



## National Committee on Uniform Traffic Control Devices

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**Attachment No. 5**  
**Item No.: 19A-TTC-01**

### NCUTCD Proposal for Changes to the Manual on Uniform Traffic Control Devices

**TECHNICAL COMMITTEE:** Temporary Traffic Control Committee  
**ITEM NUMBER:** 19A-TTC-01  
**TOPIC:** Background Color for W11-1 and W11-2 Signs in Work Zones  
**ORIGIN OF REQUEST:** Neil Boudreau, TTC Regulatory, Warning & Guide Sign Task Force  
**AFFECTED SECTIONS OF MUTCD:** Table 2A-5 Common Uses of Sign Colors  
Table 6F-1  
Section 6F.02 General Characteristics of Signs  
Figure 6F-4 Warning Signs and Plaques in Temporary Traffic Control Zones Sheet 2 of 3  
New Section 6F.XX Vehicular Traffic Warning Signs (W11-1, W11-10)  
New Section 6F.YY Non-Vehicular Warning Sign (W11-2)

#### **DEVELOPMENT HISTORY:**

- Approved by TTC Technical Committee: 01/10/2019

*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 through the federal rulemaking process.*

#### **SUMMARY:**

Part 6 uses the W11-2 Pedestrian sign in Figure 6H.29 Sidewalk Closures and Pedestrian Detours using black legend on an orange background. However, Part 6 does not define the W11-2 sign or the W11-1 Bicycle sign. This proposal adds both signs and appropriate language.

29 **DISCUSSION**

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31 Part 6 uses the W11-2 sign in Figure 6H-29 with black legend on an orange background. While both  
32 W11-1 and W11-2 signs are in common use within Temporary Traffic Control Zone applications,  
33 neither is defined in Part 6. A practitioner looking in the MUTCD for guidance with this sign will  
34 only see it in Part 2 as a warning sign with black legend on a yellow background.  
35 This proposal addresses this issue by including orange as a permitted background color in Table 2A-5  
36 Common Uses of Sign Colors. Table 6F-1 Temporary Traffic Control Zone Sign and Plaque Sizes  
37 [Sheet 2 Of 3] does not list either sign. This proposal adds in both signs.

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39 Language is added to Section 6F.02 to ensure that within a Temporary Traffic Control Zone, use of a  
40 supplemental plaque along with a W11-1 or W11-2 sign shall utilize the same black legend on orange  
41 background.

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43 Finally, this proposal adds language to Chapter 6F defining both signs using language consistent with  
44 that in Sections 2C.49 Vehicular Traffic Warning Signs and 2C.50 Non-Vehicular Warning Signs.

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46 **RECOMMENDED MUTCD CHANGES**

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

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**PART 2. SIGNS**

**Table 2A-5. Common Uses of Sign Colors**

Type of Sign	Legend									Background									
	Black	Green	Red	White	Yellow	Orange	Fluorescent Yellow-Green	Fluorescent Pink	Black	Blue	Brown	Green	Orange*	Red*	White	Yellow*	Purple	Fluorescent Yellow-Green	Fluorescent Pink
Regulatory	X		X	X					X					X	X				
Prohibitive			X	X										X	X				
Permissive		X													X				
Warning	X															X			
Pedestrian	X												X			X		X	
Bicycle	X												X			X		X	
Guide				X							X								
Interstate Route				X						X				X					
State Route	X														X				
U.S. Route	X														X				
County Route					X					X									
Forest Route				X							X								
Street Name				X								X							
Destination				X								X							
Reference Location				X								X							
Information				X						X		X							
Evacuation Route				X						X									
Road User Service				X						X									
Recreational				X							X	X							
Temporary Traffic Control	X												X						
Incident Management	X												X						X
School	X																	X	
ETC-Account Only	X																X****		
Changeable Message Signs																			
Regulatory			X***	X						X									
Warning					X					X									
Temporary Traffic Control					X	X				X									
Guide				X						X		X**							
Motorist Services				X						X	X**								
Incident Management					X			X		X									
School, Pedestrian, Bicycle					X		X		X										

\* Fluorescent versions of these background colors may also be used.

