

March 17, 2026

SR 552 at Dixie Belle Dr/Bahia Ave Traffic Signal Mast Arm Reconstruction

State Road Number: 552 (Curry Ford Rd)
 Section Number: 75012-000
 County: Orange
 Project Limits: Dixie Belle Dr/Bahia Ave intersections
 Begin MP/End MP: MP 0.995 to MP 1.039 (0.044 MI)
 FM: 457550-1

1. Existing R/W Map Project Numbers:	75012-2502 (1995); MP 1.101 to MP 2.639, var 50-ft LT & 53-ft RT (typ)			
2. Old Construction Project Numbers:	413601-1 (2005); MP 0.000 to MP 1.176, Mill & Resurface City of Orlando (1984); Dixie Belle Dr & Bahia Ave, Signal Rebuild 75620-3605 (1977); MP 0.000 to MP 1.451, Reconstruction 75620-3601 (1959); MP 0.000 to MP 2.634, Resurfacing			
3. Additional R/W required?	No.			
4. Level of Community Awareness Plan:	CAP Level 1, replace existing traffic signal mast arms.			
5. Agreements required?	☐ No ☒ Yes ☐ Yes, including Local Funds.			
6. Are there any bridges within the limits?	No.			
7. Are there any RR Crossings within the project limits or in the vicinity?	No.			
8. Are there any Airports within 10 nautical miles?	Yes.			
9. Storm Water Management jurisdiction:	SJRWMD.			
10. Is the Project within the CCCL (<i>Coastal Construction Control Line</i>)?	No.			
11. Existing Utilities: (per SS1C, as-builts, and field markers)	AT&T Florida Bright House Networks LLC dba Charter/Spectrum City of Orlando Water Reclamation Division Orlando Utilities Commission (OUC) – Electric Distribution & Transmission Orlando Utilities Commission (OUC) – Water Summit Broadband TECO Peoples Gas Verizon Business / MCI ZAYO Group			
12. Any special MOT concerns?	Maintaining intersection signal operations during reconstruction. Temporary intersection control/signalization is anticipated. Pedestrian detours and school crossings.			
13. Any construction concerns?	Signal work and proximity to overhead utilities, including electrical distribution and transmission lines, de-energization may be required.			
14. Design/Posted/Target Speeds (mph):	Facility	Design Speed	Posted Speed	Target Speed
	SR 552	45	40	N/A
	Dixie Belle Dr	30*	30	N/A
	Bahia Ave	25*	25	N/A
*Assumed to match posted.				
15. Design Criteria/ Context Class/ Access Class:	SHS, FDM (2026)			
	Facility	Context Classification		Access Class
	SR 552	C4 "Urban General"		05
	Dixie Belle Dr	Local Rd		N/A
	Bahia Ave	Local Rd		N/A
16. Lump Sum or Pay Item?	Pay Item.			
17. Proposed Design Schedule:	18-24 Months.			

The District has determined that this project is to be programmed as a mast arm replacement only, therefore additional roadway and roadside evaluation, analysis, improvements, etc. are not to be included. Work is limited

to replacing the existing deficient mast arms, drainage modifications to accommodate the proposed mast arm foundations, and associated site restoration. No additional intersection improvements or modifications are to be included.

The Engineer is responsible for verifying all items in the proposed scope and shall review the project for conformance with all applicable criteria and standards.

