

GRE

NOVEMBER 2017

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
<del>Section No.</del>	<del>4</del>	<del>Right of Way Plat</del>
Section No.	5	Plan and Profile
Section No.	6	Standard Detail Drawings
Section No.	7	Sign Plates
Section No.	8	Structure Plans
<del>Section No.</del>	<del>9</del>	<del>Computer Earthwork Data</del>
<del>Section No.</del>	<del>9</del>	<del>Cross Sections</del>

TOTAL SHEETS = 42



DESIGN DESIGNATION

A.A.D.T.	2015	=	61900
A.A.D.T.	2028	=	65900
D.H.V.		=	8390
D.D.		=	57/43
T.		=	13.6%
DESIGN SPEED		=	70 MPH
ESALS		=	

CONVENTIONAL SYMBOLS

PLAN

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

PROFILE

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

# STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

APPLETON - KAUKAUNA

CAPITOL DRIVE OVERPASS

IH 41

OUTAGAMIE

STATE PROJECT NUMBER

1120-60-71

APPLETON - GREEN BAY

WCL RR/ MALONEY RD BRIDGES

IH - 41

OUTAGAMIE

STATE PROJECT NUMBER

1130-49-71

WAUPACA - APPLETON

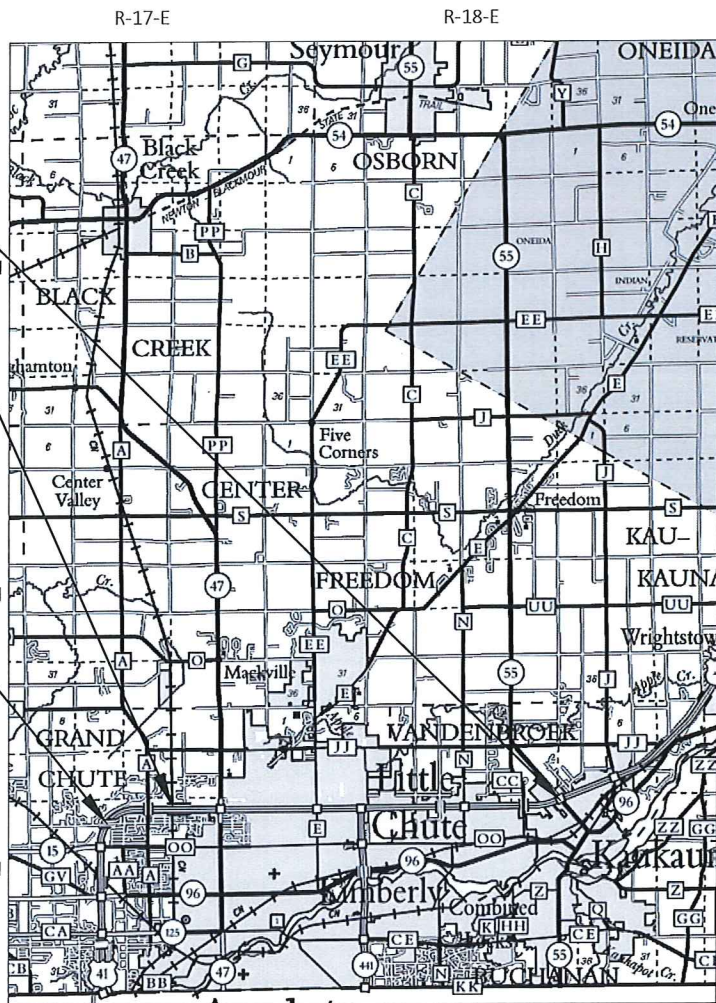
DALE ROAD OVERPASS

USH 10

WINNEBAGO

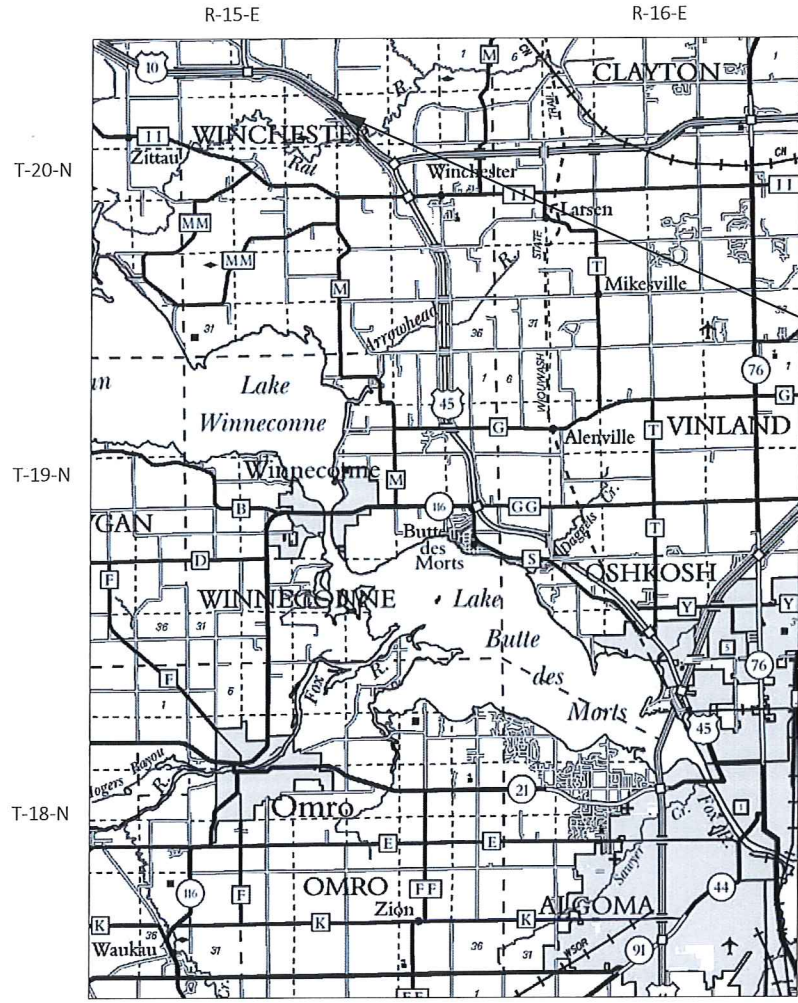
STATE PROJECT NUMBER

1517-13-71



SCALE 0 4 MILE

TOTAL NET LENGTH OF CENTERLINE = 0.000



STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

PREPARED BY	
Surveyor	NORTHEAST REGION
Designer	MASON SIMMONS
Project Manager	TIM RANK
Regional Examiner	---
Regional Supervisor	CHARLES KAROW

APPROVED FOR THE DEPARTMENT

DATE: 4/22/17 (Signature)

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DNR AREA LIAISON

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2984 SHAWANO AVE  
GREEN BAY, WI 54303  
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2984 SHAWANO AVE  
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COUNTY SURVEYOR OR SURVEYS CONTACT PERSON

CORMAC MCINNIS  
NORTHEAST REGIONAL SURVEY COORDINATOR  
944 VANDERPERREN WAY  
GREEN BAY, WI 54304  
PHONE: 920-492-5638  
EMAIL: CORMAC.MCINNIS@DOT.WI.GOV

GENERAL NOTES

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

UTILITIES

ERIC MILLER  
KAUKAUNA UTILITIES - ELECTRICITY  
777 ISLAND STREET  
PO BOX 1777  
KAUKAUNA, WI 54130 -7077  
(920) 462-0214  
EMILLER@KU-WI.ORG

JOSEPH KASSAB  
AT&T WISCONSIN - COMMUNICATIONS LINE  
221 WEST WASHINGTON ST.  
APPLETON, WI 54911-4742  
(920) 735-3206  
JK572K@ATT.COM

KEVIN OBIALA  
KAUKAUNA UTILITIES - WATER  
777 ISLAND ST  
PO BOX 1777  
KAUKAUNA, WI 54130-7077  
(920) 462-0233  
KOBIALA@KU-WI.ORG

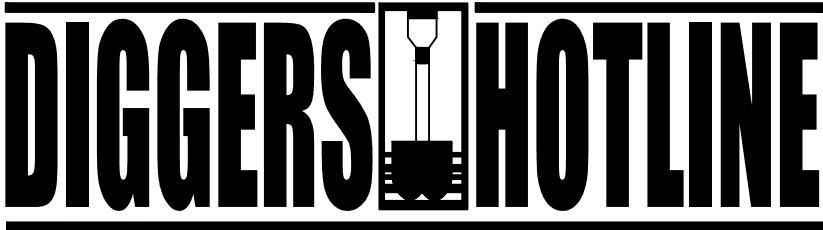
STEVE JAKUBIEC  
TDS METROCOM - COMMUNICATION LINE  
10 COLLEGE AVE. SUITE 218A  
APPLETON, WI 54911  
(920) 882-4166  
STEVE.JAKUBIEC@TDSTELECOM.COM

VINCENT ALBIN  
TIME WARNER CABLE - COMMUNICATION  
LINE  
3520 E DESTINATION DR.  
APPLETON, WI 54915  
(920) 831-9249  
VINCE.ALBIN@TWCABLE.COM

KEN VAN OSS  
WE ENERGIES - ELECTRICITY  
333 WEST EVERETT ST, ROOM A299  
MILWAUKEE, WI 53203  
(920) 380-3318  
KENNETH.VAN-OSS@WE-ENERGIES.COM

HEATHER DEUTH  
WE ENERGIES - GAS/PETROLEUM  
333 WEST EVERETT ST, ROOM A299  
MILWAUKEE, WI 53203  
(920) 242-5633  
HEATHER.DEUTH@WE-ENERGIES.COM

BYRON WALLESER  
WISCONSIN PUBLIC SERVICE CORPORATION -  
ELECTRICITY  
3300 N. MAIN ST  
OSHKOSH, WI 54901  
(920) 236-5912  
BEWALLESER@WISCONSINPUBLICSERVICE.COM



Dial  or (800)242-8511  
[www.DiggersHotline.com](http://www.DiggersHotline.com)

PROJECT NO:	1120-60-71	HWY:	IH 41	COUNTY:	OUTAGAMIE/WINNEBAGO	PLAN:	GENERAL NOTES	SHEET	E
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PROJECT NO:1120-60-71

HWY:IH 41

COUNTY:OUTAGAMIE

PROJECT OVERVIEW - CAPITOL DRIVE

SHEET

E

FILE NAME : N:\PDS\C3D\11206000\SHEETSPLAN\020201\_PO.DWG  
LAYOUT NAME - 020201\_PO

PLOT DATE : 5/4/2017 12:41 PM

PLOT BY : SOUFAL, GREGORY K

PLOT NAME :

PLOT SCALE : 1 IN:200 FT

WISDOT/CADDs SHEET 42



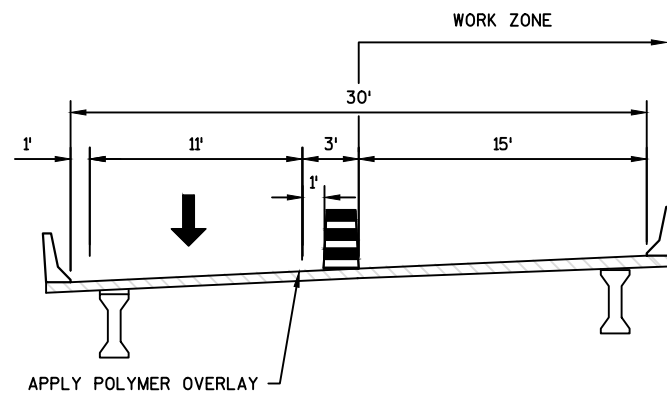




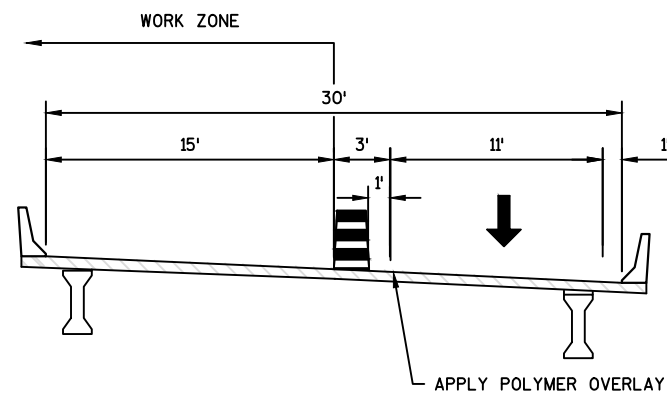


PROJECT NO: 1517-13-71	HWY: USH 10	COUNTY: WINNEBAGO	PROJECT OVERVIEW - USH 10	SHEET	E
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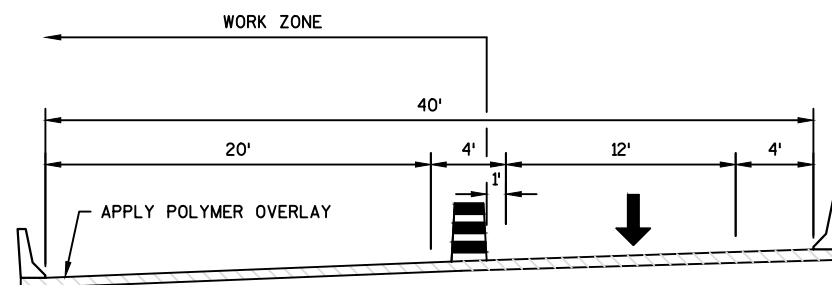




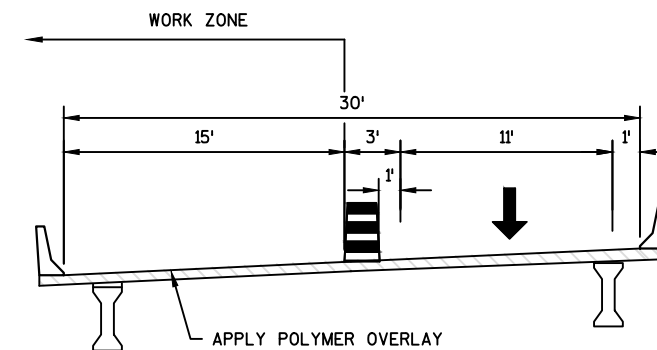
TRAFFIC CONTROL TYPICAL SECTION SB I-41

B-44-0020 STAGE 1  
(LOOKING EAST)

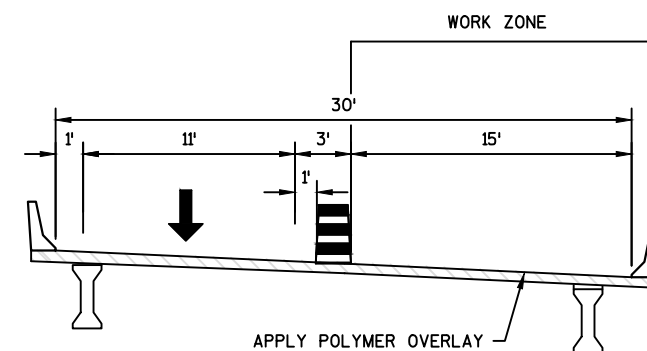
TRAFFIC CONTROL TYPICAL SECTION NB I-41

B-44-0021 STAGE 1  
(LOOKING EAST)

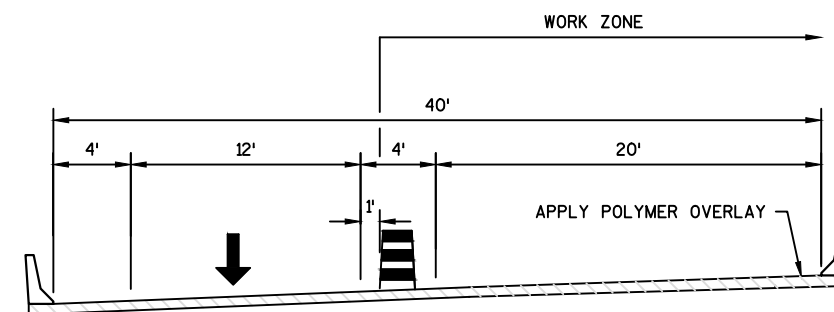
TRAFFIC CONTROL TYPICAL SECTION SB I-41

B-44-0042 STAGE 1  
(LOOKING EAST)

TRAFFIC CONTROL TYPICAL SECTION SB I-41

B-44-0020 STAGE 2  
(LOOKING EAST)

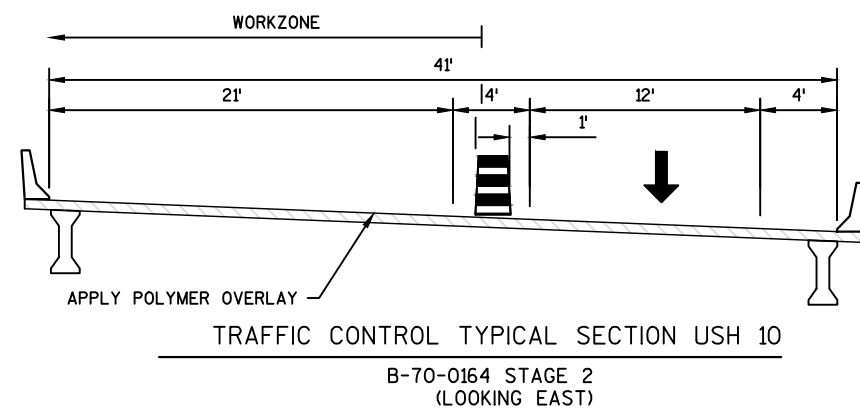
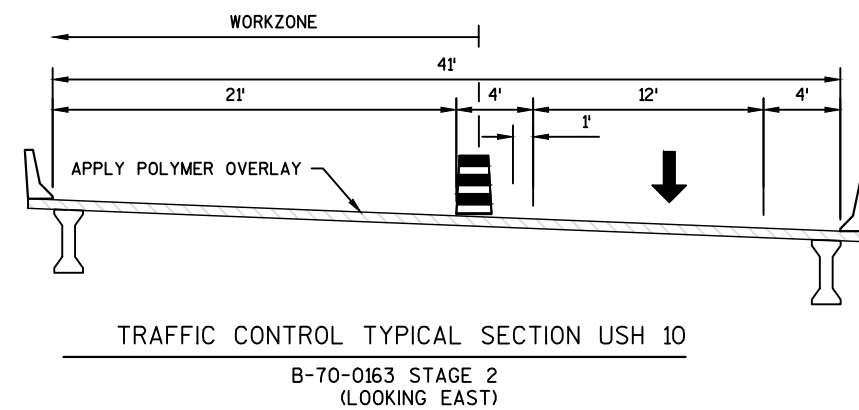
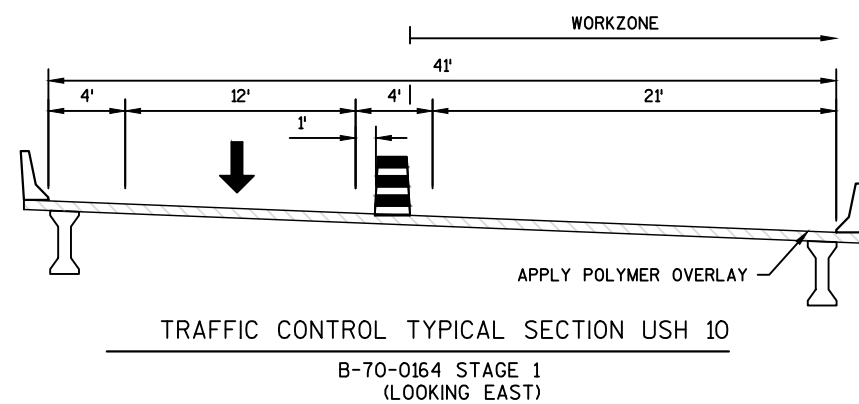
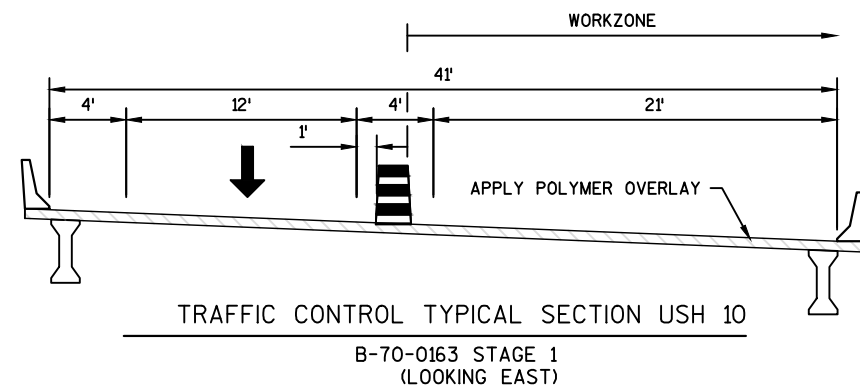
TRAFFIC CONTROL TYPICAL SECTION NB I-41

B-44-0021 STAGE 2  
(LOOKING EAST)

TRAFFIC CONTROL TYPICAL SECTION SB I-41

B-44-0042 STAGE 2  
(LOOKING EAST)







MCCARTHY ROAD

CASSALOMA DRIVE

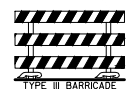
WOODHAVEN COURT

SEE SDD BARRICADES AND SIGNS FOR MAINLINE CLOSURES

CAPITOL DRIVE

ROAD CLOSED  
1.1MILES AHEAD  
LOCAL TRAFFIC ONLY

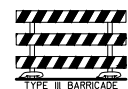
R11-3  
60"X30"



TYPE III BARRICADE

ROAD CLOSED  
0.7MILES AHEAD  
LOCAL TRAFFIC ONLY

R11-3  
60"X30"



TYPE III BARRICADE





PROJECT NO: 1120-60-71	HWY: IH 41	COUNTY: OUTAGAMIE	PLAN: TRAFFIC CONTROL	SHEET	E
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LEGEND

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TYPE III BARRICADE

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TYPE III BARRICADE WITH ATTACHED SIGN

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MB

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STAGE 1



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.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE 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.

