orthophosphate Chemicals	50,000			50,000	50,000
421	8023-533-6221	22WS09	SRWTP Spare Chemical Feed Pumps	20,000			20,000	20,000
421	8023-533-6301	22WS13	SRWTP Deep Injection Well Road	70,000			70,000	70,000
421	8023-533-6401	N/A	Gator Vehicle for South Regional Water Treatment Plant	10,000			10,000	10,000
421	8023-533-6407	21WS02	SRWTP SCADA Upgrade	60,000	100,000		160,000	160,000
421	8024-533-6221	19WS12	NRWTP Sludge Handling		103,000		103,000	103,000
421	8024-533-6403	N/A	Vehicle & Equipment Replacement	49,000			49,000	49,000
421	8024-533-6407	22WS08	Well SCADA Upgrades	21,500			21,500	21,500
421	8030-535-6201	20WS05	NR Aggregate Storage Facility		10,000		10,000	10,000
421	8030-535-6325	22WS01	SRWRF-NRWRF Diversion Valves	30,000			30,000	30,000
421	8030-535-6325	22WS07	Smart Cover - Subsonic Manhole Covers	42,520			42,520	42,520
421	8030-535-6327	16WS07	Regional Pump Station #1		1,041,790		1,041,790	1,041,790
421	8030-535-6327	21WS25	Lift Station Solar Panels		17,553	6,000	23,553	23,553
421	8030-535-6327	22WS05	Permanent Bypass Pump - Critical Waterfront Lift Stations	300,000			300,000	300,000
421	8030-535-6401	N/A	Groundwater Dewatering Wellpoint System	6,500		1,500	8,000	8,000
421	8030-535-6403	N/A	Vehicle & Equipment Replacement	98,000	26,114		124,114	124,114
421	8030-535-6404	N/A	Vehicle & Equipment Replacement	80,000			80,000	80,000
421	8030-535-6407	22WS11	WIN911 SCADA Call Outs	22,000			22,000	22,000
421	8033-535-6211	N/A	SRWRF Capital Needs	8,000			8,000	8,000
421	8033-535-6301	N/A	SRWRF Capital Needs	10,000			10,000	10,000
421	8033-535-6401	N/A	SRWRF Capital Needs	40,500			40,500	40,500
421	8033-535-6403	N/A	SRWRF Capital Needs	55,000			55,000	55,000
421	8034-535-6221	17WS13	NRWWTP Clarifier 2 Construction		895,531		895,531	895,531
421	8034-535-6221	17WS16	WRF Denitrification Project		254,398		254,398	254,398
421	8034-535-6221	20WS01	NRWWTP EMERGENCY POND LIN		51,500		51,500	51,500
421	8034-535-6221	22WS04	NRWWTP Sewage Dewatering Facility	87,000			87,000	87,000
421	8034-535-6221	22WS12	Deep Injection Well TSS Meter	5,500			5,500	5,500
421	8034-535-6325	21WS03	NRWRF Substandard Force Main		701,500		701,500	701,500
421	8034-535-6325	21WS03	NRWRF Substd Force Main & Substd Tank Demo	50,000			50,000	50,000
421	8034-535-6401	N/A	Laboratory Spectrophotometer	5,000			5,000	5,000
421	8034-535-6403	N/A	Vehicle & Equipment Replacement	49,000			49,000	49,000
421	8034-535-6407	22WS10	NRWWTP Headworks SCADA	6,480			6,480	6,480
421							0	0
Utilities Connections Fee Fund								
423	8021-533-6324	22WS15	Water Main Extension - Osmosis to DeGroodt	191,000			191,000	191,000
423	8021-533-6324	20WS07	PM Unit 3 WM Replacement		28,081		28,081	28,081
423	8021-533-6324	20WS08	Mandarin WM Extension & Replacement		61,830		61,830	61,830
423	8021-533-6324	20WS09	Cadez WM Replacement and Upgrade		113,057		113,057	113,057
423	8021-533-6324	21WS22	Eagle Rock Water Main Loop/Upgrade		4,096		4,096	4,096
423	8031-535-6221	16WS05	So Regional Water Reclamation		558		558	558
423	8031-535-6221	22WS14	SRWRF Expansion - 1 MG to 2 MG	35,000			35,000	35,000
423	8031-535-6325	22WS16	Force Main Extension - Osmosis to DeGroodt	11,000			11,000	11,000
Utilities Renewal and Replacement Fund								
424	8022-533-6221	14WS02	NRWTP Elevated Walkways		40,329		40,329	40,329
424	8022-533-6221	17WS04	Tsf Filter/Backwash Pump		221,991	29,103	251,094	251,094
424	8022-533-6221	18WS06	NRWTP HSP Replacement		250,681		250,681	250,681
424	8022-533-6221	18WS19	Generator and Air Compressor		113,276		113,276	113,276
424	8022-533-6221	19WS07	NRWTP CO2 System	763,760	19,037		782,797	782,797
424	8022-533-6221	19WS08	NRWTP Sodium Hypochlorite Pump Skid Replc	160,000	53,000		213,000	213,000
424	8022-533-6221	19WS10	Nash HSP/MCC Replacement		1,025,709		1,025,709	1,025,709
424	8022-533-6221	19WS11	NRWTP Lime Slaking Silo Replacement		1,035,075		1,035,075	1,035,075
424	8022-533-6221	21WS08	SRWTP Bleach Tank Replacement		38,545		38,545	38,545
424	8022-533-6221	21WS09	SRWTP Transfer Switch Replacement		63,185		63,185	63,185
424	8022-533-6221	21WS12	NRWTP Treatment Unit #3		35,810		35,810	35,810
424	8022-533-6221	21WS13	NRWTP Elevated Tank Rehabilitation		250,000		250,000	250,000
424	8022-533-6221	21WS14	North Regional RO Plant Rehabilitation	885,000	234,777		1,119,777	1,119,777
424	8022-533-6221	21WS15	NRWTP 1.0 MG Ground Storage Tank Rehab		50,000		50,000	50,000
424	8022-533-6221	21WS20	NRWTP Actuators on Clearwell Pumps Discharge		50,000		50,000	50,000
424	8022-533-6221	21WS21	South Regional Gutters/Downspouts Replacement		11,400		11,400	11,400
424	8022-533-6221	22WS17	NRWTP Fluoride System Replacement	177,792			177,792	177,792
424	8022-533-6221	22WS18	SRWTP Fluoride System Replacement	170,628			170,628	170,628
424	8022-533-6221	22WS20	SRWTP Micron Filter Lines Rehabilitation	39,000			39,000	39,000
424	8022-533-6318	17WS22	WELL 17 REHAB		63,878		63,878	63,878
424	8022-533-6318	19WS17	Rehabilitation of Well #10		7,399		7,399	7,399
424	8022-533-6322	21WS16	Replace Large Meter Assemblies		50,000		50,000	50,000
424	8022-533-6322	21WS18	Dual Check Replacement Program		128,657		128,657	128,657
424	8022-533-6322	N/A	Meter Services - Meter Replacements	275,000	13,076		288,076	288,076
424	8022-533-6324	19WS02	Public Works Utility Relocation Projects	187,500	315,926		503,426	503,426
424	8022-533-6324	19WS06	Valve Replacement Program		166,721		166,721	166,721

Non-Utility Departments

Fund	Department Division Account	Project Number	Capital Improvements Program Summary	FY 2022 Adopted CIP Budget	FY 2021 to FY 2022 Rollovers	FY 2022 Amendments	New Project TOTAL	TOTAL FY 2022
521	7070-519-6405	22FD04	Replacement Engines - Station 2 & 6			570,000	570,000	570,000
521	7070-519-6405	22FD05	Replacement Engines - Station 2 & 6			570,000	570,000	570,000
521	7070-519-6407	21PW07	Faster Web Upgrade		38,800		38,800	38,800
521	7070-519-6413	N/A	Diesel Laptop Diagnostic Kit			12,455	12,455	12,455
								0
								0
Information Technology								0
001	2310-519-6413	20IT01	Disaster Recovery Solution		67,036	(27,210)	39,826	39,826
								0
Police								0
180	5050-521-6403	N/A	Police Community Outreach Vehicle			59,870	59,870	59,870
183	5050-521-6403	N/A	Police Vehicle Markings		365	12,457	12,822	12,822
184	5050-521-6403	N/A	Police Vehicle		28,680	6,402	35,082	35,082
186	5050-521-6403	N/A	Police Vehicle Markings		1,460	25,608	27,068	27,068
301	5090-521-6201	20PD01	PD HQ - Roof Replacement & Shutter Install		221,723	224,473	446,196	446,196
301	5090-521-6201	21PD01	CDBG-MIT CFHP PD MAIN ST		24,849	379,778	404,627	404,627
301	5090-521-6201	21PD02	CDBG-MIT CFHP PD SUB ST		15,896	80,187	96,083	96,083
								0
Public Works								0
001	7017-541-6401	N/A	Bush Hog Replacement		7,681		7,681	7,681
001	7026-541-6316	21PW01	Eldron & Malabar Signal Respan		40,754		40,754	40,754
001	7026-541-6316	21PW02	Eldron & Bayside Signal Respan		40,000		40,000	40,000
001	7026-541-6316	N/A	Traffic Signal Respan x 2			80,000	80,000	80,000
001	7026-541-6335	N/A	Street Lights			100,000	100,000	100,000
001	7034-541-6221	22PK09	Covered structures for vehicle/equipment			150,000	150,000	150,000
001	7034-541-6315	22PW03	San Filippo Sidewalk			100,000	100,000	100,000
001	7034-541-6401	N/A	2 gator ATVs			25,000	25,000	25,000
197	7050-541-6303	22PW01	Malabar Road Widening			2,500,000	2,500,000	2,500,000
197	7050-541-6303	22PW04	Emerson @ Glencove Widen			158,000	158,000	158,000
197	7050-541-6316	20PW03	Emerson NW & Glencove NW		31,222		31,222	31,222
197	7090-541-6316	18PW01	SJHP TRAFFIC SIGNAL @ MAL		298,289		298,289	298,289
198	7050-541-6303	22PW01	Malabar Road Widening			4,500,000	4,500,000	4,500,000
199	7050-541-6303	15PW11	SO. I-95 INTERCHANGE/PKWY		47,345		47,345	47,345
199	7050-541-6303	21PW06	SJHP Intersxn and Babcock		13,000	568,000	581,000	581,000
301	7090-539-6301	22pw02	2 Nutrient Sep Baffle Box			100,000	100,000	100,000
301	7090-539-6306	21PW05	2 Nutrient Sep Baffle Box		200,000	88,000	288,000	288,000
301	7090-541-6315	18PW02	Safe Routes to Schools		293,617	(293,617)	0	0
306	7090-541-6303	15PW11	SO. I-95 INTERCHANGE/PKWY		180,645		180,645	180,645
307	7090-541-6304	18PW02	Safe Routes to Schools		9,235	(9,235)	0	0
307	7090-541-6304	20PW03	Road Maintenance			4,107	4,107	4,107
307	7090-541-6304	21RD01	FY21 Asphalt Rejuvenation		1,199,575	(4,107)	1,195,468	1,195,468
307	7090-541-6315	18PW02	Safe Routes to Schools		600	(600)	0	0
308	7090-541-6303	15PW11	SO. I-95 INTERCHANGE/PKWY		309,608		309,608	309,608
309	7090-541-6303	20GO11	Emerson Dr NE Paving Phase 1		554,985		554,985	554,985
309	7090-541-6303	20GO13	Unit 46 Road Paving		862,781		862,781	862,781
309	7090-541-6303	20GO14	Unit 24 Road Paving		3,314,114		3,314,114	3,314,114
309	7090-541-6303	20GO15	Unit 25 Road Paving		4,485,356		4,485,356	4,485,356
309	7090-541-6303	20GO17	Unit 17 Road Paving		904,681		904,681	904,681
309	7090-541-6303	21GO08	Unit 26 Road Paving		645,518		645,518	645,518
309	7090-541-6303	21GO09	Unit 38 Road Paving		164,518		164,518	164,518
309	7090-541-6303	21GO10	Unit 39 Road Paving		694,363		694,363	694,363
309	7090-541-6303	21GO11	Unit 40 Road Paving		337,719		337,719	337,719
309	7090-541-6303	21GO13	Unit 48 Road Paving		3,903,087	1,000,000	4,903,087	4,903,087
309	7090-541-6303	21GO14	KIRBY INDUST PARK PAVING		531,736		531,736	531,736
309	7090-541-6303	21GO15	PB COLONY ROAD PAVING		633,656		633,656	633,656
309	7090-541-6303	21GO17	PB COLONY ROAD PAVING		1,369,479		1,369,479	1,369,479
309	7090-541-6303	22GO01	Driskell Heights Paving			588,766	588,766	588,766
309	7090-541-6303	22GO02	Florida Avenue Paving			300,000	300,000	300,000
309	7090-541-6303	22GO03	Fairview Subdivision Paving			402,150	402,150	402,150
309	7090-541-6303	22GO04	Emerson-Fairhaven to C1 Paving			1,150,000	1,150,000	1,150,000
309	7090-541-6303	22GO08	Unit 13 Road Paving			3,400,000	3,400,000	3,400,000
309	7090-541-6303	22GO09	Unit 14 Road Paving			2,600,000	2,600,000	2,600,000
309	7090-541-6303	22GO10	Unit 22 Road Paving			2,700,000	2,700,000	2,700,000
309	7090-541-6303	22GO11	Unit 30 & Madden Road Paving			13,000,000	13,000,000	13,000,000
309	7090-541-6303	22GO12	Unit 37 Road Paving			2,700,000	2,700,000	2,700,000
309	7090-541-6303	22GO13	Unit 57 Road Paving			2,100,000	2,100,000	2,100,000
309	7090-541-6305	22GO05	PMU 20 and Malabar Rd Paving			2,750,000	2,750,000	2,750,000
309	7090-541-6306	22GO06	NE Area Misc Road Paving			4,885,000	4,885,000	4,885,000
309	7090-541-6307	22GO07	CC 1-10 Road Paving			5,475,000	5,475,000	5,475,000
461	7083-538-6309	20SU10	GALLASH @ C-14 CULVERT		29,026		29,026	29,026
461	7084-541-6309	20SU12	Malabar Road Drainage		64,631	(64,631)	0	0
461	7084-541-6309	20SU15	Emerson @ C51 Culvert Replacement		370,970	64,631	435,601	435,601
461	7084-541-6309	20SU27	Pipe Replacement NE Area		556,000	(165,000)	391,000	391,000
461	7084-541-6309	21SU12	Country Club Units (repair failed street crossing pipes)		548,897	200,000	748,897	748,897
461	7084-541-6309	21SU13	Cure in Place Pipes		275,500	(275,500)	0	0
461	7084-541-6309	21SU15	TRANTER @ C-41 PIPE REPLC		284,343		284,343	284,343
461	7084-541-6309	21SU16	Unit 48 Pipe Replacement		623,392		623,392	623,392
461	7084-541-6309	21SU17	San Filippo Drive CIPP		24,500		24,500	24,500
461	7084-541-6309	22SU06	Unit 22 Pipe Replacement	281,424			281,424	281,424
461	7084-541-6309	22SU07	Pipe Replacement NE Area Knecht Road			165,000	165,000	165,000
461	7084-541-6311	22SU01	Cured in Place Pipe - Multi locations	1,000,000		275,500	1,275,500	1,275,500
461	7084-541-6312	22SU02	Walden @ C-42 Culvert Replacement	364,572			364,572	364,572
461	7084-541-6313	22SU03	Ferguson @ C-9 Culvert Replacement -	500,000			500,000	500,000
461	7084-541-6314	22SU05	Unit 30 and Portion of Unit 49 Pipe	427,017			427,017	427,017
461	7084-541-6401	N/A	Mower Max with 26 ft Boom Arm	217,925		14,750	232,675	232,675
461	7084-541-6401	N/A	Tractor with mowing/trenching attachments			210,500	210,500	210,500
461	7084-541-6401	N/A	2 zero turn mowers			25,000	25,000	25,000
461	7084-541-6404	N/A	Tractor with Boom Ditcher Head	175,724		(14,750)	160,974	160,974
461	7084-541-6404	N/A	M315F Caterpillar Excavator	227,938			227,938	227,938

Social and Economic Appendix

Contents:

Figure 3 Community Features Map

Figure 5 Existing Land Use Map

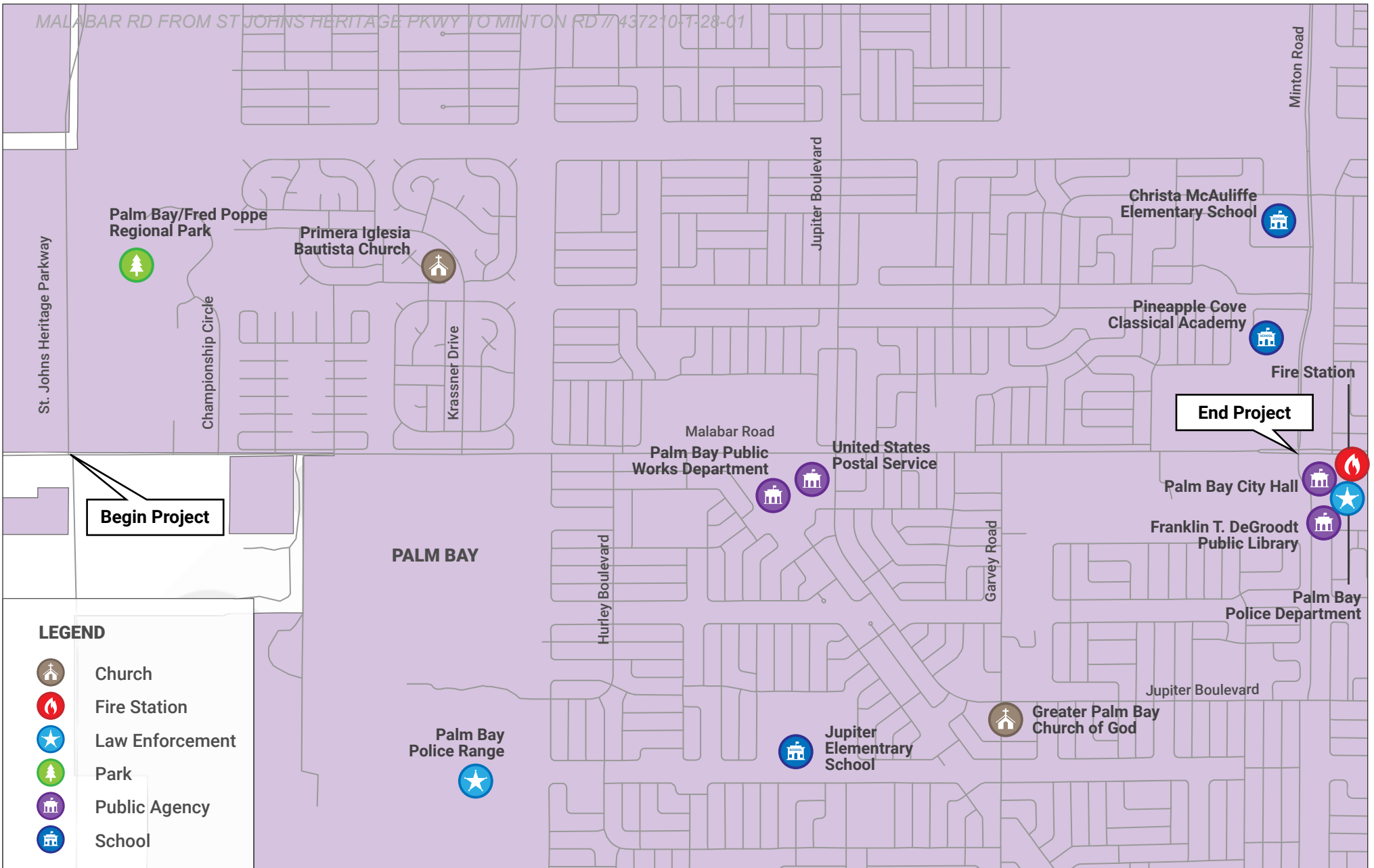
Figure 6 Future Land Use Map

Malabar Road USDA Farmland Conversion Impact Rating Form

NRCS Correspondence

Figure 4 New Developments Map

Figure 7 Trail and Transit Facilities Map



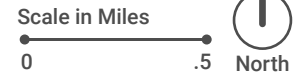
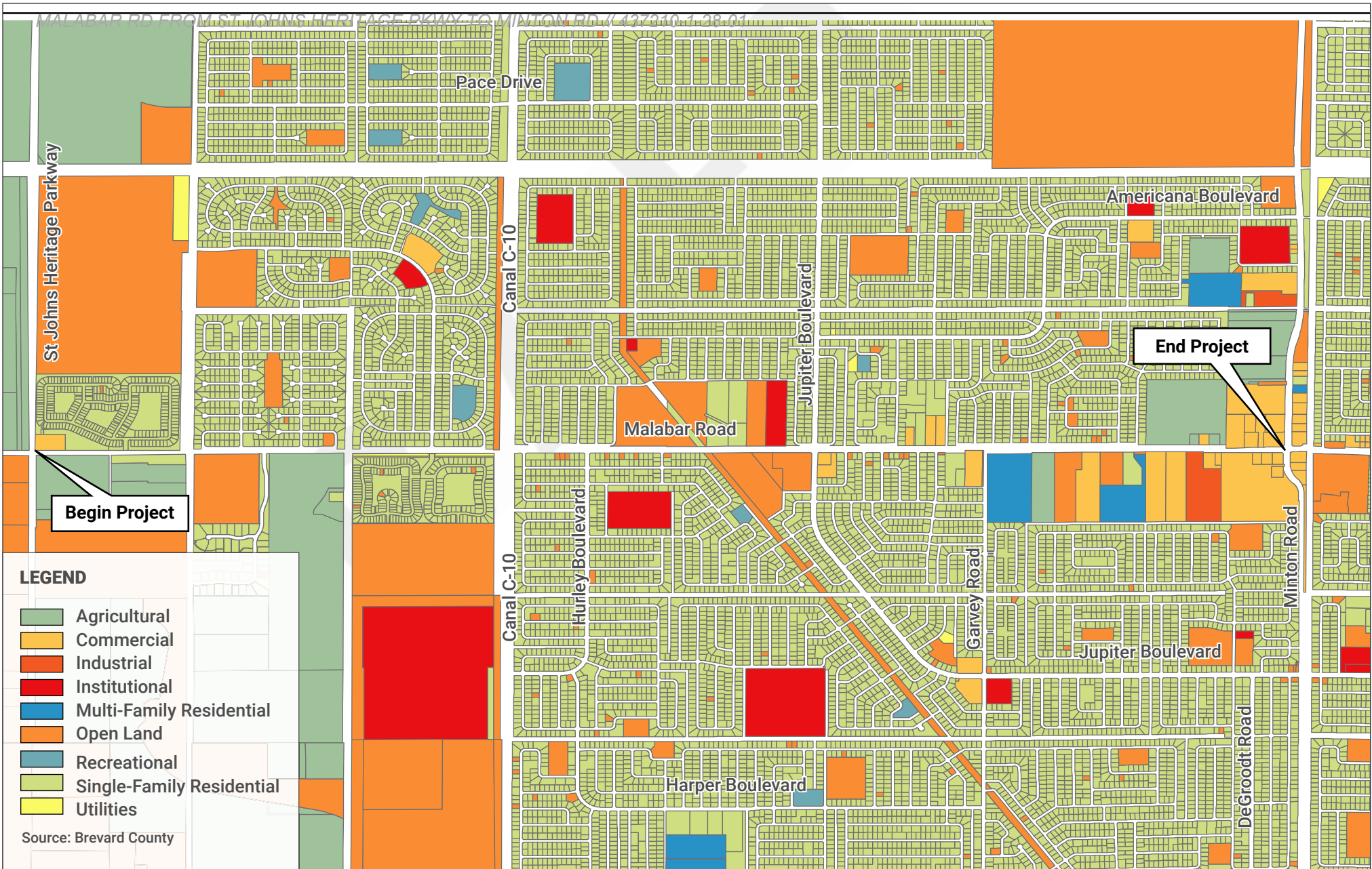
Malabar Road PD&E Study

