

Florida Department of Transportation

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DATE: September 28, 2000

TO: Registered Plans Preparation Manual Holders

FROM: Billy Hattaway, P.E.

State Roadway Design Engineer

CC: Freddie Simmons, William Nickas, Jim Mills

SUBJECT: IMPLEMENTATION - PLANS PREPARATION MANUAL

JANUARY 2001 UPDATES

The January 2001 Updates include:

- 1. Revisions to Plans Preparation Manual, Volume I Metric, January, 1998.
- 2. Revisions to Plans Preparation Manual, Volume II Metric, January, 1999.
- 3. Revisions to Plans Preparation Manual, Volume I English, January, 2000.
- 4. Revisions to Plans Preparation Manual, Volume II English, January, 2000.

The revisions to the English and Metric manuals are nearly identical except for units of measure. The major changes in design requirements included in both the English and Metric revisions are to be implemented as follows:

<u>Volume I, Chapter 1, Section 1.7.1 Transportation Design for Livable Communities</u> (TDLC)

SUMMARY OF CHANGE:

This section has been revised to reference the new TDLC chapter (Chapter 21). Changes have also been made to Table 1.9.1 to incorporate TDLC design speeds.

IMPLEMENTATION:

These changes may be implemented on applicable projects beginning immediately. These changes apply to both Metric and English Projects.

Volume I Chapter 2, Section 2.5.1 Limited Access Facilities

SUMMARY OF CHANGE:

Section 2.5.1 has been added to include a new requirement for fencing (or other treatment) on Limited Access facilities.

IMPLEMENTATION:

The general requirement for fencing on Limited Access facilities is a clarification of existing requirements and is effective immediately.

This change applies to both Metric and English Projects.

Volume I Chapter 2, Section 2.5 Borders, Table 2.5.1 Highways with Flush Shoulders

SUMMARY OF CHANGE:

Table 2.5.1 has been revised to show the measurement of the border width for freeways (including ramps) from the edge of the outside travel lane. Corresponding changes were made to Exhibits TYP-10, TYP-11, and TYP-12 (English only)

IMPLEMENTATION:

This change is a correction to existing requirements and is effective immediately.

This change applies to both Metric and English Projects.

Volume I Chapter 2, Section 2.10.1 Vertical Clearance

SUMMARY OF CHANGE:

The minimum vertical clearance above Mean High Water (MHW) has been corrected.

IMPLEMENTATION:

This change is a correction and is effective immediately.

These changes apply to both Metric and English Projects.

Volume I Chapter 2, Section 2.12 Bridge Railings and Separators

SUMMARY OF CHANGE:

Section 2.12 has been added to address the applications of different bridge rail types as detailed in the new Figures 2.12.1 thru 2.12.4. Corresponding changes have been made to Figures 2.0.1 thru 2.0.4.

IMPLEMENTATION:

These changes are clarification of existing guidance and are to be implemented on all projects beginning design as of January 1, 2001.

These changes apply to both Metric and English Projects.

Volume I Chapter 4, Roadside Safety

SUMMARY OF CHANGE:

Section 4.2 has been renamed Hazard Standards and expanded to include a new section, 4.2.2, on Drop-off Hazards. This section defines drop-off hazards and provides guidelines for shielding them. A new corresponding figure has also been added (Figure 4.2.2 - Drop-Off Hazards in Urban Sections).

Because of this new section on drop-off hazards, the bullet on roadside barrier requirements for vertical drop-offs created by retaining walls has been removed from Section 4.3.1.

IMPLEMENTATION:

The general requirement that roadside vertical drop-offs be addressed is a clarification and is not new. New design criteria values for drop-off hazards are to be implemented on all projects beginning design as of January 1, 2001.

This change applies to both Metric and English Projects.

Volume I Chapter 7, Section 7.3.2.2 Standard Aluminum Light Poles

SUMMARY OF CHANGE:

This section has been added to address the use of Standard Aluminum Light Poles.

