ADMINISTRATIVE INFORMATION:

- This Engineering Bulletin (EB) is effective beginning with projects submitted for the letting of 09/06/12.
- This EB does not supersede any other issuances.
- These standard sheets will be included in the next revision of the Standard Sheets and will be available on the Department’s Internet site.

PURPOSE: The purpose of this EB is to issue the following standard sheets:

U.S.C. 606-01 Cable Guide Railing (Metric versions, M606-1R3, M606-2R3)
U.S.C. 606-02 Cable Median Barrier (Metric versions, M606-52R1, M606-53 R1, M606-54 R1)
U.S.C. 606-19 Transition: Box Beam – Cable (Metric version, M606-17 R1)

TECHNICAL INFORMATION:

- Changes in the Cable Guide Rail standard sheets are listed below:

  **606-01 Guide Railing**
  1. Increased cable separation from 3 inches to 6 inches. Top cable is a nominal 29 inches above ground (2 inches higher) and the bottom cable is 17 inches above ground (4 inches lower).
  2. Standard post length has increased to 65 inches. Post embedment has not changed; the extra length is above ground. Extra long posts remain unchanged. The universal post, detailed on 606-04 (sheet 2 of 4), accommodates the cable separation.
  3. Eliminated the two-piece anchor option.
  4. Changed the anchor shape (eliminated the inclined top making it parallel to the base) to simplify fabrication.
  5. Decreased anchor offset from 4 feet to 2 feet to minimize disruption of the embankment profile.
  6. Removed design guidance and some material requirements, which are already in the Highway Design Manual and Standard Specifications.

  **606-02 Median Barrier**
  1. Eliminated the two-piece anchor option.
  2. Changed the anchor shape (eliminated the inclined top making it parallel to the base) to simplify fabrication.
  3. Decreased anchor offset from 4 feet to 2 feet.
  4. Removed details redundant with the 606-01 Cable Guide Railing and inserted references to the guide rail sheet.
  5. Removed design guidance and some material requirements, which are already in the
606-19 Transition: Box to Cable

1. Increased cable separation from 3 inches to 6 inches.
2. Standard post length has increased to 65 inches.
3. Changed the anchor dimensions to match the cable guide rail anchor. Anchor dimensioning details have been removed and a reference to the anchor detail on 606-01 Cable Guide Railing has been added.
4. Decreased anchor offset from 5 feet to 2 feet.
5. Changed installation instructions for the U-bolt installation.
6. Removed the note prohibiting installation of compensating devices at the transition end of the cable run.
7. Changed all references of “Point of Need” to “Point of Redirection.”

- Design Guidance. The design guidance has not changed for cable guide rail.
- Cost. No significant material cost change is anticipated, as the new post length (2 additional inches) is the same as the current weak post guide rail/ median barrier post and the universal post specified on the box beam guide rail sheet.

IMPLEMENTATION: The subject standard sheets are effective for the 09/06/12 letting. Earlier use of this specification is not permitted in order to give manufacturers time to retool.


BACKGROUND: Research has shown that increased cable separation and higher top cable capture a larger variety of vehicles. The changes affected by this EB will enable cable guide rail to more effectively prevent over-rides by high center of gravity vehicles and under rides by low front end vehicles.

CONTACT: Direct questions regarding this EB to Robert Lohse of the Design Quality Assurance Bureau at (518) 457-3528 or by e-mail at robert.lohse@dot.state.ny.us.