

GRE
PROJECT ID:
WITH: N/A

6190-26-71

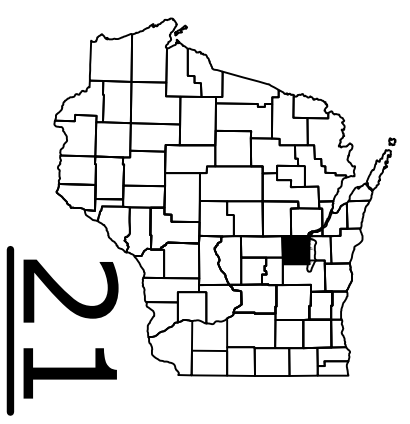
COUNTY:
WINNEBAGO

MAY 2024

ORDER OF SHEETS

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

TOTAL SHEETS = 68



DESIGN DESIGNATION

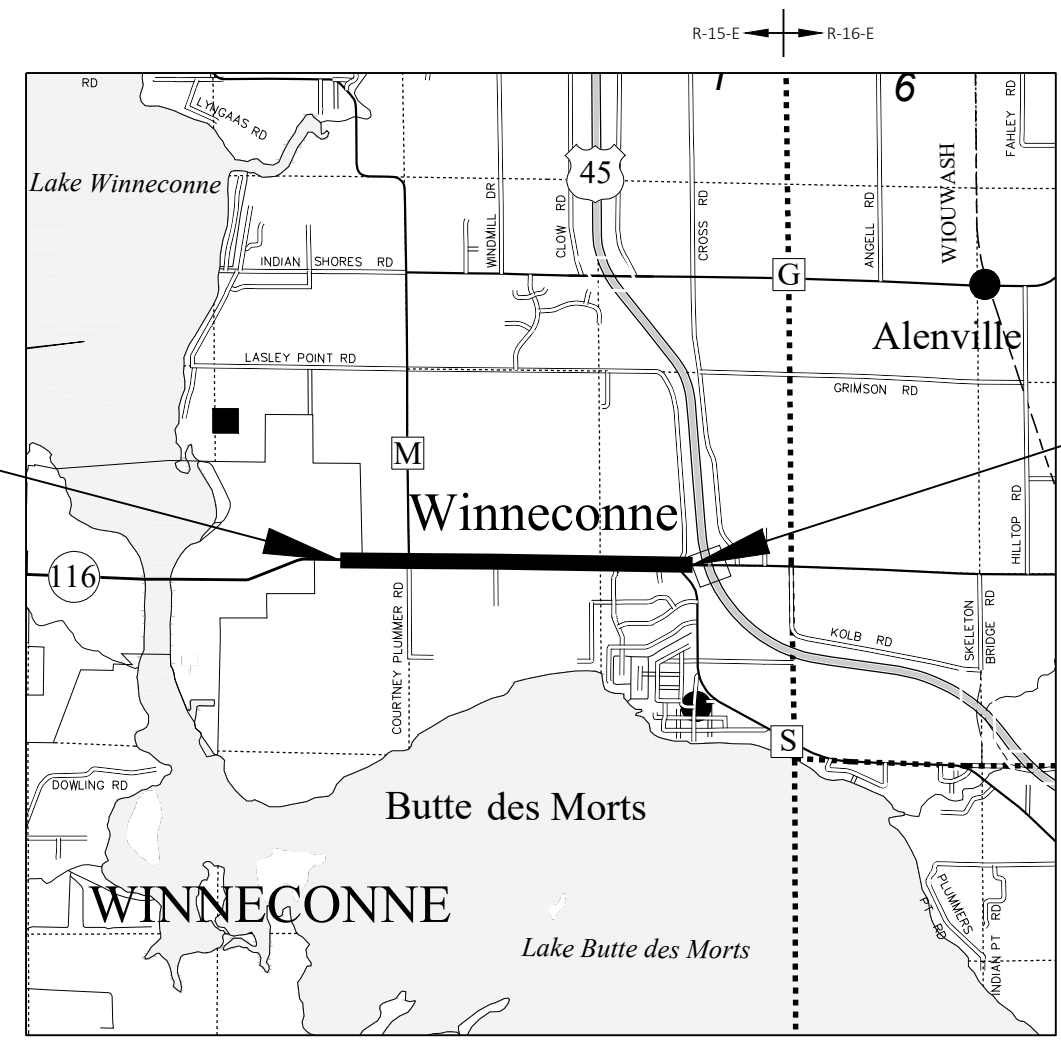
A.A.D.T.	2024	=	8,310
A.A.D.T.	2044	=	9,260
D.H.V.		=	530
D.D.		=	60/40
T.		=	9.2
DESIGN SPEED		=	60
ESALS		=	2,100,000

CONVENTIONAL SYMBOLS

PLAN	PROFILE
CORPORATE LIMITS	GRADE LINE
PROPERTY LINE	ORIGINAL GROUND
LOT LINE	MARSH OR ROCK PROFILE (To be noted as such)
LIMITED HIGHWAY EASEMENT	SPECIAL DITCH
EXISTING RIGHT OF WAY	GRADE ELEVATION
PROPOSED OR NEW R/W LINE	CULVERT (Profile View)
SLOPE INTERCEPT	UTILITIES
REFERENCE LINE	ELECTRIC
EXISTING CULVERT	FIBER OPTIC
PROPOSED CULVERT (Box or Pipe)	GAS
COMBUSTIBLE FLUIDS	SANITARY SEWER
MARSH AREA	STORM SEWER
WOODED OR SHRUB AREA	TELEPHONE
	WATER
	UTILITY PEDESTAL
	POWER POLE
	TELEPHONE POLE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PLAN OF PROPOSED IMPROVEMENT
WINNECONNE - USH 45
EAST VILLAGE LIMITS - USH 45
STH 116
WINNEBAGO COUNTY

STATE PROJECT NUMBER
6190-26-71



LAYOUT
SCALE 0 1 MI
TOTAL NET LENGTH OF CENTERLINE = 1.915 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), WINNEBAGO COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES. ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6190-26-71		

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
PREPARED BY	SURVEYOR
Designer	ERIC DANKE
Project Manager	WILLIAM BERTRAND
Regional Examiner	REGIONAL EXAMINER
Regional Supervisor	TAMMY RABE
APPROVED FOR THE DEPARTMENT	<i>Bill Bertrand, P.E.</i>
DATE: 2/22/24	(Signature)

GENERAL NOTES

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

ORDER OF SECTION 2 DETAIL SHEETS

- GENERAL NOTES
- TYPICAL SECTIONS
- CONSTRUCTION DETAILS
- PLAN DETAILS
- TRAFFIC CONTROL
- DETOUR PLAN
- ALIGNMENT PLAN

DNR LIAISON

JAY SCHIEFELBEIN
2984 SHAWANO AVE
GREEN BAY, WI 54313
(920) 360-3784
jeremiah.schiefelbein@wisconsin.gov

WINNEBAGO COUNTY HIGHWAY COMMISSIONER

ROBERT DOEMEL
901 W COUNTY RD Y
OSHKOSH, WI 54901
(920) 232-1713
rdoemel@co.winnebago.wi.us

NE REGION SURVEY COORDINATOR

MICHAEL ANDRASCHKO, PLS
944 VANDERPERREN WAY
GREEN BAY, WI 54304
(920) 492-4166
michael.andraschko@dot.wi.gov

NE REGION DESIGN PROJECT MANAGER

WILLIAM BERTRAND, PE
944 VANDERPERREN WAY
GREEN BAY, WI 54304
(920) 360-3124
william.bertrand@dot.wi.gov

UTILITIES CONTACTS

CHUCK BARTELT
AT&T WISCONSIN - COMMUNICATION LINE
70 E DIVISION ST
FOND DU LAC, WI 54935
(920) 410-5104
cb1461@att.com

ALLYSA DUCAT
ALLIANT ENERGY - ELECTRICITY/GAS/PETROLEUM
880 N WISCONSIN ST
BERLIN, WI 54923
(920) 361-5629 & (920) 946-6498
allysaducat@alliantenergy.com

TODD HILDEBRANDT
SPECTRUM - COMMUNICATION LINE
165 KNIGHTS WAY
FOND DU LAC, WI 54935
(920) 907-7724 & (920) 794-4946
todd.hildebrandt@charter.com

LINDA TREBIATOWSKI
WISCONSIN PUBLIC SERVICE CORP - ELECTRICITY
2850 S ASHLAND ST
GREEN BAY, WI 54304
(920) 236-5904 & (920) 660-3266
linda.trebiatowski@wisconsinpublicservice.com

CHRIS DAILEY
ATC MANAGEMENT, INC. - ELECTRICITY/TRANSMISSION
PO BOX 47
WAUKESHA, WI 53187
(262) 506-6884
cdailey@atcllc.com

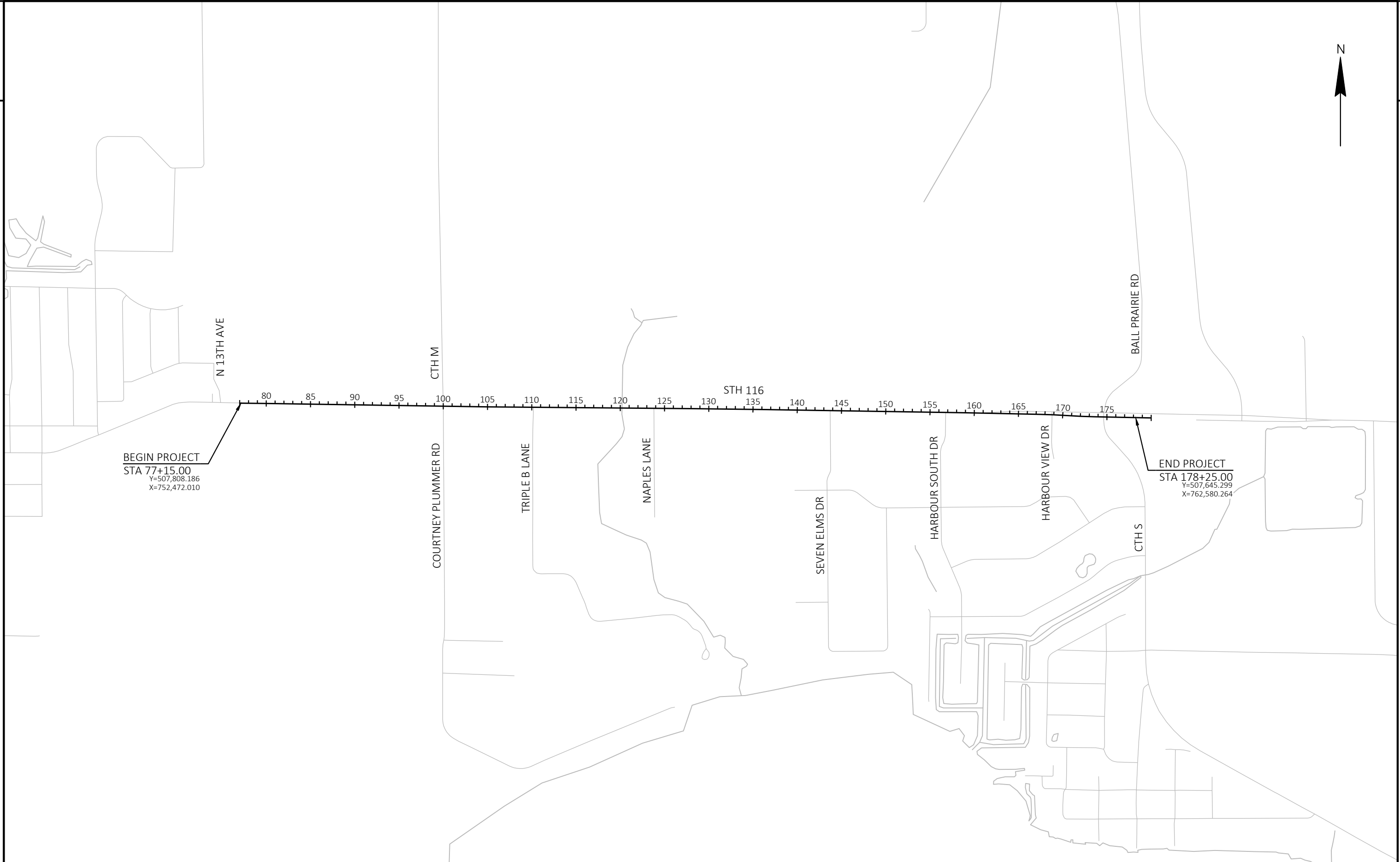
ADAM VANDENHOUTEN
WISCONSIN PUBLIC SERVICE CORPORATION - GAS/PETROLEUM
3300 N MAIN ST
OSHKOSH, WI 54901
(920) 617-2736 & (920) 660-5548
adam.vandenhouten@wisconsinpublicservice.com

RUNOFF COEFFICIENT TABLE

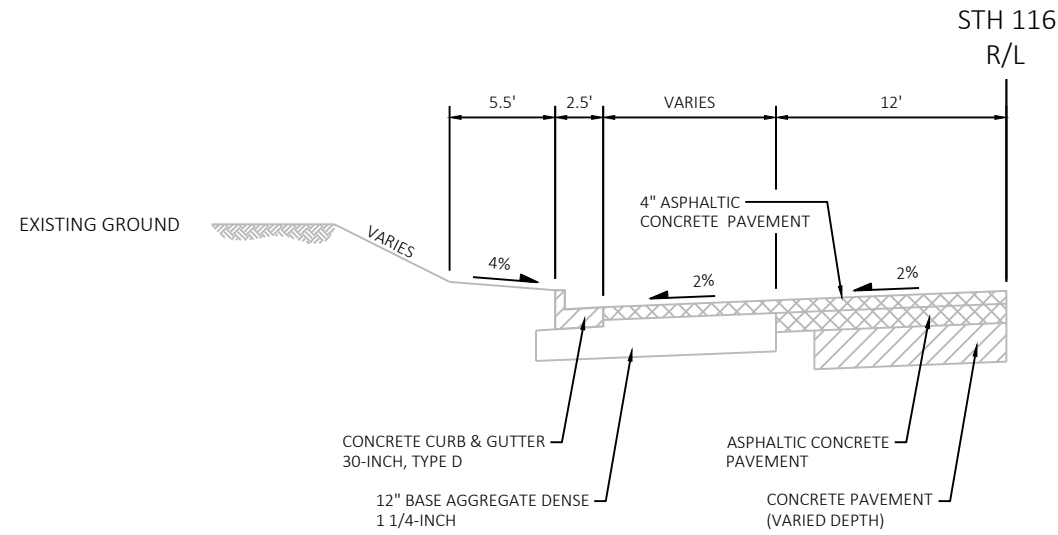
	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIP-TURF	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
SIDE SLOPE-TURF			.25 .32			.27 .34			.28 .36			.30 .38
PAVEMENT:												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

TOTAL PROJECT AREA = 11.8 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.25 ACRES

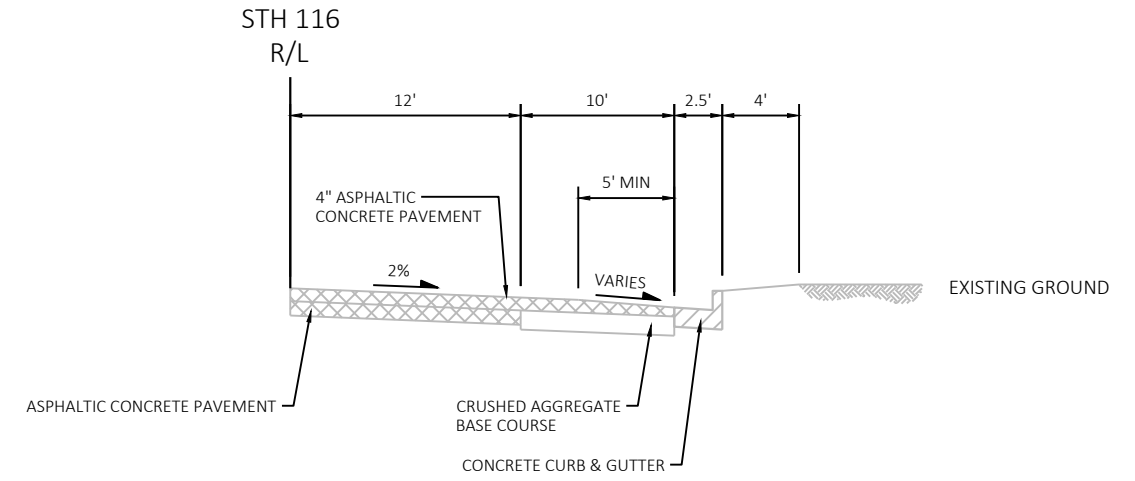




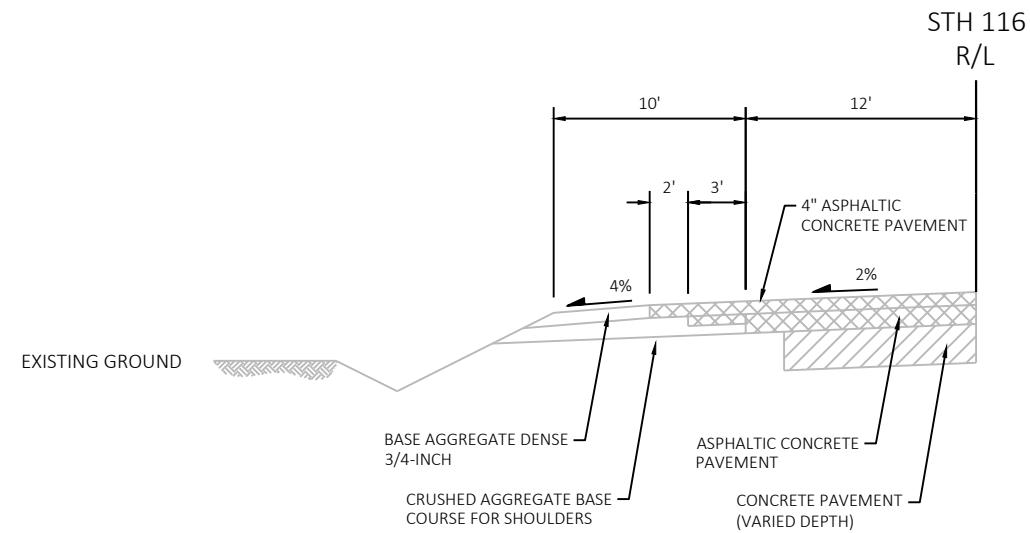
PROJECT NO: 6190-26-71	HWY: STH 116	COUNTY: WINNEBAGO	PROJECT OVERVIEW	SHEET	E
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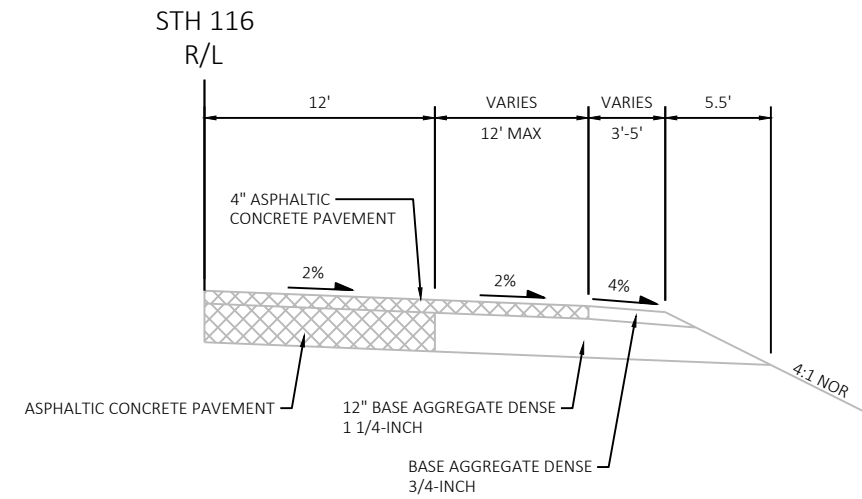
EXISTING 1/2 TYPICAL SECTION STH 116
 STA 77+15 TO STA 82+70 LT
 STA 77+15 TO STA 79+50 RT



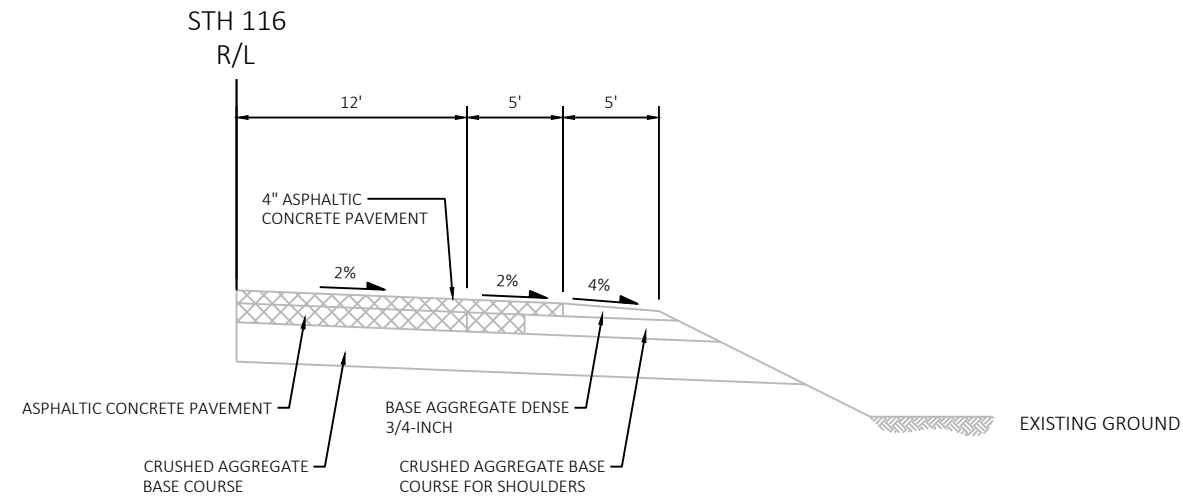
EXISTING 1/2 TYPICAL SECTION STH 116
 STA 79+50 TO STA 82+50 RT



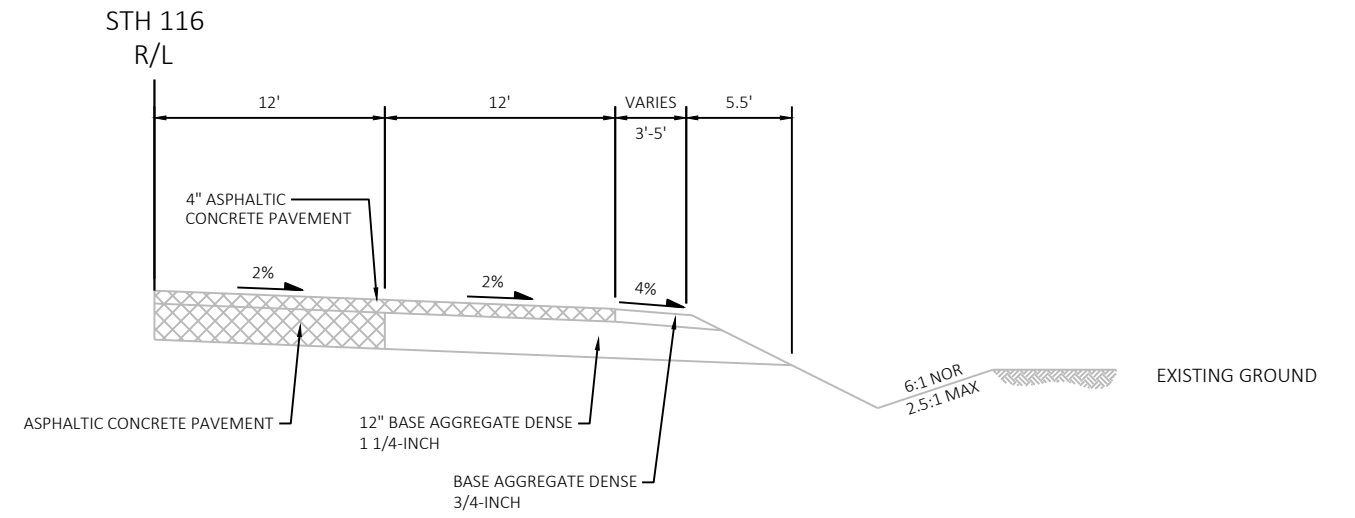
EXISTING 1/2 TYPICAL SECTION STH 116
 STA 83+00 TO STA 98+00 LT & RT
 STA 128+00 TO STA 139+00 LT & RT
 STA 145+00 TO STA 161+68.50 LT & RT



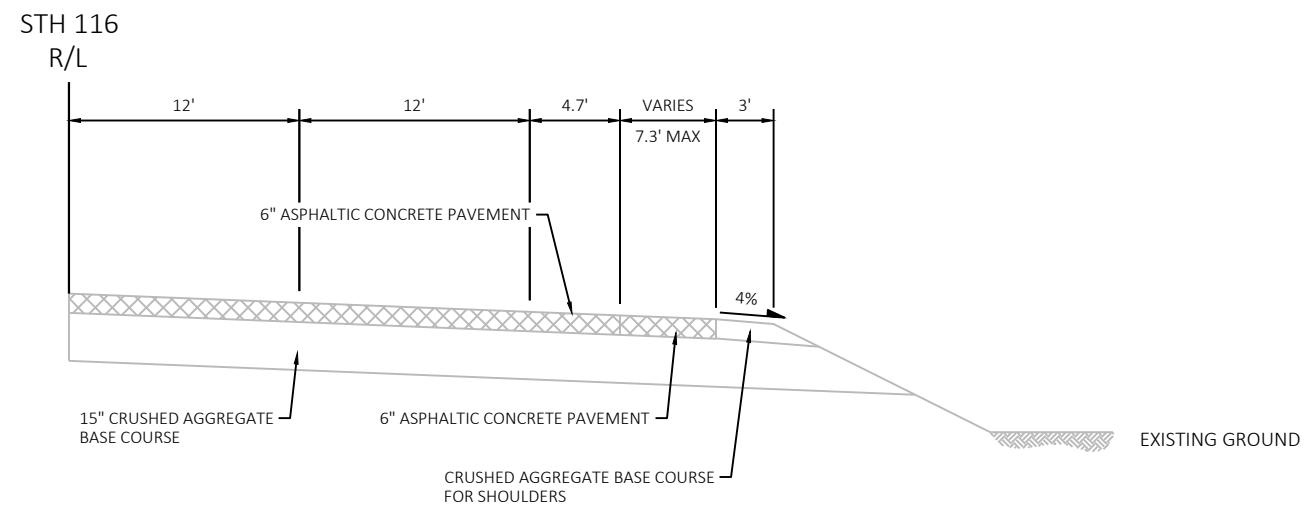
EXISTING 1/2 TYPICAL SECTION STH 116 FOR RIGHT TURN LANE
 STA 96+79 TO STA 98+60 RT
 STA 102+59 TO STA 106+59 LT



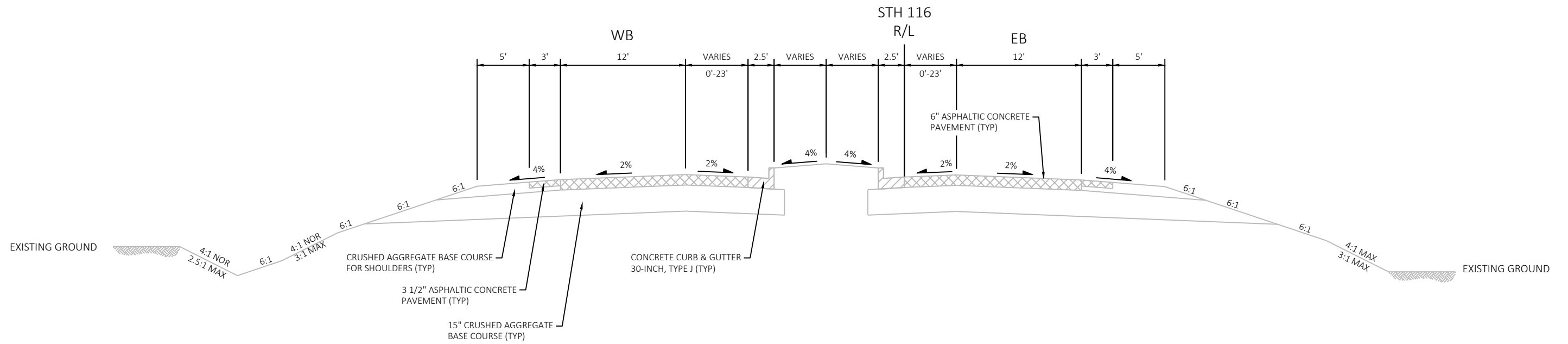
EXISTING 1/2 TYPICAL SECTION STH 116
 STA 98+00 TO STA 128+00
 STA 135+50 TO STA 145+50



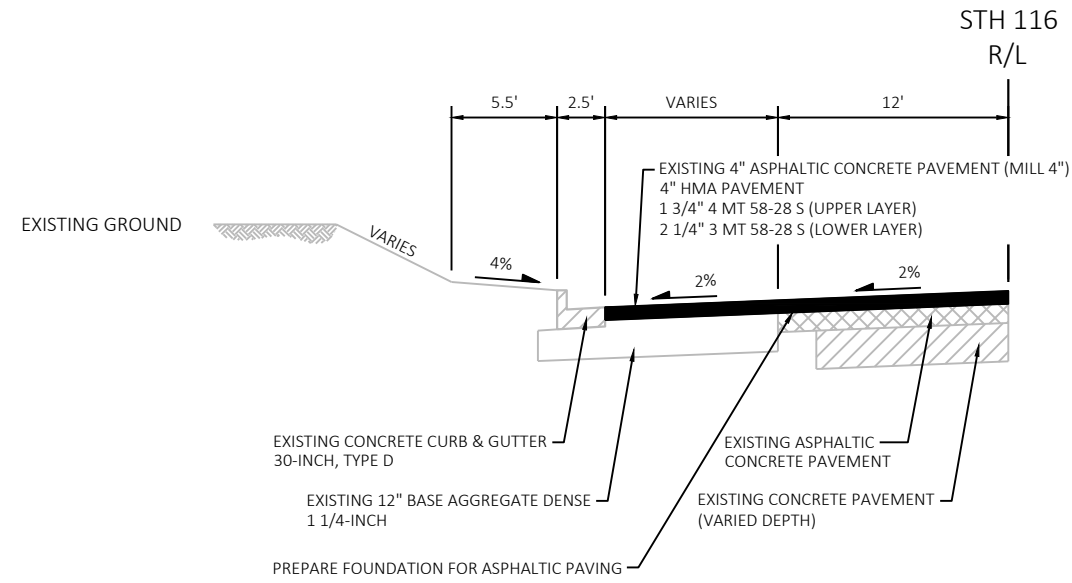
EXISTING 1/2 TYPICAL SECTION STH 116 PASSING LANE
 STA 152+51.38 TO STA 160+43.38 LT



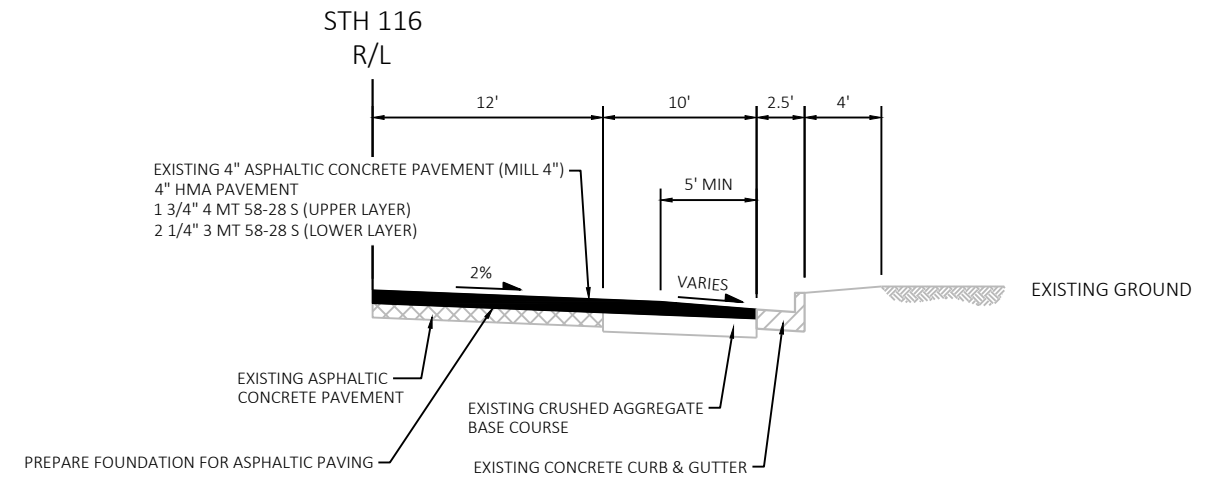
EXISTING 1/2 TYPICAL SECTION STH 116 FOR RIGHT TURN LANE
 HARBOUR VIEW RD - CTH S



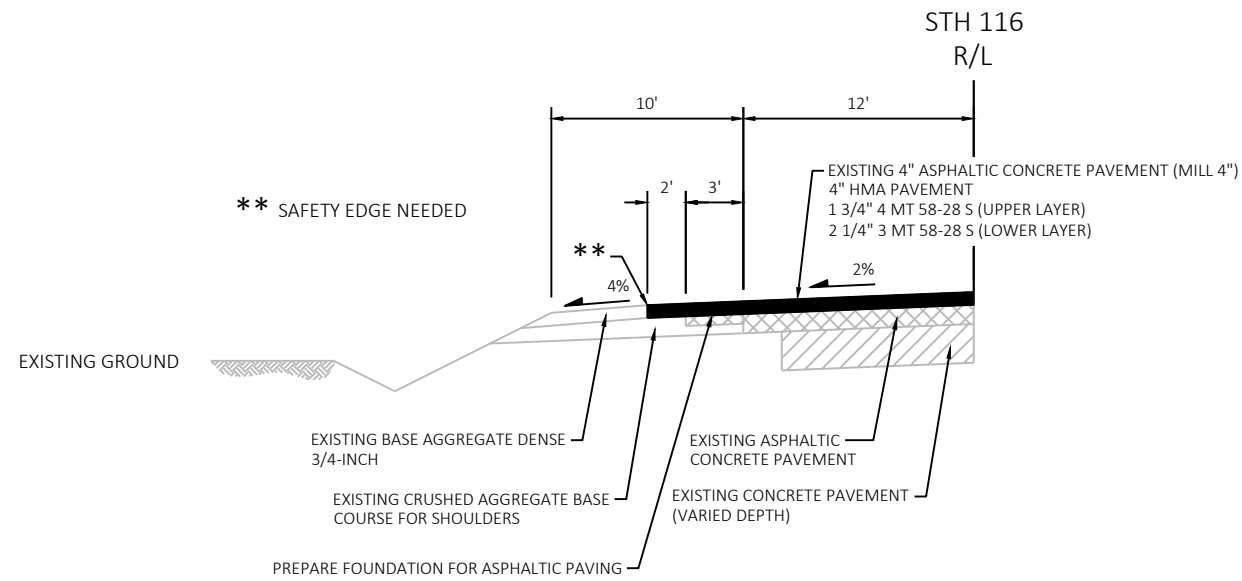
EXISTING TYPICAL SECTION STH 116
 STA 161+68.50 TO STA 178+25



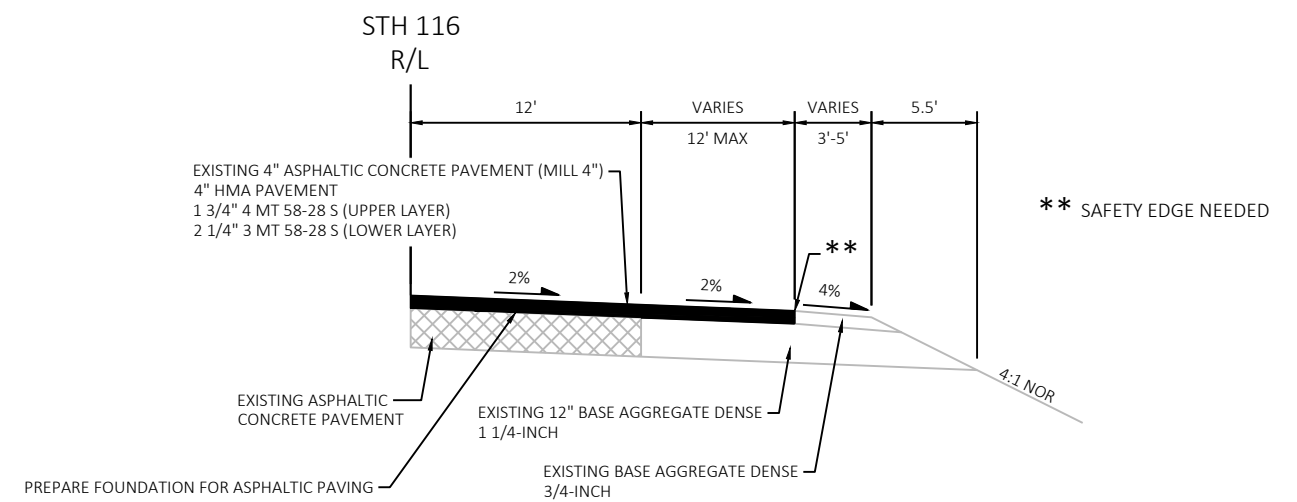
FINISHED 1/2 TYPICAL SECTION STH 116
 STA 75+62 TO STA 82+70 LT
 STA 75+07 TO STA 79+50 RT



