



Florida Department of Transportation

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DATE: January 18, 2007

TO: Registered Plans Preparation Manual Holders

FROM: David C. O'Hagan, P.E., State Roadway Design Engineer

CC: Lora Bailey Hollingsworth, Robert Robertson, Jim Mills, Tana Ashbaker

SUBJECT: IMPLEMENTATION - PLANS PREPARATION MANUAL
JANUARY 1, 2007 UPDATES

**THIS MEMORANDUM SERVES AS
ROADWAY DESIGN BULLETIN 07-01**

The January 1, 2007 Updates include:

1. Revisions to Plans Preparation Manual (PPM), Volume I, January 2007 (Topic No. 625-000-007).
2. Revisions to PPM, Volume II, January 2007 (Topic No. 625-000-008).

The major changes in design requirements are to be implemented as follows:

Volume I, Chapter 1, Section 1.9.1 Design Speed Coordination and Approvals

SUMMARY OF CHANGE:

This section has been updated to add the requirement for joint design speed approval by the District Design Engineer and the District Traffic Operations Engineer. This section has also been updated to add the requirement for documenting this joint approval in the Typical Section Package as described in Section 16.2.3.

Corresponding changes have been made to Chapter 16, Section 16.2.3, Exhibit 16-B and Section 25.4.4.

IMPLEMENTATION:

These changes are effective on all applicable projects where the Typical Section Package has not yet been approved.

Volume I, Chapter 2, Section 2.0 General

SUMMARY OF CHANGE:

This section has been updated to include guidance for SIS and Emerging SIS Highway Intermodal Connectors.

Corresponding changes have been made to the Volume 1 Introduction and Chapters 8, 21, and 25.

IMPLEMENTATION:

These changes are clarification of existing requirements.

Volume I, Chapter 2, Section 2.0 General

SUMMARY OF CHANGE:

This section has been updated to address the requirement that public facilities constructed or funded by FDOT shall comply with Department criteria and manuals.

IMPLEMENTATION:

These changes are effective on all applicable projects beginning immediately.

Volume I, Chapter 2, Table 2.9.10 Horizontal Clearance to Other Roadside Obstacles

SUMMARY OF CHANGE:

This table has been updated to reference the Florida Administrative Code Rules that contain bus shelter and bench placement requirements. Corresponding changes have been made to Section 4.6.5, Section 8.10, Table 21.5, and Table 25.4.14.9.

IMPLEMENTATION:

These changes are clarification of existing requirements.

Volume I, Chapter 2, Table 2.9.11 Horizontal Clearance for ITS Poles and Related Items

SUMMARY OF CHANGE:

This section has been updated to include horizontal clearance requirements specific to ITS poles and related items.

IMPLEMENTATION:

These changes clarify existing requirements and are effective on all applicable projects beginning immediately.

Volume I, Chapter 2, Section 2.14.4 Crossovers on Limited Access Facilities

SUMMARY OF CHANGE:

This section has been added to include criteria for when and where to place crossovers on limited access facilities and approval requirements for crossovers that cannot meet the criteria. New Figures 2.14.1, 2.14.2 and 2.14.3 showing typical layouts for the design of median crossovers have also been added to this section. Corresponding changes have been made to Section 25.1.2 to address requirements for existing median crossovers on Interstate highways and freeways.

IMPLEMENTATION:

These changes are based on the [Roadway Design Bulletin 06-09](#) and were effective on all applicable projects as described in the design bulletin.

Volume I, Chapter 4, Table 4.3.1 Minimum Offset of Barriers

SUMMARY OF CHANGE:

Changes were made to this table regarding the Policy for Miscellaneous Attachments to Traffic Railings/Barriers. Specifically, a note was added containing additional offset requirements for hazards that extend above the top of a barrier wall.

IMPLEMENTATION:

These changes are based on the [Roadway Design Bulletin 06-05 / Structures Temporary Design Bulletin C06-05](#) and were effective on all applicable projects as described in the design bulletin.

Volume I, Chapter 5, Section 5.1 General

SUMMARY OF CHANGE:

This section has been updated to add language regarding the consideration of Subsurface Utility Engineering selection methods in the scoping process. Corresponding changes have been made in Section 13.3.

IMPLEMENTATION:

These changes are guidelines and considerations that are effective immediately.

Volume I, Chapter 6, Section 6.3.4 Crash Walls

SUMMARY OF CHANGE:

This section has been updated to add reference to the Structures Design Guidelines for crash wall requirements. The Crash Wall Elevation figure (Figure 6.2) was also removed.

Corresponding changes were made to Section 25.1.2, and 25.4.26.1, and a new Section 25.4.25.6 (Pier Protection and Design) was added.

