

December 2025



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 456240-1-52-01

SR 78 From E of Del Prado Blvd to E of New Post Rd

Lee County, Florida



Candidate Project RRR Scope

December 31, 2025

To: Lavenia Toole, PE
 From: Felicia Pannell, PE

RE: SR 78 From E of Del Prado Blvd to E of New Post Rd TECHNICAL SCOPE

State Road Number: SR 78
 Section Number: 12060000
 County: Lee County
 Project Limits: SR 78 From E of Del Prado Blvd to E of New Post Rd
 Begin MP/End MP: 12.107 to 17.023
 Section Equation: N/A
 Project Length: 4.916 miles
 FPID No.: 456240-1
 Work Mix: 0012 (Resurfacing)
 Criteria: Current Manuals and Design Standards for 25/26

1. Existing R/W Map Project Numbers:	12060-2519(1990), 1206-1123 V(1933), 12060-2507(1969), 12580-2606(1972), 1258-150(250)(1955), 1201-NRS124(1933), 12010-2121(1959),12060-2530(1993), 12060-2521(1982), 1252-251(1957), 12001-2501(2001),
2. Old Construction Project Numbers:	425230-1 (2012) RRR MP 12.107-14.736 431317-1 (2016) RRR MP 14.775-17.023
3. Adjacent Projects:	450723-1 (2026) RRR MP 9.618-12.107 450722-1 (2028) POP MP 17.023-18.361
4. Proposed projects within the same limits (such as safety, sidewalk or drainage projects):	452680-1-22-01 PD&E on SR 78 from US 41 to Veteran’s Parkway (MP 5.460-14.566 12060000)
5. Additional R/W Required?	No
6. Level of Community Awareness Plan:	Level 1
7. Are there any bridges within the limits?	Yes; BR 120171, BR 120161, BR 120163
8. Are there any RR Crossings within the project limits or in the vicinity?	No
9. Are there any Airports within 5-miles?	No, Page Field Airport within 10 miles
10. Storm Water Management Jurisdiction:	South Florida WMD
11. AADT (ESAL Data):	33,400 AADT (2025); Truck % = 9.9
12. Are there any old houses or buildings adjacent to the project?	No
13. Number of Existing Utilities:	9 Utilities: Centurylink – Fiber, Telephone; City of Cape Coral – Reuse Lines, Sewer, Water; Comcast – CATV, Crown Castle – Fiber; FL Utility – Reclaimed Water, Wastewater; Hotwire – CATV< Fiber, Telephone; Lee County – Fiber, Electric, Street Lights, Comm Lines, Reclaimed

	Water, Wastewater, Water, Irrigation; Summit 0 Fiber, Telephone; TECO – Gas; FDOT ITS
14. Posted/Design/Target Speed Limits	Posted/Target Speed 50 MPH (MP 12.107 to MP 14.554) 40 MPH (MP 14.554 to MP 16.164) 50 MPH (MP 16.164 to MP 17.023) Design Speed 55 MPH (MP 12.107 to MP 14.736) 45 MPH (MP 14.736 to MP 15.840) 55 MPH (MP 15.840 to MP 17.023)
15. SIS Facility? / Context Classification:	No/C3C MP 12.107 to MP 17.023
16. Access Classification:	5
17. Resilient Modulus:	30,000 psi (MP 12.107-14.819) <u>25,000 psi (MP 14.819-17.023)</u>
18. Smoothness Class (To be included on Typical Section Sheets in Design Plans):	Not available currently.
19. List Non-ADA Compliant Curb Ramps Identified by Safety: (All ADA items should be evaluated during design when the field review is conducted).	No RSA and no documented issues at this time.
20. Safety Top 20:	Not TOP 20 but high in County ranking #4 in County for segment #5 in County for Bike/Ped
21. State Materials Review for Pav't Design	Yes (Concurred with both FC-5 and FC-12.5 designs 7/30/25)

The purpose of candidate project scope is to support the development of a long-range estimate (LRE) within the 5-year work program. There are 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.

Project Location Map:



Project limits:

The proposed limits of the project begin on SR 78 from east of Del Prado Blvd. at MP 12.107 and proceed east to east of New Post Rd. at MP 17.023 for a total of 4.916 miles.

Project Description:

- This is a RRR project with milling and resurfacing of the existing roadway mainline and any side street connections. Other improvements include
 - Reconstructing curb ramps that are not ADA compliant
 - Updating the bus stop locations with boarding and alignment pads if needed
 - Adding crosswalks at the approaches of the signalized intersections where crosswalk do not exists
 - Reconstructing ramps that are not ADA compliant, and separate curb ramps/crosswalks where viable
 - Adding hardened centerlines at the signalized intersections where viable
 - Adding where missing and separation of pedestrian buttons on all corners of the signalized intersections
 - Adding left turn phasing/split phasing and lead pedestrian interval at the signalized intersections
 - Update 9 signals for FDM requirements

- Improving the lighting for FDM requirements and at all the signalized intersections
- Lengthening EB and WB left turn lanes at SR 78 and US 41 (Traffic request)
- Typical 1 (MP 12.107 to MP 14.741) – add curb to the median.
- Please reference Approved Typical Section Package (TSP) for lane configurations.
- The speed meeting was held 3/26/25. The project target speed was set to match the posted speed. The long range planning target is 40 mph but is not implemented in this project.
 - Typical 1 - (MP 12.107 to MP 14.741) The 55 mph posted speed was reduced to 50 mph.
- The context meeting was held 4/25/25 and again on 12/12/25. The earlier meeting asked for inside shoulder to be compared to adding curb at the median for typical 1. The 12/12/25 context meeting confirmed adding median curb to typical one (instead of inside shoulders). (MP 12.107 to MP 14.741).
- Planning Studios is currently preparing a shared use path study that includes these project limits. The study will be finished in 2026. Design may need to coordinate with Planning for the outcome of this study.
- During the context meeting on 4/25/25, it was determined that the sidewalk requested for typical 1 (MP 12.107 to MP 14.741) will be evaluated as a separate sidewalk project.

Roadway Scope Items:

- This proposed SR 78 RRR project segment was milled and resurfaced in 2012 from MP 12.107 to MP 14.736 under FPID 425230-1-52-01 and in 2016 from MP 14.775 to MP 17.023 under FPID 431317-1-52-01. The typical section in the as-built plans show (6) six horizontal curves. The typical section in the as-built plans also calls for the cross slope to match existing. Design should re-evaluate cross slopes and superelevation during the plans preparation period to determine if corrections will be required.
- There will not be any contingency in the LRE budget for any of the concrete items (curb and gutter, sidewalk, separators, etc.). Design will need to evaluate those items (for any repairs or not being ADA compliant) and present the list of items to Kevin Ingle for approval. Once approved, then design will look for funding.
- The context meeting on 12/12/25 confirmed adding curb to the inside median for typical one (MP 12.107 to MP 14.741).

Pavement Description:

Mainline and shoulder Milling and Resurfacing:

- For budget purposes, the LRE assumes mainline through lanes, crossovers, and turn lanes throughout the project limits be milled
 - Rural typical:
 - 2 ¾" and resurfaced with 2" SP 12.5 (Traffic C, PG 76-22) and ¾" FC-5 (PG 76-22).
 - Outside shoulder recommended to be milled 2 ¼" with 1 ½" SP 12.5 (Traffic C, PG 76-22) and ¾" FC-5 (PG 76-22).
 - New inside shoulder pavement for budget purposes was Type B Stabilization, Optional Base Group 2, 2" SP 12.5 (Traffic C, PG 76-22) and ¾" FC-5 (PG 76-22).
 - Urban typical: 3½" and resurfaced with 2" SP 12.5 (Traffic C, PG 76-22) and 1 ½" FC-12.5 (Traffic C, PG 76-22).
 - Design will need to coordinate with the Material Office to see if this roadway qualifies for FC-5 or FC-7 for the rural typical area.

Side Street Milling and Resurfacing:

- There are 68 existing asphalt side streets shown on the Straight-Line Diagram.
- For budget purposes, the side streets are recommended to be milled 1½" and resurfaced with 1½" SP-12.5 (Traffic C, PG 76-22). In accordance with the FDM Chapter 214 and the Standard Plans Index 330-001, it is recommended that all side streets be resurfaced to the back of the furthest return, right of way, or existing pavement joint, whichever is greater.

Turn Lane Lengthening

- The EB and WB left turn lanes at the intersection of SR 78 and US 41 will be lengthened. For budget purposes, the LRE assumes the EB turn lane will be lengthened from approximately 415' to 475' and the WB left turn lane will be lengthened from approximately 500' to 600'.

Median Upgrade for Temporary Directional Median Opening:

- There are tubular markers to create a bidirectional median at Hibiscus Rd, Safety will have a separate project to replace delineators with a concrete traffic separator.

Keyhole Widening:

Location	Existing keyhole? (Yes or No)	Recommend adding keyhole? (Yes or No)
WB right turn lane at Del Prado Blvd	Yes	N/A
WB right turn lane at Lowes Entrance	Yes	N/A
EB right turn lane at Pondella Rd	Yes	N/A
WB right turn lane at Publix	Yes	N/A
WB right turn lane at NE 17 th Pl	Yes	N/A
EB right turn lane at Target	Yes	N/A
WB right turn lane at Northpoint Shopping Center	Yes	N/A
EB right turn lane at Coral Walk	Yes	N/A
EB right turn lane at Del Pine Dr	Yes	N/A
EB right turn lane at Hibiscus Dr	Yes	N/A
WB right turn lane at Hibiscus Dr	Yes	N/A
EB right turn lane at Walmart	Yes	N/A
WB right turn lane at NE 24 th Ave	Yes	N/A
EB right turn lane at Hancock Creek S	Yes	N/A
WB right turn lane at Uptown Cpe Dr	Yes	N/A
WB right turn lane at Commerce Creek Blvd	Yes	N/A
WB right turn lane at Corbett Rd	Yes	N/A
EB right turn lane at Barrett Rd	Yes	N/A
WB right turn lane at DOT Ops Cntr	Yes	N/A
WB right turn lane at Merchants Crossing	Yes	N/A
EB right turn lane at Judd Creek Blvd	Yes	N/A
EB right turn lane at Cleveland Ave	Yes	N/A
EB right turn lane at Walmart	Yes	N/A
EB right turn lane at N Tamiami Trl	Yes	N/A
WB right turn lane at N Tamiami Trl	Yes	N/A
EB right turn lane at Daniels Dr	Yes	N/A
EB right turn lane at Old Bridge Rd	Yes	N/A
EB right turn lane at New Post Rd	Yes	N/A

Curb Ramp Updated for Pedestrian Upgrades:

- There are shared curb ramps and pedestrian buttons at the intersections of US 41/N Cleveland Ave, Piney Rd, and US Business 41/Bayshore Rd/Pine Island road. Safety has requested these curb ramps be separated.

Horizontal Curves/Superelevation:

- At the Target Speed Meeting, the design speed for this project was set to 55 mph from MP 12.107 to MP 14.736 and from MP 15.840 to MP 17.023, and 45 mph from MP 14.736 to MP 15.840. The existing design curve data below indicates that the curves are not within the acceptable e-factor and a correction or design variation will be required. It is recommended that the design engineer analyze curve data superelevation rates based on the actual field survey to verify minimum criteria is met.

Curve No.	DS	SLD PC MP	SLD PT MP	Degree of Curvature/ Deflection Angle	As-built Radius (ft)	As-built SE (e)	FDM SE (e)
1	55 mph	N/A	N/A	00°29'38" △30°54"	11,600.00	NC	NC
2	55 mph	N/A	N/A	00°29'38" △17°51"	11,600.00	NC	NC
3	55 mph	N/A	N/A	00°29'38" △17°51"	11,600.00	NC	NC
4	55 mph	N/A	N/A	2°53'25" △8°02'22"	1,982.27	0.047	0.065
5	55 mph	N/A	N/A	00°45'00" △2°28'29"	1,663.30	NC	0.074
6	55 mph	16.391	16.424	1°00'00" △1°55'53"	5,729.58	NC	0.025

Roadway Guardrail:

- There is existing guardrail within the project limits that should be evaluated during the design phase for replacement. Installation of new thrie-beam and W-beam guardrail, end anchorage assemblies, and bridge anchorage assemblies should comply with the current Standard Plans, Index(s) 536-001 and 536-002. For budget purposes, the LRE assumes all guardrail will be replaced. Listed below are the locations and approximate lengths of guardrail with applicable anchorages:
 - EB and WB lanes of SR 78, east of Commerce Creek Blvd. The approximate length is 290-feet in the EB direction and 310-feet in the WB direction.
 - Approximately 500-feet east of Barrett Rd, over Yellow Fever Creek. The approximate length is 980-feet in the EB direction and 550-feet in the WB direction.
 - Approximately 200-feet east of Judd Creek Blvd in the EB direction. The approximate length is 130-feet and appears to be shielding a drop-off hazard.
 - NW quadrant of the N Cleveland Ave intersection. The guardrail is located along the SB lanes of N Cleveland Ave and continues around the return. There is approximately 660-

feet of guardrail in which 580-feet extend beyond the project limits. The entire run of guardrail should be evaluated for replacement and noted that this work will be outside of the project limits of this RRR project.

- EB and WB lanes of SR 78, west of Daniels Dr over Powell Creek. The approximate length is 180-feet in the EB direction and 250-feet in the WB direction.
- EB and WB lanes of SR 78, east of Old Bridge Rd/N Evalena Ln over Martin Canal. The approximate length is 180-feet in the EB direction and 180-feet in the WB direction.