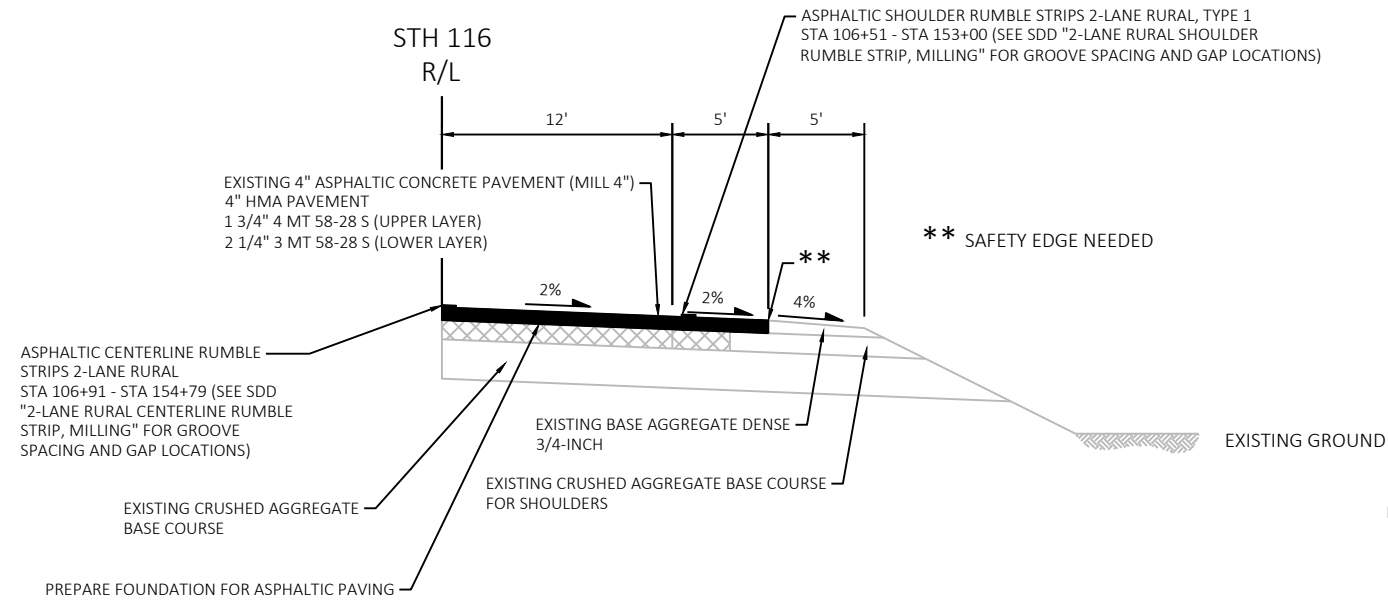
FINISHED 1/2 TYPICAL SECTION STH 116
 STA 79+50 TO STA 82+50 RT



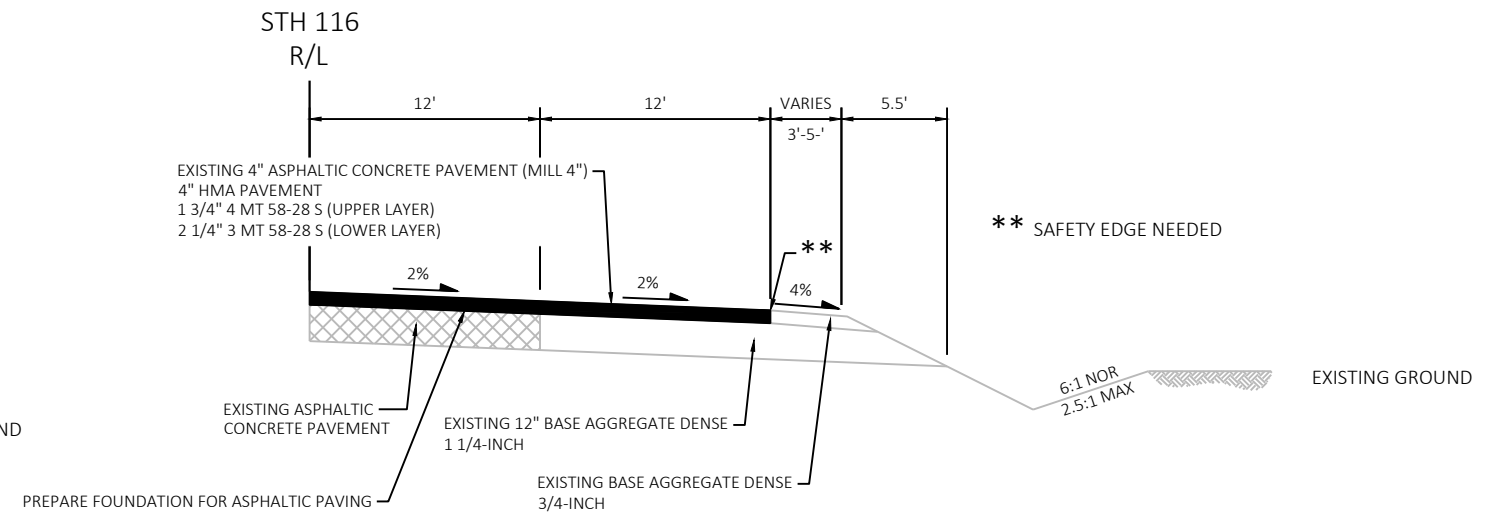
FINISHED 1/2 TYPICAL SECTION STH 116
 STA 83+00 TO STA 98+00 LT & RT
 STA 128+00 TO STA 139+00 LT & RT
 STA 145+00 TO STA 161+68.50 LT & RT



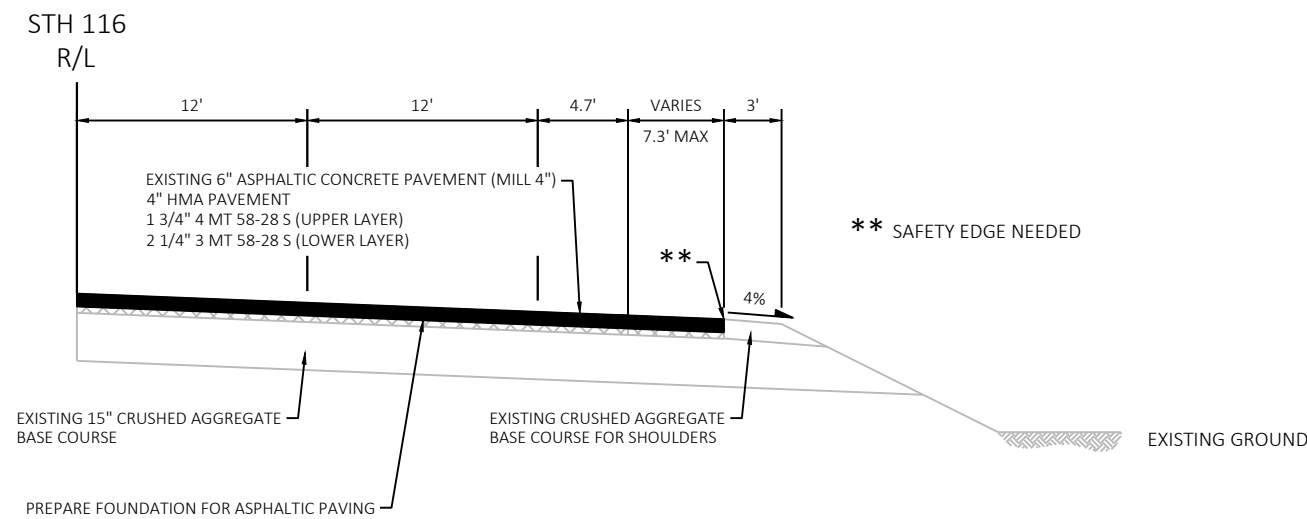
FINISHED 1/2 TYPICAL SECTION STH 116 FOR RIGHT TURN LANE
 STA 96+79 TO STA 98+60 RT
 STA 102+59 TO STA 106+59 LT



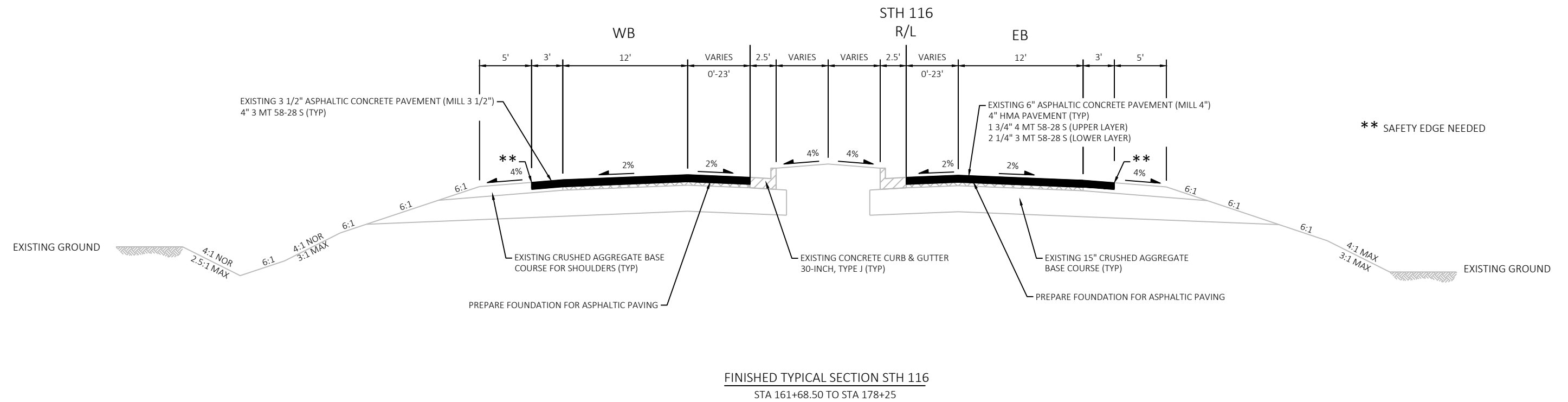
FINISHED 1/2 TYPICAL SECTION STH 116
STA 98+00 TO STA 128+00
STA 135+50 TO STA 145+50



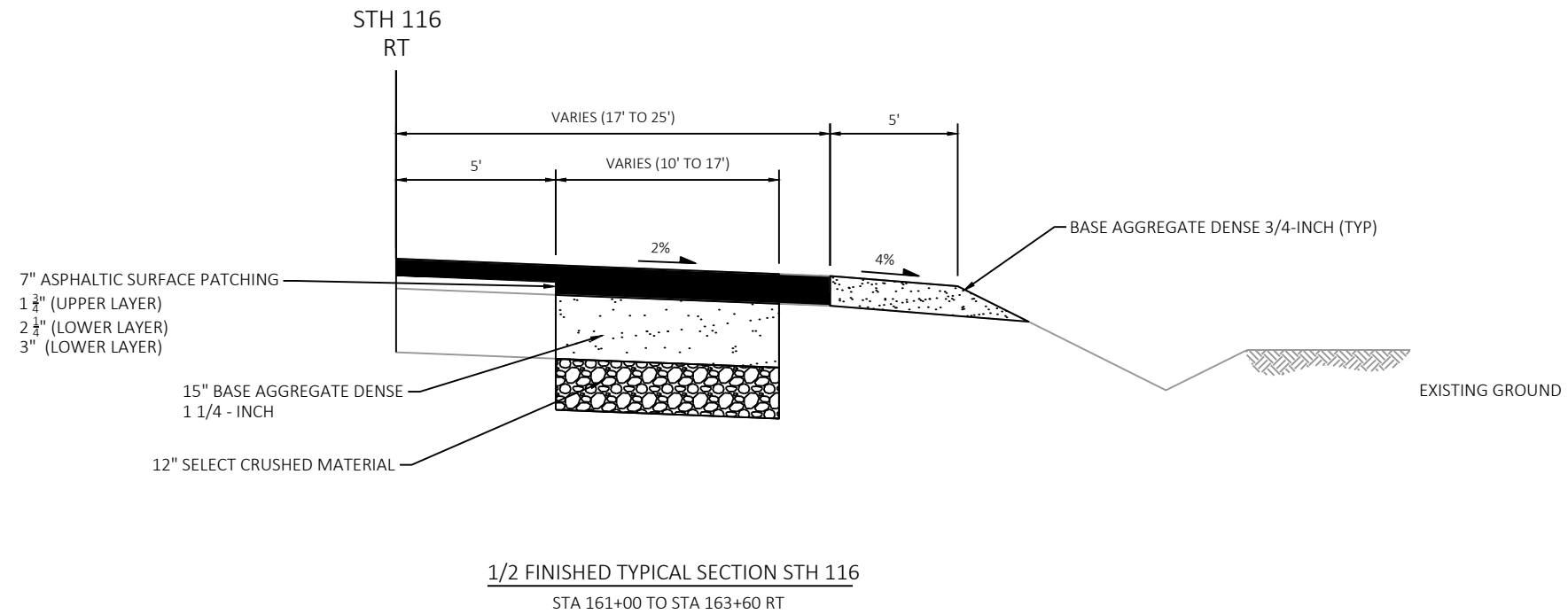
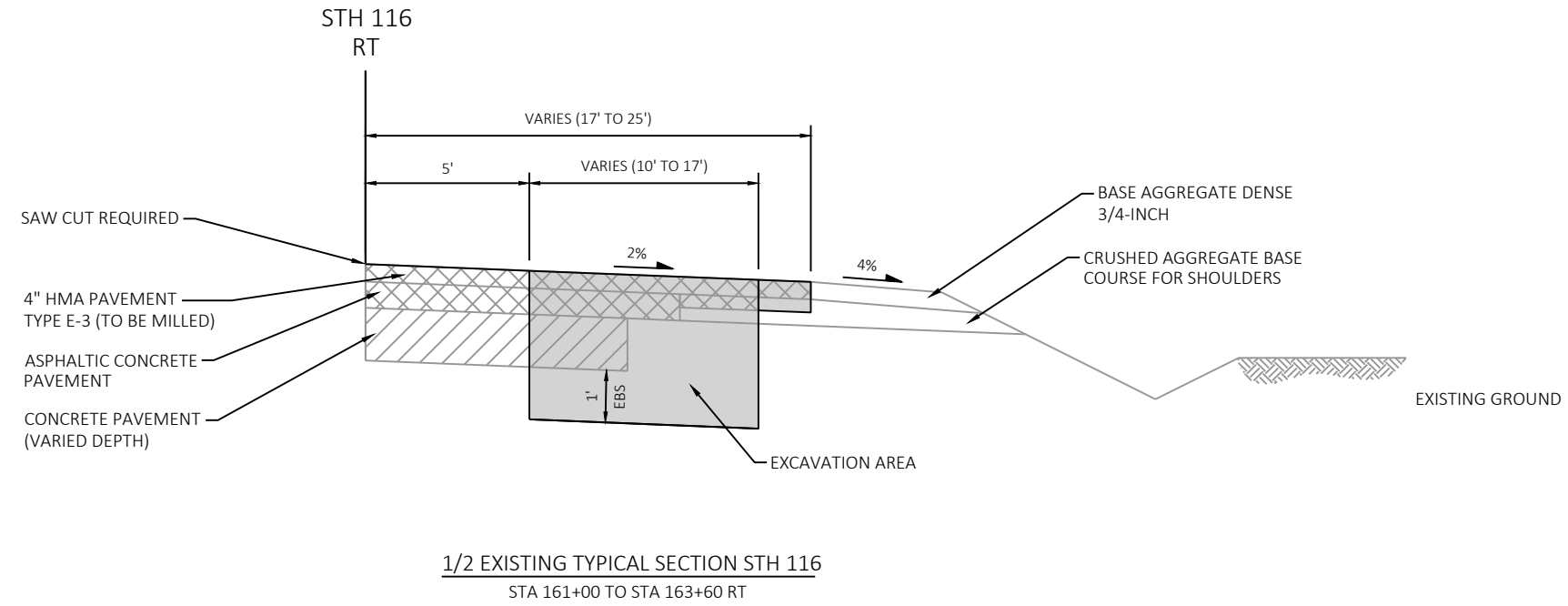
FINISHED 1/2 TYPICAL SECTION STH 116 PASSING LANE
STA 152+51.38 TO STA 160+43.38 LT

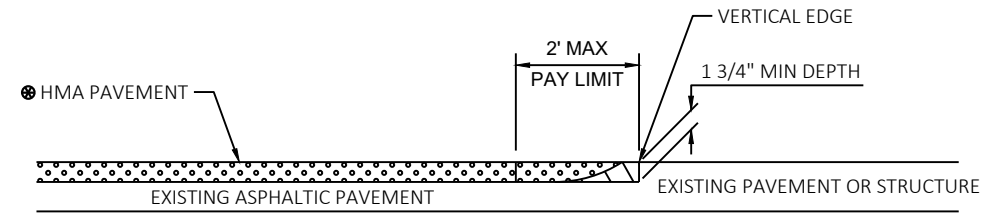


FINISHED 1/2 TYPICAL SECTION STH 116 FOR RIGHT TURN LANE
HARBOUR VIEW RD - CTH S



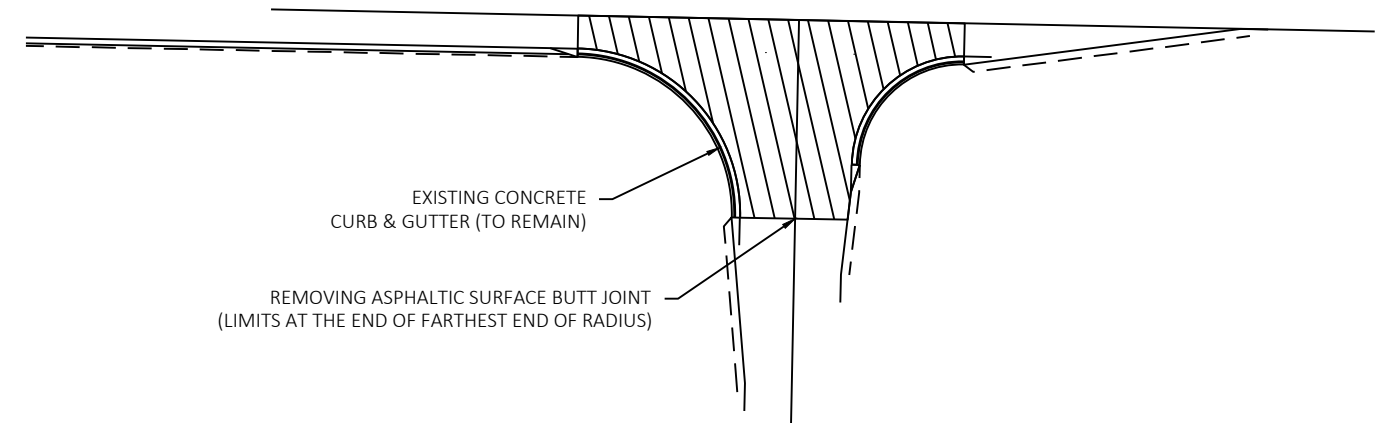
FULL DEPTH REPAIR SECTION



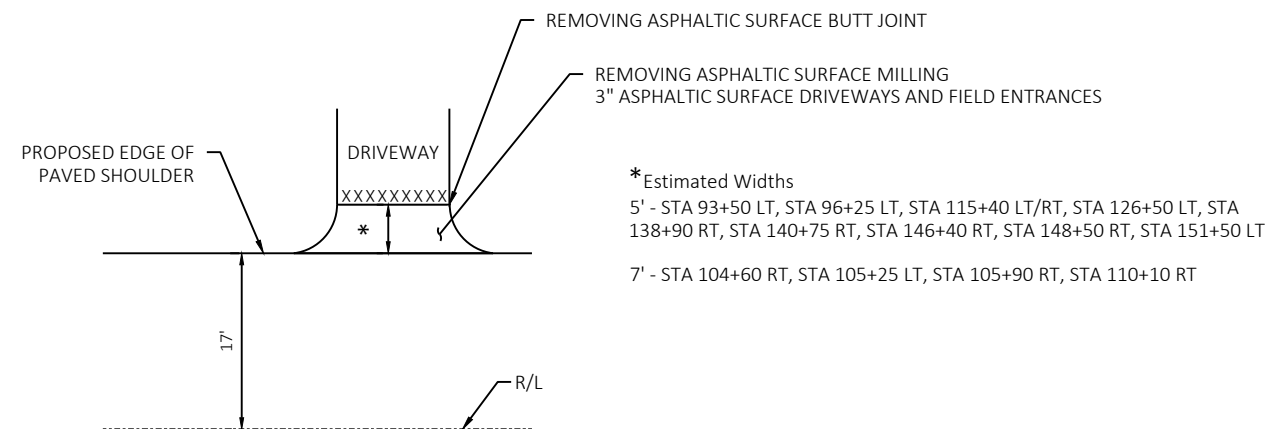


- ⊗ SEE TYPICAL CROSS SECTION FOR PAVEMENT TYPE AND THICKNESS OF INDIVIDUAL LAYERS
- REMOVING ASPHALTIC SURFACE, MILLING
- REMOVE ASPHALTIC SURFACE WEDGE AT BUTT JOINT TO CREATE VERTICAL EDGE

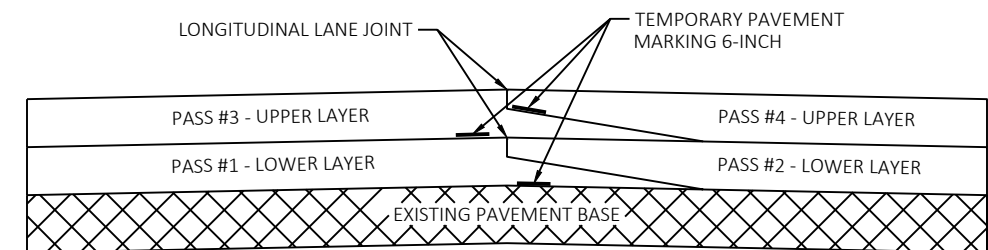
BUTT JOINT DETAIL FOR ASPHALTIC PAVEMENTS (NO PROFILE CHANGE)



SIDE ROAD CONSTRUCTION LIMITS

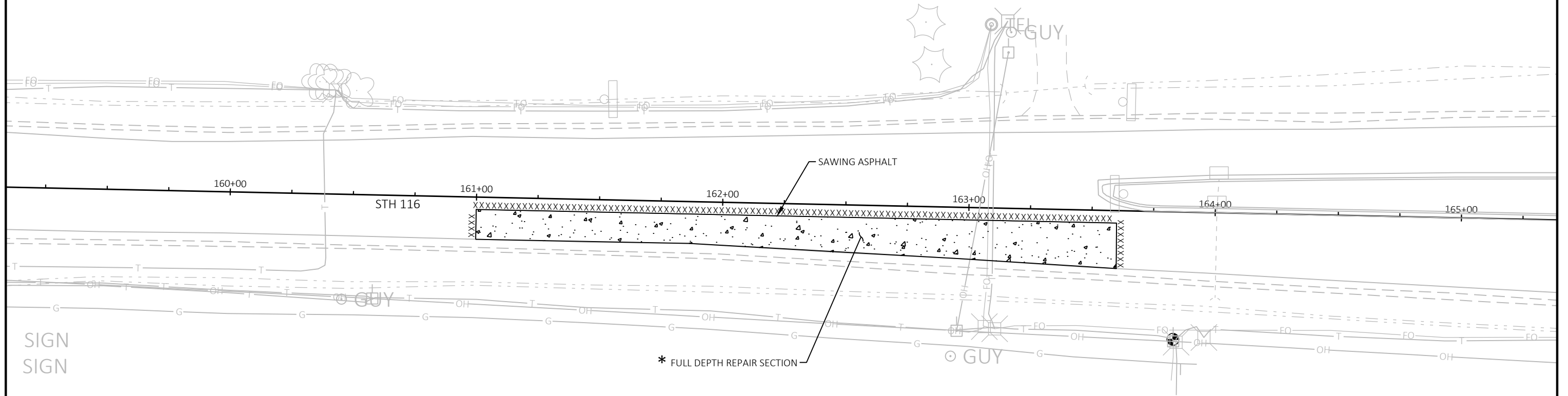


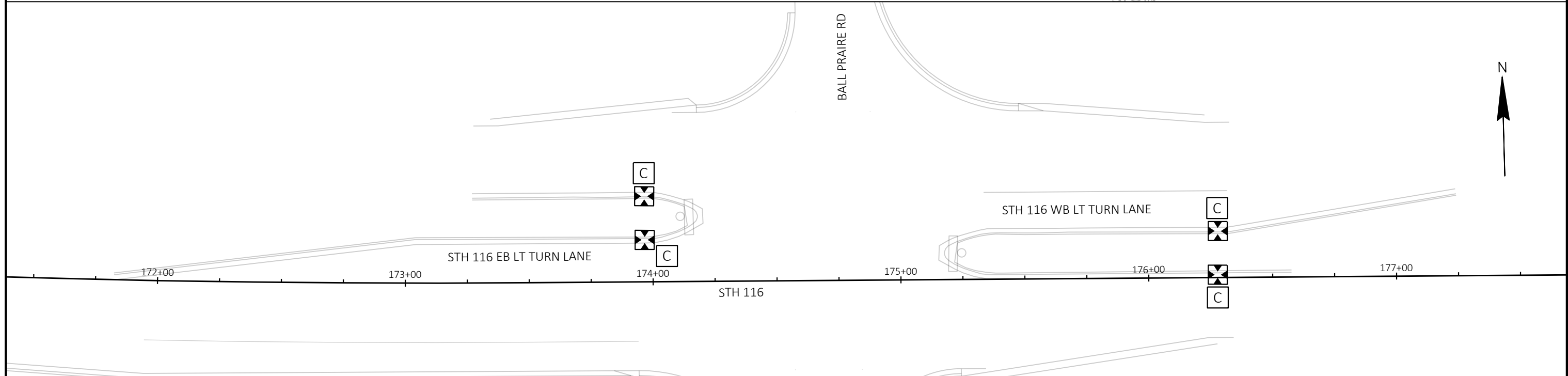
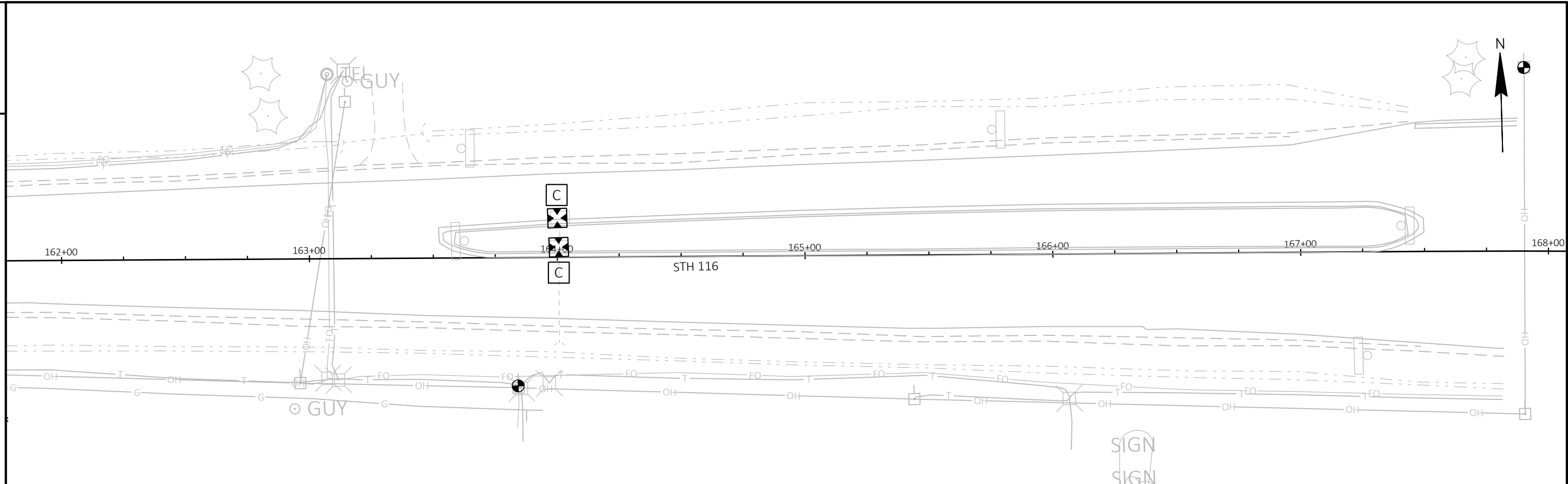
PAVED DRIVEWAY DETAIL (NO ROADWAY PROFILE CHANGE)




PAVEMENT MARKING DETAIL FOR TAPERED OVERLAPPING JOINTS IN HMA PAVEMENTS


*SEE CONSTRUCTION DETAILS FOR FULL DEPTH REPAIR TYPICAL SECTION





LEGEND

 INLET PROTECTION

 INLET PROTECTION TYPE

TRAFFIC CONTROL - FLAGGING/LANE CLOSURES FOR EB LANE WORK IN THE 2 TO 4 LANE TRANSITION OF WIS 116



STH 116

WORK ZONE

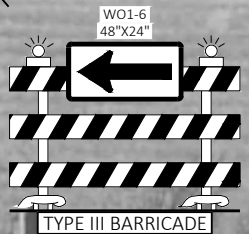
50' (TYP)

STH 116

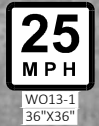
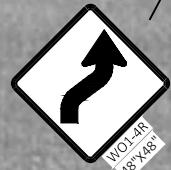
165

WORK ZONE








SEE SDD 15C12 FOR FLAGGING REQUIREMENTS PRIOR TO THIS DETAIL FOR EB WIS 116



FULL DEPTH REPAIR SECTION (SEE CONSTRUCTION DETAILS AND PLAN DETAILS FOR FURTHER INFORMATION)



LEGEND

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

PROJECT NO: 6190-26-71

HWY: STH 116

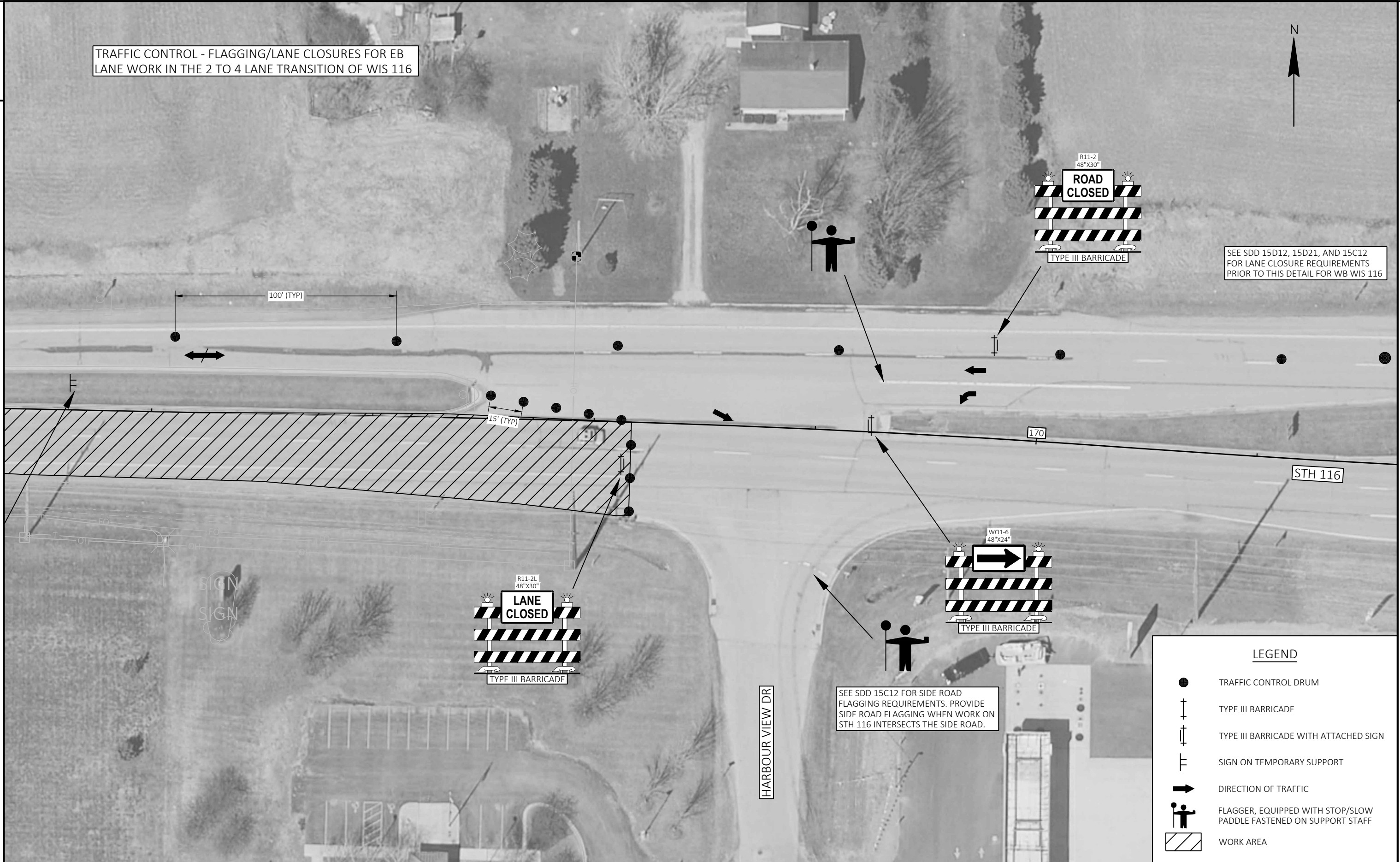
COUNTY: WINNEBAGO

TRAFFIC CONTROL

SHEET

E

TRAFFIC CONTROL - FLAGGING/LANE CLOSURES FOR EB LANE WORK IN THE 2 TO 4 LANE TRANSITION OF WIS 116



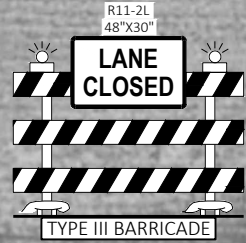
SEE SDD 15D12, 15D21, AND 15C12 FOR LANE CLOSURE REQUIREMENTS PRIOR TO THIS DETAIL FOR WB WIS 116

SEE SDD 15C12 FOR SIDE ROAD FLAGGING REQUIREMENTS. PROVIDE SIDE ROAD FLAGGING WHEN WORK ON STH 116 INTERSECTS THE SIDE ROAD.

LEGEND

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

TRAFFIC CONTROL - FLAGGING/LANE CLOSURES FOR EB LANE WORK IN THE 2 TO 4 LANE TRANSITION OF WIS 116



160

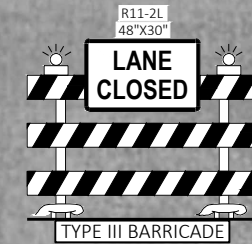
50' (TYP)

WORK ZONE

165

STH 116

SEE SDD 15C12 FOR FLAGGING REQUIREMENTS PRIOR TO THIS DETAIL FOR EB WIS 116



LEGEND

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

PROJECT NO: 6190-26-71

HWY: STH 116

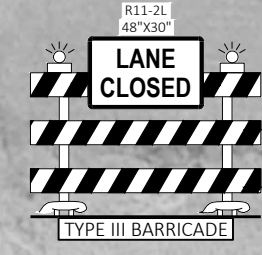
COUNTY: WINNEBAGO

TRAFFIC CONTROL

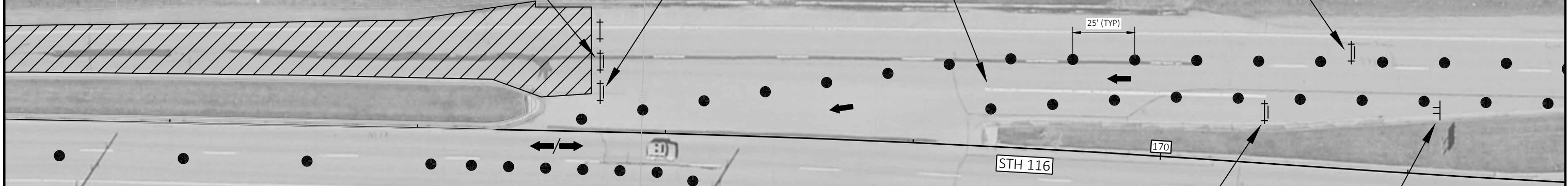
SHEET

E

TRAFFIC CONTROL - FLAGGING/LANE CLOSURES FOR EB LANE WORK IN THE 2 TO 4 LANE TRANSITION OF WIS 116



SEE SDD 15D12, 15D21, AND 15C12 FOR LANE CLOSURE REQUIREMENTS PRIOR TO THIS DETAIL FOR WB WIS 116



STH 116

170

15' (TYP)

25' (TYP)

SIGN
SIGN

HARBOUR VIEW DR

SEE SDD 15C12 FOR SIDE ROAD FLAGGING REQUIREMENTS. PROVIDE SIDE ROAD FLAGGING WHEN WORK ON STH 116 INTERSECTS THE SIDE ROAD.



