
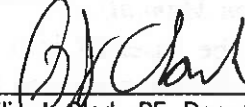


To: <p style="text-align: center;"><b>SUPERSEDED BY</b>  <b>EB 10-021</b>  <b>EFFECTIVE 1/6/11</b></p>		<p style="text-align: center;"><i>New York State</i>  <i>Department of</i>  <i>Transportation</i>  <b>ENGINEERING</b>  <b>INSTRUCTION</b></p>	<p style="text-align: center;"><b>EI</b>  <b>04-036</b></p>
<b>Title: WEAK-POST CORRUGATED BEAM GUIDE RAIL AND MEDIAN BARRIER TRANSITIONS - NEW PAY ITEMS</b>			
Distribution: <input checked="" type="checkbox"/> Manufacturers (18) <input checked="" type="checkbox"/> Surveyors (33) <input checked="" type="checkbox"/> Local Govt. (31) <input checked="" type="checkbox"/> Consultants (34) <input checked="" type="checkbox"/> Agencies (32) <input checked="" type="checkbox"/> Contractors (39) <input type="checkbox"/> _____ ( )	Approved:  Philip J. Clark, PE, Deputy Chief Engineer, Design Division <div style="text-align: right;">           09/16/04            Date         </div>		

**ADMINISTRATIVE INFORMATION:**

- This Engineering Instruction is effective with projects submitted for the letting of May 5, 2005.
- This EI supersedes portions of the Guide Rail and Median Barrier Reference Sheets and supplements EI 04-016 Modified G2 Weak-Post, Corrugated Beam Guide Rail, Design Guidance.
- The new pay items will reside in the next printing of the *Standard Specifications*.

**PURPOSE:** The purpose of this EI is to disapprove six pay items and create eight new pay items for Weak-Post Corrugated Beam Guide Rail and Median Barrier Transitions to Box Beam and Heavy Post Corrugated Beam. A clarification to the design guidance for nonfreeway 3R projects is also provided.

**TECHNICAL INFORMATION:**

- Designers should include the new transition items in any project designs requiring such transitions. The guide rail transitions are good for both the new Modified G2 Weak-Post Corrugated Beam Guide Rail system and the previous Weak-Post Corrugated Beam system that it replaces, differing only in that the height of the rail on the corrugated beam side of the transition will be two inches higher for the modified G2 system. The payment for the Weak-Post Corrugated Beam to Heavy Post Blocked-Out Corrugated Beam guide rail transition will be handled using the existing pay factors for guide rail.
- The policy concerning the new guide rail system and the new transitions are included in EI 04-016 except the following shall replace that provided for **Nonfreeway 3R Projects Policy** under Technical Information:

**Nonfreeway 3R Projects Policy.** New installations of barrier should conform to the policy for new construction. With respect to replacement of existing runs of weak-post, corrugated beam guide rail, the Regional Design groups should exercise their discretion. Replacement is suggested when the operating speed is over 80 km/h. Replacement is also suggested when both the rate of reportable accident impacts on the weak-post, W-beam guide rail exceeds 0.2 crashes/year/km and the percentage of impacting vehicles that penetrate through, over, or under the weak-post guide rail exceeds approximately 10%. In cases where the operating speed is found to be over 80 km/h, the rate of reportable accidents exceeds 0.2, and the penetrations exceeds 10%, replacement should be considered necessary.

While replacement may not be necessary, it is encouraged, if convenient, or when significant work on a given run is part of the project. The Modified G2 system may be considered as a replacement.

**IMPLEMENTATION:**

- Designers need to use the new items in all proposals effective beginning with those submitted for the letting date of May 5, 2005. For proposals with earlier letting dates, designers need to amend the proposal and replace the disapproved items if they are specified.
- We do not expect a need for an order-on-contract (OOC); however, if one is needed, the contract change may be considered to be a minor change in work in accordance with *MURK Part 1A §104-03 (Construction Administration Manual)*.
- A copy of this EI should be inserted into the project file as part of the documentation of the amendment or OOC. The FHWA reviewed the standard sheet changes prior to the issuance of the referenced official issuances; thus, these minor changes should not require further Federal approval.
- The following table includes new pay items, identifies the disapproved pay items they replace, and the existing Standard Sheet that includes the transition details. There are no disapproved Standard pay items identified for the Median Barrier Transition Weak-Post Corrugated Beam to Heavy Post Blocked-Out Corrugated Beam because none were established previously.

<b>New Pay Item</b>	<b>Disapproved Pay Item</b>	<b>Item Description</b>	<b>Standard Sheet</b>
606.8101	606.81	Guide Rail Transition Weak-Post Corrugated Beam to Box Beam Guide Rail (One or Two-Way Operation)	M606-19
606.8151	606.8150	Guide Rail Transition Weak-Post Corrugated Beam to Box Beam Guide Rail (One or Two-Way Operation) (Rustic)	M606-19
606.8201	606.82	Guide Rail Transition Box Beam to Weak-Post Corrugated Beam Guide Rail (One-Way Only)	M606-19
606.8251	606.8250	Guide Rail Transition Box Beam to Weak-Post Corrugated Beam Guide Rail (One-Way Only) (Rustic)	M606-19
606.8501	606.85	Median Barrier Transition Weak-Post Corrugated Beam to Box Beam	M606-16R1
606.8551	606.8550	Median Barrier Transition Weak-Post Corrugated Beam to Box Beam (Rustic)	M606-16R1
606.9601	Not Applicable	Median Barrier Transition Weak-Post Corrugated Beam to Heavy Post Blocked-out Corrugated Beam	M606-18
606.9651	Not Applicable	Median Barrier Transition Weak-Post Corrugated Beam to Heavy Post Blocked-out Corrugated Beam (Rustic)	M606-18

**TRANSMITTED MATERIALS:** No materials are transmitted with this issuance.

**BACKGROUND:** New Standard Sheets were recently issued (see below) that detailed barrier transitions. The revised transitions to box beam required nested corrugated beam where the box beam ends. This detail was not required in the previous Standard Sheets. Because there may be a slight increase in the cost of these transitions, new item numbers are provided. The median barrier transition to Heavy Post Blocked-Out Corrugated Beam is a new design and needs a pay item to represent it.

**REFERENCES:** The following recently issued Official Issuances:

- EI 04-016 Modified G2, Weak-Post, Corrugated Beam Guide Rail, Design Guidance
- EB 04-010 Standard Sheet M606-16R1 Transition Between Weak-Post, Corrugated Beam and Box Beam Median Barrier
- EB 04-011 Modified G2 Weak-Post, Corrugated Beam Guide Rail Transitions, New Standard Sheets M606-18 (to HPBOCB) and M606-19 (to Box Beam)

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