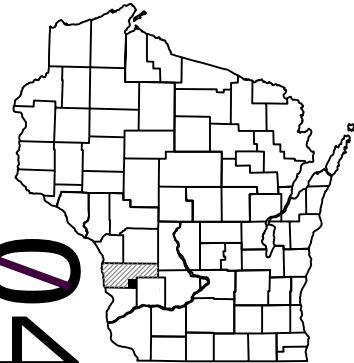


ORDER OF SHEETS

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

TOTAL SHEETS = 116



04

DESIGN DESIGNATION

A.A.D.T. 2012	=	1040
A.A.D.T. 2032	=	1220
D.H.V.	=	
D.D.	=	60-40
T.	=	8.39%
DESIGN SPEED	=	55 MPH
ESALS	=	162,423

CONVENTIONAL SYMBOLS

PLAN	
CORPORATE LIMITS	
REFERENCE LINE	
COMBUSTIBLE FLUIDS	
UTILITIES	
ELECTRIC	
FIBER OPTIC	
GAS	
SANITARY SEWER	
STORM SEWER	
TELEPHONE	
WATER	
UTILITY PEDESTAL	
POWER POLE	
TELEPHONE POLE	

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STATE HIGHWAY REHABILITATION-MAINTENANCE PROJECT

READSTOWN - VIOLA

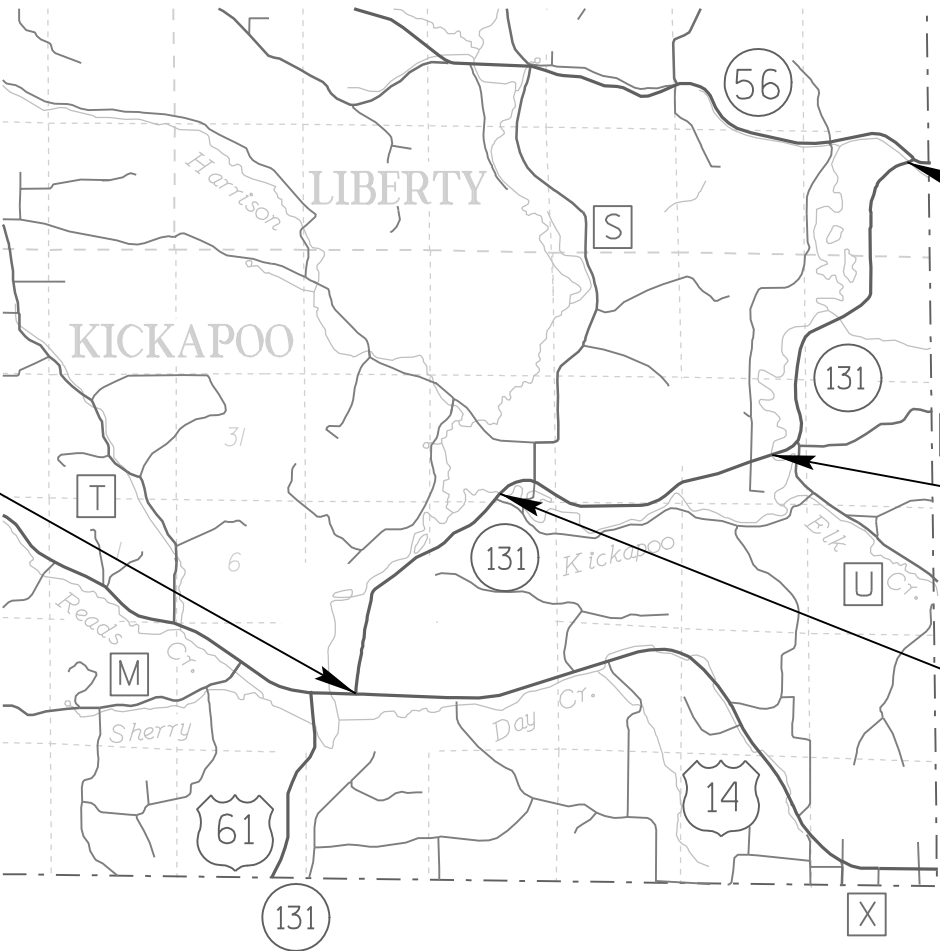
USH 14 TO KICKAPOO RIVER BRIDGE

STH 131

VERNON COUNTY

STATE PROJECT NUMBER
5110-02-61

BEGIN CONSTRUCTION
STATION 822+72



LAYOUT
SCALE 0 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 7.157 MI.

END CONSTRUCTION
STATION 1207+48.96

EXCEPTION TO NET CENTERLINE LENGTH
B-62-28 1054+55 TO 1057+81 326'

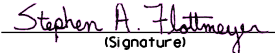
EXCEPTION TO NET CENTERLINE LENGTH
B-62-27 931+57 TO 935+19 362'

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	
Designer	KATHLEEN KLUDY
Project Manager	DAN KLEINERTZ
Regional Examiner	
Regional Supervisor	STEPHEN FLOTTMEYER
C.O. Examiner	

APPROVED FOR THE DEPARTMENT

DATE: 10/31/12 
(Signature)

E

GENERAL NOTES

- 1. THERE ARE UTILITIES WITHIN THE PROJECT LIMITS WHICH ARE NOT SHOWN ON PLANS.
- 2. ALL P.E.'S SHALL BE REPLACED IN KIND (AGGREGATE OR ASPHALT).
- 3. LOCATIONS OF PRIVATE AND FIELD ENTRANCES AS SHOWN ON PLAN ARE APPROXIMATE. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.
- 4. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES EXCEPT WHEN OPERATIONS REQUIRE THE DRIVEWAY TO BE CLOSED. ACCESS TO DRIVEWAY SHALL BE RE-ESTABLISHED IMMEDIATELY AFTER OPERATIONS ARE COMPLETE. ACCESS SHALL BE PROVIDED DURING ALL NON-WORKING HOURS.
- 5. THE CONTRACTOR SHALL MAINTIAN ACCESS TO ALL FIRE HYDRANTS, WATER AND GAS VALVES AND ALL SEWER, WATER AND UTILITY MANHOLES.
- 6. THE CONTRACT SHALL FIELD VERIFY ALL INVERT AND RIM ELEVATIONS OF EXISTING STORM SEWER AND SANITARY SEWER STRUCTURES PRIOR TO CONSTRUCTION.
- 7. CURB AND GUTTER WILL BE PLACED AFTER MILL AND RELAY OPERATIONS ARE COMPLETE. ALL CURB AND GUTTER ELEVATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER. EXCAVATION OF 2-3 INCHES OF COMPACTED BASE COURSE WILL BE REQUIRED TO PLACE CURB AND GUTTER.
- 8. MATERIAL DISPLACED DURING THE CONSTRUCTION OF THE CONCRETE CURB & GUTTER SHALL BE REPLACED TO THE ORGINAL GRADE LINE BY THOSE DOING THE WORK. THIS WORK SHALL BE INCIDENTAL TO THE ITEM OF CONCRETE CURB AND GUTTER.
- 9. THE RATE OR SUPER ELEVATION AND LENGTH OF THE TRANSITION SHALL BE DETERMINED USING THE EXISTING SUPER ELEVATION, NOT TO EXCEED 0.08 AND DESIGN SPEED OF 55 MPH. THE LENGTH ON TANGENT AND ONE-THIRD WITHIN THE CURVE.
- 10. THE RATE OF APPLICATION FOR TACK COAT IS COMPUTED AT 0.025 GAL/SY.
- 11. ASPHALTIC SURFACE WEIGHT CALCULATIONS ARE BASED ON 113 LB/SY/IN
- 12. WHEN THE QUANTITIES OF ASPHALTIC SURFACE IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OF THICKNESS OF THE MATERIAL THAT IS SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.
- 13. THE AVERAGE DEPTH OF "SALVAGED ASPHALTIC PAVEMENT MILLING" SHALL BE 3.5 INCHES ON THROUGH LANES AND 2.0 INCHES ON PARKING LANES.
- 14. THE 3.5 INCH HMA PAVEMENT TYPE E-1 SHALL BE PLACED IN TWO (2) 1.75 INCH LIFTS. BOTH LAYERS WILL USE A -1/2 INCH (12.5 mm) NOMINAL AGGREGATE SIZE MIXTURE.
- 15. ASPHALT MATERIAL FOR PLANT MIXES HAS BEEN ESTIMATED AT 5.5% OF THE HMA PAVEMENT.
- 16. ASPHALTIC CONCRETE PAVEMENT FOR SIDE ROAD PAVING SHALL BE A NOMINAL 2 INCH DEPTH, CONSTRUCTED WITH UPPER LAYER MATERIAL.
- 17. ALL RADII ARE MEASURED TO EDGE OF PAVEMENT OR FLAG OF CURB UNLESS OTHERWISE SHOWN OR NOTED ON THE PLAN.
- 18. EXPANSION JOINTS TO BE CONSTRUCTED AT ALL RADIUS POINTS IN CURB AND GUTTER OR AT LOCATIONS SHOWN ON THE PLAN. WHEN PORTIONS OF EXISTING ASPHALTIC SURFACES ARE TO BE REMOVED TO ACCOMMODATE NEW CONSTRUCTION, THE LINE OF SUCH REMOVAL SHALL BE NEATLY DELINEATED WITH A SAW CUT JOINT THROUGH THE ASPHALTIC SURFACE SO THAT REMOVAL OF THE ASPHALT SHALL BE ACCOMPLISHED WITHOUT DAMAGE TO REMAINING PORTIONS. THE LOCATION OF SAW JOINTS AND THE AMOUNT REMOVED AT SIDE ROADS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- 19. PAVEMENT REMOVAL WILL BE TO THE NEAREST JOINT OR A SAWED EDGE WILL BE REQUIRED AS DIRECTED BY THE ENGINEER.
- 20. SILT FENCE SHALL BE PLACED AS DIRECTED BY THE ENGINEER.
- 21. UNLESS OTHERWISE IDENTIFIED BY CONSTRUCTION DETAILS, ALL INTERSECTIONS ARE TYPE "C" AS SHOWN ON THE STANDARD DETAIL DRAWING.
- 22. TYPE 'D' INTERSECTIONS SHALL BE AS SHOWN ON THE STANDARD DETAIL DRAWING AND DETERMINED IN THE FIELD BY THE ENGINEER
- 23. ALL BEAM GUARD WIDENING AND FINISHING SHALL BE COMPLETED PRIOR TO THIS CONTRACT BY OTHERS.
- 24. THE FACE OF THE STEEL PLATE BEAM GUARD RAIL SHALL BE FLUSH WITH THE FACE OF THE CURB AND GUTTER.
- 25. ENERGY ABSORBING TERMINALS SHALL BE OFFSET A MINIMUM OF 1 FOOT AT THE DIRECTION OF THE ENGINEER.
- 26. TRAFFIC CONTROL DRUMS SHALL BE PLACED AT LOCATIONS WHERE GUARD RAIL HAS BEEN REMOVED AT 50 FT MIN. SPACING, AS PER PLAN AND AT LOCATIONS AS DIRECTED BY THE ENGINEER.
- 27. AI SALVAGE ASPHALTIC PAVEMENT MILLING WILL REMAIN PROPERTY OF THE STATE. CONTACT JEFF FISH, PATOROL SUPERINTENDENT AT THE VERNON COUNTY HIGHWAY DEPARTMENT. THE PHONE NUMBER IS (608) 637-5452 FOR COORDINATION. HAUL TO COUNTY LOT LOCATED ON SW CORNER OF YORK ST AND CENTRAL ST IN VIOLA. THE VERNON COUNTY FORCES WILL STOCKPILE MATERIAL AS NEEDED.
- 28 THE CONTRACTOR'S PAVING OPERATIONS SHALL BE CONSISTENT WITH THE PLAN TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, PASSING OR PARKING LANE.

STANDARD ABBREVIATIONS

AC.	ACRE	MAX.	MAXIMUM
AGG.	AGGREGATE	MGAL	1000 GALLONS
AH	AHEAD	MIN.	MINIMUM
<	ANGLE	N.C.	NORMAL CROWN OR NO CHANGE
AE, AEW	APRON ENDWALL	N	NORTH
ASPH.	ASPHALTIC	NO.	NUMBER
A.D.T.	AVERAGE DAILY TRAFFIC	PAV'T	PAVEMENT
B.F.	BACK FACE	P.L.E.	PERMANENT LIMITED EASEMENT
BK.	BACK	P.C.	POINT OF CURVATURE
BEG.	BEGIN	P.I.	POINT OF INTERSECTION
B.M.	BENCH MARK	P.T.	POINT OF TANGENCY
C/L	CENTER LINE	V.P.C.	VERTICAL POINT OF CURVATURE
			VERTICAL POINT OF
D	CENTRAL ANGLE OR DELTA	V.P.I.	INTERSECTION
	CORRUGATED METAL CULVERT		
C.M.C.P.	PIPE	V.P.T.	VERTICAL POINT OF TANGENCY
C.M.P.	CORRUGATED METAL PIPE	PCC	PORTLAND CEMENT CONCRETE
CO.	COUNTY	P.E.	PRIVATE ENTRANCE
CTH	COUNTY TRUNK HIGHWAY	P.L.	PROPERTY LINE
CR.	CREEK	R	RADIUS OR RANGE
	CRUSHED AGGREGATE BASE		
C.A.B.C.	COURSE	R/L	REFERENCE LINE
		R.C.C.P	REINFORCED CONCRETE CULVERT
C.Y.	CUBIC YARD	.	PIPE
C.P.	CULVERT PIPE	RT	RIGHT
C. & G.	CURB AND GUTTER	REQ'D	REQUIRED
D	DEGREE OF CURVE	R.H.F.	RIGHT HAND FORWARD
D.H.V.	DESIGN HOUR VOLUME	R/W	RIGHT OF WAY
DIA.	DIAMETER	R.	RIVER
DISCH.	DISCHARGE	RD.	ROAD
EA	EACH	SHLD.	SHOULDER(S)
E	EAST	SHR.	SHRINKAGE
ELEC.	ELECTRIC(AL) , ELEC. CABLE	S	SOUTH
EL. ,			
ELEV.	ELEVATION	S.F.	SQUARE FOOT (FEET)
EXC.	EXCAVATION	SDD	STANDARD DETAIL DRAWING(S)
F.F.	FACE TO FACE	STH	STATE TRUNK HIGHWAY
FERT.	FERTILIZER	STA.	STATION
F.E.	FIELD ENTRANCE	S.E.	SUPERELEVATION
F/L, F.L.	FLOW LINE	S/L	SURVEY LINE
CWT.	HUNDRED WEIGHT	T	TANGENT
INL	INLET	TEL.	TELEPHONE
INTER.	INTERSECTION	TEMP.	TEMPORARY
JT.	JOINT	T.L.E.	TEMPORARY LIMITED EASEMENT
LT	LEFT	T.O.C.	TOP OF CURB
L.H.F.	LEFT HAND FORWARD	T.	(TRUCKS) PERCENT OF
L.	LENGTH OF CURVE	TYP.	TYPICAL
L.F.	LINEAR FOOT(FEET)	UNCL.	UNCLASSIFIED
LC.	LONG CHORD	U.G.	UNDERGROUND (CABLE)
LS	LUMP SUM	V.C.	VERTICAL CURVE
M.P.	MARKER POST	W	WEST

UTILITY COMPANIES & PERSONNEL

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Doug Dickinson
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jbartz@mwt.net

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P.O. Box 817
La Crosse, WI 54601
(608) 788-4000
kdc@dairynet.com

Readstown Municipal Water Utility - Water
P.O. Box 247
Readstown, WI 54652-0247

Daniel Stelpflug
Scenic River Energy - Electricity
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Lancaster, WI 53813-1342
(608) 723-2121
dstelpflug@srec.net

Wisconsin Department of Transportation

Southwest Region - La Crosse Office
3550 Mormon Coulee Rd.
La Crosse, WI 54601
ATTN: Bob Gonia (Utilities Coordinator)
PHONE: (608) 785-9082
bob.gonia@dot.wi.gov

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La Crosse, WI 54601
Attn: Russ Frank (Soils Coordinator)
PHONE: (608) 785-9082
russell.frank@dot.wi.gov

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3550 Mormon Coulee Rd.
La Crosse, WI 54601
Attn: Kathleen Kludy (Designer)
PHONE: (608) 785-9948
kathleen.kludy@dot.wi.gov

PAVEMENT DESIGN ENGINEER CONTACT

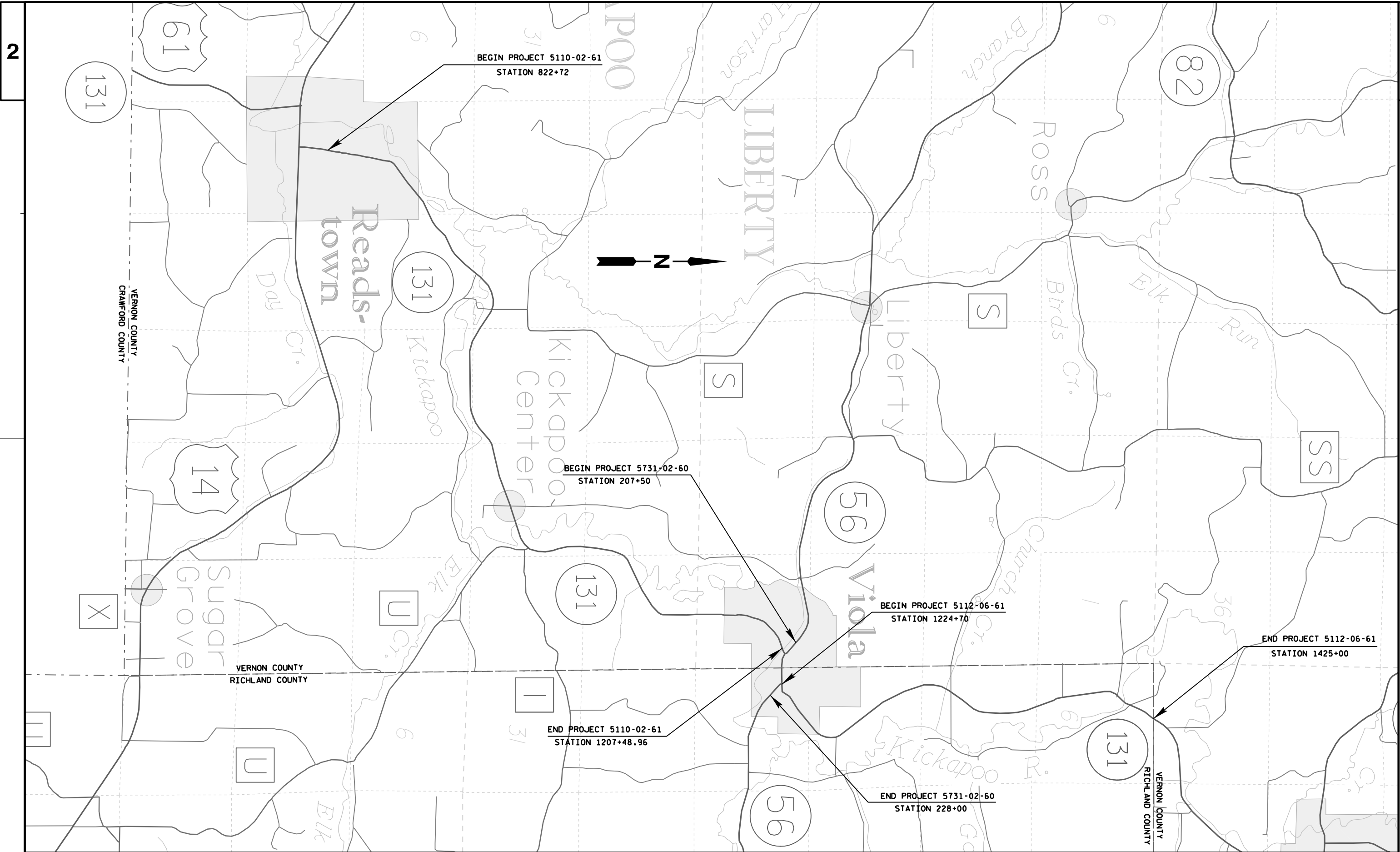
Wisconsin Department of Transportation
Soutwest Region - Madison Office
Pavement Engineer
ATTN: Tim McCarthy
2101 Wright St.
Madison, WI 53704-2583
(608) 246-5623
timothy.mccarthy@dot.state.wi.us

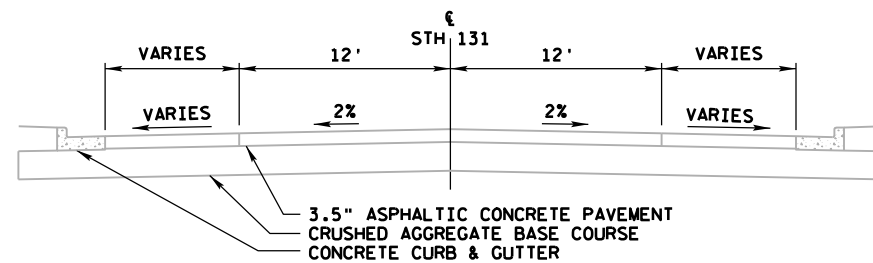
Wisconsin DNR

DNR Service Center
3550 Mormon Coulee Rd.
La Crosse, WI 54601
ATTN: Karen Kalvelage (Vernon County)
(608) 785-9115
karen.kalvelage@wisconsin.gov



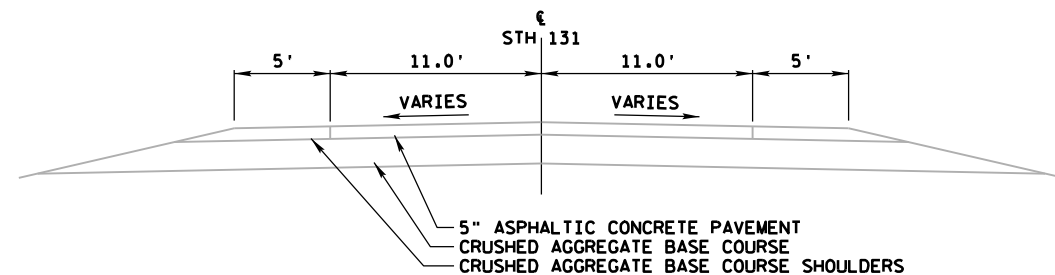
Call 811 3 Work Days Before You Dig
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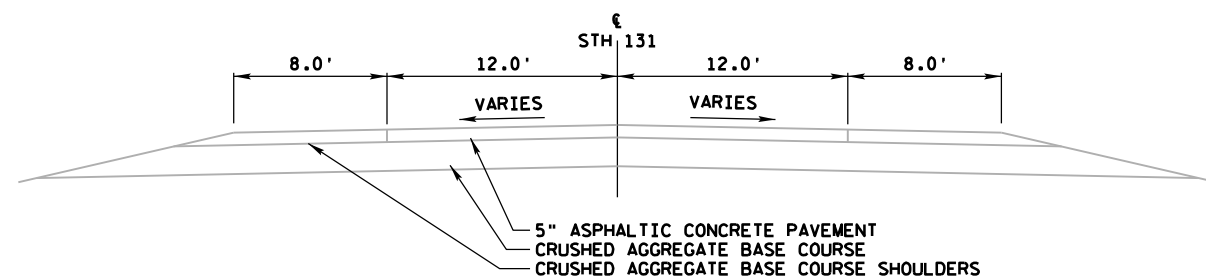
EXISTING URBAN TYPICAL SECTION

822+72 TO 850+38



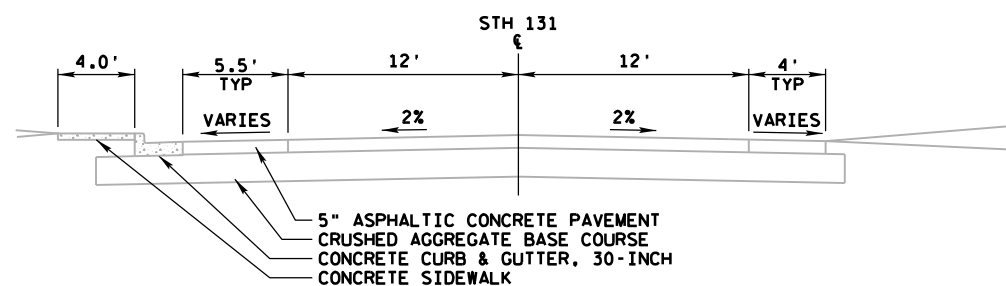
EXISTING RURAL TYPICAL SECTION

850+38 TO 917+77
957+10 TO 1040+61
1082+00 TO 1191+68



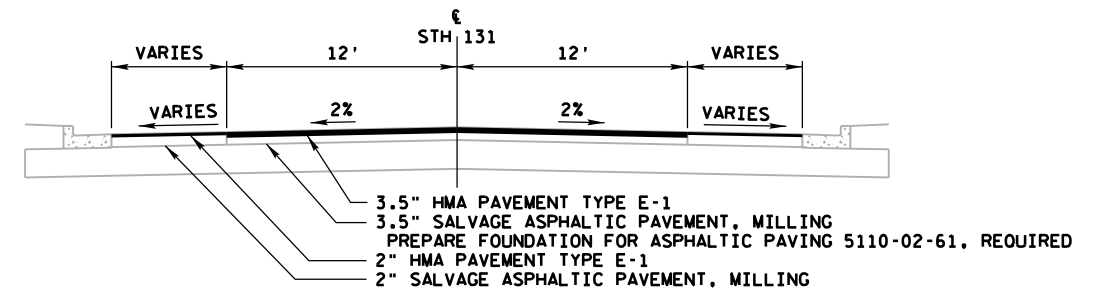
EXISTING RURAL TYPICAL SECTION

917+77 TO 957+10
1040+61 TO 1082+00



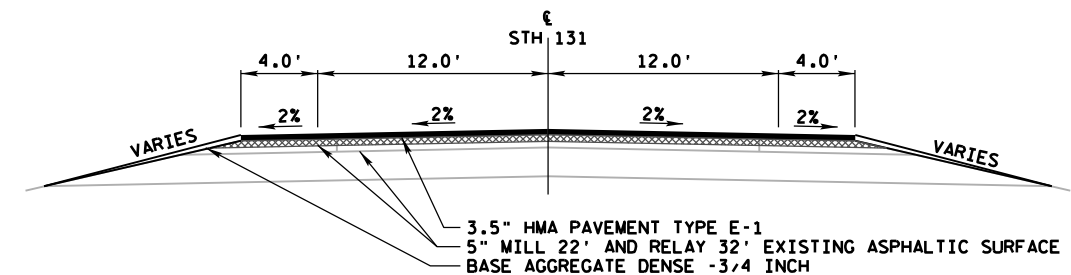
EXISTING URBAN TYPICAL SECTION

1191+68 TO 1207+49



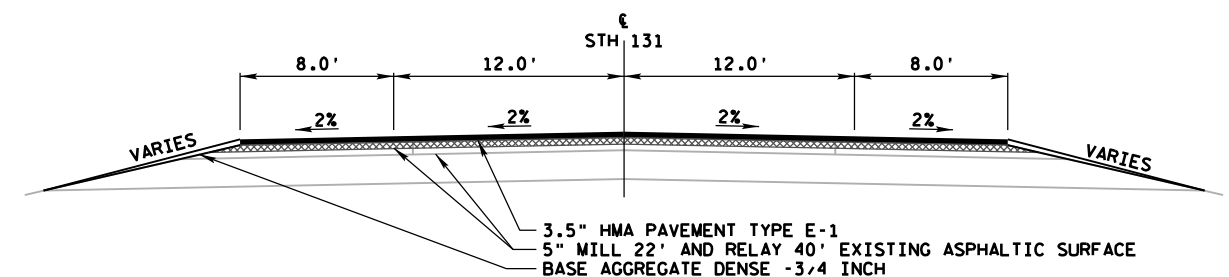
PROPOSED URBAN TYPICAL SECTION

822+72 TO 850+38



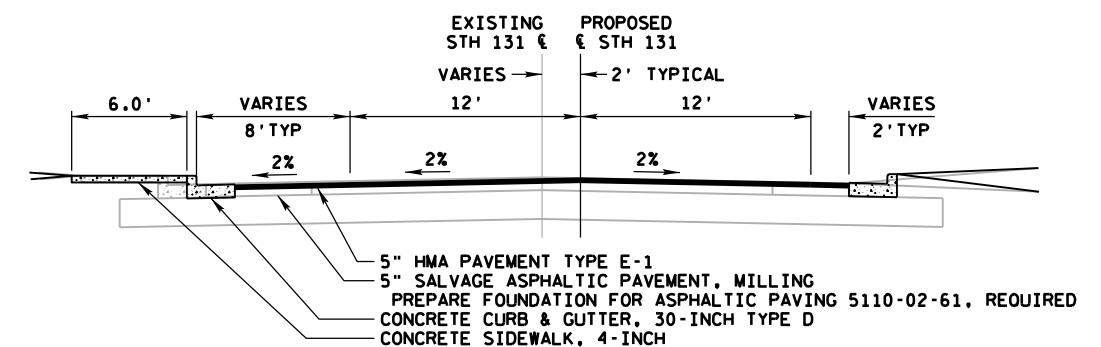
PROPOSED RURAL TYPICAL SECTION

850+38 TO 917+77
957+10 TO 1040+61
1082+00 TO 1191+68



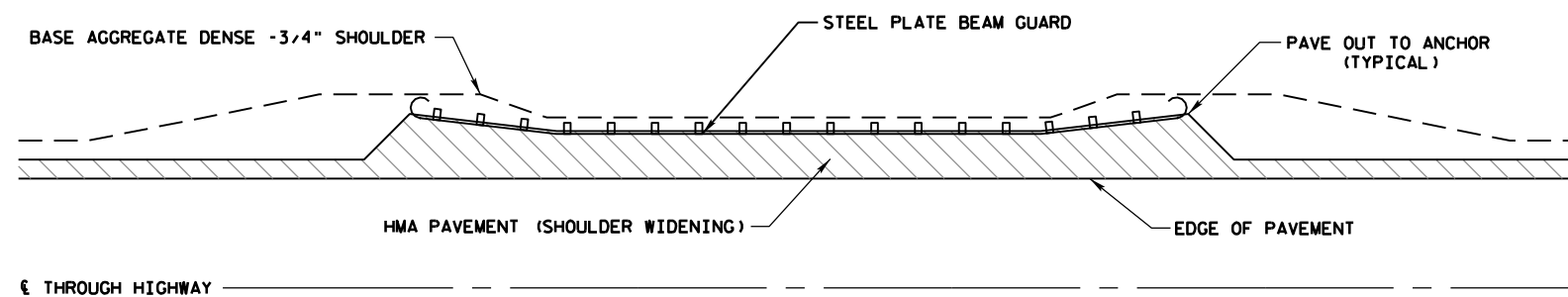
PROPOSED RURAL TYPICAL SECTION

917+77 TO 957+10
1040+61 TO 1082+00

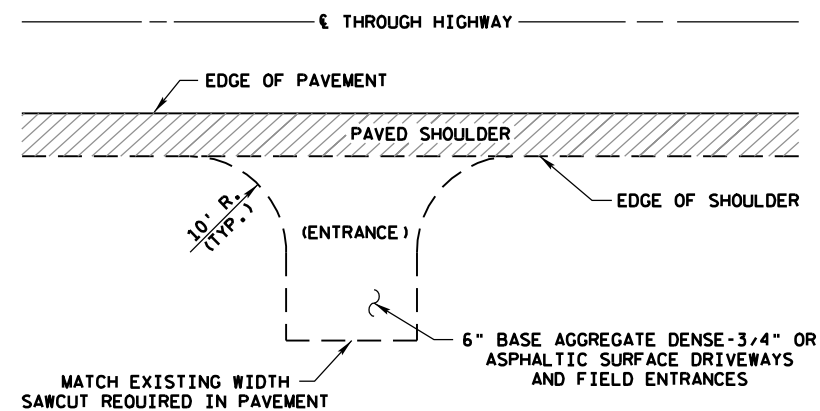


PROPOSED URBAN TYPICAL SECTION

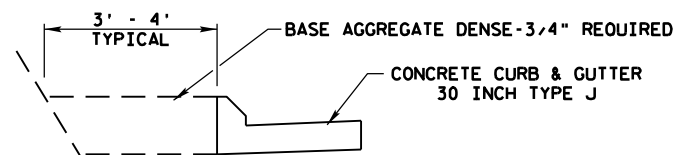
1191+68 TO 1207+49



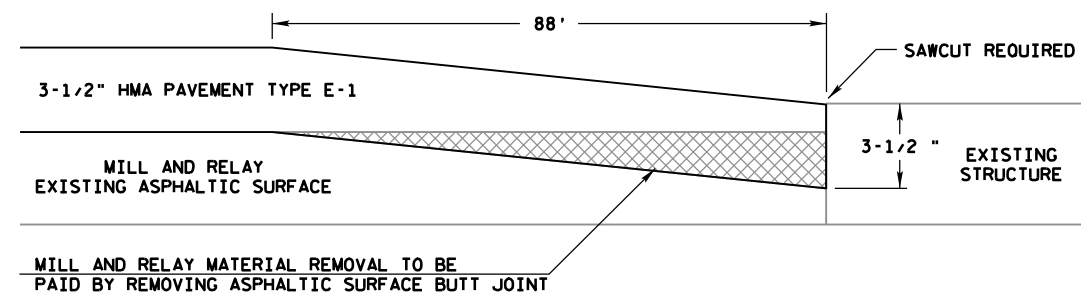
ASPHALTIC PAVING ALONG BEAM GUARD



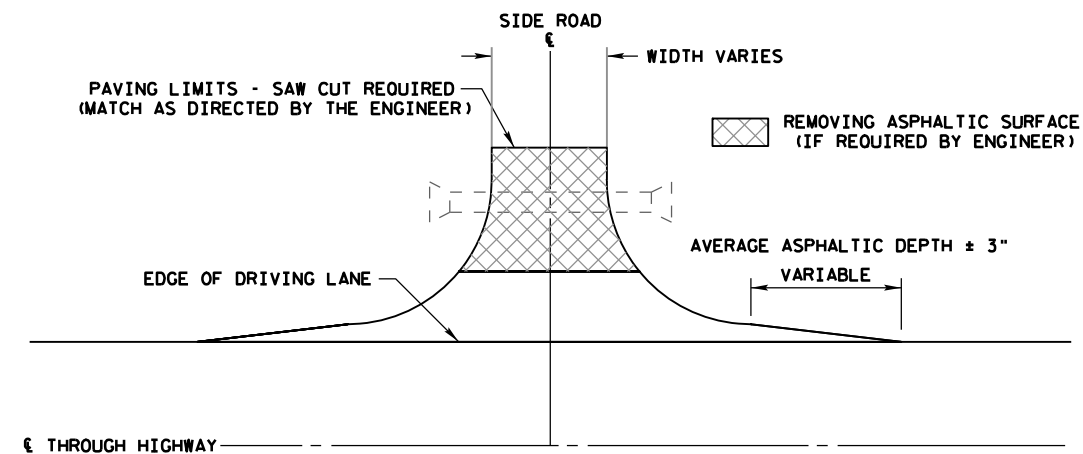
PRIVATE ENTRANCE DETAIL



CONCRETE CURB & GUTTER 30 INCH TYPE J
BACKFILL DETAIL (RURAL SECTIONS)



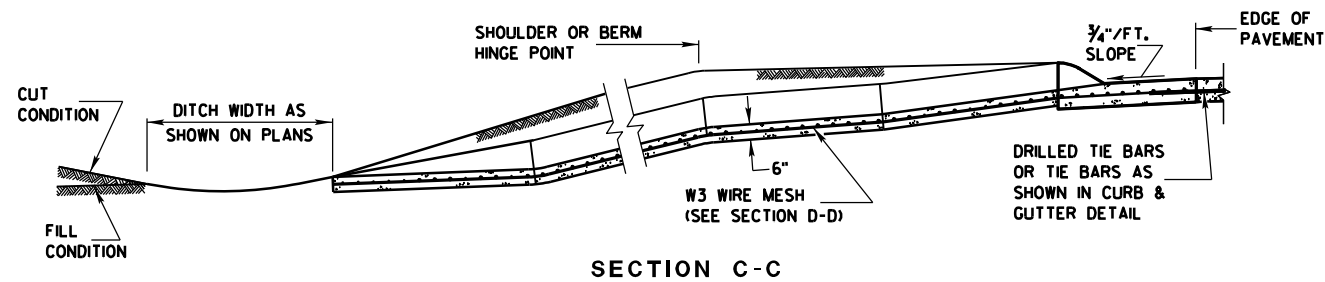
TRANSITION SECTION DETAIL
BEGIN PROJECT AND BRIDGES B-62-27, B-62-28

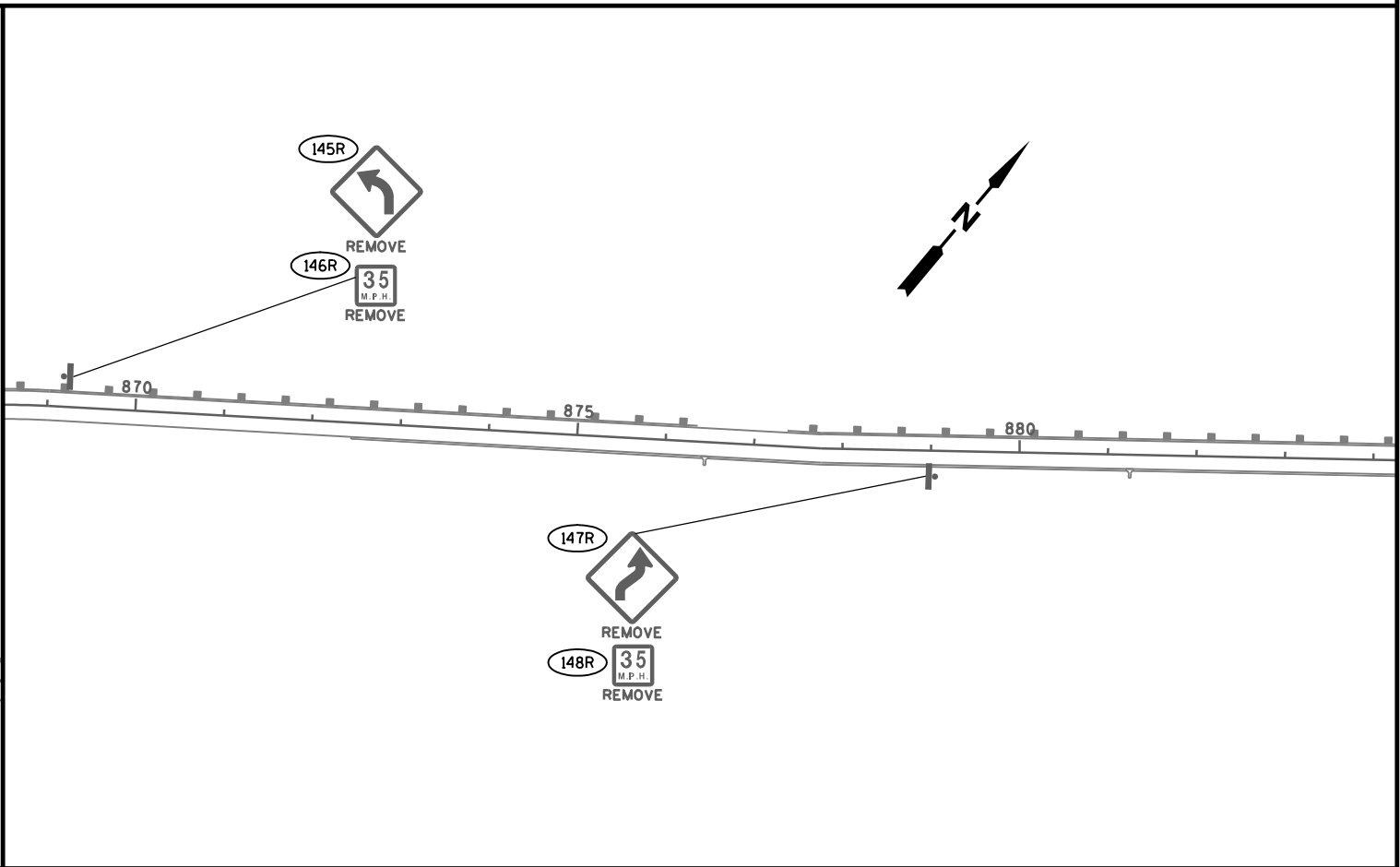
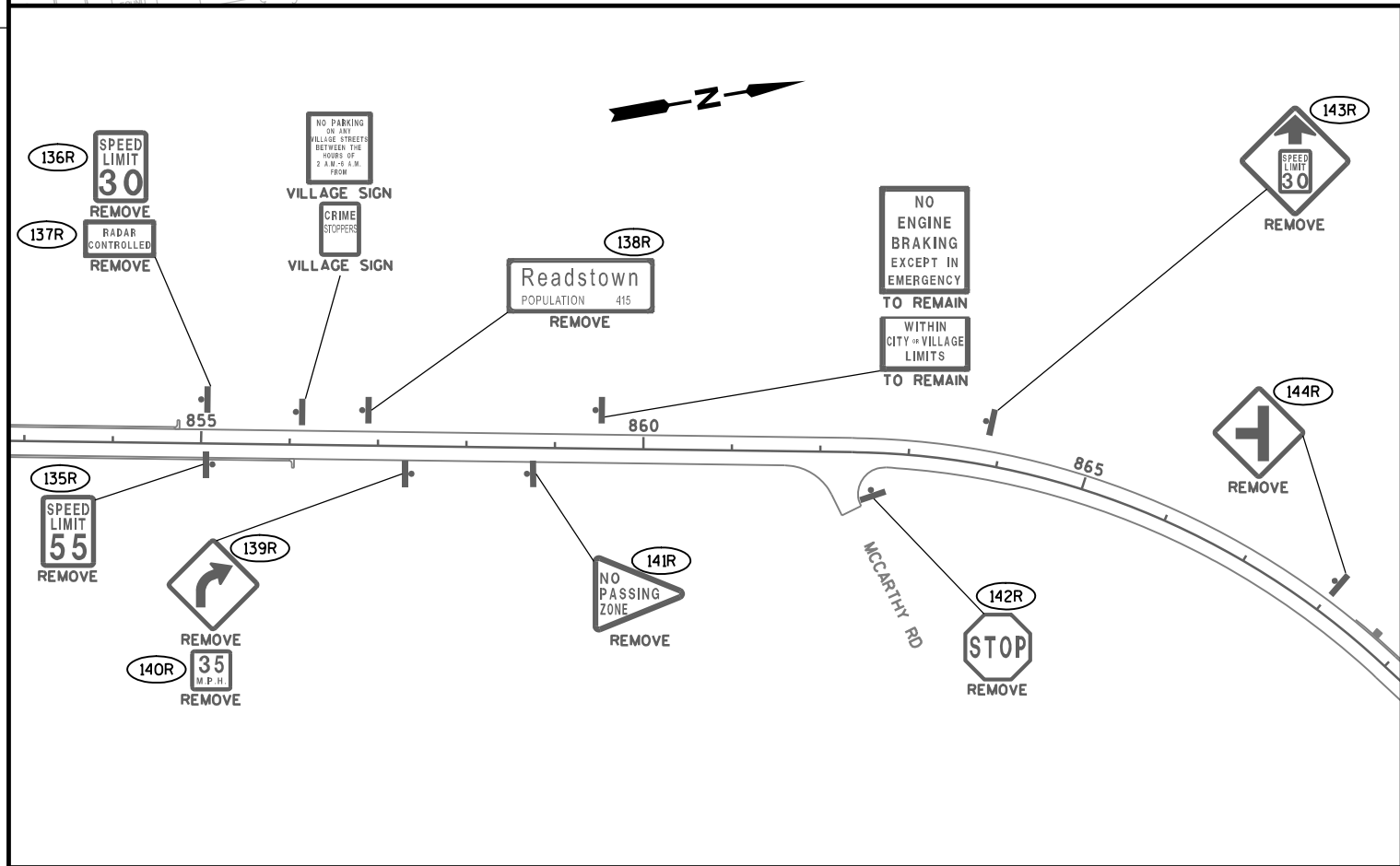
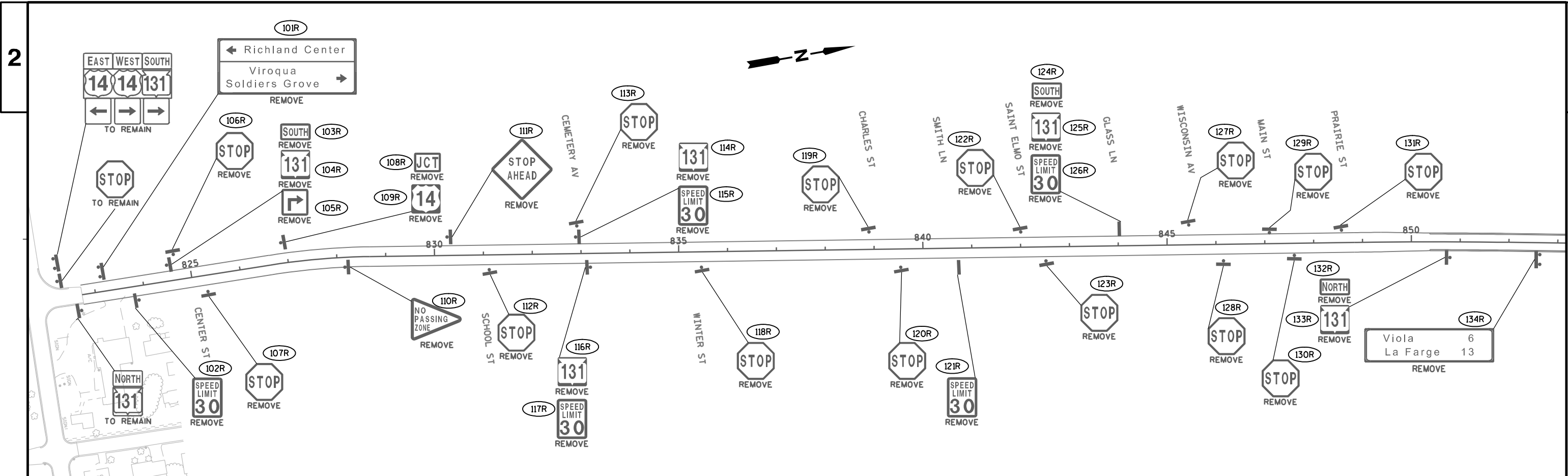


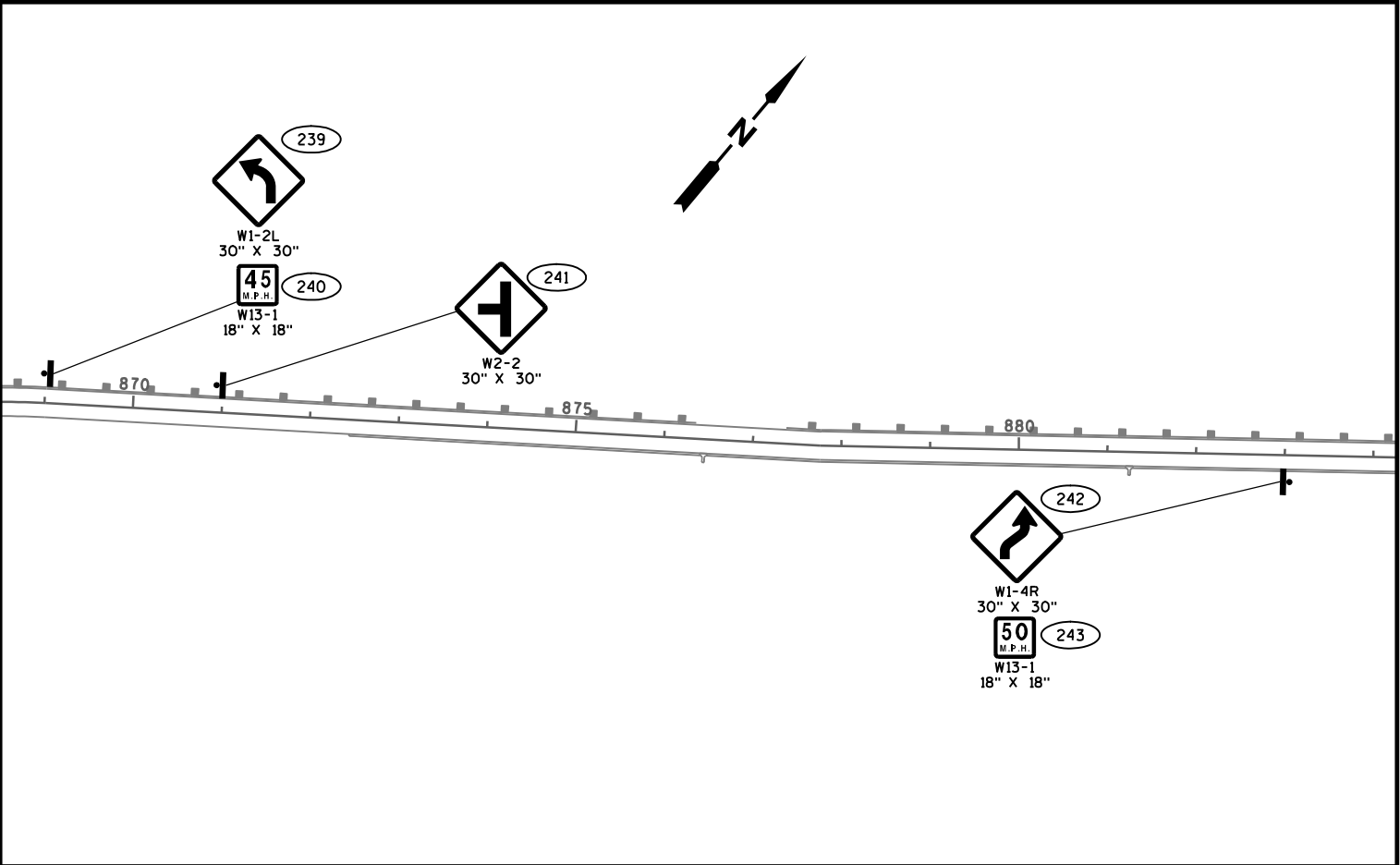
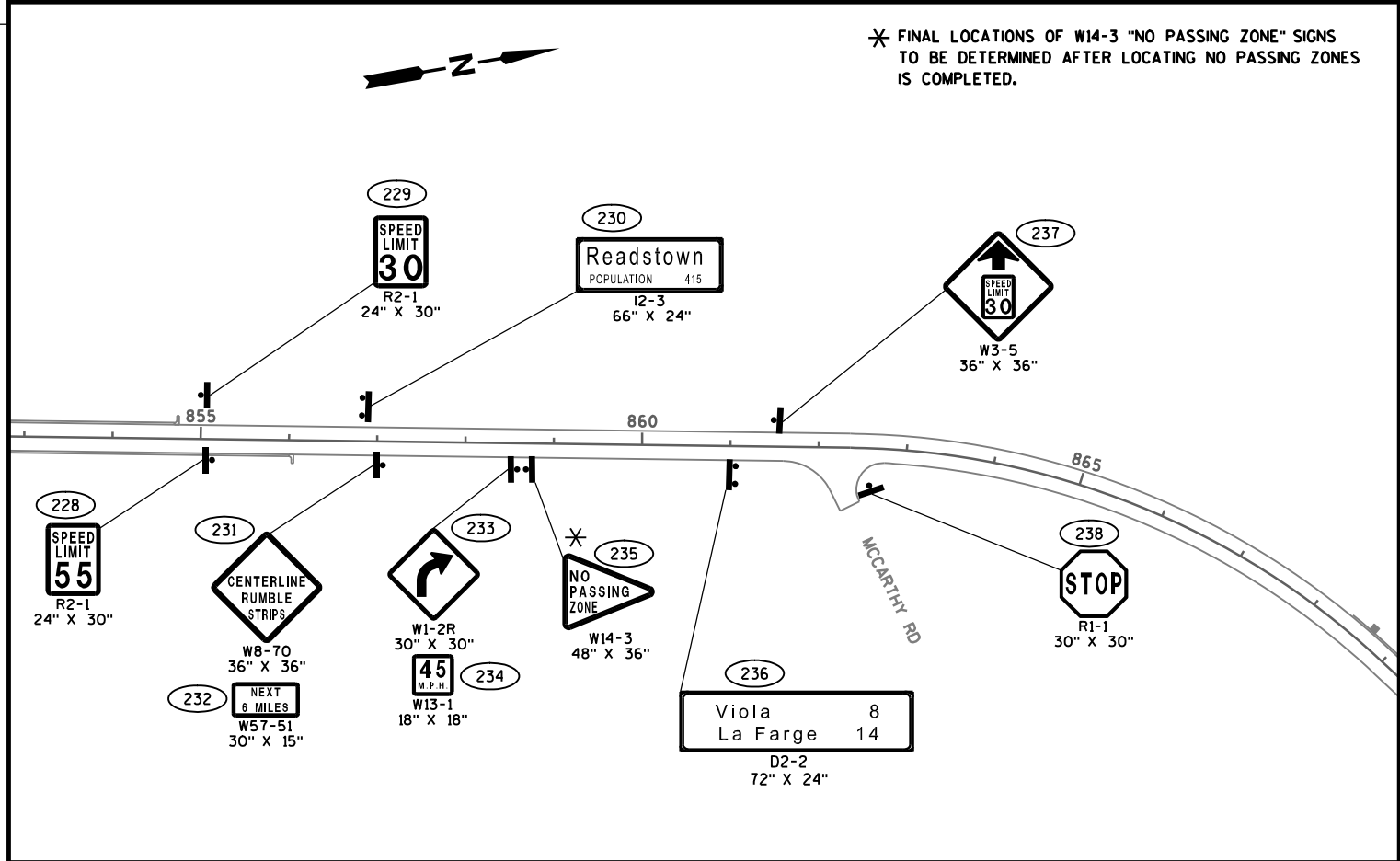
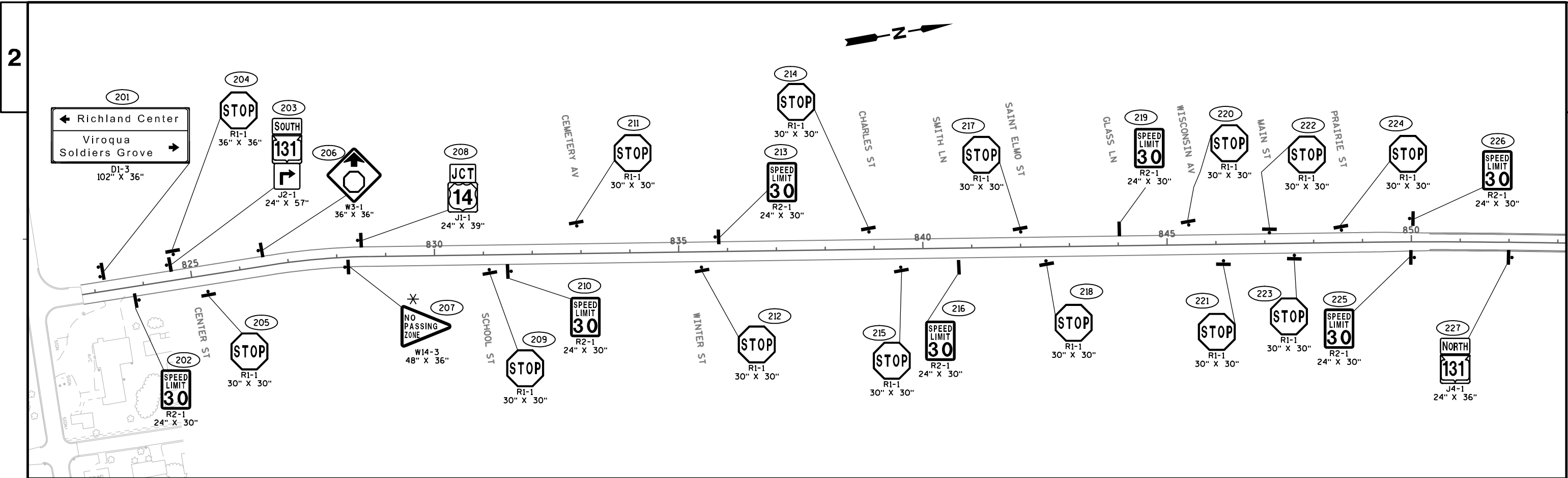
RURAL INTERSECTION BUTT OR FEATHER JOINT DETAIL

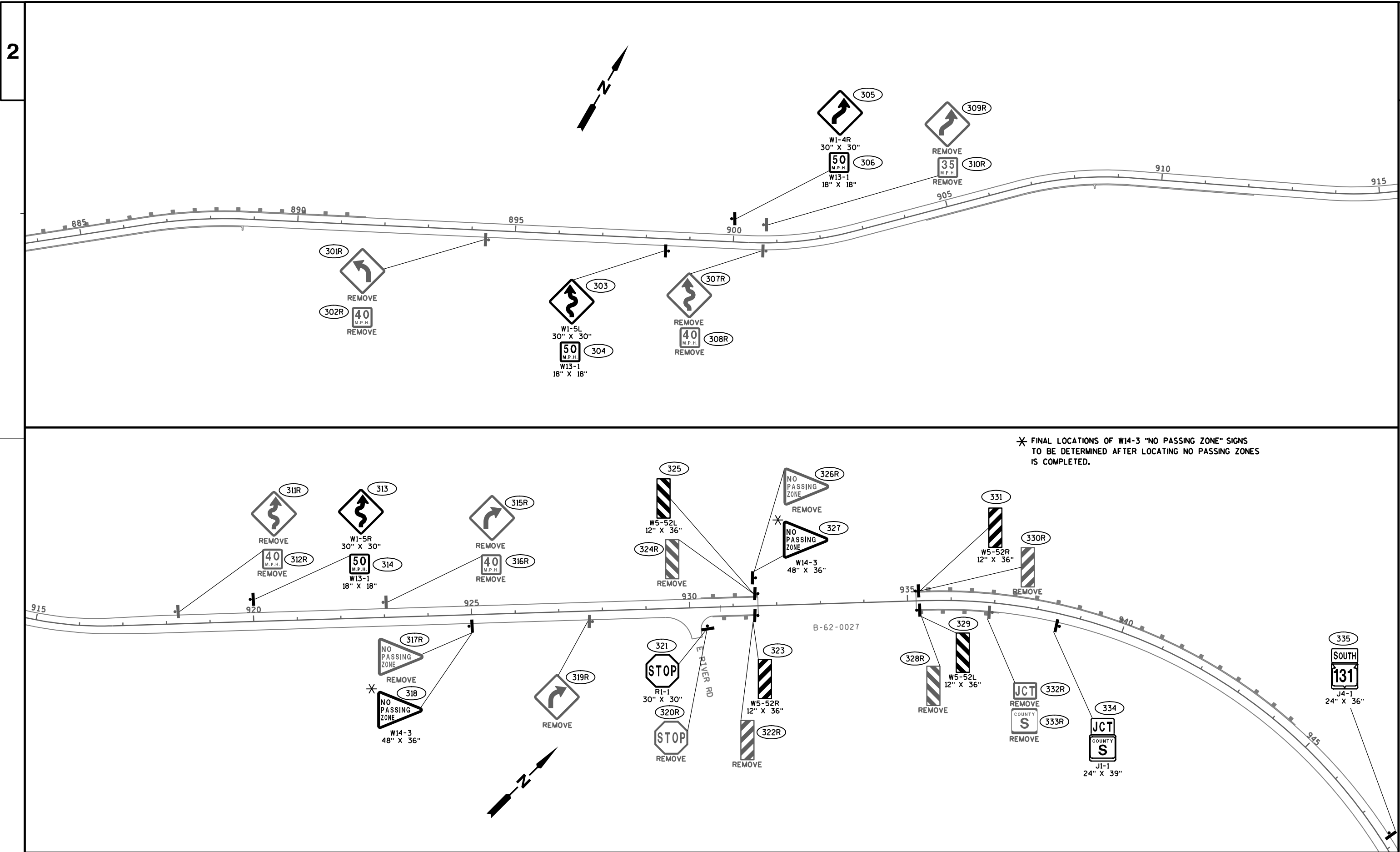
DETAILS OF CONSTRUCTION MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS. WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

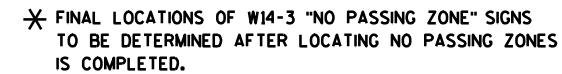
- ### ③ CONCRETE SURFACE DRAIN

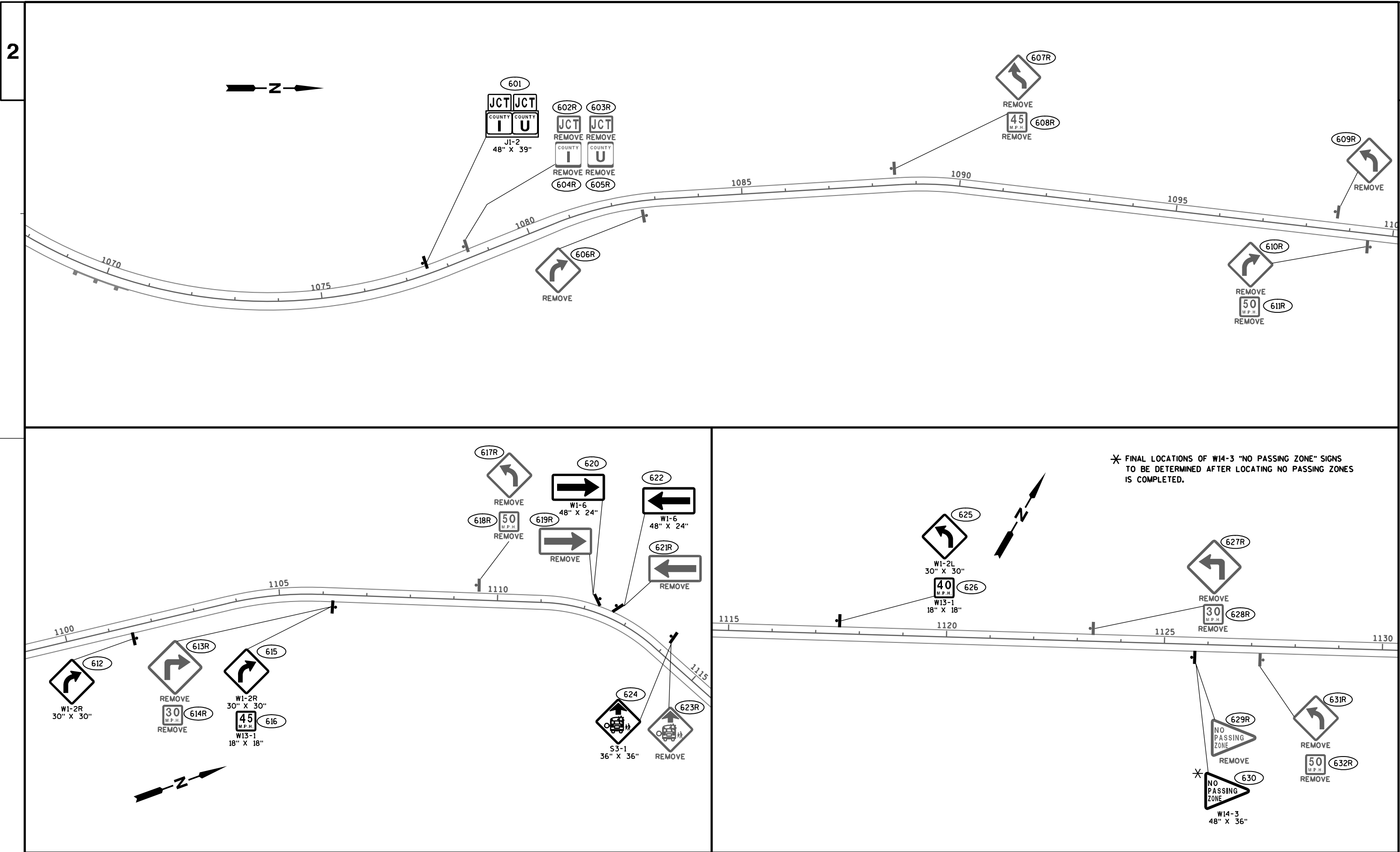


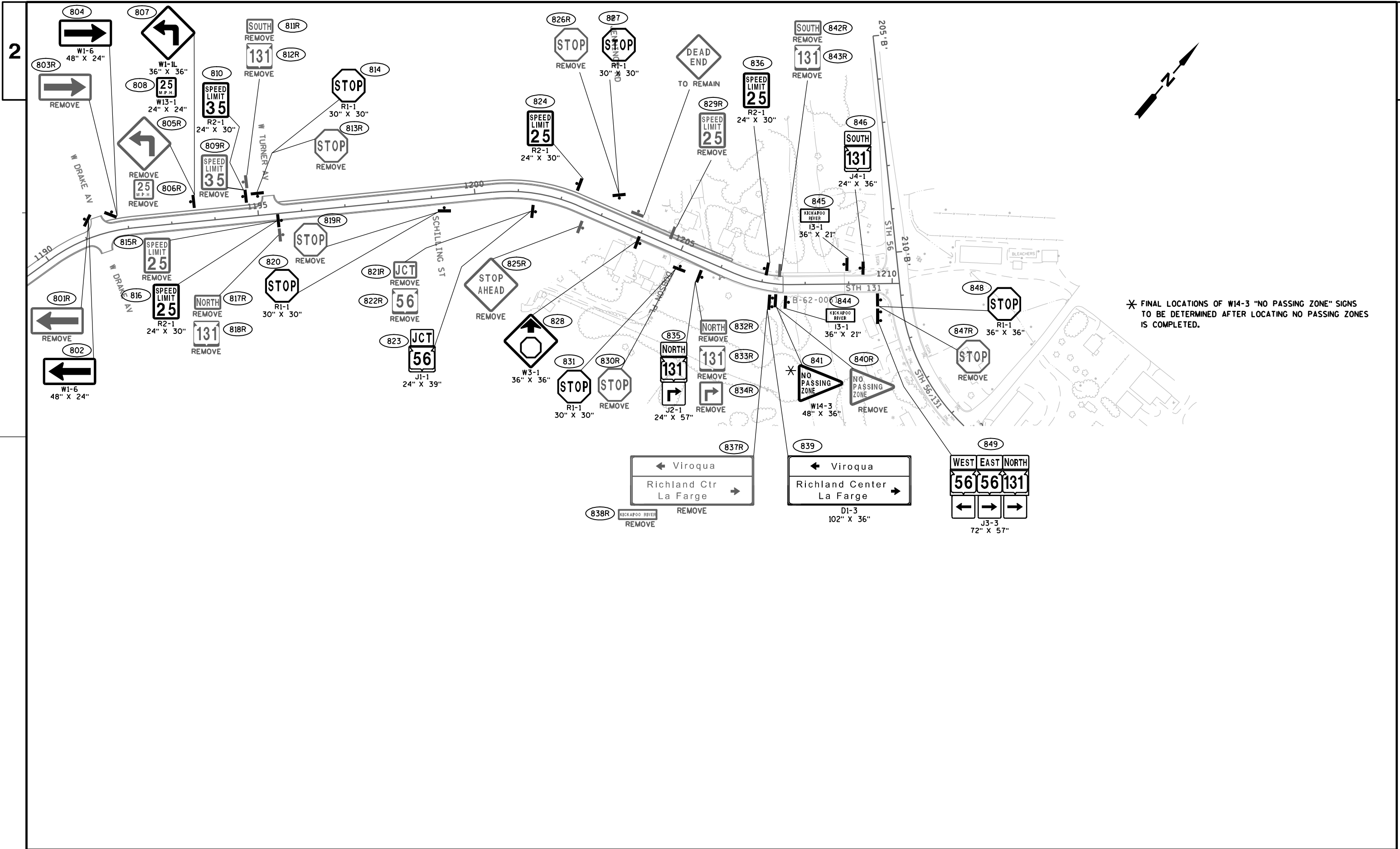


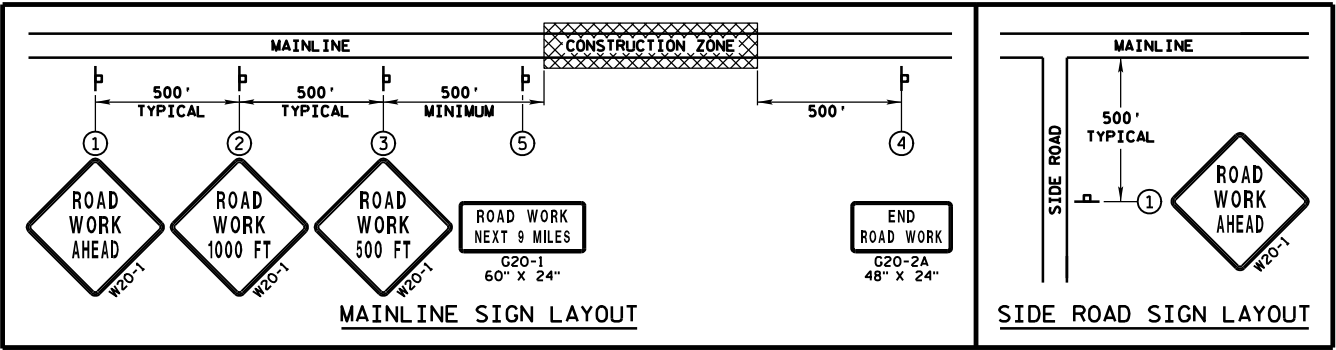
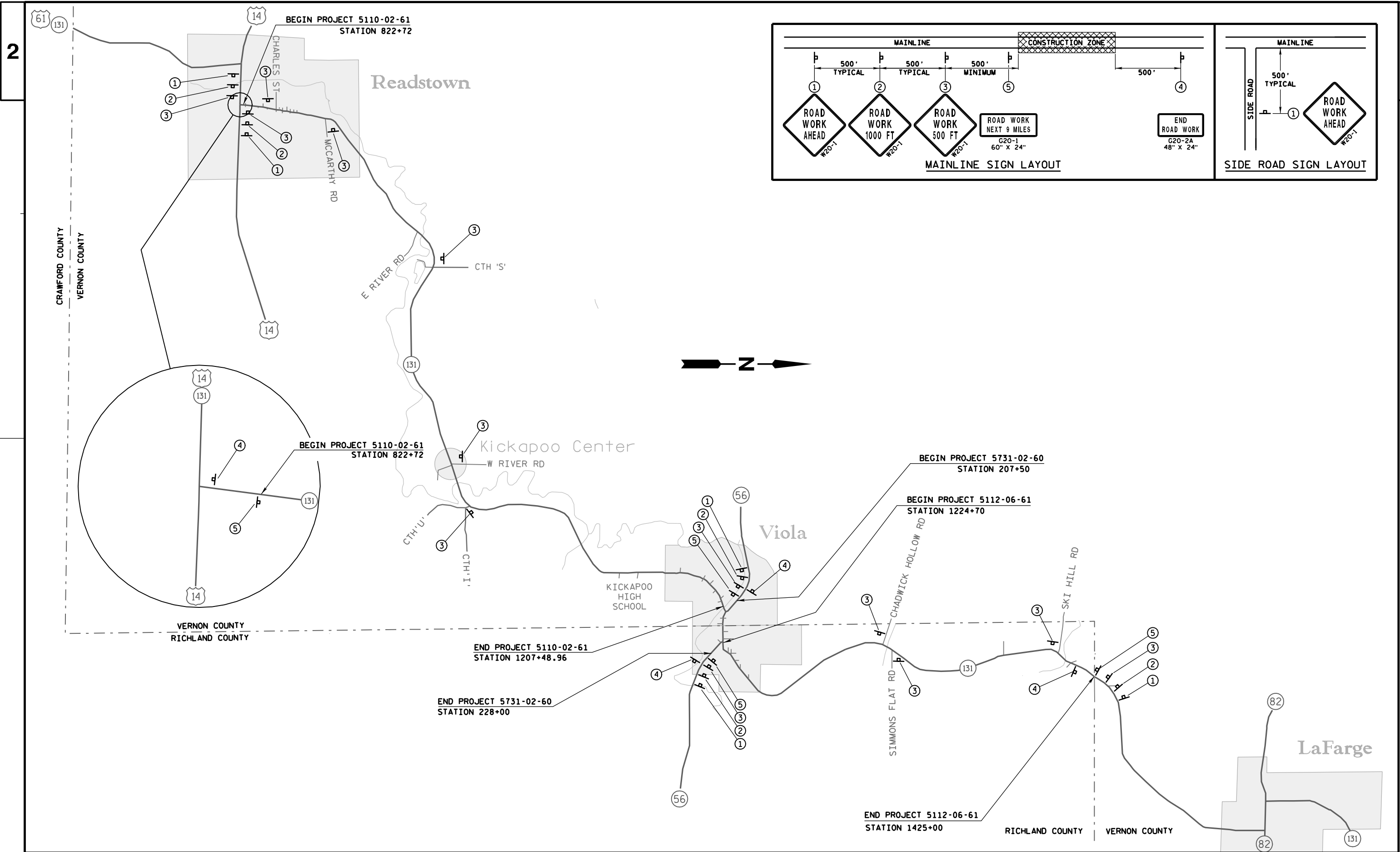


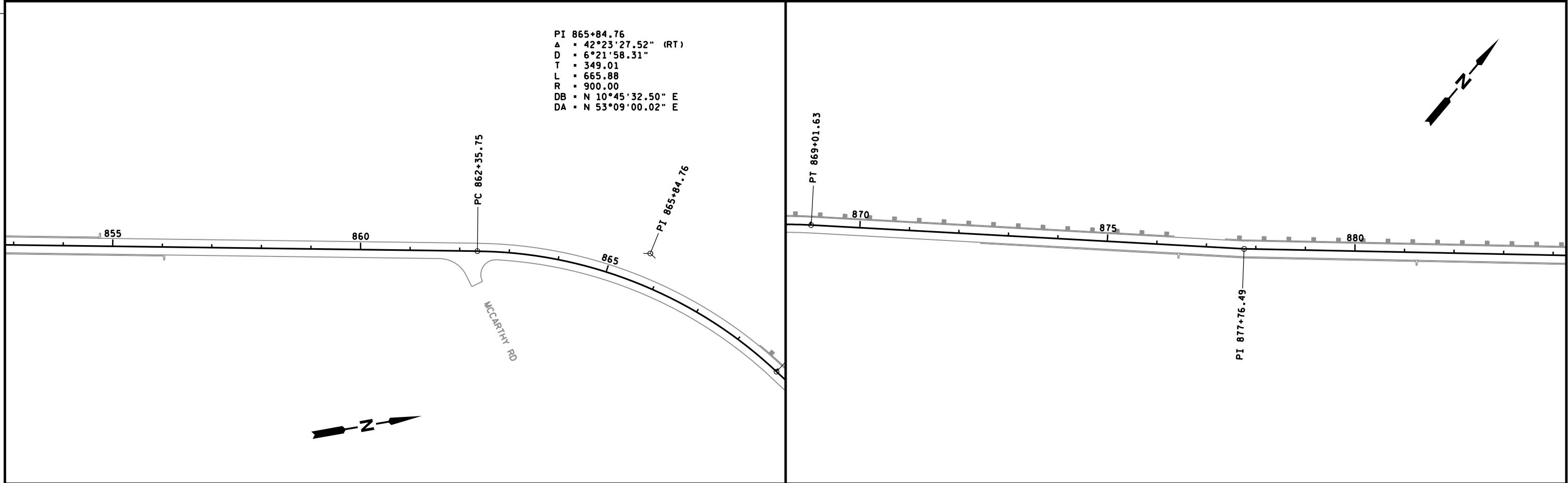
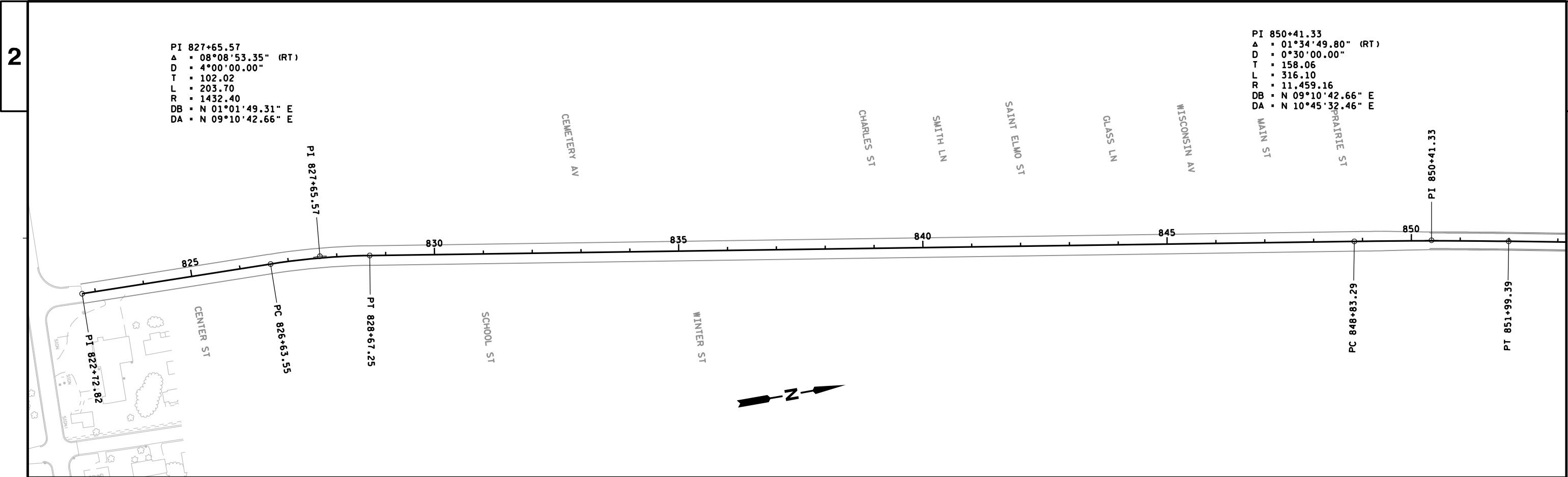


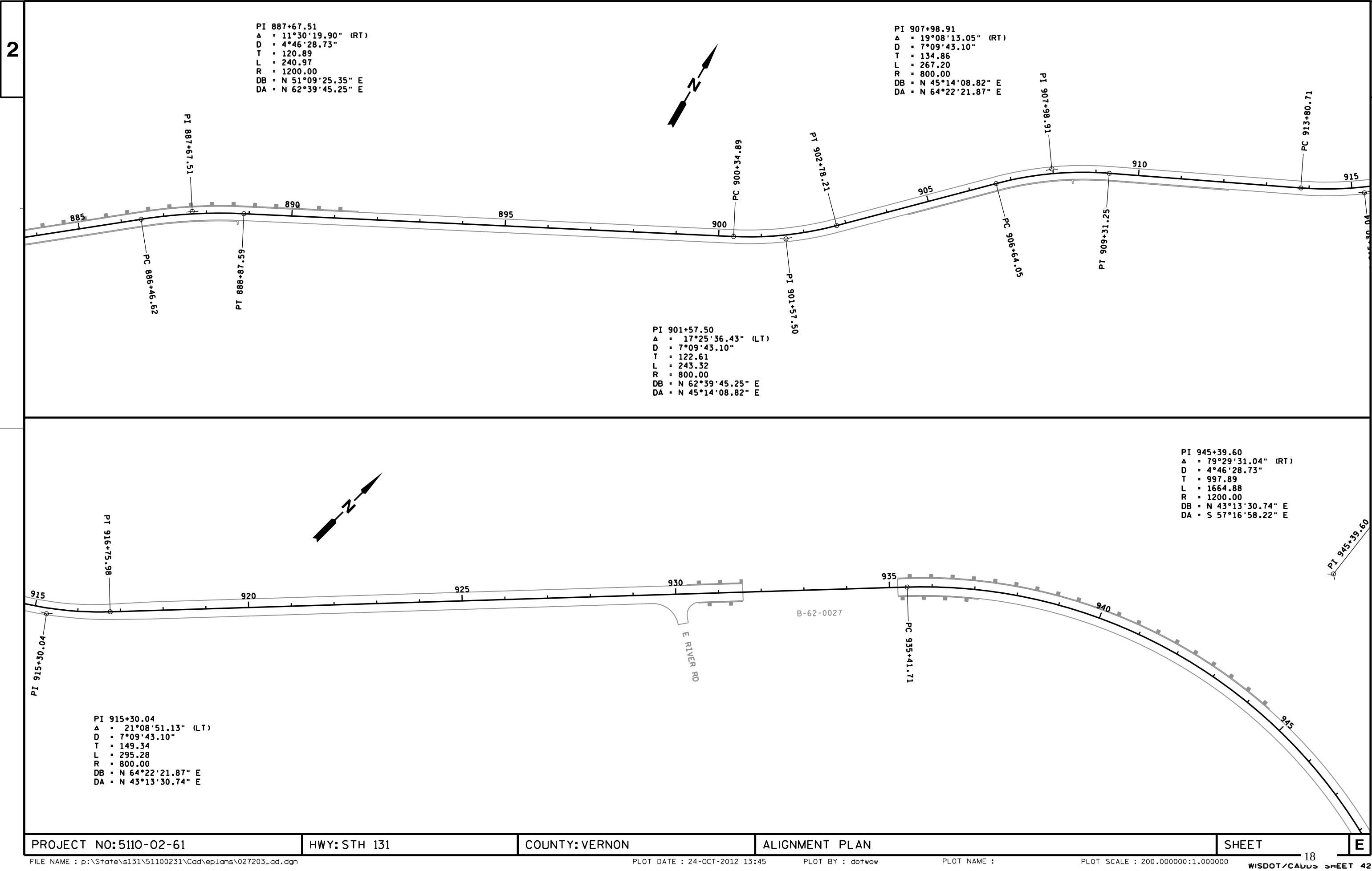


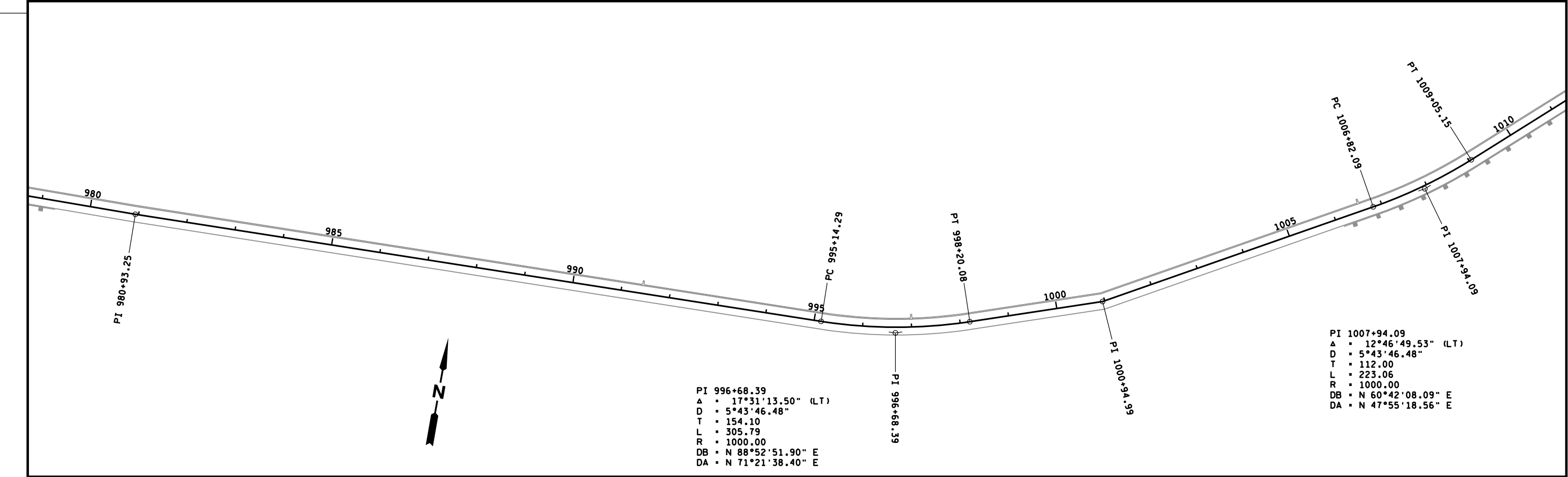
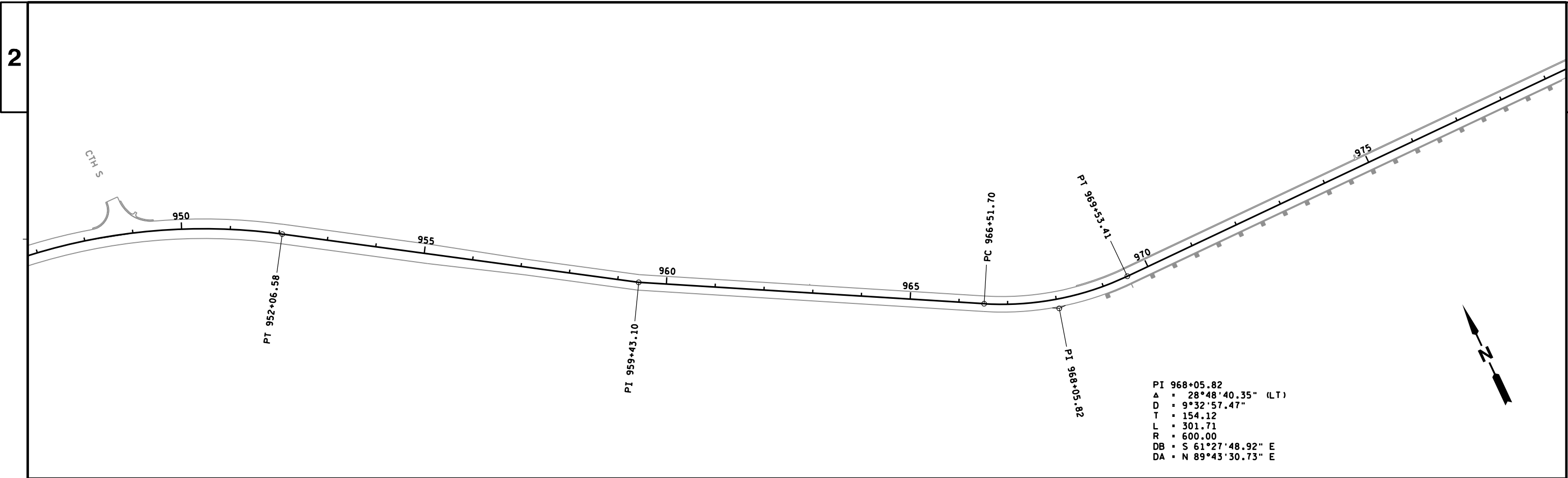




