

TTC Technical Committee Recommendations

Approved by NCUTCD Council January 12, 2008

- 6G.01 1005 3-9 TTC Concur
- 6G.01 1005 18 – 19 modify to read: “Well designed TTC plans for planned special events ~~will also likely~~ might can result in a combination of ...”
- 6G.01 1005 21 – 22 concur – note to Edit Committee to include reference to private/other facilities
- 6G.02 1005 35-36 TTC Concur
- 6G.02 1006 14-15 TTC Dues not concur, reinsert and delete “~~pay back~~”
- 6G.02 1006 25-26 TTC Concur
- 6G.04 1007 46-47 TTC Concur
- 6G.04 1008 17 insert as follows: “Temporary traffic barriers– stationary or movable “ Not in NPA, not acted on
- 6G.04 1008 38-40 TTC Concur
- 6G.05 1009 6 Editorial
- 6G.06 1009 21-22 TTC Concur
- 6G.07 1009 45-46 TTC Concur
- 6G.07 1010 6-23 TTC Concur
- 6G.10 1011 21 Editorial
- 6G.11 1011 42-44 TTC Concur

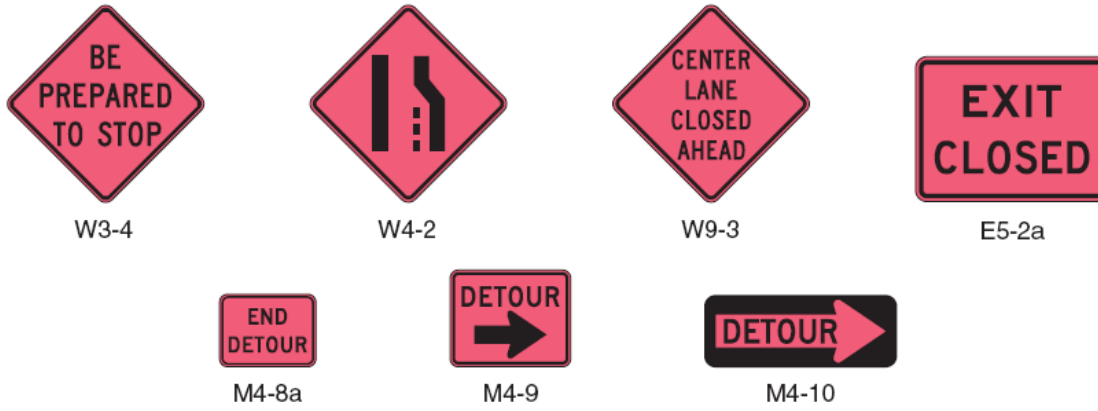
6G.12	1012	31	Editorial
6G.12	1012	33-37	TTC Concur
6G.12	1012	39-40	TTC Concur
6G.12	1012	47	TTC Does not concur
6G.12	1013	3	TTC Concur
6G.12	1013	5	TTC Concur
6G.12	1013	12	TTC Concur
6G.13	1013	48-50	TTC Concur
6G.13	1013	51	modify to read: "...to provide <del>improved</del> <u>adequate</u> visibility."
<b>New</b>		<b>52</b>	<b>request that attention be paid to already NC approved work on aerial lifts</b>
6G.13	1014	21	TTC modify to read: "...left <del>turning</del> or right <del>turning</del> ..."
6G.14	1014	46-47	TTC modify - insert to read: "...protecting <del>work-forces</del> <u>road users and workers.</u> "
6G.18	1016	7-12	TTC Concur
6G.19	1016	13	Editorial
6G.19	1016	24	Editorial
6G.19	1017	9	insert to read: "...illumination to <u>protect workers and accomplish</u> <del>perform</del> the work tasks."

**End of Chapter 6G**

**6H.01 1018 1 TTC Does not concur – return to “6I” – unanimous**

- 6H.01 1018 3-10 TTC Concur
- 6H.01 1018 11-13 NC already approved this language
- 6H.01 1018 28 NC already approved this language
- 6H.01 1018 38-43 TTC Concur
- 6H.01 1018 44-47 TTC Concur
- 6H.01 1019 9 NC already approved this language
- 6H.02 1019 45 TTC modify to read: “...warning devices to alert traffic approaching the ~~back of the~~ queue.”
- 6H.02 1019 46 TTC Concur
- 6H.02 1019 47 TTC modify to read: “...to traffic approaching the ~~back of the~~ queue.”
- 6H.02 1020 5-6 TTC Concur
- 6H.02 1020 8-13 TTC Concur
- 6H.03 1020 25 TTC modify to read: “...warning devices to alert ~~road users~~ traffic approaching the ~~back of the~~ queue.”
- 6H.03 1020 27 TTC Concur
- 6H.03 1020 27-28 TTC modify to read: “...to ~~road users~~ traffic approaching the ~~back of the~~ queue.”
- 6H.03 1020 36-37 TTC Concur
- 6H.03 1020 39-44 TTC Concur

