



*Florida Department of Transportation*

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**TRAFFIC ENGINEERING AND OPERATIONS BULLETIN 23-01**


DATE: November 1, 2023

TO: District Traffic Operations Engineers, District Design Engineers,  
District Maintenance Engineers, District Program Management Engineers  
and Administrators, District Safety Administrators

FROM: Rudy Powell, P.E.  
Director, State Traffic Engineering and Operations Office

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SUBJECT: Release of the *2024 Traffic Engineering Manual*

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This bulletin announces the release of the *2024 Traffic Engineering Manual (TEM)*, which is available on the State Traffic Engineering and Operations website:  
<https://www.fdot.gov/traffic/TrafficServices/Studies/TEM/TEM.shtm>

**SUMMARY OF REVISIONS**

The TEM as a whole has received updates to links for outdated references and cross-referencing for tables and figures. Chapters 3, 4, and 5 have been completely rewritten to follow the Federal Plain Language Guidelines along with receiving an updated format. The following updates are also included in this release.

**Chapter 3: Signals**

- **All Sections:** Updated terminology to be consistent with current practices. Updated references to match current Florida Traffic Plans sign numbering.
- **Section 3.1.3 –FLASHING MODE APPLICATIONS:** Added guidance on when to choose red-red vs. yellow-red flashing mode. Updated language to include all turn arrow indications.
- **Section 3.1.6 – INTERSECTION CONTROL BEACONS INSTALLATION AND OPERATION REQUIREMENTS:** Updated guidance to clarify the requirements for new beacons.

- **Section 3.2 – GUIDELINES FOR LEFT TURN TREATMENT:** Added Variable Left-Turn Mode definition and display guidance.
- **Section 3.3 – SCHEDULING INTERSECTION CONTROL EVALUATIONS AND FUNDING ARRANGEMENTS:** Updated Traffic Signal Maintenance and Compensation Agreement procedure to match current practice.
- **Section 3.4.4 – EMERGENCY SIGNAL CONFIGURATION AND OPERATION:** Updated Figure 3.4-1 to match written guidance.
- **Section 3.5 – TRAFFIC SIGNAL MAST ARM SUPPORT BOUNDARIES:** Updated boundary map description.
- **Section 3.7.4 – APS REQUEST REVIEW PROCESS:** Clarified District Traffic Operations Engineer approval on Accessible Pedestrian Signals being required for intersection and midblock signals on the State Highway System.
- **Section 3.9 – INSTALLING RETROREFLECTIVE SIGNAL BACKPLATES ON EXISTING STRUCTURES:** Updated procedure for use of Flexible Retroreflective Backplates on existing mast arm and span wire structures.
- **Section 3.10 – FLASHING YELLOW ARROW SIGNAL APPLICATION:** Included background information on Flashing Red Arrow Signal Application. Clarified installation guidance on replacing a five-section signal head with a four-section Flashing Yellow Arrow signal head.

#### **Chapter 4: Markings**

- **Section 4.1 – CROSSWALKS IN HEAVY PEDESTRIAN CONCENTRATION AREAS:** Updated crosswalk width to 10 feet for midblock locations per Standard Plan Index 711 001
- **Section 4.1.2. END OF PEDESTRIAN CROSSING** sign updated from 8x3 to 8x4 per Standard Plan Index 700-102 and Speed Zoning Manual.
- **Section 4.2 – PAVEMENT WORD, SYMBOL, AND ARROW MARKINGS:** Clarified steps to complete a Request to Experiment for non-standard word or symbol pavement markings.
- **Section 4.2.3 – ROUTE SHIELD PAVEMENT MARKINGS:** Clarified District Traffic Operations Engineer approval responsibility regarding route shield applications.
- **Section 4.2.4 – ROUTE SHIELDS FOR WRONG WAY TREATMENT:** Updated section name to Route Shields for Interchange Access. Updated language description and images related to the E Bearss Avenue and I-275 interchange with current markings.
- **Section 4.5 – EXPRESS LANE MARKINGS:** Updated definitions for clarity.
- **Section 4.6 – USE OF INTERNALLY ILLUMINATED RAISED PAVEMENT MARKERS:** Included additional name of Internally Illuminated Raised Pavement Markers to improve cross-referencing between manuals.

#### **Chapter 5: Specialized Operational Topics**

- **Section 5.1 – GOLF CART CROSSING AND OPERATION ON THE STATE HIGHWAY SYSTEM:** Revised the definition of State Roadway.
- **Section 5.2.7.1 – PAVEMENT MARKINGS:** Additional guidance on the placement of W11-2 pavement markings.
- **Section 5.2.7.2 – SIGNS:** Updated coordination language for new Traffic Control Device installations.
- **Section 5.2.8 – TREATMENT OPTIONS SELECTION MATRIX:** Revised Midblock Crosswalk and Unsignalized Intersection Selection Guidance Matrix (Figure 5.2-13) to clarify treatment applications.

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## **COMMENTARY**

All revisions in this bulletin ensure accurate and consistent implementation.

## **IMPLEMENTATION**

These changes are effective on projects beginning design on or after January 1, 2024, and on projects currently in the design phase where implementation will not adversely impact production schedules.

## **CONTACT**

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