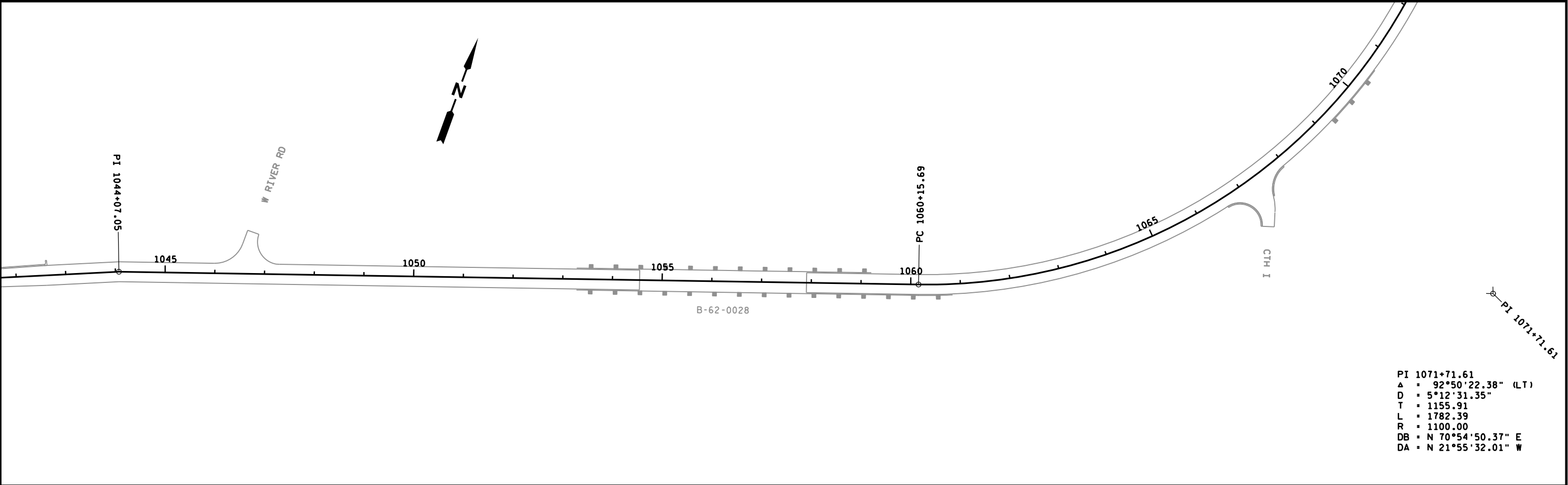




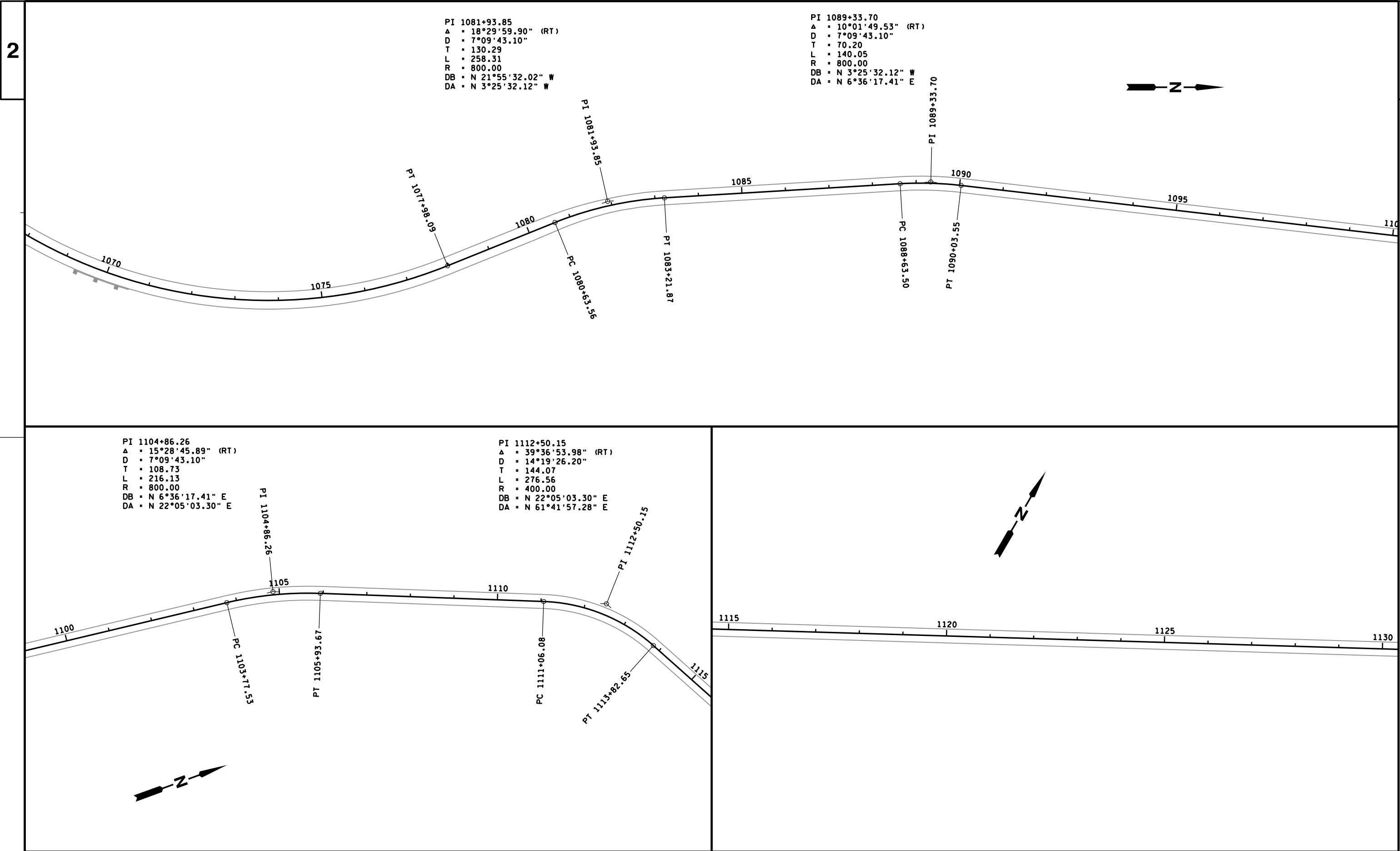


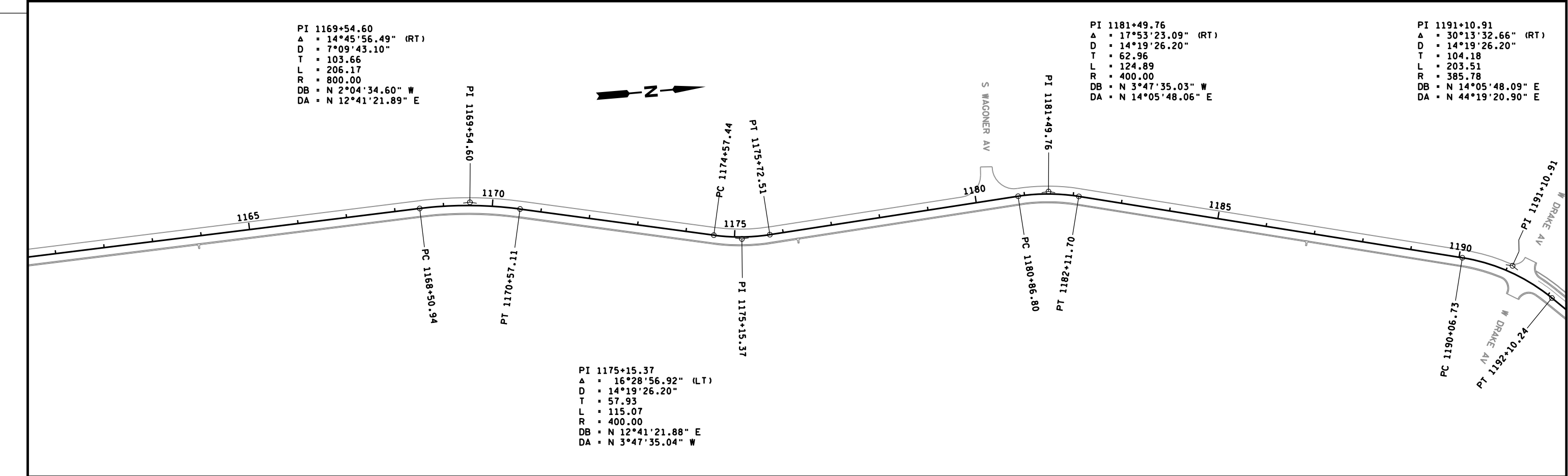
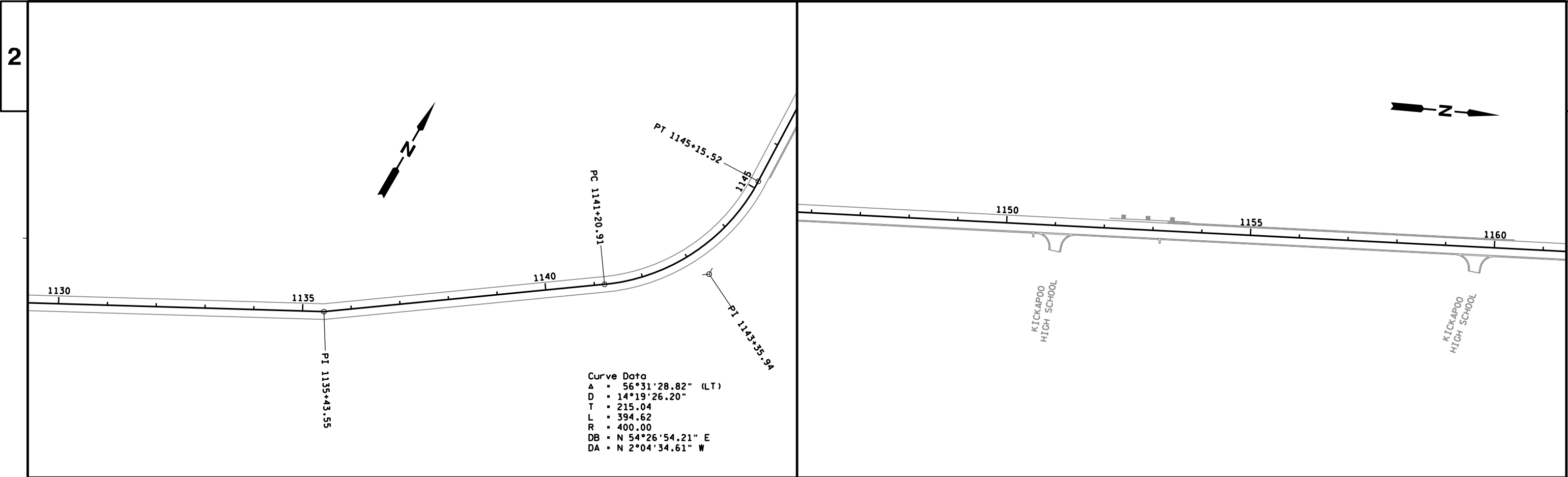


PI 1015+26.26
Δ = 26°14'40.79" (RT)
D = 9°32'57.47"
T = 139.87
L = 274.83
R = 600.00
DB = N 47°55'18.57" E
DA = N 74°09'59.36" E



PI 1071+71.61
Δ = 92°50'22.38" (LT)
D = 5°12'31.35"
T = 1155.91
L = 1782.39
R = 1100.00
DB = N 70°54'50.37" E
DA = N 21°55'32.01" W





2

PI 1191+10.91
 A = 30°13'32.66" (RT)
 D = 14°19'26.20"
 T = 104.18
 L = 203.51
 R = 385.78
 DB = N 14°05'48.09" E
 DA = N 44°19'20.90" E

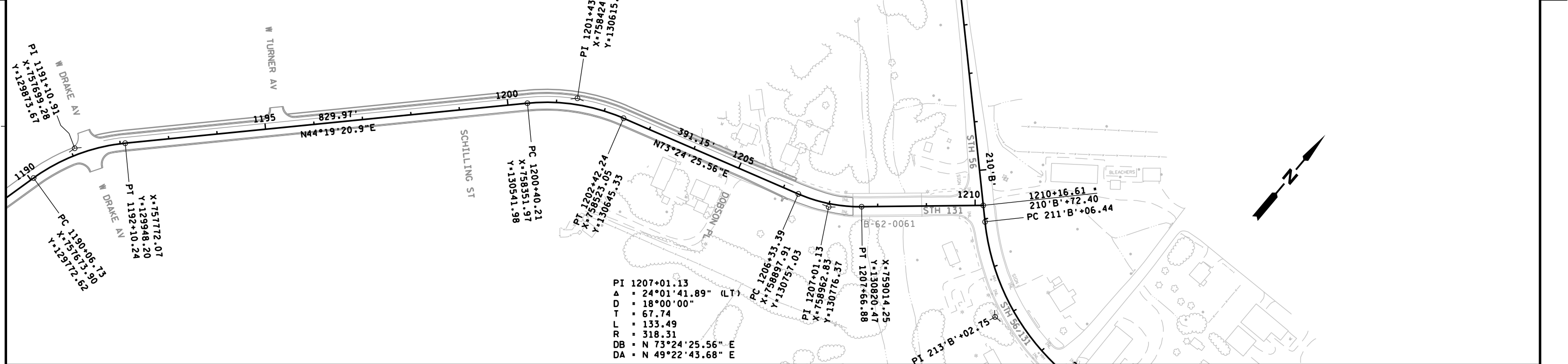
PI 1201+43.45
 A = 29°05'04.66" (RT)
 D = 14°23'45.34"
 T = 103.24
 L = 202.03
 R = 398.00
 DB = N 44°19'20.90" E
 DA = N 73°24'25.56" E

W JENNINGS RD

205' B'

105' B'

2



3

DATE 08FEB13		E S T I M A T E O F Q U A N T I T I E S			
LINE				5110-02-61	
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0010	204.0110	REMOVING ASPHALTIC SURFACE	SY	2,734.000	2,734.000
0020	204.0115	REMOVING ASPHALTIC SURFACE BUTT JOINTS	SY	1,564.000	1,564.000
0030	204.0150	REMOVING CURB & GUTTER	LF	1,524.000	1,524.000
0040	204.0155	REMOVING CONCRETE SIDEWALK	SY	1,051.000	1,051.000
0050	204.0165	REMOVING GUARDRAIL	LF	755.000	755.000
0060	211.0100	PREPARE FOUNDATION FOR ASPHALTIC PAVING	LS	1.000	1.000
		(PROJECT) 01. 5110-02-61			
0090	213.0100	FINISHING ROADWAY (PROJECT) 01.	EACH	1.000	1.000
		5110-02-61			
0120	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	5,344.500	5,344.500
0130	305.0500	SHAPING SHOULDERS	STA	36.000	36.000
0140	330.0100	MILL AND RELAY	SY	128,074.000	128,074.000
0150	416.1010	CONCRETE SURFACE DRAINS	CY	93.850	93.850
0160	440.4410.S	INCENTIVE IRI RIDE	DOL	14,314.000	14,314.000
0170	455.0105	ASPHALTIC MATERIAL PG58-28	TON	1,803.000	1,803.000
0180	455.0605	TACK COAT	GAL	825.000	825.000
0190	460.1101	HMA PAVEMENT TYPE E-1	TON	30,487.000	30,487.000
0200	460.2000	INCENTIVE DENSITY HMA PAVEMENT	DOL	18,478.000	18,478.000
0210	465.0120	ASPHALTIC SURFACE DRIVEWAYS AND FIELD	TON	360.000	360.000
		ENTRANCES			
0220	465.0475.S	ASPHALT CENTER LINE RUMBLE STRIP 2-LANE	LF	27,679.000	27,679.000
		RURAL			
0230	490.0200	SALVAGED ASPHALTIC PAVEMENT MILLING	SY	17,868.000	17,868.000
0240	601.0411	CONCRETE CURB & GUTTER 30-INCH TYPE D	LF	2,882.000	2,882.000
0250	601.0415	CONCRETE CURB & GUTTER 6-INCH SLOPED	LF	15,758.000	15,758.000
		30-INCH TYPE J			
0260	601.0557	CONCRETE CURB AND GUTTER 6-INCH SLOPED	LF	311.000	311.000
		36-INCH TYPE D			
0270	602.0405	CONCRETE SIDEWALK 4-INCH	SF	9,456.000	9,456.000
0280	602.0505	CURB RAMP DETECTABLE WARNING FIELD	SF	40.000	40.000
		YELLOW			
0300	611.8110	ADJUSTING MANHOLE COVERS	EACH	15.000	15.000
0310	611.8115	ADJUSTING INLET COVERS	EACH	3.000	3.000
0320	614.0920	SALVAGED RAIL	LF	3,100.000	3,100.000
0330	614.2300	MGS GUARDRAIL 3	LF	3,077.500	3,077.500
0340	614.2330	MGS GUARDRAIL 3 K	LF	3,050.000	3,050.000
0350	614.2500	MGS THRIE BEAM TRANSITION	LF	315.120	315.120
0360	614.2610	MGS GUARDRAIL TERMINAL EAT	EACH	20.000	20.000
0370	618.0100	MAINTENANCE AND REPAIR OF HAUL ROADS	EACH	1.000	1.000
		(PROJECT) 01. 5110-02-61			
0400	619.1000	MOBILIZATION	EACH	0.450	0.450
0410	624.0100	WATER	MGAL	499.000	499.000
0420	628.1504	SILT FENCE	LF	100.000	100.000
0430	628.1520	SILT FENCE MAINTENANCE	LF	100.000	100.000
0440	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	1.000	1.000
0450	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	1.000	1.000
0460	628.7005	INLET PROTECTION TYPE A	EACH	2.000	2.000
0470	628.7010	INLET PROTECTION TYPE B	EACH	1.000	1.000
0480	628.7015	INLET PROTECTION TYPE C	EACH	3.000	3.000
0490	634.0612	POSTS WOOD 4X6-INCH X 12-FT	EACH	18.000	18.000
0500	634.0614	POSTS WOOD 4X6-INCH X 14-FT	EACH	52.000	52.000
0510	634.0616	POSTS WOOD 4X6-INCH X 16-FT	EACH	69.000	69.000
0520	634.0618	POSTS WOOD 4X6-INCH X 18-FT	EACH	25.000	25.000
0530	637.0202	SIGNS REFLECTIVE TYPE II	SF	1,097.400	1,097.400
0540	638.2602	REMOVING SIGNS TYPE II	EACH	206.000	206.000

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DATE 08FEB13		E S T I M A T E O F Q U A N T I T I E S			
LINE		5110-02-61			
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0550	638.3000	REMOVING SMALL SIGN SUPPORTS	EACH	144.000	144.000
0560	642.5201	FIELD OFFICE TYPE C	EACH	0.450	0.450
0570	643.0100	TRAFFIC CONTROL (PROJECT) 01. 5110-02-61	EACH	1.000	1.000
0600	643.0300	TRAFFIC CONTROL DRUMS	DAY	57,600.000	57,600.000
0610	643.0410	TRAFFIC CONTROL BARRICADES TYPE II	DAY	300.000	300.000
0620	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	300.000	300.000
0630	643.0900	TRAFFIC CONTROL SIGNS	DAY	3,650.000	3,650.000
0640	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	132,200.250	132,200.250
0660	647.0556	PAVEMENT MARKING STOP LINE EPOXY 12-INCH	LF	30.000	30.000
0670	647.0776	PAVEMENT MARKING CROSSWALK EPOXY 12-INCH	LF	384.000	384.000
0680	648.0100	LOCATING NO-PASSING ZONES	MI	7.160	7.160
0690	649.0200	TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH	LF	128,254.500	128,254.500
0700	650.8000	CONSTRUCTION STAKING RESURFACING REFERENCE	LF	38,477.000	38,477.000
0710	690.0150	SAWING ASPHALT	LF	486.000	486.000
0720	690.0250	SAWING CONCRETE	LF	2.500	2.500
0730	SPV.0060	SPECIAL 01. ADJUST WATER VALVE BOX	EACH	17.000	17.000
0740	SPV.0090	SPECIAL 01. STEEL THRIE BEAM STRUCTURE APPROACH SPECIAL	LF	690.000	690.000
0750	SPV.0105	SPECIAL 01. SALVAGE EXISTING RAILING STRUCTURE B-62-28	LS	1.000	1.000

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PERMANENT SIGNING

SIGN NUMBER	STATION	LOCATION	SIGN CODE	SIZE	DESCRIPTION	ORDER LINES	634.0612	634.0614	634.0616	634.0618	637.0202	638.2602	638.3000	NOTES
							POSTS WOOD 4X6-INCH X 12-FT EACH	POSTS WOOD 4X6-INCH X 14-FT EACH	POSTS WOOD 4X6-INCH X 16-FT EACH	POSTS WOOD 4X6-INCH X 18-FT EACH	SIGNS REFLECTIVE TYPE II SF	REMOVING SIGNS TYPE II EACH	REMOVING SMALL SIGN SUPPORTS EACH	
101R	823+20	STH 131, Left	D1-3	102" x 36"	Three Destinations (Arrows)	Arrow Left, Richland Center Viroqua, Arrow Right Soldiers Grove						1	2	
102R	823+80	STH 131, Right	R2-1	24" x 30"	Speed Limit _ MPH	30						1	1	
103R	824+60	STH 131, Left	M3-3	24" x 12"	South Cardinal Route Marker							1	1	
104R	824+60	STH 131, Left	M1-6	24" x 24"	State Route Marker	131						1		Mounted with 103R
105R	824+60	STH 131, Left	M5-1R	21" x 21"	Advance Arrow Right Turn							1		Mounted with 103R
106R	824+65	STH 131, Left	R1-1	30" x 30"	Stop							1	1	
107R	825+30	STH 131, Right	R1-1	30" x 30"	Stop							1	1	
108R	827+00	STH 131, Left	M2-1	21" x 15"	Junction Marker							1	1	
109R	827+00	STH 131, Left	M1-4	24" x 24"	US Route Marker	14						1		Mounted with 108R
110R	828+20	STH 131, Right	W14-3	48" x 36"	No Passing Zone							1	1	
111R	830+30	STH 131, Left	W3-1	36" x 36"	Stop Ahead							1	1	
112R	831+15	STH 131, Right	R1-1	30" x 30"	Stop							1	1	
113R	832+90	STH 131, Left	R1-1	30" x 30"	Stop							1	1	
114R	832+90	STH 131, Left	M1-6	24" x 24"	State Route Marker	131						1	1	
115R	832+90	STH 131, Left	R2-1	24" x 30"	Speed Limit _ MPH	30						1		Mounted with 114R
116R	833+15	STH 131, Right	M1-6	24" x 24"	State Route Marker	131						1	1	
117R	833+15	STH 131, Right	R2-1	24" x 30"	Speed Limit _ MPH	30						1		Mounted with 116R
118R	835+50	STH 131, Right	R1-1	30" x 30"	Stop							1	1	
119R	838+90	STH 131, Left	R1-1	30" x 30"	Stop							1	1	
120R	839+60	STH 131, Right	R1-1	30" x 30"	Stop							1	1	
121R	840+75	STH 131, Right	R2-1	24" x 30"	Speed Limit _ MPH	30						1		Banded to Light Pole
122R	842+00	STH 131, Left	R1-1	30" x 30"	Stop							1	1	
123R	842+50	STH 131, Right	R1-1	30" x 30"	Stop							1	1	
124R	844+00	STH 131, Left	M3-3	24" x 12"	South Cardinal Route Marker							1		Banded to Light Pole
125R	844+00	STH 131, Left	M1-6	24" x 24"	State Route Marker	131						1		Mounted with 124R
126R	844+00	STH 131, Left	R2-1	24" x 30"	Speed Limit _ MPH	30						1		Mounted with 124R
127R	845+50	STH 131, Left	R1-1	30" x 30"	Stop							1	1	
128R	846+15	STH 131, Right	R1-1	30" x 30"	Stop							1	1	
129R	847+10	STH 131, Left	R1-1	30" x 30"	Stop							1	1	
130R	847+60	STH 131, Right	R1-1	30" x 30"	Stop							1	1	
131R	848+60	STH 131, Left	R1-1	30" x 30"	Stop							1	1	
132R	850+75	STH 131, Right	M3-1	24" x 12"	North Cardinal Route Marker							1	1	
133R	850+75	STH 131, Right	M1-6	24" x 24"	State Route Marker	131						1		Mounted with 132R
134R	852+60	STH 131, Right	D2-2	72" x 24"	Destinations / Distance (Two)	Viola 6 La Farge 13						1	2	
135R	855+10	STH 131, Right	R2-1	24" x 30"	Speed Limit _ MPH	55						1	1	
136R	855+10	STH 131, Left	R2-1	24" x 30"	Speed Limit _ MPH	30						1	1	
137R	855+10	STH 131, Left		24" x 18"	Radar Controlled							1		Mounted with 136R
138R	856+85	STH 131, Right	I2-3	66" x 24"	Comm Pop Name Sign (with Number)	Readstown 415						1	1	
139R	857+30	STH 131, Right	W1-2R	30" x 30"	Right Curve							1	1	
140R	857+30	STH 131, Right	W13-1	18" x 18"	Advisory Speed Plate	35						1		Mounted with 137R
141R	858+75	STH 131, Right	W14-3	48" x 36"	No Passing Zone							1	1	
142R	862+55	STH 131, Right	R1-1	30" x 30"	Stop							1	1	
143R	863+80	STH 131, Left	W3-5	36" x 36"	Speed Limit_Ahead (Arrow)	30						1	1	
144R	868+00	STH 131, Left	W2-2	30" x 30"	Side Road (90 Degrees)							1	1	
145R	869+25	STH 131, Left	W1-2L	30" x 30"	Left Curve							1	1	
146R	869+25	STH 131, Left	W13-1	18" x 18"	Advisory Speed Plate	35						1		Mounted with 143R
147R	879+00	STH 131, Right	W1-4R	30" x 30"	Right Reverse Curve							1	1	
148R	879+00	STH 131, Right	W13-1	18" x 18"	Advisory Speed Plate	35						1		Mounted with 145R
201	823+20	STH 131, Left	D1-3	102" x 36"	Three Destinations (Arrows)	Arrow Left, Richland Center Viroqua, Arrow Right Soldiers Grove			2		25.50			
202	823+80	STH 131, Right	R2-1	24" x 30"	Speed Limit _ MPH	30			1		5.00			
203	824+60	STH 131, Left	J2-1	24" x 57"	Route Turn Assembly	South STH 131 Advance Arrow Right Turn				1	9.50			
204	824+65	STH 131, Left	R1-1	30" x 30"	Stop			1			5.18			
205	825+30	STH 131, Right	R1-1	30" x 30"	Stop			1			5.18			
206	826+50	STH 131, Left	W3-1	36" x 36"	Stop Ahead				1		9.00			
207	828+20	STH 131, Right	W14-3	48" x 36"	No Passing Zone				1		6.00			
Sheet Totals							0	2	5	1	65.36	48	36	

STATE PROJECT NO: 5110-02-61

HWY: STH 131

COUNTY: VERNON

MISCELLANEOUS QUANTITIES

SHEET NO: 26

E

FILE NAME : _____

PLOT DATE : _____

PLOT BY : _____

PLOT NAME : _____

ORG DATE : _____

ORIGINATOR : DIST _

PLOT SCALE : 1:1

3

PERMANENT SIGNING

SIGN NUMBER	STATION	LOCATION	SIGN CODE	SIZE	DESCRIPTION	ORDER LINES	634.0612	634.0614	634.0616	634.0618	637.0202	638.2602	638.3000	NOTES
							POSTS WOOD 4X6-INCH X 12-FT EACH	POSTS WOOD 4X6-INCH X 14-FT EACH	POSTS WOOD 4X6-INCH X 16-FT EACH	POSTS WOOD 4X6-INCH X 18-FT EACH	REFLECTIVE SIGNS TYPE II SF	REMOVING SIGNS TYPE II EACH	REMOVING SMALL SIGN SUPPORTS EACH	
208	828+40	STH 131, Left	J1-1	24" x 39"	Junction Assembly	Jct USH 14			1		6.50			
209	831+15	STH 131, Right	R1-1	30" x 30"	Stop			1			5.18			
210	831+50	STH 131, Right	R2-1	24" x 30"	Speed Limit _ MPH	30		1			5.00			
211	832+90	STH 131, Left	R1-1	30" x 30"	Stop			1			5.18			
212	835+50	STH 131, Right	R1-1	30" x 30"	Stop			1			5.18			
213	835+80	STH 131, Left	R2-1	24" x 30"	Speed Limit _ MPH	30		1			5.00			
214	838+90	STH 131, Left	R1-1	30" x 30"	Stop			1			5.18			
215	839+60	STH 131, Right	R1-1	30" x 30"	Stop			1			5.18			
216	840+75	STH 131, Right	R2-1	24" x 30"	Speed Limit _ MPH	30					5.00			Band to Light Pole
217	842+00	STH 131, Left	R1-1	30" x 30"	Stop			1			5.18			
218	842+50	STH 131, Right	R1-1	30" x 30"	Stop			1			5.18			
219	844+00	STH 131, Left	R2-1	24" x 30"	Speed Limit _ MPH	30					5.00			Band to Light Pole
220	845+40	STH 131, Left	R1-1	30" x 30"	Stop			1			5.18			
221	846+20	STH 131, Right	R1-1	30" x 30"	Stop			1			5.18			
222	847+10	STH 131, Left	R1-1	30" x 30"	Stop			1			5.18			
223	847+60	STH 131, Right	R1-1	30" x 30"	Stop			1			5.18			
224	848+60	STH 131, Left	R1-2	30" x 30"	Stop			1			5.18			
225	850+00	STH 131, Right	R2-1	24" x 30"	Speed Limit _ MPH	30		1			5.00			
226	850+00	STH 131, Left	R2-1	24" x 30"	Speed Limit _ MPH	30		1			5.00			
227	852+00	STH 131, Right	J4-1	24" x 36"	Reassurance Assembly	North 131			1		6.00			
228	855+10	STH 131, Right	R2-1	24" x 30"	Speed Limit _ MPH	55			1		5.00			
229	855+10	STH 131, Left	R2-1	24" x 30"	Speed Limit _ MPH	30			1		5.00			
230	856+85	STH 131, Left	I2-3	66" x 24"	Comm Pop Name Sign (with Number)	Readstown Population 415		2			11.00			
231	857+00	STH 131, Right	W8-70	36" x 36"	Centerline Rumble Strip					1	9.00			
232	857+00	STH 131, Right	W57-51	30" x 15"	Next _ Miles	6					3.13			Mount with 231
233	858+50	STH 131, Right	W1-2R	30" x 30"	Right Curve					1	6.25			
234	858+50	STH 131, Right	W13-1	18" x 18"	Advisory Speed Plate	45					2.25			Mount with 233
235	858+75	STH 131, Right	W14-3	48" x 36"	No Passing Zone				1		6.00			
236	861+00	STH 131, Right	D2-2	72" x 24"	Destinations / Distance (Two)	Viola 8 La Farge 14		2			12.00			
237	861+50	STH 131, Left	W3-5	36" x 36"	Speed Limit Ahead (Arrow)	30			1		9.00			
238	862+60	STH 131, Right	R1-1	30" x 30"	Stop			1			5.18			
239	869+00	STH 131, Left	W1-2L	30" x 30"	Left Curve					1	6.25			
240	869+00	STH 131, Left	W13-1	18" x 18"	Advisory Speed Plate	45					2.25			Mount with 239
241	871+00	STH 131, Left	W2-2	30" x 30"	Side Road (90 Degrees)				1		6.25			
242	883+00	STH 131, Right	W1-4R	30" x 30"	Right Reverse Curve					1	6.25			
243	883+00	STH 131, Right	W13-1	18" x 18"	Advisory Speed Plate	50					2.25			Mount with 242
301R	894+30	STH 131, Right	W1-2L	30" x 30"	Left Curve							1	1	
302R	894+30	STH 131, Right	W13-1	18" x 18"	Advisory Speed Plate	40						1		Mounted with 301R
303	898+50	STH 131, Right	W1-5L	30" x 30"	Left Winding Road					1	6.25			
304	898+50	STH 131, Right	W13-1	18" x 18"	Advisory Speed Plate	50					2.25			Mount with 303
305	900+00	STH 131, Left	W1-4R	30" x 30"	Right Reverse Curve					1	6.25			
306	900+00	STH 131, Left	W13-1	18" x 18"	Advisory Speed Plate	50					2.25			Mount with 305
307R	900+75	STH 131, Right	W1-5L	30" x 30"	Left Winding Road							1	1	
308R	900+75	STH 131, Right	W13-1	18" x 18"	Advisory Speed Plate	40						1		Mounted with 307R
309R	900+75	STH 131, Left	W1-4R	30" x 30"	Right Reverse Curve							1	1	
310R	900+75	STH 131, Left	W13-1	18" x 18"	Advisory Speed Plate	35						1		Mounted with 309R
311R	918+25	STH 131, Left	W1-5R	30" x 30"	Right Winding Road							1	1	
312R	918+25	STH 131, Left	W13-1	18" x 18"	Advisory Speed Plate	40						1		Mounted with 311R
313	920+00	STH 131, Left	W1-5R	30" x 30"	Right Winding Road					1	6.25			
314	920+00	STH 131, Left	W13-1	18" x 18"	Advisory Speed Plate	50					2.25			Mount with 313
315R	923+00	STH 131, Left	W1-2R	30" x 30"	Right Curve							1	1	
316R	923+00	STH 131, Left	W13-1	18" x 18"	Advisory Speed Plate	40						1		Mounted with 315R
317R	925+00	STH 131, Right	W14-3	48" x 36"	No Passing Zone							1	1	
318	925+00	STH 131, Right	W14-3	48" x 36"	No Passing Zone				1		6.00			
319R	927+75	STH 131, Right	W1-2R	30" x 30"	Right Curve							1	1	
320R	930+30	STH 131, Right	R1-1	30" x 30"	Stop							1	1	
321	930+30	STH 131, Right	R1-1	30" x 30"	Stop				1		5.18			
322R	931+50	STH 131, Right	W5-52R	12" x 36"	Clearance Striper Down Left							1	1	
323	931+50	STH 131, Right	W5-52R	12" x 36"	Clearance Striper Down Left		1				3.00			
324R	931+50	STH 131, Left	W5-52L	12" x 36"	Clearance Striper Down Right							1	1	
325	931+50	STH 131, Left	W5-52L	12" x 36"	Clearance Striper Down Right		1				3.00			
Sheet Totals							2	20	10	7	244.395	15	10	

STATE PROJECT NO: 5110-02-61

HWY: STH 131

COUNTY: VERNON

MISCELLANEOUS QUANTITIES

SHEET NO: 27

E

3

PERMANENT SIGNING

SIGN NUMBER	STATION	LOCATION	SIGN CODE	SIZE	DESCRIPTION	ORDER LINES	634.0612 POSTS WOOD 4X6- INCH X 12-FT EACH	634.0614 POSTS WOOD 4X6- INCH X 14-FT EACH	634.0616 POSTS WOOD 4X6- INCH X 16-FT EACH	634.0618 POSTS WOOD 4X6- INCH X 18-FT EACH	637.0202 SIGN REFLECTIVE TYPE II SF	638.2602 REMOVING SIGN TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	NOTES
326R	931+45	STH 131, Left	W14-3	48" x 36"	No Passing Zone							1	1	
327	931+45	STH 131, Left	W14-3	48" x 36"	No Passing Zone									
328R	935+25	STH 131, Right	W5-52L	12" x 36"	Clearance Striper Down Right				1		6.00	1	1	
329	935+25	STH 131, Right	W5-52L	12" x 36"	Clearance Striper Down Right		1				3.00			
330R	935+25	STH 131, Left	W5-52R	12" x 36"	Clearance Striper Down Left							1	1	
331	935+25	STH 131, Left	W5-52R	12" x 36"	Clearance Striper Down Left		1				3.00			
332R	936+95	STH 131, Right	M2-1	21" x 15"	Junction Marker							1	1	
333R	936+95	STH 131, Right	M1-5A	24" x 24"	County Marker	S						1		Mounted with 332R
334	938+50	STH 131, Right	J1-1	24" x 39"	Junction Assembly	Jct			1		6.50			
335	947+75	STH 131, Left	J4-1	24" x 36"	Reassurance Assembly	County S								
401	848+25	STH 131, Right	J13-1	24" x 45"	Directional without Cardinal	South			1		6.00			
402R	948+20	STH 133, Left	M1-6	24" x 24"	State Route Marker	131								
403R	948+20	STH 133, Left	M6-4	21" X 21"	Directional Arrows (Left - Right)	County S			1		7.50	1	1	Mounted with 402R
404	948+20	STH 133, Left	J13-1	24" x 45"	Directional without Cardinal	Arrow Left								
405R	948+50	STH 133, Left	R1-1	30" x 30"	Stop	STH 131			1		7.50			
406	948+50	STH 133, Left	R1-1	30" x 30"	Stop	Arrows Left - Right								
407R	948+50	STH 131, Right	M1-5A	24" x 24"	County Marker				1		5.18	1	1	
408R	948+50	STH 131, Right	M6-1	21" X 21"	Arrow Left	S						1	1	Mounted with 407R
409	948+75	STH 131, Right	W1-7	48" x 24"	Nioight Arrow (Double)			1			8.00			
410R	949+60	STH 131, Left	M1-5A	24" x 24"	County Marker	S						1	1	Mounted with 410R
411R	949+60	STH 131, Left	M6-1	21" X 21"	Arrow Right							1		
412	949+60	STH 131, Left	J13-1	24" x 45"	Directional without Cardinal	County S			1		7.50			
413	950+00	STH 131, Right	J4-1	24" x 36"	Reassurance Assembly	Arrow Right								
414	954+50	STH 131, Right	W1-5L	30" x 30"	Left Winding Road	North			1		6.25			
415	954+50	STH 131, Right	W13-1	18" x 18"	Advisory Speed Plate	131					2.25			Mount with 414
416R	957+80	STH 131, Left	W1-2L	30" x 30"	Left Curve	45						1	1	
417R	958+30	STH 131, Right	W1-4R	30" x 30"	Right Reverse Curve							1	1	
418R	958+30	STH 131, Right	W13-1	18" x 18"	Advisory Speed Plate	35						1		Mounted with 417R
419	959+25	STH 131, Left	J1-1	24" x 39"	Junction Assembly	Jct			1		6.50			
420R	959+80	STH 131, Left	M2-1	21" x 15"	Junction Marker	County S								
421R	959+80	STH 131, Left	M1-5A	24" x 24"	County Marker							1	1	Mounted with 420R
422	972+50	STH 131, Left	W1-5R	30" x 30"	Right Winding Road	S								
423	972+50	STH 131, Left	W13-1	18" x 18"	Advisory Speed Plate					1	6.25			
424R	975+40	STH 131, Left	W1-4R	30" x 30"	Right Reverse Curve	45					2.25			Mount with 422
425R	975+40	STH 131, Left	W13-1	18" x 18"	Advisory Speed Plate							1	1	
426R	984+75	STH 131, Right	W14-3	48" x 36"	No Passing Zone	35						1	1	Mounted with 424R
427	984+75	STH 131, Right	W14-3	48" x 36"	No Passing Zone				1		6.00			
428R	988+60	STH 131, Right	W1-2L	30" x 30"	Left Curve							1	1	
429R	988+60	STH 131, Right	W13-1	18" x 18"	Advisory Speed Plate	45						1		Mounted with 428R
430R	989+50	STH 131, Left	W14-3	48" x 36"	No Passing Zone							1	1	
431	989+50	STH 131, Left	W14-3	48" x 36"	No Passing Zone				1		6.00			
432	991+50	STH 131, Right	W1-2L	30" x 30"	Left Curve					1	6.25			
433	991+50	STH 131, Right	W13-1	18" x 18"	Advisory Speed Plate	50					2.25			Mount with 432
434R	1000+20	STH 131, Right	W1-4L	30" x 30"	Left Reverse Curve							1	1	
435R	1000+20	STH 131, Right	W13-1	18" x 18"	Advisory Speed Plate	40						1		Mounted with 434R
436	1003+30	STH 131, Right	W1-4L	30" x 30"	Left Reverse Curve					1	6.25			
437	1003+30	STH 131, Right	W13-1	18" x 18"	Advisory Speed Plate	45					2.25			Mount with 436
438	1004+30	STH 131, Left	W1-2R	30" x 30"	Right Curve					1	6.25			
439	1004+30	STH 131, Left	W13-1	18" x 18"	Advisory Speed Plate	50					2.25			Mount with 438
440R	1007+25	STH 131, Left	W1-2R	30" x 30"	Right Curve							1	1	
441R	1007+25	STH 131, Left	W13-1	18" x 18"	Advisory Speed Plate	45						1		Mounted with 440R
501	1019+50	STH 131, Left	W1-4L	30" x 30"	Left Reverse Curve					1	6.25			
502	1019+50	STH 131, Left	W13-1	18" x 18"	Advisory Speed Plate	45					2.25			Mount with 501
503R	1023+40	STH 131, Left	W14-3	48" x 36"	No Passing Zone							1	1	
504	1023+40	STH 131, Left	W14-3	48" x 36"	No Passing Zone				1		6.00			
Sheet Totals							2	1	12	6	141.68	28	18	

STATE PROJECT NO: 5110-02-61

HWY: STH 131

COUNTY: VERNON

MISCELLANEOUS QUANTITIES

SHEET NO: 28

E

3

PERMANENT SIGNING

SIGN NUMBER	STATION	LOCATION	SIGN CODE	SIZE	DESCRIPTION	ORDER LINES	634.0612	634.0614	634.0616	634.0618	637.0202	638.2602	638.3000	NOTES
							POSTS WOOD 4X6-INCH X 12-FT EACH	POSTS WOOD 4X6-INCH X 14-FT EACH	POSTS WOOD 4X6-INCH X 16-FT EACH	POSTS WOOD 4X6-INCH X 18-FT EACH	637.0202 SIGNS REFLECTIVE TYPE II SF	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	
505R	1024+50	STH 131, Right	W14-3	48" x 36"	No Passing Zone							1	1	
506	1024+50	STH 131, Right	W14-3	48" x 36"	No Passing Zone									
507R	1026+75	STH 131, Left	W1-4L	30" x 30"	Left Reverse Curve				1		6.00		1	
508R	1026+75	STH 131, Left	W13-1	18" x 18"	Advisory Speed Plate	40						1	1	Mounted with 507R
509R	1046+40	STH 131, Left	R1-1	30" x 30"	Stop							1	1	
510	1046+40	STH 131, Left	R1-1	30" x 30"	Stop				1		5.18			
511R	1047+50	STH 131, Right	R1-1	30" x 30"	Stop							1	1	
512	1047+50	STH 131, Right	R1-1	30" x 30"	Stop				1		5.18			
513R	1048+70	STH 131, Right	W14-3	48" x 36"	No Passing Zone							1	1	
514	1048+70	STH 131, Right	W14-3	48" x 36"	No Passing Zone				1		6.00		1	
515R	1053+10	STH 131, Left	W14-3	48" x 36"	No Passing Zone							1	1	
516	1053+10	STH 131, Left	W14-3	48" x 36"	No Passing Zone				1		6.00			
517R	1054+50	STH 131, Right	W5-52R	12" x 36"	Clearance Striper Down Left							1	1	
518	1054+50	STH 131, Right	W5-52R	12" x 36"	Clearance Striper Down Left		1				3.00			
519R	1054+50	STH 131, Left	W5-52L	12" x 36"	Clearance Striper Down Right							1	1	
520	1054+50	STH 131, Left	W5-52L	12" x 36"	Clearance Striper Down Right		1				3.00			
521R	1057+80	STH 131, Right	W5-52L	12" x 36"	Clearance Striper Down Right							1	1	
522	1057+80	STH 131, Right	W5-52L	12" x 36"	Clearance Striper Down Right		1				3.00			
523R	1057+80	STH 131, Left	W5-52R	12" x 36"	Clearance Striper Down Left							1	1	
524	1057+80	STH 131, Left	W5-52R	12" x 36"	Clearance Striper Down Left		1				3.00			
525R	1058+50	STH 131, Right	J1-2	48" x 39"	Junction Assembly	Jct, Jct County I, County U						1	1	
526	1058+50	STH 131, Right	J1-2	48" x 39"	Junction Assembly	Jct, Jct County I, County U			1		13.00			
527	1064+80	STH 131, Right	I55-56	30" x 36"	Adopt A Highway	KICKAPOO JUNIOR HIGH STUDENT COUNCIL			1		7.50			
528R	1065+80	STH 131, Right	I55-56	30" x 36"	Adopt A Highway	KICKAPOO JUNIOR HIGH STUDENT COUNCIL						1	1	
529	1066+00	STH 131, Left	J4-1	24" x 36"	Reassurance Assembly	South 131			1		6.00			
530R	1066+70	STH 131, Right	M1-5A	24" x 24"	County Marker	I						1	1	
531R	1066+70	STH 131, Right	M1-5A	24" x 24"	County Marker	U						1		Mounted with 530R
532R	1066+70	STH 131, Right	M6-1	21" X 21"	Arrow Right							1		Mounted with 530R
533R	1066+70	STH 131, Right	M6-1	21" X 21"	Arrow Right							1		Mounted with 530R
534	1066+70	STH 131, Right	J13-2	48" x 45"	Directional without Cardinal	County I, County U Arrow Right, Arrow Right			1		15.00			
535	1067+60	STH 131, Right	R1-1	30" x 30"	Stop				1		5.18			
536R	1067+60	STH 131, Right	R1-1	30" x 30"	Stop							1	1	
537	1067+60	STH 131, Left	W1-7	48" x 24"	Nioght Arrow (Double)			1			8.00			
538R	1067+70	STH 131, Right	M1-6	24" x 24"	State Route Marker	131						1	1	
539	1067+70	STH 131, Right	J13-1	24" x 45"	Directional without Cardinal	STH 131 Arrow Left - Right			1		7.50			
540R	1067+90	STH 131, Left	M1-5A	24" x 24"	County Marker	I						1	1	
541R	1067+90	STH 131, Left	M1-5A	24" x 24"	County Marker	U						1		Mounted with 540R
542R	1067+90	STH 131, Left	M6-1	21" X 21"	Arrow Left							1		Mounted with 540R
543R	1067+90	STH 131, Left	M6-1	21" X 21"	Arrow Left							1		Mounted with 540R
544	1067+90	STH 131, Left	J13-2	48" x 45"	Directional without Cardinal	County I, County U Arrow Left, Arrow Left			1		15.00			
545R	1068+50	STH 131, Right	W1-4L	30" x 30"	Left Reverse Curve							1	1	
546R	1068+50	STH 131, Right	W13-1	18" x 18"	Advisory Speed Plate	45						1		Mounted with 545R
547	1068+50	STH 131, Right	J4-1	24" x 36"	Reassurance Assembly	North 131			1		6.00			
601	1077+50	STH 131, Left	J1-2	48" x 39"	Junction Assembly	Jct, Jct County I, County U			1		13.00			
602R	1078+50	STH 131, Left	M2-1	21" x 15"	Junction Marker							1	1	
603R	1078+50	STH 131, Left	M2-1	21" x 15"	Junction Marker							1		Mounted with 602R
604R	1078+50	STH 131, Left	M1-5A	24" x 24"	County Marker	I						1		Mounted with 602R
605R	1078+50	STH 131, Left	M1-5A	24" x 24"	County Marker	U						1		Mounted with 602R
606R	1082+75	STH 131, Right	W1-2R	30" x 30"	Right Curve							1	1	
607R	1088+50	STH 131, Left	W1-4L	30" x 30"	Left Reverse Curve							1	1	
608R	1088+50	STH 131, Left	W13-1	18" x 18"	Advisory Speed Plate	45						1		Mounted with 607R
609R	1098+65	STH 131, Left	W1-2L	30" x 30"	Left Curve							1	1	
Sheet Totals							4	1	14	0	136.54	33	21	

STATE PROJECT NO: 5110-02-61

HWY: STH 131

COUNTY: VERNON

MISCELLANEOUS QUANTITIES

SHEET NO: 29

E

FILE NAME :

PLOT DATE :

PLOT BY :

PLOT NAME :

ORG DATE :

ORIGINATOR : DIST _

PLOT SCALE : 1:1

3

PERMANENT SIGNING

SIGN NUMBER	STATION	LOCATION	SIGN CODE	SIZE	DESCRIPTION	ORDER LINES	634.0612	634.0614	634.0616	634.0618	637.0202	638.2602	638.3000	NOTES
							POSTS WOOD 4X6-INCH X 12-FT EACH	POSTS WOOD 4X6-INCH X 14-FT EACH	POSTS WOOD 4X6-INCH X 16-FT EACH	POSTS WOOD 4X6-INCH X 18-FT EACH	SIGNS REFLECTIVE TYPE II SF	REMOVING SIGNS TYPE II EACH	REMOVING SMALL SIGN SUPPORTS EACH	
610R	1099+40	STH 131, Right	W1-2R	30" x 30"	Right Curve							1		
611R	1099+40	STH 131, Right	W13-1	18" x 18"	Advisory Speed Plate	50						1	1	Mounted with 610R
612	1101+50	STH 131, Right	W1-2R	30" x 30"	Right Curve					1	6.25			
613R	1106+25	STH 131, Right	W1-1R	36" X 36"	Right Turn							1	1	
614R	1106+25	STH 131, Right	W13-1	24" x 24"	Advisory Speed Plate	30						1		Mounted with 613R
615	1106+25	STH 131, Right	W1-2R	30" x 30"	Right Curve					1	6.25			
616	1106+25	STH 131, Right	W13-1	18" x 18"	Advisory Speed Plate	45					2.25			Mount with 615
617R	1109+50	STH 131, Left	W1-2L	30" x 30"	Left Curve							1	1	
618R	1109+50	STH 131, Left	W13-1	18" x 18"	Advisory Speed Plate	50						1		Mounted with 617R
619R	1112+25	STH 131, Left	W1-7	48" x 24"	Night Arrow (Right)							1	1	
620	1112+25	STH 131, Left	W1-7	48" x 24"	Night Arrow (Right)			1			8.00			
621R	1112+70	STH 131, Left	W1-7	48" x 24"	Night Arrow (Left)							1	1	
622	1112+70	STH 131, Left	W1-7	48" x 24"	Night Arrow (Left)			1			8.00			
623R	1114+00	STH 131, Left	S3-1	36" X 36"	School Bus Stop Ahead							1	1	
624	1114+00	STH 131, Left	S3-1	36" X 36"	School Bus Stop Ahead				1		9.00			
625	1117+50	STH 131, Left	W1-2L	30" x 30"	Left Curve					1	6.25			
626	1117+50	STH 131, Left	W13-1	18" x 18"	Advisory Speed Plate	40					2.25			Mount with 625
627R	1123+30	STH 131, Left	W1-1L	36" X 36"	Left Turn							1	1	
628R	1123+30	STH 131, Left	W13-1	24" x 24"	Advisory Speed Plate	30						1		Mounted with 627R
629R	1125+70	STH 131, Right	W14-3	48" x 36"	No Passing Zone							1	1	
630	1125+70	STH 131, Right	W14-3	48" x 36"	No Passing Zone				1		6.00			
631R	1127+25	STH 131, Right	W1-2L	30" x 30"	Left Curve							1	1	
632R	1127+25	STH 131, Right	W13-1	18" x 18"	Advisory Speed Plate	50						1		Mounted with 631R
701R	1135+90	STH 131, Right	W1-1L	36" X 36"	Left Turn							1	1	
702R	1135+90	STH 131, Right	W13-1	24" x 24"	Advisory Speed Plate	30						1		Mounted with 701R
703	1137+00	STH 131, Right	W1-2L	30" x 30"	Left Curve					1	6.25			
704	1137+00	STH 131, Right	W13-1	18" x 18"	Advisory Speed Plate	35					2.25			Mount with 703
705R	1137+50	STH 131, Left	W1-2R	30" x 30"	Right Curve							1	1	
706R	1137+50	STH 131, Left	W13-1	18" x 18"	Advisory Speed Plate	50						1		Mounted with 705R
707	1139+00	STH 131, Right	S1-1	36" X 36"	School Advance					1	6.75			
708	1139+00	STH 131, Right	WF16-9P	30" X 18"	Ahead Plaque						3.75			Mount with 707
709	1139+00	STH 131, Right	R2-6P	24" X 18"	Fines Higher Plaque						3.00			Mount with 707
710	1141+80	STH 131, Right	W1-8	18" X 24"	Chevron, To the Left		1				3.00			4' Mounting Height
711	1141+85	STH 131, Right	W1-8	18" X 24"	Chevron, To the Right		1				3.00			4' Mounting Height
712	1142+65	STH 131, Right	W1-8	18" X 24"	Chevron, To the Left		1				3.00			4' Mounting Height
713R	1142+70	STH 131, Right	W1-7	48" x 24"	Night Arrow (Left)							1	1	
714	1142+70	STH 131, Right	W1-8	18" X 24"	Chevron, To the Right		1				3.00			4' Mounting Height
715	1143+40	STH 131, Right	W1-8	18" X 24"	Chevron, To the Left		1				3.00			4' Mounting Height
716R	1143+40	STH 131, Right	W1-7	48" x 24"	Nioght Arrow (Right)							1	1	
717	1143+45	STH 131, Right	W1-8	18" X 24"	Chevron, To the Right		1				3.00			4' Mounting Height
718R	1143+80	STH 131, Right	S1-1	36" X 36"	School Advance							1	1	
719R	1143+80	STH 131, Right	WF16-9P	30" X 18"	Ahead Plaque							1		Mounted with 718R
720	1143+95	STH 131, Right	W1-8	18" X 24"	Chevron, To the Left		1				3.00			4' Mounting Height
721	1144+00	STH 131, Right	W1-8	18" X 24"	Chevron, To the Right		1				3.00			4' Mounting Height
722	1144+30	STH 131, Left	S5-2	24" X 30"	End School Zone				1		5.00			
723	1144+80	STH 131, Right	W1-8	18" X 24"	Chevron, To the Left		1				3.00			4' Mounting Height
724	1144+85	STH 131, Right	W1-8	18" X 24"	Chevron, To the Right		1				3.00			4' Mounting Height
725	1150+50	STH 131, Left	W1-2R	30" x 30"	Right Curve					1	6.25			
726	1150+50	STH 131, Left	W13-1	18" x 18"	Advisory Speed Plate	35					2.25			Mount with 725
727R	1151+30	STH 131, Left	R7-1R	18" x 24"	No Parking Any Time Right Arrow							1	1	
728	1151+30	STH 131, Left	R7-1R	24" x 30"	No Parking Any Time Right Arrow									
729R	1151+35	STH 131, Right	R1-1	30" x 30"	Stop					1	5.00		1	
730	1151+35	STH 131, Right	R1-1	30" x 30"	Stop							1	1	
731R	1151+30	STH 131, Right	R7-1L	18" x 24"	No Parking Any Time Left Arrow							1	1	
732	1151+30	STH 131, Right	R7-1L	24" x 30"	No Parking Any Time Left Arrow									
733R	1154+25	STH 131, Right	S1-1	36" X 36"	School Advance				1		5.00		1	
734R	1154+25	STH 131, Right	WF16-7L	24" X 12"	Left Diagonal Downward Pointing Arrow							1		Mounted with 733R
735	1154+25	STH 131, Right	S1-1	36" X 36"	School Advance				1		6.75			
736	1154+25	STH 131, Right	WF16-7L	24" X 12"	Left Diagonal Downward Pointing Arrow						2.00			Mount with 735
737R	1155+10	STH 131, Left	W1-1R	36" X 36"	Right Turn							1	1	
738R	1155+10	STH 131, Left	W13-1	24" x 24"	Advisory Speed Plate	30						1		Mounted with 737R
739R	1155+20	STH 131, Right	R7-1D	18" x 24"	No Parking Any Time Double Arrow							1	1	
740	1155+20	STH 131, Right	R7-1D	24" x 30"	No Parking Any Time Double Arrow									
Sheet Totals							10	5	5	6	148.68	30	20	

STATE PROJECT NO: 5110-02-61

HWY: STH 131

COUNTY: VERNON

MISCELLANEOUS QUANTITIES

SHEET NO: 30

E

FILE NAME : _____

PLOT DATE : _____

PLOT BY : _____

PLOT NAME : _____

ORG DATE : _____

ORIGINATOR : DIST _

PLOT SCALE : 1:1

PERMANENT SIGNING

SIGN NUMBER	STATION	LOCATION	SIGN CODE	SIZE	DESCRIPTION	ORDER LINES	634.0612 POSTS WOOD 4X6-INCH X 12-FT EACH	634.0614 POSTS WOOD 4X6-INCH X 14-FT EACH	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	634.0618 POSTS WOOD 4X6-INCH X 18-FT EACH	637.0202 SIGNS REFLECTIVE TYPE II SF	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	NOTES
741	1155+20	STH 131, Left	R7-1R	24" x 30"	No Parking Any Time Right Arrow			1			5.00			
742R	1157+85	STH 131, Left	S1-1	36" X 36"	School Advance							1	1	
743R	1157+85	STH 131, Left	WF16-7L	24" X 12"	Left Diagonal Downward Pointing Arrow							1		Mounted with 742R
744	1157+85	STH 131, Left	S1-1	36" X 36"	School Advance			1			6.75			
745	1157+85	STH 131, Left	WF16-7L	24" X 12"	Left Diagonal Downward Pointing Arrow						2.00			Mount with 744
746R	1159+10	STH 131, Right	R5-1	30" x 30"	Do Not Enter							1	1	
747	1159+10	STH 131, Right	R5-1	30" x 30"	Do Not Enter				1		6.25			
748R	1159+10	STH 131, Right	---	24" X 18"	We Need You to Buckle Up							1		Mounted on back of 746R
749R	1159+20	STH 131, Right	R7-1R	18" x 24"	No Parking Any Time Right Arrow							1	1	
750	1159+20	STH 131, Right	R7-1R	24" x 30"	No Parking Any Time Right Arrow			1			5.00			
751R	1159+30	STH 131, Left	R7-1L	18" x 24"	No Parking Any Time Left Arrow							1	1	
752	1159+30	STH 131, Left	R7-1L	24" x 30"	No Parking Any Time Left Arrow			1			5.00			
753R	1159+40	STH 131, Right	R1-1	30" x 30"	Stop							1	1	
754	1159+40	STH 131, Right	R1-1	30" x 30"	Stop				1		5.18			
755R	1159+95	STH 131, Right	R1-1	30" x 30"	Stop							1	1	
756	1159+95	STH 131, Right	R1-1	30" x 30"	Stop				1		5.18			
757R	1160+20	STH 131, Right	R5-1	30" x 30"	Do Not Enter							1	1	
758	1160+20	STH 131, Right	R5-1	30" x 30"	Do Not Enter				1		6.25			
759	1165+00	STH 131, Right	S5-2	24" X 30"	End School Zone				1		5.00			
760R	1168+25	STH 131, Right	R2-5A	24" X 30"	Reduced Speed Ahead							1	1	
761R	1168+25	STH 131, Right	W13-1	18" x 18"	Advisory Speed Plate	35						1		Mounted with 760R
762R	1168+40	STH 131, Left	S1-1	36" X 36"	School Advance							1	1	
763R	1168+40	STH 131, Left	WF16-9P	30" X 18"	Ahead Plaque							1		Mounted with 762R
764	1168+40	STH 131, Left	S1-1	36" X 36"	School Advance					1	6.75			
765	1168+40	STH 131, Left	WF16-9P	30" X 18"	Ahead Plaque						3.75			Mount with 764
766	1168+40	STH 131, Left	R2-6P	24" X 18"	Fines Higher Plaque						3.00			Mount with 764
767	1169+50	STH 131, Right	W3-5	36" x 36"	Speed Limit Ahead (Arrow)	35			1		9.00			
768	1172+00	STH 131, Left	D2-1	78" x 15"	Destinations / Distance (One)	Readstown 8		2			8.13			
769	1172+50	STH 131, Right	I2-3	60" x 24"	Comm Pop Name Sign (with Number)	Viola Population 699		2			10.00			
770	1173+00	STH 131, Left	W8-70	36" x 36"	Centerline Rumble Strip					1	9.00			
771	1173+00	STH 131, Left	W57-51	30" x 15"	Next _ Miles	6					3.13			Mount with 770
772R	1175+00	STH 131, Right	R2-1	24" x 30"	Speed Limit _ MPH	35						1	1	
773	1175+00	STH 131, Right	R2-1	24" x 30"	Speed Limit _ MPH	35			1		5.00			
774R	1175+00	STH 131, Left	R2-1	24" x 30"	Speed Limit _ MPH	55						1	1	
775	1175+00	STH 131, Left	R2-1	24" x 30"	Speed Limit _ MPH	55			1		5.00			
776R	1177+90	STH 131, Right	W11-2	30" x 30"	Pedestrian Crossing Symbol							1	1	
777	1177+90	STH 131, Right	W11-2	30" x 30"	Pedestrian Crossing Symbol				1		6.25			
778	1177+90	STH 131, Right	WF16-9P	24" X 12"	Ahead Plaque						2.00			Mount with 777
779R	1179+20	STH 131, Right	I2-3	60" x 24"	Comm Pop Name Sign (with Number)	Viola 700						1	1	
780	1179+60	STH 131, Right	R2-1	24" x 30"	Speed Limit _ MPH	35			1		5.00			
781R	1179+90	STH 131, Left	R1-1	30" x 30"	Stop							1	1	
782	1179+90	STH 131, Left	R1-1	30" x 30"	Stop				1		5.18			
783R	1180+90	STH 131, Left	D2-2	90" x 24"	Destinations / Distance (Two)	Readstown 7 Soldiers Grove 12						1	2	
784	1181+00	STH 131, Right	W11-2	30" x 30"	Pedestrian Crossing Symbol				1		6.25			
785	1181+00	STH 131, Right	WF16-7L	24" X 12"	Left Diagonal Downward Pointing Arrow						2.00			Mount with 784
786	1181+70	STH 131, Left	W11-2	30" x 30"	Pedestrian Crossing Symbol				1		6.25			
787	1181+70	STH 131, Left	WF16-7L	24" X 12"	Left Diagonal Downward Pointing Arrow						2.00			Mount with 786
788R	1184+40	STH 131, Left	W11-2	30" x 30"	Pedestrian Crossing Symbol							1	1	
789	1184+40	STH 131, Left	W11-2	30" x 30"	Pedestrian Crossing Symbol				1		6.25			
790	1184+40	STH 131, Left	WF16-9P	24" X 12"	Ahead Plaque						2.00			Mount with 789
791R	1185+15	STH 131, Right	W1-1R	36" X 36"	Right Turn							1	1	
792R	1185+15	STH 131, Right	W13-1	24" x 24"	Advisory Speed Plate	25						1		Mounted with 791R
793R	1185+30	STH 131, Left	R2-1	24" x 30"	Speed Limit _ MPH	35						1	1	
794	1186+50	STH 131, Left	R2-1	24" x 30"	Speed Limit _ MPH	35			1		5.00			
795R	1186+75	STH 131, Right	R2-1	24" x 30"	Speed Limit _ MPH	35						1	1	
796R	1186+85	STH 131, Left	I55-56	30" x 36"	Adopt A Highway	KICKAPOO JUNIOR HIGH STUDENT COUNCIL						1	1	
797	1187+50	STH 131, Right	W1-1R	36" X 36"	Right Turn					1	9.00			
798	1187+50	STH 131, Right	W13-1	24" x 24"	Advisory Speed Plate	25					4.00			Mount with 797
799	1188+50	STH 131, Left	I55-56	30" x 36"	Adopt A Highway	KICKAPOO JUNIOR HIGH STUDENT COUNCIL			1		7.50			
Sheet Totals							0	7	17	3	183.05	25	21	

STATE PROJECT NO: 5110-02-61

HWY: STH 131

COUNTY: VERNON

MISCELLANEOUS QUANTITIES

SHEET NO: 31

E

FILE NAME :

PLOT DATE :

PLOT BY :

PLOT NAME :

ORG DATE :

ORIGINATOR : DIST _

PLOT SCALE : 1:1

PERMANENT SIGNING

SIGN NUMBER	STATION	LOCATION	SIGN CODE	SIZE	DESCRIPTION	ORDER LINES	634.0612	634.0614	634.0616	634.0618	637.0202	638.2602	638.3000	NOTES
							POSTS	POSTS	POSTS	POSTS	SIGNS	REMOVING	REMOVING	
							WOOD	WOOD	WOOD	WOOD	REFLECTIVE	SIGNS	SMALL	
							4X6-INCH	4X6-INCH	4X6-INCH	4X6-INCH	TYPE II	TYPE II	SUPPORTS	
							X 12-FT	X 14-FT	X 16-FT	X 18-FT	SF	EACH	EACH	
7-100	1189+50	STH 131, Right	R2-1	24" x 30"	Speed Limit _ MPH	35			1		5.00			
801R	1191+20	STH 131, Left	W1-7	48" x 24"	Night Arrow (Left)							1	1	
802	1191+20	STH 131, Left	W1-7	48" x 24"	Night Arrow (Left)			1			8.00			
803R	1191+65	STH 131, Left	W1-7	48" x 24"	Night Arrow (Right)							1	1	
804	1191+65	STH 131, Left	W1-7	48" x 24"	Night Arrow (Right)			1			8.00			
805R	1193+50	STH 131, Left	W1-1L	36" X 36"	Left Turn							1	1	
806R	1193+50	STH 131, Left	W13-1	18" x 18"	Advisory Speed Plate	25						1		Mounted with 805R
807	1193+50	STH 131, Left	W1-1L	36" X 36"	Left Turn				1		9.00			
808	1193+50	STH 131, Left	W13-1	18" x 18"	Advisory Speed Plate	25								Mount with 807
809R	1194+75	STH 131, Left	R2-1	24" x 30"	Speed Limit _ MPH	35						1	1	
810	1194+75	STH 131, Left	R2-1	24" x 30"	Speed Limit _ MPH	35		1			5.00			
811R	1194+75	STH 131, Left	M3-3	24" x 12"	South Cardinal Route Marker							1	1	
812R	1194+75	STH 131, Left	M1-6	24" x 24"	State Route Marker	131						1		Mounted with 811R
813R	1195+00	STH 131, Left	R1-1	30" x 30"	Stop							1	1	
814	1195+00	STH 131, Left	R1-1	30" x 30"	Stop			1			5.18			
815R	1195+50	STH 131, Right	R2-1	24" x 30"	Speed Limit _ MPH	25						1	1	
816	1195+50	STH 131, Right	R2-1	24" x 30"	Speed Limit _ MPH	25		1			5.00			
817R	1195+50	STH 131, Right	M3-1	24" x 12"	North Cardinal Route Marker							1	1	
818R	1195+50	STH 131, Right	M1-6	24" x 24"	State Route Marker	131						1		Mounted with 817R
819R	1199+25	STH 131, Right	R1-1	30" x 30"	Stop							1	1	
820	1199+25	STH 131, Right	R1-1	30" x 30"	Stop			1			5.18			
821R	1201+50	STH 131, Right	M2-1	21" x 15"	Junction Marker							1	1	
822R	1201+50	STH 131, Right	M1-6	24" x 24"	State Route Marker	56						1		Mounted with 821R
823	1201+50	STH 131, Right	J1-1	24" x 39"	Junction Assembly	Jct STH 56		1			6.50			
824	1202+25	STH 131, Left	R2-1	24" x 30"	Speed Limit _ MPH	25		1			5.00			
825R	1202+70	STH 131, Right	W3-1	36" x 36"	Stop Ahead (Words)							1	1	
826R	1203+25	STH 131, Left	R1-1	30" x 30"	Stop							1	1	
827	1203+25	STH 131, Left	R1-1	30" x 30"	Stop			1			5.18			
828	1204+00	STH 131, Right	W3-1	36" x 36"	Stop Ahead (Symbol)				1		9.00			
829R	1204+65	STH 131, Left	R2-1	24" x 30"	Speed Limit _ MPH	25						1	1	
830R	1205+15	STH 131, Right	R1-1	30" x 30"	Stop							1	1	
831	1205+15	STH 131, Right	R1-1	30" x 30"	Stop			1			5.18			
832R	1205+65	STH 131, Right	M3-1	24" x 12"	North Cardinal Route Marker							1	1	
833R	1205+65	STH 131, Right	M1-6	24" x 24"	State Route Marker	131						1		Mounted with 832R
834R	1205+65	STH 131, Right	M5-1R	21" x 21"	Advance Arrow Right Turn							1		Mounted with 832R
835	1205+65	STH 131, Right	J2-1	24" x 57"	Route Turn Assembly	North STH 131			1		9.50			
836	1207+00	STH 131, Left	R2-1	24" x 30"	Speed Limit _ MPH	Advance Arrow Right Turn 25		1			5.00			
837R	1207+25	STH 131, Right	D1-3	78" x 36"	Three Destinations (Arrows)	Arrow Left, Viroqua Richland Center, Arrow Right La Farge, Arrow Right						1	2	
838R	1207+25	STH 131, Right	I3-1	24" X 9"	River Name	Kickapoo River						1		Mounted with 837R
839	1207+25	STH 131, Right	D1-3	102" x 36"	Three Destinations (Arrows)	Arrow Left, Viroqua Richland Center, Arrow Right La Farge, Arrow Right			2		25.50			
840R	1207+30	STH 131, Right	W14-3	48" x 36"	No Passing Zone							1		Mounted on back of 837R
841	1207+30	STH 131, Right	W14-3	48" x 36"	No Passing Zone			1			6.00			
842R	1205+65	STH 131, Right	M3-3	24" x 12"	South Cardinal Route Marker							1		Banded to Light Pole
843R	1205+65	STH 131, Right	M1-6	24" x 24"	State Route Marker	131						1		Mounted with 842R
844	1207+60	STH 131, Right	I3-1	36" x 21"	River Name	Kickapoo River		1			5.25			
845	1208+95	STH 131, Left	I3-1	36" x 21"	River Name	Kickapoo River		1			5.25			
846	1209+35	STH 131, Left	J4-1	24" x 36"	Reassurance Assembly	South 131		1			6.00			
847R	1209+75	STH 131, Right	R1-1	30" x 30"	Stop							1	1	
848	1209+75	STH 131, Right	R1-1	36" x 36"	Stop			1			7.46			
849	1209+75	STH 131, Right	J3-3	72" x 57"	Route Turn Assembly	West, East, North STH 56, STH 56,STH 131				2	28.50			
Sheet Totals							0	16	6	2	179.68	27	18	
Signing Totals							18	52	69	25	1099.38	206	144	

643.0900 TRAFFIC CONTROL SIGNS

CATEGORY	LOCATION	MAINLINE		NO.		SIGN
		STA	LT/RT	DAYS	SIGNS	
10	USH 14 (EAST)		RT	50	1	STH 131
10	USH 14 (EAST)		RT	50	1	ROAD WORK 500 FT
10	USH 14 (EAST)		RT	50	1	ROAD WORK 1000 FT
10	USH 14 (EAST)		RT	50	1	ROAD WORK AHEAD
10	USH 14 (WEST)		LT	50	1	STH 131
10	USH 14 (WEST)		LT	50	1	ROAD WORK 500 FT
10	USH 14 (WEST)		LT	50	1	ROAD WORK 1000 FT
10	USH 14 (WEST)		LT	50	1	ROAD WORK AHEAD
10	ML - START OF PROJECT		RT	50	1	ROAD WORK AHEAD
10	ML - START OF PROJECT		RT	50	1	ROAD WORK 250 FT
10	ML - START OF PROJECT		RT	50	1	ROAD WORK NEXT 11 MILES
10	ML - START OF PROJECT		LT	50	1	END ROAD WORK
10	ML - START OF PROJECT		RT	50	1	FINES DOUBLE IN WORK ZONES
10	CENTER ST.	825+00	LT & RT	100	2	ROAD WORK AHEAD
10	SCHOOL ST.	831+00	RT	50	1	ROAD WORK AHEAD
10	WINTER ST.	835+30	RT	50	1	ROAD WORK AHEAD
10	CHARLES ST.	839+40	LT & RT	100	2	ROAD WORK AHEAD
10	SANT ELMO ST.	842+30	LT & RT	100	2	ROAD WORK AHEAD
10	GLASS LANE	844+00	LT	50	1	ROAD WORK AHEAD
10	WISCONSIN AVE.	845+70	LT & RT	100	2	ROAD WORK AHEAD
10	MAIN ST.	847+30	LT & RT	100	2	ROAD WORK AHEAD
10	PRAIRIE ST.	848+83.29	LT & RT	100	2	ROAD WORK AHEAD
10	MCCARTHY ST.	862+35.75	RT	50	1	ROAD WORK AHEAD
10	EAST RIVER RD.	930+00	RT	50	1	ROAD WORK AHEAD
10	CTH S	948+95	LT	50	1	ROAD WORK AHEAD
10	WEST RIVER ROAD	1046+50	LT	50	1	ROAD WORK AHEAD
10	ICKAPOO CENTER LANE	1047+00	RT	50	1	ROAD WORK AHEAD
10	CTH I	1067+50	RT	50	1	ROAD WORK AHEAD
10	ICKAPOO HIGH SCHOOL	1151+10	RT	50	1	ROAD WORK AHEAD
10	ICKAPOO HIGH SCHOOL	1159+75	RT	50	1	ROAD WORK AHEAD
10	SOUTH WAGONER RD.	1180+30	LT	50	1	ROAD WORK AHEAD
10	WEST DRAKE AVE.	1191+40	LT & RT	100	2	ROAD WORK AHEAD
10	WEST TURNER AVE.	1195+30	LT	50	1	ROAD WORK AHEAD
10	SCHILLING RD	1199+10	RT	50	1	ROAD WORK AHEAD
10	W. JENNING ROAD	1204+90	LT	50	1	ROAD WORK AHEAD
10	DOBSON PLACE	1205+00	RT	50	1	ROAD WORK AHEAD
10	PLACED AT 2 MILE INTERVALS		RT	300	6	NO CENTER STRIPE
10	PLACED AT 2 MILE INTERVALS		LT	300	6	NO CENTER STRIPE
10	PLACED AT 2 MILE INTERVALS		RT	300	6	LOOSE GRAVEL
10	PLACED AT 2 MILE INTERVALS		LT	300	6	LOOSE GRAVEL
10	W. DRAKE AVE.	1191+55	LT	50	1	SIDEWALK CLOSED
10	W. TURNER AVE.	1195+00	LT	50	1	SIDEWALK CLOSED
10	W. TURNER AVE.	1195+47	LT	50	1	SIDEWALK CLOSED
10	W. JENNINGS RD.	1203+36	LT	50	1	SIDEWALK CLOSED
10	W. JENNINGS RD.	1203+67	LT	50	1	SIDEWALK CLOSED
10	STH 56	1209+72	LT	50	1	SIDEWALK CLOSED
				TOTAL	3,650	

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204.0110 REMOVING ASPHALTIC SURFACE

CATEGORY	STATION	LT/RT	SY	REMARKS
10	918+00	LT	41	P.E.
10	930+00	RT	224	EAST RIVER RD
10	948+90	LT	306	CTH S
10	953+00	LT	41	P.E.
10	1046+37	LT	438	WEST RIVER RD
10	1067+45	RT	264	CTH I
10	1151+00	RT	124	KICKAPOO H.S. DRWY
10	1159+66	RT	124	KICKAPOO H.S. DRWY
10	1165+66	RT	41	F.E
10	1168+00	RT	41	F.E
10	1175+00	RT	41	P.E.
10	1179+32	RT	41	P.E.
10	1181+20	RT	70	P.E.
10	1183+00	LT	41	P.E.
10	1185+00	LT	41	P.E.
10	1187+50-1191+50	LT	445	10 FT WIDE AREA BETWEEN LT EDGE OF PAV'T & RT EDGE OF BIKE PATH
10	1188+40	RT	41	P.E.
10	1199+20-1199+80	RT	133	P.E.
10	1199+00	RT	237	SCHILLING ST
TOTAL			2,734	

204.0150 REMOVING CURB & GUTTER

CATEGORY	STATION - STATION	LT/RT	LF
10	1191+76 - 1206+17	LT	1,441
10	1206+09 - 1206+91	RT	83
TOTAL			1,524

REMOVING CONCRETE SIDEWALK

204.0155			
CATEGORY	STATION - STATION	LT/RT	SY
10	1191+76 - 1207+52	LT	1,051

204.0165 REMOVING GUARD RAIL

CATEGORY	STATION - STATION	LT/RT	LF	REMARKS
10	057+81.5 - 1061+86.5	RT	405	B-62-028
10	1067+70 - 1071+20	RT	350	NEAR CTH I
TOTAL			755	

330.0100 MILL AND RELAY

						DEPTH	
CATEGORY	STATION	- STATION	WIDTH	LENGTH	SY	IN	REMARKS
10	850+38	- 917+77	32	6739	23,961	5	
10	917+77	- 919+77	32-40	200	800	5	TAPER 32' TO 40'
10	919+77	955+10	40	3,533	15,702	5	
10	955+10	957+10	40-32	200	800	5	TAPER 40' TO 32'
10	957+10	1040+58	32	8,348	29,682	5	
10	1040+58	1042+58	32-40	200	800	5	TAPER 32' TO 40'
10	1042+58	1080+00	40	3,742	16,631	5	
10	1080+00	1082+00	40-32	200	800	5	TAPER 40' TO 32'
10	1082+00	1191+40	32	10,940	38,898	5	
TOTAL					128,074		

REMOVING ASPHALTIC SURFACE BUTT JOINT

204.0115				
CATEGORY	STATION - STATION	SY	REMARKS	
10	930+69 - 931+57	391	B-62-27	
10	935+19 - 936+07	391	B-62-27	
10	1053+67 - 1054+55	391	B-62-28	
10	1057+81 - 1058+69	391	B-62-28	
TOTAL		1,564		

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305.0110 BASE AGGREGATE DENSE 3/4 - INCH TON

CATEGORY	STATION	-	STATION	LT/RT	LENGTH	TON	REMARKS
10	850+38	-	854+70	LT	432	32.50	*
10	850+38	-	856+00	RT	562	45.00	*
10	856+00	-	861+60	RT	560	64.00	**
10	862+77	-	872+45	RT	968	110.00	**
10	872+45	-	888+70	RT	1,625	131.00	*
10	888+70	-	904+46	RT	1576	179.50	**
10	904+46	-	912+13	RT	767	61.50	*
10	912+13	-	929+43	RT	1730	196.50	**
10	930+71	-	931+57	RT	86	10.00	**
10	935+59	-	1018+90	RT	8331	947.00	**
10	949+17	-	956+32	LT	715	81.00	**
10	956+32	-	962+93	LT	661	53.00	*
10	962+93	-	968+47	LT	554	63.00	**
10	968+47	-	1016+35	LT	4788	386.00	*
10	1016+35	-	1022+63	LT	628	71.50	**
10	1018+90	-	1022+15	RT	325	18.00	*
10	1022+20	-	1046+90	RT	2470	281.00	**
10	1022+63	-	1042+58	LT	1995	161.00	*
10	1042+58	-	1153+15	LT	11057	31.00	**
10	1047+10	-	1054+40	RT	730	83.00	**
10	1057+90	-	1066+60	RT	870	99.00	**
10	1068+00	-	1145+33	RT	7733	879.00	**
10	1145+33	-	1191+40	RT	4607	371.00	*
10	1153+15	-	1160+40	LT	725	83.00	**
10	1160+40	-	1176+00	LT	1560	207.00	**
10						200.00	AGGREGATE P.E., F.E. & C.E.
10						500.00	CROWN/SUPER ELEVATION CORRECTIONS
TOTAL						5,344.50	

* Note this is for the area behind the curb & gutter Type J
** Note This is for shoulder in rural area not where C&G is located

416.1010 CONCRETE SURFACE DRAINS

		WIDTH		LENGTH	DEPTH		
CATEGORY	STATION	LT/RT	FT	FT	IN	CY	REMARKS
10	854+70	LT	10	10	6	1.85	
10	856+00	RT	10	10	6	1.85	
10	876+45	RT	20	25	6	9.20	LOW POINT
10	881+25	RT	10	10	6	1.85	
10	888+70	RT	10	10	6	1.85	
10	908+45	RT	20	25	6	9.26	LOW POINT
10	949+00	LT	6	12	6	1.33	CTH S NE QUAD.
10	974+79	LT	20	25	6	9.26	LOW POINT
10	991+43	LT	20	25	6	9.26	LOW POINT
10	997+00	LT	20	25	6	9.26	LOW POINT
10	1006+55	LT	20	25	6	9.26	LOW POINT
10	1022+15	RT	10	10	6	1.85	
10	1022+63	LT	10	10	6	1.85	
10	1035+38	LT	10	10	6	1.85	
10	1042+58	LT	10	10	6	1.85	
10	1150+60	RT	20	20	6	7.40	LOW POINT
10	1153+15	LT	10	10	6	1.85	DROP INLET
10	1153+15	RT	10	10	6	1.85	
10	1163+93	RT	20	10	6	3.70	LOW POINT
10	1176+28	RT	10	10	6	1.85	
10	1186+87	RT	20	10	6	3.70	LOW POINT
10	1206+08	RT	10	10	6	1.85	
TOTAL						93.85	

614.0920 SALVAGED RAIL

CATEGORY	STATION	-	STATION	LT/RT	LF	REMARKS
10	930+50	-	931+17.61	RT	201	RIVER RD TO THRIE BEAM B-62-027
10	930+52	-	931+17.61	LT	65	TO THRIE BEAM B-62-027
10	935+59	-	943+00	RT	741	FROM THRIE BEAM B-62-027
10	935+59	-	944+27	LT	868	FROM THRIE BEAM B-62-027
10	1007+98	-	1016+33	RT	835	TENSION CABLE SYSTEM
10	1053+24.4	-	1054+54.4	LT	130	B-62-028
10	1053+24.4	-	1054+54.4	RT	130	B-62-028
10	1057+81.5	-	1059+11.5	LT	130	B-62-028
TOTAL					3,100	

VERNON COUNTY WANTS ALL SALVAGE

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ASPHALTIC ITEMS								
CATEGORY	STATION	- STATION	LOCATION	DEPTH INCHES	455.0105 ASPHALTIC MATERIAL	455.0605 TACK COAT	460.1101 HMA PAVEMENT	REMARKS
					PG 58-28 TON	GAL	TYPE E-1 TON	
10	822+72	- 825+20	ML	3.5	11	10	196	URBAN - READSTOWN
10	825+20	- 850+38	ML	3.5	77	66	1,328	URBAN - READSTOWN
10	825+20	- 850+38	ML	2	18	16	506	READSTOWN PARKING
10	850+38	- 917+77	ML	3.5	275	118	4,738	
10	862+27		RT	3	2	1	40	MCCARTY RD
10	917+77	- 955+10	ML	3.5	171	74	3,281	
10	930+00		RT	3	3	1	38	EAST RIVER RD
10	948+90		LT	3	4	1	52	CTH S
10	955+10	- 956+10	ML	3.5	5	2	158	100 FT TAPER FROM 40 FT to 32 FT
10	956+10	- 1018+90	ML	3.5	256	110	4,416	
10	1018+90	- 1022+20	ML	3.5	13	6	232	
10	1022+20	- 1041+61	ML	3.5	79	34	1,363	
10	1041+61	- 1042+61	ML	3.5	4	2	158	100 FT TAPER FROM 32 FT TO 40 FT
10	1042+61	- 1071+20	ML	3.5	131	57	2,515	
10	1046+37		LT	3	5.50	2	74	WEST RIVER RD
10	1067+45		RT	3	3.50	1	45	CTH I
10	1071+20	- 1072+20	ML	3.5	4	2	79	100 FT TAPER FROM 40 FT to 32 FT
10	1072+20	- 1152+03	ML	3.5	326	140	5,613	
10	1152+03	- 1153+93	ML	3.5	8	4	142	
10	1153+93	- 1207+48.96	ML	5	312	134	5,380	URBAN - VIOLA
10	1180+22		LT	3	3	1	42	S. WAGONER AVE
10	1191+38		LT	3	2	1	17	W. DRAKE AVE
10	1191+38		RT	3	1	1	16	W. DRAKE AVE
10	1195+26		LT	3	1	1	18	W. TURNER AVE
10	1199+00		RT	3	2.50	1	40	SCHILLING ST
10					86	39	1444	UNDISTRIBUTED
TOTALS					1,803	825	30,487	

465.0475.S ASPHALT CENTER LINE RUMBLE STRIP 2-LANE RURAL

CATEGORY	STATION	- STATION	LF	REMARKS
10	850+38	- 860+36	998	
10	864+36	- 928+00	6,364	
10	935+45	- 946+78	1,478	
10	950+72	- 1044+76	9,404	
10	1048+76	- 1054+29	553	
10	1058+18	- 1065+32	714	
10	1068+32	- 1150+00	8,168	
TOTAL			27,679	

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

CATEGORY	STATION	- STATION	LT/RT	465.0120 TON	REMARKS
10		918+00	LT	10	P.E.
10		953+00	LT	10	P.E.
10		1151+00	RT	30	KICKAPOO H.S. DRWY
10		1159+66	RT	30	KICKAPOO H.S. DRWY
10		1165+66	RT	10	F.E
10		1168+00	RT	10	F.E
10		1175+00	RT	10	P.E.
10		1179+32	RT	10	P.E.
10		1181+20	RT	10	P.E.
10		1183+00	LT	10	P.E.
10		1185+00	LT	10	P.E.
					10 FT WIDE AREA BETWEEN LT EDGE OF PAVT & RT EDGE OF BIKE PATH
10	1187+50	- 1191+50	LT	100	
10		1187+30	RT	10	P.E.
10	1199+20	- 1199+80	RT	50	P.E.
10				50	UNDISTRIBUTED
TOTAL				360	

SALVAGED ASPHALTIC PAVEMENT MILLING

CATEGORY	STATION	- STATION	WIDTH FT	LENGTH FT	DEPTH IN	490.0200 SY	REMARKS
10	822+48	- 825+20	36	272	3.5	1,088	READSTOWN
10	825+20	- 850+38	24	2,518	3.5	6,715	READSTOWN
10	825+20	- 850+38	16	2,518	2	4,476	PARKING LANES
10	1191+76	- 1207+48	32	1,572	5	5,589	VIOLA
TOTAL						17,868	

601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D

CATEGORY	STATION	- STATION	LT/RT	LF	REMARKS
10	1191+76	- 1206+17	LT & RT	2,882	VIOLA

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601.0415 CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J

CATEGORY	STATION - STATION	LT/RT	LF
10	850+38 - 854+70	LT	432
10	850+38 - 856+00	RT	562
10	872+45 - 888+70	RT	1,625
10	904+46 - 912+13	RT	767
10	974+80 - 1016+35	LT	4,735
10	1018+90 - 1022+15	RT	325
10	1022+63 - 1042+58	LT	1,995
10	1145+33 - 1191+40	RT	4,607
10	1153+30 - 1160+40	LT	710
TOTAL			15,758

601.0557 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D

CATEGORY	SIDE ROAD	LOCATION	LF	Remarks
10	CTH S	NW	69	40 FT RADIUS
10	CTH S	NE	83	70 FT RADIUS
10	CTH I	SE	94	45 FT RADIUS
10	CTH I	NE	65	60 FT RADIUS
TOTAL			311	

602.0405 CONCRETE SIDEWALK 4-INCH

CATEGORY	STATION - STATION	LOCATION	SF	REMARKS
10	1191+76 - 1207+52	LT	9,456	VIOLA

602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW

CATEGORY	STATION	LOCATION	SF	WIDTH LENGTH		REMARKS
				LF	LF	
10	1191+55	LT	8	2	4	W. DRAKE AVE.
10	1195+00	LT	8	2	4	W. TURNER AVE.
10	1195+47	LT	8	2	4	W. TURNER AVE.
10	1203+36	LT	8	2	4	W. JENNINGS RD.
10	1203+67	LT	8	2	4	W. JENNINGS RD.
TOTAL			40			

ADJUSTING MANHOLES COVERS AND WATER VALVES

			SPV.0060.01		REMARKS
			611.8110	ADJUST	
			ADJUSTING	WATER	
			MANHOLE	VALVE	
			COVERS	BOX	
CATEGORY	STATION	LOCATION	EACH	EACH	
20	1170+60	RT		3	
20	1180+20	LT S. WAGONER AVE.	1		SANITARY MANHOLE
20	1180+30	RT S. WAGONER AVE.		1	
20	1191+25	LT W. DRAKE AVE.	1		SANITARY MANHOLE
20	1191+40	RT W. DRAKE AVE.		3	
20	1195+20	LT W. TURNER AVE.	1		SANITARY MANHOLE
20	1199+20	LT SHILLING ST.	1		SANITARY MANHOLE
20	1201+43	LT	1		SANITARY MANHOLE
20	1203+80	RT W. JENNING ST.		1	
20	1206+80	LT	1		SANITARY MANHOLE
SUBTOTALS			6	8	
30	825+00	LT CL CENTER ST.	1		SANITARY MANHOLE
30	828+04	LT 304 FT NORTH OF CENTER ST.	1		SANITARY MANHOLE
30	831+85	LT 85 FT N. OF SCHOOL ST.	1		SANITARY MANHOLE
30	833+53	RT 197 FT S. OF WINTER ST.		1	
30	835+44	LT 12 FT N. OF WINTER ST.	1		SANITARY MANHOLE
30	838+85	RT 24 FT S. CHARLES ST.		1	
30	839+25	CL CL CHARLES ST.	1		SANITARY MANHOLE
30	839+55	RT 16 FT N. OF CHARLES ST.		1	
30	842+24	LT CL ELMO ST.	1		SANITARY MANHOLE
30	842+36	RT 2 FT N. OF ELMO ST.		1	
30	845+43	RT 18 FT S. WISCONSIN ST.		1	
30	845+80	LT CL WISCONSIN ST	1		SANITARY MANHOLE
30	845+50	RT 11 FT S. OF WISCONSIN ST		1	
30	846+10	RT 16 FT N. OF WISCONSIN ST.		1	
30	846+08	LT 14 FT N. OF WISCONSIN ST.		1	
30	849+01	LT 12 FT N. OF PRAIRIE ST.	1		SANITARY MANHOLE
30	850+91	RT 209 FT N. OF PRAIRIE ST.		1	
30	853+66	LT 476 FT N. OF PRAIRIE ST.	1		SANITARY MANHOLE
SUBTOTALS			9	9	
GRAND TOTALS			15	17	

