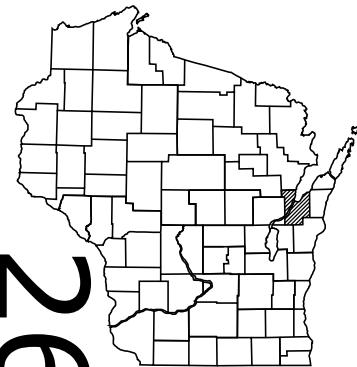


ORDER OF SHEETS		
Section No.	1	Title
Section No.	2	Typical Sections and Details
Section No.	3	Estimate of Quantities
Section No.	3	Miscellaneous Quantities
Section No.	5	Plan
Section No.	6	Standard Detail Drawings
Section No.	7	Sign Plates
Section No.	8	Structure Plans

TOTAL SHEETS = 108



DESIGN DESIGNATION

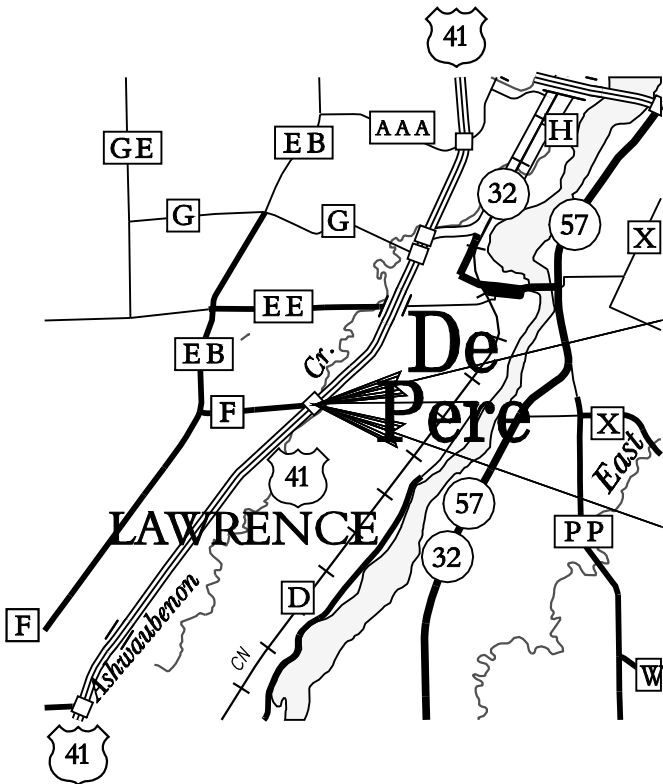
A.A.D.T. 2010	=	23,750
A.A.D.T. 2030	=	26,750
D.H.V.	=	2,595
D.D.	=	50/50
T.	=	6.5%
DESIGN SPEED	=	40 MPH
ESALS	=	8,767,300

CONVENTIONAL SYMBOLS

PLAN	
CORPORATE LIMITS	
REFERENCE LINE	
COMBUSTIBLE FLUIDS	
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
TRAFFIC OPERATIONS IMPROVEMENT
APPLETON - GREEN BAY
SCHEURING ROAD BRIDGE
USH 41
BROWN COUNTY

STATE PROJECT NUMBER
1130-45-60



END PROJECT 1130-45-60

STA 140+68
X = 442549.98
Y = 880646.31

BEGIN PROJECT 1130-45-60

STA 137+70

LAYOUT
SCALE 0 2 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.057 MI.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE
WISCONSIN COUNTY COORDINATE SYSTEM (WCCS),
BROWN COUNTY.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1130-45-60		

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
PREPARED BY	
Surveyor	N E REGION
Designer	T FENDRICK
Project Manager	A FULCER
Regional Examiner	
Regional Supervisor	D SEGERSTROM
C.O. Examiner	
APPROVED FOR THE DEPARTMENT	
DATE: 1-30-13	 (Signature)

UTILITIES

TDS METROCOM - COMMUNICATION LINE
STEVE JAKUBIEC
SUITE 218A
10 COLLEGE AVE
APPLETON, WI 54911
PHONE: 920-882-4166
EMAIL: STEVE.JAKUBIEC@TDSTELECOM.COM

WISCONSIN PUBLIC SERVICE CORPORATION - GAS/PETROLEUM
PHIL MAUERMANN
2850 S. ASHLAND AVE
P.O. BOX 19001
GREEN BAY, WI 54307-9001
OFFICE: 920-617-5092
MOBILE: 920-606-8448

WISCONSIN PUBLIC SERVICE CORPORATION - ELECTRICITY
RANDY STEIER
2850 S. ASHLAND AVE
P.O. BOX 19001
GREEN BAY, WI 54307-9001
OFFICE: 920-617-5167
MOBILE: 920-655-1596
EMAIL: RDSTEIER@WISCONSINPUBLICSERVICE.COM

DNR AREA LIAISON

JAMES DOPERALSKI JR
DEPARTMENT OF NATURAL RESOURCES
NORTHEAST REGION
2984 SHAWANO AVE
GREEN BAY, WI 54313
920-662-5119
JAMES.DOPERALSKI@WISCONSIN.GOV



Call 811 3 Work Days Before You Dig
or Toll Free (800) 242-8511
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

GENERAL NOTES

NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

THE AREA BETWEEN USH 41 NB AND THE USH 41 NB ON-RAMP FROM STA 672+00 NOG TO STA 674+00 NOG MAY BE USED FOR STAGING OPERATIONS. ANY MATERIAL BROUGHT IN FOR STAGING AND CRANE OPERATIONS MUST BE REMOVED PRIOR TO PROJECT COMPLETION. ALL STAGING MATERIAL AND OPERATIONS AND CLEARING AND GRUBBING DONE BY THE CONTRACTOR SHALL BE INCIDENTAL TO REMOVING OLD STRUCTURE.

DISTURBED AREAS NOT PART OF CONSTRUCTION, WITHIN THE RIGH-OF-WAY ARE TO BE TOP SOILED, SEEDED, FERTILIZED, AND EMATTED AT THE CONTRACTOR'S EXPENSE.

THE EROSION CONTROL FEATURES AS SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. EXACT LOCATION WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

TRAFFIC CONTROL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

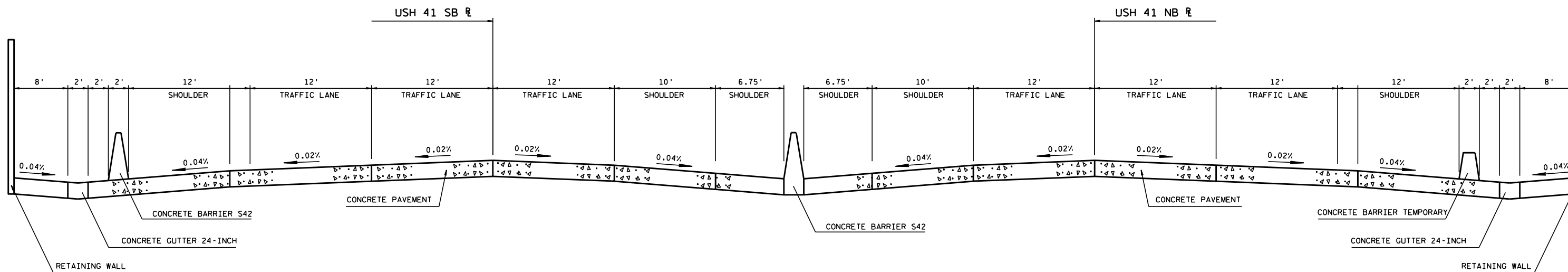
SEE TYPICAL INSTALLATION OF EROSION BALES/TEMPORARY DITCH CHECKS STANDARD DETAIL DRAWING FOR TEMPORARY DITCH CHECK APPLICATIONS.

MAINTAIN DRAINAGE AT ALL TIMES.

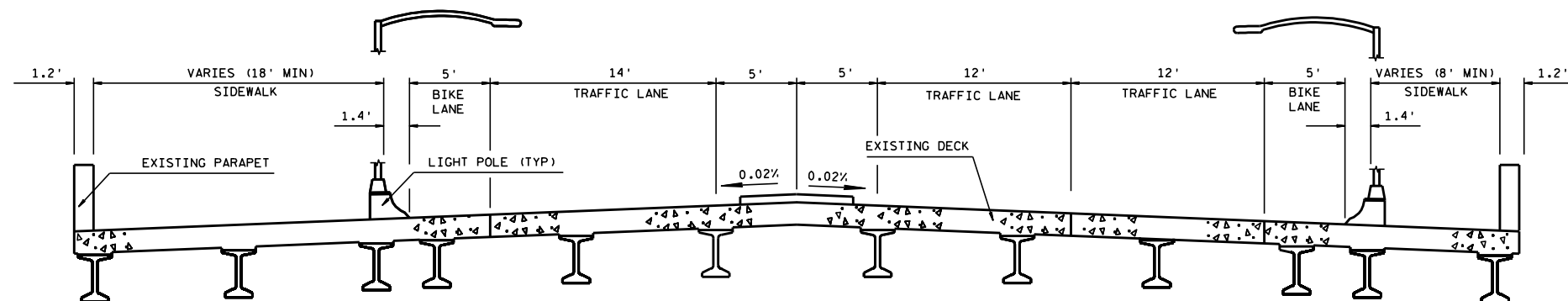
THE CONTRACTOR SHALL VERIFY THE DECORATIVE FENCE LOCATION AND DIMENSIONS PRIOR TO REMOVAL.

ABUTMENT FILL SLOPES FOR STRUCTURE B-5-600 CONTAIN FLY ASH.

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

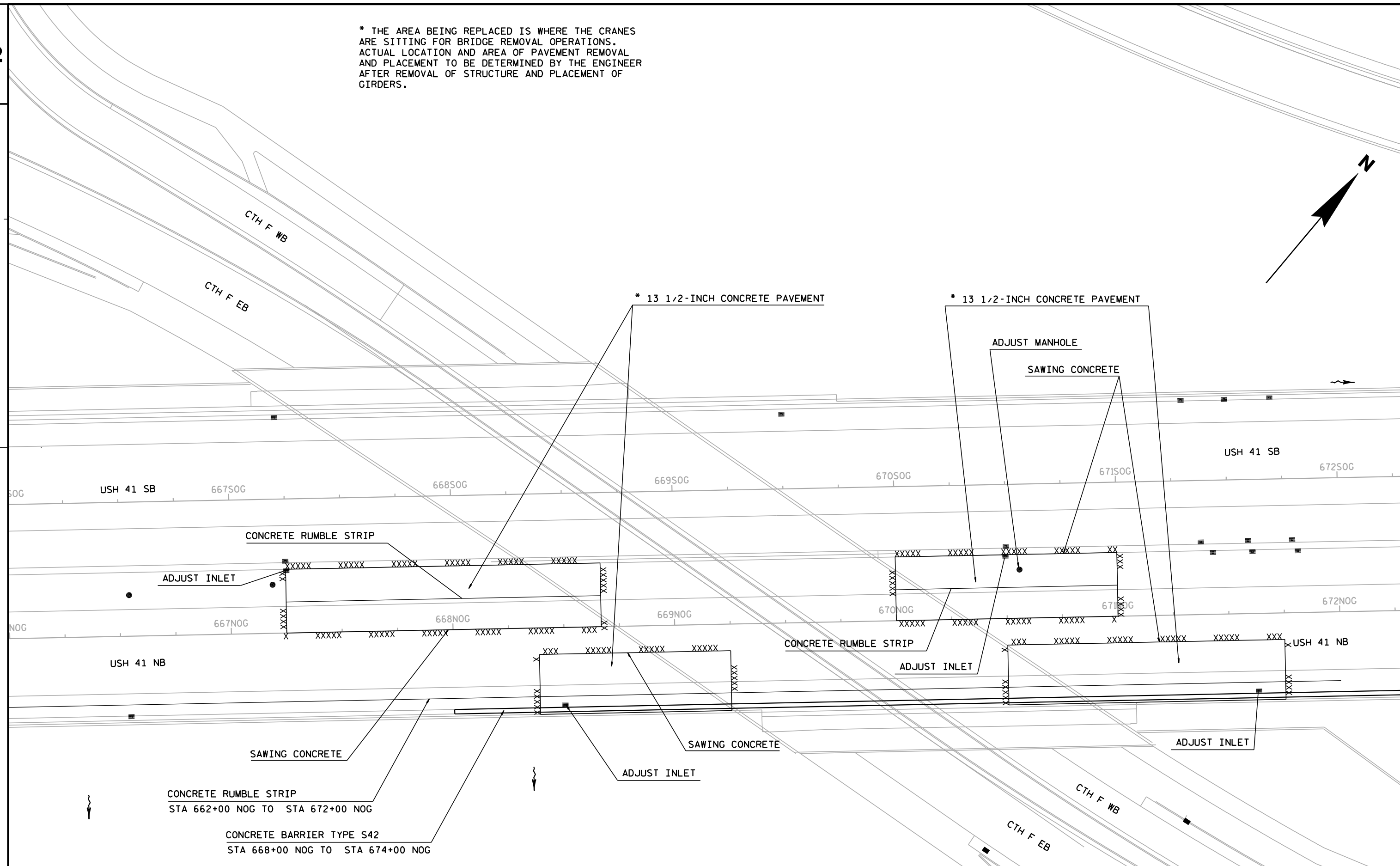


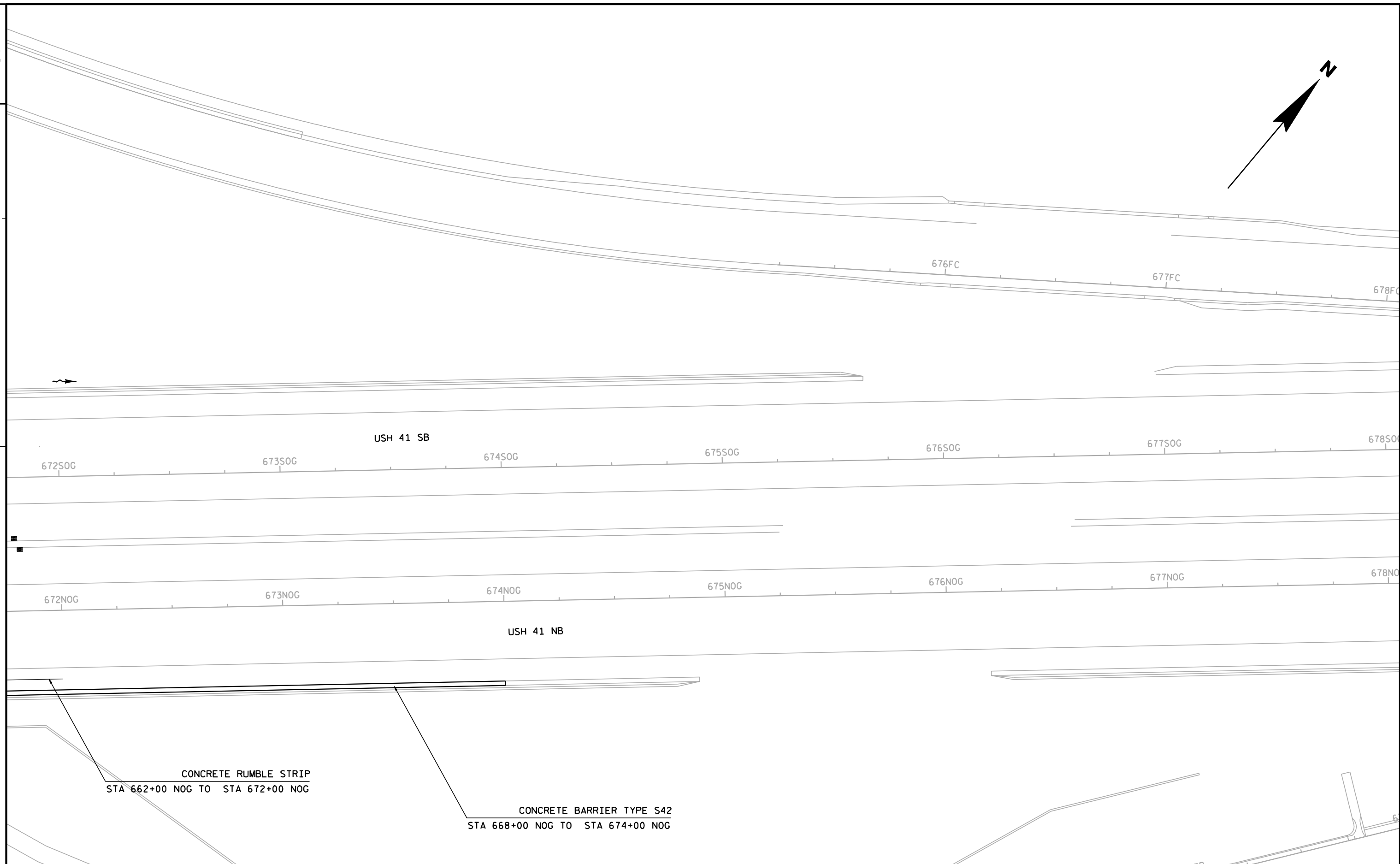
TYPICAL EXISTING CROSS SECTION FOR USH 41
LOOKING NORTH

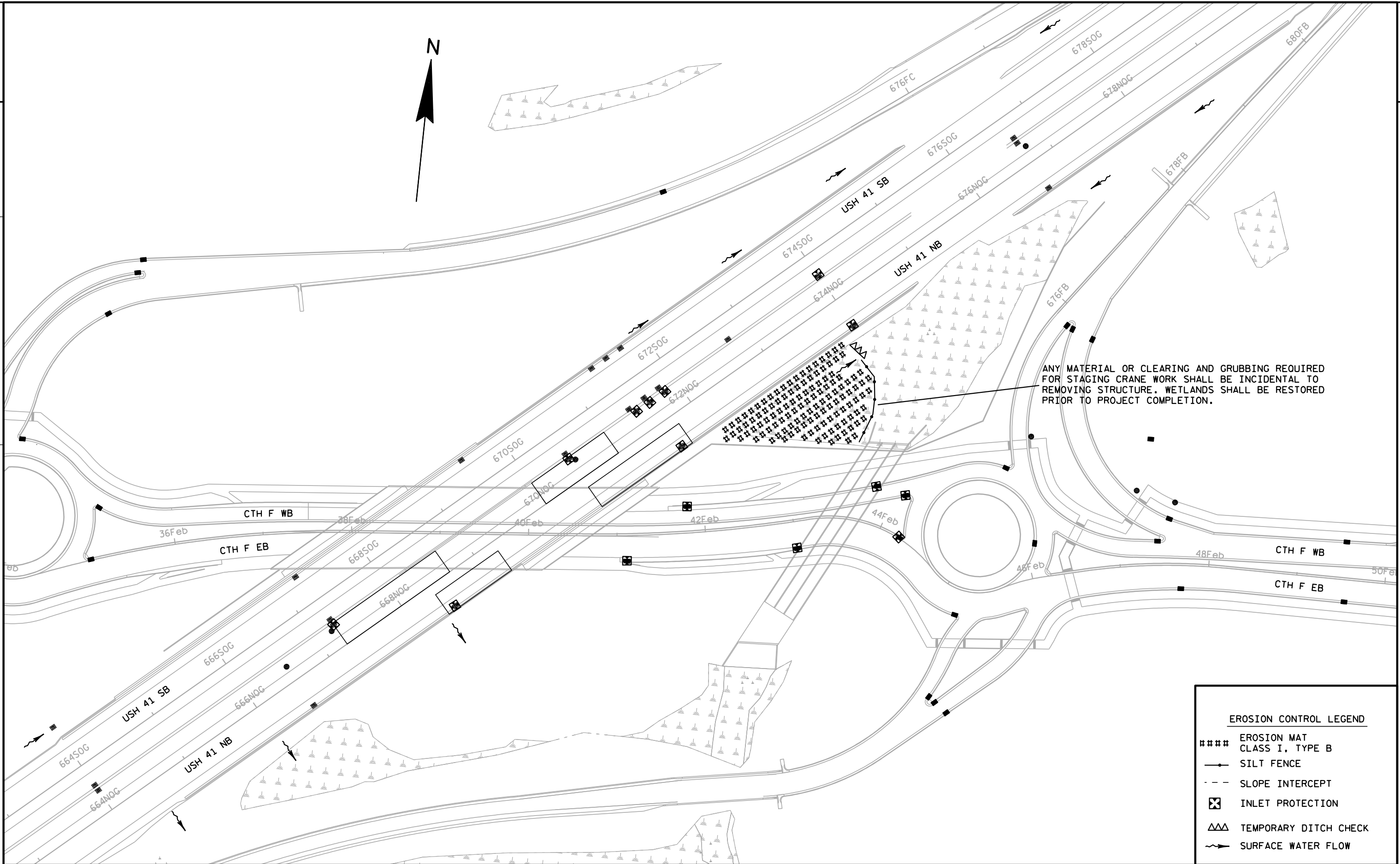


TYPICAL EXISTING CROSS SECTION FOR CTH F
LOOKING EAST

* THE AREA BEING REPLACED IS WHERE THE CRANES
ARE SITTING FOR BRIDGE REMOVAL OPERATIONS.
ACTUAL LOCATION AND AREA OF PAVEMENT REMOVAL
AND PLACEMENT TO BE DETERMINED BY THE ENGINEER
AFTER REMOVAL OF STRUCTURE AND PLACEMENT OF
GIRDERS.







EROSION CONTROL LEGEND

####

EROSION MAT
CLASS I, TYPE B

—●—

SILT FENCE

- - -

SLOPE INTERCEPT

⊠

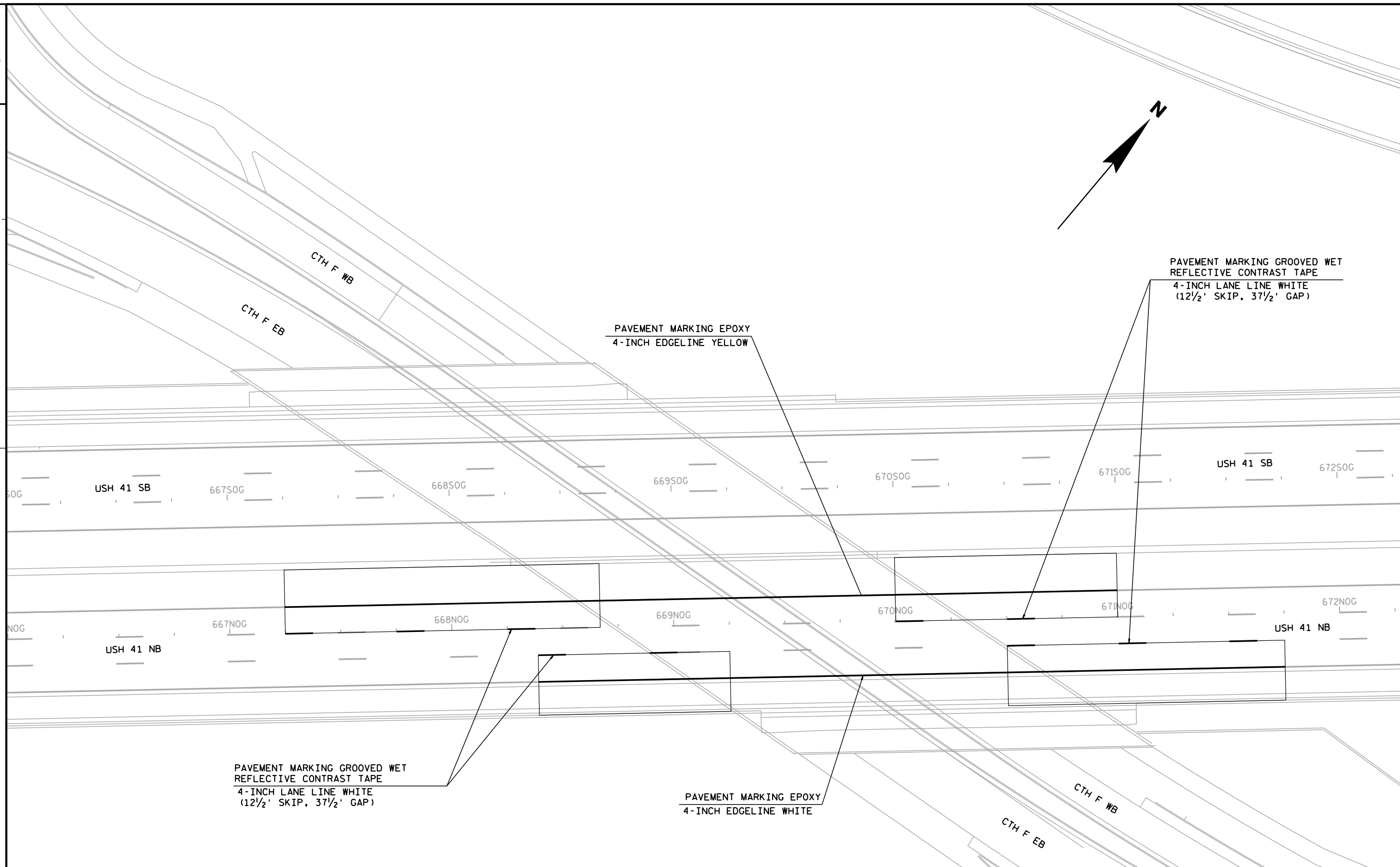
INLET PROTECTION

△△

TEMPORARY DITCH CHECK

~>

SURFACE WATER FLOW



N

PAVEMENT MARKING GROOVED WET
REFLECTIVE CONTRAST TAPE
4-INCH LANE LINE WHITE
(12½' SKIP, 37½' GAP)

PAVEMENT MARKING EPOXY
4-INCH EDGE LINE WHITE

CTH F WB

CTH F WB

37Feb+00

38Feb+00

39Feb+00

40Feb+00

41Feb+00

42Feb+00

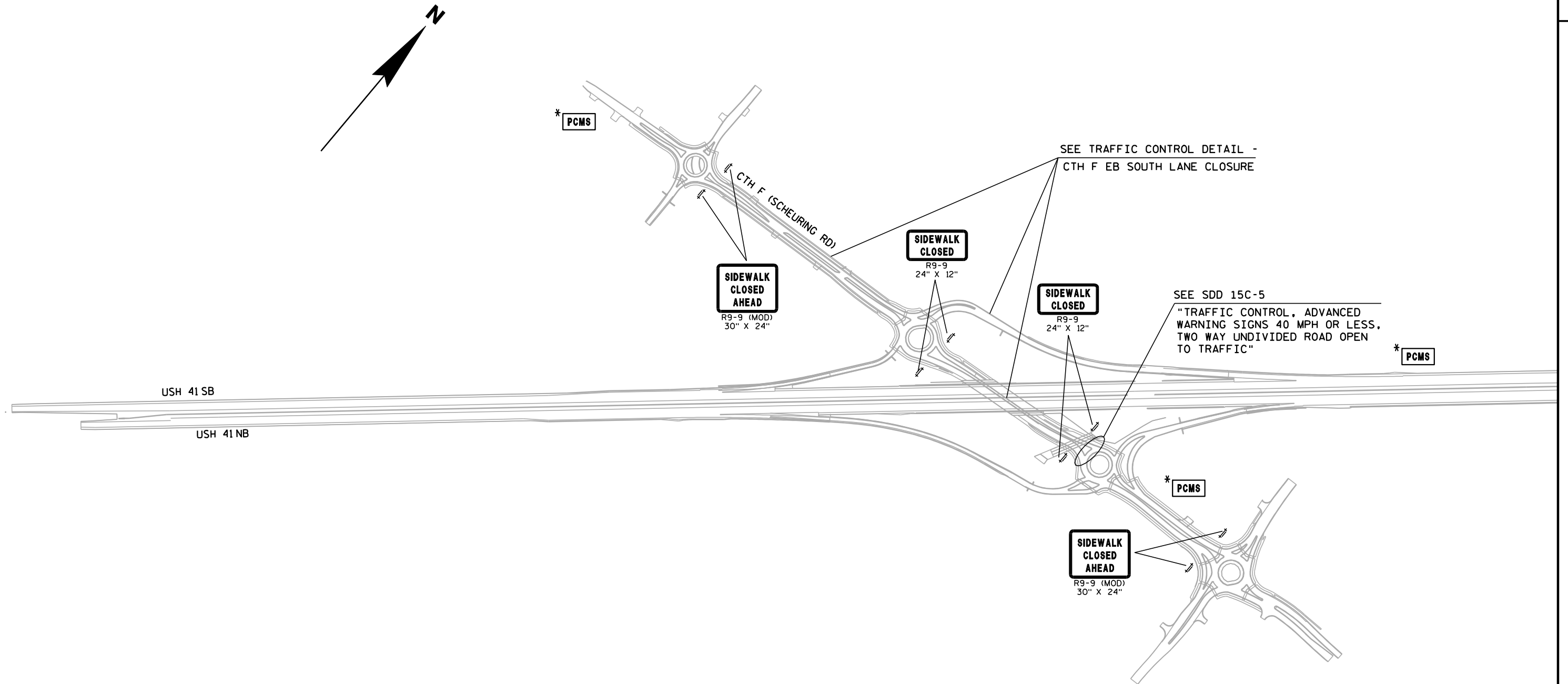
43Feb+00

CTH F EB

CTH F EB

USH 41 SB

USH 41 NB



* PORTABLE CHANGEABLE MESSAGE BOARDS SHALL BE INSTALLED 14 CALENDAR DAYS PRIOR TO PROJECT START. CONTACT NE REGION TRAFFIC UNIT FOR MESSAGE.

N

TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE
4-INCH BLACK (COVER EXISTING LANE LINE)

TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE
4-INCH EDGELINE (WHITE ON RIGHT, YELLOW ON LEFT)

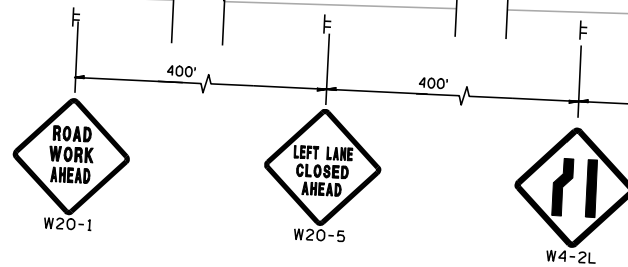
CTH F (SCHEURING RD)









R3-5A
COVER









R11-2L
48" X 30"



TRAFFIC CONTROL LEGEND

-  ARROW BOARD
-  POST MOUNTED SIGN
-  SIGN MOUNTED ON TYPE III BARRICADE
-  DRUM
-  DRUM WITH LIGHT
-  TEMPORARY PRECAST CONCRETE BARRIER

TRAFFIC CONTROL LEGEND

-  ARROW BOARD
-  POST MOUNTED SIGN
-  SIGN MOUNTED ON TYPE III BARRICADE
-  DRUM
-  DRUM WITH LIGHT
-  TEMPORARY PRECAST CONCRETE BARRIER

N

COVER

R3-8PP
54" X 30"LANE
CLOSEDR11-2L
48" X 30"

USH 41 SB OFF RAMP

COVER

R3-8PP
54" X 30"

Scheuring Rd

E6-54
156" X 72"LANE
CLOSEDR11-2L
48" X 30"50'
(TYP)

COVER

R3-8PP

54" X 30"

CTH F (SCHEURING RD)

TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE
4-INCH EDGELINE (WHITE ON RIGHT, YELLOW ON LEFT)TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE
4-INCH BLACK (COVER EXISTING LANE LINE)W5-52R
18" X 54"

USH 41 SB

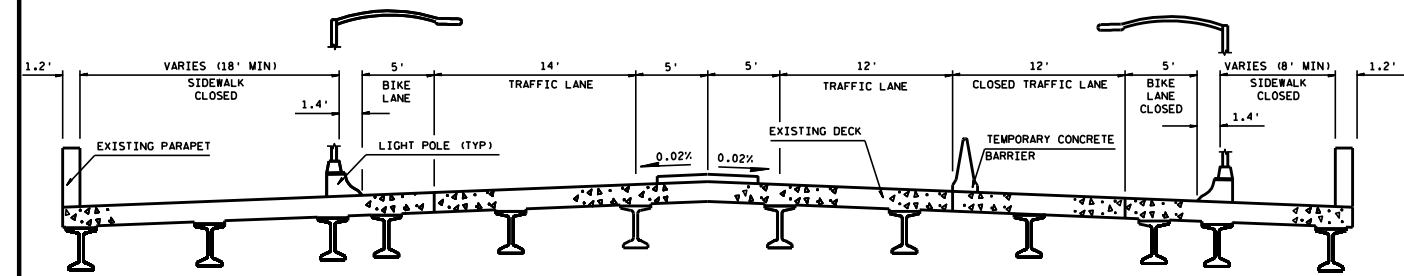
USH 41 NB

CTH F (SCHEURING RD)

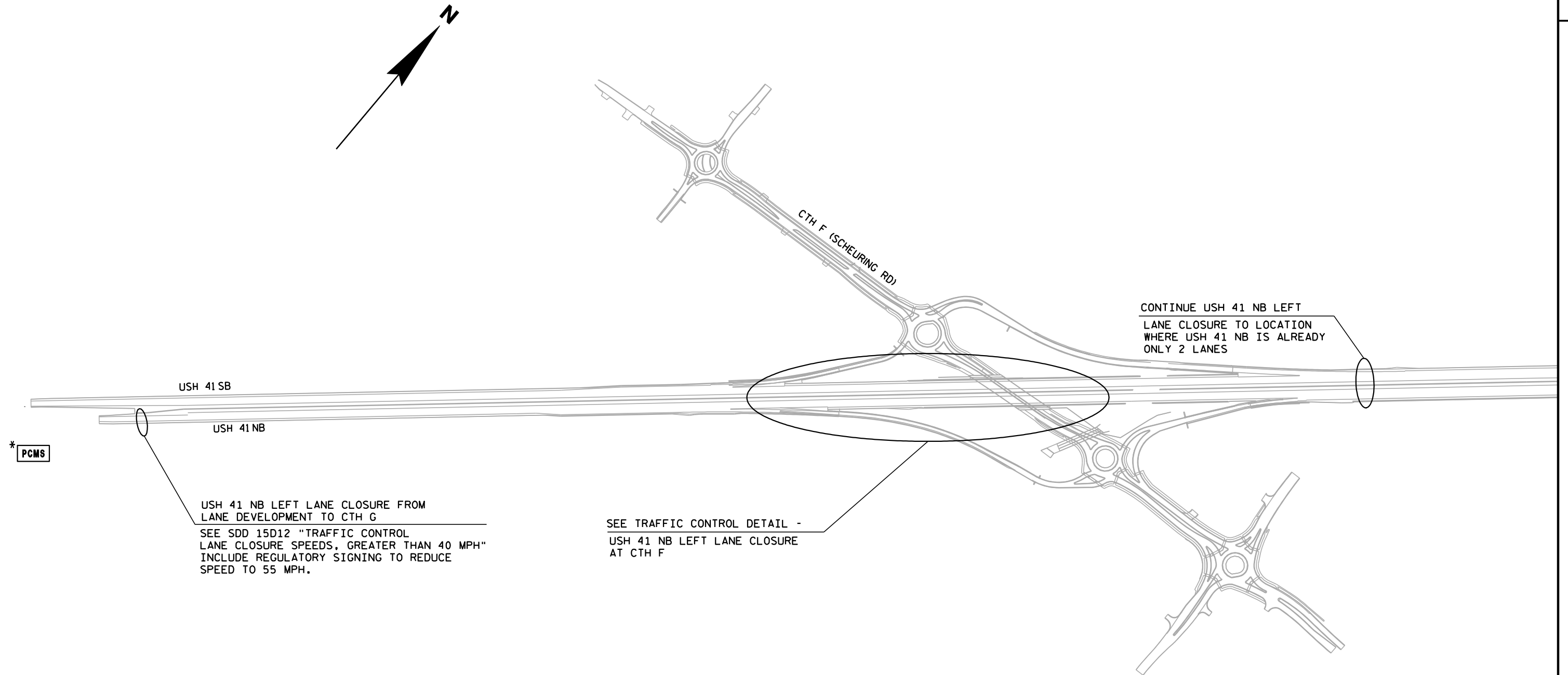
TEMPORARY CRASH CUSHION

LANE
CLOSEDR11-2L
48" X 30"

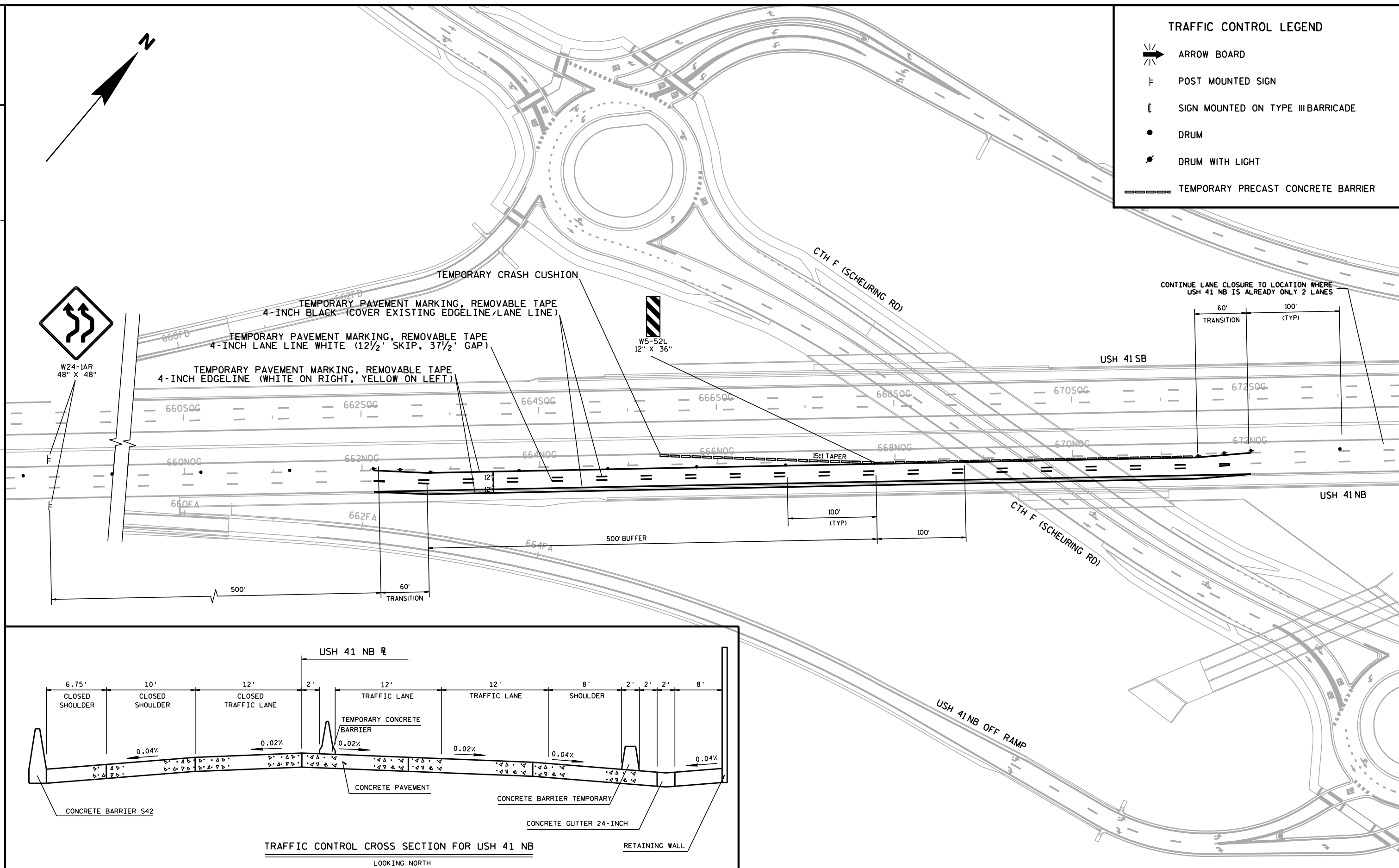
200' TAPER

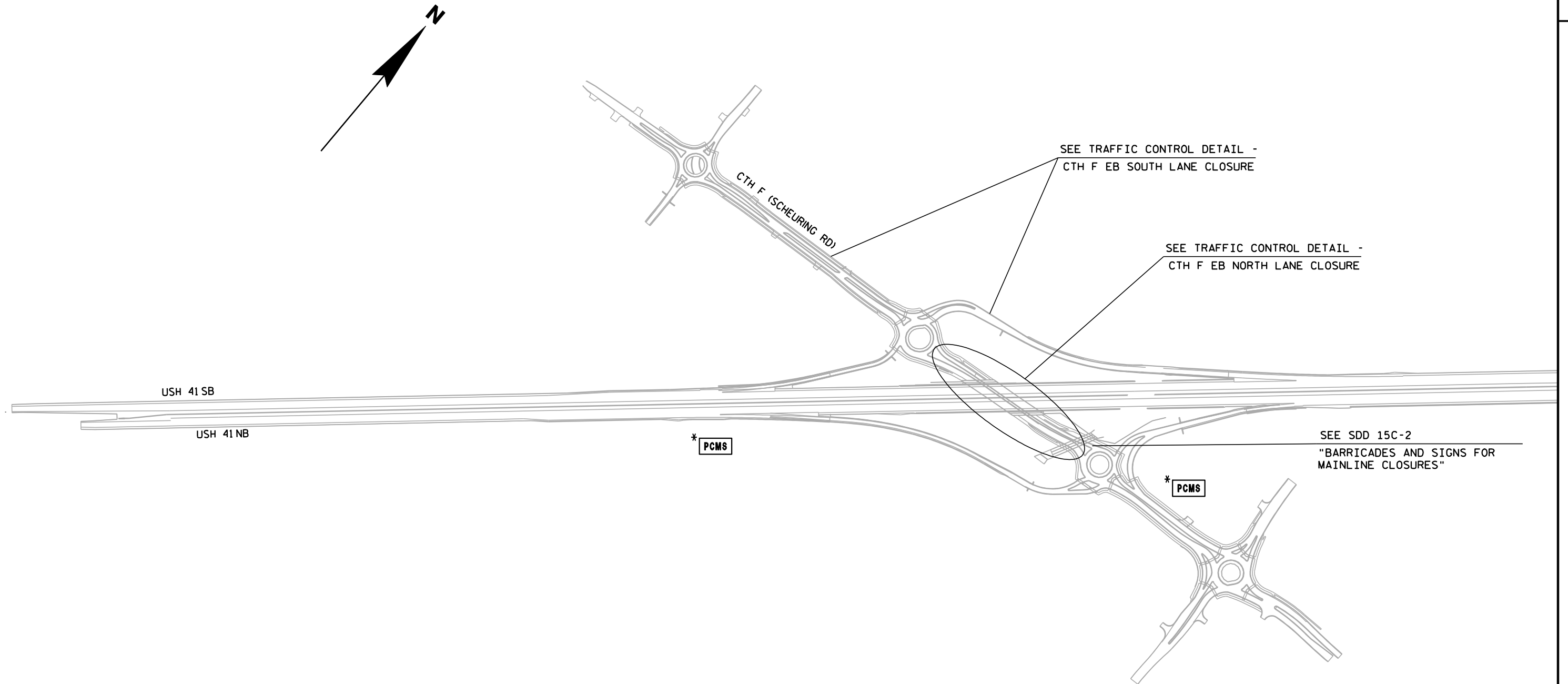
TRAFFIC CONTROL CROSS SECTION FOR CTH F
LOOKING EAST











* PORTABLE CHANGEABLE MESSAGE BOARDS SHALL BE INSTALLED 3 BUSINESS DAYS PRIOR TO CLOSURES. CONTACT NE REGION TRAFFIC UNIT FOR MESSAGE.





* PORTABLE CHANGEABLE MESSAGE BOARDS SHALL
BE INSTALLED 3 BUSINESS DAYS PRIOR TO
CLOSURE. CONTACT NE REGION TRAFFIC
UNIT FOR MESSAGE.

TRAFFIC CONTROL LEGEND

-  ARROWN BOARD
-  POST MOUNTED SIGN
-  SIGN MOUNTED ON TYPE III BARRICADE
-  DRUM
-  DRUM WITH LIGHT
-  TEMPORARY PRECAST CONCRETE BARRIER

N

USH 41 SB OFF RAMP

SEE TRAFFIC CONTROL DETAIL CTH F EB SOUTH LANE CLOSURE FOR
TRAFFIC CONTROL REQUIRED FOR USH 41 SB OFF RAMP AND TO THE
WEST.

**LANE
CLOSED**R11-2L
48" X 30"

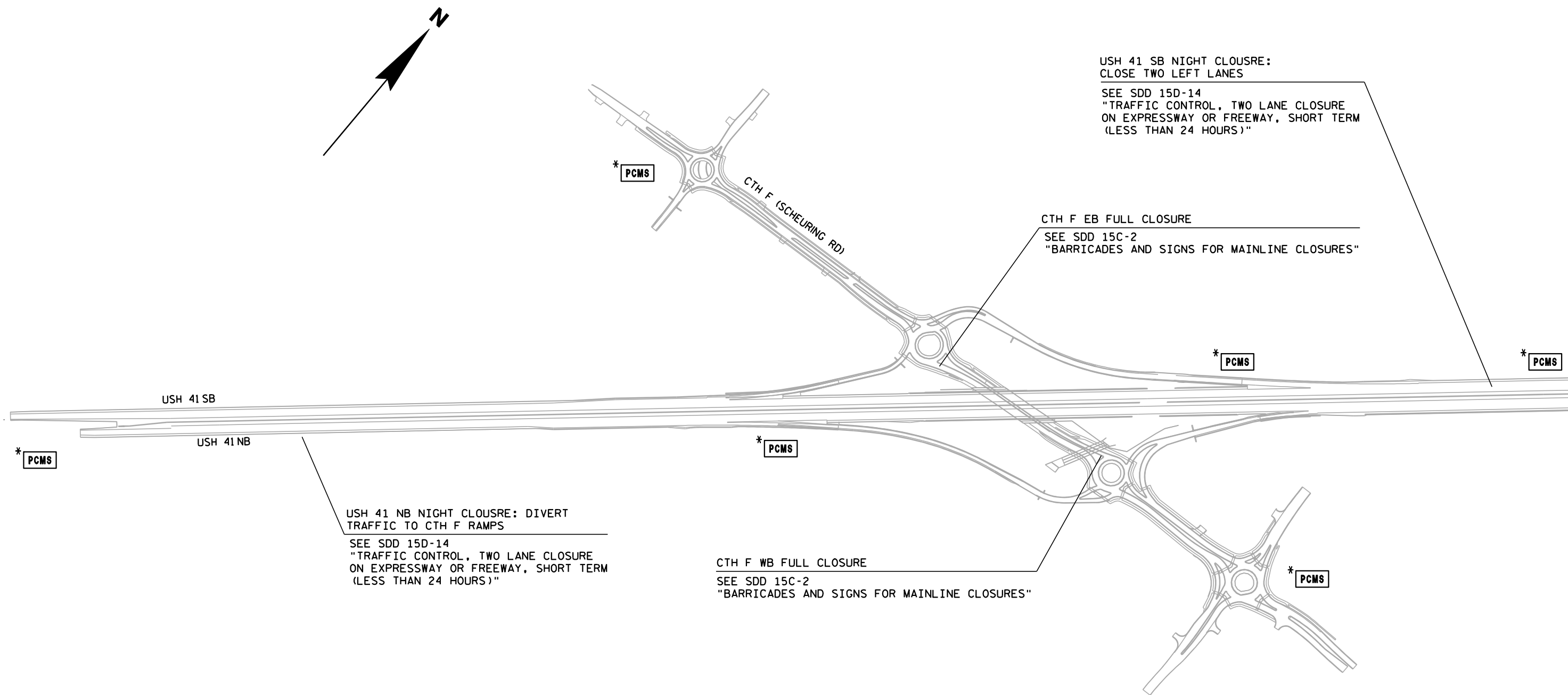
CTH F (SCHEURING RD)

USH 41 SB

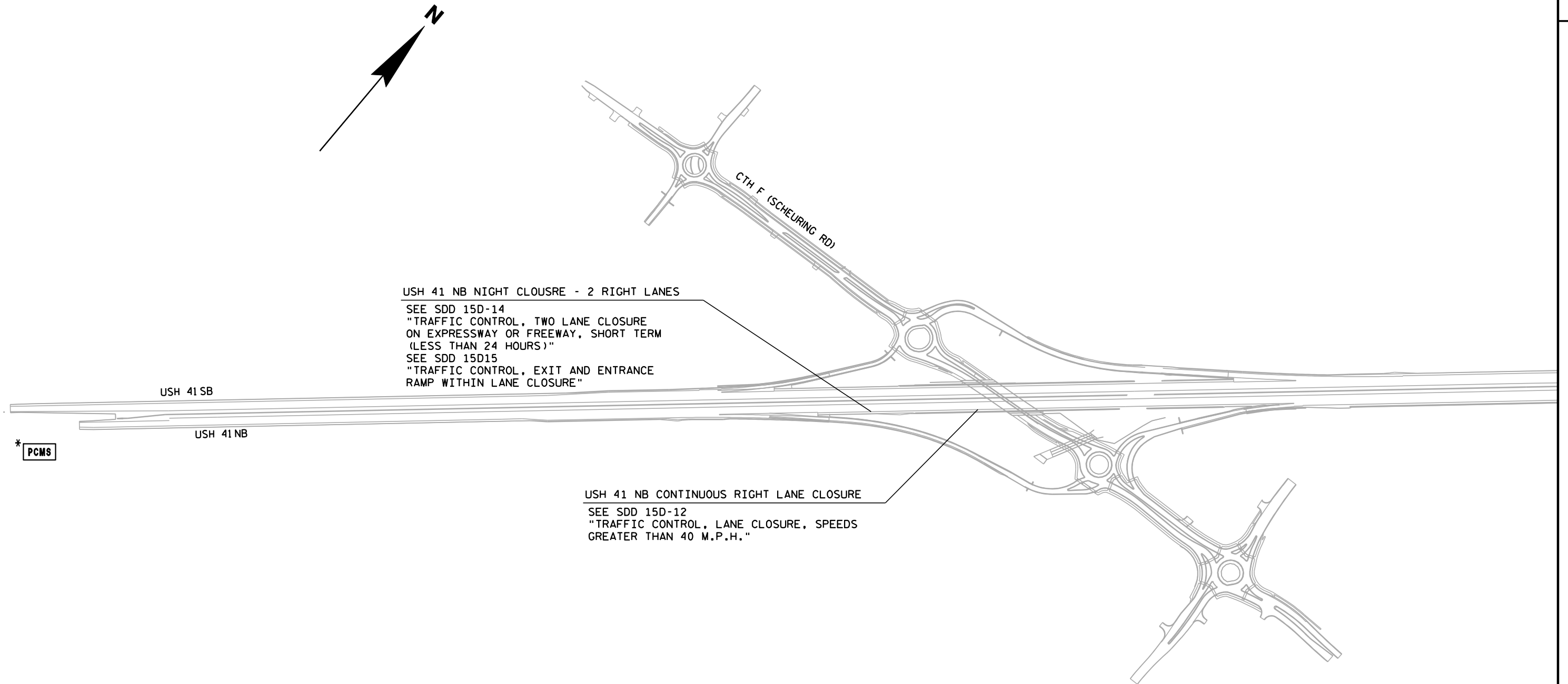
USH 41 NB

CTH F (SCHEURING RD)

25'
(TYP)



* PORTABLE CHANGEABLE MESSAGE BOARDS SHALL
BE INSTALLED 3 BUSINESS DAYS PRIOR TO
CLOSURE. CONTACT NE REGION TRAFFIC
UNIT FOR MESSAGE.



* PORTABLE CHANGEABLE MESSAGE BOARDS SHALL
BE INSTALLED 3 BUSINESS DAYS PRIOR TO
LANE CLOSURES. CONTACT NE REGION TRAFFIC
UNIT FOR MESSAGE.

DATE 18MAR13		E S T I M A T E O F Q U A N T I T I E S			
LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1130-45-60 QUANTITY
0010	203.0200	REMOVING OLD STRUCTURE (STATION) 01. 39+19	LS	1.000	1.000
0020	204.0100	REMOVING PAVEMENT	SY	1,407.000	1,407.000
0030	204.0157	REMOVING CONCRETE BARRIER	LF	600.000	600.000
0040	213.0100	FINISHING ROADWAY (PROJECT) 01. 1130-45-60	EACH	1.000	1.000
0050	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	100.000	100.000
0060	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	50.000	50.000
0070	311.0110	BREAKER RUN	TON	25.000	25.000
0080	415.0135	CONCRETE PAVEMENT 13 1/2-INCH	SY	1,407.000	1,407.000
0090	416.0610	DRILLED TIE BARS	EACH	231.000	231.000
0100	416.0620	DRILLED DOWEL BARS	EACH	212.000	212.000
0110	416.1110	CONCRETE RUMBLE STRIPS SHOULDER	LF	1,241.000	1,241.000
0120	502.3200	PROTECTIVE SURFACE TREATMENT	SY	72.000	72.000
0130	502.6105	MASONRY ANCHORS TYPE S 5/8-INCH	EACH	20.000	20.000
0140	502.6500	PROTECTIVE COATING CLEAR	GAL	1.000	1.000
0150	503.0172	PRESTRESSED GIRDER TYPE I 72W-INCH	LF	443.000	443.000
0160	505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	30,290.000	30,290.000
0170	509.5100.S	POLYMER OVERLAY	SY	2,650.000	2,650.000
0180	603.1142	CONCRETE BARRIER TYPE S42	LF	600.000	600.000
0190	603.8000	CONCRETE BARRIER TEMPORARY PRECAST DELIVERED	LF	1,004.000	1,004.000
0200	603.8125	CONCRETE BARRIER TEMPORARY PRECAST INSTALLED	LF	1,004.000	1,004.000
0210	611.8110	ADJUSTING MANHOLE COVERS	EACH	1.000	1.000
0220	611.8115	ADJUSTING INLET COVERS	EACH	3.000	3.000
0230	614.0905	CRASH CUSHIONS TEMPORARY	EACH	2.000	2.000
0240	616.0700.S	FENCE SAFETY	LF	100.000	100.000
0250	619.1000	MOBILIZATION	EACH	1.000	1.000
0260	624.0100	WATER	MGAL	2.000	2.000
0270	628.1504	SILT FENCE	LF	200.000	200.000
0280	628.1520	SILT FENCE MAINTENANCE	LF	50.000	50.000
0290	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	2.000	2.000
0300	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	2.000	2.000
0310	628.2004	EROSION MAT CLASS I TYPE B	SY	1,624.000	1,624.000
0320	628.7010	INLET PROTECTION TYPE B	EACH	9.000	9.000
0330	628.7015	INLET PROTECTION TYPE C	EACH	6.000	6.000
0340	628.7504	TEMPORARY DITCH CHECKS	LF	16.000	16.000
0350	629.0210	FERTILIZER TYPE B	CWT	1.200	1.200
0360	630.0120	SEEDING MIXTURE NO. 20	LB	51.000	51.000
0370	630.0200	SEEDING TEMPORARY	LB	51.000	51.000
0380	642.5001	FIELD OFFICE TYPE B 01. 1130-45-60	EACH	1.000	1.000
0390	643.0100	TRAFFIC CONTROL (PROJECT) 01. 1130-45-60	EACH	1.000	1.000
0400	643.0300	TRAFFIC CONTROL DRUMS	DAY	14,427.000	14,427.000
0410	643.0410	TRAFFIC CONTROL BARRICADES TYPE II	DAY	760.000	760.000
0420	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	1,125.000	1,125.000
0430	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	2,084.000	2,084.000
0440	643.0715	TRAFFIC CONTROL WARNING LIGHTS TYPE C	DAY	5,923.000	5,923.000
0450	643.0800	TRAFFIC CONTROL ARROW BOARDS	DAY	243.000	243.000
0460	643.0900	TRAFFIC CONTROL SIGNS	DAY	4,101.000	4,101.000
0470	643.0910	TRAFFIC CONTROL COVERING SIGNS TYPE I	EACH	1.000	1.000
0480	643.0920	TRAFFIC CONTROL COVERING SIGNS TYPE II	EACH	9.000	9.000
0490	643.1050	TRAFFIC CONTROL SIGNS PCMS	DAY	204.000	204.000
0500	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	1,322.000	1,322.000

DATE 18MAR13		E S T I M A T E O F Q U A N T I T I E S			
LINE				1130-45-60	
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0510	646.0841.S	PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH	LF	201.000	201.000
0520	649.0400	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH	LF	6,260.000	6,260.000
0530	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 01.B-5-600	LS	1.000	1.000
0540	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01.1130-45-60	LS	1.000	1.000
0550	652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	5.000	5.000
0560	652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	158.000	158.000
0570	653.0220	JUNCTION BOXES 18X6X6-INCH	EACH	1.000	1.000
0580	690.0250	SAWING CONCRETE	LF	913.000	913.000
0590	715.0415	INCENTIVE STRENGTH CONCRETE PAVEMENT	DOL	1,125.000	1,125.000
0600	SPV.0035	SPECIAL 601. HIGH PERFORMANCE CONCRETE (HPC) MASONRY STRUCTURES	CY	247.000	247.000
0610	SPV.0060	SPECIAL 01. SALVAGE POLE, MAST ARM, AND LUMINAIRE SPECIAL	EACH	1.000	1.000
0620	SPV.0060	SPECIAL 02. RE-INSTALL SALVAGED POLE, MAST ARM, AND LUMINAIRE	EACH	1.000	1.000
0630	SPV.0060	SPECIAL 601. ANCHOR ASSEMBLIES FOR LIGHT POLES	EACH	1.000	1.000
0640	SPV.0165	SPECIAL 503. ARCHITECTURAL SURFACE TREATMENT	SF	2,350.000	2,350.000
0650	SPV.0165	SPECIAL 504. STAINING CONCRETE	SF	6,695.000	6,695.000
0660	SPV.0165	SPECIAL 505. STAINING CONCRETE BRICK	SF	2,350.000	2,350.000

REMOVING PAVEMENT

CATEGORY	STATION	TO	STATION	LOCATION	204. 0100 SY
0010	667' NOG' +25	-	668' NOG' +66	USH 41 LT	453
0010	668' NOG' +38	-	669' NOG' +25	USH 41 RT	259
0010	670' NOG' +00	-	671' NOG' +00	USH 41 LT	319
0010	670' NOG' +50	-	671' NOG' +75	USH 41 RT	375
TOTAL					1407

BASE AGGREGATE DENSE SUMMARY

			305. 0110 BASE AGGREGATE DENSE 3/4 INCH	305. 0120 BASE AGGREGATE DENSE 1-1/4 INCH	311. 0110 BREAKER RUN	624. 0100 WATER		
CATEGORY	STATION	TO	STATION	LOCATION	TON	TON	TON	MGAL
0010	PROJECT			UNDI STRI BUTED	100	50	25	2
TOTALS					100	50	25	2

CONCRETE PAVEMENT SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	415. 0135 CONCRETE PAVEMENT 13 1/2-INCH SY	416. 0610 DRI LLED TIE BARS EACH	416. 062 DRI LLED DOWEL BARS EACH
0010	667' NOG' +25	-	668' NOG' +66	USH 41 LT	453	71	54
0010	668' NOG' +38	-	669' NOG' +25	USH 41 RT	259	45	52
0010	670' NOG' +00	-	671' NOG' +00	USH 41 LT	319	51	54
0010	670' NOG' +50	-	671' NOG' +75	USH 41 RT	375	64	52
TOTAL					1407	231	212

CONCRETE RUMBLE STRIPS SHOULDER

CATEGORY	STATION	TO	STATION	LOCATION	416. 1110 LF	REMARKS
0010	662' NOG' +00	-	672' NOG' +00	USH 41 RT	1000	RT SI DE
0010	667' NOG' +25	-	668' NOG' +66	USH 41 LT	141	MEDI AN
0010	670' NOG' +00	-	671' NOG' +00	USH 41 LT	100	MEDI AN
TOTAL					1241	

CONCRETE BARRIER SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	204. 0157 REMOVI NG CONCRETE BARRI ER LF	603. 1142 CONCRETE BARRI ER TYPE S42 LF	603. 8000 CONCRETE BARRI ER PRECAST DELI VERED LF	603. 8125 CONCRETE BARRI ER PRECAST I NSTALLLED LF	614. 0905 CRASH CUSHI ONS TEMPORARY EACH
0010	668' NOG' +00	-	674' NOG' +00	USH 41 RT	600	600			
0010	665' NOG' +35	-	671' NOG' +35	USH 41			600	600	1
0010	37' FEB' +10	-	41' FEB' +11	CTH F RT			404	404	1
TOTALS					600	600	1004	1004	2

MANHOLE AND INLET COVER SUMMARY

CATEGORY	STATION	LOCATION	OFFSET	611. 8110 ADJUSTING MANHOLE COVERS EACH	611. 8115 ADJUSTING INLET COVERS EACH
0010	667' NOG + 25	USH 41	28. 0' RT	-	1
0010	668' NOG' +50	USH 41	34. 1' RT	-	1
0009	670' NOG' +56	USH 40	21. 9' LT	1	-
0010	671' NOG' +62	USH 41	34. 1' RT	-	1
TOTALS				1	3

SILT FENCE SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	628. 1504 SILT FENCE LF	628. 1520 SILT FENCE MAINTENANCE LF
0010	673' NOG' +21	-	673' NOG' +85	USH 41 RT	150	38
0010		-		UNDI STRI BUTED	50	13
TOTAL					200	50

FENCE SAFETY

CATEGORY	STATION	TO	STATION	LOCATION	616. 0700. S LF
0010			PROJECT	UNDI STRI BUTED	100
TOTALS					100

RESTORATION SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	628. 2004 EROSI ON MAT CLASS I TYPE B SY	629. 0210 FERTI LI ZER TYPE B CWT	630. 0200 SEEDI NG TEMPORARY LB	630. 0120 SEEDI NG MI XTURE NO. 20 LB
0010	671' NOG+92	-	673' NOG' +85	USH 41 RT	1524	1	41	41
0010		-		UNDI STRI BUTED	100	0. 2	10	10
TOTAL					1624	1. 2	51	51

MOBILIZATIONS EROSION CONTROL AND MOBILIZATIONS EMERGENCY EROSION CONTROL

CATEGORY	STATION	TO	STATION	LOCATION	628. 1905 MOBI LI ZATI ONS EROSI ON CONTROL EACH	628. 1910 MOBI LI ZATI ONS EMERGENCY EROSI ON CONTROL EACH
0010		-		PROJECT	2	2
TOTAL					2	2

TEMPORARY DITCH CHECKS

CATEGORY	STATION	LOCATION	628. 7504 LF
0010	673' NOG' +85	USH 41 RT	16
TOTAL			16

INLET PROTECTION SUMMARY

CATEGORY	STATION	LOCATION	628. 7010 INLET PROTECTION TYPE B EACH	628. 7015 INLET PROTECTION TYPE C EACH
0010	667' NOG' +25	USH 41 LT	1	-
0010	668' NOG' +50	USH 41 RT	1	-
0010	670' NOG' +50	USH 41 LT	1	-
0010	671' NOG' +43	USH 41 LT	1	-
0010	671' NOG' +63	USH 41 LT & RT	2	-
0010	671' NOG' +83	USH 41 LT	1	-
0010	674' NOG' +00	USH 41 LT & RT	2	-
0010	41' FEB' +11	CTH F RT	-	1
0010	41' FEB' +81	CTH F LT	-	1
0010	43' FEB' +00	CTH F RT	-	1
0010	43' FEB' +84	CTH F LT	-	1
0010	44' FEB' +08	CTH F LT	-	1
0010	44' FEB' +25	CTH F LT	-	1
TOTAL			9	6

TRAFFIC CONTROL SUMMARY

CATEGORY	LOCATION	APPROX. SERVICE PERIOD DAYS	643. 0300 DRUMS		643. 0410 BARRI CADES TYPE II		643. 0420 BARRI CADES TYPE III		643. 0705 WARNI NG LI GHTS TYPE A		643. 0715 WARNI NG LI GHTS TYPE C		643. 0800 ARROW BOARDS		643. 0900 SI GNS		643. 0910 COVERI NG SI GNS			643. 0920 COVERI NG SI GNS			643. 1050 SI GNS PCMS	
		NO. IN SERVICE	DAYS	NO. IN SERVICE	DAYS	NO. IN SERVICE	DAYS	NO. IN SERVICE	DAYS	NO. IN SERVICE	DAYS	NO. IN SERVICE	DAYS	NO. IN SERVICE	DAYS	SI GNS	CYCLES	EACH	SI GNS	CYCLES	EACH	NO. IN SERVICE	DAYS	
GIRDER REPLACEMENT																								
CTH F EB SOUTH LANE CLOSURE																								
0010	USH 41 SB EXIT RAMP	80	37	2960	-	-	2	160	4	320	13	1040	1	80	6	480	1	1	1	2	1	2	1	14
0010	CTH F RBT WEST LEG	80	15	1200	2	160	1	80	2	160	10	800	1	80	7	560	-	-	-	1	1	1	1	14
0010	CTH F RBT	80	15	1200	-	-	2	160	4	320	7	560	-	-	2	160	-	-	-	-	-	-	-	-
0010	CTH F RBT EAST LEG & BRIDGE	80	31	2480	6	480	2	160	4	320	28	2240	-	-	13	1040	-	-	-	-	-	-	1	14
USH 41 NB LEFT LANE CLOSURE																								
0010	USH 41 NB	30	116	3480	-	-	8	240	16	480	6	180	-	-	31	930	-	-	-	6	1	6	2	17
USH 41 NB RIGHT LANE CLOSURE																								
0010	USH 41 NB	14	43	602	-	-	2	28	4	56	14	196	1	14	22	308	-	-	-	-	-	-	1	3
NIGHT CLOSURES																								
0010	USH 41 NB 2 RIGHT LANES CLOSURE	1	95	95	-	-	4	4	7	7	37	37	3	3	16	16	-	-	-	-	-	-	1	3
0010	USH 41 SB 2 LEFT LANES CLOSURE	6	140	840	-	-	2	12	4	24	32	192	3	18	15	90	-	-	-	-	-	-	1	3
0010	USH 41 NB CLOSURE	6	65	390	-	-	5	30	7	42	28	168	3	18	13	78	-	-	-	-	-	-	3	54
0010	CTH F EB CLOSURE	6	-	-	-	-	8	48	10	60	-	-	-	-	2	12	-	-	-	-	-	-	1	18
0010	CTH F WB CLOSURE	6	-	-	-	-	8	48	10	60	-	-	-	-	2	12	-	-	-	-	-	-	2	36
BRIDGE EPOXY																								
CTH F EB SOUTH LANE CLOSURE																								
0010	CTH F RBT EAST LEG & BRIDGE	5	104	520	8	40	7	35	12	60	51	255	2	10	27	135	-	-	-	-	-	-	2	6
CTH F EB NORTH LANE CLOSURE																								
0010	CTH F RBT EAST LEG & BRIDGE	5	92	460	8	40	6	30	10	50	31	155	2	10	26	130	-	-	-	-	-	-	2	6
CTH F WB CLOSURE																								
0010	CTH F WB BRIDGE CLOSURE	5	-	-	8	40	8	40	10	50	-	-	-	-	10	50	-	-	-	-	-	-	2	6
0010	UNDI STRIBUTED	-	-	200	-	-	-	50	-	75	-	100	-	10	-	100	-	-	-	-	-	-	-	10
PROJECT TOTALS			14427		760		1125		2084		5923		243		4101		1			9			204	

PERMANENT PAVEMENT MARKING SUMMARY

CATEGORY	STATION TO STATION			LOCATION	646. 0106 PAVEMENT MARKING 4-INCH EPOXY			646. 0841. S PAVEMENT MARKING 4-INCH GROOVED WET REFLECTIVE CONTRAST TAPE	REMARKS
					WHI TE		YELLOW SOLI D		
					SOLI D	DASHED			
					LF	LF		LF	
0010	667' NOG' +25	-	671' NOG' +00	USH 41 LT	-	-	375	63	
0010	668' NOG' +38	-	671' NOG' +75	USH 41 RT	337	-	-	63	
0010	37' FEB' +30	-	40' FEB' +55	CTH F	305	-	-	75	EB
0010	38' FEB' +05	-	41' FEB' +10	CTH F	305	-	-	-	WB
SUBTOTAL					947	0	375	-	
PROJECT TOTALS					1322			201	

TEMPORARY PAVEMENT MARKING SUMMARY

CATEGORY	STATION TO STATION			LOCATION	649. 0400 REMOVABLE TAPE 4-INCH				
					WHI TE		YELLOW SOLI D LF	BLACK	
					SOLI D LF	DASHED LF		SOLI D LF	DASHED LF
0010	670' FC' +66	-	677' FC' +26	USH 41 SB OFF RAMP LT	-	-	660	-	175
0010	29' FEB' +05	-	31' FEB' +05	CTH F RT	-	-	200	-	25
0010	34' FEB' +73	-	41' FEB' +14	CTH F RT	640	-	200	-	50
0010	662' NOG' +12	-	672' NOG' +00	USH 41 RT	990	250	990	990	250
0010	649' NOG' +90	-	657' NOG' +00	USH 41 RT	660	-	-	-	180
SUBTOTAL					2290	250	2050	990	680
PROJECT TOTALS					6260				

CONSTRUCTION STAKING SUMMARY

CATEGORY	STATION TO STATION			LOCATION	650. 6500 CONSTRUCTION STAKING STRUCTURE LAYOUT LS	650. 9910 CONSTRUCTI ON STAKING SUPPLEMENTAL CONTROL LS
0010				PROJECT	1	1
TOTALS					1	1

CONCRETE SAWING

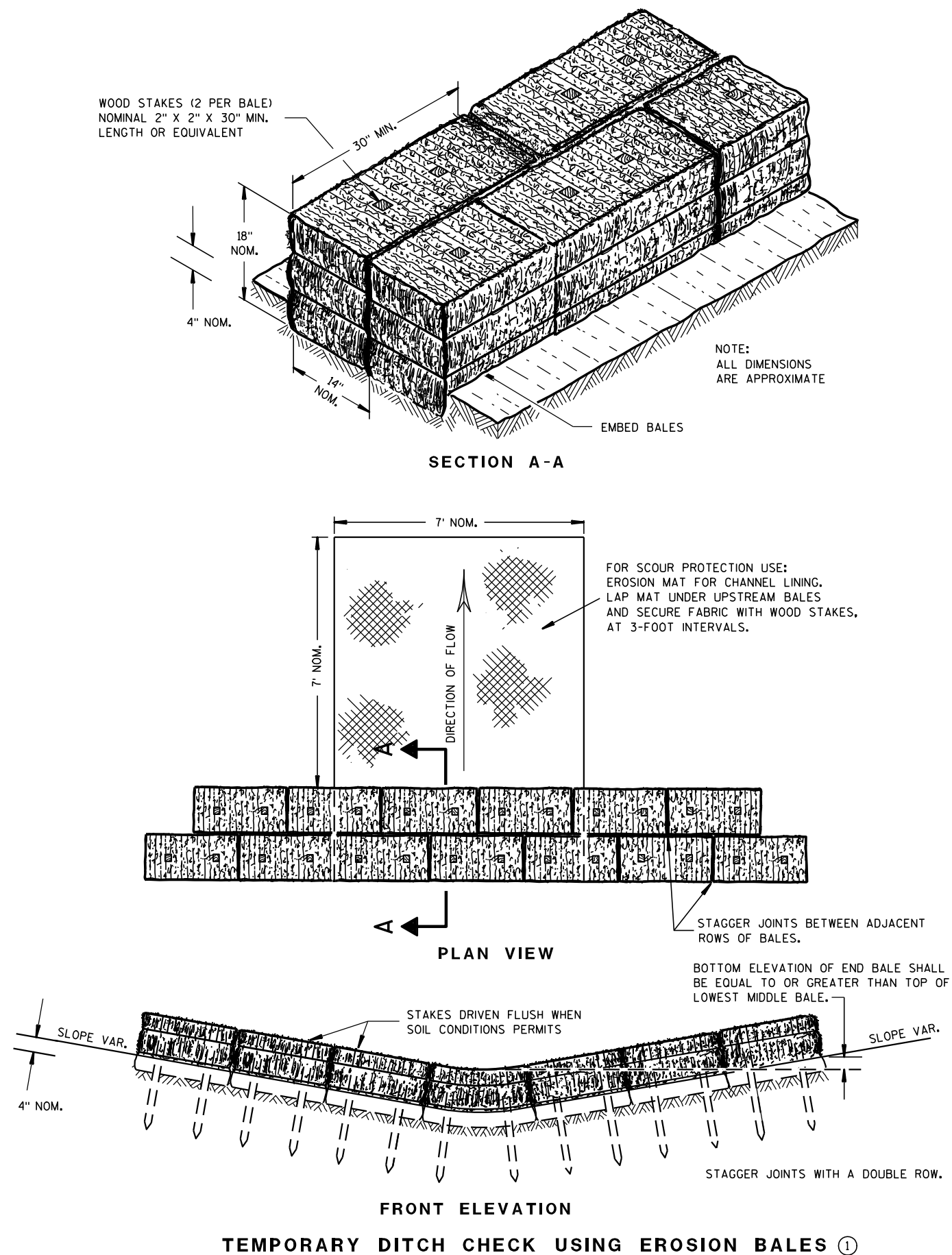
CATEGORY	STATION TO STATION			LOCATI ON	690. 0250 SAWI NG CONCRETE LF	REMARKS
0010	667' NOG' +25	-	668' NOG' +66	USH 41 LT	338	PATCH
0010	668' NOG' +38	-	669' NOG' +25	USH 41 RT	140	PATCH
0010	670' NOG' +00	-	671' NOG' +00	USH 41 LT	256	PATCH
0010	670' NOG' +50	-	671' NOG' +75	USH 41 RT	179	PATCH
TOTALS					913	

ELECTRICAL SUMMARY

CATEGORY	STATION	LOCATI ON	OFFSET	SPV. 0060. 01 SALVAGE POLE, MAST ARM, AND LUMI NAI RE SPECI AL EACH	SPV. 0060. 02 RE-I NSTALL SALVAGED POLE, MAST ARM, AND LUMI NAI RE SPECI AL EACH
0010	39' FEB' +75	CTH F	30. 5' RT	1	1
TOTALS				1	1

Standard Detail Drawing List

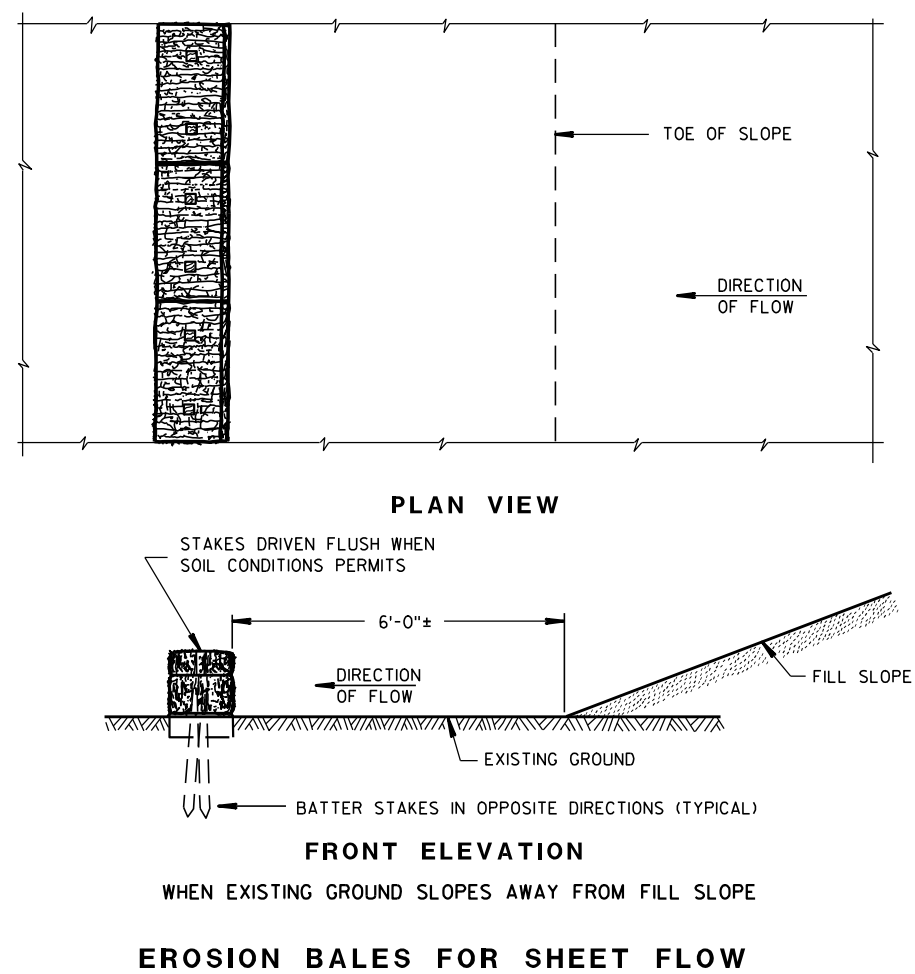
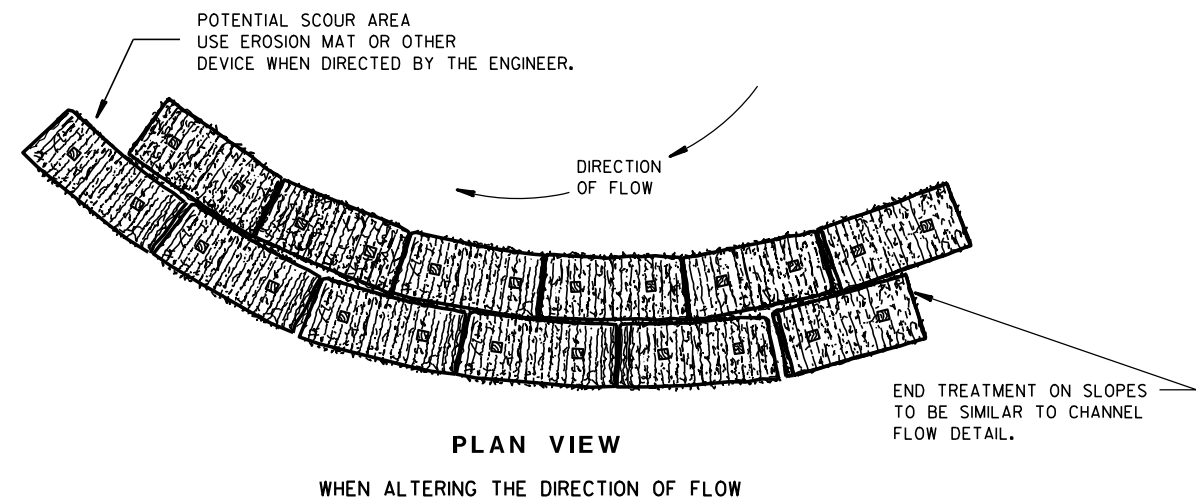
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
13A05-05A	SHOULDER RUMBLE STRIP, MILLING
13A05-05B	SHOULDER RUMBLE STRIP, MILLING
13C01-15	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C11-10A	RURAL DOWELED CONCRETE PAVEMENT
13C11-10B	RURAL DOWELED CONCRETE PAVEMENT
13C13-07	URBAN DOWELED CONCRETE PAVEMENT
13C18-01A	CONCRETE PAVEMENT JOINTING
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"
14B08-01A	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-01B	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-01C	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-01D	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-01E	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B32-01A	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-01B	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-01C	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-01D	CONCRETE BARRIER SINGLE SLOPE (CBSS)
15C02-04A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-04B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-04C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-01	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-01	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M. P. H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-01	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M. P. H. OR LESS
15C08-15A	PAVEMENT MARKING (MAINLINE)
15C08-15B	PAVEMENT MARKING (INTERSECTIONS)
15C08-15C	PAVEMENT MARKING (CLIMBING LANE & PASSING LANE)
15C08-15D	PAVEMENT MARKING (CLIMBING LANE & PASSING LANE)
15C08-15E	PAVEMENT MARKING (LEFT TURN LANE)
15C08-15F	PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)
15D03-01	TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M. P. H. WITH BARRIER
15D12-02	TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M. P. H.
15D14-01	TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT-TERM (LESS THAN 24 HOURS)
15D15-01	TRAFFIC CONTROL, EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE
15D20-01	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D27-01	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D30-01	TRAFFIC CONTROL, SIDEWALK CLOSURE



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.

- ① TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

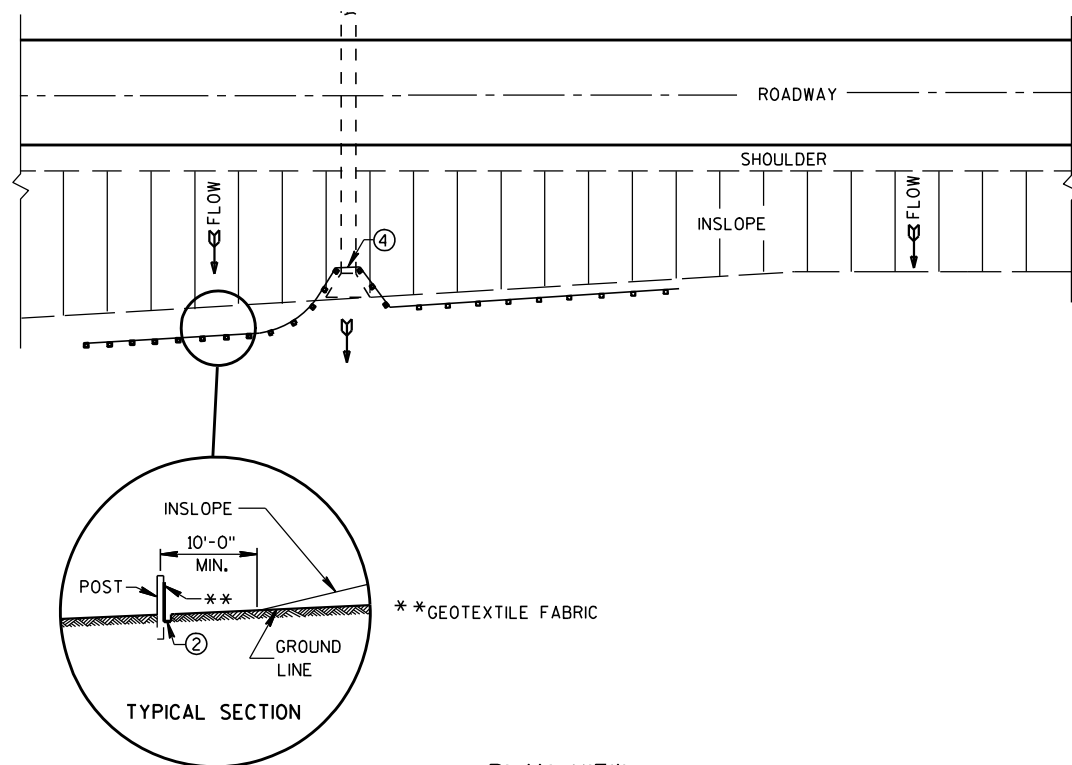
TYPICAL INSTALLATIONS OF
EROSION BALES / TEMPORARY
DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

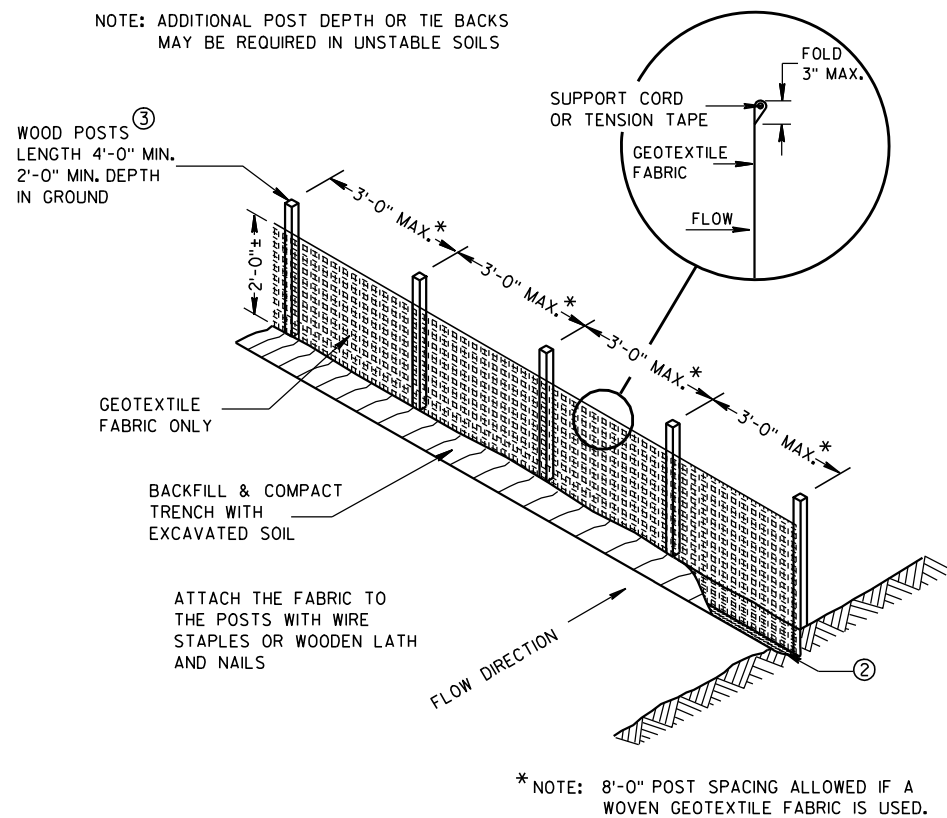
6/04/02
DATE/S/ Beth Canestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

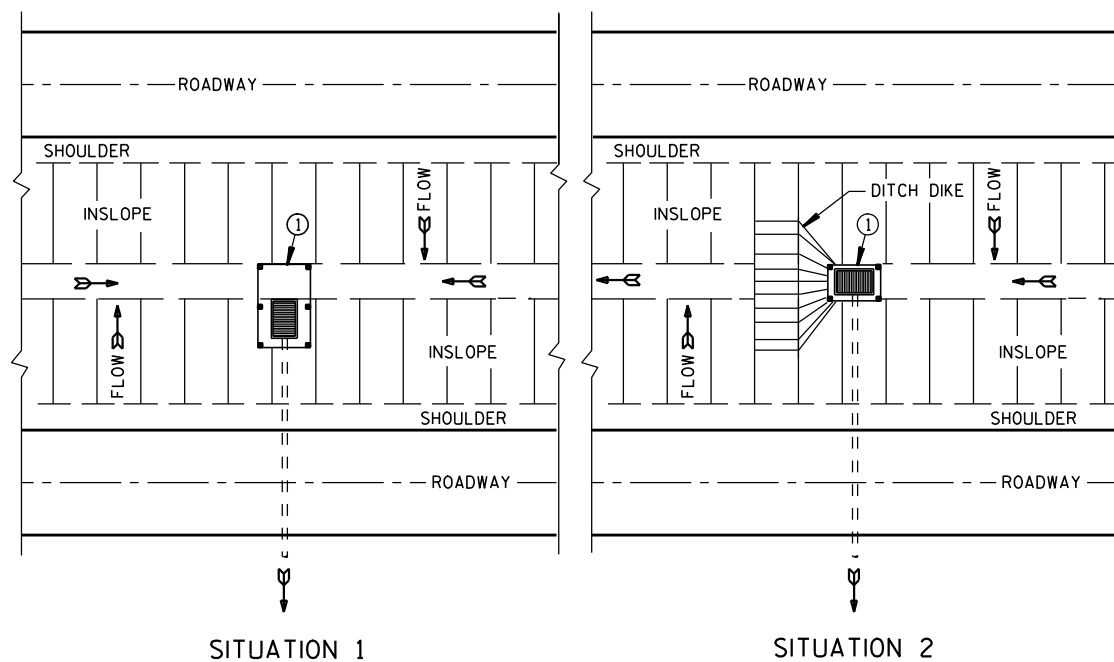


PLAN VIEW
TYPICAL APPLICATION OF SILT FENCE

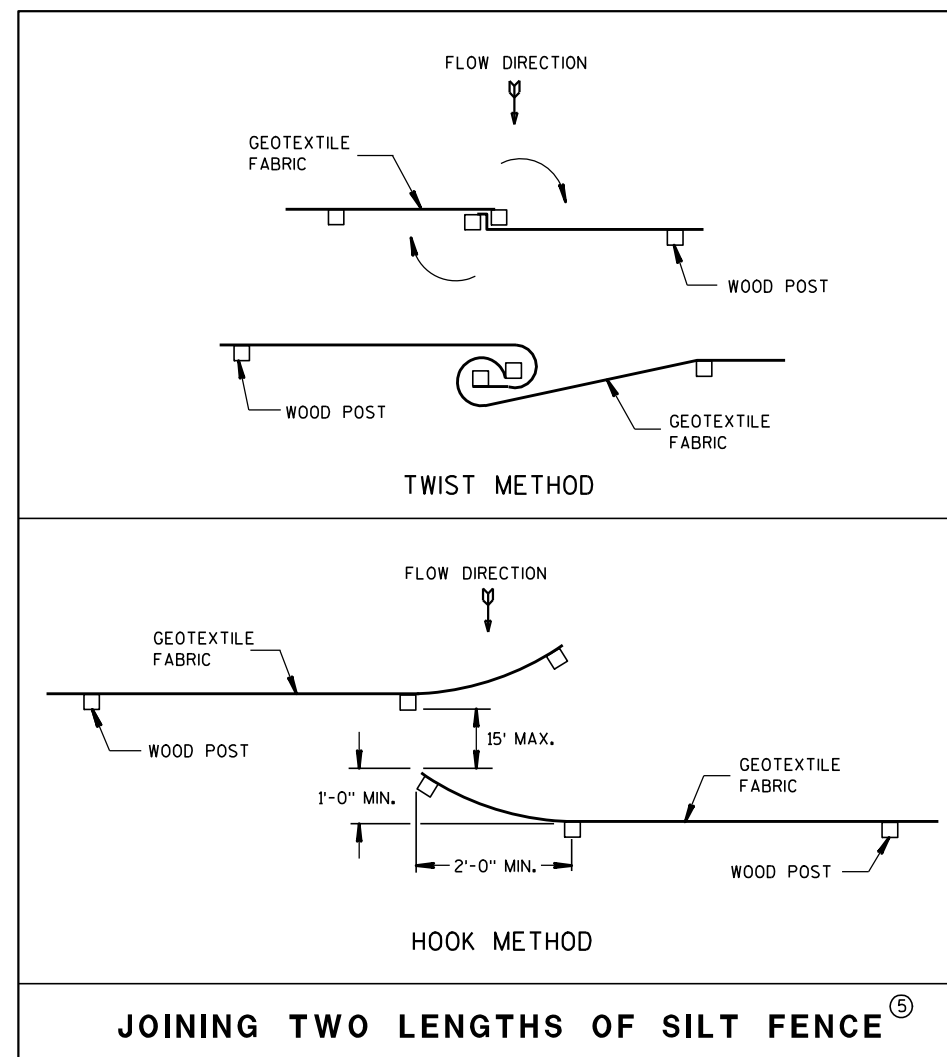
NOTE: ADDITIONAL POST DEPTH OR TIE BACKS
MAY BE REQUIRED IN UNSTABLE SOILS



SILT FENCE



PLAN VIEW
SILT FENCE AT MEDIAN SURFACE DRAINS

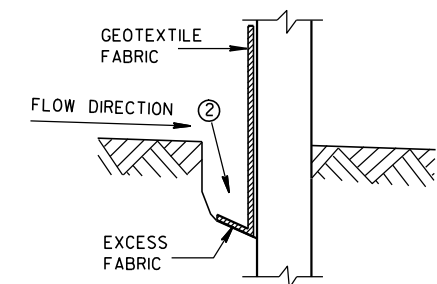


JOINING TWO LENGTHS OF SILT FENCE^⑤

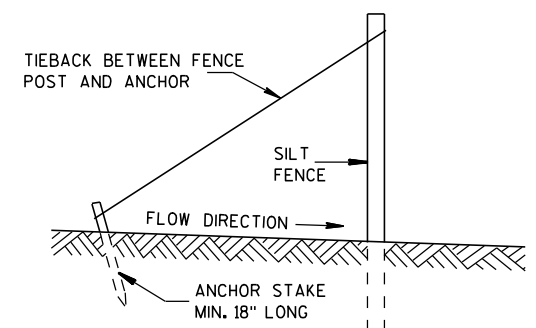
GENERAL NOTES

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

- 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 1 1/8" X 1 1/8" 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.



TRENCH DETAIL



SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

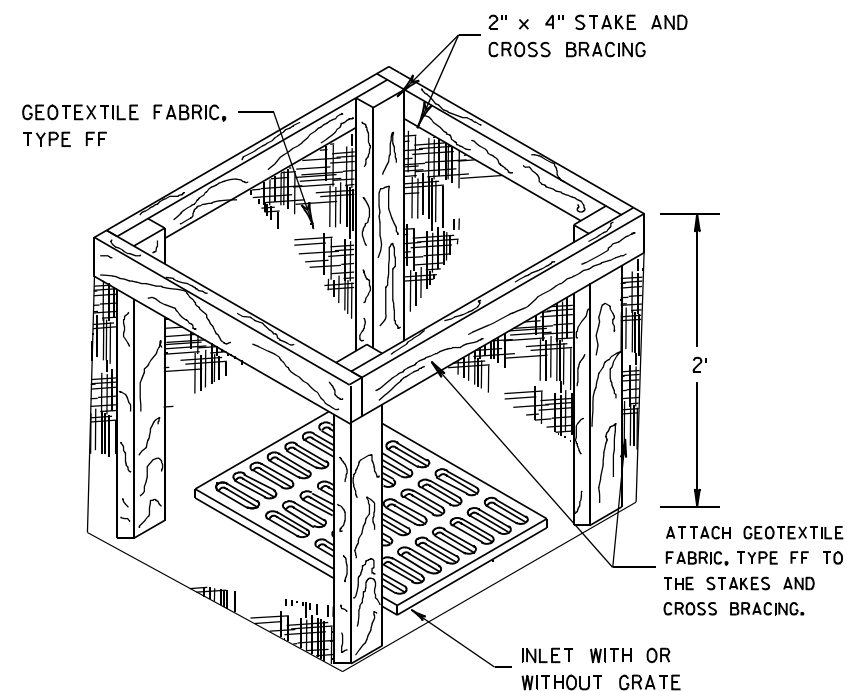
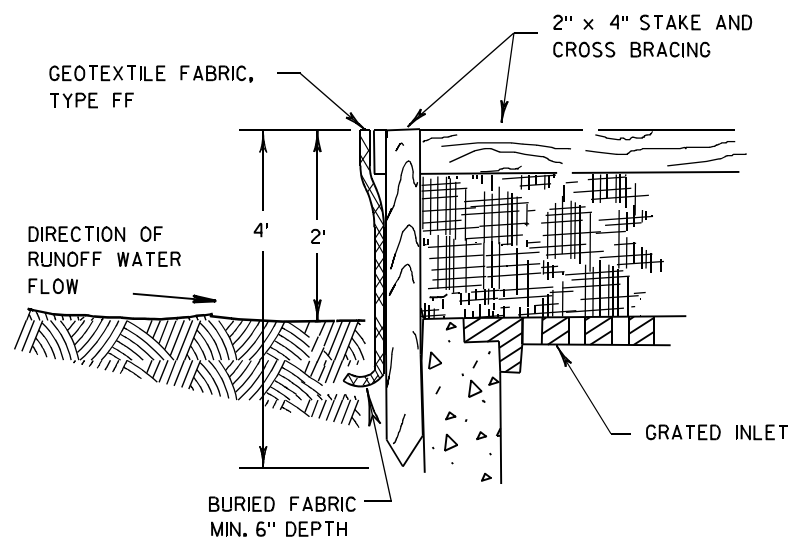
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-29-05
DATE

FHWA

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER



INLET PROTECTION, TYPE A

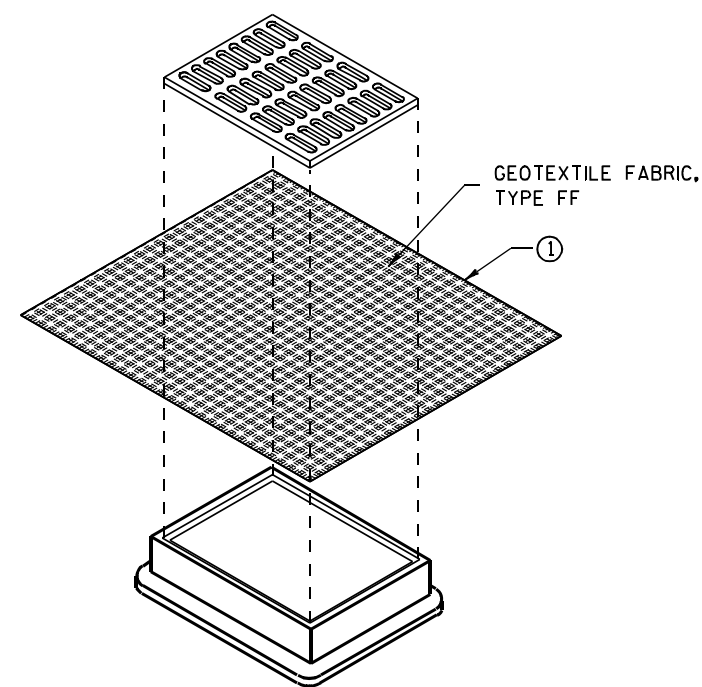
GENERAL NOTES

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.

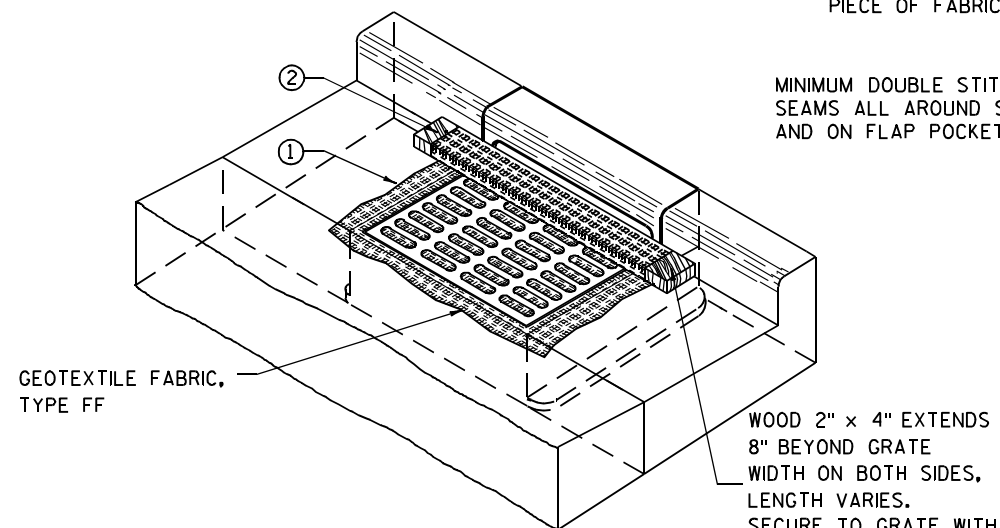
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- 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.

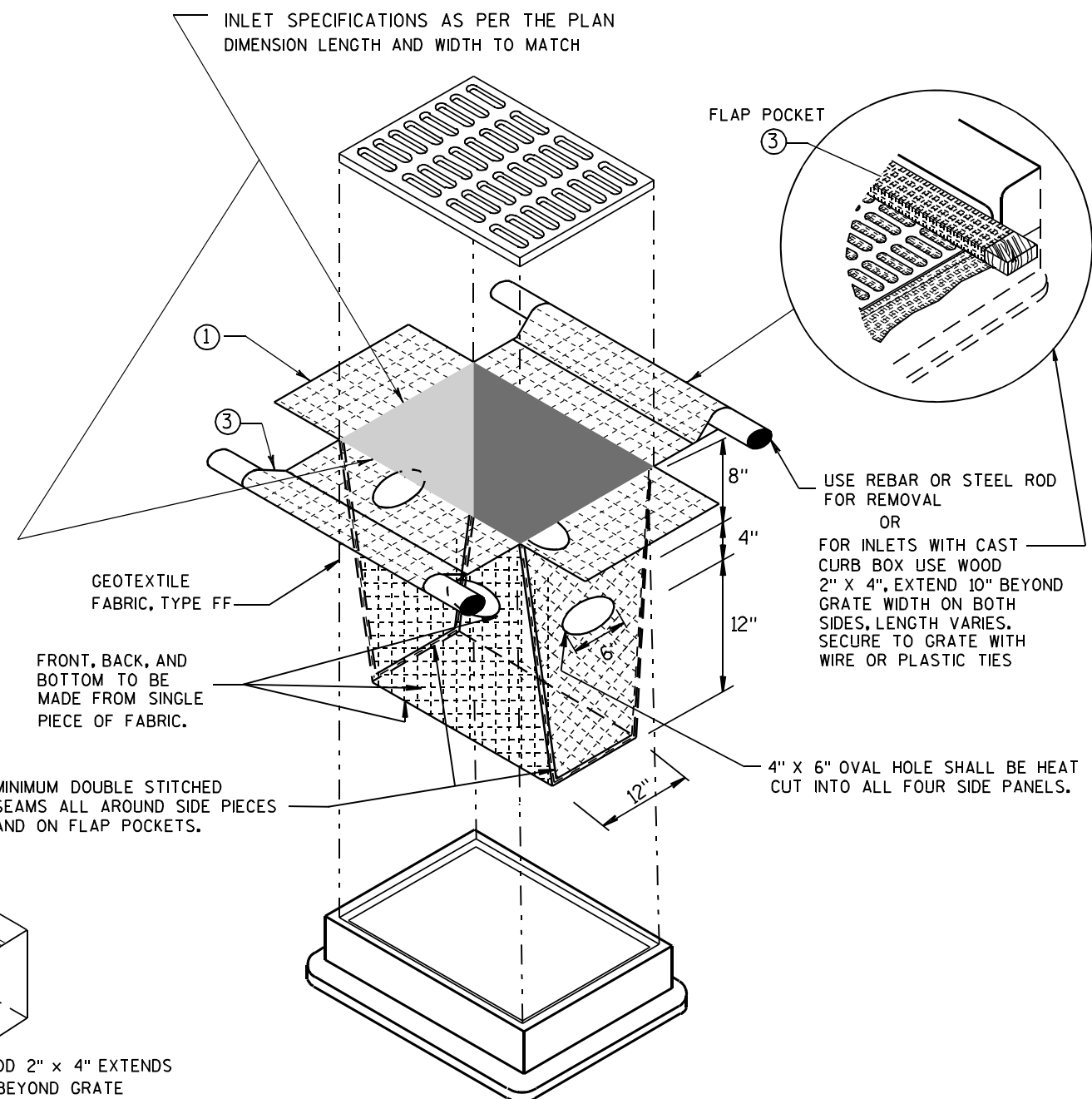
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

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.



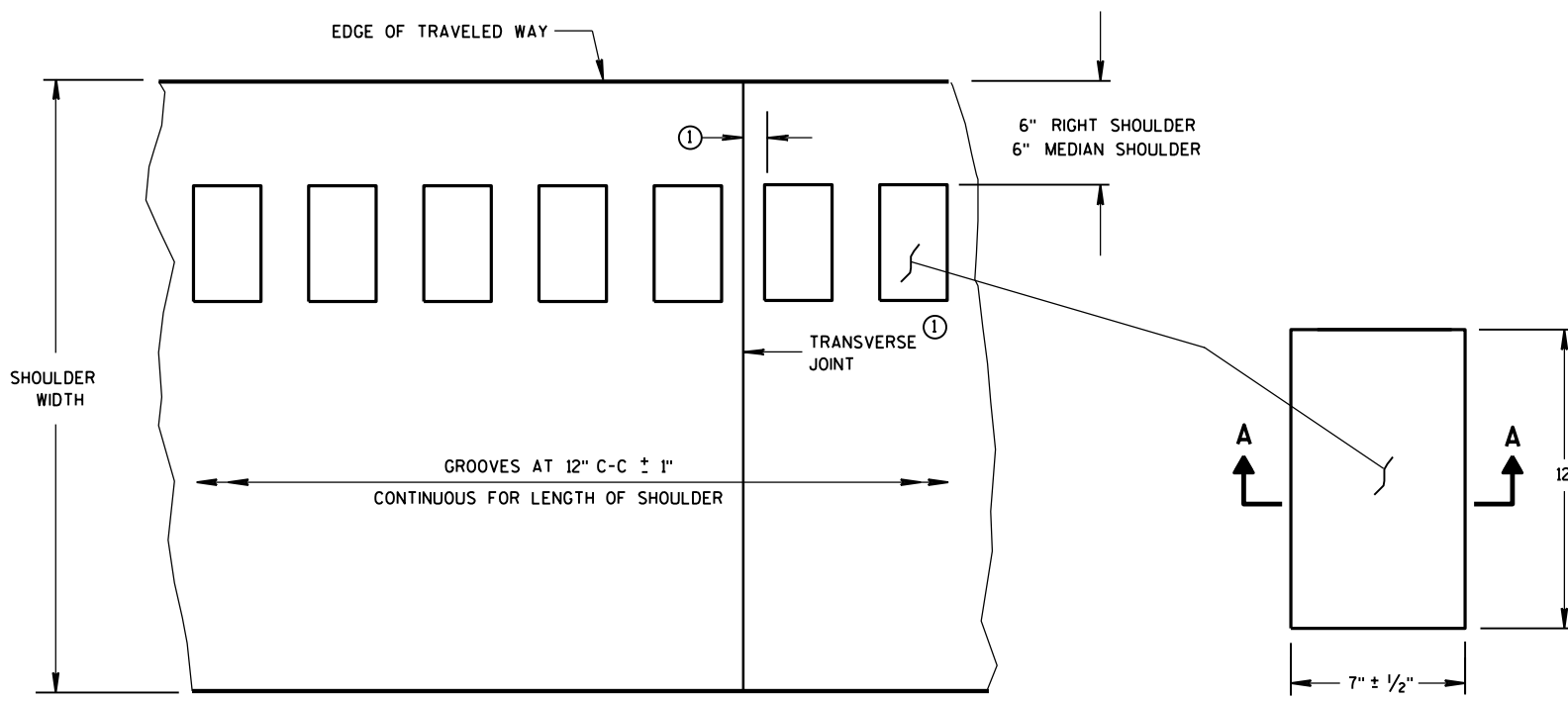
INLET PROTECTION, TYPE D

(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 /S/ Beth Cannestra
DATE
FHWA CHIEF ROADWAY DEVELOPMENT ENGINEER



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

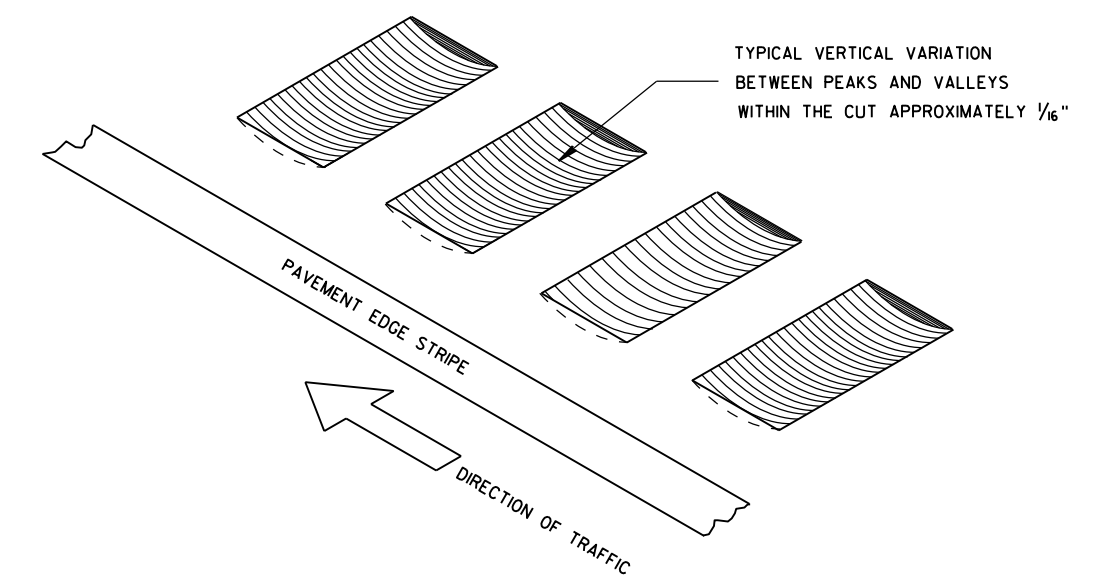
GENERAL NOTES

DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

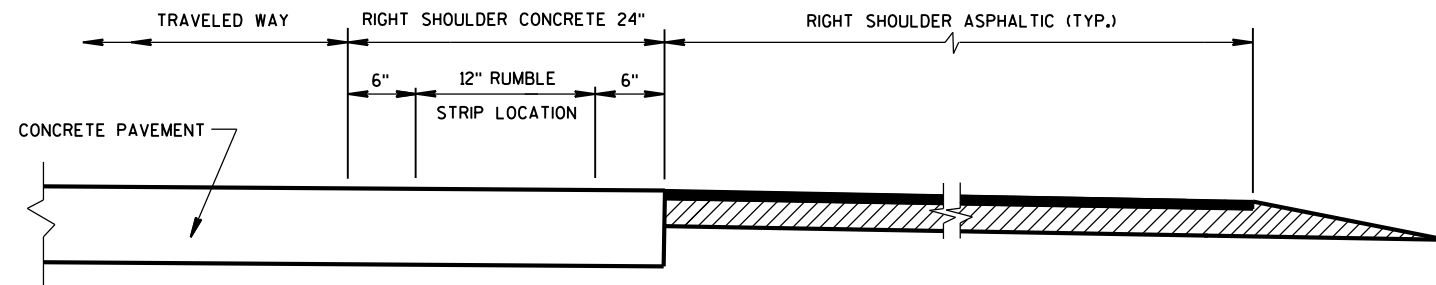
RUMBLE STRIPS ON EXPRESSWAYS

DO NOT INSTALL RUMBLE STRIPS ACROSS SIDE ROAD INTERSECTIONS, COMMERCIAL DRIVEWAYS, PRIVATE DRIVEWAYS OR ADJACENT TO RIGHT TURN LANES, LEFT TURN LANES, TURN LANE TAPERS, BRIDGE DECKS, BRIDGE APPROACHES, OR 100 FEET IN ADVANCE OF RAILROAD CROSSING. THE ATTACHED STANDARD DETAIL DRAWING SHOWS THE LOCATION OF THE RUMBLE STRIPS AT INTERCHANGE AREAS.

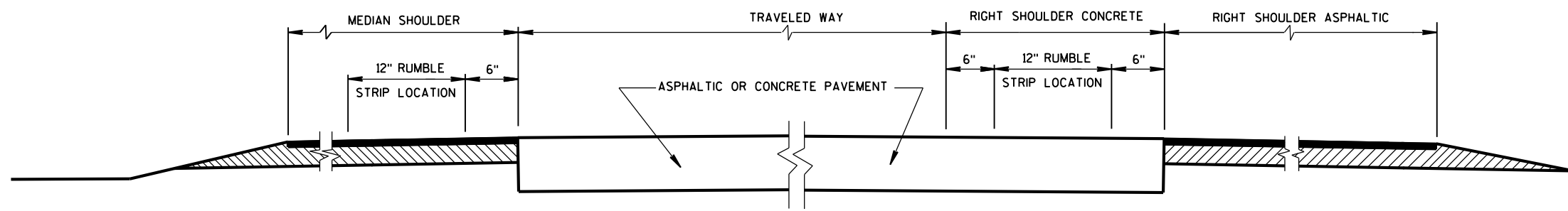
① CONCRETE PAVEMENT - RUMBLE STRIPS SHALL BE A MINIMUM OF 6" AWAY FROM TRANSVERSE JOINTS.



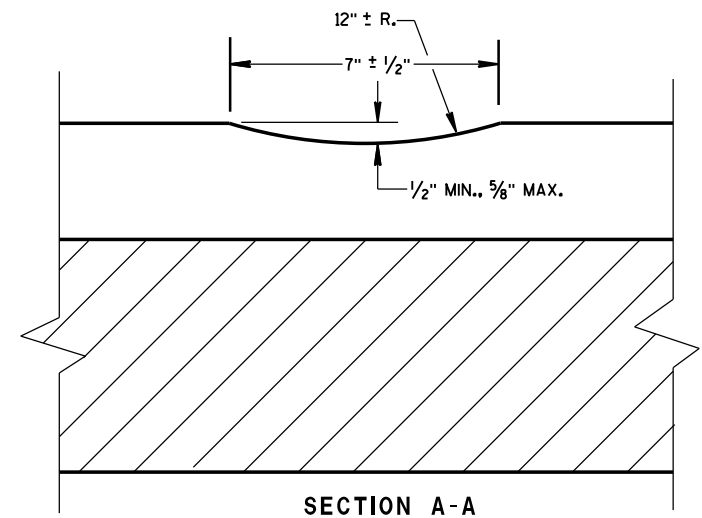
ISOMETRIC



SECTION VIEW
(CONCRETE PAVEMENT EXTENDS INTO RIGHT SHOULDER)



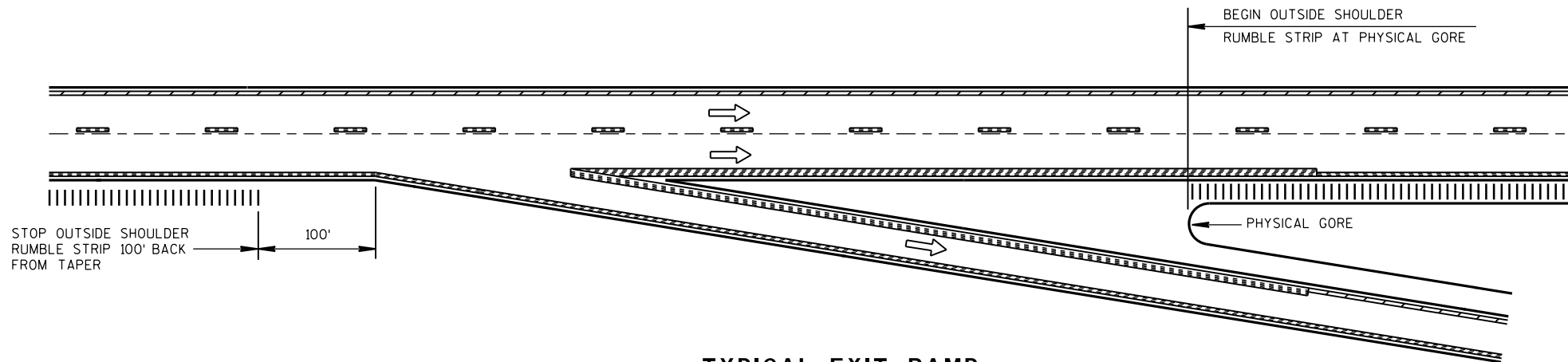
SECTION VIEW
TYPICAL LOCATIONS OF SHOULDER RUMBLE STRIPS
IN RURAL DIVIDED HIGHWAYS
(ONE ROADWAY IS SHOWN)



SECTION A-A

SHOULDER RUMBLE STRIP,
MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



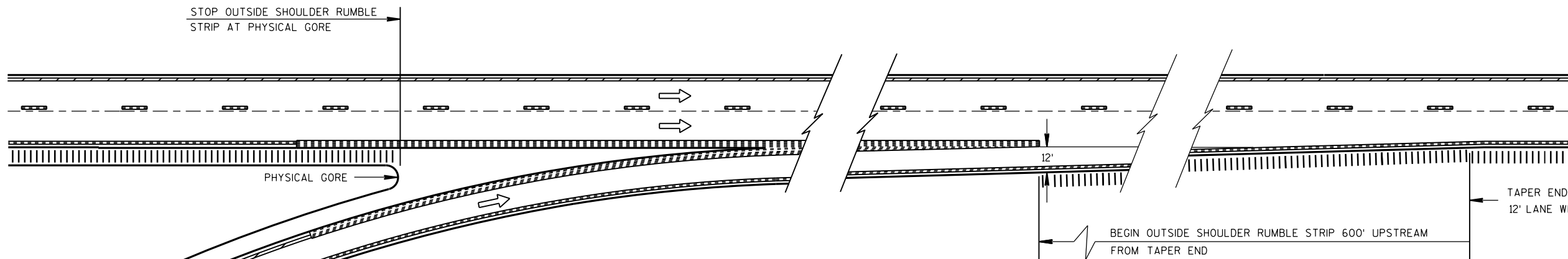
TYPICAL EXIT RAMP

NOTES:

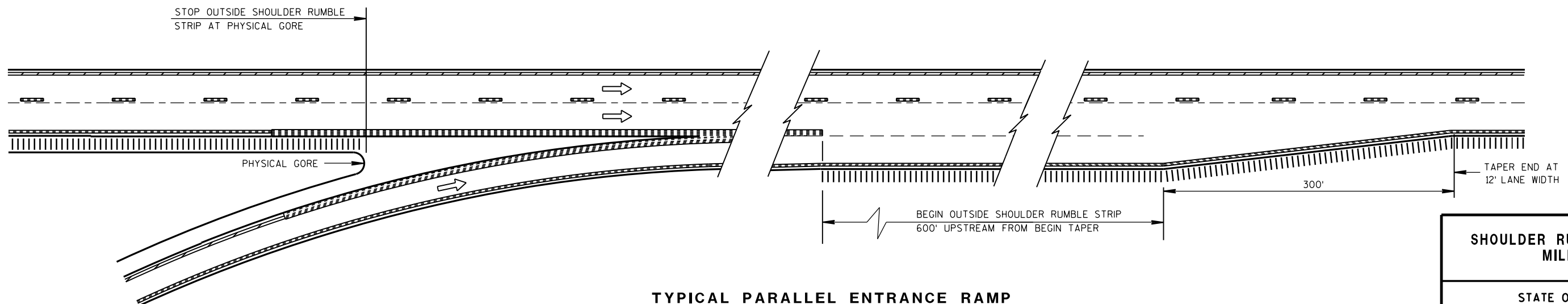
NO RUMBLE STRIP ON EXIT, DIRECTIONAL, OR ENTRANCE RAMPS, EXCEPT NEAR THE ENTRANCE TAPER END AND ALONG THE PARALLEL RAMP AREA AS SHOWN.

PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

NOTE:
ARROW SYMBOL (→)
SHOWS DIRECTION OF TRAVEL



**TYPICAL TAPERED ENTRANCE RAMP
RAMP AND GORE RUMBLE STRIP LOCATIONS**



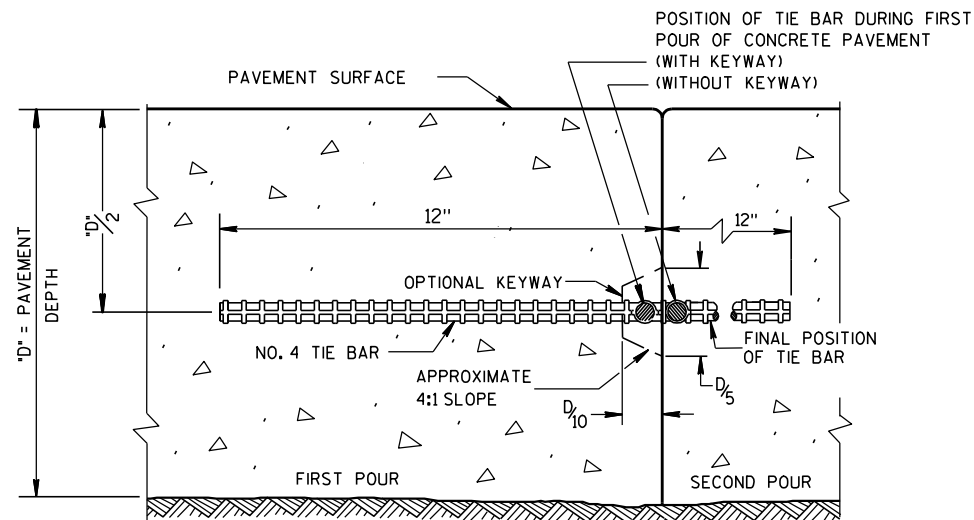
**TYPICAL PARALLEL ENTRANCE RAMP
RAMP AND GORE RUMBLE STRIP LOCATIONS**

**SHOULDER RUMBLE STRIP,
MILLING**

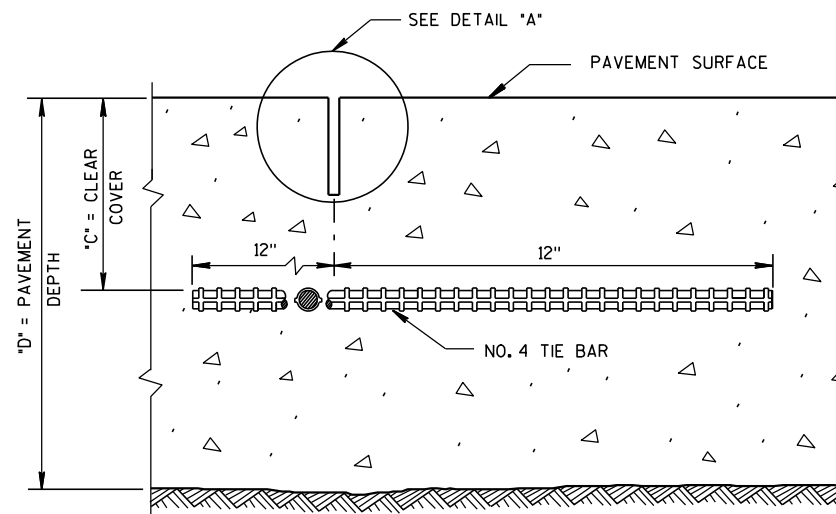
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/17/2012
DATE
FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



CONSTRUCTION JOINT



SAWED JOINT

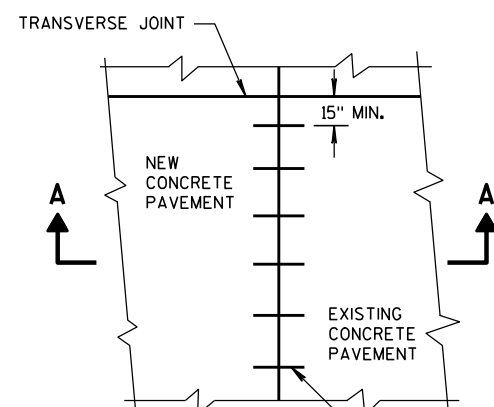
GENERAL NOTES

DO NOT SEAL OR FILL LONGITUDINAL JOINTS.

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

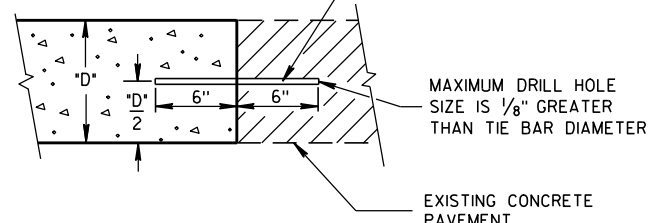
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

① ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

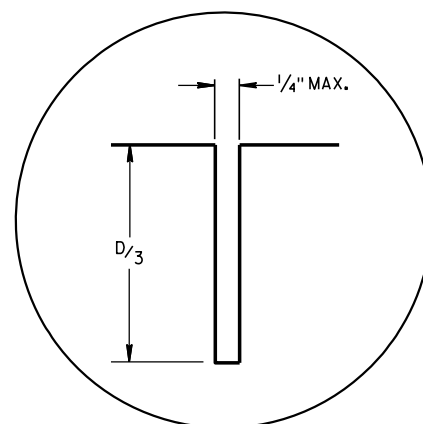


PLAN VIEW

NO. 6 TIE BARS SPACED 2'-6" C-C, INSTALLED PERPENDICULAR TO THE LONGITUDINAL JOINT. ①

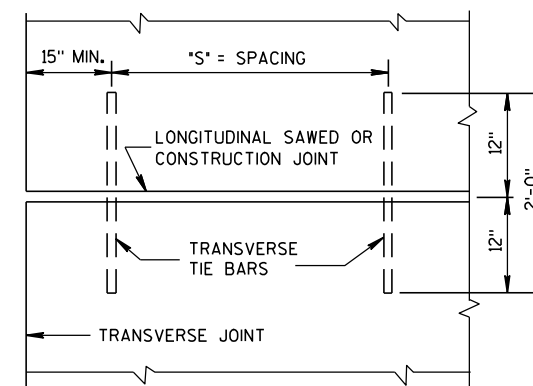


**SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT
TIE BARS ANCHORED
INTO EXISTING PAVEMENT**



DETAIL "A"

PAVEMENT DEPTH "D"	CLEAR COVER "C"	MAXIMUM TIE BAR SPACING "S"	
		PAVEMENT WIDTH 24' OR 26'	≥ 30'
6, 6 1/2"	3" ± 1/2"	48"	42"
7, 7 1/2"	3 1/4" ± 1"	45"	36"
8, 8 1/2"	3 3/4" ± 1"	39"	30"
9, 9 1/2"	4 1/4" ± 1"	33"	27"
10, 10 1/2"	4 3/4" ± 1"	30"	24"
11, 11 1/2"	5 1/4" ± 1"	27"	21"
12"	5 3/4" ± 1"	24"	21"



**PLAN VIEW
SHOWING LOCATION OF TIE BARS**

**CONCRETE PAVEMENT
LONGITUDINAL JOINTS AND TIES**

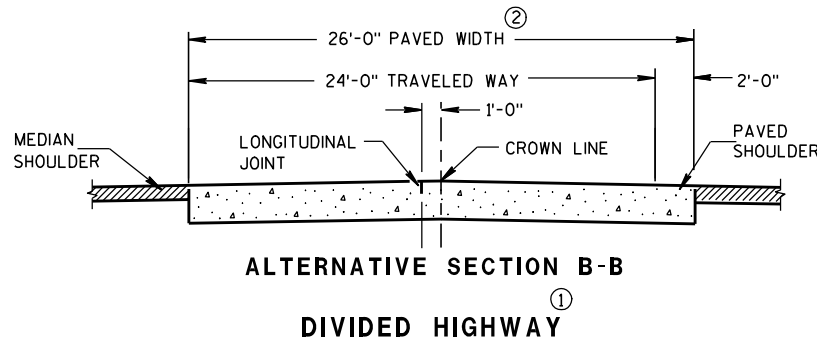
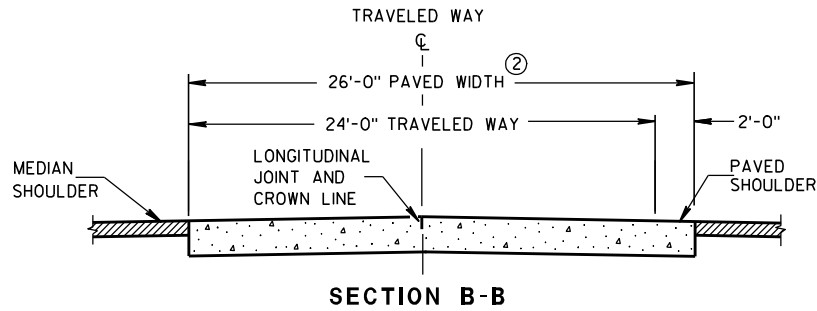
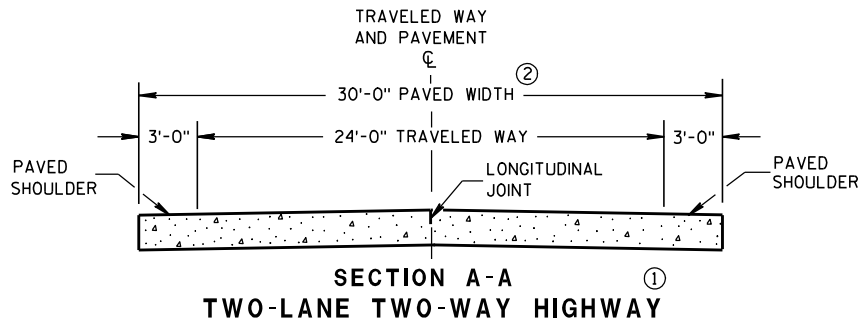
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10-5-2010
DATE

FHWA

/S/ Deb Bischoff
PAVEMENT POLICY & DESIGN ENGINEER



GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT SEAL OR FILL CONTRACTION JOINTS.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, CENTER THE DOWEL ASSEMBLY ACROSS THE LANES. LOCATE THE INNER AND OUTER MOST DOWEL BARS SO THAT THE CENTER OF THE BARS ARE A MINIMUM OF 6 INCHES AND A MAXIMUM OF 12 INCHES FROM THE LONGITUDINAL JOINT AND THE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

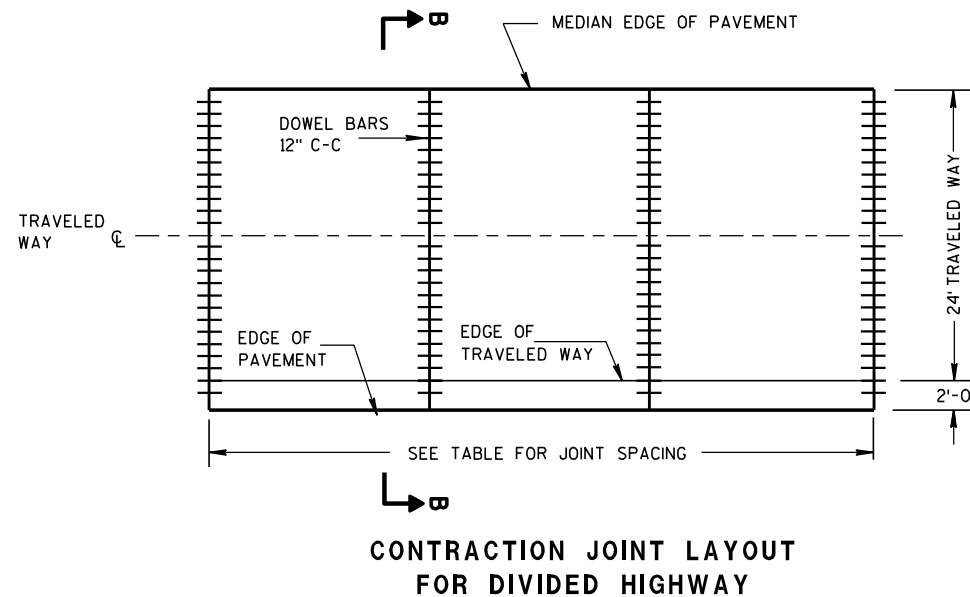
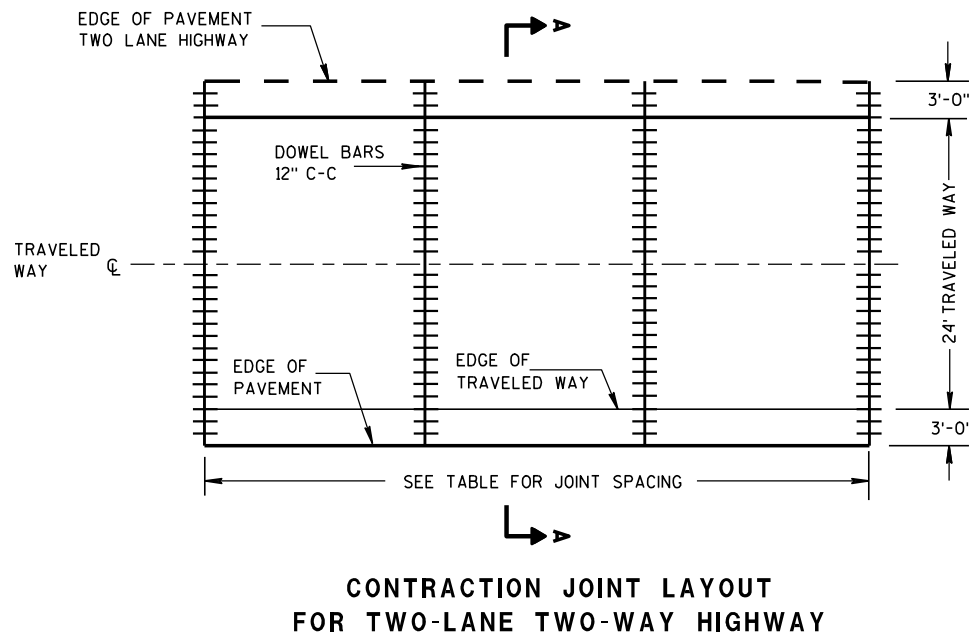
LOCATE CONSTRUCTION JOINTS A MINIMUM OF 4 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

THE CONTRACTOR MAY INSERT TIE BARS THROUGH THE HEADER BOARD AFTER THE CONCRETE HAS BEEN PLACED.

- ① REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.
- ② MEASURE THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED PAVED SHOULDER AS CONCRETE PAVEMENT.

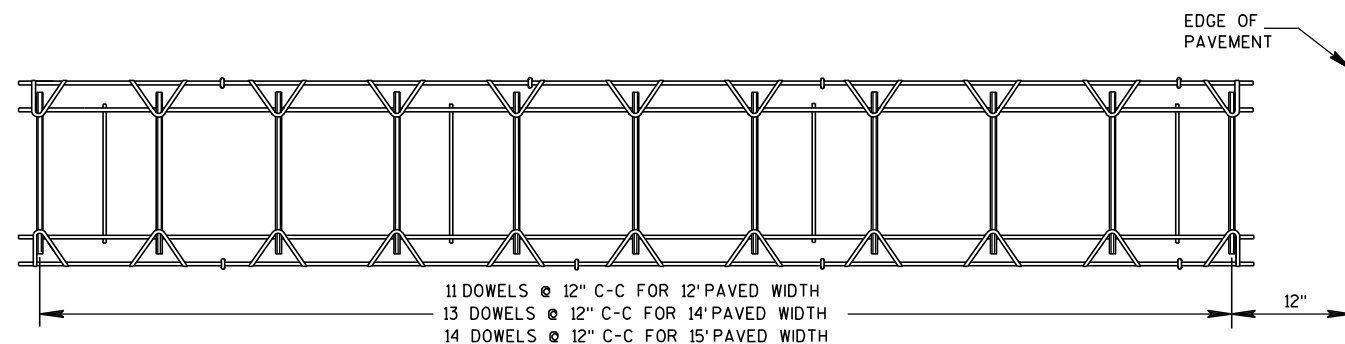
PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 1/2", 6", 6 1/2"	NONE	12'
7", 7 1/2"	1"	14'
8", 8 1/2"	1 1/4"	15'
9", 9 1/2"	1 1/4"	15'
10" & ABOVE	1 1/2"	15'

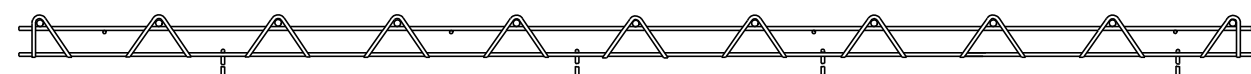


RURAL DOWELED
CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

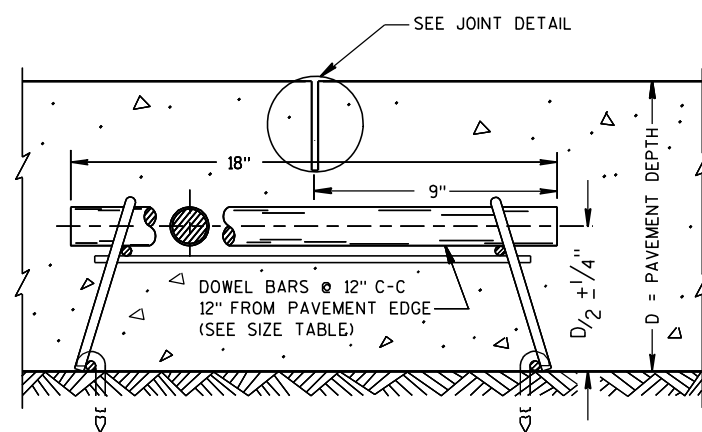


PLAN VIEW

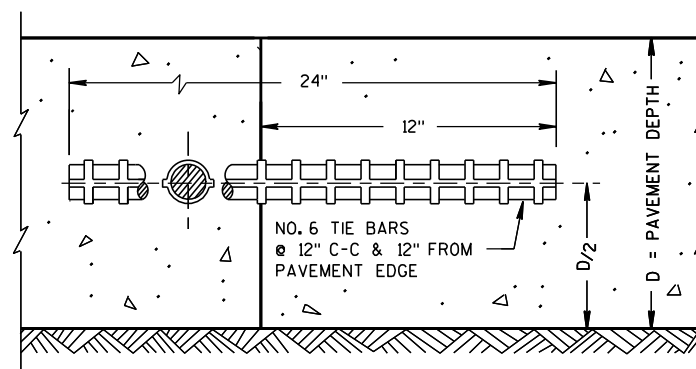


SIDE VIEW

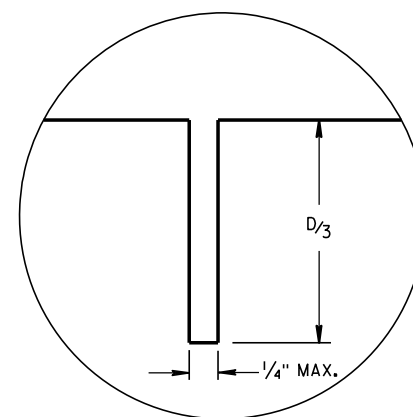
(NORMAL TO CENTERLINE)

CONTRACTION JOINT DOWEL ASSEMBLY^①

DOWELED CONTRACTION JOINT



CONSTRUCTION JOINT

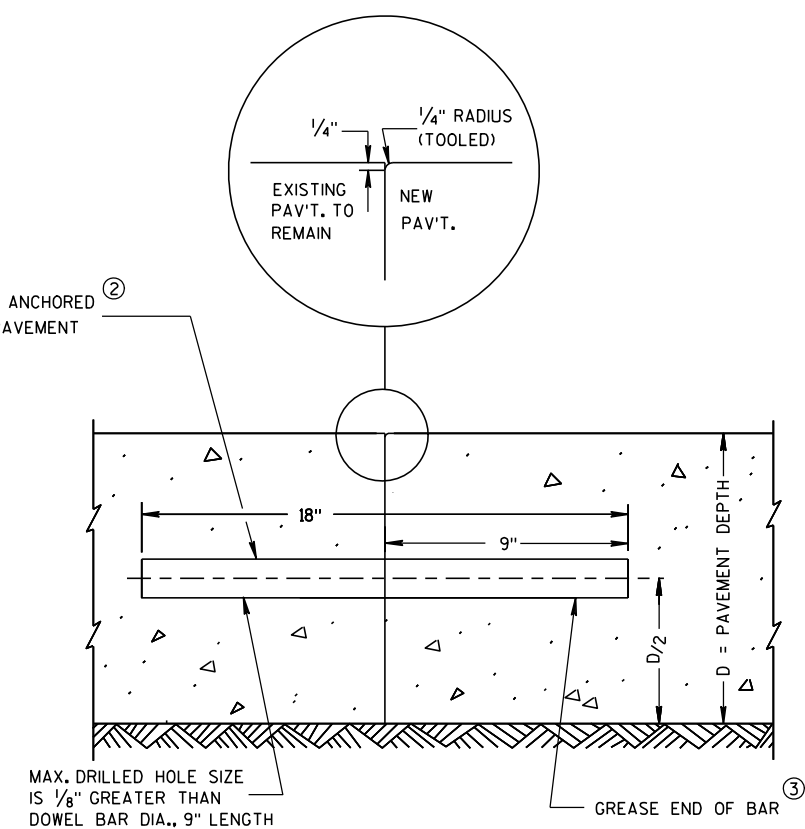


JOINT DETAIL

GENERAL NOTES

- ① THE ENGINEER MAY APPROVE THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. THE CONTRACTOR MAY USE MECHANICAL DOWEL BAR INSERTERS INSTEAD OF DOWEL ASSEMBLIES.
- ② ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY.
- ③ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.
- ④ SPACE DOWEL BARS INSTALLED BY DRILLING 1'-3" ON CENTER. CENTER THE GROUPING OF DOWEL BARS INSIDE THE SLAB BASED ON ALL THE FOLLOWING SITUATIONS:

BETWEEN THE EDGES OF PAVEMENTS WITHOUT LONGITUDINAL JOINTS OR BETWEEN THE EDGE OF PAVEMENT AND NEAREST LONGITUDINAL JOINT OR BETWEEN TWO ADJACENT LONGITUDINAL JOINTS.
- ⑤ SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

18" DOWEL BARS ANCHORED
INTO EXISTING PAVEMENTTRANSVERSE CONTRACTION JOINTS ABUTTING
EXISTING PAVEMENT

④ DOWEL BAR DETAIL

RURAL DOWELED
CONCRETE PAVEMENTSTATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

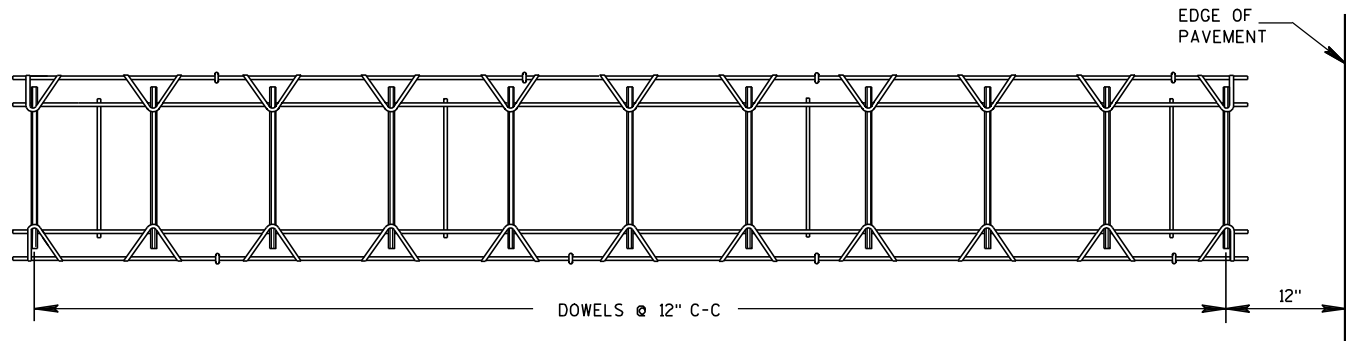
12/11/09

DATE

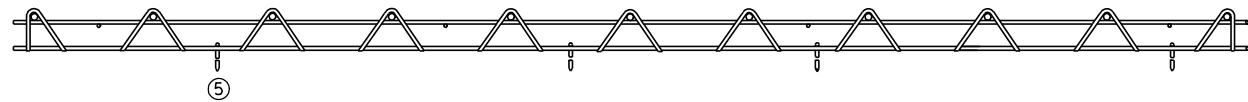
/S/ Deb Bischoff

PAVEMENT POLICY & DESIGN ENGINEER

FHWA



PLAN VIEW

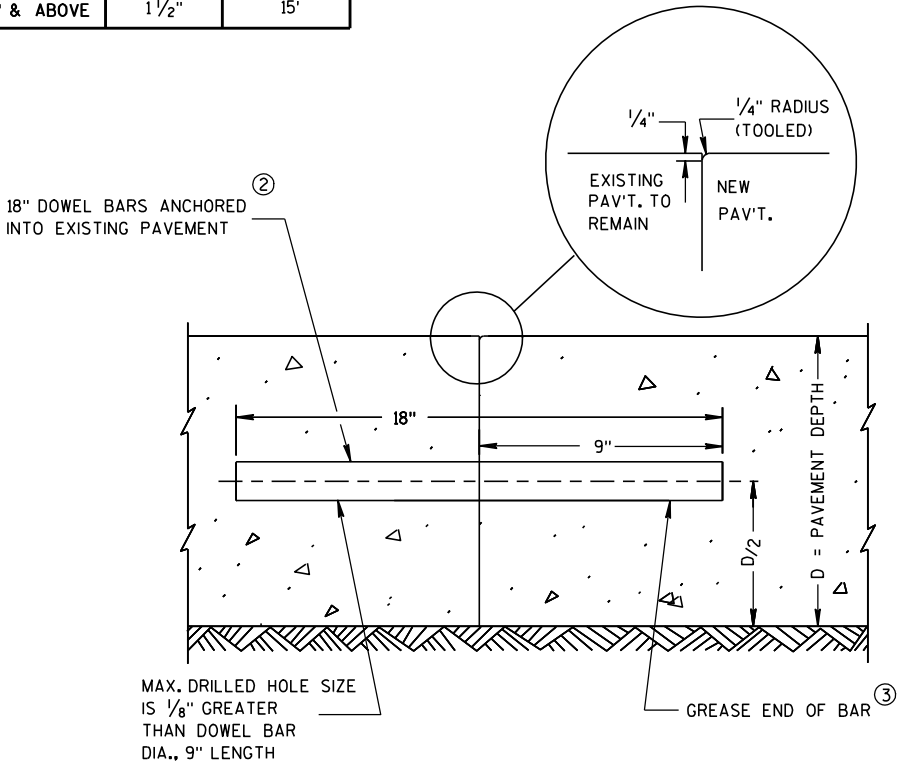


SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY

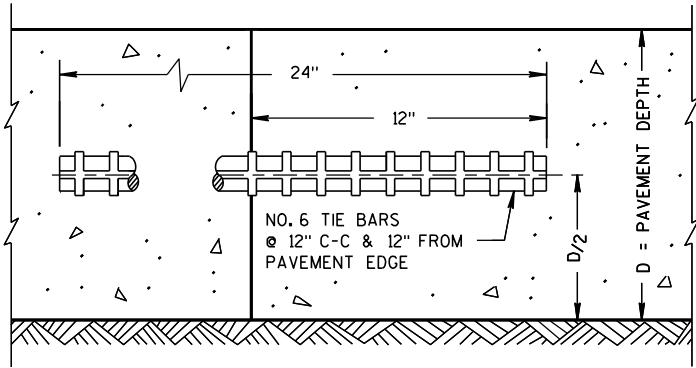
PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
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9", 9 1/2"	1 1/4"	15'
10" & ABOVE	1 1/2"	15'

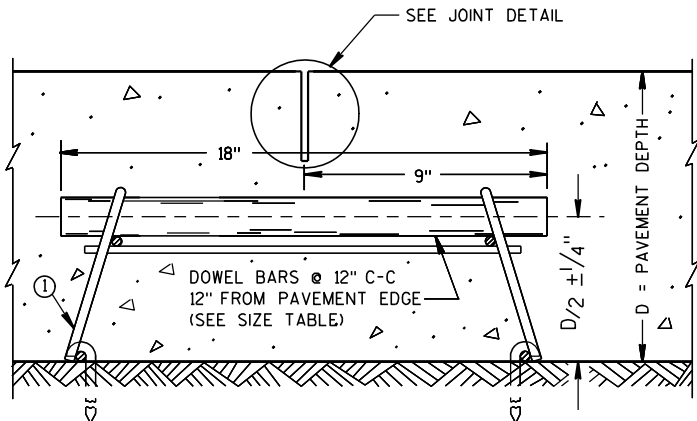


TRANSVERSE CONTRACTION JOINTS ABUTTING EXISTING PAVEMENT

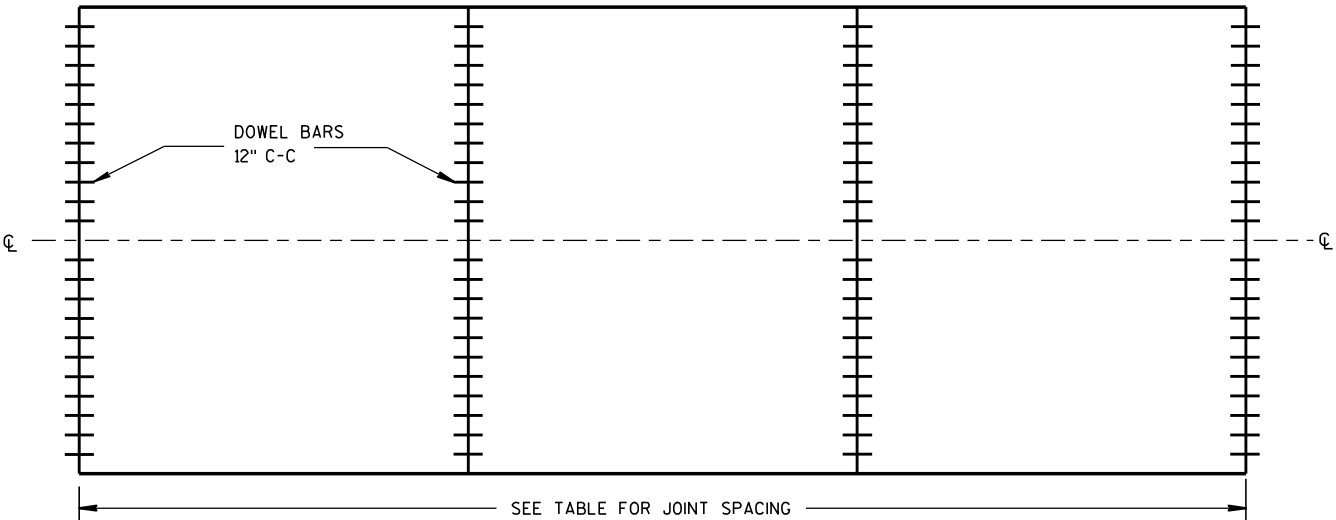
DOWEL BAR DETAIL



TRANSVERSE CONSTRUCTION JOINT



DOWELED CONTRACTION JOINT



CONTRACTION JOINT LOCATIONS

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT SEAL OR FILL CONTRACTION JOINTS.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, CENTER THE DOWEL ASSEMBLY ACROSS THE LANES. LOCATE THE INNER AND OUTER MOST DOWEL BARS SO THAT THE CENTER OF THE BARS ARE A MINIMUM OF 6 INCHES AND A MAXIMUM OF 12 INCHES FROM THE LONGITUDINAL JOINT AND THE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

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THE CONTRACTOR MAY INSERT TIE BARS THROUGH THE HEADER BOARD AFTER THE CONCRETE HAS BEEN PLACED.

