

DISTRICT #: Metro  
 I/PLOT NAME: Temporary Traffic Control Title Sheet 2021/220  
 PATH & FILENAME: OTST\WorkZone\Templates\2020\Plans, Plates, and Templates\TTC Title Sheet\2021\220\20-DEC-2021

**NOTES & GUIDELINES**

**GENERAL INFORMATION:**

- ALL DISTANCES ARE APPROXIMATE.
- SIGNING:**
- ALL TEMPORARY SIGNS ARE REQUIRED TO BE CRASHWORTHY PER THE AASHTO MANUAL FOR ASSESSING SAFETY HARDWARE 2016 (MASH-2016). TEMPORARY SIGN STRUCTURES THAT ARE CRASHWORTHY UNDER THE NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM REPORT 350 (NCHRP-350) MAY BE USED PROVIDED THE DEVICES WERE ACQUIRED BY THE CONTRACTOR PRIOR TO DECEMBER 31ST, 2019. THE MINNESOTA TYPE "C" AND "D" BRACED LEG U-CHANNEL (KNEE BRACE) SIGN SUPPORT IS NOT ALLOWED.
  - THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE FINAL SIGNS TO ASSURE THAT THE FINAL SIGNS ARE PLACED AS NEEDED, OR PROVIDE TEMPORARY SIGNING UNTIL THE FINAL SIGNING IS PLACED.
  - WHEN MULTIPLE GROUND MOUNTED SIGN STRUCTURES ARE PLACED ADJACENT TO EACH OTHER THERE SHOULD BE NO MORE THAN 2 POSTS WITHIN 84" OF EACH OTHER. WHEN THIS SPACING CAN NOT BE MAINTAINED, THEN SIGN STRUCTURES SHALL BE OFFSET, AND STAGGERED WITH A MINIMUM OF 4' BETWEEN SIGN STRUCTURES BOTH Laterally and Longitudinally. EXAMPLE SHOWS DETOUR SIGNAGE, BUT THIS REQUIREMENT APPLIES TO ALL SIGNAGE.
  - WHEN A SIGN OR BARRICADE IS ORIENTED SUCH THAT VISIBILITY TO ROAD USERS INCLUDING BIKES AND PEDESTRIANS IS REDUCED ENOUGH TO CAUSE A HAZARD, DELINEATE THE SIGN/BARRICADE WITH APPROPRIATE DEVICES.
  - TEMPORARY SIGNS SHALL BE PLACED SUCH THAT OBSTACLES DO NOT BLOCK THEM FROM BEING VIEWED BY APPROACHING ROAD USERS. OBSTACLES MAY INCLUDE, BUT ARE NOT LIMITED TO, LIGHT POLES, TREES, SIGNS, AND BUILDINGS.
  - TEMPORARY SIGNS SHALL BE PLACED AND ORIENTED APPROXIMATELY AS SHOWN IN THE PLAN, AT RIGHT ANGLES TO DIRECTION OF AND FACING THE TRAFFIC THEY ARE INTENDED TO SERVE, UNLESS OTHERWISE SPECIFIED.
  - LONGITUDINAL DROPOFFS SHALL BE SIGNED AS SHOWN IN THE "MINNESOTA TEMPORARY TRAFFIC CONTROL FIELD MANUAL" PAGES (6K-a) THRU (6K-d) UNLESS OTHERWISE SPECIFIED IN THESE PLANS.
  - AFTER REMOVAL OF SIGN AND/OR SIGN BASE, BACK FILL, COMPACT, AND LEVEL SOIL TO MATCH SURROUNDING SOIL.

**PAVEMENT MARKING:**

- MASK OR REMOVE ANY CONFLICTING PAVEMENT MARKINGS AS SHOWN IN THE PLAN OR APPROVED BY THE ENGINEER.
- ALL TEMPORARY PAVEMENT MARKINGS SHALL BE WET REFLECTIVE. ALL PAVEMENT MARKINGS IN TAPERS AND TRANSITIONS SHALL BE 6" IN WIDTH.
- SEE 2582 IN THE SPECIAL PROVISIONS FOR PAVEMENT MARKING SPOTTING RESPONSIBILITIES.

**BARRIER & DELINEATION:**

- PLACE AND MAINTAIN PORTABLE BARRIER DELINEATORS ANY TIME TRAFFIC IS WITHIN 10' OF BARRIER. DELINEATORS WILL EACH HAVE A MINIMUM OF 24 SQ IN. OF RETROREFLECTIVE SURFACE ON BOTH SIDES PLACED AT 25' SPACING ON TOP OF THE BARRIER. SIDE MOUNTED PORTABLE BARRIER DELINEATORS WILL HAVE A MINIMUM OF 12 SQ. IN. OF RETROREFLECTIVE SURFACE AREA AND BE PLACED AT 12.5' SPACING. IF A SMALLER APPROVED BARRIER DELINEATOR IS USED IT SHALL BE A MINIMUM OF 6 SQ IN. OF RETROREFLECTIVE SURFACE AREA AND BE PLACED ON BOTH SIDES AT 6.25' SPACING. TEMPORARY BARRIER DELINEATOR COLOR SHALL MATCH APPLICABLE PAVEMENT MARKING.

