

PROJECT ID: 1520-00-62  
WITH: 6150-01-63

COUNTY: WOOD

ORDER OF SHEETS

Section No. 1	Title
Section No. 2	Typical Sections and Details
Section No. 3	Estimate of Quantities
Section No. 3	Miscellaneous Quantities
Section No. 4	Right-of-Way Plat
Section No. 5	Plan and Profile
Section No. 6	Standard Detail Drawings
Section No. 7	Sign Plates
Section No. 8	Structure Plans
Section No. 9	Computer Earthwork Data
Section No. 9	Gross Sections

TOTAL SHEETS = 22



DESIGN DESIGNATION

A.A.D.T. 2008	= 1,400
A.A.D.T.	= N/A
D.H.V.	= N/A
D.D.	= N/A
T.	= N/A
DESIGN SPEED	= N/A
ESALS	= N/A

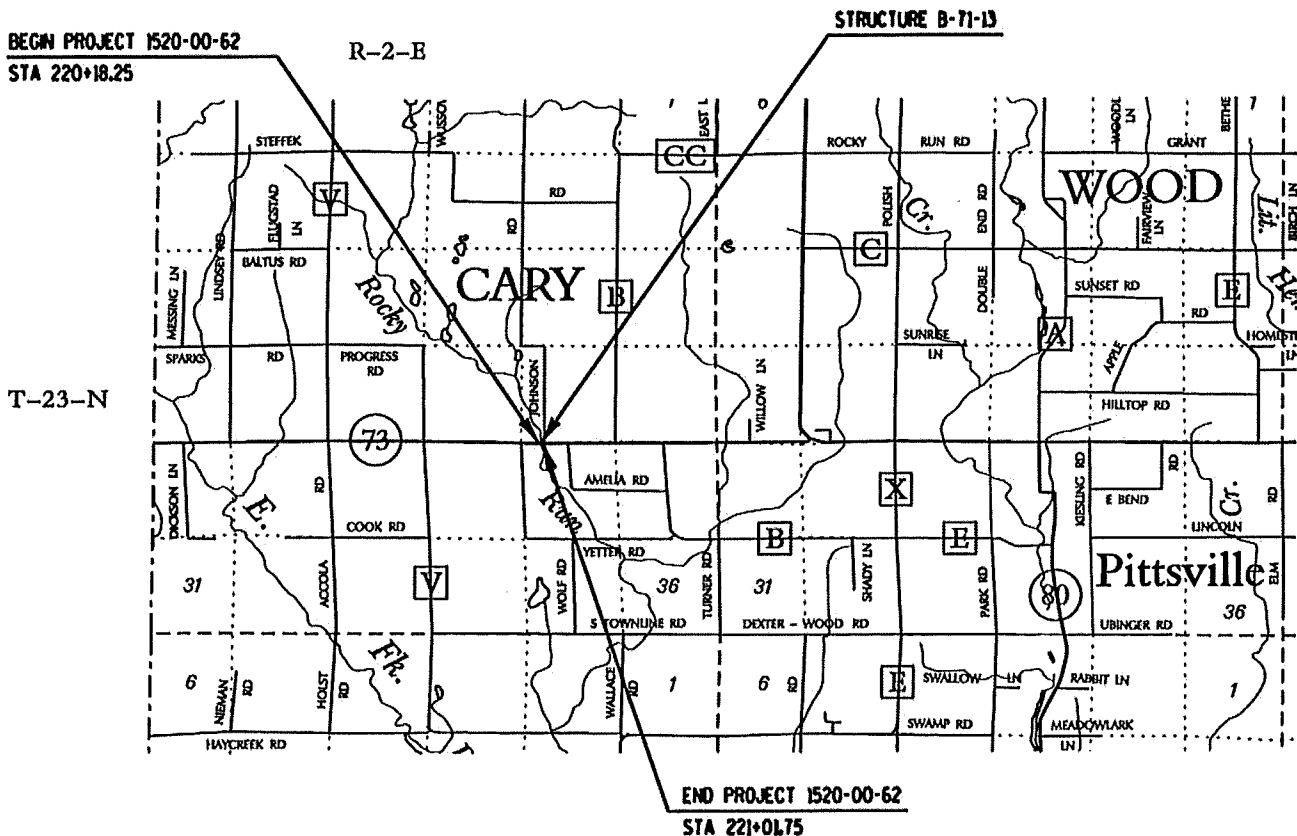
CONVENTIONAL SYMBOLS

PLAN	
CORPORATE LIMITS	////
PROPERTY LINE	---
LOT LINE	- - - -
LIMITED HIGHWAY EASEMENT	L---
EXISTING RIGHT OF WAY	---
PROPOSED OR NEW R/W LINE	---
SLOPE INTERCEPT	- - - -
REFERENCE LINE	---
EXISTING CULVERT	- - - -
PROPOSED CULVERT (Box or Pipe)	---
COMBUSTIBLE FLUIDS	CAUTION
MARSH AREA	~ ~ ~ ~
WOODED OR SHRUB AREA	~~~~

PROFILE	
GRADE LINE	---
ORIGINAL GROUND	---
MARSH OR ROCK PROFILE (To be noted as such)	---
SPECIAL DITCH	---
GRADE ELEVATION	95.36
CULVERT (Profile View)	0 □
UTILITIES	
ELECTRIC	— E —
FIBER OPTIC	— FO —
GAS	— G —
SANITARY SEWER	— SAN —
STORM SEWER	— SS —
TELEPHONE	— T —
WATER	— W —
UTILITY PEDESTAL	⊗
POWER POLE	⊕
TELEPHONE POLE	⊗

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION  
PLAN OF PROPOSED IMPROVEMENT  
PITTSVILLE - NEILLSVILLE  
ROCKY RUN BRIDGE B-71-13  
STH 73  
WOOD COUNTY

STATE PROJECT NUMBER  
1520-00-62



LAYOUT  
SCALE 0 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.016 MI.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1520-00-62		

ORIGINAL PLANS PREPARED BY

**OMNI ASSOCIATES**

WISCONSIN PROFESSIONAL ENGINEER

JUDITH ANN WILSON  
E-22940  
NEENAH, WI

10/25/11

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor \_\_\_\_\_

Designer **OMNI ASSOCIATES**

Project Manager **KEVIN GARRIGAN, P.E.**

Regional Examiner **CHERYL SIMON, P.E.**

Regional Supervisor **SHANNON P. RILEY, P.E.**

C.O. Examiner \_\_\_\_\_

APPROVED FOR THE DEPARTMENT

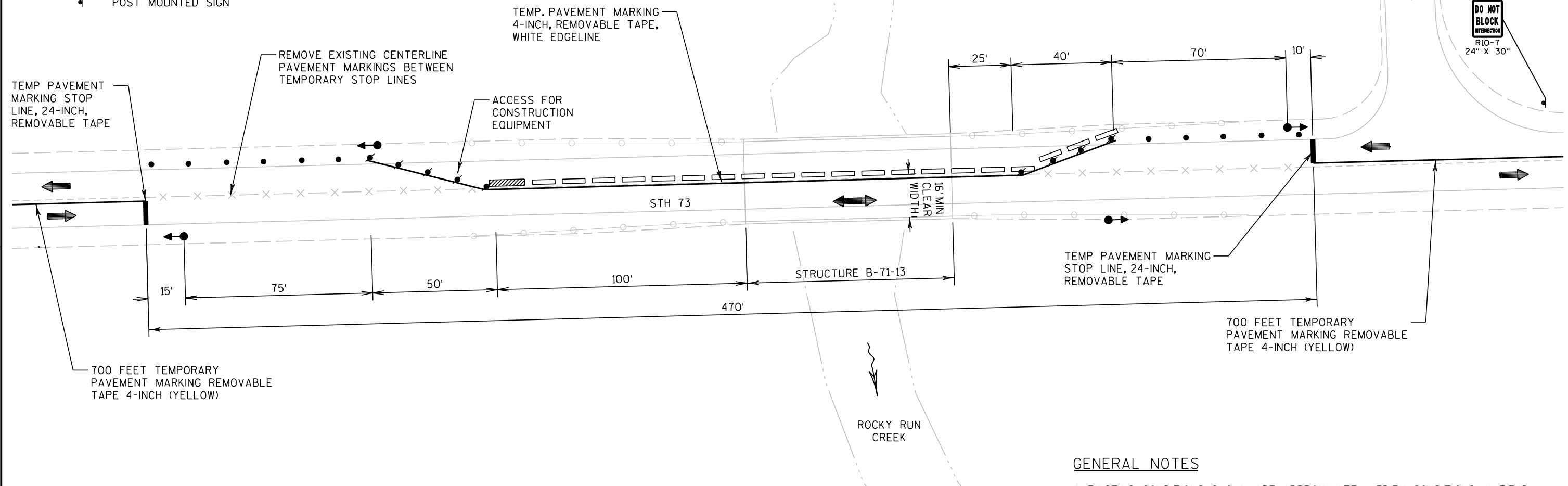
DATE: 10/25/11 *Shannon P. Riley*  
(Signature)

**E**

2	<div><div><div>GENERAL NOTES</div><div><p>THE LOCATIONS OF EXISTING AND PROPOSED UTILITY FACILITIES ARE NOT SHOWN ON THE PLANS. THERE MAY BE UTILITY FACILITIES WITHIN THE PROJECT AREA, BUT NO CONFLICTS ARE ANTICIPATED.</p><p>THERE ARE NO KNOWN UTILITIES ON THE EXISTING BRIDGE.</p><p>CONSIDER DIMENSIONS GIVEN FOR EXISTING FEATURES AS APPROXIMATE AND MEASURE FEATURES IN THE FIELD FOR MATCHING PURPOSES.</p><p>CONTRACTOR WILL BE RESPONSIBLE FOR RESHAPING AND SEEDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY HIS OPERATION OUTSIDE THE NORMAL CONSTRUCTION LIMITS.</p></div></div><div><div>CONTACTS</div><div><div>DNR LIAISON</div><div>MARC HERSHFIELD DEPARTMENT OF NATURAL RESOURCES 473 GRIFFITH AVENUE WISCONSIN RAPIDS, WI 54494 TELEPHONE: 715-421-7867 EMAIL: marc.hershfield@wisconsin.gov</div></div></div><div><div><div>DIGGERSHOTLINE</div><div><div>Toll Free (800) 242-8511</div><div>Hearing Impaired TDD (800) 542-2289</div><div>www.DiggersHotline.com</div></div></div></div></div>	2					
PROJECT NO: 1520-00-62			HWY: STH 73	COUNTY: WOOD	GENERAL NOTES	SHEET: E	2.1

## LEGEND

- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- ▬ TEMPORARY PRECAST CONCRETE BARRIER
- ◀ TEMPORARY TRAFFIC SIGNAL
- ➡ DIRECTION OF TRAFFIC FLOW
- ▨ CRASH CUSHION TEMPORARY
- × — × — REMOVING PAVEMENT MARKINGS
- Ⓜ POST MOUNTED SIGN



## GENERAL NOTES

- EXISTING CONDITIONS SHOWN ARE APPROXIMATE. VERIFY CONDITIONS IN FIELD.
- THIS DETAIL SUPPLEMENTS SDD "TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNAL". FOLLOW SDD EXCEPT AS SHOWN IN THIS DETAIL.
- REDUCE WORK ZONE ON EAST APPROACH TO MAINTAIN TRAFFIC TO AND FROM JOHNSON RD. STAGING AREA TO BE ON WEST APPROACH.
- TEMPORARY EDGELINE AND TEMPORARY ASPHALT WIDENING NOT NECESSARY FOR THIS LOCATION.
- SEE ADDITIONAL STANDARD DETAIL DRAWINGS FOR OTHER TRAFFIC CONTROL REQUIREMENTS.

TEMPORARY TRAFFIC SIGNAL FOR ONE LANE BRIDGE - STH 73  
TRAFFIC TO USE EASTBOUND LANE ON BRIDGE

SEQUENCE OF OPERATIONS				
STRUCTURE: B - 71 - 13     STH 73				
PRE - TIMED CYCLE 1 = 80 SECONDS				
TIME: ALL DAY				
INTERVAL	NB	SB	INTERVAL LENGTH (SEC)	% OF CYCLE
	A1, A2	B1, B2		
PHASE A	G	R	16	20.0%
CLEARANCE	Y	R	4	5.0%
CLEARANCE	R	R	20	25.0%
PHASE B	R	G	16	20.0%
CLEARANCE	R	Y	4	5.0%
CLEARANCE	R	R	20	25.0%
			80	100%

NOTE:        G = GREEN  
                 Y = YELLOW  
                 R = RED

DATE 12FEB13		E S T I M A T E O F Q U A N T I T I E S			
LINE					1520-00-62
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0010	517.1800.S	STRUCTURE REPAINTING RECYCLED ABRASIVE (STRUCTURE) 01. B-71-13	LS	1.000	1.000
0030	517.4500.S	NEGATIVE PRESSURE CONTAINMENT AND COLLECTION OF WASTE MATERIALS (STRUCTURE) 01. B-71-13	LS	1.000	1.000
0050	517.6001.S	PORTABLE DECONTAMINATION FACILITY	EACH	1.000	1.000
0060	603.8000	CONCRETE BARRIER TEMPORARY PRECAST DELIVERED	LF	250.000	250.000
0070	603.8125	CONCRETE BARRIER TEMPORARY PRECAST INSTALLED	LF	250.000	250.000
0080	614.0905	CRASH CUSHIONS TEMPORARY	EACH	1.000	1.000
0100	619.1000	MOBILIZATION	EACH	0.500	0.500
0110	643.0100	TRAFFIC CONTROL (PROJECT) 01. 1520-00-62	EACH	1.000	1.000
0130	643.0300	TRAFFIC CONTROL DRUMS	DAY	700.000	700.000
0140	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	40.000	40.000
0150	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	80.000	80.000
0160	643.0715	TRAFFIC CONTROL WARNING LIGHTS TYPE C	DAY	200.000	200.000
0170	643.0900	TRAFFIC CONTROL SIGNS	DAY	580.000	580.000
0180	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	120.000	120.000
0190	646.0600	REMOVING PAVEMENT MARKINGS	LF	120.000	120.000
0200	649.0400	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH	LF	1,720.000	1,720.000
0210	649.1400	TEMPORARY PAVEMENT MARKING STOP LINE REMOVABLE TAPE 24-INCH	LF	30.000	30.000
0220	661.0100	TEMPORARY TRAFFIC SIGNALS FOR BRIDGES (STRUCTURE) 01. B-71-13	LS	1.000	1.000

CONCRETE BARRIER TEMPORARY PRECAST

	603. 8000 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED	603. 8125 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED	614. 0905 CRASH CUSHI ONS TEMPORARY	
LOCATI ON	LF	LF	EACH	REMARKS
STH 73	250	250	1	
TOTALS	250	250	1	

TRAFFIC CONTROL

LOCATION	SERVICE PERIOD DAYS	643. 0300		643. 0420		643. 0705		643. 0715		643. 0900		661. 0100. 01 TEMPORARY TRAFFIC SIGNALS FOR BRIDGES LS	REMARKS
		DRUMS DAYS	NO	BARRICADES TYPE III DAYS	NO	WARNING LIGHTS TYPE A DAYS	NO	WARNING LIGHTS TYPE C DAYS	SIGNS DAYS	NO			
INSTALL/REMOVAL FOR TEMPORARY SIGNAL	5	30	150	0		0		0		10	50		
TEMPORARY SIGNAL	20	25	500	2	40	4	80	10	200	24	480	1	
UNDISTRIBUTED			50							50			
TOTALS			700		40		80		200		580	1	

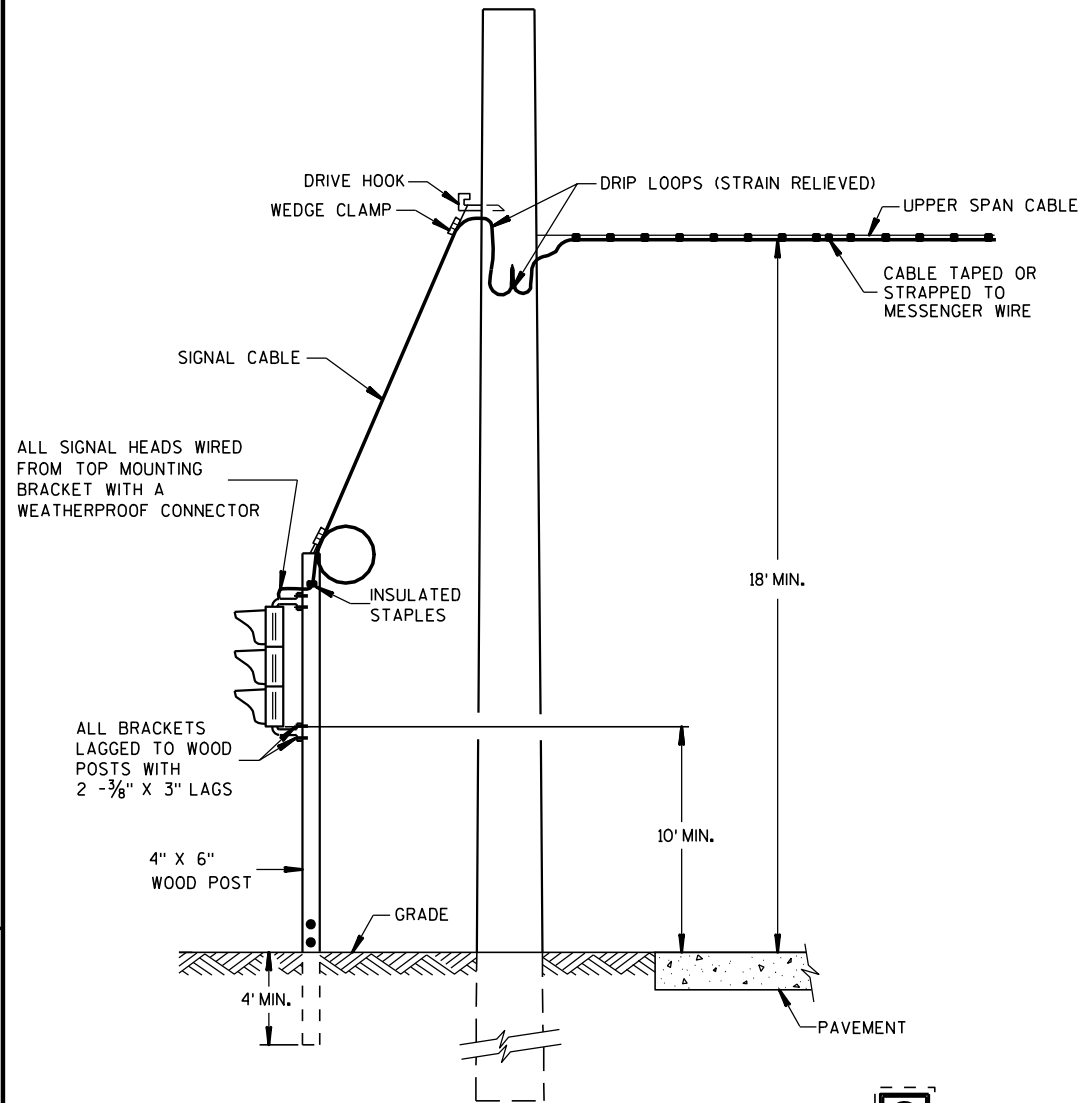
PAVEMENT MARKING

	646. 0106	646. 0600	**** TEMPORARY PAVT MARKING REMOVABLE TAPE 4- INCH (WHI TE) LF	**** TEMPORARY PAVT MARKING REMOVABLE TAPE 4- INCH (YELLOW) LF	649. 0400 TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4- INCH LF	649. 1400 TEMPORARY PAVT MARKING STOP LINE REMOVABLE TAPE 24- INCH LF
LOCATI ON	EPOXY 4- INCH (YELLOW) LF	REMOVING PAVEMENT MARKINGS LF				
STH 73 ALONG CONCRETE BARRIER	0	0	320	0	320	---
STH 73 CENTERLINE	120	120	0	1, 400	1, 400	30
TOTALS	120	120	320	1, 400	1, 720	30

\*\*\*\* FOR INFORMATION ONLY.

Standard Detail Drawing List

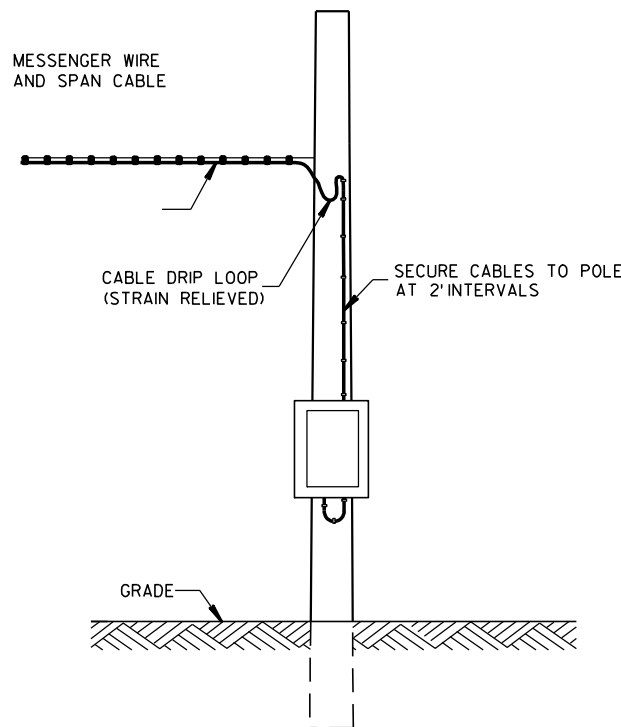
09G02-03A	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
09G02-03B	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
09G02-03C	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
14B07-13A	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-13B	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-13C	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-13D	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-13E	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-13F	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-13G	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-13H	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
15C08-15A	PAVEMENT MARKING (MAINLINE)
15D33-02	TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS



TYPICAL DROP TO TRAFFIC SIGNAL FACE

OFFSET DISTANCES FOR TEMPORARY NON-BREAKAWAY POLES	
SPEED LIMIT	OFFSET DISTANCE**
GREATER THAN 45 MPH	18 FT
45 MPH OR LESS	12 FT
45 MPH OR LESS W/ CURBS	2 FT
**NOTE: OFFSET MEASURED FROM OUTER EDGE OF OUTSIDE THRU LANE.	

MINIMUM POLE LENGHTS	CLASS	MINIMUM BURIAL DEPTHS
25 FEET	V	5 FEET
30 FEET	V	6 FEET
35 FEET	IV	7 FEET
40 FEET	IV	8 FEET
45 FEET	IV	9 FEET



POLE MOUNT CABINET INSTALLATION

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

POLE MOUNTED TRAFFIC SIGNAL CONTROL CABINET MAYBE MOUNTED ON THE SERVICE POLE IF THE ELECTRICAL UTILITY ALLOWS THE INSTALLATION.

WHEN UTILITY PLOES ARE USED TO SPAN THE TEMPORARY OVERHEAD CABLE, WRITTEN PERMISSION MUST BE OBTAINED FROM THE OWNER OF THE POLES AND GIVEN TO THE PROJECT MANAGER. ALL PERTINENT UTILITY AND CODE CLEARANCES SHALL BE MAINTAINED.

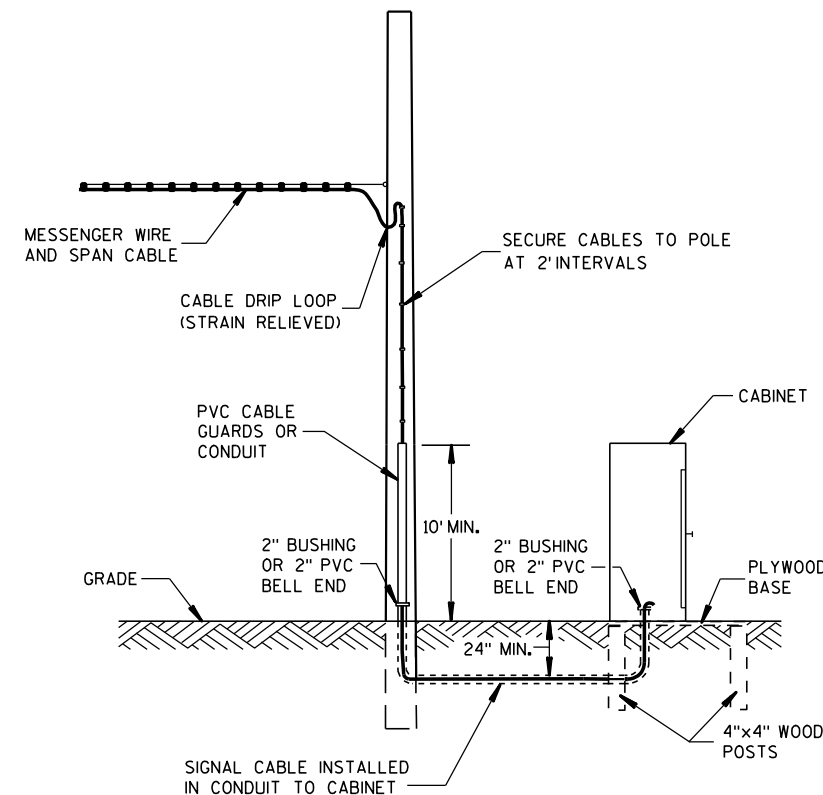
WOOD POLES (NONBREAKAWAY) SHALL BE NO CLOSER TO EDGE OF PAVEMENT THAN OFFSET DISTANCE CHART ALLOWS OR 4 FEET BEHIND PROTECTIVE BARRIER (BEAMGUARD, ETC.).

WOOD POSTS (BREAKAWAY) SHALL BE NO CLOSER THAN 2 FEET OUTSIDE OF SHOULDER.

VERTICAL CLEARANCE ETC. PER NEC.

TRAFFIC SIGNAL FACES SHALL BE TYPICALLY PLACED 12 FEET FROM EDGE OF PAVEMENT.

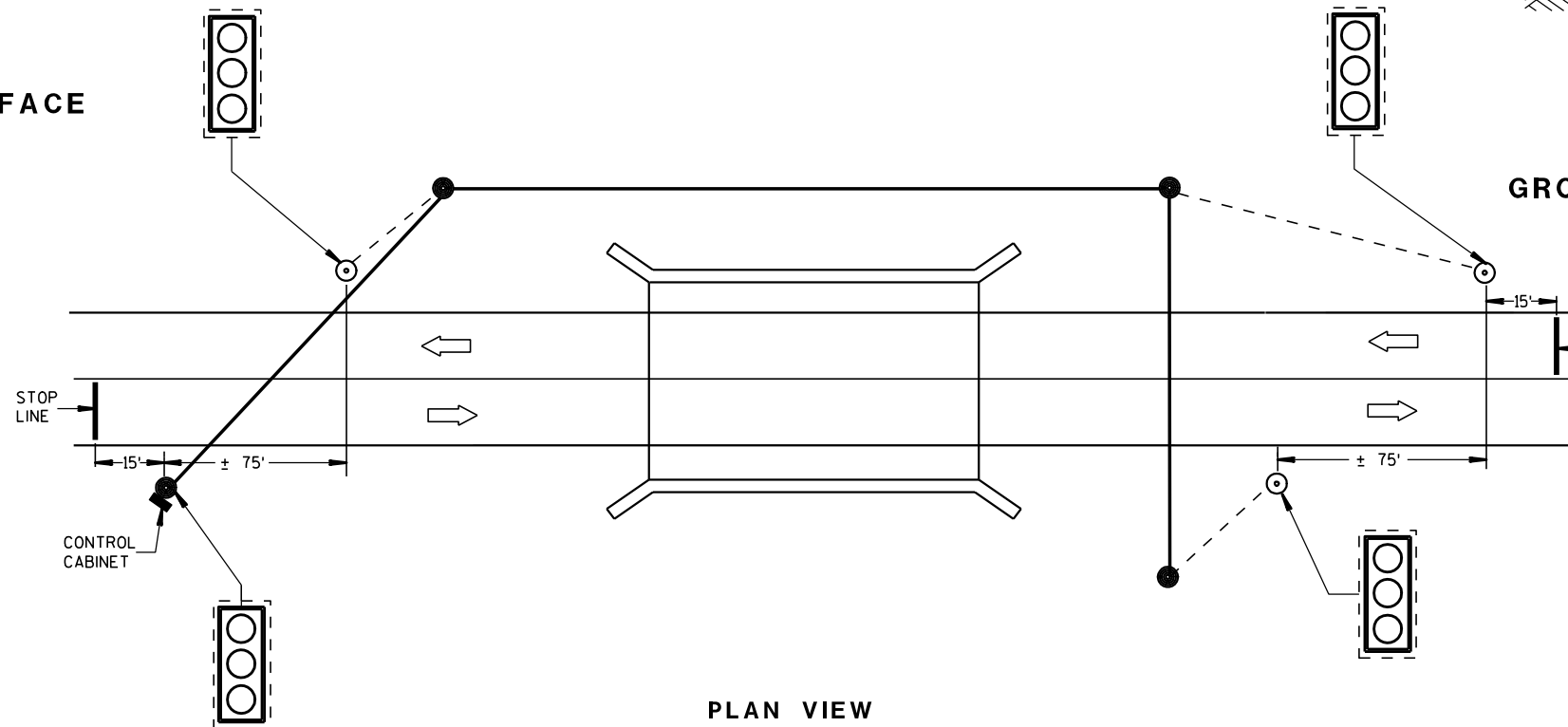
EACH TRAFFIC SIGNAL FACE SHALL HAVE A BACKPLATE.



