November 2023

Florida Department of Transportation – District One

Technical Scope and LRE

Technical Scope, Scope Analysis for Social and Environmental Issues, and Long Range Estimate (LRE) for

FPID 451270-1-52-01

SR 25 (US 27) From N. of Ponce De Leon Blvd. to N. of Lake Isis Ave.

Highlands County, Florida

Candidate Project RRR Scope

To: Lavenia Toole, PE November 13, 2023
From: Felicia Pannell, PE

RE: SR 25 (US 27) From N. of Ponce De Leon Blvd. to N. of Lake Isis Ave. TECHNICAL SCOPE

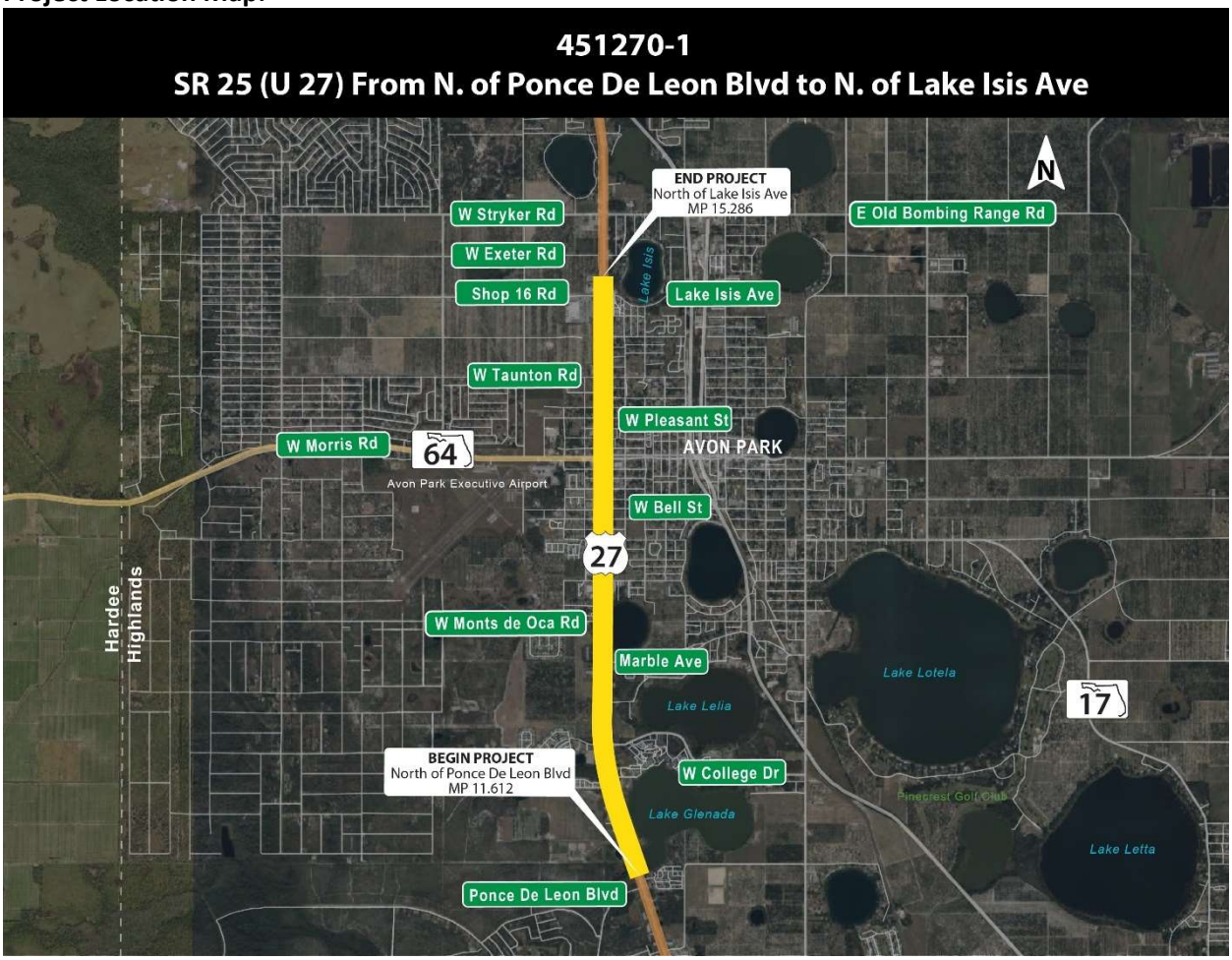
State Road Number: SR 25
Section Number: 09030-000
County: Highlands County
Project Limits: SR 25 (US 27) From N. of Ponce De Leon Blvd to N. of Lake Isis Ave
Begin MP/End MP: 11.612 to 15.286
Exceptions: NB: MP 13.988 to MP 14.283
SB: MP 14.180 to MP 14.472
Project Length: 3.674 miles
FPID No.: 451270-1
Work Mix: 0012 (Resurfacing)

1. Existing R/W Map Project Numbers:	09030-2529; Varies from 100-244 feet
2. Old Construction Project Numbers:	434986-1 (2018) Rigid Intersection Improv MP 13.988-14.472 194510-1 (2001) Lanes and Rehab MP 11.536-13.453 408469-1 (2004) Add Lanes MP 14.224-15.228 194485-1 (2011) Add Lanes and Rehab MP 15.286-18.038 194470-1 (1995) Lighting MP 14.483-15.817 413306-1 (2003) Traffic Control Devices MP 12.446-14.414 194372-1 (1986) Reconstruction MP 0.000-MP 18.041 194424-1 (1986) RRR MP 8.474-MP 14.224 194355-1 (1996) RRR MP 13.100-MP 13.300
3. Proposed projects within the same limits (such as safety, sidewalk or drainage projects):	Potential Goes with projects: 452621-1 (2027) POP MP 6.811-11.612 451361-1 (2027) Safety MP 14.091-14.311 451362-1 (2027) Safety MP 8.320-8.595
4. Adjacent Projects:	425225-1 (2011) RRR MP 6.811-11.560 194485-1 (2011) Add Lanes Rehab MP 15.286-18.038 434986-1 (2018) Rigid Pavt MP 13.988-MP14.472 452621-1 (2027) POP MP 6.811-11.612
5. Additional R/W Required?	No
6. Level of Community Awareness Plan:	Level 1
7. Are there any bridges within the limits?	Yes; 090054 and 090028 (MP 13.168 to MP 13.191)

8. Are there any RR Crossings within the project limits or in the vicinity?	No
9. Are there any Airports within 5-miles?	Yes; Avon Park Executive Airport
10. Storm Water Management Jurisdiction:	Southwest Florida WMD
11. AADT:	34,200 AADT (2023); Truck %= 12.9
12. Are there any old houses or buildings adjacent to the project?	No
13. Number of Existing Utilities:	7 Utilities: Centurlink – Fiber, Telephone; City of Avon Park – Sewer, Water; Comcast – CATV; Duke – Electric; Highlands – Traffic Signals; Sun n lakes – Drainage, Sewer, Water; TECO – Gas
14. Any Special MOT concerns?	No
15. Any Construction concerns?	No
16. Posted/Design Speed Limits:	Design Speed: 50 mph MP 11.612-13.286, 45 mph MP 13.286-15.286 Posted Speed: 55 mph MP 11.612-13.327, 45 mph MP 13.327-15.286
17. SIS Facility?/Context Classification:	Yes / C3C – Suburban

The purpose of 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 in order to develop and process the LRE. The district design project manager and engineer are responsible for verifying all items in the scope and shall review the project for conformance with all applicable criteria and standards. The Design Project Manager shall be notified of any proposed deviations from the scope. The Design Project Manager shall coordinate the proposed deviations with the scoping team and the District Roadway Design Engineer for approval.

Project Location Map:



Intent and Nature of Project:

This is a Resurfacing, Restoration, and Rehabilitation (RRR) project that is intended to extend the service life of the existing roadway. This project was identified as a result of deficient pavement conditions noted in the 2022 Pavement Condition Survey. Additional improvements to this roadway shall adhere to the standards set forth in the 2023 FDOT Design Manual (FDM).

Project Abstract

Milling and resurfacing with ADA improvements on SR 25 (US 27) From N of Ponce De Leon Blvd to N of Lake Isis Ave.

Project Description:

- This is a RRR project. Mill and resurface existing roadway, turn lanes, and side street connections.
- The project begins at the existing pavement joint north of Ponce De Leon Boulevard at MP 11.612, then proceeds approximately 3.674 miles along SR 25 (US 27) to MP 15.286, just north of Lake Isis Avenue. The existing rigid pavement from approximately MP 13.988 to MP 14.283 NB and MP 14.180 to MP 14.472 SB is excepted from the project scope for a net project length of 3.379 miles.
- An existing concrete bridge (090054 and 090028) over Lake Anoka is from MP 13.168 to 13.191.
- Potential Goes-with 452621-1 (RRR) (FY 27) and the two safety projects 451361-1 (Safety) (FY 27) and 451362-1 (Safety).
    - The project will need to be coordinated with two safety projects (451361-1 and 451362-1). The safety project at SR 64/SR 17 for signalization and lighting (from MP 14.091 to

14.311) and before the begin project limits at MP 8.474, are possibly goes-with projects. Plans were not available yet.

- The context and target speed meetings were held on September 16, 2022. The target speed was set to match the posted speed at 55 and 45 mph.
- Typical section discussion:
    - This section of SR 25 (US 27) is on the Strategic Intermodal System (SIS) and is classified as an urban principal arterial.
    - MP 11.612 to MP 13.286: six (6) 12-ft wide travel lanes with 30-ft median with type F curb and gutter and 10 ft outside shoulders (5-ft paved). There are no sidewalks in tis section. The ROW is 200-ft min.
    - MP 13.286 to MP 15.286: six (6) 11-ft wide travel lanes with 17-ft median with type E curb and gutter and type F curb and cutter along the outside of each side of the roadway. There are 5-8-ft sidewalks on both sides. The ROW is 100-ft min.
- District Construction has provided the following comment in the technical scope review for design to be aware:
    - This project is located within the Lake Wales Ridge in a xeric habitat. The concern is the well- drained white and yellow quartzite sands have no organic matter that Bahia sod is easily established in. Maybe a top-soil layer MSP can be used to make the sod establishment more successful.

Project limits:

- Begin the project at the existing pavement joints north of the intersection with Ponce De Leon Blvd. at MP 11.612 then proceed approximately 3.674 miles north to north of Lake Isis Avenue at MP 15.286. There is an exception for rigid pavement from MP 13.988 to MP 14.283 (NB) and MP 14.180 to 14.472 (SB). The net project length is 3.379 miles.