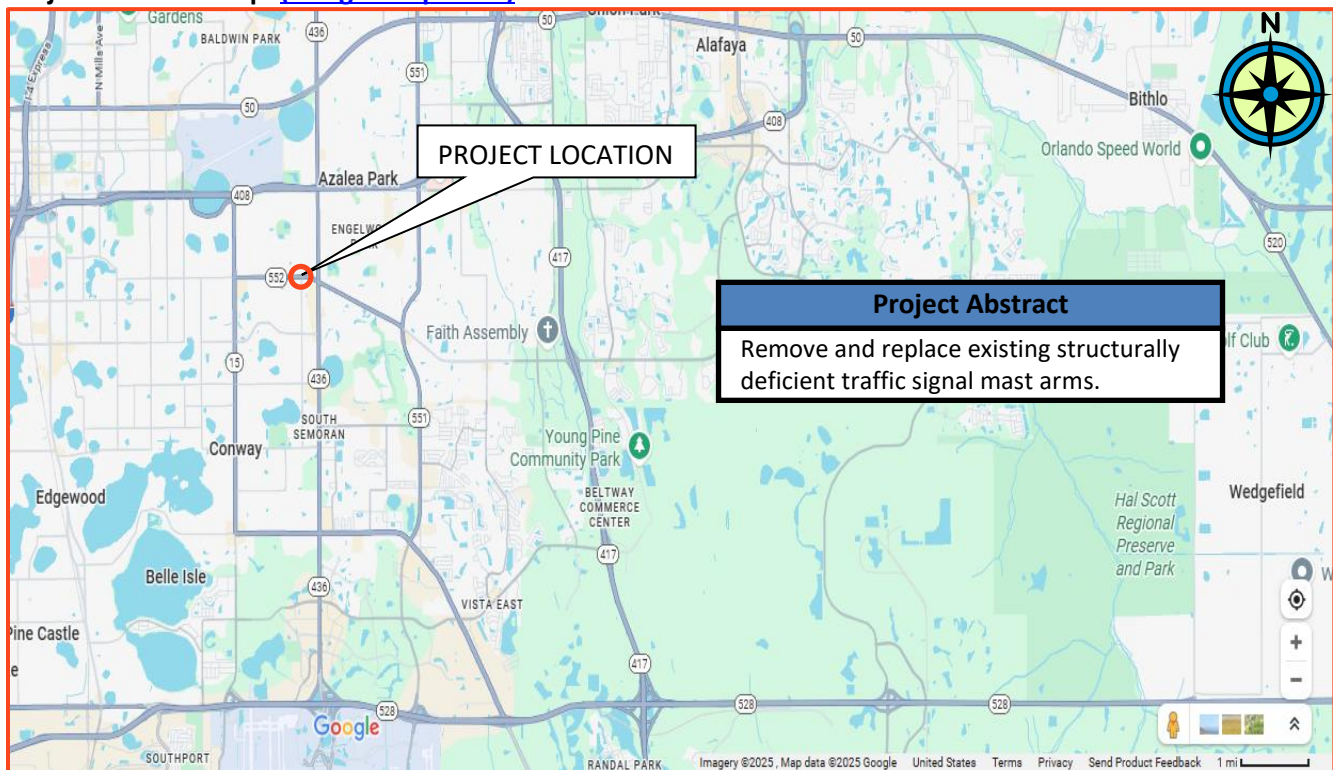
Local Agency Coordination:

Conduct a Stakeholder meeting during the design phase to confirm the proposed scope remains consistent with the expectations set during scoping, close the loop on what will be included in the project and learn of any changes that may have occurred since the Scope's development.

The Engineer shall coordinate to obtain an agreement, or modification to an existing agreement, with the City of Orlando for maintenance related to the proposed signal reconstruction, including paint color. District standard is to provide galvanized structural components.

An agreement will be needed if work is required within the City of Orlando's Right of Way.

Project Location Map: ([Google Maps Link](#))



Intent and Nature of Project:

The purpose of the project is to replace the structurally deficient traffic signal mast arms in accordance with FDOT Design Manual Section 114. Improvements are limited to replacing the existing mast arms and restoring areas disturbed by the mast arms reconstruction. The project is based on a request from the FDOT District 5 Traffic Operations Office to replace structurally deficient structures 75M113 (V1H1/V2H2) and 75M112 (V1H1/V2H2) as identified in the *Interim Inspection Report* completed by Ayres Associates, dated May 28, 2025, and subsequent Corrective Action Advisory, dated May 30, 2025. Additionally, the District Traffic Operations Office has requested the replacement of all signal structures at the intersection due to condition rating, including removal of the upright mounted signals.

- The Scope and Plan Sheets are provided to convey the general overall intent of the project and to establish the estimated cost for programming. These documents are not intended to serve as detailed design level directives but are to communicate the project's primary objectives as approved by District

staff. The Engineer is responsible for developing the final design within the constraints of the project budget while meeting the project's needs.

Project Description:

- Project is in central Orange County within the City of Orlando.
- SR 552 is classified as an urban minor arterial, Dixie Belle Dr and Bahia Ave are local roads.
- The following projects have been identified within the vicinity of this project. The FDOT PM is to confirm the status and proposed improvements, and coordinate project limits prior to advertisement.
 - FPID: 457859-1 candidate FY 30 SR 552 resurfacing from SR 15 (Conway Blvd) to SR 436 (S Semoran Blvd). This project is not yet funded for design or construction. The FDOT PM is Celine Bounds.
 - FPID: 457869-1 candidate FY 30 SR 436 resurfacing from TG Lee Blvd to SR 552 (Curry Ford Rd). This project is not yet funded for design or construction. The FDOT PM is Celine Bounds.
 - 992503-3 SR 552 at Dixie Bell Dr/Bahia Ave, a Traffic Operations Study has determined that a new crosswalk is warranted near the intersection in conjunction with the on-going emergency signal repairs as a Push-Button project. The FDOT PM is Matthew Richardson.
 - FDOT Connection Permit 20205-H-594-00504 SR 552 at Dixie Bell Dr – Underground utility work by OUC to install (5) 45 FT concrete poles, (5) switches, down guys and anchors, 705 LF of conduit with ground wire and underground wire via directional bore. OUC to remove (1) 40 FT concrete pole, down guys and anchors, (2) switches and 430 LF of overhead wire.