① THE ENGINEER MAY APPROVE THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. THE CONTRACTOR MAY USE MECHANICAL DOWEL BAR INSERTERS INSTEAD OF DOWEL ASSEMBLIES.

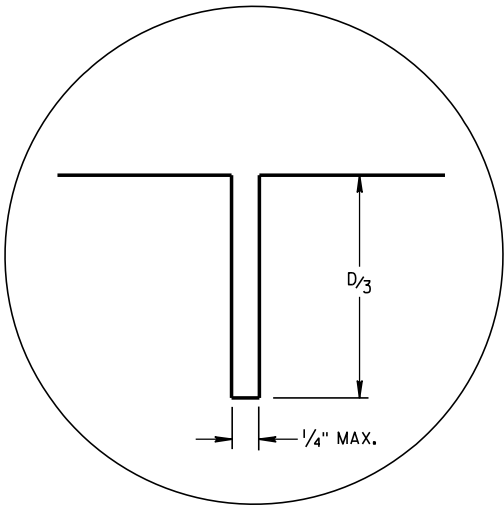
② ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY.

③ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

④ SPACE DOWEL BARS INSTALLED BY DRILLING 1'-3" ON CENTER. CENTER THE GROUPING OF DOWEL BARS INSIDE THE SLAB BASED ON ALL THE FOLLOWING SITUATIONS:

BETWEEN THE EDGES OF PAVEMENTS WITHOUT LONGITUDINAL JOINTS OR BETWEEN THE EDGE OF PAVEMENT AND NEAREST LONGITUDINAL JOINT OR BETWEEN TWO ADJACENT LONGITUDINAL JOINTS.

⑤ SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.



JOINT DETAIL

URBAN DOWELED
CONCRETE PAVEMENT

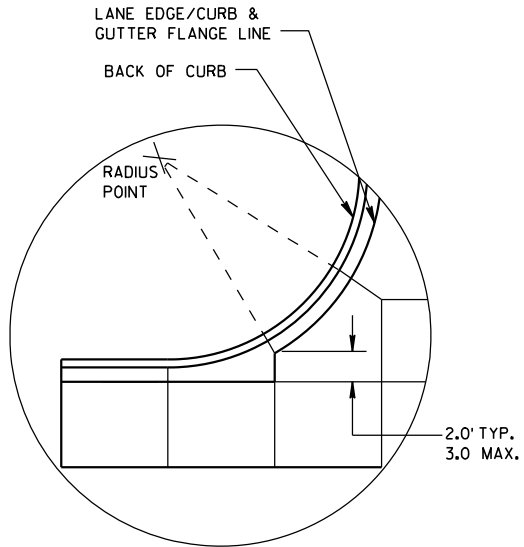
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

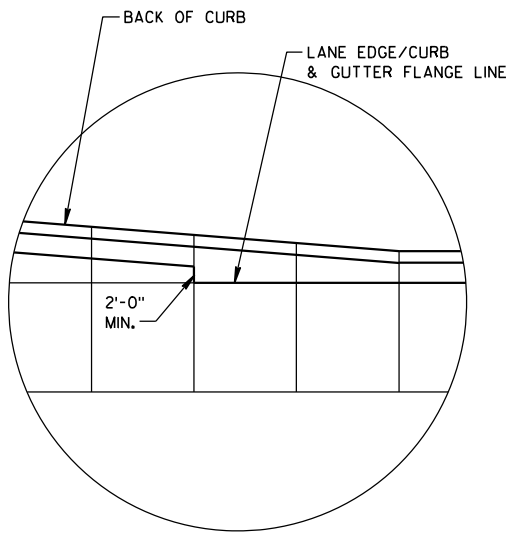
12/11/2009
DATE

FHWA

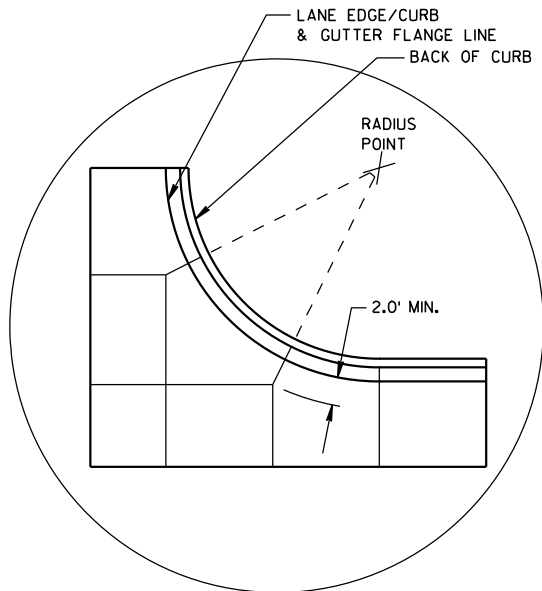
/S/ Deb Bischoff
PAVEMENT POLICY & DESIGN ENGINEER



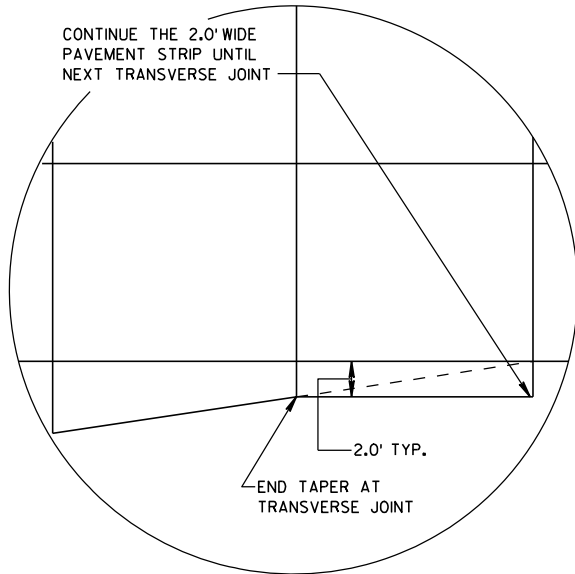
DETAIL "A"



DETAIL "B"



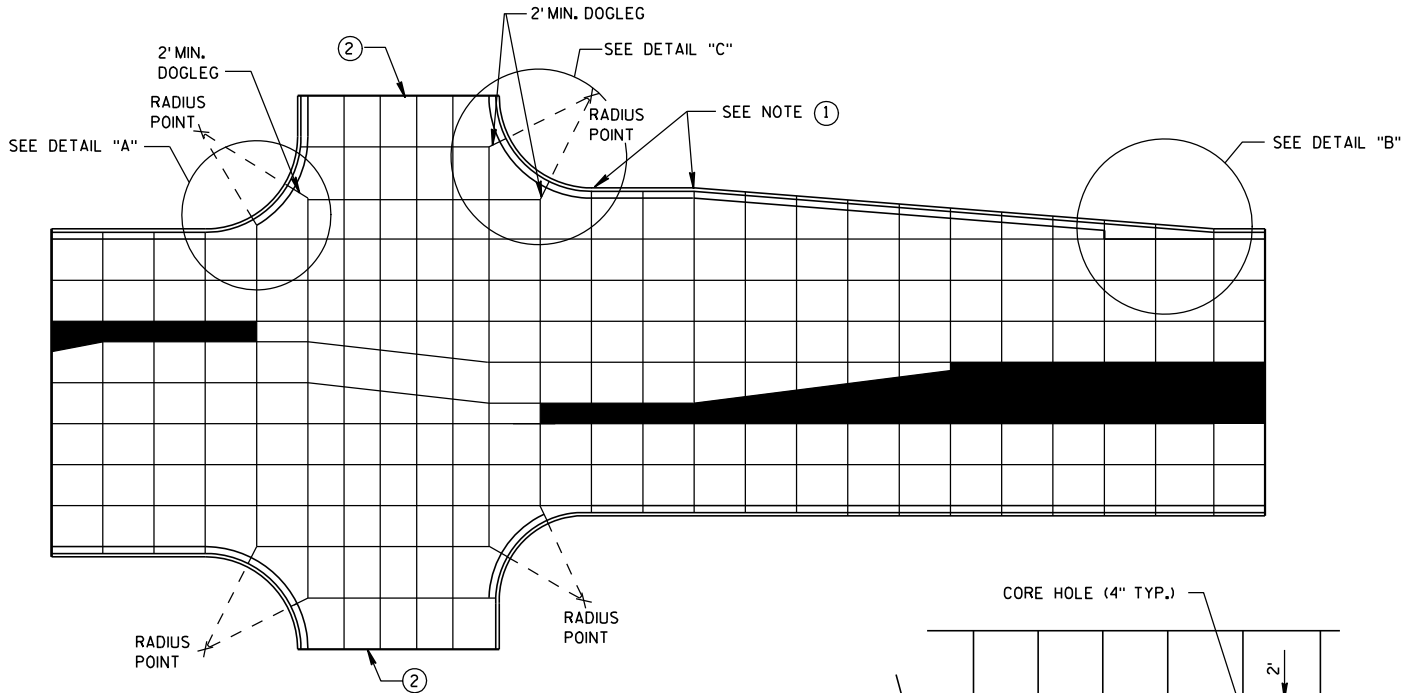
DETAIL "C"



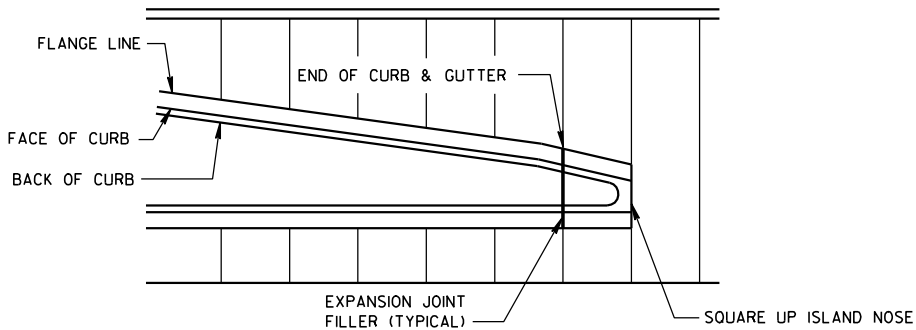
DETAIL "D"

GENERAL NOTES

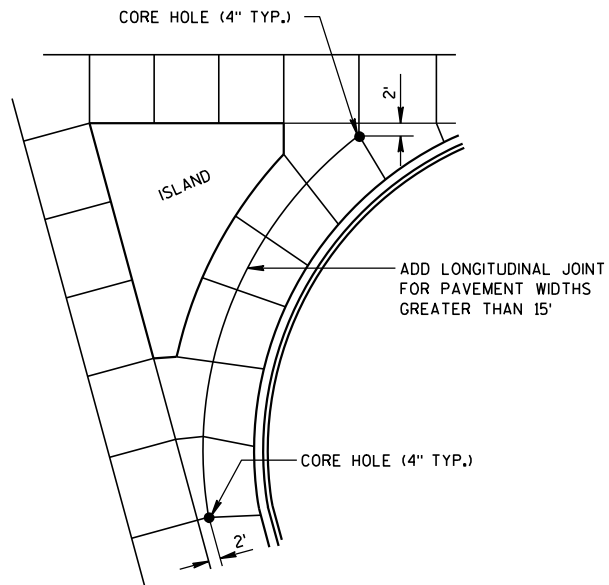
- THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.
- ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.
- CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.
- ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G. MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.
- AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.
- SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.
- AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.
- CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
 2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
 3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



STANDARD INTERSECTION



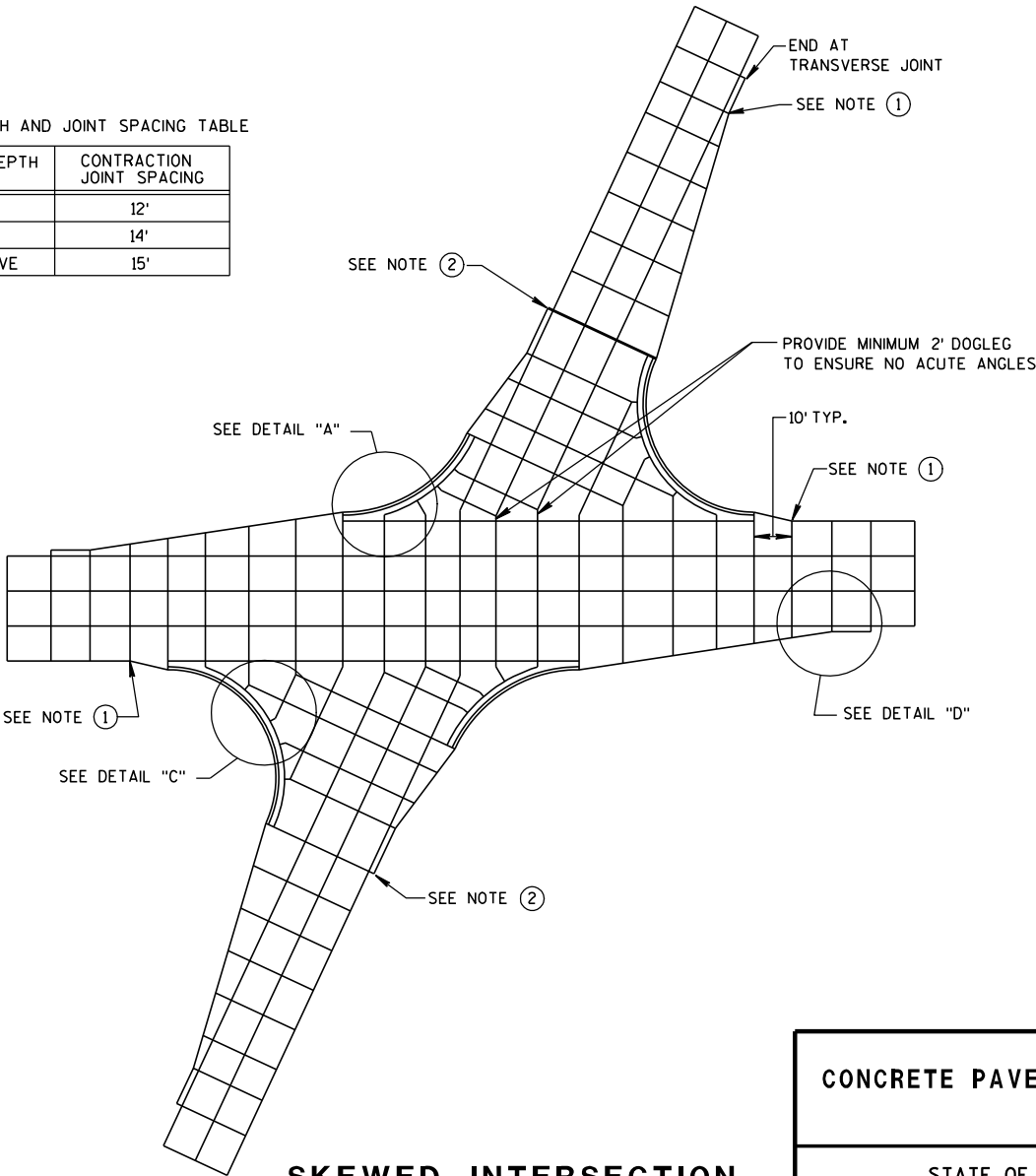
APPROACH TO MEDIAN



LARGE RIGHT TURN

PAVEMENT DEPTH AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 1/2"	12'
7", 7 1/2"	14'
8" & ABOVE	15'



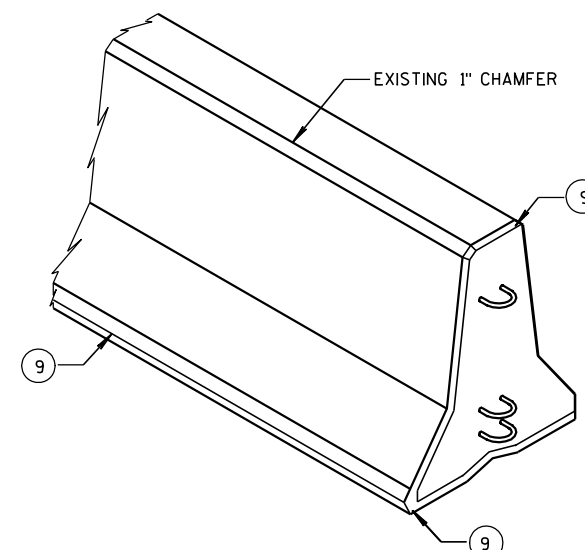
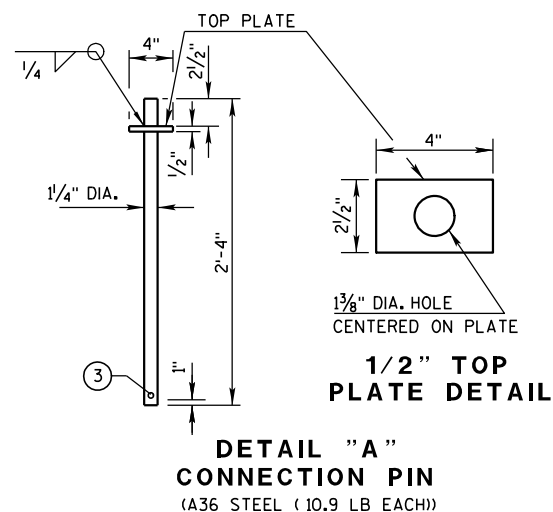
SKEWED INTERSECTION

CONCRETE PAVEMENT JOINTING

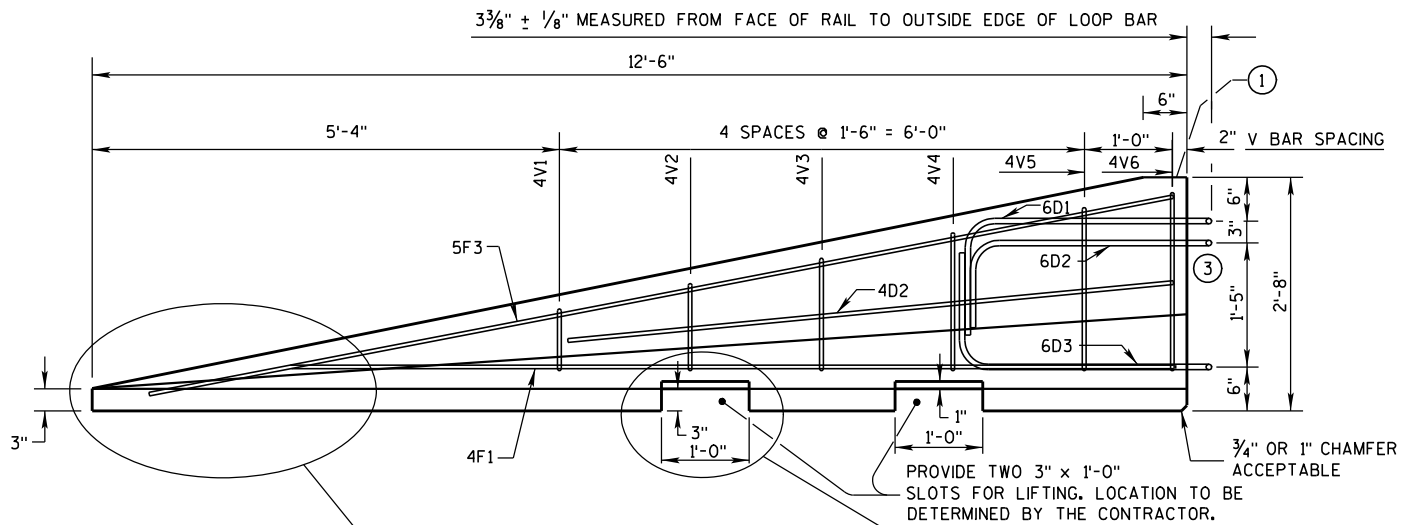
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



⑨ 1" CHAMFER OPTIONAL.

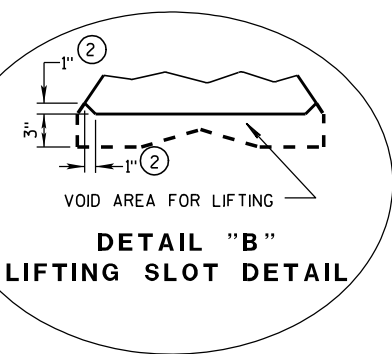


STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

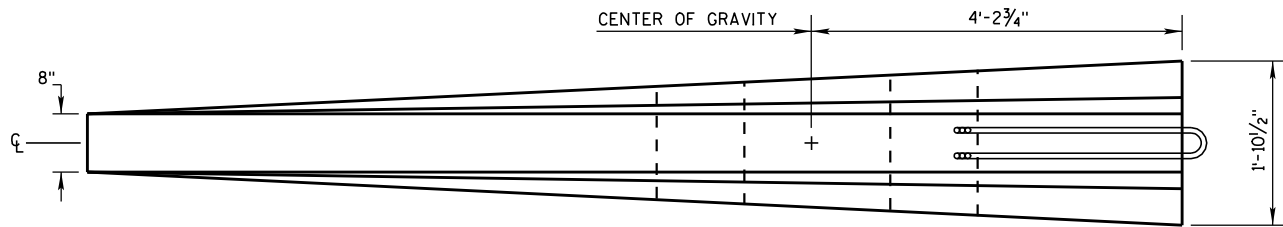


SEE DETAIL "C", BENT BAR DETAIL

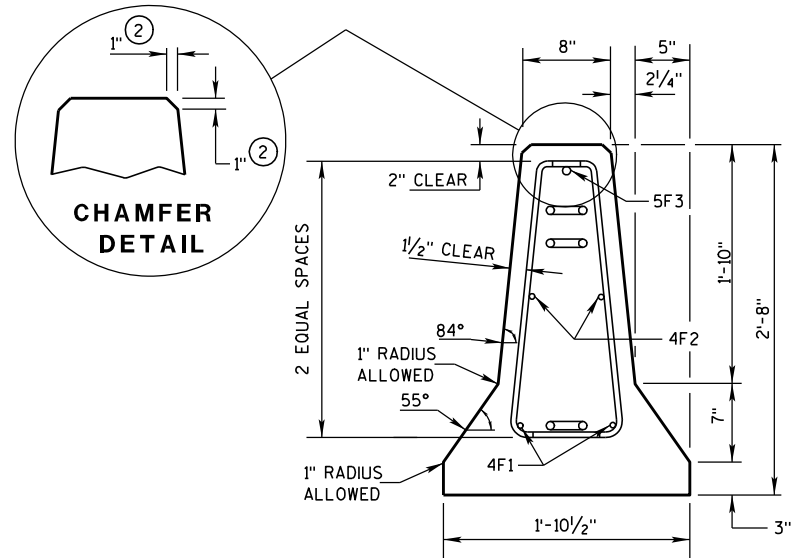
SIDE ELEVATION
(FOR CONNECTION TO LEFT END OF BARRIER)



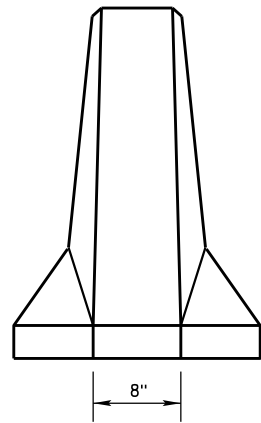
DETAIL "B"
LIFTING SLOT DETAIL



PLAN VIEW

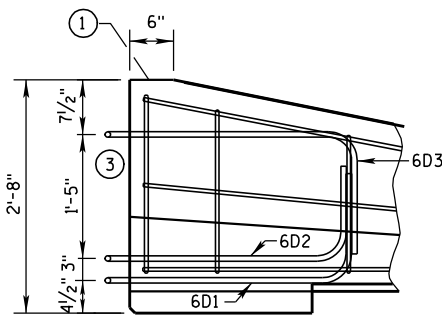


END SECTION



FRONT ELEVATION

DETAILS OF BARRIER TAPER SECTION

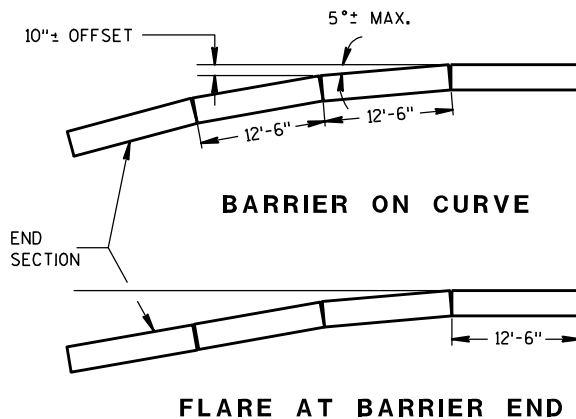


SIDE ELEVATION

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

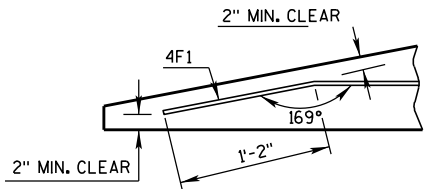
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

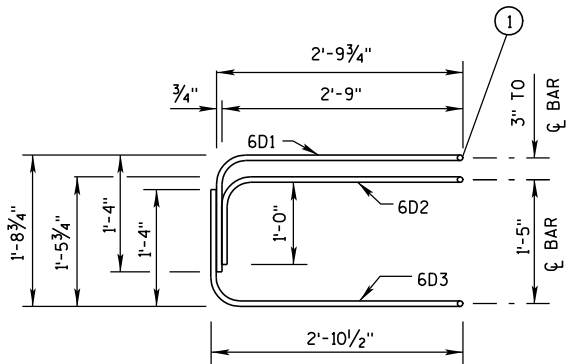
BARRIER TAPER SECTION
BILL OF MATERIALS

(PER 12'-6" BARRIER TAPER SECTION)

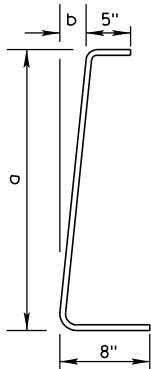
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"
LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"



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

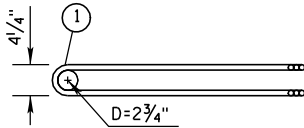
GENERAL NOTES

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

BARRIER SECTION
BILL OF MATERIALS

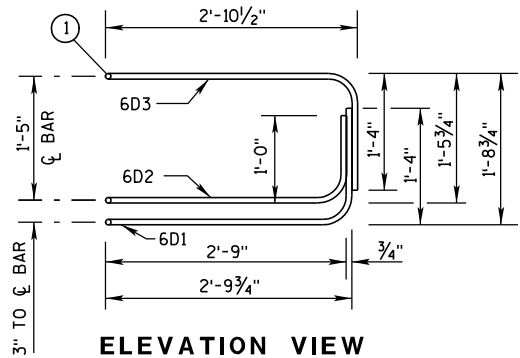
(PER 12'-6" BARRIER SECTION)

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"

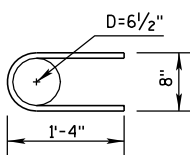


PLAN VIEW
LOOP BAR ASSEMBLY

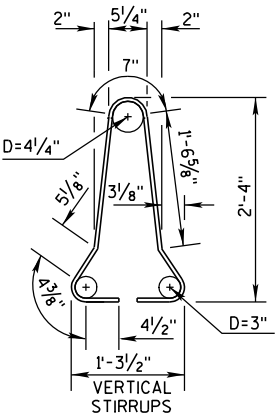
(MARKED END SHOWN, INVERT FOR OTHER END)



ELEVATION VIEW



6A2

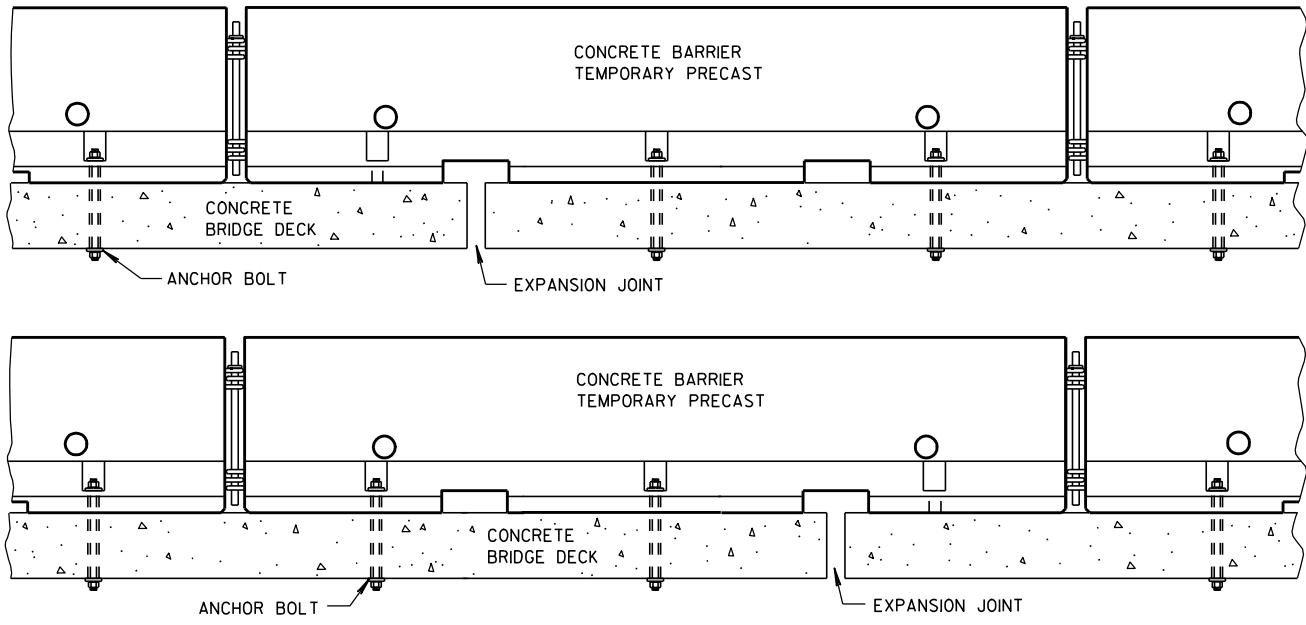


4A1

BARRIER SECTION

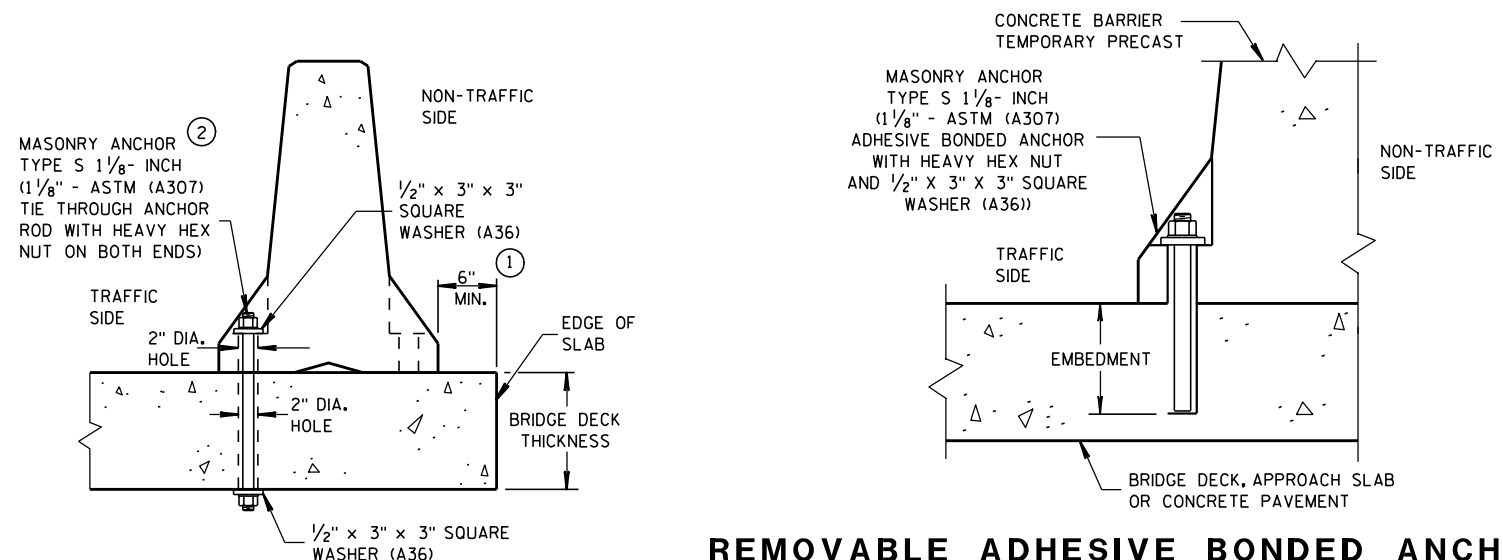
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

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.)

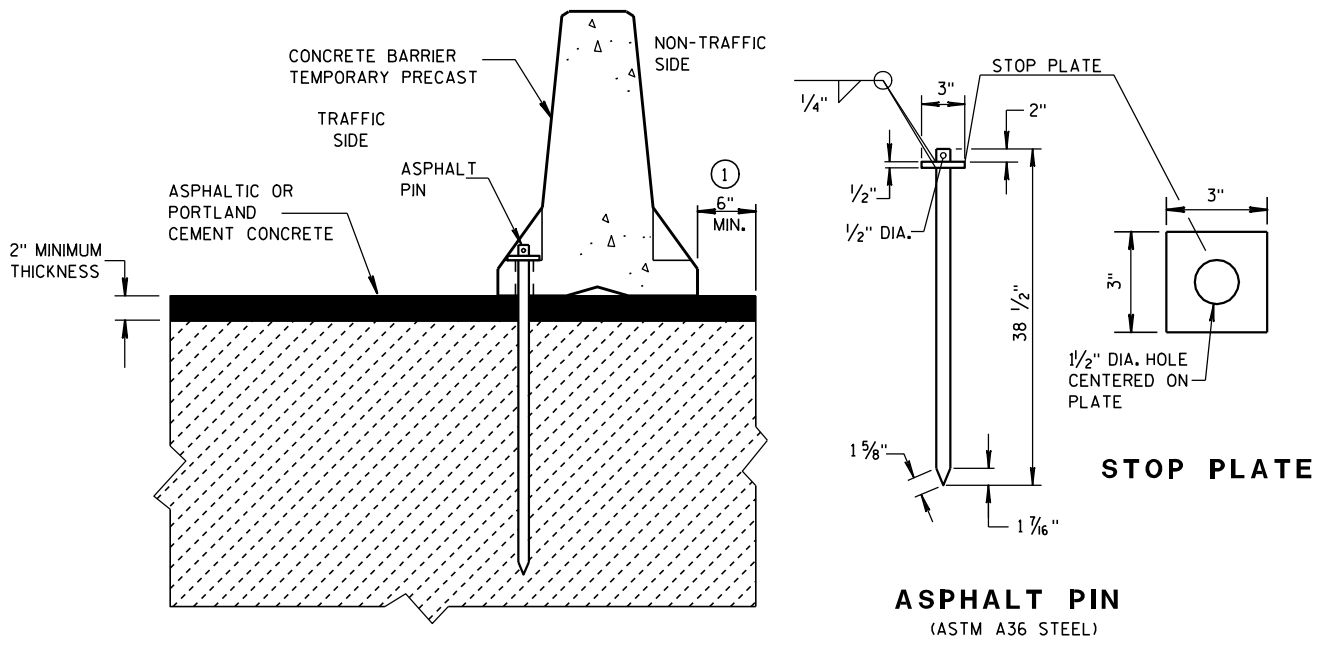


THROUGH BOLTED ANCHOR INSTALLATION ON BRIDGE DECK

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

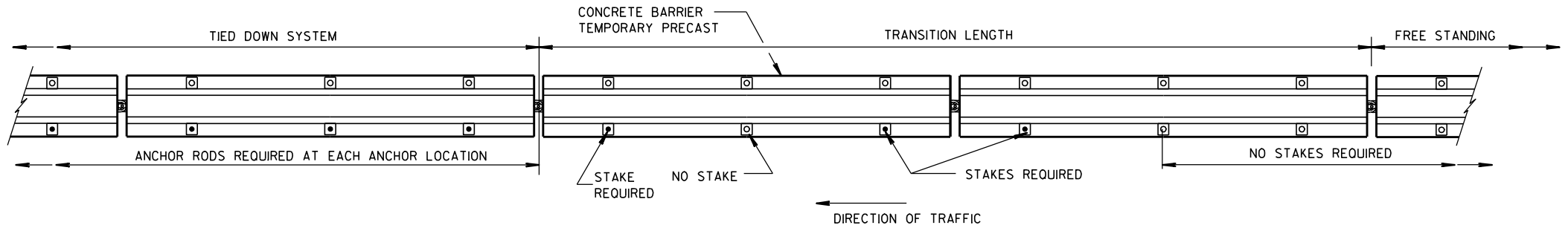
REMOVABLE ADHESIVE BONDED ANCHOR INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)



STAKE DOWN INSTALLATION FOR ASPHERALTIC OR PORTLAND CEMENT CONCRETE SURFACE

(STAKING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST)



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

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.

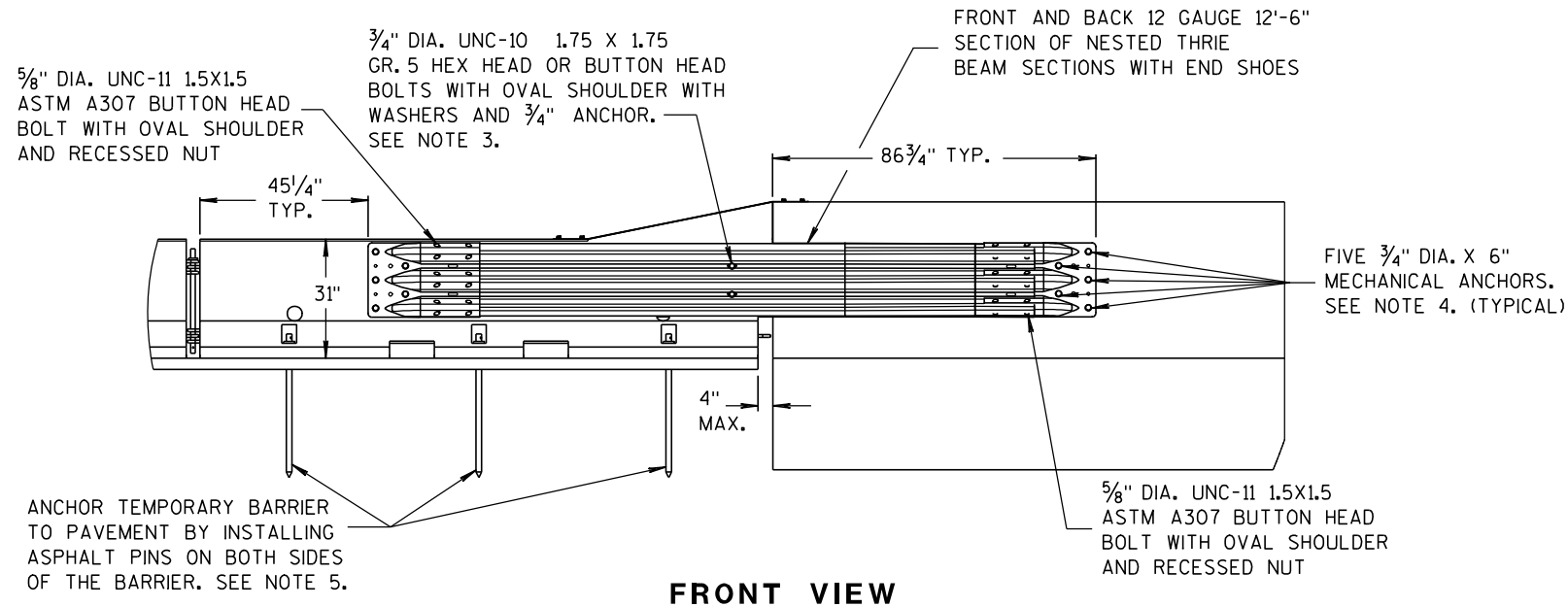
② ANCHORING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST.

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.

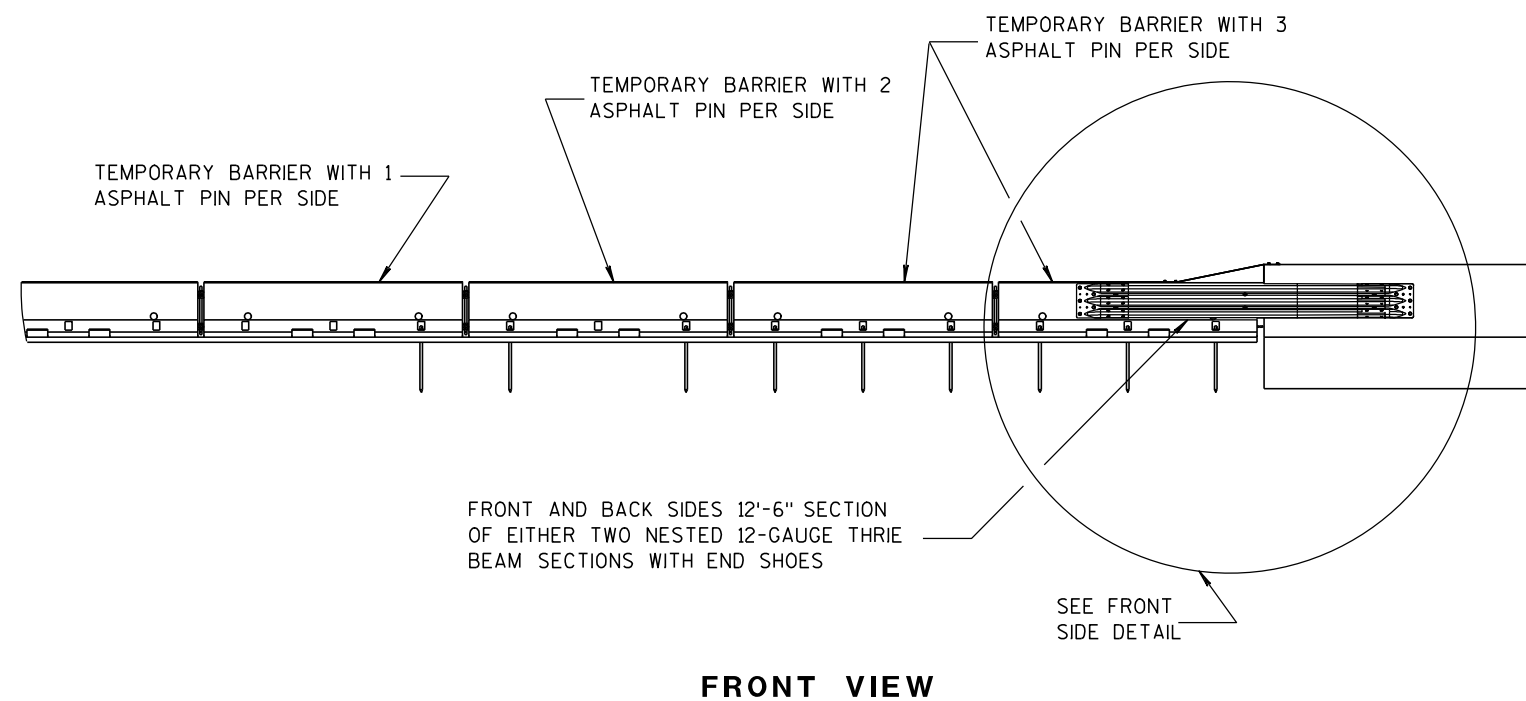
**CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

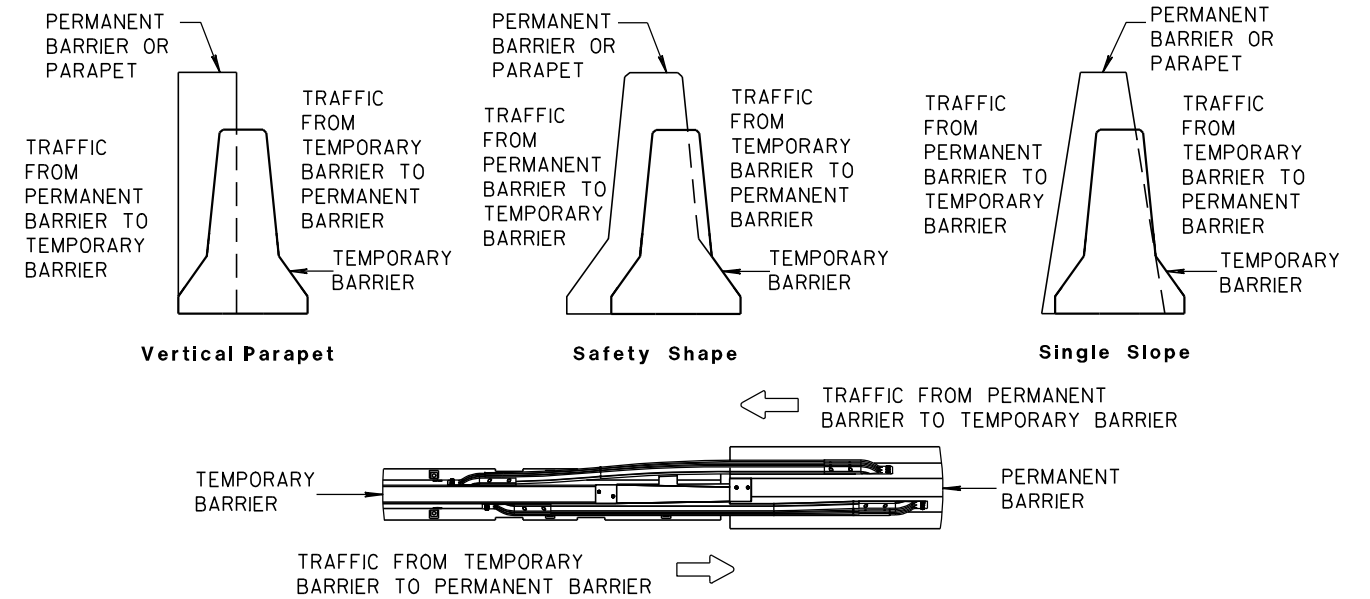


NOTES

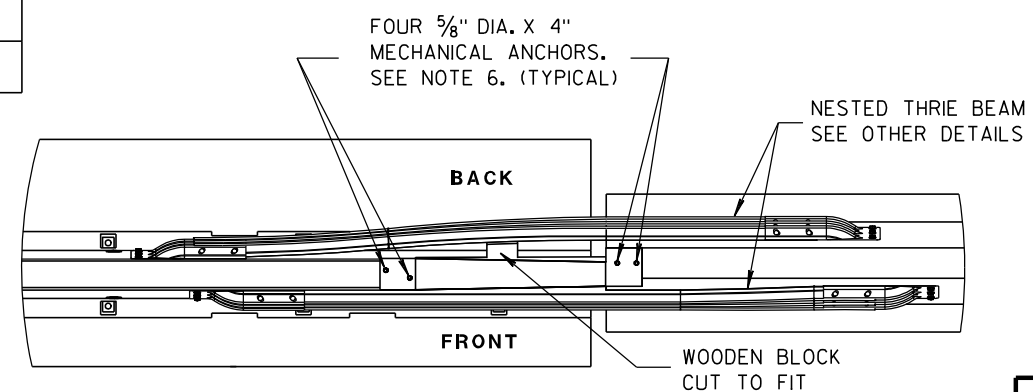
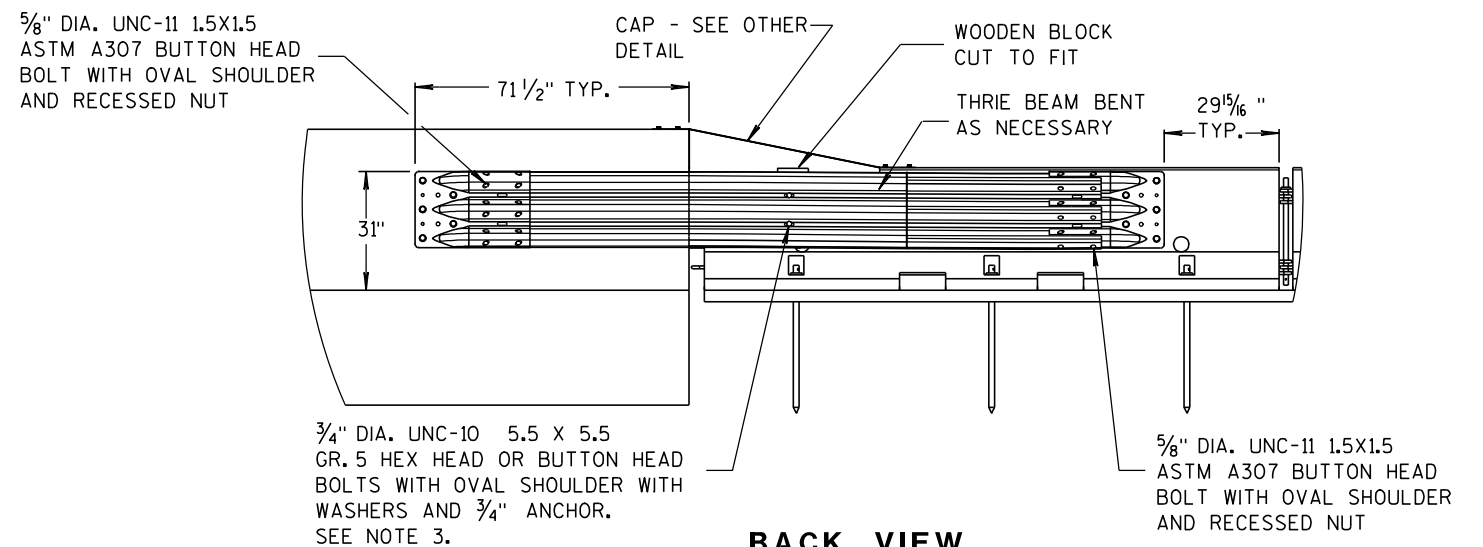
1. CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF PERMANENT BARRIER OR PARAPET.
2. THRIE BEAM PIECES ARE OFFSET 15 1/4" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.
3. MINIMUM MECHANICAL OR EPOXY ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 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

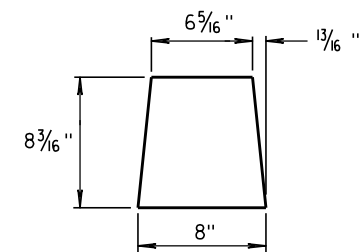


TEMPORARY BARRIER PLACEMENT FOR BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

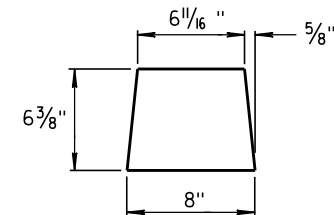


CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

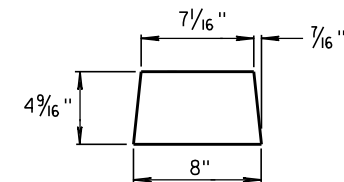
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



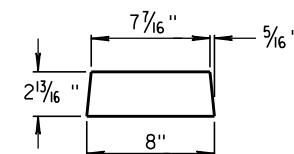
GUSSET 1



GUSSET 2

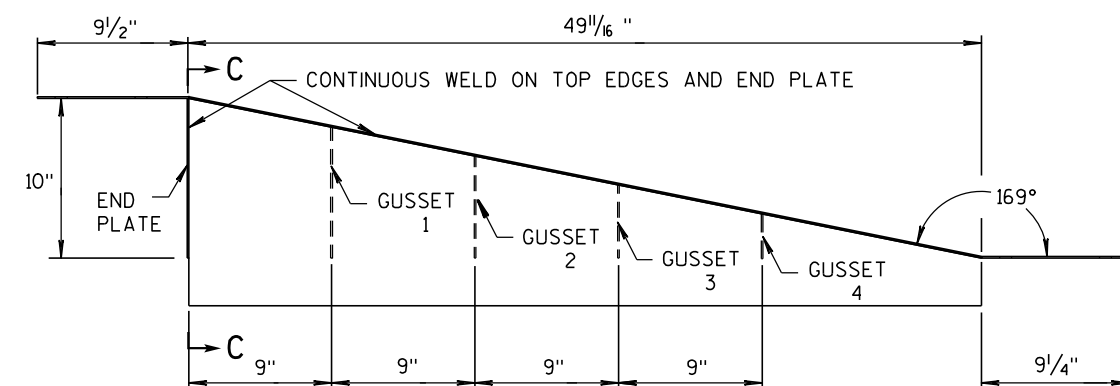
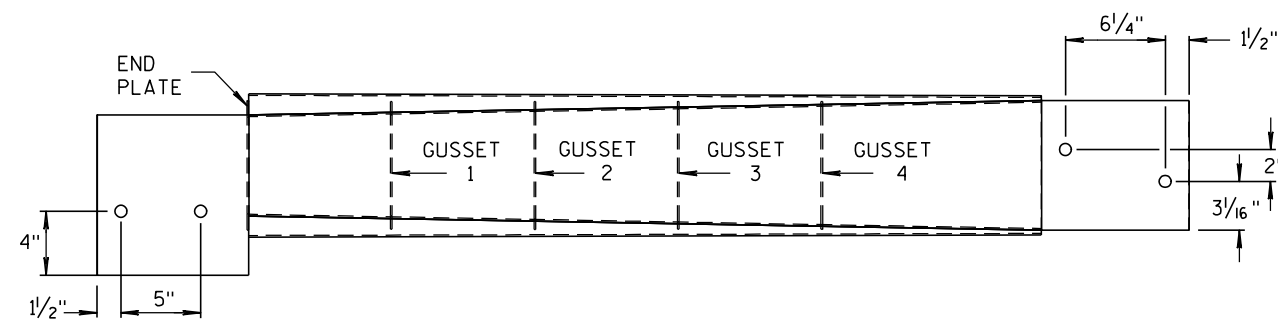


GUSSET 3

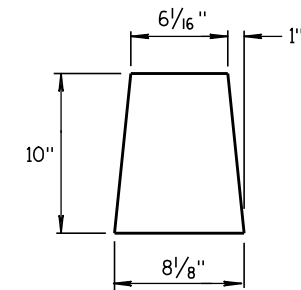
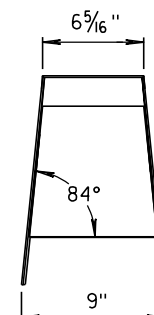


GUSSET 4

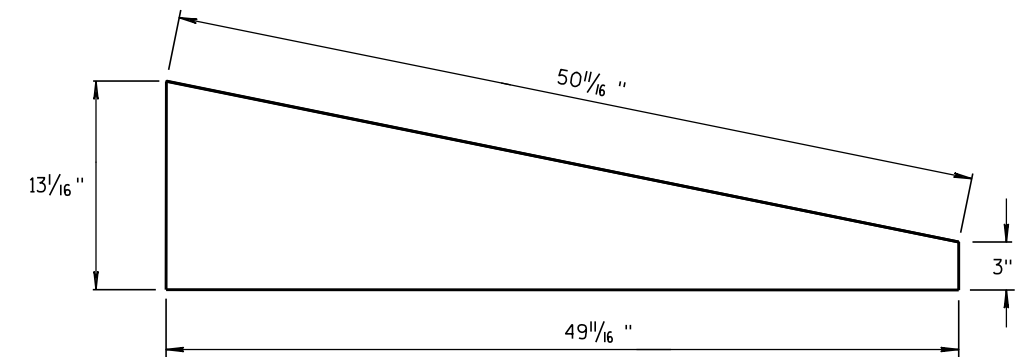
GUSSETS



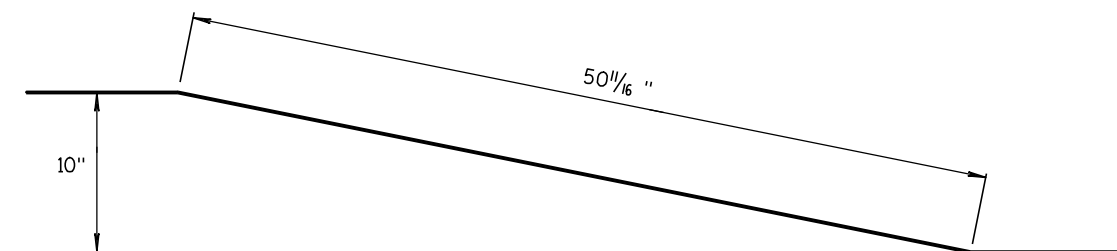
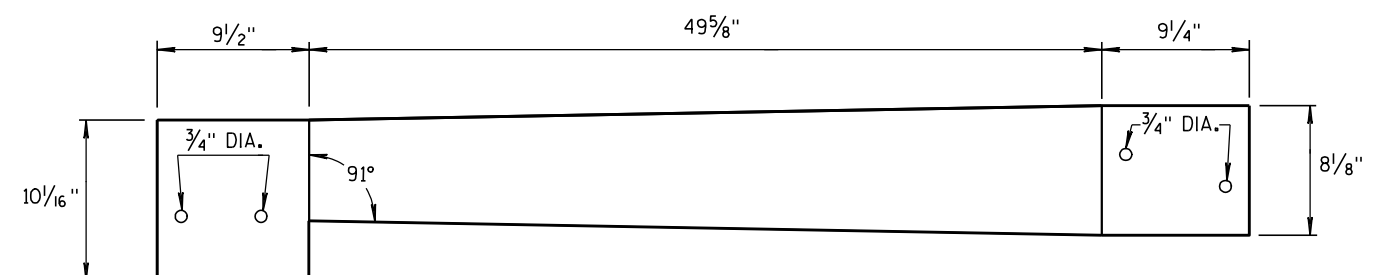
SECTION C-C



END PLATE



SIDE PLATE



TOP PLATE

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

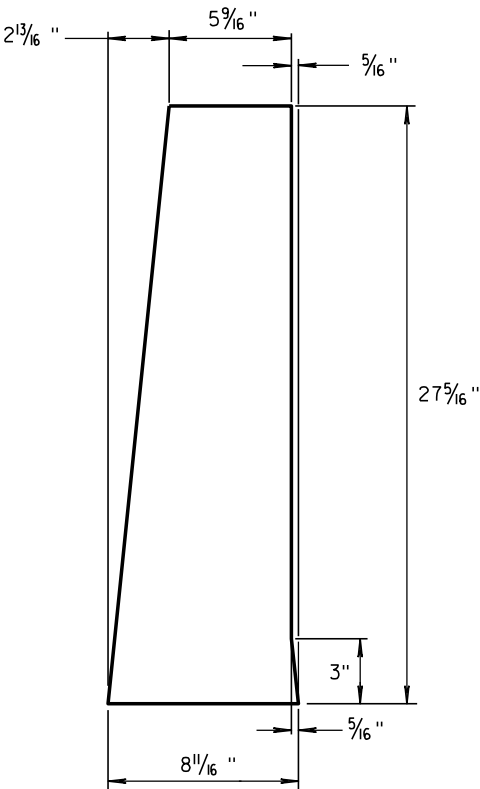
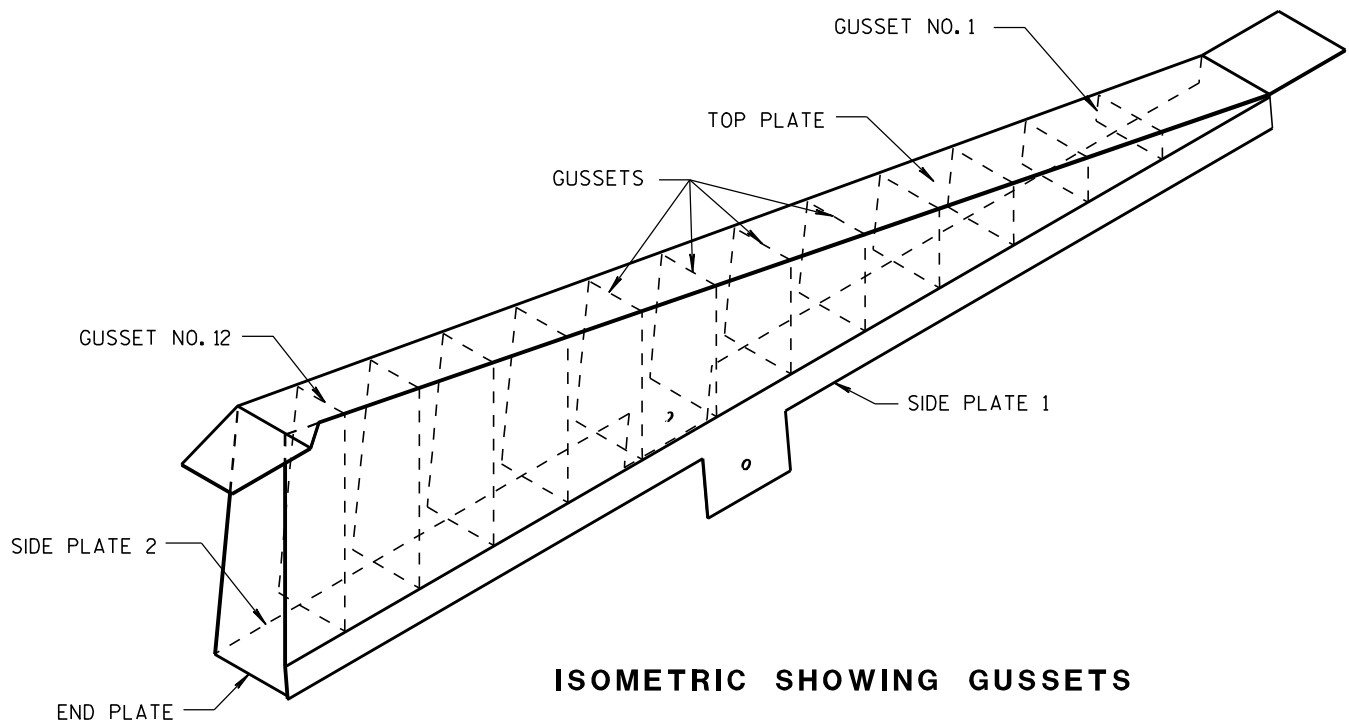
SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 GALVANIZED STEEL.

- 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.

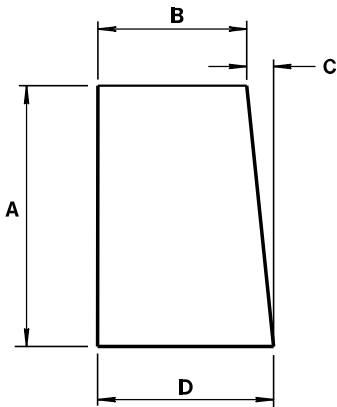
**CAP DETAILS FOR TEMPORARY CONCRETE
BARRIER TO 42" PERMANENT CONCRETE BARRIER**

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



1/8" STEEL PLATE

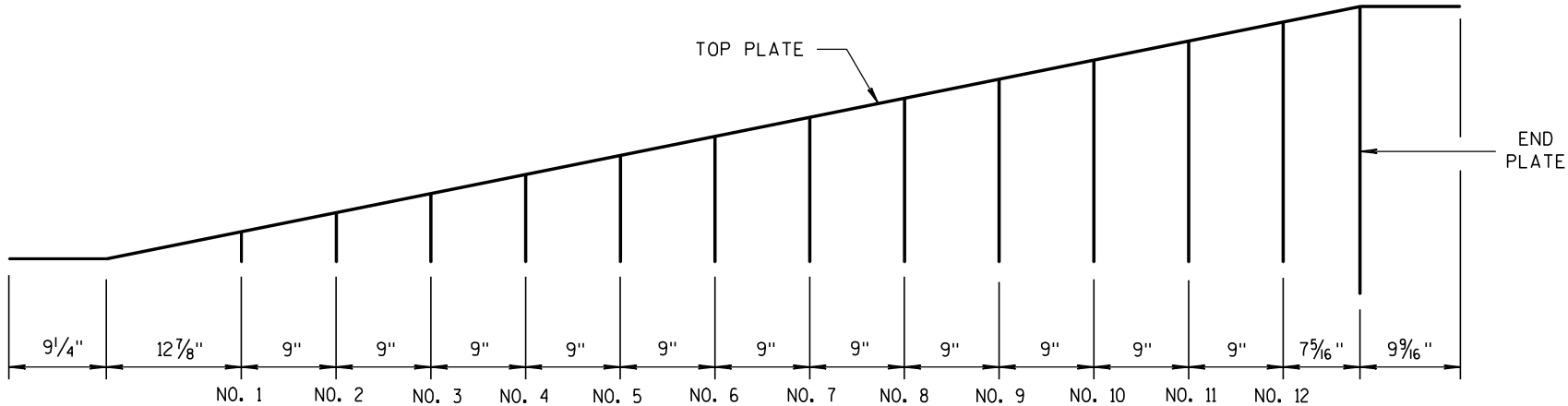


ALL GUSSETS 1/8" STEEL PLATE

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.

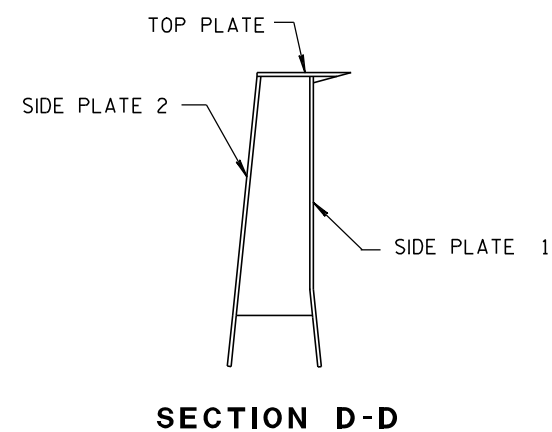
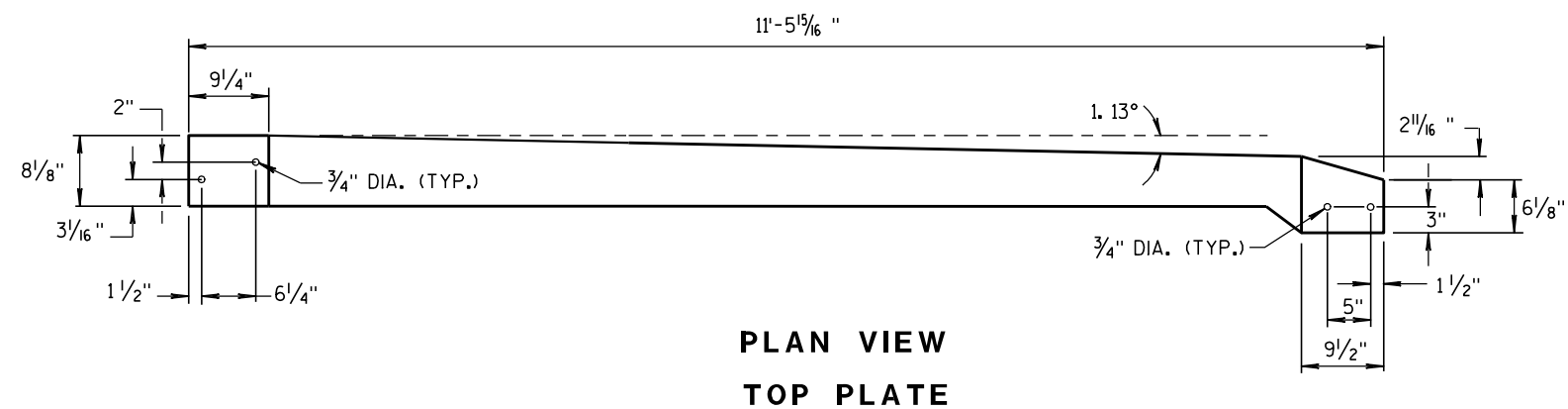
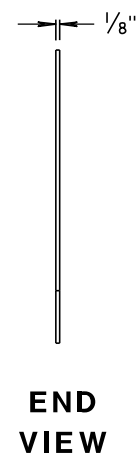
GUSSETS AND END PLATE ARE STITCH WELDED ON 3 SIDES. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE AND GUSSETS.