FPID: 437210-1-28-01

Type 2 Categorical Exclusion

COMMUNITY FEATURES

FIGURE 3



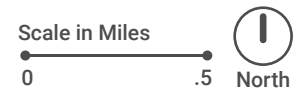
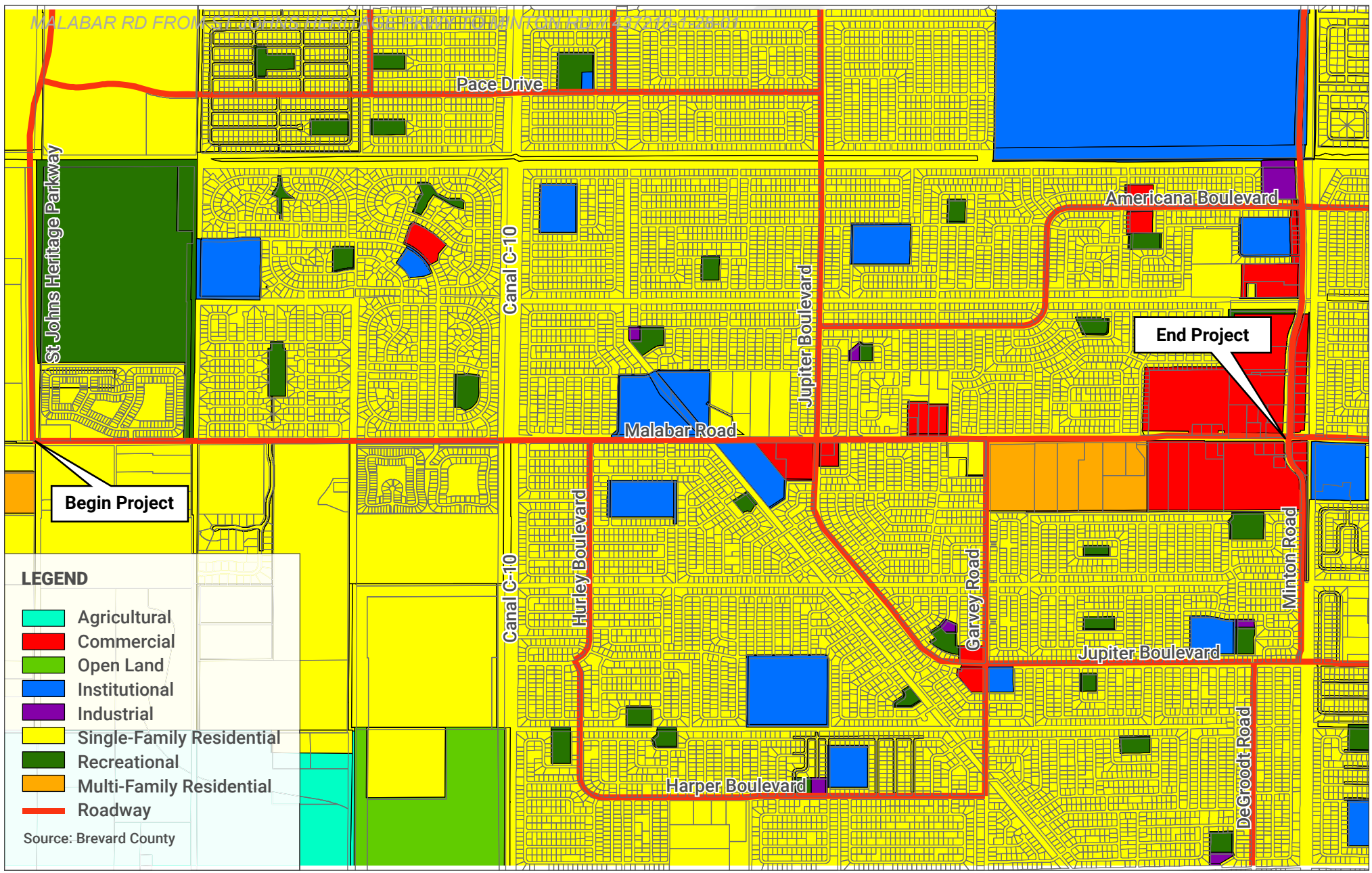
Malabar Road PD&E Study

FPID: 437210-1-28-01

Type 2 Categorical Exclusion

EXISTING LAND USE

FIGURE 5
Page 56 of 121



Malabar Road PD&E Study

FPID: 437210-1-28-01

Type 2 Categorical Exclusion

FUTURE LAND USE

FIGURE 6
Page 57 of 121

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request 01/13/2022				
Name of Project Malabar Road PD&E Study		Federal Agency Involved Department of Transportation				
Proposed Land Use Roadway widening		County and State Brevard County, Florida				
PART II (To be completed by NRCS)		Date Request Received By NRCS 1/13/2022		Person Completing Form: Isabelle Giuliani		
Does the site contain Prime, Unique, Statewide or Local Important Farmland? (If no, the FPPA does not apply - do not complete additional parts of this form)		YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	Acres Irrigated 13,414	Average Farm Size 286	
Major Crop(s) citrus	Farmable Land In Govt. Jurisdiction Acres: 32,751 % 5.03	Amount of Farmland As Defined in FPPA Acres: 11,950 % 0.0183				
Name of Land Evaluation System Used soil potential rating	Name of State or Local Site Assessment System none	Date Land Evaluation Returned by NRCS 1/14/2022				
PART III (To be completed by Federal Agency)		Alternative Site Rating				
		Site A	Site B	Site C	Site D	
A. Total Acres To Be Converted Directly		38.60				
B. Total Acres To Be Converted Indirectly						
C. Total Acres In Site		38.60				
PART IV (To be completed by NRCS) Land Evaluation Information						
A. Total Acres Prime And Unique Farmland		26				
B. Total Acres Statewide Important or Local Important Farmland						
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted		0.1				
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value		40.6				
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)		48.4				
PART VI (To be completed by Federal Agency) Site Assessment Criteria (Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)		Maximum Points	Site A	Site B	Site C	Site D
1. Area In Non-urban Use		(15)	0			
2. Perimeter In Non-urban Use		(10)	0			
3. Percent Of Site Being Farmed		(20)	8			
4. Protection Provided By State and Local Government		(20)	0			
5. Distance From Urban Built-up Area		(15)	0			
6. Distance To Urban Support Services		(15)	0			
7. Size Of Present Farm Unit Compared To Average		(10)	0			
8. Creation Of Non-farmable Farmland		(10)	0			
9. Availability Of Farm Support Services		(5)	5			
10. On-Farm Investments		(20)	3			
11. Effects Of Conversion On Farm Support Services		(10)	0			
12. Compatibility With Existing Agricultural Use		(10)	1			
TOTAL SITE ASSESSMENT POINTS		160	17	0	0	0
PART VII (To be completed by Federal Agency)						
Relative Value Of Farmland (From Part V)		100	48.4	0	0	0
Total Site Assessment (From Part VI above or local site assessment)		160	17	0	0	0
TOTAL POINTS (Total of above 2 lines)		260	65.4	0	0	0
Site Selected: Widening Alternative		Date Of Selection April 2021		Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>		
Reason For Selection: Satisfaction of the project purpose and need; minimization of environmental, residential, and commercial impacts; and public support.						
Name of Federal agency representative completing this form: Jada Barhorst					Date: 01/31/2022	

(See Instructions on reverse side)

Form AD-1006 (03-02)

MALABAR RIVER CORRIDOR STEPS IN THE PROCESSING THE FARMLAND AND NB CONVERSION IMPACT RATING FORM

- Step 1 - Federal agencies (or Federally funded projects) involved in proposed projects that may convert farmland, as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses, will initially complete Parts I and III of the form. For Corridor type projects, the Federal agency shall use form NRCS-CPA-106 in place of form AD-1006. The Land Evaluation and Site Assessment (LESA) process may also be accessed by visiting the FPPA website, <http://fppa.nrcs.usda.gov/lesa/>.
- Step 2 - Originator (Federal Agency) will send one original copy of the form together with appropriate scaled maps indicating location(s) of project site(s), to the Natural Resources Conservation Service (NRCS) local Field Office or USDA Service Center and retain a copy for their files. (NRCS has offices in most counties in the U.S. The USDA Office Information Locator may be found at http://offices.usda.gov/scripts/ndISAPI.dll/oip_public/USA_map, or the offices can usually be found in the Phone Book under U.S. Government, Department of Agriculture. A list of field offices is available from the NRCS State Conservationist and State Office in each State.)
- Step 3 - NRCS will, within 10 working days after receipt of the completed form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland. (When a site visit or land evaluation system design is needed, NRCS will respond within 30 working days.
- Step 4 - For sites where farmland covered by the FPPA will be converted by the proposed project, NRCS will complete Parts II, IV and V of the form.
- Step 5 - NRCS will return the original copy of the form to the Federal agency involved in the project, and retain a file copy for NRCS records.
- Step 6 - The Federal agency involved in the proposed project will complete Parts VI and VII of the form and return the form with the final selected site to the servicing NRCS office.
- Step 7 - The Federal agency providing financial or technical assistance to the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA.

INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM
(For Federal Agency)

Part I: When completing the "County and State" questions, list all the local governments that are responsible for local land use controls where site(s) are to be evaluated.

Part III: When completing item B (Total Acres To Be Converted Indirectly), include the following:

- 1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them or other major change in the ability to use the land for agriculture.
- 2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities planned build out capacity) that will cause a direct conversion.

Part VI: Do not complete Part VI using the standard format if a State or Local site assessment is used. With local and NRCS assistance, use the local Land Evaluation and Site Assessment (LESA).

- 1. Assign the maximum points for each site assessment criterion as shown in § 658.5(b) of CFR. In cases of corridor-type project such as transportation, power line and flood control, criteria #5 and #6 will not apply and will, be weighted zero, however, criterion #8 will be weighed a maximum of 25 points and criterion #11 a maximum of 25 points.
- 2. Federal agencies may assign relative weights among the 12 site assessment criteria other than those shown on the FPPA rule after submitting individual agency FPPA policy for review and comment to NRCS. In all cases where other weights are assigned, relative adjustments must be made to maintain the maximum total points at 160. For project sites where the total points equal or exceed 160, consider alternative actions, as appropriate, that could reduce adverse impacts (e.g. Alternative Sites, Modifications or Mitigation).

Part VII: In computing the "Total Site Assessment Points" where a State or local site assessment is used and the total maximum number of points is other than 160, convert the site assessment points to a base of 160.

Example: if the Site Assessment maximum is 200 points, and the alternative Site "A" is rated 180 points:

$\frac{\text{Total points assigned Site A}}{\text{Maximum points possible}} = \frac{180}{200} \times 160 = 144 \text{ points for Site A}$

For assistance in completing this form or FPPA process, contact the local NRCS Field Office or USDA Service Center.

NRCS employees, consult the FPPA Manual and/or policy for additional instructions to complete the AD-1006 form.

From: [Travis Hills](#)
To: [Travis Hills](#)
Subject: FW: [External Email]RE: Farmlands Determination - 437210: Malabar Road PD&E Study
Date: Wednesday, August 10, 2022 11:11:25 AM

From: Giuliani, Isabelle - NRCS, Palmetto, FL <isabelle.giuliani@usda.gov>
Sent: Monday, April 18, 2022 4:01 PM
To: Jada Barhorst <jbarhorst@inwoodinc.com>
Subject: RE: [External Email]RE: Farmlands Determination - 437210: Malabar Road PD&E Study

Hi Jada;

NRCS has concluded the our part on the FPPA request. Good luck with the project!

Thank you;

Isabelle Giuliani
Area Resource Soil Scientist
324 8th Avenue, West, Suite 104
Palmetto, FL 34221
941-729-6804/855-464-1961 (FAX)
Cell: 941-889-9345

From: Jada Barhorst <jbarhorst@inwoodinc.com>
Sent: Friday, April 15, 2022 8:11 AM
To: Giuliani, Isabelle - NRCS, Palmetto, FL <isabelle.giuliani@usda.gov>
Cc: Crockett, Leroy - NRCS, Quincy, FL <leroy.crockett@usda.gov>; Jason Houck <jhouck@inwoodinc.com>; Jack Freeman <jfreeman@kittelton.com>; Travis Hills <thills@kittelton.com>
Subject: [External Email]RE: Farmlands Determination - 437210: Malabar Road PD&E Study

[External Email]

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Good Morning Ms. Giuliani,

I am following up with the Malabar Road PD&E Study Farmlands Determination coordination. Our client has requested confirmation to ensure the coordination process is complete. Please let me know if there is anything else you need from me.

Thank you,

Jada Barhorst

SENIOR ECOLOGIST

FWC Authorized Gopher Tortoise Agent

INWOOD CONSULTING ENGINEERS

3000 Dovera Dr., Suite 200, Oviedo, FL 32765

P: 407-971-8850

inwoodinc.com

From: Jada Barhorst

Sent: Monday, January 31, 2022 5:45 PM

To: Giuliani, Isabelle - NRCS, Palmetto, FL <isabelle.giuliani@usda.gov>

Cc: Crockett, Leroy - NRCS, Quincy, FL <leroy.crockett@usda.gov>; Chasez, Heather <Heather.Chasez@dot.state.fl.us>; Jason Houck <jhouck@inwoodinc.com>; Jack Freeman <jfreeman@kittelson.com>

Subject: RE: Farmlands Determination - 437210: Malabar Road PD&E Study

Hello Ms. Giuliani,

We have completed the Form AD-1006 after your determination and is attached for your review. Please let me know if this completes the coordination efforts.

Thank you,

Jada Barhorst

SENIOR ECOLOGIST

FWC Authorized Gopher Tortoise Agent

INWOOD CONSULTING ENGINEERS

3000 Dovera Dr., Suite 200, Oviedo, FL 32765

P: 407-971-8850

inwoodinc.com

From: Giuliani, Isabelle - NRCS, Palmetto, FL <isabelle.giuliani@usda.gov>

Sent: Friday, January 14, 2022 11:20 AM

To: Jada Barhorst <jbarhorst@inwoodinc.com>

Cc: Crockett, Leroy - NRCS, Quincy, FL <leroy.crockett@usda.gov>

Subject: FW: Farmlands Determination - 437210: Malabar Road PD&E Study

Hello Jada Barhost;

Please see attached NRCS response regarding Farmland Protection Policy Act (FPPA) request for 437210: Malabar Road PD&E Study in Brevard county.

Have a good day;

Isabelle Giuliani
Area Resource Soil Scientist
324 8th Avenue, West, Suite 104
Palmetto, FL 34221
941-729-6804/855-464-1961 (FAX)
Cell: 941-889-9345

From: Jada Barhorst <jbarhorst@inwoodinc.com>
Sent: Thursday, January 13, 2022 11:01 AM
To: Crockett, Leroy - NRCS, Quincy, FL <leroy.crockett@usda.gov>
Cc: Jack Freeman <jfreeman@kittelson.com>; Chasez, Heather <Heather.Chasez@dot.state.fl.us>; Cucek, Lorena (Lorena.Cucek@dot.state.fl.us) <Lorena.Cucek@dot.state.fl.us>; Jason Houck <jhouck@inwoodinc.com>; Frank.Watanabe@palmbayflorida.org; Travis Hills <thills@kittelson.com>
Subject: [External Email]Farmlands Determination - 437210: Malabar Road PD&E Study

[External Email]

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Hello Mr. Crockett,

I hope the New Year finds you well.

We are conducting a PD&E Study for the widening of Malabar Road in Brevard County, Florida. This project requires a Farmlands Conversion Impact Determination. The project limits are from St. Johns Heritage Parkway to Minton Road.

I have attached Form AD-1006 and ROW Impact shapefile which includes the preferred ponds.

Please let me know if you have any questions or need any additional information.