**Figure 6H-1. Examples of Traffic Incident Management Area Signs**



NPA Did Not Change the Figure, but TTC voted to add the following:

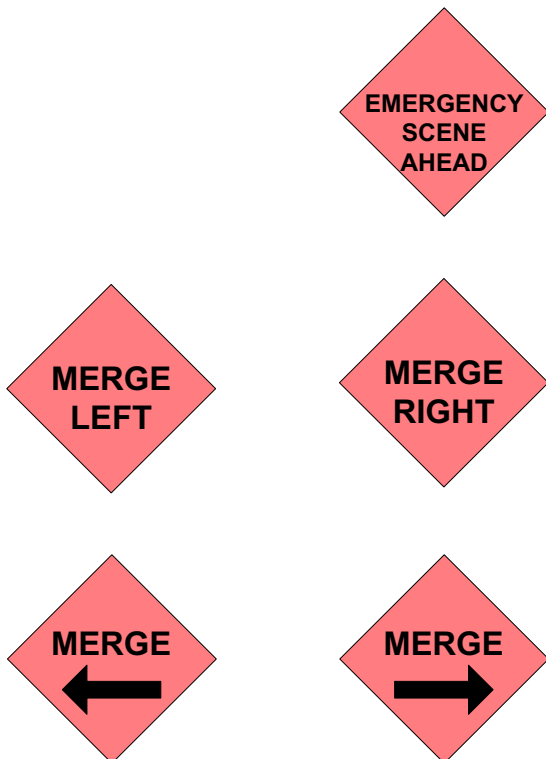


Figure 6H-1

insert diamond signs: “EMERGENCY SCENE AHEAD” and “MERGE RIGHT/LEFT”

Incident Management TAs –TTC **Strongly Requests** that the Incident Management TAs as previously approved by the National Committee be included in this addition of the MUTCD– unanimous

Many incident management responders are already using parts of these TAs as currently in the National Fire Regulations. They think it is a good idea, why can't we?

Chapter 6F Temporary Traffic Control Devices

- 6F.01 967 not addressed, to be reviewed in June; from 6F.01 through 6F.59
- 6F.60 986 18-19 TTC Concur
- 6F.60 986 23 TTC Concur
- 6F.60 986 25 – 26 TTC Concur
- 6F.60 986 31 through page 987 line 37 tabled till June
- 6F.61 987 38 Editorial
- 6F.62 988 29 – 33 TTC Concur
- 6F.62 988 34 TTC Concur with modification: “orange bands placed a maximum of 150 mm (6 in) from the top...”
- 6F.62 988 36 – 38 note coordinate with 6D.01
- 6F.63 989 5 - 15 TTC Concur
- 6F.64 989 44 – 47 TTC Concur
- 6F.64 989 49 – 50 TTC Concur with recommendation that this be moved to section 6F.60 and modified to:
  - “Ballast shall not be placed on the top of a channelizing device. Channelizing devices shall not be weighted with sand, water, or any material to the extent that would make them hazardous to road users or workers when struck.”
- 6F.65 990 7 Editorial
- 6F.65 990 29 – 36 defer to June meeting
- 6F.65 990 37 Editorial
- 6F.65 990 49 Editorial

6F.65	991	1 -2	Editorial
6F.65	991	9	TTC Concur with modification “ conformance with the manufacturer’s application and installation recommendations ...”
6F.65	991	11 – 12	delete 1 <sup>st</sup> sentence; modify 2 <sup>nd</sup> sentence to read “Channelizing devices...”; move to 6F.60
6F.65	991	13 – 14	move to 6F.60
6F.65	991	35 – 36	TTC Concur.
6F.66	991	40	Editorial
6F.66	991	41	TTC Concur
6F.66	992	1	Editorial
6F.67	992	14 – 25	TTC Concur
6F.67	992	27 – 31	TTC Concur with modification: “...with the manufacturer’s application and installation recommendations for the ...”
6F.67	992	32	TTC Concur
6F.67	992	34 – 38	deferring to June 2008 meeting
6F.68	992	39 – 49	TTC Concur
6F.68	993	1	TTC Dues not concur
6F.68	993	2 – 4	TTC Concur with modification: “...with the manufacturer’s application and installation recommendations for the ...”
6F.68	993	6 – 21	TTC Concur with modification to line 20 – “... provide positive protection for hazards, obstacles or <del>provide positive protection</del> for pedestrians...”
6F.69	993	22, 27	TTC Concur

