

GENERAL NOTES

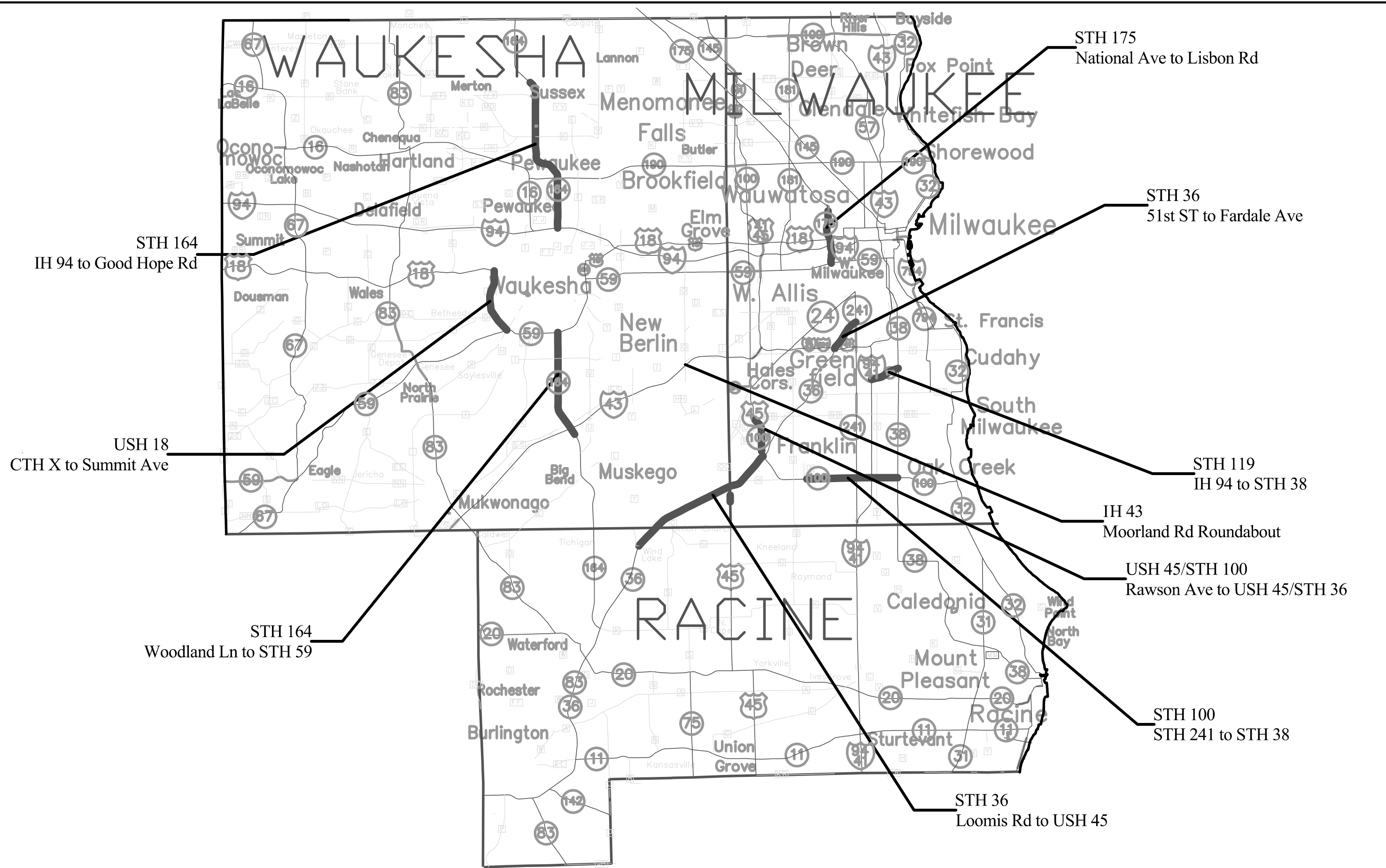
THERE ARE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS. COORDINATE CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OR DIGGERS HOTLINE.

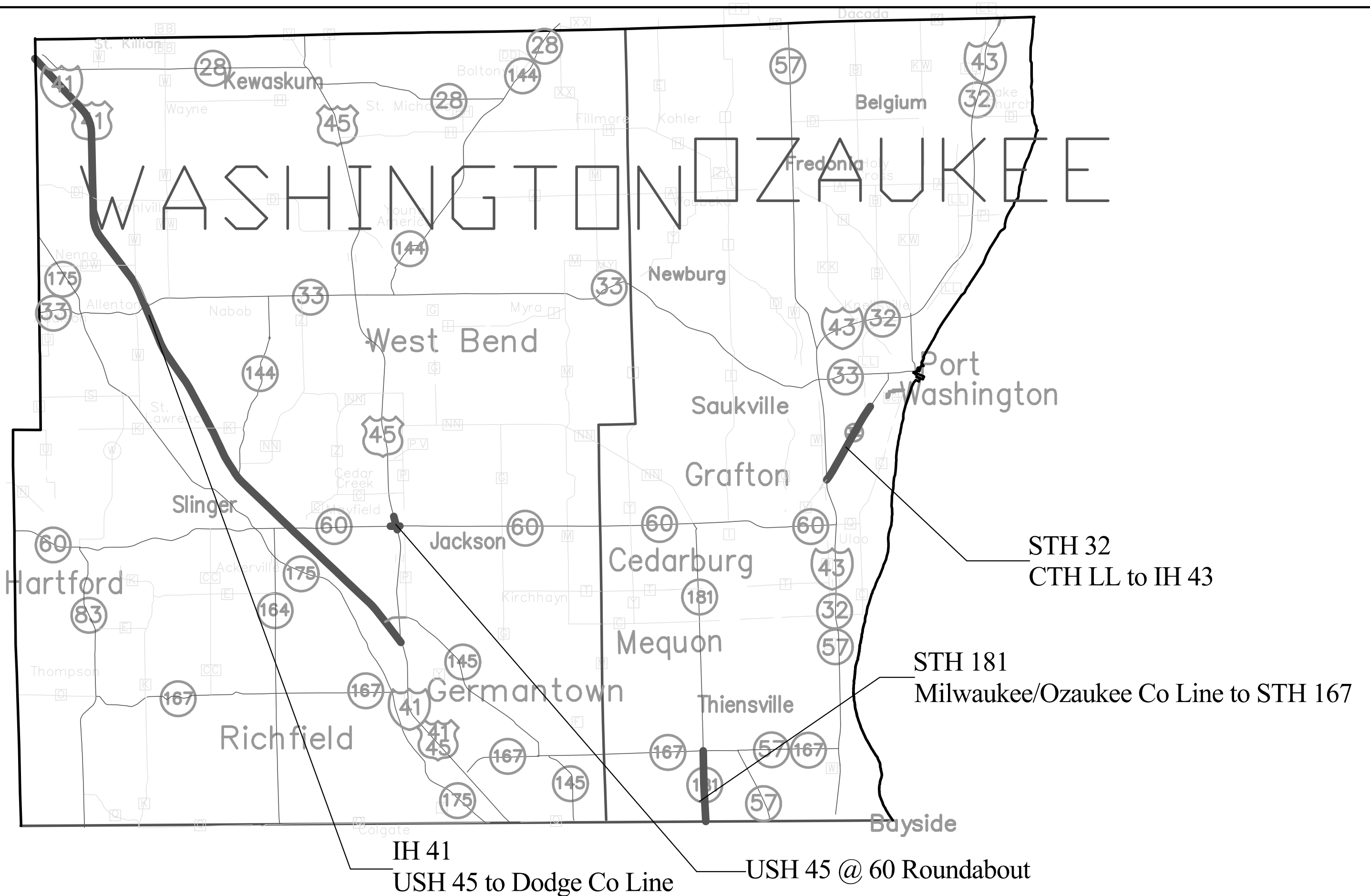


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IH 41
 USH 45 to Dodge Co Line

USH 45 @ 60 Roundabout

STH 32
 CTH LL to IH 43

STH 181
 Milwaukee/Ozaukee Co Line to STH 167

Estimate Of Quantities

1000-77-24

Line	Item	Item Description	Unit	Total	Qty
0002	619.1000	Mobilization	EACH	1.000	1.000
0004	646.1555	Marking Line Grooved Contrast Permanent Tape 4-Inch	LF	50.000	50.000
0006	646.2020	Marking Line Epoxy 6-Inch	LF	2,235,601.000	2,235,601.000
0008	646.2041.S	Marking Replace Line Wet Reflective Epoxy 6-inch	LF	38,725.000	38,725.000
0010	646.3555	Marking Line Grooved Contrast Permanent Tape 8-Inch	LF	50.000	50.000
0012	646.4020	Marking Line Epoxy 10-Inch	LF	147,643.000	147,643.000
0014	646.4041.S	Marking Replace Line Wet Reflective Epoxy 10-inch	LF	46,926.000	46,926.000
0016	646.5020	Marking Arrow Epoxy	EACH	632.000	632.000
0018	646.5120	Marking Word Epoxy	EACH	304.000	304.000
0020	646.5320	Marking Railroad Crossing Epoxy	EACH	10.000	10.000
0022	646.5420	Marking Aerial Enforcement Bar Epoxy	EACH	80.000	80.000
0024	646.6120	Marking Stop Line Epoxy 18-Inch	LF	9,294.000	9,294.000
0026	646.6320	Marking Dotted Extension Epoxy 18-Inch	LF	326.000	326.000
0028	646.7120	Marking Diagonal Epoxy 12-Inch	LF	1,776.000	1,776.000
0030	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	18,887.000	18,887.000
0032	646.7520	Marking Crosswalk Epoxy Block Style 24-Inch	LF	360.000	360.000
0034	SPV.0060	Special 01. Traffic Control	EACH	1.000	1.000
0036	SPV.0090	Special 01. Marking Line Black Epoxy	LF	84,950.000	84,950.000
0038	SPV.0090	Special 02. Marking Stop Line Epoxy 24-In	LF	24.000	24.000

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KENOSHA COUNTY IH 41/94 State Line to Racine/Kenosha County Line		646.2020 LINE EPOXY 6-IN			646.4020 LINE EPOXY 10-IN			646.2041.S LINE WET REFL EPOXY 6-IN	646.4041.S LINE WET REFL EPOXY 10-IN	SPV.0090.01 MARKING LINE BLACK EPOXY	646.5020 ARROW EPOXY					646.5120 WORD EPOXY	646.6120 STOP LINE EPOXY 18-IN		646.7120 DIAGONAL EPOXY 12-IN	646.7420 CROSSWALK EPOXY 6-IN			
ROUTE	LOCATION	EDGE LINE		LANE LINE	GORE	3' LINE, 9' GAP	RAMP GORE	LANE LINE	3' LINE, 9' GAP	GORE	LANE LINE	TURN LANE		RAMP	MAINLINE	TURN LANE	OFF RAMP	INTERSECTING ROADWAY	GORE	RAMP	INTERSECTING ROADWAY		
		YELLOW LF	WHITE LF	WHITE LF	WHITE LF	WHITE LF	WHITE LF	WHITE LF	WHITE LF	WHITE LF	WHITE LF	BLACK LF	TYPE 1 EACH	TYPE 2 EACH	TYPE 3 EACH	TYPE 4 EACH	TYPE 5 EACH	ONLY EACH	WHITE LF	WHITE LF	WHITE LF	WHITE LF	WHITE LF
IH 41 NB	State Line to STH 142	19800	19800					4950			4950												
	Weigh Station Off Ramp	1180	1090		730		340																
	Weigh Station On Ramp	500	880		765																		
	STH 165/ CTH Q OFF RAMP	1365	1156	125			492		72	430			6	2			3	64					
	STH 165/ CTH Q ON RAMP	2071	3045	75																			
	CTH C/Wilmot Rd OFF RAMP	1373	1835	62.5				172		799	990			2	2		1	17	62			76	
	CTH C/Wilmot Rd ON RAMP	1463	2208							252	1465					2							
	STH 50 OFF RAMP	935	2363	437.5	688			325		225	1195		4	8			12	154				308	
	CD Road from STH 50 to 71st St	1265	1265	100	242			353		42			2	4			4		37			98	
	71st St ON RAMP	862	1992	175				1814															
STH 158 OFF RAMP	839	1102		395			686		852	806			4	2			2	54					
STH 158 ON RAMP	1159	1842	266						54	1482					2								
STH 142 OFF RAMP to CTH KR OFF RAMP	46728	46728														1	46						
STH 142 OFF RAMP	984	1367					461						2	2									
STH 142 ON RAMP	1220	1663													2								
CTH E/Somers Rd OFF RAMP	955	1260					165							1			24	67					
CTH E/Somers Rd ON RAMP	808	1492													2								
CTH KR OFF RAMP				1422	125	745							4	2			62	100			124		
CTH KR ON RAMP	981	1569	125																		114		
CTH KR ON RAMP to STH 142 ON RAMP	46728	46728																					
CTH KR OFF RAMP	981	1455		274		336							4	2			64	71			146		
CTH KR ON RAMP	1196	1484			168										4						152		
CTH E/Somers Rd OFF RAMP	1141	1543				149								1			36	51					
CTH E/Somers Rd ON RAMP	944	1791													2								
STH 142 ON RAMP to State Line	19800	19800						4950			4950												
STH 142 OFF RAMP	915	1527							159	1028			4	2		4	60						
STH 142 ON RAMP	832	1512							57	1355					2								
STH 158 OFF RAMP	913	1208		396		433			210	585			4	2		4	30						
STH 158 ON RAMP	1168	1882							747	1413													
STH 71st St OFF RAMP	856	1643	462	240		306				1222		2	4	2		6	36				110		
CD Road from 71st St to STH 50	1278	1198	275						100	500		2	6	2		8		65			208		
STH 50 ON RAMP	935	2223							39	2649					2						82		
Wilmot Rd/CTH C OFF RAMP	1204	1691	125			402			177	939			2	2		1	12	80				78	
Wilmot Rd/CTH C ON RAMP	1084	1707							54	1352													
STH 165 OFF RAMP	1751	2045				429			204	495				1					200				
STH 165 ON RAMP	4514	4798				792			42	2250					2								
TOTAL		170728	186892	2228	6199	293	8400	9900	4085	20951	9900	10	54	24	3	20	46	659	533	200	1418	78	

SKIP TAPE LANE LINE AND CHANNELIZING LINE UNLESS NOTED

WASHINGTON COUNTY IH 41 USH 45 to Dodge Co Line		646.2020 LINE EPOXY 6-IN EDGELINE		646.4020 LINE EPOXY 10-IN			646.2041.S LINE WET REFL EPOXY 6-IN	SPV.0090.01 MARKING LINE BLACK EPOXY	646.5020 ARROW EPOXY								646.5120 WORD EPOXY	646.6120 STOP LINE EPOXY 18-IN	646.6320 DOTTED EXTENSION EPOXY 18-IN
ROUTE	LOCATION	YELLOW LF	WHITE LF	TURN LANE WHITE LF	LANE LINE WHITE LF	GORE WHITE LF	LANE LINE WHITE LF	LANE LINE BLACK LF	TURN LANE					RAMP	MAINLINE	TURN LANE ONLY EACH	OFF RAMP WHITE LF	2' LINE, 2' GAP WHITE LF	
									TYPE 1 EACH	TYPE 2 EACH	TYPE 2R EACH	TYPE 3 EACH	TYPE 3R EACH	TYPE 6 EACH	TYPE 4 EACH	TYPE 5 Each			
IH 41 NB	USH 45/MILE 59.5 TO STH 144 JOINT Mile 67.2	40870	40870								2			2			1		28
	STH 145 OFF RAMP	875	1130																
	STH 145 Interior RAB				375	225			1	1		2					1		
	STH 145 ON RAMP	1070	1705																
	STH 60 EB OFF RAMP	440	1205																
	STH 60 WB OFF RAMP	1415	2138																
	STH 60 ON RAMP	1645	2310																
	STH 144 OFF RAMP	1235	1595												1			32	
	STH 144 ON RAMP	885	1210													2			
	STH 144 JOINT TO Mile 69.8	29250	29250				7312.5	7312.5											
CTH K OFF RAMP	1715	2050	220		715									1			24		
CTH K ON RAMP	1220	2310			2170														
MILE 69.8 TO DODGE CO LINE	45040	45040																	
STH 33 OFF RAMP	1520	1980												1			32		
STH 33 ON RAMP	1250	2260																	
CTH D OFF RAMP	1625	2140								1		1					36		
CTH D ON RAMP	1115	2540																	
IH 41 SB	DODGE CO LINE to Mile 69.8	45040	45040																
	CTH D OFF RAMP	1340	1945															36	
	CTH D ON RAMP	1185	2315																
	STH 33 OFF RAMP	845	1350												1			38	
	STH 33 ON RAMP	935	2180																
	Mile 69.8 to STH 144	29250	29250				7312.5	7312.5		1		1							
	CTH K OFF RAMP	1245	1750												1			35	
CTH K ON RAMP	1365	2560	925		2400														
STH 144 to USH 45/Mile 59.5	40870	40870																	
STH 144 OFF RAMP	1560	1810												1			20		
STH 144 ON RAMP	1015	1645													2				
STH 60 OFF RAMP	340	1020															55		
STH 60 ON RAMP	660	1420																	
STH 145 OFF RAMP	860	1325								2		3	2			2	42		
STH 145 Interior RAB					250	285			2	2									
STH 145 ON RAMP	1000	1850																	
TOTAL		258680	276063	1145	625	5795	14625	14625	3	5	2	7	2	2	6	4	4	350	28

SKIP TAPE LANE LINE AND CHANNELIZING LINE UNLESS NOTED

WAUKESHA COUNTY IH 43 CTH O/MOORLAND RD RAB SOUTH OF IH 43		646.2020 LINE EPOXY 6-IN LANE LINE	646.4020 LINE EPOXY 10-IN GORE	646.5020 ARROW EPOXY					646.5120 WORD EPOXY TURN LANE	646.6320 DOTTED EXTENSION EPOXY 18-IN 2' LINE, 2' GAP
ROUTE	LOCATION	WHITE LF	WHITE LF	TYPE 1 EACH	TYPE 2 EACH	TYPE 2R EACH	TYPE 3 EACH	TYPE 6 EACH	ONLY EACH	WHITE LF
IH 43/ CTH O RAB	IH 43 NB OFF RAMP INNER CIRCLE	400	240	2	2	2	3	2	1	78
TOTAL		400	240	2	2	2	3	2	1	78

**WALWORTH COUNTY
USH 12
STH 120 Roundabouts**

ROUTE	LOCATION	646.2020 LINE EPOXY 6-IN EDGE LINE		646.4020 LINE EPOXY 10-IN RAMP GORE	646.5020 ARROW EPOXY TURN LANE				646.5120 WORD EPOXY TURN LANE	646.6320 DOTTED EXTENSION EPOXY 18-IN 2' LINE, 2' GAP	646.7420 CROSSWALK EPOXY 6-IN RAMP
		YELLOW LF	WHITE LF	WHITE LF	TYPE 1 EACH	TYPE 2 EACH	TYPE 3 EACH	TYPE 3R EACH	ONLY EACH	WHITE LF	WHITE LF
USH 12 EB	STH 120 OFF RAMP	810	1030								40
	STH 120 ON RAMP	1035	1655								36
	STH 120 EB RAB				3	1	5	3	1	46	
USH 12 WB	STH 120 OFF RAMP	1020	1020	75						16	36
	STH 120 ON RAMP	890	890								40
	STH 120 WB RAB			210	3	1	4	2	1	44	
TOTAL		3755	4595	285	6	2	9	5	2	106	152

DO NOT PAINT TAPE LANE LINES OR CHANNELIZNG LINES

ROUTE	LOCATION	646.2020 LINE EPOXY 6-IN EDGE LINE		646.5020 ARROW EPOXY TURN LANE	646.5120 WORD EPOXY TURN LANE	646.6120 STOP LINE EPOXY 18-IN		646.7120 DIAGONAL EPOXY 12-IN	646.7420 CROSSWALK EPOXY 6-IN		646.5320 RAILROAD CROSSING EPOXY
		YELLOW LF	WHITE LF	TYPE 2 EACH	ONLY EACH	MAINLINE WHITE LF	INTERSECTING ROADWAY WHITE LF	GORE WHITE LF	RAMP WHITE LF	INTERSECTING ROADWAY WHITE LF	WHITE EACH
USH 18 WB	CTH X to Summit Ave	16800	16800								
	CTH DE TURN LANE			4	2	68		176	256	148	
	RAILROAD CROSSING Mac Arthur Rd			2	1			72			3
	House 2431			4	2			72			
	Kame Terrace			2	1			54			
USH 18 EB	Merrill Hills Ct			2	1			65	208		
	Madison St			2	1			65	200		
	Kisdon Hill Dr			4	2	67	43	112	188	128	
	Fiddlers Creek Dr			2	1			65	180	104	
	Summit Ave			4	2			65	196		
USH 18 EB	Summit Ave to CTH X	16800	16800								
	Fiddlers Creek Dr			5	2	44		83	275		
	Kisdon Hill Dr			4	2			30			
	Madison St			2	1			70	200		
	Merrill Hills Ct			4	2	63	31	78	236	102	
	Kame Terrace			4	2			78	207	102	
	House 2431			4	2			78	207	114	
Mac Arthur Rd			2	1			45				
RAILROAD CROSSING			2	1			65			3	
TOTAL	TURN LANE			2	1			60			
	CTH DE			4	2	60	32	84	226	142	
	CTH X			4	2	45			233		

DO NOT PAINT TAPE LANE LINE OR CHANNELIZING LINE

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WASHINGTON COUNTY USH 45 Ramps and Roundabouts STH 60		646.2020 LINE EPOXY 6-IN EDGE LINE		646.4020 LINE EPOXY 10-IN RAMP GORE	646.5020 ARROW EPOXY TURN LANE					646.5120 WORD EPOXY TURN LANE ONLY EACH	646.6320 DOTTED EXTENSION EPOXY 18-IN 2' LINE, 2' GAP	646.7520 CROSSWALK EPOXY BLOCK STYLE 24-IN RAMP
ROUTE	LOCATION	YELLOW LF	WHITE LF	WHITE LF	TYPE 1 EACH	TYPE 2 EACH	TYPE 2R EACH	TYPE 3 EACH	TYPE 3R EACH		WHITE LF	WHITE LF
USH 45 RAB	Tille Lake Rd to Pharmacal Way	3094			2				2		20	170
	STH 60 EB Approach to USH 45 SB										10	120
	USH 45 SB OFF RAMP	943	1133	432	3	2	2			2		
	USH 45 SB Inner Circle					1		2				
	USH 45 SB ON RAMP	860	1855	64								
	STH 60 WB Approach to USH 45 SB				2				2	4	14	
	STH 60 EB Approach USH 45 NB				2		2			2	22	
	USH 45 NB OFF RAMP	959	1234	391		2			2	1	32	
	USH 45 NB Inner Circle				3	1		1				
	USH 45 NB ON RAMP	980	1690	149	2			2				70
STH 60 WB Approach to USH 45 NB				2			2		1	16		
TOTAL		6836	5912	1036	16	6	4	7	6	10	114	360

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MILWAUKEE COUNTY USH 45/STH 100 Rawson Ave to Divided before USH 45/STH 36		646.2020 LINE EPOXY 6-IN			646.4020 LINE EPOXY 10-IN	SPV.0090.01 MARKING LINE BLACK EPOXY	646.5020 ARROW EPOXY	646.5120 WORD EPOXY	646.6120 STOP LINE EPOXY 18-IN		646.7420 CROSSWALK EPOXY 6-IN			
ROUTE	LOCATION	CENTERLINE	EDGE LINE		LANE LINE	TURN LANE	GORE	LANE LINE	TURN LANE	TURN LANE	MAINLINE	INTERSECTING ROADWAY	MAINLINE	INTERSECTING ROADWAY
		YELLOW LF	YELLOW LF	WHITE LF	WHITE LF									
USH 45 SB	Rawson Ave Bridge Deck to Divided at STH 36/USH 45	5100	5280	8131	1325			1325						
	Church					271			1	1				
	Woelfel Rd/Friar Ln					341								
	Drexel Ave					225	283		4	4	56	45	242	192
	Speedway					90								
	Target					190			2	2				
USH 45 NB	Target					200			2	2				
	STH 36/USH 45 to Rawson Ave Bridge Deck		5280	8131	1300			1300						
	Target					140			2	2				
	Target					192								
	Drexel Ave					185	352		4	2	51	42	222	160
	Woelfel Rd/Friar Ln					345								
Church					110			1	1					
Rawson Ave						288								
TOTAL		5100	10560	16262	2625	2289	923	2625	16	14	107	87	464	352

OZAUKEE COUNTY STH 32 CTH LL to IH 43		646.2020 LINE EPOXY 6-IN			646.4020 LINE EPOXY 10-IN		SPV.0090.01 MARKING LINE BLACK EPOXY	646.5020 ARROW EPOXY	646.5120 WORD EPOXY
ROUTE	LOCATION	EDGE LINE		LANE LINE	TURN LANE	RAMP GORE	LANE LINE	TURN LANE	TURN LANE
		YELLOW LF	WHITE LF	WHITE LF	WHITE LF	WHITE LF	BLACK LF	TYPE 2 EACH	ONLY EACH
STH 32 NB	IH 43 NB OFF RAMP to CTH LL	12958	12958	3750			3750		
	IH 43 SB OFF RAMP to IH 43 NB OFF RAMP GORE	1275	1275	325			325	2	2
	I-43 NB OFF RAMP					1323			
	House #1867				125				
	EAST FRONTAGE RD				220				
	WEST FRONTAGE RD				125				
STH 32 NB	ULAO PARKWAY				521				
	House # 2149				120				
	House # 118				111				
	House # 2273				117				
	BLUE SPRUCE CT CROSSOVER				110	320			
STH 32 SB	EAST SAUK RD CTH LL				219				
					554				
	IH 43 NB OFF RAMP to CTH LL	12958	12958	3750			3750		
	EAST SAUK RD CROSSOVER				342				
					119				
	MISTY RIDGE LA				235				
	House # 2275				119				
	House # 123				158				
	House #2149				117				
	ULAO PARKWAY				554				
STH 32 SB	WEST FRONTAGE RD				212				
	EAST FRONTAGE RD				120				
	House #1867				125				
	IH 43 SB OFF RAMP to IH 43 NB OFF RAMP GORE	1275	1275	325			325		
	I-43 NB ON RAMP				615				
TOTAL	I-43 SB ON RAMP				228			2	2
		28466	28466	8150	5166	1643	8150	4	4

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MILWAUKEE COUNTY STH 36 51st St to Fardale Ave		646.2020 LINE EPOXY 6-IN EDGELINE		646.2041.S LINE WET REFL EPOXY 6-IN LANE LINE	646.4041.S LINE WET REFL EPOXY 10-IN TURN LANE	646.5020 ARROW EPOXY TURN LANE	646.5120 WORD EPOXY TURN LANE	646.6120 STOP LINE EPOXY 18-IN		646.7420 CROSSWALK EPOXY 6-IN	
Route	LOCATION	YELLOW LF	WHITE LF	WHITE LF	WHITE LF	TYPE 2 EACH	WHITE EACH	MAINLINE WHITE LF	INTERSECTING ROADWAY WHITE LF	RAMP WHITE LF	INTERSECTING ROADWAY WHITE LF
STH 36 NB	51st St to Layton Ave/CTH Y Edgerton Ave Aurora Health Center Aurora Health Center Layton Ave	4015	4015	1000	330 135 390 555	3 2 3	1 1 1	61 47	27 62	212 200	122 256
	43rd Ave to Fardale Ave Cold Spring Rd 35th St	6550	6550	1625	215 130	4 2	1	55	30	214	130
	Howard Ave 3390 Fardale Ave				335 105 75	4	1	62	39	220 228	166
STH 36 SB	Fardale Ave to 43rd Ave Miner St/33rd St Howard Ave 35th St	6550	6550	1625	155 250 105	4 2	1 1	48	48	234	174
	Cold Spring Rd Park and Ride				345 110	4 2	2	53	36	220	150
	Layton Ave/CTH Y to 51st St Southpointe Healthcare Center Edgerton Ave 51st ST	4015	4015	1000	195 345 175	4	2	66	30	253	172
TOTAL		21130	21130	5250	3950	34	11	392	272	1781	1170