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MGS BEAM GUARD									
CATEGORY	STATION	- STATION	LT/RT	LOCATION	614.2300	614.2330	614.2500	614.2610	SPV.0090.01
					MGS	MGS	MGS	MGS	STEEL
					GUARDRAIL	GUARDRAIL	THRIE BEAM	GUARDRAIL	THRIE BEAM
					3	3K	TRANSITION	TERMINAL	STRUCTURE
					LF	LF	LF	EAT	APPROACH SPECIAL
								EACH	LF
10	868+41.25	- 868+94.38	LT					1	
10	868+94.38	- 875+81.88	LT			687.5			
10	875+81.88	- 876+35	LT					1	
10	877+37	- 877+90.13	LT					1	
10	877+90.13	- 891+02.63	LT			1312.5			
10	891+02.63	- 891+55.76	LT					1	
10	930+25.98	- 930+79.11	LT	B-62-27				1	
10	930+79.11	- 930+91.61	LT	B-62-27	12.5				
10	930+91.61	- 931+57	LT	B-62-27			39.39		
10	930+25.98	- 930+79.11	RT	B-62-27				1	
10	930+79.11	- 930+91.61	RT	B-62-27	12.5				
10	930+91.61	- 931+57	RT	B-62-27			39.39		
10	935+19.7	- 935+59.09	RT	B-62-27			39.39		
10	935+59.09	- 936+59.09	RT	B-62-27	100				
10	936+59.09	- 937+12.13	RT	B-62-27				1	
10	935+19.7	- 935+59.09	LT	B-62-27			39.39		
10	935+59.09	- 943+96.59	LT	B-62-27	837.5				
10	943+96.59	- 944+49.50	LT	B-62-27				1	
10	968+98	- 969+51.13	RT					1	
10	969+51.13	- 978+76.13	RT		925				
10	978+76.13	- 979+29.26	RT					1	
10	1006+12	- 1006+65.125	RT					1	
10	1006+65.125	- 1017+15.125	RT			1,050			
10	1017+15.125	- 1017+68.25	RT					1	
10	1030+95	- 1031+48.125	RT					1	
10	1031+48.125	- 1038+60.625	RT		712.5				
10	1038+60.625	- 1039+13.75	RT					1	
10	1053+27.88	- 1053+81.01	RT	B-62-0028				1	
10	1053+81.01	- 1054+06.01	RT	B-62-0028	25				
10	1054+06.01	- 1054+45.4	RT	B-62-0028			39.39		
10	1053+27.88	- 1053+81.01	LT	B-62-0028				1	
10	1053+81.01	- 1054+06.01	LT	B-62-0028	25				
10	1054+06.01	- 1054+45.4	LT	B-62-0028			39.39		
10	1054+45.4	- 1057+90.49	LT	B-62-0028					345
10	1054+45.4	- 1057+90.49	RT	B-62-0028					345
10	1057+90.49	- 1058+29.88	RT	B-62-0028			39.39		
10	1058+29.88	- 1060+29.88	RT	B-62-0028	200				
10	1060+29.88	- 1060+83.01	RT	B-62-0028				1	
10	1057+90.49	- 1058+29.88	LT	B-62-0028			39.39		
10	1058+29.88	- 1058+67.38	LT	B-62-0028	37.5				
10	1058+67.38	- 1059+20.5	LT	B-62-0028				1	
10	1069+27	- 1069+80.13	RT					1	
10	1069+80.13	- 1070+05.13	RT		25				
10	1070+05.13	- 1070+58.26	RT					1	
10	1152+10	- 1153+75	LT		165				
TOTALS					3,077.50	3,050.00	315.12	20.00	690.00

ADJUSTING INLET COVERS				
CATEGORY	STATION	LT/RT	611.8115	REMARKS
			EACH	
10	1194+92	RT	1	IN DRIVEWAY APRON
10	1207+38	RT	1	EDGE OF STRUCTURE
10	1207+38	LT	1	EDGE OF STRUCTURE
TOTAL			3	

628.7005 INLET PROTECTION TYPE A				
CATEGORY	STATION	LOCATION	EACH	REMARKS
10	1163+10	RT	1	INLET IN DITCH LINE
10	1186+28	RT	1	DOUBLED INLET IN DITCH LINE
TOTAL			2	

628.7010 INLET PROTECTION TYPE B				
CATEGORY	STATION	LOCATION	EACH	REMARKS
10	1176+00	RT	1	INLET IN DITCH LINE OF DRIVEWAY

628.7015 INLET PROTECTION TYPE C				
CATEGORY	STATION	LOCATION	EACH	REMARKS
10	1195+00	RT	1	
10	1207+45	LT & RT	2	END OF PROJECT @ BRIDGE
TOTAL			3	

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WATER

CATEGORY	STATION -	STATION	ML LT/RT	624.01 MGAL	REMARKS
10	850+38 -	917+77	ML	60.00	*
10	856+00 -	861+60	RT	1.00	**
10	862+77 -	872+45	RT	1.00	**
10	888+70 -	904+46	RT	1.75	**
10	912+13 -	929+43	RT	2.00	**
10	917+77 -	919+77	ML	2.00	TAPER 32' TO 40' *
10	919+77 -	955+10	ML	39.00	*
10	930+71 -	931+57	RT	0.50	**
10	935+59 -	1018+90	RT	19.00	**
10	949+17 -	956+32	LT	2.00	**
10	955+10 -	957+10	ML	2.00	TAPER 40' TO 32' *
10	957+10 -	1040+58	ML	72.00	*
10	962+93 -	968+47	LT	1.00	**
10	1016+35 -	1022+63	LT	1.00	**
10	1022+20 -	1046+90	RT	2.75	**
10	1040+58 -	1042+58	ML	2.00	TAPER 32' TO 40' *
10	1042+58 -	1080+00	ML	42.00	*
10	1042+58 -	1153+15	LT	25.00	**
10	1047+10 -	1054+40	RT	2.00	**
10	1057+90 -	1066+60	RT	2.00	**
10	1068+00 -	1145+33	RT	17.00	**
10	1080+00 -	1082+00	ML	2.00	TAPER 40' TO 32' *
10	1082+00 -	1191+40	ML	97.00	*
10	1153+15 -	1160+40	LT	1.00	**
10	1160+40 -	1176+00	LT	2.00	**
10				50.00	PE, FE,CE,& SIDE ROADS
10				50.00	UNDISTRUBTED
	TOTAL			499.00	

* Note this is Mill & Relay portions
** Note This is for shoulder in rural area not where C&G is located

SILT FENCE

CATEGORY	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENCE LF	REMARKS
10	100	100	UNDISTRIBUTED

643.0410 TRAFFIC CONTROL BARRICADES TYPE II

CATEGORY	STATION	LT/RT	NO. BARRICADES	DAYS	REMARKS
10	1191+55	LT	1	50	W. DRAKE AVE.
10	1195+00	LT	1	50	W. TURNER AVE.
10	1195+47	LT	1	50	W. TURNER AVE.
10	1203+36	LT	1	50	W. JENNINGS RD.
10	1203+67	LT	1	50	W. JENNINGS RD.
10	1209+72	LT	1	50	STH 56
	TOTAL			300	

643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A

CATEGORY	STATION	LT/RT	NO. LIGHTS	DAYS	REMARKS
10	1191+55	LT	1	50	W. DRAKE AVE.
10	1195+00	LT	1	50	W. TURNER AVE.
10	1195+47	LT	1	50	W. TURNER AVE.
10	1203+36	LT	1	50	W. JENNINGS RD.
10	1203+67	LT	1	50	W. JENNINGS RD.
10	1209+72	LT	1	50	STH 56
	TOTAL			300	

643.0300 TRAFFIC CONTROL DRUMS

CATEGORY	STATION -	STATION	LT/RT	LOCATION	LENGTH	NO. DRUMS	DAYS	REMARKS
10	850+38	- 854+40	LT	ML	402	16	800	C&G
10	850+38	- 856+00	RT	ML	562	23	1,150	C&G
10	868+41	- 876+35	LT	ML	794	32	1,600	BEAM GUARD
10	877+37	- 891+55	LT	ML	1,418	57	2,850	BEAM GUARD
10	872+45	- 888+70	RT	ML	1,625	65	3,250	C&G
10	904+50	- 912+13	RT	ML	763	31	1,550	C&G
10	931+25	- 944+50	LT	B-62-27	1,325	54	2,700	BEAM GUARD
10	931+18	- 943+15	RT	B-62-27	1,165	48	2,400	BEAM GUARD
10	956+32	- 962+93	LT	ML	661	27	1,350	C&G
10	968+47	- 1016+35	LT	ML	4,788	192	9,600	C&G
10	1006+12	- 1017+70	RT	ML	1,158	47	2,350	BEAM GUARD
10	1018+90	- 1022+20	RT	ML	330	13	650	C&G
10	1022+63	- 1042+58	LT	ML	1,995	80	4,000	C&G
10	1030+90	- 1039+20	RT	ML	830	33	1,650	BEAM GUARD
10	1145+33	- 1191+40	RT	ML	4,607	185	9,250	C&G
10	1053+20	- 1060+00	LT	B-62-28	680	27	1,350	BEAM GUARD
10	1053+20	- 1061+90	RT	B-62-28	870	35	1,750	BEAM GUARD
10	1069+27	- 1070+59	RT	ML	132	6	300	BEAM GUARD
10	1191+76	- 1206+09	LT & RT	ML	2,866	115	5,750	C&G
10				CTH S	60	4	200	SW QUADRANT C&G
10				CTH S	60	4	200	NW QUADRANT C&G
10				CTH I	60	4	200	SE QUADRANT C&G
10				CTH I	60	4	200	NE QUADRANT C&G
10						50	2,500	UNDISTRIBUTED
						TOTAL	57,600	

647.0776 PAVEMENT MARKING CROSSWALK EPOXY 12 - INCH

CATEGORY	STATION	LOCATION	LF	REMARKS
10	842+05	ML	64	STH 131 / SAINT ELMO ST SOUTH SIDE OF INTERSECTION ML
10	842+35	ML	64	STH 131 / SAINT ELMO ST NORTH SIDE OF INTERSECTION ML
10	845+60	ML	64	STH 131/WISCONSIN AVE SOUTH SIDE OF INTERSECTION ML
10	846+00	ML	64	STH 131/WISCONSIN AVE NORTH SIDE OF INTERSECTION ML
10	848+77	ML	64	STH 131/PRAIRIE ST SOUTH SIDE OF INTERSECTION ML
10	849+00	ML	64	STH 131/PRAIRIE ST NORTH SIDE OF INTERSECTION ML
TOTAL			384	

LAYOUT PER S.D.D. 15C 8-14F

647.0556 PAVEMENT MARKING STOP LINE EPOXY 12 - INCH

CATEGORY	STATION	LOCATION	LF	REMARKS
10	1151+00	RT	15	KICKAPOO HIGH SCHOOL DRWY
10	1159+66	RT	15	KICKAPOO HIGH SCHOOL DRWY
TOTAL			30	

LAYOUT PER S.D.D. 15C 8-14F

650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE

CATEGORY	STATION -	STATION	LF
10	822+73 -	1207+50	38,477

305.0500 SHAPING SHOULDERS

CATEGORY	STATION -	STATION	LT/RT	STA	REMARKS
10	930+50	- 931+17.61	RT	2.00	RIVER RD TO THRIE BEAM
10	930+52	- 931+17.61	LT	2.00	TO THRIE BEAM
10	935+59	- 943+00	RT	8.00	FROM THRIE BEAM
10	935+59	- 944+27	LT	9.00	FROM THRIE BEAM
10	1007+98	- 1016+33	RT	9.00	
10	1053+24.4	- 1054+54.4	LT	2.00	
10	1053+24.4	- 1054+54.4	RT	2.00	
10	1057+81.5	- 1059+11.5	LT	2.00	
TOTAL				36	

690.0250 SAWING CONCRETE

CATEGORY	STATION	LT/RT	LF	REMARKS
10	1206+09	LT	2.5	C&G

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646.0106 PAVEMENT MARKING EPOXY 4-INCH										
CATEGORY	STATION	-	STATION	C/L	C/L	C/L	C/L	C/L	EDGE LINE	EDGE LINE
				DASHED	DASHED	DASHED	NO PASSING	NO PASSING	SOLID	EDGE LINE
				YELLOW	YELLOW	YELLOW	NO PASSING	NO PASSING	WHITE	EDGE LINE
				L.F.	LT.	RT.	LT.	RT.	LT.	RT.
				L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.
10	822+73	-	828+33			140	560			
10	828+33	-	845+63	432.5						
10	845+63	-	852+58		173.75			695		
10	850+38	-	948+59						9,821	
10	850+38	-	867+25							1,687
10	852+58	-	859+00				642	642		
10	859+00	-	864+60		140			560		
10	864+60	-	917+77				5,317	5,317		
10	867+47	-	930+03							6,256
10	917+77	-	927+25			237	948			
10	927+25	-	931+57	108						
10	930+25	-	1067+12							13,687
10	931+57	-	940+00		210.75			843		
10	940+00	-	979+00				3,900	3,900		
10	948+52	-	1046+61						9,809	
10	979+00	-	986+00			175	700			
10	986+00	-	987+50	37.5						
10	987+50	-	997+35		246.25			985		
10	997+35	-	1017+68				2,033	2,033		
10	1017+68	-	1023+63			149	595			
10	1023+63	-	1032+50		221.75			887		
10	1032+50	-	1040+00				750	750		
10	1040+00	-	1047+70			193	770			
10	1046+84	-	1180+20						13,336	
10	1047+70	-	1054+55	171.25						
10	1054+55	-	1057+81		81.5			326		
10	1057+81	-	1112+65				5,484	5,484		
10	1067+31	-	1191+26							12,395
10	1112+65	-	1124+17			288	1,152			
10	1127+17	-	1135+00			271		1,083		
10	1135+00	-	1207+48				7,248	7,248		
10	1180+44	-	1191+26						1,082	
				749.25	1,074	1,452	30,099	30,753	34,048	34,025
TOTAL				132,200.25						

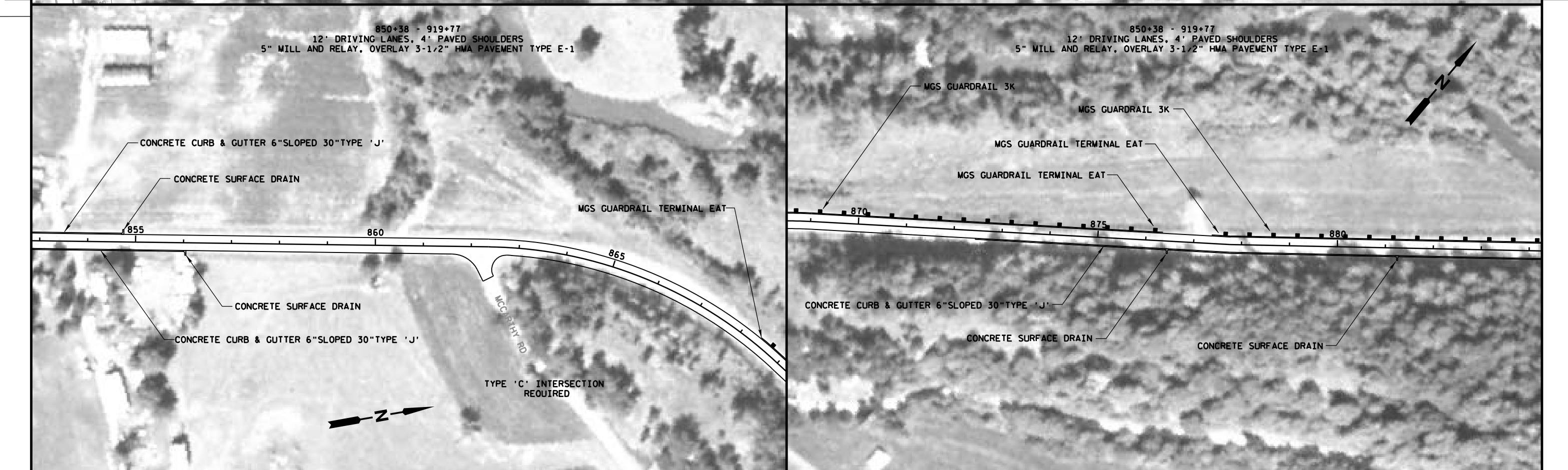
649.0200 TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH

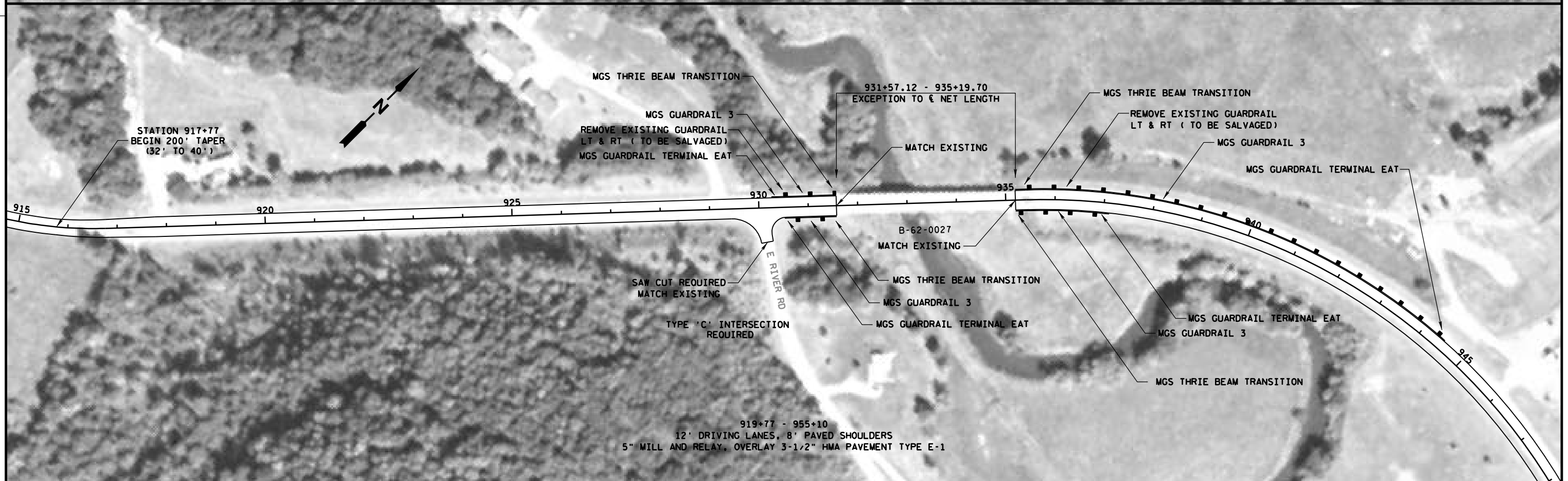
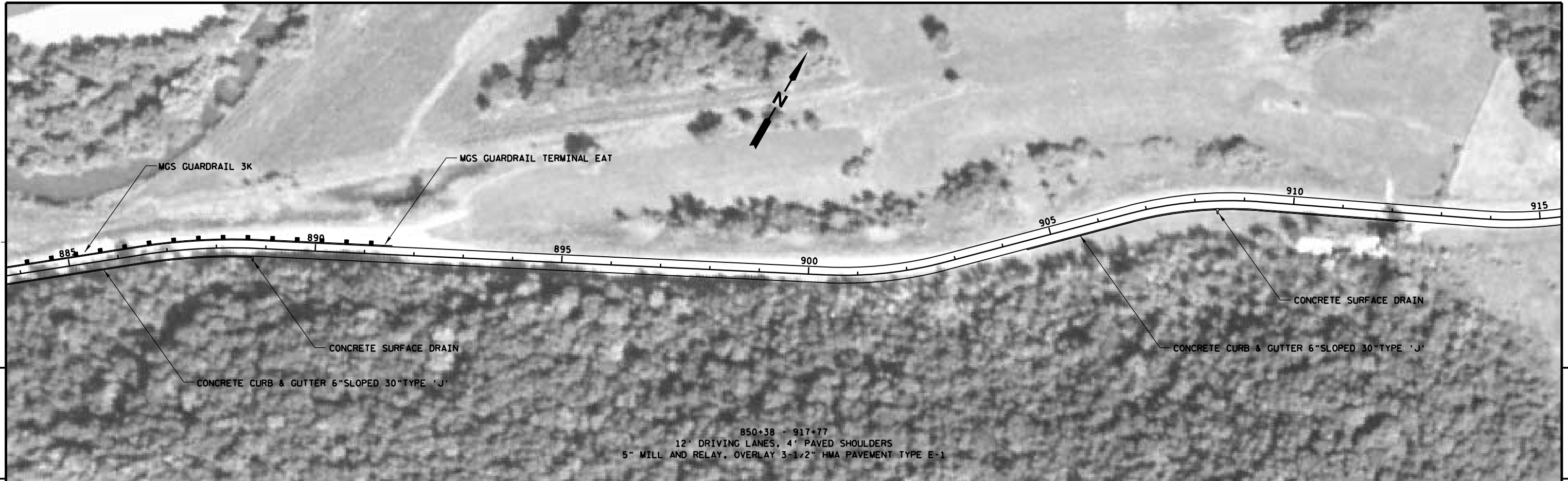
690.0150 SAWING ASPHALT

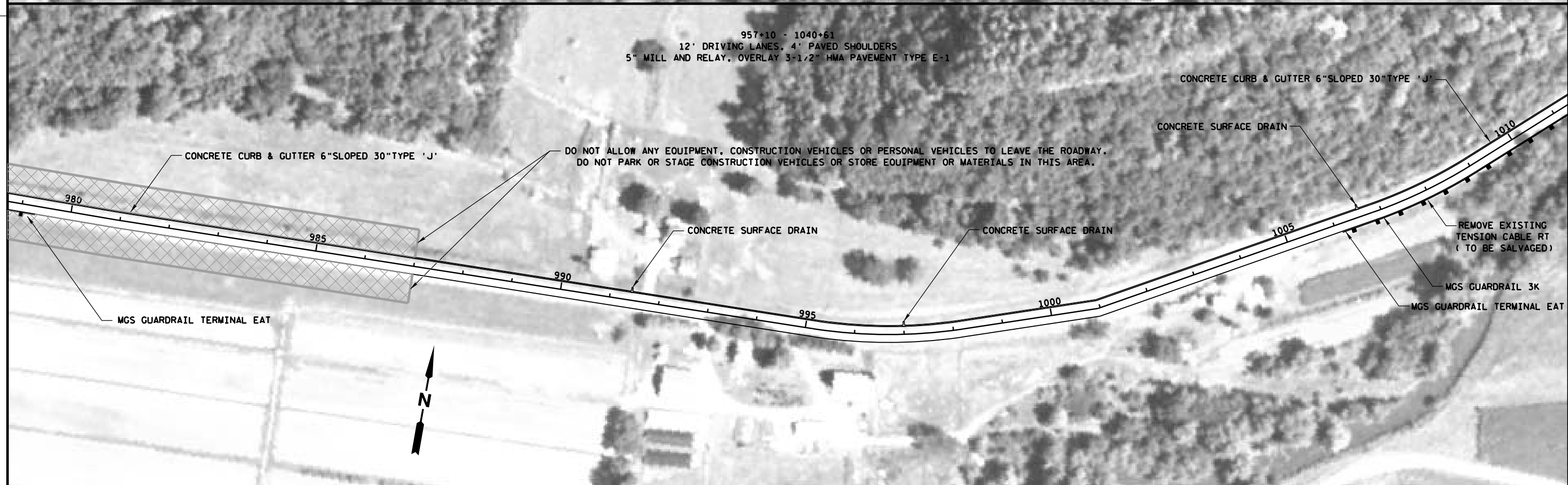
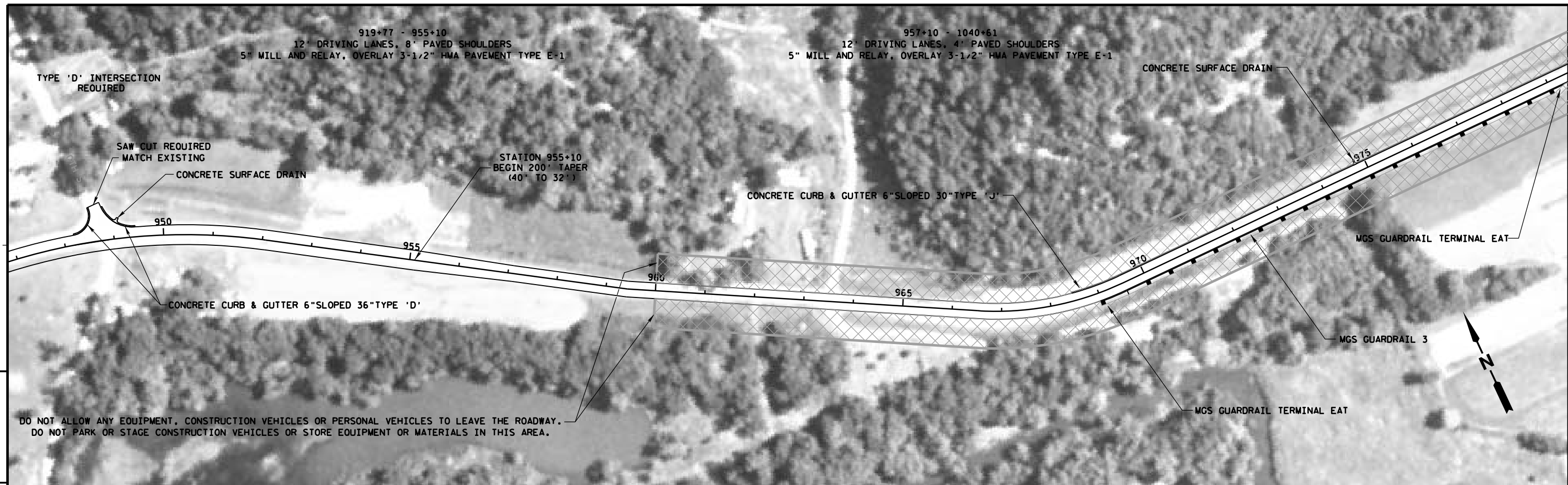
CATEGORY	STATION	- STATION	C/L	C/L	C/L	C/L	C/L	REMARKS
			DASHED	DASHED	DASHED	NO PASSING	NO PASSING	
			YELLOW	YELLOW	YELLOW	YELLOW	YELLOW	
			L.F.	LT.	RT.	LT.	RT.	
			L.F.	L.F.	L.F.	L.F.	L.F.	
10	822+73	- 828+33			140	560		STAGE I
10	828+33	- 845+63	432.5					STAGE I
10	845+63	- 852+58		173.75			695	STAGE I
10	852+58	- 859+00				642	642	STAGE I
10	859+00	- 864+60		140			560	STAGE I
10	864+60	- 917+77				5,317	5,317	STAGE I
10	917+77	- 927+25			237	948		STAGE I
10	927+25	- 931+57	108					STAGE I
10	931+57	- 940+00		210.75			843	STAGE I
10	940+00	- 979+00				3,900	3,900	STAGE I
10	979+00	- 986+00			175	700		STAGE I
10	986+00	- 987+50	37.5					STAGE I
10	987+50	- 997+35		246.25			985	STAGE I
10	997+35	- 1017+68				2,033	2,033	STAGE I
10	1017+68	- 1023+63			149	595		STAGE I
10	1023+63	- 1032+50		221.75			887	STAGE I
10	1032+50	- 1040+00				750	750	STAGE I
10	1040+00	- 1047+70			193	770		STAGE I
10	1047+70	- 1054+55	171.25					STAGE I
10	1054+55	- 1057+81		81.5			326	STAGE I
10	1057+81	- 1112+65				5,484	5,484	STAGE I
10	1112+65	- 1124+17			288	1,152		STAGE I
10	1127+17	- 1135+00			271		1,083	STAGE I
10	1135+00	- 1207+48				7,248	7,248	STAGE I
10	822+73	- 828+33			140	560		STAGE II
10	828+33	- 845+63	432.5					STAGE II
10	845+63	- 852+58		173.75			695	STAGE II
10	852+58	- 859+00				642	642	STAGE II
10	859+00	- 864+60		140			560	STAGE II
10	864+60	- 917+77				5,317	5,317	STAGE II
10	917+77	- 927+25			237	948		STAGE II
10	927+25	- 931+57	108					STAGE II
10	931+57	- 940+00		210.75			843	STAGE II
10	940+00	- 979+00				3,900	3,900	STAGE II
10	979+00	- 986+00			175	700		STAGE II
10	986+00	- 987+50	37.5					STAGE II
10	987+50	- 997+35		246.25			985	STAGE II
10	997+35	- 1017+68				2,033	2,033	STAGE II
10	1017+68	- 1023+63			149	595		STAGE II
10	1023+63	- 1032+50		221.75			887	STAGE II
10	1032+50	- 1040+00				750	750	STAGE II
10	1040+00	- 1047+70			193	770		STAGE II
10	1047+70	- 1054+55	171.25					STAGE II
10	1054+55	- 1057+81		81.5			326	STAGE II
10	1057+81	- 1112+65				5,484	5,484	STAGE II
10	1112+65	- 1124+17			288	1,152		STAGE II
10	1127+17	- 1135+00			271		1,083	STAGE II
10	1135+00	- 1207+48				7,248	7,248	STAGE II
SUBTOTAL			1,498.5	2,148.0	2,904.0	60,198.0	61,506.0	
TOTAL			128,254.5					

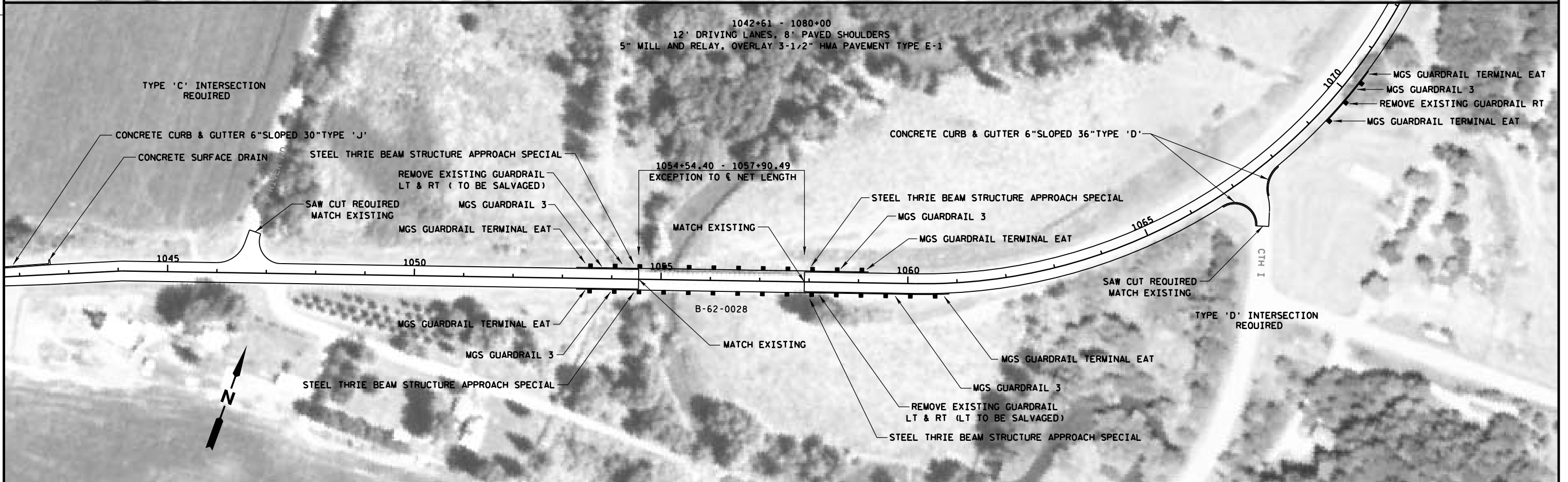
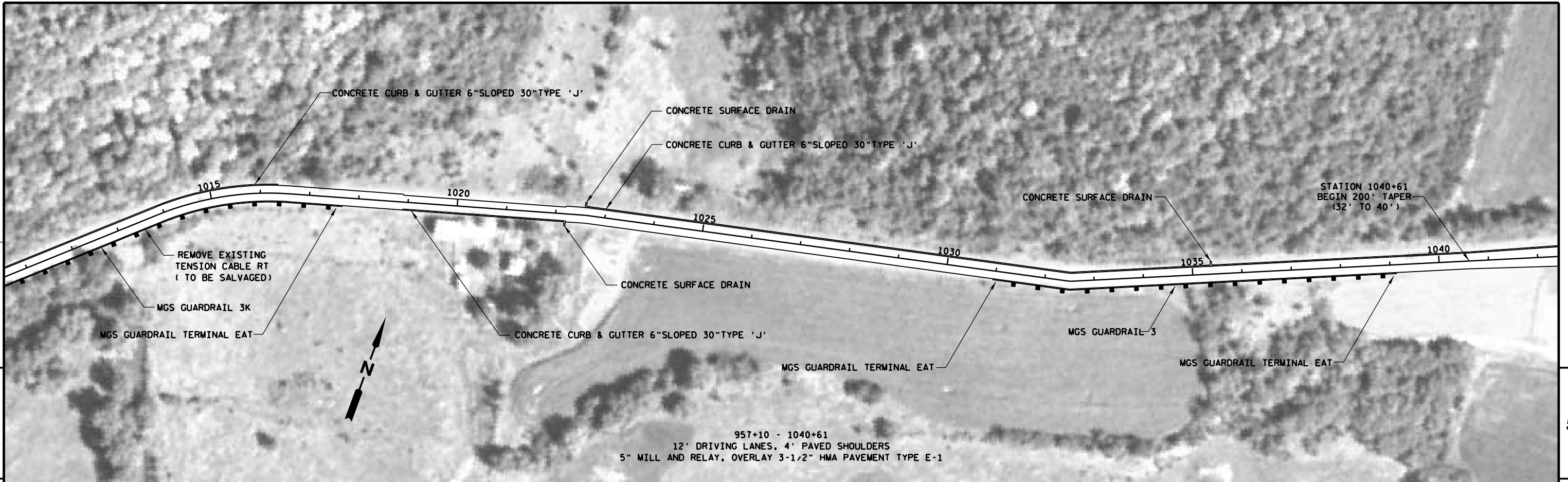
CATEGORY	STATION	LT/RT/ML	LOCATION	LF	REMARKS
10	822+72	ML		36	BEGINNING OF PROJECT
10	862+27	RT	SIDE ROAD	30	MCCARTY RD
10	930+00	RT	SIDE ROAD	30	EAST RIVER RD.
10	948+94	LT	SIDE ROAD	30	CTH S
10	1046+55	LT	SIDE ROAD	30	WEST RIVER RD.
10	1067+53	RT	SIDE ROAD	30	CTH I
10	1151+00	RT	DRIVEWAY	30	KICKAPOO HIGH SCHOOL
10	1159+66	RT	DRIVEWAY	30	KICKAPOO HIGH SCHOOL
10	1180+22	LT	SIDE ROAD	30	S. WAGONER AVE
10	1181+20	RT		10	P.E.
10	1183+00	LT		10	P.E.
10	1185+00	LT		10	P.E.
10	1191+38	LT	SIDE ROAD	30	W. DRAKE AVE
10	1191+38	RT	SIDE ROAD	30	W. DRAKE AVE
10	1195+26	LT	SIDE ROAD	30	W. TURNER AVE
10	1199+00	RT	SIDE ROAD	30	SCHILLING ST
10	1199+20-1199+80	RT		60	P.E.
TOTAL				486	

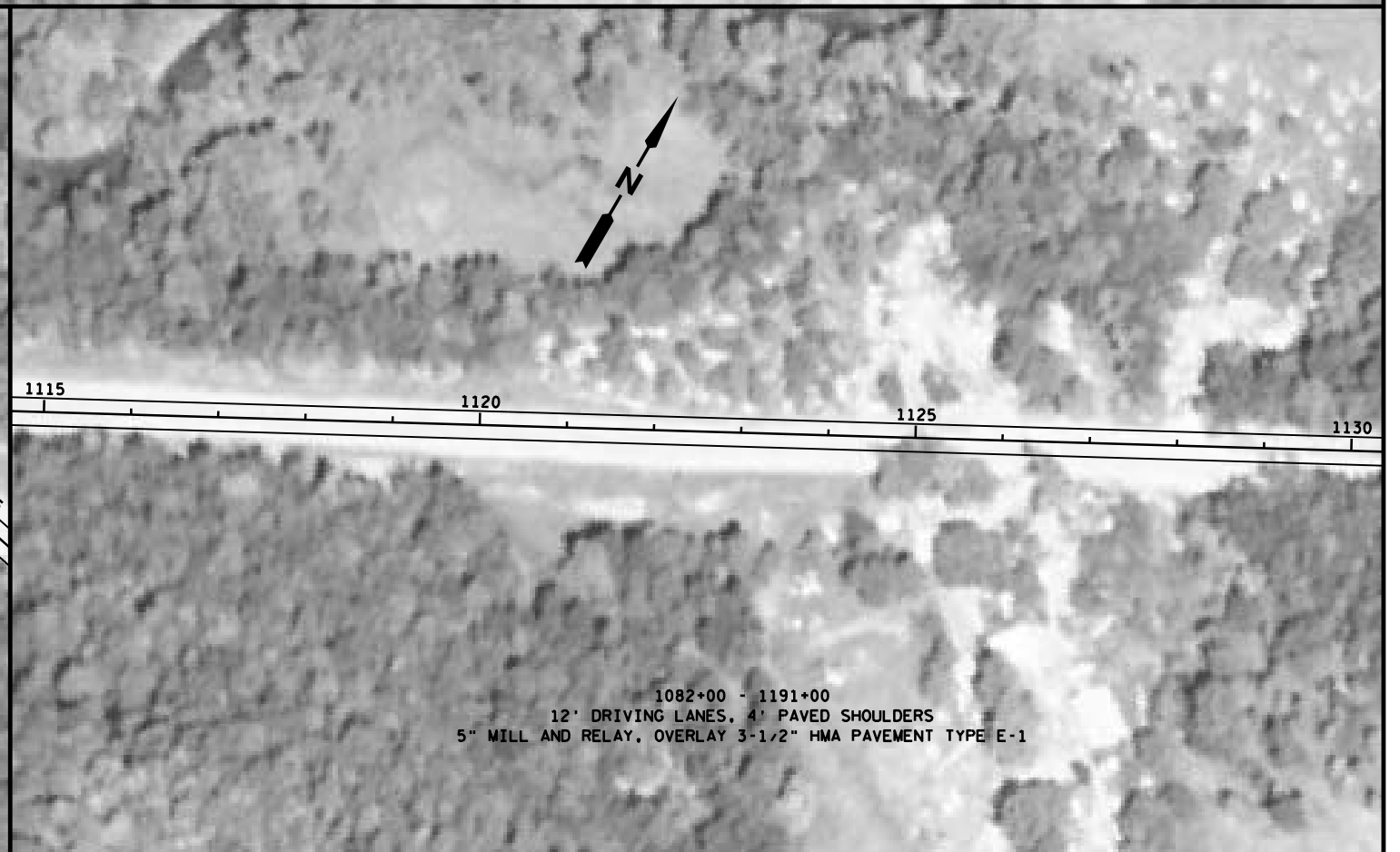
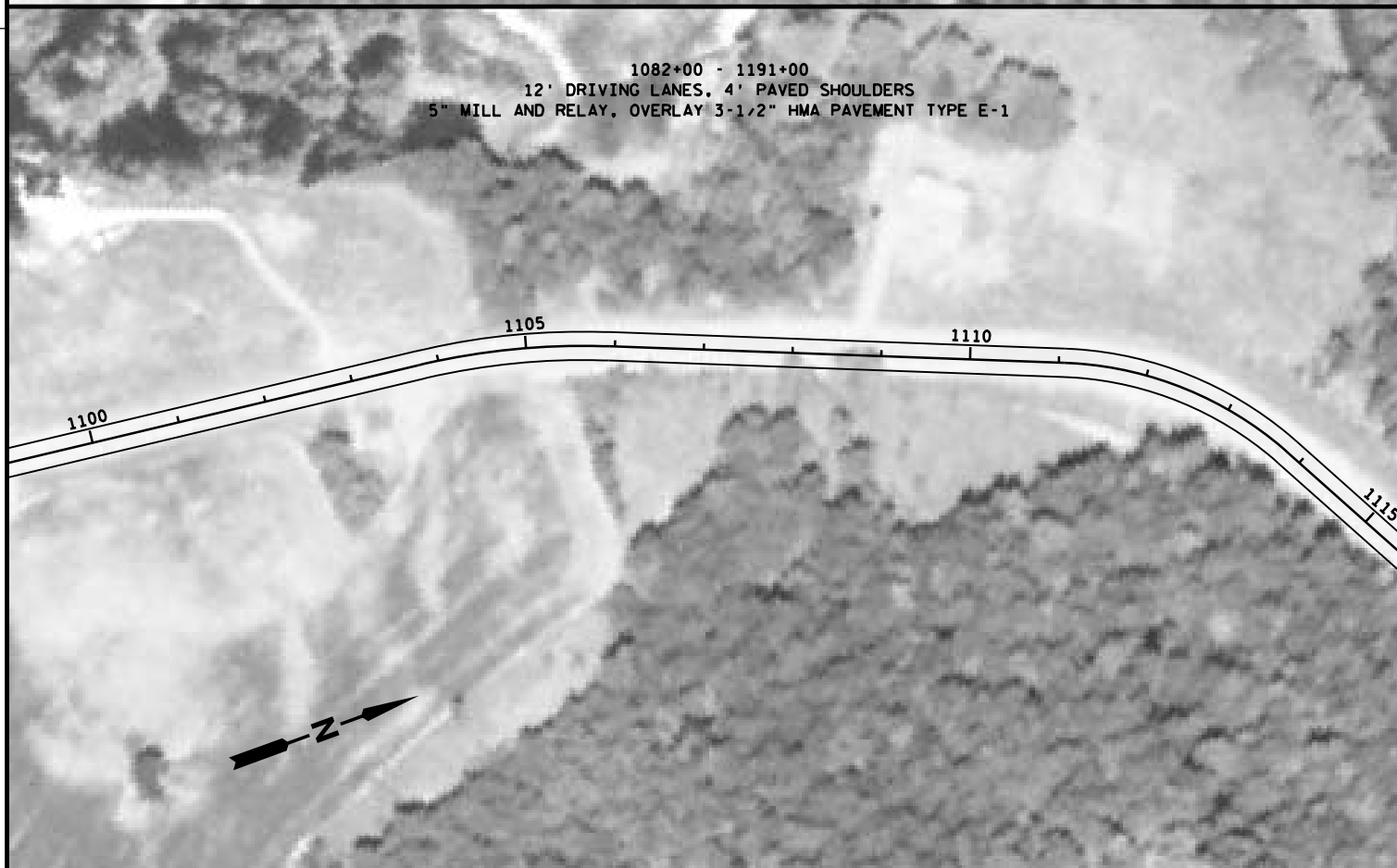
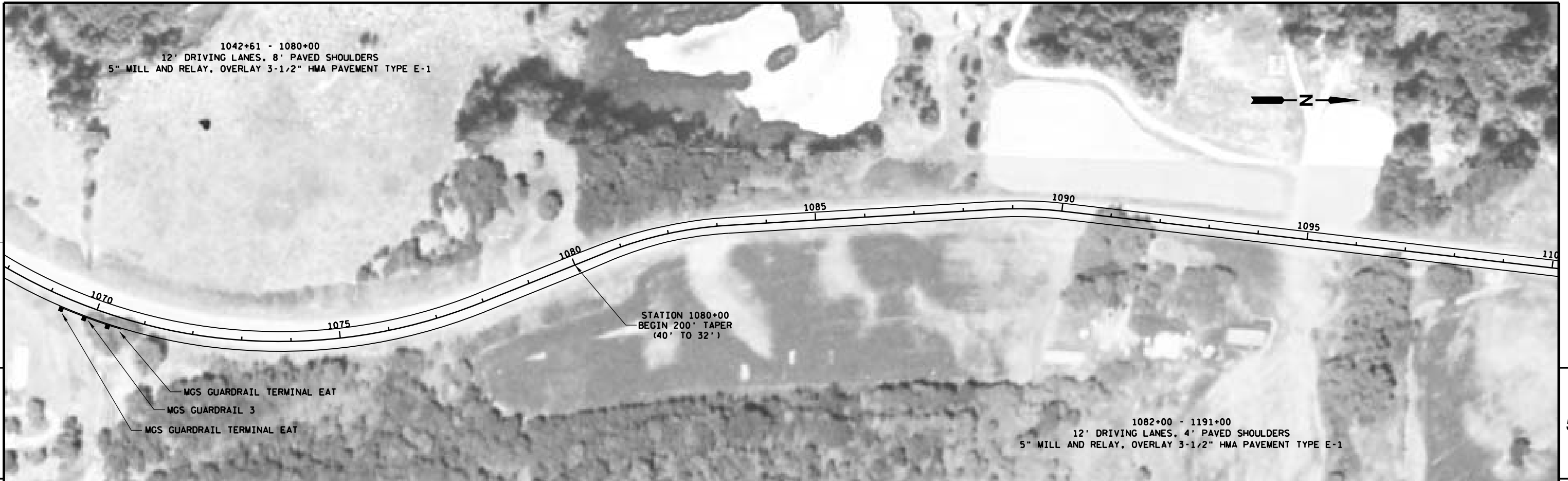
STAGE I: FIRST LIFT OF HMA PAVEMENT TYPE E-1
STAGE II: FINAL LIFT OF HMA PAVEMENT TYPE E-1

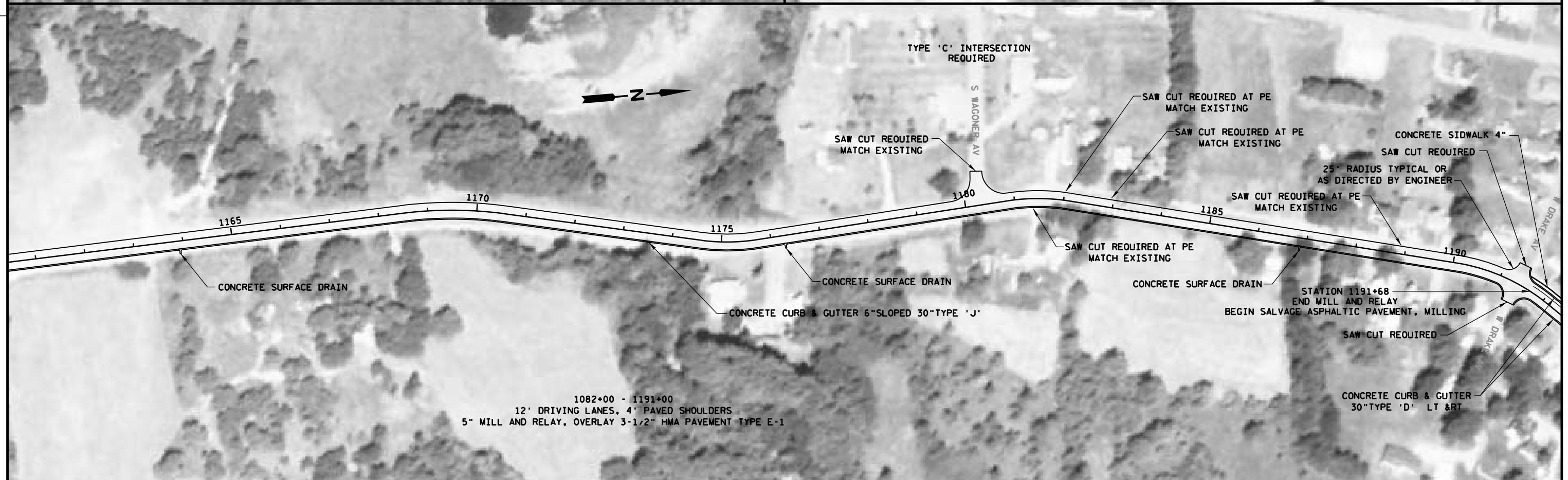
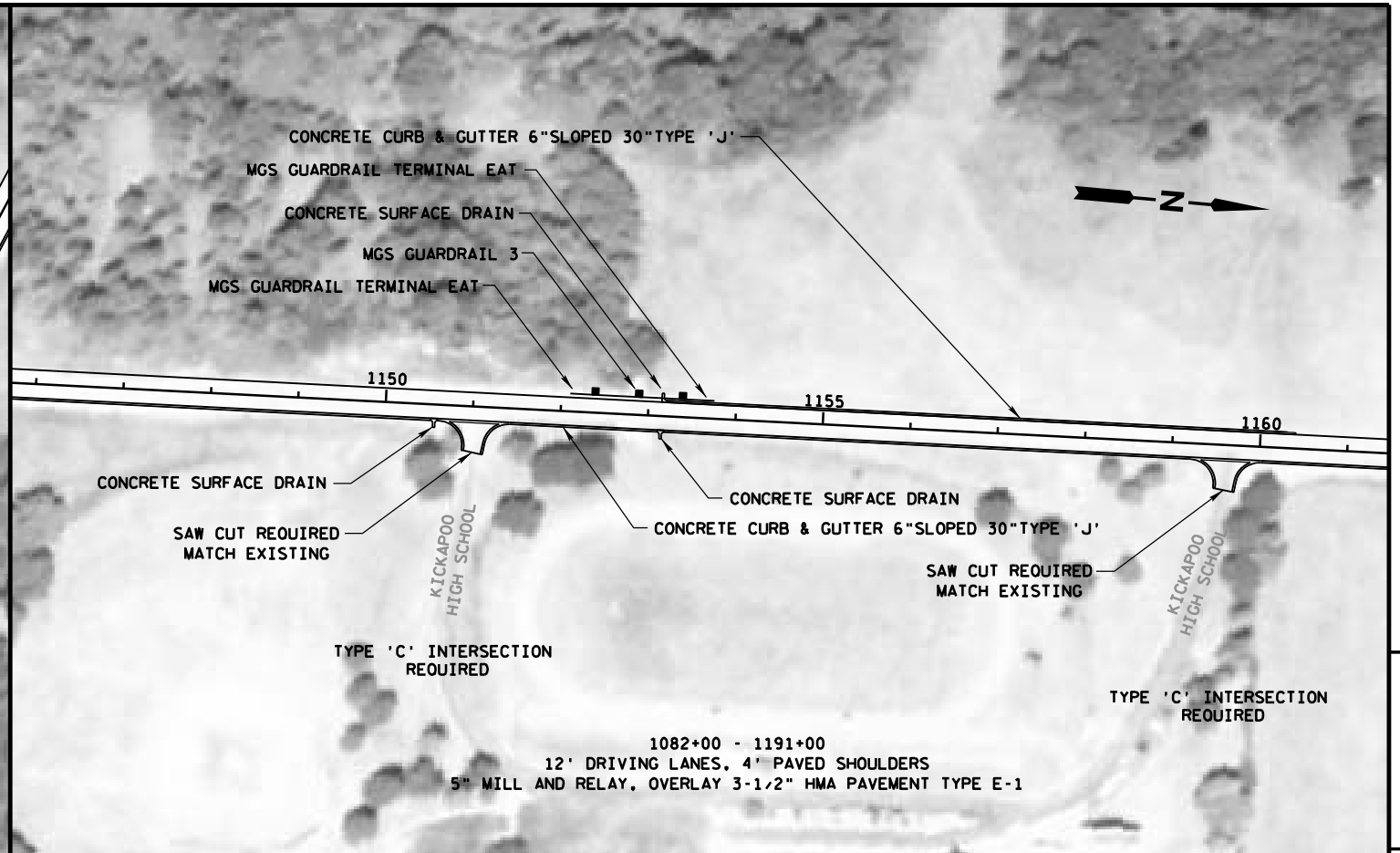








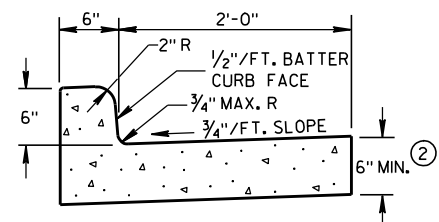




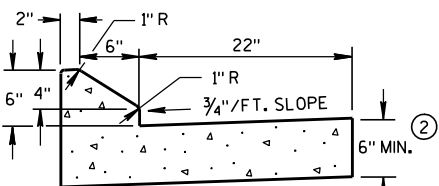


Standard Detail Drawing List

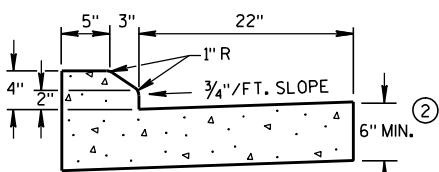
08D01-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D05-14A	CURB RAMPS TYPES 1 AND 1-A
08D05-14B	CURB RAMPS TYPES 2 AND 3
08D05-14C	CURB RAMPS TYPE 4A
08D05-14D	CURB RAMPS TYPE 4B
08D05-14E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
09A01-12A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
09A01-12B	AT-GRADE SIDE ROAD INTERSECTION, TYPE "A1" & "A2"
13A11-01A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-01B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
14B42-02A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-02B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-02C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-01A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-01B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-01C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-03A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
15C04-01	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-15A	PAVEMENT MARKING (MAINLINE)
15C08-15B	PAVEMENT MARKING (INTERSECTIONS)
15C08-15F	PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)
15C12-03	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15D12-02	TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H.
15D28-01	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D30-01	TRAFFIC CONTROL, SIDEWALK CLOSURE



TYPES A & D ①



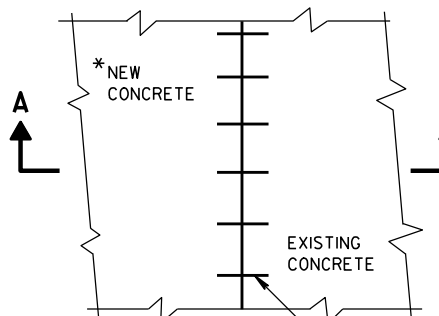
6" SLOPED CURB TYPES G & J ①



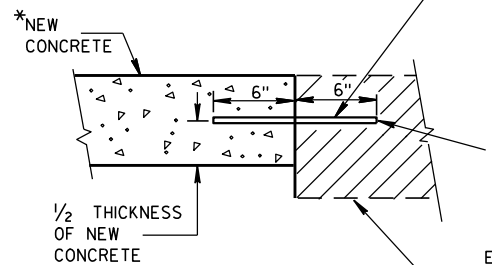
4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"

* NEW CURB & GUTTER,
SURFACE DRAINS,
CONCRETE PAVEMENT
OR OTHER NEW CONCRETE.



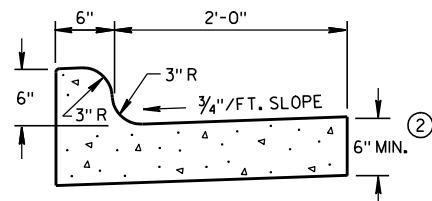
PLAN VIEW

SECTION A-A
TIE BARS DRILLED
INTO EXISTING PAVEMENT

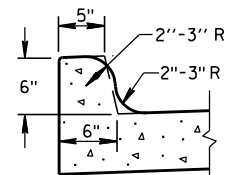
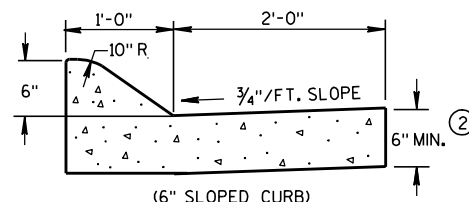
NO. 6 TIE BARS SPACED 2'-6" C-C,
INSTALLED PERPENDICULAR
TO THE LONGITUDINAL JOINT.

MAXIMUM DRILL HOLE
SIZE IS 1/8" GREATER
THAN TIE BAR DIAMETER

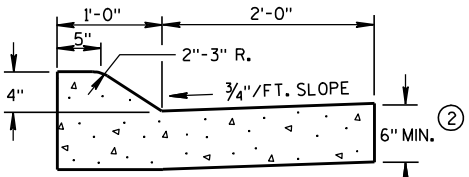
EXISTING
CONCRETE



TYPES K & L ①

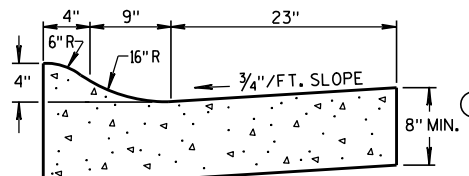
OPTIONAL CURB SHAPE
FOR TYPES K & L ①

(6" SLOPED CURB)



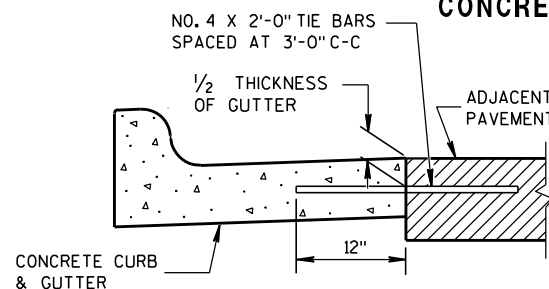
(4" SLOPED CURB)

TYPES A & D ①

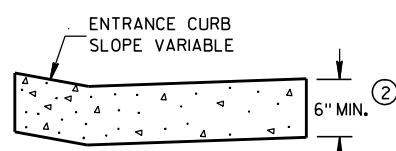


4" SLOPED CURB TYPES R & T ① ④

CONCRETE CURB & GUTTER 36"

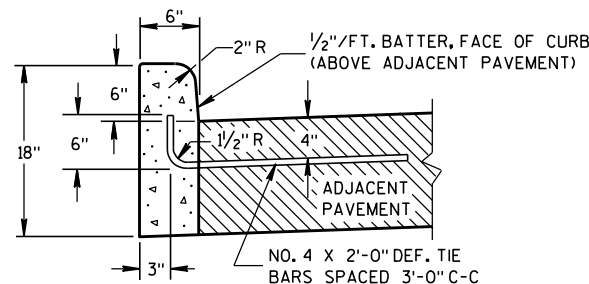


TYPICAL TIE BAR LOCATION ①



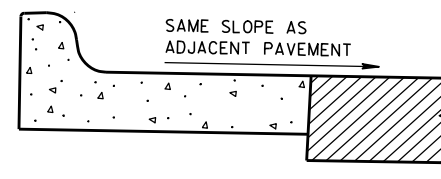
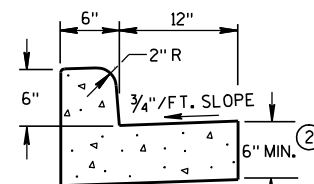
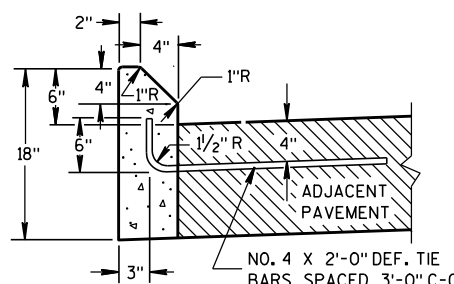
DRIVEWAY ENTRANCE CURB

(WHEN DIRECTED BY THE ENGINEER)



TYPES A & D ①

CONCRETE CURB

REVERSE SLOPE GUTTER ⑤
(TYPICAL FOR ALL CURB & GUTTER TYPES)TYPES A & D
CONCRETE CURB & GUTTER 18"

TYPES G & J ①

GENERAL NOTES

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

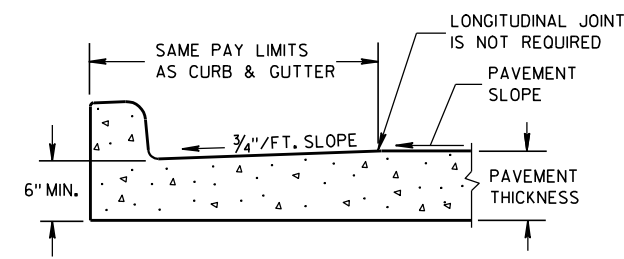
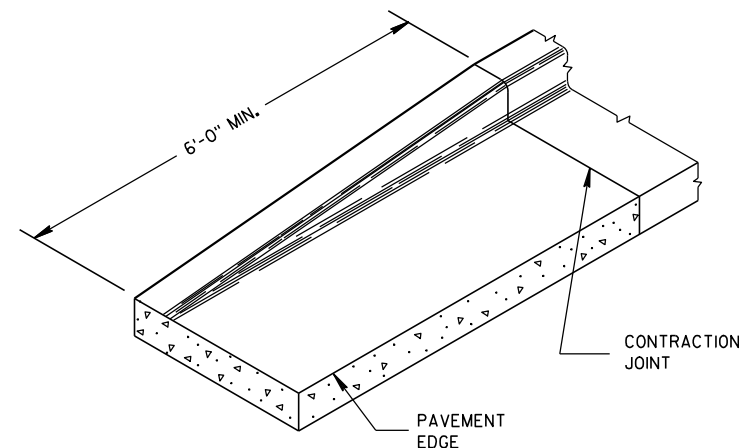
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

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 GUTTER TYPES A, G, K AND R.
- 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 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.
- ④ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
- ⑤ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER

END SECTION CURB & GUTTER

CONCRETE CURB, CONCRETE
CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9/4/08

DATE

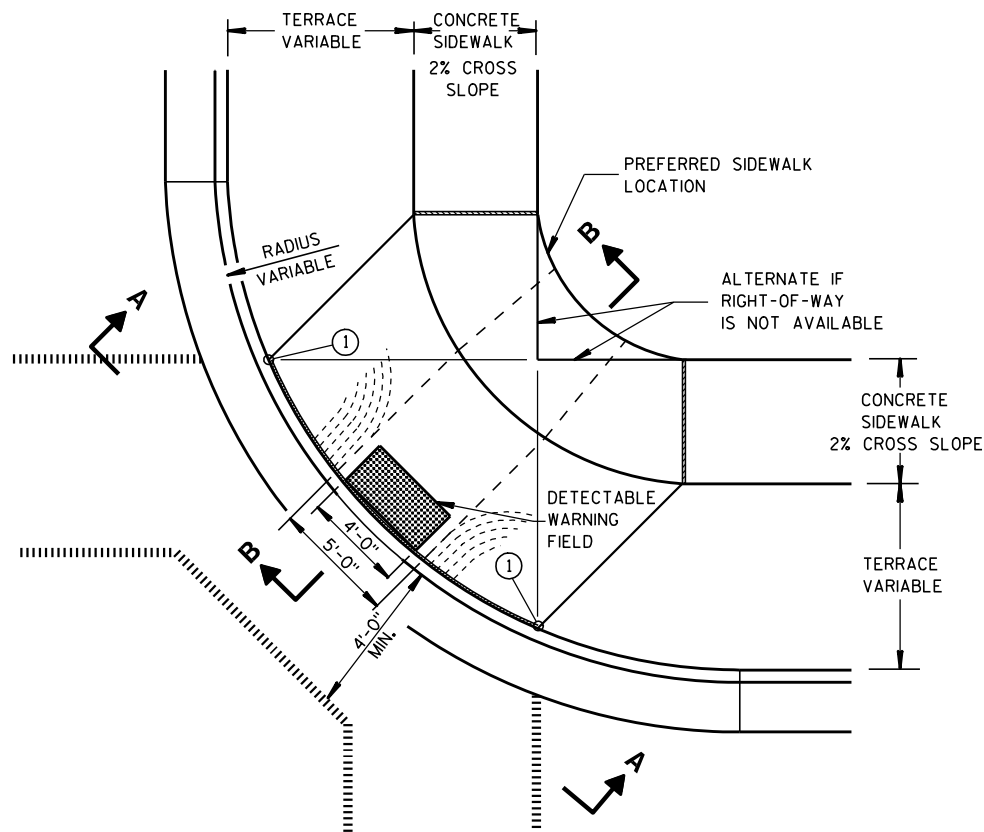
FHWA

/S/ Jerry H. 7

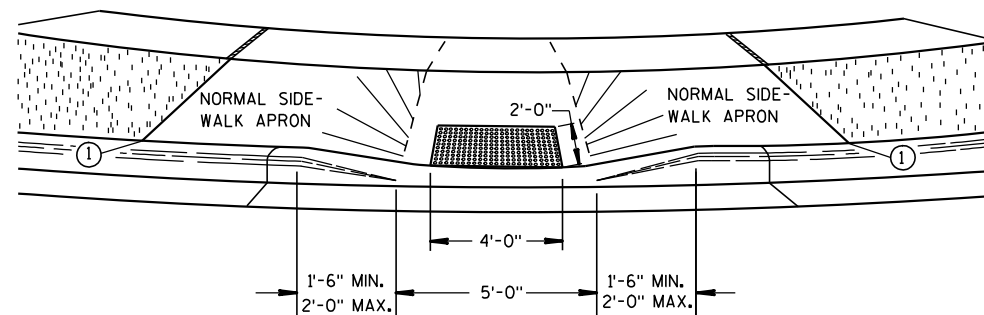
ROADWAY STANDARDS 51

ENGINEER

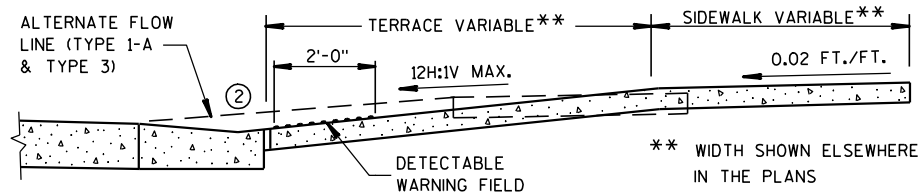
ENT



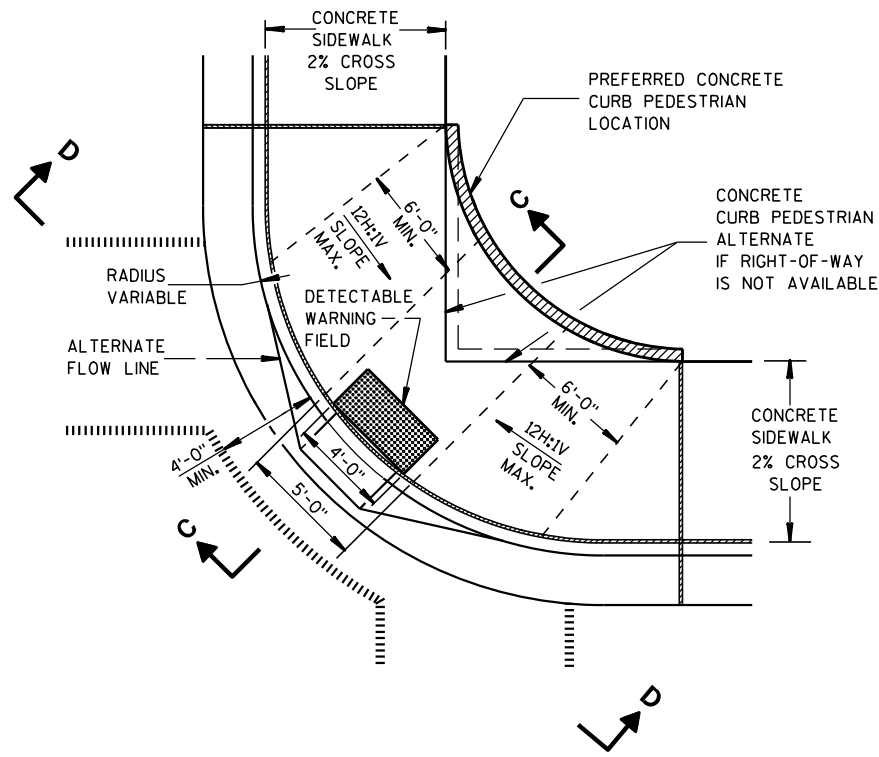
PLAN VIEW
TYPE 1 RAMP
(CENTER OF CORNER RADIUS)



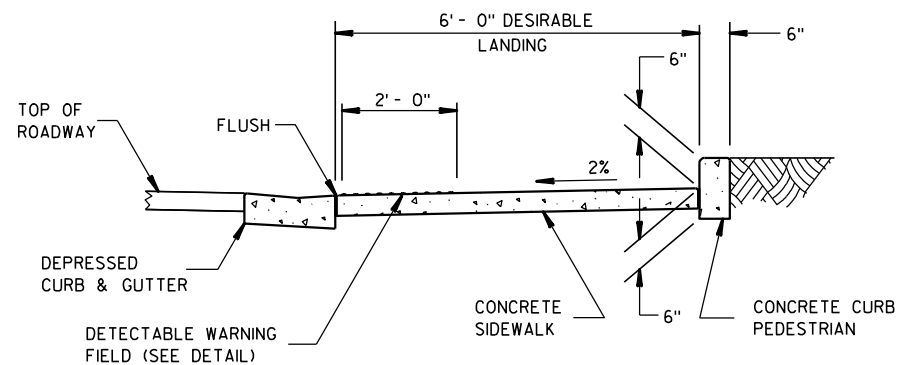
VIEW A-A



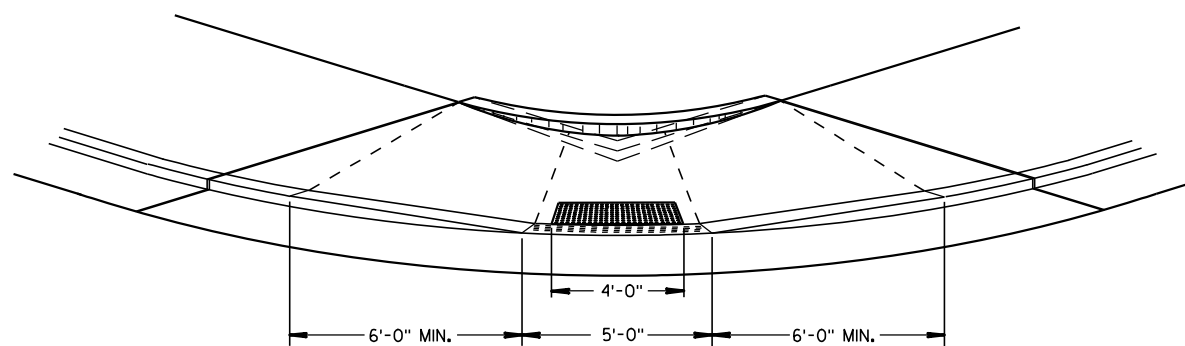
SECTION B-B



PLAN VIEW
TYPE 1-A RAMP
(NO TERRACE)



SECTION C-C



VIEW D-D

GENERAL NOTES

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

RAMPS SHALL BE BUILT AT 12H:1V OR FLATTER. WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAL FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD".

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

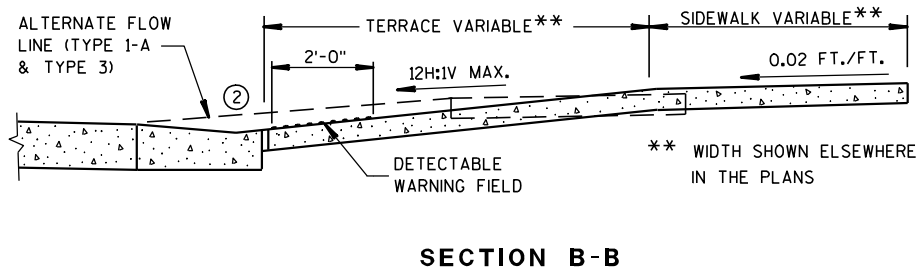
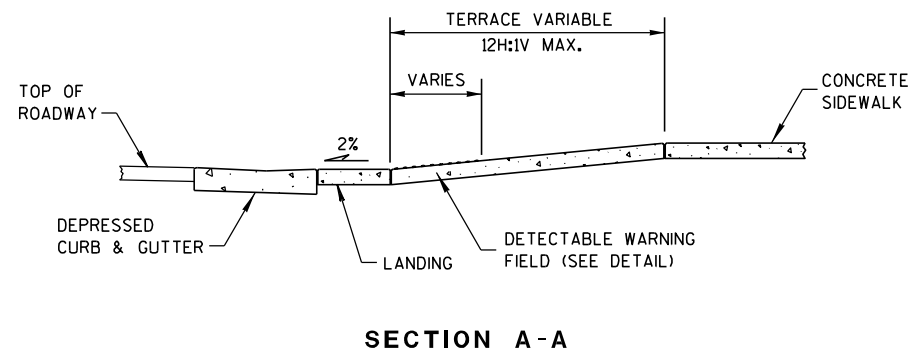
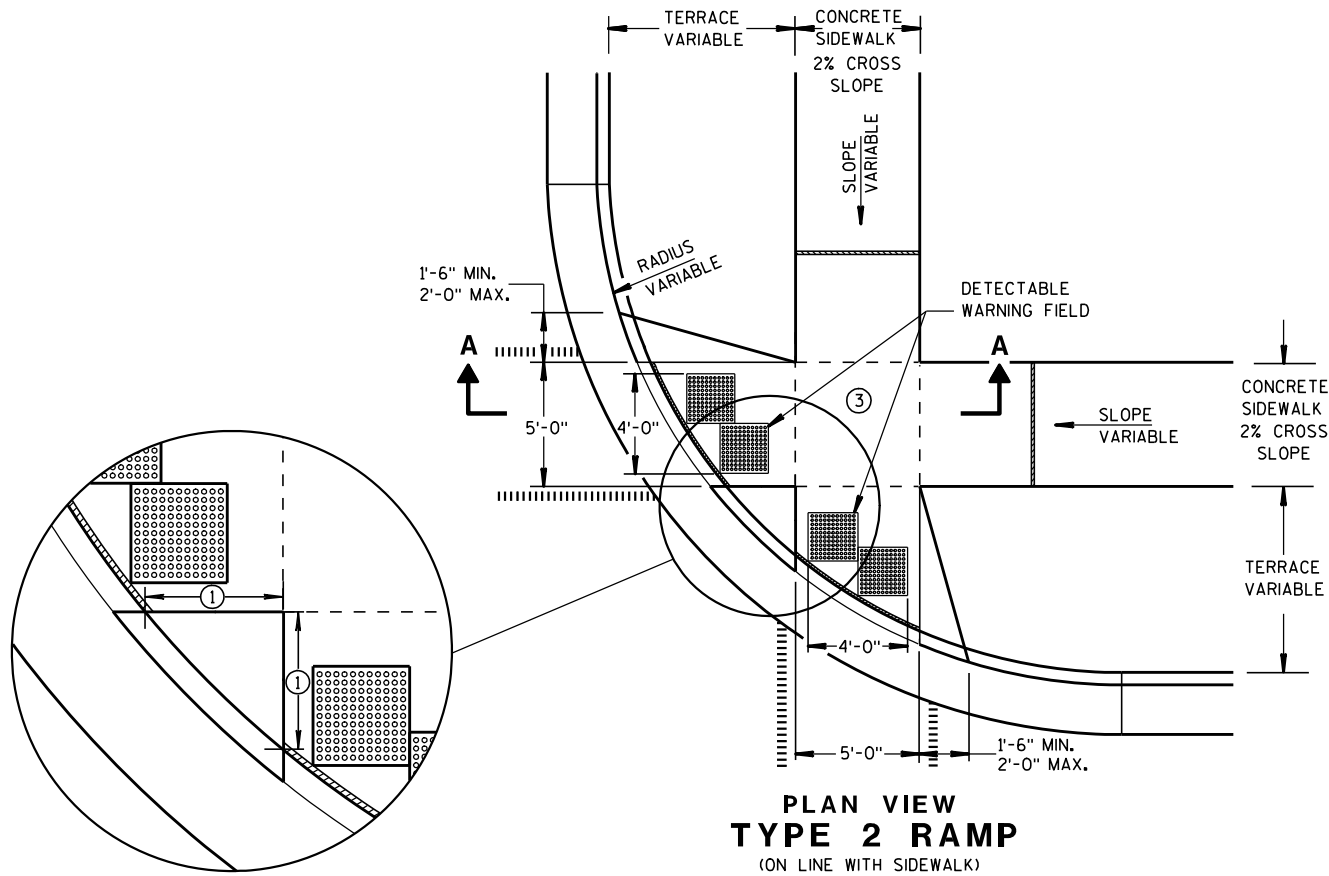
- THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.
- GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.

LEGEND

- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

CURB RAMPS TYPES 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



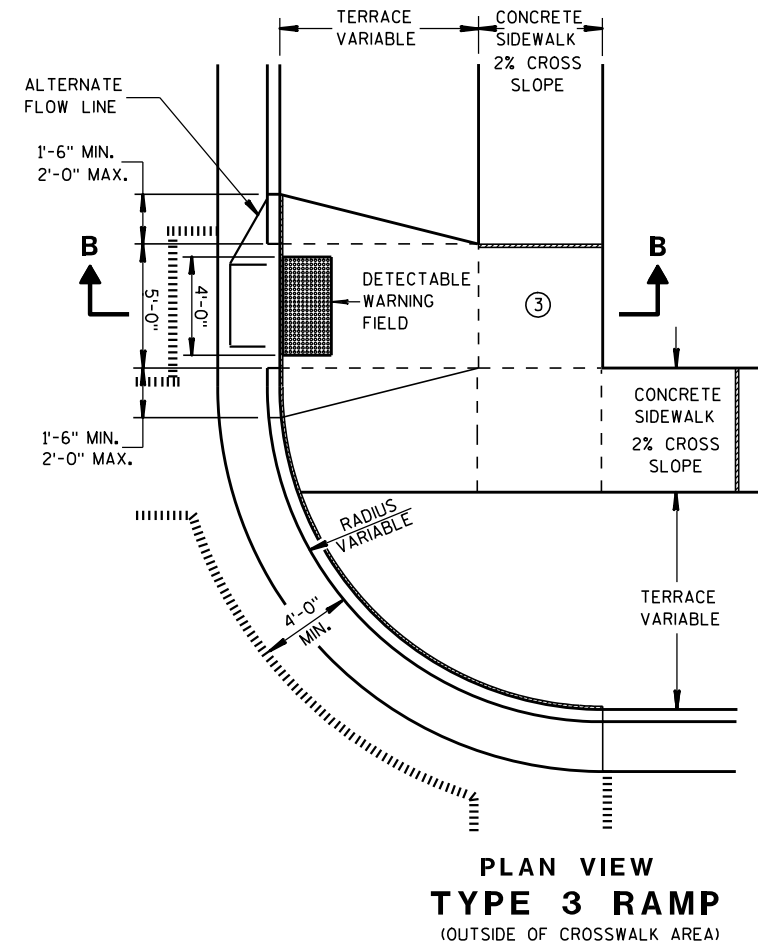
GENERAL NOTES

USE THE TYPE 3 RAMP ONLY WHEN A TYPE 1 OR TYPE 2 CANNOT BE ACHIEVED BECAUSE OF FIELD CONDITIONS.

- ① WHEN THIS DISTANCE IS LESS THAN 6'-0" IT MAY BE DIFFICULT TO ACHIEVE A 12H:1V SLOPE, OR FLATTER, ON THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 12H:1V SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.
- ③ PROVIDE LANDING AT TOP OF RAMP WITH NO MORE THAN 2% SLOPE IN ANY DIRECTION.

LEGEND

- ===== 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- ||||| PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



CURB RAMPS TYPES 2 AND 3

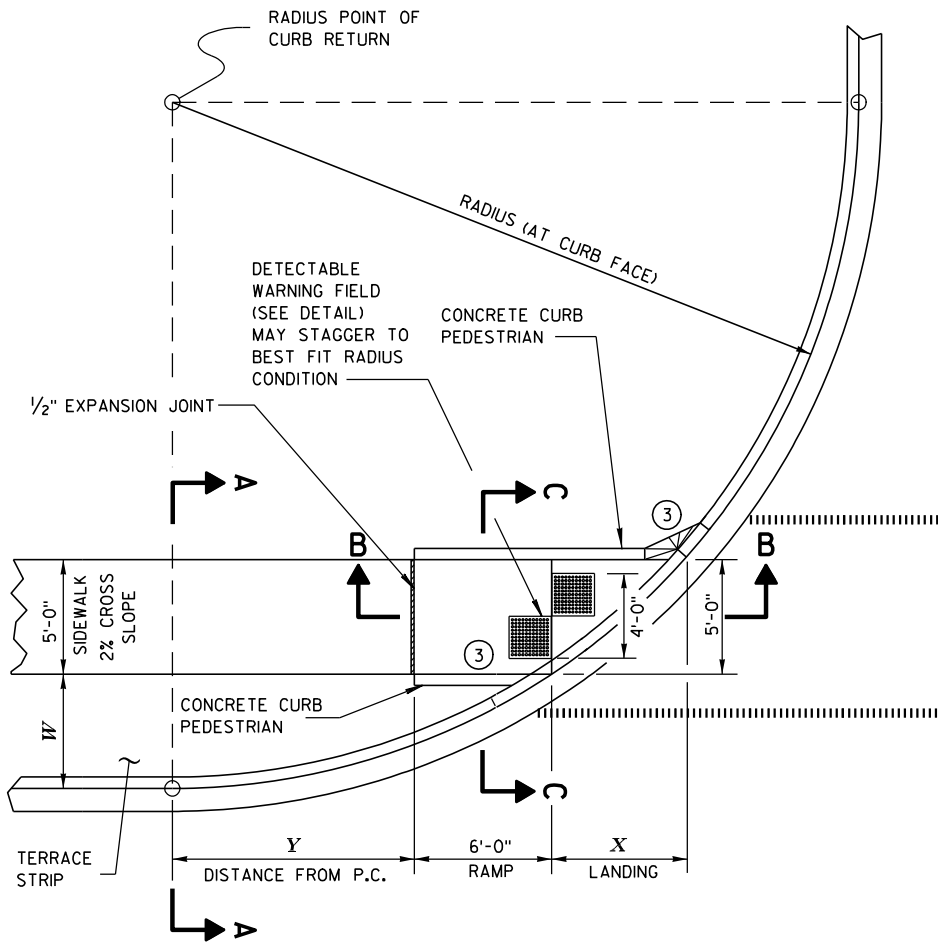
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



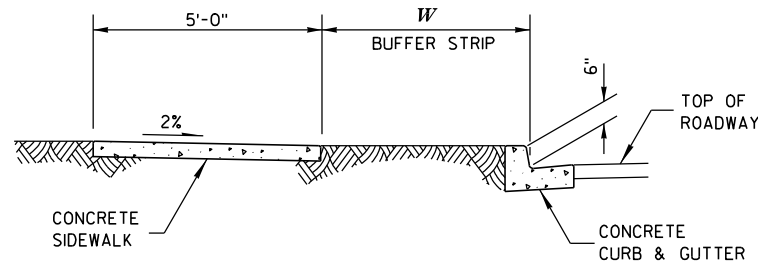
INTERMEDIATE RADII CAN BE INTERPOLATED



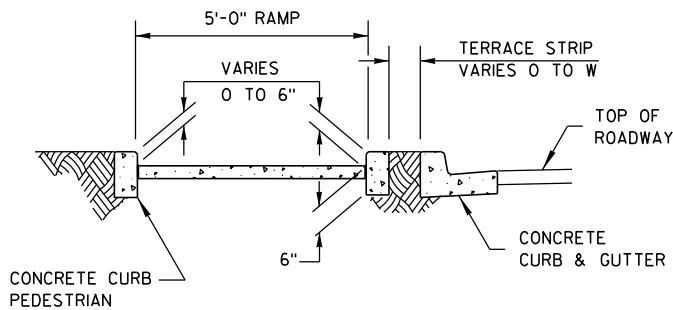
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



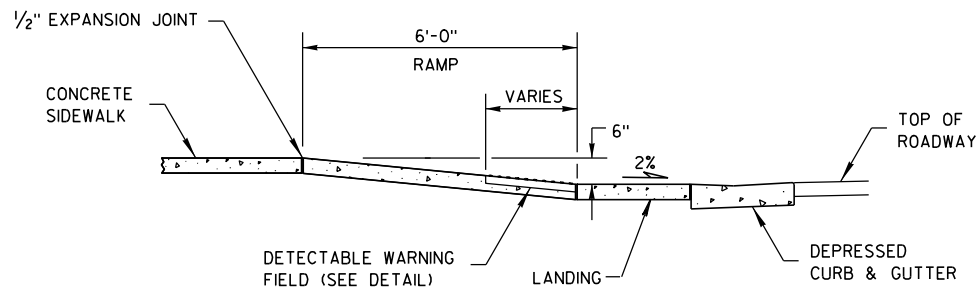
**CURB RAMP TYPE 4B
PLAN VIEW**



SECTION A-A



SECTION C-C



SECTION B-B

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

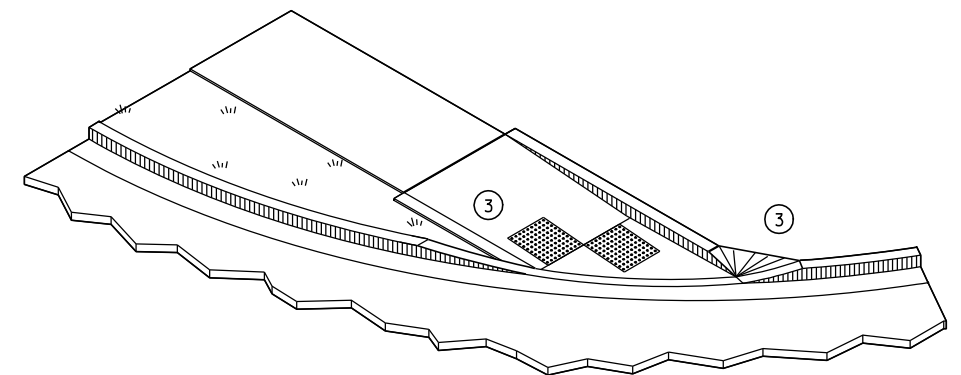
RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

- ③ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS).
DO NOT MARK TRANSITION NOSE.

