

RHI
PROJECT ID:
WITH: N/A

1009-46-61

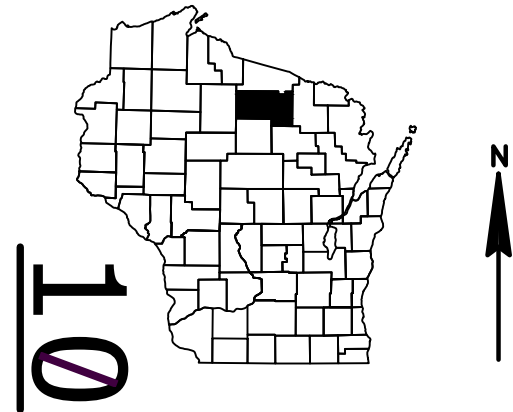
COUNTY:
ONEIDA

JUNE 2020

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 Plan
Section No.	5	Plan and Profile
Section No.	6	Standard Detail Drawings
Section No.	7	Sign Plates
Section No.	8	Structure Plans
Section No.	8	Computer Earthwork Data
Section No.	8	Gross Sections

TOTAL SHEETS = 50



DESIGN DESIGNATION

A.A.D.T.	2022	=	3,800
A.A.D.T.	2042	=	4,200
D.H.V.		=	468
D.D.		=	54/46
T.		=	17.6%
DESIGN SPEED		=	60 MPH
ESALS		=	N/A

CONVENTIONAL SYMBOLS

PLAN

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

PROFILE

GRADE LINE	
ORIGINAL GROUND	
MARSH OR ROCK PROFILE (To be noted as such)	
SPECIAL DITCH	
GRADE ELEVATION	
CULVERT (Profile View)	
UTILITIES	
ELECTRIC	
FIBER OPTIC	
GAS	
SANITARY SEWER	
STORM SEWER	
TELEPHONE	
WATER	
UTILITY PEDESTAL	
POWER POLE	
TELEPHONE POLE	

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

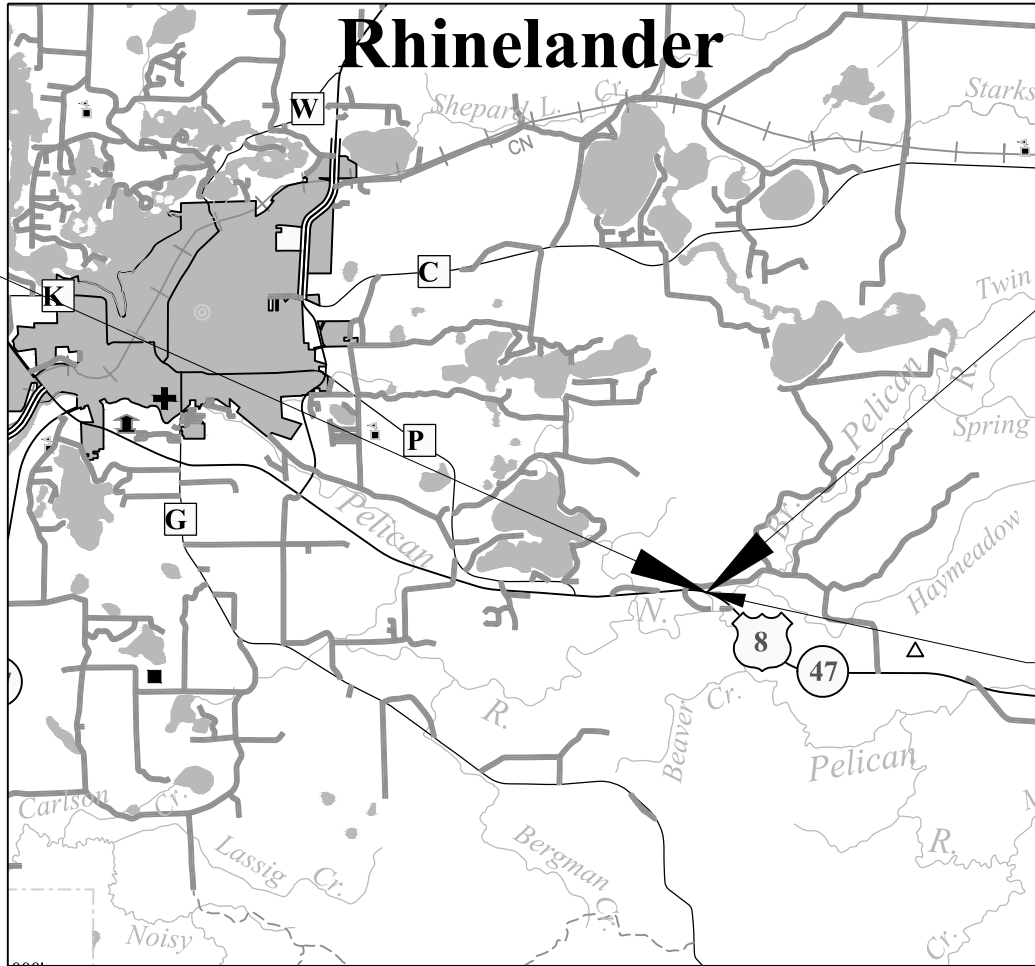
RHINELANDER - MONICO

N BR PELICAN RIVER BRIDGE B-43-0016

USH 8
ONEIDA COUNTY

STATE PROJECT NUMBER
1009-46-61

BEGIN PROJECT
STA 468+90.93
Y=150,848.716
X=293,476.181



LAYOUT
SCALE 0 2 MI
TOTAL NET LENGTH OF CENTERLINE = 0.000 MILES

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, ONEIDA COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

STATE PROJECT

1009-46-61

FEDERAL PROJECT

PROJECT

WISC 2020332

CONTRACT

1

ORIGINAL PLANS PREPARED BY

AECOM



DATE: 1/22/2019
(Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY	
Surveyor	AECOM
Designer	AECOM
Project Manager	JIM VOLKMANN
Regional Examiner	CHERYL SIMON
Regional Supervisor	JED PETERS

APPROVED FOR THE DEPARTMENT
DATE: 1/23/2019
(Signature)

E

GENERAL NOTES

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

RADII, ELEVATIONS, AND DIMENSIONS ARE GIVEN AT THE PAVEMENT EDGES, UNLESS OTHERWISE NOTED IN THE PLANS.

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED, AND MULCHED (RESTORATION ITEMS PAID AS INCIDENTAL TO CONTRACT).

ORDER OF SECTION 2 SHEETS

GENERAL NOTES
PROJECT OVERVIEW
CONSTRUCTION DETAILS
PAVEMENT MARKING PLAN
TRAFFIC CONTROL

UTILITY CONTACTS

STEVE BROWN
CHARTER COMMUNICATIONS - COMMUNICATION LINE
821 LINCOLN STREET
RHINELANDER, WI 54501
PHONE: 715-519-0042
EMAIL: STEVE.BROWN@CHARTER.COM

CHRIS POLLACK
FRONTIER COMMUNICATIONS OF WI LLC - COMMUNICATION LINE
521 NORTH 4TH STREET
WAUSAU, WI 54403
PHONE: 715-847-1240
CELL: 715-297-4773

RICK VINCENT
NSIGHT TELESERVICES - COMMUNICATION LINE
450 SECURITY BOULEVARD
PO BOX 19079
GREEN BAY, WI 54307
PHONE: 920-617-7316
CELL: 920-660-6644

PROJECT CONTACTS

WENDY HENNIGES
WDNR LIAISON
107 SUTLIFF
RHINELANDER, WI 54501
PHONE: 715-365-8916
EMAIL: WENDY.HENNIGES@WISCONSIN.GOV

RUNOFF COEFFICIENT TABLE

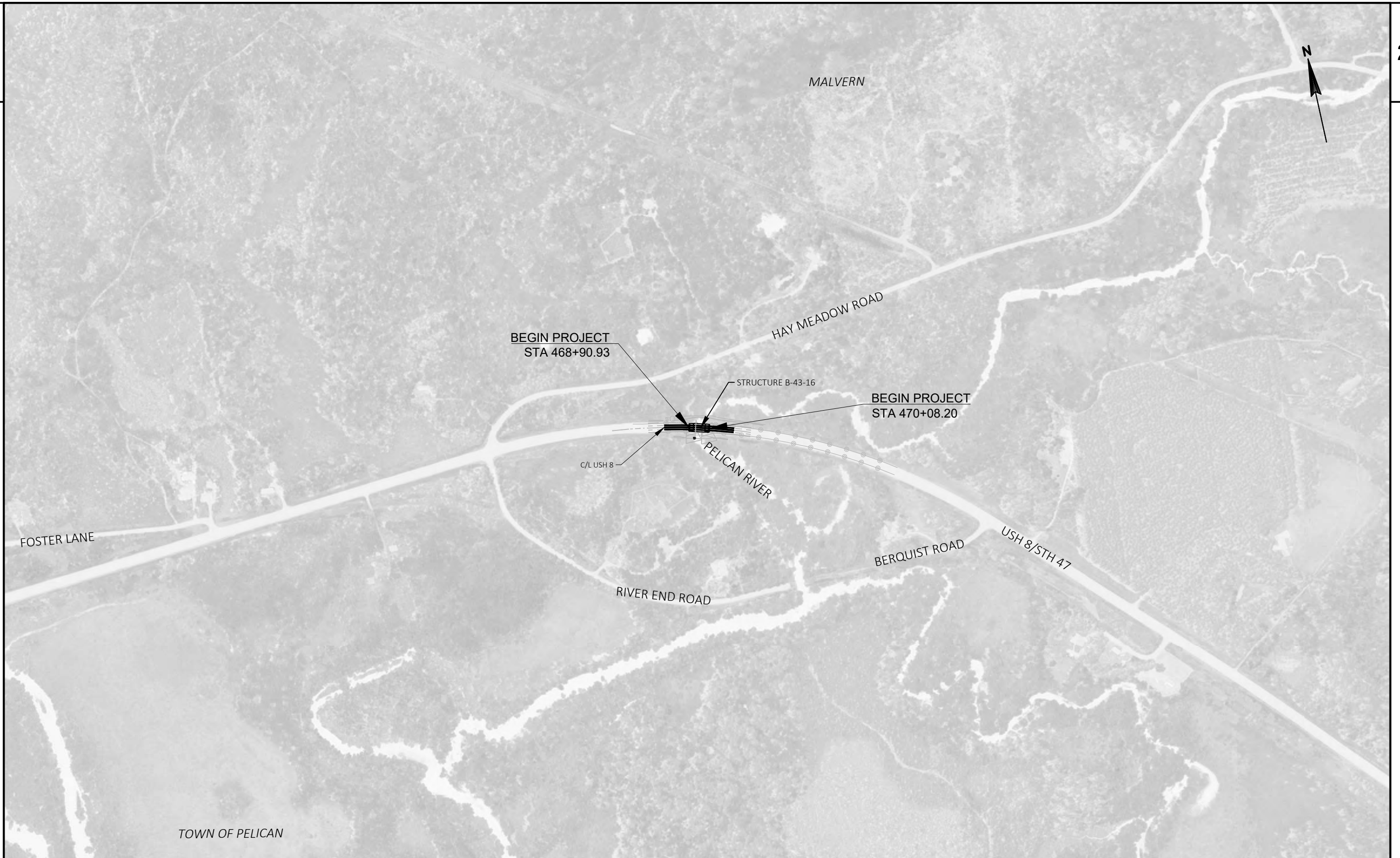
	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	0.08	0.16	0.22	0.12	0.20	0.27	0.15	0.24	0.33	0.19	0.28	0.38
	0.22	0.30	0.38	0.26	0.34	0.44	0.30	0.37	0.50	0.34	0.41	0.56
MEDIAN STRIP-TURF	0.19	0.20	0.24	0.19	0.22	0.26	0.20	0.23	0.30	0.20	0.25	0.30
	0.24	0.26	0.30	0.25	0.28	0.33	0.26	0.30	0.37	0.27	0.32	0.40
SIDE SLOPE-TURF			0.25			0.27			0.28			0.30
			0.32			0.34			0.36			0.38
PAVEMENT:												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

1009-46-61
TOTAL PROJECT AREA = 0.8 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.3 ACRES

DIGGERSHOTLINE

Dial 811 or (800)242-8511

www.DiggersHotline.com



PROJECT NO: 1009-46-61

HWY: USH 8

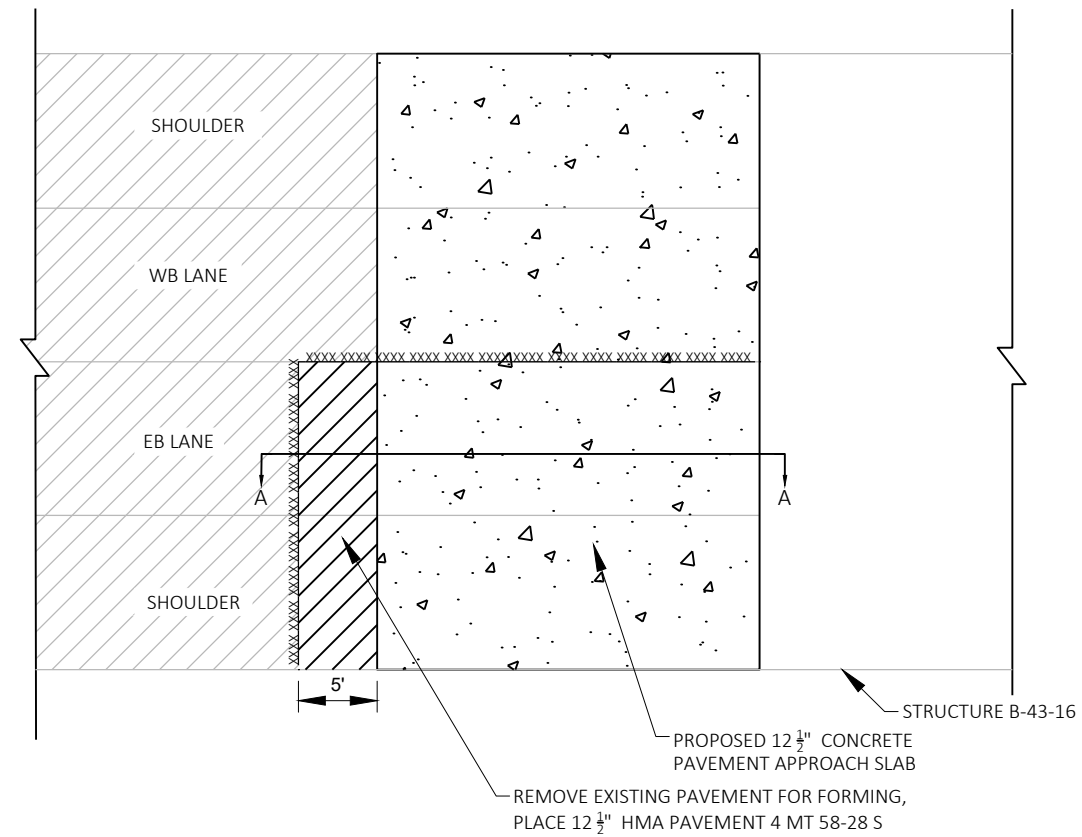
COUNTY: ONEIDA

PROJECT OVERVIEW

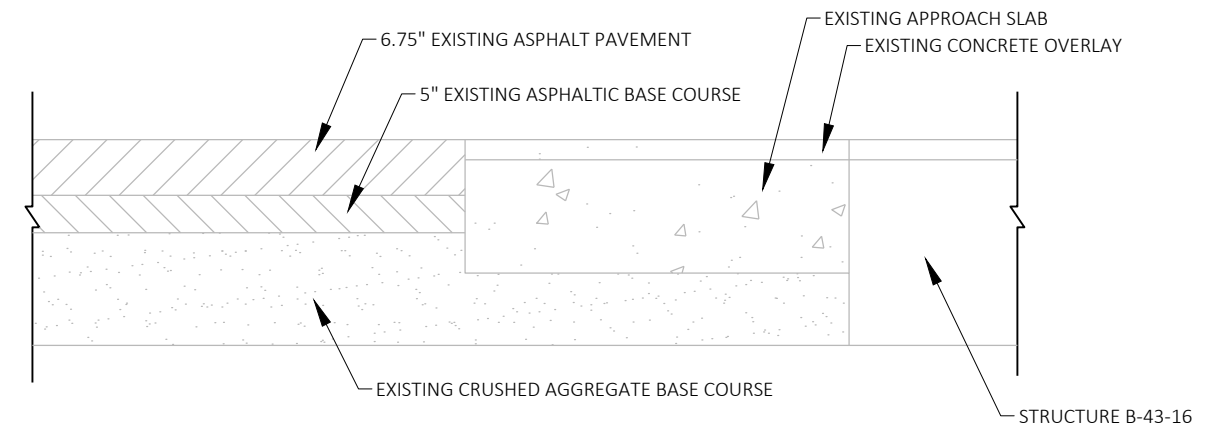
SHEET

E

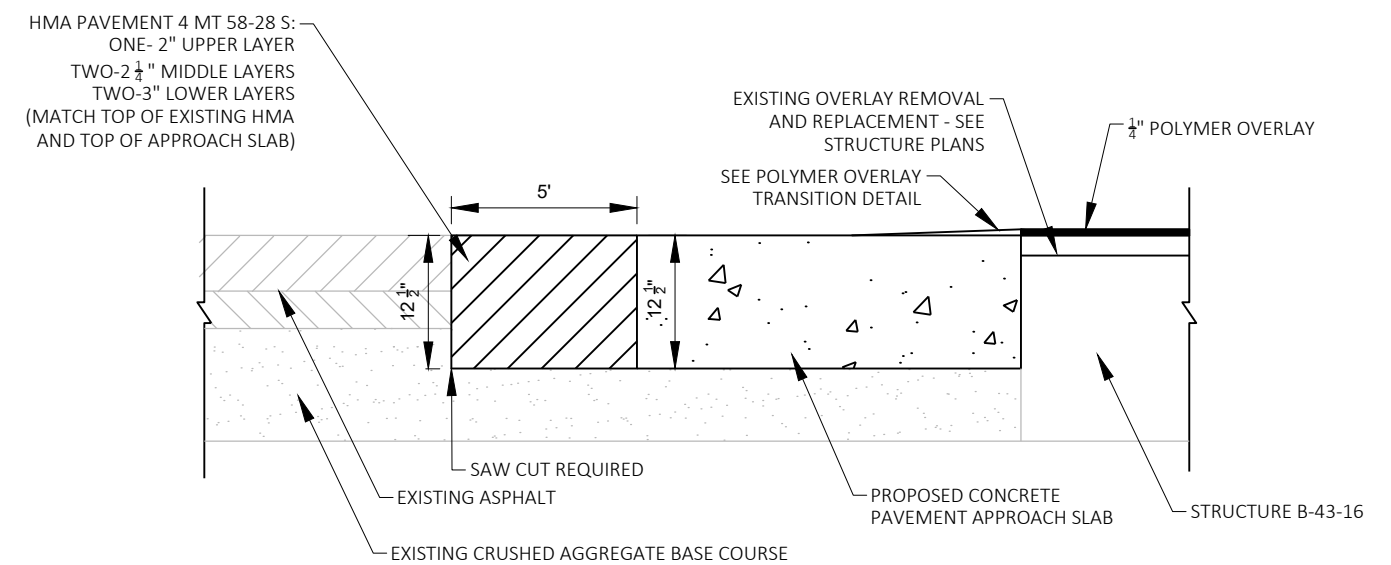
NOTE:
STAGE 1 EASTBOUND LANE APPROACH
SHOWN. MIRROR DETAIL FOR
WESTBOUND APPROACH AND STAGE 2.



PLAN VIEW
NOT TO SCALE

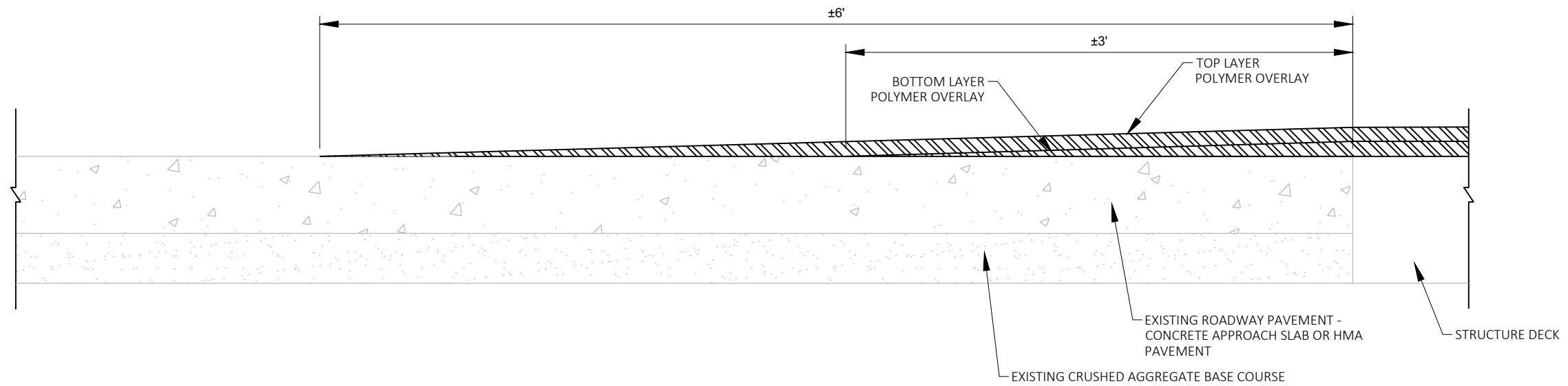


EXISTING SECTION A-A
NOT TO SCALE



PROPOSED SECTION A-A
NOT TO SCALE

PAVEMENT TRANSITION DETAIL
STA 468+90.93 TO 468+95.93
STA 470+03.20 TO 470+08.20 (MIRROR)



POLYMER OVERLAY TRANSITION DETAIL

NOT TO SCALE

NOTE:
POLYMER OVERLAY TO BE PLACED FULL WIDTH COVERING
PAVEMENT AND SHOULDERS.

PLACE AFTER MILLING AND HMA APPROACH PAVEMENT
COMPLETED.

POLYMER TRANSITION INCIDENTAL TO "POLYMER OVERLAY"
BID ITEM ON STRUCTURE PLAN.

PROJECT NO: 1009-46-61

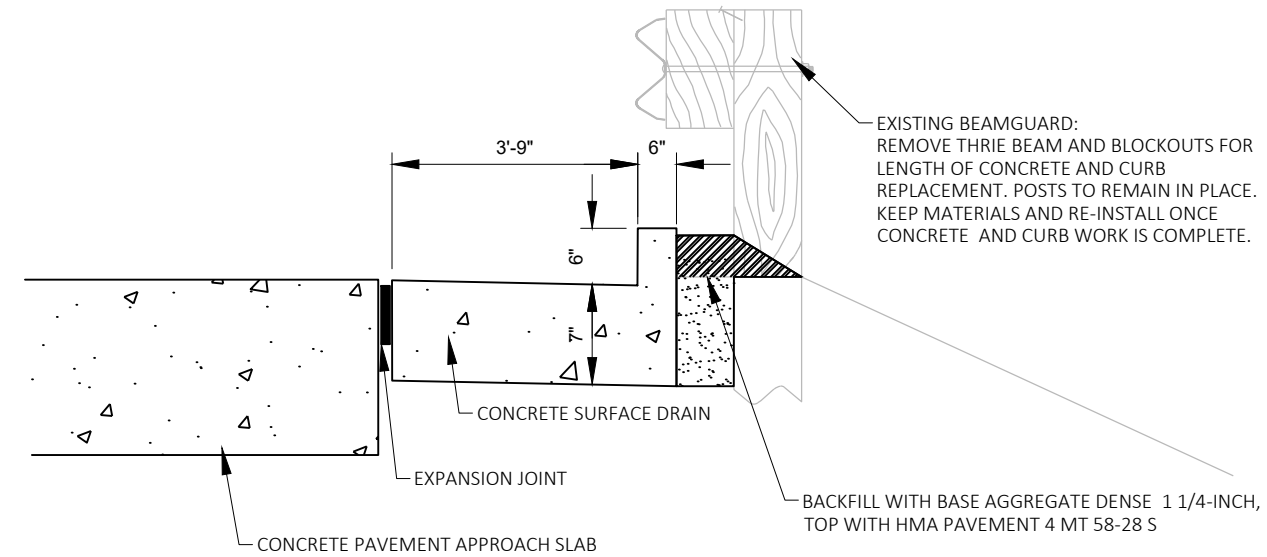
HWY: USH 8

COUNTY: ONEIDA

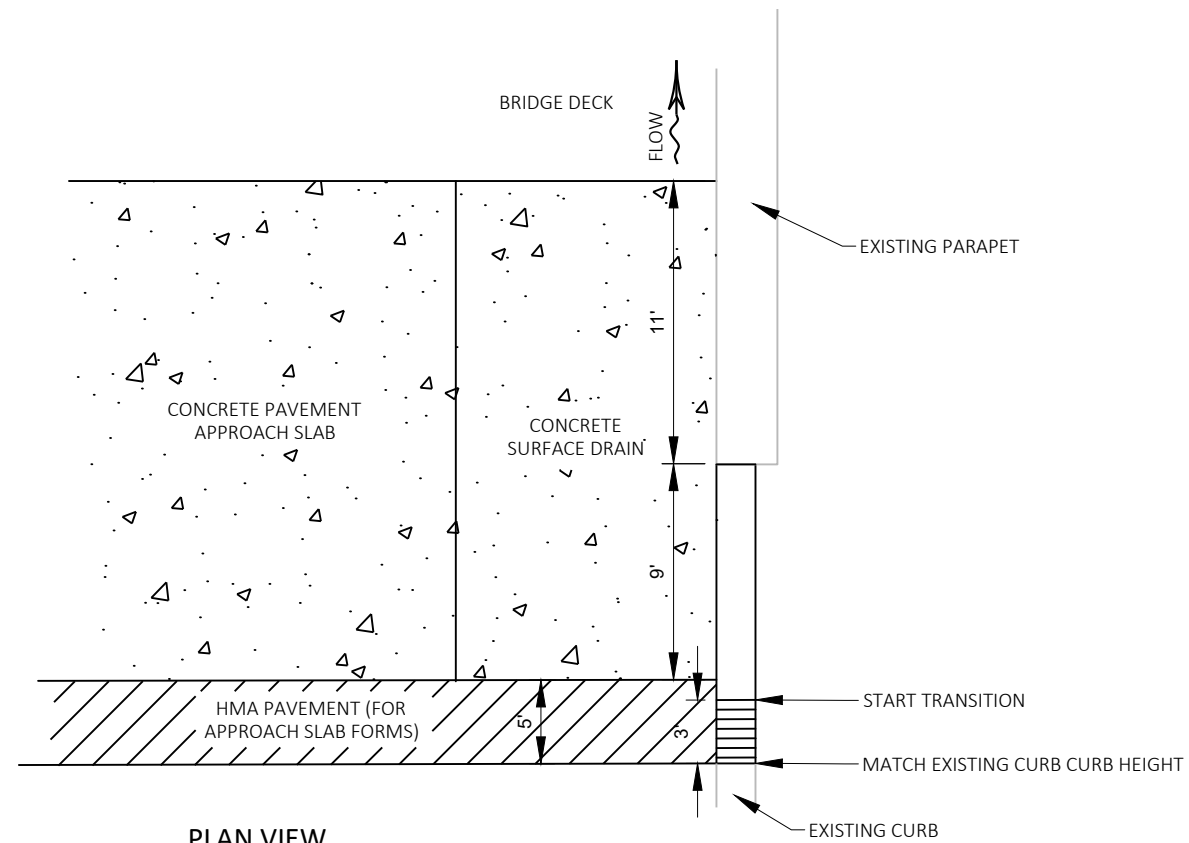
CONSTRUCTION DETAILS

SHEET

E



SECTION VIEW



PLAN VIEW

CONCRETE SURFACE DRAIN MODIFICATION DETAIL

NOT TO SCALE

NOTE:
SEE SDD "CONCRETE SURFACE DRAINS DROP INLET TYPE AT STRUCTURES" FOR CONCRETE CURB AND FINISHING DETAILS.
NO INLET REQUIRED IN THIS CONTRACT.

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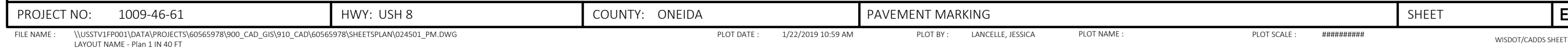
HWY: USH 8

COUNTY: ONEIDA

CONSTRUCTION DETAILS

SHEET

E

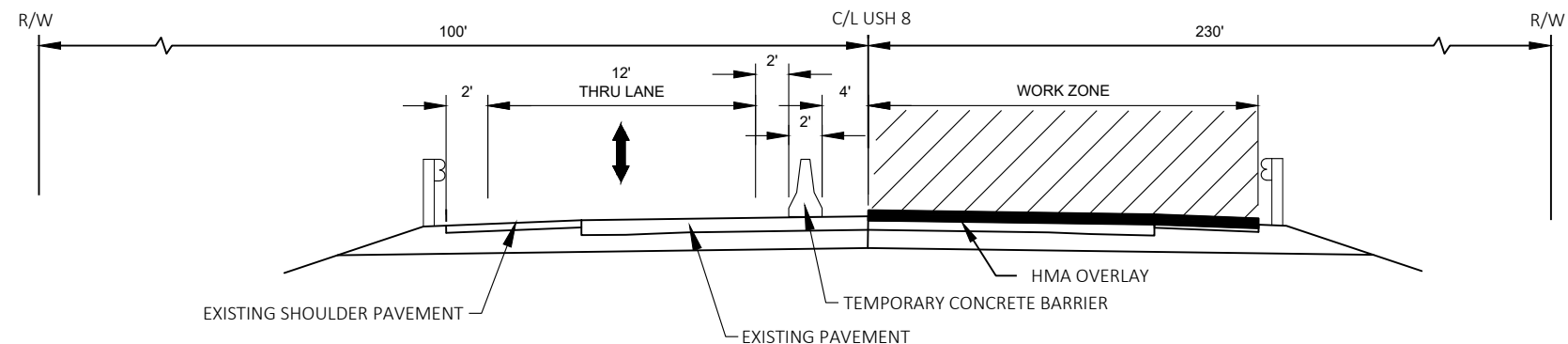


TYPICAL SECTION - STAGE 1 (LOOKING EAST)

ON THE EASTBOUND LANES, COMPLETE CONCRETE OVERLAY AND RELATED BRIDGE REPAIR.

REMOVE AND REPLACE EASTBOUND CONCRETE APPROACH SLAB.

PLACE EASTBOUND HMA PAVEMENT.

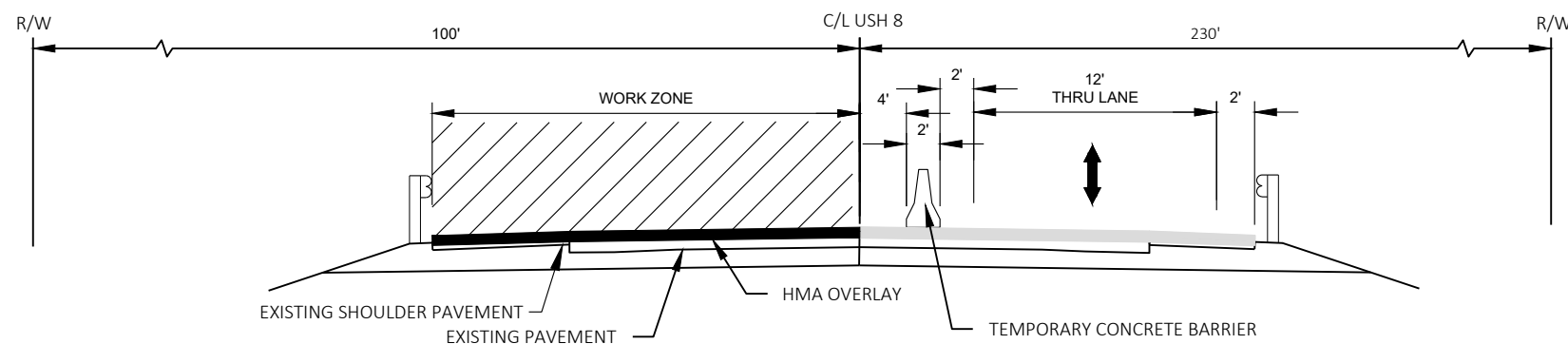


TYPICAL SECTION - STAGE 2 (LOOKING EAST)

ON THE WESTBOUND LANES, COMPLETE CONCRETE OVERLAY AND RELATED BRIDGE REPAIR.