Begin Project MP 11.612 Southbound

Begin Project MP 11.612 Northbound

Begin Exception MP 14.180

Begin Exception MP 13.988

Southbound

End Exception MP 14.472
Southbound

Northbound

End Exception MP 14.283
Northbound

End Project MP 15.286
Southbound

End Project MP 15.286
Northbound

Roadway Scope Items:

- The 2023 FDOT Design Manual (FDM), Florida Department of Transportations (FDOT) FY2023-24 Standard Plans for Road and Bridge Construction, as well as the 2023 Flexible Pavement Design Manual (FPDM) was used to develop this scope report.
- The existing roadway components include vehicular, pedestrian and bicyclist elements. Transit elements if any will be itemized under multi-modal transportation scope Items.
- A Pavement Condition Assessment had not been completed by the FDOT at the time of this report. The pavement is in fair to poor condition based on available information. It is recommended that flexible pavement be used for rehabilitation.
- The FDOT is to perform the Pavement Coring Report and provide ESAL calculations as well as Resilient Modulus values for further analysis. The project designer will prepare the Pavement Design Package per FPDM. Any pavement design used in this scope evaluates old as-built information and is used for budget purposes only.
- The flush shoulder portion of the corridor has a design speed of 50mph which requires a clear zone width of 18 ft per FDM Chapter 215, Table 215.2.1. The required clear zone appears to be maintained throughout the typical section limits.
- There is an adjacent safety project which abuts to the southern limit of this project starting at MP 8.474. The adjacent project is currently planned as a "goes with" for this project. The FPID is pending at the time of writing this report.
- There is an additional safety project at the intersection of SR 64/SR 17 and SR 25 (US 27). This is a possible goes with project from MP 14.091 to MP 14.311 which will include signals and lighting components. The FPID for this project is pending at the time of this report.

Mainline, Turn Lanes and Shoulder Milling and Resurfacing:

- For budget purposes, the LRE assumes recommended pavement design:

- The existing pavement should be milled 3" and resurfaced with 1 ½" Type SP-12.5 (Traffic C, PG 76-22) and 1 ½" FC-12.5 (Traffic C, PG-76-22).
- The existing paved shoulders should be milled 1 ½" and resurfaced with 1 ½" FC-12.5 (Traffic C, PG 76-22).

Side Street Milling and Resurfacing:

- There are an estimated 48 existing asphalt side streets. Exact number, location and condition of side streets shall be verified. For budget purposes, the LRE assume the side streets are to be milled to 1½" depth and resurfaced with 1 ½" FC-12.5 (Traffic C, PG 76-22). In accordance with the FDM and Standard Plans, it is recommended that all side streets be resurfaced to the back of the farthest return, right of way, or existing pavement joint, whichever is greater.

Horizontal Curves:

- There are eight existing horizontal curves within the project limits. The following curve information was obtained from the Straight-Line Diagram (SLD) and as-built plans available at the time of this report.

Curve No.	PC Milepost	PT Milepost	DS (mph)	Degree of Curvature (or Radius)	Superelevation	
					As-Built	FDM
1	12.056	12.556	50	0°40'00"	RC	If the existing superelevation rates are outside of the range of derived values from the AASHTO Green Book emax = 6% and emax = 12% tables, correct the superelevation rates.
2	13.010	13.044	50	0°10'00"	NC	
3	13.419	13.449	50	0°45'00"	NC	
4	14.056	14.095	50	0°05'00"	NC	
5	14.472	14.504	45	1°00'00"	NC	
6	14.536	14.568	45	1°00'00"	NC	
7	14.724	14.756	45	1°00'00"	NC	
8	14.788	14.820	45	1°00'00"	NC	

- Only Curve 1 listed above requires superelevation. The project designer should analyze the superelevation rate obtained in field survey for Curve 1 to verify that it meets the required criteria per the current FDM Chapter 210 as well as the American Association of State Highways and Transportation Officials (AASHTO).

Curb and Gutter:

- Typical Section 1 (MP 11.612 – MP 13.286) is a high-speed suburban typical section with Type F curb and gutter in the median. FDM 210.5.1 requires a 6.5 ft offset between the edge of travel lane and the lip of curb for high-speed curb facilities. The existing typical section does not provide the required 6.5 feet offset; in addition, the curb type use in the median is Type F instead of Type E. A design variation memorandum will be required to not have the required inside offset and to keep the Type F curb and gutter in the median for a high-speed facility.
- Typical Section 2 (MP 13.286 to MP 15.286) has type E curb and gutter in the median and type F curb and gutter on the outside of the roadway.
- For budget purposes, the LRE assumes 20% of concrete curb and gutter will be repaired/replaced.

Concrete Separators:

- Within the project limits there are 4-foot concrete separator located along the median areas. The separators should be repaired/replaced as needed. For budget purposes, the LRE assumes 20% of concrete separator will be repaired/replaced. Construct the concrete separator in accordance with the FDM, 210.3.2.2 and the Standard Plans Index 520-020.

Guardrail:

- At the time of writing this report there does not appear to be any guardrail within the project limits.

Keyhole widening:

- There are several right turn lanes (RTLs) within the SR 25 (US 27) project limits with only two providing keyholes, one to the entrance of the Raceway at Marble Ave. and to the Murphy Express at W Shop 16 Rd. For budget purposes, the LRE assumes 2 keyholes will be able to be added in the shoulder section of the first typical. In the curb and gutter section keyholes are likely not feasible due to the right of way constraints and the drainage impacts. Variations may be required for not accommodating keyholes.

Access Management:

- Determine the disposition of side streets and driveways with access management during the design phase.
- There are no unpaved named side street turnouts within the proposed project limits.

Turnout/Driveway milling and resurfacing:

- Asphalt Driveways: There are twenty-seven (27) existing asphalt driveways within the project limits. Asphalt driveways are recommended to be milled at 1½" and resurfaced with 1½" SP 12.5 (Traffic C, PG 76-22). It is recommended that all asphalt driveways be resurfaced to the back of the furthest return, right of way, or existing pavement joint, whichever is greater.
- Concrete driveway reconstruction: There are thirty-six (36) existing concrete driveways within the project limits. Considerations should be made for reconstruction or repair on a case-by-case basis. Reconstruction should be made in accordance with the Americans with Disabilities Act (ADA), FDM Chapter 214, and Standard Plans Index 522-003.
- Unpaved driveways: There are three (3) dirt, grass, or gravel driveways within the proposed project limits that should be evaluated for reconstruction since these existing connections do have discernable homes or destinations and have mailboxes associated with these existing access points. These unpaved driveway turnouts should be evaluated during the design phase to determine their disposition, property owner coordination, funding constraints, and if they should be paved accordingly. If funding becomes available and for the purposes of the LRE all the unpaved driveways are assumed to be paved with flexible pavement. For driveway turnouts reconstruct with asphalt using minimum of 25-foot (maximum 35 foot) radial connections per the FDM Section 114 and the Standard Plans Index 330-001. If funding becomes available and for budget purposes, the LRE assumes unpaved driveway turnouts will be reconstructed and should consist of Type B Stabilization and Optional Base, Base Group 2, with 2" Type SP 12.5 (Traffic C, PG 76-22).

Multi-Modal transportation Scope Items:

- The requirements of a bicycle facility are satisfied by the existing 5-foot paved shoulder from the beginning of the project (MP 11.612) to Granite Ave/Marble Ave. (MP 12.968).
- There is a marked bicycle lane along SR 25 (US 27) from Granite Ave/Marble Ave. (MP12.968) to W Hal McRae Blvd (MP. 13.464) which satisfies the bicycle facility requirements in FDM 223.
- There is no bicycle facility from W Hal McRae Blvd (MP 13.464) to the end of the project north of Lake Isis Ave (MP 15.286). This will require a design variation for bicycle facility.
- There is an existing sidewalk along the right side of the road from Marble Ave. (MP 12.968) to north of Lake Isis Ave. (MP 15.286). There is an existing sidewalk along the left side of the road from Marble Ave. (MP 12.968) to north of Lake Isis Ave. (MP 15.286). The existing sidewalk does not have detectable warnings at appropriate locations. Detectable warnings must be added at locations in accordance with FDM 222.3.

- There are no bus stops within the project limits. It is recommended that the designer confirm with the District 1 Transit Office during the design phase of this project to confirm there have not been any changes to the routes in this area.

Design Variation/Exception:

- FDM Table 201.5.1 requires a minimum design speed of 50 mph for context classification C3 that is SIS. A design variation will be required for a design speed of 45 mph from MP 14.283 NB/MP 14.472 SB to MP 15.286.
- FDM Table 210.3.1 requires a 22-ft median for context classifications C3. A design variation will be required for the existing median from MP 14.283 NB/MP 14.472 SB to MP 15.286.
- FDM 210.3.2.2 requires a 4-ft median traffic separator width. A variation will be required to maintain the existing 2-ft separators since they are less than the 4-ft minimum required width (refer W Bell St.).
- FDM 210.3.3 required harden centerline. A variation will be required if hardened centerlines are not accommodated.
- FDM 223.1 requires bicycle facilities (and keyholes) to be constructed throughout the project limits. A variation will be required if bicycle facilities (and keyholes) are not provided from MP 13.464 to MP 15.286.
- FDM 210.5.1 requires Type E curb on both the median and outside forhigh-speed roadways. A variation will be required to maintain the existing Type F curbs. This section is also missing the 6.5-ft median curb offset required for high speed roadways as well.
- FDM Figure 260.1.4 requires a traffic barrier between traveled and sidewalk for design speeds 50mph or greater. A variation will be required to maintain the bridges as-is without the traffic barrier.

Drainage Scope Items:

The existing drainage consists of an open system up to MP 13.00 +/- where it transitions to a closed system with curb and gutter conveyance of roadway runoff with a ditch system behind the sidewalk to MP 13.70 where the goes away for the remainder of the project. The project generally consists of milling and resurfacing and providing keyholes. There are fifteen RTLs within the project limits. Of these, two currently have existing keyholes, four can support the construction of a keyhole, five will not be able to have keyholes constructed due to curb and gutter. The remaining four are adjacent to stormwater management systems and cannot be impacted by widening for a keyhole. Where applicable, sidewalk ADA issues will be corrected. There is a wet weather crash hot spot at MP 12.5. This area will require further investigation, some additional analysis, and a construction fix. There are no other apparent drainage issues, however, include a rainy day visit to determine the drainage facilities are functioning correctly and curb profiles have positive drainage.