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**PART 6. TEMPORARY TRAFFIC CONTROL**

**Table 6F-1. Temporary Traffic Control Zone Sign and Plaque Sizes (Sheet 2 of 3)**

Sign or Plaque	Sign Designation	Section	Conventional Road	Freeway or Expressway	Minimum
XX MPH Speed Zone Ahead	W3-5a	6F.16	36 x 36	48 x 48	30 x 30
Merging Traffic	W4-1,5	6F.16	36 x 36	48 x 48	36 x 36
Lane Ends	W4-2	6F.24	36 x 36	48 x 48	30 x 30
Added Lane	W4-3,6	6F.16	36 x 36	48 x 48	30 x 30
No Merge Area (plaque)	W4-5P	6F.16	18 x 24	24 x 30	—
Road Narrows	W5-1	6F.16	36 x 36	48 x 48	30 x 30
Narrow Bridge	W5-2	6F.16	36 x 36	48 x 48	30 x 30
One Lane Bridge	W5-3	6F.16	36 x 36	48 x 48	30 x 30
Ramp Narrows	W5-4	6F.26	36 x 36	48 x 48	30 x 30
Divided Highway	W6-1	6F.16	36 x 36	48 x 48	30 x 30
Divided Highway Ends	W6-2	6F.16	36 x 36	48 x 48	30 x 30
Two-Way Traffic	W6-3	6F.32	36 x 36	48 x 48	30 x 30
Two-Way Traffic	W6-4	6F.76	12 x 18	12 x 18	—
Hill (symbol)	W7-1	6F.16	36 x 36	48 x 48	30 x 30
Next XX Miles (plaque)	W7-3aP	6F.53	24 x 18	36 x 30	—
Bump	W8-1	6F.16	36 x 36	48 x 48	30 x 30
Dip	W8-2	6F.16	36 x 36	48 x 48	30 x 30
Pavement Ends	W8-3	6F.16	36 x 36	48 x 48	30 x 30
Soft Shoulder	W8-4	6F.44	36 x 36	48 x 48	30 x 30
Slippery When Wet	W8-5	6F.16	36 x 36	48 x 48	30 x 30
Truck Crossing	W8-6	6F.36	36 x 36	48 x 48	30 x 30
Loose Gravel	W8-7	6F.16	36 x 36	48 x 48	30 x 30
Rough Road	W8-8	6F.16	36 x 36	48 x 48	30 x 30
Low Shoulder	W8-9	6F.44	36 x 36	48 x 48	30 x 30
Uneven Lanes	W8-11	6F.45	36 x 36	48 x 48	30 x 30
No Center Line	W8-12	6F.47	36 x 36	48 x 48	30 x 30
Fallen Rocks	W8-14	6F.16	36 x 36	48 x 48	30 x 30
Grooved Pavement	W8-15	6F.16	36 x 36	48 x 48	30 x 30
Motorcycle (plaque)	W8-15P	6F.54	24 x 18	30 x 24	—
Shoulder Drop Off (symbol)	W8-17	6F.44	36 x 36	48 x 48	30 x 30
Shoulder Drop-Off (plaque)	W8-17P	6F.44	24 x 18	30 x 24	—
Road May Flood	W8-18	6F.16	36 x 36	48 x 48	24 x 24
No Shoulder	W8-23	6F.16	36 x 36	48 x 48	30 x 30
Steel Plate Ahead	W8-24	6F.46	36 x 36	48 x 48	30 x 30
Shoulder Ends	W8-25	6F.16	36 x 36	48 x 48	30 x 30
Lane Ends	W9-1,2	6F.16	36 x 36	48 x 48	30 x 30
Center Lane Closed Ahead	W9-3	6F.23	36 x 36	48 x 48	30 x 30
Grade Crossing Advance Warning	W10-1	6F.16	36 dia.	—	—
<a href="#">Bicycle</a>	<a href="#">W11-1</a>	<a href="#">6F-XX</a>	<a href="#">30x30</a>	<a href="#">36x36</a>	<a href="#">24x24</a>
<a href="#">Pedestrian</a>	<a href="#">W11-2</a>	<a href="#">6F-XX</a>	<a href="#">30x30</a>	<a href="#">36x36</a>	<a href="#">24x24</a>
Truck	W11-10	6F.36	36 x 36	48 x 48	30 x 30