IMPLEMENTATION:

These changes are based on the [Roadway Design Bulletin 06-10 / Structures Temporary Design Bulletin C06-06](#) and were effective on all applicable projects as described in the design bulletin.

Volume I, Chapter 7, Section 7.2.1 Design Criteria

SUMMARY OF CHANGE:

This section has been changed to include the requirement for the lamp type for signs to be specified in the plans. Clarification has also been given that Table 7.2.1 is based on 175 watt mercury vapor deluxe white lamps.

IMPLEMENTATION:

These changes correspond with changes made to Interim Design Standard 17505 and are effective on all applicable projects beginning with the July 2008 letting.

Volume I, Chapter 7, Section 7.2.2 Wind Loading Criteria

SUMMARY OF CHANGE:

The wind loading criteria for signs has been updated based on changes in the wind pressure computation on all sign structures.

IMPLEMENTATION:

These changes are based on the [January 8, 2007 Basis of Estimates Summary of Major Changes \(“Cover Letter”\)](#) and are effective for ground signs on all applicable projects beginning with the July 2007 letting, and are effective for overhead signs on all applicable projects beginning with the January 2008 letting.

Volume I, Chapter 7, Section 7.2.8 Guidance on Use of Various Pavement Marking Materials

SUMMARY OF CHANGE:

This section has been added to provide some guidance on the selection of pavement marking materials to be used during maintenance of traffic operations or in permanent marking applications.

IMPLEMENTATION:

These changes are guidelines and considerations that are effective immediately.

Volume I, Chapter 7, Section 7.3.2.2 Standard Aluminum Light Poles

SUMMARY OF CHANGE:

The wind loading criteria for standard aluminum light poles has been updated based on changes in the wind pressure computation on all lighting structures.

IMPLEMENTATION:

These changes are based on the [January 8, 2007 Basis of Estimates Summary of Major Changes \(“Cover Letter”\)](#) and are effective on all applicable projects beginning with the January 2008 letting.

Volume I, Chapter 7, Section 7.4.12 Mast Arm Supports

SUMMARY OF CHANGE:

The wind loading criteria for mast arms has been updated based on changes in the wind pressure computation on all signal structures.

IMPLEMENTATION:

These changes are based on the [January 8, 2007 Basis of Estimates Summary of Major Changes \(“Cover Letter”\)](#) and are effective on all applicable projects beginning with the January 2008 letting.

Volume I, Chapter 7, Section 7.4.14 LED Light Sources

SUMMARY OF CHANGE:

This section has been updated to require the LED as the standard for all signal indications.

IMPLEMENTATION:

This change is effective on all applicable projects beginning immediately.

Volume I, Chapter 7, Section 7.5 ITS Components

SUMMARY OF CHANGE:

This section has been updated to include new design criteria and ITS components. Corresponding changes have been made to Volume 2, Chapter 29.

IMPLEMENTATION:

The following changes are effective on all applicable projects beginning immediately:

Dynamic Message Signs,	Highway Advisory Radio,
Closed-circuit Television Cameras,	Video Displays,
Network Devices,	Fiber Optic Cable & Interconnect,
Grounding and Surge Suppression,	Pole and Lowering Device

The changes regarding Vehicle Collection and Data Collection are effective on applicable projects beginning design on or after January 1, 2007.

The changes regarding ITS Field Cabinet are effective on all applicable projects beginning with the July 2007 letting.

The changes regarding Road Weather Information System, and ITS Equipment Shelter are effective on applicable projects beginning with the January 2008 letting

Volume I, Chapter 8, Section 8.7 Bridges, Overpasses, and Underpasses

SUMMARY OF CHANGE:

This section has been revised to update the requirements for pedestrian and shared use path bridges.

IMPLEMENTATION:

These changes are based on [Structures Temporary Design Bulletin C06-07](#) and were effective on all applicable projects as described in the design bulletin.

Volume I, Chapter 9, Section 9.1 General

SUMMARY OF CHANGE:

This section has been updated to include new view zone requirements for legally permitted outdoor advertising signs. Corresponding changes have been made to Section 32.4 and Volume 2, Section 26.5.2.

IMPLEMENTATION:

These changes are based on House Bill 273-Outdoor Advertising and are already in effect.

Volume I, Chapter 9, Section 9.4 Community Identification Structures and Landscapes (CISL)

SUMMARY OF CHANGE:

This section was updated to clarify that the criteria in this section do not apply to Place Name Signs. Requirements for Place Name Signs are in Rule 14-51 Part IV Place Name Signs:

IMPLEMENTATION:

This change is clarification of existing requirements already in effect.