GROUND MOUNT CABINET INSTALLATION

LEGEND

- WOOD POLE (NONBREAKAWAY)
- WOOD POST (BREAKAWAY)
- SIGNAL CABLE
- SIGNAL CABLE W/MESSENGER
- LED TRAFFIC SIGNAL FACE WITH BACKPLATE
- DIRECTION OF TRAFFIC



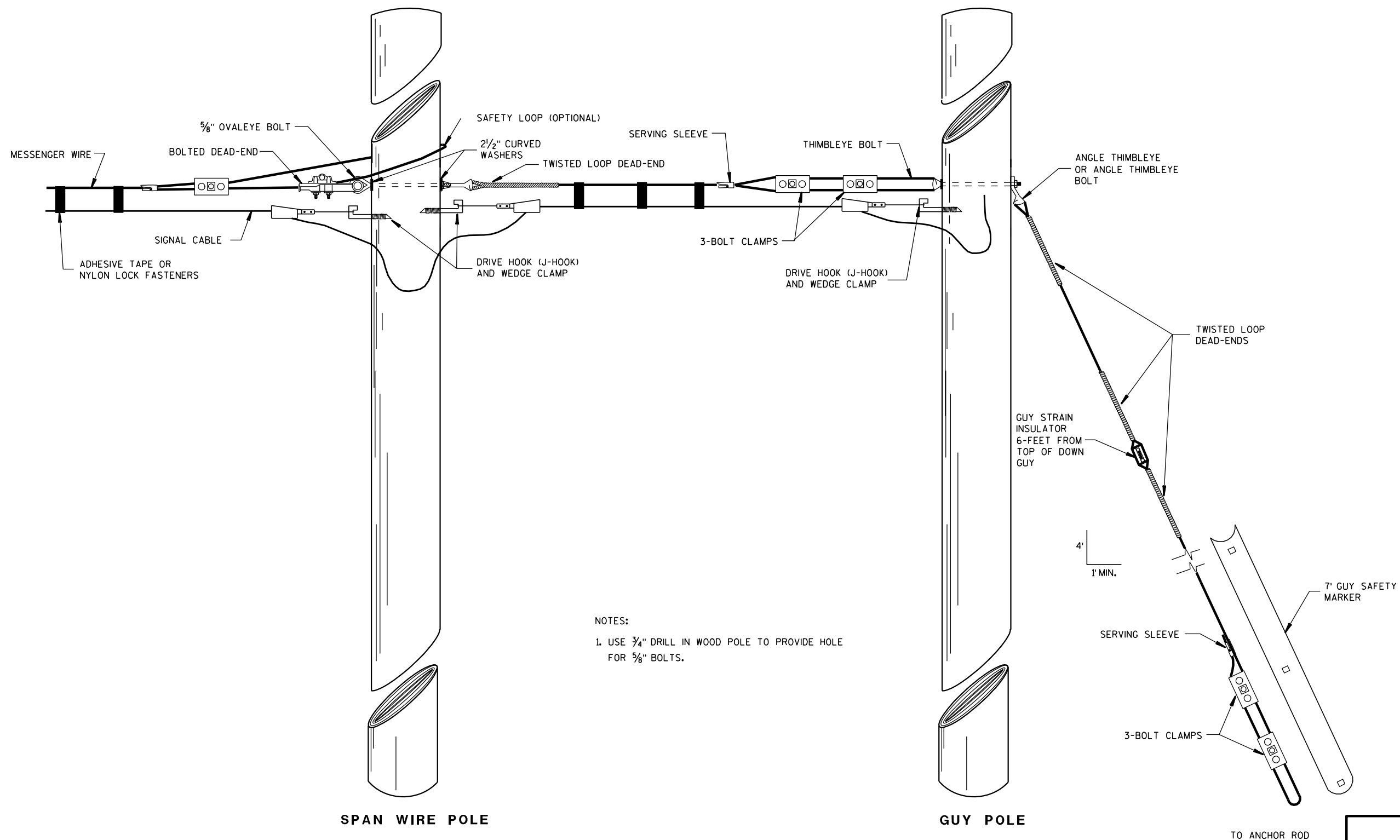
PLAN VIEW  
TYPICAL BRIDGE TEMPORARY TRAFFIC SIGNAL LOCATION

BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
3/2/2011 DATE /S/ Thomas J. Goring  
STATE ELECTRICAL ENGINEER FOR HWYS  
FHWA





## NOTES:

1. USE  $\frac{3}{4}$ " DRILL IN WOOD POLE TO PROVIDE HOLE FOR  $\frac{5}{8}$ " BOLTS.

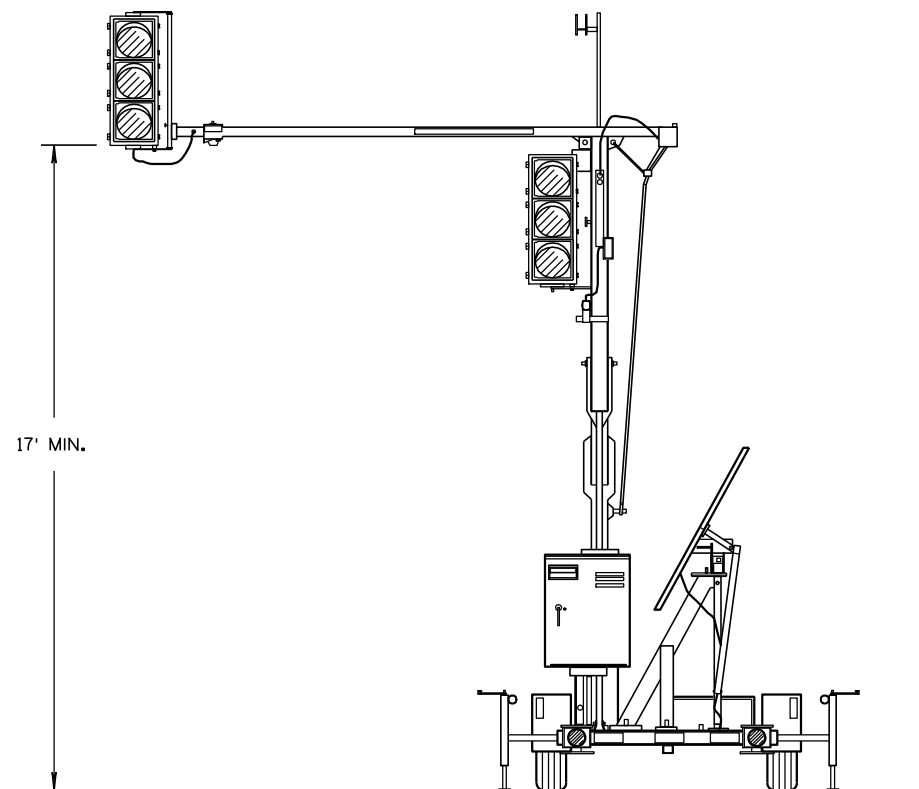
## TYPICAL DEAD-ENDINGS OR GUYING

BRIDGE TEMPORARY  
TRAFFIC SIGNAL INSTALLATIONSTATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED

3/2/2011  
DATE/S/ Thomas J. Goring  
STATE ELECTRICAL ENGINEER FOR HWYS

FHWA

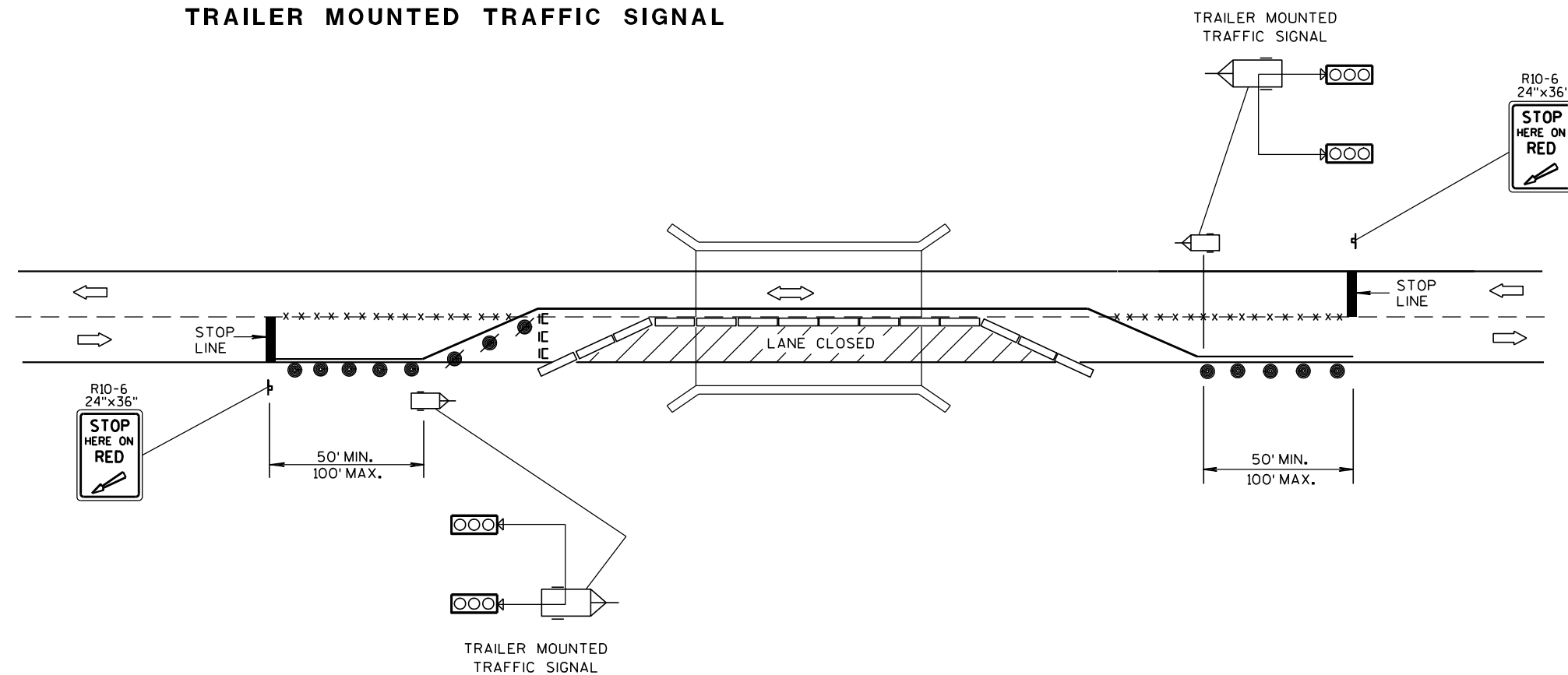


TRAILER MOUNTED TRAFFIC SIGNAL

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

SIGNING, PAVEMENT MARKING AND LANE CONTROL REQUIREMENTS SHALL CONFORM TO STANDARD DETAIL DRAWING 15 D 33.



TYPICAL TRAILER MOUNTED TRAFFIC SIGNAL LOCATION

## LEGEND

- ⌋ POST MOUNTED SIGN
- \*-x-\* REMOVING PAVEMENT MARKING
- ⌋ TYPE III BARRICADE WITH SIGN
- /● DRUM WITH/WITHOUT WARNING LIGHT, TYPE C (STEADY-BURN)
- ▬ TEMPORARY PRECAST CONCRETE BARRIER
- ⌋ TRAILER MOUNTED TRAFFIC SIGNAL
- ➡ DIRECTION OF TRAFFIC FLOW

## BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

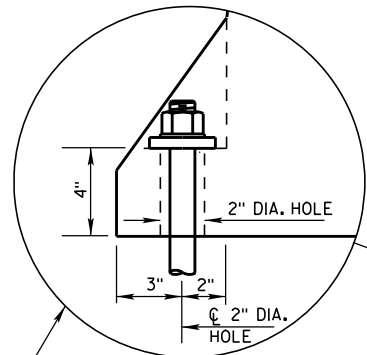
APPROVED

3/2/2011

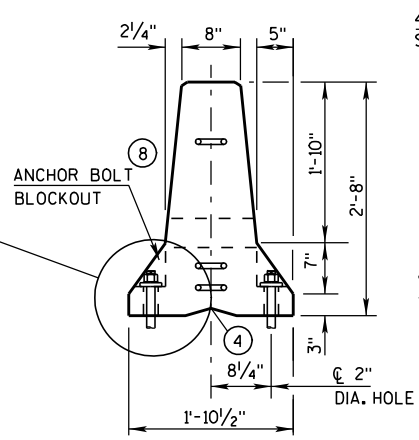
DATE

FHWA

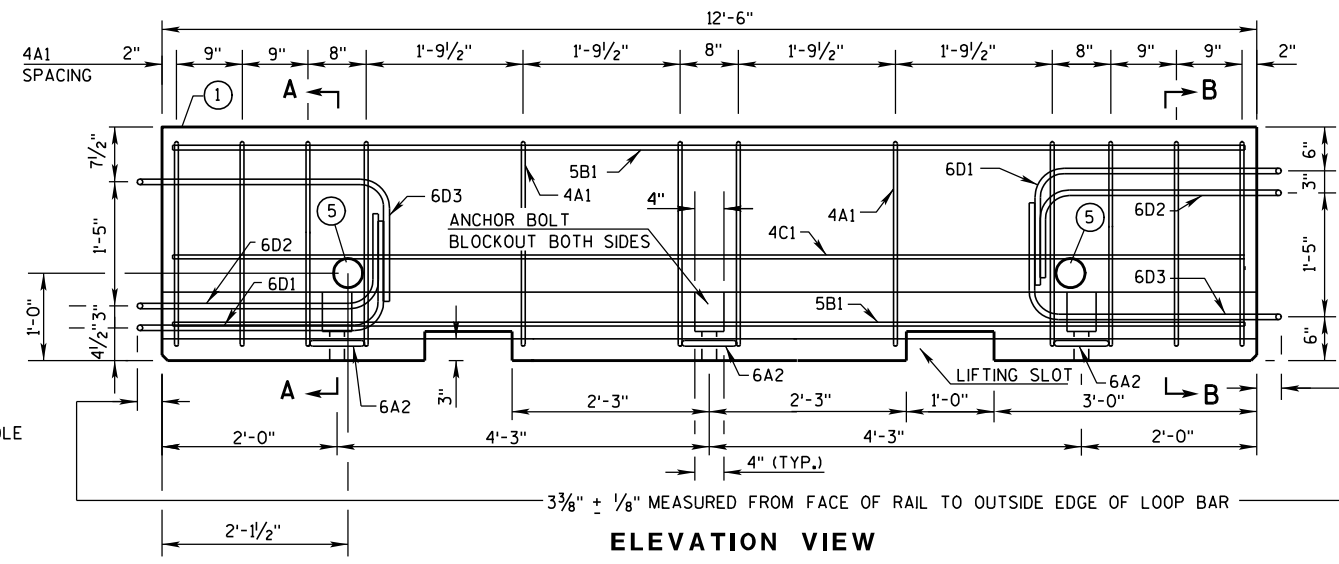
/S/ Thomas J. Goring  
STATE ELECTRICAL ENGINEER FOR HWYS



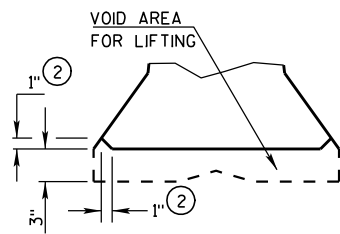
ANCHOR ON TRAFFIC SIDE  
ONLY WHEN REQUIRED  
(SEE SHEET D FOR ADDITIONAL  
ANCHOR DETAIL)



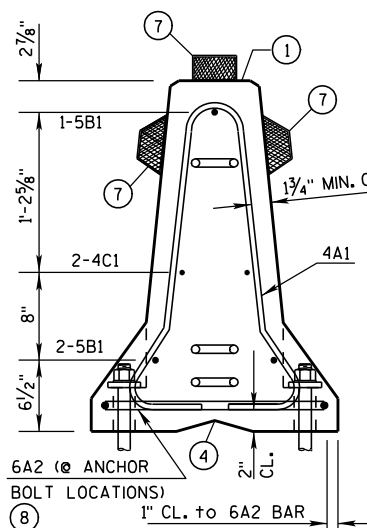
END VIEW



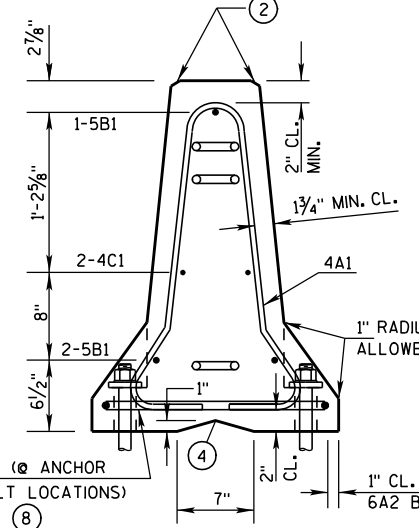
ELEVATION VIEW



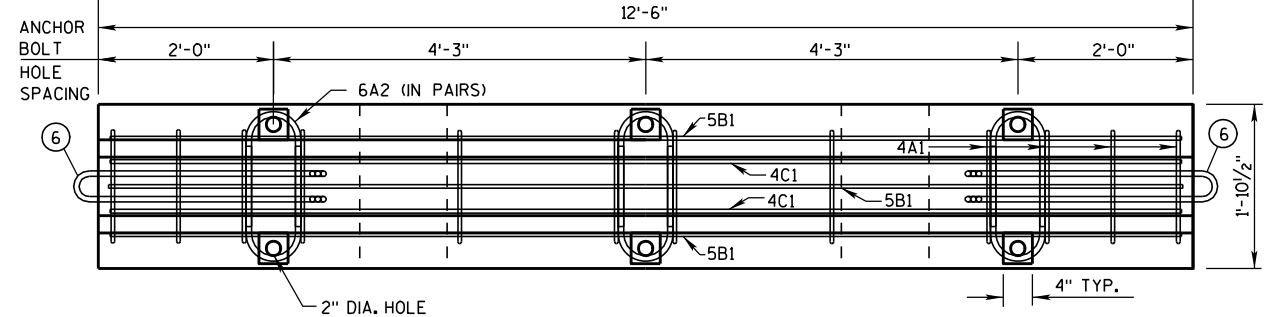
DETAIL "B"  
LIFTING SLOT DETAIL



SECTION A-A  
(STIRRUP PLACEMENT)

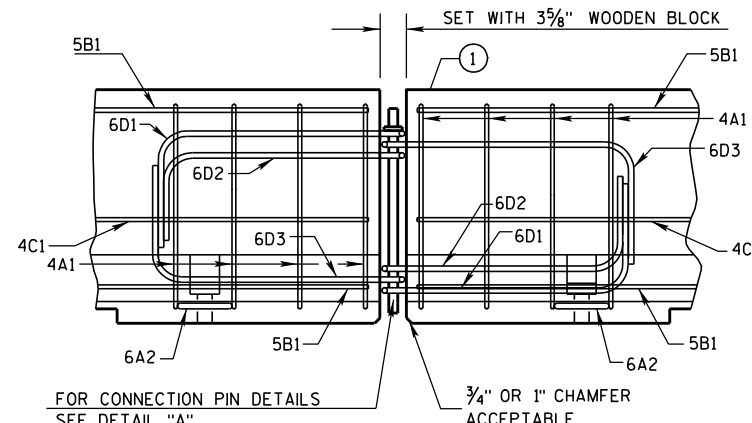


SECTION B-B  
(STIRRUP PLACEMENT)

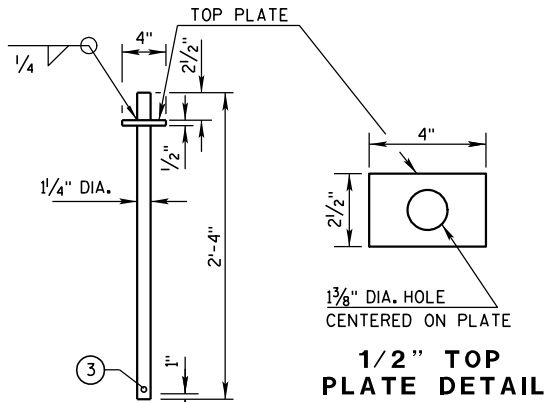


PLAN VIEW

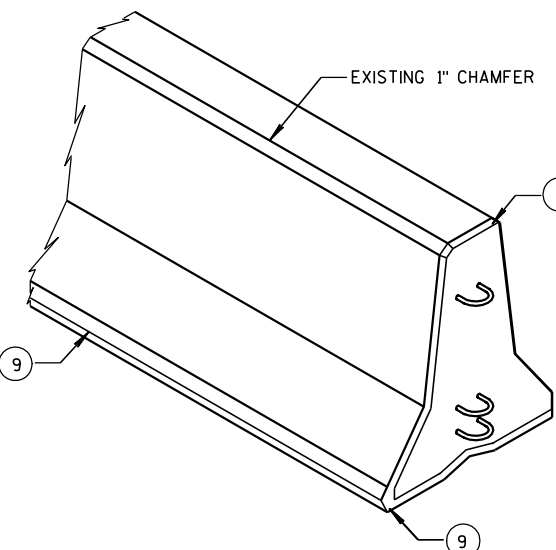
DETAILS OF BARRIER SECTION



DETAILS OF BARRIER CONNECTION



DETAIL "A"  
CONNECTION PIN  
(A36 STEEL (10.9 LB EACH))

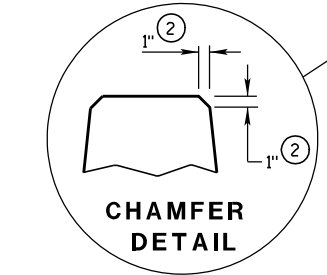
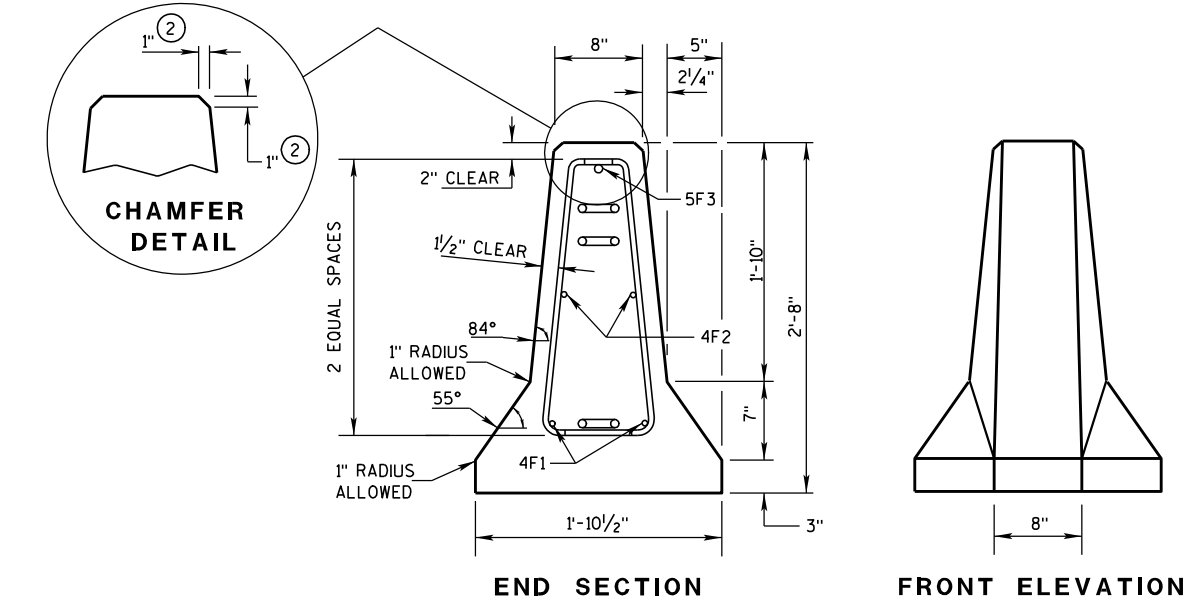
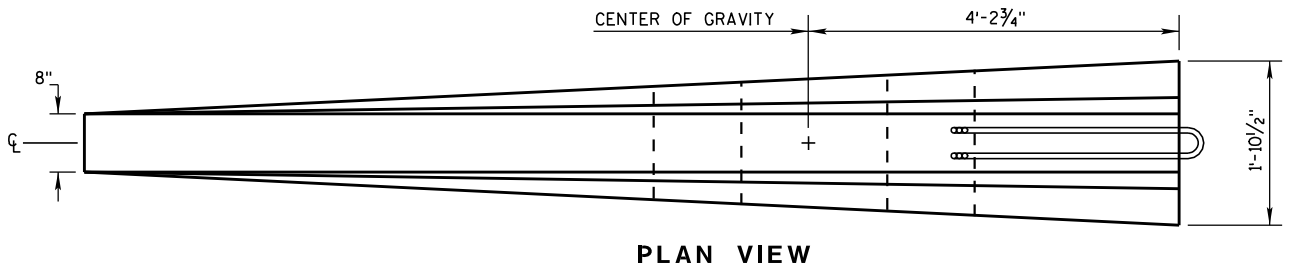
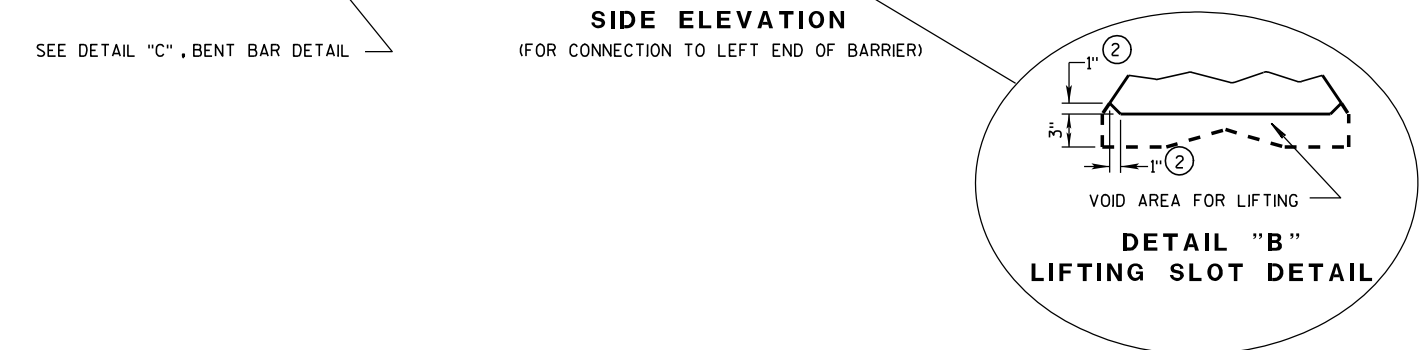
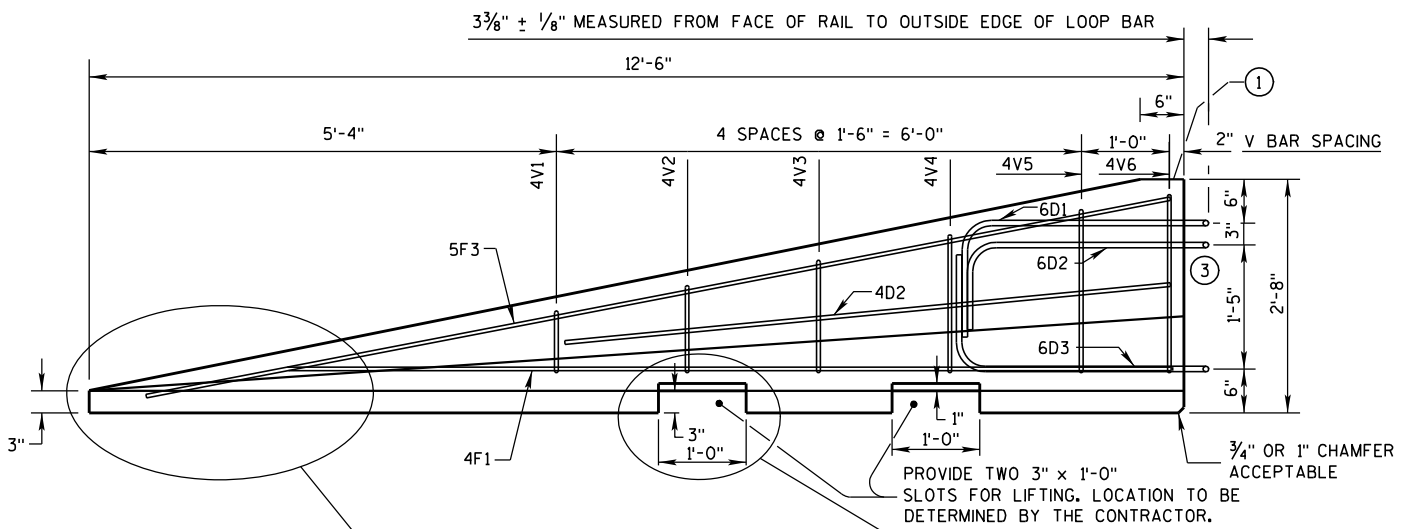


GENERAL NOTES

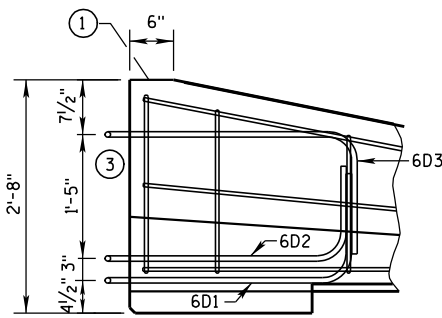
- THESE GENERAL NOTES APPLY TO SHEETS 14B7-13(g) THRU 14B7-13(h).
- DO NOT INTERMIX CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" (CBTP12.5) WITH OTHER TEMPORARY CONCRETE BARRIERS.
- USE ASTM A-615, GRADE 60, DEFORMED STEEL BARS FOR BARS 4A1, 6A2, 5B1 AND 4C1 IN THE BARRIER SECTION AND FOR 4V1, 4V2, 4V3, 4V4, 4V5, 4V6, 4F1, 4F2 AND 5F3 IN THE BARRIER TAPER SECTION.
- LOOP BARS 6D1, 6D2 AND 6D3 SHALL BE 3/4" SMOOTH STEEL BARS WITH A MINIMUM YIELD STRENGTH OF 60 KSI, A TENSILE STRENGTH OF NOT LESS THAN 1.25 TIMES THE YIELD STRENGTH BUT A MINIMUM OF 80 KSI, A MINIMUM 14% ELONGATION IN 8 INCHES AND PASSING A 180 DEGREE BEND TEST USING A 3-1/2" PIN BEND DIAMETER FOR BEND TESTS. THE LOOPS SHALL BE INSTALLED WITHIN 1/8" OF THE PLAN DIMENSION.
- CONSTRUCT LIFTING SLOTS AS SPECIFIED ON THE PLANS TO FACILITATE THE DRAINAGE OF WATER AFTER INSTALLATION.
- PLACE BARRIER ON A PAVED SURFACE. REMOVE ALL LOOSE DIRT AND SAND FROM THE ROADWAY SURFACE PRIOR TO PLACEMENT OF THE BARRIER.
- INSTALL MECHANICAL OR EPOXY ANCHORS PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE MANUFACTURER'S INFORMATION TO PROJECT ENGINEER.
- MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
    - TYPE: WICBTP
    - MANUFACTURER
    - DATE MANUFACTURED (MONTH AND YEAR)
  - 1" CHAMFER TO PREVENT SPALLING.
  - A 3/8" HOLE IN THE CONNECTION PIN, AT THE LOCATION SHOWN, IS ACCEPTABLE, BUT NOT REQUIRED..
  - "V" NOTCH IS OPTIONAL.
  - THE 4" DIAMETER, 11 GAUGE STEEL, ROUND MECHANICAL TUBING SLEEVE FOR LIFTING (OPTIONAL).
  - NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.
  - USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MAY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURES INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED TO THE LEFT OF TRAFFIC AND WHITE REFLECTORS WHEN BARRIER IS LOCATED TO THE RIGHT OF TRAFFIC. SPACE DELINEATORS A MAXIMUM OF 25 FEET APART. PROVIDE TOP MOUNTED DELINEATORS IN ADDITION TO THE SIDE MOUNTED DELINEATORS ON ALL BARRIER INSTALLATIONS LOCATED ON A CURVED ALIGNMENT LONGER THAN 200 FEET AND ON BARRIERS USED TO SEPARATE OPPOSING TRAFFIC.
  - SEE SHEET D FOR ANCHORING CRITERIA.
  - 1" CHAMFER OPTIONAL.

CONCRETE BARRIER  
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



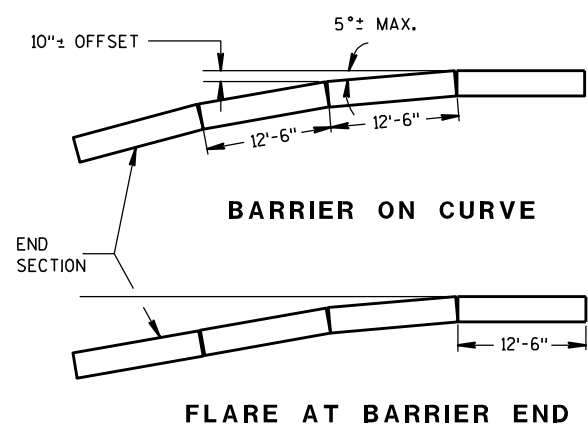
DETAILS OF BARRIER TAPER SECTION



SIDE ELEVATION  
LOOP BAR ASSEMBLY INVERTED  
FOR OPPOSITE END.  
(FOR CONNECTION TO RIGHT END OF BARRIER)

GENERAL NOTES

- ① MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
  - a. TYPE W/CBTP
  - b. MANUFACTURER
  - c. DATE MANUFACTURED (MONTH AND YEAR)
- ② 1" CHAMFER TO PREVENT SPALLING.
- ③ NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.



POSTED SPEED, (MPH)	FLARE RATE
40 OR LESS	6:1
45 OR GREATER	8:1

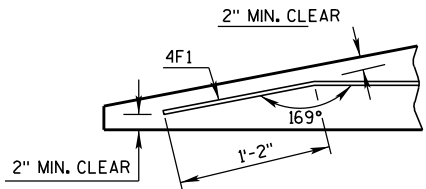
CONCRETE BARRIER  
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

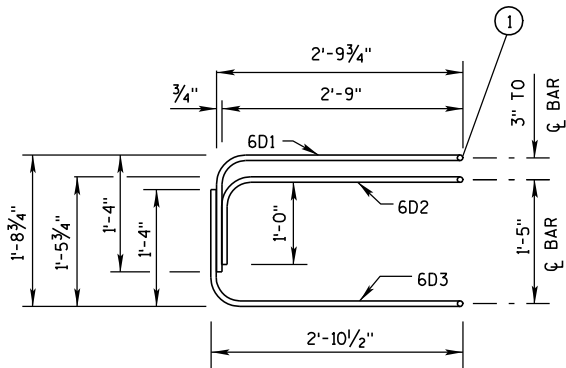
BARRIER TAPER SECTION  
BILL OF MATERIALS

(PER 12'-6" BARRIER TAPER SECTION)

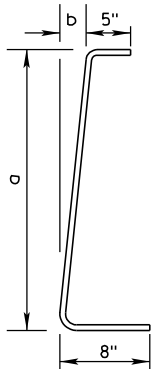
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"
LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"



DETAIL "C"  
BENT BAR DETAIL



ELEVATION  
LOOP BAR ASSEMBLY



4V BARS

2 AT EACH SIZE REQUIRED  
FOR STIRRUP ASSEMBLY

BAR	a	b
V1	10"	1"
V2	1'-1"	1 1/4"
V3	1'-5"	1 5/8"
V4	1'-8"	1 7/8"
V5	2'-0 1/2"	2 3/8"
V6	2'-3"	2 3/4"

TAPER BARRIER SECTION

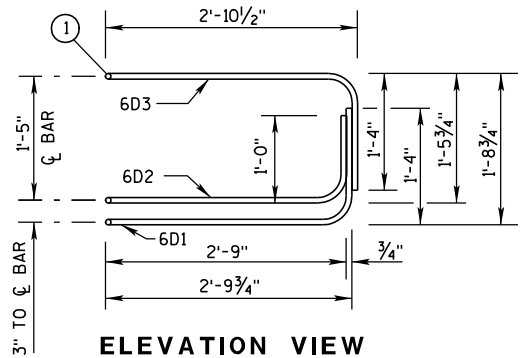
GENERAL NOTES

① NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

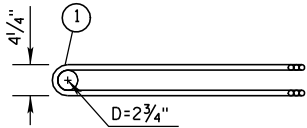
BARRIER SECTION  
BILL OF MATERIALS

(PER 12'-6" BARRIER SECTION)

BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"

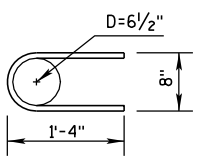


ELEVATION VIEW

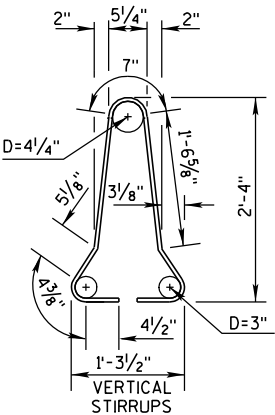


PLAN VIEW  
LOOP BAR ASSEMBLY

(MARKED END SHOWN, INVERT FOR OTHER END)



6A2

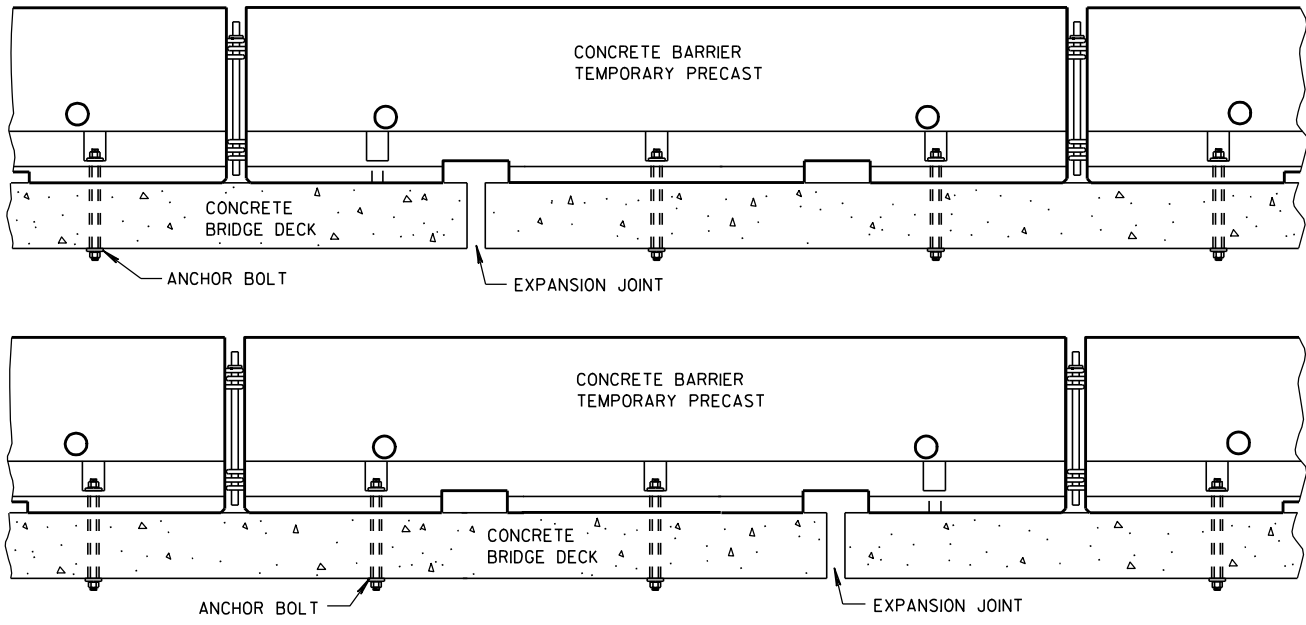


4A1

BARRIER SECTION

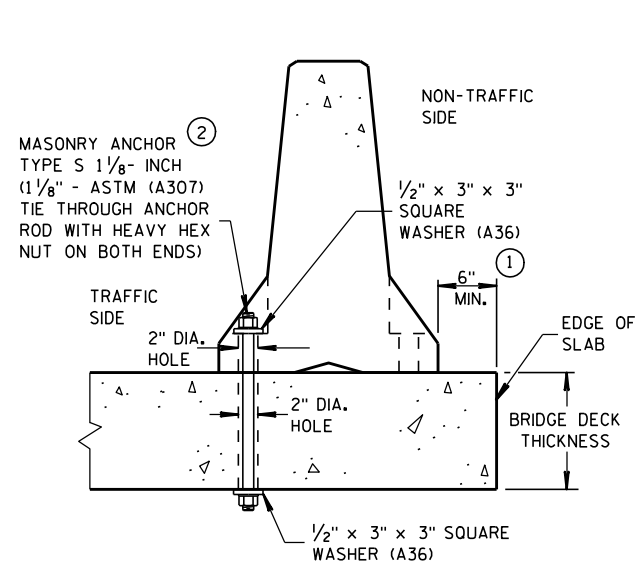
CONCRETE BARRIER  
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



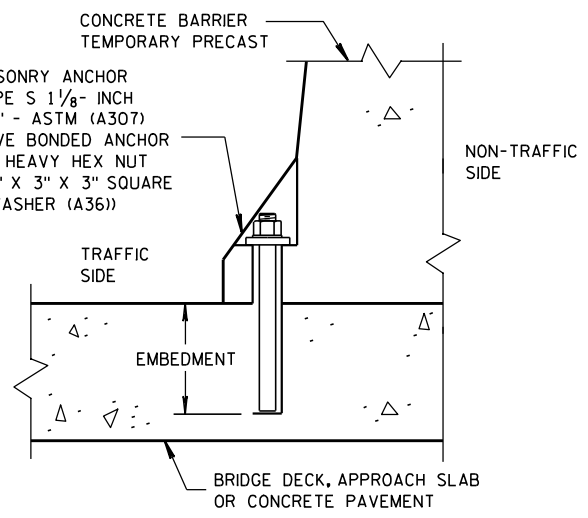
**TREATMENT AT BRIDGE DECK EXPANSION JOINTS**

(NO SINGLE CONCRETE BARRIER SECTION SHALL BE ANCHORED TO BOTH THE BRIDGE DECK AND THE APPROACH SLAB. ALL ANCHOR BOLT LOCATIONS SHALL BE ANCHORED TO THE DECK IN ACCORDANCE WITH THE DETAIL. NO MORE THAN ONE ANCHOR BOLT SHALL BE ELIMINATED FROM A BARRIER SECTION WHEN SPANNING AN EXPANSION JOINT.)