RADIUS (AT CURB FACE)	W = 3'- 0"		W = 4'- 0"		W = 5'- 0"		W = 6'- 0"		W = 7'- 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y
20 FEET	5'-5 1/2"	4'-6 1/2"	4'-8 1/2"	6'-0"	4'-1"	7'-2 3/4"	3'-7"	8'-3 1/2"	3'-1 1/2"	9'-2 1/2"
30 FEET	7'-3 3/4"	7'-1"	6'-5 1/2"	8'-11 1/2"	5'-9 1/4"	10'-7"	5'-2 1/2"	12'-0"	4'-8 3/4"	13'-3 1/4"
40 FEET	8'-9 1/2"	9'-2 1/2"	7'-10"	11'-5 1/4"	7'-1"	13'-4 1/2"	6'-5 3/4"	15'-3 1/4"	5'-11 1/2"	16'-7 1/4"
50 FEET	10'-3 1/4"	11'-3 1/4"	9'-1 1/4"	13'-7 1/4"	8'-2 1/2"	15'-9 1/2"	7'-6 1/2"	17'-9"	6'-11 3/4"	19'-6 1/4"
60 FEET	11'-2 1/2"	12'-8 3/4"	10'-3 1/4"	15'-6 1/2"	9'-2 1/4"	17'-11 3/4"	8'-5 3/4"	20'-1 3/4"	7'-10 1/2"	22'-1 1/2"
70 FEET	12'-2 3/4"	14'-3 1/4"	11'-1 1/4"	17'-4"	10'-1"	19'-11 3/4"	9'-3 3/4"	22'-4 1/4"	8'-8 1/4"	24'-6 1/4"
80 FEET	13'-2"	15'-8 1/2"	11'-10 1/2"	18'-11 3/4"	10'-10 3/4"	21'-10"	10'-1"	24'-4 3/4"	9'-5"	26'-8 3/4"
90 FEET	14'-1 1/2"	17'-1 1/2"	12'-8 1/4"	20'-6 1/2"	11'-7 3/4"	23'-7"	10'-9 3/4"	26'-3 3/4"	10'-1 1/4"	28'-9 1/2"
100 FEET	14'-10 1/2"	18'-3 3/4"	13'-5 1/2"	22'-0"	12'-4 1/4"	25'-2 3/4"	11'-5 3/4"	28'-1 1/2"	10'-9"	30'-9"

INTERMEDIATE RADII CAN BE INTERPOLATED



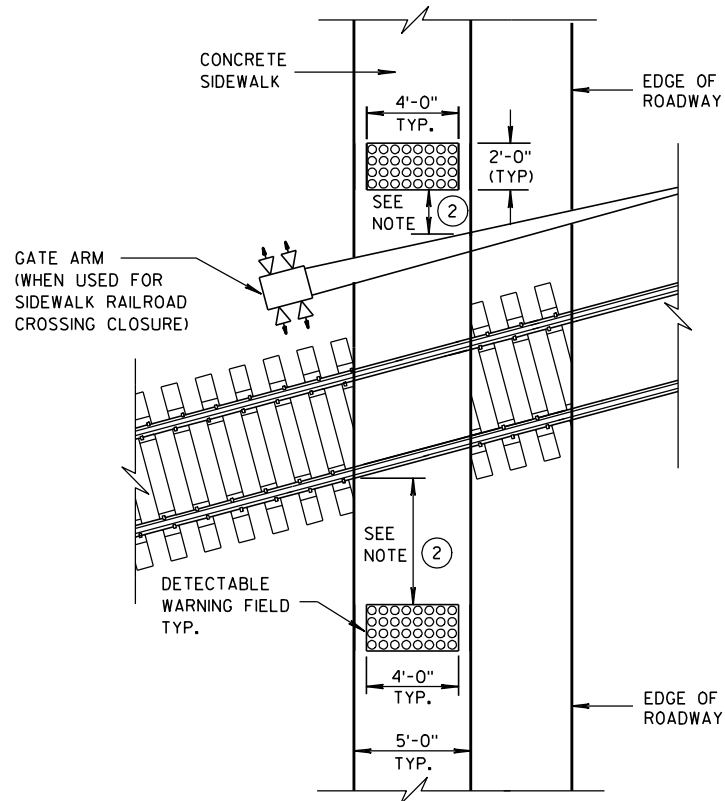
ISOMETRIC VIEW

LEGEND

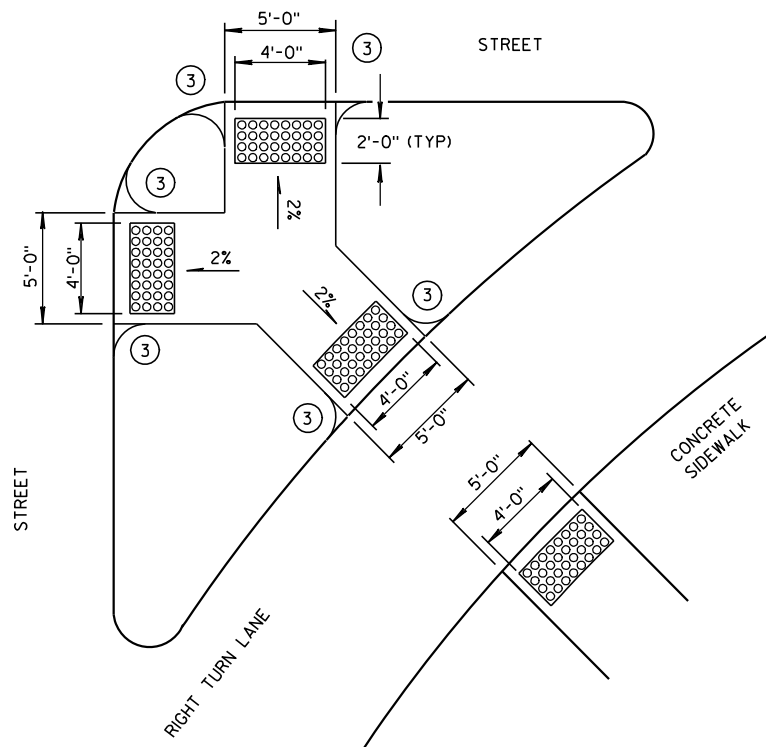
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

**CURB RAMPS
TYPE 4B**

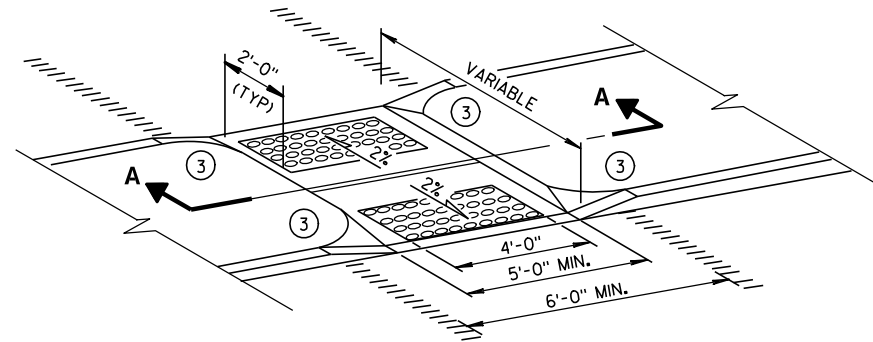
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



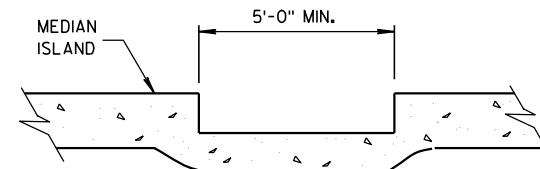
TYPE 8
DETECTABLE WARNINGS
AT RAILROAD CROSSING



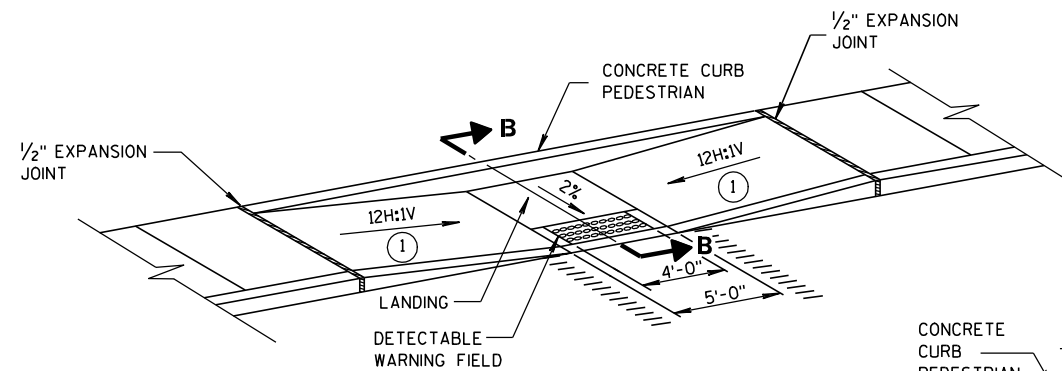
TYPE 6
DETECTABLE WARNING AT ISLANDS



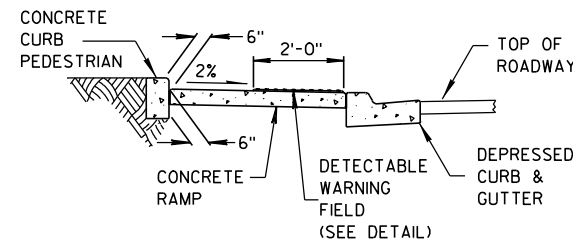
MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5



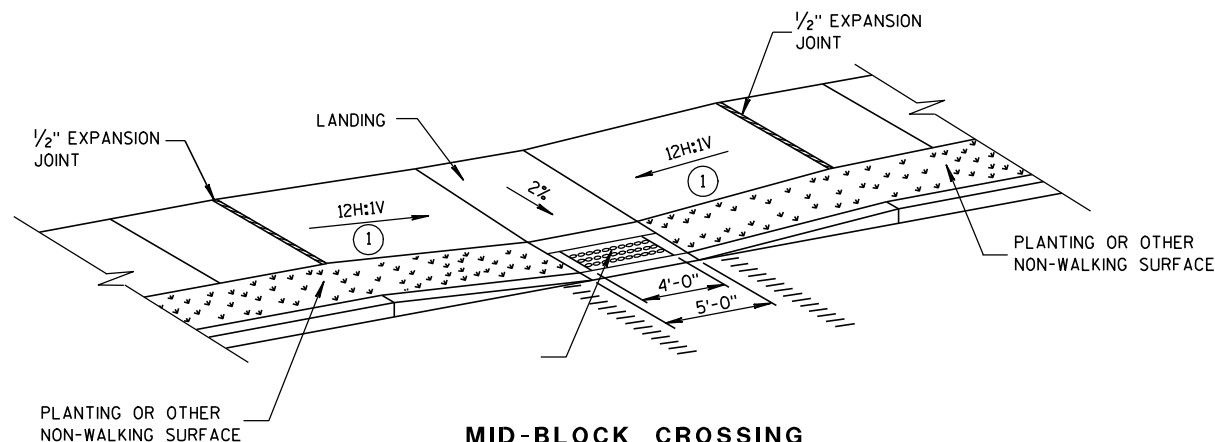
SECTION A-A



MID-BLOCK CROSSING
TYPE 7A



SECTION B-B



MID-BLOCK CROSSING
TYPE 7B

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS
MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

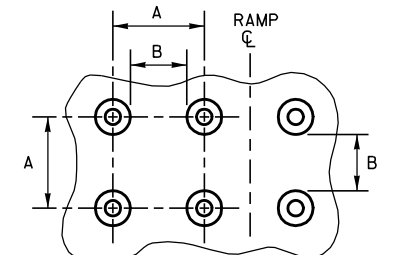
GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

- 1 SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.
- 2 THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET $\pm$ 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.
- 3 INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

LEGEND

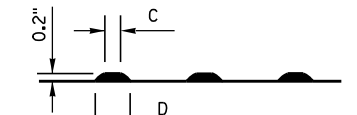
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



PLAN VIEW

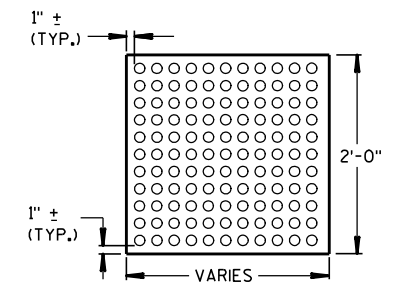
	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING
PATTERN DETAIL



PLAN VIEW

DETECTABLE WARNING
FIELD (TYPICAL)

CURB RAMPS
TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

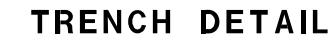
2-9-10
DATE

FHWA

/s/ Jerry H. Zogg
ROADWAY STANDARDS 56 ENT
ENGINEER



- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1½" X 1½" OF OAK OR HICKORY.
- ④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- ⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.

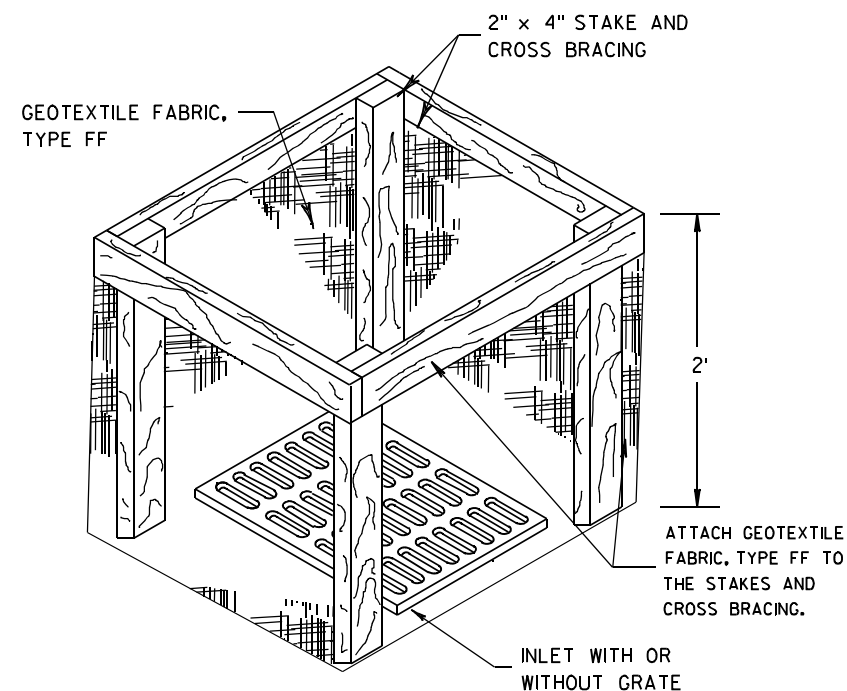
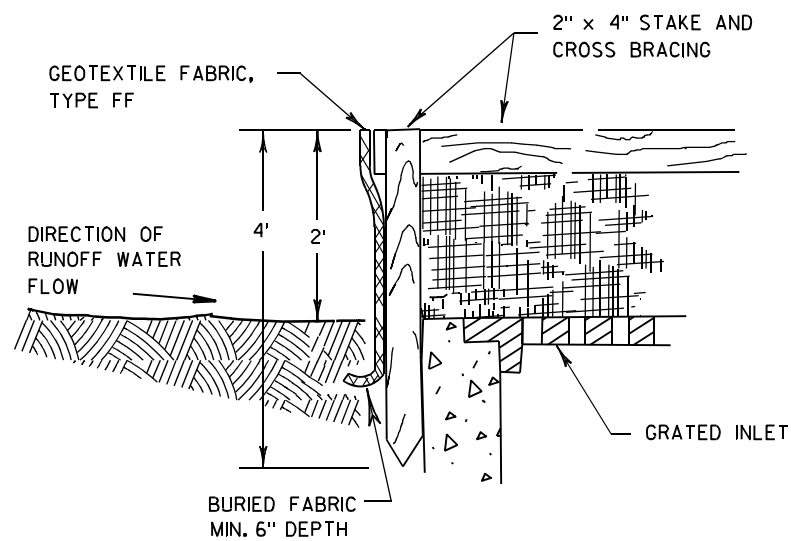


SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-29-05
DATE /S/ Beth Cannata
CHIEF ROADWAY DEVELOPMENT 57 INCHES

FHWA



INLET PROTECTION, TYPE A

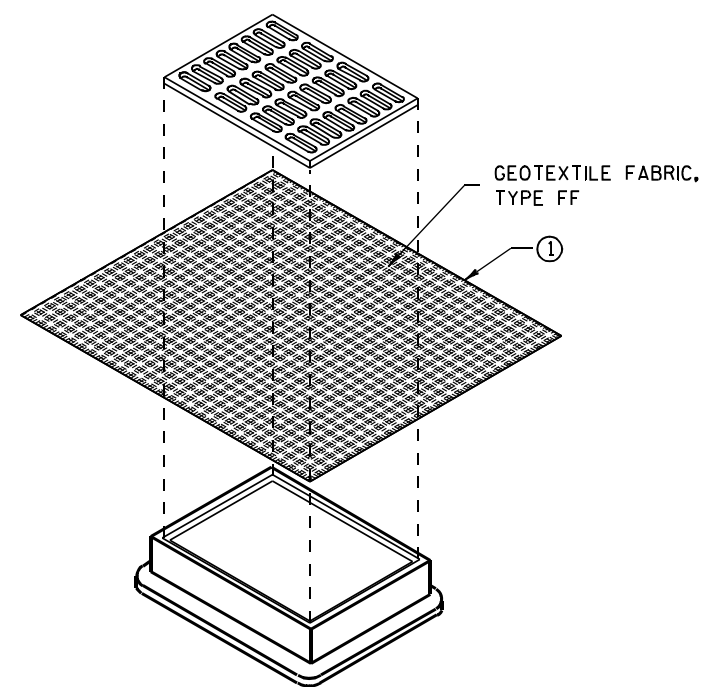
GENERAL NOTES

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

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

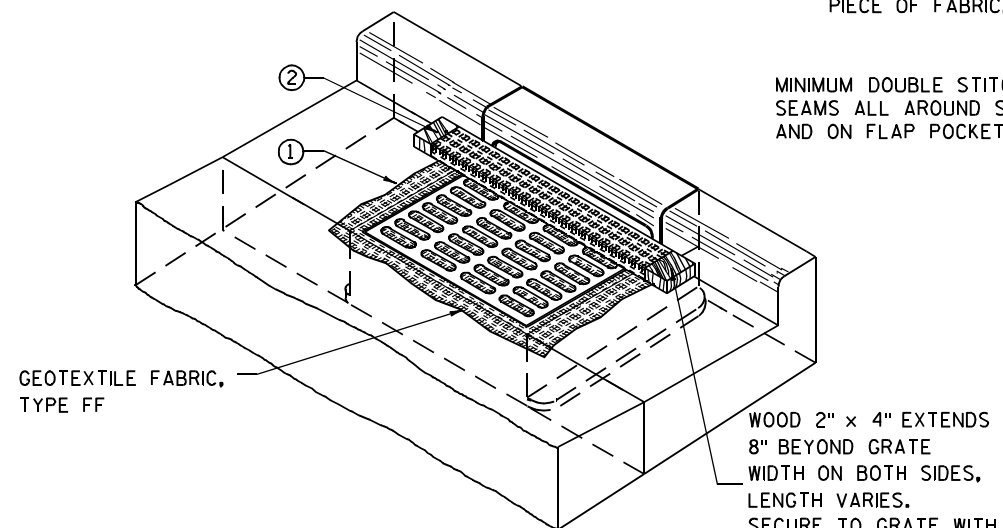
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

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



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

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

INSTALLATION NOTES

TYPE B & C

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

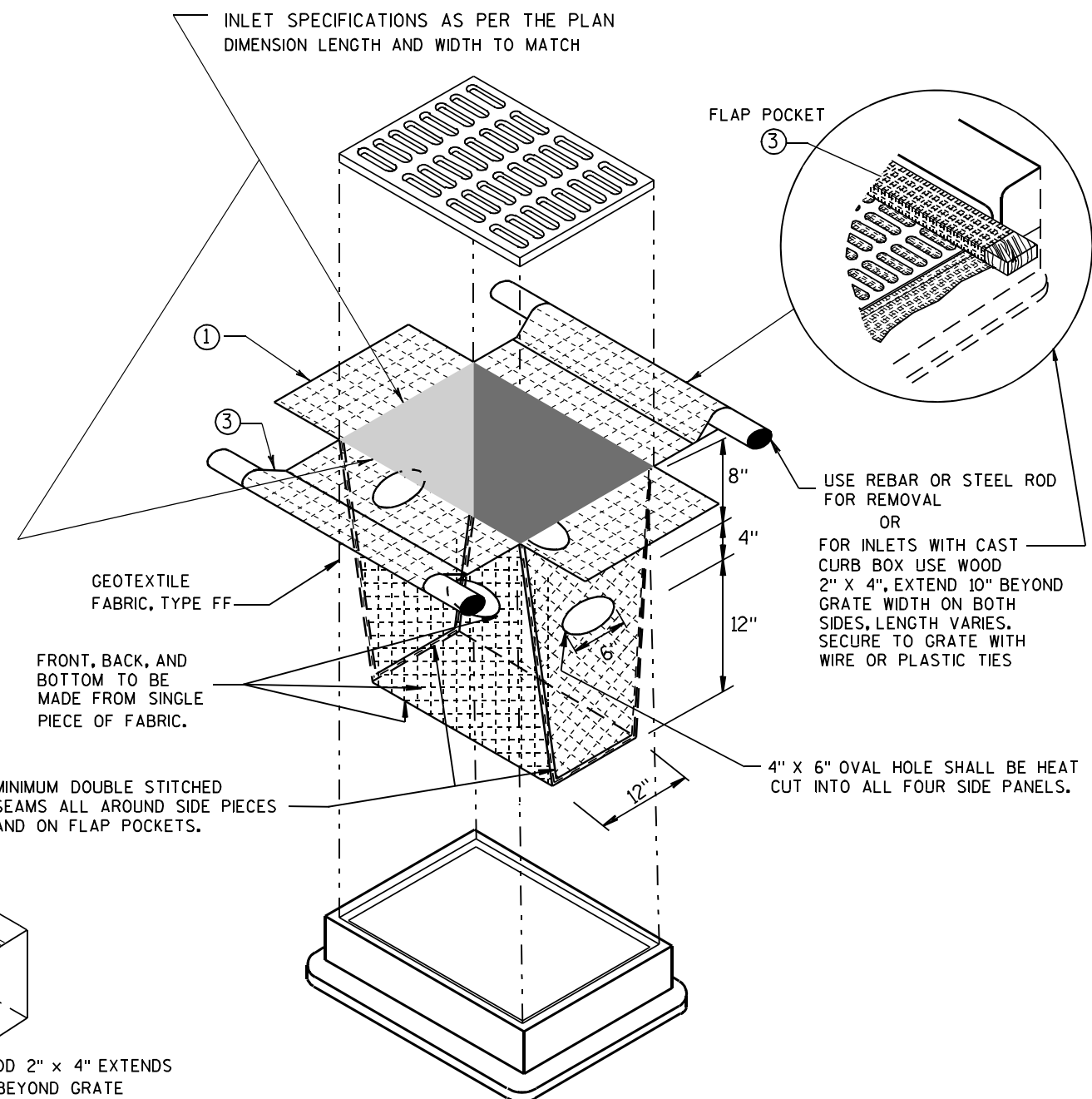
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

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

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

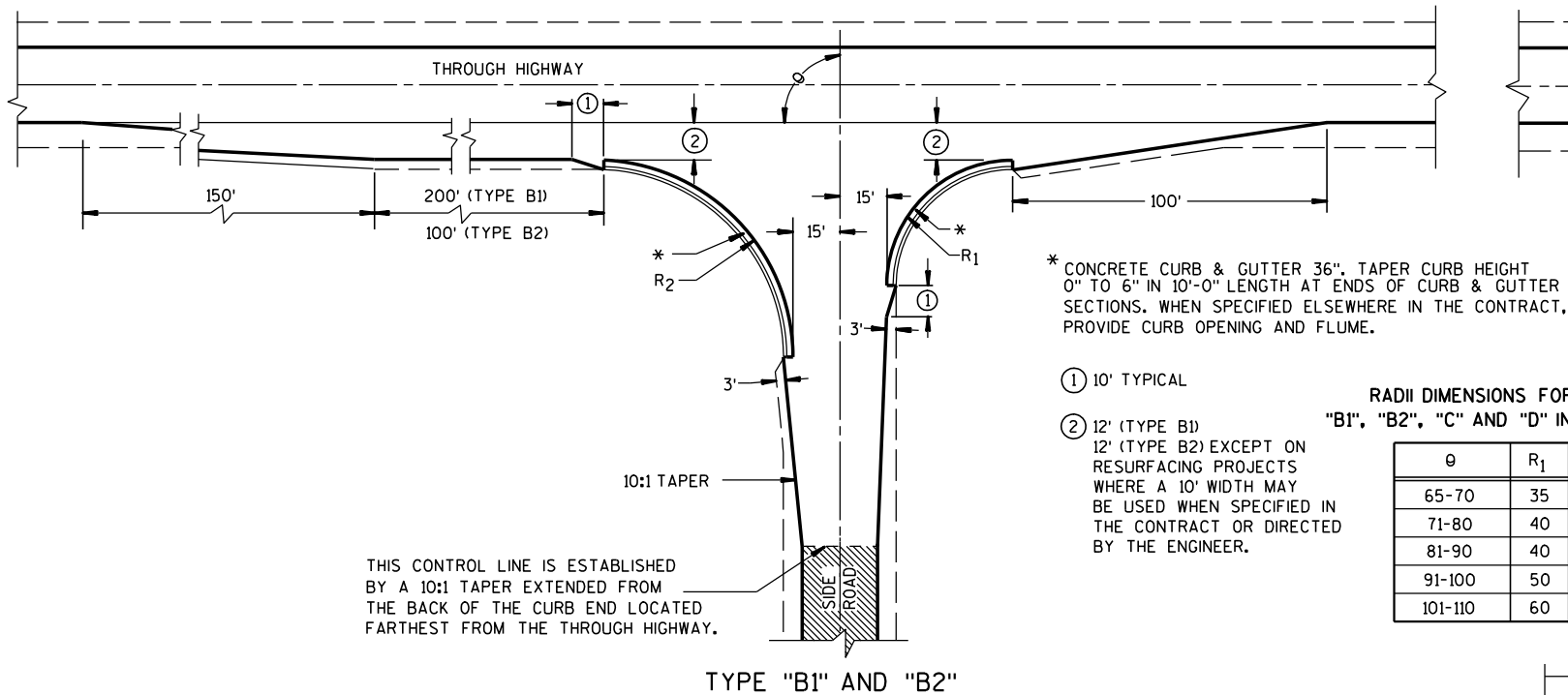
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE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



INLET PROTECTION, TYPE D

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

INLET PROTECTION TYPE A, B, C, AND D	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 10/16/02 DATE	/S/ Beth Connolly 58 CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA	



GENERAL NOTES

DESIGNS MAY BE USED INTERCHANGEABLY IN COMBINATION OR SEPARATELY FOR ANY ONE COMPLETE INTERSECTION DEPENDING UPON INTERSECTION ANGLE AND SURFACING OF EACH APPROACH ROADWAY.

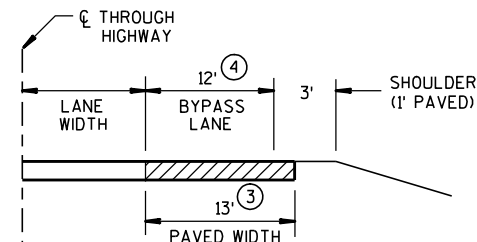
SIDE ROAD SURFACING NOTE

WHEN THE SIDE ROAD IS NOT PRESENTLY PAVED, PAVEMENT SHALL BE PLACED TO THE LIMITS SHOWN UNLESS OTHERWISE PROVIDED IN THE CONTRACT. WHERE THE CONSTRUCTION LIMITS ARE BEYOND THE PAVING LIMITS, CRUSHED AGGREGATE SURFACING SHALL BE PLACED BETWEEN THE PAVING LIMITS AND CONSTRUCTION LIMITS.

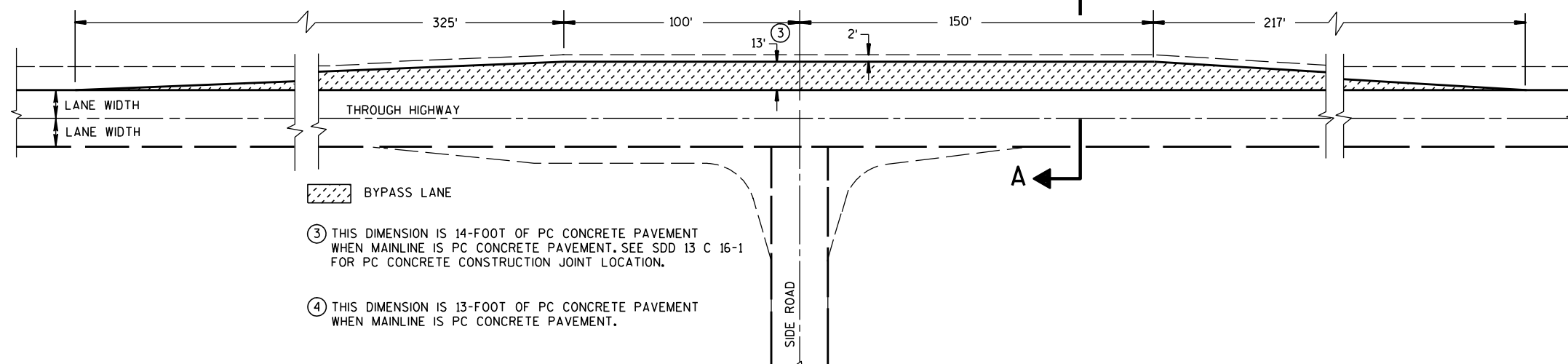
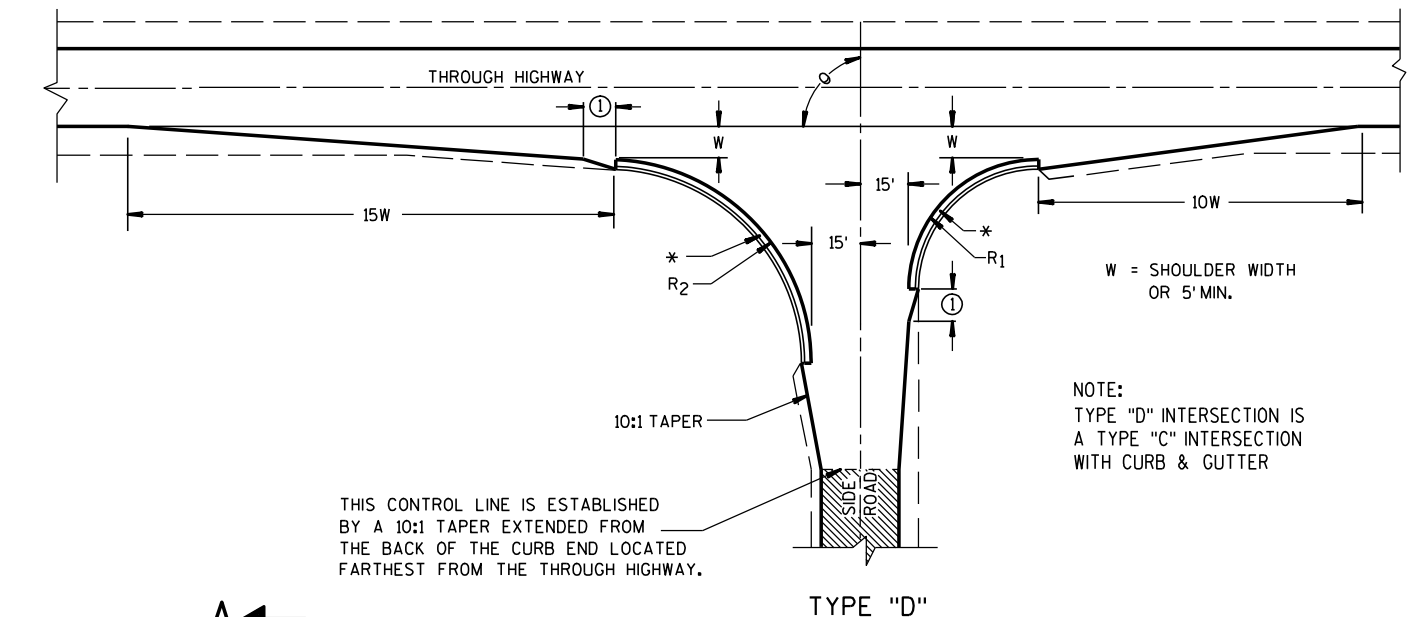
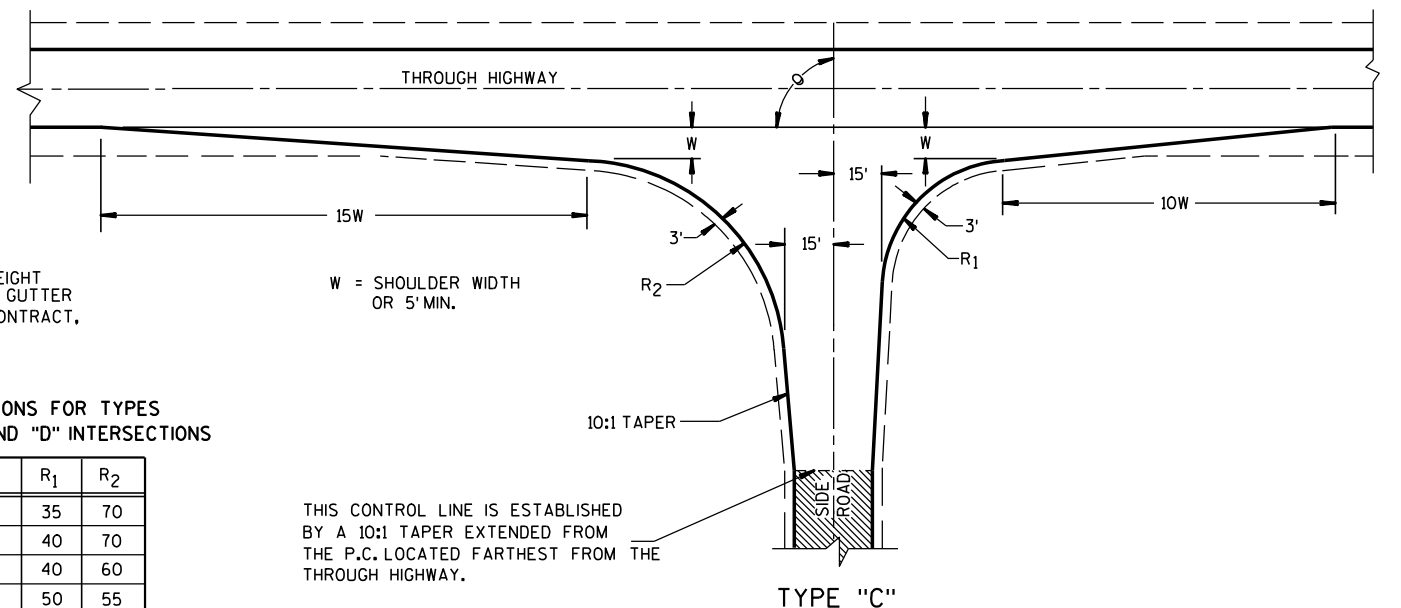
WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

WHEN THE SIDE ROAD IS THE CONSTRUCTION PROJECT, THE INTERSECTION SURFACING SHALL BE THE SAME AS FOR THE PROJECT.

EXISTING SURFACE



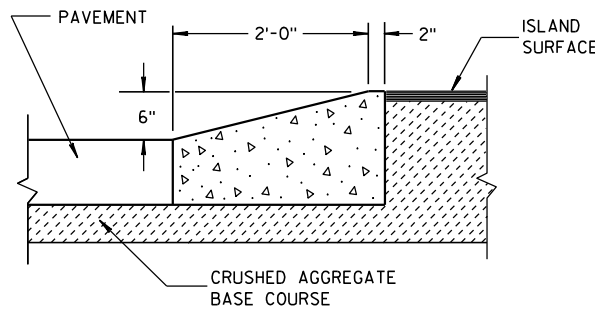
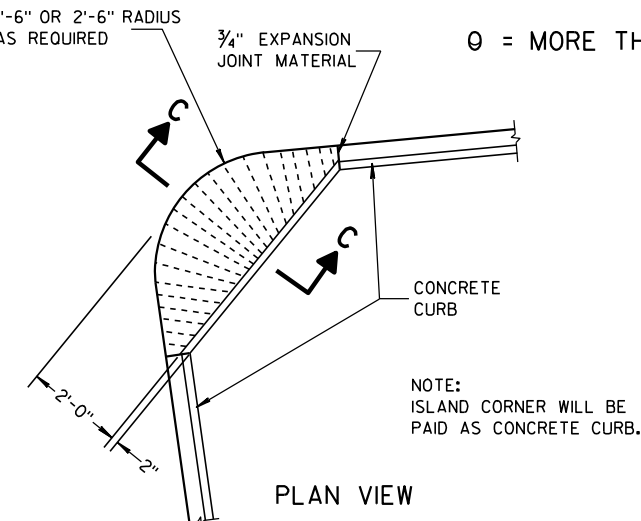
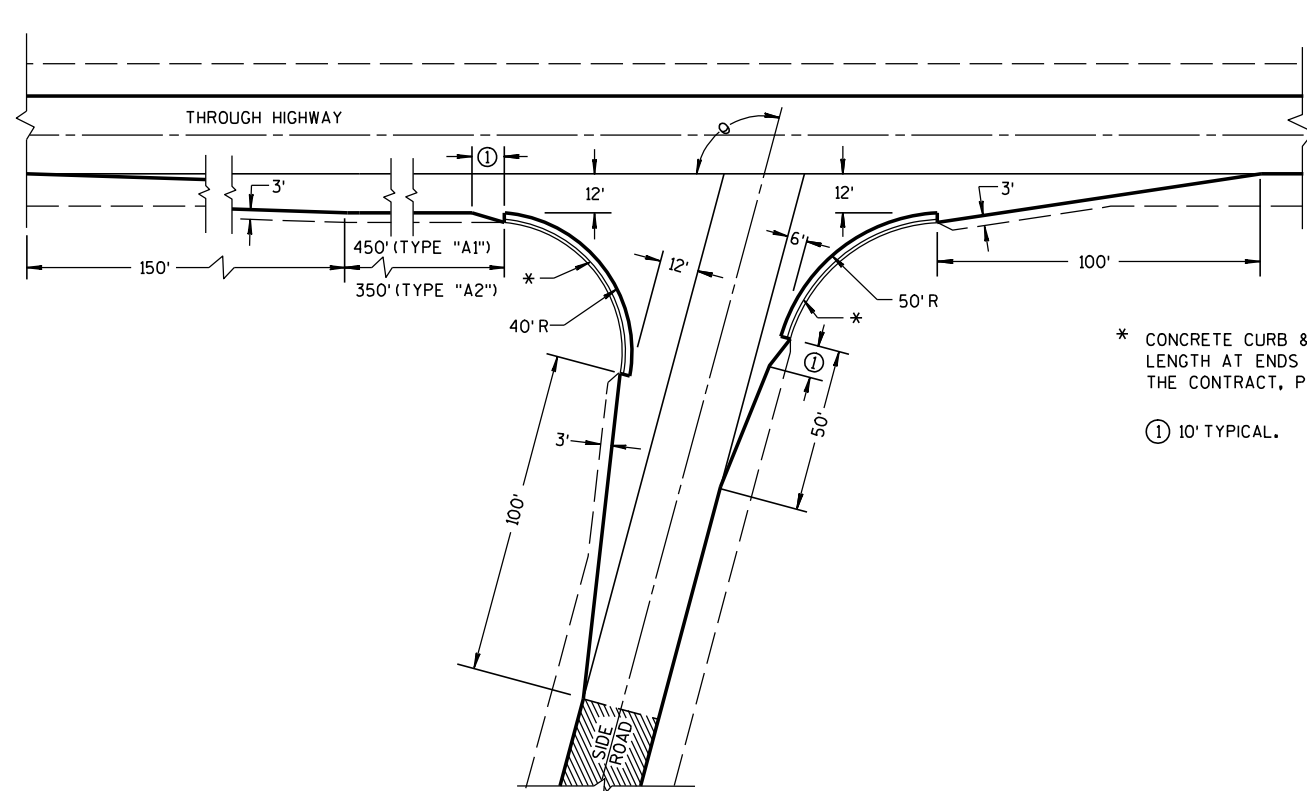
SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)



TEE INTERSECTION BYPASS LANE DETAIL

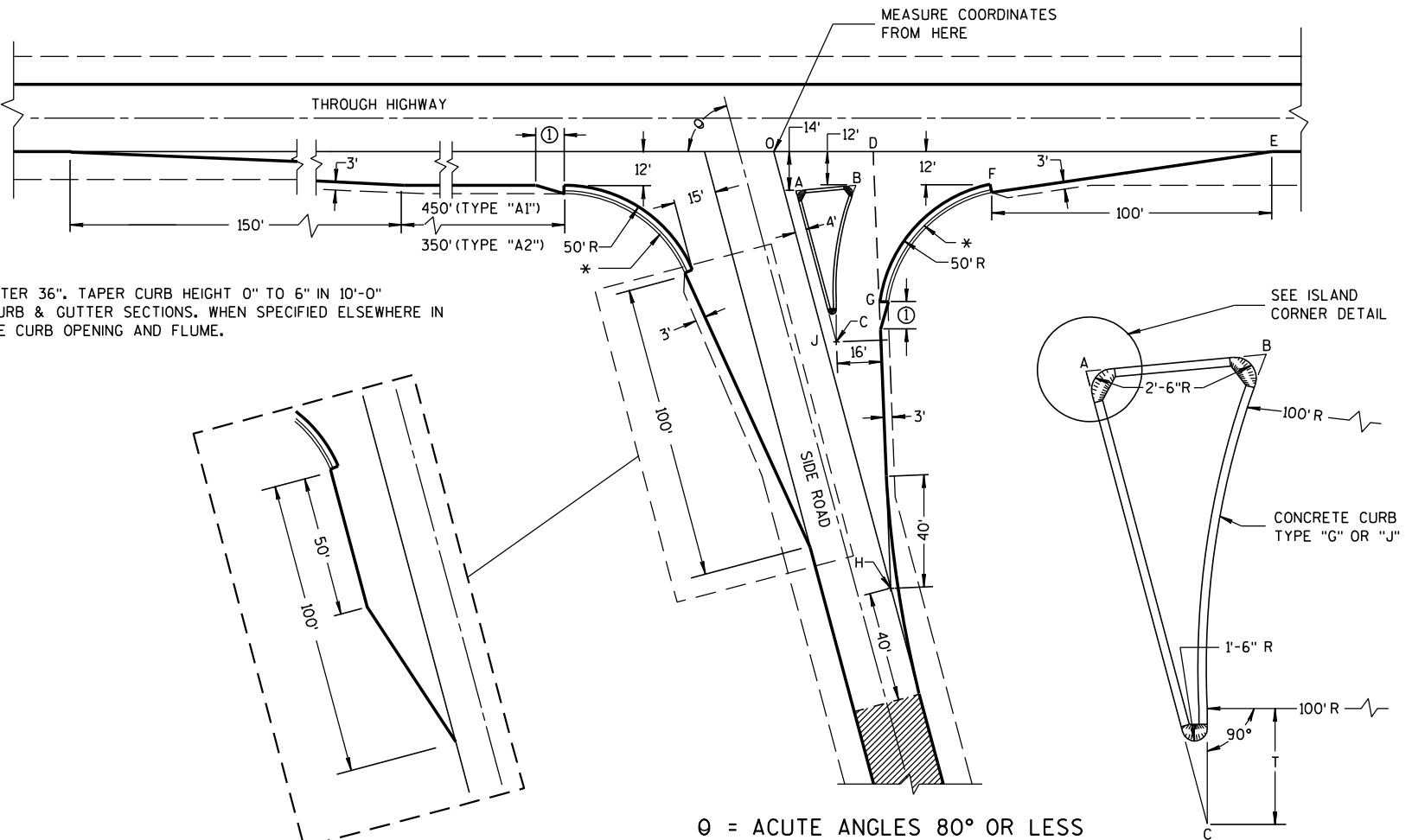
AT-GRADE SIDE ROAD
INTERSECTION, TYPES "B1", "B2",
"C" AND "D" AND TEE
INTERSECTION BYPASS LANE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



ISLAND CORNER DETAIL
(TO BE CONSTRUCTED AT ALL ISLAND CORNERS)

* CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.
① 10' TYPICAL.



SIDE ROAD WIDENING AND TAPER REQUIRED WHERE THE THROUGH HIGHWAY CARRIES TWO-WAY TRAFFIC
 θ = ACUTE ANGLES 70° OR LESS

TABLE OF DIMENSIONS FOR
VARIABLE SIDE ROAD INTERSECTION ANGLES
(INTERPOLATE VALUES FOR ANGLES NOT SHOWN)

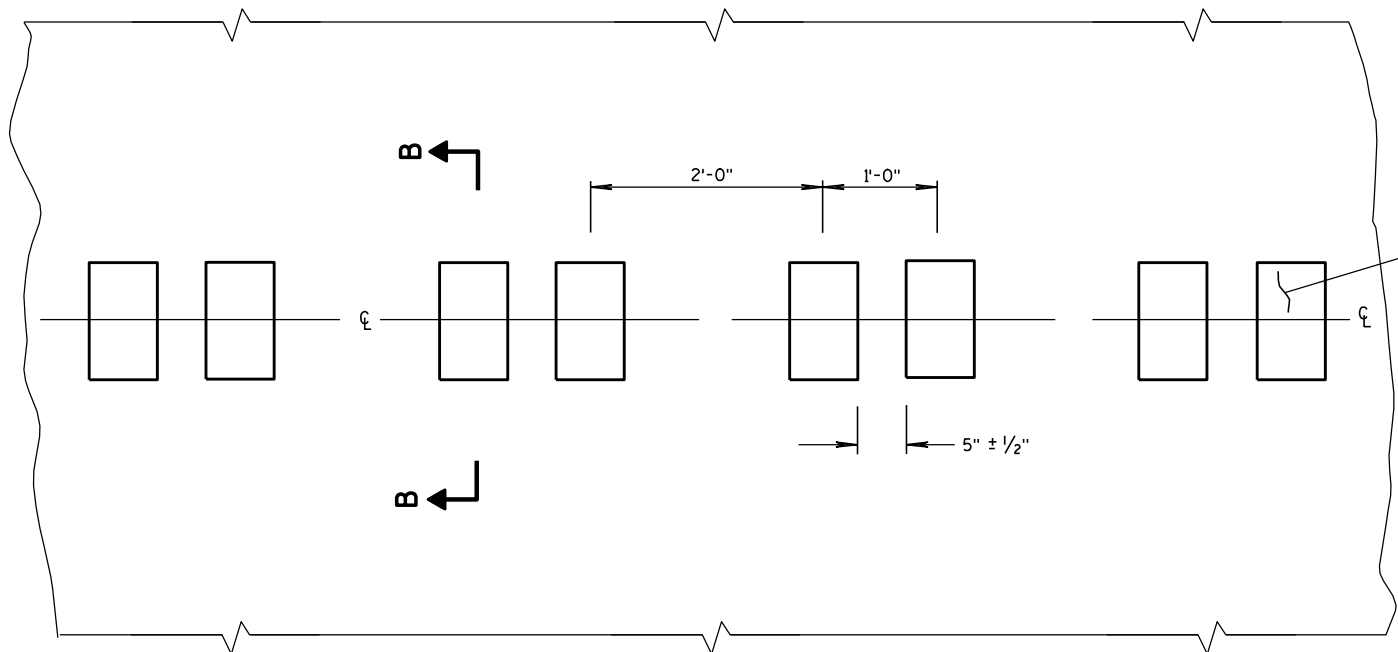
ANGLE θ DEGREES	COORDINATES IN FEET (MEASURED FROM POINT "O")								LENGTH IN FEET				
	A	B	C	D	E	F	G	H	AB	AC	T	OJ	OH
60	12.7	44.9	46.4	41.9	205.0	104.6	64.0	85.0	32.3	67.4	4.9	85.9	169.9
	-14.0	-12.0	-72.4	0.0	0.0	-12.0	-75.5	-147.1					
65	10.9	39.0	37.8	39.4	196.1	95.7	54.1	70.5	28.2	63.6	8.5	80.9	166.9
	-14.0	-12.0	-71.6	0.0	0.0	-12.0	-71.5	-151.3					
70	9.4	33.9	29.8	37.4	188.3	87.8	45.6	56.1	24.6	59.7	11.5	76.1	164.1
	-14.0	-12.0	-70.1	0.0	0.0	-12.0	-67.5	-154.2					
75	7.9	29.3	22.3	35.7	181.2	80.7	38.2	41.8	21.5	55.8	13.8	71.4	161.4
	-14.0	-12.0	-67.9	0.0	0.0	-12.0	-63.4	-155.9					
80	6.5	25.4	15.6	34.4	174.8	74.4	31.8	27.6	18.9	52.0	15.6	66.9	158.9
	-14.0	-12.0	-65.2	0.0	0.0	-12.0	-59.3	-156.5					

TYPE "A1" & "A2" SIDE ROAD INTERSECTION DETAILS

AT-GRADE SIDE ROAD
INTERSECTION, TYPE "A1" & "A2"

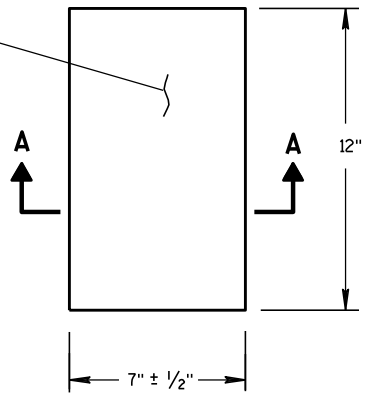
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/17/02 DATE /S/ Beth Conn-----
CHIEF ROADWAY DEVELOPER
FHWA



PLAN VIEW
CENTER LINE WITH GROOVES

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP



PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

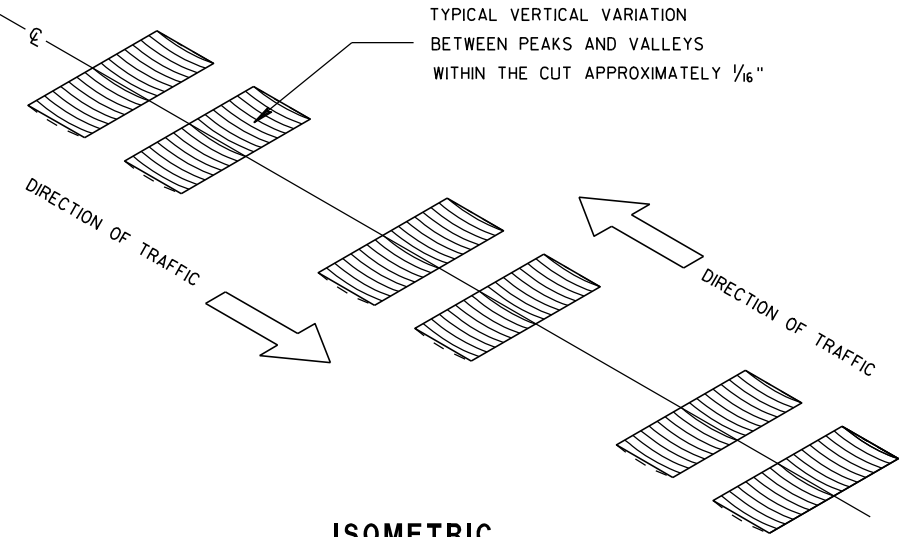
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

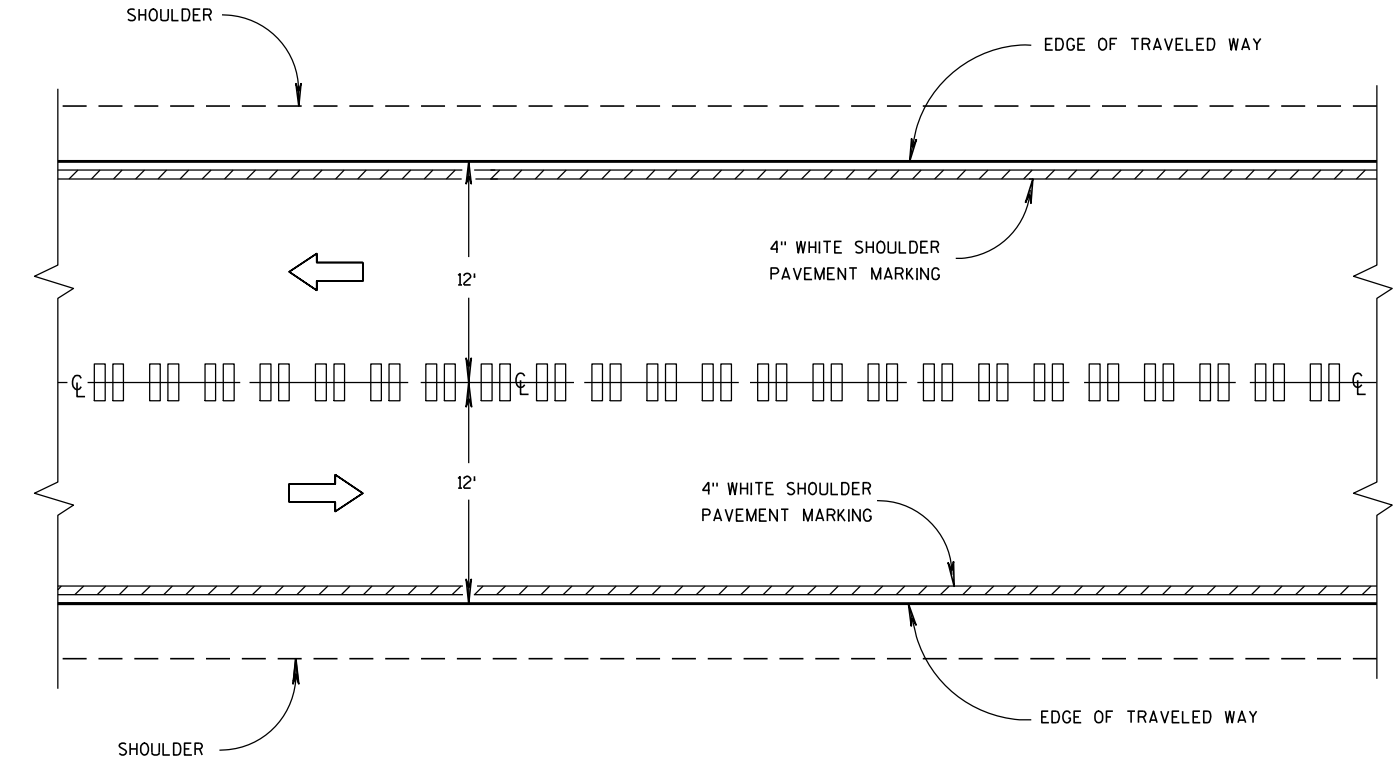
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

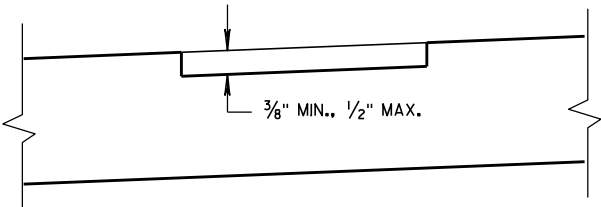
① CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



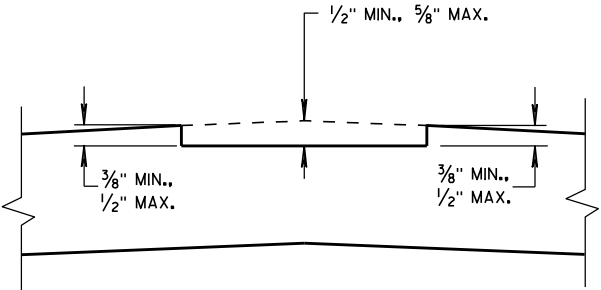
ISOMETRIC



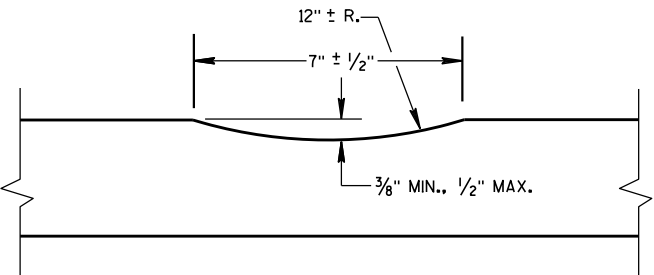
CENTER LINE GROOVES ON TWO-WAY ROADWAYS



SECTION B-B
SUPERELEVATED ROADWAY



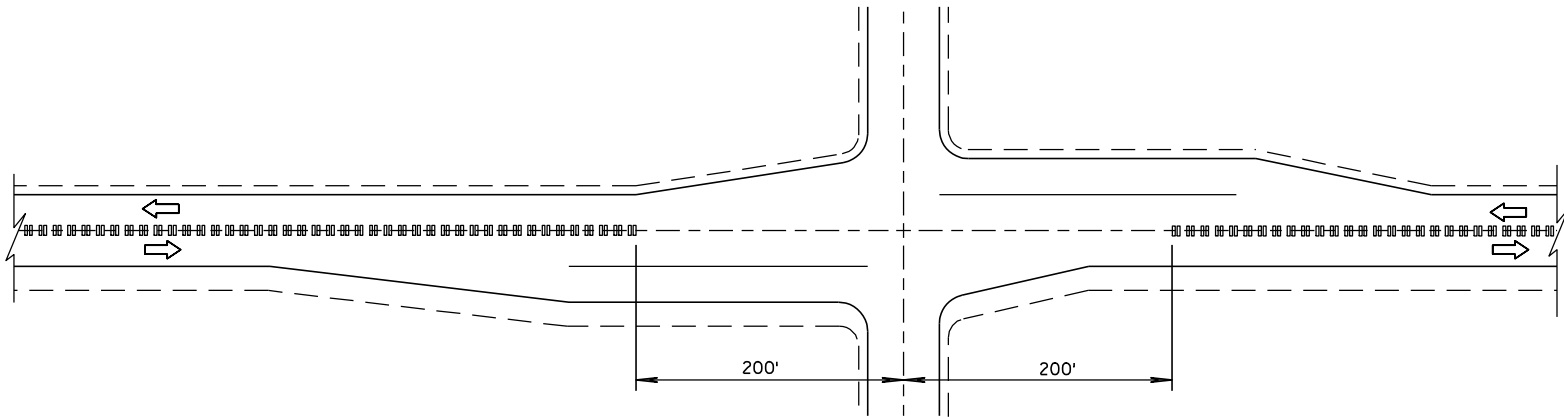
SECTION B-B
CROWNED ROADWAY



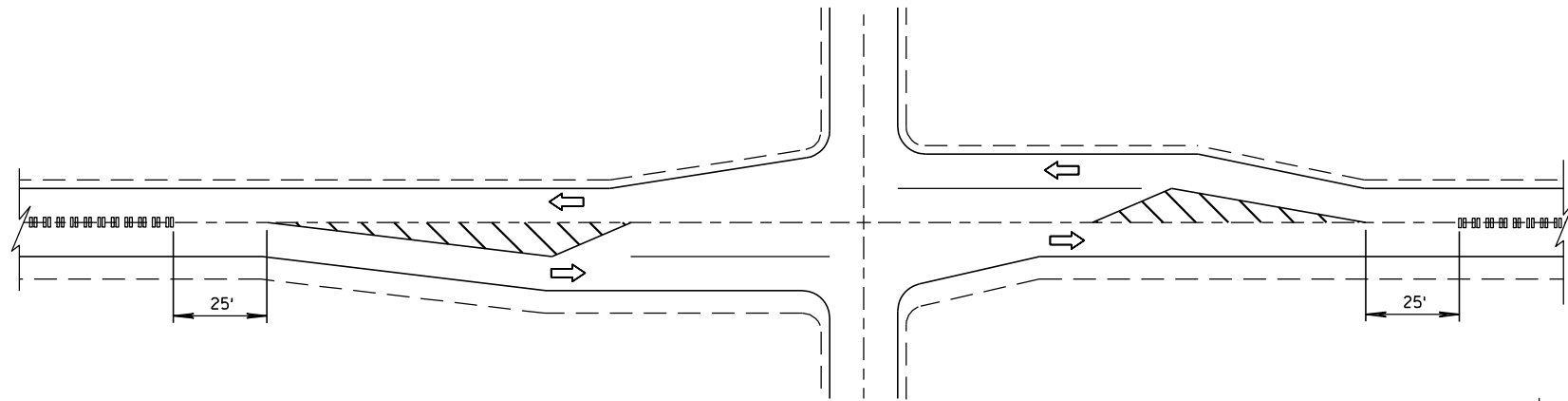
SECTION A-A

2-LANE RURAL
CENTER LINE RUMBLE STRIP,
MILLING

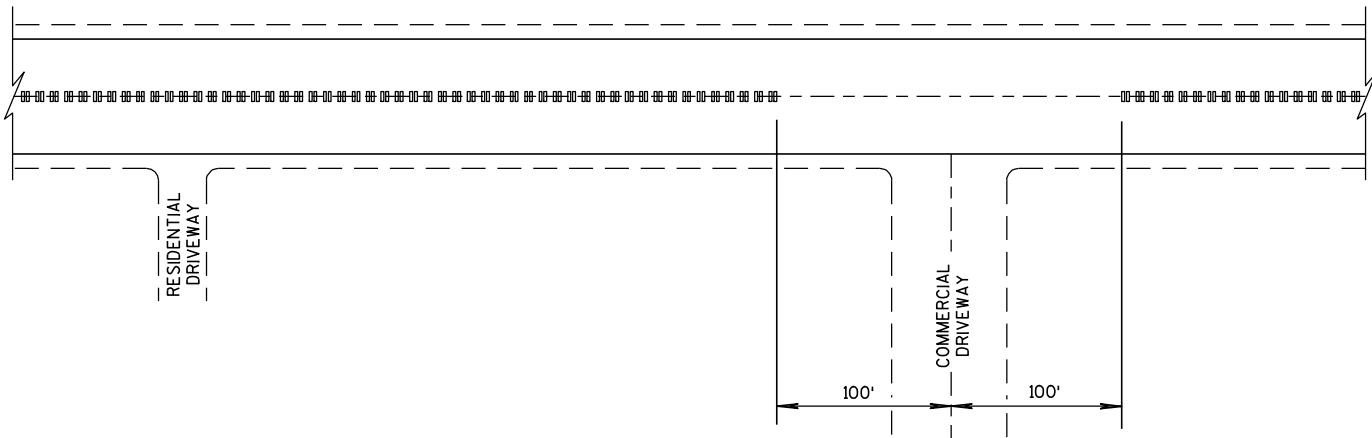
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CENTER LINE GROOVES AT INTERSECTIONS

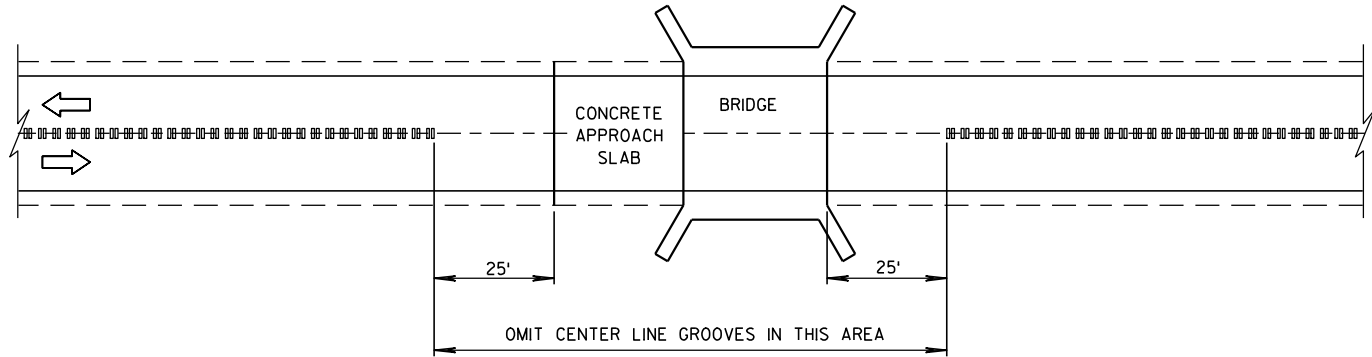


CENTER LINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)

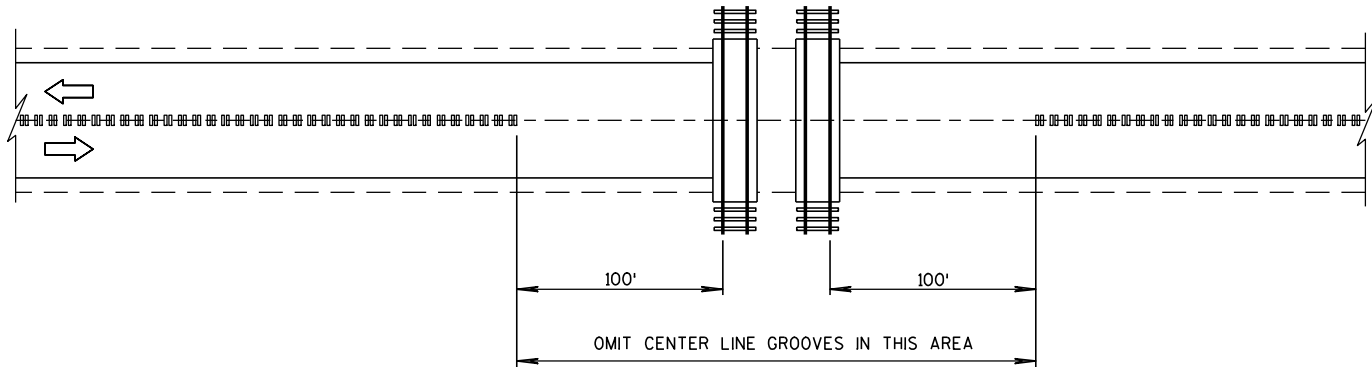


CENTER LINE GROOVES AT DRIVEWAYS¹

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



CENTER LINE GROOVES AT BRIDGES

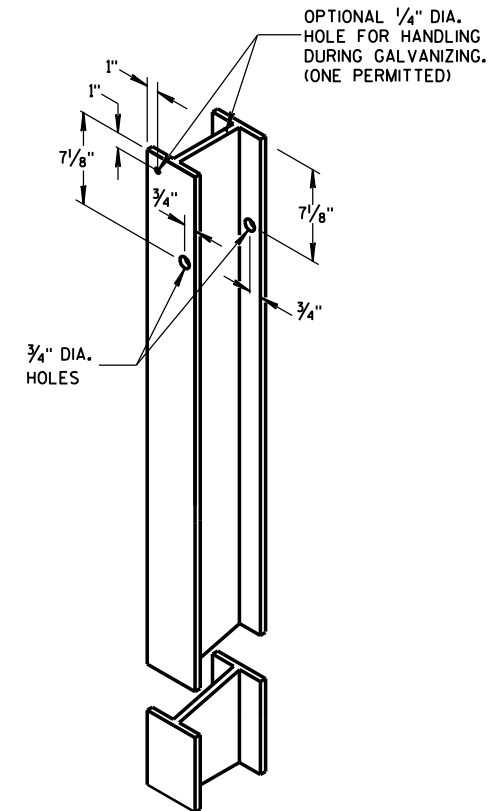
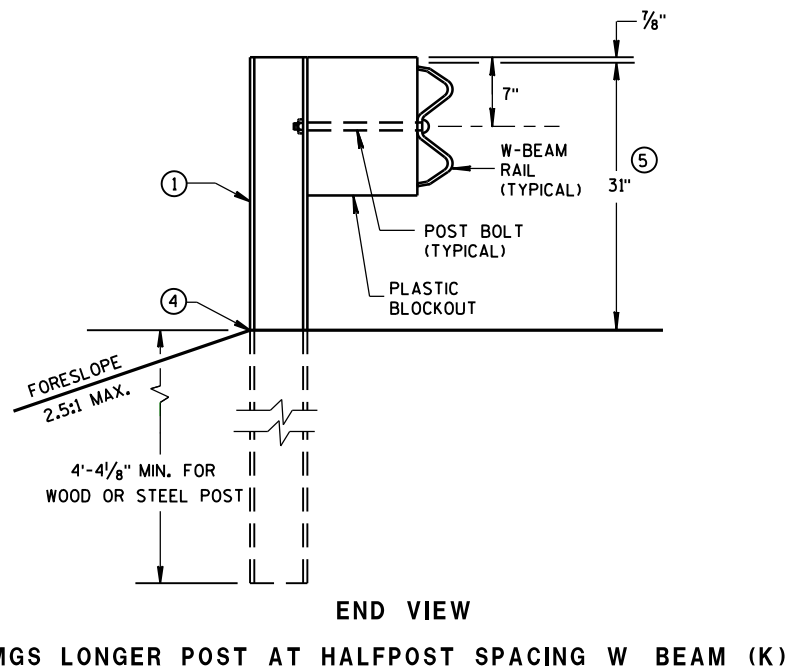
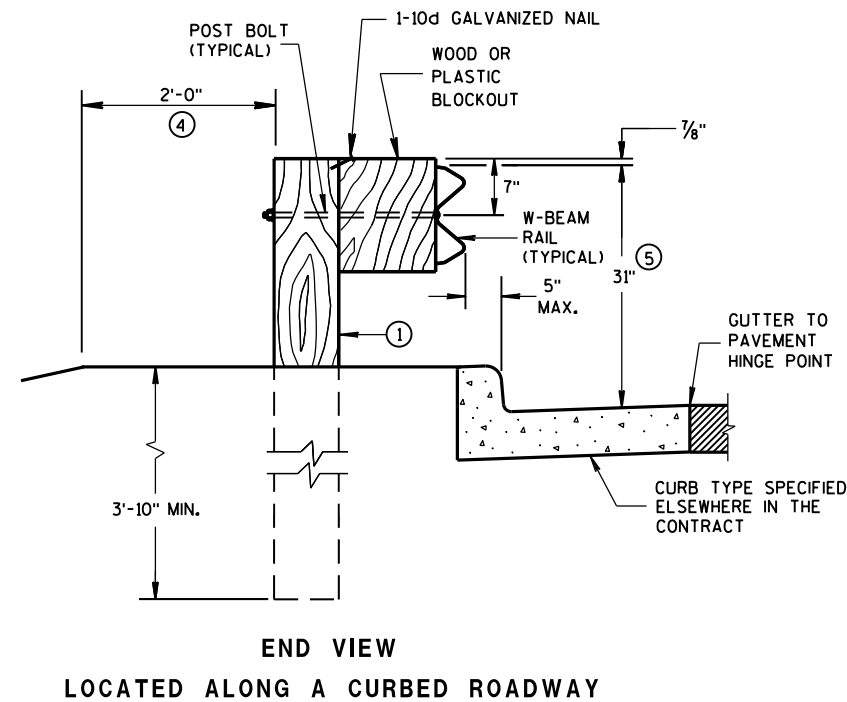
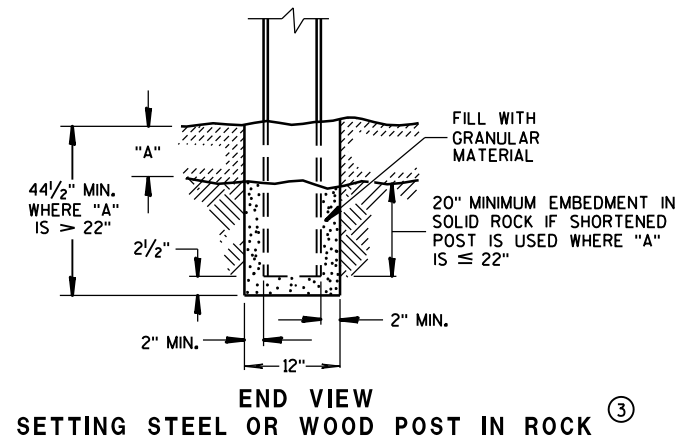


CENTER LINE GROOVES AT RAILROADS

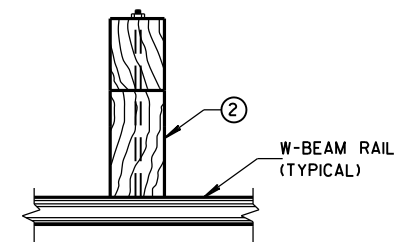
2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING		
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION		
APPROVED 8/28/2012 DATE	/S/ Jerry H. Zogg ROADWAY STANDARDS 162 ENGINEER	ENT
FHWA		

S.D.D. 14 B 42-2a

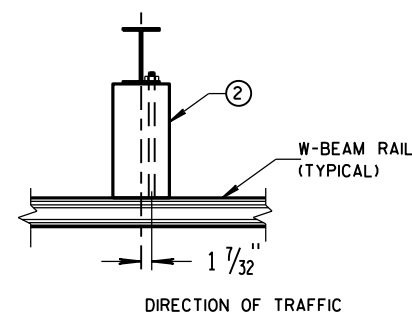
- S.D.D. 14 B 42-2a**



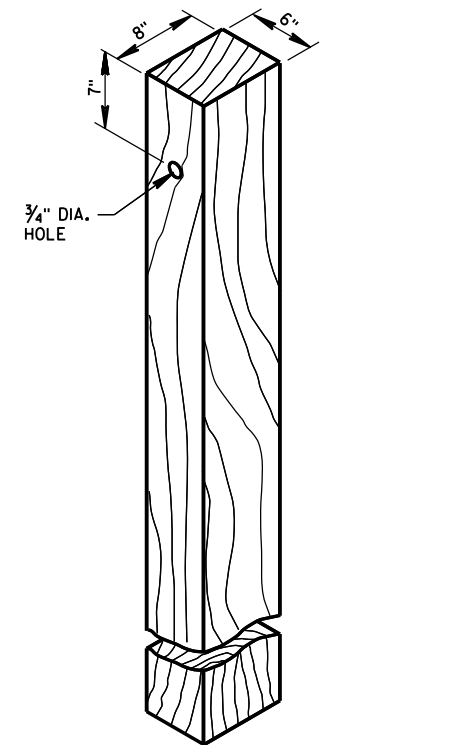
**STEEL POST &
HOLE PUNCHING DETAIL
(w6X9)^①**



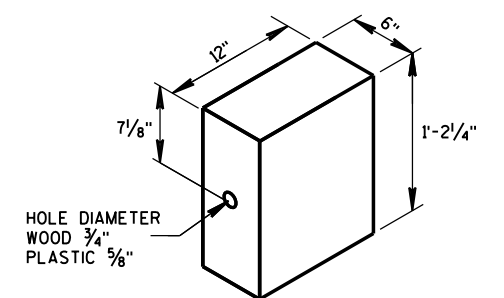
PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



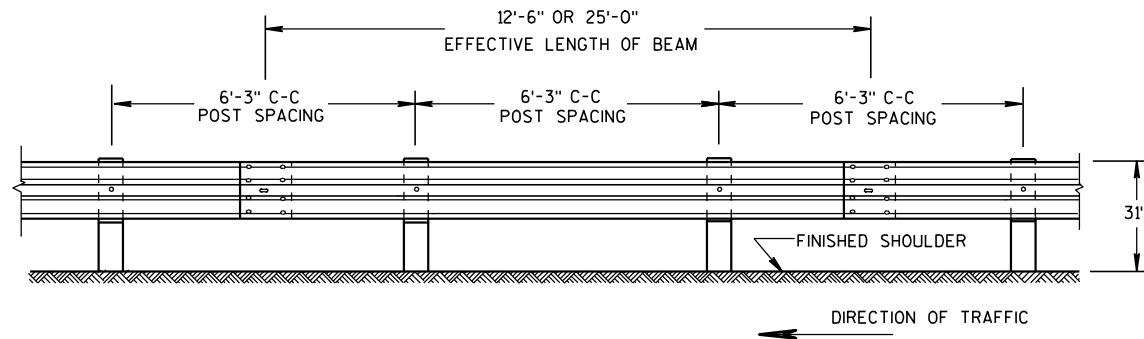
PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM



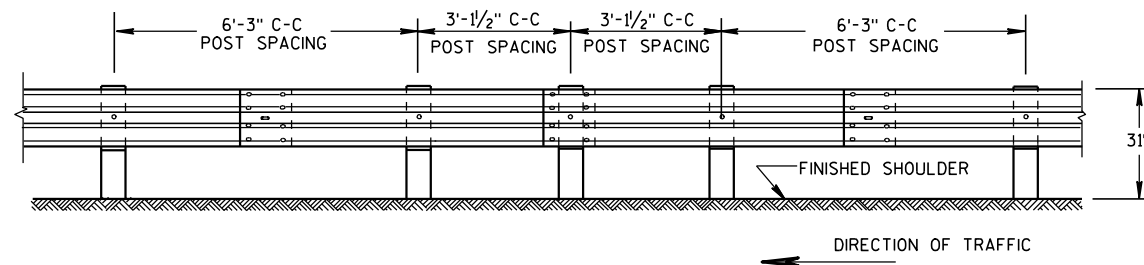
WOOD POST
(6" X 8") NOMINAL ①



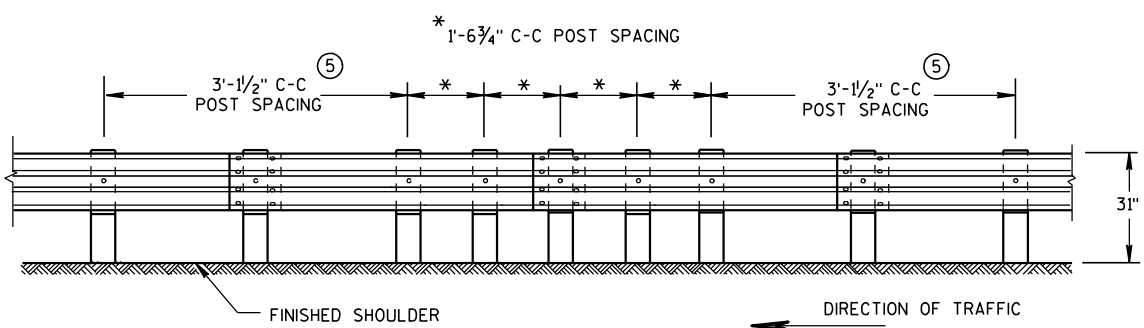
**WOOD OR
PLASTIC BLOCKOUT** ②



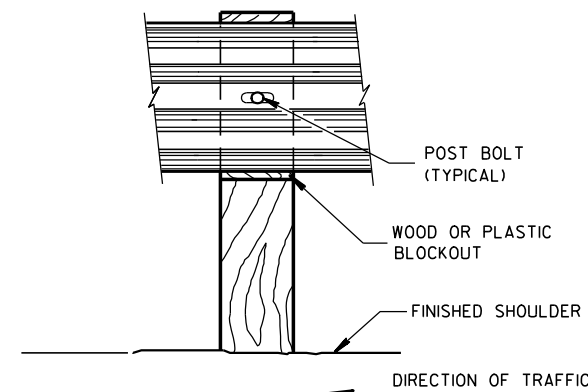
FRONT VIEW
POST SPACING STANDARD INSTALLATION



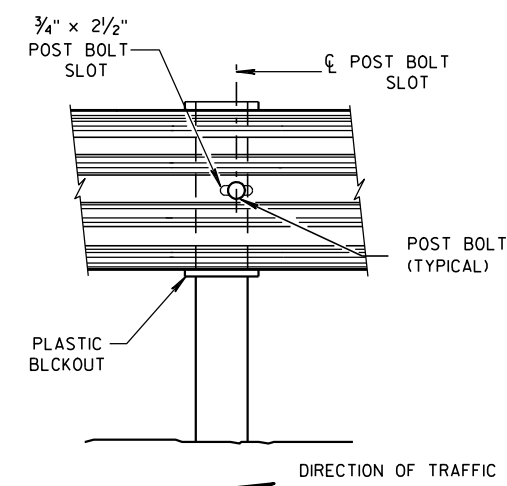
FRONT VIEW
**HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)**



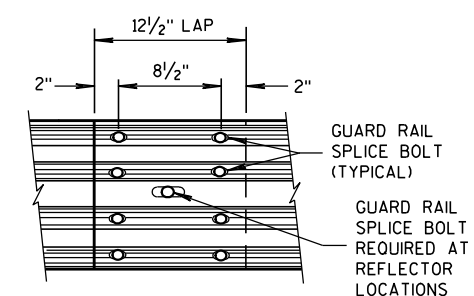
FRONT VIEW
QUARTER POST SPACING (QS)



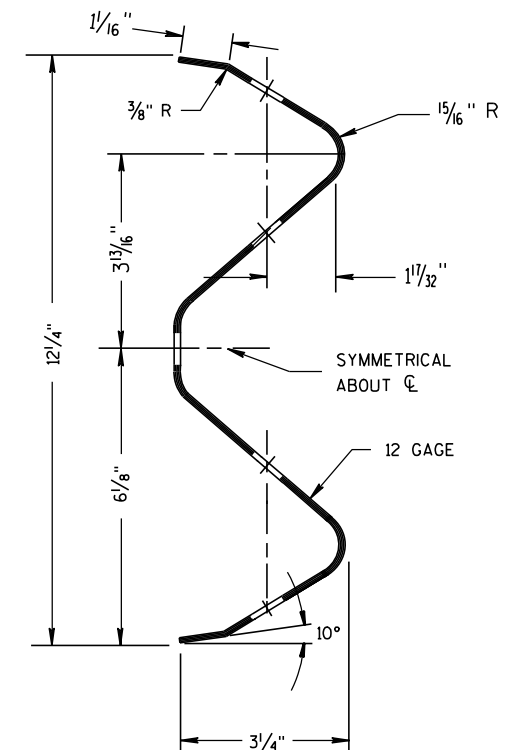
FRONT VIEW AT WOOD POST



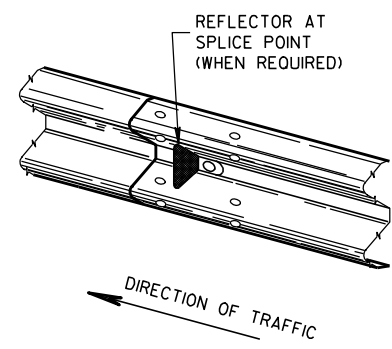
FRONT VIEW AT STEEL POST



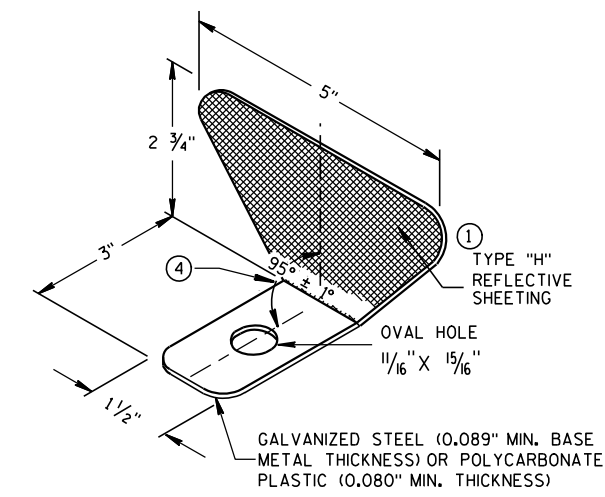
**FRONT VIEW
MID-SPAN BEAM SPLICE**



SECTION THRU W-BEAM RAIL



ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION



GENERAL NOTES

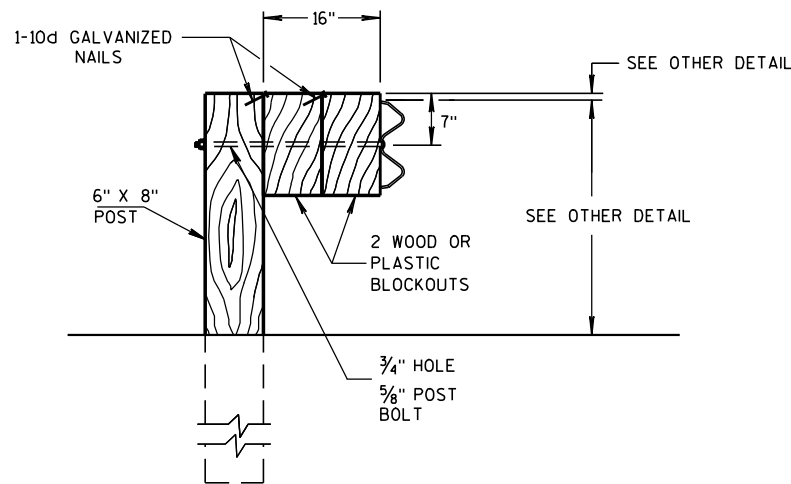
- ① PROVIDE TYPE "H" SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH TYPE "H" YELLOW REFLECTIVE SHEETING.
 - ② DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL. RAIL SPLICE LOCATIONS ARE THE ONLY ACCEPTABLE LOCATIONS FOR REFLECTORS.
 - ③ REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.
 - ④ PROVIDE AN ANGLE OF BEND OF 90° ± 1° FOR TWO-SIDED REFLECTORS.
 - ⑤ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.
- POST BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND 5/8" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.
- GUARD RAIL SPLICE BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

REFLECTOR SPACING

	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200'	50' C-C	1	3
	> 200'	100' C-C	1	
TWO WAY TRAFFIC	< 200'	25' C-C	1 ③	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2 ④	3
	> 200'	100' C-C	2	

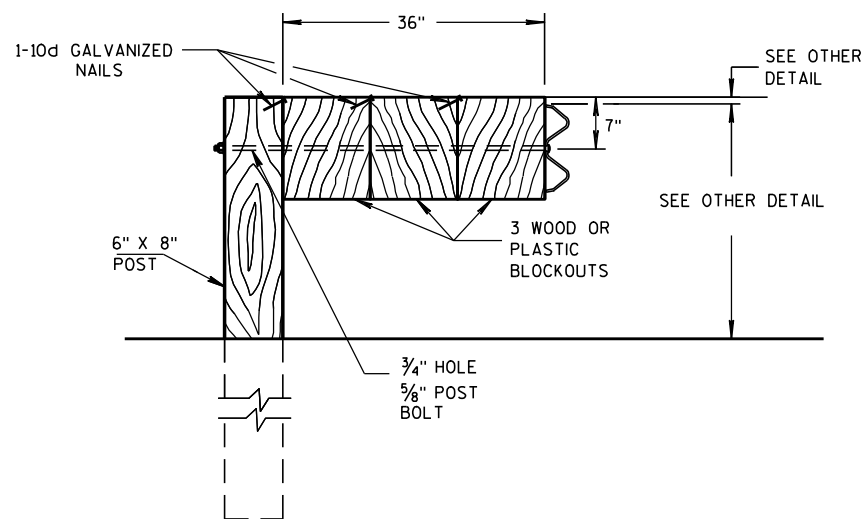
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

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DEPARTMENT OF TRANSPORTATION



DETAIL FOR 16" BLOCKOUT DEPTH

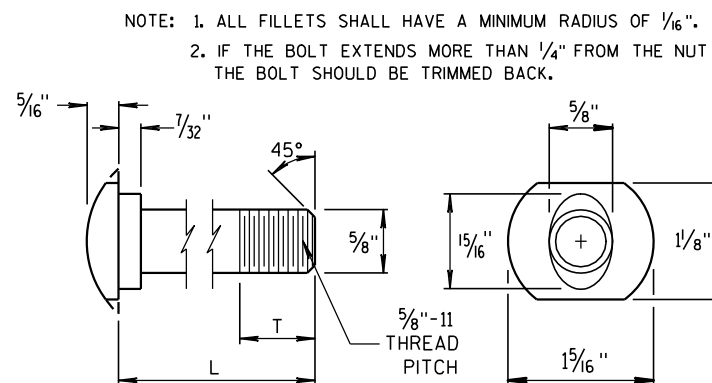
IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.



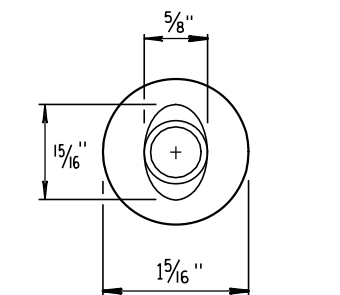
DETAIL FOR 36" BLOCKOUT DEPTH

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

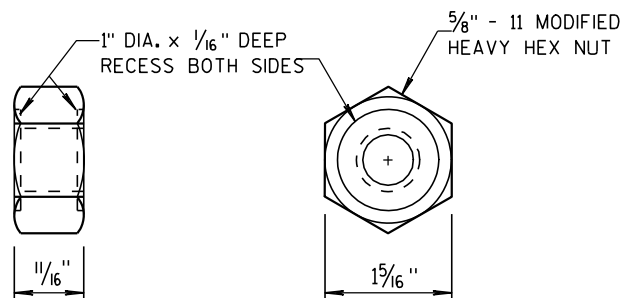
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.



