

To: SUPERSEDED BY EB 98-060 EFFECTIVE 11/17/98		ENGINEERING INSTRUCTION <i>New York State Department of Transportation</i>	95-013 Supersedes: Several Els See text
Title: HIGHWAY DESIGN MANUAL REVISION NO. 22 CHAPTER 10 ROADSIDE DESIGN, GUIDE RAIL AND APPURTENANCES			
Distribution: ☒ Main Office(30) ☒ Local Gov.(31) ☒ Regions(32) ☐ Contractors/AGC(39) ☒ Consultants(34) ☐ _____ ()		Approved:  P. J. Clark, Deputy Chief Engineer Design Division 3/7/95 Date	

Chapter 10 of the Highway Design Manual (HDM) has been revised. Projects initiated after April 3, 1995 or with a design approval date after January 1, 1996 or later shall utilize this revised chapter. Regions are also encouraged to utilize the chapter for projects with earlier design approval dates.

Chapter 10 has been metricated and extensively revised to reflect the Department's current design policy for clear zones, guide rail and appurtenances and is in general conformance with AASHTO's 1990 *Roadside Design Guide*. More explicit guidance than was previously provided has also been developed for clear zone treatments on 3R projects. Any previous version of Chapter 10 should be replaced with the new Chapter 10 dated March 6, 1995.

Effective with the issuance of this revision of the HDM, many of the Engineering Instructions and other reference materials compiled in the training aid *GUIDERAIL III* are outdated. Consequently, *GUIDERAIL III* should be discarded. This revision also incorporates or supersedes the engineering guidance previously found in the following Engineering Instructions:

- 74-008 Reuse of Existing Cable Guide Rail
- 75-078 Guide Rail Protection for Overhead Sign Structures-Standard Sheet 645-14R2
- 76-023 Guide Rail Location Shown on Plans
- 77-010 Screen Fencing
- 77-013 Guide Rail and Median Barrier Transitions
- 78-008 Guide Rail Selection Criteria
- 78-016 Concrete Median Barrier
- 79-007 Guide Rail Transitions for Box Beam to Corrugated Beam Guide Rail
- 79-010 Resetting Guide Rail
- 79-053 Maintenance and Protection of Traffic Through Construction Zones
- 80-032 Temporary Timber Safety Curb / Temporary Timber Median Barrier
- 80-035 Temporary Concrete Barrier
- 81-049 Guide Rail Transition Box Beam - Cable
- 82-001 Restriction on Use of Top Rail Chain Link Fencing
- 82-058 Omni-Directional Breakaway Base and Hinge Assemblies
- 83-011 Spot Welding Guide Railing Posts
- 84-002 Concrete Barrier End Treatments in Construction Work Zones

85-026 Noise Barrier Walls
85-056 Temporary Guide Rail Terminal Impact Attenuators
86-015 Temporary Guide Rail Terminal Impact Attenuators
86-031 Inertial Barrier Modules
87-014 Roadside Barriers for Bridge Pier Protection
89-007 Box Beam Guide Railing
89-029 Guide Railing with Extra Long Posts
90-043 Flexible Delineator Posts

The following Standard Sheets were issued in the above superseded EIs, but are still current and should be used in conjunction with Chapter 10, except as modified and metricated by Chapter 10. Note that metric revisions of these sheets are to be issued in the near future. Complete lists of the current Standard Sheets are periodically issued by Engineering Bulletins.

606-3R4	Box Beam Guide Railing
606-15R1	Guide Rail Transitions for Box Beam Guide Rail to Corrugated Beam Guide Rail
606-16	Transition for Corrugated Beam Median Barrier to 6" x 8" Box Beam Median Barrier
606-17R1	Guide Rail Transitions-Box Beam to Cable
606-20	Concrete Median Barrier, Cast-in-Place or Slipformed
606-21	Precast Concrete Median Barrier
606-25	Pier Protection
630-1R2	Highway Barrier and Highway-Railroad Barricade
645-14R2	Guide Rail Protection for Overhead Sign Structures and Sign Positioning to Minimize Specular Glare
645-30	Omni-Directional Breakaway Base and Hinge Assembly

The following Special Specifications were issued by the superseded EIs, but are still current and may be used in conjunction with Chapter 10.

15606.0103	Cable Guide Railing with Extra Long Posts
15606.0151	Cable Guide Railing with Extra Long Posts (Rustic Posts)
15606.1001	Box Beam Guide Railing With Extra Long Posts
15606.1051	Box Beam Guide Railing With Extra Long Posts (Rustic Posts)
15606.1100	Box Beam Guide Railing With Extra Long Posts (Shop Curved)
15606.1151	Box Beam Guide Railing With Extra Long Posts (Shop Curved) (Rustic)
15606.2000	Corrugated Beam Guide Railing with Extra Long Posts
15606.2050	Corrugated Beam Guide Railing with Extra Long Posts (Rustic)
15606.2001	Corrugated Beam Guide Railing with Extra Long Posts (Shop Curved)
15606.2051	Corrugated Beam Guide Railing with Extra Long Posts (Shop Curved) (Rustic)
15606.3203	Heavy Post Blocked-Out Corrugated Beam Guide Railing with Extra Long Posts
15606.3231	Heavy Post Blocked-Out Corrugated Beam Guide Railing with Extra Long Posts (Shop Curved)
15606.3250	Heavy Post Blocked-Out Corrugated Beam Guide Railing with Extra Long Posts (Rustic)
15606.3251	Heavy Post Blocked-Out Corrugated Beam Guide Railing with Extra Long Posts (Shop Curved) (Rustic)

15607.2332. Optional Chain Link Fence for Aluminum Insert Slats
through
15607.2335

15607.2512 Insert Slats for Screen Fencing
through
15607.2515, and
15607.2622
through
15607.2625

15607.9901 Noise Barrier Wall (Horizontal or Vertical Sheathing)
15607.9902 Noise Barrier Wall (Vertical Sheathing)
15607.9903 Noise Barrier Wall (Horizontal Sheathing)
15619.1401 Temporary Timber Safety Curb
15619.1402 Temporary Timber Median Barrier
16619.1401 12" X 24" Timber Barrier System for Structures
15619.6801 Temporary Inertial Barrier Module (200 Pounds)
15619.6802 Temporary Inertial Barrier Module (400 Pounds)
15619.6803 Temporary Inertial Barrier Module (700 Pounds)
15619.6804 Temporary Inertial Barrier Module (1400 Pounds)
15619.6805 Temporary Inertial Barrier Module (2100 Pounds)
15645.42XX Omni-Directional Breakaway Base and Hinge Assembly
15654.6801 Inertial Barrier Module (200 Pounds)
15654.6802 Inertial Barrier Module (400 Pounds)
15654.6803 Inertial Barrier Module (700 Pounds)
15654.6804 Inertial Barrier Module (1400 Pounds)
15654.6805 Inertial Barrier Module (2100 Pounds)

HDM Revision 22 will be distributed separately. It also contains a new index for the entire HDM. Consultants and others who are required to purchase the Highway Design Manual may purchase revision 22 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, New York 12232

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 Terry Hale of the Design Quality Assurance Bureau. He may be reached at (518) 485-7009.