

## Montana Department of Transportation PO Box 201001 Helena, MT 59620-1001

## Memorandum

To: Distribution

From: Paul Ferry, P.E.

Highways Engineer

Date: June 14, 2011

Subject: Edge Line Rumble Strip Evaluation

MDT conducted research to determine the effectiveness and potential problems with edge line rumble strips, also known as rumble stripes.

Research from other state has shown that rumble stripes can provide a number of benefits including additional recovery time for errant vehicles, additional room for pedestrians and bicyclists, improved wet reflectivity and improved longevity of the pavement marking.

MDT research showed that sediment collected within the indentation of the rumble strip which offset the potential increased reflectivity on the face of the strip. In addition, field observations revealed an accelerated loss of paint between the rumble strips, possibly due to the harmonics of snow plow blades on the rumble strip.

We have determined that rumble stripes should only be used in special situations, such as a segment of roadway with extensive run-off-the-road crashes and shoulders that do not meet the criteria for standard rumble strip installation (4 feet of greater in accordance with MDT policy). The use of rumble stripes must also be approved by the Traffic & Safety Engineer, the Consultant Design Engineer or the Highways Engineer and written documentation must be provided in the project file.

If you have guestions concerning this, please contact me at 444-6244.

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