1100-46-71 Project Coordination from Layton Ave to 43rd Ave

RACINE AND WAUKESHA COUNTY STH 36 Loomis Rd Wind Lake to USH 45		646.2020 LINE EPOXY 6-IN EDGELINE			646.2041.S LINE WET REFL EPOXY 6-IN LANE LINE	646.6120 STOP LINE EPOXY 18-IN		646.7120 DIAGONAL EPOXY 12-IN	646.7420 CROSSWALK EPOXY 6-IN	
Route	LOCATION	YELLOW LF	WHITE LF	WHITE LF	WHITE LF	MAINLINE WHITE LF	INTERSECTING ROADWAY WHITE LF	GORE WHITE LF	MAINLINE WHITE LF	INTERSECTING ROADWAY WHITE LF
STH 36 NB	Loomis Rd to USH 45/STH 100 Muskego Dam USH 45	33369	33369	8350	49 42	12 68	224			
	USH 45/STH 100 to Loomis Rd USH 45 Muskego Dam Loomis Rd	33369	33369	8350	42 46 40	25 22		230 224	100	
TOTAL		66738	66738	16700	219	127	224	454	100	

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KENOSHA COUNTY STH 50 236th Ave to 118th Ave		646.2020 LINE EPOXY 6-IN			646.4020 LINE EPOXY 10-IN	SPV.0090.01 MARKING LINE BLACK EPOXY	646.5020 ARROW EPOXY		646.5120 WORD EPOXY	646.6120 STOP LINE EPOXY 18-IN		646.7420 CROSSWALK EPOXY 6-IN	
		EDGE LINE		LANE LINE	TURN LANE	LANE LINE	TURN LANE		TURN LANE	MAINLINE	INTERSECTING ROADWAY	MAINLINE	INTERSECTING ROADWAY
		YELLOW LF	WHITE LF	WHITE LF	WHITE LF	BLACK LF	TYPE 1 EACH	TYPE 2 EACH	WHITE EACH	WHITE LF	WHITE LF	WHITE LF	WHITE LF
STH 50 EB	236th Ave to 118th Ave Crossover	38300	38300	9550	890	9550							
	216th Ave				475		2	1					
	Pfeiffer Trailer Sales USH 45 Crossovers				1320 1310 680		4	2	40	38			
	CTH D Crossovers				545 1280		4	2					
	CTH MB				435		2	1					
	156th Ave Crossovers				245 530		2	1					
	144th Ave				1455		4	2					
	Crossovers/Driveway 130th Ave 128th Ave				520 400 235		2 2	1 1					
125th Ave 123rd Ave				1295 1010		2 2	1 1						
IH 41 SB On Ramp IH 41 NB On Ramp 118th Ave				1120 385 1580		2 4 4	2 2 4	65 65 67	76	154 158	86 152		
STH 50 WB	118th Ave to 236TH Ave, Paddock IH 41 NB On Ramp IH 41 SB On Ramp	38300	38300	9550	905 370	9550	2	1 4	3 2	65 65	68	154	80 136
	122nd Ave 123rd Ave 125th Ave				240 895 1025		4 2	2 1	81		254	192	
	128th Ave 130th Ave Crossovers/Driveway				235 190 490		2 2	1 1					
	144th Ave Crossovers				1665 510		4	2					
	156th Ave				185		2	1					
	CTH MB Crossovers				250 1210		2	1					
	CTH D				525		4	2					
	Crossovers USH 45 Crossover				750 1333 1240		2	1	40	36			
	216th Ave Crossover				245 920		2	1					
	TOTAL	76600	76600	19100	28893	19100	4	67	40	488	218	720	646

**KENOSHA COUNTY
STH 50
381st Ave to Silver Lake Rd**

ROUTE	LOCATION	646.2020 LINE EPOXY 6-IN		646.4020 LINE EPOXY 10-IN	SPV.0090.01 MARKING LINE BLACK EPOXY	646.5020 ARROW EPOXY	646.5120 WORD EPOXY	646.6120 STOP LINE EPOXY 18-IN		
		EDGELINE YELLOW LF	WHITE LF	LANE LINE WHITE LF	TURN LANE WHITE LF	LANE LINE BLACK LF	TURN LANE TYPE 2 EACH	TURN LANE WHITE EACH	MAINLINE WHITE LF	INTERSECTING ROADWAY WHITE LF
STH 50 EB	381st Ave to Silver Lake Rd/CTH F 381st Ave Crossover	43250	43250	10800	225 130	10800	1	1		
	376th Ave Crossover				190 185		1	1		
	368th Ave/ CTH O Crossovers				1225 280		3	3	51	22
	352nd Ave/ CTH KD Crossover				350 390		4	2		
	STH 83/Geneva Rd Crossovers				375 500		4	2		
	CTH W South Crossover				235 80		2	1		
	CTH W North Crossover				160 165		1	1		
	317th Ave Crossovers				315 455		2	1		
	304th Ave Crossovers				465 970		2	1		
	288th Ave/CTH B Crossovers				1180 1185		3	2	75	45
75th St Inn 261st Ave Crossover				155 435 135		2	1			
STH 50 WB	Silver Lake Rd/CTH F to 381st Ave Crossover	43250	43250	10800	120	10800				
	261st Ave Crossover				220		2	1		
	75th St Inn Crossovers				185 1215					
	288th Ave/CTH B Crossovers				1315 845		4	2	73	59
	304th Ave Crossovers				195 445		2	1		
	317th Ave 319th Ave Crossover				180 150 140		2 2	.		
	CTH W North CTH W South Crossovers				435 55 510		2 1	1 1		
	STH 83/Geneva Rd Crossovers				380 400		4	2	64	25
	352nd Ave/ CTH KD Crossovers				340 295		4	2		
	368th Ave/ CTH O Crossover				1250 195		4	2	47	22
376th Ave Crossover				190 180		2	1			
381st Ave				195						
TOTAL	86500	86500	21600	19220	21600	54	29	310	173	

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MILWAUKEE COUNTY STH 100 STH 241 to STH 38		646.2020 LINE EPOXY 6-IN EDGELINE		646.4020 LINE EPOXY 10-IN		646.2041.S LINE WET REFL EPOXY 6-IN LANE LINE	SPV.0090.01 MARKING LINE BLACK LAG MAINLINE	646.5020 ARROW EPOXY		646.5120 WORD EPOXY	646.6120 STOP LINE EPOXY 18-IN		646.7420 CROSSWALK EPOXY 6-IN	
ROUTE	LOCATION	YELLOW LF	WHITE LF	TURN LANE WHITE LF	GORE WHITE LF	WHITE LF	BLACK LF	TURN LANE TYPE 2 EACH	TURN LANE TYPE 3 EACH	TURN LANE WHITE EACH	MAINLINE WHITE LF	INTERSECTING ROADWAY WHITE LF	RAMP WHITE LF	INTERSECTING ROADWAY WHITE LF
STH 100 NB	STH 241 to STH 38	11088	11088			2775	2775							
	Oakbrook Shopping Center			190										
	Elwood Corp			355										
	Oak Creek Municipal Ct			325										
	Edgerton Contractors			380										
	Cummins Sales			345										
	Bartel Ct			760				2		1	57			
	South 13th St			125	610			4		2	77	43	324	250
	IH 41			800	330			4		2	49		226	
	IH 41			425				2	1	2	59			
	20th ST/ Ardys			1060	295			4		4	61			
22nd St		140	140	535			4		2	76	27		152	
Pick N Save			325				1		1					
Auto Zone			415											
STH 241			195	645			6		6	76	60	238	220	
STH 100 SB	STH 38 to STH 241	11088	11088			2775	2775							
	Pick N Save			665				2		2				
	22nd St			668				2		2	66	17	240	86
	20th St		150	150				2		2	56	44	234	190
	IH 41		320	815				2		2	64		192	
	IH 41			881				4		4	61			
	Park n Ride			200				2		2				
	South 13th St			600				6		3	88	70	320	264
	Bartel Ct			190				2		1	60	41		210
	Cummins Sales			345										
	Edgerton Contractors			354										
Oak Creek Municipal Ct			330											
Brentwood Animal Hospital			340											
Lakeside Credit Union			365											
STH 38			526	553			9		9	76	63	288	250	
TOTAL		22176	22981	12719	2323	5550	5550	58	1	47	926	365	2062	1622

MILWAUKEE COUNTY STH 119 IH 94 to STH 38		646.2020 LINE EPOXY 6-IN EDGELINE		646.2041.S LINE WET REFL EPOXY 6-IN LANE LINE	646.4041.S LINE WET REFL EPOXY 10-IN GORE	SPV.0090.01 MARKING LINE BLACK LAG MAINLINE
ROUTE	LOCATION	YELLOW LF	WHITE LF	WHITE LF	WHITE LF	BLACK LF
STH 119 NB	IH 94 to STH 38 ON RAMP	7450	7450	1700	2300	1700
STH 119 SB	STH 38 OFF RAMP to IH 94 OFF RAMP	7450	7450	1700	2300	1700
TOTAL		14900	14900	3400	4600	3400

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WAUKESHA COUNTY STH 164 IH 94 to Good Hope Rd		646.2020 LINE EPOXY 6-IN			646.4020 LINE EPOXY 10-IN	646.5020 ARROW EPOXY		646.5120 WORD EPOXY	646.6120 STOP LINE EPOXY 18-IN		646.7420 CROSSWALK EPOXY 6-IN		646.5320 RAILROAD CROSSING EPOXY	SPV.0090.02 MARKING STOP LINE EPOXY 24-IN
COUNTY	LOCATION	EDGE LINE		LANE LINE WHITE LF	TURN LANE WHITE LF	TURN LANE		TURN LANE WHITE EACH	MAINLINE WHITE LF	INTERSECTING ROADWAY WHITE LF	RAMP YELLOW LF	INTERSECTING ROADWAY WHITE LF	WHITE EACH	WHITE LF
		YELLOW LF	WHITE LF			TYPE 1 EACH	TYPE 2 EACH							
STH 164 NB	IH 94 to Good Hope Rd	60561	60564	18955			4	2						
	Stone Ridge Dr				422				60	25				
	Busse Rd				422				34	23				
	River Wood Dr				264									
	Ridgeview Pkwy				475				456	38				
	Hawks Meadow Dr				369									
	River Park Ct				264									
	CTH M				475				36	36				
	Paul Rd				317									
	Schuett Dr				475									
	Green Rd				422				48	31				
	Rough Hill Rd				475									
	Crossover				106									
	STH 190				581				48	65	274	296		
	Swan Rd				422				48	39				
Church Ent				1095				62	15	242	140			
Chesterwood				211										
Lake Park Dr				475										
Lindsay Rd				475										
Seven Stones Dr				264										
CTH K				686				48	40	240	212			
Corporate Circle Dr				211										
Crossover				106										
N Corporate Cir				475										
Clover Dr				475										
Crossover				264										
Prospect Circle				475										
CTH VV				528										
Private Dr				211			2	2	44	60	232	190		
Crossover				211			2	2						
Stonegate CT				435									2	
RAILROAD CROSSING				211										
Indian Grass Ln				475			2	1						
Good Hope Rd				422			2	2						
TOTAL		60561	60564	18955	13194	0	12	9	884	372	988	838	2	12

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WAUKESHA COUNTY STH 164 Woodland Ln to STH 59		646.2020 LINE EPOXY 6-IN		646.4041.S LINE WET REFL EPOXY 10-IN		646.5020 ARROW EPOXY	646.5120 WORD EPOXY	646.6120 STOP LINE EPOXY 18-IN	
		EDGE LINE		LEFT TURN	RIGHT TURN	TURN LANE	TURN LANE	MAINLINE	INTERSECTING ROADWAY
		ROUTE	LOCATION	YELLOW LF	WHITE LF	WHITE LF	WHITE LF	TYPE 2 EACH	WHITE EACH
STH 164 NB	Woodland Ln to STH 59	22970	24000						
	IH 43 NB ON RAMP			264				44	
	IH 43 SB ON RAMP			145		2	1	36	
	CTH ES			632	487	6	4	72	36
	DREAMCATCHER WAY			66	180	2	1		
	House W238			58					
	SKYLINE AVE			366	226	2	1		
	Crossover			48					
	TOWNLIN RD			425	189	2	1		
STH 164 SB	COYOTE CROSSING			53					
	RED WING DR			148					
	GLENDAL RD			264	423	2	1		
	House w239			56					
	House w240			52					
	CTH I			374	439	4	2	57	23
	House 4415			61					
	ROCKWOOD WAY			436					
	WILMONT DR			469					
USH 18/STH 59			1499	504	4	2			
STH 164 SB	STH 59 TO Woodland Ln	22970	24000						
	WILMONT DR				507	2	1		
	ROCKWOOD WAY				204	2	1		
	House 4415			56					
	CTH I			211	414	4	2	61	23
	House 4901			73					
	House 5122			54					
	GLENDAL RD			446	204	2	1		
	Crossover			48					
House 5850			47						
RED WING DR			58						
COYOTE CROSSING			150						
TOWNLIN RD			211	439	2	1			
Crossover			83						
SKYLINE AVE			200	406	2	1			
DREAMCATCHER WAY			443						
CTH ES			613	459	2	1	37	24	
IH 43 South ON RAMP							35		
ON to N 43			150		2	1	37		
TOTAL		45940	48000	8259	5081	42	22	379	106

MILWAUKEE COUNTY STH 175 National Ave/ STH 59 to Lisbon Rd		646.2020 LINE EPOXY 6-IN			646.4020 LINE EPOXY 10-IN			646.5020 ARROW EPOXY				646.5120 WORD EPOXY	646.6120 STOP LINE EPOXY 18-IN		646.7420 CROSSWALK EPOXY 6-IN		Comments	
COUNTY	LOCATION	EDGE LINE		LANE LINE	TURN LANE	DOTTED LINE	RAMP GORE	TURN LANE			MAINLINE	TURN LANE	OFF RAMP	INTERSECTING ROADWAY	RAMP	INTERSECTING ROADWAY		
		YELLOW	WHITE	WHITE	WHITE	WHITE	WHITE	TYPE 1	TYPE 2	TYPE 3	TYPE 5	WHITE	WHITE	WHITE	WHITE	WHITE		
		LF	LF	LF	LF	LF	LF	EACH	EACH	EACH	Each	EACH	LF	LF	LF	LF		
STH 175 NB	National Ave to Lisbon Ave	19008	15625	4625														
	American Family Field OFF RAMP	528	1267	237.5	167	1600	957	2	4			4	78	140	28	156		
	American Family Field ON RAMP	678	757	175			272											
	IH 94 East OFF RAMP																	SKIP
	IH 94 West OFF RAMP																	SKIP
	IH 94 West ON RAMP						402				2							
	IH 94 East ON RAMP						715				2							
	USH 18 OFF RAMP	253	473				337		1	2				35		72		
	USH 18 ON RAMP	764	1113				829											
	Martin Dr OFF RAMP	503	974				403							39				
Martin Dr ON RAMP	590	803				942												
Washington Blvd/Olmstead Way OFF RAMP	754	1163				819		2	2				41		82			
Lloyd St OFF RAMP	532	989		122		1115	2	5	1			3	26	59	94			
Lloyd St ON RAMP	528	635											35					
Lisbon Ave				182					1	2		1						
STH 175 SB	Lisbon Ave to National Ave	19008	16520	4625														
	Lisbon Ave						134											
	47th ON RAMP	741	381				798											
	State St OFF RAMP	391	695				528		1				21	36	66	144		
	State St ON RAMP	406	723				924											
	USH 18 OFF RAMP	370	873			930	1115	1		1			48			96		
USH 18 ON RAMP	384	580				395												
IH 94 OFF RAMP																	SKIP	
IH 94 ON RAMP																	SKIP	
American Family Field OFF RAMP	907	848	225		417	547		4	2			4	43	113				
American Family Field ON RAMP	666	820	112.5			309												
National Ave/STH 59 OFF RAMP	144	264			345	240		4				4	93		296			
TOTAL		47155	45503	10000	471	3695	11765	5	22	8	4	16	459	348	638	396		

OZAUKEE COUNTY STH 181 Milwaukee/Ozaukee Co Line to STH 167		646.2020 LINE EPOXY 6-IN		646.4020 LINE EPOXY 10-IN	646.5020 ARROW EPOXY	646.5120 WORD EPOXY	646.6120 STOP LINE EPOXY 18-IN		646.7420 CROSSWALK EPOXY 6-IN	
		EDGE LINE	LANE LINE	TURN LANE	TURN LANE	TURN LANE	MAINLINE	INTERSECTING ROADWAY	RAMP	
COUNTY	LOCATION	YELLOW LF	WHITE LF	WHITE LF	WHITE LF	TYPE 2 EACH	WHITE EACH	WHITE LF	WHITE LF	WHITE LF
STH 181 NB	Milwaukee Co Line to STH 167	9557	8607	2600						
	House #9716				61					
	Field Entrance				68					
	Wayside Nurseries Driveway				62					
	Vessels of Honour Church				106					
	Golf Course				56					
	DONGES BAY RD				375	2	1	51	40	
	HIDDEN CREEK DR				285					
	Essex Dr				302					
	Knightsbridge Dr				318					
MEQUON SQUARE DR				116						
STH 167				600			32		202	
STH 181 SB	STH 167 to Milwaukee Co Line	9295	8976	2600						
	MEQUON SQUARE DR				382					
	Knightsbridge Dr				247					
	Essex Dr				876					
	HIDDEN CREEK DR				765					
	DONGES BAY RD				432	2	1	47	38	
	Golf Course				58					
	CROSSOVER				106					
	Wayside Nurseries Driveway				64					
	Field Entrance				73					
House #9617				68						
Milwaukee Co Line				636	4	3	57			
TOTAL		18852	17583	5200	6056	8	5	187	78	202

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2024 SOUTHEAST LONGLINE MARKINGS SUMMARY

ROUTE	MILES	COUNTY	LIMITS	646.2020 LINE EPOXY 6-IN			646.4020 LINE EPOXY 10-IN			646.2041.S LINE WET REFL EPOXY 6-IN	646.4041.S LINE WET REFL EPOXY 10-IN		SPV.0090.01 MARKING LINE BLACK EPOXY		
				CENTERLINE YELLOW LF	EDGE LINE YELLOW LF	WHITE LF	LANE LINE WHITE LF	TURN LANE WHITE LF	DOTTED LINE WHITE LF	GORE WHITE LF	LANE LINE WHITE LF	3' LINE, 9' GAP WHITE LF	GORE WHITE LF	TURN LANE WHITE LF	LANE LINE BLACK LF
IH 41	13	KENOSHA	State Line to Racine/Kenosha Co Line		170728	186892	2228	6199	293	8400	9900	4085	20951	9900	
IH 41	21	WASHINGTON	USH 45 to Washington/Dodge County Line		258680	276063		1145	625	5795	14625			14625	
IH 43	0	WAUKESHA	CTH O/Moorland Rd Roundabout				400			240					
USH 12	0	WALWORTH	STH 120 Roundabout		3755	4595				285					
USH 18	3.2	WAUKESHA	CTH X to Summit Ave		33600	33600									
USH 45	0.5	WASHINGTON	STH 60 Ramps and Roundabout		6836	5912				1036					
USH 45/ STH 100	1.5	MILWAUKEE	Rawson Ave to USH 45/STh 36	5100	10560	16262	2625	2289		923				2625	
STH 32	2.5	OZAUKEE	CTH LL to IH 43		28466	28466	8150	5166		1643				8150	
STH 36	2.3	MILWAUKEE	51st St to Fardale Ave		21130	21130					5250		3950		
STH 36	7.5	RACINE/WAUKESHA	Loomis Rd to USH 45		66738	66738	16700								
STH 50	14.5	KENOSHA	236th Ave to 118th Ave		76600	76600	19100	28893						19100	
STH 50	16	KENOSHA	381st Ave to Silver Lake Rds		86500	86500	21600	19220						21600	
STH 100	4	MILWAUKEE	STH 241 to STH 38		22176	22981		12719		2323	5550			5550	
STH 119	1	MILWAUKEE	IH 94 to STH 38		14900	14900					3400		4600	3400	
STH 164	7.5	WAUKESHA	IH 94 to Good Hope Rd		121122	121125	37910	28462							
STH 164	4.5	WAUKESHA	Woodland Ln to STH 59		45940	48000							13340		
STH 175	3	MILWAUKEE	National Ave to Lisbon Rd		47155	45503	10000	471	3695	11765					
STH 181	2	OZAUKEE	Ozaukee/Milwaukee County Line to STH 167		18852	17583	5200	6056							
104 SUBTOTAL				5100	1033738	1072850	123913	110620	4613	32410	38725	4085	25551	17290	84950
TOTAL					2235601				147643		38725	46926			84950

PROJECT NO: 1000-77-24

HWY: VARIOUS

COUNTY: VARIOUS

MISCELLANEOUS QUANTITIES

SHEET:

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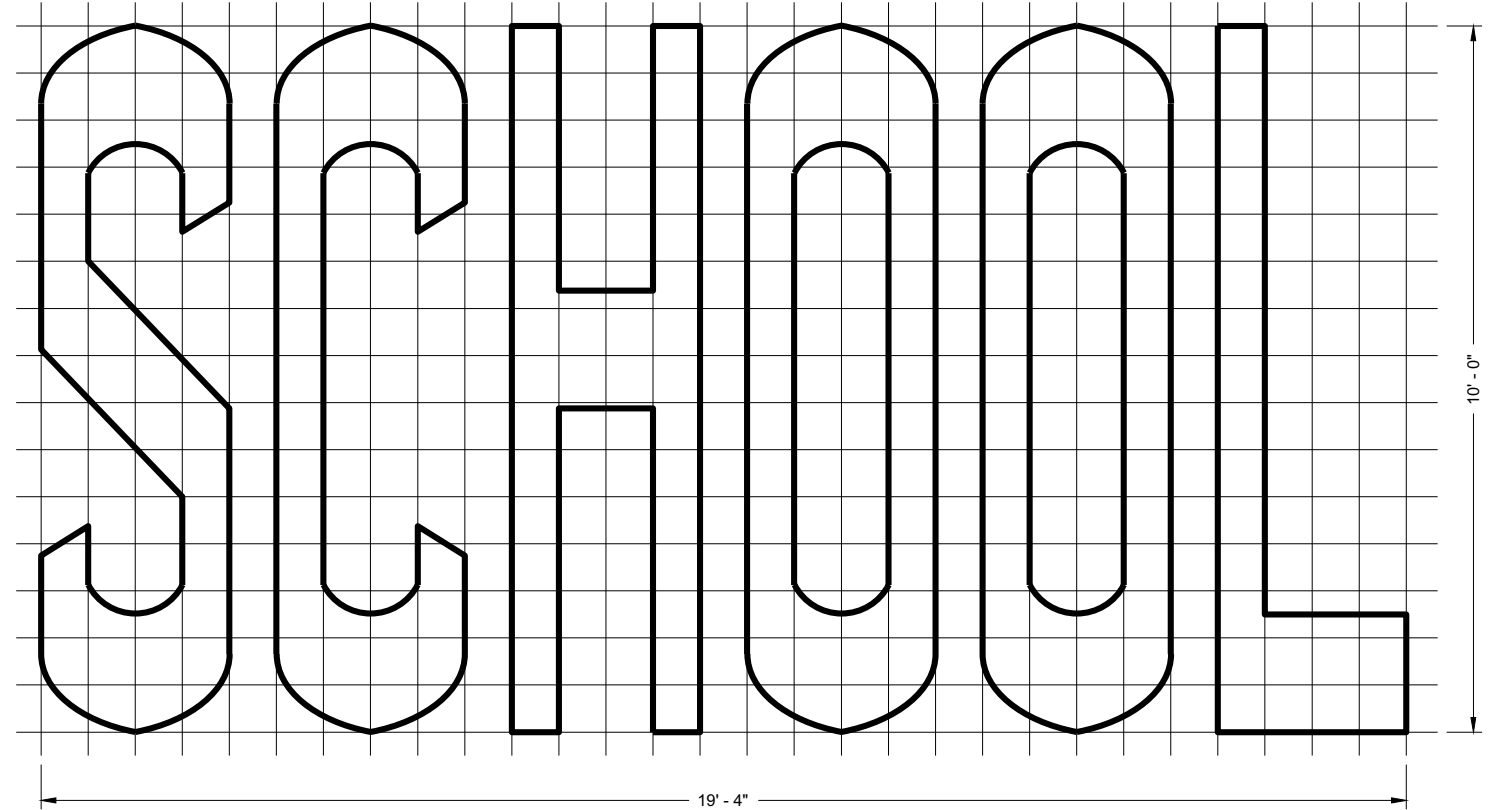
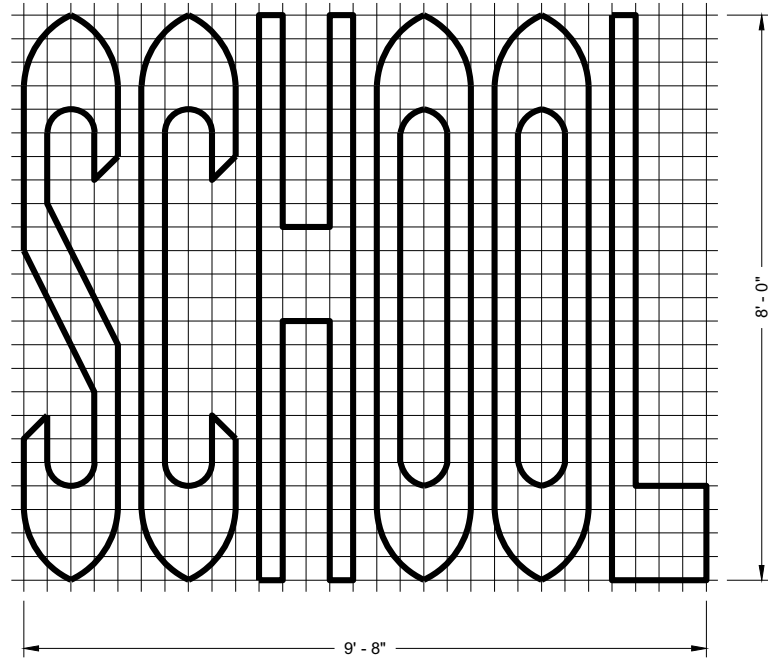
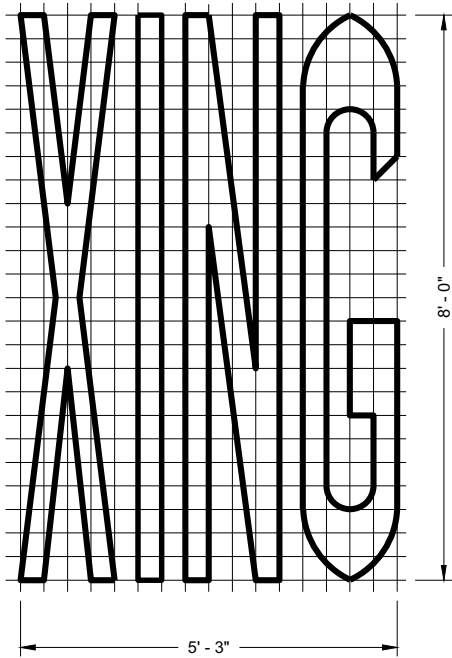
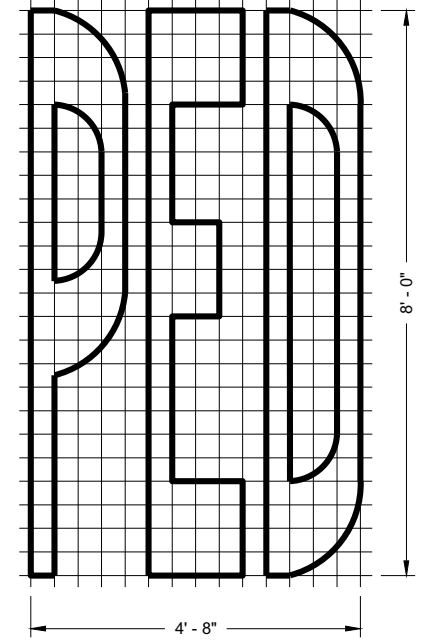
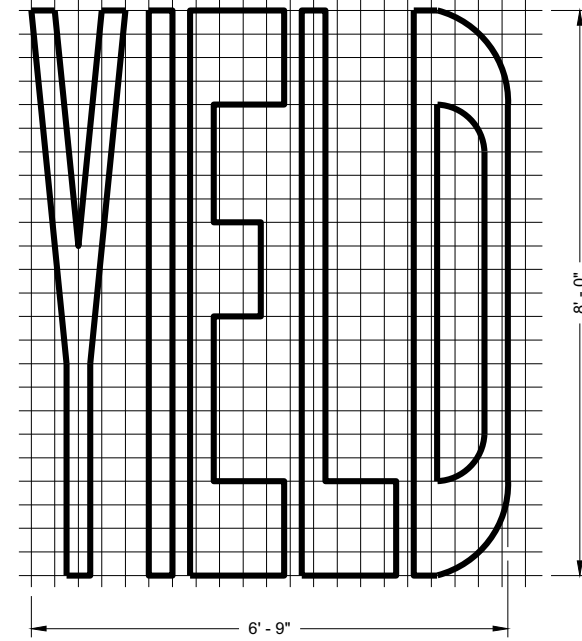
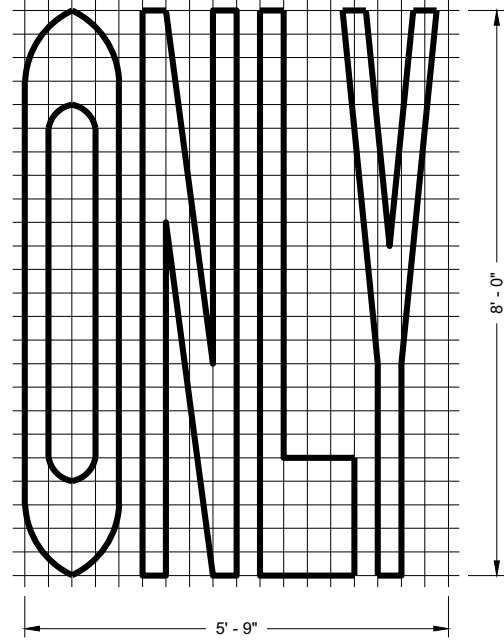
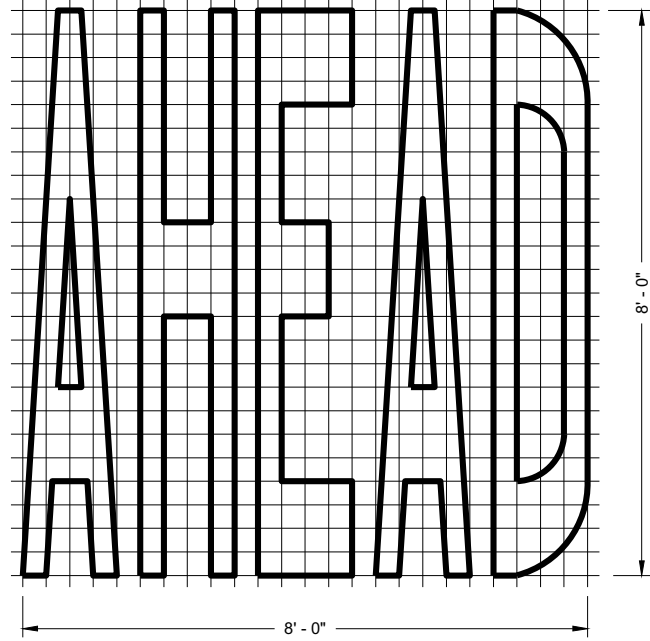
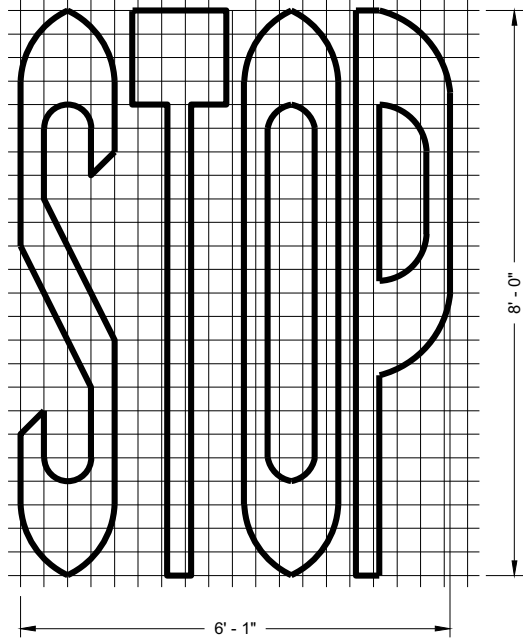
2024 SOUTHEAST SPECIAL MARKINGS SUMMARY

