

Maine Department of Transportation
Field Inspection of Road Systems, Inc.
MSKT End Terminals on Maine Highways

Project No.		Date		Inspector	
LAT		LONG		Installer	

Ensure that proper installation procedures were used during initial installation and/or maintenance:

Scoring

- 1** - Meets all requirements and within tolerances
- 2** - Meets all but one of the requirements and/or within 1 in. of tolerances
- 3** - More than one part of the criteria not met and/or more than an 1 in. outside tolerances

1. The rail height is in accordance with the contract plans. This should be $31" \pm 1"$ above the edge of the finished grade

Score ____

2. A ground strut is secured between posts #1 & #2 using the $\frac{3}{4}" \times 8 \frac{1}{2}"$ hinge bolt at post #2 and a second $\frac{5}{8}" \times 9"$ hex bolt at post location #1.

Score ____

3. There is no radius rail within the MSKT 50'-0" length (TL-3).

Score ____

4. No blockouts are used on Post 1 & 2.

Score ____

5. Blockouts from Post 3 and beyond within the terminal limits are 8" deep

Score ____

6. The end rail panel is not attached to the post at post location #1.

Score ____

7. The end rail panel has $\frac{1}{2}" \times 4"$ slots and all rails are lapped in the proper direction.

Score ____

8. The $\frac{3}{4}" \times 8 \frac{1}{2}"$ hinge bolt at post #2 is on the downstream side of the post.

Score ____

9. The $\frac{5}{8}" \times 9"$ hinge bolt at post location #1 is on the upstream side of the post.

Score ____

10. Posts 1 & 2 – are hinged steel posts and are plumb and w/o damage

Score ____

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11. The lower stub at posts #1 and #2 do not protrude more than 4" above the ground line (measured by the AASHTO 5' cord method). Site grading may be necessary to meet this requirement.
Score ____
12. At post #2, the open-ended slot(s) at the post bolt is on the upstream side of the post.
Score ____
13. Standard steel W6x9# x 6'-0" guardrail posts are used at post locations #3 and beyond.
Score ____
14. All posts within the MSKT are spaced at 6'-3" centers.
Score ____
15. The two 5/16" x 1" hex bolts holding the impact head to post #1 are secured.
Score ____
16. W-beam is fully seated into Impact Head without being seated too far.
Score ____
17. The 8" x 8" bearing plate at post #1 is correctly positioned with the 5" dimension up (resting on the angle spacer) and 3" dimension down.
Score ____
18. The anchor cable is taut and correctly installed.
Score ____
19. A retainer/tie has been placed over the bearing plate to prevent rotation.
Score ____
20. The cable anchor bracket shoulder bolts are properly attached to the W-Beam guardrail and the cable anchor bracket is fully seated on the shoulder portion of the bolts.
Score ____
21. If the posts were augered, the backfill material around the posts is properly compacted.
Score ____
22. No washers are used on the face of the rail except at the cable anchor bracket bolts.
Score ____
23. The end rail panel is 12'-6" long. The second rail must be 9'-4 1/2" long to establish the mid-span splices between posts. A second rail length of 15'-7 1/2" may also be used.
Score ____

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24. The MSKT impact head does not encroach on the shoulder.
Score ____
25. The slope of the area immediately behind the guardrail widening is 3:1 or flatter.
Score ____
26. Existing damage to w-beam from impact head through last post should be noted.
Score ____
27. If there is previous impact damage, was it repaired correctly with only manufacturer supplies replacement parts?
Score ____
28. Ensure guardrail delineation is in place and reflective sheeting on the extruder face is oriented correctly.
Score ____
29. MSKT impact head installed with the rail exit slot on the back side of the impact head away from traffic.
Score ____
30. MSKT-SP rail is bolted to Post 3 (and blockout) and beyond with $\frac{5}{8}$ " x 10" H.G.R. bolts and nuts (within the terminal limit).
Score ____
31. MSKT-SP tangent terminal may be flared to no more than 2'-0" at the extruder head (25:1 taper over the length of the terminal).
Score ____
32. MSKT cable is fed inside through the feeder chute.
Score ____
33. The preferred grading of the shoulder is to a point 5' wide behind the impact head, tapering to 2' minimum behind back of Post 5 and beyond with a cross slope of 1V:10H. Alternate grading (on retrofit) is 2' wide behind the backs of posts throughout with a cross slope of 1V:10H.
Score ____