
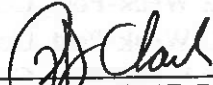


| | | | |
|---|--|--|----------------------------|
| To: <p style="text-align: center;">SUPERSEDED BY <u>EB 06-057</u> EFFECTIVE <u>5/3/07</u></p> |  | New York State Department of Transportation ENGINEERING INSTRUCTION | EI 04-017 |
| Title: MODIFIED G2 WEAK-POST, CORRUGATED BEAM GUIDE RAIL, NEW PAY ITEMS | | | |
| 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 W. Clark, PE, Deputy Chief Engineer, Design Division <div style="float: right; text-align: right;"> <u>04/02/04</u> Date </div> | |

ADMINISTRATIVE INFORMATION:

- Effective Date: This EI is effective beginning with projects submitted for the letting of September 9, 2004.
- No issuances are superseded by this instruction.
- The new pay items will be included in the Control Report of Metric Pay Items and the next printing of the Standard Specifications.

PURPOSE: This EI issues new pay items for Modified G2 Weak-Post, Corrugated Beam Guide Rail.

TECHNICAL INFORMATION: The Modified G2 Weak-Post, Corrugated Beam Guide Rail system is detailed on the Standard Sheets M606-50 and M606-51 transmitted by EB 04-012. The system is based on a NCHRP 350-tested design that has been approved by the Federal Highway Administration (FHWA) for use in TL3 applications. The new 606.18 pay item family introduced will replace the 606.16 family as the "Department standard," weak-post, corrugated beam guide rail. The new system includes some significant variations from the old system, including a 50 mm longer post, backup plate at the post, rail splice located at midspan, and a 55 mm increase in rail height.

Designers now have the option of specifying a weak-post system in TL-3 applications. Designers should use the new items for all designs for weak-post, corrugated beam guide rail unless they can demonstrate that 606.16 is better-suited in certain applications with design speeds requiring a TL-2 or lesser treatment. It is due to the expectancy that there will be such instances that the 606.16 family will remain active. If the usage of the 606.16 family on projects becomes greatly reduced the family will be disapproved.

Design guidance, policy, cost information, and details of changes from the previous Department-standard Weak-Post, Corrugated Beam Guide Rail are included in EI 04-016. Designers should become familiar with this information, particularly the termination requirements as there currently is no TL3-approved terminal for the Weak-Post system.

The new posts will be acceptable for use with the 606.16 Weak-Post system; however, the old posts are unacceptable for use with the Modified G2 606.18 Weak-Post system. Maintenance personnel will need to replace damaged posts in the Modified G2 system and may also replace damaged posts in the replaced Weak-Post system with the 1650 mm modified G2 posts driven 50 mm deeper to achieve proper post alignment for the required rail height. It will no longer be necessary to stock the 1600 mm posts.

EI 04-017 Page 2 of 2

IMPLEMENTATION: DQAB will update the Control Report of Metric Pay Items and the Standard Specifications to include these new pay items.

NEW PAY ITEMS: This instruction introduces the pay item family 606.18 as follows:

| Item No. | Item | Pay Unit |
|-----------------|---|-----------------|
| 606.18 M | Modified G2 Weak-Post, Corrugated Beam Guide Rail | Meter |
| 606.180001 M | Modified G2 Weak-Post, Corrugated Beam Guide Rail (Shop Curved) | Meter |
| 606.1801 M | Modified G2 Weak-Post, Corrugated Beam Guide Rail With Extra Long Posts | Meter |
| 606.180101 M | Modified G2 Weak-Post, Corrugated Beam Guide Rail With Extra Long Posts (Shop Curved) | Meter |
| 606.1850 M | Modified G2 Weak-Post, Corrugated Beam Guide Rail (Rustic) | Meter |
| 606.185001 M | Modified G2 Weak-Post, Corrugated Beam Guide Rail (Rustic) (Shop Curved) | Meter |
| 606.1851 M | Modified G2 Weak-Post, Corrugated Beam Guide Rail With Extra Long Posts (Rustic) | Meter |
| 606.185101 M | Modified G2 Weak-Post, Corrugated Beam Guide Rail With Extra Long Posts (Rustic) (Shop Curved) | Meter |

TRANSMITTED MATERIALS. No materials are transmitted with this instruction.

REFERENCES: This Bulletin supplements the information in EI 04-016 (Design Guidance), EI 04-012 (Standard Sheets), and EB 04-011 (Weak-Post Transitions). Other references include EB 03-057 (Guide Rail Quick Reference Sheet) and the Highway Design Manual, highway barrier sections 10.2.3.2 Weak-Post and 10.2.5.6 Transitions.

CONTACT PERSON: Marc Connolly of the Design Quality Assurance Bureau at (518) 457-5440 or by e-mail at mconnolly@www.dot.state.ny.us.