LEGEND

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

Estimate Of Quantities

6190-26-71

Line	Item	Item Description	Unit	Total	Qty
0002	204.0100	Removing Concrete Pavement	SY	90.000	90.000
0004	204.0115	Removing Asphaltic Surface Butt Joints	SY	161.000	161.000
0006	204.0120	Removing Asphaltic Surface Milling	SY	49,675.000	49,675.000
0008	205.0100	Excavation Common	CY	350.000	350.000
0010	211.0101	Prepare Foundation for Asphaltic Paving (project) 01. 6190-26-71	EACH	1.000	1.000
0012	213.0100	Finishing Roadway (project) 01. 6190-26-71	EACH	1.000	1.000
0014	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,001.000	1,001.000
0016	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	320.000	320.000
0018	312.0110	Select Crushed Material	TON	230.000	230.000
0020	450.4000	HMA Cold Weather Paving	TON	1,350.000	1,350.000
0022	455.0605	Tack Coat	GAL	5,968.000	5,968.000
0024	460.2000	Incentive Density HMA Pavement	DOL	7,770.000	7,770.000
0026	460.6223	HMA Pavement 3 MT 58-28 S	TON	6,760.000	6,760.000
0028	460.6224	HMA Pavement 4 MT 58-28 S	TON	5,370.000	5,370.000
0030	465.0110	Asphaltic Surface Patching	TON	220.000	220.000
0032	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	49.000	49.000
0034	465.0520	Asphaltic Rumble Strips, Shoulder	LF	7,759.000	7,759.000
0036	465.0560	Asphaltic Rumble Strips, Centerline	LF	4,388.000	4,388.000
0038	618.0100	Maintenance and Repair of Haul Roads (project) 01. 6190-26-71	EACH	1.000	1.000
0040	619.1000	Mobilization	EACH	1.000	1.000
0042	624.0100	Water	MGAL	20.000	20.000
0044	628.1905	Mobilizations Erosion Control	EACH	4.000	4.000
0046	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0048	628.7015	Inlet Protection Type C	EACH	8.000	8.000
0050	642.5001	Field Office Type B	EACH	1.000	1.000
0052	643.0300	Traffic Control Drums	DAY	444.000	444.000
0054	643.0420	Traffic Control Barricades Type III	DAY	36.000	36.000
0056	643.0800	Traffic Control Arrow Boards	DAY	12.000	12.000
0058	643.0900	Traffic Control Signs	DAY	569.000	569.000
0060	643.1050	Traffic Control Signs PCMS	DAY	14.000	14.000
0062	643.3165	Temporary Marking Line Paint 6-Inch	LF	41,206.000	41,206.000
0064	643.5000	Traffic Control	EACH	1.000	1.000
0066	646.2020	Marking Line Epoxy 6-Inch	LF	115.000	115.000
0068	646.2040	Marking Line Grooved Wet Ref Epoxy 6-Inch	LF	23,063.000	23,063.000
0070	646.4040	Marking Line Grooved Wet Ref Epoxy 10-Inch	LF	1,535.000	1,535.000
0072	646.4720	Marking Line Same Day Epoxy 6-Inch	LF	8,238.000	8,238.000
0074	646.7120	Marking Diagonal Epoxy 12-Inch	LF	165.000	165.000
0076	650.4500	Construction Staking Subgrade	LF	260.000	260.000
0078	650.5000	Construction Staking Base	LF	260.000	260.000
0080	650.8000	Construction Staking Resurfacing Reference	LF	10,110.000	10,110.000
0082	690.0150	Sawing Asphalt	LF	292.000	292.000
0084	690.0250	Sawing Concrete	LF	266.000	266.000
0086	740.0440	Incentive IRI Ride	DOL	18,400.000	18,400.000

204.0100 REMOVING CONCRETE PAVEMENT

ROADWAY	LOCATION	LENGTH (FT)	WIDTH (FT)	AREA (SF)	AREA (SY)	REMARKS
STH 116 EB	STA 161+00 to 163+60 RT	260.00	3.0	780.00	90	FULL DEPTH REPAIR SECTION
					<u>TOTAL</u>	<u>90</u>

204.0120 REMOVING ASPHALTIC SURFACE MILLING

STATION	TO	STATION	ROADWAY	AREA (SY)	REMARKS
77+15	-	79+50	STH 116	1044	
79+50	-	82+50	STH 116	1467	
82+50	-	83+00	STH 116	223	
83+00	-	98+00	STH 116	5667	
98+00	-	99+90	STH 116	718	
99+90	-	110+40	STH 116	3967	
110+40	-	123+90	STH 116	5100	
123+90	-	128+00	STH 116	1549	
128+00	-	139+00	STH 116	4156	
139+00	-	145+00	STH 116	2267	
145+00	-	156+80	STH 116	4458	
153+00	-	160+25	STH 116 WB	522	PASSING LANE
156+80	-	160+25	STH 116 WB	460	MAINLINE
160+25	-	167+90	STH 116 WB	1530	2 TO 4-LANE TRANSITON
167+50	-	171+90	STH 116 WB	722	MEDIAN/LT TURN LANE
160+25	-	173+25	STH 116 WB	567	SHOULDER
167+90	-	178+25	STH 116 WB	2760	MAINLINE
156+80	-	161+85	STH 116 EB	954	MAINLINE
161+85	-	165+15	STH 116 EB	843	2 TO 4-LANE TRANSITON
165+15	-	178+25	STH 116 EB	3493	MAINLINE
99+90			STH 116 RT	761	COURTNEY PLUMMER RD
99+90			STH 116 LT	911	CTH M
123+90			STH 116 RT	581	NAPLES LN
156+80			STH 116 RT	861	HARBOUR S DR
168+75			STH 116 RT	1000	HARBOUR VIEW DR
174+65			STH 116 RT	889	CTH S
174+65			STH 116 LT	722	BELL PRAIRIE RD
				<u>TOTAL</u>	<u>49675</u>

204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS

STATION	ROADWAY	LOCATION	AREA (SY)	
77+15	STH 116	WEST PROJECT LIMITS	9	
99+90	CTH M	NORTH LIMITS	10	
99+90	JURTNEY PLUMMER RO	SOUTH LIMITS	4	
123+90	NAPLES LANE	SOUTH LIMITS	7	
156+80	HARBOUR SOUTH DRIVE	SOUTH LIMITS	7	
168+75	HARBOUR VIEW DRIVE	SOUTH LIMITS	7	
174+65	BALL PRAIRIE ROAD	NORTH LIMITS	6	
174+65	CTH S	SOUTH LIMITS	7	
178+25	WB STH 116	EAST PROJECT LIMITS	6	
178+25	EB STH 116	EAST PROJECT LIMITS	6	
-	DRIVEWAYS	PROJECT WIDE	93	
			<u>TOTAL</u>	<u>161</u>

205.0100 EXCAVATION COMMON

LOCATION	OFFSET	CUT (CY)	REMARKS	
STA 161+00 to STA 163+60	RT	247	EXISTING PAVEMENT STRUCTURE	
STA 161+00 to STA 163+60	RT	130	EXCAVATION BELOW SUBGRADE	
STA 161+00 to STA 163+60	RT	29	REMOVING CONCRETE PAVEMENT (-)	
			<u>TOTAL</u>	<u>350</u>

305.0110 BASE AGGREGATE DENSE 3/4-INCH

624.0100 WATER

ROADWAY	RT/LT	STATION	TO	STATION	TON	MGAL
STH 116 EB	RT	82+50	-	178+25	476	7.1
STH 116 WB	LT	82+75	-	178+25	502	7.5
SIDE ROADS	-	-	-	-	23	0.3
					<u>TOTAL</u>	<u>1,001</u>
						<u>15</u>

305.0120 BASE AGGREGATE DENSE 1 1/4-INCH

624.0100 WATER

ROADWAY	RT/LT	STATION	TO	STATION	TON	MGAL
STH 116 EB	RT	161+00	-	163+60	320	5
					<u>TOTAL</u>	<u>320</u>
						<u>5</u>

312.0110 SELECT CRUSHED MATERIAL

ROADWAY	RT/LT	STATION	TO	STATION	TONS	
STH 116 EB	RT	161+00	-	163+60	230	
					<u>TOTAL</u>	<u>230</u>

STATION	TO	STATION	ROADWAY	450.4000 HMA COLD WEATHER PAVING	455.0605 TACK COAT LOWER LAYER	460.6223 HMA PAVEMENT 3 MT 58-28 S	460.6224 HMA PAVEMENT 4 MT 58-28 S	465.0110 ASPHALTIC SURFACE PATCHING	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	REMARKS
				TON	GAL	TON	TON	TON	TON	
77+15	-	79+50	STH 116	-	73	52	140	110	-	-
79+50	-	82+50	STH 116	-	103	74	200	160	-	-
82+50	-	83+00	STH 116	-	15	11	30	20	-	-
83+00	-	98+00	STH 116	-	397	284	770	610	-	5
98+00	-	99+90	STH 116	-	50	36	100	80	-	-
99+90	-	110+40	STH 116	-	278	199	540	430	-	17
110+40	-	123+90	STH 116	-	357	255	690	550	-	10
123+90	-	128+00	STH 116	-	109	78	210	170	-	3
128+00	-	139+00	STH 116	-	291	208	570	450	-	2
139+00	-	145+00	STH 116	-	159	114	310	240	-	3
145+00	-	156+80	STH 116	-	312	223	610	480	-	8
153+00	-	160+25	STH 116 WE	-	36	26	70	60	-	-
156+80	-	160+25	STH 116 WE	-	32	23	60	50	-	-
160+25	-	167+90	STH 116 WE	-	107	77	210	170	-	2 TO 4-LANE TRANSITION
160+25	-	163+55	STH 116 WE	-	20	14	40	30	-	MEDIAN
167+50	-	171+90	STH 116 WE	-	50	36	100	80	-	MEDIAN/LT TURN LANE
160+25	-	173+25	STH 116 WE	-	40	29	80	60	-	SHOULDER
174+25	-	178+00	STH 116 WE	-	34	24	60	50	-	LT TURN LANE
176+15	-	178+25	STH 116 WE	-	5	4	10	10	-	SHOULDER
167+90	-	178+25	STH 116 WE	-	193	138	380	300	-	MAINLINE
156+80	-	161+85	STH 116 EB	-	67	48	130	100	-	MAINLINE
161+00	-	163+60	STH 116 EB	-	-	-	-	170	-	FULL DEPTH REPAIR SECTION
161+85	-	165+15	STH 116 EB	-	59	42	110	90	-	2 TO 4-LANE TRANSITION
171+50	-	175+10	STH 116 EB	-	34	24	60	50	-	LT TURN LANE
175+10	-	176+80	STH 116 EB	-	7	5	10	10	-	SHOULDER
175+75	-	178+25	STH 116 EB	-	6	4	10	10	-	SHOULDER
165+15	-	178+25	STH 116 EB	-	244	175	480	380	-	MAINLINE
		99+90	STH 116 RT	-	53	38	100	80	-	COURTNEY PLUMMER RD
		99+90	STH 116 LT	-	64	46	120	100	-	CTH M
		123+90	STH 116 RT	-	41	29	80	60	-	NAPLES LN
		156+80	STH 116 RT	-	60	43	120	90	-	HARBOUR S DR
		168+75	STH 116 RT	-	70	50	140	110	-	HARBOUR VIEW DR
		174+65	STH 116 RT	-	62	45	120	100	-	CTH S
		174+65	STH 116 LT	-	50	36	100	80	-	BELL PRAIRIE RD
				1350	-	-	-	50	-	PROJECT WIDE
					3,478	2,490				
			TOTAL	1,350	5,968	6,760	5,370	220	49	

465.0520 ASPHALTIC RUMBLE STRIPS, SHOULDER

ROADWAY	RT/LT	STATION	TO	STATION	LENGTH (LF)	REMARKS
STH 116 EB	RT	106+51	-	120+55	1,266	55 MPH POSTED SPEED
STH 116 EB	RT	125+71	-	150+45	2,194	55 MPH POSTED SPEED
STH 116 WB	LT	106+51	-	153+00	4,299	55 MPH POSTED SPEED
				TOTAL	7,759	

465.0560 ASPHALTIC RUMBLE STRIPS, CENTERLINE

ROADWAY	STATION	TO	STATION	LENGTH (LF)	REMARKS
STH 116	106+91	-	121+79	1,488	55 MPH POSTED SPEED
STH 116	125+79	-	154+79	2,900	55 MPH POSTED SPEED
			TOTAL	4,388	

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STATION	RT/LT	EACH	EACH	REMARKS
UNDISTRUBTED		4	2	PROJECT WIDE
TOTAL		4	2	

STATION	RT/LT	EACH
STH 116 WB	RT	3
STH 116 EB	LT	3
UNDISTRIBUTED		2
TOTAL		8

ROADWAY	STATION	TO	STATION	YELLOW CENTERLINE				* 643.3165 TEMPORARY MARKING LINE PAINT 6-INCH		REMARKS
				LENGTH (LF)	DOUBLE LENGTH (LF)	SINGLE LENGTH (LF)	DASHED LENGTH (LF)	MILLED SURFACE LENGTH (LF)	TOP LOWER LAYER LENGTH (LF)	
STH 116	77+15	-	77+50	35	140	-	-	140	140	DOUBLE YELLOW - x2
STH 116	77+50	-	85+50	800	-	800	200	1,000	1,000	SOLID AND SKIPS YELLOW
STH 116	85+50	-	96+00	1,050	-	-	262.5	263	263	SKIPS YELLOW
STH 116	96+00	-	99+50	350	-	-	87.5	88	88	SKIPS YELLOW
STH 116	99+50	-	104+50	500	1,000	-	-	1,000	1,000	DOUBLE YELLOW
STH 116	104+50	-	115+00	1,050	-	1,050	262.5	1,313	1,313	SOLID AND SKIPS YELLOW
STH 116	115+00	-	133+00	1,800	-	-	450	450	450	SKIPS YELLOW
STH 116	133+00	-	141+50	850	-	850	212.5	1,063	1,063	SOLID AND SKIPS YELLOW
STH 116	141+50	-	143+50	200	-	-	50	50	50	SKIPS YELLOW
STH 116	143+50	-	154+50	1,100	-	1,100	275	1,375	1,375	SOLID AND SKIPS YELLOW
STH 116	154+50	-	163+50	900	1,800	-	-	1,800	1,800	DOUBLE YELLOW
TOTAL								8,540	8,540	
TOTAL								17,080		

*Additional Quantity Shown Elsewhere

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OPERATION	ESTIMATED DURATION (CALENDER DAYS)	TRAFFIC CONTROL											REMARKS
		* EACH	643.0300 TRAFFIC CONTROL DRUMS DAY	* EACH	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	* EACH	643.0800 TRAFFIC CONTROL ARROW BOARDS DAY	* EACH	643.0900 TRAFFIC CONTROL SIGNS DAY	* EACH	643.1050 TRAFFIC CONTROL SIGNS PCMS DAY	* EACH	
PRECONSTRUCTION	7	8	56	-	-	-	-	-	-	2	14	-	
ADVANCED WARNING	25	-	-	-	-	-	-	12	300	-	-	-	DIVIDED SECTIONS OF STH 116 REQUIRE SIGNING ON BOTH SIDES OF ROADWAY
SIDE ROADS	25	-	-	-	-	-	-	7	175	-	-	-	
WIS 116 EB CLOSURE	4	54	216	5	20	2	8	15	60	-	-	-	WIS 116 EB LANE WORK IN THE 2 TO 4 LANE TRANSITION
WIS 116 WB CLOSURE	2	86	172	8	16	2	4	17	34	-	-	-	WIS 116 WB LANE WORK IN THE 2 TO 4 LANE TRANSITION
UNDISTRIBUTED		-	-	-	-	-	-	-	-	-	-	1	
TOTAL		444	36	12	569	14	1						

*FOR INFORMATION ONLY

ROADWAY	START POINT	TO	END POINT	SEGMENT	WHITE			* 643.3165 TEMPORARY MARKING LINE PAINT 6-INCH			REMARKS
					LENGTH (LF)	LEFT EDGELINE LENGTH (LF)	RIGHT EDGELINE LENGTH (LF)	DASHED LENGTH (LF)	MILLED SURFACE LENGTH (LF)	TOP LOWER LAYER LENGTH (LF)	
STH 116	WEST PROJECT LIMITS	-	CTH M/COURTNEY PLUMMER ROAD	2,285	1,660	1,685	-	-	-	3,345	
STH 116	CTH M/COURTNEY PLUMMER ROAD	-	NAPLES LANE	2,380	2,315	2,255	-	-	-	4,570	
STH 116	NAPLES LANE	-	HARBOUR SOUTH DRIVE	3,295	3,295	3,170	25	-	-	6,490	
STH 116	HARBOUR SOUTH DRIVE	-	TRANSITION FROM 2-LANE TO DIVIDED BEGIN	275	275	220	37.5	-	-	533	
STH 116 WB	TRANSITION FROM 2-LANE TO DIVIDED BEGIN	-	BEGIN CURB AND GUTTER MEDIAN	400	400	-	-	-	-	400	
STH 116 EB	TRANSITION FROM 2-LANE TO DIVIDED BEGIN	-	BEGIN CURB AND GUTTER MEDIAN	400	-	400	-	-	-	400	
STH 116 WB	BEGIN CURB AND GUTTER MEDIAN	-	HARBOUR VIEW DRIVE	530	535	-	25	25	25	560	MILLED/LOWER LAYER ARE LANE LINE SKIPS
STH 116 EB	BEGIN CURB AND GUTTER MEDIAN	-	HARBOUR VIEW DRIVE	530	-	230	112.5	112.5	112.5	343	MILLED/LOWER LAYER ARE LANE LINE SKIPS
STH 116 WB	HARBOUR VIEW DRIVE	-	CTH S/BALL PRAIRIE ROAD	580	535	-	137.5	137.5	137.5	673	MILLED/LOWER LAYER ARE LANE LINE SKIPS
STH 116 EB	HARBOUR VIEW DRIVE	-	CTH S/BALL PRAIRIE ROAD	580	530	450	112.5	112.5	112.5	1,093	MILLED/LOWER LAYER ARE LANE LINE SKIPS
STH 116 WB	CTH S/BALL PRAIRIE ROAD	-	EAST PROJECT LIMITS	365	140	-	87.5	87.5	87.5	228	MILLED/LOWER LAYER ARE LANE LINE SKIPS
STH 116 EB	CTH S/BALL PRAIRIE ROAD	-	EAST PROJECT LIMITS	365	-	300	75	75	75	375	MILLED/LOWER LAYER ARE LANE LINE SKIPS
								550	550	19,008	
TOTAL									20,108		

*Additional Quantity Shown Elsewhere

ROADWAY	STATION	TO	STATION	YELLOW CENTERLINE				646.4720	643.3165	REMARKS
				SEGMENT	DOUBLE	SINGLE	DASHED	MARKING LINE SAME DAY EPOXY 6-INCH	* TEMPORARY MARKING LINE PAINT 6-INCH	
				LENGTH (LF)	LENGTH (LF)	LENGTH (LF)	LENGTH (LF)	FINAL SURFACE (LF)	FINAL SURFACE (LF)	
STH 116	77+15	-	77+50	35	140	-	-	140	-	DOUBLE YELLOW - x2
STH 116	77+50	-	85+50	800	-	800	200	1,000	-	SOLID AND SKIPS YELLOW
STH 116	85+50	-	96+00	1,050	-	-	262.5	263	-	SKIPS YELLOW
STH 116	96+00	-	99+50	350	-	350	87.5	438	-	SOLID AND SKIPS YELLOW
STH 116	99+50	-	103+50	400	800	-	-	800	-	DOUBLE YELLOW
STH 116	103+50	-	115+00	1,050	-	1,150	287.5	416	1,022	SOLID AND SKIPS YELLOW
STH 116	115+00	-	133+00	1,800	-	-	450	-	450	SKIPS YELLOW
STH 116	133+00	-	141+50	850	-	850	212.5	-	1,063	SOLID AND SKIPS YELLOW
STH 116	141+50	-	143+50	200	-	-	50	-	50	SKIPS YELLOW
STH 116	143+50	-	154+50	1,100	-	1,100	275	-	1,375	SOLID AND SKIPS YELLOW
STH 116	154+50	-	160+50	600	1,200	-	-	1,142	58	DOUBLE YELLOW
STH 116	160+50	-	163+50	300	1,200	-	-	1,200	-	DOUBLE YELLOW - x2
STH 116 EB	163+50	-	167+50	400	-	400	-	400	-	SINGLE YELLOW
STH 116 WB	163+50	-	167+50	400	-	400	-	400	-	SINGLE YELLOW
STH 116 EB	169+25	-	174+25	500	-	500	-	500	-	SINGLE YELLOW
STH 116 WB	169+25	-	174+25	500	-	500	-	500	-	SINGLE YELLOW
STH 116 EB	175+25	-	178+25	300	-	300	-	300	-	SINGLE YELLOW
STH 116 WB	175+25	-	178+25	300	-	300	-	300	-	SINGLE YELLOW
CTH M	STH 116	-	NORTH LIMITS	75	80	-	-	80	-	DOUBLE YELLOW
HARBOUR SOUTH DRIVE	SOUTH LIMITS	-	STH 116	85	90	-	-	90	-	DOUBLE YELLOW
HARBOUR VIEW DRIVE	SOUTH LIMITS	-	STH 116 EB	95	80	-	-	80	-	DOUBLE YELLOW
BALL PRAIRIE ROAD	STH 116 WB	-	NORTH LIMITS	130	110	-	-	110	-	DOUBLE YELLOW
CTH S	SOUTH LIMITS	-	STH 116 EB	90	80	-	-	80	-	DOUBLE YELLOW
				TOTAL				8,238	4,018	

*Additional Quantity Shown Elsewhere

646.2020 MARKING LINE EPOXY 6-INCH					
ROADWAY	START POINT	TO	END POINT	WHITE	
				LEFT EDGELINE	RIGHT EDGELINE
				LENGTH (FT)	
CTH M	STH 116	-	NORTH LIMITS	-	15
HARBOUR SOUTH DRIVE	SOUTH LIMITS	-	STH 116	-	20
HARBOUR VIEW DRIVE	SOUTH LIMITS	-	STH 116 EB	5	-
BALL PRAIRIE ROAD	STH 116 WB	-	NORTH LIMITS	65	-
CTH S	SOUTH LIMITS	-	STH 116 EB	-	10
				70	45
TOTAL				115	

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646.2040 MARKING LINE GROOVED WET REF EPOXY 6-INCH

ROADWAY	START POINT	TO	END POINT	SEGMENT LENGTH (FT)	WHITE			YELLOW	TOTAL LENGTH (LF)	REMARKS
					LEFT EDGELINE LENGTH (FT)	RIGHT EDGELINE LENGTH (FT)	DASHED LENGTH (FT)	CENTERLINE LENGTH (FT)		
STH 116	WEST PROJECT LIMITS	-	CTH M/COURTNEY PLUMMER ROAD	2,285	1,660	1,685	-	-	3,345.0	
STH 116	CTH M/COURTNEY PLUMMER ROAD	-	NAPLES LANE	2,380	2,315	2,255	-	-	4,570.0	
STH 116	NAPLES LANE	-	HARBOUR SOUTH DRIVE	3,295	3,295	3,170	25.0	-	6,490.0	
STH 116	HARBOUR SOUTH DRIVE	-	TRANSITION FROM 2-LANE TO DIVIDED BEGIN	275	275	220	37.5	-	532.5	
STH 116 WB	TRANSITION FROM 2-LANE TO DIVIDED BEGIN	-	BEGIN CURB AND GUTTER MEDIAN	400	400	-	-	-	400.0	
STH 116 EB	TRANSITION FROM 2-LANE TO DIVIDED BEGIN	-	BEGIN CURB AND GUTTER MEDIAN	400	-	400	-	-	400.0	
STH 116 WB	BEGIN CURB AND GUTTER MEDIAN	-	HARBOUR VIEW DRIVE	530	535	-	-	-	535.0	
STH 116 EB	BEGIN CURB AND GUTTER MEDIAN	-	HARBOUR VIEW DRIVE	530	-	230	112.5	-	342.5	
STH 116 WB	HARBOUR VIEW DRIVE	-	CTH S/BALL PRAIRIE ROAD	580	535	-	150.0	-	685.0	
STH 116 EB	HARBOUR VIEW DRIVE	-	CTH S/BALL PRAIRIE ROAD	580	530	450	137.5	-	1,117.5	
STH 116 WB	CTH S/BALL PRAIRIE ROAD	-	EAST PROJECT LIMITS	365	140	-	87.5	-	227.5	
STH 116 EB	CTH S/BALL PRAIRIE ROAD	-	EAST PROJECT LIMITS	365	-	300	100.0	-	400.0	
STH 116	106+91	-	121+79	-	-	-	-	1,297	1,297.0	OVER RUMBLE STRIPS
STH 116	125+76	-	154+79	-	-	-	-	2,721	2,721.0	OVER RUMBLE STRIPS
TOTAL									23,063	

646.4040 MARKING LINE GROOVED WET REF EPOXY 10-INCH

ROADWAY	START POINT	TO	END POINT	WHITE LENGTH (LF)	REMARKS
STH 116	WEST PROJECT LIMITS	-	CTH M/COURTNEY PLUMMER ROAD	200	RIGHT TURN LANE CHANNELIZATION
STH 116	CTH M/COURTNEY PLUMMER ROAD	-	NAPLES LANE	545	LEFT AND RIGH TURN LANE CHANNELIZATION
STH 116	NAPLES LANE	-	HARBOUR SOUTH DRIVE	180	RIGHT TURN LANE CHANNELIZATION
STH 116 WB	HARBOUR VIEW DRIVE	-	CTH S/BALL PRAIRIE ROAD	115	LEFT TURN LANE CHANNELIZATION
STH 116 EB	HARBOUR VIEW DRIVE	-	CTH S/BALL PRAIRIE ROAD	375	LEFT AND RIGH TURN LANE CHANNELIZATION
STH 116 WB	CTH S/BALL PRAIRIE ROAD	-	EAST PROJECT LIMITS	120	LEFT TURN LANE CHANNELIZATION
TOTAL				1,535	

646.7120
MARKING
DIAGONAL EPOXY
12-INCH

ROADWAY	STA	TO	STA	LENGTH (LF)	REMARKS
STH 116	160+50	-	163+50	165	YELLOW
TOTAL				165	

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		650.4500	650.5000
		CONSTRUCTION STAKING SUBGRADE	CONSTRUCTION STAKING BASE
<u>STATION</u>	<u>TO</u> <u>STATION</u>	<u>LF</u>	<u>LF</u>
161+00	- 163+60	260	260
<u>TOTAL</u>		<u>260</u>	<u>260</u>

			650.8000
			CONSTRUCTION STAKING RESURFACING REFERENCE
<u>STATION</u>	<u>TO</u> <u>STATION</u>		<u>LF</u>
77+15	- 77+50		35
77+50	- 85+50		800
85+50	- 96+00		1,050
96+00	- 99+50		350
99+50	- 104+50		500
104+50	- 115+00		1,050
115+00	- 133+00		1,800
133+00	- 141+50		850
141+50	- 143+50		200
143+50	- 154+50		1,100
154+50	- 163+50		900
163+50	- 178+25		1475
<u>TOTAL</u>			<u>10110</u>

		690.0150	690.0250		
		SAWING ASPHALT	SAWING CONCRETE		
<u>APPROXIMATE STATION</u>	<u>OFFSET</u>	<u>LOCATION</u>	<u>LF</u>	<u>LF</u>	<u>REMARKS</u>
161+00	RT	STH 116	12	3	FULL DEPTH REPAIR SECTION
161+00 to 163+60	RT	STH 116	260	260	FULL DEPTH REPAIR SECTION
163+60	RT	STH 116	20	3	FULL DEPTH REPAIR SECTION
<u>TOTAL</u>			<u>292</u>	<u>266</u>	

3



5

5

MATCH LINE 82+75



MATCH LINE 82+75

MATCH LINE 97+50

PROJECT NO: 6190-26-71	HWY: STH 116	COUNTY: WINNEBAGO	PLAN	SHEET	E
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5

5

PROJECT NO: 6190-26-71	HWY: STH 116	COUNTY: WINNEBAGO	PLAN	SHEET	E
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PROJECT NO: 6190-26-71

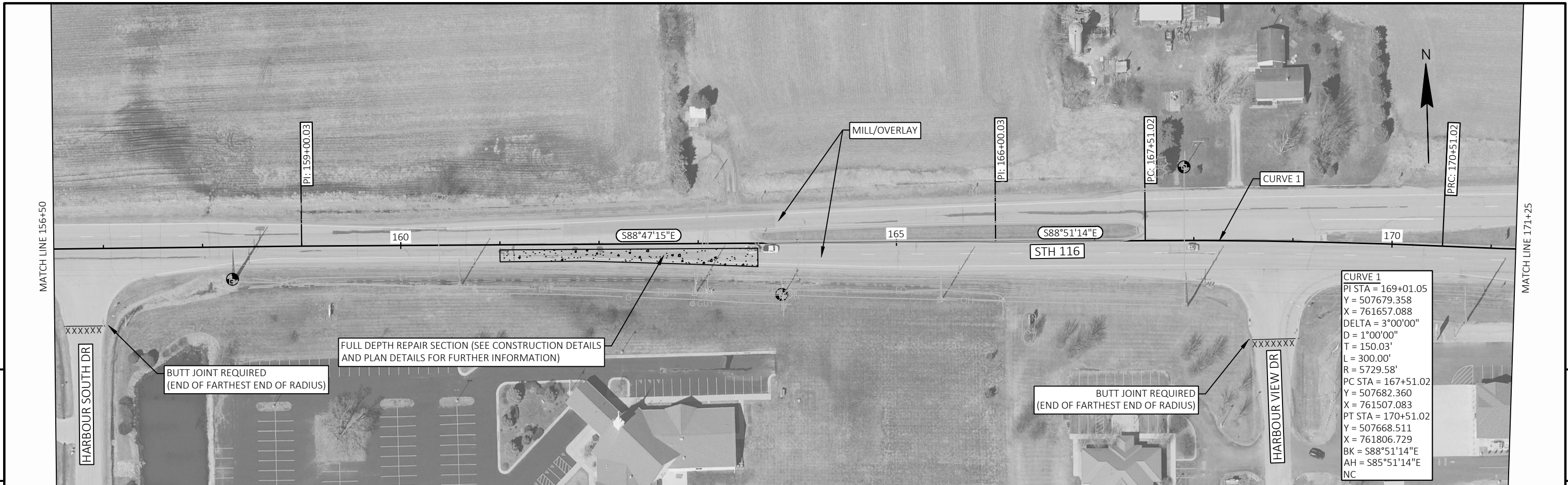
HWY: STH 116

COUNTY: WINNEBAGO

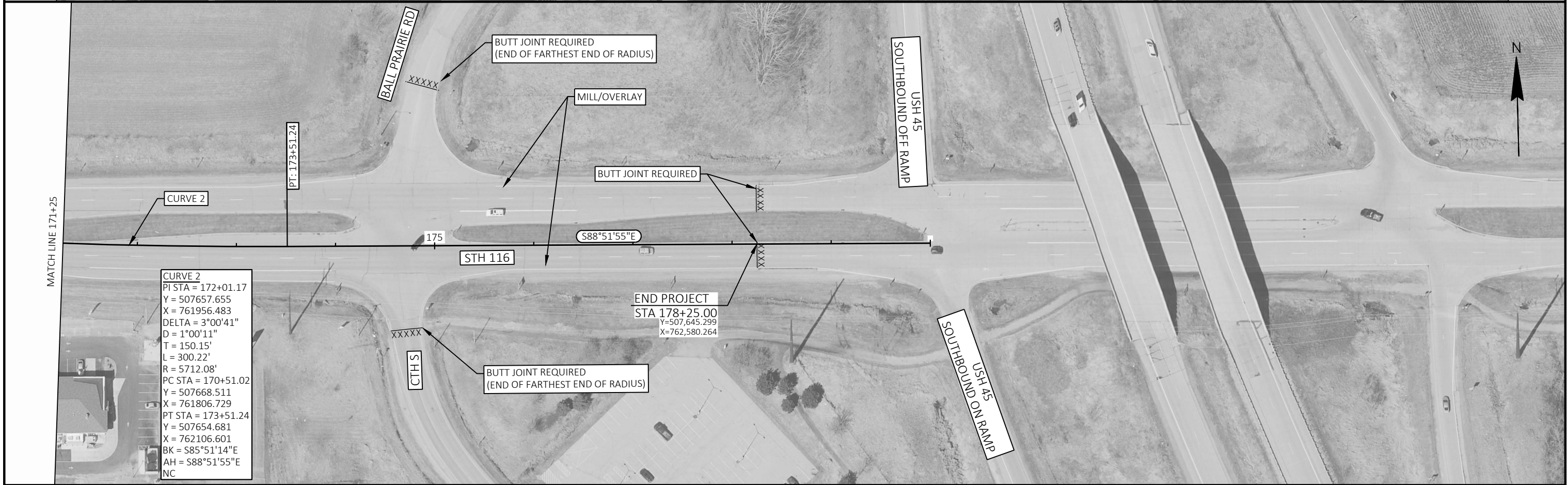
PLAN

SHEET

E



CURVE 1
 PI STA = 169+01.05
 Y = 507679.358
 X = 761657.088
 DELTA = 3°00'00"
 D = 1°00'00"
 T = 150.03'
 L = 300.00'
 R = 5729.58'
 PC STA = 167+51.02
 Y = 507682.360
 X = 761507.083
 PT STA = 170+51.02
 Y = 507668.511
 X = 761806.729
 BK = S88°51'14"E
 AH = S85°51'14"E
 NC

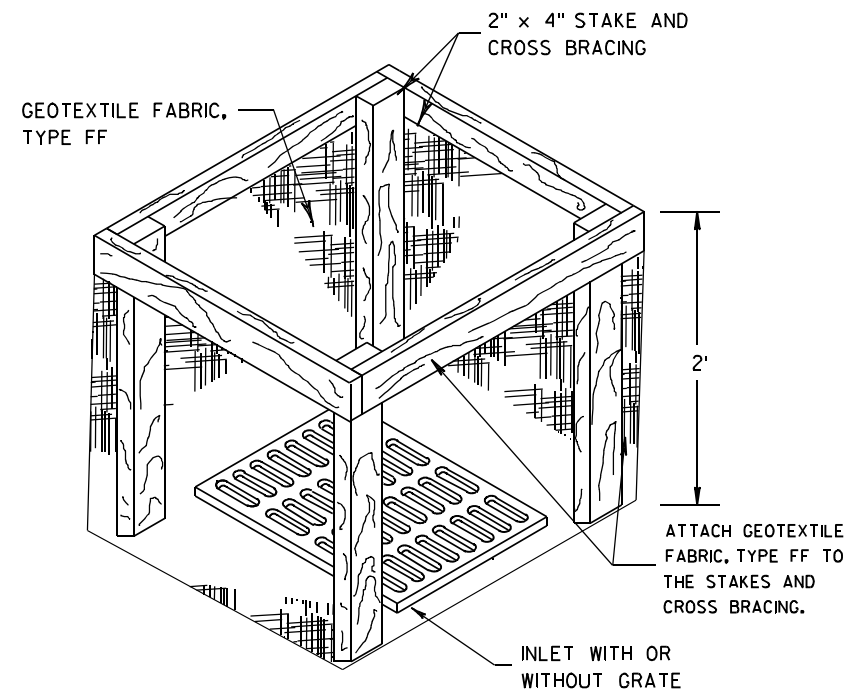
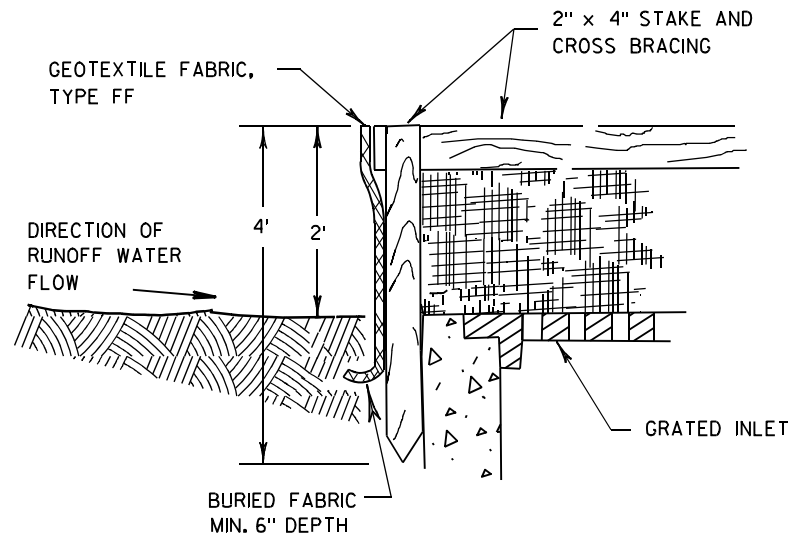