Volume I, Chapter 10, Transportation Management Plan

SUMMARY OF CHANGE:

Chapter 10 has been renamed and revised based on the Final Rule on Work Zone Safety and Mobility. Corresponding changes have been made to Volume 2, Chapter 19, Temporary Traffic Control Plan.

IMPLEMENTATION:

These changes are based on the Final Rule on Work Zone Safety and Mobility (23 CFR 630 Subpart J), and are effective on all applicable projects beginning with the October 2007 letting.

Volume I, Chapter 12, Section 12.2.1 Open Cut and Fill Roadway Section

SUMMARY OF CHANGE:

This section was updated to add consideration for joint use ponds (including golf course ponds) and/or regional treatment facilities.

IMPLEMENTATION:

This change is effective on all applicable projects beginning immediately.

Volume I, Chapter 13, Section 13.5.5 Buy America Provisions

SUMMARY OF CHANGE:

This section has been added to address the Buy America Provisions, established in CFR 635.410. Those provisions require that on all Federal-Aid highway construction projects, if steel or iron materials are to be used, all manufacturing processes for those materials must occur in the United States.

IMPLEMENTATION:

This change are based on the [Roadway Design Bulletin 05-08 / Structures Temporary Design Bulletin C05-18](#) and clarifies requirements already in effect as described in the design bulletin.

Volume I, Chapter 13, Section 13.5.6 Traffic Monitoring Sites

SUMMARY OF CHANGE:

This section has been added to address the consideration of traffic monitoring sites on construction projects.

IMPLEMENTATION:

This change is taken from the Work Program Instructions and is already in effect.

Volume I, Chapter 15, Section 15.2 Design Update Review and Decision Process

SUMMARY OF CHANGE:

This section has been updated with the requirement for Design Exceptions and Variations to be resubmitted on projects going through the update engineering design process.

IMPLEMENTATION:

This change is effective on all applicable projects beginning immediately.

Volume I, Chapter 19, Section 19.2.2 Electronic Sealing

SUMMARY OF CHANGE:

This section has been changed to include the Rules for Landscape Architects and Architects in the electronic signature note.

IMPLEMENTATION:

These changes reference changes in the Rules that are already in effect.

Volume I, Chapter 20, Section 20.4 Revisions to the Contract Plans Package

SUMMARY OF CHANGE:

This section has been changed to update the definition of “Design Revisions” and the use of the revision number. Corresponding changes have been made to the Revision Memo (Exhibit 20-C), and in Volume 2, Section 3.11.

IMPLEMENTATION:

These changes are effective on applicable projects beginning immediately.

Volume I, Chapter 20, Exhibit 20-A Transmittal of Plans, Specifications, and Estimates Package

SUMMARY OF CHANGE:

This transmittal has been updated to include TRNS*PORT Site Record information under Alternative Contracting.

IMPLEMENTATION:

These changes are effective on applicable projects beginning immediately.

Volume I, Chapter 20, Exhibit 20-B Contract File Index

SUMMARY OF CHANGE:

The Contract File Index has been updated to include the FHWA Cost Estimate Summary Sheet as an attachment for federally funded projects.

IMPLEMENTATION:

These changes are effective on applicable projects beginning immediately.

Volume I, Chapter 20, Exhibit 20-D Status of Environmental Certification

SUMMARY OF CHANGE:

The Status of Environmental Certification memo has been updated.

IMPLEMENTATION:

These changes are effective on applicable projects beginning immediately.

Volume I, Chapter 23 Exceptions and Variations

SUMMARY OF CHANGE:

This chapter has been completely rewritten to clarify and simplify the description of the exception and variation processes.

Also, the criteria tables in this chapter have been updated to include references to the 2004 AASHTO where applicable.

IMPLEMENTATION:

These changes clarify existing requirements and are effective on applicable projects beginning immediately.

Volume I, Chapter 25, Section 25.2.4 Ride Rehabilitation Projects

SUMMARY OF CHANGE:

This section was added to identify which types of projects can be programmed as Ride Rehabilitation Projects.

IMPLEMENTATION:

These changes are effective on applicable projects beginning immediately.

Volume I, Chapter 29 Structural Supports for Signs, Luminaires, and Traffic Signals

SUMMARY OF CHANGE:

This chapter has been completely rewritten.

IMPLEMENTATION:

The changes regarding standard single column ground signs and standard multipost ground signs are effective on applicable projects beginning with the July 2007 letting.

The remainder of changes in this chapter are effective on applicable projects beginning with the January 2008 letting.

Volume I, Chapter 32, Section 32.3 Noise Abatement Criteria

SUMMARY OF CHANGE:

The cost per benefited receiver site was increased to \$42,000 and the average unit cost of sound barriers to be used in the calculation of the cost/benefited receiver was increased to \$30.00/ft².

