

MDT “W” Beam Guardrail System

Updated 1/30/2019

MASH Implementation Date: 12/31/2017

Overview:

The Department adopted the Midwest Guardrail System (MGS) for most “W” beam guardrail installations 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
Metal Guardrail – Wood Posts (MGS)	606-05A	Jan. 2018	MASH	B-230	
Metal Guardrail – Steel Posts (MGS)	606-05B	Jan. 2018	MASH	B-212	
Stiffened Guardrail Sections (MGS)	606-07	Jan. 2018	350	NA	Use this system (TRP-03-139-04) until an acceptable alternative is tested and approved.
Long Span Guardrail (MGS)	606-09	Jan. 2018	MASH*	B-189	*1 post or 2 posts omitted not included in crash testing.
Metal Guardrail - Long Posts-Wood (MGS)	606-11A	Jan. 2018	MASH	B-211 *	*Steel posts tested, 7.5' wood post alternative per TRP-03-234-10 .
Metal Guardrail - Long Posts-Steel (MGS)	606-11B	Jan. 2018	MASH	B-261	
MASH Optional Terminal Sections	606-13	Jan. 2018	MASH		Generic layout, QPL determines system, see manufacturer details.
One-Way Departure Terminal Section (MGS)	606-18	Jan. 2018	MASH	B-256	
MGS to Metal Guardrail Transition	606-20	Jan. 2018	None	FHWA FAQ #13	NCHRP 350 to MASH transition, no testing criteria.
MGS Thrie Beam Bridge Approach Section – Wood Posts	606-23A	Jan. 2018	MASH	B-236 (B-263 w/ curb)	TRP-03-243-11 (TRP-03-291-14 w/ curb) Coordinate with Bridge for attachment to bridge barriers.
MGS Thrie Beam Bridge Approach Section – Steel Posts	606-23B	Jan. 2018	MASH	B-231 (B-263 w/ curb)	TRP-03-210-10 (TRP-03-291-14 w/ curb) Coordinate with Bridge for attachment to bridge barriers.
Bridge Approach Sections - Wood Posts	606-24A	Sept. 2014	350		Use this system if no MASH system is available for bridge barrier conditions.
Bridge Approach Sections - Steel Posts	606-24B	Sept. 2014	350		Use this system if no MASH system is available for bridge barrier conditions.
Skewed Bridge Approach Sections - Wood Posts	606-25A	Sept. 2014	350		Use this system if no MASH system is available for bridge barrier conditions.
Skewed Bridge Approach Sections - Steel Posts	606-25B	Sept. 2014	350		Use this system if no MASH system is available for bridge barrier conditions.
Intersecting Roadway Terminal Section (MGS)	606-46	Jan. 2018	None	NA	Use this system until an acceptable alternative is tested and approved.