ROUTE	COUNTY	LIMITES	646.5020 ARROW EPOXY EPOXY EACH	646.5120 WORD EPOXY ONLY EACH	646.6120 STOP LINE EPOXY 18-IN WHITE LF	646.7120 DIAGONAL EPOXY 12-IN WHITE LF	646.6320 DOTTED EXTENSION EPOXY 18-IN WHITE LF	646.7420 CROSSWALK EPOXY 6-IN WHITE LF	646.7520 CROSSWALK EPOXY BLOCK STYLE 24-IN WHITE LF	646.5320 RAILROAD CROSSING EPOXY WHITE EACH	SPV.0090.02 MARKING STOP LINE EPOXY 24-IN WHITE LF
IH 41	KENOSHA	State Line to Racine/Kenosha Co Line	111	46	1192	200		1496			
IH 41	WASHINGTON	USH 45 to Washington/Dodge County Line	31	4	350		28				
IH 43	WAUKESHA	CTH O/Moorland Rd Roundabout	11	1			78				
USH 12	WALWORTH	STH 120 Roundabout	22	2			106	152			
USH 18	WAUKESHA	CTH X to Summit Ave	63	31	453	1352		3652		6	
USH 45	WASHINGTON	STH 60 Ramps and Roundabout	39	10			114		360		
USH 45/ STH 100	MILWAUKEE	Rawson Ave to USH 45/STH 36	16	14	194			816			
STH 32	OZAUKEE	CTH LL to IH 43	4	4							
STH 36	MILWAUKEE	51st St to Fardale Ave	34	11	664			2951			
STH 36	RACINE/WAUKESHA	Loomis Rd to USH 45			346	224		554			
STH 50	KENOSHA	236th Ave to 118th Ave	71	40	706			1366			
STH 50	KENOSHA	381st Ave to Silver Lake Rd	54	29	483						
STH 100	MILWAUKEE	STH 241 to STH 38	59	47	1291			3684			
STH 164	WAUKESHA	IH 94 to Good Hope Rd	28	22	2058			2980		4	24
STH 164	WAUKESHA	Woodland Ln to STH 59	42	22	485						
STH 175	MILWAUKEE	National Ave to Lisbon Rd	39	16	807			1034			
STH 181	OZAUKEE	Ozaukee/Milwaukee County Line to STH 167	8	5	265			202			
TOTAL			632	304	9294	1776	326	18887	360	10	24

Undistributed Quantities	
619.1000 Mobilization	1
SPV.0060.01 Traffic Control	1
646.1555 Marking Line Grooved Contrast Tape 4-IN	50
646.3555 Marking Line Grooved Contrast Tape 8-IN	50
646.5420 Marking Line Aerial Enforcement Bars	80

Standard Detail Drawing List

15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C07-15D	ROUNDBOUT ARROWS
15C07-15E	PAVEMENT MARKING FOR BIKE LANES
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-23C	PAVEMENT MARKING (TURN LANES)
15C08-23D	PAVEMENT MARKING (TURN LANES)
15C09-13A	SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD-HIGHWAY GRADE CROSSINGS
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C14-04	AERIAL ENFORCEMENT BARS PAVEMENT MARKING DETAILS
15C18-08A	MEDIAN ISLAND MARKING PAVEMENT MARKINGS
15C18-08B	MEDIAN ISLAND MARKING MEDIAN ISLAND NOSE
15C18-08C	MEDIAN PAVEMENT MARKINGS DOUBLE ARROW WARNING SIGN PLACEMENT
15C19-08A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C19-08B	MOVING PAVEMENT MARKING OPERATION MULTI-LANE UNDIVIDED ROADWAY
15C19-08C	MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY
15C31-05A	PAVEMENT MARKING EXIT RAMP AND PARALLEL EXIT RAMP
15C31-05B	PAVEMENT MARKING MAJOR SPLIT FREEWAY TO FREEWAY
15C31-05C	PAVEMENT MARKING ENTRANCE RAMP AND PARALLEL ENTRANCE RAMP
15C31-05D	PAVEMENT MARKING LANE DROP AND LANE REDUCTION
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-06A	PAVEMENT MARKING (INTERSECTIONS)
15D12-11A	TRAFFIC CONTROL, LANE CLOSURE
15D20-07A	TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY
15D20-07B	TRAFFIC CONTROL, SINGLE RIGHT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY
15D20-07C	TRAFFIC CONTROL, SINGLE LEFT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY
15D27-03	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D37-03	TRAFFIC CONTROL, 2-LANE ROUNDBOUT
15D43-02	TRAFFIC CONTROL, SHORT DURATION MOBILE OPERATIONS
15D50-03A	TRAFFIC CONTROL, ADDED LANE CLOSURE WITHOUT LANE SHIFT
15D50-03B	TRAFFIC CONTROL, ADDED LANE CLOSURE WITH LANE SHIFT



SINGLE LANE

TWO - LANE

GENERAL NOTES

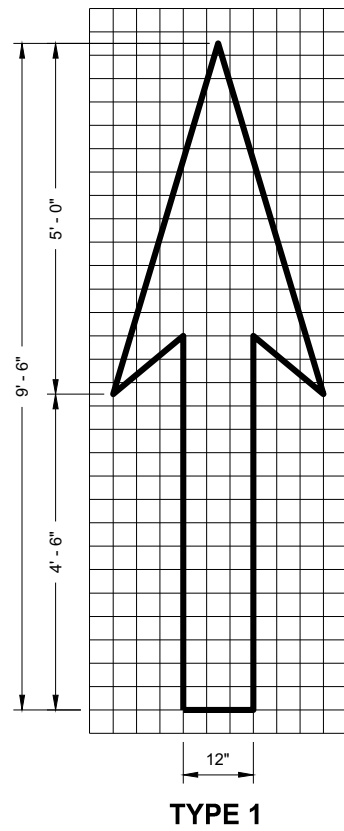
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

PAVEMENT MARKING WORDS

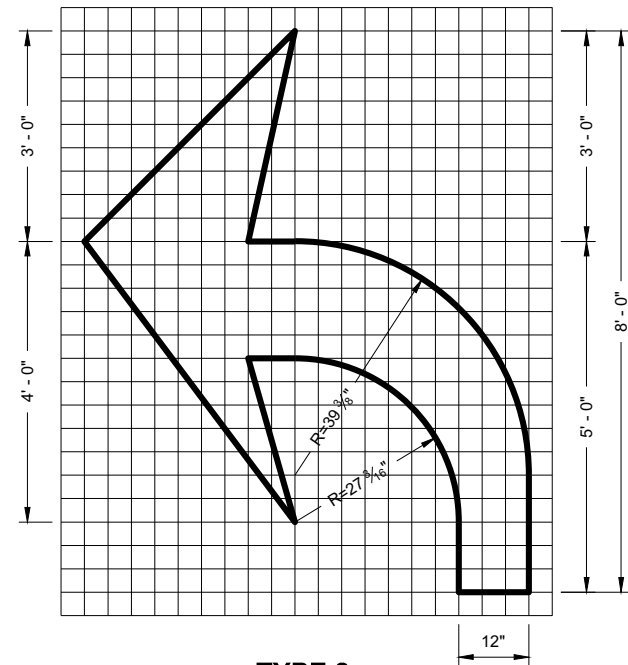
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 /S/ Matthew Rauch
DATE STATE SIGNING AND MARKING
ENGINEER

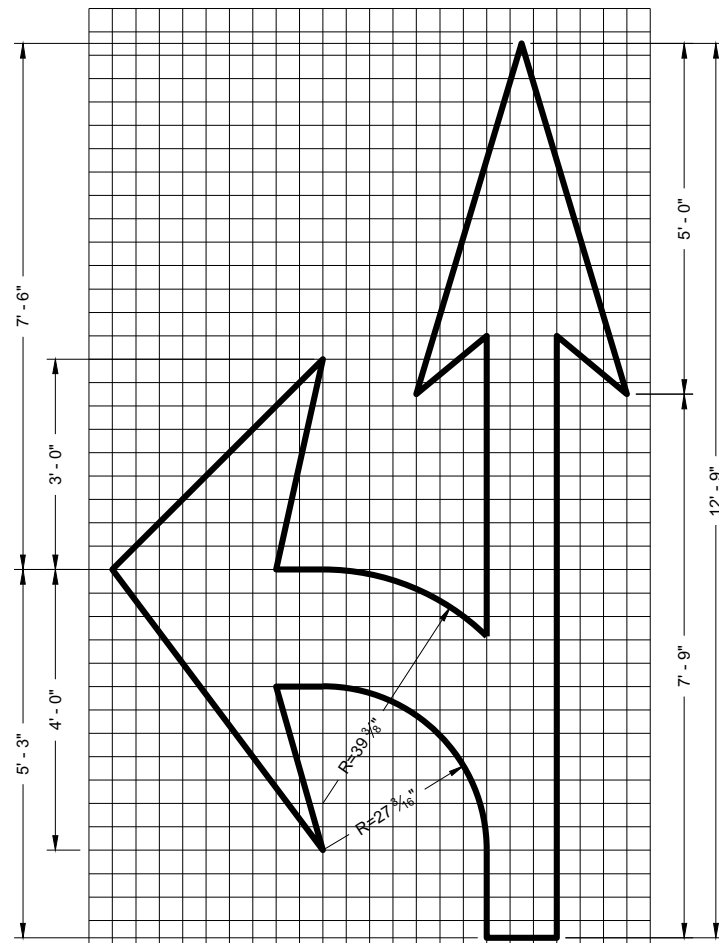
FHWA



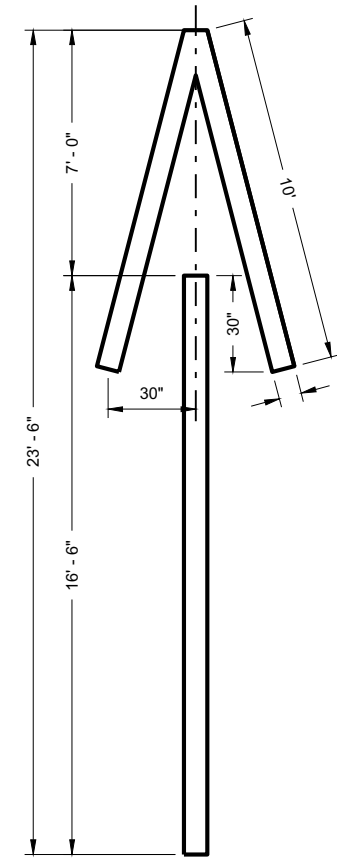
TYPE 1



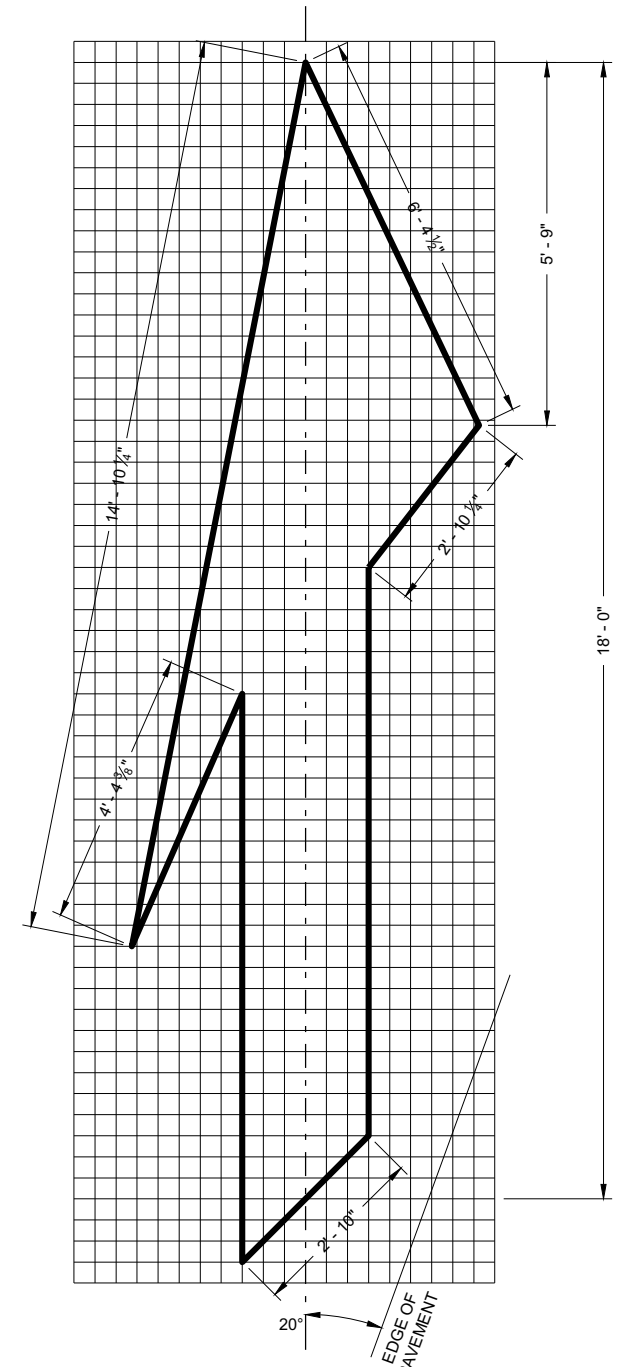
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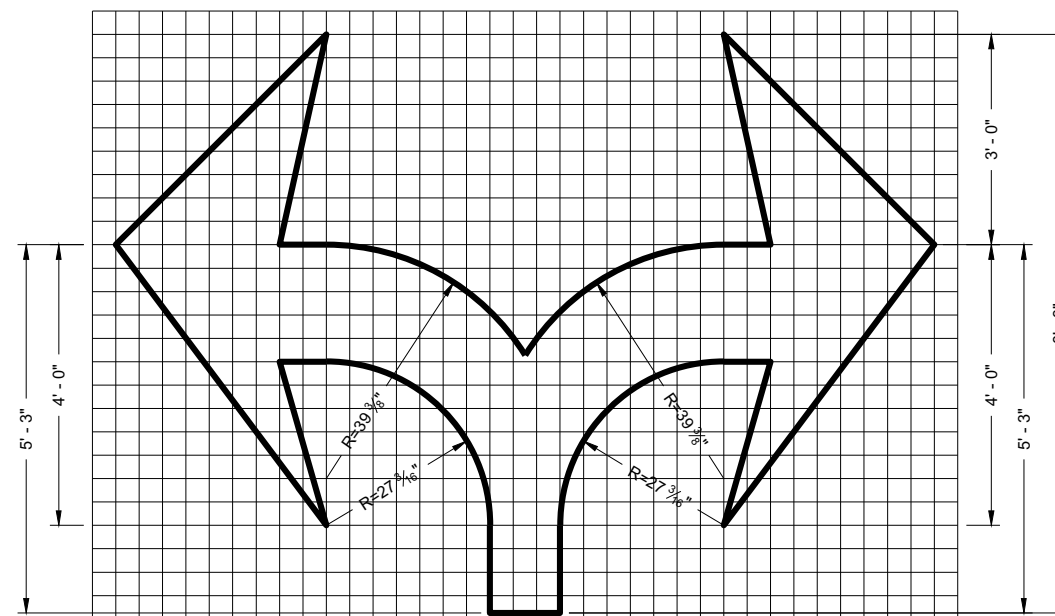
TYPE 3



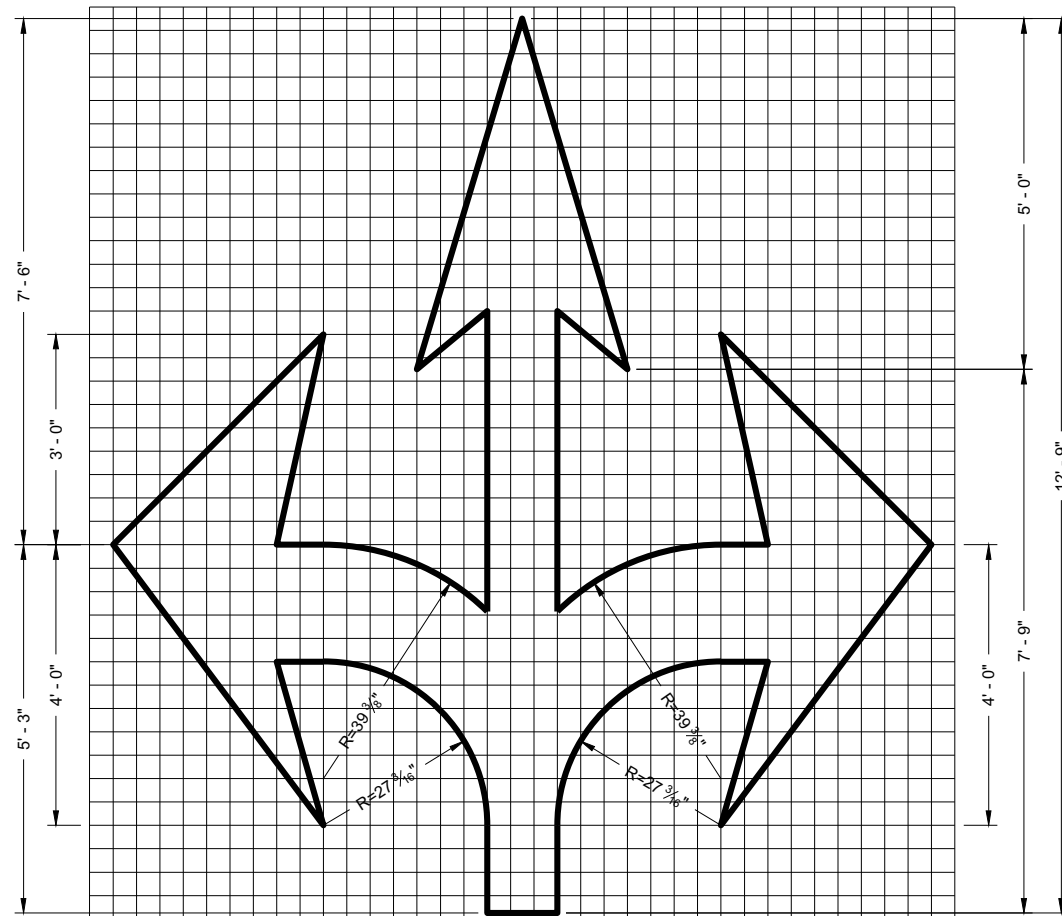
TYPE 4



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

GENERAL NOTES

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

PAVEMENT MARKING ARROWS

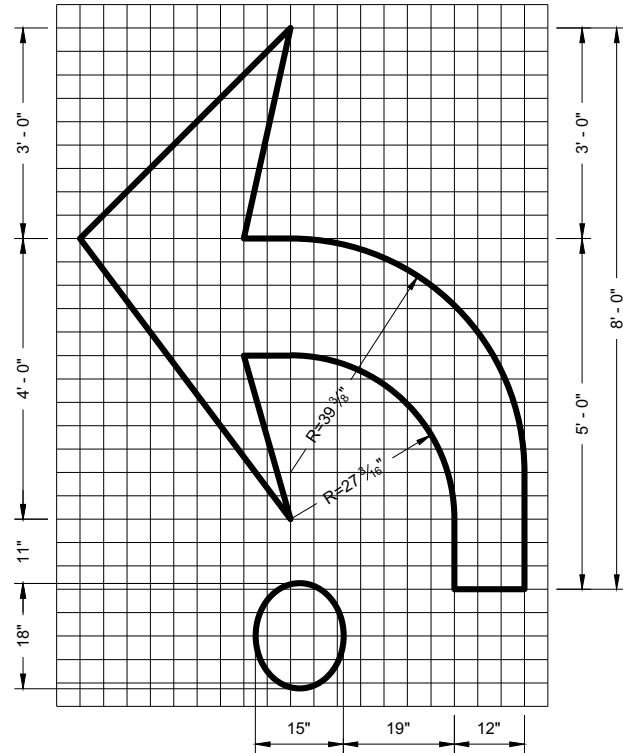
STATE OF WISCONSIN
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November 2019
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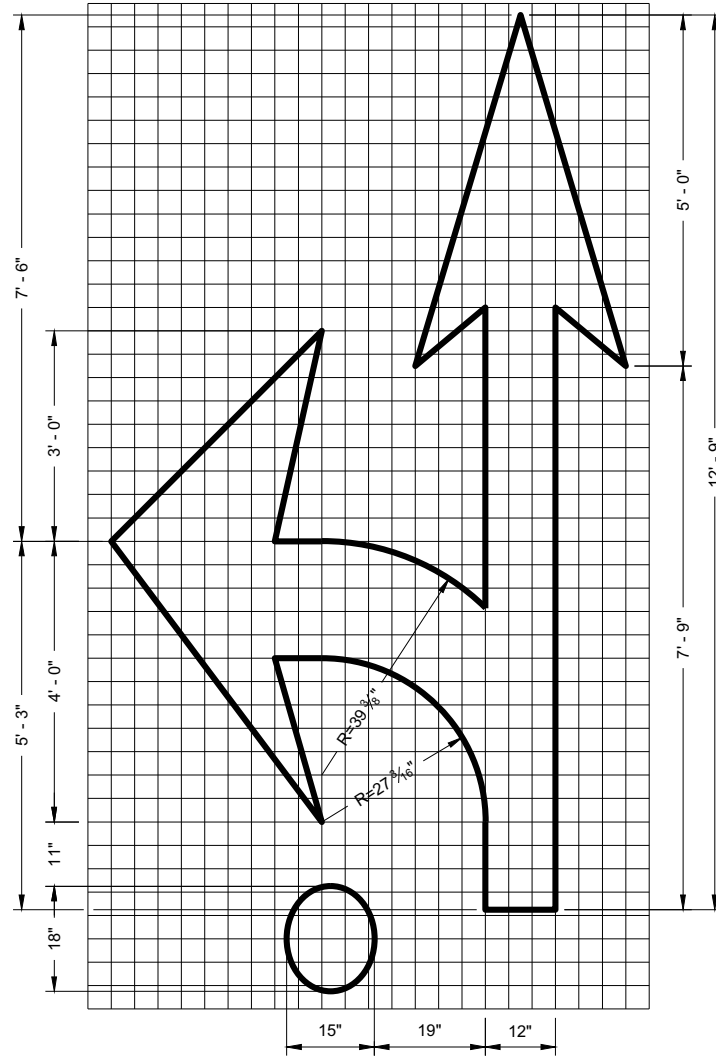
FHWA

GENERAL NOTES

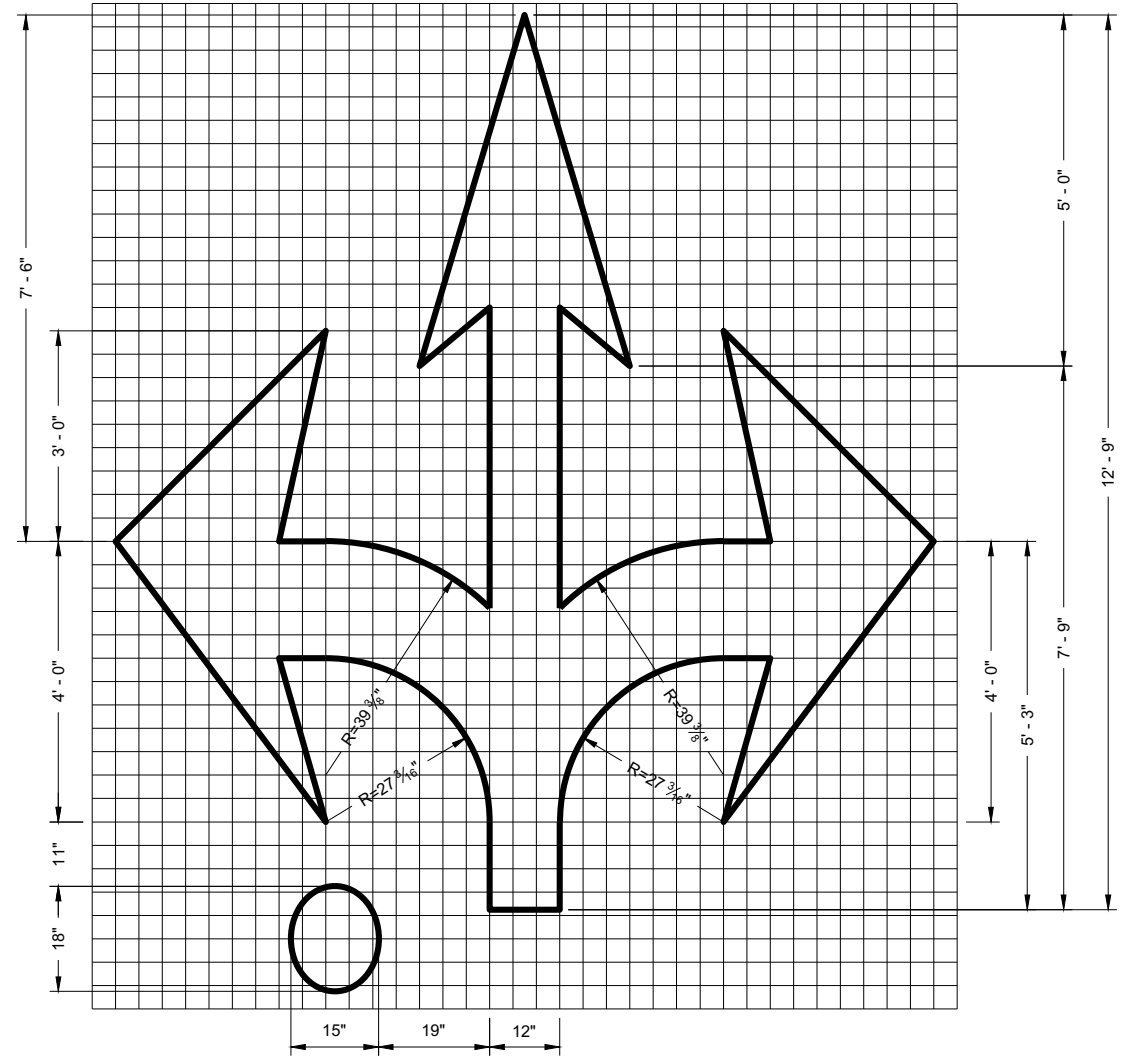
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