CURVE 2
 PI STA = 172+01.17
 Y = 507657.655
 X = 761956.483
 DELTA = 3°00'41"
 D = 1°00'11"
 T = 150.15'
 L = 300.22'
 R = 5712.08'
 PC STA = 170+51.02
 Y = 507668.511
 X = 761806.729
 PT STA = 173+51.24
 Y = 507654.681
 X = 762106.601
 BK = S85°51'14"E
 AH = S88°51'55"E
 NC

PROJECT NO: 6190-26-71	HWY: STH 116	COUNTY: WINNEBAGO	PLAN	SHEET	E
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Standard Detail Drawing List

08E10-02	INLET PROTECTION TYPE A, B, C AND D
13A10-03A	SHOULDER RUMBLE STRIPS - ASPHALT
13A10-03G	SHOULDER AND EDGE LINE RUMBLE STRIPS - CROSSINGS, INTERSECTIONS, BRIDGES, DRIVEWAYS
13A10-03H	SHOULDER AND EDGE LINE RUMBLE STRIPS - RAILROAD, PASSING, CLIMBING AND BYPASS LANES
13A11-04A	CENTERLINE RUMBLE STRIPS - ASPHALT
13A11-04D	CENTERLINE RUMBLE STRIPS - INTERSECTIONS, DRIVEWAYS, BRIDGES, RAILROADS
13C19-03	HMA LONGITUDINAL JOINTS
14B29-01	SAFETY EDGE
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-23B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C08-23D	PAVEMENT MARKING (TURN LANES)
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C12-09B	TRAFFIC CONTROL, LANE CLOSURE WITH AUTOMATED FLAGGER ASSISTANCE DEVICE
15C19-08A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C19-08C	MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY
15C21-11	SIGNING AND MARKING FOR TWO LANE TO FOUR LANE DIVIDED TRANSITIONS
15D12-12A	TRAFFIC CONTROL, LANE CLOSURE, WITH TEMPORARY RUMBLE STRIPS
15D20-07A	TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY
15D21-07A	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D21-07B	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D27-03	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES
15D45-03	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH LOOSE GRAVEL



INLET PROTECTION, TYPE A

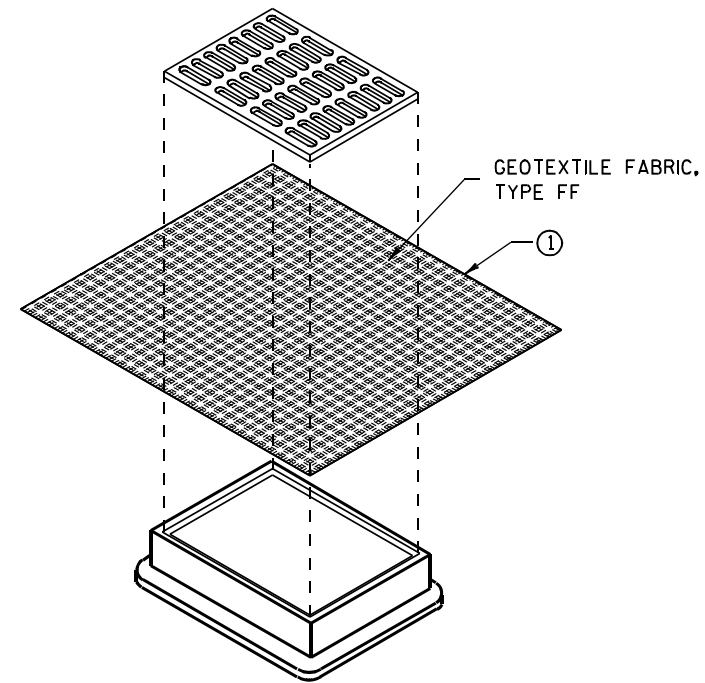
GENERAL NOTES

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

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

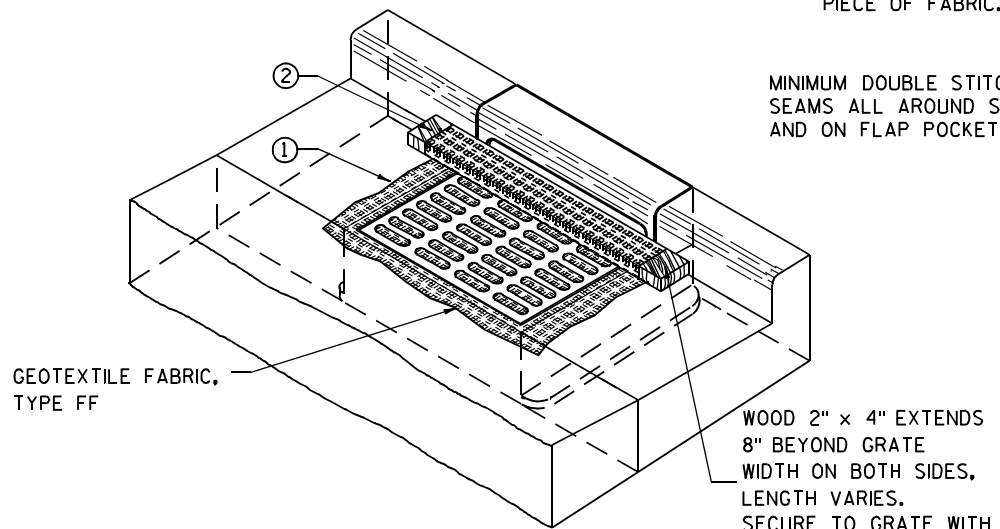
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

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



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

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

INSTALLATION NOTES

TYPE B & C

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

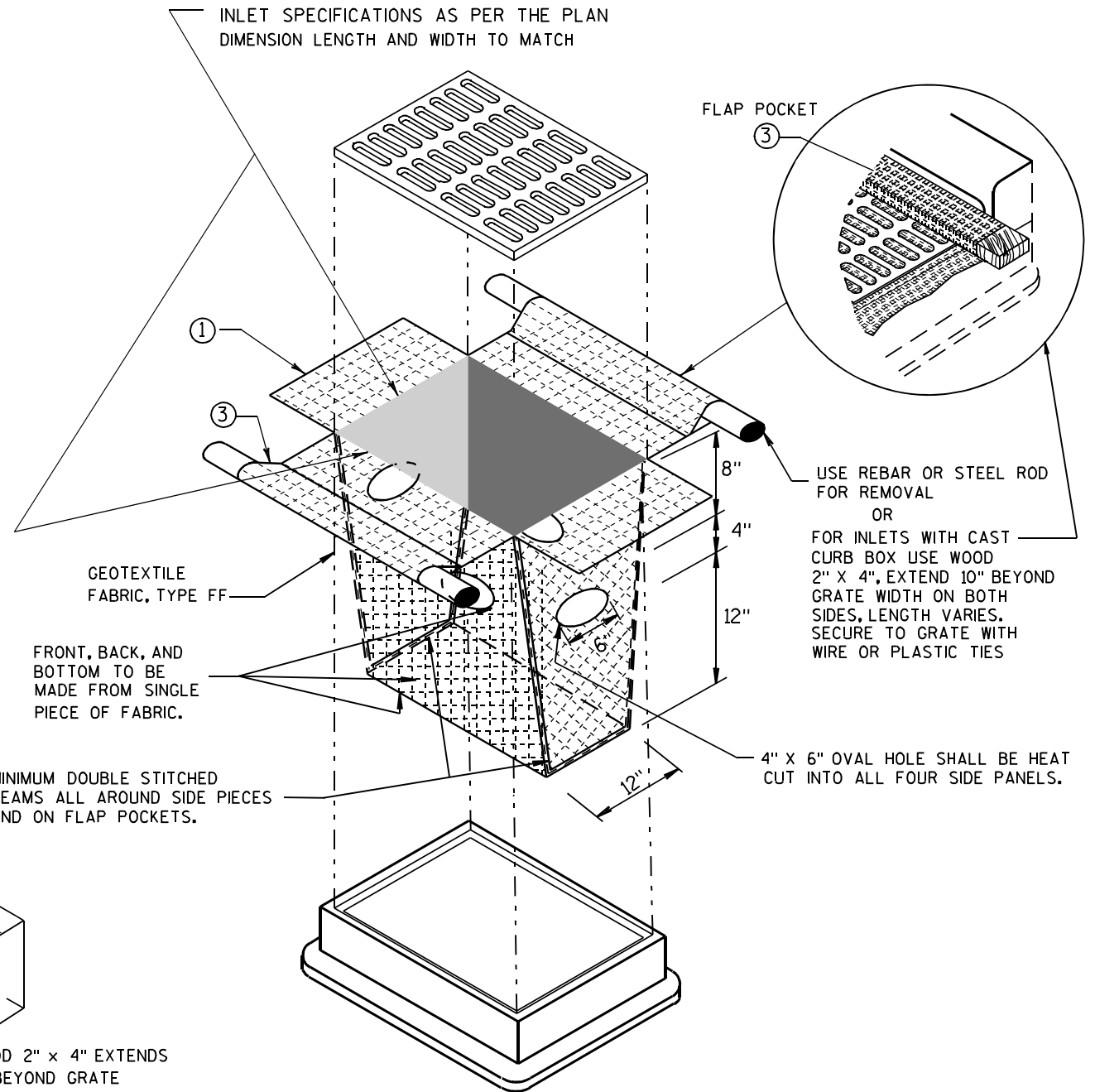
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

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

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

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



INLET PROTECTION, TYPE D

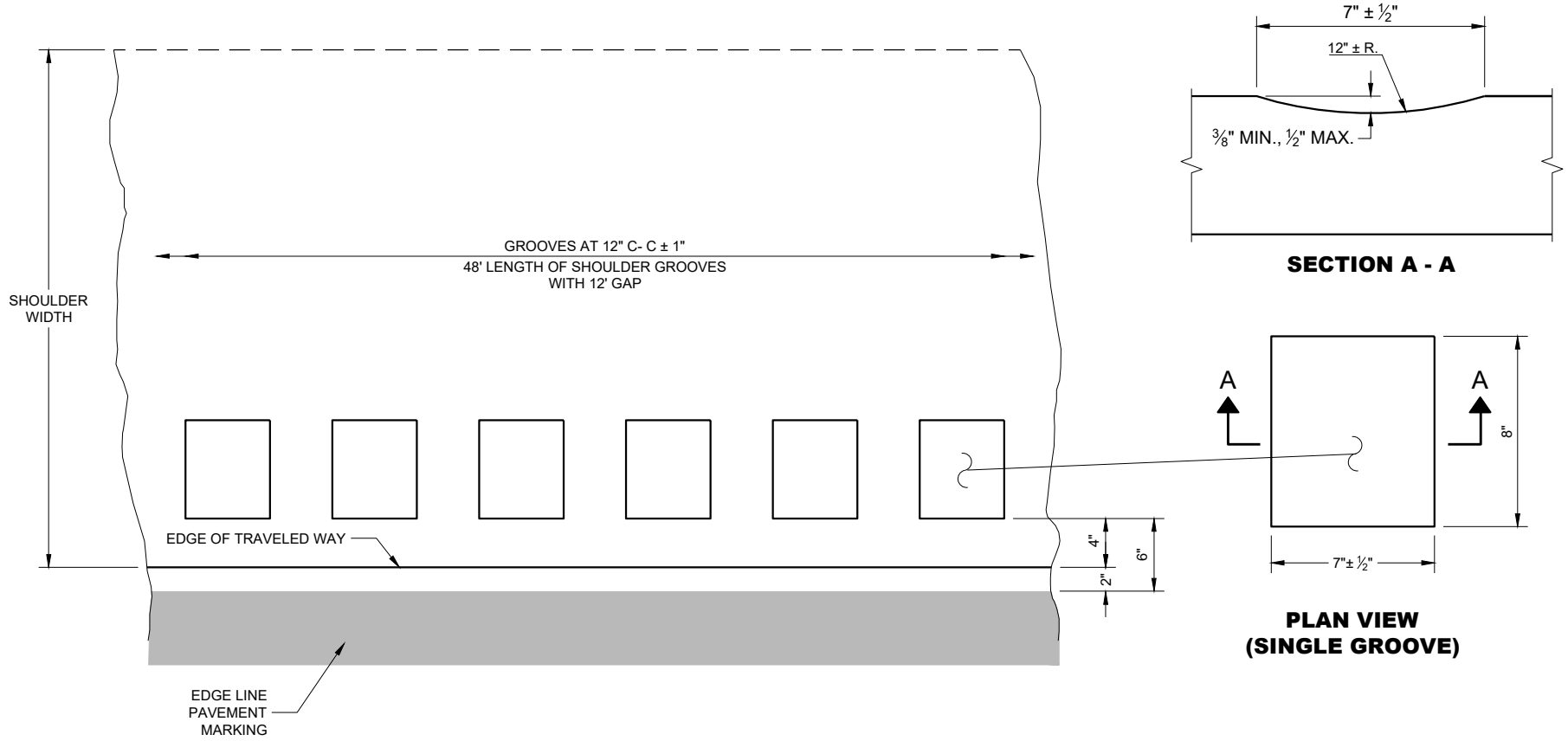
(CAN BE INSTALLED IN ANY INLET TYPE WITH OR WITHOUT A CURB BOX AS PER NOTE ②)

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

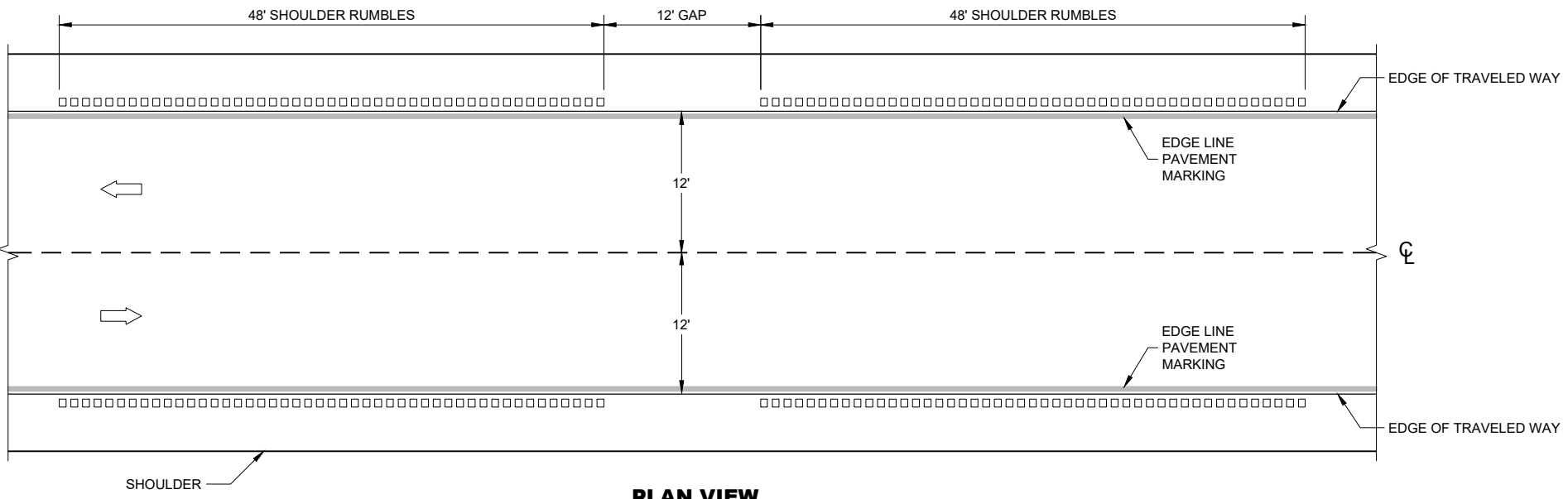
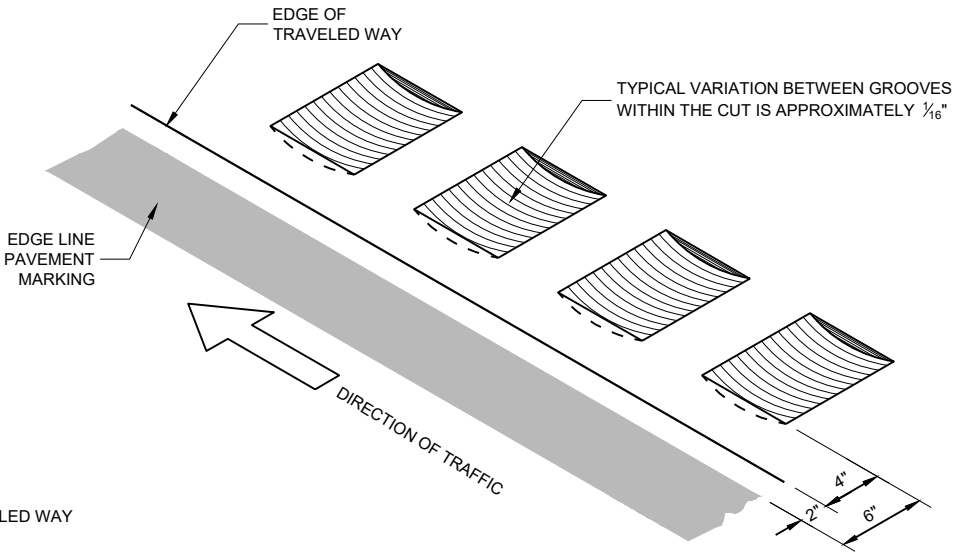
GENERAL NOTES

DO NOT MILL SHOULDER GROOVES THROUGH INTERSECTIONS, MARKED CROSSWALKS, NON-MOTORIZED PATH CROSSINGS, ETC. REFER TO SDD 13A10 SHEETS "g" AND "h".

SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS WHEN DIRECTED BY THE ENGINEER.

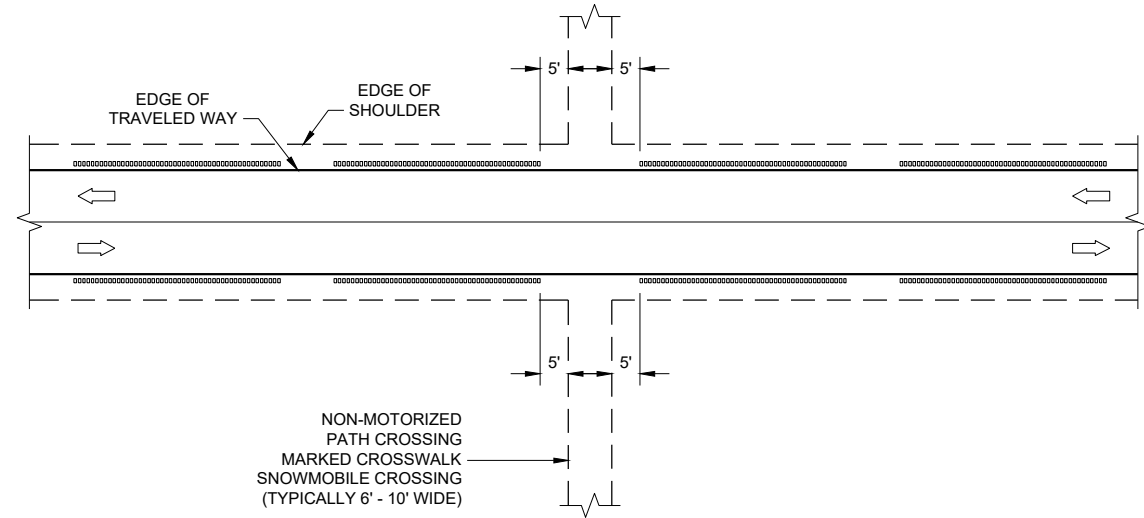


**PLAN DETAIL VIEW
SHOULDER WITH GROOVES**

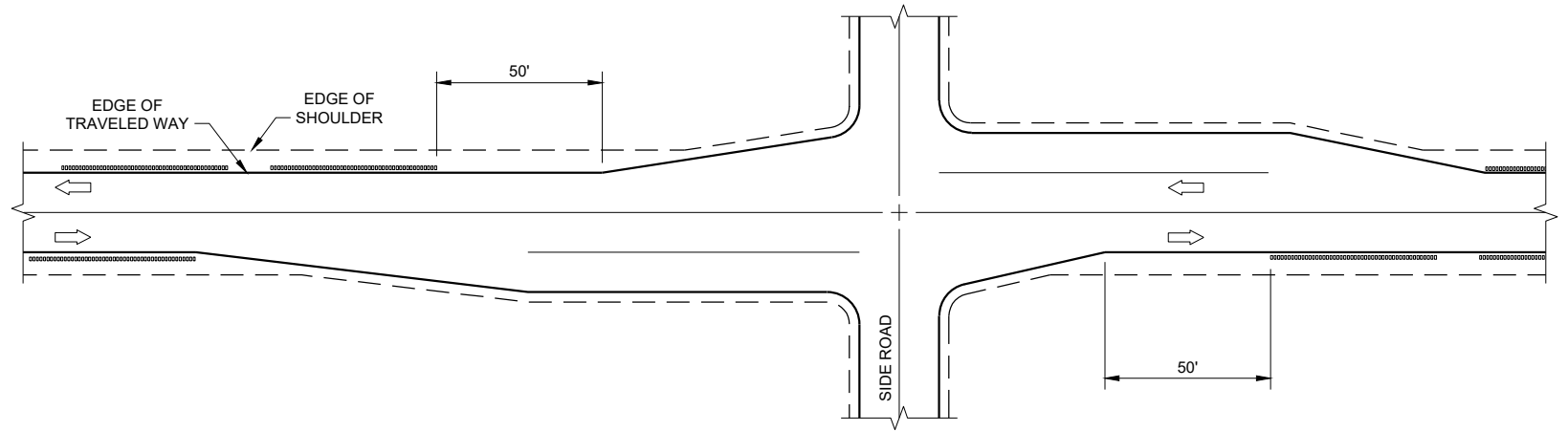


SHOULDER RUMBLE STRIPS - ASPHALT

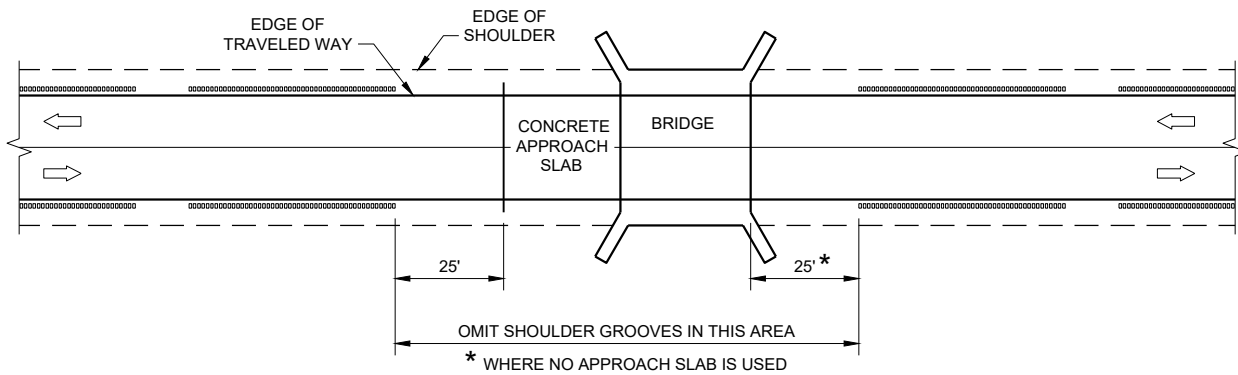
SHOULDER RUMBLE STRIPS ASPHALT
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION



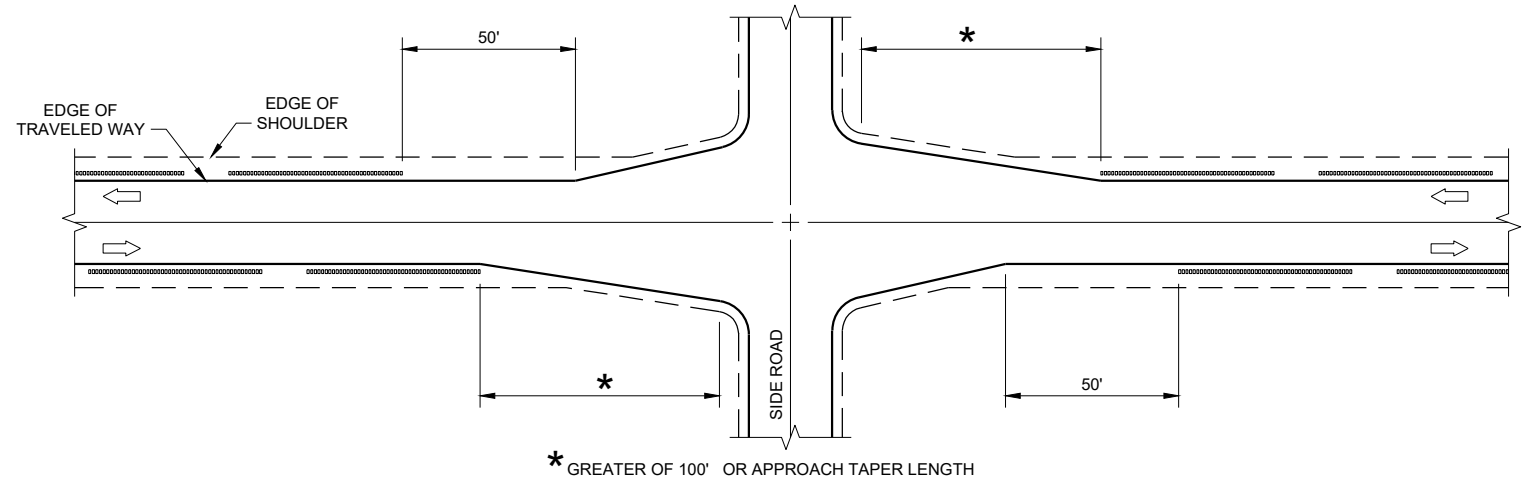
GROOVES AT MISCELLANEOUS CROSSINGS



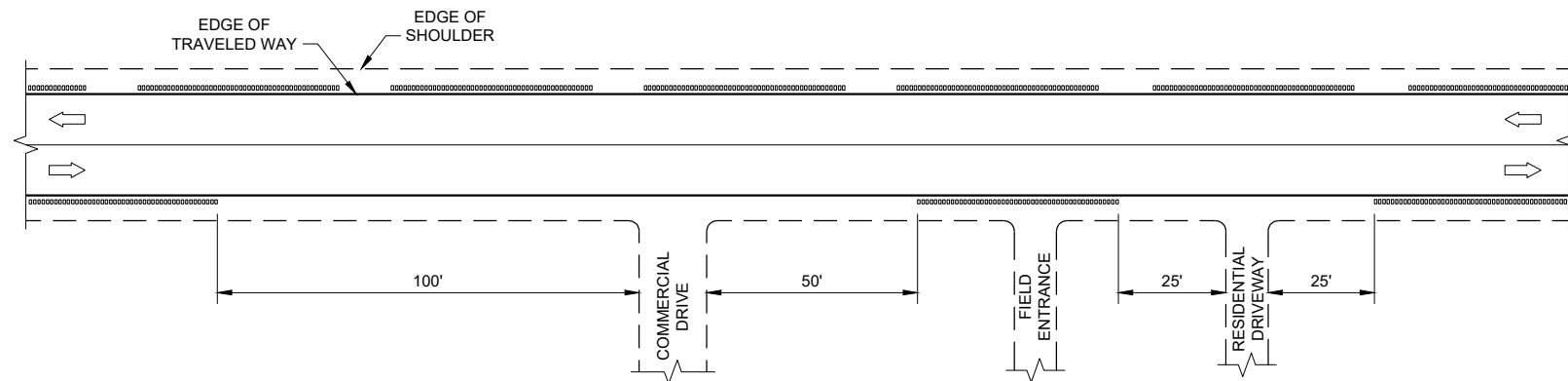
GROOVES AT RIGHT TURN LANE



GROOVES AT BRIDGES



GROOVES AT INTERSECTIONS WITH APPROACH TAPER



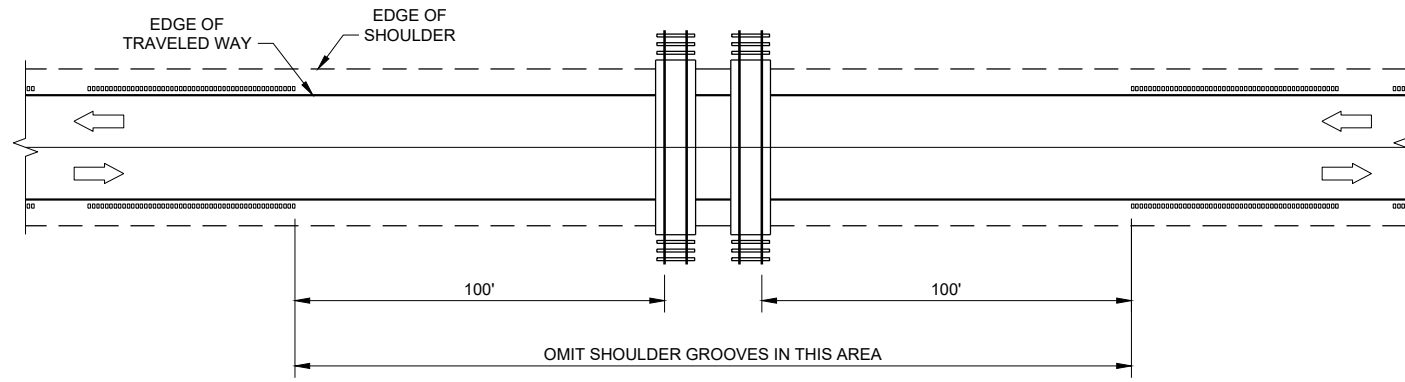
GROOVES AT DRIVEWAYS

GENERAL NOTES

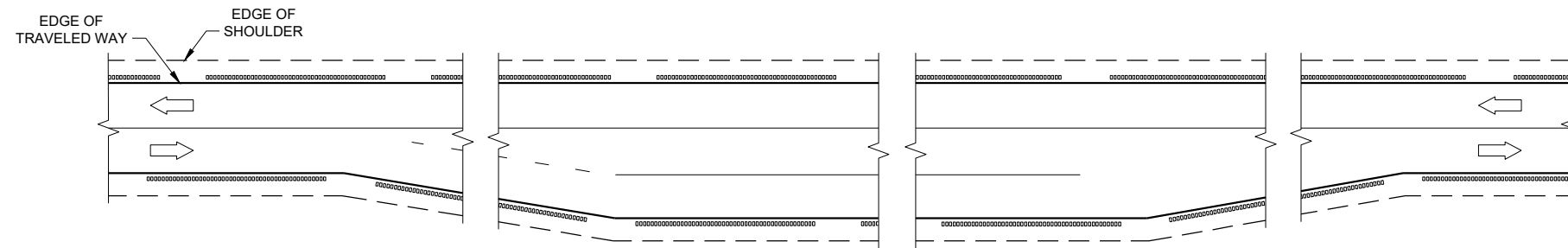
- ① SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.

**SHOULDER AND EDGE LINE
RUMBLE STRIPS
CROSSINGS, INTERSECTIONS,
BRIDGES, DRIVEWAYS**

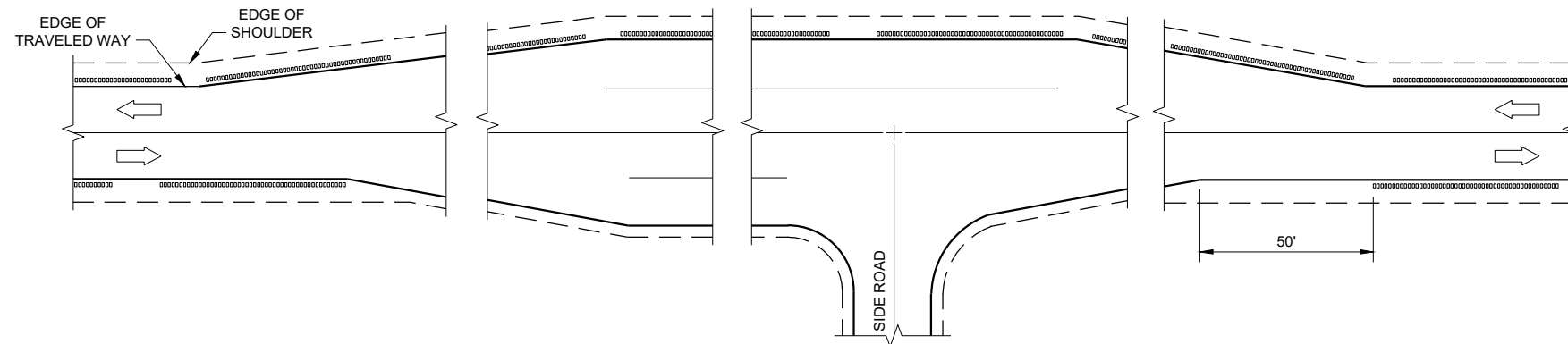
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



GROOVES AT RAILROADS



GROOVES AT PASSING AND CLIMBING LANES



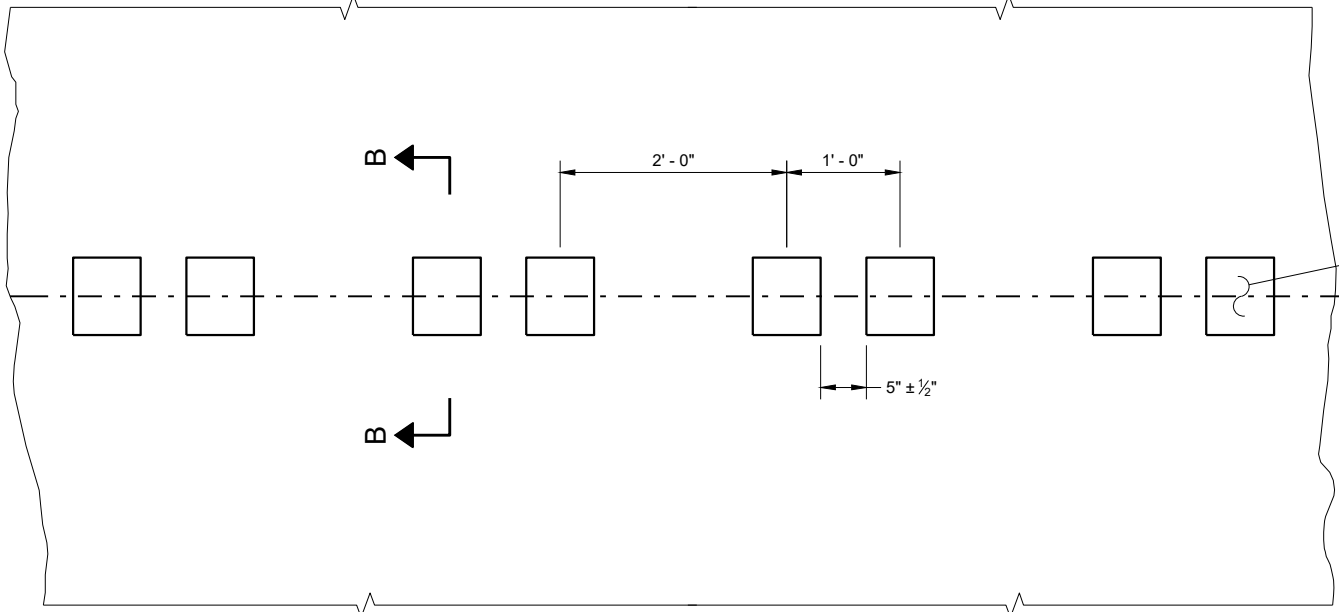
GROOVES AT BYPASS LANES

SHOULDER AND EDGE LINE RUMBLE STRIPS - RAILROAD, PASSING, CLIMBING AND BYPASS LANES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2023 DATE	/S/ John Jenkins ROADWAY STANDARDS DEVELOPMENT ENGINEER
<small>FHWA</small>	

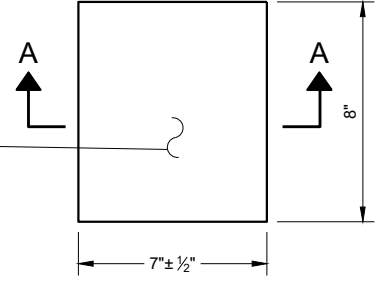
GENERAL NOTES

DO NOT MILL SHOULDER GROOVES THROUGH INTERSECTIONS, MARKED CROSSWALKS, NON-MOTORIZED PATH CROSSINGS, ETC. REFER TO SDD 13A11 SHEETS "d" AND "e".