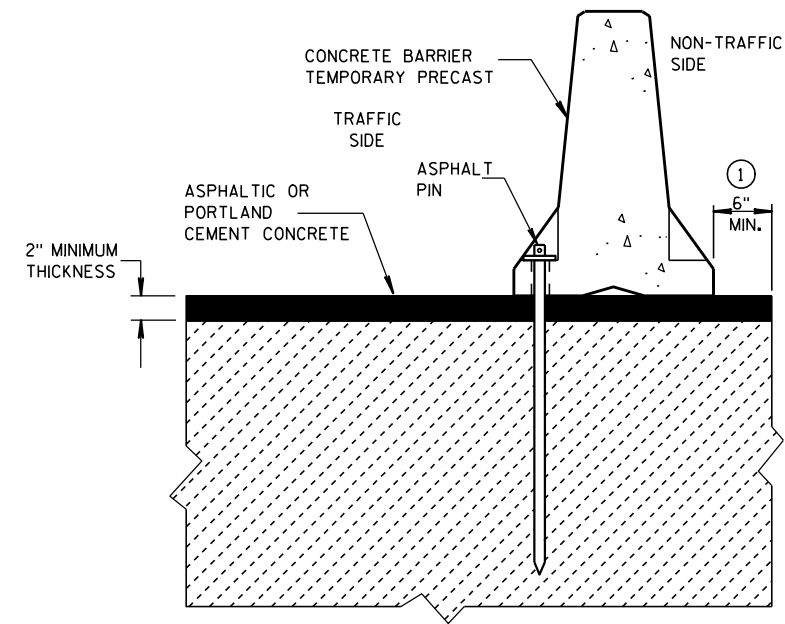
**THROUGH BOLTED ANCHOR INSTALLATION ON BRIDGE DECK**

(DO NOT USE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY)



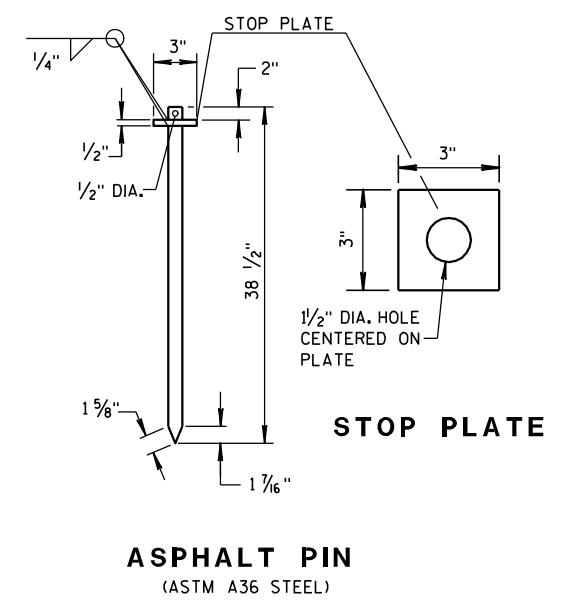
**REMOVABLE ADHESIVE BONDED ANCHOR INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT**

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)

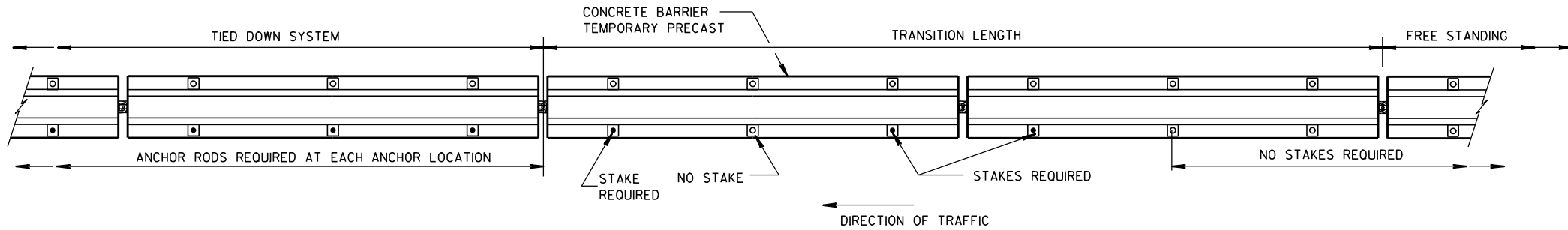


**STAKE DOWN INSTALLATION FOR ASPHALTIC OR PORTLAND CEMENT CONCRETE SURFACE**

(STAKING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST)



**ASPHALT PIN**  
(ASTM A36 STEEL)

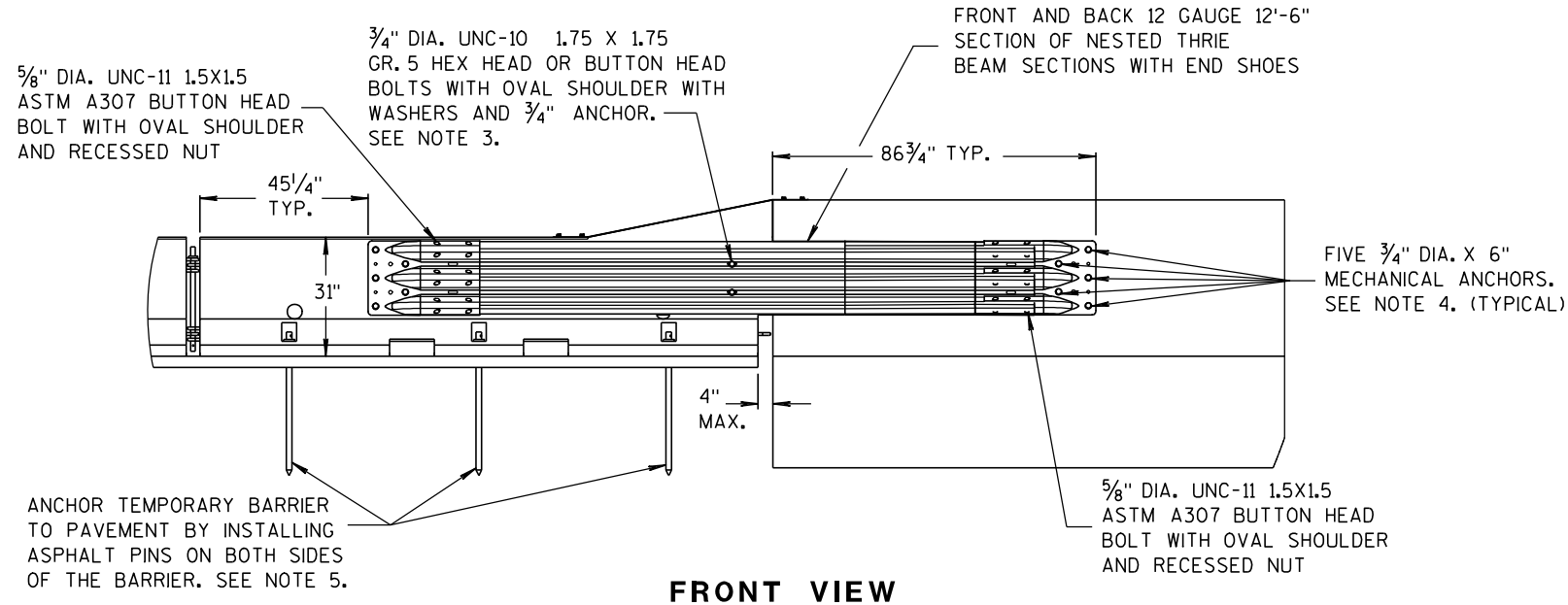


**FREE STANDING TRANSITION TO TIED-DOWN SYSTEM**

(PLACE TRANSITION IN A TANGENT SECTION OF BARRIER PARALLEL TO THE ROADWAY. IF TRANSITION OCCURS ON STRUCTURAL SLAB, ANCHOR AS SHOWN.)

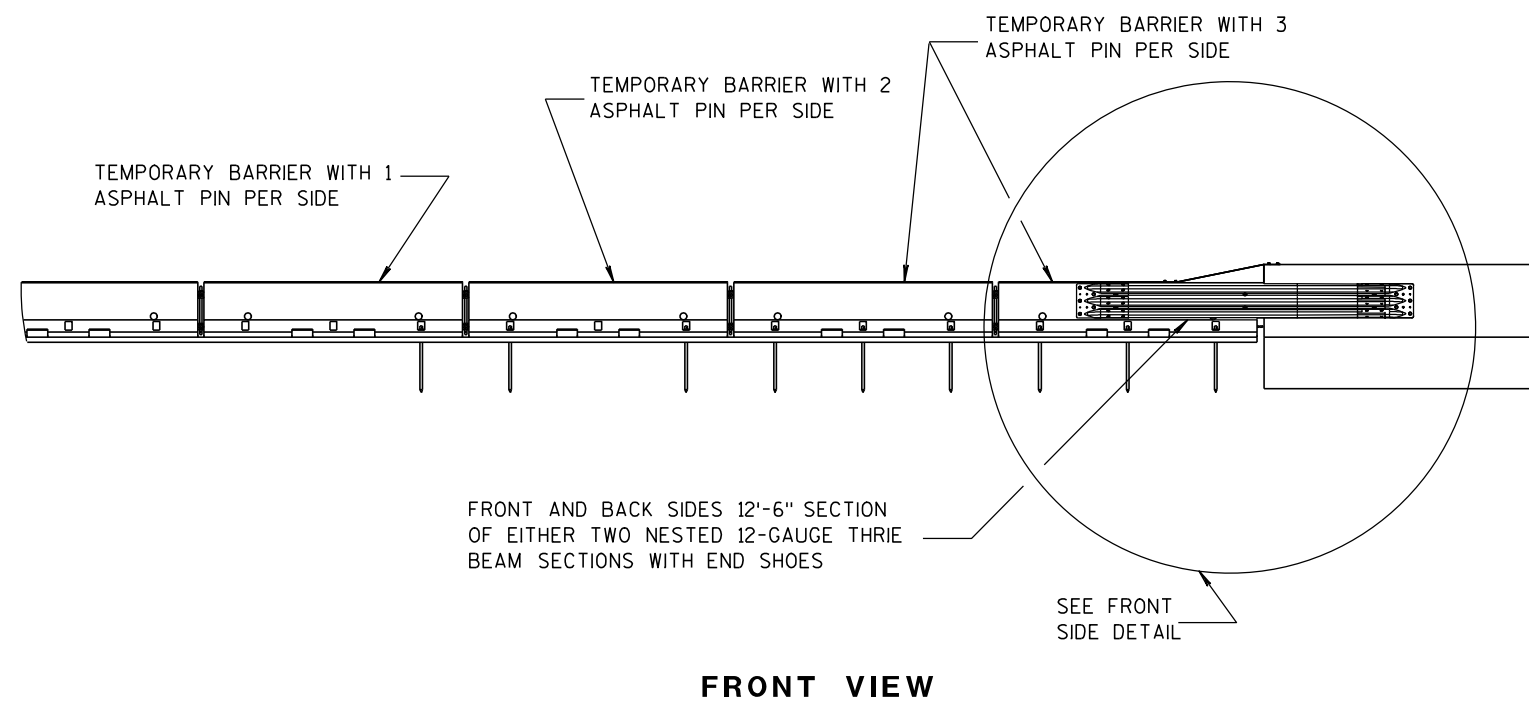
**GENERAL NOTES**

- 1 CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" SHALL BE ANCHORED IF:  
THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V, FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT, IS LESS THAN 4 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF AND THE POSTED SPEED IS 45 MPH OR GREATER, OR  
  
THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V, FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT, IS LESS THAN 2 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF AND THE POSTED SPEED IS 40 MPH OR LESS.
- 2 ANCHORING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST.  
  
WITH THE APPROVAL OF THE ENGINEER, REMOVABLE ADHESIVE BONDED (EPOXY) ANCHOR BOLT INSTALLATION MAY BE USED IN LIEU OF THROUGH BOLTED ANCHOR INSTALLATION. THE ADHESIVE BONDED ANCHOR BOLT MUST BE REMOVABLE. USE ASTM (A307) MASONRY ANCHORS TYPE S 1 1/8-INCH, EMBEDDED TO A DEPTH SUFFICIENT TO DEVELOP THE ULTIMATE CAPACITY OF THE ANCHOR BOLT AND PROVIDE DOCUMENTATION TO CONFIRM THIS.  
  
UPON REMOVAL OR RELOCATION OF THE BARRIER UNITS, REMOVE ALL ANCHOR BOLTS AND COMPLETELY FILL IN THE REMAINING HOLES IN CONCRETE BRIDGE DECKS, CONCRETE APPROACH SLABS AND CONCRETE PAVEMENTS THAT ARE TO REMAIN, WITH A NON-SHRINK COMMERCIAL GROUT OR EPOXY MATERIAL IDENTIFIED ON THE CURRENT WISDOT APPROVED PRODUCTS LIST.

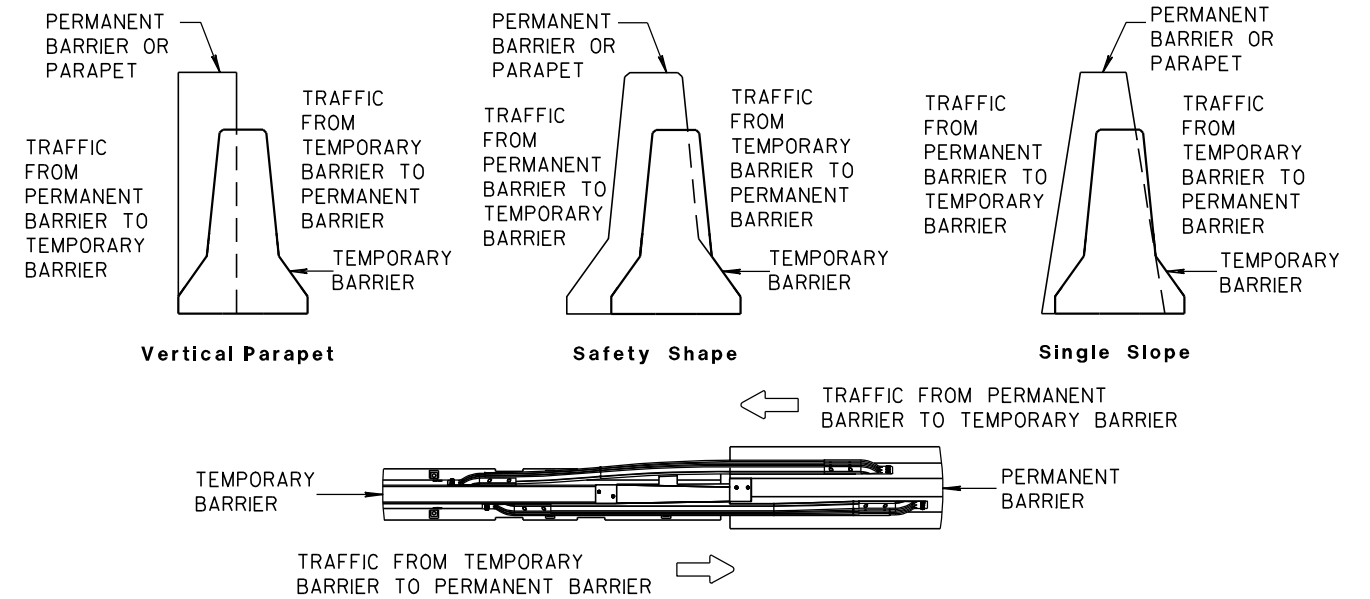


### NOTES

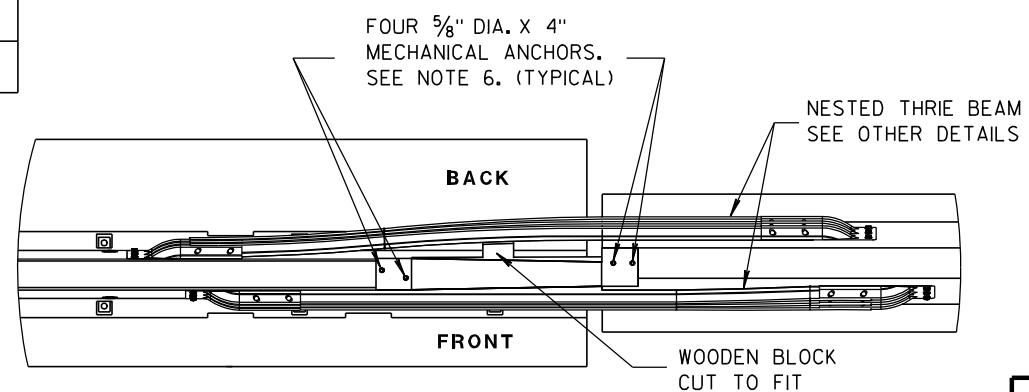
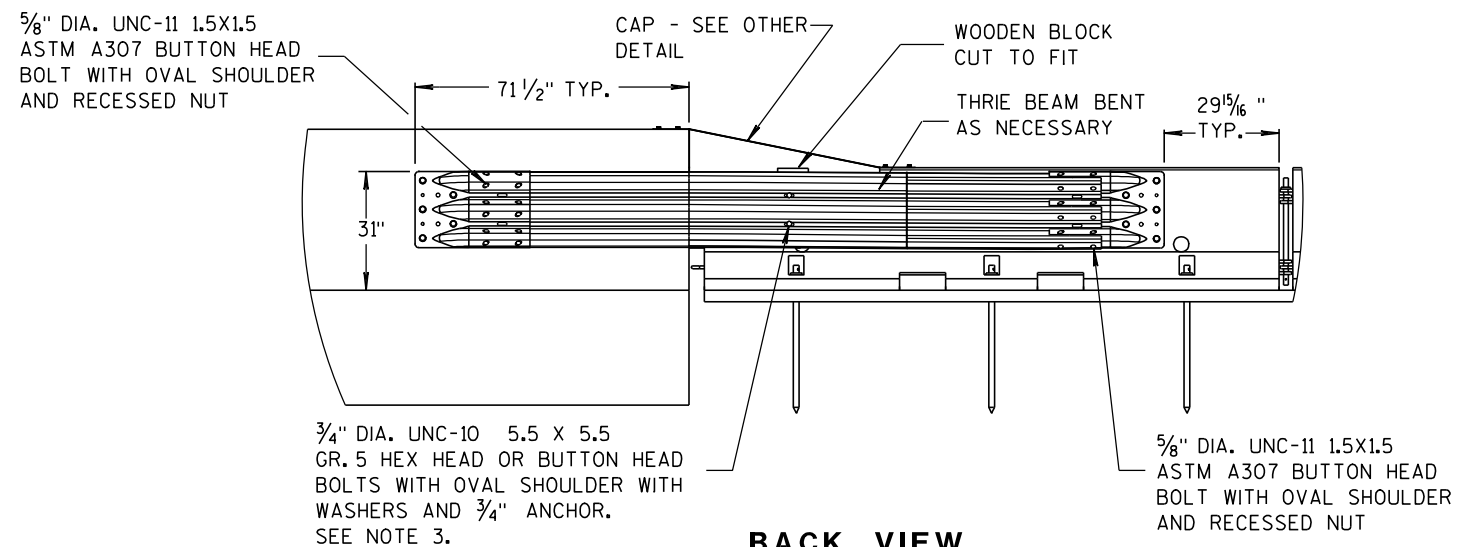
1. CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF PERMANENT BARRIER OR PARAPET.
2. THRIE BEAM PIECES ARE OFFSET 15 1/4" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.
3. MINIMUM MECHANICAL OR EPOXY ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS.
4. MINIMUM MECHANICAL OR EPOXY ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 17.9 KIPS AND ULTIMATE SHEAR LOAD 21.96 KIPS.
5. MAY BE USED ON CONCRETE OR ASPHALT PAVEMENTS. ASPHALT OPTION SHOWN. FOR CONCRETE OPTION SEE OTHER DETAILS.
6. MINIMUM MECHANICAL OR EPOXY ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.



## BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

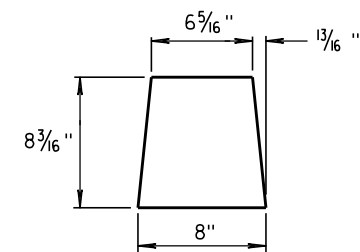


## TEMPORARY BARRIER PLACEMENT FOR BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

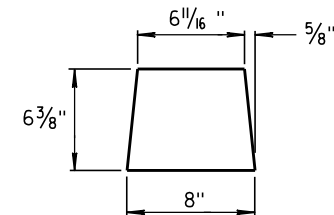


CONCRETE BARRIER  
TEMPORARY PRECAST, 12'-6"

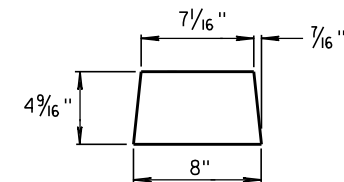
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



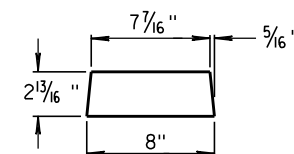
## GUSSET 1



**GUSSET 2**

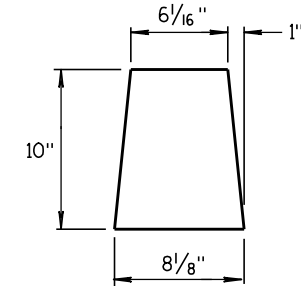


**GUSSET 3**

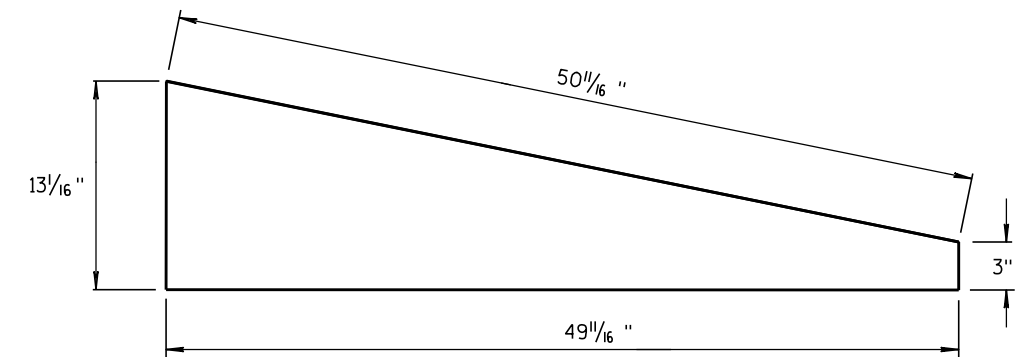


## GUSSET 4

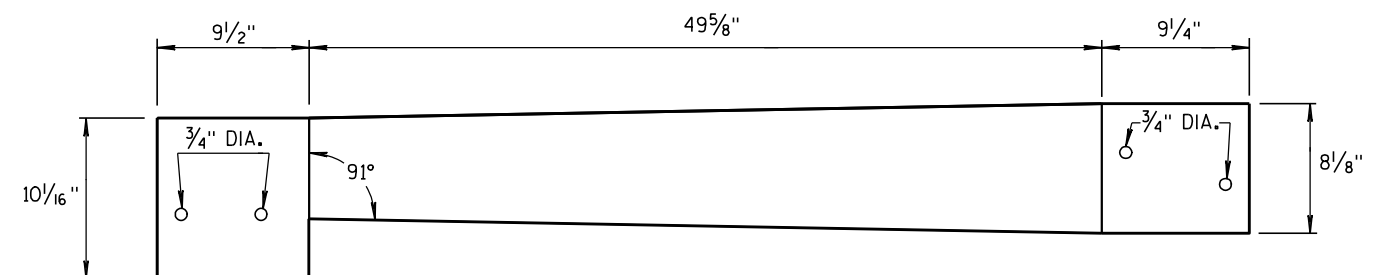
## GUSSETS



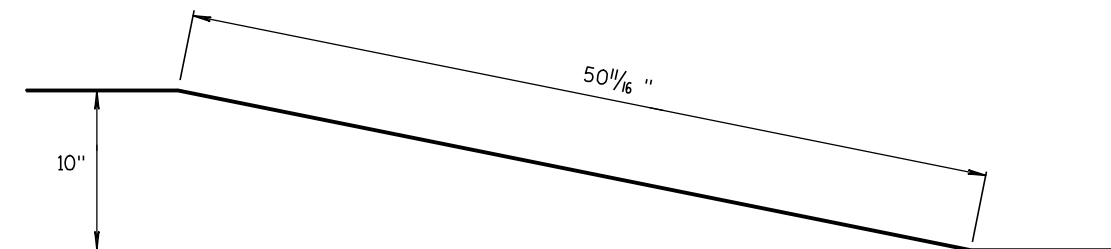
## END PLATE



## SIDE PLATE

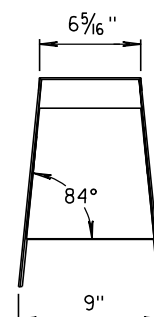


## TOP PLATE

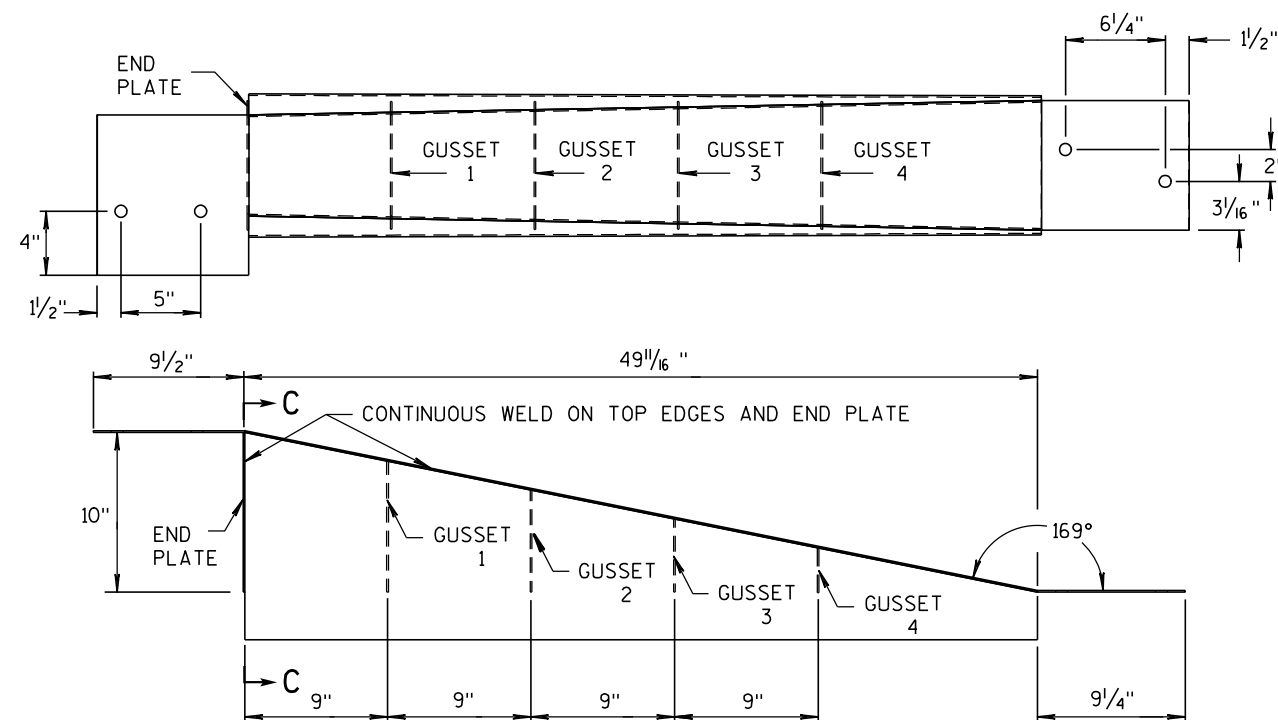


**SIDE, TOP AND END PLATES FOR CAP  
FROM TEMPORARY CONCRETE BARRIER  
TO 42" PERMANENT CONCRETE BARRIER**

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 GALVANIZED STEEL.