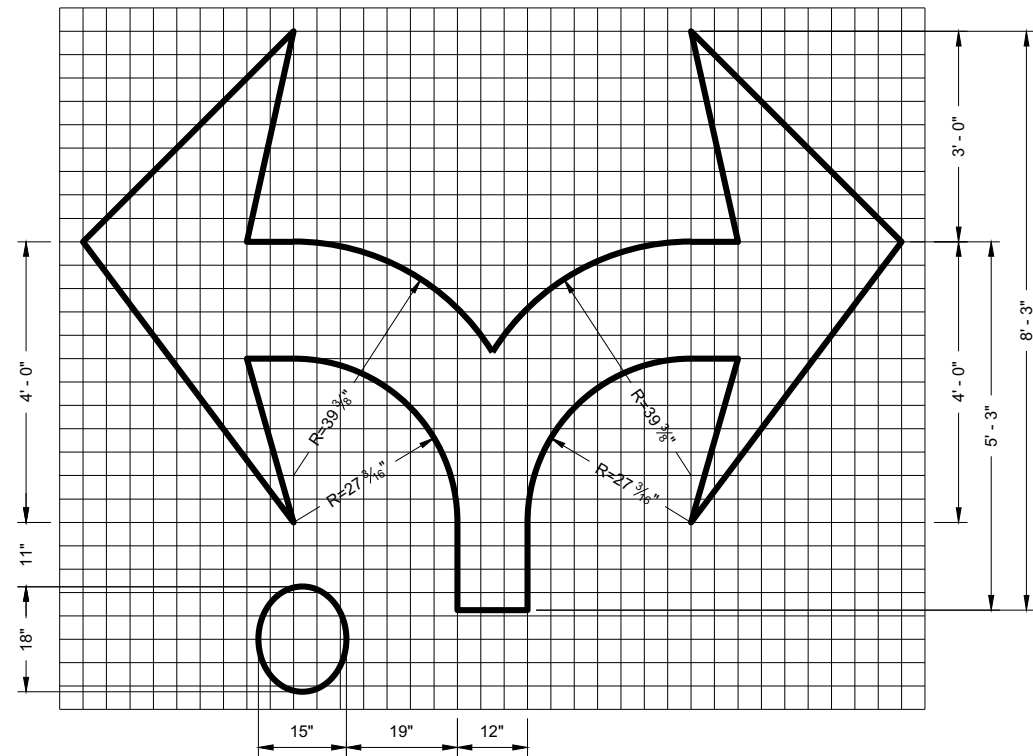
TYPE 2R



TYPE 3R



TYPE 6R



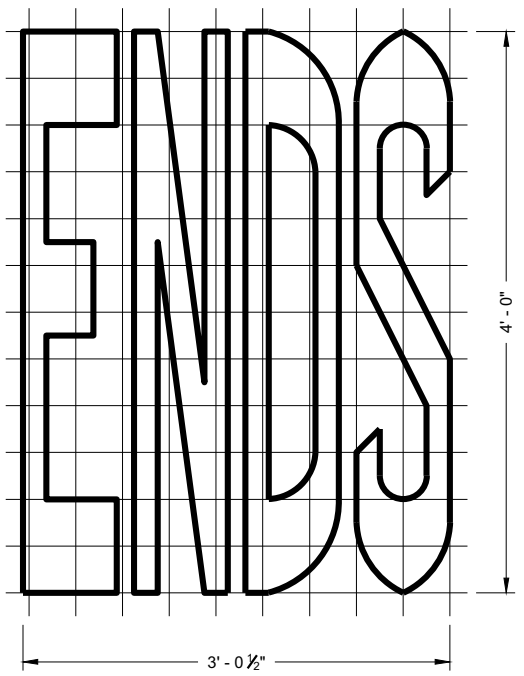
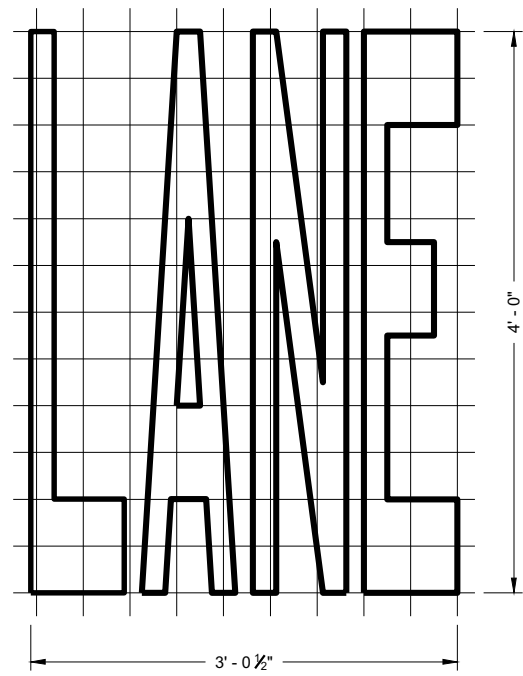
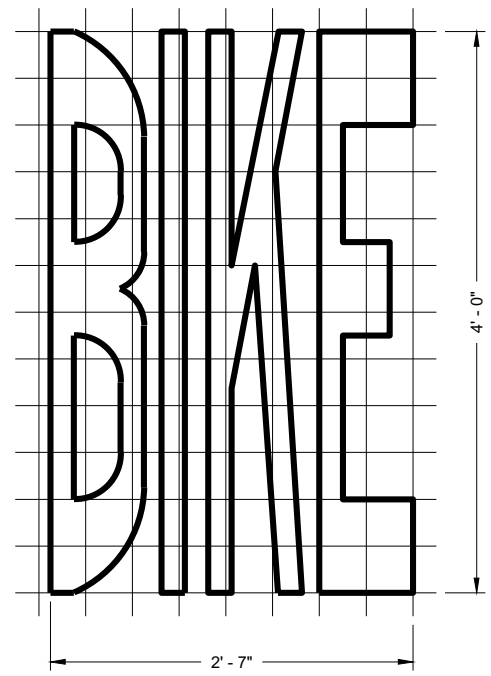
TYPE 7R

**ROUNDBOUT
MARKING ARROWS**

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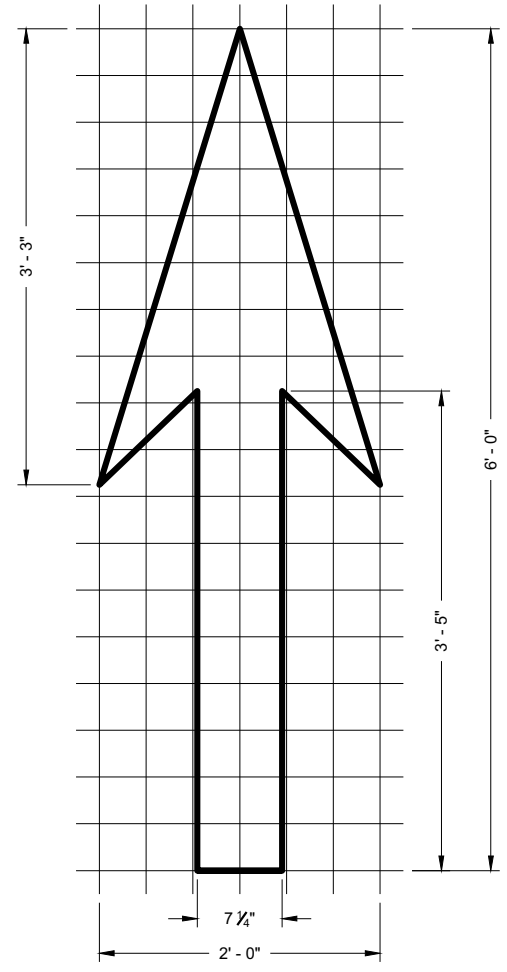
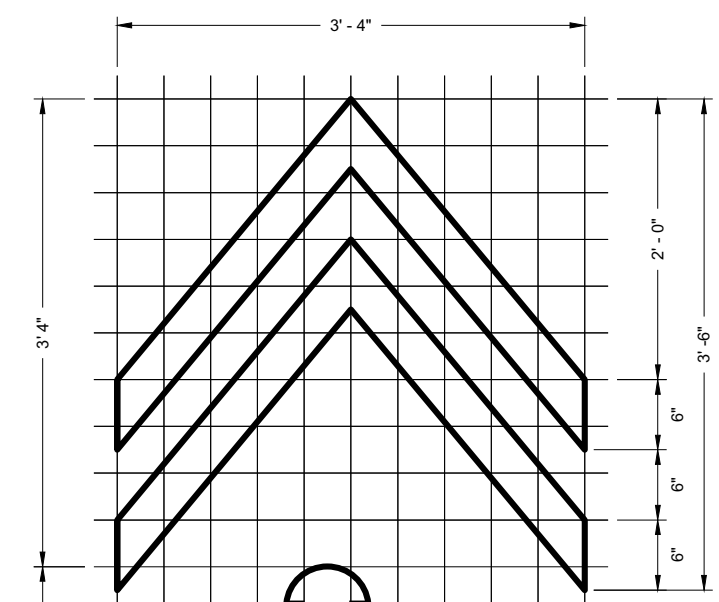
FHWA



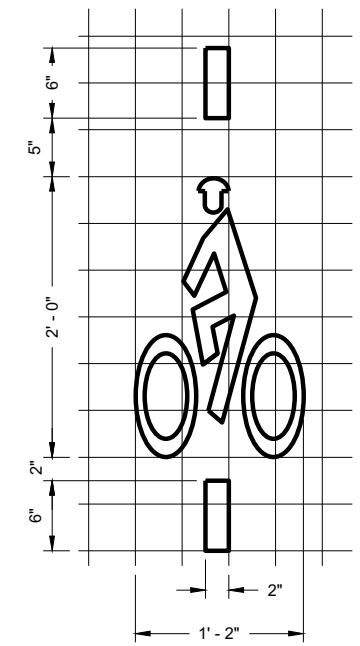
BIKE LANE WORDS

GENERAL NOTES

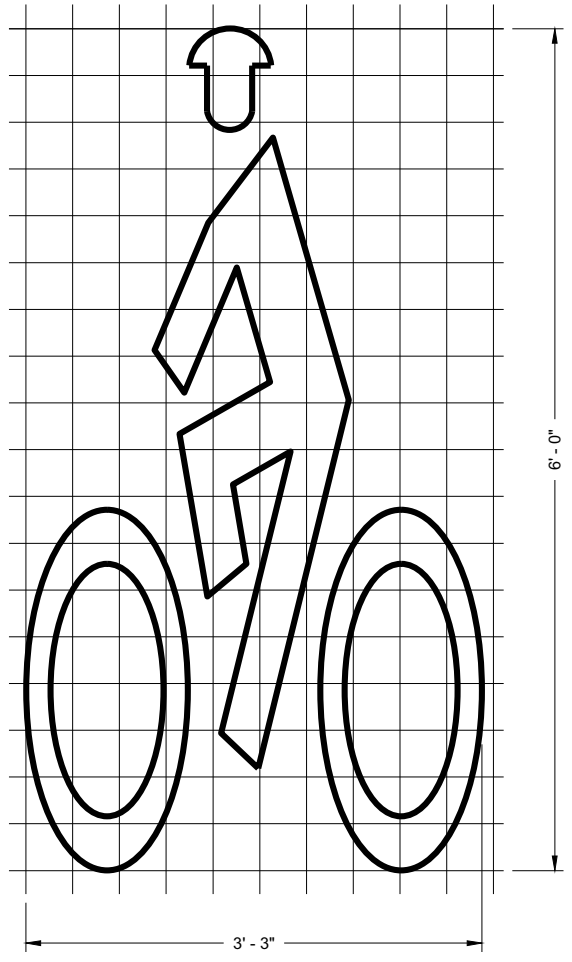
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



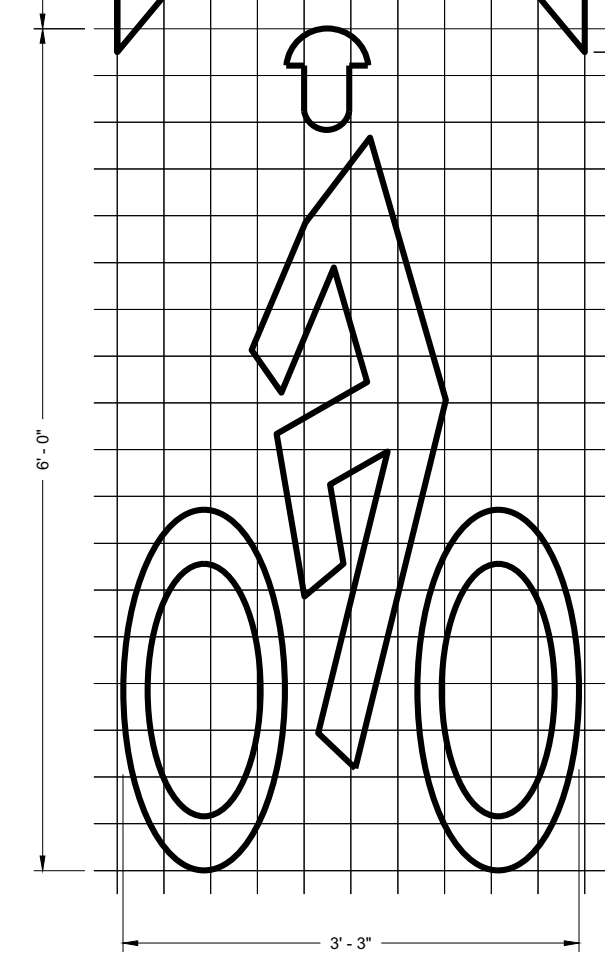
BIKE LANE ARROW



BIKE DETECTOR PAVEMENT MARKING



BIKE LANE SYMBOL



BIKE LANE SYMBOL FOR SHARED LANE

6

6




PAVEMENT MARKING FOR BIKE LANES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2019 DATE	/s/ Matthew Rauch STATE SIGNING AND MARKING ENGINEER
FHWA	

GENERAL NOTES

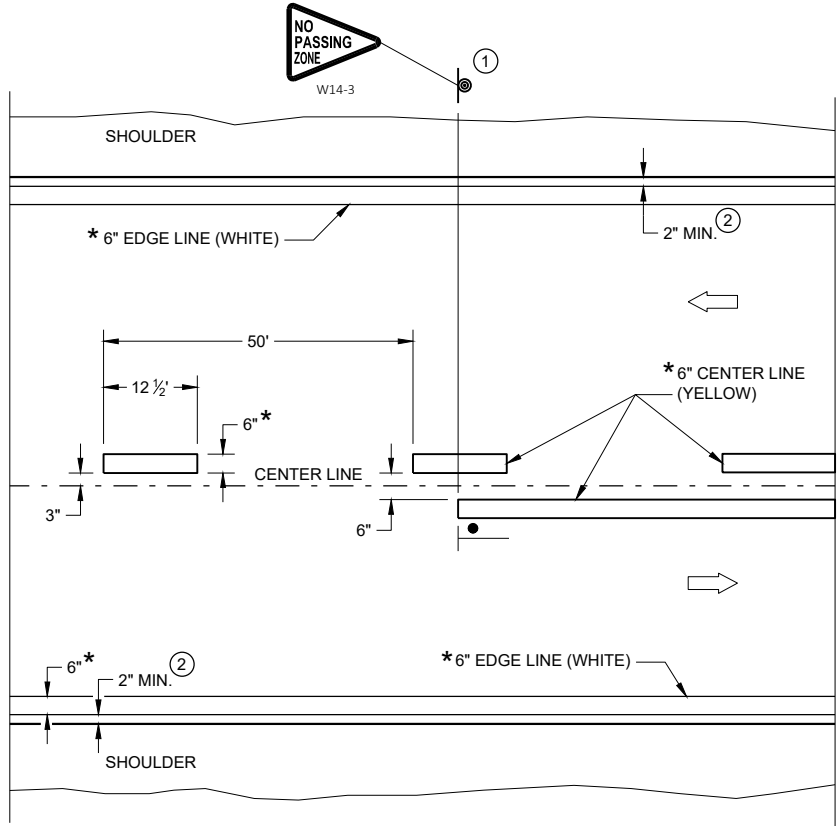
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

- ① LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
- ② MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

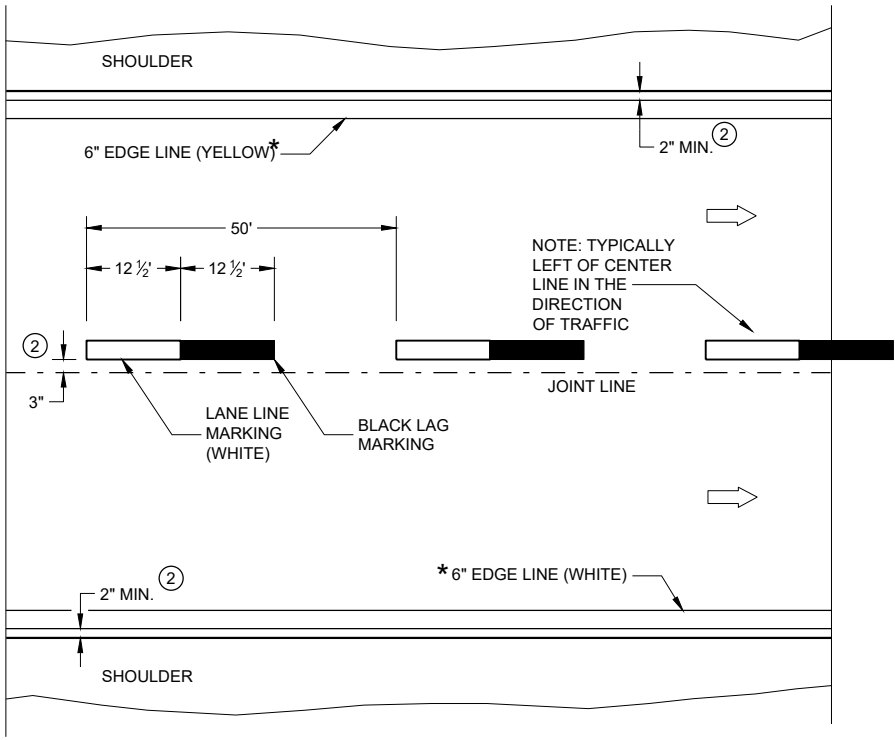
LEGEND

-  "T" MARKING
-  SIGN ON PERMANENT SUPPORT
-  DIRECTION OF TRAFFIC

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

6

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SDD 15C08-23a

SDD 15C08-23a

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
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May 2023 /S/ Jeannie Silver
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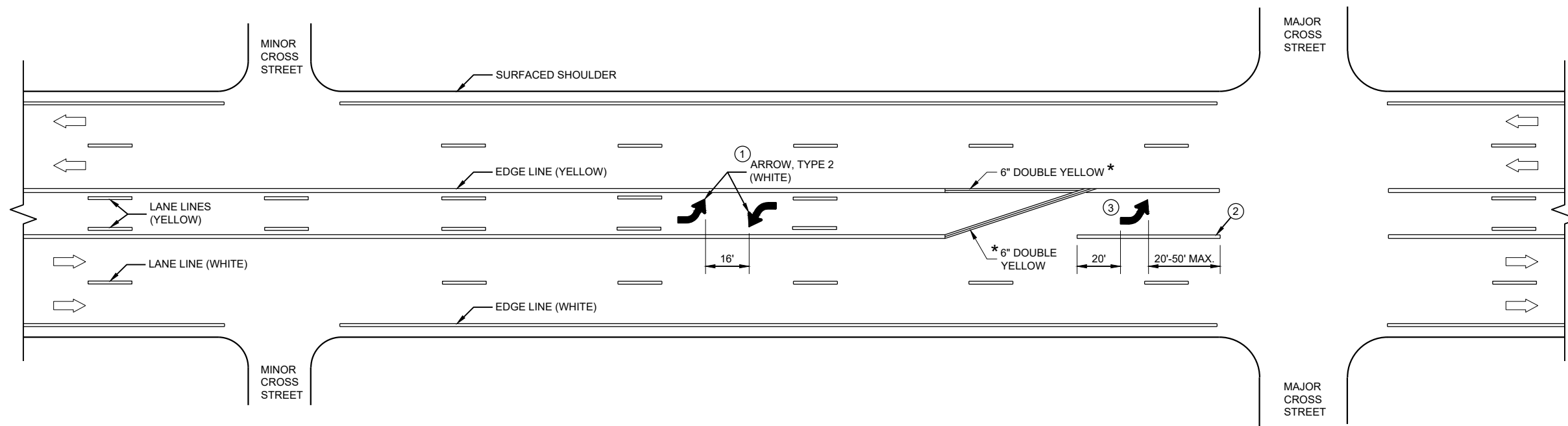
FHWA

GENERAL NOTES

- ① A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
- ② 10" WHITE
- ③ TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

➡ DIRECTION OF TRAFFIC

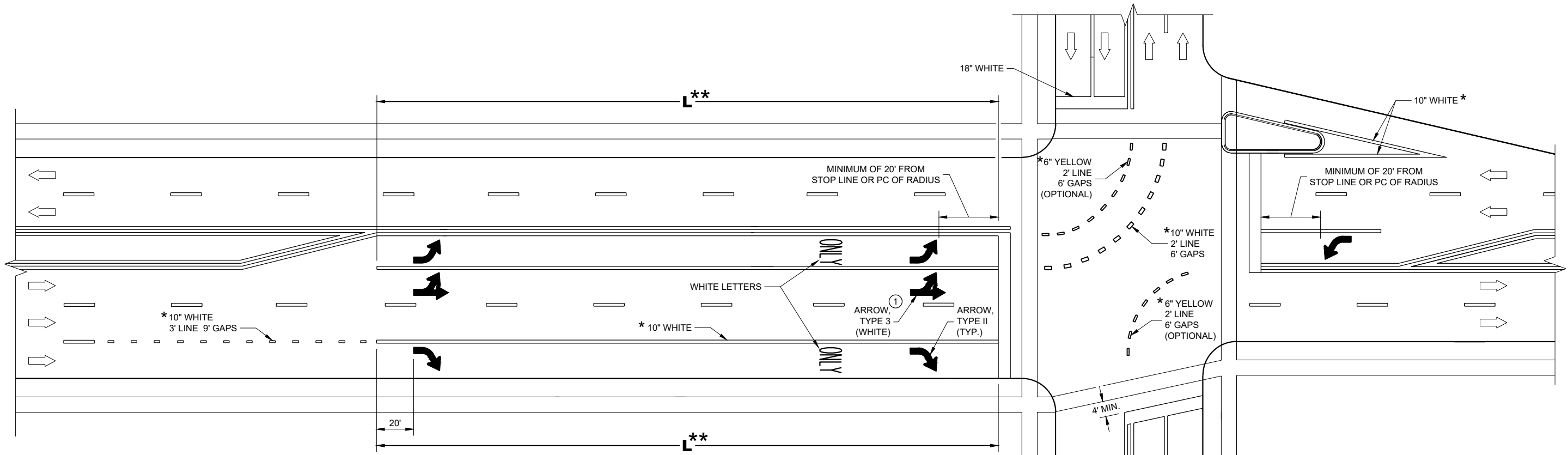
* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY LEFT TURN LANE

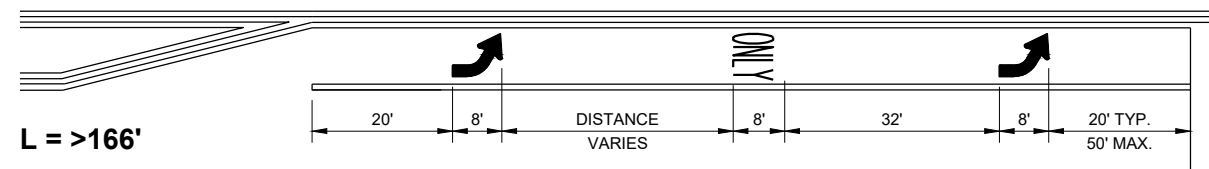
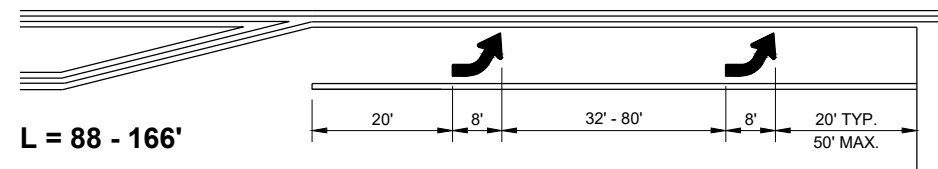
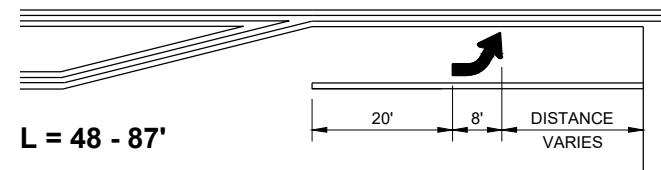
**PAVEMENT MARKING
(TURN LANES)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



TURN LANE OPTIONS

LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



** (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

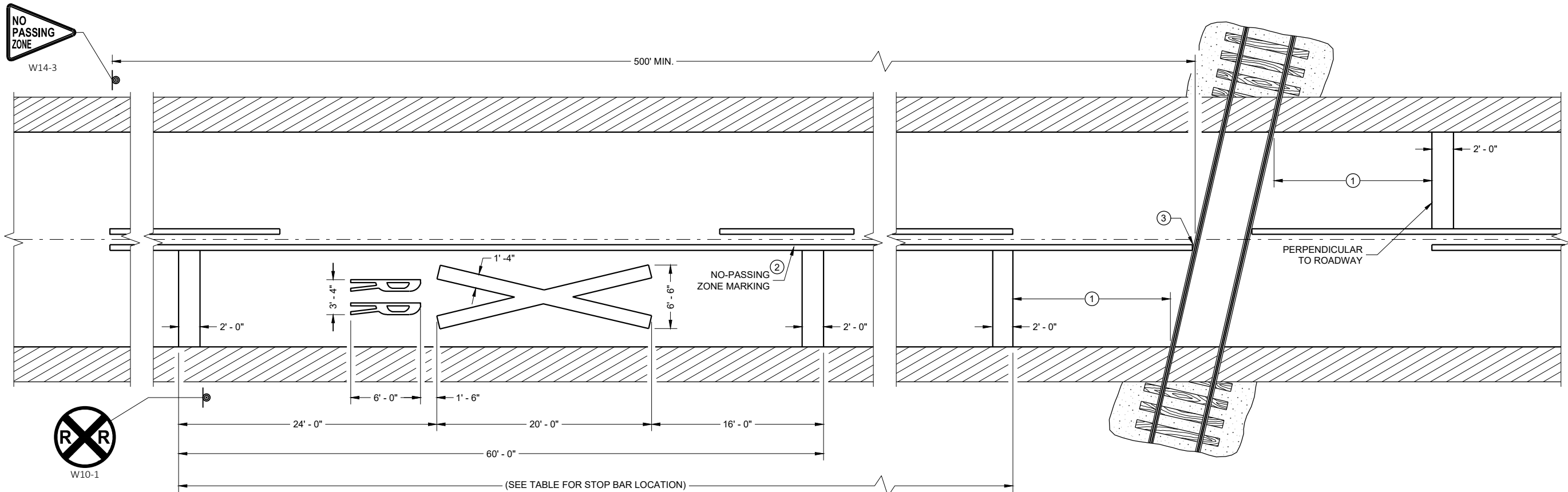
GENERAL NOTES

① QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

➡ DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



PAVEMENT MARKING

LEGEND

⊙ SIGN ON PERMANENT SUPPORT

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.

ON MULTI-LANE ROADS THE TRANSVERSE BANDS SHOULD EXTEND ACROSS ALL APPROACH LANES, AND INDIVIDUAL R X R SYMBOLS SHOULD BE USED IN EACH APPROACH LANE.

CENTER OR LANE LINES AND NO-PASSING ZONE MARKINGS SHOWN ON THIS DRAWING ARE REQUIRED AND PAID FOR UNDER OTHER ITEMS IN THE CONTRACT.

TRACE EXISTING SYMBOL WHERE EXISTING SYMBOLS ARE PLACED.