Access Management Scope Items:

- The existing median opening at Hibiscus has been directionalized with temporary delineators. The directional median opening will be updated with a separate project.
- There have been no additional requests for median opening changes.

Multi-Modal transportation Scope Items:

- There are existing intermittent 6 to 8-foot sidewalks throughout the project limits. For budget purposes, the LRE does not assume any sidewalk replacement, or filling sidewalk gaps along the corridor.
- For budget purposes, the LRE does not assume any curb ramp replacement.
- There are fourteen transit stops within the project limits.
 - Transit has requested to provide boarding and alighting pads at:
 - WB SR 78, west of Hibiscus Dr.
 - WB SR 78, west of NE 23rd Ave.
 - WB SR 78, west Commerce Creek Blvd.
 - WB SR 78 at Corbett Rd.
 - WB SR 78, west of Judd Creek Blvd.
 - WB SR 78 at Woodward Ave.
 - WB SR 78 at Pacific Ave.
 - WB SR 78 at Piney Rd.
 - WB SR 78, west of BUS 41.
 - Transit has requested to provide bench pads at:
 - WB SR 78, east of BUS 41
 - WB SR 78 at Ixora Dr.
 - WB SR 78 at Evalena Ln.
 - WB SR 78, east of Shirley Dr.
 - WB SR 78 at Village Ln.
- For budget purposes, the LRE includes the boarding and alighting pads and bench pads requested above.

Design Variation/Exception:

- A design variation will be required for:
 - No pedestrian facilities per Section 222 of the FDM.
- Possible design variations may be needed for cross slope correction and superelevation if the survey determines that the criteria is not met.

Drainage Scope Items:

- There are no apparent drainage issues; however, include a rainy-day visit to determine whether drainage facilities are functioning correctly and provide positive drainage.

Permitting:

- 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.

SUE Items: N/A

Signing Scope Items:

- Nine existing two-post signs were noted in Google through this project. All should be evaluated for replacement. *NOTE: Dates of Google street views were in 2022 and 2023. Some of these signs may have been impacted by hurricanes in 2022, 2023, and 2024, and may be slated for replacement with FEMA funds. Contact local Operation Center for information regarding pending replacement.*
- There are nine traffic signals fully within the project limits. Most do not have advance street name signs on the approaches. Consider adding these on all approaches where possible. Because some of the signals are close together, this may require combining two locations on one advance sign (NEXT SIGNAL/SECOND SIGNAL).

Pavement Marking Scope Items: N/A

Object Marker and Delineator Scope Items: N/A

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.
- Recommended replacement of 4-bolt existing signal structures that will have additional load being added, shall be replaced with a 6-bolt signal structure.
- Existing support structures should be evaluated for load capacity and signs of distress and replaced if the existing signal structure is found to be deficient.
- Requests from District TSM&O for ITS related improvements or additions.

Existing traffic signal related features outside the project limits 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 78 (Pine Island Rd)
at Pondella Rd
MP: 12.361
Signal ID: 355

Signal Location 2:

SR 78 (Pine Island Rd)
at 24th Ave (Hancock CRK Blvd)
MP: 13.248
Signal ID: 1024

Signal Location 3:

SR 78 (Pine Island Rd)
at Merchants Crossing ENT (Judd Creek Blvd)
MP: 14.523
Signal ID: 356

Signal Location 4:

SR 78 (Pine Island Rd)
at SR 45 (US 41 / Cleveland)
MP: 14.741
Signal ID: 301

Signal Location 5:

SR 78 (Pine Island Rd)
at Walmart ENT (Woodward Ave)
MP: 14.997
Signal ID: 357

Signal Location 6:

SR 78 (Pine Island Rd)
at Piney Rd (School ENT)
MP: 15.504
Signal ID: 358

Signal Location 7:

SR 78 (Pine Island Rd)
at SR 739 (US BUS 41)
MP: 15.858
Signal ID: 223

Signal Location 8:

SR 78 (Pine Island Rd)
at N Evalena Ln (Old Bridge Rd)
MP: 16.380
Signal ID: 359

Signal Location 9:

SR 78 (Pine Island Rd)
at New Post Rd (Hart Rd)
MP: 17.015
Signal ID: 360

Maintaining Agency: Lee

Roadway safety audit impacts:

To be provided at a future date.

Signal Location 1:

SR 78 (Pine Island Rd)
at Pondella Rd

District Safety recommendations:

- Add Leading Pedestrian Interval (LPI) controls.

- Replace existing 5-Section Head with a 4-Section Head and 3-Section Head on E and S corner structures.
- Provide dilemma zone loops at all intersections for each SR 78 approach lane(s).

District TSM&O recommendations:

- Upgrade intersection to meet US 41 FRAME requirements.
 - Add fiber connectivity if not present.
 - Provide Connected Vehicle (CV) roadside unit (RSU).
 - Provide NEMA / ATC standard controller.
 - Upgrade existing ethernet switches.

Roadway Safety Audit (RSA) impacts:

- To be provided at a later date.

Additional scoping items and recommended design considerations:

Structural support:

- The existing mast arm support structure residing on the east corner was designed with four bolt connection methods. Historically, this bolt pattern or configuration has proved inadequate against current standards for wind loading. The four-bolt pattern is also indicative that the structure is of an older design and may be nearing the end of its design service life. This scope proposes to add load to the mast arms to reduce the amount of left turn crashes and to protect pedestrians. Follow condition evaluation and structural analysis guidance provided in FDM 261.8. Replacement shall be considered if the existing signal structures are found to be deficient. Coordinate painted mast arm policy with District TSM&O and with the maintaining agency.
- The existing support structures should be evaluated for load capacity and signs of distress. Evaluate existing mast arm structures in accordance with FDM 261.8. Replacement shall be considered if the existing signal structure is found to be deficient.

Controller and cabinet:

- District TSM&O is requesting that the controller be upgraded to a NEMA / ATC standard. Should the request be granted, 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. Provide UPS battery backup and coordinate UPS placement and mounting preferences with the maintaining agency.
- District TSM&O is requesting that the existing ethernet switch in the traffic signal cabinet be replaced. Confirm and coordinate equipment compatibility with the Maintaining Agency.

Signal heads:

- Review and coordinate the planned SOP with TSM&O and replace 5-section heads with 4-section heads where appropriate. Follow MUTCD guidance (section 4D.11) for the number of signal faces on an approach and add additional signal heads where necessary. Per FDM 232.1.5, provide backplates with retroreflective borders for all overhead signal heads.
- Recommend replacing or adding backplates on existing signal head assemblies that have missing, damaged or backplates without reflectorized borders. Per FDM 232.1.5, provide backplates with retroreflective borders for all overhead signal heads. Should the structure remain and the addition of backplates negatively affect structural load capacity, consideration should be given for the use of flexible backplates (TEM section 3.9).
- With the recommendation for new structures, replacement of the existing signal head assemblies is also recommended. 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 an existing the 4-bolt mast arm be replaced, replacement of the existing overhead signage is recommended.
- Consideration should be given to placing FTP-85-13 signs adjacent to any proposed 4-section heads.
- For enhanced pedestrian safety, consider adding overhead mounted R10-15a signs (per TEM 2.44.3) for all approaches.

Internally illuminated street name signs:

- To facilitate all named roadways, recommend adding internally illuminated signs where appropriate or where they are missing or damaged. Follow TEM and FDM guidelines to ensure appropriate letter and sign sizing. Coordinate sign and mounting preferences with the maintaining agency.
- Should the signal support structures be replaced, provide internally illuminated signs. Follow TEM and FDM guidelines to ensure appropriate letter and sign sizing. Coordinate sign and mounting preferences with the maintaining agency.

Vehicle detection:

- Maintain existing video detection equipment.
- Should the signal support structures be replaced, replacement of the existing video detection equipment is recommended. Coordinate preferences and any sole sourced or proprietary equipment requirements with the maintaining agency.
- Provide dilemma zone loops in advance of the intersection for SR 78 eastbound and westbound.

Traffic monitoring and associated technologies:

- District TSM&O is requesting a connected vehicle RSU at this location. Should this system be implemented, it is recommended to coordinate this effort with the maintaining agency to determine specifications for any sole sourced or proprietary controller and cabinet related equipment.

Pedestrian assemblies and detection:

- Timing modifications have been recommended for this intersection for providing leading pedestrian intervals (LPI). Per MUTCD 4E.06, para. 20, consideration should be given to utilizing accessible pedestrian signal detectors (APS).

Emergency preemption:

- No recommendations provided.

Power source and service type:

- No recommendations provided.

Fiber interconnect: ATMS / TMC communications:

- District TSM&O is requesting replacement of the controller and cabinet, it will be necessary to upgrade, replace or relocate ITS items. Confirm and coordinate equipment compatibility and reconnection methods with the maintaining agency.
- District TSM&O is requesting fiber connectivity at the cabinet as part of US 41 FRAME requirements. Include ethernet switch, patch panel and related connection hardware at the controller. Confirm and coordinate equipment compatibility with the Maintaining Agency. Should an existing splice vault be further away than an existing fiber pull box, consider utilizing the fiber pull location as a splice point. Remove existing fiber pull box and replace with fiber splice vault. Provide splice tray and conduct splicing operations.

Signal Location 2:

SR 78 (Pine Island Rd)

at 24th Ave (Hancock CRK Blvd)

District Safety recommendations:

- Add Leading Pedestrian Interval (LPI) controls.
- Provide dilemma zone loops at all intersections for each SR 78 approach lane(s).

District TSM&O recommendations:

- Upgrade intersection to meet US 41 FRAME requirements.
 - Add fiber connectivity if not present.
 - Provide Connected Vehicle (CV) roadside unit (RSU).
 - Provide NEMA / ATC standard controller.
 - Upgrade existing ethernet switches.

Roadway Safety Audit (RSA) impacts:

- To be provided at a later date.

Additional scoping items and recommended design considerations:**Structural support:**

- The existing support structures should be evaluated for load capacity and signs of distress. Evaluate existing mast arm structures in accordance with FDM 261.8. Replacement shall be considered if the existing signal structure is found to be deficient.

Controller and cabinet:

- District TSM&O is requesting that the controller be upgraded to a NEMA / ATC standard. Should the request be granted, 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. Provide UPS battery backup and coordinate UPS placement and mounting preferences with the maintaining agency.
- District TSM&O is requesting that the existing ethernet switch in the traffic signal cabinet be replaced. Confirm and coordinate equipment compatibility with the Maintaining Agency.

Signal heads:

- Recommend replacing or adding backplates on existing signal head assemblies that have missing, damaged or backplates without reflectorized borders. Per FDM 232.1.5, provide backplates with retroreflective borders for all overhead signal heads. Should the structure remain and the addition of backplates negatively affect structural load capacity, consideration should be given for the use of flexible backplates (TEM section 3.9).

Overhead signs:

- For enhanced pedestrian safety, consider adding overhead mounted R10-15a signs (per TEM 2.44.3) for all approaches.

Internally illuminated street name signs:

- To facilitate all named roadways, recommend adding internally illuminated signs where appropriate or where they are missing or damaged. Follow TEM and FDM guidelines to ensure appropriate letter and sign sizing. Coordinate sign and mounting preferences with the maintaining agency.

- Should the signal support structures be replaced, provide internally illuminated signs. 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, based on the maintaining agency's preferences, it is recommended to continue using inductive loop detection. Add multiple point detection zone loops or replace as necessary.
- Provide dilemma zone loops in advance of the intersection for SR 78 eastbound and westbound.

Traffic monitoring and associated technologies:

- District TSM&O is requesting a connected vehicle RSU at this location. Should this system be implemented, it is recommended to coordinate this effort with the maintaining agency to determine specifications for any sole sourced or proprietary controller and cabinet related equipment.

Pedestrian assemblies and detection:

- Timing modifications have been recommended for this intersection for providing leading pedestrian intervals (LPI). Per MUTCD 4E.06, para. 20, consideration should be given to utilizing accessible pedestrian signal detectors (APS).

Emergency preemption:

- No recommendations provided.

Power source and service type:

- No recommendations provided.

Fiber interconnect: ATMS / TMC communications:

- District TSM&O is requesting replacement of the controller and cabinet, it will be necessary to upgrade, replace or relocate ITS items. Confirm and coordinate equipment compatibility and reconnection methods with the maintaining agency.
- District TSM&O is requesting fiber connectivity at the cabinet as part of US 41 FRAME requirements. Include ethernet switch, patch panel and related connection hardware at the controller. Confirm and coordinate equipment compatibility with the Maintaining Agency. Should an existing splice vault be further away than an existing fiber pull box, consider utilizing the fiber pull location as a splice point. Remove existing fiber pull box and replace with fiber splice vault. Provide splice tray and conduct splicing operations.

Signal Location 3:

SR 78 (Pine Island Rd)

at Merchants Crossing (Judd Creek Blvd)

District Safety recommendations:

- Add Leading Pedestrian Interval (LPI) controls.
- Provide dilemma zone loops at all intersections for each SR 78 approach lane(s).

District TSM&O recommendations:

- Upgrade intersection to meet US 41 FRAME requirements.
 - Add fiber connectivity if not present.
 - Provide Connected Vehicle (CV) roadside unit (RSU).
 - Provide NEMA / ATC standard controller.
 - Upgrade existing ethernet switches.