Double Arrow	W12-1	6F.16	30 x 30	—	—
Low Clearance	W12-2	6F.16	36 x 36	48 x 48	30 x 30
Advisory Speed (plaque)	W13-1P	6F.52	24 x 24	30 x 30	18 x 18
On Ramp (plaque)	W13-4P	6F.25	36 x 36	36 x 36	—
No Passing Zone (pennant)	W14-3	6F.16	48 x 48 x 36	64 x 64 x 48	40 x 40 x 30
XX Feet (plaque)	W16-2P	6F.16	24 x 18	30 x 24	—
Road Work (with distance)	W20-1	6F.18	36 x 36	48 x 48	30 x 30

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69 **Section 6F.02 General Characteristics of Signs**

70 Support:

71 01 TTC zone signs convey both general and specific messages by means of words, symbols, and/or  
72 arrows and have the same three categories as all road user signs: regulatory, warning, and guide.

73 **Standard:**

74 02 **The colors for regulatory signs shall follow the Standards for regulatory signs in Table 2A-  
75 5 and Chapter 2B. Warning signs and plaques in TTC zones shall have a black legend and  
76 border on an orange background, except for the Grade Crossing Advance Warning (W10-1)  
77 sign which shall have a black legend and border on a yellow background, and except for signs  
78 that are required or recommended in Parts 2 or 7 to have fluorescent yellow-green  
79 backgrounds. Colors for guide signs shall follow the Standards in Table 2A-5 and Chapter 2D,  
80 except for guide signs as otherwise provided in Section 6F.55.**

81 Option:

82 03 Where the color orange is required, the fluorescent orange color may also be used.

83 Support:

84 04 The fluorescent version of orange provides higher conspicuity than standard orange, especially  
85 during twilight.

86 Option:

87 05 Existing warning signs that are still applicable may remain in place.

88 06 In order to maintain the systematic use of yellow or fluorescent yellow-green backgrounds for  
89 pedestrian, bicycle, and school warning signs and plaques in a jurisdiction, the yellow or fluorescent  
90 yellow-green background for pedestrian, bicycle, and school warning signs may be used in TTC  
91 zones.

92 07 Standard orange flags or flashing warning lights may be used in conjunction with signs.

93 **Standard:**

94 08 **When standard orange flags or flashing warning lights are used in conjunction with signs,  
95 they shall not block the sign face.**

96 09 **Except as provided in Section 2A.11, the sizes for TTC signs and plaques shall be as shown  
97 in Table 6F-1. The sizes in the minimum column shall only be used on local streets or roadways  
98 where the 85<sup>th</sup>-percentile speed or posted speed limit is less than 35 mph.**

99 Option:

100 10 The dimensions of signs and plaques shown in Table 6F-1 may be increased wherever necessary  
101 for greater legibility or emphasis.

102 **Standard:**

103 11 **Deviations from standard sizes as prescribed in this Manual shall be in 6-inch increments.**

104 Support:

105 12 Sign design details are contained in the “Standard Highway Signs and Markings” book (see  
106 Section 1A.11).

107 13 Section 2A.06 contains additional information regarding the design of signs, including an Option  
108 allowing the development of special word message signs if a standard word message or symbol sign  
109 is not available to convey the necessary regulatory, warning, or guidance information.

110 **Standard:**

111 14 **All signs used at night shall be either retroreflective with a material that has a smooth,**  
112 **sealed outer surface or illuminated to show the same shape and similar color both day and**  
113 **night.**

114 15 **The requirement for sign illumination shall not be considered to be satisfied by street,**  
115 **highway, or strobe lighting.**