ALL DRUM SPACING SHALL BE 50' IN CURVE SECTIONS AND 100' IN TANGENT SECTIONS UNLESS OTHERWISE NOTED.

DRUM ARRAY IN FRONT OF FLASHING ARROW BOARDS NOT SHOWN FOR CLARITY.

NOTE:  
SEE 15D12 TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION FOR SIGN PLACEMENT REQUIRED FOR SINGLE LANE CLOSURES AND 15D16 TRAFFIC CONTROL, EXIT RAMP CLOSURE

STAGE 2







PROJECT NO: 1517-13-71

HWY: USH 10

COUNTY: WINNEBAGO

TRAFFIC CONTROL - DALE ROAD OVERPASS STAGE 1

SHEET

E

FILE NAME : N:\PDS\C3D\11304900\SHEETS\PLAN\025004\_TC.DWG  
LAYOUT NAME - 025004\_tc

PLOT DATE : 5/4/2017 10:44 AM

PLOT BY : SIMMONS, MASON A

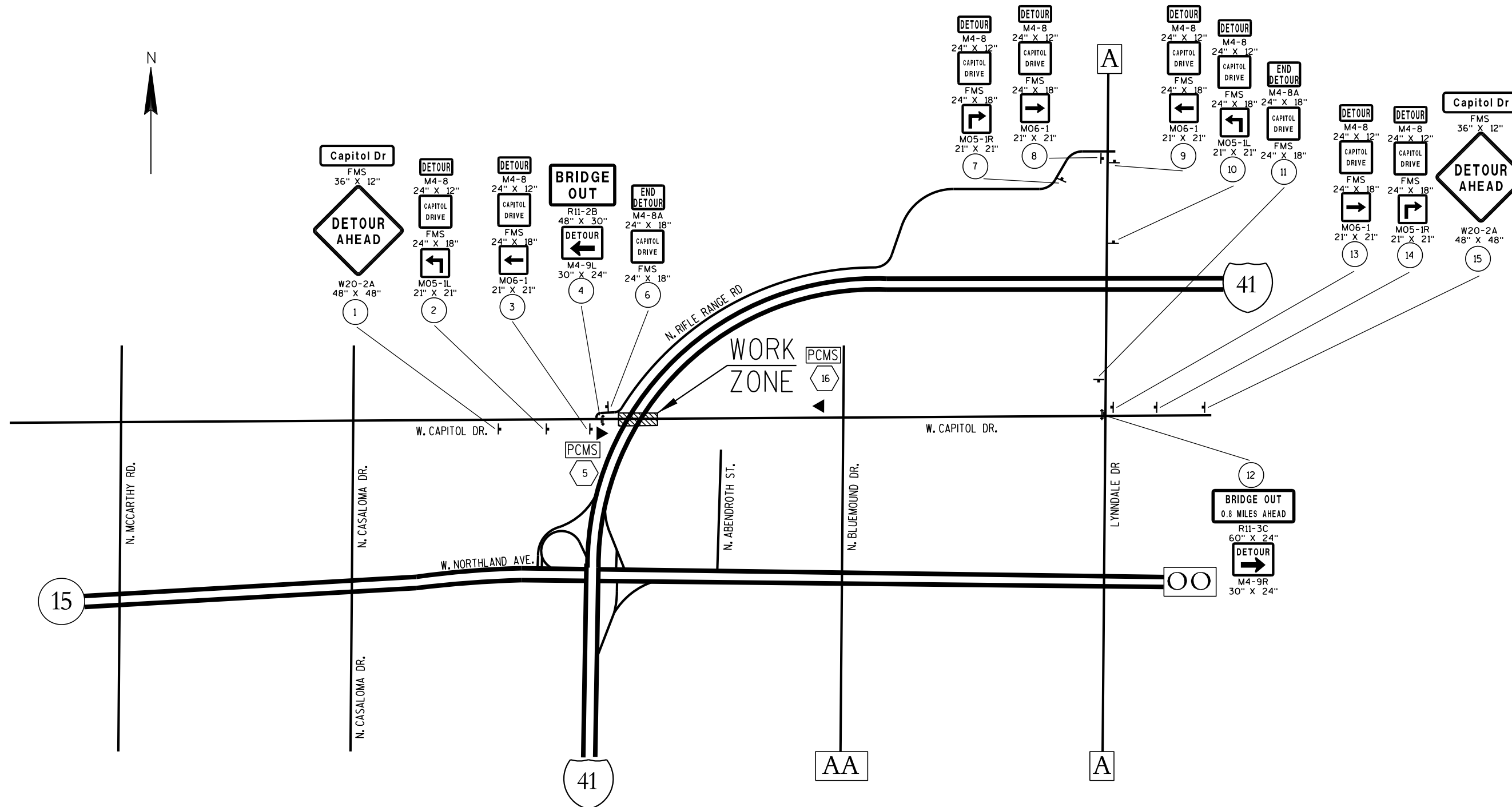
PLOT NAME :

PLOT SCALE : 1 IN:200 FT

WISDOT/CADDs SHEET 44







## LEGEND

- (X) SIGN NUMBER. REFER TO MISCELLANEOUS QUANTITY SHEET
- SIGN MOUNTED ON TYPE III BARRICADE
- POST MOUNTED SIGN
- PCMS (X) PORTABLE CHANGABLE MESSAGE SIGN

PLAN SHEET PRODUCED  
BY WisDOT-NE REGION

PROJECT NO: 1120-60-71

HWY: CAPITOL DRIVE

COUNTY: OUTAGAMIE

DETOUR SIGNING DETAIL

SHEET

E

FILE NAME : N:\spo\traffic\A Work Zone\Detours\Outagamie County\local roads\Capitol Dr\027001.d\tdgn

PLOT DATE : 21-DEC-2016 07:39

PLOT BY : dotj1f

PLOT NAME :

PLOT SCALE : 12000:1

WISDOT/CADDs SHEET 42



Estimate Of Quantities

					1120-60-71	1130-49-71	1517-13-71
Line	Item	Item Description	Unit	Total	Qty	Qty	Qty
0002	203.0225.S	Debris Containment (structure) 03. B-44-0024	LS	1.000	1.000		
0004	213.0100	Finishing Roadway (project) 05. 1120-60-71	EACH	1.000	1.000		
0006	213.0100	Finishing Roadway (project) 06. 1130-49-71	EACH	1.000		1.000	
0008	213.0100	Finishing Roadway (project) 08. 1517-13-71	EACH	1.000			1.000
0010	502.3200	Protective Surface Treatment	SY	743.000	743.000		
0012	502.3210	Pigmented Surface Sealer	SY	830.000	223.000	345.000	262.000
0014	509.0301	Preparation Decks Type 1	SY	258.000	258.000		
0016	509.0302	Preparation Decks Type 2	SY	121.000	121.000		
0018	509.0500	Cleaning Decks	SY	717.000	717.000		
0020	509.2000	Full-Depth Deck Repair	SY	14.000	14.000		
0022	509.2500	Concrete Masonry Overlay Decks	CY	40.000	40.000		
0024	509.5100.S	Polymer Overlay	SY	2,565.000		1,393.000	1,172.000
0026	618.0100	Maintenance And Repair of Haul Roads (project) 02. 1120-60-71	EACH	1.000	1.000		
0028	619.1000	Mobilization	EACH	1.000	0.340	0.330	0.330
0030	643.0100	Traffic Control (project) 01. 1120-60-71	EACH	1.000	1.000		
0032	643.0100	Traffic Control (project) 07. 1130-49-71	EACH	1.000		1.000	
0034	643.0100	Traffic Control (project) 09. 1517-13-71	EACH	1.000			1.000
0036	643.0300	Traffic Control Drums	DAY	1,350.000	300.000	625.000	425.000
0038	643.0420	Traffic Control Barricades Type III	DAY	781.000	746.000	25.000	10.000
0040	643.0705	Traffic Control Warning Lights Type A	DAY	1,172.000	1,112.000	40.000	20.000
0042	643.0715	Traffic Control Warning Lights Type C	DAY	386.000	36.000	210.000	140.000
0044	643.0800	Traffic Control Arrow Boards	DAY	62.000	12.000	30.000	20.000
0046	643.0900	Traffic Control Signs	DAY	497.000	132.000	225.000	140.000
0048	643.0910	Traffic Control Covering Signs Type I	EACH	7.000		3.000	4.000
0050	643.1000	Traffic Control Signs Fixed Message	SF	36.000	36.000		
0052	643.1050	Traffic Control Signs PCMS	DAY	63.000	28.000	21.000	14.000
0054	643.1055.S	Truck or Trailer Mounted Attenuator	DAY	10.000		6.000	4.000
0056	643.2000	Traffic Control Detour (project) 04. 1120-60-71	EACH	1.000	1.000		
0058	643.3000	Traffic Control Detour Signs	DAY	1,080.000	1,080.000		
0060	646.0106	Pavement Marking Epoxy 4-Inch	LF	2,478.000	1,032.000	851.000	595.000
0062	649.0400	Temporary Pavement Marking Removable Tape 4-Inch	LF	7,200.000		4,320.000	2,880.000
0064	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	150.000	50.000	50.000	50.000
0066	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	300.000	100.000	100.000	100.000

TRAFFIC CONTROL DETOUR SIGN SUMMARY

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 45 DAYS	643. 3000 TRAFFI C CONTROL DETOUR SIGN S DAYS	643. 0420 BARRI CADES TYPE III DAYS	643. 0705 WARNI NG LIGHTS TYPE A DAYS	643. 1000 SIGN S FI XED MESSAGE SF	643. 1050 SIGN S PORTABLE CHANGEABLE MESSAGE DAYS	REMARKS
1	CAPITOL DR, W. OF I-41, PLACE 1500' W. OF RIFLE RANGE RD	FMS	36"X12"	1	45				3		CAPITOL DR
	"	W 20- 2A	48"X48"	1	45	45					
2	CAPITOL DR, W. OF I-41, PLACE 500' W. OF RIFLE RANGE RD	M 4- 8	24"X12"	1	45	45					
	"	FMS	24"X18"	1	45				3		CAPITOL DRIVE
	"	MD 5- 1L	21"X21"	1	45	45					
3	CAPITOL DR, W. OF I-41, PLACE AT INTERSECTION OF RIFLE RANGE RD	M 4- 8	24"X12"	1	45	45					
	"	FMS	24"X18"	1	45				3		CAPITOL DRIVE
	"	MD 6- 1	21"X21"	1	45	45					LEFT
4	CAPITOL DR, W. OF I-41, PLACE IN MIDDLE OF ROADWAY	R 11- 2B	60"X24"	1	45	45	45	90			
	"	M 4- 9L	30"X24"	1	45	45					
5		PCMS		1	45					7	PRIOR TO START OF PROJECT
6	RIFLE RANGE RD, N. OF CAPITOL DR, PLACE 500' PRIOR TO CAPITOL DR INTERSECTION	M 4- 8A	24"X18"	1	45	45					
	"	FMS	24"X18"	1	45				3		CAPITOL DRIVE
7	RIFLE RANGE RD, W. OF LYNNDALE DR, PLACE 500' PRIOR TO LYNNDALE DR INTERSECTION	M 4- 8	24"X12"	1	45	45					
	"	FMS	24"X18"	1	45				3		CAPITOL DRIVE
	"	MD 5- 1R	21"X21"	1	45	45					
8	RIFLE RANGE RD, W. OF LYNNDALE DR, PLACE AT INTERSECTION OF LYNNDALE DR	M 4- 8	24"X12"	1	45	45					
	"	FMS	24"X18"	1	45				3		CAPITOL DRIVE
	"	MD 6- 1	21"X21"	1	45	45					RIGHT
9	LYNNDALE DR, S. OF RIFLE RANGE RD, PLACE AT INTERSECTION OF RIFLE RANGE RD	M 4- 8	24"X12"	1	45	45					
	"	FMS	24"X18"	1	45				3		CAPITOL DRIVE
	"	MD 6- 1	21"X21"	1	45	45					LEFT
10	LYNNDALE DR, S. OF RIFLE RANGE RD, PLACE 750' S. OF RIFLE RANGE RD	M 4- 8	24"X12"	1	45	45					
	"	FMS	24"X18"	1	45				3		CAPITOL DRIVE
	"	MD 5- 1L	21"X21"	1	45	45					
11	LYNNDALE DR, N. OF CAPITOL DR, PLACE 500' N. OF CAPITOL DR	M 4- 8A	24"X18"	1	45	45					
	"	FMS	24"X18"	1	45				3		CAPITOL DRIVE
12	CAPITOL DR, E. OF I-41, PLACE IN MIDDLE OF ROADWAY	R 11- 3C	60"X24"	1	45	45	45	90			0. 8 MILES AHEAD
	"	M 4- 9R	30"X24"	1	45	45					
13	CAPITOL DR, E. OF I-41, PLACE AT INTERSECTION OF LYNNDALE DR	M 4- 8	24"X12"	1	45	45					
	"	FMS	24"X18"	1	45				3		CAPITOL DRIVE
	"	MD 6- 1	21"X21"	1	45	45					
14	CAPITOL DR, E. OF I-41, PLACE 500' E. OF LYNNDALE DR	M 4- 8	24"X12"	1	45	45					
	"	FMS	24"X18"	1	45				3		CAPITOL DRIVE
	"	MD 5- 1R	21"X21"	1	45	45					
15	CAPITOL DR, E. OF I-41, PLACE 1500' E. OF LYNNDALE DR	FMS	36"X12"	1	45				3		CAPITOL DR
	"	W 20- 2A	48"X48"	1	45	45					
16	CAPITOL DR, E. OF I-41, PLACE ON RIGHT SHOULDER JUST W. OF BLUEMOUND DR	PCMS		1	45					7	PRIOR TO START OF PROJECT

PROJECT TOTALS

38

1, 080

90

180

36

14

PLAN SHEET PRODUCED  
BY WisDOT - NE REGION



Category 0010 unless otherwise noted					
		646.0106		649.0600	
		Pavement Marking		Temporary Pavement Marking	
		Epoxy 4 - Inch		Removable Tape 4 - Inch	
Location	White	Yellow	White	Yellow	Remarks
1120-60-71					
B-44-0024	516	516			
	516	516			
Total		1032			
1130-49-71					
B-44-0020	258	38	720	720	IH 41 SB
B-44-0021	258	38	720	720	IH 41 NB
B-44-0042	222	38	720	720	IH 41 SB
Total	738	113	2160	2160	
1130-49-71 Total		851		4320	
1517-13-71					
B-70-0163	260	38	720	720	USH 10 EB
B-70-0164	260	38	720	720	USH 10 WB
Total	520	75	1440	1440	
1517-13-71 Total		595		2880	

