

MDT Box Beam Guardrail System

Updated 1/21/2025

MASH Implementation Date: 12/31/2019

Overview:

The Department will continue using the box beam guardrail system in response to the AASHTO/FHWA Joint Implementation Agreement for MASH. Not every system listed below meets the requirements of MASH and the Department will continue to install those systems until an acceptable MASH system is approved.

System Name	Detailed Drawing	MDT Effective Date	Testing Status	FHWA Eligibility	Notes
Box Beam Guardrail	606-50	Sept. 2014	MASH*	NA	*MASH testing part of NCHRP Project 22-14(03) .
Box Beam One-Way Departure Terminal Section	606-52	Sept. 2014	350		Use this system if no MASH system is available for site conditions.
Box Beam Bridge Approach Section - Types 1 & 2	606-53	Sept. 2014	350		Use this system if no MASH system is available for site conditions.
Box Beam Bridge Approach Section - Type 3	606-53A	Sept. 2014	350		Use this system if no MASH system is available for site conditions.
Box Beam Bridge Approach Section - Type 4	606-53B	June 2024	MASH*	NA	*MASH testing part of pooled fund w/ WYDOT and MDT
Box Beam One-Way Bridge Departure Section	606-54	Sept. 2014	350		Use this system if no MASH system is available for site conditions.
Optional Box Beam Terminal Section - MBEAT	606-55	Apr. 2022	MASH*	NA	*MASH testing performed by manufacturer.
Box Beam to MGS Transition Section	606-58	Jan. 2018	350		Use this system if no MASH system is available for site conditions.