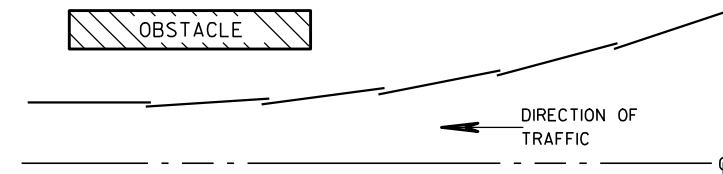
POST BOLT TABLE



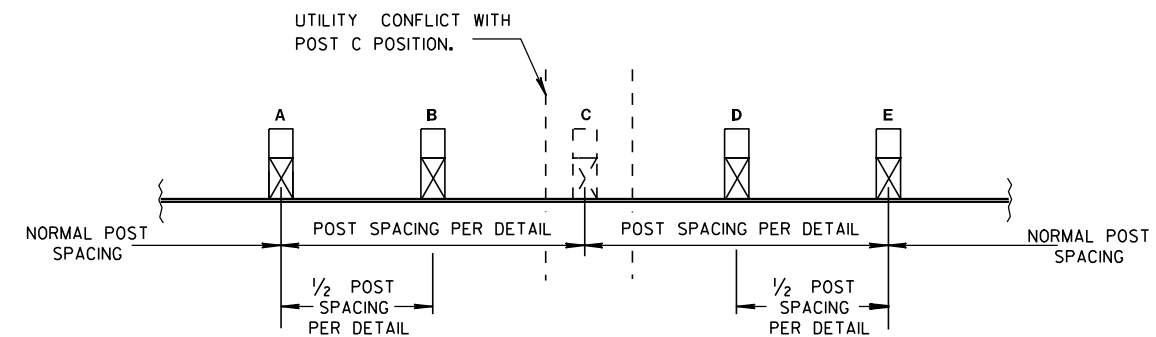
ALTERNATE BOLT HEAD



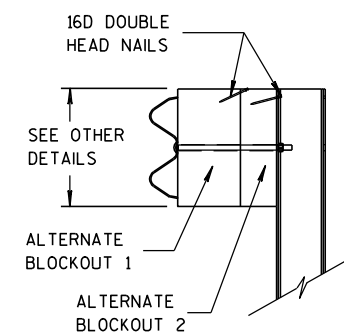
POST BOLT AND RECESS NUT



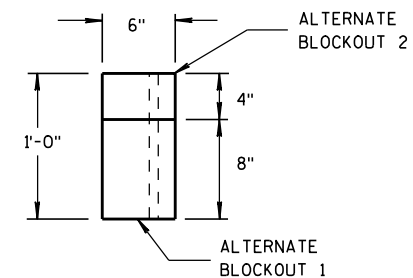
PLAN VIEW
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS
UNDERGROUND OBSTRUCTION



SIDE VIEW



TOP VIEW

ALTERNATE WOOD
BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/15/2011
DATE

FHWA

/S/ Jerry H. Zapp
ROADWAY STANDARDS ENGINEER

65 ENT

GENERAL NOTES

- (A) THE SLOPE IN THE AREA BOUNDED BY THE EXTENDED VEHICLE RUNOUT PATH (EVRP), THE HINGE POINT LINE (HPL), AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.
- (B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED.
- (C) DIFFERENT MANUFACTURES REQUIRE DIFFERENT PERFORATED W-BEAM RAIL END PANELS. SEE MANUFACTURES INFORMATION.
- (D) THE TOP OF THE STEEL TUBE ON POST 1 AND POST 2 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.
- (E) SHEETING IS ATTACHED TO 0.040 ALUMINUM SHEET AND ATTACHED TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER OF E.A.T.
- (F) 1/2" DIAMETER X 3" LONG LAG BOLT AND WASHER.
- (H) HARDWARE VARIES BETWEEN DIFFERENT MANUFACTURES. SEE MANUFACTURE'S DRAWING FOR INFORMATION.
- (I) DIMENSIONS MAY VARY. SEE MANUFACTURE'S INFORMATION.

SEE SDD 14B42 FOR MORE INFORMATION.

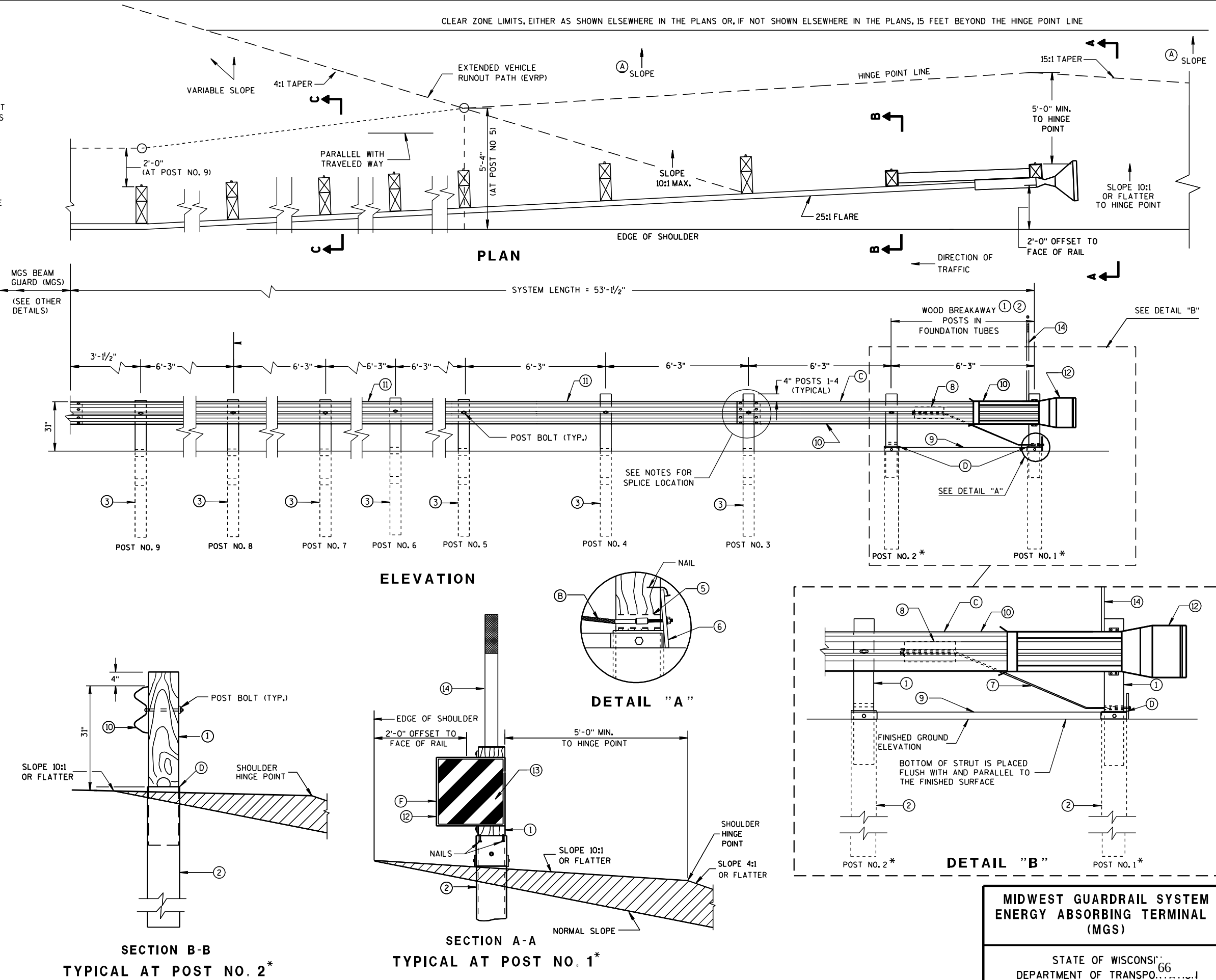
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

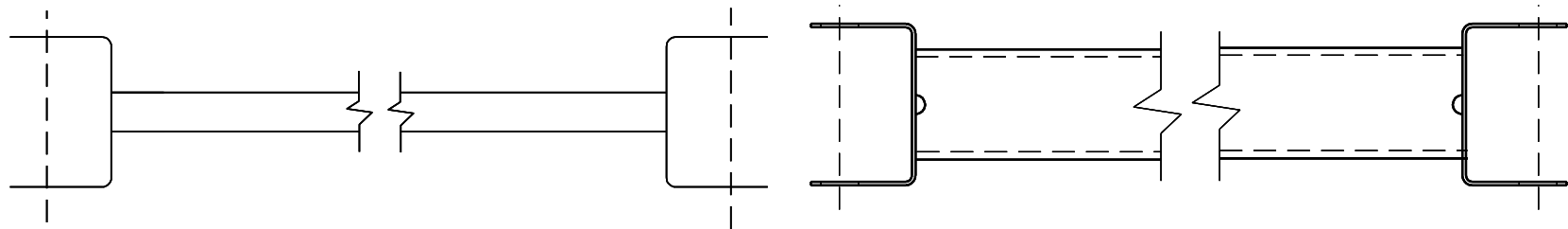
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

W-BEAM RAIL SPLICES ARE LOCATED AT POST NUMBER 3, AND BETWEEN POST 5 AND 6, BETWEEN POSTS 7 AND 8, AND MIDDLE OF THE SPAN AFTER POST 9.

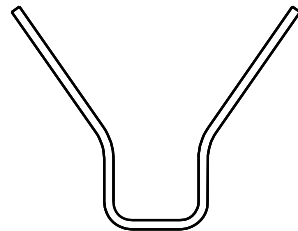
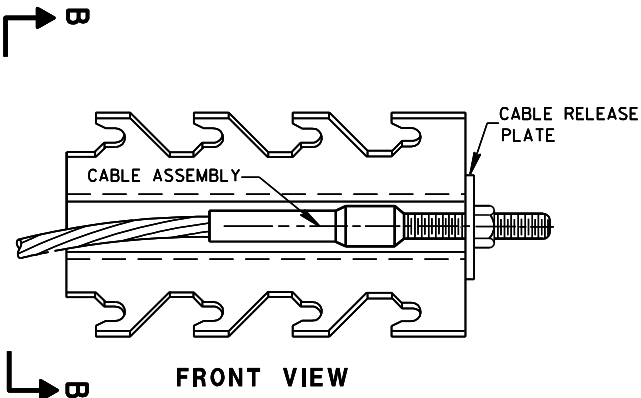
PATTERN AND COLORS ON REFLECTIVE SHEETING TYPE H ARE TO CONFORM TO OM3-L OR OM3-R OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

THE CENTER OF THE UPPER 3/2" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE ($\pm \frac{3}{4}$ ")

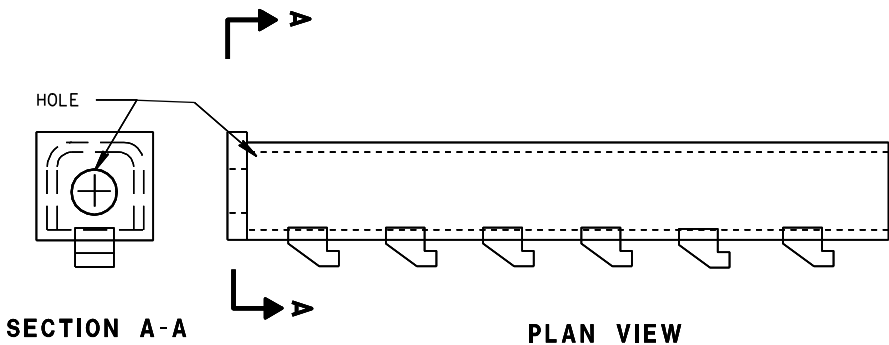




9 H
GENERIC GROUND STRUT



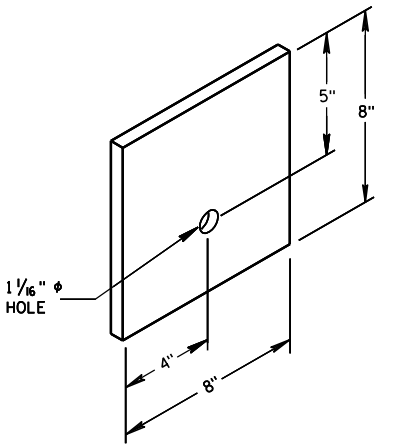
SECTION B-B



8 H
GENERIC ANCHOR CABLE BOX

BILL OF MATERIALS

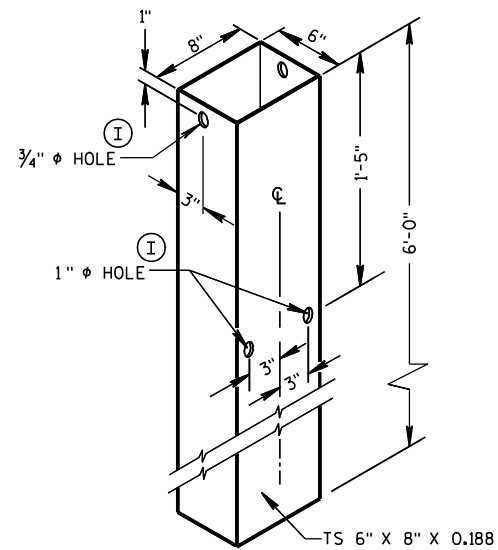
PART NO.	DESCRIPTION
MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.	
①	WOOD BREAKAWAY POST
②	6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE AT POSTS 1 AND 2
③	WOOD CRT
④	WOOD BLOCKOUT
⑤	PIPE SLEEVE
⑥	BEARING PLATE
⑦	BCT CABLE ASSEMBLY
⑧	ANCHOR CABLE BOX
⑨	GROUND STRUT
⑩	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
⑪	STANDARD W-BEAM RAIL, MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
⑫	END SECTION EAT
⑬	0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE H (ONLY THE SHEETING IS SUPPLIED BY THE MANUFACTURER)
⑭	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)



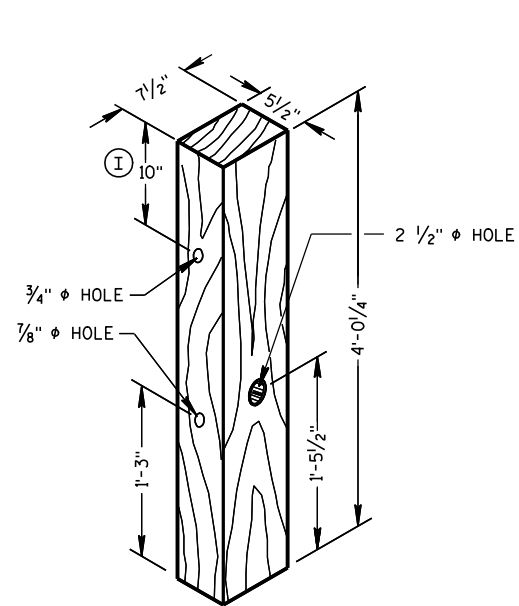
6
BEARING PLATE

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

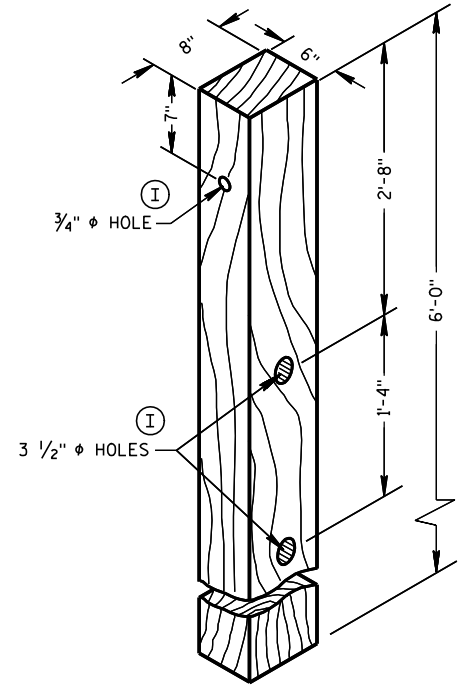
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



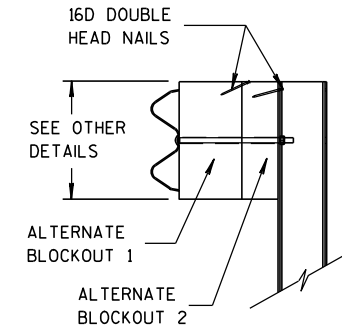
FOUNDATION TUBE ②



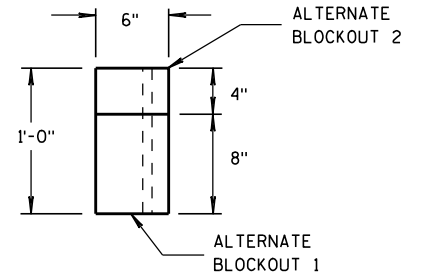
WOOD BREAKAWAY POST ①



WOOD CRT POST ③

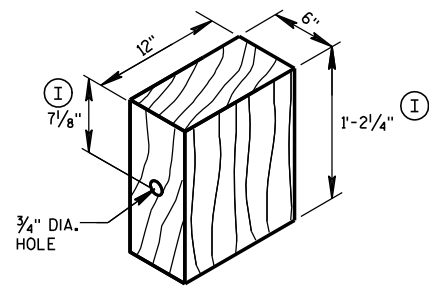


SIDE VIEW



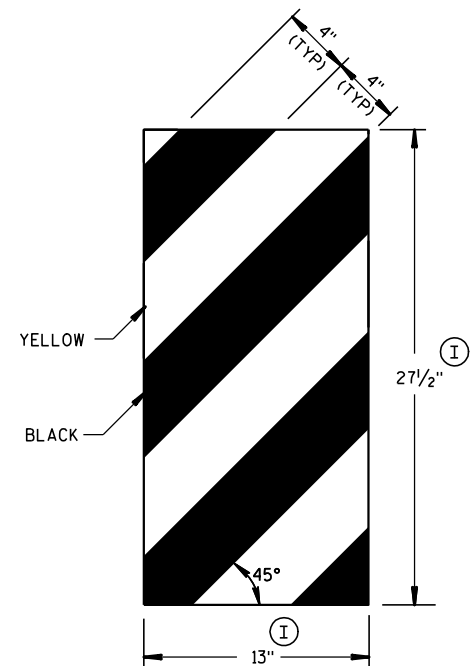
TOP VIEW

ALTERNATE WOOD
BLOCKOUT DETAIL

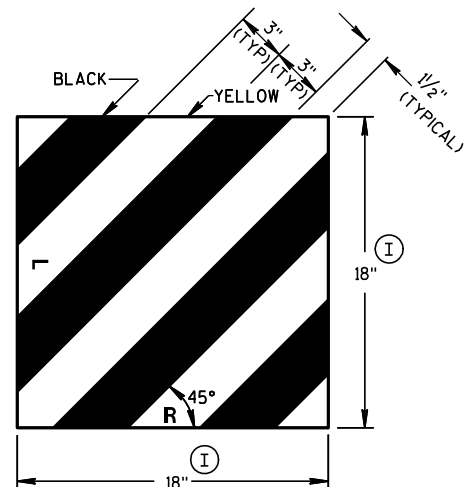


WOOD BLOCKOUT ④

YELLOW REFLECTIVE TAPE
3" X 9" TYPE H
REFLECTIVE SHEETING



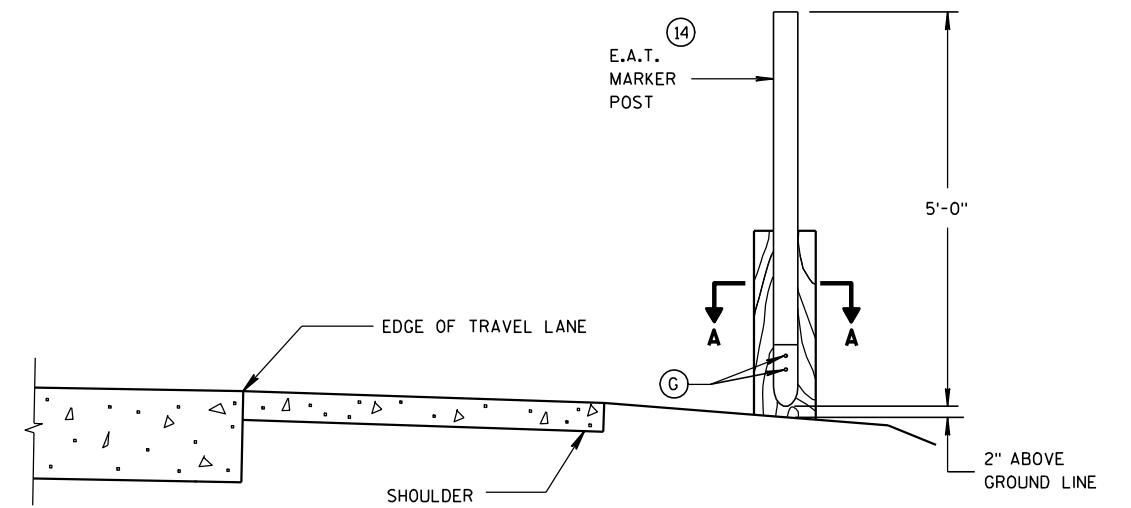
GENERIC REFLECTIVE SHEETING ⑬ ④



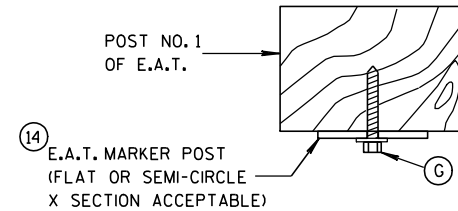
FRONT VIEW

SIDE VIEW

E.A.T. MARKER POST ⑭



TYPICAL INSTALLATION OF E.A.T.
MARKER POST BACKSIDE OF POST NO. 1
(E.A.T. AND RAIL REMOVED FOR CLARITY)

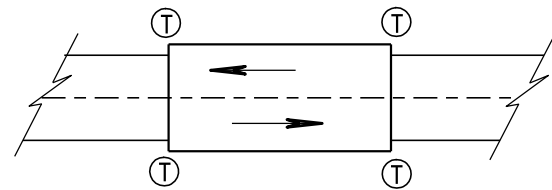


SECTION A-A

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

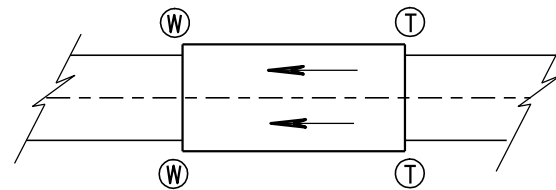
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/2011 /S/ Jerry H. 3000
DATE ROADWAY STANDARDS 68 1ENT
FHWA ENGINEER



TWO WAY TRAFFIC

Ⓣ THRIE BEAM CONNECTION



ONE WAY TRAFFIC

Ⓦ W-BEAM CONNECTION WHEN REQUIRED

GENERAL NOTES

BOLT THE THRIE BEAM TO ALL POSTS AND BLOCKOUTS. DRILL OR PUNCH BOLT HOLES IN THE BEAM IF THE POST SPACING IS LESS THAN 6'-3".

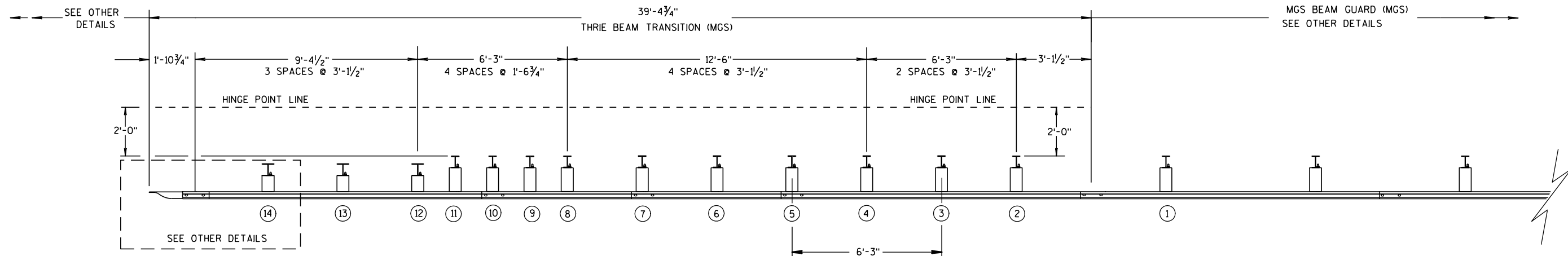
IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2 1/2", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

TRANSITION USES STEEL POSTS ONLY.

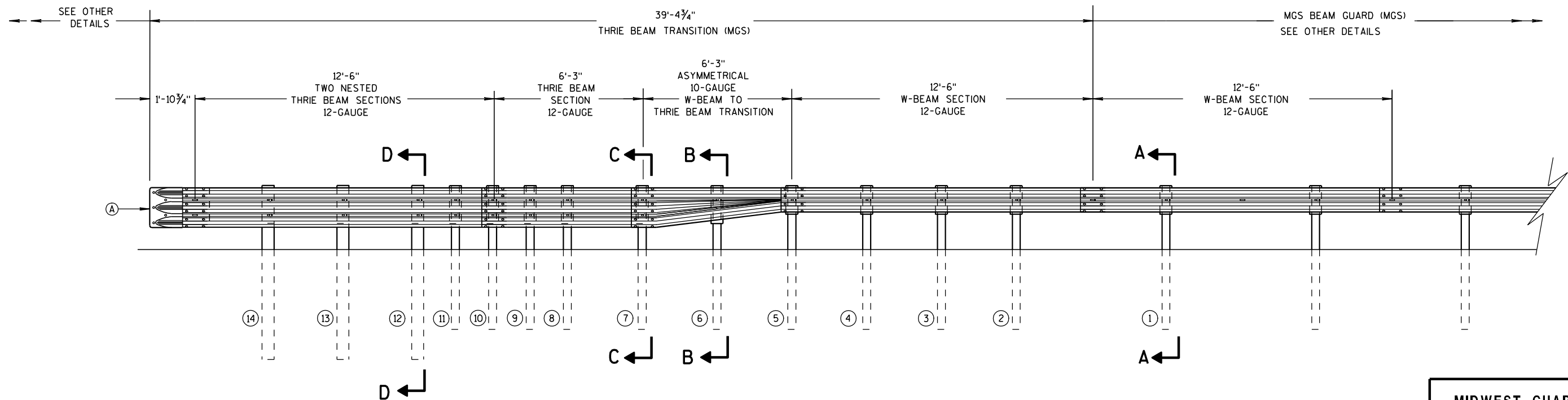
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

Ⓐ BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 14 B 45-3b



S.D.D. 14 B 45-3b

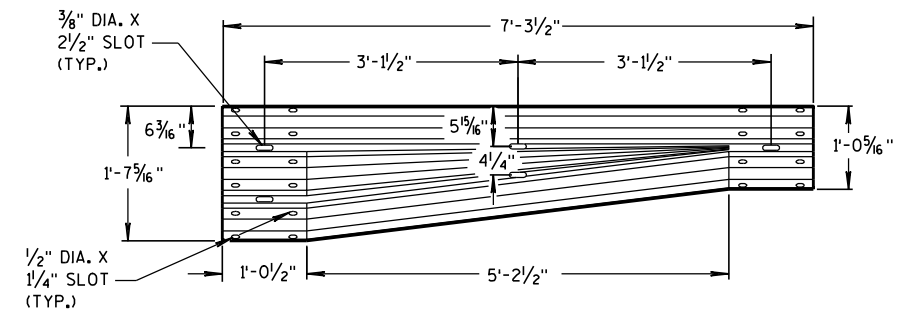


S.D.D. 14 B 45-3b

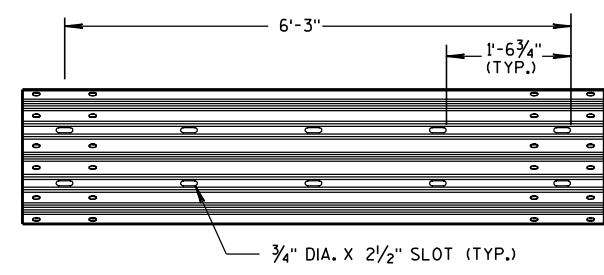
10

10

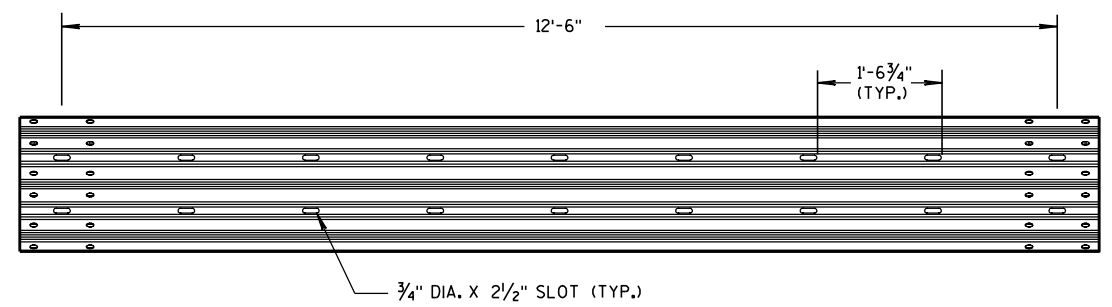
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



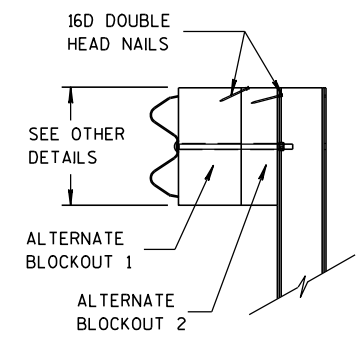
W-BEAM TO THRIE BEAM TRANSITION SECTION



6'-3" THRIE BEAM SECTION

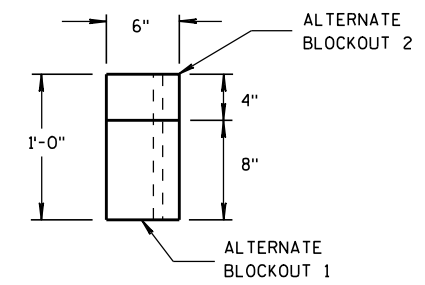


12'-6" THRIE BEAM SECTION

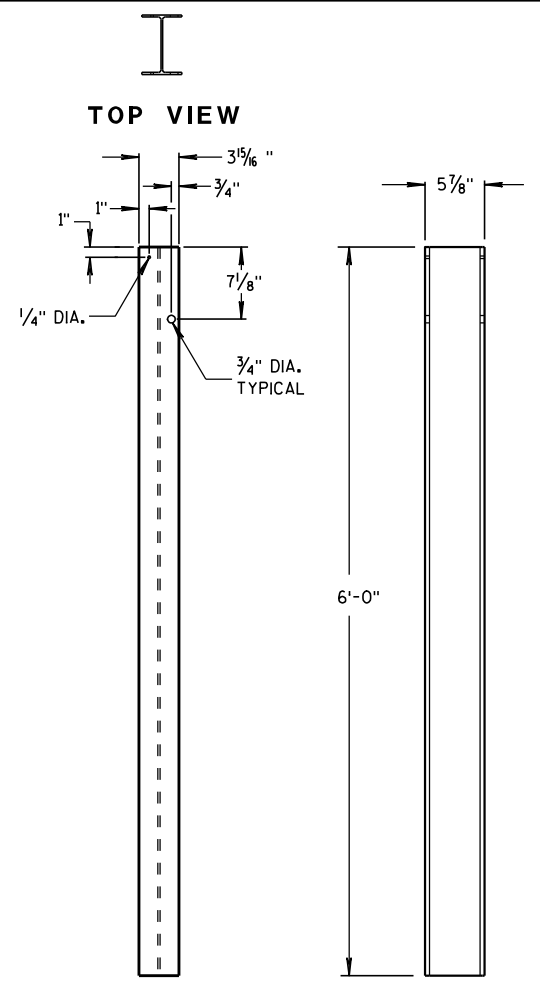


SIDE VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



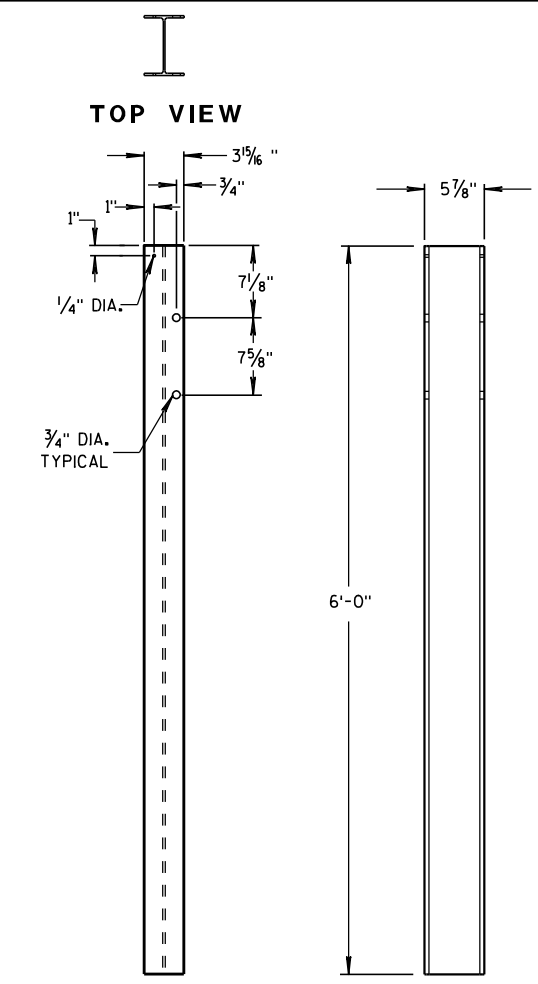
TOP VIEW



FRONT VIEW

SIDE VIEW

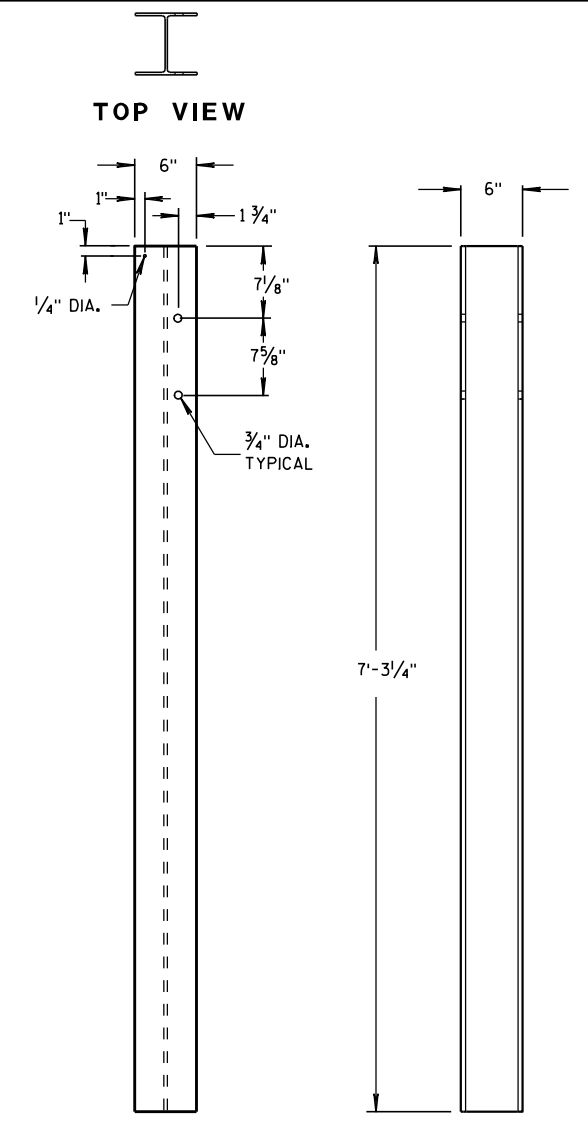
STEEL POSTS 1-5



FRONT VIEW

SIDE VIEW

STEEL POSTS 6-11

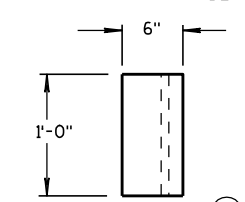


FRONT VIEW

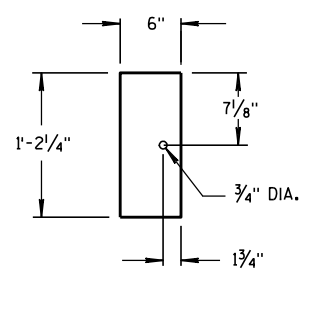
SIDE VIEW

STEEL POSTS 12-14

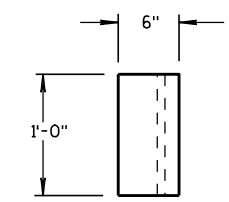
① WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.



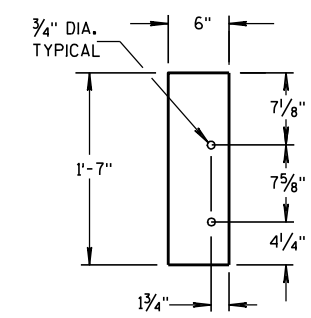
TOP VIEW



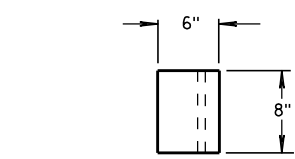
FRONT VIEW
BLOCKOUT
POSTS 1-5



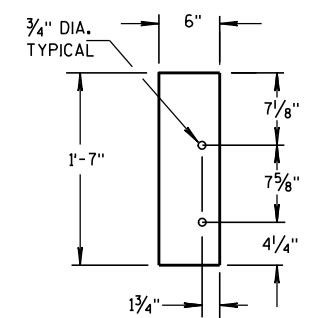
TOP VIEW



FRONT VIEW
BLOCKOUT
POSTS 6-11



TOP VIEW



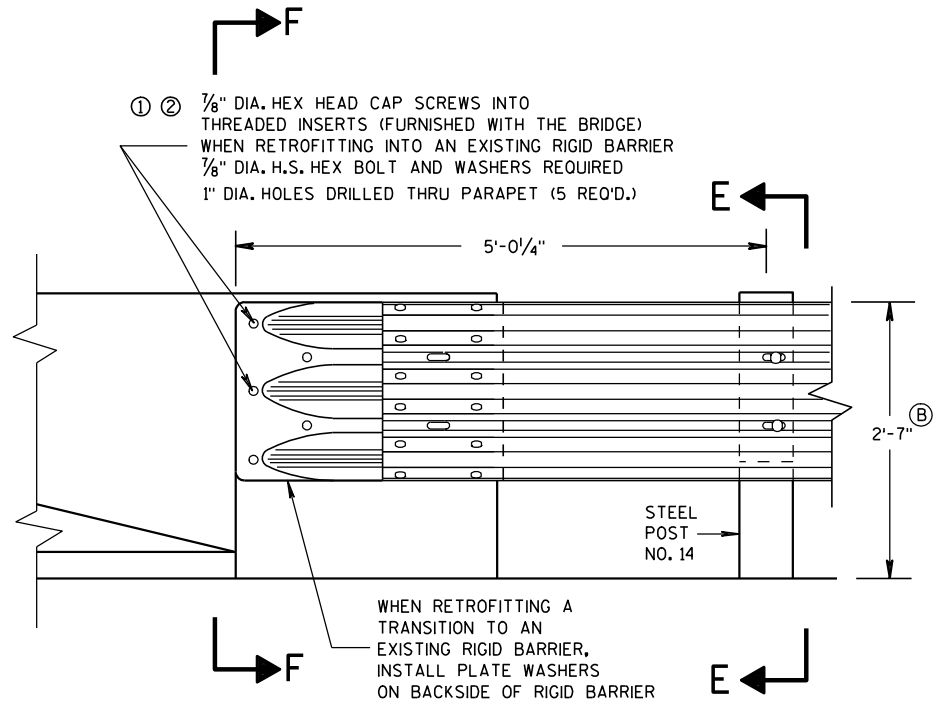
FRONT VIEW
BLOCKOUT
POSTS 12-14

STEEL POST SIZES

POST NUMBER	SECTION TYPE	LENGTH
①	W6x9	72"
②	W6x9	72"
③	W6x9	72"
④	W6x9	72"
⑤	W6x9	72"
⑥	W6x9	72"
⑦	W6x9	72"
⑧	W6x9	72"
⑨	W6x9	72"
⑩	W6x9	72"
⑪	W6x9	72"
⑫	W6x15	87 1/8"
⑬	W6x15	87 1/8"
⑭	W6x15	87 1/8"

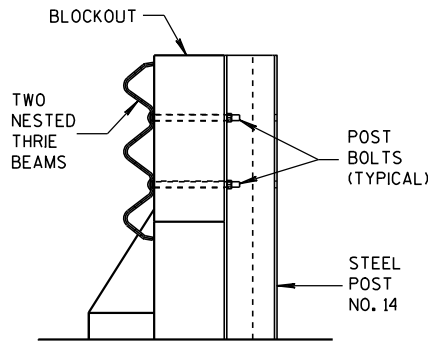
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



FRONT VIEW

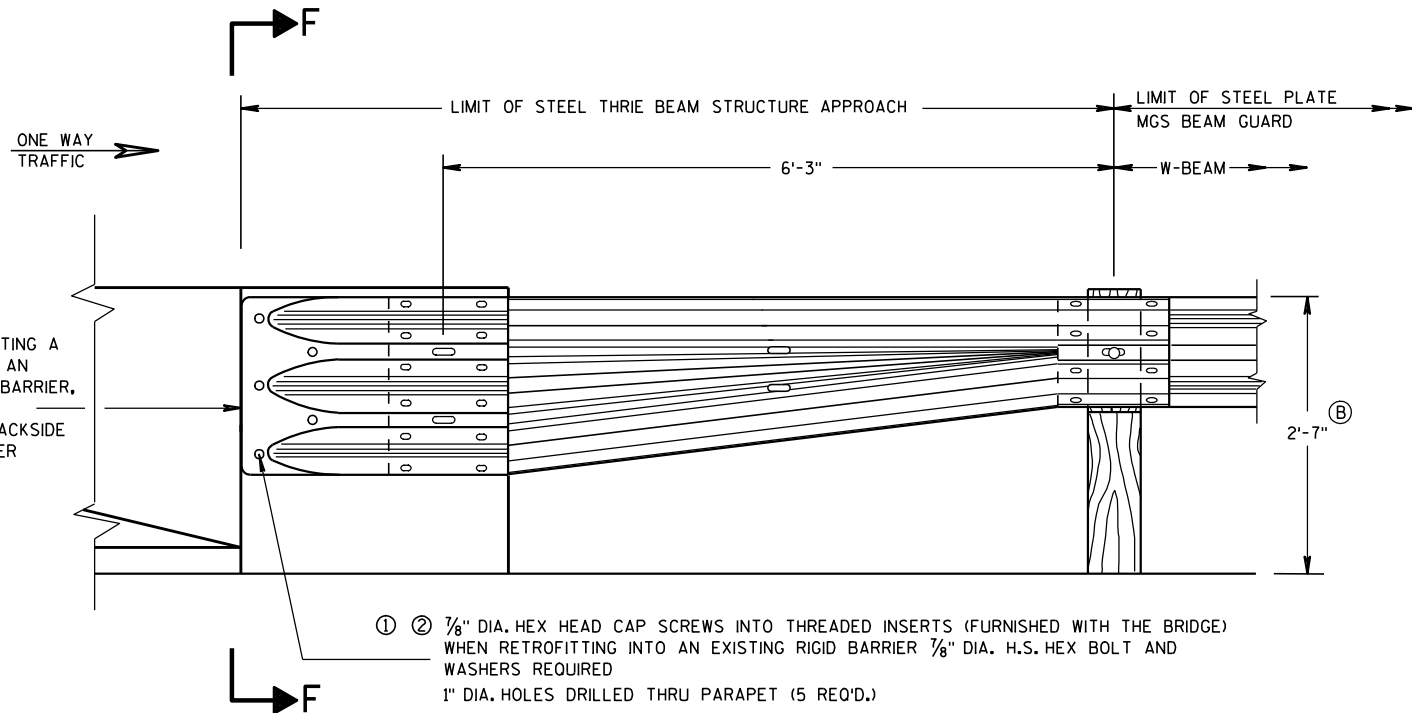
THRIE BEAM CONNECTION TO BRIDGE
PARAPET WITH SQUARE ENDS



SECTION E-E

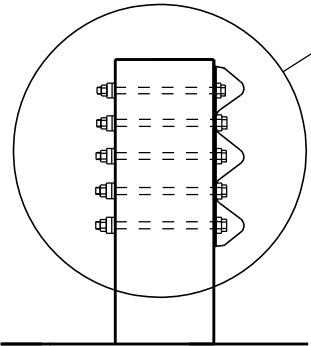
GENERAL NOTES

- THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.
- ① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.
 - ② BOLTS MAY BE A325 BOLTS OR A449 BOLTS, BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.
 - ③ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".
- Ⓑ TOLERANCE FOR TOP OF BEAM IS ± 1".

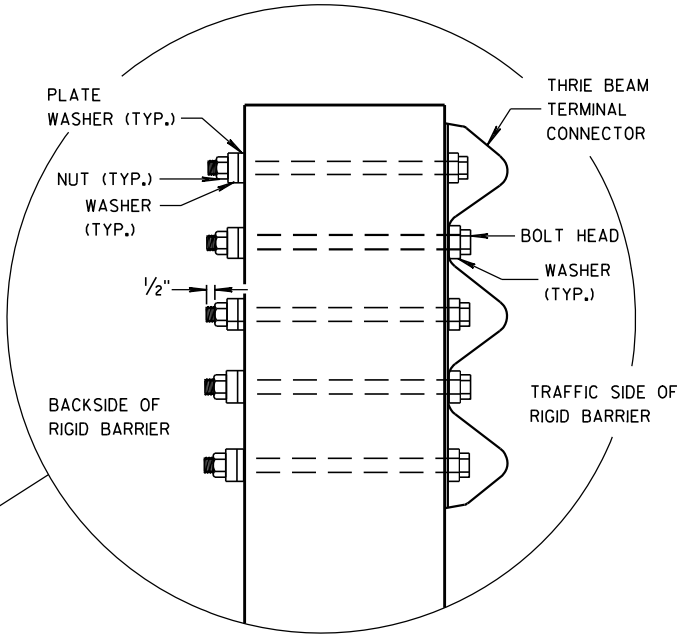


FRONT VIEW

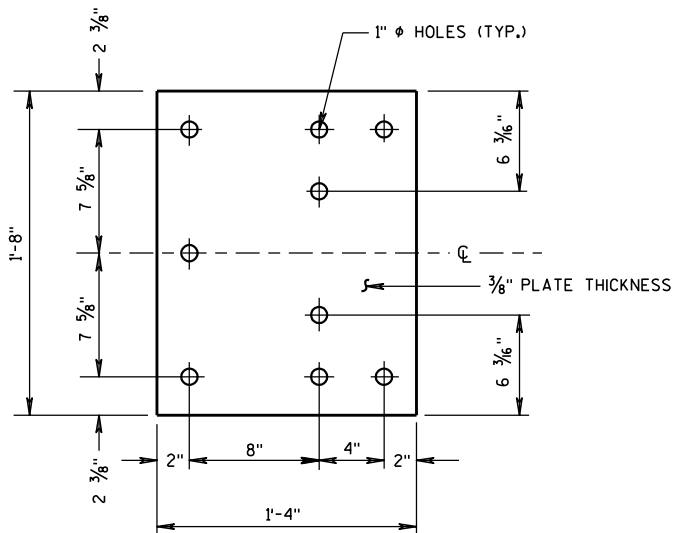
W BEAM TRANSITION AND CONNECTION TO
BRIDGE PARAPETS WITH SQUARE ENDS
(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)



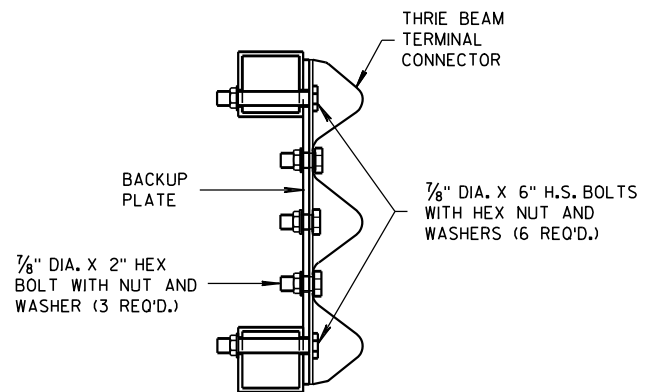
SECTION F-F



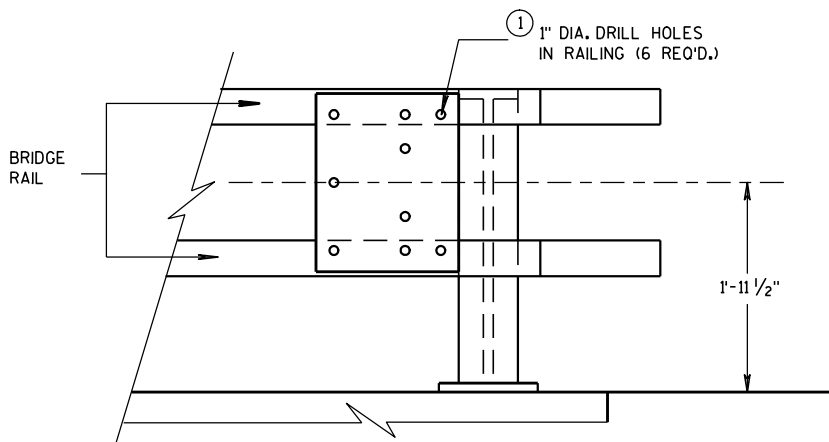
MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 8/31/2012 DATE	/S/ Jerry H. Zapp ROADWAY STANDARDS ENGINEER
FHWA	



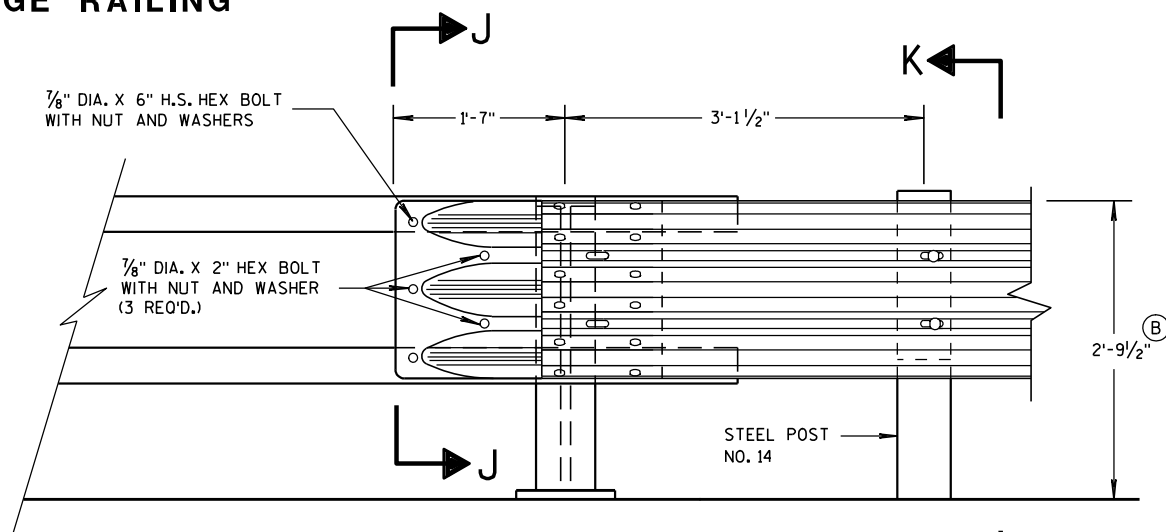
BACK-UP PLATE DETAIL



SECTION J-J

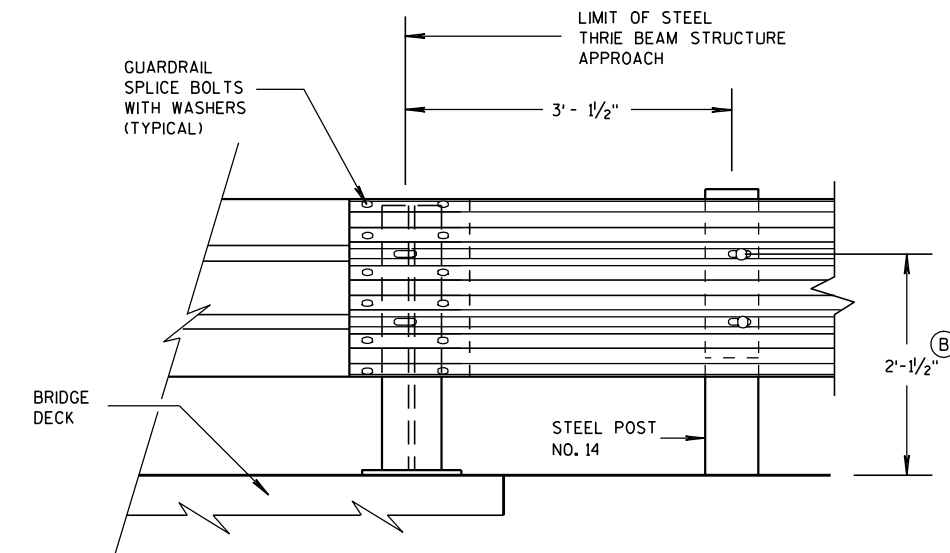


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING



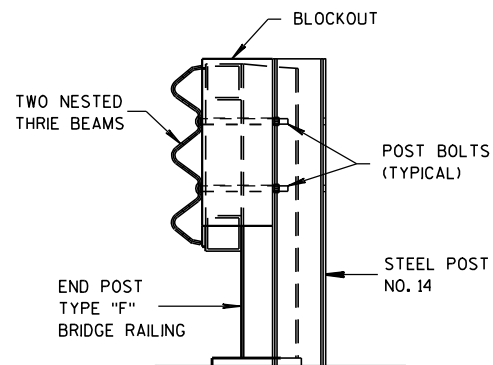
FRONT VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"



FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



SECTION K-K

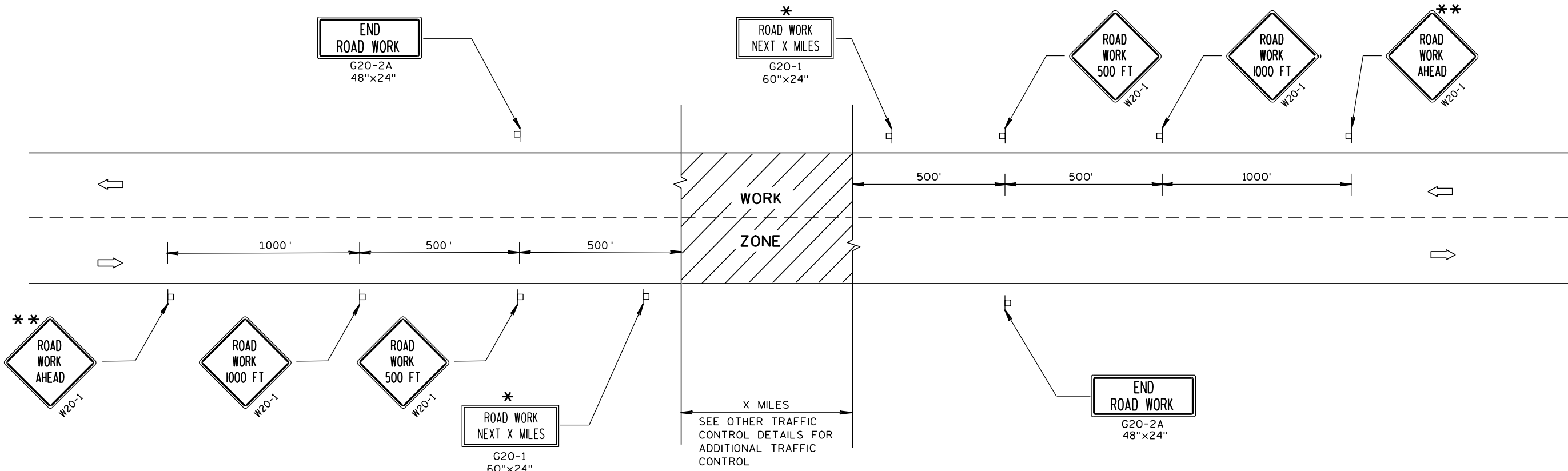
GENERAL NOTES

- ① DRILLING HOLES THROUGH THE PAPER, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.
- ② TOLERANCE FOR TOP OF BEAM IS $\pm 1"$.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/31/2012 DATE /S/ Jerry H. Zeng
ROADWAY STANDARDS [73] ENT
ENGINEER



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

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

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

LEGEND

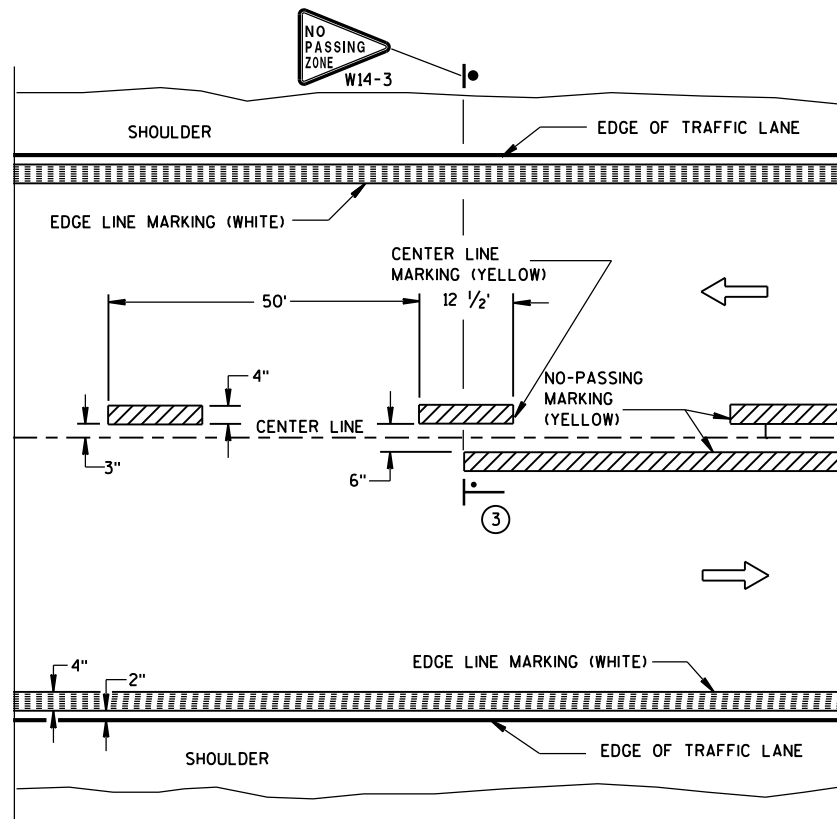
┆ POST MOUNTED SIGN

➡ DIRECTION OF TRAFFIC FLOW

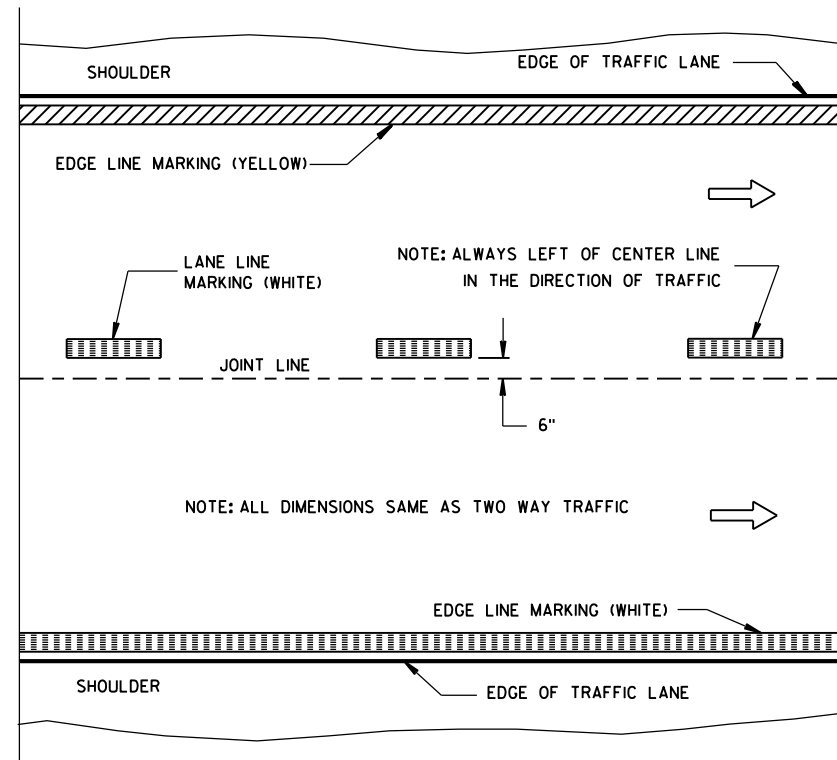
TRAFFIC CONTROL, ADVANCE
WARNING SIGNS 45 M.P.H.
OR GREATER TWO-WAY
UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/00 /S/ Chester J. Neer
DATE CHIEF SIGNS AND MARKINGS
FHWA

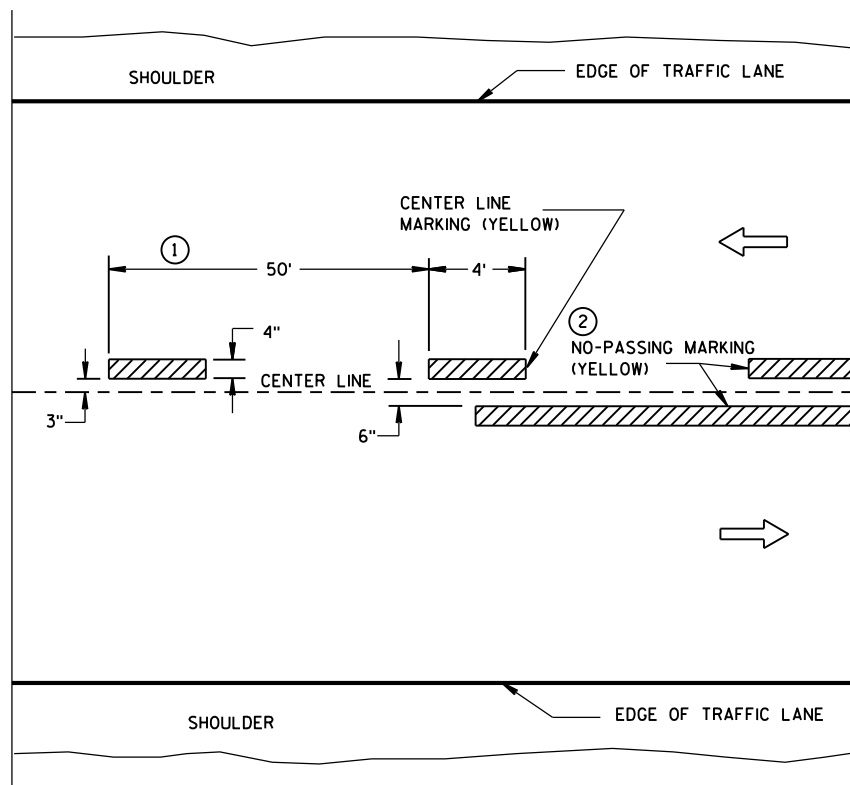


TWO WAY TRAFFIC

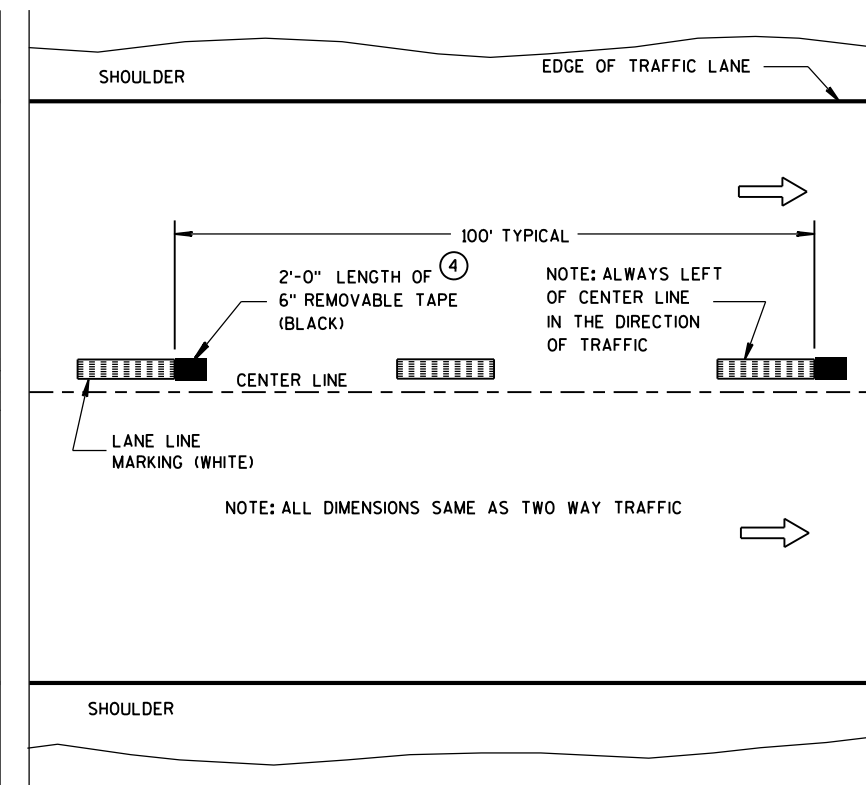


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

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

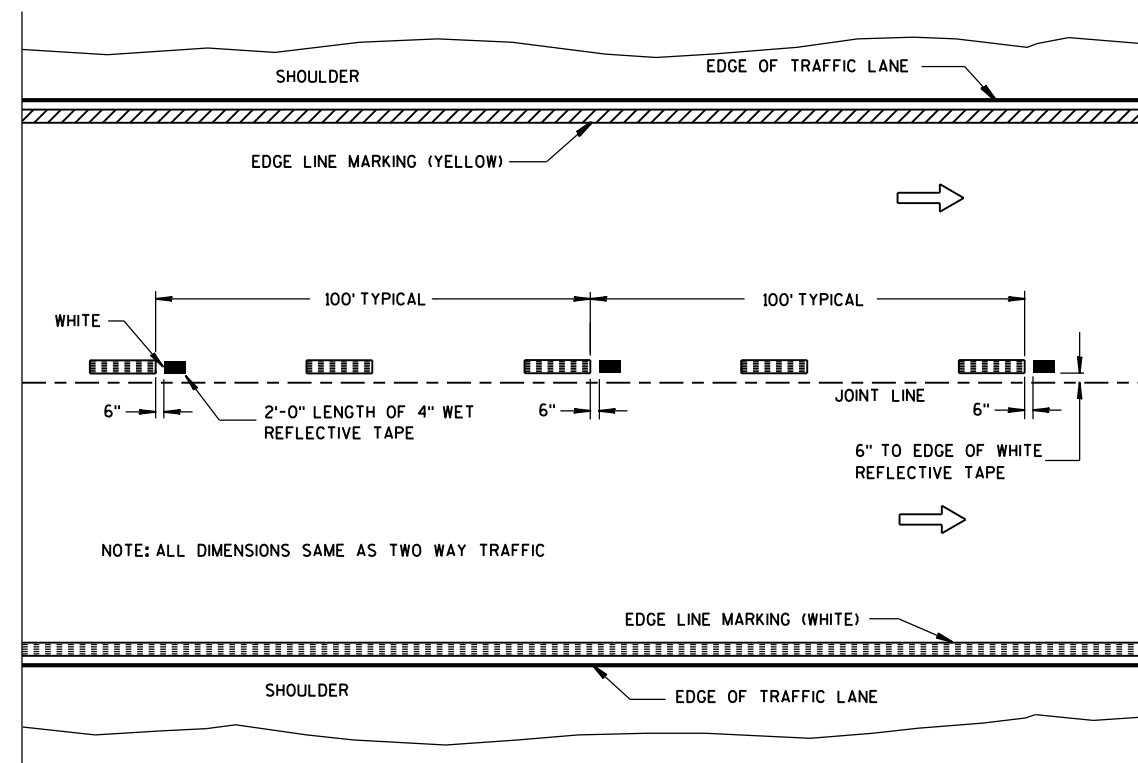
GENERAL NOTES

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

- ① HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
- ② NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
- ③ NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
- ④ CONCRETE ONLY.

NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL



WET REFLECTIVE TAPE SUPPLEMENT TO
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE

LEGEND

- "T" MARKING
- POST MOUNTED SIGN

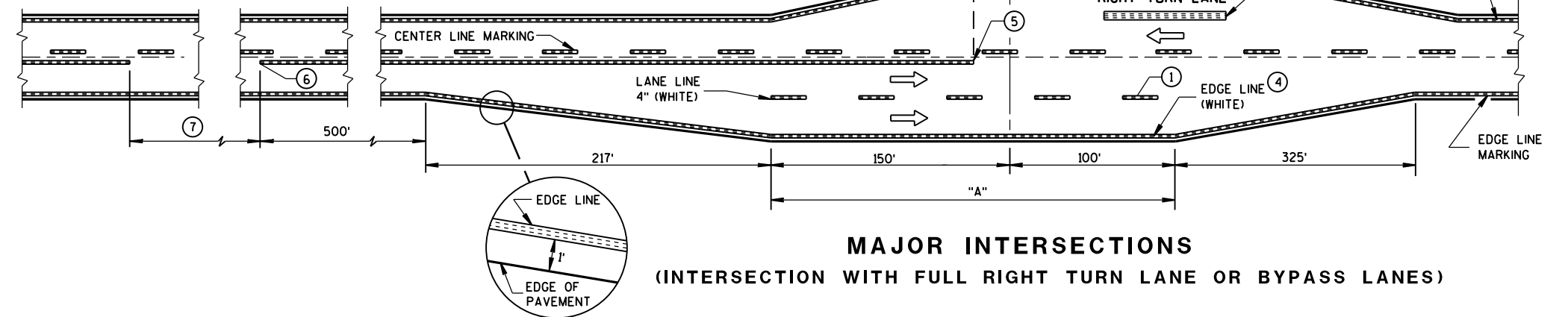
PAVEMENT MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10-1-2012 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINE 75 :SIGN
FHWA

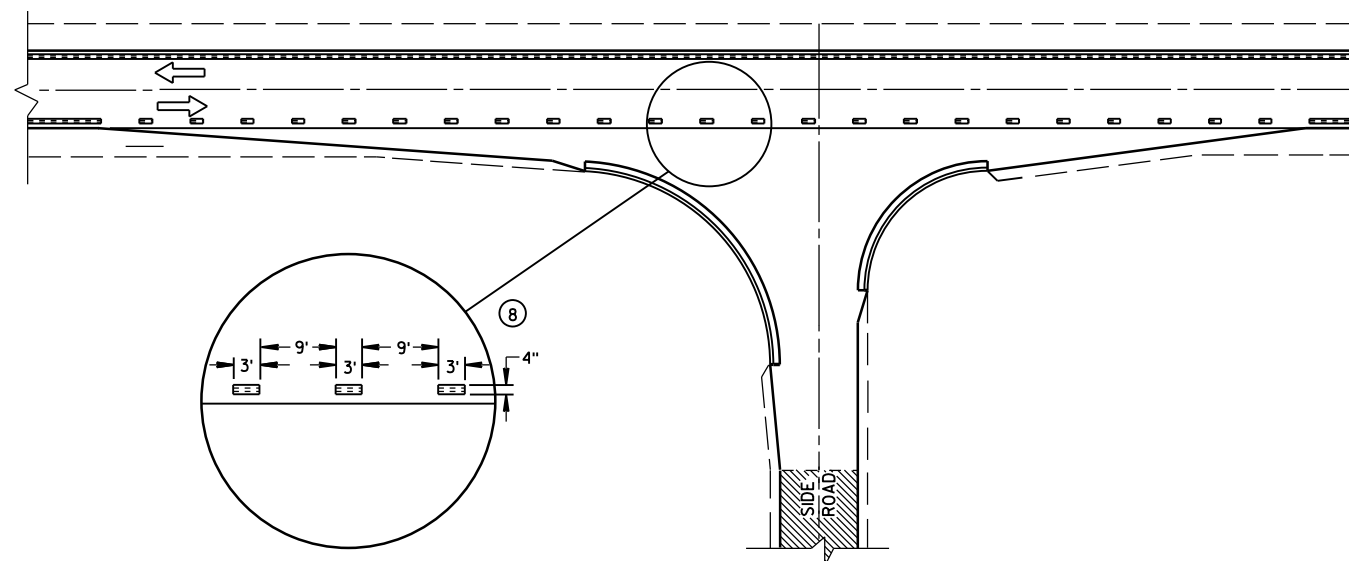


7	
POSTED SPEED (MPH)	MINIMUM DISTANCE BETWEEN ZONES (FEET)
25 - 30	528
35 - 40	528
45 - 50	686
55	792



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS

③ (FOR SPECIAL CONDITIONS AS SPECIFIED)

PAVEMENT MARKING (INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 76

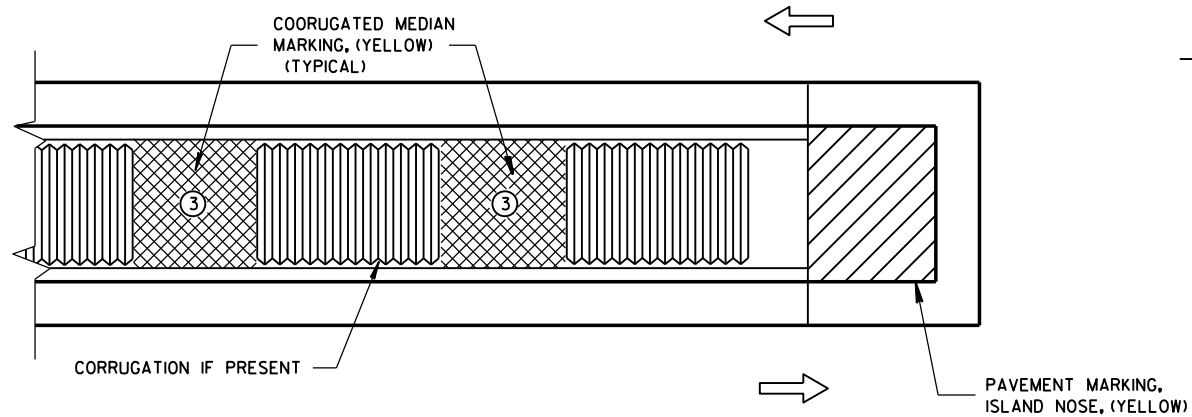
GENERAL NOTES

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

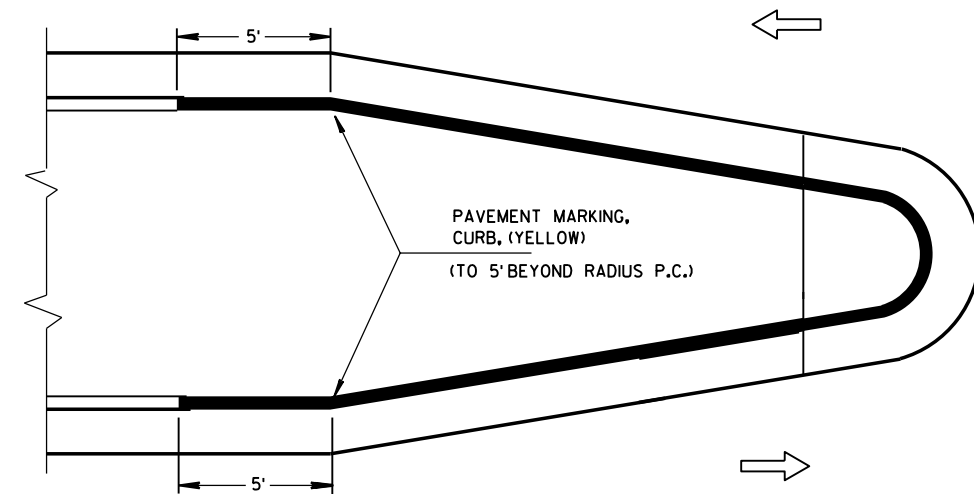
- ① WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
- ② WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
- ③ ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP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

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

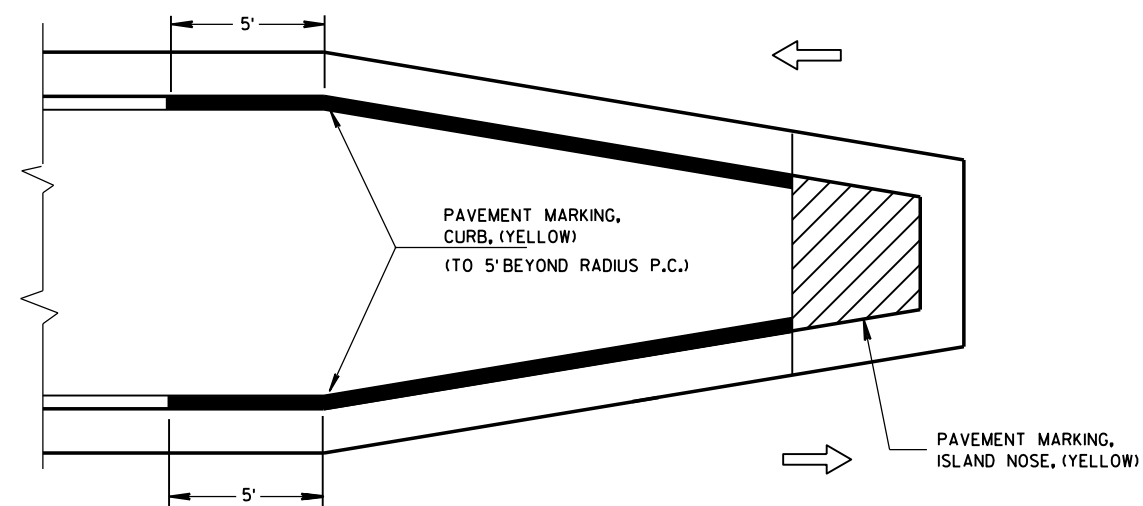
ARROW SYMBOL () SHOWS DIRECTION OF TRAVEL



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

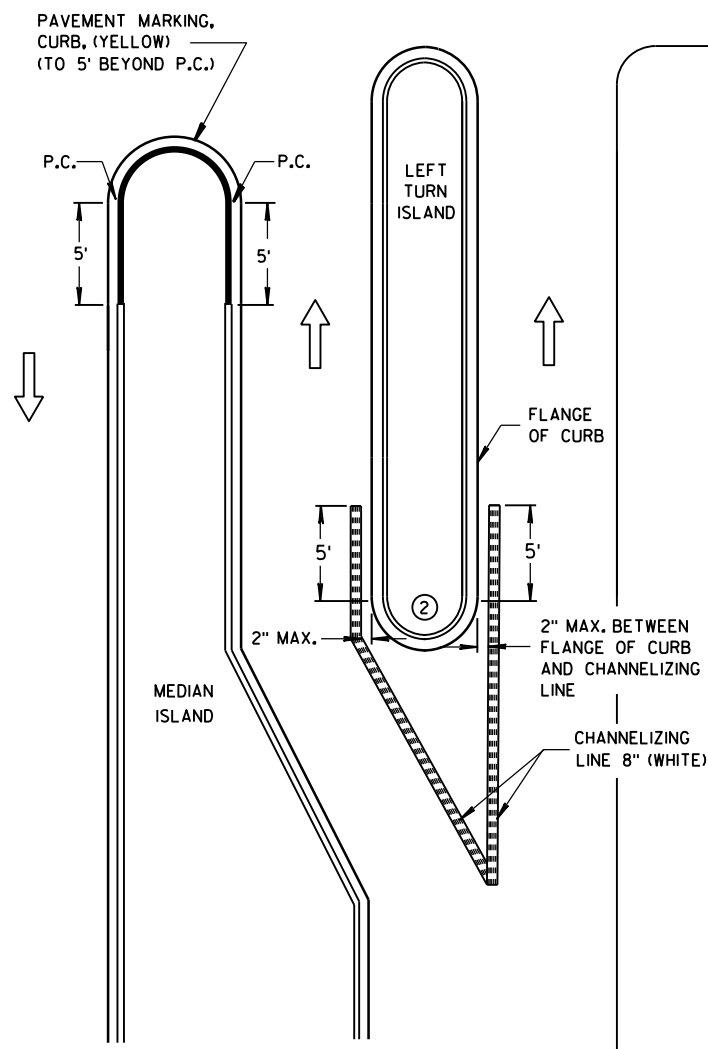


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

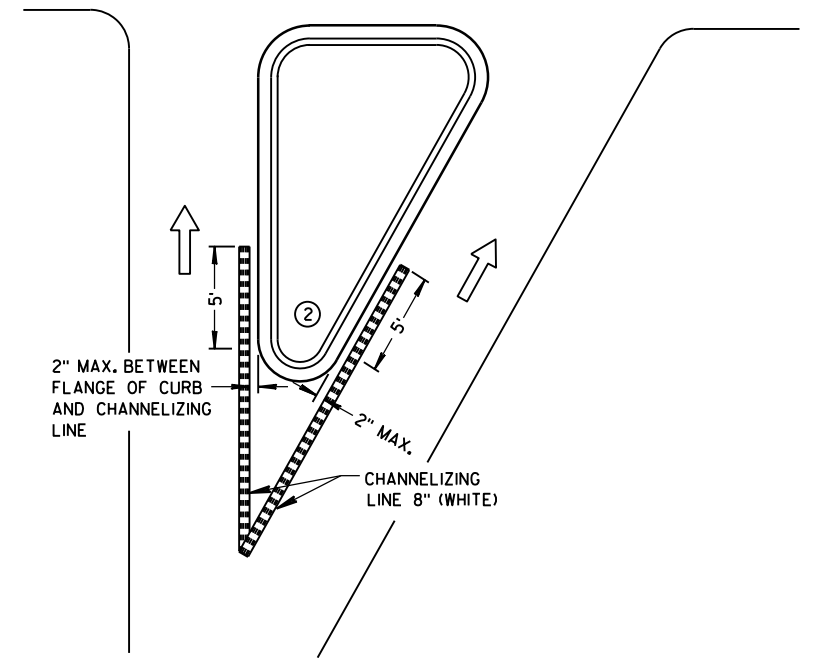
TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS



LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

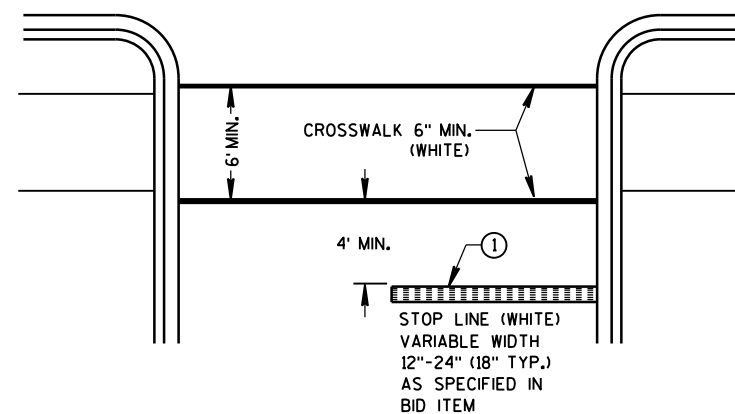
- ① STOP LINE IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
- ② DO NOT MARK CURB NOSES THAT SEPARATE LANES OF TRAFFIC TRAVELING IN THE SAME DIRECTION.
- ③ WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION YELLOW PAVEMENT MARKING SHALL BE APPLIED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



RIGHT TURN ISLAND

LEGEND

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



STOP LINE AND CROSSWALK

PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

TWO-LANE ROADWAY

SYMBOLS



WORK AREA



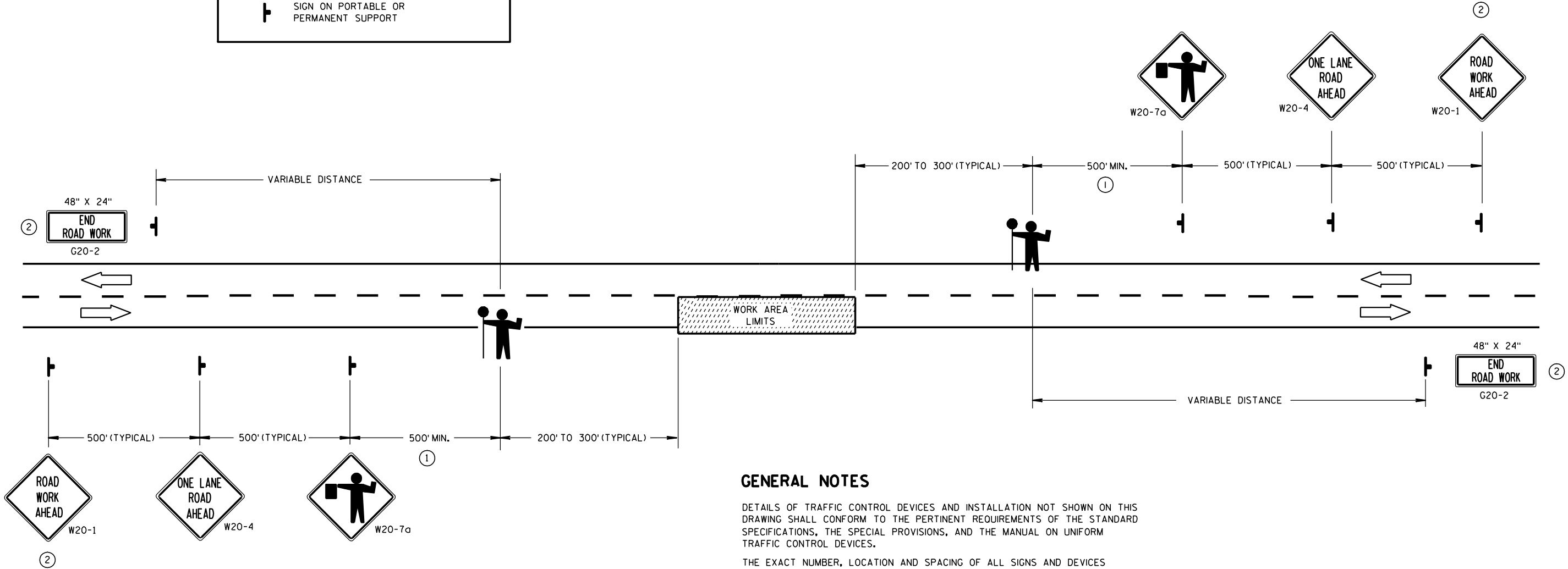
FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF



SIGN ON PORTABLE OR PERMANENT SUPPORT



USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



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.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES (AND THE 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.

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, THE "FLAGGER AHEAD", THE "ROAD WORK AHEAD" AND THE ONE LANE ROAD AHEAD" SIGNS SHALL BE COVERED OR REMOVED AND THE HIGHWAY RESTORED TO NORMAL OPERATION.

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

- ① FOR A MOVING WORK OPERATION, SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT 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.

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9/5/06 /S/ Thomas N. Nothohm
DATE STATE TRAFFIC ENGINE 78
FHWA

ESIGN

LEGEND

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

GENERAL NOTES :

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

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

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

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

GENERAL NOTES CONTINUED:

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

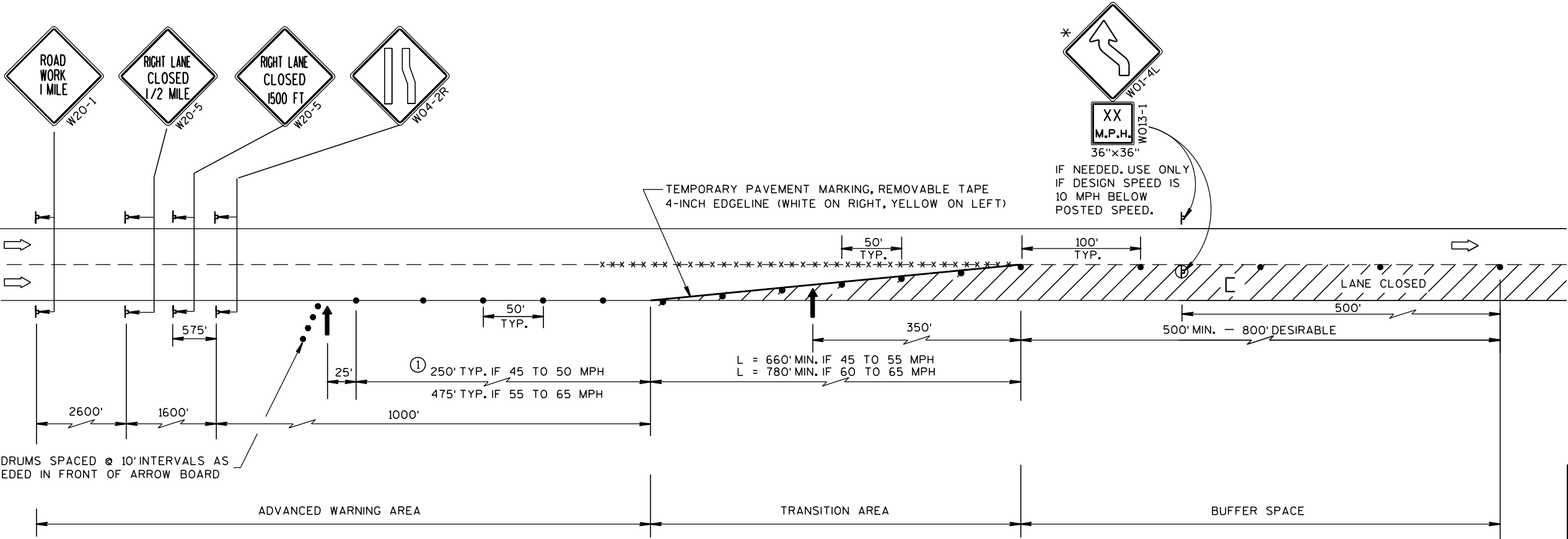
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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

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

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

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



TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H.	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 8-7-95 DATE	/S/ Chester J. DIRECTOR, OFFICE OF 79 c
FHWA	

GENERAL NOTES

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

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

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

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

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

W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.