Sincerely,

Jada Barhorst

SENIOR ECOLOGIST

FWC Authorized Gopher Tortoise Agent

INWOOD CONSULTING ENGINEERS

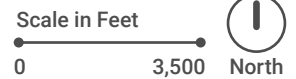
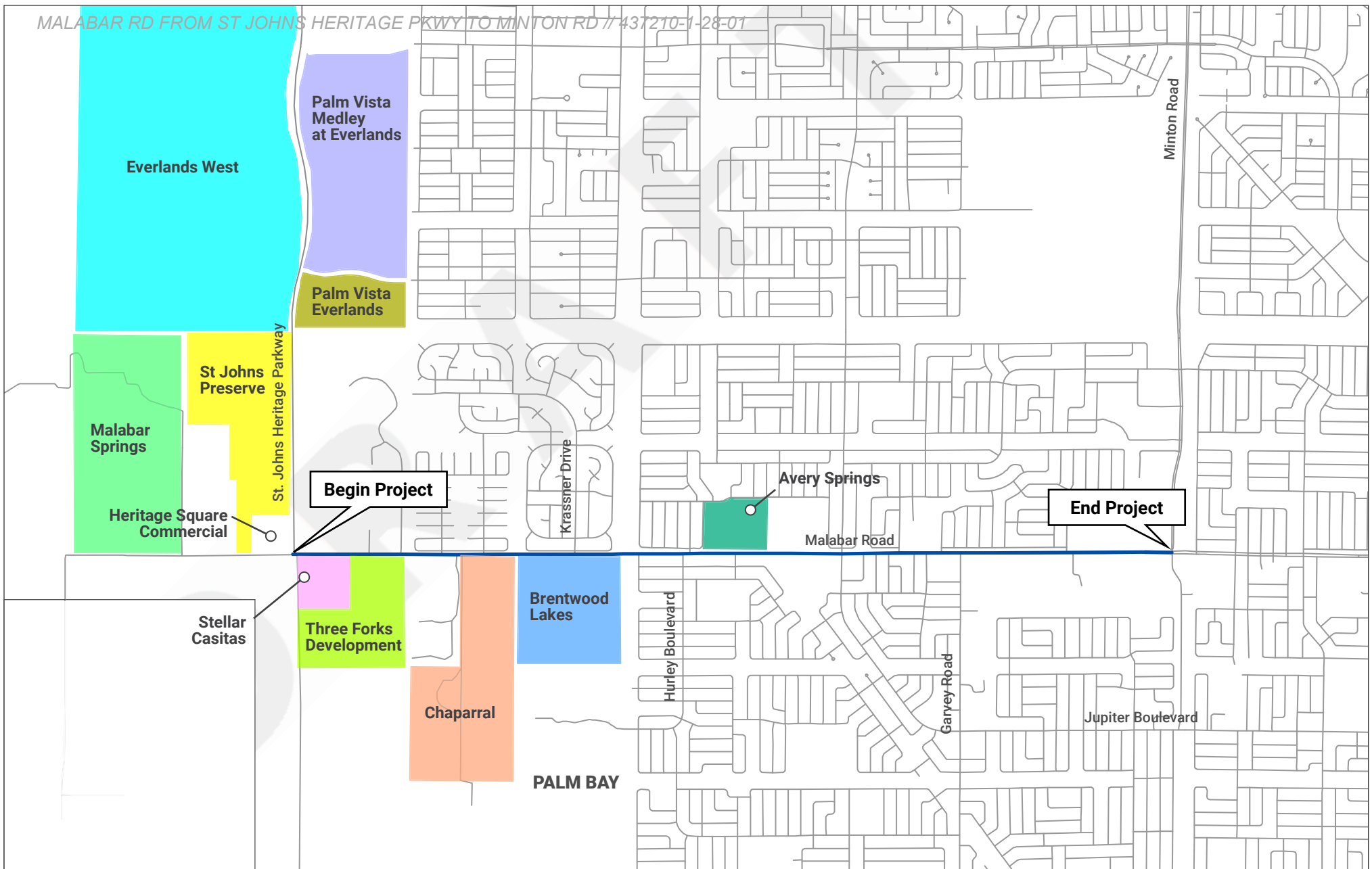
3000 Dovera Dr., Suite 200, Oviedo, FL 32765

P: 407-971-8850

inwoodinc.com

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DRAFT



Malabar Road PD&E Study

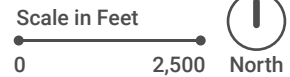
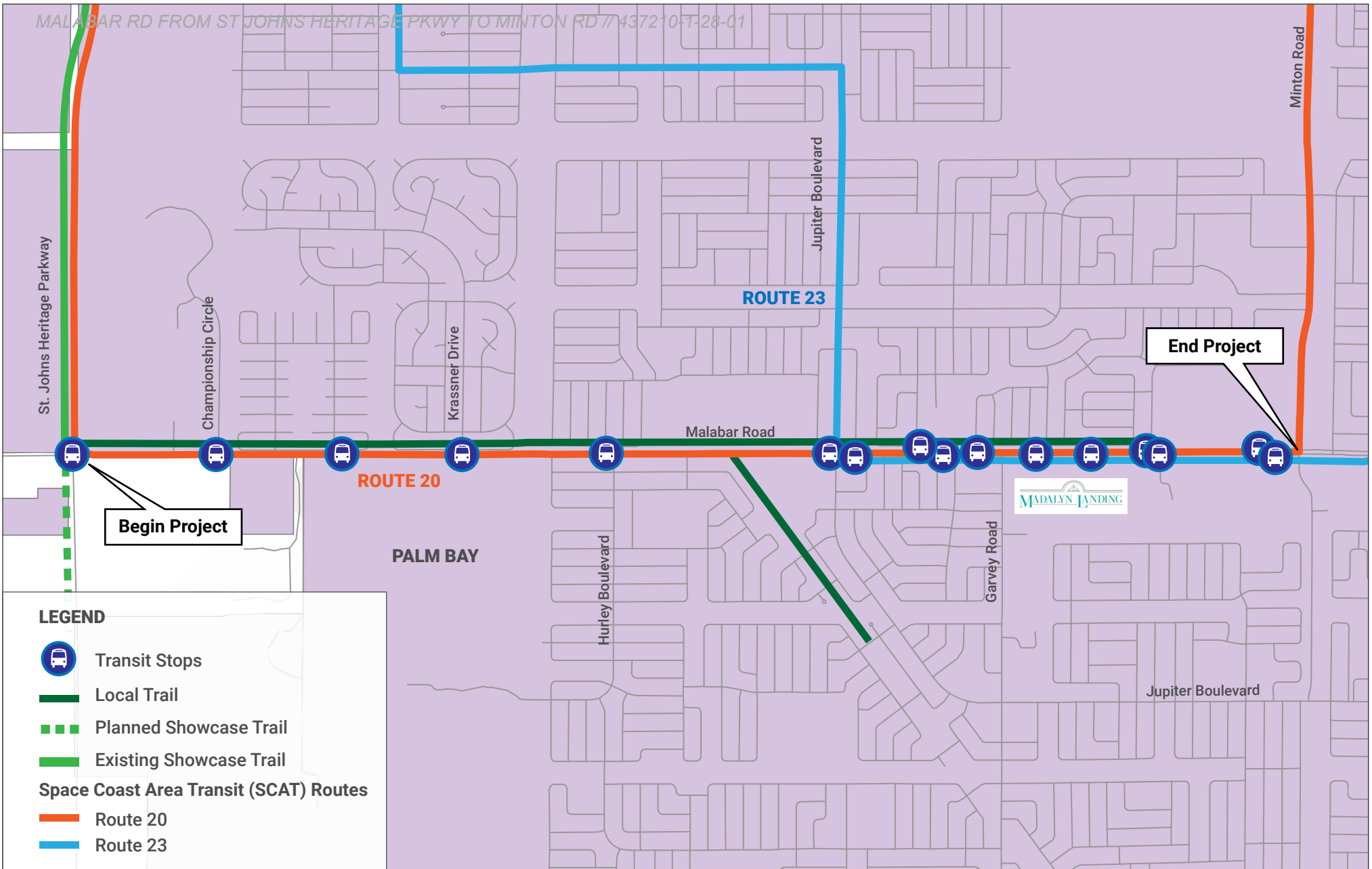
FPID: 437210-1-28-01

Type 2 Categorical Exclusion

NEW DEVELOPMENTS

FIGURE 4

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Malabar Road PD&E Study

FPID: 437210-1-28-01

Type 2 Categorical Exclusion

TRAIL AND TRANSIT FACILITIES

FIGURE 7

Page 65 of 121

Cultural Resources Appendix

Contents:

SHPO Concurrence Letter

SHPO Concurrence Letter - Ponds Addendum #1

SHPO Concurrence Letter - Pond C-7 Alt. 3 Addendum

SHPO Concurrence Letter - Ponds Addendum #2

Fred Poppe Regional Park Section 4(f) Resource Form

DRAFT



Florida Department of Transportation

RON DESANTIS
GOVERNOR

719 South Woodland Boulevard
DeLand, Florida 32720-6834

KEVIN J. THIBAUT, P.E.
SECRETARY

July 28, 2021

Timothy A. Parsons, Ph.D.,
Director and State Historic Preservation Officer
Florida Division of Historical Resources
Florida Department of State
R.A. Gray Building
500 South Bronough Street
Tallahassee, Florida 32399-0250

Attn: Dr. Adrienne Daggett, Transportation Compliance Review Program

RE: Cultural Resource Assessment Survey
Malabar Road Improvements PD&E Study
Brevard County, Florida
Financial Management No.: 437210-1

Dear Dr. Parsons,

Enclosed please find one copy of the report titled *Cultural Resource Assessment Survey of the Malabar Road Improvements Project Development and Environment Study, Brevard County, Florida*. This report presents the findings of a cultural resource assessment survey (CRAS) conducted in support of the proposed improvements to the Malabar Road from east of St. Johns Heritage Parkway to Minton Road in Brevard County, Florida. The City of Palm Bay is proposed to widening Malabar Road to accommodate additional lanes and traffic control intersections. This project will require the acquisition of up to 75 feet (22.9 meters) of new right-of-way, although the majority of right-of-way acquisition will be less than 45 feet (13.7 meters). This is a Local Area Program (LAP) project being conducted by the City of Palm Bay using federal funds administered by the Florida Department of Transportation (FDOT), District 5.

The project area of potential effects (APE) was defined to include the existing and proposed right-of-way from approximately 984 feet (300 meters) west of St. Johns Heritage Parkway to the intersection with Minton Road. This APE was extended to the back or side property lines of parcels adjacent to the right-of-way or a distance of no more than 328 feet (100 meters) from the right-of-way line. The archaeological survey was conducted within the existing and proposed right-of-way. The historic structure survey was conducted within the entire APE.

This CRAS was conducted in accordance with the requirements set forth in Section 106 of the National Historic Preservation Act of 1966, as amended, found in 36 CFR Part 800 (Protection of Historic Properties). The studies also comply with Chapter 267 of the Florida Statutes and Rule

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Dr. Parsons, SHPO
FM # 437210-1
July 28, 2021
Page 2

Chapter 1A-46, Florida Administrative Code and Section 267.12, Florida Statutes, Chapter 1A-32. All work was performed in accordance with Part 2, Chapter 8 of FDOT's Project Development & Environment Study (PD&E) Manual (revised July 2020), FDOT's Cultural Resources Management Handbook, and the standards stipulated in the Florida Division of Historical Resources' (FDHR) *Cultural Resource Management Standards & Operations Manual, Module Three: Guidelines for Use by Historic Preservation Professionals*. The Principal Investigator for this project meets the Secretary of the Interior's *Standards and Guidelines for Archeology and Historic Preservation* (48 FR 44716-42). This study also complies with Public Law 113-287 (Title 54 U.S.C.), which incorporates the provisions of the National Historic Preservation Act of 1966, as amended, and the Archeological and Historic Preservation Act of 1979, as amended.

Due to significant disturbance within the APE, the archaeological survey was limited to the excavation of 30 shovel tests and pedestrian survey and surface inspection of the existing and proposed right-of-way. No archaeological sites were identified, and no artifacts were recovered from the APE. No further archaeological survey is recommended.

The architectural survey resulted in the identification and evaluation of eight historic resources within the Malabar Road APE, including one previously recorded resource (8BR03535) and seven newly recorded resources (8BR04374-8BR04380). Based on the results of the current survey, it is the opinion of SEARCH that all eight resources are ineligible for the National Register of Historic Places (NRHP), due to a lack of significant historic associations and architectural and/or engineering distinction. No further architectural work is recommended.

Based on the results of this study, it is the opinion of the District that the proposed undertaking will have no effect on NRHP-listed or -eligible historic properties. No further work is recommended.

I respectfully request your concurrence with the findings of the enclosed report.

If you have any questions or need further assistance, please contact Catherine Owen, District Cultural Resource Coordinator, at (386) 943-5383 or me at (386) 943-5411.

Sincerely,



For: William G. Walsh
Environmental Manager
FDOT, District Five

Dr. Parsons, SHPO

FM # 437210-1

July 28, 2021

Page 3

The Florida State Historic Preservation Officer finds the attached Cultural Resource Assessment Survey Report complete and sufficient and concurs / does not concur with the recommendations and findings provided in this cover letter for SHPO/FDHR Project File Number 2019-4374B. Or, the SHPO finds the attached document contains _____ insufficient information.

In accordance with the Programmatic Agreement among the ACHP, SHPO and FDOT Regarding Implementation of the Federal-Aid Highway Program in Florida, if providing concurrence with a finding of No Historic Properties Affected for a project as a whole, or to No Adverse Effect on a specific historic property, SHPO shall presume that FDOT may approve the project as de minimis use under Section 4(f) under 23 CFR 774.

SHPO Comments:

<u>Jason Aldridge DSHPO</u> Timothy A. Parsons, PhD, Director Florida Division of Historical Resources	<u>August 2, 2021</u> Date
--	-------------------------------



Florida Department of Transportation

RON DESANTIS
GOVERNOR

719 South Woodland Boulevard
DeLand, Florida 32720-6834

KEVIN J. THIBAUT, P.E.
SECRETARY

January 13, 2022

Timothy A. Parsons, Ph.D.,
Director and State Historic Preservation Officer
Florida Division of Historical Resources
Florida Department of State
R.A. Gray Building
500 South Bronough Street
Tallahassee, Florida 32399-0250

Attn: Mr. Cletus Rooney, Transportation Compliance Review Program

RE: Cultural Resource Assessment Survey
Malabar Road Ponds
Brevard County, Florida
Financial Management No.: 437210-1

Dear Dr. Parsons,

Enclosed please find one copy of the report titled *Technical Memorandum: Cultural Resource Assessment Survey in Support of Malabar Road Improvements Ponds, Brevard County, Florida*. This report presents the findings of a cultural resource assessment survey (CRAS) conducted in support of the proposed pond construction associated with the proposed widening of Malabar Road from east of the St. Johns Heritage Parkway to Minton Road in Brevard County, Florida. The City of Palm Bay is proposing to construct nine ponds along Malabar Road. The nine pond locations total 48.68 acres. This is a Local Area Program (LAP) project being conducted by the City of Palm Bay using federal funds administered by the Florida Department of Transportation (FDOT), District 5.

The area of potential effects (APE) defines the area within which visual, audible, and atmospheric effects that the roadway improvements and subsequent maintenance may have on historic properties. The APE defined for this project includes the proposed pond footprints plus a 100-foot (30.5-meter) buffer. The archaeological survey was conducted within the proposed footprints; the architectural history survey included the entire APE.

This CRAS was conducted in accordance with the requirements set forth in Section 106 of the National Historic Preservation Act of 1966, as amended, found in 36 CFR Part 800 (Protection of Historic Properties). The studies also comply with Chapter 267 of the Florida Statutes and Rule Chapter 1A-46, Florida Administrative Code and Section 267.12, Florida Statutes, Chapter 1A-32. All work was performed in accordance with Part 2, Chapter 8 of FDOT's Project Development &

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Dr. Parsons, SHPO
FM # 437210-1
January 13, 2022
Page 2

Environment (PD&E) Manual (revised July 2020), FDOT's Cultural Resources Management Handbook, and the standards stipulated in the Florida Division of Historical Resources' (FDHR) *Cultural Resource Management Standards & Operations Manual, Module Three: Guidelines for Use by Historic Preservation Professionals*. The Principal Investigator for this project meets the Secretary of the Interior's *Standards and Guidelines for Archeology and Historic Preservation* (48 FR 44716-42). This study also complies with Public Law 113-287 (Title 54 U.S.C.), which incorporates the provisions of the National Historic Preservation Act of 1966, as amended, and the Archeological and Historic Preservation Act of 1979, as amended.

The current archaeological survey included the excavation of 23 shovel tests within the proposed ponds. All testing was negative for cultural materials. No archaeological sites were identified, and no artifacts were recovered from the APE. No further archaeological survey is recommended.

The architectural survey resulted in the revisit and evaluation of one historic resource within the Malabar Road Ponds APE (8BR04375). Based on the results of the current survey, it is the opinion of SEARCH that 8BR04375 is ineligible for the National Register of Historic Places (NRHP) due to a lack of significant historic associations and architectural and/or engineering distinction. No further architectural work is recommended.

Based on the results of this study, it is the opinion of the District that the proposed undertaking will have no effect on NRHP-listed or -eligible historic properties. No further work is recommended.

I respectfully request your concurrence with the findings of the enclosed report.

If you have any questions or need further assistance, please contact Catherine Owen, District Cultural Resource Coordinator, at (386) 943-5383 or me at (386) 943-5411.

Sincerely,



For: William G. Walsh
Environmental Manager
FDOT, District Five

Dr. Parsons, SHPO
FM # 437210-1
January 13, 2022
Page 3

<p>The Florida State Historic Preservation Officer finds the attached Cultural Resource Assessment Survey Report complete and sufficient and <input checked="" type="checkbox"/> concurs / <input type="checkbox"/> does not concur with the recommendations and findings provided in this cover letter for SHPO/FDHR Project File Number <u>2019-4374</u>. Or, the SHPO finds the attached document contains _____ insufficient information.</p> <p>In accordance with the Programmatic Agreement among the ACHP, SHPO and FDOT Regarding Implementation of the Federal-Aid Highway Program in Florida, if providing concurrence with a finding of No Historic Properties Affected for a project as a whole, or to No Adverse Effect on a specific historic property, SHPO shall presume that FDOT may approve the project as de minimis use under Section 4(f) under 23 CFR 774.</p>	
SHPO Comments:	
Kelly L. Chase, DSHPO	2/22/2022
Timothy A. Parsons, PhD, Director Florida Division of Historical Resources	Date _____



Florida Department of Transportation

RON DESANTIS
GOVERNOR

719 S. Woodland Blvd.
DeLand, FL 32720

JARED W. PERDUE, P.E.
SECRETARY

July 6, 2023

Alissa S. Lotane,
Director and State Historic Preservation Officer
Florida Division of Historical Resources
Florida Department of State
R.A. Gray Building
500 South Bronough Street
Tallahassee, Florida 32399-0250

Attn: Mr. Benjamin Stewart, Transportation Compliance Review Program

RE: Cultural Resource Assessment Survey
Malabar Road Improvements Pond Addendum (C-7 Alt 3)
Brevard County, Florida
Financial Management No.: 437210-1

Dear Ms. Lotane,

Enclosed please find one copy of the report titled *Cultural Resource Assessment Survey Addendum in Support of the Malabar Road Pond C-7 Alt 3, Brevard County, Florida*. This report presents the findings of a cultural resource assessment survey (CRAS) conducted in support of the proposed improvements to the Malabar Road from east of St. Johns Heritage Parkway to Minton Road in Brevard County, Florida. The City of Palm Bay is proposing to widen Malabar Road to accommodate additional lanes and traffic control intersections, and to construct associated ponds, swales, and floodplain compensation areas (FPCAs). The current report is limited to survey of one new pond and FPCA, Pond C-7 Alt 3. This report serves as an addendum to the 2021 SEARCH surveys titled *Cultural Resource Assessment Survey for the Malabar Road Improvements Project Development and Environment Study, Brevard County, Florida* (Florida Master Site File [FMSF] Survey No. 28025, Boschi et al., 2021) and *Technical Memorandum: Cultural Resource Assessment Survey in Support of Malabar Road Improvements Ponds, Brevard County, Florida* (FMSF Survey No. 28024, Fish et al. 2021). The current project was limited to 2.23 hectares (5.52 acres) of previously unsurveyed pond and FPCA. This is a Local Area Program (LAP) project being conducted by the City of Palm Bay using federal funds administered by the Florida Department of Transportation (FDOT), District 5.

The project area of potential effects (APE) was defined to include the Pond C-7 Alt 3 footprint, easement, and FPCA. A 30.5-meter (100-foot) buffer was used to evaluate the potential to affect any adjacent historic buildings or structures. The archaeological survey was limited to the construction footprint.

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Ms. Lotane, SHPO
FM # 437210-1
July 6, 2023
Page 2

This CRAS was conducted in accordance with the requirements set forth in Section 106 of the *National Historic Preservation Act* of 1966, as amended, found in 36 CFR Part 800 (*Protection of Historic Properties*). The studies also comply with Chapter 267 of the Florida Statutes and Rule Chapter 1A-46, Florida Administrative Code and Section 267.12, Florida Statutes, Chapter 1A-32. All work was performed in accordance with Part 2, Chapter 8 of FDOT's PD&E Manual (revised July 2020), FDOT's Cultural Resources Management Handbook, and the standards stipulated in the Florida Division of Historical Resources' (FDHR) *Cultural Resource Management Standards & Operations Manual, Module Three: Guidelines for Use by Historic Preservation Professionals*. The Principal Investigator for this project meets the Secretary of the Interior's *Standards and Guidelines for Archeology and Historic Preservation* (48 FR 44716-42). This study also complies with Public Law 113-287 (Title 54 U.S.C.), which incorporates the provisions of the *National Historic Preservation Act* of 1966, as amended, and the *Archeological and Historic Preservation Act* of 1974, as amended.

The archaeological survey included the excavation of nine shovel tests, all of which were negative for artifacts. No archaeological sites, occurrences, or features were recorded, and no further work is recommended.

No architectural survey was conducted as no buildings of historic age (45 years or older) are located within or adjacent to the proposed pond footprint.

Based on the results of this study, it is the opinion of the District that the proposed undertaking will have no effect on NRHP-listed or -eligible historic properties. No further work is recommended.

I respectfully request your concurrence with the findings of the enclosed report.

If you have any questions or need further assistance, please contact Catherine Owen, District Cultural Resource Coordinator, at (386) 943-5383 or me at (386) 943-5436.

Sincerely,



Casey Lyon, M.S.
Environmental Manager
FDOT, District Five

Ms. Lotane, SHPO
FM # 437210-1
July 6, 2023
Page 3

The Florida State Historic Preservation Officer finds the attached Cultural Resource Assessment Survey Report complete and sufficient and concurs / does not concur with the recommendations and findings provided in this cover letter for SHPO/FDHR Project File Number 202304091. Or, the SHPO finds the attached document contains _____ insufficient information.

In accordance with the Programmatic Agreement among the ACHP, SHPO and FDOT Regarding Implementation of the Federal-Aid Highway Program in Florida, if providing concurrence with a finding of No Historic Properties Affected for a project as a whole, or to No Adverse Effect on a specific historic property, SHPO shall presume that FDOT may approve the project as de minimis use under Section 4(f) under 23 CFR 774.