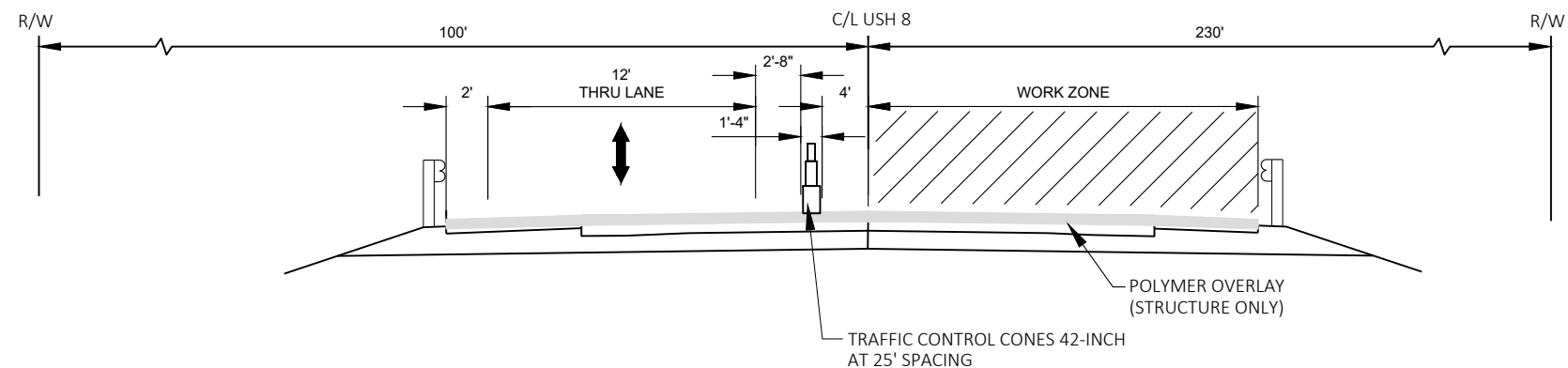
REMOVE AND REPLACE WESTBOUND CONCRETE APPROACH SLAB.

PLACE WESTBOUND HMA PAVEMENT.



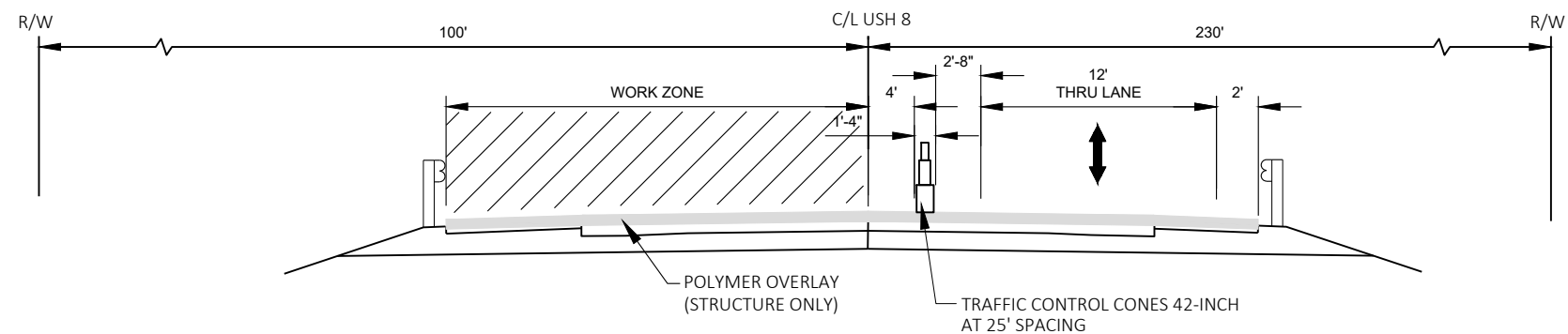
TYPICAL SECTION - STAGE 3 (LOOKING EAST)

PLACE POLYMER OVERLAY ON THE EASTBOUND LANES OF STRUCTURE B-43-16 UNDER FLAGGING OPERATIONS.



TYPICAL SECTION - STAGE 4 (LOOKING EAST)

PLACE POLYMER OVERLAY ON THE WESTBOUND LANES OF STRUCTURE B-43-16 UNDER FLAGGING OPERATIONS.

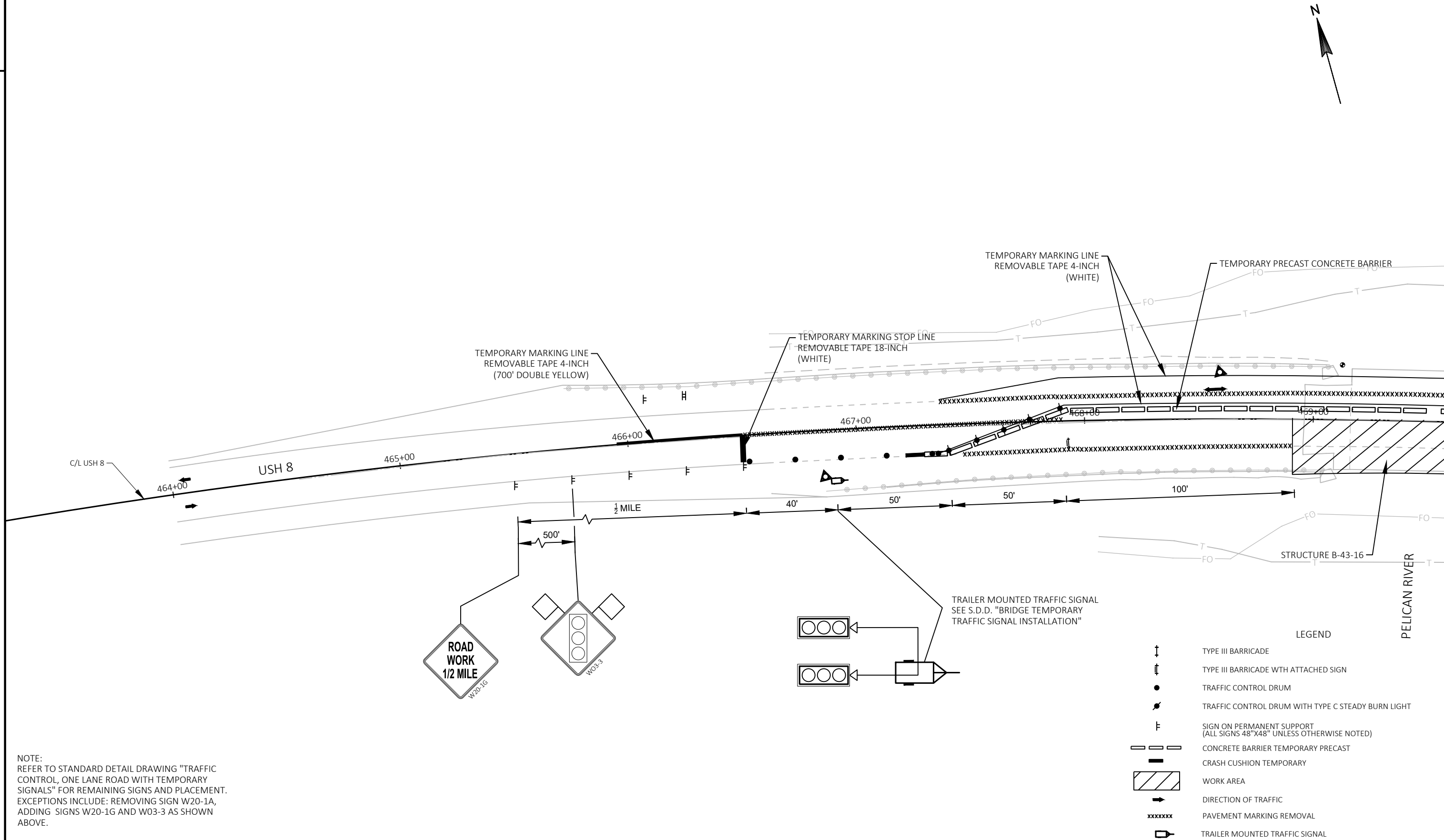


NOTE:
FOR STAGES 1 & 2:
REFER TO STANDARD DETAIL DRAWINGS "TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS", "BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION", "CHANNELIZING DEVICES - DRUMS, CONES, BARRICADES, AND VERTICAL PANEL", AND "MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY".

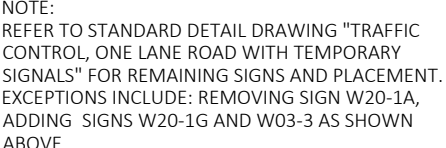
FOR STAGES 3 & 4:
REFER TO STANDARD DETAIL DRAWINGS "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION", "CHANNELIZING DEVICES - DRUMS, CONES, BARRICADES, AND VERTICAL PANEL", AND "MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY".

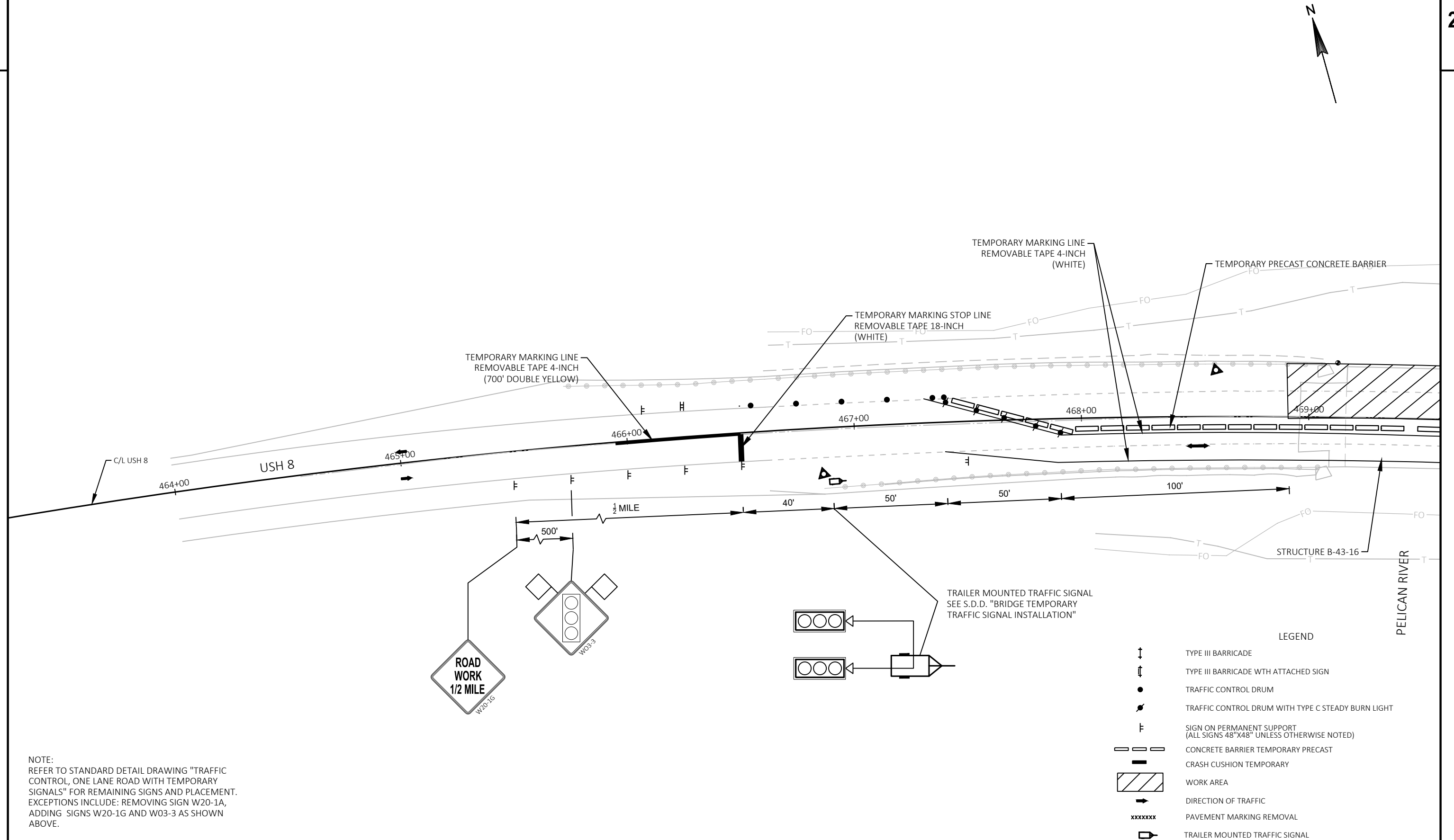
WHEN USING 42-INCH CONES, TRAFFIC CONTROL DRUMS WITH LIGHTS TYPE C ARE REQUIRED IN THE TAPER AREAS.

REFER TO "TRAFFIC CONTROL ONE LANE ROAD STOP CONDITION" FOR DRUM, 42-INCH CONE, AND BARRICADE PLACEMENT. A PCMS SHALL BE PLACED $\frac{1}{2}$ MILE FROM THE BEGINNING OF THE WORK ZONE TAPER. TEMPORARY PAVEMENT MARKINGS ARE NOT REQUIRED DURING THESE STAGES.



NOTE:
REFER TO STANDARD DETAIL DRAWING "TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS" FOR REMAINING SIGNS AND PLACEMENT. EXCEPTIONS INCLUDE: REMOVING SIGN W20-1A, ADDING SIGNS W20-1G AND W03-3 AS SHOWN ABOVE.





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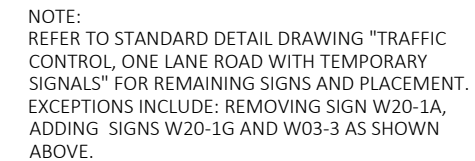
HWY: USH 8

COUNTY: ONEIDA

TRAFFIC CONTROL STAGE 2

SHEET

E



TEMPORARY SIGNAL TIMING B-43-16 (600-FT STOP BAR SPACING)

SIGNAL TIMING PROVIDED BY NC REGION, TRAFFIC SECTION

8:00AM TO 6:00 PM (EB)	
GREEN	27 SEC
YELLOW	5 SEC
ALL RED	20 SEC
8:00AM TO 6:00 PM (WB)	
GREEN	27 SEC
YELLOW	5 SEC
ALL RED	20 SEC
TOTAL CYCLE LENGTH = 104 SEC	

6:00 PM TO 8:00AM (EB)	
GREEN	22 SEC
YELLOW	5 SEC
ALL RED	20 SEC
6:00 PM TO 8:00AM (WB)	
GREEN	22 SEC
YELLOW	5 SEC
ALL RED	20 SEC
TOTAL CYCLE LENGTH = 94 SEC	

Estimate Of Quantities

1009-46-61

Line	Item	Item Description	Unit	Total	Qty
0002	204.0100	Removing Pavement	SY	142.000	142.000
0004	204.0150	Removing Curb & Gutter	LF	7.000	7.000
0006	205.0100	Excavation Common	CY	34.000	34.000
0008	208.0100	Borrow	CY	34.000	34.000
0010	213.0100	Finishing Roadway (project) 01. 1009-46-61	EACH	1.000	1.000
0012	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	68.000	68.000
0014	415.0090	Concrete Pavement 9-Inch	SY	9.000	9.000
0016	415.0410	Concrete Pavement Approach Slab	SY	184.000	184.000
0018	416.1010	Concrete Surface Drains	CY	2.000	2.000
0020	450.4000	HMA Cold Weather Paving	TON	37.000	37.000
0022	455.0605	Tack Coat	GAL	20.000	20.000
0024	460.2000	Incentive Density HMA Pavement	DOL	30.000	30.000
0026	460.6224	HMA Pavement 4 MT 58-28 S	TON	37.000	37.000
0028	502.3200	Protective Surface Treatment	SY	350.000	350.000
0030	502.3210	Pigmented Surface Sealer	SY	78.000	78.000
0032	509.0301	Preparation Decks Type 1	SY	55.000	55.000
0034	509.0302	Preparation Decks Type 2	SY	25.000	25.000
0036	509.0505.S	Cleaning Decks to Reapply Concrete Masonry Overlay	SY	326.000	326.000
0038	509.1500	Concrete Surface Repair	SF	90.000	90.000
0040	509.2000	Full-Depth Deck Repair	SY	5.000	5.000
0042	509.2500	Concrete Masonry Overlay Decks	CY	26.000	26.000
0044	509.5100.S	Polymer Overlay	SY	326.000	326.000
0046	509.9005.S	Removing Concrete Masonry Deck Overlay (structure) 01. B-43-0016	SY	326.000	326.000
0048	509.9050.S	Cleaning Parapets	LF	176.000	176.000
0050	603.8000	Concrete Barrier Temporary Precast Delivered	LF	450.000	450.000
0052	603.8125	Concrete Barrier Temporary Precast Installed	LF	900.000	900.000
0054	606.0300	Riprap Heavy	CY	14.000	14.000
0056	611.8115	Adjusting Inlet Covers	EACH	1.000	1.000
0058	614.0905	Crash Cushions Temporary	EACH	2.000	2.000
0060	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1009-46-61	EACH	1.000	1.000
0062	619.1000	Mobilization	EACH	1.000	1.000
0064	624.0100	Water	MGAL	1.000	1.000
0066	628.1504	Silt Fence	LF	100.000	100.000
0068	628.1520	Silt Fence Maintenance	LF	100.000	100.000
0070	628.1905	Mobilizations Erosion Control	EACH	2.000	2.000
0072	628.1910	Mobilizations Emergency Erosion Control	EACH	1.000	1.000
0074	628.7015	Inlet Protection Type C	EACH	1.000	1.000
0076	642.5001	Field Office Type B	EACH	1.000	1.000

Estimate Of Quantities

1009-46-61

Line	Item	Item Description	Unit	Total	Qty
0078	643.0300	Traffic Control Drums	DAY	2,193.000	2,193.000
0080	643.0420	Traffic Control Barricades Type III	DAY	98.000	98.000
0082	643.0715	Traffic Control Warning Lights Type C	DAY	950.000	950.000
0084	643.0900	Traffic Control Signs	DAY	2,091.000	2,091.000
0086	643.1050	Traffic Control Signs PCMS	DAY	20.000	20.000
0088	643.1070	Traffic Control Cones 42-Inch	DAY	119.000	119.000
0090	643.5000	Traffic Control	EACH	1.000	1.000
0092	645.0120	Geotextile Type HR	SY	24.000	24.000
0094	646.1020	Marking Line Epoxy 4-Inch	LF	3,200.000	3,200.000
0096	646.6464	Cold Weather Marking Epoxy 4-Inch	LF	320.000	320.000
0098	646.9000	Marking Removal Line 4-Inch	LF	2,026.000	2,026.000
0100	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	3,120.000	3,120.000
0102	649.0850	Temporary Marking Stop Line Removable Tape 18-Inch	LF	24.000	24.000
0104	650.6500	Construction Staking Structure Layout (structure) 01. B-43-0016	LS	1.000	1.000
0106	650.9910	Construction Staking Supplemental Control (project) 01. 1009-46-61	LS	1.000	1.000
0108	661.0100	Temporary Traffic Signals for Bridges (structure) 01. B-43-0016	LS	1.000	1.000
0110	690.0150	Sawing Asphalt	LF	88.000	88.000
0112	690.0250	Sawing Concrete	LF	42.000	42.000
0114	715.0415	Incentive Strength Concrete Pavement	DOL	500.000	500.000
0116	SPV.0105	Special 01. Remove and Replace Guardrail	LS	1.000	1.000

EARTHWORK								
Division	From / To Station	Location	Common Excavation (1)	Available Material (5)	Unexpanded Fill	Expanded Fill (13)	Mass Ordinate + / - (14)	Borrow
			(item # 205.0100)			Factor 1.25		
			Cut (2)					
1	468+90 to 470+08	Stage 1 - EB Lanes	15	15	0	0	15	
Stage 1 Subtotal			15	15	0	0	15	
2	468+90 to 470+08	Stage 2 - WB Lanes	19	19	0	0	19	
Stage 2 Subtotal			19	19	0	0	19	34
Grand Total			34	34	0	0	34	34
Total Common Exc			34					

1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
2) Salvaged/Unsuable Pavement Material is included in Cut.
5) Available Material = Cut - Salvaged/Unusuable Pavement Material
13) Expanded Fill. Factor = 1.25
14) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

3

REMOVING PAVEMENT			
		204.0100	
		REMOVING	
		PAVEMENT	
STAGE	LOCATION	SY	
1	W. ABUTMENT APPROACH SLAB	40	
	E. ABUTMENT APPROACH SLAB	34	
2	W. ABUTMENT APPROACH SLAB	34	
	E. ABUTMENT APPROACH SLAB	34	
TOTAL		142	

REMOVING CURB			
		204.0150	
		REMOVING	
		CURB & GUTTER	
STAGE	LOCATION	LF	
1	SW BRIDGE CORNER	7	
TOTAL		7	

FINISHING ROADWAY	
213.0100	
FINISHING	
ROADWAY	
1009-46-61	
LOCATION	EACH
PROJECT	1
TOTAL	1

HMA PAVEMENT				
		450.4000	460.6224	455.0605
		HMA COLD	HMA PAVEMENT	TACK
		WEATHER PAVING	4 MT 58-28 S	COAT
STAGE	LOCATION	TON	TON	GAL
PROJECT		-	-	-
1	W. ABUTMENT	-	9	5
	E. ABUTMENT	-	9	5
CONCRETE DRAIN		-	1	-
2	W. ABUTMENT	-	9	5
	E. ABUTMENT	-	9	5
UNDSITRIBUTED		37	-	-
TOTAL		37	37	20

3

CONCRETE PAVEMENT						
		415.0410	415.0090	416.1010	305.0120	624.0100
		CONCRETE	CONCRETE	CONCRETE	BASE	
		PAVEMENT	PAVEMENT	SURFACE	AGGREGATE	
		APPROACH SLAB	9-INCH	DRAINS	DENSE 1 1/4-INCH	WATER
STAGE	LOCATION	SY	SY	CY	TON	MGAL
1	W. ABUTMENT	42	-	2	18	0.3
	E. ABUTMENT	42	9	-	17	0.2
2	W. ABUTMENT	50	-	-	16	0.2
	E. ABUTMENT	50	-	-	17	0.3
TOTAL		184	9	2	68	1

ADJUSTING INLET		
611.8115		
ADJUSTING		
INLET		
COVERS		
STA	LT/RT	EACH
496+93	RT	1
TOTAL		1

MAINTENANCE AND REPAIR OF HAUL ROADS	
618.0100	
MAINTENANCE AND REPAIR	
OF HAUL ROADS	
LOCATIONS	EACH
PROJECT	1
TOTAL	1

MOBILIZATION	
619.1000	
MOBILIZATION	
LOCATION	EACH
PROJECT	1
TOTAL	1

EMERGENCY MOBILIZATION		
628.1905 628.1910		
MOBILIZATIONS		
EROSION		
CONTROL		
LOCATION	EACH	EACH
STAGE1	1	1
STAGE2	1	-
TOTAL	2	1

EROSION CONTROL			
628.1504 628.1520 628.7015			
SILT			
FENCE			
MAINTENANCE			
PROTECTION			
TYPE C			
STATION - LT/RT	LF	LF	EACH
469+93 RT	-	-	1
UNDISTRIBUTED	100	100	-
TOTAL	100	100	1

FIELD OFFICE	
642.5001	
FIELD OFFICE	
TYPE B	
LOCATION	EACH
PROJECT	1
TOTAL	1

TRAFFIC CONTROL															
LOCATION	643.5000	603.8000	603.8125	614.0905	643.0300	643.0420		643.0715		643.0900		643.1070			
	TRAFFIC CONTROL EACH	COCNRETE BARRIER		CRASH	TRAFFIC	TRAFFIC CONTROL		TRAFFIC CONTROL		TRAFFIC		TRAFFIC CONTROL			
		TEMPORARY PRECAST		CUSHIONS	CONTROL	BARRICADES		WARNING LIGHTS		CONTROL		CONES			
		DELIVERED	INSTALLED	TEMPORARY	DRUMS	TYPE III		TYPE C		SIGNS		42-INCH			
		LF	LF	EACH	EACH	DAY	EACH	DAY	EACH	DAY	EACH	DAY	EACH	DAY	DAYS
PROJECT	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STAGE 1 - EB CONSTRUCTION	-	450	450	1	22	968	1	44	10	440	22	968	-	-	44
STAGE 2 - WB CONSTRUCTION	-	-	450	1	22	902	1	41	10	410	22	902	-	-	41
STAGE 3 - EB CONSTRUCTION	-	-	-	-	31	124	1	4	10	40	22	88	13	52	4
STAGE 4 - WB CONSTRUCTION	-	-	-	-	31	124	1	4	10	40	22	88	13	52	4
UNDISTRIBUTED	-	-	-	-	15	75	1	5	4	20	9	45	3	15	5
TOTAL	1	450	900	2	2,193		98		950		2,091		119		

CRASH CUSHION RATING:

2' BACK WIDTH, OM-3R (W05-58R) OBJECT MARKING PATTERN, CRASH TEST LEVEL TL-3, BIDIRECTIONAL TRAFFIC, TRAFFIC ON LEFT OF BARRIER, SHIELDING TEMPORARY PRECAST CONCRETE BARRIER BLUNT END

TRAFFIC CONTROL SIGNS PCMS

643.1050				
TRAFFIC CONTROL				
SIGNS PCMS				
STAGE	LOCATION	EACH	DAY	DAYS
3&4	EB TRAFFIC	1	8	8
3&4	WB TRAFFIC	1	8	8
UNDISTRIBUTED		-	4	-
TOTAL			20	

MARKING REMOVAL

646.9000			
MARKING REMOVAL			
LINE 4-INCH			
STAGE	STA	-	STA
1	465+60	467+00	140
	467+36	471+61	425
	467+36	468+91	155
	470+08	471+61	153
	472+00	473+40	140
3	465+60	467+00	140
	467+36	471+61	425
	467+36	468+91	155
	470+08	471+61	153
	472+00	473+40	140
TOTAL			2,026

MARKING LINE

646.1020					
MARKING LINE					
EPOXY 4-INCH					
			COLD WEATHER		MARKING EPOXY
			SOLID	SOLID	
			YELLOW	WHITE	4-INCH
STAGE	STA	-	STA	LF	LF
2	465+50	473+50	800	800	-
4	465+50	473+50	800	800	-
UNDISTRIBUTED			-	-	320
SUBTOTAL			1,600	1,600	320
TOTAL			3,200		320

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE SPECIFIED.

TEMPORARY MARKING LINE

	649.0150		649.0850
	TEMPORARY		TEMPORARY
	MARKING LINE		MARKING STOP LINE
	REMOVABLE TAPE		REMOVABLE TAPE
	4-INCH		18-INCH
	WHITE	YELLOW	WHITE
STAGE	LF	LF	LF
1	860	1,400	24
2	860	-	-
SUBTOTAL	1,720	1,400	24
TOTAL	3,120		24

CONSTRUCTION STAKING

	650.6500	650.9910
	CONSTRUCTION	CONSTRUCTION
	STAKING	STAKING
	STRUCTURE	SUPPLEMENTAL
	LAYOUT	CONTROL
	B-43-0016	1009-46-61
LOCATION	LS	LS
PROJECT	1	1
TOTAL	1	1

TEMPORARY SIGNALS

	661.0100
	TEMPORARY TRAFFIC SIGNALS
	FOR BRIDGES B-43-0016
LOCATION	LS
PROJECT	1
TOTAL	1

SAWING PAVEMENT

		690.0150	690.0250
		SAWING	SAWING
		ASPHALT	CONCRETE
LOCATION	STATION	LF	LF
BEGIN PROJECT	468+90	44	-
END PROJECT	470+08	44	-
APPROACH SLAB	468+95-469+16	-	21
APPROACH SLAB	469+82-470+03	-	21
TOTAL		88	42

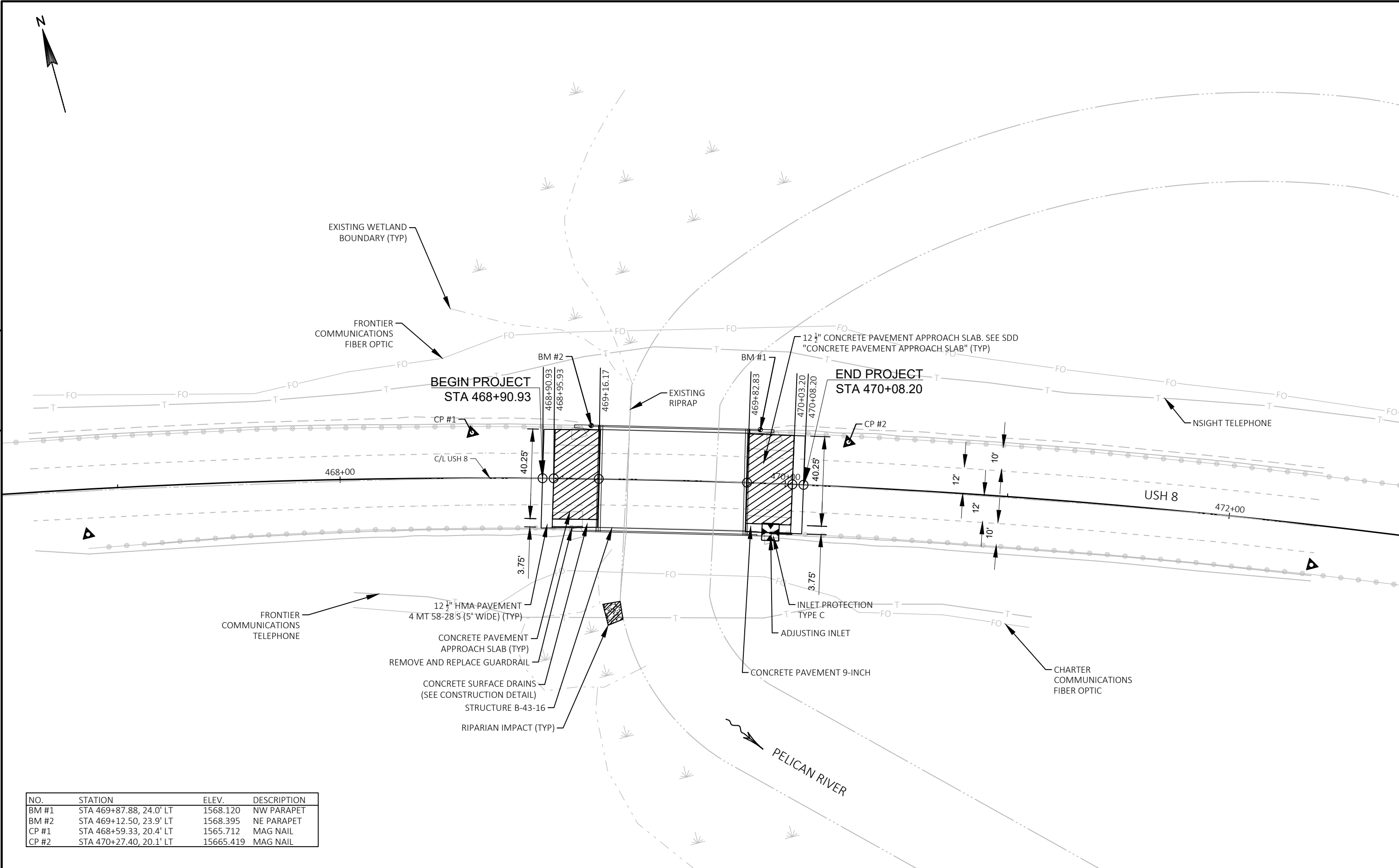
REMOVE AND REPLACE GUARDRAIL

		SPV.0105.01
		REMOVE AND REPLACE
		GUARDRAIL
STAGE	LOCATION	LS
1	SW BRIDGE CORNER	1
TOTAL		1

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE SPECIFIED.