619.1000 Mobilization	
Project	Each
1120-60-71	0.34
1130-49-71	0.33
1517-13-71	0.33
Total	1

213.0100 Finishing Roadway	
(Project)	
Project	Each
1120-60-71	1
1130-49-71	1
1517-13-71	1
Total	3

643.2000 Traffic Control Detour (Project)	
Project	Each
1120-60-71	1
Total	1

643.0100 Traffic Control (Project)	
Project	Each
1120-60-71	1
1130-49-71	1
1517-13-71	1
Total	3

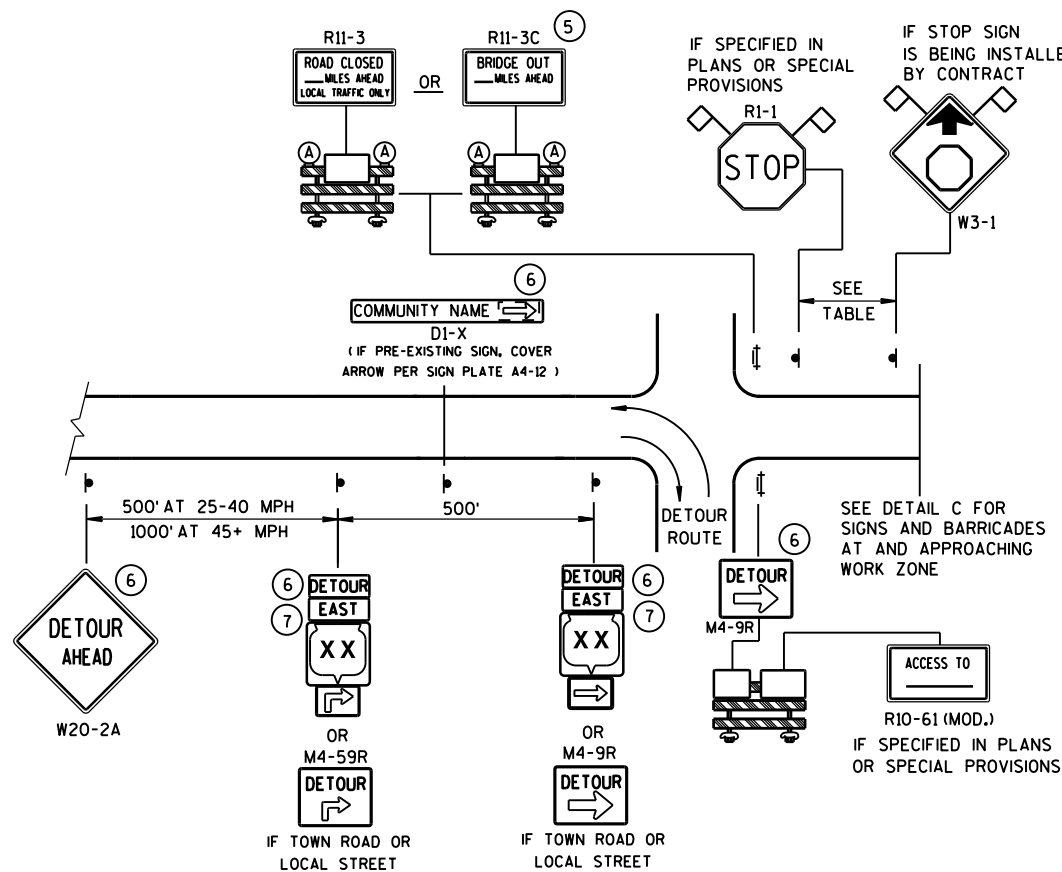


Category 0010 unless otherwise noted																	
Traffic Control Summary																	
643.0300 Traffic Control			643.0420 Traffic Control		643.0705 Traffic Control		643.0715 Traffic Control		643.0800 Traffic Control		643.0900 Traffic Control		643.0910 Traffic Control		643.1050 Traffic Control		643.1055.S Truck or Trailer
Drums			Barricades Type III		Warning Lights Type A		Warning Lights Type C		Arrow Boards		Signs		Covering Signs Type I		Signs PCMS		Mounted Attenuator
Location	Each*	Days	Each*	Days	Each*	Days	Each*	Days	Each*	Days	Each*	Days	Each	Each*	Days	Days	Remarks
1120-60-71																	
B-44-0024	275	275	654	654	930	930	30	30	10	10	22	110		2	14		
Undistributed		25		2		2		6		2		22					
1120-60-71 Total		300		656		932		36		12		132		2	14		
1130-49-71																	
B-44-0020																	IH 41 SB
Stage 1A	37	74	1	2	2	4	14	28	2	4	14	28		1	7		
Stage 1B	37	74	1	2	2	4	14	28	2	4	14	28					
B-44-0021																	IH 41 NB
Stage 1A	37	74	1	2	2	4	14	28	2	4	14	28		1	7		
Stage 1B	37	74	1	2	2	4	14	28	2	4	14	28					
B-44-0042																	IH 41 SB
Stage 1A	51	102	5	10	6	12	14	28	2	4	20	40		1	7		
Stage 1B	51	102	1	2	2	4	14	28	2	4	14	28					
Undistributed		125		5		8		42		6		45	3			6	Cover Existing Speed
1130-49-71 Total		625		25		40		210		30		225	3		21	6	Limit Signs
1517-13-71																	
B-70-0163																	USH 10 EB
Stage 1A	65	130	1	2	2	4	14	28	2	4	14	28		1	7		
Stage 1B	35	70	1	2	2	4	14	28	2	4	14	28					
B-70-0164																	USH 10 WB
Stage 1A	35	70	1	2	2	4	14	28	2	4	14	28		1	7		
Stage 1B	35	70	1	2	2	4	14	28	2	4	14	28					
Undistributed		85		2		4		28		4		28	4			4	Cover Existing Speed
1517-13-71 Total		425		10		20		140		20		140	4		14	4	Limit Signs
* For Information Only																	
PROJECT NO: 1120-60-71			HWY: IH 41/ USH 10			COUNTY: OUTAGAMIE/ WINNEBAGO			MISCELLANEOUS QUANTITIES						SHEET:		E

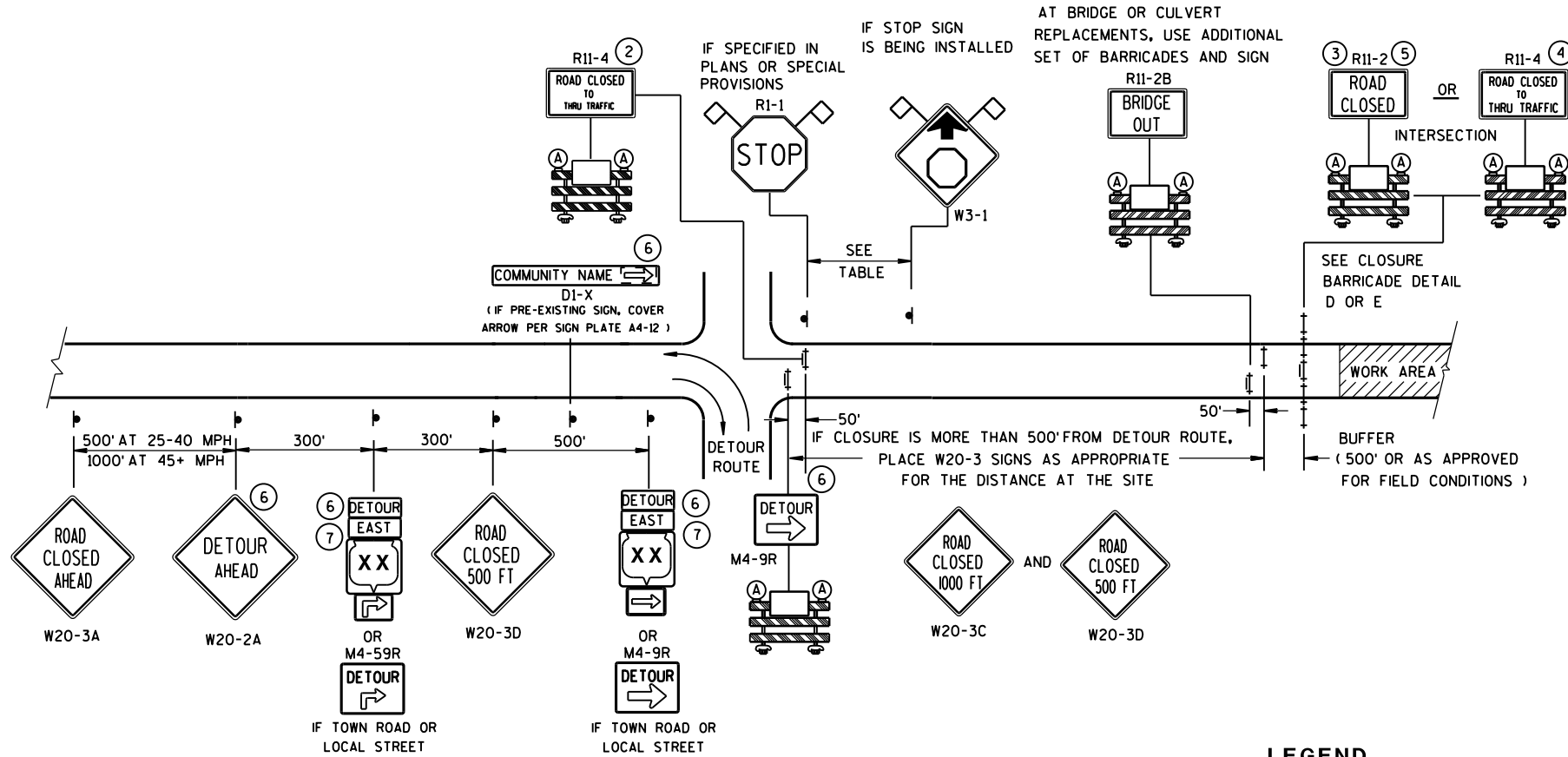
Standard Detail Drawing List

15C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C08-17A	LONGITUDINAL MARKING (MAINLINE)
15D12-06B	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
15D16-03	TRAFFIC CONTROL, EXIT RAMP CLOSURE

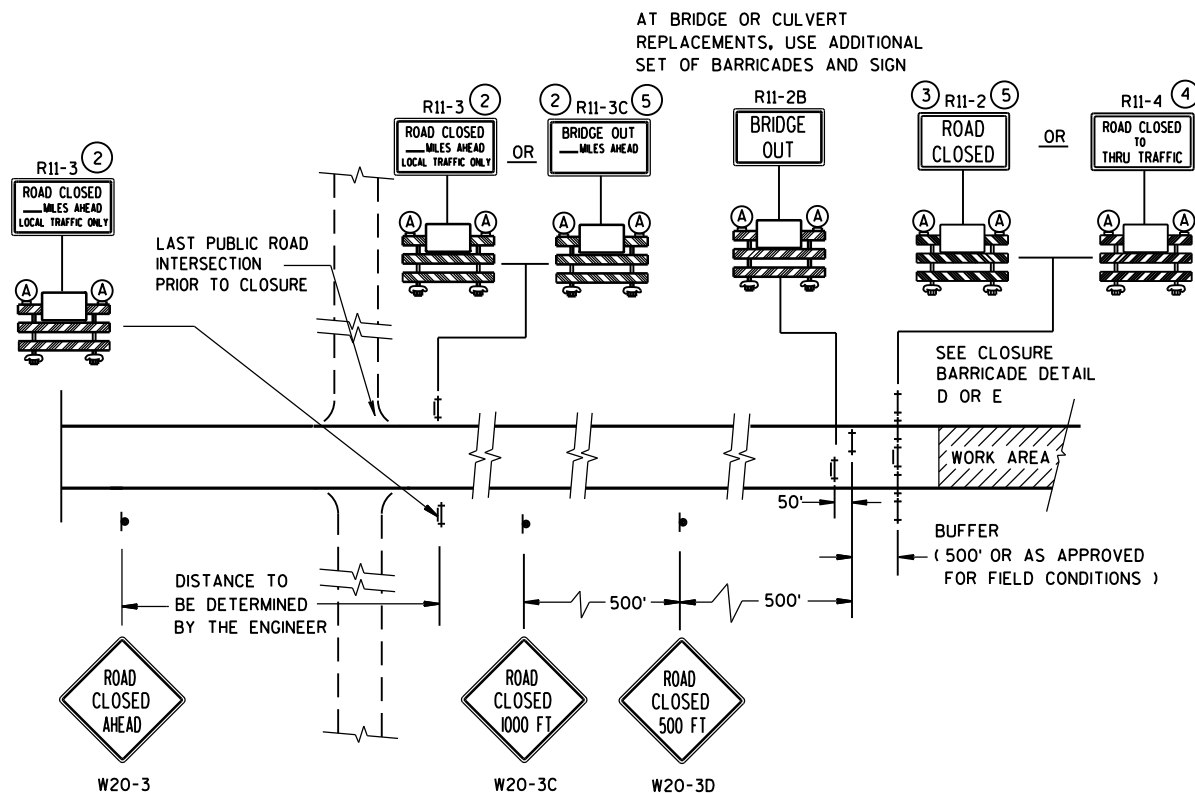




DETAIL A  
MAINLINE CLOSURE WITH POSTED DETOUR  
WORK ZONE GREATER THAN 1/2 MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



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

LEGEND

- SIGN ON PERMANENT SUPPORT
- ⊥ TYPE III BARRICADE
- ⊥ TYPE III BARRICADE WITH ATTACHED SIGN
- Ⓐ TYPE "A" WARNING LIGHT (FLASHING)

WORK AREA

DETOUR EAST  
M4-8  
M3-X  
XX OR XX OR XX  
M1-4 M1-5A M1-6

M05-1 OR M06-1

FLAGS, 16" X 16" MIN., (ORANGE)

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-SHEET "b"  
FOR GENERAL NOTES  
AND FOOTNOTES ① THROUGH ⑦

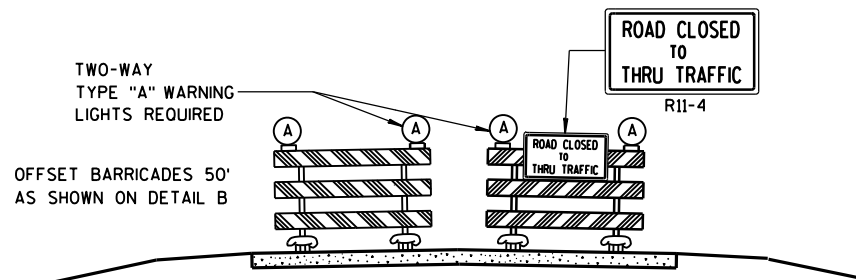
BARRICADES AND SIGNS  
FOR  
MAINLINE CLOSURES

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

Sept. 2015 /S/ Peter Amokobe Atepe  
DATE STATEWIDE WORK ZONE TRAFFIC  
FHWA SAFETY ENGINEER



DETAIL D  
ROAD CLOSURE BARRICADE DETAIL  
APPROACH VIEW



DETAIL E  
LANE CLOSURE BARRICADE DETAIL  
APPROACH VIEW

SEE SDD 15C2-SHEET "a" 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.

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

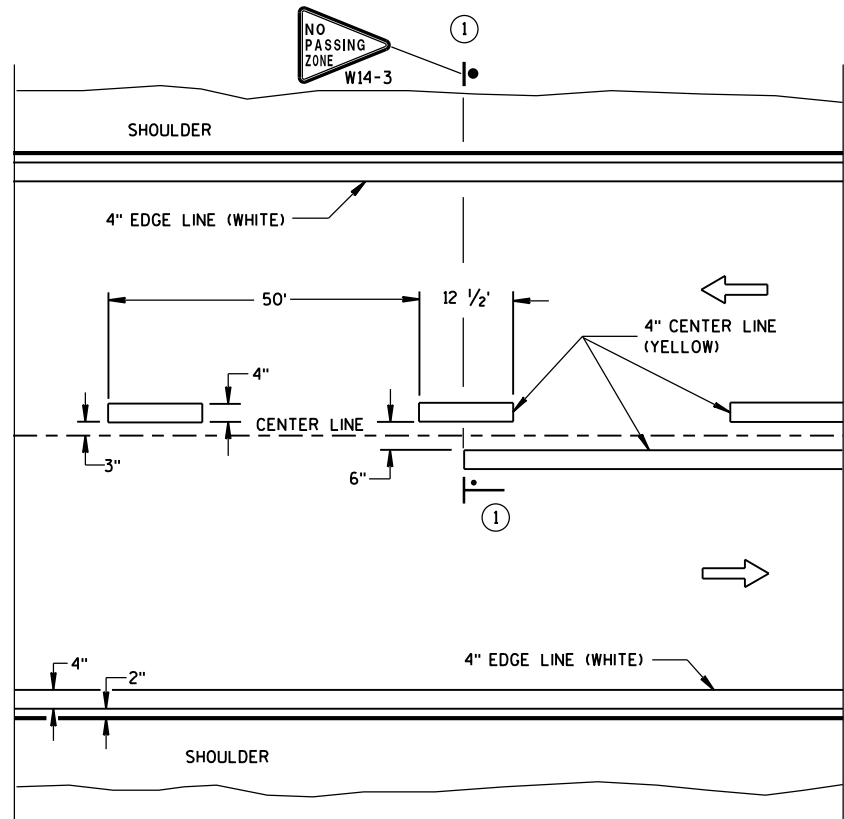
ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

- 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 SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- 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".

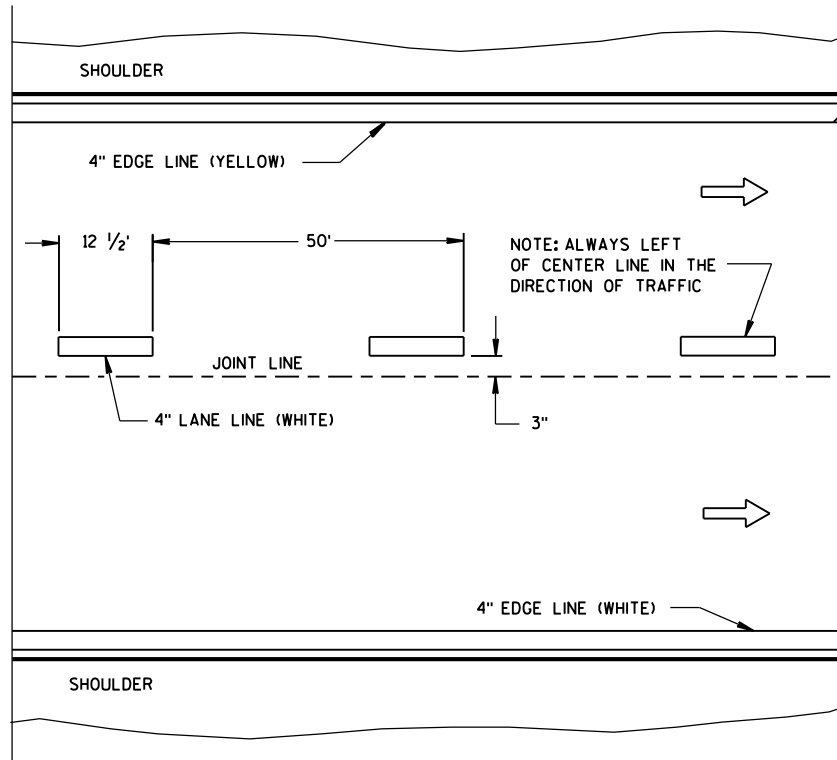
- 1 TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).
- 2 THESE SIGNS 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	
Sept. 2015 DATE	/S/ Peter Amokobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA	



