August 14, 2024

**452911-1: SR 424 from Lee Road to Forest City Road**

State Road Numbers: SR 424

Section Number: 75260000

County: Orange

Project Limits: SR 424 from Lee Road to Forest City Road

Begin MP/End MP: 4.211 – 4.882 (Length 0.710 MI)

FM: 452911-1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Existing R/W Map Project Numbers: | 75500-2607 (1975) | | | |
| Old Construction Project Numbers: | 415468-1 (2015) MP 2.62 – MP 4.85; Lighting  239422-1 (2015) MP 4.85 – MP 6.94; Add Lanes & Reconstruct  422011-1 (2012) MP 4.85 – MP 6.58; Resurfacing  424899-1 (2012) MP 2.27 – MP 4.78; Resurfacing  244783-1 (1998) MP 0.00 – MP 6.94; Landscaping  239503-1 (1998) MP 2.21 – MP 4.85; Resurfacing  241738-1 (1978); Preliminary Engineering | | | |
| Additional R/W required? | No | | | |
| Level of Community Awareness Plan: | CAP Level 2 (Urban Arterial Resurfacing) | | | |
| Agreements required? | No | | Yes | |
| Yes, including Local Funds. | | | |
| Are there any bridges within the limits? | No | | | |
| Are there any RR Crossings within the project limits or in the vicinity? | No | | | |
| Are there any Airports within 10 nautical miles? | Yes, Orlando Executive Airport | | | |
| Storm Water Management jurisdiction: | SJRWMD | | | |
| Is the Project within CCCL *(Coastal Construction Control Line)*? | No | | | |
| Existing Utilities per Sunshine One Call: | AT&T Corp  AT&T Distribution  Bright House Networks LLC dba Charter/Spectrum  City of Orlando Water Reclamation  City of Winter Park  Crown Castle NG (Fiber)  Duke Energy Distribution  Duke Energy Fiber  Duke Energy Transmission  Knology Broadband of Florida (Wide Open West)  Orange County Public Works  Orlando Utilities Commission  Smart City Telecommunications  Summit Broadband  Uniti Fiber LLC  Verizon Business/MCI  Windstream Communication  Zayo Group | | | |
| Any special MOT concerns? | No | | | |
| Any construction concerns? | No | | | |
| Posted/Design Speed Limits (mph):  Source:  FDOT SLD (Section Number: 75260000)  As-Builts (FPID 424899-1-52-01)  Target Speed Source: D5 Community Visioning | Milepost Range | Design | Posted | Target |
| 4.211 – 4.882 | 45 mph | 45 mph | 45 mph |
| Design Criteria and Highway System:  Source: FDOT RCI Database | SHS, FDM (2024), RRR | | | |
| Milepost Range | | Context Classification | |
| 4.211 – 4.882 | | C3C | |
| Lump Sum or Pay Item? | Pay Item | | | |
| Proposed Design Schedule: | 18-24 Months | | | |

# Agreements Required:

* None.

# Project Location Map:

Shape, arrow

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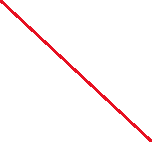
Description automatically generated with medium confidenceA map of a city

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**Project Abstract**

Mill and Resurface SR 424 pavement only.

BEGIN PROJECT LIMITS



END PROJECT LIMITS

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

# Intent and Nature of Project:

The purpose of this Pavement Only Project is to mill and resurface the existing pavement, rehabilitate the roadway sections that are in distress, and restore the final surface on SR 424 between Lee Road and Forest City Road.

# Project Description:

* Project is located along SR 424, from Lee Road to Forest City Road in northern Orlando, Florida within Orange County.
* SR 424 is classified as an Urban Minor Arterial with access classification 06 from MP 4.211 to MP 4.854 and access classification 05 from MP 4.854 to MP 4.882.
* There are currently two (2) active projects identified within the vicinity of this project:
  + 443816-1: SR 428 from Chantell Rd to SR 423 (John Young Pkwy) (MP 0.00 – MP 1.48); Resurfacing.
  + 432193-1: I-4 managed lanes from Kirkman to SR 434 (MP 9.23 – MP 24.67); Addition of Lanes/Reconstruction.
* The Tentative Work Program indicates the following efforts may be active within the immediate project vicinity:
  + 450531-1: SR 424 (Edgewater Dr) from South of Satel Drive to North of Aloha Street (0.092 miles); Traffic Signal Maintenance.
  + 239422-1: SR 434 from Forest City Road to Seminole County Line (2.113 miles); Widening.
  + 449214-1: SR 423 from Kingswood Drive to Adanson Street (0.449 miles); Pedestrian Safety Improvements.
  + 447104-1: US 441 from SR 50 to SR 414 Ramps (6.529 miles); Resurfacing.

# Typical Sections:

* Within project limits, the typical section along 75260000 (SR 424) is the following:
  + 4-lane, 2-way undivided Urban Minor Arterial highway with 10.5-foot travel lanes. The median is an 11-foot two-way left turn lane for driveway access movements. There are no inside shoulders, but there are 4-foot shoulders on the outside used as dedicated bicycle facilities. Type F Curb and Gutter is present on the outside throughout. No changes proposed.
* Lane width transitions to 12-feet on the approach towards the intersection at Forest City Road.
* Sidewalks are present on both sides of the corridor separated by utility strips. No changes to the typical section are being proposed.
* 2023 traffic data from FDOT GIS Data Hub:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Mile Post Limits | AADT | K (%) | D (%) | T (%) |
| 4.211 – 4.871 | 24.500 | 9.0 | 53.2 | 5.4 |

# Roadway Scope Items:

* Most recent milling & resurfacing project was completed in 2012 (424899-1). 2.5” of asphalt was removed and replaced with 1.5” Type-SP (Traffic C) and 1.0” FC-9.5 (Rubber, Traffic C).
* Mill and resurface existing asphalt pavement along SR 424, rehabilitate the roadway sections that are in distress, and restore the final surface.
* Cross slope correction:
  + MPSV data for this project has been requested; however, cross slope and superelevation correction are not to be included as components of this project.