5

5



NO.	STATION	ELEV.	DESCRIPTION
BM #1	STA 469+87.88, 24.0' LT	1568.120	NW PARAPET
BM #2	STA 469+12.50, 23.9' LT	1568.395	NE PARAPET
CP #1	STA 468+59.33, 20.4' LT	1565.712	MAG NAIL
CP #2	STA 470+27.40, 20.1' LT	15665.419	MAG NAIL

PROJECT NO: 1009-46-61

HWY: USH 8

COUNTY: ONEIDA

PLAN

SHEET

E

FILE NAME : \\USSTV1FP001\DATA\PROJECTS\60565978\900_CAD_GIS\910_CAD\60565978\SHEETSPLAN\050101_PP.DWG
LAYOUT NAME - Plan 1 IN 40 FT

PLOT DATE : 1/22/2019 11:00 AM

PLOT BY : LANCELLE, JESSICA

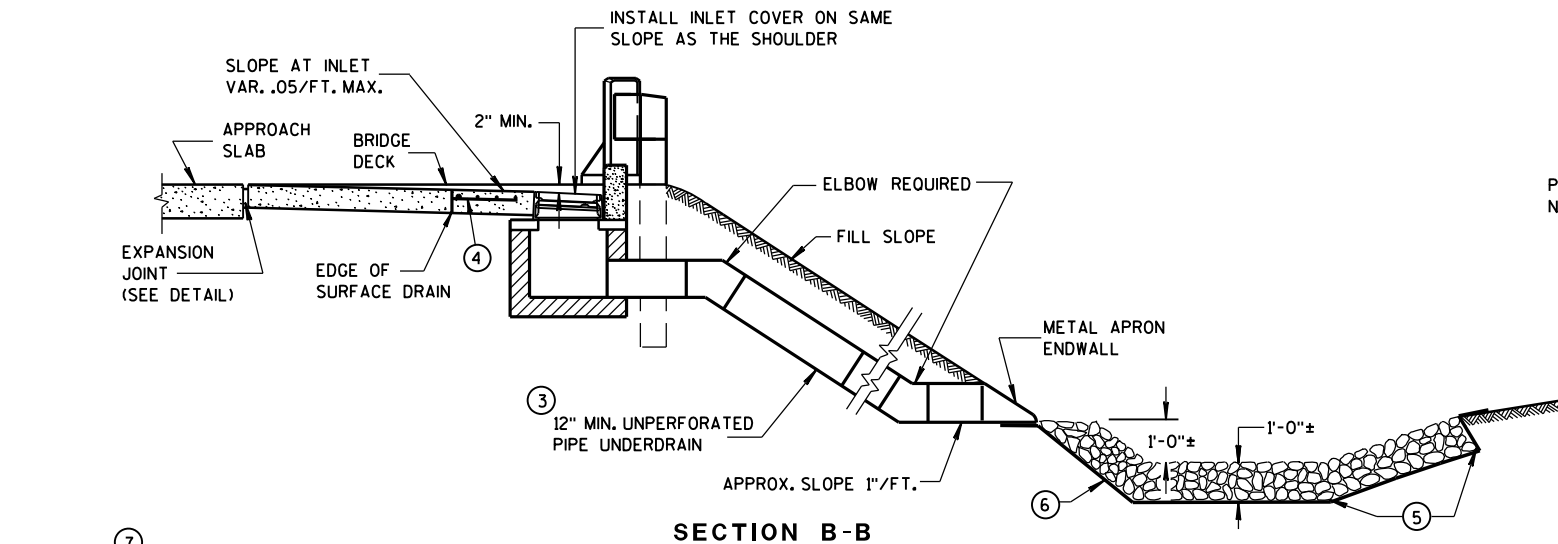
PLOT NAME :

PLOT SCALE : #####

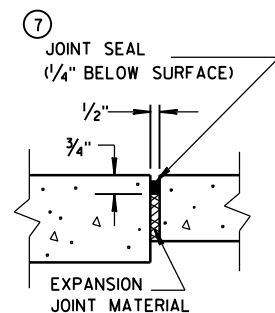
WISDOT/CADD5 SHEET 44

Standard Detail Drawing List

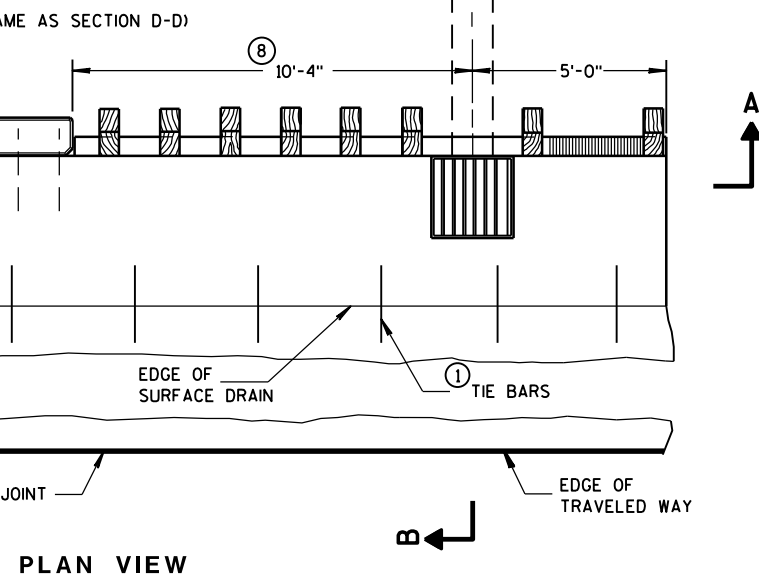
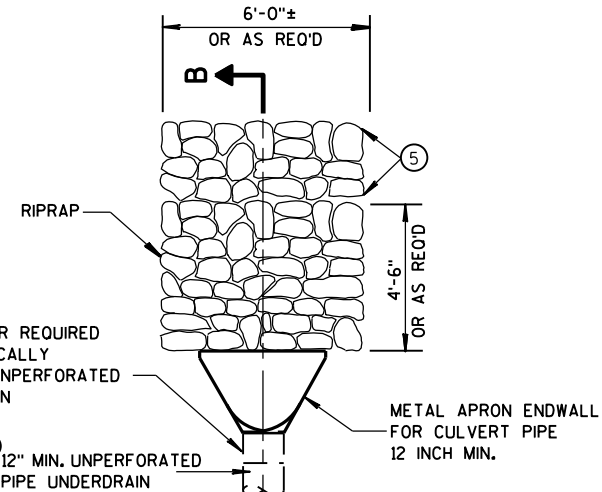
08D03-07	CONCRETE SURFACE DRAINS DROP INLET TYPE AT STRUCTURES
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
09G02-05A	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
09G02-05B	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
09G02-05C	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
13B02-09A	CONCRETE PAVEMENT APPROACH SLAB
13B02-09B	STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB
14B07-15A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15E	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15F	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15G	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15H	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15I	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
15C08-19A	LONGITUDINAL MARKING (MAINLINE)
15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-07	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C19-06A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15D32-05	TRAFFIC CONTROL, ONE LANE ROAD STOP CONDITION
15D33-06	TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS



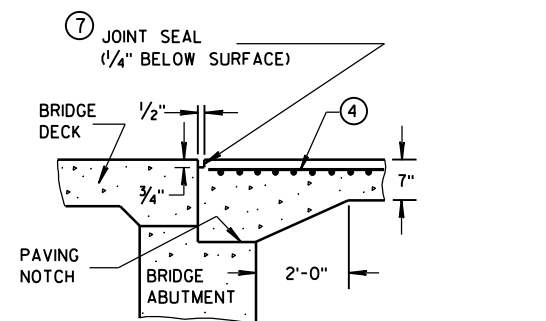
SECTION B-B



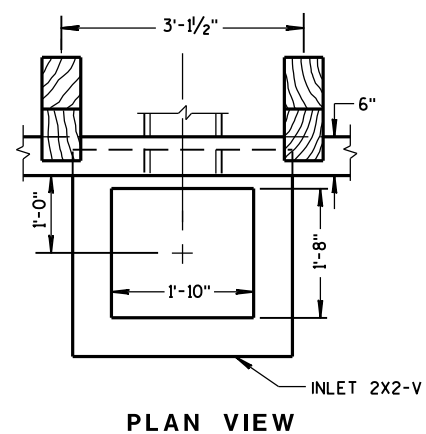
EXPANSION JOINT DETAIL



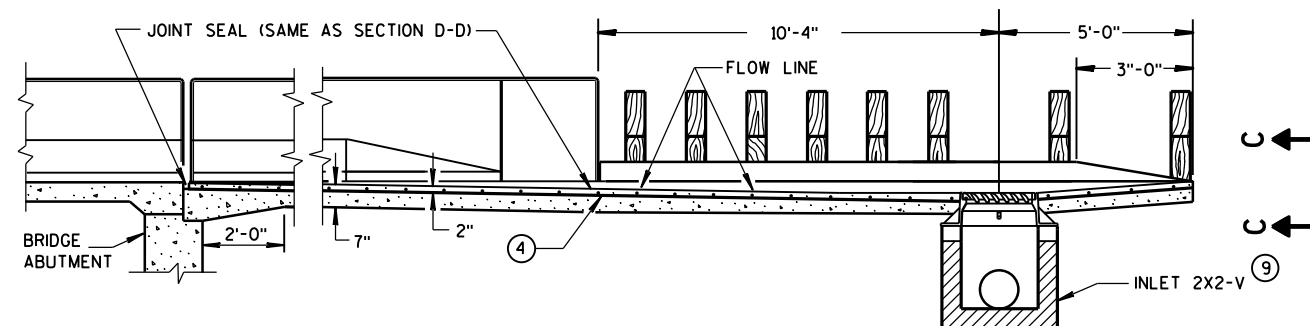
PLAN VIEW



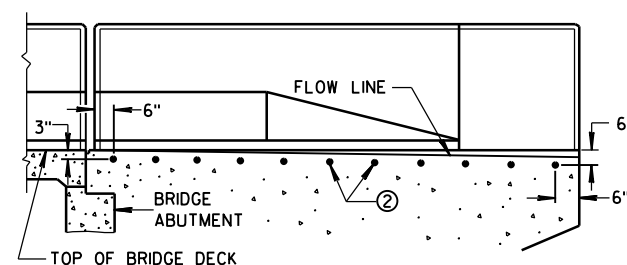
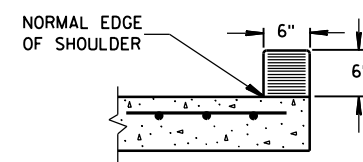
SECTION D-D



PLAN VIEW



SECTION A-A

LOCATION OF
TIE BARS IN WINGWALL

SECTION C-C

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.

ALL STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

- ① NO. 4 X 2'-0" TIE BARS SPACED AT 3'-0" CENTERS TO BE USED ONLY WHEN ADJACENT TO P.C. CONCRETE.
- ② NO. 4 X 2'-0" TIE BARS SPACED AT 12" CENTERS TO BE PLACED BY BRIDGE CONTRACTOR, OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.
- ③ THE PIPE UNDERDRAIN MAY BE ANY ONE OF THE SIX MATERIALS LISTED IN THE STANDARD SPECIFICATIONS SECTION 612.2 EXCEPT DRAIN TILE.
- ④ MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C-C.
- ⑤ LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH IS REQUIRED.
- ⑥ GEOTEXTILE FABRIC.
- ⑦ HOT POURED SEALANT UNLESS OTHERWISE SPECIFIED.
- ⑧ THIS DIMENSION MAY VARY DEPENDING ON THE SPACING OF POSTS FOR THE STEEL PLATE BEAM GUARD. THE TYPICAL LOCATION FOR THE SURFACE DRAIN IS WHERE THE POST SPACING WIDENS TO 3'-1/2".
- ⑨ SEE CURRENT STANDARD DETAIL DRAWINGS 8A5 AND 8C7 FOR DETAILS.

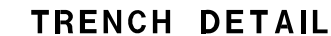
CONCRETE SURFACE DRAINS
DROP INLET TYPE
AT STRUCTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

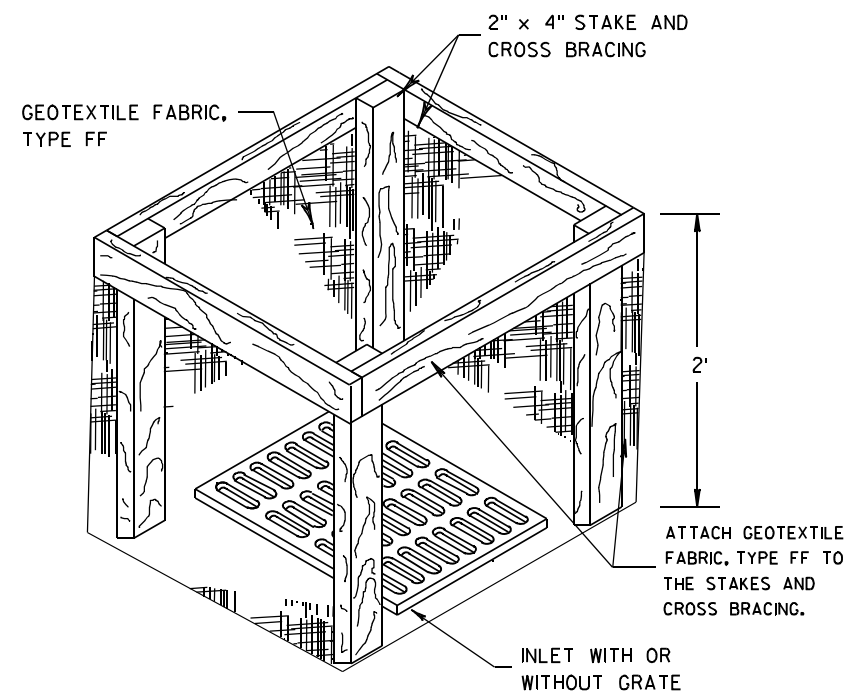
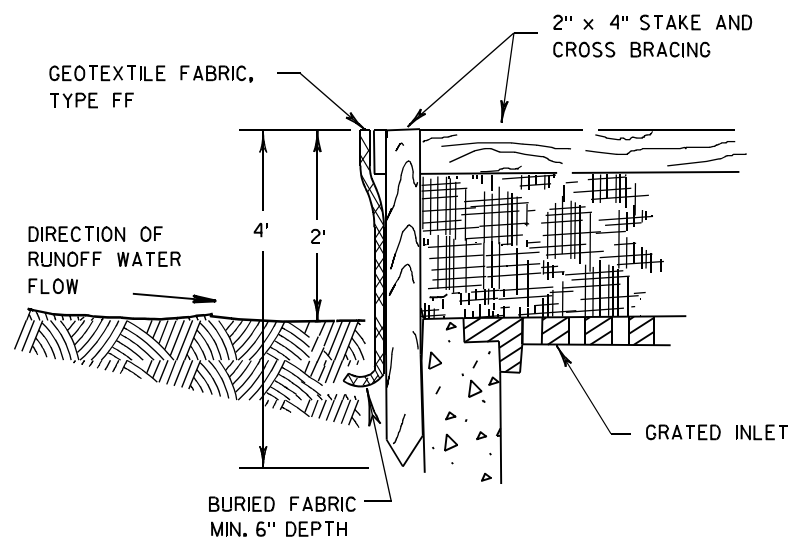
APPROVED
June 2017 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
FHWA UNIT SUPERVISOR



- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1½" X 1½" OF OAK OR HICKORY.
- ④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- ⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



SILT FENCE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED <u>4-29-05</u> DATE	<u>/S/ Beth Canestra</u> CHIEF ROADWAY DEVELOPMENT ENGINEER



INLET PROTECTION, TYPE A

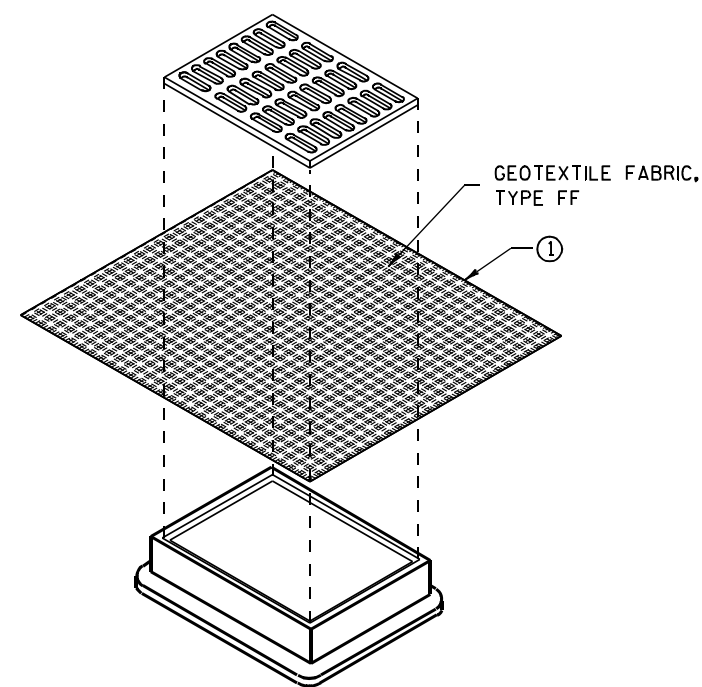
GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

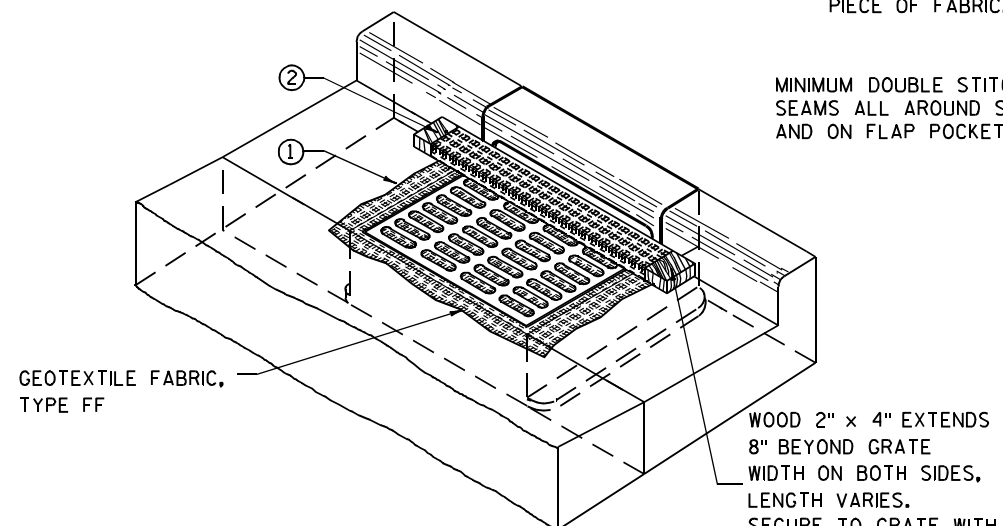
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- ① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
- ② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
- ③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.



**INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)**

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE C (WITH CURB BOX)

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

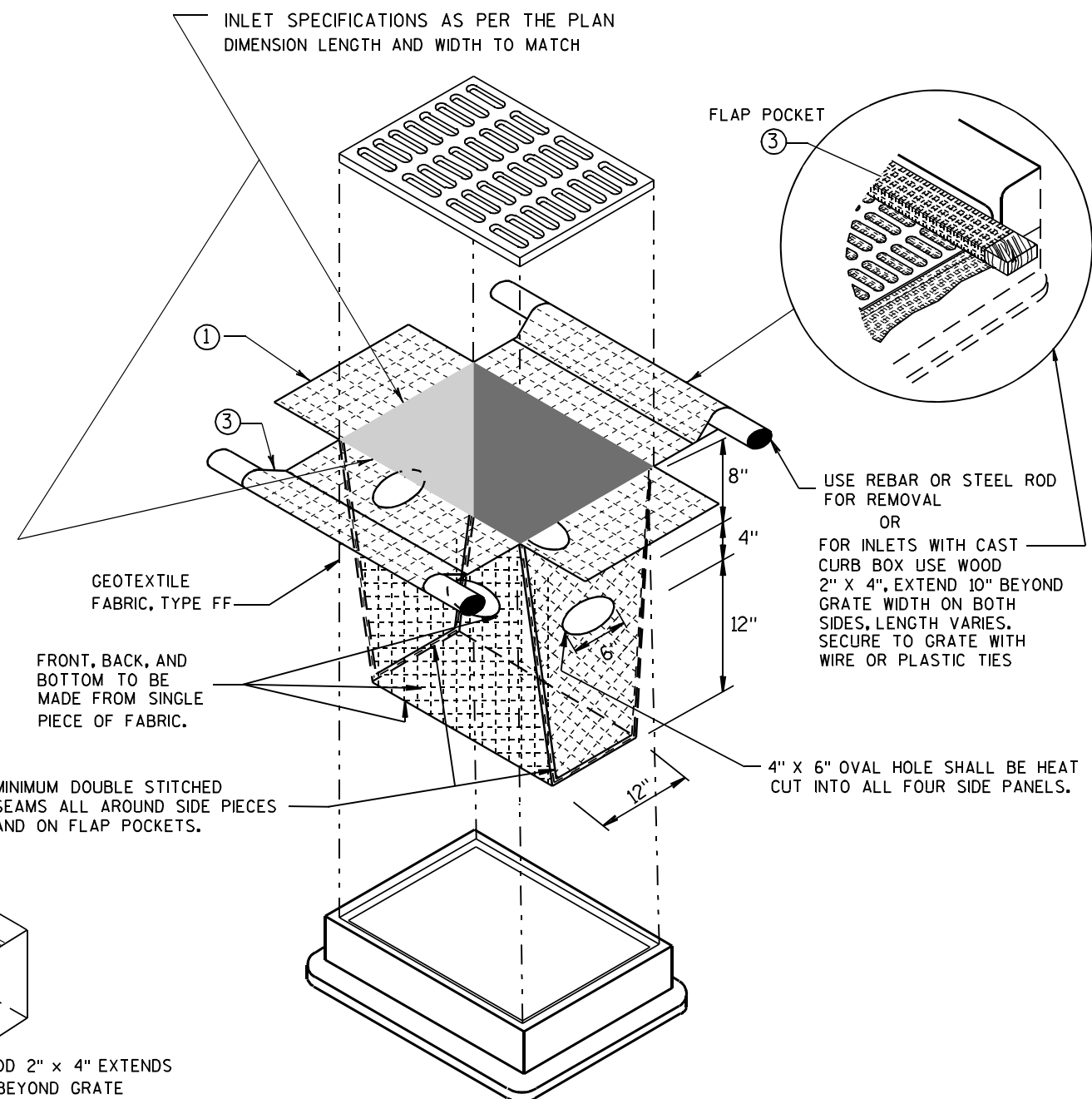
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

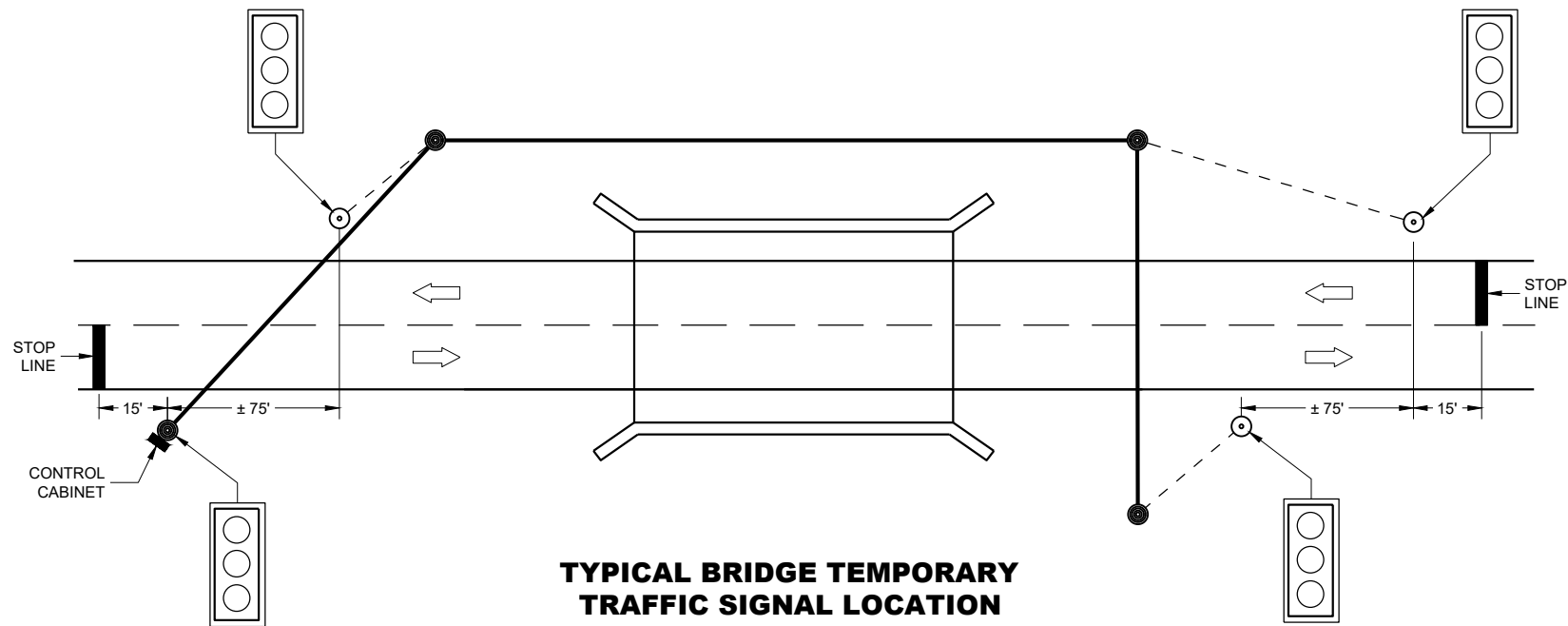
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH OR WITHOUT A CURB BOX AS PER NOTE ②)

INLET PROTECTION TYPE A, B, C, AND D	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 10/16/02 DATE	/S/ Beth Cannestra CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA	



TYPICAL BRIDGE TEMPORARY TRAFFIC SIGNAL LOCATION

LEGEND

- WOOD POLE (NON-BREAKAWAY)
- WOOD POST (BREAKAWAY)
- SIGNAL CABLE
- SIGNAL CABLE W/MESSENGER
- DIRECTION OF TRAFFIC
- LED TRAFFIC SIGNAL WITH BACKPLATE (3-12")

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 MAY BE 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 (NON-BREAKAWAY) SHALL BE NO CLOSER TO EDGE OF PAVEMENT THAN OFFSET DISTANCE CHART ALLOWS OR 4 FEET BEHIND PROTECTIVE BARRIER (BEAM GUARD, ETC.).

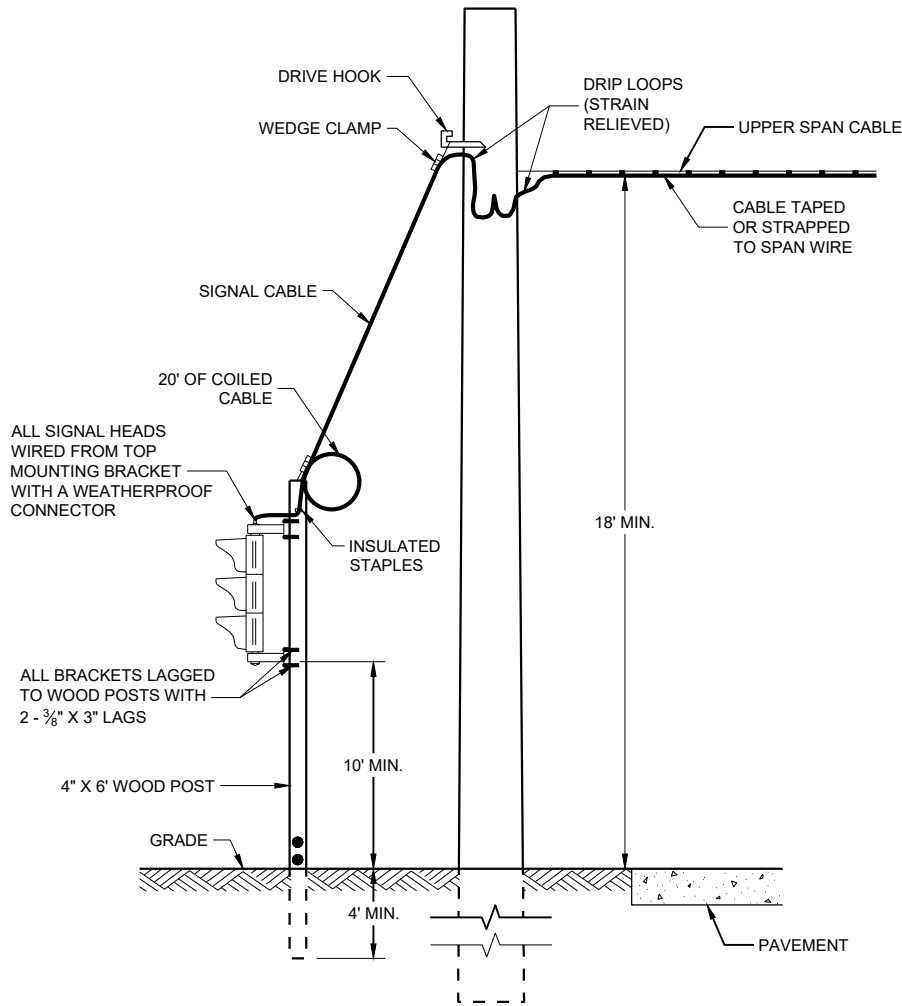
WOOD POSTS (BREAKAWAY) SHALL BE NO CLOSER THAN 2 FEET OUTSIDE OF SHOULDER.

VERTICAL CLEARANCE ETC. PER NEC.

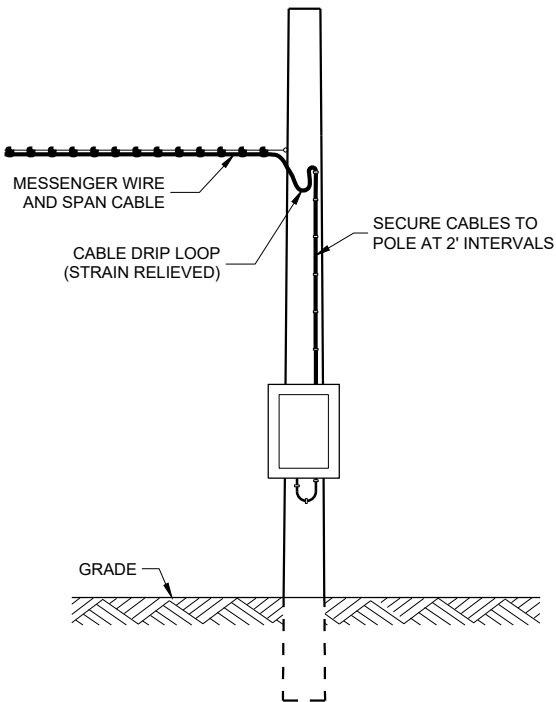
TRAFFIC SIGNAL FACES SHALL BE TYPICALLY PLACED 12 FEET FROM EDGE OF PAVEMENT.

EACH TRAFFIC SIGNAL SHALL HAVE A BACKPLATE.

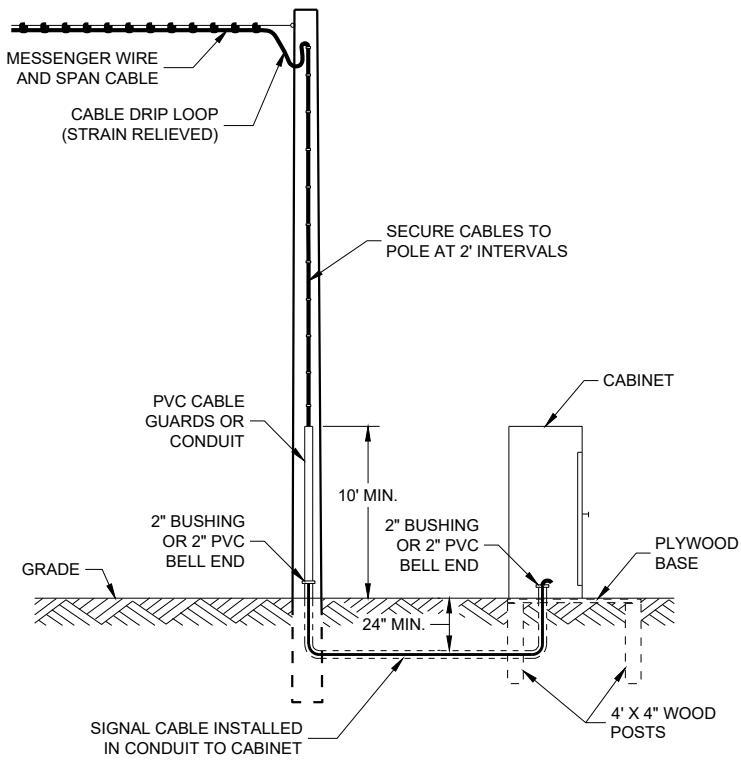
SIGNING, PAVEMENT MARKING AND LANE CONTROL REQUIREMENTS SHALL CONFORM TO STANDARD DETAIL DRAWING 15D33.



TYPICAL DROP TO TRAFFIC SIGNAL FACE



POLE MOUNT CABINET INSTALLATION



GROUND MOUNT CABINET INSTALLATION

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

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.