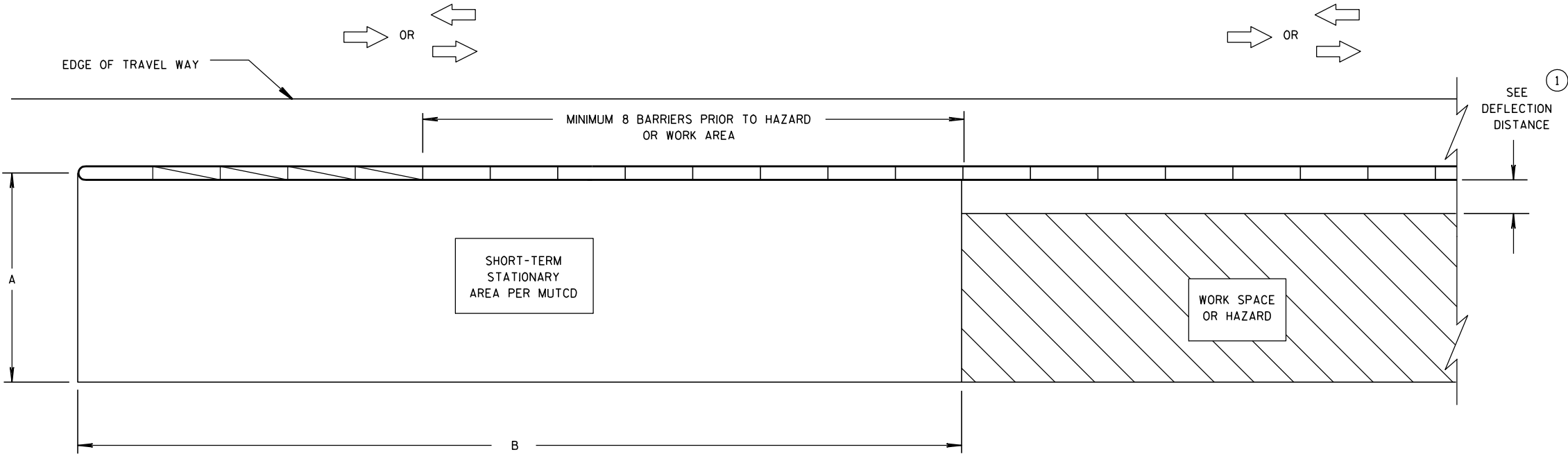
CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



APPROVED
8/31/2012 /S/ Jerry H. Zogg
DATE ROADWAY STANDARD DEVELOPMENT
FHWA ENGINEER



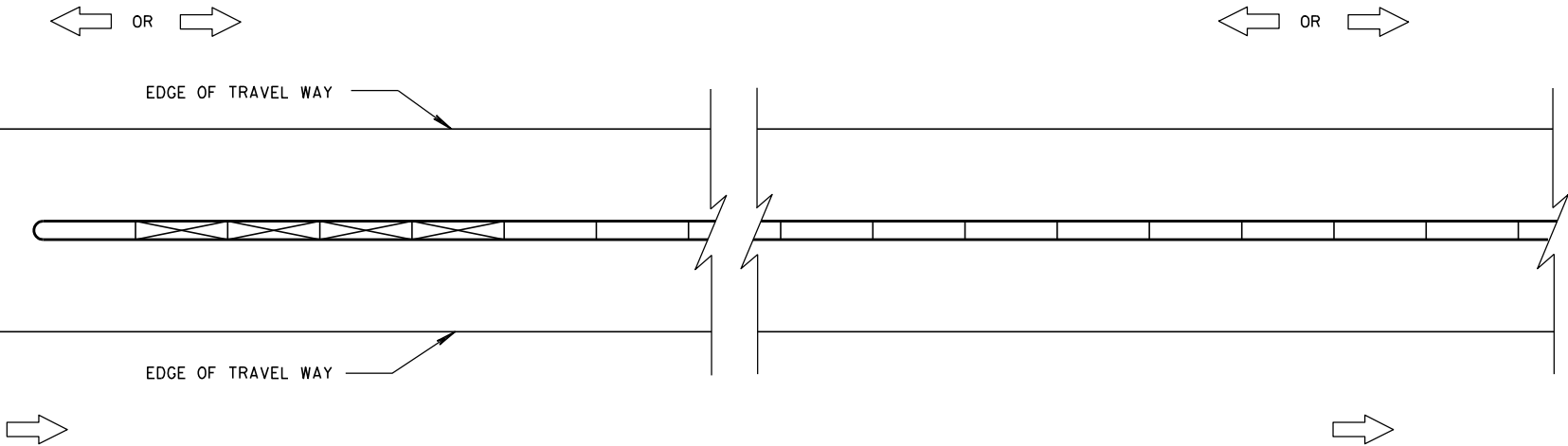
**CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER
INSTALLATION FOR TRAFFIC ON ONE SIDE OF BARRIER**

DIMENSION A TABLE ②

FACILITY	POSTED SPEED MPH	DIMENSION A	
		MIN. FT	MAX. FT
FREEWAY/EXPRESSWAY	ALL	15	20
NON-FREEWAY/EXPRESSWAY	GREATER THAN OR EQUAL TO 45	10	15
NON-FREEWAY/EXPRESSWAY	LESS THAN 45	8	10
AADT LESS THAN 1,500	ALL	8	10

DIMENSION B TABLE ②

POSTED SPEEDS MPH	DIMENSION B FT
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645



**CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER
INSTALLATION FOR TRAFFIC ON BOTH SIDES OF BARRIER**

LEGEND

DIRECTION OF TRAVEL	
CRASH CUSHION OR SAND BARREL ARRAY	
SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS	
SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS	
3 PINS PLACED ON TRAFFIC SIDE OF BARRIER	
PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET	
FREE STANDING TEMPORARY BARRIER	

GENERAL NOTES

SEE STANDARD DETAIL DRAWING 14B7 FOR MORE INFORMATION.

DETAILS PROVIDE A GENERAL LAYOUT OF TEMPORARY CONCRETE BARRIER, CRASH CUSHIONS, SAND BARREL ARRAYS AND TIE DOWN TRANSITIONS. DETAILS PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

ADDITIONAL TEMPORARY BARRIER MAY BE REQUIRED TO PROTECT TRAVELING PUBLIC FROM HAZARDS, CONTRACTOR'S OPERATIONS OR TO CONTROL TRAFFIC.

TEMPORARY BARRIER MAY BE REQUIRED TO BE ANCHORED TO PAVEMENT OR BRIDGE DECK.

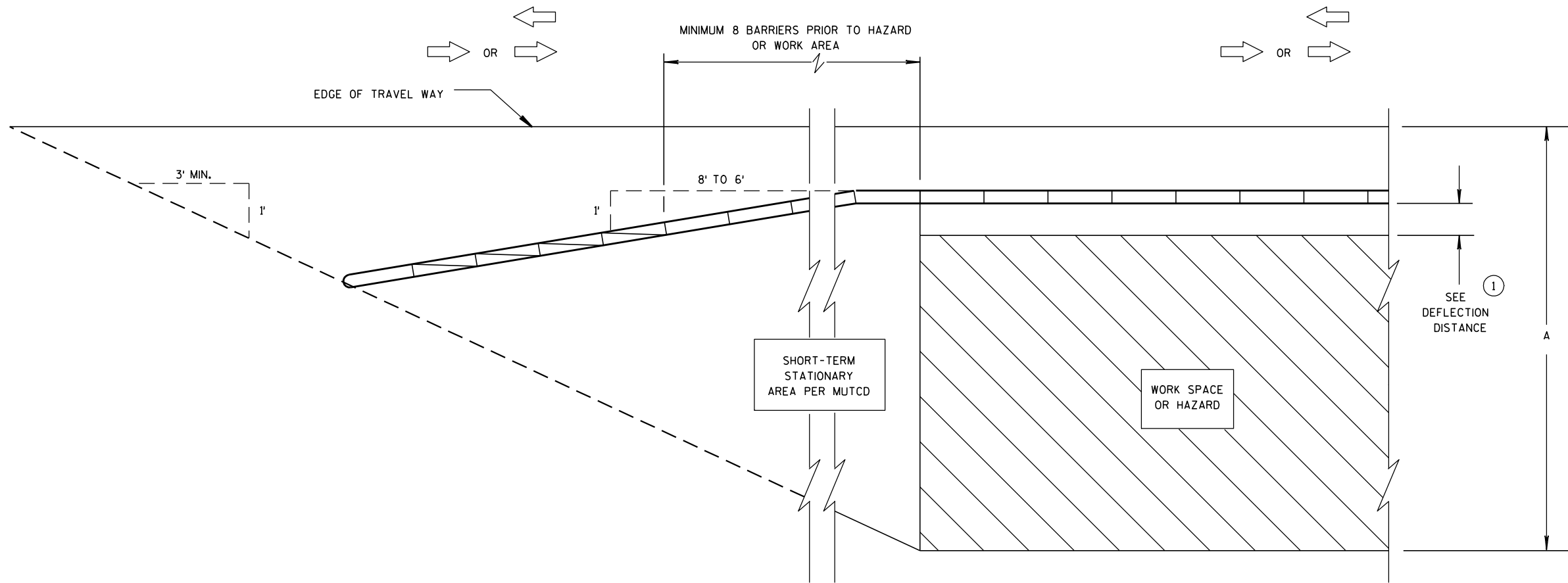
FOR DETAILS ON CRASH CUSHION OR SAND BARREL ARRAYS SEE OTHER SECTIONS OF THE PLAN AND MANUFACTURE'S DETAILS.

SLOPES LEADING TO TEMPORARY BARRIER, CRASH CUSHION OR SAND BARREL ARRAY ARE 10:1 OR LESS.

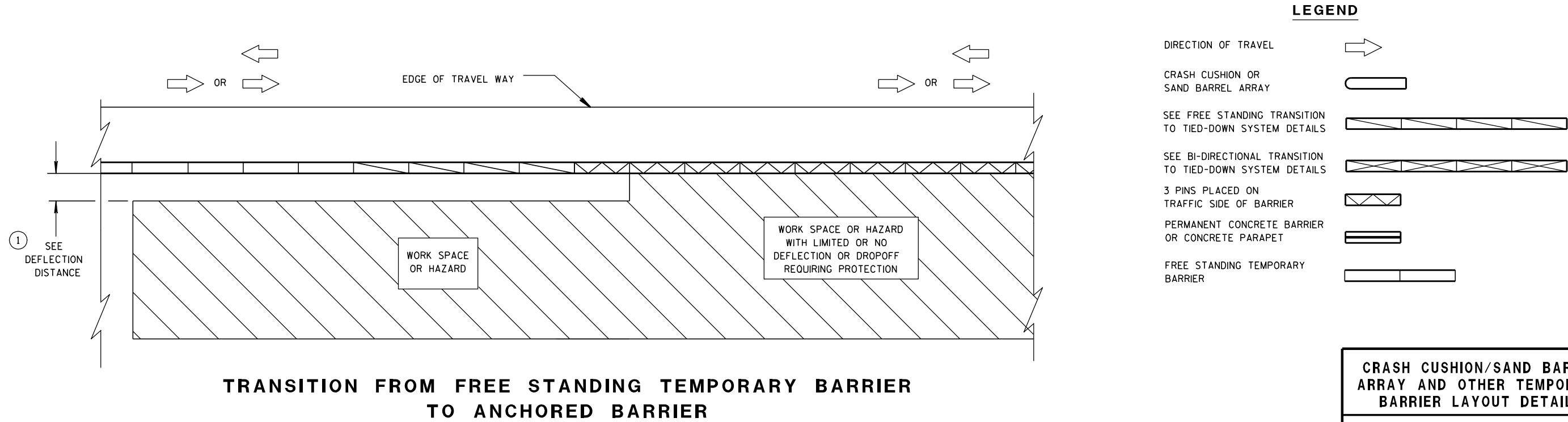
- ① FOR DEFLECTION INFORMATION SEE STANDARD DETAIL DRAWING 14B7.
- ② VALUES PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

**CRASH CUSHION/SAND BARREL
ARRAY AND OTHER TEMPORARY
BARRIER LAYOUT DETAILS**

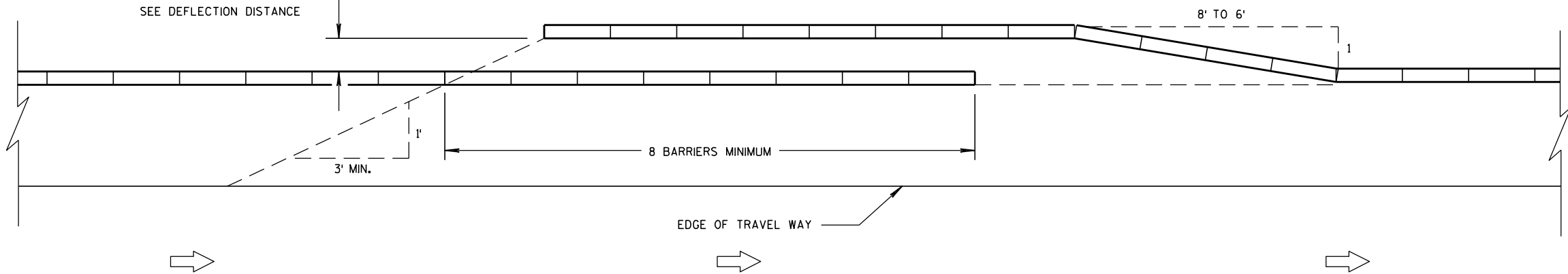
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



**CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER
INSTALLATION FOR TRAFFIC ON ONE SIDE - FLARED INSTALLATION**

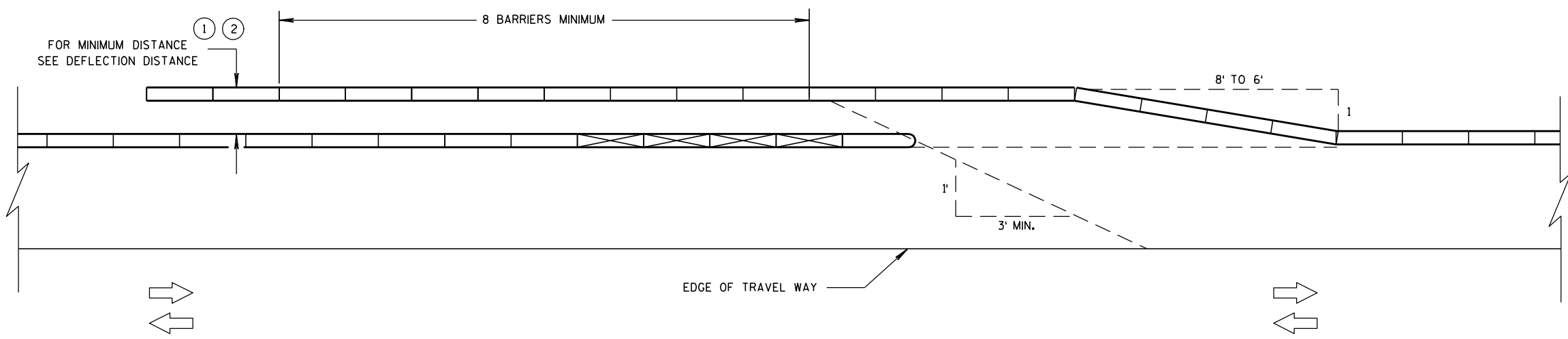


FOR MINIMUM DISTANCE
SEE DEFLECTION DISTANCE

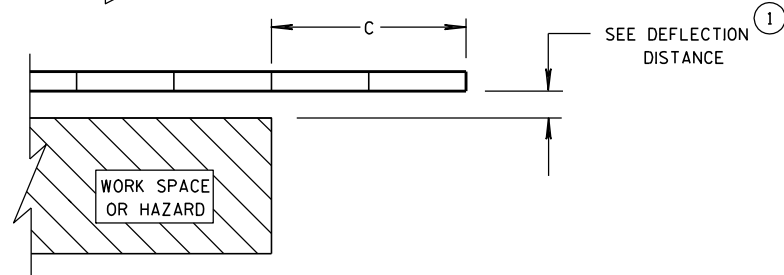


TEMPORARY BARRIER OVERLAP - ONE-WAY TRAFFIC

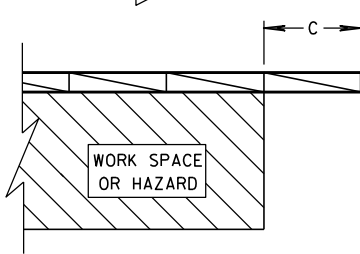
FOR MINIMUM DISTANCE
SEE DEFLECTION DISTANCE



TEMPORARY BARRIER OVERLAP - TWO-WAY TRAFFIC



**ENDING TEMPORARY BARRIER
DOWNSTREAM - UNANCHORED**



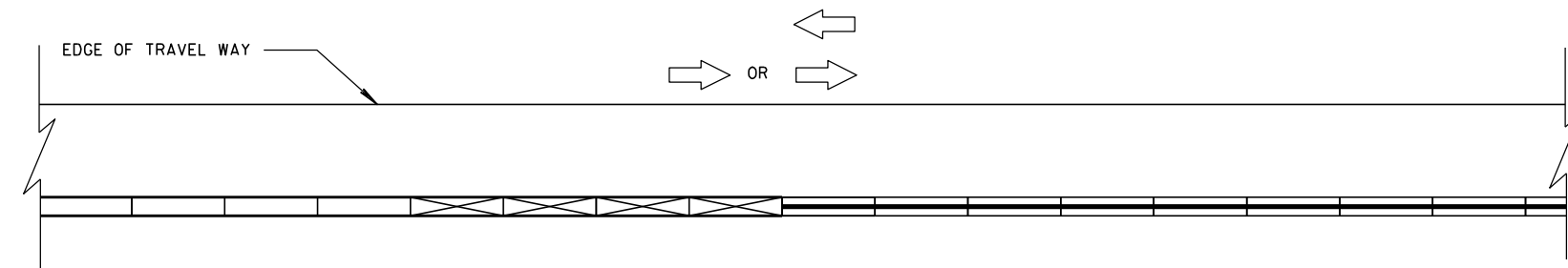
**ENDING TEMPORARY BARRIER
DOWNSTREAM - ANCHORED**

LEGEND

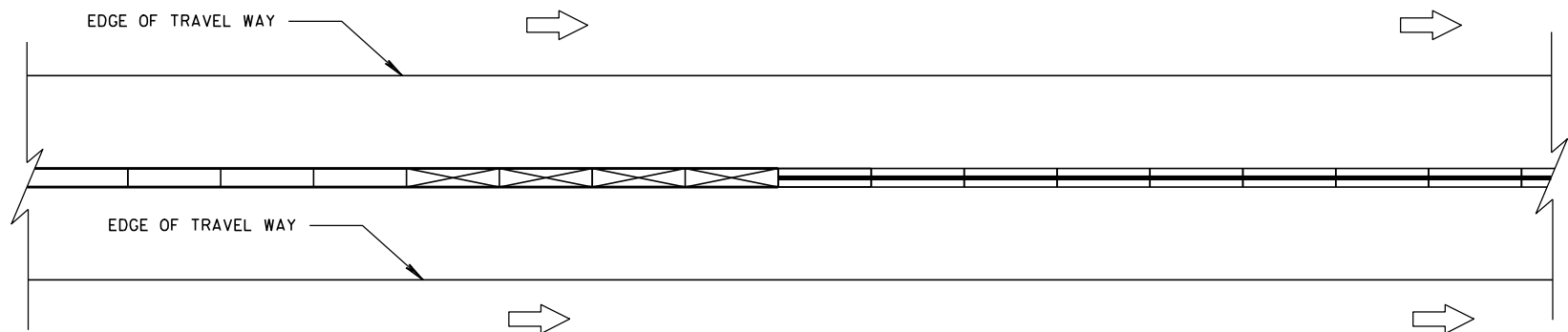
- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

**CRASH CUSHION/SAND BARREL
ARRAY AND OTHER TEMPORARY
BARRIER LAYOUT DETAILS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



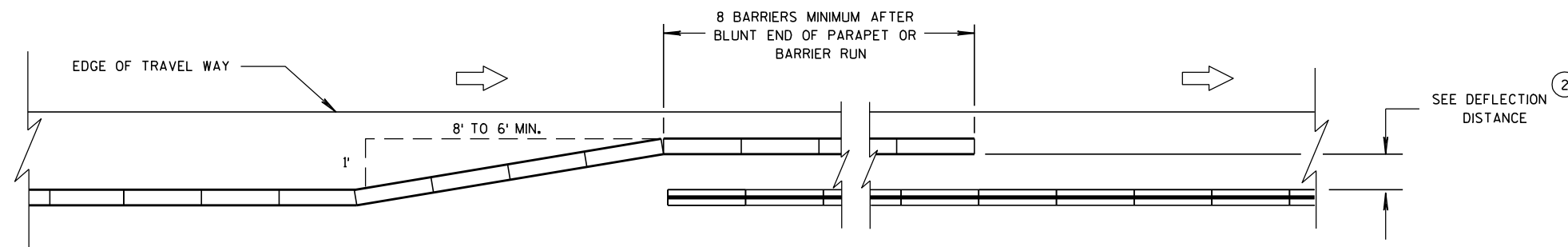
CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON ONE SIDE



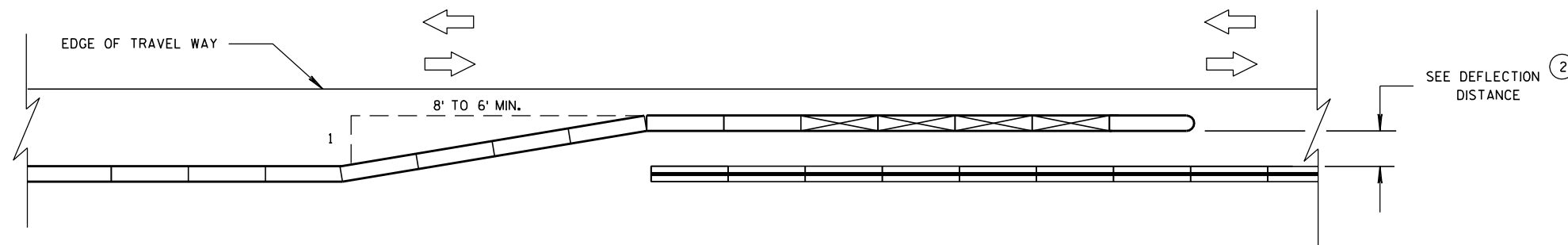
CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON BOTH SIDES

LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
ONE WAY TRAFFIC


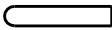




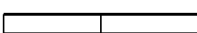


OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
TWO WAY TRAFFIC

CRASH CUSHION/SAND BARREL
ARRAY AND OTHER TEMPORARY
BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

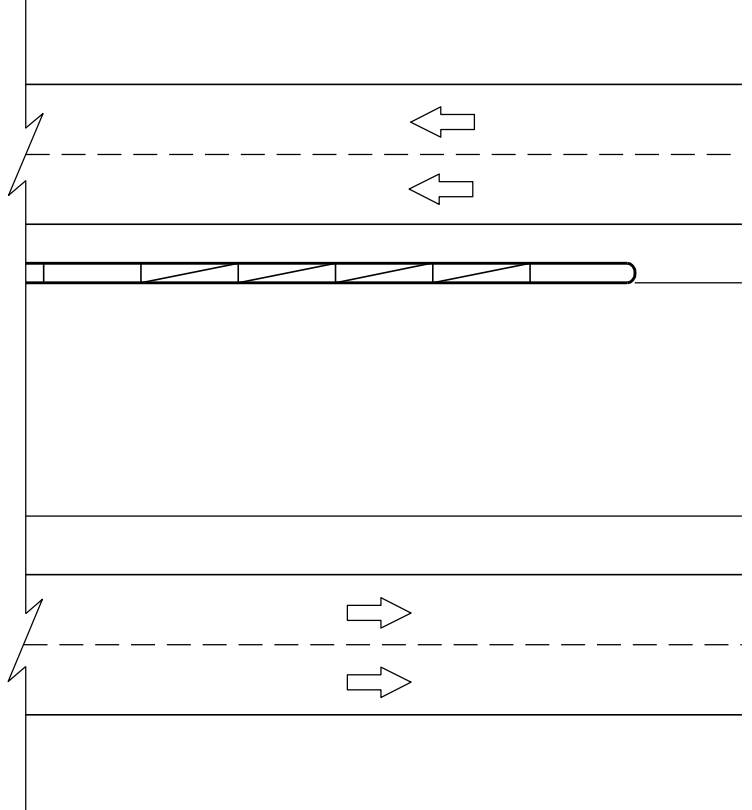
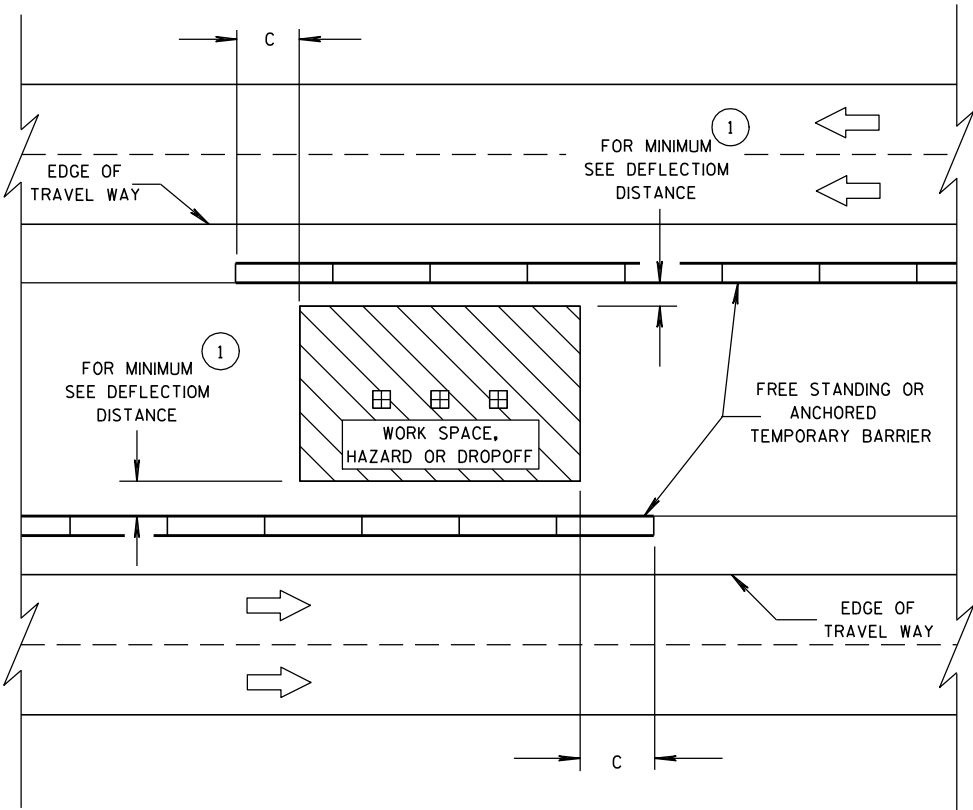
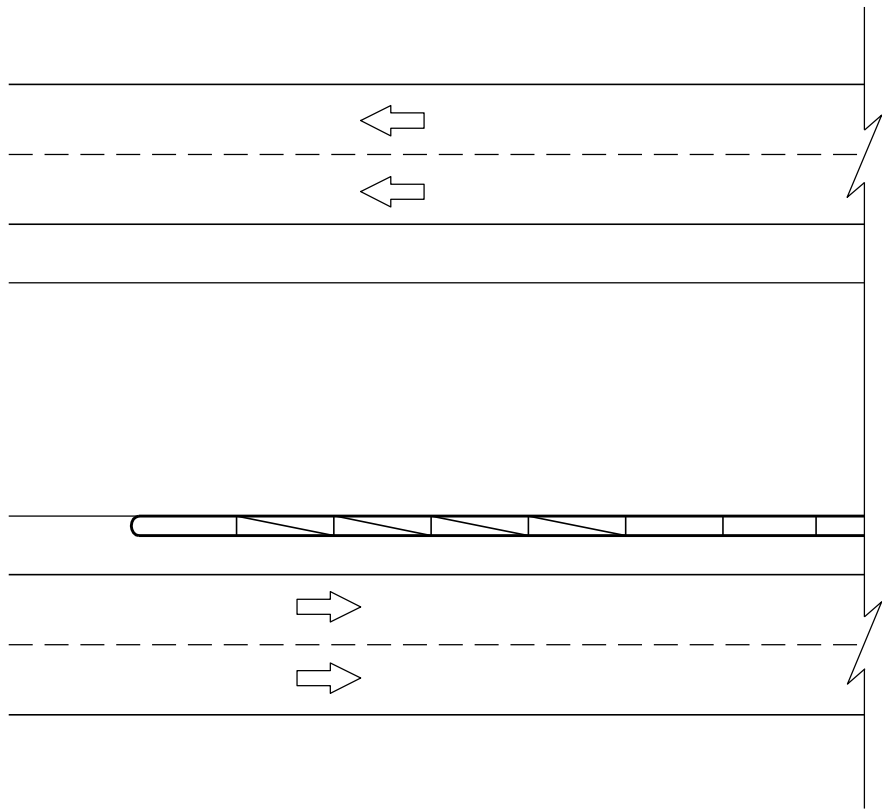
DIRECTION OF TRAVEL	
CRASH CUSHION OR SAND BARREL ARRAY	
SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS	
SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS	
3 PINS PLACED ON TRAFFIC SIDE OF BARRIER	
PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET	
FREE STANDING TEMPORARY BARRIER	

DIMENSION C TABLE

2

AVAILABLE DEFLECTION DISTANCE	MINIMUM LENGTH OF BARRIER BEYOND HAZARD FT
GREATER THAN 8'	12.5
LESS THAN OR EQUAL TO 8' BUT GREATER THAN 4'	50
LESS THAN OR EQUAL TO 4'	100

6



6

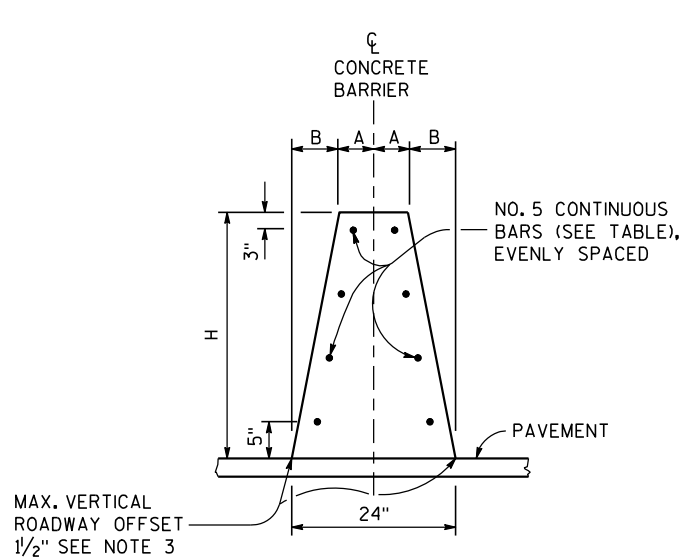
S.D.D. 14 B 8-1e

**CRASH CUSHION/SAND BARREL
ARRAY AND OTHER TEMPORARY
BARRIER LAYOUT DETAILS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

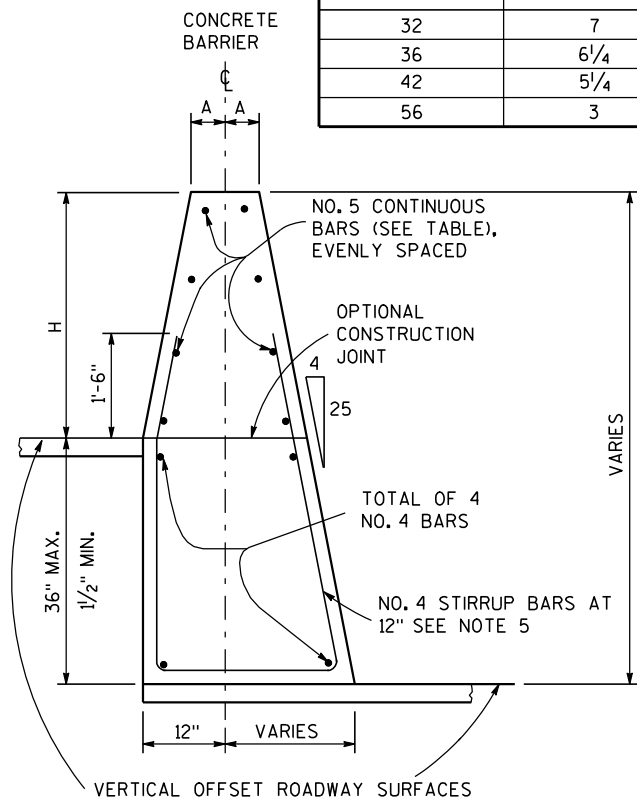
APPROVED
8/31/2012
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA

S.D.D. 14 B 8-1e

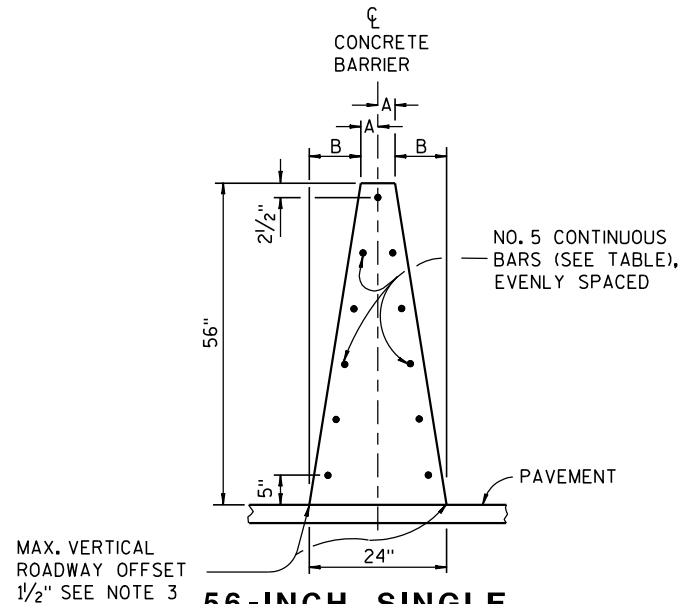


**32-INCH, 36-INCH OR 42-INCH
SINGLE SLOPE CONCRETE BARRIER
(TYPE S32, TYPE S36, AND
TYPE S42)**

BARRIER HEIGHT H INCHES	A INCHES	B INCHES	NUMBER OF NO. 5 BARS EACH
32	7	5	8
36	6 1/4	5 3/4	8
42	5 1/4	6 3/4	10
56	3	9	11

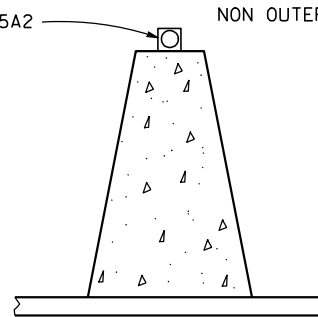


**SINGLE SLOPE CONCRETE
BARRIER AND RETAINING WALL
(TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)
(BETWEEN ADJACENT ROADWAYS)**

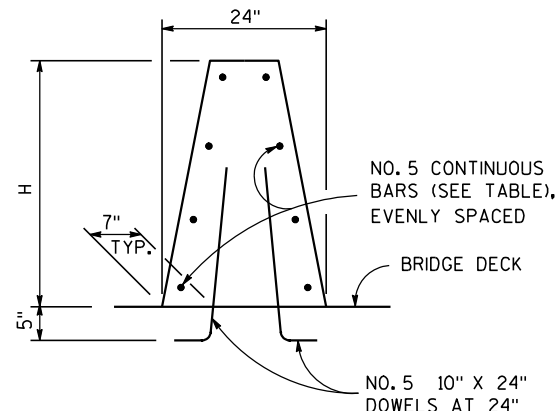


**56-INCH SINGLE
SLOPE CONCRETE BARRIER
(TYPE S56)**

SEE STANDARD
DETAIL DRAWING 15A2
FOR DELINEATOR
DETAILS

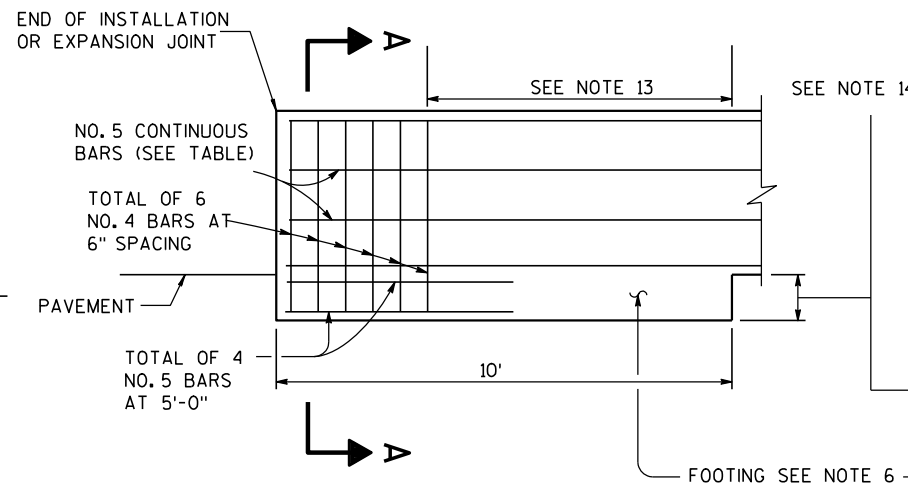


DELINEATION

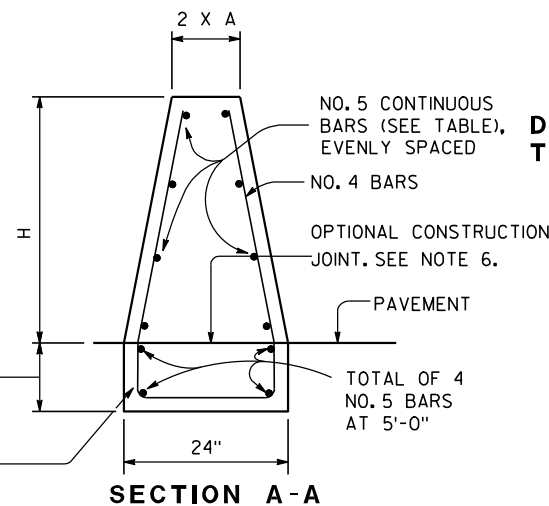


**SINGLE SLOPE
CONCRETE BARRIER
ON BRIDGE**

14. IN TYPE S32, TYPE S36, TYPE S42 AND TYPE S56 DEPTH OF FOOTING 10". IN TYPE S32A, TYPE S36A, TYPE S42A AND TYPE S56A MATCH TOTAL HEIGHT OF SINGLE SLOPE BARRIER RETAINING WALL.
15. FOR ALL BARRIER TYPES SHOWN, ANCHOR IS REQUIRED AT CONCRETE BARRIER ENDS AND AT INTERRUPTIONS IN CONCRETE BARRIER. ANCHOR MAY BE AS SHOWN ON DRAWING OR DETAILS SHOWN ON S.D.D. 14B33. ANCHORS INCIDENTAL TO CBSS.



**END ANCHOR SINGLE
SLOPE CONCRETE BARRIER
AT CONSTRUCTION JOINT**



GENERAL NOTES

1. WHERE THE CONCRETE BARRIER IS ADDED TO THE FACE OF EXISTING CONCRETE STRUCTURE, MATCH EXISTING WEEP HOLES.
2. EXPANSION JOINTS IN CONCRETE BARRIER SHALL BE LOCATED AT ALL DECK, PAVEMENT AND PRINCIPAL WALL JOINTS. EXPANSION JOINT FILLER MATERIAL SHALL BE THE SAME SIZE AS JOINT OR 1/2" MINIMUM.
3. WHERE VERTICAL ROADWAY OFFSET IS GREATER THAN 1 1/2", USE TYPE A
4. PLACE BARRIER PERPENDICULAR TO SHOULDER GRADE, UNLESS INDICATED IN PLAN.
5. EXCEPT IN ANCHORS, VERTICAL REINFORCING STIRRUP NOT REQUIRED FOR ROADWAY OFFSETS LESS THAN 1'-0".
6. FOR TYPE S32, TYPE S36, TYPE S42, AND S56 MONOLITHIC FOOTING OR DOWELED FOOTING WITH 2-#8 x 8" @ 2'-0".
7. STAGGER LAPPING OF LONGITUDINAL STEEL. MINIMUM OVERLAP OF STEEL 2 FEET. BARS AT LAPS TO BE FIRMLY TIED OR CONNECTED.
8. 4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATION 501.
9. WHEN SWITCHING BETWEEN SLIP FORM AND CAST-IN-PLACE OPERATIONS, EXTEND LONGITUDINAL STEEL 3 FEET BEYOND SLIP-FORMING CUT OFF POINT. EXPOSED STEEL INTO NEXT POURS REINFORCEMENT. LAPS TO BE FIRMLY TIED.
10. USE 3/4" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS OTHERWISE NOTED.
11. 2" CLEAR COVER TYPICAL.
12. COLD-JOINTS MAY BE USED BETWEEN ANCHOR INSTALLATIONS. WHEN A COLD JOINT IS NEEDED, 3 FEET OF LAP OF LONGITUDINAL STEEL IS REQUIRED. LAPS TO BE FIRMLY TIED
13. IN TYPE S32, TYPE S36, TYPE S42 AND TYPE S56 NO ADDITIONAL VERTICAL STEEL NEEDED. IN TYPE S32A, TYPE S36A, TYPE S42A AND TYPE S56A REQUIRES VERTICAL STEEL. SEE OTHER DETAIL

**DELINEATOR SPACING
ON HORIZONTAL CURVES**

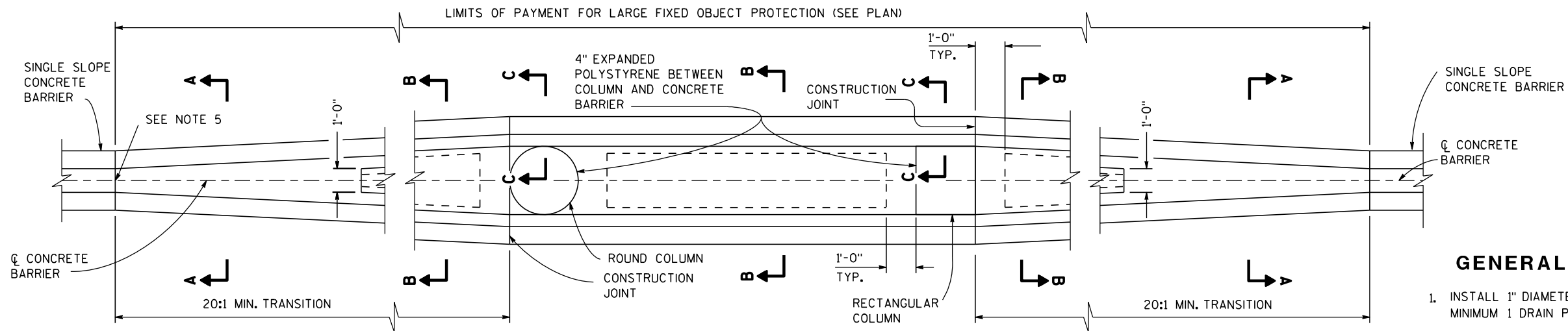
RADIUS OF CURVE	APPROXIMATE SPACING ON CURVE
50 FEET	20 FEET
115 FEET	25 FEET
180 FEET	35 FEET
250 FEET	40 FEET
300 FEET	50 FEET
400 FEET	55 FEET
500 FEET	65 FEET
600 FEET	70 FEET
700 FEET	75 FEET
800 FEET	80 FEET
900 FEET	85 FEET
1000 FEET	90 FEET

**DELINEATOR SPACING ON RADIUS GREATER
THAN 1000 FEET OR TANGENT SECTIONS**

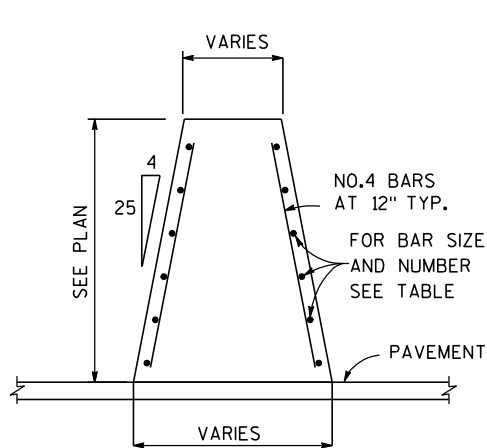
	LENGTH OF BARRIER	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	1 1	3
TWO WAY TRAFFIC	< 200' > 200'	25' C-C 50' C-C	1 1	6
TWO WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	2 2	3

**CONCRETE BARRIER SINGLE SLOPE
(CBSS)**

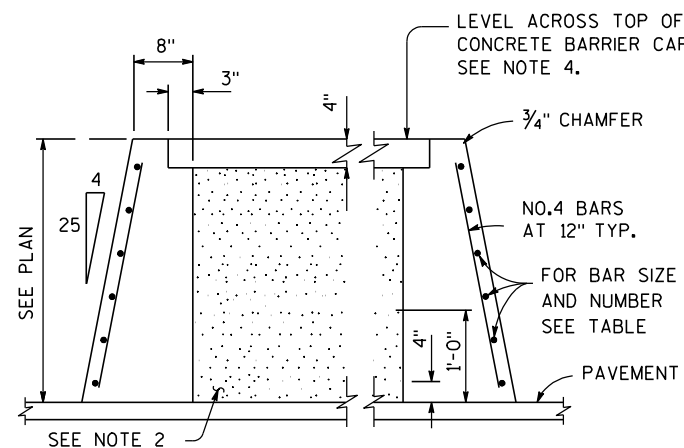
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



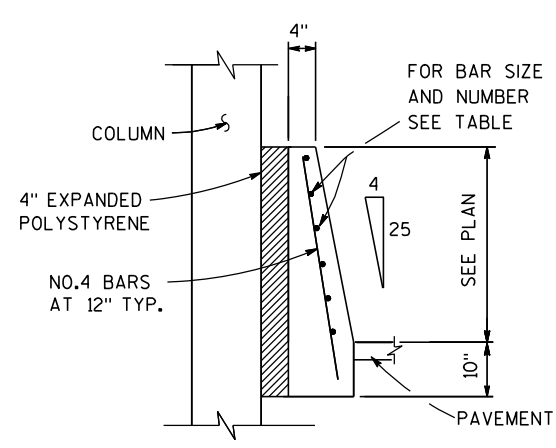
LARGE FIXED OBJECTS PROTECTION
TYPE S32, TYPE S36, TYPE S42, TYPE S56



SECTION A-A



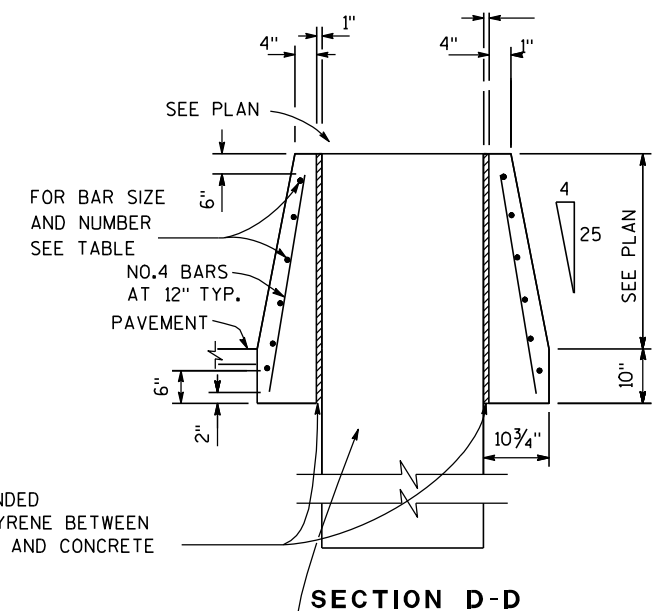
SECTION B-B



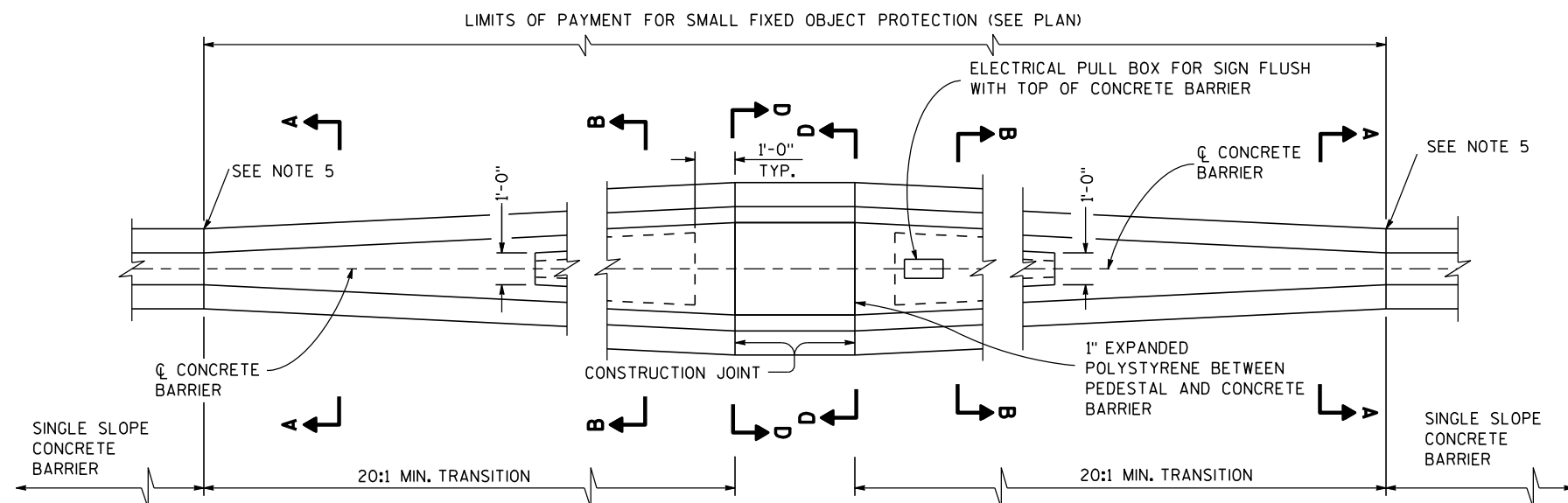
SECTION C-C

GENERAL NOTES

1. INSTALL 1" DIAMETER DRAIN PIPE EVERY 20' OF CROSS SECTION B-B. MINIMUM 1 DRAIN PER CAVITY.
2. BETWEEN CONCRETE BARRIER WALLS FILL WITH GRANULAR BACKFILL GRADE 2
3. REINFORCING STEEL SHALL EXTEND CONTINUOUS THROUGH CONSTRUCTION JOINTS.
4. ADJUST HEIGHT OF CONCRETE BARRIER WALL ON LOW SIDE OF OFFSET OR SUPERELEVATED ROADWAYS TO PROVIDE LEVEL GRADE ACROSS TOP OF CONCRETE CAP.
5. IF FIXED OBJECT PROTECTION IS INSTALLED FIRST, USE COLD JOINTS. IF CBSS PLACED FIRST, USE EXPANSION JOINT.



SECTION D-D

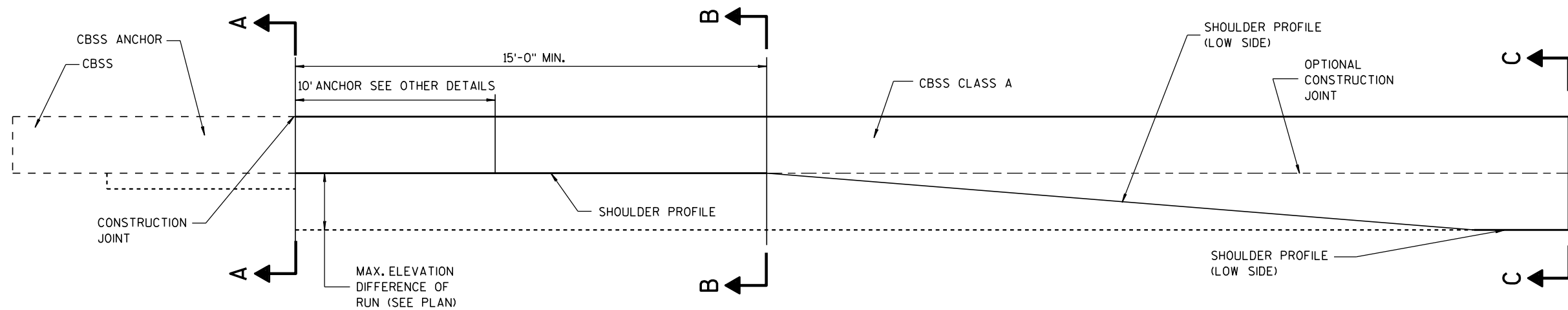


SMALL FIXED OBJECTS PROTECTION
TYPE S32, TYPE S36, TYPE S42, TYPE S56

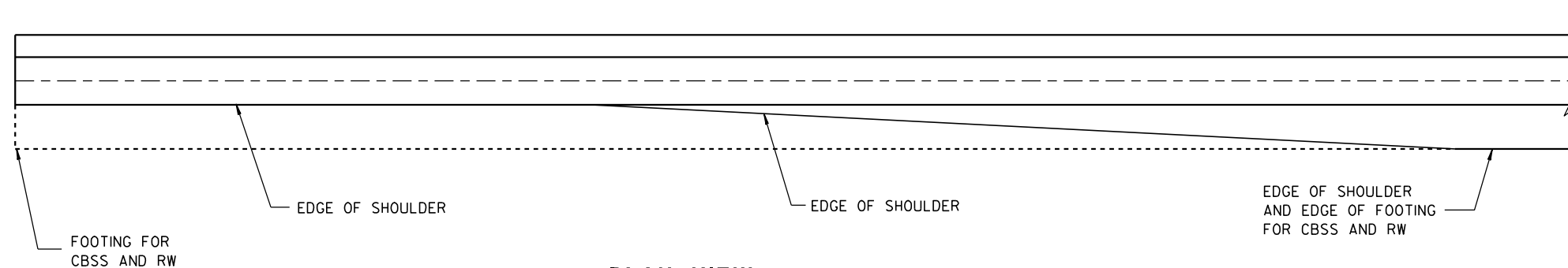
BARRIER HEIGHT H INCHES	BAR SIZE	NUMBER OF BARS EACH
32	4	6
36	4	6
42	5	6
56	5	9

**CONCRETE BARRIER SINGLE SLOPE
 (CBSS)**

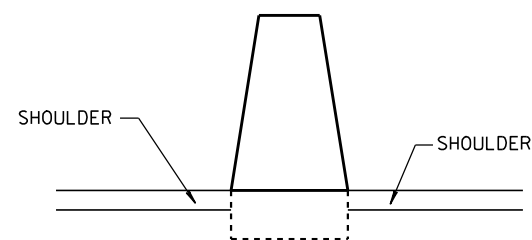
STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION



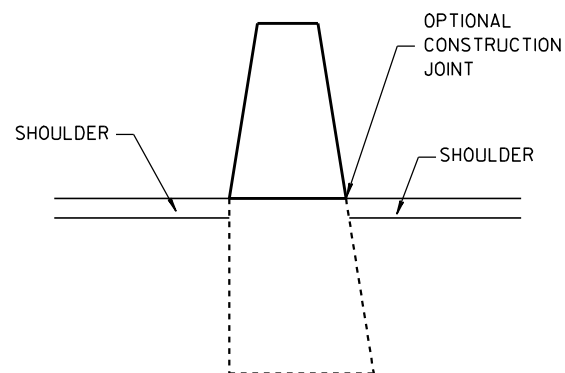
ELEVATION VIEW
TRANSITION TO CBSS CLASS A
(TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)



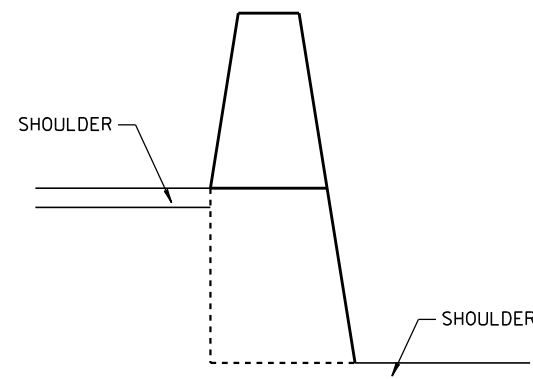
PLAN VIEW
TRANSITION TO CBSS CLASS A
(TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)



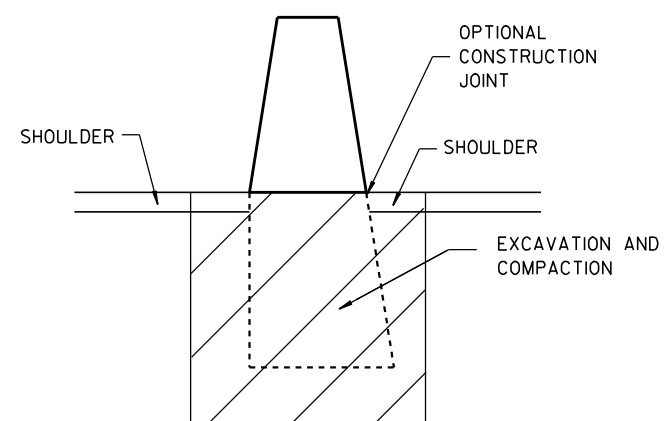
SECTION A-A



SECTION B-B

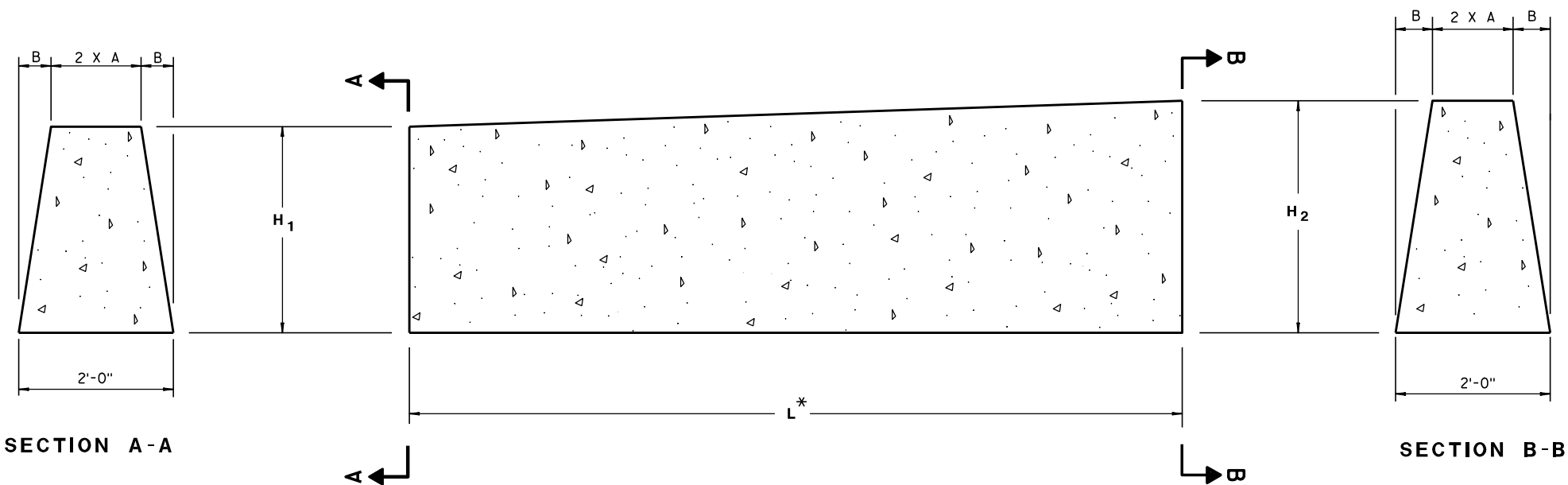


SECTION C-C



CONCRETE BARRIER SINGLE SLOPE
(CBSS)

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION



BARRIER DIMENSIONS

BARRIER HEIGHT INCHES	A INCHES	B INCHES
32	7	5
36	6 ¹ / ₄	5 ³ / ₄
42	5 ¹ / ₄	6 ³ / ₄
56	3	9

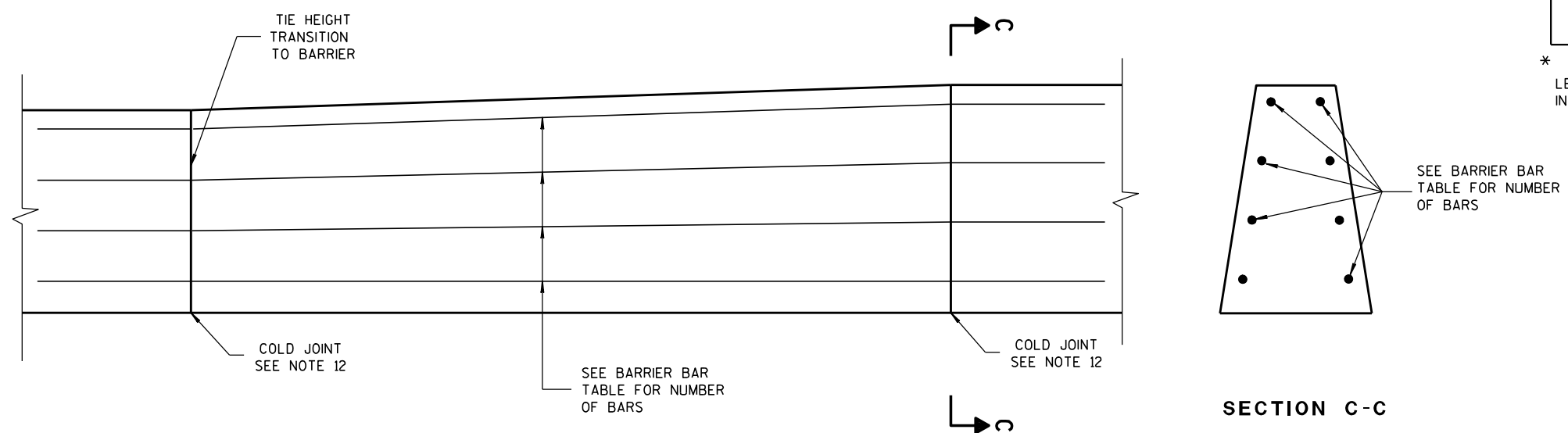
MULTIPLE HEIGHT TRANSITIONS MAY BE USED IN SEQUENCE TO GET TO APPROPRIATE HEIGHT.

USE COLD JOINT TO CONNECT MULTIPLE HEIGHT TRANSITIONS.

BARRIER BARS

H ₁	H ₂	L*	NUMBER OF NO. 5 BARS
32"	36"	10'-0"	8
36"	42"	10'-6"	10
42"	56"	24'-6"	11

*
LENGTH OF DOUBLE COLD JOINT INCLUDED IN THE TOTAL LENGTH OF CBSS.



**CONCRETE BARRIER
SINGLE SLOPE**

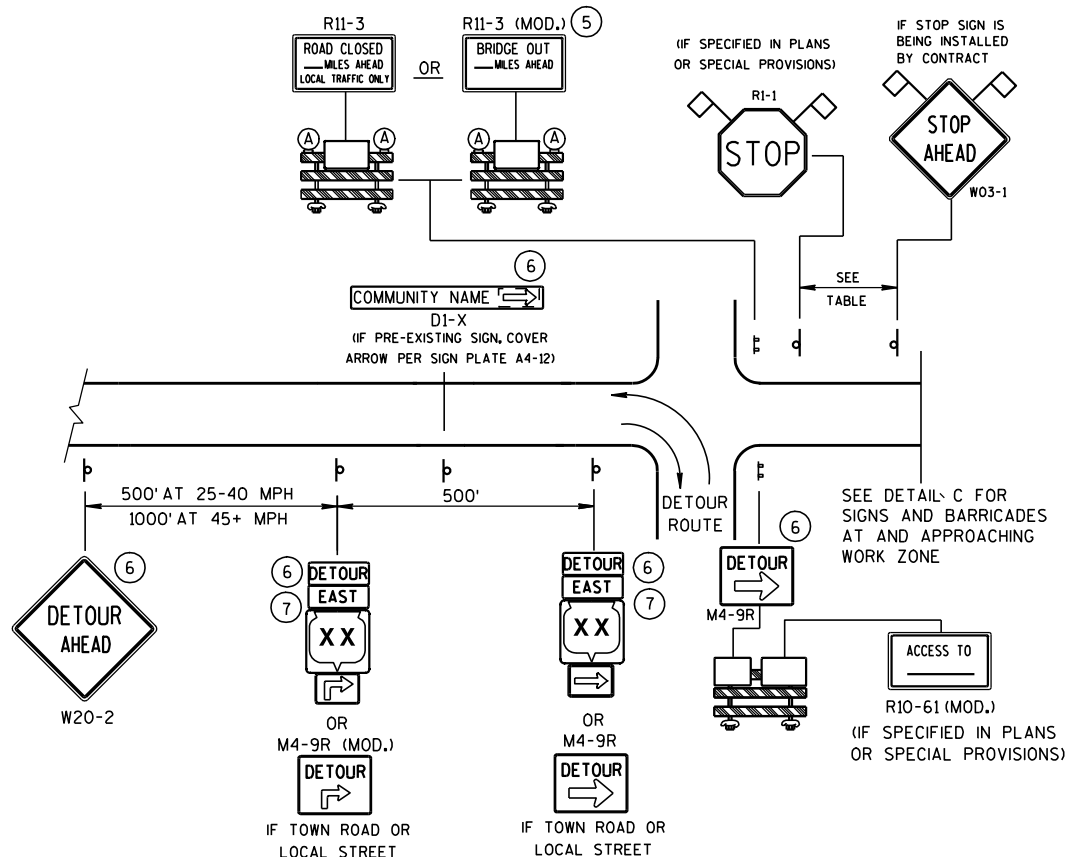
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6-3-2010
DATE

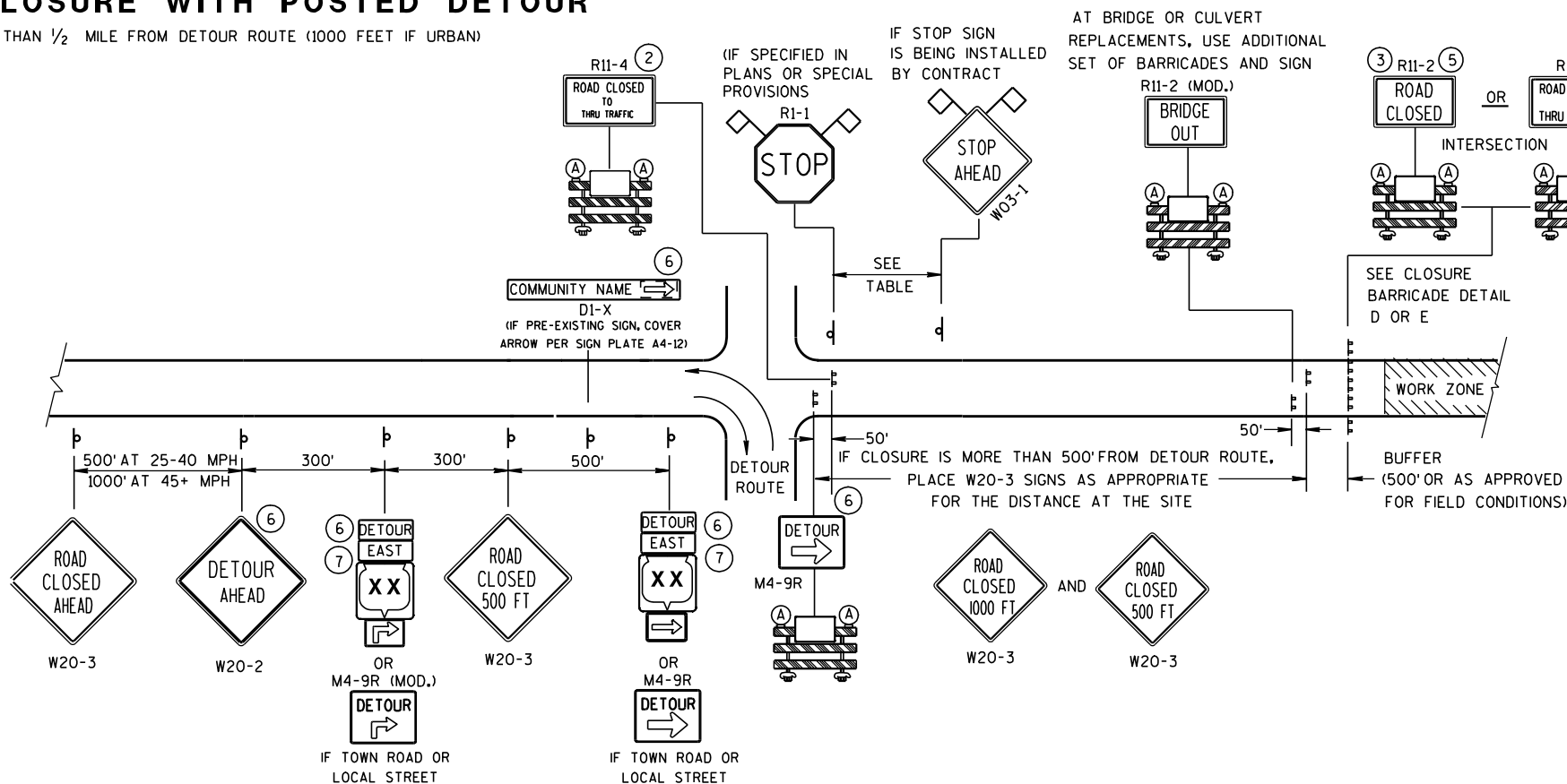
FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

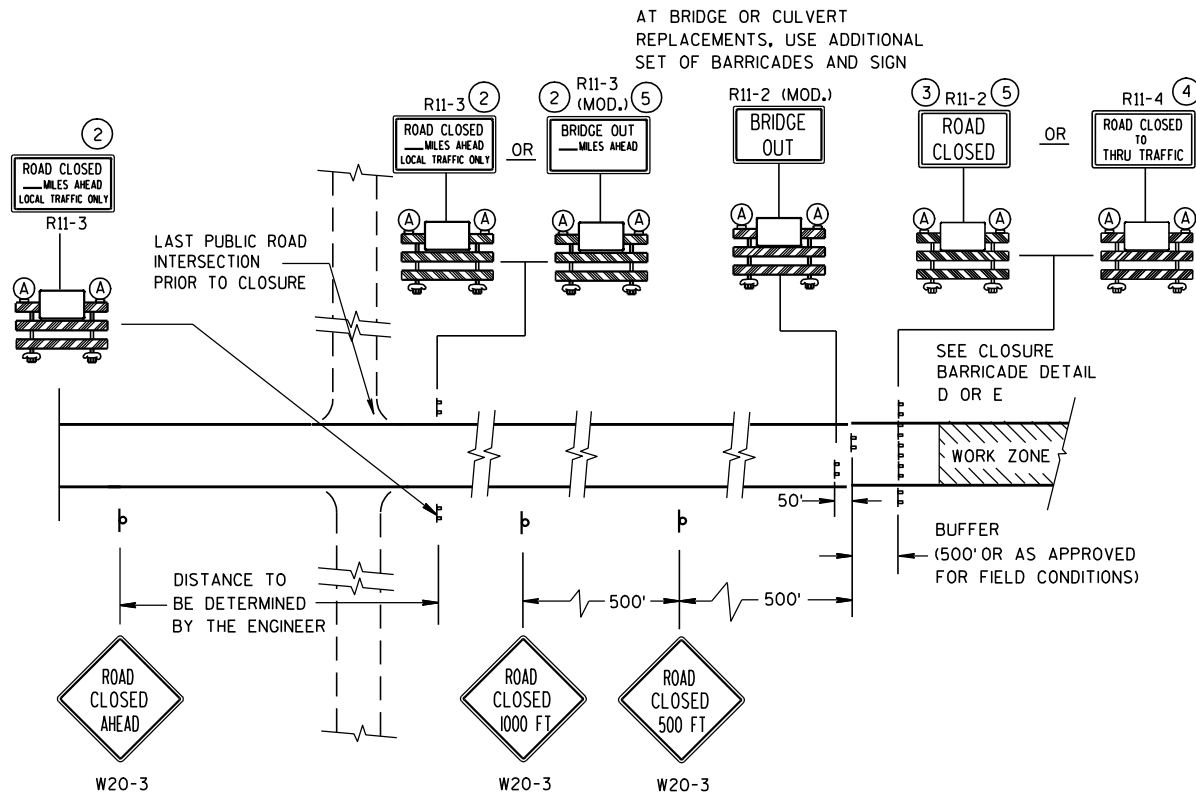
WORK ZONE GREATER THAN 1/2 MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN 1/2 MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)

DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR



SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

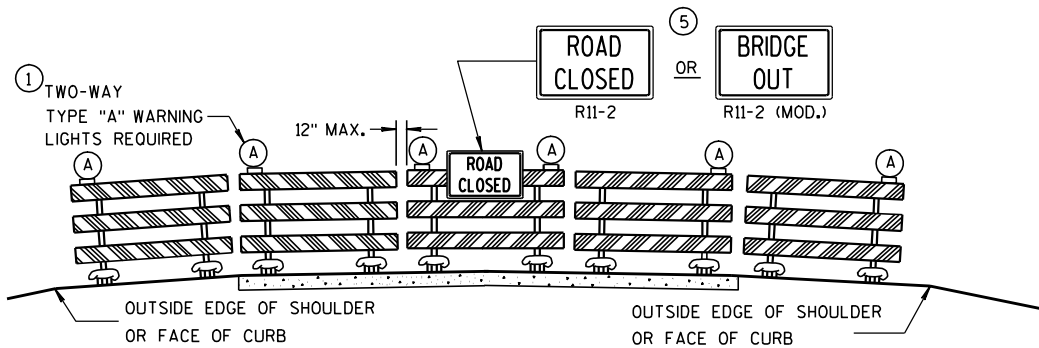
SEE SDD 15C2-4b
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦

LEGEND

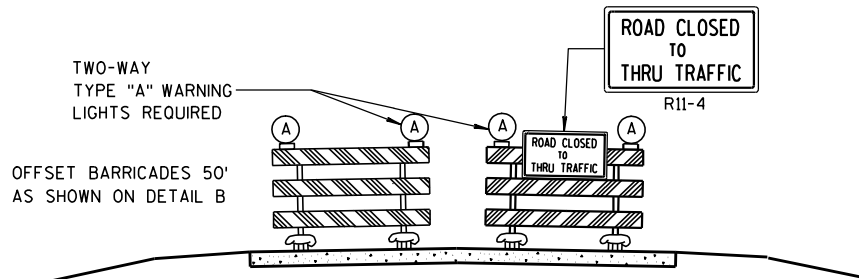
- POST MOUNTED SIGN
- TYPE III BARRICADES
- TYPE "A" LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)
- WORK ZONE
- DETOUR EAST M4-8 M3-X
- MI-4 OR MI-5A OR MI-6
- MO5-1 OR MO6-1
- FLAGS, 16" X 16" MIN., (ORANGE)

**BARRICADES AND SIGNS
FOR
MAINLINE CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2-4a FOR LEGEND

GENERAL NOTES

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

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.