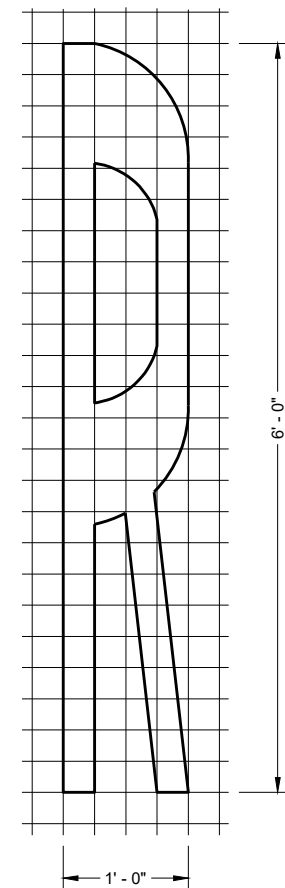
- ① PLACE STOP BAR APPROXIMATELY 8 FEET IN ADVANCE OF THE GATE (IF PRESENT), BUT NO CLOSER THAN 15 FEET IN ADVANCE OF THE NEAREST RAIL. FIELD-FIT STOP BAR TO MAXIMIZE VIEW OF APPROACHING TRAIN.
- ② 500' MINIMUM. MARKING LIMITS MAY BE EXTENDED AS DIRECTED BY THE ENGINEER TO MEET ADJACENT NO-PASSING ZONE MARKINGS.
- ③ FOR MULTIPLE TRACK CROSSINGS, THE BARRIER LINE SHALL EXTEND TO THE NEAR RAIL OF THE FURTHEST TRACK IN THE DIRECTION OF HIGHWAY TRAVEL.

DISTANCE TABLE

TABLE BASED UPON 2C-4 WISCONSIN SUPPLEMENT OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

POSTED SPEED (M.P.H.)	DIMENSION RANGE (FEET)
25	150* - 250'
30	200* - 300'
35	250* - 450'
40	300* - 500'
45	400* - 650'
50	550* - 800'
55	750* - 1000'
60	1000* - 1250'
65	1000* - 1250'

* THE MINIMUM DISTANCES IN THE TABLE ARE DESIRABLE AND SHOULD BE USED. THE DISTANCES MAY BE INCREASED UP TO THE MAXIMUM TO ALLOW FOR FIELD CONDITIONS SUCH AS THE CLOSED PROXIMITY OF DRIVEWAYS, BRIDGES, SIDE ROADS OR OTHER FEATURES THAT WOULD PROHIBIT THE MINIMUM DISTANCES FROM BEING USED.

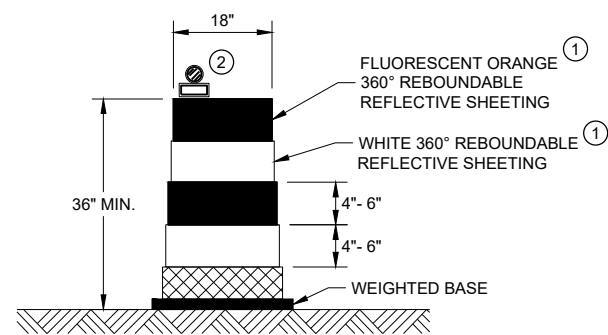


SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD - HIGHWAY GRADE CROSSINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

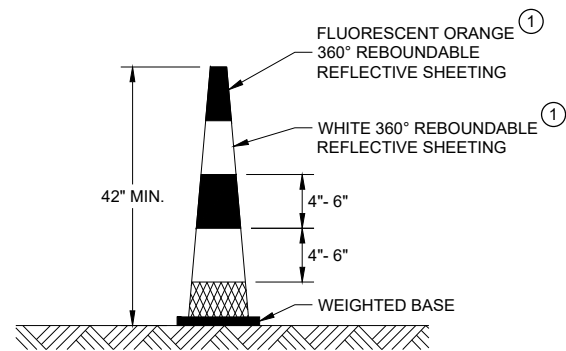
APPROVED
May 2023 DATE /S/ Matthew R. Rauch
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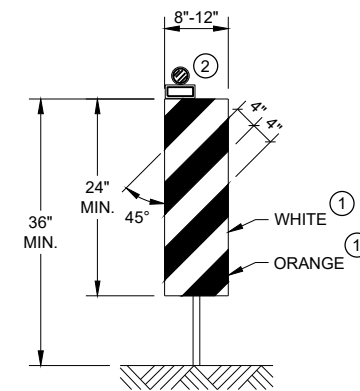
DRUM

BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS
BALLAST WIDTHS
RANGE FROM 14"-20"

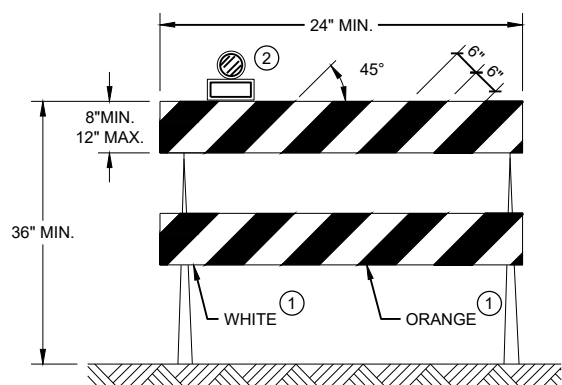


VERTICAL PANEL

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

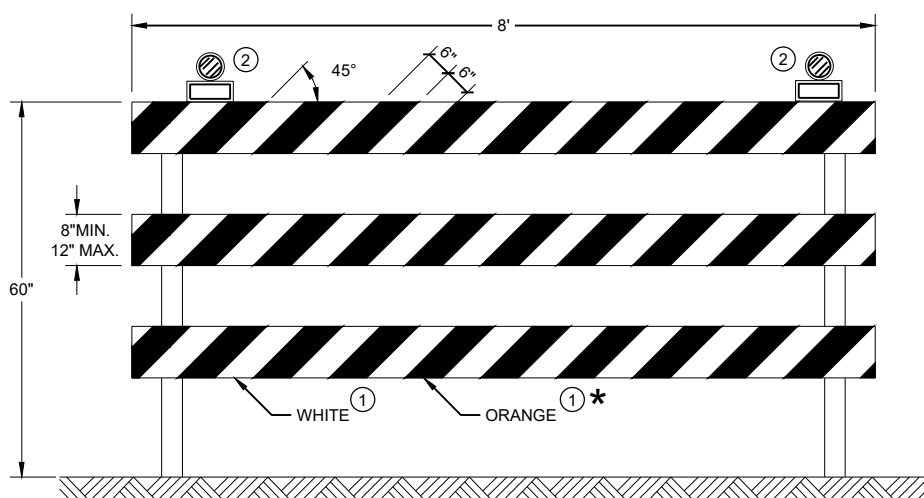
GENERAL NOTES

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



TYPE II BARRICADE

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








TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2022 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

LEGEND

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

GENERAL NOTES

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

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

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

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

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

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

FLAGGING

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

- ① FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.
- ② SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

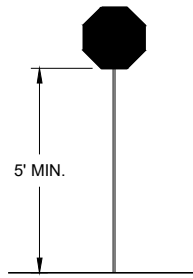
- ③ EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.



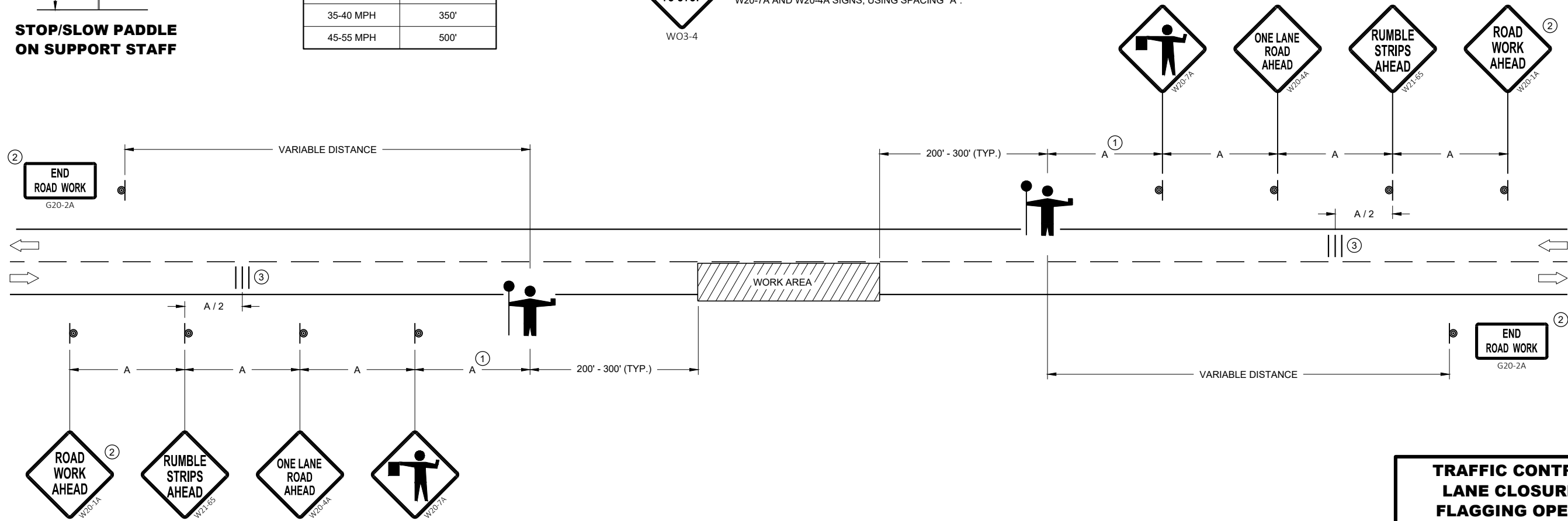
STOP/SLOW PADDLE ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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



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



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SDD 15C12 - 09a

SDD 15C12 - 09a

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

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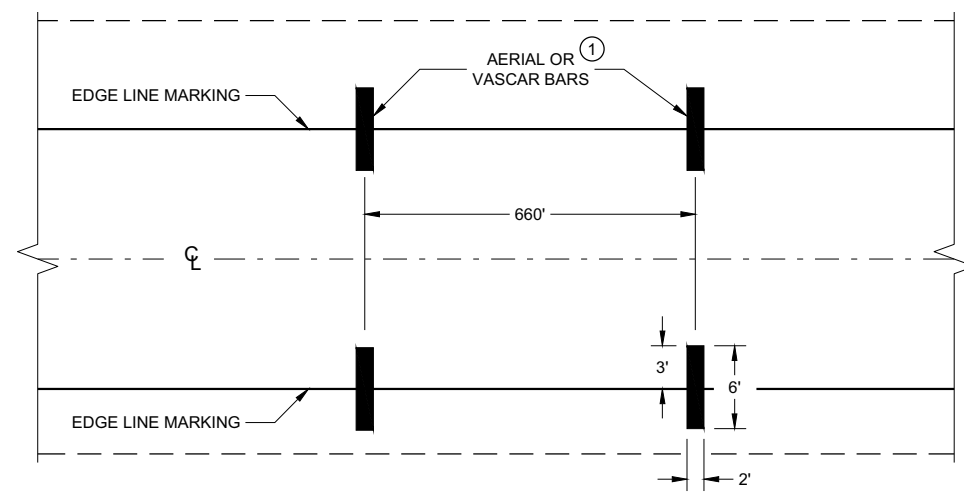
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DATE _____ WORK ZONE ENGINEER

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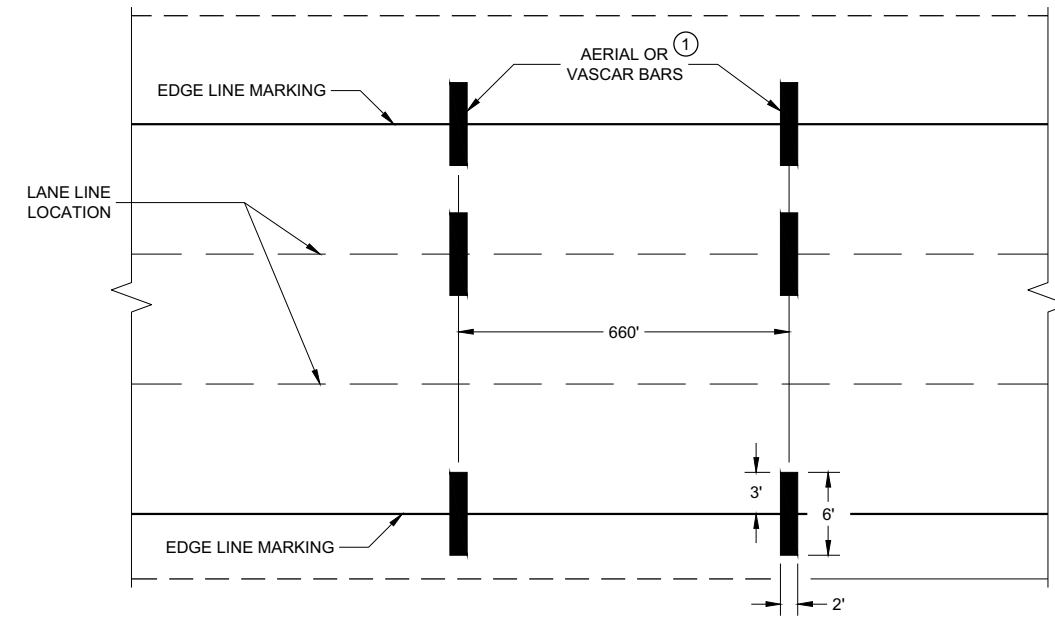
GENERAL NOTES

① PLACE TWO TO FIVE AERIAL OR VASCAR BARS AT 660 FOOT SPACING.

A CAR CAN BE PROVIDED BY THE WISCONSIN STATE PATROL FOR TRAFFIC CONTROL.



TYPICAL FOR TWO WAY OR ONE WAY TRAFFIC



TYPICAL FOR MULTILANE TRAFFIC

SPEED ENFORCEMENT ZONE WITH AERIAL OR VASCAR BARS

6

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SDD 15C14 - 04

SDD 15C14 - 04

**AERIAL ENFORCEMENT BARS
PAVEMENT MARKING DETAILS**

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February 2021 /S/ Matthew R. Rauch
DATE STATE SIGNING AND MARKING
ENGINEER

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GENERAL NOTES

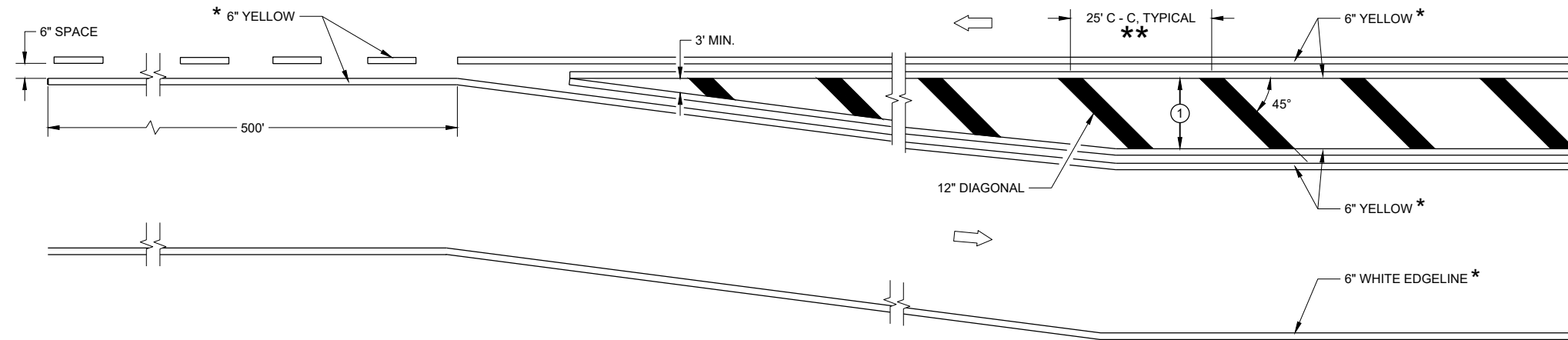
- ① DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT THE WIDEST POINT. OMIT DIAGONALS IF WIDTH IS LESS THAN 4 FEET.

➔ DIRECTION OF TRAVEL

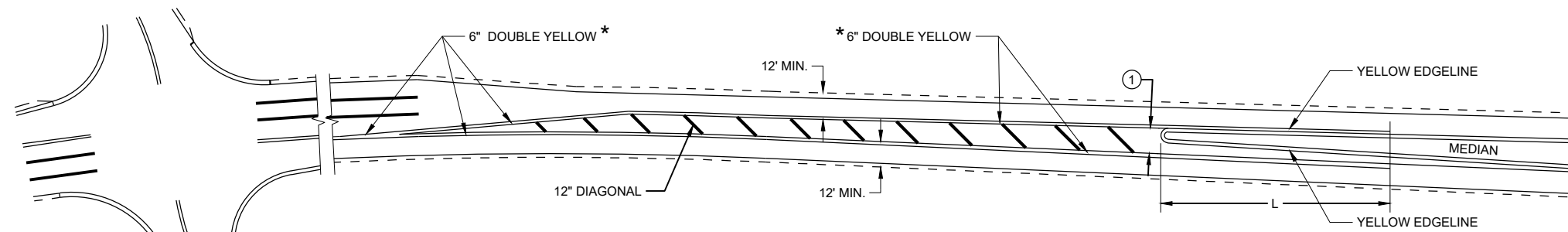
* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

SPEED LIMIT	L
<35 MPH	5'
35> MPH	50'

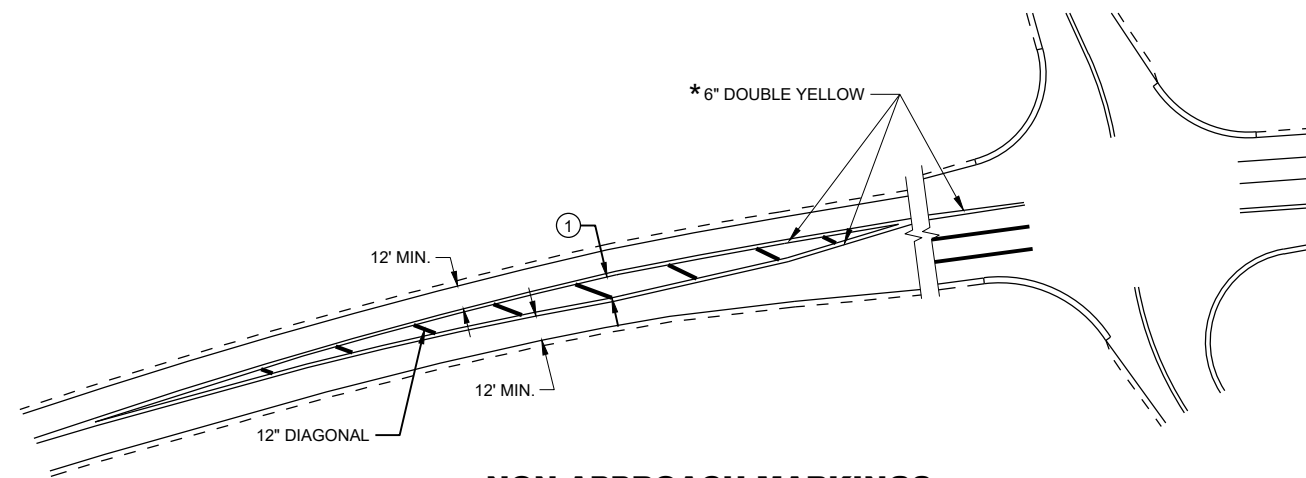
** WHEN THE PAINTED MEDIAN LENGTH IS LESS THAN 50 FEET THE SPACING IS 10'.



MEDIAN ISLAND DETAIL



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



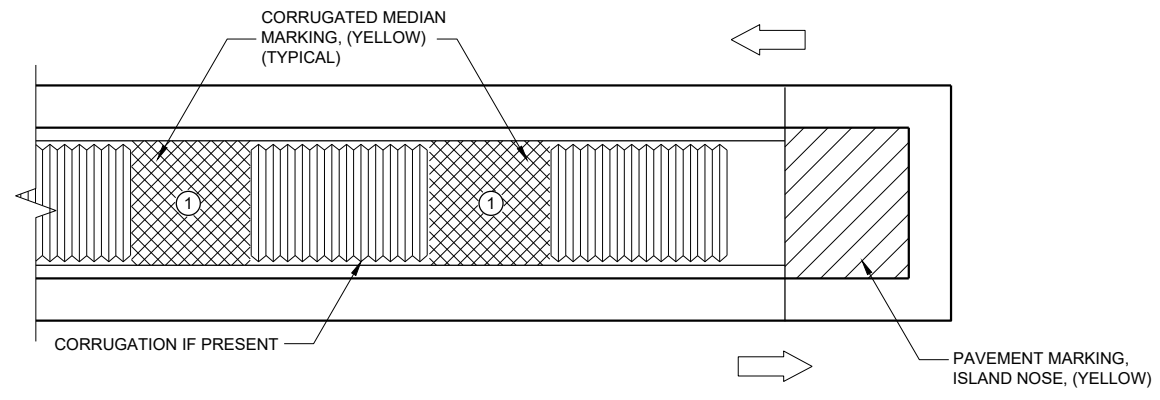
NON-APPROACH MARKINGS

MEDIAN ISLAND PAVEMENT MARKINGS

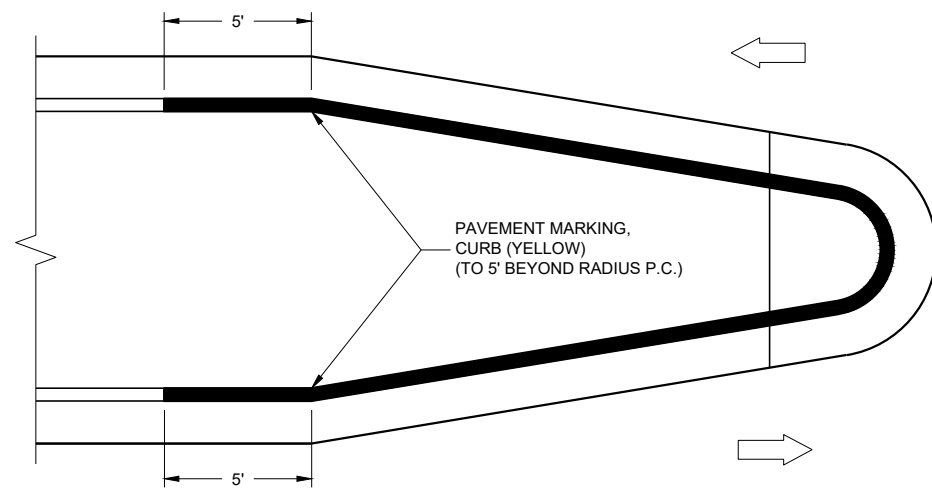
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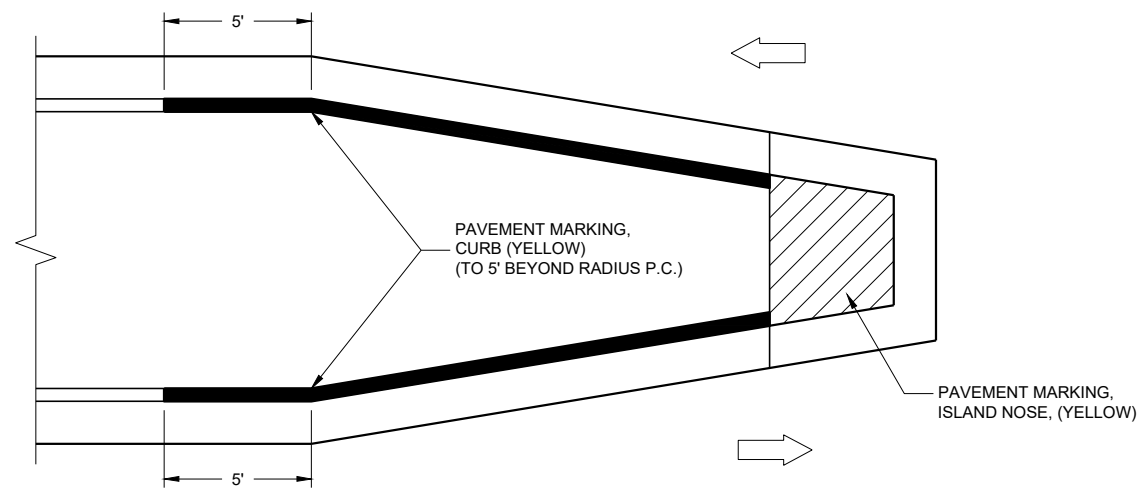
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MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE







MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

GENERAL NOTES

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.

- ① APPLY PAVEMENT MARKING TO THE FLAT PORTION OF CORRUGATED MEDIAN.

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

**PAVEMENT MARKINGS,
MEDIAN ISLAND NOSE**

STATE OF WISCONSIN
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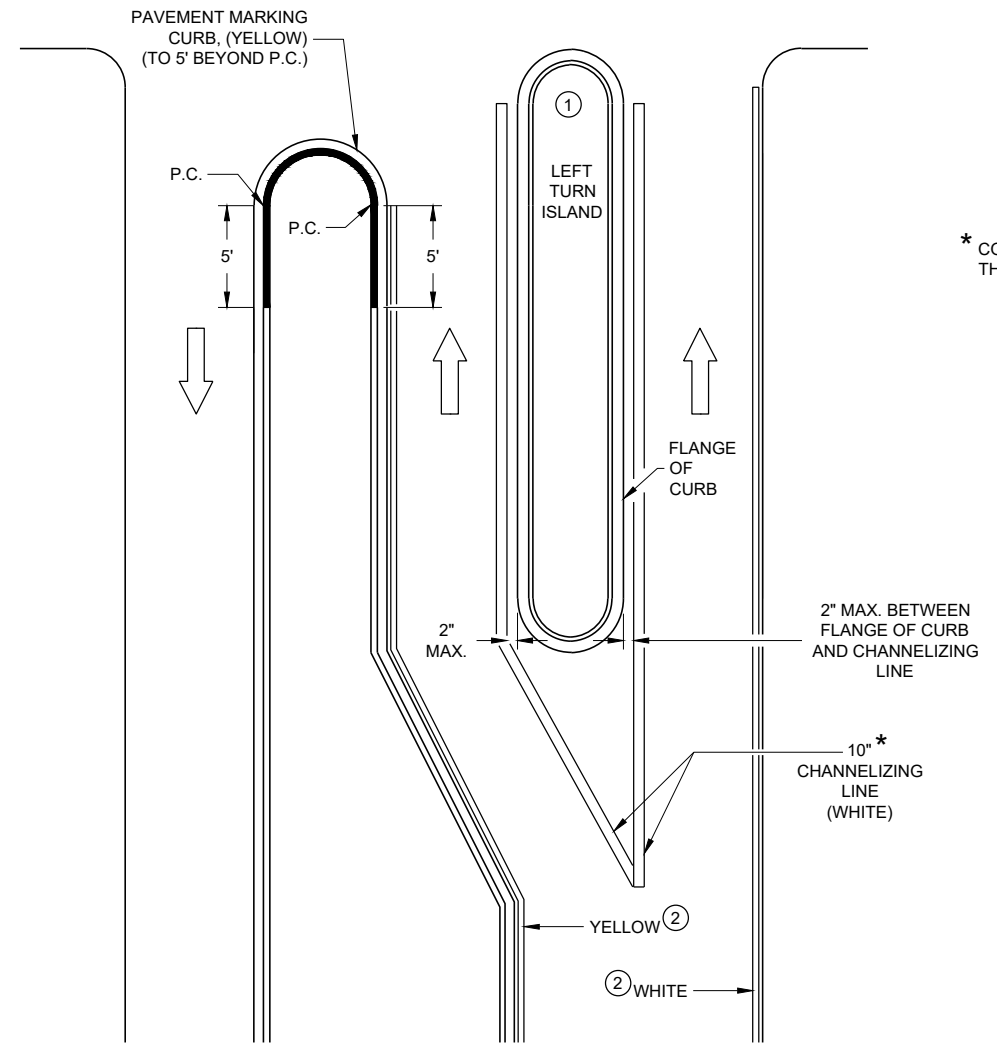
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DATE STATE SIGNING AND MARKING
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REQUIREMENTS FOR EDGE LINES		
POSTED SPEED	IS THERE CONTINUOUS LIGHTING?	
	YES	NO
≤ 30 MPH	NO	OPTIONAL
35 OR 40 MPH	OPTIONAL	RECOMMENDED
≥ 45 MPH	RECOMMENDED	REQUIRED

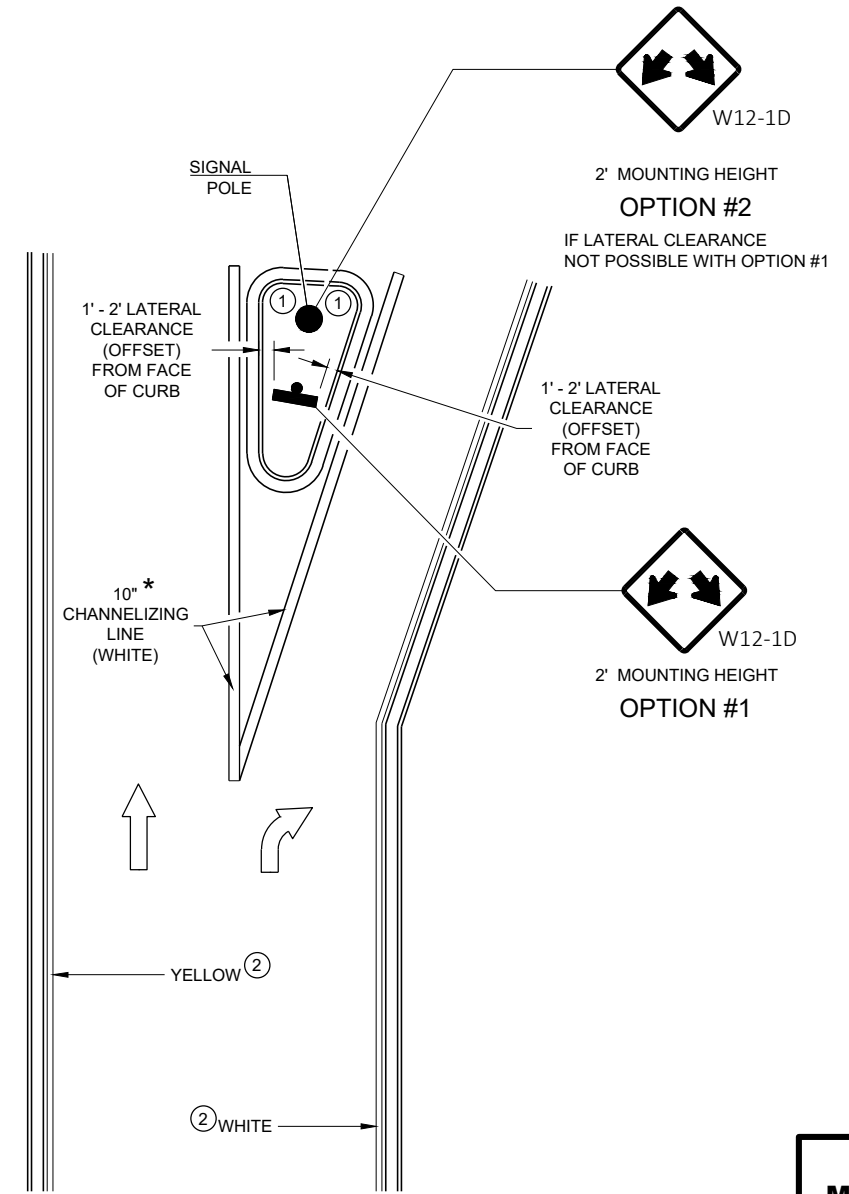
GENERAL NOTES

APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.
SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.

