# January 2024





# Technical Scope and Long-Range Estimate (LRE) for FPID No. 449683-1 Coconut Rd. Sidewalk From Via Coconut Point to Oakwilde Blvd. Village of Estero in Lee County



To: Lavenia Toole, PE

From: Felicia Pannell, PE

#### RE: Coconut Rd. Sidewalk from Via Coconut Point to Oakwilde Blvd. TECHNICAL SCOPE

State Road Number:	NA – Off-System
Section Number:	NA – Off-System
County:	Lee
Project Limits:	From Via Coconut Point to Oakwilde Blvd.
Begin MP/End MP:	NA – Off-System
Project Length:	0.437 miles
FPID No.:	449683-1

1. Existing R/W Map Project Numbers:	As-Built Plans: 97-07-175.00D; 150 feet (min.)
2. Old Construction Project Numbers:	As-Built Const. Plans: 97-07-175.00D, (1997)
3. Additional R/W Required?	No
4. Level of Community Awareness Plan:	Level 1
5. Are there any bridges within the limits?	No
6. Are there any RR Crossings within the	Yes, within the limits.
project limits or in the vicinity?	Seminole Gulf Railroad crossing no. 917829
7. Are there any Airports within 5-miles?	No
8. Storm Water Management Jurisdiction:	South Florida Water Management District
9. AADT:	19,000 (2023); Truck%=3.9
10. Is the project a significant archeological site?	No
11. Number of Existing Utilities:	12 Utilities –
	Advanced Cable Comm. DBA Blue Stream –
	CATV; Bonita Springs Utilities – Sewer, Water,
	Wastewater; <b>Centurylink</b> – Fiber, Telephone;
	Comcast – CATV; Florida Power & Light –
	Electric; Hotwire Comm. – CATV, Fiber,
	Telephone; Lee Co. Signal Dept. –
	Communication, Electric, Fiber, Street Lights;
	Lee Memorial Health System – Fiber; Lumen –
	Fiber; Resource Conservation Systems –
	Irrigation; Summit Broadband – Fiber,
	Telephone; Teco Peoples Gas– Gas
12. Any Special MOT concerns?	No
13. Any Construction concerns?	No
14. Posted/Design Speed Limits:	PS=45 mph
15. SIS Facility? / Context Classification:	NA – Off-System

The purpose of the candidate project scope is to support the development of a long-range estimate (LRE) within the 5-year work program. There is a significant amount of planning assumptions made to develop and process the LRE. The district design project manager is responsible for verifying all items in the scope and shall review the project for conformance with all applicable criteria and standards. The Scoping Manager shall be notified of any proposed deviations from the scope. The Scoping Manager shall coordinate the proposed deviations with the scoping team and the District Roadway Design Engineer for approval.

#### **Project Location Map:**



#### **Project Abstract**

Construct an eight-ft asphalt sidewalk on the north side of Coconut Rd. from Via Coconut Point to Oakwilde Blvd. The project is in the Village of Estero in Lee County.

The engineer is responsible for verifying all items in the proposed scope and shall review the project for conformance with all applicable criteria and standards. The Scoping Manager shall be notified of any proposed deviations from the scope. The Scoping Manager shall coordinate the proposed deviations with the scoping team and the District Roadway Design Engineer for approval.

### Intent and Nature of Project:

There is no sidewalk within these limits on the north side, however, sidewalk exists to the east and to the west of the project's limits. Pedestrians must cross Coconut Rd. at a marked crossing on the east side of Oakwilde Blvd. to continue west. To improve safety, the proposed sidewalk will fill the sidewalk gap on the north side. This project is identified in the Village of Estero Bike Ped Master Plan, the development of which was paid for and co-managed by the Lee MPO. This sidewalk will provide sidewalks to cover gaps of missing sidewalk on the north side of Coconut Rd., which is the most heavily traveled roadway in the Village of Estero.

