ATTACHMENT NO. 35

Approved by NCUTCD Council January 20, 2006

TECHNICAL COMMITTEE: Railroad and Light Rail Transit Technical Committee

DATE OF ACTION: January 20, 2006

TOPIC: Crossbuck Assembly

ORIGIN OF REQUEST: NCUTCD Railroad and Light Rail Transit Technical Committee

AFFECTED PORTIONS OF MUTCD: Section 5F.01 – 5F.06 and Figure 5F-1

DISCUSSION: The proposed change below to Section 5F complements Part 5, Part 8 and Part 10 changes voted and passed by the NCUTCD in June 2004. Note that the January 2006 action by the National Committee was only to add the words “or has been omitted as provided in Part 8B,” in Standard paragraph 4. All other changes to this part were approved by the National Committee in June 2004.

ACTION: Approved by National Committee

Chapter 5F. Traffic Control for Highway-Rail Grade Crossings

Section 5F.01 Introduction

Support: The criteria for highway-rail grade crossing traffic control devices are contained in Part 8 and in other Sections of this Manual.

Traffic control for highway-rail grade crossings includes all signs, signals, markings, illumination, and other warning devices and their supports along roadways either approaching or at highway-rail grade crossings. The function of this traffic control is to permit reasonably safe and efficient operation of both rail and road traffic at highway-rail grade crossings.

Section 5F.02 Highway-Rail Grade Crossing (Crossbuck) Sign (R15-1, R15-2): Crossbuck Assembly

Standard: The Highway-Rail Grade Crossing (Crossbuck) (R15-1) sign (see Figure 5F-1) shall be used at all highway-rail grade crossings. For all low-volume roads, a Crossbuck Assembly consisting of a Crossbuck (R15-1) sign, a Number of Tracks (R15-2) sign if two or more tracks are present, and either a YIELD (R1-2) sign or a STOP (R1-1) sign as required (see Section 8B-04 and Figures 8B-1 and 8B-2) Crossbucks signs shall be used on the right side of each approach at all highway-rail grade crossings not equipped with active traffic control systems. If there are two or more tracks, the supplemental Number of Tracks (R15-2) sign (see Figure 5F-1) shall display the number of tracks and shall be installed below the Crossbuck sign.
A strip of retroreflective white material not less than 50 mm (2 in) in width shall be used on the back of each blade of each Crossbuck sign for the length of each blade, at all highway-rail grade crossings, except those where Crossbuck signs have been installed back-to-back.

A vertical strip of retroreflective white material, not less than 50 mm (2 in) in width, shall be used on each Crossbuck Assembly support at passive highway-rail grade crossings for the full length of the front-and back of the support from the bottom of the Crossbuck sign or Number of Tracks sign to within 0.6 m (2 ft) above the edge of the roadway, except on the side of those supports where a STOP (R1-1) or YIELD (R1-2) sign or flashing lights have been installed or on the back side of supports for Crossbuck signs installed on one-way streets.

On each Crossbuck Assembly where the YIELD or STOP sign is on a separate post, or has been omitted as provided in Part 8B, a vertical strip of retroreflective white material, not less than 50 mm (2 in) in width, shall be on the front of the support from the bottom of the Crossbuck sign or Number of Tracks sign to within 0.6 m (2 ft) above the roadway level.

Option:
The vertical strip of retroreflective material may be omitted from the back sides of Crossbuck Assembly sign supports installed on one-way streets.

Section 5F.03 Highway-Rail Grade Crossing Advance Warning Signs (W10 Series)

Standard:
Except as noted in the Option, a Highway-Rail Grade Crossing Advance Warning (W10-1) sign with either an Active Control (W10-16) sign for those crossings with active traffic control devices or a No Signal (W10-10) sign for those crossings without active traffic control devices installed as a supplemental plaque directly beneath it (see Figure 5F-1) shall be used on all low-volume roads in advance of every highway-rail grade crossing.

Option:
The Highway-Rail Grade Crossing Advance Warning sign may be omitted for highway-rail grade crossings that are flagged by train crews.

The W10-2, W10-3, and W10-4 signs (see Figure 5F-1) may be used on low-volume roads that run parallel to railroad tracks to warn road users making a turn that they will encounter a highway-rail grade crossing soon after making the turn.

Section 5F.04 STOP AHEAD and YIELD AHEAD Signs (W3-1, W3-2 R1-1, R1-2)

Option:
STOP (R1-1) or YIELD (R1-2) signs may be used at low-volume highway-rail grade crossings, at the discretion of the responsible jurisdiction, for crossings without automatic traffic control devices, consistent with the provisions of Sections 2B.04 to 2B.10.

Standard:
A Stop Ahead (W3-1) sign or Yield Ahead (W3-2) sign shall be used in advance of a STOP
or YIELD sign at a highway-rail grade crossing equipped with a Crossbuck Assembly if the STOP or YIELD sign portion of the Crossbuck Assembly is not visible for a distance that enables the road user to bring the vehicle to a reasonably safe stop at the highway-rail grade crossing.

If a Yield Ahead or Stop Ahead sign is installed on the approach to a crossing, the W10-1 sign with W10-10 supplemental plaque shall be installed in advance of the Yield Ahead or Stop Ahead sign. The Yield Ahead or Stop Ahead sign shall be located in accordance with Table 2C-4. The minimum distance between the signs shall be in accordance with Section 2C.05 and Table 2C-4.

Section 5F.05 Pavement Markings

Guidance:
Pavement markings at highway-rail grade crossings, in accordance with Sections 8B.20 and 8B.21, should be used on paved low-volume roads, particularly if they are already deployed at most other highway-rail grade crossings within the immediate vicinity, or when the roadway has centerline markings.

Section 5F.06 Other Traffic Control Devices

Standard:
Other traffic control devices that are used at highway-rail grade crossings on low-volume roads, such as other signs, signals, and illumination that are not in this Chapter, shall conform with the criteria contained in Part 8 and other applicable Parts of this Manual.

Figure 5F-1 Highway-Rail Grade Crossing Signs for Low-Volume Roads

(60x60)

(NOTE: Add W-10-10 and W10-16 signs to the above figure)

W10-10

W10-16