



Florida Department of Transportation

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MEMORANDUM

DATE: June 24, 2013
TO: Holders of the FDOT Drainage Manual
FROM: Rick Renna, P.E.
COPY:
SUBJECT: FDOT Drainage Manual – July 2013

The Drainage Manual has been revised for 2013 and has been posted on the FDOT web site. A list of revisions and details of the revisions follow. These revisions should be implemented on all design projects when possible without impacting production schedules.

The July 2013 Drainage Manual was revised to incorporate revisions for non-conventional projects. The manual language has been adjusted to be more authoritative, eliminating flexibility.

Table of Contents – Updated to reflect the revisions shown below.

Chapter 1 – Introduction

Section 1.5 – Added new section titled Documentation of Drainage Design. Subsequent section numbers adjusted accordingly

Section 1.6 – Appendix D, deleted protective treatment section; added new Appendix E for pipe cover height

Section 1.7 – Updated web address for Drainage Manual

Chapter 2 – Open Channel

Section 2.2 – Deleted requirement for risk analysis and flood rights

Section 2.4.3 – Added reference to Open Channel Handbook

Section 2.4.3.1.3 – Added that asphalt linings are not allowed for design projects

Section 2.4.3.1.4 – Added section for Turf Reinforcement Mat

Section 2.6.1 – Updated reference to protective treatment criteria

Figure 2-1 – Added column for shear stress

Chapter 3 – Storm Drain Hydrology and Hydraulics

Section 3.3 - Deleted requirement for risk analysis and flood rights

Section 3.5 – Added exception for hydrograph use when designing French drain systems
Section 3.6.1 – Added modification for non-conventional projects
Section 3.6.2 – Revised minor loss requirement
Section 3.7 – Added Protective treatment to this section. Language moved from Appendix D to this section.
Section 3.7.1.1 – Added consideration for erosion and defined location of critical section
Section 3.10.2 – Deleted Index 205 reference, added Appendix E reference.
Section 3.11.1 – Added modification for non-conventional projects
Section 3.11.2 – Added requirement for drainage openings in sound walls
Section 3.11.3 – Added section for miscellaneous French drains requirements
Section 3.12 – Section moved to Section 3.7

Chapter 4 – “Cross Drain Hydraulics”

Section 4.3.1 - Deleted statement regarding higher design frequencies
Section 4.4 – Deleted statement regarding acquisition of flood data rights
Section 4.7.2 – Website address updated
Section 4.8.1.1 – Updated computer program list
Section 4.8.2.1 – Added new section titled “Ocean Boundary Hydrographs”
Section 4.8.2.2 – Added new section for Coastal Engineers and added modification for non-conventional projects
Section 4.9.1 – Reference to figure 4.1 was deleted.
Section 4.9.2.2 – Website address updated.
Section 4.11.2.2 – Added requirement for output files
Section 4.11.2.3 – Added requirement for output files
Figure 4.1 – Deleted

Chapter 5 – Storm Water Management

Section 5.3.1.1 – Added language regarding trapezoidal weirs, co-mingling of offsite inflows, and modifications for non-conventional projects
Section 5.3.3 – Deleted reference to Appendix D and added reference to Section 3.7. Deleted duplicate language
Section 5.3.4.2 – Maintenance berm criteria was added to be consistent with Handbook. Item 2 was renamed slopes.
Section 5.3.4.3 – Moved French drain language to section 3.11.3
Figure 5-1 – Updated

Chapter 6 – “Optional Culvert Materials”

Section 6.1 – Added vertical drains to list of optional material considerations
Section 6.2.1 – Added “Class” designations to HDPE pipe
Section 6.3 – Revised references to Design Standard Index 205 and updated to Appendix E.
Section 6.7 – Added modification for non-conventional projects.
Table 6-1 – Modified Note #4 to clarify intent of note

Appendix E – Pipe cover height tables from Index 205 were added as Appendix E