# Drainage Scope Items:

* The primary goal for improvement along this corridor is to utilize the existing drainage system where feasible. Based on field observations, the existing drainage system appears to be functioning adequately, but the following items need attention:
  + Manhole at MP 4.85 is depressed and not flush with the pavement and needs to be adjusted to match new pavement. Coordinate this work with the roadway design office prior during negotiations to determine the appropriate course of action.
  + Excessive debris build-up within curb and gutter was noted at multiple locations affecting drainage flows, requiring maintenance.

# Utility Scope Items:

* Adjust all valve covers, utility pull boxes, fire hydrants, utility manholes, etc. to be flush with proposed sidewalk, ramps, roadside, and roadway pavement as necessary to complete the proposed improvements.
* The Engineer is to confirm that utility poles are shown in the plans.
* Quality Level C “QL C” utility information is anticipated.

# Multimodal Scope Items:

## Transit:

* LYNX routes 23 and 443 utilize the SR 424 corridor. Coordinate temporary or permanent changes that may affect these routes or stops.

## Bicycle facilities:

* Exclusive bicycle facilities are present on both sides of the corridor within the project limits between Lee Road and Forest City Road. No changes to these facilities are being proposed.

Pedestrian facilities:

* Reconstruct existing curb ramps that do not comply with minimum ADA criteria and ensure all ramps have detectable warning surfaces (DWS).
* A pedestrian-specific temporary traffic control plan should be provided to maintain connectivity within the corridor in the event of lane closures/detours during milling and resurfacing operations.

# 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.
* Wetlands were noted adjacent to the Right of Way and are not to be impacted. The apparent wetland lines shown on the Concept are from the Florida Geographic Data Library and are for informational purposes only.

# 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 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:

* There is one intersection within the project limits with existing mast arm assemblies (SR 424 and Lee Road)
* There are no bridges or culverts within the project limits; no scope relating to those structural assets.

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

## Signing and Pavement Markings

* Signing and Pavement Marking shall be completed for the proposed improvements. The Consultant will inventory all signing within the project limits, including evaluation for compliance with FDOT Specifications, FDM, Standard Plans, MUTCD, FHWA, etc. criteria. Any existing signs or pavement markings that conflict with the proposed signs or pavement markings or non-compliant signs or pavement markings shall be addressed in the plans.

## Signals (ITS)

* Signal detection is to be reestablished. Existing detection methods are provided within the table below.
* The project includes 2 signalized intersections:

|  |  |
| --- | --- |
| **MP 4.211- Lee Road (Mast Arms)** | |
| Detection | Inductive Loops |
| Backplates | Existing Retroreflective Backplates |
| Left Turns | All Protected/Permissive. |
| Pedestrian Signals | On Pedestrian Poles, Mast Arm, and Utility Pole |
| Other | CCTV Camera, GPS Preemption |

|  |  |
| --- | --- |
| **MP 4.871- Forest City Rd./John Young Parkway (Mast Arms)** | |
| Detection | Video |
| Backplates | Existing backplates. |
| Left Turns | NB/SB Protected. EB/WB Protected/Permissive |
| Pedestrian Signals | On Pedestrian Poles and Mast Arms |
| Other | CCTV Camera, GPS Preemption |

* Traffic Monitoring Sites within the project limits have been reviewed and the following recommendations coordinated with the Data Collection Manager:

|  |  |  |
| --- | --- | --- |
| **MP** | **TMS Site No. & Type** | **Recommendation** |
| 4.326 | 755218; PTMS | Coordinate disposition with the District Data Collection Manager, work is limited to removal of site or restoration of detection if the site is to remain. |

* Coordinate any signalization requirements including for lane closures/detours with Maintaining Agency.

## Intelligent Transportation Systems (ITS)

* Restoration of detection systems are anticipated and are to be consistent with the ITS Master Plan. The Engineer:
* Shall follow the Risk Assessment protocol, including Checklist and Systems Engineering analysis.
* 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)>

# Lighting Scope Items:

* No work.

# Landscaping Scope Items:

* No Work.

# Survey Scope Items:

* Obtain Design Survey for the areas and locations of identified and proposed improvements shown on the Concept. Total survey area will be determined by the Engineer based on the limits of disturbance.
  + Utility designates at a minimum in the areas of anticipated design.
  + Include items identified by the environmental assessment.

# Right of Way and Mapping Scope Items:

* No work.

# Geotechnical and Pavement Scope Items:

* Pavement Coring Report and Resilient Modulus values are to be provided by FDOT District Materials Office.
* ESAL Calculations to be provided by the FDOT District Planning Office.

# Design Documentation:

* POP 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 POP limitations, a Design Variation will be required.
* Design Variation Memorandum
  + None.
* Design Variation
  + None
* Design Exception
  + None.

# Candidate Project Development Considerations (items not to be included in final design):

* None.