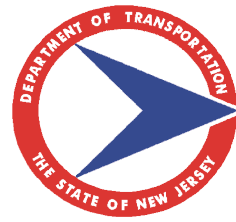


New Jersey Department of Transportation

1035 Parkway Avenue, PO Box 600, Trenton, New Jersey 08625-0600

Baseline Document Change Announcement



NJDOT *Design Manual – Roadway (English)*

BDC11MR-04

January 17, 2012

SUBJECT: Revisions to the *Design Manual – Roadway*, Section 13, Guidelines for the Design of Ground Mounted Sign Supports-BDC11MR-04

REFERENCE: Revisions to the Standard Roadway Construction Details CD-612-4, CD-612-5, CD-612-6, CD-612-7, CD-612-8 and CD-612-10 -- BDC11D-05 dated January 18 2012

Design Manual – Roadway Section 13 is revised as follows.

- Page 13-1: In the second paragraph, the reference material is updated to the latest dated material. Second to last paragraph: Changed "or a crash cushion" to "crash cushions, or other traffic barriers". Last paragraph: changed "guide rails" to "guide rail". The plural of "guide rail" is "guide rail".
- Page 13-2: First sentence: changed "roadside barriers" to "traffic barriers". "Traffic barriers" includes roadside and median barriers. Added Steps 1d and 1e to include horizontal sign offsets for ramps and behind guide rail. In step 2a.(2), added "For land service highways" to add consistency with Standard Construction detail CD-612-4. In Step 2b., added where grading requirements may be eliminated.
- Page 13-3: At end of Step 2b, added more guidance on grading and sign under clearance where the sign is behind a traffic barrier.
- Page 13-7: In Step 2, changed "guide rail" to "traffic barrier" at four locations. In Step 2, changed "berm side" to "berm (far) side" to make it more clear. In Step 3, revised the entire note to give better direction on minimum panel width of 2 post and 3 post sign supports.
- Page 13-7: Added a new table to help clarify the above change to Step 3.
- Page 13-9: See PDF attachment for Figure 13-C. Changed "guide rail" to "traffic barrier". Place "TYP." under "7' MIN."
- Page 13-10: See PDF attachment for Figure 13-D. Added "7' MIN. TYP." between the posts. Changed "guide rail" to "a traffic barrier" in 3 locations.
- Page 13-11: Step 6, added note concerning design criteria for Tables 13-3.1, 13-3.2 and 13-4. Made revisions to Step 6 and 7 to comply with revised Tables 13-3.1, 13-2.2 and 13-4.
- Pages 13-13, 13-14 and 13-15: Revised Tables 13-3.1, 13-3.2 and 13-4. Transpo's first CD version of the Break-Safe was based upon the AASHTO Specification of 1994, Appendix C. The latest CD version of the Break-Safe (CD Ver 2.1) are based upon Section 3 of the 2001 AASHTO Specifications. The wind speeds are 3-second gust speeds and vary from 90 mph in the western side of the state to over 110 mph on the eastern side. NJDOT chose to design for

a basic wind speed of 100 MPH (3-second gust speeds). NJDOT chose to convert the 3 figures to conform to the latest CD version of the Break-Safe (CD Ver 2.1), which is based on the formulas in Section 3 of the 2001 AASHTO Specifications.

- Page 13-16: Made revisions to Step 8 and 9 to comply with revised Tables 13-3.1, 13-3.2 and 13-4. Basically, post size W12x30 is no longer used. It has been replaced by W12x26.
- Page 13-17: Added a step which gives guidance on the maximum projection of footings and footing bevel. Also, directed designers to a Break Safe Sign Post Selection program on compact disk. Using input from the designer, this program will automatically select the appropriate sign post section and the corresponding Break-Safe breakaway sign support assembly.

This BDC announcement must be read in conjunction with the referenced BDC11D-05

Since the changes affected the text on most of the pages, replace the current Section 13 with the attached revised Section 13.

Implementation Code R (ROUTINE)

Changes must be implemented in all applicable Department projects scheduled for Final Design Submission at least one month after the date of the BDC announcement. This will allow designers to make necessary plan, specifications, and estimate/proposal changes without requiring the need for an addenda or postponement of advertisement or receipt of bids.

Recommended By:

Original Signed by

Walter McGrosky
Director,
Capital Program Support

Approved By:

Original Signed by

Richard T. Hammer
Assistant Commissioner,
Capital Program Management

Attachment: Design Manual – Roadway, Section 13, pages 13-1 to 13-17 (hard copies available upon request from Engineering Documents Unit—phone number (609) 530-5587)