



MEMORANDUM

TO: District Engineers

DATE: December 3, 2001

FROM: Ken Bohuslav, P.E.
Design Division

SUBJECT: Revised Roadway Standards (English and Metric)

The following changes have been made to the roadway standard sheets.

The attached sheets will be applicable to all new construction projects beginning with the May 2002 letting. The use of these sheets prior to that date is at the option of the district. The new standards are available from the Roadway Standards web page in Microstation® "dgn". The following represents a summary of the individual sheet changes.

MBGF-01 (English and Metric). The MBGF-01 and the MBGF-01(M) are a revision of the MBGF-94 and the MBGF-95A(M) respectively. A rectangular wood post option has been added to the round wood post and the steel post alternatives. A nominal six-inch by eight-inch blockout is required for all posts. Steel blockouts will not be allowed on future new construction projects. Also, regardless of speed or average daily traffic volume, the use of terminal anchor sections is only allowable for downstream guardrail end anchorage outside the horizontal clearance area of opposing traffic.

MBGF(TR)-01 (English and Metric). The MBGF(TR)-01 and the MBGF(TR)-01(M) are new sheets representing the guardrail to concrete bridge rail transition section. The transition consists of nested thrie-beam rail elements mounted on seven-foot posts. Also, a curb is placed beneath the thrie-beam portion of the rail regardless of whether curb is used on the remainder of the project. The curb must taper to a four-inch maximum height at the termination point if additional curb is not indicated. The Special Provisions to Item 540, 540---023 (1993) and 540---008 (1995), provide for measurement and payment of the transition section and were included in the November 30, 2001 memorandum from the Specifications Committee.

MBGF(T101)-01 (English and Metric). The MBGF(T101)-01 and the MBGF(T101)-01(M) are new sheets. These sheets provide a specific guardrail transition to T101 bridge rail. The Special Provisions to Item 540, 540---023 (1993) and 540---008 (1995), are also applicable to this transition.

BED-01 (English and Metric). The BED-01 and the BED-01(M) are a revision of the BED-91 and the BED-95(M) respectively. The new transition sections have been included along with the required guardrail end treatments.

CCCG-01 (English and Metric). The CCCG-01 and the CCCG-01(M) are a revision of the CCCG-00 and the CCCG-00(M) respectively. A minor revision was made to Note 6 to allow for curb height taper transition lengths to vary depending on the specific application.

These revisions will bring all guardrail components into conformance with the National Cooperative Highway Research Report (NCHRP) 350 testing criteria as required by the Federal Highway Administration. Therefore, this release of new standards will complete implementation of the NCHRP 350 guardrail end treatments for new construction projects on all roadways regardless of speed or average daily traffic. As noted above in the MBGF sheet revision and as described in the Roadway Design Manual, Appendix A, Section 5, the turned-down guardrail end treatment (or terminal anchor section) should only be located on the downstream end (with respect to adjacent traffic) of future guardrail installations that are outside the horizontal clearance for opposing traffic.

If you have any questions or need additional information concerning these standard details, please contact Mark A. Marek at (512) 416-2653.

Note: Original signed by Ken Bohuslav, P.E.

Attachments

cc: Administration
Bridge Division
Construction Division
Maintenance Division
Texas Turnpike Authority Division
Traffic Operations Division
Federal Highway Administration