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Montana Department of Transportation

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Steve Bullock, Governor
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MEMORANDUM

To:	Distribution
From:	Nathan Haddick, P.E., Bridge Design Engineer
Approved By:	Stephanie Brandenberger, P.E., Bridge Engineer
Date:	January 23, 2020
Subject:	MASH Bridge Rail Implementation Guidance

This memo is intended to establish criteria for implementation of MASH compliant bridge rail in accordance with MDT Roadside Safety Hardware Upgrades Policy (POL 5.03.002) and as presented in MDT Bridge Rail Design and Selection Guidance and in the Guidelines for Nomination and Development of Pavement Projects. This guidance supersedes MDT Bridge Design Standards, attachment 1-G, and Montana Structures Manual – Part II, Section 15.5.1.2-3, and will stay in effect until a new version of the Manual is published, or until otherwise superseded.

For the bridge-specific work types listed below, and for all new and replacement bridges, provide MASH compliant bridge rail and approach transitions as directed by the MDT Bridge Rail Design and Selection Guidance:

- New Bridge (210)
- Bridge Replacement with Added Capacity (220)
- Bridge Replacement with no Added Capacity (221)
- Bridge Replacement with a Culvert with no Added Capacity (222)
- Bridge Replacement with a Culvert with Added Capacity (223).

The extent to which existing bridge rail requires modification is described in the Guidelines for Nomination and Development of Pavement Projects and the MDT Bridge Rail Design and Selection Guidance. Modify bridge railings and provide appropriate approach transitions per the MDT Bridge Rail Design and Selection Guidance for rehabilitation work with the following bridge-specific work types:

- Bridge Rehabilitation with Added Capacity (230)
- Major Bridge Rehabilitation without Added Capacity (231)
- Minor Bridge Rehabilitation (232).

Existing bridge rails and approach sections meeting NCHRP 350 criteria may remain in place. Where a MASH compliant approach section will be installed, modify the ends of the existing bridge rail to accept the approach section.

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