



2-Lane Rural Center Line Rumble Strip

2013 Construction Note Number 1 - Issued July 2013

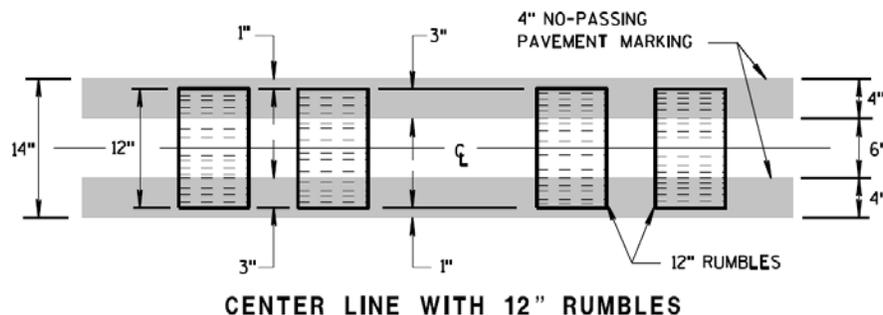
Wisconsin Department of Transportation

Background

WisDOT Bureau of Project Development published Standard Detail Drawing (SDD) 13A11-1a and 1b for centerline rumble strip installation on 2-lane undivided, rural, high speed (posted speed ≥ 50 mph) State Trunk Highways (STH) beginning in construction year 2012. Approximately 500 miles of center line rumbles strips were installed on existing pavement (retro-fitted) at various locations around the state. The center line rumbles shown on that SDD are 12 inches wide, 3/8-1/2 inch deep, and 5 inches long. This is a common dimension on this type of facility as stated in NCHRP 641.

Problem

During the winter of 2012-2013 the center line pavement marking, in some locations, had varying degrees of damaged pavement marking as a result of snow plowing blade vibration which gouged the pavement and peeled off the pavement marking through the snow plowing operations. See the example drawing of the 12-inch wide rumble strip centered in the middle of the 14 inch width of the double yellow (no passing zone) center line pavement marking:



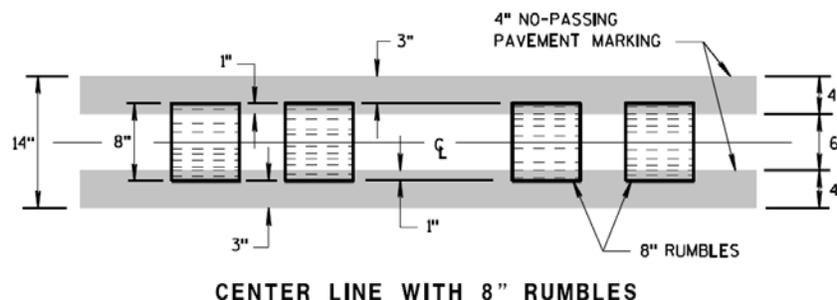
Solution

Where 12 inch wide center line rumbles are included in the plans and specifications replace the 12 inch center line plan drawing (SDD 13A11-1a & b) with the 8 inch center line plan drawing (13A11-2a & b) through a no-cost change order. The new drawing is available online at:

<http://wisconsindot.gov/rdwy/sdd/sd-13a11.pdf#1>

Replace standard detail SDD 13A11-1a & b with SDD 13A11-2a & b.

New SDD 13A11-2a and 2b showing the 8 inch wide center line rumble strip was published in June 2013 and is included in let projects beginning August 2013. This 8 inch wide center line rumble strip is adequate to alert drivers of lane departure as noted in NCHRP 641. See the example drawing of the 8 inch wide rumble strip centered in the middle of the 14 inch width of the double yellow (no passing zone) center line pavement marking:



Some projects specify a shallow groove to be milled into the pavement to allow the center line pavement marking to be in-laid (below the pavement surface), use the 8 inch wide rumble on those projects as well.

A narrower center line rumble strip will cause less snow plow blade vibration thus reduce or eliminate the damage done to the center line pavement marking caused by the snow plowing operation.

Contact Patrick Fleming (608-266-8486) for more information.