GRE SEPTEMBER 2020

PROJECT ID: 9170-18-60
WITH: NA

COUNTY: OCONTO

ORDER OF SHEETS

TOTAL SHEETS = 66

60

N

DESIGN DESIGNATION

A.A.D.T. (2020)	=	2400
A.A.D.T. (2040)	=	3000
D.H.V.	=	489
D.D.	=	60/40
T.	=	11.4
DESIGN SPEED	=	55 MPH
ESALS	=	820,000

CONVENTIONAL SYMBOLS

PLAN

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

PROFILE

- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) — ROCK
- SPECIAL DITCH — LABEL
- GRADE ELEVATION — 95.36
- CULVERT (Profile View)

UTILITIES

- ELECTRIC — E
- FIBER OPTIC — FO
- GAS — G
- SANITARY SEWER — SAN
- STORM SEWER — SS
- TELEPHONE — T
- WATER — W
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

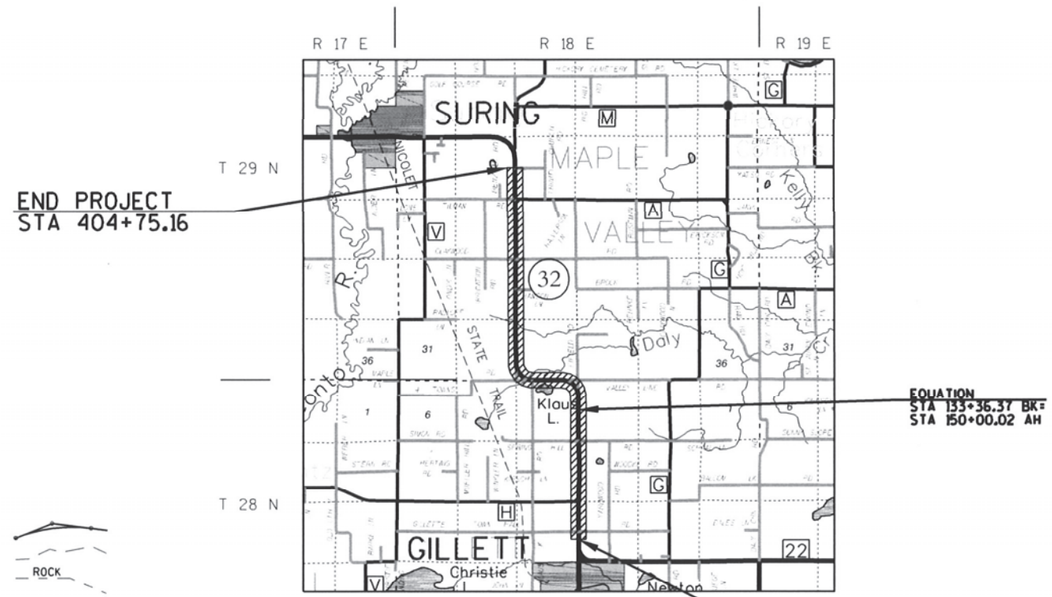
GILLETT - SURING

STH 22 - TRINITY CHURCH RD

STH 32

OCONTO COUNTY

STATE PROJECT NUMBER
9170-18-60



LAYOUT
SCALE 0 2.0 MI.

TOTAL NET LENGTH OF CENTERLINE = 7.038 MI.

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

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
9170-18-60	—	—

ORIGINAL PLANS PREPARED BY:
CBS SQUARED INC.

10/28/2019

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	CBS SQUARED INC.
Designer	CBS SQUARED INC.
Project Manager	MATTHEW TERNES
Regional Examiner	JODI JAROSINSKI
Regional Supervisor	DANIEL SEGERSTROM

APPROVED FOR THE DEPARTMENT

DATE: 10/28/2019 (Signature)

FILE NAME : O:\PDS\C3D\91701830\SHEETSPLAN\010101-TI.DWG

SHEET NAME: 010101-TI

WISDOT/CADDS SHEET 10

GENERAL NOTES

THE ALIGNMENT ON THIS PLAN IS BASED ON AERIAL DRAWINGS AND AS BUILTS (PROJECT ID 9170-08-71).

THE CENTERLINE AS SHOWN IN THE PLANS MAY REQUIRE ADJUSTMENT TO MATCH FIELD CONDITIONS. ANY ADJUSTMENTS SHALL BE INCIDENTAL TO OTHER ITEMS IN THE CONTRACT.

THE CONTRACTOR IS TO WORK WITH UTMOST CARE AND PROTECT ALL SURVEY MARKERS. SURVEY MARKERS SHALL NOT BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

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

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

THE CONTRACTOR'S HMA PAVING OPERATION SHALL BE CONSTRUCTED TO PREVENT LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN THE DRIVING, TURNING, PASSING OR PARKING LANE.

EXISTING SUPERELEVATION RATES AS SHOWN ON THE PLAN SHEETS REPRESENT THE APPROXIMATE EXISTING RATES AS OUTLINED ON THE AS-BUILTS. WHERE NO PROPOSED SUPERELEVATION RATE IS SHOWN, THE EXISTING SUPERELEVATION SHALL BE MAINTAINED.
FIELD VERIFY SUPER ELEVATION RATES.

HMA PAVEMENT SHALL BE CONSTRUCTED WITH THE FOLLOWING LAYER THICKNESS:

PAVEMENT THICKNESS (INCH)	LOWER (INCH)	MIDDLE (INCH)	UPPER (INCH)
2.00	-	-	2.00
7.50	3.50	2.00	2.00

ORDER OF TYPICAL SECTION AND DETAIL SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
TRAFFIC CONTROL

UTILITY CONTACTS

DAN SANDE
WE ENERGIES - ELECTRICITY
A299
333 W EVERETT ST
MILWAUKEE, WI 53203
(414) 221-4578
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WISCONSIN PUBLIC SERVICE CORPORATION - ELECTRICITY
700 N ADAMS ST
P.O. BOX 19001
GREEN BAY, WI 54307-9001
(920) 433-1703
LABUTRY@INTEGRYSGROUP,COM

KEVIN ZICKERT
CENTURYLINK - COMMUNICATION LINE
224 INDUSTRIAL DR
NORTH PRAIRIE, WI 53153
(262) 392-5200 (MOBILE)
KEVIN.ZICKERT@CENTURYLINK.COM

HEATHER DEUTH
WE ENERGIES - GAS
800 S LYNNDALE DR
APPLETON, WI 54914
(920) 242-5633
HEATHER.DEUTH@WE-ENERGIES.COM

JACK PARDY
OCONTO ELECTRIC COOPERATIVE - ELECTRICITY
7479 REA ROAD
OCONTO FALLS, WI 54154
(920) 846-2816
JPARDY@OCONTOELECTRIC.COM

WISCONSIN DNR LIASON

JAMES P. DOPERALSKI JR.
ENVIRONMENTAL ANALYSIS AND REVIEW SPECIALIST
BUREAU OF ENVIRONMENTAL ANALYSIS AND SUSTAINABILITY (BEAS)
2984 SHAWANO AVENUE, GREEN BAY, WI 54313
(920) 412-0165
JAMES.DOPERALSKI@WISCONSIN.GOV

WISDOT SURVEY LIASON

CORMAC MCINNIS - PLS
WISDOT - NORTHEAST REGION
944 VANDERPERREN WAY, GREEN BAY, WI 54304-5344
(920) 492-5638
CORMAC.MCINNIS@DOT.WI.GOV

OCONTO COUNTY SURVEY

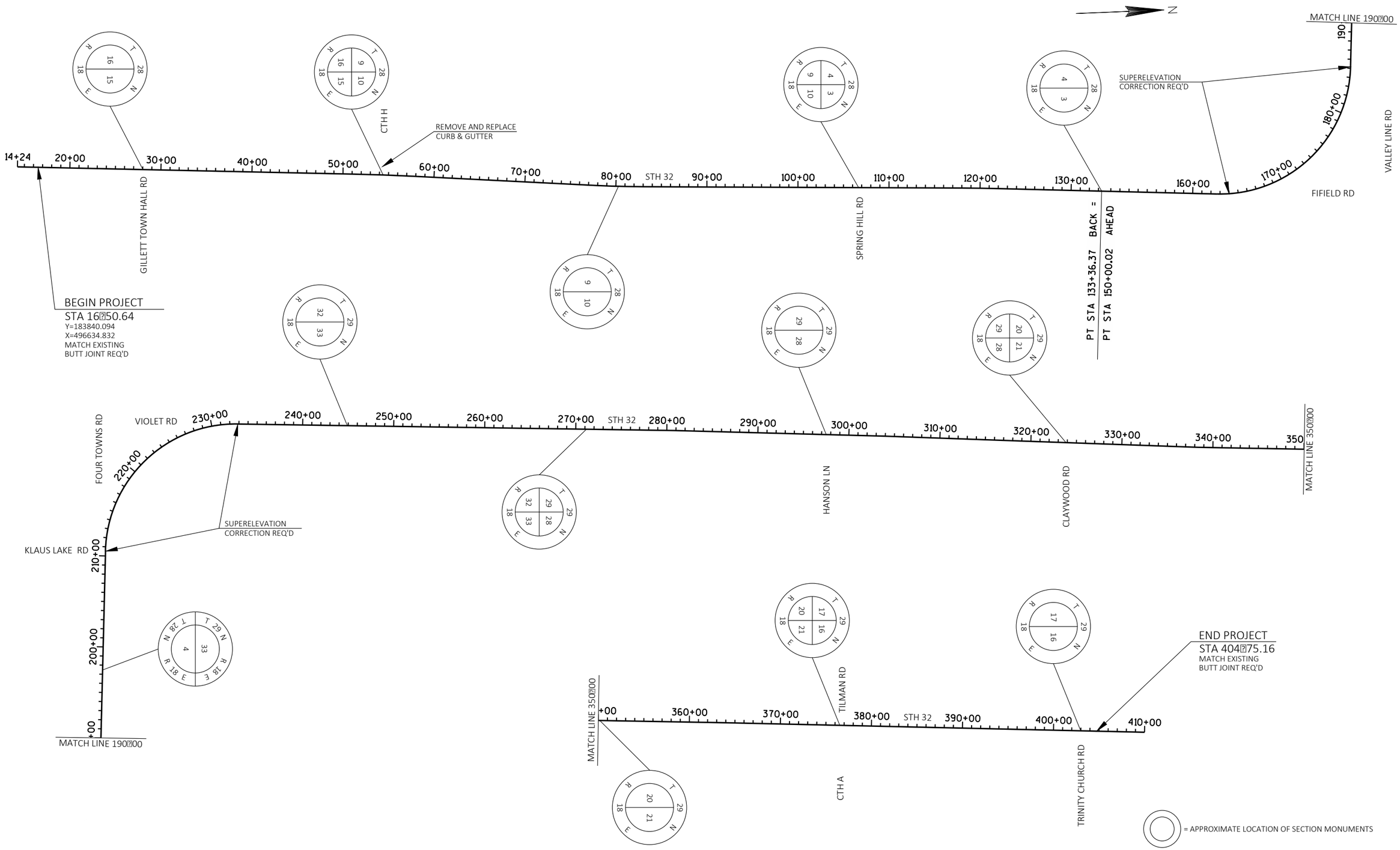
BRIAN GROSS
OCONTO COUNTY
301 WASHINGTON ST
OCONTO, WI 54153
(715) 369-6179

DIGGERS HOTLINE
Dial 811 or (800)242-8511
www.DiggersHotline.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 = 39.67 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.01 ACRES



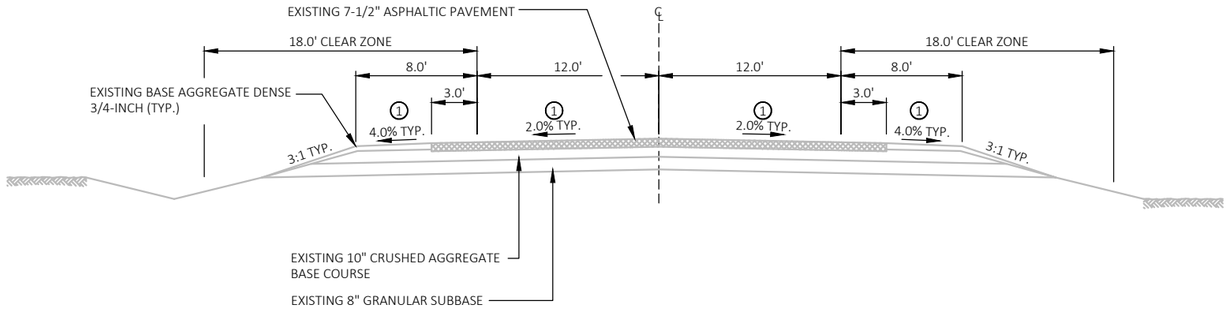
PROJECT NO: 9170-18-60	HWY: STH 32	COUNTY: OCONTO	PROJECT OVERVIEW	SHEET 3

FILE NAME : O:\PDS\C3D\91701830\SHEETSPLAN\020201-P0.DWG

SHEET NAME: 020201-P0

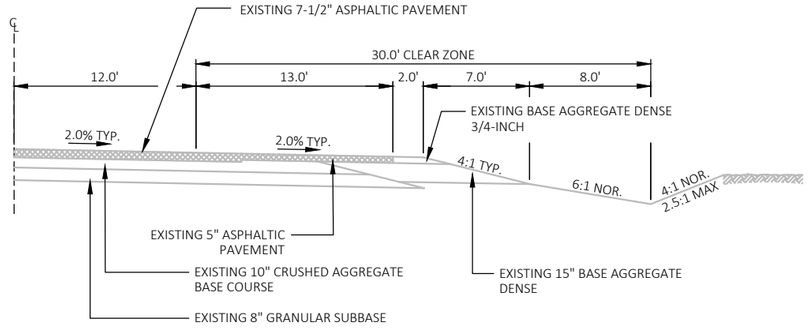
NOTES:

(1) EXISTING SUPERELEVATION:
PI STA 80+37.56 - RC
PI STA 176+98.96 - 0.065%
PI STA 224+70.24 - 0.065%



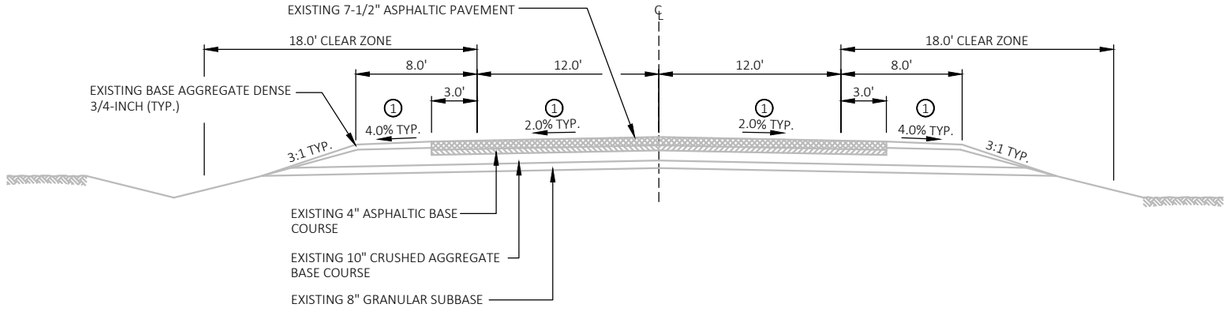
TYPICAL EXISTING SECTION FOR STH 32

STA 16+50.64 TO STA 163+12.00
STA 234+00.00 TO STA 404+75.16



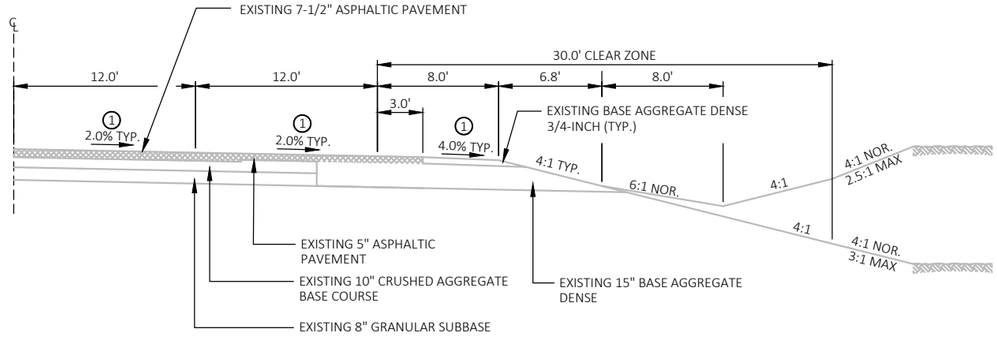
TYPICAL EXISTING HALF SECTION FOR STH 32

BY-PASS LANE
STA 50+78.80 TO STA 58+70.80 (RT)



TYPICAL EXISTING SECTION FOR STH 32

STA 163+12.00 TO STA 234+00.00



TYPICAL EXISTING HALF SECTION FOR STH 32

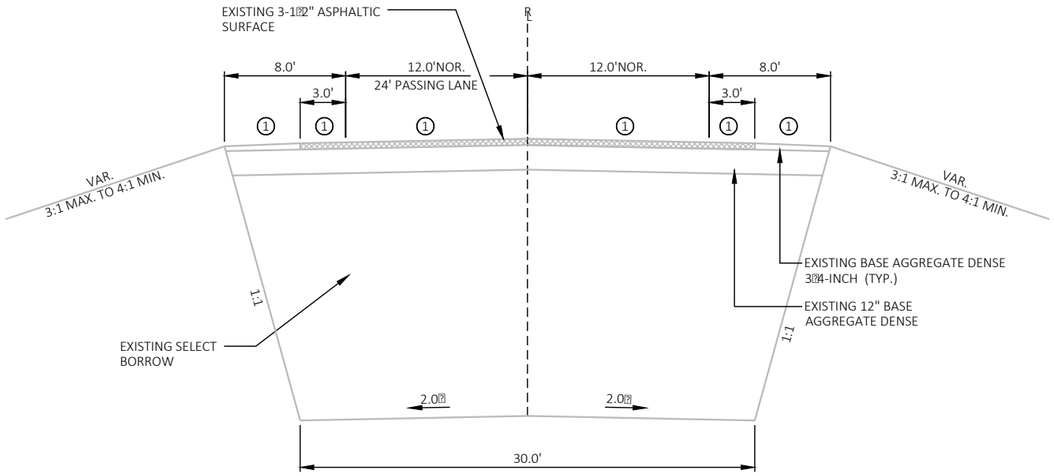
BY-PASS LANE
STA 64+00.00 TO STA 150+63.63 (RT)
STA 243+00.00 TO STA 317+50.00 (LT)

PROJECT NO: 9170-18-60	HWY: STH 32	COUNTY: OCONTO	TYPICAL SECTIONS	SHEET 4	E

FILE NAME : O:\PDS\C3D\91701830\SHEETSPLAN\020301-TS(EXISTING).DWG
SHEET NAME: 020301-TS

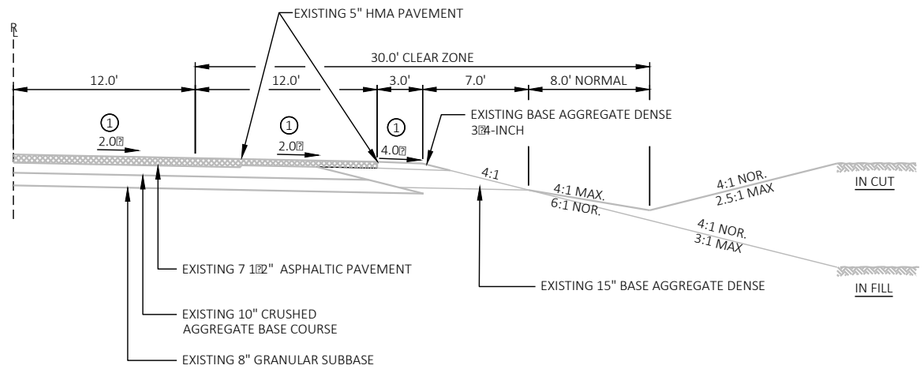
NOTES:

(1) EXISTING SUPERELEVATION:
PI STA 80+37.56 - RC
PI STA 176+98.96 - 0.065%
PI STA 224+70.24 - 0.065%



TYPICAL EXISTING CROSS SECTION FOR
FROST HEAVE REPAIR AREAS

STA 230+65 - STA 233+65
STA 253+50 - STA 256+50
STA 256+50 - STA 259+50
STA 270+00 - STA 273+50
STA 277+50 - STA 281+00



TYPICAL EXISTING HALF SECTION FOR STH 32

RIGHT TURN LANE
GILLETT TOWN HALL ROAD
SPRING HILL ROAD
VALLEY LINE ROAD
KLAUS LAKE ROAD
FOUR TOWNS ROAD
CTH A
TILLMAN ROAD

PROJECT NO: 9170-18-60	HWY: STH 32	COUNTY: OCONTO	TYPICAL SECTIONS	SHEET 5	E

FILE NAME : O:\PDS\C3D\91701830\SHEETSPLAN\020301-TS (EXISTING).DWG
SHEET NAME: 020302-TS

NOTES:

DEPTH OF MILLING/HMA PAVEMENT AT THE CENTERLINE IS TO BE HELD AT 2". ROADWAY CROSS SLOPE IS TO BE APPLIED FROM THIS DEPTH. ACTUAL DEPTHS OF MILLING/HMA PAVEMENT ACROSS ROADWAY MAY VARY DUE TO EXISTING ROADWAY CONDITIONS. ANY VARIATIONS FROM THE PLAN DEPTHS ARE TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER.

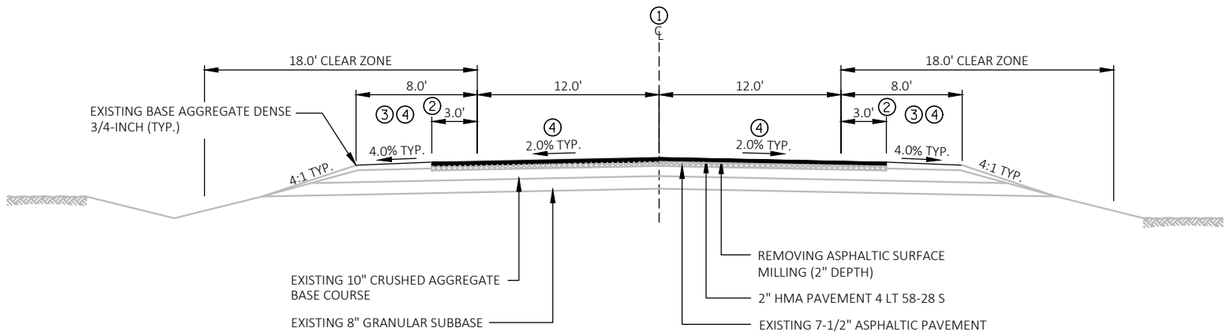
(1) STA 30+05 TO STA 400+89 ASPHALT CENTERLINE RUMBLE STRIP 2-LANE RURAL REQ'D IN ACCORDANCE WITH SDD 2-LANE RURAL CENTERLINE RUMBLE STRIP, MILLING.

(2) CONSTRUCT ASPHALT SAFETY EDGE IN ACCORDANCE WITH SDD SAFETY EDGE.

(3) ADDITIONAL BASE AGGREGATE DENSE ¾" MAY BE REQUIRED TO CONSTRUCT TO ELEVATION OF FINISHED HMA PAVEMENT AND AS DIRECTED BY THE ENGINEER.

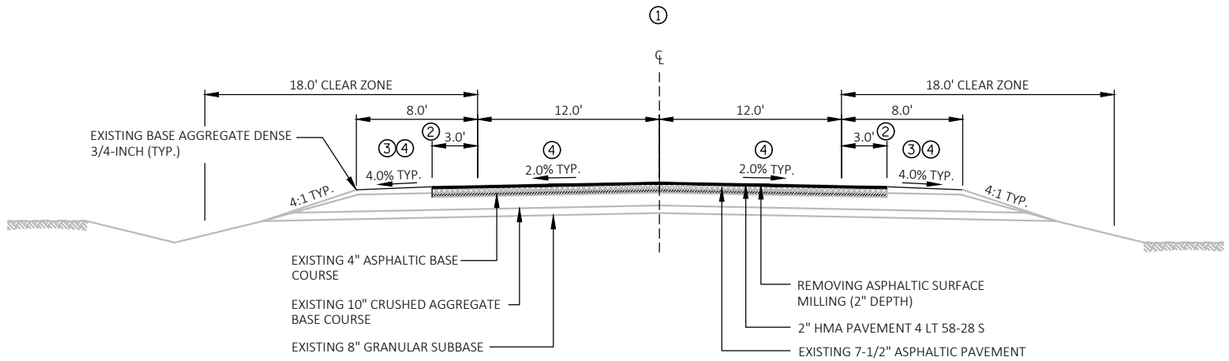
(4) MATCH EXISTING SUPERELEVATION: PI STA 80+37.56
SUPERELEVATION CORRECTION REQUIRED AT: PI STA 176+98.96, PI STA 224+70.24. HMA WEDGING AND/OR ADDITIONAL DEPTH OF MILLING MAY BE REQUIRED TO ACHIEVE PROPOSED SUPERELEVATION.

CONTRACTOR SHALL PROVIDE STAKING AND LAYOUT OF SUPERELEVATION TRANSITIONS, WORK SHALL BE CONSIDERED INCIDENTAL TO "CONSTRUCTION STAKING RESURFACING REFERENCE".