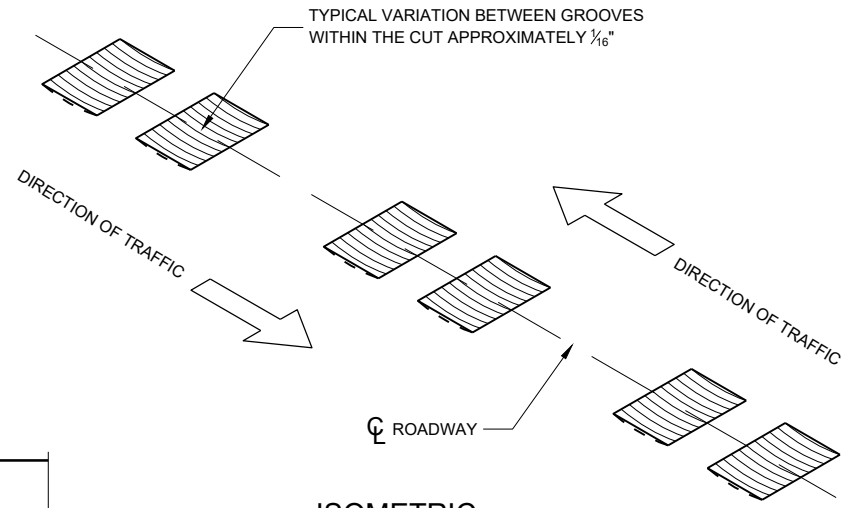
CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS WHEN DIRECTED BY THE ENGINEER.



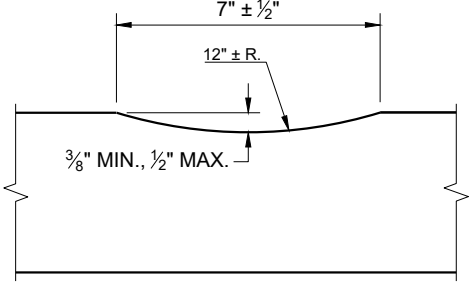
PLAN DETAIL VIEW



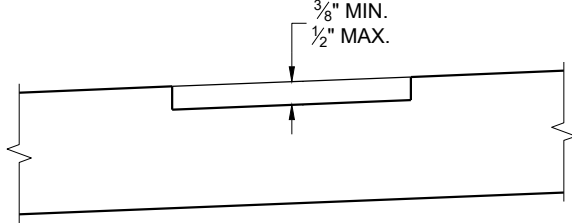
PLAN VIEW (SINGLE GROOVE)



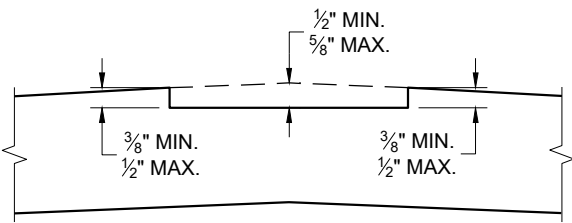
ISOMETRIC



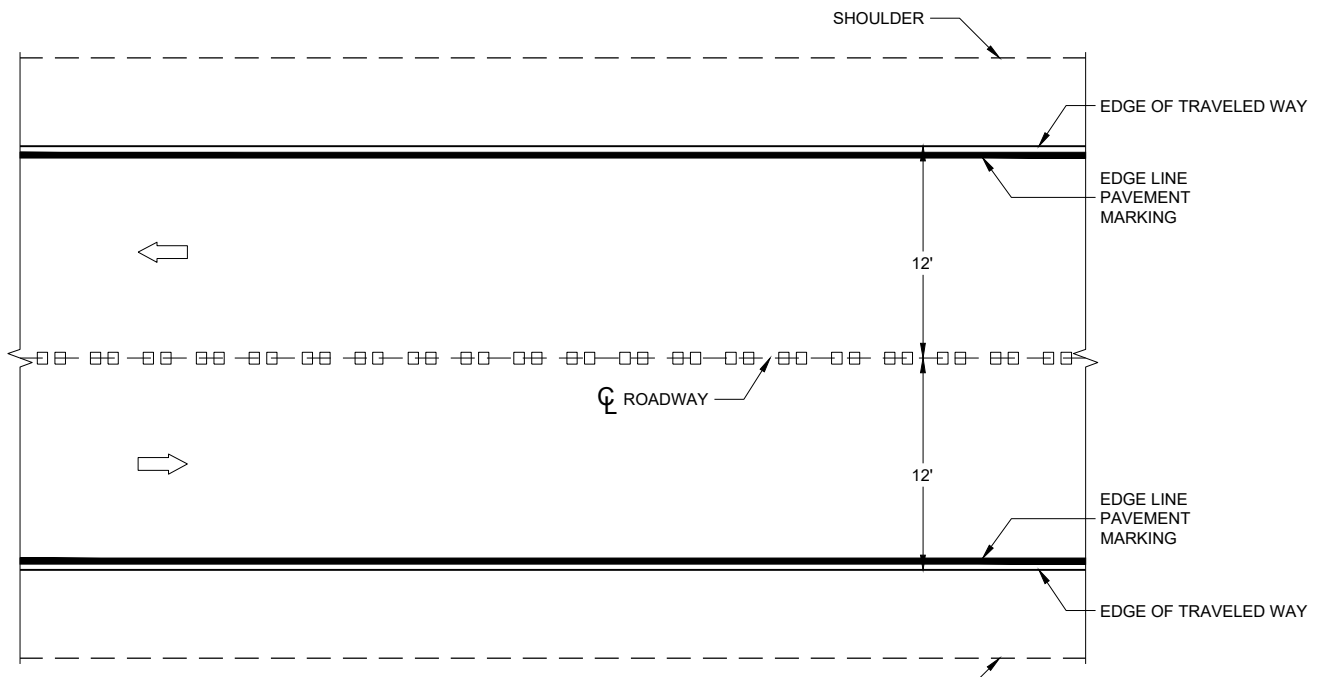
SECTION A - A



SECTION B - B SUPERELEVATED ROADWAY



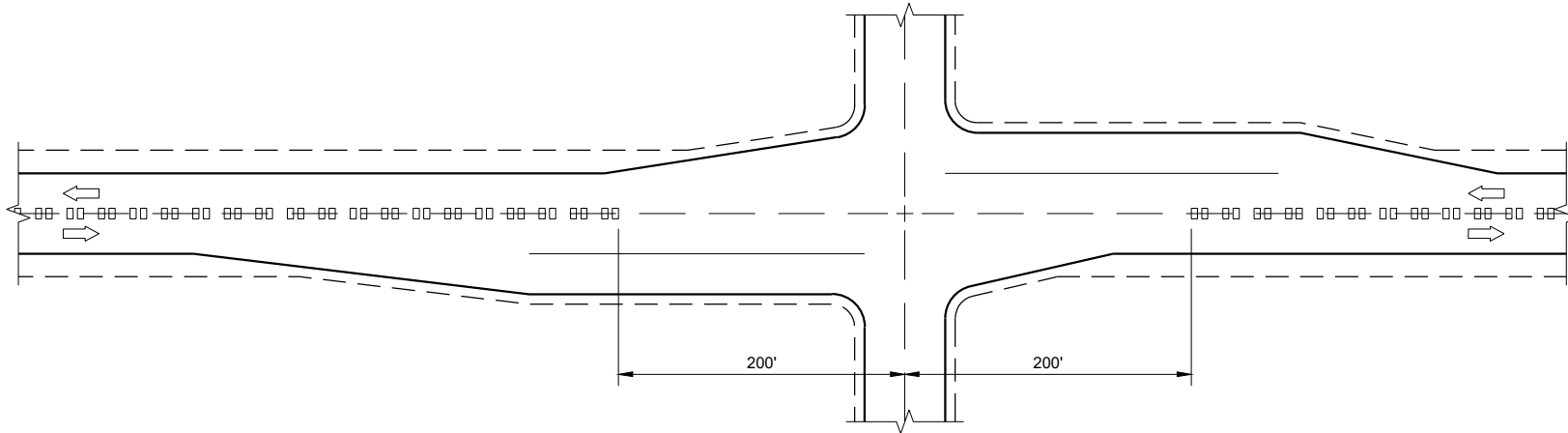
SECTION B - B CROWNED ROADWAY



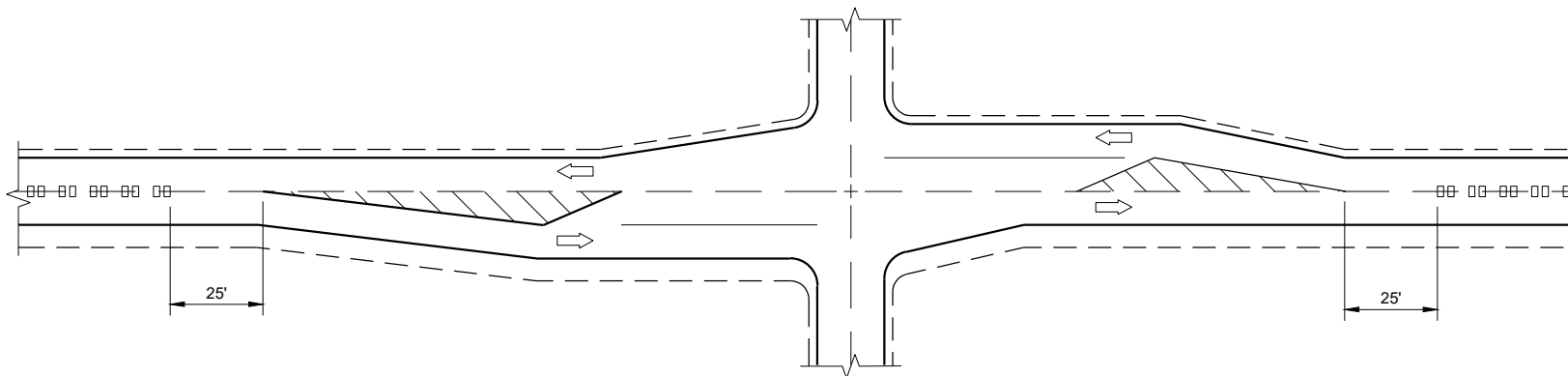
PLAN VIEW

CENTERLINE RUMBLE STRIPS - ASPHALT

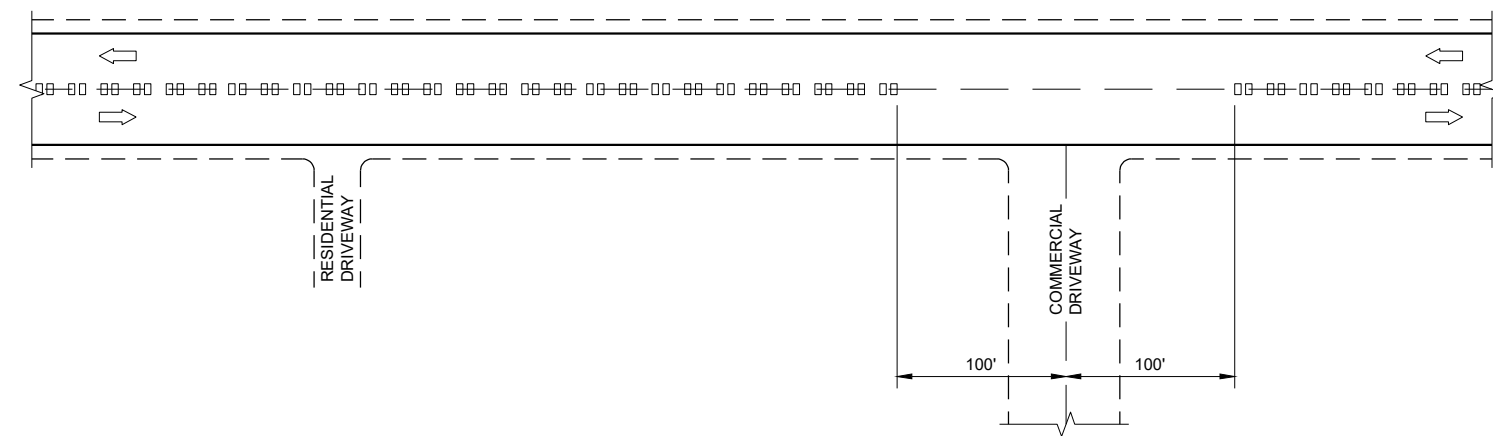
CENTERLINE RUMBLE STRIPS - ASPHALT
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION



CENTERLINE GROOVES AT INTERSECTIONS



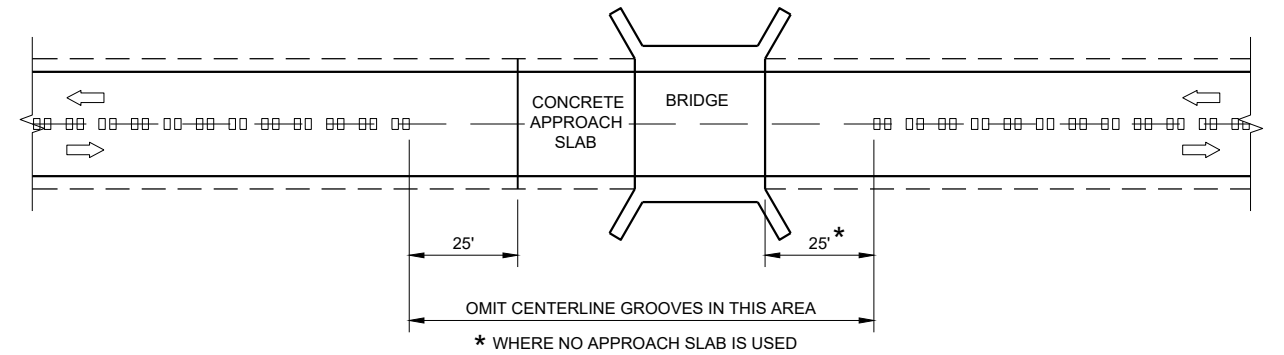
**CENTERLINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)**



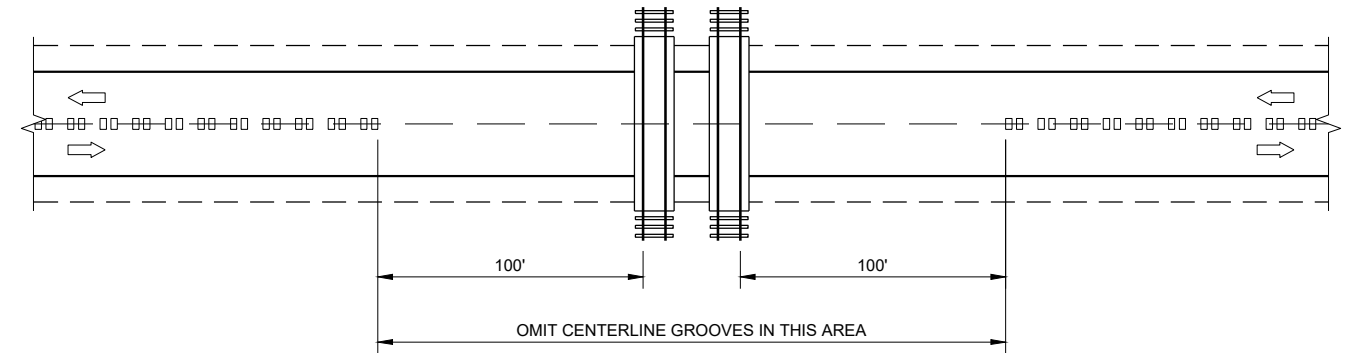
CENTERLINE GROOVES AT DRIVEWAYS^①

GENERAL NOTES

① CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS WHEN DIRECTED BY THE ENGINEER.



CENTERLINE GROOVES AT BRIDGES



CENTERLINE GROOVES AT RAILROADS

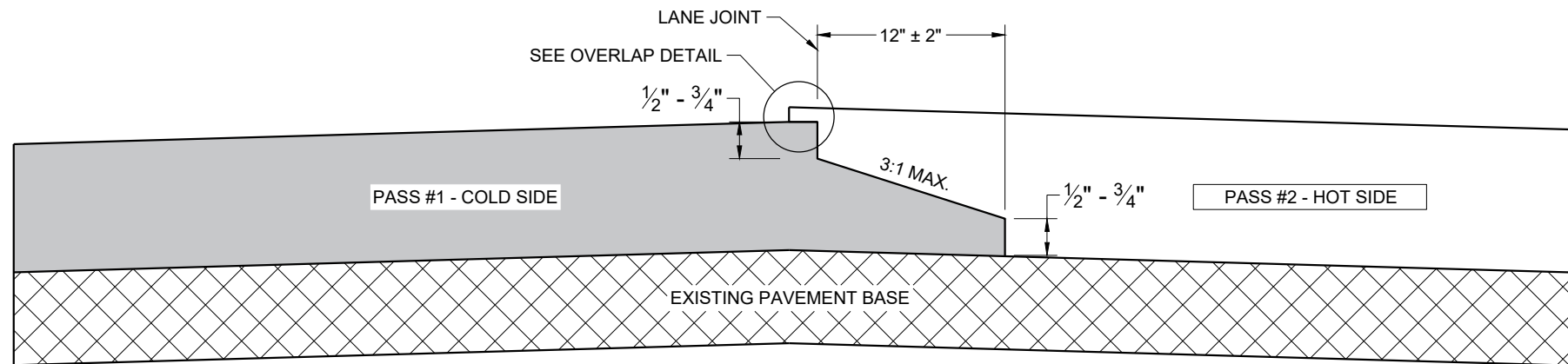
6

6

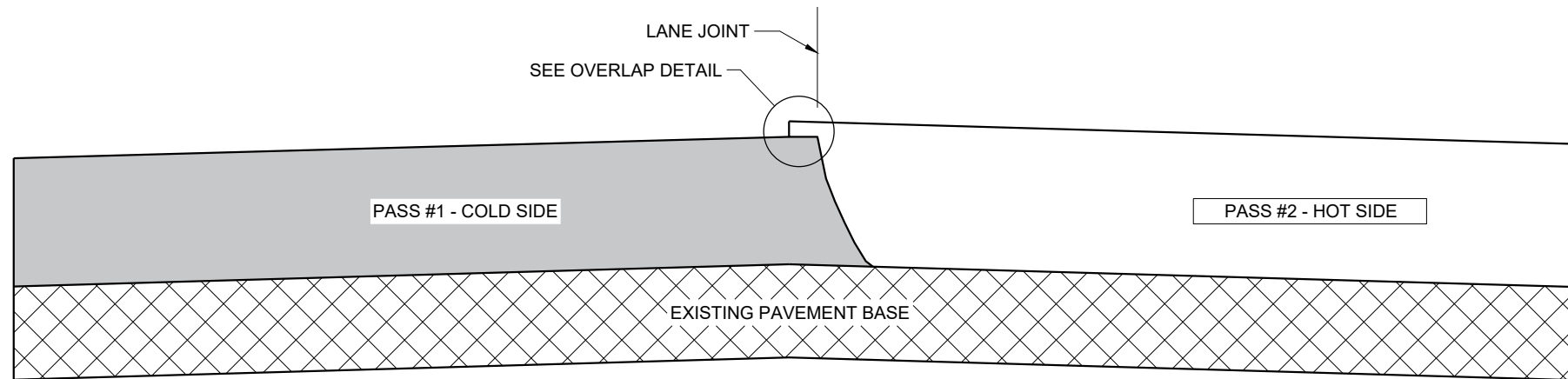
SDD 13A11 - 04d

SDD 13A11 - 04d

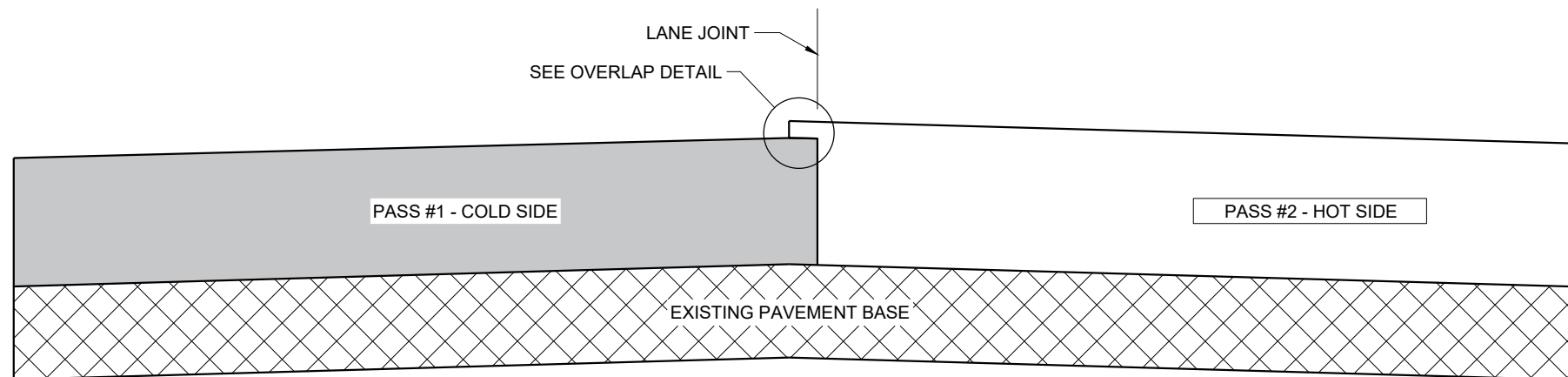
CENTER LINE RUMBLE STRIPS - INTERSECTIONS, DRIVEWAYS, BRIDGES, RAIL ROADS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2023 DATE	/S/ John Jenkins ROADWAY STANDARDS DEVELOPMENT ENGINEER
<small>FHWA</small>	



**TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT**



**TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT**



**TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)**

GENERAL NOTES

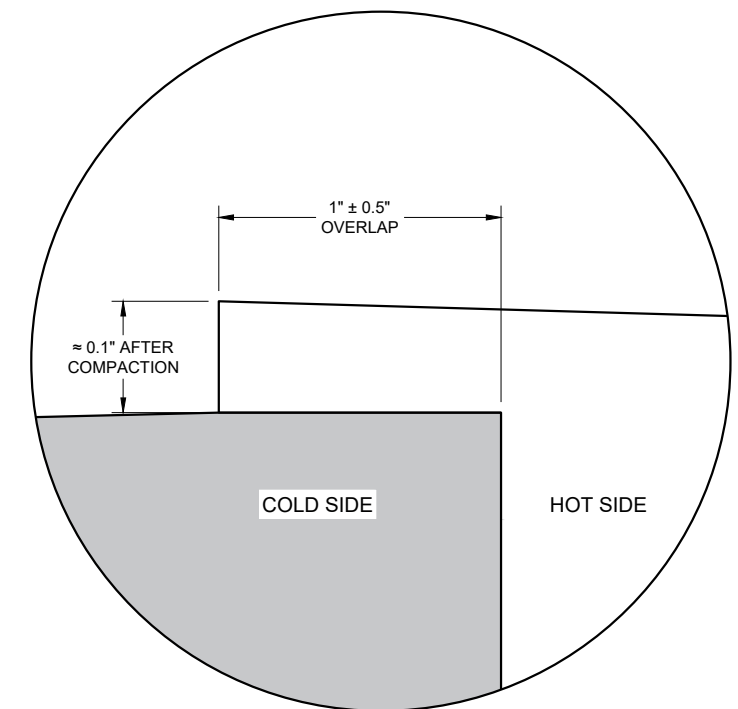
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY $1" \pm 0.5"$ AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY $0.1"$ AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO $2"$ FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.



OVERLAP DETAIL (TYPICAL)

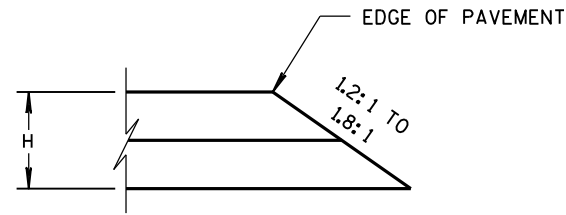
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6

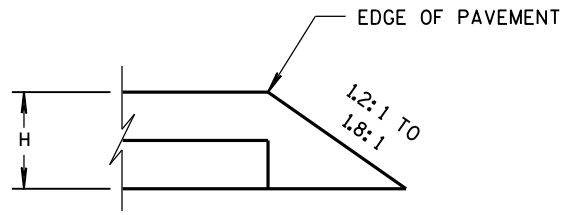
SDD 13C19 - 03

SDD 13C19 - 03

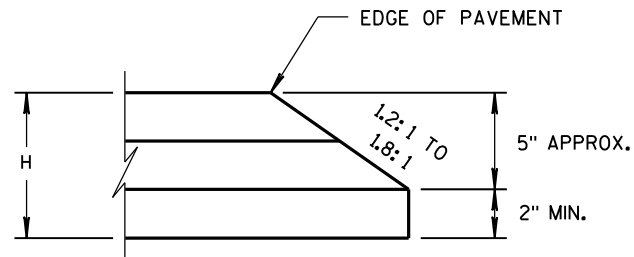
HMA LONGITUDINAL JOINTS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2020 DATE	/S/ Steven Hefel HMA PAVEMENT ENGINEER
FHWA	



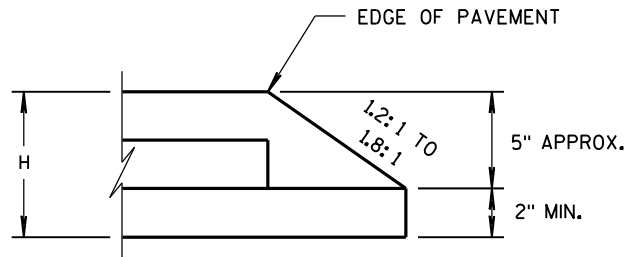
CONSTRUCTED WITH FINAL TWO LAYERS
FOR H 5" OR LESS



CONSTRUCTED WITH FINAL LAYER
FOR H 5" OR LESS

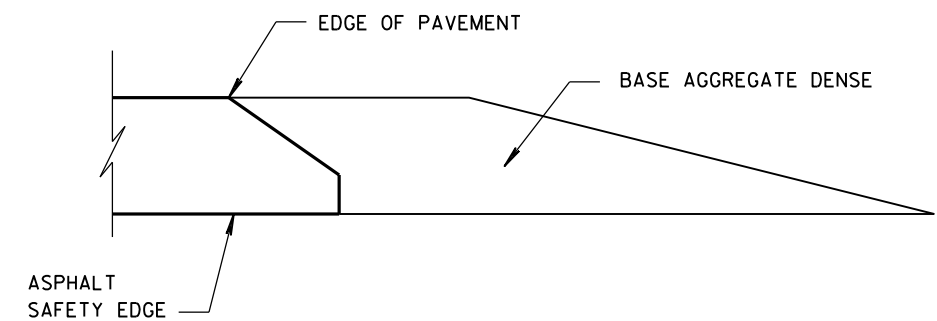


CONSTRUCTED WITH FINAL TWO LAYERS
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER
FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

6

6

S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

SAFETY EDGE _{SM}	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED DATE 11/30/2012	/s/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	

GENERAL NOTES

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

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




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

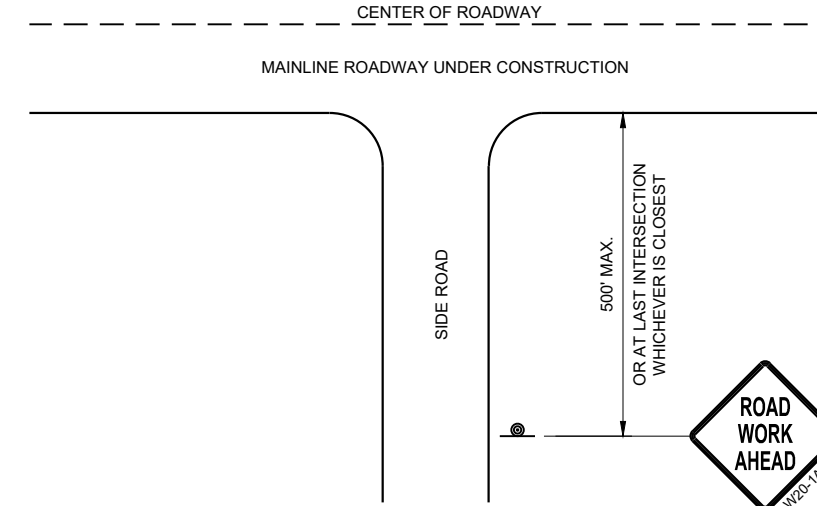
SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

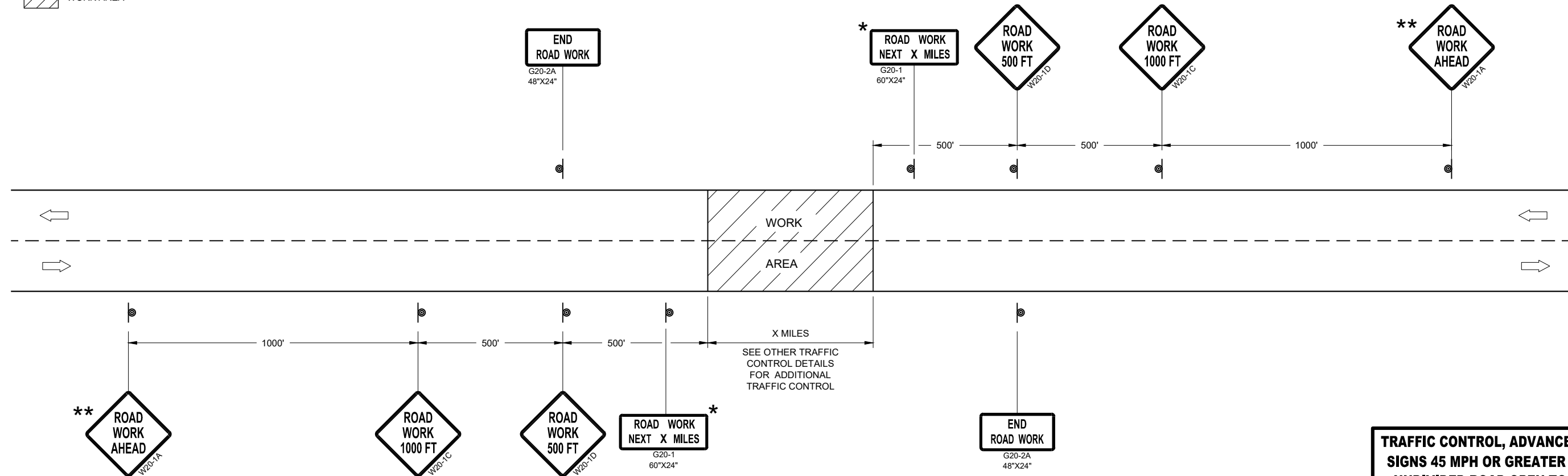
- * OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS
- ** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.

LEGEND

-  SIGN ON PERMANENT SUPPORT
-  DIRECTION OF TRAFFIC
-  WORK AREA



TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL



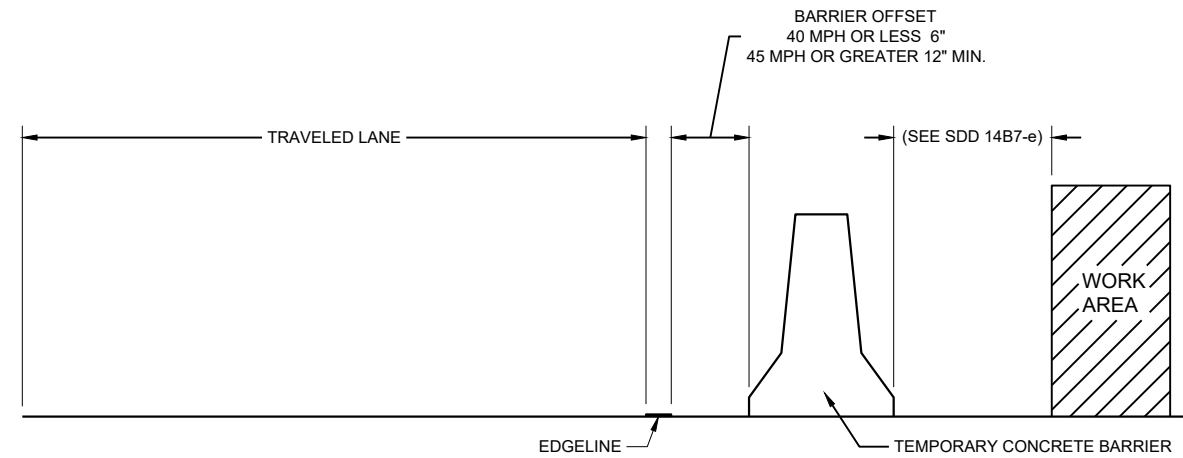
TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA



TEMPORARY BARRIER OFFSET FROM EDGELINE

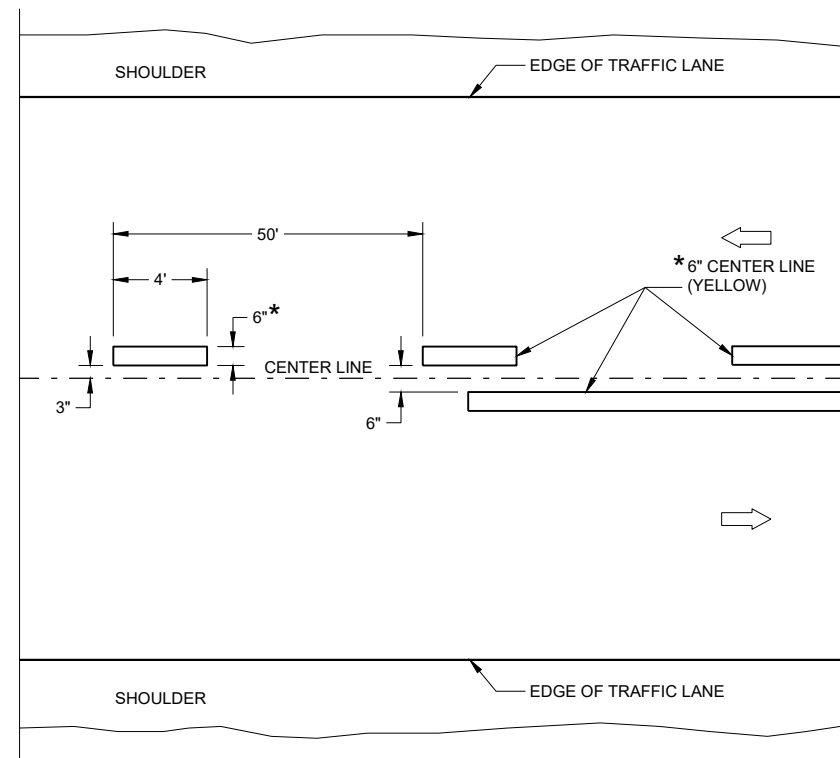
GENERAL NOTES

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

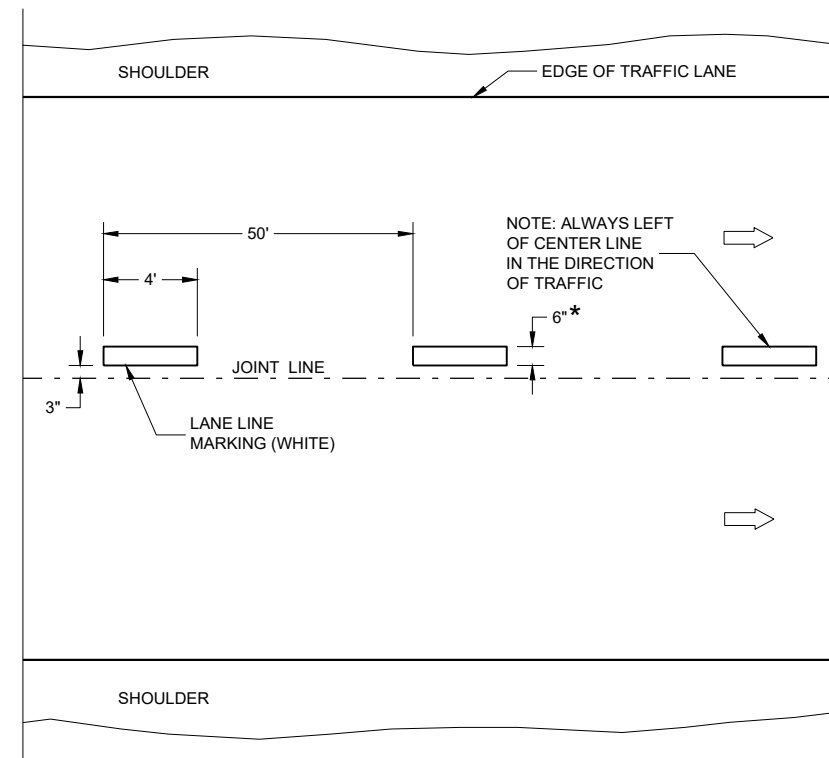
LEGEND

➡ DIRECTION OF TRAFFIC

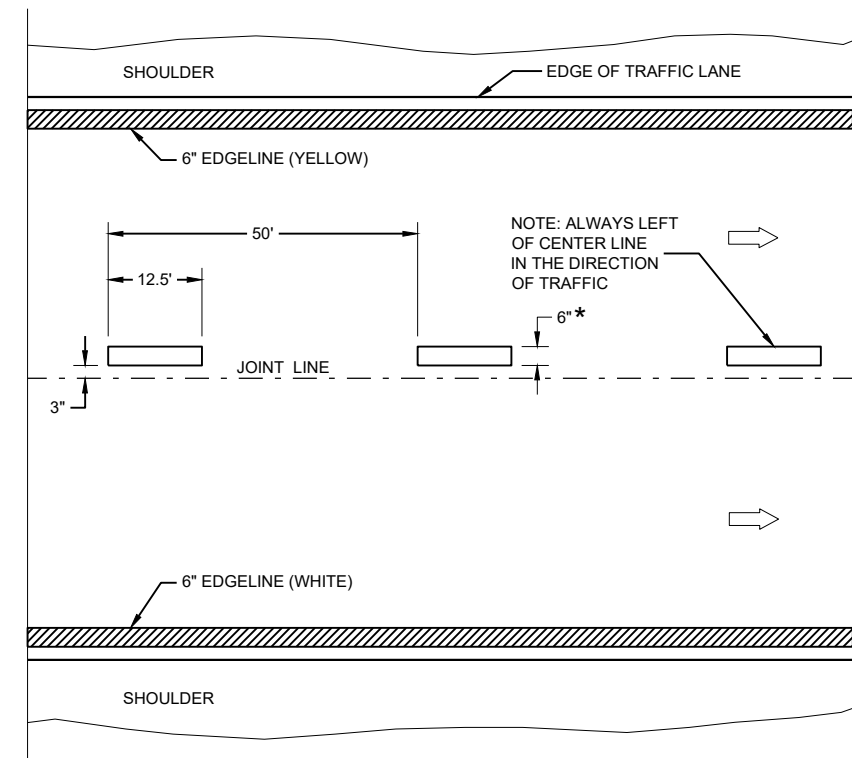
* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