Typical Sections:

- Per as-built plans, the project includes 1 typical section. No changes are proposed.
 - SR 552 (Curry Ford Rd): Four lane divided curb and gutter roadway with an 11-ft inside lane, 12-ft outside lane, type F curb and gutter, a 5.25-ft grassed utility strip and 5-ft concrete sidewalk per direction, separated by a 15.5-ft type E curbed raised median.
 - Dixie Belle Dr: Two lane curb and gutter roadway with 12-ft travel lanes, type F curb and gutter, 5-ft sidewalks, and a 6-ft grassed utility strip (SB only), separated by an 11-ft two-way left turn paved median (3-lane section).
 - Bahia Ave: Two lane curb and gutter roadway with 12-ft travel lanes, type F curb and gutter, 11-ft grassed utility strip and 5-ft sidewalks on both sides.

- Per 2024 traffic data:

MP	TMS Site No.	AADT	T%
SR 552 (75012-000)			
0.260*	750491	29,500	1.5
1.346*	750492	32,000	2.7
Dixie Belle Dr (75000-191)			
0.500*	758126	9,200	5.4

*Not within the project limits, data provided for traffic characteristics only.

Roadway Scope Items:

- No impacts or changes to the existing roadway are anticipated.

Drainage Scope Items:

- The existing drainage structures and systems are to be maintained. No work.

Utility Scope Items:

- Quality Level A "QL A" utility information is anticipated.
- Adjust all valve covers, utility pull boxes, utility manholes, etc. to be flush with proposed sidewalk, ramps, and roadside, as necessary to complete the proposed improvements.
 - Due to proximity to overhead facilities, including electrical distribution and transmission, adjustment, relocation, or temporary de-energization may be required.
- The Engineer is to confirm utility poles and above ground utility features are shown on all applicable plan

sheets for the purpose of utility coordination.

- Mast arms, pedestrian poles, etc. must be Vvh'd, completed, and shown in the plans prior to the Phase II plans ERC submittal.

Multimodal Scope Items:

- The Engineer shall include a project-specific pedestrian/bicyclist temporary traffic control plan.
 - Note; marked School Zone and crossing guards present at the intersection.

Transit:

- LYNX Route 15 utilizes the SR 552 corridor. Route 6 crosses SR 552. Coordinate temporary and permanent changes that may affect these routes or stops.

Bicycles:

- There are no bicycle facilities within the project limits. No changes are proposed.

Pedestrians:

- There is complete sidewalk coverage.
- Reconstruct existing curb ramps and sidewalk impacted by the removal of the existing mast arms, construction of the proposed mast arms, and pedestrian signal equipment only. Existing ramps and sidewalk not impacted by the proposed mast arms are to remain. Crosswalks are assumed to remain.

Permitting Scope Items:

- Coordinate with FDOT, submitting a permit determination letter to the Environmental Permits Office, Attention District Five Permits Coordinator, for review and concurrence during the design process, considering the below descriptions of work and conditions.
 - This project is not anticipated to exceed one acre of soil disturbing activities and will not require NPDES coverage under the FDEP Generic Permit for Stormwater Discharge from Large and Small Construction Activities.

Environmental Scope Items:

- Complete an environmental assessment:
 - A protected species assessment is required for the project. The level of assessment should be commensurate with the scope of work. The assessment should focus on species applicable to the project area with consideration given to consultation areas, habitats, and known occurrence data.
 - A contamination assessment is required for the project. The level of documentation required will be dependent on the contamination sites in the area, scope of work proposed, and previous assessments conducted. Coordinate with the District Contamination Impact Coordinator to determine project needs.
- A Cultural Resources Assessment is required and is to be conducted by Cultural Resources Professionals as outlined in 36 CFR Part 61 and set forth in the Professional Qualifications Standards section of the Secretary of the Interior's Standard and Guidelines for Archaeology and Historic Preservation.

Structural Scope Items:

- A structural design and analysis will be required for the proposed mast arm and pedestal mounted assemblies. Standard assemblies are anticipated.

Traffic Operations (Includes Signing, Signals, ITS) Scope Items:

Signing and Pavement Markings

- Provide left turn arrows in the median for the eastbound left turn to Bahia Ave and westbound left turn to Dixie Belle Dr.

Signals

- All features added or modified should be designed "Accessible Pedestrian Signal Ready" to permit future upgrades without reconstructing curb ramps or relocating pedestrian poles to meet spacing requirements where practical.
- Complete analysis and plan detailing for the construction of a mast arm and pedestal mounted signal system at the intersection.