**SECTION C-C**



**CAP DETAILS FOR TEMPORARY CONCRETE  
BARRIER TO 42" PERMANENT CONCRETE BARRIER**

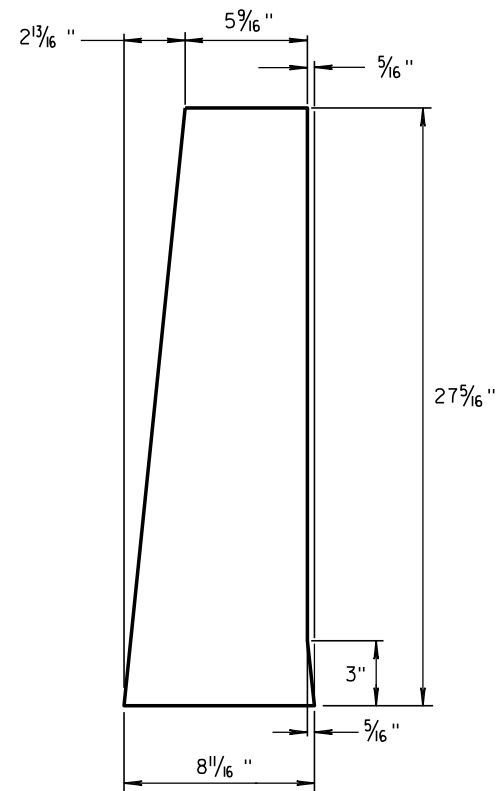
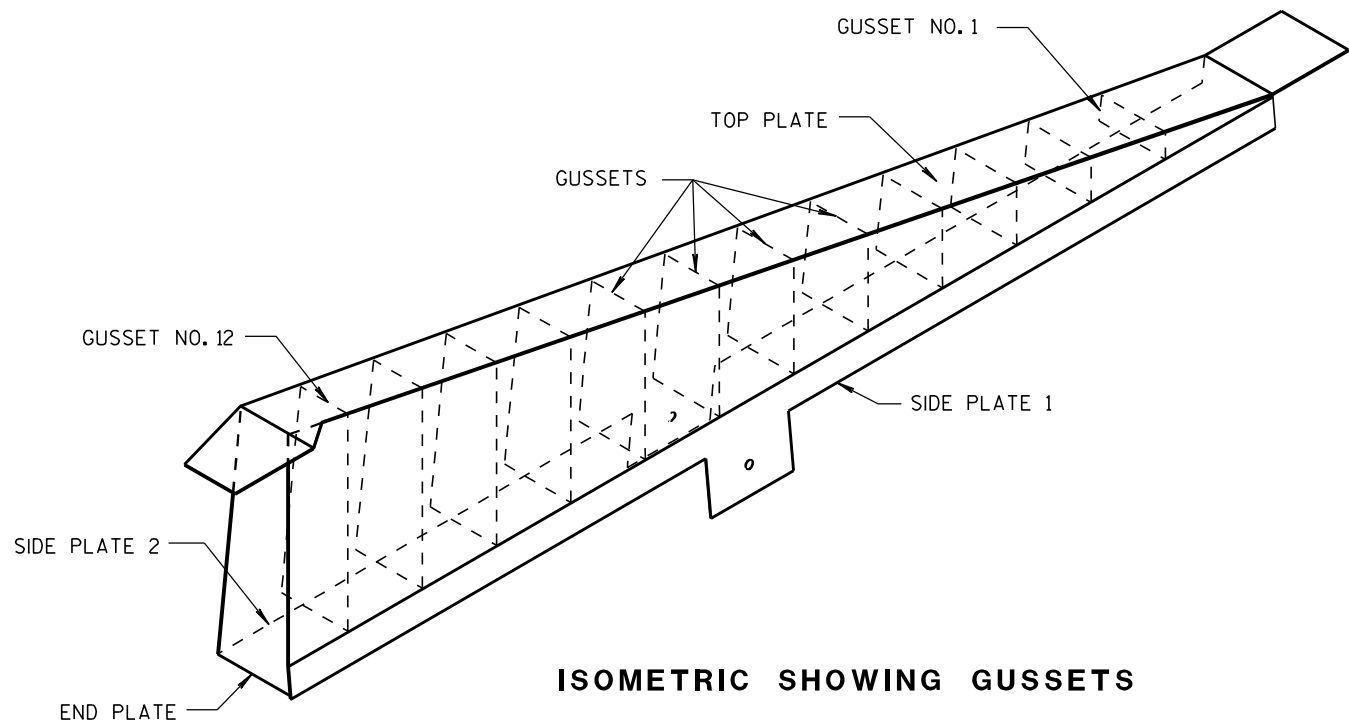
NOTES

1. FOUR GUSSETS AND END PLATE ARE STITCH WELDED ON THREE SIDES.
2. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE, AND GUSSETS.

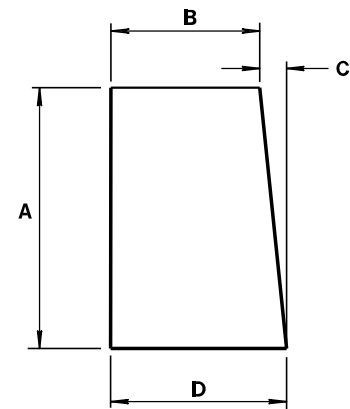
CONCRETE BARRIER  
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION





1/8" STEEL PLATE

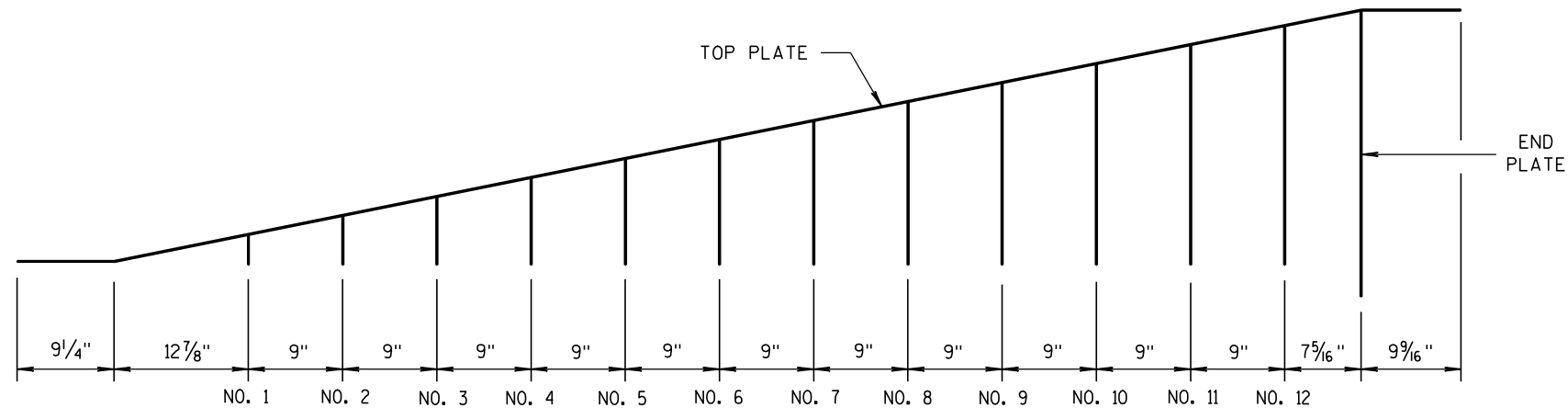


ALL GUSSETS 1/8" STEEL PLATE

GUSSET DIMENSIONS				
GUSSET NO.	A	B	C	D
1	2 7/8"	7 3/4"	1/4"	8
2	4 11/16 "	7 9/16 "	1/2"	8
3	6 1/2"	7 3/8"	11/16 "	8 1/16 "
4	8 5/16 "	7 3/16 "	7/8"	8 1/16 "
5	10 1/8 "	7"	1 1/16 "	8 1/16 "
6	11 5/16 "	6 13/16 "	1 1/4"	8 1/16 "
7	13 3/4"	6 5/8"	1 7/16 "	8 1/16 "
8	15 9/16 "	6 7/16 "	1 9/16 "	8 1/16 "
9	17 3/8"	6 1/4"	1 13/16 "	8 1/16 "
10	19 3/16 "	6 1/16 "	1 15/16 "	8 1/16 "
11	21"	5 7/8"	2 3/16 "	8 1/16 "
12	22 13/16 "	5 11/16 "	2 5/16 "	8 1/16 "

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 STEEL AND GALVANIZED.

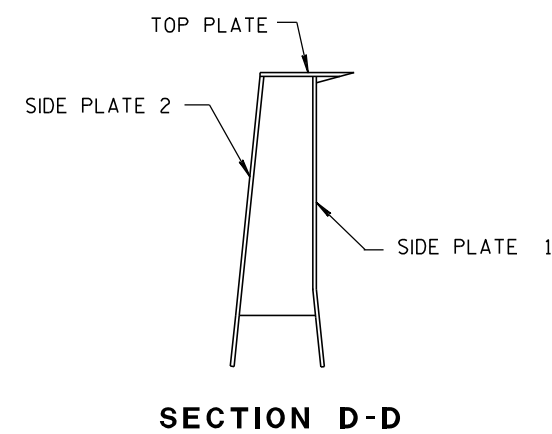
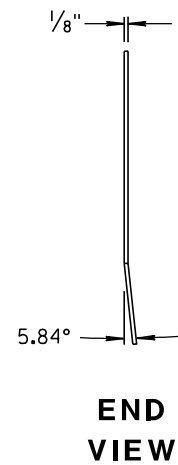
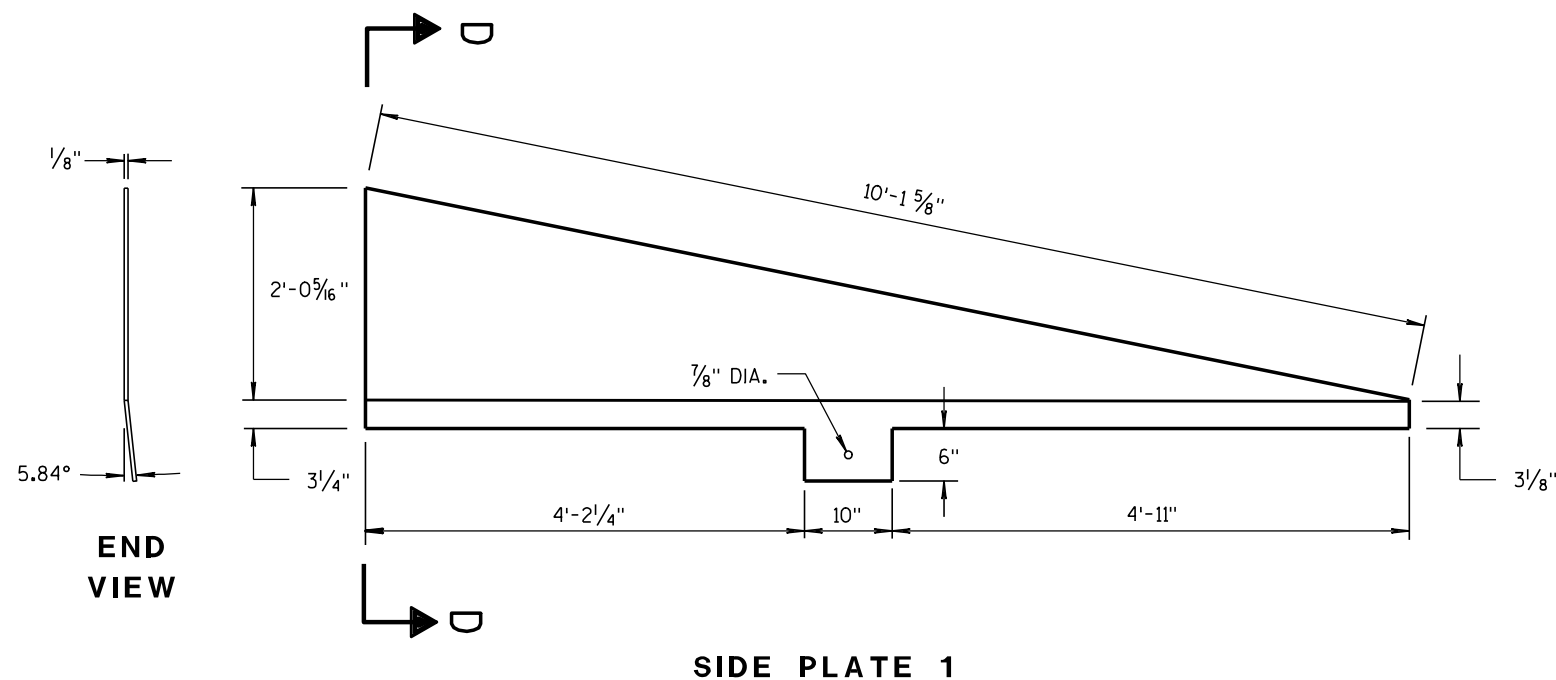
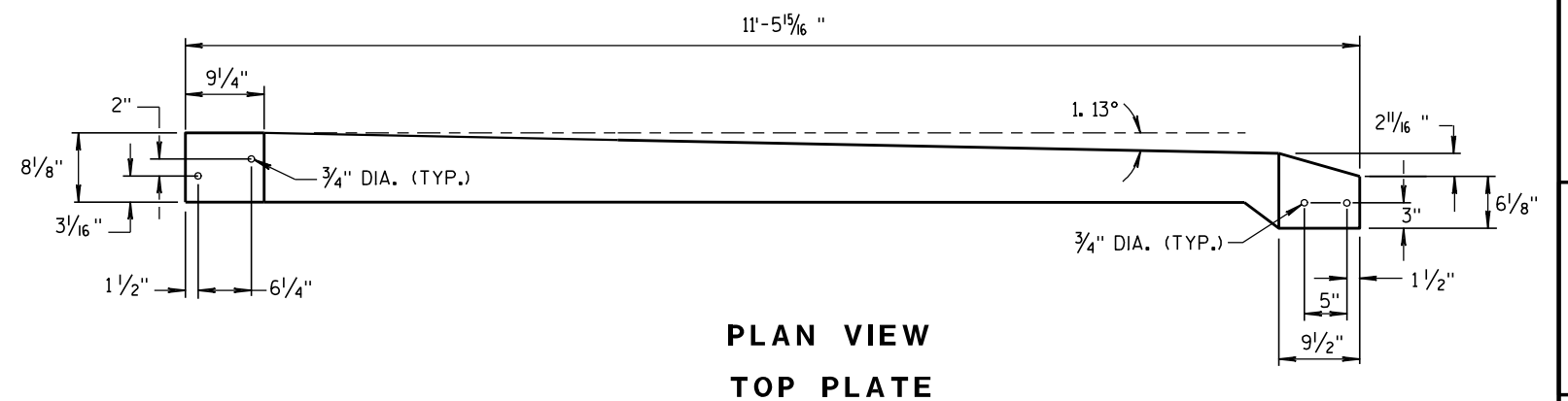
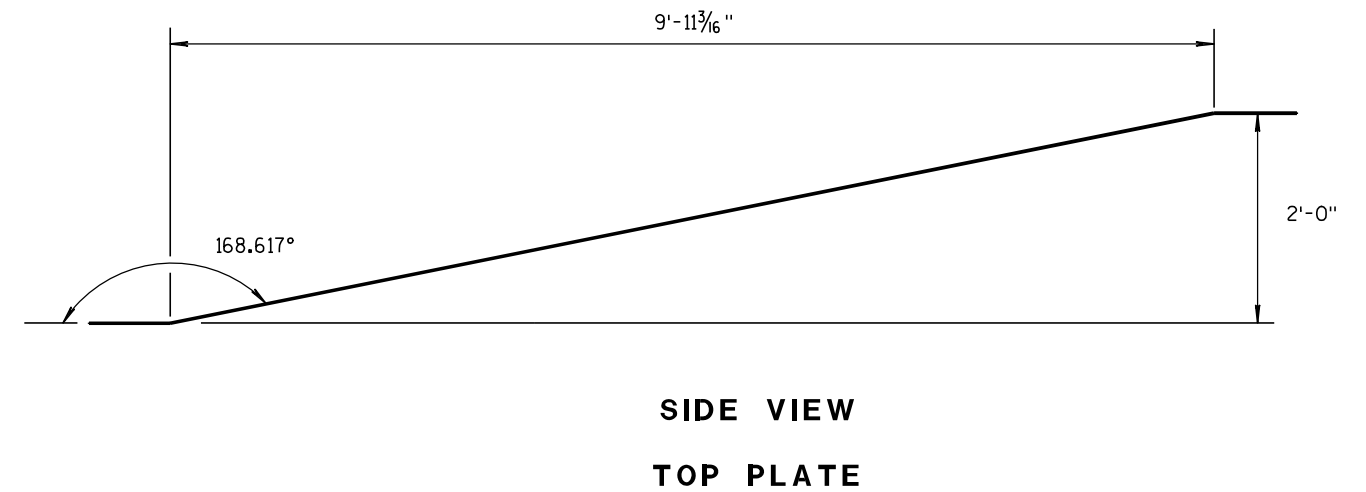
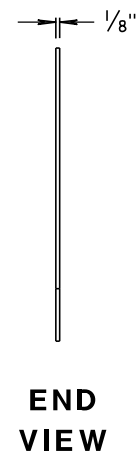
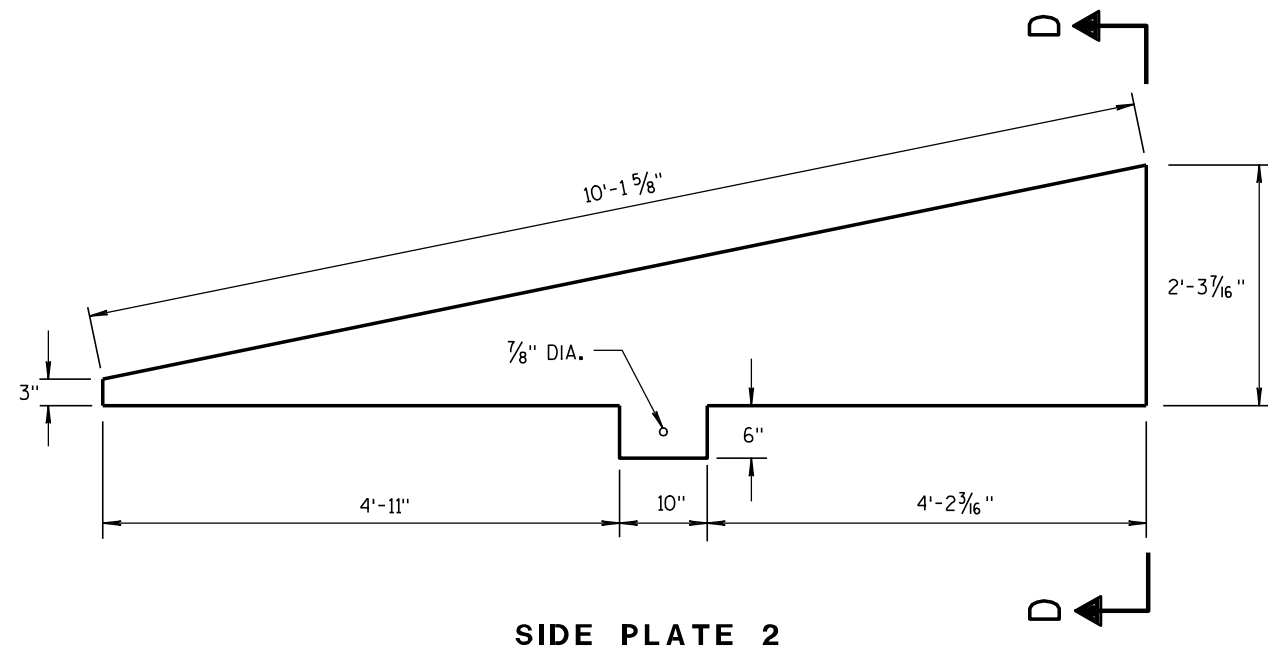
GUSSETS AND END PLATE ARE STITCH WELDED ON 3 SIDES. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE AND GUSSETS.



CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER  
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



**CAP DETAILS FOR TEMPORARY CONCRETE  
BARRIER TO 56" PERMANENT CONCRETE BARRIER**

**CONCRETE BARRIER  
TEMPORARY PRECAST, 12'-6"**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED

8/31/2012

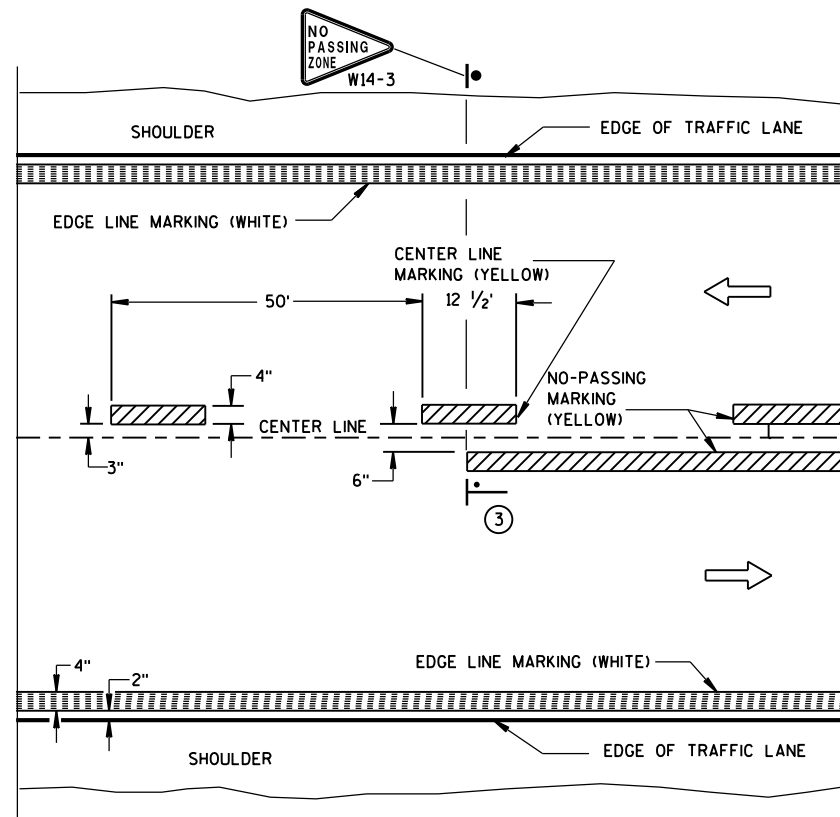
DATE

FHWA

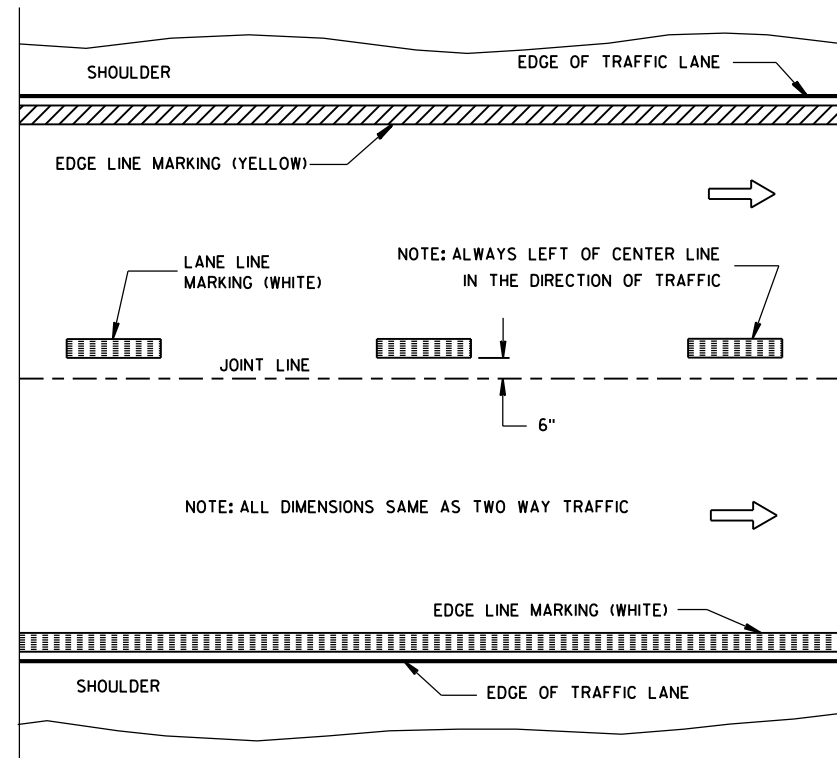
/S/ Jerry H. Zogg

ROADWAY STANDARD DEVELOPMENT

ENGINEER

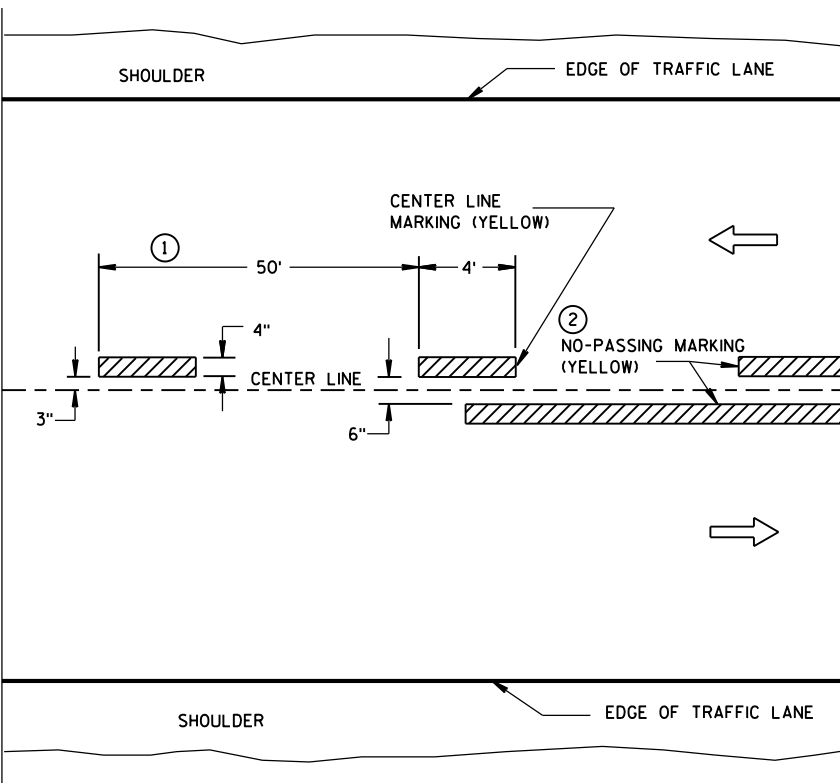


TWO WAY TRAFFIC

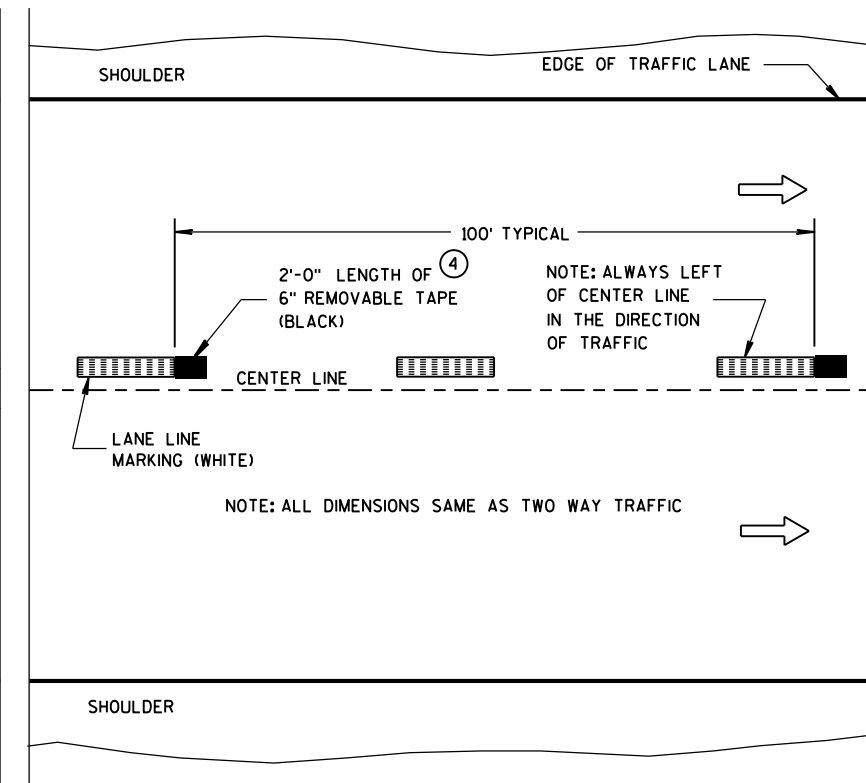


ONE WAY TRAFFIC

## PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

**TEMPORARY (INTERMEDIATE) PAVEMENT MARKING**  
(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

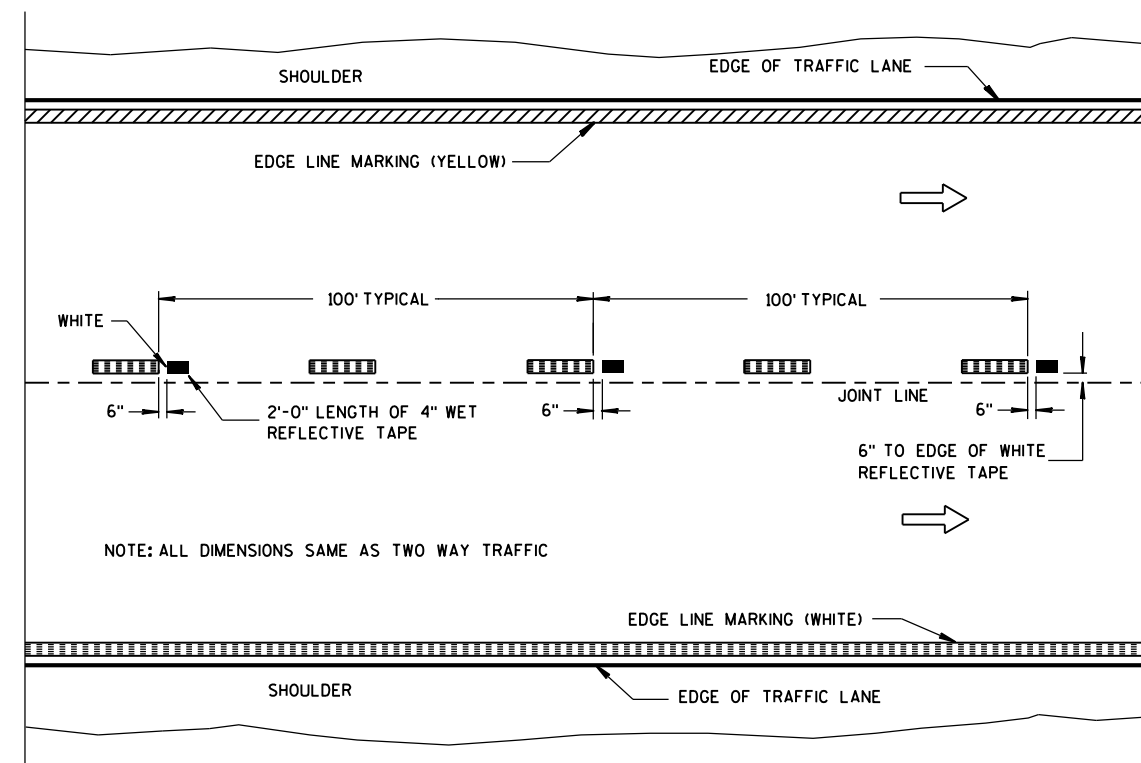
## GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

- ① HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
- ② NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
- ③ NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
- ④ CONCRETE ONLY.

## NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL



**WET REFLECTIVE TAPE SUPPLEMENT TO  
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE**

## LEGEND

- "T" MARKING
- POST MOUNTED SIGN

PAVEMENT MARKING  
(MAINLINE)

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
10-1-2012 /S/ Travis Feltes  
DATE STATE TRAFFIC ENGINEER OF DESIGN  
FHWA

## LEGEND

- POST MOUNTED SIGN
- REMOVING PAVEMENT MARKING
- TYPE III BARRICADE WITH SIGN
- DRUM WITH/WITHOUT WARNING LIGHT, TYPE C (STEADY-BURN)
- TEMPORARY PRECAST CONCRETE BARRIER
- FLAGS, 16"x16" MIN., ORANGE
- TEMPORARY SIGNAL WITH BACKPLATE AND 12-INCH LENSES ON BREAKAWAY POLE
- ASPHALTIC PAVEMENT WIDENING
- DIRECTION OF TRAFFIC FLOW
- 4" X 6" WOOD POST

## GENERAL NOTES :

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

NON-OPERATIONAL EQUIPMENT OR MATERIAL SHALL BE LOCATED BEHIND THE PRECAST CONCRETE BARRIER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

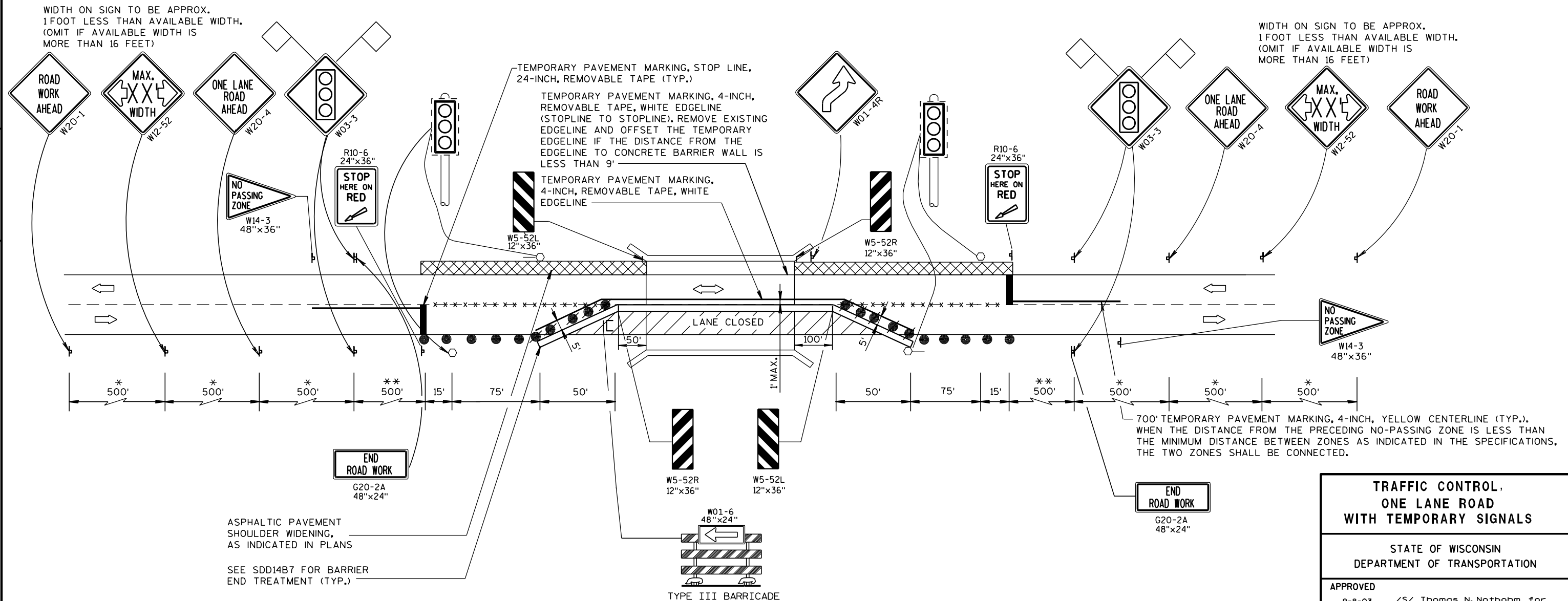
SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

PLACE TEMPORARY PAVEMENT MARKING EDGELINE AND CENTERLINE, AND REMOVE EXISTING PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS OR AS NOTED ON DETAIL.