#### **Project Description**:

The proposed 8-ft asphalt sidewalk on the north side of Coconut Rd. will be a continuation of the existing sidewalk traveling east and west. The proposed sidewalk will start at Via Coconut Point traveling east and ending at the intersection of Oakwilde Blvd. Construction includes removal of the existing marked crossing on the east side of Oakwilde Blvd. The project's length is approximately 0.437 miles and is in the Village of Estero in Lee County. Coconut Rd. is a four-lane roadway with 11-ft lanes, 4-ft undesignated bikes lanes, Type F curb and gutter, a 50-ft raised median with Type F curb and gutter, an 8-ft asphalt sidewalk on the south side, and a closed drainage system. The posted speed is 45 mph. The right-of-way (ROW) width is approximately 150-ft in width according to construction as-built plans.

#### **Roadway Scope Items:**

The 2024 FDM and the FY 2024-25 Standard Plans for Road and Bridge Construction were used to develop this scope report.

Construct an 8-ft asphalt sidewalk on the north side of Coconut Rd. from Via Coconut Point to Oakwilde Blvd. Construct the sidewalk approximately 5-ft from the back of curb. The sidewalk can meander to minimize impacts to the existing mature landscaping like the south side asphalt sidewalk. Coordinate with the Village of Estero regarding any landscaping impacts. Construction of the 8-ft asphalt sidewalk is as follows:

- Sediment Barrier (total of 2,176 linear feet)
  - Install along the proposed asphalt sidewalk.
- Clearing & Grubbing (total of 1.03 acres)
  - Clearing areas for the proposed sidewalk location.
- Removal of Existing Concrete (total of 85 square yards).
  - Remove the existing concrete curb & gutter in areas of new sidewalk ramps.
  - Remove the existing concrete sidewalk at the marked crossing east of Oakwilde Blvd.
- Regular Excavation (total 914 cubic yards)
  - Excavation for the proposed sidewalk.
- Embankment (total of 6 cubic yards)
- Type B Stabilization (total of 2,683 square yards)
  - Install in location of proposed asphalt sidewalk.
- Optional Base Group 01 (total of 1,934 square yards)
  - Install in location of proposed asphalt sidewalk.
- Superpave Asphaltic Conc., Traffic A (total of 147 tons)
  - Install asphalt pavement for proposed asphalt sidewalk.
- Concrete Curb and Gutter, Type F (total of 70 linear feet)
  - Install at the curb ramps.
  - Replace curb and gutter at the marked crossing east of Oakwilde Blvd.
- Concrete Sidewalk, 4-in thick (total of 176 square yards)
  - Install concrete sidewalk adjacent to the existing curb and gutter for the length of the westbound right-turn lane at Via Coconut Point.
- Concrete Sidewalk, 6-in thick (total of 36 square yards)
  - Pedestrian curb ramps.
  - Railroad crossing
- Detectable Warnings (total of 2, 32 square yards)
  - Place at pedestrian curb ramps (total of 32 square feet)
- Sod/Turf (total of 3,088 square yards)
  - Install in area between back of existing curb and the front of the proposed asphalt sidewalk.
  - Install in the area between the back of the proposed asphalt sidewalk and the ROW line.
- Rail Grade Crossing (total of 8 linear feet)
  - Railroad crossing for the proposed 8-ft wide asphalt sidewalk.

## Drainage Scope Items:

Drainage on Coconut Rd. is a closed drainage system. Stormwater roadway runoff flows along the curb and gutter and is collected in curb inlets. The proposed asphalt sidewalk is not anticipated to impact the existing curb inlets. Include a rainy day visit to determine drainage facilities are functioning correctly.

## Permitting/Environmental Scope Items:

No Environmental Permits are anticipated but coordination with FDOT for determination is recommended during the design phase. These improvements should be an "Exempt Activity" under ERP Chapter 62-330.051 (4) (c).

## Utility Scope Items:

Utility coordination will be required to determine if adjustments are necessary to ensure there are no conflicts with the proposed construction.

- Utility poles or overhead utilities currently do not exist with the project limits.
- Underground utility locations should be verified during the design phase.