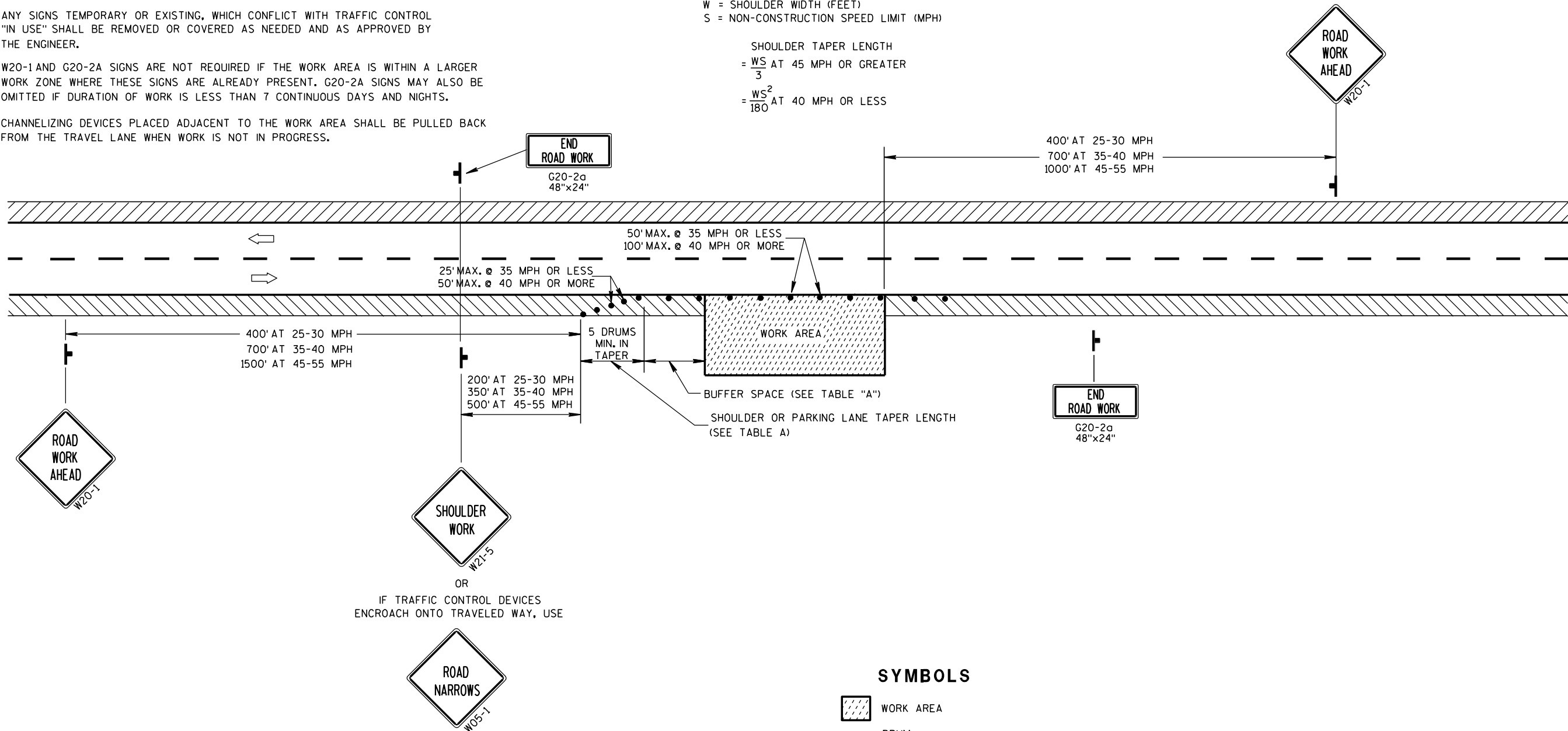
CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

TABLE A

SHOULDER TAPER LENGTH (FEET)					BUFFER SPACE (FEET)
S	W	4	6	8	
30	20	30	40	50	85
35	30	45	55	70	120
40	40	55	75	90	170
45	60	90	120	150	220
50	70	100	135	170	280
55	75	110	150	185	335

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

SHOULDER TAPER LENGTH
= $\frac{WS}{3}$ AT 45 MPH OR GREATER
= $\frac{WS^2}{180}$ AT 40 MPH OR LESS



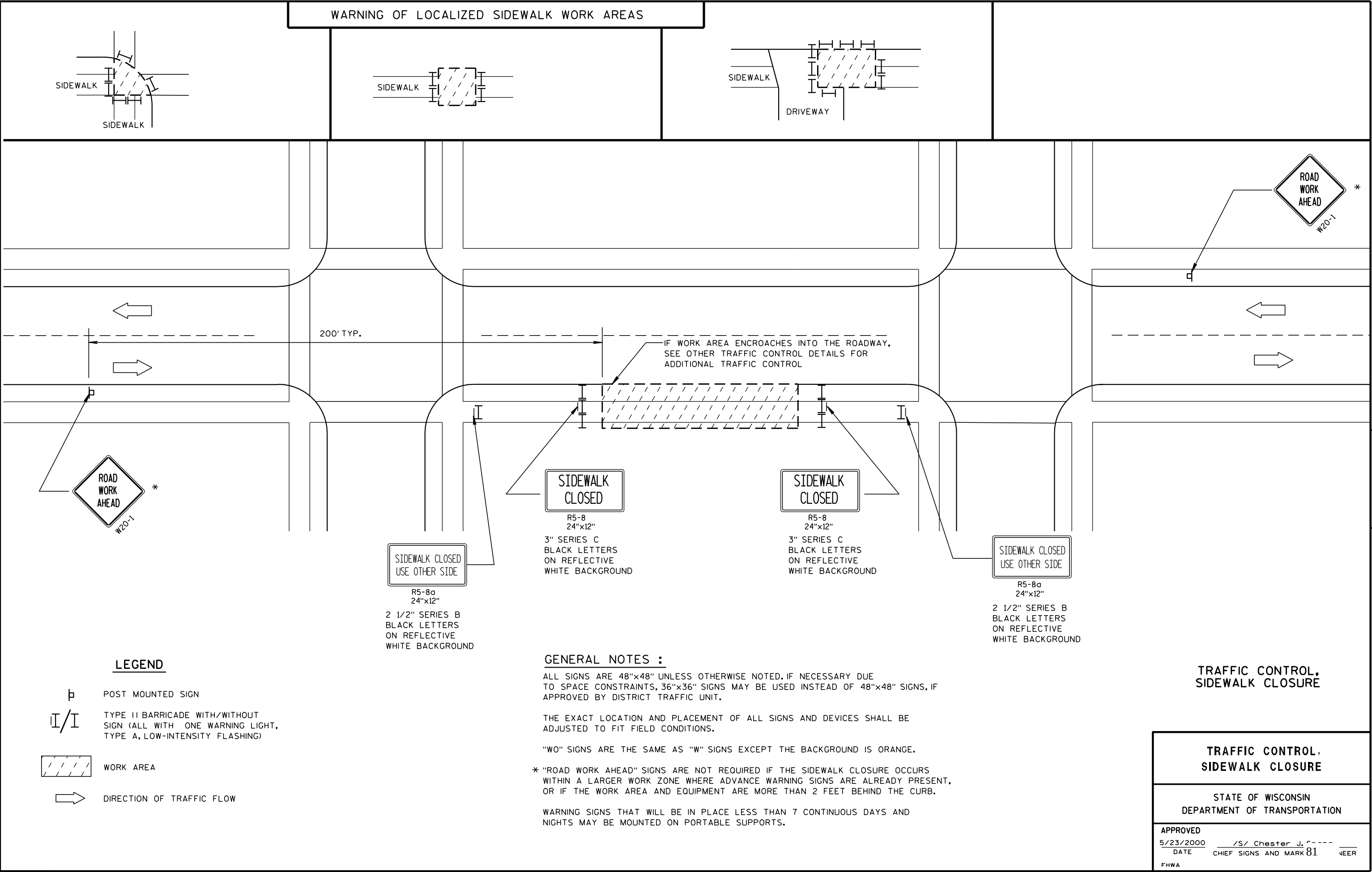
SYMBOLS

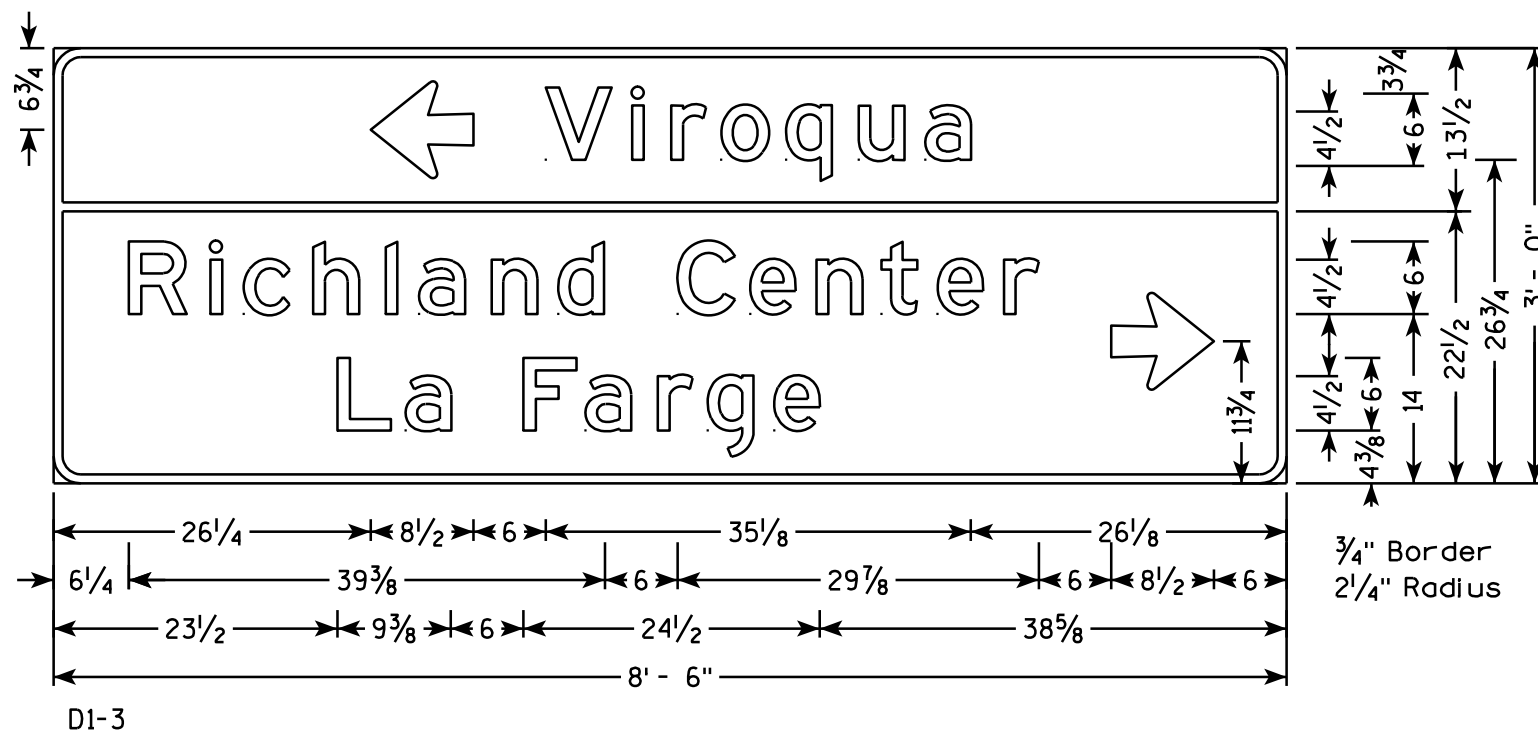
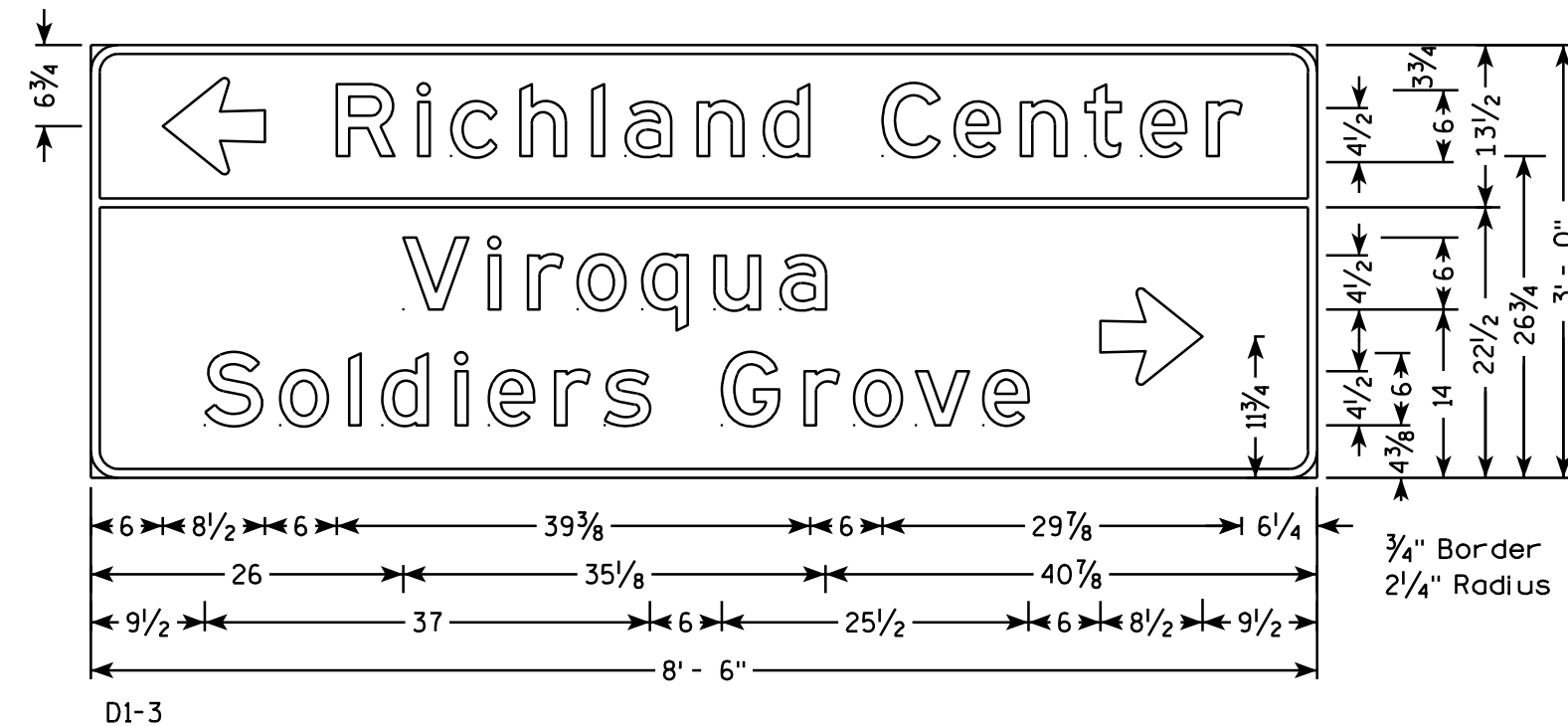
- WORK AREA
- DRUM
- POST MOUNTED SIGN
- DIRECTION OF TRAFFIC FLOW

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

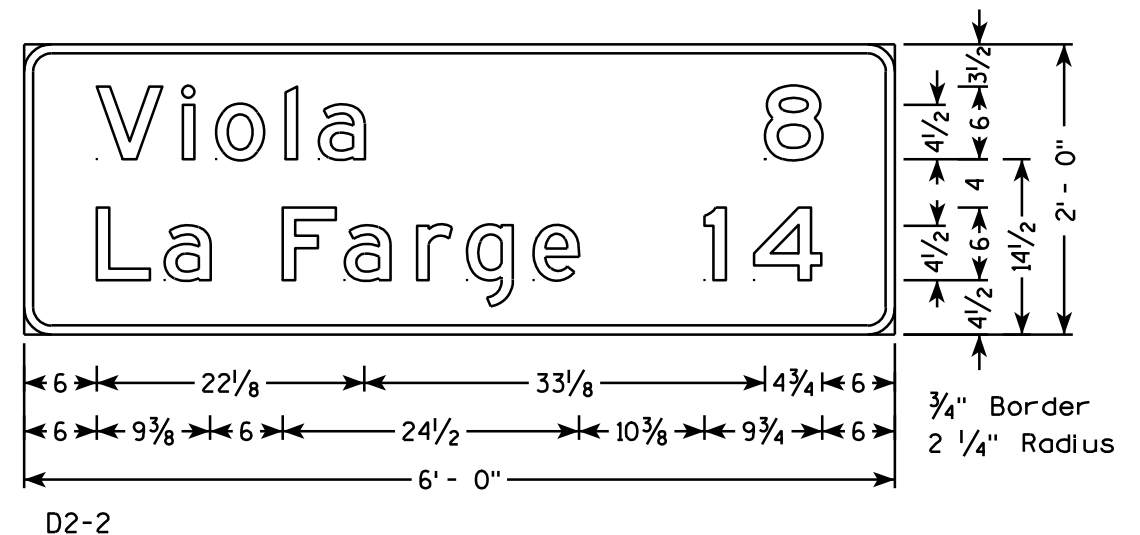
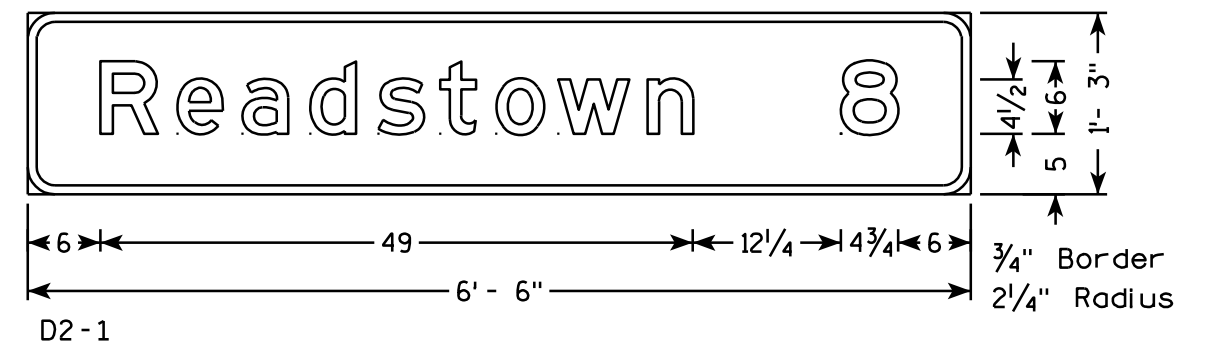
APPROVED
5/23/00 /S/ Chester J. NNEER
DATE CHIEF SIGNS AND MARK 80
FHWA

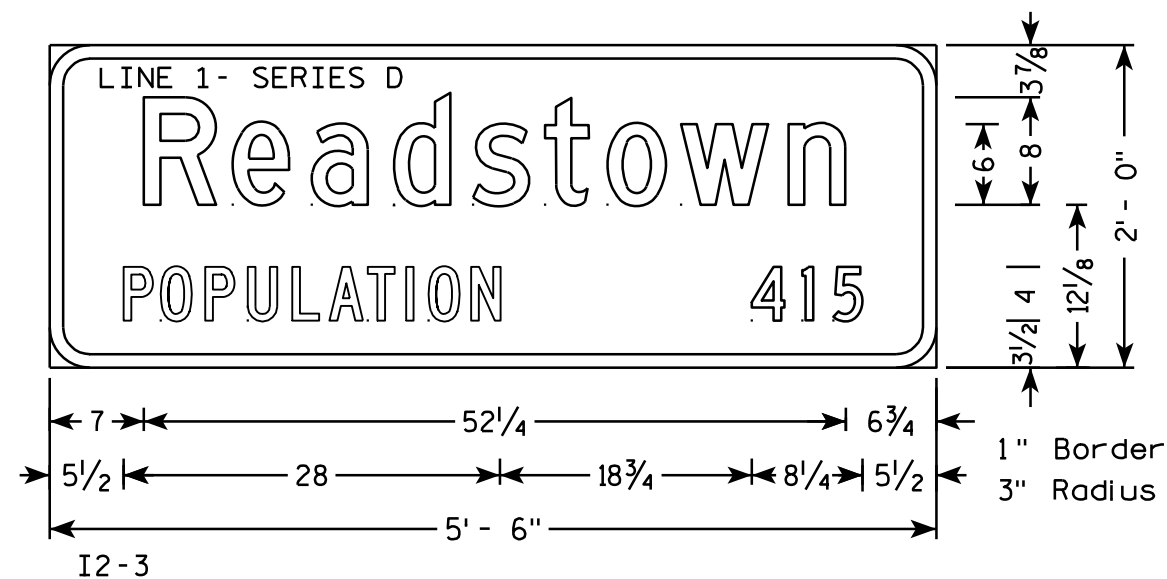




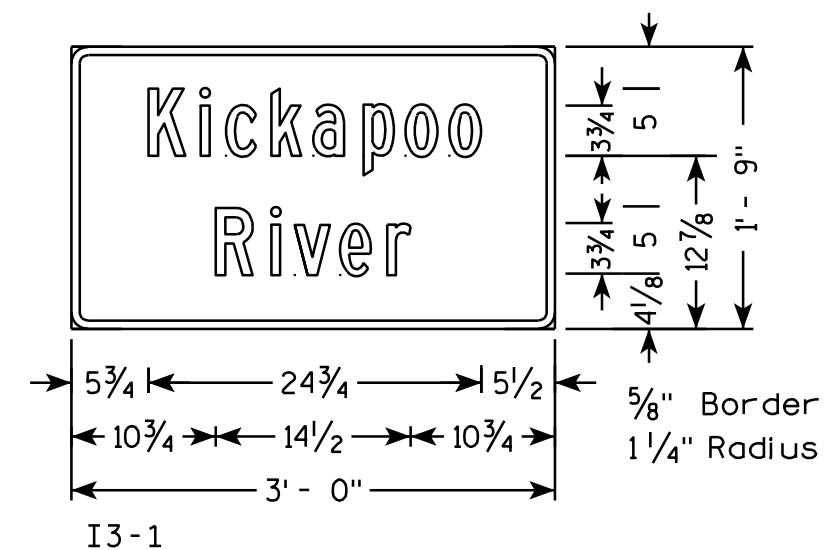
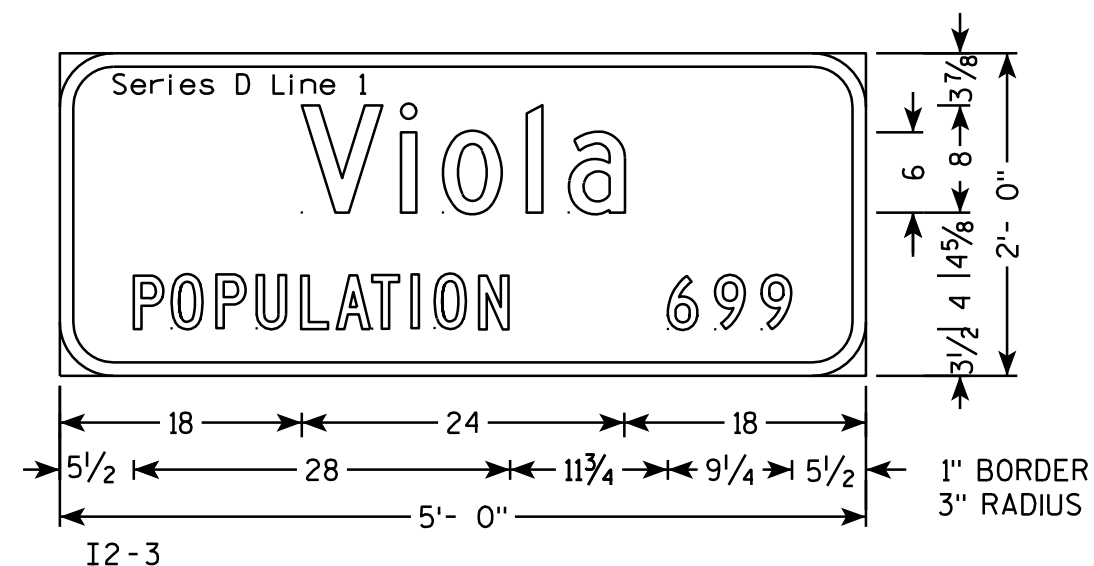
NOTES

1. All Signs Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - GREEN
Message - WHITE
3. Message Series - E

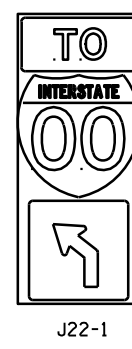
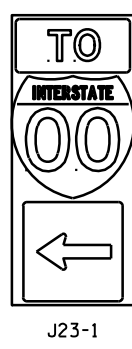
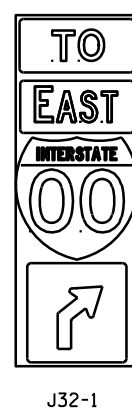
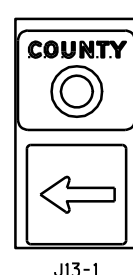
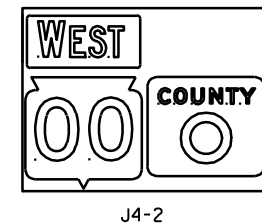
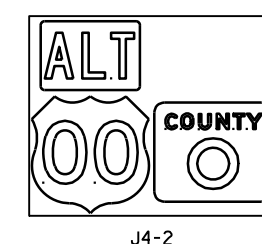
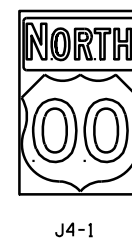
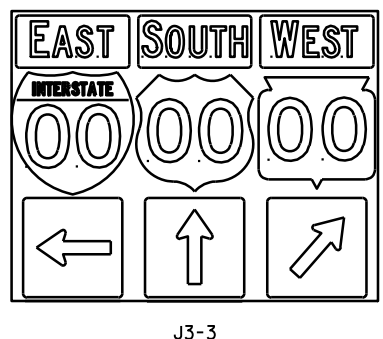
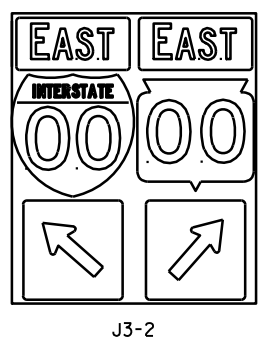
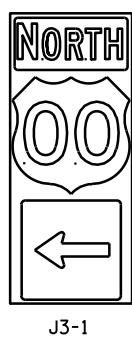
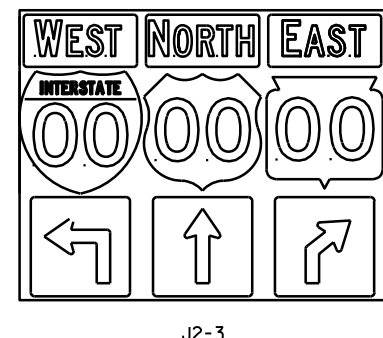
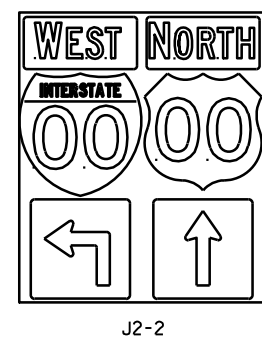
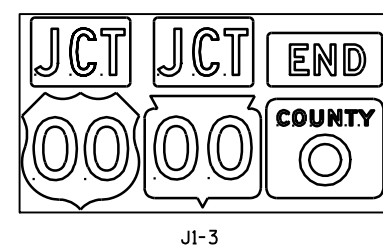
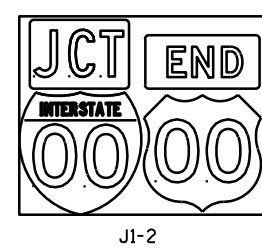
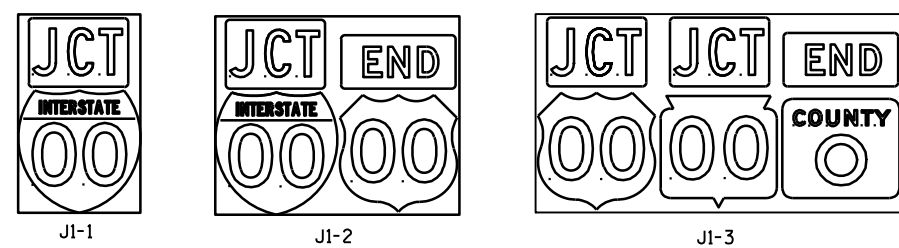




- NOTES**
1. All Signs Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
 2. Color:
Background - GREEN
Message - WHITE
 3. Message Series - C except as Shown



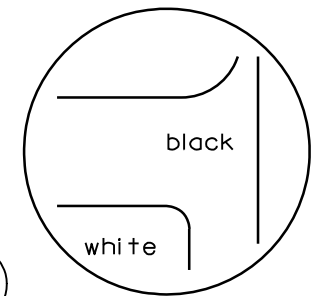
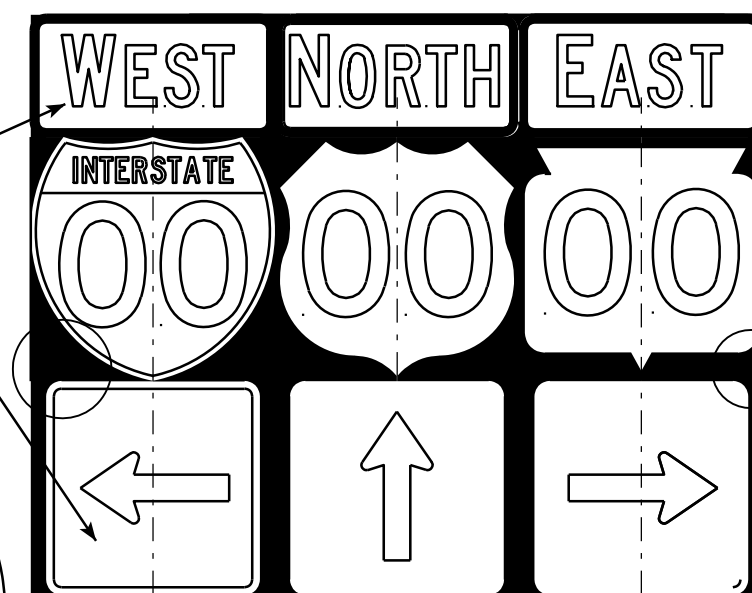
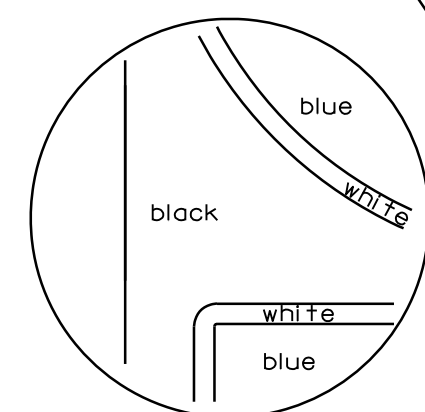
TYPICAL ASSEMBLIES



NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Black Non-reflective
Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square since base material is plywood.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.

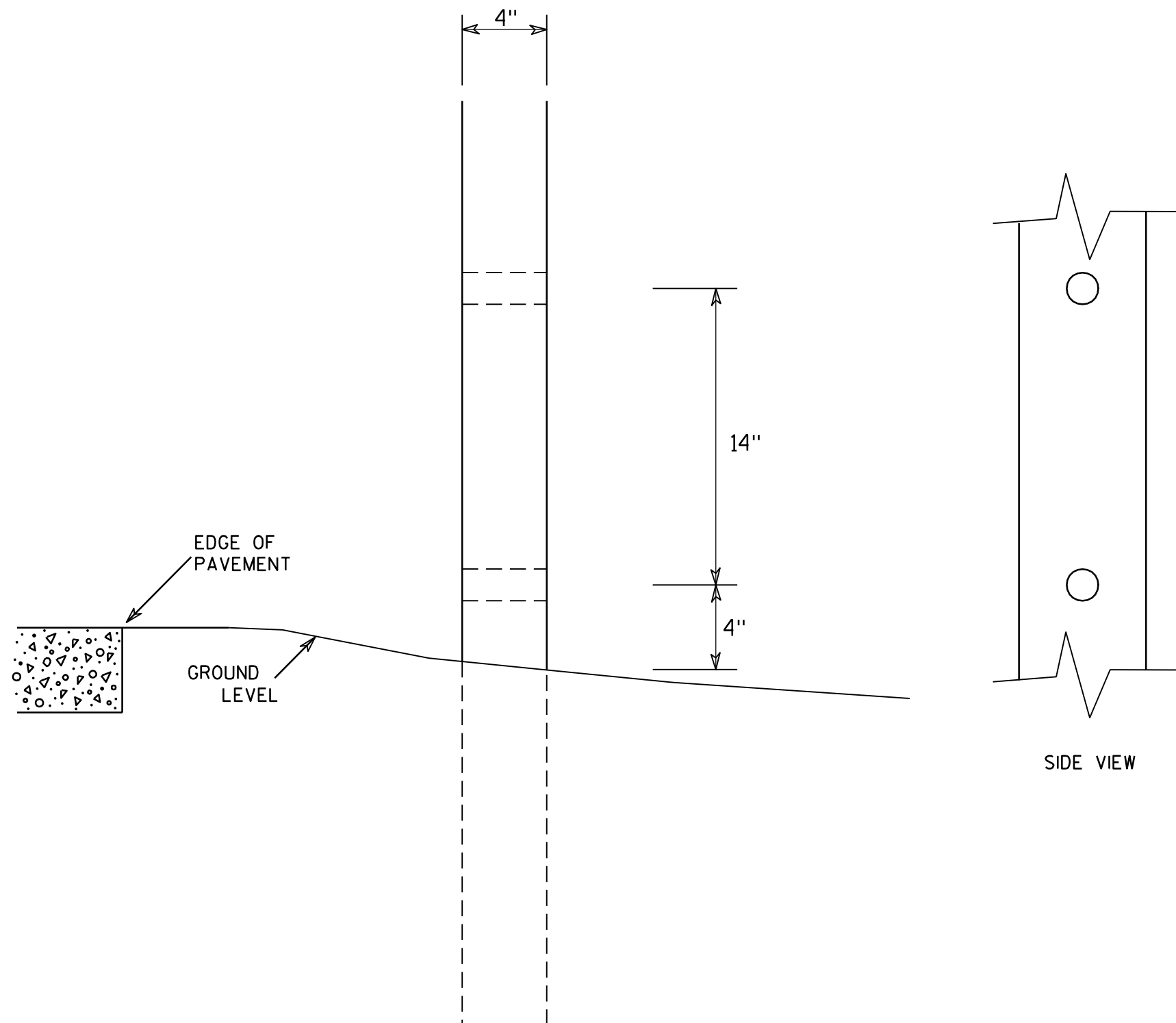
[blue background with interstate]



[black background]

ROUTE MARKERS & COMPONENTS IN TYPICAL ASSEMBLIES	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 10/21/09	PLATE NO. A2-1S.6

7



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

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:

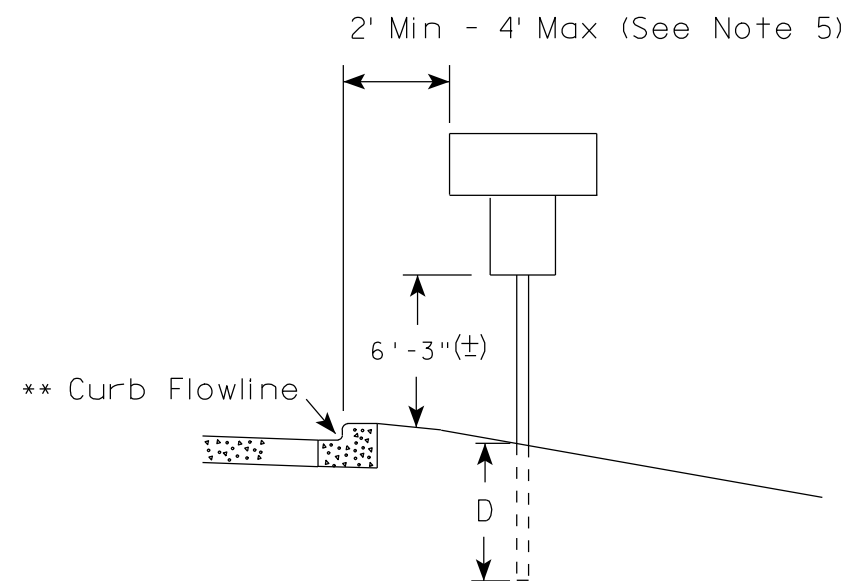
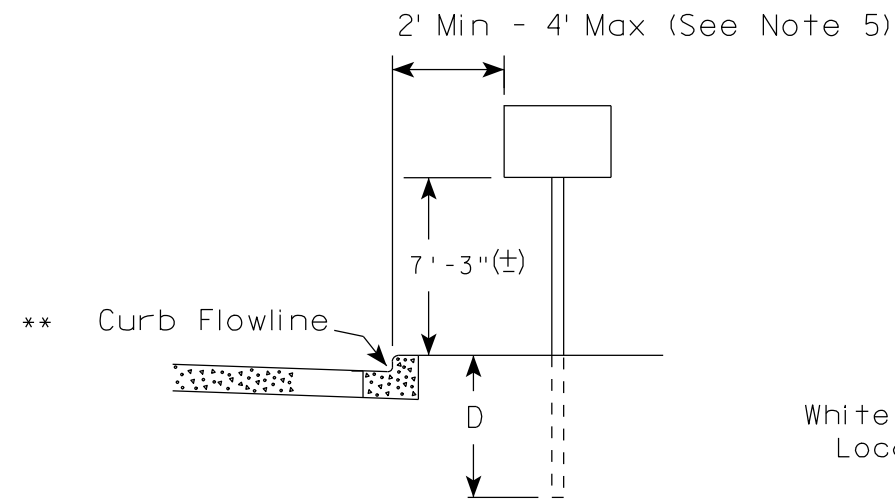
HWY:

COUNTY:

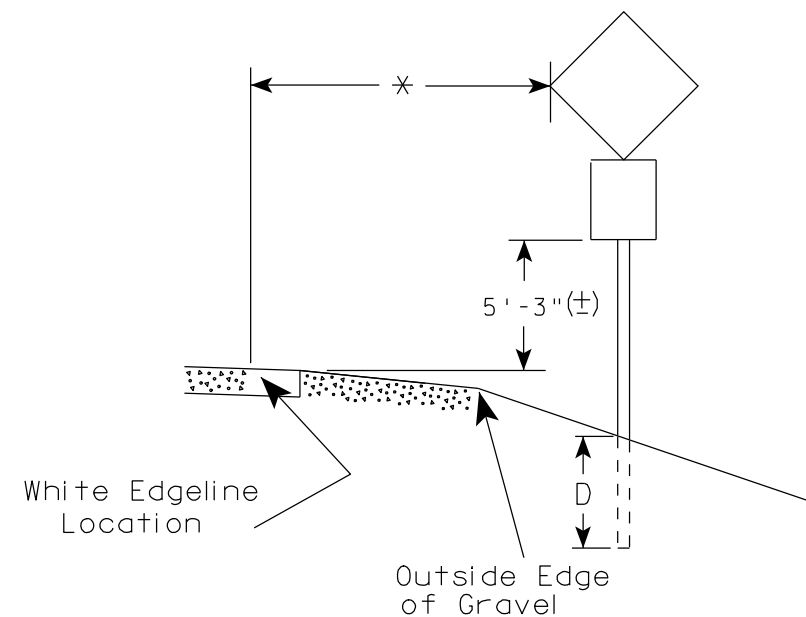
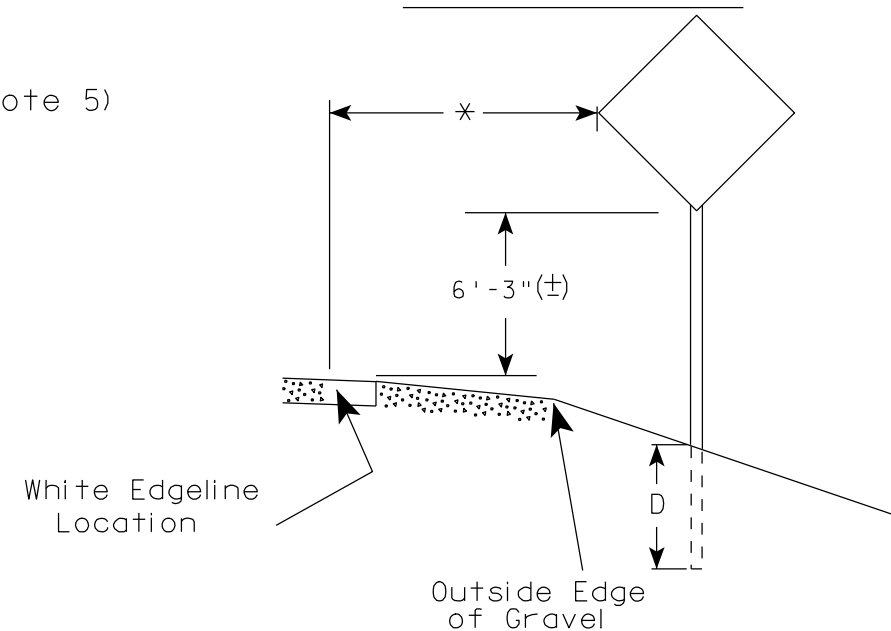
SHEET NO: 85

E

URBAN AREA



RURAL AREA (See Note 2)



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 larger than 20 sq. ft. shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
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 J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
9. 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) & End of Road Markers (W5-56 & W5-56A) shall be mounted at a height of 4'-3" (±).

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

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

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 9/21/2011 PLATE NO. A4-3.16

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 86

E

GENERAL NOTES

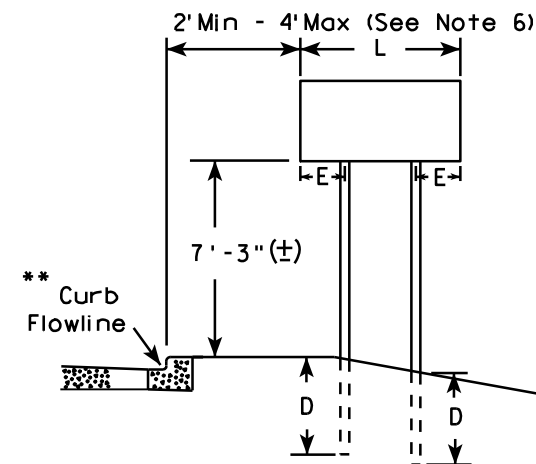
- For multiple post installations, individual post spacing shall be greater than 3'-6".
- See tables below for required number of posts.
- For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
- The (±) tolerance for mounting height is 3 inches.
- Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
- Offset distance shall be consistent with existing signs or consistent throughout length of project.
- Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
- 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) & End of Road Markers (W5-56 & W5-56A) 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.

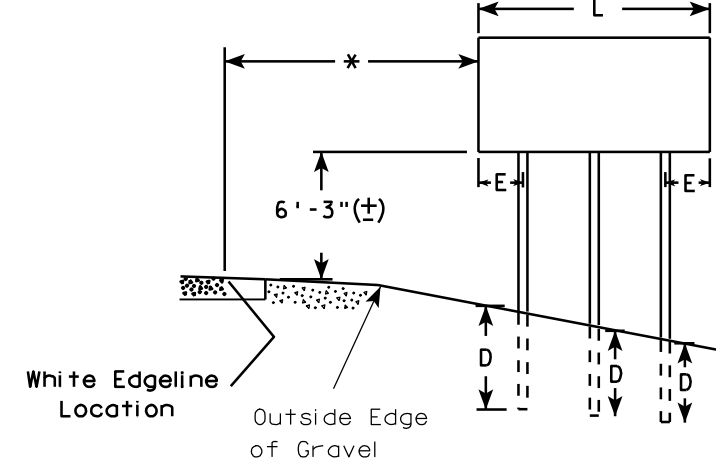
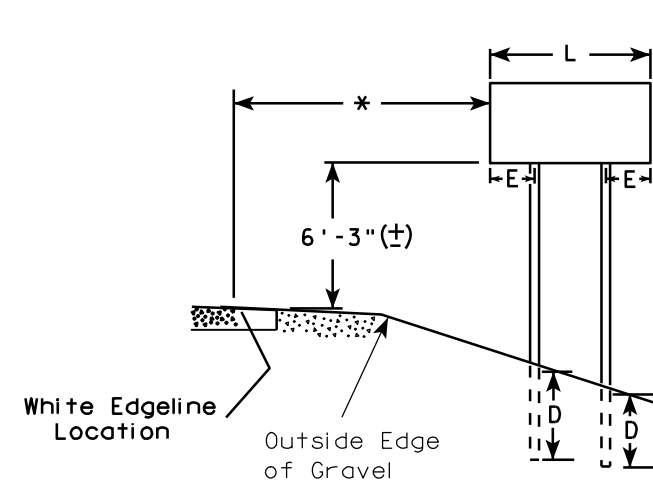
** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs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

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

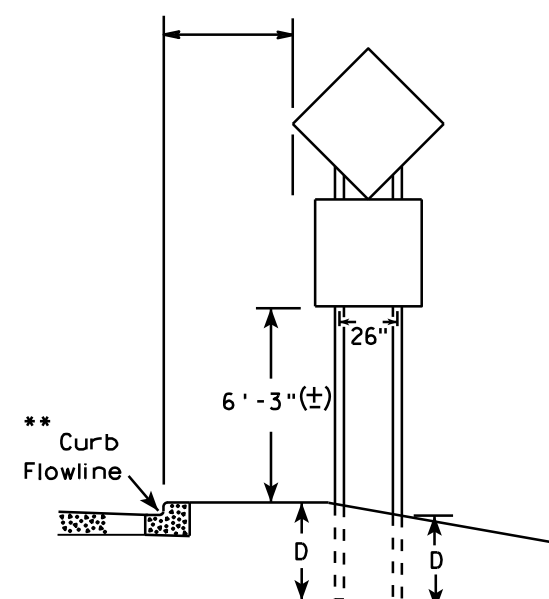
URBAN AREA



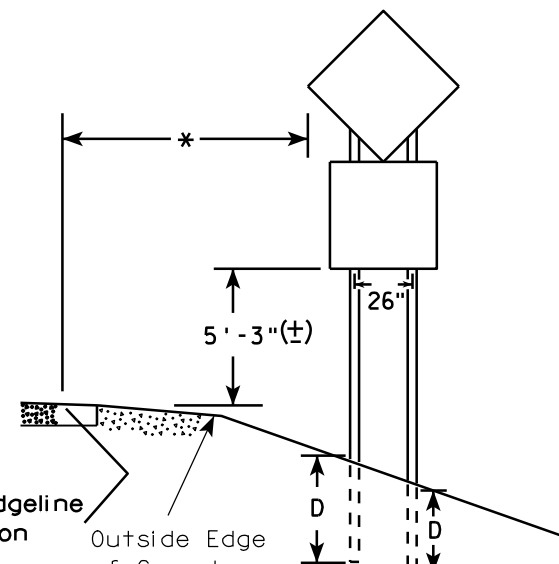
RURAL AREA (See Note 3)



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



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 120"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 120" less than 168"	12"

SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)	
L	E
168" and greater	12"

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION
OF TYPE II SIGNS
ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 9/21/2011 PLATE NO. A4-4.11

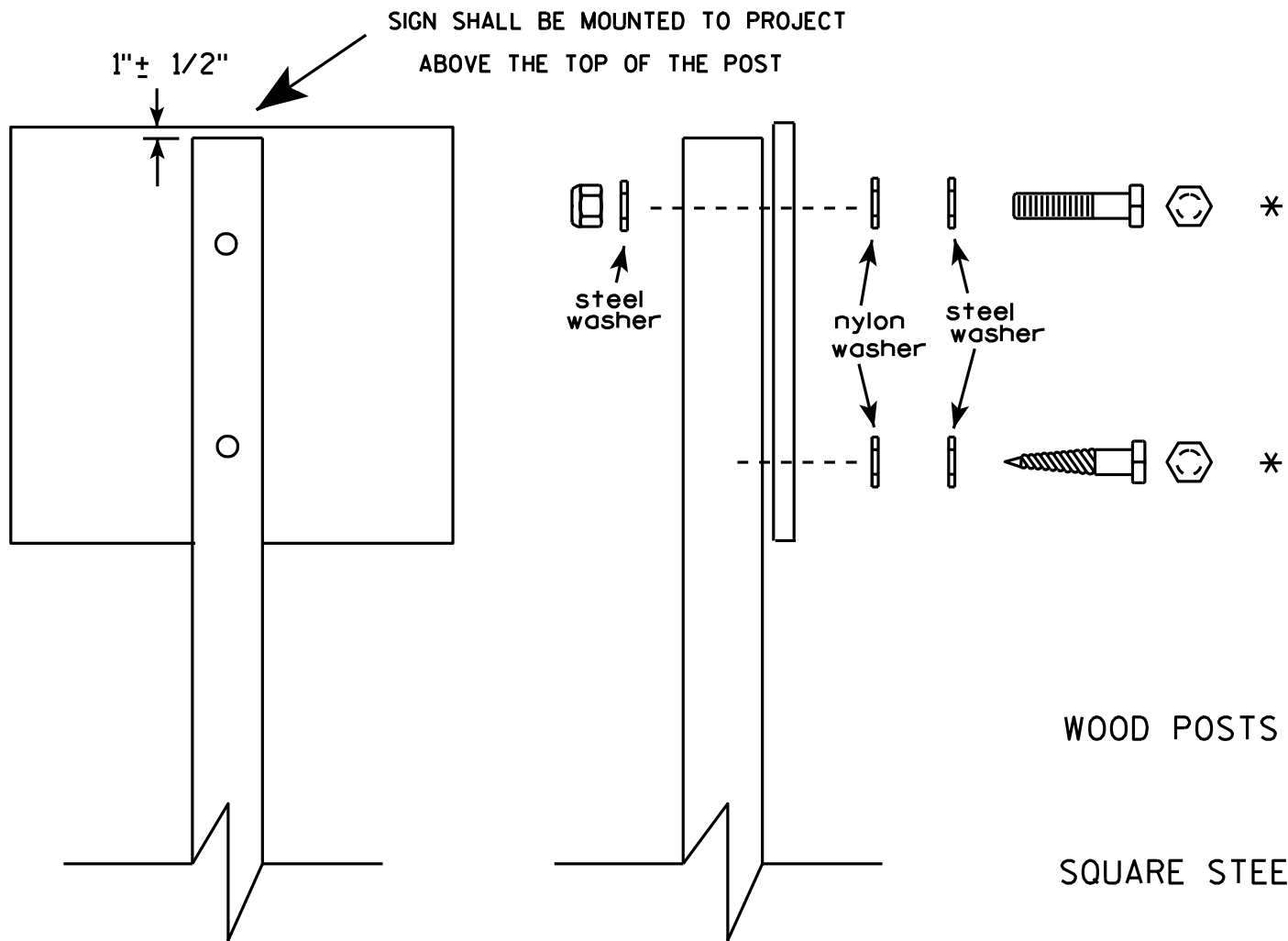
PROJECT NO:

HWY:

COUNTY:

SHEET NO: 87

E

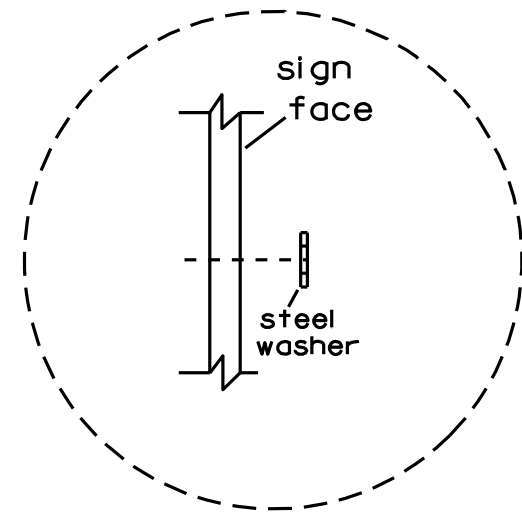


Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

- 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.

- WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3"
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts
- SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts
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 for all Type H signs.

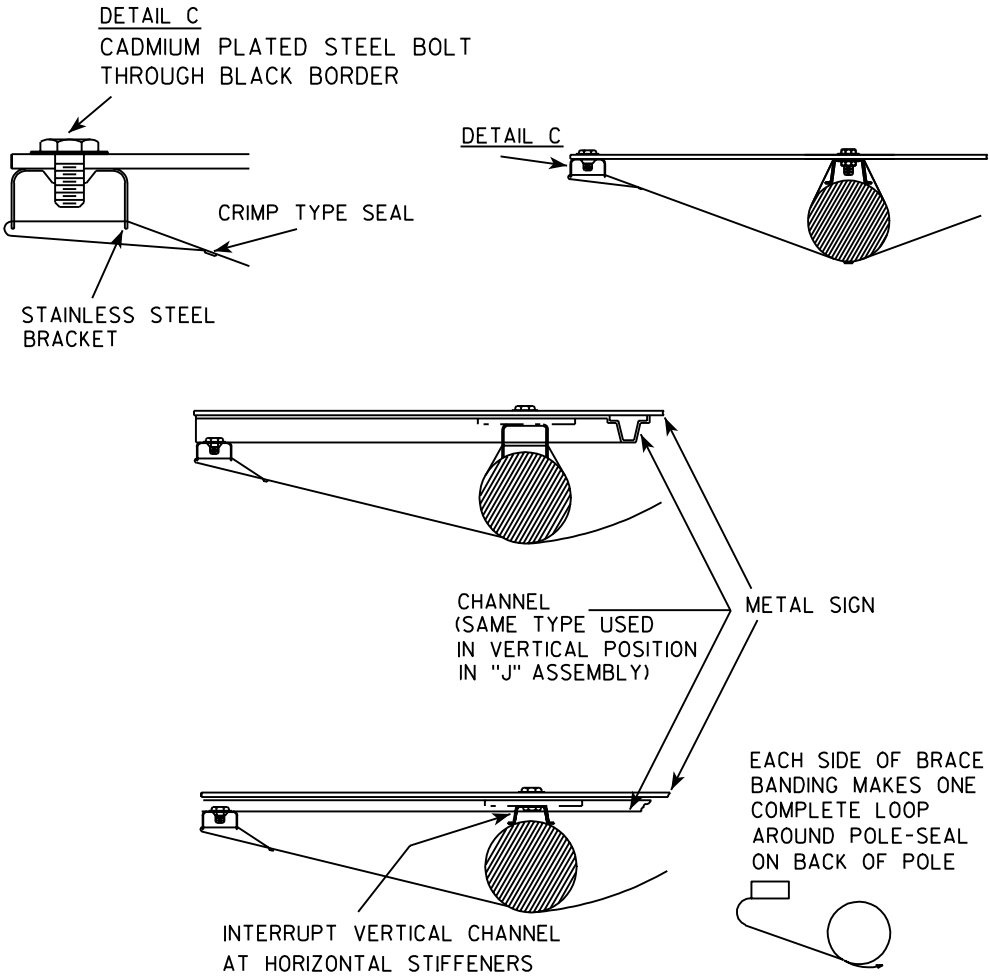


Washer Placement when Sign Has Other Than Type H or Type F Face

* 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	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 3/23/10	PLATE NO. A4-8.7

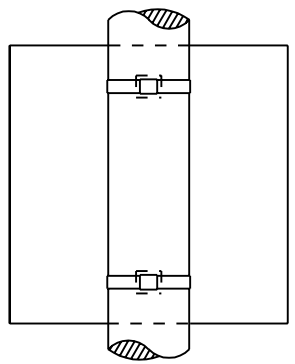
BRACE BANDING



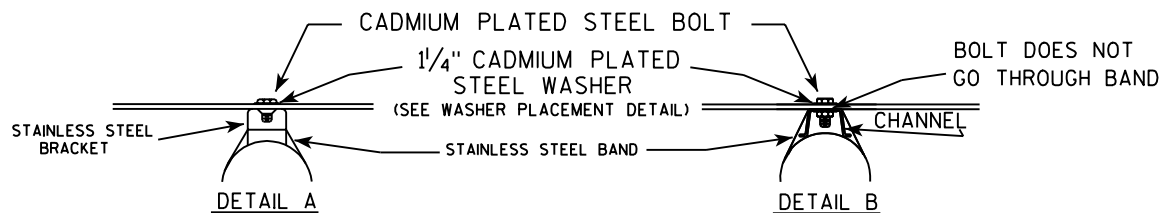
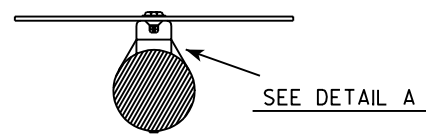
BRACE BANDING

BRACE BANDING SHALL BE TIGHTENED FIRMLY
BUT NOT SO TIGHT AS TO APPRECIABLY
CURVE FACE OF SIGN.

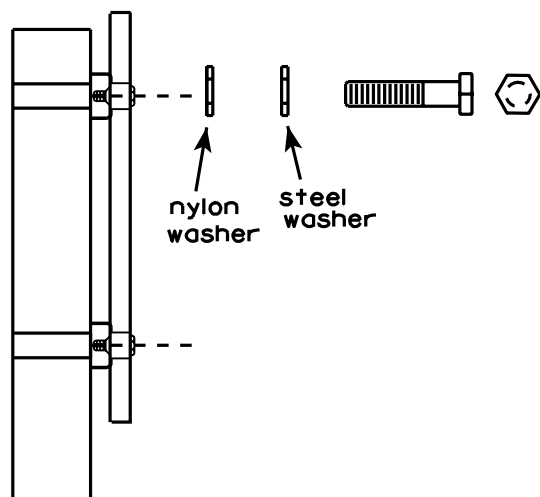
SINGLE SIGN



BRACKET BANDING

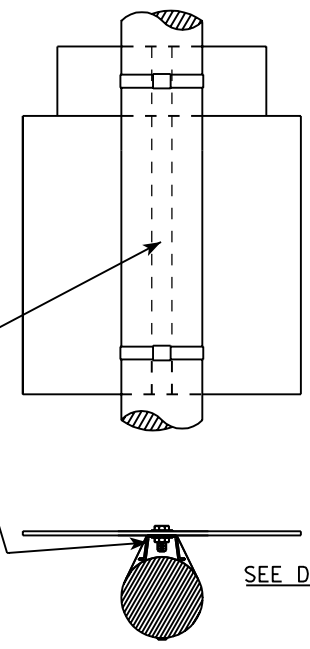


WASHER PLACEMENT



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
FOR ALL TYPE H SIGNS

"J" ASSEMBLY



GENERAL NOTES

1. Signs 4' or greater in width shall have one brace band installed at the center of the sign.
2. Signs 3' or greater in height shall have three bracket bands installed. Signs less than 3' in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be 3/4" in width and 0.025" thickness.

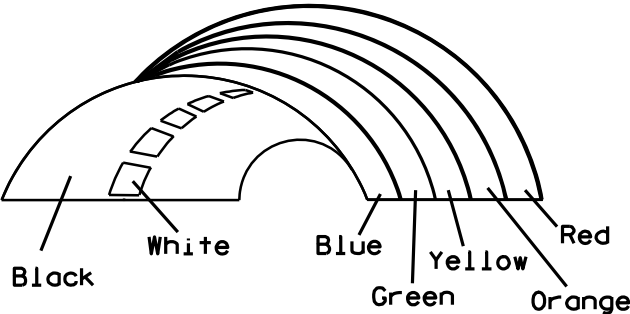
STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
For State Traffic Engineer
DATE 11/08/05 PLATE NO. A5-9.2



* VARIES

Background Colors of Symbol*



*1/4" Black Border between each color of rainbow and border of rainbow

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 - (See Note 5)
3. Message Series - (See Note 6)
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Border - Blue
Line 1 - Red
Line 2 - Black
Line 3-5 - Blue
6. Line 1 - Dutch 8011L
Line 2 - Series E
Line 3-5 - Series C
7. Contractor shall provide and install a new post bracket in accordance with the I55-56B sign detail.

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																											
2	30	36	1 1/2	1/2	5/8	3	2	3 1/2	2 7/8	1	8	2 1/8	11 1/4	11 1/8	9 3/8	1 1/4		3/4	12 5/8	7 1/2							7.5
3																											
4																											
5																											

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 90

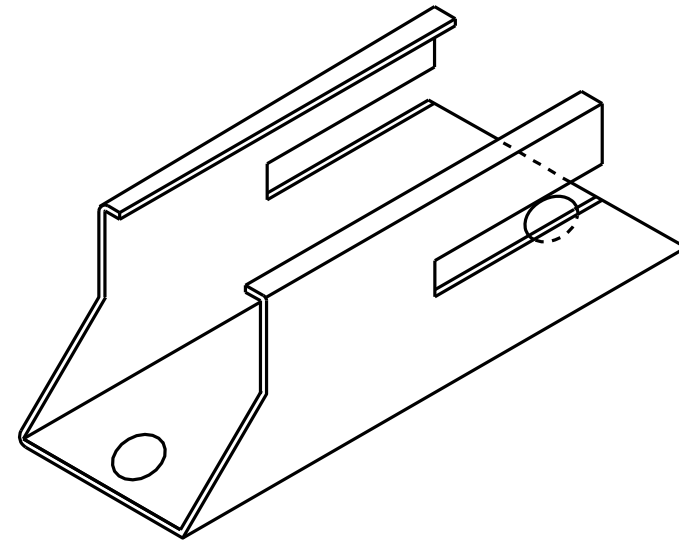
STANDARD SIGN
I55-56

WISCONSIN DEPT OF TRANSPORTATION

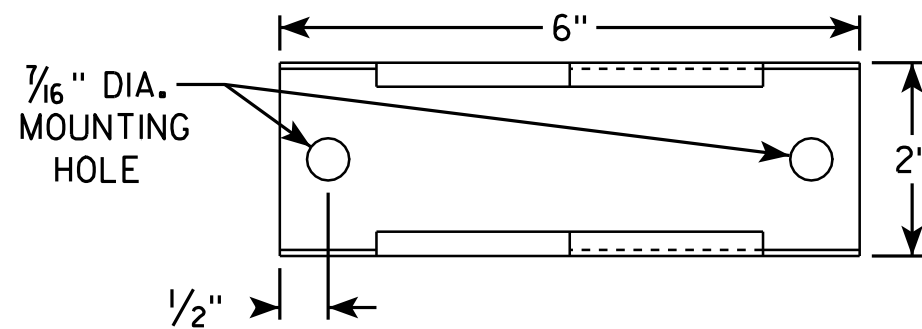
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 4/27/11 PLATE NO. I55-56.3

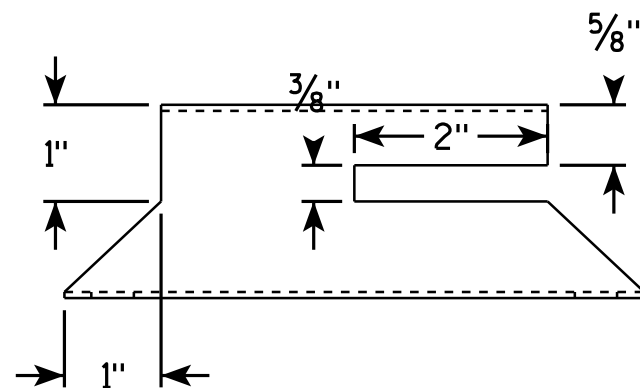
ISOMETRIC VIEW



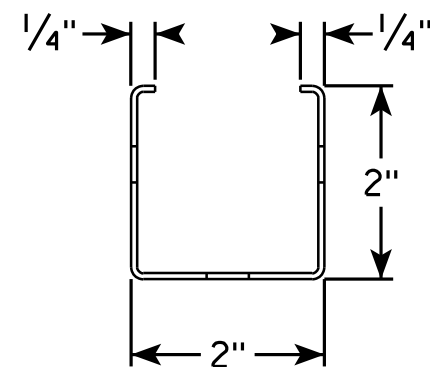
TOP VIEW



SIDE VIEW



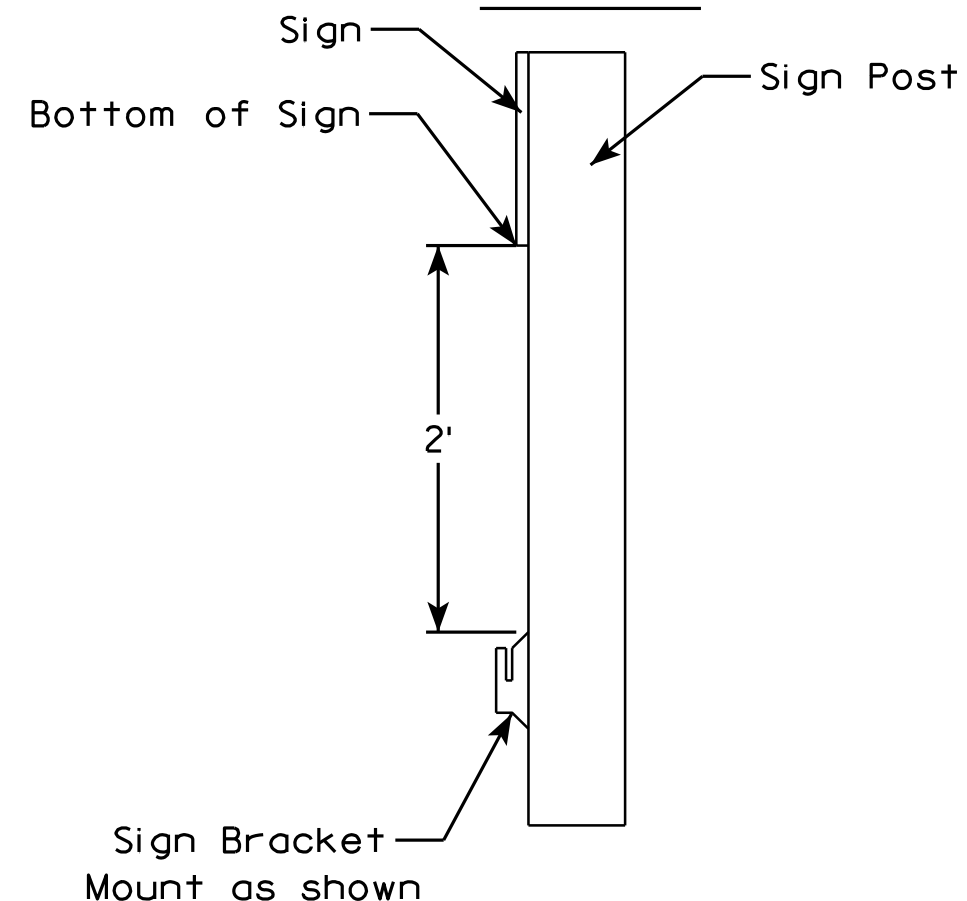
END VIEW



NOTES

1. Must be capable of permanent attachment to a wood or steel channel sign post utilizing the fastening hardware specified on the A4-8 sign plate.
2. Shall be entirely primed and painted with two coats of a black powder coated enamel paint.
3. Shall be made with 12 gauge steel, and incorporate no welds, no hinged components, no threaded lock-type components, and no parts which are loose or can be separated from the main body.
4. Shall have rounded edges with at least 1/8" radii.
5. Shall not have unrounded and uncoated metal edges which can contact the back surface of the roll-up sign.
6. Top of bracket shall be mounted 2' below the bottom of the I55-56 sign.
7. Cost of bracket and fastening hardware shall be incidental to the I55-56 sign.

SIDE VIEW



ROLLUP SIGN BRACKET
I55-56B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 2/5/10 PLATE NO. I55-56B.1

PROJECT NO:

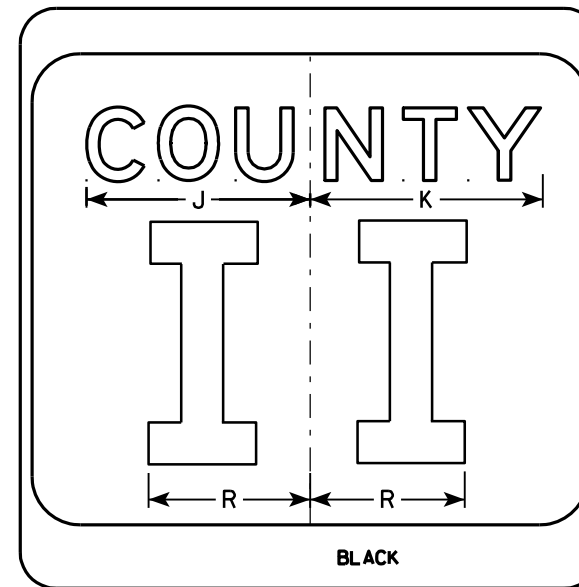
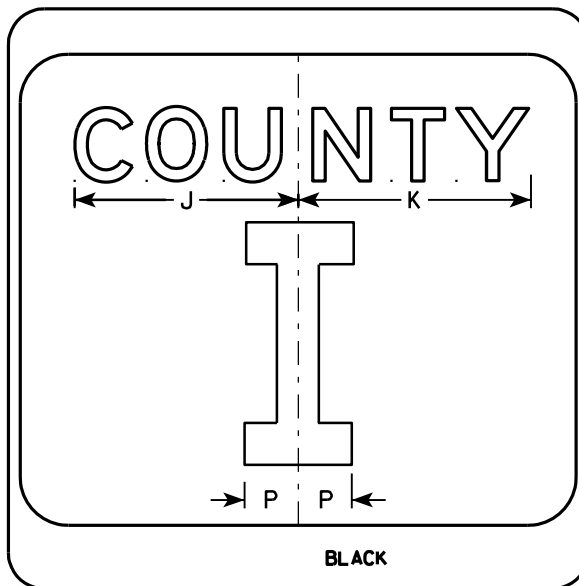
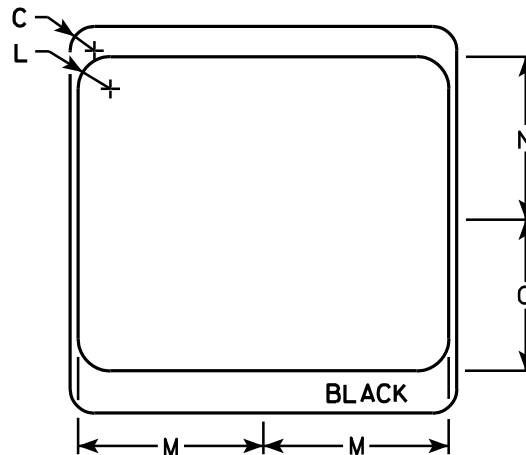
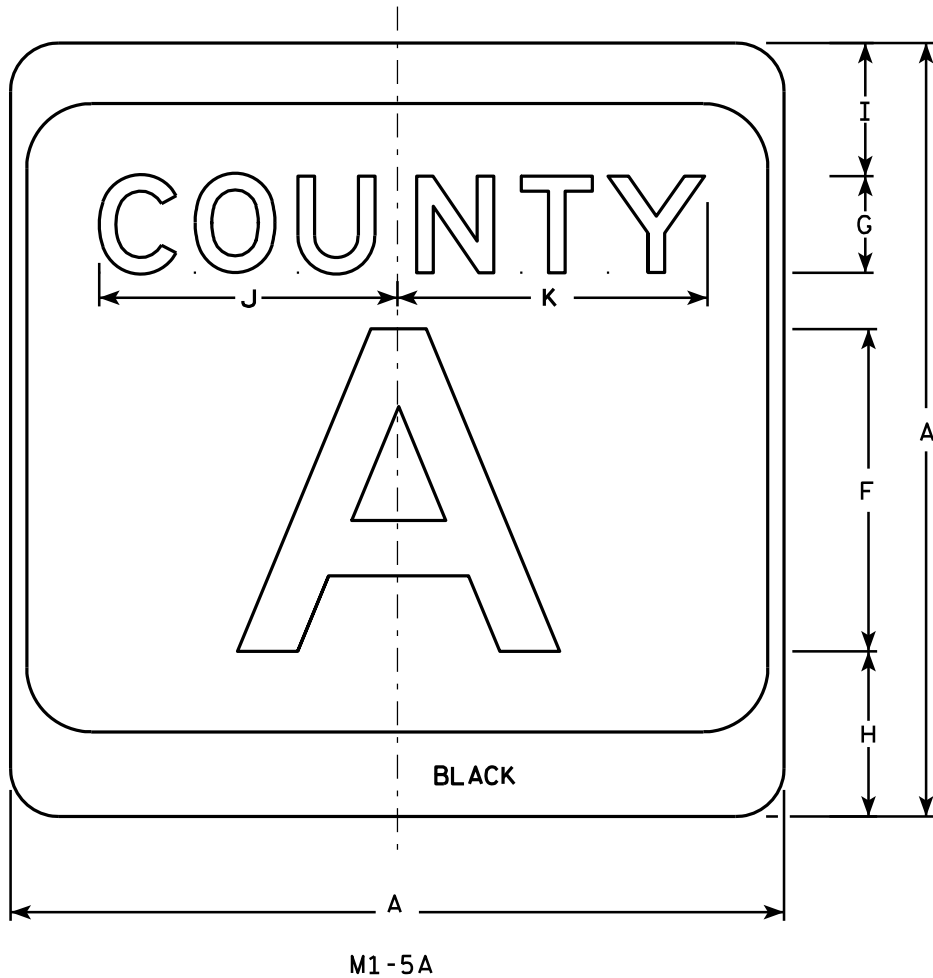
HWY:

COUNTY:

SHEET NO: 91

E

7



NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White & Black - See Note 7
Message - Black
3. Message Series - see Note 5
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. Message Series E for 1 letter.
Message Series D for 2 letters unless message is too big then Series C.
Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
Background - Type H Reflective
Detour or temporary Signs
Background - Reflective

7

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																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

PROJECT NO:	HWY:	COUNTY:	SHEET NO: 92	E
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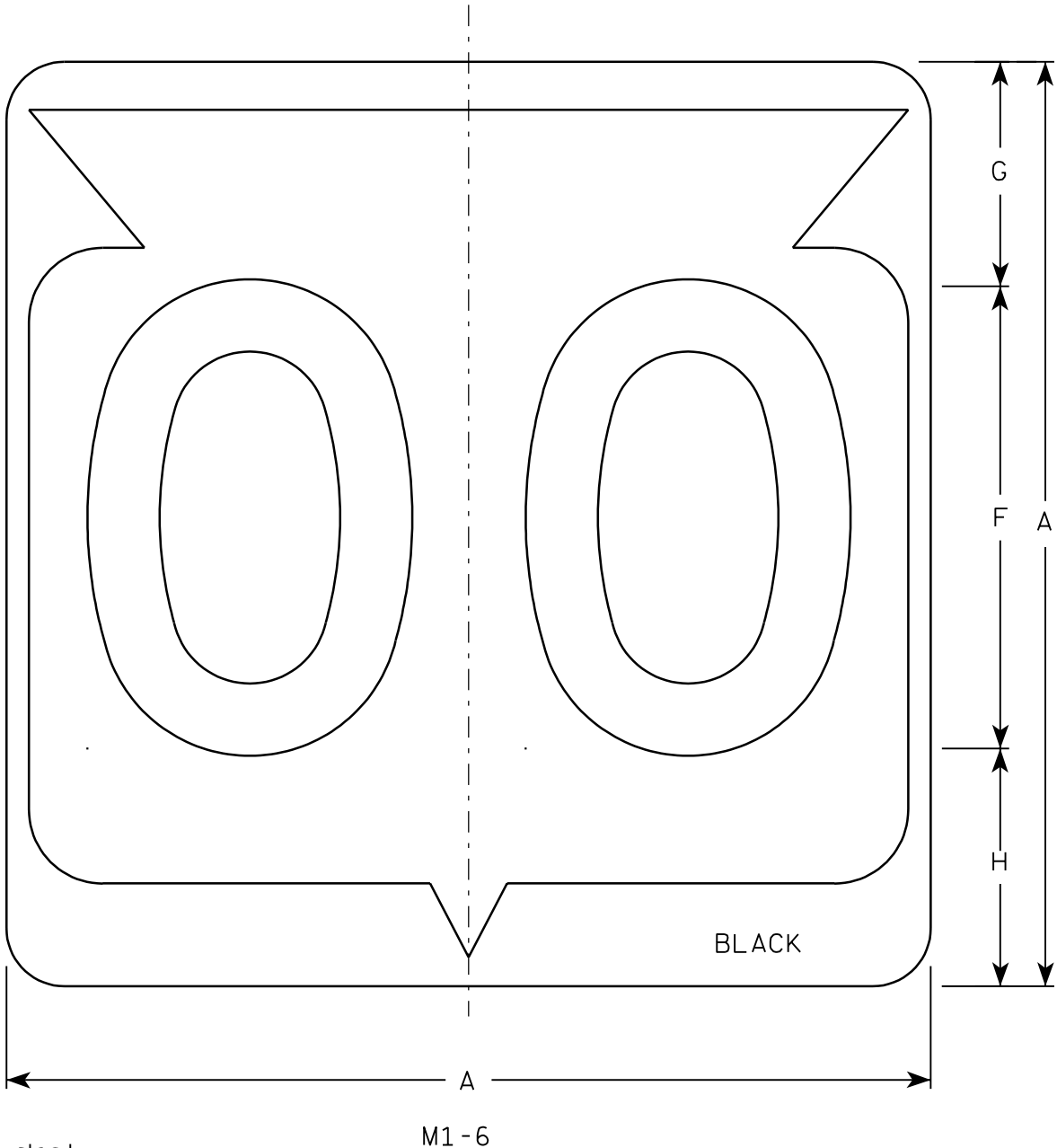
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

7



Metric equivalent
for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

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.	Area m ²
1																												
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0	.36
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 93

E

FILE NAME : C:\Users\Projects\tr_stdplate\M16.DGN

PLOT DATE : 13-OCT-2005 14:55

PLOT BY : DITJPH

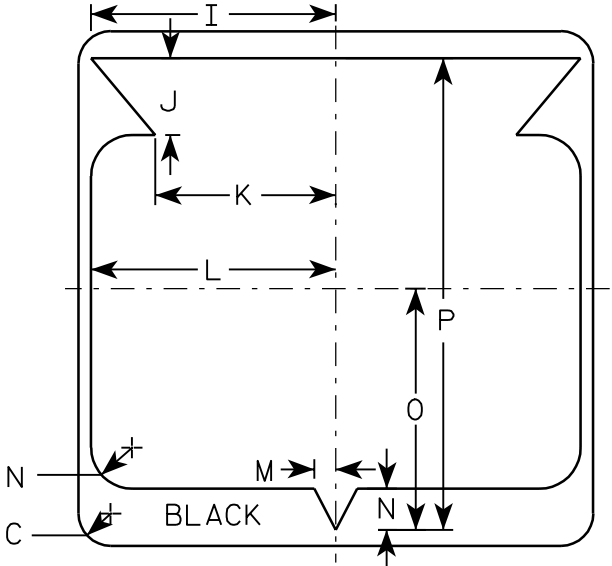
PLOT NAME :

PLOT SCALE : 6.715871:1.000000

WISDOT/CADDs SHEET 42

NOTES

1. Sign is Type II - See Note 6 - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White & Black - See Note 6
Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base
material is plywood but borders shall be rounded
as shown. When base material is metal, the
corners and borders shall be rounded.
5. Substitute appropriate Series numerals and
adjust spacing as per plate A10-1.
6. Permanent Signs
Background - Type H Reflective
Detour or temporary Signs
Background - Reflective



STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

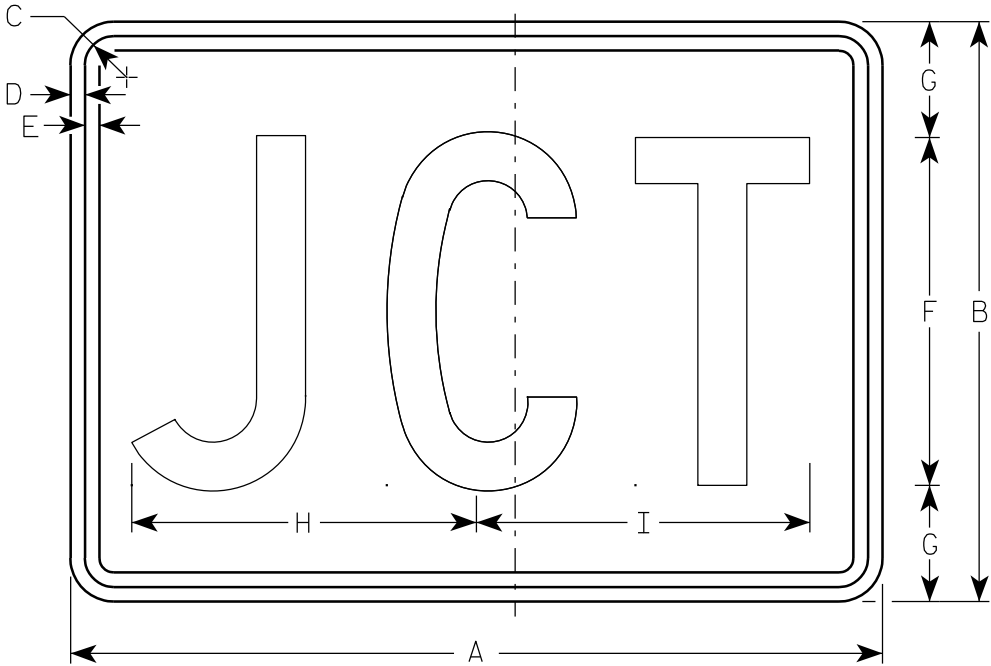
Chester J. Spang
for State Traffic Engineer

DATE 3/20/02

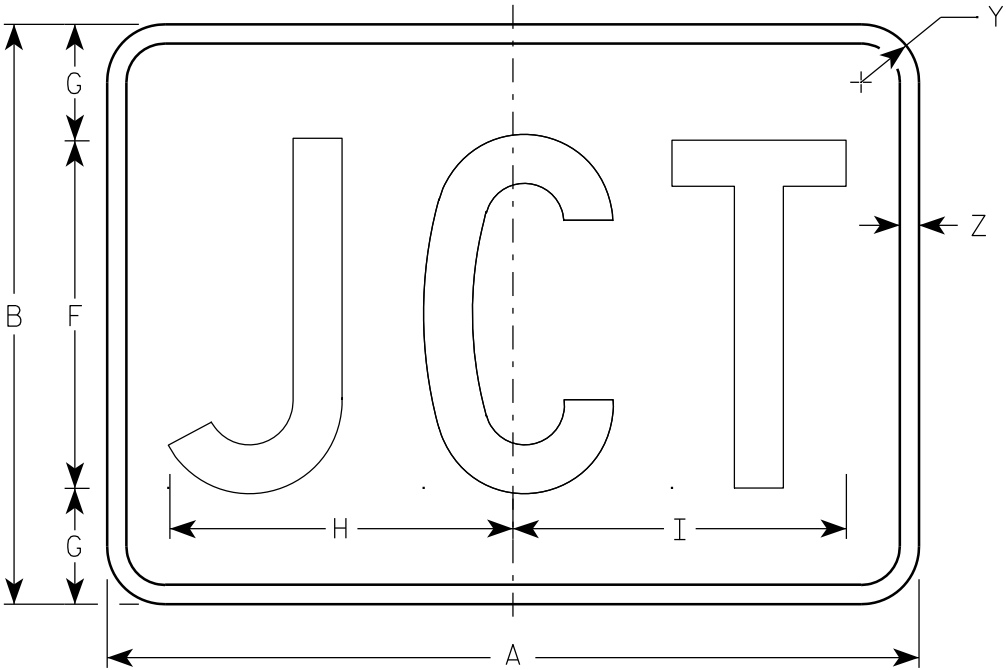
PLATE NO. M1-6.9

NOTES

1. Sign is Type II - See Note 5 - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - See note 5
Message - See note 5
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.
5. M2-1 Background - White - Type H Reflective
(Detour or temporary Signs - Reflective)
Message - Black
MB2-1 Background - Blue
Message - White - Type H Reflective
(Detour or temporary Signs - Reflective)
MG2-1 Background - Green
Message - White - Type H Reflective
MK2-1 Background - Green
Message - White - Type H Reflective
MM2-1 Background - White - Type H Reflective
Message - Green
MN2-1 Background - Brown
Message - White - Type H Reflective
MR2-1 Background - Brown
Message - Yellow - Type H Reflective



M2-1
MK2-1
MM2-1
MR2-1



MB2-1
MG2-1
MN2-1

Metric equivalent
for this sign is:

SIZE	
1	
2	525 mm X 375 mm
3	750 mm X 525 mm
4	750 mm X 525 mm
5	750 mm X 525 mm

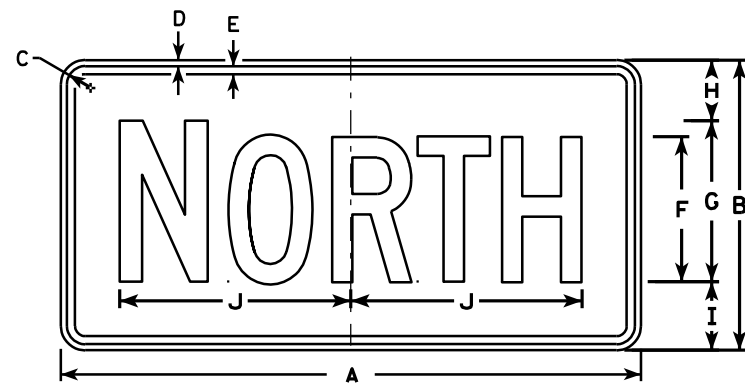
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20	0.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20

STANDARD SIGN
M2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

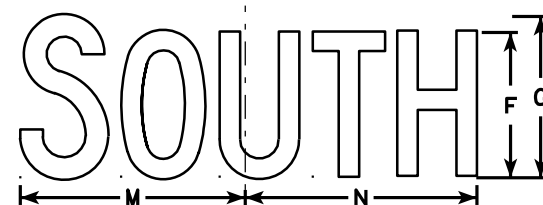
DATE 3/16/10 PLATE NO. M2-1.10



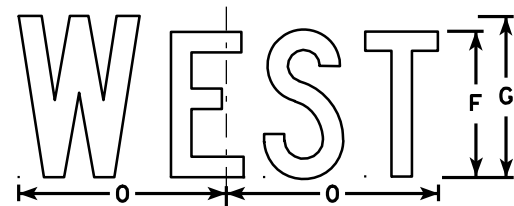
M3-1
MK3-1
M03-1



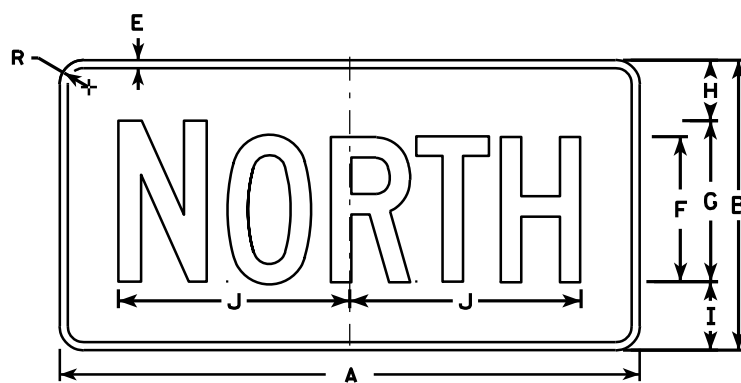
M3-2
MK3-2
M03-2



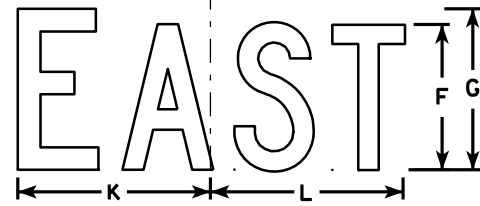
M3-3
MK3-3
M03-3



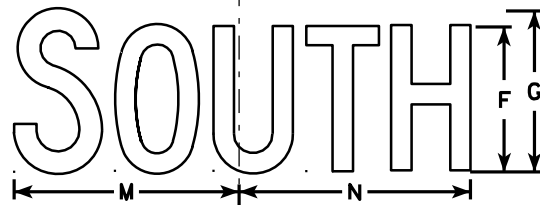
M3-4
MK3-4
M03-4



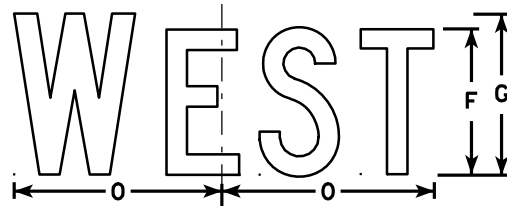
MB3-1
MG3-1
MM3-1
MN3-1



MB3-2
MG3-2
MM3-2
MN3-2



MB3-3
MG3-3
MM3-3
MN3-3



MB3-4
MG3-4
MM3-4
MN3-4

NOTES

1. All Signs Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - See note 5
Message - See note 5
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.
5. M3-1 thru M3-4 Background - White - Type H Reflective (Detour or temporary signs - Reflective)
Message - Black
MB3-1 thru MB3-4 Background - Blue
Message - White - Type H Reflective (Detour or temporary signs - Reflective)
MG3-1 thru MG3-4 Background - Green
Message - White - Type H Reflective
MK3-1 thru MK3-4 Background - Green
Message - White - Type H Reflective
MM3-1 thru MM3-4 Background - White - Type H Reflective
Message - Green
MN3-1 thru MN3-4 Background - Brown
Message - White - Type H Reflective
M03-1 thru M03-4 Background - Orange - Reflective
Message - Black
6. Note the first letter of each direction is larger than the remainder of the message.