SHPO Comments:

Kelly L. Chase 8.1.2023
Alissa S. Lotane, Director Date
Florida Division of Historical Resources



Florida Department of Transportation

RON DESANTIS
GOVERNOR

719 South Woodland Boulevard
DeLand, Florida 32720-6834

KEVIN J. THIBAUT, P.E.
SECRETARY

October 20, 2022

Alissa S. Lotane,
Director and State Historic Preservation Officer
Florida Division of Historical Resources
Florida Department of State
R.A. Gray Building
500 South Bronough Street
Tallahassee, Florida 32399-0250

Attn: Ms. Alyssa McManus, Transportation Compliance Review Program

RE: Cultural Resource Assessment Survey
Malabar Road Improvements Pond Addendum
Brevard County, Florida
Financial Management No.: 437210-1

Dear Ms. Lotane,

Enclosed please find one copy of the report titled *Cultural Resource Assessment Addendum in Support of the Malabar Road Ponds Update, Brevard County, Florida*. This report presents the findings of a cultural resource assessment survey (CRAS) conducted in support of the proposed improvements to the Malabar Road from east of St. Johns Heritage Parkway to Minton Road in Brevard County, Florida. The City of Palm Bay is proposing to widen Malabar Road to accommodate additional lanes and traffic control intersections as well as construct associated ponds, swales, and floodplain compensation areas (FPCAs). The current report is limited to survey of one newly relocated pond, Pond C-20 Alt 1. This report serves as an addendum to the 2021 SEARCH surveys titled *Cultural Resource Assessment Survey for the Malabar Road Improvements Project Development and Environment Study, Brevard County, Florida* (Florida Master Site File [FMSF] Survey No. 28025, Boschi et al., 2021) and *Technical Memorandum: Cultural Resource Assessment Survey in Support of Malabar Road Improvements Ponds, Brevard County, Florida* (FMSF Survey No. 28024, Fish et al. 2021). The current project was limited to 2.85 hectares (7.04 acres) of previously unsurveyed pond. This is a Local Area Program (LAP) project being conducted by the City of Palm Bay using federal funds administered by the Florida Department of Transportation (FDOT), District 5.

The project area of potential effects (APE) was defined to include the Pond C-20 Alt 1 footprint. No buffer was used as no structures of historic age (45 years or older) are located within or adjacent to the pond footprint.

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Ms. Lotane, SHPO
FM # 437210-1
October 20, 2022
Page 2

This CRAS was conducted in accordance with the requirements set forth in Section 106 of the National Historic Preservation Act of 1966, as amended, found in 36 CFR Part 800 (Protection of Historic Properties). The studies also comply with Chapter 267 of the Florida Statutes and Rule Chapter 1A-46, Florida Administrative Code and Section 267.12, Florida Statutes, Chapter 1A-32. All work was performed in accordance with Part 2, Chapter 8 of FDOT's Project Development & Environment Study (PD&E) Manual (revised July 2020), FDOT's Cultural Resources Management Handbook, and the standards stipulated in the Florida Division of Historical Resources' (FDHR) *Cultural Resource Management Standards & Operations Manual, Module Three: Guidelines for Use by Historic Preservation Professionals*. The Principal Investigator for this project meets the Secretary of the Interior's *Standards and Guidelines for Archeology and Historic Preservation* (48 FR 44716-42). This study also complies with Public Law 113-287 (Title 54 U.S.C.), which incorporates the provisions of the National Historic Preservation Act of 1966, as amended, and the Archeological and Historic Preservation Act of 1979, as amended.

The archaeological survey included the excavation of three shovel tests, all of which were negative for artifacts. No archaeological sites, occurrences, or features were recorded and no further work is recommended.

No architectural survey was conducted as no buildings of historic age (45 years or older) are located within or adjacent to the proposed pond footprint.

Based on the results of this study, it is the opinion of the District that the proposed undertaking will have no effect on NRHP-listed or -eligible historic properties. No further work is recommended.

I respectfully request your concurrence with the findings of the enclosed report.

If you have any questions or need further assistance, please contact Catherine Owen, District Cultural Resource Coordinator, at (386) 943-5383 or me at (386) 943-5411.

Sincerely,



For: William G. Walsh
Environmental Manager
FDOT, District Five

Ms. Lotane, SHPO
FM # 437210-1
October 20, 2022
Page 3

The Florida State Historic Preservation Officer finds the attached Cultural Resource Assessment Survey Report complete and sufficient and concurs / does not concur with the recommendations and findings provided in this cover letter for SHPO/FDHR Project File Number 201904374D. Or, the SHPO finds the attached document contains _____ insufficient information.

In accordance with the Programmatic Agreement among the ACHP, SHPO and FDOT Regarding Implementation of the Federal-Aid Highway Program in Florida, if providing concurrence with a finding of No Historic Properties Affected for a project as a whole, or to No Adverse Effect on a specific historic property, SHPO shall presume that FDOT may approve the project as de minimis use under Section 4(f) under 23 CFR 774.

SHPO Comments:

Kelly L. Chase, DSHPO DN: cn=Kelly L. Chase, DSHPO, o, qu, email=kelly.chase@dos.myflorida. com, c=US Date: 2022.11.01 13:58:56 -04'00'	11.1.2022
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Alissa S. Lotane, Director	Date
Florida Division of Historical Resources	

Section 4(f) Resources

Florida Department of Transportation

MALABAR RD FROM ST JOHNS HERITAGE PKWY TO MINTON RD

District: FDOT District 5

County: Brevard County

ETDM Number: 14396

Financial Management Number: 437210-1-28-01

Federal-Aid Project Number: D519-067-B

Project Manager: David Graeber

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 May 26, 2022 and executed by the Federal Highway Administration and FDOT. Submitted pursuant 49 U.S.C. § 303.

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Fred Poppe Regional Park	2
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DRAFT

Summary and Approval

Resource Name	Facility Type	Property Classification	Owner/Official with Jurisdiction	Recommended Outcome	OEM SME Action
Fred Poppe Regional Park	City Park	Park/Rec Area	City of Palm Bay	No Use	Determination Pending

DRAFT

Fred Poppe Regional Park

Facility Type: City Park

Property Classification: Park/Rec Area

Address and Coordinates:

Address: 1951 Malabar Rd NW, Palm Bay, FL, 32907, USA

Latitude: 27.99901 Longitude: -80.73103

Description of Property:

Owner/Official with Jurisdiction: City of Palm Bay

Relationship Between the Property and the Project

Yes No

Will the property be "used" within the meaning of Section 4(f)?

Recommended Outcome: No Use

OEM SME Determination Date: Pending

Resource Attachments

Fred Poppe Regional Park

Fred Poppe Regional Park Location

DRAFT

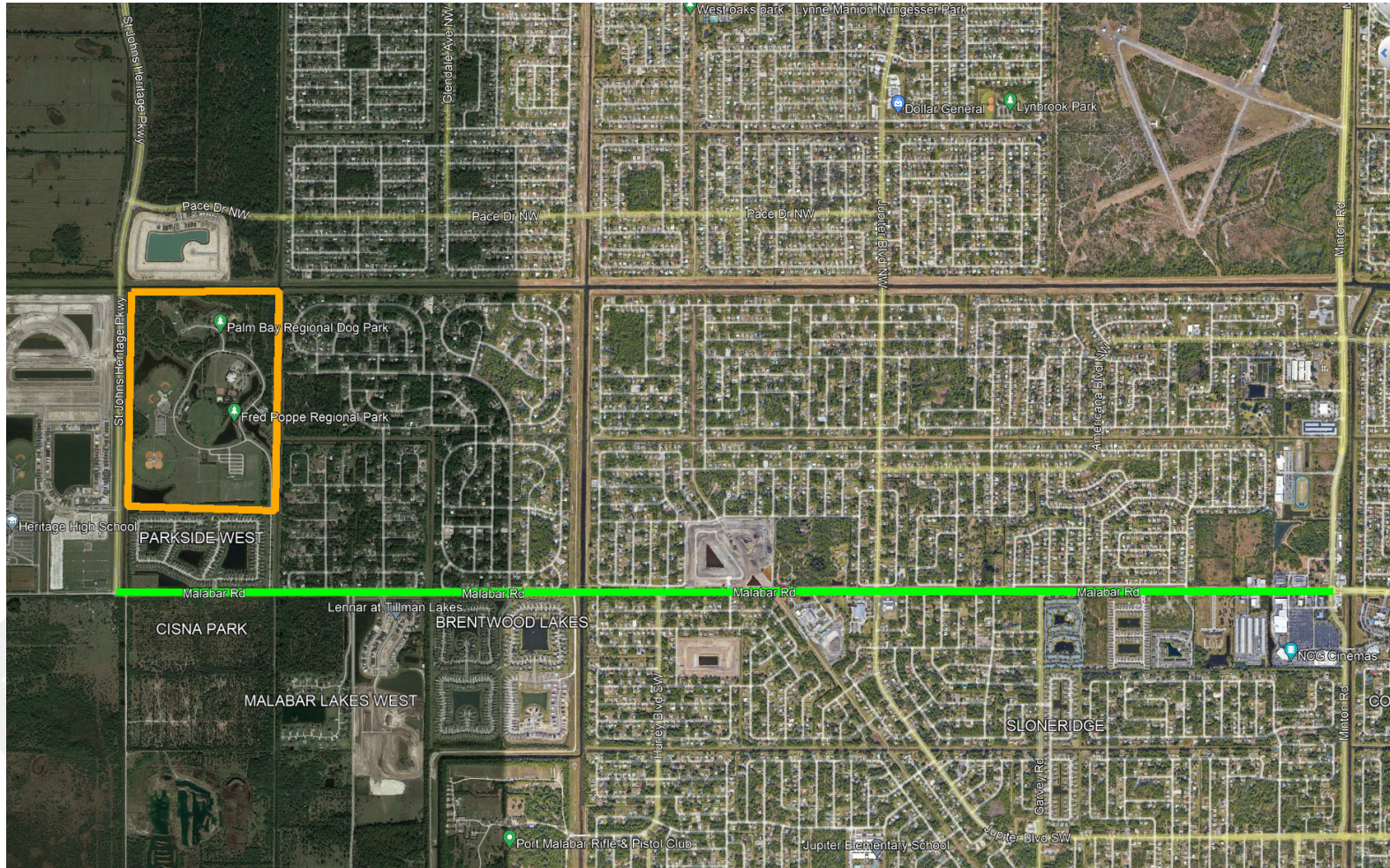
Fred Poppe Regional Park

Contents:

Fred Poppe Regional Park Location

DRAFT

Malabar Road Study Corridor (in green) and location of Fred Poppe Regional Park (boxed in orange)



Detail of Fred Poppe Regional Park



Natural Resources Appendix

Contents:

United States Fish and Wildlife Service (USFWS) Natural Resource Evaluation (NRE) Concurrence Letter - Digital Signature

Figure 8 Protected Species and Habitat Map

Figure 9 Caracara Survey Nest Locations and Impacts Map

Figure 10 Wetlands Map

Figure 11 Floodplains Map

FWC Species Concurrence Letter

USFWS NRE Addendum Species Concurrence Letter

FWC NRE Addendum Species Concurrence Letter

DRAFT



Florida Department of Transportation

RON DESANTIS
GOVERNOR

719 S. W. C
DeLand, F

November 29, 2021

Annie DZiergowski, Deputy Field Supervisor
US Fish and Wildlife Service
North Florida Ecological Services Office
7915 Baymeadows Way, Suite 200
Jacksonville, FL 32256-7517



U.S. Fish and Wildlife Service
Florida Ecological Service Office

FWS Log No. 04EF1000-2022-I-0358

The U.S. Fish and Wildlife Service has reviewed the information provided and finds that the proposed action is not likely to adversely affect any federally listed species or designated critical habitat protected by the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 et. seq.). A record of this consultation is on file at the Florida Ecological Service Office.

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

Attention: Mrs. Zakia Williams

RE: Request for Section 7 Informal Consultat
Malabar Road PD&E Study
Brevard County, Florida
Financial Management Number: 437210-1-28-01

José J. Rivera, Division Supervisor, Environmental Review

12/17/2021

Date

The Florida Department of Transportation is conducting a Project Development and Environment (PD&E) Study to evaluate the proposed widening of Malabar Road from St. Johns Heritage Parkway to Minton Road in Brevard County, Florida. As part of the study, a Natural Resources Evaluation (NRE) has been developed to assess the project for its impacts to wetlands and protected species.

Agency coordination to obtain species and habitat related information has occurred through the Efficient Transportation Decision Making (ETDM) Program Screening. The final ETDM Summary Report was published on October 25, 2019. The project received a Degree of Effect of Moderate (3) from the USFWS and the project's class of action is a Type II Categorical Exclusion. Additional coordination took place in December 2019 and is included in Appendix D in the NRE.

The study area is either partially or wholly within several consultation areas, however, there is no suitable habitat for the following species: Everglade snail kite (*Rostrhamus sociabilis plumbeus*), Florida grasshopper sparrow (*Ammodramus savannarum floridanus*), red-cockaded woodpecker (*Picoides borealis*), Carter's warea (*Warea carteri*), Lewton's polygala (*Polygala lewtonii*), and short-leaved rosemary (*Conradina brevifolia*). As there is no suitable habitat and no documented occurrences, it has been determined that the project will have "no effect" for any of these species. Additionally, "no effect" has been determined for the bald eagle as there are no eagle's nests within the project area.

There are five (5) federally protected animal species (American alligator, Audubon's crested caracara, eastern indigo snake, Florida scrub-jay, and wood stork). These species, and their associated effect determinations, are discussed below:

American Alligator (*Alligator mississippiensis*) - Suitable habitat for the American alligator was observed within the project study area. Most of the habitat consists of canals and reservoirs. No Alligators were observed during the field surveys. While the project will impact suitable habitat, the extent of impacts relative to habitat within the corridor will be minimal and alligators will be able to continue their life history strategies. Based on this information, the proposed project "may affect, but is not likely to adversely affect" the American alligator.

Audubon's Crested Caracara (*Polyborus plancus audubonii*) – Suitable habitat for the caracara was observed near the eastern terminus of the project study area. A species-specific caracara survey was conducted from January through April 2020. Five caracara observation stations were established within the project study area. Adult and juvenile caracara were observed. Caracara activity included foraging in the pastures and along the roadsides, perching on trees and powerlines, traveling over and between pastures, and demonstrating mating behavior, such as pairs perching together, preening, and sharing food was observed. Nesting activity was documented on several occasions, resulting in the positive identification of two caracara nests. The nests range from approximately 1041 meters to approximately 1105 meters from proposed project activities.

The Standard Local Operating Procedures for Endangered Species (SLOPES) for Audubon's crested caracara and the FWS Guidelines provide a series of recommended restrictions for activities in the primary and secondary zones both during nesting season and outside nesting season. The Guidelines and SLOPES flowchart were utilized to determine the impacts on the caracara as a result of the proposed project. The survey identified two caracara nests located within 1500 meters of the proposed project activities; and therefore, avoidance or implementation of conservation measures must be utilized to ensure the project is not likely to adversely affect the caracara. Both strategies will be utilized to eliminate adverse effects to the caracara. To avoid and minimize impacts to caracara foraging habitat, the recommended preferred pond site (C8 and C9 Atl. 1) was chosen to eliminate impacts to suitable habitat within 1,500 meters from the nests. Conservation measures will be implemented for areas within the protection zone where avoidance was not practicable. The SLOPES flowchart followed the sequence which concluded with conservation measures and actions proposed outside nesting season in order to obtain a not likely to adversely affect determination.

Based on the distance of the proposed construction activities from the nest; existing disturbances which do not appear to affect caracara nesting; lack of caracara utilization due to unsuitable foraging habitat within the proposed construction footprint; remaining foraging capacity; implementation of conservation measures, including constructing outside of nesting season as

described above, FDOT has determined this project “may affect, but is unlikely to adversely affect” the Audubon’s crested caracara.

Eastern Indigo Snake (*Drymarchon couperi*) - Suitable habitat for the eastern indigo snake was observed within the project study area. Suitable habitat for the gopher tortoise was also observed; however, no gopher tortoise burrows (a primary source of shelter) were identified within the project study area during field reviews.

The FWS has a programmatic effect key for the indigo snake. Following this 2013 key, (A) the project is not located in open water or salt marsh, (B) the permit will be conditioned for use of the Services Standard Protection Measures For the Eastern Indigo Snake during site preparation and project construction, (C) there are gopher tortoise burrows, 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 active and inactive gopher tortoise burrows, and (E) any permit will be conditioned such that all gopher tortoise burrows, active or inactive will be excavated prior to site manipulation in the vicinity of the burrow. Based on use of the programmatic key, FDOT has determined that this project would result in a “may affect, but not likely to adversely affect” determination for this species.

Florida Scrub-Jay (*Aphelocoma coerulescens*) - The project study area contains habitats consisting mostly of Type III or non-ranked (i.e., non-suitable) scrub-jay habitats. Suitable habitat is suboptimal for the scrub jay as most of these areas contained pine trees or cabbage palms which provide perches for scrub jay avian predators. Scrub jays were not observed during any field events.

A species-specific scrub-jay survey was conducted in areas of suitable habitat during March and April of 2020. Twelve call-stations were established in areas of potential habitat within and adjacent to the limits of construction. No scrub-jays were identified during the survey.


Based on the scrub-jay survey results as well as the current site conditions and limits of proposed impacts, FDOT has determined that this project “may affect, but is not likely to adversely affect” the Florida scrub-jay.

Wood Stork (*Mycteria americana*) - The FWS wood stork colony database was searched for active wood stork colonies located within 15-miles of the project area. According to the FWS wood stork colony website, portions of the study area fall within the Core Foraging Area (CFA) of seven wood stork breeding colonies (Deseret Ranch, Grange Island, Grant Farm Island, Kemper Ranch, Micco North, Micco South, and US 192 East). Wood storks were observed during field surveys. The project will impact approximately 0.69 acres of Suitable Foraging Habitat (SFH).

The FWS has a programmatic Effect Determination Key for the Wood Stork in Central and North Peninsular Florida (FWS 2008). Following this 2008 key, (A) The project is more than

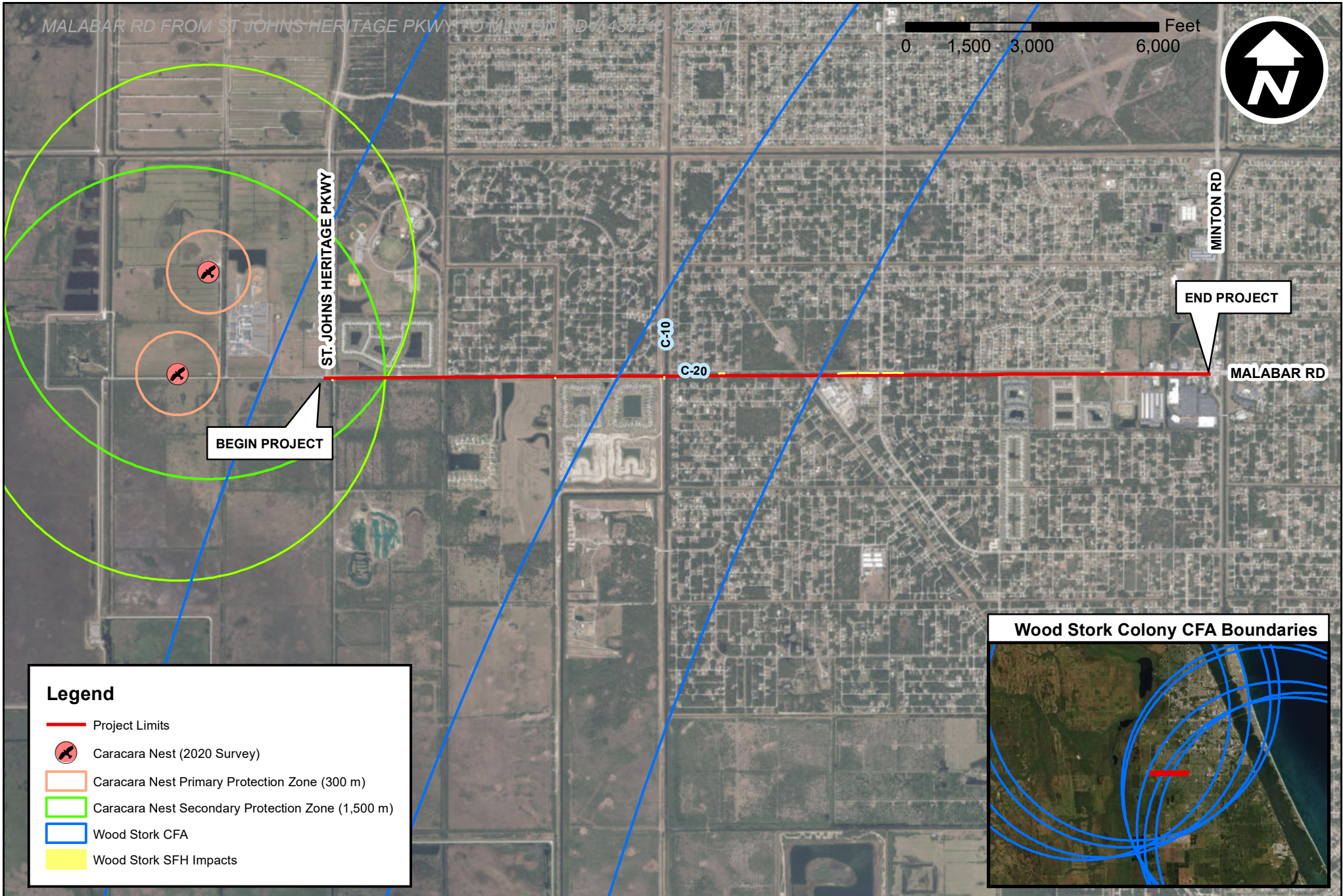
2,500 feet from a colony site, (B) project impacts SFH, (C) project impacts to SFH are greater than or equal to 0.5-acre, (D) project impacts to SFH are within the CFA of a colony site, (E-1) project provides SFH compensation within the Service Area of a Service-approved wetland mitigation bank or wood stork conservation bank within the CFA. Based on the programmatic key, FDOT has determined that the project "may affect, but not likely to adversely affect" the wood stork.