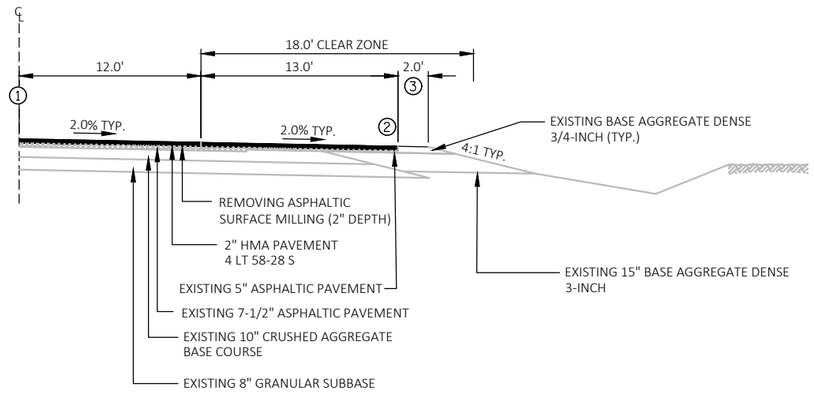
TYPICAL FINISHED SECTION FOR STH 32

STA 16+50.64 TO STA 163+12.00
STA 234+00.00 TO STA 404+75.16



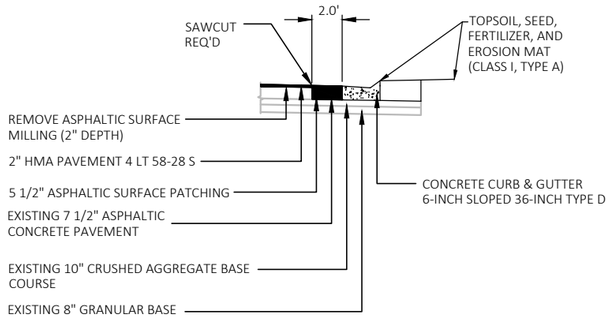
TYPICAL FINISHED SECTION FOR STH 32

STA 163+12.00 TO STA 234+00.00



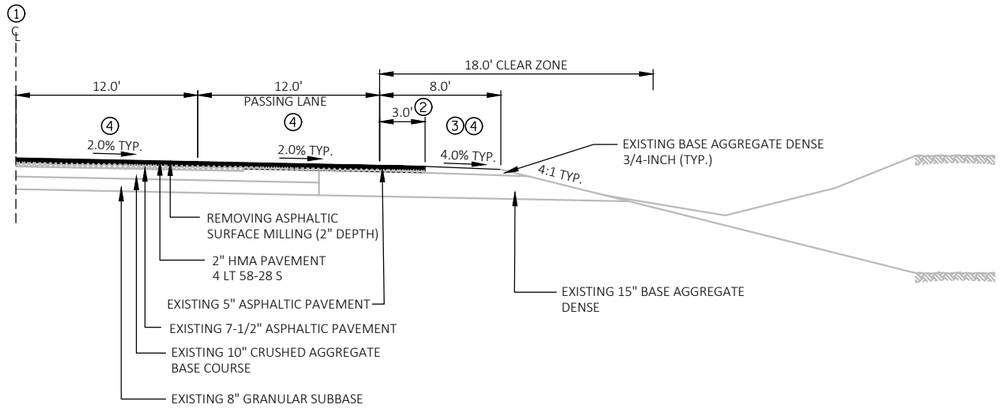
TYPICAL FINISHED HALF SECTION FOR STH 32

BY-PASS LANE
STA 50+78.80 TO STA 58+70.80



TYPICAL FINISHED CURB & GUTTER REPLACEMENT SECTION

CTH H



TYPICAL FINISHED HALF SECTION FOR STH 32

BY-PASS LANE
STA 64+00.00 TO STA 150+63.63 (RT)
STA 243+00.00 TO STA 317+50.00 (LT)

2

NOTES:

DEPTH OF MILLING/HMA PAVEMENT AT THE CENTERLINE IS TO BE HELD AT 2". ROADWAY CROSS SLOPE IS TO BE APPLIED FROM THIS DEPTH. ACTUAL DEPTHS OF MILLING/HMA PAVEMENT ACROSS ROADWAY MAY VARY DUE TO EXISTING ROADWAY CONDITIONS. ANY VARIATIONS FROM THE PLAN DEPTHS ARE TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER.

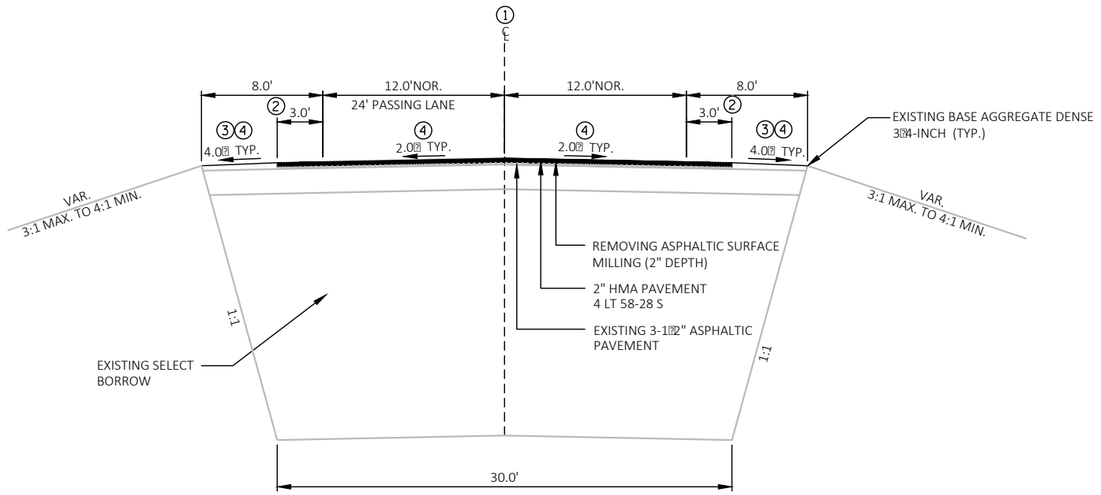
(1) ASPHALT CENTERLINE RUMBLE STRIPS 2-LANE RURAL REQ'D IN ACCORDANCE WITH SDD 2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING.

(2) CONSTRUCT ASPHALT SAFETY EDGE IN ACCORDANCE WITH SDD SAFETY EDGE.

(3) ADDITIONAL BASE AGGREGATE DENSE ¾" MAY BE REQUIRED TO CONSTRUCT TO ELEVATION OF FINISHED HMA PAVEMENT AND AS DIRECTED BY THE ENGINEER.

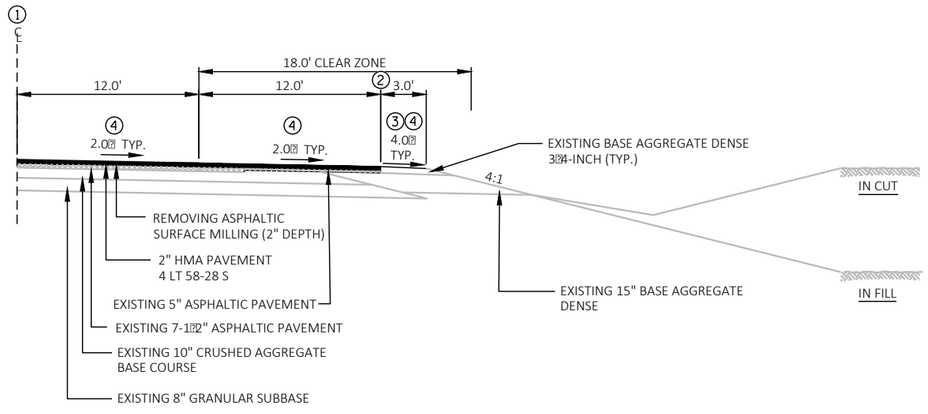
(4) MATCH EXISTING SUPERELEVATION: PI STA 80/37.56
SUPERELEVATION CORRECTION REQUIRED AT: PI STA 176/98.96, PI STA 224/70.24.
HMA WEDGING AND/OR ADDITIONAL DEPTH OF MILLING MAY BE REQUIRED TO ACHIEVE PROPOSED SUPERELEVATION.

CONTRACTOR SHALL PROVIDE STAKING AND LAYOUT OF SUPERELEVATION TRANSITIONS, WORK SHALL BE CONSIDERED INCIDENTAL TO "CONSTRUCTION STAKING RESURFACING REFERENCE".



TYPICAL FINISHED CROSS SECTION FOR
PREVIOUS FROST HEAVE REPAIR AREAS

STA 230/65 - STA 233/65
STA 253/50 - STA 256/50
STA 256/50 - STA 259/50
STA 270/00 - STA 273/50
STA 277/50 - STA 281/00



TYPICAL FINISHED HALF SECTION FOR STH 32

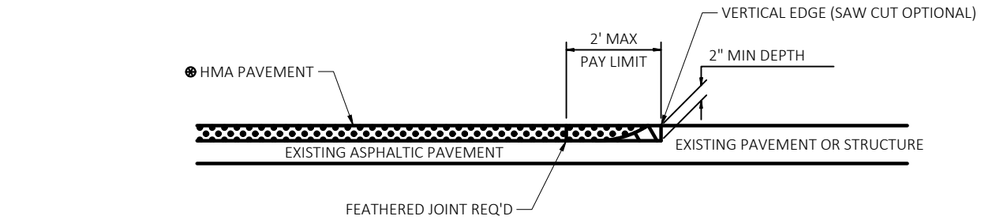
RIGHT TURN LANE
GILLETT TOWN HALL ROAD
SPRING HILL ROAD
VALLEY LINE ROAD
KLAUS LAKE ROAD
FOUR TOWNS ROAD
CTH A
TILLMAN ROAD

2

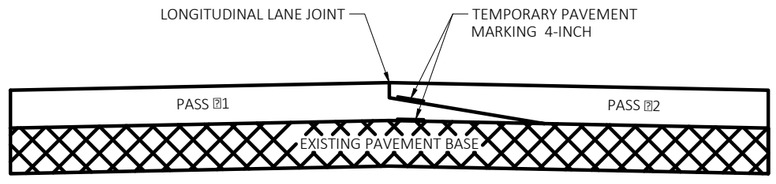
STH 32 - SUPERELEVATION CORRECTION				
SUPERELEVATION TABLE				
	STATION	LEFT LANE	RIGHT LANE	NOTES
END NORMAL CROWN	161+38.09	-2.0%	-2.0%	MATCH EXISTING
END RUNOUT	161+89.09	-2.0%	0.0%	
REVERSE CROWN	162+40.09	-2.0%	2.0%	
BEGIN FULL SUPER	163+42.09	-6.0%	6.0%	
END FULL SUPER	184+65.73	-6.0%	6.0%	
REVERSE CROWN	185+67.73	-2.0%	2.0%	
BEGIN RUNOUT	186+18.73	-2.0%	0.0%	
BEGIN NORMAL CROWN	186+69.73	-2.0%	-2.0%	MATCH EXISTING
END NORMAL CROWN	208+98.28	-2.0%	-2.0%	MATCH EXISTING
END RUNOUT	209+49.28	0.0%	-2.0%	
REVERSE CROWN	210+00.28	2.0%	-2.0%	
BEGIN FULL SUPER	211+02.28	6.0%	-6.0%	
END FULL SUPER	232+36.98	6.0%	-6.0%	
REVERSE CROWN	233+38.98	2.0%	-2.0%	
BEGIN RUNOUT	233+89.98	0.0%	-2.0%	
BEGIN NORMAL CROWN	234+40.98	-2.0%	-2.0%	MATCH EXISTING

CONTRACTOR SHALL FIELD VERIFY EXISTING ROADWAY SUPERELEVATIONS AND DISCUSS ANTICIPATED MILLING/PAVING DEPTHS WITH THE ENGINEER PRIOR TO THE START OF MILLING OPERATIONS.

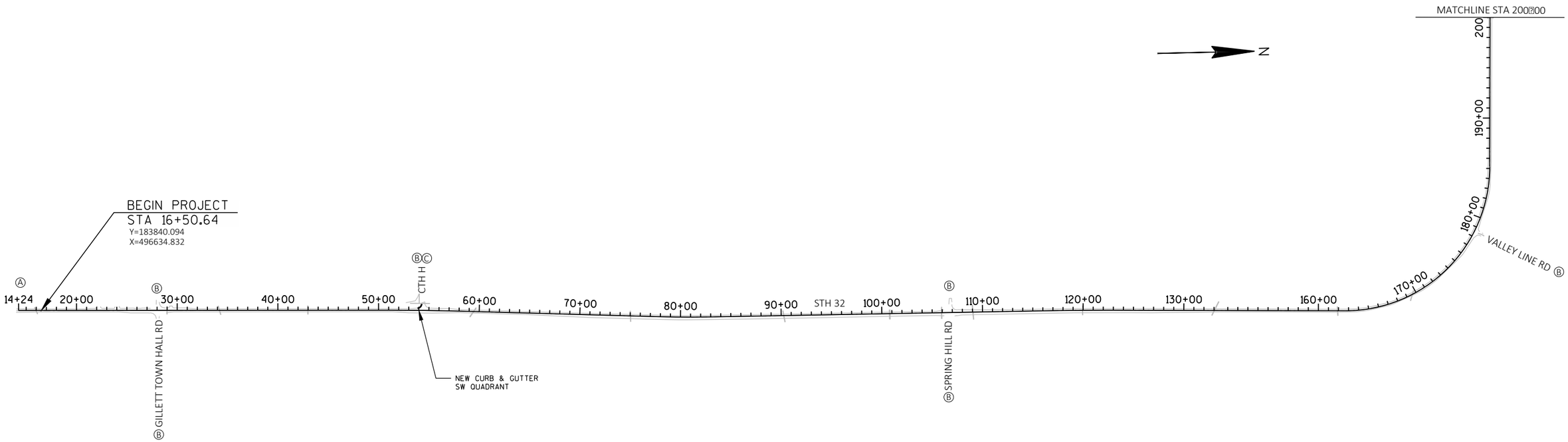
2



BUTT JOINT DETAIL FOR ASPHALTIC PAVEMENTS (NO PROFILE CHANGE)



PAVEMENT MARKING DETAIL FOR TAPERED OVERLAPPING JOINTS IN HMA PAVEMENTS



GENERAL NOTES:

DRAWING IS NOT TO SCALE.

ALL TRAFFIC CONTROL SIGNS AND DEVICES AND THEIR LOCATION SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD), THE PLANS, STANDARD SPECIFICATIONS, CONTRACT AND APPLICABLE STANDARD DETAIL DRAWINGS.

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 ARE 48" X 48" UNLESS OTHERWISE NOTED IN STANDARD DETAIL DRAWINGS.

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

FOLLOW SDD "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION" FOR WORK OPERATIONS THAT REQUIRE ENCROACHMENT OR CLOSURE OF A TRAVEL LANE OF STH 32.

FOLLOW SDD "TRAFFIC CONTROL, DROP-OFF SIGNING" WHEN A DROP-OFF CONDITION EXISTS.

PLACE WO8-52 "GROOVED PAVEMENT" SIGNS IN ADVANCE OF THE LIMITS WHERE TRAFFIC WILL UTILIZE THE MILLED SURFACE, INCLUDING AT SIDE ROADS IN ACCORDANCE WITH SDD "TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES".

PLACE WO8-12 "NO CENTER LINE" SIGNS AT THE BEGINNING OF SEGMENTS WITHOUT CENTERLINE MARKINGS AND AT INTERVALS OF NO MORE THAN 2 MILES WITHIN THE WORK ZONE.

PERFORM MAINLINE PAVEMENT MARKING OPERATIONS IN ACCORDANCE WITH SDD "MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY".

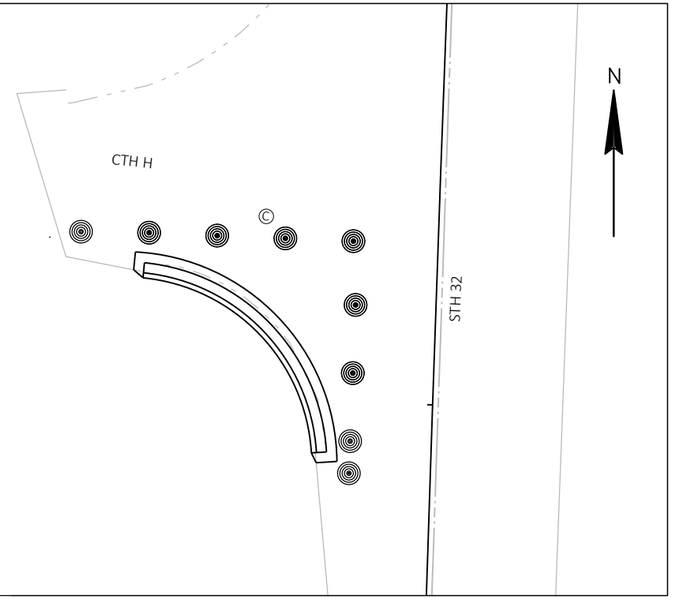
LEGEND:

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

Ⓑ FOLLOW SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL.

Ⓒ FOLLOW SDD "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY" FOR WORK THAT WILL TAKE PLACE OUTSIDE OF THE TRAVEL LANES OF STH 32. IF WORK, EQUIPMENT, MATERIALS, ETC. WILL ENCROACH INTO THE TRAVEL LANES OF STH 32, SDD "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION" SHALL BE UTILIZED. ACTUAL TRAFFIC CONTROL REQUIREMENTS WILL BE DEPENDENT ON CONTRACTOR MEANS & METHODS AND/OR AS DIRECTED BY THE ENGINEER.

STH 32 / CTH H INTERSECTION



NOTES:

PLACE DRUMS ALONG EDGE OF EXCAVATION DURING NON-WORKING HOURS.

AFTER PLACEMENT OF ASPHALTIC PAVEMENT, DRUMS SHALL BE REMOVED.

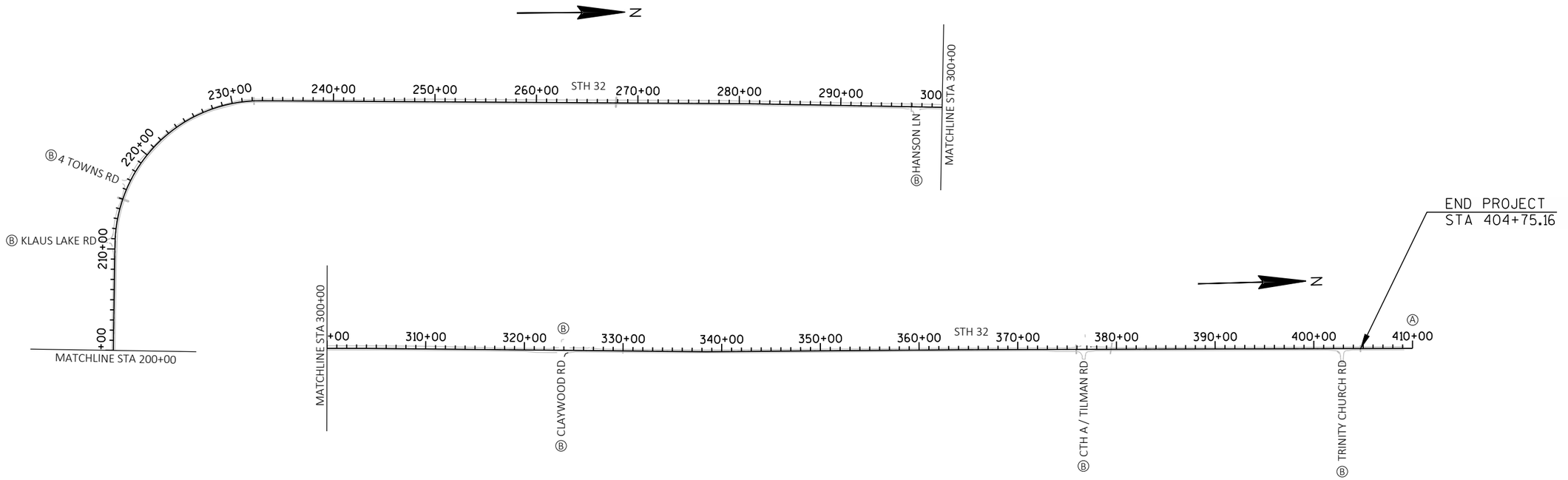
FOLLOW SDD "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION" FOR WORK OPERATIONS THAT REQUIRE ENCROACHMENT OR CLOSURE OF A TRAVEL LANE OF STH 32.

FLAGPERSONS SHALL BE UTILIZED IF LANE CLOSURE ON CTH H IS REQUIRED.

PROJECT NO: 9170-18-60	HWY: STH 32	COUNTY: OCONTO	TRAFFIC CONTROL - OVERVIEW	SHEET 10	E

FILE NAME : O:\PDS\C3D\91701830\SHEETSPLAN\025101-TC.DWG | SHEET NAME: 025101-TC | PLOT SCALE : 1 IN:500 FT

2



GENERAL NOTES:

DRAWING IS NOT TO SCALE.

ALL TRAFFIC CONTROL SIGNS AND DEVICES AND THEIR LOCATION SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD), THE PLANS, STANDARD SPECIFICATIONS, CONTRACT AND APPLICABLE STANDARD DETAIL DRAWINGS.

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 ARE 48" X 48" UNLESS OTHERWISE NOTED IN STANDARD DETAIL DRAWINGS.

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

FOLLOW SDD "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION" FOR WORK OPERATIONS THAT REQUIRE ENCROACHMENT OR CLOSURE OF A TRAVEL LANE OF STH 32.

FOLLOW SDD "TRAFFIC CONTROL, DROP-OFF SIGNING" WHEN A DROP-OFF CONDITION EXISTS.

PLACE WO8-52 "GROOVED PAVEMENT" SIGNS IN ADVANCE OF THE LIMITS WHERE TRAFFIC WILL UTILIZE THE MILLED SURFACE, INCLUDING AT SIDE ROADS IN ACCORDANCE WITH SDD "TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES".

PLACE WO8-12 "NO CENTER LINE" SIGNS AT THE BEGINNING OF SEGMENTS WITHOUT CENTERLINE MARKINGS AND AT INTERVALS OF NO MORE THAN 2 MILES WITHIN THE WORK ZONE.

PERFORM MAINLINE PAVEMENT MARKING OPERATIONS IN ACCORDANCE WITH SDD "MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY".

LEGEND:

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

Ⓑ FOLLOW SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL.

Ⓒ FOLLOW SDD "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY" FOR WORK THAT WILL TAKE PLACE OUTSIDE OF THE TRAVEL LANES OF STH 32. IF WORK, EQUIPMENT, MATERIALS, ETC. WILL ENCROACH INTO THE TRAVEL LANES OF STH 32, SDD "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION" SHALL BE UTILIZED. ACTUAL TRAFFIC CONTROL REQUIREMENTS WILL BE DEPENDENT ON CONTRACTOR MEANS & METHODS AND/OR AS DIRECTED BY THE ENGINEER.

9170-18-60

Line	Item	Item Description	Unit	Total	Qty
0002	201.0220	Grubbing	ID	24.000	24.000
0004	204.0110	Removing Asphaltic Surface	SY	15.000	15.000
0006	204.0115	Removing Asphaltic Surface Butt Joints	SY	107.000	107.000
0008	204.0120	Removing Asphaltic Surface Milling	SY	151,280.000	151,280.000
0010	204.0150	Removing Curb & Gutter	LF	55.000	55.000
0012	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 9170-18-60	LS	1.000	1.000
0014	213.0100	Finishing Roadway (project) 01. 9170-18-60	EACH	1.000	1.000
0016	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,970.000	1,970.000
0018	455.0605	Tack Coat	GAL	10,580.000	10,580.000
0020	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	1.000	1.000
0022	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	1.000	1.000
0024	460.2005	Incentive Density PWL HMA Pavement	DOL	11,580.000	11,580.000
0026	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	14,870.000	14,870.000
0028	460.2010	Incentive Air Voids HMA Pavement	DOL	16,930.000	16,930.000
0030	460.5224	HMA Pavement 4 LT 58-28 S	TON	16,930.000	16,930.000
0032	465.0110	Asphaltic Surface Patching	TON	50.000	50.000
0034	465.0475	Asphalt Centerline Rumble Strips 2-Lane Rural	LF	33,884.000	33,884.000
0036	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	55.000	55.000
0038	618.0100	Maintenance And Repair of Haul Roads (project) 01. 9170-18-60	EACH	1.000	1.000
0040	619.1000	Mobilization	EACH	1.000	1.000
0042	624.0100	Water	MGAL	30.000	30.000
0044	625.0100	Topsoil	SY	31.000	31.000
0046	628.1905	Mobilizations Erosion Control	EACH	2.000	2.000
0048	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0050	628.2002	Erosion Mat Class I Type A	SY	31.000	31.000
0052	629.0210	Fertilizer Type B	CWT	0.040	0.040
0054	630.0130	Seeding Mixture No. 30	LB	0.300	0.300
0056	630.0200	Seeding Temporary	LB	0.300	0.300
0058	630.0500	Seed Water	MGAL	1.000	1.000
0060	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	16.000	16.000
0062	638.2102	Moving Signs Type II	EACH	16.000	16.000
0064	638.3000	Removing Small Sign Supports	EACH	16.000	16.000
0066	638.4000	Moving Small Sign Supports	EACH	16.000	16.000
0068	642.5001	Field Office Type B	EACH	1.000	1.000
0070	643.0300	Traffic Control Drums	DAY	70.000	70.000
0072	643.0900	Traffic Control Signs	DAY	1,286.000	1,286.000
0074	643.1000	Traffic Control Signs Fixed Message	SF	36.000	36.000
0076	643.5000	Traffic Control	EACH	1.000	1.000

9170-18-60

Line	Item	Item Description	Unit	Total	Qty
0078	646.1020	Marking Line Epoxy 4-Inch	LF	50,412.000	50,412.000
0080	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	72,214.000	72,214.000
0082	646.3040	Marking Line Grooved Wet Ref Epoxy 8-Inch	LF	1,959.000	1,959.000
0084	649.0105	Temporary Marking Line Paint 4-Inch	LF	92,537.000	92,537.000
0086	649.0120	Temporary Marking Line Epoxy 4-Inch	LF	46,269.000	46,269.000
0088	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	55.000	55.000
0090	650.8000	Construction Staking Resurfacing Reference	LF	38,825.000	38,825.000
0092	650.9910	Construction Staking Supplemental Control (project) 01. 9170-18-60	LS	1.000	1.000
0094	690.0150	Sawing Asphalt	LF	580.000	580.000
0096	740.0440	Incentive IRI Ride	DOL	29,413.000	29,413.000

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GRUBBING

ROADWAY	LOCATION	201.0220 GRUBBING ID
STH 32	347+90 LT	24
TOTAL		**24**

ASPHALT REMOVAL

ROADWAY	LOCATION	STA	TO	STA	204.0110 REMOVING ASPHALTIC SURFACE SY	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY
STH 32	LT/RT	16+50.64	-	65+00	--	28	18,970
STH 32	LT/RT	65+00	-	107+00	--	10	20,170
STH 32	LT/RT	107+00	-	151+00	--	--	12,710
STH 32	LT/RT	151+00	-	188+00	--	8	13,110
STH 32	LT/RT	188+00	-	216+00	--	7	10,120
STH 32	LT/RT	216+00	-	258+00	--	8	16,090
STH 32	LT/RT	258+00	-	300+00	--	6	19,990
STH 32	LT/RT	300+00	-	342+00	--	14	17,240
STH 32	LT/RT	342+00	-	384+00	--	14	15,330
STH 32	LT/RT	384+00	-	404+75.16	--	12	7,550
STH 32	54+00 LT	--	--	--	15	--	--
TOTAL					**15**	**107**	**151,280**