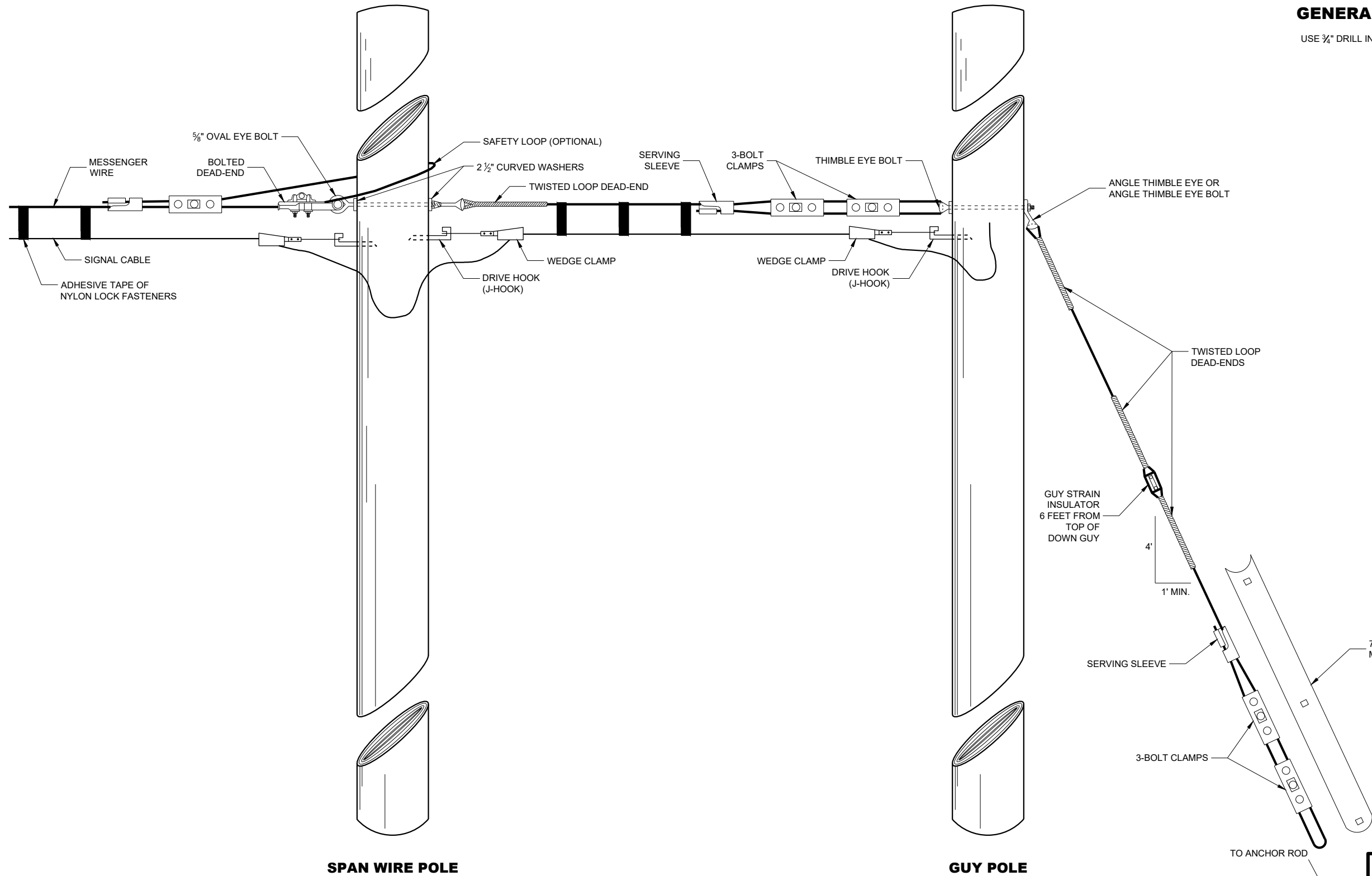
BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Ahmet Demirbilek
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

FHWA



GENERAL NOTES

USE 3/4\"/>

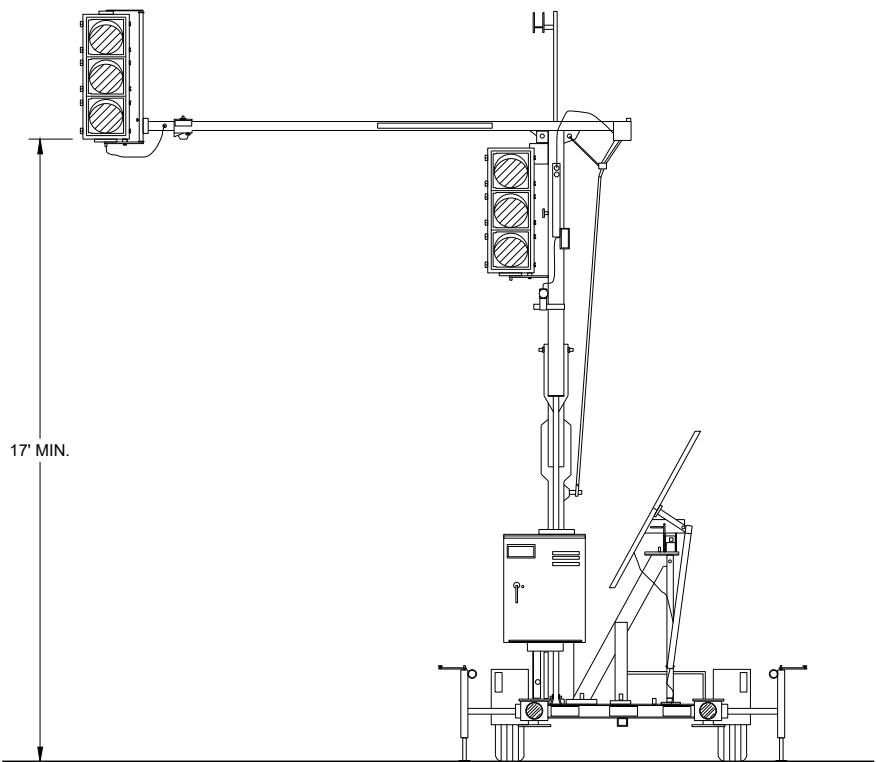
TYPICAL DEAD-ENDINGS OR GUYING

**BRIDGE TEMPORARY TRAFFIC
SIGNAL INSTALLATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2015 /S/ Ahmet Demerbilek
DATE ROADWAY STANDARDS DEVELOPMENT
ENGINEER

FHWA

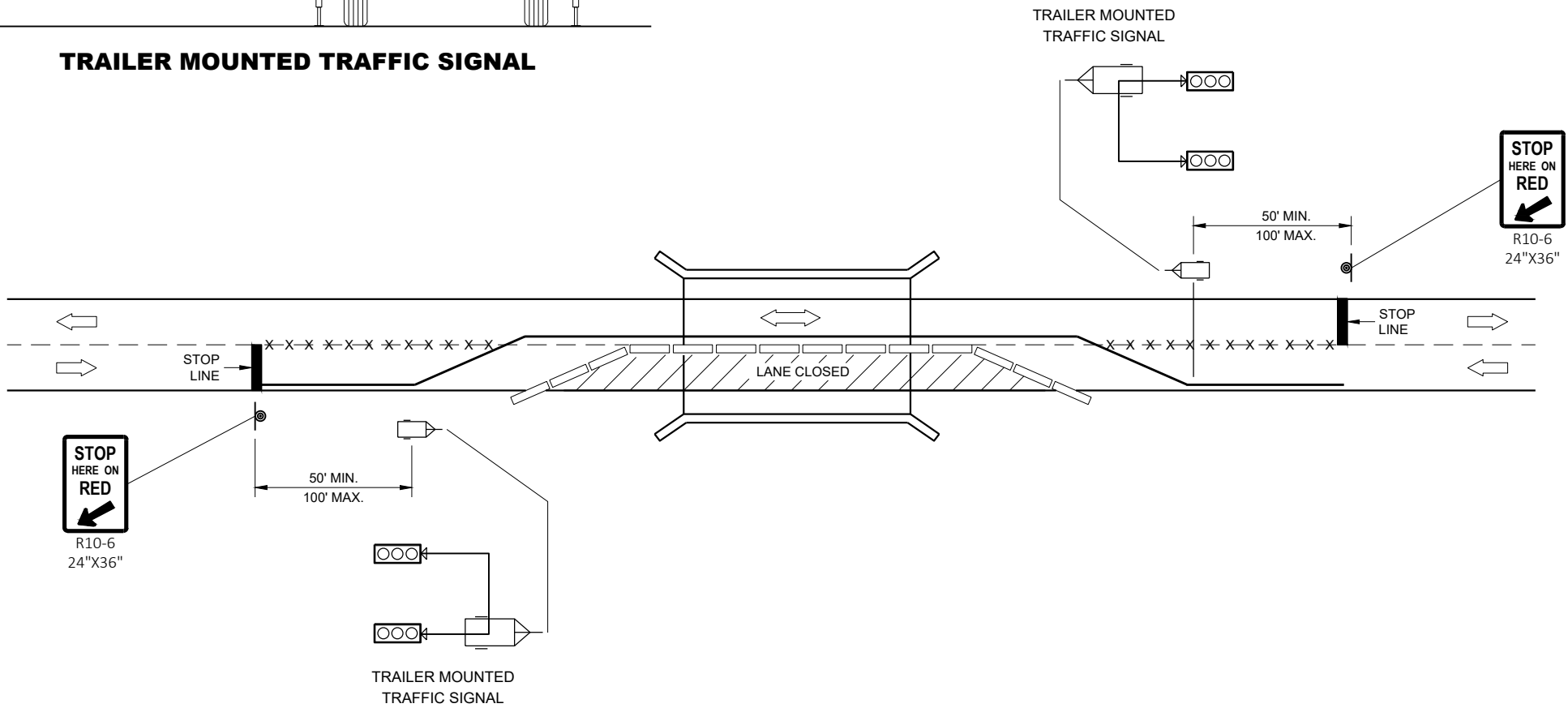


TRAILER MOUNTED TRAFFIC SIGNAL

GENERAL NOTES

DETAIL 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 15D33.



TYPICAL TRAILER MOUNTED TRAFFIC SIGNAL LOCATION

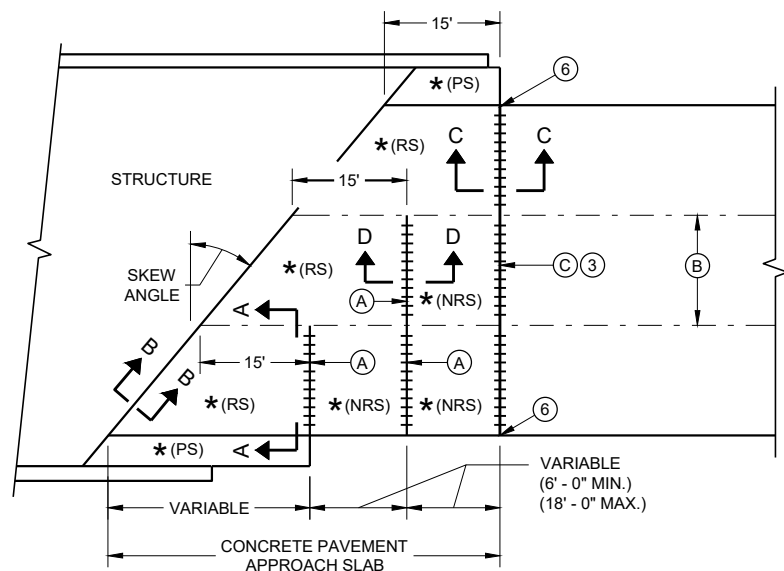
LEGEND

- POST MOUNTED SIGN
- TEMPORARY PRECAST CONCRETE BARRIER
- TRAILER MOUNTED TRAFFIC SIGNAL
- REMOVE PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC

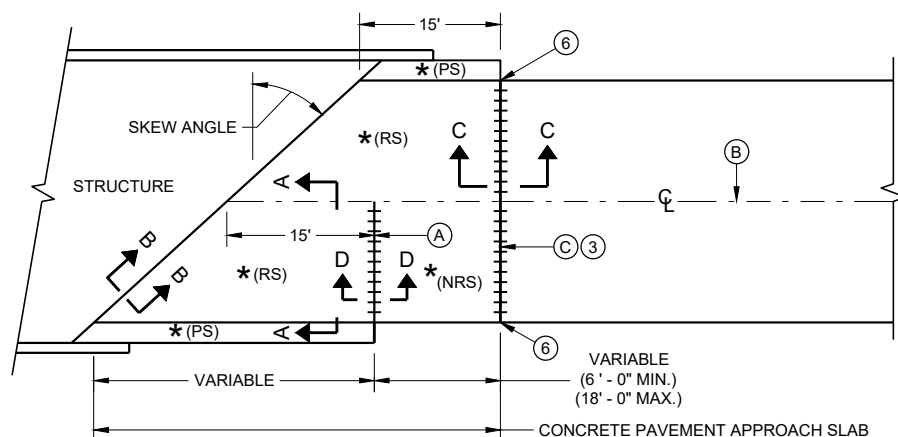
BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

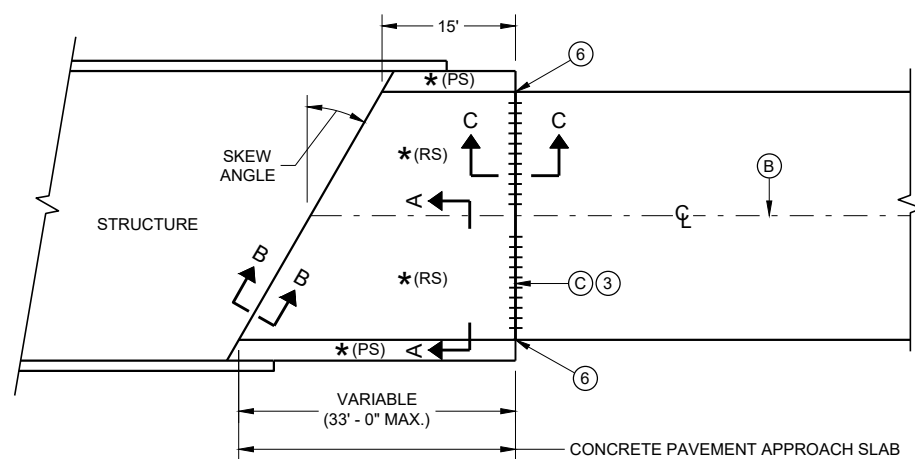
APPROVED
June 2015
DATE /S/ Ahmet Demerbilek
ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA



**SKewed Approach
(Pavement more than two lanes)**



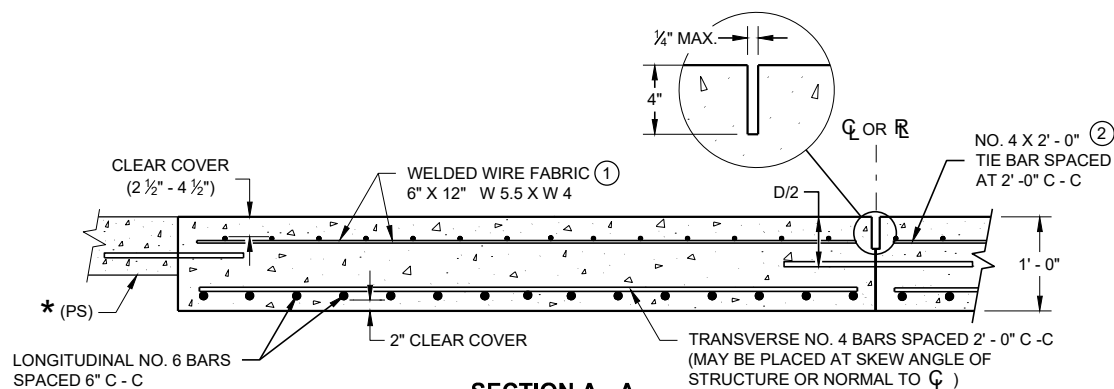
**SKews > 20°
(Pavement width ≤ 30')**



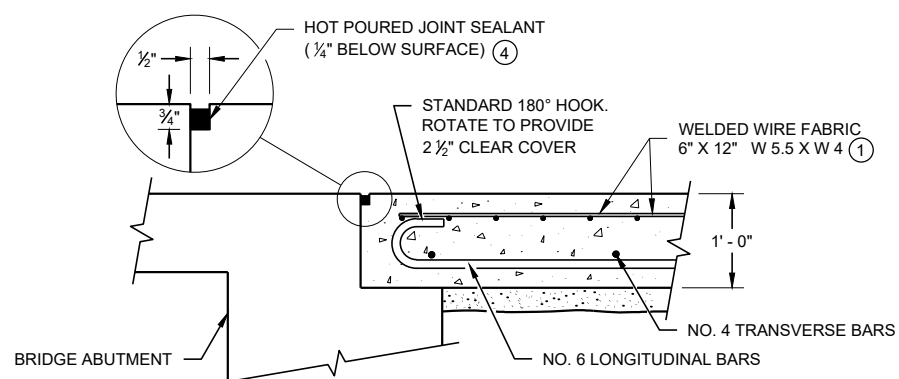
**SKews ≤ 20°
(Pavement width ≤ 30')**

APPROACH SLAB AND ADJACENT PAVEMENT

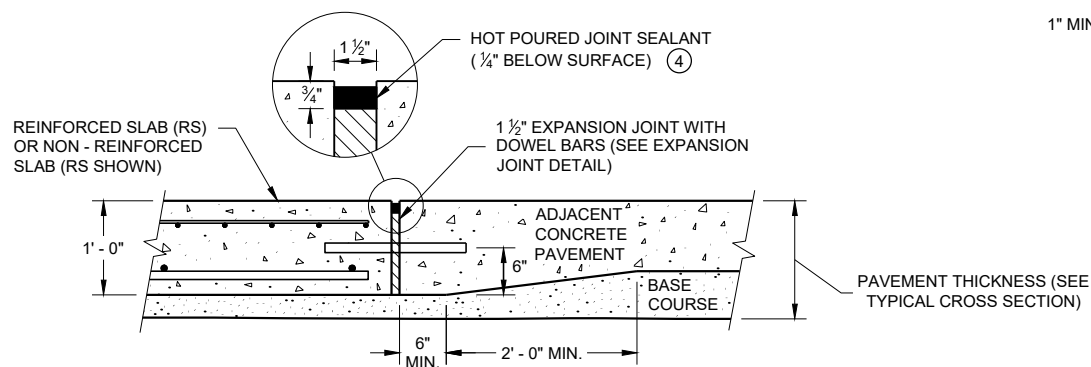
- * (RS) = REINFORCED CONCRETE SLAB
- * (PS) = PAVED CONCRETE SHOULDER OR CONCRETE DRAINAGE SLAB
- * (NRS) = NON - REINFORCED CONCRETE SLAB
- *** STANDARD DOWEL BAR DIAMETER (SEE SDD 13C11 AND SDD 13C13)



**SECTION A - A
REINFORCEMENT POSITIONING DETAIL**



**SECTION B - B
BEND DETAIL
BOTTOM REINFORCEMENT**



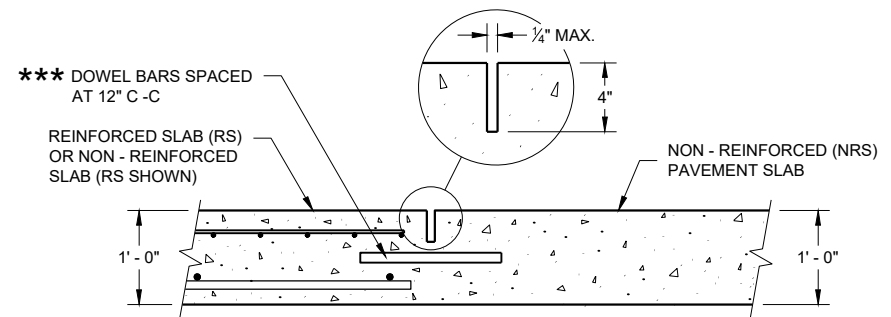
**SECTION C - C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT**

GENERAL NOTES

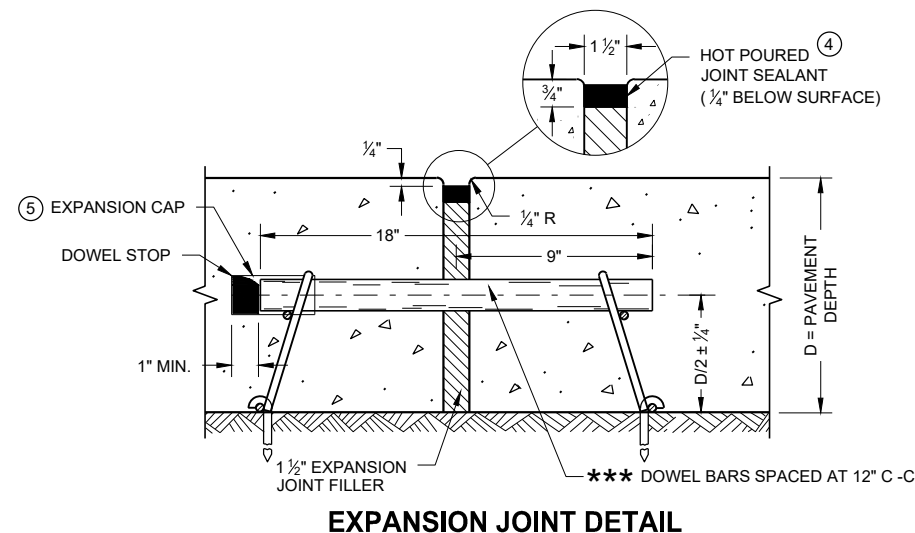
THE CONTRACTOR MAY SPLICE NO. 6 BARS IN THE APPROACH SLAB FOR SKEWED STRUCTURES ONLY. STAGGER SPLICES WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP IS 20 INCHES.

TACK WELD DOWEL BARS TO THE BASKETS ON ALTERNATE ENDS.

- ① THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2' - 0" C - C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.
- ② THE CONTRACTOR MAY OMIT THE BARS BETWEEN REINFORCED SLABS WHERE SLAB REINFORCEMENT BARS EXTEND ACROSS THE CENTERLINE OR REFERENCE LINE.
- ③ DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.
- ④ USE A JOINT SEALANT MEETING THE REQUIREMENTS OF ASTM D6690.
- ⑤ PLACE EXPANSION CAP ON THE END OF THE DOWEL THAT IS NOT TACK WELDED TO THE BASKET. DO NOT FORCE DOWEL BAR PAST THE DOWEL STOP.
- ⑥ EXTEND EXPANSION JOINT THROUGH ANY ADJACENT TIED CONCRETE.
- (A) STANDARD CONTRACTION JOINT NORMAL TO $\mathcal{C}$ OR $\mathcal{R}$.
- (B) STANDARD LONGITUDINAL JOINT WITH TIE BARS.
- (C) 1 1/2" EXPANSION JOINT WITH DOWEL BARS NORMAL TO $\mathcal{C}$ OR $\mathcal{R}$.



**SECTION D - D
CONTRACTION JOINT**



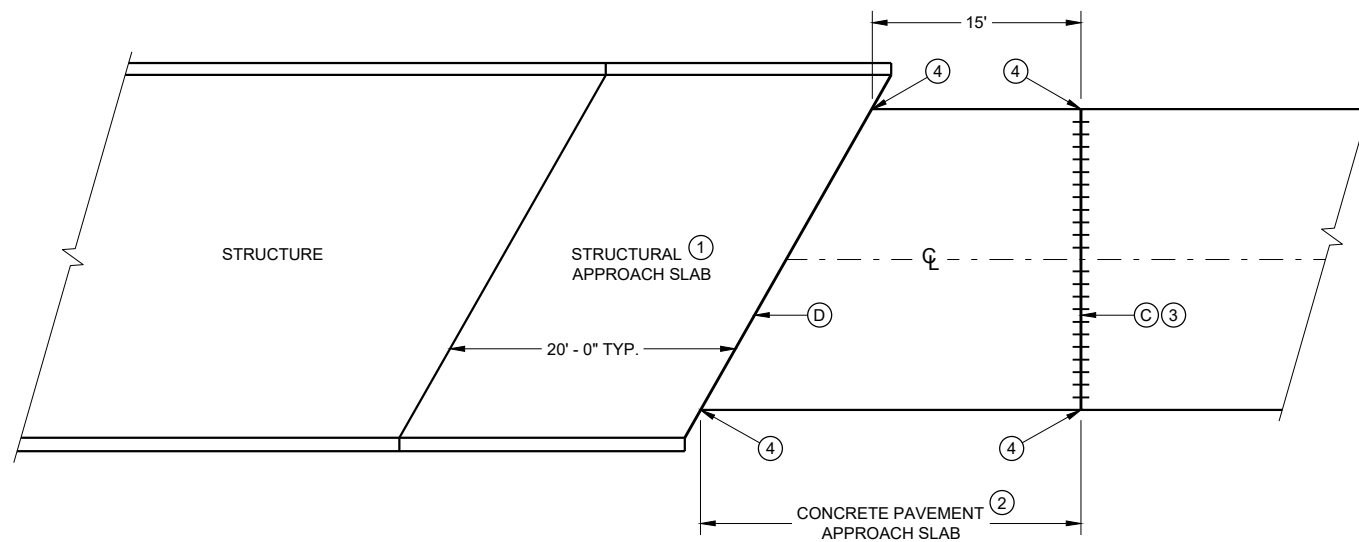
EXPANSION JOINT DETAIL

CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018 /S/ Peter Kemp P.E.
DATE PAVEMENT SUPERVISOR

FHWA

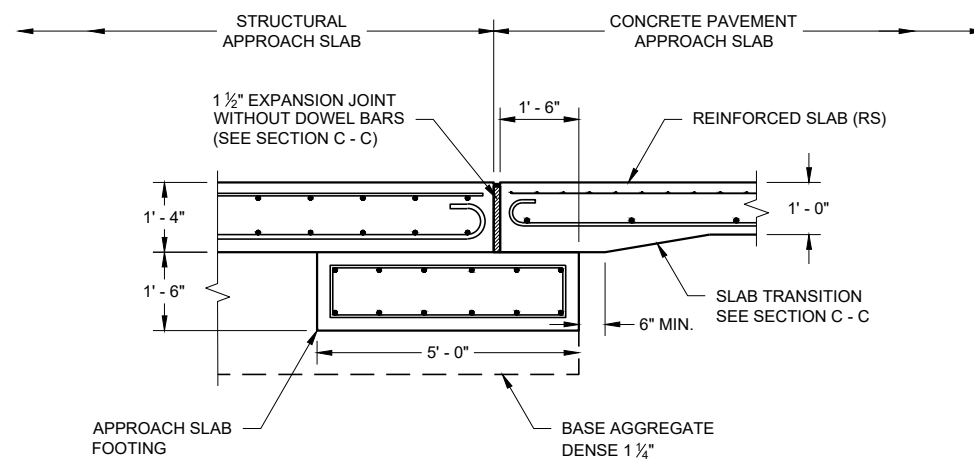


GENERAL NOTES

ALL PROJECTS THAT INVOLVE A STRUCTURAL APPROACH SLAB WILL ALSO HAVE A CONCRETE PAVEMENT APPROACH SLAB.

- ① SEE BRIDGE PLAN.
- ② CONFORM TO SDD 13B02 SHEET A FOR CONCRETE PAVEMENT APPROACH SLAB DETAILS
- ③ DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.
- ④ EXTEND EXPANSION JOINT THROUGH ANY ADJACENT TIED CONCRETE.
- Ⓒ 1 ½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO $\overleftrightarrow{C}$ OR $\overleftrightarrow{R}$.
- Ⓓ 1 ½" EXPANSION JOINT (NO DOWELS)

BRIDGE APPROACHES



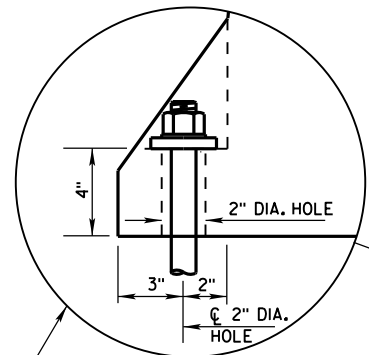
SECTION E - E
FOOTING DETAIL
 STRUCTURAL APPROACH SLAB TO CONCRETE BRIDGE APPROACH

STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB

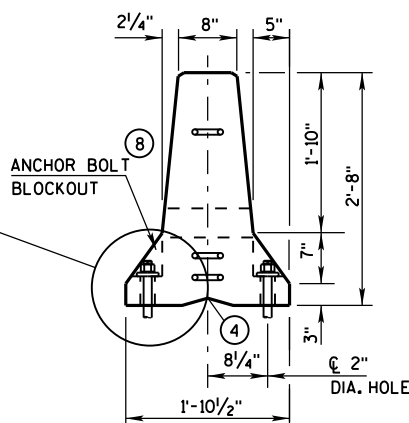
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
 November 2018 /S/ Peter Kemp P.E.
 DATE PAVEMENT SUPERVISOR

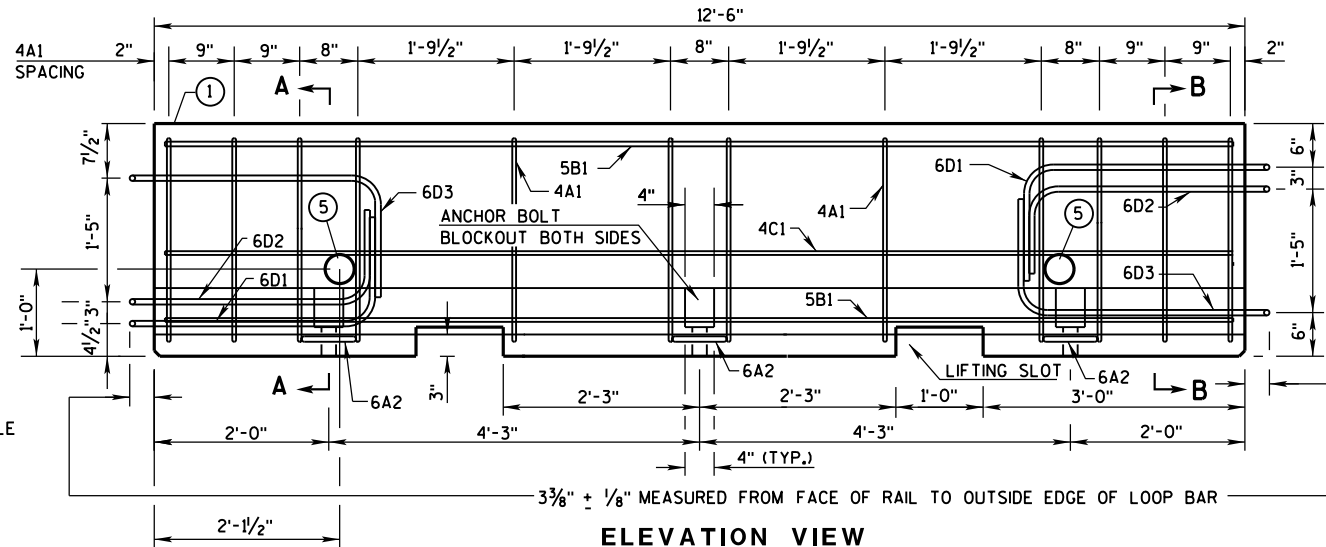
FHWA



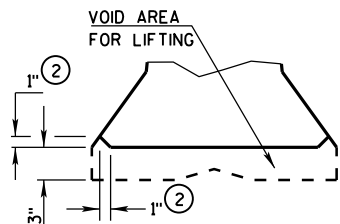
ANCHOR ON TRAFFIC SIDE
ONLY WHEN REQUIRED
(SEE SHEET D FOR ADDITIONAL
ANCHOR DETAIL)



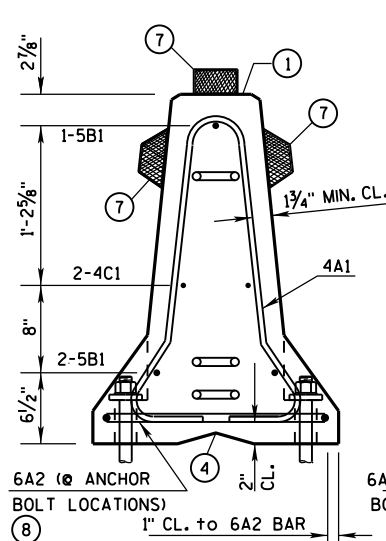
END VIEW



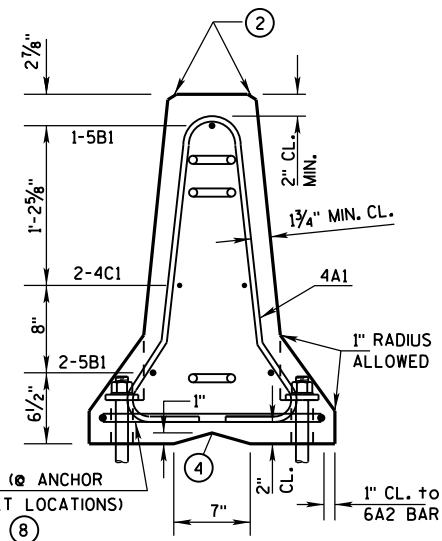
ELEVATION VIEW



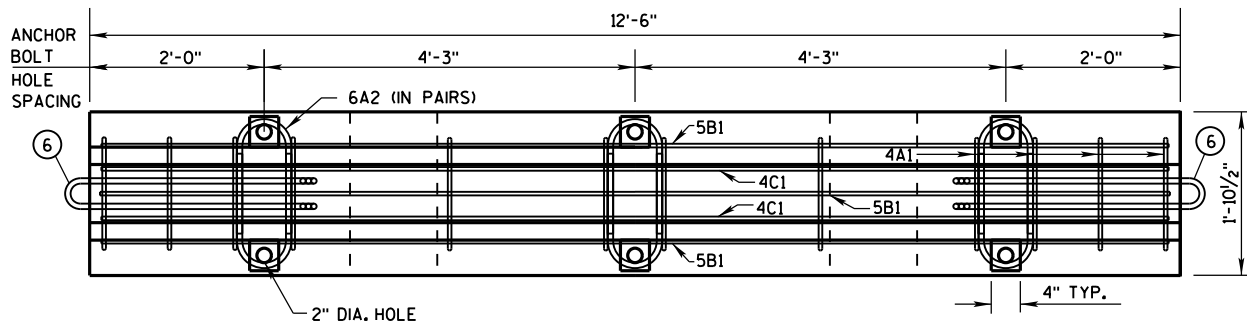
DETAIL "B"
LIFTING SLOT DETAIL



SECTION A-A
(STIRRUP PLACEMENT)

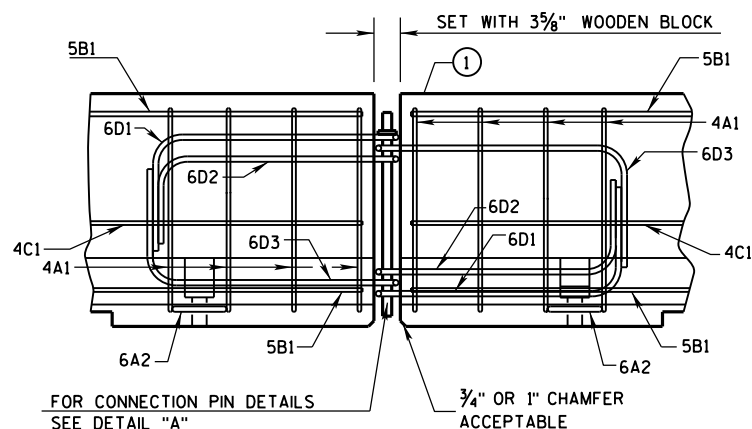


SECTION B-B
(STIRRUP PLACEMENT)

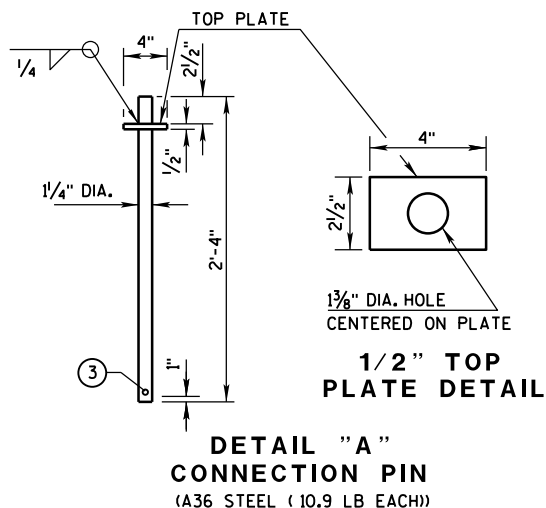


PLAN VIEW

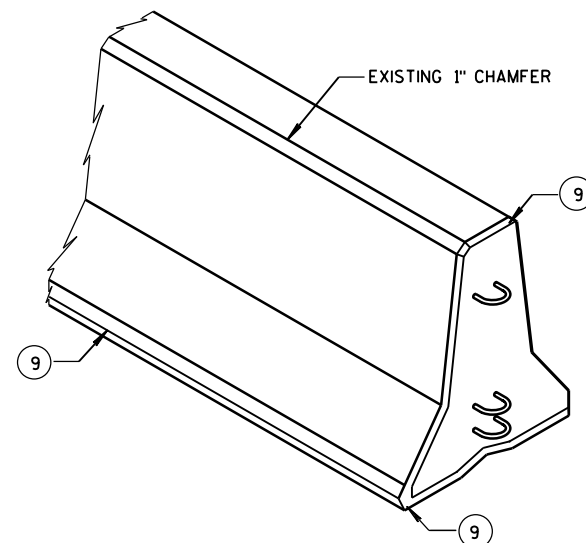
DETAILS OF BARRIER SECTION



DETAILS OF BARRIER CONNECTION



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



GENERAL NOTES

THESE GENERAL NOTES APPLY TO SHEETS 14B7-15(a) THRU 14B7-15(i).