Roadway Safety Audit (RSA) impacts:

- To be provided at a later date.

Additional scoping items and recommended design considerations:

Structural support:

- The existing support structures should be evaluated for load capacity and signs of distress. Evaluate existing span wire structures in accordance with FDM 261.8. Replacement shall be considered if the existing signal structure is found to be deficient.

Controller and cabinet:

- District TSM&O is requesting that the controller be upgraded to a NEMA / ATC standard. Should the request be granted, 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. Provide UPS battery backup and coordinate UPS placement and mounting preferences with the maintaining agency.
- District TSM&O is requesting that the existing ethernet switch in the traffic signal cabinet be replaced. Confirm and coordinate equipment compatibility with the Maintaining Agency.

Signal heads:

- Review and coordinate the planned SOP with TSM&O and replace 5-section heads with 4-section heads where appropriate. Follow MUTCD guidance (section 4D.11) for the number of signal faces on an approach and add additional signal heads where necessary. Per FDM 232.1.5, provide backplates with retroreflective borders for all overhead signal heads.
- Recommend replacing or adding backplates on existing signal head assemblies that have missing, damaged or backplates without reflectorized borders. Per FDM 232.1.5, provide backplates with retroreflective borders for all overhead signal heads. Should the structure remain and the addition of backplates negatively affect structural load capacity, consideration should be given for the use of flexible backplates (TEM section 3.9).

Overhead signs:

- Provide static signage in accordance with MUTCD sections 2B and 4A.
- Consideration should be given to placing FTP-85-13 signs adjacent to any proposed 4-section heads.
- For enhanced pedestrian safety, consider adding overhead mounted R10-15a signs (per TEM 2.44.3) for all approaches.

Internally illuminated street name signs:

- Provide internally illuminated signs. 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, based on the maintaining agency's preferences, it is recommended to continue using inductive loop detection. Add multiple point detection zone loops or replace as necessary.
- Provide dilemma zone loops in advance of the intersection for SR 78 eastbound and westbound.

Traffic monitoring and associated technologies:

- District TSM&O is requesting a connected vehicle RSU at this location. Should this system be implemented, it is recommended to coordinate this effort with the maintaining agency to determine specifications for any sole sourced or proprietary controller and cabinet related equipment.

Pedestrian assemblies and detection:

- Timing modifications have been recommended for this intersection for providing leading pedestrian intervals (LPI). Per MUTCD 4E.06, para. 20, consideration should be given to utilizing accessible pedestrian signal detectors (APS).

Emergency preemption:

- No recommendations provided.

Power source and service type:

- No recommendations provided.

Fiber interconnect: ATMS / TMC communications:

- District TSM&O is requesting replacement of the controller and cabinet, it will be necessary to upgrade, replace or relocate ITS items. Confirm and coordinate equipment compatibility and reconnection methods with the maintaining agency.
- District TSM&O is requesting fiber connectivity at the cabinet as part of US 41 FRAME requirements. Include ethernet switch, patch panel and related connection hardware at the controller. Confirm and coordinate equipment compatibility with the Maintaining Agency. Should an existing splice vault be further away than an existing fiber pull box, consider utilizing the fiber pull location as a splice point. Remove existing fiber pull box and replace with fiber splice vault. Provide splice tray and conduct splicing operations.

Signal Location 4:

SR 78 (Pine Island Rd)

at SR 45 (US 41 / Cleveland)

District Safety recommendations:

- Separate pedestrian push-buttons on NW, SE, and SW corners.
- Add Leading Pedestrian Interval (LPI) controls.
- Provide dilemma zone loops at all intersections for each SR 78 approach lane(s).

District TSM&O recommendations:

- Upgrade intersection to meet US 41 FRAME requirements.
 - Add fiber connectivity if not present.
 - Provide Connected Vehicle (CV) roadside unit (RSU).
 - Provide NEMA / ATC standard controller.
 - Upgrade existing ethernet switches.

Roadway Safety Audit (RSA) impacts:

- To be provided at a later date.

Additional scoping items and recommended design considerations:

Structural support:

- The existing support structures should be evaluated for load capacity and signs of distress. Evaluate existing mast arm structures in accordance with FDM 261.8. Replacement shall be considered if the existing signal structure is found to be deficient.

Controller and cabinet:

- District TSM&O is requesting that the controller be upgraded to a NEMA / ATC standard. Should the request be granted, 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. Provide UPS battery backup and coordinate UPS placement and mounting preferences with the maintaining agency.

- District TSM&O is requesting that the existing ethernet switch in the traffic signal cabinet be replaced. Confirm and coordinate equipment compatibility with the Maintaining Agency.

Signal heads:

- Recommend replacing or adding backplates on existing signal head assemblies that have missing, damaged or backplates without reflectorized borders. Per FDM 232.1.5, provide backplates with retroreflective borders for all overhead signal heads. Should the structure remain and the addition of backplates negatively affect structural load capacity, consideration should be given for the use of flexible backplates (TEM section 3.9).

Overhead signs:

- For enhanced pedestrian safety, consider adding overhead mounted R10-15a signs (per TEM 2.44.3) for all approaches.

Internally illuminated street name signs:

- To facilitate all named roadways, recommend adding internally illuminated signs where appropriate or where they are missing or damaged. Follow TEM and FDM guidelines to ensure appropriate letter and sign sizing. Coordinate sign and mounting preferences with the maintaining agency.
- Should the signal support structures be replaced, provide internally illuminated signs. Follow TEM and FDM guidelines to ensure appropriate letter and sign sizing. Coordinate sign and mounting preferences with the maintaining agency.

Vehicle detection:

- Maintain existing video detection equipment.
- Should the signal support structures be replaced, replacement of the existing video detection equipment is recommended. Coordinate preferences and any sole sourced or proprietary equipment requirements with the maintaining agency.
- Provide dilemma zone loops in advance of the intersection for SR 78 eastbound and westbound. In addition, provide dilemma zone loops in advance of the intersection for SR 45 (US 41) northbound and southbound.

Traffic monitoring and associated technologies:

- District TSM&O is requesting a connected vehicle RSU at this location. Should this system be implemented, it is recommended to coordinate this effort with the maintaining agency to determine specifications for any sole sourced or proprietary controller and cabinet related equipment.

Pedestrian assemblies and detection:

- Recommend separating pedestrian detector push buttons from shared pedestrian signal detector posts and replacing or relocating 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. Coordinate with local jurisdiction and maintaining agency.
- Timing modifications have been recommended for this intersection for providing leading pedestrian intervals (LPI). Per MUTCD 4E.06, para. 20, consideration should be given to utilizing accessible pedestrian signal detectors (APS).

Emergency preemption:

- No recommendations provided.

Power source and service type:

- No recommendations provided.

Fiber interconnect: ATMS / TMC communications:

- District TSM&O is requesting replacement of the controller and cabinet, it will be necessary to upgrade, replace or relocate ITS items. Confirm and coordinate equipment compatibility and reconnection methods with the maintaining agency.
- District TSM&O is requesting fiber connectivity at the cabinet as part of US 41 FRAME requirements. Include ethernet switch, patch panel and related connection hardware at the controller. Confirm and coordinate equipment compatibility with the Maintaining Agency. Should an existing splice vault be further away than an existing fiber pull box, consider utilizing the fiber pull location as a splice point. Remove existing fiber pull box and replace with fiber splice vault. Provide splice tray and conduct splicing operations

Signal Location 5:

SR 78 (Pine Island Rd)

at Walmart ENT (Woodward Ave)

District Safety recommendations:

- Separate pedestrian push-buttons on SE and SW corners.
- Replace existing 5-Section Head with a 4-Section Head and 3-Section Head on SE corner structure.
- Add Leading Pedestrian Interval (LPI) controls.
- Provide dilemma zone loops at all intersections for each SR 78 approach lane(s).

District TSM&O recommendations:

- Upgrade intersection to meet US 41 FRAME requirements.
 - Add fiber connectivity if not present.
 - Provide Connected Vehicle (CV) roadside unit (RSU).
 - Provide NEMA / ATC standard controller.
 - Upgrade existing ethernet switches.

Roadway Safety Audit (RSA) impacts:

- To be provided at a later date.

Additional scoping items and recommended design considerations:

Structural support:

- The existing support structures should be evaluated for load capacity and signs of distress. Evaluate existing mast arm structures in accordance with FDM 261.8. Replacement shall be considered if the existing signal structure is found to be deficient.

Controller and cabinet:

- District TSM&O is requesting that the controller be upgraded to a NEMA / ATC standard. Should the request be granted, 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. Provide UPS battery backup and coordinate UPS placement and mounting preferences with the maintaining agency.
- District TSM&O is requesting that the existing ethernet switch in the traffic signal cabinet be replaced. Confirm and coordinate equipment compatibility with the Maintaining Agency.

Signal heads:

- Review and coordinate the planned SOP with TSM&O and replace 5-section heads with 4-section heads where appropriate. Follow MUTCD guidance (section 4D.11) for the number of signal faces

on an approach and add additional signal heads where necessary. Per FDM 232.1.5, provide backplates with retroreflective borders for all overhead signal heads.

- Recommend replacing or adding backplates on existing signal head assemblies that have missing, damaged or backplates without reflectorized borders. Per FDM 232.1.5, provide backplates with retroreflective borders for all overhead signal heads. Should the structure remain and the addition of backplates negatively affect structural load capacity, consideration should be given for the use of flexible backplates (TEM section 3.9).

Overhead signs:

- For enhanced pedestrian safety, consider adding overhead mounted R10-15a signs (per TEM 2.44.3) for all approaches.

Internally illuminated street name signs:

- To facilitate all named roadways, recommend adding internally illuminated signs where appropriate or where they are missing or damaged. Follow TEM and FDM guidelines to ensure appropriate letter and sign sizing. Coordinate sign and mounting preferences with the maintaining agency.
- Should the signal support structures be replaced, provide internally illuminated signs. Follow TEM and FDM guidelines to ensure appropriate letter and sign sizing. Coordinate sign and mounting preferences with the maintaining agency.

Vehicle detection:

- Maintain existing video detection equipment.
- Should the signal support structures be replaced, replacement of the existing video detection equipment is recommended. Coordinate preferences and any sole sourced or proprietary equipment requirements with the maintaining agency.
- Provide dilemma zone loops in advance of the intersection for SR 78 eastbound and westbound.

Traffic monitoring and associated technologies:

- District TSM&O is requesting a connected vehicle RSU at this location. Should this system be implemented, it is recommended to coordinate this effort with the maintaining agency to determine specifications for any sole sourced or proprietary controller and cabinet related equipment.

Pedestrian assemblies and detection:

- Recommend separating pedestrian detector push buttons from shared pedestrian signal detector posts and replacing or relocating 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. Coordinate with local jurisdiction and maintaining agency.
- Timing modifications have been recommended for this intersection for providing leading pedestrian intervals (LPI). Per MUTCD 4E.06, para. 20, consideration should be given to utilizing accessible pedestrian signal detectors (APS).

Emergency preemption:

- No recommendations provided.

Power source and service type:

- No recommendations provided.

Fiber interconnect: ATMS / TMC communications:

- District TSM&O is requesting replacement of the controller and cabinet, it will be necessary to upgrade, replace or relocate ITS items. Confirm and coordinate equipment compatibility and reconnection methods with the maintaining agency.

- District TSM&O is requesting fiber connectivity at the cabinet as part of US 41 FRAME requirements. Include ethernet switch, patch panel and related connection hardware at the controller. Confirm and coordinate equipment compatibility with the Maintaining Agency. Should an existing splice vault be further away than an existing fiber pull box, consider utilizing the fiber pull location as a splice point. Remove existing fiber pull box and replace with fiber splice vault. Provide splice tray and conduct splicing operations.

Signal Location 6:

SR 78 (Pine Island Rd)

at Piney Rd (School ENT)

District Safety recommendations:

- Separate pedestrian push-buttons on NE, NW, and SW corners.
- Add Leading Pedestrian Interval (LPI) controls.
- Provide dilemma zone loops at all intersections for each SR 78 approach lane(s).

District TSM&O recommendations:

- Upgrade intersection to meet US 41 FRAME requirements.
 - Add fiber connectivity if not present.
 - Provide Connected Vehicle (CV) roadside unit (RSU).
 - Provide NEMA / ATC standard controller.
 - Upgrade existing ethernet switches.

Roadway Safety Audit (RSA) impacts:

- To be provided at a later date.

Additional scoping items and recommended design considerations:

Structural support:

- The existing support structures should be evaluated for load capacity and signs of distress. Evaluate existing mast arm structures in accordance with FDM 261.8. Replacement shall be considered if the existing signal structure is found to be deficient.

Controller and cabinet:

- District TSM&O is requesting that the controller be upgraded to a NEMA / ATC standard. Should the request be granted, 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. Provide UPS battery backup and coordinate UPS placement and mounting preferences with the maintaining agency.
- District TSM&O is requesting that the existing ethernet switch in the traffic signal cabinet be replaced. Confirm and coordinate equipment compatibility with the Maintaining Agency.

Signal heads:

- Recommend replacing or adding backplates on existing signal head assemblies that have missing, damaged or backplates without reflectorized borders. Per FDM 232.1.5, provide backplates with retroreflective borders for all overhead signal heads. Should the structure remain and the addition of backplates negatively affect structural load capacity, consideration should be given for the use of flexible backplates (TEM section 3.9).