\* 500' SPACING SHOWN IS FOR ROADWAYS WITH A PRE-CONSTRUCTION REGULATORY SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350' TYPICAL SPACING. FOR 25-30 MPH, USE 200' TYPICAL SPACING.

\*\* USE 300' SPACING IF PRE-CONSTRUCTION REGULATORY SPEED LIMIT IS 35 MPH OR LESS.







## *Wisconsin Department of Transportation*

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**GENERAL NOTES**

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY FACILITIES ARE NOT SHOWN ON THE PLANS. THERE MAY BE UTILITY FACILITIES WITHIN THE PROJECT AREA, BUT NO CONFLICTS ARE ANTICIPATED.

THERE ARE NO KNOWN UTILITIES ON THE EXISTING BRIDGE.

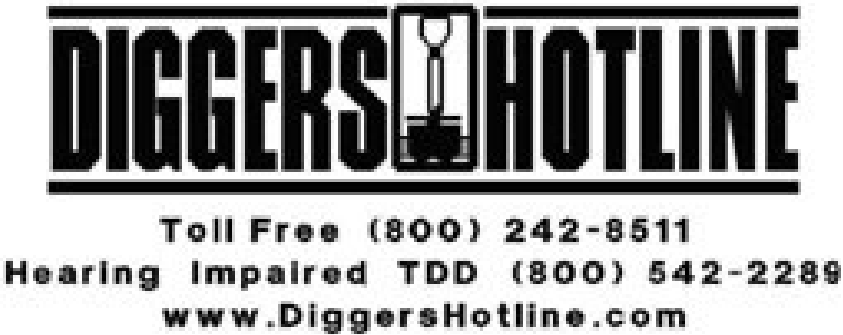
CONSIDER DIMENSIONS GIVEN FOR EXISTING FEATURES AS APPROXIMATE AND MEASURE FEATURES IN THE FIELD FOR MATCHING PURPOSES.

CONTRACTOR WILL BE RESPONSIBLE FOR RESHAPING AND SEEDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTRUBED BY HIS OPERATION OUTSIDE THE NORMAL CONSTRUCTION LIMITS.

**CONTACTS**

DNR LIAISON

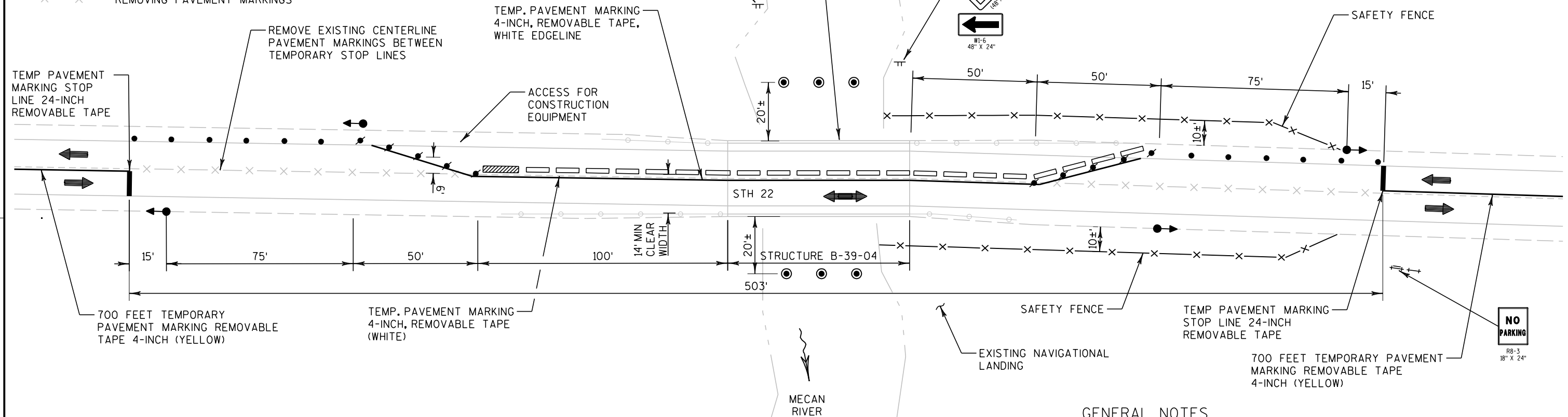
BOBBI JO FISCHER  
DEPARTMENT OF NATURAL RESOURCES  
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## LEGEND

- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C LIGHT
- ⏏ TRAFFIC CONTROL BARRICADE TYPE III WITH/WITHOUT SIGN
- ▭ TEMPORARY PRECAST CONCRETE BARRIER
- ◀ TEMPORARY TRAFFIC SIGNAL
- ➡ DIRECTION OF TRAFFIC FLOW
- ▨ CRASH CUSHION TEMPORARY
- NAVIGATIONAL BOUY
- × × REMOVING PAVEMENT MARKINGS



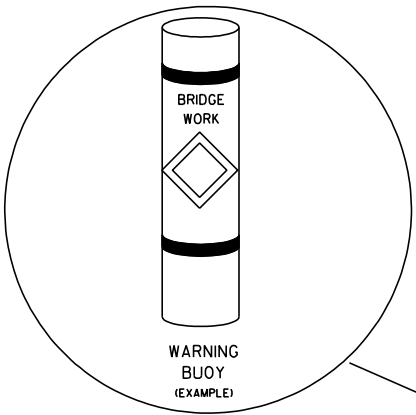
## GENERAL NOTES

- EXISTING CONDITIONS SHOWN ARE APPROXIMATE. VERIFY CONDITIONS IN FIELD.
- THIS DETAIL SUPPLEMENTS S.D.D. "TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNAL". FOLLOW S.D.D. EXCEPT AS SHOWN IN THIS DETAIL.
- TEMPORARY EDGELINE AND TEMPORARY ASPHALT WIDENING NOT NECESSARY FOR THIS LOCATION.
- SEE ADDITIONAL STANDARD DETAIL DRAWINGS FOR OTHER TRAFFIC CONTROL REQUIREMENTS.
- PLACE SIGNS FOR TEMPORARY PORTAGE PRIOR TO BEGINNING WORK THAT RESTRICTS NAVIGATION IN THE CHANNEL.
- SEE TEMPORARY PORTAGE SIGN DETAILS AND WARNING BOUY DETAILS FOR ADDITIONAL INFORMATION.

TEMPORARY TRAFFIC SIGNAL FOR ONE LANE BRIDGE - STH 22  
TRAFFIC TO USE NORTHBOUND LANE ON BRIDGE

SEQUENCE OF OPERATIONS				
STRUCTURE: B-39-04 STH 22				
PRE-TIMED CYCLE 1 = 80 SECONDS				
TIME: ALL DAY				
INTERVAL	NB A1, A2	SB B1, B2	INTERVAL LENGTH (SEC)	% OF CYCLE
PHASE A	G	R	16	20.0%
CLEARANCE	Y	R	4	5.0%
CLEARANCE	R	R	20	25.0%
PHASE B	R	G	16	20.0%
CLEARANCE	R	Y	4	5.0%
CLEARANCE	R	R	20	25.0%
			80	100%

NOTE: G = GREEN  
Y = YELLOW  
R = RED

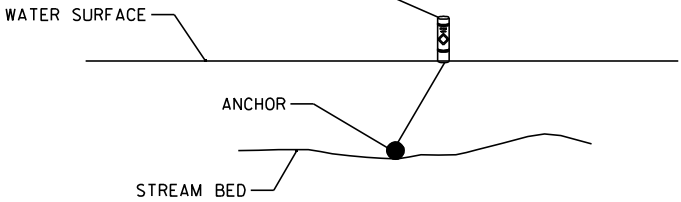


GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

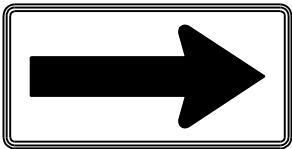
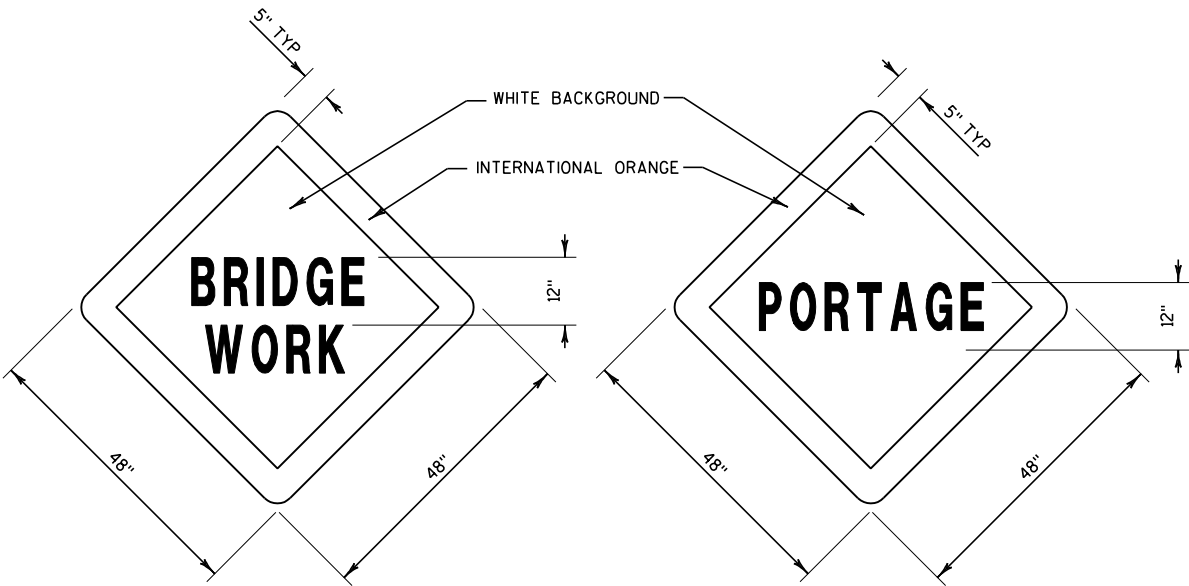
WARNING BUOYS WILL BE CONSIDERED INCIDENTAL TO TRAFFIC CONTROL.

SEE TRAFFIC CONTROL DETAIL SHEET FOR LOCATION.



WARNING BUOY DETAIL

PLACE WARNING BUOYS AS SHOWN ON THE PLAN.



W1-6  
48" X 24"

TEMPORARY PORTAGE SIGN DETAILS

12 INCH BLACK BLOCK LETTERING.

ALL SIGNS SHALL CONFORM TO THE UNIFORM WATERWAY MARKING SYSTEM SET FORTH IN SECTION NR 5.09 WISCONSIN ADMINISTRATIVE CODE.

SIGNS TO BE PLACED AS SPECIFIED BY THE ENGINEER IN THE FIELD.

DATE 12FEB13			E S T I M A T E O F Q U A N T I T I E S		
LINE					6150-01-63
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0020	517.1800.S	STRUCTURE REPAINTING RECYCLED ABRASIVE (STRUCTURE) 02. B-39-04	LS	1.000	1.000
0040	517.4500.S	NEGATIVE PRESSURE CONTAINMENT AND COLLECTION OF WASTE MATERIALS (STRUCTURE) 02. B-39-04	LS	1.000	1.000
0050	517.6001.S	PORTABLE DECONTAMINATION FACILITY	EACH	1.000	1.000
0060	603.8000	CONCRETE BARRIER TEMPORARY PRECAST DELIVERED	LF	280.000	280.000
0070	603.8125	CONCRETE BARRIER TEMPORARY PRECAST INSTALLED	LF	280.000	280.000
0080	614.0905	CRASH CUSHIONS TEMPORARY	EACH	1.000	1.000
0090	616.0700.S	FENCE SAFETY	LF	380.000	380.000
0100	619.1000	MOBILIZATION	EACH	0.500	0.500
0120	643.0100	TRAFFIC CONTROL (PROJECT) 02. 6150-01-63	EACH	1.000	1.000
0130	643.0300	TRAFFIC CONTROL DRUMS	DAY	700.000	700.000
0140	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	80.000	80.000
0150	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	80.000	80.000
0160	643.0715	TRAFFIC CONTROL WARNING LIGHTS TYPE C	DAY	200.000	200.000
0170	643.0900	TRAFFIC CONTROL SIGNS	DAY	660.000	660.000
0180	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	125.000	125.000
0190	646.0600	REMOVING PAVEMENT MARKINGS	LF	125.000	125.000
0200	649.0400	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH	LF	1,740.000	1,740.000
0210	649.1400	TEMPORARY PAVEMENT MARKING STOP LINE REMOVABLE TAPE 24-INCH	LF	30.000	30.000
0230	661.0100	TEMPORARY TRAFFIC SIGNALS FOR BRIDGES (STRUCTURE) 02. B-39-04	LS	1.000	1.000

CONCRETE BARRIER TEMPORARY PRECAST

	603.8000 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED	603.8125 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED	614.0905  CRASH CUSHIONS TEMPORARY	
LOCATION	LF	LF	EACH	REMARKS
STH 22	280	280	1	
TOTALS	280	280	1	

SAFETY FENCE

	616.0700.S	
LOCATION	FENCE SAFETY LF	REMARKS
WEST OF BRIDGE	190	
EAST OF BRIDGE	190	
TOTALS	380	

TRAFFIC CONTROL

		643.0300	643.0420	643.0705	643.0715	643.0900	661.0100.02	
	SERVICE PERIOD		BARRICADES	WARNING LIGHTS	WARNING LIGHTS		TEMPORARY TRAFFIC SIGNALS	
LOCATION	DAYS	NO DRUMS DAYS	TYPE III	TYPE A	TYPE C	SIGNS	FOR BRIDGES	REMARKS
		NO DAYS	NO DAYS	NO DAYS	NO DAYS	NO DAYS	LS	
INSTALL/REMOVAL FOR TEMPORARY SIGNAL	5	30 150	0	0	0	10 50		
TEMPORARY SIGNAL	20	25 500	4 80	4 80	10 200	25 500	1	
NAVIGATIONAL SIGNS	20	0	0	0	0	3 60		
UNDISTRIBUTED		50				50		
TOTALS		700	80	80	200	660	1	

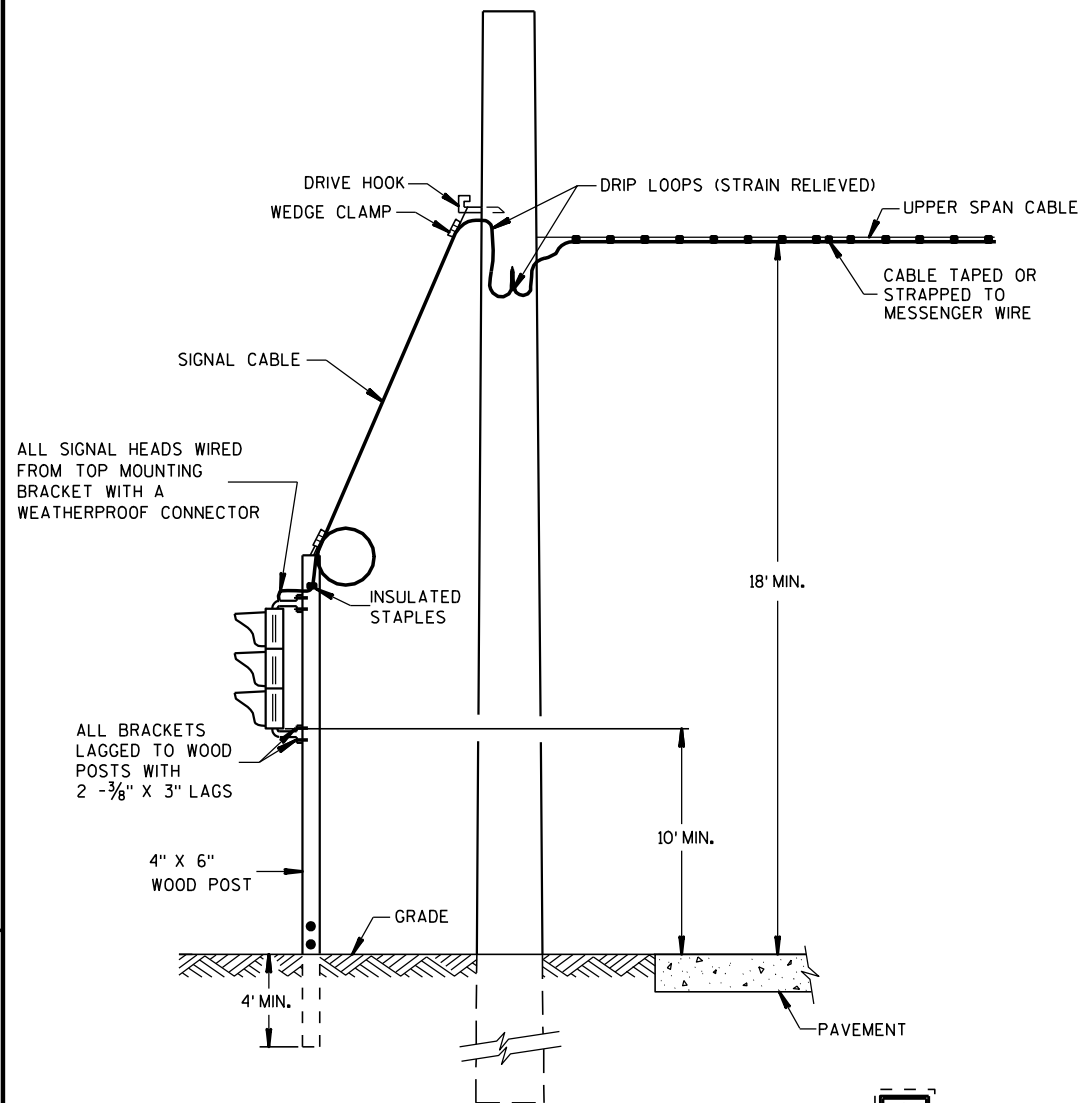
PAVEMENT MARKING

	646.0106	646.0600	****	****	649.0400	649.1400
	EPOXY	REMOVING	TEMPORARY	TEMPORARY	TEMPORARY	TEMPORARY
	4-INCH	PAVEMENT	PAVT MARKING	PAVT MARKING	PAVEMENT	PAVT MARKING
	(YELLOW)	MARKINGS	REMOVABLE	REMOVABLE	MARKING	STOP LINE
	LF	LF	TAPE	TAPE	REMOVABLE	REMOVABLE
			4-INCH	4-INCH	TAPE	TAPE
			(WHITE)	(YELLOW)	4-INCH	24-INCH
LOCATION	LF	LF	LF	LF	LF	LF
STH 22 ALONG CONCRETE BARRIER	0	0	340	0	340	---
STH 22 CENTERLINE	125	125	0	1,400	1,400	30
TOTALS	125	125	340	1,400	1,740	30

\*\*\*\* FOR INFORMATION ONLY.

Standard Detail Drawing List

09G02-03A	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
09G02-03B	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
09G02-03C	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
14B07-13A	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-13B	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-13C	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-13D	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-13E	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-13F	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-13G	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
14B07-13H	CONCRETE BARRIER TEMPORARY PRECAST, 12' -6"
15C08-15A	PAVEMENT MARKING (MAINLINE)
15D33-02	TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS

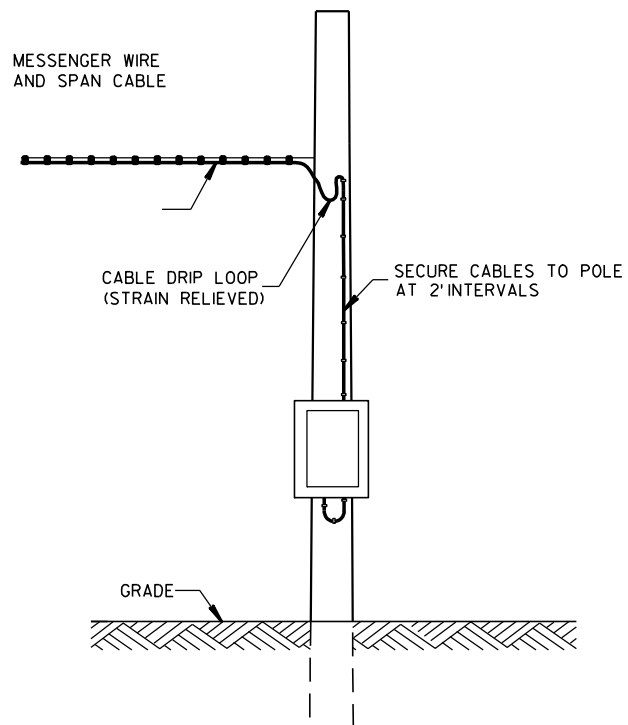


**TYPICAL DROP  
TO TRAFFIC SIGNAL FACE**

OFFSET DISTANCES FOR TEMPORARY NON-BREAKAWAY POLES	
SPEED LIMIT	OFFSET DISTANCE**
GREATER THAN 45 MPH	18 FT
45 MPH OR LESS	12 FT
45 MPH OR LESS W/ CURBS	2 FT

\*\*NOTE: OFFSET MEASURED FROM OUTER EDGE OF  
OUTSIDE THRU LANE.

MINIMUM POLE LENGTHS	CLASS	MINIMUM BURIAL DEPTHS
25 FEET	V	5 FEET
30 FEET	V	6 FEET
35 FEET	IV	7 FEET
40 FEET	IV	8 FEET
45 FEET	IV	9 FEET



**POLE MOUNT  
CABINET INSTALLATION**

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

POLE MOUNTED TRAFFIC SIGNAL CONTROL CABINET MAYBE MOUNTED ON THE SERVICE POLE IF THE ELECTRICAL UTILITY ALLOWS THE INSTALLATION.

WHEN UTILITY POLES ARE USED TO SPAN THE TEMPORARY OVERHEAD CABLE, WRITTEN PERMISSION MUST BE OBTAINED FROM THE OWNER OF THE POLES AND GIVEN TO THE PROJECT MANAGER. ALL PERTINENT UTILITY AND CODE CLEARANCES SHALL BE MAINTAINED.

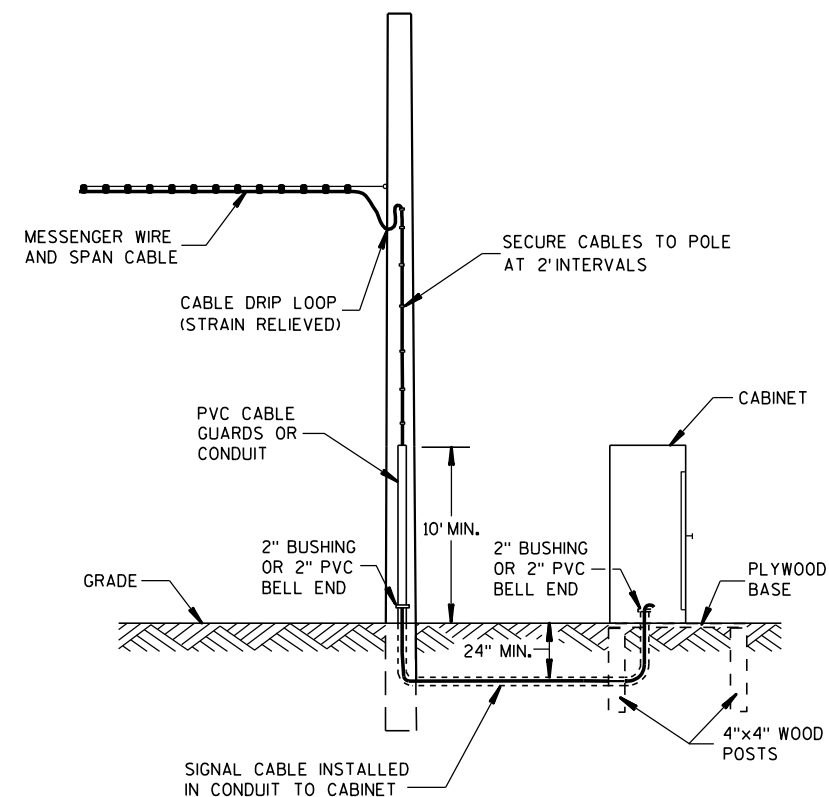
WOOD POLES (NONBREAKAWAY) SHALL BE NO CLOSER TO EDGE OF PAVEMENT THAN OFFSET DISTANCE CHART ALLOWS OR 4 FEET BEHIND PROTECTIVE BARRIER (BEAMGUARD, ETC.).

WOOD POSTS (BREAKAWAY) SHALL BE NO CLOSER THAN 2 FEET OUTSIDE OF SHOULDER.

VERTICAL CLEARANCE ETC. PER NEC.

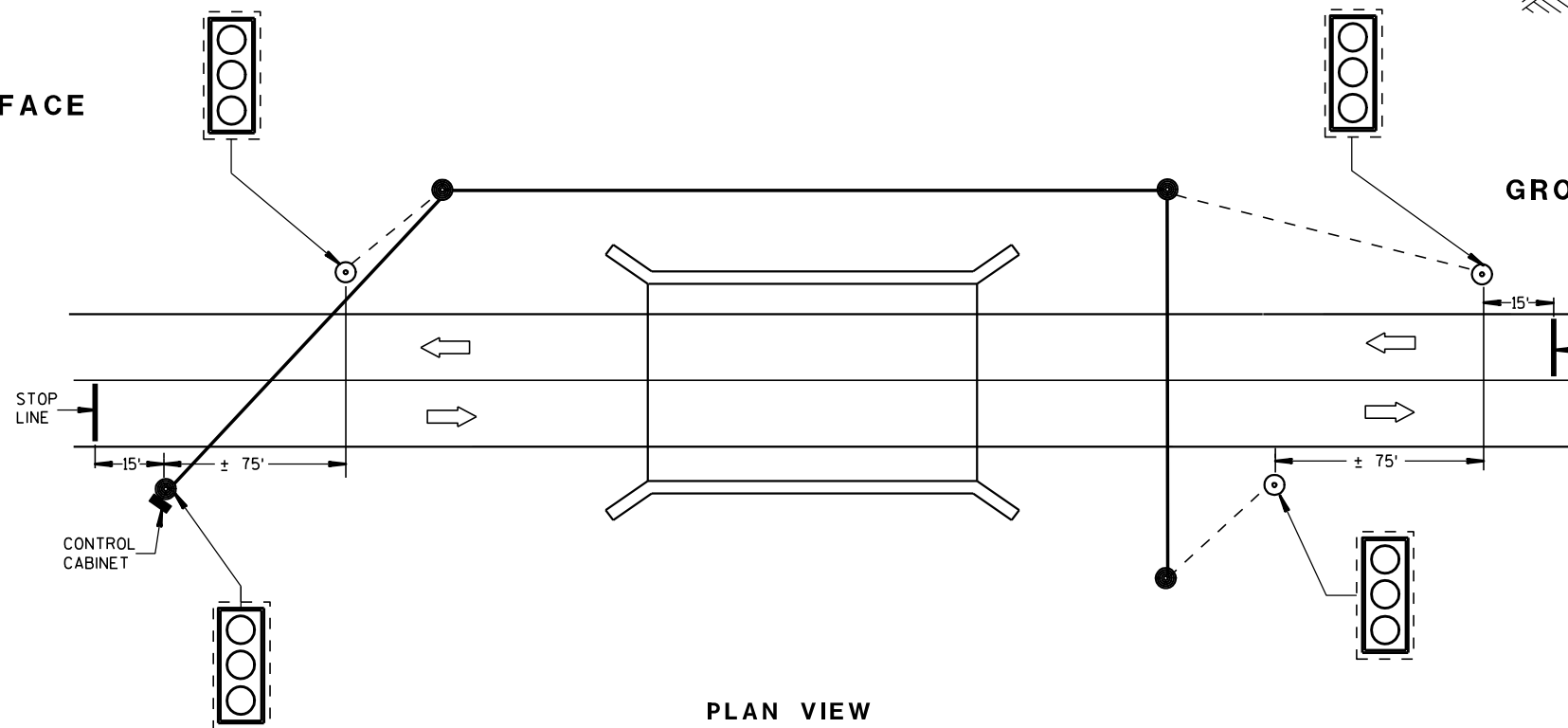
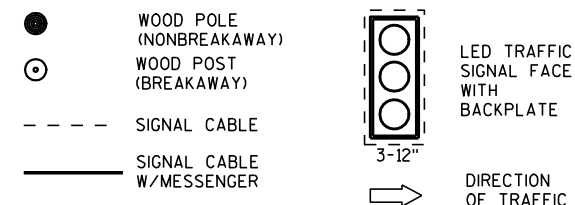
TRAFFIC SIGNAL FACES SHALL BE TYPICALLY PLACED 12 FEET FROM EDGE OF PAVEMENT.

EACH TRAFFIC SIGNAL FACE SHALL HAVE A BACKPLATE.



