



PURPOSE

The MUTCD Section [8B.29](#) defines dynamic envelope pavement markings as a 4-inch solid white line, placed parallel to and 6 feet away from the nearest rail of an at-grade crossing. The MUTCD further defines a supplemental marking consisting of 12-inch solid white lines, placed at a 45-degree angle and 5 foot spacing between the 4-inch solid lines. This policy will clarify dynamic envelope pavement marking installation on state maintained roadways.

POLICY AND GUIDELINES

Between the 4-inch parallel lines, dynamic envelope markings fully cover 20 percent of the driving surface. This broad coverage area presents a potential safety hazard to bicycles and motorcyclists, as pavement marking material offers significantly less surface friction than unmarked pavement. In addition, this large amount of marking creates a maintenance issue for the department. For these reasons, dynamic envelope markings **shall not** be utilized on state maintained roadways.

Certain grade-crossing locations on state maintained roadways *may* present operational issues. In lieu of dynamic envelope markings, the following signing countermeasures *may* be implemented:

1. The R8-8 "DO NOT STOP ON TRACKS" sign *may* be used at grade crossings where drivers tend to stop on the tracks.
2. The R10-6 "STOP HERE ON RED" sign *may* be used at grade crossings with signals downstream of the crossing.
3. The W10-11-A "XX FEET BETWEEN TRACKS & HIGHWAY" sign *may* be mounted in advance of a grade crossing where limited storage space exists between the tracks and a downstream intersection.
4. The W10-11-B "XX FEET BETWEEN HIGHWAY & TRACKS BEHIND YOU" sign *may* be used downstream of a grade crossing where limited storage space exists between the tracks and a downstream controlled intersection. If used, this sign *should* be mounted either below the STOP or YIELD sign, or just prior to the signalized intersection.