Overhead signs:

- For enhanced pedestrian safety, consider adding overhead mounted R10-15a signs (per TEM 2.44.3) for all approaches.

Internally illuminated street name signs:

- To facilitate all named roadways, recommend adding internally illuminated signs where appropriate or where they are missing or damaged. Follow TEM and FDM guidelines to ensure appropriate letter and sign sizing. Coordinate sign and mounting preferences with the maintaining agency.
- Should the signal support structures be replaced, provide internally illuminated signs. Follow TEM and FDM guidelines to ensure appropriate letter and sign sizing. Coordinate sign and mounting preferences with the maintaining agency.

Vehicle detection:

- Maintain existing video detection equipment.
- Should the signal support structures be replaced, replacement of the existing video detection equipment is recommended. Coordinate preferences and any sole sourced or proprietary equipment requirements with the maintaining agency.
- Provide dilemma zone loops in advance of the intersection for SR 78 eastbound and westbound.

Traffic monitoring and associated technologies:

- District TSM&O is requesting a connected vehicle RSU at this location. Should this system be implemented, it is recommended to coordinate this effort with the maintaining agency to determine specifications for any sole sourced or proprietary controller and cabinet related equipment.

Pedestrian assemblies and detection:

- Recommend separating pedestrian detector push buttons from shared pedestrian signal detector posts and replacing or relocating 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. Coordinate with local jurisdiction and maintaining agency.
- Timing modifications have been recommended for this intersection for providing leading pedestrian intervals (LPI). Per MUTCD 4E.06, para. 20, consideration should be given to utilizing accessible pedestrian signal detectors (APS).

Emergency preemption:

- No recommendations provided.

Power source and service type:

- No recommendations provided.

Fiber interconnect: ATMS / TMC communications:

- District TSM&O is requesting replacement of the controller and cabinet, it will be necessary to upgrade, replace or relocate ITS items. Confirm and coordinate equipment compatibility and reconnection methods with the maintaining agency.
- District TSM&O is requesting fiber connectivity at the cabinet as part of US 41 FRAME requirements. Include ethernet switch, patch panel and related connection hardware at the controller. Confirm and coordinate equipment compatibility with the Maintaining Agency. Should an existing splice vault be further away than an existing fiber pull box, consider utilizing the fiber pull location as a splice point. Remove existing fiber pull box and replace with fiber splice vault. Provide splice tray and conduct splicing operations.

Signal Location 7:

SR 78 (Pine Island Rd)

at SR 739 (US BUS 41)

District Safety recommendations:

- Separate pedestrian push-buttons on NW, and SE corners.
- Add Leading Pedestrian Interval (LPI) controls.
- Provide dilemma zone loops at all intersections for each SR 78 approach lane(s).

District TSM&O recommendations:

- Upgrade intersection to meet US 41 FRAME requirements.
 - Add fiber connectivity if not present.
 - Provide Connected Vehicle (CV) roadside unit (RSU).
 - Provide NEMA / ATC standard controller.
 - Upgrade existing ethernet switches.

Roadway Safety Audit (RSA) impacts:

- To be provided at a later date.

Additional scoping items and recommended design considerations:

Structural support:

- The existing support structures should be evaluated for load capacity and signs of distress. Evaluate existing mast arm structures in accordance with FDM 261.8. Replacement shall be considered if the existing signal structure is found to be deficient.

Controller and cabinet:

- District TSM&O is requesting that the controller be upgraded to a NEMA / ATC standard. Should the request be granted, 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. Provide UPS battery backup and coordinate UPS placement and mounting preferences with the maintaining agency.
- District TSM&O is requesting that the existing ethernet switch in the traffic signal cabinet be replaced. Confirm and coordinate equipment compatibility with the Maintaining Agency.

Signal heads:

- Recommend replacing or adding backplates on existing signal head assemblies that have missing, damaged or backplates without reflectorized borders. Per FDM 232.1.5, provide backplates with retroreflective borders for all overhead signal heads. Should the structure remain and the addition of backplates negatively affect structural load capacity, consideration should be given for the use of flexible backplates (TEM section 3.9).

Overhead signs:

- For enhanced pedestrian safety, consider adding overhead mounted R10-15a signs (per TEM 2.44.3) for all approaches.

Internally illuminated street name signs:

- To facilitate all named roadways, recommend adding internally illuminated signs where appropriate or where they are missing or damaged. Follow TEM and FDM guidelines to ensure appropriate letter and sign sizing. Coordinate sign and mounting preferences with the maintaining agency.

- Should the signal support structures be replaced, provide internally illuminated signs. Follow TEM and FDM guidelines to ensure appropriate letter and sign sizing. Coordinate sign and mounting preferences with the maintaining agency.

Vehicle detection:

- Maintain existing video detection equipment.
- Should the signal support structures be replaced, replacement of the existing video detection equipment is recommended. Coordinate preferences and any sole sourced or proprietary equipment requirements with the maintaining agency.
- Provide dilemma zone loops in advance of the intersection for SR 78 eastbound and westbound. In addition, provide dilemma zone loops in advance of the intersection for SR 739 (US BUS 41) northbound and southbound.

Traffic monitoring and associated technologies:

- District TSM&O is requesting a connected vehicle RSU at this location. Should this system be implemented, it is recommended to coordinate this effort with the maintaining agency to determine specifications for any sole sourced or proprietary controller and cabinet related equipment.

Pedestrian assemblies and detection:

- Recommend separating pedestrian detector push buttons from shared pedestrian signal detector posts and replacing or relocating 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. Coordinate with local jurisdiction and maintaining agency.
- Timing modifications have been recommended for this intersection for providing leading pedestrian intervals (LPI). Per MUTCD 4E.06, para. 20, consideration should be given to utilizing accessible pedestrian signal detectors (APS).

Emergency preemption:

- No recommendations provided.

Power source and service type:

- No recommendations provided.

Fiber interconnect: ATMS / TMC communications:

- District TSM&O is requesting replacement of the controller and cabinet, it will be necessary to upgrade, replace or relocate ITS items. Confirm and coordinate equipment compatibility and reconnection methods with the maintaining agency.
- District TSM&O is requesting fiber connectivity at the cabinet as part of US 41 FRAME requirements. Include ethernet switch, patch panel and related connection hardware at the controller. Confirm and coordinate equipment compatibility with the Maintaining Agency. Should an existing splice vault be further away than an existing fiber pull box, consider utilizing the fiber pull location as a splice point. Remove existing fiber pull box and replace with fiber splice vault. Provide splice tray and conduct splicing operations.

Signal Location 8:

SR 78 (Pine Island Rd)

at N Evalena Ln (Old Bridge Rd)

District Safety recommendations:

- Add Leading Pedestrian Interval (LPI) controls.
- Provide dilemma zone loops at all intersections for each SR 78 approach lane(s).

District TSM&O recommendations:

- Upgrade intersection to meet US 41 FRAME requirements.
 - Add fiber connectivity if not present.
 - Provide Connected Vehicle (CV) roadside unit (RSU).
 - Provide NEMA / ATC standard controller.
 - Upgrade existing ethernet switches.

Roadway Safety Audit (RSA) impacts:

- To be provided at a later date.

Additional scoping items and recommended design considerations:**Structural support:**

- The existing support structures should be evaluated for load capacity and signs of distress. Evaluate existing mast arm structures in accordance with FDM 261.8. Replacement shall be considered if the existing signal structure is found to be deficient.

Controller and cabinet:

- District TSM&O is requesting that the controller be upgraded to a NEMA / ATC standard. Should the request be granted, 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. Provide UPS battery backup and coordinate UPS placement and mounting preferences with the maintaining agency.
- District TSM&O is requesting that the existing ethernet switch in the traffic signal cabinet be replaced. Confirm and coordinate equipment compatibility with the Maintaining Agency.

Signal heads:

- Recommend replacing or adding backplates on existing signal head assemblies that have missing, damaged or backplates without reflectorized borders. Per FDM 232.1.5, provide backplates with retroreflective borders for all overhead signal heads. Should the structure remain and the addition of backplates negatively affect structural load capacity, consideration should be given for the use of flexible backplates (TEM section 3.9).

Overhead signs:

- For enhanced pedestrian safety, consider adding overhead mounted R10-15a signs (per TEM 2.44.3) for all approaches.

Internally illuminated street name signs:

- To facilitate all named roadways, recommend adding internally illuminated signs where appropriate or where they are missing or damaged. Follow TEM and FDM guidelines to ensure appropriate letter and sign sizing. Coordinate sign and mounting preferences with the maintaining agency.
- Should the signal support structures be replaced, provide internally illuminated signs. Follow TEM and FDM guidelines to ensure appropriate letter and sign sizing. Coordinate sign and mounting preferences with the maintaining agency.

Vehicle detection:

- Maintain existing video detection equipment.
- Should the signal support structures be replaced, replacement of the existing video detection equipment is recommended. Coordinate preferences and any sole sourced or proprietary equipment requirements with the maintaining agency.
- Provide dilemma zone loops in advance of the intersection for SR 78 eastbound and westbound.

Traffic monitoring and associated technologies:

- District TSM&O is requesting a connected vehicle RSU at this location. Should this system be implemented, it is recommended to coordinate this effort with the maintaining agency to determine specifications for any sole sourced or proprietary controller and cabinet related equipment.

Pedestrian assemblies and detection:

- Timing modifications have been recommended for this intersection for providing leading pedestrian intervals (LPI). Per MUTCD 4E.06, para. 20, consideration should be given to utilizing accessible pedestrian signal detectors (APS).

Emergency preemption:

- No recommendations provided.

Power source and service type:

- No recommendations provided.

Fiber interconnect: ATMS / TMC communications:

- District TSM&O is requesting replacement of the controller and cabinet, it will be necessary to upgrade, replace or relocate ITS items. Confirm and coordinate equipment compatibility and reconnection methods with the maintaining agency.
- District TSM&O is requesting fiber connectivity at the cabinet as part of US 41 FRAME requirements. Include ethernet switch, patch panel and related connection hardware at the controller. Confirm and coordinate equipment compatibility with the Maintaining Agency. Should an existing splice vault be further away than an existing fiber pull box, consider utilizing the fiber pull location as a splice point. Remove existing fiber pull box and replace with fiber splice vault. Provide splice tray and conduct splicing operations.

Signal Location 9:

SR 78 (Pine Island Rd)

at New Post Rd (Hart Rd)

District Safety recommendations:

- Replace existing 5-Section Head with a 4-Section Head and 3-Section Head on N and S corner structures.
- Add Leading Pedestrian Interval (LPI) controls.
- Provide dilemma zone loops at all intersections for each SR 78 approach lane(s).

District TSM&O recommendations:

- Upgrade intersection to meet US 41 FRAME requirements.
 - Add fiber connectivity if not present.
 - Provide Connected Vehicle (CV) roadside unit (RSU).
 - Provide NEMA / ATC standard controller.
 - Upgrade existing ethernet switches.

Roadway Safety Audit (RSA) impacts:

- To be provided at a later date.

Additional scoping items and recommended design considerations:

Structural support:

- The existing support structures should be evaluated for load capacity and signs of distress. Evaluate existing mast arm structures in accordance with FDM 261.8. Replacement shall be considered if the existing signal structure is found to be deficient.

Controller and cabinet:

- District TSM&O is requesting that the controller be upgraded to a NEMA / ATC standard. Should the request be granted, 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. Provide UPS battery backup and coordinate UPS placement and mounting preferences with the maintaining agency.
- District TSM&O is requesting that the existing ethernet switch in the traffic signal cabinet be replaced. Confirm and coordinate equipment compatibility with the Maintaining Agency.

Signal heads:

- Review and coordinate the planned SOP with TSM&O and replace 5-section heads with 4-section heads where appropriate. Follow MUTCD guidance (section 4D.11) for the number of signal faces on an approach and add additional signal heads where necessary. Per FDM 232.1.5, provide backplates with retroreflective borders for all overhead signal heads.
- Recommend replacing or adding backplates on existing signal head assemblies that have missing, damaged or backplates without reflectorized borders. Per FDM 232.1.5, provide backplates with retroreflective borders for all overhead signal heads. Should the structure remain and the addition of backplates negatively affect structural load capacity, consideration should be given for the use of flexible backplates (TEM section 3.9).

Overhead signs:

- For enhanced pedestrian safety, consider adding overhead mounted R10-15a signs (per TEM 2.44.3) for all approaches.

Internally illuminated street name signs:

- To facilitate all named roadways, recommend adding internally illuminated signs where appropriate or where they are missing or damaged. Follow TEM and FDM guidelines to ensure appropriate letter and sign sizing. Coordinate sign and mounting preferences with the maintaining agency.
- Should the signal support structures be replaced, provide internally illuminated signs. Follow TEM and FDM guidelines to ensure appropriate letter and sign sizing. Coordinate sign and mounting preferences with the maintaining agency.

Vehicle detection:

- Maintain existing video detection equipment.
- Should the signal support structures be replaced, replacement of the existing video detection equipment is recommended. Coordinate preferences and any sole sourced or proprietary equipment requirements with the maintaining agency.
- Provide dilemma zone loops in advance of the intersection for SR 78 eastbound and westbound.

Traffic monitoring and associated technologies:

- District TSM&O is requesting a connected vehicle RSU at this location. Should this system be implemented, it is recommended to coordinate this effort with the maintaining agency to

determine specifications for any sole sourced or proprietary controller and cabinet related equipment.