REMOVING CURB & GUTTER

ROADWAY	LOCATION	204.0150 REMOVING CURB & GUTTER LF
STH 32/CTH H SW	54+00 LT	55
TOTAL		**55**

BASE AGGREGATE DENSE ITEMS

ROADWAY	LOCATIONS	STA	TO	STA	305.0110 3/4-INCH TON	624.0100 WATER MGAL
STH 32	SHOULDERS	16+50.64	-	65+00	240	4
STH 32	SHOULDERS	65+00	-	107+00	200	3
STH 32	SHOULDERS	107+00	-	151+00	210	3.2
STH 32	SHOULDERS	151+00	-	188+00	180	2.7
STH 32	SHOULDERS	188+00	-	216+00	140	2.1
STH 32	SHOULDERS	216+00	-	258+00	200	3.0
STH 32	SHOULDERS	258+00	-	300+00	200	3.0
STH 32	SHOULDERS	300+00	-	342+00	200	3.0
STH 32	SHOULDERS	342+00	-	384+00	200	3.0
STH 32	SHOULDERS	384+00	-	404+75.16	100	1.5
UNDISTRIBUTED					100	1.5
TOTAL					**1,970**	**30**

RUMBLE STRIP ITEMS

ROADWAY	STA	TO	STA	465.0475 CENTER LINE RUMBLE STRIPS 2-LANE RURAL LF
STH 32	30+05	-	65+00	3,095
STH 32	65+00	-	107+00	4,000
STH 32	107+00	-	151+00	4,200
STH 32	151+00	-	188+00	3,300
STH 32	188+00	-	216+00	2,400
STH 32	216+00	-	258+00	3,800
STH 32	258+00	-	300+00	3,800
STH 32	300+00	-	342+00	3,800
STH 32	342+00	-	384+00	3,800
STH 32	384+00	-	400+89	1,689
TOTAL				**33,884**

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

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ASPHALTIC ITEMS

ROADWAY	STA	TO	STA	LOCATION	211.0100 PREPARE FOUNDATION FOR ASPHALTIC PAVING (PROJECT) 01. 9170-18-60 LS	460.5224 HMA PAVEMENT 4 LT 58-28 S TON	455.0605 TACK COAT GAL	460.0105.S HMA PWL TEST STRIP VOLUMETRICS EACH	460.0110.S HMA PWL TEST STRIP DENSITY EACH	465.0110 ASPHALTIC PATCHING TON	REMARKS
STH 32	16+50.64	-	65+00	LT/RT	--	2,120	1,325	--	--	--	
STH 32	65+00	-	107+00	LT/RT	--	2,260	1,410	--	--	--	
STH 32	107+00	-	151+00	LT/RT	--	1,420	890	--	--	--	
STH 32	151+00	-	188+00	LT/RT	--	1,470	915	--	--	--	
STH 32	188+00	-	216+00	LT/RT	--	1,130	710	--	--	--	
STH 32	216+00	-	258+00	LT/RT	--	1,800	1,125	--	--	--	
STH 32	258+00	-	300+00	LT/RT	--	2,240	1,400	--	--	--	
STH 32	300+00	-	342+00	LT/RT	--	1,930	1,205	--	--	--	
STH 32	342+00	-	384+00	LT/RT	--	1,720	1,070	--	--	--	
STH 32	384+00	-	404+75.16	LT/RT	--	840	530	--	--	--	
STH 32	16+50.64	-	404+75.16	LT/RT	1	--	--	--	--	--	
UNDISTRIBUTED					--	--	--	1	1	50	POTHOLES, PATCHING, C&G REPLACEMENT, RAMPING
TOTAL					**1**	**16,930**	**10,580**	**1**	**1**	**50**	

PWL MIXTURE USE TABLE

Project ID	Location	Station	Mixture Use	Underlying Surface	Bid Item	Tons	Thickness	Quality Management Program to be used for:	
								Mixture Acceptance	Density Acceptance
9017-18-60	12-Ft Driving Lanes - STH 32	4+35.24 to 469+00	Upper Layer	Milled Existing HMA Surface	4 LT 58-28 S	11,580	2"	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
9017-18-60	3-Ft Shoulder - STH 32	4+35.24 to 469+00	Upper Layer	Milled Existing HMA Surface	4 LT 58-28 S	5,350	2"	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance testing by the Department; Not eligible for incentive
9017-18-60	Project		Patching	Existing Base Aggregate	ASPHALTIC SURFACE PATCHING	45	Varies	QMP as per Standard Specification 465	Acceptance by ordinary compaction
9017-18-60	CTH H - SW Quad	54+00 LT	Patching	Existing Base Aggregate	ASPHALTIC SURFACE PATCHING	5	5 1/2"	QMP as per Standard Specification 465	Acceptance by ordinary compaction

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

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CONCRETE CURB AND GUTTER ITEMS

ROADWAY	LOCATION	601.0557 CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D LF
STH 32/CTH H SW	54+00 LT	55
TOTAL		**55**

EROSION CONTROL MOBILIZATION

LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
PROJECT	2	2
TOTAL	**2**	**2**

REMOVING AND MOVING SIGNS

ROADWAY	LOCATION	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	638.2102 MOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	638.4000 MOVING SMALL SIGN SUPPORTS EACH
UNDISTRIBUTED	STH 32	16	16	16	16
TOTAL		**16**	**16**	**16**	**16**

NOTE: UNDISTRIBUTED SIGNING ITEMS ARE TO ADJUST NO PASSING ZONE SIGNS AND ANY OTHER SIGNS AS DIRECTED BY THE ENGINEER.

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TRAFFIC CONTROL

ROADWAY	LOCATION	USAGE	DURATION DAYS**	643.0300 DRUMS EACH**	643.0300 DRUMS DAY	643.0900 SIGNS EACH**	643.0900 SIGNS DAY	643.1000 SIGNS FIXED MESSAGE SF	REFERENCE
STH 32	W PROJECT LIMITS	ADVANCED NOTICE	7	--	--	--	--	18	PLACE SIGN G20-57 SIGN 7 DAYS PRIOR TO START OF CONSTRUCTION
STH 32	E PROJECT LIMITS	ADVANCED NOTICE	7	--	--	--	--	18	PLACE SIGN G20-57 SIGN 7 DAYS PRIOR TO START OF CONSTRUCTION
STH 32	W PROJECT LIMITS	ADVANCED WARNING	37	--	--	8	296	--	SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"
STH 32	E PROJECT LIMITS	ADVANCED WARNING	37	--	--	8	296	--	SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"
	SIDE ROADS	ADVANCED WARNING	37	--	--	14	518	--	SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"
STH 32	--	MILLED SURFACE	11	--	--	16	176	--	SDD "TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES"
CTH H	SW QUAD	CURB & GUTTER REPLACEMENT	7	10	70	--	--	--	
TOTAL					**70**		**1,286**	**36**	

** INFORMATION ONLY

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

PAVEMENT MARKING ITEMS

ROADWAY	STATION	TO	STATION	646.1020 MARKING LINE EPOXY 4-INCH SOLID YELLOW* LF	646.1020 MARKING LINE EPOXY 4-INCH 12.5' SKIP YELLOW* LF	646.1020 MARKING LINE EPOXY 4-INCH 12.5' SKIP WHITE LF	646.1020 MARKING LINE EPOXY 4-INCH 3 FT LINE 9 FT SKIP WHITE LF	646.1040 GROOVED WET REFLECTIVE EPOXY 4-INCH WHITE LF	646.3040 GROOVED WET REFLECTIVE EPOXY 8-INCH WHITE LF	649.0120*** TEMPORARY MARKING LINE EPOXY 4-INCH YELLOW LF	649.0105** TEMPORARY MARKING LINE PAINT 4-INCH YELLOW LF
STH 32	16+50.64	-	GILLETT TOWN HALL RD	1,412	238	---	---	2,191	190	1,650	3,299
STH 32	GILLETT TOWN HALL RD	-	123+57	10,512	1,800	2,164	195	15,171	494	12,312	24,624
STH 32	123+57	-	164+87	3,806	288	---	---	10,825	---	4,094	8,187
STH 32	164+87	-	202+00	4,572	500	---	---	6,326	192	5,072	10,144
STH 32	202+00	-	213+05	1,105	275	---	---	1,014	193	1,380	2,760
STH 32	213+05	-	250+30	5,425	500	---	---	16,052	192	5,925	11,850
STH 32	250+30	-	300+14	5,598	1,100	1,400	---	5,123	---	6,698	13,396
STH 32	300+14	-	325+06	3,876	275	250	135	10,323	198	4,151	8,302
STH 32	325+06	-	377+00	---	1,313	---	---	4,826	400	1,313	2,625
STH 32	377+00	-	404+76.16	3,125	550	---	---	363	100	3,675	7,350
SUBTOTAL				39,431	6,838	3,814	330				
TOTAL					**50,412**			**72,214**	**1,959**	**46,269**	**92,537**

* NOTE: PAVEMENT MARKING EPOXY 4-INCH FOR FINAL CENTERLINE APPLICATION AFTER CENTERLINE RUMBLE STRIPS PLACED.

** NOTE: TEMPORARY PAVEMENT MARKING PAINT 4-INCH FOR CENTERLINE APPLIED TO MILLED SURFACE AND TO TAPERED JOINT IN THE HMA PAVEMENT PASS #1, IF REQUIRED.

*** NOTE: TEMPORARY PAVEMENT MARKING EPOXY 4-INCH FOR CENTERLINE APPLIED TO FINAL SURFACE BEFORE CENTERLINE RUMBLE STRIPS PLACED.

RESTORATION ITEMS

ROADWAY	LOCATION	625.0100 TOPSOIL SY	628.2002 EROSION MAT CLASS I TYPE A SY	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIXTURE NO. 30 LB	630.0200 SEEDING TEMPORARY LB	630.0500 SEED WATER MGAL	COMMENTS
STH 32	54+00 LT	22	22	0.02	0.1	0.1	--	CTH H SW QUAD
STH 32	347+90 LT	3	3	0.01	0.1	0.1	--	GRUBBING AREA
UNDISTRIBUTED		6	6	0.01	0.1	0.1	1	
TOTAL		**31**	**31**	**0.04**	**0.3**	**0.3**	**1**	

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

CONSTRUCTION STAKING

ROADWAY	STATION	TO	STATION	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF	650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL PROJECT 9170-18-60 LS
STH 32	16+50.64		404+75.16	55	38,825	1
TOTAL				**55**	**38,825**	**1**

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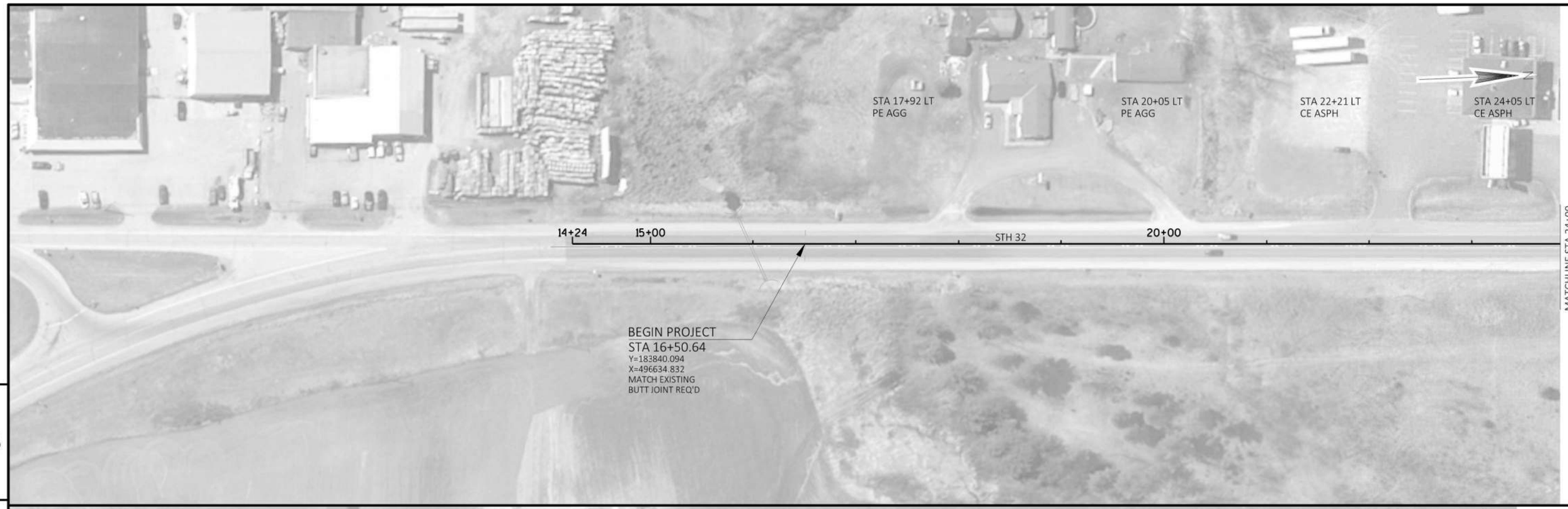
SAW CUTTING ITEMS

ROADWAY	STATION	690.0150 SAWING ASPHALT LF
STH 32	16+50.64	30
GILLETT TOWN HALL ROAD		58
CTH H		98
SPRING HILL ROAD		44
VALLEY LINE ROAD		36
KLAUS LAKE ROAD		29
4 TOWNS ROAD		35
HANSON LANE		27
CLAYWOOD ROAD		60
TILMAN ROAD		31
CTH A		29
TRINITY CHURCH ROAD		22
STH 32	404+75.16	31
UNDISTRIBUTED		50
TOTAL		**580**

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE NOTED



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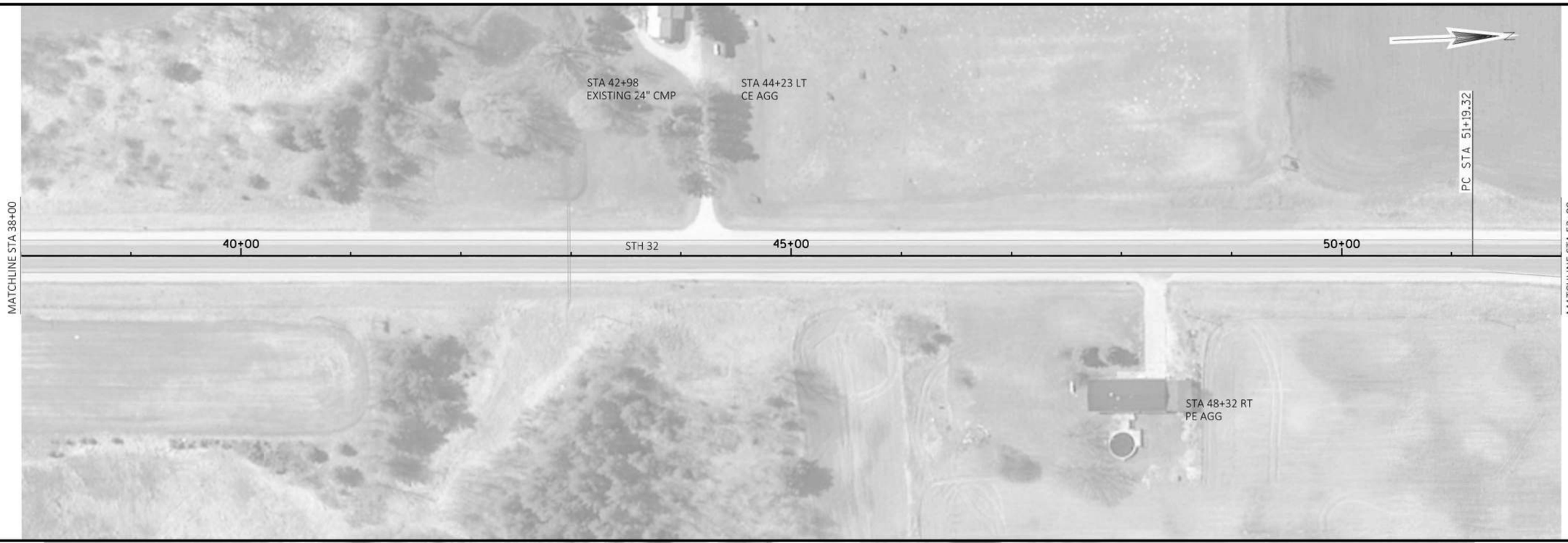

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SHEET NAME: 050202

PROJECT NO: 9170-18-60	HWY: STH 32	COUNTY: OCONTO	PLAN	SHEET 21 E

FILE NAME : O:\PDS\C3D\91701830\SHEETSPLAN\050201-PN.DWG

SHEET NAME: 050203

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PROJECT NO: 9170-18-60	HWY: STH 32	COUNTY: OCONTO	PLAN	SHEET 22 E

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SHEET NAME: 050204

PROJECT NO: 9170-18-60	HWY: STH 32	COUNTY: OCONTO	PLAN	SHEET 23 E

FILE NAME : O:\PDS\C3D\91701830\SHEETSPLAN\050201-PN.DWG

SHEET NAME: 050205

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PROJECT NO: 9170-18-60	HWY: STH 32	COUNTY: OCONTO	PLAN	SHEET 24 E

FILE NAME : O:\PDS\C3D\91701830\SHEETSPLAN\050201-PN.DWG

SHEET NAME: 050206

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PROJECT NO: 9170-18-60	HWY: STH 32	COUNTY: OCONTO	PLAN	SHEET 25 E

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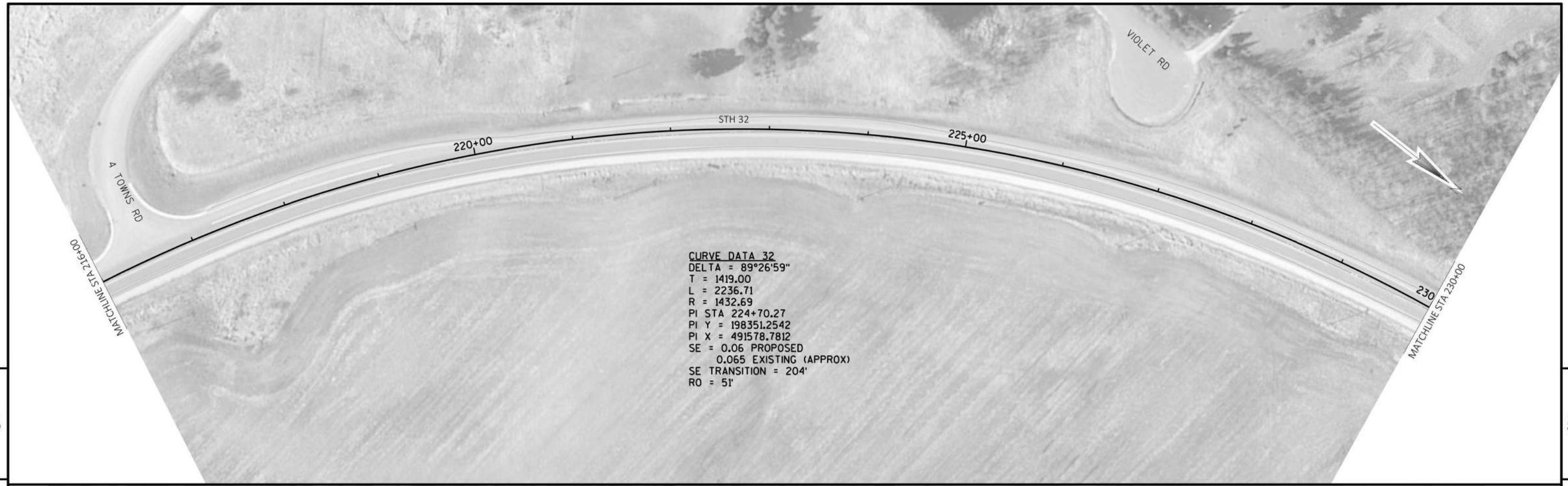

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PROJECT NO: 9170-18-60	HWY: STH 32	COUNTY: OCONTO	PLAN	SHEET 26 E

FILE NAME : O:\PDS\C3D\91701830\SHEETSPLAN\050201-PN.DWG

SHEET NAME: 050208

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PROJECT NO: 9170-18-60	HWY: STH 32	COUNTY: OCONTO	PLAN	SHEET 27 E

FILE NAME : O:\PDS\C3D\91701830\SHEETSPLAN\050201-PN.DWG

SHEET NAME: 050209

PROJECT NO: 9170-18-60	HWY: STH 32	COUNTY: OCONTO	PLAN	SHEET 28 E

FILE NAME : O:\PDS\C3D\91701830\SHEETSPLAN\050201-PN.DWG

SHEET NAME: 0502010

PROJECT NO: 9170-18-60	HWY: STH 32	COUNTY: OCONTO	PLAN	SHEET 29 E

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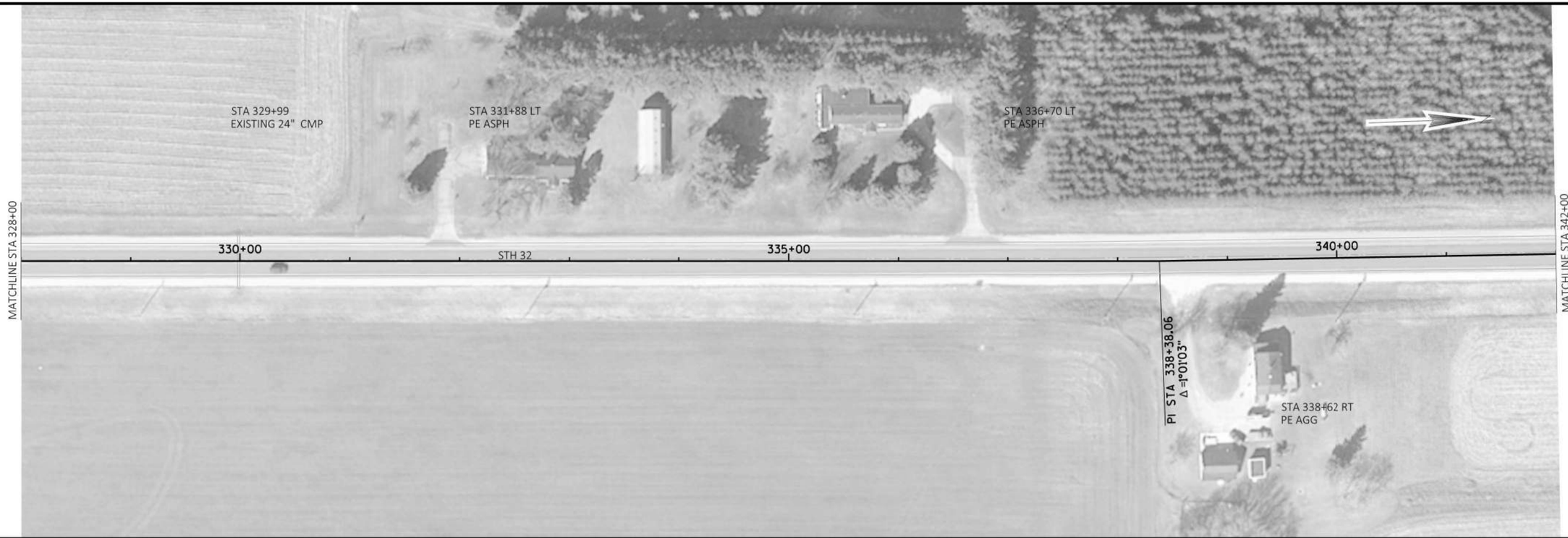
SHEET NAME: 0502011



PROJECT NO: 9170-18-60	HWY: STH 32	COUNTY: OCONTO	PLAN	SHEET 30 E

FILE NAME : O:\PDS\C3D\91701830\SHEETSPLAN\050201-PN.DWG

SHEET NAME: 0502012

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5

PROJECT NO: 9170-18-60	HWY: STH 32	COUNTY: OCONTO	PLAN	SHEET 31 E

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SHEET NAME: 0502013

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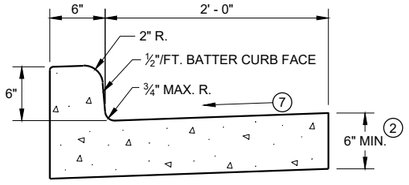
PROJECT NO: 9170-18-60	HWY: STH 32	COUNTY: OCONTO	PLAN	SHEET 32 E

FILE NAME : O:\PDS\C3D\91701830\SHEETSPLAN\050201-PN.DWG

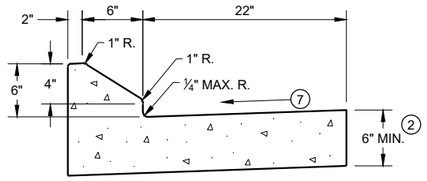
SHEET NAME: 0502014

Standard Detail Drawing List

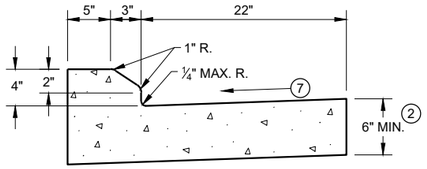
08D01-21A	CONCRETE CURB & GUTTER
08D01-21B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
13A11-03A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-03B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13C19-02	HMA LONGITUDINAL JOINTS
14B29-01	SAFETY EDGE
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-07	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C19-06A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C35-04A	PAVEMENT MARKING (INTERSECTIONS)
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES



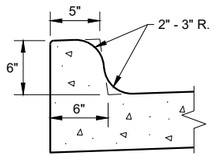
TYPES A[1] & D



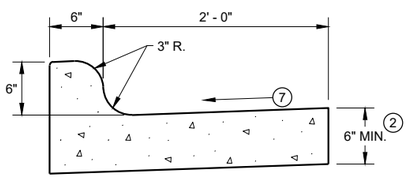
6" SLOPED CURB TYPES G[1] & J



4" SLOPED CURB TYPES G[1] & J

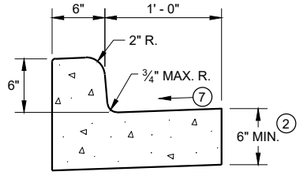


TYPES K[1] & L
(OPTIONAL CURB SHAPE)



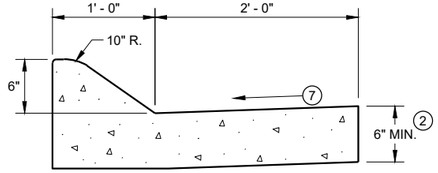
TYPES K[1] & L

CONCRETE CURB AND GUTTER 30"