- MP 12.00 RT – RTL fill ditch with pipe system for keyhole construction

- Stormwater management ditch block

- Ditch system behind sidewalk

- All drainage structure end treatment is outside the clear zone for the entire project, no pipe extensions anticipated.

Permitting/Environmental Scope Items:

- Coordinate with FDOT for determination of Environmental Permits for review and concurrence during the design process, considering the below descriptions of work and conditions;
    - Conduct an on-site environmental assessment including wetland delineation.
    - Records indicate that rare species or suitable habitat may exist within or near the project limits. For additional information please see the attached Scope Analysis for Social and Environment Issues.
- This project is anticipated to exceed one acre of soil disturbing activities and will require NPDES coverage under the FDEP Generic Permit for Stormwater Discharge from Large and Small Construction Activities.
- This project is anticipated to be exempt from WMD permitting under FAC 62-330.051 (4)(c), as it is limited to pavement resurfacing and safety modifications. A permit exemption request will be needed.

Utility Scope Items:

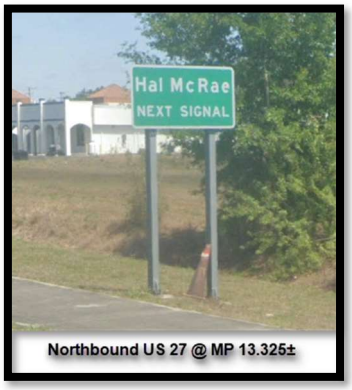
- Utility coordination will be required to determine if adjustments are necessary to ensure there are no conflicts with the proposed construction.
- SUE may be needed at widening area for keyholes, new drainage structure or for foundations such at for signs, signals or lighting.

Signing Scope Items:

- All existing signing should be evaluated for possible replacement to ensure signs meet current design criteria for size, placement, and reflectivity.
- There are five signalized intersections within the project. The locations are:
    1. College Dr./Sachsenmaier Dr., MP 12.457
    2. Hal McRea St., MP 13.464
    3. Morrill St./Shopping Center Ent., MP 13.622
    4. SR 64/SR 17/Main St., MP 14.230

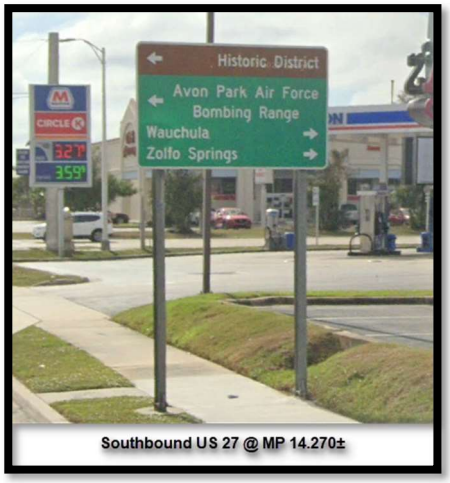
5. Lake Isis Ave./Shop 16 Rd., MP 15.225

Of these five locations, only the first location has advance street name (ASN) signs on both approaches. Location No. 2, Hal McRea, has an ASN sign on the south approach. Existing signs should be evaluated with regard to condition, reflectivity, and placement. Replace if required. All other locations should be evaluated to determine if advance street name signs can be installed. See Chapter 2.37 of the Traffic Engineering Manual (TEM) and "Condition A" of Table 2c-4 of the MUTCD for guidelines.



- In addition to the above signs, there are four other two-post signs that should be evaluated for possible replacement. The first two are on each approach to the signalized intersection of W. College Dr./Sachsenmaier.

The next two-post sign is on the north approach to the signalized intersection of SR 64/SR 17/Main St. On the south approach of this intersection, the information shown on this sign is separated on two single-post cantilever assemblies. All should be evaluated for replacement.

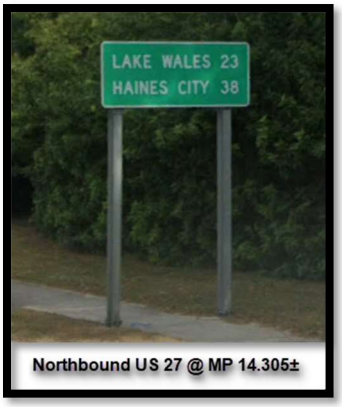


Southbound US 27 @ MP 14.270±

Northbound US 27 @ MP 14.±130

Northbound US 27 @ MP 14.170±

The final two-post is a destination/mileage sign on northbound US 27 north of SR 17/64/Main St. This sign should be replaced. Per current requirements in the Traffic Engineering Manual (TEM), three destinations must be shown on these signs if they exist. The third city must be a control city. Haines City is a control city, so consider adding **Dundee 32** as the center destination.



Northbound US 27 @ MP 14.305±

- There is a destination/mileage sign on southbound US 27 south of SR 17/64/Main St. This sign is a single-post cantilever assembly, and it should be replaced. As noted previously, a third destination is required to be a control city. Miami is a control city, so consider adding **Lk Placid 26** as the center destination.

Southbound US 27 @ MP 14.085±

- Ensure that STOP, YIELD, and ONE WAY signing at all median openings with turn lanes meet current design criteria shown in the FDM Chapter 230, Standard Plans Index 700-109, and the MUTCD.
- Add DO NOT ENTER (R5-1) and WRONG WAY (R5-1a) signs with retroreflective strips where required per current FDM Chapter 230, Sect. 230.4.
- There are locations within the project that include street signs attached to the STOP sign assembly. Replace with STOP assembly without street signs included. If existing post is reusable, remove existing STOP sign panel and relocate street sign assembly to adjacent corner. If existing post is not reusable, install existing street signs on new post in adjacent corner.
- A safety recommendation has been made to install Intersection Ahead signs (W2 Series) with bright sticks for all cross streets in the project. The safety recommendation also included installation of bright sticks on all STOP (R1-1) assemblies. If considered, coordination is required with District Traffic Operations Engineer for installation of W2 Series signs and bright sticks.

Pavement Marking Scope Items:

- Restripe roadway per current Standard Plans and MUTCD.
- Where required, add guidelines for left turn lanes at signalized intersections as currently shown in FDM Chapter 230, Exhibit 230-8.
- Where required, add Wrong-Way Arrow pavement markings as currently shown in FDM Chapter 230, Sect. 230.4.3.
- Because of the higher speed limits from the beginning of the project to MP 13.327, Audible and Vibratory Treatment (AVT) is required for flush shoulders. Sinusoidal ground-in rumble striping is the AVT recommended due to the proximity of homes. Because all medians are curbed, provision of AVT will be applicable to the shoulders only.
- Use special emphasis/preformed thermoplastic for all crosswalks at signalized intersections.
- Use permanent tape for markings on concrete bridge surfaces.
- Use standard thermoplastic for all other markings in the project.
- Where appropriate, ensure double yellow pavement markings for side streets are a minimum of 50’ in length. See Index 711-001 of the Standard Plans.
- A safety recommendation has been made to include optical pavement markings for curves in the project. However, at the time of this report there is no such item available in the Basis of Estimates. Review recommendation at the time of preliminary design and incorporate these markings if available.

Object Marker and Delineator Scope Items:

- Evaluate the condition of all existing object markers within the project. Replace if required.
- Replace delineators in the median/separator noses where needed. See Index 711-001-1 for guidelines.

Signalization Scope Items:

Signal scoping items and recommendations are limited to the following:

- Required improvements listed within section 114 of the FDM and RDB 22-01.
- Items specifically recommended by District Safety that advance safety countermeasures.
- Upgrades of existing vehicle detection methods based on current Maintaining Agency requirements.
- Recommended replacement of existing signal structures. Signal structures displaying characteristics that lead to a high probability of replacement. Further analysis may be required.

- Requests from District TSM&O for ITS related improvements or additions. Approval will be based on available funding.

Existing traffic signal related features not meeting this criteria will not be included in the scope.

Existing field conditions described in this report represent the conditions present at the time of scoping. All traffic signal related recommendations listed within this scope shall follow the latest design guidelines as outlined in the FDM, Standard Plans, MUTCD, TEM, MUTS and Structures Design Manual.

The following signalized intersections fall within the limits of the begin and end mile posts and or construction limits for this RRR scope:

Signal location 1:
SR 25 (US 98 / US 27)
at W. College Dr.
MP: 12.457
Sig ID: 204

Signal location 2:
SR 25 (US 98 / US 27)
at Hal McRea St.
MP: 13.464
Sig ID: 205

Signal location 3:
SR 25 (US 98 / US 27)
at W. Morrill St.
MP: 13.622
Sig ID: 206

Signal location 4:
SR 25 (US 98 / US 27)
at SR 64 / SR 17 (Main St.)
MP: 14.230
Sig ID: 207

Signal location 5:
SR 25 (US 98 / US 27)
at Lake Isis Ave.
MP: 15.225
Sig ID: 1498

Signal location 1:
SR 25 (US 98 / US 27)
at W. College Dr.

District Safety recommendations:

- Replace 5-section signal heads with 3-section, arrowed signal heads for protected left turn movements.
- Within the physical limits of the intersection, retrofit existing HPS luminaires to LED.

District TSM&O recommendations:

- Provide Connected Vehicle (CV) roadside unit (RSU).
- Provide NEMA / ATC standard controller.
- Evaluate existing SOP and intersection timing for adding leading pedestrian intervals (LPI).

Additional scoping recommendations:

Structural support:

- Per FDM 232.9, diagonal signal spans are only to be used for flashing beacon installations. Therefore, it is recommended to replace the existing diagonal configuration to a box span configuration. During the design phase, should it be determined that the diagonal configuration shall remain, a design variation will be required.
- The existing support structures should be evaluated for load capacity and signs of distress. Per FDM 261.7, a category 1, condition evaluation should be considered for existing structures that remain with no proposed additional loading or are modified with smaller components. likewise, a category 2, condition and analytical evaluation will be required on existing structures when proposed changes in loading are considered. Replacement shall be considered If the existing signal structures are found to be deficient.

Controller and cabinet:

- Replacement of controller and cabinet is recommended. Coordinate with the Maintaining Agency specifications for any sole sourced controller and cabinet related equipment. District One policy is to provide UPS battery backup for all controllers and cabinets. Coordinate UPS placement and mounting preferences with the Maintaining Agency. NEMA / ATC standard controllers are required.