Pedestrian assemblies and detection:

- Timing modifications have been recommended for this intersection for providing leading pedestrian intervals (LPI). Per MUTCD 4E.06, para. 20, consideration should be given to utilizing accessible pedestrian signal detectors (APS).

Emergency preemption:

- No recommendations provided.

Power source and service type:

- No recommendations provided.

Fiber interconnect: ATMS / TMC communications:

- District TSM&O is requesting replacement of the controller and cabinet, it will be necessary to upgrade, replace or relocate ITS items. Confirm and coordinate equipment compatibility and reconnection methods with the maintaining agency.
- District TSM&O is requesting fiber connectivity at the cabinet as part of US 41 FRAME requirements. Include ethernet switch, patch panel and related connection hardware at the controller. Confirm and coordinate equipment compatibility with the Maintaining Agency. Should an existing splice vault be further away than an existing fiber pull box, consider utilizing the fiber pull location as a splice point. Remove existing fiber pull box and replace with fiber splice vault. Provide splice tray and conduct splicing operations.

Lighting Scope Items:

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

- Items specifically recommended by District Safety that advance safety countermeasures.
- Ensure lighting at indicated intersections meets FDM 231 guidelines for the intersection, pedestrian crosswalks, and side street approaches.

The locations listed below have been identified as meeting this criterion:

Intersection Location 1:

SR 78 (Pine Island Rd)
at Pondella Rd
MP: 12.361

Intersection Location 2:

SR 78 (Pine Island Rd)
at 24th Ave (Hancock CRK Blvd)
MP: 13.248

Intersection Location 3:

SR 78 (Pine Island Rd)
at Merchants Crossing ENT (Judd Creek Blvd)
MP: 14.523

Intersection Location 4:

SR 78 (Pine Island Rd)
at SR 45 (US 41 / Cleveland)
MP: 14.741

Intersection Location 5:

SR 78 (Pine Island Rd)
at Walmart ENT (Woodward Ave)
MP: 14.997

Intersection Location 6:

SR 78 (Pine Island Rd)
at Piney Rd (School ENT)
MP: 15.504

Intersection Location 7:

SR 78 (Pine Island Rd)
at SR 739 (US BUS 41)
MP: 15.858

Intersection Location 8:

SR 78 (Pine Island Rd)
at N Evalena Ln (Old Bridge Rd)
MP: 16.380

Intersection Location 9:

SR 78 (Pine Island Rd)
at New Post Rd (Hart Rd)
MP: 17.015

District Safety recommendations:

District One Safety Department has identified the intersections listed above as locations where existing lighting features may be insufficient for pedestrian safety and nighttime visibility. Review and analyze the existing lighting features and consider the following recommended countermeasures:

- Update existing lighting infrastructure at the intersections and for each approach leg to current FDOT FDM standards.

Roadway Safety Audit (RSA) impacts:

To be provided at a future date.

Additional scoping items and recommended design considerations:

The following guidance and recommendations apply for rebuilt intersections as well as areas identified as needing lighting upgrades or retrofit by D1 Safety:

- At locations where lighting improvements are recommended, the 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.
- Lighting on each approach leg beyond the intersection limits shall be evaluated and upgraded to meet FDOT FDM standards.
- Existing light poles and/or mast arm–mounted luminaires that are not in optimal locations to adequately illuminate pedestrian crosswalks should be evaluated for potential relocation, removal, or replacement.
- Existing light poles and foundations to remain shall be evaluated for signs of distress in accordance with FDM 261. If found deficient, replacement shall be considered.
- Coordinate luminaire types with the Maintaining Agency. Only light fixtures listed on the Department’s Approved Product List are permitted.
- Replace any existing high pressure sodium (HPS) luminaires with new LED luminaires.
- Replace any traditional luminaires retrofitted with LED lamps with new LED luminaires.
- The luminaire housing color for all new and replacement installations shall match the color of the pole on which they are mounted.
- During the design phase, assess whether new luminaire locations can be powered by extending existing lighting circuits instead of installing a new service point.
- Coordinate any new power source locations and requirements with UAO.
- Coordinate any new lighting locations around existing utilities and with UAO.
- Coordinate with the traffic signal design team regarding any potential shared facilities, such as directional bores, luminaire support structures, and power service poles.
- Coordinate lighting maintenance agreement with the District Maintenance Office and the Maintaining Agency.

Structural Scope Items:

- Bridge Joints:
 - Bridges with asphalt overlay will include joint repair in the scope. Structures Maintenance has provided a spreadsheet and kmz identifying their location.
 - *MP 14.174 – Bridge Culvert 120171.*
 - *No expansion joints within bridge limits.*
 - *No changes anticipated.*
 - *MP 16.243 – Bridge Culvert 120161.*
 - *No expansion joints within bridge limits.*
 - *No changes anticipated.*
 - *MP 16.400 – Bridge Culvert 120163.*
 - *No expansion joints within bridge limits.*
 - *No changes anticipated.*
 - For all projects that include bridges that do not have asphalt overlay, design should coordinate with the District Bridge Maintenance office to clarify scope for bridge needs and opportunities for joint replacement while the lane is closed.
 - *Not applicable.*
 - Per coordination with the District Structures Maintenance Office, for bridges with little to no joint deficiencies reported, any joint repair work will be considered minor and shall be addressed by the Structures Asset Maintenance Contractor, where applicable.
- MP 14.174 – Bridge Culvert 120171:
 - No structure/ hazard markers appear to be installed at the EB and WB approach.
- MP 14.588 – 3-8’x4’x104’ CBC:
 - No changes anticipated.
- MP 14.955 – 2-5’x3’x164’ CBC:
 - No structure/ hazard markers appear to be installed at the WB approach.
 - Repair/ Replace damaged (tilted) structure/hazard marker at the EB approach end of the culvert.
- MP 15.886 – 1-6’x4’x260’ CBC:
 - No structure/ hazard markers appear to be installed at the EB or WB approaches.
- MP 16.243 – Bridge Culvert 120161:
 - No structure/ hazard markers appear to be installed at the EB or WB approaches.
- MP 16.400 – Bridge Culvert 120163:
 - No structure/ hazard markers appear to be installed at the WB approach.
 - Structure/ hazard marker at the EB approach appears to have fallen off from the top of the headwall and is located on the embankment near the approach wingwall.

Scope Analysis for Social and Environmental Issues

FPID No:	456240-1	County:	Lee	City:	North Fort Myers
Project Limits:	SR 78 from east of Del Prado Boulevard to east of New Post Road				
Section:	12060-000	Length of Project:	4.916		
Begin MP:	12.107	End MP:	17.023		
Scope:	Resurfacing, Restoration, and Rehabilitation (RRR)				
Review Date:	5/12/2025 – B. Feagle	Anticipated NEPA COA:	Type 1 CE / NMSA		

Potential Cost or Schedule Impacts

Social: 8% of the population is designated as limited English proficiency (LEP); therefore, translation services must be provided through verbal interpretation and written translation of vital documents.

Archaeological and Historical Resources: A National Register of Historic Places (NRHP) listed structure, J. Collin English Elementary School, is located within the project limits.

Section 4(f): Due to the proximity of the NRHP-listed property, along with other public recreational areas, a Section 4(f) evaluation is anticipated.

Wetlands and Other Surface Waters: A wetland evaluation, along with mitigation for impacts, may be required.

Florida bonneted bat: A Roost Inventory/Survey is required. Pending the results of the survey, either the implementation of Best Management Practices (BMPs) or consultation is anticipated.

Eastern indigo snake: The Standard Protection Measures for the Eastern Indigo Snake must be followed and Special Provision SP0070104-7 (indigo snake) should be added to the Standard Specifications

Gopher tortoise: Design-phase field review must be completed to verify if a permit is required to relocate tortoises. Special Provision SP0070104-3 (gopher tortoise) should be added to the Standard Specifications.

Florida burrowing owl: A Design-phase field review is recommended.

Social and Economic Resources

Social: The minority population accounts for 32% of the population of the area with 22% of the population residing below poverty level.

Land Use Changes: The current land use consists of roads and highways, single-family units, commercial and services, and retail service areas, which is consistent with the future land uses of central urban, commercial, and development; therefore, the project is not expected to result in land use changes.

Mobility: The project contains four bus transit routes and is not expected to affect mobility.

Community Cohesion: The project area contains five religious centers and one public elementary school. The project is not expected to affect community services or cohesion.

Relocation Potential: Right-of-way is not required; therefore, relocations are not anticipated.

Farmlands: While farmland of unique importance are present, the project is not subject to the provisions of the *Farmland Protection Policy Act of 1981* as the project is located in the Cape Coral urbanized area.

Cultural Resources

Archaeological and Historical Resources: A preliminary review of the Florida Master Site File (FMSF) records revealed New Prospect Cemetery (LL02803, ca. 1872) and 11 historic standing structures that have not been evaluated. J. Collin English School, Site LL01200, is a historic site that is listed on the NRHP. In the project area, 124 structures were built prior to 1970.

The project will be reviewed during the Design Phase for involvement with archaeological and historical resources; coordination with the State Historic Preservation Officer (SHPO) will be required.

Section 4(f): A Section 4(f) evaluation will be required to evaluate involvement with NRHP-eligible properties, as well as the Caloosahatchee SUN Trail, Tamiami Trail, and the Great Calusa Blueway Paddling Trail on the Yellow Fever Creek. The project is expected to result in a 'no use' determination for the trails as land acquisitions, occupancies, or proximity impacts are not anticipated.

Natural Resources

Wetlands and Other Surface Waters: Mixed wetland hardwoods, freshwater forested/shrub wetland, freshwater emergent wetland, freshwater pond, and riverine areas appear to be present in the project area.

Essential Fish Habitat: No Essential Fish Habitat (EFH) is present within the project area.

Floodplains: Approximately half of the project is located in the 100-year floodplain (Zones AE and A).

Sole Source Aquifer: The project area is not associated with a sole source aquifer.

Wild and Scenic Rivers: No Wild and Scenic Rivers are identified within the project area.

Coastal Barrier Resources: No Coastal Barrier Resource Act (CBRA) areas are within the project area.

Protected Species and Habitat: The project area was reviewed for potential impacts to wildlife and habitat resources, including federal and state protected species in accordance with Section 7 of the Endangered Species Act (ESA, 1973), as amended, and Chapter 68A-27 Florida Administrative Code (FAC).

The anticipated determinations of effects utilized applicable species keys and the 2024 FDOT *Programmatic Approach for Minor Transportation Activities* for landscaping (B3); replacement of signs, signals or lighting (B4); drainage repair or improvements (B7); minor bridge maintenance (B9); resurfacing pavement (B12), and vegetation management (B14).

Species survey, elevated review, coordination, or consultation is expected for the following species:

Florida bonneted bat: Per the 2024 USFWS *Florida Bonneted Bat Consultation Key*, the project is located in a Assumed Presence Polygon; therefore, a Roost Structure Inventory/Survey is required. Pending the results of the survey, various BMPs or consultation may be required.

Eastern indigo snake: Undeveloped habitat is located in the area and historical observations have occurred in the vicinity. Since the project may include vegetation management such as clearing and grubbing, the Standard Protection Measures for the Eastern Indigo Snake must be followed.

Gopher tortoise: Design-phase review and coordination will determine if a gopher tortoise survey and/or relocation permit is required. If burrows remain within the area, the location must be noted in the plans and silt fence must be installed to protect the burrow from destruction during ground-disturbing activities.

Wood stork: The project is located within the 18.6-mile core foraging area of the Caloosahatchee River East and Caloosahatchee River East wood stork colonies. It appears the project has the potential to impact suitable foraging habitat. If the project has wetland impacts greater than 0.5 acres, impacts must be compensated at a wetland mitigation bank or created and restored onsite.

Florida burrowing owl: Due to the suitable habitat along the project and historical observations in the vicinity, a Design-phase field review for burrows within 33 feet of the project should be conducted.

Critical Habitat: The Charlotte Harbor is designated as smalltooth sawfish critical habitat; however, the project does not include in-water work and will not result in the destruction or adverse modification of critical habitat.

Due to the lack of suitable habitat and prior occurrences, the project is expected to result in a determination of *no effect/no adverse effect* and no further coordination is expected for the following species:

Federal Species

- American crocodile
- Beautiful pawpaw
- Crested caracara
- Eastern black rail
- Eastern indigo snake
- Everglade snail kite
- Florida panther
- Red-cockaded woodpecker
- Rufa red knot
- Sea turtles (green, hawksbill, Kemp's Ridley)
- West Indian manatee
- Wood stork

State or Non-Listed Species

- Florida sandhill crane
- Sherman's short-tailed shrew
- Florida pine snake
- Southeastern American kestrel
- Wading birds (reddish egret, little blue heron, roseate spoonbill, tricolored heron)
- Imperiled beach-nesting birds (American oystercatcher, snowy plover, black simmer, least tern)
- Bald eagle
- Florida black bear

Physical Resources

Noise: The project meets the criteria for a Type III project established in 23 CFR 772; therefore, analysis of highway traffic noise is not required.

Air Quality: As this project will not impact traffic volumes, no changes to air quality are anticipated.

Contamination: The project buffer area includes hazardous waste facilities, petroleum contamination monitoring sites, storage tank contamination monitoring sites, biomedical waste sites, and off-site contamination notice facilities. The project will be reviewed for contamination during the Design Phase; it is anticipated a Contamination Technical Memorandum will be prepared and Level 2 testing may be required.