We appreciate the coordination effort and input already provided and look forward to continued consultation on this project. If you have any questions, feel free to contact either Heather Chasez at (386) 943-5393, heather.chasez@dot.state.fl.us or me at (386) 943-5411, william.walsh@dot.state.fl.us at your convenience. Thank you for your assistance with this project.







Sincerely,

William G. Walsh

Environmental Manager
FDOT, District Five

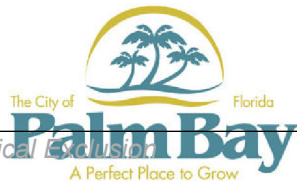
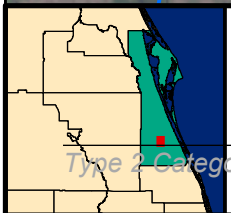
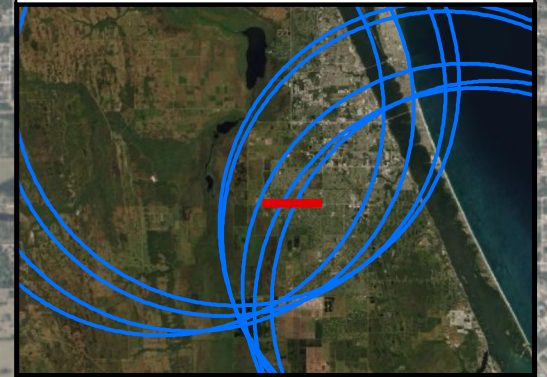
cc: Jack Freeman (Kittelson), Jason Houck, Jada Barhorst (Inwood), Heather Chasez (FDOT)



Legend

-  Project Limits
-  Caracara Nest (2020 Survey)
-  Caracara Nest Primary Protection Zone (300 m)
-  Caracara Nest Secondary Protection Zone (1,500 m)
-  Wood Stork CFA
-  Wood Stork SFH Impacts

Wood Stork Colony CFA Boundaries

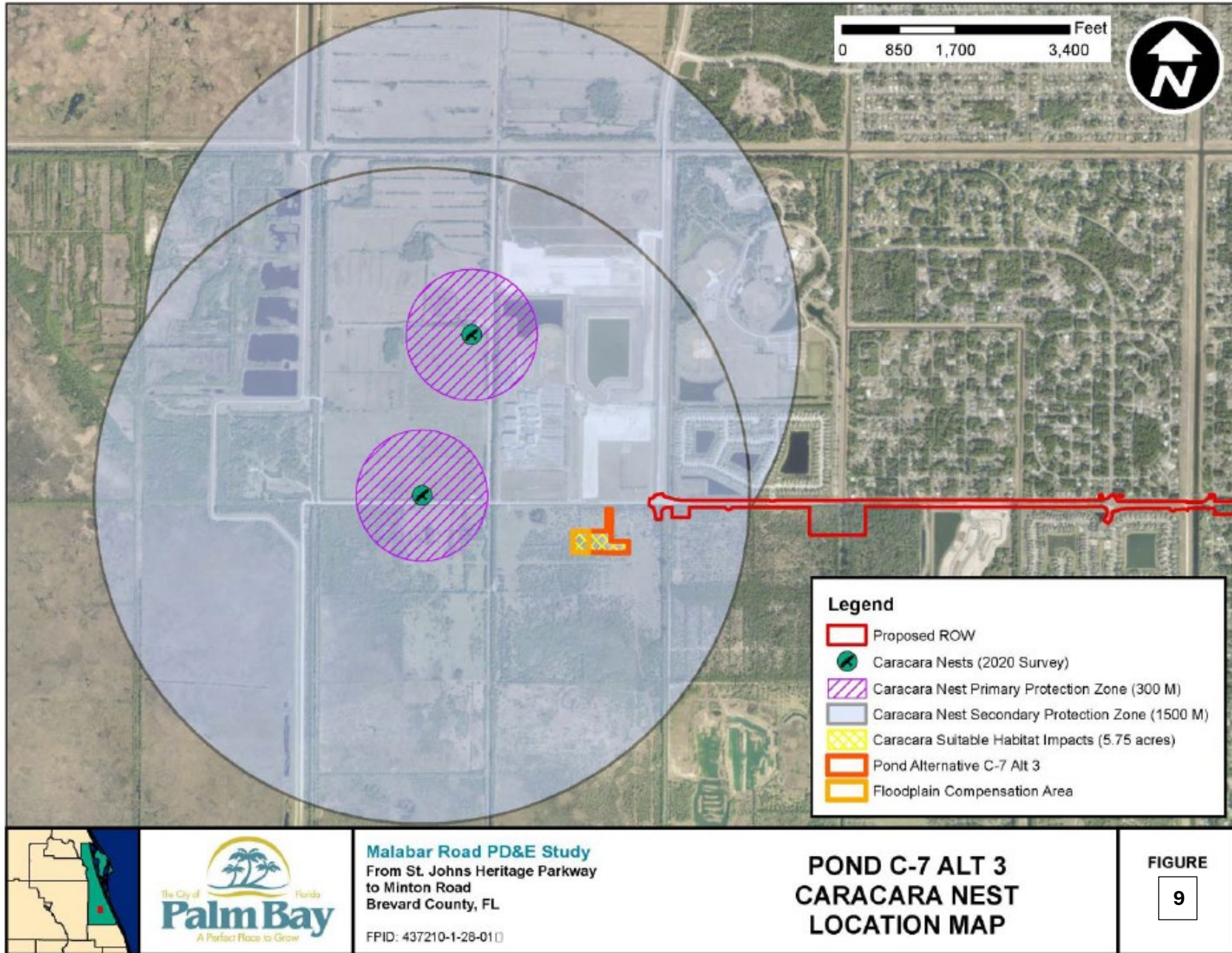


Malabar Road PD&E Study
From St. Johns Heritage Parkway
to Minton Road
Brevard County, FL

FPID: 437210-1-28-01

**PROTECTED SPECIES
AND HABITAT MAP**

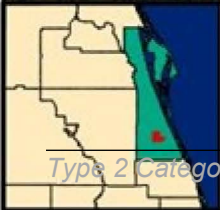
**FIGURE
8**





Legend

-  Proposed R/W
-  FPC Alternative
-  Pond Site Alternative
-  Preferred Pond Site Alternative
-  Wetlands
-  Other Surface Waters

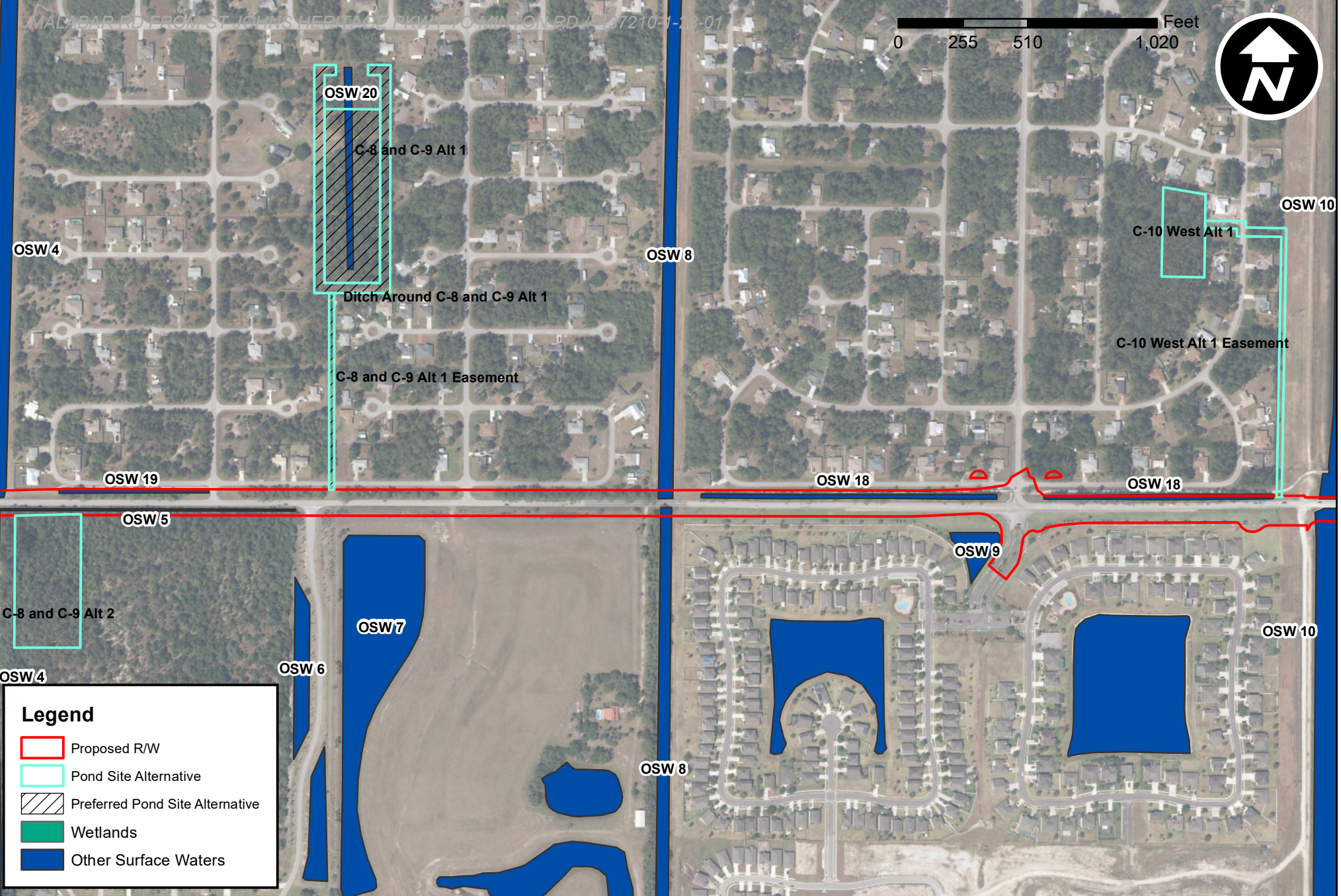


Malabar Road PD&E Study
 From St. Johns Heritage Parkway
 to Minton Road
 Brevard County, FL






FPID: 437210-1-28-01

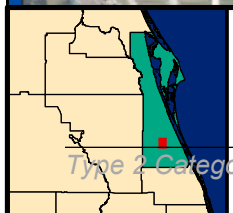
**WETLANDS AND
 OTHER SURFACE WATERS
 MAP**

**FIGURE
 10**



Legend

-  Proposed R/W
-  Pond Site Alternative
-  Preferred Pond Site Alternative
-  Wetlands
-  Other Surface Waters



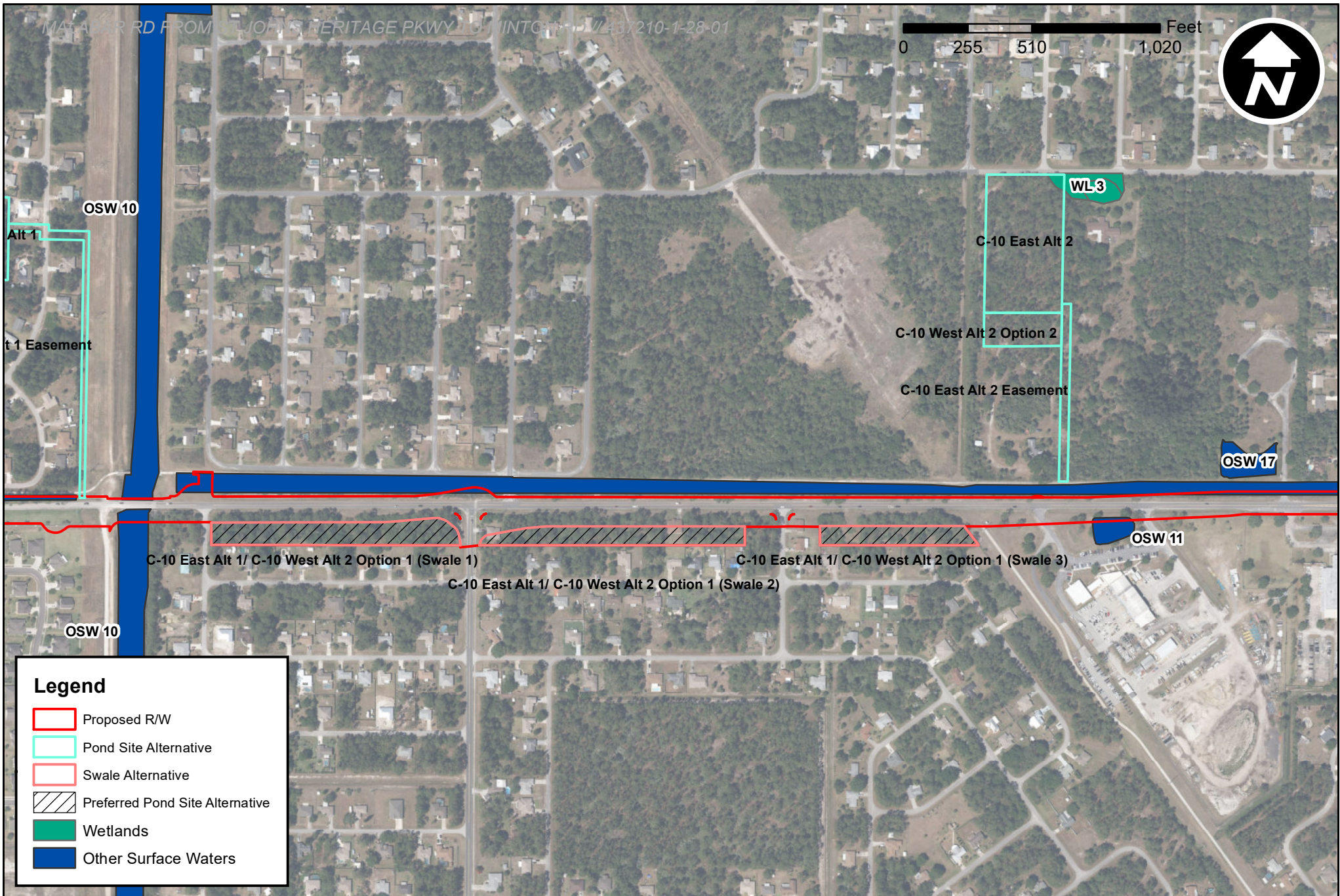
Malabar Road PD&E Study
 From St. Johns Heritage Parkway
 to Minton Road
 Brevard County, FL

FPID: 437210-1-28-01

**WETLANDS AND
 OTHER SURFACE WATERS
 MAP**

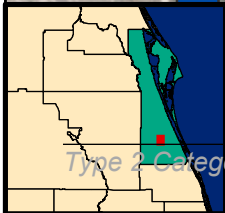
**FIGURE
 10**

Page 96 of 124
 Sheet 2 of 5



Legend

- Proposed R/W
- Pond Site Alternative
- Swale Alternative
- Preferred Pond Site Alternative
- Wetlands
- Other Surface Waters

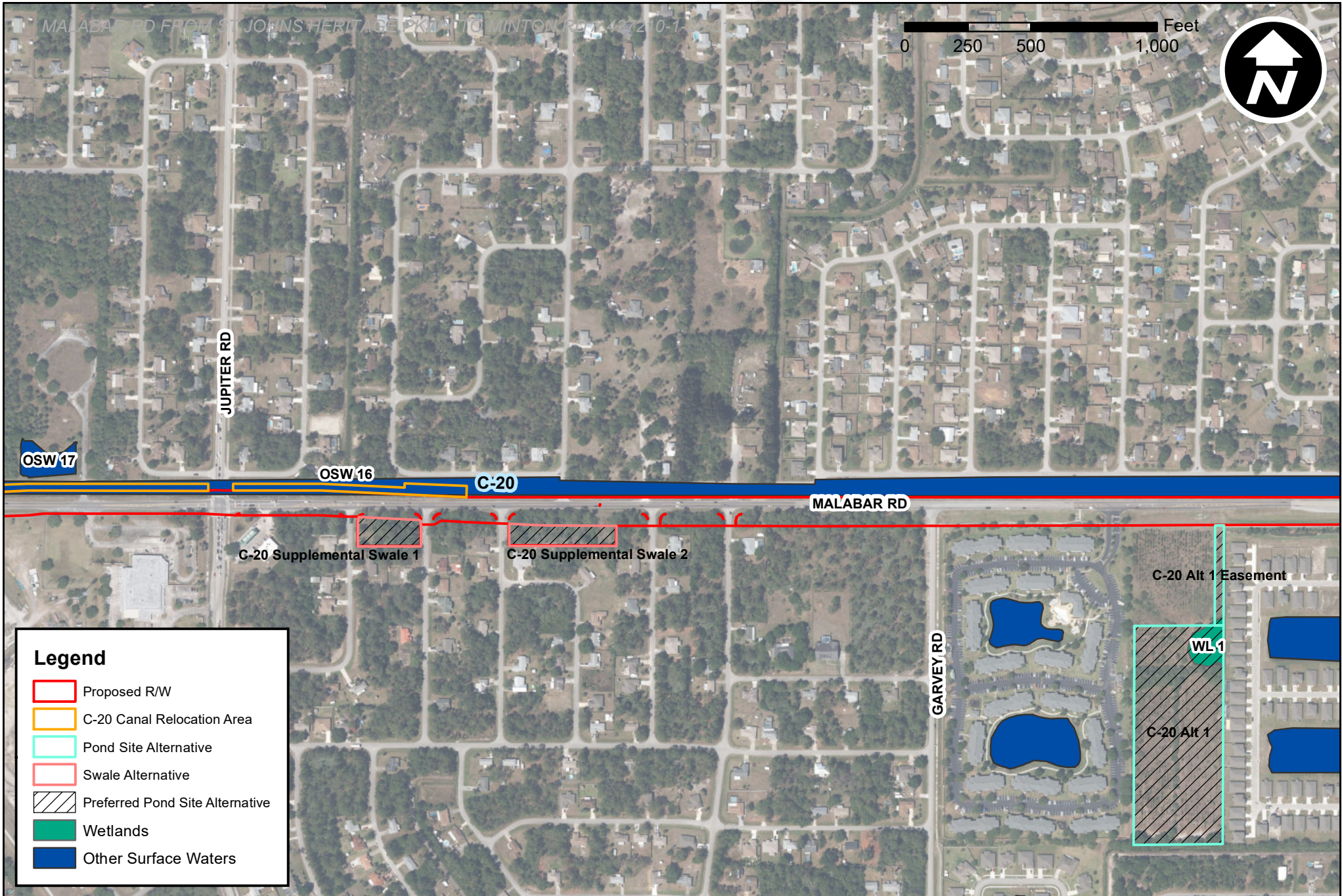


Malabar Road PD&E Study
 From St. Johns Heritage Parkway
 to Minton Road
 Brevard County, FL








FPID: 437210-1-28-01

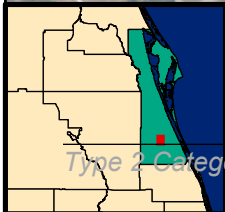
**WETLANDS AND
 OTHER SURFACE WATERS
 MAP**

**FIGURE
 10**



Legend

-  Proposed R/W
-  C-20 Canal Relocation Area
-  Pond Site Alternative
-  Swale Alternative
-  Preferred Pond Site Alternative
-  Wetlands
-  Other Surface Waters

