

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 1in. of tolerances
- 3 - More than one part of the criteria not met and/or more than an 1in. 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** \_\_\_\_\_

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

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  $\frac{1}{2}$ " long to establish the mid-span splices between posts. A second rail length of 15'-7  $\frac{1}{2}$ " may also be used.

**Score** \_\_\_\_

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

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** \_\_\_\_