

## VDOT DRAINAGE MANUAL SEPTEMBER 2009 REVISIONS

All chapters have been revised except for 3, 4 and 5.

All revisions have been shaded on the pages of text for more clarity and there will be a revision date (9/09) shown in the lower left corner of the page.

All Errata have been incorporated into the Manual.

The following HDA's have been incorporated into the Manual:

HDA 05-01	Consideration of Flood Plain Storage in the Design of Drainage Facilities
HDA 05-02.2	Change in Procedure for Determining Mean & Low Tide Elevations (Revised 3/24/08)
HDA 05-03	DOT's Adoption & Implementation of NOAA ATLAS 14 Rainfall Precipitation Frequency Data  * <a href="#">DOWNLOAD FILE</a> -Microsoft EXCEL spreadsheet file containing "B, D, & E" factors referenced in Hydraulic Design Advisory (HDA) 05-03
HDA 05-04.3	Application of NRCS' "TR-55" ,"TR-20", EFH -2 Hydrologic Computations Using NOAA ATLAS 14 Rainfall Data (Revised 9/08)  * <a href="#">DOWNLOAD FILE</a> - Microsoft EXCEL spreadsheet file containing NRCS' implementation of NOAA ATLAS 14 24-hr total point rainfall data for Virginia (and appropriate county zone maps) as presented in Hydraulic Design Advisory (HDA)05-04.2
HDA 05-05	Dan Anderson Peak Discharge Determinations - Procedural Revision
HDA 06-02	Scour Considerations for Three-sided Drainage Structures
HDA 06-03.1	Culvert Outlet Protect Road and Bridge Standard EC-1 (Revised 9/07)
HDA 06-04	Recommendations for Mannings "n" Values for VDOT Standard Riprap Sizes (Revised 11/06)
HDA 06-05	Erosion and Sediment Control Plan Details (Revised11/06)
HDA 07-02	Countersinking Considerations for Single and Multiple Barrel Culverts.
HDA 08-02	Guidelines for the Design and Acceptance of Roadway Causeways
HDA 08-03	Inlet Design - Allowable Spread Criteria
HDA 09-02	Storm Sewer Pipe 06/08/09