**GROUND MOUNT CABINET INSTALLATION**

## LEGEND



**PLAN VIEW  
TYPICAL BRIDGE TEMPORARY TRAFFIC SIGNAL LOCATION**

## BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

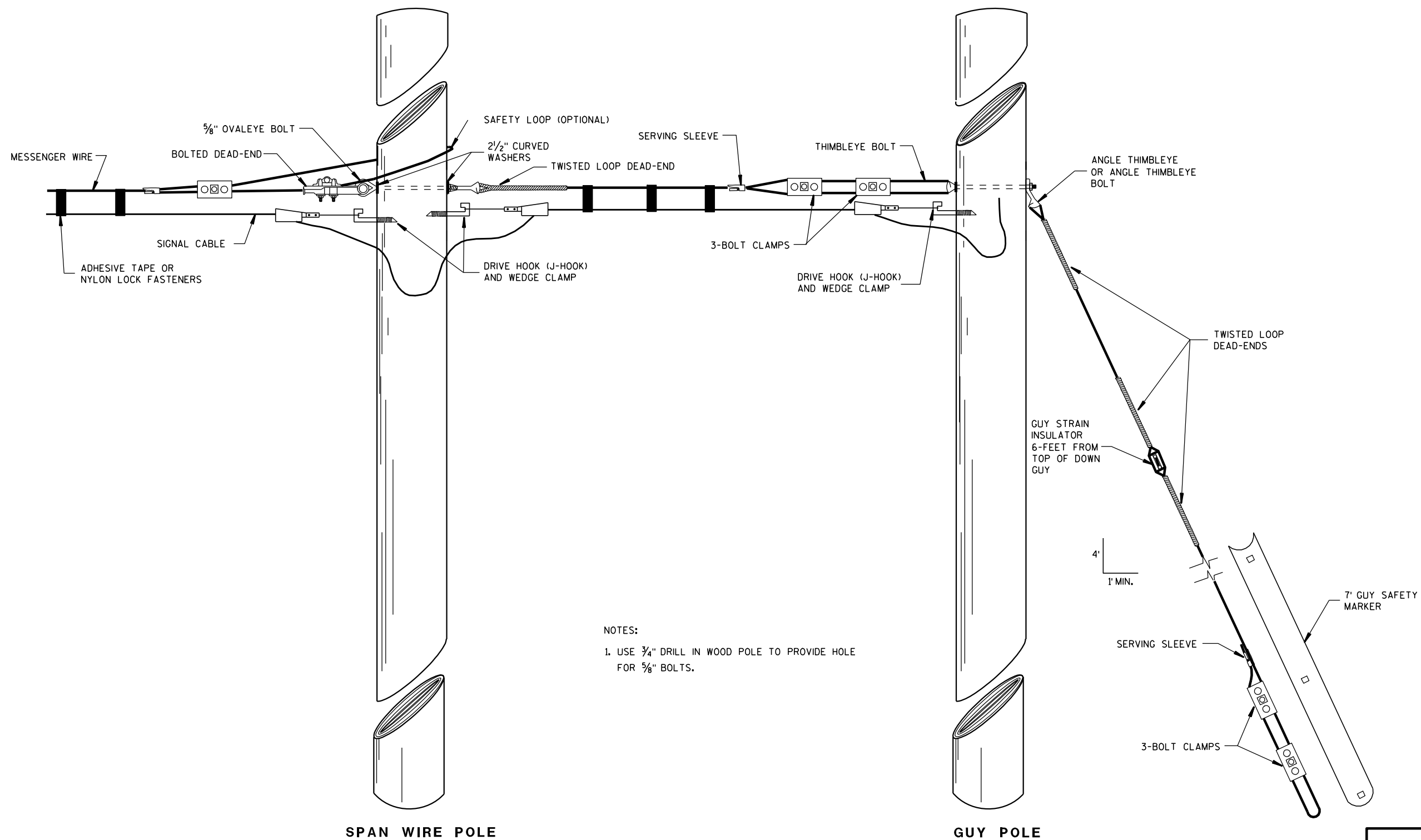
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED

3/2/2011  
DATE

/S/ Thomas J. Goring  
STATE ELECTRICAL ENGINEER FOR HWYS

FHWA



## NOTES:

1. USE 3/4" DRILL IN WOOD POLE TO PROVIDE HOLE FOR 5/8" BOLTS.

SPAN WIRE POLE

GUY POLE

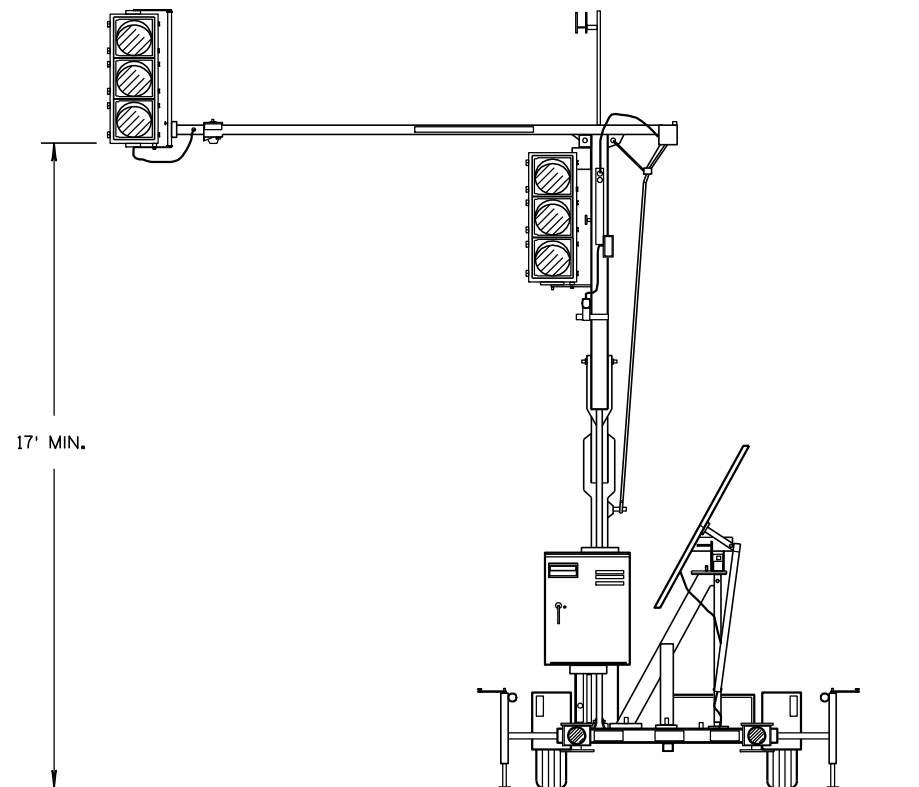
## TYPICAL DEAD-ENDINGS OR GUYING

BRIDGE TEMPORARY  
TRAFFIC SIGNAL INSTALLATIONSTATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED

3/2/2011  
DATE/S/ Thomas J. Goring  
STATE ELECTRICAL ENGINEER FOR HWYS

FHWA

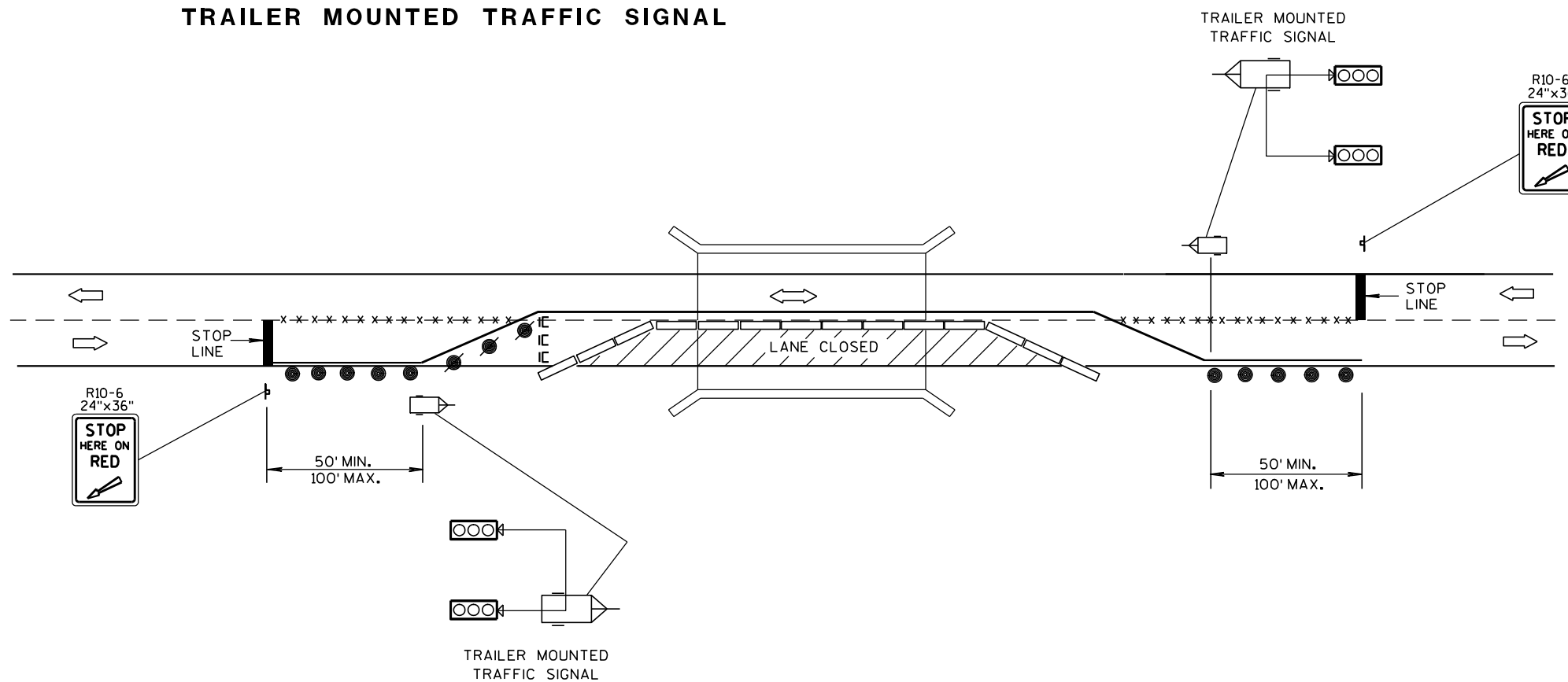


TRAILER MOUNTED TRAFFIC SIGNAL

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

SIGNING, PAVEMENT MARKING AND LANE CONTROL REQUIREMENTS SHALL CONFORM TO STANDARD DETAIL DRAWING 15 D 33.



TYPICAL TRAILER MOUNTED TRAFFIC SIGNAL LOCATION

## LEGEND

- POST MOUNTED SIGN
- \*-x-\* REMOVING PAVEMENT MARKING
- TYPE III BARRICADE WITH SIGN
- DRUM WITH/WITHOUT WARNING LIGHT, TYPE C (STEADY-BURN)
- TEMPORARY PRECAST CONCRETE BARRIER
- TRAILER MOUNTED TRAFFIC SIGNAL
- DIRECTION OF TRAFFIC FLOW

BRIDGE TEMPORARY  
TRAFFIC SIGNAL INSTALLATION

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED

3/2/2011  
DATE

FHWA

/S/ Thomas J. Goring  
STATE ELECTRICAL ENGINEER FOR HWYS



## END VIEW

### ELEVATION VIEW

**DETAIL "B"**  
**LIFTING SLOT DETAIL**

**SECTION A-A**  
(STIRRUP PLACEMENT)

**SECTION B-B**  
(STIRRUP PLACEMENT)

### PLAN VIEW

## DETAILS OF BARRIER SECTION

## DETAILS OF BARRIER CONNECTION

**DETAIL "A"**  
**CONNECTION PIN**  
(A36 STEEL (10.9 LB EACH))

## GENERAL NOTES

THESE GENERAL NOTES APPLY TO SHEETS 14B7-13(a) THRU 14B7-13(h).

DO NOT INTERMIX CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" (CBTP12.5) WITH OTHER TEMPORARY CONCRETE BARRIERS.

USE ASTM A-615, GRADE 60, DEFORMED STEEL BARS FOR BARS 4A1, 6A2, 5B1 AND 4C1 IN THE BARRIER SECTION AND FOR 4V1, 4V2, 4V3, 4V4, 4V5, 4V6, 4F1, 4F2 AND 5F3 IN THE BARRIER TAPER SECTION.

LOOP BARS 6D1, 6D2 AND 6D3 SHALL BE  $\frac{3}{4}$ " SMOOTH STEEL BARS WITH A MINIMUM YIELD STRENGTH OF 60 KSI, A TENSILE STRENGTH OF NOT LESS THAN 1.25 TIMES THE YIELD STRENGTH BUT A MINIMUM OF 80 KSI, A MINIMUM 14% ELONGATION IN 8 INCHES AND PASSING A 180 DEGREE BEND TEST USING A  $3\frac{1}{2}$ " PIN BEND DIAMETER FOR BEND TESTS. THE LOOPS SHALL BE INSTALLED WITHIN  $\frac{1}{8}$ " OF THE PLAN DIMENSION.

CONSTRUCT LIFTING SLOTS AS SPECIFIED ON THE PLANS TO FACILITATE THE DRAINAGE OF WATER AFTER INSTALLATION.

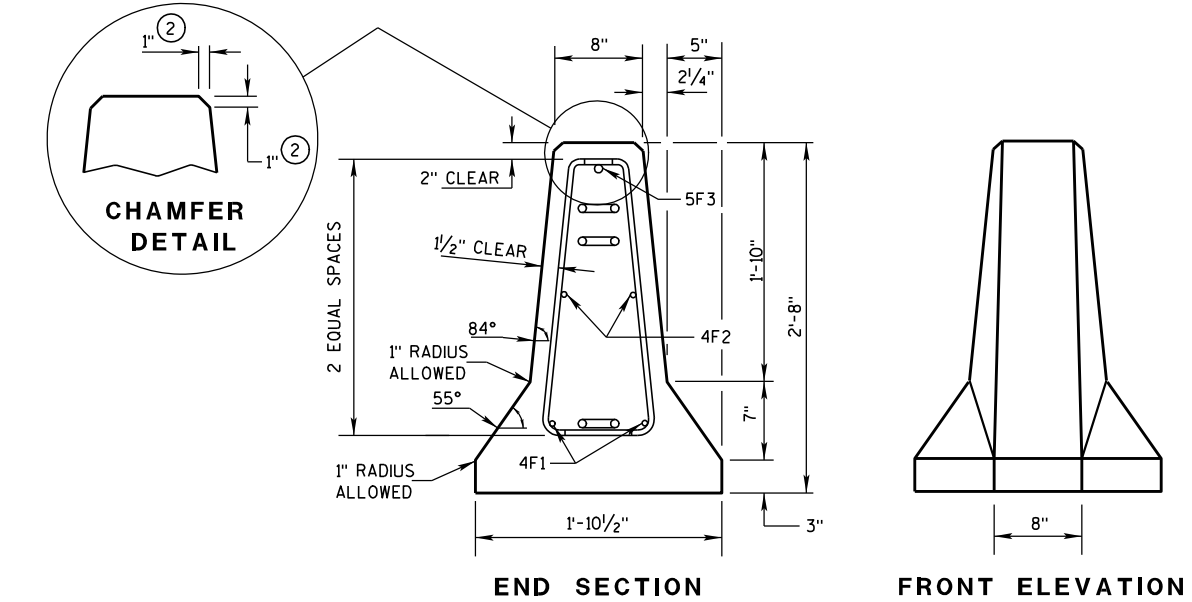
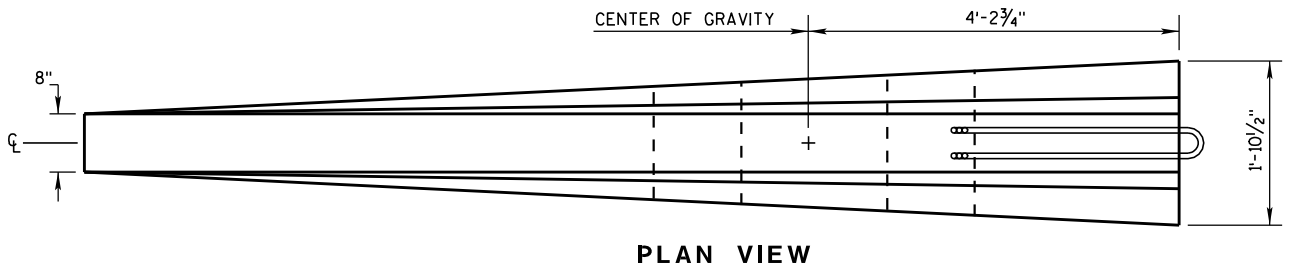
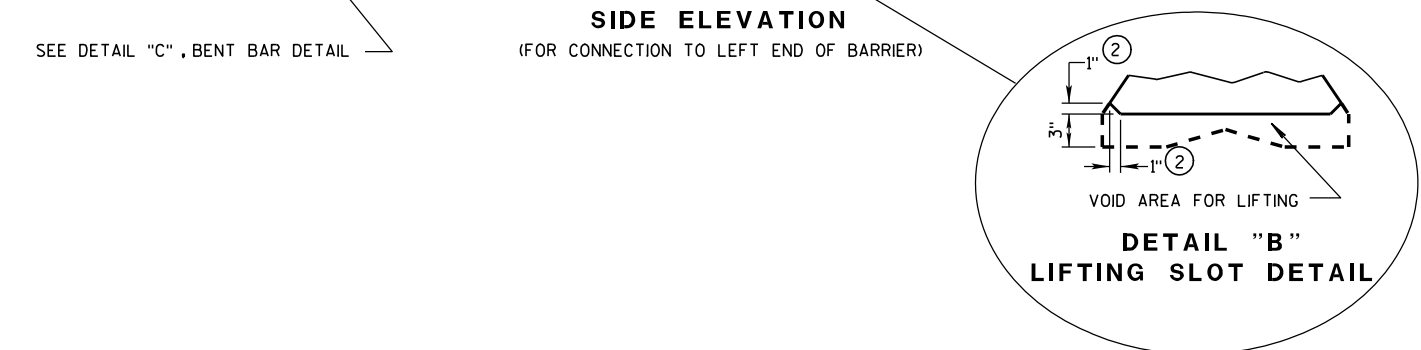
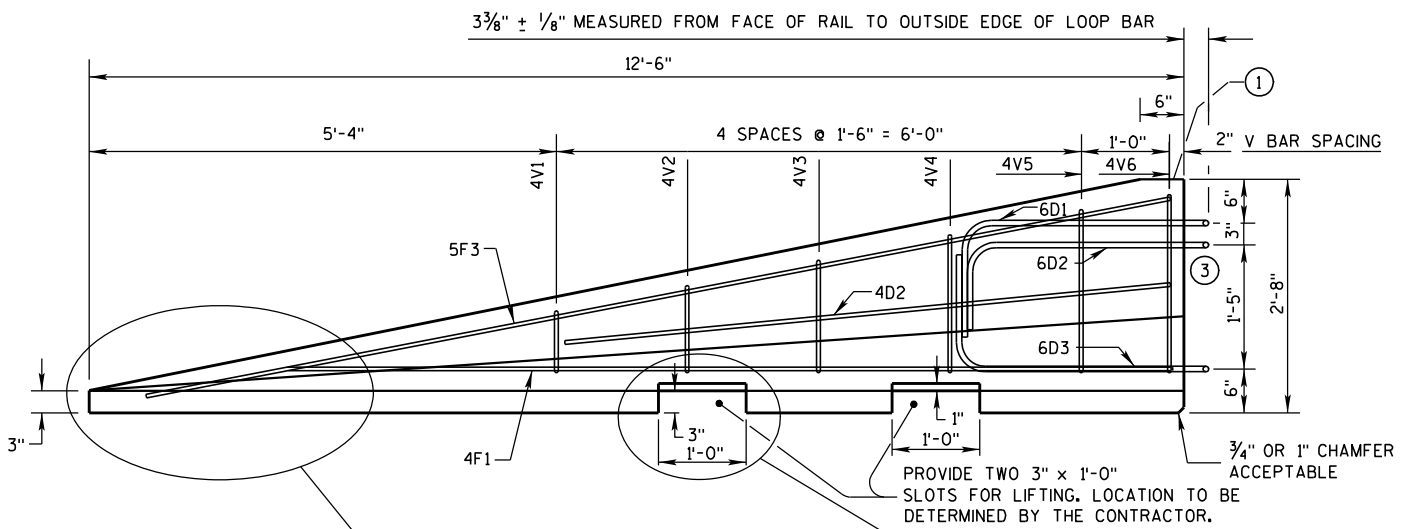
PLACE BARRIER ON A PAVED SURFACE. REMOVE ALL LOOSE DIRT AND SAND FROM THE ROADWAY SURFACE PRIOR TO PLACEMENT OF THE BARRIER.

INSTALL MECHANICAL OR EPOXY ANCHORS PER MANUFACTURER'S RECOMMENDATIONS.  
PROVIDE MANUFACTURER'S INFORMATION TO PROJECT ENGINEER.

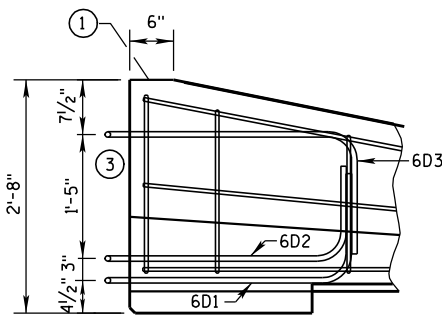
- ① MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
  - a. TYPE: WICBTP
  - b. MANUFACTURER
  - c. DATE MANUFACTURED (MONTH AND YEAR)
- ② 1" CHAMFER TO PREVENT SPALLING.
- ③ A  $\frac{3}{8}$ " HOLE IN THE CONNECTION PIN, AT THE LOCATION SHOWN, IS ACCEPTABLE, BUT NOT REQUIRED..
- ④ "V" NOTCH IS OPTIONAL.
- ⑤ THE 4" DIAMETER, 11 GAUGE STEEL, ROUND MECHANICAL TUBING SLEEVE FOR LIFTING (OPTIONAL).
- ⑥ NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.
- ⑦ USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MAY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURES INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED TO THE LEFT OF TRAFFIC AND WHITE REFLECTORS WHEN BARRIER IS LOCATED TO THE RIGHT OF TRAFFIC. SPACE DELINEATORS A MAXIMUM OF 25 FEET APART. PROVIDE TOP MOUNTED DELINEATORS IN ADDITION TO THE SIDE MOUNTED DELINEATORS ON ALL BARRIER INSTALLATIONS LOCATED ON A CURVED ALIGNMENT LONGER THAN 200 FEET AND ON BARRIERS USED TO SEPARATE OPPOSING TRAFFIC.
- ⑧ SEE SHEET D FOR ANCHORING CRITERIA.
- ⑨ 1" CHAMFER OPTIONAL.

CONCRETE BARRIER  
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



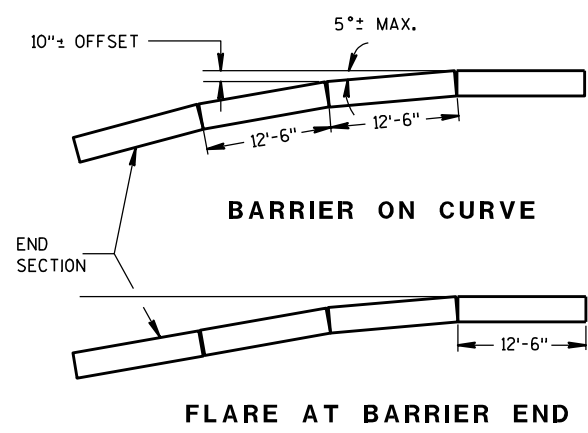
DETAILS OF BARRIER TAPER SECTION



SIDE ELEVATION  
LOOP BAR ASSEMBLY INVERTED  
FOR OPPOSITE END.  
(FOR CONNECTION TO RIGHT END OF BARRIER)

GENERAL NOTES

- ① MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
  - a. TYPE W/CBTP
  - b. MANUFACTURER
  - c. DATE MANUFACTURED (MONTH AND YEAR)
- ② 1" CHAMFER TO PREVENT SPALLING.
- ③ NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.



POSTED SPEED, (MPH)	FLARE RATE
40 OR LESS	6:1
45 OR GREATER	8:1

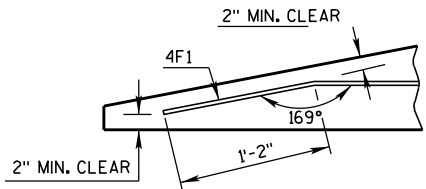
CONCRETE BARRIER  
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

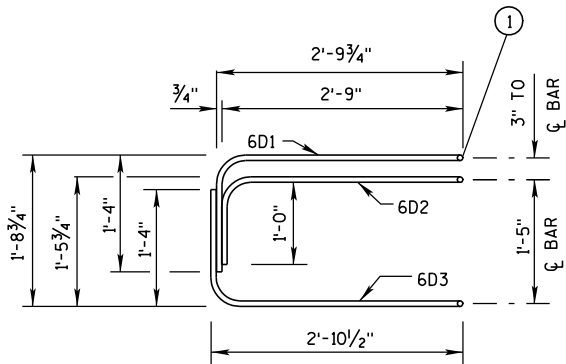
BARRIER TAPER SECTION  
BILL OF MATERIALS

(PER 12'-6" BARRIER TAPER SECTION)

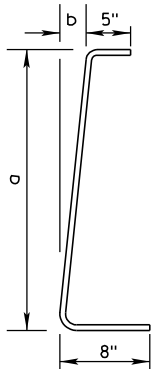
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"
LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"



DETAIL "C"  
BENT BAR DETAIL



ELEVATION  
LOOP BAR ASSEMBLY



4V BARS

2 AT EACH SIZE REQUIRED  
FOR STIRRUP ASSEMBLY

BAR	a	b
V1	10"	1"
V2	1'-1"	1 1/4"
V3	1'-5"	1 5/8"
V4	1'-8"	1 7/8"
V5	2'-0 1/2"	2 3/8"
V6	2'-3"	2 3/4"

TAPER BARRIER SECTION

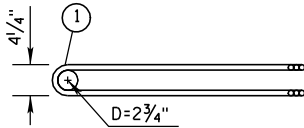
GENERAL NOTES

① NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

BARRIER SECTION  
BILL OF MATERIALS

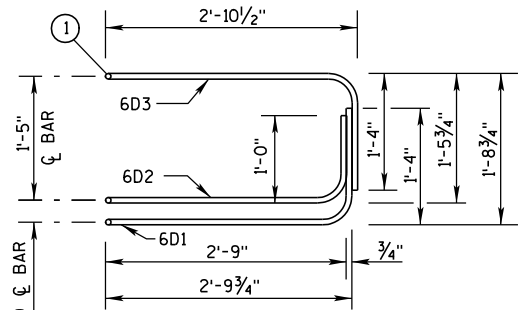
(PER 12'-6" BARRIER SECTION)

BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"

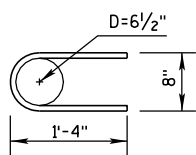


PLAN VIEW  
LOOP BAR ASSEMBLY

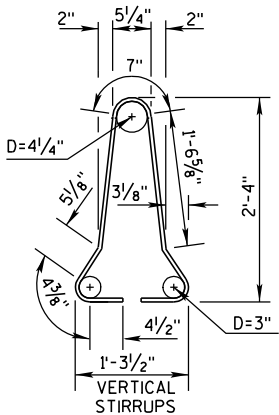
(MARKED END SHOWN, INVERT FOR OTHER END)



ELEVATION VIEW



6A2

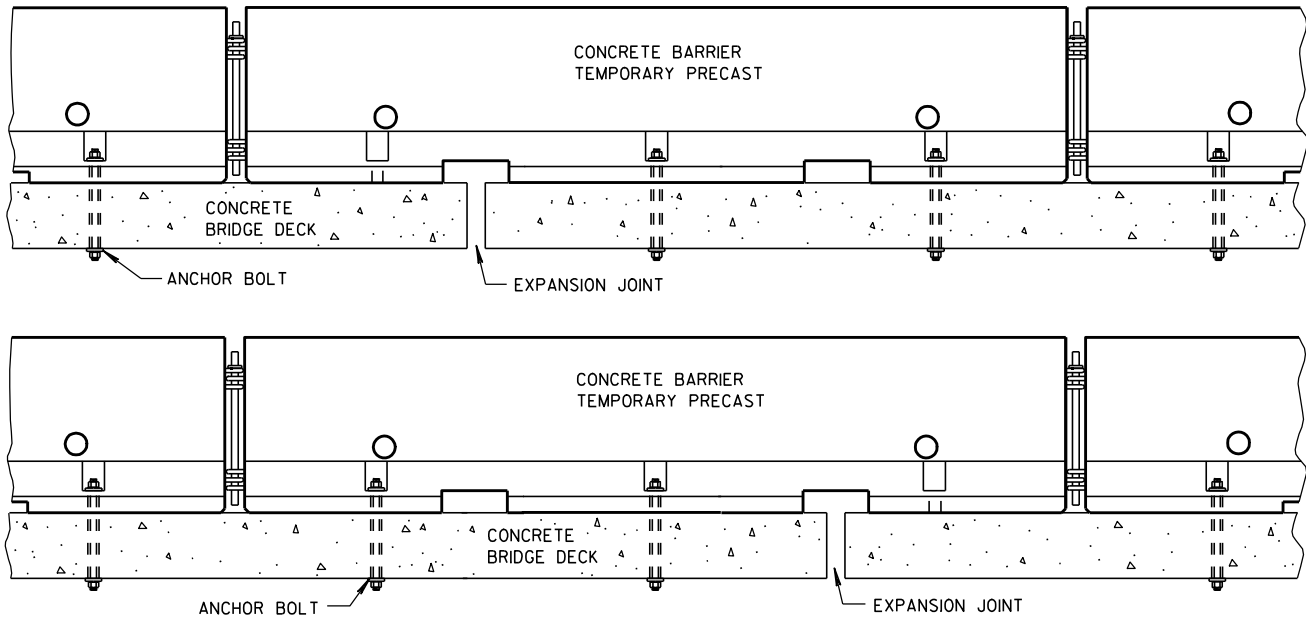


4A1

BARRIER SECTION

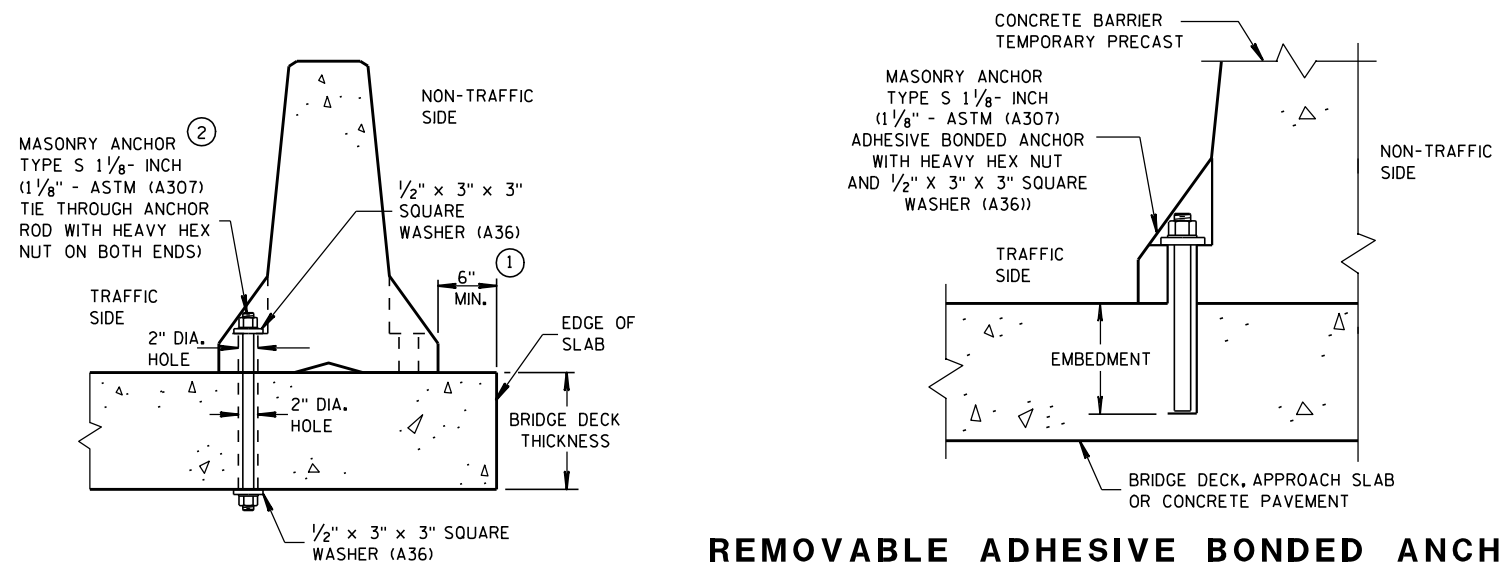
CONCRETE BARRIER  
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



**TREATMENT AT BRIDGE DECK EXPANSION JOINTS**

(NO SINGLE CONCRETE BARRIER SECTION SHALL BE ANCHORED TO BOTH THE BRIDGE DECK AND THE APPROACH SLAB. ALL ANCHOR BOLT LOCATIONS SHALL BE ANCHORED TO THE DECK IN ACCORDANCE WITH THE DETAIL. NO MORE THAN ONE ANCHOR BOLT SHALL BE ELIMINATED FROM A BARRIER SECTION WHEN SPANNING AN EXPANSION JOINT.)

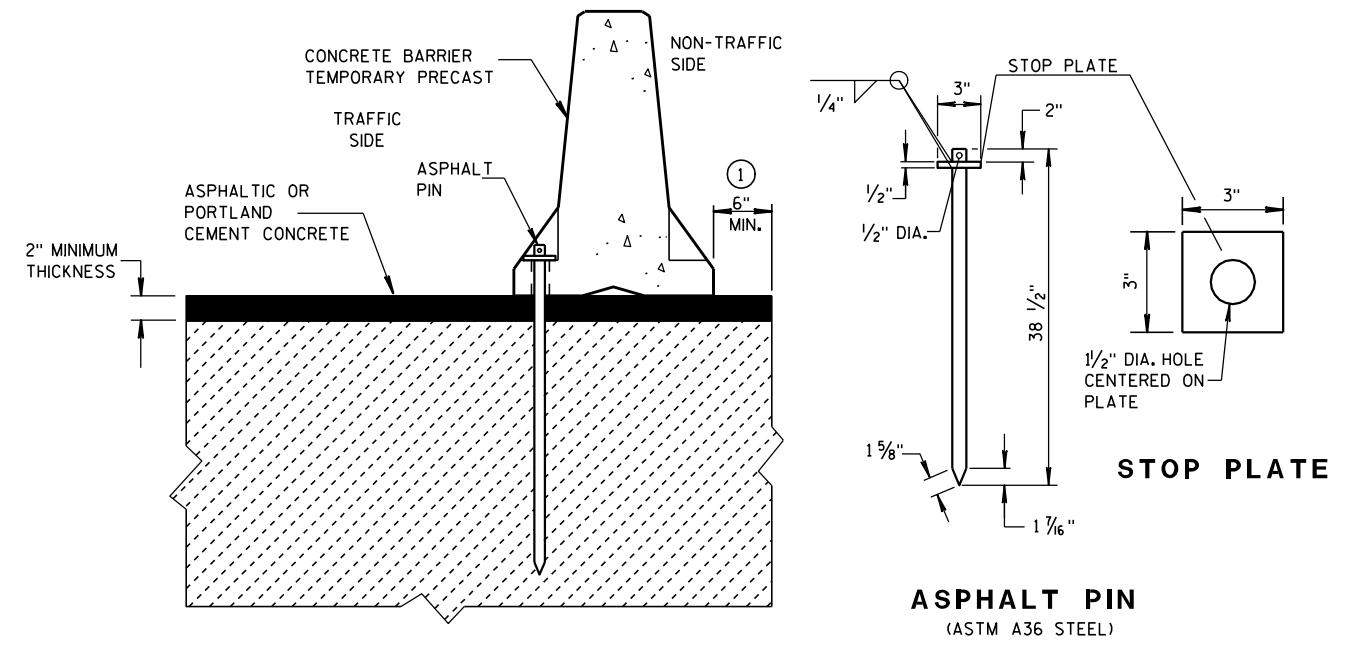


**THROUGH BOLTED ANCHOR INSTALLATION ON BRIDGE DECK**

(DO NOT USE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY)

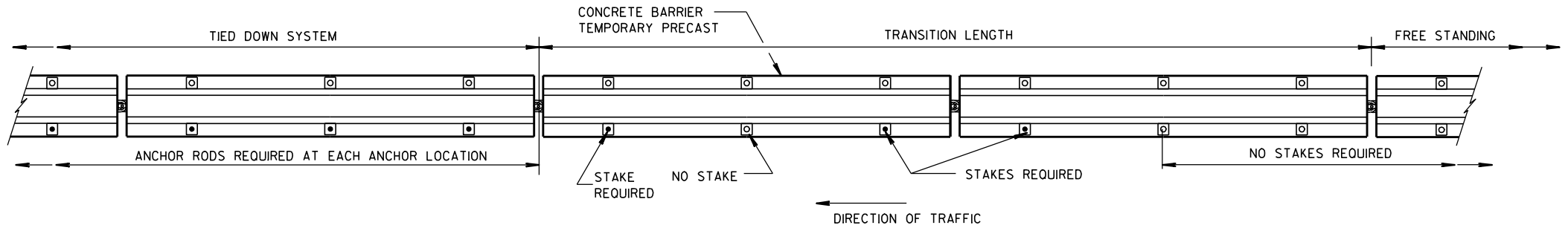
**REMOVABLE ADHESIVE BONDED ANCHOR INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT**

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)



**STAKE DOWN INSTALLATION FOR ASPHALTIC OR PORTLAND CEMENT CONCRETE SURFACE**

(STAKING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST)



**FREE STANDING TRANSITION TO TIED-DOWN SYSTEM**

(PLACE TRANSITION IN A TANGENT SECTION OF BARRIER PARALLEL TO THE ROADWAY. IF TRANSITION OCCURS ON STRUCTURAL SLAB, ANCHOR AS SHOWN.)

**GENERAL NOTES**

① CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" SHALL BE ANCHORED IF:  
THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V,  
FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT,  
IS LESS THAN 4 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF  
AND THE POSTED SPEED IS 45 MPH OR GREATER, OR

THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V,  
FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT,  
IS LESS THAN 2 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF  
AND THE POSTED SPEED IS 40 MPH OR LESS.