Utilities and Railroads: The project area has two electric power transmission lines owned by Florida Power and Light Company (FP&L).

Navigation: Two bridges, #120171 (1995) and #120163 (1987), are located within the project limits.

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 456240-1-52-01

Letting Date: 07/2028

Description: SR 78 FROM EAST OF DEL PRADO BOULEVARD TO E OF NEW POST ROAD

District: 01 **County:** 12 LEE **Market Area:** 10 **Units:** English

Contract Class: 1 **Lump Sum Project:** N **Design/Build:** N **Project Length:** 4.916 MI

Project Manager: NEM-LAT-4P

Version 6-P Project Grand Total

\$21,835,161.64

Description: Copy V5 - change addition of inside shoulder to type E curb for typical 1 (Seq 8)- 1/16/26

Sequence: 1 RSD - Resurfacing, Divided

Net Length: 2.634 MI
13,908 LF

Description: POP 1 (pavement, signal loops, pavement markings) 4 lane divided rural - MP 12.107 TO MP 14.741 (FC-5)

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	4
Roadway Pavement Width L/R	24.00 / 24.00
Structural Spread Rate	220
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
327-70-15	MILLING EXIST ASPH PAVT,2 3/4" AVG DEPTH	74,173.44 SY	\$2.84	\$210,652.57
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	8,159.08 TN	\$150.48	\$1,227,778.36
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	2,966.94 TN	\$301.67	\$895,036.79

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
327-70-2	MILLING EXIST ASPH PAVT,3 1/2" AVG DEPTH Comment: Aux. lanes	9,809.36 SY	\$4.09	\$40,120.28
327-70-6	MILLING EXIST ASPH PAVT,1 1/2" AVG DEPTH Comment: Side streets	37,833.33 SY	\$3.97	\$150,198.32
327-70-15	MILLING EXIST ASPH PAVT,2 3/4" AVG DEPTH Comment: aux lanes	33,746.89 SY	\$2.84	\$95,841.17
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22 Comment: Aux. lanes	6,901.40 TN	\$150.48	\$1,038,522.67
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22 Comment: Aux. lanes	1,351.10 TN	\$301.67	\$407,586.34
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22 Comment: Aux. lanes	2,860.83 TN	\$186.51	\$533,573.40

705-10-2	OBJECT MARKER, TYPE 2	30.00 EA	\$122.26	\$3,667.80
705-11-1	DELINEATOR, FLEXIBLE TUBULAR	56.00 EA	\$124.32	\$6,961.92
706-1-3	RAISED PAVMT MARK, TYPE B	3,534.00 EA	\$4.57	\$16,150.38
710-12-290	PAINTED PAVT MARK,DUR,YELLOW,ISLAND NOSE	1,500.00 SF	\$4.20	\$6,300.00
710-90	PAINTED PAVEMENT MARKINGS, FINAL SURFACE	1.00 LS	\$75,731.12	\$75,731.12
711-11-123	THERMOPLASTIC, STD, WHITE, SOLID, 12"	10,565.00 LF	\$3.95	\$41,731.75
711-11-124	THERMOPLASTIC, STD, WHITE, SOLID, 18"	4,090.00 LF	\$5.45	\$22,290.50
711-11-125	THERMOPLASTIC, STD, WHITE, SOLID, 24"	2,745.00 LF	\$7.11	\$19,516.95
711-11-141	THERMOPLASTIC, STD, WHITE, DOT GUIDE, 6"	3.77 GM	\$2,883.22	\$10,869.74
711-11-160	THERMOPLASTIC, STD, WHITE, MESSAGE	27.00 EA	\$112.01	\$3,024.27
711-11-170	THERMOPLASTIC, STD, WHITE, ARROW	525.00 EA	\$84.74	\$44,488.50
711-11-224	THERMOPLASTIC, STD, YELLOW, SOLID, 18"	3,350.00 LF	\$5.11	\$17,118.50
711-11-241	THERMOPLASTIC,STD,YELLOW,DOT / GUIDE, 6"	1.10 GM	\$2,956.41	\$3,252.05
711-14-125	THERMOPLASTIC, PREFORM, WHITE, SOLID,24"	6,120.00 LF	\$19.00	\$116,280.00
711-14-160	THERMOPLASTIC, PREFORMED, WHITE, MESSAGE	87.00 EA	\$356.68	\$31,031.16
711-14-170	THERMOPLASTIC, PREFORMED, WHITE, ARROW	87.00 EA	\$105.38	\$9,168.06
711-16-102	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 8"	1.26 GM	\$7,344.64	\$9,254.25

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-1-3	RAISED PAVMT MARK, TYPE B	1,067.00	EA	\$4.57	\$4,876.19
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	10.54	GM	\$1,835.58	\$19,347.01
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	5.27	GM	\$615.18	\$3,242.00
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	10.54	GM	\$5,945.12	\$62,661.56
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	5.27	GM	\$1,502.31	\$7,917.17
711-16-201	THERMOPLASTIC, STD- OTH,YELLOW, SOLID, 6"	10.54	GM	\$5,824.93	\$61,394.76

Roadway Component Total \$5,195,585.54

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	8.67 / 8.67
Total Outside Shoulder Perf. Turf Width L/R	2.67 / 2.67
Paved Outside Shoulder Width L/R	6.00 / 6.00
Structural Spread Rate	165
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips 1/2 No. of Sides	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
327-70-11	MILLING EXIST ASPH PAVT,2 1/4" AVG DEPTH	18,543.36	SY	\$3.62	\$67,126.96
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	1,529.83	TN	\$150.48	\$230,208.82
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	81.59	TN	\$301.67	\$24,613.26
546-72-3	GROUND-IN RUMBLE STRIPS, 8" SIN	2.63	GM	\$2,265.96	\$5,959.47
570-1-1	PERFORMANCE TURF	8,251.80	SY	\$6.09	\$50,253.46

Erosion Control**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	51,912.96	LF	\$1.28	\$66,448.59
104-11	FLOATING TURBIDITY BARRIER	263.40	LF	\$14.17	\$3,732.38
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	263.40	LF	\$6.07	\$1,598.84
107-1	LITTER REMOVAL	45.98	AC	\$48.60	\$2,234.63
107-2	MOWING	45.98	AC	\$70.36	\$3,235.15
Shoulder Component Total					\$455,411.56

SIGNALIZATIONS COMPONENT**Signalization 1**

Description	Value
Type	Miscellaneous
Multiplier	1
Description	SR 78 (Pine Island Rd) at Pondella Rd

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
660-2-102	LOOP ASSEMBLY, F&I, TYPE B	4.00	AS	\$1,501.28	\$6,005.12

Signalization 2

Description	Value
Type	Miscellaneous
Multiplier	1
Description	SR 78 (Pine Island Rd) at 24th Ave (Hancock CRK Blvd)

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
660-2-102	LOOP ASSEMBLY, F&I, TYPE B	4.00	AS	\$1,501.28	\$6,005.12
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	14.00	AS	\$1,844.15	\$25,818.10

Signalization 3

Description	Value
Type	Miscellaneous
Multiplier	1
Description	SR 78 (Pine Island Rd) at Merchants Crossing ENT (Judd Creek Blvd)

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	4.00	EA	\$649.33	\$2,597.32

Traffic Monitoring 1

Description	Value
Lanes	4
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	150.00	LF	\$16.62	\$2,493.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	40.00	LF	\$38.36	\$1,534.40
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	3.00	EA	\$1,401.59	\$4,204.77
695-1-1	TMS VEH SNSR-NON-WEIGHT, F&I,	2.00	EA	\$3,047.82	\$6,095.64

Signalizations Component Total \$54,753.47

Sequence 1 Total \$5,705,750.57

Sequence: 2 RSD - Resurfacing, Divided

Net Length: 0.987 MI
5,211 LF

Description: POP 2 (pavement, signal loops, pavement markings) 4 lane divided urban - MP 14.741 TO MP 15.728 (FC 12.5)

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	4
Roadway Pavement Width L/R	28.00 / 28.00
Structural Spread Rate	220
Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
327-70-2	MILLING EXIST ASPH PAVT,3 1/2" AVG DEPTH	32,426.24 SY	\$4.09	\$132,623.32
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	3,566.89 TN	\$150.48	\$536,745.61
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	2,675.16 TN	\$186.51	\$498,944.09

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	2

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-1-3	RAISED PAVMT MARK, TYPE B	400.00 EA	\$4.57	\$1,828.00
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	3.95 GM	\$1,835.58	\$7,250.54
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	1.97 GM	\$615.18	\$1,211.90
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	3.95 GM	\$7,778.44	\$30,724.84
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	1.97 GM	\$1,502.31	\$2,959.55
711-16-201	THERMOPLASTIC, STD-OTH,YELLOW, SOLID, 6"	3.95 GM	\$5,824.93	\$23,008.47

Roadway Component Total \$1,235,296.32

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	80

Total Width (T) / 8" Overlap (O)	T
Rumble Strips 1/2 No. of Sides	0

Erosion Control

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-11	FLOATING TURBIDITY BARRIER	98.70 LF	\$14.17	\$1,398.58
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	98.70 LF	\$6.07	\$599.11
104-18	INLET PROTECTION SYSTEM	42.00 EA	\$161.20	\$6,770.40
107-1	LITTER REMOVAL	15.31 AC	\$48.60	\$744.07
107-2	MOWING	15.31 AC	\$70.36	\$1,077.21
Shoulder Component Total				\$10,589.37

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	40.00
Performance Turf Width	5.34
Total Median Shoulder Width L/R	8.00 / 8.00
Paved Median Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips 1/2 No. of Sides	0

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
570-1-1	PERFORMANCE TURF	3,092.07 SY	\$6.09	\$18,830.71
Median Component Total				\$18,830.71

SIGNALIZATIONS COMPONENT

Signalization 4

Description	Value
Type	Miscellaneous
Multiplier	1
Description	SR 78 (Pine Island Rd) at SR 45 (US 41 / Cleveland)

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
660-2-102	LOOP ASSEMBLY, F&I, TYPE B	8.00 AS	\$1,501.28	\$12,010.24

Signalization 5

Description	Value
Type	Miscellaneous
Multiplier	1
Description	SR 78 (Pine Island Rd) at Walmart ENT (Woodward Ave)

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
660-2-102	LOOP ASSEMBLY, F&I, TYPE B	4.00	AS	\$1,501.28	\$6,005.12

Signalization 6

Description	Value
Type	Miscellaneous
Multiplier	1
Description	SR 78 (Pine Island Rd) at Piney Rd (School ENT)

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
660-2-102	LOOP ASSEMBLY, F&I, TYPE B	4.00	AS	\$1,501.28	\$6,005.12

Signalizations Component Total \$24,020.48

Sequence 2 Total \$1,288,736.88

Sequence: 3 RSD - Resurfacing, Divided

Net Length: 0.706 MI
3,728 LF

Description: POP 3 (pavement, signal loops, pavement markings) 5 lane undivided - MP 15.728 TO MP 16.434 (FC-5)

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	5
Roadway Pavement Width L/R	23.00 / 33.00
Structural Spread Rate	220
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
327-70-15	MILLING EXIST ASPH PAVT,2 3/4" AVG DEPTH	23,194.45 SY	\$2.84	\$65,872.24
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	2,551.39 TN	\$150.48	\$383,933.17
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	927.78 TN	\$301.67	\$279,883.39

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	3

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-1-3	RAISED PAVMT MARK, TYPE B	381.00 EA	\$4.57	\$1,741.17
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	2.82 GM	\$1,835.58	\$5,176.34
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	2.12 GM	\$615.18	\$1,304.18
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	2.82 GM	\$5,945.12	\$16,765.24
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	2.12 GM	\$1,502.31	\$3,184.90
711-16-201	THERMOPLASTIC, STD-OTH,YELLOW, SOLID, 6"	2.82 GM	\$5,824.93	\$16,426.30

Roadway Component Total \$774,286.93

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	10.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	4.00 / 4.00
Paved Outside Shoulder Width L/R	6.00 / 6.00
Structural Spread Rate	165
Friction Course Spread Rate	80

Total Width (T) / 8" Overlap (O) 0
 Rumble Strips 1/2 No. of Sides 2

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
327-70-11	MILLING EXIST ASPH PAVT,2 1/4" AVG DEPTH	4,970.24 SY	\$3.62	\$17,992.27
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	410.04 TN	\$150.48	\$61,702.82
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	21.87 TN	\$301.67	\$6,597.52
546-72-3	GROUND-IN RUMBLE STRIPS, 8" SIN	1.41 GM	\$2,265.96	\$3,195.00
570-1-1	PERFORMANCE TURF	3,313.49 SY	\$6.09	\$20,179.15

Erosion Control

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-11	FLOATING TURBIDITY BARRIER	70.60 LF	\$14.17	\$1,000.40
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	70.60 LF	\$6.07	\$428.54
107-1	LITTER REMOVAL	9.67 AC	\$48.60	\$469.96
107-2	MOWING	9.67 AC	\$70.36	\$680.38
Shoulder Component Total				\$112,246.04

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	40.00
Performance Turf Width	5.34
Total Median Shoulder Width L/R	8.00 / 8.00
Paved Median Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips 1/2 No. of Sides	0

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
570-1-1	PERFORMANCE TURF	2,211.76 SY	\$6.09	\$13,469.62
Median Component Total				\$13,469.62

