Florida Department of Transportation
605 Suwannee Street
Tallahassee, FL 32399-0450

RICK SCOTT
GOVERNOR

MIKE DEW
SECRETARY

MEMORANDUM

DATE: October 30, 2017

TO: Holders of the FDOT Drainage Manual

FROM: Carlton Spirio, P.E. (State Drainage Engineer)

SUBJECT: FDOT Drainage Manual – January 2018

The Drainage Manual has been revised for the January 2018 scheduled release date. Implement the revised 2018 Drainage Manual policies on all design projects, when possible, without impacting production schedules. Significant revisions and pertinent details are listed below.

Global Change

Changed all Plans Preparation Manual or PPM references to FDM.

Changed all Design Standard Index or Index references to Standard Plans.

Updated all Design Standard Index numbers to the new Standard Plans Index numbers.

Changed all Standard Specifications for Road and Bridge Construction references to Standard Specifications.

Changed some language to result in a more direct instruction by substituting words like “consider” and “should” with “evaluate” and “will.”

Table of Contents

Updated as necessary to reflect the revisions shown below.

Chapter 1 – Introduction

Section 1.4– Added a paragraph to reference some of the supporting documents to the Drainage Manual.

Chapter 2 – Open Channel

Section 2.2.2 – Added table number to design storm frequencies of open channels table.

Section 2.4.2 – Modified language to clarify that minimum slope applies to all conveyance ditches.

Section 2.4.3.1.3 – Section removed from Drainage Manual as asphalt is not allowed as a ditch liner.

Section 2.4.3.1.4 – Section renumbered to 2.4.3.1.3.

Section 2.7 – Added calculated freeboard to the required design documentation. Updated table numbers.

Figure 2-1 – Added "calculated freeboard" as its own column.

Chapter 3 – Storm Drain Hydrology and Hydraulics

Section 3.3 – Added table number to design storm frequencies of storm drain systems table.

Section 3.4.1 – Removed the reference to the number of tidal gage stations. Added table number to the sea level rise data table and a figure number to the tidal station data figure.

Section 3.7.1.1 – Added language to include maximum allowable pipe lengths as a factor in inlet spacing design. Also revised inlet placement requirement to 10 feet prior to the level section in a super-elevation transition.

Section 3.7.2 – Added restriction to prevent manholes in travel lanes of interstate facilities.

Section 3.7.4 – Updated tables on inlet placement to represent new Standard Plans. Also revised Median Barrier Wall to only have two inlet types. This change was made to Standard Plans, Index 425-030 to remove inlet types III, IV, and V. Added table numbers to all three tables in this section.

Section 3.9.1 – Added table number for spread criteria for permanent construction table.

Section 3.9.3 – Added requirement for inlet design to capture 100 percent of the flow.

Section 3.12.3 – Revised language regarding resilient connectors and bridge collection piping for clarity.

Chapter 4 – Cross Drain Hydraulics

Section 4.3.1 - Added table number to design storm frequencies of permanent facilities table.

Section 4.3.2 - Added table number to design storm frequencies of temporary facilities table.

Section 4.9.2.2 - Added table number to scour estimates table.

Section 4.9.4.3 – Added statement that measures to capture runoff from sidewalks on bridges are only required at bridge ends.

Chapter 6 – Optional Culvert Materials

Section 6.2.1 – Added text stating that the latest version of the computer program will be used. Also changed the reference to the Optional Pipe Handbook to the Drainage Design Guide (DDG).

Section 6.8 – Added a statement within the Modification for Non-Conventional Projects: box to allow for the pipe materials to be documented on the plan sheets if desired.