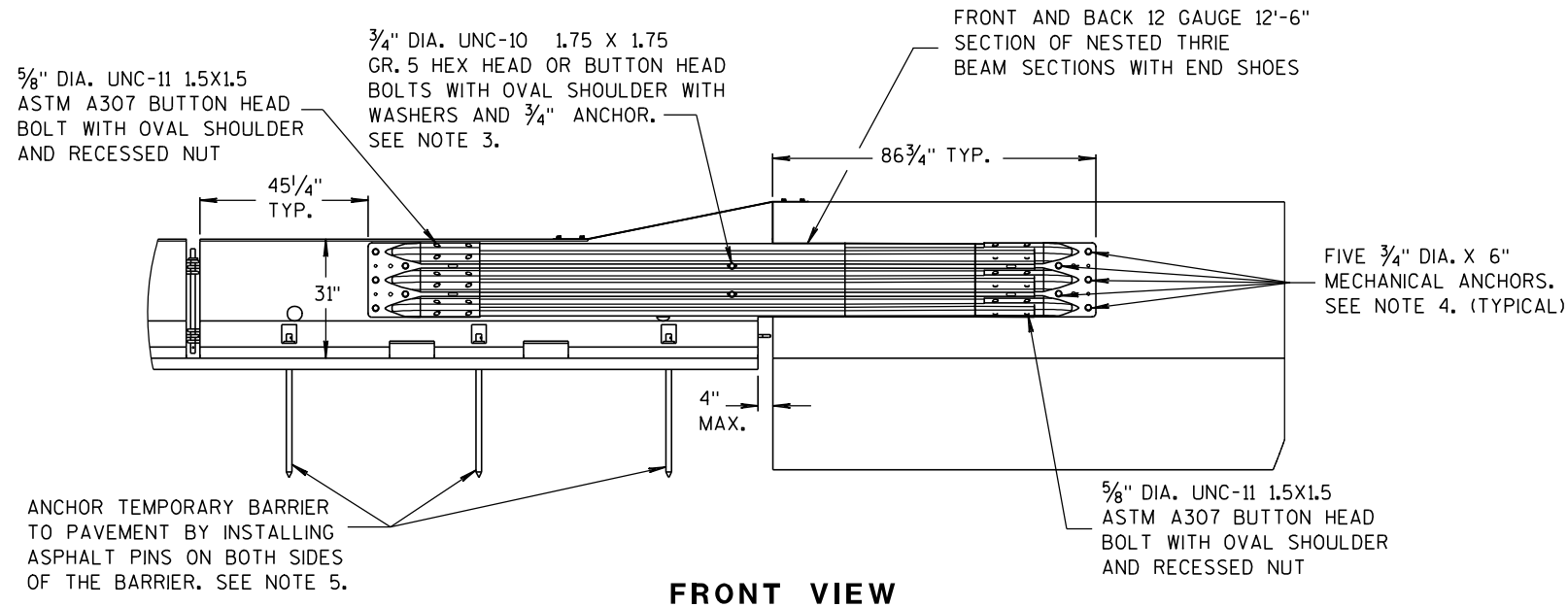
② ANCHORING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST.

WITH THE APPROVAL OF THE ENGINEER, REMOVABLE ADHESIVE BONDED (EPOXY) ANCHOR BOLT  
INSTALLATION MAY BE USED IN LIEU OF THROUGH BOLTED ANCHOR INSTALLATION. THE ADHESIVE  
BONDED ANCHOR BOLT MUST BE REMOVABLE. USE ASTM (A307) MASONRY ANCHORS TYPE  
S 1 1/8-INCH, EMBEDDED TO A DEPTH SUFFICIENT TO DEVELOP THE ULTIMATE CAPACITY OF THE  
ANCHOR BOLT AND PROVIDE DOCUMENTATION TO CONFIRM THIS.

UPON REMOVAL OR RELOCATION OF THE BARRIER UNITS, REMOVE ALL ANCHOR BOLTS AND COMPLETELY  
FILL IN THE REMAINING HOLES IN CONCRETE BRIDGE DECKS, CONCRETE APPROACH SLABS AND CON-  
CRETE PAVEMENTS THAT ARE TO REMAIN, WITH A NON-SHRINK COMMERCIAL GROUT OR EPOXY MATERIAL  
IDENTIFIED ON THE CURRENT WISDOT APPROVED PRODUCTS LIST.

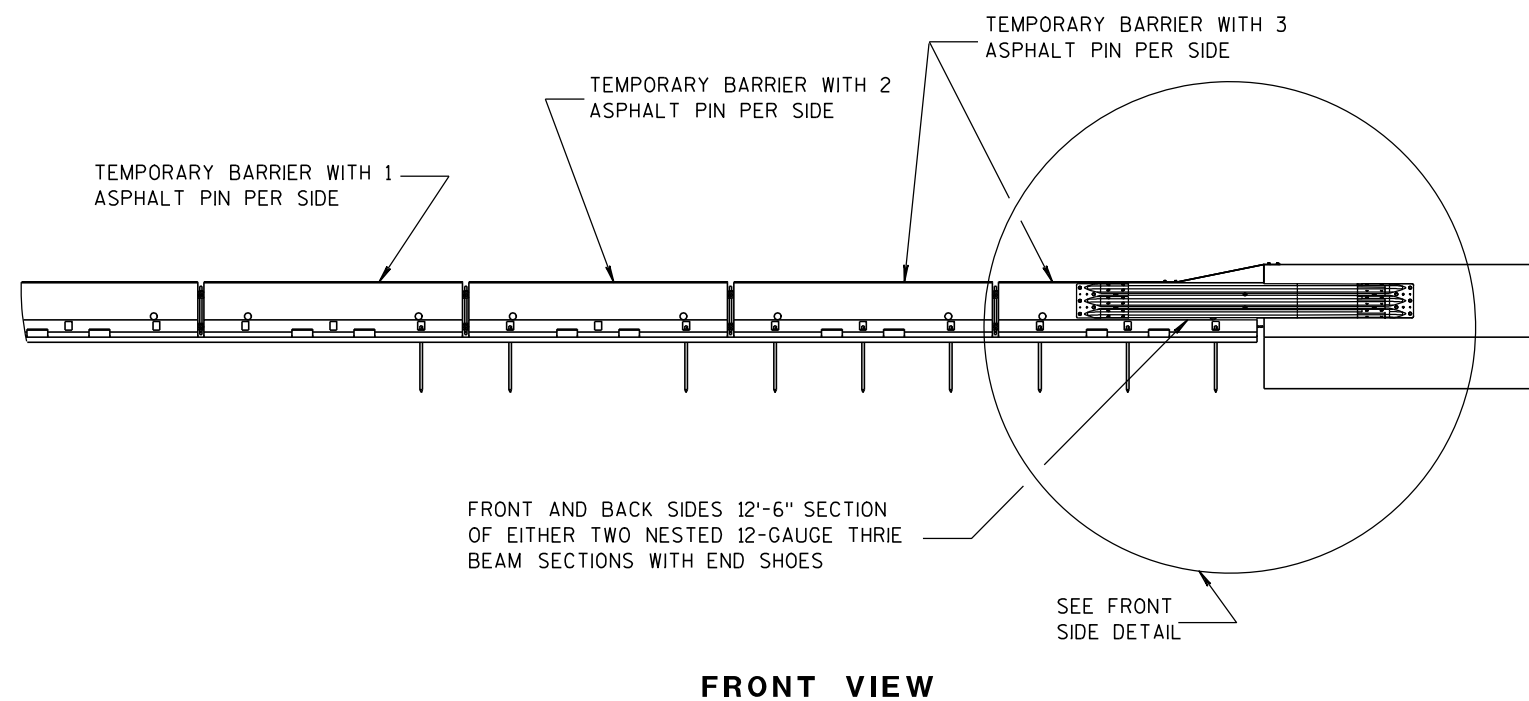
**CONCRETE BARRIER  
TEMPORARY PRECAST, 12'-6"**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

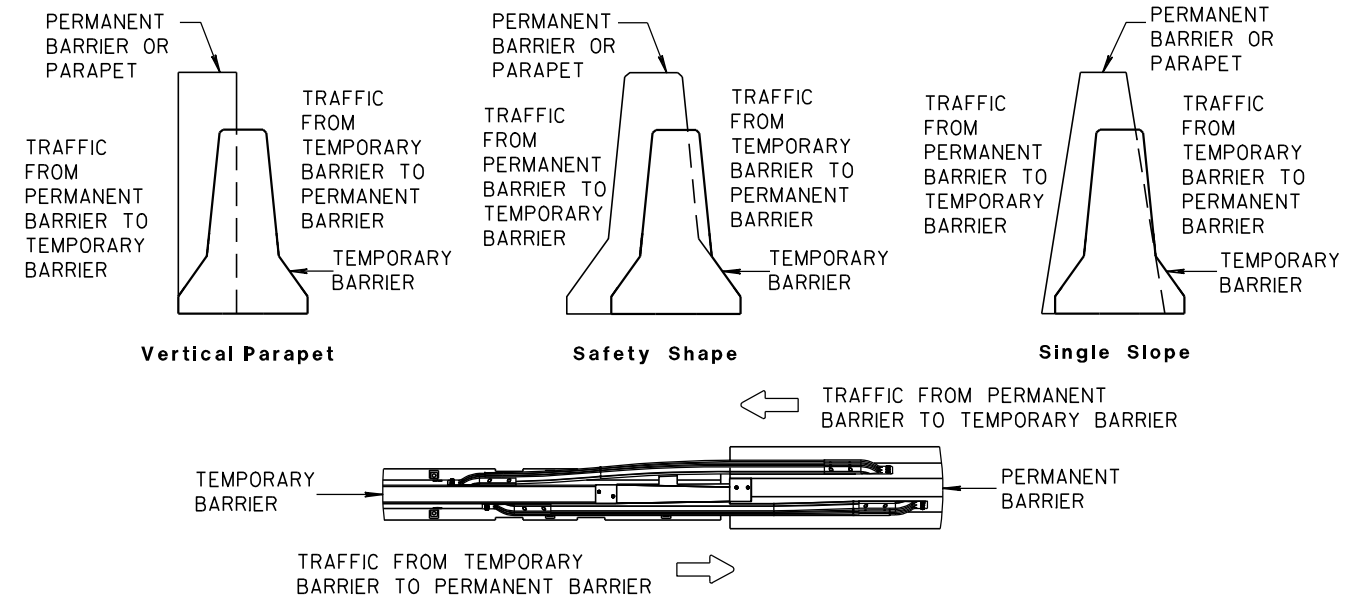


### NOTES

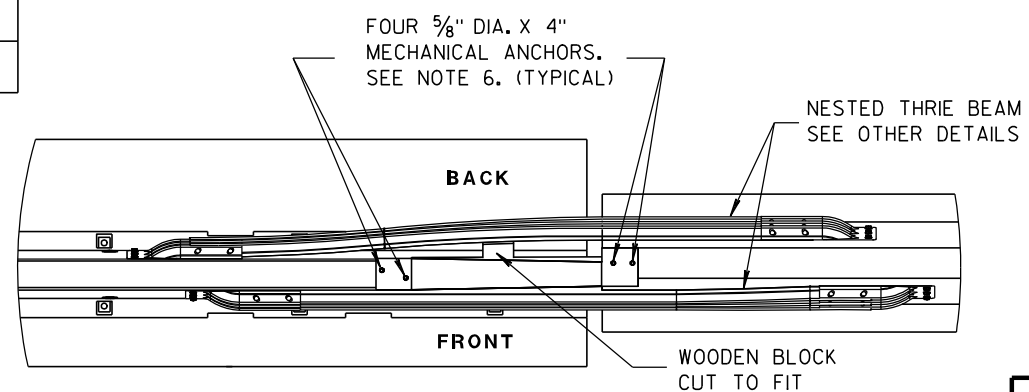
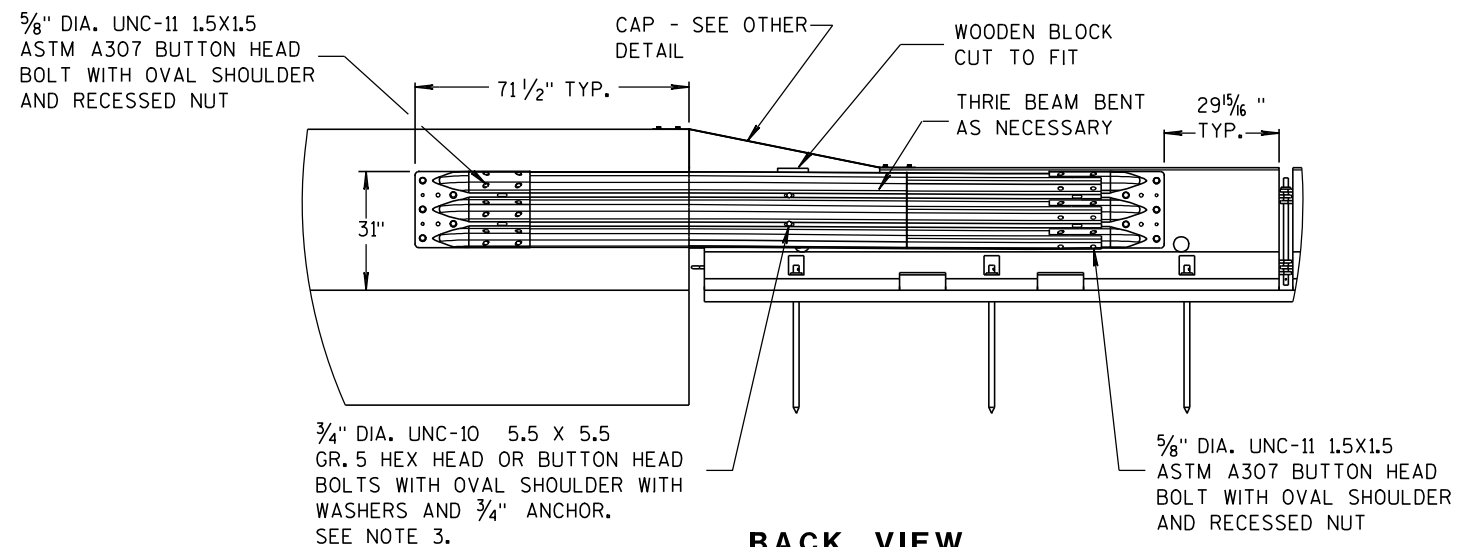
1. CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF PERMANENT BARRIER OR PARAPET.
2. THRIE BEAM PIECES ARE OFFSET 15 1/4" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.
3. MINIMUM MECHANICAL OR EPOXY ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS.
4. MINIMUM MECHANICAL OR EPOXY ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 17.9 KIPS AND ULTIMATE SHEAR LOAD 21.96 KIPS.
5. MAY BE USED ON CONCRETE OR ASPHALT PAVEMENTS. ASPHALT OPTION SHOWN. FOR CONCRETE OPTION SEE OTHER DETAILS.
6. MINIMUM MECHANICAL OR EPOXY ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.



## BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

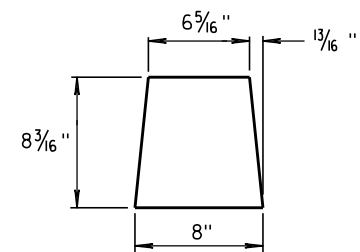


## TEMPORARY BARRIER PLACEMENT FOR BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

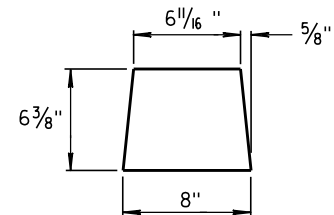


CONCRETE BARRIER  
TEMPORARY PRECAST, 12'-6"

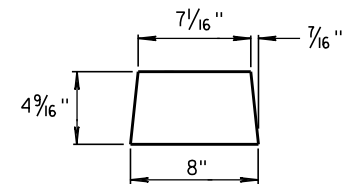
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



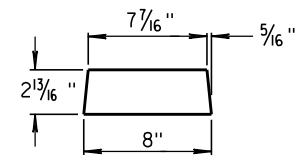
**GUSSET 1**



**GUSSET 2**

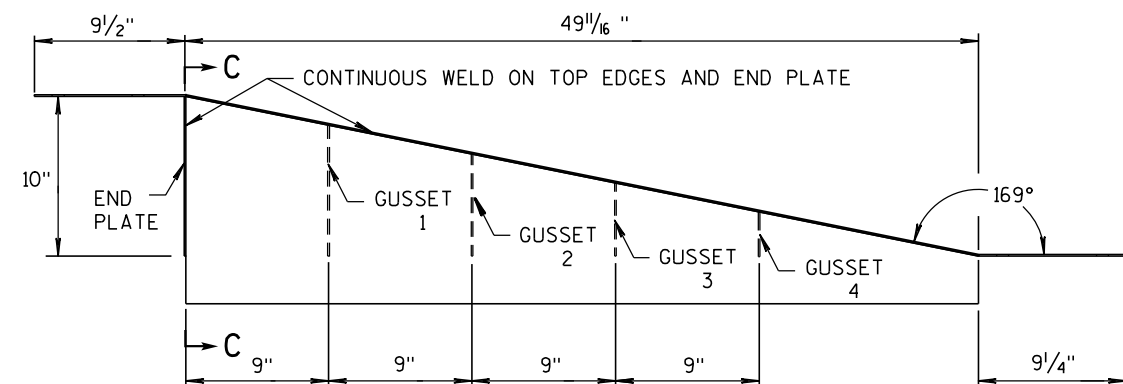
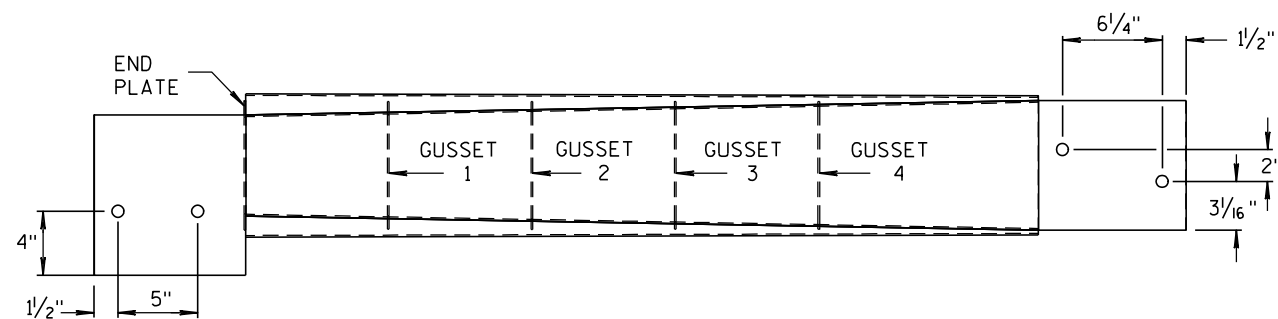


**GUSSET 3**

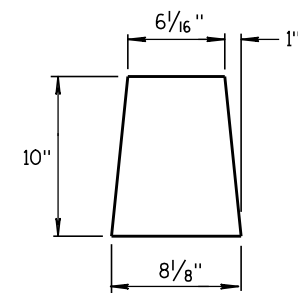
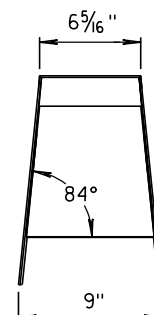


**GUSSET 4**

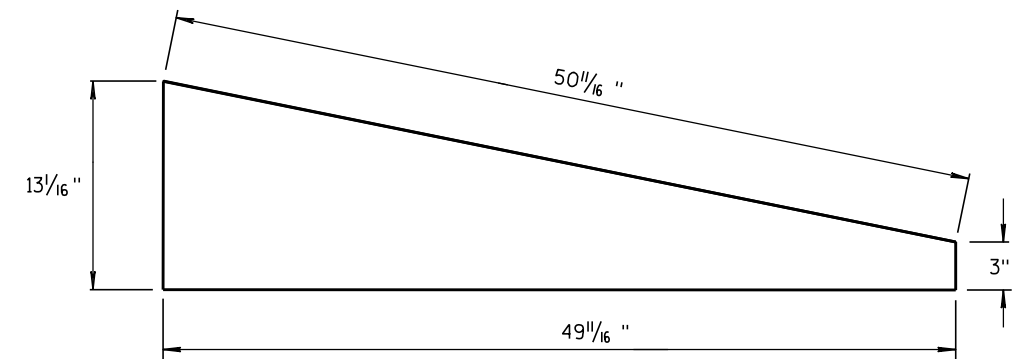
## GUSSETS



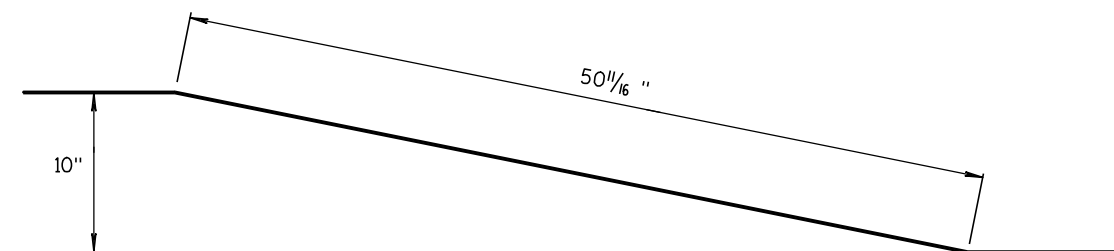
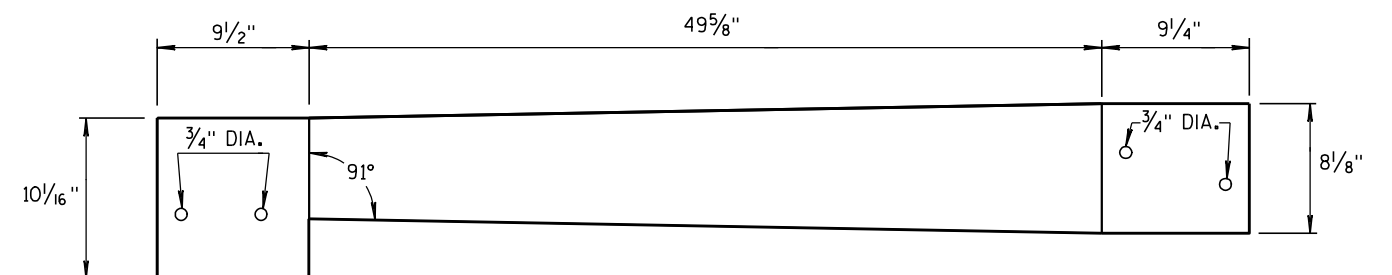
**SECTION C-C**



## END PLATE



## SIDE PLATE



**TOP PLATE**

**SIDE, TOP AND END PLATES FOR CAP  
FROM TEMPORARY CONCRETE BARRIER  
TO 42" PERMANENT CONCRETE BARRIER**

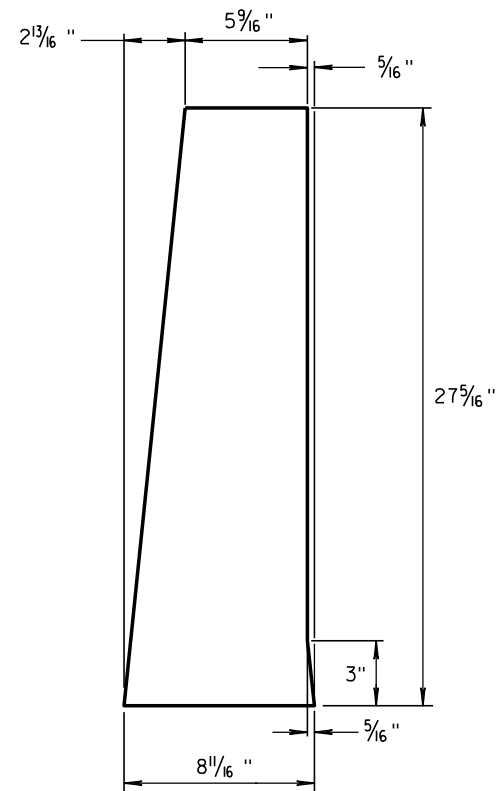
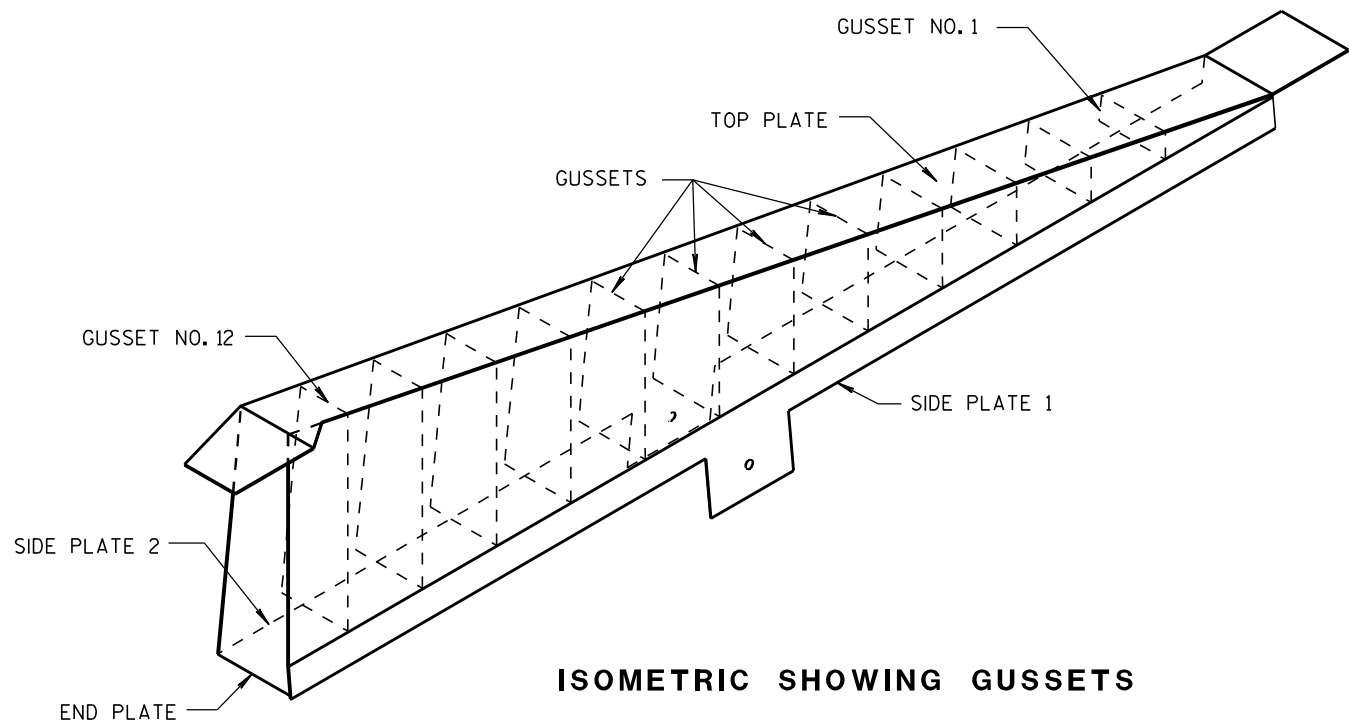
SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 GALVANIZED STEEL.

- NOTES
1. FOUR GUSSETS AND END PLATE ARE STITCH WELDED ON THREE SIDES.
  2. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE, AND GUSSETS.

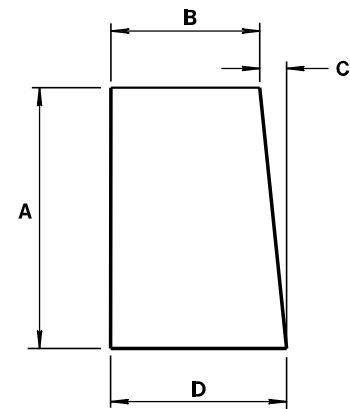
**CAP DETAILS FOR TEMPORARY CONCRETE  
BARRIER TO 42" PERMANENT CONCRETE BARRIER**

CONCRETE BARRIER  
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



1/8" STEEL PLATE

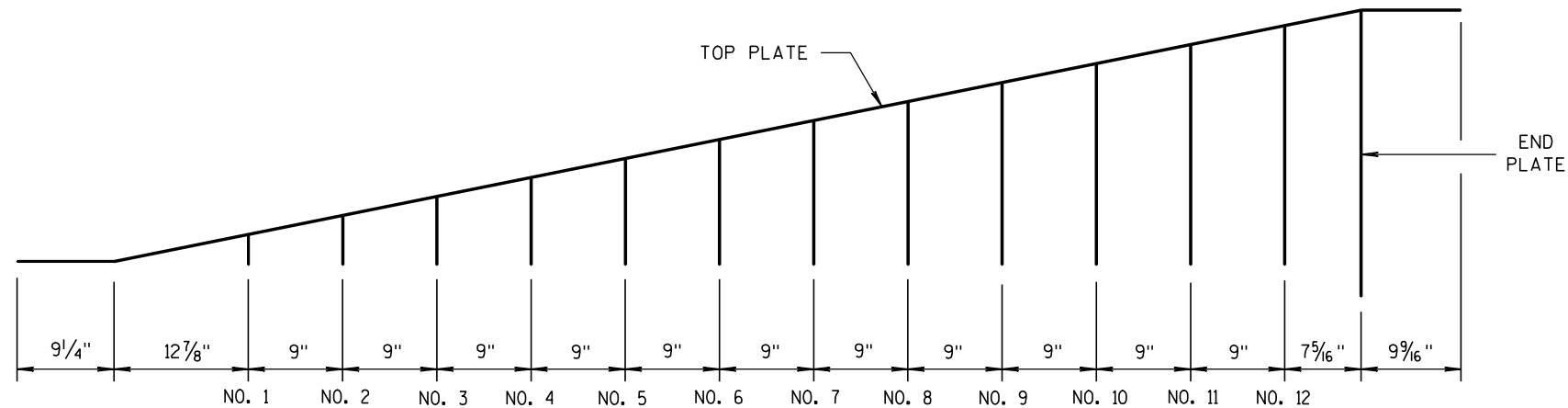


ALL GUSSETS 1/8" STEEL PLATE

GUSSET DIMENSIONS				
GUSSET NO.	A	B	C	D
1	2 7/8"	7 3/4"	1/4"	8
2	4 11/16 "	7 9/16 "	1/2"	8
3	6 1/2"	7 3/8"	11/16 "	8 1/16 "
4	8 5/16 "	7 3/16 "	7/8"	8 1/16 "
5	10 1/8 "	7"	1 1/16 "	8 1/16 "
6	11 5/16 "	6 13/16 "	1 1/4"	8 1/16 "
7	13 3/4"	6 5/8"	1 7/16 "	8 1/16 "
8	15 9/16 "	6 7/16 "	1 9/16 "	8 1/16 "
9	17 3/8"	6 1/4"	1 13/16 "	8 1/16 "
10	19 3/16 "	6 1/16 "	1 15/16 "	8 1/16 "
11	21"	5 7/8"	2 3/16 "	8 1/16 "
12	22 13/16 "	5 11/16 "	2 5/16 "	8 1/16 "

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 STEEL AND GALVANIZED.

