

1 Make the following Section a part of the Standard Specifications:  
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4 **“SECTION 615 – MILLED RUMBLE STRIP**  
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6 **615.01 Description.** This section describes constructing Centerline,  
7 Shoulder, and Edgeline Milled Rumble Strips (MRS) in HMA pavement.  
8

9 **615.02 Materials.** None.  
10

11 **615.03 Construction.**  
12

13 **(A) Submittal.** Method of constructing the milled rumble strip shall  
14 be submitted to the Engineer for acceptance. Meeting shall be scheduled  
15 14 days before start of construction work. Discuss sequence of work  
16 plans, and proposal for dust control.  
17

18 **(B) Equipment.** Milling equipment shall be equipped with a rotary-  
19 type cutting head with cutting tips arranged in a pattern as to provide a  
20 relatively smooth cut, approximately 1/16 inches between peaks and  
21 valleys.  
22

23 The cutting head(s) shall be on a suspension independent from the  
24 power unit to allow the head(s) to self-align with surface slopes and  
25 irregularities.  
26

27 The machine shall have a guidance system that provides consistent  
28 alignment of each cut in relation to the roadway and provide uniformity  
29 and consistency throughout the project.  
30

31 **(C) Longitudinal Spacing.** The Milled Rumble Strips (MRS) shall be  
32 placed perpendicular to the roadway with longitudinal spacing as follow:  
33

34 Centerline MRS: 20 inch on-center (milled across centerline)  
35 Shoulder MRS: 12 inch on-center  
36 Edgeline MRS: 12 inch on-center  
37

38 The 20 inch on-center longitudinal spacing for Centerline MRS is  
39 designed to accommodate multiple centerline pavement striping and  
40 raised pavement marker configurations. It will allow placement of raised  
41 pavement markers between the milled concave depressions.  
42

43 **(D) Milling Operations.** Clean pavement surface before constructing  
44 the rumble strips. Mill the concave depressions to the dimensions shown  
45 in the plans.  
46

Align the concave depressions as shown in the plans. Alignment of milled rumble strips shall not deviate from the plans more than  $\pm 2$  inches.

After the concave depressions are milled into the pavement surface, use a power broom or sweeper/vacuum to collect the waste material resulting from the milling operations.

Contractor shall dispose the waste material as directed by the Engineer at no increase in contract price or contract time.

**615.04 Measurement.** The Engineer will measure the milled rumble strip by the linear foot for the width specified in the contract and in the proposal.

**615.05 Payment.** The Engineer will pay for the accepted quantities of milled rumble strip for the width specified at the contract unit price per linear foot according to the contract complete in place.

The contract unit prices paid shall be full compensation for furnishing labors, materials, tools, equipment and incidentals and for doing the work involved in furnishing and installing milled rumble strip complete in place according to the contract and ordered by the Engineer.

Payment will be full compensation for the work prescribed in this section and the contract documents.

The Engineer will pay for the following pay item:

Pay Item	Pay Unit
16-Inch Milled Rumble Strip, Centerline	Linear Foot"

**END OF SECTION 615**