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																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

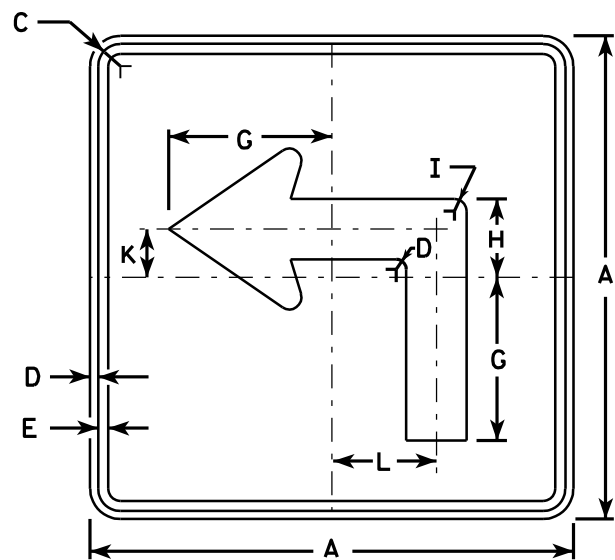
PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: 95 E

STANDARD SIGNS M3-1 thru M3-4 SERIES

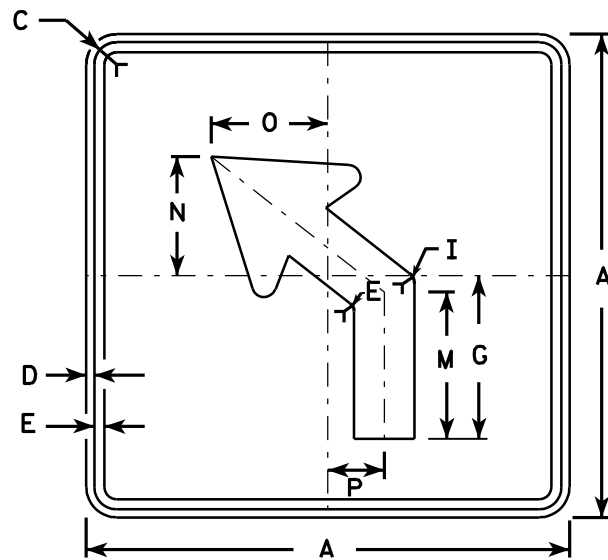
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

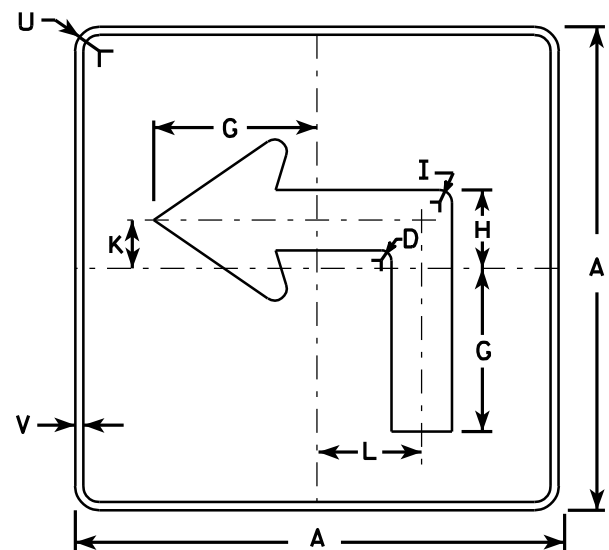
DATE 11/10/10 PLATE NO. M3-1.12



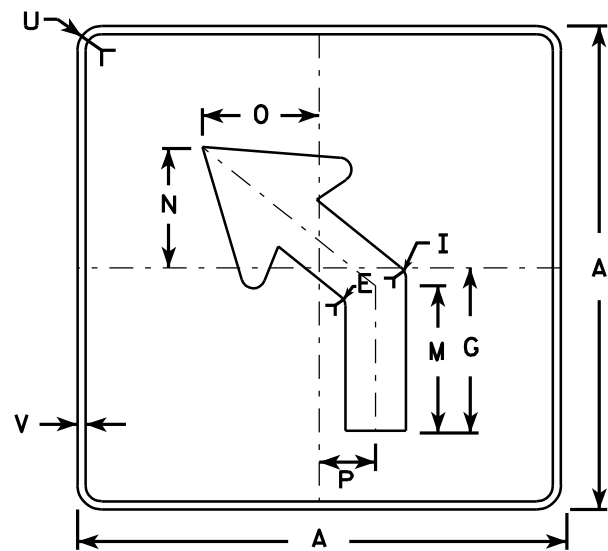
M5-1L
MK5-1L
MM5-1L
MO5-1L
MR5-1L



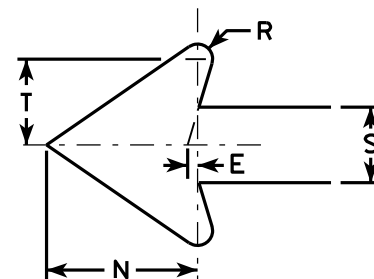
M5-2L
MK5-2L
MM5-2L
MO5-2L
MR5-2L



MB5-1L
MG5-1L
MN5-1L



MB5-2L
MG5-2L
MN5-2L



NOTES

- Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - See note 4
Message - See note 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.
- M5-1 and M5-2 Background - White - Type H Reflective (Detour or temporary Signs - Reflective)
Message - Black
MB5-1 and MB5-2 Background - Blue
Message - White - Type H Reflective (Detour or temporary Signs - Reflective)
MG5-1 and MG5-2 Background - Green
Message - White - Type H Reflective
MK5-1 and MK5-2 Background - Green
Message - White Type H Reflective
MM5-1 and MM5-2 Background - White - Type H Reflective
Message - Green
MN5-1 and MN5-2 Background - Brown
Message - White - Type H Reflective
MO5-1 and MO5-2 Background - Orange - Reflective
Message - Black
MR5-1 and MR5-2 Background - Brown
Message - Yellow - Type H Reflective
- M5-1R same as M5-1L except arrow points right.
- M5-2R same as M5-2L except arrow tilts right.

Metric equivalent
for this sign is:

SIZE	
1	
2	525 mm X 525 mm
3	750 mm X 750 mm
4	750 mm X 750 mm
5	750 mm X 750 mm

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.	Area m ²
1																												
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06	0.28
3	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25	0.56
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25	0.56
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25	0.56

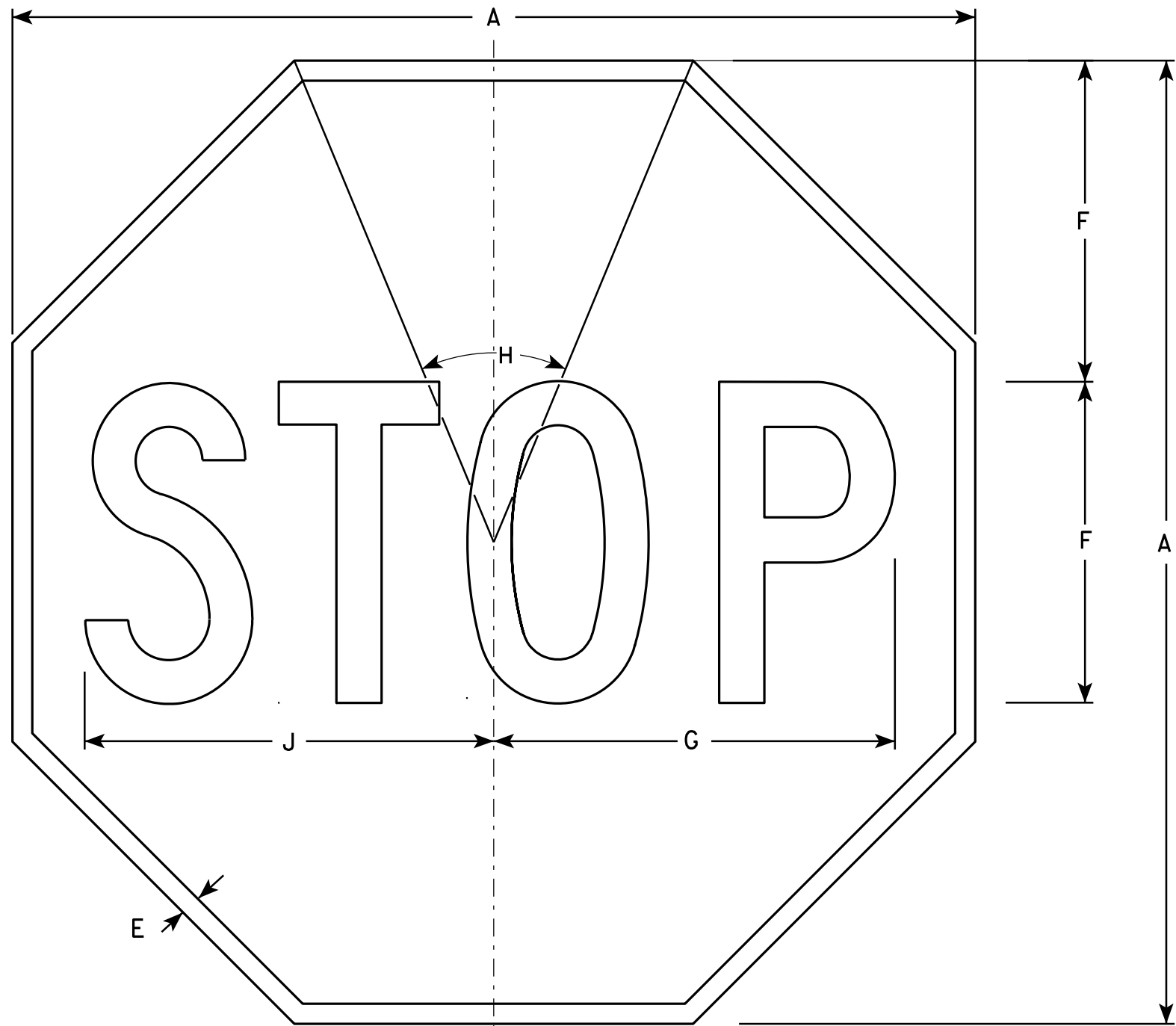
PROJECT NO:	HWY:	COUNTY:	SHEET NO: 96	E
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STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/16/10 PLATE NO. M5-1.11



NOTES

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

R1-1

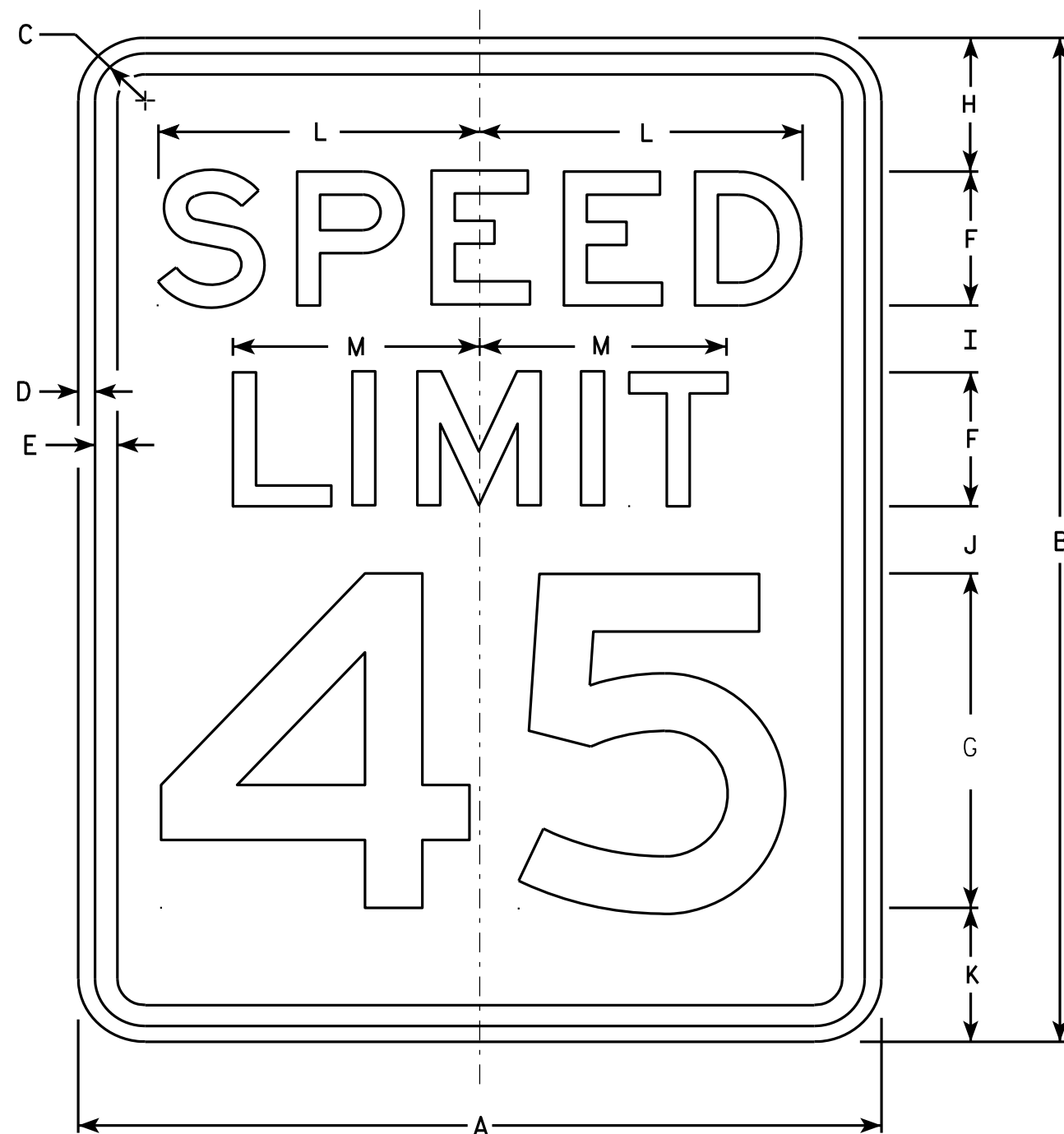
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24				3/8	8	10	45°		10 1/4																	3.31
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

STANDARD SIGN
R1 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1.12



R2-1

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 - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

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	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

STANDARD SIGN R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

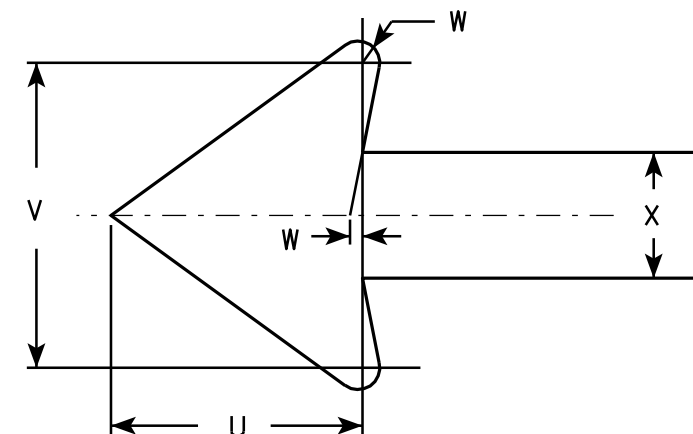
PROJECT NO: HWY: COUNTY: SHEET NO: 98 E



R7-1

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 - Red
3. Message Series - See Note 5
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. Lines 1, 3 and 4 are series C, line 2 is series B.
6. R7-1D (double arrow)
R7-1L (left arrow)
R7-1R (right arrow)



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	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	2 1/4	2 1/8	2 1/2	3 7/8	1 1/2	1 3/4	1/8	3/4			1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	2 3/4	2 5/8	3 1/8	5 7/8	2 1/4	2 5/8	1/4	1 1/8			3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
4																											
5																											

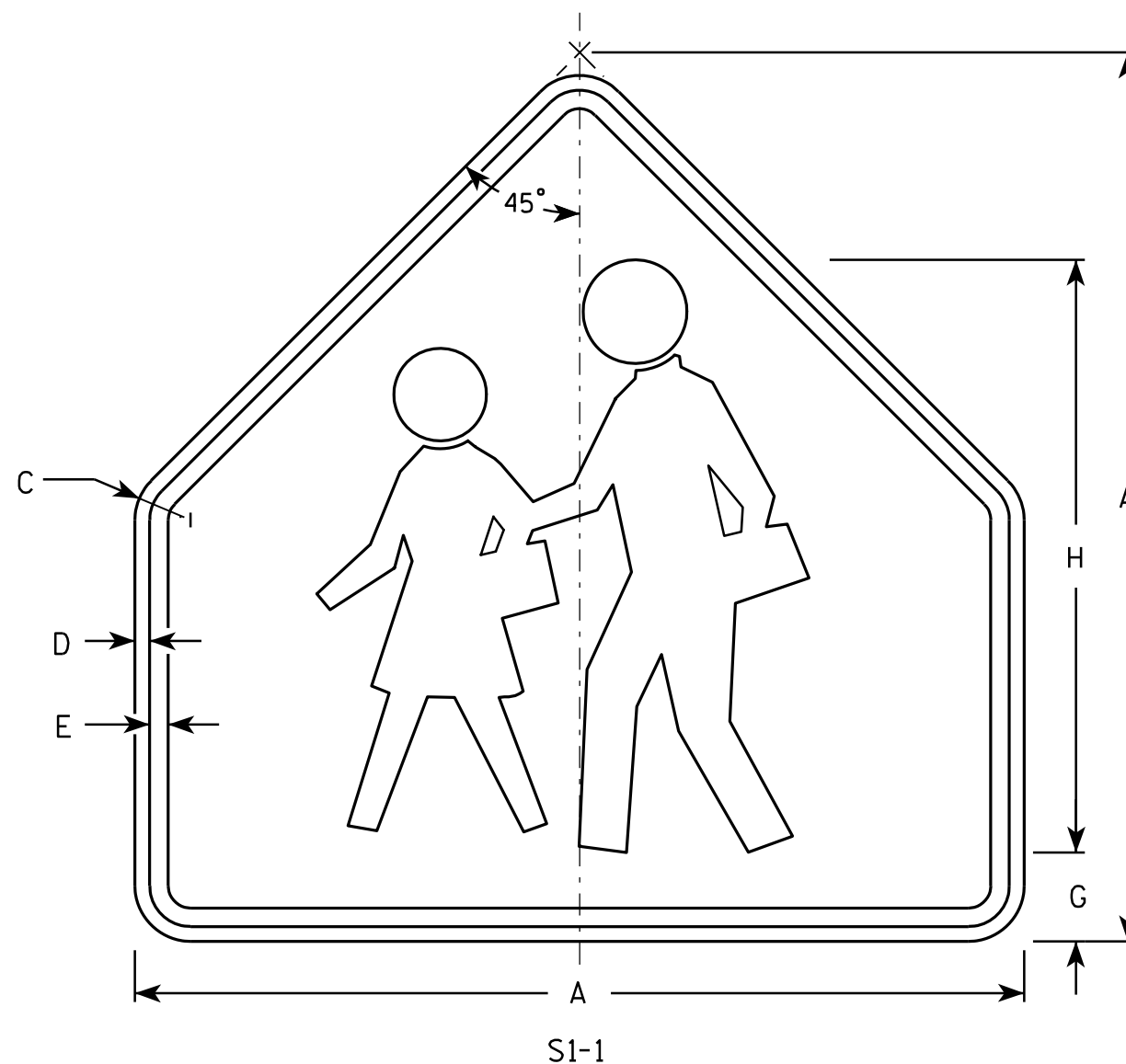
STANDARD SIGN
R7-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-1.9

PROJECT NO: HWY: COUNTY: SHEET NO: 99 E



- NOTES**
1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
 2. Color:
Background - Yellow-Green
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.

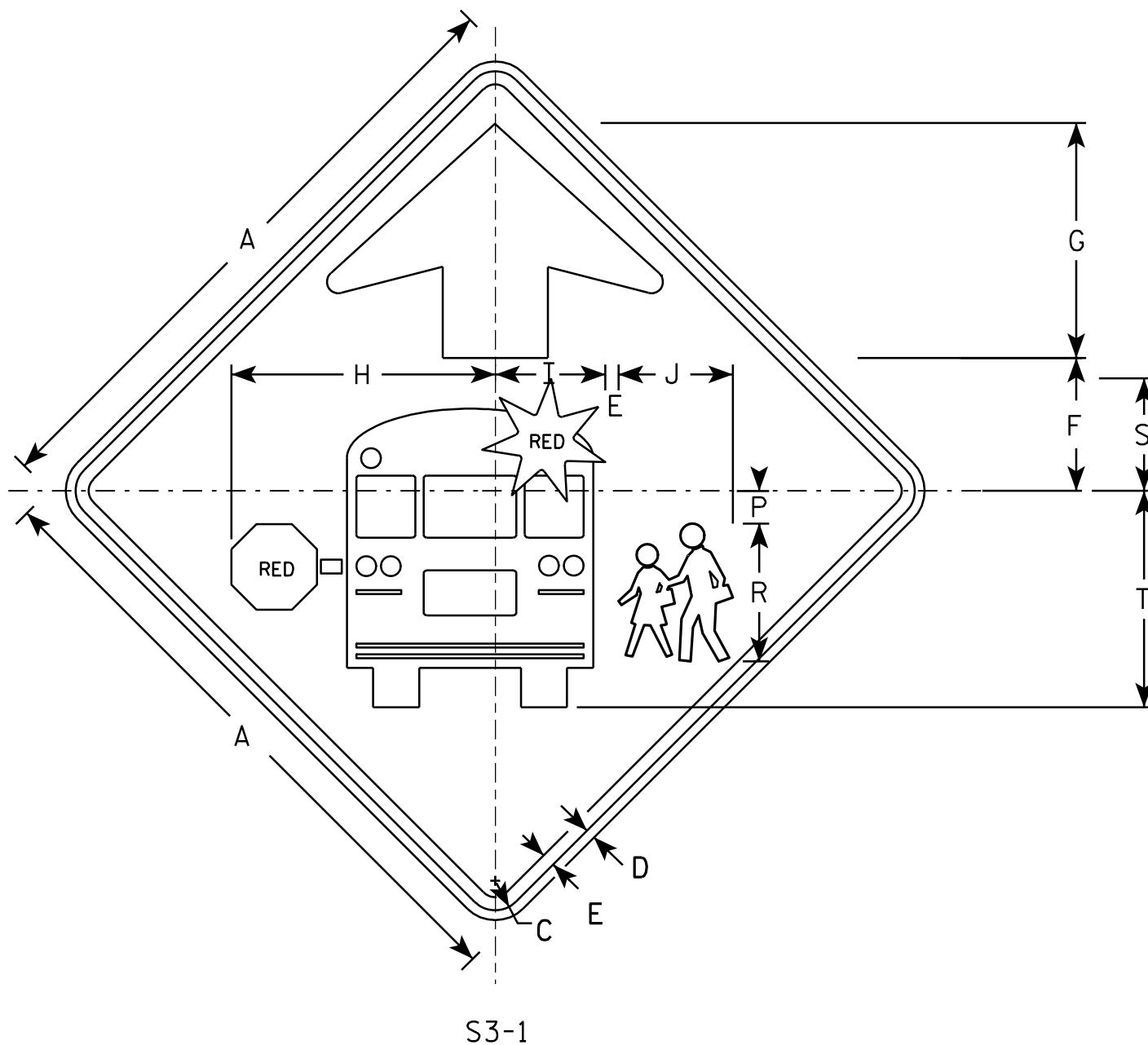
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		3	20																			4.69
2	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
3	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
4	48		2 1/4	3/4	1		4 3/4	32																			12
5																											

STANDARD SIGN
S1-1

WISCONSIN DEPT OF TRANSPORTATION

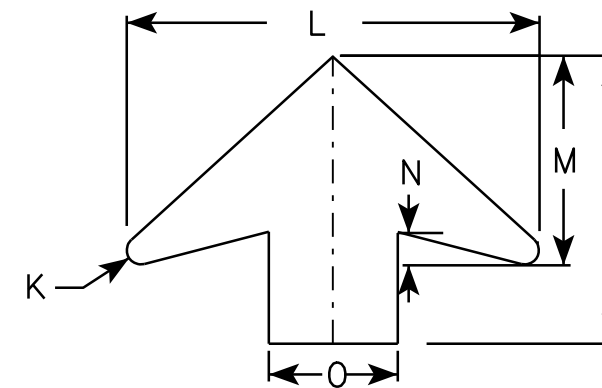
APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 6/30/05 PLATE NO. S1-1.8

PROJECT NO: HWY: COUNTY: SHEET NO: 100 E

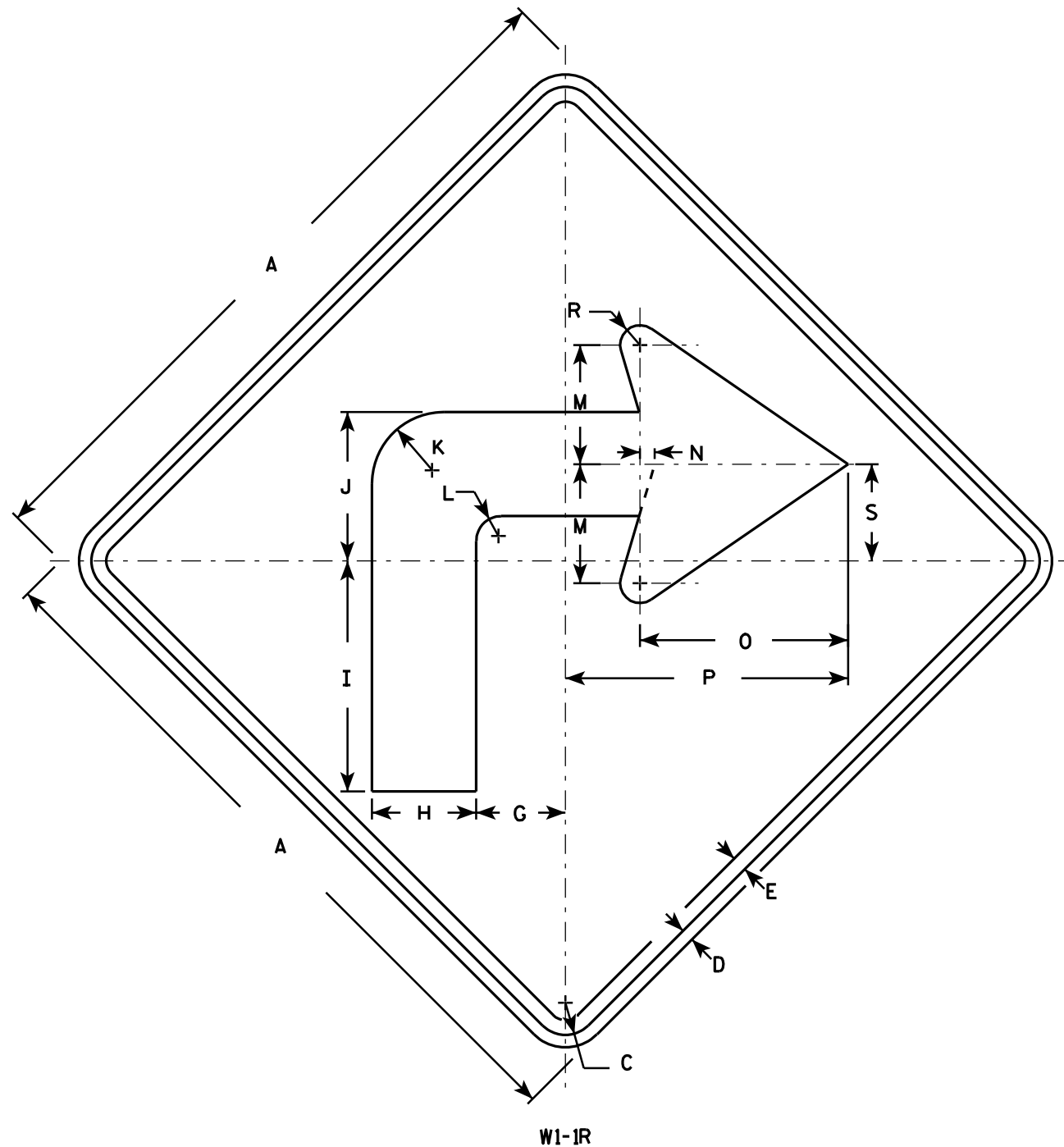


NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
 - Background - YELLOW-GREEN
 - Message - BLACK except as noted
 - Circles except PEDS- RED BACKGROUND
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.

[illegible]

STANDARD SIGN	
S3-1	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<u>Matthew R. Rauch</u> for State Traffic Engineer
DATE <u>6/8/10</u>	PLATE NO. <u>S3-16</u>



NOTES

- Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - Yellow
Message - Black
- 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.
- W1-1L is the same as W1-1R 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	24		1 1/8	3/8	1/2		3	3 1/2	7 3/4	5	2 1/2	7/8	4	1/2	7	9 1/2		5/8	3 1/4								4.0
2S	36		1 5/8	5/8	3/4		4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	1 1/4	6	3/4	10 1/2	14 1/4		1	4 7/8								9.0
2M	36		1 5/8	5/8	3/4		4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	1 1/4	6	3/4	10 1/2	14 1/4		1	4 7/8								9.0
3	36		1 5/8	5/8	3/4		4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	1 1/4	6	3/4	10 1/2	14 1/4		1	4 7/8								9.0
4	48		2 1/4	3/4	1		6	7	15 1/2	10	4 7/8	1 5/8	8	1	14	19		1 1/4	6 1/2								16.0
5	48		2 1/4	3/4	1		6	7	15 1/2	10	4 7/8	1 5/8	8	1	14	19		1 1/4	6 1/2								16.0

STANDARD SIGN

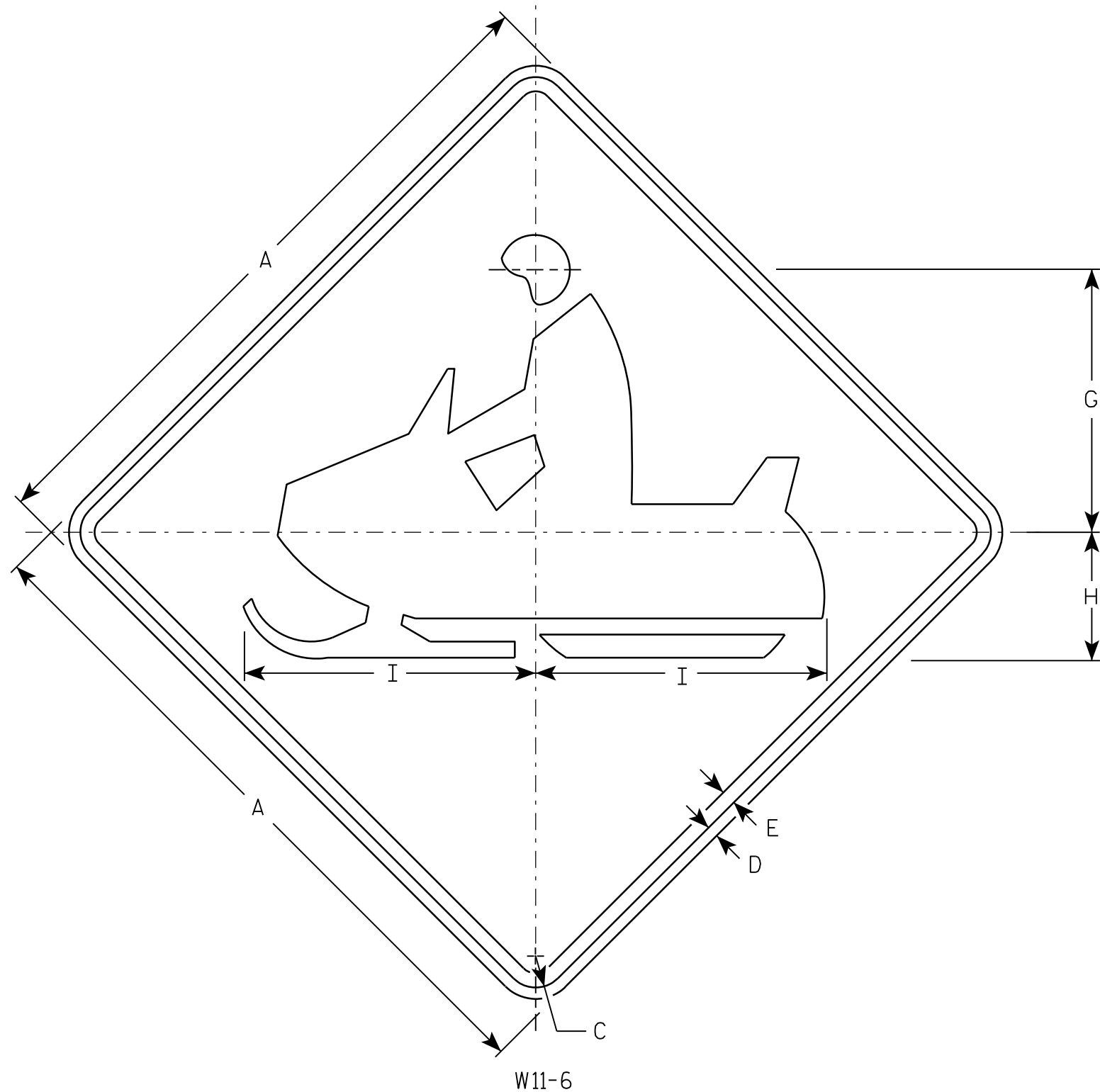
W1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/15/12 PLATE NO. W1-1.11

PROJECT NO: HWY: COUNTY: SHEET NO: 102 E



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
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	24		1 1/8	3/8	1/2		9 1/2	4 1/2	10 1/4																		4.0
2S	30		1 3/8	1/2	5/8		11 1/2	5 5/8	12 3/4																		6.25
2M	30		1 3/8	1/2	5/8		11 1/2	5 5/8	12 3/4																		6.25
3	36		1 5/8	5/8	3/4		14 1/8	6 3/4	15 1/4																		9.0
4	48		2 1/4	3/4	1		19	9	20 1/2																		16.0
5																											

STANDARD SIGN
W11-6

WISCONSIN DEPT OF TRANSPORTATION

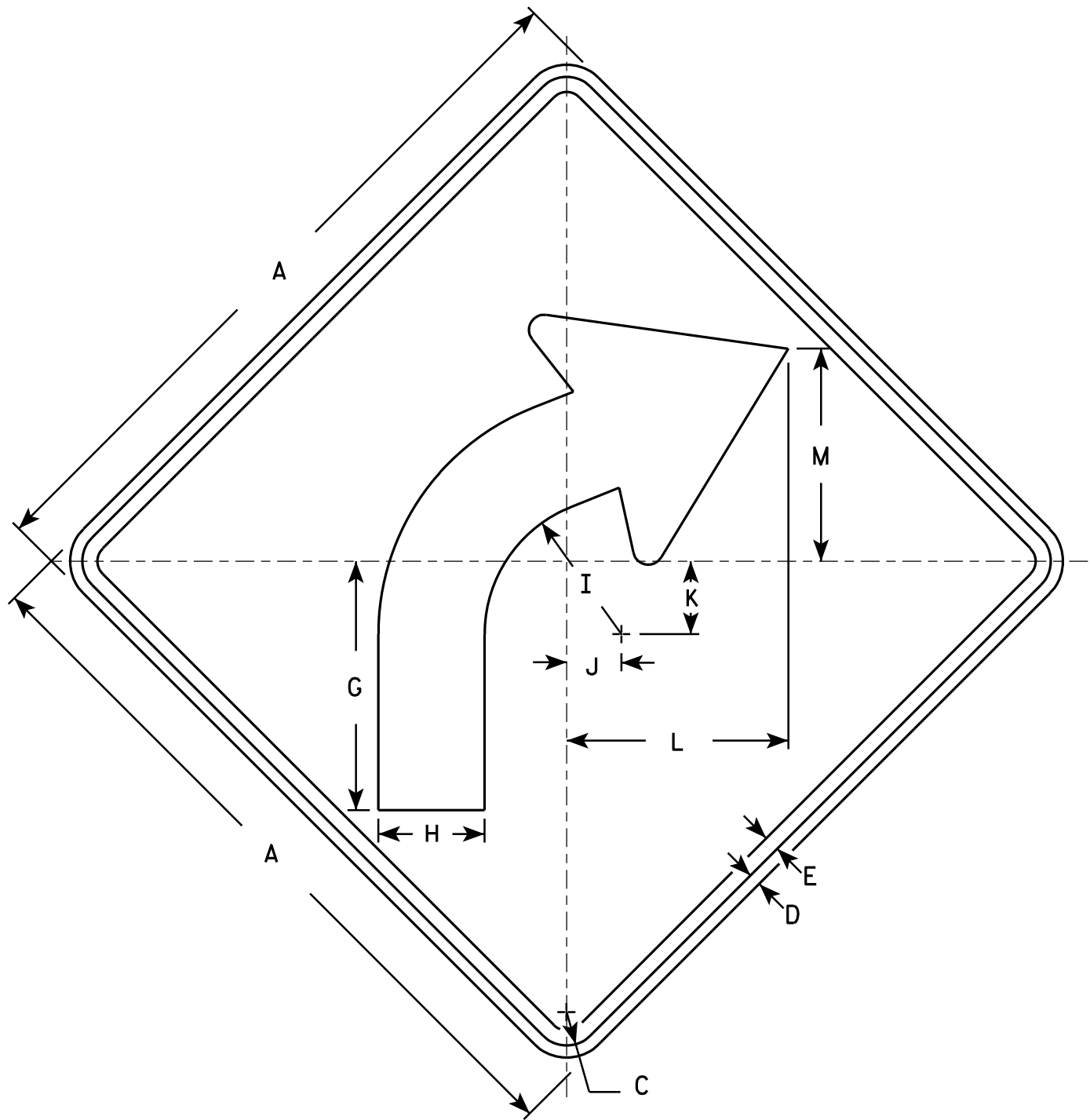
APPROVED Matthew R. Rauch
for State Traffic Engineer

DATE 3/16/11 PLATE NO. W11-6.7

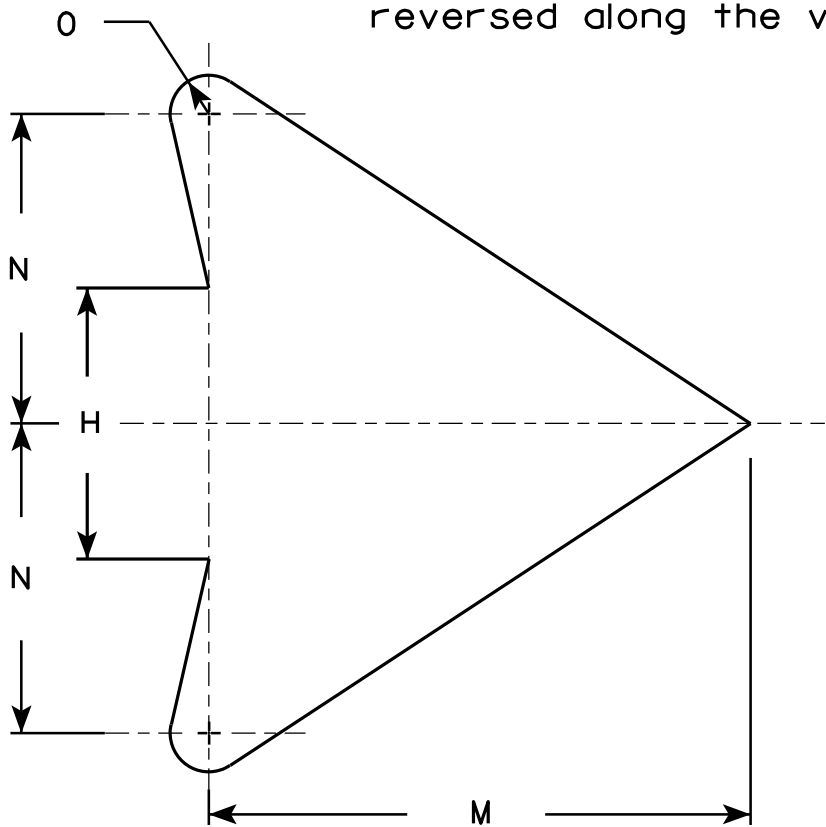
PROJECT NO: HWY: COUNTY: SHEET NO: 103 E

NOTES

1. Sign is Type II - Type F Reflective - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Corners may be square or rounded when base
material is plywood but borders shall be rounded
as shown. When base material is metal, the
corners and borders shall be rounded.
4. W1-2L is the same as W1-2R except the arrow is
reversed along the vertical centerline.



W1-2R



ARROW DETAIL

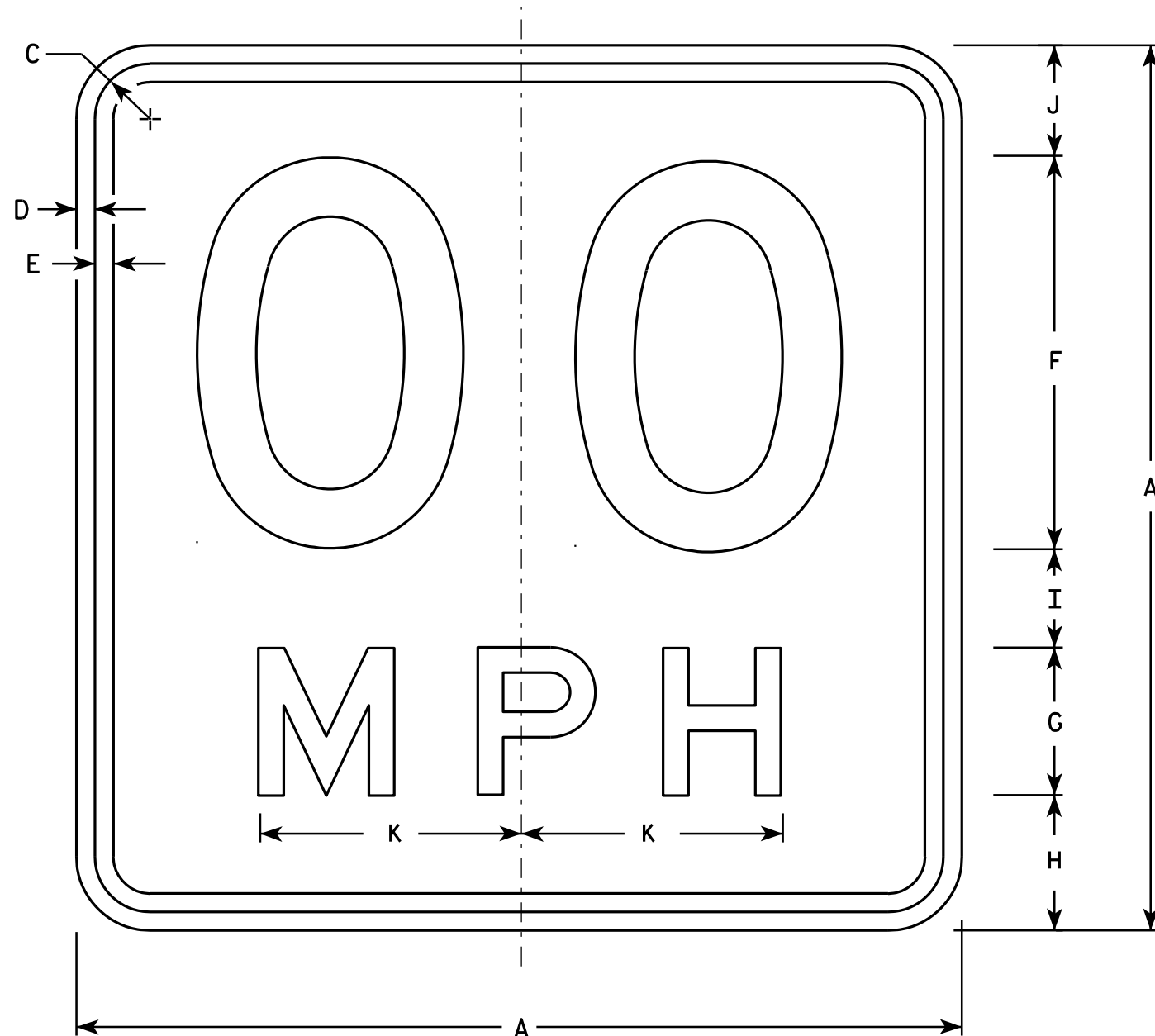
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		8 1/4	3 1/2	4 1/2	1 3/4	2 3/8	7 1/4	7	4	1/2												4.0
2S	30		1 3/8	1/2	5/8		10 1/4	4 3/8	5 5/8	2 1/4	3	9 1/8	8 3/4	5	5/8												6.25
2M	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
3	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
4	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
5	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0

STANDARD SIGN
W1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 5/15/12 PLATE NO. W1-2.10



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 - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
Line 2 is Series E

W13-1

- * For 30" x 30" Warning Signs, use 18" x 18" W13-1 signs.
For 36" x 36" Warning Signs, use 24" x 24" W13-1 signs.

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	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
* 2S	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
* 2M	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
3	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00
4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

STANDARD SIGN

W13-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 5/31/12 PLATE NO. W13-1.16

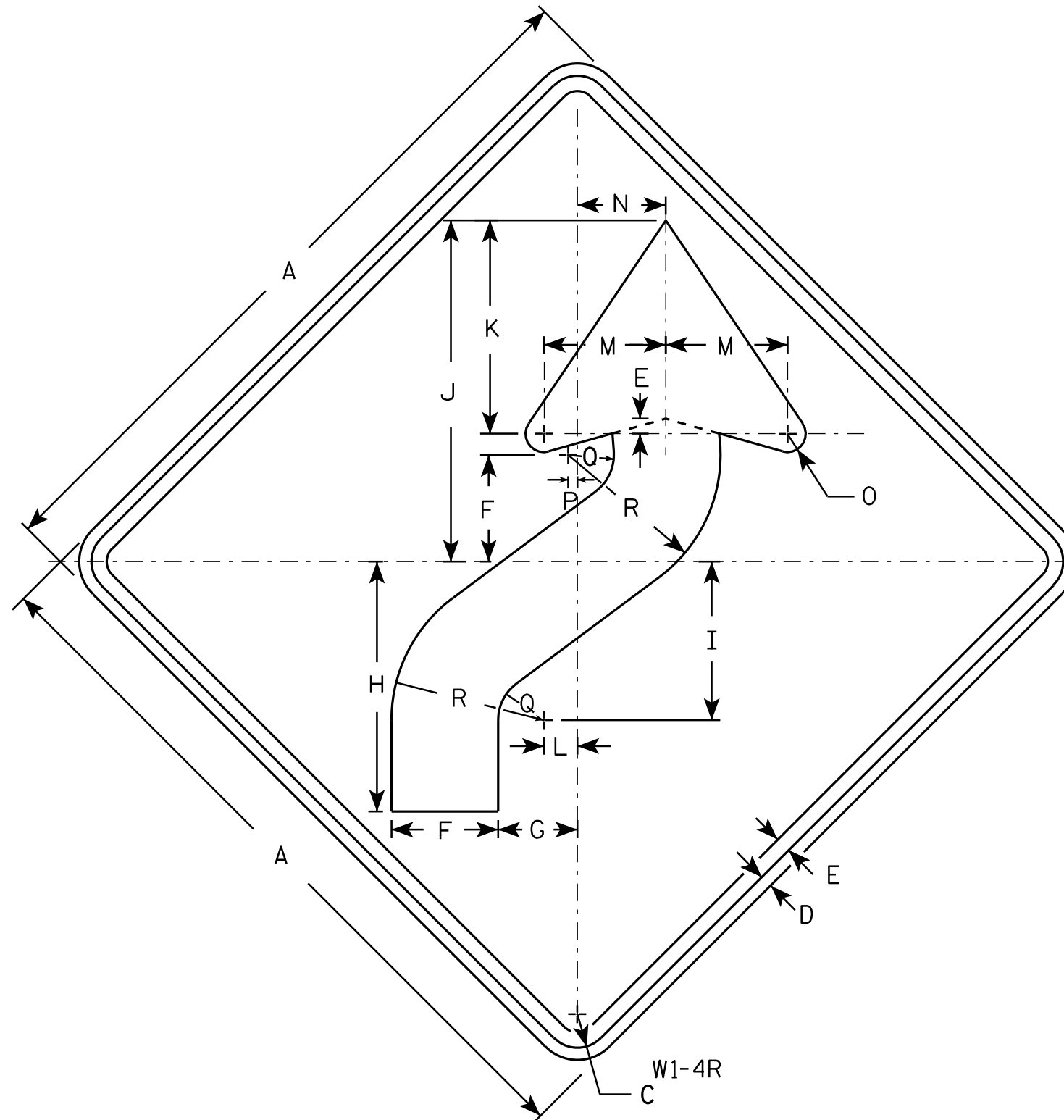
PROJECT NO:

HWY:

COUNTY:

SHEET NO: 105

E



NOTES

- Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - Yellow
Message - Black
- 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.
- W1-4L is the same as W1-4R 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	24		1 1/8	3/8	1/2	3 1/2	2 5/8	8 1/4	5 1/4	11 1/4	7	1 1/8	4	3	5/8	1/4	1 1/2	5									4.0
2S	30		1 3/8	1/2	5/8	4 3/8	3 1/4	10 1/4	6 1/2	14	8 3/4	1 3/8	5	3 5/8	3/4	3/8	1 7/8	6 1/4									6.25
2M	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
3	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
4	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
5	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

STANDARD SIGN W1 - 4

WISCONSIN DEPT OF TRANSPORTATION

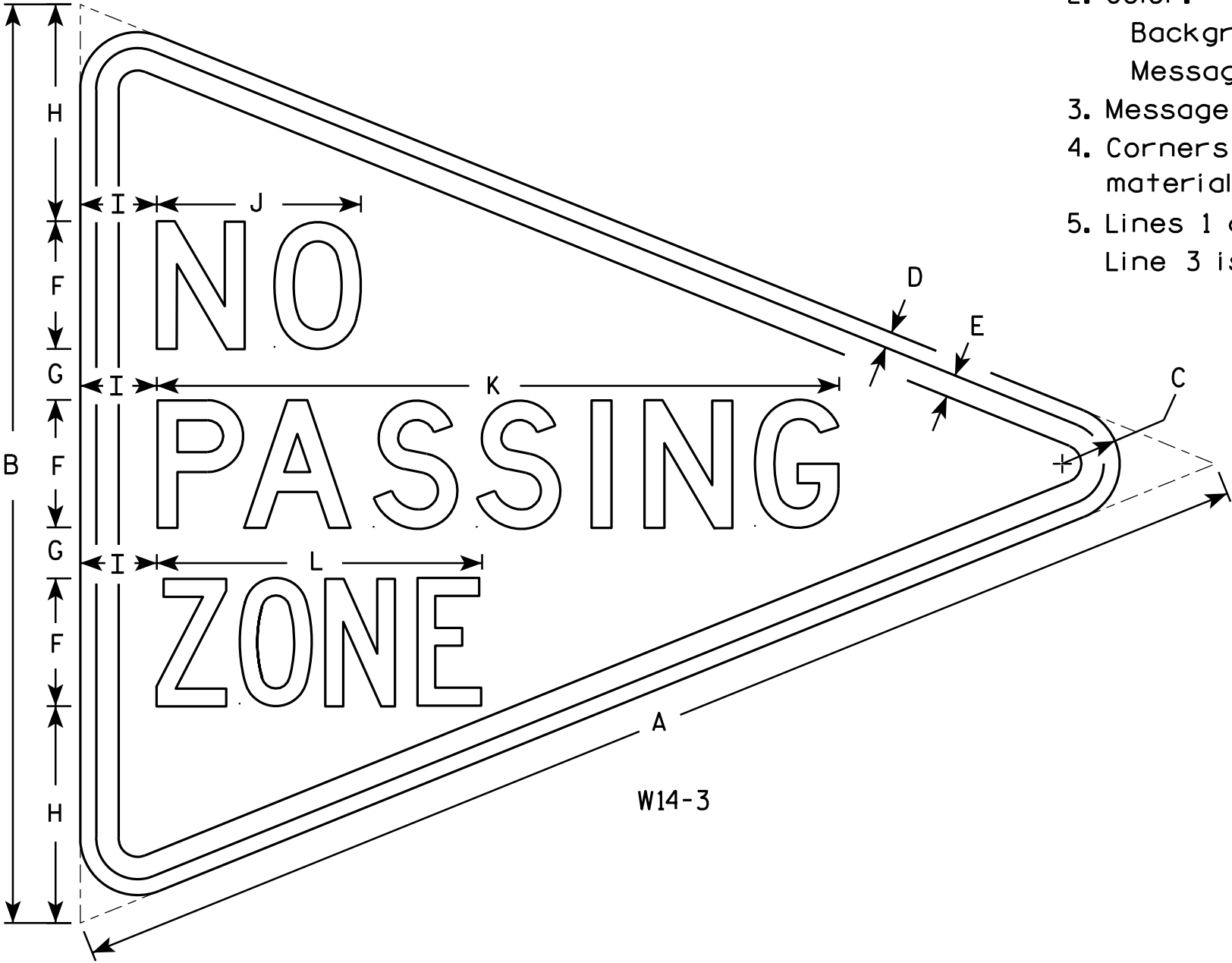
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/17/12 PLATE NO. W1-4.11

PROJECT NO:	HWY:	COUNTY:	SHEET NO: 106	E
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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 - See note 5
- 4. Corners and borders shall be rounded on all base materials for this sign.
- 5. Lines 1 and 2 are Series D.
Line 3 is series C.



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	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
2M	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
3	64	48	3	3/4	1 1/4	6	3	12	4	10 3/4	33 5/8	16 1/2															10.7
4																											
5																											

STANDARD SIGN
W14-3

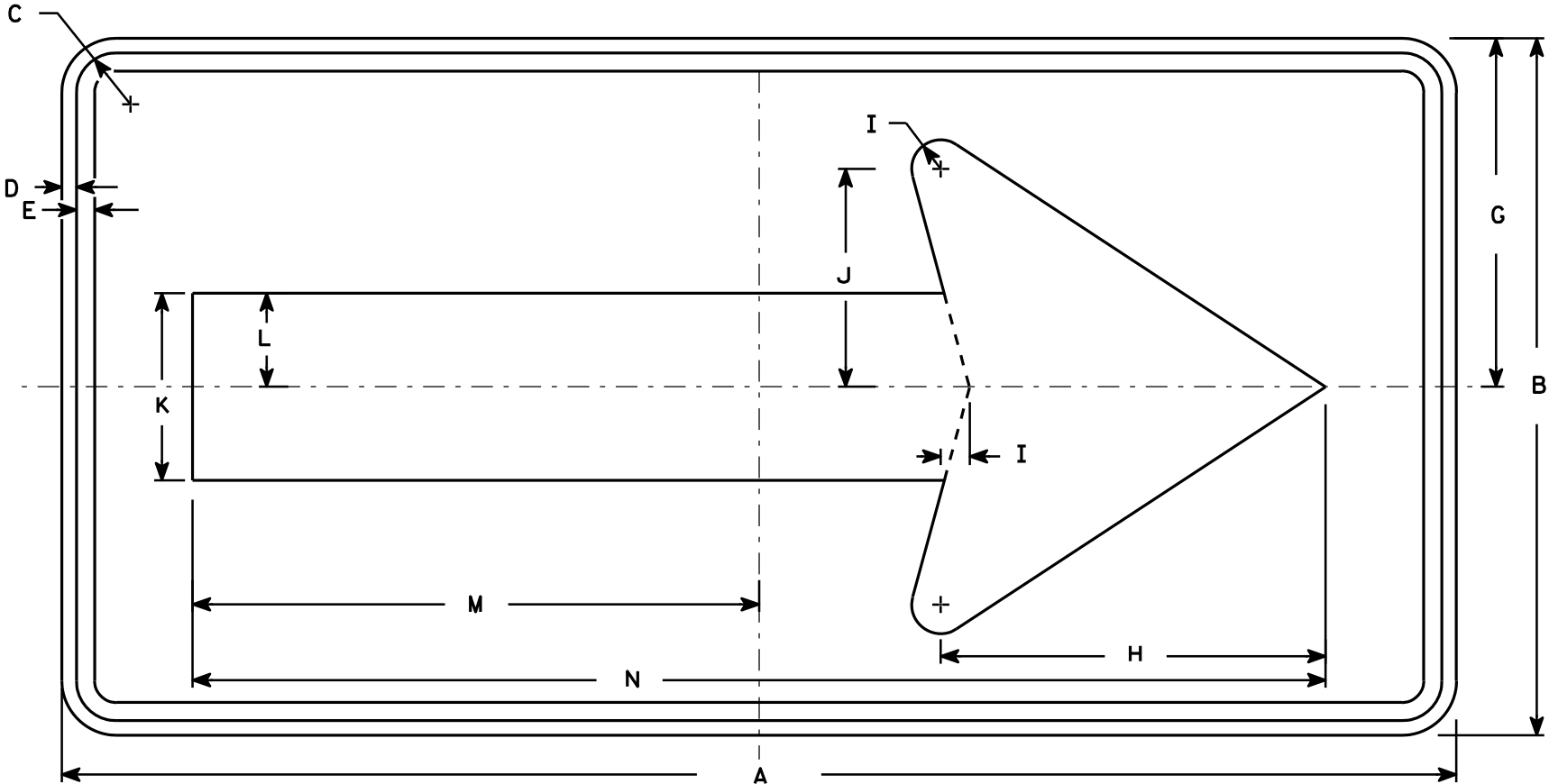
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 6/7/10 PLATE NO. W14-3.9

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. 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.



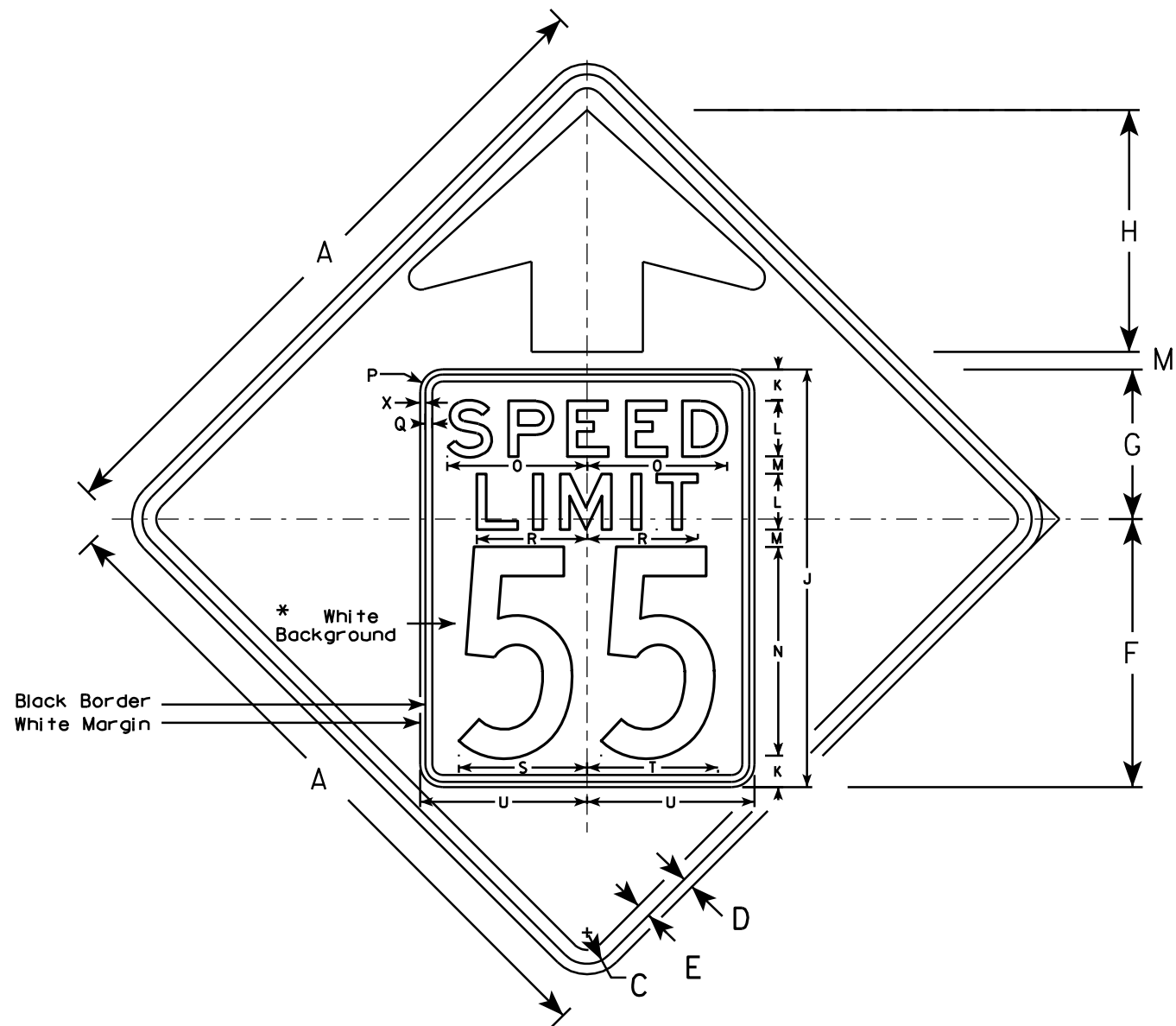
W1-6

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	18	1 1/8	3/8	3/8		9	10	3/4	5 5/8	4 3/4	2 3/8	14 5/8	29 1/4													4.5
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	96	48	2 1/4	3/4	1		24	26 1/2	2	15	13	6 1/2	39	78													32.0

STANDARD SIGN
W1-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 6/7/10 PLATE NO. W1-6.8

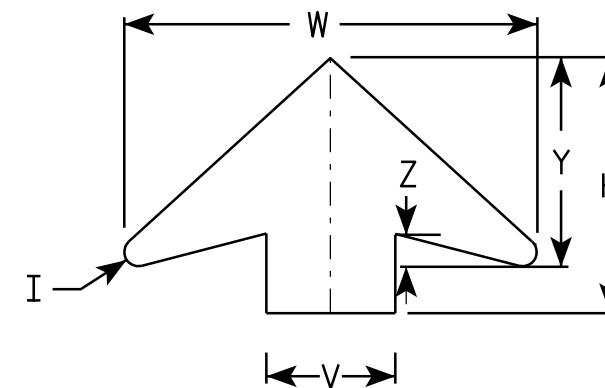


W3-5

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 for numbers Series E for wording
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

*Speed Limit Sign shall have a White Background



ARROW DETAIL

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	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
2M	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
3	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
4	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
5	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0

STANDARD SIGN

W3-5

WISCONSIN DEPT OF TRANSPORTATION

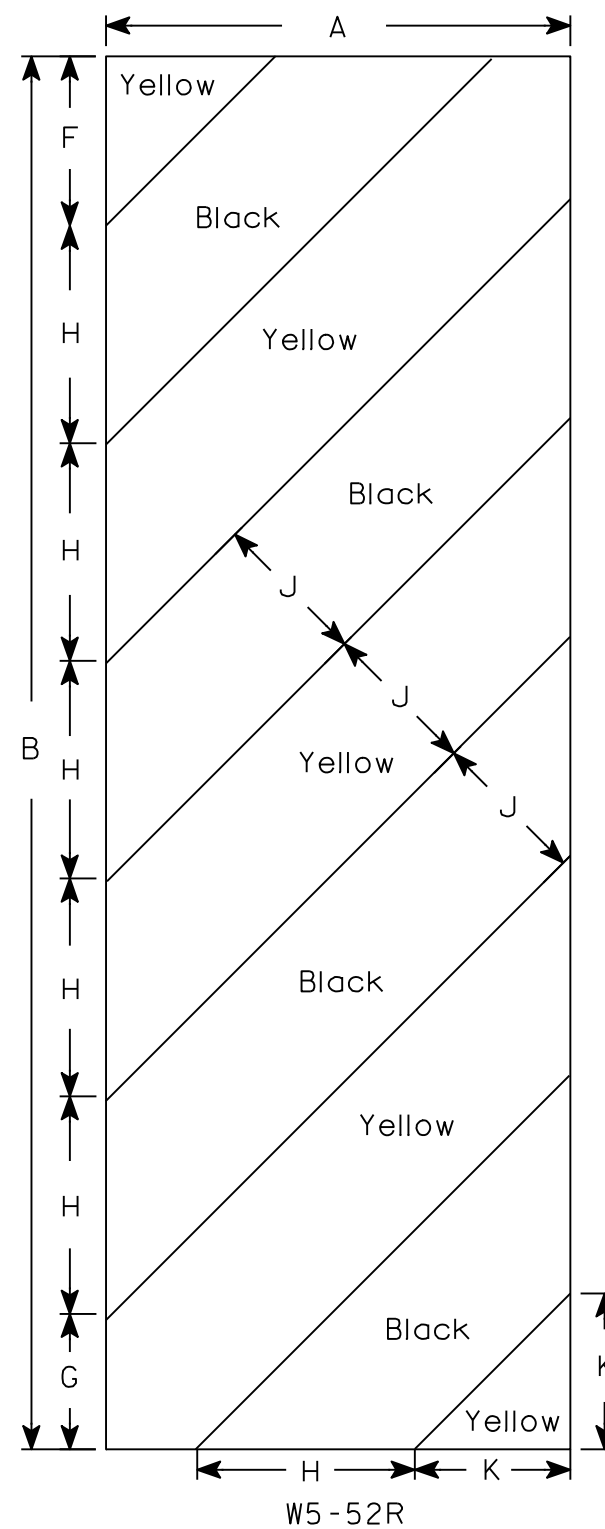
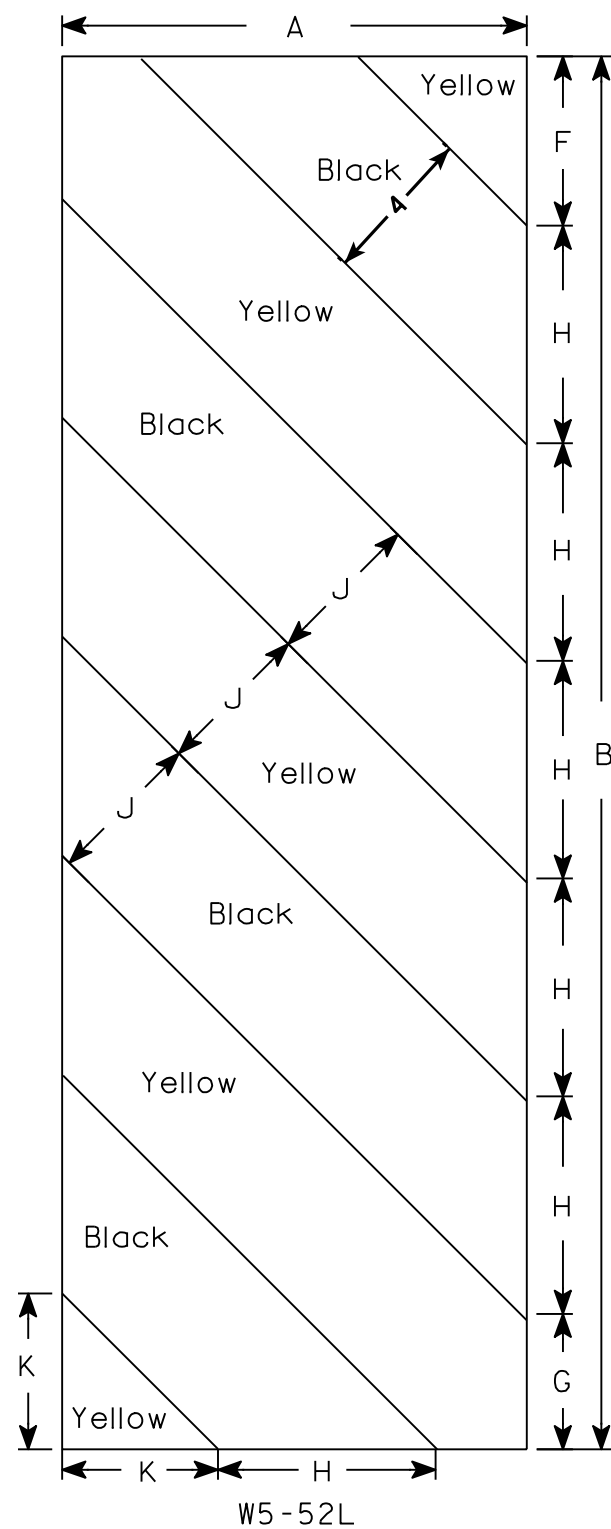
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W3-5.5

PROJECT NO:

SHEET NO: 109

E



NOTES

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

[illegible]

STANDARD SIGN
W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 5/29/12 PLATE NO. W5-52.9

PROJECT NO:

HWY:

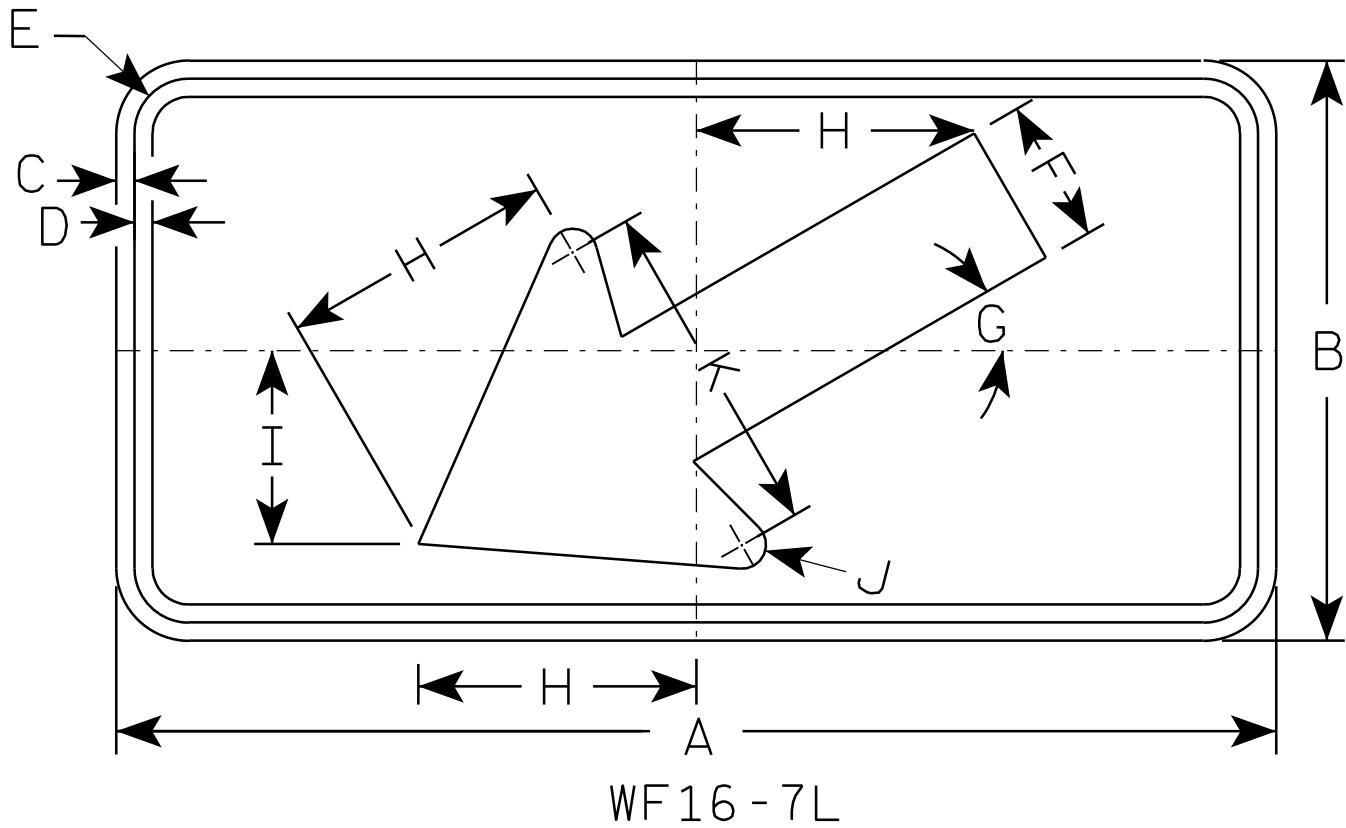
COUNTY:

SHEET NO: 110

E

NOTES

1. Sign is Type II - Type F Reflective -
reference WIS DOT Standard Specification for
HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow-Green
Message - Black
3. Corners may be square or rounded when base
material is plywood but borders shall be rounded
as shown. When base material is metal, the
corners and borders shall be rounded.
4. WF16-7R are the same as
WF-16-7L except the arrow is reversed along
the vertical centerline.

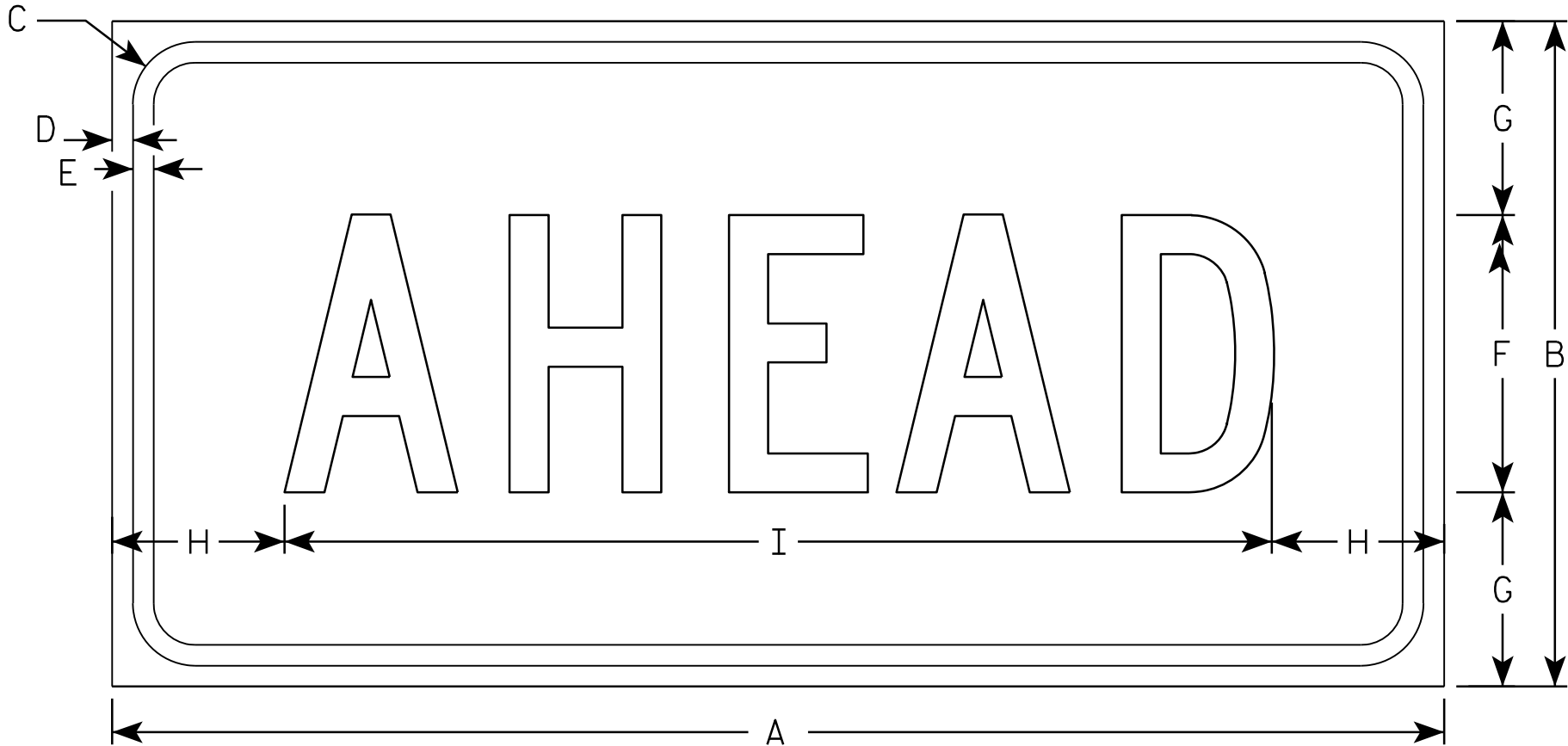


SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24	12	3/8	3/8	1 1/8	3	30°	5 3/4	4	1/2	7																2.0
2S	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
2M	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
3	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
4	48	24	1/2	5/8	1 3/8	6	30°	11 1/2	8	1	14																8.0
5																											

STANDARD SIGN	
WF16-7	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 12/21/10	PLATE NO. WF16-7.3

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-Green
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.



WF16-9P

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	12	1 1/8	3/8	3/8	5	3 1/2	3 1/8	17 3/4																		2.0
2S	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
2M	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
3	30	18	1 1/8	3/8	1/2	7	3 1/2	2 3/4	24 1/2																		3.75
4	48	24	1 3/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
5																											

STANDARD SIGN

WF16-9P

WISCONSIN DEPT OF TRANSPORTATION

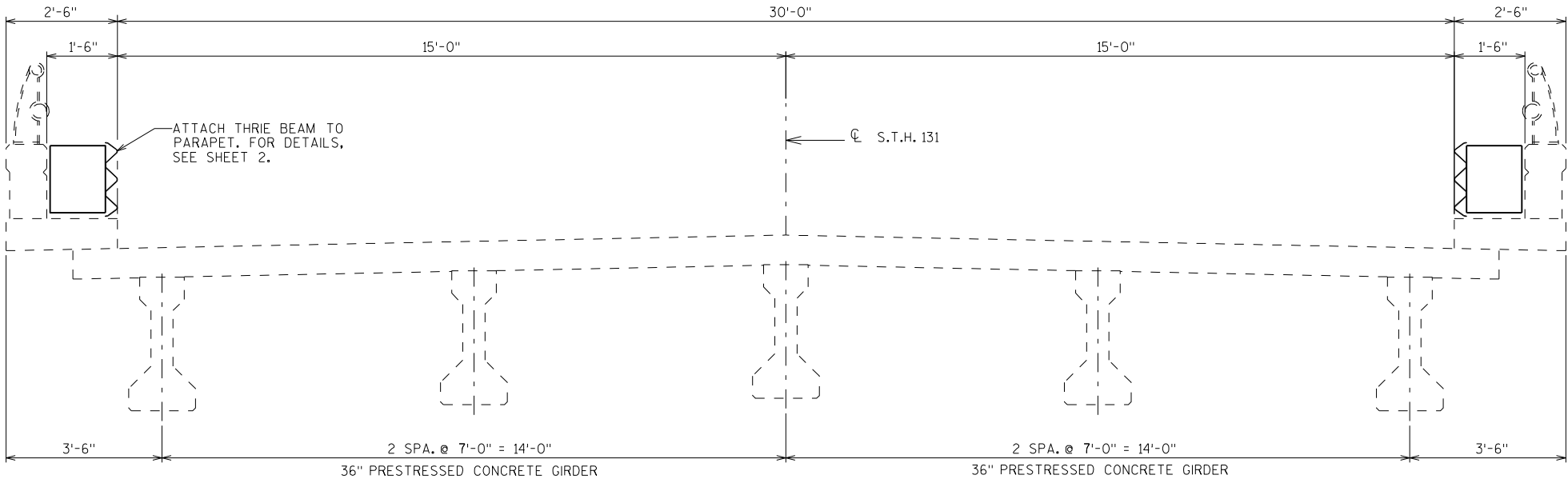
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/29/2012 PLATE NO. WF16-9P.4

NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.



CROSS SECTION THRU ROADWAY

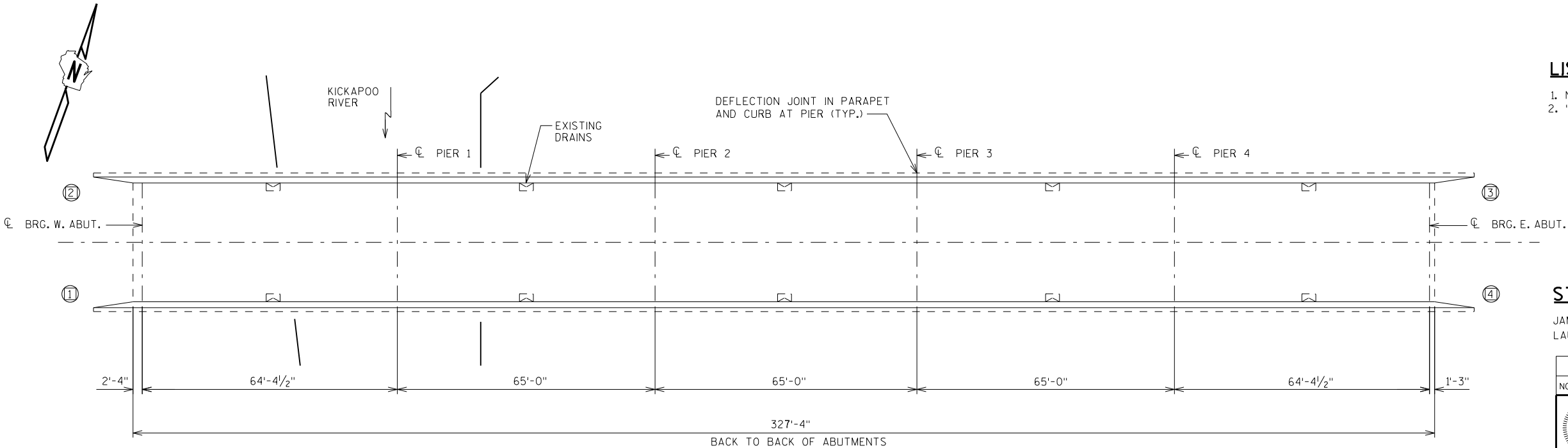
(LOOKING EAST)

TOTAL ESTIMATED QUANTITIES

SPV.0090 STEEL THRIE BEAM STRUCTURE APPROACH SPECIAL ____ 690 LF

LIST OF DRAWINGS

- 1. NEW RAIL PLAN
- 2. 'W' RAILING DETAILS



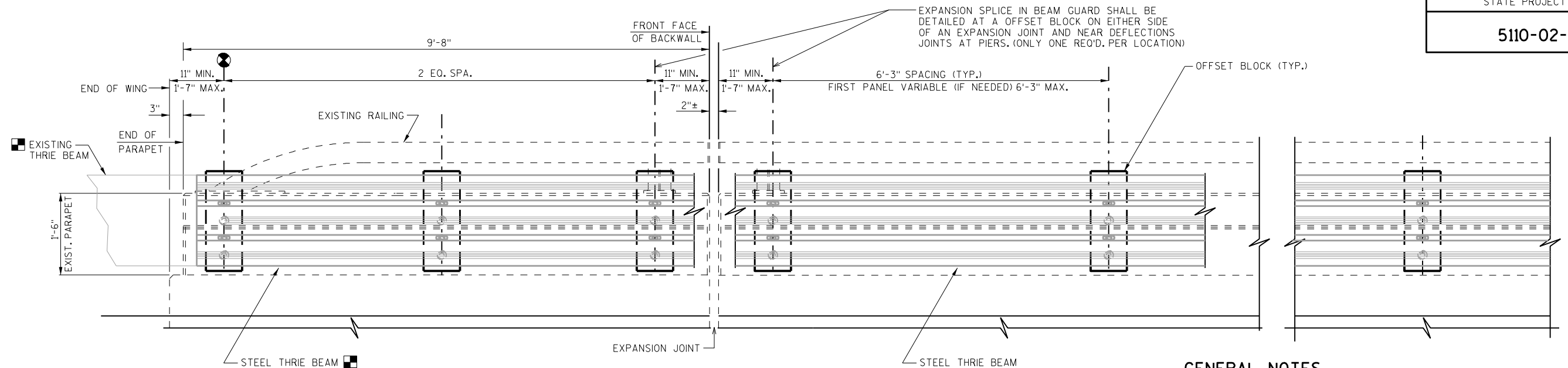
PLAN

INDICATES WING NUMBER

STRUCTURE DESIGN CONTACTS:

JAMES LUEBKE (608) 266-5098
LAURA SHADEWALD (608) 267-9592

NO.	DATE	REVISION	BY
 Plans Prepared By WISDOT BUREAU OF STRUCTURES ACCEPTED <i>William C. Dehn</i> 1/31/13 CHIEF STRUCTURES DESIGN ENGINEER DATE			
STRUCTURE B-62-28			
S.T.H. 131 OVER KICKAPOO RIVER			
COUNTY	VERNON	TOWN/CITY/VILLAGE	KICKAPOO
DESIGN SPEC. AASHTO LRFD DESIGN SPEC. 5th EDITION			
DESIGNED BY	JDL	DESIGN CK'D.	DFD
DRAWN BY	WWR	PLANS CK'D.	ARC
NEW RAIL PLAN			SHEET 1 OF 2
			113

**PART ELEVATION AT WING PARAPET**

(SHOWN AT INSIDE FACE OF PARAPET AT WING 2, OTHER WINGS SIMILAR)

- PROVIDE RAIL MEMBER SPLICE WITH EXISTING AND PROPOSED THRIE BEAM AT OFFSET BLOCK. CUT AND MODIFY EXISTING THRIE BEAM AS REQ'D TO NEST EXISTING THRIE BEAM WITH PROPOSED THRIE BEAM AT (2)-OFFSET BLOCK LOCATIONS MINIMUM. SEE RAIL MEMBER SPLICE FOR BEAM NESTING.