- 6F.70 993 29 - 33 TTC Concur with modification: "... open in the same direction.  
~~And to provide continuous pedestrian channelization."~~
- 6F.70 993 34 – 37 TTC Concur with modification: "Temporary lane separators shall  
be between 64 mm (2.5 in) and 100 mm (4 in) in height and  
between 0.25 m ( 10 in) and 0.3 m (12 in) in width, and shall have  
sloping sides..."
- 6F.70 993 38 – 50 TTC Concur with modification  
to line 43 – "... to provide ~~maximum~~ nighttime ..."  
to line 44 – "... are not used, ~~the curbing of the temporary...~~"
- 6F.71 994 1 Editorial – section tabled
- 6F.72 994 36 Editorial
- 6F.72 994 47 – 48 TTC Concur with modification – change in line 48 - "300 mm (12  
in)" to "250 mm (10)"
- 6F.73 995 4, 10 TTC Concur
- 6F.74 995 13-18 concur
- 6F.74 995 19-22 concur
- 6F.74 995 25 concurs
- 6F.74 995 26 concur with modification to retain "...along pave streets and  
highways..."
- 6F.74 995 27 - 29 concur
- 6F.74 995 32 - 35 concur
- 6F.74 995 38 do not concur ...remove [delete all of] the non pavement...
- 6F.74 995 39 delete "...and the obliteration methods) shall minimize pavement  
scarring.



- 6F.74 995 42 change Guidance to read:
- Pavement marking obliteration methods should not leave scars that can appear to be a pavement marking.
- 6F.75 995 49 concur
- 6F.75 996 1-9 concur and add to the end of line 9: an exiting pavement surface, or where lanes are temporarily shifted on pavement that is to remain in place.
- 6F.75 996 11 concur with modifications: remove “~~an~~” and “~~study~~” and replace with “engineering judgment”.
- 6F.75 996 12-13 concur
- 6F.75 996 16 remove “~~State’s or highway agency’s policy based on engineering judgment.~~”
- 6F.75 996 19 -20 concur
- 6F.75 996 22-25 concur
- 6F.75 996 26 change by removing 26-27 to guidance to read:
- “All pavement markings and devices used to delineate road user paths ~~shall~~ should be ~~carefully~~ reviewed during daytime and nighttime periods.”
- 6F.75 996 30 concur
- 6F.75 996 31 concur and strike the word “~~calendar~~”
- 6F.76 996 39-43 concur
- 6F.76 996 44-46 concur
- 6F.76 996 47-49 concur
- 6F.76 996 51-52 retain the word “temporary”:

do not concur - retain original language for 51 through line 1 on page 997

6F.76 997 3 move the sentence: "The value of N referenced for solid lines shall equal the N for the broken or dotted lines that might be adjacent to or might extend the solid lines (see Section 3B.11)." and move to the end of line 8

6F.76 997 6-8 concur

6F.76 997 9-12 do not concur

6F.76 997 14-15 concur

6F.76 997 20-21 concur

6F.77 997 27-28 do not concur with the right ~~hand~~ and left ~~hand~~

65.77 997 31-34 concur6F.78 997 41-42 Support needs to be re-worded since they have removed most of the items in the NPA. We recommend the following wording:

There are four types of warning lights commonly used in TTC zones: Type A, Type B, Type C and Type D.

6F.76 998 1-20 TTC Does Not Concur

6F.77 998 21-32 TTC could not get a 2/3 vote

6F.78 999 3 TTC concurs

6F.79 999 11-12 TTC concurs

6F.79 999 29-35 TTC Concurs

6F.80 999 39 TTC concurs

6F.80 999 45-49 TTC concurs

6F.80 1000 8-11 TTC Concurs

6F.80	1000	49-53	TTC concurs through to 1001 lines 1 - 4
6F.81	1001	8	editorial
6F.81	1001	21- 51	TTC concurs
6F.81	1002	1-6	TTC concurs
6F.82	1002	9-44	TTC Does not concur
6F.83	1002	45-50	TTC Does not concur
6F.83	1003	1-3	TTC concurs
6F.84	1003	17	TTC concurs
6F.85	1003	35-48	TTC does not concur
6F.86	1003	49	TTC Concurs
6F.86	1004	1-9	TTC Concurs

6D.01 953 3 – 9 TTC Concur

6D.01 953 14 – 21 TTC Concur

6D.01 953 22 – 25 TTC Concur

6D.01 953 30 – 33 TTC Concur

6D.01 953 34 – 35 TTC Does not concur

6D.01 953 35 – 36 TTC Concur

6D.01 953 42 – 47 TTC Concur

6D.01 953 49 TTC Concur with modification – “... conflicts with ~~worksite~~ work vehicles, equipment ...”