SIGNALIZATIONS COMPONENT

Signalization 7

Description	Value
Type	Miscellaneous
Multiplier	1
Description	SR 78 (Pine Island Rd) at SR 739 (US BUS 41)

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
660-2-102	LOOP ASSEMBLY, F&I, TYPE B	10.00 AS	\$1,501.28	\$15,012.80

Signalization 8

Description	Value
Type	Miscellaneous
Multiplier	1
Description	SR 78 (Pine Island Rd) at N Evalena Ln (Old Bridge Rd)

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
660-2-102	LOOP ASSEMBLY, F&I, TYPE B	4.00 AS	\$1,501.28	\$6,005.12

Signalizations Component Total \$21,017.92

Sequence 3 Total \$921,020.51

Sequence: 4 RSD - Resurfacing, Divided

Net Length: 0.589 MI
3,110 LF

Description: POP 4 (pavement, signal loops, pavement markings) 5 lane undivided - MP 16.434 TO MP 17.023 (FC-5)

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	5
Roadway Pavement Width L/R	34.00 / 23.00
Structural Spread Rate	220
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
327-70-15	MILLING EXIST ASPH PAVT,2 3/4" AVG DEPTH	19,696.16 SY	\$2.84	\$55,937.09
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	2,166.58 TN	\$150.48	\$326,026.96
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	787.85 TN	\$301.67	\$237,670.71

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	3

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-1-3	RAISED PAVMT MARK, TYPE B	318.00 EA	\$4.57	\$1,453.26
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	2.36 GM	\$1,835.58	\$4,331.97
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	1.77 GM	\$615.18	\$1,088.87
711-16-101	THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6"	2.36 GM	\$5,945.12	\$14,030.48
711-16-131	THERMOPLASTIC, STD-OTH, WHITE, SKIP, 6"	1.77 GM	\$1,502.31	\$2,659.09
711-16-201	THERMOPLASTIC, STD-OTH,YELLOW, SOLID, 6"	2.36 GM	\$5,824.93	\$13,746.83

Roadway Component Total \$656,945.26

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	10.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	4.00 / 4.00
Paved Outside Shoulder Width L/R	6.00 / 6.00
Structural Spread Rate	165
Friction Course Spread Rate	80

Total Width (T) / 8" Overlap (O) 0
 Rumble Strips 1/2 No. of Sides 2

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
327-70-11	MILLING EXIST ASPH PAVT,2 1/4" AVG DEPTH	4,146.56 SY	\$3.62	\$15,010.55
334-1-53	SUPERPAVE ASPH CONC, TRAF C, PG76-22	342.09 TN	\$150.48	\$51,477.70
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	18.24 TN	\$301.67	\$5,502.46
546-72-3	GROUND-IN RUMBLE STRIPS, 8" SIN	1.18 GM	\$2,265.96	\$2,673.83
570-1-1	PERFORMANCE TURF	2,764.37 SY	\$6.09	\$16,835.01

Erosion Control

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-11	FLOATING TURBIDITY BARRIER	58.90 LF	\$14.17	\$834.61
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	58.90 LF	\$6.07	\$357.52
107-1	LITTER REMOVAL	8.63 AC	\$48.60	\$419.42
107-2	MOWING	8.63 AC	\$70.36	\$607.21
Shoulder Component Total				\$93,718.31

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	40.00
Performance Turf Width	5.34
Total Median Shoulder Width L/R	8.00 / 8.00
Paved Median Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips 1/2 No. of Sides	0

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
570-1-1	PERFORMANCE TURF	1,845.22 SY	\$6.09	\$11,237.39
Median Component Total				\$11,237.39

SIGNALIZATIONS COMPONENT

Signalization 9

Description	Value
Type	Miscellaneous
Multiplier	1
Description	SR 78 (Pine Island Rd) at New Post Rd (Hart Rd)

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
660-2-102	LOOP ASSEMBLY, F&I, TYPE B	4.00	AS	\$1,501.28	\$6,005.12
	Signalizations Component Total				\$6,005.12
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Sequence 4 Total					\$767,906.08
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Sequence: 5 MIS - Miscellaneous Construction

Net Length: 0.000 MI
0 LF

Description: RRR items not included in POP Seq 1 - signing and transit (no drainage pay items for project),
guardrail

ROADWAY COMPONENT

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	195.50	TN	\$377.27	\$73,756.28
520-1-10	CONCRETE CURB & GUTTER, TYPE F	160.00	LF	\$43.13	\$6,900.80
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	420.00	SY	\$88.76	\$37,279.20
522-3	BUS BOARDING PAD- CONCRETE	40.00	SY	\$162.85	\$6,514.00
522-4	BUS SHELTER PAD- CONCRETE	7.00	SY	\$336.27	\$2,353.89
	Comment: Bench pad				
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	3,710.00	LF	\$30.01	\$111,337.10
536-73	GUARDRAIL REMOVAL	3,710.00	LF	\$2.19	\$8,124.90
536-85-20	GUARDRAIL END TREAT- TRAILING ANCHORAGE	10.00	EA	\$1,726.20	\$17,262.00
536-85-24	GUARDRAIL END TREATMENT- PARA APP TERM	10.00	EA	\$3,580.03	\$35,800.30
	Roadway Component Total				\$299,328.48

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-111	SINGLE COL GRND SIGN AS, F&I GM, <12 SF	353.00	EA	\$596.49	\$210,560.97
700-1-112	SINGLE COL GRND SIGN AS, F&I GM, 12-20	75.00	EA	\$1,847.26	\$138,544.50
700-1-600	SINGLE COL GRND SIGN AS, REMOVE	285.00	EA	\$29.83	\$8,501.55
700-2-114	MULTI- COLUMN SIGN, F&I GM, 30.1-50 SF	7.00	EA	\$7,891.68	\$55,241.76
700-2-115	MULTI- COLUMN SIGN, F&I GM, 50.1-100 SF	1.00	EA	\$13,959.97	\$13,959.97
700-2-600	MULTI- COLUMN GROUND SIGN, REMOVE	9.00	EA	\$1,159.36	\$10,434.24

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-113	SINGLE COL GRND SIGN AS, F&I GM, 20.1-30	1.00	EA	\$2,427.24	\$2,427.24
700-1-114	SNGL GRND SIGN AS, F&I GM, 30.1+ B2B	2.00	EA	\$3,136.92	\$6,273.84
700-1-914	SNGL GRND SIGN AS, F&I CANTILE GM, 30.1+	1.00	EA	\$4,766.73	\$4,766.73
700-2-113	MULTI- COLUMN SIGN, F&I GM, 20.1-30 SF	2.00	EA	\$6,532.20	\$13,064.40
700-13-15	RETROREFLECTIVE SIGN STRIP- F&I, 5'	176.00	EA	\$80.64	\$14,192.64
700-141-132	EHSA, AC, GROUND MT, EDS, 12-20 SF	4.00	EA	\$18,532.01	\$74,128.04
700-141-902	EHSA, AC POWER, REMOVE EDS - GM	4.00	EA	\$1,406.00	\$5,624.00

700-142-520	EHSA, SOL POWER, RETROFIT GM, 2 BEACONS	1.00 EA	\$12,629.69	\$12,629.69
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Signing Component Total				\$570,349.57
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Sequence 5 Total				\$869,678.05
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Sequence: 6 MIS - Miscellaneous Construction

Net Length: 0.000 MI
0 LF

Description: Hardened Centerlines - 9 signalized intersections including additional ped poles

ROADWAY COMPONENT

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-4-10	REMOVAL OF EXIST CONC	320.00	SY	\$50.32	\$16,102.40
520-1-10	CONCRETE CURB & GUTTER, TYPE F	420.00	LF	\$43.13	\$18,114.60
522-2	CONCRETE SIDEWALK AND DRIVEWAYS, 6"	460.00	SY	\$119.83	\$55,121.80
527-2	DETECTABLE WARNINGS	360.00	SF	\$35.34	\$12,722.40
570-1-2	PERFORMANCE TURF, SOD	100.00	SY	\$5.34	\$534.00
704-1-4	TUBULAR MARKER, 36" YELLOW POST	190.00	EA	\$247.14	\$46,956.60
711-11-123	THERMOPLASTIC, STD, WHITE, SOLID, 12"	2,292.00	LF	\$3.95	\$9,053.40
711-11-125	THERMOPLASTIC, STD, WHITE, SOLID, 24"	2,453.00	LF	\$7.11	\$17,440.83
711-15-201	THERMOPLASTIC, STD-OP, YELLOW, SOLID, 6"	0.13	GM	\$7,398.19	\$961.76
Roadway Component Total					\$177,007.79

SIGNALIZATIONS COMPONENT

Signalization 1

Description	Value
Type	Miscellaneous
Multiplier	1
Description	Old Bridge Rd

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	80.00	LF	\$16.62	\$1,329.60
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	280.00	LF	\$38.36	\$10,740.80
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	\$11,249.89	\$11,249.89
632-7-6	SIGNAL CABLE, REMOVE-INTERSECTION	1.00	PI	\$1,170.95	\$1,170.95
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	21.00	EA	\$1,401.59	\$29,433.39
646-1-11	ALUMINUM SIGNALS POLE, PEDESTAL	8.00	EA	\$3,226.51	\$25,812.08
646-1-60	ALUMINUM SIGNALS POLE, REMOVE	8.00	EA	\$413.42	\$3,307.36
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00	AS	\$1,203.83	\$9,630.64
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00	EA	\$372.36	\$2,978.88
671-2-40	TRAFFIC CONTROLLER, MODIFY	1.00	EA	\$2,862.61	\$2,862.61

Signalization 2

Description	Value
Type	Miscellaneous
Multiplier	1
Description	New Post Rd

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	60.00	LF	\$16.62	\$997.20
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	330.00	LF	\$38.36	\$12,658.80
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	\$11,249.89	\$11,249.89
632-7-6	SIGNAL CABLE, REMOVE- INTERSECTION	1.00	PI	\$1,170.95	\$1,170.95
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	15.00	EA	\$1,401.59	\$21,023.85
646-1-11	ALUMINUM SIGNALS POLE, PEDESTAL	6.00	EA	\$3,226.51	\$19,359.06
646-1-60	ALUMINUM SIGNALS POLE, REMOVE	6.00	EA	\$413.42	\$2,480.52
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	6.00	AS	\$1,203.83	\$7,222.98
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	6.00	EA	\$372.36	\$2,234.16
671-2-40	TRAFFIC CONTROLLER, MODIFY	1.00	EA	\$2,862.61	\$2,862.61
	Signalizations Component Total				\$179,776.22

Sequence 6 Total**\$356,784.01**

Sequence: 8 MIS - Miscellaneous Construction

Net Length: 0.000 MI
0 LF

Description: Inside curb at the median MP 12.107 to MP 14.741 (typical 1)

ROADWAY COMPONENT

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.55	AC	\$91,130.05	\$232,381.63
120-1	REGULAR EXCAVATION	1,030.19	CY	\$49.78	\$51,282.86
120-6	EMBANKMENT	4,120.75	CY	\$44.69	\$184,156.32
160-4	TYPE B STABILIZATION	7,983.95	SY	\$15.03	\$119,998.77
285-708	OPTIONAL BASE, BASE GROUP 08	7,983.95	SY	\$40.93	\$326,783.07
Roadway Component Total					\$914,602.65

SHOULDER COMPONENT

User Input Data

Description Value

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	27,815.04	LF	\$18.75	\$521,532.00
570-1-2	PERFORMANCE TURF, SOD	16,503.59	SY	\$5.34	\$88,129.17
Shoulder Component Total					\$609,661.17

Sequence 8 Total

\$1,524,263.82

Sequence: 9 MIS - Miscellaneous Construction

Net Length: 0.000 MI
0 LF

Description: Signalization - Updates to all signals. Includes mast arms replaced at Pondella Rd. (Merchant replacement was removed at TRM 9/29/25)

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 Comment: Signal 3 - Merchant's crossing Ent	4.00 EA	\$1,268.42	\$5,073.68
700-3-601	SIGN PANEL, REMOVE, UP TO 12 SF Comment: Signal 3 - Merchant's crossing Ent	2.00 EA	\$154.22	\$308.44
700-5-22	INTERNAL ILLUM SIGN, F&I OM, 12-18 SF	12.00 EA	\$8,174.29	\$98,091.48
700-5-60	INTERNAL ILLUM SIGN, REMOVE	11.00 EA	\$387.82	\$4,266.02
Signing Component Total				\$107,739.62

SIGNALIZATIONS COMPONENT

Signalization 1

Description	Value
Type	Miscellaneous
Multiplier	1
Description	SR 78 (Pine Island Rd) at Pondella Rd

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
611-1-1	ITSFM SUBSURFACE DOCUMENTATION- PROJ LEN	4.92 MI	\$2,886.63	\$14,202.22
611-2-1	ITSFM LOCATION DOCUMENTATION- INTERS	1.00 EA	\$2,532.91	\$2,532.91
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,040.00 LF	\$16.62	\$17,284.80
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	150.00 LF	\$38.36	\$5,754.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00 PI	\$11,249.89	\$11,249.89
635-2-19	PULL & SPLICE BOX,F&I,DIMENSIONS PER UAO	3.00 EA	\$1,176.81	\$3,530.43
649-21-15	STEEL MAST ARM ASSEMBLY, F&I, 70'	1.00 EA	\$116,834.53	\$116,834.53
649-26-5	STEEL MAST ARM ASSEMBLY, REMOVE	1.00 EA	\$17,679.96	\$17,679.96
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	4.00 AS	\$2,519.51	\$10,078.04
650-1-16	VEH TRAF SIGNAL,F&I ALUMINUM, 4 S 1 W	2.00 AS	\$2,967.98	\$5,935.96
650-1-60	VEH TRAF SIGNAL, REMOVE- POLES TO REMAIN	4.00 AS	\$343.13	\$1,372.52
650-2-102	VEHIC SIGNAL AUX, REP/RETROFIT- F&I, BAC	6.00 EA	\$970.38	\$5,822.28
660-4-12	VEHICLE DETECTION SYSTEM- VIDEO, ABOVE G	1.00 EA	\$8,499.36	\$8,499.36
660-4-60	VEHICLE DETECTION SYSTEM- VIDEO, REMOVE	1.00 EA	\$1,313.00	\$1,313.00