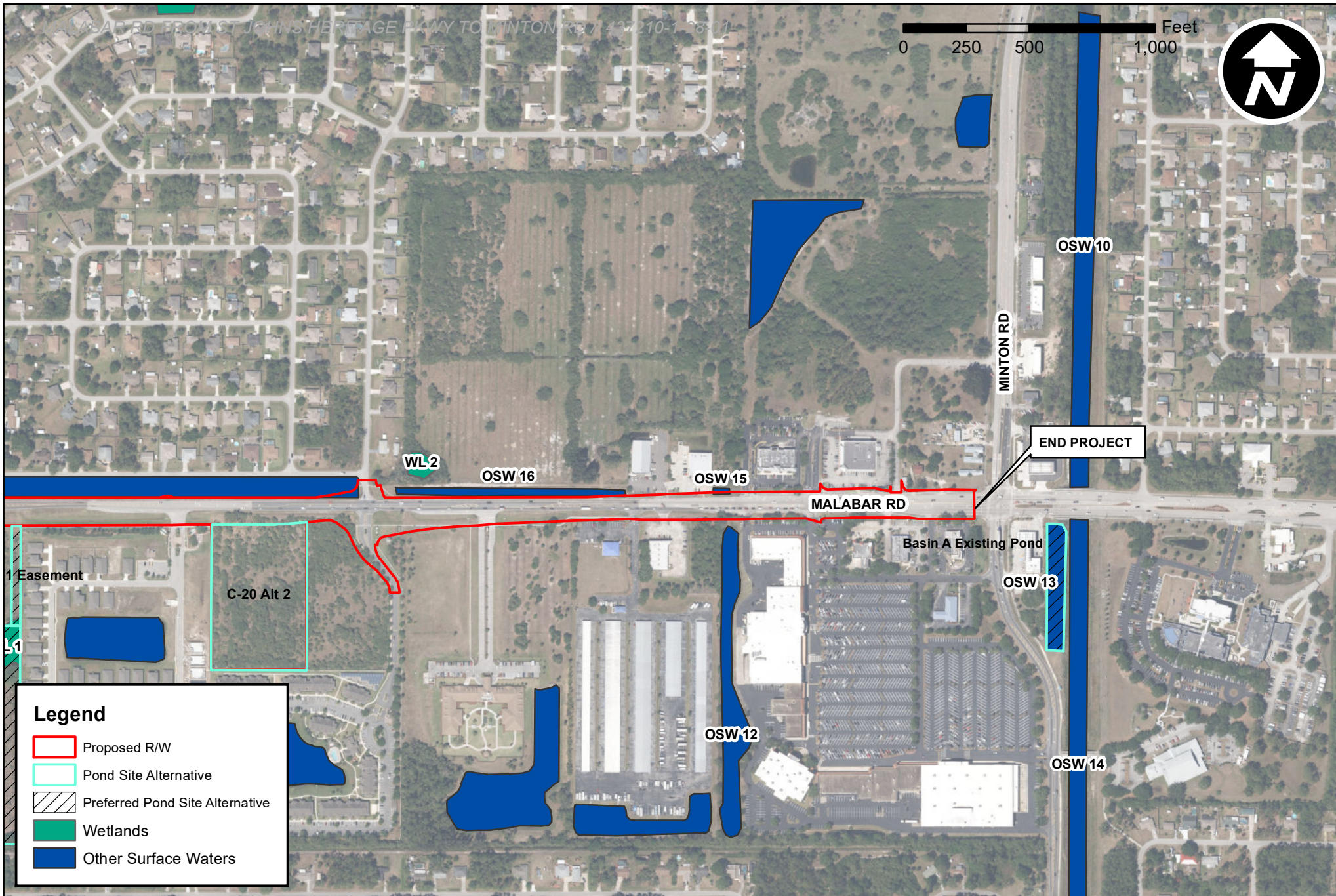


Malabar Road PD&E Study
From St. Johns Heritage Parkway
to Minton Road
Brevard County, FL

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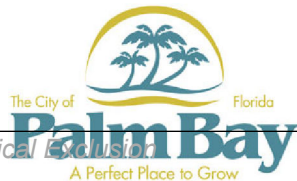
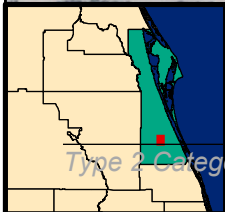
**WETLANDS AND
OTHER SURFACE WATERS
MAP**

**FIGURE
10**



Legend

- Proposed R/W
- Pond Site Alternative
- Preferred Pond Site Alternative
- Wetlands
- Other Surface Waters

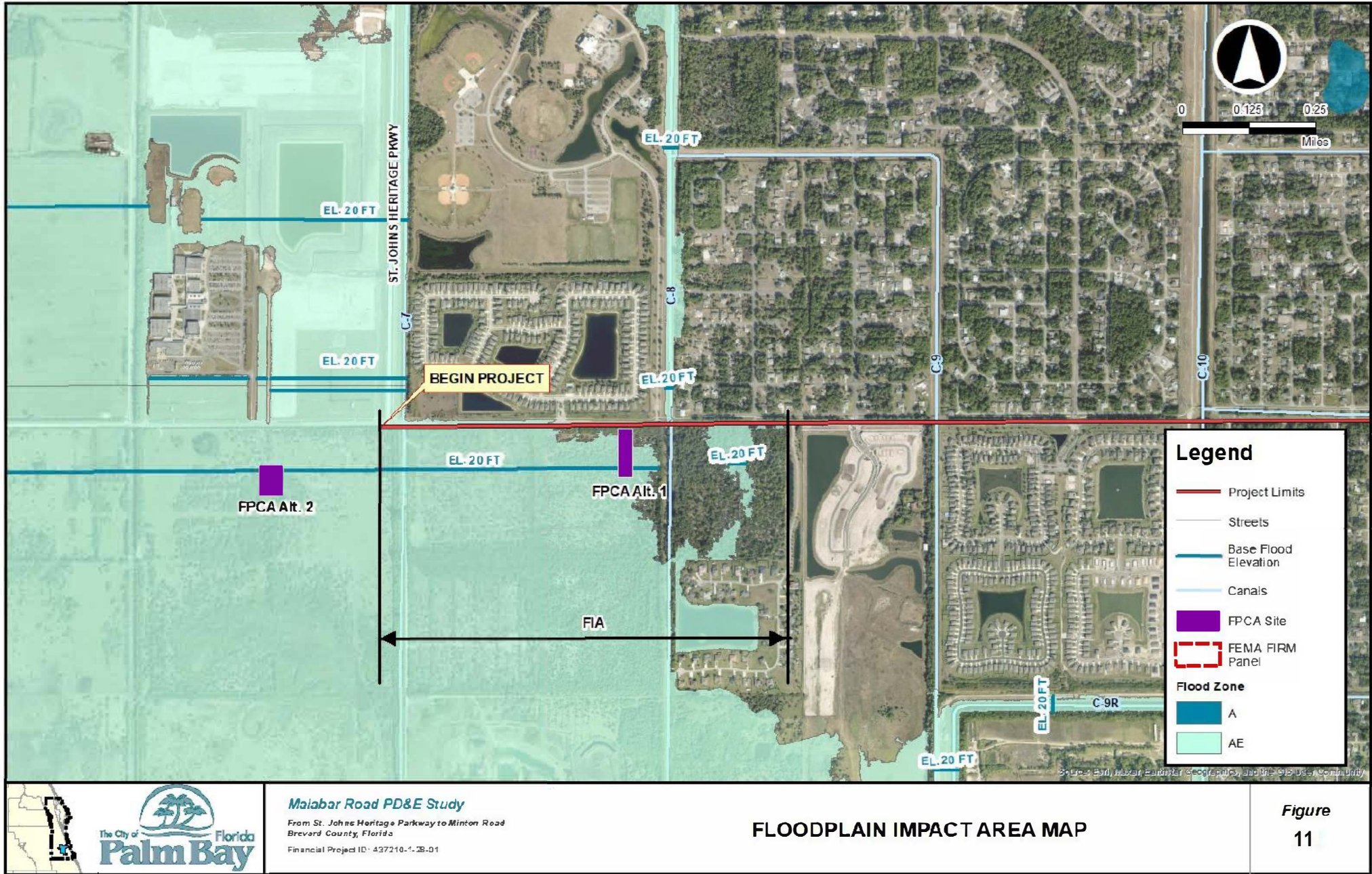


Malabar Road PD&E Study
 From St. Johns Heritage Parkway
 to Minton Road
 Brevard County, FL

FPID: 437210-1-28-01

**WETLANDS AND
 OTHER SURFACE WATERS
 MAP**

**FIGURE
 10**



FLOODPLAIN IMPACT AREA MAP

Figure 11



December 29, 2021

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Lorena Cucek
FDOT Project Manager
Florida Department of Transportation District Five
719 S Woodland Ave
Deland, Florida 32720
Lorena.Cucek@dot.state.fl.us

Re: Malabar Road from St. Johns Heritage Parkway to Minton Road, Natural Resources Evaluation, Brevard County, Florida, ETDM # 14396

Dear Ms. Cucek:

Florida Fish and Wildlife Conservation Commission (FWC) staff reviewed the Natural Resources Evaluation (NRE) for the above-referenced project in accordance with Chapter 379, Florida Statutes and Rule 68A-27, Florida Administrative Code. The Florida Department of Transportation District Five, in conjunction with the City of Palm Bay, is studying the potential environmental effects of capacity, safety, and multi-modal improvements on Malabar Road from St. Johns Heritage Parkway to Minton Road, a distance of approximately four miles, in the City of Palm Bay and Brevard County, Florida.

The NRE was prepared as part of the Project Development and Environment (PD&E) Study (ETDM Number 14396) to document the natural resources analysis and to summarize potential impacts to wetlands, federal and state protected species, and protected habitats within new proposed right-of-way for the roadway widening project.

FWC staff agrees with the determinations of effect and supports the project implementation measures and commitments for protected species. For specific technical questions regarding the content of this letter, please contact Kristee Booth at (850) 363-6298 or email KristeeBooth@MyFWC.com. All other inquiries may be directed to ConservationPlanningServices@MyFWC.com.

Sincerely,

A handwritten signature in blue ink, appearing to read "Hight".

Jason Hight, Director
Office of Conservation Planning Services

jh/kb
Malabar Road from St. Johns Heritage Parkway to Minton Road NRE_12292021



Florida Department of Transportation

RON DESANTIS
GOVERNOR


719 S. Woodland Boulevard
DeLand, Florida 32720-6834

JEROD W. PERDUE, P.E.
SECRETARY

August 21, 2024

Zakia Williams
US Fish and Wildlife Service
North Florida Ecological Services Office
7915 Baymeadows Way, Suite 200
Jacksonville, FL 32256-7517

RE: Request for Section 7 Informal Consultation
Malabar Road PD&E Study
Brevard County, Florida
Financial Management Number: 437210-1-28-01

	Florida Ecological Services Field Office
	Service Project 2022-I-0358 Code No. _____
The U.S. Fish and Wildlife Service has reviewed the information provided and finds that the proposed action is not likely to adversely affect any federally listed species or designated critical habitat protected by the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 et. seq.). A record of this consultation is on file at the Florida Ecological Services Field Office.	
This fulfills the requirements of section 7 of the Act and further action is not required. If modifications are made to the project, if additional information involving potential effects to listed species becomes available, or if a new species is listed, reinitiation of consultation may be necessary.	
Supervisor _____	

Dear Ms. Zakia Williams

The Florida Department of Transportation is conducting a Project Development and Environment (PD&E) Study to evaluate the proposed widening of Malabar Road from St. Johns Heritage Parkway to Minton Road in Brevard County, Florida. As part of the study, a Natural Resources Evaluation (NRE) has been developed to assess the project for its impacts to wetlands and protected species. The NRE was submitted to the US Fish and Wildlife Service (USFWS) on November 29, 2021, and the USFWS subsequently issued concurrence on December 17, 2021. Due to project modifications, an NRE Addendum has been developed, and the Florida Department of Transportation (FDOT) is reinitiating consultation.

Agency coordination to obtain species and habitat-related information has occurred through the Efficient Transportation Decision Making (ETDM) Program Screening. The final ETDM Summary Report was published on October 25, 2019. The project received a Degree of Effect of Moderate (3) from the USFWS, and the project’s class of action is a Type II Categorical Exclusion. Additional coordination took place in December 2019 and is included in Appendix E in the NRE.

The study area is either partially or wholly within several consultation areas; however, there is no suitable habitat for the following species: Everglade snail kite (*Rostrhamus sociabilis plumbeus*), Florida grasshopper sparrow (*Ammodramus savannarum floridanus*), red-cockaded woodpecker (*Picoides borealis*), Carter’s warea (*Warea carteri*), Lewton’s polygala (*Polygala lewtonii*), and short-leaved rosemary (*Conradina brevifolia*). As there is no suitable habitat and no documented occurrences, it has been determined that the project will have “no effect” for any of these

species. Additionally, it is anticipated that the proposed project will have no impact on the bald eagle as there are no eagle's nests within the project area.

There are five (5) federally protected animal species (Audubon's crested caracara, eastern indigo snake, Florida scrub-jay, tricolored bat, eastern black rail, and wood stork). These species, and their associated effect determinations, are discussed below:

Audubon's Crested Caracara (*Polyborus plancus audubonii*) – Suitable habitat for the caracara was observed near the eastern terminus of the project study area. A species-specific caracara survey was conducted from January through April 2020. Five caracara observation stations were established within the project study area. Adult and juvenile caracara were observed. Caracara activity included foraging in the pastures and along the roadsides, perching on trees and powerlines, traveling over and between pastures, and demonstrating mating behavior, such as pairs perching together, preening, and sharing food was observed. Nesting activity was documented on several occasions, resulting in the positive identification of two caracara nests. The nests range from approximately 1041 meters to approximately 1105 meters from proposed project activities.

The Standard Local Operating Procedures for Endangered Species (SLOPES) for Audubon's crested caracara and the FWS Guidelines provide a series of recommended restrictions for activities in the primary and secondary zones both during nesting season and outside nesting season. The Guidelines and SLOPES flowchart were utilized to determine the impacts on the caracara as a result of the proposed project. The survey identified two caracara nests located within 1500 meters of the proposed project activities; and therefore, avoidance or implementation of conservation measures must be utilized to ensure the project is not likely to adversely affect the caracara. Both strategies will be utilized to eliminate adverse effects to the caracara. To avoid and minimize impacts to caracara foraging habitat, the recommended preferred pond site (C8 and C9 Atl. 1) was chosen to reduce impacts to suitable habitat within 1,500 meters from the nests. Conservation measures will be implemented for areas within the protection zone where avoidance was not practicable. The SLOPES flowchart followed the sequence which concluded with conservation measures and actions proposed outside nesting season in order to obtain a not likely to adversely affect determination.

Based on the distance of the proposed construction activities from the nest; existing disturbances which do not appear to affect caracara nesting; lack of caracara utilization due to unsuitable foraging habitat within the proposed construction footprint; remaining foraging capacity; implementation of conservation measures, including constructing outside of nesting season as described above, FDOT has determined this project "may affect, but is unlikely to adversely affect" the Audubon's crested caracara.

Eastern Indigo Snake (*Drymarchon couperi*) - Suitable habitat for the eastern indigo snake was observed within the project study area. Suitable habitat for the gopher tortoise was also observed;

however, no gopher tortoise burrows (a primary source of shelter) were identified within the proposed project limits during field reviews.

The FWS has a programmatic effect key for the indigo snake. Following this 2013 key, (A) the project is not located in open water or salt marsh, (B) the permit will be conditioned for use of the Services Standard Protection Measures For the Eastern Indigo Snake during site preparation and project construction, (C) there are gopher tortoise burrows, 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 active and inactive gopher tortoise burrows, and (E) any permit will be conditioned such that all gopher tortoise burrows, active or inactive will be excavated prior to site manipulation in the vicinity of the burrow. Based on use of the programmatic key, FDOT has determined that this project would result in a “may affect, but not likely to adversely affect” determination for this species.

Florida Scrub-Jay (*Aphelocoma coerulescens*) - The project study area contains habitats consisting mostly of Type III or non-ranked (i.e., non-suitable) scrub-jay habitats. Suitable habitat is suboptimal for the scrub jay as most of these areas contained pine trees or cabbage palms which provide perches for scrub jay avian predators. Scrub jays were not observed during any field events.

A species-specific scrub-jay survey was conducted in areas of suitable habitat during March and April of 2020. Twelve call-stations were established in areas of potential habitat within and adjacent to the limits of construction. No scrub-jays were identified during the survey.

Based on the scrub-jay survey results as well as the current site conditions and limits of proposed impacts, FDOT has determined that this project “may affect, but is not likely to adversely affect” the Florida scrub-jay.

Tricolored Bat (*Perimyotis subflavus*) – Suitable foraging and roosting habitat for the tricolored bat was observed within the proposed project area. The project corridor is mostly developed, and offsite habitat will remain including the adjacent St. Johns River corridor.

FDOT will continue consultation with the USFWS regarding the tricolored bat during the design and permitting phase as needed. If the listing status of the tri-colored bat is elevated by USFWS to threatened or endangered and the proposed site is located within the consultation area during the design and permitting phase of the proposed project, consultation with the USFWS will be re-initiated.

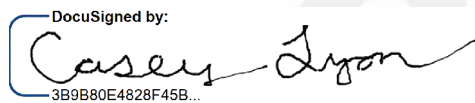
Eastern black rail (*Laterallus jamaicensis jamaicensis*)- Suitable habitat is present within the proposed pond sites for the project. No eastern black rails were observed during field visits and according to FNAI, there has been no documented occurrences within the project area. Technical assistance was provided by USFWS on July 7, 2024, confirming that deferring a species-specific survey until the design phase of the project is acceptable.

Wood Stork (*Mycteria americana*) - The FWS wood stork colony database was searched for active wood stork colonies located within 15-miles of the project area. According to the FWS wood stork colony website, portions of the study area fall within the Core Foraging Area (CFA) of seven wood stork breeding colonies (Deseret Ranch, Grange Island, Grant Farm Island, Kemper Ranch, Micco North, Micco South, and US 192 East). Wood storks were observed during field surveys. The project will impact approximately 0.85 acres of Suitable Foraging Habitat (SFH).

The FWS has a programmatic Effect Determination Key for the Wood Stork in Central and North Peninsular Florida (FWS 2008). Following this 2008 key, (A) The project is more than 2,500 feet from a colony site, (B) project impacts SFH, (C) project impacts to SFH are greater than or equal to 0.5-acre, (D) project impacts to SFH are within the CFA of a colony site, (E-1) project provides SFH compensation within the Service Area of a Service-approved wetland mitigation bank or wood stork conservation bank within the CFA. Based on the programmatic key, FDOT has determined that the project “may affect, but not likely to adversely affect” the wood stork.

We ask that USFWS review the enclosed NRE Addendum for this project and provide comment and/or concurrence with FDOT’s determinations for these species. We appreciate the coordination effort and input already provided and look forward to continued consultation on this project. If you have any questions, feel free to contact either Edward Northey at (386) 943-5047, Edward.Northey@dot.state.fl.us or me at (386) 943-5436, Casey.Lyon@dot.state.fl.us at your convenience. Thank you for your assistance with this project.

Sincerely,

DocuSigned by:

3B9B80E4828F45B...

Casey Lyon
Environmental Manager
FDOT, District Five

cc: Jack Freeman (Kittelson), Jason Houck, Jada Barhorst (Ardurra)



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September 18, 2024

Deysia Roberson
Florida Department of Transportation District 5
719 South Woodland Boulevard
DeLand, Florida 32720
Deysia.Roberson@dot.state.fl.us

Re: Malabar Road from St. Johns Heritage Parkway to Minton Road, Natural Resource Evaluation Addendum, Brevard County

Dear Ms. Roberson:

Florida Fish and Wildlife Conservation Commission (FWC) staff reviewed the above-referenced Natural Resources Evaluation (NRE) report in accordance with FWC's authorities under Chapter 379, Florida Statutes, and Chapter 68A-27, Florida Administrative Code.

The Florida Department of Transportation District Five in cooperation with the City of Palm Bay is conducting a Project Development and Environment (PD&E) study to evaluate the proposed widening of Malabar Road from St. Johns Heritage Parkway to Minton Road. The proposed project is approximately four miles long and will widen Malabar Road from two to four lanes in order to improve safety, increase capacity, and accommodate multi-modal features along the corridor. The subject Addendum evaluates the preferred stormwater pond alternatives and a floodplain compensation area.

The NRE report was prepared as part of the PD&E study to document wetlands, surface waters, protected species, critical habitat, and Essential Fish Habitat within the project's corridor; evaluate potential impacts associated with the proposed project; provide effect determinations for protected species; identify mitigation needs, and coordinate with federal and state regulatory and resource agencies. The proposed pond alternative C-7 Alt 3 and the floodplain compensation area abut or are in close proximity to the Three Forks Conservation Area managed by the St. Johns River Water Management District (SJRWMD), and coordination with SJRWMD is recommended. FWC staff agrees with the effect determinations and supports the project implementation measures and commitments for protected species. Further coordination could be required during future species-specific surveys and project permitting.

For specific technical questions regarding the content of this letter, please contact Elijah McBride at (904) 603-1200 or Elijah.McBride@myfwc.com. All other inquiries may be directed to ConservationPlanningServices@MyFWC.com.