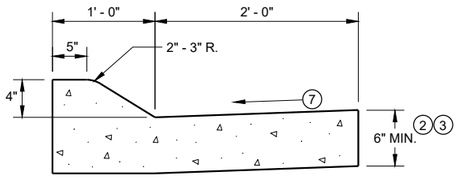


TYPES A[1] & D

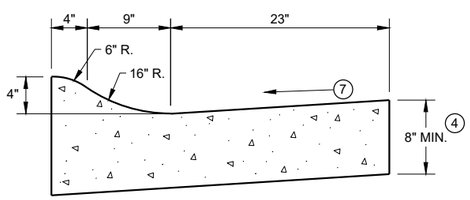
CONCRETE CURB AND GUTTER 18"



6" SLOPED CURB TYPES A[1] & D



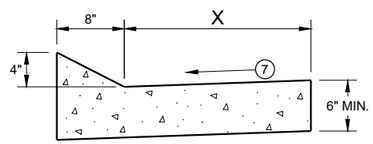
4" SLOPED CURB TYPES A[1] & D



4" SLOPED CURB TYPES R[1] & T[5]

CONCRETE CURB AND GUTTER 36"

TBT & TBTT	X
30"	22"
36"	28"

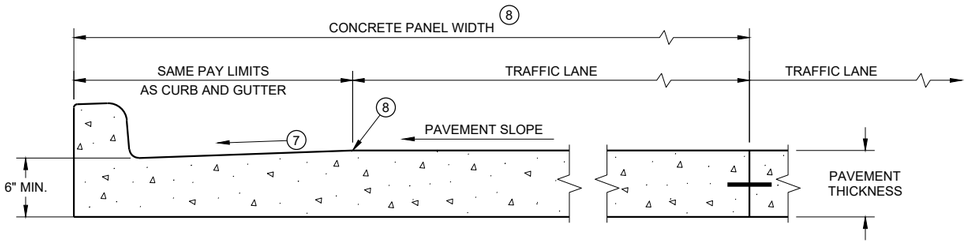


TYPES TBT & TBTT[1]

CONCRETE CURB AND GUTTER

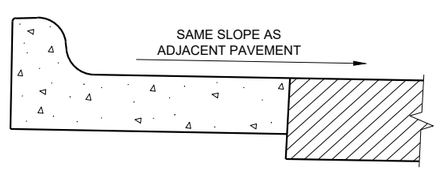
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'



PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



REVERSE SLOPE GUTTER[6]
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

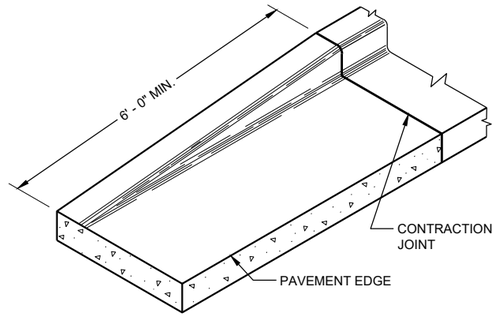
1. TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.
2. THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
3. USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.
4. THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.
5. THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
6. WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.
7. USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.
8. INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

CONCRETE CURB AND GUTTER

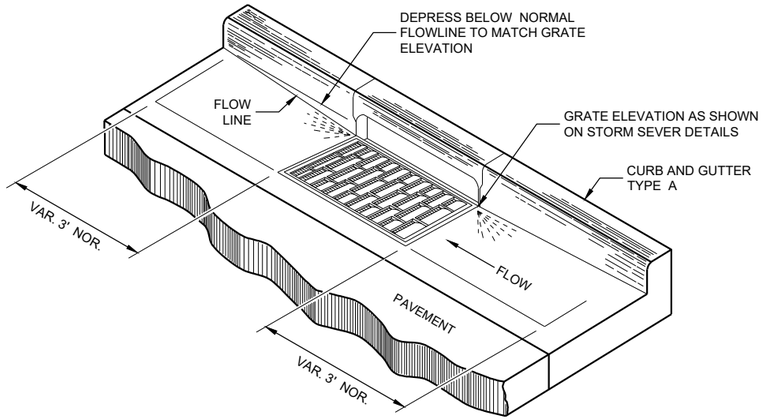
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D01 - 21a



END SECTIONCURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS
(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

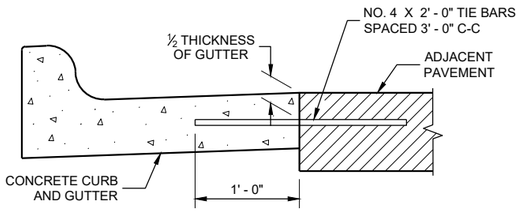
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

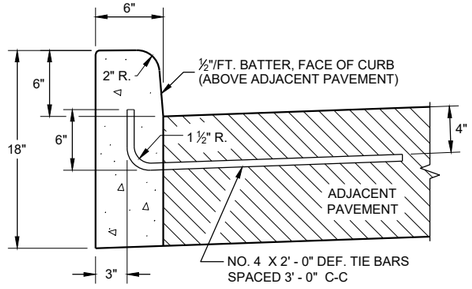
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

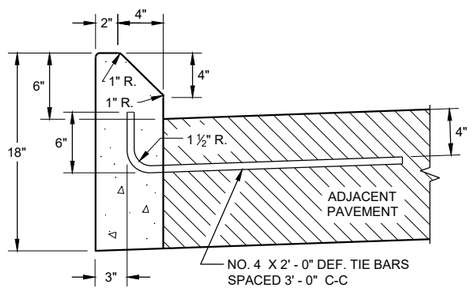
(9) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.



TYPICAL TIE BAR LOCATION (1)

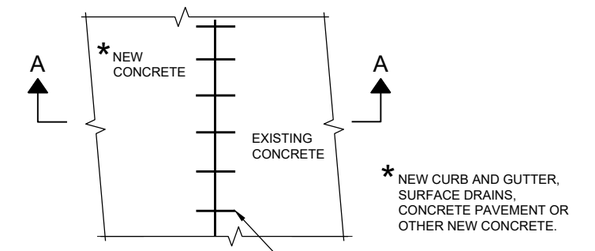


TYPES A (1) & D

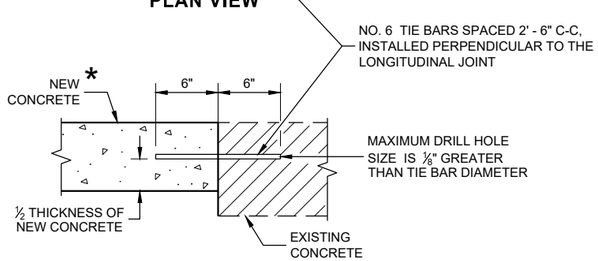


TYPES G (1) & J

CONCRETE CURB

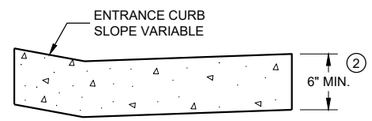


PLAN VIEW



SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



DRIVEWAY ENTRANCE CURB (9)
(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

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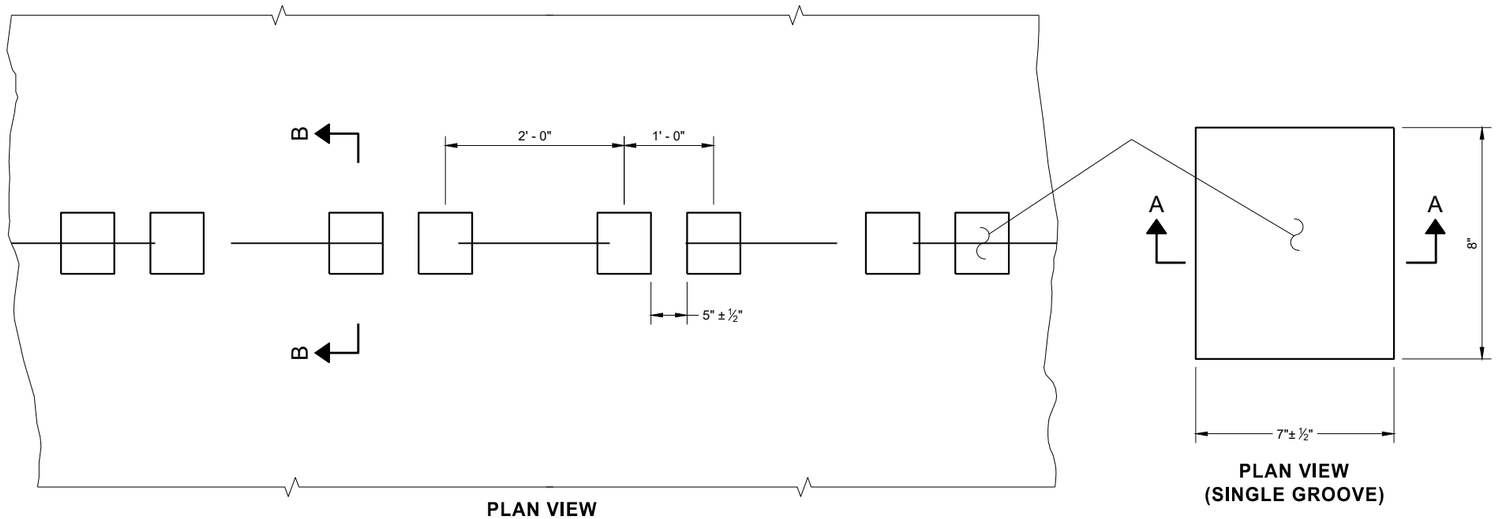
SDD08D01 - 21b

SDD08D01 - 21b



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP

GENERAL NOTES

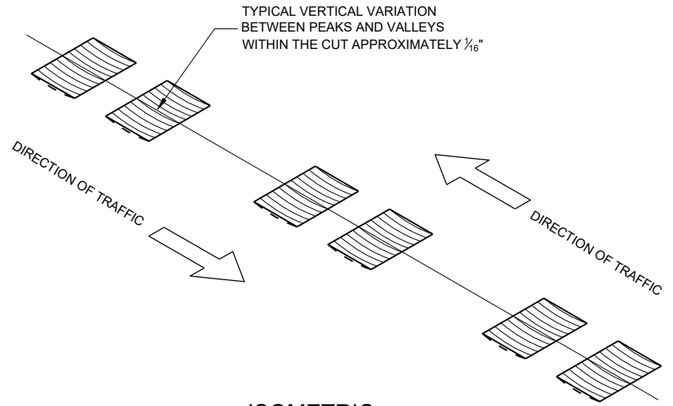
DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL CENTERLINE GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

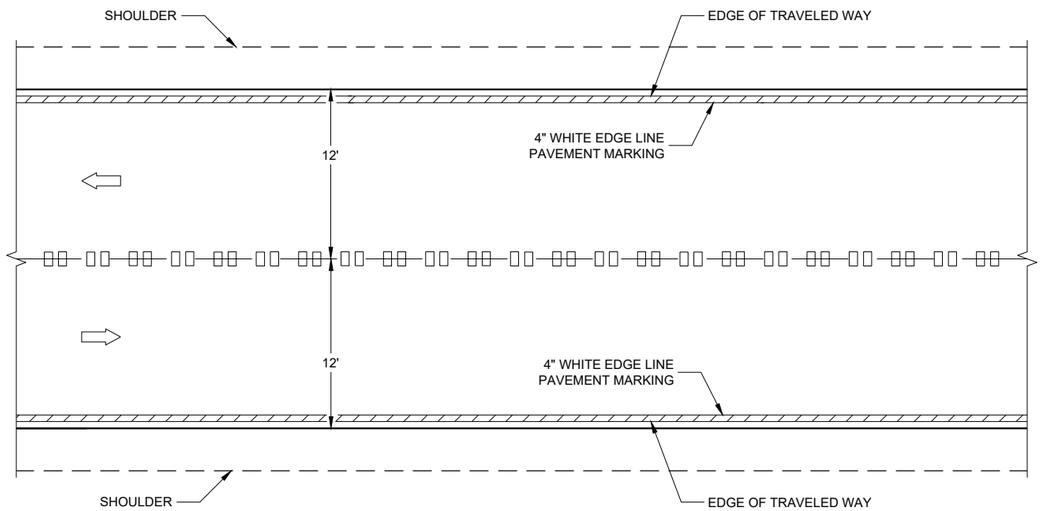
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

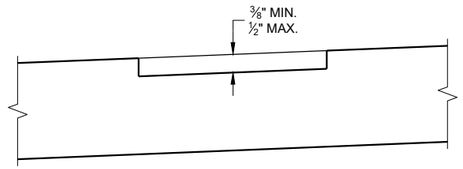
(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



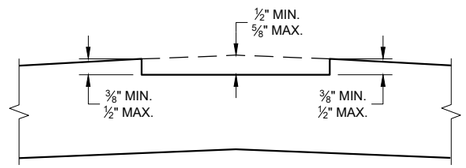
ISOMETRIC



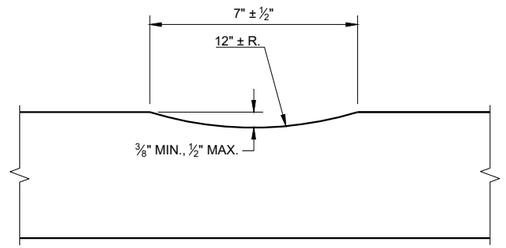
CENTERLINE GROOVES ON TWO-WAY ROADWAYS



SECTION B - B
SUPERELEVATED ROADWAY



SECTION B - B
CROWNED ROADWAY



SECTION A - A

2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

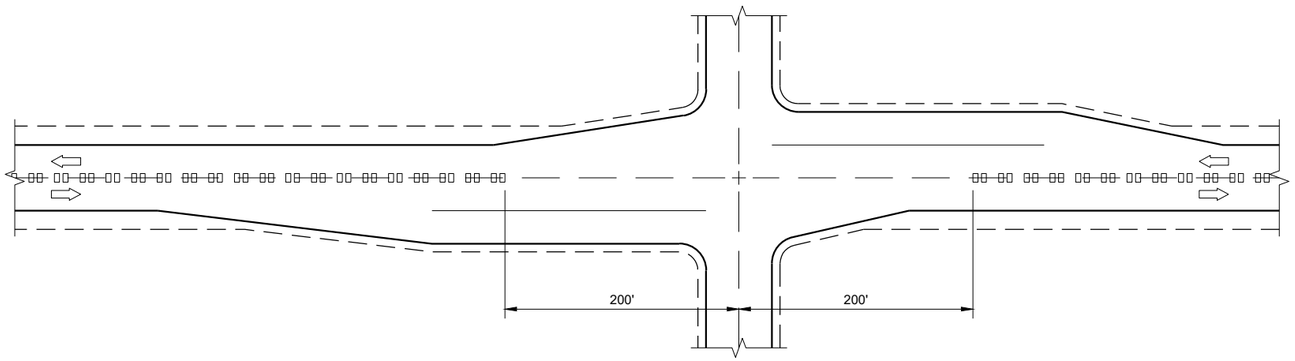
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

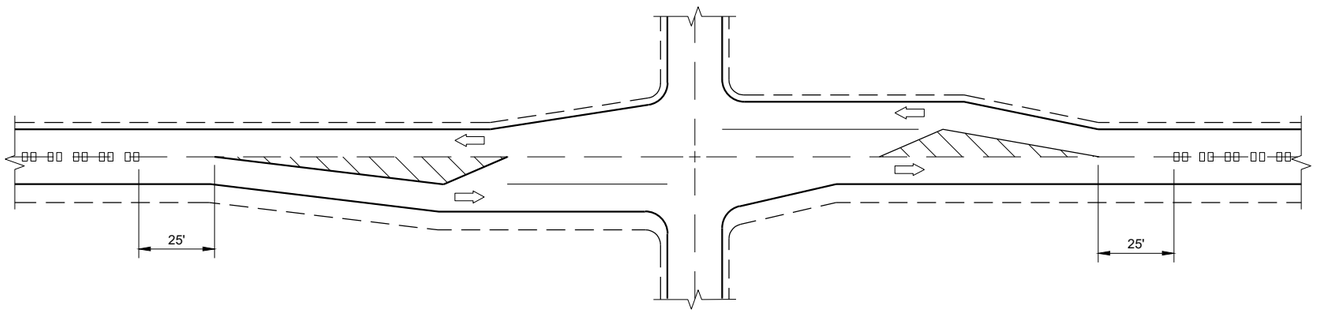
SDD 13A11 - 03a

6

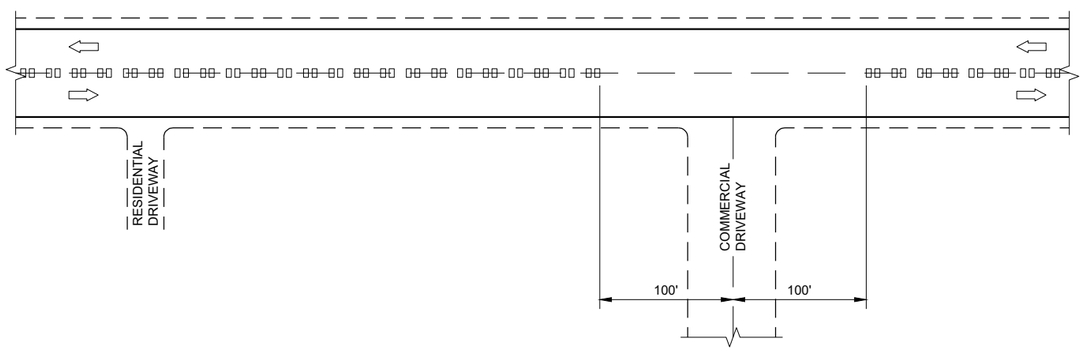
SDD 13A11 - 03a



CENTERLINE GROOVES AT INTERSECTIONS



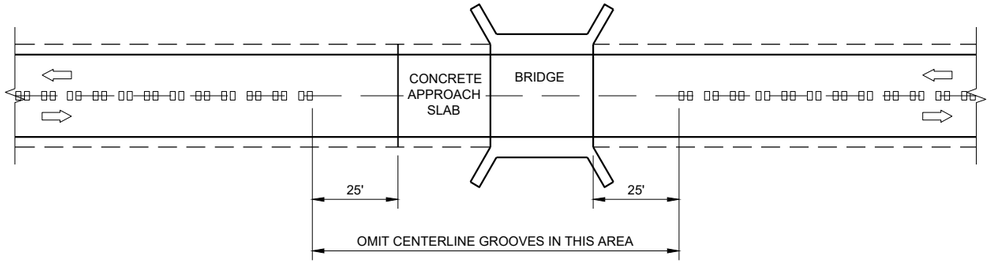
CENTERLINE GROOVES AT INTERSECTIONS (WITH LEFT TURN LANES)



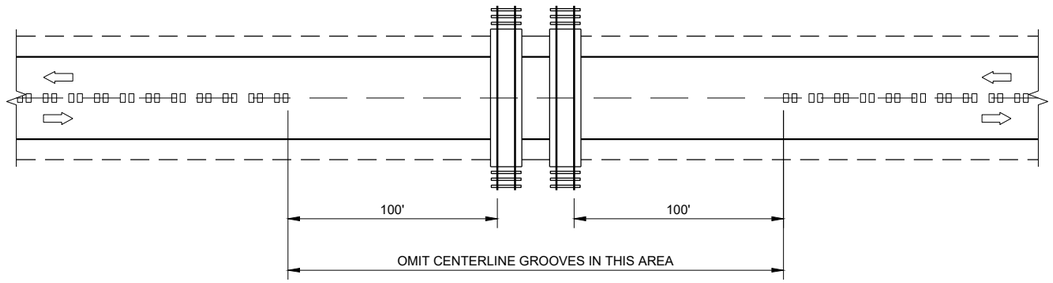
CENTERLINE GROOVES AT DRIVEWAYS (1)

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

2-LANE RURAL CENTERLINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

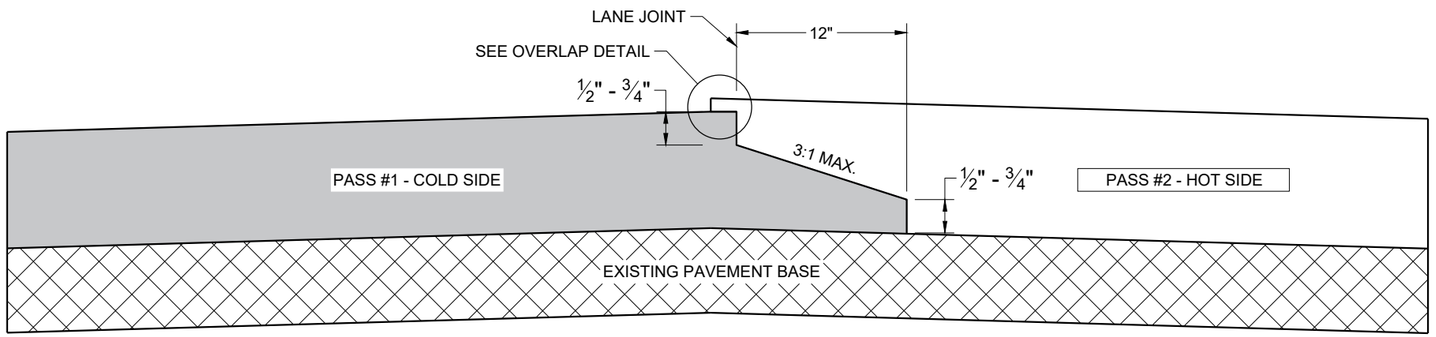
FHWA

6

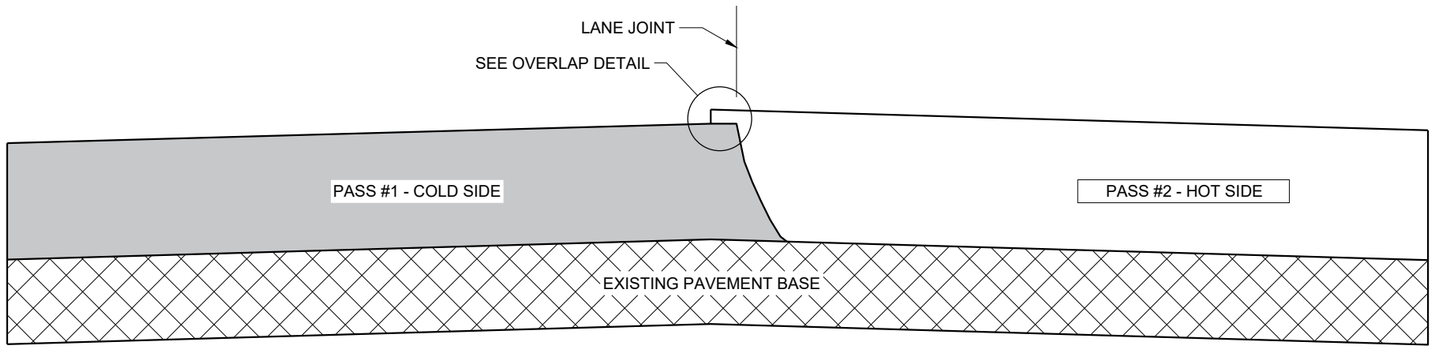
SDD 13A11 - 03b

6

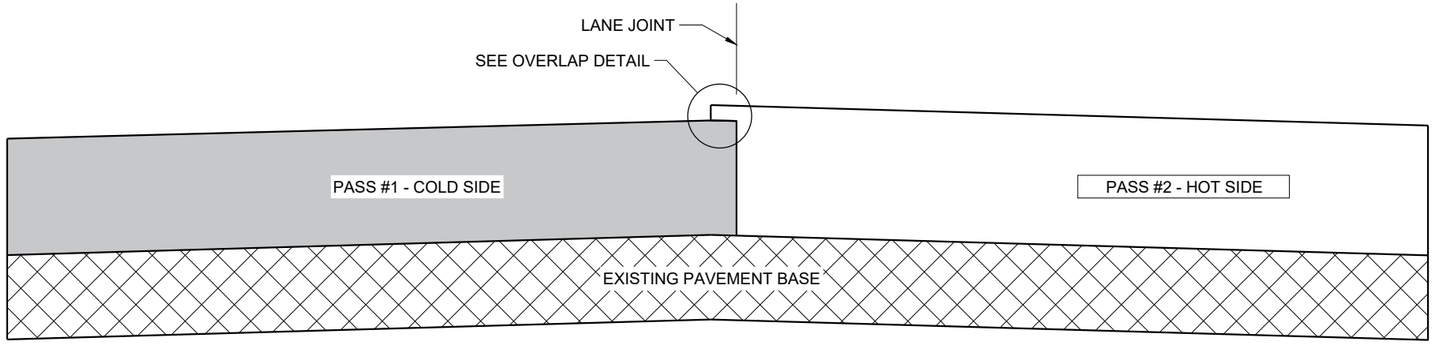
SDD 13A11 - 03b



TYPICAL PAVEMENT CROSS SECTION
OF NOTCHED WEDGE LONGITUDINAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL LONGITUDINAL JOINT



TYPICAL PAVEMENT CROSS SECTION
OF MILLED LONGITUDINAL JOINT

GENERAL NOTES

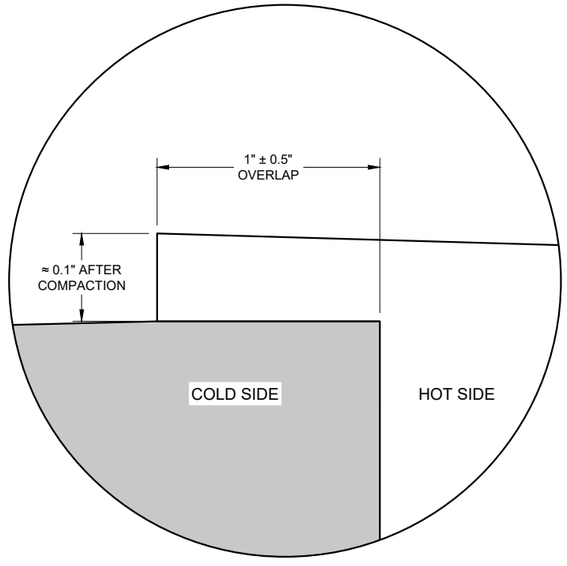
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY 1" ± 0.5" AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY 0.1" AFTER FINAL COMPACTION.