IMPLEMENTATION:

The new Standard Aluminum Light Pole is available. Interim Index 17515, Standard Aluminum Light Pole has been issued and may be used on projects beginning with the July 2001 letting. This change applies to both Metric and English Projects.

Volume I Chapter 7, Section 7.4.12.2 Standard Monotube Signal Structures

SUMMARY OF CHANGE:

This section has been added to address the use of Standard Monotube Signal Structures.

IMPLEMENTATION:

The new Standard Monotube Signal Structure is available. Interim Index 17746, Standard Monotube Signal Structure has been issued and may be used on projects beginning with the July 2001 letting.

This change applies to both Metric and English Projects.

Volume I Chapter 7, Section 7.4.14 LED Light Sources

SUMMARY OF CHANGE:

This section has been added to reference the Light Emitting Diode (LED) as the new Department standard for the red indication of traffic signals. Incandescent lamps will remain the standard for the yellow and green indications.

IMPLEMENTATION:

The new LED criteria is effective on all projects beginning with the January 2001 letting. This change applies to both Metric and English Projects.

Volume I Chapter 8, Pedestrian and Bicycle Facilities

SUMMARY OF CHANGE:

Sections 8.3.3 and 8.4.4 regarding Pedestrian and Bicycle Railings have been deleted. This information has been included in the new Section 8.8 Drop-off Hazards for Pedestrians and Bicyclists. Also new is the corresponding figure for this section, Figure 8.2.

Section 8.7, Shared Use Paths, has several changes and clarification regarding drop-offs, railings and grades.

IMPLEMENTATION:

These changes are to be implemented on all applicable projects beginning design as of January 1, 2001.

These changes apply to both Metric and English Projects.

Volume I Chapter 9, Landscaping

SUMMARY OF CHANGE:

Language has been added to this chapter regarding requirements for wildflower use.

IMPLEMENTATION:

This change has previously been implemented by Federal requirement.

This change applies to both Metric and English Projects.

Volume I Chapter 10, Section 10.14.7 Lane Closure Analysis

SUMMARY OF CHANGE:

Section 10.14.7 and its exhibits (10-A Sheets 1 thru 11) have been changed to clarify the use of the Peak Season Conversion Factor (PSCF) in a Lane Closure Analysis.

IMPLEMENTATION:

These changes are clarification to existing requirements and are effective immediately.

These changes apply to both Metric and English Projects.

Volume I Chapter 10, Section 10.17 Motorist Awareness System

SUMMARY OF CHANGE:

This section has been added to reference the purpose, uses, and components of a Motorist Awareness System (MAS). Corresponding changes have been made to Sections 10.4 and 10.8 to add a bullet for MAS in each section.

IMPLEMENTATION:

The MAS may be used on approved, applicable projects beginning with the July 2001 letting. Construction may implement the use of a MAS prior to July 2001 by Construction Supplemental Agreement.

These changes apply to both Metric and English Projects.

Volume I Chapter 11, Section 11.2 Narrative Description, Section 12.2.1 Site Description

SUMMARY OF CHANGE:

This corrected copy contains added language that matches the English PPM.

IMPLEMENTATION:

These changes are corrections of existing requirements and are effective immediately. These changes apply only to Metric Projects.

Volume I Chapter 16, Design Submittals, Exhibit B, Sheet 1 of 6

SUMMARY OF CHANGE:

This exhibit has been revised to include Criteria on the Typical Section Data Sheet.

IMPLEMENTATION:

This change is to be implemented on all projects beginning design as of January 1, 2001. This change applies to both Metric and English Projects.

Volume I Chapter 17, Section 17.4.3 Utility Contract Plans (Joint Project Agreements)

SUMMARY OF CHANGE:

Language has been added to this section chapter regarding requirements for the use of Mobilization and Maintenance of Traffic pay items in contracts containing a Joint Project Agreement (JPA).

IMPLEMENTATION:

This change is effective with the January 2001 Letting (or sooner if it does not affect production.)

This change applies to both Metric and English Projects.