Sincerely,

Laura DiGruttolo
Land Use Planning Supervisor
Office of Conservation Planning Services

ld/em
Malabar Road from St Johns Heritage Parkway to Minton Road NRE_59825_09182024

Physical Resources Appendix

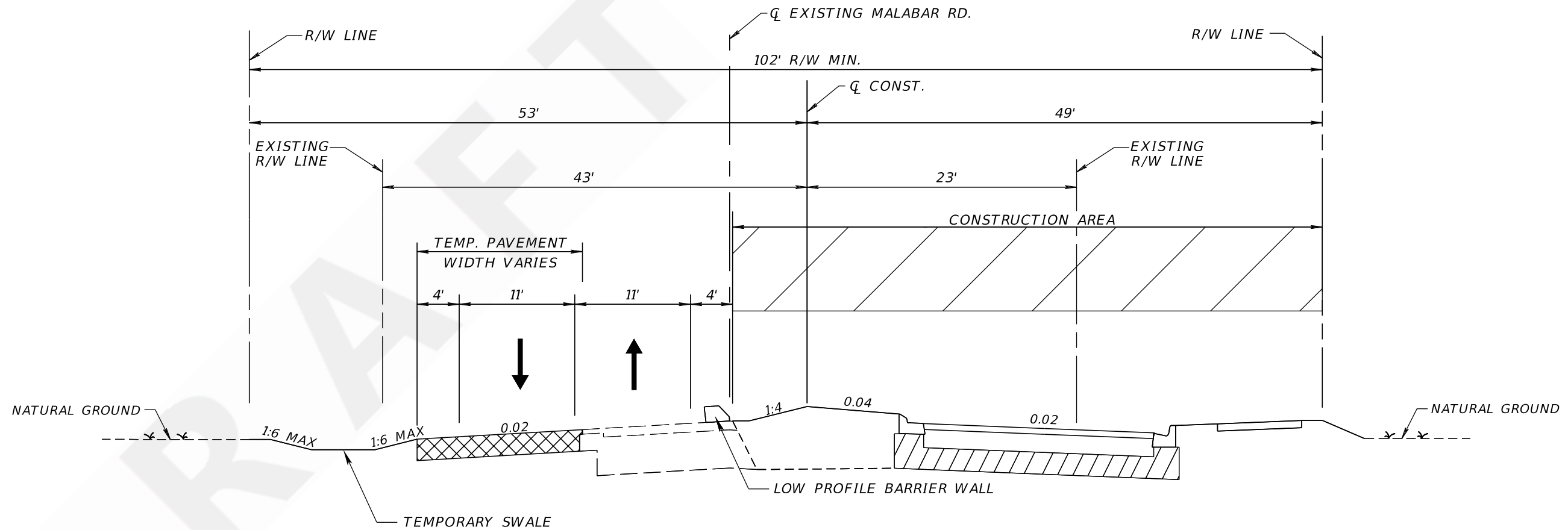
Contents:

Figure 13 MOT Phase II and III Typical Sections

Figure 12 Potential Contamination Site Map

DRAFT

BEGIN STATION	END STATION	CONSTRUCTION TYPICAL
NOTE: PHASE I IS RE-CONSTRUCTION OF CANAL AND CONSTRUCTION OF BOX CULVERT AT JUPITER BLVD.		
PHASE II		
55+00.00	59+00.00	CONSTRUCT EASTBOUND LANES (TYP 1)
59+00.00	64+00.00	CONSTRUCT ST. JOHN'S HERITAGE ROUNDABOUT
64+00.00	125+00.00	CONSTRUCT EASTBOUND LANES (TYP 1)
125+00.00	132+00.00	CONSTRUCT KRASSNER/BENDING BRANCH ROUNDABOUT
132+00.00	141+16.00	CONSTRUCT EASTBOUND LANES (TYP 2)
141+16.00	143+07.62	BRIDGE OVER MTDD CANAL 10
143+07.62	152+00.00	CONSTRUCT EASTBOUND LANES (TYP 3)
152+00.00	157+00.00	CONSTRUCT HURLEY ROUNDABOUT
157+00.00	175+00.00	CONSTRUCT EASTBOUND LANES (TYP 3)
175+00.00	185+00.00	TRANSITION AREA (TYP 3 AND TYP 4)
185+00.00	197+00.00	CONSTRUCT EASTBOUND LANES (TYP 4)
197+00.00	206+00.00	TRANSITION AREA (TYP 4 AND TYP 3)
206+00.00	243+00.00	CONSTRUCT EASTBOUND LANES (TYP 3)
243+00.00	249+00.00	CONSTRUCT MAYWOOD/DAFFODIL ROUNDABOUT
249+00.00	257+00.00	TRANSITION AREA (TYP 5 AND TYP 6)
257+00.00	271+80.00	CONSTRUCT EASTBOUND LANES (TYP 6)
PHASE III		
55+00.00	59+00.00	CONSTRUCT WESTBOUND LANES (TYP 7)
59+00.00	64+00.00	CONSTRUCT ST. JOHN'S HERITAGE ROUNDABOUT
64+00.00	125+00.00	CONSTRUCT WESTBOUND LANES (TYP 7)
125+00.00	132+00.00	CONSTRUCT KRASSNER/BENDING BRANCH ROUNDABOUT
132+00.00	141+16.00	CONSTRUCT WESTBOUND LANES (TYP 8)
141+16.00	143+07.62	BRIDGE OVER MTDD CANAL 10
143+07.62	152+00.00	CONSTRUCT WESTBOUND LANES (TYP 9)
152+00.00	157+00.00	CONSTRUCT HURLEY ROUNDABOUT
157+00.00	175+00.00	CONSTRUCT WESTBOUND LANES (TYP 9)
175+00.00	185+00.00	TRANSITION AREA (TYP 9 AND TYP 10)
185+00.00	197+00.00	CONSTRUCT WESTBOUND LANES (TYP 10)
197+00.00	206+00.00	TRANSITION AREA (TYP 10 AND TYP 9)
206+00.00	243+00.00	CONSTRUCT WESTBOUND LANES (TYP 9)
243+00.00	249+00.00	CONSTRUCT MAYWOOD/DAFFODIL ROUNDABOUT
249+00.00	257+00.00	TRANSITION AREA (TYP 11 AND TYP 12)
257+00.00	271+80.00	CONSTRUCT WESTBOUND LANES (TYP 12)

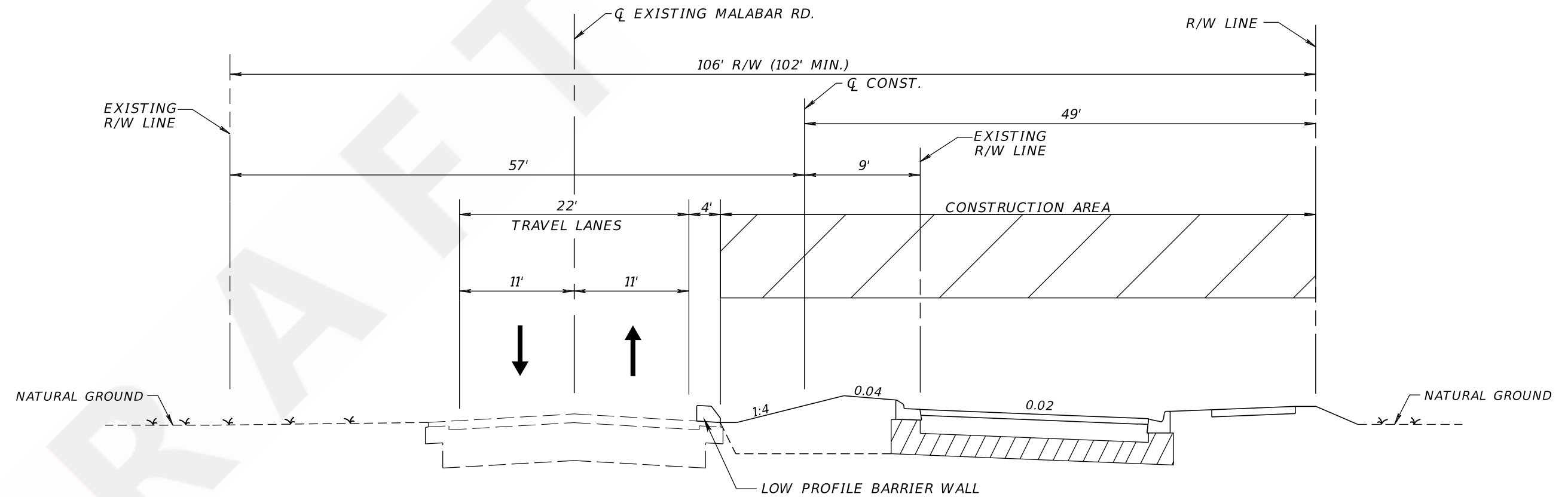


**PROPOSED TEMPORARY TRAFFIC CONTROL
TYPICAL SECTION 1
EASTBOUND CONSTRUCTION**

PHASE II

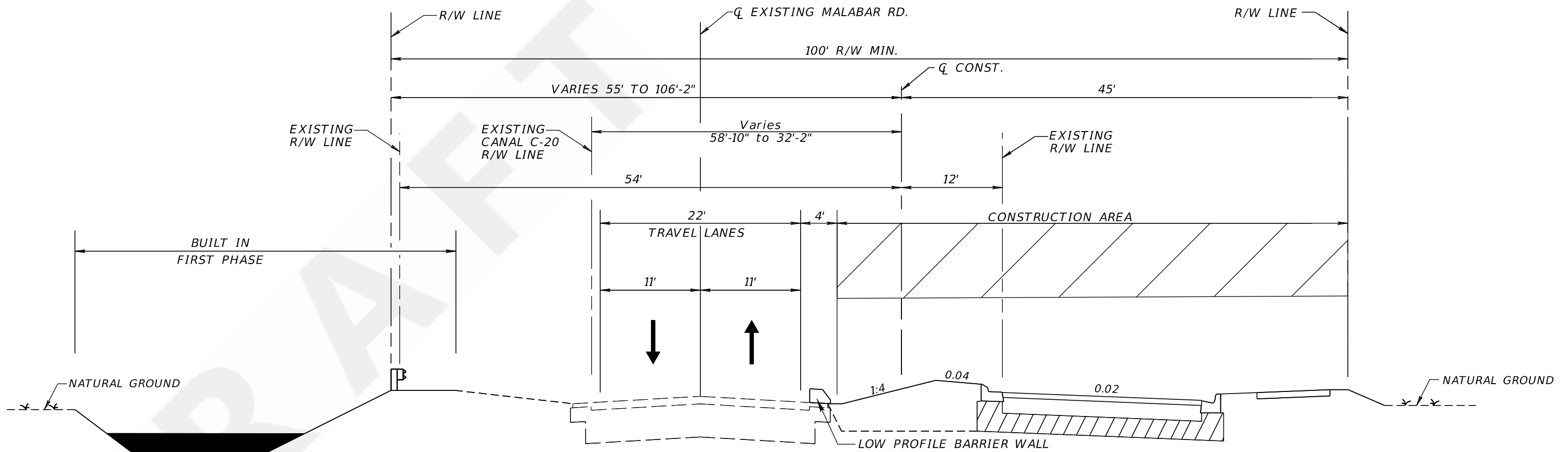
**STA. 55+00.00 TO STA. 59+00.00
STA. 64+00.00 TO STA. 125+00.00**

Figure 13-1



PROPOSED TEMPORARY TRAFFIC CONTROL
TYPICAL SECTION 2
EASTBOUND CONSTRUCTION
PHASE II
STA. 132+00.00 TO STA. 141+16.00

Figure 13-2



**PROPOSED TEMPORARY TRAFFIC CONTROL
TYPICAL SECTION 3
EASTBOUND CONSTRUCTION**

PHASE II

STA. 143+07.62 TO STA. 152+00.00
 STA. 157+00.00 TO STA. 175+00.00
 STA. 206+00.00 TO STA. 243+00.00

Figure 13-3

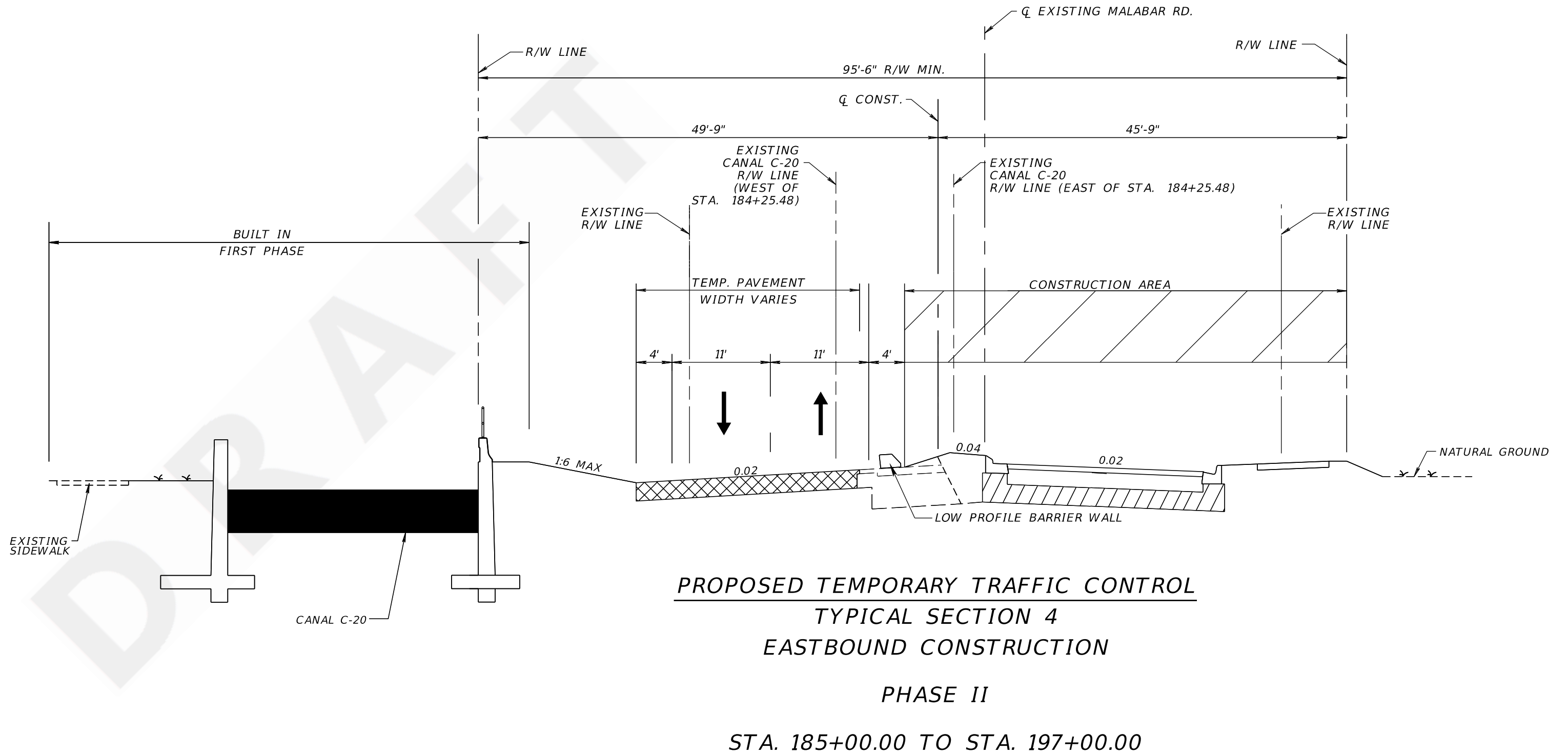
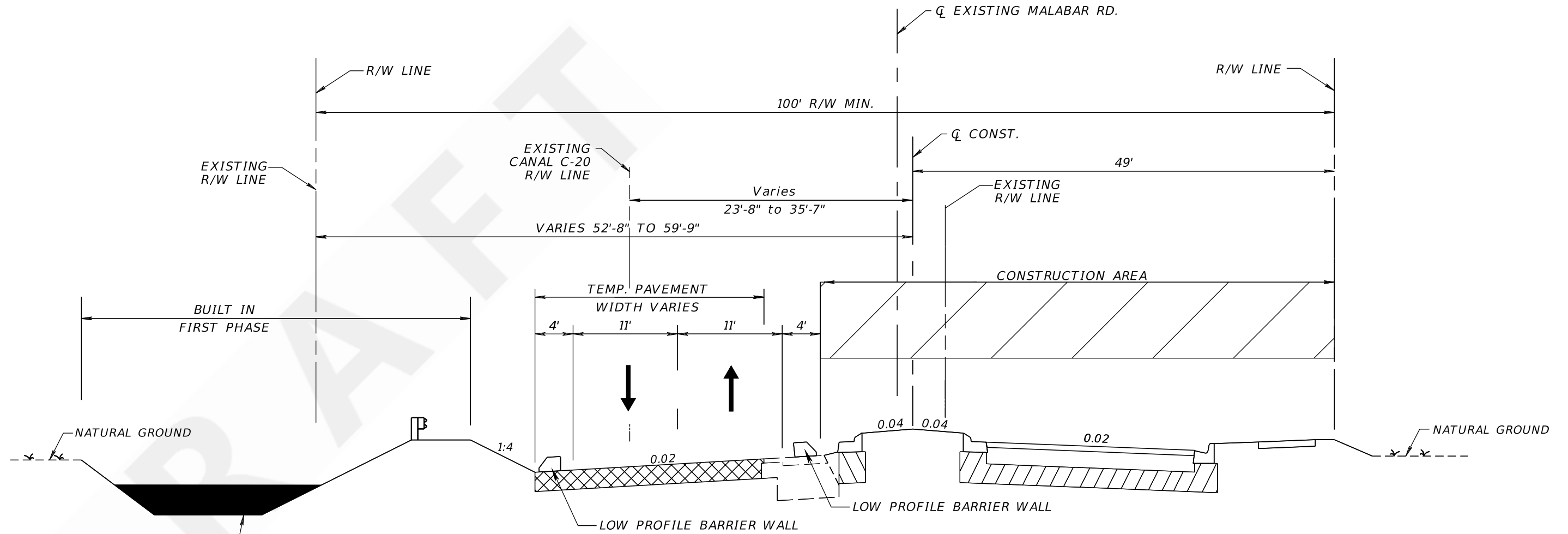