#### Traffic Scope Items:

Signs (total of 6 signs):

- Proposed single post signs, up to 12 SF (total of 6 assemblies)
  - Install single post signs within the project limits (total of 6 assemblies)
- Remove single post signs (total of 2 assemblies)

Pavement Markings are as follows:

- Install 12-in wide, preformed, solid, white, thermoplastic crosswalks (total of 164 linear feet):
  - Install at the crosswalk at Oakwilde Blvd. (total of 164 linear feet)
- Install 24-in wide, preformed, solid, white, thermoplastic stop bars (total of 1,241 linear feet):
  - Install at the crosswalks at Oakwilde Blvd. (total of 162 linear feet)
  - Install at the crosswalks at Via Coconut Point. (total of 1,079 linear feet)
- Install 6-in wide, preformed, white, railroad dynamic envelop (total of 105 linear feet):
  - Install at the existing railroad crossing eastbound and westbound on Coconut Rd. (total of 105 linear feet)
- Install 12-in wide, preformed, white, railroad dynamic envelop (total of 353 linear feet):
  - Install at the existing railroad crossing eastbound and westbound on Coconut Rd. (total of 353 linear feet)
- Refurbish 12-in wide, solid, thermoplastic crosswalks (total of 988 linear feet)
  - Refurbish the 12-in wide crosswalks at the intersection at Via Coconut Point.
- Removal of existing thermoplastic pavement marking (total of 148 square feet)
  - Remove thermoplastic pavement markings at the existing mid-block crossing.

#### Lighting Scope Items:

Lighting currently exists within the medians along Coconut Rd. Additional lighting is not anticipated for this project.

#### **Geotechnical Scope Items:**

Geotechnical work is NOT anticipated to be performed. Contact District Materials to coordinate.

#### Structural Scope Items:

Per FDM 261.7, an ancillary structures report shall be provided for all existing sign, signal, lighting, and ITS support structures within the project limits.

#### Multi-Modal Transportation Scope Items:

Currently, 4-ft undesignated bike lanes exist eastbound and westbound. An 8-ft wide asphalt sidewalk exists along the south side of Coconut Rd within the project limits. Currently, there are no bus stops located within the project limits. Coordinate with the local bus agency to determine any future changes that may need to be incorporated during the Design phase.

#### Right-of-Way Scope Items:

The existing ROW width is approximately 150-ft wide per the as-built construction plans.

### **Design Variation/Exception:**

Design Variations/Exceptions are NOT anticipated for the construction of the proposed asphalt sidewalk.

### Survey Required:

Obtain 3D Design Survey, collecting data from the north edge of pavement to the north ROW line. Also, include the intersection of Via Coconut Point and the intersection of Oakwilde Blvd.

## Scope Analysis for Social and Environmental Issues 500-foot Project Buffer Area

FPID No:	449683-1	County:	Lee	City:	Village of Estero
Project Limits:	Coconut Rd. from Via Coconut Point to Oakwilde Blvd.				
Section:	Off System		Length of Project:		0.437
Begin Milepost:	N/A		End Milepost:		N/A
Scope:	Construct an 8-ft wide asphalt sidewalk on the north side of Coconut Rd.				
Review Date:	1/2/2024 – B. F	eagle	Anticipated NEP	A COA:	Type 1 CE

Elements with Potential Cost/Schedule Impacts

- **Cultural**: Cultural/historical evaluation and State Historic Preservation Officer (SHPO) coordination will be necessary.
- Section 4(f): Due to the proximity of potential Section 4(f) resources, coordination with the District Environmental Management Office (DEMO) and Official(s) with Jurisdiction may be necessary. If the project is state funded, the provisions of Section 4(f) do not apply.
- Floodplain: Project activities must not adversely impact (fill) floodplain storage.
- Florida bonneted bat: The project area contains large, mature trees that may be considered potential roosting habitat. The trees are located within the footprint of the sidewalk and may be cleared for the installation of the sidewalk. Per the October 2019 US Fish and Wildlife Service (USFWS) *Consultation Key for the Florida Bonneted Bat*, the project may require a limited roost survey to determine if Florida bonneted bats are likely to be actively roosting.
- Florida scrub-jay: Per the Florida Department of Transportation (FDOT) *Programmatic Approach* for Minor Transportation Activities, if scrub-jay play-call surveys are not conducted between March 1<sup>st</sup> and October 31<sup>st</sup>, the area is assumed to be occupied habitat. FDOT must adhere to the avoidance and minimization measures regarding vegetation removal or alteration.
- **Noise**: The FDOT *Standard Specifications for Road and Bridge Construction* should be utilized to control noise and/or vibration impacts.
- **Contamination**: Level 1 evaluation of potential contamination facilities may be needed in conjunction with project plans development; Level 2 testing may also be required.