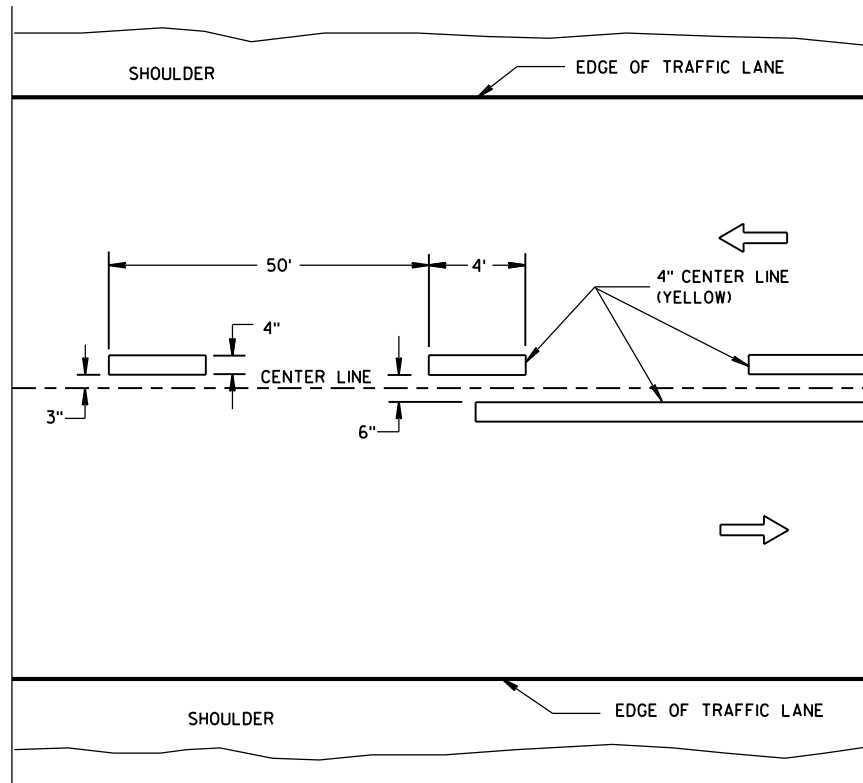


TWO WAY TRAFFIC

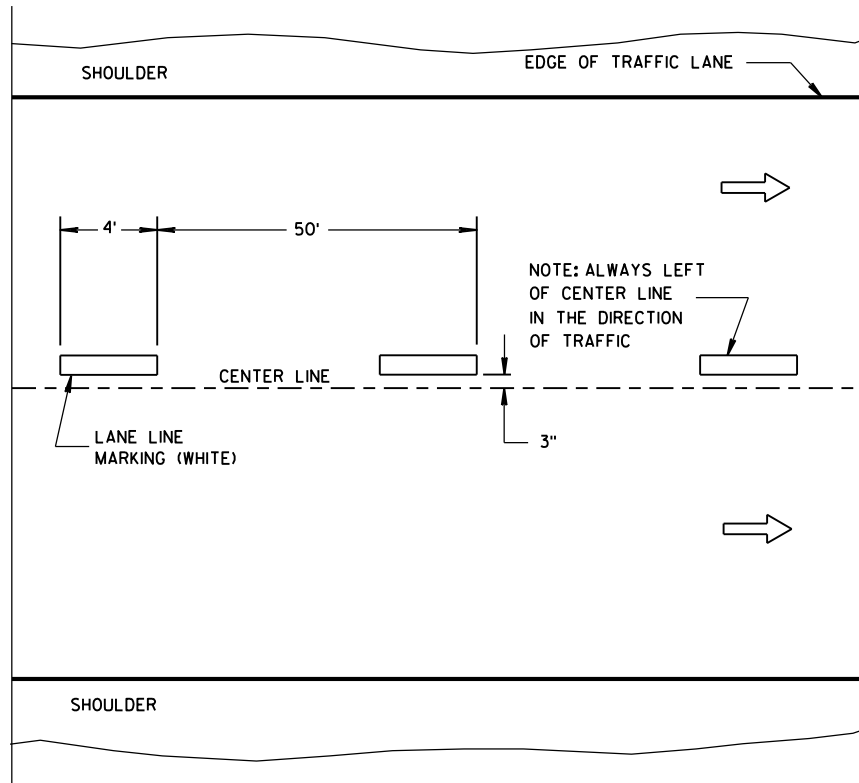


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

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

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

NOTE

ARROW SYMBOL ( → ) SHOWS DIRECTION OF TRAVEL

LEGEND

—•— "T" MARKING

● POST MOUNTED SIGN

LONGITUDINAL MARKING  
(MAINLINE)

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
Sept., 2016 /S/ Matthew R. Rauch  
DATE STATE SIGNING AND MARKING ENGINEER  
FHWA

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC
- WORK AREA

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.

"W0" 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.

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.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

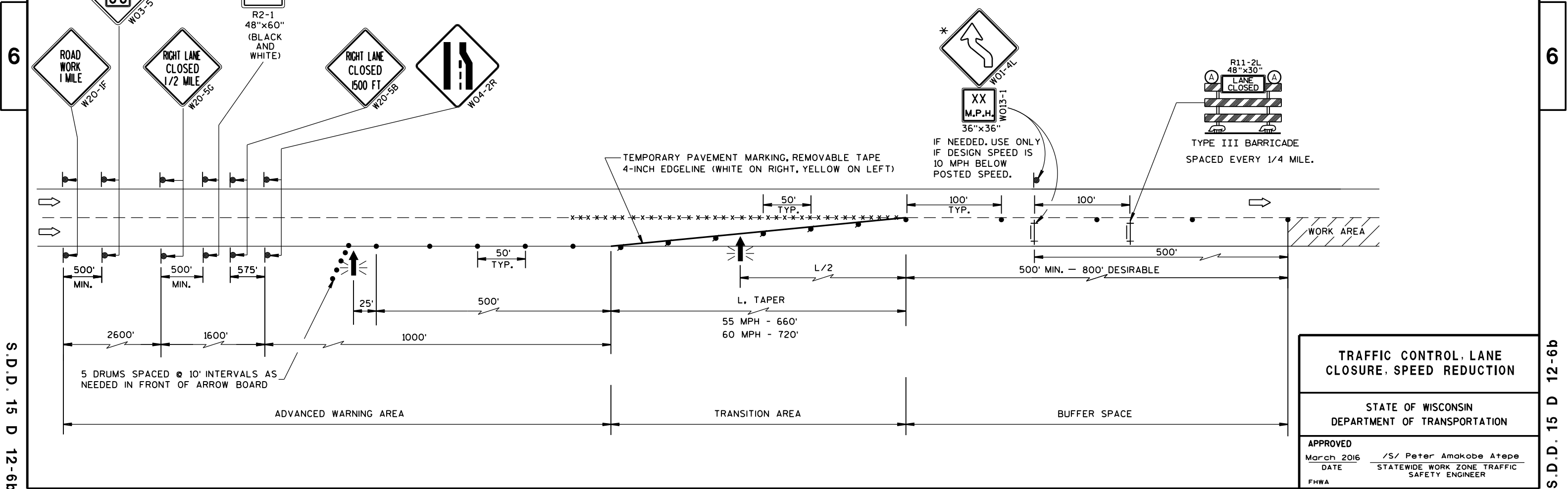
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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

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.

\*\* A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. THERE SHOULD BE A SPEED LIMIT SIGN INCORPORATED A MINIMUM OF EVERY 2 OR 3 MILES. INCLUDE A RESUME SPEED LIMIT SIGN 200 FEET MINIMUM (500 FEET DESIREABLE) BEYOND THE "END OF ROADWORK" SIGN.



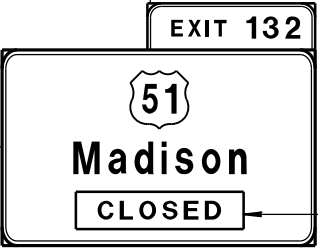
TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED March 2016 DATE	/S/ Peter Amakobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA	





G20-60  
108"x24"

OR



G20-60  
108"x24"

PLACE SIGN G20-60 OVER MILEAGE  
ON EXISTING E1-1A SIGN



COVER ARROW ON  
EXISTING E4-1A  
SIGN (COVERING  
SIGNS TYPE I)

G20-61  
120"x30"

## GENERAL NOTES

THIS RAMP CLOSURE DETAIL IS TYPICAL FOR CLOSING A RIGHT SIDE EXIT RAMP. FOR A LEFT SIDE EXIT RAMP, 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.

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.

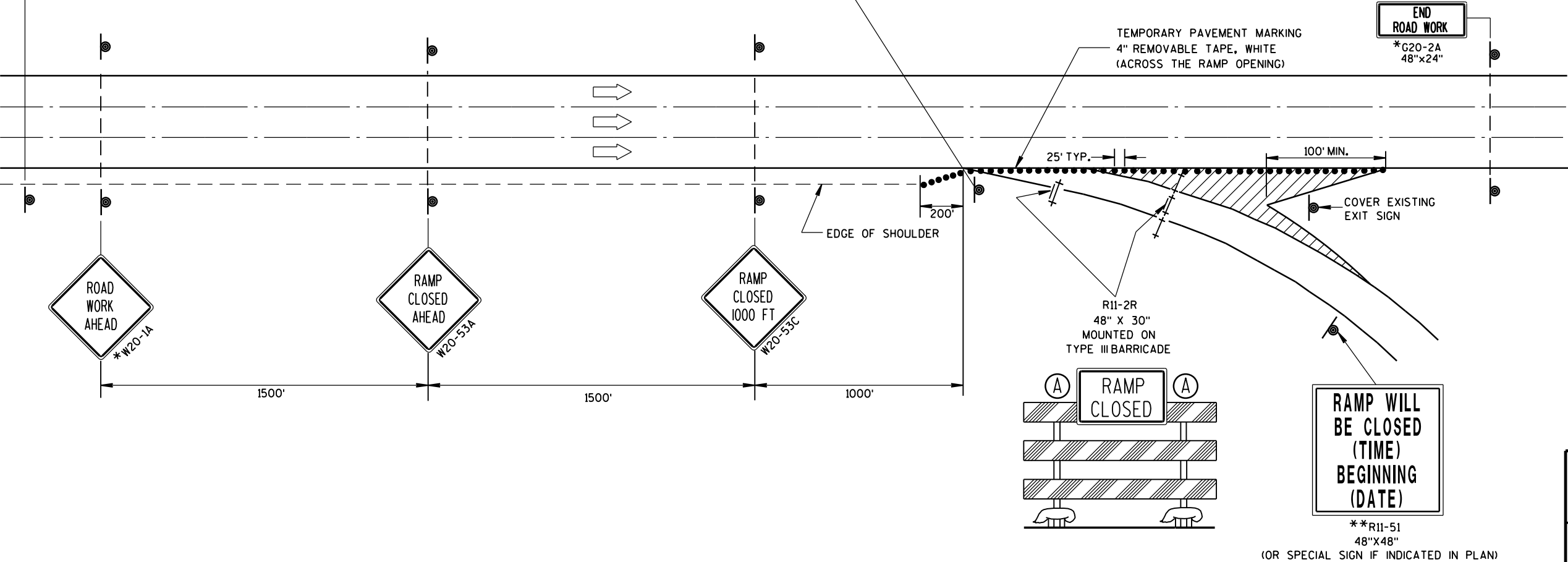
PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF RAMP CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WORK AREAS WITH A DROPOFF ALONG THE EDGE OF AN OPEN TRAVEL LANE SHALL BE LEVELED WITH TEMPORARY FILL WHEN THE CONTRACTOR IS NOT WORKING ADJACENT TO THE TRAVEL LANE. DRUMS SHALL BE PLACED ENTIRELY OUTSIDE THE TRAVEL LANE, ALLOWING THE FULL UNOBSTRUCTED LANE WIDTH, WHEN THE WORK IS NOT IN PROGRESS.

WHERE MEDIAN BARRIER IS IN PLACE, SIGNS SHOWN ON LEFT SIDE OF ROADWAY MAY BE OMITTED FOR RIGHT SIDE RAMP CLOSURES OF LESS THAN 12-HOUR DURATION.

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

\*\* PLACE "RAMP WILL BE CLOSED" SIGN 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR SIGN LAYOUT.



## LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC

## TRAFFIC CONTROL, EXIT RAMP CLOSURE

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept. 2015

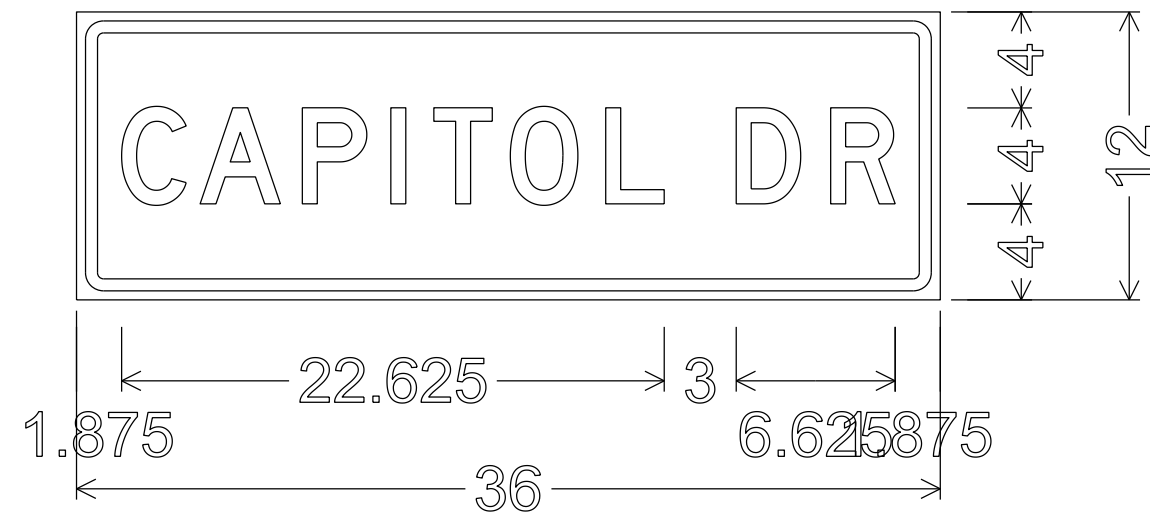
DATE

FHWA

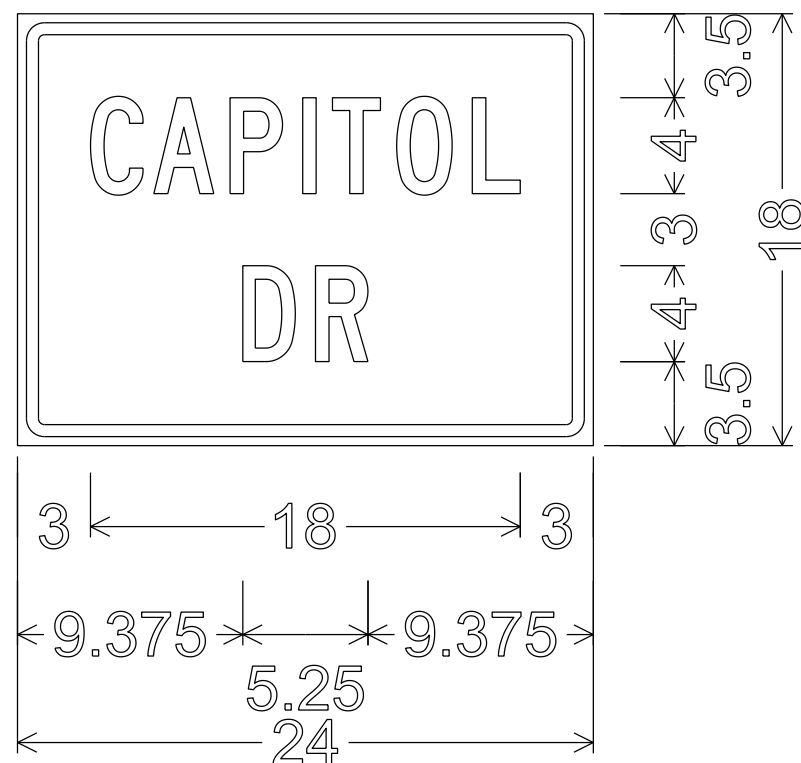
/S/ Peter Amakobe Atepe  
STATEWIDE WORK ZONE TRAFFIC  
SAFETY ENGINEER

NOTES

1. Signs are Type II- Type F Reflective
2. Color:  
Background - Orange  
Message - Black
3. Message Series - C except as noted

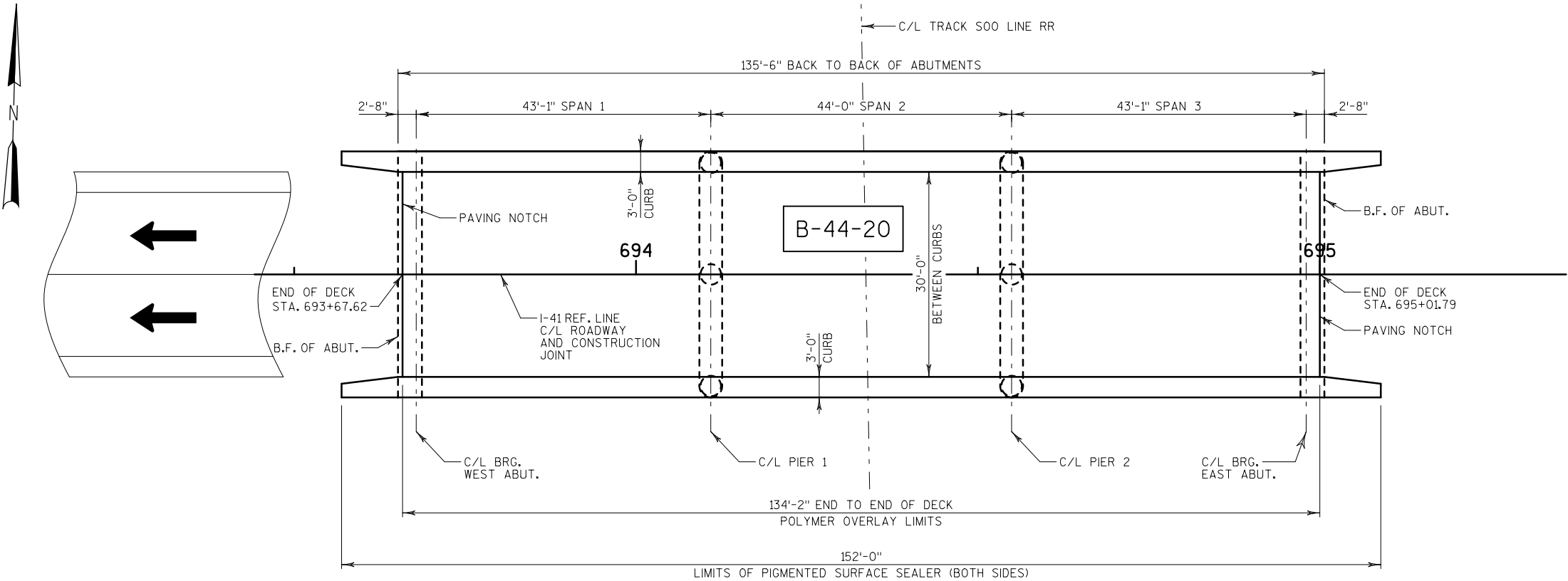


1.125" Radius, 0.500" Border, 0.375" Indent,  
"CAPITOL" D; "DR" D;