- ① MARK CURB NOSES YELLOW.
- ② MARK ACCORDING TO TABLE.



LEFT TURN & MEDIAN ISLAND



RIGHT TURN ISLAND

6





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SDD 15C18-08C

SDD 15C18-08C

MEDIAN PAVEMENT MARKINGS, DOUBLE ARROW WARNING SIGN PLACEMENT	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2023 DATE	/S/ Jeannie Silver STATE SIGNING AND MARKING ENGINEER
FHWA	

LEGEND

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

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

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

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

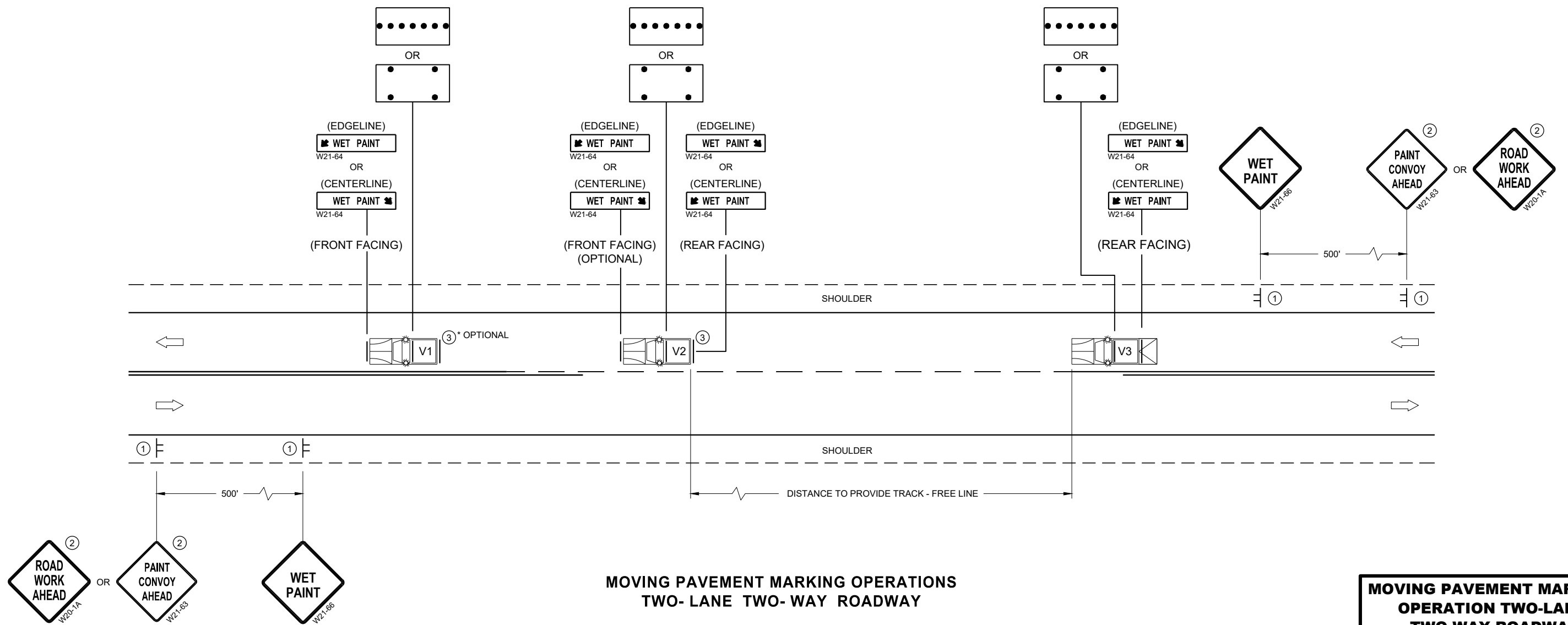
CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL BE A MINIMUM OF 28" FOR WET PAVEMENT MARKING.

- ① SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.
- ② IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.
- ③ V1 AND V2 CAN BE SWITCHED SO THAT THE MARKER IS THE LEAD VEHICLE.

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



**MOVING PAVEMENT MARKING OPERATIONS
TWO-LANE TWO-WAY ROADWAY**

SDD 15C19-08a

SDD 15C19-08a

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED February 2023 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

LEGEND

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

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

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

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

WHEN WORK ACTIVITY BLOCKS THE LEFT LANE, REVERSE TRAFFIC CONTROL.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

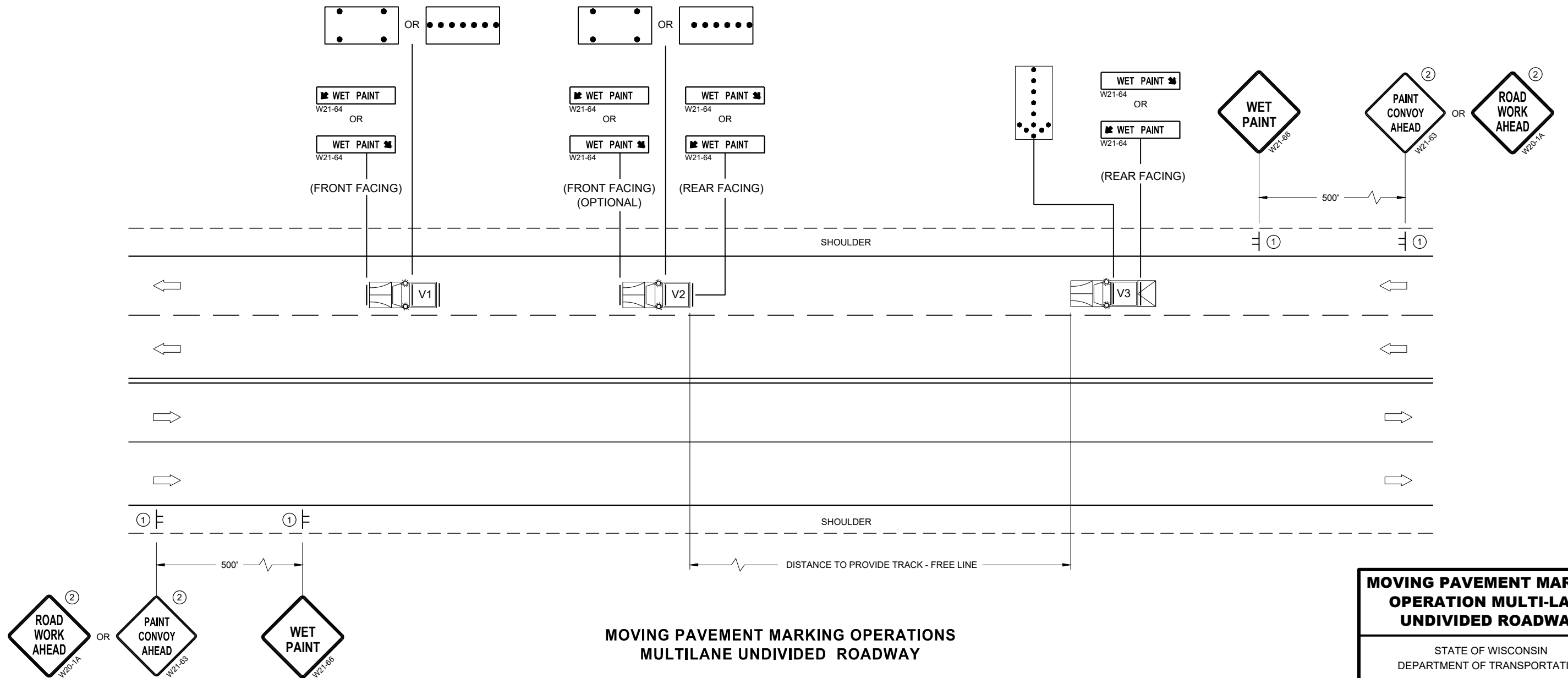
CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLES AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL HAVE A MINIMUM HEIGHT OF 28" FOR WET PAVEMENT MARKINGS.

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

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




SDD 15C19-08b

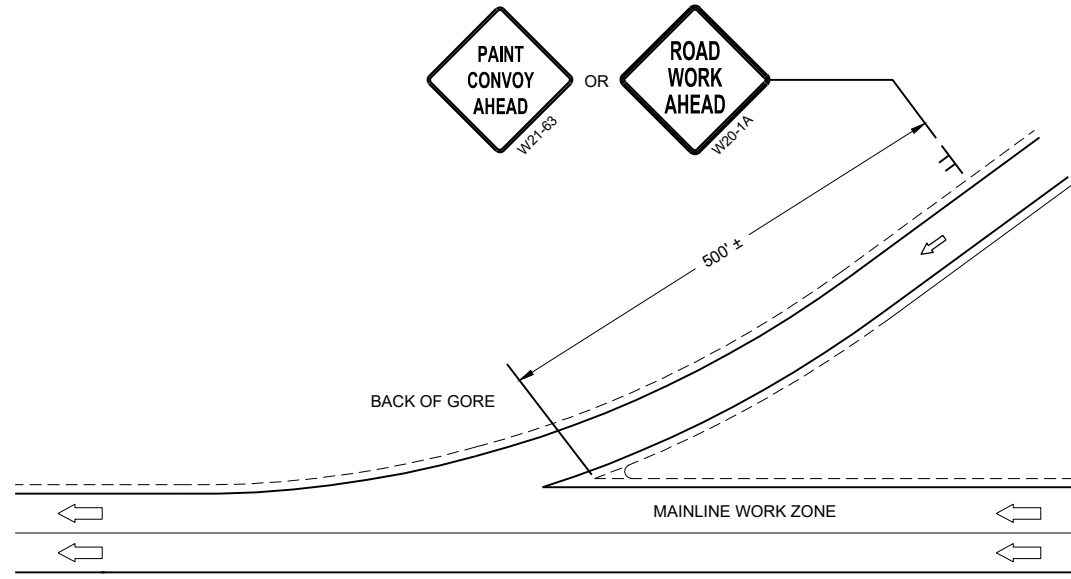
SDD 15C19-08b

**MOVING PAVEMENT MARKING OPERATIONS
MULTILANE UNDIVIDED ROADWAY**

MOVING PAVEMENT MARKING OPERATION MULTI-LANE UNDIVIDED ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED February 2023 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

LEGEND

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



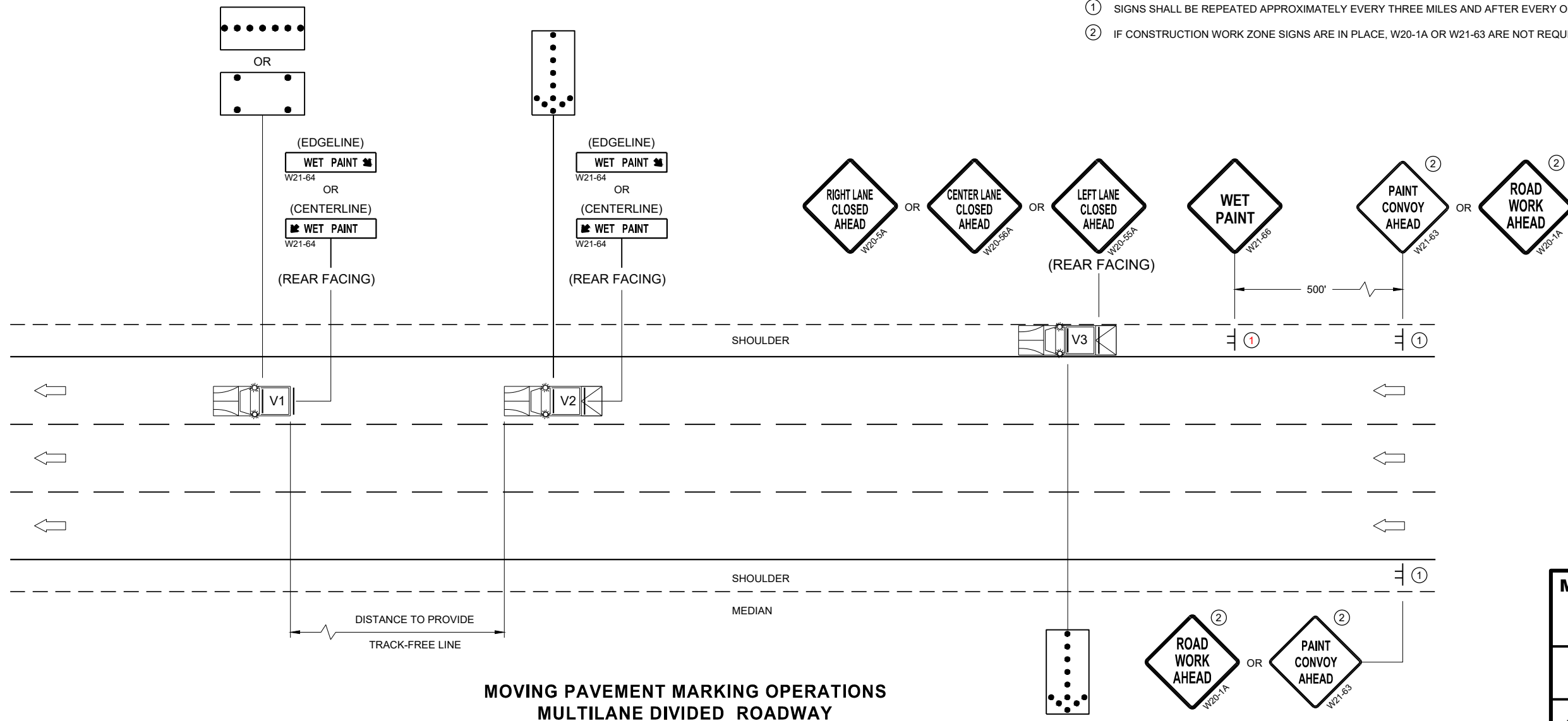
GENERAL NOTES

- ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.
- ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE SPECIFIED.
- DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.
- WHEN WORK ACTIVITY BLOCKS THE LEFT LANE, REVERSE TRAFFIC CONTROL.
- WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.
- USE AN ATTENUATOR ON THE REAR MOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.
- IF THE SHOULDER IS TOO NARROW TO ACCOMMODATE THE LAST TRAILING VEHICLE, THE VEHICLE SHOULD STRADDLE THE EDGE LINE.
- WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC
- CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.
- CONES SHALL BE A MINIMUM HEIGHT OF 28" FOR WET PAVEMENT MARKINGS

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

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**MOVING PAVEMENT MARKING OPERATIONS
MULTILANE DIVIDED ROADWAY**

**MOVING PAVEMENT MARKING
OPERATION MULTI-LANE
DIVIDED ROADWAY**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2023 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

SDD 15C19-08c

SDD 15C19-08c

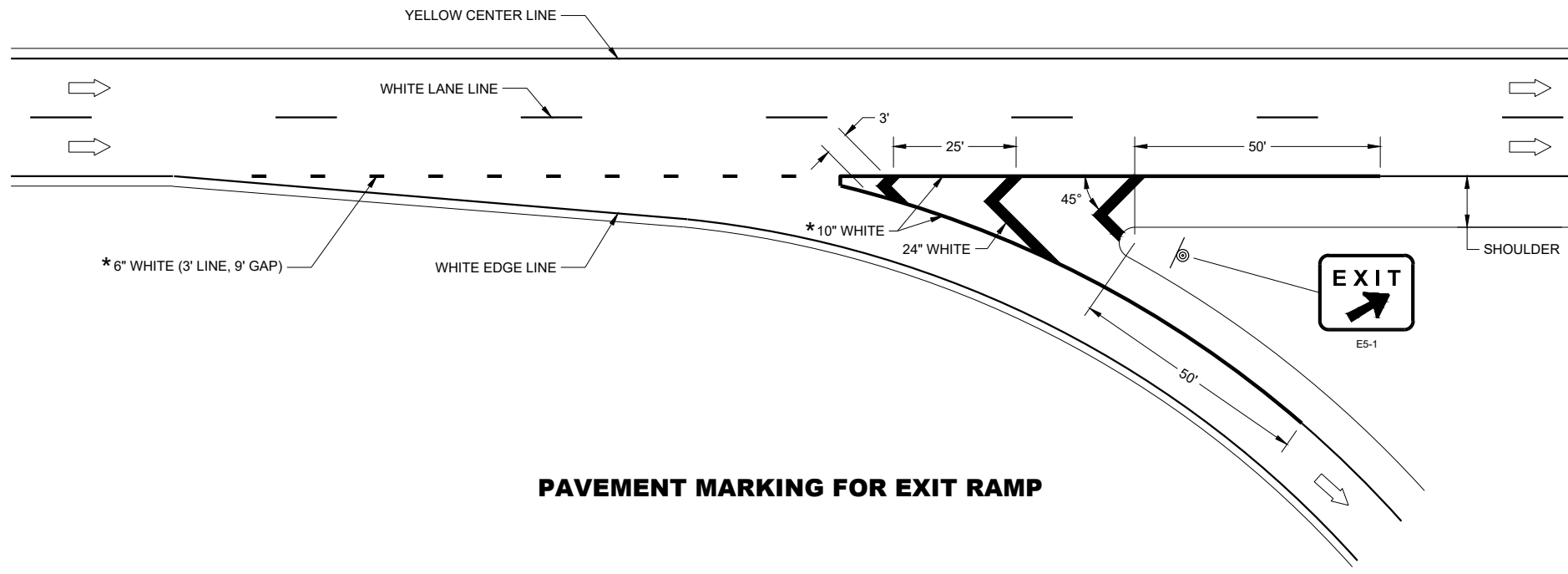
GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

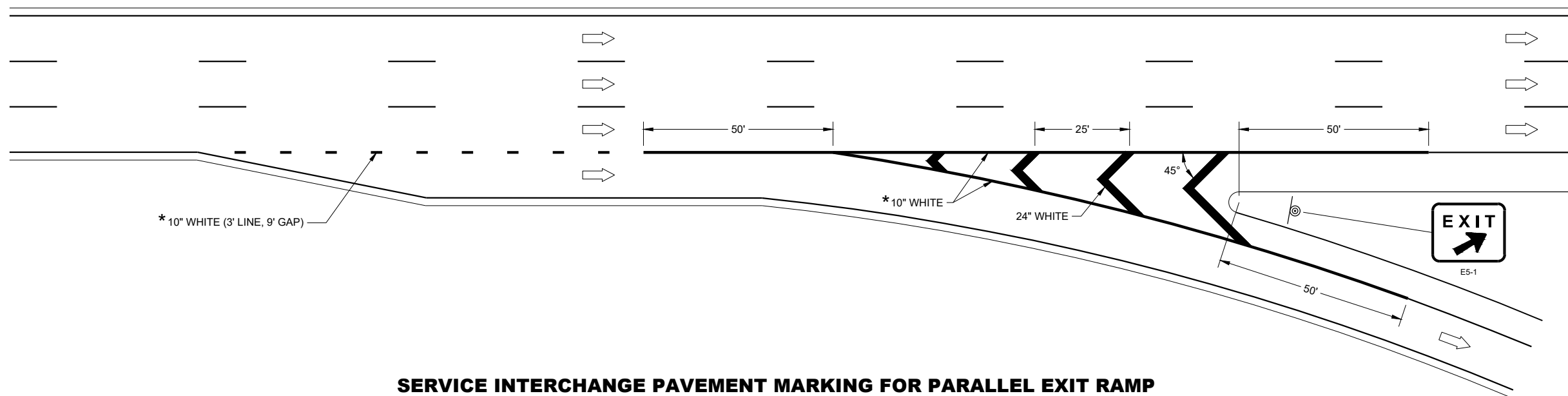
LEGEND

- ⊙ SIGN ON PERMANENT SUPPORT
- ➡ DIRECTION OF TRAVEL

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



PAVEMENT MARKING FOR EXIT RAMP



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL EXIT RAMP

**PAVEMENT MARKING,
EXIT RAMP AND
PARALLEL EXIT RAMP**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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
SDD 15C31-05a

SDD 15C31-05a

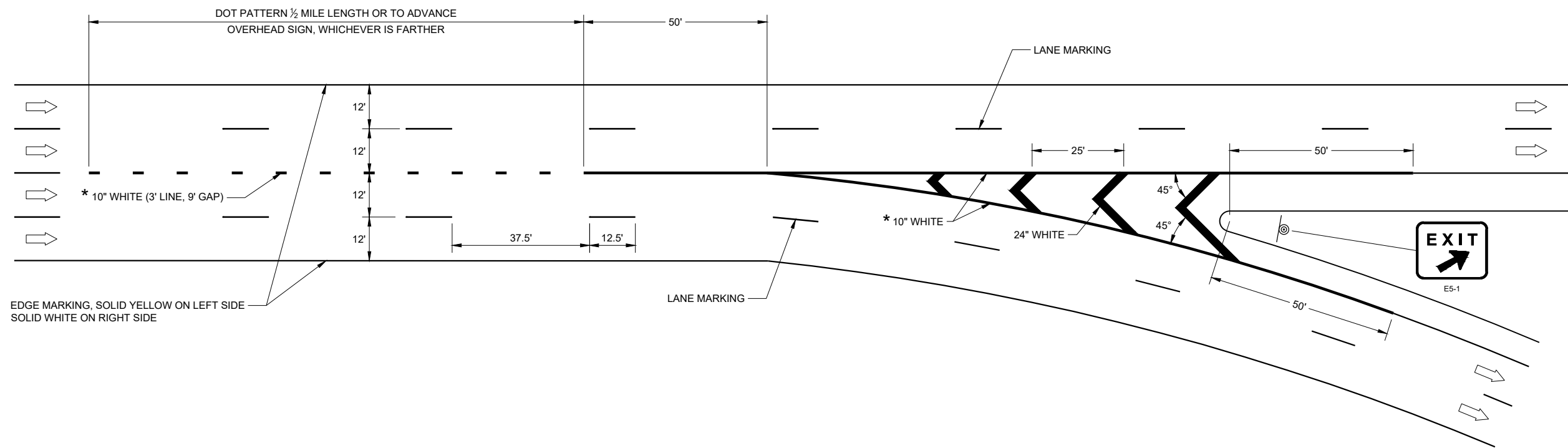
GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

LEGEND

-  SIGN ON PERMANENT SUPPORT
-  DIRECTION OF TRAVEL

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



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SDD 15C31-05b

SDD 15C31-05b

**PAVEMENT MARKING,
MAJOR SPLIT
FREEWAY TO FREEWAY**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

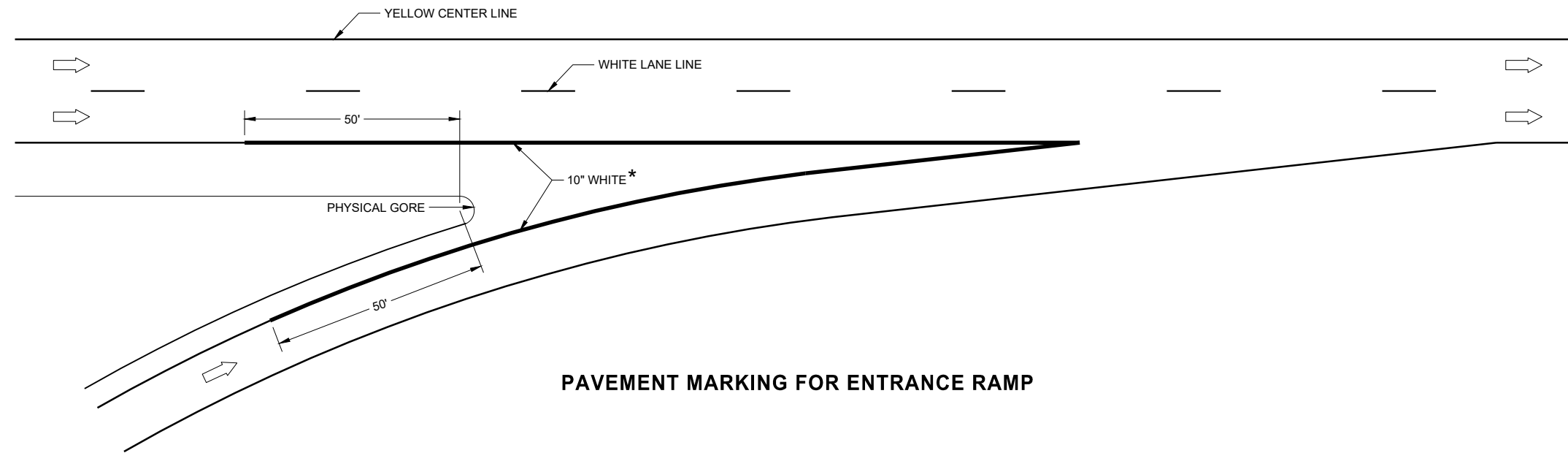
PLACE GROOVE 3 INCHES LEFT OF JOINT.

① ½ LENGTH OF FULL WIDTH ACCELERATION LANE.