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.

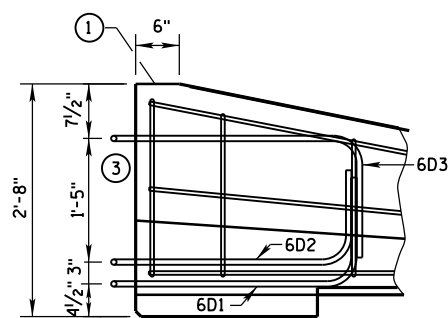
INSTALL MECHANICAL OR ADHESIVE ANCHORS PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE MANUFACTURER'S INFORMATION TO PROJECT ENGINEER.

- 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 HOW TO ANCHOR BARRIER. SEE SHEET E FOR WHEN TO ANCHOR BARRIER.
- 1" CHAMFER OPTIONAL.

f'c = 4,000 psi

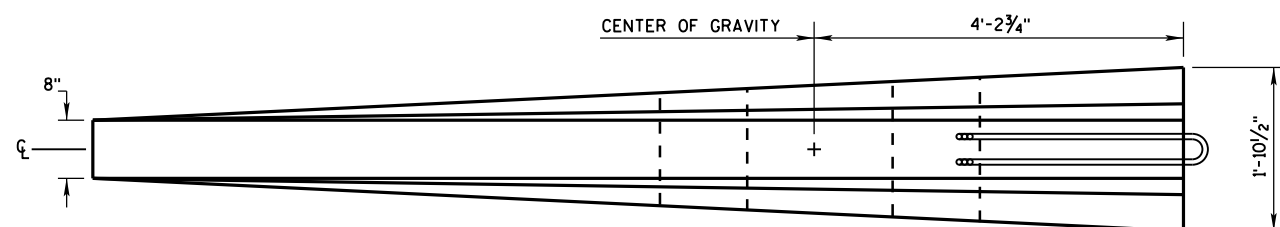
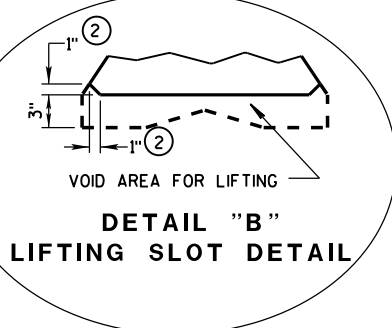
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



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

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



**CHAMFER
DETAIL**

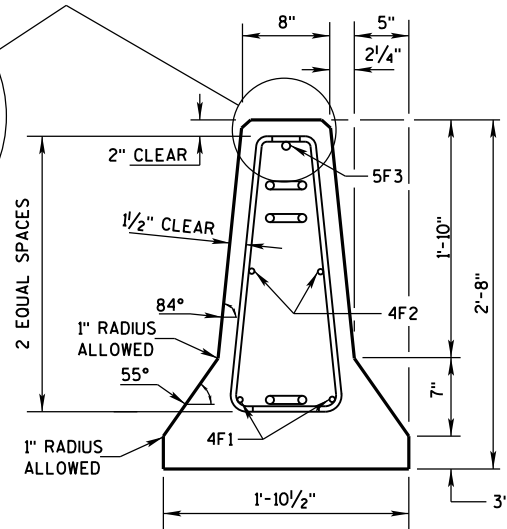


Diagram illustrating the barrier placement on a curve. The diagram shows a cross-section of a barrier with a 10"± OFFSET and a 5°± MAX. angle. The barrier is divided into sections, with dimensions of 12'-6" and 12'-6" indicated. The text "BARRIER ON CURVE" is prominently displayed. The diagram also shows the "END SECTION" of the barrier.

FLARE AT BARRIER END

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

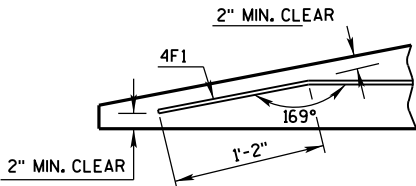
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

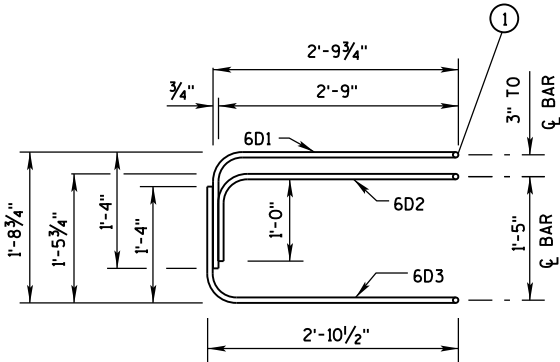
BARRIER TAPER SECTION
BILL OF MATERIALS

(PER 12'-6" BARRIER TAPER SECTION)

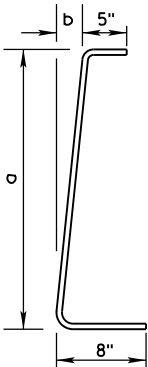
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"
LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"



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

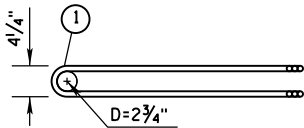
GENERAL NOTES

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

BARRIER SECTION
BILL OF MATERIALS

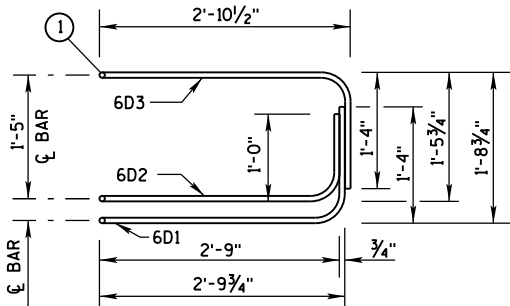
(PER 12'-6" BARRIER SECTION)

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"

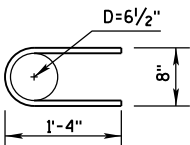


PLAN VIEW
LOOP BAR ASSEMBLY

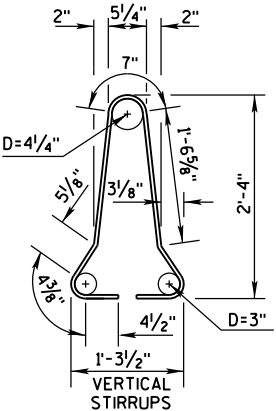
(MARKED END SHOWN, INVERT FOR OTHER END)



ELEVATION VIEW



6A2

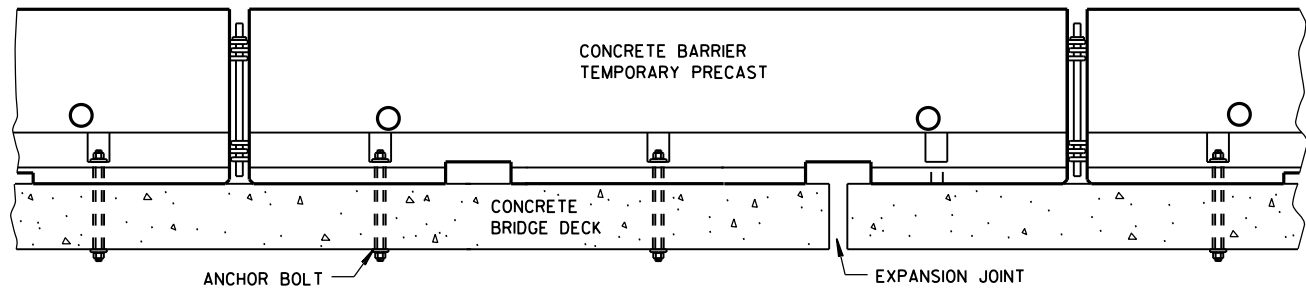
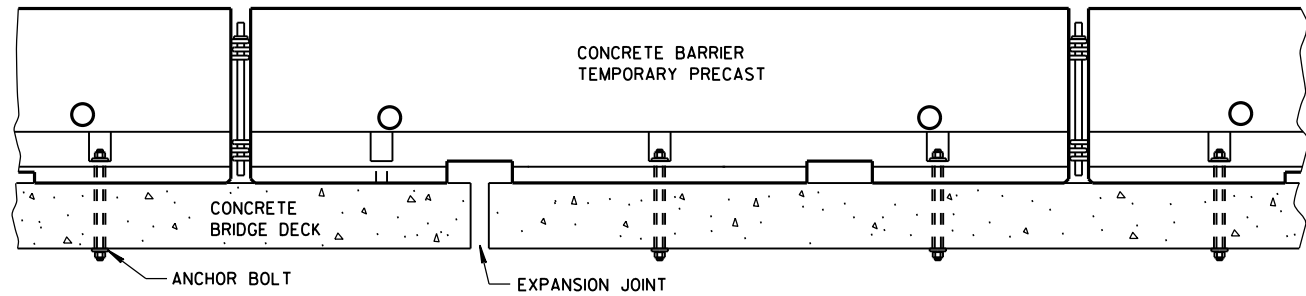


4A1

BARRIER SECTION

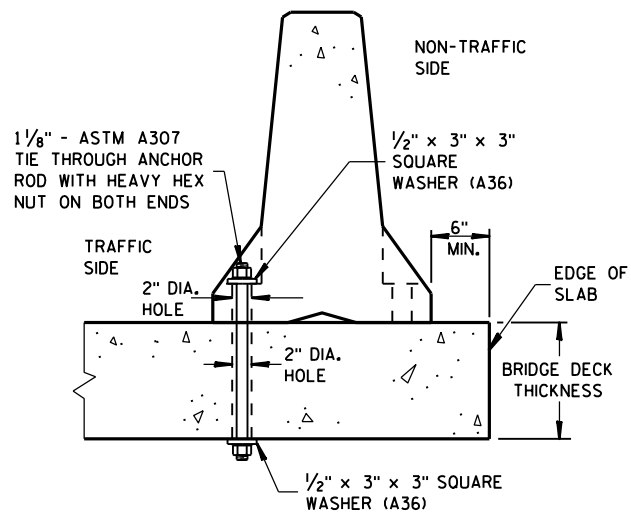
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



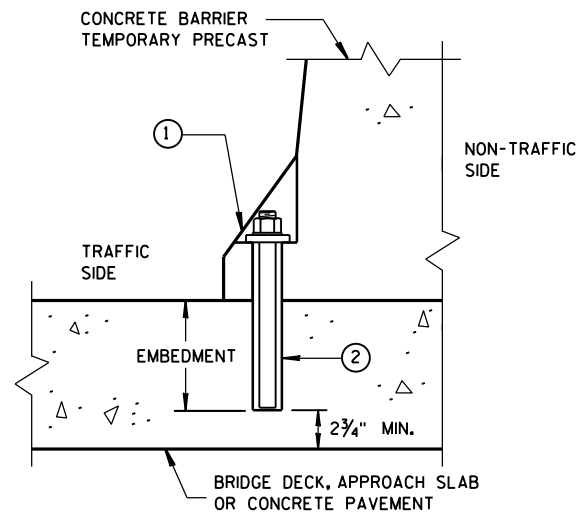
TREATMENT AT BRIDGE DECK EXPANSION JOINTS

(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.)



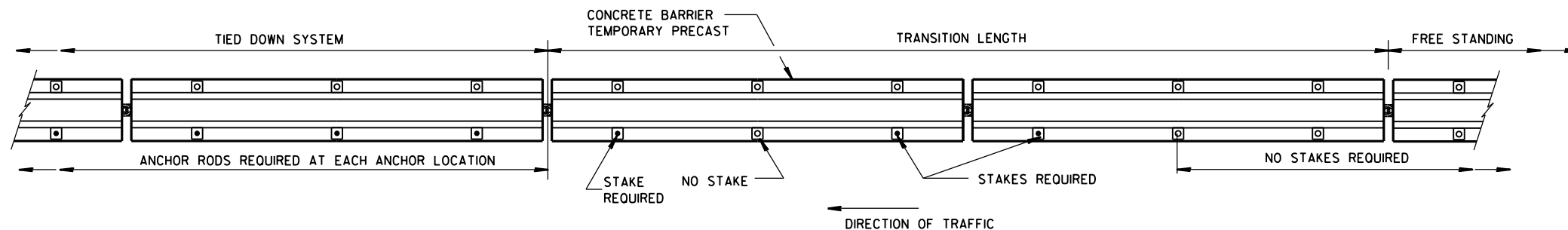
THROUGH BOLTED ANCHOR INSTALLATION ON BRIDGE DECK

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



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

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)



PLAN VIEW

FREE STANDING TRANSITION TO TIED-DOWN SYSTEM

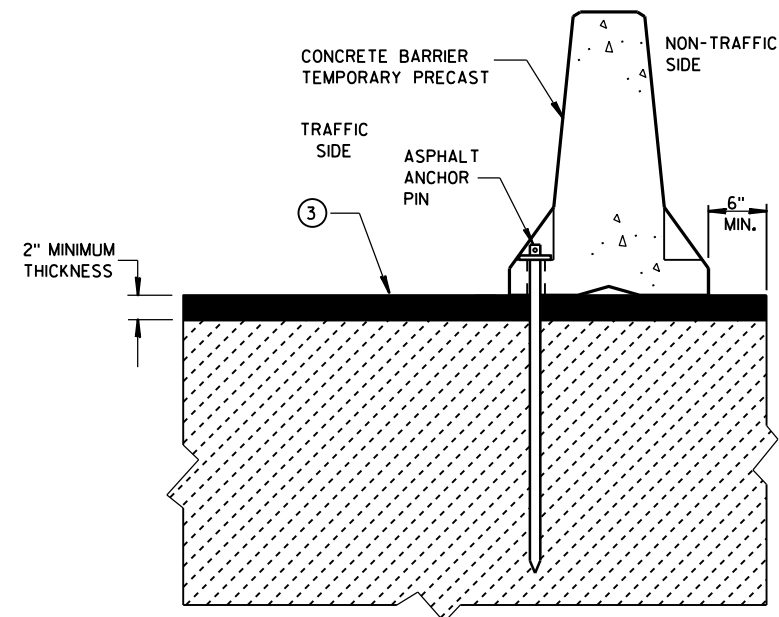
(PLACE TRANSITION IN A TANGENT SECTION OF BARRIER PARALLEL TO THE ROADWAY. IF TRANSITION OCCURS ON STRUCTURAL SLAB, ANCHOR AS SHOWN.)

GENERAL NOTES

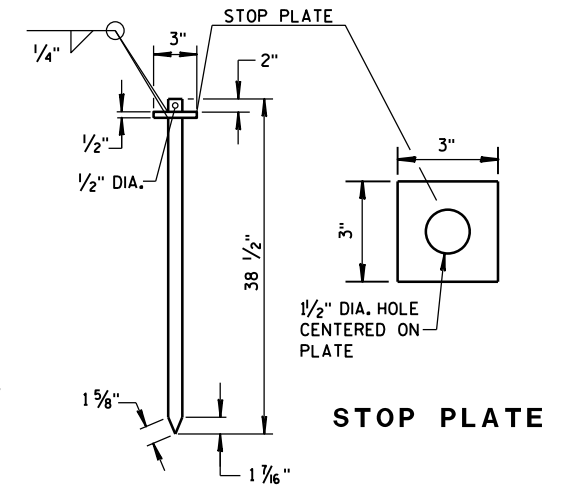
SEE SHEET E FOR WHEN TO ANCHOR. OTHER PARTS OF THE PLAN MAY SHOW ADDITIONAL LOCATIONS REQUIRING ANCHORING.

REMOVE ALL ANCHORS WHEN NO LONGER NEEDED. FILL CONCRETE PAVEMENTS, DECKS AND APPROACH SLABS WITH NON-SHRINK COMMERCIAL GROUT FROM THE APPROVED PRODUCT LIST. FILL ASPHALT PAVEMENTS WITH ASTM D6690 TYPE II RUBBERIZED CRACK FILLER.

- ① 1/8" DIAMETER A307 THREADED ROD, 1/2" X 3" X 3" SQUARE PLATE WASHER WITH ASTM A36 STEEL, ASTM A563A HEAVY HEX NUT.
- ② ADHESIVE ANCHORS WITH A MINIMUM BOND STRENGTH OF 1,800 PSI AND 5/4" EMBEDMENT. SEE 603.2 AND 603.3.12 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.
- ③ ASPHALT SURFACE SHOWN. CONTRACTOR MAY DRILL THROUGH CONCRETE PAVEMENT AND THEN DRIVE ASPHALT ANCHOR PIN.



STAKE DOWN INSTALLATION FOR ASPHALTIC SURFACE

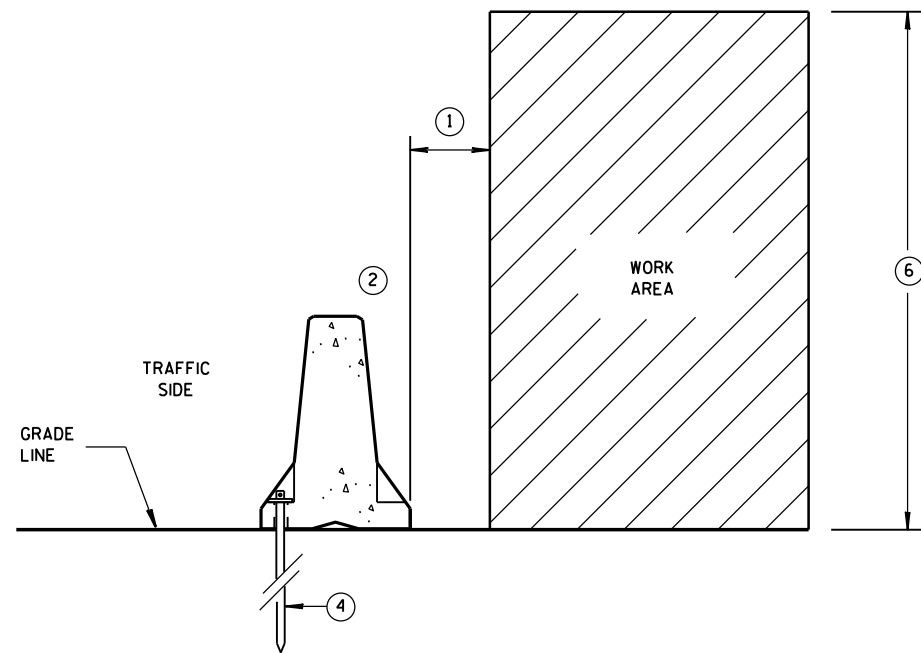


ASPHALT ANCHOR PIN

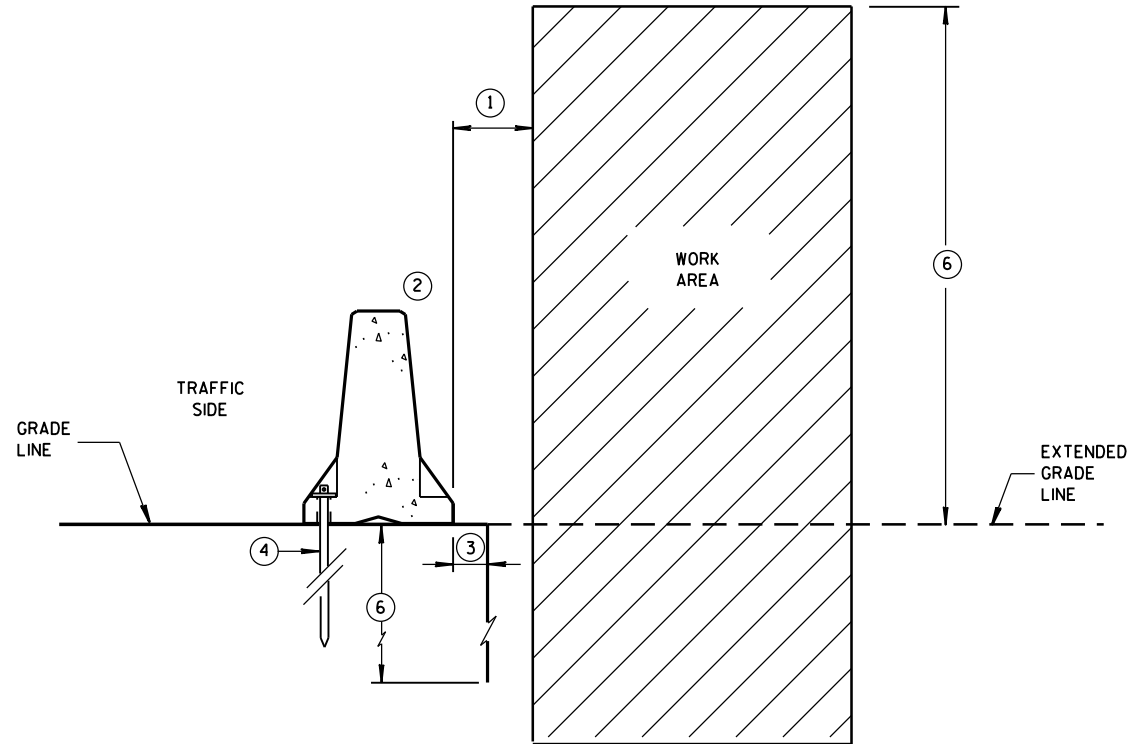
(ASTM A36 STEEL)

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

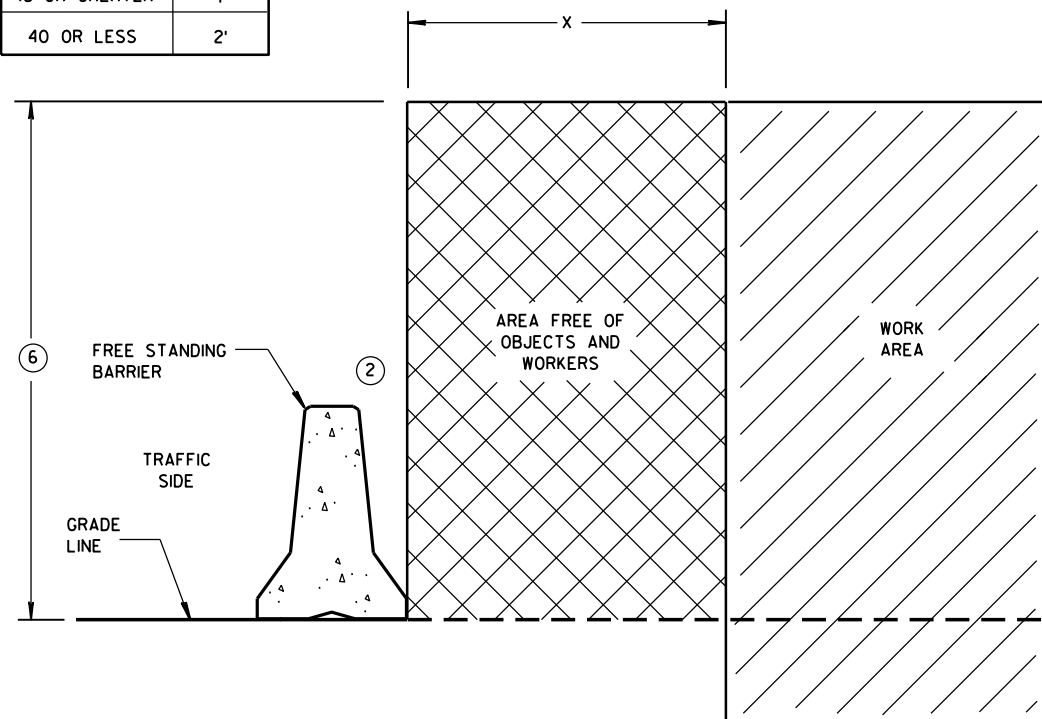


**ANCHORED BARRIER SPACE REQUIREMENTS
FOR HAZARDS EXTENDED
ABOVE THE GRADE LINE**

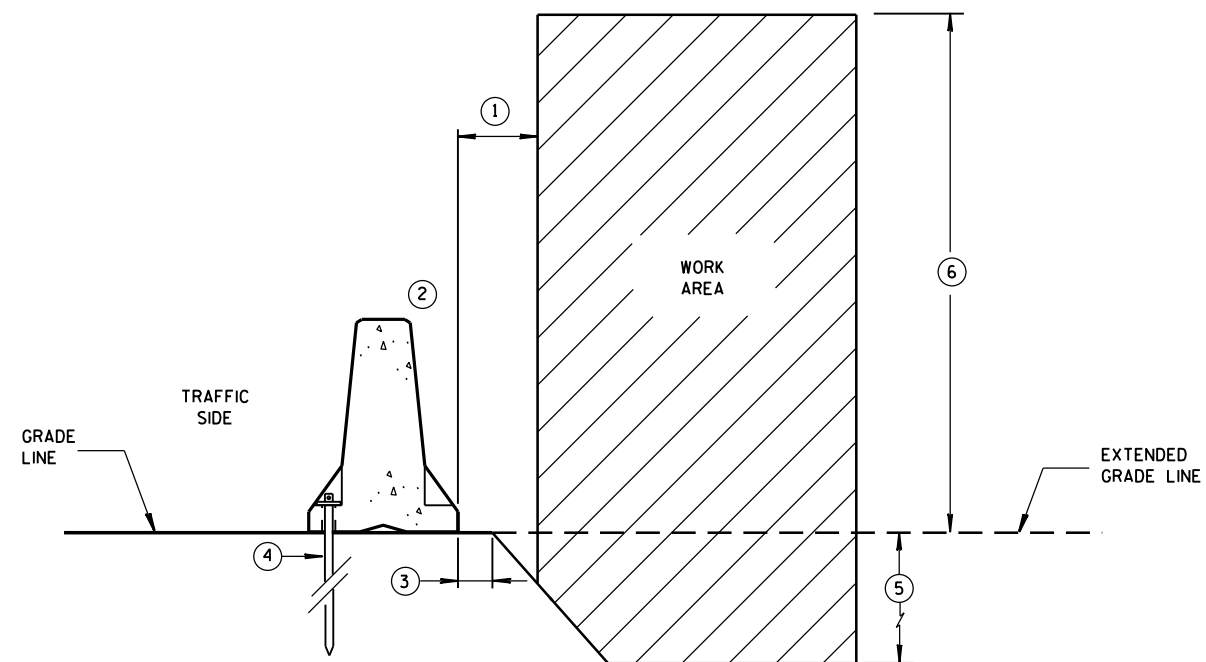


**ANCHORED BARRIER SPACE REQUIREMENTS
ON VERTICAL DROP OFFS**

POSTED SPEED MPH	X
45 OR GREATER	4'
40 OR LESS	2'



FREE STANDING BARRIER SPACE REQUIREMENTS



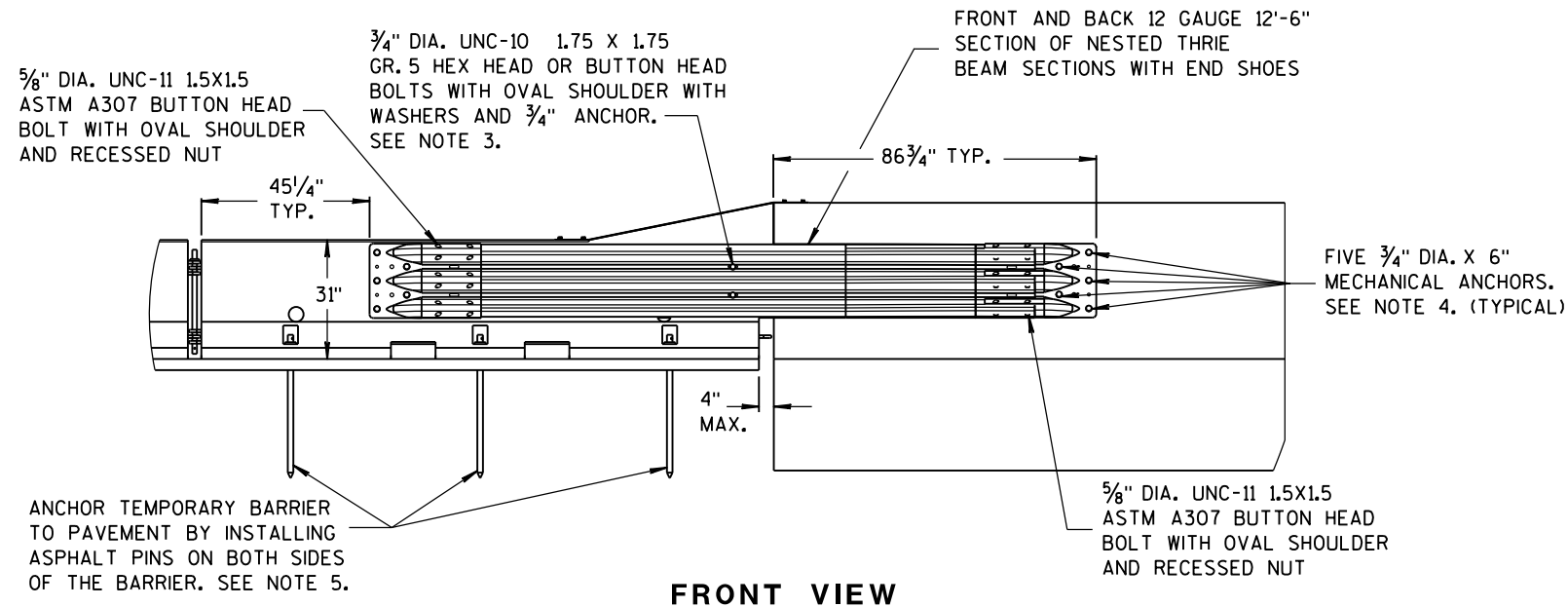
**ANCHORED BARRIER SPACE REQUIREMENTS
ON SLOPES**

GENERAL NOTES

- 1 WHEN OBJECTS EXTEND ABOVE THE GRADE, A MINIMUM OF 1 FOOT IS REQUIRED FROM BACK OF BARRIER TO OBJECT. SEE OTHER DETAILS FOR THE MINIMUM OFFSET FROM BACK OF BARRIER TO SLOPES OR VERTICAL DROPS.
- 2 OBJECTS ARE NOT TO BE PLACED ON, MOUNTED TO, OR LEANED AGAINST THE BARRIER WITHOUT PERMISSION OF THE PROJECT ENGINEER.
- 3 SEE OTHER DETAIL ON SHEET "D" FOR SPACE REQUIREMENTS.
- 4 SEE BOLT THROUGH DECK, REMOVABLE ADHESIVE ANCHOR, OR A STAKE DOWN FOR ASPHALTIC SURFACE TREATMENT DETAILS. ASPHALTIC ANCHOR SHOWN.
- 5 DEPTH OF 3 FEET OR MORE.
- 6 Y = 6'-6".

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



FRONT VIEW

NOTES

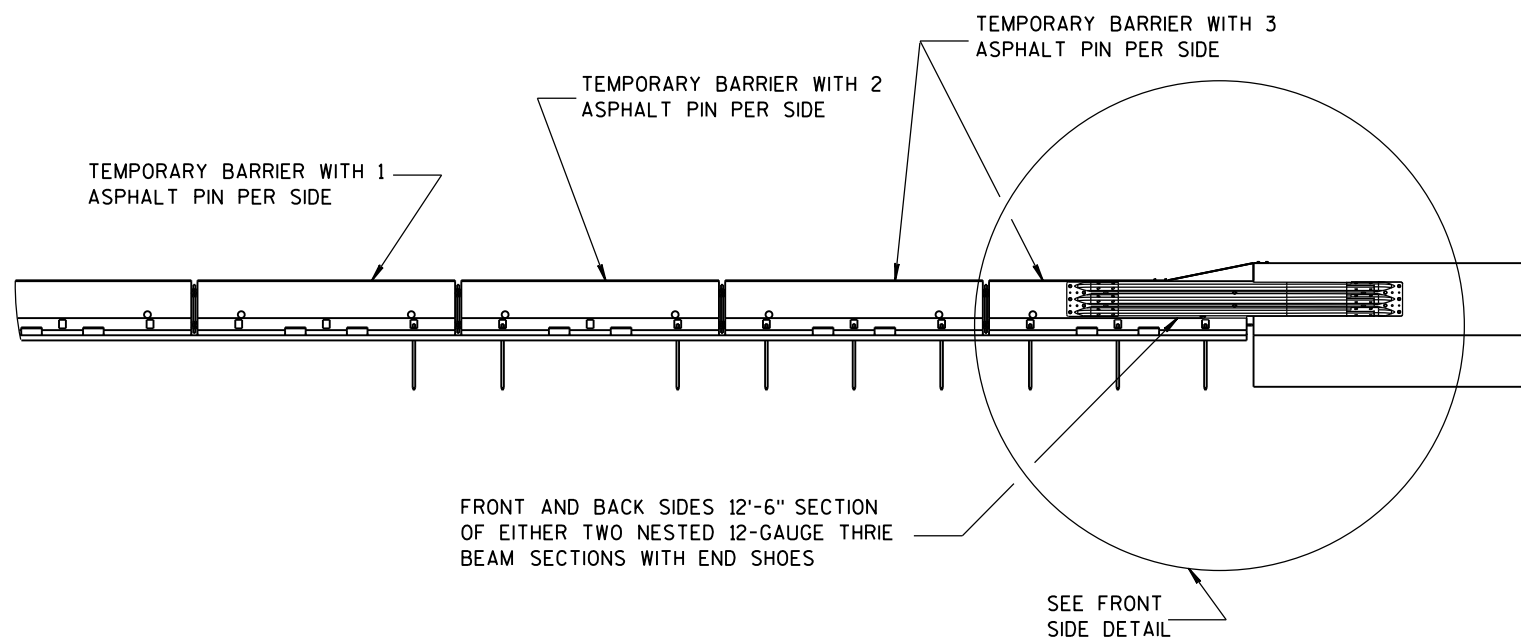
NESTED THRIE BEAM IS REQUIRED ON BOTH SIDES OF THE TEMPORARY BARRIER FOR ALL INSTALLATIONS REGARDLESS OF TRAFFIC.