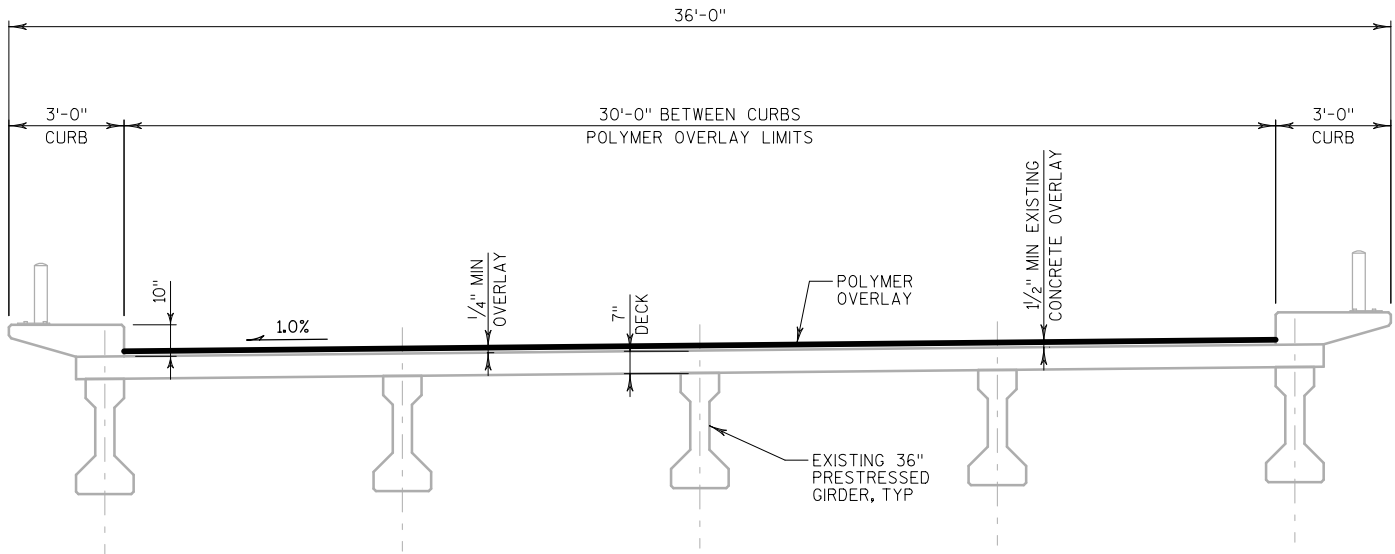
1.125" Radius, 0.500" Border, 0.375" Indent,





PLAN

(POLYMER OVERLAY OF 3-SPAN PRESTRESSED GIRDER)



BRIDGE CROSS SECTION

(LOOKING EAST)

DESIGN DATA

LIVE LOAD:  
INVENTORY RATING: HS-23  
OPERATING RATING: HS-39  
WISCONSIN STANDARD PERMIT VEHICLE: 240 KIPS

TRAFFIC DATA

I-41  
AADT = 39310 (2023)  
RDS = 70 MPH

LIST OF DRAWINGS

- 1. GENERAL PLAN & CROSS SECTION
- 2. GENERAL NOTES, QUANTITIES, & STAGING

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:  
WILLIAM DREHER (608) 266-8489  
CONSULTANT:  
RANDY THOMAS (414) 847-0447

NO.	DATE	REVISION	BY
<div>ch2m</div>			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED	<i>William C. Dreher</i> <sup>SOR</sup>	08/28/17	DATE
STRUCTURE B-44-20			
IH 41SB OVER SOO LINE RR			
COUNTY	OUTAGAMIE	TOWN/CITY/VILLAGE	GRAND CHUTE
DESIGN SPEC. REHABILITATION N/A			
DESIGNED BY	ASW	DESIGN CK'D.	WRT
DRAWN BY	MHM	PLANS CK'D.	ASW
GENERAL PLAN & CROSS SECTION			SHEET 1 OF 2



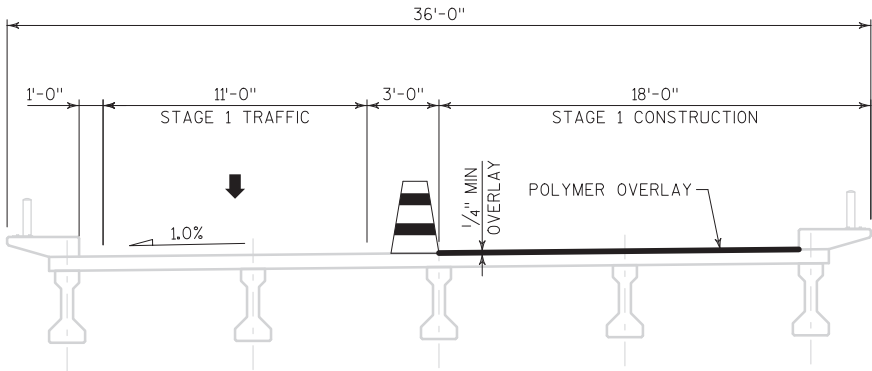
TOTAL ESTIMATED QUANTITIES

ITEM NO.	BID ITEMS	UNIT	TOTAL
502.3210	PIGMENTED SURFACE SEALER	SY	128
509.5100.S	POLYMER OVERLAY	SY	448

ALL ITEMS ARE CATEGORY 0020

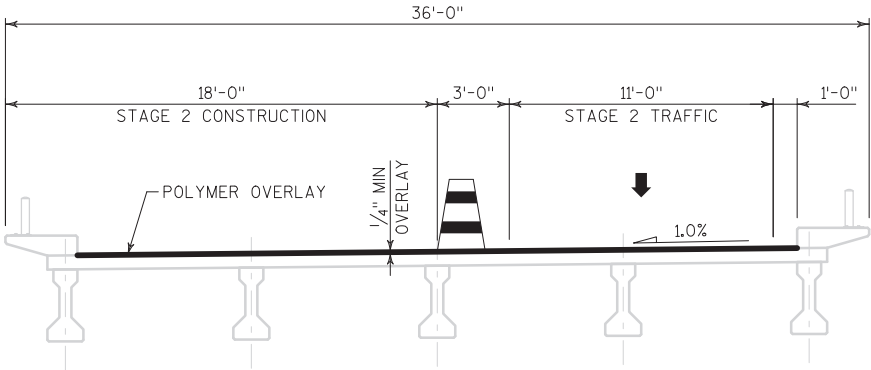
GENERAL NOTES

- DRAWINGS SHALL NOT BE SCALED.
- DIMENSIONS SHOWN ARE BASED ON ORIGINAL STRUCTURE PLANS.
- ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
- ALL STATIONS AND ELEVATIONS ARE IN FEET. ELEVATIONS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD).
- THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE. UTILITIES LABELED AS PROPOSED MAY BE INSTALLED BY OTHERS PRIOR TO THIS CONTRACT.
- DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".



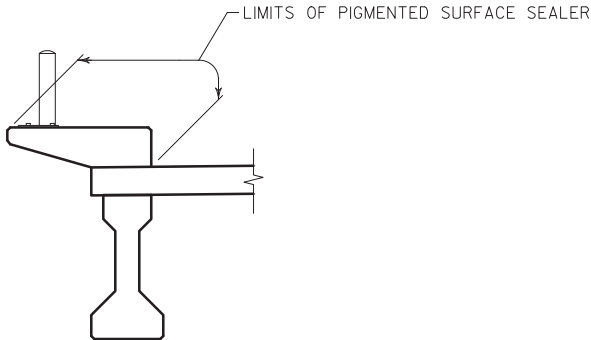
STAGE 1

(LOOKING EAST)



STAGE 2

(LOOKING EAST)

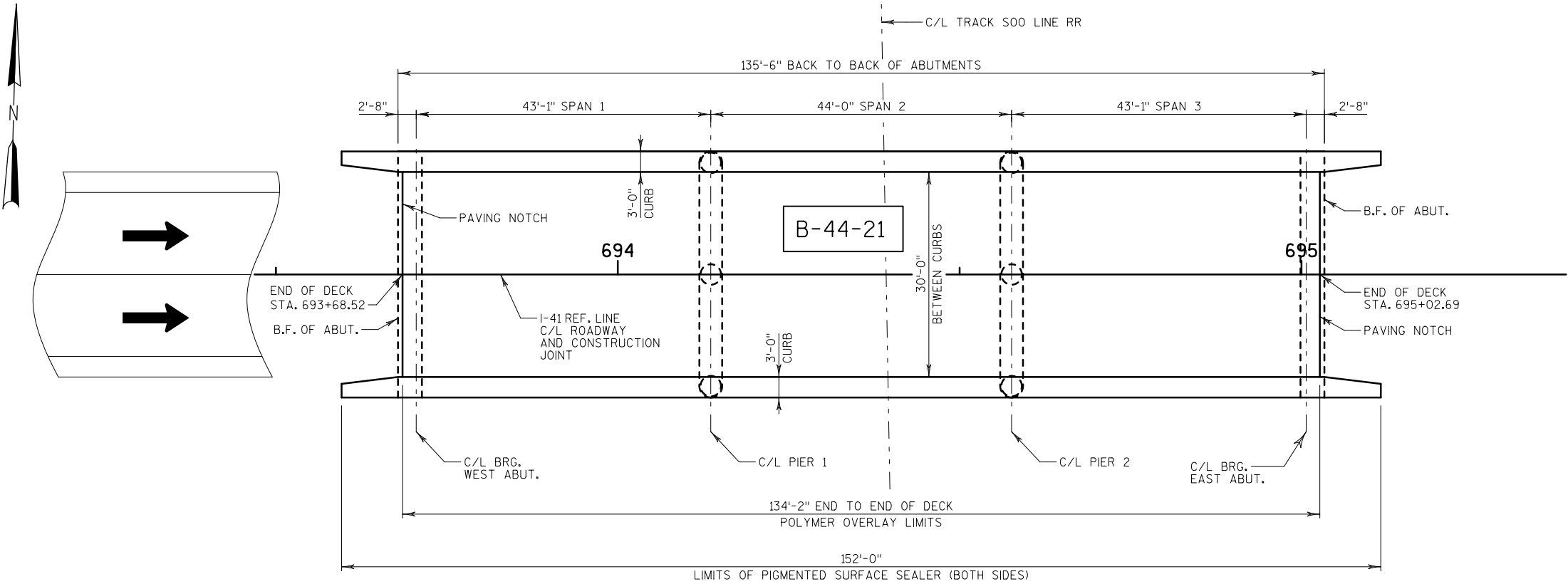


SIDEWALK & CURB DETAIL

PIGMENTED SURFACE SEALER EXTENDS BEYOND ENDS OF BRIDGE (SEE PLAN VIEW, SHEET 1)

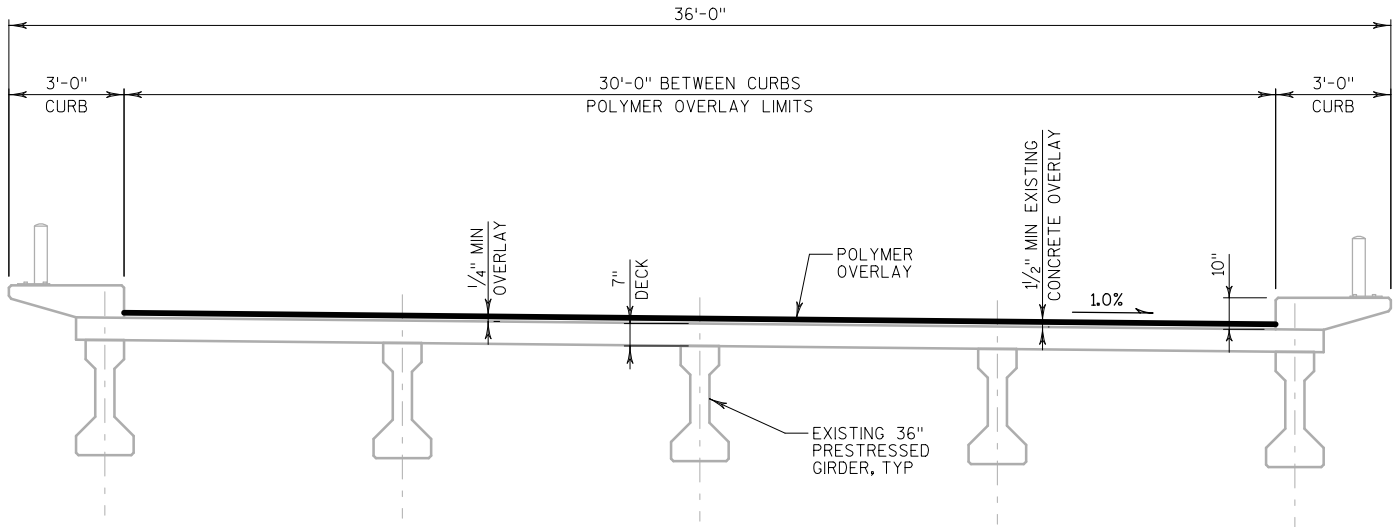
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-44-20			
DRAWN BY		ASW	PLANS CK'D. WRT
GENERAL NOTES, QUANTITIES, & STAGING			SHEET 2 OF 2





PLAN

(POLYMER OVERLAY OF 3-SPAN PRESTRESSED GIRDER)



BRIDGE CROSS SECTION

(LOOKING EAST)

DESIGN DATA

LIVE LOAD:  
INVENTORY RATING: HS-23  
OPERATING RATING: HS-39  
WISCONSIN STANDARD PERMIT VEHICLE: 240 KIPS

TRAFFIC DATA

I-41  
AADT = 39310 (2023)  
RDS = 70 MPH

LIST OF DRAWINGS

- 1. GENERAL PLAN & CROSS SECTION
- 2. GENERAL NOTES, QUANTITIES, & STAGING

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:  
WILLIAM DREHER (608) 266-8489  
CONSULTANT:  
RANDY THOMAS (414) 847-0447

NO.	DATE	REVISION	BY

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

ACCEPTED *William C. Dreher* SDR 08/28/17  
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-44-21

IH 41 NB OVER S00 LINE RR

COUNTY OUTAGAMIE TOWN/CITY/VILLAGE GRAND CHUTE

DESIGN SPEC. REHABILITATION N/A

DESIGNED BY ASW DESIGN CK'D. WRT DRAWN BY MHM PLANS CK'D. ASW

GENERAL PLAN & CROSS SECTION

SHEET 1 OF 2



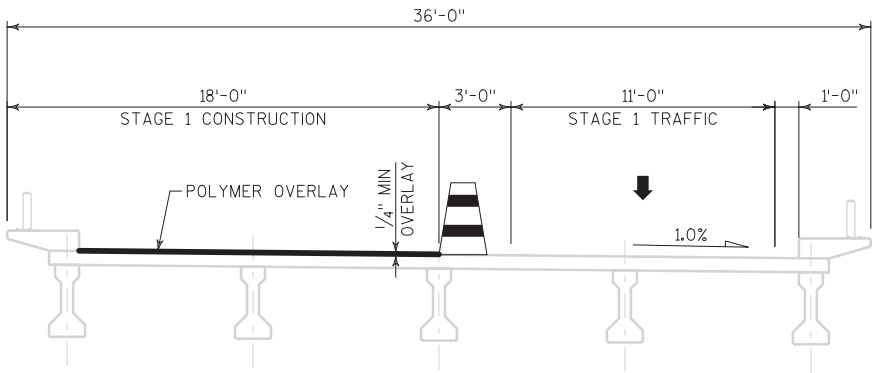
TOTAL ESTIMATED QUANTITIES

ITEM NO.	BID ITEMS	UNIT	TOTAL
502.3210	PIGMENTED SURFACE SEALER	SY	128
509.5100.S	POLYMER OVERLAY	SY	448

ALL ITEMS ARE CATEGORY 0030

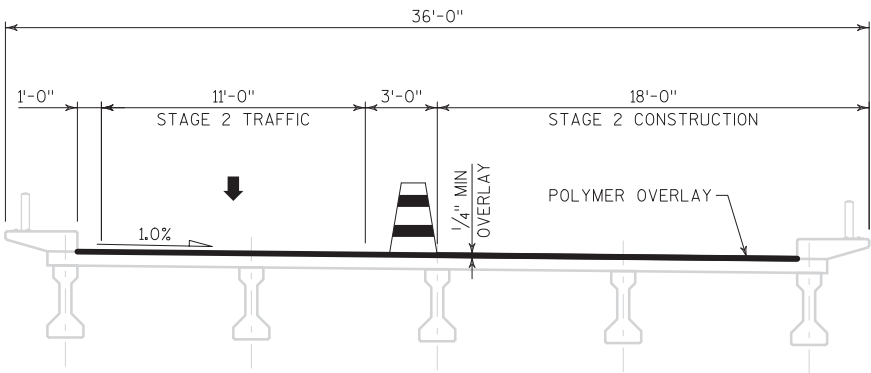
GENERAL NOTES

- DRAWINGS SHALL NOT BE SCALED.
- DIMENSIONS SHOWN ARE BASED ON ORIGINAL STRUCTURE PLANS.
- ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
- ALL STATIONS AND ELEVATIONS ARE IN FEET. ELEVATIONS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD).
- THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE. UTILITIES LABELED AS PROPOSED MAY BE INSTALLED BY OTHERS PRIOR TO THIS CONTRACT.
- DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".



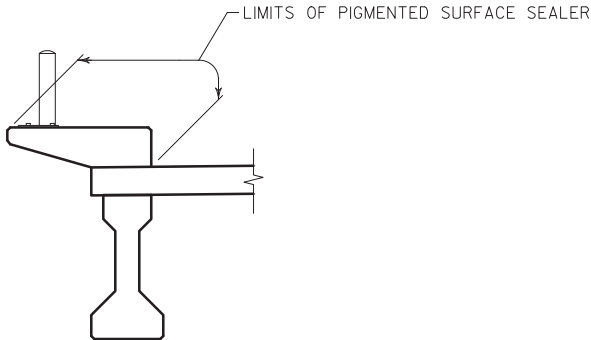
STAGE 1

(LOOKING EAST)



STAGE 2

(LOOKING EAST)



SIDEWALK & CURB DETAIL

PIGMENTED SURFACE SEALER EXTENDS BEYOND ENDS OF BRIDGE (SEE PLAN VIEW, SHEET 1)

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-44-21			
DRAWN BY		ASW	PLANS CK'D. WRT
GENERAL NOTES, QUANTITIES, & STAGING			SHEET 2 OF 2





INVENTORY RATING:	HS-18
OPERATING RATING:	HS-30
WISCONSIN STANDARD PERMIT VEHICLE:	200 KIPS

CONCRETE MASONRY OVERLAY DECKS  $f'_c = 4,000$  P.S.I.