Signalization 2

Description	Value
Type	Miscellaneous
Multiplier	1
Description	SR 78 (Pine Island Rd) at 24th Ave (Hancock CRK Blvd)

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,120.00	LF	\$16.62	\$18,614.40
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	390.00	LF	\$38.36	\$14,960.40
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	\$11,249.89	\$11,249.89
635-2-19	PULL & SPLICE BOX,F&I,DIMENSIONS PER UAO	6.00	EA	\$1,176.81	\$7,060.86

Signalization 3

Description	Value
Type	Miscellaneous
Multiplier	1
Description	SR 78 (Pine Island Rd) at Merchants Crossing ENT (Judd Creek Blvd)

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	950.00	LF	\$16.62	\$15,789.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	360.00	LF	\$38.36	\$13,809.60
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	\$11,249.89	\$11,249.89
635-2-19	PULL & SPLICE BOX,F&I,DIMENSIONS PER UAO	6.00	EA	\$1,176.81	\$7,060.86
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	2.00	AS	\$2,519.51	\$5,039.02
650-1-16	VEH TRAF SIGNAL,F&I ALUMINUM, 4 S 1 W	4.00	AS	\$2,967.98	\$11,871.92
650-1-60	VEH TRAF SIGNAL, REMOVE-POLES TO REMAIN	4.00	AS	\$343.13	\$1,372.52
660-2-102	LOOP ASSEMBLY, F&I, TYPE B	4.00	AS	\$1,501.28	\$6,005.12
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	12.00	AS	\$1,844.15	\$22,129.80

Signalization 4

Description	Value
Type	Miscellaneous
Multiplier	1
Description	SR 78 (Pine Island Rd) at SR 45 (US 41 / Cleveland)

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,140.00	LF	\$16.62	\$18,946.80
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	510.00	LF	\$38.36	\$19,563.60
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	\$11,249.89	\$11,249.89

635-2-19	PULL & SPLICE BOX,F&I,DIMENSIONS PER UAO	4.00 EA	\$1,176.81	\$4,707.24
646-1-11	ALUMINUM SIGNALS POLE, PEDESTAL	6.00 EA	\$3,226.51	\$19,359.06
646-1-60	ALUMINUM SIGNALS POLE, REMOVE	3.00 EA	\$413.42	\$1,240.26
650-2-102	VEHIC SIGNAL AUX, REP/RETROFIT- F&I, BAC	10.00 EA	\$970.38	\$9,703.80
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	6.00 AS	\$1,203.83	\$7,222.98
653-1-60	PEDESTRIAN SIGNAL, REMOVE	6.00 AS	\$167.35	\$1,004.10
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	6.00 EA	\$372.36	\$2,234.16
665-1-60	PEDESTRIAN DETECTOR, REMOVE	6.00 EA	\$107.48	\$644.88

Signalization 5

Description	Value
Type	Miscellaneous
Multiplier	1
Description	SR 78 (Pine Island Rd) at Walmart ENT (Woodward Ave)

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	470.00	LF	\$16.62	\$7,811.40
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	200.00	LF	\$38.36	\$7,672.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	\$11,249.89	\$11,249.89
635-2-19	PULL & SPLICE BOX,F&I,DIMENSIONS PER UAO	3.00	EA	\$1,176.81	\$3,530.43
646-1-11	ALUMINUM SIGNALS POLE, PEDESTAL	4.00	EA	\$3,226.51	\$12,906.04
646-1-60	ALUMINUM SIGNALS POLE, REMOVE	3.00	EA	\$413.42	\$1,240.26
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	1.00	AS	\$2,519.51	\$2,519.51
650-1-16	VEH TRAF SIGNAL,F&I ALUMINUM, 4 S 1 W	1.00	AS	\$2,967.98	\$2,967.98
650-1-60	VEH TRAF SIGNAL, REMOVE- POLES TO REMAIN	1.00	AS	\$343.13	\$343.13
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	4.00	AS	\$1,203.83	\$4,815.32
653-1-60	PEDESTRIAN SIGNAL, REMOVE	4.00	AS	\$167.35	\$669.40
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	4.00	EA	\$372.36	\$1,489.44
665-1-60	PEDESTRIAN DETECTOR, REMOVE	4.00	EA	\$107.48	\$429.92

Signalization 6

Description	Value
Type	Miscellaneous
Multiplier	1
Description	SR 78 (Pine Island Rd) at Piney Rd (School ENT)

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
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630-2-11	CONDUIT, F& I, OPEN TRENCH	660.00 LF	\$16.62	\$10,969.20
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	330.00 LF	\$38.36	\$12,658.80
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00 PI	\$11,249.89	\$11,249.89
635-2-19	PULL & SPLICE BOX,F&I,DIMENSIONS PER UAO	5.00 EA	\$1,176.81	\$5,884.05
646-1-11	ALUMINUM SIGNALS POLE, PEDESTAL	6.00 EA	\$3,226.51	\$19,359.06
646-1-60	ALUMINUM SIGNALS POLE, REMOVE	6.00 EA	\$413.42	\$2,480.52
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	6.00 AS	\$1,203.83	\$7,222.98
653-1-60	PEDESTRIAN SIGNAL, REMOVE	6.00 AS	\$167.35	\$1,004.10
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	6.00 EA	\$372.36	\$2,234.16
665-1-60	PEDESTRIAN DETECTOR, REMOVE	6.00 EA	\$107.48	\$644.88

Signalization 7

Description	Value
Type	Miscellaneous
Multiplier	1
Description	SR 78 (Pine Island Rd) at SR 739 (US BUS 41)

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,270.00	LF	\$16.62	\$21,107.40
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	430.00	LF	\$38.36	\$16,494.80
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	\$11,249.89	\$11,249.89
646-1-11	ALUMINUM SIGNALS POLE, PEDESTAL	4.00	EA	\$3,226.51	\$12,906.04
646-1-60	ALUMINUM SIGNALS POLE, REMOVE	2.00	EA	\$413.42	\$826.84
650-2-102	VEHIC SIGNAL AUX, REP/RETROFIT- F&I, BAC	23.00	EA	\$970.38	\$22,318.74
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	4.00	AS	\$1,203.83	\$4,815.32
653-1-60	PEDESTRIAN SIGNAL, REMOVE	4.00	AS	\$167.35	\$669.40
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	4.00	EA	\$372.36	\$1,489.44
665-1-60	PEDESTRIAN DETECTOR, REMOVE	4.00	EA	\$107.48	\$429.92

Signalization 8

Description	Value
Type	Miscellaneous
Multiplier	1
Description	SR 78 (Pine Island Rd) at N Evalena Ln (Old Bridge Rd)

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	830.00	LF	\$16.62	\$13,794.60
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	30.00	LF	\$38.36	\$1,150.80

632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00 PI	\$11,249.89	\$11,249.89
635-2-19	PULL & SPLICE BOX,F&I,DIMENSIONS PER UAO	2.00 EA	\$1,176.81	\$2,353.62

Signalization 9

Description	Value
Type	Miscellaneous
Multiplier	1
Description	SR 78 (Pine Island Rd) at New Post Rd (Hart Rd)

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	940.00	LF	\$16.62	\$15,622.80
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	200.00	LF	\$38.36	\$7,672.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	\$11,249.89	\$11,249.89
635-2-19	PULL & SPLICE BOX,F&I,DIMENSIONS PER UAO	4.00	EA	\$1,176.81	\$4,707.24
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	2.00	AS	\$2,519.51	\$5,039.02
650-1-16	VEH TRAF SIGNAL,F&I ALUMINUM, 4 S 1 W	2.00	AS	\$2,967.98	\$5,935.96
650-1-60	VEH TRAF SIGNAL, REMOVE- POLES TO REMAIN	2.00	AS	\$343.13	\$686.26

Signalizations Component Total \$767,302.18

Sequence 9 Total \$875,041.80

Sequence: 10 MIS - Miscellaneous Construction

Net Length: 0.000 MI
0 LF

Description: Lighting - Pondella Rd., 24th Ave., Merchants Crossing Ent., SR 45, Wal-Mart Ent., Piney Rd., SR 739, N. Evalena, New Post Rd.

LIGHTING COMPONENT

Conventional Lighting Subcomponent

Description	Value				
Spacing	MAX				
Pay Items					
Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	17,430.00	LF	\$16.62	\$289,686.60
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	4,140.00	LF	\$38.36	\$158,810.40
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	52.00	EA	\$1,401.59	\$72,882.68
Subcomponent Total					\$521,379.68

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	3.00	AS	\$6,130.30	\$18,390.90
639-2-1	ELECTRICAL SERVICE WIRE, F&I	900.00	LF	\$12.78	\$11,502.00
639-3-11	ELEC SERV DISCON, F&I, POLE MNT	3.00	EA	\$1,607.82	\$4,823.46
715-1-12	LIGHTING CONDUCTORS, F&I, INSUL,NO.8-6	64,710.00	LF	\$2.65	\$171,481.50
715-5-31	LUMINAIRE & BRACKET ARM, F&I NEW	9.00	EA	\$3,440.91	\$30,968.19
715-5-51	LUMINAIRE & BRACKET ARM, REMOVE L &ARM	12.00	EA	\$500.00	\$6,000.00
715-7-11	LOAD CENTER, F&I, SECONDARY VOLTAGE	3.00	EA	\$24,517.83	\$73,553.49
715-11-211	LUMINAIRE ,F&I-REP EXIST, RDWY, COBRA H	19.00	EA	\$1,888.69	\$35,885.11
715-61-242	LIGHT POLE CMPLT,STD,F&I, 35'MH,12'ARM L	74.00	EA	\$9,987.73	\$739,092.02
715-65-266	LIGHT POLE CMPLT,UTILITY CONF,F&I, 35'MH	3.00	EA	\$15,973.98	\$47,921.94
715-69-000	LIGHT POLE COMPLETE, REMV POLE AND FND	11.00	EA	\$737.41	\$8,111.51
Lighting Component Total					\$1,669,109.80

Sequence 10 Total

\$1,669,109.80

Sequence: 11 MIS - Miscellaneous Construction

Net Length: 0.000 MI
0 LF

Description: TSM&O - all intersections - updated for FRAME

SIGNALIZATIONS COMPONENT

Signalization 1

Description	Value
Type	Miscellaneous
Multiplier	1
Description	TSM&O Items

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
660-1-110	LOOP DETECTOR INDUCTIVE, F&I, TYPE 10	78.00	EA	\$482.00	\$37,596.00
660-2-101	LOOP ASSEMBLY- F&I, TYPE A	67.00	AS	\$1,804.54	\$120,904.18
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	88.00	AS	\$1,844.15	\$162,285.20
660-4-11	VEHICLE DETECTION SYSTEM-VIDEO, CABINET	4.00	EA	\$13,597.54	\$54,390.16
660-4-12	VEHICLE DETECTION SYSTEM-VIDEO, ABOVE G	16.00	EA	\$8,499.36	\$135,989.76
670-5-600	TRAF CNTL ASSEM, REMOVE	9.00	AS	\$994.21	\$8,947.89
671-2-15	TRAFFIC CONTROLLER, ATC, F&I IN NEMA	9.00	EA	\$28,000.00	\$252,000.00
682-1-173	ITS CCTV CAMERA, F&I, NON-PRES, IP, HD	5.00	EA	\$7,643.94	\$38,219.70
685-1-13	UPS, F&I, LINE INTERACTIVE W CAB	9.00	EA	\$13,092.00	\$117,828.00
Signalizations Component Total					\$928,160.89

Sequence 11 Total

\$928,160.89

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 456240-1-52-01

Letting Date: 07/2028

Description: SR 78 FROM EAST OF DEL PRADO BOULEVARD TO E OF NEW POST ROAD

District: 01

County: 12 LEE

Market Area: 10

Units: English

Contract Class: 1 Lump Sum Project: N

Design/Build: N

Project Length: 4.916 MI

Project Manager: NEM-LAT-4P

Version 6-P Project Grand Total

\$21,835,161.64

Description: Copy V5 - change addition of inside shoulder to type E curb for typical 1 (Seq 8)- 1/16/26

Resurfacing Lane Mile Cost	\$1,041,753.90
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Project Sequences Subtotal	\$14,906,452.41
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102-1	Maintenance of Traffic	15.00 %	\$2,235,967.86
101-1	Mobilization	10.00 %	\$1,714,242.03

Project Sequences Total	\$18,856,662.30
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Project Unknowns	15.00 %	\$2,828,499.34
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	\$150,000.00	\$150,000.00

Project Non-Bid Subtotal	\$150,000.00
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Version 6-P Project Grand Total

\$21,835,161.64