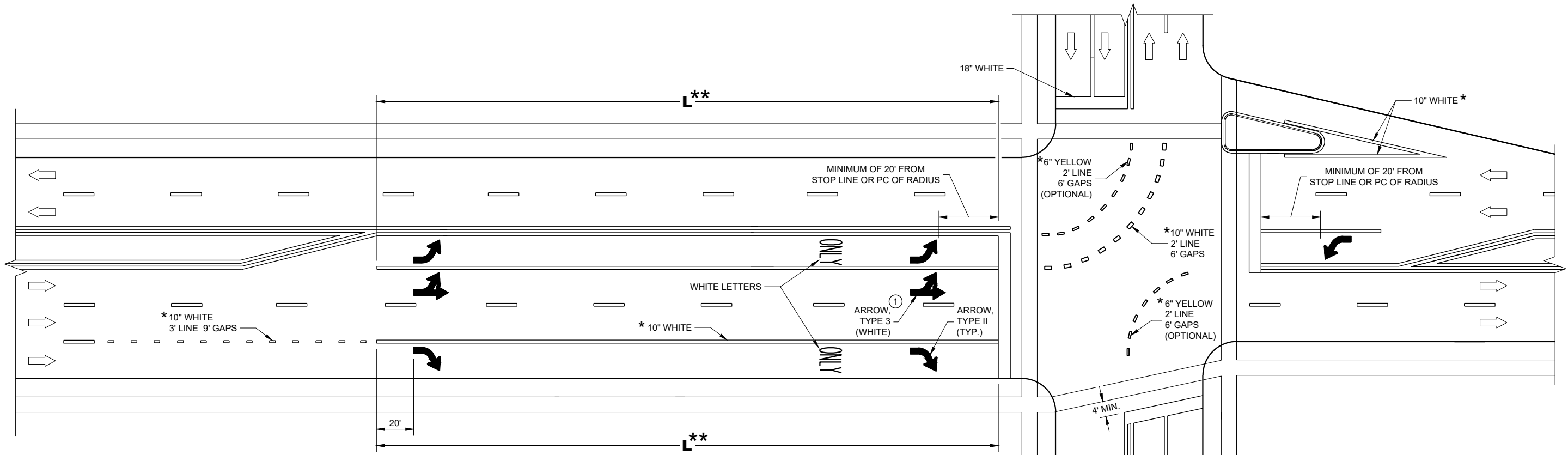
TEMPORARY PAVEMENT MARKING

TEMPORARY LONGITUDINAL PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

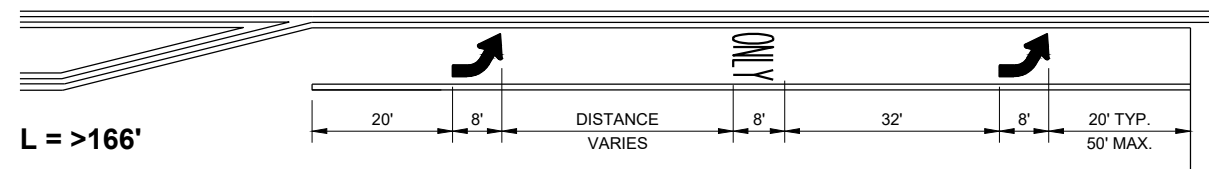
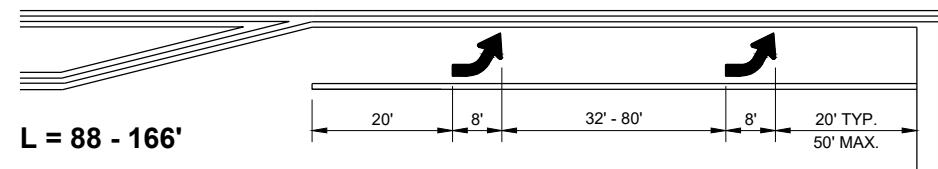
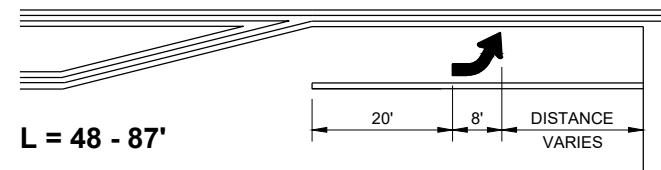
APPROVED
May 2023 /S/ Jeannie Silver
DATE STATEWIDE SIGNING AND MARKING ENGINEER

FHWA



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.

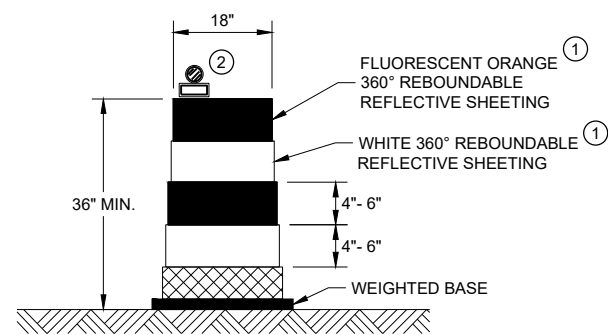
➡ DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

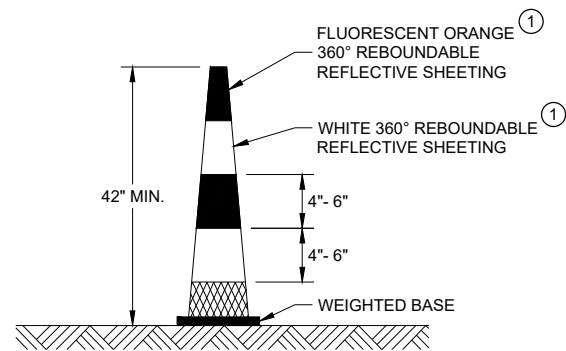
PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



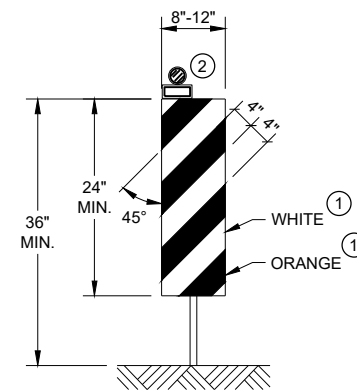
DRUM

BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

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

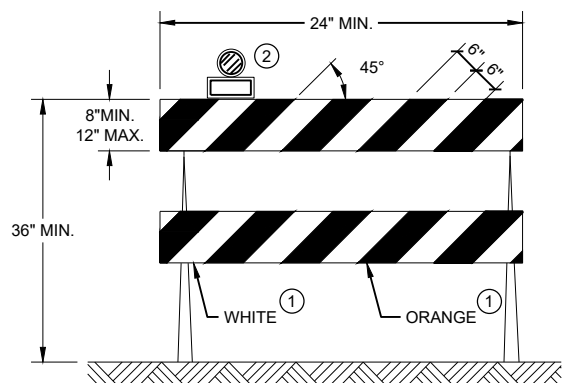


VERTICAL PANEL

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

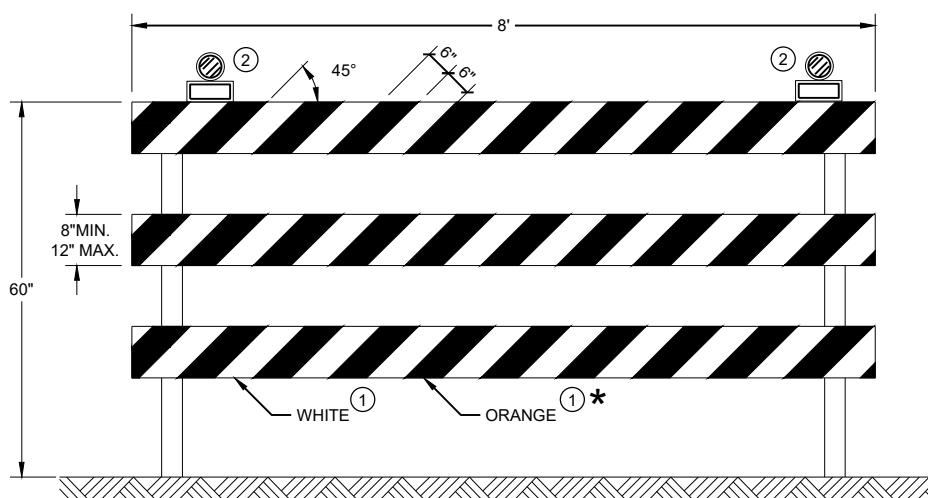
GENERAL NOTES

- 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	/S/ Andrew Heidtke
November 2022	DATE
	WORK ZONE ENGINEER
FHWA	

LEGEND

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

GENERAL NOTES

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

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

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

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

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

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

FLAGGING

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

- 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.

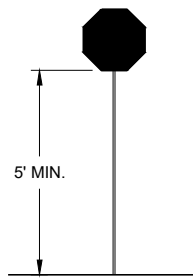
- ③ EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

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.



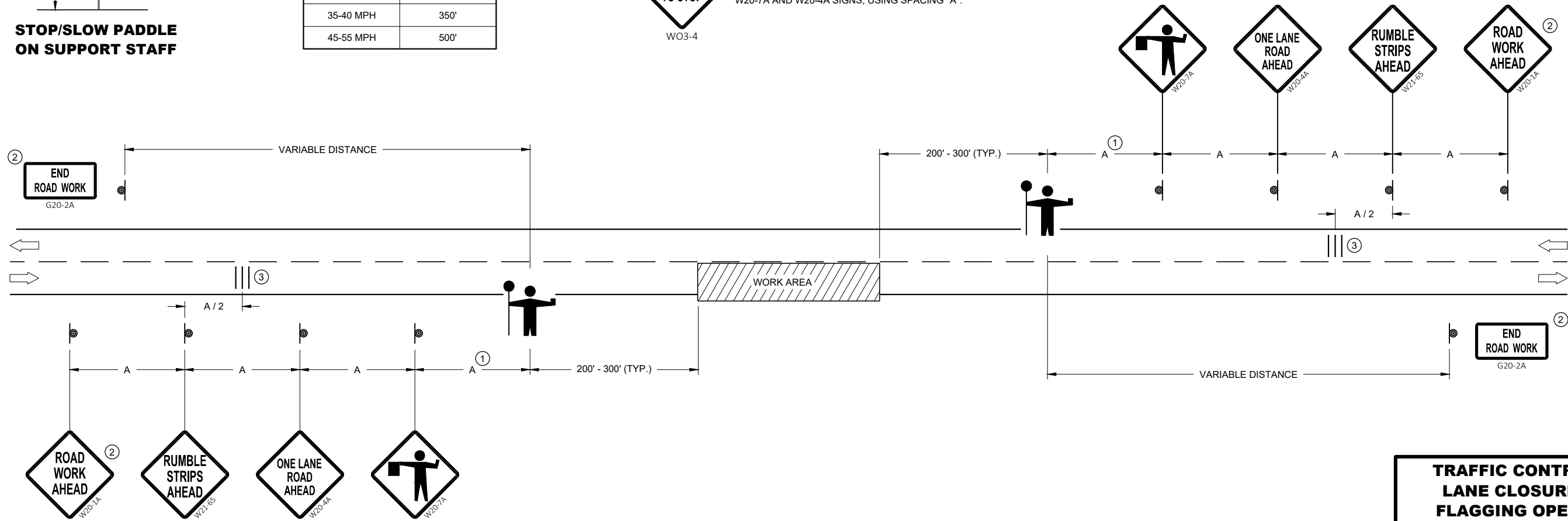
STOP/SLOW PADDLE ON SUPPORT STAFF

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".










TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
DATE May 2022 /S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

GENERAL NOTES

-  SIGN ON PERMANENT SUPPORT
-  TRAFFIC CONTROL CONE 42-INCH
-  TRAFFIC CONTROL DRUM
-  TEMPORARY PORTABLE RUMBLE STRIP ARRAY
-  DIRECTION OF TRAFFIC
-  WORK AREA
-  **AFAD** AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD)

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

IF THE AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD) STOPS WORKING, 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.

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.

- ① SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.
- ② IF FLAGGERS ARE PHYSICALLY NEEDED TO FLAG, REPLACE WO3-4 SIGNS WITH W20-7A SIGNS.

TEMPORARY PORTABLE RUMBLE STRIPS

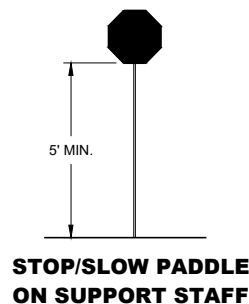
UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

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

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

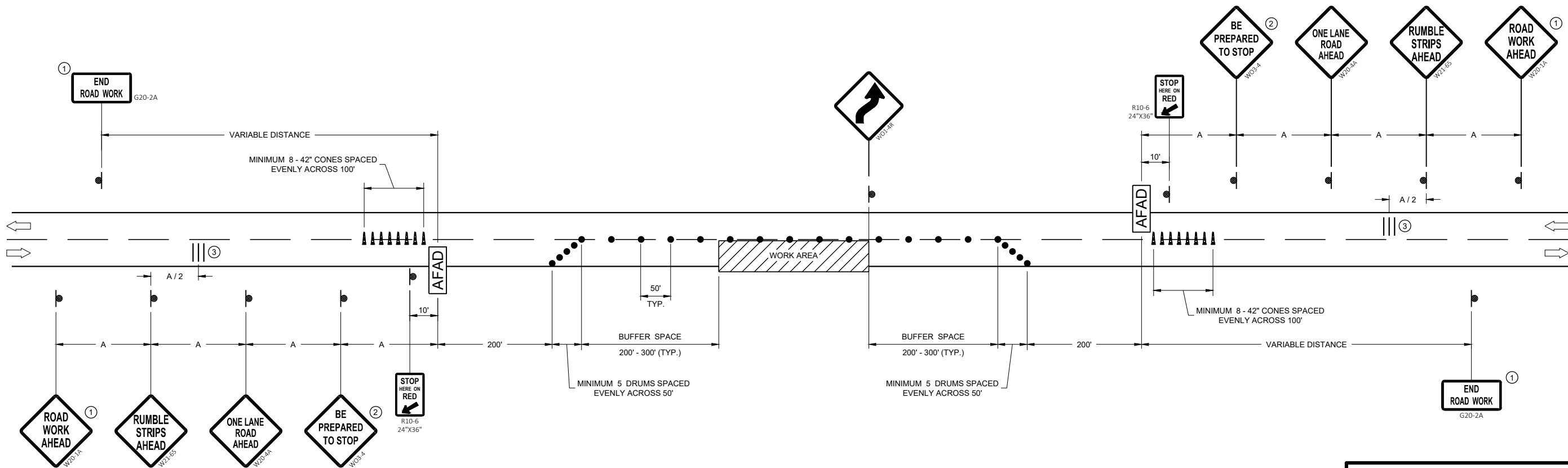
DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.

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



SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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







TRAFFIC CONTROL, LANE CLOSURE WITH AUTOMATED FLAGGER ASSISTANCE DEVICE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

LEGEND

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

GENERAL NOTES

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

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

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

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

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

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

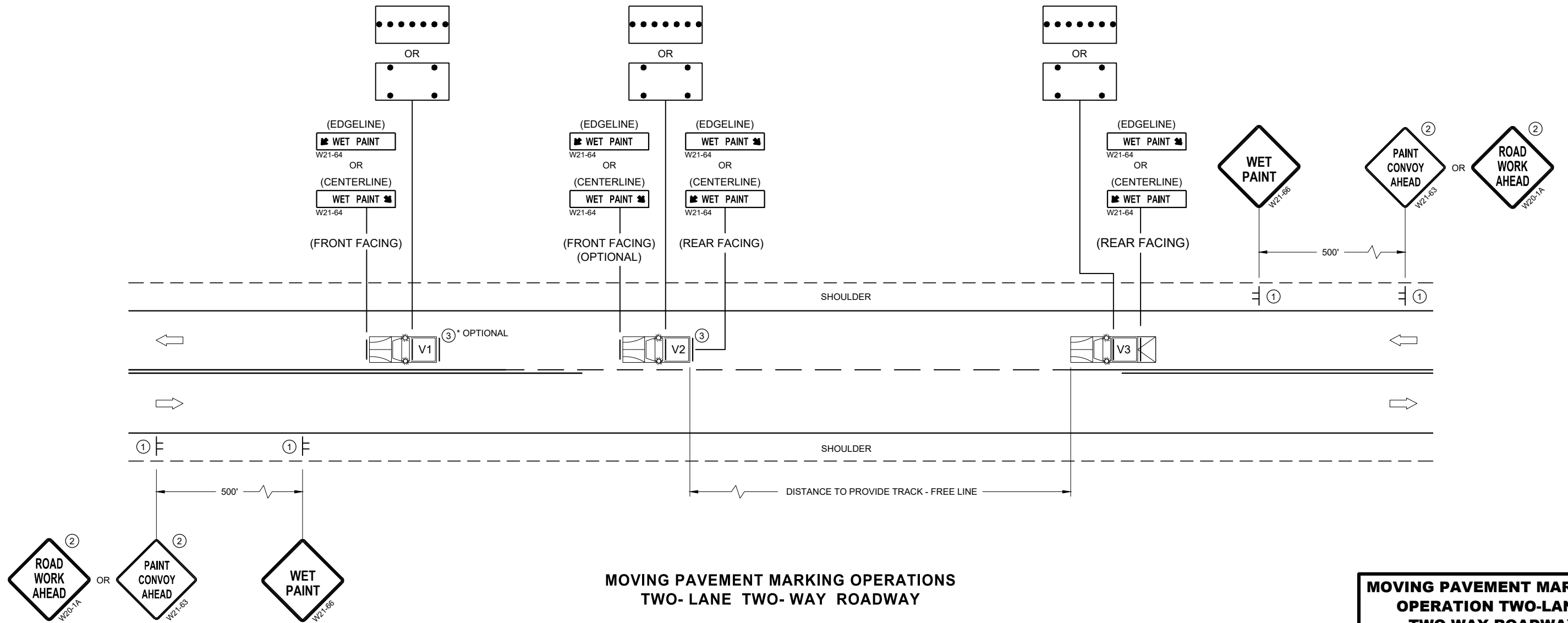
CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL BE A MINIMUM OF 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.

6

6








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

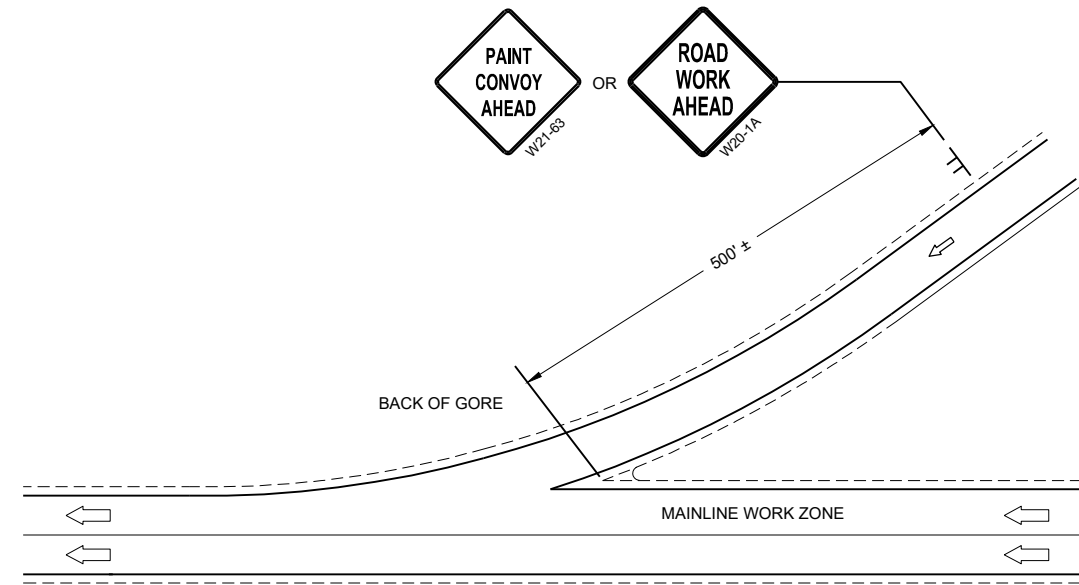
SDD 15C19-08a

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 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)



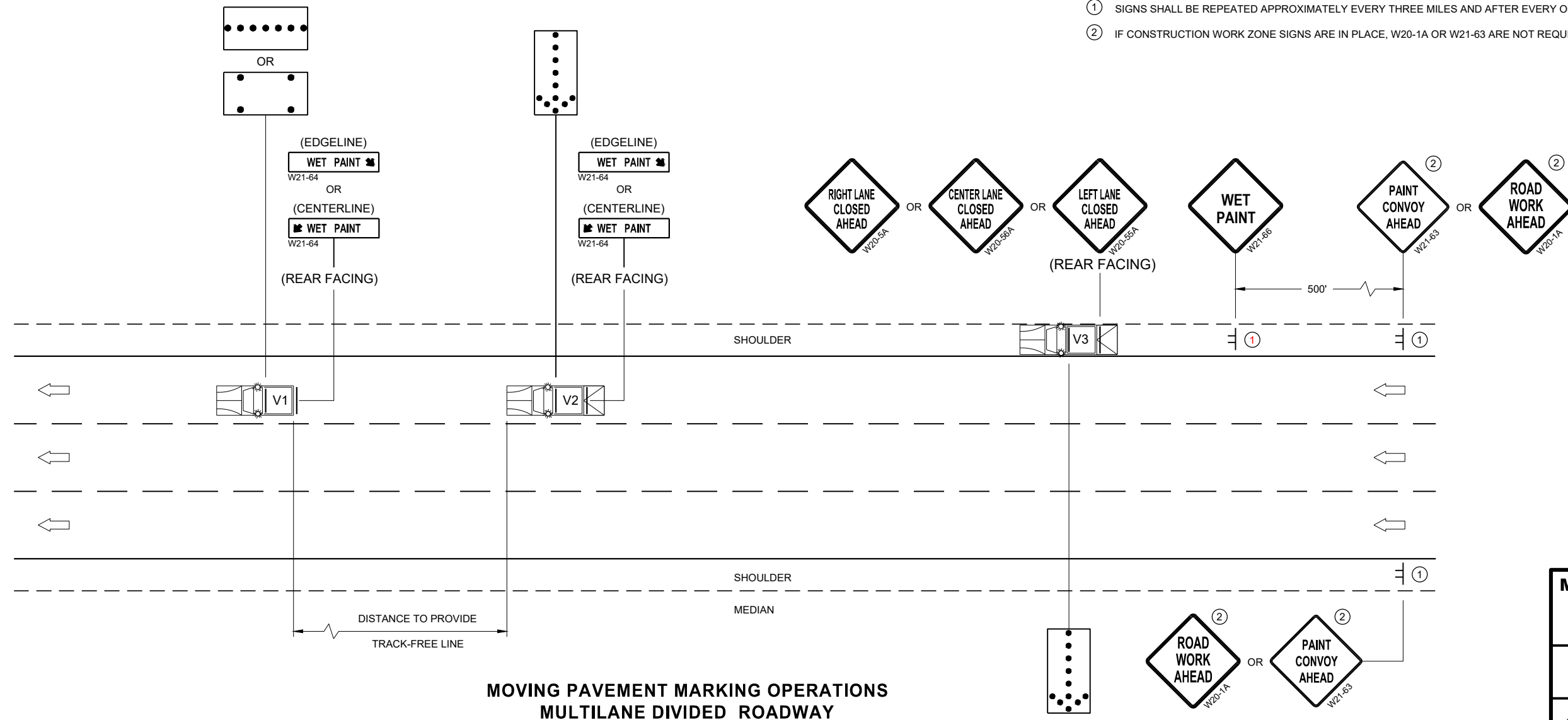
GENERAL NOTES

- 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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SDD 15C19-08c

SDD 15C19-08c

**MOVING PAVEMENT MARKING OPERATIONS
MULTILANE DIVIDED ROADWAY**

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

GENERAL NOTES

SIGNING AND MARKING IS SHOWN AS TYPICAL PLACEMENT. FIELD CONDITIONS MAY DICTATE CHANGES IN SIGNING AND MARKING PLACEMENT.

① USED ONLY WHEN APPROVED BY REGION TRAFFIC ENGINEER.

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

** SIGNS MAY BE OMITTED IF SPACE DOES NOT PERMIT PLACEMENT.

*** IF POSTED SPEED IS 45 MPH OR GREATER, PLACE W5-54 SIGN UNDER R4-7 SIGN. MOUNT W5-54 SIGN AT 4' MOUNTING HEIGHT (TOP OF ROADWAY TO BOTTOM OF SIGN).

LEGEND

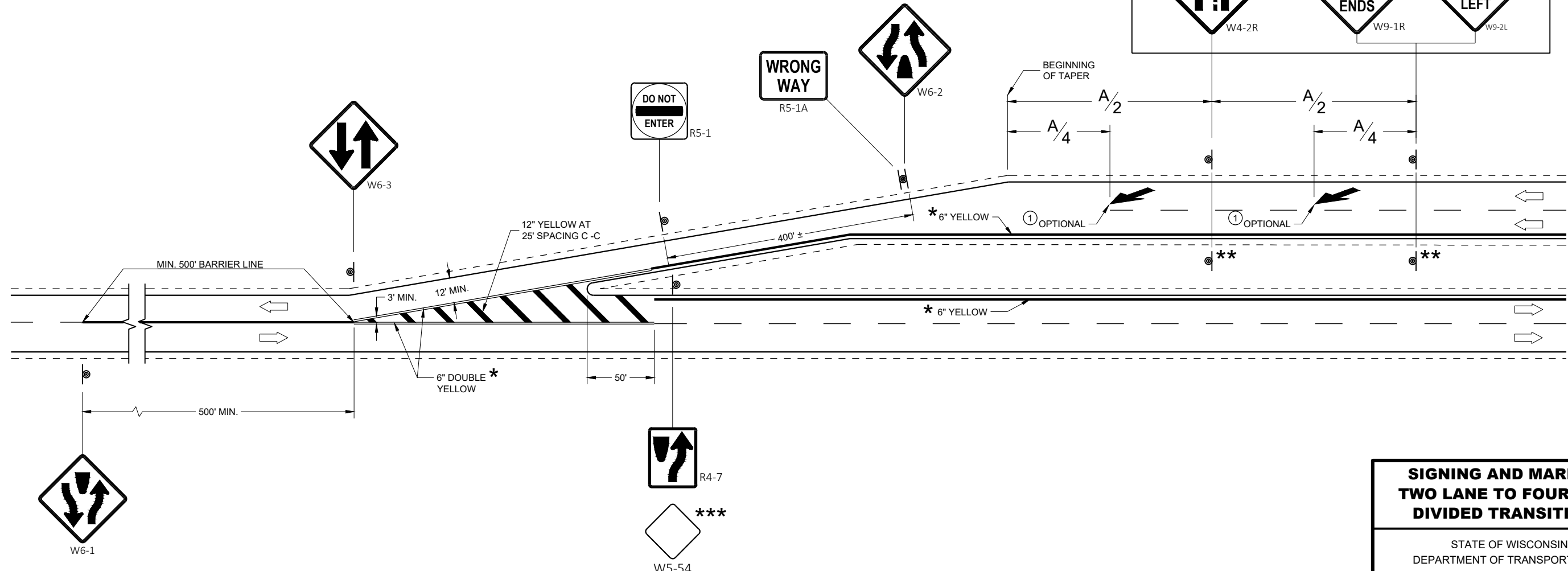
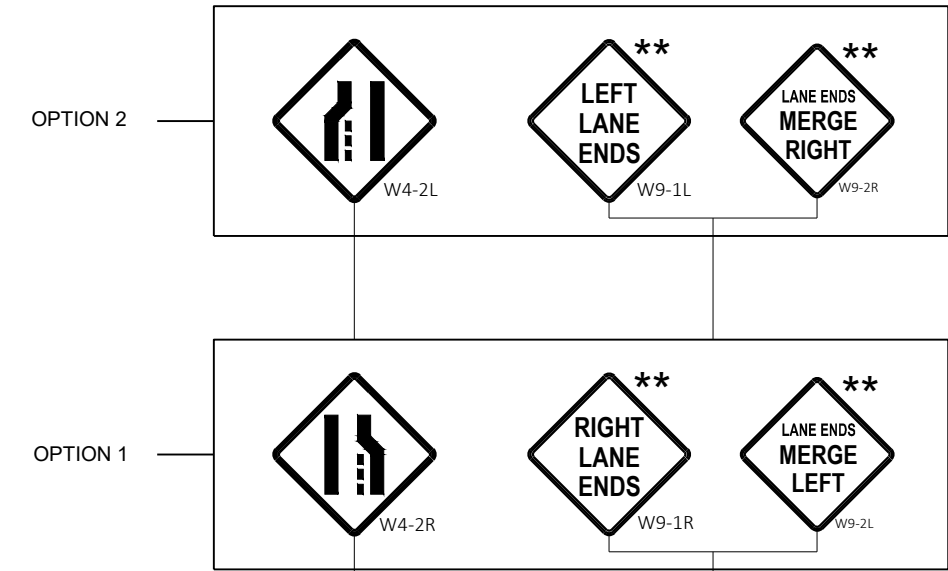
A DISTANCE DEPENDENT ON SPEED (SEE TABLE)

⊙ SIGN MOUNTED ON PERMANENT SUPPORT

➡ DIRECTION OF TRAFFIC

DISTANCE TABLE

POSTED OR 85TH PERCENTILE SPEED	DISTANCE "A"
25	325'
30	460'
35	565'
40	670'
45	775'
50	885'
55	990'
65	1200'
70	1250'



**SIGNING AND MARKING
TWO LANE TO FOUR LANE
DIVIDED TRANSITIONS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

6

6

SDD 15C21-11

SDD 15C21-11

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.

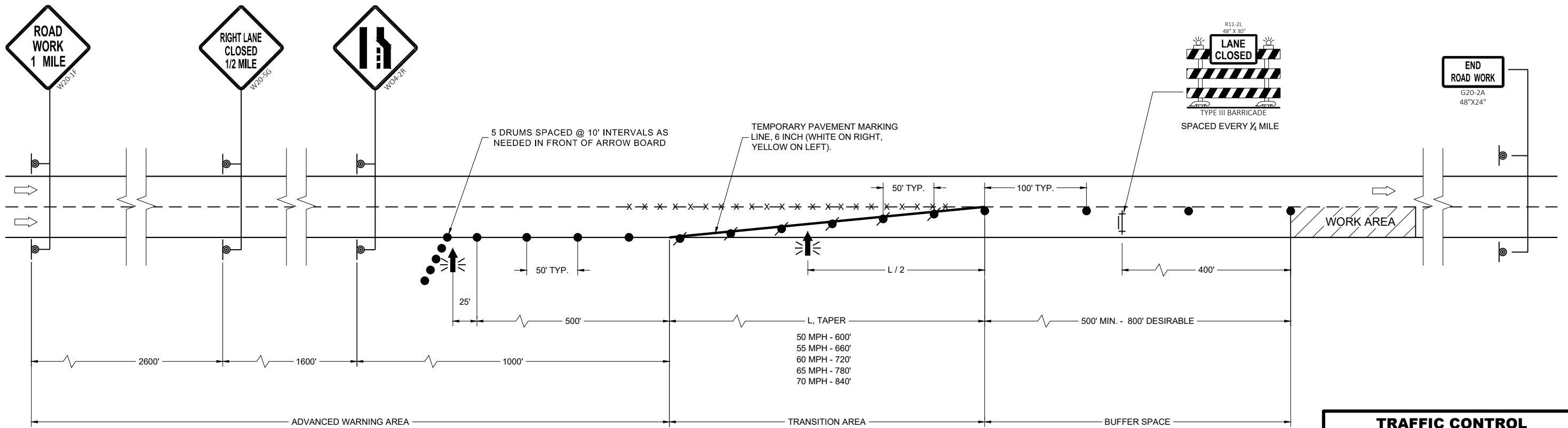
CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

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

6

SDD 15D12-12a












6

SDD 15D12-12a

TRAFFIC CONTROL LANE CLOSURE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED September 2023 DATE	/s/ Andrew Heidtke ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

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"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.

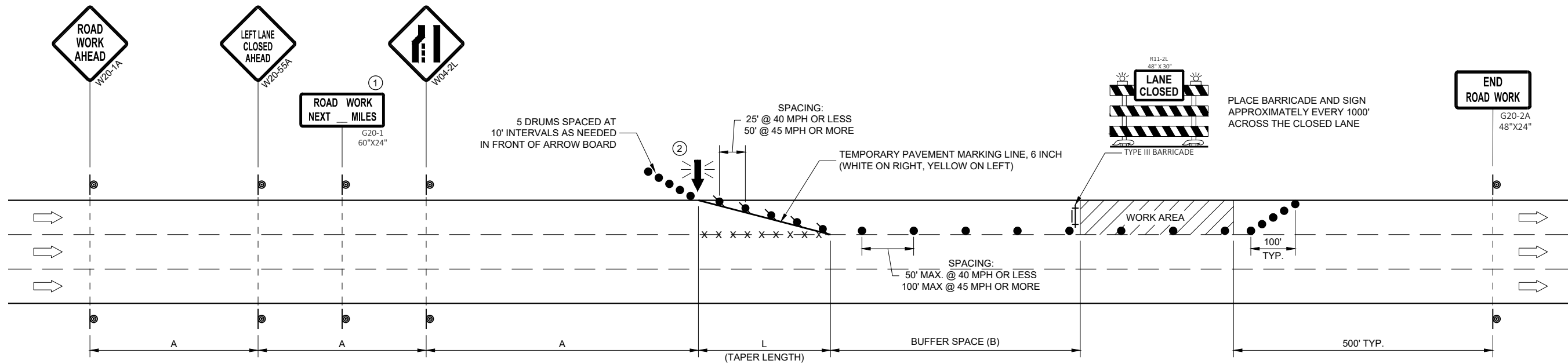
CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

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.
- 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.