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)

6

6

SDD 13C19 - 02

SDD 13C19 - 02

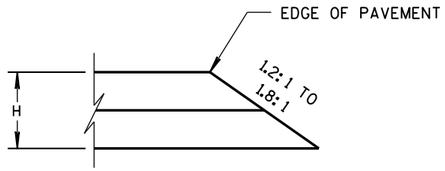
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

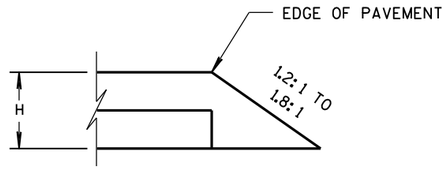
/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA



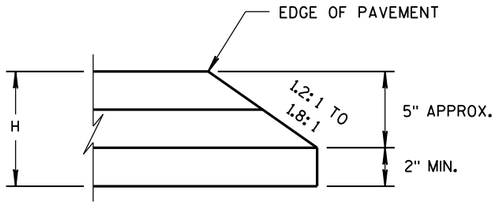
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



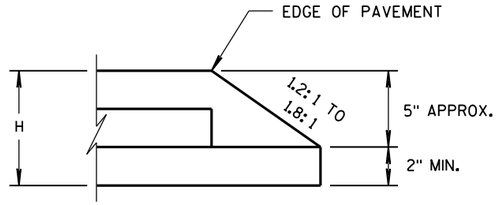
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

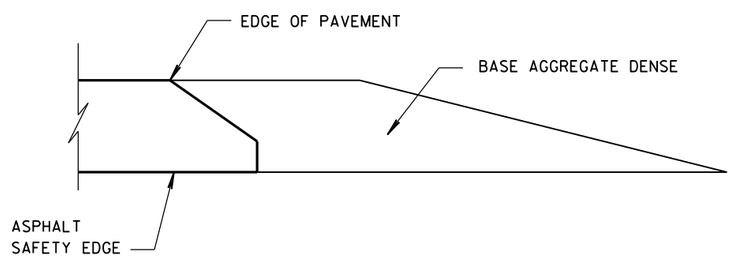
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

6

SAFETY EDGE SM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/2012
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

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.

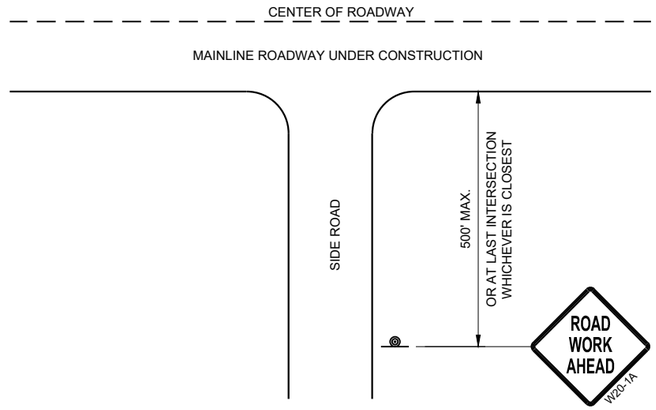
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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.



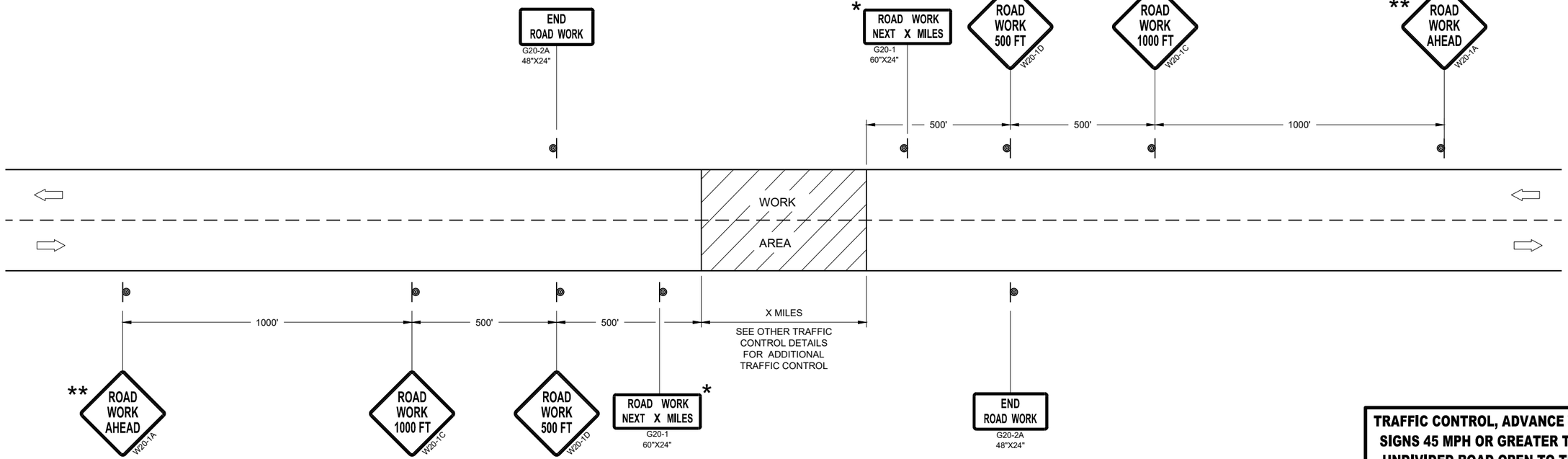
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

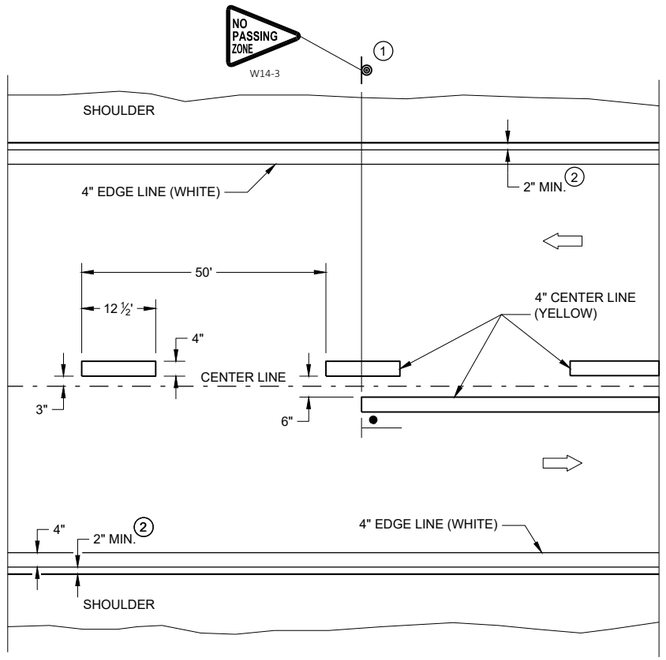
APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

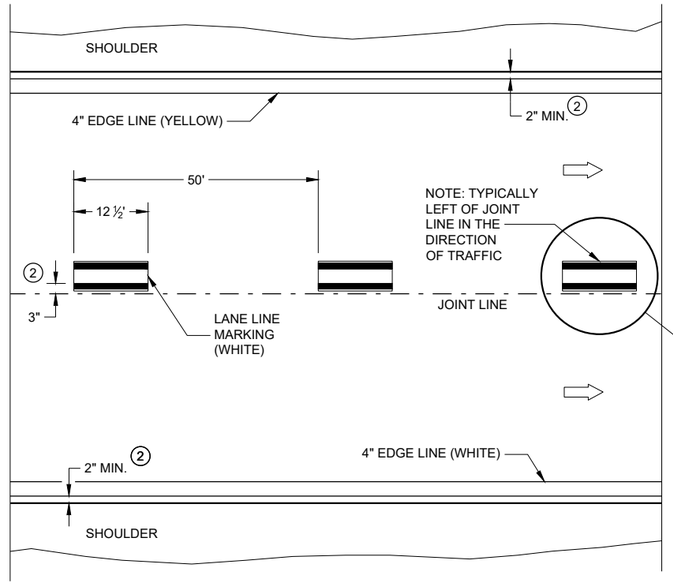
FHWA

6

SDD 15C04 - 05

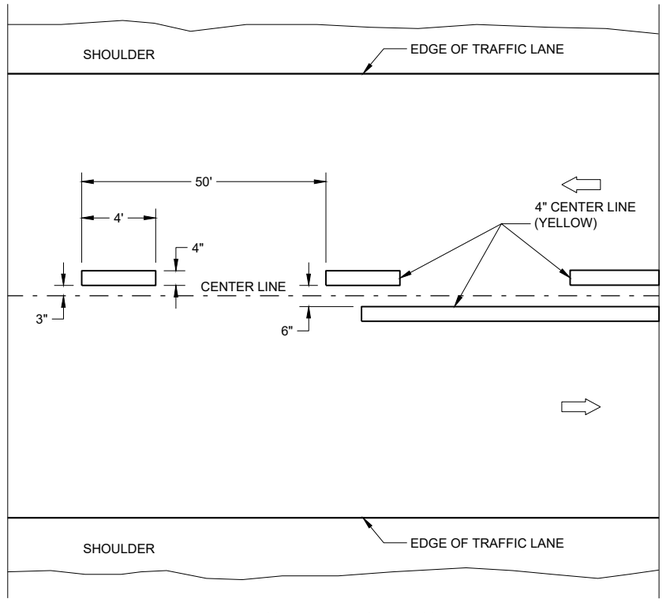


TWO WAY TRAFFIC

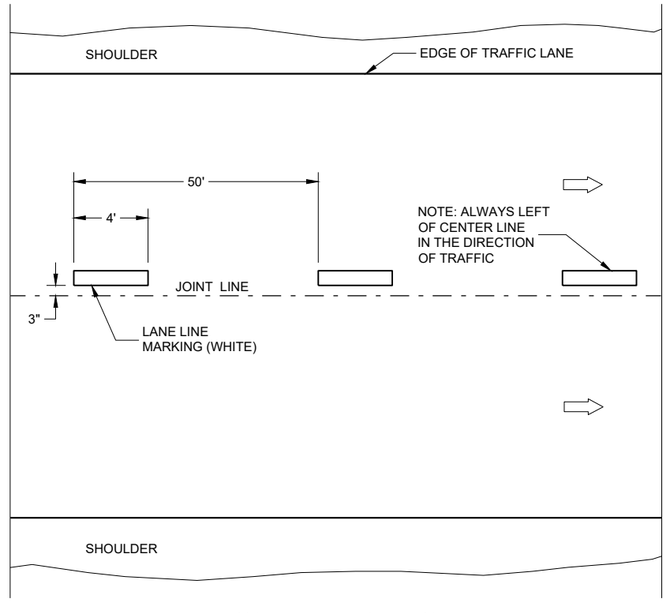


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

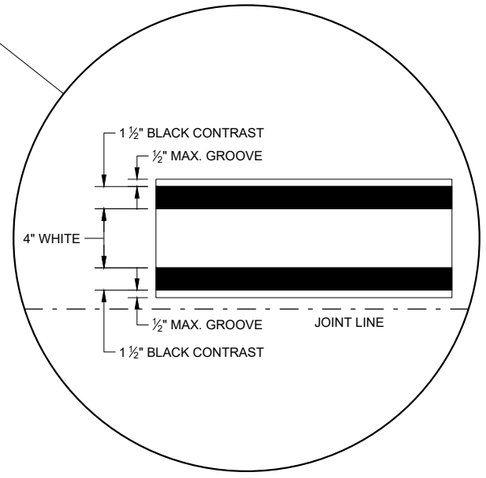
1. LOCATE THE NO PASSING ZONE W14-3 SIGN WITH 50 FEET OF THE "T" MARKING
2. MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Matthew Rauch
STATEWIDE SIGNING AND M
ENGINEER

FHWA

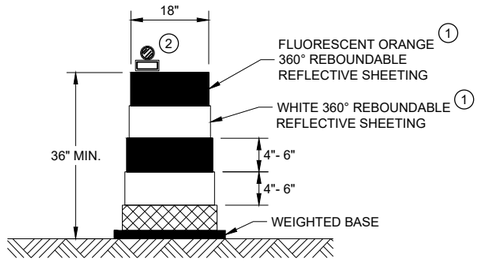
SDD 15C08 - 20a

SDD 15C08 - 20a

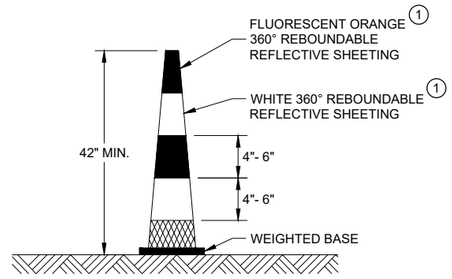
GENERAL NOTES

(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.

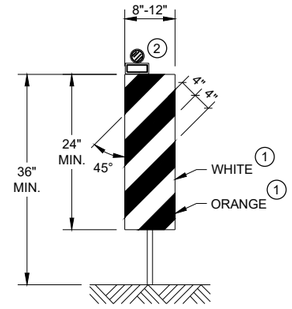


DRUM



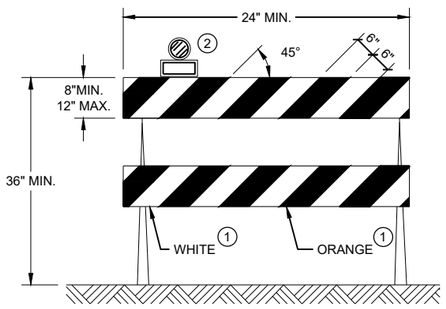
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



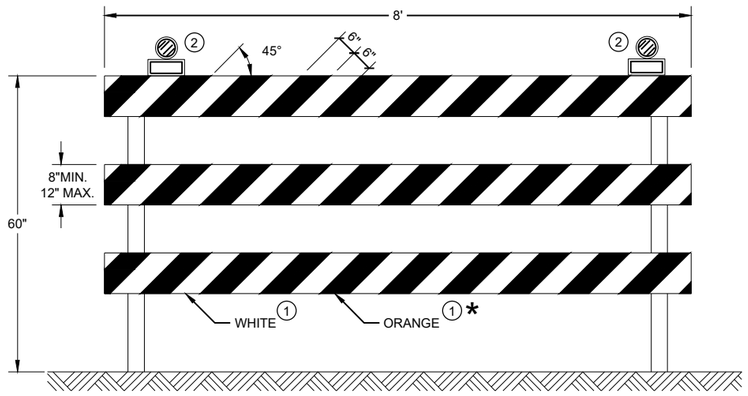
VERTICAL PANEL

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



TYPE II BARRICADE

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



TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C11 - 07b

6

SDD 15C11 - 07b

LEGEND

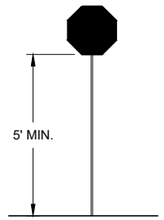
SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF



STOP/SLOW PADDLE 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 SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.

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

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

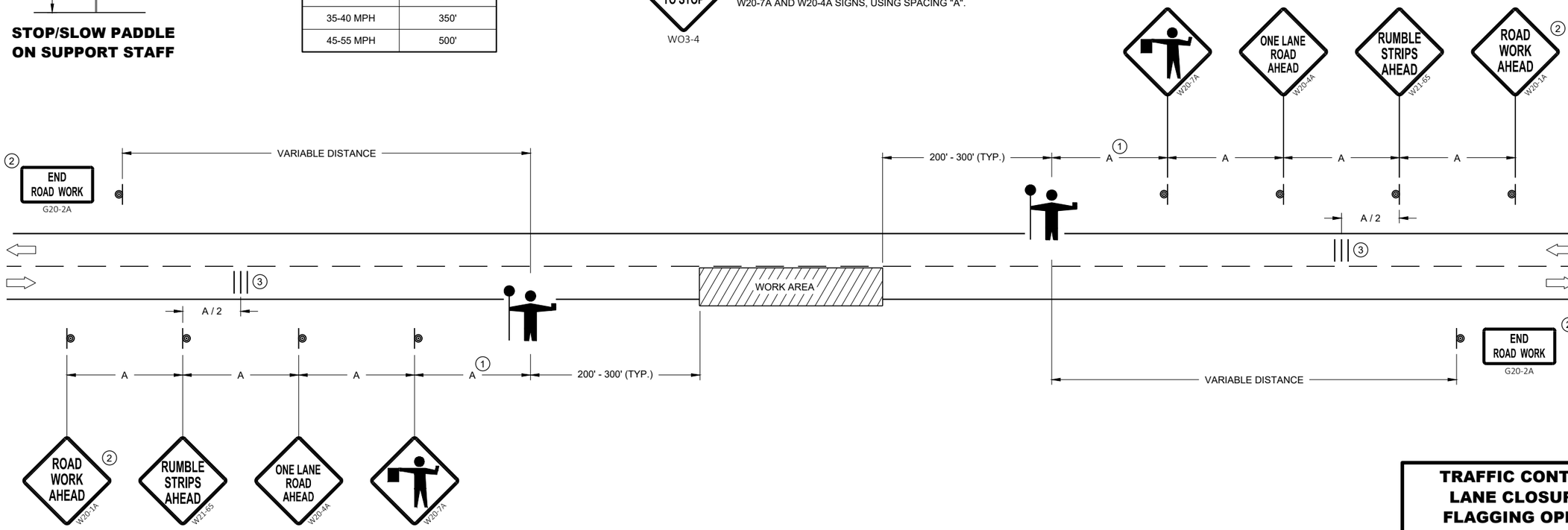
DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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

WO3-4

USE OF WO3-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C12 - 07

SDD 15C12 - 07

LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

FLASHING ARROW PANEL (CAUTION)

GENERAL NOTES

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

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

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

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

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

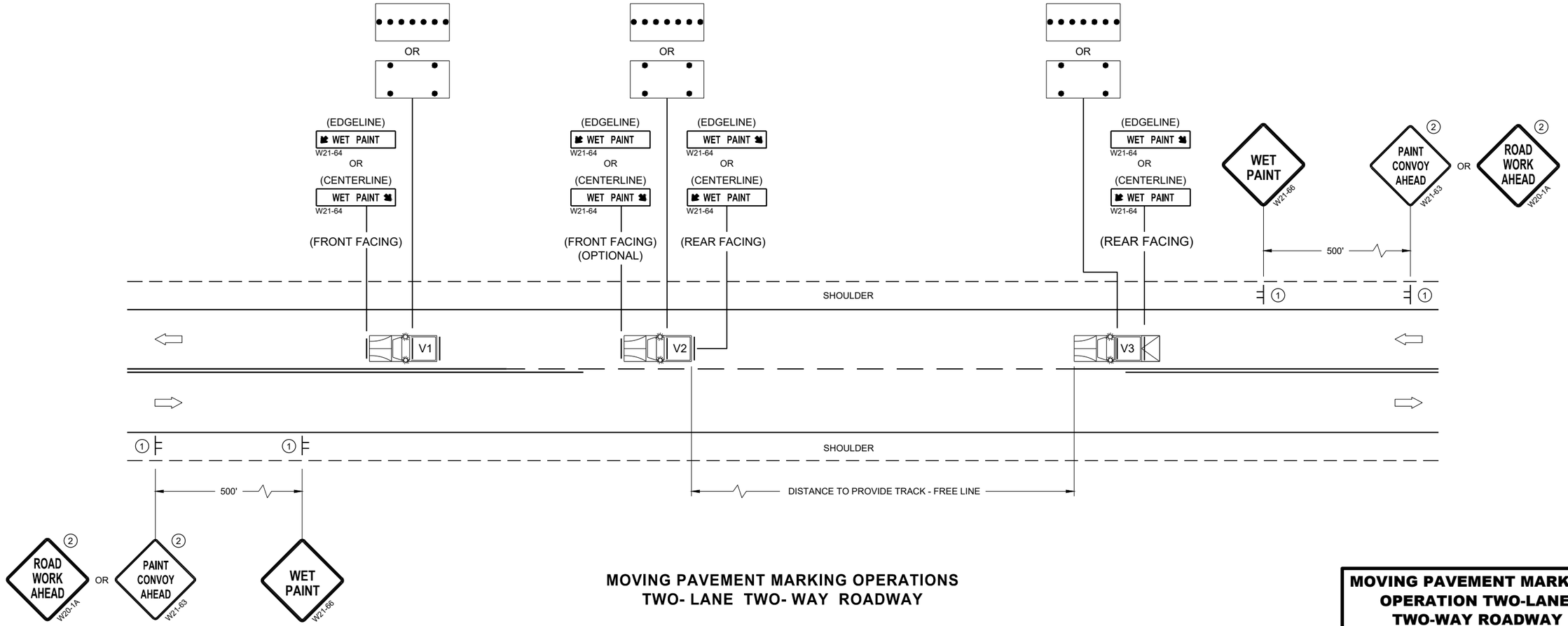
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

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

CONES SHALL BE A MINIMUM OF 18" FOR WET PAVEMENT MARKING .

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

(2) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.



MOVING PAVEMENT MARKING OPERATIONS TWO- LANE TWO- WAY ROADWAY

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

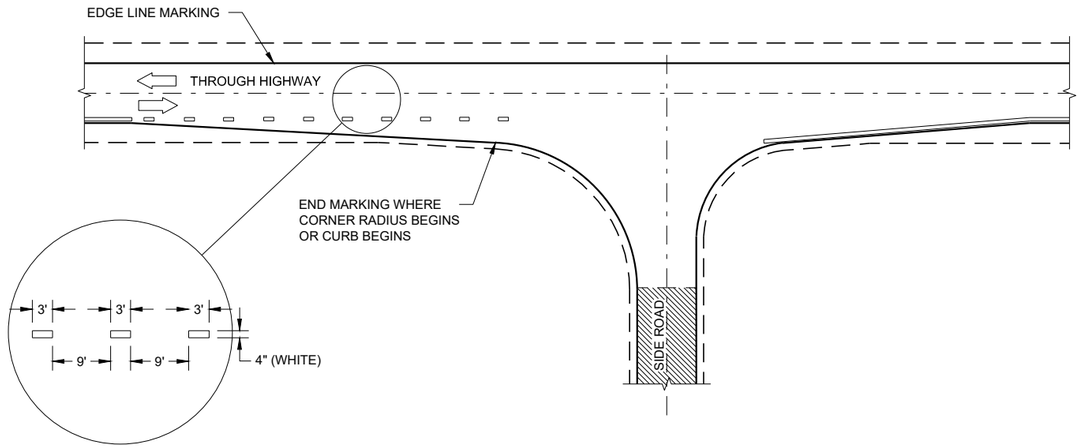
FHWA

6

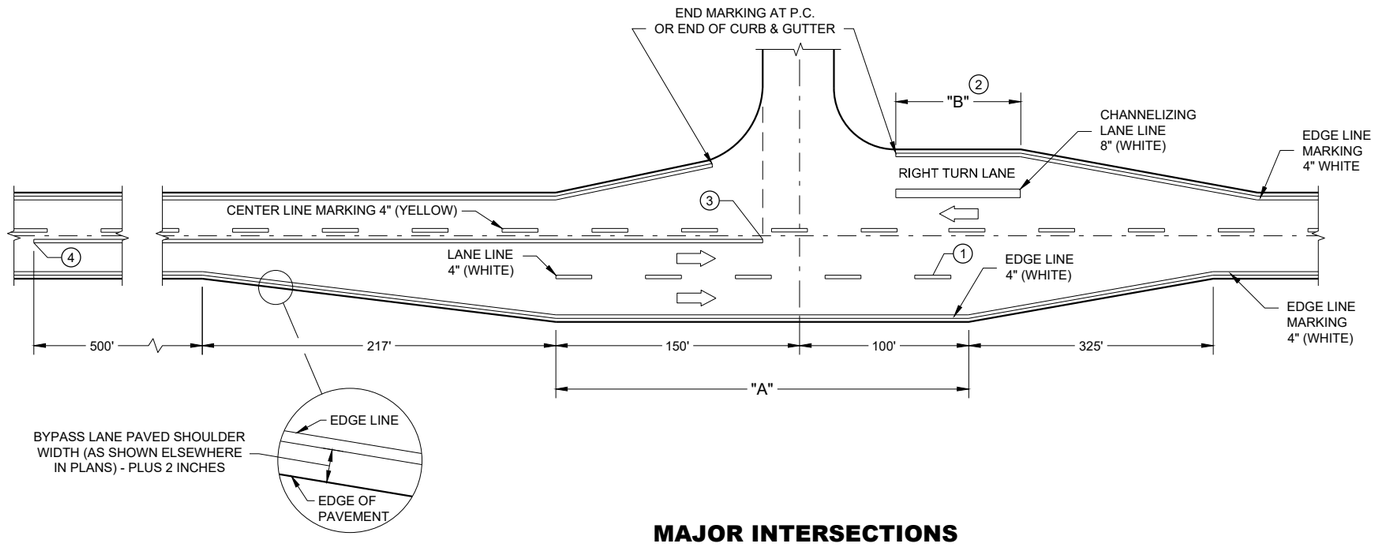
SDD 15C19 - 06a

6

SDD 15C19 - 06a



MINOR INTERSECTION



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

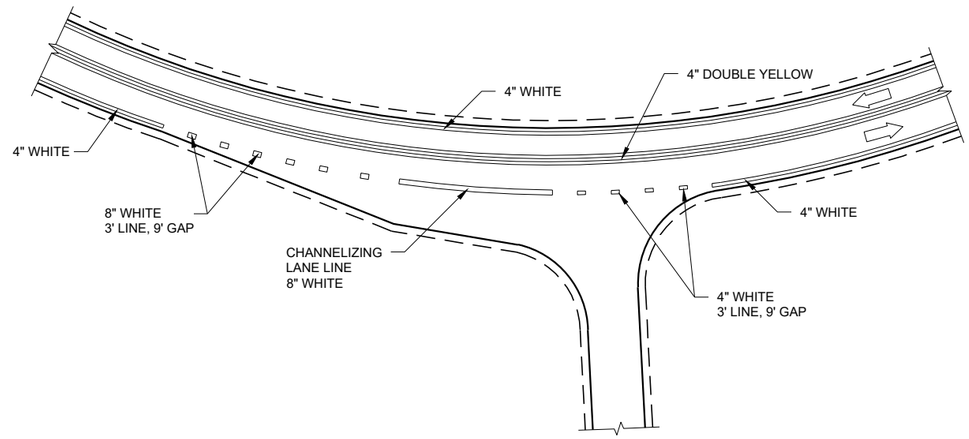
GENERAL NOTES

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

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

LEGEND

DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE

PAVEMENT MARKING (INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C35 - 04a

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- DIRECTION OF TRAFFIC
- WORK ZONE

TABLE A

SHOULDER TAPER LENGTH (FEET)					BUFFER SPACE (FEET)
W / S	4	6	8	10	
30	20	30	40	50	200
35	30	45	55	70	250
40	40	55	75	90	305
45	60	90	120	150	360
50	70	100	135	170	425
55	75	110	150	185	495

W = SHOULDER WIDTH (FEET
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

TAPER LENGTH

L= WS AT 45 MPH OR GREATER
L = WS² / 60 AT 40 MPH OR LESS

SHOULDER TAPER LENGTH = 1/3L

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

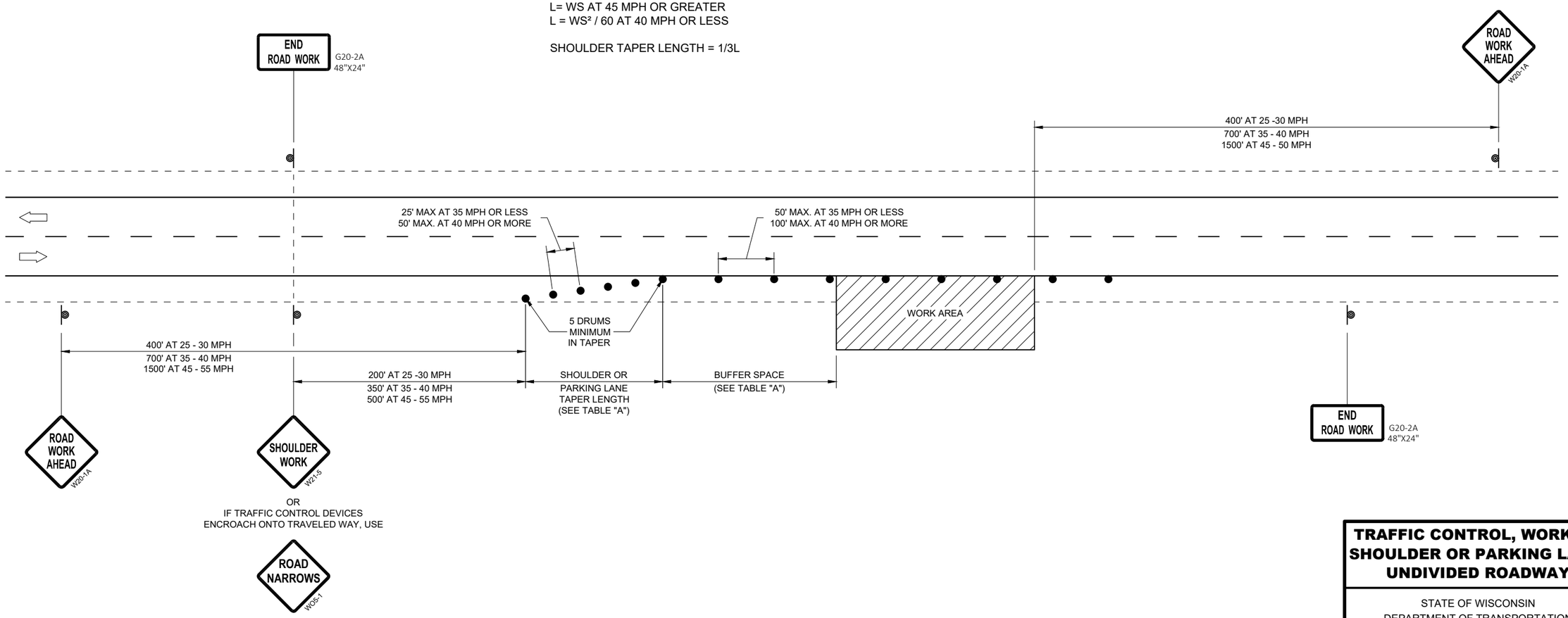
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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 WITHN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY RESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.