Signal head assemblies:

- Recommend replacing all existing signal head assemblies. Per FDM 232.1.5, provide backplates with retroreflective borders for all overhead signal heads. Review and coordinate the planned SOP with TSM&O. Follow MUTCD guidance (section 4D.11) for the number of signal faces on an approach. Utilize 4-section signal heads with FYA where appropriate for protected / permissive movements.

Overhead signs:

- Should 4-section heads be introduced as part of the SOP, consideration should be given to placing FTP-85-13 signs adjacent to the 4-section heads.

Internally illuminated street name signs:

- To facilitate all named roadways, provide internally illuminated signs where appropriate. Follow TEM and FDM guidelines to ensure appropriate letter and sign sizing. Coordinate sign and mounting preferences with the Maintaining Agency.

Vehicle detection:

- Inductive loops will be damaged during milling operations. Replace as necessary. Add multiple point detection zone loops.

Traffic monitoring and associated technologies:

- With the recommended new signal support structures, relocation or replacement of the existing cellular communications modem and associated hardware will be necessary. Coordinate location and mounting preferences with the Maintaining Agency.

Power source and service type:

- It is recommended that with an addition of a new controller and cabinet, a new power service assembly be added. Coordinate service type with Maintaining Agency (flat rate or metered).

Pedestrian assemblies and detection:

- Replacement of existing pedestrian assemblies and detectors is recommended. Pedestrian assembly and push button locations shall follow ADA, FDOT Standard Plans and MUTCD guidelines.

Photo / signal location 1:

Signal location 2:
SR 25 (US 98 / US 27)
at Hal McRea St.

District Safety recommendations:

- Replace 5-section signal heads with 3-section, arrowed signal heads for protected left turn movements.
- Provide intersection lighting for enhanced pedestrian safety.

District TSM&O recommendations:

- Provide Connected Vehicle (CV) roadside unit (RSU).
- Provide NEMA / ATC standard controller.
- Evaluate existing SOP and intersection timing for adding leading pedestrian intervals (LPI).

Additional scoping recommendations:

Structural support:

- Per FDM 232.9, diagonal signal spans are only to be used for flashing beacon installations. Therefore, it is recommended to replace the existing diagonal configuration to a box span configuration. During the design phase, should it be determined that the diagonal configuration shall remain, a design variation will be required.
- The existing support structures should be evaluated for load capacity and signs of distress. Per FDM 261.7, a category 1, condition evaluation should be considered for existing structures that remain with no proposed additional loading or are modified with smaller components. likewise, a category 2, condition and analytical evaluation will be required on existing structures when proposed changes in loading are considered. Replacement shall be considered If the existing signal structures are found to be deficient.

Controller and cabinet:

- Replacement of controller and cabinet is recommended. Coordinate with the Maintaining Agency specifications for any sole sourced controller and cabinet related equipment. District One policy is to provide UPS battery backup for all controllers and cabinets. Coordinate UPS placement and mounting preferences with the Maintaining Agency. NEMA / ATC standard controllers are required.

Signal head assemblies:

- Recommend replacing all existing signal head assemblies. Per FDM 232.1.5, provide backplates with retroreflective borders for all overhead signal heads. Review and coordinate the planned SOP with TSM&O. Follow MUTCD guidance (section 4D.11) for the number of signal faces on an

approach. Utilize 4-section signal heads with FYA where appropriate for protected / permissive movements.

Overhead signs:

- Should 4-section heads be introduced as part of the SOP, consideration should be given to placing FTP-85-13 signs adjacent to the 4-section heads.

Internally illuminated street name signs:

- To facilitate all named roadways, provide internally illuminated signs where appropriate. Follow TEM and FDM guidelines to ensure appropriate letter and sign sizing. Coordinate sign and mounting preferences with the Maintaining Agency.

Vehicle detection:

- Inductive loops will be damaged during milling operations. Replace as necessary. Add multiple point detection zone loops.

Traffic monitoring and associated technologies:

- With the recommended new signal support structures, relocation or replacement of the existing cellular communications modem and associated hardware will be necessary. Coordinate location and mounting preferences with the Maintaining Agency.

Power source and service type:

- It is recommended that with an addition of a new controller and cabinet, a new power service assembly be added. Coordinate service type with Maintaining Agency (flat rate or metered).

Pedestrian assemblies and detection:

- Replacement of existing pedestrian assemblies and detectors is recommended. Pedestrian assembly and push button locations shall follow ADA, FDOT Standard Plans and MUTCD guidelines.

Photo / signal location 2:

<u>Signal location 3:</u>

SR 25 (US 98 / US 27)
at W. Morrill St.

<u>District Safety recommendations:</u>

- Replace 5-section signal heads with 3-section, arrowed signal heads for protected left turn movements.
- Provide intersection lighting for enhanced pedestrian safety.

<u>District TSM&O recommendations:</u>

- Provide Connected Vehicle (CV) roadside unit (RSU).
- Provide NEMA / ATC standard controller.

- Evaluate existing SOP and intersection timing for adding leading pedestrian intervals (LPI).

Additional scoping recommendations:

Structural support:

- Per FDM 232.9, diagonal signal spans are only to be used for flashing beacon installations. Therefore, it is recommended to replace the existing diagonal configuration to a box span configuration. During the design phase, should it be determined that the diagonal configuration shall remain, a design variation will be required.
- The existing support structures should be evaluated for load capacity and signs of distress. Per FDM 261.7, a category 1, condition evaluation should be considered for existing structures that remain with no proposed additional loading or are modified with smaller components. likewise, a category 2, condition and analytical evaluation will be required on existing structures when proposed changes in loading are considered. Replacement shall be considered If the existing signal structures are found to be deficient.

Controller and cabinet:

- Replacement of controller and cabinet is recommended. Coordinate with the Maintaining Agency specifications for any sole sourced controller and cabinet related equipment. District One policy is to provide UPS battery backup for all controllers and cabinets. Coordinate UPS placement and mounting preferences with the Maintaining Agency. NEMA / ATC standard controllers are required.

Signal head assemblies:

- Recommend replacing all existing signal head assemblies. Per FDM 232.1.5, provide backplates with retroreflective borders for all overhead signal heads. Review and coordinate the planned SOP with TSM&O. Follow MUTCD guidance (section 4D.11) for the number of signal faces on an approach. Utilize 4-section signal heads with FYA where appropriate for protected / permissive movements.

Overhead signs:

- Should 4-section heads be introduced as part of the SOP, consideration should be given to placing FTP-85-13 signs adjacent to the 4-section heads.

Internally illuminated street name signs:

- To facilitate all named roadways, provide internally illuminated signs where appropriate. Follow TEM and FDM guidelines to ensure appropriate letter and sign sizing. Coordinate sign and mounting preferences with the Maintaining Agency.

Vehicle detection:

- Inductive loops will be damaged during milling operations. Replace as necessary. Add multiple point detection zone loops.

Traffic monitoring and associated technologies:

- With the recommended new signal support structures, relocation or replacement of the existing cellular communications modem and associated hardware will be necessary. Coordinate location and mounting preferences with the Maintaining Agency.

Power source and service type:

- It is recommended that with an addition of a new controller and cabinet, a new power service assembly be added. Coordinate service type with Maintaining Agency (flat rate or metered).

Pedestrian assemblies and detection:

- Replacement of existing pedestrian assemblies and detectors is recommended. Pedestrian assembly and push button locations shall follow ADA, FDOT Standard Plans and MUTCD guidelines.

Photo / signal location 3:

Signal location 4:
SR 25 (US 98 / US 27)
at SR 64 / SR 17 (Main St.)

District Safety recommendations:

- None; see additional scoping recommendations below.

District TSM&O recommendations:

- Evaluate existing SOP and intersection timing for adding leading pedestrian intervals (LPI).

Additional scoping recommendations:

Other than timing evaluation for implementing LPI's, additional signal improvements at this location will be excepted out of this scope for the following reasons.

- A safety project is being programmed at this intersection to provide SOP change, an additional mast arm for westbound right movement and eastbound right blank-out sign.
- Recent upgrades for the majority of the signal infrastructure.
- With the exception of the westbound approach, there is existing concrete pavement within the limits of the intersection. Existing stop bar and multiple point detection loops will not be impacted as there will be no milling.
- Existing loops, embedded in asphalt, for the westbound movement will be accounted for in FPID 451361-1.

Photo / signal location 4:

Signal location 5:
SR 25 (US 98 / US 27)
at Lake Isis Ave.

District Safety recommendations:

- Review SOP for timing plan for addition of SB left protected / permissive 4-section head or protected 3-section head.
- Retrofit mast arm mounted luminaires from HPS to LED.

District TSM&O recommendations:

- Provide Connected Vehicle (CV) roadside unit (RSU).
- Confirm existing controller is NEMA / ATC standard. If not, replacement is recommended.
- Evaluate existing SOP and intersection timing for adding leading pedestrian intervals (LPI).

Additional scoping recommendations:

Pedestrian assemblies and detection:

- Recommend separating pedestrian detector push buttons from shared pedestrian signal detector posts and any mast arm uprights. Replace or relocate pedestrian assemblies that do not meet ADA location requirements. Replacement or upgrades of the existing pedestrian assemblies and push button locations shall follow ADA, FDOT Standard Plans and MUTCD guidelines.

Photo / signal location 5:

Lighting Scope Items:
Lighting scoping items and recommendations are limited to the following criteria:

- For new or fully reconstructed signalized intersections that fall within roadway context classifications C3 through C6, lighting shall be provided.
- Existing signalized intersections that have been identified by District Safety as having a history of nighttime pedestrian crashes.
- Corridor or sections of corridor that have been identified by District Safety as having a history of nighttime crashes.
- New or existing mid-block pedestrian crossings.

The locations listed below have been identified as meeting this criteria.

Intersection location 1:
SR 25 (US 98 / US 27)
at W. College Dr.
MP: 12.457

Intersection location 2:
SR 25 (US 98 / US 27)
at Hal McRea St.
MP: 13.464

Intersection location 3:
SR 25 (US 98 / US 27)
at W. Morrill St.
MP: 13.622

Intersection location 4:
SR 25 (US 98 / US 27)
at SR 64 / SR 17 (Main St.)
MP: 14.230

Intersection location 5:
SR 25 (US 98 / US 27)
at Lake Isis Ave.
MP: 15.225

Existing lighting features:

Elements of corridor lighting exist within the project limits. The north and south ends of the project consist of FDOT standard light poles with HPS luminaires while the middle of the project consists of other agency owned LED street lighting.