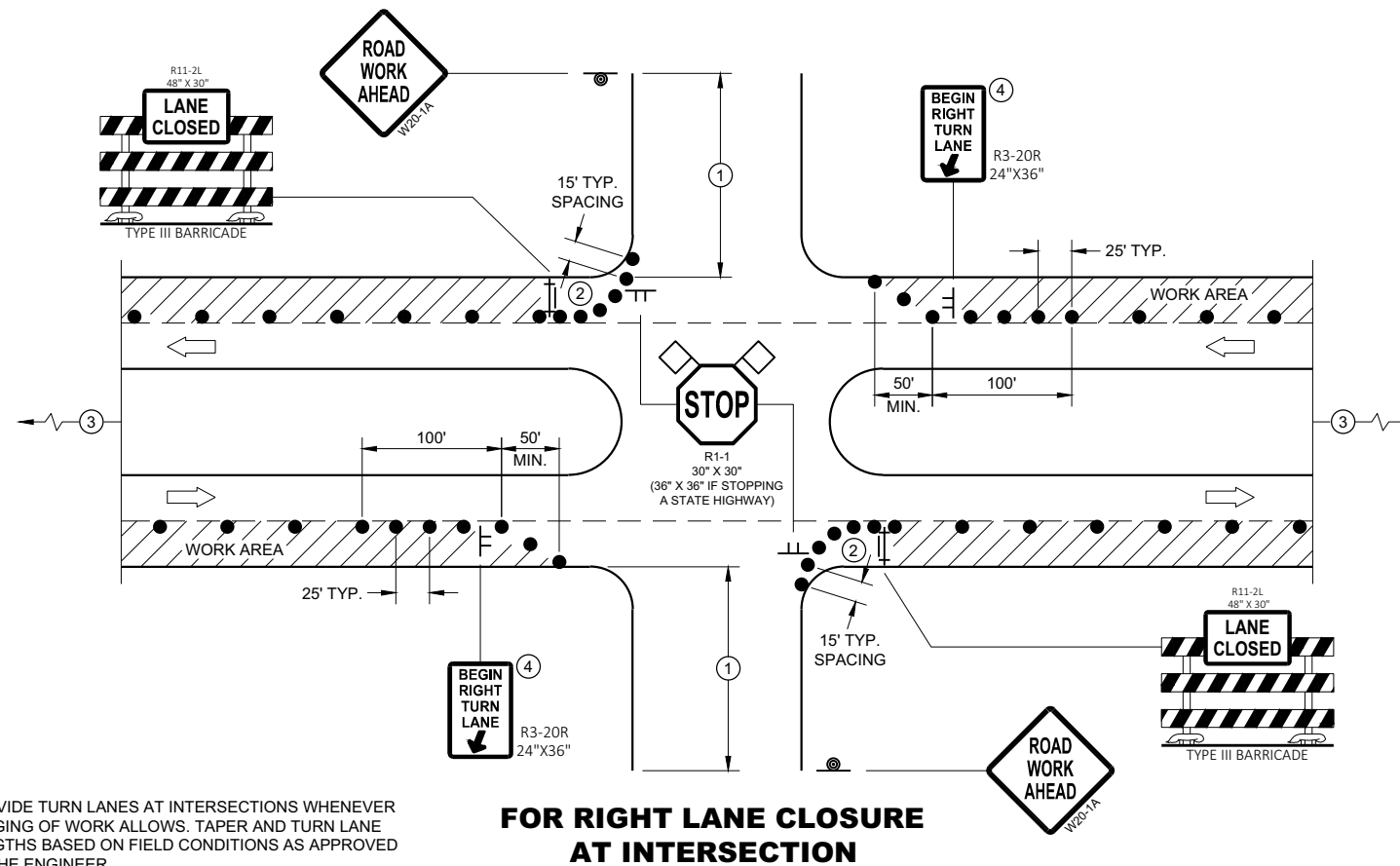
POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'

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



PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT 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.

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

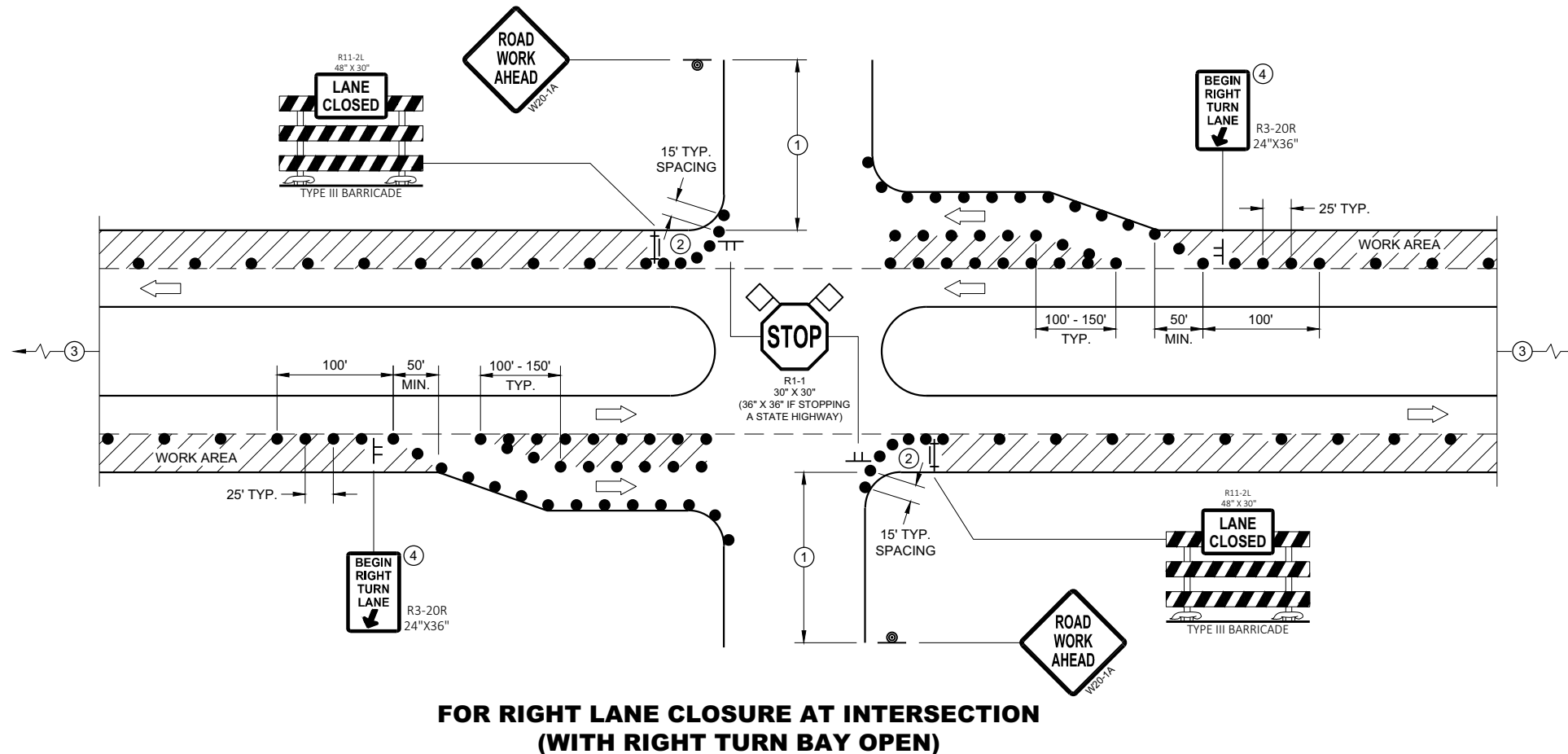
SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

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

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.

- ① 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.
- ② ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS
- ③ SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.
- ④ MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.

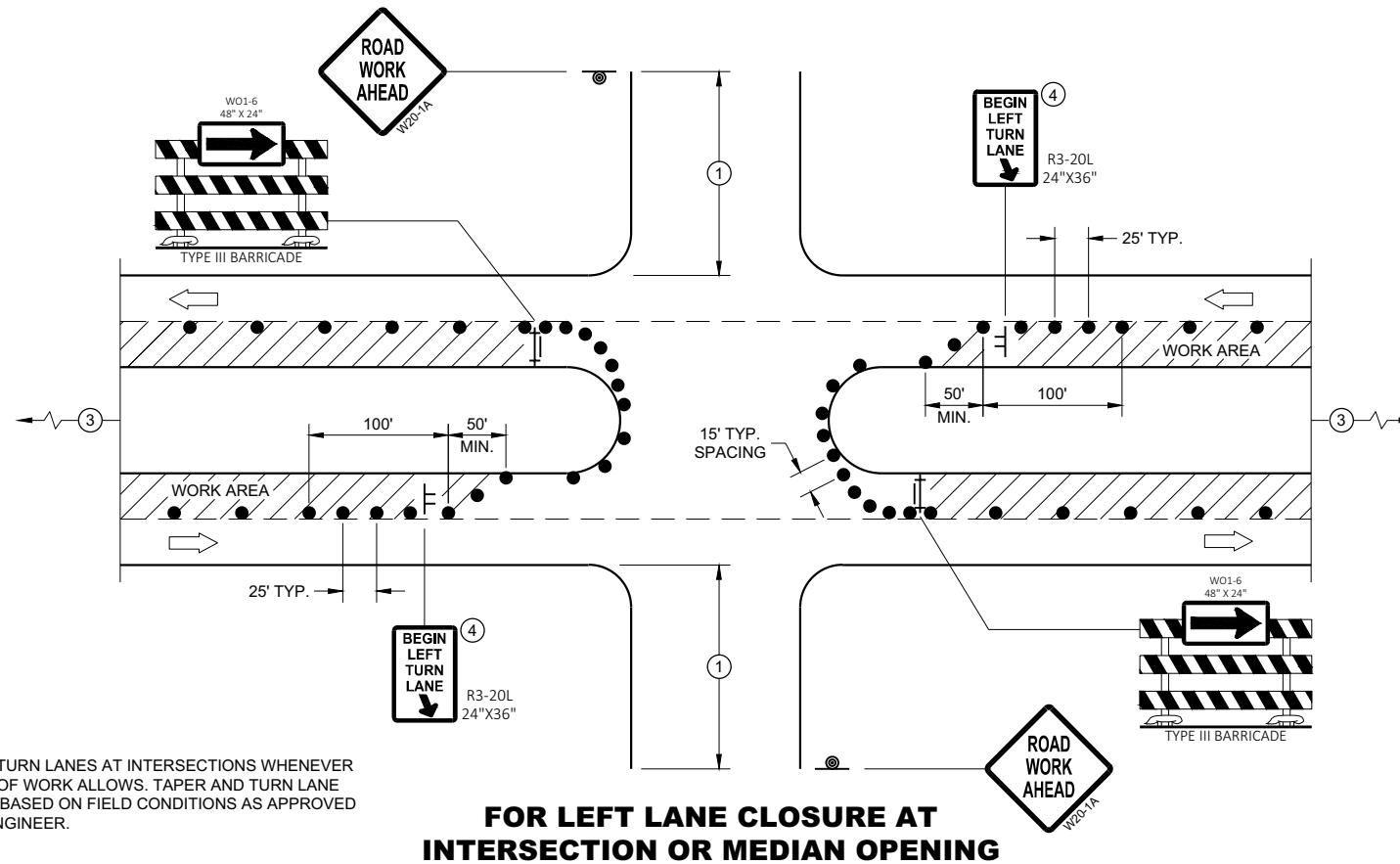


LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

**TRAFFIC CONTROL,
INTERSECTION WITHIN SINGLE
RIGHT LANE CLOSURE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT 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.

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

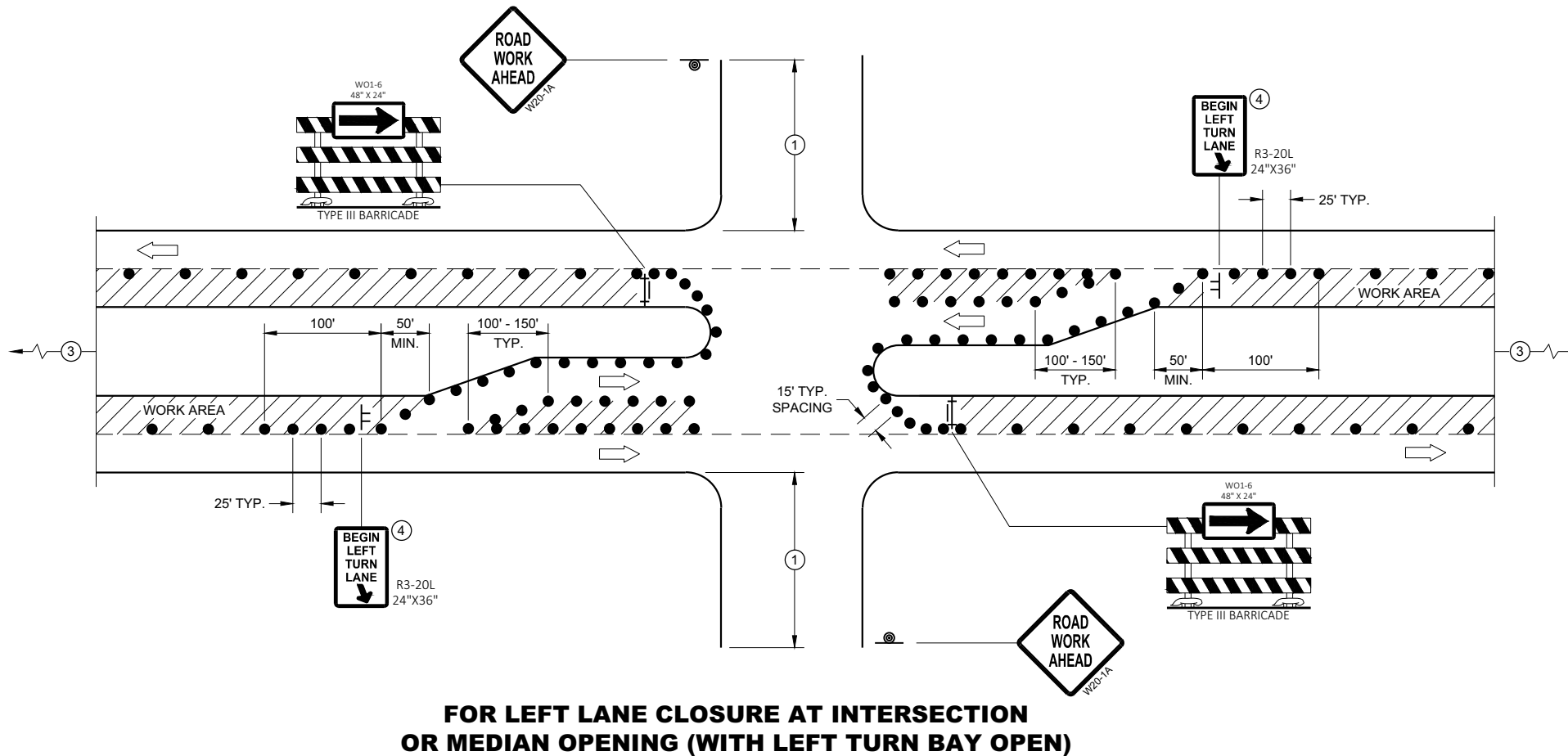
SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

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

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.

- ① 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.
- ② ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS
- ③ SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.
- ④ MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.



FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

**TRAFFIC CONTROL,
INTERSECTION WITHIN SINGLE
LEFT LANE CLOSURE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

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.

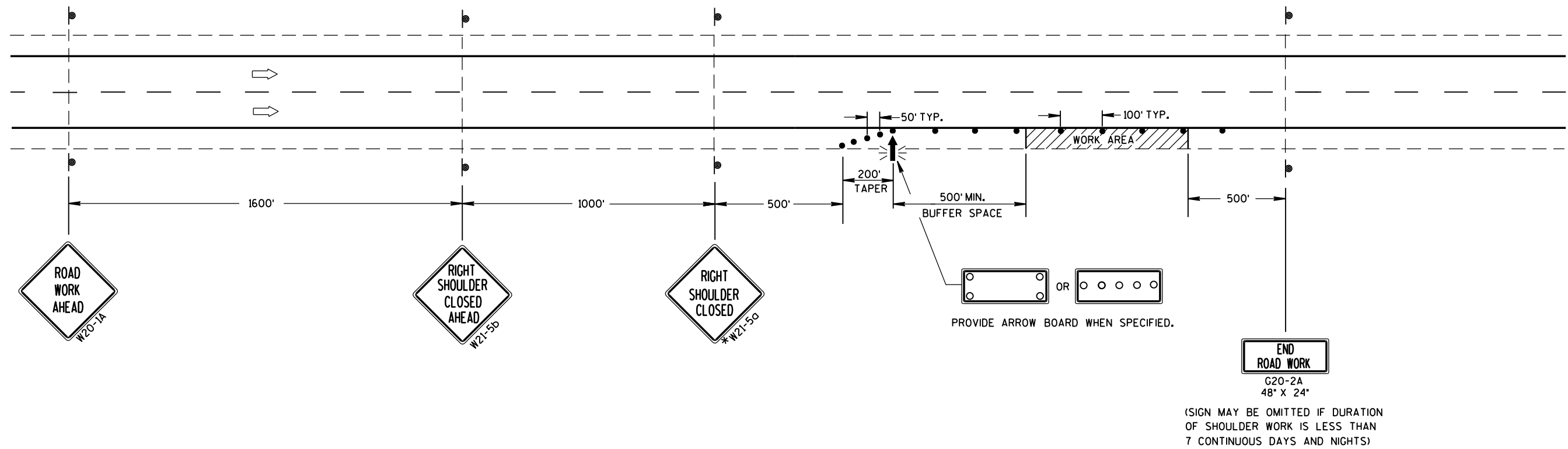
CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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
-  DIRECTION OF TRAFFIC
-  WORK ZONE

GENERAL NOTES

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 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.

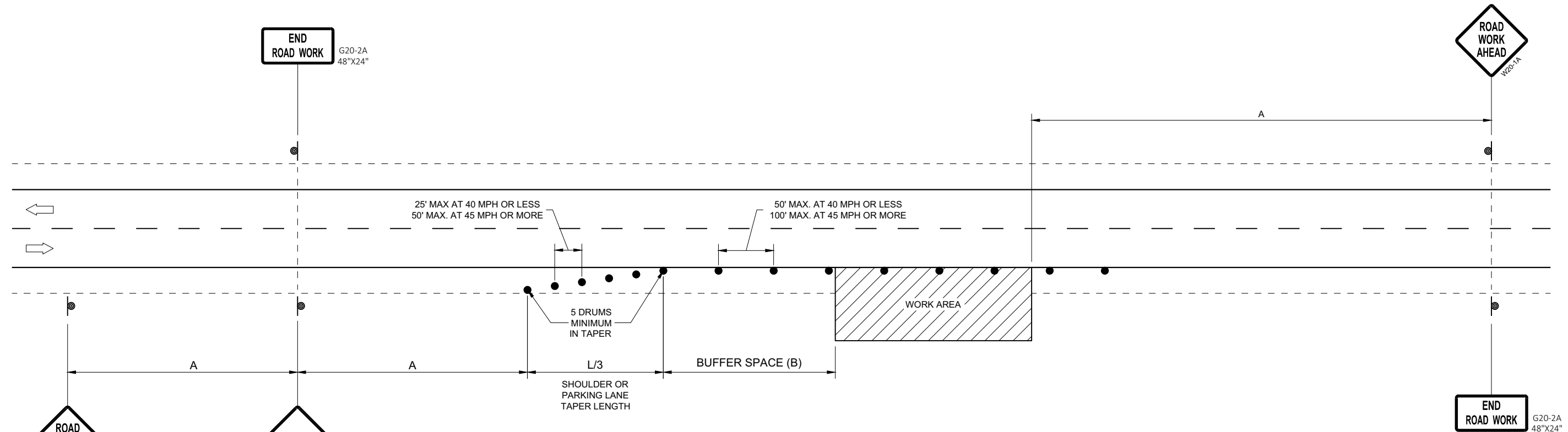
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

W20-1A 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 OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.

6

6



OR
IF TRAFFIC CONTROL DEVICES
ENCROACH ONTO TRAVELED WAY, USE

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHOULDER TAPER L / 3 W, LATERAL OFFSET (FT)						BUFFER SPACE (B) FEET
		3	4	5	6	7	8	
25	200'	10	14	17	21	24	28	55
30	200'	15	20	25	30	35	40	85
35	350'	20	27	34	40	47	54	120
40	350'	26	35	44	53	62	70	170
45	500'	45	59	74	89	104	119	220
50	500'	50	66	83	99	116	132	280
55	500'	54	73	91	109	127	145	335'

**TRAFFIC CONTROL, WORK ON
SHOULDER OR PARKING LANE,
UNDIVIDED ROADWAY**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

SDD 15D28 - 04

SDD 15D28 - 04

GENERAL NOTES

DRAWING NOT TO SCALE. ALL SIGNS AND POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS WHICH ARE UNDER CONSTRUCTION OF CURB AND GUTTER AND/OR GRADING SHALL BE ADEQUATELY SIGNED.

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

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

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



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

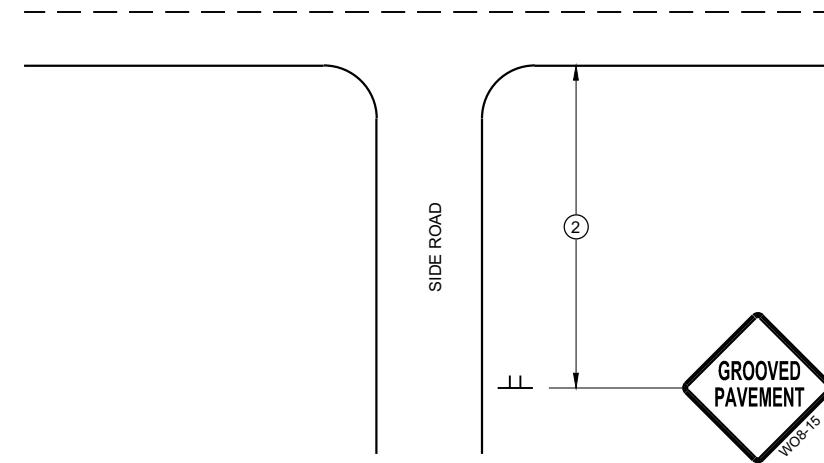
ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

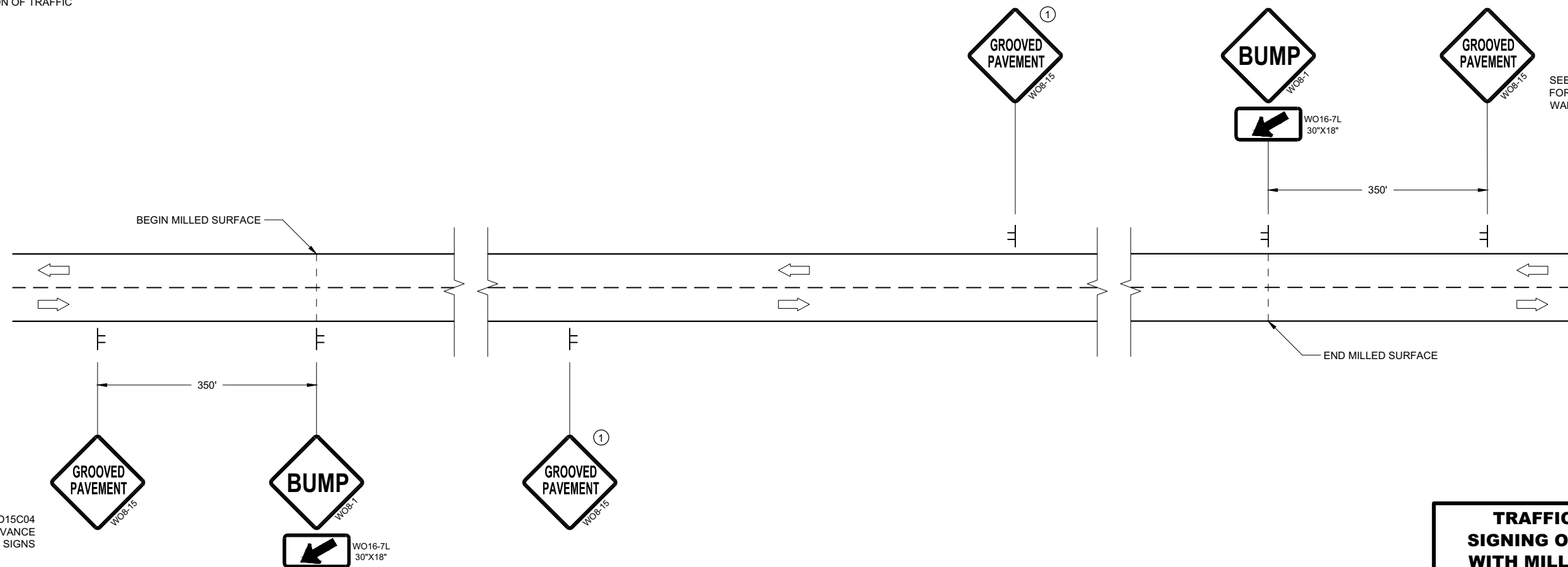
- ① PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.
- ② PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

LEGEND

-  SIGN ON TEMPORARY SUPPORT
-  DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON MILLED SURFACES

TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED February 2020 DATE	/s/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

GENERAL NOTES

DRAWING NOT TO SCALE. ALL SIGNS AND POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS WHICH ARE UNDER CONSTRUCTION OF CURB AND GUTTER AND/OR GRADING SHALL BE ADEQUATELY SIGNED.

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

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

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

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

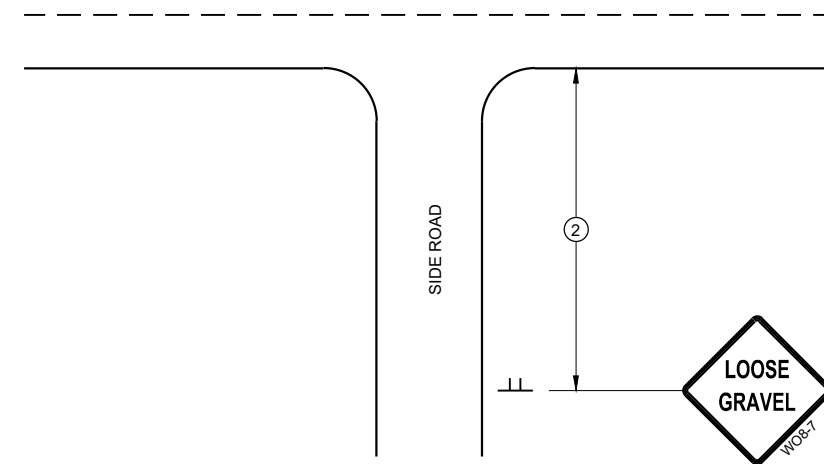
ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

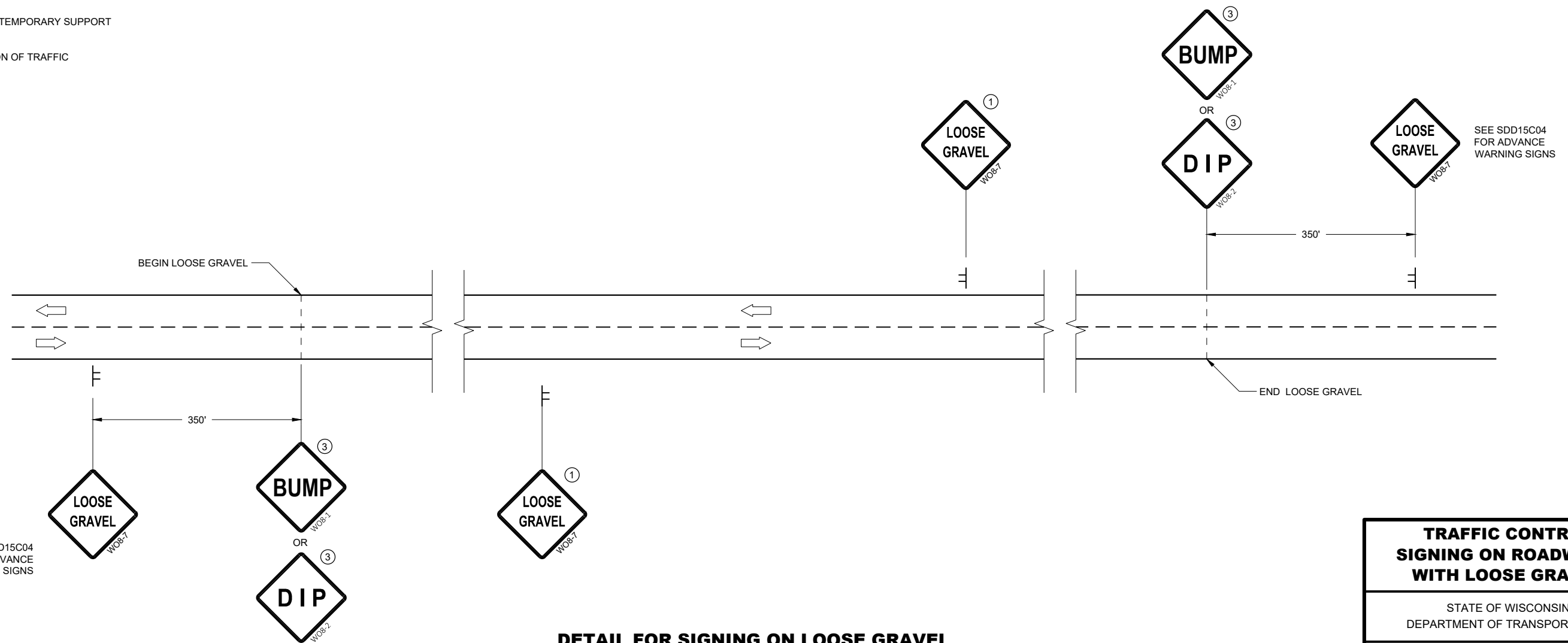
- ① PLACE SIGNS 350' IN ADVANCE OF CHIP SEALED OR LOOSE GRAVEL SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.
- ② PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.
- ③ ADD WO8-1 OR WO8-2 SIGN WHEN THE CONDITION IS PRESENT.

LEGEND

- ⊥ SIGN ON TEMPORARY SUPPORT
- ➡ DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON LOOSE GRAVEL OR CHIP SEALED SURFACES

SEE SDD15C04 FOR ADVANCE WARNING SIGNS

SEE SDD15C04 FOR ADVANCE WARNING SIGNS

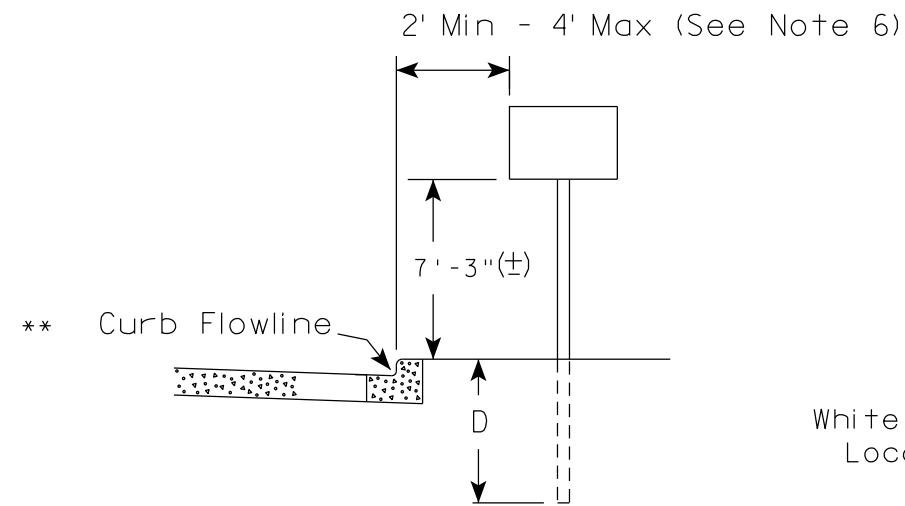
TRAFFIC CONTROL SIGNING ON ROADWAYS WITH LOOSE GRAVEL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

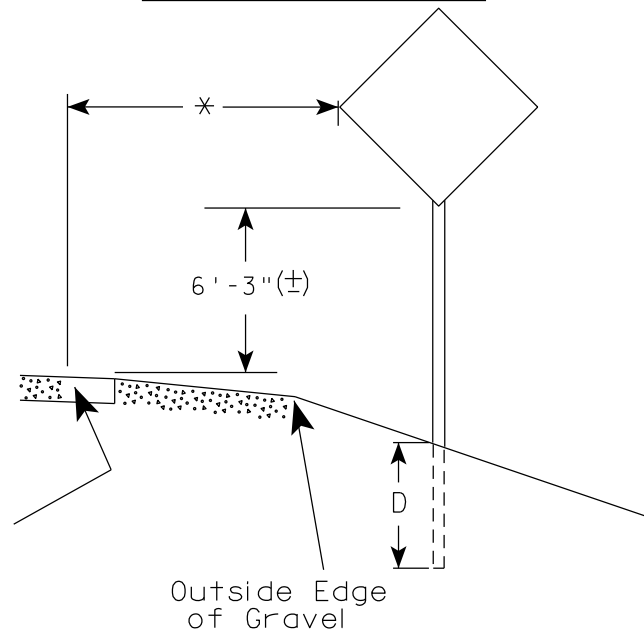
APPROVED
February 2021 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER
FHWA

URBAN AREA

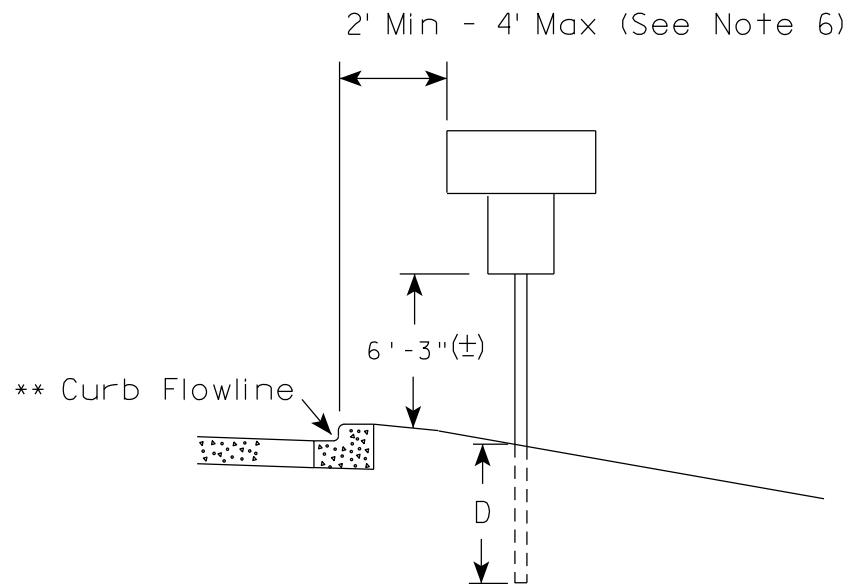
RURAL AREA (See Note 2)



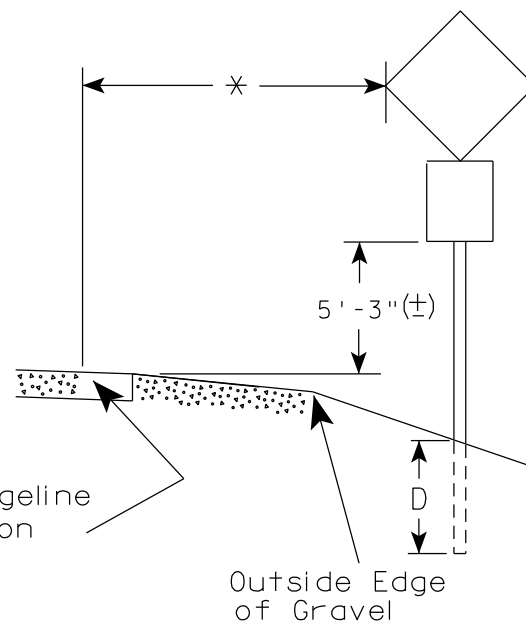
White Edgeline Location



Outside Edge of Gravel



White Edgeline Location



Outside Edge of Gravel

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.

