TECHNICAL COMMITTEE: Markings Committee

ITEM NUMBER: 19B-MRK-01

TOPIC: Vertical Panels, Lane Separators, and Raised Islands for use for Emphasis of Pavement Marking Patterns

ORIGIN OF REQUEST: Industry presentation at January 6, 2016 MTC meeting suggesting that NCUTCD review Chapter 3H in regard to the color of permanent devices.

AFFECTED SECTIONS OF MUTCD: Chapter 3H Channelization Devices Used for Emphasis of Pavement Marking Patterns

DEVELOPMENT HISTORY

- Approved by Technical Committee: 06/19/2019
- Approved by NCUTCD Council:

This is a proposal for recommended changes to the MUTCD that has been developed by a technical committee of the NCUTCD. The NCUTCD is distributing it to its sponsoring organizations for review and comment. Sponsor comments will be considered in revising the proposal prior to NCUTCD Council consideration. This proposal does not represent a revision of the MUTCD and does not constitute official MUTCD standards, guidance, or options. If approved by the NCUTCD Council, the recommended changes will be submitted to FHWA for consideration for inclusion in a future MUTCD revision. The MUTCD can be revised only by the FHWA through the federal rulemaking process.

SUMMARY

There is a need for a new/expanded category or classification within the MUTCD as there is currently confusion and disagreement within four MUTCD sections, in regards to flexible delineators/channelizers.

DISCUSSION

In Section 3H.01, the color of the devices used outside of temporary traffic control zones (TTCZ) shall be either orange or the same color as the pavement markings they supplement. As a short term fix for 3H.01, it is proposed that the color orange shall not be an option except for use as temporary traffic control. Any permanent device would have to have the same color as the pavement marking that it supplements, or for which it is a substitution. Long term, subsections within Chapter 3H for permanently mounted channelizer posts with emphasis on
color, dimensions, placement and reflectivity should be created. Sections 3H.03; Vertical Panels, 3H.04; Lane Separators, and 3H.05; Raised Islands used for Emphasis of Pavement Marking Patterns are being proposed.

**RECOMMENDED MUTCD CHANGES**

The following present the proposed changes to the current MUTCD within the context of the current MUTCD language. Proposed additions to the MUTCD are shown in blue underline and proposed deletions from the MUTCD are shown in red strikethrough. Changes previously approved by NCUTCD Council (but not yet adopted by FHWA) are shown in green double underline for additions and green double strikethrough for deletions. In some cases, background comments may be provided with the MUTCD text. These comments are indicated by [highlighted light blue in brackets].

**PART 3. MARKINGS**

**CHAPTER 3H. CHANNELIZING DEVICES USED FOR EMPHASIS OF PAVEMENT MARKING PATTERNS**

Section 3H.01 Channelizing Devices- General

**Option:**

01 Channelizing devices **used to emphasize pavement markings**, as described in Sections 6F.63, 6F.65, 6F.66, 6F.72 through 6F.73, and 6F.75, and as shown in Figure 6F-7 include such as cones, tubular markers, **vertical panels, and drums**, lane separators [Approved 01/06/2017, 16B-MKG-01] lane separators, and raised islands [Approved 01/19/2012, 12A-MKG-01], and may be used for general traffic control purposes in permanent installations such as adding emphasis to reversible lane delineation, channelizing lines, or islands. Channelizing devices may also be used along a center line to preclude turns or along lane lines to preclude turns or along lane lines to preclude lane changing, as determined by engineering judgment. [Approved 01/06/2017, 16B-MKG-01]

**Support:**

01a Although not defined as traffic control devices, lane separators and raised islands can be used for channelizing purposes. [Approved 01/19/2012, 12A-MKG-01]

**Standard:**

02 **Except for color, the** design of channelizing devices, including but not limited to retroreflectivity, minimum dimensions, and mounting height, shall comply with the provisions of Chapter 6 F _except for color_. [Approved 01/06/2017, 16B-MKG-01]

03 The color of the channelizing devices used outside of temporary traffic control zones shall be either orange or the same color as the pavement marking that they supplement, or for which they are substituted. [Approved 01/06/2017, 16B-MKG-01]

04 For nighttime use, channelizing devices shall be retroreflective (as described in Part 6) or internally illuminated. On channelizing devices used outside of temporary traffic control zones, retroreflective sheeting or bands shall be white if the devices separate traffic flows in the same direction and shall be yellow if the devices separate traffic flows in the opposite direction or are placed along the left hand edge line of a one-way roadway or ramp. [Approved 01/06/2017, 16B-MKG-01]
Guidance:
02 Channelizing devices should be kept clean and bright to maximize target value.
04 The color of the channelizing devices used outside of temporary traffic control zones should
be the same color as the pavement marking that they supplement.
05 On channelizing devices used outside of temporary traffic control zones, retroreflective
sheeting or bands on channelizing devices should be white if the devices separate traffic flows in
the same direction and should be yellow if the devices separate traffic flows in the opposite
direction or are placed along the left hand edge line of a one-way roadway or ramp.

Section 3H.02 Tubular Markers

Standard:
01 Tubular markers shall be retroreflectorized and made with a material that can be
struck without causing damage to the impacting vehicle. Tubular markers shall be a
minimum of 28 inches in height and shall be a minimum of 2 inches wide facing road users.

Guidance:
02 Tubular markers should be the same color as the pavement marking they supplement.
Retroreflective material should be the same color as the tubular marker.
03 Tubular markers should be affixed to the pavement or other surface either directly or by
means of an attachment system that is affixed to the pavement or other surface. Tubular markers
should be spaced 10 to 40 feet apart.

Option:
04 Other spacing may be used based on engineering judgment.

Section 3H.03 Vertical Panels

Standard:
01 Vertical panels shall be made with a material that can be struck without causing
damage to the impacting vehicle. Vertical panels shall be a minimum of 36 inches in
height and shall be a minimum of 8 inches wide facing road users.

Guidance:
02 Vertical panels should be affixed to the pavement or other surface either directly or by
means of an attachment system that is affixed to the pavement or other surface. Vertical panels
should be spaced 10 to 40 feet apart.

Section 3H.04 Lane Separators

Guidance:
01 Lane Separators should be affixed to the pavement or other surface either directly or by
means of an attachment system that is affixed to the pavement or other surface.

Section 3H.05 Raised Islands

Guidance:
01 Raised Islands should be a minimum of 4 inches in height and a minimum of 12 inches in
width. Raised Islands should be affixed to the pavement or other surface either directly or by
means of an attachment system that is affixed to the pavement or other surface.