## TRAFFIC DATA

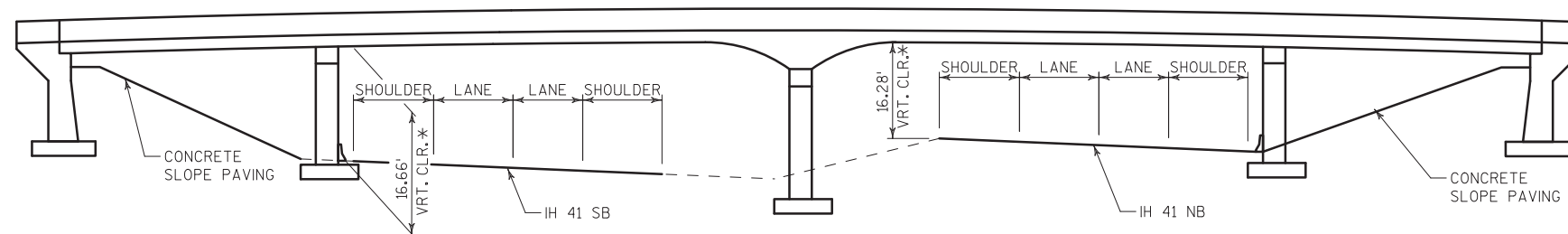
<u>CAPITOL DRIVE</u>	<u>IH-41</u>
AADT = 2,100 (2017)	AADT = 75,600 (2017)
RDS = 35 MPH	RDS = 70 MPH

## LIST OF DRAWINGS

1. GENERAL PLAN, ELEVATION & CROSS SECTION
2. GENERAL NOTES, QUANTITIES & DETAILS
3. DECK THERMOGRAPHY
4. DECK REINFORCEMENT DEPTH

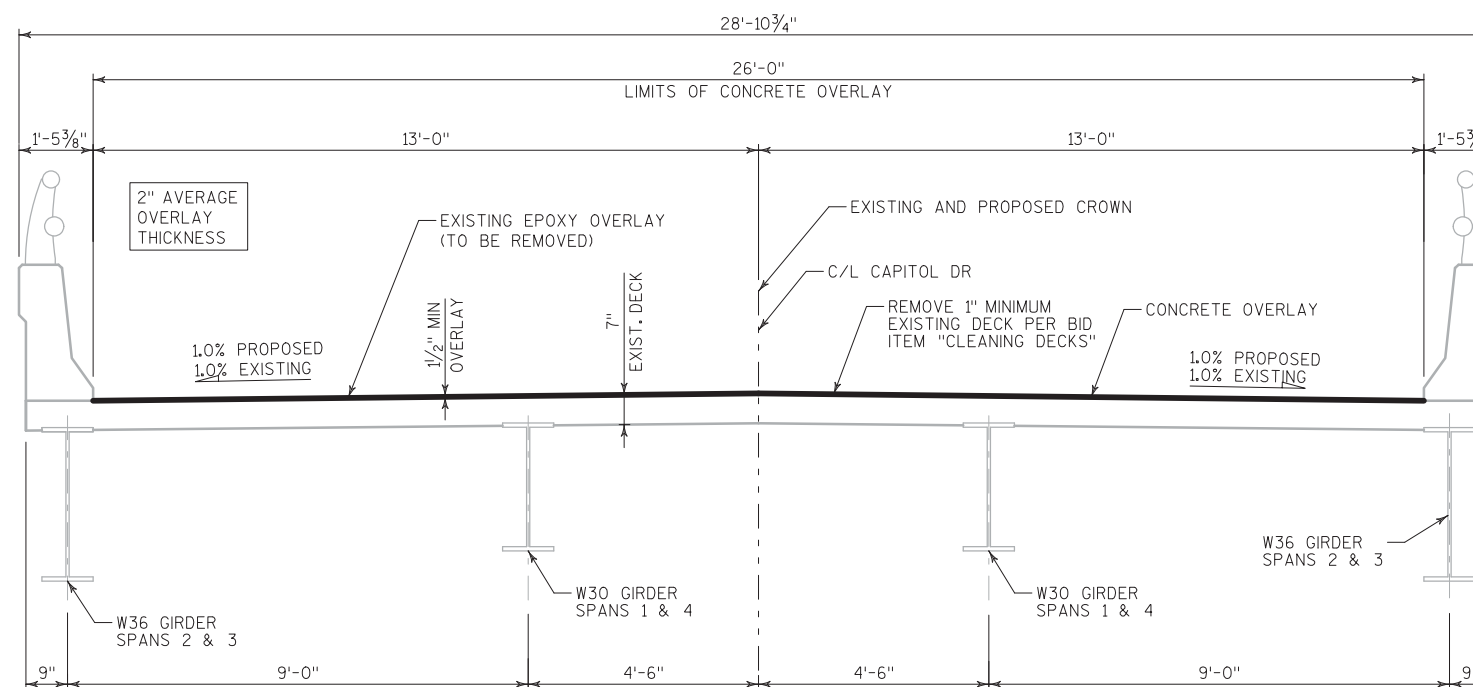
## PLAN

(CONCRETE OVERLAY OF 4-SPAN STEEL GIRDER)



## ELEVATION

\* VERTICAL CLEARANCE FROM  
HSI. LAST UPDATED 10/06/2009.



## BRIDGE CROSS SECTION

(LOOKING EAST)



BRIDGE OFFICE:  
WILLIAM DREHER (608) 266-8489  
CONSULTANT:  
RANDY THOMAS (414) 847-0447

NO.	DATE	REVISION	BY

ch2m:

ACCEPTED William C. Dieker<sup>SDR</sup> 08/28/17  
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-44-24

CAPITOL DRIVE OVER IH 41

COUNTY	OUTAGAMIE	TOWN/CITY/VILLAGE	GRAND CHUTE
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DESIGN SPEC.	
REHABILITATION N/A	

DESIGNED BY	WRT	DESIGN CK'D.	SGM	DRAWN BY	TEK	PLANS CK'D.	A
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GENERAL PLAN,  
ELEVATION &  
CROSS SECTION

SHEET 1 OF

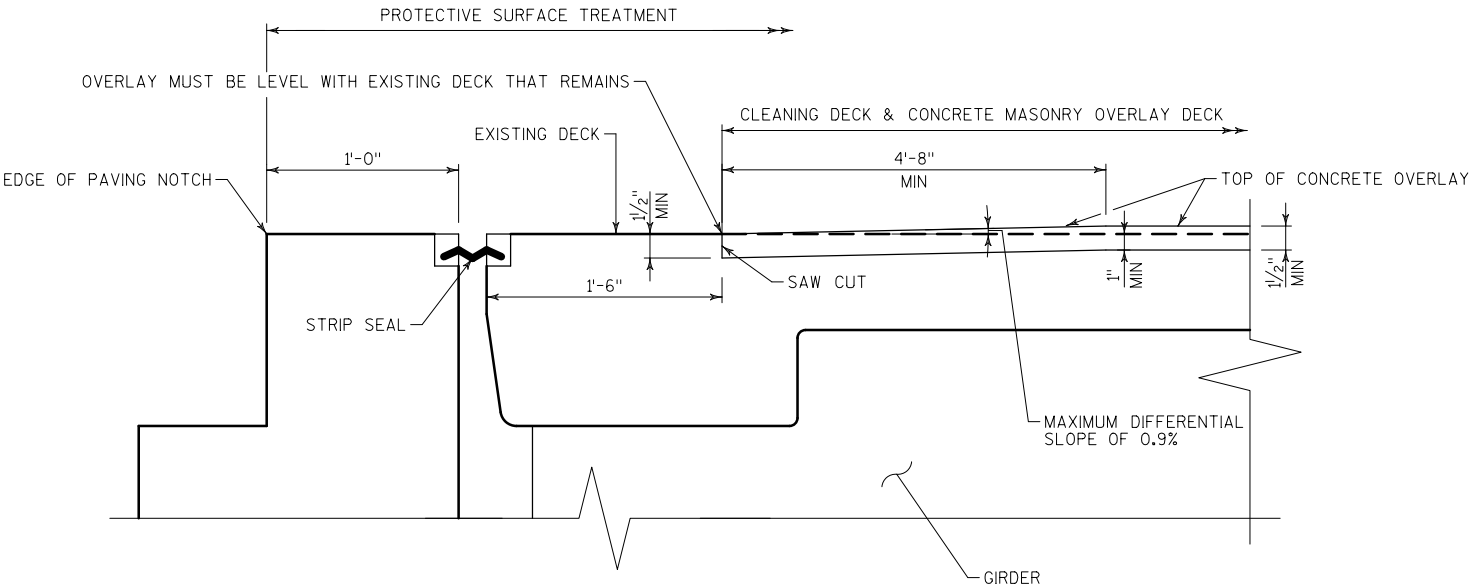
TOTAL ESTIMATED QUANTITIES

ITEM NO.	BID ITEMS	UNIT	TOTAL
502.3200	PROTECTIVE SURFACE TREATMENT	SY	743
502.3210	PIGMENTED SURFACE SEALER	SY	223
509.0301	PREPARATION DECKS TYPE 1	SY	258
509.0302	PREPARATION DECKS TYPE 2	SY	121
509.0500	CLEANING DECKS	SY	717
509.2000	FULL-DEPTH DECK REPAIR	SY	14
509.2500	CONCRETE MASONRY OVERLAY DECKS	CY	40

ALL ITEMS ARE CATEGORY 0020

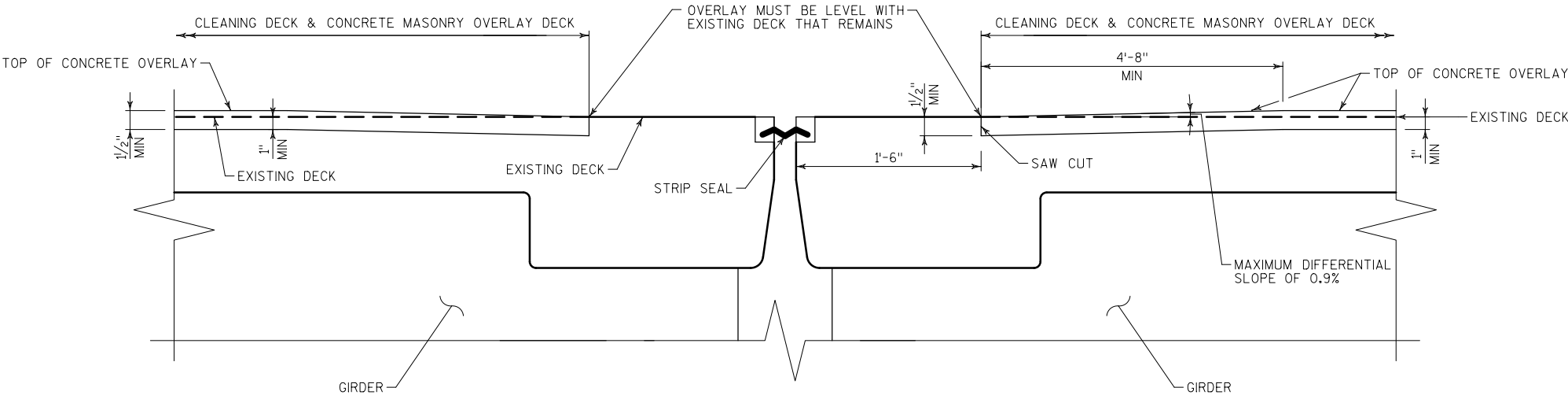
GENERAL NOTES

- DRAWINGS SHALL NOT BE SCALED.
- DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.
- ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
- ALL STATIONS AND ELEVATIONS ARE IN FEET. ELEVATIONS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD).
- THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE. UTILITIES LABELED AS PROPOSED MAY BE INSTALLED BY OTHERS PRIOR TO THIS CONTRACT.
- PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE ENTIRE TOP SURFACE OF THE BRIDGE DECK, INCLUDING THE ABUTMENT BACKWALLS AND JOINTS.
- THE EXISTING, EPOXY OVERLAY AND A MINIMUM OF 1-INCH OF CONCRETE SHALL BE REMOVED FROM THE ENTIRE BRIDGE DECK UNDER THE BID ITEM "CLEANING DECKS".
- PREPARATION DECKS TYPE 1, PREPARATION DECKS TYPE 2 AND FULL DEPTH DECK REPAIR AREAS ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION AND FULL-DEPTH DECK REPAIRS SHALL BE FILLED WITH "CONCRETE MASONRY OVERLAY DECKS".
- PROFILE GRADE LINE SHALL BE DETERMINED IN THE FIELD BASED ON A MINIMUM OVERLAY THICKNESS OF 1/2" PLACED ABOVE THE DECK SURFACE AFTER SURFACE PREPARATION. EXPECTED AVERAGE OVERLAY THICKNESS IS 2". IF EXPECTED AVERAGE THICKNESS IS EXCEEDED BY MORE THAN 1/2" CONTACT THE STRUCTURES DESIGN SECTION.
- BRIDGE B-44-24 WILL BE CLOSED TO LIVE TRAFFIC DURING CONSTRUCTION. NO STAGING IS REQUIRED.
- EXISTING DECK EXPANSION DEVICES ARE TO REMAIN. PROTECT EXPANSION DEVICES WHEN PREPARING DECK AND PLACING OVERLAY.



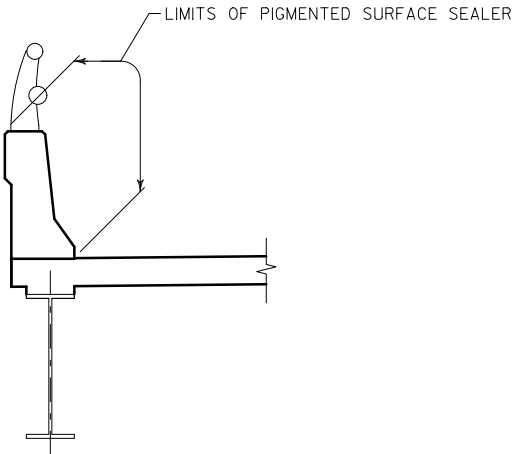
END OF DECK DETAIL

OVERLAY BEGINS 1'-6" PAST STRIP SEAL TO AVOID DAMAGING JOINT



INTERIOR DECK JOINT DETAIL

STOP OVERLAY 1'-6" SHORT OF STRIP SEAL  
JOINT DETAIL IS SYMMETRIC ABOUT THE CENTER OF THE STRIP SEAL

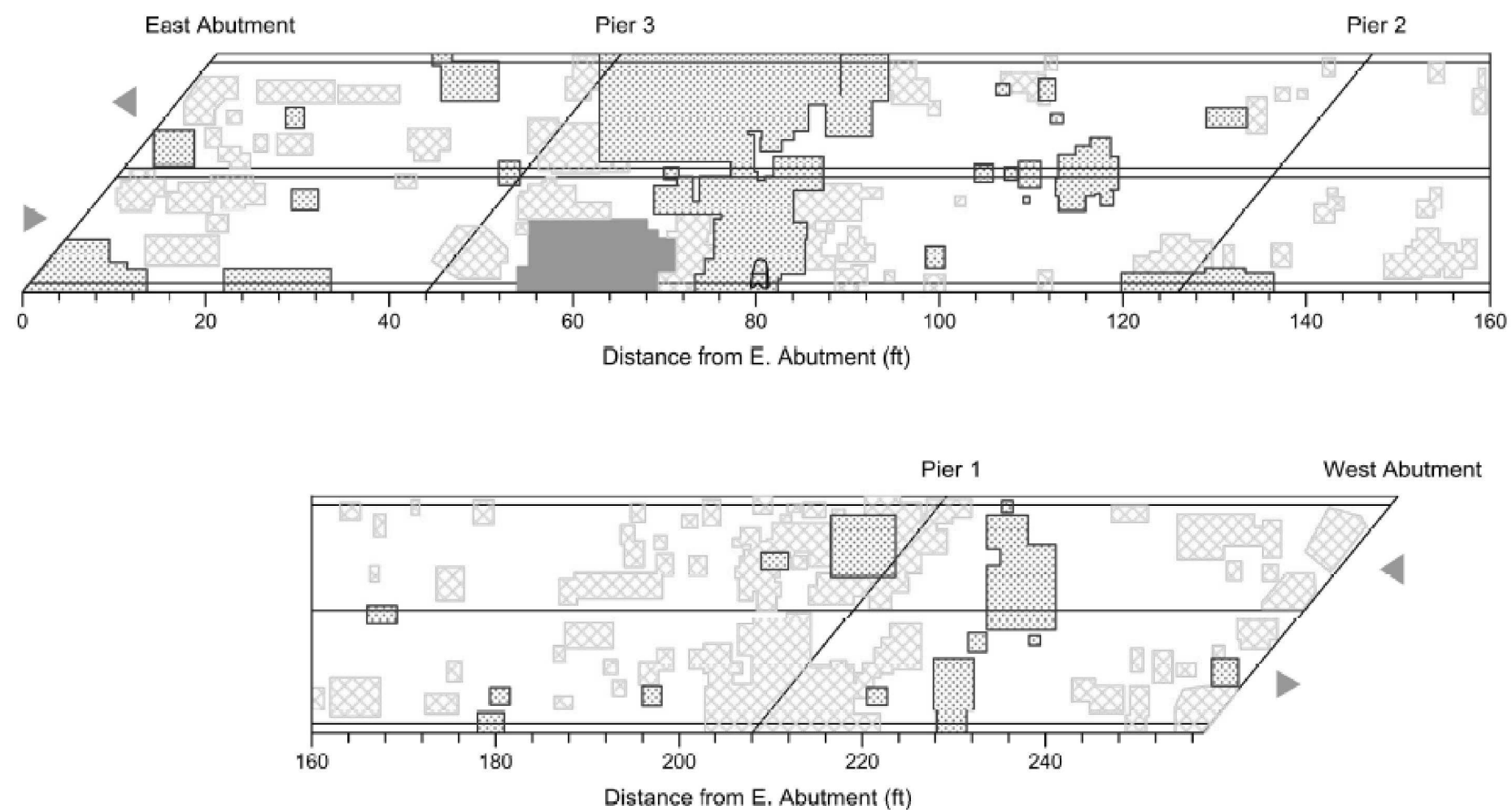


PARAPET DETAIL

PIGMENTED SURFACE SEALER EXTENDS BEYOND ENDS OF BRIDGE (SEE PLAN VIEW, SHEET 1)

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-44-24			
DRAWN BY		ASW	PLANS CK'D. WRT
GENERAL NOTES QUANTITIES & DETAILS			SHEET 2 OF 4





► Direction of traffic



Type I



Full Depth



Type II



Patching

Rehabilitation Category	Quantity (sq. ft.)	% of deck area
Type 1	2318.3	34.7%
Type 2	1082.4	16.2%
Full-Depth	120.3	1.8%

**Deck Condition Evaluation**

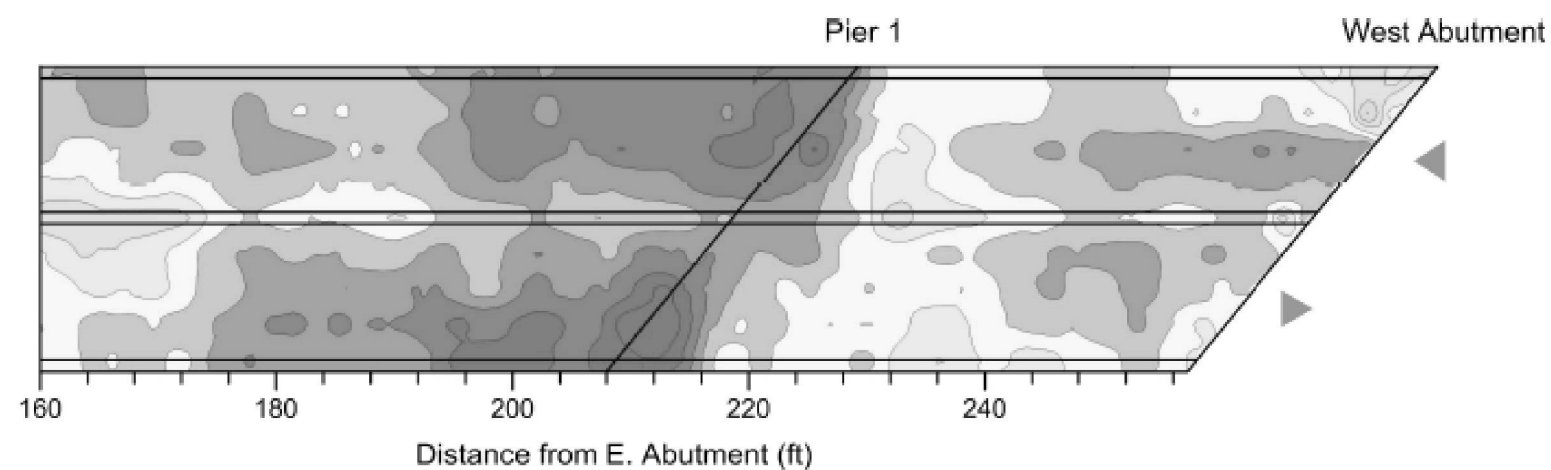
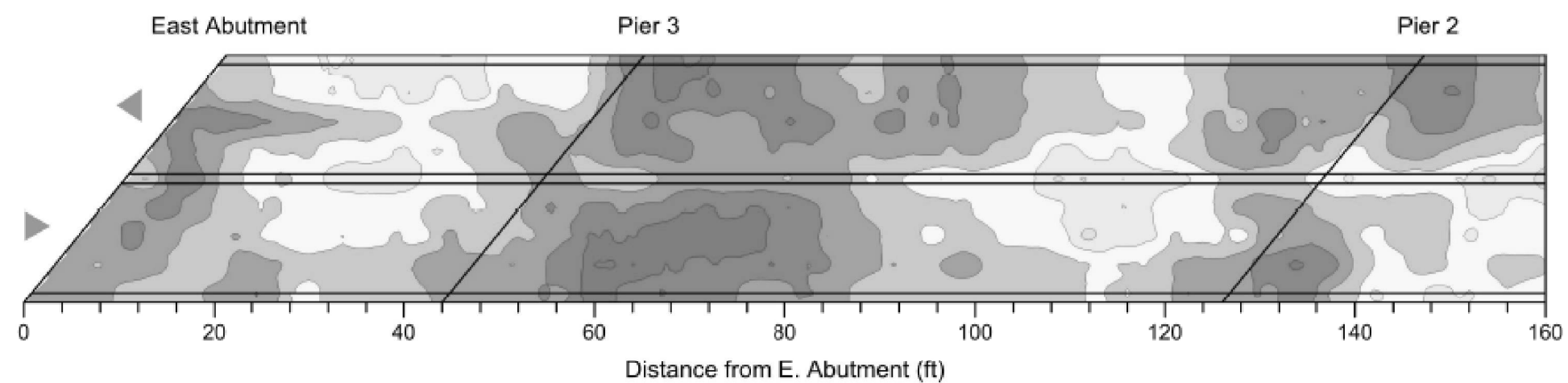
Bridge ID: B-44-24  
Capitol Drive over USH-41

Analyzed by: EMG  
Reviewed by: AJC  
Completed: 08-23-16

Sheet 1 of 1



NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-44-24			
DRAWN BY ASW		PLANS CK'D. WRT	
DECK THERMOGRAPHY			SHEET 3 OF 4



Direction of traffic

Rebar Depth (in.)