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

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

THE REFLECTIVE SHEETING USED ON R11-2, R11-3, R11-4, R10-61 AND R1-1 SIGNS SHALL COMPLY WITH SUBSECTION 637.2.2.2 OF THE STANDARD SPECIFICATIONS.

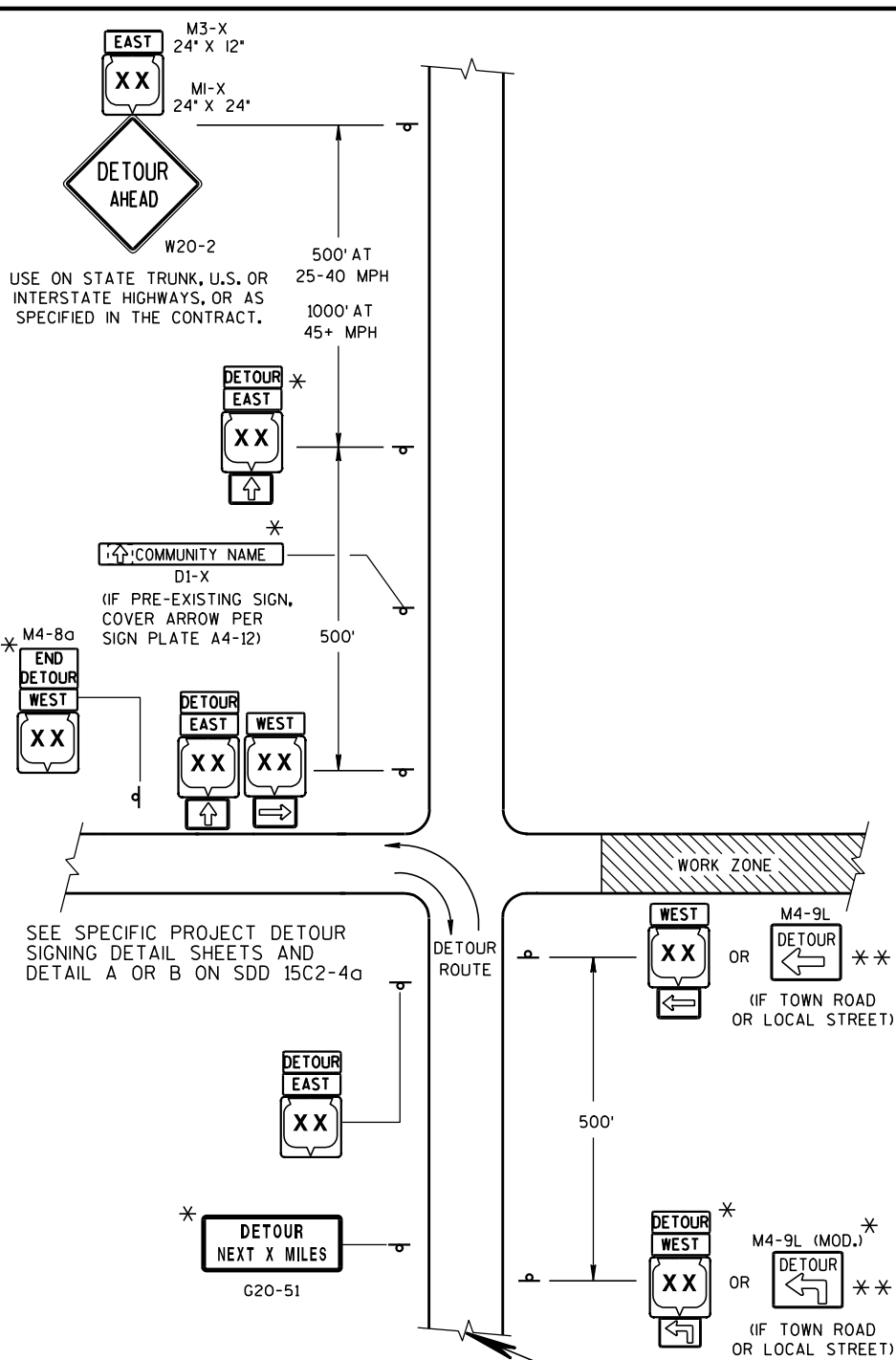
"WO AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X AND M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1-1 SHALL BE 36" X 36".

- 1 TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).
- 2 THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.
- 3 FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.
- 4 FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.
- 5 FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.
- 6 INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.
- 7 "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR MAINLINE CLOSURES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
<u>9/16/03</u> DATE	<u>/S/ Thomas N. Notbohm</u> CHIEF SIGNS AND MARKING ENGINEER
FHWA	






LEGEND

POST MOUNTED SIGN

 WORK ZONE

DETOUR	M4-8
EAST	M3-X


 OR
 
 OR
 

M1-4 M1-5A M1-6


 OR
 
 OR
 

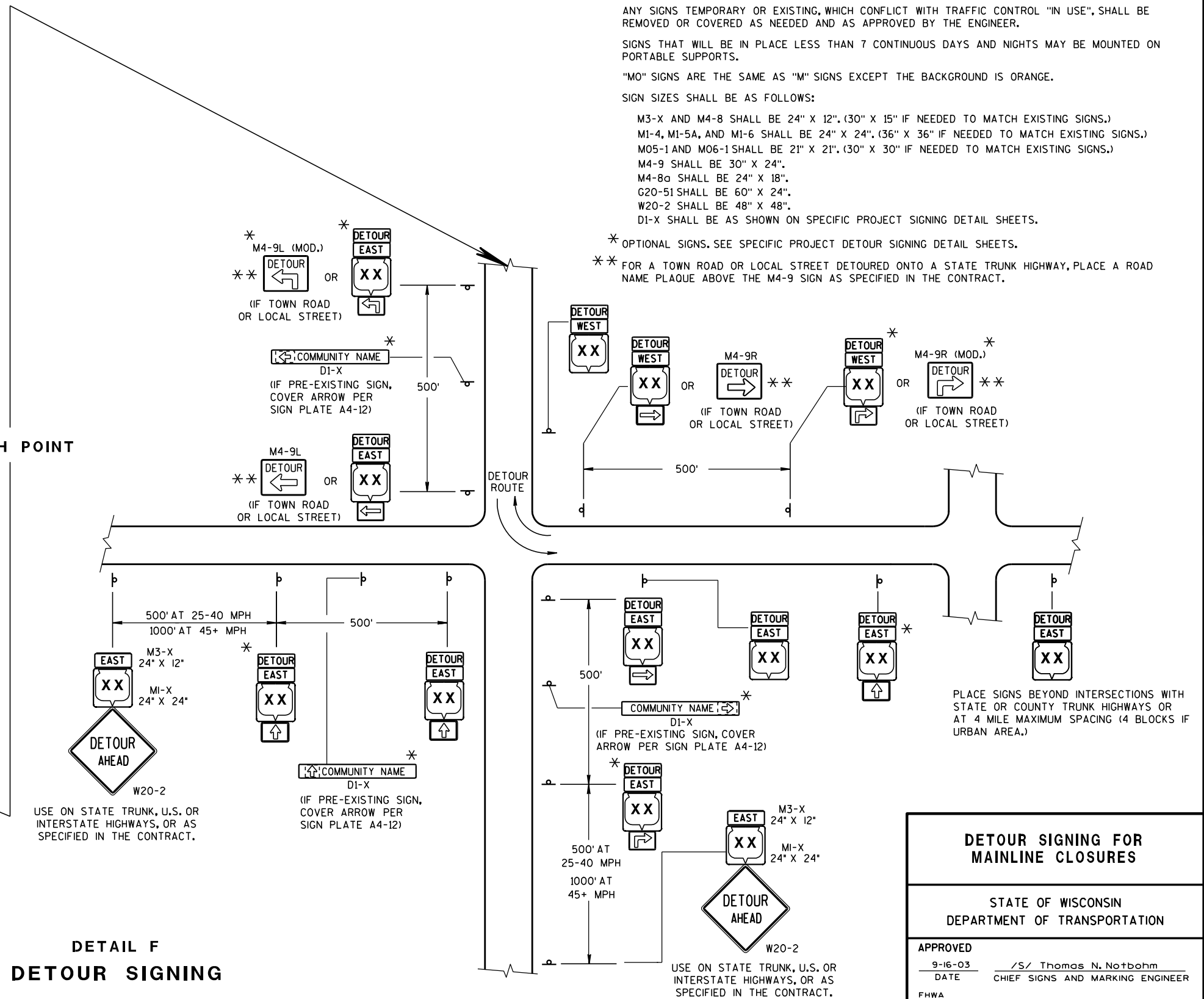
M05-1 M06-1 M06-1

**THIS DRAWING PROVIDES GENERAL GUIDANCE
ON TYPICAL DETOUR SIGN LAYOUT AND SPACING.
SEE PROJECT DETOUR SIGNING SHEETS FOR
SPECIFIC DETAILS FOR EACH PROJECT.**

MATCH POINT

DETAIL F

DETOUR SIGNING



GENERAL NOTES

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

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

M3-X AND M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
M4-9 SHALL BE 30" X 24".
M4-8a SHALL BE 24" X 18".
G20-51 SHALL BE 60" X 24".
W20-2 SHALL BE 48" X 48".
D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

*** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.

DETOUR SIGNING FOR MAINLINE CLOSURES

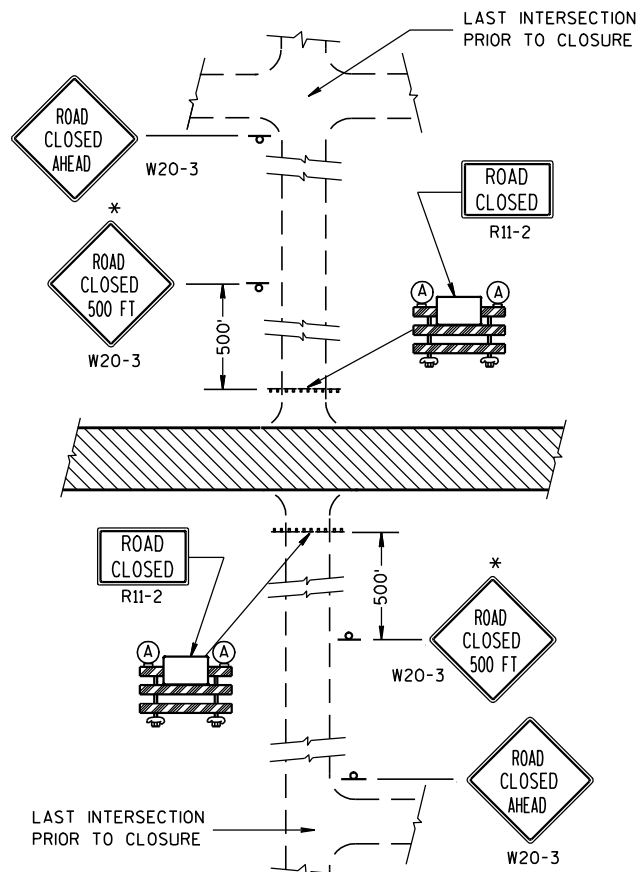
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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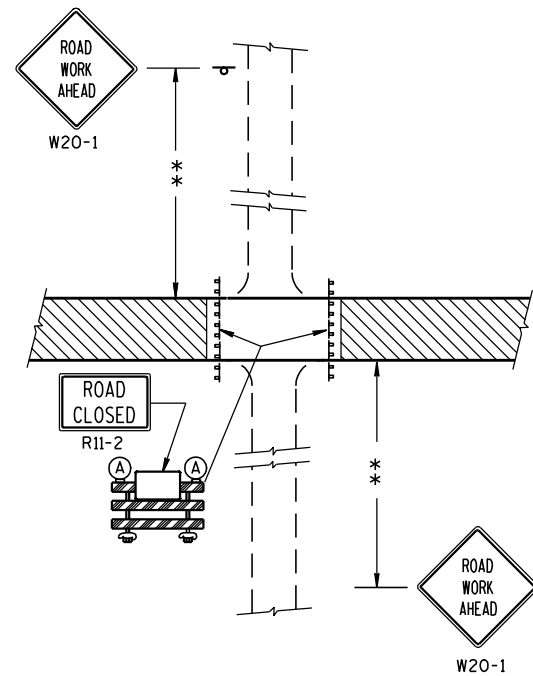
9-16-03
DATE

/S/ Thomas N. Notbohm
CHIEF SIGNS AND MARKING ENGINEER

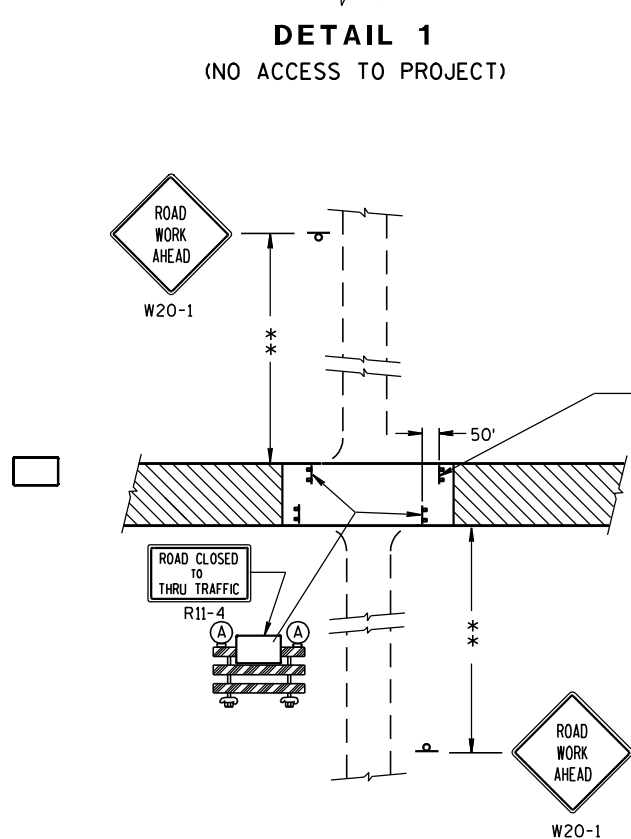
FHWA



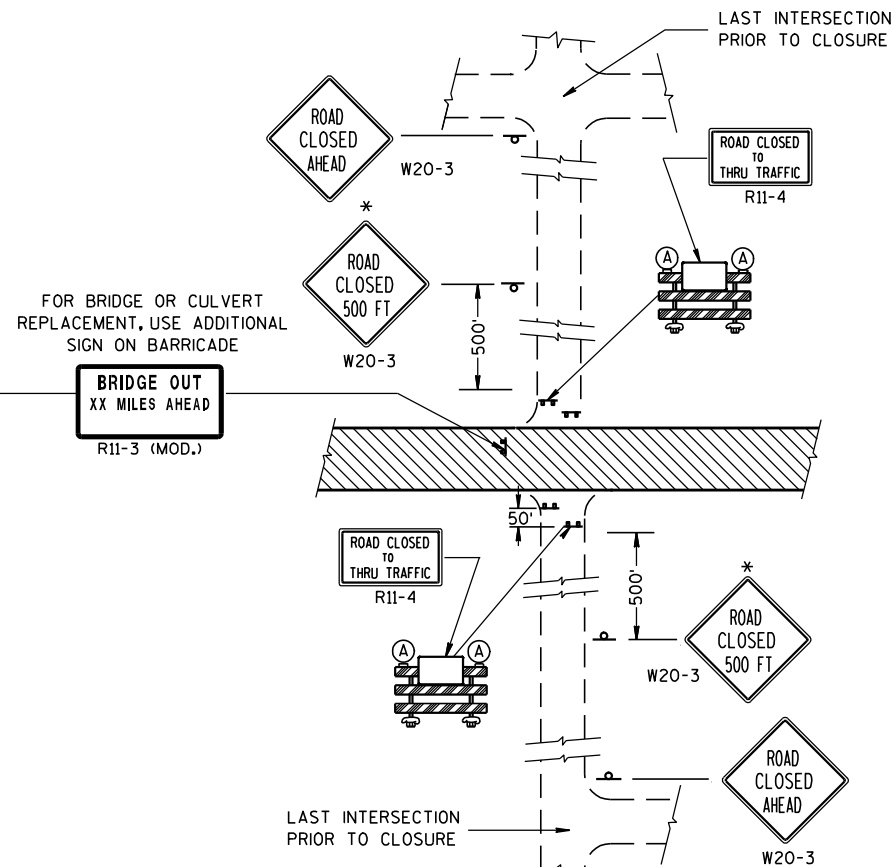
DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT).



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR,
LOCAL BUSINESS AND RESIDENT ACCESS).



DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

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

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.

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

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3 AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

THE REFLECTIVE SHEETING USED ON R11-2, R11-3 AND R11-4 SIGNS SHALL COMPLY WITH SUBSECTION 637.2.2.2 OF THE STANDARD SPECIFICATIONS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

R11-2 SHALL BE 48" X 30".

R11-4 AND R11-3 SHALL BE 60" X 30".

*OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FT. OR LESS FROM THE WORK ZONE.

**500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSER.

LEGEND

⌋ POST MOUNTED WARNING SIGN

⌋ TYPE III BARRICADES

Ⓐ TYPE "A" LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)

▨ WORK AREA

**BARRICADES AND SIGNS
FOR
SIDEROAD CLOSURES**

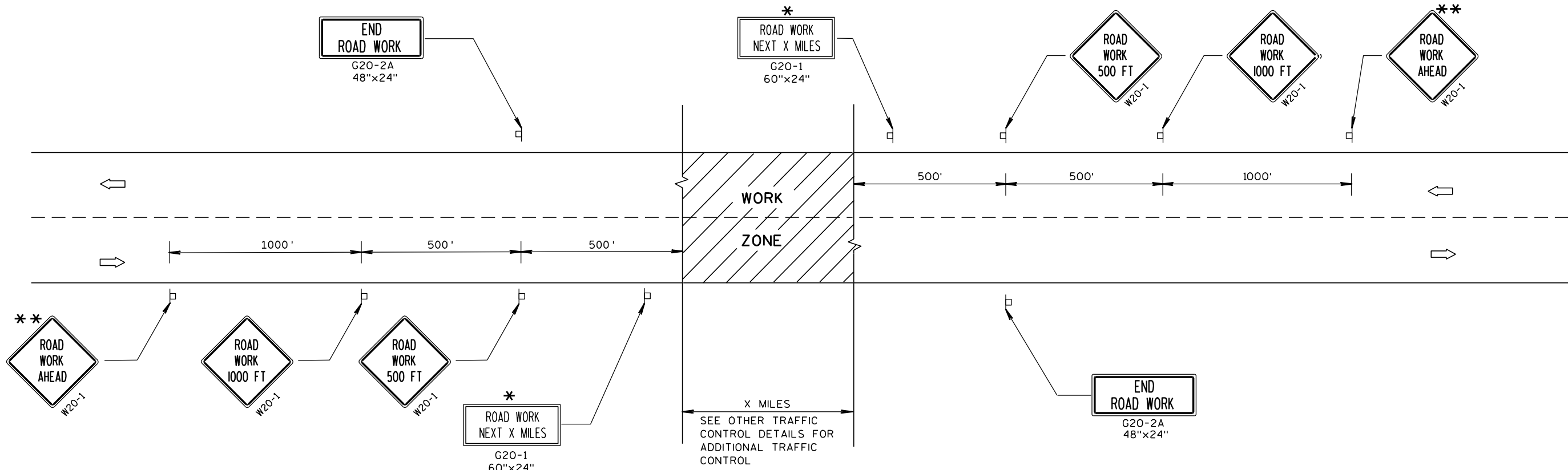
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9-16-03
DATE

/S/ Thomas N. Notbohm
CHIEF SIGNS AND MARKING ENGINEER

FHWA



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

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

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.

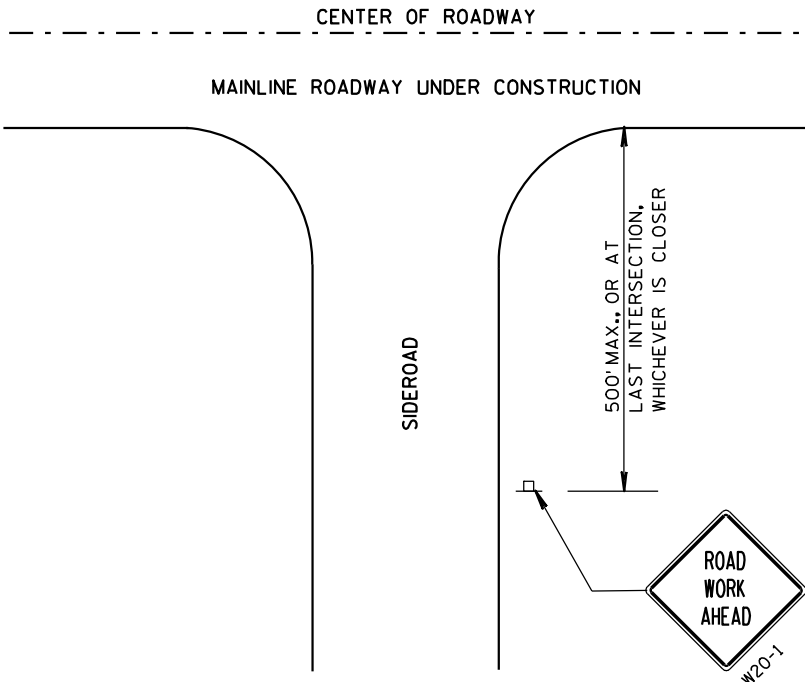
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

** PLACE ADDITIONAL W20-1 "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA OR SIGNING.



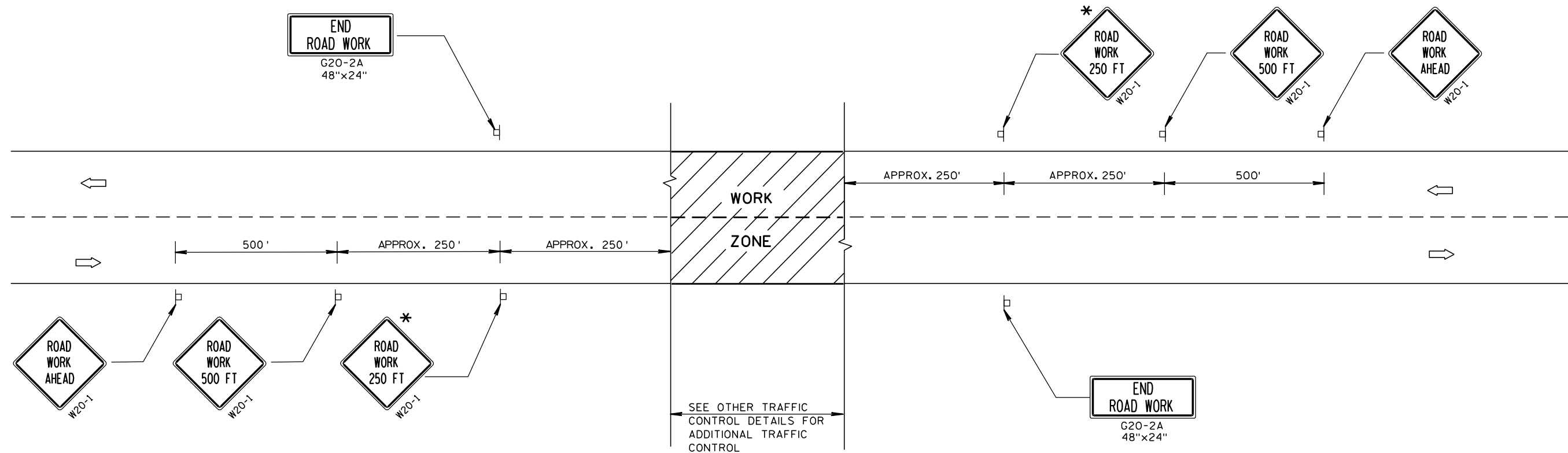
LEGEND

- POST MOUNTED SIGN
- DIRECTION OF TRAFFIC FLOW

TRAFFIC CONTROL, ADVANCE
WARNING SIGNS 45 M.P.H.
OR GREATER TWO-WAY
UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/00 /S/ Chester J. Spang
DATE CHIEF SIGNS AND MARKING ENGINEER
FHWA



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

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

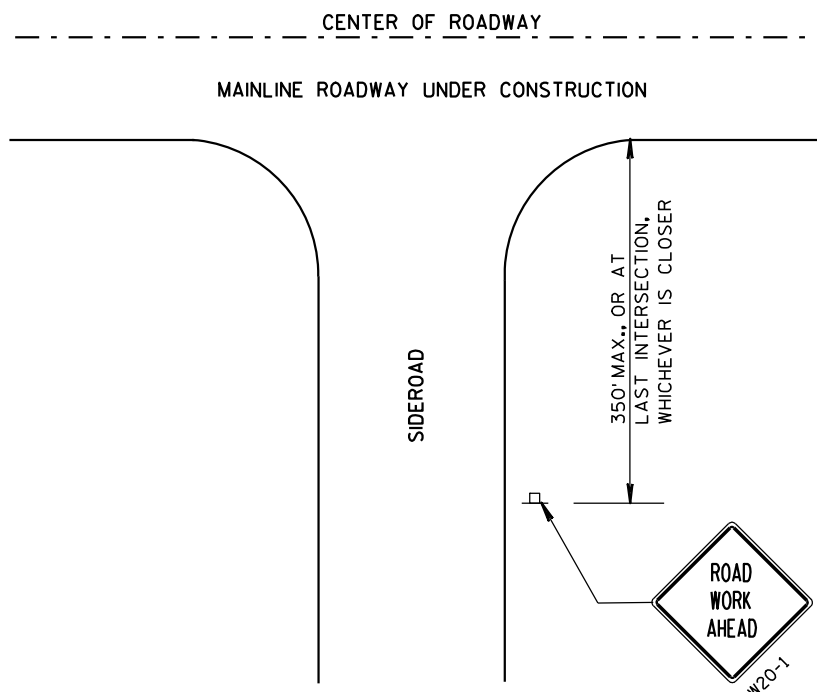
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS, IF APPROVED BY DISTRICT TRAFFIC UNIT.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

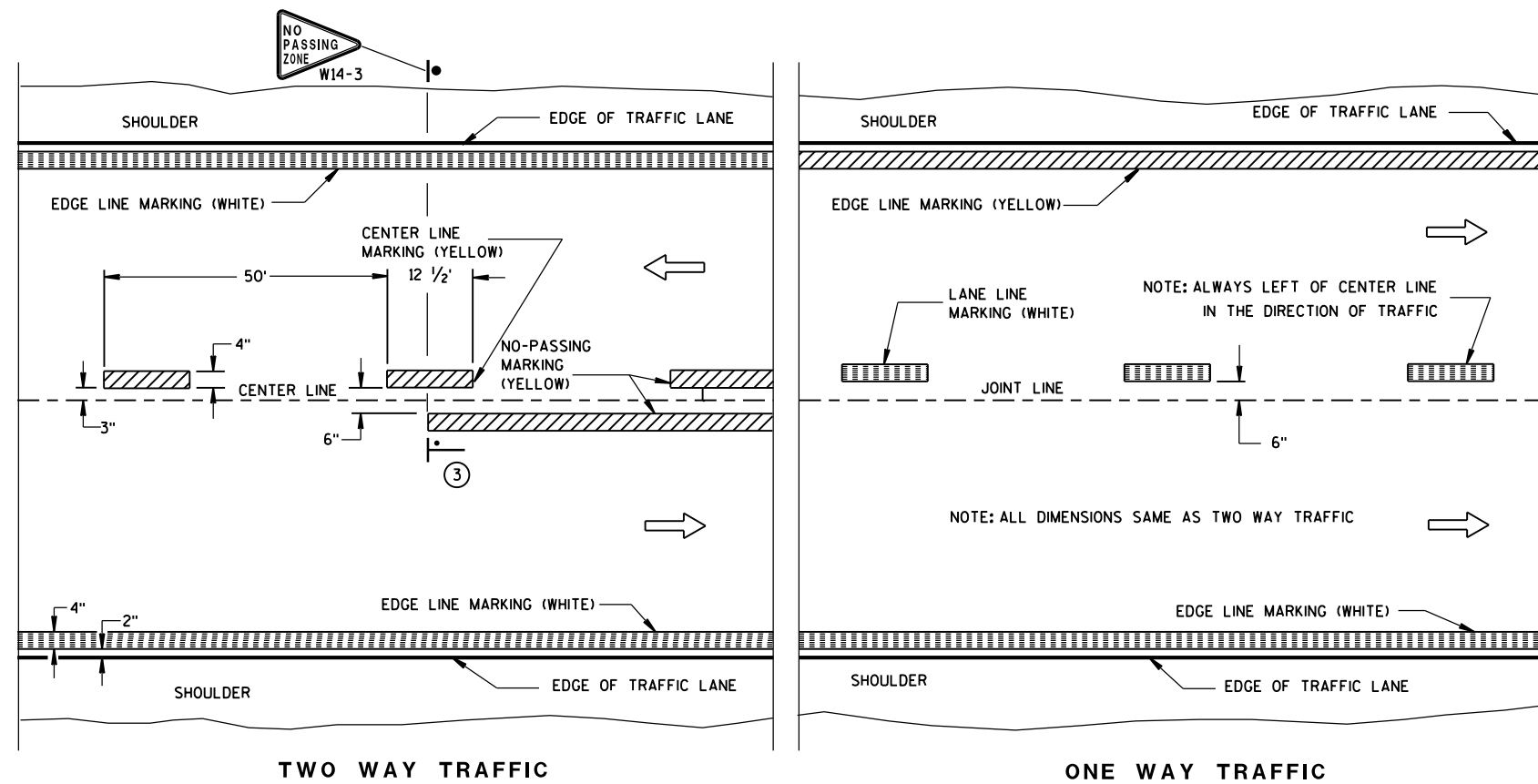
* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FT" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



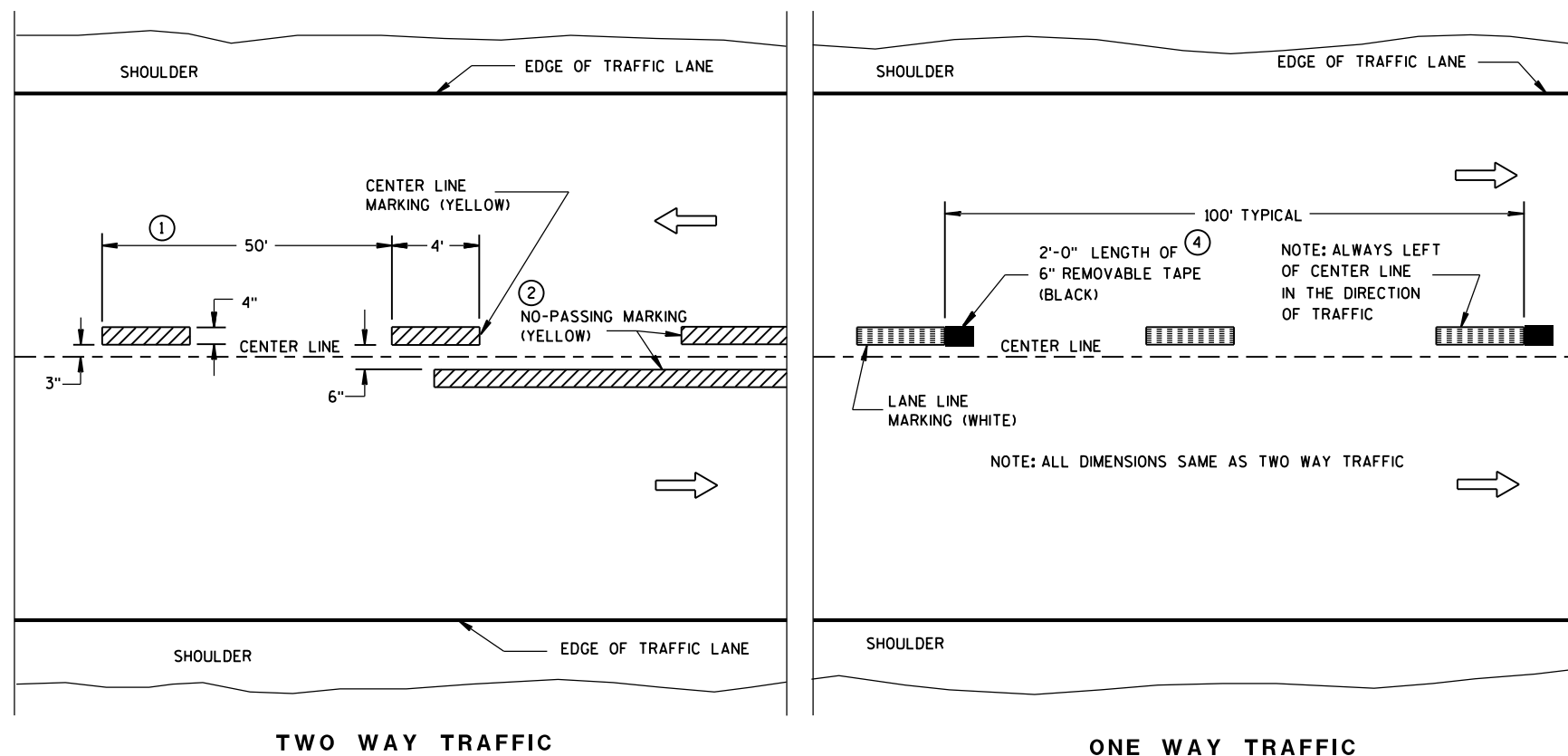
LEGEND

- POST MOUNTED SIGN
- ➡ DIRECTION OF TRAFFIC FLOW

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 5/23/00 DATE	/S/ Chester J. Spang CHIEF SIGNS AND MARKING ENGINEER
FHWA	



PERMANENT PAVEMENT MARKING




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

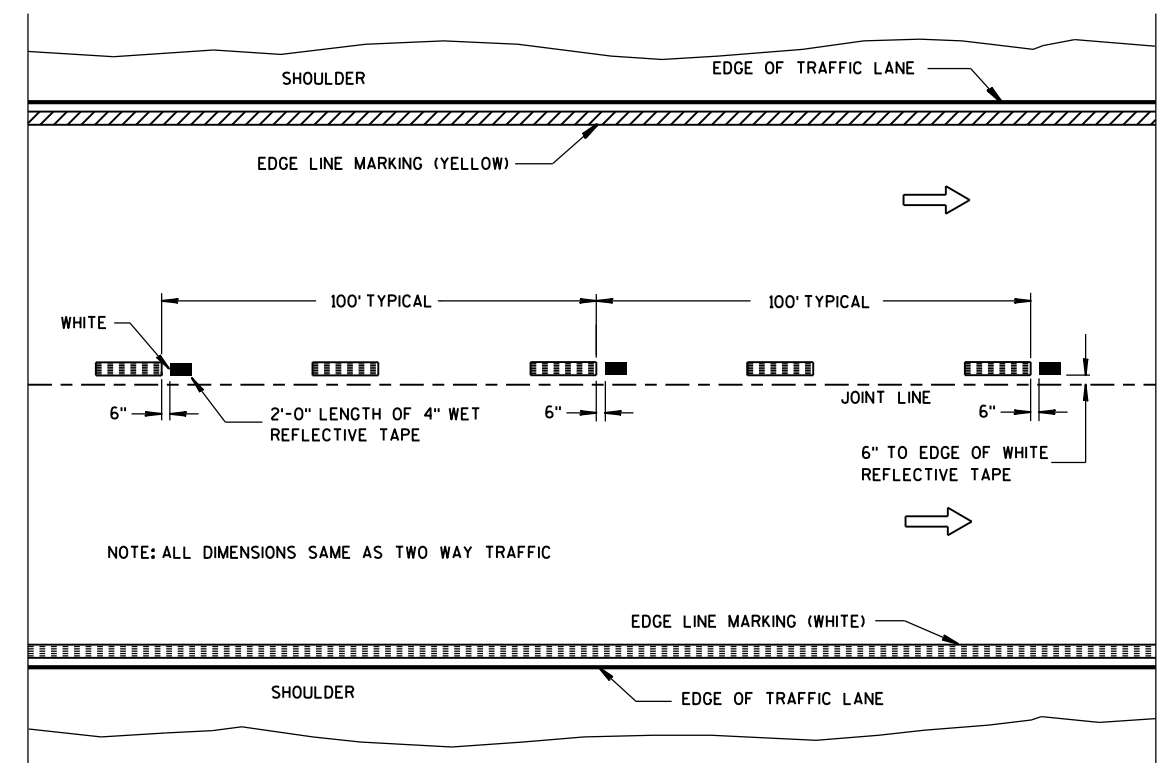
GENERAL NOTES

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

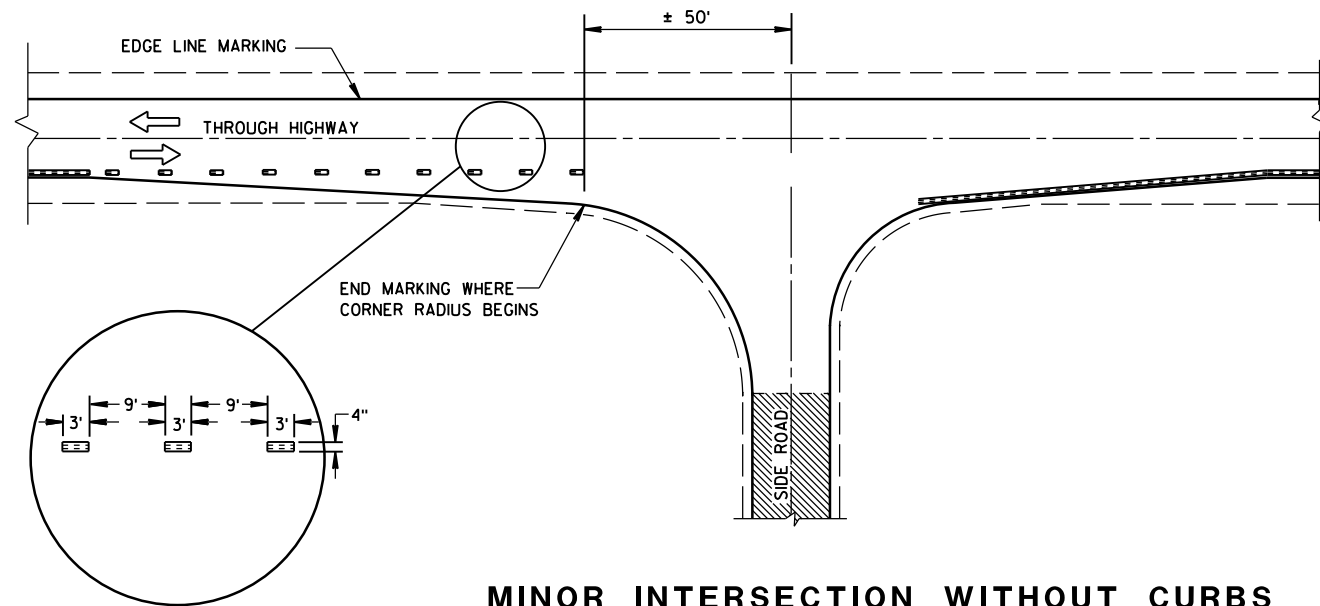
 "T" MARKING

● POST MOUNTED SIGN

PAVEMENT MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

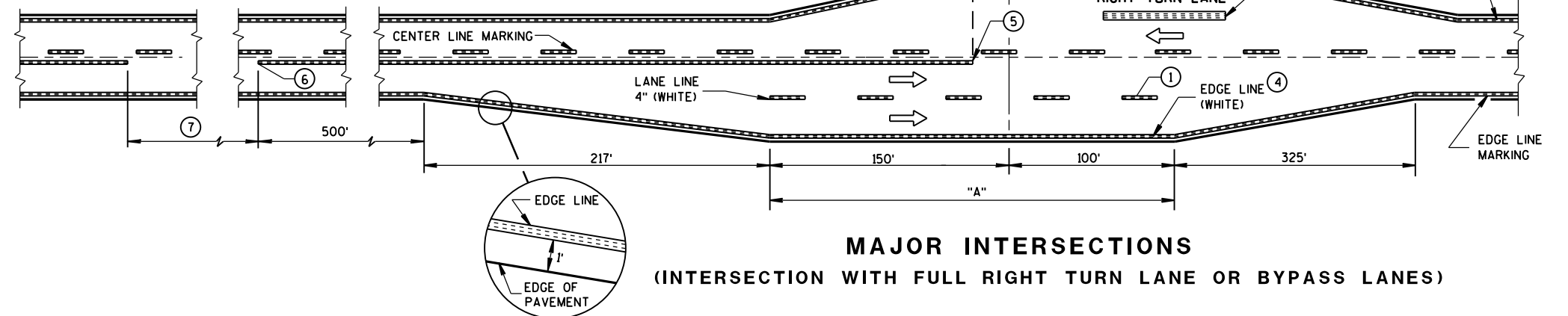
APPROVED
10-1-2012 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA



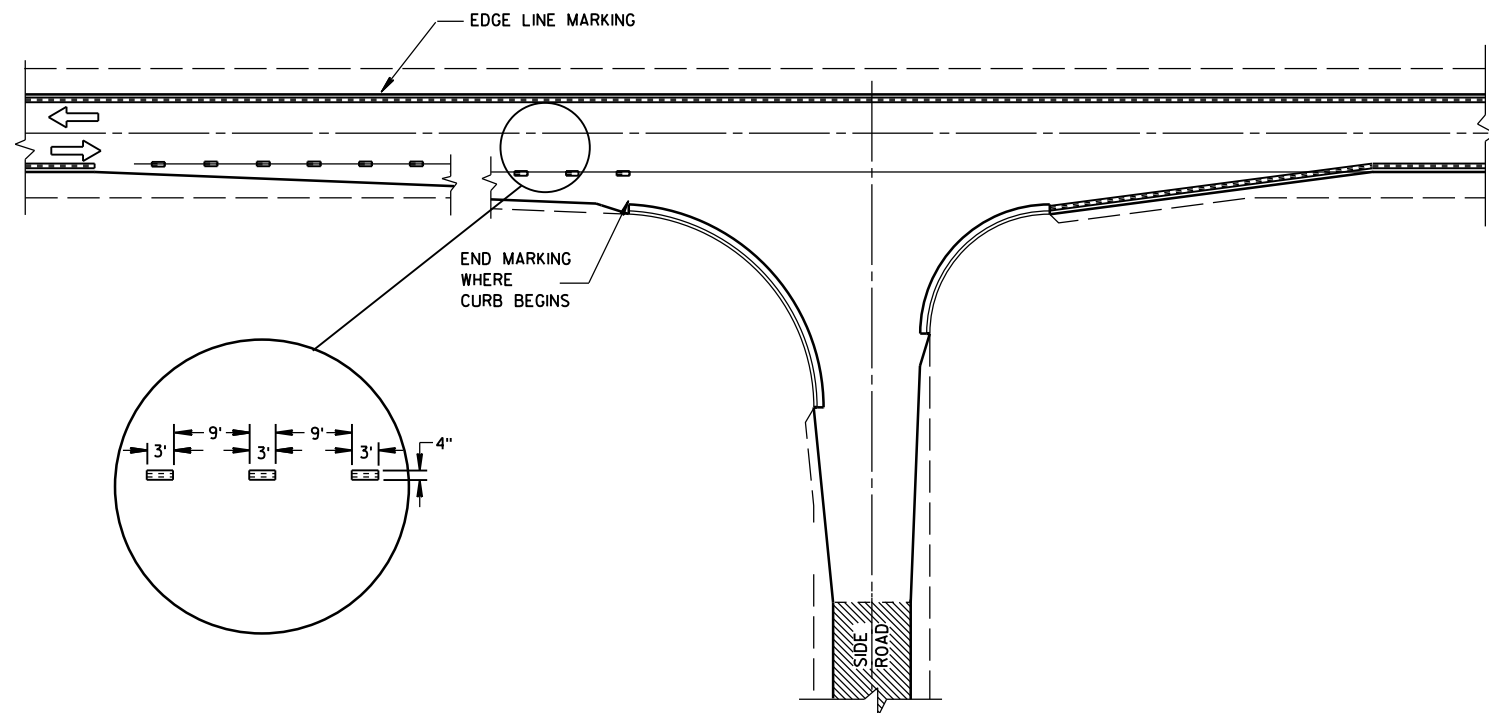
MINOR INTERSECTION WITHOUT CURBS

⑦

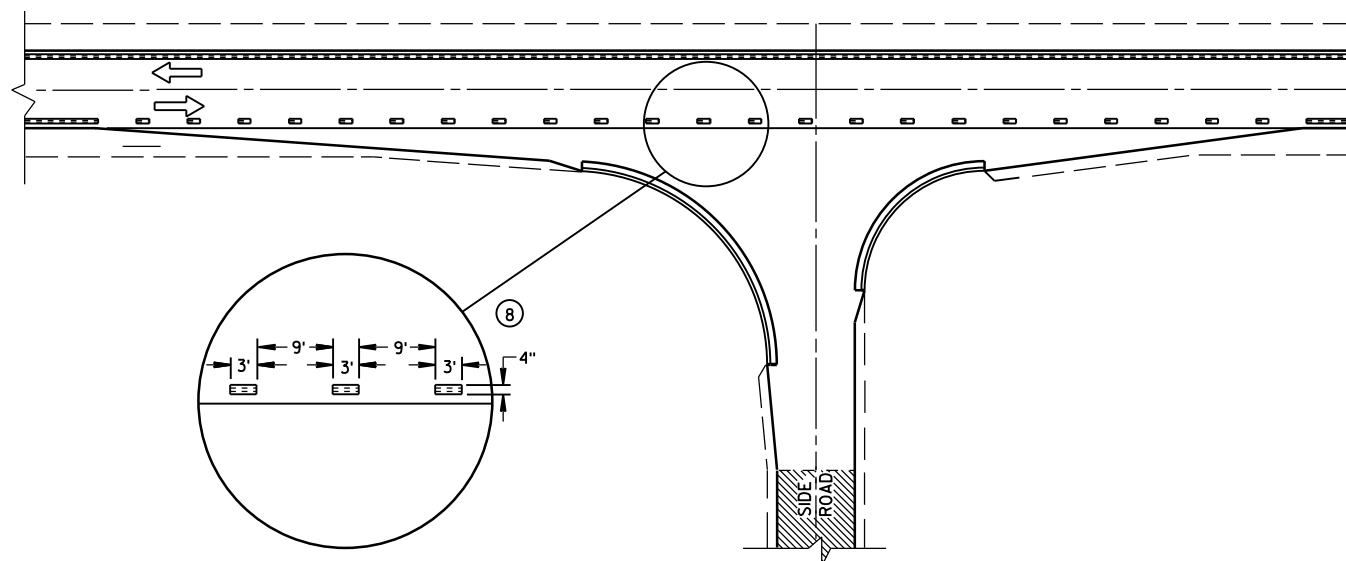
POSTED SPEED (MPH)	MINIMUM DISTANCE BETWEEN ZONES (FEET)
25 - 30	528
35 - 40	528
45 - 50	686
55	792



MAJOR INTERSECTIONS
(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS
(TYPICAL MARKING)



MINOR INTERSECTION WITH CURBS
③ (FOR SPECIAL CONDITIONS AS SPECIFIED)

GENERAL NOTES

EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.

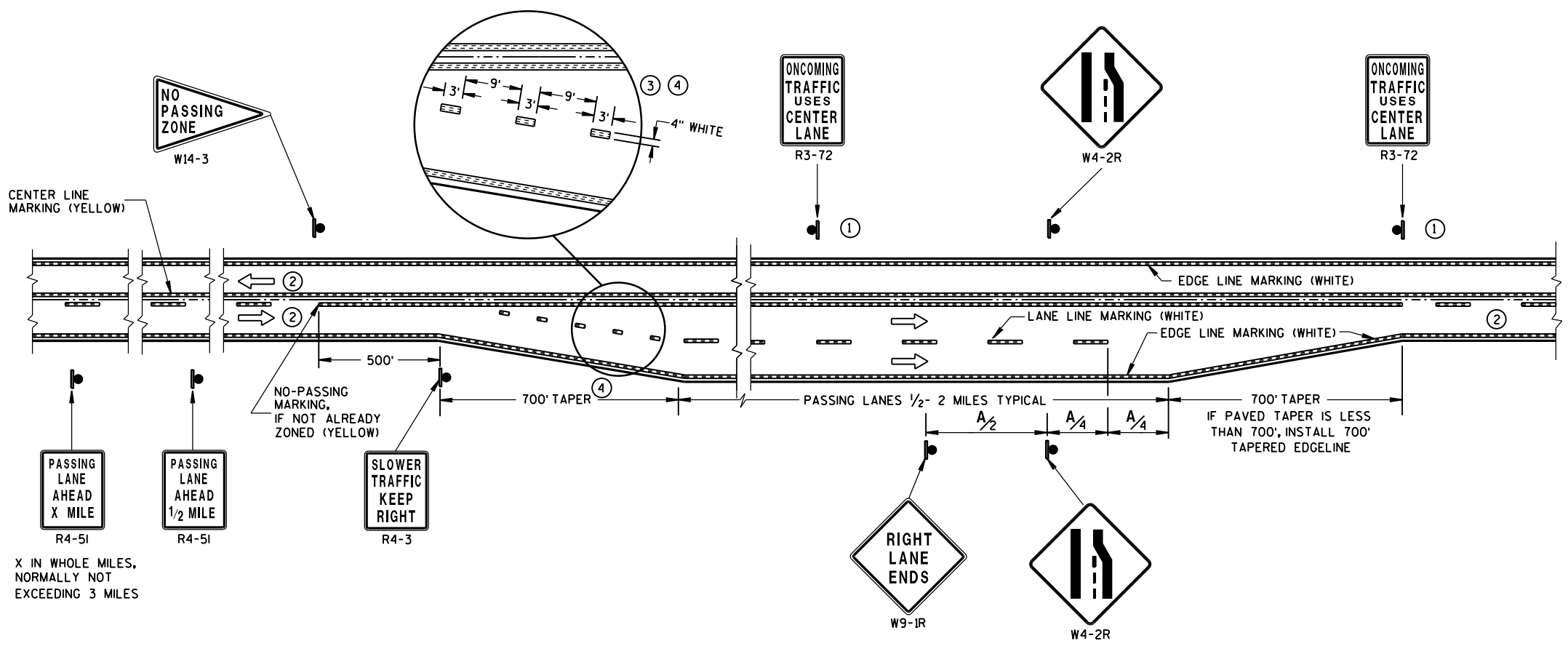
- ① WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
- ② WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
- ③ ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.
- ④ THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.

- ⑤ BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.
- ⑥ BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
- ⑦ IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.
- ⑧ 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL

PAVEMENT MARKING
(INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



**SOLID DOUBLE-YELLOW LINE
(THROUGHOUT ENTIRE PASSING/CLIMBING LANE)**

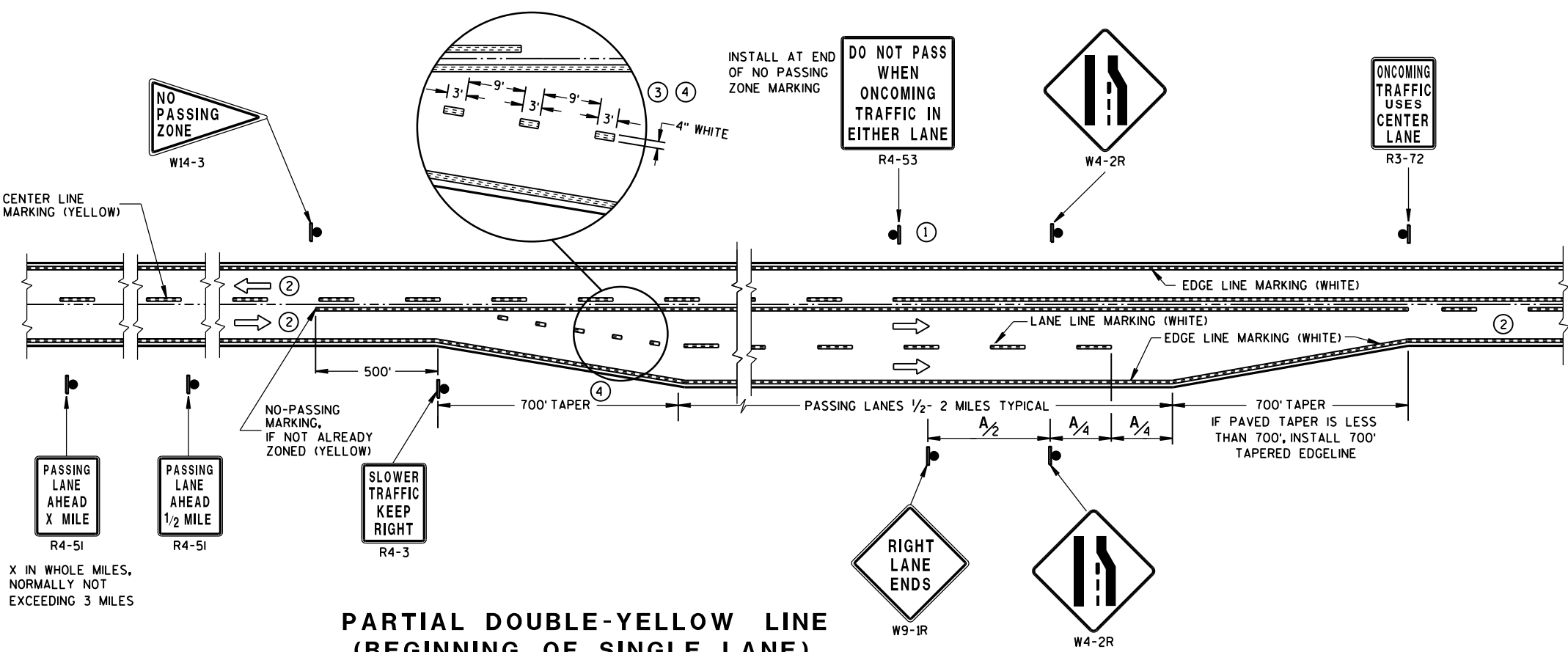
GENERAL NOTES

- ① SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
- ② THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
- ③ THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE-GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
- ④ WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING/CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.

ARROW SYMBOL (➡) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

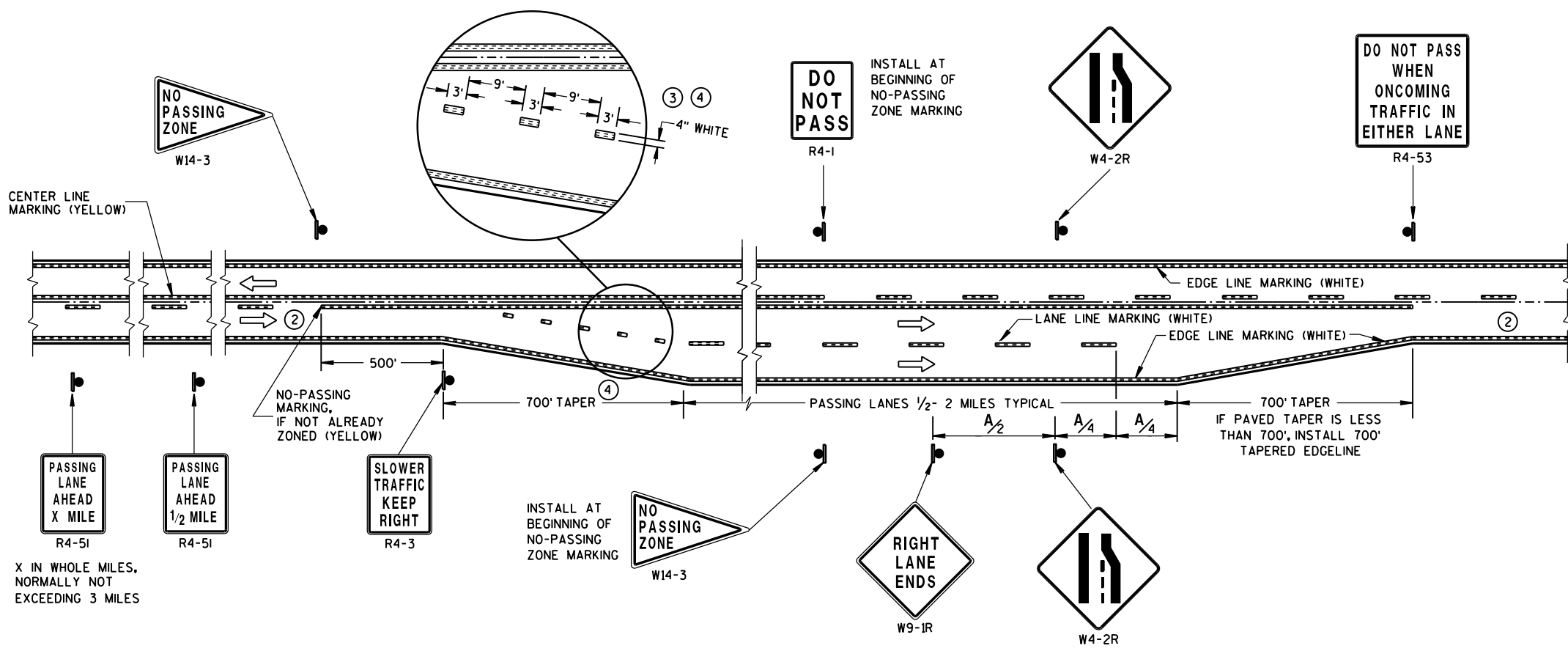
POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	750
50	850
55	950



**PARTIAL DOUBLE-YELLOW LINE
(BEGINNING OF SINGLE LANE)**

**PAVEMENT MARKING & SIGNING
(CLIMBING LANE & PASSING LANE)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



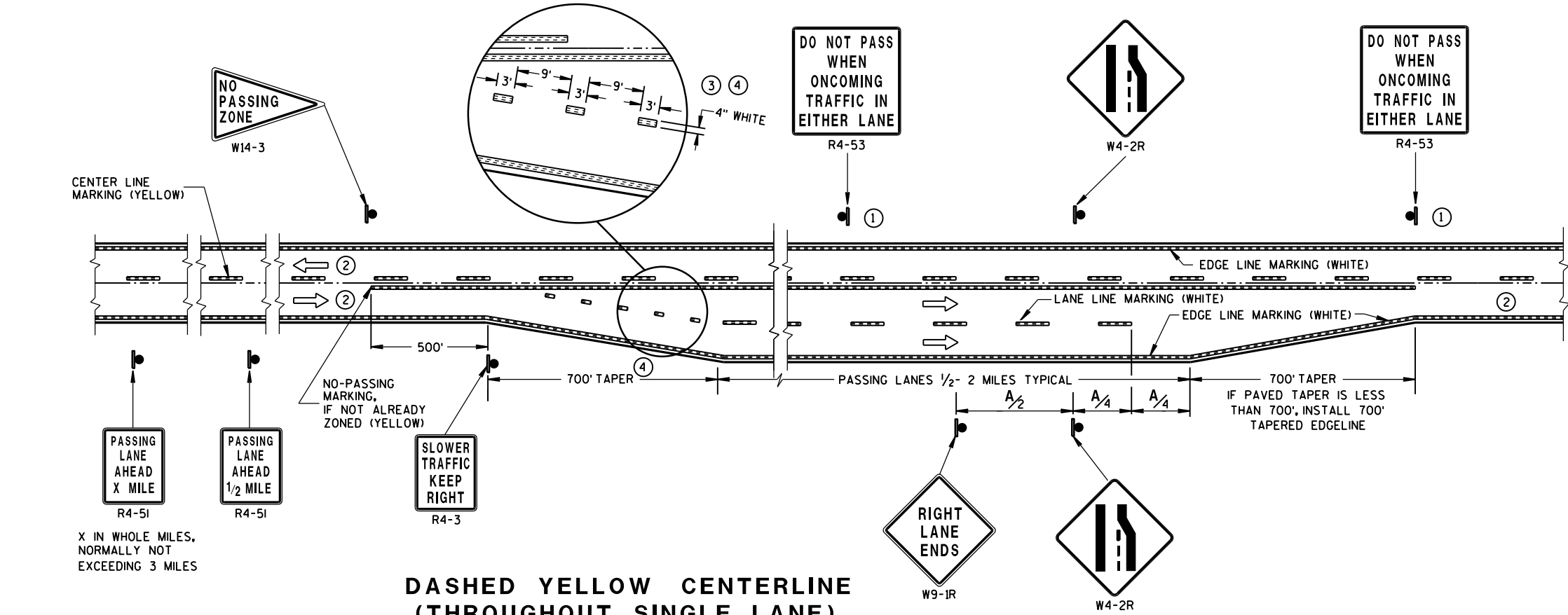
**SOLID DOUBLE-YELLOW LINE
(END OF SINGLE LANE)**

GENERAL NOTES

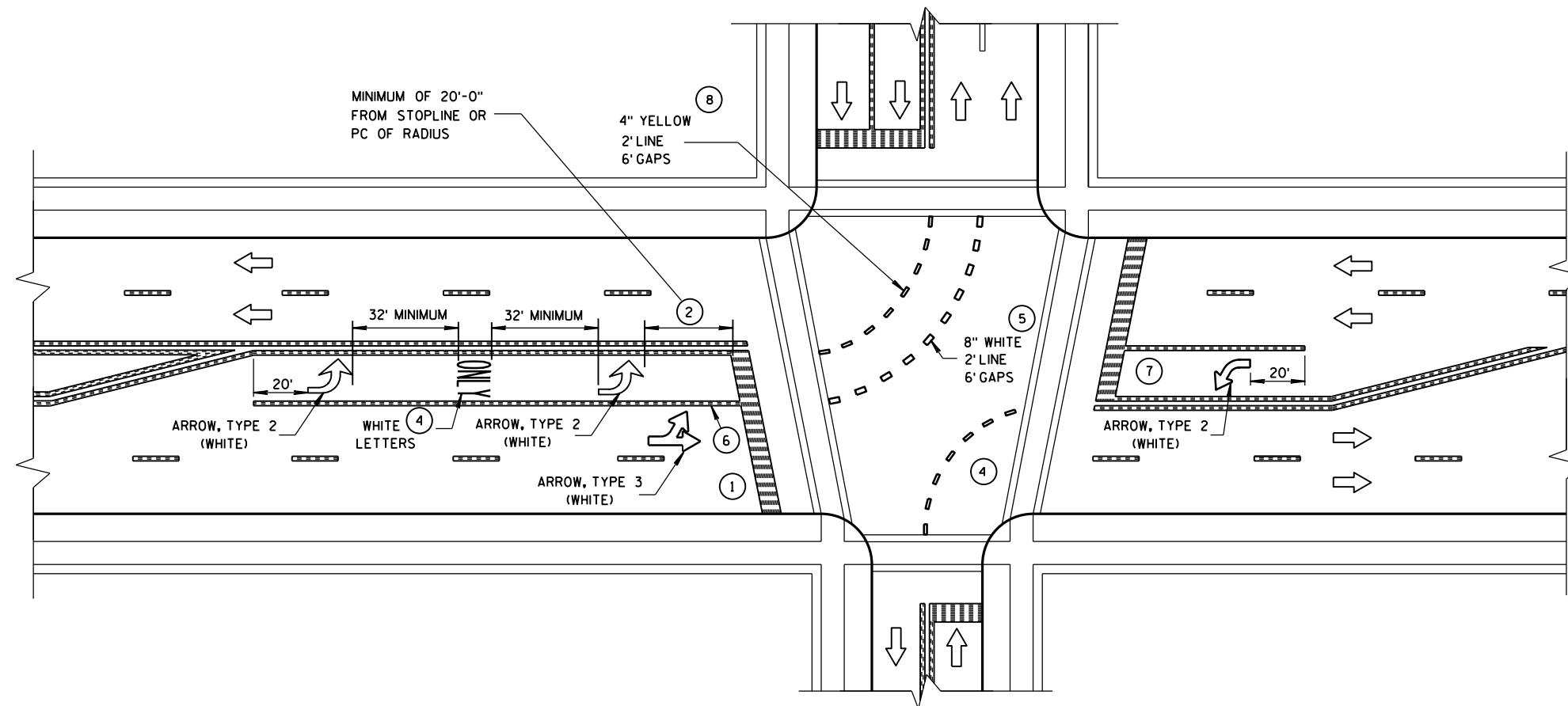
- ① SIGN SHALL BE REPEATED AT 1/2 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
- ② THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
- ③ THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3" LINE 9" GAP, EXCEPT RETRACE THE EXISTING LINE-GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
- ④ WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING/CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL


DISTANCE TABLE	
POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	750
50	850
55	950

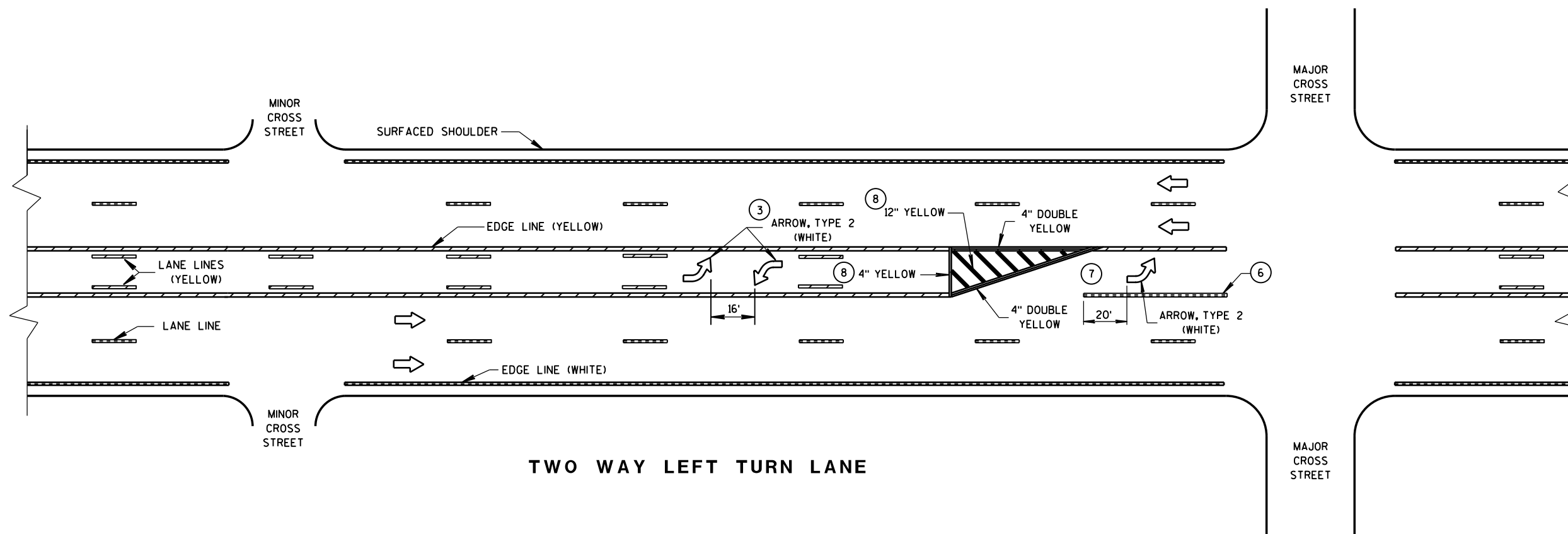


**DASHED YELLOW CENTERLINE
(THROUGHOUT SINGLE LANE)**

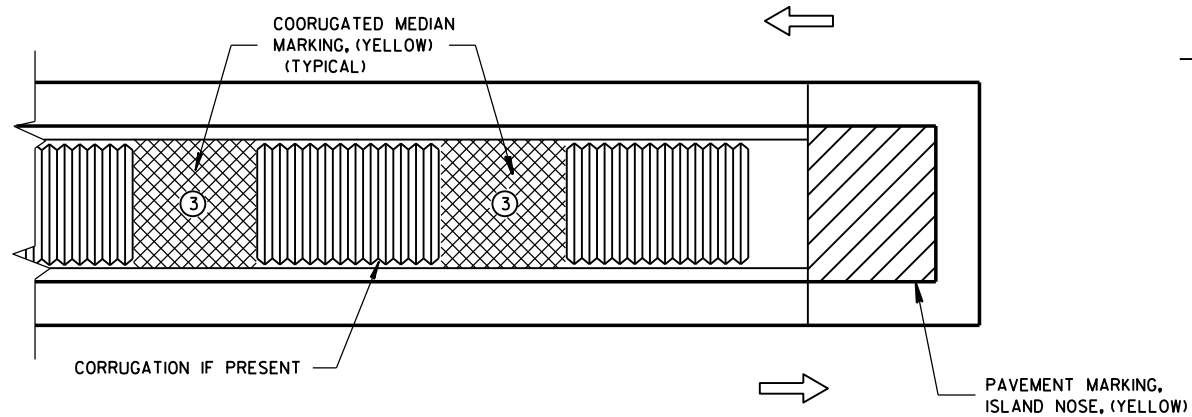


- ## GENERAL NOTES
- 1 STOP BAR IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
 - 2 DISTANCE MAY BE ADJUSTED TO ACCOMMODATE SHORT LEFT TURN LANES, AS APPROVED BY THE ENGINEER.
 - 3 A SET OF ARROWS IS REQUIRED EVERY 400' OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
 - 4 ADD EXTRA ARROW AND ONLY PER 160' OR WHEN ON A CURVE.
 - 5 8" WHITE WITH 2" LINE 6' GAPS FOR DUAL TURN LANE.
 - 6 8" WHITE
 - 7 ADD SECOND ARROW WHEN TURN BAY IS GREATER THAN OR EQUAL TO 108'.
 - 8 REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.

