

Bridge Barrier Guidelines

The AASHTO Manual for Assessing Safety Hardware (MASH) is the new set of guidelines for crash testing of safety hardware devices. The need for updated crash test criteria was based primarily on changes in the vehicle fleet since the old NCHRP Report 350 criteria was adopted in 1993. Vehicle changes include an overall mass increase and center of gravity changes in both the small car and pickup vehicles.

On January 7, 2016 MASH and the FHWA issued a joint memorandum that prompted MnDOT to develop a Test Level 4 (TL4) (all speed limits) and Test Level 2 (TL2) (speed limit \leq 40 mph) MASH crash tested barriers for implementation. MnDOT's preferred MASH TL4 barrier is the S concrete barrier, with barrier heights; 36", 42" and 54". MnDOT's preferred MASH TL2 barrier is the P-1 concrete parapet, with a parapet height of 2'-8".

For details, please reference [MnDOT's Bridge Details Manual Part II webpage](#). Note, the preferred contractor construction method is slip forming. For specific bridge railing guidance and selection polices, please reference the [MnDOT LRFD Bridge Design Manual Chapter 13](#) (PDF).

Whenever possible, please use MnDOT's MASH approved bridge railings. Otherwise please consult the State Aid Bridge Unit during preliminary bridge plan development for assistance with bridge railing selection and bridge funding eligibility.