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 ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS.

4. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 17.9 KIPS AND ULTIMATE SHEAR LOAD 21.96 KIPS.

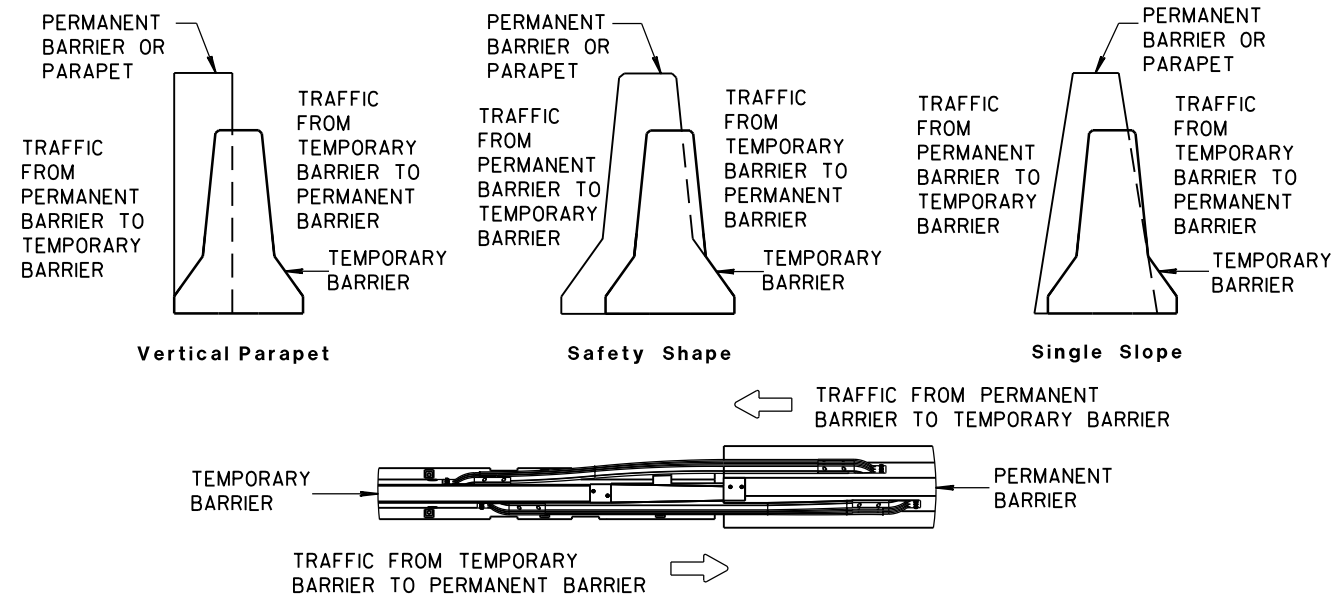
5. MAY BE USED ON CONCRETE OR ASPHALT PAVEMENTS. ASPHALT OPTION SHOWN. FOR CONCRETE OPTION SEE OTHER DETAILS.

6. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.

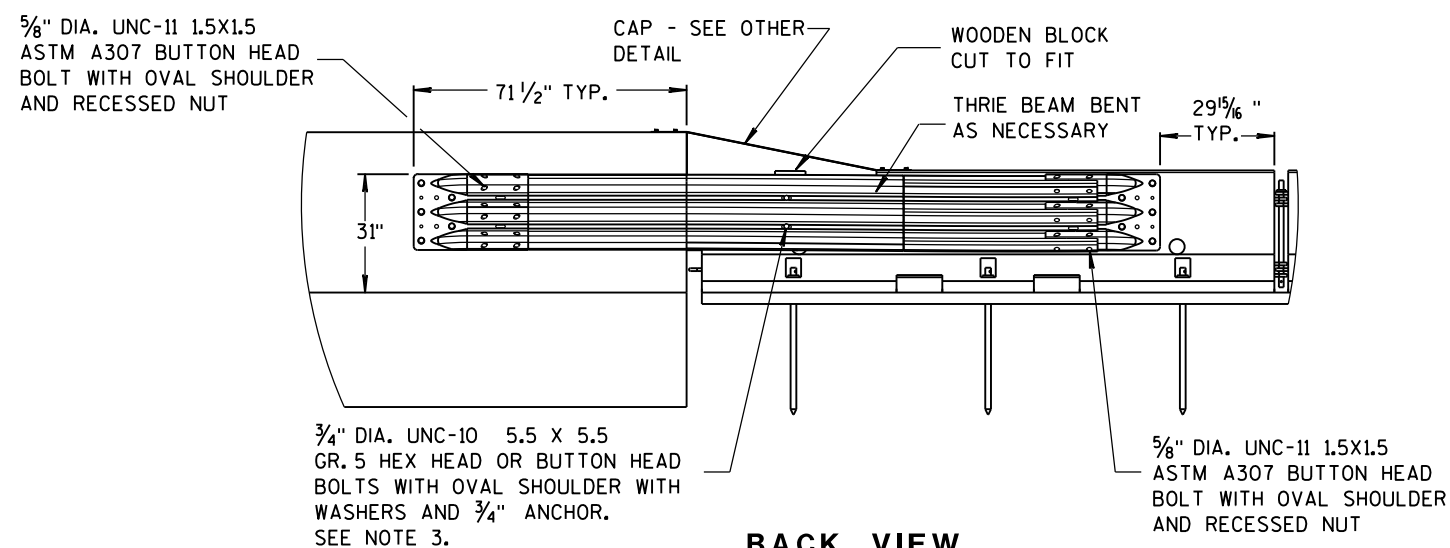


FRONT VIEW

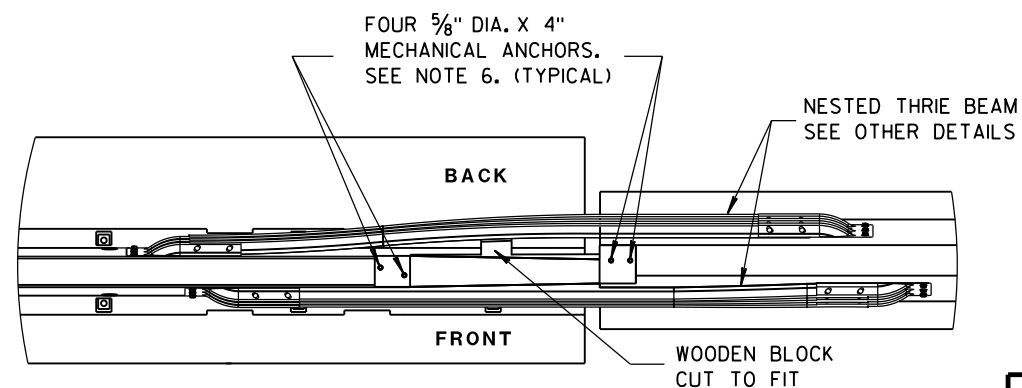
BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM



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



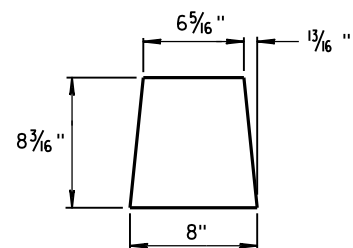
BACK VIEW



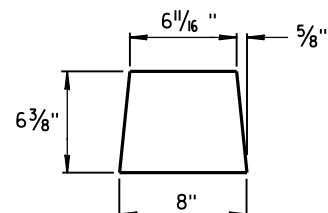
PLAN VIEW

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

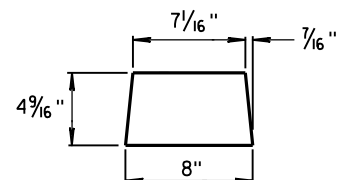
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



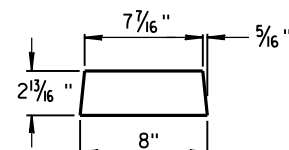
GUSSET 1



GUSSET 2

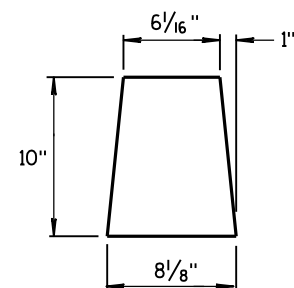


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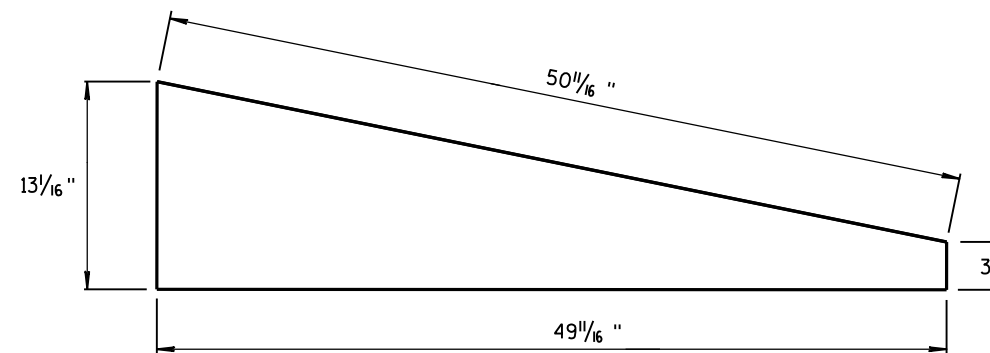


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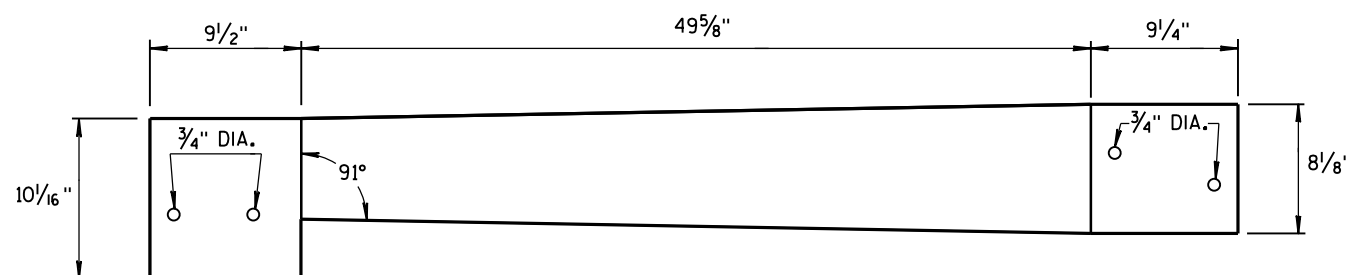
GUSSETS



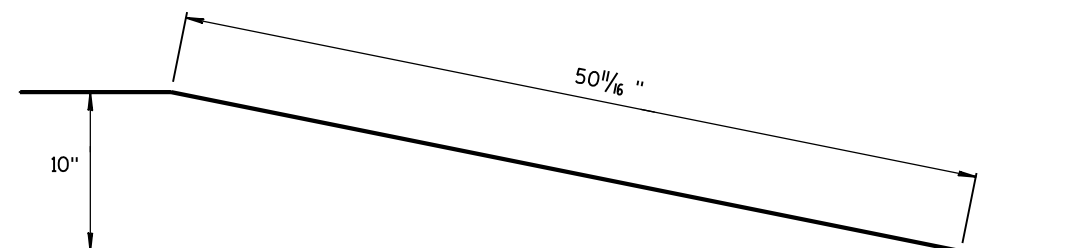
END PLATE



SIDE PLATE

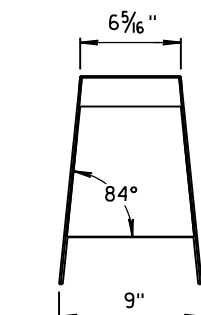
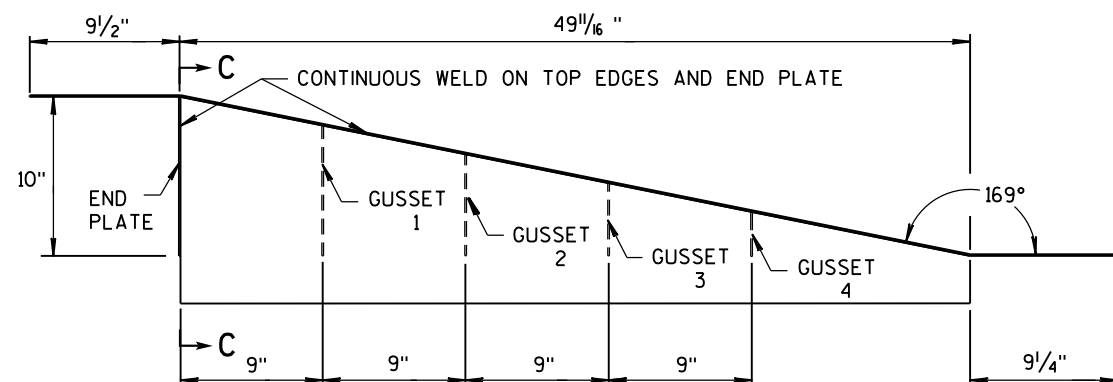
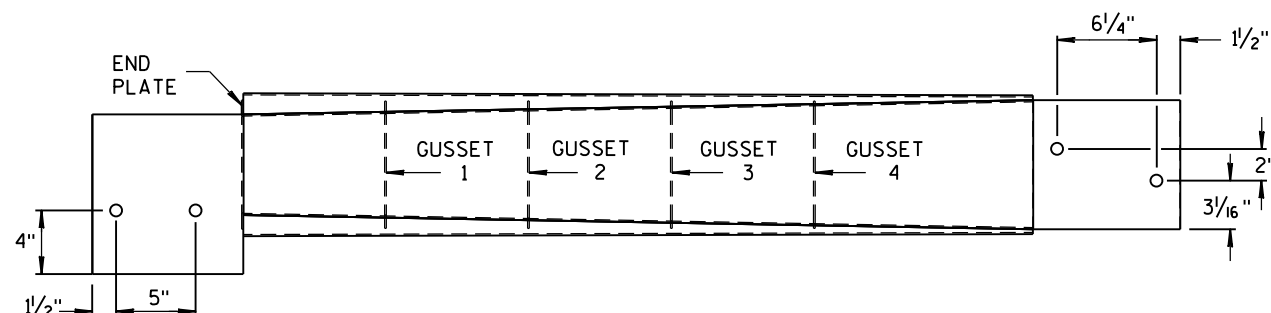


TOP PLATE



**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

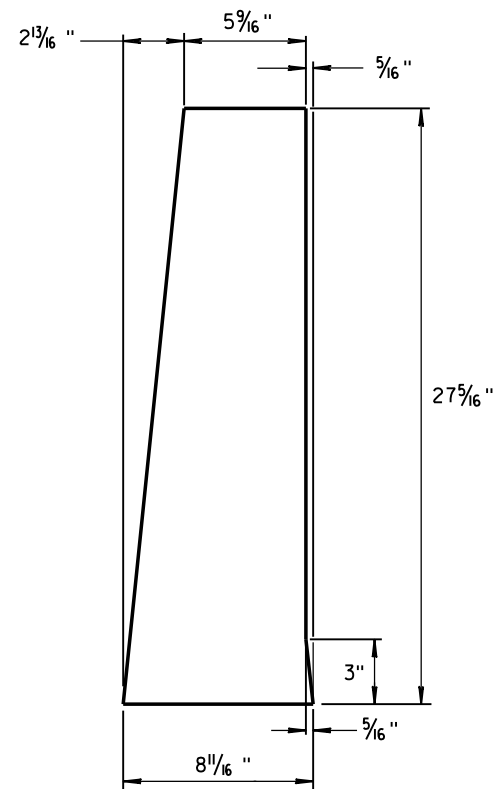
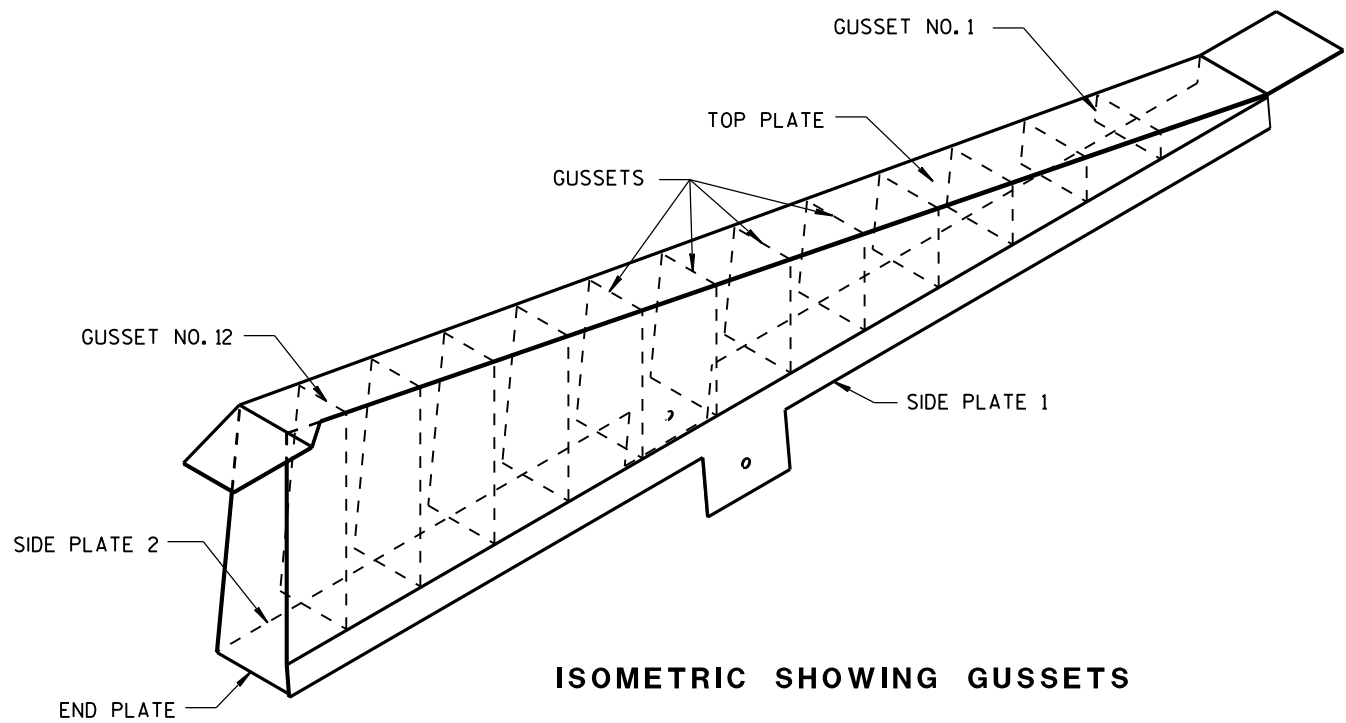
NOTES

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.

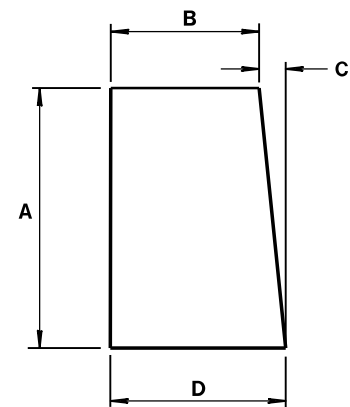
**CAP DETAILS FOR TEMPORARY CONCRETE
BARRIER TO 42" PERMANENT CONCRETE BARRIER**

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



1/8" STEEL PLATE

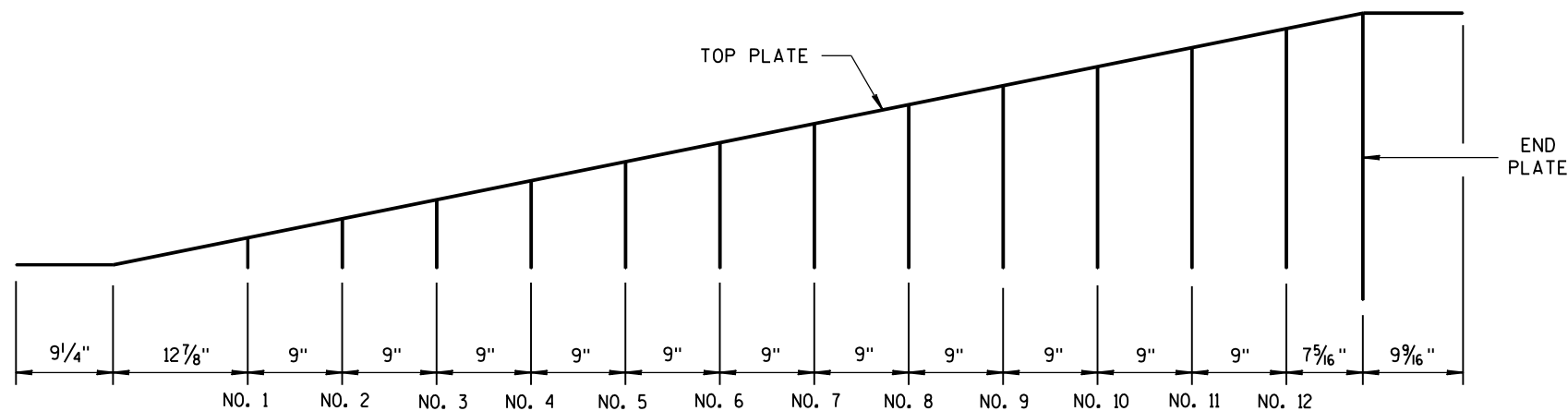


ALL GUSSETS 1/8" STEEL PLATE

GUSSET DIMENSIONS				
GUSSET NO.	A	B	C	D
1	2 7/8"	7 3/4"	1/4"	8
2	4 1/16 "	7 9/16 "	1/2"	8
3	6 1/2"	7 3/8 "	1 1/16 "	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.

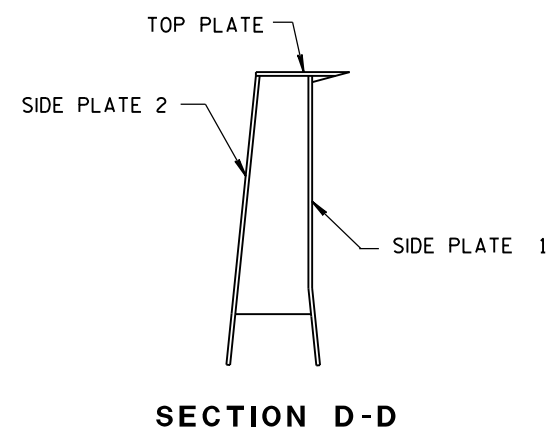
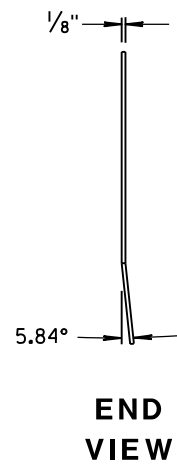
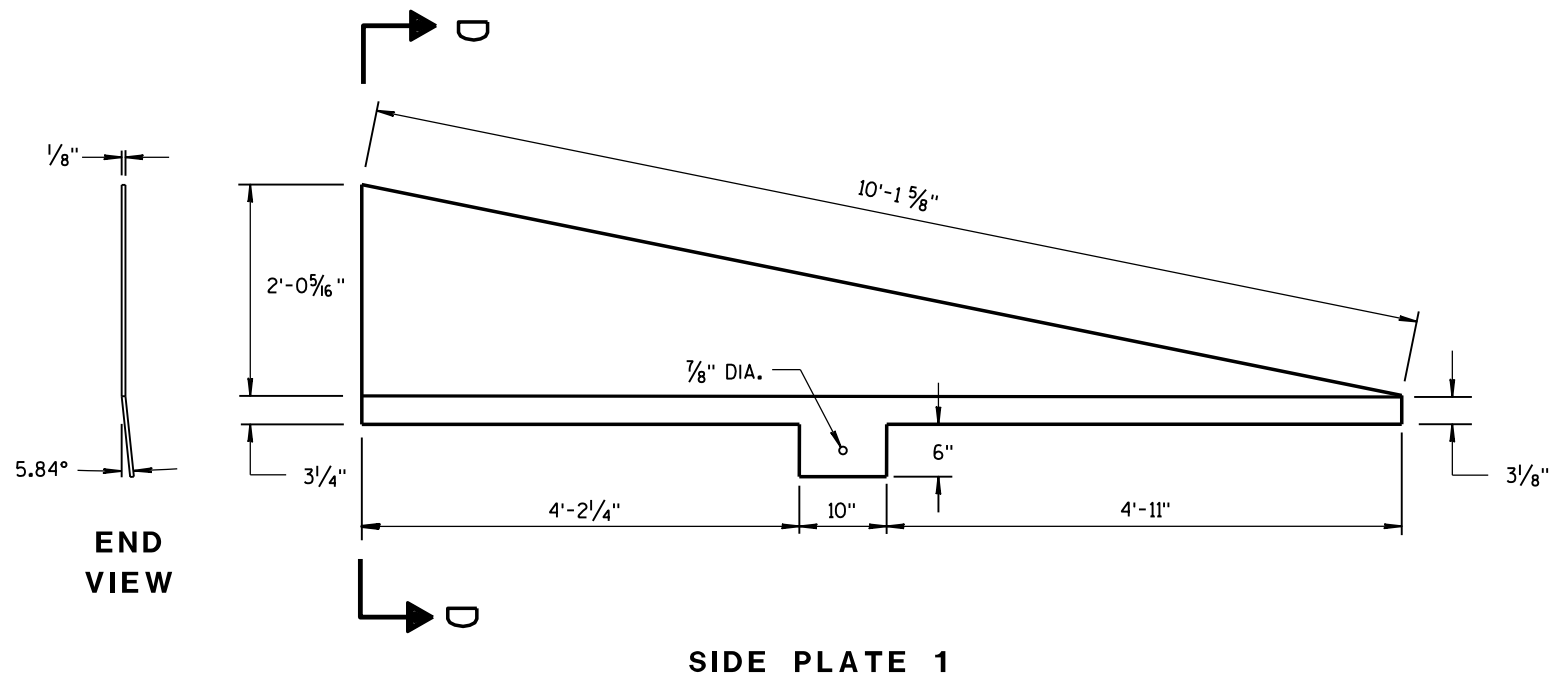
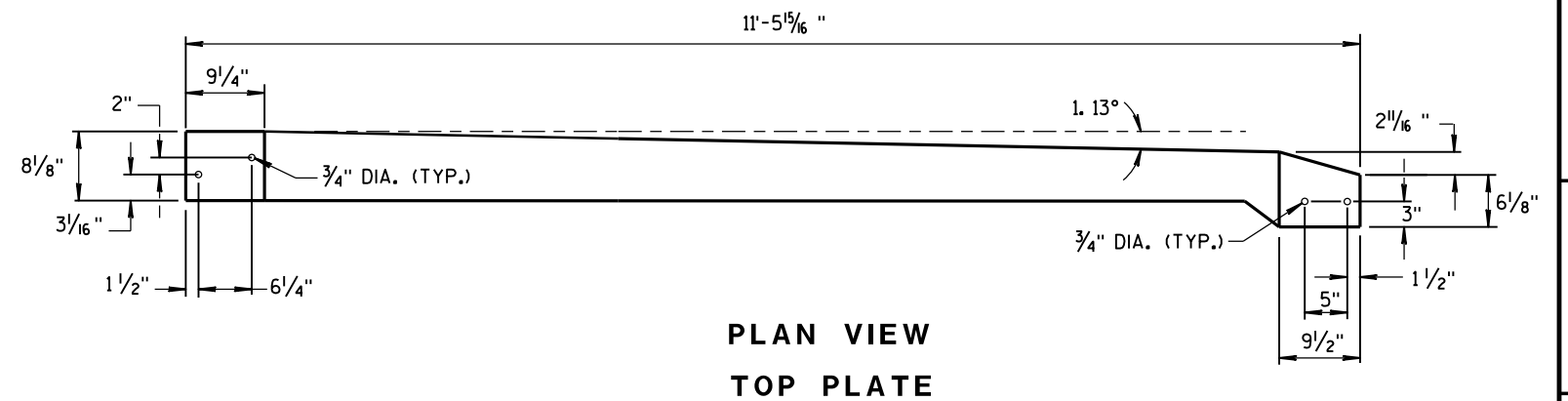
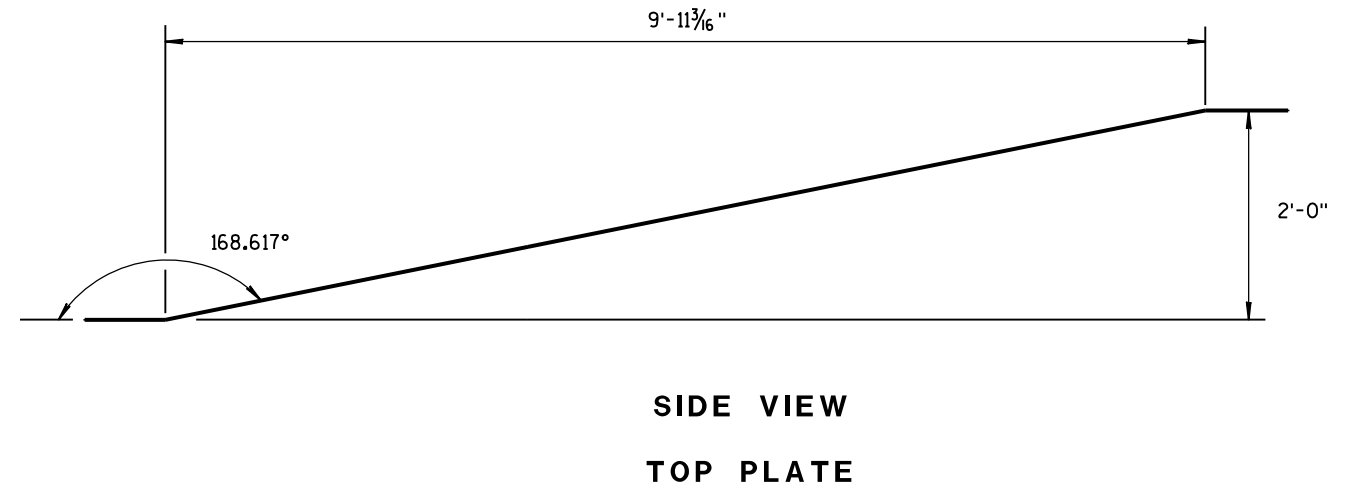
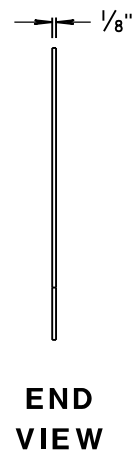
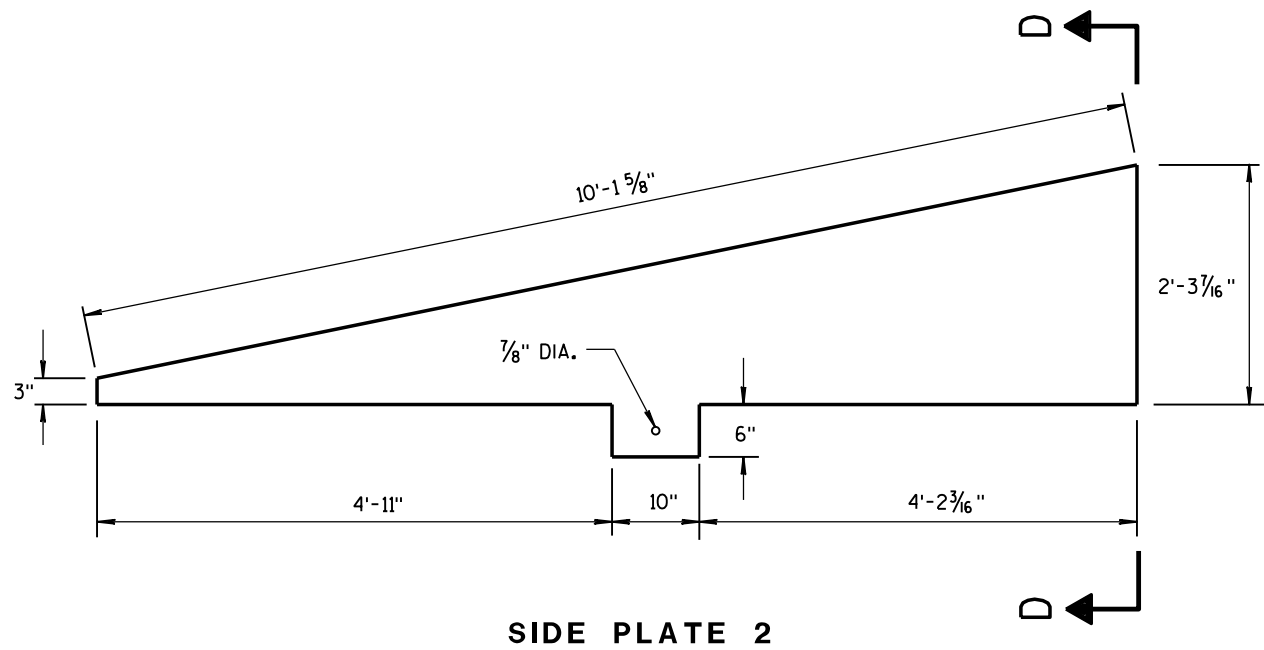
GUSSETS AND END PLATE ARE STITCH WELDED ON 3 SIDES. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE AND GUSSETS.