## Social and Economic

## Land Use

- The five major land uses within the project buffer area include roads and highways, reservoirs, low-rise multiple dwelling units, retail sales and services, and golf courses.
- No impacts to land use are anticipated as the proposed work is expected to occur within the existing right-of-way.

## <u>Social</u>

- The project buffer area has 48 households with a population of 81 people.
- The median household income is \$91,522 with 2.47% of the population below poverty level. The median household income of the project area is significantly higher than the median household income for Lee County (\$69,368).

- The minority population makes up 8.64% of the total population of the area with six people claiming a "Hispanic or Latino of Any Race" ethnicity. There is no claimed limited English proficiency (LEP) population.
- Housing within the project buffer area consists of single-family units (52%) and multi-family units (48%) that are vacant (48%), owner-occupied (44%), and renter-occupied (8%).
- No social resources exist within the project buffer area.
- Standard Specifications will require maintenance of access to adjacent properties.
- No impacts to social or community resources are anticipated as the proposed work is expected to occur within the existing right-of-way.

## **Relocation Potential**

- Residential land use consists of 16.05 acres of low-rise multiple dwelling units and 3.95 acres of fixed single-family units within the project buffer area.
- Commercial and services account for 3.92 acres of the project buffer area.
- No impacts to residential or commercial properties are anticipated as the proposed work is expected to occur within the existing right-of-way.

## <u>Farmlands</u>

• The project buffer area contains no farmlands.

## Aesthetic Effects

• The project buffer area contains no aesthetic effects.

## <u>Economic</u>

- The project buffer area contains three Developments of Regional Impact and two Planned Unit Developments.
- No impacts to economic resources are anticipated as the proposed work is expected to occur within the existing right-of-way.

## <u>Mobility</u>

- The project buffer area contains a bus transit route.
- No impacts to mobility resources are anticipated as the proposed work is expected to occur within the existing right-of-way.

## Cultural

## Historic and Archaeological Sites (note: results of a basic screening)

- No project-specific Cultural Resource Assessment Survey (CRAS) has been completed.
- CSX Railroad (Site ID# LL02445), a Florida Master Site File (FMSF) Resource Group is located within the project buffer area. The resource has been determined to have insufficient information for listing.
- Five FMSF Field Survey Projects conducted from 1976 to 1997 are located within the project buffer area.
- The project buffer area includes no structures built before 1970.
- Although the proposed project will occur within the generally disturbed right-of-way, cultural/historical evaluation and SHPO coordination will be necessary to address the existing

historical/cultural resources, any areas outside of the existing right-of-way (if applicable), and other possible resources not able to be identified in the desktop review.

• No impacts to historic and archaeological sites are anticipated as the proposed work is expected to occur within the existing right-of-way.

## Recreational and Protected Lands

- The project buffer area contains two golf courses.
- Based on work within the exiting right-of-way, no impacts are expected to Section 4(f) resources. However, due to the proximity of potential Section 4(f) resources, coordination with DEMO and Official(s) with Jurisdiction may be necessary. If the project is state funded, the provisions of Section 4(f) do not apply.

## Natural

## Wetlands and Surface Waters

- The project buffer area contains minimal palustrine (freshwater pond) and palustrine (freshwater forested/shrub wetland) National Wetland Inventory Areas.
- No impacts to wetlands and surface waters are anticipated as the proposed work is expected to occur within the existing right-of-way.

## Water Resources

- The project buffer area contains one water quality data monitoring station, seven waters not attaining standards, five verified impaired waters, two waterbodies with verified nutrient impairment, and two waterbodies.
- The project buffer area includes interaction with the surficial aquifer system and discharge/less than 1 area of the Floridian Aquifer.
- No impacts to water resources are anticipated as the proposed work is expected to occur within the existing right-of-way.

## <u>Floodplains</u>

- 31.95 acres (30.14) of the project buffer area is located within of the 100-year floodplain.
- Project activities must not adversely impact (fill) floodplain storage.