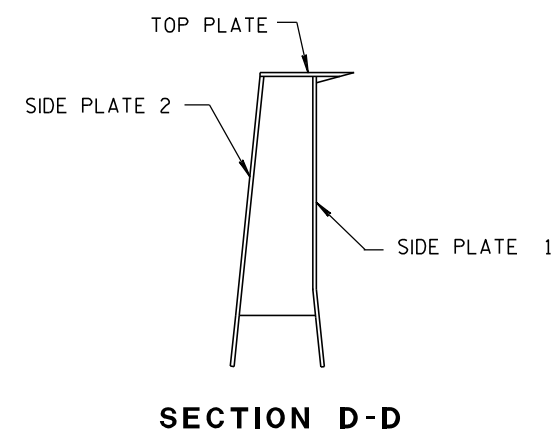
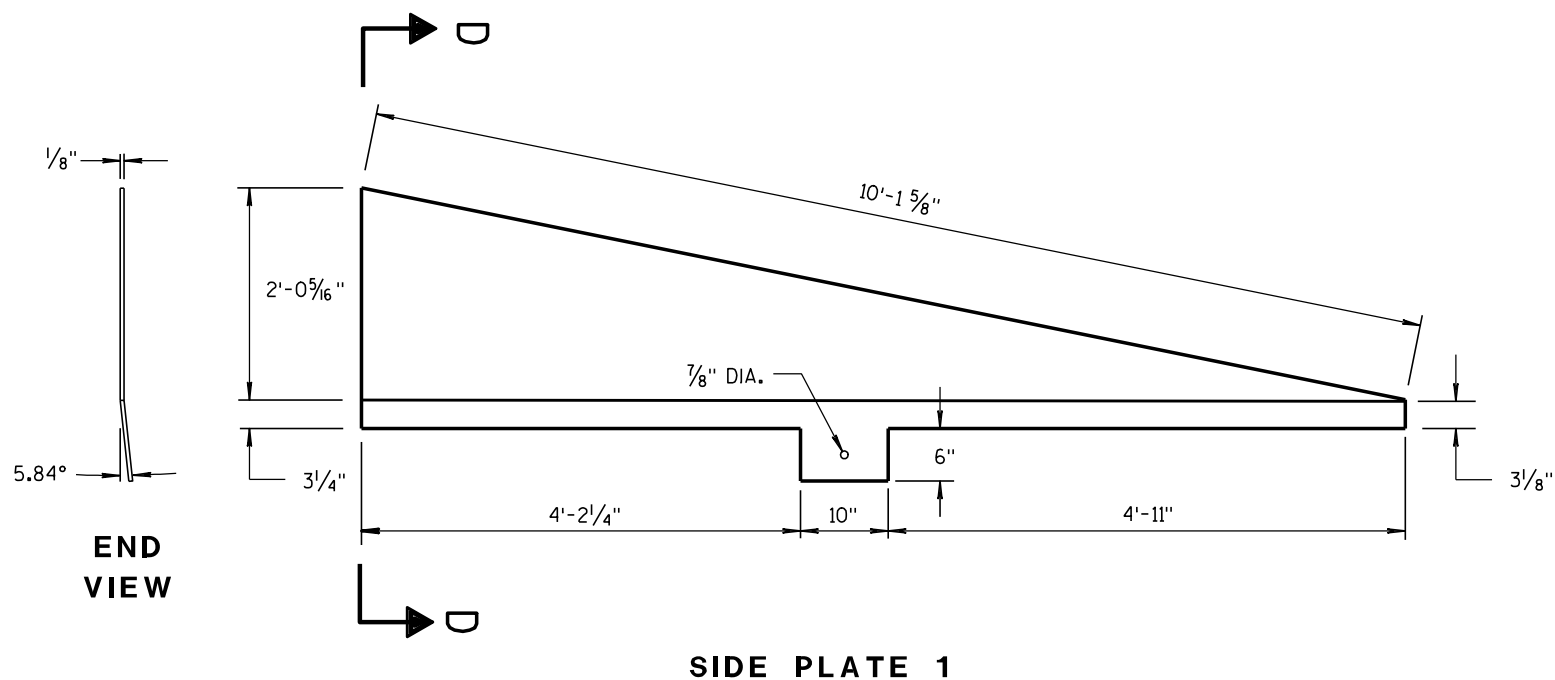
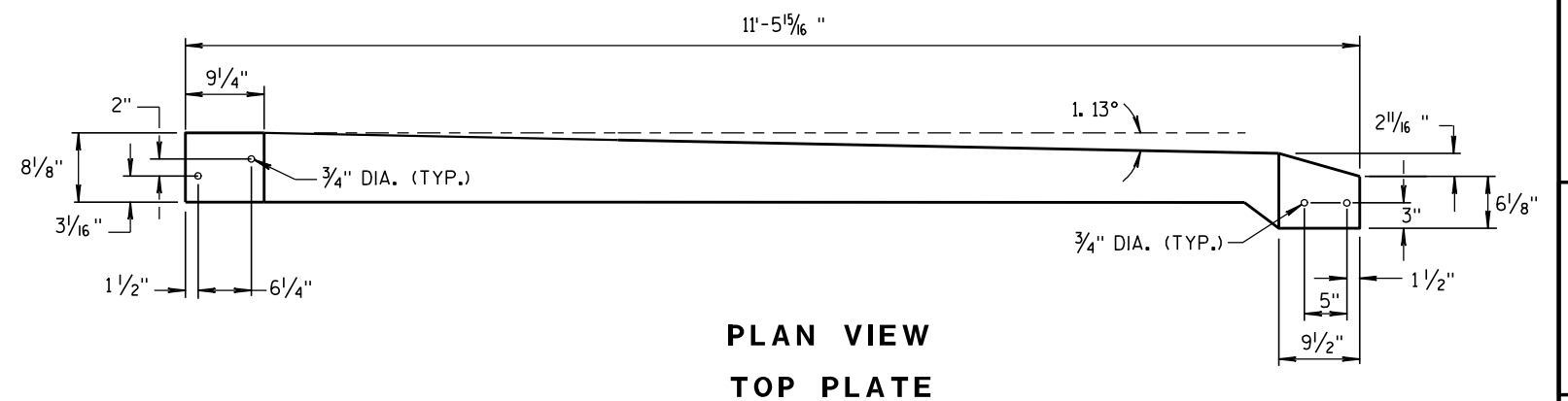
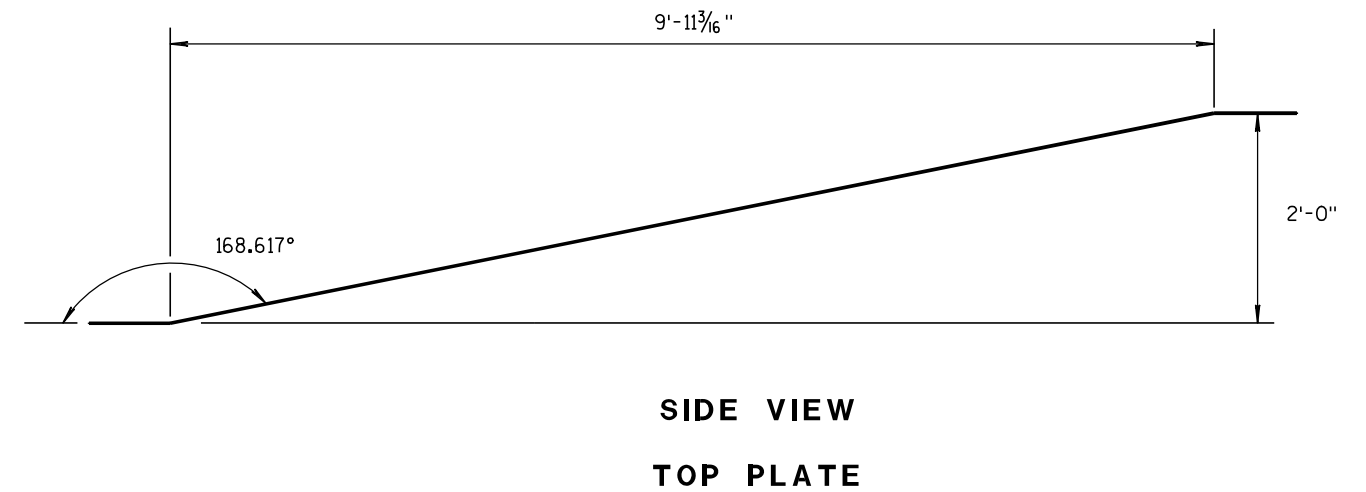
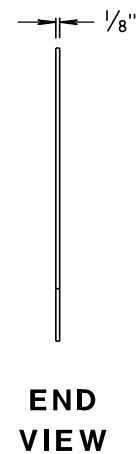
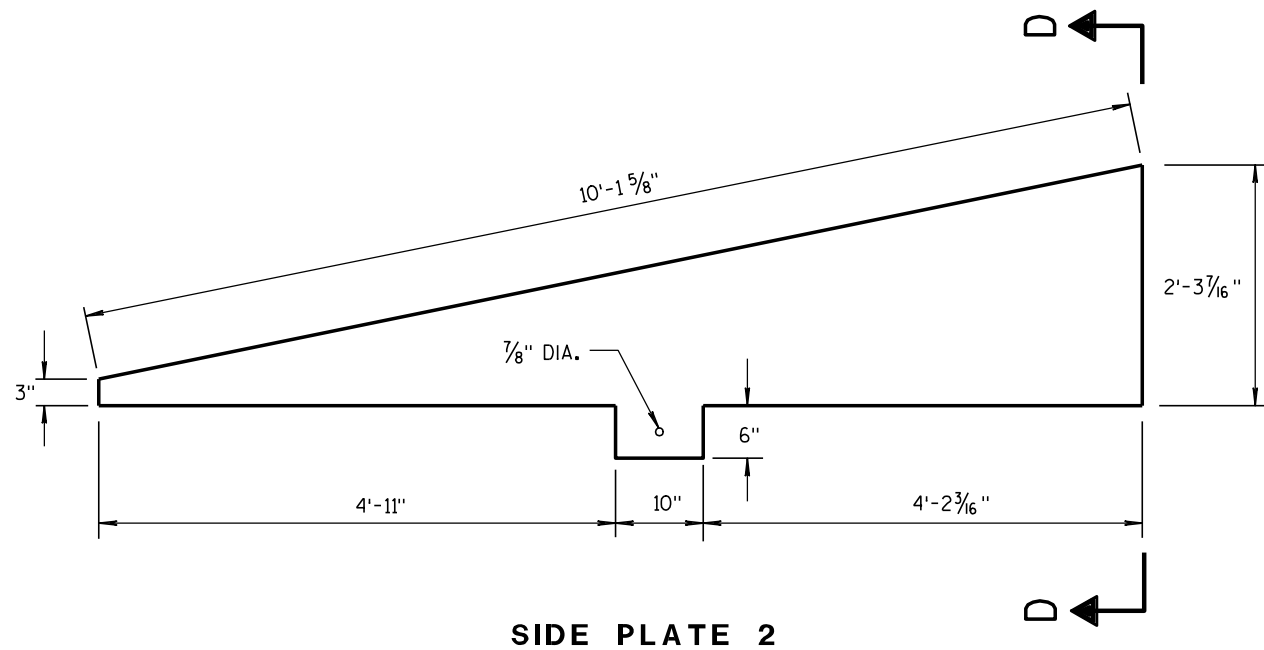
GUSSETS AND END PLATE ARE STITCH WELDED ON 3 SIDES. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE AND GUSSETS.



CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER  
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



**CAP DETAILS FOR TEMPORARY CONCRETE  
BARRIER TO 56" PERMANENT CONCRETE BARRIER**

**CONCRETE BARRIER  
TEMPORARY PRECAST, 12'-6"**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED

8/31/2012

DATE

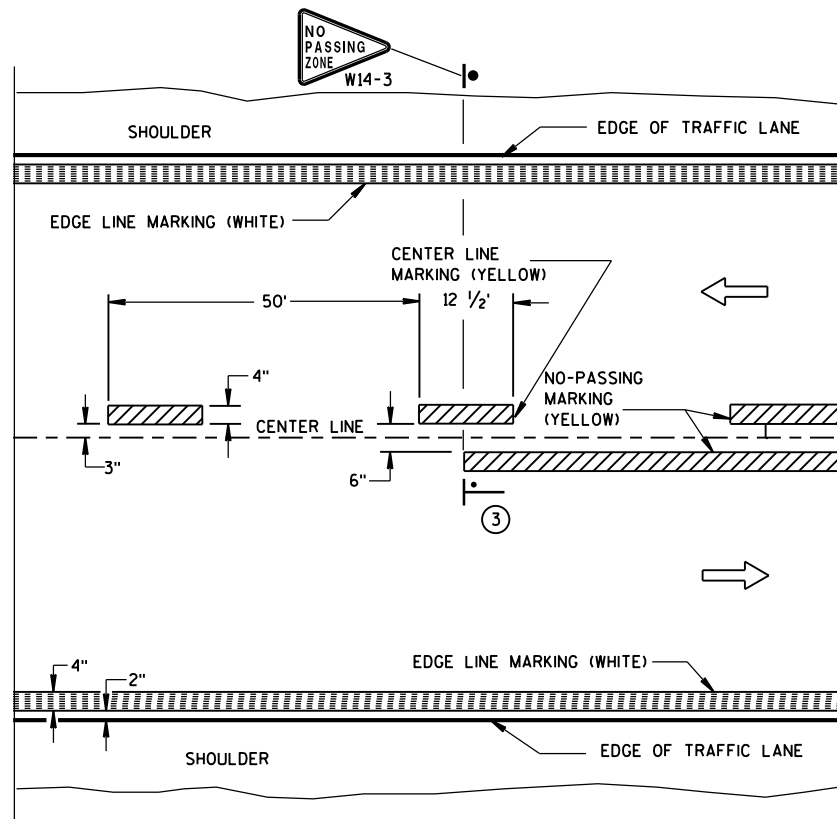
FHWA

/S/ Jerry H. Zogg

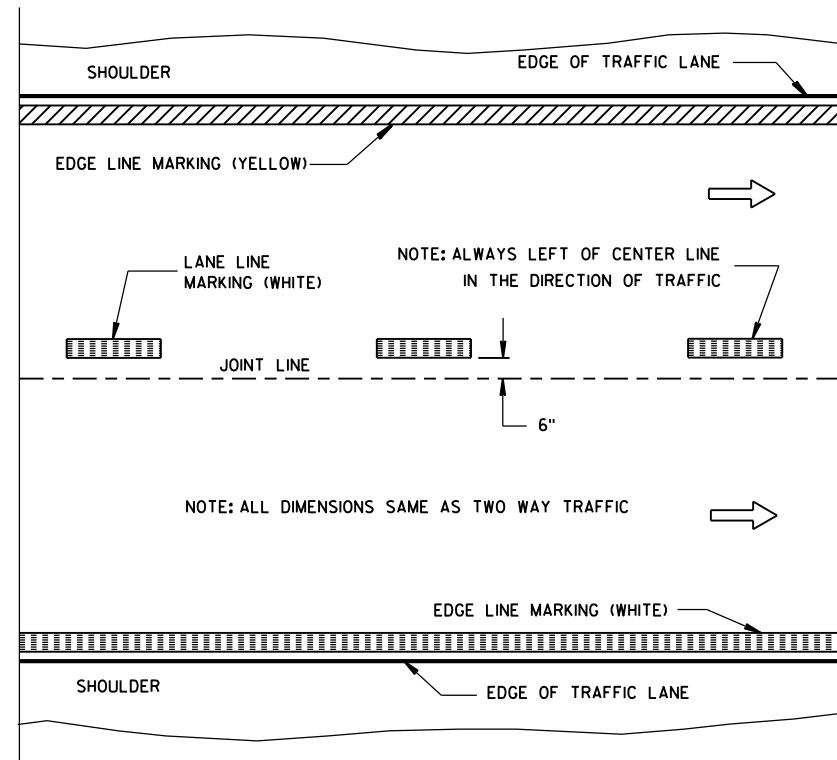
ROADWAY STANDARD DEVELOPMENT

ENGINEER



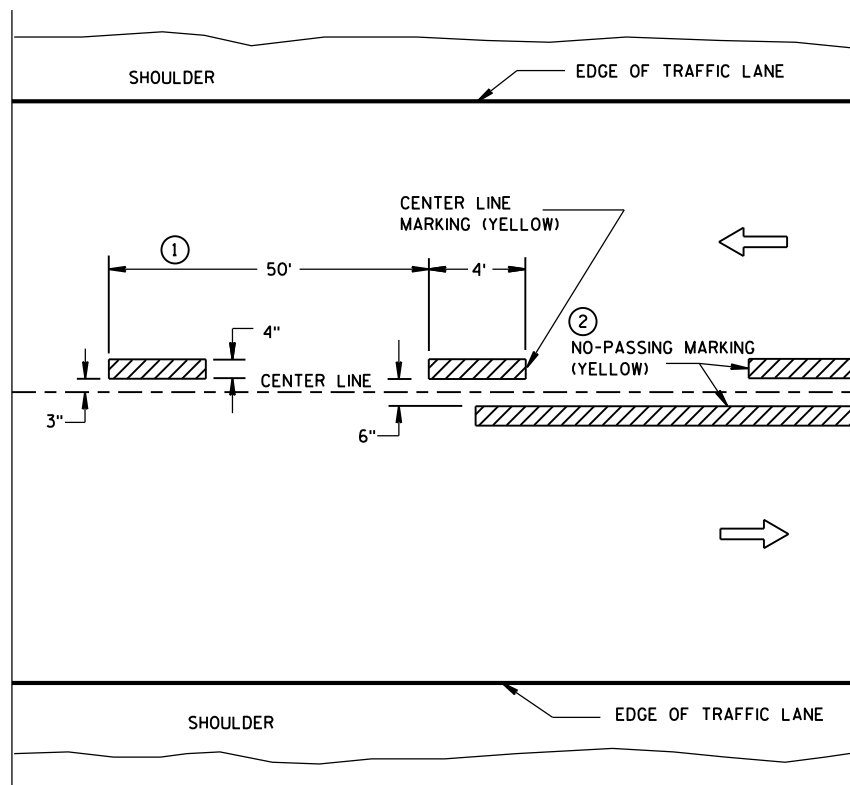


TWO WAY TRAFFIC

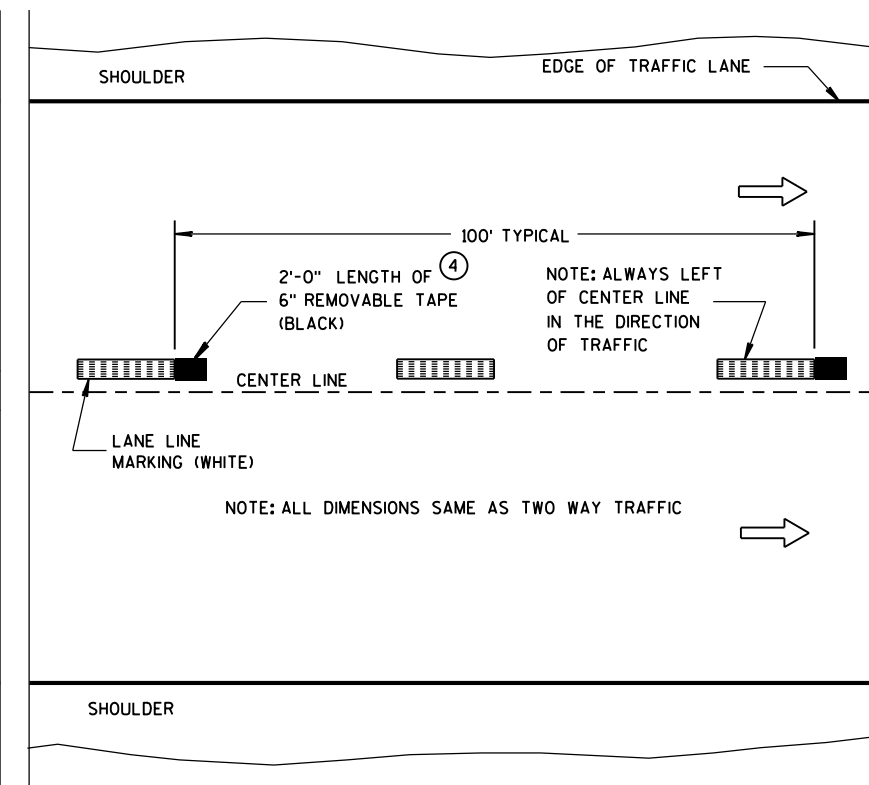


ONE WAY TRAFFIC

## PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING  
(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

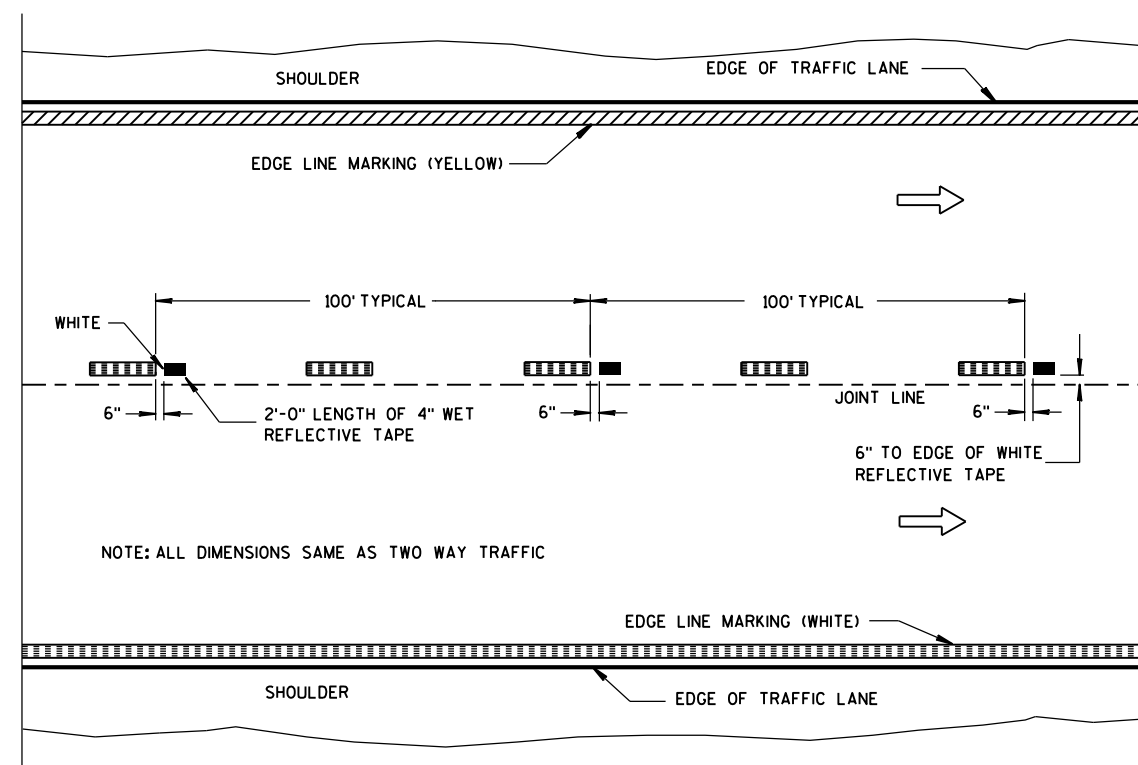
## GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

- ① HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
- ② NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
- ③ NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
- ④ CONCRETE ONLY.

## NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL



WET REFLECTIVE TAPE SUPPLEMENT TO  
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE

## LEGEND

- "T" MARKING
- POST MOUNTED SIGN

PAVEMENT MARKING  
(MAINLINE)

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
10-1-2012 /S/ Travis Feltes  
DATE STATE TRAFFIC ENGINEER OF DESIGN  
FHWA

## LEGEND

- POST MOUNTED SIGN
- REMOVING PAVEMENT MARKING
- TYPE III BARRICADE WITH SIGN
- DRUM WITH/WITHOUT WARNING LIGHT, TYPE C (STEADY-BURN)
- TEMPORARY PRECAST CONCRETE BARRIER
- FLAGS, 16"x16" MIN., ORANGE
- TEMPORARY SIGNAL WITH BACKPLATE AND 12-INCH LENSES ON BREAKAWAY POLE
- ASPHALTIC PAVEMENT WIDENING
- DIRECTION OF TRAFFIC FLOW
- 4" X 6" WOOD POST

## GENERAL NOTES :

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

NON-OPERATIONAL EQUIPMENT OR MATERIAL SHALL BE LOCATED BEHIND THE PRECAST CONCRETE BARRIER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

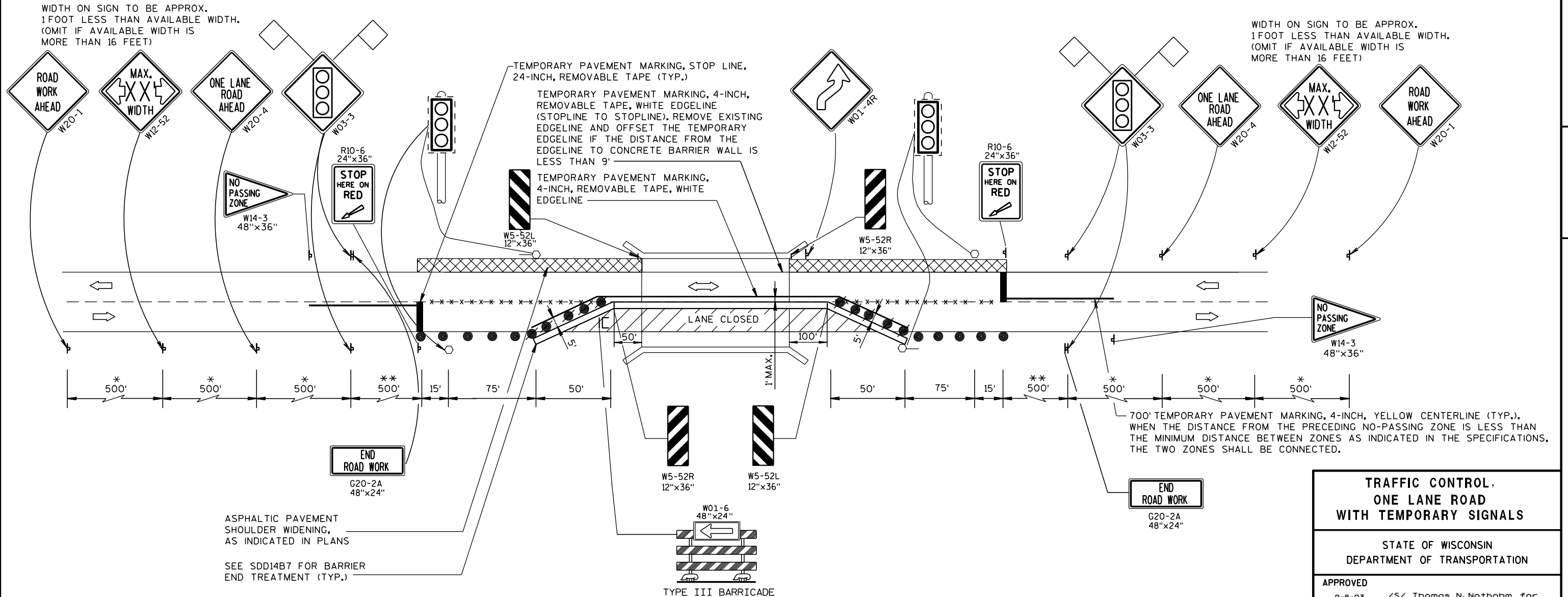
SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

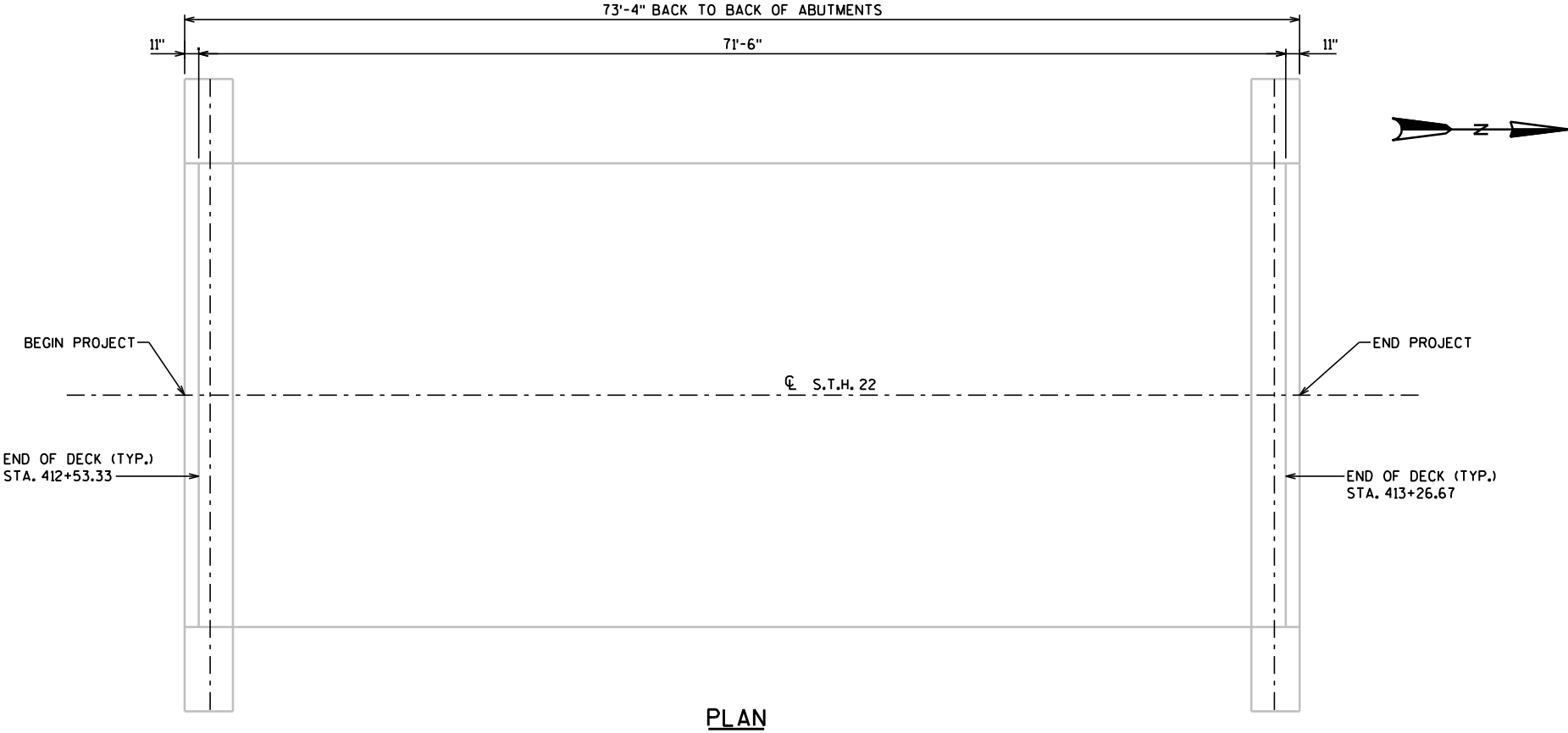
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

PLACE TEMPORARY PAVEMENT MARKING EDGELINE AND CENTERLINE, AND REMOVE EXISTING PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS OR AS NOTED ON DETAIL.

\* 500' SPACING SHOWN IS FOR ROADWAYS WITH A PRE-CONSTRUCTION REGULATORY SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350' TYPICAL SPACING. FOR 25-30 MPH, USE 200' TYPICAL SPACING.

\*\* USE 300' SPACING IF PRE-CONSTRUCTION REGULATORY SPEED LIMIT IS 35 MPH OR LESS.





TRAFFIC DATA

ADT = 1,100 (2008)  
RDS = 60 M.P.H.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

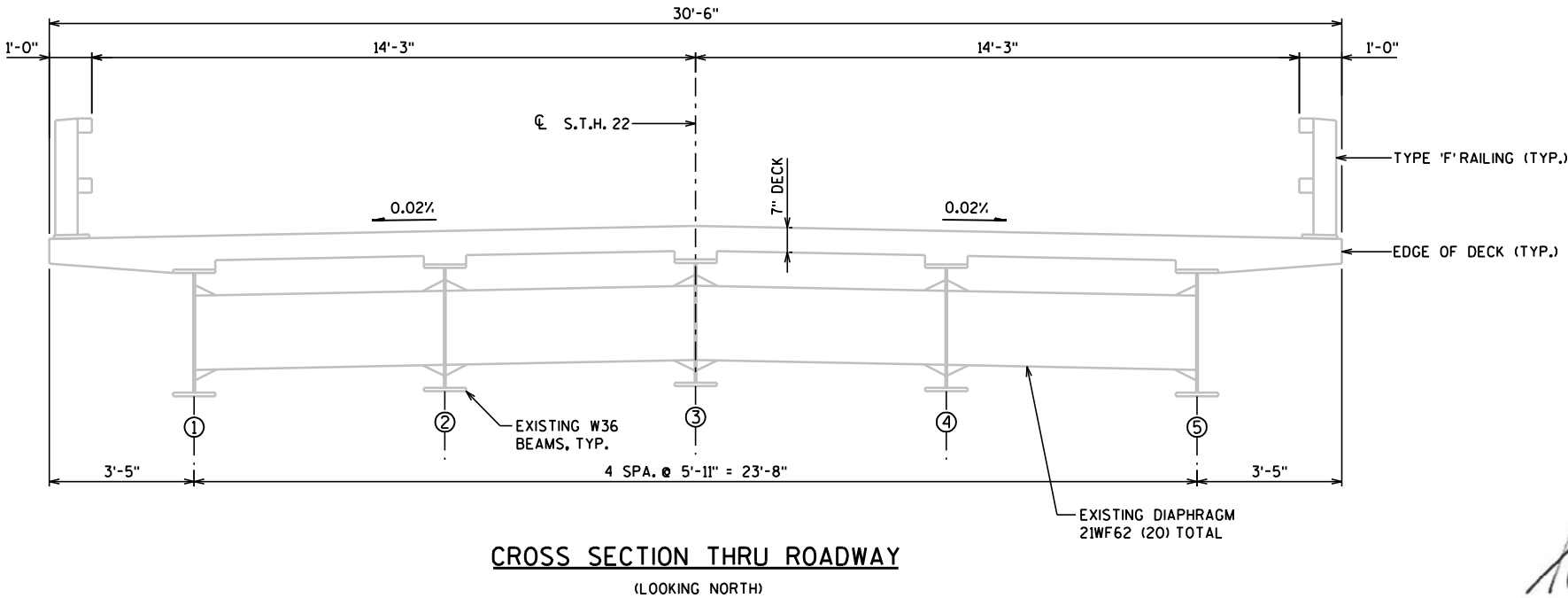
THE COLOR OF THE FINISH TOP COAT SHALL BE GRAY, (FEDERAL STANDARD COLOR NO. 26293) OR SIMILAR COLOR APPROVED BY THE ENGINEER.

DIMENSIONS ARE BASED ON EXISTING PLANS.

INFORMATION ON THESE DRAWINGS RELATED TO THE EXISTING BRIDGE IS BASED UPON AVAILABLE DRAWINGS FROM THE WISCONSIN DEPARTMENT OF TRANSPORTATION, NO GUARANTEE OR WARRANTY IS MADE THAT THE INFORMATION IS ALL INCLUSIVE OR TOTALLY ACCURATE. THEREFORE, THE CONTRACTOR SHALL MAKE THEIR OWN DETERMINATION OF THE ACTUAL CONDITIONS TO BE ENCOUNTERED.

ESTIMATE OF QUANTITIES

517.1800.S	STRUCTURE REPAINTING RECYCLED ABRASIVE	
	STRUCTURE B-39-04	1 LS
517.4500.S	NEGATIVE PRESSURE CONTAINMENT AND COLLECTION	
	OF WASTE MATERIALS STRUCTURE B-39-04	1 LS
517.6001.S	PORTABLE DECONTAMINATION FACILITY	1 EACH



BRIDGE OFFICE CONTACT

WILLIAM DREHER  
(608) 266-8489

CONSULTANT CONTACT

KRISTOFER OLSON  
OMNI ASSOCIATES  
(920) 735-6900



NO.	DATE	REVISION	BY
ORIGINAL PLANS PREPARED BY			
<b>Omni ASSOCIATES</b>			
Plans Prepared For <b>WISDOT</b>			
<b>BUREAU OF STRUCTURES</b>			
ACCEPTED	<i>William C. Dreher</i>	KAR	02/04/13
CHIEF STRUCTURES DESIGN ENGINEER DATE			
STRUCTURE B-39-04			
STH 22 OVER MECAN RIVER			
COUNTY	MARQUETTE	TOWN	CRYSTAL LAKE
DESIGN SPEC.	AASHTO STD. SPEC. 2002		LOAD HS-20
DESIGNED BY	BRE	DESIGN CK'D. KRO	DRAWN BY BRE
GENERAL PLAN			PLANS CK'D. KRO
			SHEET 1 OF 1



## *Wisconsin Department of Transportation*

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through innovation and exceptional service.

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