Candidate TSMA Reconstruction Project Technical Scope

- Remove the existing mast arm signal structures.
- Construct new mast arm signal structures.
 - Provide illuminated street name signs.
 - Provide retroreflective backplates for all approaches.
 - Provide a new controller assembly.
 - Provide video detection.
 - Coordinate with the utility provider to ensure a power source is available and adequate for the proposed signal work.
 - Provide 8 APS ready pedestrian assemblies.
 - Mast arm design to accommodate flexibility for future 4-section FYA's and future blank-out signs for all approaches per the District Traffic Operations Office.
 - Remove the existing temporary pedestal mounted signals and provide four pedestal mounted signal heads at the correct height for both the Bahia Ave and Dixie Belle Dr approaches. The District Traffic Operations Office has given preliminary approval for the proposed pedestal mounted heads to eliminate Right of Way acquisition.
 - Video detection and preemption equipment shall be mounted with the pedestal-mounted signal heads.
 - Existing mast arm mounted "No Turn on Red" signs for the Bahia Ave and Dixie Belle Dr approaches. New signal to accommodate replacement.
 - Existing mast arm mounted "Yield to Peds" blank-out sign for the Dixie Belle Dr approach. New signal to accommodate replacement.
 - Evaluate a Leading Pedestrian Interval (LPI) and implement if warranted.
 - Pole locations and configuration have not been cleared and are shown to convey intent. The Engineer is to determine the final locations and configuration.
 - Signal equipment shall be smart signal compatible.
 - Design is to limit impacts to existing utilities to the extent practical.

Intelligent Transportation Systems (ITS)

- Reconstruction of the signal is to be consistent with the ITS Master Plan. The Engineer;
 - Shall follow the Risk Assessment protocol, including Checklist and Systems Engineering analysis.
 - Shall design the signals to be smart signal compatible with the districtwide ATSPM database and future compatibility for CV, including enhanced detection.
 - Shall designate fiber in the plans, determine any conflicts and resolve.

Additional ITS guidance can be found here:

[https://www.cflsmartroads.com/projects/technical_docs.html#\(Designers\)](https://www.cflsmartroads.com/projects/technical_docs.html#(Designers))

Lighting Scope Items:

- Existing lighting is mast arm mounted luminaires at the intersection and utility pole mounted on both approach corridors.
 - Provide mast arm mounted luminaires.
 - Provide supplemental intersection lighting as necessary to restore removed mast arm mounted luminaires. Intent is to replace existing lighting and not an intersection lighting retrofit.

Landscaping Scope Items:

- No work.

Survey Scope Items:

Design Survey

- Provide 3D Topographic Survey for the areas and locations of proposed improvements. Total survey area will be determined by the Engineer based on their needs for design.
 - Survey should include all above ground surface features, including, but not limited to valve covers, overhead utilities, meter boxes, manholes, etc.
 - Include items identified by the environmental assessment.

Candidate TSMA Reconstruction Project Technical Scope

- Include drainage structures and nearest connecting structures shall be detailed within the survey areas only, unless otherwise instructed.
 - Obtain overhead line heights for the Engineer to evaluate mast arm clearances.
- Provide Quality Level “A” (QL A) Sub-surface Utility Engineering (SUE) and survey thereof for the areas and locations of proposed improvements. Total SUE limits will be determined by the Engineer based on the limits of disturbance.
 - Vvh’s are anticipated. Coordinate with the Engineer for anticipated number of Vvh’s required for the project.

Right of Way Mapping

- Establish the existing Right of Way for the areas and locations of proposed improvements based upon the best available evidence. The level of effort for this task will be unique for each project based on the proposed design and nature of the corridor. The District Right of Way Office has requested for the Right of Way to be staked prior to initiating design.
- Establish a computed survey baseline (baselines if needed) and provide to the Engineer for their plans. Stationing should be adjusted to be different than any historic alignment, as it should not be misconstrued as a retracement of the existing alignment.

Office of Right of Way Scope Items:

- No work.

Geotechnical and Pavement Scope Items:

- Perform and obtain the necessary geotechnical information as directed by the Geotechnical Office.
 - Soil boring(s) for the proposed signal structures.

Design Documentation:

- Structures Maintenance projects are exempt from Design Variation and Exception documentation other than for ADA curb ramp requirements. If compliance with ADA curb ramp requirements is determined to be technically infeasible within the project’s limitations, a Design Variation will be required.
- Design Variation Memorandum
 - None.
- Design Variation
 - None, pending ADA evaluation by the Engineer.
- Design Exception
 - None.

Additional Items Considered During Scoping:

- Existing curb ramps that meet ADA criteria for cross slope and longitudinal grade, but do not meet current FDOT Standard Plans, are to remain per the District Roadway Design Office.
- A median mast arm alternative was discussed during scope development. District preference is to avoid the introduction of a median hazard.