
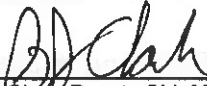


To: SUPERSEDED ^{BY} <i>EB 02-024</i> EFFECTIVE 7/11/02		New York State Department of Transportation ENGINEERING INSTRUCTION	EI 99-017
Title: TRANSITIONS BETWEEN BOX BEAM RAIL AND SINGLE SLOPE CONCRETE BARRIER.			
Distribution: <input checked="" type="checkbox"/> Manufacturers (18) <input checked="" 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 checked="" type="checkbox"/> Contractors (39) <input checked="" type="checkbox"/> Regions/Agencies (32) <input type="checkbox"/> ()	Approved:  <hr/> P.J. Clark, Deputy Chief Engineer, Design Division 5/13/99 Date 		

ADMINISTRATION INFORMATION. This instruction becomes effective with the letting of 11/04/99. However, since there are no current standard details for these transitions, designers are encouraged to incorporate the details sooner. No Engineering Instructions are superseded hereby.

PURPOSE. The purpose of this Engineering Instruction is to establish pay items for transitions between box beam median barrier and single slope concrete median barrier and between box beam guide rail and single slope half section concrete barrier.

TRANSMITTED MATERIALS. Shelf note establishing the following pay items:

- 606.8803 M: Transition Between Box Beam Guide Rail and Single Slope Half Section Concrete Barrier (One or Two Way Operation)
- 606.8853 M: Transition Between Box Beam Guide Rail and Single Slope Half Section Concrete Barrier (One or Two Way Operation) (Rustic)
- 606.8804 M: Transition Between Single Slope Half Section Concrete Barrier and Box Beam Guide Rail (One Way - Trailing End of Barrier)
- 606.8854 M: Transition Between Single Slope Half Section Concrete Barrier and Box Beam Guide Rail (One Way - Trailing End of Barrier) (Rustic)
- 606.8805 M: Transition Between Box Beam Median Barrier and Single Slope Concrete Median Barrier
- 606.8855 M: Transition Between Box Beam Median Barrier and Single Slope Concrete Median Barrier (Rustic)

BACKGROUND. The single slope barriers are becoming commonly used median and roadside barriers due to the fact that adjacent roadside surfaces can be resurfaced without resetting the barriers. With the increased usage of the single slope barriers, a need has arisen for details that show transitions between median or roadside box beam rail (NCHRP 350 Test Level 3 qualified) and single slope barrier. In order to accommodate this need, transitions were developed and detailed on the attached standard sheets. It is anticipated that these transitions will successfully meet the requirements of NCHRP Report 350 Test Level 3. Single slope concrete barriers have already been successfully crash tested in accordance with the requirements of NCHRP Report 350 Test Level 3, for speeds up to 100 km/h.

DIMENSIONS. Grade elevations can vary by as much as 250 mm from one side of the concrete median barrier transition to the other. Due to this fact, the height of the median barrier at the railing attachments will be site specific. Details are provided in the standard sheets for determining the initial height of the median barrier before tapering it on a 4:1 slope up to full height.

There is no height differential problem associated with the half section roadside transition. This allows for a more gradual transition (8:1) to full height.

OTHER INFORMATION. The following standard sheets will be transmitted separately in EB 99-042:

- ◆ M606-32 Transition Between Box Beam Guide Rail and Single Slope Half Section Concrete Barrier (Sheet 1 of 3)
- ◆ M606-33 Transition Between Box Beam Guide Rail and Single Slope Half Section Concrete Barrier (Details I) (Sheet 2 of 3)
- ◆ M606-34 Transition Between Box Beam Guide Rail and Single Slope Half Section Concrete Barrier (Details II) (Sheet 3 of 3)
- ◆ M606-35 Transition Between Box Beam Median Barrier and Single Slope Concrete Median Barrier (Sheet 1 of 3)
- ◆ M606-36 Transition Between Box Beam Median Barrier and Single Slope Concrete Median Barrier (Details I) (Sheet 2 of 3)
- ◆ M606-37 Transition Between Box Beam Median Barrier and Single Slope Concrete Median Barrier (Details II) (Sheet 3 of 3)

ACTIONS. The attached specification changes will be main office inserts into contract proposals which contain the referenced item number.

CONTACT PERSON. Jim Flynn of the Design Quality Assurance Bureau at (518) 485-5457.

BARRIER TRANSITIONS

Make the following changes to the Standard Specifications of January 2, 1995:

Page 6-39, under 606-5 BASIS OF PAYMENT *insert* the following *below* line 39:

"606.8803 M	Transition Between Box Beam Guide Rail and Single Slope Half Section Concrete Barrier (One or Two Way Operation)	Each
606.8853 M	Transition Between Box Beam Guide Rail and Single Slope Half Section Concrete Barrier (One or Two Way Operation) (Rustic)	Each
606.8804 M	Transition Between Single Slope Half Section Concrete Barrier and Box Beam Guide Rail (One Way - Trailing End of Barrier)	Each
606.8854 M	Transition Between Single Slope Half Section Concrete Barrier and Box Beam Guide Rail (One Way - Trailing End of Barrier) (Rustic)	Each
606.8805 M	Transition Between Box Beam Median Barrier and Single Slope Concrete Median Barrier	Each
606.8855 M	Transition Between Box Beam Median Barrier and Single Slope Concrete Median Barrier (Rustic)	Each"