6D.01 953 51 TTC Concur

6D.01 954 1 – 5 TTC Concur

6D.01 954 9 TTC Concur

6D.01 954 18 – 20 TTC Concur

6D.01 954 21 - 24 TTC Concur with modification – delete 2 sentences in lines 21 – 24 and replace with –

“To accommodate the needs of pedestrians, the following considerations should be addressed when temporary pedestrian pathways in TTC zones are designed or modified:

A. Provisions for continuity of paths for pedestrians should be incorporated into the TTC process.

B. Access to transit stops should be maintained.

C. A smooth, continuous hard surface should be provided throughout the entire length of the temporary pedestrian facility.

There should be no curbs or abrupt changes in grade or terrain that could cause tripping.

D. The width of the existing pedestrian facility should be provided for the temporary facility if practical. Traffic control devices and other construction materials and features should not intrude into the usable width of the sidewalk, temporary pathway, or other pedestrian facility.”

6D.01 954 27 – 32 TTC Concur

6D.01 954 38 – 42 TTC Concur

6D.01 955 40 – 41 TTC Concur

6D.02 955 51 – 2 TTC Concur with modification – “The extent of pedestrian needs, including pedestrians with disabilities, should be determined through engineering judgment or by the individual responsible for each TTC zone situation. ~~Adequate provision should be made for pedestrians with disabilities.~~”

6D.02 956 4 – 8 tabled - TTC Concur with modification –

Line 5 – “...shall include detectable and accessibility features consistent...”

Line 6 – “...the a closed sidewalk pedestrian facility...”

Line 8 – “...the a closed sidewalk pedestrian facility...”

6D.02 956 10 – 14 TTC Concur

6D.02 956 15 – 20 TTC Concur with insertion – “... alternate crossings, path guidance, and sign...”

6D.02 956 21 – 29 TTC Concur

6D.02 956 31 – 33 TTC Concur with modifications

- relocate to end of line 20 in this section
- modify "... ~~the pushbutton~~ **it** should be equipped with a **pushbutton** locator tone..."

6D.02 956 34 TTC Concur with modification

To accommodate the needs of pedestrians with disabilities, the following considerations should be addressed when temporary pedestrian pathways in TTC zones are designed or modified:

A. Provisions for continuity of accessible and detectable paths for pedestrians should be incorporated into the TTC process.

B. Accessible **and detectable** access to ~~temporary~~ transit stops should be provided.

C. ~~(Blocked routes, alternate crossings, and sign and signal information should be communicated to pedestrians with visual disabilities by providing devices such as audible information devices, accessible pedestrian signals, or barriers and channelizing devices that are detectable to the pedestrians traveling with the aid of a long cane or who have low vision.)~~ Where pedestrian traffic is detoured to a TTC signal, engineering judgment should be used to determine if pedestrian signals or accessible pedestrian signals should be considered for crossings along an alternate route.

D. When channelization is used to delineate a pedestrian pathway, a continuous detectable edging should be provided throughout the length of the facility such that pedestrians using a long cane can follow it. These detectable edgings should comply with the provisions of Section 6F.71.

E. [ delete first sentence] There should be no curbs or abrupt changes in grade or terrain that could cause tripping or be a barrier to wheelchair use. The geometry and alignment of the

facility should meet the applicable requirements of the “Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG)” (see Section 1A.11).

F. [delete first sentence] When it is not possible to maintain a minimum width of 1500 mm (60 in) throughout the entire length of the pedestrian pathway, a 1500 x 1500 mm (60 x 60 in) passing space should be provided at least every 60 m (2004 ft), to allow individuals in wheelchairs to pass.

G. Signs and other devices mounted lower than 2.1 m (7 ft) above the temporary pedestrian pathway should not project more than 100 mm (4 in) into accessible pedestrian facilities.”

6D.03 957 24 – 29 TTC Concur

6D.03 957 39 TTC Concur

6D.03 957 47 – 55 TTC Concur with modification

Line 48 – “All workers, **including emergency responders**, within...”

Line 49 – “...or to **work vehicles** and construction equipment...”

Line 53 – “ ...risk exposure, **except as noted in the option below**. A person designated by the employer to be responsible for the worker safety ~~plan~~ shall...”