District Safety recommended lighting countermeasures:

Intersection location 1:

- Within the physical limits of the intersection, add supplemental intersection / pedestrian level lighting where appropriate / connect to existing circuit. Retrofit existing HPS luminaires to LED.

Intersection locations 2 and 3:

- Provide intersection lighting for enhanced pedestrian safety.

Intersection location 4:

- Improvements for intersection lighting are already constructed through a separate safety project.

Intersection location 5:

- Within the physical limits of the intersection, add supplemental intersection / pedestrian level lighting where appropriate / connect to existing circuit. Retrofit existing HPS luminaires, including mast arm mounted, to LED.

Corridor:

- Retrofit existing FDOT HPS luminaires to LED.

Scoping items and recommendations:

In addition to District Safety recommendations, intersection locations 1, 2 and 3 have been recommended for full signal replacement. Based on District policy for rebuilt signalized intersections, pedestrian level intersection lighting shall be provided. The following guidance and recommendations apply for these locations:

- During design, existing and proposed intersection lighting should be assessed with a complete lighting analysis to ensure minimum vertical and horizontal illumination values are met. Utilize lighting design criteria based on the latest FDOT FDM, Standard Specifications and Standard Plans for Road and Bridge Construction. Per RDM 16-02 and Standard Spec 992, LED light fixtures shall be used.

- During the design phase, it should be determined if new light poles can be powered by extending the circuits of the existing intersection or corridor lighting infrastructure.
- Coordinate with signal design any potential shared facilities (i.e., directional bores, luminaire support structures, and power service poles).
- Recommend replacing other agency owned street lighting or shared use lighting with FDOT standard light poles. Coordinate the replacement of other agency owned street lighting with the UAO and Maintaining Agency.
- Coordinate power source location and requirements with UAO.
- Coordinate lighting maintenance agreement with the District Maintenance Office and the Maintaining Agency.
- Coordinate light fixture types with Maintaining Agency. Only light fixtures that appear on the Departments approved product list are allowed.
- Existing light poles and / or mast arm upright mounted luminaires that are not in locations that are conducive to appropriately illuminate pedestrian crosswalks should be evaluated for relocation, removal or replacement.
- Coordinate with District Utilities and the UAO for any potential overhead power line conflicts. Utilization of conflict light poles may be necessary.

Geotechnical Scope Items:

- Geotechnical exploration may be needed for keyhole widening, drainage and any foundations (signs, signals, or lighting) on this project.

Structural Scope Items:

- Per section 261.7 of the FDM, an Ancillary Structures Report shall be provided for all existing overhead and cantilever signs, signal, HMLP lighting and ITS support structures within the project limits.
- Per FDM 260.9, an engineering analysis and report is required to evaluate the structural and functional adequacy of the existing bridge. Coordinate with the District Structures Office to determine the scope of the engineering analysis and report.
- MP 11.690 - Box Culvert 1-10'x4'x176' CBC: Single barrel 4' high x 10' wide x 176' long reinforced concrete box culvert carrying SR 25 (US 27) over an unnamed ditch 0.142 miles north of the intersection of Ponce de Leon Blvd. and SR 25 (US 27). The box culvert carries six (6) 12’-0” wide thru travel lanes (three in each direction), an outside tapered merge lane in the NB direction, 5’-0” wide flush paved outside shoulders in each direction, 2’-0” wide inside curb and gutter, approximately 26’-0” wide raised grass center median, and grass area between the edge of shoulder and headwall. The outside face of the headwalls are approximately 28’-6” SB and 21’-0” NB from the edge of the respective outside lane. Hazards markers are installed at the NB and SB approaches only. The concrete electrical pole adjacent to the north end of the east headwall is approximately 36’-6” from the edge of the outside tapered merge lane. The posted speed limit across the culvert is 55 mph. As-built plans are not available in the project folder.
- MP 13.168 - Bridge 090054: Five span continuous concrete flat slab superstructure (25’-0" spans) carrying SR 25 (US 27) SB over Lake Anoka. The bridge carries three (3) 12'-0" wide travel lanes, 1’-4” wide inside curb and gutter, 5’-4” wide outside shoulder, 6’-0” wide raised outside concrete sidewalk, and 1’-6 ½” wide F-shape concrete traffic railing barriers with a two-rail bullet railing on top at the outside coping line. The raised 10’-7 ½” wide concrete center median is separated from Bridge No. 090028 by a longitudinal 1” wide open joint. The raised concrete sidewalk and concrete traffic railing barriers at the approach and trailing ends of the bridge continue well beyond the

approach slabs. The bridge was constructed in 2002, and was last load rated in 2009 using Load Factor Rating methodology. The posted speed limit at the bridge is 45 mph. Roadway plans are available in the project file (FPID No. 194510-1-52-01; State Project No. 09030-3501).

- MP 13.168 - Bridge 090028: Five span continuous concrete flat slab superstructure (25'-0" spans) carrying SR 25 (US 27) NB over Lake Anoka. The bridge carries three (3) 12'-0" wide travel lanes, 1'-4" wide inside curb and gutter, 5'-4" wide outside shoulder, 6'-0" wide raised outside concrete sidewalk, and 1'-6 ½" wide F-shape concrete traffic railing barriers with a two-rail bullet railing on top at the outside coping line. The raised 10'-7 ½" wide concrete center median is separated from Bridge No. 090054 by a 1" wide longitudinal open joint. The raised concrete sidewalk and concrete traffic railing barriers at the approach and trailing ends of the bridge continue well beyond the approach slabs. The bridge was constructed in 1969 and reconstructed in 2002. The bridge was last load rated in 2009 using Load Factor Rating methodology. The posted speed limit at the bridge is 45 mph. Roadway plans are available in the project file (FPID No. 194510-1-52-01; State Project No. 09030-3501).

Right-of-Way Scope Items:

- ROW impacts are not expected on this project.

Survey Required:

- Obtain 3D survey prior to beginning design.

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

FPID No:	451270-1	County:	Highlands	City:	Avon Park
Project Limits:	State Road (SR) 25/US 27 from north of Ponce De Leon Boulevard to north of Lake Isis Avenue				
Section:	09030-000		Length of Project:		3.726
Begin Milepost:	11.560		End Milepost:		15.286
Scope:	Resurfacing, Restoration, and Rehabilitation (RRR)				
Review Date:	11/8/2022 – B. Feagle		Anticipated NEPA COA:		Type 1 CE

Elements with Potential Cost/Schedule Impacts

- **LEP:** The limited English proficiency (LEP) population is above the threshold of 5% for the project area; therefore, efforts must be taken to ensure the LEP population receives translation services including presentations, materials, and other important project-related documentation.
- **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.
- **Sank skink/Blue tail mole skink***:* Per the Florida Department of Transportation (FDOT) *Programmatic Approach for Minor Transportation Activities,* the project will require a coverboard survey to be completed between March 1st and May 15th. If no skink tracks are found during the survey, a finding of *no effect* is anticipated; however, if skink tracks are found during the survey, a finding of *may affect* will apply and consultation with US Fish and Wildlife Service (USFWS) will be necessary.
- **Florida scrub-jay**: Per the FDOT *Programmatic Approach for Minor Transportation Activities*, if scrub-jay play-call surveys are not conducted between March 1st and October 31st, the area will be assumed to "occupied habitat." FDOT must adhere to the following avoidance and minimization measures regarding vegetation removal or alteration: scrub habitat must be avoided, scrub habitat must be noted on plan sheets and delineated on-site prior to initiation of ground-disturbing activities and maintained throughout the project, and any delineation materials must be removed after construction is complete.
- **Florida bonneted bat**: Per the October 2019 USFWS *Consultation Key for the Florida Bonneted Bat*, the project will result in a *no effect* determination and no further coordination for the Florida bonneted bat is required if foraging habitat will not be affected. If the project does affect foraging habitat, a determination of *may affect, not likely to adversely affect – programmatic* will apply with programmatic concurrence if two of the Best Management Practices (BMP) listed in Appendix D of the *Consultation Key* are followed.
- **Bald eagle**: Design-phase coordination and review is recommended to determine whether an active bald eagle nest is located within the project area.
- **Wood stork**: Per the FDOT *Programmatic Approach for Minor Transportation Activities,* the determination of *may affect, not likely to adversely affect* will apply. If the project has wetland

impacts less than 0.5 acres and wood storks have not been observed, no further action is necessary. If the project has wetland impacts greater than 0.5 acres or if wood storks have been observed onsite, impacts must be compensated at a wetland mitigation bank or created and restored onsite.

- **Gopher tortoise**: Design-phase coordination and review is recommended. If a burrow is located within 25 feet of construction, a relocation permit or exclusionary silt fencing is required.
- **Eastern indigo snake**: Per the FDOT *Programmatic Approach for Minor Transportation Activities,* since eastern indigo snakes have the potential to occur, the most recent version of the *Standard Protection Measures for the Eastern Indigo Snake* must be followed during site preparation and construction.
- **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 commercial and services, transportation, medium-density residential, open land, and tree crops.
- No impacts to land use are anticipated as the proposed work is expected to occur within the existing right-of-way.

Social

- The project buffer area has 186 households with a population of 499 people.
- The median household income is $30,902 with 24.65% of the population below poverty level. The median household income of the project area is below the median household income for Highlands County ($43,708).
- The minority population makes up 77.35% of the total population of the area with 242 people claiming a “Hispanic or Latino of Any Race” ethnicity. There is a claimed LEP population of 45 people (9.83%). The LEP population is above the threshold of 5% for the project area; therefore, efforts must be taken to ensure the LEP population receives translation services including presentations, materials, and other important project-related documentation.
- Housing within the project buffer area consist of multi-family (46%), single-family (44%) and mobile home (10%) units that are renter-occupied (52%), owner-occupied (31%), and vacant (17%).
- Social resources within the project buffer area include the Lake Glenada Boat Ramp, Victory Tabernacle International Incorporated, Avon Park Holiness Camp, Episcopal Church of Redeemer, Fellowship Baptist Church and Library, Cornerstone Christian Church of Avon Park, Calvary Baptist Church, First Christian Church, South Florida State College Career Center for Technology, Marin Housing/Sebring Citrus migrant housing, and Oak Tree Inn migrant housing.
- 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 36.46 acres of medium-density, 8.94 acres high-density, and 4.57 acres of low-density residential units within the project buffer area.
- Commercial and services properties account for 239.04 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.

Farmlands

- The project buffer area contains 59.43 acres (12.72%) of farmland of unique importance.
- The project is located entirely within the Sebring – Avon Park urbanized area.
- The project is not expected to be subject to the provisions of the Farmland Protection Policy Act as project construction is expected to remain within the existing right-of-way.