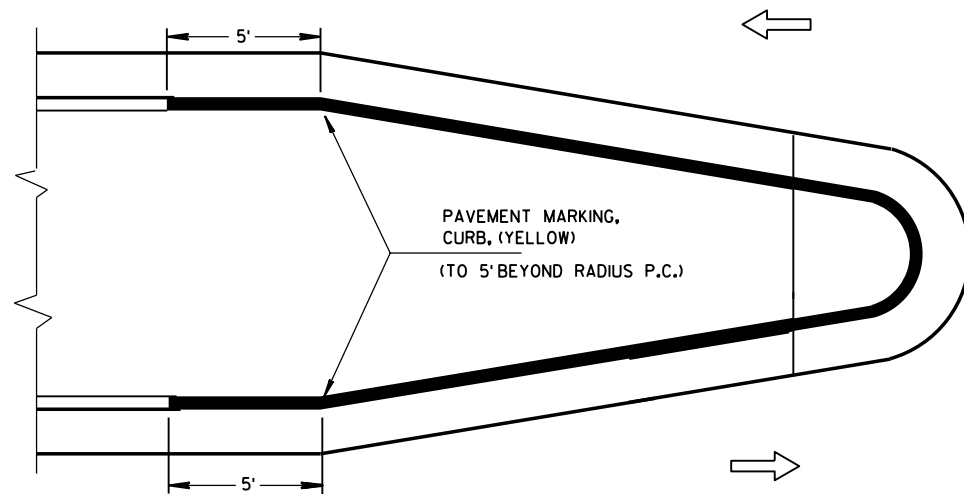
NOTE:
ARROW SYMBOL ()
SHOWS DIRECTION OF TRAVEL

PAVEMENT MARKING
(LEFT TURN LANE)

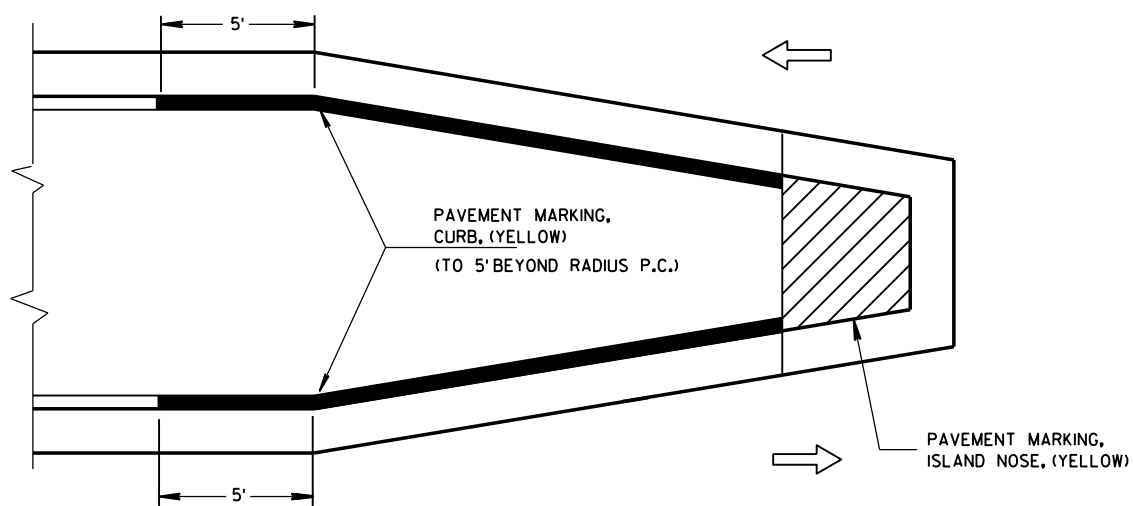
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

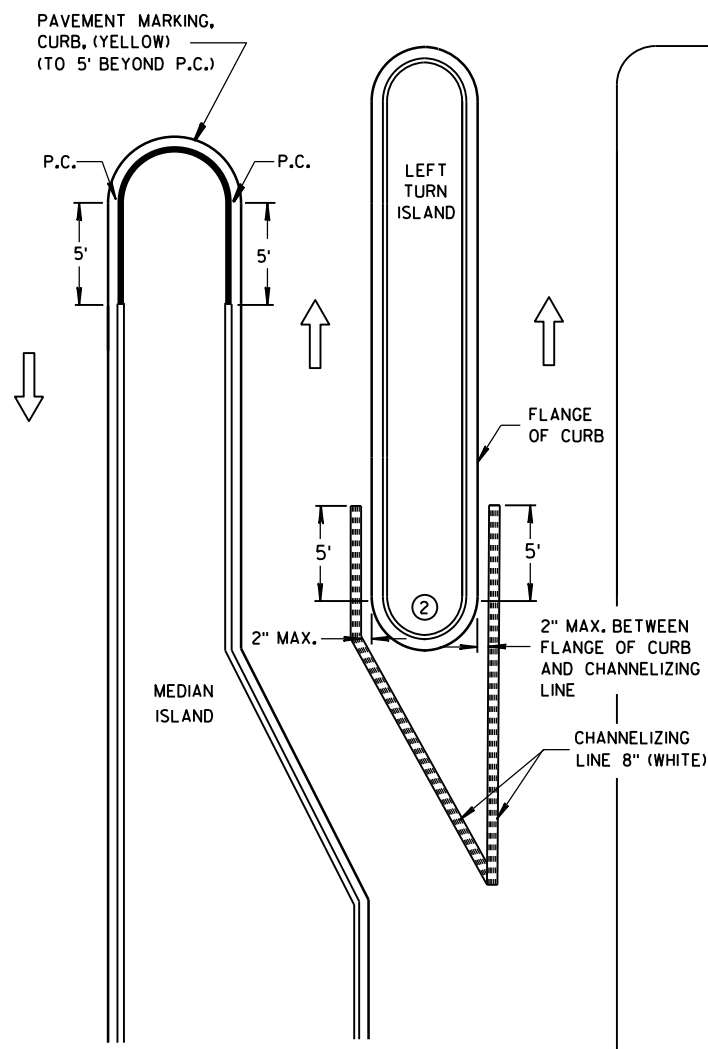


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

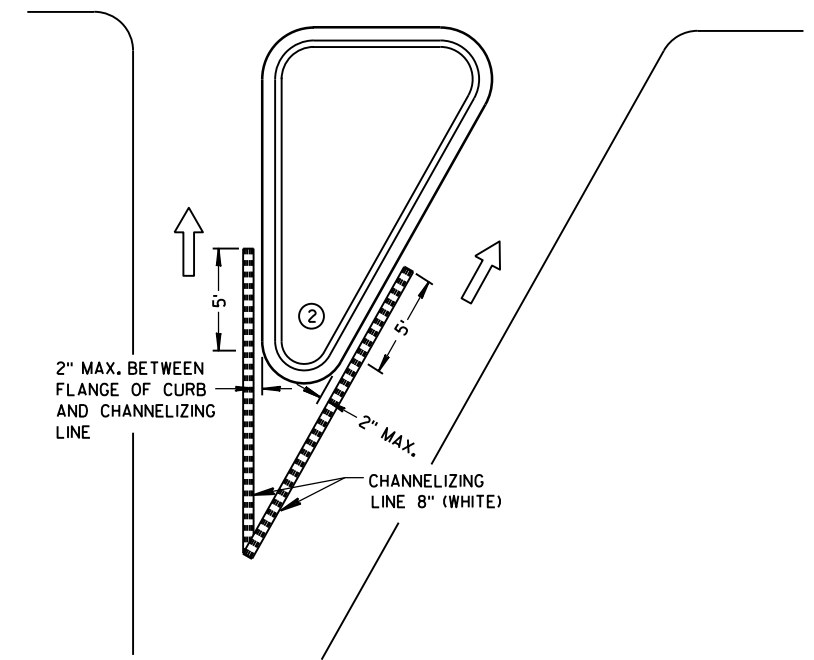
TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS



LEFT TURN & MEDIAN ISLAND





GENERAL NOTES

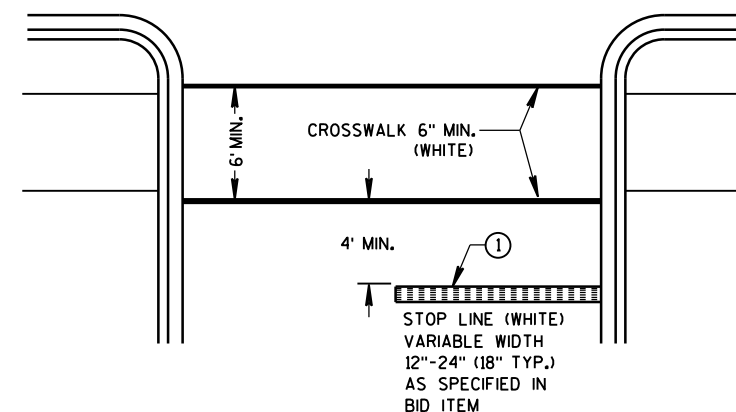
- ① STOP LINE IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
- ② DO NOT MARK CURB NOSES THAT SEPARATE LANES OF TRAFFIC TRAVELING IN THE SAME DIRECTION.
- ③ WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.



RIGHT TURN ISLAND

LEGEND

-  ISLAND NOSE MARKING
-  CURB MARKING
-  CORRUGATED MEDIAN MARKING
-  DIRECTION OF TRAVEL



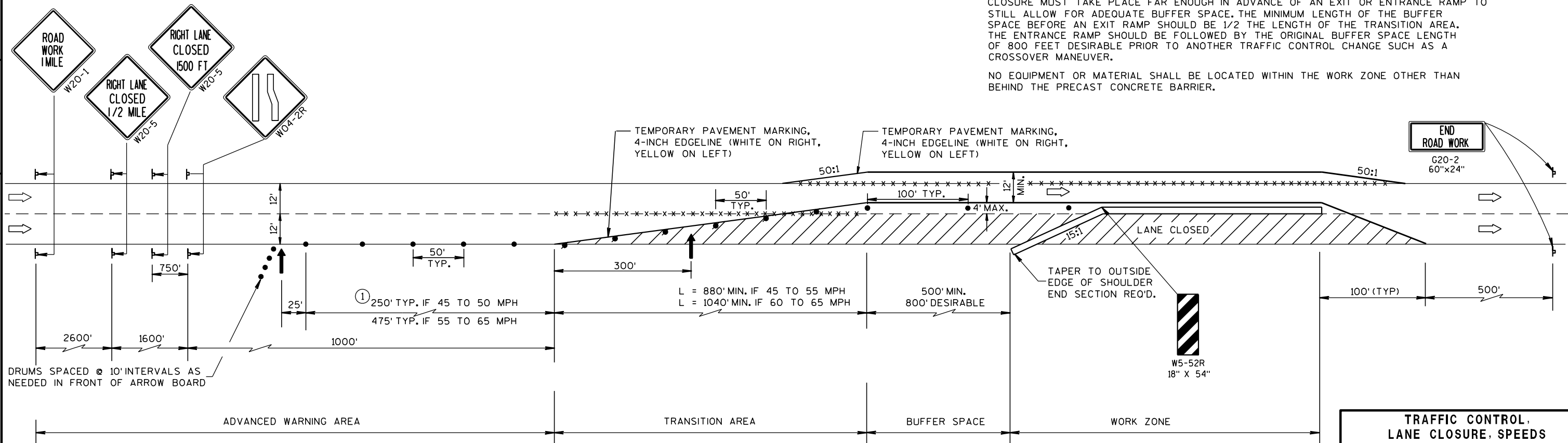
STOP LINE AND CROSSWALK

PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

- POST WITH ATTACHED SIGN
- DRUM WITH WARNING LIGHT (TYPE C)
- DRUM
- ARROW BOARD
- REMOVING PAVEMENT MARKING
- TEMPORARY PRECAST CONCRETE BARRIER
- DIRECTION OF TRAFFIC
- WORK ZONE



GENERAL NOTES :

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

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 SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

ALL SIGNS ARE 48"x48" 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 AND AS APPROVED BY THE ENGINEER.

① CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 7 CONTINUOUS DAYS AND NIGHTS.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

NO EQUIPMENT OR MATERIAL SHALL BE LOCATED WITHIN THE WORK ZONE OTHER THAN BEHIND THE PRECAST CONCRETE BARRIER.

TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H. WITH BARRIER	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 7-14-94 DATE	/S/ Chester J. Spang DIRECTOR, OFFICE OF TRAFFIC
FHWA	

LEGEND

- POST WITH ATTACHED SIGN
- POST WITH ATTACHED SIGN IN DRUM
- DRUM WITH WARNING LIGHT (TYPE C)
- DRUM
- ARROW BOARD
- 8' TYPE III BARRICADE
- *-x-* REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC

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 SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIREABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

ALL SIGNS ARE 48"x48" 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 AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

- ① CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

GENERAL NOTES CONTINUED:

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 7 CONTINUOUS DAYS AND NIGHTS.

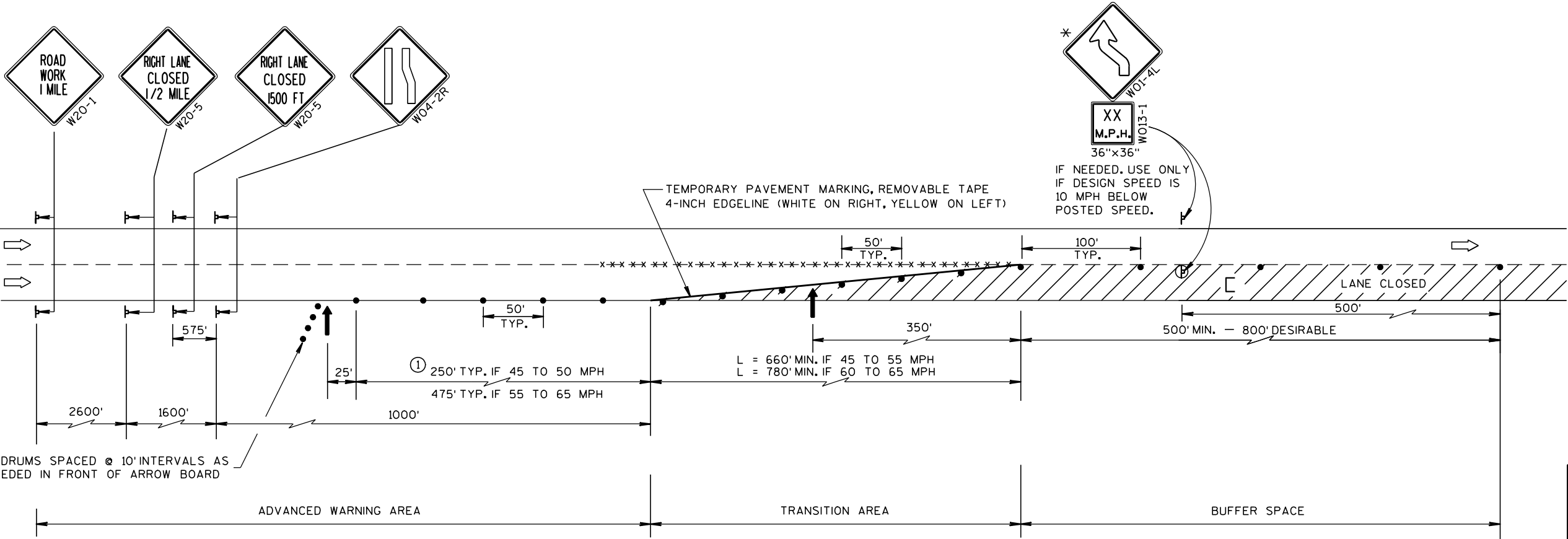
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

IF LANE CLOSURE IS MORE THAN 1 MILE, PLACE A TYPE III BARRICADE APPROXIMATELY EVERY 1/4 MILE ACROSS THE CLOSED LANE TO HELP ENFORCE THE DRUM LINE.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

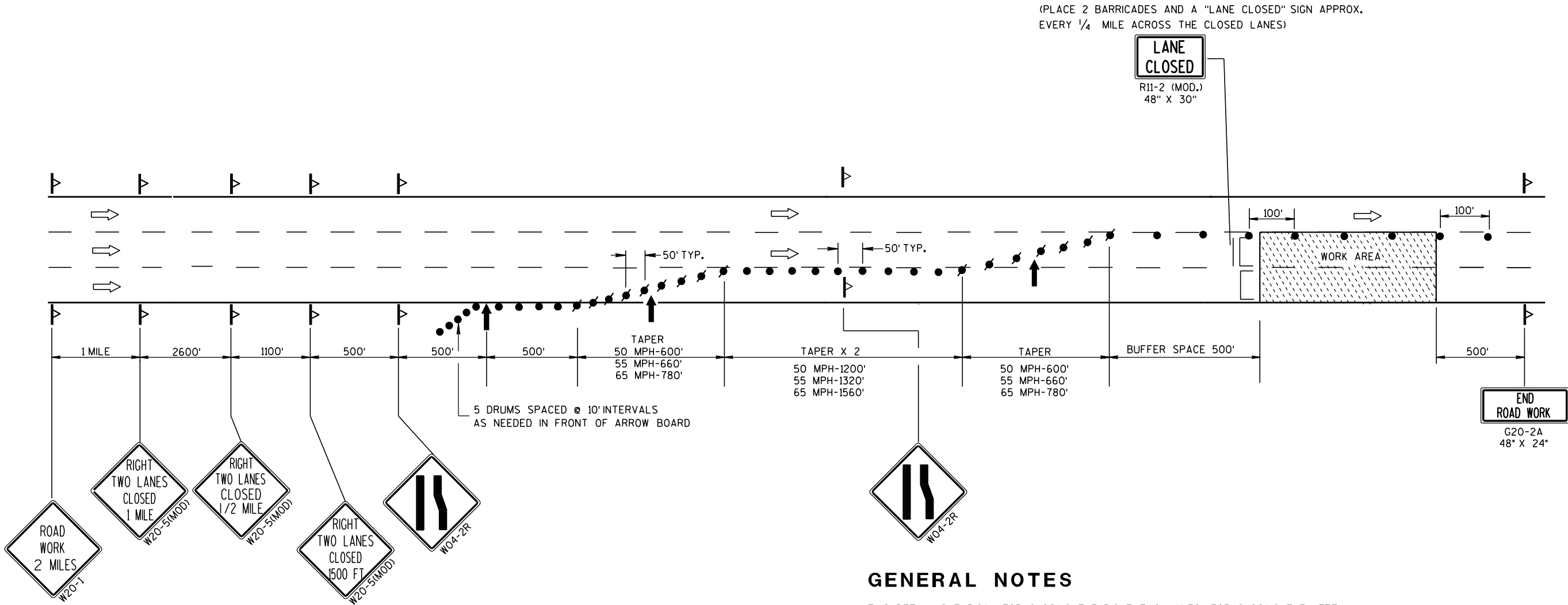
- * THE LEFT REVERSE CURVE SIGN (W01-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.



TRAFFIC CONTROL,
LANE CLOSURE, SPEEDS
GREATER THAN 40 M.P.H.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8-7-95
DATE /S/ Chester J. Spang
DIRECTOR, OFFICE OF TRAFFIC
FHWA



LEGEND

- DRUM WITH/WITHOUT WARNING LIGHT, TYPE C (STEADY BURN)
- SIGN ON POST OR PORTABLE SUPPORT
- FLASHING ARROW BOARD
- TYPE III BARRICADE (8' EQUIVALENT) WITH/WITHOUT SIGN
- DIRECTION OF TRAFFIC FLOW

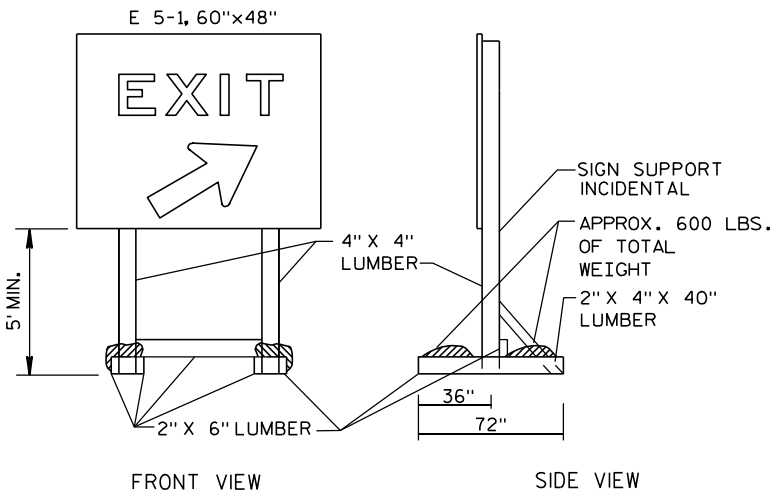
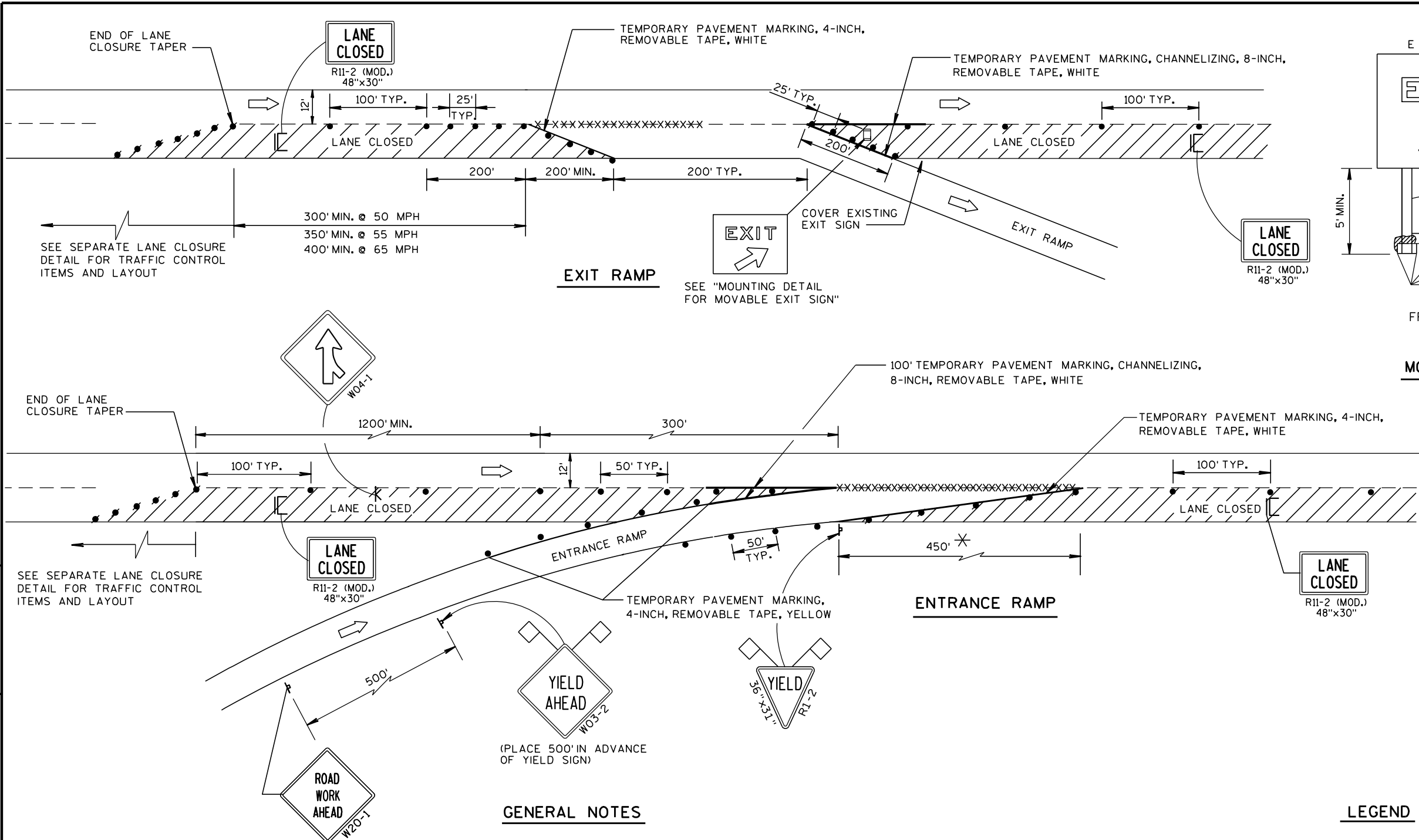
GENERAL NOTES

- THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT TWO LANES. FOR CLOSING THE LEFT TWO LANES, REVERSE THE TRAFFIC CONTROL.
- 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 SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
- "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
- 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.
- W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.
- CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.
- WHEN A RAMP OR SIDE ROAD INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.
- BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.
- CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.
- WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

TRAFFIC CONTROL,
TWO LANE CLOSURE ON
FREEWAY OR EXPRESSWAY,
SHORT-TERM (LESS THAN 24 HOURS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/2000 DATE /S/ Chester J. Spang
CHIEF SIGNS AND MARKING ENGINEER
FHWA



FRONT VIEW SIDE VIEW
NOTE: ALL LUMBER DIMENSIONS ARE NOMINAL
MOUNTING DETAIL FOR MOVABLE EXIT SIGN

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

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 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.

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2 (MOD.) "LANE CLOSED" SIGNS.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

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.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

* LENGTH OF OPENING MAY BE REDUCED TO 150 FEET DURING STAGING OF WORK IN IMMEDIATE AREA OF RAMP TAPER.

LEGEND

- POST MOUNTED SIGN
- SIGN ON PORTABLE SUPPORT
- TRAFFIC CONTROL, DRUM
- TRAFFIC CONTROL, DRUM WITH WARNING LIGHT, TYPE C (STEADY-BURN)
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- TYPE III BARRICADE (8' EQUIVALENT) WITH SIGN
- FLAGS, 16"x16" MIN., ORANGE
- DIRECTION OF TRAFFIC FLOW

TRAFFIC CONTROL, EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 5/24/2000 DATE	/S/ Chester J. Spang CHIEF SIGNS AND MARKING ENGINEER
FHWA	

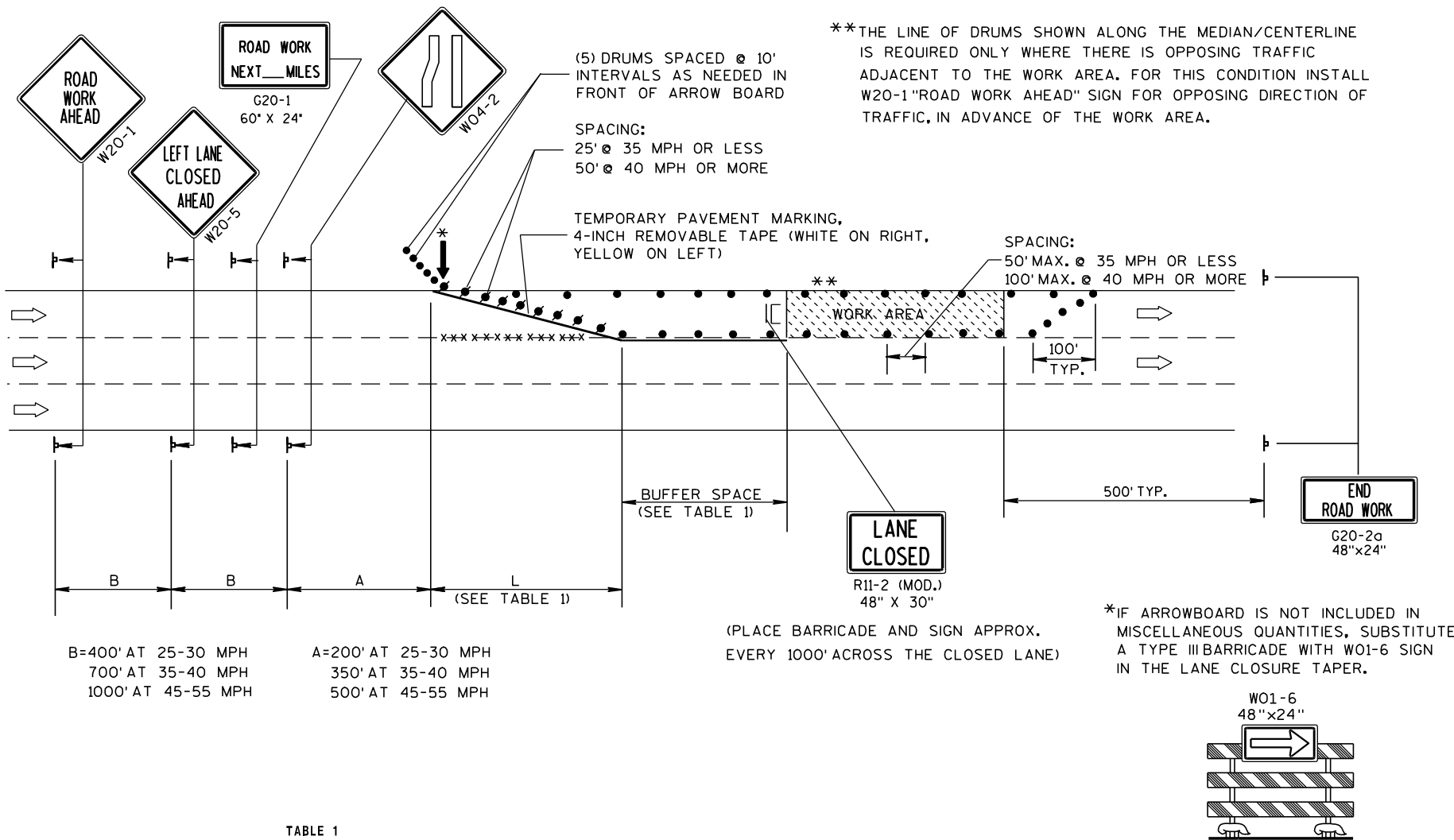


TABLE 1
TAPER AND BUFFER SPACE
FOR 12' LANE WIDTH

S	L	BUFFER SPACE
25	125'	55'
30	180'	85'
35	245'	120'
40	320'	170'
45	540'	220'
50	600'	280'
55	660'	335'

FOR LANE WIDTH OTHER THAN 12':
L = WS AT 45 MPH OR GREATER
 $L = \frac{WS^2}{60}$ AT 40 MPH OR LESS
L = TAPER LENGTH IN FEET
S = NON-CONSTRUCTION SPEED LIMIT (MPH)
W = WIDTH OF LANE CLOSURE

LEGEND

- DRUM WITH/WITHOUT WARNING LIGHT, TYPE C (STEADY-BURN)
- ⌋ POST MOUNTED SIGN
- ↑ ARROW BOARD
- IC/C TYPE III BARRICADE (8' EQUIVALENT) AND WARNING LIGHTS, TYPE A (FLASHING) WITH/WITHOUT SIGN
- DIRECTION OF TRAFFIC FLOW
- x x x x REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)

GENERAL NOTES

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

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 SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS.

ON UNDIVIDED ROADWAYS, OMIT THE SIGNS SHOWN ON LEFT SIDE OF ROAD.

W20-1, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS.

PLACE THE ARROWBOARD AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE LANE CLOSURE TAPER, PREFERABLY ON THE SHOULDER OR TERRACE.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 5/23/00 DATE	/S/ Chester J. Spang CHIEF SIGNS AND MARKING ENGINEER
FHWA	

SYMBOLS

- TRAFFIC CONTROL DRUM
- ┐ POST MOUNTED SIGN
- ➡ DIRECTION OF TRAFFIC FLOW
- ⓧ ARROW BOARD IN CAUTION MODE

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

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

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

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

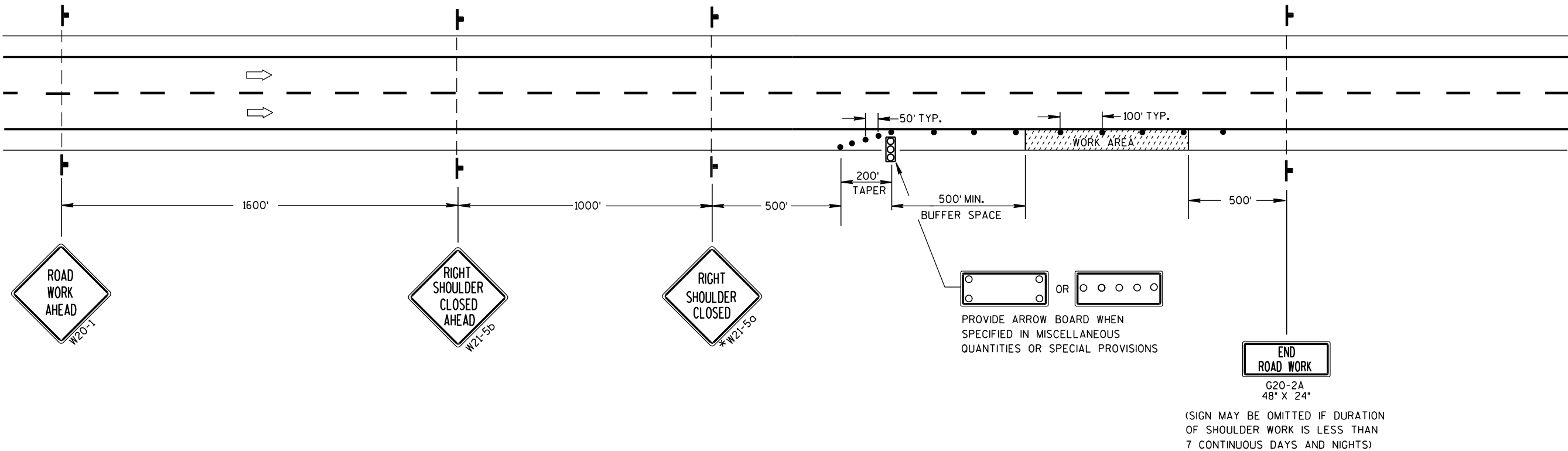
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WHEN A 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.

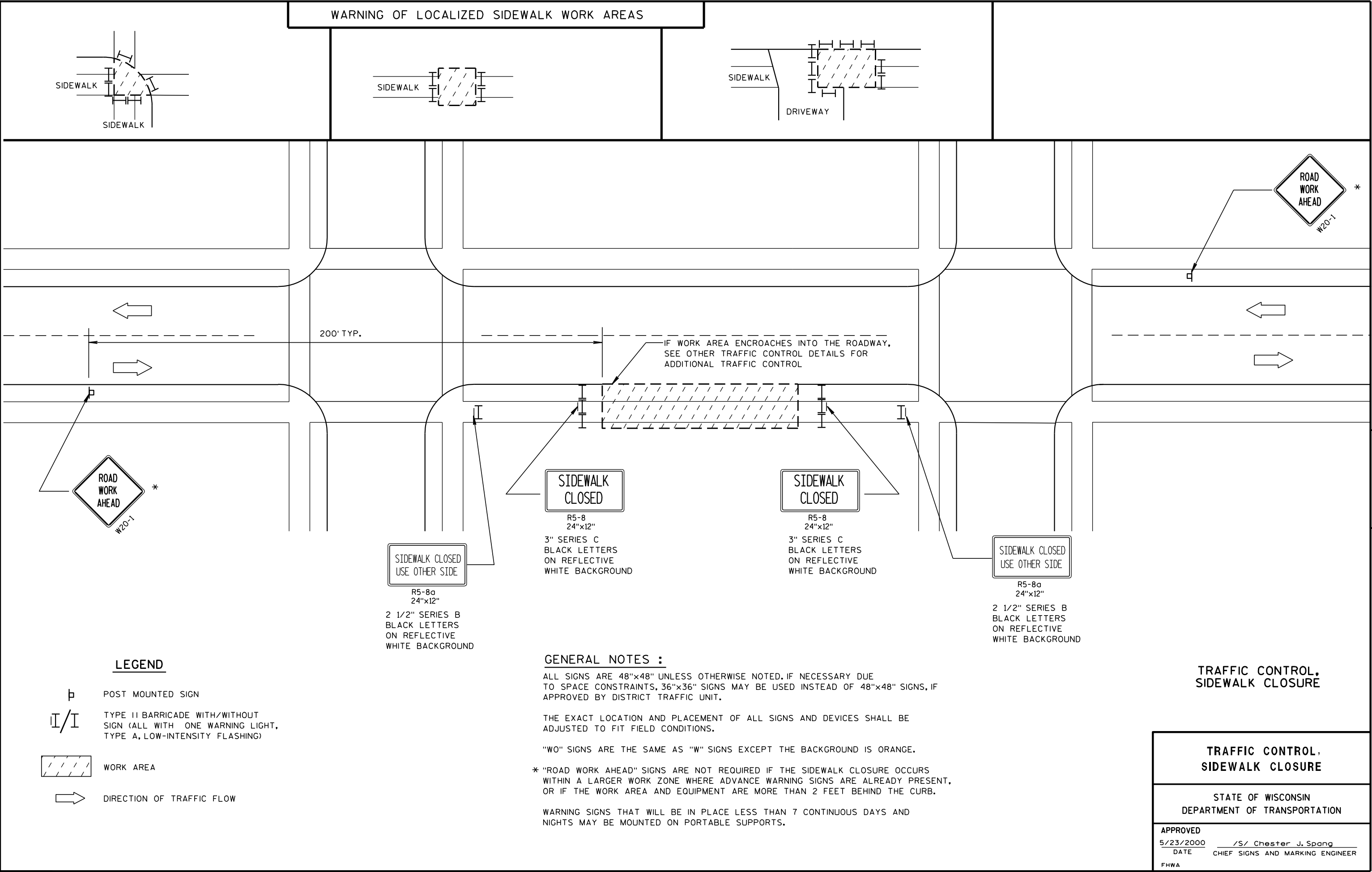
*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.



TRAFFIC CONTROL
SHOULDER CLOSURE ON DIVIDED
ROADWAY, SPEEDS GREATER
THAN 40 MPH

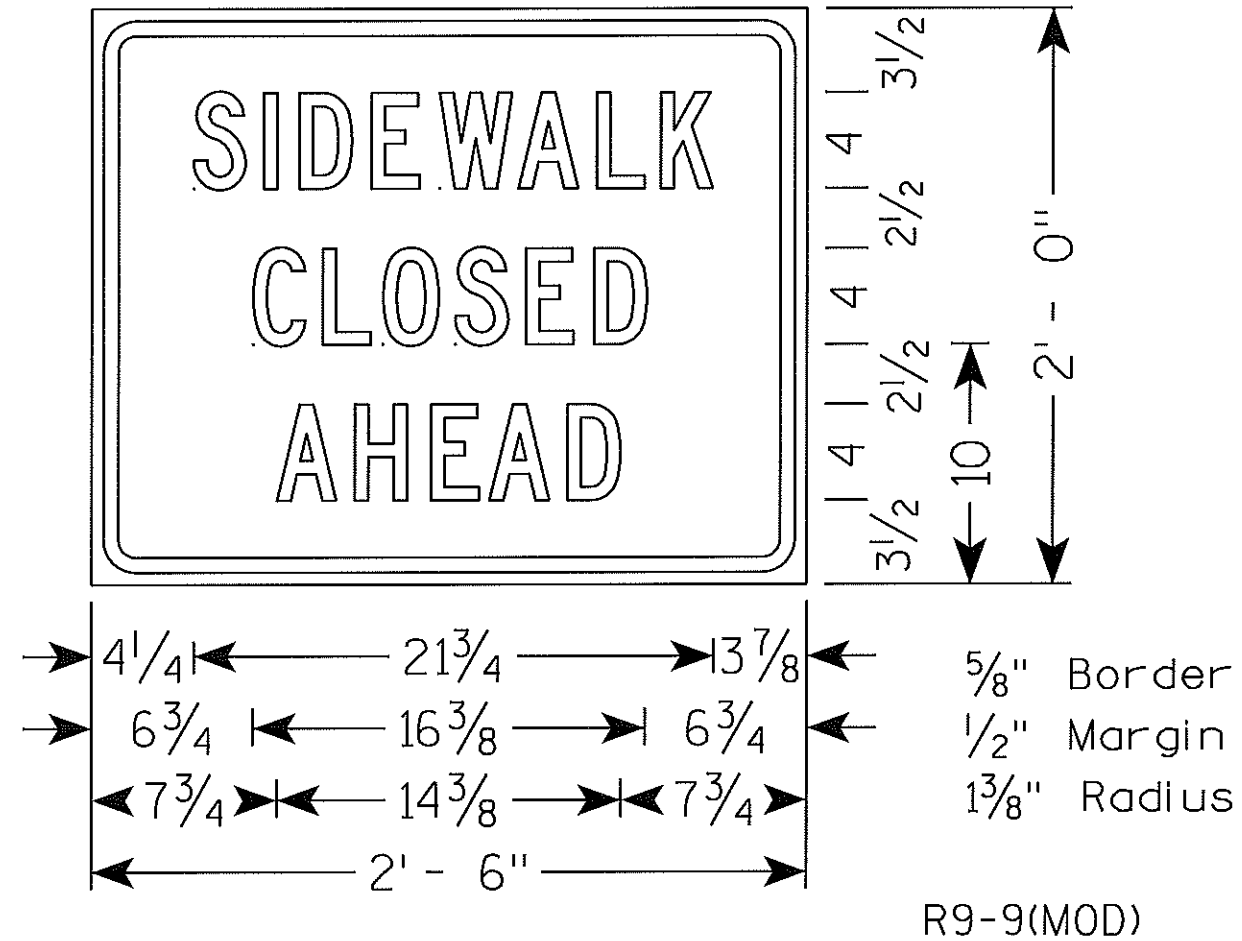
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

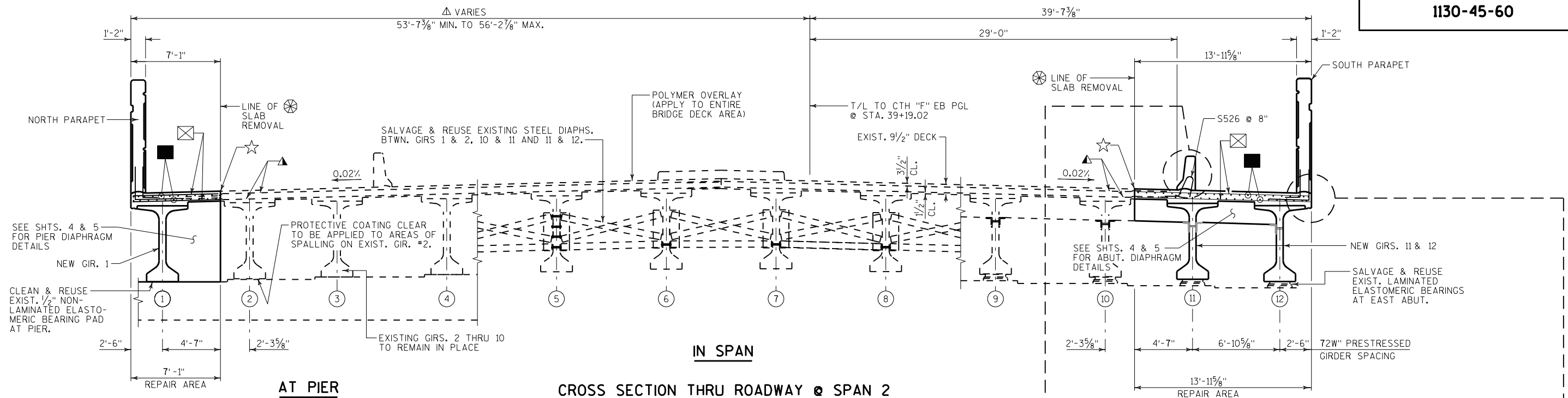
APPROVED
5/23/00 /S/ Chester J. Spang
DATE CHIEF SIGNS AND MARKING ENGINEER
FHWA



NOTES

1. Sign is Type II - Type H Reflective - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - WHITE
Message - BLACK
3. Message Series - C



**GENERAL NOTES**

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED. THE TOP LAYER OF BAR STEEL REINFORCEMENT IN THE DECK SHALL BE PLACED WITH 3 1/2" OF CLEAR COVER.

DIMENSIONS ARE BASE ON ORIGINAL STRUCTURE PLANS.

MATCH PARAPET TO EXISTING PARAPET.

MATCH TOP OF DECK TO EXISTING TOP OF DECK.

EXISTING DECORATIVE FENCE TO BE SALVAGED AND RESET ON NEW PARAPETS. (INCIDENTAL TO "REMOVING OLD STRUCTURE".)

PLACEMENT AND REMOVAL OF ANY MATERIAL REQUIRED FOR STAGING CRANE WORK SHALL BE INCIDENTAL TO "REMOVING OLD STRUCTURE".

EXISTING ABUTMENT STRIP SEAL EXPANSION JOINT TO REMAIN IN PLACE. CONCRETE ON SPAN SIDE OF JOINT IS TO BE CAREFULLY CHIPPED FROM AROUND THE JOINT. EXISTING COVER PLATES TO BE REUSED.

EXISTING PILASTERS AT PIER & EAST ABUT. TO REMAIN.

SALVAGE AND REUSE EXISTING LIGHT POLE.

PRESTRESSED GIRDER FABRICATION PLANS ARE AVAILABLE ON H.S.I. OR CONTACT BUREAU OF STRUCTURES.

TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	BID ITEM	UNIT	TOTALS
203.0200	REMOVING OLD STRUCTURE STATION 39+19	LS	1
502.3200	PROTECTIVE SURFACE TREATMENT	SY	72
502.6105	MASONRY ANCHORS TYPE S 5/8-INCH	EACH	20
502.6500	PROTECTIVE COATING CLEAR	GAL	1
503.0172	PRESTRESSED GIRDER TYPE I 72W-INCH	LF	443
505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	30,290
509.5100.S	POLYMER OVERLAY	SY	2,650
652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	5
652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	158
653.0220	JUNCTION BOX 18X6X6-INCH	EACH	1
SPV.0035.601	HIGH PERFORMANCE CONCRETE (HPC) MASONRY STRUCTURES	CY	247
SPV.0060.601	ANCHOR ASSEMBLIES FOR LIGHT POLES	EACH	1
SPV.0165.503	ARCHITECTURAL SURFACE TREATMENT	SF	2,350
SPV.0165.504	STAINING CONCRETE	SF	6,695
SPV.0165.505	STAINING CONCRETE BRICK	SF	2,350
NON BID - ITEM			
	FILLER	SIZE	1/2" & 1"

DESIGN DATA**ULTIMATE DESIGN STRESSES:**

CONCRETE MASONRY (HPC)	
SLAB	f'c = 4,000 P.S.I.
ALL OTHER	f'c = 4,000 P.S.I.
BAR STEEL REINFORCEMENT	
HIGH-STRENGTH, GRADE 60	f_y = 60,000 P.S.I.
72W" PRESTRESSED GIRDERS	
CONCRETE MASONRY	f'c = 8,000 P.S.I.
PRESTRESSING STRANDS - 0.6" DIA. WITH AN	
ULTIMATE TENSILE STRENGTH OF	f_u = 270,000 P.S.I.

HORIZONTAL CURVE DATA

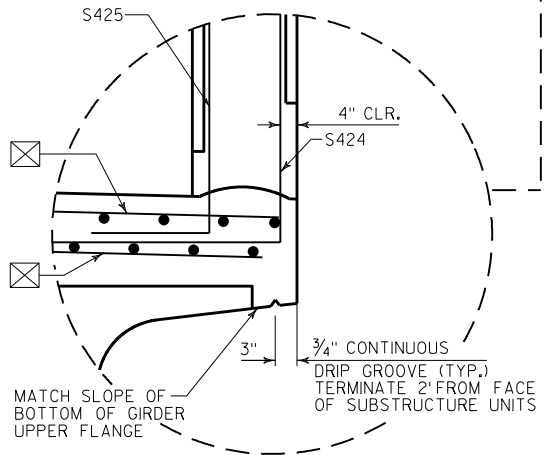
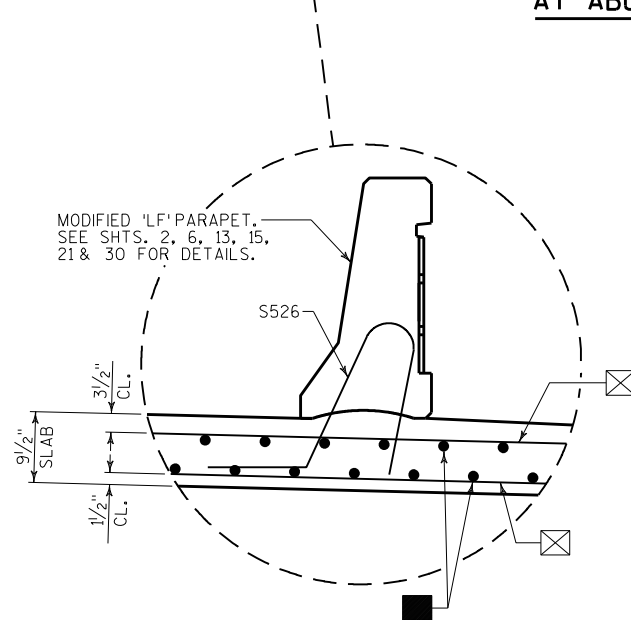
P.I. = 41F eb +88.45
Δ = 9°49'39" (LT)
D = 3°48'53"
T = 129.13
L = 257.62
R = 1502.00
P.C. = 40F eb +59.32
P.T. = 43F eb +16.94

LIST OF DRAWINGS


1. GENERAL PLAN
2. SUPERSTRUCTURE PLAN
3. SUPERSTRUCTURE REINF. PLAN
4. SUPERSTRUCTURE DETAILS 1
5. SUPERSTRUCTURE DETAILS 2
6. SUPERSTRUCTURE REBAR DETAILS
7. TANGENT OFFSETS
8. FRAMING PLAN
9. LAMINATED ELASTOMERIC BEARINGS
10. 72W" PRESTRESSED GIRDER DETAILS
11. 72W" PRESTRESSED GIRDER DETAILS
12. STEEL DIAPHRAGM
13. LIGHTING DETAILS
14. SOUTH EXTERIOR PARAPET ELEVATION REMOVAL
15. SOUTH INT. & EXT. PARAPET REMOVAL & DETAILS
16. NEW SOUTH EXTERIOR PARAPET OUTSIDE ELEVATION
17. NEW SOUTH EXTERIOR PARAPET INSIDE ELEVATION
18. SOUTH EXTERIOR PARAPET LAYOUT & REINFORCEMENT
19. SOUTH EXTERIOR PARAPET DETAILS
20. LEVEL EXTERIOR PARAPET DETAILS
21. EXT.-INT. PARAPET JOINT LAYOUT
22. NORTH EXTERIOR PARAPET ELEVATION REMOVAL
23. NEW NORTH EXTERIOR PARAPET OUTSIDE ELEVATION
24. NEW NORTH EXTERIOR PARAPET INSIDE ELEVATION
25. NORTH EXTERIOR PARAPET LAYOUT & REINFORCEMENT
26. NORTH EXTERIOR PARAPET DETAILS
27. EXISTING DECORATIVE FENCE ELEVATION
28. EXISTING DECORATIVE FENCE DETAILS
29. ARCHITECTURAL DETAILS - 1
30. ARCHITECTURAL DETAILS - 2

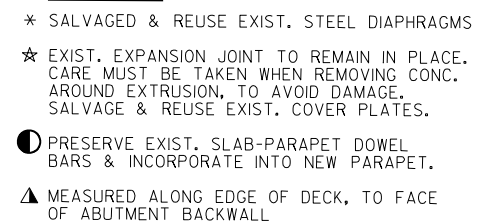
LEGEND

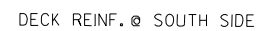
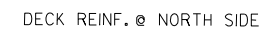
- ⊗ ALL LINES OF SLAB REMOVAL WILL BE DEFINED BY A 1" DEEP SAW CUT (TYP.).
- ☆ SEAL CONST. JOINT IN THE DECK WITH AN APPROVED POURABLE CRACK SEALER, PER SECTIONS 502.2.11 & 502.3.13.1 OF THE STANDARD SPECIFICATION. COST IS INCIDENTAL TO BID ITEM "HPC MASONRY STRUCTURES."
- △ SEE "TANGENT OFFSETS" SHEET FOR DECK LAYOUT.
- DENOTES GIRDER NUMBER
- ⊠ TRANSVERSE REINFORCEMENT. SEE SHT. 3 FOR DETAILS. SALVAGE EXIST. TRANSVERSE REINFORCEMENT (TYP.).
- LONGITUDINAL REINFORCEMENT. SEE SHT. 3 FOR DETAILS. SALVAGE EXIST. TOP MAT LONGITUDINAL REINFORCEMENT (TYP.).
- ▲ SALVAGE & REUSE EXIST. TRANSVERSE REINF. EXTEND EXIST. TRANSV. REINF. 2'-7" INTO NEW WORK.

AT ABUT.**STRUCTURE DESIGN CONTACTS:**

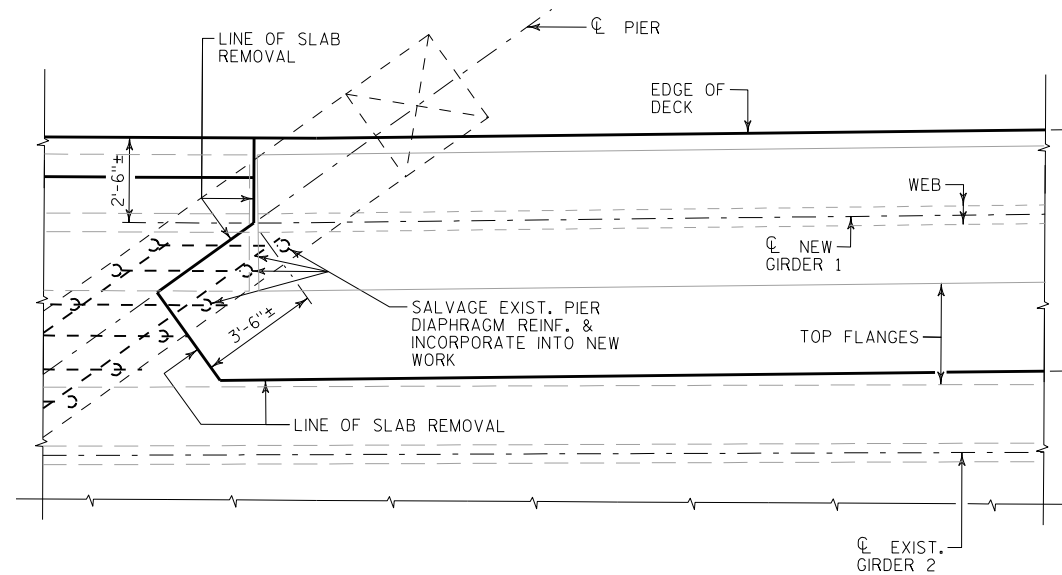
STEVE REVELLO	(608) 266-5095
LAURA SHADEWALD	(608) 267-9592

NO.	DATE	REVISION	BY
 Plans Prepared By WISDOT BUREAU OF STRUCTURES			
ACCEPTED <i>William C. Decker</i> 3/5/13 CHIEF STRUCTURES DESIGN ENGINEER DATE			
STRUCTURE B-05-600			
C.T.H. F (SCHEURING ROAD) OVER U.S.H. 41			
COUNTY	BROWN	TOWN/CITY/VILLAGE	LAWRENCE
DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS			
DESIGNED BY	SDR	DESIGN CKD.	DRAWN BY
GENERAL PLAN		ARC	PLANS CKD. SDR
			SHEET 1 OF 30

SCALE = 13.0

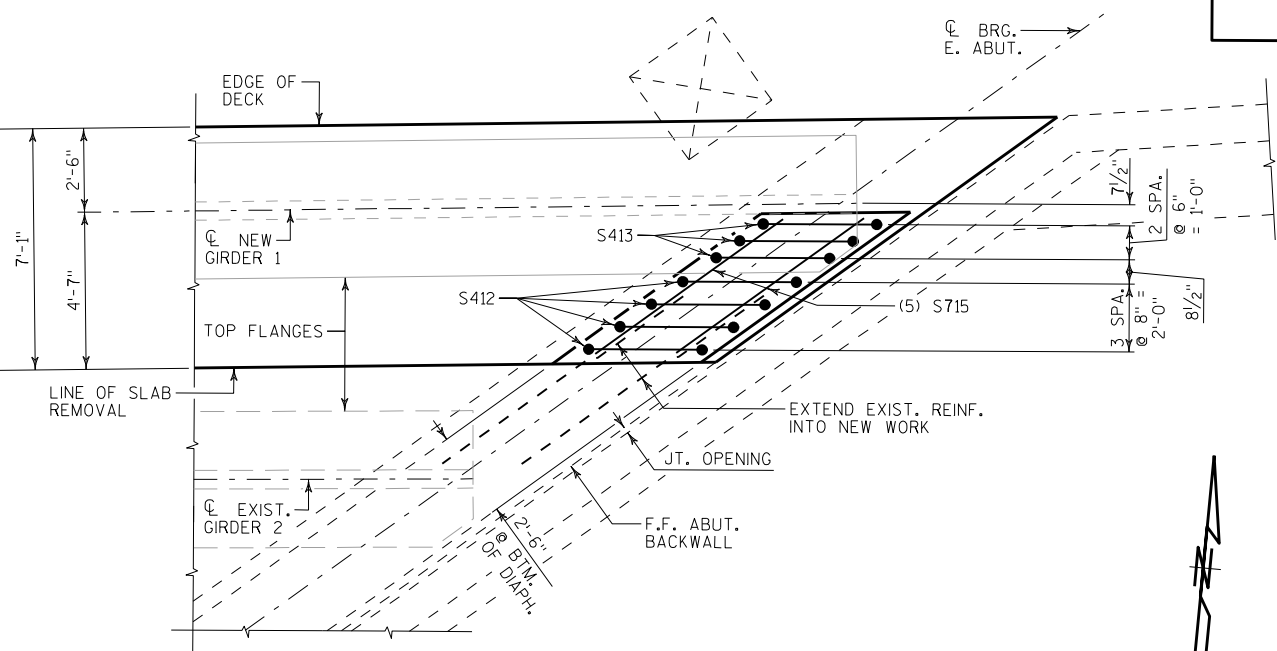


NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-05-600			
DRAWN BY		ARC	PLANS CK'D. SDR
SUPERSTRUCTURE REINF. PLAN		SHEET 3	



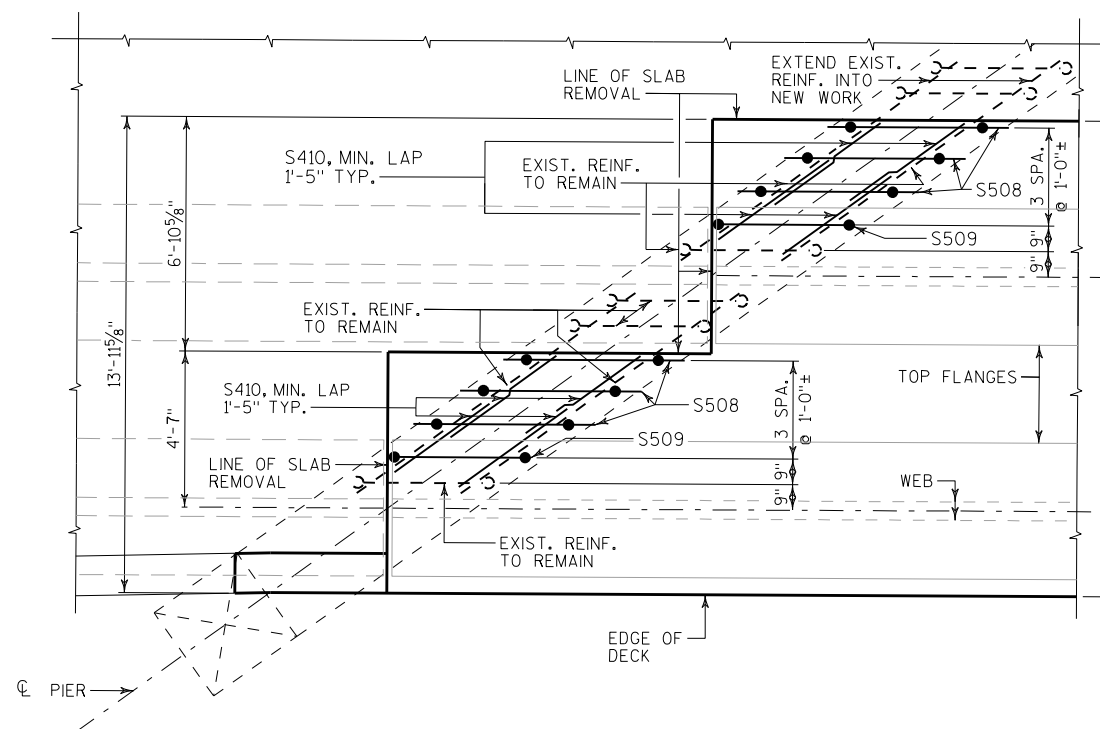
PIER DIAPHRAGM REINF. DETAIL

(© NORTH SIDE OF DECK)



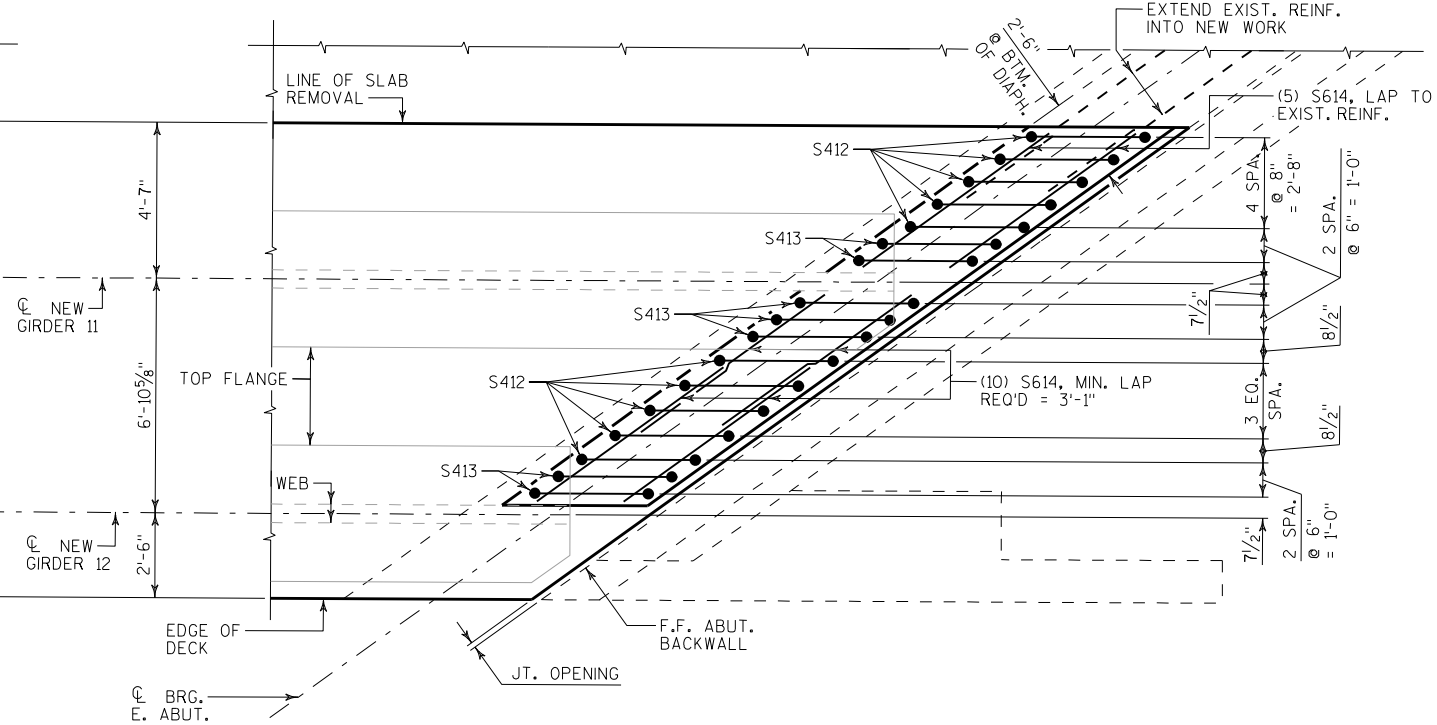
E. ABUT. DIAPHRAGM REINF. DETAIL

(© NORTH SIDE OF DECK)



PIER DIAPHRAGM REINF. DETAIL

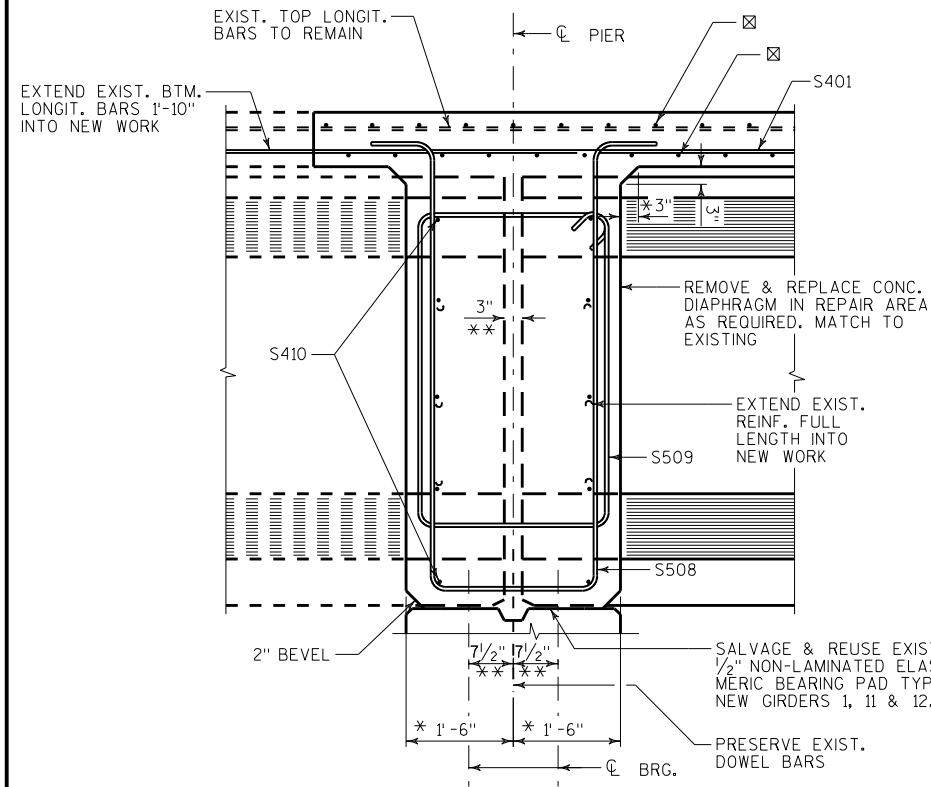
(© SOUTH SIDE OF DECK)



E. ABUT. DIAPHRAGM REINF. DETAIL

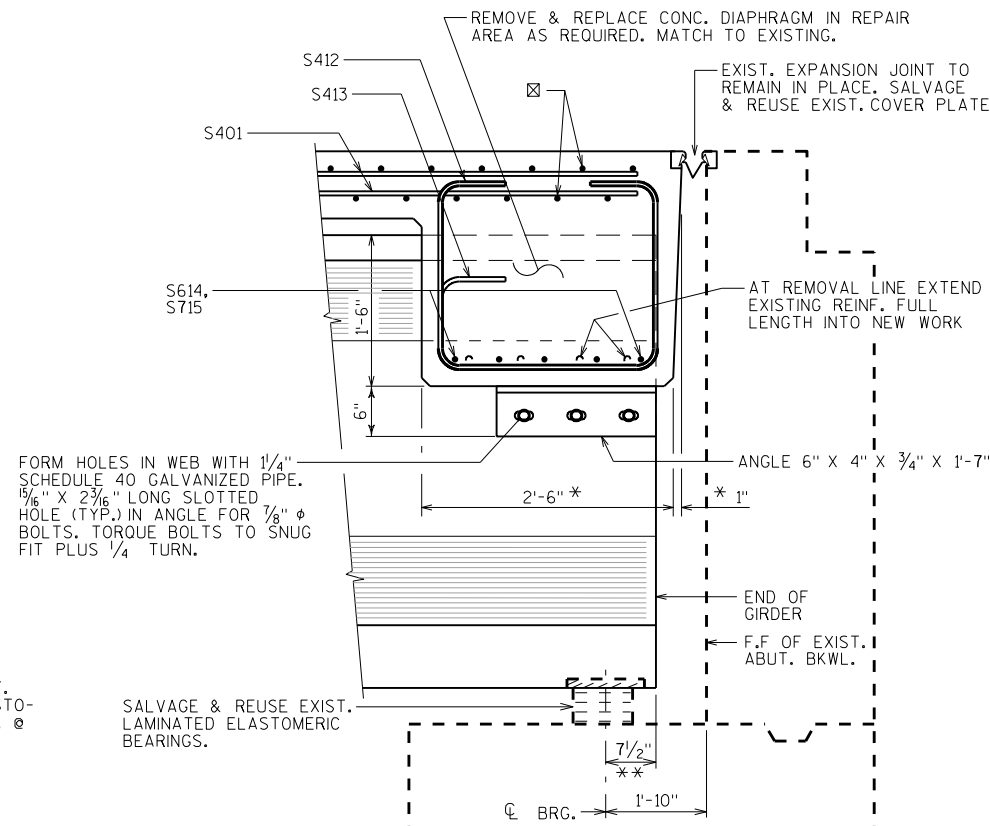
(© SOUTH SIDE OF DECK)

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-05-600			
DRAWN BY		ARC	PLANS CK'D. SDR
SUPERSTRUCTURE DETAILS 1		SHEET 4	



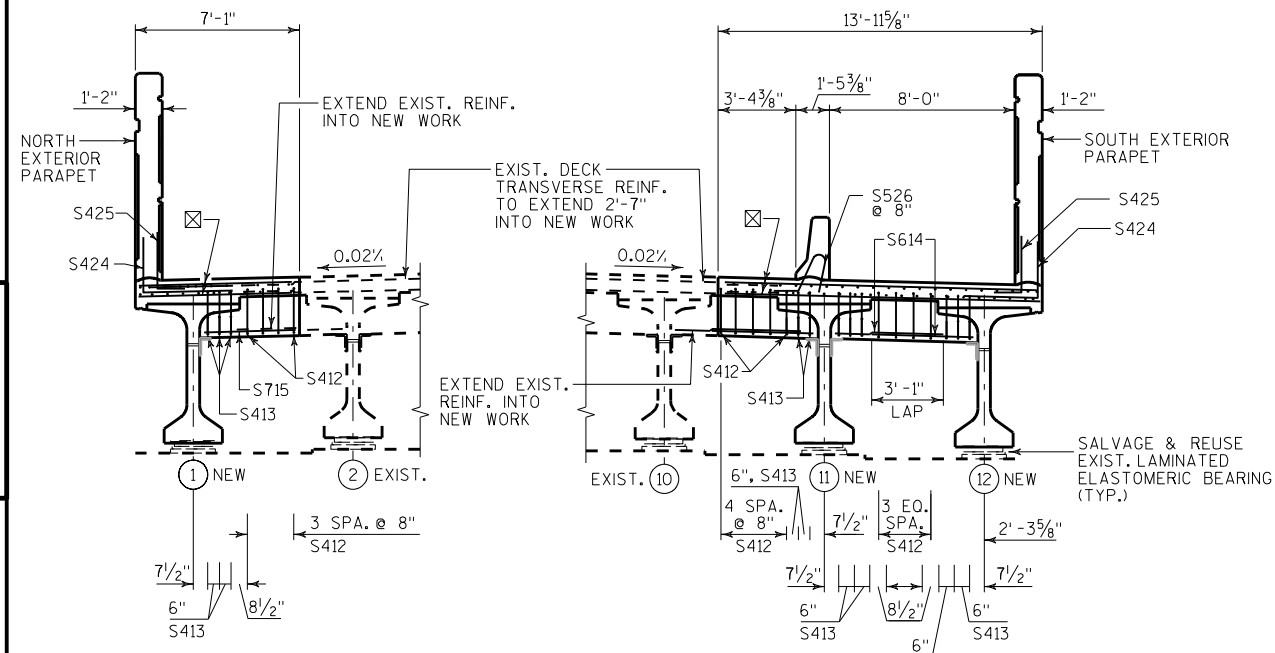
SECTION @ PIER DIAPHRAGM

(SOUTH SIDE)



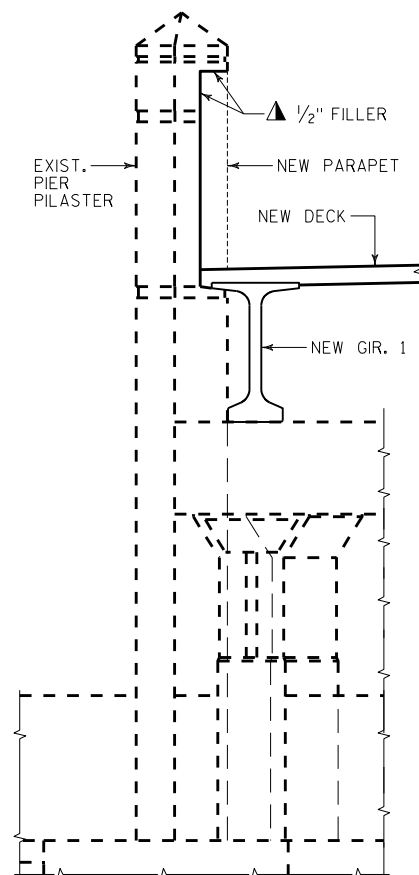
EXPANSION END

(@ EAST ABUT.)



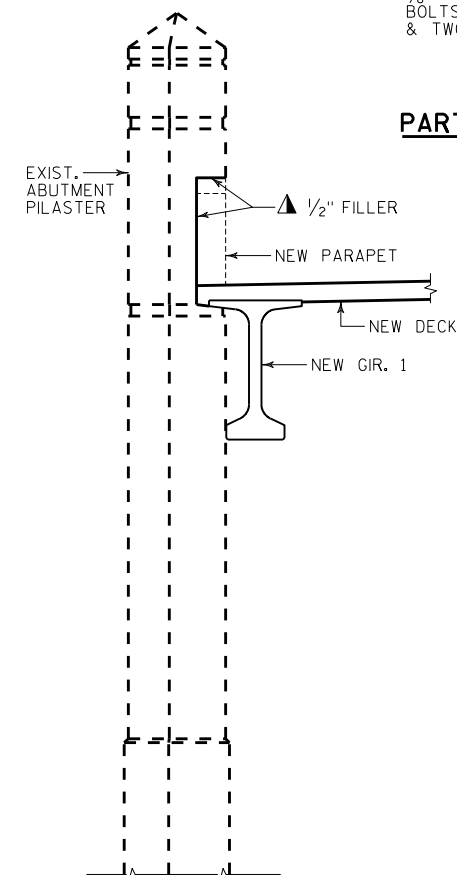
PARTIAL CROSS SECTION THRU ROADWAY @ EAST ABUT.

(LOOKING EAST)



EXIST. NORTH SIDE PIER PILASTER

(SOUTH SIDE SIMILAR)



EXIST. NORTH SIDE ABUT. PILASTER

(SOUTH SIDE SIMILAR)

NOTES

ALL VERTICAL BAR STEEL REINFORCEMENT IN CONCRETE DIAPHRAGMS SHALL BE PLACED PARALLEL TO THE GIRDERS.

DIAPHRAGM SUPPORT ANGLES SHALL BE ASTM A709 GRADE 36. ALL BOLTS, NUTS AND WASHERS SHALL BE ASTM A325 TYPE 1.

ALL SUPPORT ANGLES SHALL BE HOT-DIPPED GALVANIZED. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S10F OF ASTM A563, LUBRICANT AND TEST FOR COATED NUTS.

ALL DIAPHRAGM SUPPORT HARDWARE SHALL BE INCIDENTAL TO CONCRETE MASONRY BRIDGES.

CONCRETE FOR ABUTMENT AND PIER DIAPHRAGMS SHALL BE PLACED WITH THE DECK CONCRETE. NO OPTIONAL CONSTRUCTION JOINT WILL BE ALLOWED.

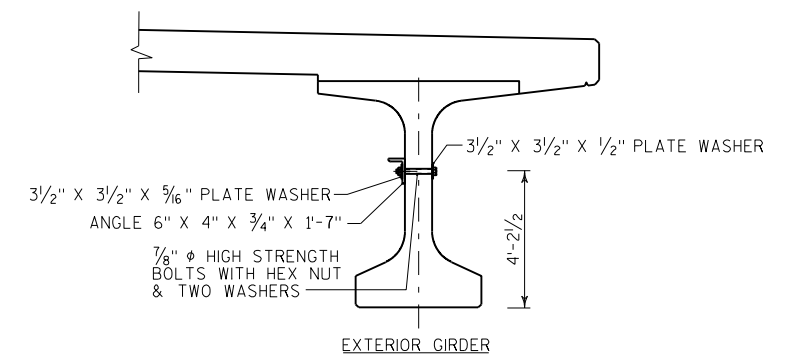
LEGEND

* DIMENSIONS ARE NORMAL TO \perp OF SUBSTRUCTURE UNITS

** DIMENSIONS ARE PARALLEL TO THE GIRDER

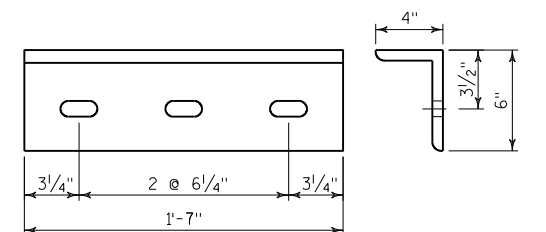
☒ TRANSVERSE REINFORCEMENT. SEE SHT. 3 FOR DETAILS.