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

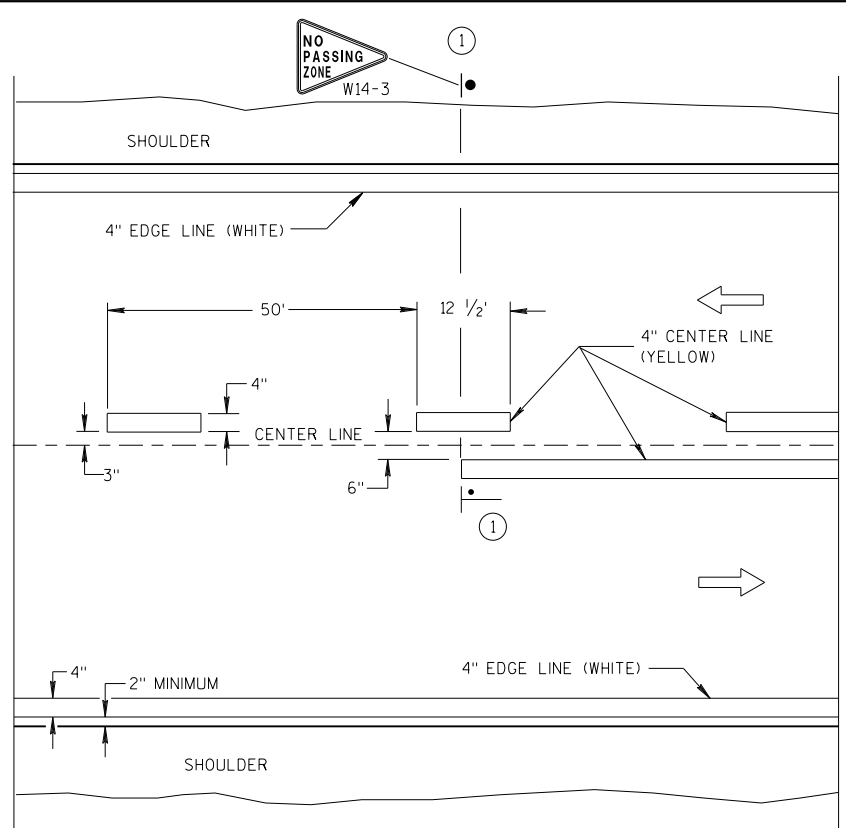
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

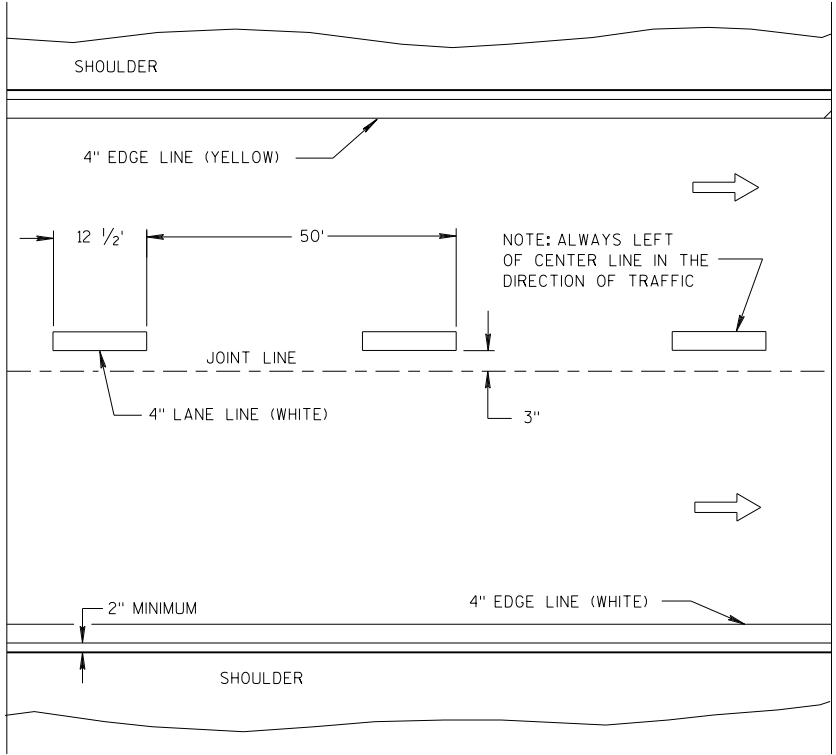


**CAP DETAILS FOR TEMPORARY CONCRETE
BARRIER TO 56" PERMANENT CONCRETE BARRIER**

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2017 DATE	/S/ Rodney Taylor ROADWAY STANDARD DEVELOPMENT UNIT SUPERVISOR
FHWA	

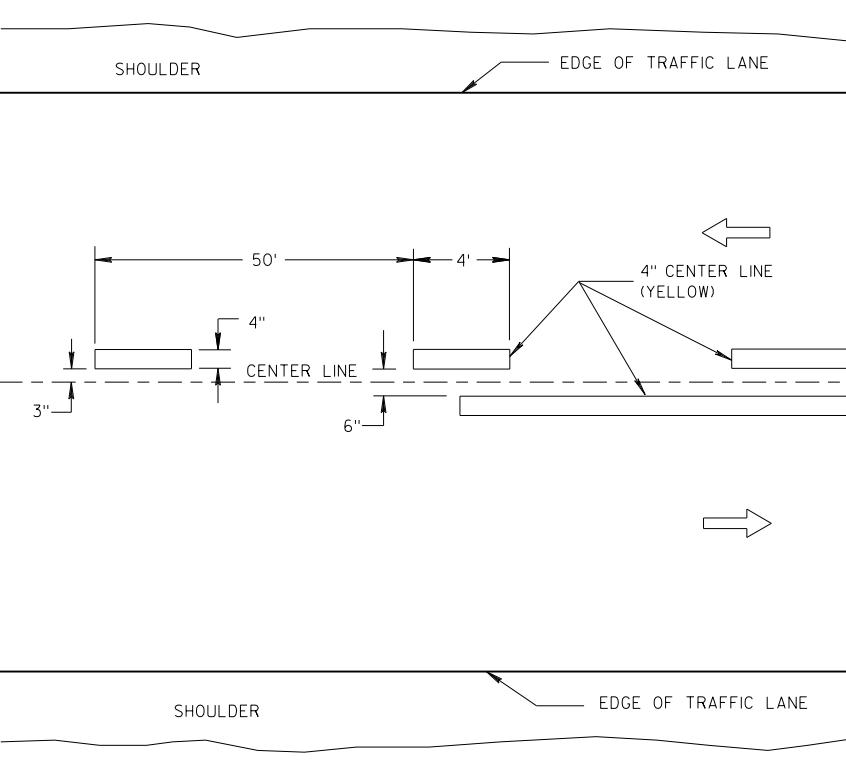


TWO WAY TRAFFIC

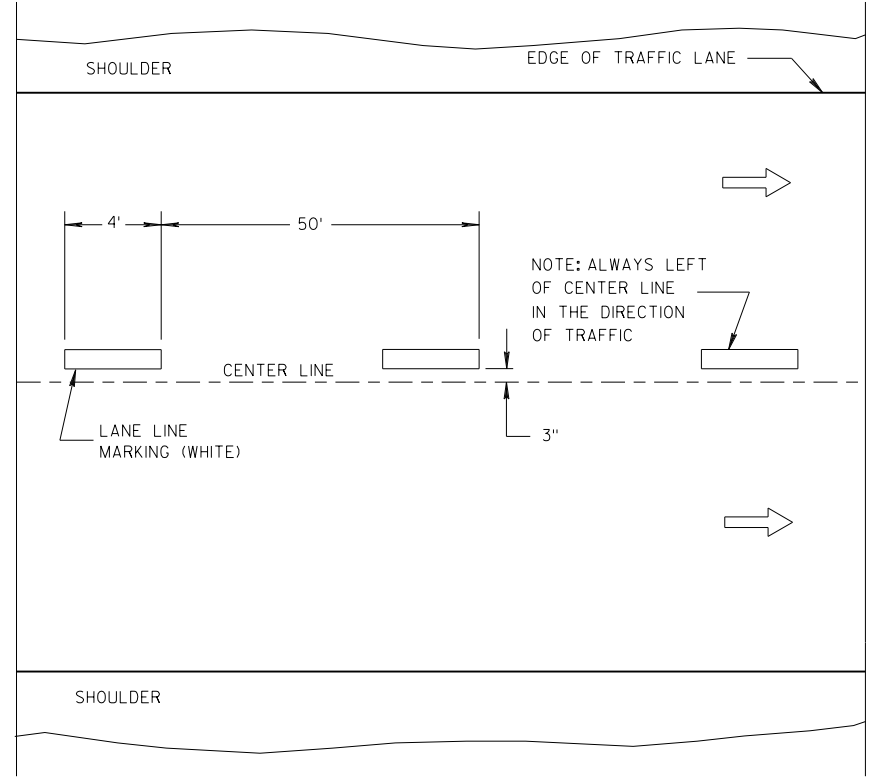


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

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

① LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING.

NOTE

ARROW SYMBOL (➡) SHOWS DIRECTION OF TRAVEL

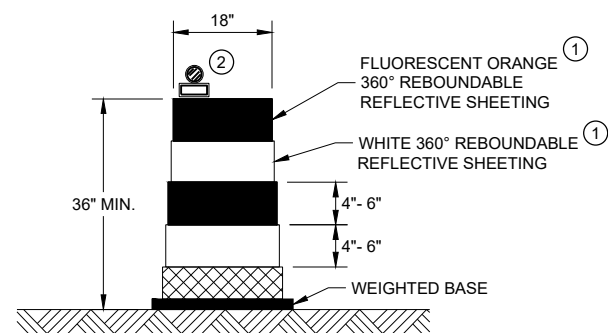
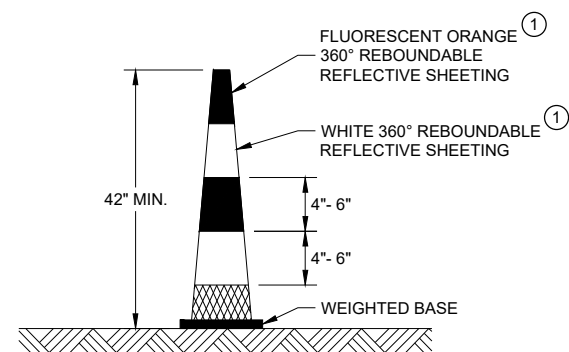
LEGEND

- "T" MARKING
- POST MOUNTED SIGN

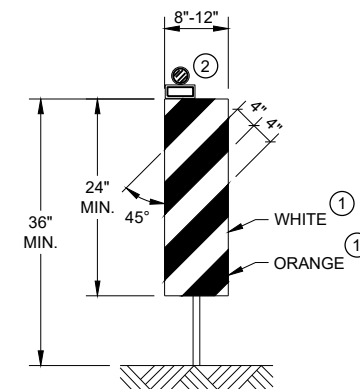
LONGITUDINAL MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

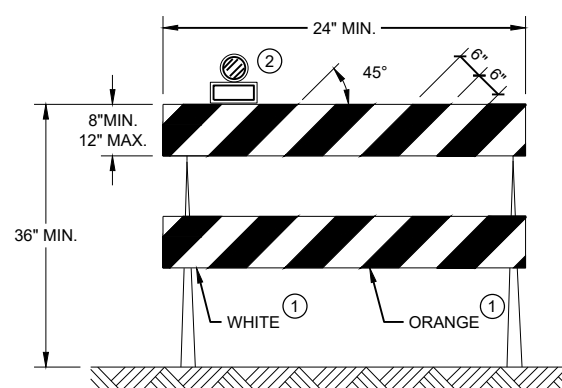
APPROVED
7/2018 /S/ Matthew R. Rauch
DATE STATE SIGNING AND MARKING ENGINEER
FHWA

**DRUM****42" CONE**

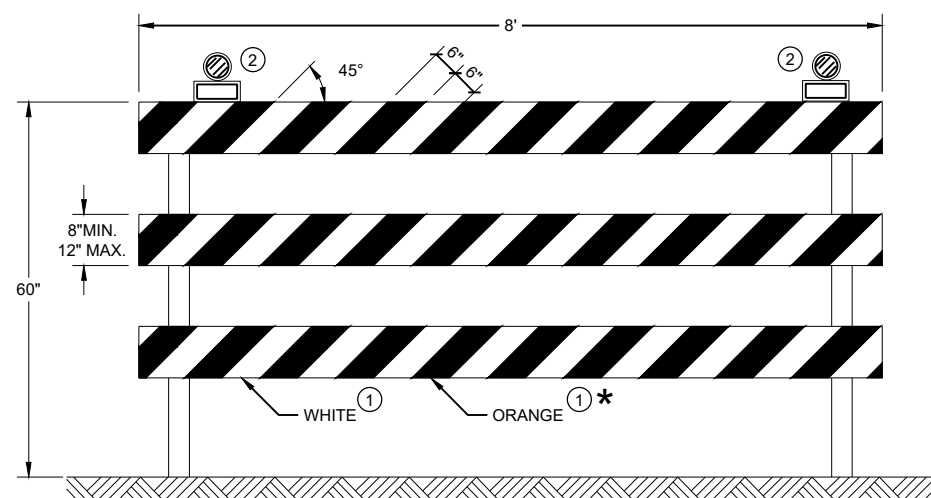
DO NOT USE IN TAPERS
 $\frac{1}{2}$ SPACING OF DRUMS

**VERTICAL PANEL**

THE STRIPES SHALL SLOPE DOWNWARD TO
 THE TRAFFIC SIDE FOR CHANNELIZATION.

**TYPE II BARRICADE**

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
 MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
 TO THE TRAFFIC SIDE FOR CHANNELIZATION.

**TYPE III BARRICADE**

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
 TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

GENERAL NOTES

- ① REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
- ② LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.

**CHANNELIZING DEVICES
 DRUMS, CONES, BARRICADES
 AND VERTICAL PANELS**

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION

APPROVED
 June 2017 /S/ Andrew Heidtke
 DATE WORK ZONE ENGINEER

FHWA

LEGEND

-  SIGN ON PORTABLE OR PERMANENT SUPPORT
-  TEMPORARY PORTABLE RUMBLE STRIP ARRAY
-  DIRECTION OF TRAFFIC
-  WORK AREA
-  FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

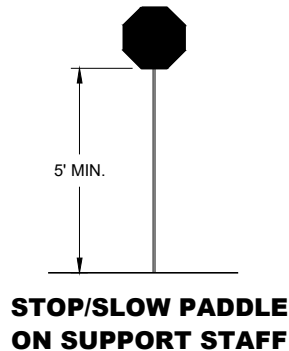
THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS, DEVICES, AND LOCATION OF ALL FLAGGERS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGING

- FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.
- FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.
 - SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.
- WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.
- TEMPORARY PORTABLE RUMBLE STRIPS**
- UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.
- EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.
- ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FOR THE APPROVED PRODUCTS LIST.
- INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.
- PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.
- DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.

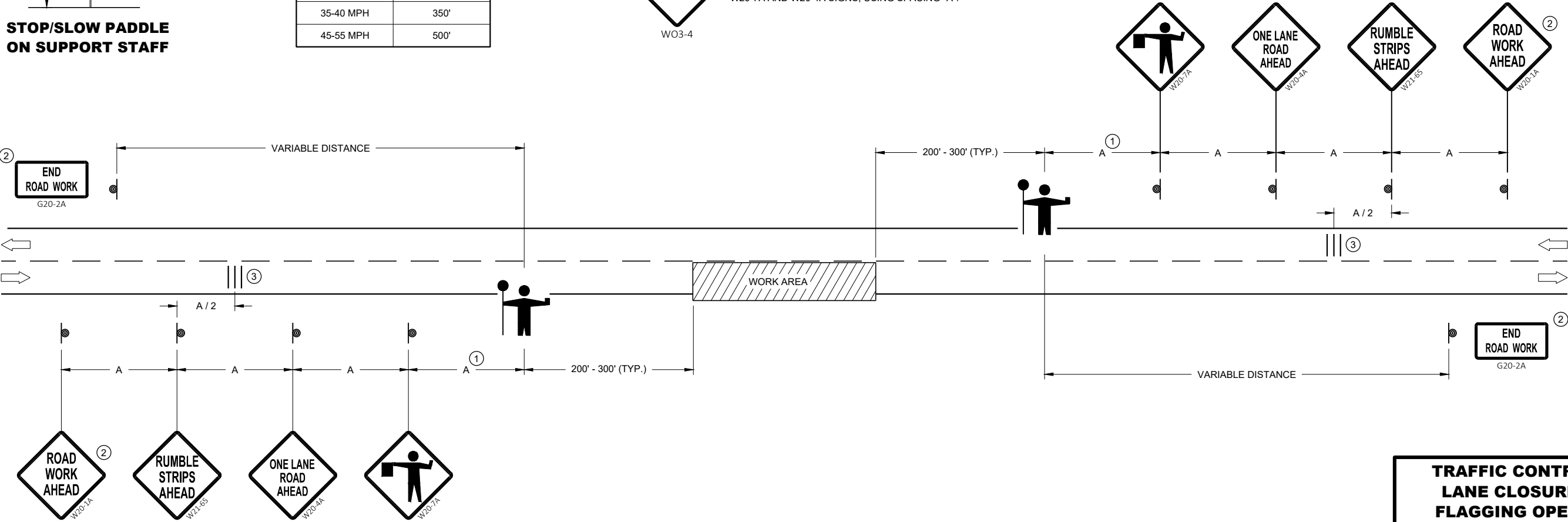


SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



USE OF W03-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2019 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

LEGEND

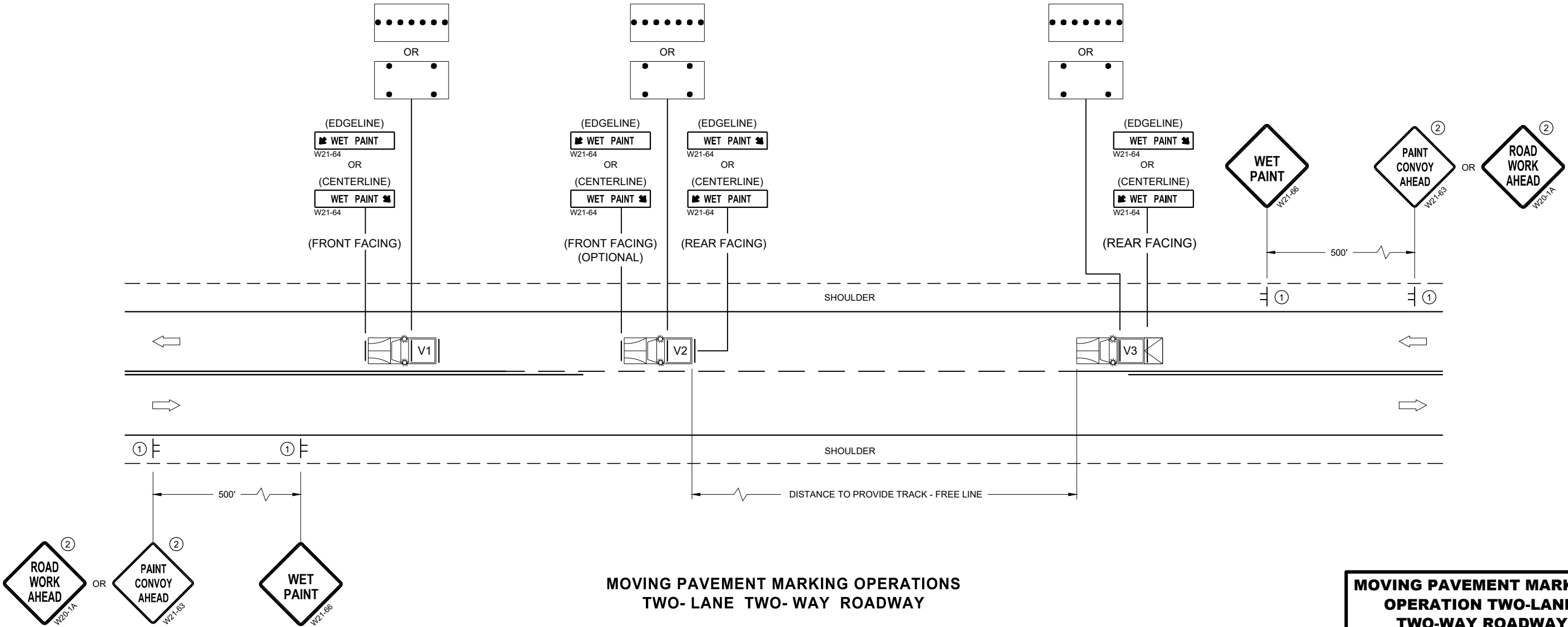
- V1 LEAD VEHICLE
- V2 MARKING VEHICLE
- V3 SHADOW VEHICLE
-  TRUCK MOUNTED ATTENUATOR (TMA)
-  SIGN ON TEMPORARY SUPPORT
-  DIRECTION OF TRAFFIC
-  FLASHING ARROW PANEL (CAUTION)

GENERAL NOTES

- ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.
- ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE SPECIFIED.
- DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.
- THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

- WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.
- CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.
- CONES SHALL BE A MINIMUM OF 18" FOR WET PAVEMENT MARKING .

- ① SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.
- ② IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.



MOVING PAVEMENT MARKING OPERATIONS
TWO-LANE TWO-WAY ROADWAY

MOVING PAVEMENT MARKING
OPERATION TWO-LANE
TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

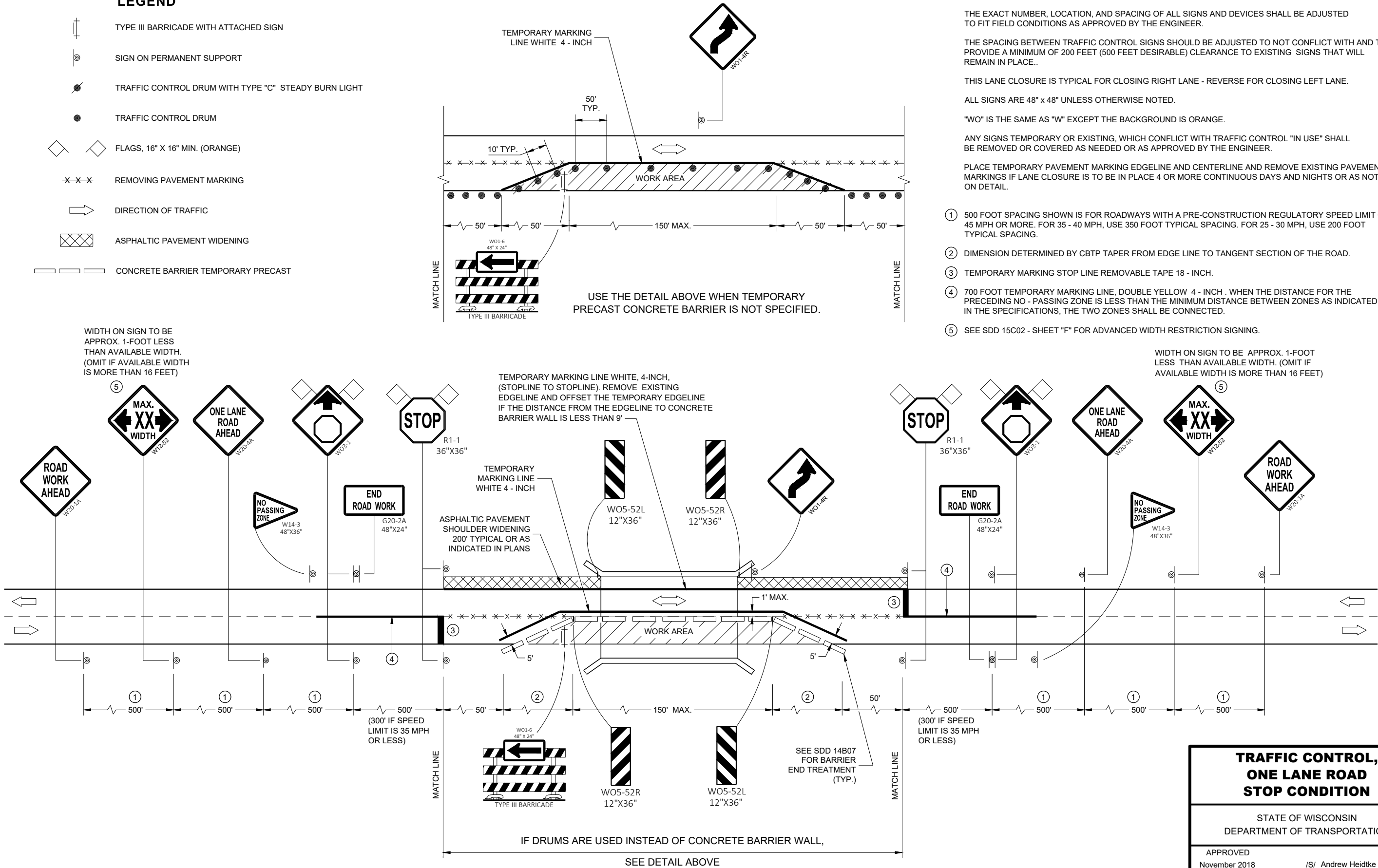
APPROVED
November 2019 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER
FHWA

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLAGS, 16" X 16" MIN. (ORANGE)
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC
- ASPHALTIC PAVEMENT WIDENING
- CONCRETE BARRIER TEMPORARY PRECAST

GENERAL NOTES

- THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
- THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE..
- THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.
- ALL SIGNS ARE 48" x 48" UNLESS OTHERWISE NOTED.
- "WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.
- ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED OR 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 4 OR MORE CONTINUOUS DAYS AND NIGHTS OR AS NOTED ON DETAIL.
- 500 FOOT SPACING SHOWN IS FOR ROADWAYS WITH A PRE-CONSTRUCTION REGULATORY SPEED LIMIT OF 45 MPH OR MORE. FOR 35 - 40 MPH, USE 350 FOOT TYPICAL SPACING. FOR 25 - 30 MPH, USE 200 FOOT TYPICAL SPACING.
 - DIMENSION DETERMINED BY CBTP TAPER FROM EDGE LINE TO TANGENT SECTION OF THE ROAD.
 - TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18 - INCH.
 - 700 FOOT TEMPORARY MARKING LINE, DOUBLE YELLOW 4 - INCH . WHEN THE DISTANCE FOR THE PRECEDING NO - PASSING ZONE IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES AS INDICATED IN THE SPECIFICATIONS, THE TWO ZONES SHALL BE CONNECTED.
 - SEE SDD 15C02 - SHEET "F" FOR ADVANCED WIDTH RESTRICTION SIGNING.



**TRAFFIC CONTROL,
ONE LANE ROAD
STOP CONDITION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

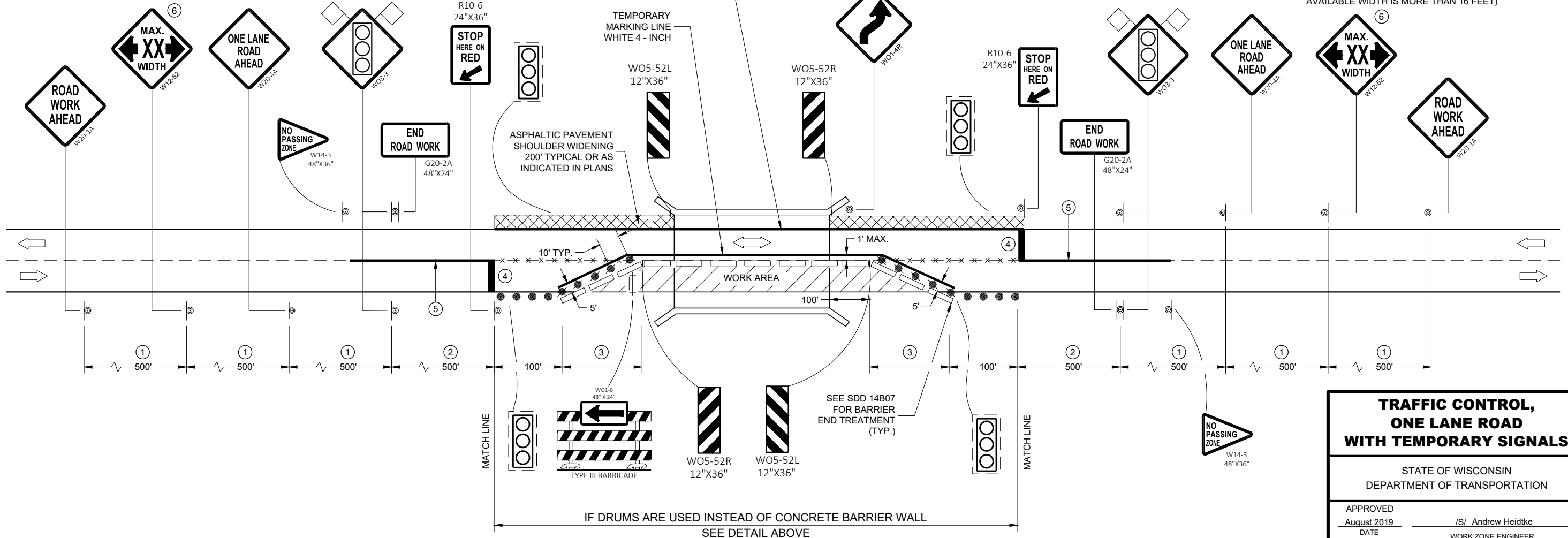
APPROVED
November 2018 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLAGS, 16" X 16" MIN. (ORANGE)
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC
- ASPHALTIC PAVEMENT WIDENING
- CONCRETE BARRIER TEMPORARY PRECAST
- TEMPORARY SIGNAL. SEE SDD 09G02 FOR EXACT PLACEMENT

WIDTH ON SIGN TO BE APPROX. 1-FOOT LESS THAN AVAILABLE WIDTH. (OMIT IF AVAILABLE WIDTH IS MORE THAN 16 FEET)



GENERAL NOTES

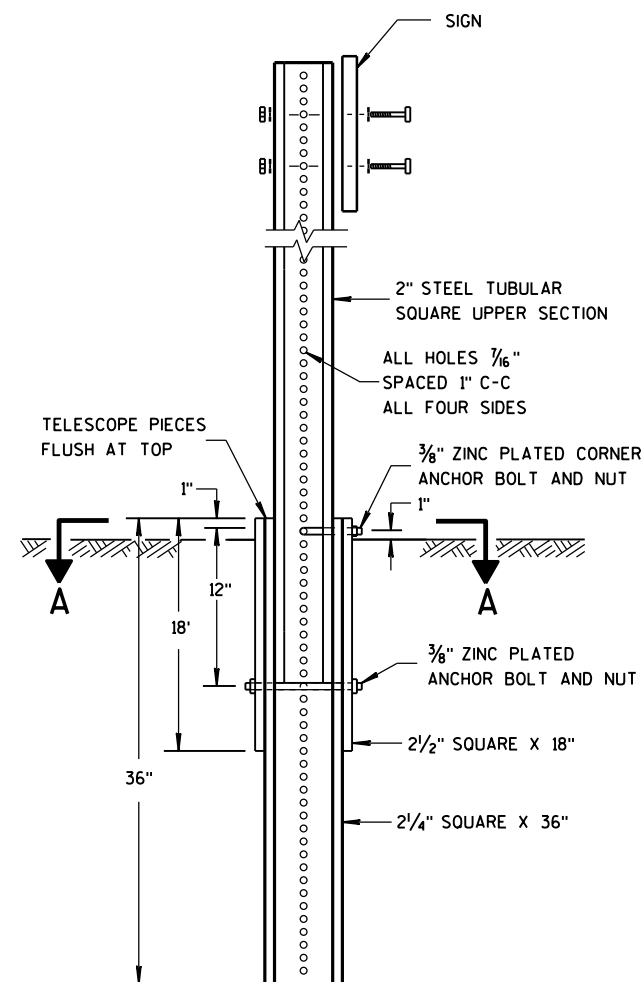
- THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
- THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE..
- THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.
- ALL SIGNS ARE 48" x 48" UNLESS OTHERWISE NOTED.
- "WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.
- ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED OR 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 4 OR MORE CONTINUOUS DAYS AND NIGHTS OR AS NOTED ON DETAIL.
- 500 FOOT SPACING SHOWN IS FOR ROADWAYS WITH A PRE-CONSTRUCTION REGULATORY SPEED LIMIT OF 45 MPH OR MORE. FOR 35 - 40 MPH, USE 350 FOOT TYPICAL SPACING. FOR 25 - 30 MPH, USE 200 FOOT TYPICAL SPACING.
 - USE 300 FOOT SPACING IF THE PRE - CONSTRUCTION REGULATORY SPEED IS 35 MPH OR LESS.
 - DIMENSION DETERMINED BY CBTP TAPER FROM EDGE LINE TO TANGENT SECTION OF THE ROAD.
 - TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18 - INCH.
 - 700 FOOT TEMPORARY MARKING LINE, DOUBLE YELLOW 4 - INCH . WHEN THE DISTANCE FOR THE PRECEDING NO - PASSING ZONE IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES AS INDICATED IN THE SPECIFICATIONS, THE TWO ZONES SHALL BE CONNECTED.
 - SEE SDD 15C02 - SHEET "F" FOR ADVANCED WIDTH RESTRICTION SIGNING.

