

# HIGHWAY MAINTENANCE BULLETIN #7/2008 (REVISED March 2016)

## **Guardrail Reflectors and Reflective Strips on Guide Posts**

# March 2, 2016 Amendment to Highway Maintenance Bulletin #7/2008

This amendment is issued to update the minimum dimensions and reference drawings of the guardrail reflectors.

# January 19, 2010 Amendment to Highway Maintenance Bulletin #7/2008

This amendment is issued to update sign sheeting to be used on guardrail reflectors and guide post reflective strips (change from ASTM D4956 Type X sheeting to ASTM D4956 Type IX or Type XI sheeting). This change in sheeting reflects the new Type XI sheeting classification and discontinuation of Type X sheeting classification.

### Summary

This Bulletin is issued to inform maintenance contractors and department staff of the department's revised recommended practice for the installation and replacement of guardrail reflectors and reflective strips on guide posts (delineators).

The department has recently adopted the national standard for guardrail reflector and delineator reflective strip colour where the reflector colour will match the colour of the adjacent lane markings, as outlined in the Manual of Uniform Traffic Control Devices for Canada. Refer to Section A3.4.12. Additionally, the size and type of sheeting used for delineator reflective strips has been updated to improve on the day time and the night time visibility as well as to enhance adhesion onto the guide post. Any new reflectors and delineators should be in accordance with these new standards.

This bulletin shall take precedence over the colour scheme listed in Section C7.2 of the Alberta Transportation Highway Pavement Marking Guide (2003) as well as in drawings TEB 3.01, and RDG-B5.10 in Appendix B1 of the Roadside Design Guide (2007) until such a time that they are updated to reflect this change.

This bulletin shall take precedence over the reflector dimensions in drawings TEB 3.01, and RDG-B5.10 in Appendix B1 of the Roadside Design Guide (2007) until such a time that they are updated to reflect this change.

### **Key Changes**

New installation or replacement of guardrail reflectors and delineators shall be as follows:

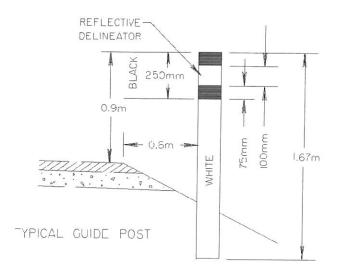
#### **Guardrail Reflectors**

- 1. When one or more reflectors are replaced on a section of guardrail, all other reflectors on that length of guardrail should also be replaced to achieve reflector colour consistency.
- Guardrail reflector colour should be either florescent yellow or white such that they
  comply with the principles for pavement edge lines with respect to their colour. The
  reflector sheeting shall meet ASTM D4956 Type IX or Type XI for luminance level.
  Minimum reflector dimensions should be 102 mm × 76 mm.

#### **Delineators and Delineator Reflective Strips**

- 1. When one or more delineators or delineator reflective strips are replaced and the colour differs from the existing delineator reflective strip colour, all other reflective strips along that stretch of delineators should be updated to maintain size/material/colour consistency.
- 2. When the replacement delineators or delineator reflective strips are the same colour as the existing reflective strips, the other delineators are not required to be updated immediately. Once more than half of the delineators reflective strips have been updated to the new standard, the remaining reflective strips should be updated to allow for size/material consistency. By the fall of 2013, all delineator reflective strips should be updated to meet the new standard.
- 3. The delineator reflective strips colour should be either florescent yellow or white such that they comply with the principles for pavement edge lines with respect to their colour. Green reflective strips are to be used at concealed intersections. Concealed intersections are described in section C7.2.6 in the Alberta Transportation Highway Pavement Marking Guide as intersections where the approach is in an area that has been delineated for reasons other than the approach (e.g., due to a horizontal curve).
- 4. The reflective strip shall meet ASTM D4956 Type IX or Type XI for luminance level, and should be 100 mm wide and 330 mm in length. Previously, the reflective strip was 50 mm wide and 300 mm in length. The increased length will allow for 38 mm of overlap, which will improve adhesion. While stocks of the previous reflective strips still exist, two 50 mm wide strips can be used on one delineator to meet the 100 mm width requirement. To prevent peeling, three staples (four if two 50 mm strips are used) should be inserted through the overlapped portion of the reflective strip. The reflective strip is to be centered on the top (black) portion of the delineator with 75 mm of the black portion of the delineator exposed both above and below the reflective strip. A diagram indicating the reflective strip placement on the delineator

is shown below.



The new recommended practices as indicated in this Bulletin are to be implemented immediately as per the usual practice.

Effective Date: November 1, 2008 Revised Date (1): January 19, 2010 Revised Date (2): March 2, 2016

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### References

Highway Pavement Marking Guide (2003) Roadside Design Guide (2007) TAC Manual of Uniform Traffic Control Devices for Canada

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