MEASURES TO COMBAT DRIVER FATIGUE
AND ENHANCE SAFETY


In an effort to combat driver fatigue and enhance driver safety, MassHighway requires several safety improvement measures on its roadways. These measures include milled rumble strips along edge lines, radar detector activators, wide pavement marking lines, and snowplowable raised pavement markers.

Effective immediately, all resurfacing, reconstruction and new construction projects that meet the following criteria shall include the appropriate items for these safety improvement measures:

**Milled Rumble Strips**

Milled rumble strips shall be installed within shoulders on all resurfaced, reconstructed or newly constructed state highways in accordance with the MassHighway Construction and Traffic Standard Details, the Standard Specifications for Highways and Bridges and as follows:

a) On all full access control highways (freeways and expressways).

1) **Outside Shoulders** - In areas with paved outside shoulders of 2 feet (0.6 m) or more, rumble strips shall be installed in the paved outside shoulder 4 inches (100 mm) from the outside edge line.

2) **Inside (Median) Shoulders** - In areas with paved inside shoulders of 2 feet (0.6 m) or more, rumble strips shall be installed in the paved inside shoulder 4 inches (100 mm) from the median edge line.

3) **Travel Permitted in Outside Shoulder** - In areas where travel is legally permitted in the paved outside shoulder during certain hours, rumble strips shall not be installed in the paved outside shoulder.
4) **Accel/Decel Lanes** – In areas where acceleration and/or deceleration lanes have no paved outside shoulders, any rumble strips that are in outside shoulders shall be terminated at the beginning of the deceleration lane and initiated at the end of the acceleration lane.

5) **Bridge Decks** - Rumble strips shall **not** be installed on bridge decks.

b) On all other state highways with a posted speed limit of 40 MPH or greater, if the roadway is not in a residential area.

1) **Outside Shoulders** - In areas with paved outside shoulders of 8 feet (2.5 m) or more, rumble strips shall be installed in the paved outside shoulder 4 inches (100 mm) from the outside edge line. If the paved outside shoulder is less than 8 feet (2.5 m), rumble strips shall **not** be installed.

2) **Inside (Median) Shoulders** - On divided highways with paved inside shoulders of 2 feet (0.6 m) or more, rumble strips shall be installed in the paved inside shoulder 4 inches (100 mm) from the median edge line.

3) **Intersections and Driveways** - Rumble strips shall **not** be installed within 50 feet (15 m) of intersections and major driveways.

4) **Minimum Application Length** - The minimum length for rumble strip application is 0.5 miles (800 m).

5) **Bridge Decks** - Rumble strips shall **not** be installed on bridge decks.

**Radar Detector Activators (“Drone” Radar Units)**

Radar Detector Activators shall be used on all construction projects on full access control state highways, and on other state highways with posted speed limits of 50 MPH or greater.

Radar Detector Activators shall conform to the most recent Department specifications for such items.

**Pavement Marking Widths**

On all state highways, the following shall apply:

a) The width of all longitudinal pavement markings (lane lines and edge lines) shall be 6 inches (150 mm).

b) The width of channelizing lines at gore areas shall be 12 inches (300 mm).

c) The width of transverse lines/chevrons used in gore areas shall be 12 inches (300 mm).
Snowplowable Raised Pavement Markers

Snowplowable raised pavement markers shall be installed on all state highways that meet the following criteria:

a) Along the lane lines on full access control highways.

b) Along the lane lines of all multi-lane, non-divided highways with posted speed limits of 40 MPH or greater.

c) Along the center lines of non-divided highways with posted speed limits of 40 MPH or greater.

d) Along channelizing lines of full access control highways at exit and entrance ramp gores.

e) Along the left edge lines of exit and entrance ramps.

f) Snowplowable raised pavement markers shall not be installed on bridge decks.