#### Rebar Depth Statistics

Average	2.8"
Standard Deviation	0.3"
25th Percentile	2.6"
75th Percentile	3.0"

#### Rebar Depth Evaluation

Bridge ID: B-44-24  
Capitol Drive over USH-41

Analyzed by: EMG  
Reviewed by: AJC  
Completed: 08-23-16

Sheet 1 of 1



NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-44-24			
DRAWN BY ASW		PLANS CK'D. WRT	
DECK REINFORCEMENT DEPTH			SHEET 4 OF 4



DESIGN DATA

LIVE LOAD:  
INVENTORY RATING:  
OPERATING RATING:  
WISCONSIN STANDARD PERMIT VEHICLE:

HS-16  
HS-27  
250 KIPS

TRAFFIC DATA

I-41  
AADT = 34,400 (2016)  
RDS = 70 MPH

MALONEY RD.  
AADT = 550 (2014)

LIST OF DRAWINGS

1. GENERAL PLAN & CROSS SECTION  
2. GENERAL NOTES, QUANTITIES, & STAGING

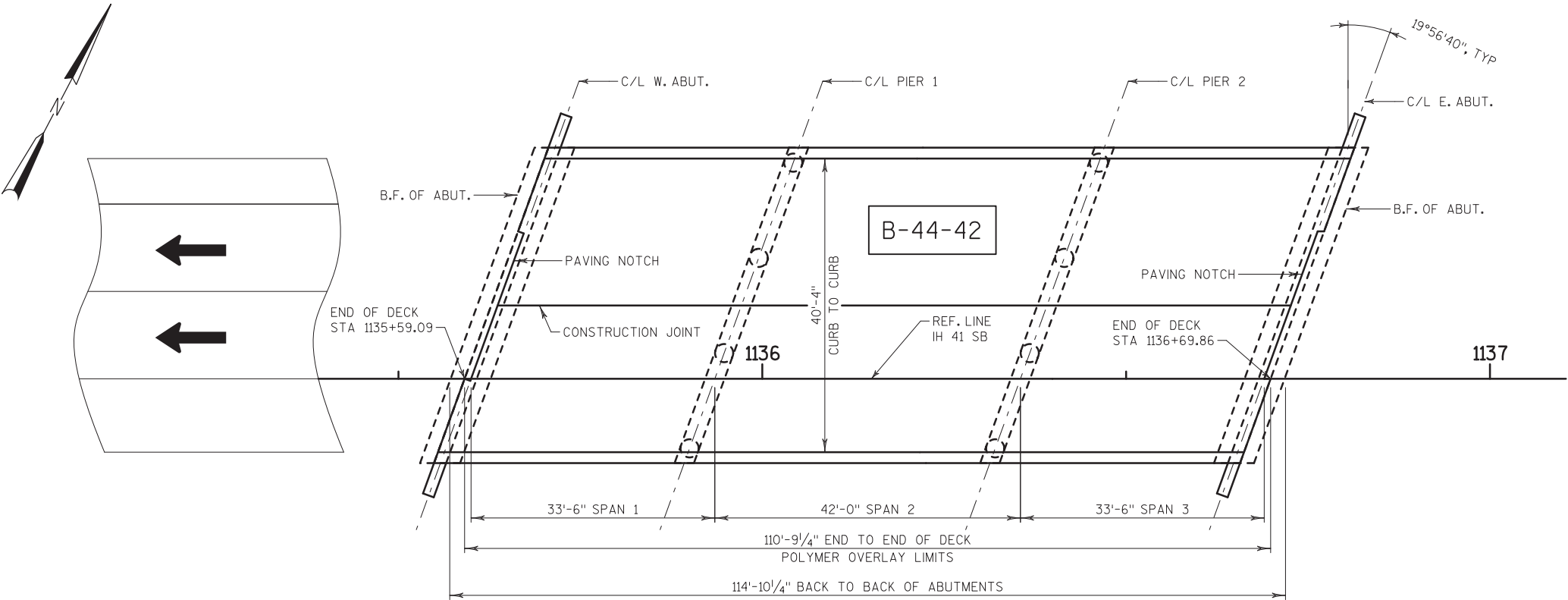


5/22/2017

STRUCTURES DESIGN CONTACTS

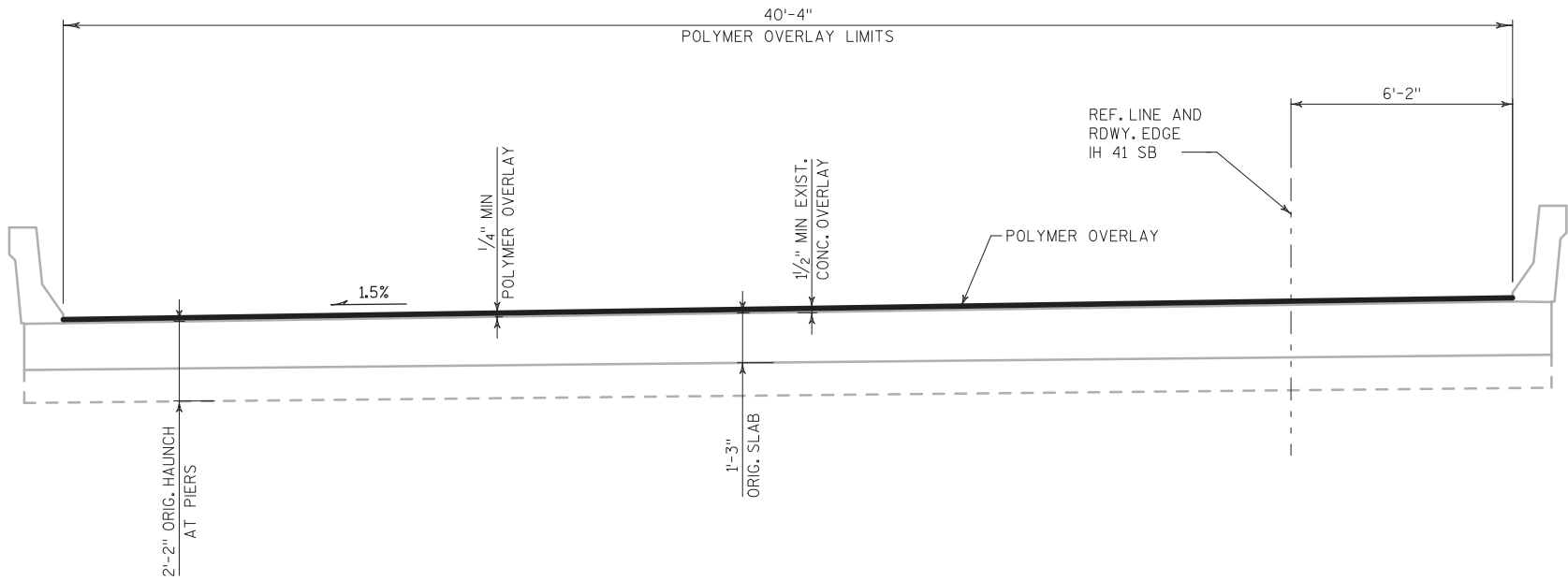
BRIDGE OFFICE:  
WILLIAM DREHER (608) 266-8489  
CONSULTANT:  
RANDY THOMAS (414) 847-0447

NO.	DATE	REVISION	BY
<div>ch2m</div>			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED <i>William C. Dreher</i> SDR		08/28/17	
CHIEF STRUCTURES DESIGN ENGINEER		DATE	
STRUCTURE B-44-42			
IH 41 SB OVER MALONEY RD			
COUNTY	OUTAGAMIE	TOWN/CITY/VILLAGE	KAUKAUNA
DESIGN SPEC. REHABILITATION N/A			
DESIGNED BY	KES	DESIGN CK'D.	ASW
DRAWN BY	MHM	PLANS CK'D.	ASW
GENERAL PLAN & CROSS SECTION			SHEET 1 OF 2



PLAN

(POLYMER OVERLAY OF 3-SPAN HAUNCHED SLAB)



BRIDGE CROSS SECTION

(LOOKING EAST)

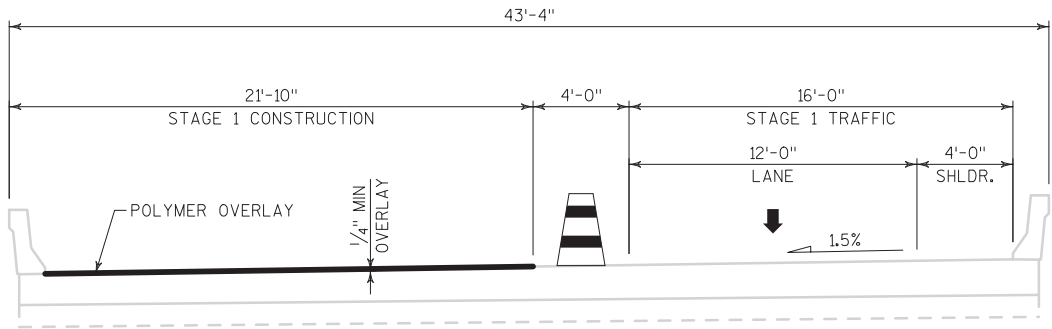
TOTAL ESTIMATED QUANTITIES

ITEM NO.	BID ITEMS	UNIT	TOTAL
502.3210	PIGMENTED SURFACE SEALER	SY	89
509.5100.S	POLYMER OVERLAY	SY	497

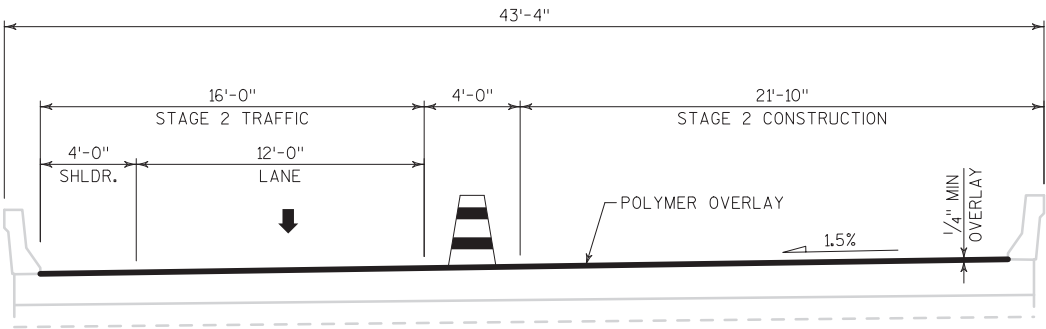
ALL ITEMS ARE CATEGORY 0040

GENERAL NOTES

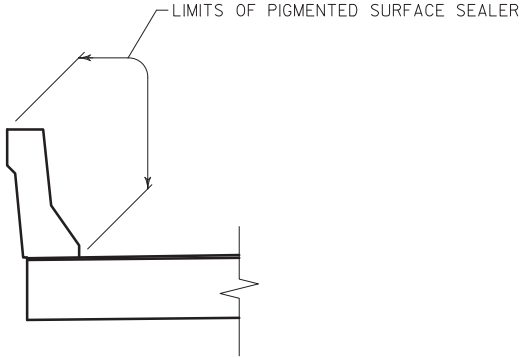
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- DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".



STAGE 1  
(LOOKING EAST)

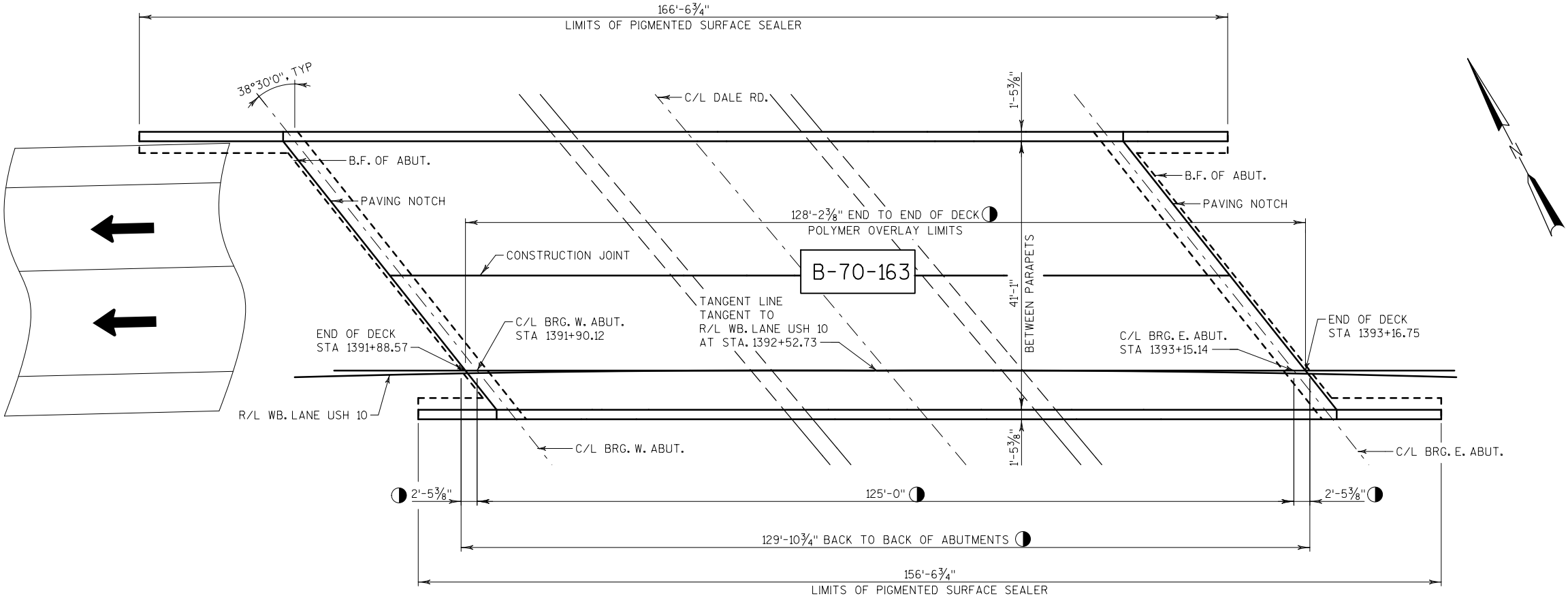


STAGE 2  
(LOOKING EAST)



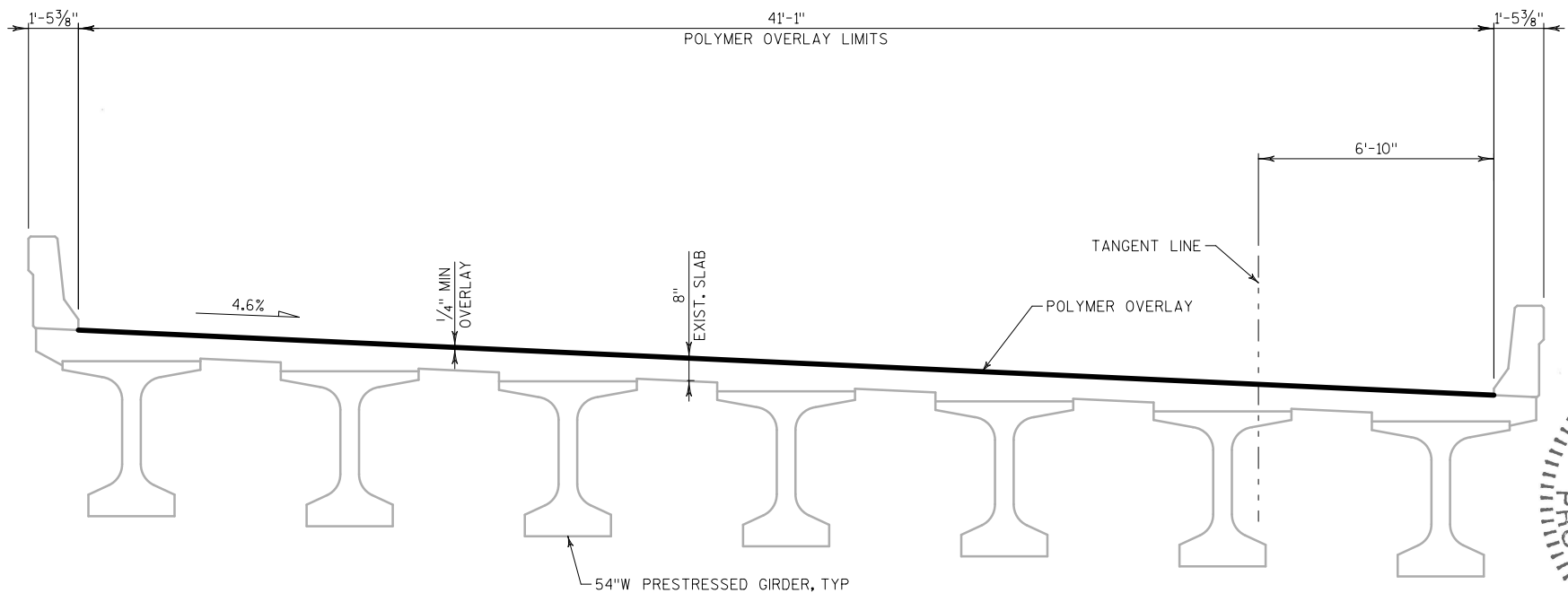
PARAPET DETAIL

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-44-42			
DRAWN BY		ASW	PLANS CK'D. WRT
GENERAL NOTES, QUANTITIES, & STAGING			SHEET 2 OF 2