Aesthetic Effects

- The project buffer area contains no aesthetic effects.

Economic

- The project buffer area contains no economic resources.

Mobility

- The project buffer area contains no mobility resources.

Cultural

Historic and Archaeological Sites (note: these are the results of a basic screening)

- No project-specific Cultural Resource Assessment Survey (CRAS) has been completed.
- A National Register of Historic Places (NRHP) site, Avon Park Historic District (Site ID# HG00640) is located within the project buffer area.
- A Florida Master Site File (FMSF) archaeological or historic site, Lake Isis West (Site ID# HG00746), which has been determined ineligible for listing on the NRHP, is located within the project buffer area.
- The project buffer area contains a FMSF cemetery site, Bougainvillea Cemetery (Site ID# HG00754), which has not been evaluated by SHPO.
- The project buffer area contains 12 FMSF historic standing structures including six that have been determined to be ineligible for listing on the NRHP and six that have not been evaluated by SHPO.
- 10 FMSF Field Survey Project Boundaries conducted from 1989 to 2007 are located within the project buffer area.
- The project buffer area includes 56 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 the Lake Glenada Boat Ramp.
- 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 lacustrine (lake), palustrine (freshwater pond), palustrine (freshwater forested/shrub wetland), palustrine (freshwater emergent wetland), and riverine 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 adopted total maximum daily load, one basin management action plan, four US Environmental Protection Agency (EPA) water quality data monitoring stations, two Florida Department of Environmental Protection (FDEP) lakes, one FDEP STORET station, one FDEP strategic monitoring plan, one water not attaining standard, one watershed information network monitoring location, one super act well, one verified impaired Florida water, five waterbodies with verified nutrient or dissolved oxygen impairment, and five waterbodies.
- The project buffer area includes interaction with the surficial aquifer system and recharge/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.

Floodplains

- 45.34 acres (3.71%) of the project buffer area is located within the 100-year floodplain.
- Project activities must not adversely impact (fill) floodplain storage.

Protected Species and Habitat

- The project is located within the US Fish and Wildlife Service (USFWS) consultation areas for the Florida bonneted bat, sand skink, blue-tail mole skink, Audubon's crested caracara, Florida grasshopper sparrow, Florida scrub-jay, snail kite, and Lake Wales Ridge plants.
- *Sank skink:* The majority of the project area contains suitable soils for sand skink and/or blue-tailed mole skink and 91.5% of the project buffer area is located above 82 feet in elevation. Per the FDOT *Programmatic Approach for Minor Transportation Activities,* the project will require a coverboard survey to be completed between March 1st and May 15th due to the fact that not all areas of suitable soils contain a thick cover of vegetation or have been altered by fill material. If no skink tracks are found during the survey, a finding of *no effect* is anticipated; however, if skink tracks are found during the survey, a finding of *may affect* will apply and consultation with USFWS will be necessary.
- *Audubon's crested caracara*: There does not appear to be suitable habitat for the Audubon's crested caracara within 985 feet of the project and the project corridor, even though the project

area has been identified as a high priority occurrence location for this species. Per the FDOT *Programmatic Approach for Minor Transportation Activities*, this project is expected to result in a *no effect* determination and no coordination for the Audubon's crested caracara is anticipated.

- *Florida scrub-jay*: The project buffer area appears to contain potential suitable habitat for the Florida scrub-jay and is located within the scrub-jay service area. Per the FDOT *Programmatic Approach for Minor Transportation Activities*, if scrub-jay play-call surveys are not conducted between March 1st and October 31st, the area will be assumed to "occupied habitat." FDOT must adhere to the following avoidance and minimization measures regarding vegetation removal or alteration: scrub habitat must be avoided, scrub habitat must be noted on plan sheets and delineated on-site prior to initiation of ground-disturbing activities and maintained throughout the project, and any delineation materials must be removed after construction is complete. Coordination with USFWS is not expected for the Florida scrub-jay.
- *Florida bonneted bat*: The project does appear to contain potential foraging habitat. Forging habitat is relatively open areas to find and catch prey that includes open water, wetlands, shrubs, and agricultural lands. Potential roosting habitat includes forest and other areas with tall, mature trees or other areas with suitable roost structures. Per the October 2019 USFWS *Consultation Key for the Florida Bonneted Bat*, the project will result in a *no effect* determination and no further coordination for the Florida bonneted bat is required if foraging habitat will not be affected. If the project does affect foraging habitat, a determination of *may affect, not likely to adversely affect – programmatic* will apply with programmatic concurrence if two of the BMPs listed in Appendix D of the *Consultation Key* are followed.
- *Bald eagle:* Bald eagle nest HI053, currently listed as unknown, is located approximately 0.2 miles east of US 27 (27.567667, -81.517833). Bald eagle nest HI048, currently listed as unknown, is located approximately 0.58 miles west of US 27 (27.566833, -81.504333). It is possible this nest is active in a nearby location. A Design-phase review of the project area is recommended to determine whether an active bald eagle nest is located within the project area. If an active nest is located within the project area, no activities may take place during nesting season between October 1st to May 15th within the 330-foot or 660-foot nest buffer zones without proper coordination and permits, if necessary.
- *Wood stork*: The project is located within the 18.6-mile core foraging area of the El Claire Ranch wood stork colony. 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. It appears the project has the potential to impact suitable foraging habitat. Per the FDOT *Programmatic Approach for Minor Transportation Activities,* the determination of *may affect, not likely to adversely affect* will apply. If the project has wetland impacts less than 0.5 acres and wood storks have not been observed, no further action is necessary. If the project has wetland impacts greater than 0.5 acres or if wood storks have been observed onsite, impacts must be compensated at a wetland mitigation bank or created and restored onsite.
- *Gopher tortoise and eastern indigo snake*: There is suitable habitat present for the gopher tortoise, eastern indigo snake, and commensal species. Design-phase coordination and review for gopher tortoises is recommended. If a burrow is located within 25 feet of construction, a relocation permit or exclusionary silt fencing is required. Per the FDOT *Programmatic Approach for Minor Transportation Activities,* since eastern indigo snakes have the potential to occur, the most recent version of the *Standard Protection Measures for the Eastern Indigo Snake* must be followed during site preparation and construction.

- *Florida grasshopper sparrow*: The Florida grasshopper sparrow inhibits dry open prairies that contain bunch grasses, low shrubs, and saw palmetto in Polk, Osceola, Highlands, and Okeechobee counties. The project area does not appear to contain suitable habitat for this species and a determination of *no effect* is anticipated.
- The project is located within the frequent black bear range. There have been two black bear nuisance reports in the project buffer area.
- The project is located within the Lake Wales Ridge 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

Noise

- The project buffer area contains potential noise and vibration sensitive sites including Sevigny & Johnson Eye Care, Family Practice Center of Avon Park, Heartland Pediatrics Associates, The Oaks at Avon, Saunders Veterinary Services, Lake Glenada Boat Ramp, Avon Park Holiness Camp, Calvary Baptist Church, Cornerstone Christian Church of Avon Park, Episcopal Church of Redeemer, Fellowship Baptist Church and Library, First Christian Church, Victory Tabernacle International Incorporated, South Florida State College, and historic structures.
- 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.

Air Quality

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

Contamination

- The project buffer area contains 12 biomedical waste facilities, 38 FDEP off site contamination notices, 20 hazardous waste facilities, two National Pollutant Discharge Elimination System (NPDES) stormwater permits, 14 onsite sewage facilities, 22 petroleum contamination monitoring sites, 28 storage tank contamination monitoring sites, 10 super act risk sources, 10 NPDES, two EPA regulated air emissions facilities, and 27 Resource Conservation and Recovery Act regulated facilities.
- The project is located within the Highlands County brownfield area.
- Level 1 evaluation of potential contamination facilities may be needed in conjunction with project plans development; Level 2 testing may also be required.

Infrastructure

- The project buffer area contains two bridges (#090028 and #090054), four electric power transmission lines, 13 Federal Aviation Administration obstruction, a FM tower structure, and one wireless antenna structure location.

- 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.

Date: 11/13/2023 10:32:55 AM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 451270-1-52-01 **Letting Date:** 07/2026

Description: SR 25 (US 27) FROM N OF PONCE DE LEON BLVD TO N OF LAKE ISIS AVE

District: 01 **County:** 09 HIGHLANDS **Market Area:** 09 **Units:** English
Contract Class: 1 **Lump Sum Project:** N **Design/Build:** N **Project Length:** 3.726 MI

Project Manager: NEM-

Version 10-P Project Grand Total **$10,385,283.54**
Description: Copy V9 - Correction from QC 10/11/23

Sequence: 1 MIS - Miscellaneous Construction **Net Length:** 3.726 MI / 19,673 LF
Description: POP Items (Loops)

ROADWAY COMPONENT

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-4-10	REMOVAL OF EXIST CONC	311.77	SY	$37.05	$11,551.08
327-70-4	MILLING EXIST ASPH PAVT, 3" AVG DEPTH	174,820.00	SY	$2.28	$398,589.60
327-70-6	MILLING EXIST ASPH PAVT,1 1/2" AVG DEPTH	16,353.00	SY	$5.23	$85,526.19
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	14,734.45	TN	$168.59	$2,484,080.93
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	15,613.50	TN	$176.72	$2,759,217.72
520-1-10	CONCRETE CURB & GUTTER, TYPE F	656.00	LF	$56.54	$37,090.24
522-2	CONCRETE SIDEWALK AND DRIVEWAYS, 6"	165.99	SY	$83.35	$13,835.27
527-2	DETECTABLE WARNINGS	79.11	SF	$40.41	$3,196.84
546-72-3	GROUND-IN RUMBLE STRIPS, 8" SIN	1.66	GM	$1,450.95	$2,408.58
570-1-2	PERFORMANCE TURF, SOD	1,301.22	SY	$4.62	$6,011.64
710-11-190	PAINTED PAVT MARK,STD,WHITE, ISLA NOSE	400.00	SF	$3.18	$1,272.00
710-11-290	PAINTED PAVT MARK,STD,YELLOW,ISLAND NOSE	650.00	SF	$3.57	$2,320.50
710-90	PAINTED PAVEMENT MARKINGS, FINAL SURFACE	1.00	LS	$47,704.29	$47,704.29
711-11-123	THERMOPLASTIC, STD, WHITE, SOLID, 12"	6,800.00	LF	$3.86	$26,248.00
711-11-124	THERMOPLASTIC, STD, WHITE, SOLID, 18"	560.00	LF	$4.75	$2,660.00
711-11-125	THERMOPLASTIC, STD, WHITE, SOLID, 24"	1,495.00	LF	$5.97	$8,925.15
711-11-141	THERMOPLASTIC, STD, WHITE, DOT GUIDE, 6"	1.45	GM	$3,562.57	$5,165.73
711-11-170	THERMOPLASTIC, STD, WHITE, ARROW	335.00	EA	$66.41	$22,247.35
711-11-224	THERMOPLASTIC, STD, YELLOW, SOLID, 18"	100.00	LF	$4.87	$487.00
711-11-241	THERMOPLASTIC,STD,YELLOW,DOT / GUIDE, 6"	0.65	GM	$2,803.31	$1,822.15