## Protected Species and Habitat

- The project is located within the USFWS consultation areas for the American crocodile, Florida bonneted bat, piping plover, snail kite, and Florida scrub-jay.
- American crocodile: Suitable habitat for the crocodile includes brackish or saltwater habitats and mangrove swamps. The project buffer area does not contain suitable habitat and no in-water work is proposed; therefore, no impacts are anticipated for the American crocodile.
- Florida bonneted bat: Potential roosting habitat includes forest and other areas with tall, mature trees or other areas with suitable roost structures. Trees greater than 33 feet in height, greater than 8 inches in diameter at breast height, and with cavity elevations higher than 16 feet are considered potential roosting habitat. The project area contains large, mature trees that may be considered potential roosting habitat. The trees are located within the footprint of the sidewalk and may be cleared for the installation of the sidewalk. Per the October 2019 USFWS Consultation

*Key for the Florida Bonneted Bat,* the project may require a limited roost survey to determine if Florida bonneted bats are likely to be actively roosting.

- *Snail kite:* Snail kite inhabit shallow freshwater marshes and shallow grassy shorelines of lakes. The project area does not contain suitable habitat and is expected to result in a determination of *no effect* for the snail kite.
- *Piping plover:* Piping plover prefer coastal habitat often associated with inlets. The project area does not contain suitable habitat and is expected to result in a determination of *no effect* for the piping plover.
- *Florida scrub-jay*: The project area does not appear to contain potential suitable habitat for the Florida scrub-jay and the project is expected to result in a determination of *no effect*. However, per the FDOT *Programmatic Approach for Minor Transportation Activities*, if the project scope of work includes vegetation management including clearing and grubbing, widening pavement, sidewalk or path construction, or drainage modifications, the project is expected to result in a determination of *may affect not likely to adversely affect*. If vegetation will be removed or altered, scrub-jay play-call surveys must be conducted between March 1<sup>st</sup> and October 31<sup>st</sup>, or the area will be assumed to "occupied habitat" and FDOT must adhere to the avoidance and minimization measures regarding vegetation removal or alteration.
- Wood stork: The project is located within the 18.6-mile core foraging area of three wood stork colonies: Corkscrew, Caloosahatchee River East, and Caloosahatchee River West. Suitable foraging habitat includes waterbodies and wetlands that have shallow, open water areas that have a permanent or seasonal water depth of two to 15 inches that is capable of supporting small fish, frogs, and other aquatic prey. There is no suitable foraging habitat, and the project is not within 0.47 miles of an active colony; therefore, per the FDOT *Programmatic Approach for Minor Transportation Activities*, this project is expected to result in a determination of *no effect* for the wood stork.
- The project is located within the frequent black bear range.
- The project is located within the Southwest Coast Ecosystem Management Area.
- Adverse impacts to listed or protected species are not anticipated.

## Coastal and Marine

• The project buffer area contains no coastal and marine resources.

## Physical

## <u>Noise</u>

- The project buffer area contains potential noise or vibration sensitive sites including two healthcare facilities.
- No impacts to noise or vibration sensitive sites are anticipated; however, the FDOT *Standard Specifications for Road and Bridge Construction* should be utilized to control noise and/or vibration impacts.

## <u>Air Quality</u>

• This portion of Lee County has not been designated as nonattainment or maintenance for ozone, carbon monoxide, particulate matter, or any of the National Ambient Air Quality Standards (NAAQS) in accordance with the Clean Air Act.

<u>Contamination (note: results of a basic screening)</u>

- The project buffer area contains 15 biomedical waste facilities, one National Pollutant Discharge Elimination System (NPDES) stormwater facility and activity, one onsite sewage facility, and one storage tank contamination monitoring site.
- Level 1 evaluation of potential contamination facilities may be needed in conjunction with project plans development; Level 2 testing may also be required.