PLAN

(POLYMER OVERLAY OF SINGLE-SPAN PRESTRESSED GIRDER)



BRIDGE CROSS SECTION

(LOOKING EAST)

DESIGN DATA

LIVE LOAD:

INVENTORY RATING: HS-26  
OPERATING RATING: HS-58  
WISCONSIN STANDARD PERMIT VEHICLE: 240 KIPS

TRAFFIC DATA

USH-10 DALE RD  
AADT = 8,250 (2016) AADT = 225 (2016)  
AADT = 22,600 (2025) AADT = 225 (2025)  
RDS = 70 MPH RDS = 50 MPH

LIST OF DRAWINGS

1. GENERAL PLAN & CROSS SECTION  
2. GENERAL NOTES, QUANTITIES, & STAGING

LEGEND

⦿ DIMENSIONS ARE TAKEN ALONG TANGENT LINE

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:  
WILLIAM DREHER (608) 266-8489  
CONSULTANT:  
RANDY THOMAS (414) 847-0447

NO.	DATE	REVISION	BY
<div>ch2m</div>			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED	<i>William C. Dreher</i> SDR	08/28/17	DATE
STRUCTURE B-70-163			
WB USH 10 OVER DALE RD			
COUNTY	WINNEBAGO	TOWN/CITY/VILLAGE	WINCHESTER
DESIGN SPEC. REHABILITATION N/A			
DESIGNED BY	ASW	DESIGN CK'D.	WRT
DRAWN BY	MHM	PLANS CK'D.	ASW
GENERAL PLAN & CROSS SECTION			SHEET 1 OF 2

5/19/17





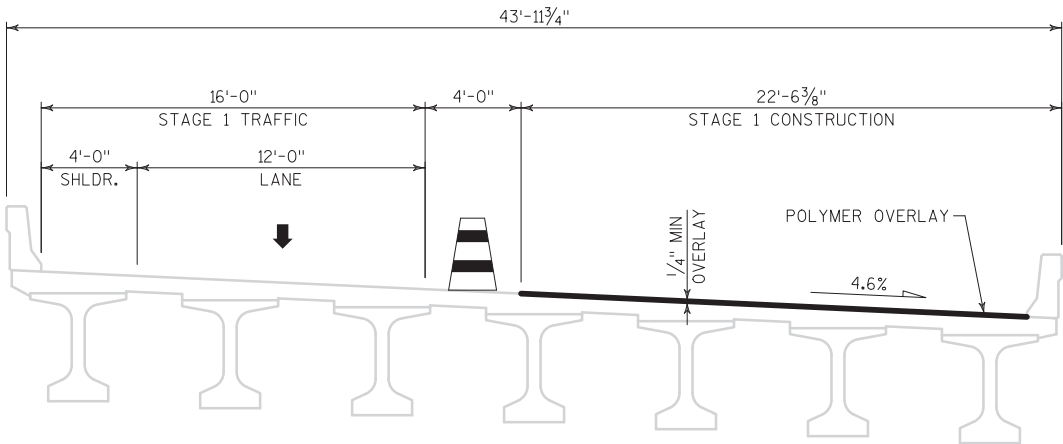
TOTAL ESTIMATED QUANTITIES

ITEM NO.	BID ITEMS	UNIT	TOTAL
502.3210	PIGMENTED SURFACE SEALER	SY	131
509.5100.S	POLYMER OVERLAY	SY	586

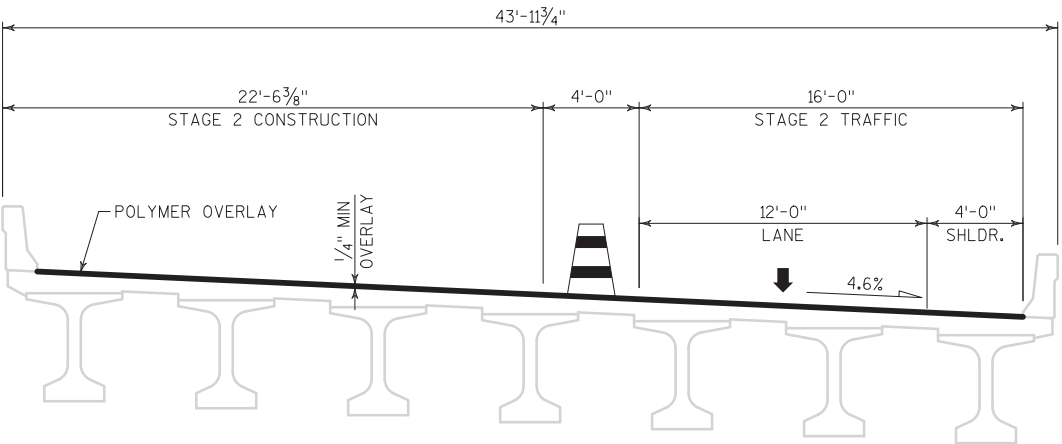
ALL ITEMS ARE CATEGORY 0020

GENERAL NOTES

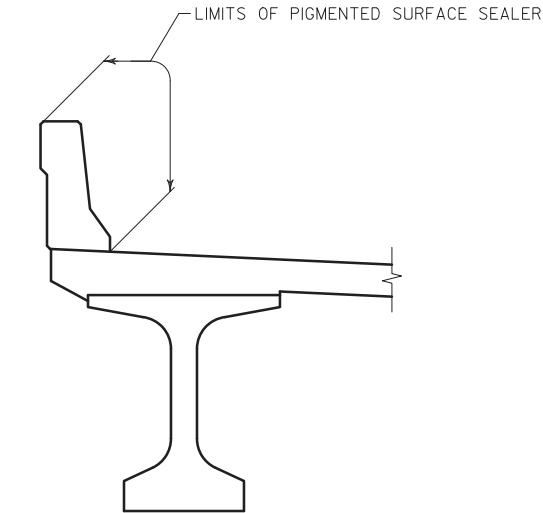
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- DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".



STAGE 1  
(LOOKING EAST)

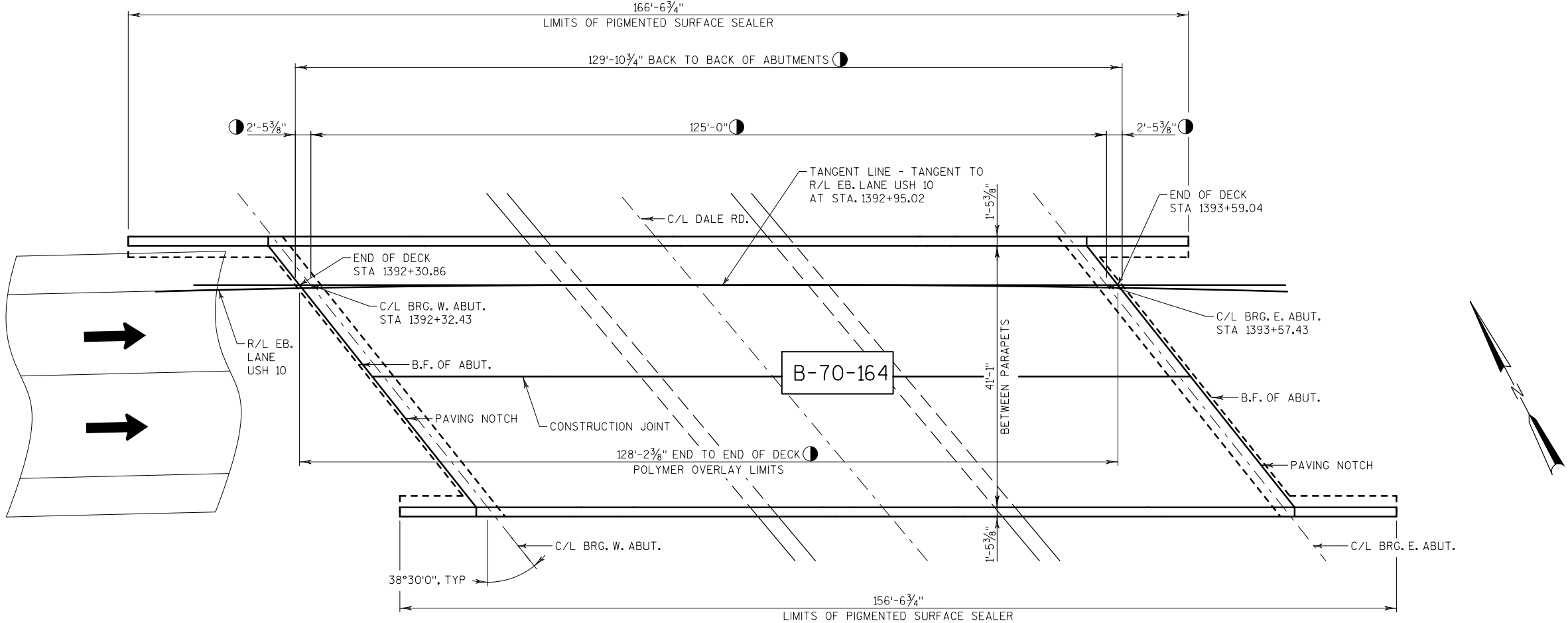


STAGE 2  
(LOOKING EAST)



PARAPET DETAIL  
PIGMENTED SURFACE SEALER EXTENDS BEYOND ENDS OF BRIDGE DECK (SEE PLAN VIEW, SHEET 1)

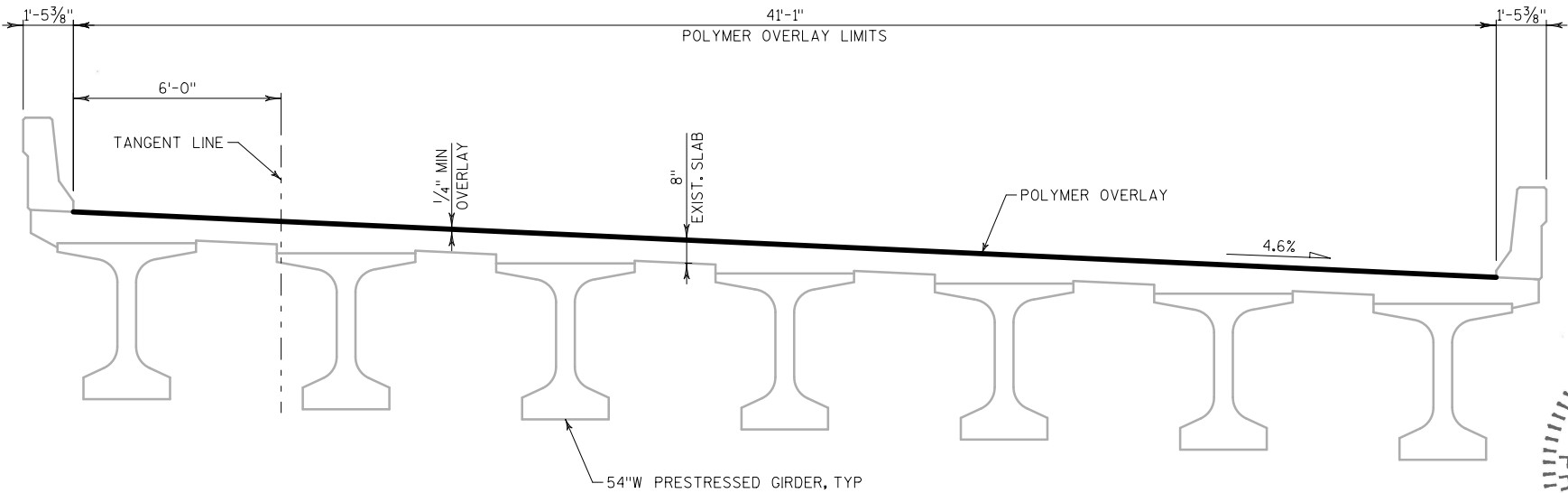
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-70-163			
DRAWN BY ASW		PLANS CK'D. WRT	
GENERAL NOTES, QUANTITIES, & STAGING			SHEET 2 OF 2



B-70-164

PLAN

(POLYMER OVERLAY OF SINGLE-SPAN PRESTRESSED GIRDER)



BRIDGE CROSS SECTION

(LOOKING EAST)

DESIGN DATA

LIVE LOAD:

INVENTORY RATING: HS-26  
OPERATING RATING: HS-58  
WISCONSIN STANDARD PERMIT VEHICLE: 240 KIPS

TRAFFIC DATA

USH-10  
AADT = 8,250 (2016)  
AADT = 22,600 (2025)  
RDS = 70 MPH

DALE RD  
AADT = 225 (2016)  
AADT = 225 (2025)  
RDS = 50 MPH

LIST OF DRAWINGS

1. GENERAL PLAN & CROSS SECTION  
2. GENERAL NOTES, QUANTITIES, & STAGING

LEGEND

● DIMENSIONS ARE TAKEN ALONG TANGENT LINE

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:  
WILLIAM DREHER (608) 266-8489  
CONSULTANT:  
RANDY THOMAS (414) 847-0447

NO.	DATE	REVISION	BY
<div>ch2m</div>			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED	<i>William C. Dreher</i> SDR CHIEF STRUCTURES DESIGN ENGINEER		08/28/17 DATE
STRUCTURE B-70-164			
EB USH 10 OVER DALE RD			
COUNTY	WINNEBAGO	TOWN/CITY/VILLAGE	WINCHESTER
DESIGN SPEC. REHABILITATION N/A			
DESIGNED BY	ASW	DESIGN CK'D.	WRT
DRAWN BY	MHM	PLANS CK'D.	ASW
GENERAL PLAN & CROSS SECTION			SHEET 1 OF 2



5/19/17

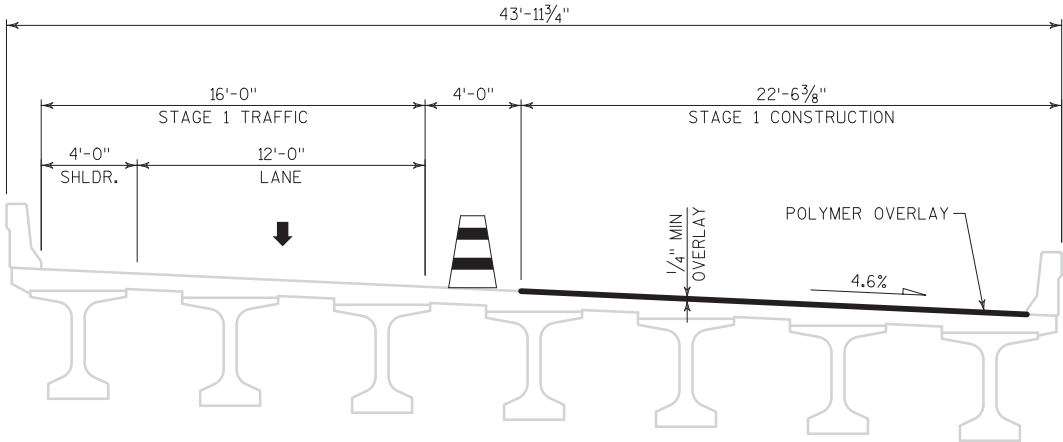
TOTAL ESTIMATED QUANTITIES

ITEM NO.	BID ITEMS	UNIT	TOTAL
502.3210	PIGMENTED SURFACE SEALER	SY	131
509.5100.S	POLYMER OVERLAY	SY	586

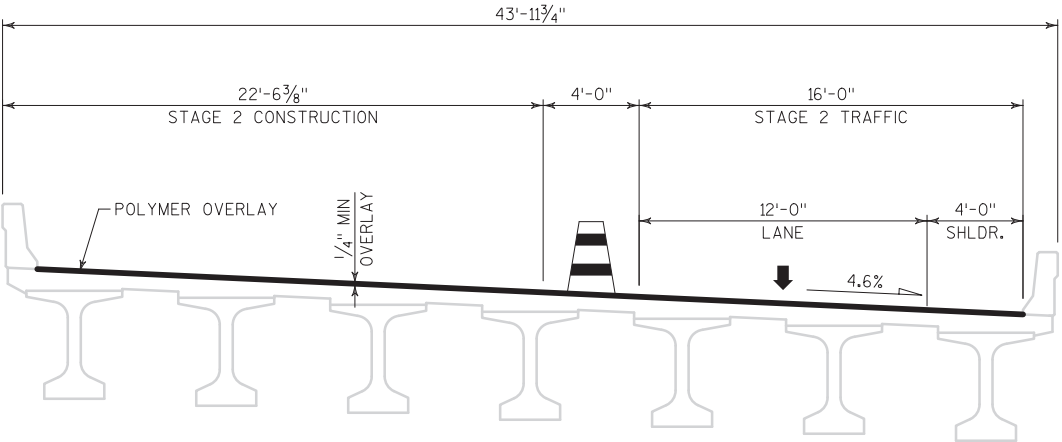
ALL ITEMS ARE CATEGORY 0030

GENERAL NOTES

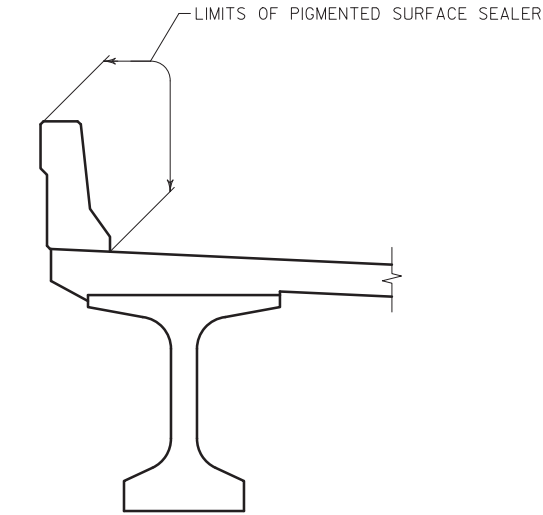
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- DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".



STAGE 1  
(LOOKING EAST)



STAGE 2  
(LOOKING EAST)



PARAPET DETAIL  
PIGMENTED SURFACE SEALER EXTENDS BEYOND ENDS OF BRIDGE DECK (SEE PLAN VIEW, SHEET 1)

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-70-164			
DRAWN BY ASW		PLANS CK'D. WRT	
GENERAL NOTES, QUANTITIES, & STAGING		SHEET 2 OF 2	





## ***Wisconsin Department of Transportation***

Dedicated people creating transportation solutions  
through innovation and exceptional service.

<http://www.dot.wisconsin.gov>