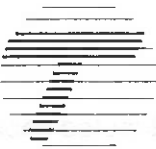
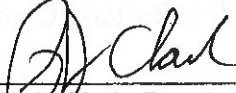


To:		New York State Department of Transportation ENGINEERING BULLETIN	EB 02-019
<i>Expires one year after issue unless replaced sooner</i>			
Title: HIGHWAY DESIGN MANUAL REVISION NO. 40 CHAPTER 10 ROADSIDE DESIGN, GUIDE RAIL, AND APPURTENANCES			
Distribution: <input type="checkbox"/> Manufacturers (18) <input checked="" 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:  Philip J. Clark, Deputy Chief Engineer, Design	

04/19/02
Date

ADMINISTRATIVE INFORMATION:

- This Engineering Bulletin (EB) is effective with projects submitted for the letting of September 12, 2002. Where it is convenient to do so, the guidance may also be applied to projects let earlier.
- The following EIs are superseded by this issuance, typically by inclusion into it:
 - 88-007 Cable Guide Rail Mounting Height
 - 88-029 Shop Curved Guide Railing, Mall Barrier, and Median Barrier
 - 92-047 Cable Guide Railing
 - 93-003 Alternate 3/4" Ø Anchor Rods for Corrugated Beam...
 - 93-009 Innovative Safety Barrier
 - 97-014 Weak Post Corrugated Rail and Median Barrier
 - 98-004 Point of Need and Runout Length Determinations...
 - 98-005 Box Beam Guide Rail End Assembly Types I, II, and III
 - 98-014 Reusable Energy Absorbing Crash Terminal (REACT 350)...
 - 98-028 Quadguard Redirective Impact Attenuator
 - 98-036 Median Barrier Redirective Gating End Terminal
 - 99-015 Single Slope Concrete Barriers
 - 00-034 Breakaway Steel and Wood Post End Terminals for HPBO...
 - 01-003 TRACC - Permanent and Construction Zone - Crash Cushion
 - 01-009 Crash Cushion Attenuating Terminal 350 (CAT 350)

PURPOSE: To announce the availability of Revision No. 40 to the Highway Design Manual.

BACKGROUND: Since the last revision of Chapter 10 in 1995, significant changes in roadside hardware have occurred, primarily as a result of the new testing criteria in NCHRP 350. Numerous Engineering Instructions, several of which are listed above, were issued on the details and conditions of use for the new proprietary guide rail terminals and attenuating systems that were developed to pass the tests. Weak post corrugated rail failed a high speed test, as did the steel blockout piece used on HPBO, necessitating further changes to the design guidance. The ISTEAs requirement for the use of innovative median barriers was dropped. The impracticality of trying to rigidly maintain the width of cleared areas made it necessary to distinguish between the Clear Zone as a fixed legal responsibility and the (wider) clear area as a cleared area maintained with a width that could vary over time. Two issues that have frequently generated questions are how to handle barrier design in areas with frequent driveways, typically areas of seasonal residence, and how to handle clear zone and barrier design when little ROW is available. Sections 10.2.7.5 and 10.3.2.3 were added as guidance on those subjects.

DISTRIBUTION: Revision 40 will be distributed separately and will contain an updated Table of Contents and Index for the entire HDM. Consultants and others who are required to purchase the HDM may purchase Revision 40 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

This revision and the entire Highway Design Manual are available, free of charge, in a downloadable Adobe® Acrobat® format on the NYSDOT internet site. They may be found from the NYSDOT Home page (www.dot.state.ny.us) by clicking on "Site Index", "H", and "Highway Design Manual".

CONTACT: Questions on the content of the revision may be directed via telephone to Terry Hale at (518) 485-7009, or via e-mail to thale@gw.dot.state.ny.us