## <u>Infrastructure</u>

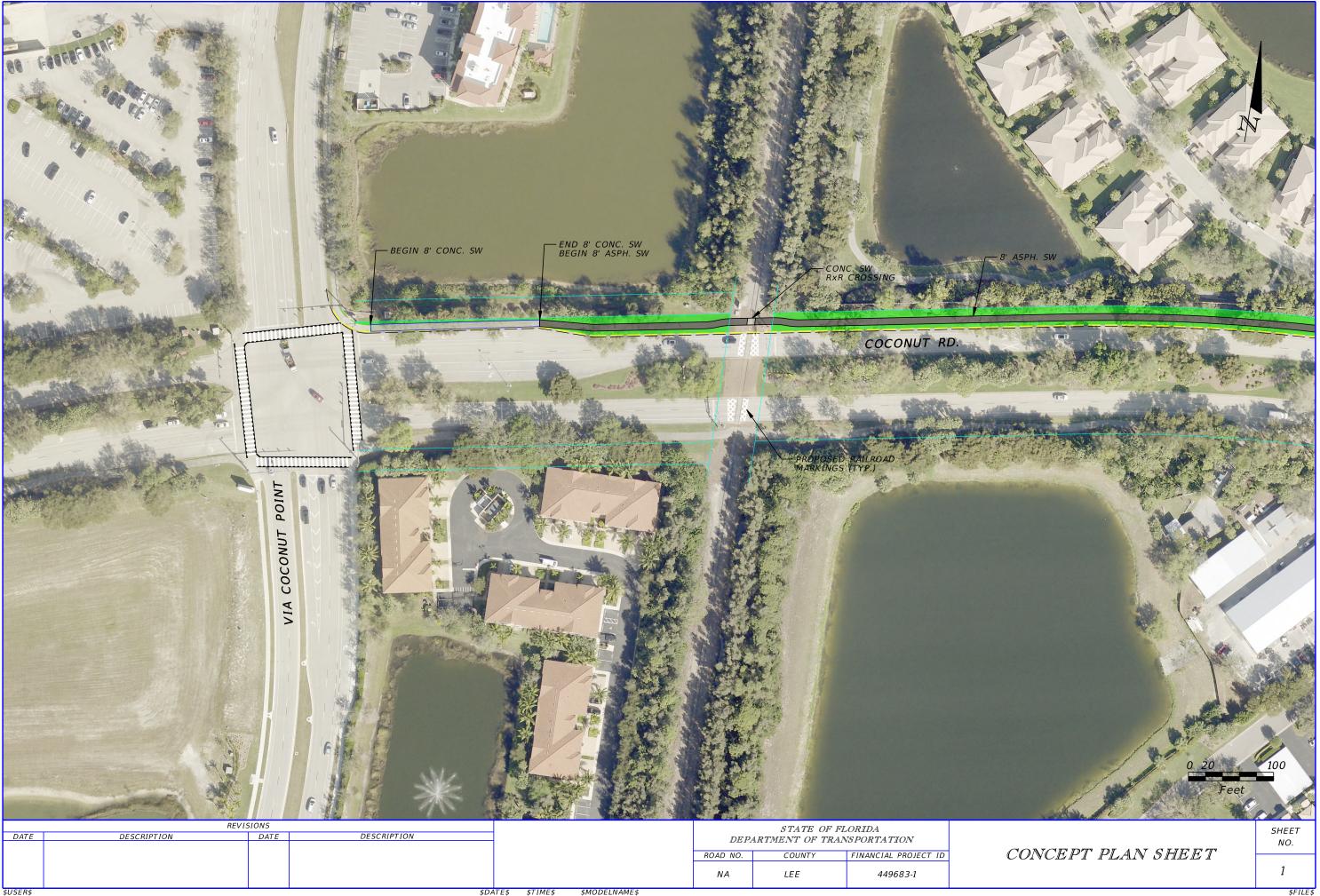
- The project buffer area contains one railroad.
- Various buried underground and overhead electric utilities are present within and adjacent to the project (utility relocations are possible pending scope development).
- No impacts to infrastructure are anticipated as the proposed work is expected to occur within the existing right-of-way.

## **Navigation**

• The project buffer area contains no navigation resources.

### Special Designations

• The project buffer area contains no special designation resources.