Figure 13-4

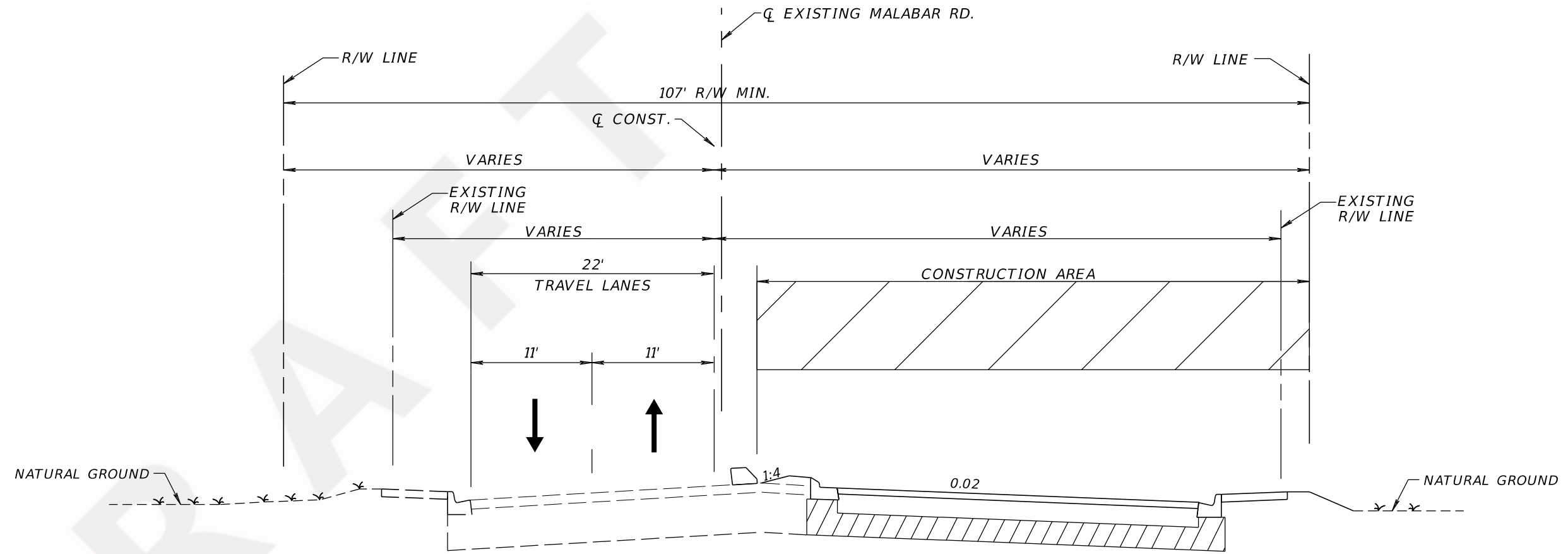


**PROPOSED TEMPORARY TRAFFIC CONTROL
TYPICAL SECTION 5
EASTBOUND CONSTRUCTION**

PHASE II

STA. 249+00.00 TO STA. 257+00.00

Figure 13-5

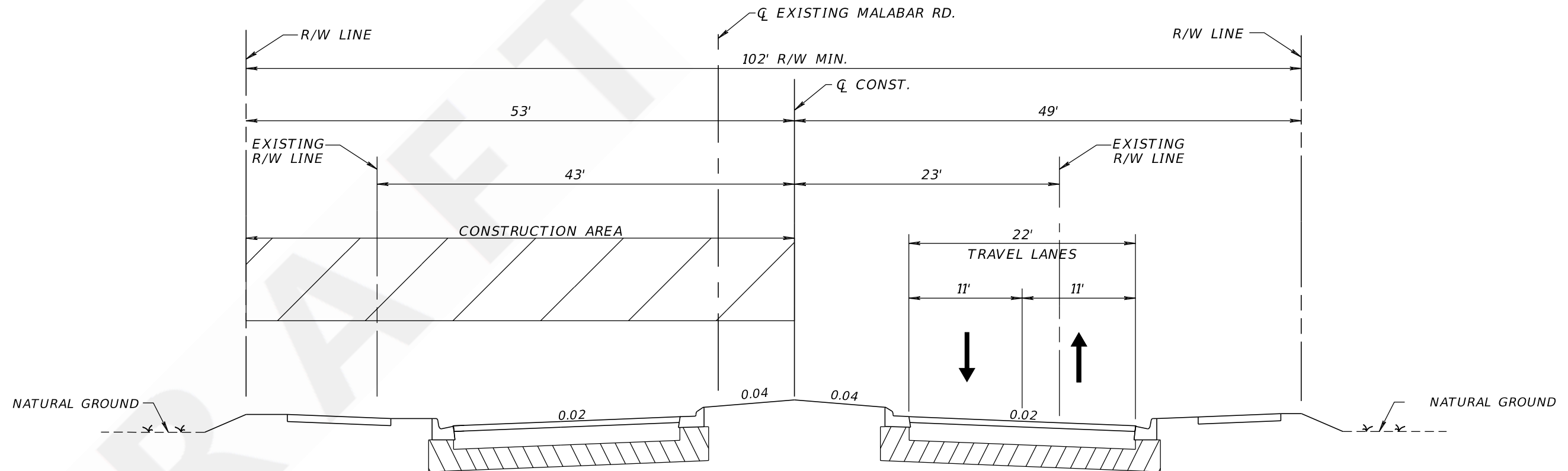


RECOMMENDED PREFERRED ALTERNATIVE
TYPICAL SECTION 6
EASTBOUND CONSTRUCTION

PHASE II

STA. 257+00.00 TO STA. 271+80.00

Figure 13-6

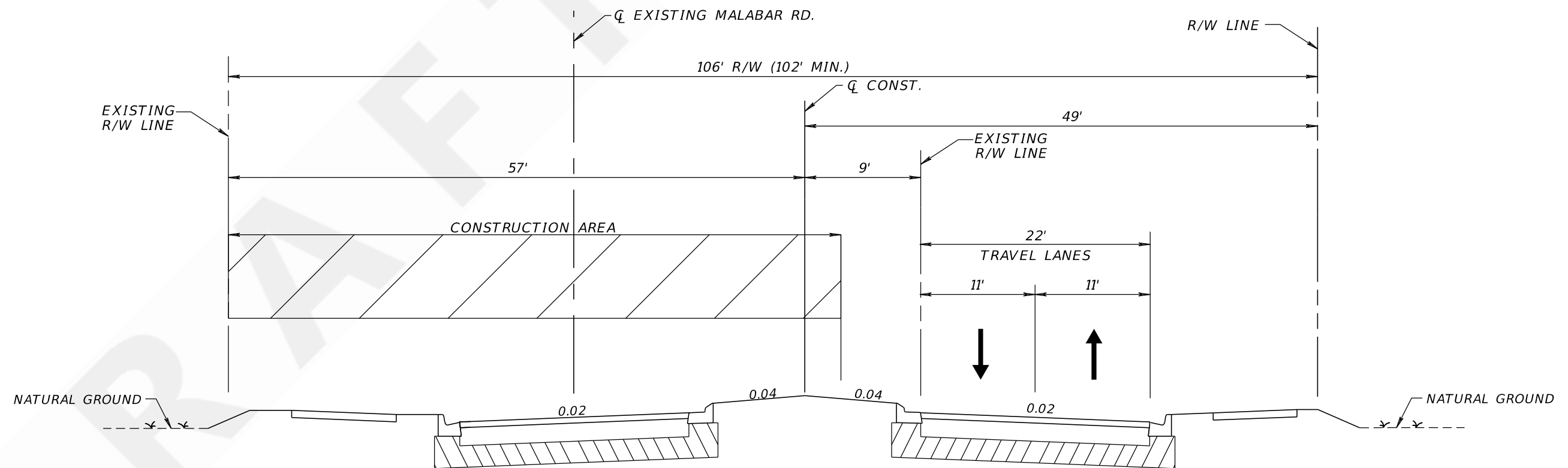


**PROPOSED TEMPORARY TRAFFIC CONTROL
TYPICAL SECTION 7
WESTBOUND CONSTRUCTION**

PHASE III

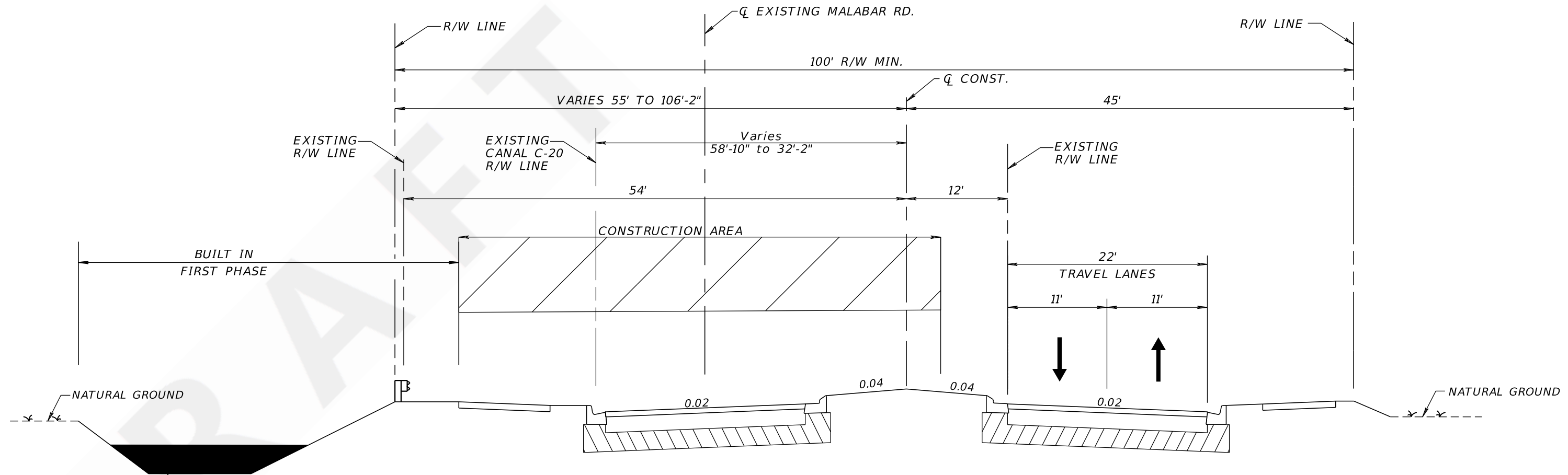
**STA. 55+00.00 TO STA. 59+00.00
STA. 64+00.00 TO STA. 125+00.00**

Figure 13-7



PROPOSED TEMPORARY TRAFFIC CONTROL
TYPICAL SECTION 8
WESTBOUND CONSTRUCTION
PHASE III
STA. 132+00.00 TO STA. 141+16.00

Figure 13-8



**PROPOSED TEMPORARY TRAFFIC CONTROL
TYPICAL SECTION 9
WESTBOUND CONSTRUCTION**

PHASE III

STA. 143+07.62 TO STA. 152+00.00
 STA. 157+00.00 TO STA. 175+00.00
 STA. 206+00.00 TO STA. 243+00.00

Figure 13-9

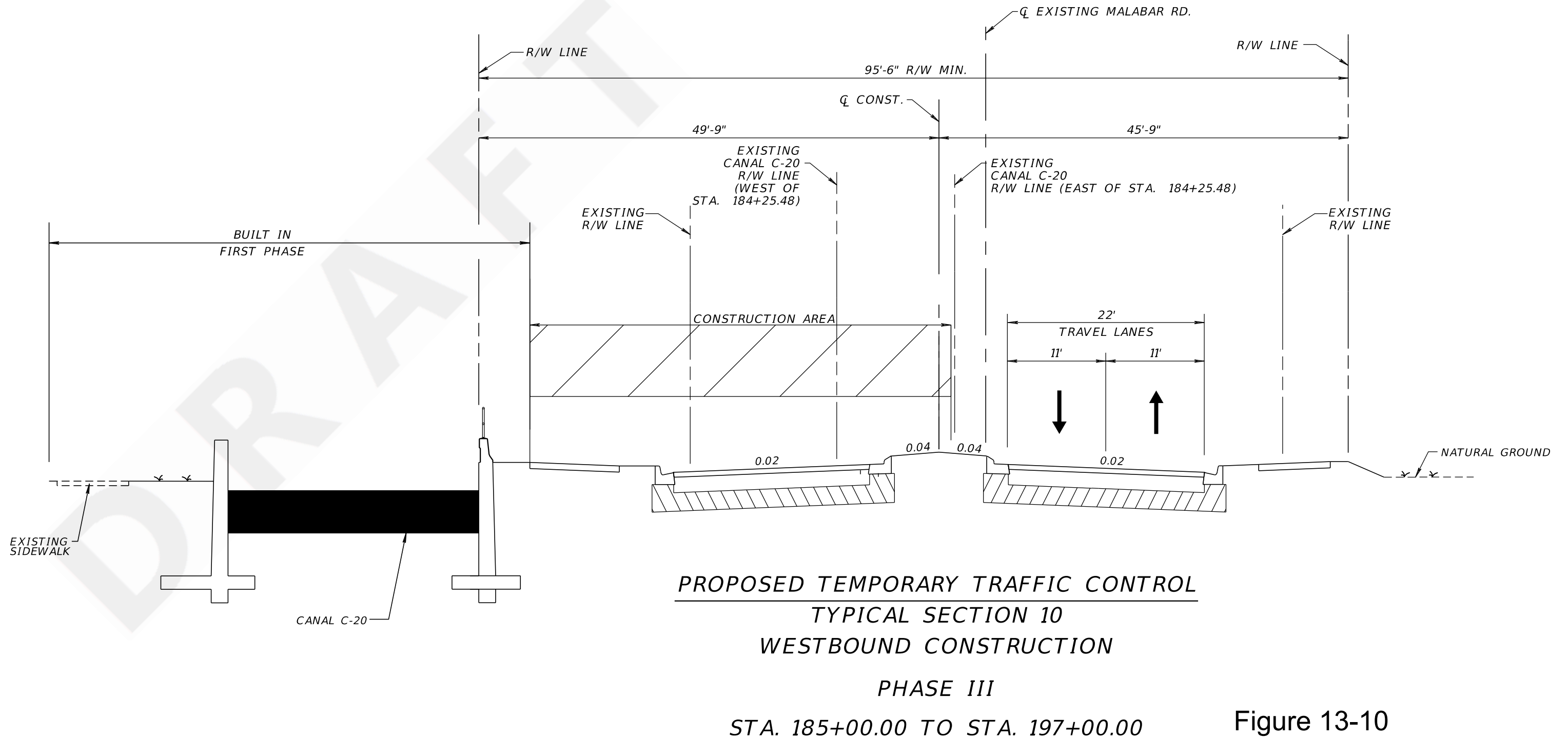
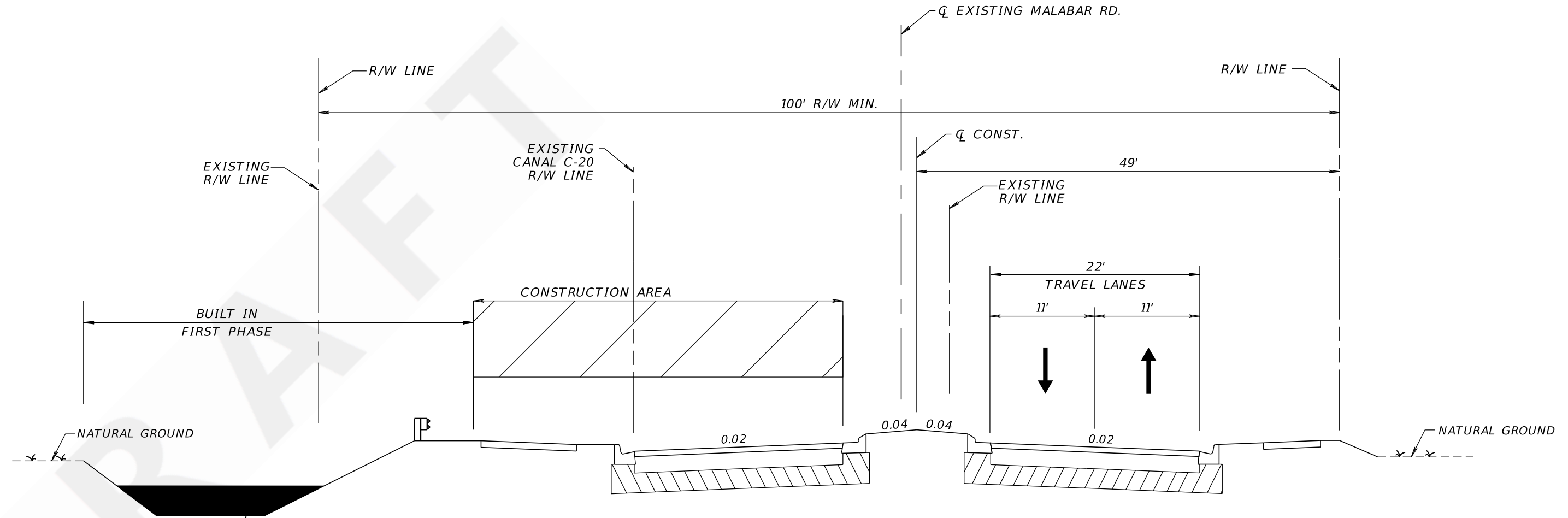


Figure 13-10

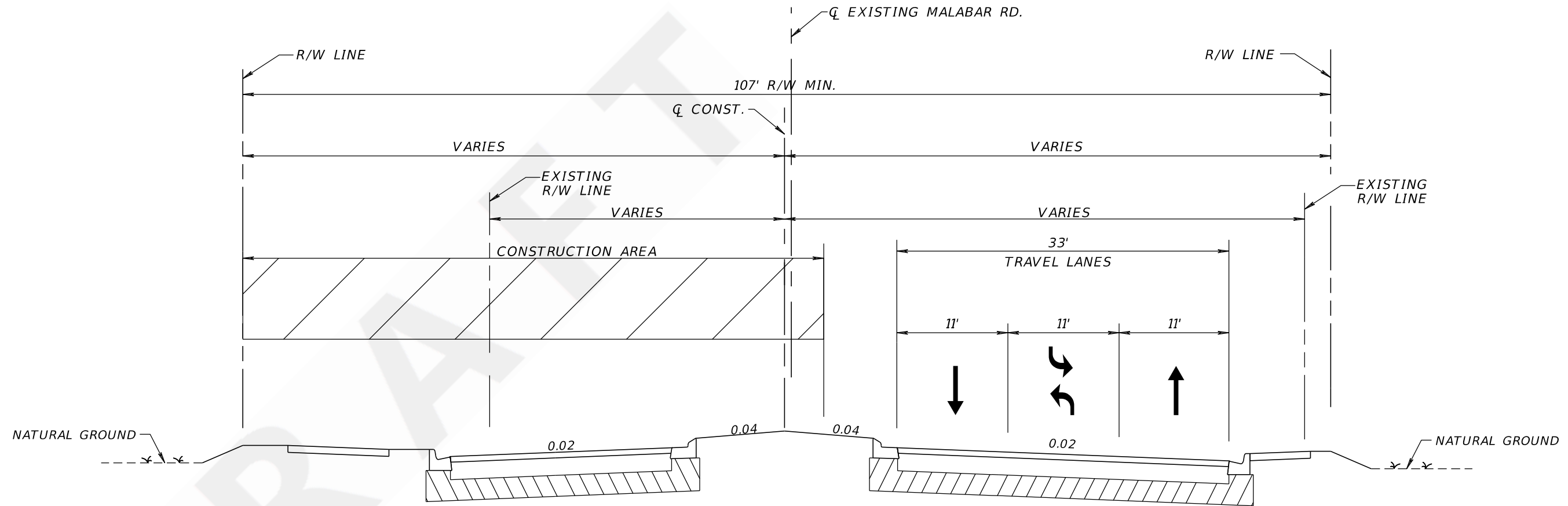


**PROPOSED TEMPORARY TRAFFIC CONTROL
TYPICAL SECTION 11
WESTBOUND CONSTRUCTION**

PHASE III

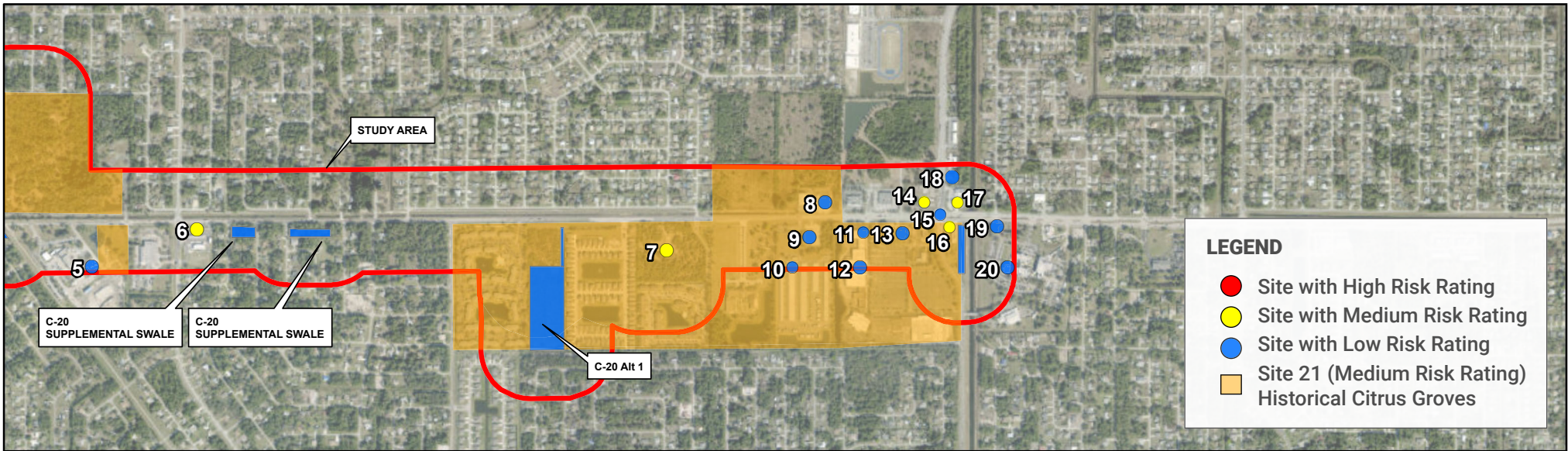
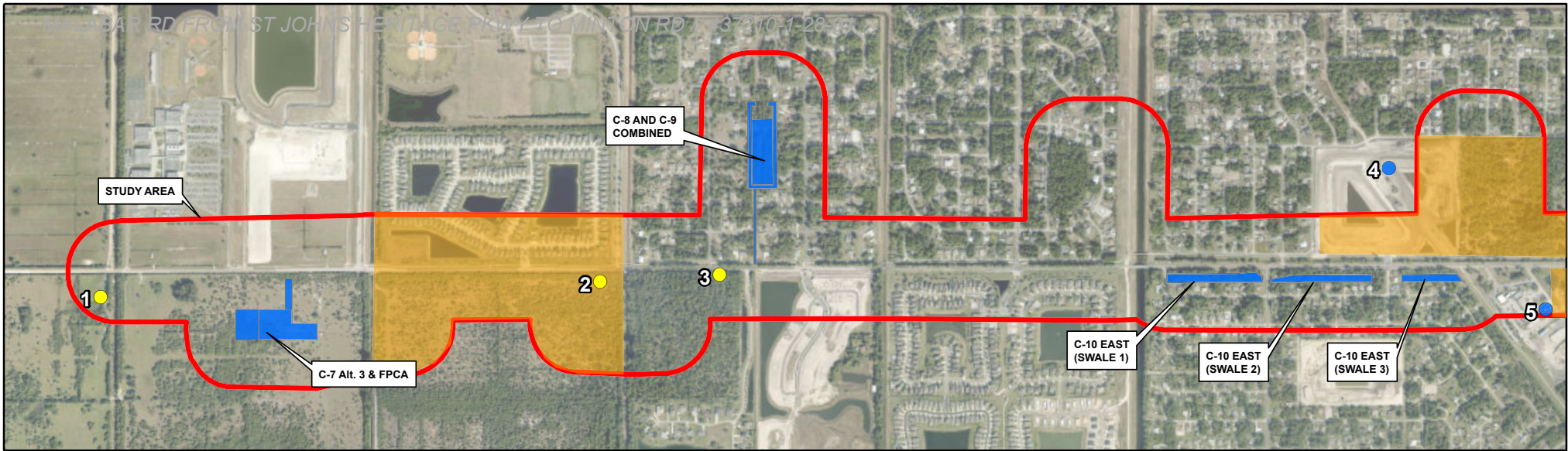
STA. 249+00.00 TO STA. 257+00.00

Figure 13-11



RECOMMENDED PREFERRED ALTERNATIVE
TYPICAL SECTION 12
WESTBOUND CONSTRUCTION
PHASE III
STA. 257+00.00 TO STA. 271+80.00

Figure 13-12



Not to Scale

North

Malabar Road PD&E Study

FPID: 437210-1-28-01

Type 2 Categorical Exclusion

SITES REVIEWED FOR CONTAMINATION RISK POTENTIAL

FIGURE 12