711-14-125	THERMOPLASTIC, PREFORM, WHITE, SOLID,24"	1,780.00 LF	$15.59	$27,750.20
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	6.34 GM	$5,050.01	$32,017.06
711-16-102	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 8"	0.37 GM	$7,090.84	$2,623.61
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	14.60 GM	$1,743.67	$25,457.58
711-16-201	THERMOPLASTIC, STD-OTH,YELLOW, SOLID, 6"	8.13 GM	$5,210.59	$42,362.10
713-103-101	PERMANENT TAPE, WHITE,SOLID,6" CONC BR	0.05 GM	$33,695.54	$1,684.78
713-103-131	PERMANENT TAPE, WHITE,SKIP/D,6" FOR CONC	0.10 GM	$10,453.94	$1,045.39
713-103-201	PERMANENT TAPE, YELLOW,SOLID,6" CONC BR	0.05 GM	$34,900.00	$1,745.00
713-103-331	PERMANENT TAPE, BLACK,SKIP/D,6" FOR CONC	0.10 GM	$10,076.13	$1,007.61
	Roadway Component Total			$6,056,053.59

SHOULDER COMPONENT

User Input Data

Description	Value

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
102-71-16	TEMPORARY BARRIER, F&I, FREE STAND	582.91	LF	$40.30	$23,491.27
104-15	SOIL TRACKING PREVENTION DEVICE	2.00	EA	$2,576.76	$5,153.52
107-1	LITTER REMOVAL	101.00	AC	$58.42	$5,900.42
107-2	MOWING	51.00	AC	$82.34	$4,199.34
	Shoulder Component Total				$38,744.55

SIGNALIZATIONS COMPONENT

Signalization 1

Description	Value
Type	Miscellaneous
Multiplier	1
Description	SR 25 (US 98 / US 27) at W. College Dr.

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
660-2-102	LOOP ASSEMBLY, F&I, TYPE B	6.00	AS	$1,000.59	$6,003.54
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	6.00	AS	$1,347.40	$8,084.40
671-2-40	TRAFFIC CONTROLLER, MODIFY	1.00	EA	$2,897.73	$2,897.73

Signalization 2

Description	Value
Type	Miscellaneous
Multiplier	1

Description	SR 25 (US 98 / US 27) at Hal McRea St.

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
660-2-102	LOOP ASSEMBLY, F&I, TYPE B	6.00	AS	$1,000.59	$6,003.54
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	5.00	AS	$1,347.40	$6,737.00
671-2-40	TRAFFIC CONTROLLER, MODIFY	1.00	EA	$2,897.73	$2,897.73

Signalization 3

Description	Value
Type	Miscellaneous
Multiplier	1
Description	SR 25 (US 98 / US 27) at W. Morrill St.

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
660-2-102	LOOP ASSEMBLY, F&I, TYPE B	6.00	AS	$1,000.59	$6,003.54
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	5.00	AS	$1,347.40	$6,737.00
671-2-40	TRAFFIC CONTROLLER, MODIFY	1.00	EA	$2,897.73	$2,897.73

Signalization 5

Description	Value
Type	Miscellaneous
Multiplier	1
Description	SR 25 (US 98 / US 27) at Lake Isis Ave.

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
660-2-102	LOOP ASSEMBLY, F&I, TYPE B	18.00	AS	$1,000.59	$18,010.62
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	5.00	AS	$1,347.40	$6,737.00
671-2-40	TRAFFIC CONTROLLER, MODIFY	1.00	EA	$2,897.73	$2,897.73

Signalizations Component Total $75,907.56

Sequence 1 Total $6,170,705.70

Sequence: 2 MIS - Miscellaneous Construction **Net Length:** 3.726 MI 19,673 LF

Description: RRR Items Removed from POP

ROADWAY COMPONENT

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-4-10	REMOVAL OF EXIST CONC	1,133.37	SY	$37.05	$41,991.36
520-1-10	CONCRETE CURB & GUTTER, TYPE F	1,940.25	LF	$56.54	$109,701.74
522-2	CONCRETE SIDEWALK AND DRIVEWAYS, 6"	1,055.70	SY	$83.35	$87,992.60
	Roadway Component Total				$239,685.70

SIGNING COMPONENT

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	120.00	AS	$453.49	$54,418.80
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	85.00	AS	$1,626.51	$138,253.35
700-1-13	SINGLE POST SIGN, F&I GM, 21-30 SF	4.00	AS	$2,054.68	$8,218.72
700-1-60	SINGLE POST SIGN, REMOVE	130.00	AS	$35.24	$4,581.20
700-2-13	MULTI- POST SIGN, F&I GM, 21-30 SF	1.00	AS	$5,507.62	$5,507.62
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	3.00	AS	$5,331.83	$15,995.49
700-2-15	MULTI- POST SIGN, F&I GM, 51-100 SF	3.00	AS	$9,681.27	$29,043.81
700-2-60	MULTI- POST SIGN, REMOVE	7.00	AS	$950.75	$6,655.25
700-3-201	SIGN PANEL, F&I OM, UP TO 12 SF	1.00	EA	$705.73	$705.73
	Comment: signal				
700-3-601	SIGN PANEL, REMOVE, UP TO 12 SF	1.00	EA	$92.17	$92.17
	Comment: Signal				
700-13-15	RETROREFLECTIVE SIGN STRIP-F&I, 5'	10.00	EA	$80.22	$802.20
705-10-1	OBJECT MARKER, TYPE 1	4.00	EA	$152.63	$610.52
705-10-2	OBJECT MARKER, TYPE 2	10.00	EA	$165.49	$1,654.90
705-11-1	DELINEATOR, FLEXIBLE TUBULAR	30.00	EA	$80.51	$2,415.30
706-1-3	RAISED PAVMT MARK, TYPE B	5,800.00	EA	$3.73	$21,634.00
	Signing Component Total				$290,589.06

Sequence 2 Total $530,274.76

Sequence: 3 MIS - Miscellaneous Construction

Net Length: 3.726 MI
19,673 LF

Description: Keyholes

ROADWAY COMPONENT

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.63	AC	$58,867.50	$37,086.52
120-1	REGULAR EXCAVATION	3,903.67	CY	$26.06	$101,729.64
160-4	TYPE B STABILIZATION	8,179.11	SY	$19.71	$161,210.26
285-706	OPTIONAL BASE,BASE GROUP 06	2,602.44	SY	$65.28	$169,887.28
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	214.80	TN	$168.59	$36,213.13
	Roadway Component Total				$506,126.84

DRAINAGE COMPONENT

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-351	INLETS, CURB, TYPE P-5, <10'	3.00	EA	$6,261.33	$18,783.99
425-1-521	INLETS, DT BOT, TYPE C, <10'	5.00	EA	$4,459.83	$22,299.15
430-174-118	PIPE CULV, OPT MATL, ROUND,18"SD	800.00	LF	$151.98	$121,584.00
430-175-118	PIPE CULV, OPT MATL, ROUND, 18"S/CD	64.00	LF	$242.38	$15,512.32
430-984-125	MITERED END SECT, OPTIONAL RD, 18" SD	2.00	EA	$2,363.79	$4,727.58
570-1-2	PERFORMANCE TURF, SOD	45.00	SY	$4.62	$207.90
	Drainage Component Total				$183,114.94

Sequence 3 Total $689,241.78

Sequence: 5 MIS - Miscellaneous Construction

Net Length: 3.726 MI
19,673 LF

Description: Signals (College, Hal McRea, Morril)

SIGNING COMPONENT

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-3-201	SIGN PANEL, F&I OM, UP TO 12 SF	12.00	EA	$705.73	$8,468.76
700-5-22	INTERNAL ILLUM SIGN, F&I OM, 12-18 SF	12.00	EA	$5,429.64	$65,155.68
	Signing Component Total				$73,624.44

SIGNALIZATIONS COMPONENT

Signalization 1

Description	Value
Type	Miscellaneous
Multiplier	1
Description	SR 25 (US 98 / US 27) at W. College Dr.

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
611-1-1	ITSFM SUBSURFACE DOCUMENTATION- PROJ LEN	3.73	MI	$1,012.71	$3,777.41
611-2-1	ITSFM LOCATION DOCUMENTATION- INTERS	1.00	EA	$1,497.15	$1,497.15
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,110.00	LF	$13.29	$14,751.90
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	430.00	LF	$29.14	$12,530.20
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	$9,881.61	$9,881.61
632-7-6	SIGNAL CABLE, REMOVE-INTERSECTION	1.00	PI	$1,498.74	$1,498.74
634-4-153	SPAN WIRE ASSEM, F&I, TWO PT, BOX/DROP B	1.00	PI	$8,410.29	$8,410.29
634-5-1	FIBERGLASS INSULATOR, FURNISH & INSTALL	24.00	LF	$54.63	$1,311.12
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00	AS	$3,851.66	$3,851.66
639-1-610	ELECTRICAL POWER SRV,REM OHD	1.00	AS	$500.54	$500.54
639-2-1	ELECTRICAL SERVICE WIRE, F&I	100.00	LF	$7.12	$712.00
641-2-12	PREST CNC POLE,F&I,TYP P-II SRV POLE	1.00	EA	$1,248.22	$1,248.22
641-2-18	PREST CNC POLE,F&I,TYP P-VIII	4.00	EA	$17,425.36	$69,701.44
641-2-80	PREST CNC POLE, REMOVE COMPLETE	2.00	EA	$5,632.10	$11,264.20
646-1-11	ALUMINUM SIGNALS POLE, PEDESTAL	2.00	EA	$1,962.12	$3,924.24
646-1-60	ALUMINUM SIGNALS POLE, REMOVE	2.00	EA	$487.46	$974.92
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	12.00	AS	$1,282.00	$15,384.00
650-1-16	VEH TRAF SIGNAL,F&I ALUMINUM, 4 S 1 W	2.00	AS	$1,484.79	$2,969.58
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	2.00	AS	$750.59	$1,501.18

660-1-109	LOOP DETECTOR INDUCTIVE, F&I, TYPE 9	11.00	EA	$216.50	$2,381.50
660-1-110	LOOP DETECTOR INDUCTIVE, F&I, TYPE 10	1.00	EA	$408.34	$408.34
660-2-102	LOOP ASSEMBLY, F&I, TYPE B	18.00	AS	$1,000.59	$18,010.62
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	6.00	AS	$1,347.40	$8,084.40
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	2.00	EA	$188.22	$376.44
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00	AS	$37,808.73	$37,808.73
670-5-600	TRAF CNTL ASSEM, REMOVE	1.00	AS	$825.44	$825.44
685-1-13	UPS, F&I, LINE INTERACTIVE W CAB	1.00	EA	$8,449.41	$8,449.41

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
684-6-40	WIRELESS COMMUNICATION DEVICE, RELOCATE	1.00	EA	$1.00	$1.00

Signalization 2

Description	Value
Type	Miscellaneous
Multiplier	1
Description	SR 25 (US 98 / US 27) at Hal McRea St.