LEGEND

➡ DIRECTION OF TRAVEL

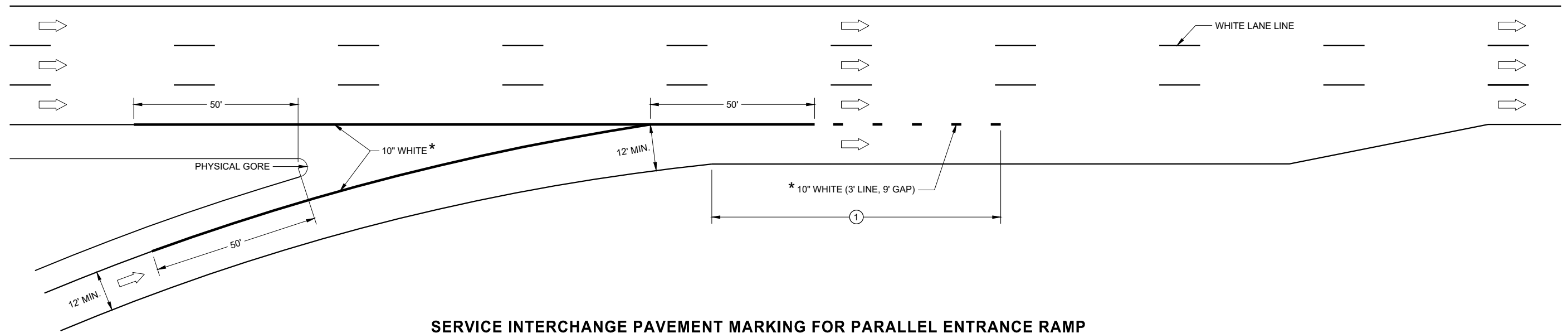
* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



PAVEMENT MARKING FOR ENTRANCE RAMP

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SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL ENTRANCE RAMP

SDD 15C31-05c

SDD 15C31-05c

**PAVEMENT MARKING,
ENTRANCE RAMP AND
PARALLEL ENTRANCE RAMP**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

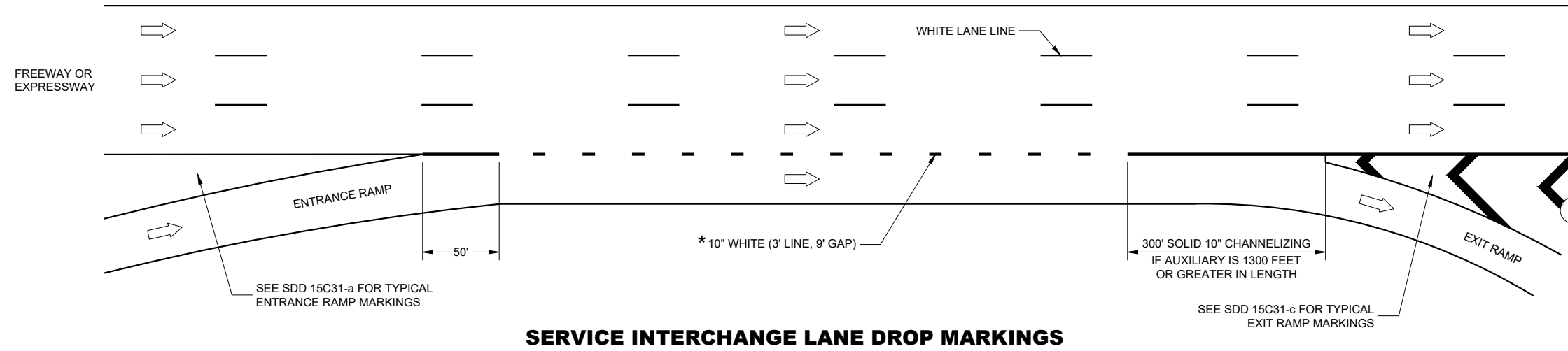
LEGEND

➡ DIRECTION OF TRAVEL

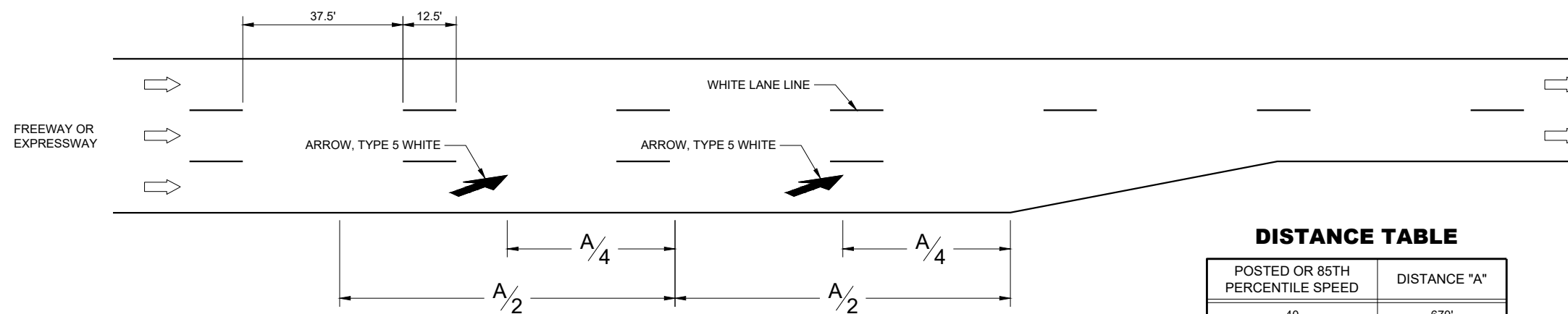
* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.



SERVICE INTERCHANGE LANE DROP MARKINGS



LANE REDUCTION MARKINGS

DISTANCE TABLE

POSTED OR 85TH PERCENTILE SPEED	DISTANCE "A"
40	670'
45	775'
50	885'
55	990'
60	1100'
65	1200'
70	1250'

**PAVEMENT MARKING,
LANE DROP AND
LANE REDUCTION**

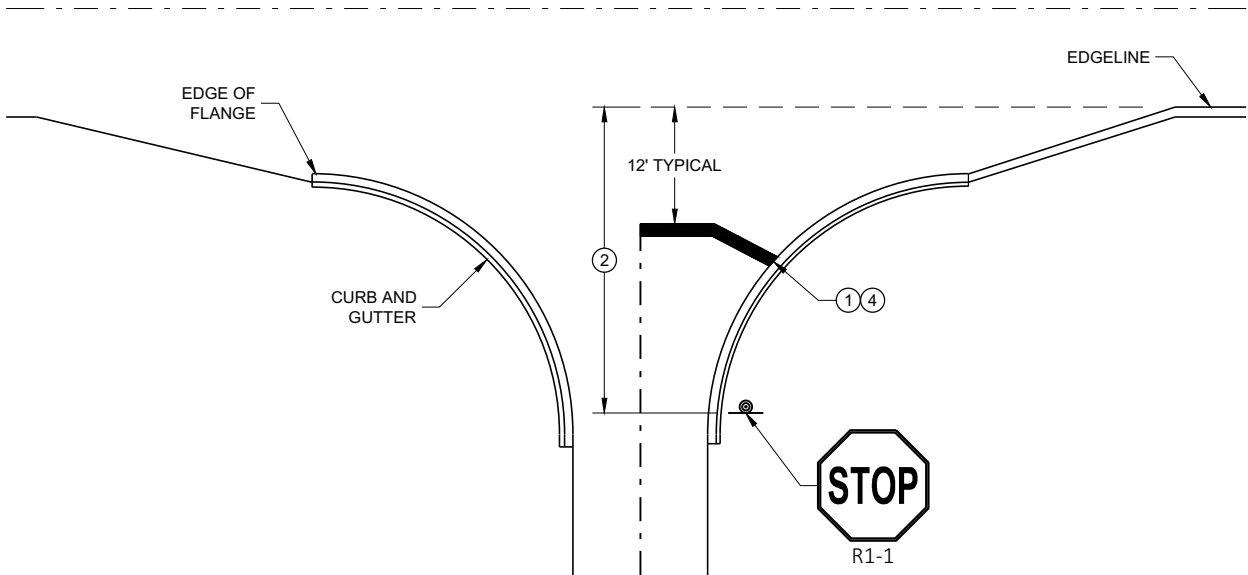
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
DATE: May 2023 /S/ Matthew Rauch
STATE MARKING AND SIGNING ENGINEER

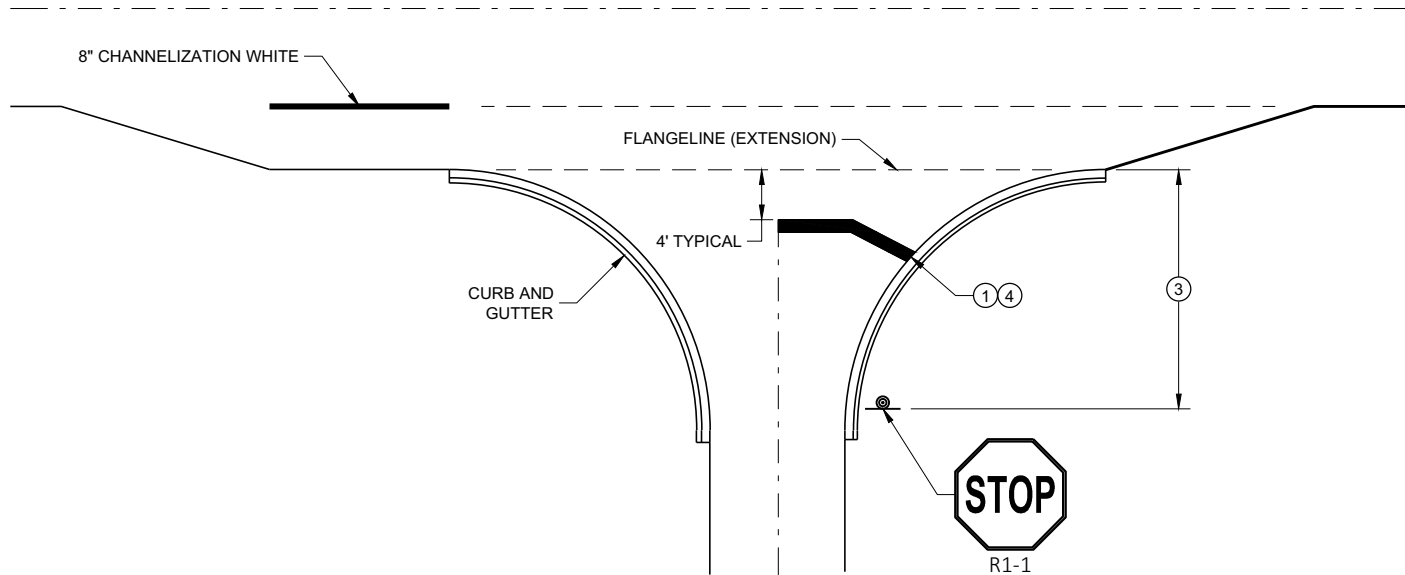
GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

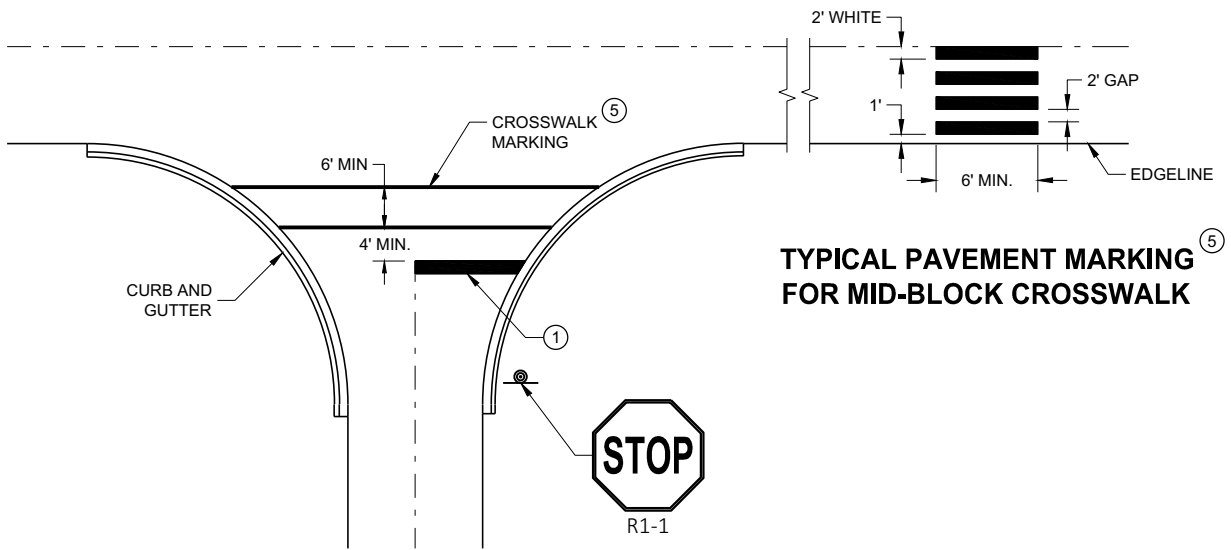
- ① 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
- ② NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
- ③ NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION.
- ④ MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
- ⑤ LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES INSTEAD.



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

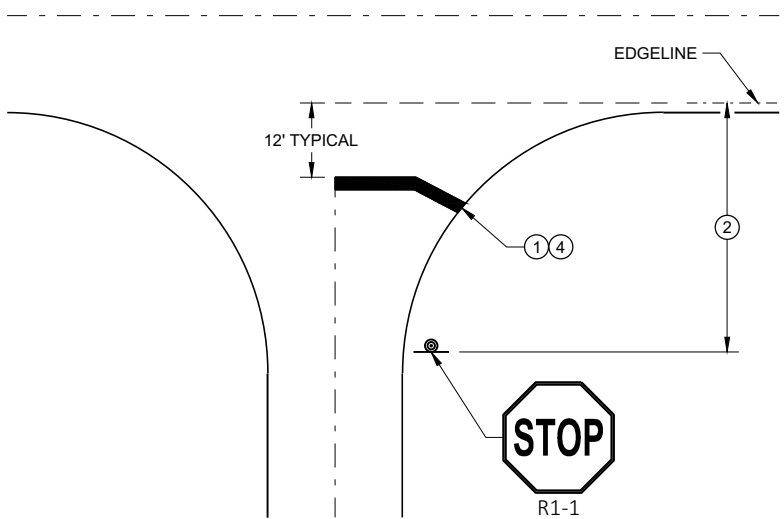


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING

TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

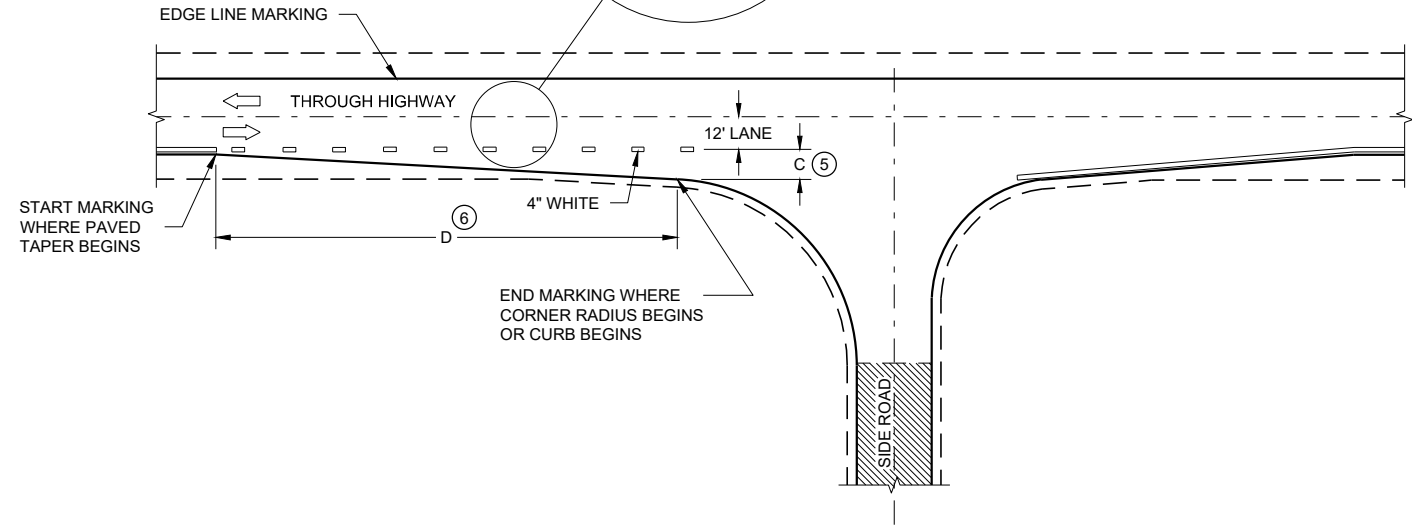
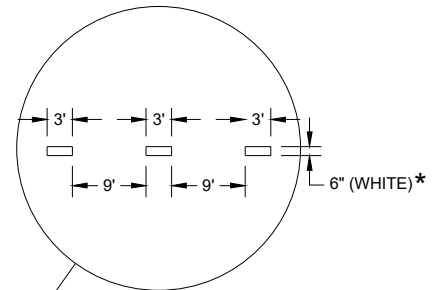
STOP LINE AND CROSSWALK PAVEMENT MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2019 DATE	/S/ Matthew Rauch STATE SIGNING AND MARKING ENGINEER
<small>FHWA</small>	

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SDD 15C33 - 04

SDD 15C33 - 04



MINOR INTERSECTION

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

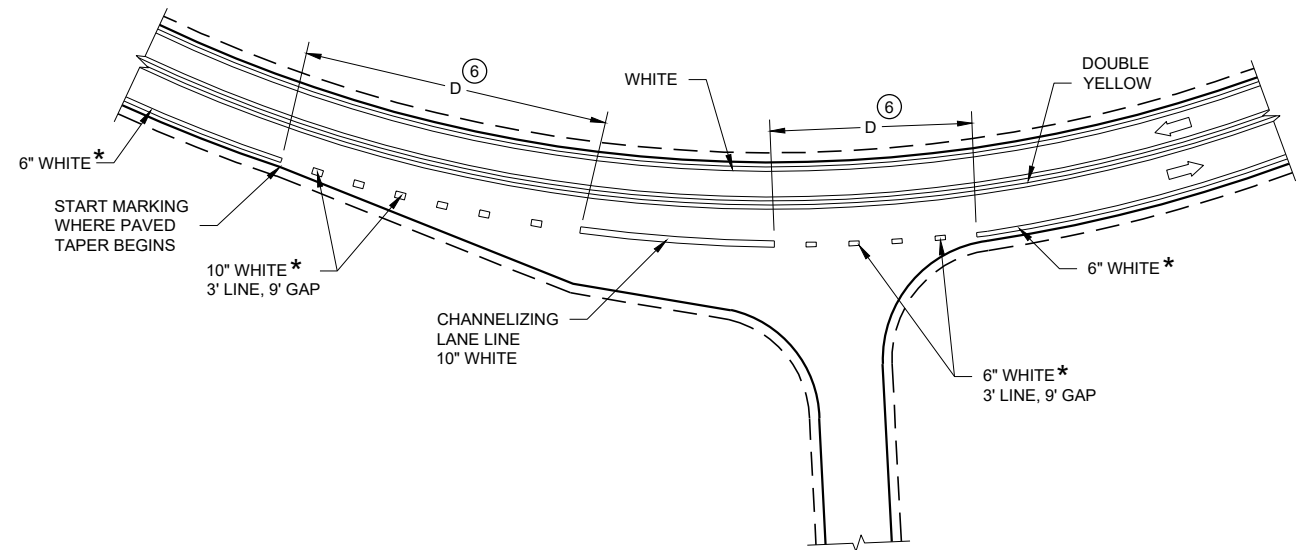
GENERAL NOTES

OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES THROUGH DRIVEWAYS.

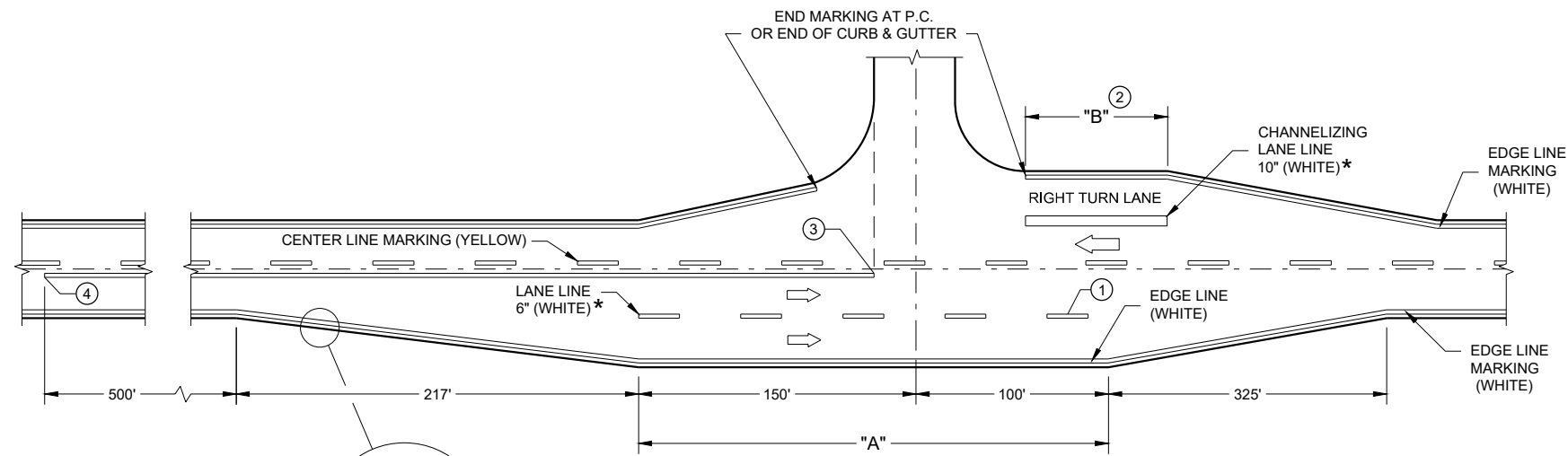
- ① WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
- ② WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
- ③ BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
- ④ BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
- ⑤ WHEN DISTANCE "C" IS LESS THAN 4 FEET, OMIT DOTTED EXTENSION.
- ⑥ WHEN DISTANCE "D" IS LESS THAN 50 FEET, OMIT DOTTED EXTENSION.

LEGEND

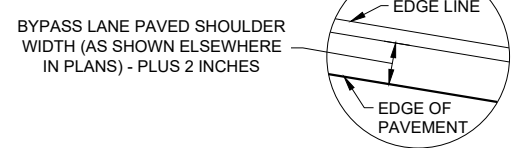
➔ DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE



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



BYPASS LANE PAVED SHOULDER WIDTH (AS SHOWN ELSEWHERE IN PLANS) - PLUS 2 INCHES

**PAVEMENT MARKING
(INTERSECTIONS)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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 DESIRABLE) CLEARANCE TO EXISTING SIGNS.

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

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

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

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

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 AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE 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.










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

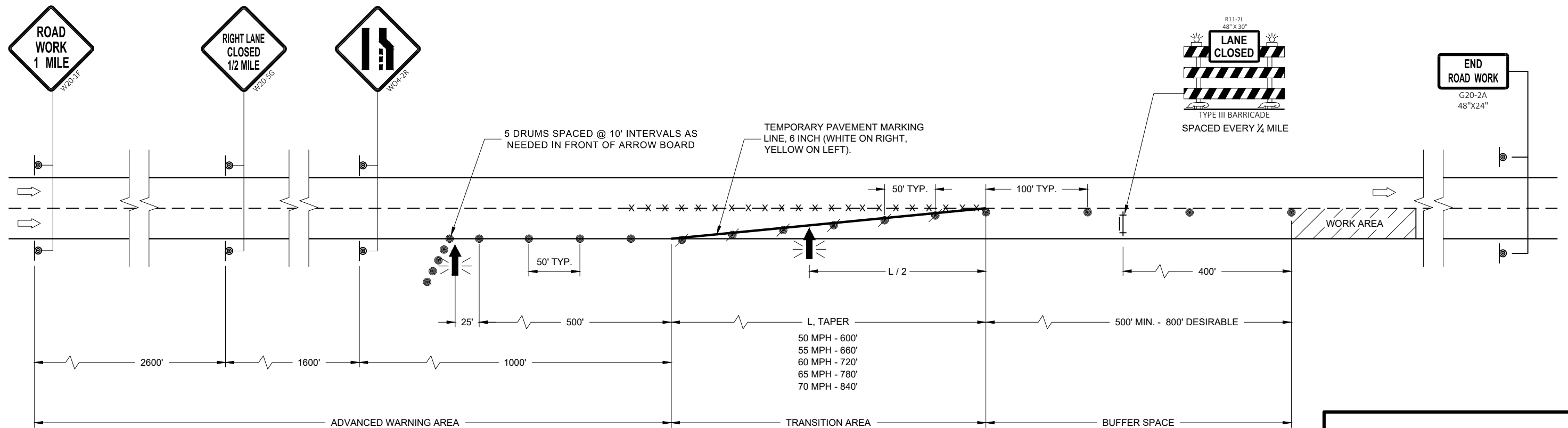
ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS

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 ONE HALF 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.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.










LEGEND

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



TRAFFIC CONTROL LANE CLOSURE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED DATE May 2023	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

LEGEND

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

GENERAL NOTES

FOR WORK ON ROADWAYS WITH SPEEDS GREATER THAN 45MPH, USE SDD 15D12.

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.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"x36" SIGNS MAY BE USED IF APPROVED BY REGIONAL TRAFFIC UNIT.

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

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.

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 TEMPORARY SUPPORTS.

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

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

W20-1A, 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.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

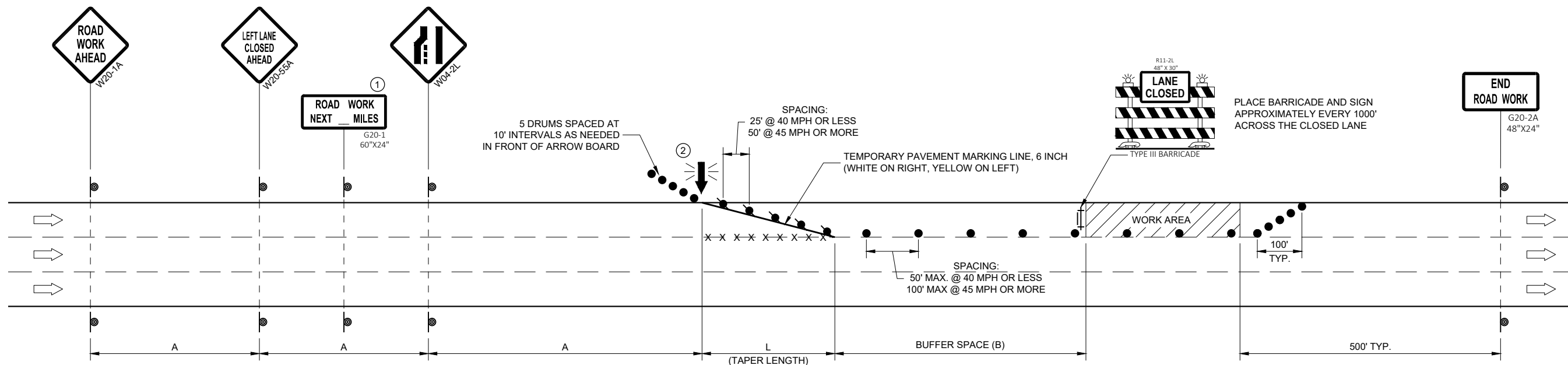
CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED 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.

- ① OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.
- ② WHERE THE SHOULDER OR TERRACE HAS INSUFFICIENT SPACE TO PLACE THE ARROW BOARD AS SHOWN, PLACE THE ARROW BOARD AT THE END OF THE TAPER.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'










TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

LEGEND

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

GENERAL NOTES

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

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 REGIONAL TRAFFIC UNIT.

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

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.

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 TEMPORARY SUPPORTS.

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

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

W20-1A, 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.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED 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.

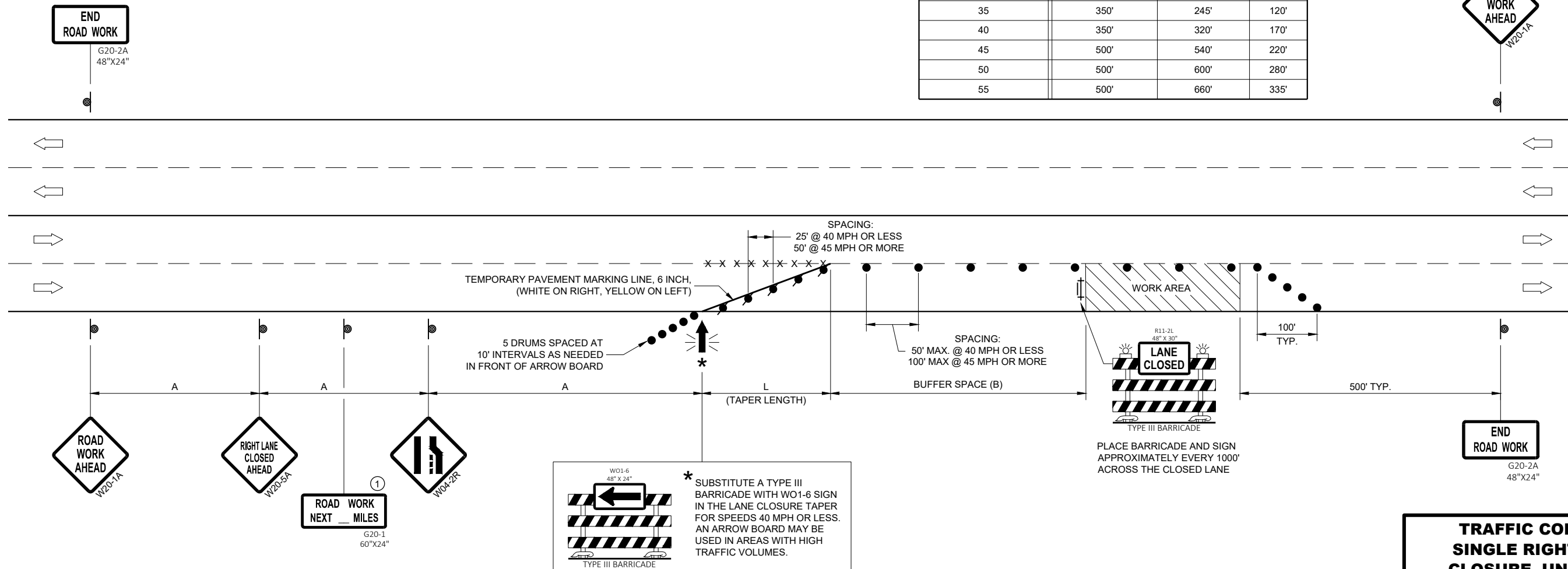
① OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'
50	500'	600'	280'
55	500'	660'	335'



6

6



SDD 15D20-07b

SDD 15D20-07b










**TRAFFIC CONTROL,
SINGLE RIGHT LANE
CLOSURE, UNDIVIDED
NON-FREEWAY/EXPRESSWAY**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

LEGEND

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

GENERAL NOTES

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

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 REGIONAL TRAFFIC UNIT.