6D.03 958 2

6D.03 958 4 – 7 TTC Concur – insert at end of line 7 – **“Emergency responders may elect not to wear high visibility apparel when they are directly exposed to risks associated with fire, chemicals or other similar hazards.”**

**6I.01 1022 1 TTC does not concur with the change in chapter numbering.**

6I.01 1022 21-23 TTC Concur

6I.01 1022 26 modify – “In general, the procedures illustrated represent ~~minimum~~ possible solutions for the situations depicted. Except for the notes (which are clearly classified using headings as being Standard, Guidance, Option, or Support), the information presented in the typical applications can generally be regarded as ~~Guidance~~ Option.”

6I.01 1022 34 TTC concurs

TTC concurs with all editorial replacements of “a” for “the”

6I TA4 1026 12 TTC concurs

6I TA4 1026 22-23 tabled

6I TA5 1027 10-11 TTC Concur

6I TA7 1029 7-8 editorial

6I TA8 1030 2, 8 editorial

6I TA9 1031 11 editorial

6I TA10 1032 26-28 do not concur – will not concur in any other TAs

6I TA10 1032 29 concur

6I TA11 1033 2 editorial

6I TA12 1034 2 editorial

6I TA14 1036 14-15 TTC concurs

6I TA15 1037 7-8 TTC concurs

6I TA16 1038 4 TTC does not concur



6I	TA16	1038	5-28	TTC concur
6I	TA17	1039	2	editorial
6I	TA20	1042	2, 8	editorial
6I	TA21	1043	2	editorial
6I	TA21	1043	4-5	do not concur
6I	TA22	1044	2-9	do not concur with addition of "hand"
6I	TA23	1045	12	concur with modification ...it as a turn bay lane, the left-turn
6I	TA24	1046	9-12	concur
6I	TA25	1047	9-12	concur
6I	TA26	1048	2	concur
6I	TA27	1049	2	concur
6I	TA28	1050	2	concur
6I	TA29	1051	18	concur
6I	TA30	1052	2	concur
6I	TA31	1053	2	concur
6I	TA31	1053	24-27	change to option as follows:

Option:

"The Reverse Curve signs may contain a single reverse curve arrow or multiple reverse curve arrows with the number of arrows being the same as the number of through lanes available to road users." Note this applies to other diagrams [ta31, ta 45] and 6F.47

6I	TA31	1053	30-31	do not concur
6I	TA32		2	Concur
6I	TA32	1054	27-29	Concur with center line, Do not concur with hand
6I	TA 33	1055		concur
6I	TA34	1056	9-29	concur
6I	TA35	1057	17-25	concur
6I	TA 36	1058	2	concur
6I	TA36	1058	4,5	concur
6I	TA36	1058	7	concur
6I	TA36	1058	12	concur
6I	TA36	1058	16-17	concur
6I	TA36	1058	19-31	concur
6I	TA 37	1059	3-5	concur
6I	TA37	1059	8-22	concur
6I	TA 38	1060	3-7	concur
6I	TA 38	1060	11	concur
6I	TA 38		12	do not concur
6I	TA 38	1060	21-22	do not concur
6I	TA 39	1061		concur to all
6I	TA 40	1062		concur to all
6I	TA 41	1063	11	insert a comma after signs to read “.. intersection guide signs, and channelizing devices ...”

6I	TA 42 1064	16	concur with all but line 16 « hand »
6I	TA 44 1066	7	concur with all but line 7 “hand”
6I	TA 45 1067	21-24	concur
6I	TA 45 1067	42	insert options from TA31 and insert the standard from TA 37

Option:

2. The procedure may be used during a peak period of vehicular traffic and then changed to provide two lanes in the other direction for the other peak.

Option:

9. A longitudinal buffer space may be used in the activity area to separate opposing vehicular traffic.  
~~9. An ALL LANES THRU supplemental plaque may be used to emphasize the point that all lanes shift and no lanes are closed.~~
10. A work vehicle or a shadow vehicle may be equipped with a truck-mounted attenuator.

Standard:

1. An arrow panel shall be used when a freeway lane is closed. When more than one freeway lane is closed, a separate arrow panel shall be used for each closed lane.

6I	TA46 1068		concur with all
TABLES			concur with all
FIGURES			
6I -1	314		no changes
6I -16	329		do not concur - delete reference to minimum 10' lane width
6I -38	351		[Figure 6I-38] TTC does not concur - when the optional cones are used, extend the temporary white edge line on the right side of the work area downstream to the end of the cones