7

7

* * The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/13/2020 PLATE NO. A4-3.22



ELEVATION VIEW

DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

- NOTES:**
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
 2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
 3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

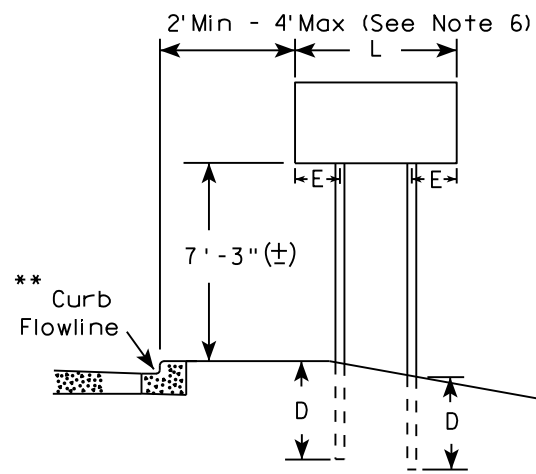
FOR NEW CONCRETE/ ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B	
<small>WISCONSIN DEPT OF TRANSPORTATION</small>	
APPROVED <i>Matthew R. Rauch</i> <small>for State Traffic Engineer</small>	
<small>DATE 1/27/14</small>	<small>PLATE NO. A4-3B.1</small>

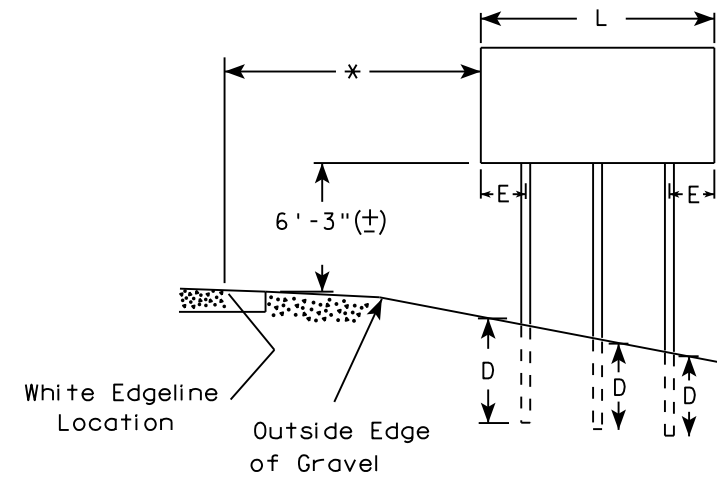
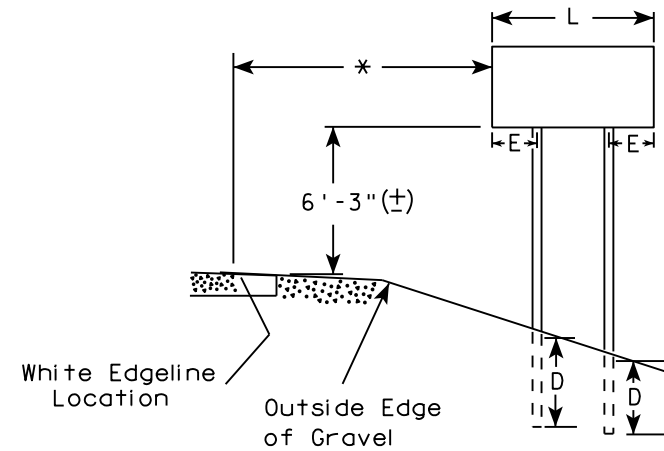
GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

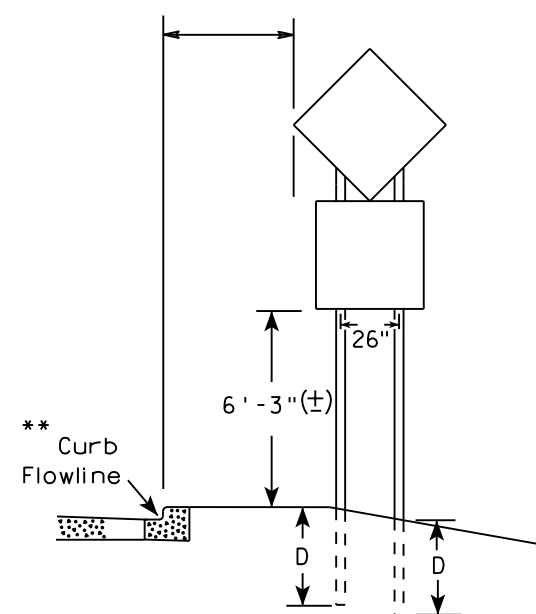
URBAN AREA



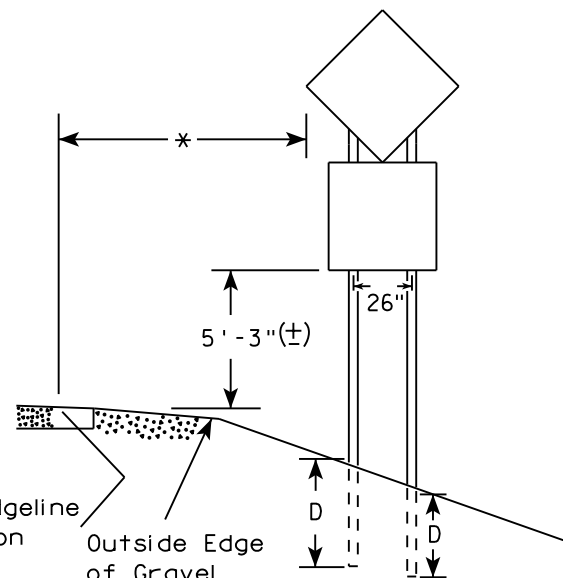
RURAL AREA (See Note 3)



2' Min - 4' Max (See Note 6)



48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 108"	L/5

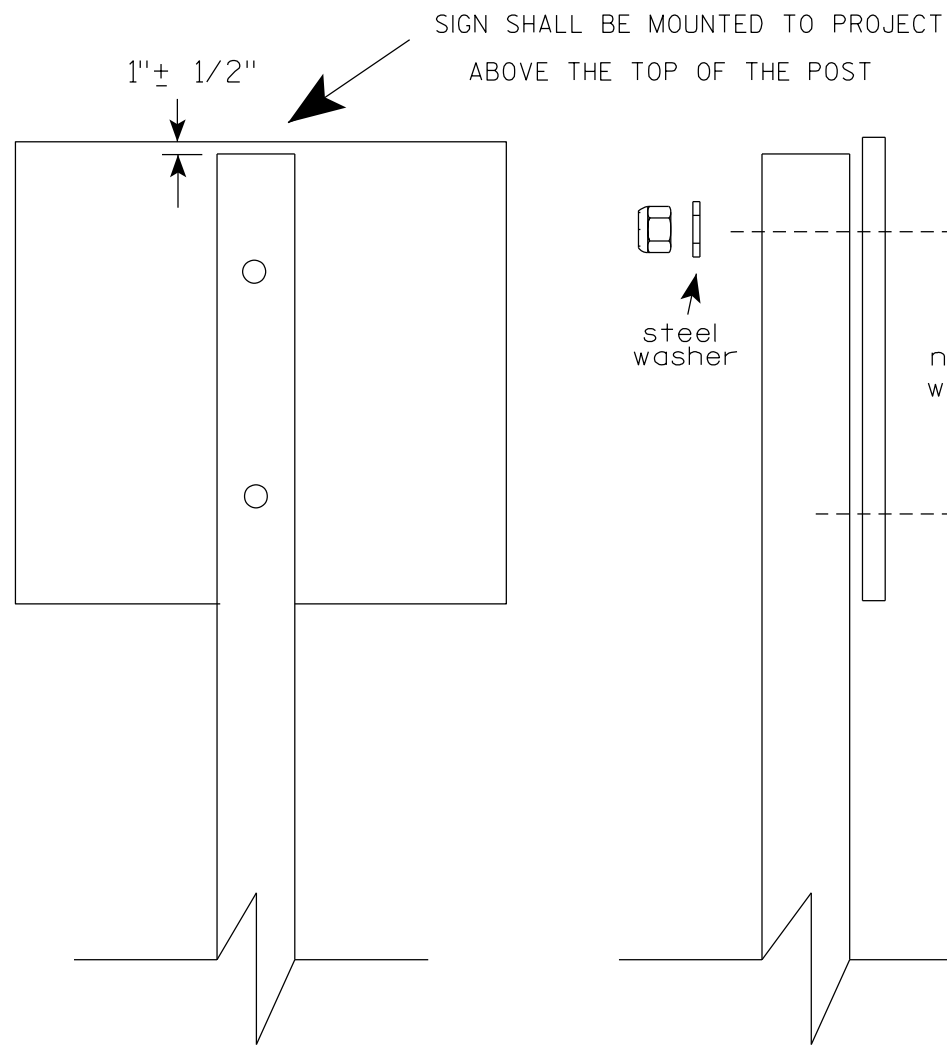
SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION
 APPROVED *Matthew R. Rauch*
 For State Traffic Engineer
 DATE 8/21/17 PLATE NO. A4-4.15



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

- a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
- b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL

1-1/4" O.D. X 3/8" I.D. X .080 NYLON

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS
TO POSTS

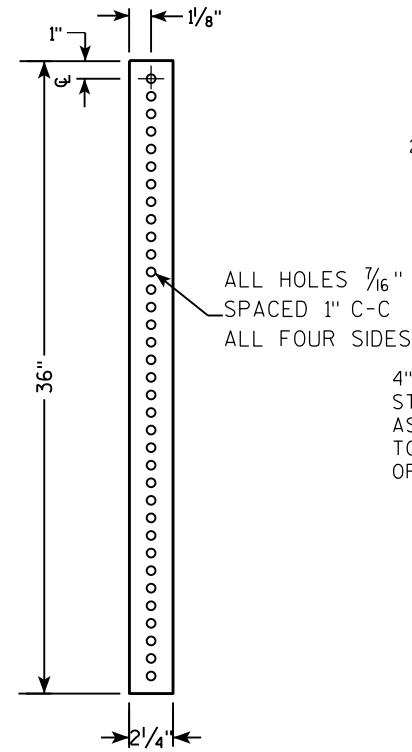
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R Rauch*
For State Traffic Engineer

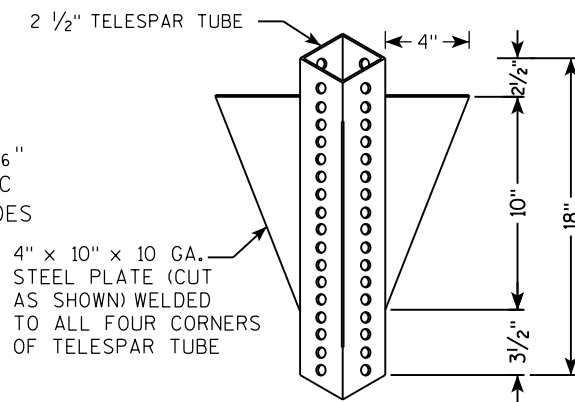
DATE 4/1/2020 PLATE NO. A4-8.9

**TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM**

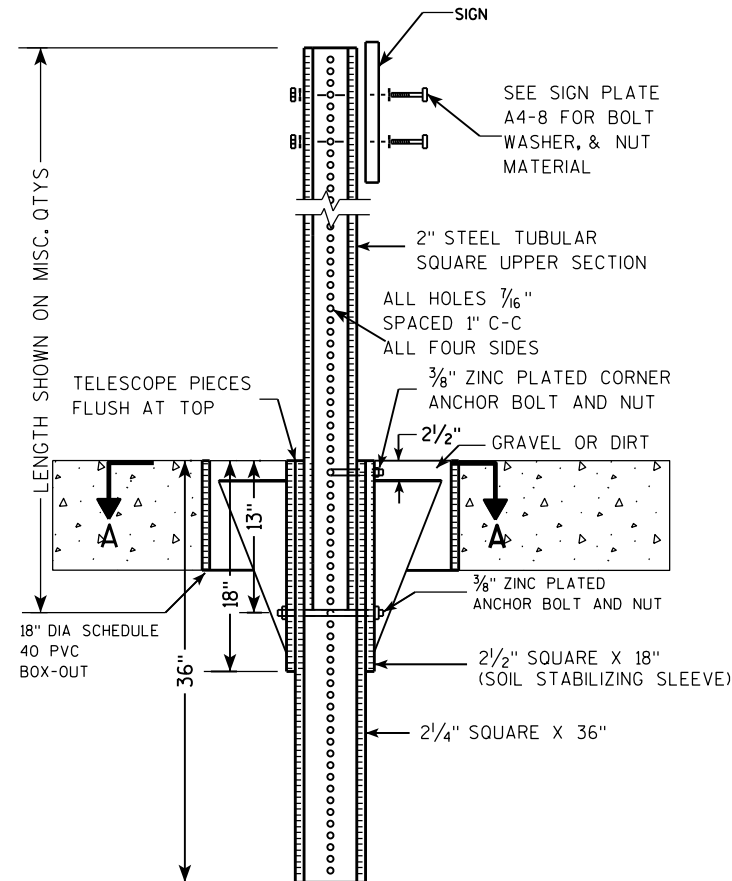
2 1/4" SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



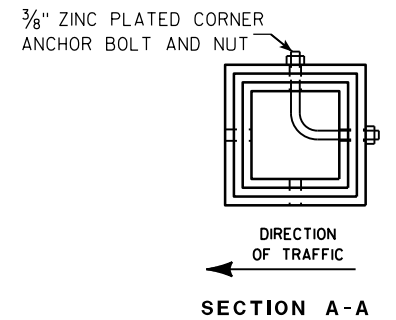
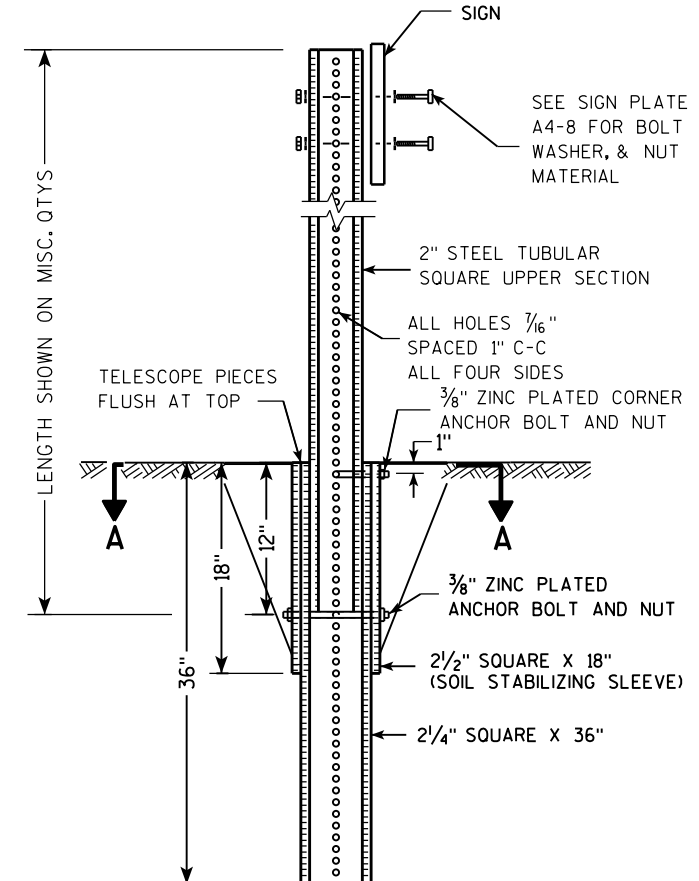
2 1/2" SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH



**DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)**



**DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)**



Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

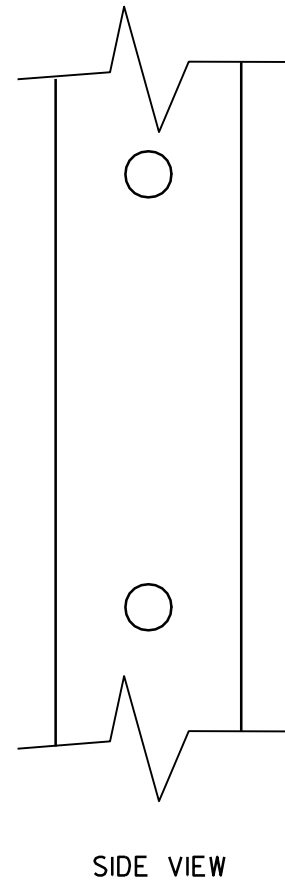
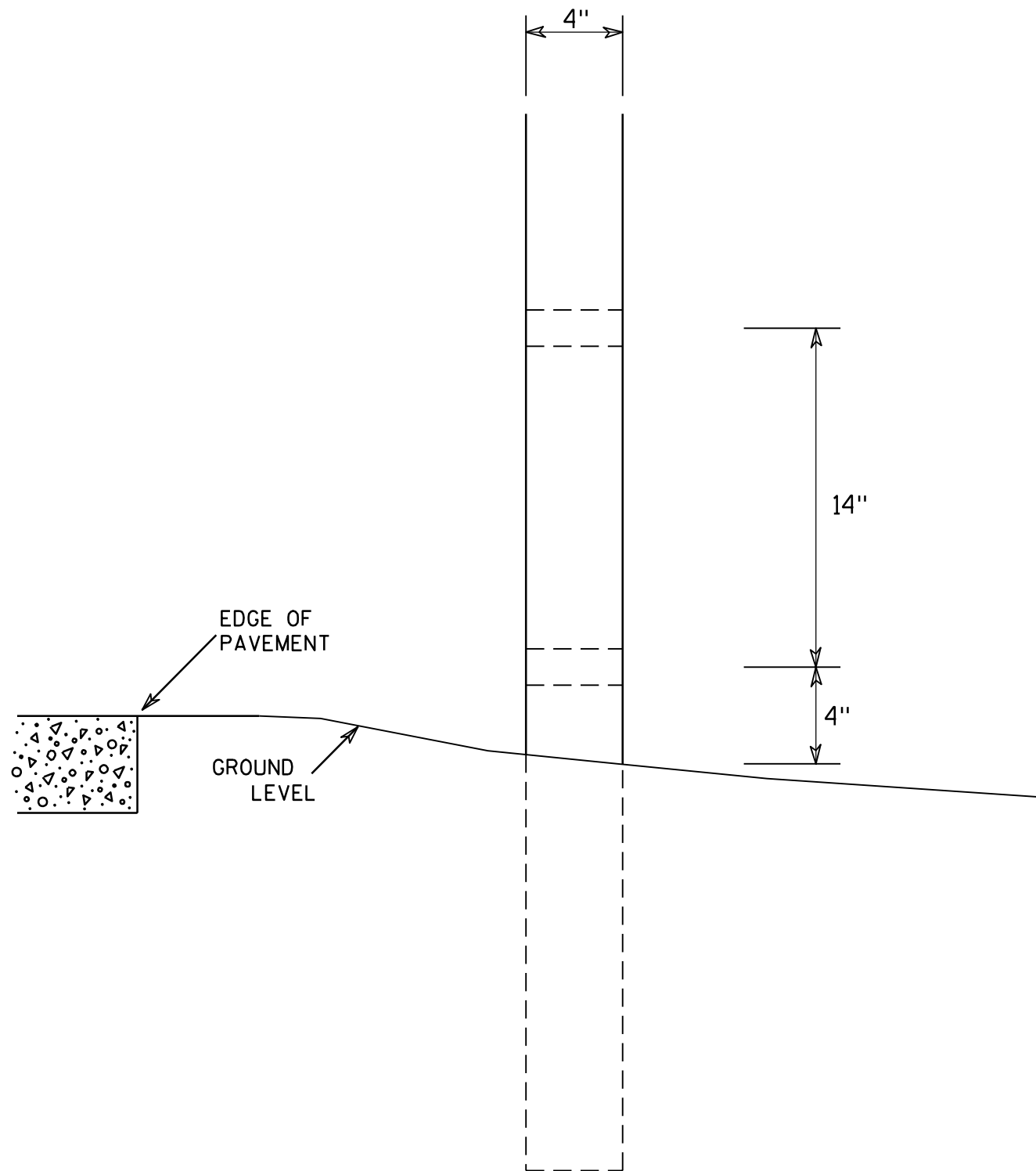
Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

**TUBULAR STEEL
SIGN POST
A4-9**

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/05/15 PLATE NO. A4-9.9



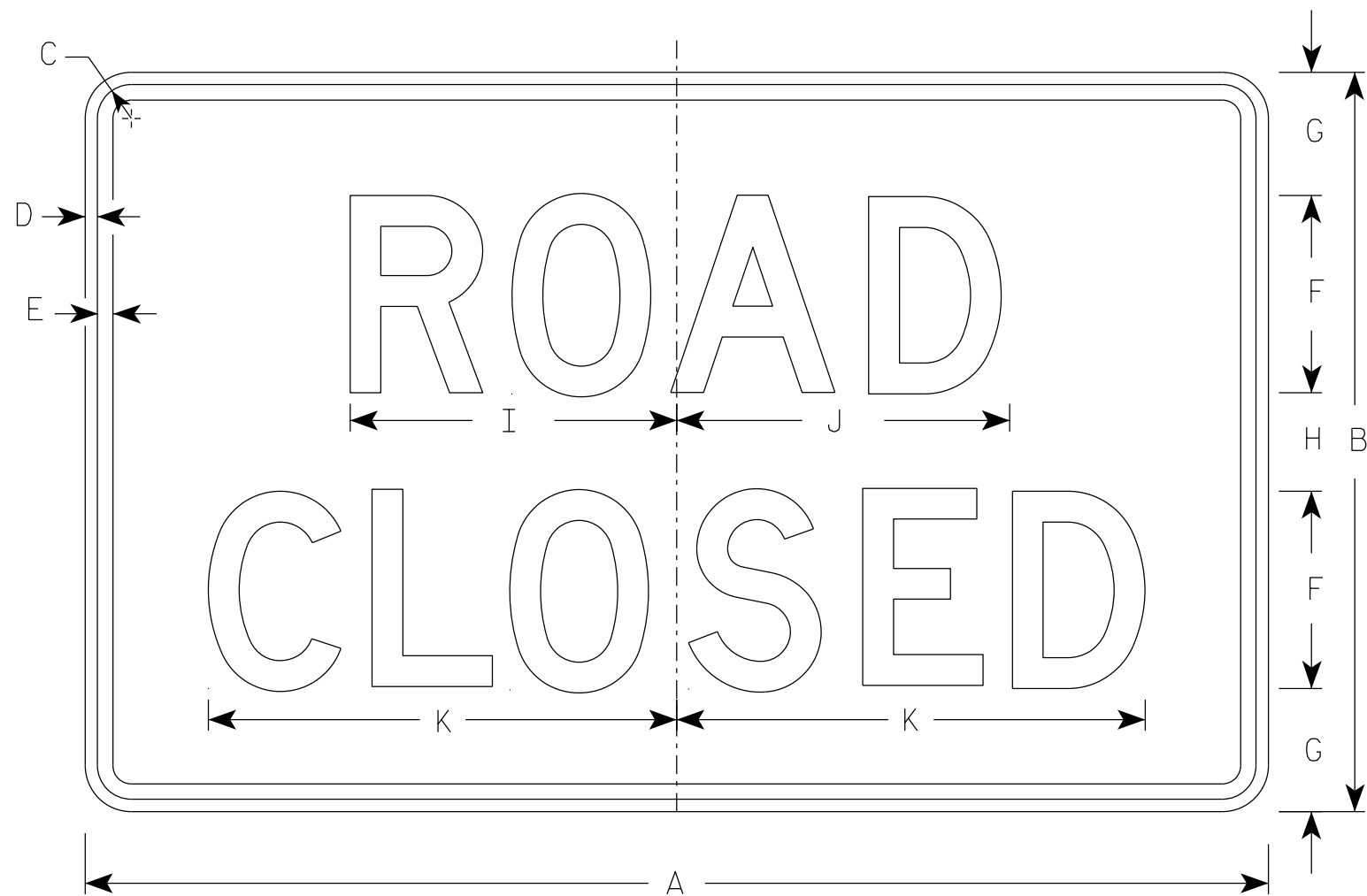
GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

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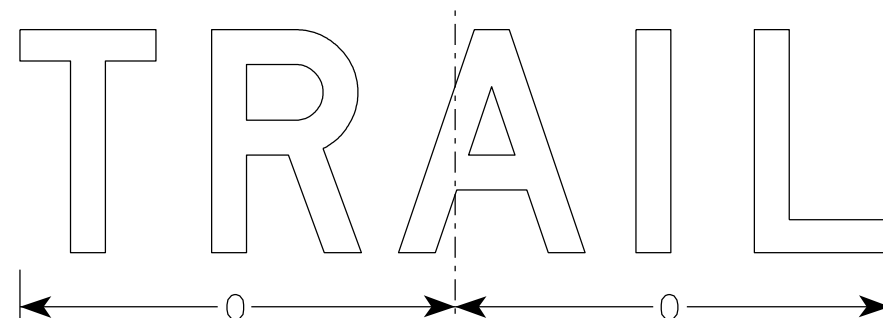
4 X 6 WOOD POST MODIFICATIONS	
<i>WISCONSIN DEPT OF TRANSPORTATION</i>	
APPROVED	<i>Chester J Spang</i> for State Traffic Engineer
DATE <u>3/27/97</u>	PLATE NO. <u>A4-11.2</u>



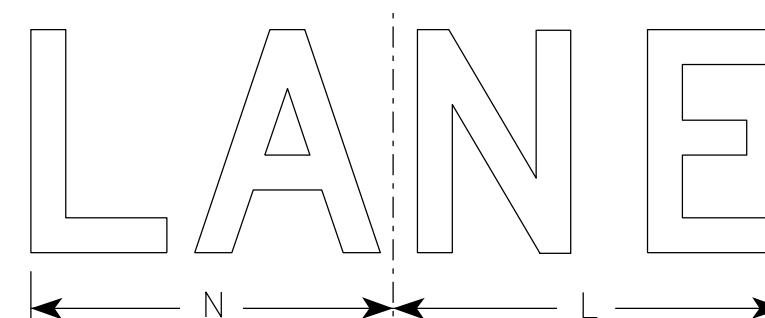
R11-2



R11-2R



R11-2T



R11-2L

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
Background - White
Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.

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SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0

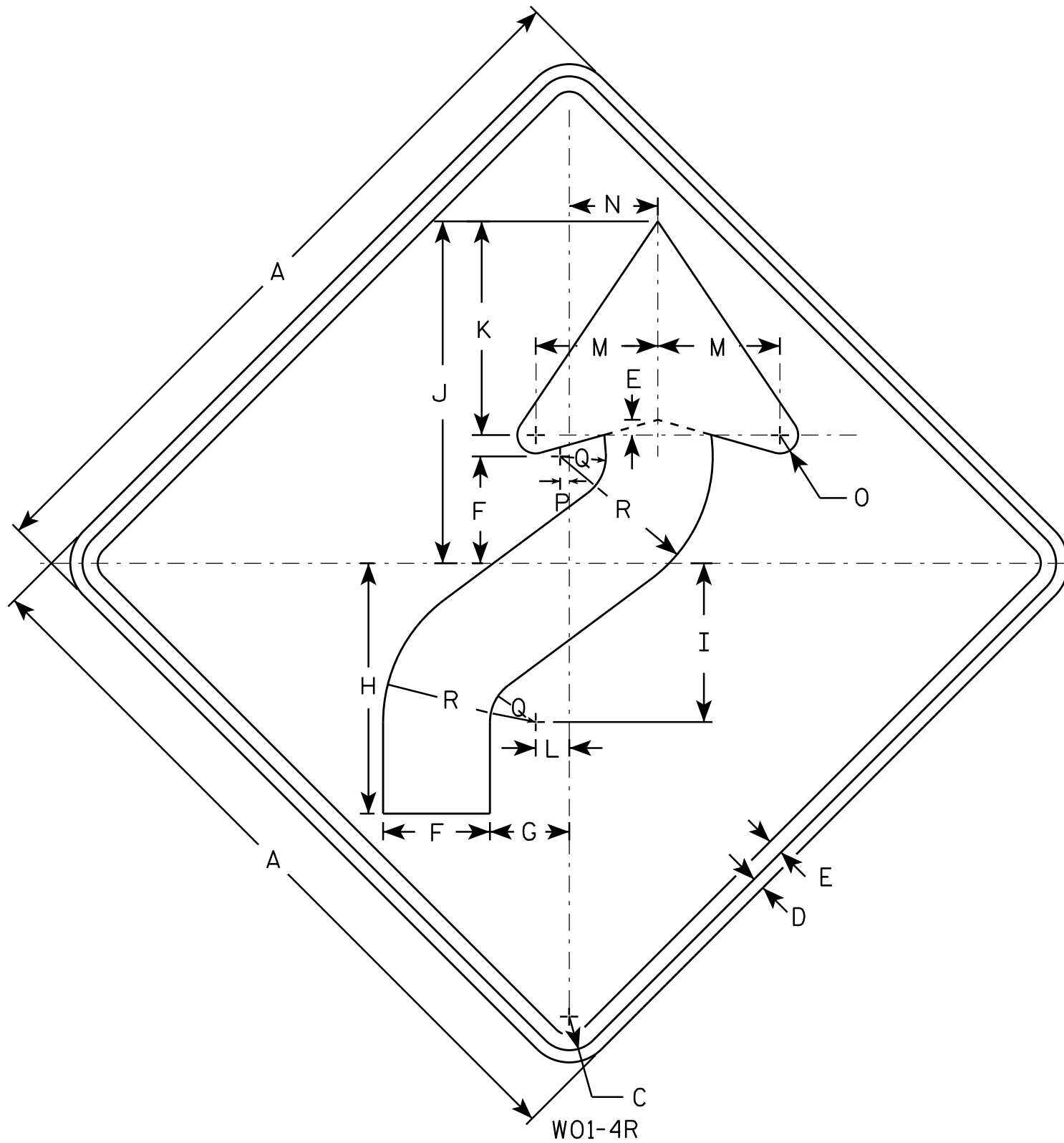
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/29/2021 PLATE NO. R11-2.11

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: **E**



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-4L is the same as W01-4R except the arrow is reversed along the vertical centerline.

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W01-4R

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
2S	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
2M	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
3	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
4	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
5	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

STANDARD SIGN
W01-4

WISCONSIN DEPT OF TRANSPORTATION

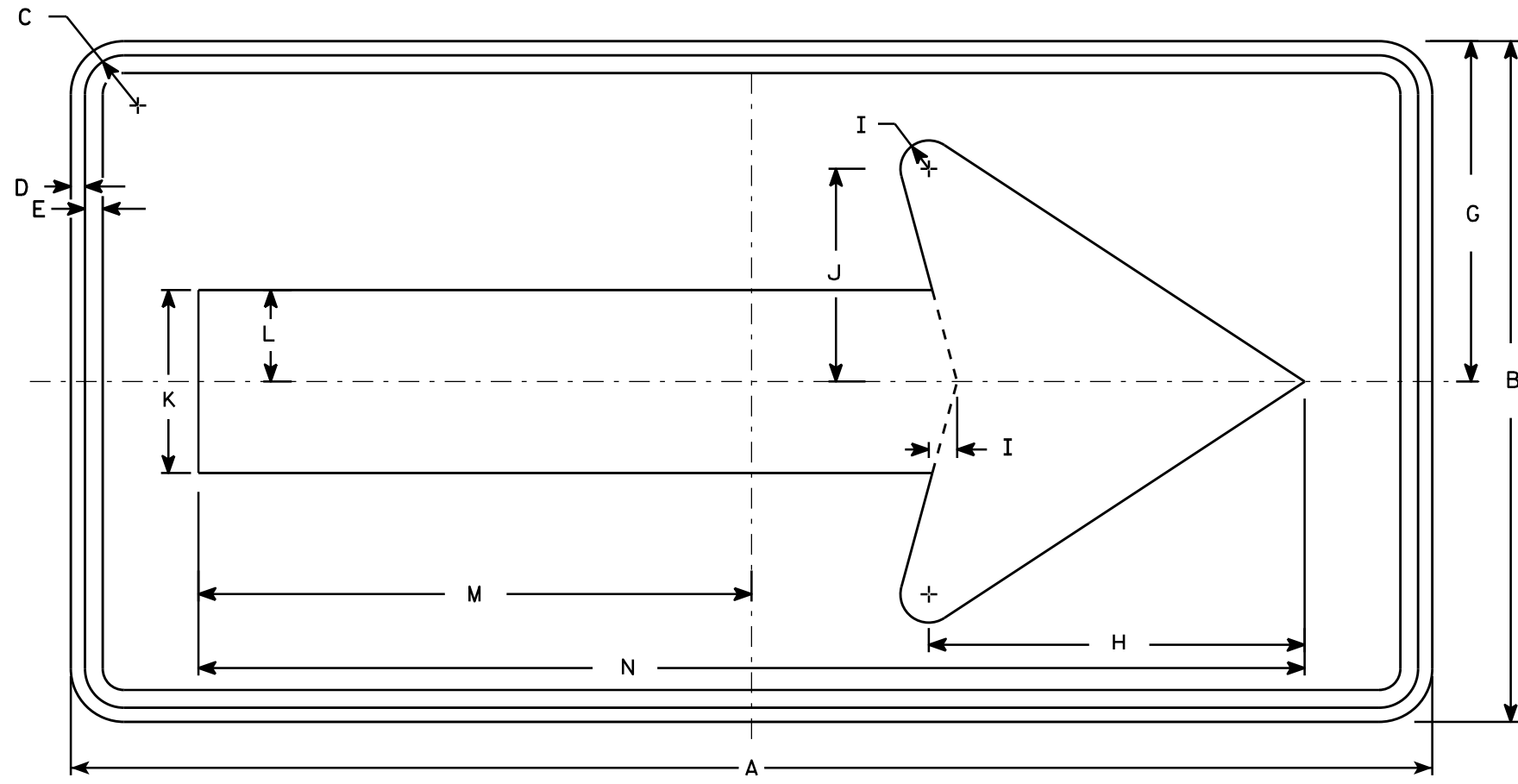
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-4.1

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: **E**

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W01-6

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SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

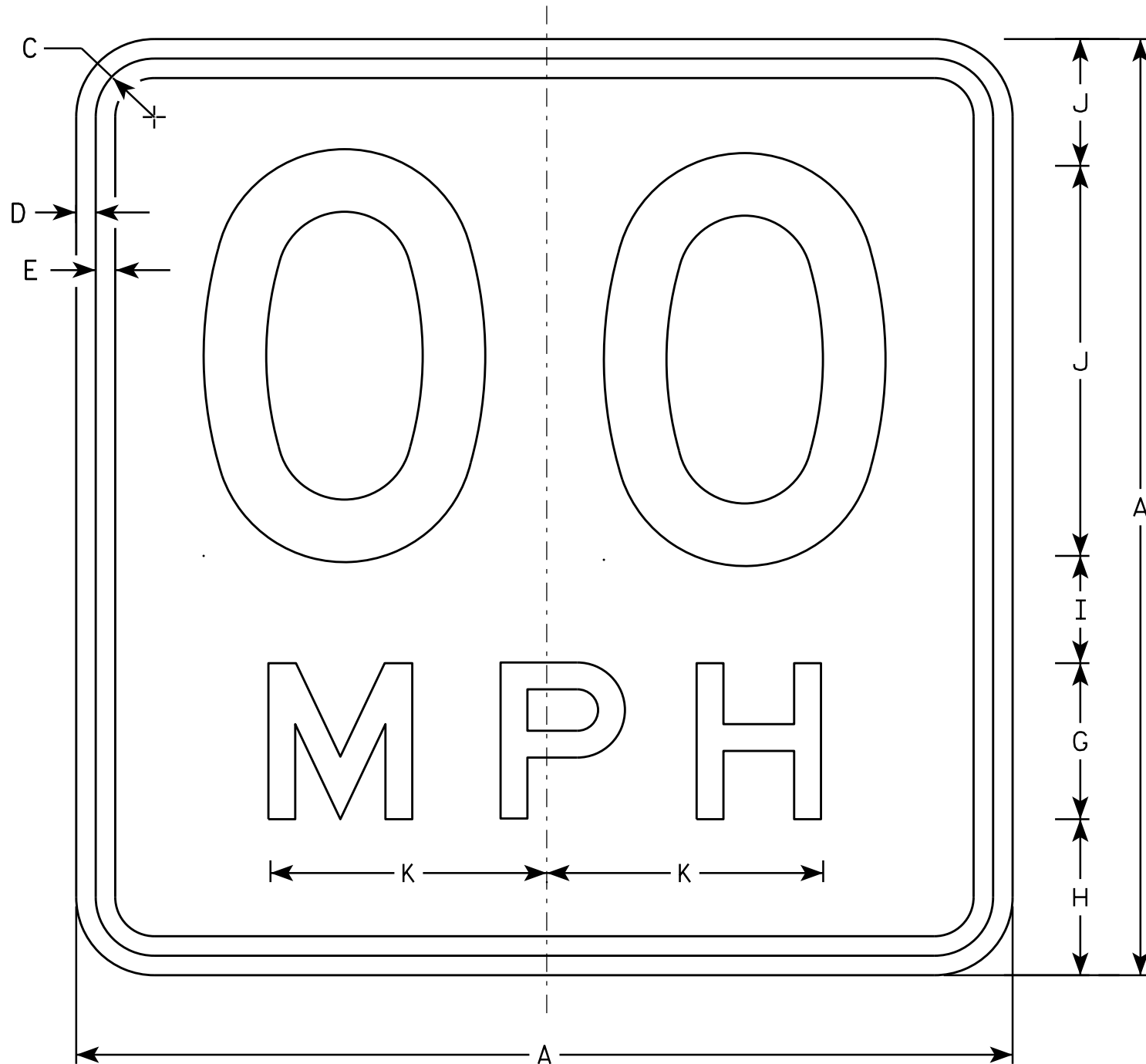
STANDARD SIGN
W01-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-6.1

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: **E**



W013-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
Line 2 is Series E

7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	7 1/8																4.00
2S	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
2M	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
3	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

STANDARD SIGN
W013-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R Rauch*
For State Traffic Engineer

DATE 11/21/13 PLATE NO. W013-1.1

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: _____ E

Notes



Wisconsin Department of Transportation

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