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

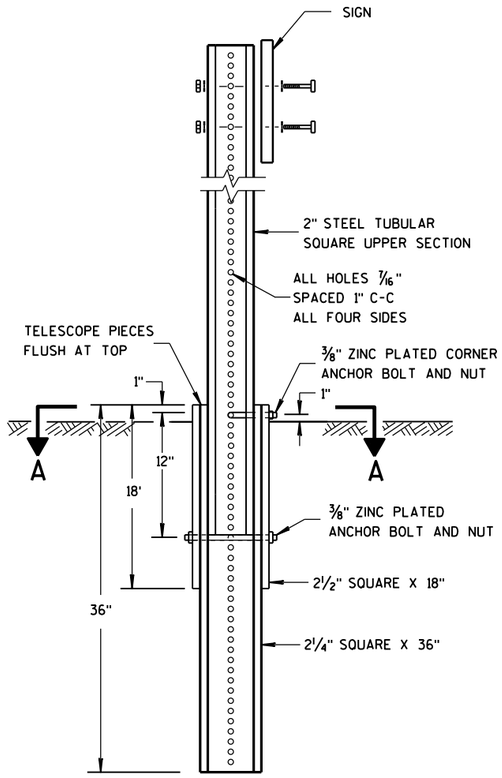
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2019 — DATE
/S/ Andrew Heidtke — STATEWIDE WORK ZONE T SAFETY ENGINEER

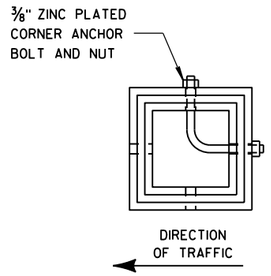
FHWA

6

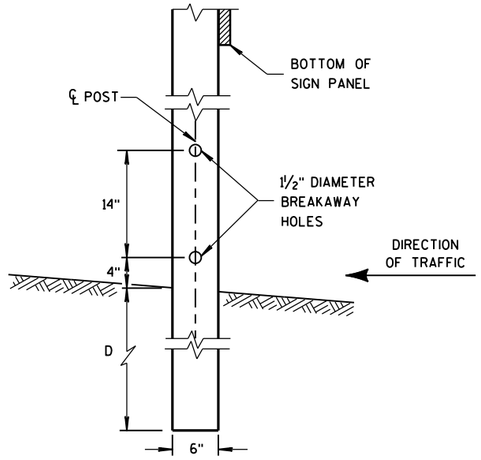
SDD 15D28 - 03



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



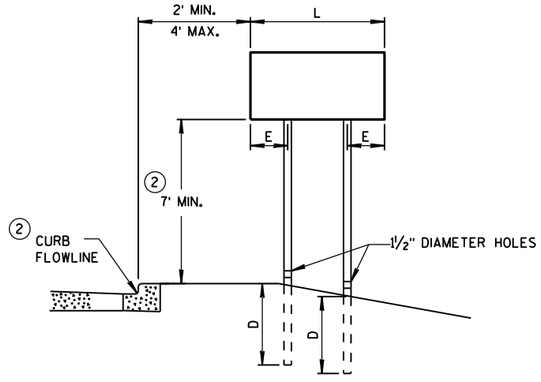
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

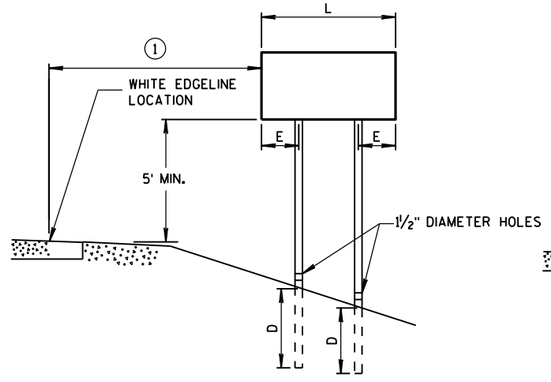
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

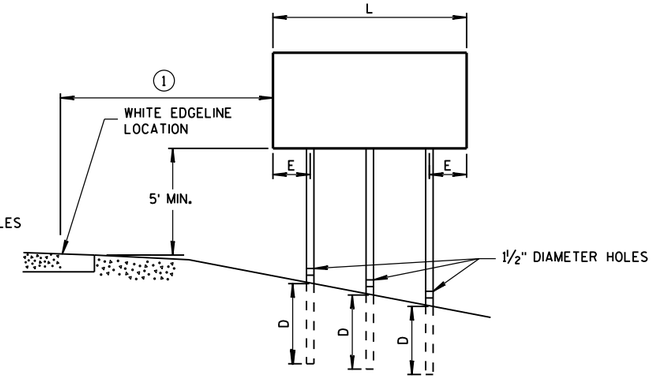
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

(3) FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

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

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

WOOD POST EMBEDMENT DEPTH

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

4" X 6" WOOD POST

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

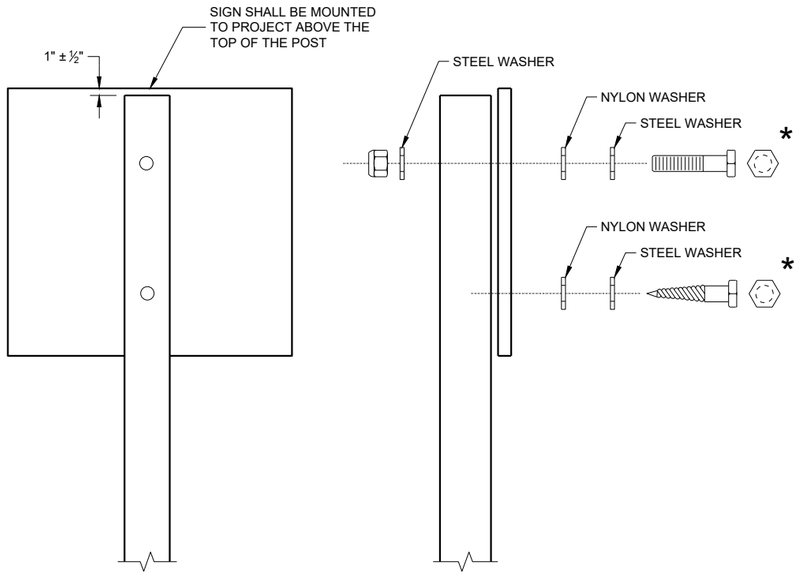
SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 15 D 38-2a



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

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

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

WOOD POST (4" x 6")
LAG SCREWS - ⅜" x 3"
MACHINE BOLTS - 5/16" x 6 ½" OR 7" LENGTH W/NUTS

SQUARE STEEL POST (2" x 2")
MACHINE BOLTS - ⅜" x 3 ¼" LENGTH W/NUTS
RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE 0.720 - 0.765 INCH, GRIP RANGE 0.042 - 0.375 INCH

WASHERS (ALL POSTS) -
1 ¼" O.D. x ⅜" I.D. x 1/16" STEEL
1 ¼" O.D. x ⅜" I.D. x 0.080 NYLON

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

6

6

SDD 15D38 - 02b

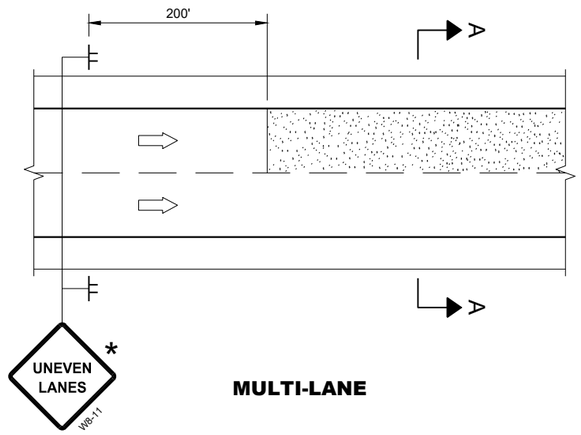
SDD15D38 - 02b

ATTACHMENT OF SIGNS TO POSTS

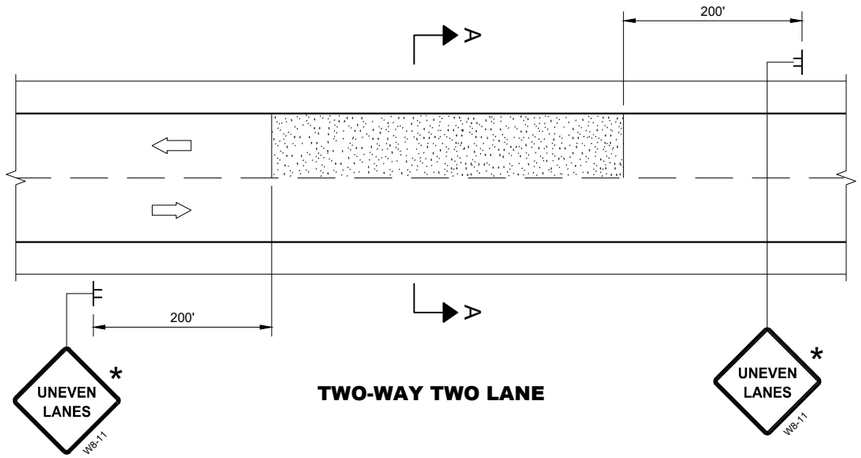
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA



MULTI-LANE



TWO-WAY TWO LANE

GENERAL NOTES

FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.

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

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

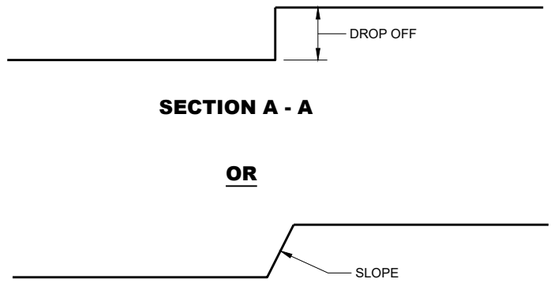
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

* IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY 1 MILE AND AFTER EVERY ENTRANCE RAMP.

(1) USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

LEGEND

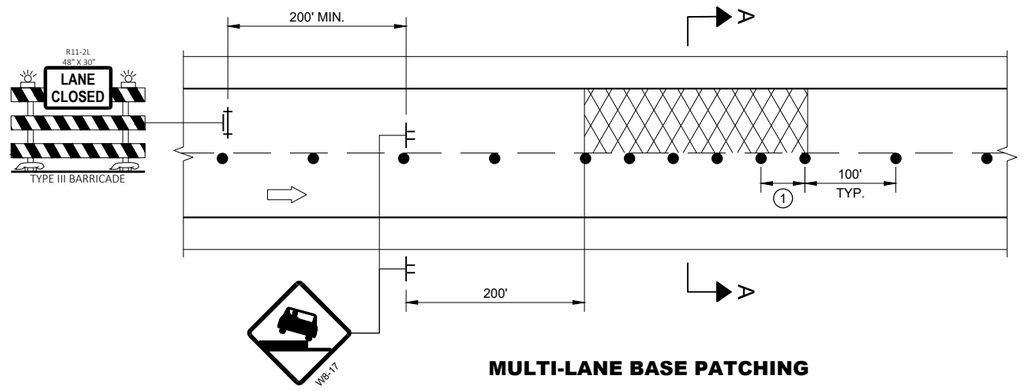
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA WITH DROP-OFF
- MILLED SURFACE



SECTION A - A

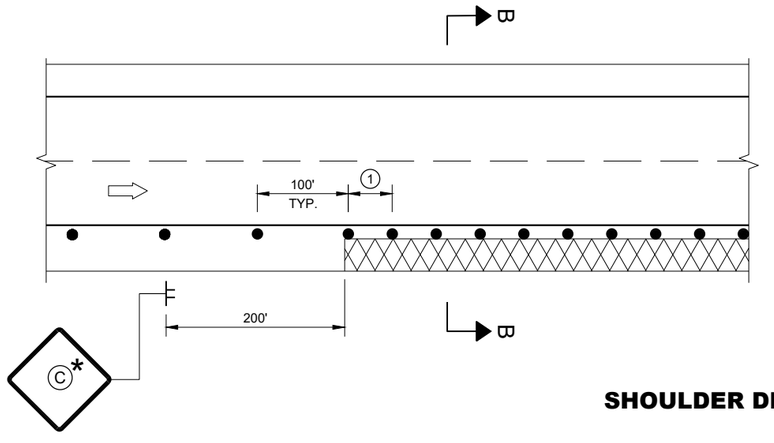
OR

SECTION A - A

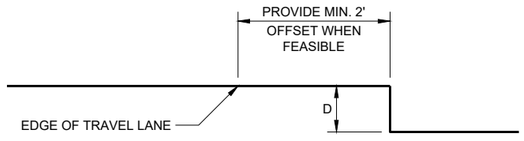


MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS



SHOULDER DROP-OFFS



SECTION B - B

D	SIGN (C)
< 2" WITH A SLOPE STEEPER THAN 3:1	LOW SHOULDER WO8-9
2" < 6" WITH A SLOPE STEEPER THAN 3:1	SHOULDER DROP - OFF W8-9A PROVIDE A 3:1 OR FLATTER SLOPE OF MATERIAL ADJACENT TO THE PAVEMENT

TRAFFIC CONTROL, DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D39 - 02

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.

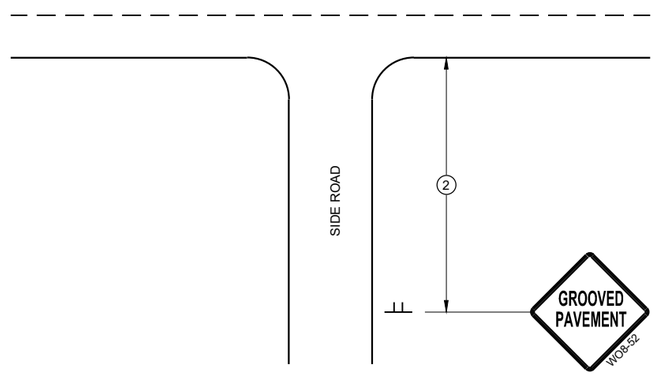
(1) PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

(2) PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

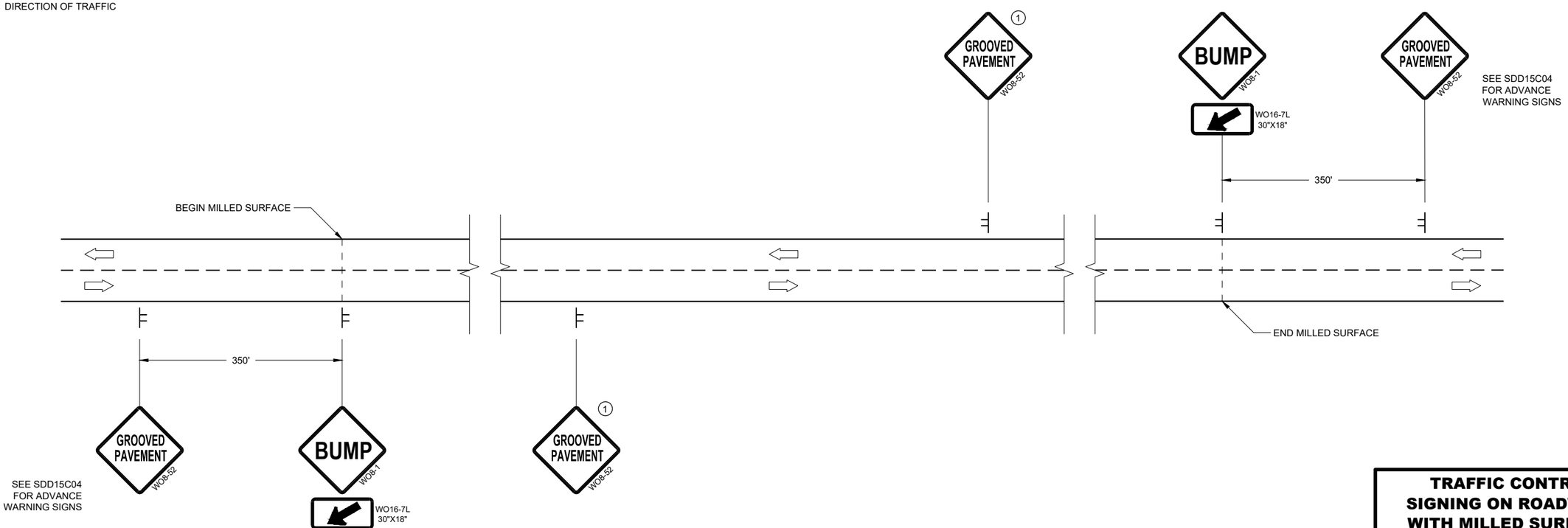
LEGEND

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

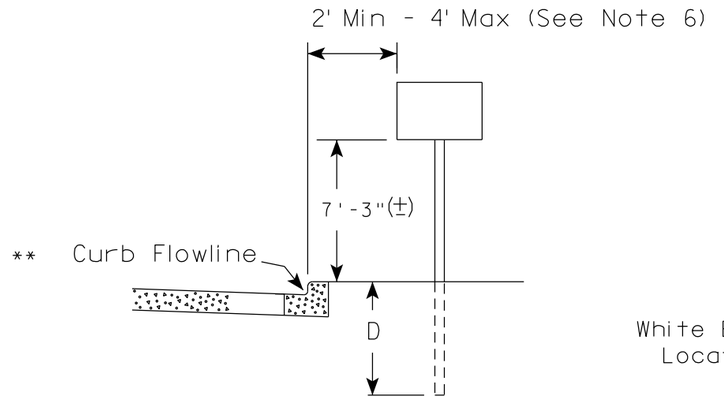
APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

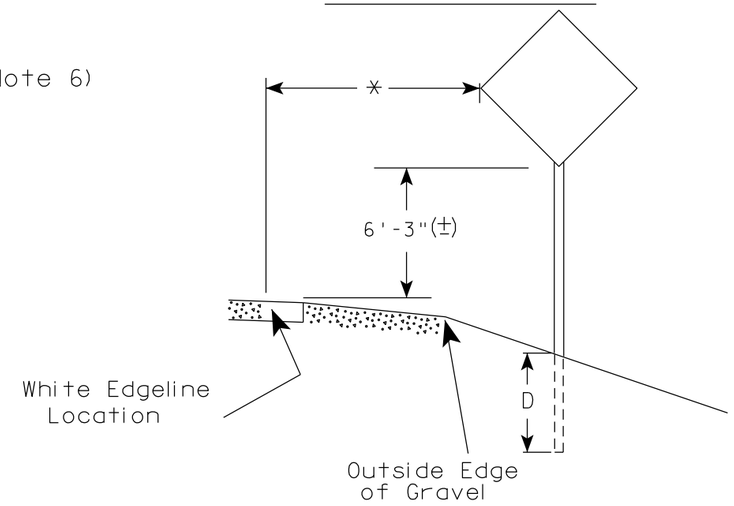
FHWA

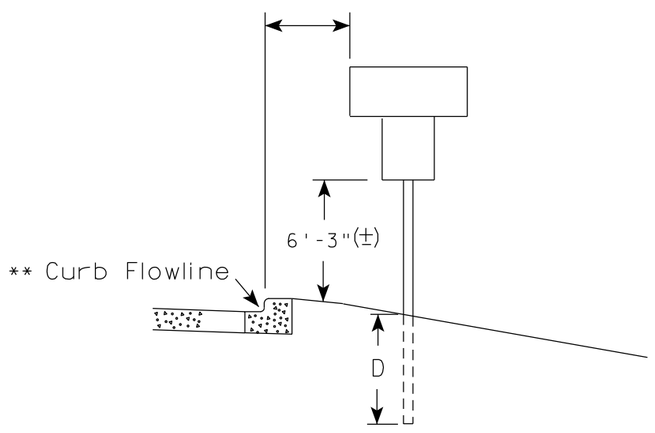
6
SDD 15D44 - 02

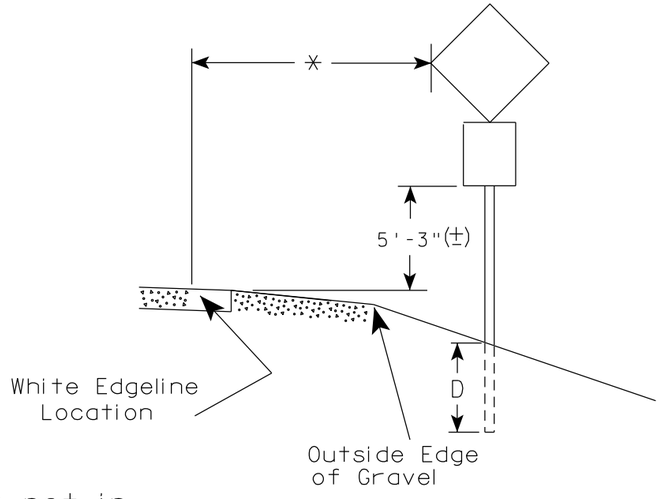
URBAN AREA



RURAL AREA (See Note 2)







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

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 directd by the Engineer.