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
611-2-1	ITSFM LOCATION DOCUMENTATION- INTERS	1.00	EA	$1,497.15	$1,497.15
630-2-11	CONDUIT, F& I, OPEN TRENCH	850.00	LF	$13.29	$11,296.50
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	300.00	LF	$29.14	$8,742.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	$9,881.61	$9,881.61
632-7-6	SIGNAL CABLE, REMOVE-INTERSECTION	1.00	PI	$1,498.74	$1,498.74
634-4-153	SPAN WIRE ASSEM, F&I, TWO PT, BOX/DROP B	1.00	PI	$8,410.29	$8,410.29
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	24.00	EA	$849.85	$20,396.40
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00	AS	$3,851.66	$3,851.66
639-1-610	ELECTRICAL POWER SRV,REM OHD	1.00	AS	$500.54	$500.54
639-2-1	ELECTRICAL SERVICE WIRE, F&I	50.00	LF	$7.12	$356.00
641-2-12	PREST CNC POLE,F&I,TYP P-II SRV POLE	1.00	EA	$1,248.22	$1,248.22
641-2-18	PREST CNC POLE,F&I,TYP P-VIII	4.00	EA	$17,425.36	$69,701.44
641-2-80	PREST CNC POLE, REMOVE COMPLETE	2.00	EA	$5,632.10	$11,264.20
646-1-11	ALUMINUM SIGNALS POLE, PEDESTAL	8.00	EA	$1,962.12	$15,696.96
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	12.00	AS	$1,282.00	$15,384.00
650-1-16	VEH TRAF SIGNAL,F&I ALUMINUM, 4 S 1 W	2.00	AS	$1,484.79	$2,969.58
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00	AS	$750.59	$6,004.72

660-1-109	LOOP DETECTOR INDUCTIVE, F&I, TYPE 9	11.00	EA	$216.50	$2,381.50
660-1-110	LOOP DETECTOR INDUCTIVE, F&I, TYPE 10	1.00	EA	$408.34	$408.34
660-2-102	LOOP ASSEMBLY, F&I, TYPE B	18.00	AS	$1,000.59	$18,010.62
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	6.00	AS	$1,347.40	$8,084.40
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00	EA	$188.22	$1,505.76
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00	AS	$37,808.73	$37,808.73
670-5-600	TRAF CNTL ASSEM, REMOVE	1.00	AS	$825.44	$825.44
685-1-13	UPS, F&I, LINE INTERACTIVE W CAB	1.00	EA	$8,449.41	$8,449.41

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
684-6-40	WIRELESS COMMUNICATION DEVICE, RELOCATE	1.00	EA	$1.00	$1.00

Signalization 3

Description	Value
Type	Miscellaneous
Multiplier	1
Description	SR 25 (US 98 / US 27) at W. Morrill St.

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
611-2-1	ITSFM LOCATION DOCUMENTATION- INTERS	1.00	EA	$1,497.15	$1,497.15
630-2-11	CONDUIT, F& I, OPEN TRENCH	850.00	LF	$13.29	$11,296.50
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	300.00	LF	$29.14	$8,742.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	$9,881.61	$9,881.61
632-7-6	SIGNAL CABLE, REMOVE-INTERSECTION	1.00	PI	$1,498.74	$1,498.74
634-4-153	SPAN WIRE ASSEM, F&I, TWO PT, BOX/DROP B	1.00	PI	$8,410.29	$8,410.29
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	24.00	EA	$849.85	$20,396.40
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00	AS	$3,851.66	$3,851.66
639-1-610	ELECTRICAL POWER SRV,REM OHD	1.00	AS	$500.54	$500.54
639-2-1	ELECTRICAL SERVICE WIRE, F&I	50.00	LF	$7.12	$356.00
641-2-12	PREST CNC POLE,F&I,TYP P-II SRV POLE	1.00	EA	$1,248.22	$1,248.22
641-2-18	PREST CNC POLE,F&I,TYP P-VIII	4.00	EA	$17,425.36	$69,701.44
641-2-80	PREST CNC POLE, REMOVE COMPLETE	2.00	EA	$5,632.10	$11,264.20
646-1-11	ALUMINUM SIGNALS POLE, PEDESTAL	8.00	EA	$1,962.12	$15,696.96
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	12.00	AS	$1,282.00	$15,384.00
650-1-16	VEH TRAF SIGNAL,F&I ALUMINUM, 4 S 1 W	1.00	AS	$1,484.79	$1,484.79
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00	AS	$750.59	$6,004.72

660-1-109	LOOP DETECTOR INDUCTIVE, F&I, TYPE 9	11.00	EA	$216.50	$2,381.50
660-1-110	LOOP DETECTOR INDUCTIVE, F&I, TYPE 10	1.00	EA	$408.34	$408.34
660-2-102	LOOP ASSEMBLY, F&I, TYPE B	18.00	AS	$1,000.59	$18,010.62
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	5.00	AS	$1,347.40	$6,737.00
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00	EA	$188.22	$1,505.76
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00	AS	$37,808.73	$37,808.73
670-5-600	TRAF CNTL ASSEM, REMOVE	1.00	AS	$825.44	$825.44
685-1-13	UPS, F&I, LINE INTERACTIVE W CAB	1.00	EA	$8,449.41	$8,449.41

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
684-6-40	WIRELESS COMMUNICATION DEVICE, RELOCATE	1.00	EA	$1.00	$1.00

Signalizations Component Total $771,554.51

Sequence 5 Total $845,178.95

Sequence: 6 MIS - Miscellaneous Construction **Net Length:** 3.726 MI 19,673 LF

Description: Lighting (College, Hal McRea, Morril, Isis, Corridor)

LIGHTING COMPONENT

Conventional Lighting Subcomponent

Description	Value
Spacing	MAX

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	720.00	LF	$13.29	$9,568.80
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	710.00	LF	$29.14	$20,689.40
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	40.00	EA	$849.85	$33,994.00
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	2.00	AS	$3,851.66	$7,703.32
639-2-1	ELECTRICAL SERVICE WIRE, F&I	200.00	LF	$7.12	$1,424.00
715-1-12	LIGHTING CONDUCTORS, F&I, INSUL,NO.8-6	6,330.00	LF	$2.04	$12,913.20
715-7-11	LOAD CENTER, F&I, SECONDARY VOLTAGE	2.00	EA	$14,886.89	$29,773.78
715-11-211	LUMINAIRE ,F&I-REP EXIST, RDWY, COBRA H	49.00	EA	$1,656.29	$81,158.21
	Comment: corridor (47)				
715-61-442	LIGHT POLE CMPLT,STD,F&I, 45'MH,12'ARM L	26.00	EA	$10,602.44	$275,663.44
715-68-000	LIGHT POLE COMPLETE, RELOCATE	1.00	EA	$4,000.00	$4,000.00
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	26.00	EA	$675.05	$17,551.30
	Lighting Component Total				$494,439.45

Sequence 6 Total $494,439.45

Sequence: 7 MIS - Miscellaneous Construction **Net Length:** 3.726 MI 19,673 LF

Description: TSM&O requests

SIGNALIZATIONS COMPONENT

Signalization 6

Description	Value
Type	Miscellaneous
Multiplier	1
Description	TSM&O and lighting

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	50.00	LF	$13.29	$664.50
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	5.00	EA	$849.85	$4,249.25
671-2-11	TRAFFIC CONTROLLER, F&I, NEMA	1.00	EA	$8,670.51	$8,670.51
671-2-60	TRAFFIC CONTROLLER, REMOVE	1.00	EA	$224.84	$224.84
682-1-133	ITS CCTV CAMERA, F&I, DOME ENCL-NP.	1.00	EA	$9,134.93	$9,134.93
684-6-12	WIRELESS COMMUNICATION DEVICE, F&I, ETHE	1.00	EA	$4,589.98	$4,589.98

EX-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
920-681-100	CONNECTED VEHICLE ROAD SIDE UNIT	5.00	EA	$25,000.00	$125,000.00

Signalizations Component Total $152,534.01

Sequence 7 Total $152,534.01

Date: 11/13/2023 10:32:56 AM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 451270-1-52-01 **Letting Date:** 07/2026

Description: SR 25 (US 27) FROM N OF PONCE DE LEON BLVD TO N OF LAKE ISIS AVE

District: 01 **County:** 09 HIGHLANDS **Market Area:** 09 **Units:** English

Contract Class: 1 **Lump Sum Project:** N **Design/Build:** N **Project Length:** 3.726 MI

Project Manager: NEM-

Version 10-P Project Grand Total **$10,385,283.54**

Description: Copy V9 - Correction from QC 10/11/23

Resurfacing Lane Mile Cost			**$0.00**
Project Sequences Subtotal			**$8,882,374.65**
102-1	Maintenance of Traffic	5.00 %	$444,118.73
101-1	Mobilization	5.00 %	$466,324.67
Project Sequences Total			**$9,792,818.05**
Project Unknowns		5.00 %	$489,640.90
Design/Build		0.00 %	$0.00

Non-Bid Components:

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
999-25	INITIAL CONTINGENCY AMOUNT (DO NOT BID)		LS	$102,824.59	$102,824.59
Project Non-Bid Subtotal					**$102,824.59**
Version 10-P Project Grand Total					**$10,385,283.54**