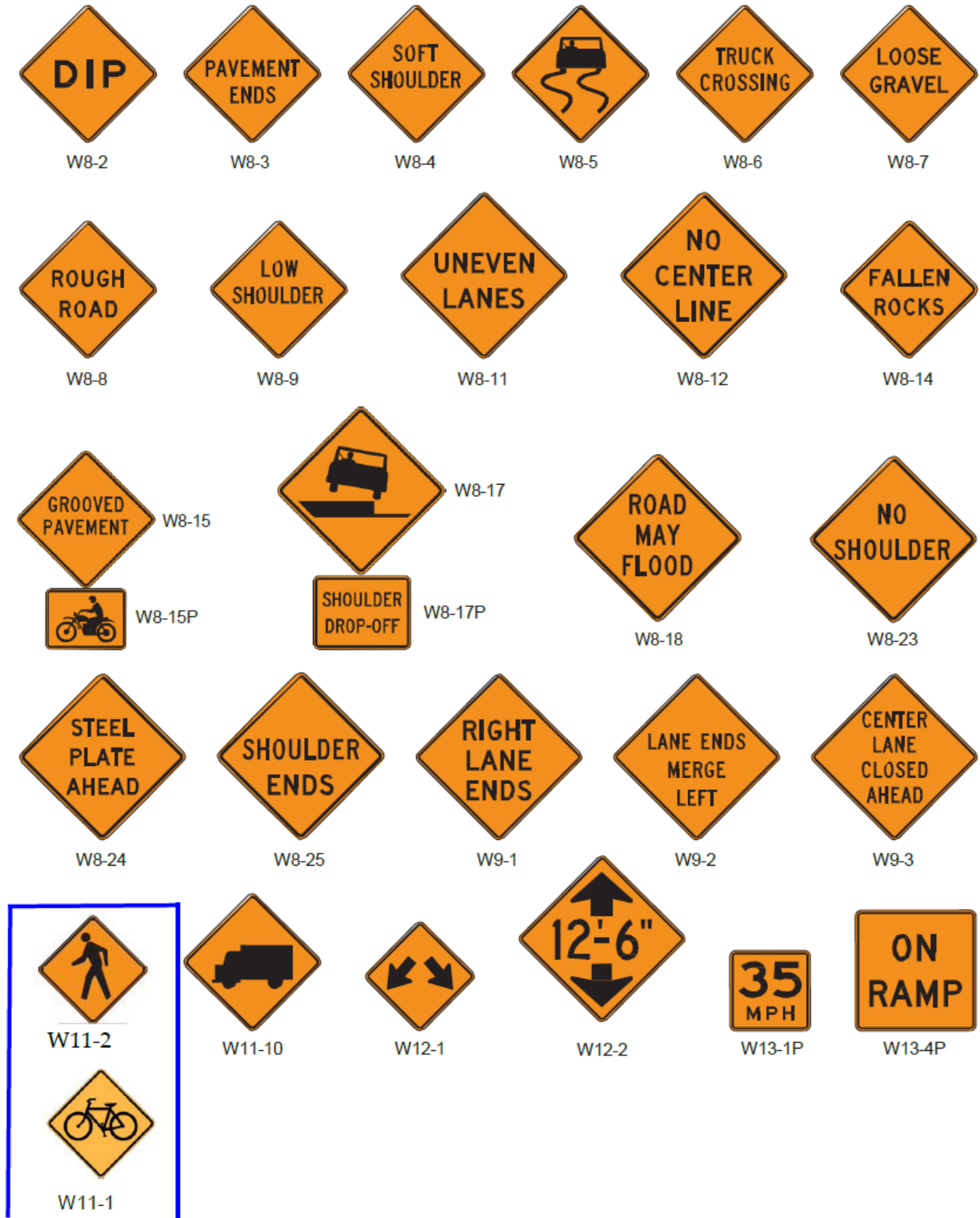
116 Option:

117 16 Sign illumination may be either internal or external.

118 17 Signs may be made of rigid or flexible material.

119

Figure 6F-4. Warning Signs and Plaques in Temporary Traffic Control Zones  
(Sheet 2 of 3)



121 **Section 6F.XX Vehicular Traffic Warning Signs (W11-1, W11-10)**

122 **Option:**

123 01 Vehicular Traffic Warning (W11-1, W11-10) signs (see Figure 6F-4) may be used to alert road  
124 users to locations where unexpected entries into the roadway by trucks, bicyclists or other vehicles  
125 might occur. The TRUCK CROSSING (W8-6) word message sign may be used as an alternate to the  
126 Truck Crossing (W11-10) symbol sign.