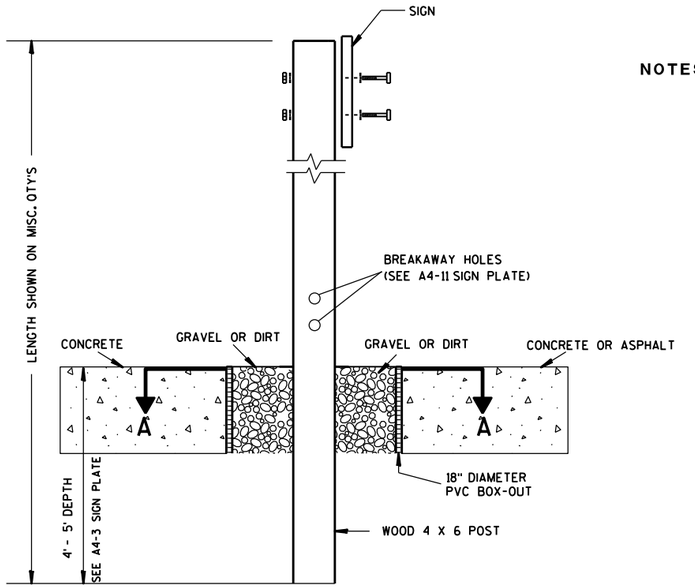
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

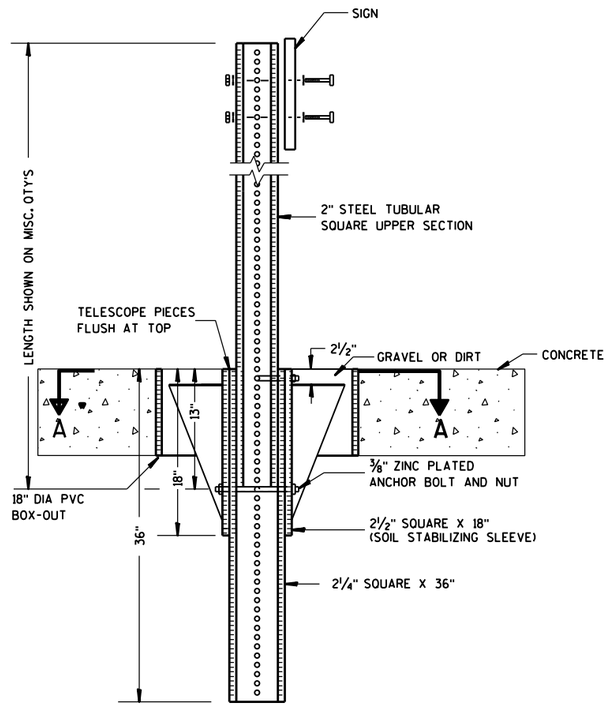
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 51	E



ELEVATION VIEW

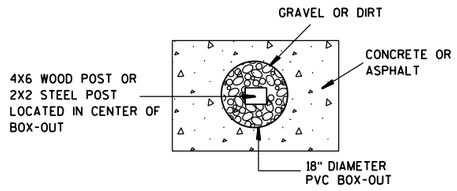
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

WISCONSIN DEPT OF TRANSPORTATION

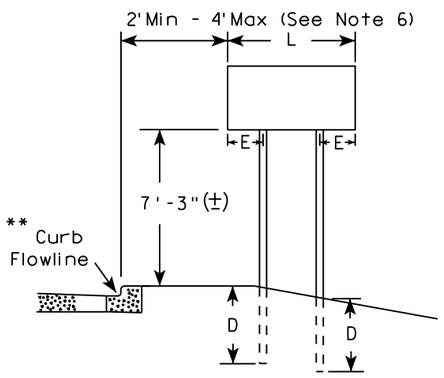
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

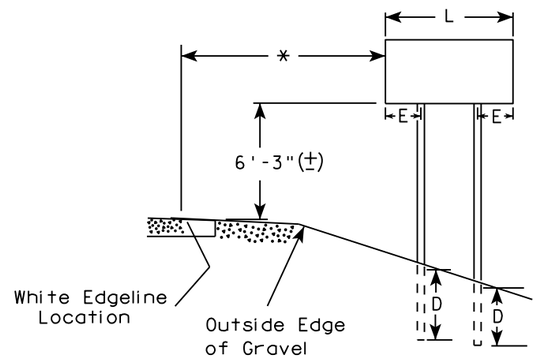
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

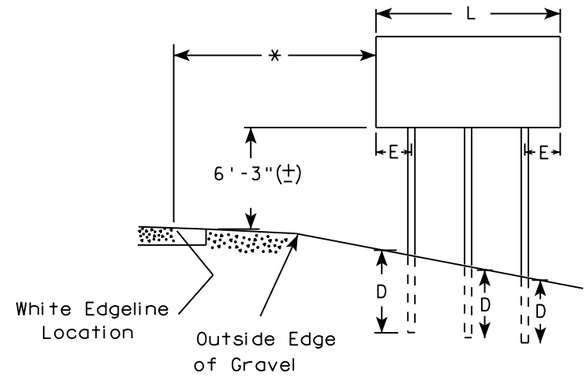
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

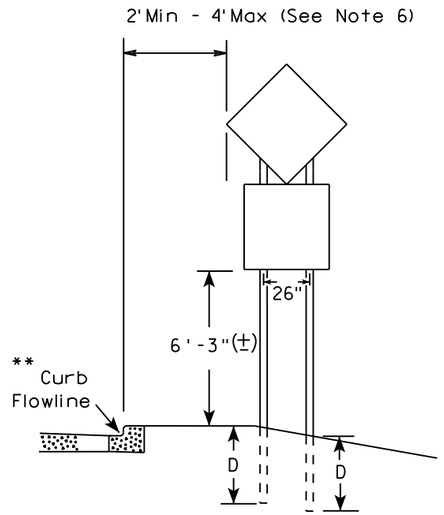
URBAN AREA



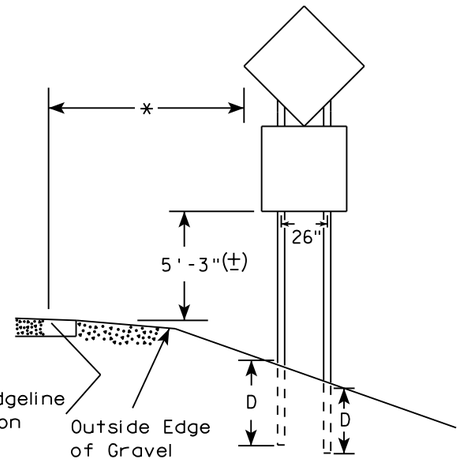
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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"

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" (±).

* 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.

POST EMBEDMENT DEPTH

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

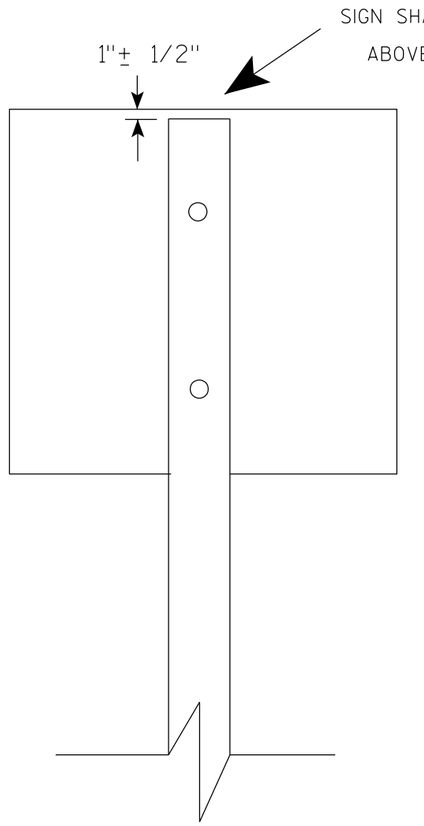
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

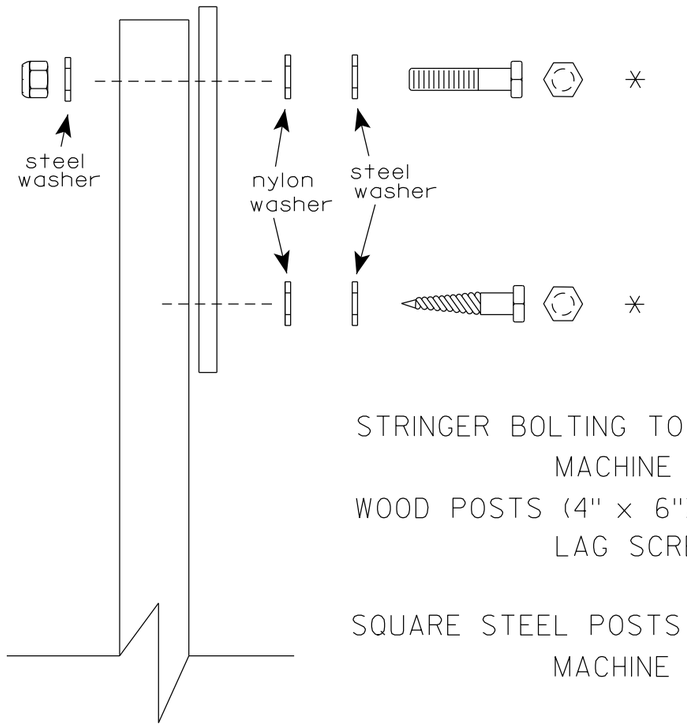
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 53	E





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

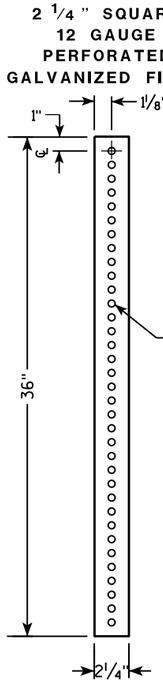
DATE 4/1/2020 PLATE NO. A4-8.9

PROJECT NO:

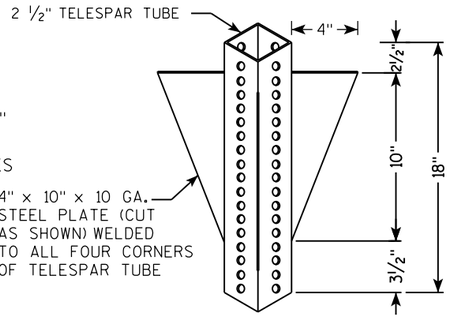
SHEET NO: 54 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

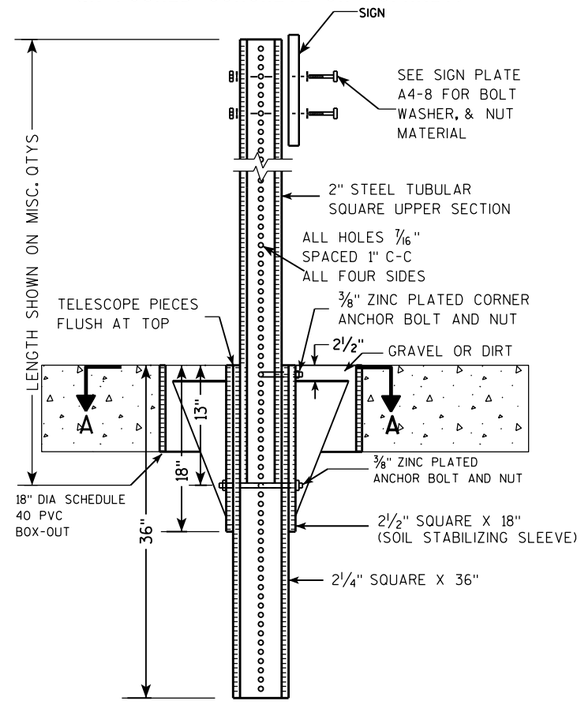
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



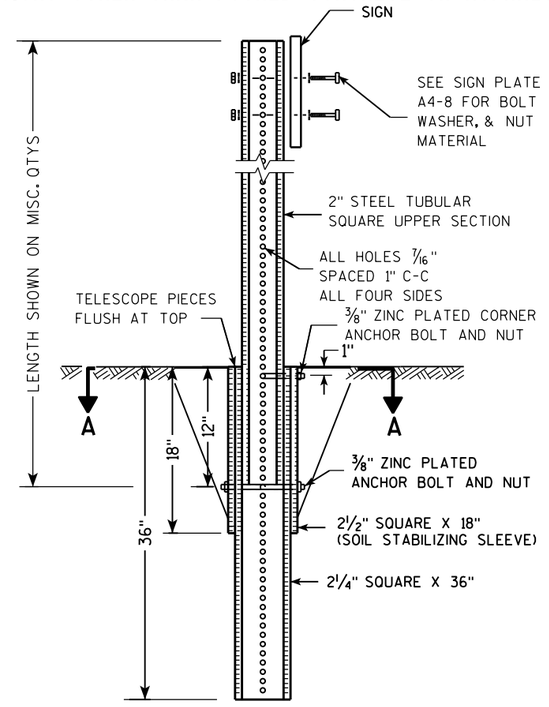
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

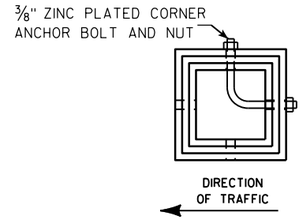


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

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).

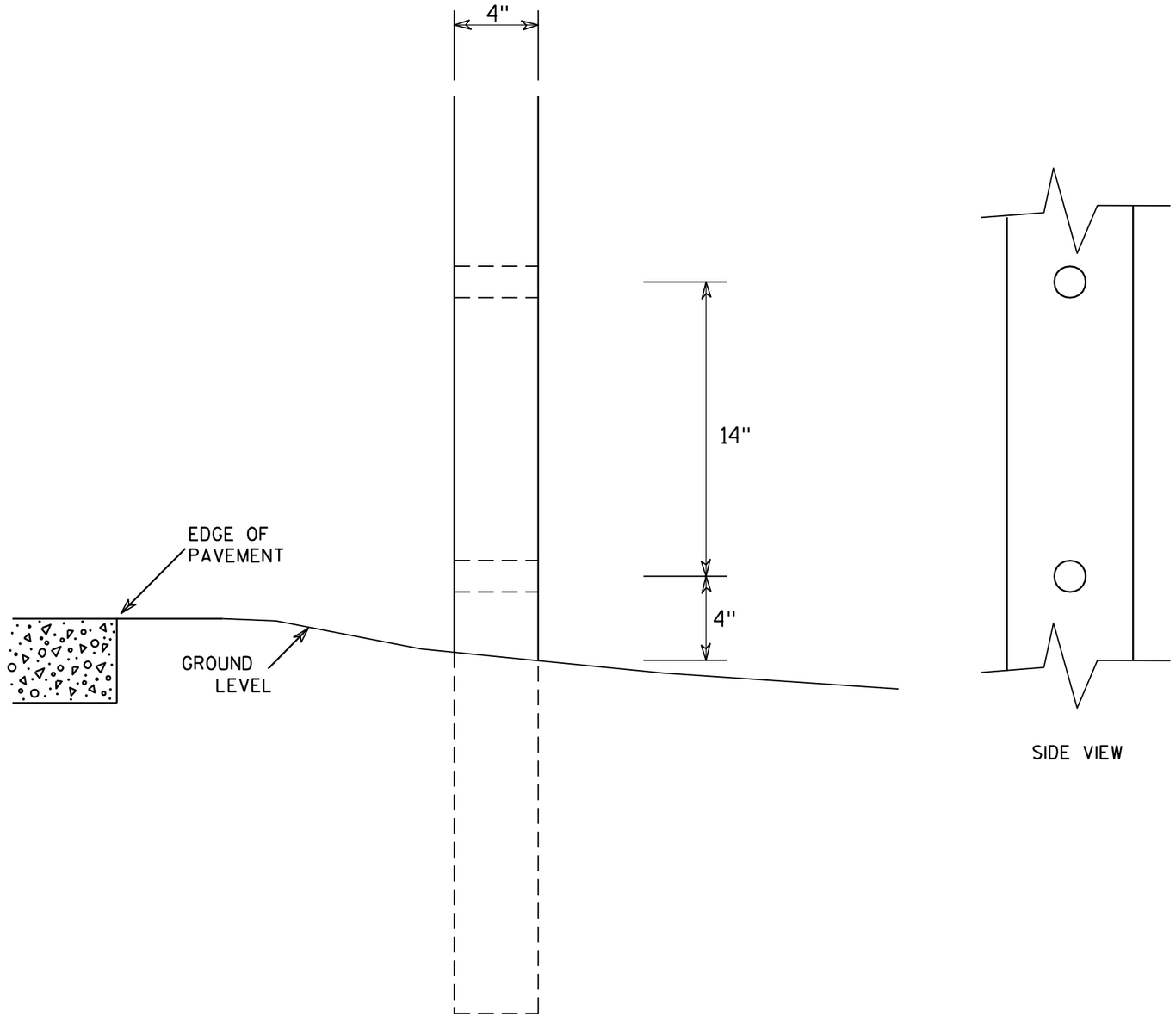
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 55 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



SIDE VIEW

GENERAL NOTES

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

7

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

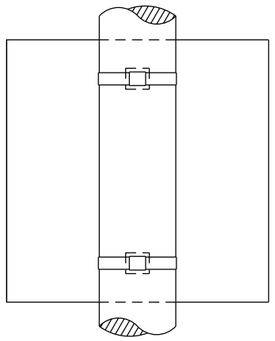
APPROVED Chester J Spang
for State Traffic Engineer

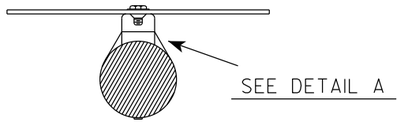
DATE 3/27/97 PLATE NO. A4-11.2

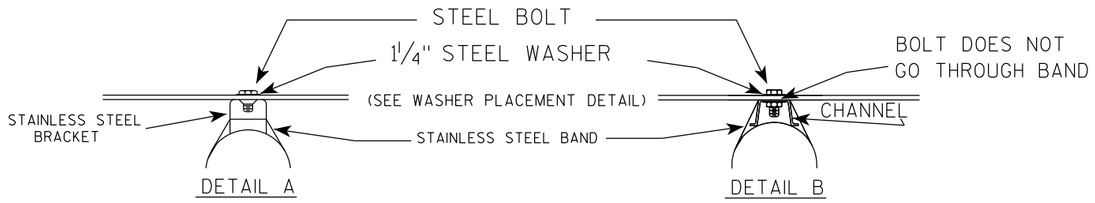
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 56	E

BANDING

SINGLE SIGN



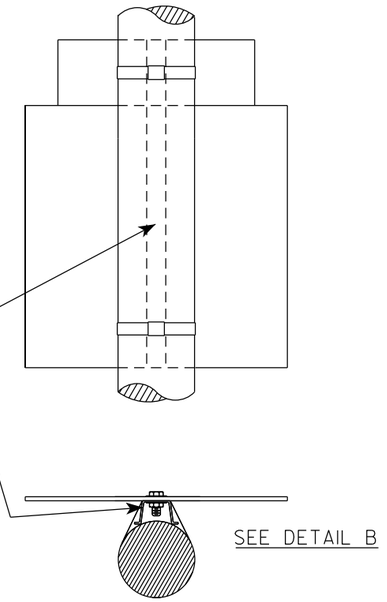




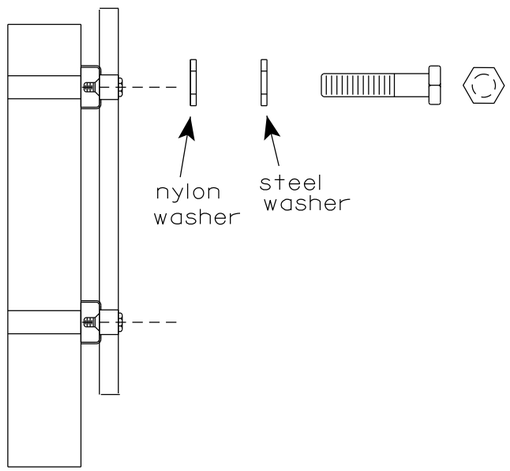
GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X ⅜" I.D. X 1/16" STEEL
1-1/4" O.D. X ⅜" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

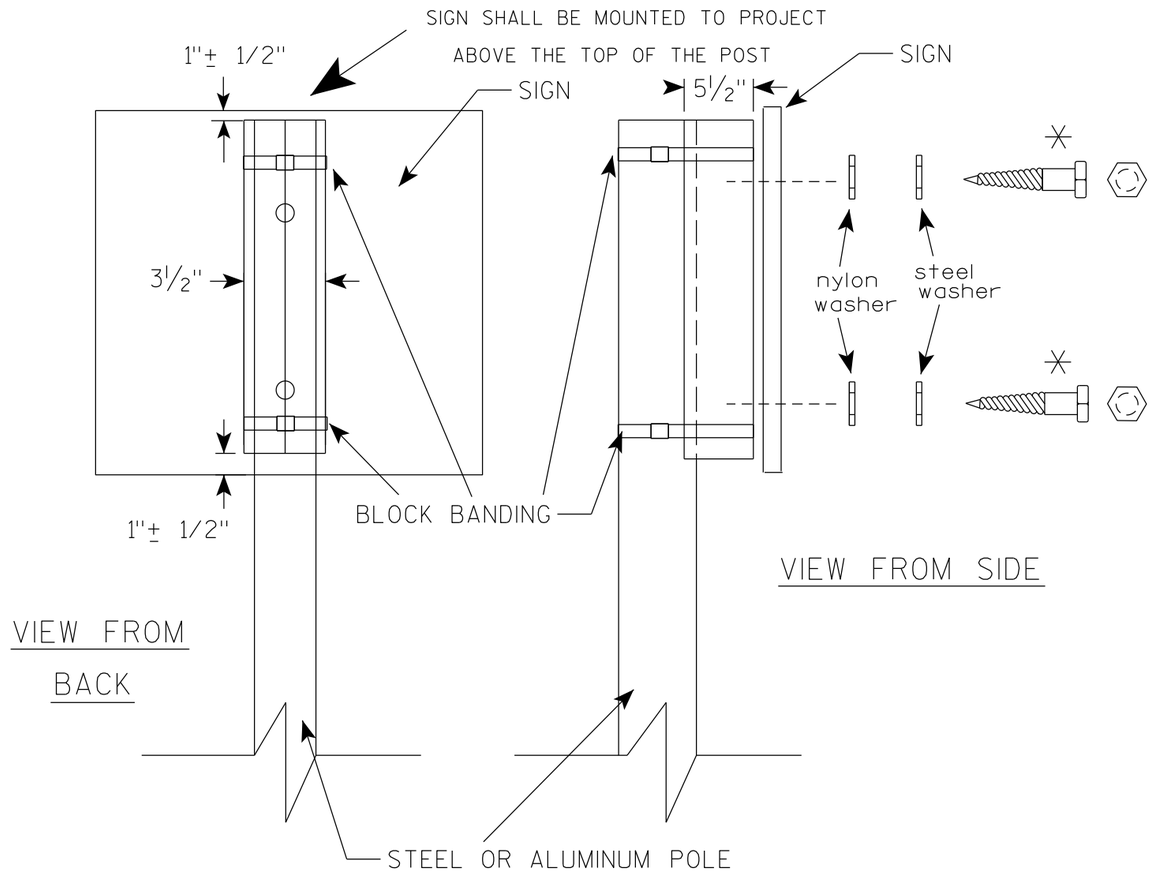
DATE 6/10/19 PLATE NO. A5-9.4

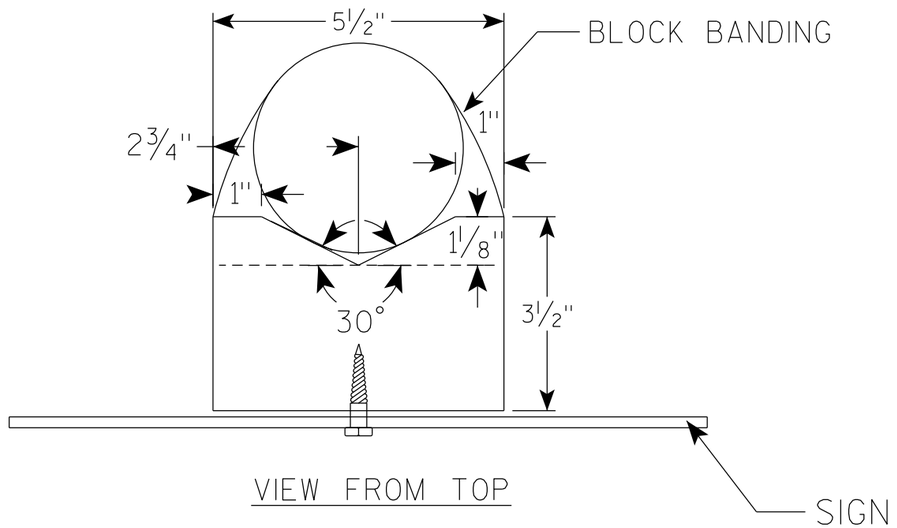
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 57	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7

7





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

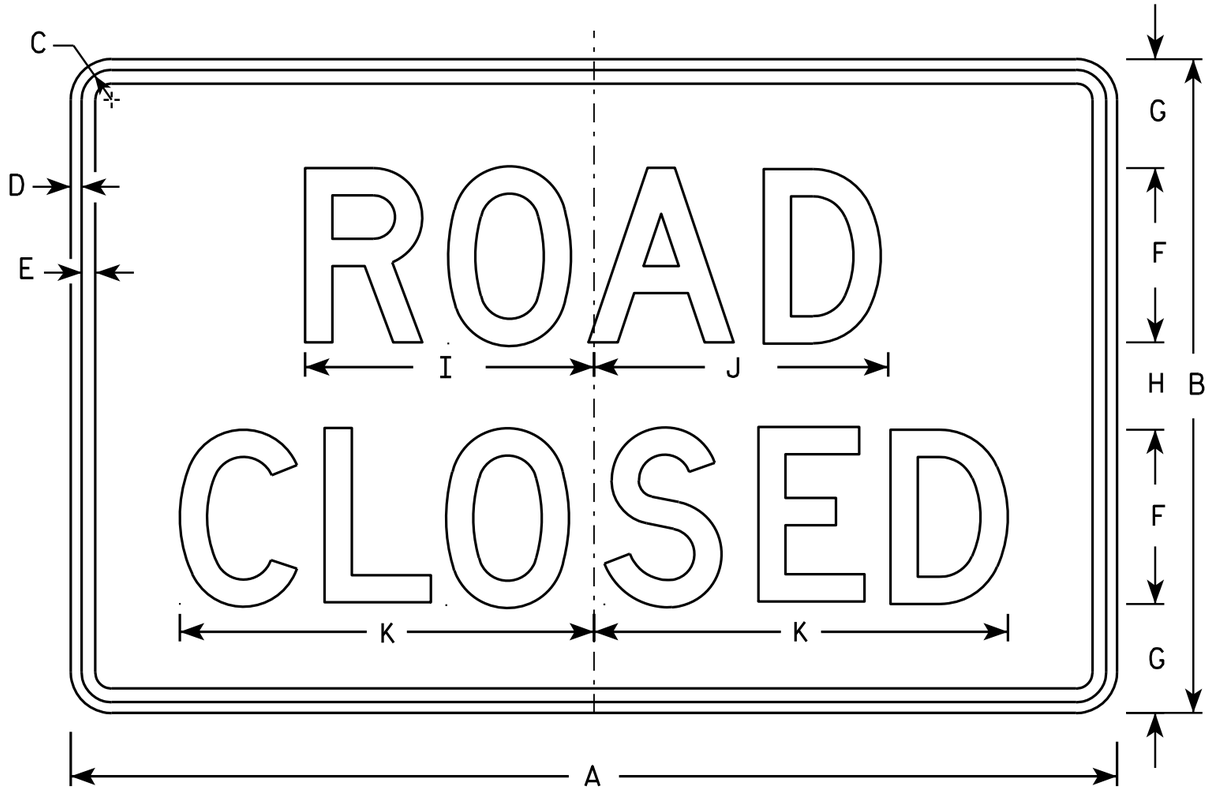
BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 6/10/19 PLATE NO. A5-10.2