Volume I Chapter 19, Section 19.2 Sealing of Contract Plans / Record Set

SUMMARY OF CHANGE:

New language has been added to this section regarding requirements for the inclusion of information on the engineer or engineering business on each sheet (Rule 61G15-23.002).

IMPLEMENTATION:

These changes are a result of rules previously implemented by the Florida Board of Professional Engineers (FBPE).

These changes apply to both Metric and English Projects.

Volume I Chapter 19, Section 19.3 Sealing Other Engineering Documents

SUMMARY OF CHANGE:

In Section 19.3, Exceptions and Variations have been added to the list of sealed documents to be kept in the district's project file.

IMPLEMENTATION:

These changes are effective on all projects beginning design as of January 1, 2001.

These changes apply to both Metric and English Projects.

Volume I Chapter 20, Section 20.3.1 District Activities, Exhibits

SUMMARY OF CHANGE:

Language has been revised regarding the number of copies of the contract plans set and specifications package submitted. Corresponding changes have been made to Exhibit 20-A (page 1 of 2).

Exhibit 20-C, page 1 of 3, includes changes to the copy distribution list, and the addition of a concurrence signature line.

IMPLEMENTATION:

These changes are effective on all projects beginning with the January 2001 letting. These changes apply to both Metric and English Projects.

Volume I Chapter 21, Transportation Design for Livable Communities

SUMMARY OF CHANGE:

Chapter 21 is an entirely new chapter addressing various aspects on TDLC including application, design criteria and design considerations.

IMPLEMENTATION:

The TDLC policy has been previously implemented. New TDLC criteria may be used on applicable TDLC projects in accordance with the conditions stated in the chapter. These changes apply to both Metric and English Projects.

Volume I Chapter 23, Design Exceptions and Variations

SUMMARY OF CHANGE:

Chapter 23 has been rewritten and reorganized to address several major changes. Major changes include:

- 1. Reference to the Utility Accommodations Manual when design criteria for utilities is not met.
- 2. New information on conceptual concurrence.
- 3. New information on acceptable benefit/cost analysis methods.
- 4. Reference to Chapter 19 for sealing requirements for Design Exceptions and Variations.
- 5. New information regarding copies and distribution of Design Exceptions.
- 6. Revised Exhibits 23-A, 23-B, and 23-C.

IMPLEMENTATION (Volume I Chapter 23, Design Exceptions and Variations):

These changes are to be implemented on all projects beginning design as of January 1, 2001.

These changes apply to both Metric and English Projects.

Volume I Chapter 25, Section 25.3.4 Survey Guidelines for RRR Projects

SUMMARY OF CHANGE:

New sections have been added to reference the types of work for RRR projects and the level of survey effort required for each.

IMPLEMENTATION:

These new guidelines may be used on applicable projects beginning immediately.

These changes apply to both Metric and English Projects.

Volume I Chapter 25, Section 25.4.5 Bridges

SUMMARY OF CHANGE:

New language has been added to reference bridges on RRR projects, and the determination as to whether an existing bridge should remain, be rehabilitated, or be replaced.

IMPLEMENTATION:

These changes are to be implemented on applicable projects beginning design as of January 1, 2001.

These changes apply to both Metric and English Projects.

Volume I Chapter 29, Section 29.3.5 Design of Monotube Signal Structures and Foundations

SUMMARY OF CHANGE:

This section has been added to include the new structural criteria for Standard Monotube Signal Structures and foundations.

IMPLEMENTATION:

The new Standard Monotube Signal Structure is Available. Interim Index 17746, Standard Monotube Signal Structure has been issued and may be used on projects beginning with the July 2001 letting.

This change applies to both Metric and English Projects.

Volume I Chapter 29, Section 29.4 Structural Design of Roadway Light Poles

SUMMARY OF CHANGE:

This section has been rewritten to include the new structural criteria for Standard Aluminum Light Poles and foundations.

IMPLEMENTATION (Volume I Chapter 29, Section 29.4):

The new Standard Aluminum Light Pole is available. Interim Index 17515, Standard Aluminum Light Pole has been issued and may be used on projects beginning with the July 2001 letting. This change applies to both Metric and English Projects.