**TRAFFIC CONTROL,
ONE LANE ROAD
WITH TEMPORARY SIGNALS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2019 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

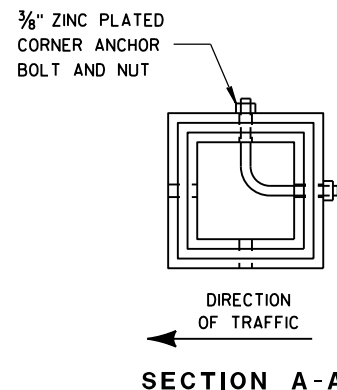


DETAIL OF TUBULAR
STEEL SIGN POST

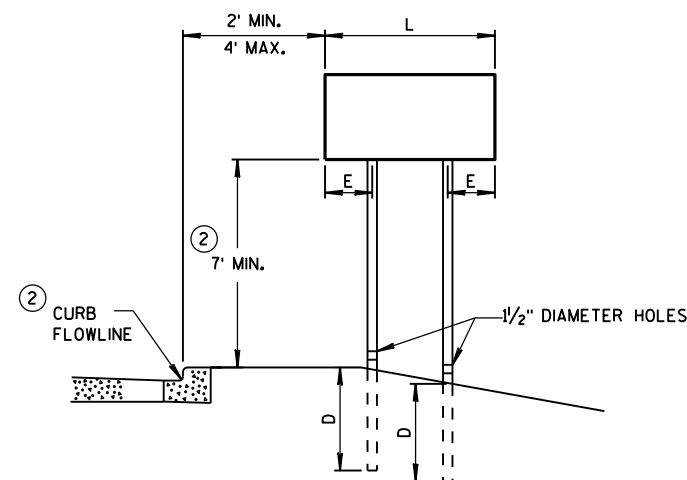
TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL
BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).
SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED
ON TUBULAR STEEL POSTS.



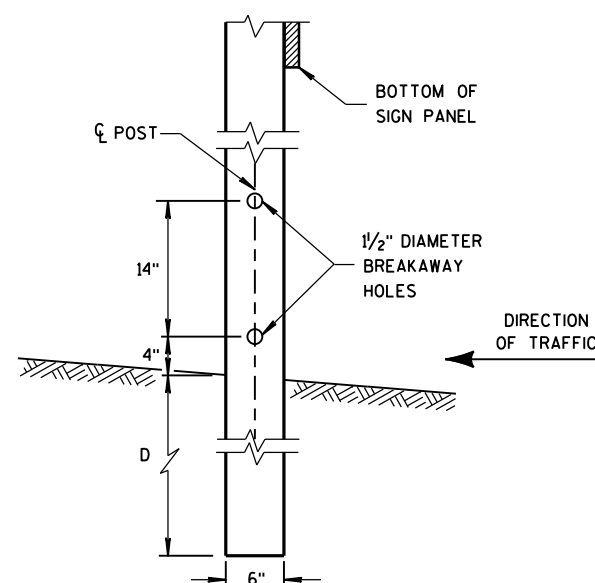
SECTION A-A



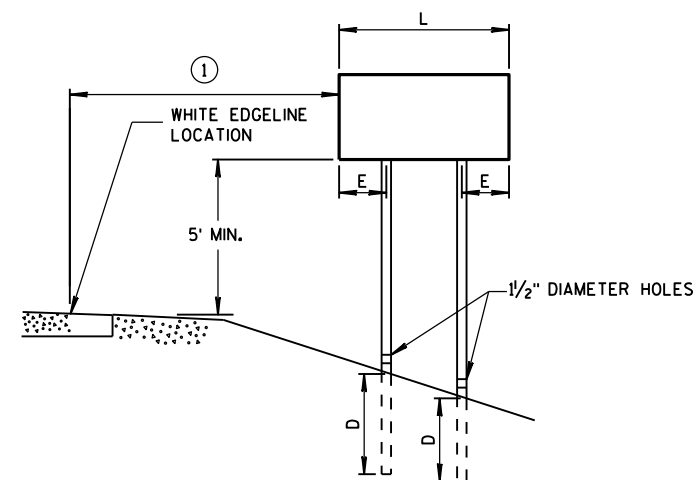
URBAN AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

WOOD POST EMBEDMENT DEPTH	
AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'



4 "x6 " WOOD POST
MODIFICATION



RURAL AREA

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

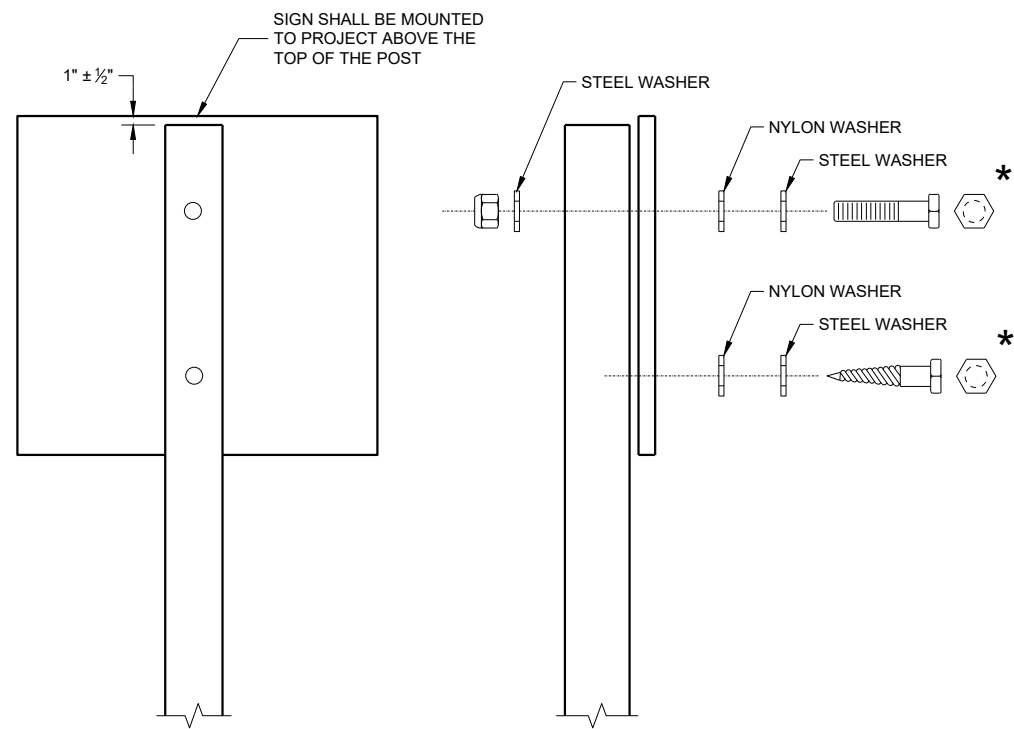
SEE NOTE ③

GENERAL NOTES

- ① 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.
- ② THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.
- ③ FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.

TEMPORARY TRAFFIC CONTROL
SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



NUTS, BOLTS AND LAGS USED FOR MOUNTING SIGNS
SHALL HAVE HEXAGONAL HEADS AND SHALL BE EITHER:

- A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM
DESIGNATION: A 153, CLASS D, OR SC 3
- B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM
DESIGNATION: B 633, TYPE III, SC 3

THREADS ON BOLTS AND NUTS SHALL BE MANUFACTURED WITH
SUFFICIENT ALLOWANCE FOR THE CADMIUM PLATE OR GALVANIZED
COATING TO PERMIT THE NUTS TO RUN FREELY ON THE BOLTS.

WOOD POST (4" x 6")
LAG SCREWS - 3/8" x 3"
MACHINE BOLTS - 5/16" x 6 1/2" OR 7" LENGTH W/NUTS

SQUARE STEEL POST (2" x 2")
MACHINE BOLTS - 3/8" x 3 1/4" LENGTH W/NUTS
RIVETS - 3/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM
BODY/MANDREL O.D. FLANGE 0.720 - 0.765 INCH,
GRIP RANGE 0.042 - 0.375 INCH

WASHERS (ALL POSTS) -
1 1/4" O.D. x 3/8" I.D. x 1/16" STEEL
1 1/4" O.D. x 3/8" I.D. x 0.080 NYLON

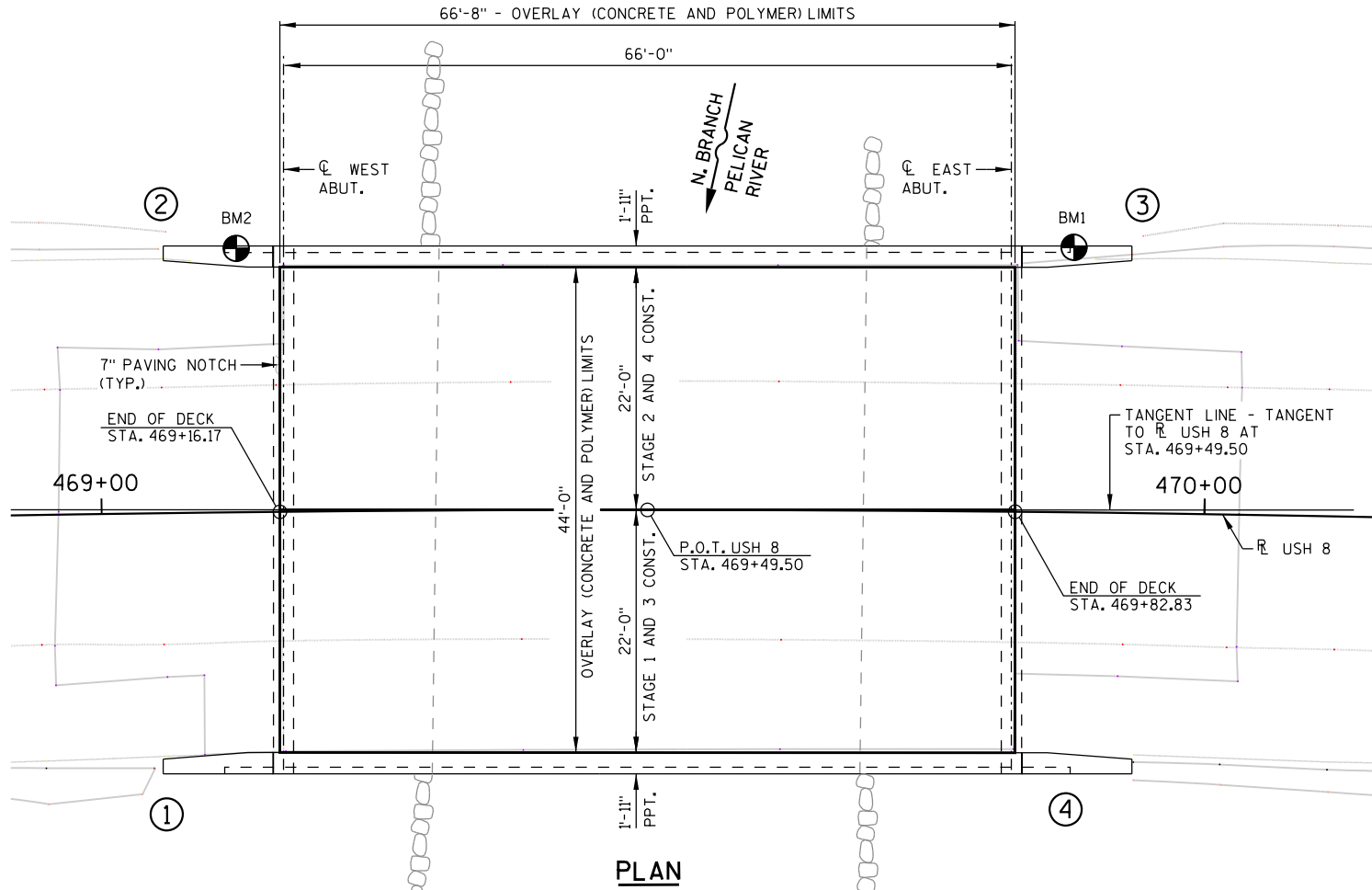
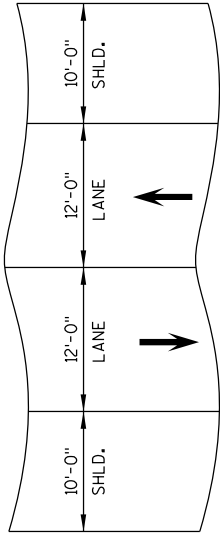
* TWO DIFFERENT FASTENING SYSTEMS ARE SHOWN FOR ILLUSTRATION
PURPOSES. ON ANY INDIVIDUAL SIGN, EITHER ONE OR THE OTHER SYSTEM
SHALL BE USED. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH
THE SIGN AREA. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER
THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

ATTACHMENT OF SIGNS TO POSTS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2017 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

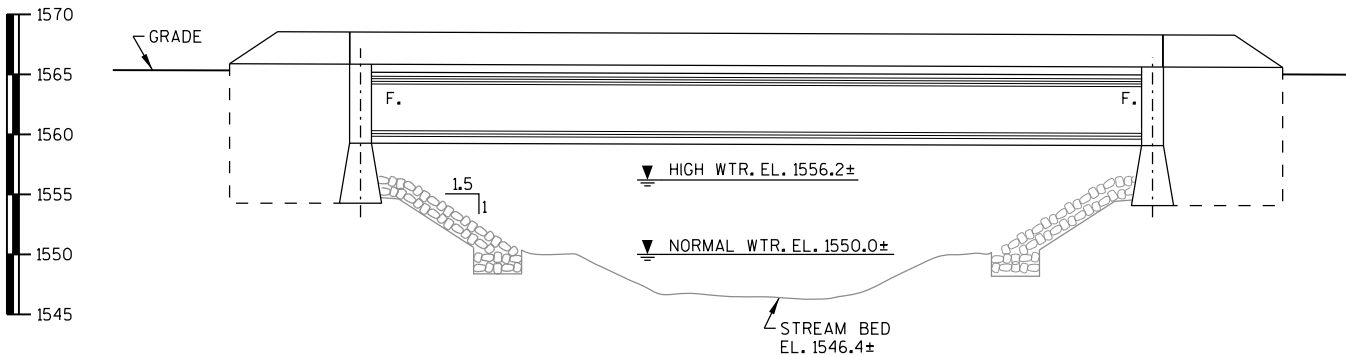
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(X) INDICATES WING NUMBER



PLAN



ELEVATION

(NORMAL TO N. BRANCH PELICAN RIVER)

STATE PROJECT NUMBER

1009-46-61

DESIGN DATA

LIVE LOAD:

INVENTORY RATING: HS 18
OPERATING RATING: HS 30
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 210 KIPS

MATERIAL PROPERTIES:

CONCRETE MASONRY OVERLAY DECKS — f'c = 4,000 PSI

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

EXISTING DIMENSIONS AND STATIONS ARE BASED ON ORIGINAL STRUCTURE PLANS. ACTUAL DIMENSIONS MAY VARY. ORIGINAL DRAWINGS CAN BE FOUND ON WISDOT HSI WEBSITE.

DECK SURFACE PREPARATION FOR POLYMER OVERLAY IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".

AFTER CLEANING THE EXISTING PARAPETS, "PIGMENTED SURFACE SEALER" SHALL BE APPLIED TO THE INSIDE AND TOPS OF PARAPETS TO THE SATISFACTION OF THE FIELD ENGINEER.

"PROTECTIVE SURFACE TREATMENT" SHALL BE APPLIED TO THE TOP OF THE CONCRETE OVERLAY.

UNDER THE BID ITEM "REMOVING CONCRETE MASONRY DECK OVERLAY", REMOVE THE ENTIRE EXISTING OVERLAY 1 1/2"±. UNDER THE BID ITEM "CLEANING DECKS TO REAPPLY CONCRETE MASONRY OVERLAY" PREPARE THE ORIGINAL DECK SURFACE FOR THE APPLICATION OF CONCRETE OVERLAY. PRIOR TO REMOVAL CHECK A MINIMUM OF 3 LOCATIONS OR AS DIRECTED BY THE ENGINEER TO ENSURE THE REMOVAL WILL MAINTAIN EXISTING CONCRETE COVER (1" MIN.) OVER THE TOP MAT OF REINFORCING STEEL.

TRAFFIC TO BE MAINTAINED DURING CONSTRUCTION.

THE AVERAGE OVERLAY THICKNESS IS BASED ON THE MINIMUM OVERLAY THICKNESS PLUS 1/2-INCH TO ACCOUNT FOR VARIATIONS IN THE DECK SURFACE.

"FULL DEPTH DECK REPAIR", "PREPARATION DECKS" AND "CONCRETE SURFACE REPAIR" SHALL BE COMPLETED AS DETERMINED BY THE FIELD ENGINEER. DECK PREPARATION AND FULL DEPTH REPAIR AREAS SHALL BE FILLED WITH "CONCRETE MASONRY OVERLAY DECKS".

ALL CONCRETE REMOVAL NOT COVERED WITH A CONCRETE OVERLAY, SHALL BE DEFINED BY A 1-INCH DEEP SAW CUT OR AS APPROVED BY ENGINEER.

ANY EXCAVATION REQUIRED TO COMPLETE THE OVERLAY AT THE ABUTMENTS IS TO BE CONSIDERED INCIDENTAL TO THE BID ITEM "CONCRETE MASONRY OVERLAY DECKS".

PROFILE GRADE LINE SHALL BE DETERMINED IN THE FIELD BASED ON MINIMUM CONCRETE OVERLAY THICKNESS OF 1 1/2" PLACED ABOVE THE DECK SURFACE AFTER SURFACE PREPARATION. EXPECTED AVERAGE CONCRETE OVERLAY THICKNESS IS 2". IF EXPECTED AVERAGE CONCRETE OVERLAY THICKNESS IS EXCEEDED BY MORE THAN 1/2" CONTACT BUREAU OF STRUCTURES DESIGN SECTION FOR REVIEW.

SEAL OVERLAY CONSTRUCTION JOINTS ACCORDING TO SECTION 502.3.13.1 OF THE STANDARD SPECIFICATIONS UNLESS OTHERWISE INSTRUCTED BY THE ENGINEER. COST INCIDENTAL TO THE BID ITEM "CONCRETE MASONRY OVERLAY DECKS".

REPAIRS USING CONCRETE REQUIRE A MINIMUM CURE TIME OF 28 DAYS BEFORE PLACING POLYMER OVERLAY.

ORIGINAL SLAB DEPTH SHOWN (FROM 1977). ASSUME CONCRETE OVERLAY IN 1994 REDUCED SLAB THICKNESS TO 8" AS PART OF DECK CLEANING PROCEDURE.

THE PROPOSED RIPRAP AREAS SHALL BE COVERED WITH RIPRAP HEAVY AND GEOTEXTILE TYPE 'HR' WITHIN THE LIMITS SHOWN ON SHEET 3 OR AS DIRECTED BY THE ENGINEER.

TRAFFIC VOLUME

USH 8

A.D.T. (2022) = 3,800

A.D.T. (2042) = 4,200

DESIGN SPEED = 60 MPH

LIST OF DRAWINGS

- CONCRETE & POLYMER OVERLAY
- CONSTRUCTION DETAILS & QUANTITIES
- RIPRAP DETAIL

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
BILL DREHER (608) 266-8489

CONSULTANT:
BETH NEMEC (715) 342-3069

AECOM PROJECT NO. 60565978

NO.	DATE	REVISION	BY
AECOM			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED <i>William C. Dreher</i> SDR		02/07/19 DATE	
CHIEF STRUCTURES DESIGN ENGINEER			
STRUCTURE B-43-16			
USH 8 OVER N. BR. PELICAN RIVER			
COUNTY	ONEIDA	TOWN/CITY/VILLAGE	PELICAN
DESIGN SPEC. REHABILITATION N/A			
DESIGNED BY	KB	DESIGN CK'D.	EAN
DRAWN BY	KAM	PLANS CK'D.	EAN
CONCRETE & POLYMER OVERLAY			SHEET 1 OF 3

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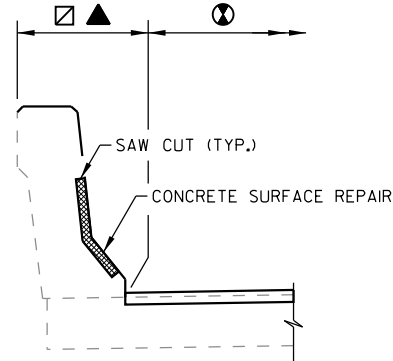
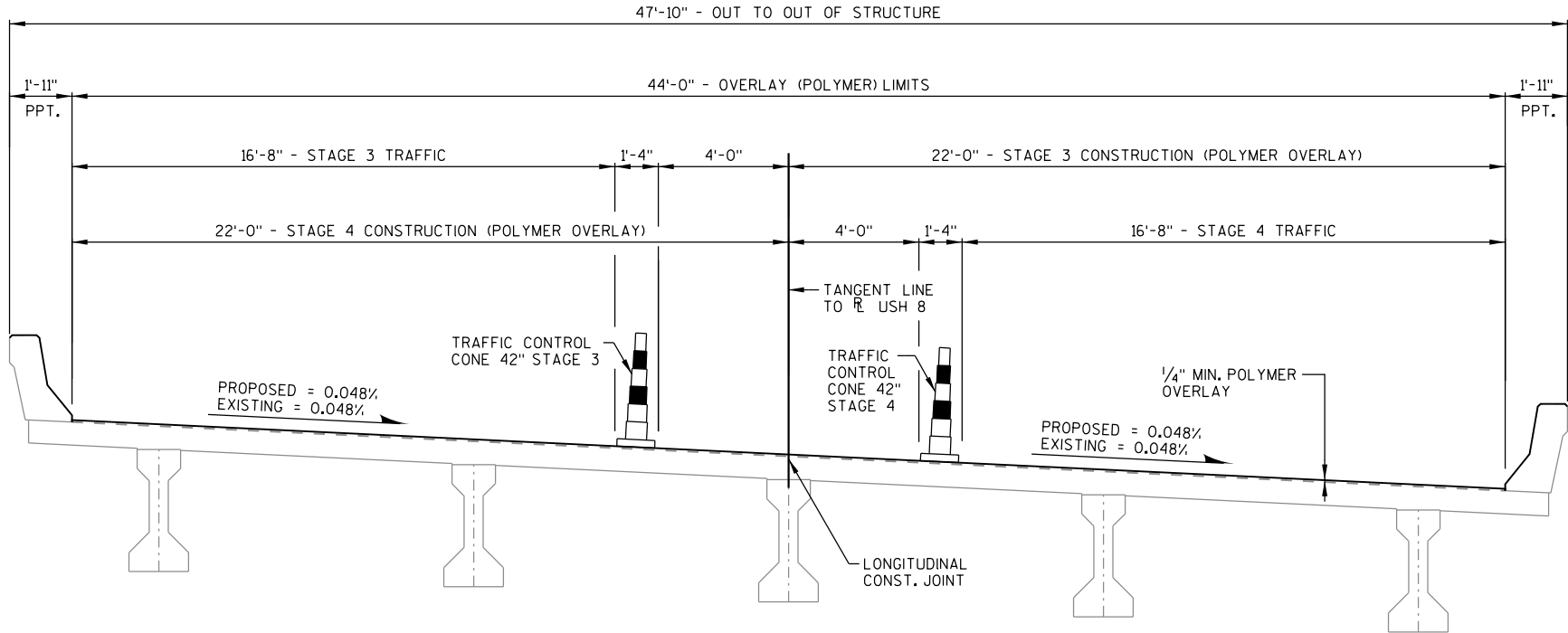
BENCH MARK TABLE

NO.	STATION	DESCRIPTION	ELEVATION
BM1	469+88, 24' LT.	METAL DISK IN TOP OF NE BRIDGE ABUTMENT	1568.12
BM2	469+12, 24' LT.	METAL DISK IN TOP OF NW BRIDGE ABUTMENT	1568.39

GPS R8, WISCRS 83/11, NAVD 88 (G128-WI)

CROSS SECTION THRU ROADWAY

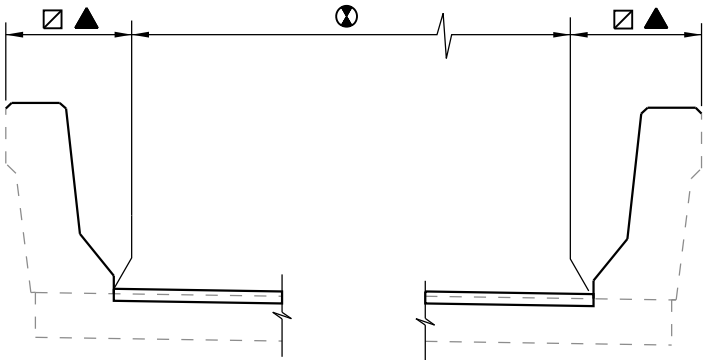
LOOKING EAST - (STAGES 3 & 4)



PARAPET REPAIR DETAIL

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEM	UNIT	TOTALS
502.3200	PROTECTIVE SURFACE TREATMENT	SY	350
502.3210	PIGMENTED SURFACE SEALER	SY	78
509.0301	PREPARATION DECKS TYPE 1	SY	55
509.0302	PREPARATION DECKS TYPE 2	SY	25
509.0505.S	CLEANING DECKS TO REAPPLY CONCRETE MASONRY OVERLAY	SY	326
509.1500	CONCRETE SURFACE REPAIR	SF	90
509.2000	FULL-DEPTH DECK REPAIR	SY	5
509.2500	CONCRETE MASONRY OVERLAY DECKS	CY	26
509.5100.S	POLYMER OVERLAY	SY	326
509.9005.S	REMOVING CONCRETE MASONRY DECK OVERLAY B-43-16	SY	326
509.9050.S	CLEANING PARAPETS	LF	176
606.0300	RIPRAP HEAVY	CY	14
645.0120	GEOTEXTILE TYPE HR	SY	24



SURFACE PROTECTION DETAIL

LEGEND

- ★ CONCRETE SURFACE REPAIR REQUIRED AT SUBSTRUCTURE AND PARAPET LOCATIONS TO BE VERIFIED IN THE FIELD BY THE ENGINEER.
- ▲ BID ITEM INCLUDES CONCRETE FOR PREPARATION DECKS TYPE 1, PREPARATION DECKS TYPE 2, FULL-DEPTH DECK REPAIR. LOCATIONS TO BE VERIFIED IN THE FIELD BY THE ENGINEER.
- ☒ "CLEANING PARAPETS" LIMITS
- ▲ "PIGMENTED SURFACE SEALER" LIMITS
- ⊗ "PROTECTIVE SURFACE TREATMENT" LIMITS

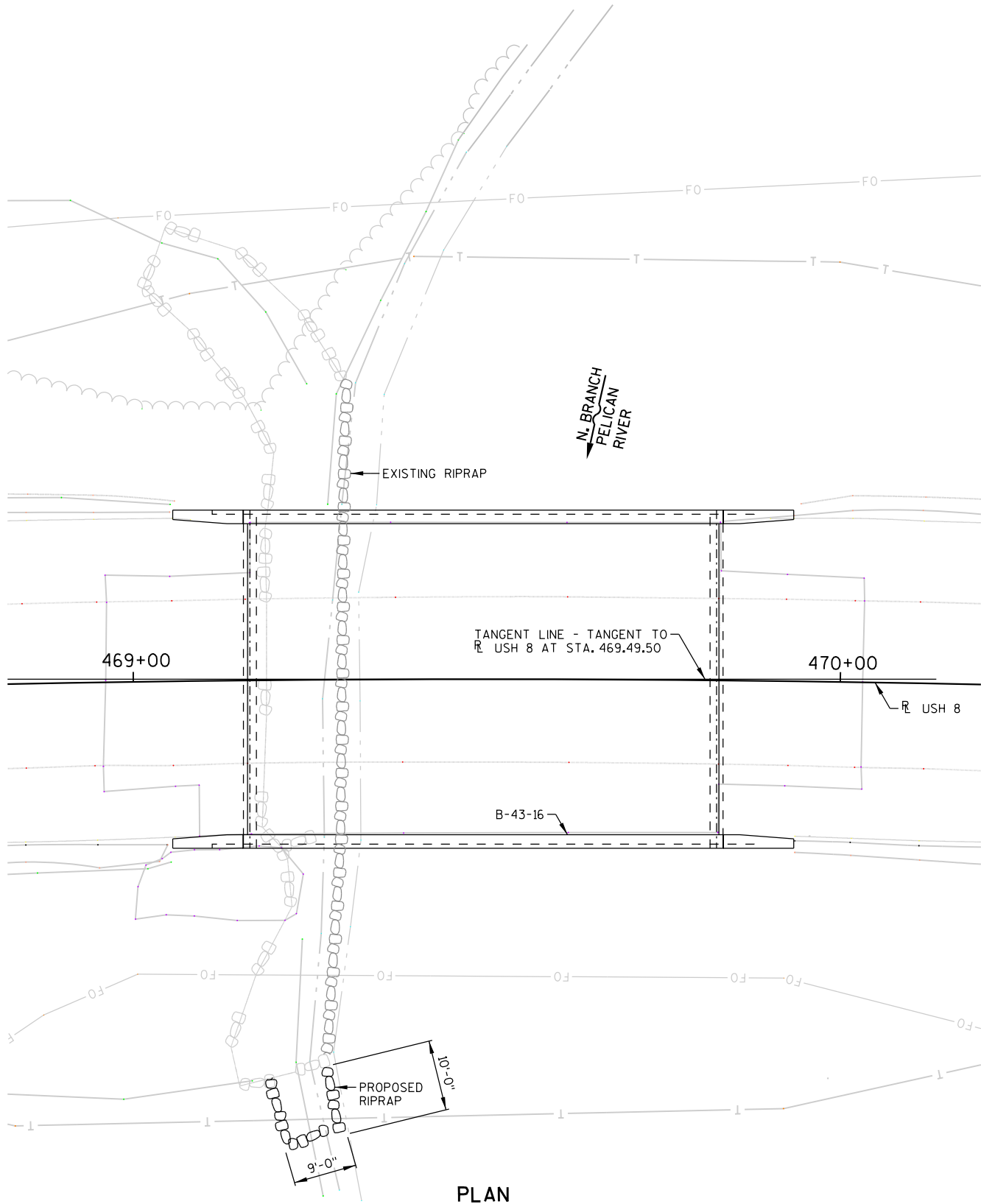
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-43-16			
DRAWN BY		KAM	PLANS CKD. EAN
CONSTRUCTION DETAILS & QUANTITIES		SHEET 2 OF 3	

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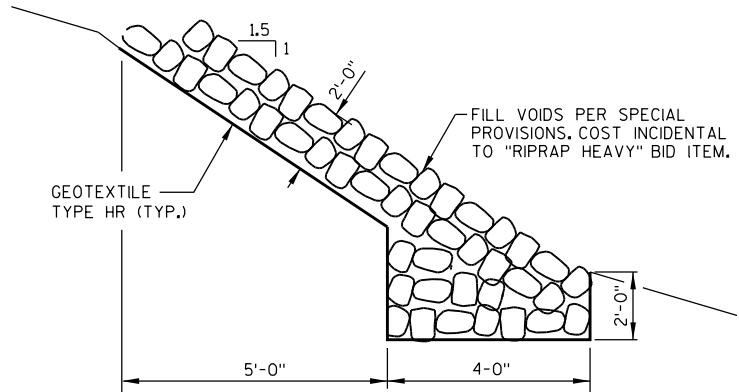
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BATCH PRINT SHEET 3 OF 3

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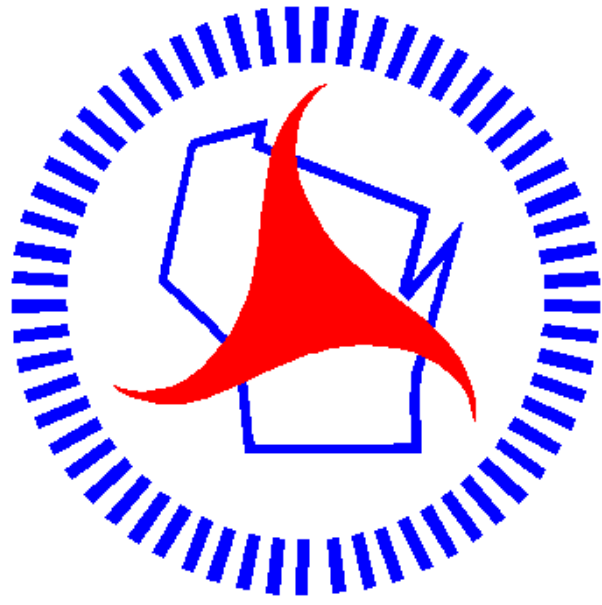
PLAN



RIPRAP DETAIL

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-43-16			
DRAWN BY		KAM	PLANS CK'D. EAN
RIPRAP DETAIL		SHEET 3 OF 3	

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Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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