



MEMORANDUM

TO: District Engineers

DATE: June 4, 2013

FROM: Mark A. Marek, P.E. *mm*

SUBJECT: Revised Roadway Standards

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

The crash cushion units are also now classified by their test level. Designers will have the choice of TL-2 for roadways of 45 mph and less, TL-3 for roadways greater than 50 mph, and "70" for locations where the designer selects a bit more capacity for head-on crashes. The FHWA only requires the use of a TL-3 system on high speed roadways regardless of posted speed.

Reference can be made to the Categorization memo dated June 3, 2013 which includes additional information regarding crash cushion selection.

The sheets will be applicable to all new construction projects beginning with the December 2013 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". See <http://www.dot.state.tx.us/business/standardplanfiles.htm>. Please distribute this information to the appropriate district staff and area offices, as well as consulting engineers working on TxDOT projects.

The following represents a summary of the individual sheet changes:

QUAD(N) & (W)-13. QUAD(N) & (W)-13 replaces QUAD(N) & (W)-10, respectively. The Design Speed column shown in the table for the crash cushion has been replaced with a Test Level column which corresponds to the crash testing evaluation of the system. System lengths for other design speeds not corresponding to a test level have been removed.

QUEST-13. QUEST-13 replaces QUEST-10. The Design Speed column shown in the table for the crash cushion has been replaced with a Test Level column which corresponds to the crash testing evaluation of the system. The Model (Type) column has been removed.

QGELITE(N) & (W)-13. QGELITE(N) & (W)-13 replaces QGELITE(N) & (W)-10, respectively. The Design Speed column shown in the table for the crash cushion has been replaced with a Test Level column which corresponds to the crash testing evaluation of the system.

REACT(N) & (W)-13. REACT(N) & (W)-13 replaces REACT(N)-12 & REACT(W)-03, respectively. The Design Speed row shown in the table for the crash cushion has been replaced with a Test Level row which corresponds to the crash testing evaluation of the system.

SMTC(N) & (W)-13. SMTC(N) & (W)-13 replaces SMTC(N) & (W)-06, respectively. The Design label shown in the table for the crash cushion has been replaced with a Test Level label which corresponds to the crash testing evaluation of the system.

TRACC(N) & (W)-13. TRACC(N) & (W)-13 replaces TRACC(N) & (W)-05, respectively. The Design Speed column shown in the table for the crash cushion has been replaced with a Test Level column which corresponds to the crash testing evaluation of the system.

HEART-13. HEART-13 replaces HEART-10. The Design Speed column shown in the table for the crash cushion has been replaced with a Test Level column which corresponds to the crash testing evaluation of the system. The Type column has been removed.

TAU-II(N) & (W)-13A. TAU-II(N) & (W)-13A replaces TAU-II(N) & (W)-13, respectively. The system length table has been modified to show only the lengths for TL-2 (previously 45 mph), TL-3 (previously 65 mph) and 70 mph, based on backup option.

TAU-II-R(N) & (W)-13A. TAU-II-R(N) & (W)-13A replaces TAU-II-R(N) & (W)-13, respectively. The system length table has been modified to show only the lengths for TL-2 (previously 45 mph), TL-3 (previously 65 mph) and 70 mph, based on backup option.

ABSORB-13. ABSORB-13 replaces ABSORB-10. The Design Speed column shown in the table for the crash cushion has been replaced with a Test Level column which corresponds to the crash testing evaluation of the system. System lengths for other design speeds not corresponding to a test level have been removed.

ACZ(350)-13. ACZ(350)-13 replaces ACZ(350)-10A. The Design Speed column shown in the table for the crash cushion has been replaced with a Test Level column which corresponds to the crash testing evaluation of the system. The Type column has been removed.

VIA(SFPM)-13. VIA(SFPM)-13 replaces VIA(SFPM)-10. The 45 mph array is now labeled as TL-2 and the 65 mph array is TL-3. All other design speed arrays have been removed.

CRASH CUSHION SUMMARY SHEET. This is a new design detail sheet that is required on all projects which include crash cushions. The sheet should include project specific information such as crash cushion installation locations, test level required, back up width and other crash cushion parameters needed for contractors to accurately bid the project.

If you have any questions or need additional information concerning these standard details, please contact Rory Meza, P.E. at (512) 416-2678.

cc: Administration
District TP&Ds
District Design Engineers
Audit Office
Bridge Division
Construction Division
General Services Division
Maintenance Division
Traffic Operations Division
Federal Highway Administration