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

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.

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 TEMPORARY SUPPORTS.

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

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

W20-1A, 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.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

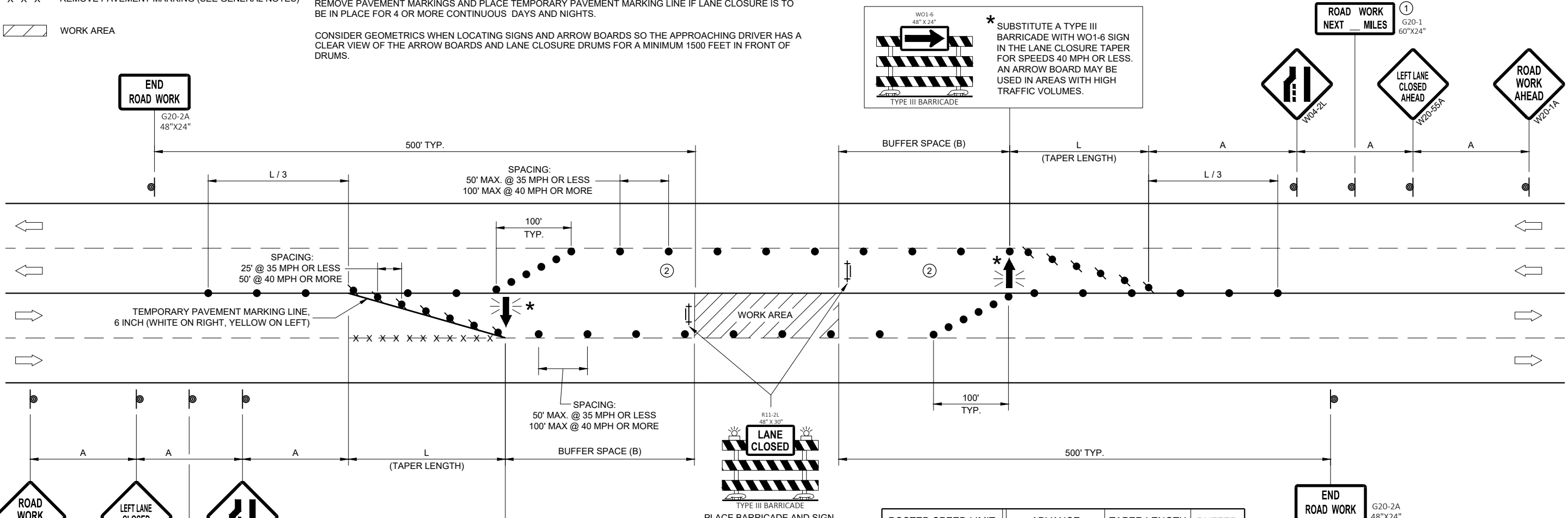
DUE TO LACK OF SHOULDER/MEDIAN, ARROW BOARD IS PLACED AT THE THE END OF THE TAPER.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED 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.

- ① OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.
- ② LANE MAY BE OPENED WHEN WORKERS ARE NOT PRESENT IN THE WORK AREA.



W01-6
48" X 24"

* SUBSTITUTE A TYPE III BARRICADE WITH W01-6 SIGN IN THE LANE CLOSURE TAPER FOR SPEEDS 40 MPH OR LESS. AN ARROW BOARD MAY BE USED IN AREAS WITH HIGH TRAFFIC VOLUMES.

TYPE III BARRICADE

W01-6
48" X 24"

* SUBSTITUTE A TYPE III BARRICADE WITH W01-6 SIGN IN THE LANE CLOSURE TAPER FOR SPEEDS 40 MPH OR LESS. AN ARROW BOARD MAY BE USED IN AREAS WITH HIGH TRAFFIC VOLUMES.

TYPE III BARRICADE

R11-2L
48" X 30"

LANE CLOSED

TYPE III BARRICADE

PLACE BARRICADE AND SIGN APPROXIMATELY EVERY 1000' ACROSS THE CLOSED LANE.

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'
50	500'	600'	280'
55	500'	660'	335'

**TRAFFIC CONTROL,
SINGLE LEFT LANE
CLOSURE, UNDIVIDED
NON-FREEWAY/EXPRESSWAY**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

6

6

SDD 15D20-07C

SDD 15D20-07C

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.

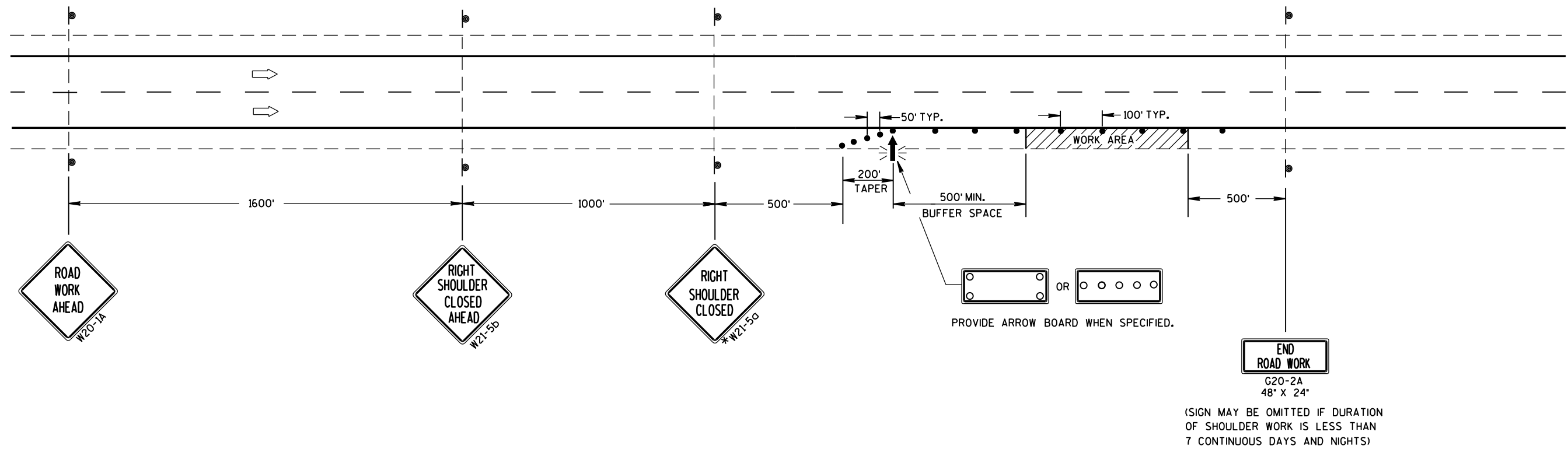
CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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 W21-50 SIGN MAY BE OMITTED.







LEGEND

- TRAFFIC CONTROL DRUM
- ⊙ SIGN ON PERMANENT SUPPORT
- ➡ DIRECTION OF TRAFFIC
- ⚡➡ FLASHING ARROW BOARD
- ▨ WORK AREA



TRAFFIC CONTROL SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2016 DATE	/s/ Peter Amakobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA	

LEGEND

-  SIGN ON PERMANENT SUPPORT
-  TRAFFIC CONTROL DRUM
-  TYPE III BARRICADE WITH ATTACHED SIGN
-  DIRECTION OF TRAFFIC
-  WORK AREA
-  FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

GENERAL NOTES

ALL SIGNS ARE 48"X48" BLACK ON ORANGE UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

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

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.

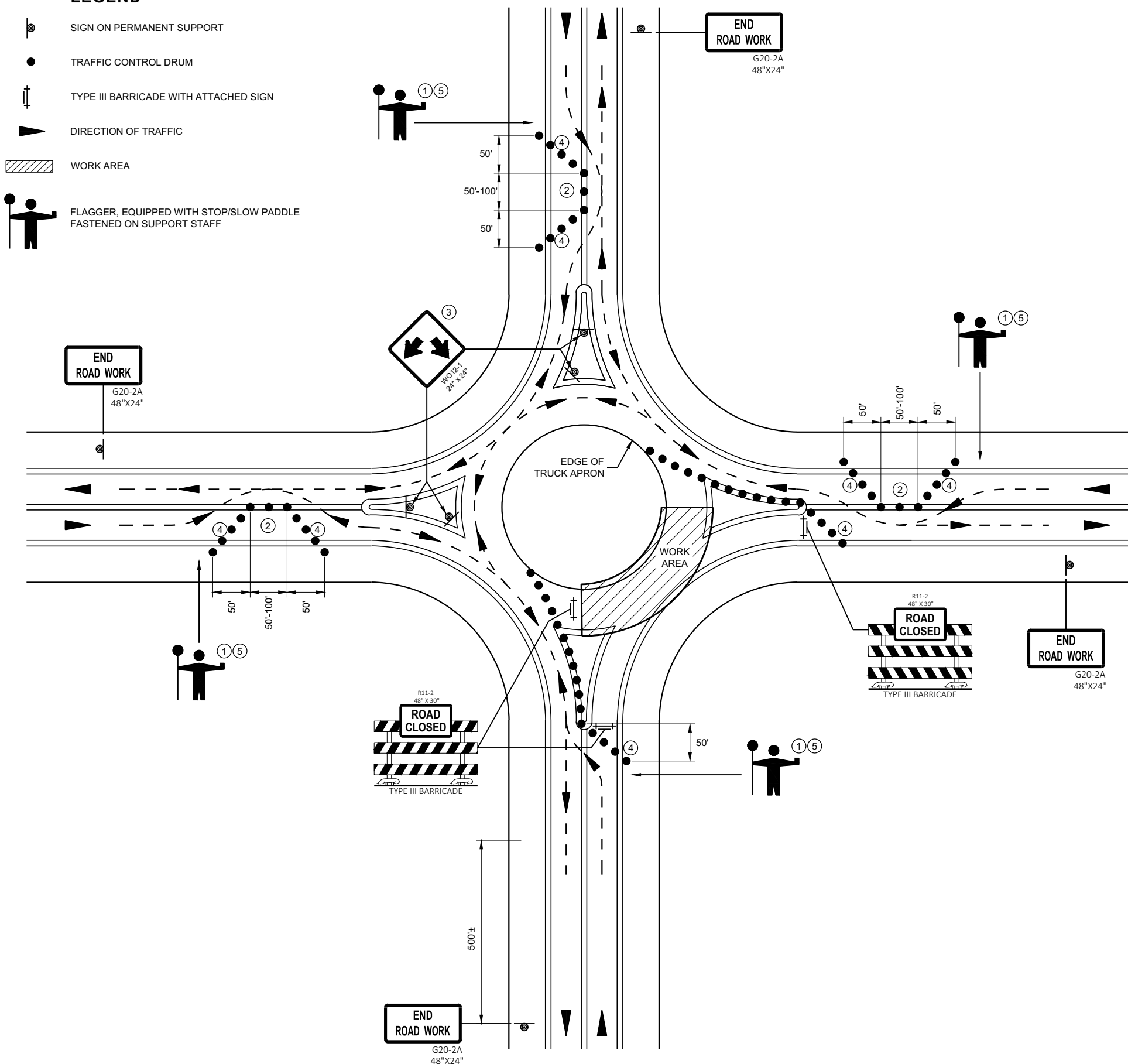
THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ONLY ONE QUADRANT OF TRAFFIC SHALL BE RELEASED AT A TIME.

FLAGGERS SHALL CONTROL TRAFFIC ON ALL APPROACHES OF THE ONE-LANE ROUNDABOUT. ONE FLAGGER SHALL BE DESIGNATED LEAD FLAGGER.

NIGHT TIME WORK REQUIRES ADDITIONAL LIGHTING AT FLAGGER STATION(S).

- ① FLAGGERS SHALL BE IN DIRECT RADIO CONTACT AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING IS NOT IN EFFECT, COVER OR REMOVE ALL TEMPORARY TRAFFIC CONTROL SIGNS.
- ② ADJUST CHANNELIZING DEVICES TO ACCOMMODATE FOR TURNING RADIUS OF LARGE VEHICLES AS DIRECTED BY THE ENGINEER.
- ③ GUIDE SIGN WITH ROAD NAMES MAY BE USED IN LIEU OF THE DOUBLE ARROW (WO12-1) SIGN.
- ④ THE TWO- WAY TAPER SHOULD BE 50 FEET USING 5 EQUALLY SPACED DRUMS.
- ⑤ FOLLOW SDD 15C12 FOR FLAGGING AND ADVANCE WARNING.



RECOMMENDED REDUCED DRUM SPACING WITHIN ROUNDABOUT

MPH	DRUM SPACING (FT)
0-40	25
45-55	50

6

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**TRAFFIC CONTROL,
FLAGGING OPERATION,
ROUNDABOUT**

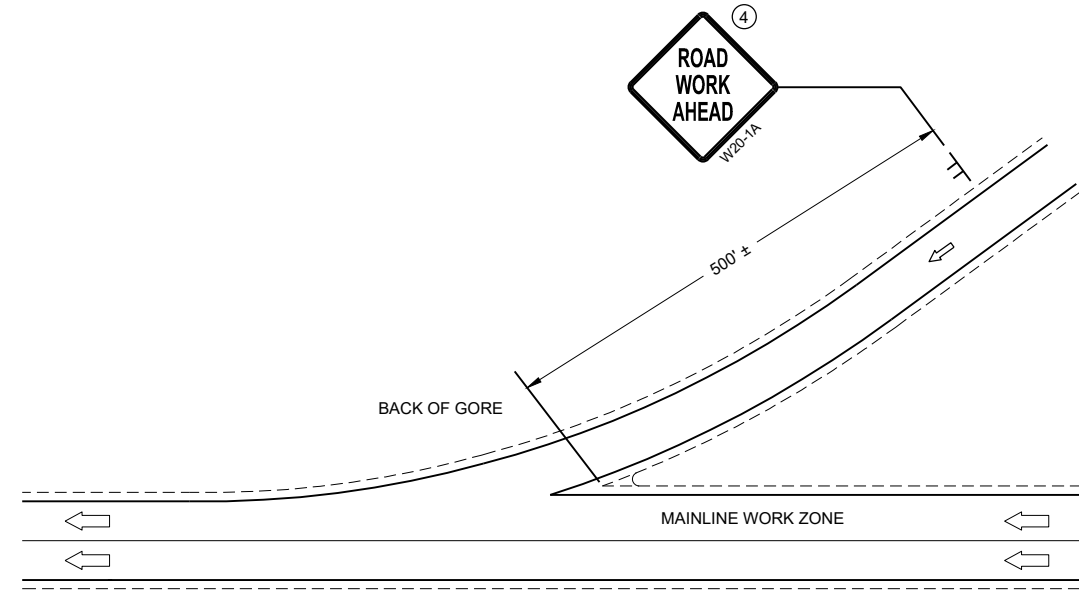
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED _____
DATE May 2020 /S/ Andrew Heidtke
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER

FHWA

LEGEND

- V1 SHADOW VEHICLE 1
- V2 SHADOW VEHICLE 2
- V3 ADVANCE WARNING TRUCK
- TRAFFIC CONTROL DRUM
- ◻ TRUCK MOUNTED ATTENUATOR (TMA)
- ⊥ SIGN ON TEMPORARY SUPPORT
- ➡ DIRECTION OF TRAFFIC
- ◻ FLASHING ARROW PANEL (MERGE)
- ◻ FLASHING ARROW PANEL (CAUTION)
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- ▨ WORK AREA



GENERAL NOTES

SHORT DURATION IS WORK THAT OCCUPIES A LOCATION UP TO 1 HOUR.

MOBILE IS WORK THAT MOVES INTERMITTENTLY OR CONTINUOUSLY.

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

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

WHEN WORK ACTIVITY BLOCKS THE RIGHT LANE, REVERSE TRAFFIC CONTROL.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.

USE DOUBLE ARROWS WHEN CONVOY IS IN CENTER LANE ONLY.

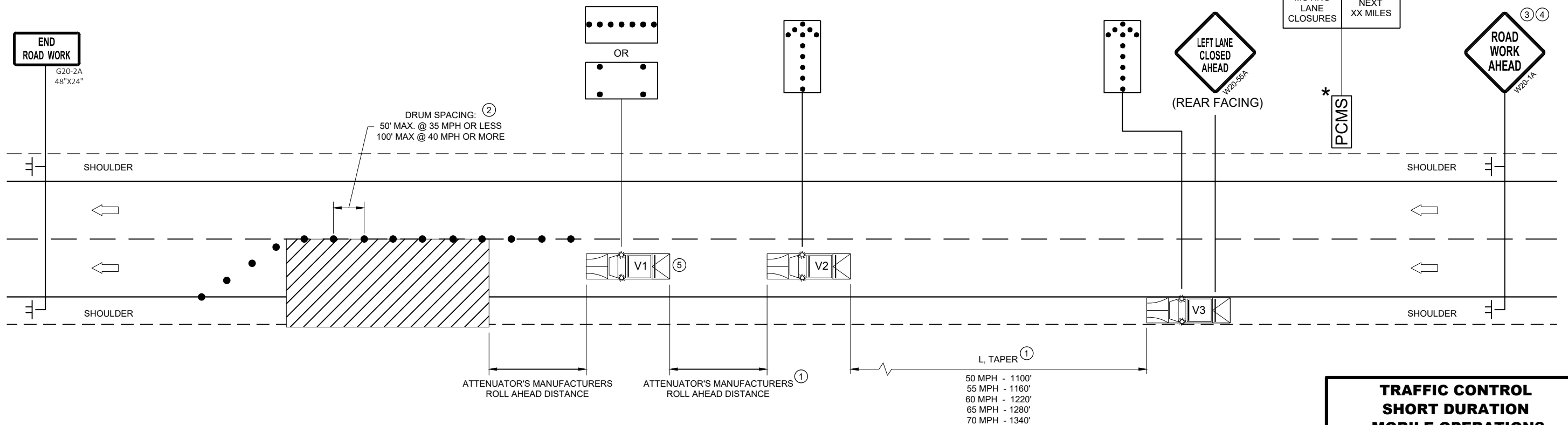
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC

- ① DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.
- ② DRUMS ARE TO BE USED FOR BRIDGE DECK SEALING AND OTHER PROJECTS THAT REQUIRE DELINEATION.
- ③ WITHIN 5 MILES, RELOCATE SIGNS AS WORK PROGRESSES AND NECESSARY OR AS DIRECTED BY THE ENGINEER.
- ④ SIGN NOT REQUIRED IF MOVING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.
- ⑤ SHADOW VEHICLE 1 (V1) IS OPTIONAL

* PCMS OPTIONAL

PCMS MESSAGING

FRAME 1	FRAME 2
MOVING LANE CLOSURES	NEXT XX MILES










**TRAFFIC CONTROL
SHORT DURATION
MOBILE OPERATIONS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2021 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

LEGEND

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

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHIFTING TAPER $L/2$					
		W, LATERAL OFFSET (FT)					
		3	4	5	6	7	8
25	200	10	14	17	21	24	28
30	200	15	20	25	30	35	40
35	350	20	27	34	40	47	54
40	350	26	35	44	53	62	70
45	500	45	59	74	89	104	119
50	500	50	66	83	99	116	132
55	500	54	73	91	109	127	145

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.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"x36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

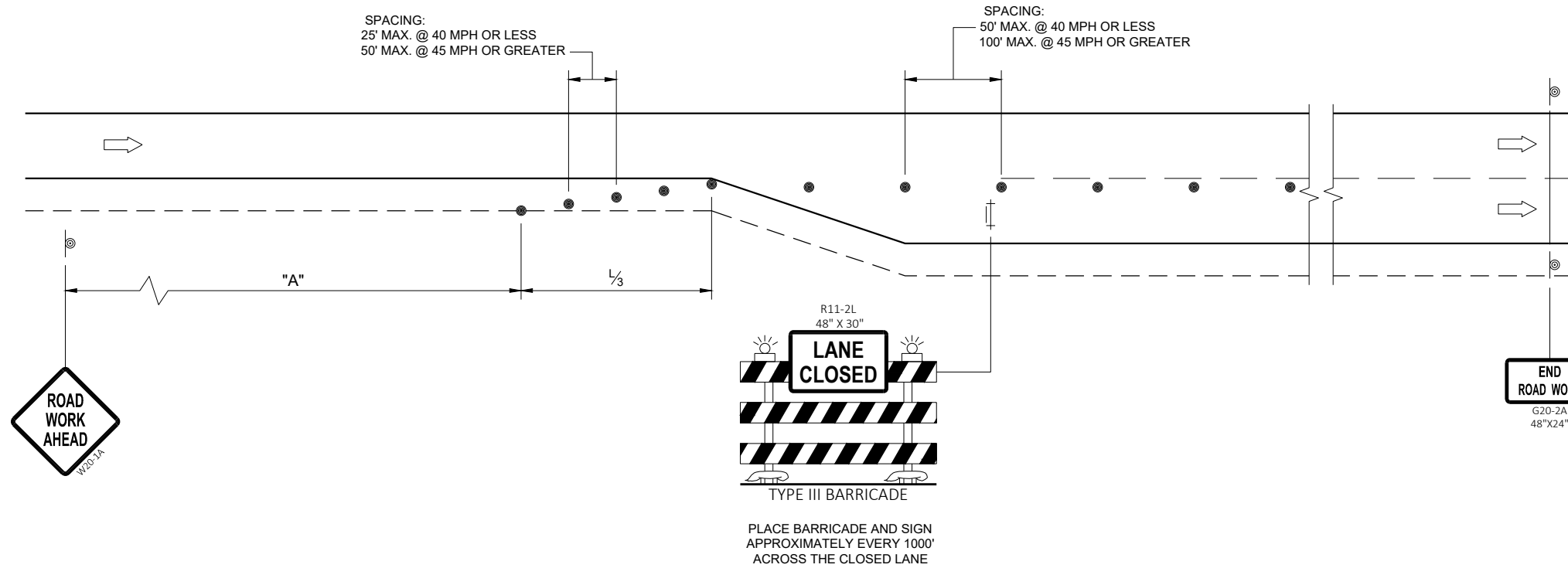
"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

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.

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

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

W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION WORK IS LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS.



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





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SDD 15D50-03a

SDD 15D50-03a

TRAFFIC CONTROL ADDED LANE CLOSURE WITHOUT LANE SHIFT	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED DATE May 2023	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

LEGEND

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

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHIFTING TAPER (L/2) FEET
25	200	60
30	200	90
35	350	120
40	350	160
45	500	270
50	500	300
55	500	330

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.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"x36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

"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.

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

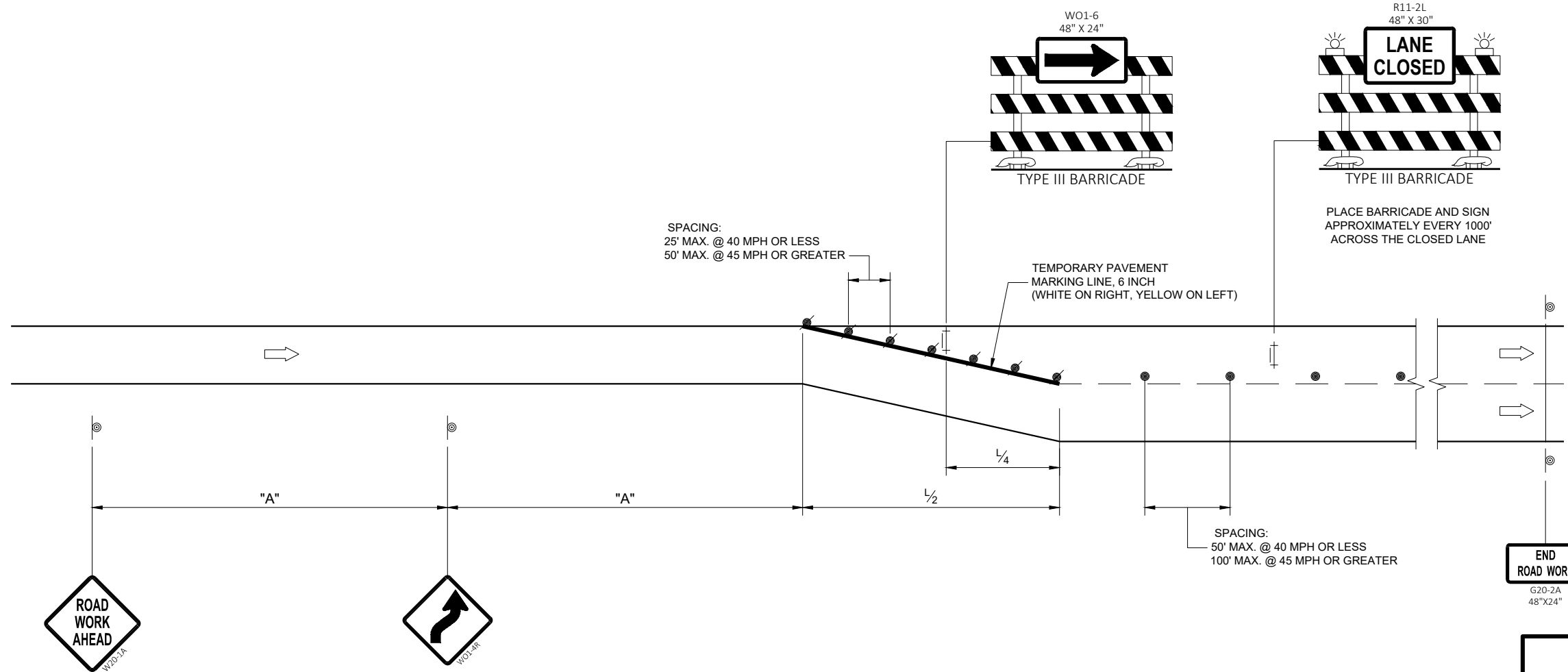
SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION WORK IS LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS.

PLACE TEMPORARY PAVEMENT MARKING AND PLACE TEMPORARY PAVEMENT LINE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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SDD 15D50-03b

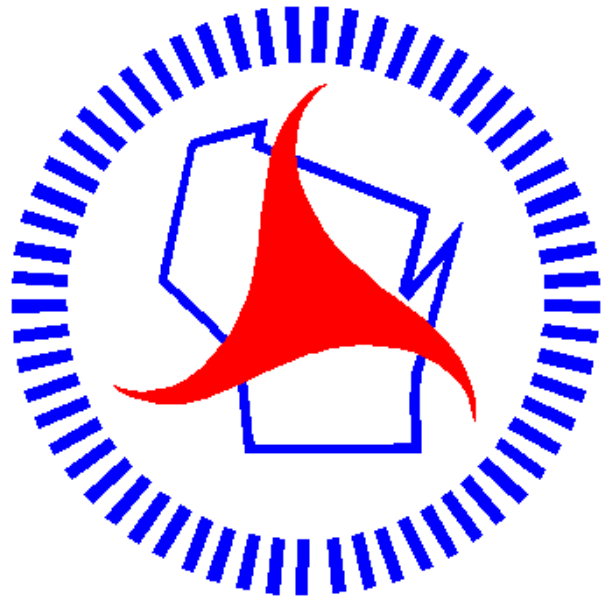
SDD 15D50-03b

**TRAFFIC CONTROL,
ADDED LANE CLOSURE
WITH LANE SHIFT**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
DATE May 2023 /S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA



Wisconsin Department of Transportation

Dedicated people creating transportation solutions through innovation and exceptional service.

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