## FDOT Long Range Estimating System - Production R3: Project Details by Sequence Report

Project: 449683-1-52-01 Letting Date: 07/2026					
Description: COCONUT RD SIDEWALK FROM VIA COCONUT POINT TO OAKWILDE BLVD					
District: 01 Contract Class: 1	County: 12 LEE Lump Sum Project: N	Market Area: 10 Design/Build: N	Units: English Project Length: 0.437 M	I	
Project Manager: JMK-					
Version 4-P Project Grand Total\$348,874.90Description: March 2023 Unit Cost Updates from Version 2P - 3/23/23				348,874.90	
Sequence: 1 MIS -	Miscellaneous Construction		Net Length:	0.437 MI 2,307 LF	

Description: Coconut Rd Sidewalk (north side) from Via Coconut Point to Oakwilde Blvd

#### **ROADWAY COMPONENT**

X-Items				
Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.03 AC	\$39,161.85	\$40,336.71
110-4-10	REMOVAL OF EXIST CONC	85.00 SY	\$37.44	\$3,182.40
120-1	REGULAR EXCAVATION	914.00 CY	\$22.62	\$20,674.68
120-6	EMBANKMENT	6.00 CY	\$146.92	\$881.52
160-4	TYPE B STABILIZATION	2,683.00 SY	\$20.47	\$54,921.01
285-701	OPTIONAL BASE, BASE GROUP 01	1,934.00 SY	\$20.80	\$40,227.20
334-1-12	SUPERPAVE ASPHALTIC CONC, TRAFFIC B	147.00 TN	\$249.22	\$36,635.34
520-1-10	CONCRETE CURB & GUTTER, TYPE F	70.00 LF	\$36.52	\$2,556.40
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	176.00 SY	\$57.57	\$10,132.32
522-2	CONCRETE SIDEWALK AND DRIVEWAYS, 6"	36.00 SY	\$96.48	\$3,473.28
527-2	DETECTABLE WARNINGS	32.00 SF	\$33.22	\$1,063.04
570-1-2	PERFORMANCE TURF, SOD	3,088.00 SY	\$4.56	\$14,081.28
711-12-123	THERMOPLASTIC,REFURB, WHITE, SOLID, 12"	988.00 LF	\$4.00	\$3,952.00
711-14-123	THERMOPLASTIC, PREFORM, WHITE, SOLID,12"	164.00 LF	\$6.59	\$1,080.76
711-14-125	THERMOPLASTIC, PREFORM, WHITE, SOLID,24"	1,241.00 LF	\$14.30	\$17,746.30
711-14-191	THERMOPLASTIC, PREF, WHITE C, RR DYN ENV	105.00 LF	\$11.47	\$1,204.35
711-14-193	THERMOPLASTIC, PREF, WHITE C, RR DYN ENV	353.00 LF	\$14.97	\$5,284.41
711-17-1	THERMOPLASTIC, REMOVE	148.00 SF	\$2.22	\$328.56
	Roadway Component Total			\$257,761.56

SHOULDER COMPONENT

Pay item	Description	Quantity Unit	Unit Price Exte	ended Amount
104-10-3	SEDIMENT BARRIER	2,176.00 LF	\$2.25	\$4,896.00
	Shoulder Component Total			\$4,896.00

### Sequence 1 Total

\$262,657.56

# FDOT Long Range Estimating System - Production R3: Project Details by Sequence Report

Project: 449683-1-52-01 Letting Date: 07/2026					
Description: COCONUT RD SIDEWALK FROM VIA COCONUT POINT TO OAKWILDE BLVD					
District: 01 Contract Class: 1	County: 12 LEE Lump Sum Project: N	Market Area: 10 Design/Build: N	Units: English Project Length: 0.437	MI	
Project Manager:	JMK-				
Version 4-P Projec Description: March	<b>t Grand Total</b> 2023 Unit Cost Updates from	Version 2P - 3/23/23		\$348,874.90	
Project Sequence	s Subtotal			\$262,657.56	
102-1 Ma	aintenance of Traffic	15.00	%	\$39,398.63	
101-1 Mo	obilization	10.00	%	\$30,205.62	
Project Sequences Total \$332,261.81					
Project Unknowns		5.00	%	\$16,613.09	
Design/Build		0.00	%	\$0.00	
Project Non-Bid Subtotal \$0.00					
Version 4-P Project Grand Total				\$348,874.90	