IMPLEMENTATION:

These changes are effective on all applicable projects beginning the PD&E phase on or after January 1, 2007. These changes may also be applied to projects currently in the PD&E or Design phase at the District's discretion; however, the Noise Study Report must be updated to reflect the new costs.

Volume I, Chapter 33 Reinforced Concrete Box and Three-Sided Culverts

SUMMARY OF CHANGE:

This chapter has been added to provide requirements for reinforced concrete box and three-sided culverts. Corresponding changes have been made in Volume 2, Section 7.3, Section 22.4 and Section 22.5.

IMPLEMENTATION:

These changes are based on the [January 8, 2007 Basis of Estimates Summary of Major Changes \(“Cover Letter”\)](#) and are effective for reinforced concrete box culverts on all applicable projects beginning with the [July 2007 letting](#), and are effective for [three-sided concrete culverts](#) on all applicable projects beginning with the [January 2007 letting](#).

Volume II, Chapter 1, Section 1.3 Displaying Information and Data

SUMMARY OF CHANGE:

This section was changed to update accuracy of proposed flow lines from 1 decimal place to 2 decimal places.

IMPLEMENTATION:

This change is effective on applicable projects beginning design on or after January 1, 2007, however it may be applied to projects currently underway at the discretion of the design engineer of record.

Volume II, Chapter 1, Section 1.5 Plan Notes

SUMMARY OF CHANGE:

This section was added to clarify the use of plan notes.

IMPLEMENTATION:

This change is effective on applicable projects beginning design on or after January 1, 2007, however it may be applied to projects currently underway at the discretion of the design engineer of record.

Volume II, Chapter 3, Section 3.6 Index of Sheets

SUMMARY OF CHANGE:

This section has been updated to address several types of sheets that may have been prepared separately and added to the plans prior to the sheet numbering being established. These sheets have been assigned sheet number prefixes and they will be placed at the end of the numbered sequence of plans. Corresponding changes have been made to Sections 23.1, 24.1, and 25.1.

IMPLEMENTATION:

These changes may be used on applicable projects beginning immediately.

Volume II, Chapter 3, Section 3.8 Governing Specifications and Standards

SUMMARY OF CHANGE:

This section has been updated to clarify that the “Governing Specifications and Standards Note” and the “Design Standards Modifications Note” are not to be shown on the key sheets of component plans that are listed on the lead key sheet of a plan set.

IMPLEMENTATION:

These changes are effective on applicable projects beginning immediately.

Volume II, Chapter 7, Exhibit 7-1 Standard Notes for Summary of Quantities Sheet

SUMMARY OF CHANGE:

This Exhibit was updated to remove the pay item note for 104-10-1 (Baled Hay or Straw) because of the implementation of synthetic bales. Corresponding changes have also been made in Volume 2, Chapter 28 (Exhibits SWP-2 and SWP-3.)

This exhibit was also updated to remove the pay item notes for temporary grassing, replacing them with appropriate notes for temporary turf. Corresponding changes have also been made to Volume 1, Section 25.4.8 and Volume 2, Chapter 6 (Exhibits TYP-1 thru TYP-16), and Chapter 28 (Exhibit SWP-2.)

This exhibit was also updated to include a note to address the appropriate use of 104-4 (Mowing).

IMPLEMENTATION:

The changes regarding baled hay or straw are based on the [April 26, 2006 Basis of Estimates Summary of Major Changes \(“Cover Letter”\)](#) and are effective on all applicable projects beginning with the January 2007 letting.

The changes regarding performance turf are based on [Roadway Design Bulletin 06-05](#) and are effective on all applicable projects beginning with the January 2007 letting.

The changes regarding mowing are based on [Roadway Design Bulletin 06-11 / Estimates Office Bulletin 06-01](#) and are effective on all applicable projects as described in the bulletin.

Volume II, Chapter 26, Chapter 26 Landscape Plans

SUMMARY OF CHANGE:

This chapter has been updated added to reflect changes to the “Tabulation of Quantities and Plant Schedule”, the “Tabulation of Quantities and Schedule for Irrigation and Site Amenities”, and “General Notes” sheets. Corresponding changes have been made to Chapter 2.

IMPLEMENTATION:

This change is effective on applicable projects beginning design on or after January 1, 2007.

**Implementation of January 1, 2007 Updates to the Plans Preparation Manual
January 18, 2007**

All other changes in the January 1, 2007 Plans Preparation Manual Update Package primarily consist of minor editing, updated references, clarification and/or error corrections and are effective immediately.

If you have any questions, please contact this office at (850)414-4356.