▲ SEAL ALL HORIZ. AND VERTICAL SURFACES OF FILLER WITH NON-STAINING, NON-BITUMINOUS JOINT SEALER (1" DEEP AND HOLD 1/8" BELOW SURFACE). COLOR TO MATCH STAIN.



PART TRANSVERSE SECTION AT DIAPHRAGM

EXPANSION END



ANGLE

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-05-600			
DRAWN BY CRJ		PLANS CK'D. SDR	
SUPERSTRUCTURE DETAILS 2		SHEET 5	

BILL OF BARS

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
S401	X	120	40'-0"			SLAB-LONGIT.-BTM.
S402	X	60	36'-1"			SLAB-LONGIT.-TOP-SOUTHSIDE
S403	X	30	37'-4"			SLAB-LONGIT.-TOP-NORTHSIDE
S904	X	28	15'-0"			SLAB-LONGIT.-TOP
S905	X	1	28'-0"			SLAB-LONGIT.-TOP-NORTH EDGE OF DECK
S406						NOT USED
S407						NOT USED
S508	X	6	17'-8"	X		PIER-DIAPH.-VERT.
S509	X	2	16'-10"	X		PIER-DIAPH.-VERT.
S410	X	40	4'-0"			PIER-DIAPH.-HORIZ.
S411						NOT USED
S412	X	14	8'-7"	X		ABUT.-DIAPH.-VERT.
S413	X	10	7'-4"	X		ABUT.-DIAPH.-VERT.
S614	X	15	6'-9"			ABUT.-DIAPH.-HORIZ.-SOUTHSIDE
S715	X	5	6'-9"			ABUT.-DIAPH.-HORIZ.-NORTHSIDE
S716						NOT USED
S517	X	438	6'-9"			SLAB-TRANS.-TOP & BTM.-NORTHSIDE
S518	X	28	6'-9"			SLAB-TRANS.-TOP & BTM.-SOUTHSIDE
S519	X	408	13'-7"			SLAB-TRANS.-TOP & BTM.-SOUTHSIDE
S520	X	11	4'-5"		▲	SLAB-TRANS.-TOP-NORTHSIDE
S521	X	23	7'-9"		▲	SLAB-TRANS.-BTM.-SOUTHSIDE
S522	X	23	7'-9"		▲	SLAB-TRANS.-TOP-SOUTHSIDE
S523	X	12	3'-11"		▲	SLAB-TRANS.-BTM.-NORTHSIDE
S424	X	370	6'-2"	X		SLAB EXTERIOR PARAPET VERT.
S425	X	370	4'-2"	X		SLAB EXTERIOR PARAPET VERT.
S526	X	224	4'-2"	X		SLAB AT PARAPET VERT.
S527	X	245	4'-10"	X		PARAPET VERT.
S528	X	25	34'-6"			PARAPET HORIZ.
S529	X	4	5'-3"	X		LIGHT. STD. VERT.
S530	X	4	6'-11"	X		SLAB LIGHT STD. DOWELS
S631	X	5	40'-0"	X		LIGHT. STD. HORIZ.
S632	X	10	6'-3"	X		LIGHT. STD. HORIZ.
S533	X	44	3'-4"	X		SLAB LIGHT STD. DOWELS
S534	X	44	3'-0"	X		LIGHT. STD. VERT.
S535	X	32	7'-10"			SLAB @ LIGHT. STD. TRANS.

▲ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

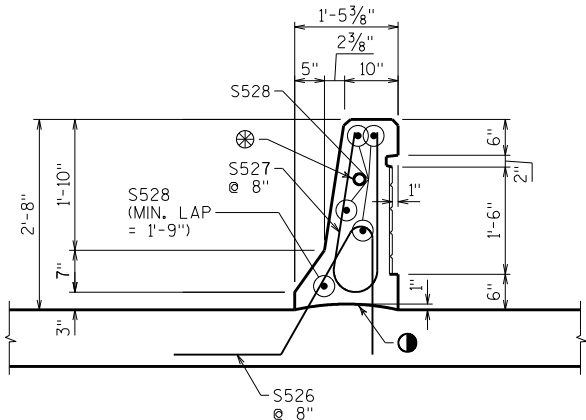
BAR SERIES TABLE

MARK	NO. REOD.	LENGTH
S520	1 SERIES OF 11	2'-2" TO 6'-8"
S521	1 SERIES OF 23	2'-5" TO 13'-1"
S522	1 SERIES OF 23	2'-3" TO 13'-3"
S523	1 SERIES OF 12	1'-4" TO 6'-6"

BUNDLE AND TAG EACH SERIES SEPARATELY.

STATE PROJECT NUMBER

1130-45-60

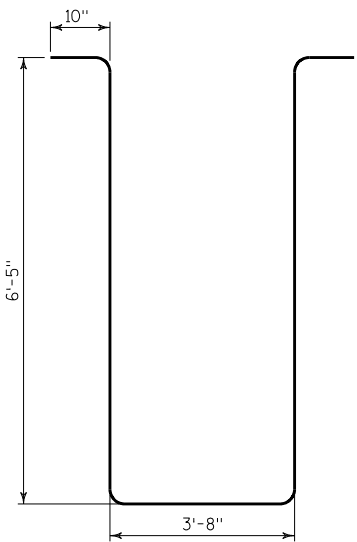


SECTION THRU PARAPET ON BRIDGE

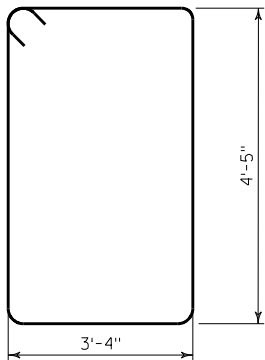
NOTES

OPTIONAL CONSTRUCTION JOINTS IN THE PARAPETS MAY BE USED. RUN REINFORCEMENT THRU THE JOINT. LAP LONGITUDINAL BARS A MINIMUM OF 1'-9". MIN. JOINT SPACING OF 80'-0"

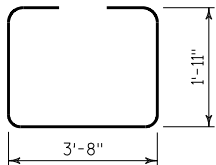
⊗ CONDUIT RIGID NON-METALLIC SCHEDULE 40 2-INCH. SEE "LIGHTING DETAILS" SHEET FOR FURTHER INFORMATION.



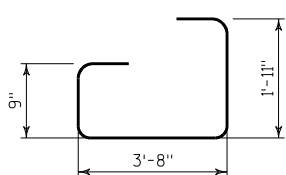
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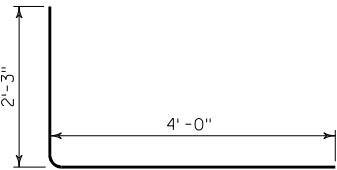
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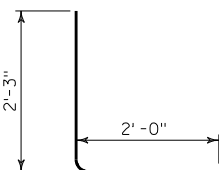
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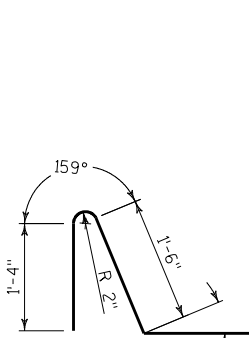
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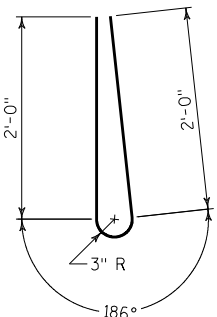
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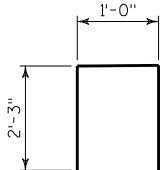
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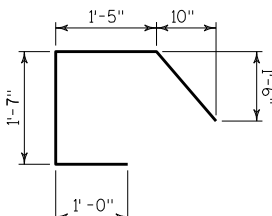
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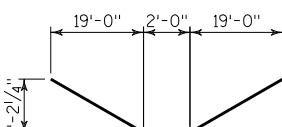
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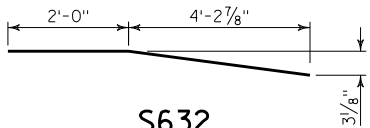
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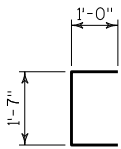
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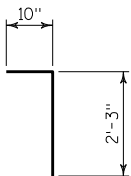
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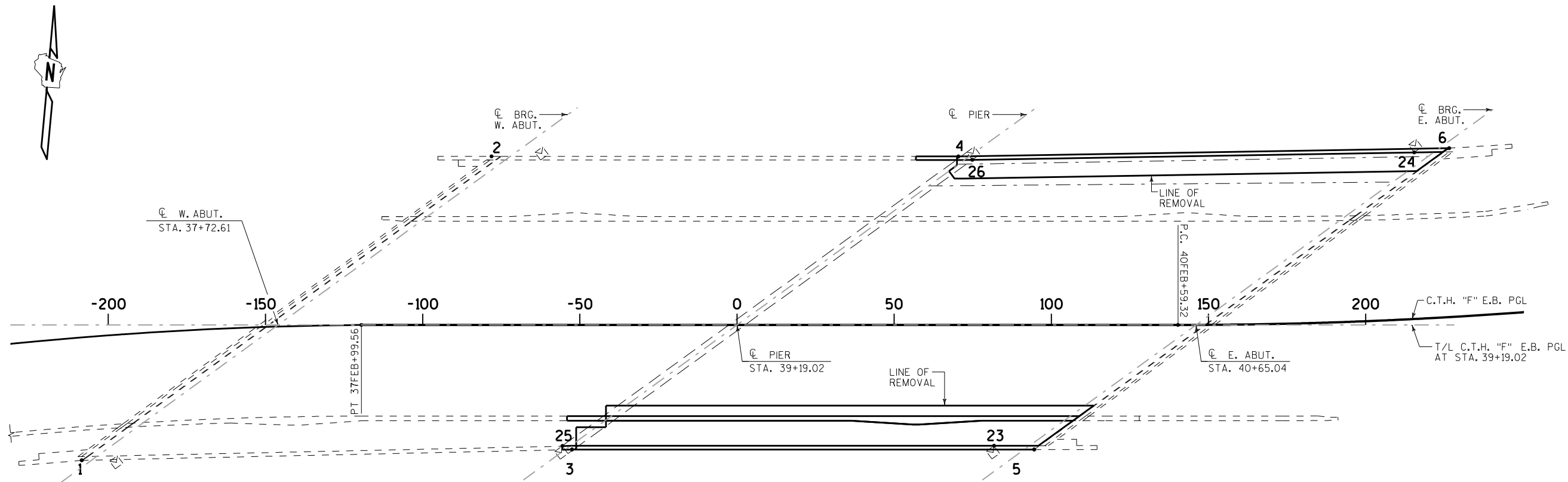
S533



S534

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-05-600			
DRAWN BY CRJ		PLANS CK'D. SDR	
SUPERSTRUCTURE REBAR DETAILS		SHEET 6	

SCALE = 1:167



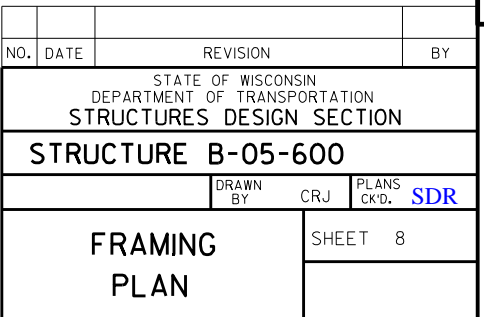
TANGENT OFFSET PLAN

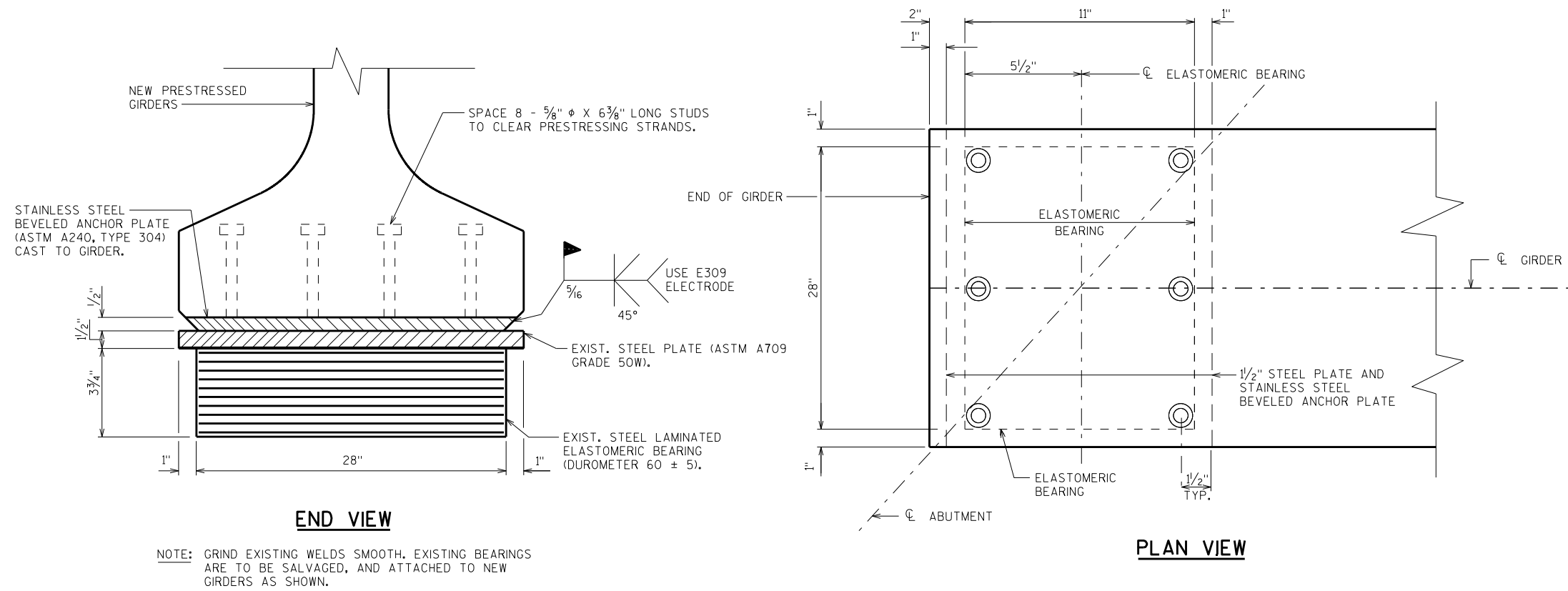
TANGENT OFFSET TABLE

LOCATION	DESCRIPTION	STATION	*OFFSET	*T/L LOCATION	*T/L OFFSET
POINT 1	SW CORNER OF DECK @ FACE OF BACKWALL	37+07.59	39.68	-208.37	43.00
POINT 2	NW CORNER OF DECK @ FACE OF BACKWALL	38+43.75	53.61	-75.26	53.61
POINT 3	SOUTH EDGE OF DECK @ KINK POINT	38+66.07	39.61	-52.95	39.61
POINT 4	NORTH EDGE OF DECK @ KINK POINT	39+91.26	53.61	72.24	53.61
POINT 5	SE CORNER OF DECK @ FACE OF BACKWALL	40+13.50	39.61	94.55	39.61
POINT 6	NE CORNER OF DECK @ FACE OF BACKWALL	41+03.05	53.67	226.59	56.24
POINT 23	CORNER OF MONUMENT @ FACE OF PARAPET, SE QUADRANT	40+00.78	38.45	81.76	38.45
POINT 24	CORNER OF MONUMENT @ FACE OF PARAPET, NE QUADRANT	41+37.24	52.94	215.44	54.88
POINT 25	CORNER OF MONUMENT @ FACE OF PARAPET, SOUTH SIDE OF PIER	38+63.42	38.50	-55.60	38.50
POINT 26	CORNER OF MONUMENT @ FACE OF PARAPET, NORTH SIDE OF PIER	39+93.88	52.50	74.86	52.50

*DIMENSION UNITS ARE FEET.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-05-600			
DRAWN BY		ARC	PLANS CK'D. SDR
TANGENT OFFSETS			SHEET 7





NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-05-600			
DRAWN BY CRJ		PLANS CK'D. SDR	
LAMINATED ELASTOMERIC BEARINGS		SHEET 9	

GENERAL NOTES

THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS.

ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

STRANDS SHALL BE FLUSH WITH END OF GIRDER. FOR GIRDER ENDS EMBEDDED COMPLETELY IN CONCRETE, ENDS OF STRANDS SHALL BE COATED WITH NON-BITUMINOUS JOINT SEALER. FOR GIRDER ENDS THAT ARE FINALLY EXPOSED, COAT THE GIRDER ENDS, EXPOSED STRAND ENDS AND ALL NON-BINDING SURFACES WITHIN 2 FEET OF THE GIRDER ENDS WITH A NON-PIGMENTED EPOXY CONFORMING TO AASHTO M-235 TYPE III, GRADE 2, CLASS B OR C. THE EPOXY SHALL BE APPLIED AT LEAST 3 DAYS AFTER MOIST CURING HAS CEASED AND PRIOR TO THE APPLICATION OF THE SEALER.

DO NOT APPLY CONCRETE SEALER TO SURFACES RECEIVING APPLICATION OF CONCRETE STAINING.

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY FOR BONDING TO THE SLAB, EXCEPT THE OUTSIDE 15" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED CONCRETE SEALER SHALL BE APPLIED TO ALL SMOOTH SURFACES INCLUDING THE OUTSIDE 15" OF THE TOP FLANGE.

SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT. IF THE FABRICATOR WANTS TO BUILD A BAR STEEL CAGE BY WELDING LONGITUDINAL REINFORCEMENT TO THE #4 STIRRUPS, THE FOLLOWING OPTION IS AVAILABLE:

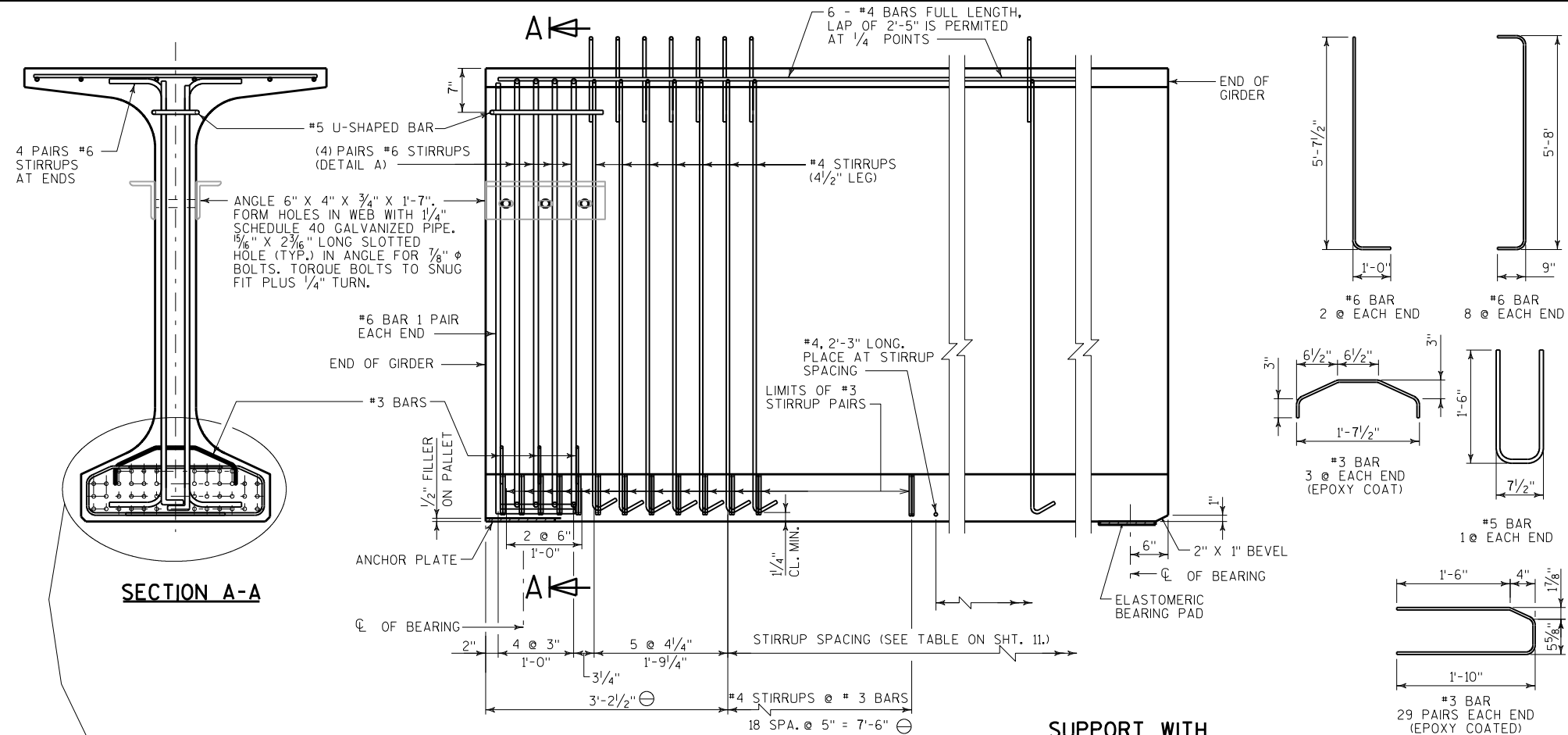
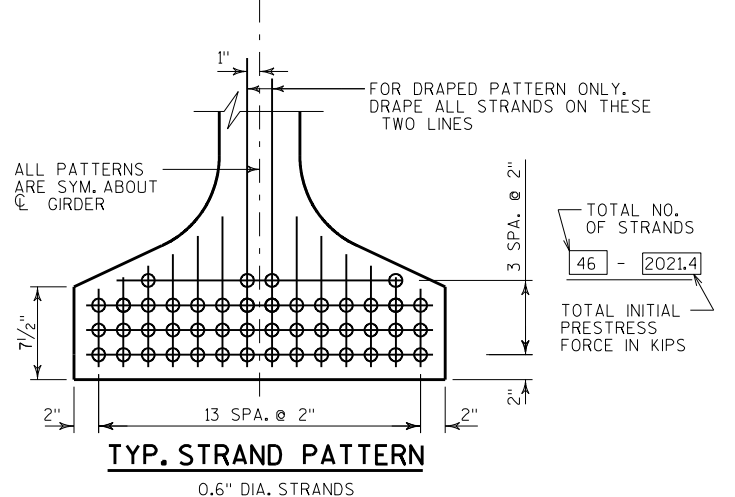
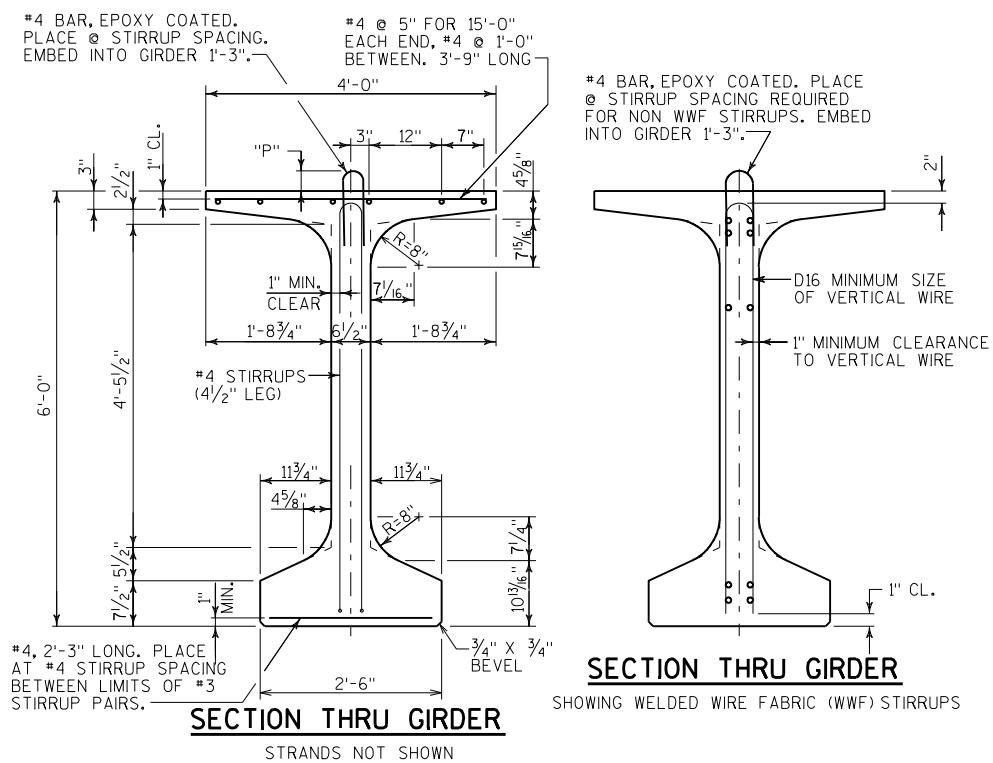
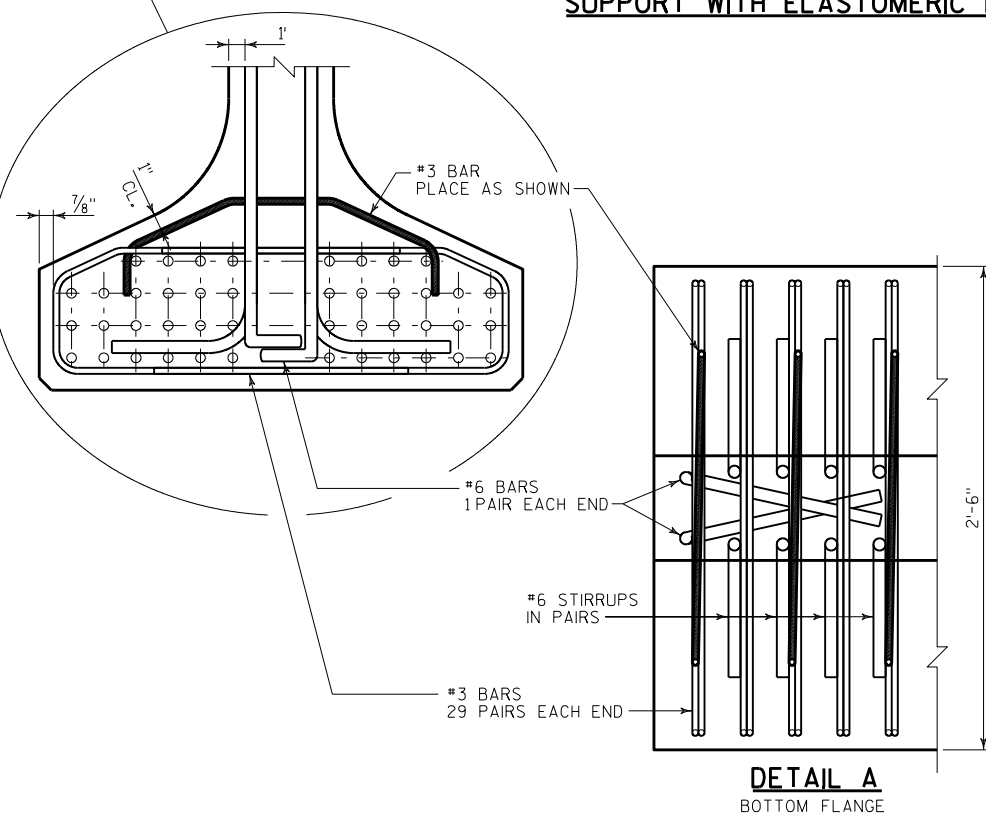
USE ASTM A706, GRADE 60 REINFORCEMENT AND THE STIRRUP SPACING AS SHOWN ON THE PLANS.

PRESTRESSING STRANDS SHALL BE 0.6 ϕ - 7 WIRE, LOW RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 270,000 P.S.I.

AN ALTERNATE EQUIVALENT OF WELDED WIRE FABRIC (WWF) ASTM A497 MAY BE SUBSTITUTED FOR THE STIRRUP REINFORCEMENT SHOWN, UPON APPROVAL OF THE STRUCTURES DEVELOPMENT CHIEF. (608) 266-0075

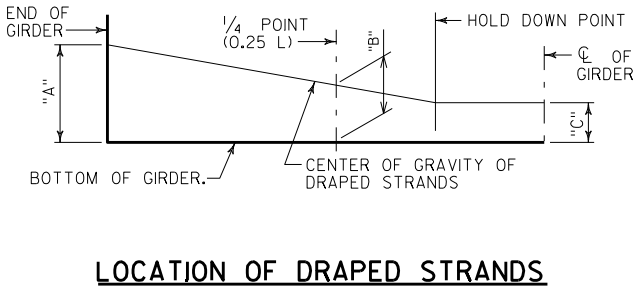
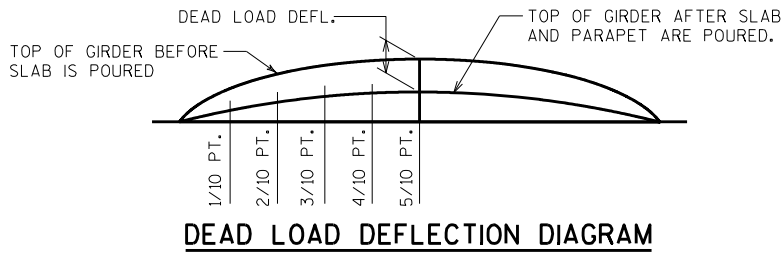
FOR STORAGE, HANDLING, AND TRANSPORTING, THIS GIRDER IS REINFORCED TO ALLOW A MAXIMUM OVERHANG FROM THE LIFTING LOCATION OR POINT OF SUPPORT OF UP TO 1/10 THE GIRDER LENGTH. THE CONTRACTOR IS RESPONSIBLE FOR LATERAL STABILITY OF THE GIRDER UNTIL THE DECK IS CURED.

BID ITEM SHALL BE "PRESTRESSED GIRDER TYPE I 72W-INCH".

**SUPPORT WITH ELASTOMERIC BRGS.****SUPPORT WITH 1/2" ELASTOMERIC BEARING PAD**

\ominus DETAIL TYPICAL AT EACH END

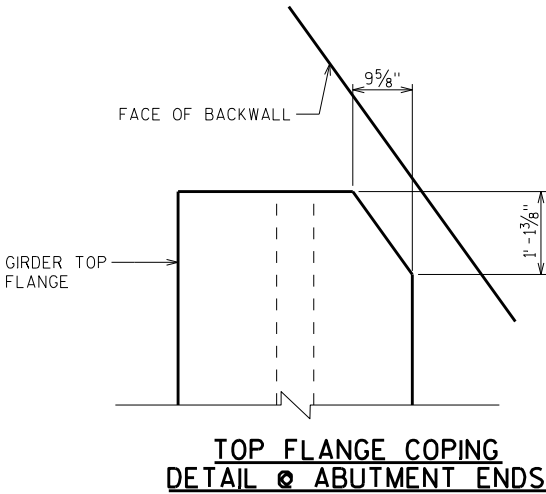
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-05-600			
DRAWN BY CRJ		PLANS CK'D. SDR	
72W" PRESTRESSED GIRDER DETAILS		SHEET 10	



STIRRUP SPACING

LOCATION	BAR SIZE	SPACING
FROM END TO 10'-8 1/2"	AS SHOWN	AS SHOWN
FROM 10'-8 1/2" TO 14'-6 1/2"	#4	9"
FROM 14'-6 1/2" TO 29'-1"	#4	1'-0"
FROM 29'-1" TO MIDSPAN	#4	1'-6"

SPACING IS SYMMETRIC ABOUT MIDSPAN OF GIRDER



GIRDER DATA																
SPAN	GIRDERS	GIRDER LENGTH "L"	DEAD LOAD DEFL. (IN.)					CONC. STRGTH. F _C (P.S.I.)	** "P"	DIA. OF STRAND (IN.)	DRAPED PATTERN					
			1/10	2/10	3/10	4/10	5/10				TOTAL NO. OF STRANDS	(F _{CI}) (P.S.I.) *	(IN.)			
												"A"	"B" MIN.	"B" MAX.	"C"	
SPAN 2	1	149'-11 1/2"	1'	2"	2 5/8"	3"	3 1/4"	8000	7"	0.6	46	6500	67	20 1/2"	23 1/2"	5
	11 AND 12	146'-6"	1'	1 3/4"	2 3/8"	2 7/8"	3"	8000	7"	0.6	46	6500	67	20 1/2"	23 1/2"	5

* MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

** NOTE: A MINIMUM STIRRUP EMBEDMENT OF 3" ABOVE THE BOTTOM OF THE DECK IS REQUIRED. THE VARIATION IN THE HAUNCH DEPTH IS NOT ANTICIPATED TO REQUIRE VARYING THE STIRRUP HEIGHT SO A CONSTANT STIRRUP PROJECTION IS DETAILED.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-05-600			
DRAWN BY		CRJ	PLANS CK'D. SDR
72W" PRESTRESSED GIRDER DETAILS		SHEET 11	

☆ BOLT HOLES SHALL BE SPACED SO AS TO MISS PRESTRESSED STRANDS
IN CONCRETE BEAMS.

ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36.
ALL BOLTS, NUTS AND WASHERS SHALL BE ASTM A325 TYPE 1.

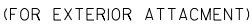
ALL DIAPHRAGM STRUCTURAL STEEL SHOWN SHALL BE HOT-DIPPED GALVANIZED. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S1 OF ASTM A563, LUBRICANT AND TEST FOR COATED NUTS.

REMOVE AND REATTACH EXISTING STEEL DIAPHRAGMS BETWEEN NEW GIRDER 1 AND EXISTING GIRDER 2, BETWEEN EXISTING GIRDER 10 AND NEW GIRDER 11, AND BETWEEN NEW GIRDER 11 AND NEW GIRDER 12

ALL BOLTS, NUTS & WASHERS NECESSARY FOR REUSING EXISTING DIAPHRAGMS AND BENTS PLATES, TO BE PROVIDED AS INCIDENTAL TO "REMOVING OLD STRUCTURE STA. 39+19.00".



☆ BOLT HOLES SHALL BE SPACED SO AS TO MISS PRESTRESSED STRANDS IN CONCRETE BEAMS.



"L" = 7"; CENTER BOLTS

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-05-600			
		DRAWN BY	CRJ PLANS CK'D. SDR
STEEL DIAPHRAGM		SHEET 12	



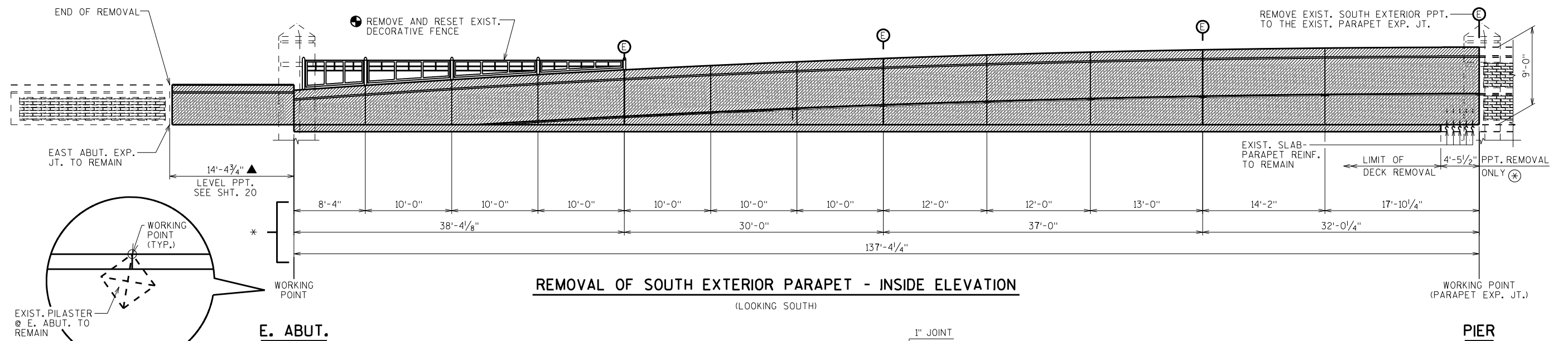
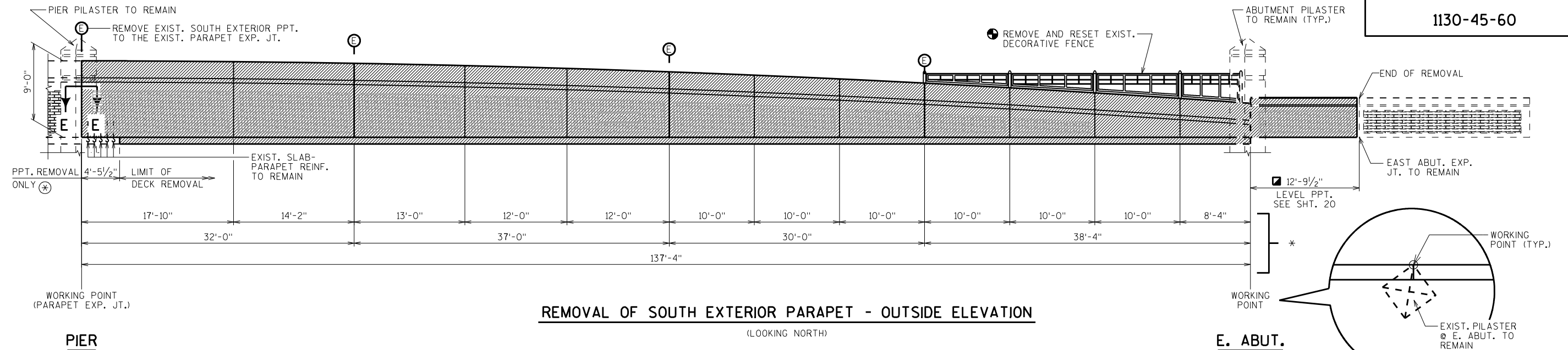
OUTSIDE ELEVATION OF INTERIOR PARAPET

* TOTAL CONDUIT MOVEMENT IS EXPECTED TO BE < 4".



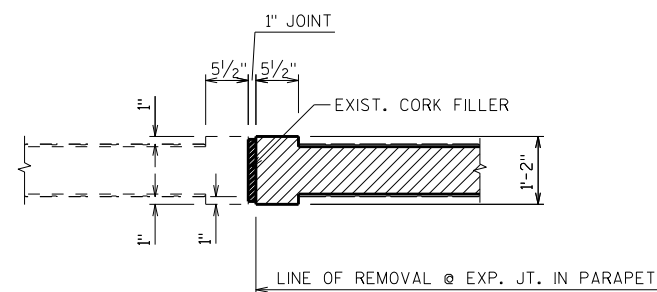
WHEN CONNECTING NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY
ADAPTER FITTINGS U.L. LISTED FOR ELECTRICAL USE SHALL BE USED.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-05-600			
		DRAWN BY	CRJ
		PLANS CK'D.	SDR
LIGHTING DETAILS		SHEET 13	



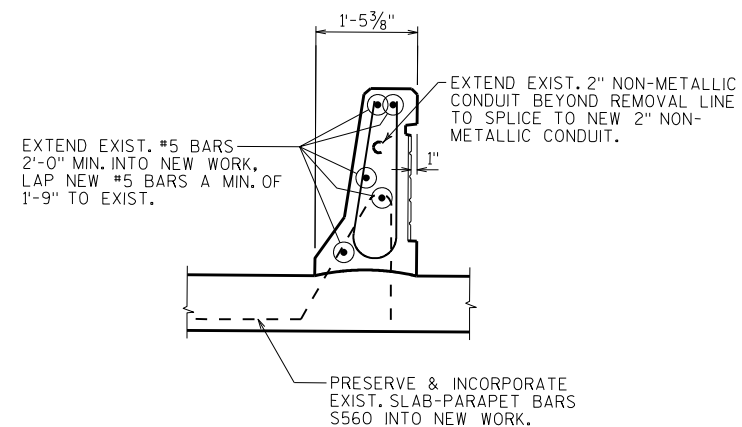
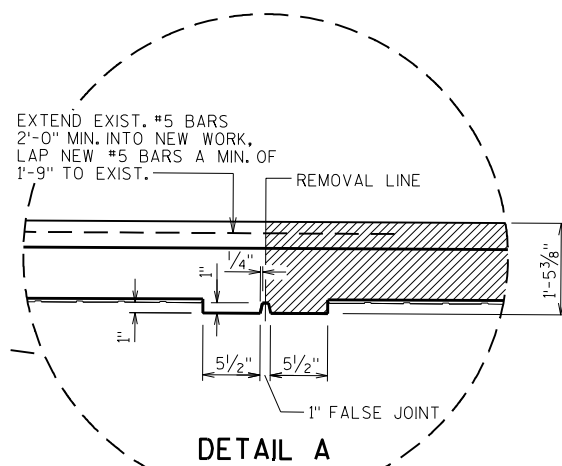
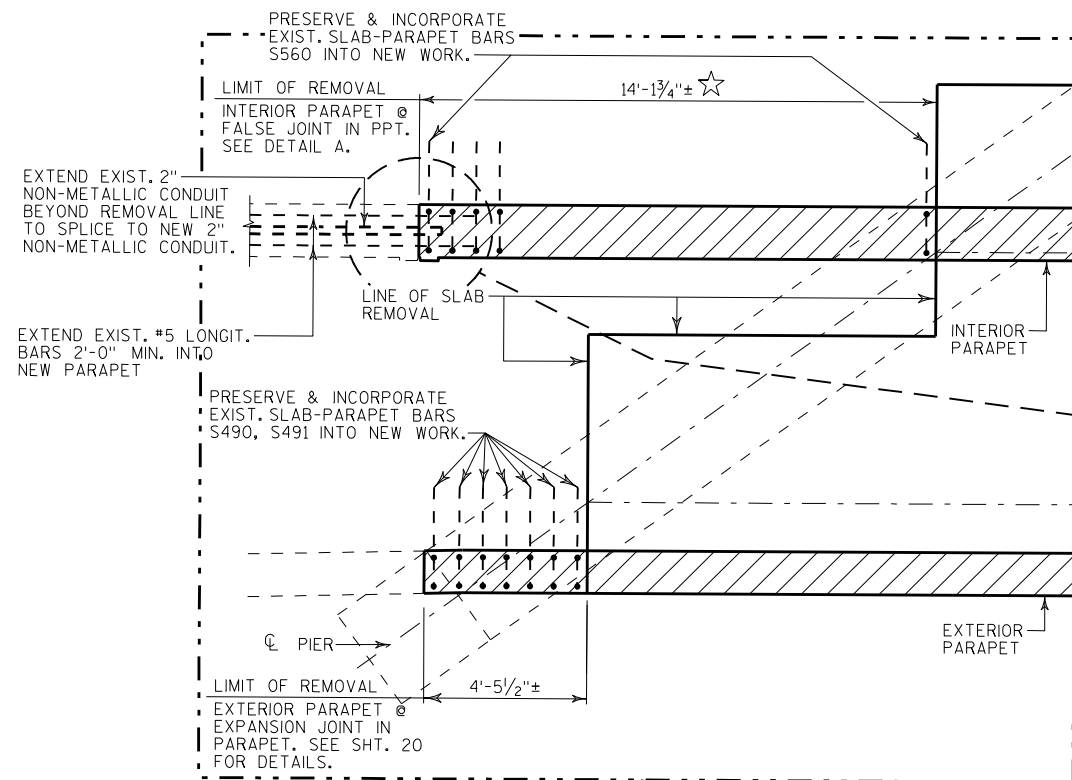
LEGEND

- ⓔ EXPANSION JOINT
- * DIMENSIONS ARE MEASURED PARALLEL TO DECK EDGE.
- ▲ DIMENSION TO FACE OF BACKWALL ALONG INSIDE FACE OF PARAPET.
- ▣ DIMENSION TO FACE OF BACKWALL ALONG OUTSIDE FACE OF PARAPET.
- ⊛ EXIST. SLAB - PARAPET REINF. TO REMAIN & INCORPORATE INTO NEW PARAPET.
- Ⓢ TO FACILITATE RESETTING EXIST. DECORATIVE FENCE, FIELD VERIFY DECORATIVE FENCE & ARCHED PARAPET DIMENSIONS PRIOR TO REMOVAL.

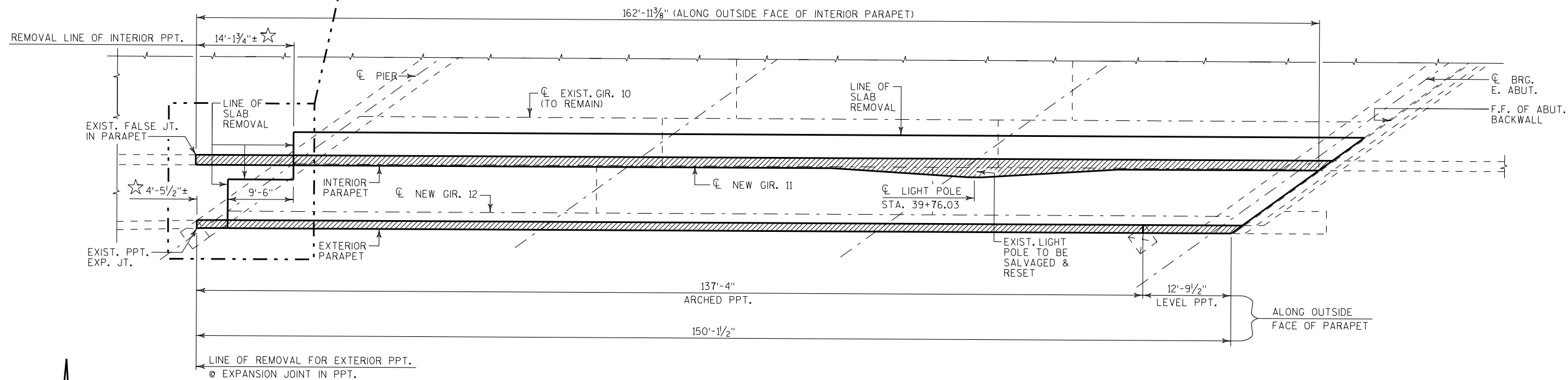


SECTION E-E

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-05-600			
DRAWN BY CRJ		PLANS CK'D. SDR	
SOUTH EXTERIOR PARAPET ELEVATION REMOVAL		SHEET 14	



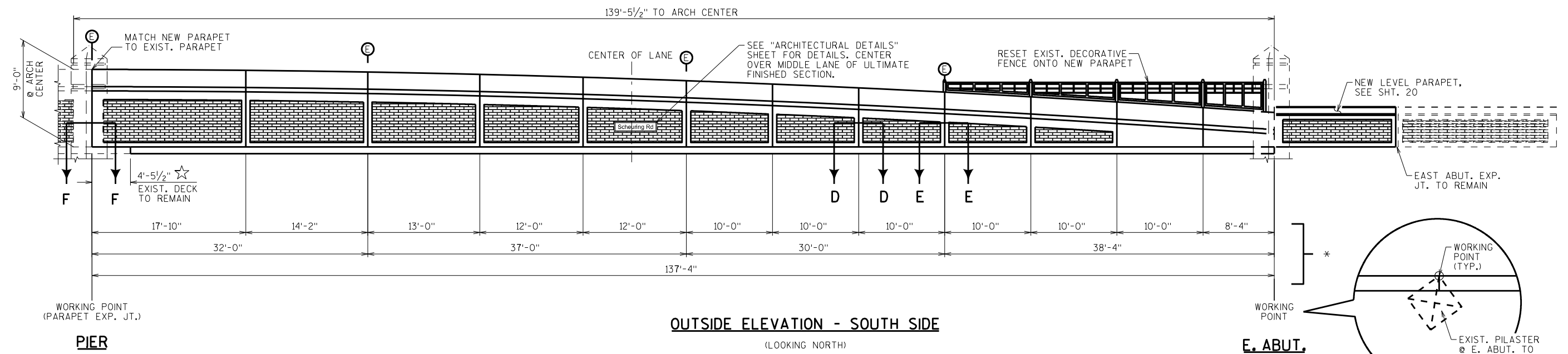
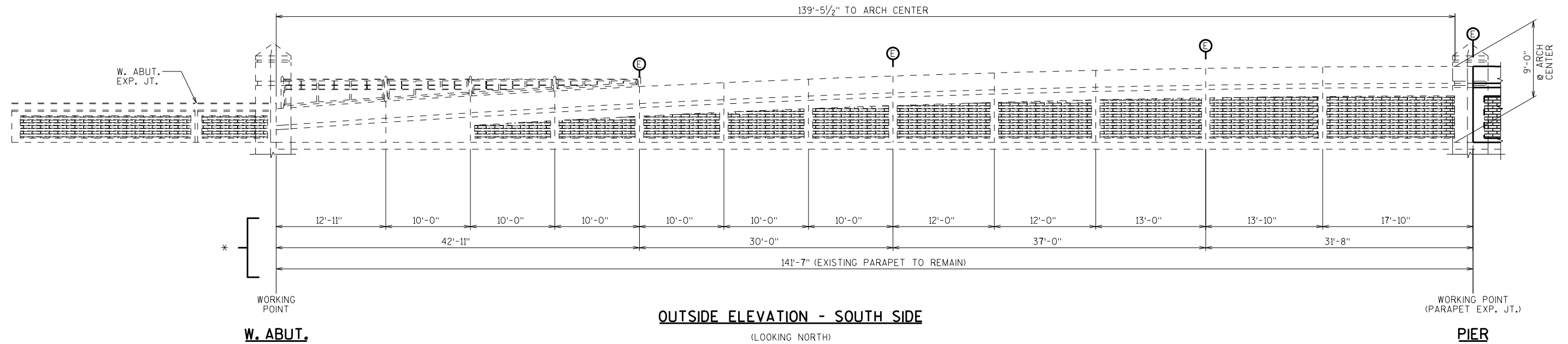
**SECTION THRU INTERIOR PARAPET
@ SOUTH SIDE OF BRIDGE**



**PLAN - INTERIOR & EXTERIOR PARAPET
REMOVAL LIMITS @ SOUTH SIDE OF BRIDGE**

☆ LIMITS OF PPT. REMOVAL BEYOND DECK REMOVAL AREA

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-05-600			
DRAWN BY	ARC	PLANS CK'D.	SDR
SOUTH INT. & EXT. PARAPET REMOVAL & DETAILS			SHEET 15

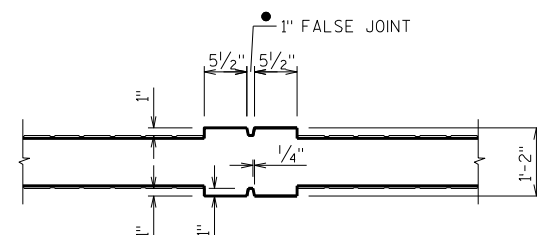
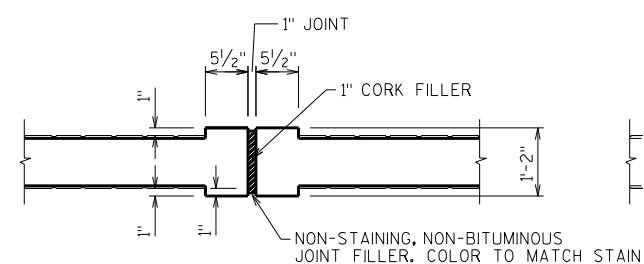
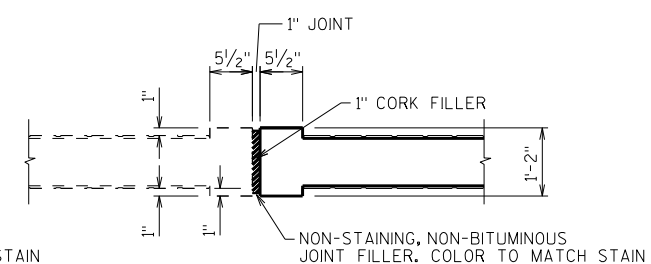
**LEGEND**

E EXPANSION JOINT

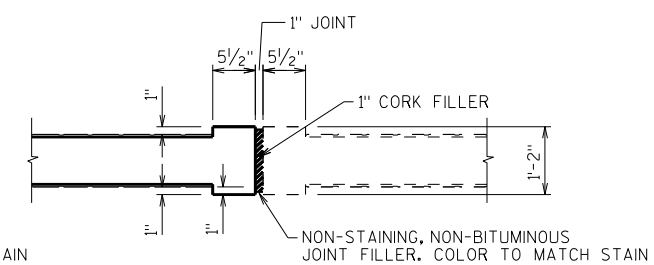
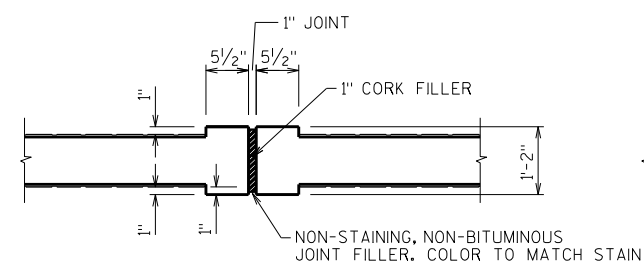
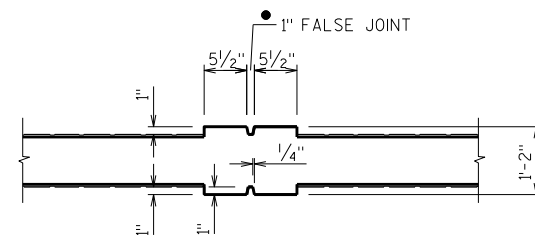
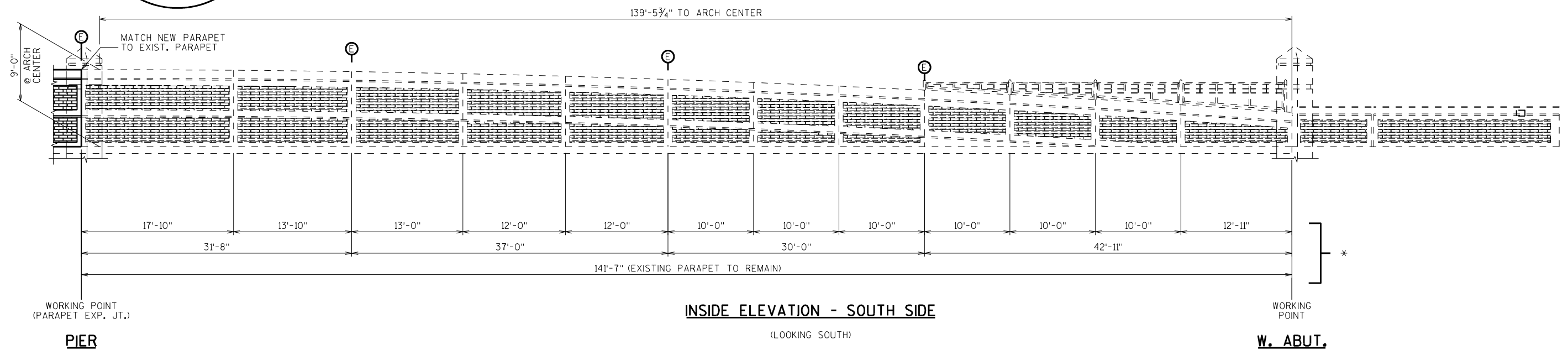
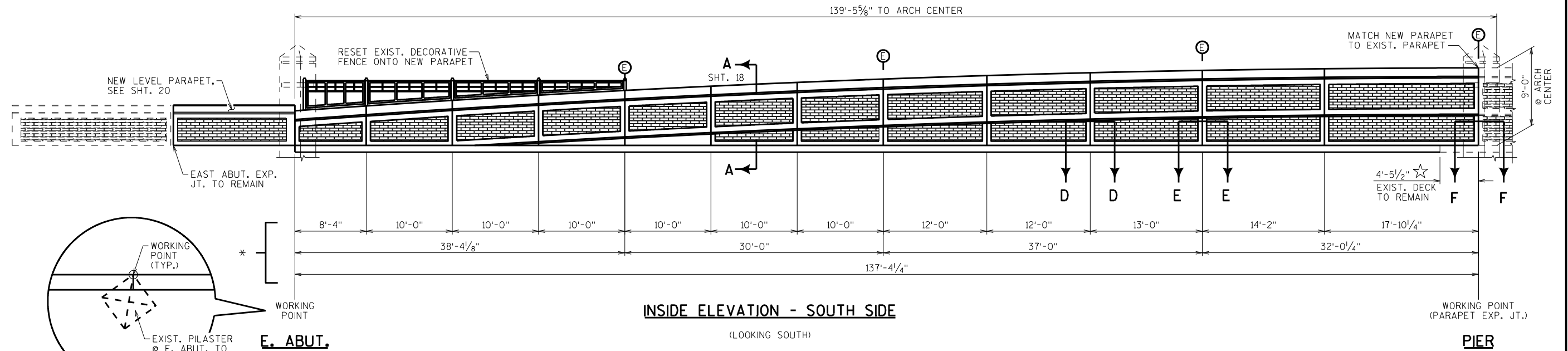
* DIMENSIONS ARE MEASURED PARALLEL TO DECK EDGE.

• FALSE JOINT MAY BE OFFSET BETWEEN INSIDE & OUTSIDE FACES. FOLLOW LAYOUT SHOWN ON ELEVATIONS.

☆ SALVAGE & INCORPORATE EXIST. SLAB-PARAPET REINF. INTO NEW WORK.

**SECTION D-D****SECTION E-E****SECTION F-F**

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-05-600			
DRAWN BY		ARC	PLANS CK'D. SDR
NEW SOUTH EXTERIOR PARAPET OUTSIDE ELEVATION			SHEET 16

**LEGEND**

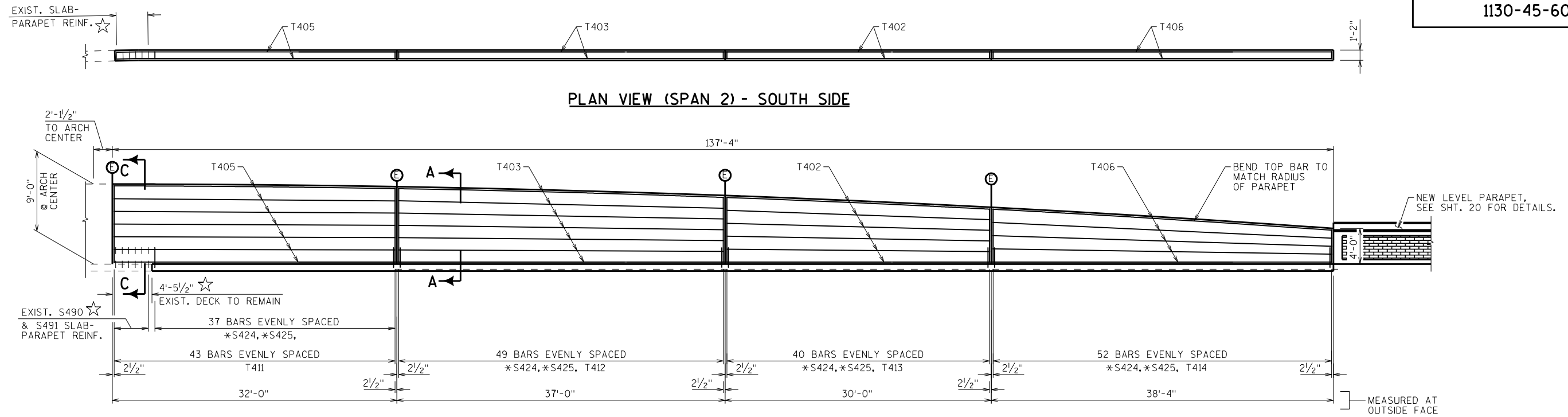
Ⓔ EXPANSION JOINT

* DIMENSIONS ARE MEASURED PARALLEL TO DECK EDGE.

• FALSE JOINT MAY BE OFFSET BETWEEN INSIDE & OUTSIDE FACES. FOLLOW LAYOUT SHOWN ON ELEVATIONS.

☆ SALVAGE & INCORPORATE EXIST. SLAB-PARAPET REINF. INTO NEW WORK.

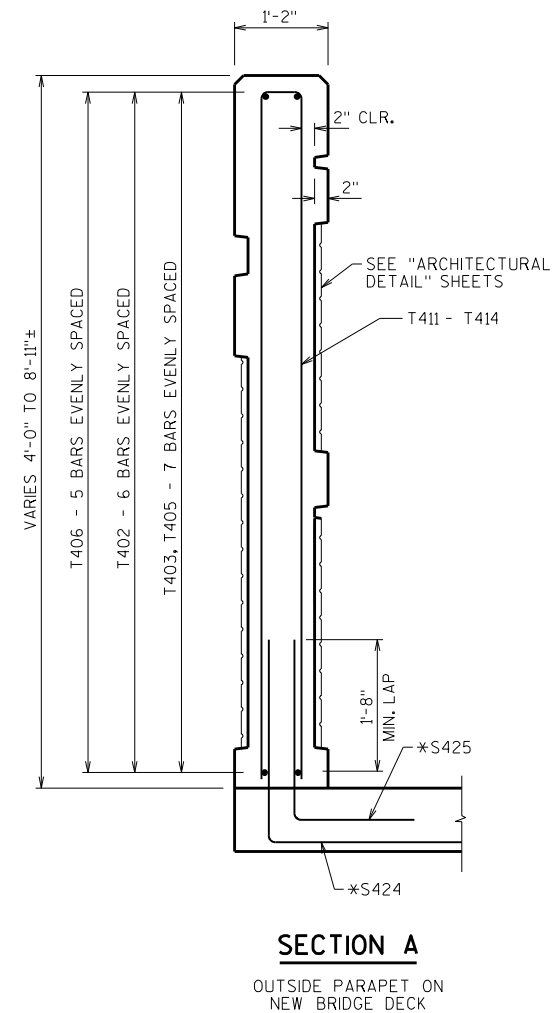
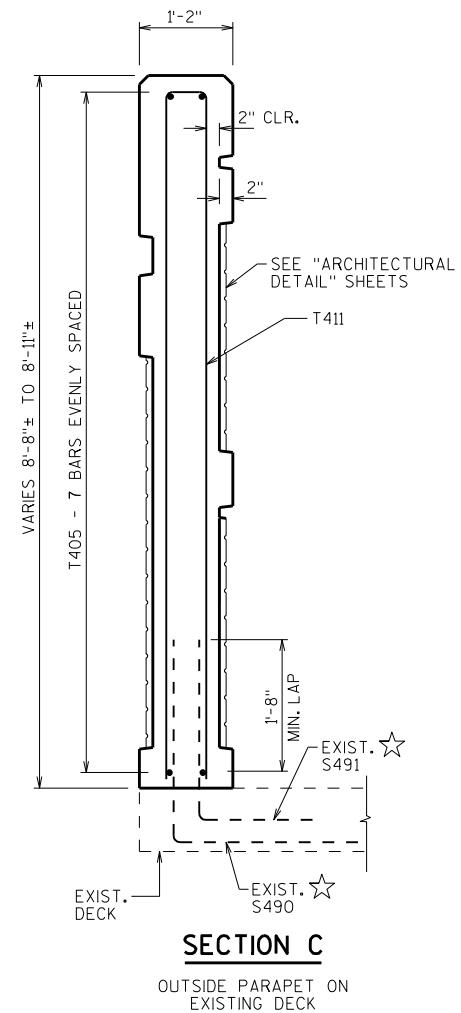
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-05-600			
DRAWN BY		ARC	PLANS CK'D. SDR
NEW SOUTH EXTERIOR PARAPET INSIDE ELEVATION		SHEET 17	

**LEGEND**

- ⊙ EXPANSION JOINT
- ☆ SALVAGE & INCORPORATE EXIST. SLAB-PARAPET REINF. INTO NEW PARAPET.
- * THESE BARS ARE INCLUDED IN THE SUPERSTRUCTURE BILL OF BARS.

OUTSIDE ELEVATION (SPAN 2) - SOUTH SIDE

(LOOKING NORTH)



NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-05-600			
DRAWN BY CRJ		PLANS CK'D. SDR	
SOUTH EXTERIOR PARAPET LAYOUT & REINFORCEMENT			SHEET 18

BILL OF BARS - SOUTH

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
T401	X					NOT USED
T402	X	12	29'-7"			LONG. EXT. PARAPET
T403	X	14	36'-7"			LONG. EXT. PARAPET
T404	X					NOT USED
T405	X	14	31'-7"			LONG. EXT. PARAPET
T406	X	10	37'-11"			LONG. EXT. PARAPET
T407	X					NOT USED
T408	X					NOT USED
T409	X					NOT USED
T410	X					NOT USED
T411	X	43	17'-3"	X	▲	PARAPET STIRRUPS
T412	X	49	16'-0"	X	▲	PARAPET STIRRUPS
T413	X	40	13'-7"	X	▲	PARAPET STIRRUPS
T414	X	52	9'-11"	X	▲	PARAPET STIRRUPS
T420	X	4	13'-2"			LONG. EXT. LEVEL PARAPET
T421	X	4	12'-5"			LONG. EXT. LEVEL PARAPET
T422	X					NOT USED
T423	X					NOT USED
T424	X	17	9'-0"	X		EXT. LEVEL PARAPET STIRRUPS
T425	X	1	9'-2"	X		EXT. LEVEL PARAPET STIRRUPS
T426	X	1	9'-4"	X		EXT. LEVEL PARAPET STIRRUPS

▲ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

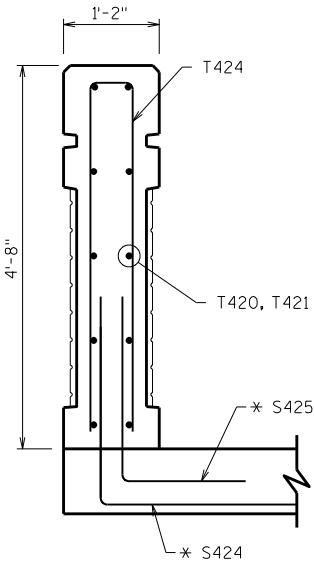
BAR SERIES - SOUTH

MARK	NO. REOD.	"A"	LENGTH
T411	1 SERIES OF 43	8'-4" TO 8'-7"	17'-0" TO 17'-6"
T412	1 SERIES OF 49	7'-4" TO 8'-4"	15'-0" TO 17'-0"
T413	1 SERIES OF 40	5'-11" TO 7'-4"	12'-2" TO 15'-0"
T414	1 SERIES OF 52	3'-8" TO 5'-11"	7'-8" TO 12'-2"

BUNDLE & TAG EACH SERIES SEPARATELY.

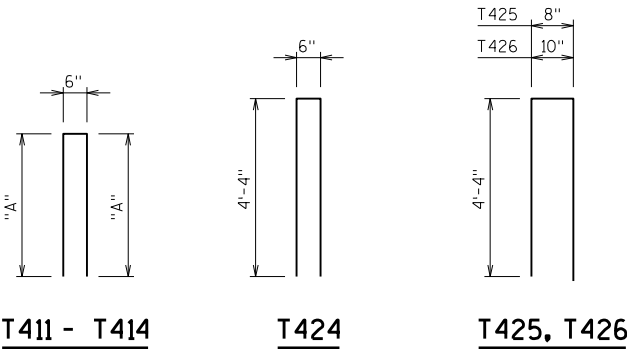
NOTE

* THESE BARS ARE INCLUDED IN THE SUPERSTRUCTURE BILL OF BARS ON SHT. 6.

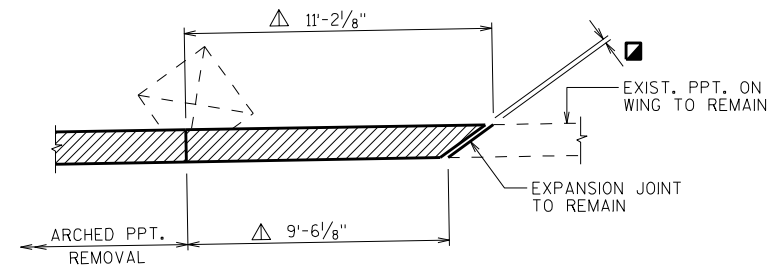


SECTION B

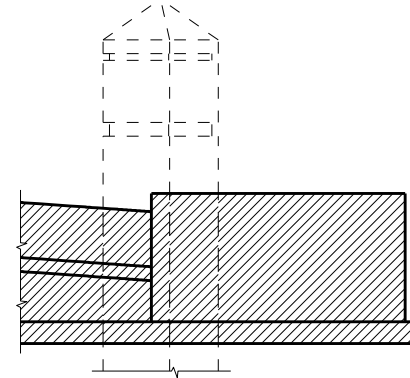
EXTERIOR LEVEL PARAPET ON BRIDGE
SEE SHT. 20 FOR ELEVATION AND PLAN VIEWS



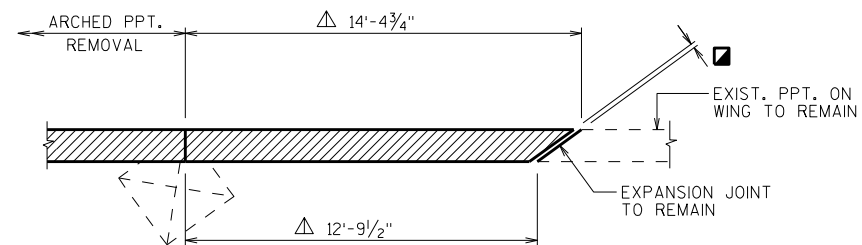
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-05-600			
DRAWN BY		ARC	PLANS CK'D. SDR
SOUTH EXTERIOR PARAPET DETAILS			SHEET 19



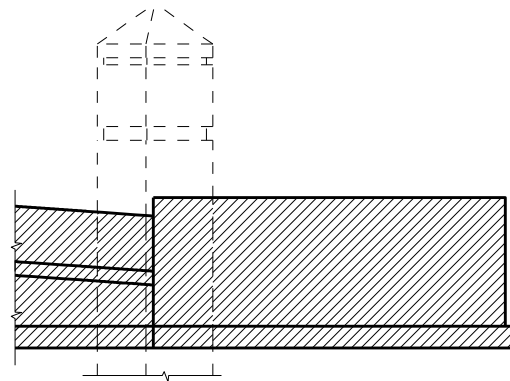
NORTHEAST EXTERIOR LEVEL PARAPET REMOVAL PLAN



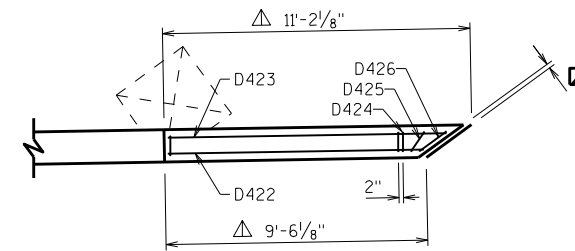
NORTHEAST EXTERIOR LEVEL PARAPET REMOVAL ELEVATION



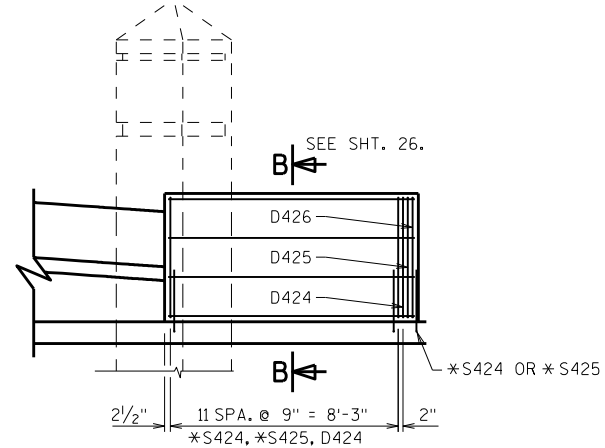
SOUTHEAST EXTERIOR LEVEL PARAPET REMOVAL PLAN



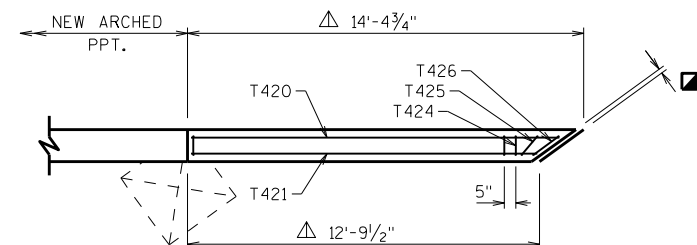
SOUTHEAST EXTERIOR LEVEL PARAPET REMOVAL ELEVATION



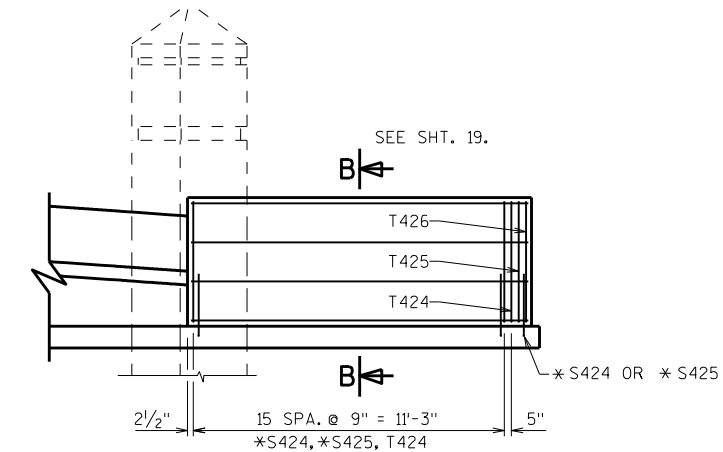
NORTHEAST EXTERIOR LEVEL PARAPET PLAN (NEW)



NORTHEAST EXTERIOR LEVEL PARAPET ELEVATION (NEW)



SOUTHEAST EXTERIOR LEVEL PARAPET PLAN (NEW)



SOUTHEAST EXTERIOR LEVEL PARAPET ELEVATION (NEW)

LEGEND

■ EXPANSION JOINT OPENING

△ DIMENSION IS TO FACE OF BACKWALL

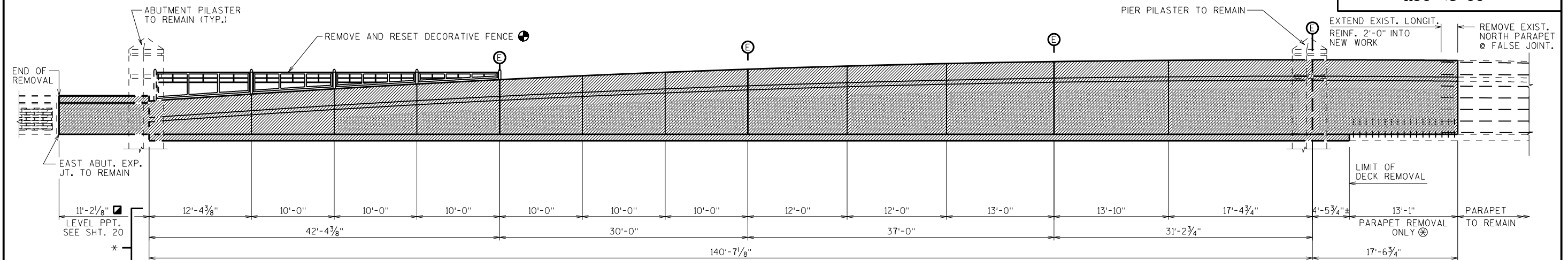
* THESE BARS ARE INCLUDED IN THE SUPERSTRUCTURE BILL OF BARS ON SHT. 6. SEE "SECTION A" ON SHTS. 18 & 25 FOR FURTHER DETAILS.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-05-600			
DRAWN BY		CRJ	PLANS CK'D. SDR
LEVEL EXTERIOR PARAPET DETAILS			SHEET 20



B.P. BREAK POINT IN DECK SEE "TANGENT OFFSETS"
SHEET FOR DETAILS (NOT A JOINT LOCATION).