**CONSTRUCTION INFORMATION SIGNING:**

- THE CONTRACTOR SHALL USE CONSTRUCTION INFORMATION SIGNING AS SHOWN IN THE PLAN WHICH ARE TO BE USED AS FOLLOWS:  
 PLACE THE G20-X1 ADVANCE CLOSURE NOTICE SIGN(S) X DAYS PRIOR TO THE PLANNED CLOSURE DATE.  
 PLACE G20-X2 ADVANCE NOTICE SIGNS X DAYS PRIOR TO THE WORK STARTING DATE. ONCE WORK BEGINS, COVER THE START DATE LEGEND WITH SUGGESTED PLAQUE CONTAINED IN THIS PLAN. IF NO ALTERNATE MESSAGE IS SHOWN IN THE PLAN OR APPROVED BY THE ENGINEER, DISPLAY THE CORRECT ESTIMATED FINISH DATE, MONTH, OR SEASON.  
 IF CONSTRUCTION INFORMATION SIGNING IS NO LONGER VISIBLE TO THE MOTORING PUBLIC ONCE WORK BEGINS, MOVE SAID SIGNING TO A SITE IN ADVANCE OF THE WORK ZONE OR CLOSURE AS SHOWN IN THE PLAN OR APPROVED BY THE ENGINEER.

**STANDARD PLANS**

5-297.680	TEMPORARY PORTABLE PRECAST CONCRETE BARRIER ANCHORING
5-297.801	INTERIM PAVEMENT MARKINGS AND SIGNING

**PAVEMENT MARKING SYMBOLS AND MATERIALS LEGEND**

- - - - - SOLID LINE PAVEMENT MARKING WITH TEMPORARY RAISED PAVEMENT MARKERS AT 10' SPACES  
 — — — — — BROKEN LINE-50' CYCLE (10' LINE, 40' GAP)  
 . . . . . DOTTED LINE-15' CYCLE (3' LINE, 12' GAP), UNLESS SHOWN OTHER WISE IN THE PLAN

CROSSWALK BLOCK  
 PAVEMENT MESSAGE (LEFT ARROW)

**STRIPING KEY**

CIRCLE-MULTI COMP	BOX-PREF TAPE
TRIANGLE-PAINT	OCTAGON-PREF THERMO

1ST DIGIT WIDTH: 4", 8", ETC.  
 2ND DIGIT PATTERN:  
 S - SOLID  
 B - BROKEN  
 T - DOTTED  
 D - DOUBLE SOLID  
 K - DOUBLE BROKEN  
 H - DOUBLE DOTTED  
 3RD DIGIT COLOR:  
 W - WHITE  
 Y - YELLOW  
 B - BLACK

G=GROUND IN W=WET REFLECTIVE  
 C=CONTRAST E=ENHANCED SKID RESISTANCE

EXAMPLE: = 4" SOLID LINE WHITE PREF THERMO GROUND IN, CONTRAST, WET REFLECTIVE

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TC-X	LONG TERM TYPICAL APPLICATION
TC-X	ALTERNATE PEDESTRIAN ROUTES AND DEVICES

**TRAFFIC CONTROL DEVICES & SYMBOLS LEGEND**

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	AREA CLOSED TO TRAFFIC / WORK AREA		FLASHING ARROW BOARD TYPE C = (4' X 8' UNLESS OTHERWISE NOTED).
	TRAFFIC CONTROL SIGN		PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)
	TYPE III BARRICADE =		PORTABLE PRECAST CONC BARRIER DES 8337 WITH DELINEATORS AT 25' SPACES (PPCB)
	DRUM-LIKE CHANNELIZER (TYPE B) =		TEMPORARY IMPACT ATTENUATOR
	TYPE A FLASHING WARNING LIGHT		AUDIBLE MESSAGE DEVICE (AMD)

I HEREBY CERTIFY THAT SHEETS \_\_\_\_\_ THROUGH \_\_\_\_\_ OF \_\_\_\_\_ OF THIS PLAN WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT ENGR NAME HERE \_\_\_\_\_ LIC. NO. \_\_\_\_\_  
 DESIGNER TECH NAME HERE \_\_\_\_\_ DATE **DATE!**

TITLE: **TEMPORARY TRAFFIC CONTROL TITLE SHEET**

STATE PROJ. NO. 0000-000 (TH 000) SHEET NO TCXXX OF TCXXX SHEETS