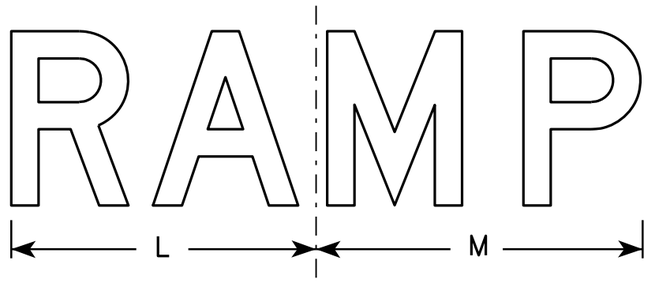
PROJECT NO:				SHEET NO: 58	E



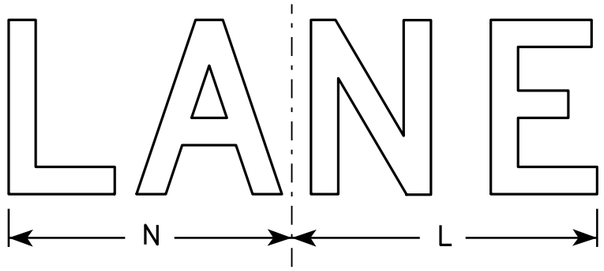
R11-2

NOTES

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



R11-2R



R11-2L

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													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													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													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													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													10.0

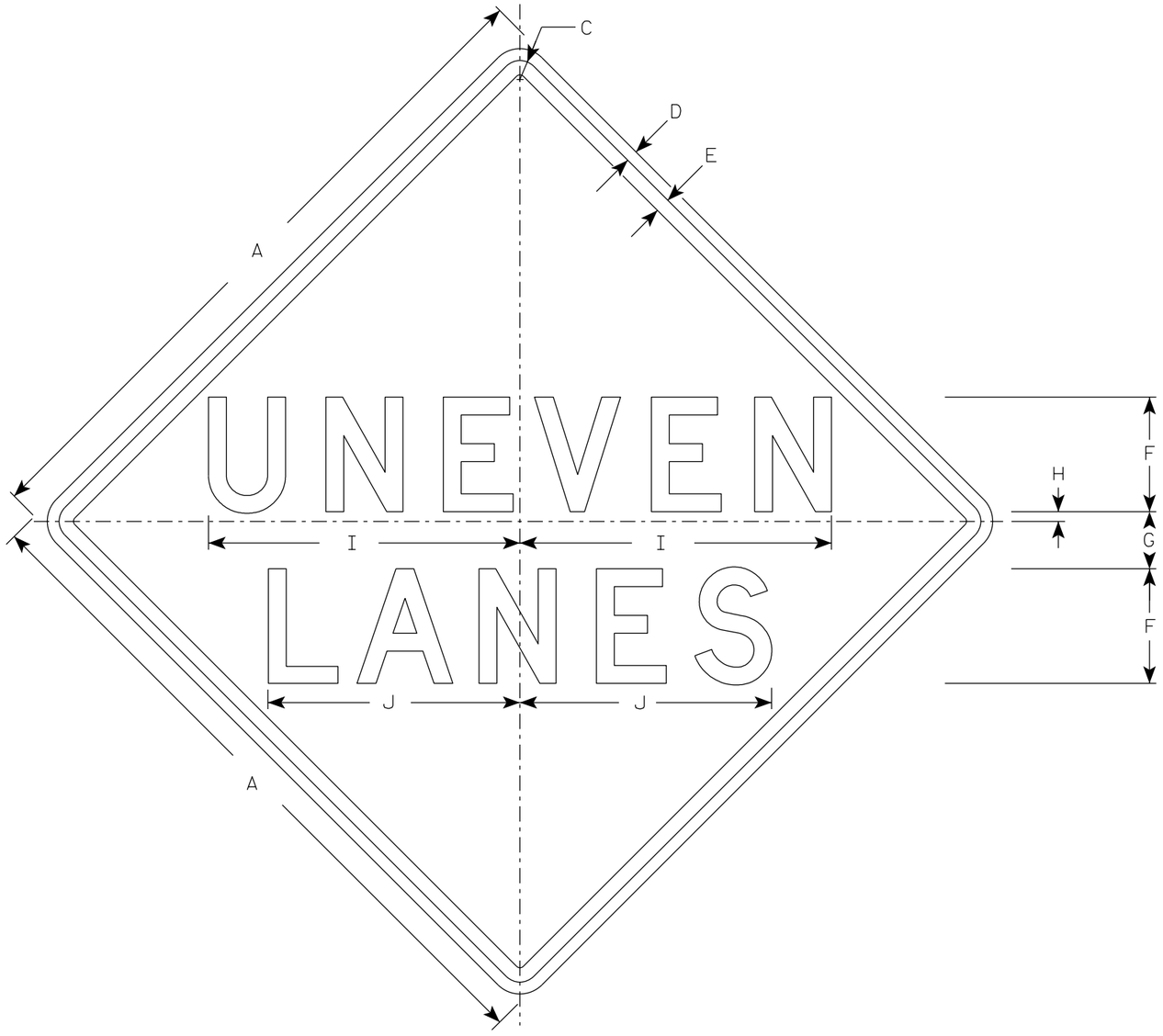
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 59 | E



W8-11

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   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.

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	6	3	1/2	16 3/8	13 1/4																	9.0
2S	48		2 1/4	3/4	1	8	4	1	21 3/4	17 5/8																	16.0
2M	48		2 1/4	3/4	1	8	4	1	21 3/4	17 5/8																	16.0
3	48		2 1/4	3/4	1	8	4	1	21 3/4	17 5/8																	16.0
4	48		2 1/4	3/4	1	8	4	1	21 3/4	17 5/8																	16.0
5	48		2 1/4	3/4	1	8	4	1	21 3/4	17 5/8																	16.0

STANDARD SIGN
W8-11

WISCONSIN DEPT OF TRANSPORTATION

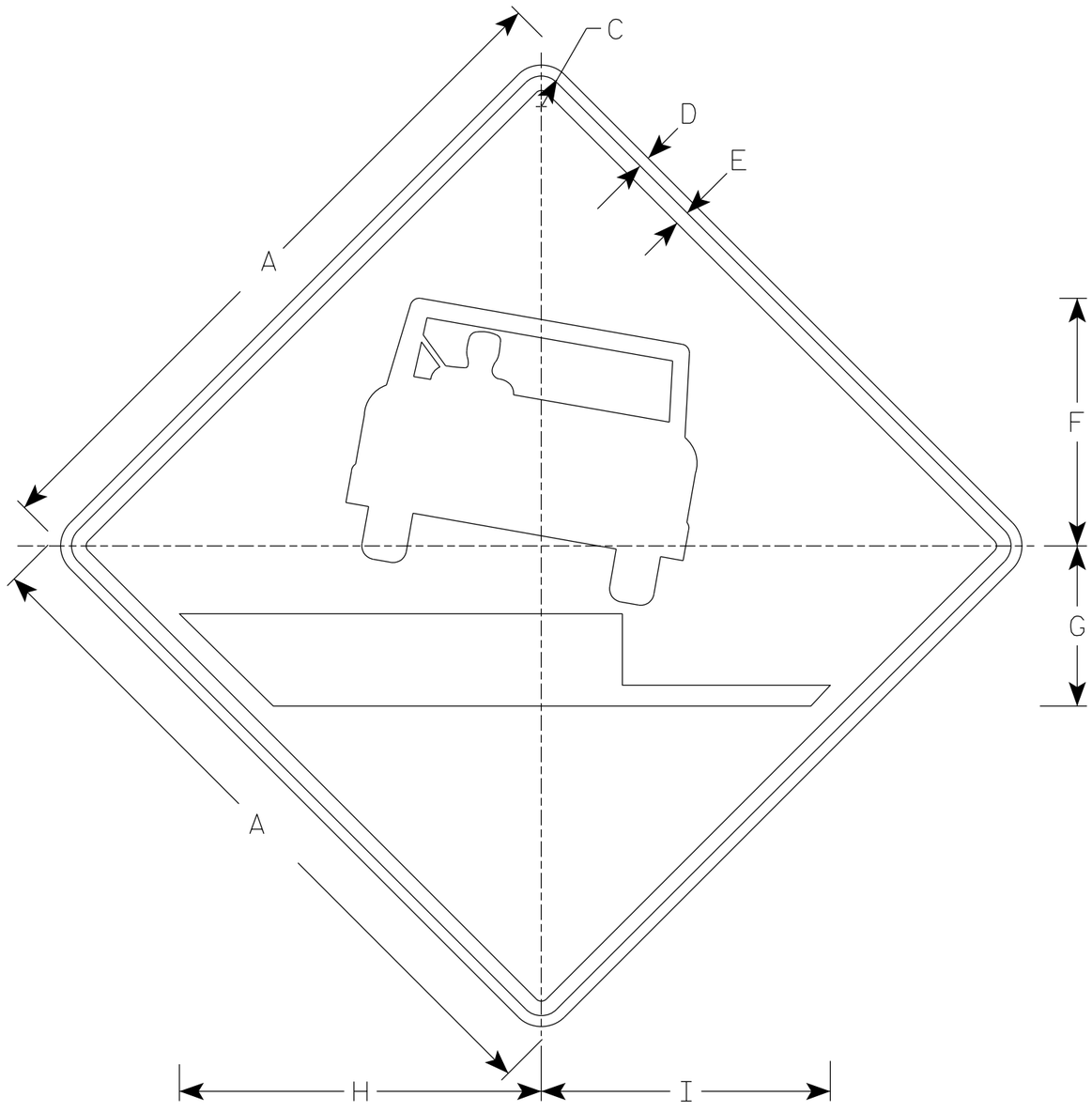
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/20/2020 PLATE NO. W8-11.5

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W811.dgn PLOT DATE : 20-APRIL 2020 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7



W8-17

NOTES

1. Sign is Type II - Type F Reflective
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.

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	12 3/4	8 1/4	18 5/8	14 7/8																		9.0
2S	48		2 1/4	3/4	1	17	11	24 7/8	19 7/8																		16.0
2M	48		2 1/4	3/4	1	17	11	24 7/8	19 7/8																		16.0
3	48		2 1/4	3/4	1	17	11	24 7/8	19 7/8																		16.0
4	48		2 1/4	3/4	1	17	11	24 7/8	19 7/8																		16.0
5	48		2 1/4	3/4	1	17	11	24 7/8	19 7/8																		16.0

STANDARD SIGN
W8-17

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/16/2020 PLATE NO. W8-17.2

PROJECT NO:

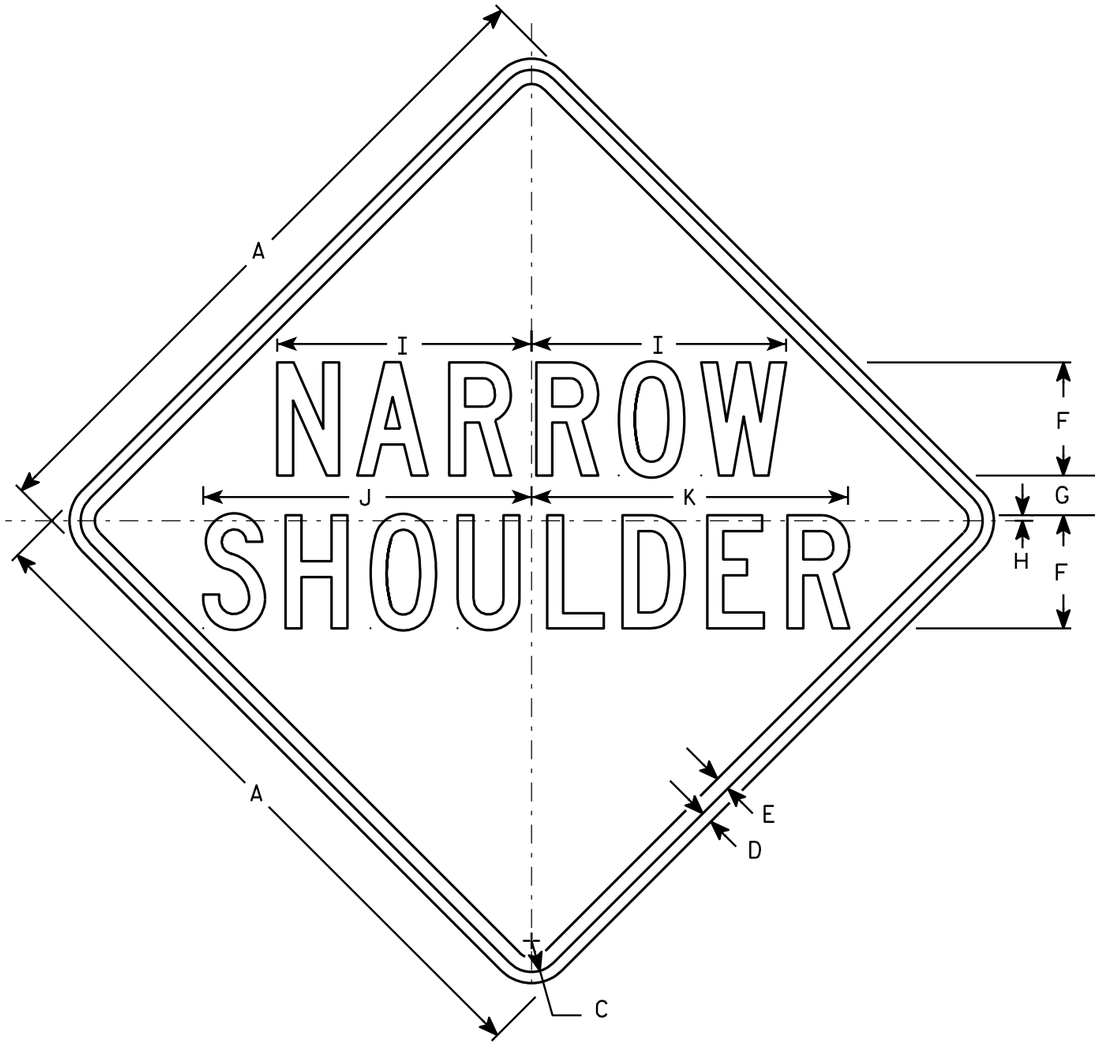
SHEET NO: 61 E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W817.dgn PLOT DATE : 16-APRIL 2020 PLOT BY : dotc4c

WISDOT/CADDS SHEET 42

7

7



W8-57

NOTES

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

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	24		1 1/8	3/8	3/8	4	1 3/8	1/4	9	11 5/8	11																4.0
2S	30		1 3/8	1/2	5/8	5	1 3/4	1/4	11 1/4	14 1/2	14																6.25
2M	36		1 5/8	5/8	3/4	6	2	3/8	13 1/2	17 1/2	16 3/4																9.0
3	36		1 5/8	5/8	3/4	6	2	3/8	13 1/2	17 1/2	16 3/4																9.0
4																											
5																											

STANDARD SIGN
W8-57

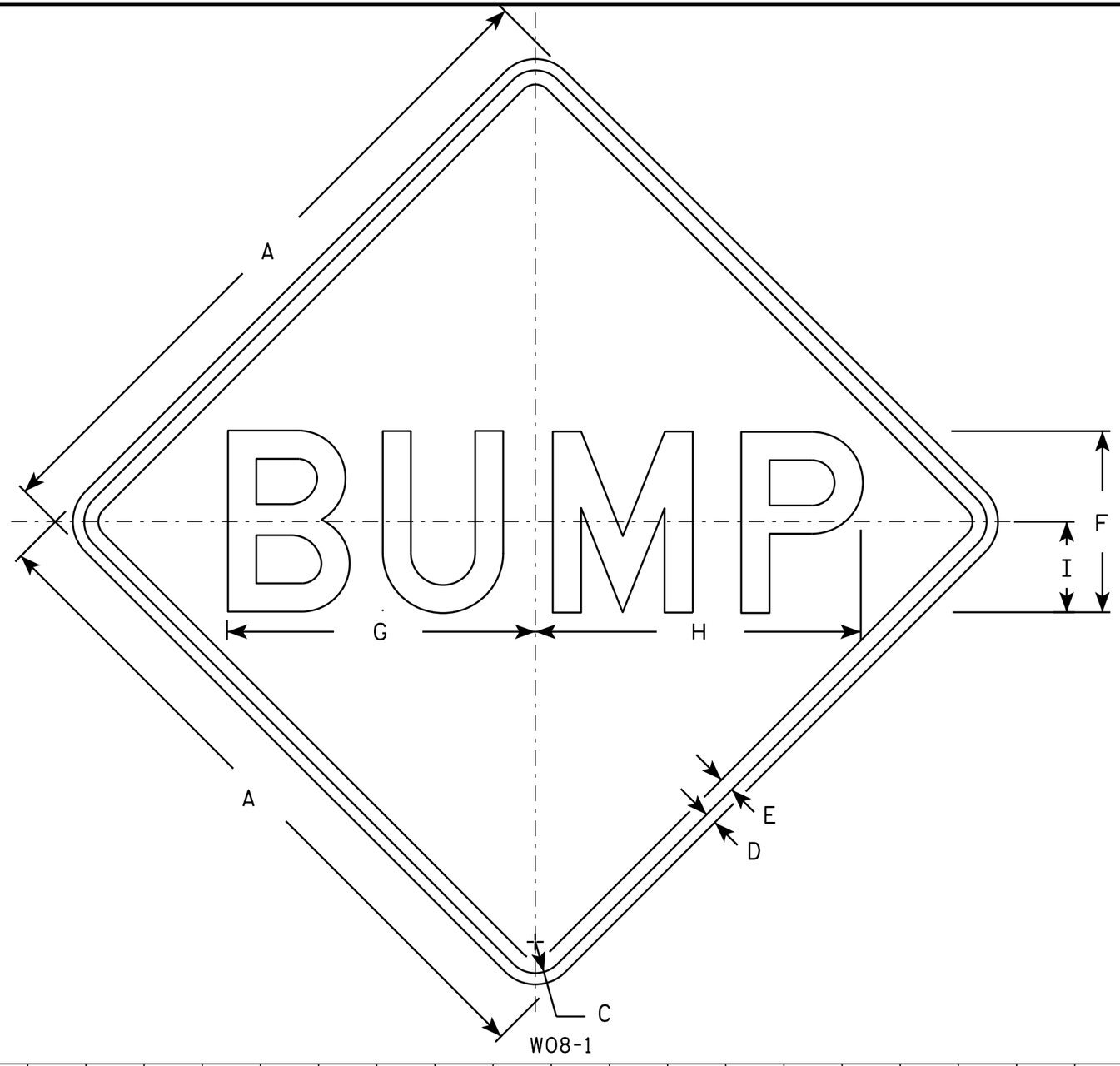
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/14/13 PLATE NO. W8-57.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 62	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W857.DGN PLOT DATE : 14-MAR-2013 11:10 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.698561:1.000000
WISDOT/CADDS SHEET 42



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 - 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.

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	10	16 7/8	17 7/8	5																		9.0
2S	48		2 1/4	3/4	1	12	20 3/8	21 5/8	6																		16.0
2M	48		2 1/4	3/4	1	12	20 3/8	21 5/8	6																		16.0
3	48		2 1/4	3/4	1	12	20 3/8	21 5/8	6																		16.0
4	48		2 1/4	3/4	1	12	20 3/8	21 5/8	6																		16.0
5	48		2 1/4	3/4	1	12	20 3/8	21 5/8	6																		16.0

STANDARD SIGN
W08-1

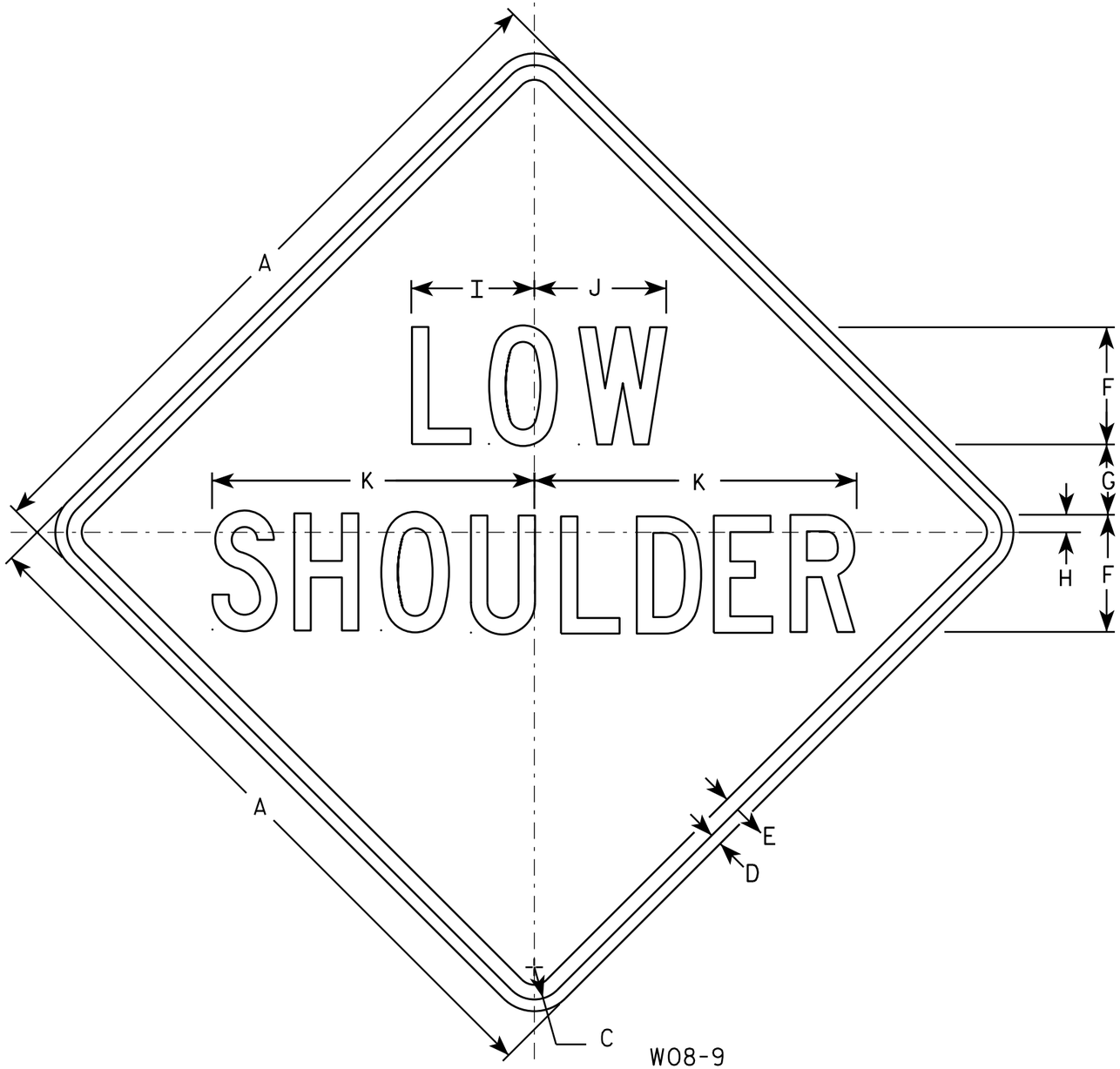
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 163 W08-1.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W081.DGN PLOT DATE : 20-NOV-2013 12:24 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.688833:1.000000 WISDOT/CADDS SHEET 42



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 - C
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.

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	6	3 1/2	1	6 1/4	6 3/4	16 1/2																9.0
2S	48		2 1/4	3/4	1	8	5	1 1/4	8 1/4	9	21 7/8																16.0
2M	48		2 1/4	3/4	1	8	5	1 1/4	8 1/4	9	21 7/8																16.0
3	48		2 1/4	3/4	1	8	5	1 1/4	8 1/4	9	21 7/8																16.0
4	48		2 1/4	3/4	1	8	5	1 1/4	8 1/4	9	21 7/8																16.0
5	48		2 1/4	3/4	1	8	5	1 1/4	8 1/4	9	21 7/8																16.0

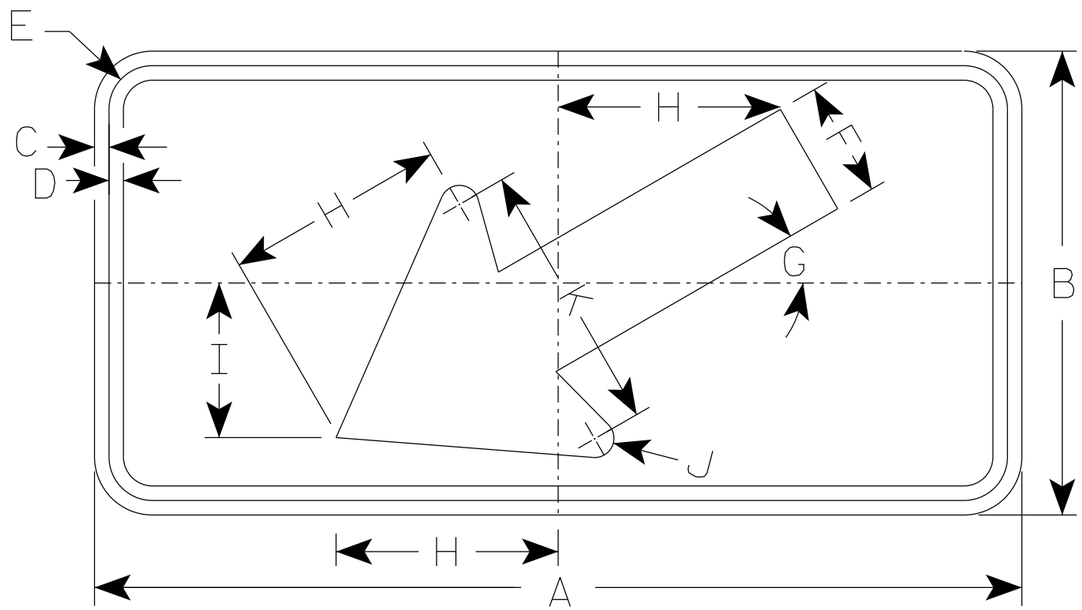
STANDARD SIGN
W08-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE W08-9.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



W016-7L

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded but corners shall be rounded when base material is metal.
4. W016-7R is the same as W016-L except the arrow is reversed along the vertical centerline.

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	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
2S	48	24	1/2	5/8	1 3/8	6	30°	11 1/2	8	1	14																8.0
2M	48	24	1/2	5/8	1 3/8	6	30°	11 1/2	8	1	14																8.0
3	48	24	1/2	5/8	1 3/8	6	30°	11 1/2	8	1	14																8.0
4	48	24	1/2	5/8	1 3/8	6	30°	11 1/2	8	1	14																8.0
5	48	24	1/2	5/8	1 3/8	6	30°	11 1/2	8	1	14																8.0

STANDARD SIGN
W016-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/11/18 PLATE NO. W016-7.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 65 | E

7

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
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