Volume II Chapter 1, Section 1.4 Base Sheet Format

SUMMARY OF CHANGE:

New language has been added to this section regarding the box provided for the inclusion of information on the engineer or engineering business on each sheet. The corresponding figure has also been modified to show this.

IMPLEMENTATION:

This change is a result of rules previously implemented by the Florida Board of Professional Engineers (FBPE).

This change applies to both Metric and English Projects.

Volume II Chapter 3, Section 3.2.2 Fiscal Year and Sheet Number, Section 3.2.3 Length of Project Box

SUMMARY OF CHANGE:

The location of the fiscal year box has been corrected in Section 3.2.2. The method of computation for length of project in Section 3.2.3 has been clarified by including adjustment for equations.

IMPLEMENTATION:

These changes are clarification of existing requirements and are effective immediately. These changes apply to both Metric and English Projects.

Volume II Chapter 3, Section 3.3 Project Location Map

SUMMARY OF CHANGE:

Requirements for requesting key map clips have been clarified.

IMPLEMENTATION:

This change is effective on all projects beginning design as of January 1, 2001.

This change applies to both Metric and English Projects.

Volume II Chapter 3, Section 3.6 Index of Sheets

SUMMARY OF CHANGE:

The location of Box Culvert details in the order of assembly of Roadway plans is dependent on the type of design (PSTDN55 or LRFD).

IMPLEMENTATION (Volume II Chapter 3, Section 3.6):

This change is effective on all projects beginning design as of January 1, 2001.

This change applies only to English Projects.

Volume II Chapter 7, Section 7.3 Box Culvert Data Sheet

SUMMARY OF CHANGE:

This section has been rewritten to reference the two methods for doing Box Culvert Data Sheets based on the type of design (PSTDN55 or LRFD).

IMPLEMENTATION:

This change is effective on all projects beginning design as of January 1, 2001.

This change applies only to English Projects.

Volume II Chapter 10, Section 10.2.6, Drainage Structures and Bridges

SUMMARY OF CHANGE:

Language has been added to clarify the information regarding cross drain pipes and box culverts.

IMPLEMENTATION:

This change is effective on all projects beginning design as of January 1, 2001.

This change applies to both Metric and English Projects.

Volume II Chapter 14, Section 14.2, Required Information

SUMMARY OF CHANGE:

Language has been changed to clarify the information to be shown regarding inlet elevations.

IMPLEMENTATION:

This change is effective on all projects beginning design as of January 1, 2001.

This change applies to both Metric and English Projects.

Volume II Chapter 22, Section 22.2, Approach Slabs

SUMMARY OF CHANGE:

Language has been changed to clarify the information on the roadway elements that interface with the approach slab areas, which are included in the roadway quantities.

IMPLEMENTATION:

This change is effective on all projects beginning design as of January 1, 2001.

This change applies to both Metric and English Projects.

Volume II Chapter 23, Section 23.6, Guide Sign Worksheet

SUMMARY OF CHANGE:

Language has been added to clarify the information on the Guide Sign Worksheet format.

IMPLEMENTATION:

This change is a clarification to existing requirements and is effective on all projects beginning design as of January 1, 2001.

This change applies to both Metric and English Projects.

Volume II Chapter 24, Section 24.8 Monotube Sheets

SUMMARY OF CHANGE:

This section has been added to include the new information regarding the Monotube Tabulation Sheets.

IMPLEMENTATION:

This change is effective on all projects beginning with the July 2001 letting.

This change applies to both Metric and English Projects.

Volume II Chapter 25, Section 25.6 Foundations and Boring Detail Sheets

SUMMARY OF CHANGE:

This section has been revised to include new information for standard conventional light pole foundation design.

IMPLEMENTATION:

This change is effective on all projects beginning with the July 2001 letting.

This change applies to both Metric and English Projects.

All other changes in the January, 2001 Plans Preparation Manual updates package primarily consist of minor editing for clarification and/or error corrections.

If you have any questions please contact this office, 850-414-4318, Suncom 994-4318.