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-05-600			
		DRAWN BY	CRJ PLANS CK'D. SDR
EXT.-INT. PARAPET JOINT LAYOUT		SHEET 21	

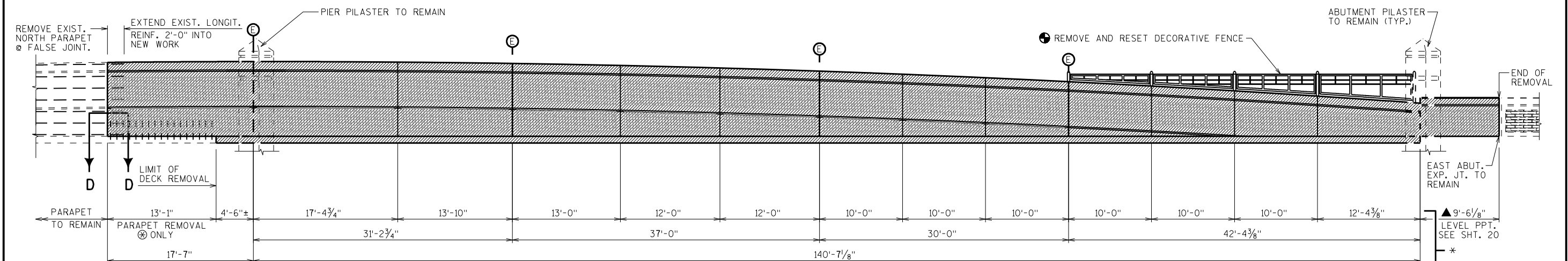


E. ABUT.

REMOVAL OF NORTH EXTERIOR PARAPET - OUTSIDE ELEVATION

(LOOKING SOUTH)

PIER

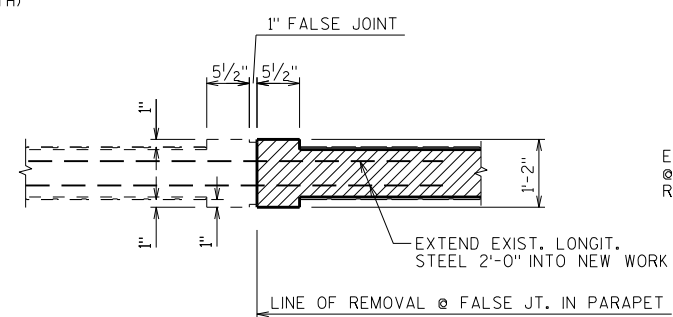


PIER

REMOVAL OF NORTH EXTERIOR PARAPET - INSIDE ELEVATION

(LOOKING NORTH)

E. ABUT.



SECTION D-D

LEGEND

E EXPANSION JOINT

* DIMENSIONS ARE MEASURED PARALLEL TO DECK EDGE.

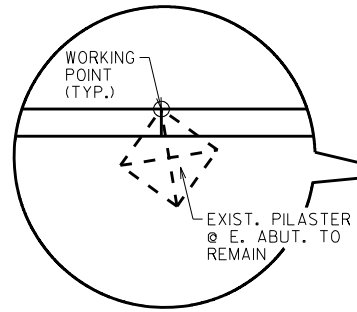
▲ DIMENSION TO FACE OF BACKWALL ALONG INSIDE FACE OF PARAPET.

■ DIMENSION TO FACE OF ABUT. BACKWALL ALONG OUTSIDE FACE OF PARAPET.

⊗ EXIST. SLAB - PARAPET REINF. TO REMAIN & INCORPORATE INTO NEW PARAPET.

⦿ TO FACILITATE RESETTING EXIST. DECORATIVE FENCE, FIELD VERIFY DECORATIVE FENCE & ARCHED PARAPET DIMENSIONS PRIOR TO REMOVAL.

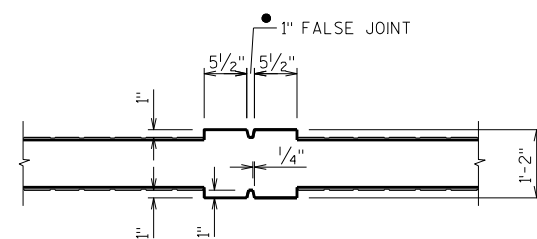
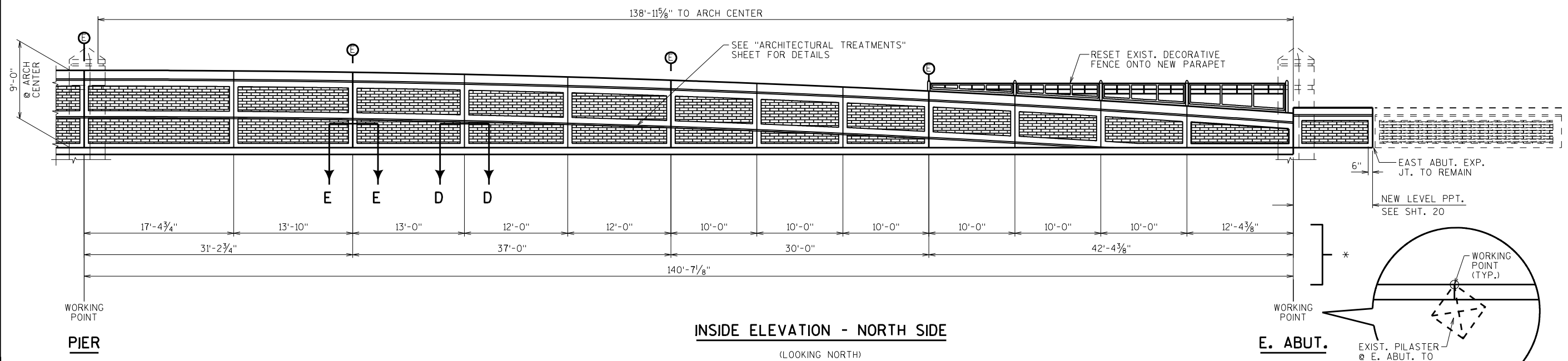
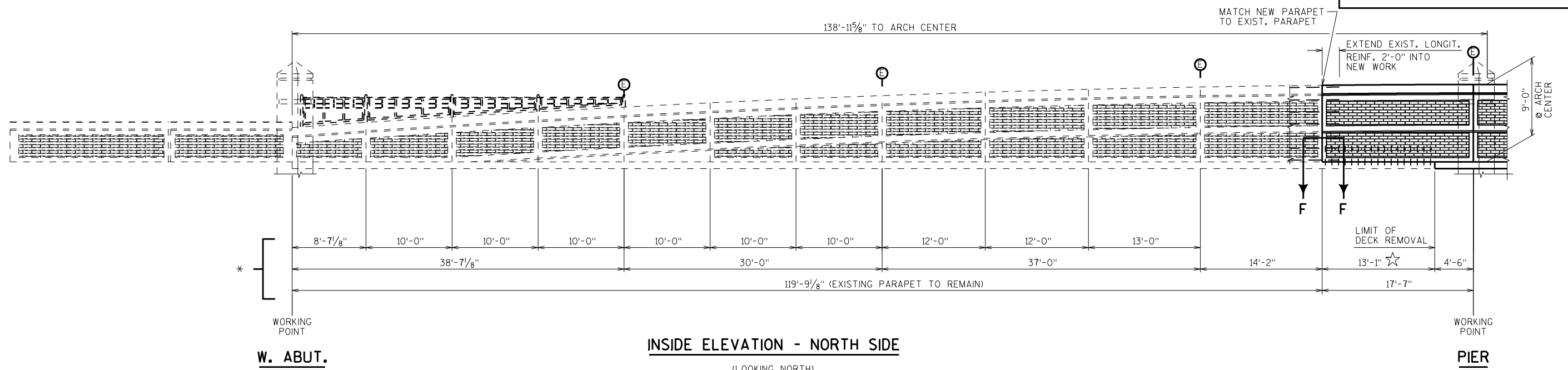
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-05-600			
DRAWN BY CRJ		PLANS CK'D. SDR	
NORTH EXTERIOR PARAPET ELEVATION REMOVAL		SHEET 22	



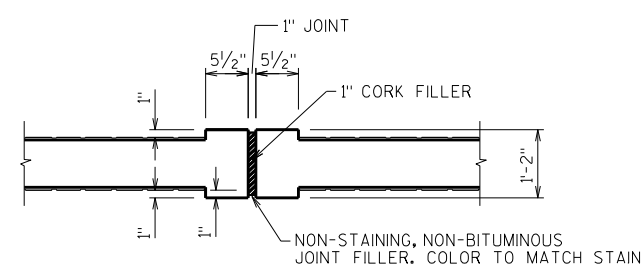
(LOOKING SOUTH)

W. ABUT.

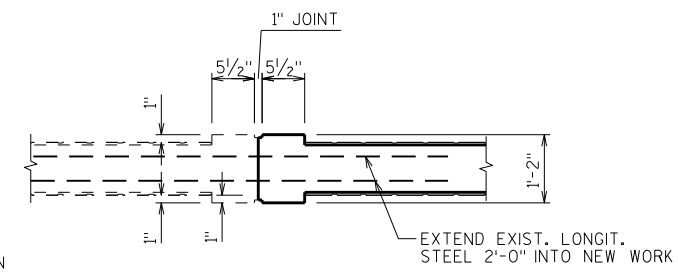
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-05-600			
		DRAWN BY	ARC PLANS CK'D. SDR
NEW NORTH EXTERIOR PARAPET OUTSIDE ELEVATION		SHEET 23	



SECTION D-D



SECTION E-E



SECTION F-F

LEGEND

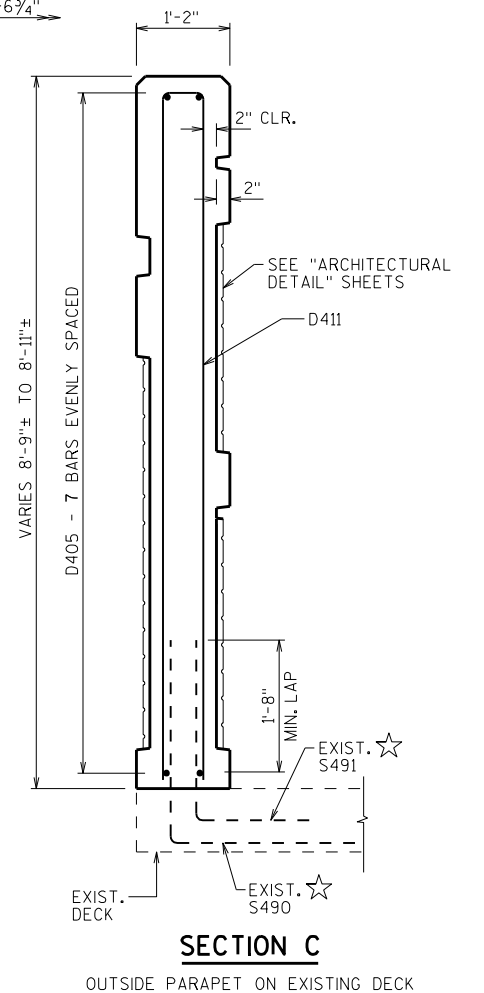
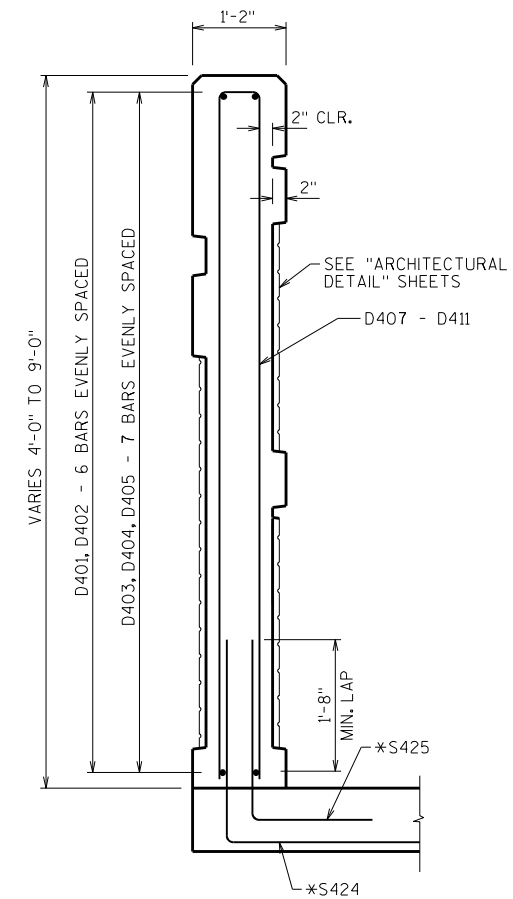
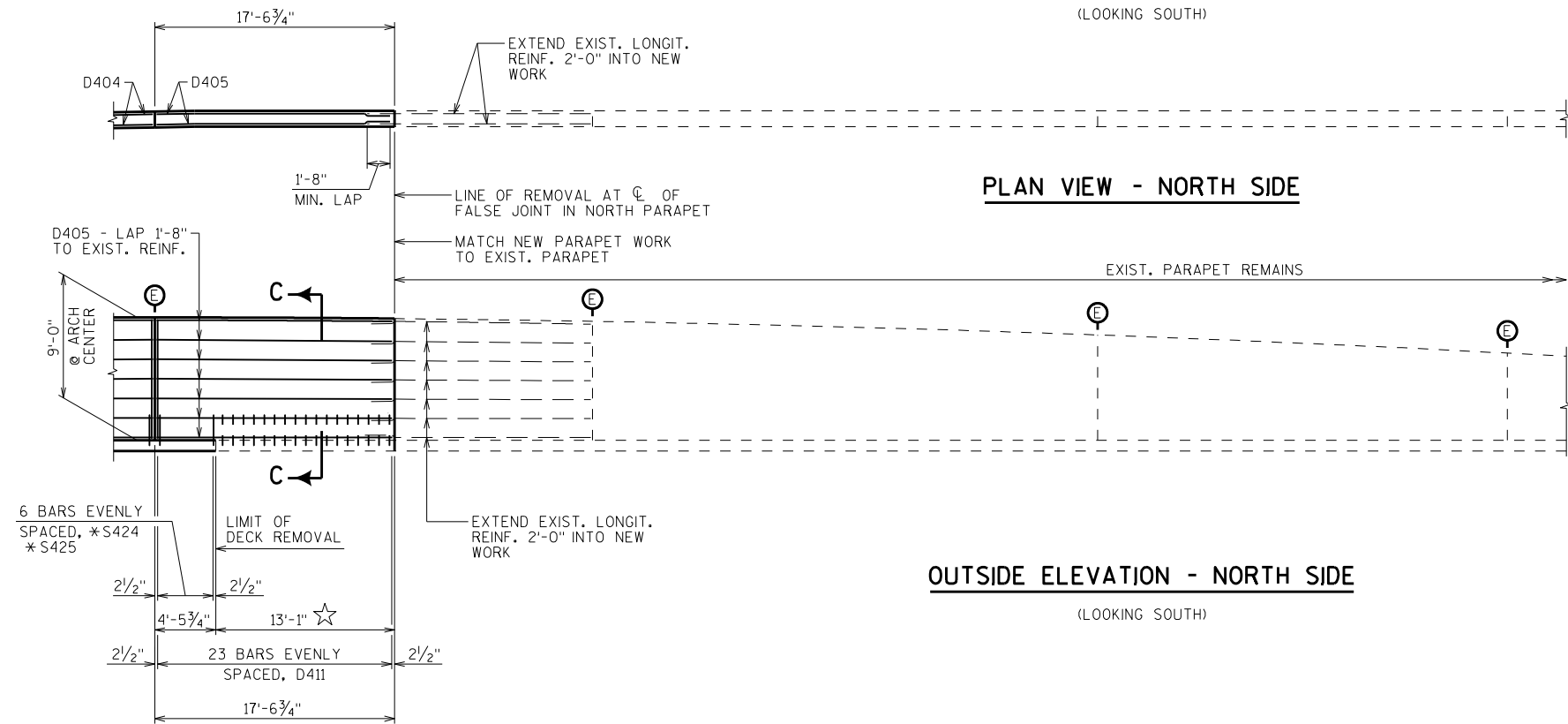
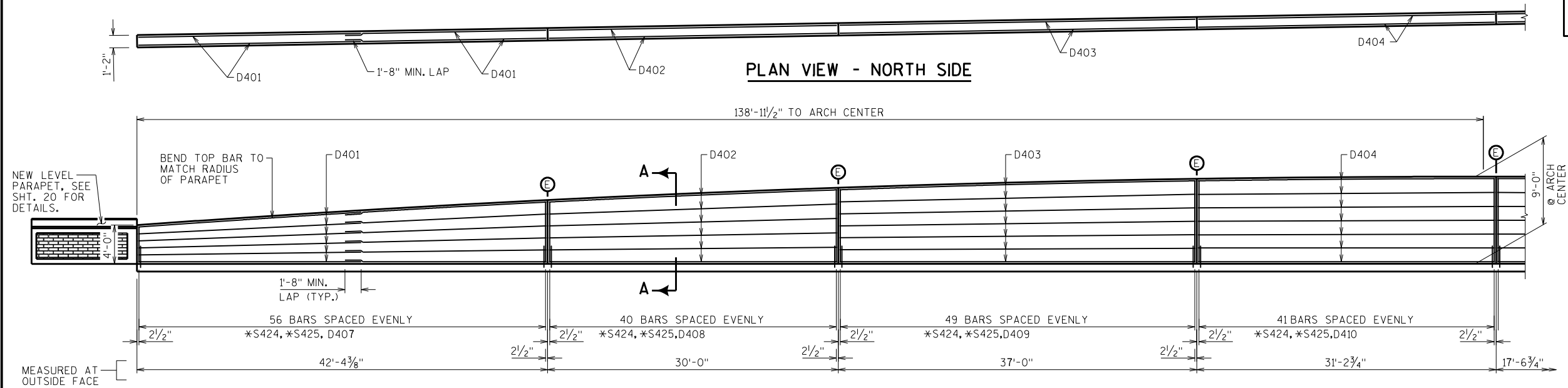
E EXPANSION JOINT

* DIMENSIONS ARE MEASURED PARALLEL TO DECK EDGE.

• FALSE JOINT MAY BE OFFSET BETWEEN INSIDE & OUTSIDE FACES. FOLLOW LAYOUT SHOWN ON ELEVATIONS.

☆ SALVAGE & INCORPORATE EXIST. SLAB-PARAPET REINF. INTO NEW WORK.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-05-600			
DRAWN BY		ARC	PLANS CK'D. SDR
NEW NORTH EXTERIOR PARAPET INSIDE ELEVATION			SHEET 24

**LEGEND**

- * THESE BARS ARE INCLUDED IN THE SUPERSTRUCTURE BILL OF BARS.
- ☆ SALVAGE & INCORPORATE EXIST. SLAB-PARAPET REINF. INTO NEW WORK.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-05-600			
DRAWN BY CRJ		PLANS CK'D. SDR	
NORTH EXTERIOR PARAPET LAYOUT & REINFORCEMENT			SHEET 25

BILL OF BARS - NORTH

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
D401	X	24	21'-11"			LONG. EXT. PARAPET
D402	X	12	29'-7"			LONG. EXT. PARAPET
D403	X	14	36'-7"			LONG. EXT. PARAPET
D404	X	14	30'-9"			LONG. EXT. PARAPET
D405	X	14	17'-2"			LONG. EXT. PARAPET
D406	X					NOT USED
D407	X	56	10'-2"	X	▲	PARAPET STIRRUPS
D408	X	40	13'-11"	X	▲	PARAPET STIRRUPS
D409	X	49	16'-1"	X	▲	PARAPET STIRRUPS
D410	X	41	17'-3"	X	▲	PARAPET STIRRUPS
D411	X	23	17'-2"	X	▲	PARAPET STIRRUPS
D412	X					NOT USED
D413	X					NOT USED
D414	X					NOT USED
D420	X					NOT USED
D421	X					NOT USED
D422	X	4	9'-1"			LONG. EXT. LEVEL PARAPET
D423	X	4	9'-11"			LONG. EXT. LEVEL PARAPET
D424	X	13	9'-0"	X		EXT. LEVEL PARAPET STIRRUPS
D425	X	1	9'-2"	X		EXT. LEVEL PARAPET STIRRUPS
D426	X	1	9'-4"	X		EXT. LEVEL PARAPET STIRRUPS

▲ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

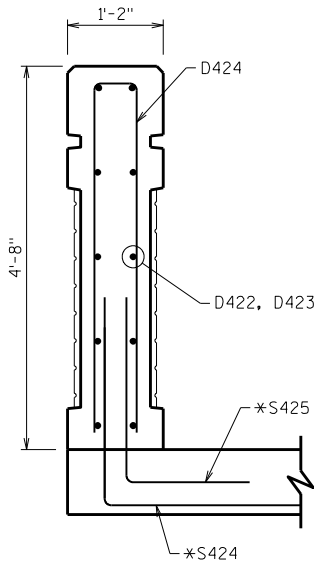
BAR SERIES - NORTH

MARK	NO. REQ'D.	"A"	LENGTH
D407	1 SERIES OF 56	3'-8" TO 6'-2"	7'-8" TO 12'-8"
D408	1 SERIES OF 40	6'-2" TO 7'-5"	12'-8" TO 15'-2"
D409	1 SERIES OF 49	7'-5" TO 8'-4"	15'-2" TO 17'-0"
D410	1 SERIES OF 41	8'-4" TO 8'-7"	17'-0" TO 17'-6"
D411	1 SERIES OF 23	8'-5" TO 8'-7"	17'-2" TO 17'-6"

BUNDLE & TAG EACH SERIES SEPARATELY.

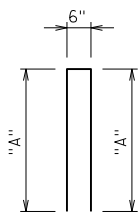
NOTE

* THESE BARS ARE INCLUDED IN THE SUPERSTRUCTURE BILL OF BARS ON SHT. 6.

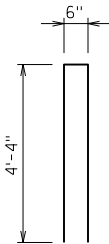


SECTION B

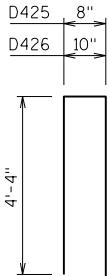
EXTERIOR LEVEL PARAPET ON BRIDGE
SEE SHT. 20 FOR ELEVATION & PLAN VIEWS



D407 - D411

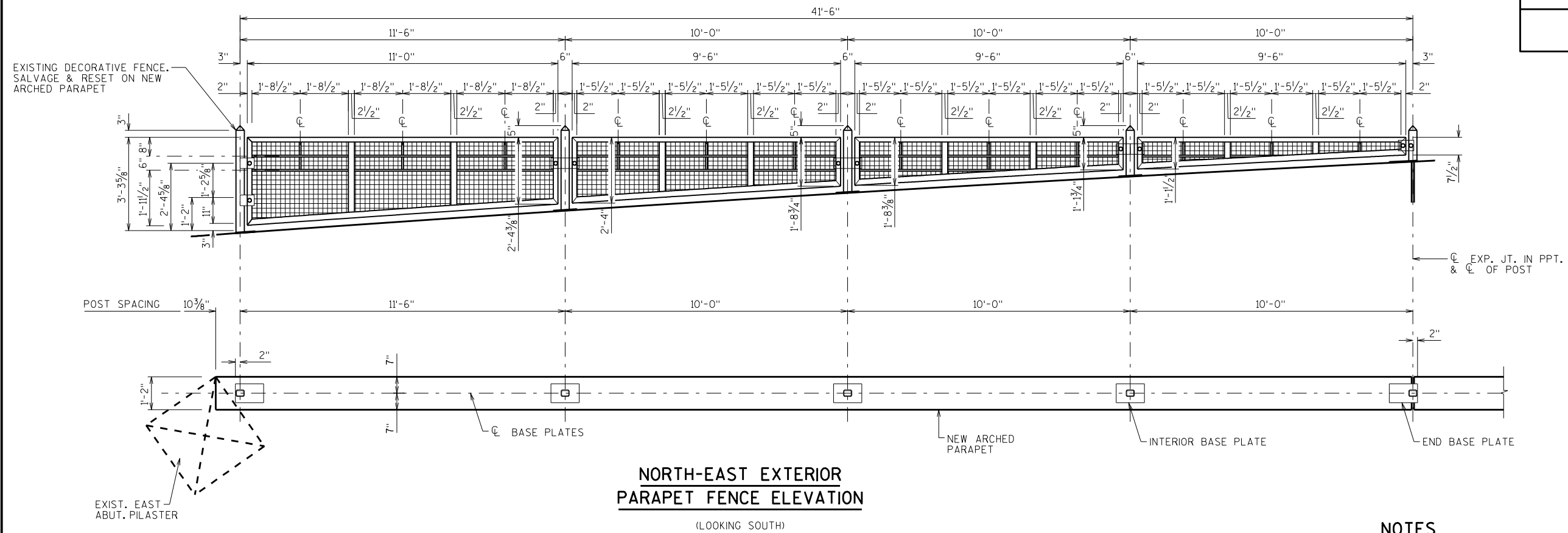


D424



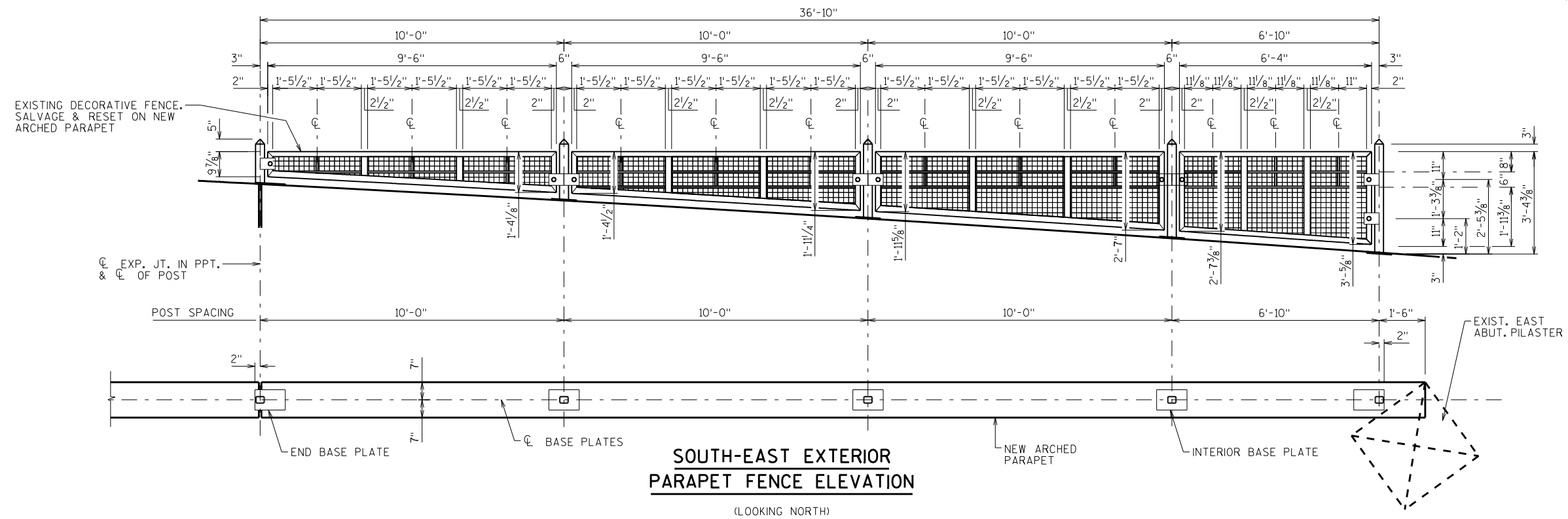
D425, D426

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-05-600			
DRAWN BY		ARC	PLANS CK'D. SDR
NORTH EXTERIOR PARAPET DETAILS			SHEET 26

**NOTES**

DIMENSIONS SHOWN ARE FROM ORIGINAL STRUCTURE PLAN. CONTRACTOR TO FIELD VERIFY DIMENSIONS. EXERCISE CARE DURING REMOVAL & RESETTING OF FENCE, SO AS TO NOT DAMAGE THE COATING SURFACE. IF DAMAGE OCCURS TO COATING SURFACE, REPAIR THE FINISH IN ACCORDANCE WITH THE ORIGINAL MANUFACTURER'S RECOMMENDATIONS.

RESET EXISTING DECORATIVE FENCE ON NEW ARCHED PARAPET. SUPPLY NEW 5/8" ϕ CONCRETE MASONRY EPOXY ANCHORS, TYPE S. (2 PER POST)



NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-05-600			
		DRAWN BY	CRJ
		PLANS CK'D.	SDR
EXISTING DECORATIVE FENCE ELEVATION		SHEET 27	

LEGEND OF EXISTING FENCE ELEMENTS

- ① HSS $3\frac{1}{2}$ X $3\frac{1}{2}$ X $\frac{3}{16}$ POST.
- ② HSS $2\frac{1}{2}$ X 2 X $\frac{3}{16}$.
- ③ PL $2\frac{1}{4}$ X $\frac{1}{4}$ WELDED FRAME. BOLT TO NO. 2 WITH NO. 8.
- ④ STEEL MESH 2 X 2 X 0.162 (8 GA.).
- ⑤ PL $\frac{1}{4}$ X WIDTH VARIES.
- ⑧ $\frac{1}{2}$ " DIA. CARRIAGE BOLT, WASHER & NUT.
- ⑪ PL $\frac{5}{16}$ X $4\frac{1}{2}$ X $0'-6"$ CONNECTION WITH 2 " DIA. HOLE FOR NO. 8. USE NO. 12 TO COVER 2 " DIA. ADJUSTMENT HOLES.
- ⑫ PL $\frac{3}{8}$ X 2 X $4\frac{1}{2}$.
- ⑬ PL WASHER $\frac{1}{4}$ X $\frac{3}{2}$ X $\frac{3}{2}$.
- ⑭ PL $\frac{1}{2}$ X 8 X 10 " BASE PLATE. WELDED TO NO. 1.
- ⑮ PL $\frac{1}{2}$ X 8 X $1'-0"$ BASE PLATE. WELDED TO NO. 1.

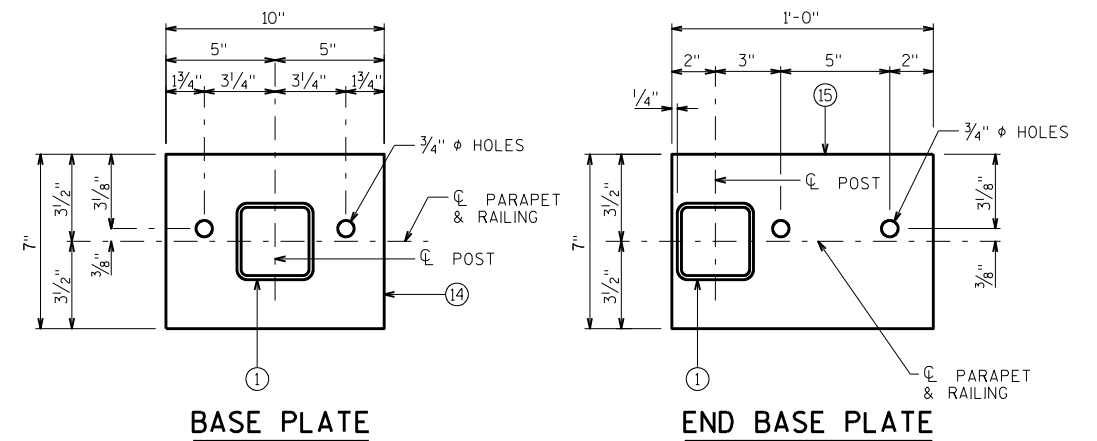
* THE DIMENSION BETWEEN THE BOTTOM OF THE WELDED FRAME AND THE TOP OF THE PARAPET VARIES DUE TO THE VERTICAL PROFILE OF THE STRUCTURE. SET THIS DIMENSION TO 3 " ADJACENT TO THE POST WHERE NO. 5 HAS THE SMALLEST VERTICAL DIMENSION.

▲ $11"$ TYPICAL. PLACE ONE @ MID HEIGHT WHEN PANEL DEPTH < $3'-0"$.

CL OF END POST

END POST

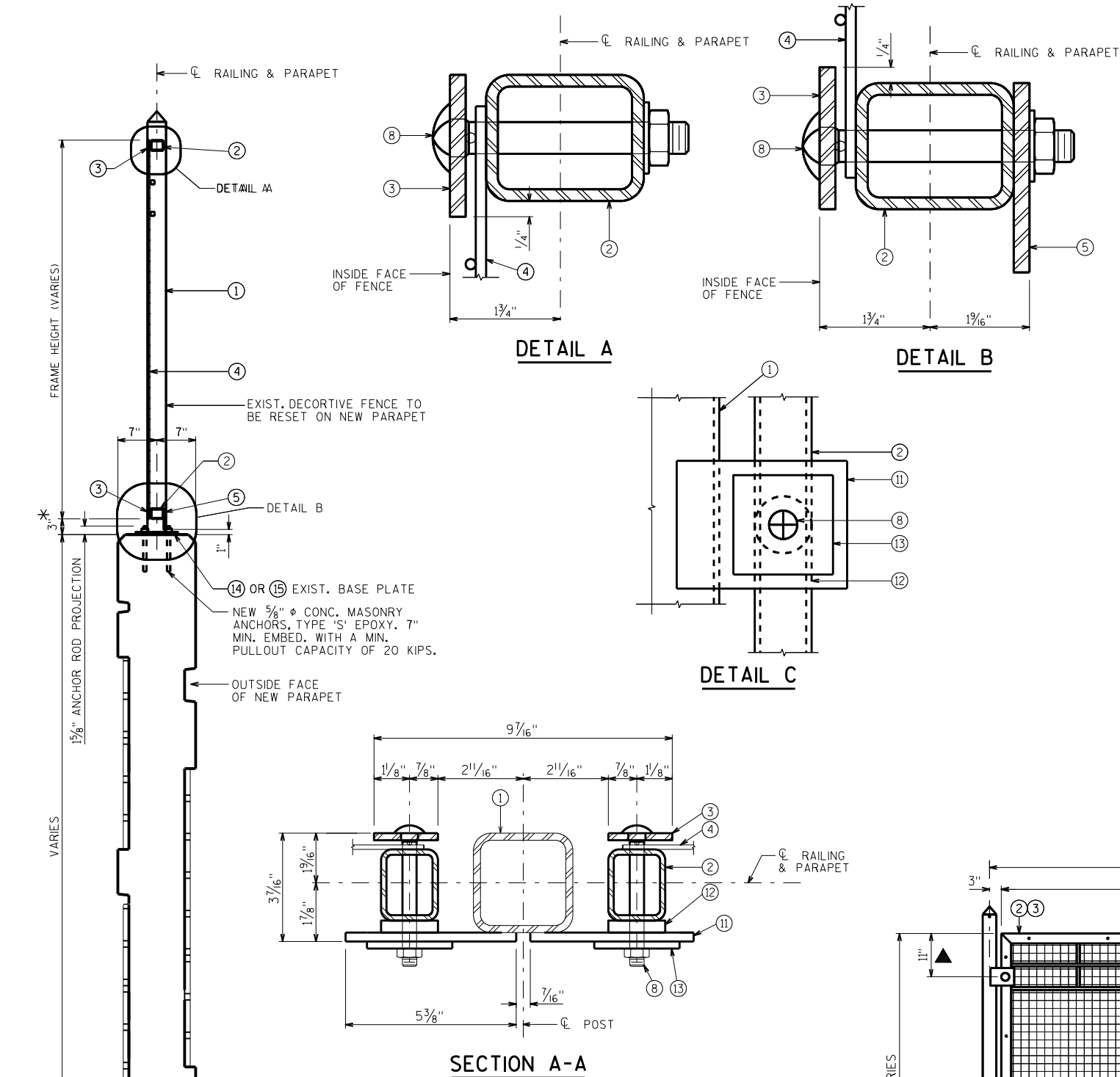
DETAIL @ EXP. JOINT



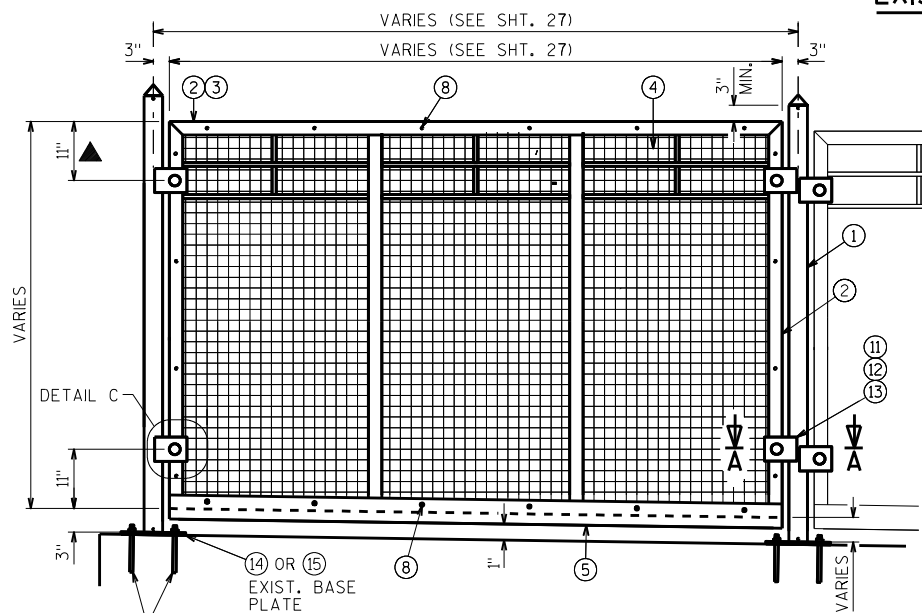
BASE PLATE

END BASE PLATE

EXISTING BASE PLATE DETAILS



SECTION A-A



OUTSIDE ELEVATION OF EXIST. PANEL

NEW $\frac{5}{8}$ " ϕ CONC. MASONRY ANCHORS, TYPE 'S' EPOXY. 7 " MIN. EMBED. WITH A MIN. PULLOUT CAPACITY OF 20 KIPS. (TYP.)

NOTES

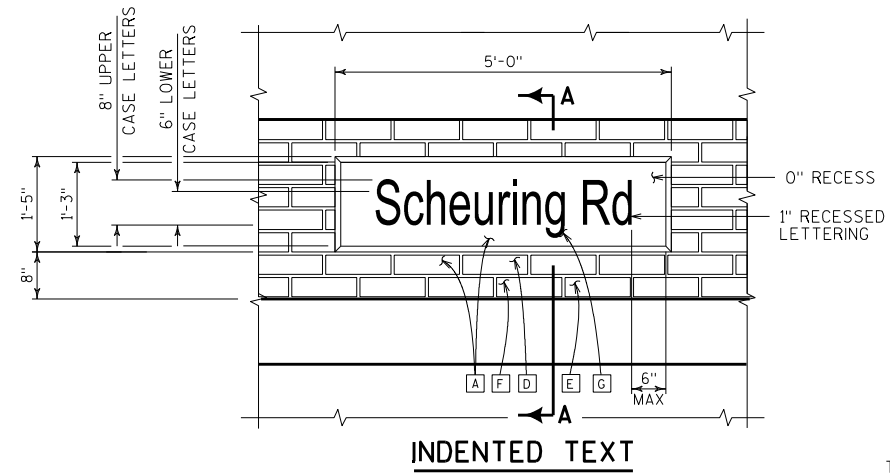
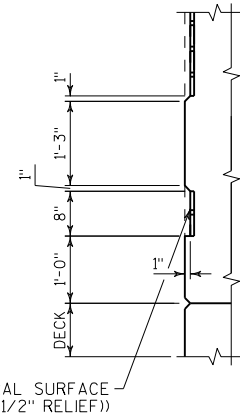
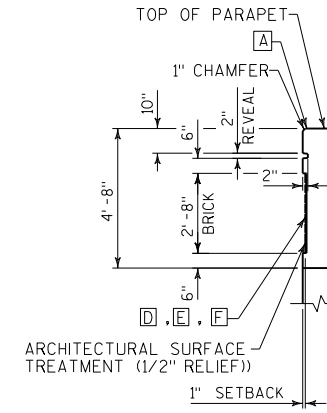
DIMENSIONS ARE FROM ORIGINAL STRUCTURE PLANS. CONTRACTOR TO FIELD VERIFY.

CAULK AROUND PERIMETER OF BASE PLATES AND FILL PORTION OF HOLES AROUND ANCHOR BOLTS WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER (COLOR TO MATCH CONCRETE STAIN).

STANDARD WASHERS SHALL BE USED TO SHIM BASE PLATES IF REQUIRED. ALL WASHERS SHALL BE GALVANIZED.

SECTION THRU PARAPET

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-05-600			
DRAWN BY CRJ		PLANS CKD. SDR	
EXISTING DECORATIVE FENCE DETAILS		SHEET 28	

**INDENTED TEXT**(OUTSIDE FACE OF EXTERIOR
PARAPET @ SE LOCATION)ARCHITECTURAL SURFACE
TREATMENT (1/2" RELIEF)**SECTION A-A****SECTION B-B****CONCRETE STAINING SCHEDULE**

MARK	COLOR	LOCATION
[A]	BASE COLOR	BRIDGES, PARAPETS, WALLS
[B]	ACCENT COLOR #1	REVEALS, OUTSIDE OF CONC. GIRDER
[D]	ACCENT COLOR #3	BRICK COLOR (70% OF BRICK)
[E]	ACCENT COLOR #4	BRICK COLOR (15% OF BRICK)
[F]	ACCENT COLOR #5	BRICK COLOR (15% OF BRICK)
[G]	ACCENT COLOR #6	LETTERING AT ROADWAY NAME

SEE SPECIAL PROVISIONS FOR STAIN COLORS.

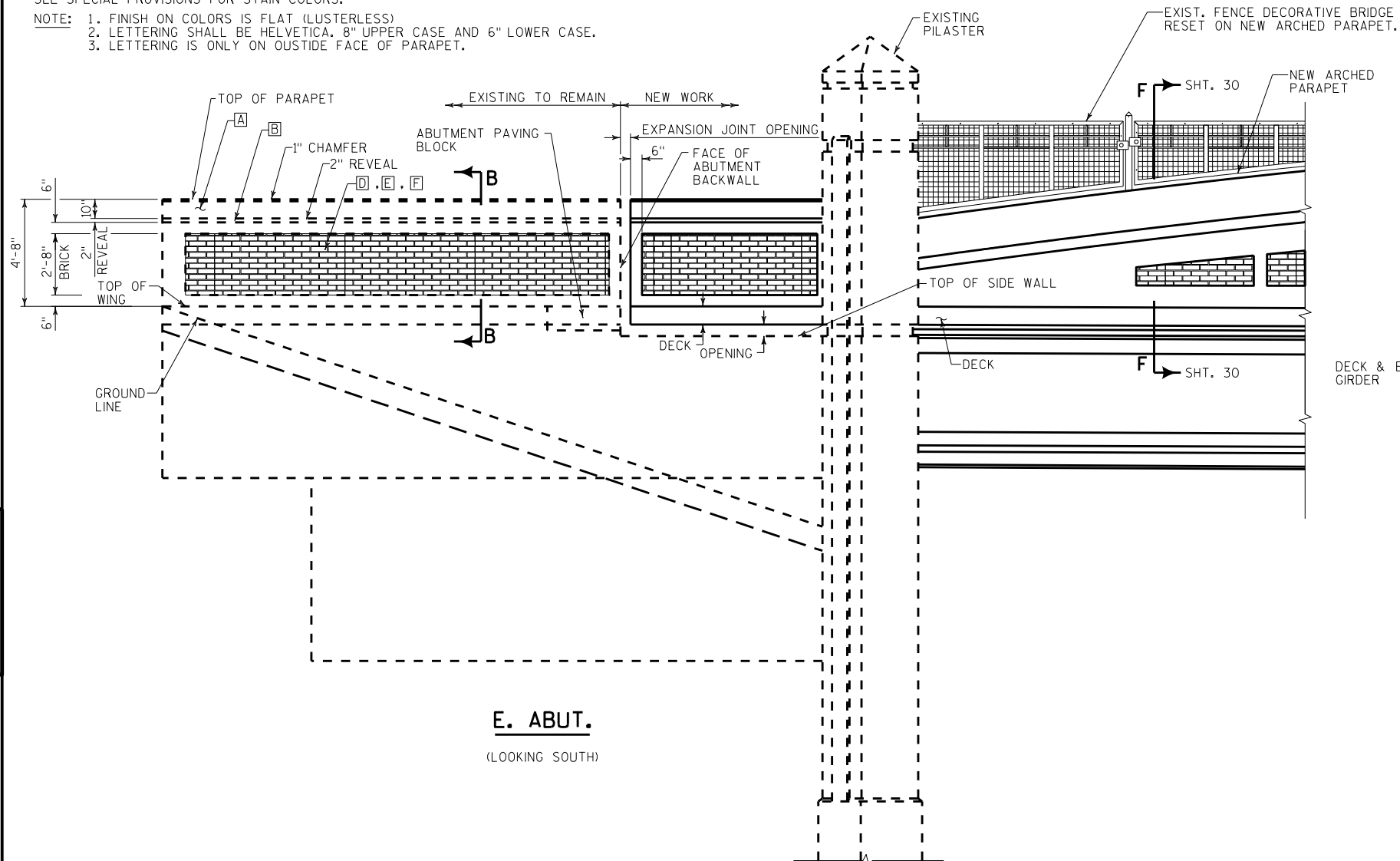
NOTE: 1. FINISH ON COLORS IS FLAT (LUSTERLESS)
2. LETTERING SHALL BE HELVETICA. 8" UPPER CASE AND 6" LOWER CASE.
3. LETTERING IS ONLY ON OUTSIDE FACE OF PARAPET.

NOTES:

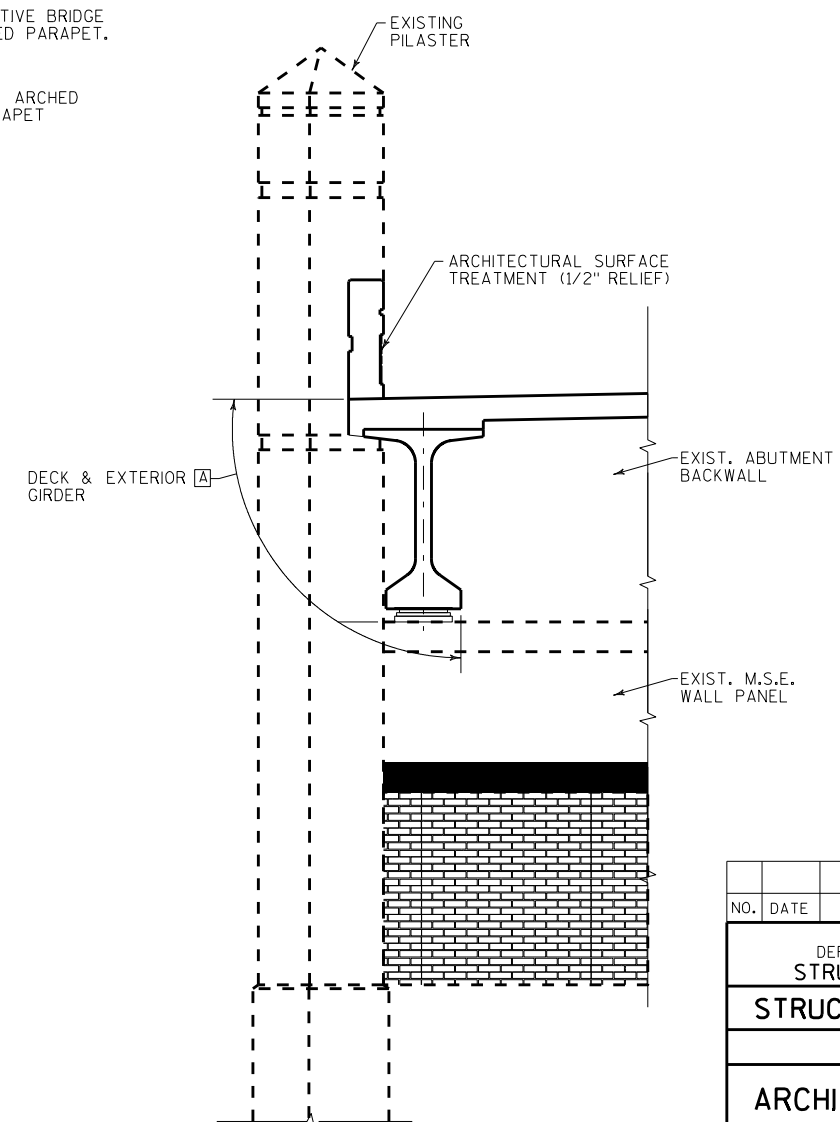
LETTERING SHALL BE HELVETICA. 8" UPPER CASE AND 6" LOWER CASE.

LETTERING IS ONLY ON OUTSIDE FACE OF PARAPET.

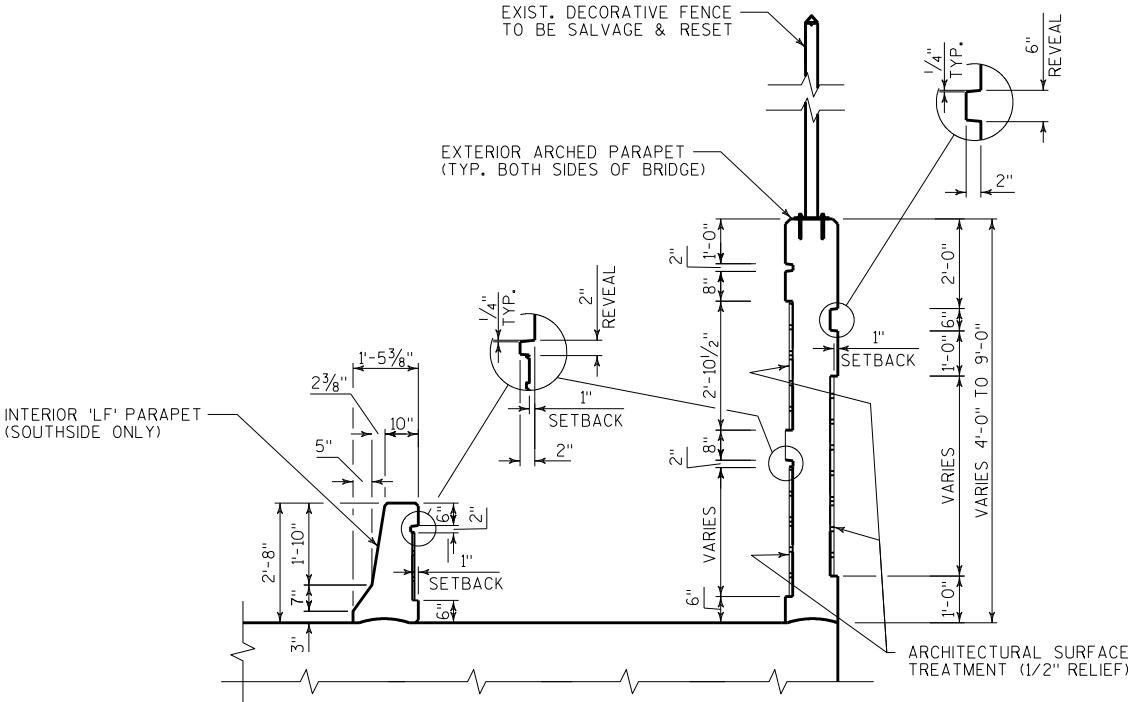
STAIN ALL BRICK PATTERN AREAS WITH BASE COLOR PRIOR TO STAINING WITH THE THREE BRICK ACCENT COLORS. APPLICATION OF ALL FOUR STAIN COLORS AT BRICK PATTERN AREAS PAID FOR AS "STAINING CONCRETE BRICK."

**E. ABUT.**

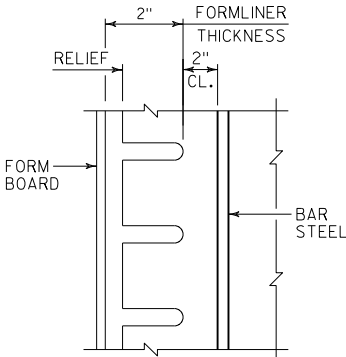
(LOOKING SOUTH)



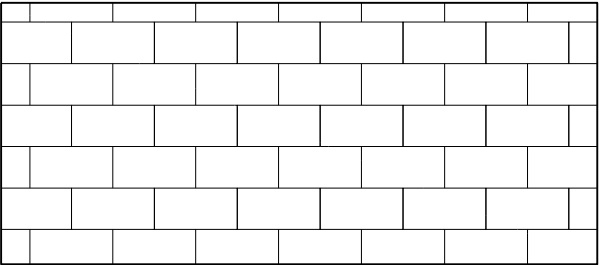
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-05-600			
DRAWN BY CRJ		PLANS CK'D. SDR	
ARCHITECTURAL DETAILS - 1		SHEET 29	



SECTION F-F



SECTION THRU FORMLINER



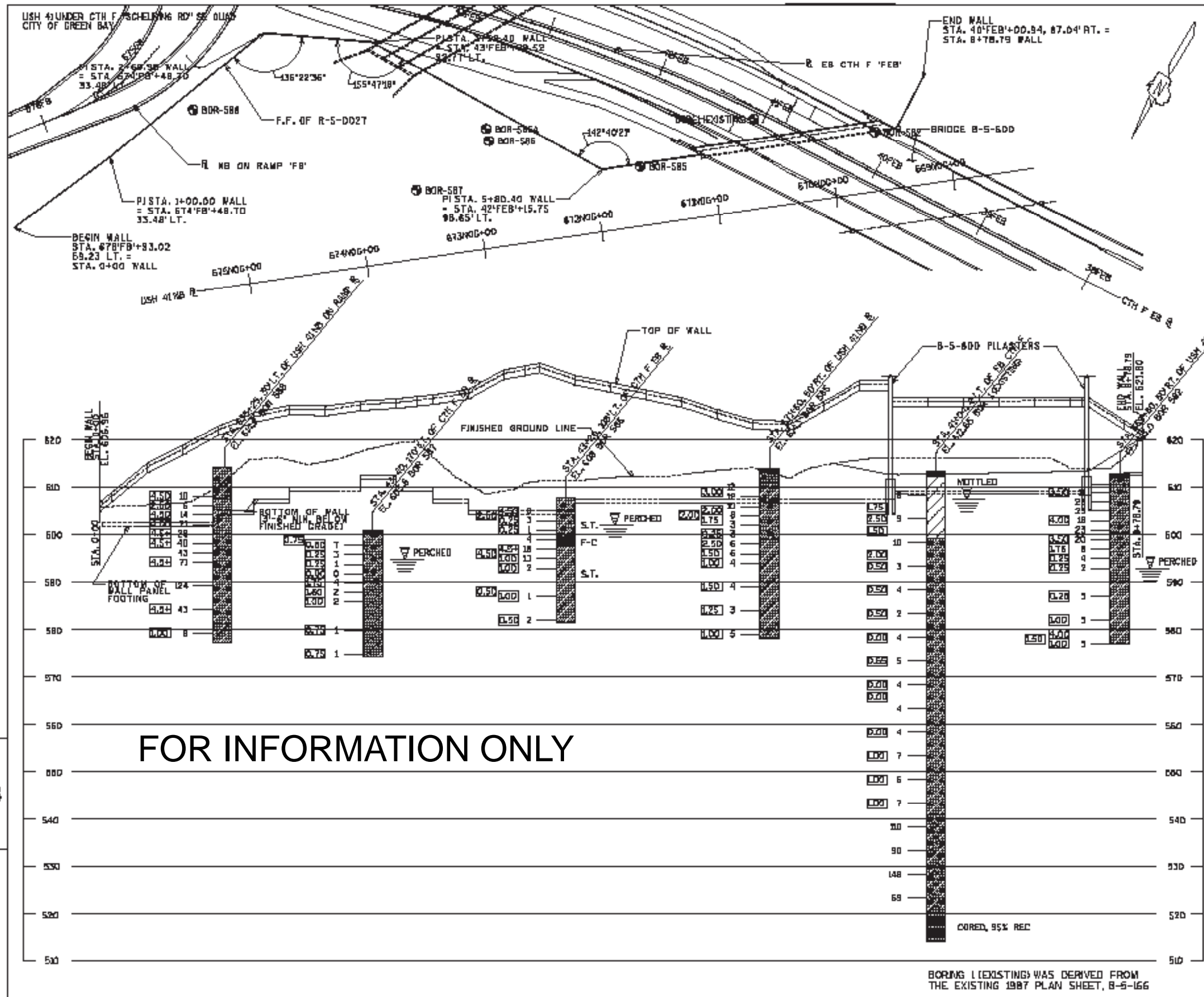
ARCHITECTURAL SURFACE TREATMENT RECTANGULAR BRICK

SIZE = 2 1/4" TO 2 3/8" X 7 5/8" TO 8"
RELIEF = 1/2"

PARAPET NOTES

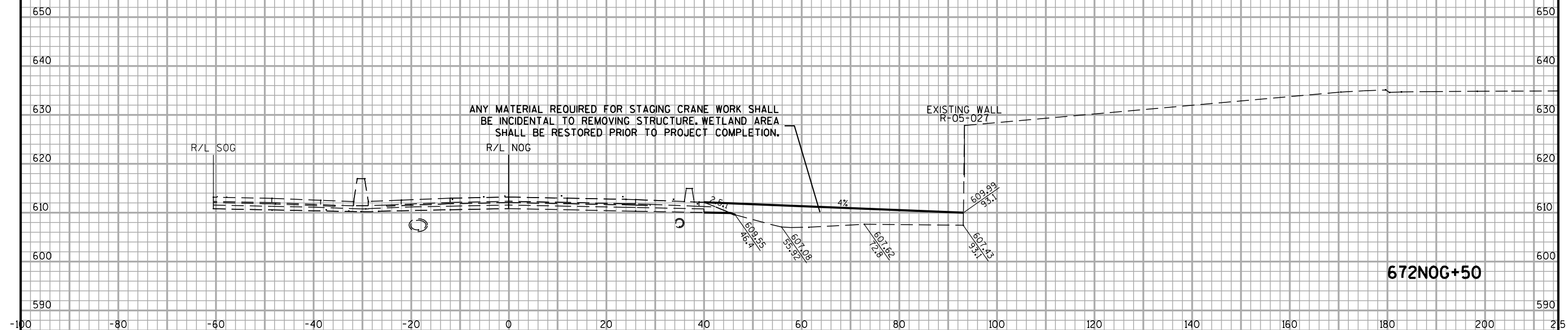
FORMLINER COURSING ON PARAPETS SHALL BE LEVEL.
FORMLINER SHOULD MATCH THE REST OF THE BRIDGE.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-05-600			
DRAWN BY		CRJ	PLANS CK'D. SDR
ARCHITECTURAL DETAILS - 2			SHEET 30



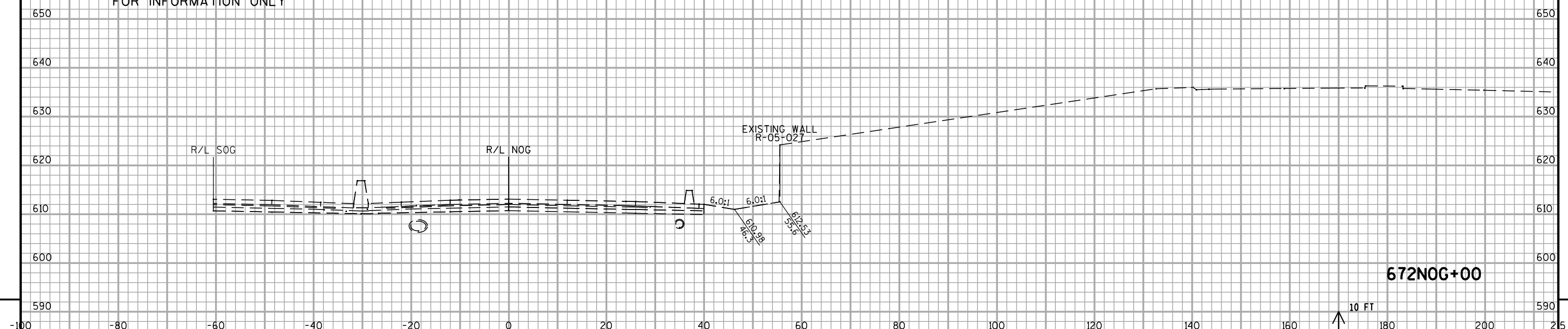
STATE PROJECT NUMBER		
1133-06-72		
ABBREVIATIONS		
F—FINE	M—MEDIUM	C—COARSE
WS—WEATHERED	SD—SOUND	
MATERIAL SYMBOLS		
TOPSOIL	SILT	SANDSTONE
SAND	PEAT	LIMESTONE
GRAVEL	CLAY	IGNEOUS ROCK
LEGEND OF PROBING		
PROBING NO. STA. ELEVATION		
75/6-95 BLOWS FOR 0' PENETRATION PROBING TAKEN WITH A 350# WT. FALLING 18" ON A 2" O.D. POINT.		
7 AVERAGE BLOWS PER FOOT		
REFUSAL 95/6		
LEGEND OF BORING		
BORING NO. STA. ELEV.		
UNCONFINED STRENGTH → 7.7		
BLOWS PER FT. USING 140# WT. FALLING 30"		
WASH SAMPLE		
SHELBY TUBE — S.T.		
GROUND WATER ELEVATION		
NO GROUND WATER OBSERVED ABOVE THIS ELEVATION		
UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 14" L.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.		
SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION		
TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.		
NO. DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION		
STRUCTURE R-5-27		
CONTR. SPEC. 2010	DESIGN BY	PR PLANS DES. BH
SUBSURFACE EXPLORATION		SHEET 8 OF 8

FOR INFORMATION ONLY



672NOG+50

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672NOG+00

STA 672NOG+00 TO 672NOG+50

PROJECT NO: 1130-45-60

HWY: USH 41

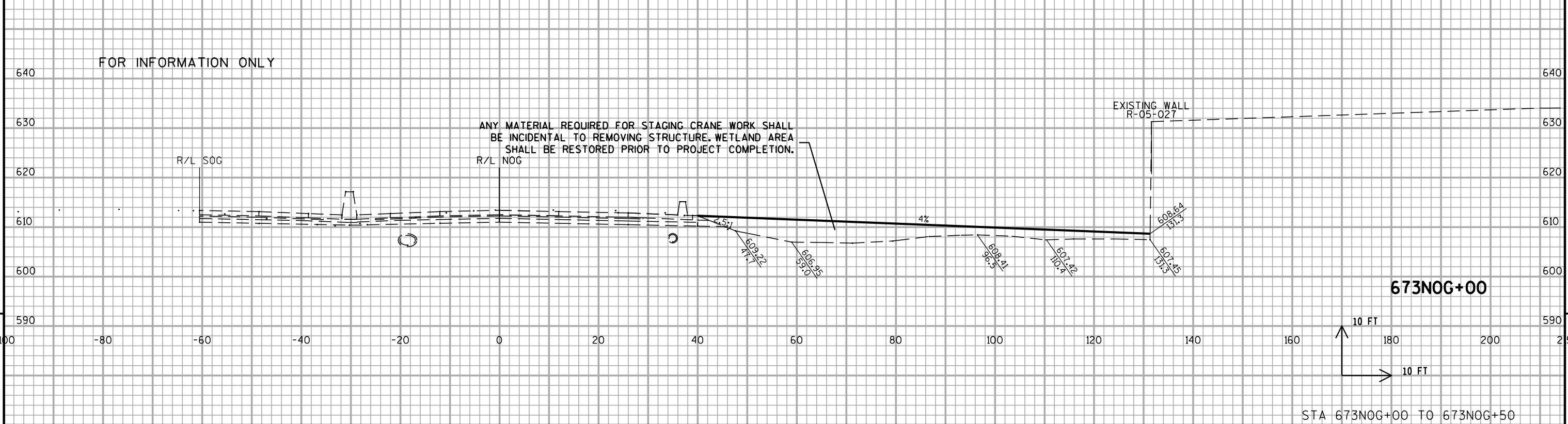
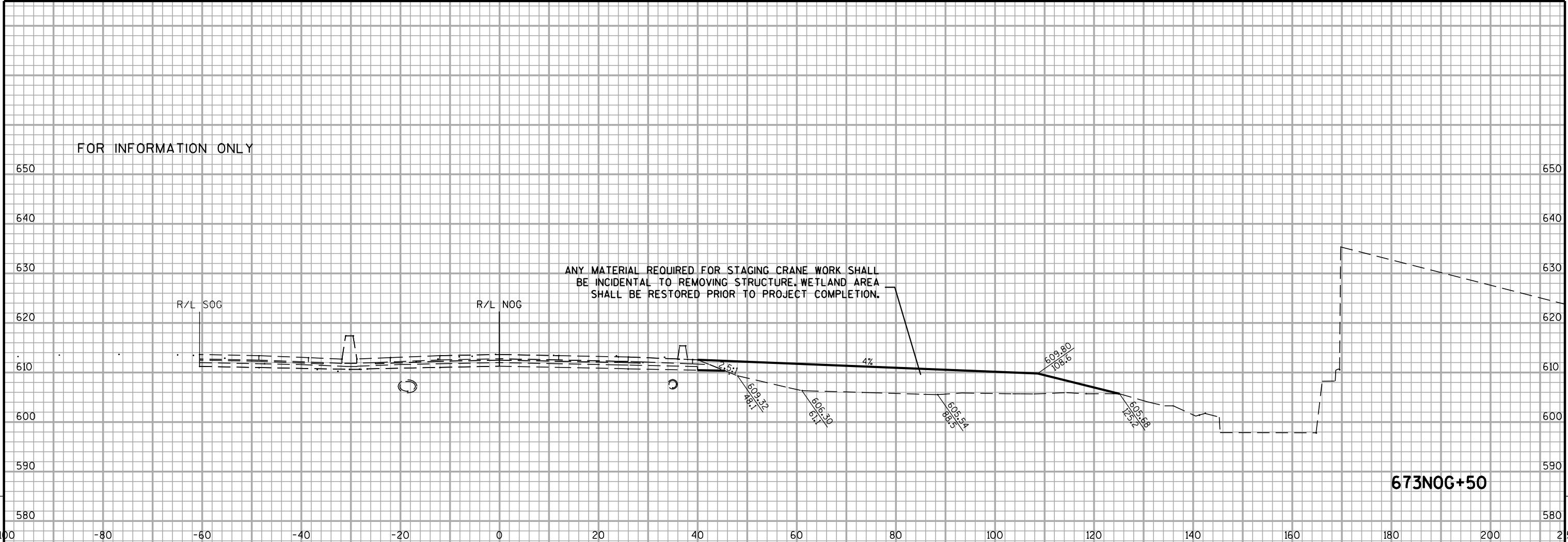
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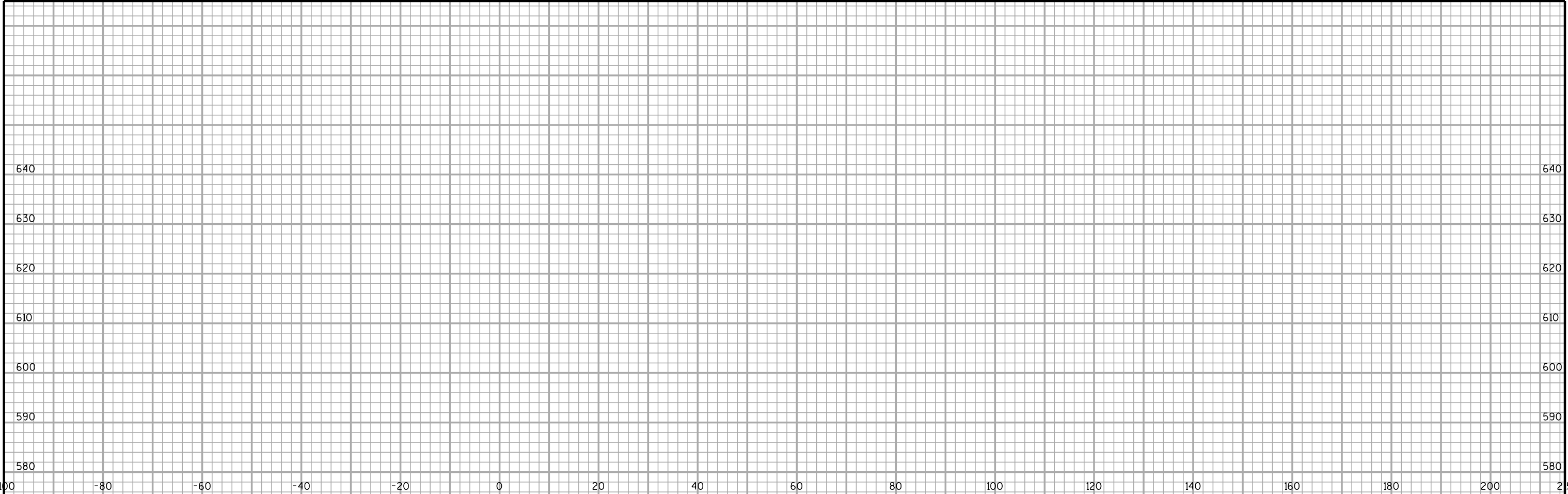
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CROSS SECTIONS: USH 41NB - TEMPORARY FILL

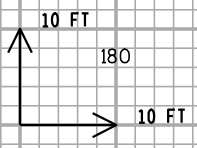
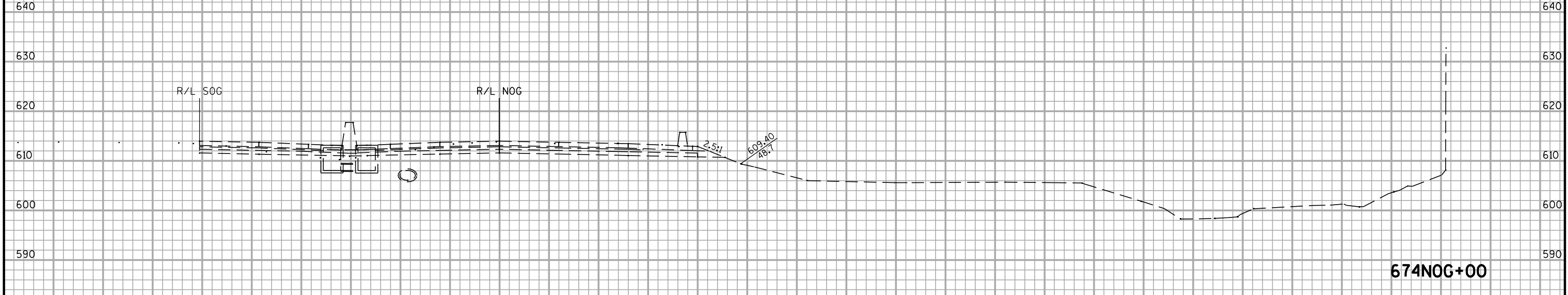
SHEET

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Notes



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