



To: n-30-1-87728- Design Quality Assurance Bureau EHS Administrator Bldg. 5, Rm. 408 MC 0750,		New York State Department of Transportation <b>ENGINEERING          BULLETIN</b>	<b>EB</b> <b>97-039</b>
Title: <b>HIGHWAY DESIGN MANUAL (HDM) REVISION NO.30          CHAPTER 8 HIGHWAY DRAINAGE</b>			
Distribution: <input type="checkbox"/> Manufacturers (18) <input type="checkbox"/> Surveyors (33) <input checked="" type="checkbox"/> Main Office (30) <input checked="" type="checkbox"/> Consultants (34) <input checked="" type="checkbox"/> Local Govt. (31) <input type="checkbox"/> Contractors (39) <input checked="" type="checkbox"/> Regions/Agencies (32) <input type="checkbox"/> ( )	Approved:  P. J. Bellair, Director Design Quality Assurance Bureau	6/23/97 Date	

### SUPERSEDED ISSUANCES

This Engineering Bulletin (EB) supersedes the Engineering Issuances listed on page 2. A brief statement is provided which explains why the specific Issuance is no longer current.

### PURPOSE

Chapter 8 of the HDM has been revised. This chapter updates existing guidance, and is renamed "Highway Drainage". The entire existing chapter, including those sections of the chapter issued with Revision 28, should be replaced with the new Chapter dated June 23, 1997.

Chapter 8 presents an overview of highway drainage consistent with the various state and federal environmental laws and regulations, and publications written on this subject. Regional experience and Department policy is stated where it may differ from the guidance presented in these other publications.

### EFFECTIVE DATE

Chapter 8 should be used to progress projects initiated after July 1, 1997, or with a design approval date after January 1, 1998. Regions are encouraged to utilize the chapter for projects with earlier design approval dates.

### DISTRIBUTION

Revision 30 will be distributed separately and contains an updated Table of Contents and Index for the entire HDM. Consultants and others who are required to purchase the HDM may purchase Revision 30 by sending a check or money order for \$3.50 payable to the New York State Department of Transportation at the following address:

Plan Sales Unit, Bldg. 5, Rm 109  
 New York State Department of Transportation  
 W. Averell Harriman State Office Building Campus  
 1220 Washington Avenue  
 Albany, N.Y. 12232

### CONTACT

Project specific assistance regarding this revision should be referred to the appropriate liaison engineer in the Design Quality Assurance Bureau. General questions regarding this revision should be addressed to Norman Schips of the Design Quality Assurance Bureau. He may be reached at (518) 485-8611.

Superseded Engineering Issuances

1. Instruction 70-33 Participation in Cost of Drainage On Federal Projects. This guidance is incorporated into Revision 30 of the HDM.
2. Engineering Instruction (EI) 74-11 Revision to NYS Culvert Analysis Computer Program. This program was last distributed to the Regions in 1993 and included the changes announced with EI 74-11. EI 74-11 provided information normally transmitted by an Engineering Bulletin. Generally, designers use either a manual method of analysis (nomographs and charts) or use computer software (e.g., HYDRAIN).
3. EI 74-80 Computer Program H805901 N.Y. Culvert Analysis Program. See item number 2.
4. EI 74-93 Roughness Coefficient For Corrugated Metal Pipes. The information presented in this EI has been incorporated into Revision 30 of the HDM.
5. EI 75-4 Rectangular Type Grates & Frames Standard Sheets 655-4R1; 655-5R1 & 655-6R1. These standard sheets are listed as the current English standard sheets in Revision 30 of the HDM.
6. EI 75-24 Revised Standard Sheets 203-4R1 and 203-5R1 - Installation Details For Pipes. These standard sheets are listed as the current English standard sheets in Revision 30 of the HDM.
7. EI 78-21 Parallel Bar Type Grates and Frames. The special specifications which were transmitted with this EI are disapproved. Approved pay items are provided in Section 655 of the Standard Specifications.
8. EI 83-42 Anchor Bolts For Corrugated Structures. Information incorporated into Revision 30 of the HDM.
9. EI 84-30 Manning's "n" Values For Small Diameter Helical Corrugated Metal Pipes. Information incorporated into Revision 30 of the HDM.
10. EI 90-27 Standard Drainage Structures. Information incorporated into Revision 30 of the HDM, and Addendum No. 1 of the Standard Specifications of 1990.
11. EI 90-28 Parallel Bar Type Grates and Frames. The standard sheet issued with this EI is listed in Revision 30 of the HDM.
12. EI 90-35 Section 604 - Drainage Structures, Standard Pay Items. Approved pay items appear in the Addenda Catalog (English) as noted in Revision 30 of the HDM.
13. EI 90-37 Galvanized Steel End Sections For Corrugated Steel Pipe & Corrugated Steel Pipe-Arch. The standard sheet issued with this EI is listed in Revision 30 of the HDM.
14. EI 91-26 Cleaning, Culverts, Closed Drainage Systems, Drainage Structures, and Manholes. Information in Addendum 1 to the 1990 Standard Specifications.
15. EI 92-11 Disapproval of Certain Concrete Pipe Jacking Pay Items. Disapproved pay items appear in the Addenda Catalog (English). Revision 30 of the HDM includes this guidance.
16. EI 95-38 Highway Design Manual, Chapter 8 Small Drainage Structures and Channels, Section 8.02.05.H Legal Responsibilities. Revision 30 of the HDM includes this guidance.