127 **Support:**

128 02 These locations might be relatively confined or might occur randomly over a segment of  
129 roadway.

130 **Guidance:**

131 03 Vehicular Traffic Warning signs should be used only at locations where the road user's sight  
132 distance is restricted, or the condition, activity, or entering traffic would be unexpected.

133 04 If the condition or activity is seasonal or temporary, the Vehicular Traffic Warning sign should  
134 be removed or covered when the condition or activity does not exist.

135 **Option:**

136 05 The W11-1 sign and their related supplemental plaques may have a fluorescent yellow-green  
137 background with a black legend and border.

138 06 Supplemental plaques (see Section 2C.53) with legends such as AHEAD, XX FEET, NEXT XX  
139 MILES, or SHARE THE ROAD may be mounted below Vehicular Traffic Warning signs to provide  
140 advance notice to road users of unexpected entries.

141 **Guidance:**

142 07 If used in advance of a bicycle crossing, a W11-1 sign should be supplemented with an AHEAD  
143 or XX FEET plaque to inform road users that they are approaching a point where crossing activity  
144 might occur.

145 **Standard:**

146 08 **If a post-mounted the W11-1 sign is placed at the location of the crossing point where**  
147 **bicyclists might be crossing the roadway, a diagonal downward pointing arrow (W16-7P)**  
148 **plaque (see Figure 2C-12) shall be mounted below the sign. If the W11-1 sign is mounted**  
149 **overhead, the W16-7P supplemental plaque shall not be used.**

150 **Option:**

151 09 The crossing location identified by a W11-1 sign may be defined with crosswalk markings (see  
152 Section 3B.18).

153  
154 **Section 6F.YY Non-Vehicular Warning Sign (W11-2)**

155 **Option:**

156 01 A Non-Vehicular Warning (W11-2) sign (see Figure 6F-4) may be used to alert road users in  
157 advance of locations where unexpected entries into the roadway might occur or where shared use of  
158 the roadway by pedestrians might occur.

159 **Support:**

160 02 These conflicts might be relatively confined, or might occur randomly over a segment of  
161 roadway.

162 **Guidance:**

163 03 If used in advance of a pedestrian crossing, the W11-2 sign should be supplemented with plaques  
164 (see Section 2C.55) with the legend AHEAD or XX FEET to inform road users that they are  
165 approaching a point where crossing activity might occur.



167 **Standard:**  
168 04 If a post-mounted W11-2 sign is placed at the location of the crossing point where  
169 pedestrians, might be crossing the roadway, a diagonal downward pointing arrow (W16-7P)  
170 plaque (see Figure 2C-12) shall be mounted below the sign. If the W11-2 sign is mounted  
171 overhead, the W16-7P plaque shall not be used.

172 Option:  
173 05 A Pedestrian Crossing (W11-2) sign may be placed overhead or may be post-mounted with a  
174 diagonal downward pointing arrow (W16-7P) plaque at the crosswalk location where Yield Here To  
175 (Stop Here For) Pedestrians signs (see Section 2B.11) have been installed in advance of the  
176 crosswalk.

177 **Standard:**  
178 06 If a W11-2 sign has been post-mounted at the crosswalk location where a Yield Here To  
179 (Stop Here For) Pedestrians sign is used on the approach, the Yield Here To (Stop Here For)  
180 Pedestrians sign shall not be placed on the same post as or block the road user's view of the  
181 W11-2 sign.

182 Option:  
183 07 An advance Pedestrian Crossing (W11-2) sign with an AHEAD or a distance supplemental  
184 plaque may be used in conjunction with a Yield Here To (Stop Here For) Pedestrians sign on the  
185 approach to the same crosswalk.

186 08 The crossing location identified by a W11-2 sign may be defined with crosswalk markings (see  
187 Section 3B.18).

188 09 The W11-2 sign and their related supplemental plaques may have a fluorescent yellow-green  
189 background with a black legend and border.

190 Guidance:  
191 10 When a fluorescent yellow-green background is used, a systematic approach featuring one  
192 background color within a zone or area should be used. The mixing of standard yellow and  
193 fluorescent yellow-green backgrounds within a selected site area should be avoided.