- ⊗ PAY LIMITS FOR "STEEL THRIE BEAM STRUCTURE APPROACH SPECIAL"

GENERAL NOTES

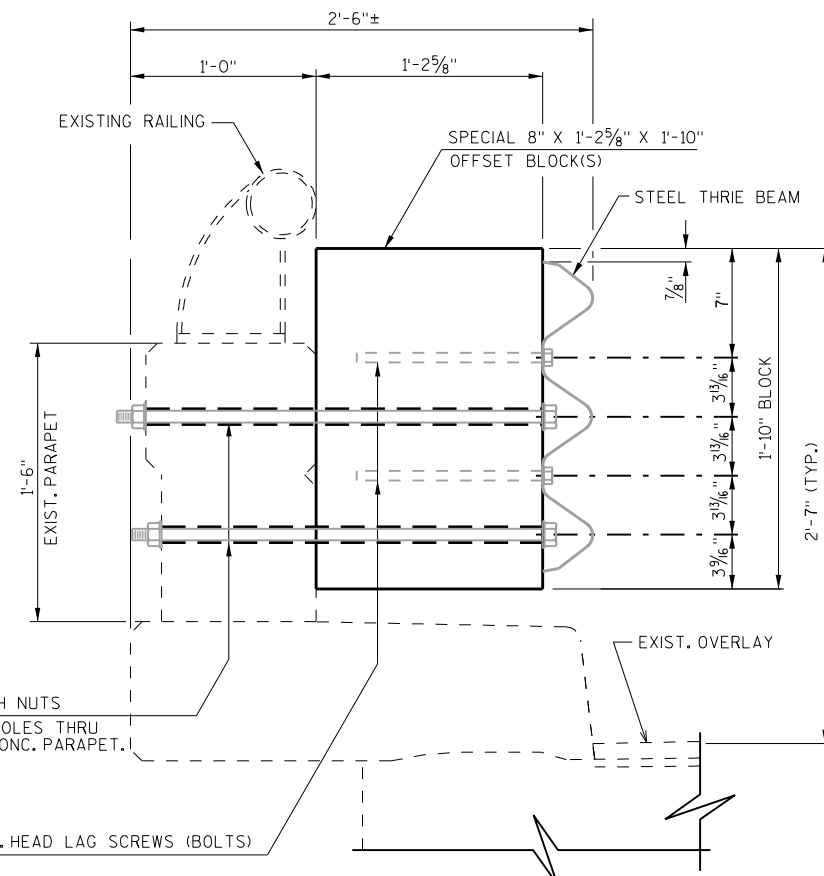
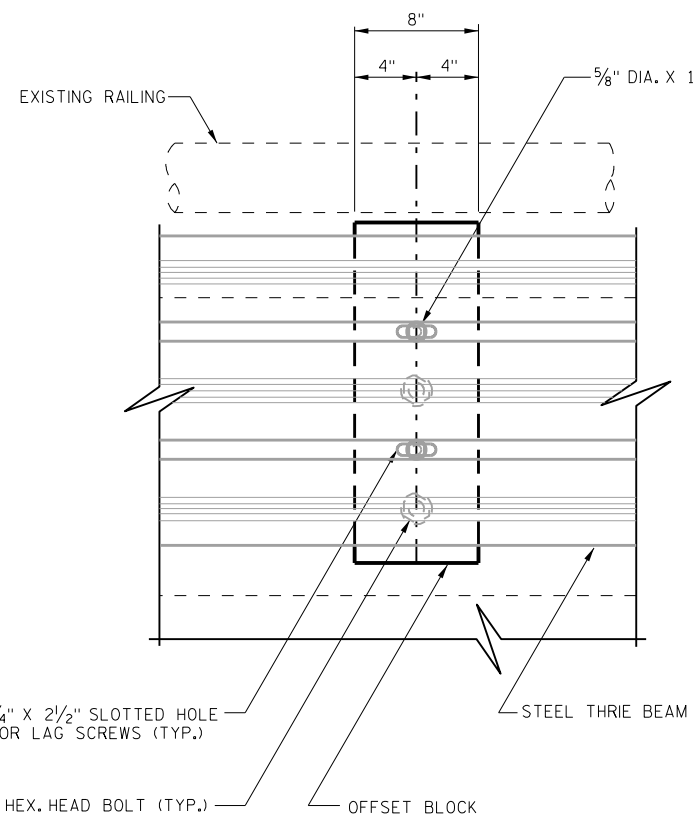
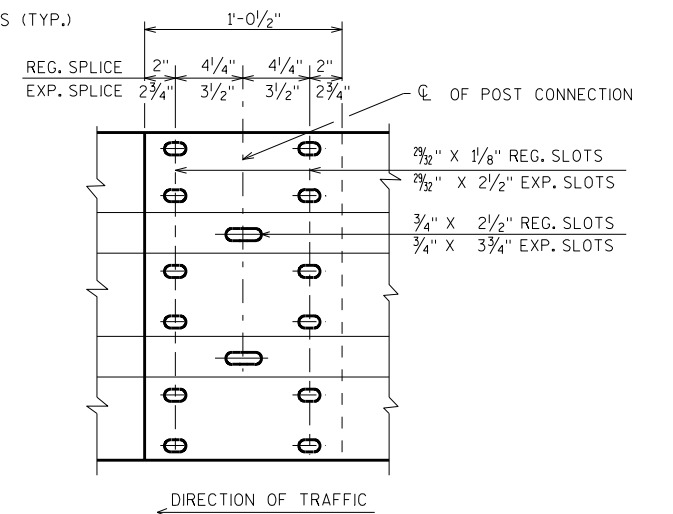
STEEL THRIE BEAM, OFFSET BLOCKS, BOLTS, WASHERS, NUTS, AND DRILLING TO BE INCLUDED IN THE BID ITEM "STEEL THRIE BEAM STRUCTURE APPROACH SPECIAL".

USE LAG SCREWS TO BOLT THE THRIE BEAM TO ALL OFFSET BLOCKS. DRILL OR PUNCH HOLES IN THRIE BEAM IF THE BLOCK SPACING IS LESS THAN 6'-3".

SEE SSD'S FOR ADDITIONAL STEEL THRIE BEAM DETAILS.

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

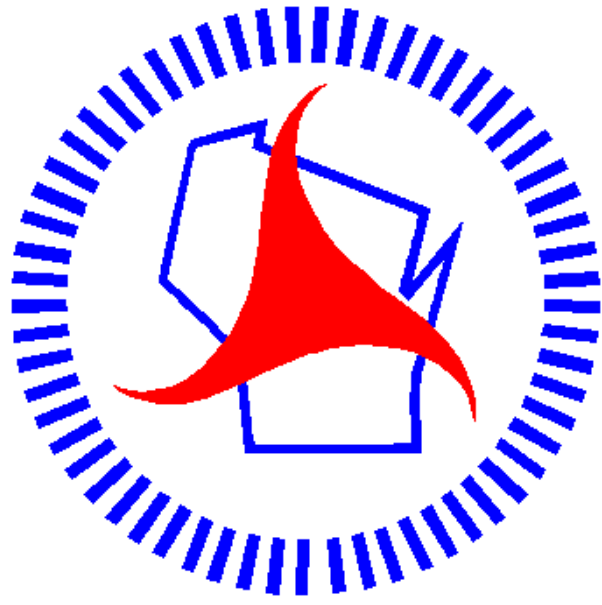
OFFSET BLOCK THICKNESS SHALL BE ADJUSTED TO ALLOW FACE OF THRIE BEAM TO BE FLUSH WITH BOTTOM OF CURB.

**SECTION THRU CURB WITH STEEL THRIE BEAM****PART ELEVATION AT THRIE BEAM POST****RAIL MEMBER SPLICE**

5/8" DIA. BUTTON HEAD OVAL SHOULDER BOLTS WITH HEX NUTS AT ALL SLOTS.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-62-28			
DRAWN BY		WWR	PLANS CK'D. ARC
'W' RAILING DETAILS		SHEET 2	
		114	

Notes



Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

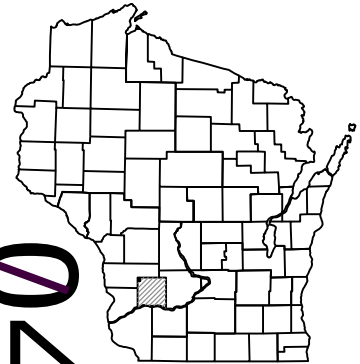
<http://www.dot.wisconsin.gov>

PROJECT ID: 5112-06-61
WITH: 5110-02-61 & 5731-02-60

COUNTY: RICHLAND

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

TOTAL SHEETS = 116



DESIGN DESIGNATION

A.A.D.T. 2012	=	1340
A.A.D.T. 2032	=	1610
D.H.V.	=	
D.D.	=	60/40
T.	=	8.39%
DESIGN SPEED	=	55 MPH
ESALS	=	212,012

CONVENTIONAL SYMBOLS

PLAN

CORPORATE LIMITS

REFERENCE LINE

COMBUSTIBLE FLUIDS

UTILITIES

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

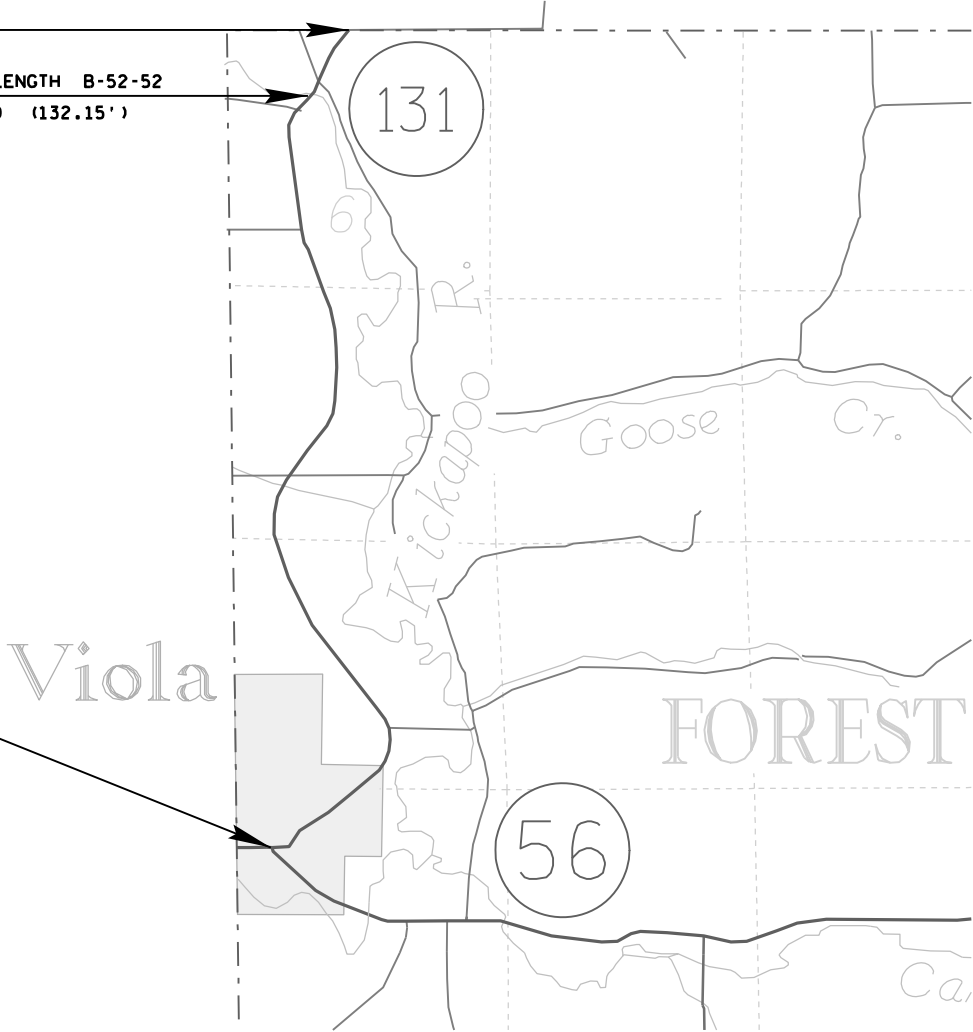


STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY REHABILITATION-MAINTENANCE PROJECT
VIOLA - NORTH COUNTY LINE
MAIN ST TO KICKAPOO RIVER BRIDGE B-52-52
STH 131
RICHLAND COUNTY

STATE PROJECT NUMBER
5112-06-61

END CONSTRUCTION
STATION 1425+00
EXCEPTION TO NET CENTERLINE LENGTH B-52-52
STATION 1406+67.85 TO 1408+00 (132.15')

BEGIN CONSTRUCTION
STATION 1224+70



LAYOUT
SCALE 0 1 Mi.
TOTAL NET LENGTH OF CENTERLINE = 3.769 MI.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
5112-06-61	—	—

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
PREPARED BY	
Surveyor	_____
Designer	KATHLEEN KLUDY
Project Manager	DAN KLEINERTZ
Regional Examiner	_____
Regional Supervisor	STEPHEN FLOTTMEYER
C.O. Examiner	_____
APPROVED FOR THE DEPARTMENT	
DATE: 10/31/12	Stephen A. Flottmeyer (Signature)

E

GENERAL NOTES

- 1. THERE ARE UTILITIES WITHIN THE PROJECT LIMITS WHICH ARE NOT SHOWN ON PLANS.
- 2. ALL P.E.'S SHALL BE REPLACED IN KIND (AGGREGATE OR ASPHALT).
- 3. LOCATIONS OF PRIVATE AND FIELD ENTRANCES AS SHOWN ON PLAN ARE APPROXIATEMENT. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.
- 4. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES EXCEPT WHEN OPERATIONS REQUIRE THE DRIVEWAY TO BE CLOSED. ACCESS TO DRIVEWAY SHALL BE RE-ESTABLISHED IMMEDIATELY AFTER OPERATIONS ARE COMPLETE. ACCESS SHALL BE PROVIDED DURING ALL NON-WORKING HOURS.
- 5. THE CONTRACTOR SHALL MAINTIAN ACCESS TO ALL FIRE HYDRANTS, WATER AND GAS VALVES AND ALL SEWER, WATER AND UTILITY MANHOLES.
- 6. THE CONTRACT SHALL FIELD VERIFY ALL INVERT AND RIM ELEVATIONS OF EXISTING STORM SEWER AND SANITARY SEWER STRUCTURES PRIOR TO CONSTRUCTION.
- 7. CURB AND GUTTER WILL BE PLACED AFTER MILL AND RELAY OPERATIONS ARE COMPLETE. ALL CURB AND GUTTER ELEVATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER. EXCAVATION OF 2-3 INCHES OF COMPACTED BASE COURSE WILL BE REQUIRED TO PLACE CURB AND GUTTER.
- 8. MATERIAL DISPLACED DURING THE CONSTRUCTION OF THE CONCRETE CURB & GUTTER SHALL BE REPLACED TO THE ORGINAL GRADE LINE BY THOSE DOING THE WORK. THIS WORK SHALL BE INCIDENTAL TO THE ITEM OF CONCRETE CURB AND GUTTER.
- 9. THE RATE OR SUPER ELEVATION AND LENGTH OF THE TRANSITION SHALL BE DETERMINED USING THE EXISTING SUPER ELEVATION, NOT TO EXCEED 0.08 AND DESIGN SPEED OF55 MPH. THE LENGTH ON TANGENT AND ONE-THIRD WITHIN THE CURVE.
- 10. THE RATE OF APPLICATION FOR TACK COAT IS COMPUTED AT 0.025 GAL/SY.
- 11. ASPHALTIC SURFACE WEIGHT CALCULATIONS ARE BASED ON 113 LB/SY/IN
- 12. WHEN THE QUANTITIES OF ASPHALTIC SURFACE IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OF THICKNESS OF THE MATERIAL THAT IS SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.
- 13. THE AVERAGE DEPTH OF "SALVAGED ASPHALTIC PAVEMENT MILLING" SHALL BE 3.5 INCHES ON THROUGH LANES AND 2.0 INCHES ON PARKING LANES.
- 14. THE 3.5 INCH HMA PAVEMENT TYPE E-1 SHALL BE PLACED IN TWO (2) 1.75 INCH LIFTS. BOTH LAYERS WILL USE A -1/2 INCH (12.5 mm) NOMINAL AGGREGATE SIZE MIXTURE.
- 15. ASPHALT MATERIAL FOR PLANT MIXES HAS BEEN ESTIMATED AT 5.5% OF THE HMA PAVEMENT.
- 16. ASPHALTIC CONCRETE PAVEMENT FOR SIDE ROAD PAVING SHALL BE A NOMINAL 3 INCH DEPTH, CONSTRUCTED WITH UPPER LAYER MATERIAL.
- 17. ALL RADII ARE MEASURED TO EDGE OF PAVEMENT OR FLAG OF CURB UNLESS OTHERWISE SHOWN OR NOTED ON THE PLAN.
- 18. EXPANSION JOINTS TO BE CONSTRUCTED AT ALL RADIUS POINTS IN CURB AND GUTTER OR AT LOCATIONS SHOWN ON THE PLAN. WHEN PORTIONS OF EXISTING ASPHALTIC SURFACES ARE TO BE REMOVED TO ACCOMMODATE NEW CONSTRUCTION, THE LINE OF SUCH REMOVAL SHALL BE NEATLY DELINEATED WITH A SAW CUT JOINT THROUGH THE ASPHALTIC SURFACE SO THAT REMOVAL OF THE ASPHALT SHALL BE ACCOMPLISHED WITHOUT DAMAGE TO REMAINING PORTIONS. THE LOCATION OF SAW JOINTS AND THE AMOUNT REMOVED AT SIDE ROADS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- 19. PAVEMENT REMOVAL WILL BE TO THE NEAREST JOINT OR A SAWED EDGE WILL BE REQUIRED AS DIRECTED BY THE ENGINEER.
- 20. SILT FENCE SHALL BE PLACED AS DIRECTED BY THE ENGINEER.
- 21. UNLESS OTHERWISE IDENTIFIED BY CONSTRUCTION DETAILS, ALL INTERSECTIONS ARE TYPE "C" AS SHOWN ON THE STANDARD DETAIL DRAWING.
- 22. TYPE 'D' INTERSECTIONS SHALL BE AS SHOWN ON THE STANDARD DETAIL DRAWING AND DETERMINED IN THE FIELD BY THE ENGINEER
- 23. ALL BEAM GUARD WIDENING SHALL BE COMPLETED PRIOR TO THIS CONTRACT BY OTHERS.
- 24. THE FACE OF THE STEEL PLATE BEAM GUARD RAIL SHALL BE FLUSH WITH THE FACE OF THE CURB AND GUTTER.
- 25. ENERGY ABSORBING TERMINALS SHALL BE OFFSET A MINIMUM OF 1 FOOT AT THE DIRECTION OF THE ENGINEER.
- 26. TRAFFIC CONTROL DRUMS SHALL BE PLACED AT LOCATIONS WHERE GUARD RAIL HAS BEEN REMOVED AT 50 FT MIN. SPACING, AS PER PLAN AND AT LOCATIONS AS DIRECTED BY THE ENGINEER.
- 27. AII SALVAGE ASPHALTIC PAVEMENT MILLING WILL REMAIN PROPERTY OF THE STATE. CONTACT JEFF FISH, PATOROL SUPERINTENDENT AT THE VERNON COUNTY HIGHWAY DEPARTMENT. THE PHONE NUMBER IS (608) 637-5452 FOR COORDINATION. HAUL TO COUNTY LOT LOCATED ON SW CORNER OF YORK ST AND CENTRAL ST IN VIOLA. THE VERNON COUNTY FORCES WILL STOCKPILE MATERIAL AS NEEDED.
- 28. THE CONTRACTOR'S PAVING OPERATIONS SHALL BE CONSISTENT WITH THE PLAN TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, PASSING OR PARKING LANE.

STANDARD ABBREVIATIONS

AC.	ACRE	MAX.	MAXIMUM
AGG.	AGGREGATE	MGAL	1000 GALLONS
AH	AHEAD	MIN.	MINIMUM
<	ANGLE	N.C.	NORMAL CROWN OR NO CHANGE
AE, AEW	APRON ENDWALL	N	NORTH
ASPH.	ASPHALTIC	NO.	NUMBER
A.D.T.	AVERAGE DAILY TRAFFIC	PAV'T	PAVEMENT
B.F.	BACK FACE	P.L.E.	PERMANENT LIMITED EASEMENT
BK.	BACK	P.C.	POINT OF CURVATURE
BEG.	BEGIN	P.I.	POINT OF INTERSECTION
B.M.	BENCH MARK	P.T.	POINT OF TANGENCY
C/L	CENTER LINE	V.P.C.	VERTICAL POINT OF CURVATURE
			VERTICAL POINT OF
D	CENTRAL ANGLE OR DELTA	V.P.I.	INTERSECTION
	CORRUGATED METAL CULVERT		
C.M.C.P.	PIPE	V.P.T.	VERTICAL POINT OF TANGENCY
C.M.P.	CORRUGATED METAL PIPE	PCC	PORTLAND CEMENT CONCRETE
CO.	COUNTY	P.E.	PRIVATE ENTRANCE
CTH	COUNTY TRUNK HIGHWAY	P.L.	PROPERTY LINE
CR.	CREEK	R	RADIUS OR RANGE
	CRUSHED AGGREGATE BASE		
C.A.B.C.	COURSE	R/L	REFERENCE LINE
		R.C.C.P	REINFORCED CONCRETE CULVERT
C.Y.	CUBIC YARD	.	PIPE
C.P.	CULVERT PIPE	RT	RIGHT
C. & G.	CURB AND GUTTER	REQ'D	REQUIRED
D	DEGREE OF CURVE	R.H.F.	RIGHT HAND FORWARD
D.H.V.	DESIGN HOUR VOLUME	R/W	RIGHT OF WAY
DIA.	DIAMETER	R.	RIVER
DISCH.	DISCHARGE	RD.	ROAD
EA	EACH	SHLD.	SHOULDER(S)
E	EAST	SHR.	SHRINKAGE
ELEC.	ELECTRIC(AL), ELEC. CABLE	S	SOUTH
EL.,			
ELEV.	ELEVATION	S.F.	SQUARE FOOT (FEET)
EXC.	EXCAVATION	SDD	STANDARD DETAIL DRAWING(S)
F.F.	FACE TO FACE	STH	STATE TRUNK HIGHWAY
FERT.	FERTILIZER	STA.	STATION
F.E.	FIELD ENTRANCE	S.E.	SUPERELEVATION
F/L, F.L.	FLOW LINE	S/L	SURVEY LINE
CWT.	HUNDRED WEIGHT	T	TANGENT
INL	INLET	TEL.	TELEPHONE
INTER.	INTERSECTION	TEMP.	TEMPORARY
JT.	JOINT	T.L.E.	TEMPORARY LIMITED EASEMENT
LT	LEFT	T.O.C.	TOP OF CURB
L.H.F.	LEFT HAND FORWARD	T.	(TRUCKS) PERCENT OF
L.	LENGTH OF CURVE	TYP.	TYPICAL
L.F.	LINEAR FOOT(FEET)	UNCL.	UNCLASSIFIED
LC.	LONG CHORD	U.G.	UNDERGROUND (CABLE)
LS	LUMP SUM	V.C.	VERTICAL CURVE
M.P.	MARKER POST	W	WEST

Wisconsin Department of Transportation

Southwest Region - La Crosse Office
3550 Mormon Coulee Rd.
La Crosse, WI 54601
Attn: Russ Frank (Soils Coordinator)
PHONE: (608) 785-9082
russell.frank@dot.wi.gov

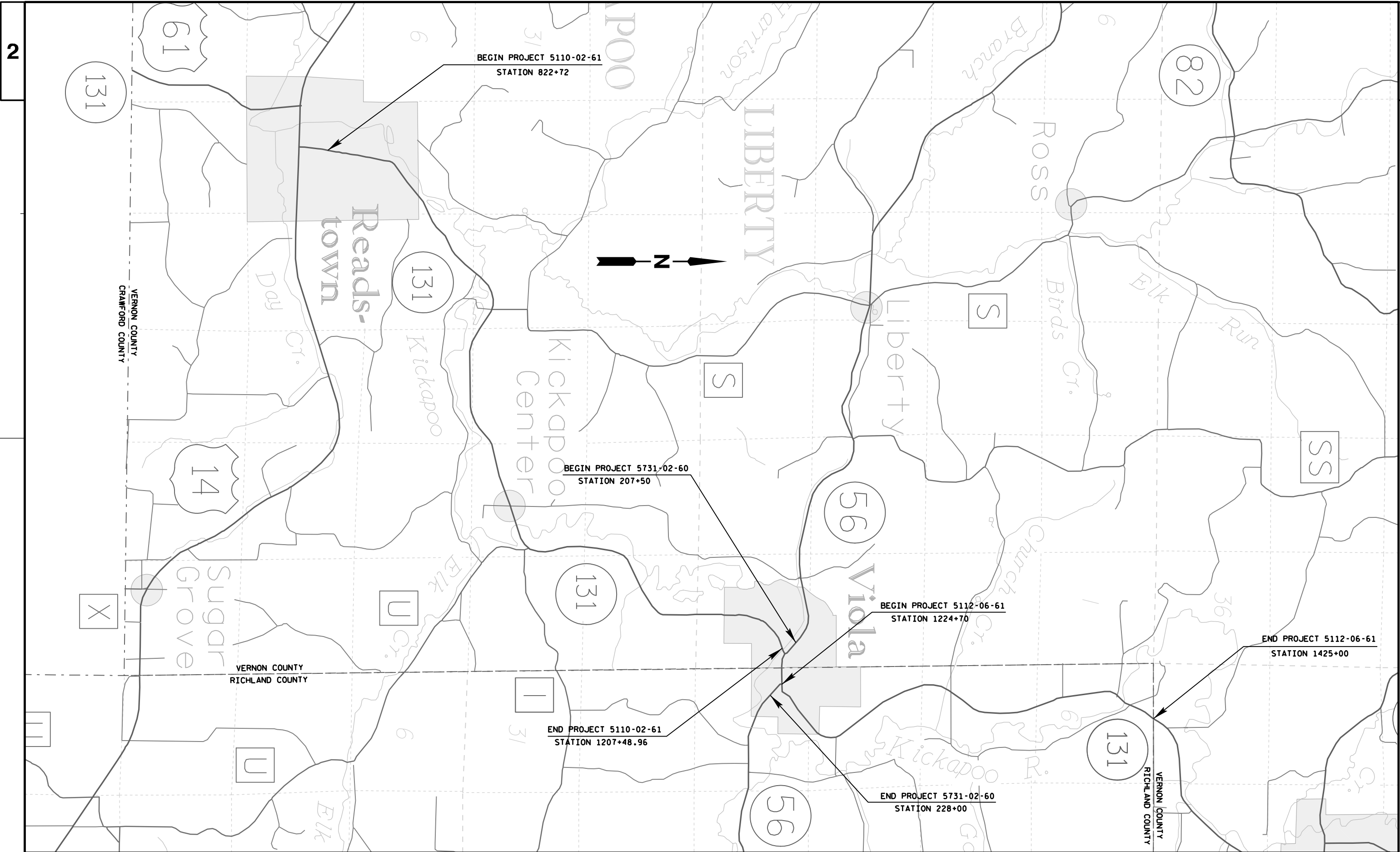
Southwest Region - La Crosse Office
3550 Mormon Coulee Rd.
La Crosse, WI 54601
Attn: Kathleen Kludy (Designer)
PHONE: (608) 785-9948
kathleen.kludy@dot.wi.gov

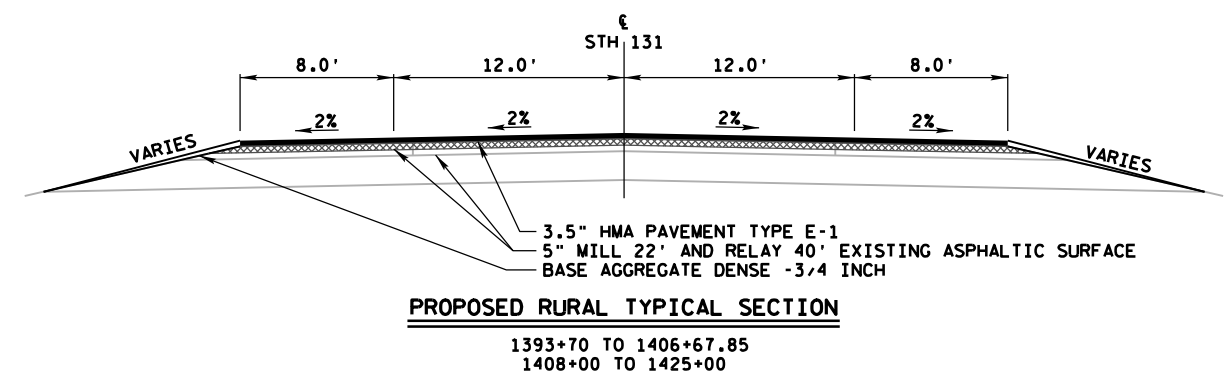
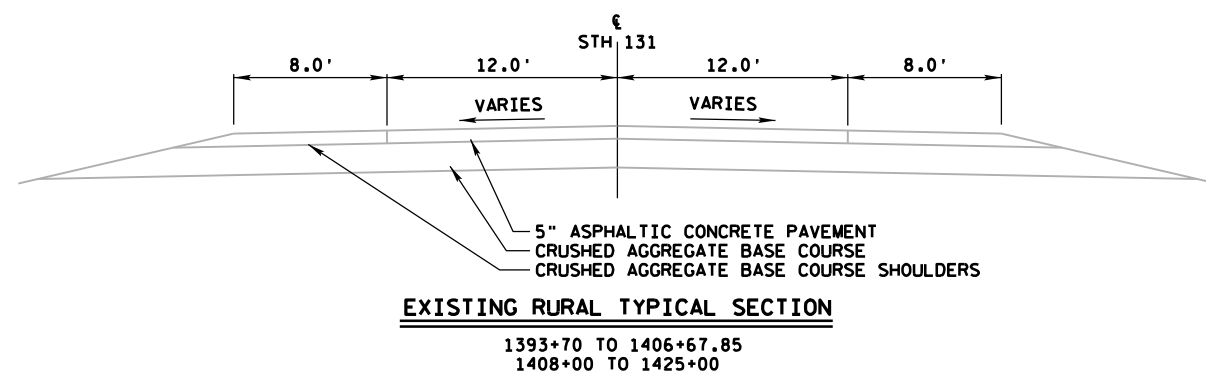
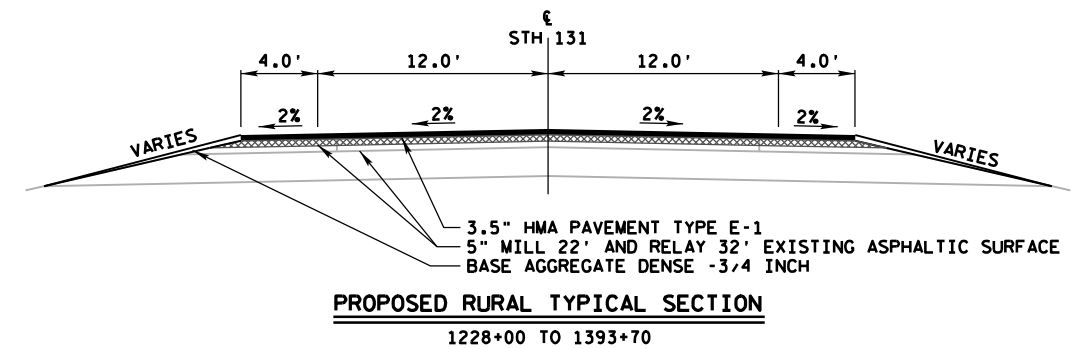
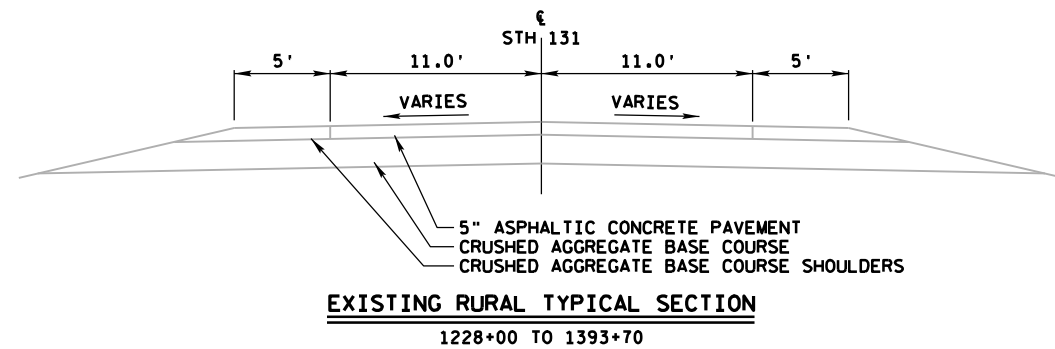
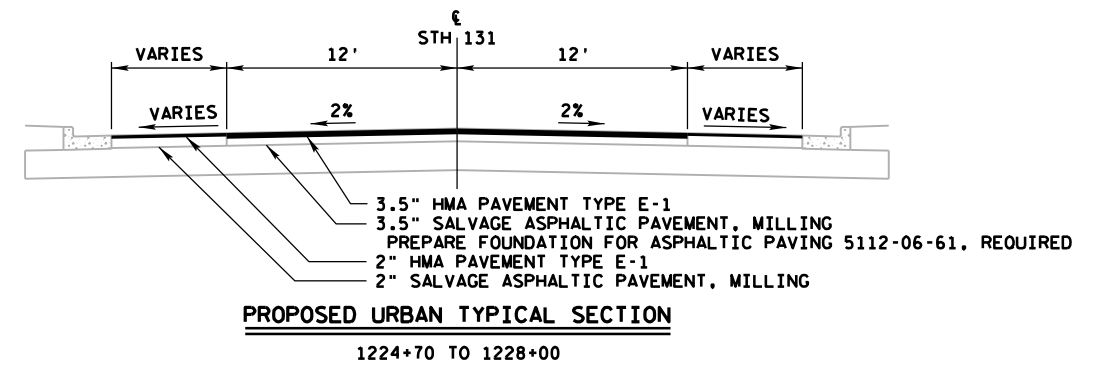
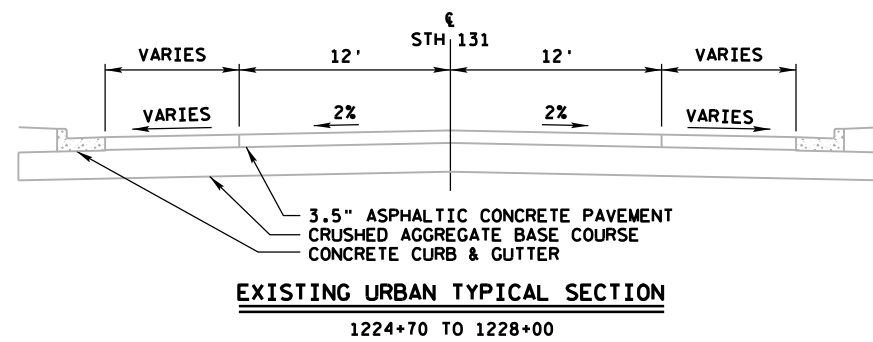
PAVEMENT DESIGN ENGINEER CONTACT
Wisconsin Department of Transportation
Southwest Region - Madison Office
Pavement Engineer
ATTN: Tim McCarthy
2101 Wright St.
Madison, WI 53704-2583
(608) 246-5623
timothy.mccarthy@dot.state.wi.us

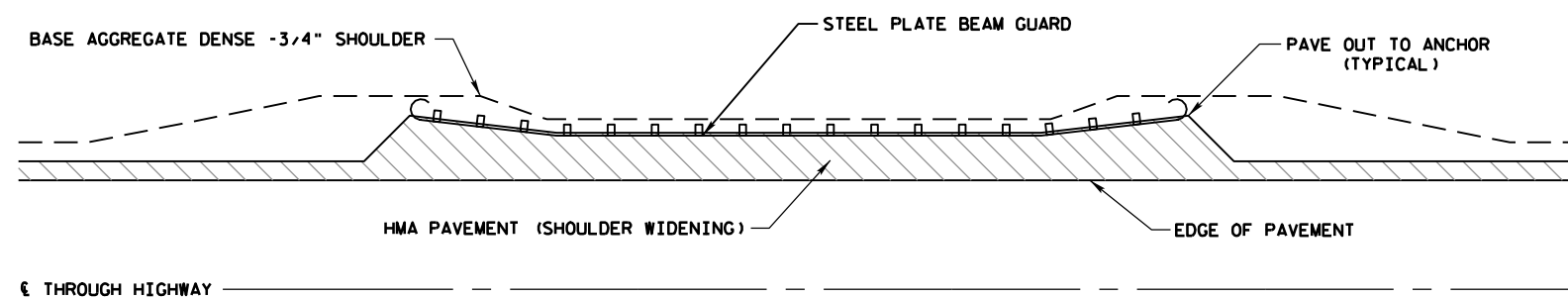
Wisconsin DNR

DNR South Central Headquarters
3911 Fish Hatchery Road
Fitchburg, WI 53711
ATTN: Cathy Bleser (Richland County)
(608) 275-3308
catherine.bleser@wisconsin.gov

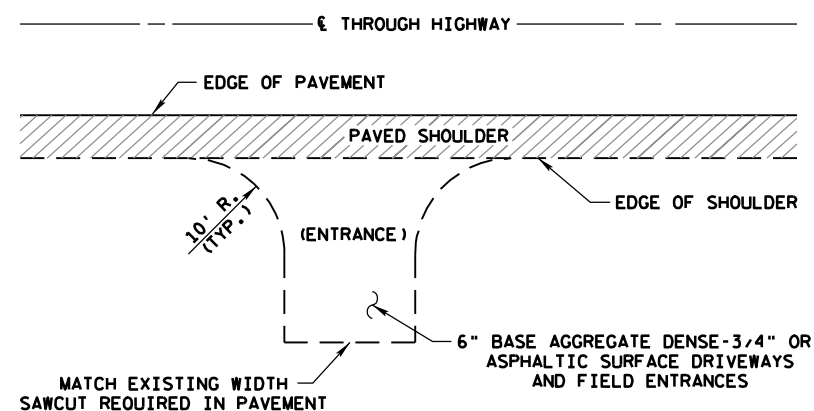




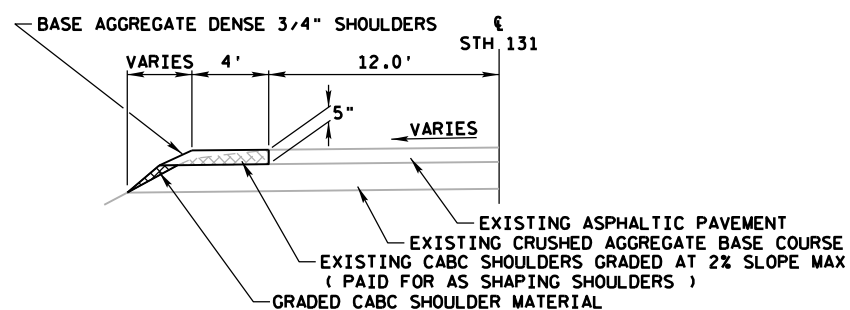




ASPHALTIC PAVING ALONG BEAM GUARD

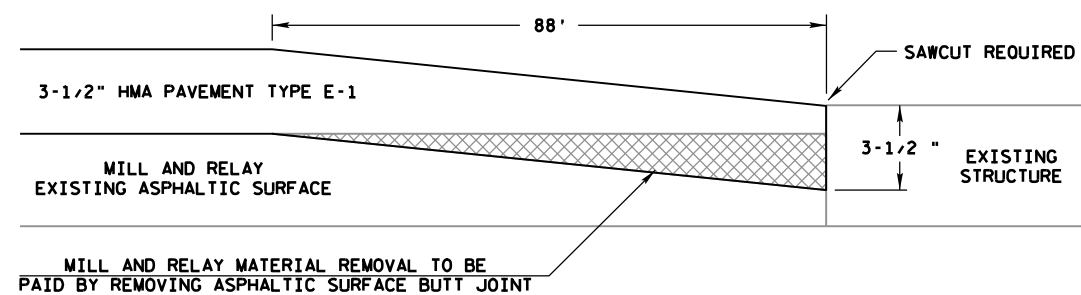


PRIVATE ENTRANCE DETAIL



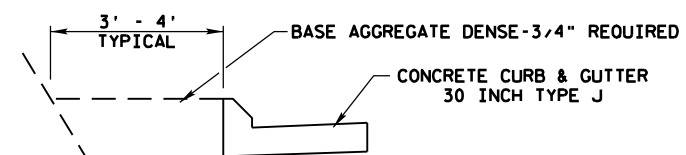
SHOULDER CUT DETAIL PRIOR TO MILL AND RELAY

1270+70 TO 1282+00
1288+49 TO 1306+81
1353+00 TO 1360+81
1365+50 TO 1379+50

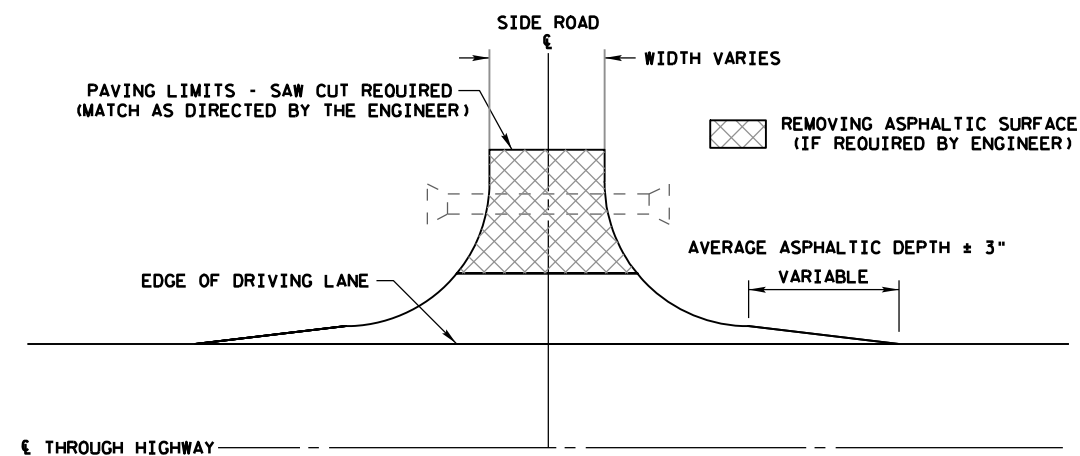


TRANSITION SECTION DETAIL

BEGIN PROJECT AND BRIDGES B-62-27, B-62-28



CONCRETE CURB & GUTTER 30 INCH TYPE J
BACKFILL DETAIL (RURAL SECTIONS)



RURAL INTERSECTION BUTT OR FEATHER JOINT DETAIL

DETAILS OF CONSTRUCTION MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS. WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

- ① JOINTS SHALL BE $\frac{1}{8}$ TO $\frac{1}{4}$ INCH WIDE BY $1\frac{1}{2}$ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
- ③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

EXPANSION JOINT

CONCRETE CURB AND GUTTER

2" MIN. CURB HEIGHT

TAPER CURB TO FLOW LINE

INCREASE ϕ FROM RIGHT ANGLE TO BEST FIT FIELD CONDITIONS

8'-0"

4'-0"

EDGE OF PAVEMENT

3'-0" MIN.

SURFACE DRAIN IS SYMETRICAL WHEN CURB AND GUTTER IS CONTINUED

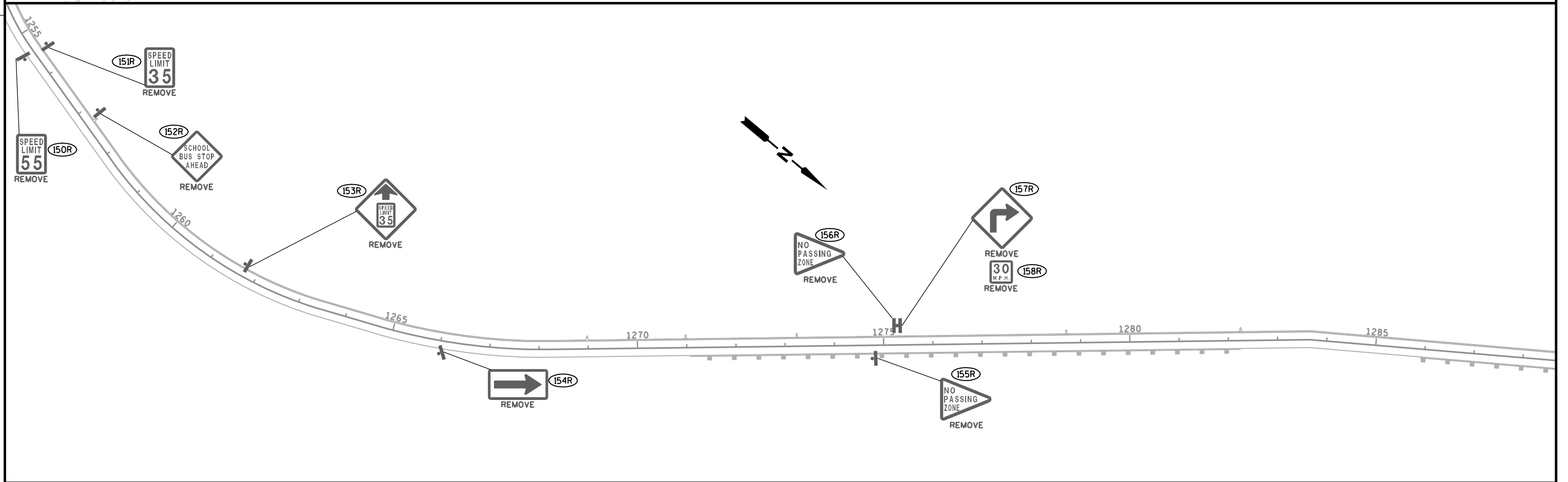
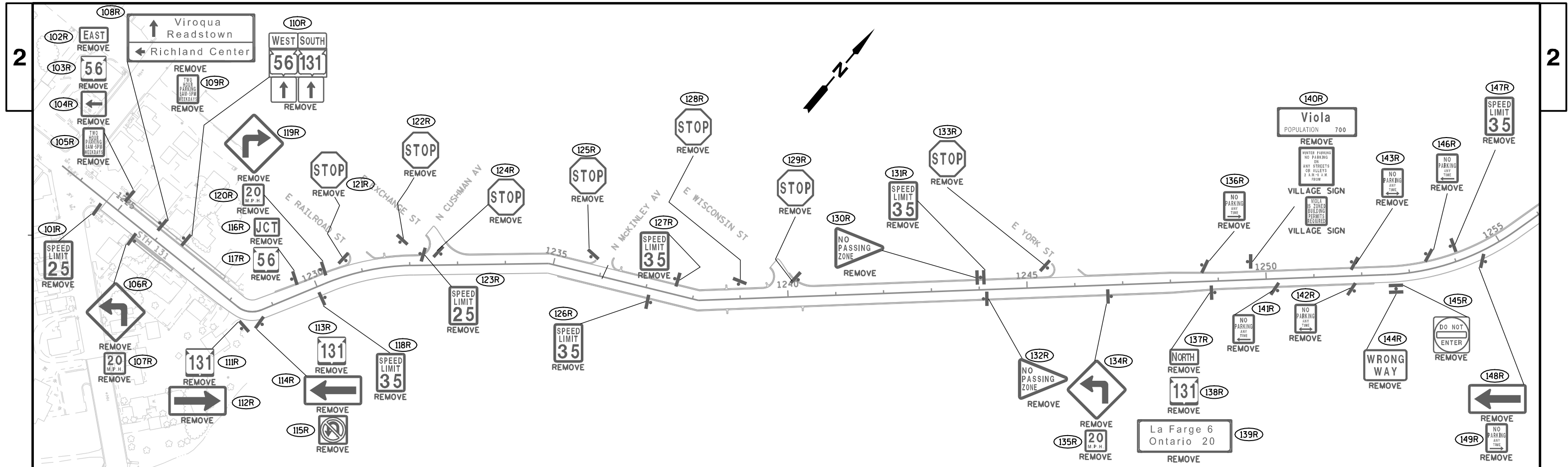
SHOULDER OR BERM HINGE POINT

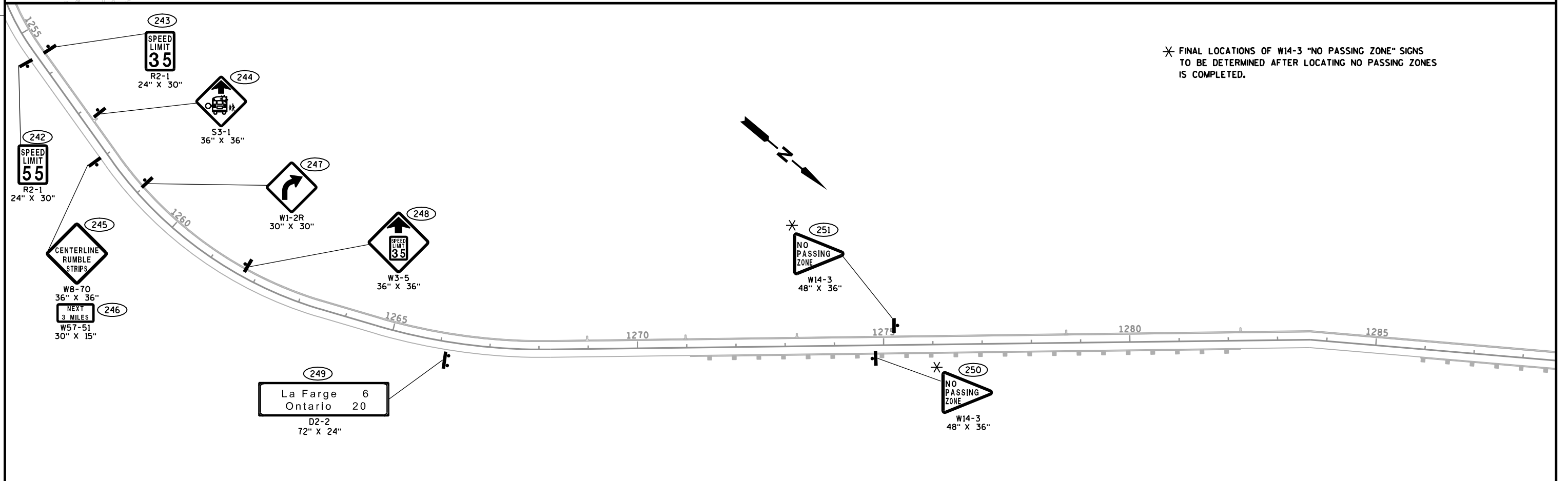
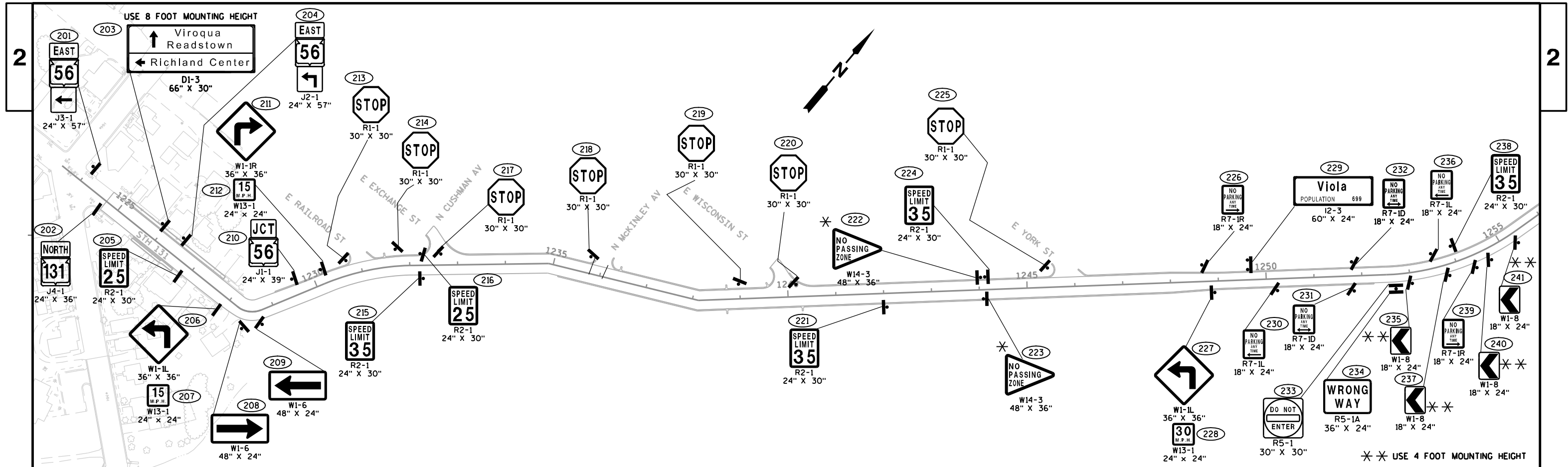
W3 WIRE MESH (SEE SECTION D-D)

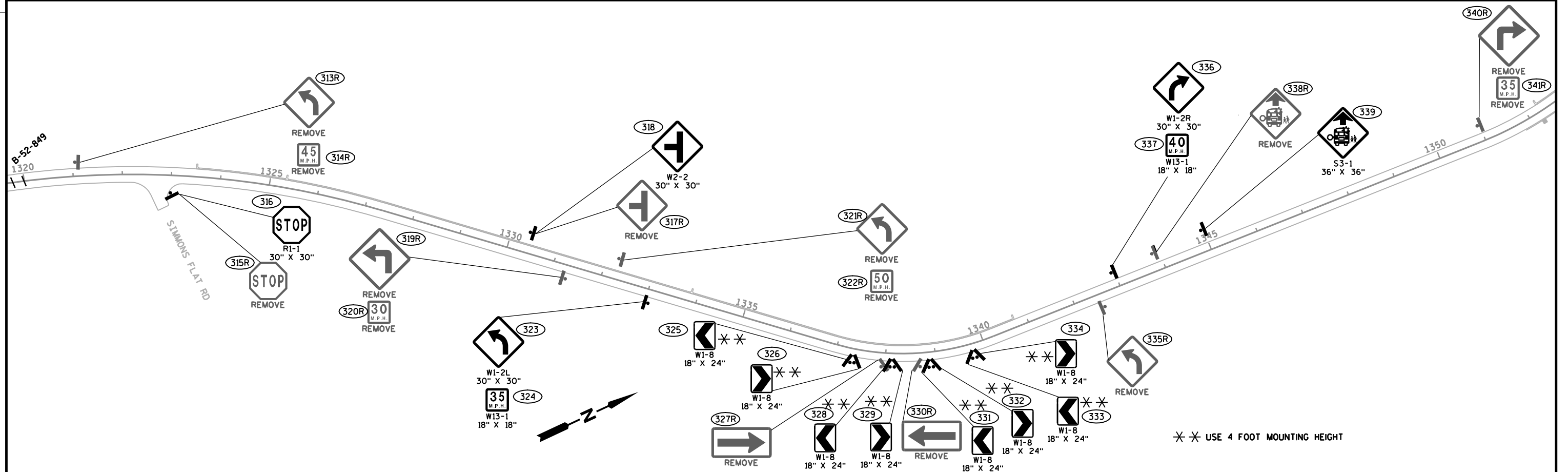
DITCH

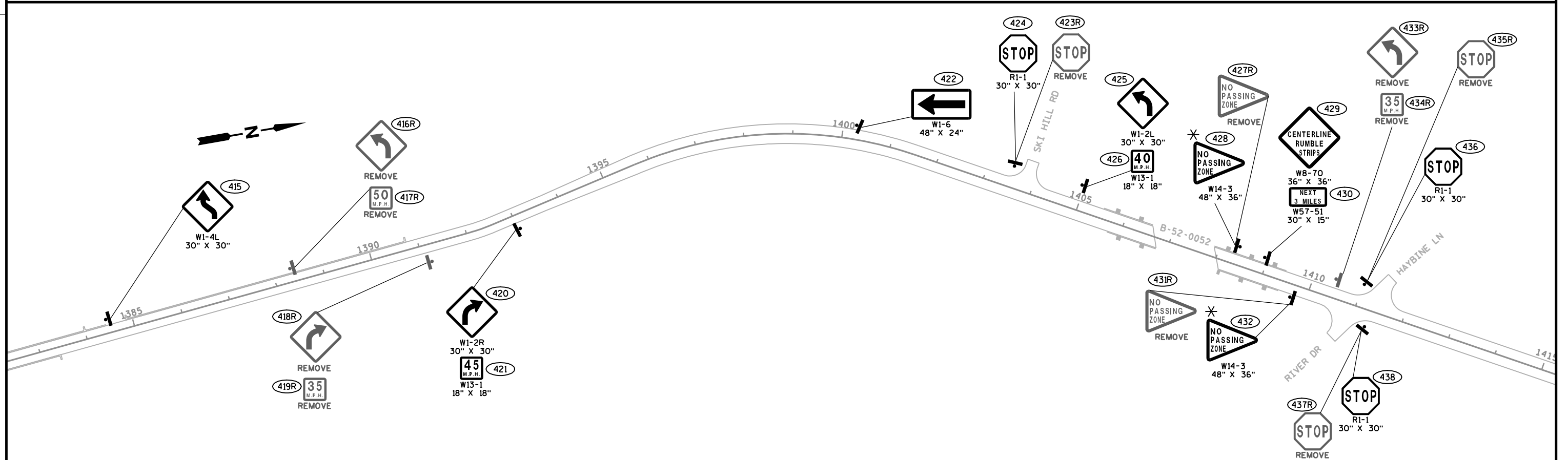
PLAN VIEW

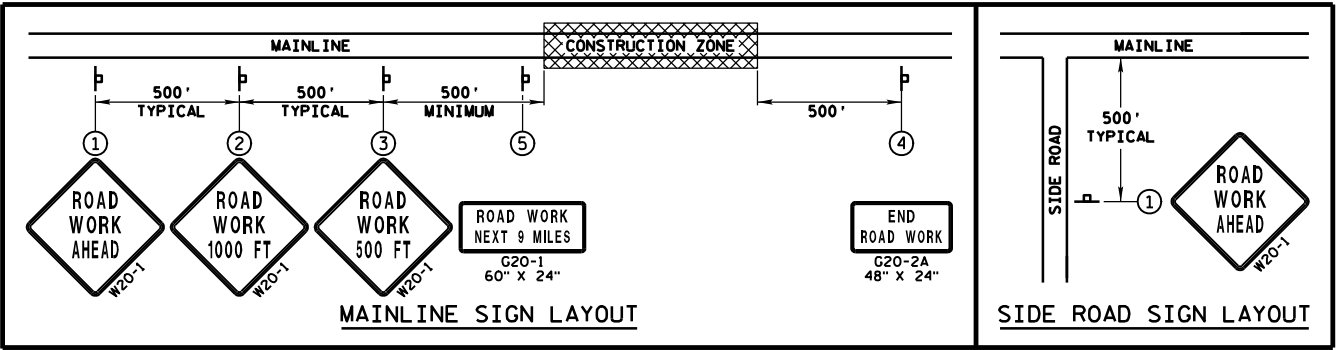
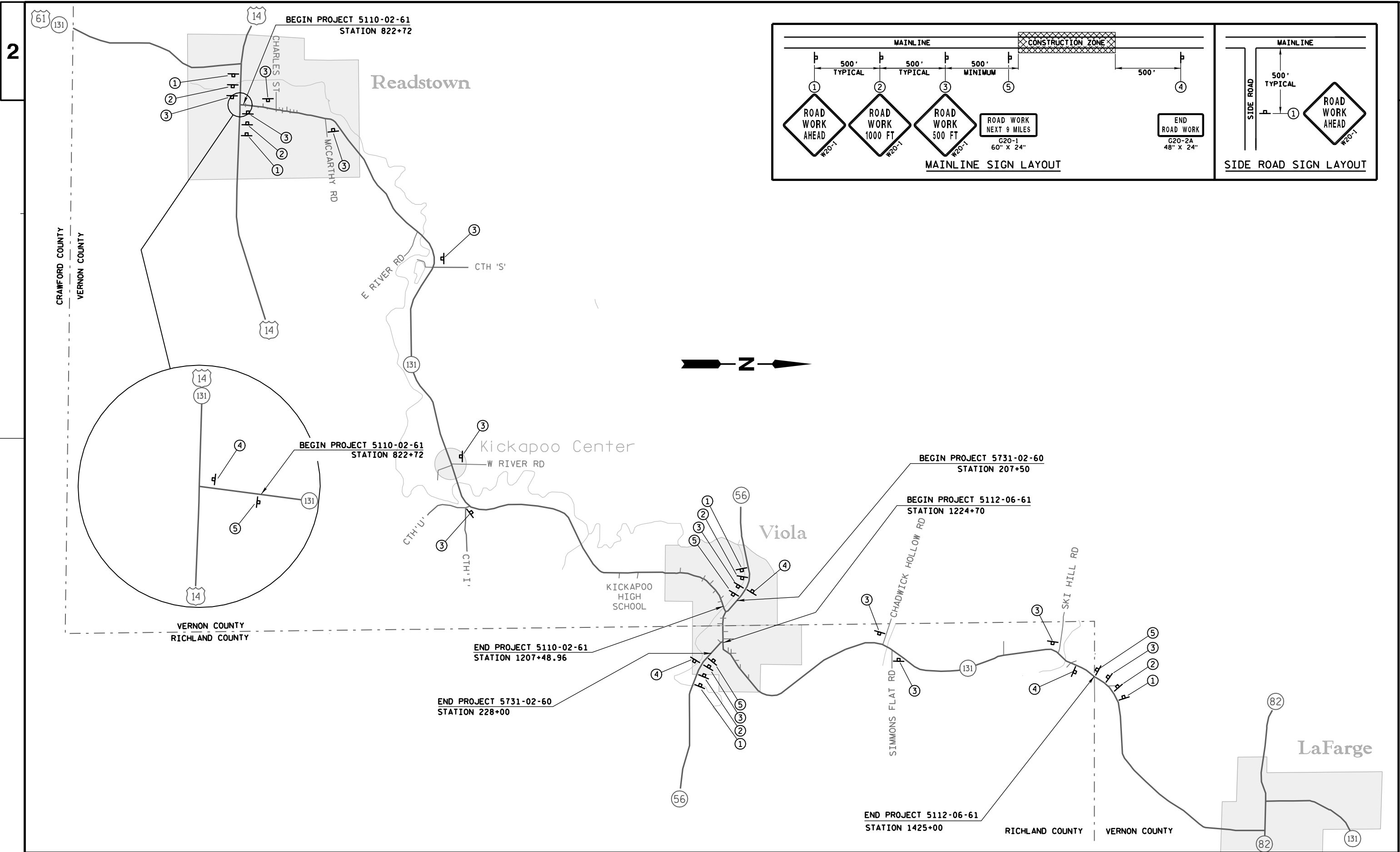
MINIMUM REINFORCEMENT
4" x 4" W3.0 x W3.0
WELDED STEEL
WIRE FABRIC

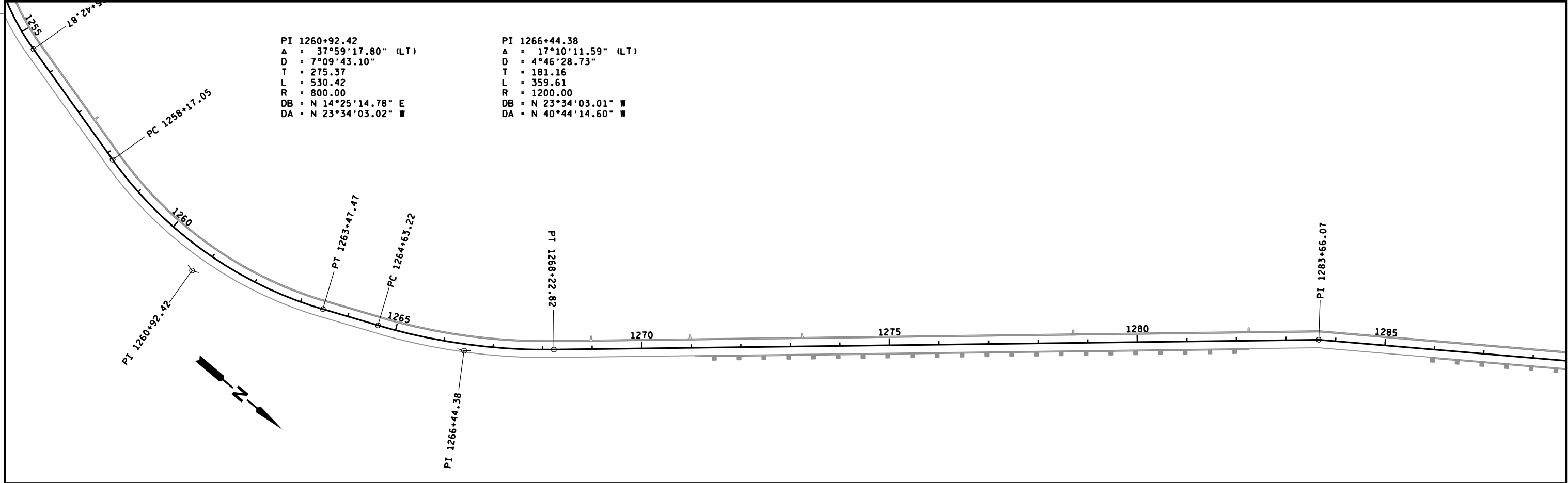
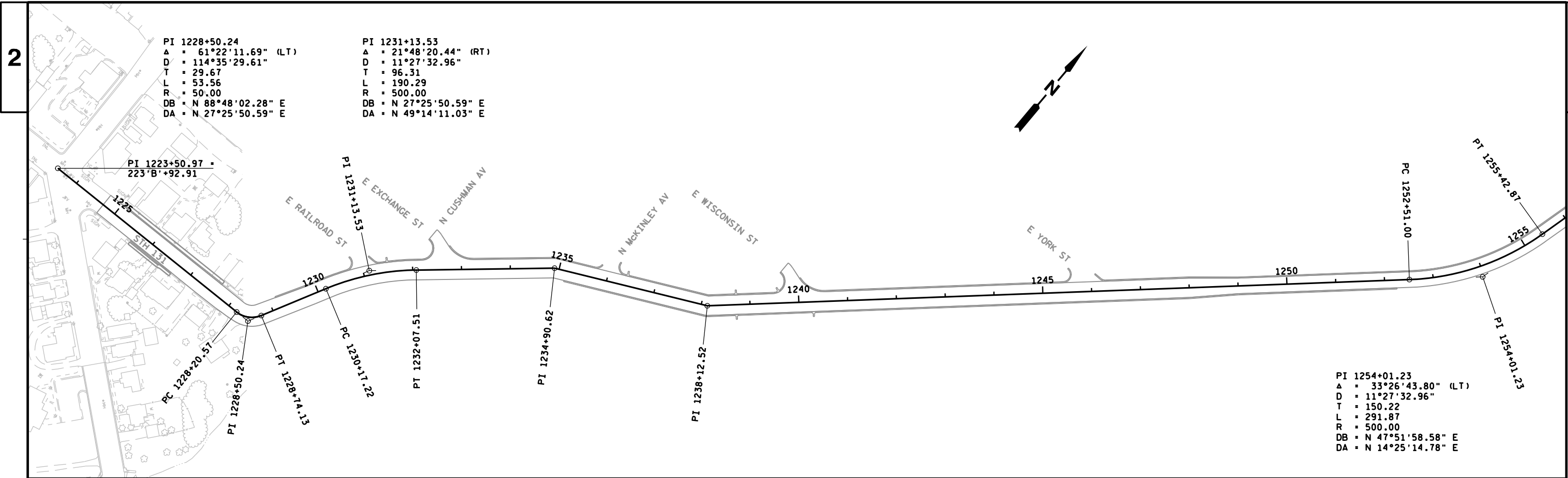


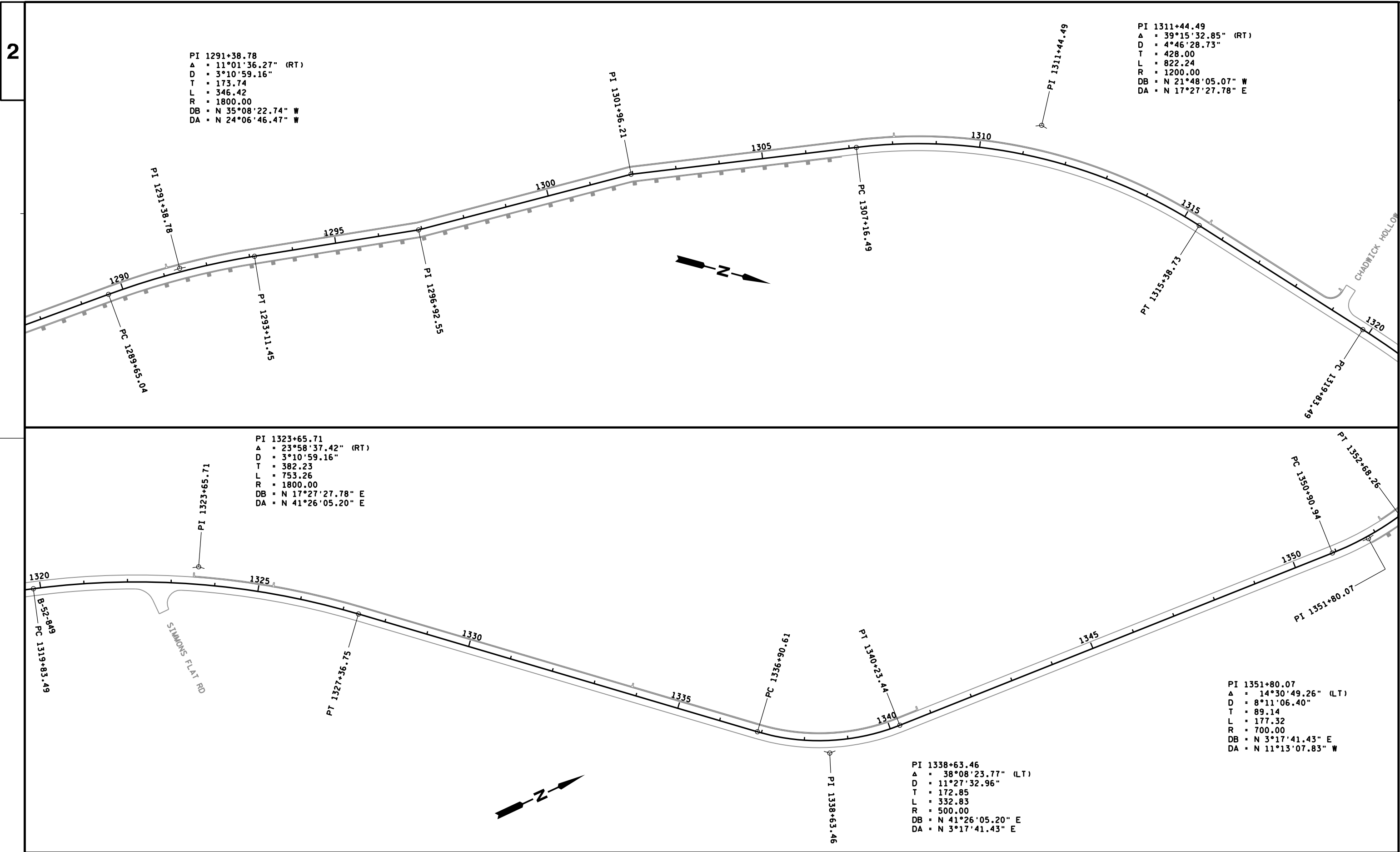


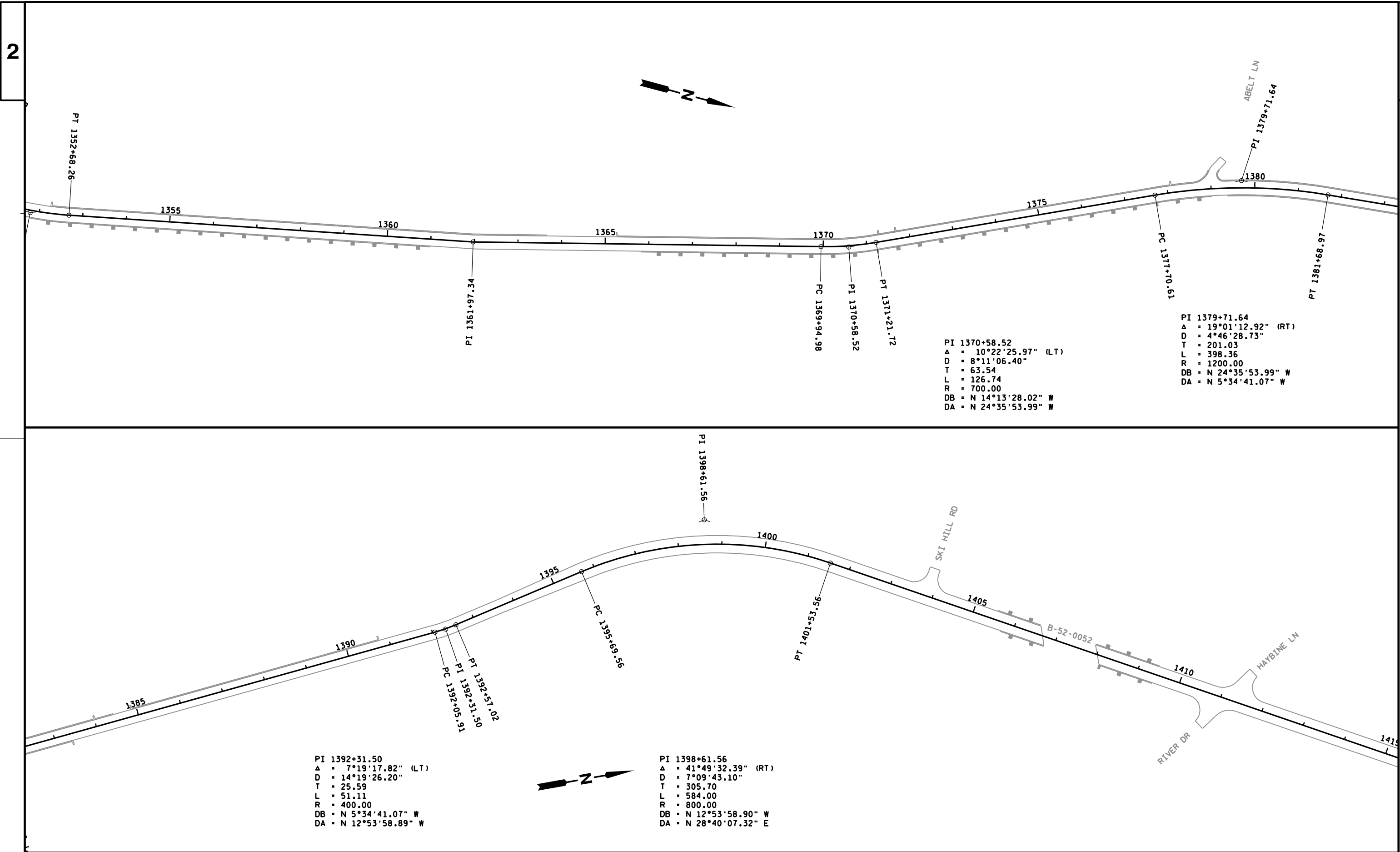


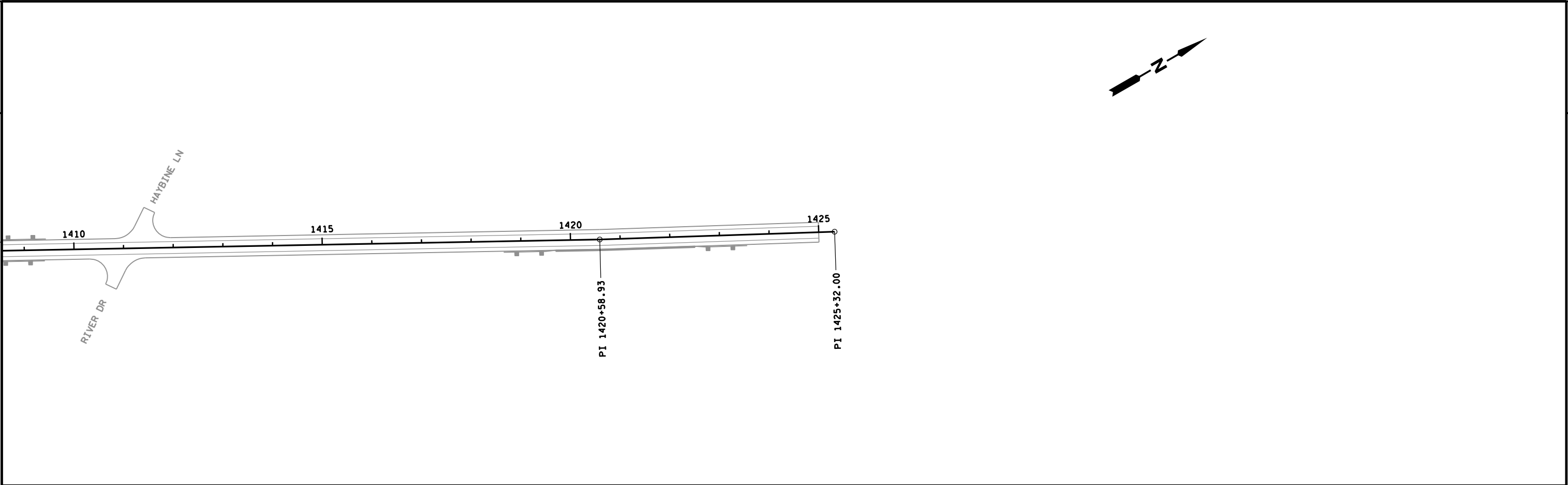












3

DATE 08FEB13		E S T I M A T E O F Q U A N T I T I E S			
LINE				5112-06-61	
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0010	204.0110	REMOVING ASPHALTIC SURFACE	SY	1,806.000	1,806.000
0020	204.0115	REMOVING ASPHALTIC SURFACE BUTT JOINTS	SY	1,173.000	1,173.000
0030	204.0150	REMOVING CURB & GUTTER	LF	520.000	520.000
0040	204.0155	REMOVING CONCRETE SIDEWALK	SY	242.000	242.000
0050	204.0165	REMOVING GUARDRAIL	LF	5,686.000	5,686.000
0070	211.0100	PREPARE FOUNDATION FOR ASPHALTIC PAVING (PROJECT) 02. 5112-06-61	LS	1.000	1.000
0100	213.0100	FINISHING ROADWAY (PROJECT) 02. 5112-06-61	EACH	1.000	1.000
0120	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	3,937.500	3,937.500
0130	305.0500	SHAPING SHOULDERS	STA	52.000	52.000
0140	330.0100	MILL AND RELAY	SY	72,747.000	72,747.000
0150	416.1010	CONCRETE SURFACE DRAINS	CY	74.920	74.920
0160	440.4410.S	INCENTIVE IRI RIDE	DOL	7,542.000	7,542.000
0170	455.0105	ASPHALTIC MATERIAL PG58-28	TON	815.000	815.000
0180	455.0605	TACK COAT	GAL	392.000	392.000
0190	460.1101	HMA PAVEMENT TYPE E-1	TON	15,589.000	15,589.000
0200	460.2000	INCENTIVE DENSITY HMA PAVEMENT	DOL	9,692.000	9,692.000
0210	465.0120	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	TON	200.000	200.000
0220	465.0475.S	ASPHALT CENTER LINE RUMBLE STRIP 2-LANE RURAL	LF	14,571.000	14,571.000
0230	490.0200	SALVAGED ASPHALTIC PAVEMENT MILLING	SY	3,316.000	3,316.000
0240	601.0411	CONCRETE CURB & GUTTER 30-INCH TYPE D	LF	2,563.000	2,563.000
0250	601.0415	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J	LF	13,930.000	13,930.000
0270	602.0405	CONCRETE SIDEWALK 4-INCH	SF	2,172.000	2,172.000
0290	603.1236	CONCRETE BARRIER TYPE S36A	LF	280.000	280.000
0300	611.8110	ADJUSTING MANHOLE COVERS	EACH	3.000	3.000
0320	614.0920	SALVAGED RAIL	LF	50.000	50.000
0330	614.2300	MGS GUARDRAIL 3	LF	3,187.500	3,187.500
0340	614.2330	MGS GUARDRAIL 3 K	LF	1,983.000	1,983.000
0350	614.2500	MGS THRIE BEAM TRANSITION	LF	236.000	236.000
0360	614.2610	MGS GUARDRAIL TERMINAL EAT	EACH	14.000	14.000
0380	618.0100	MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 02. 5112-03-61	EACH	1.000	1.000
0400	619.1000	MOBILIZATION	EACH	0.450	0.450
0410	624.0100	WATER	MGAL	170.750	170.750
0420	628.1504	SILT FENCE	LF	100.000	100.000
0430	628.1520	SILT FENCE MAINTENANCE	LF	100.000	100.000
0440	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	1.000	1.000
0450	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	1.000	1.000
0490	634.0612	POSTS WOOD 4X6-INCH X 12-FT	EACH	12.000	12.000
0500	634.0614	POSTS WOOD 4X6-INCH X 14-FT	EACH	29.000	29.000
0510	634.0616	POSTS WOOD 4X6-INCH X 16-FT	EACH	25.000	25.000
0520	634.0618	POSTS WOOD 4X6-INCH X 18-FT	EACH	6.000	6.000
0530	637.0202	SIGNS REFLECTIVE TYPE II	SF	453.470	453.470
0540	638.2602	REMOVING SIGNS TYPE II	EACH	100.000	100.000
0550	638.3000	REMOVING SMALL SIGN SUPPORTS	EACH	69.000	69.000
0560	642.5201	FIELD OFFICE TYPE C	EACH	0.450	0.450
0580	643.0100	TRAFFIC CONTROL (PROJECT) 02. 5112-06-61	EACH	1.000	1.000
0600	643.0300	TRAFFIC CONTROL DRUMS	DAY	76,244.000	76,244.000
0610	643.0410	TRAFFIC CONTROL BARRICADES TYPE II	DAY	800.000	800.000
0620	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	800.000	800.000
0630	643.0900	TRAFFIC CONTROL SIGNS	DAY	2,900.000	2,900.000

3

DATE 08FEB13			E S T I M A T E O F Q U A N T I T I E S		
LINE			5112-06-61		
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0640	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	73,741.000	73,741.000
0680	648.0100	LOCATING NO-PASSING ZONES	MI	3.770	3.770
0690	649.0200	TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH	LF	72,532.000	72,532.000
0700	650.8000	CONSTRUCTION STAKING RESURFACING REFERENCE	LF	20,030.000	20,030.000
0710	690.0150	SAWING ASPHALT	LF	390.000	390.000
0720	690.0250	SAWING CONCRETE	LF	10.000	10.000
0730	SPV.0060	SPECIAL 01. ADJUST WATER VALVE BOX	EACH	3.000	3.000

PERMANENT SIGNING

SIGN NUMBER	STATION	LOCATION	SIGN CODE	SIZE	DESCRIPTION	ORDER LINES	634.0612	634.0614	634.0616	634.0618	637.0202	638.2602	638.3000	NOTES
							POSTS WOOD 4X6-INCH X 12-FT EACH	POSTS WOOD 4X6-INCH X 14-FT EACH	POSTS WOOD 4X6-INCH X 16-FT EACH	POSTS WOOD 4X6-INCH X 18-FT EACH	SIGNS REFLECTIVE TYPE II SF	REMOVING SIGNS TYPE II EACH	REMOVING SMALL SIGN SUPPORTS EACH	
101R	1224+65	STH 131, Right	R2-1	24" x 30"	Speed Limit _ MPH	25						1		Banded to Light Pole
102R	1225+00	STH 131, Left	M3-2	24" x 12"	East Cardinal Route Marker							1	1	
103R	1225+00	STH 131, Left	M1-6	24" x 24"	State Route Marker	56						1		Mounted with 102R
104R	1225+00	STH 131, Left	M6-1	21" x 21"	Arrow Left							1		Mounted with 102R
105R	1225+00	STH 131, Left	R7-	12" x 18"	2 Hour Parking							1		Mounted with 102R
106R	1225+60	STH 131, Right	W1-1L	36" x 36"	Left Turn							1	1	
107R	1225+60	STH 131, Right	W13-1	24" x 24"	Advisory Speed Plate	20						1		Mounted with 105R
108R	1225+90	STH 131, Left	D1-3	66" x 30"	Three Destinations (Arrows)	Arrow Ahead, Viroqua Arrow Ahead, Readstown Arrow Left, Richland Center						1	1	
109R	1225+90	STH 131, Left	R7-	12" x 18"	2 Hour Parking							1		Mounted with 108R
110R	1226+50	STH 131, Left	J2-2	48" x 57"	Route Turn Assembly	West, Souith STH 56, STH 131 Arrow Ahead, Arrow Ahead						1	1	
111	1228+50	STH 131, Right	M1-6	24" x 24"	State Route Marker	56						1	1	
112R	1228+50	STH 131, Right	W1-6	48" x 24"	Night Arrow (Single)	Arrow Right						1		Mounted with 109R
113R	1228+70	STH 131, Right	M1-6	24" x 24"	State Route Marker	56						1	1	
114R	1228+70	STH 131, Right	W1-6	48" x 24"	Night Arrow (Single)	Arrow Left						1		Mounted with 111R
115R	1228+70	STH 131, Right	R3-4	24" x 24"	No U Turn							1		Mounted with 111R
116R	1229+60	STH 131, Left	M2-1	21" x 15"	Junction Marker							1	1	
117R	1229+60	STH 131, Left	M1-6	24" x 24"	State Route Marker	56						1		Mounted with 114R
118R	1230+00	STH 131, Right	R2-1	24" x 30"	Speed Limit _ MPH	35						1	1	
119R	1230+25	STH 131, Left	W1-1R	36" x 36"	Right Turn							1	1	
120R	1230+25	STH 131, Left	W13-1	24" x 24"	Advisory Speed Plate	20						1		Mounted with 117R
121R	1230+75	STH 131, Left	R1-1	30" x 30"	Stop							1	1	
122R	1231+80	STH 131, Left	R1-1	30" x 30"	Stop							1	1	
123R	1232+25	STH 131, Left	R2-1	24" x 30"	Speed Limit _ MPH	25						1	1	
124R	1232+65	STH 131, Left	R1-1	30" x 30"	Stop							1	1	
125R	1235+75	STH 131, Left	R1-1	30" x 30"	Stop							1	1	
126R	1237+10	STH 131, Left	R2-1	24" x 30"	Speed Limit _ MPH	35						1	1	
127R	1237+60	STH 131, Right	R2-1	24" x 30"	Speed Limit _ MPH	35						1	1	
128R	1238+95	STH 131, Left	R1-1	30" x 30"	Stop							1	1	
129R	1240+15	STH 131, Left	R1-1	30" x 30"	Stop							1	1	
130R	1244+00	STH 131, Left	W14-3	48" x 36"	No Passing Zone							1	1	
131R	1244+00	STH 131, Left	R2-1	24" x 30"	Speed Limit _ MPH	35						1		Mounted on back of 128R
132R	1244+15	STH 131, Right	W14-3	48" x 36"	No Passing Zone							1	1	
133R	1245+45	STH 131, Left	R1-1	30" x 30"	Stop							1	1	
134R	1246+75	STH 131, Right	W1-1L	36" x 36"	Left Turn							1	1	
135R	1246+75	STH 131, Right	W13-1	24" x 24"	Advisory Speed Plate	20						1		Mounted with 132R
136R	1248+65	STH 131, Left	R7-1R	18" x 24"	No Parking Any Time, Right Arrow							1	1	
137R	1248+90	STH 131, Right	M3-1	24" x 12"	North Cardinal Route Marker							1	1	
138R	1248+90	STH 131, Right	M1-6	24" x 24"	State Route Marker	131						1		Mounted with 135R
139R	1248+90	STH 131, Right	D2-2	66" x 24"	Destinations / Distance (Two)	La Farge 6 Ontario 20 Viola Population 699						1		Mounted with 135R
140R	1249+65	STH 131, Left	I2-3	60" x 24"	Comm Pop Name Sign (with Number)							1	1	
141R	1250+20	STH 131, Right	R7-1L	18" x 24"	No Parking Any Time, Left Arrow							1	1	
142R	1251+80	STH 131, Right	R7-1D	18" x 24"	No Parking Any Time, Double Arrow							1	1	
143R	1251+80	STH 131, Left	R7-1L	18" x 24"	No Parking Any Time, Left Arrow							1	1	
144R	1252+70	STH 131, Right	R5-1A	36" x 24"	Wrong Way							1	1	
145R	1252+70	STH 131, Right	R5-1	36" x 36"	Do Not Enter							1		Mounted on back of 142R
146R	1253+50	STH 131, Left	R7-1L	18" x 24"	No Parking Any Time, Left Arrow							1	1	
147R	1254+05	STH 131, Left	R2-1	24" x 30"	Speed Limit _ MPH	35						1	1	
148R	1254+50	STH 131, Right	W1-6	48" x 24"	Night Arrow (Single)	Arrow Left						1	1	
149R	1254+50	STH 131, Right	R7-1R	18" x 24"	No Parking Any Time, Right Arrow							1		Mounted with 146R
150R	1255+45	STH 131, Right	R2-1	24" x 30"	Speed Limit _ MPH	55						1	1	
151R	1255+45	STH 131, Left	R2-1	24" x 30"	Speed Limit _ MPH	35						1	1	
152R	1257+20	STH 131, Left	S3-1	36" x 36"	School Bus Stop Ahead							1	1	
153R	1261+70	STH 131, Left	W3-5	36" x 36"	Speed Limit Ahead (Arrow)	35						1	1	
154R	1266+00	STH 131, Right	W1-6	48" x 24"	Night Arrow (Single)	Arrow Right						1	1	
155R	1274+85	STH 131, Left	W14-3	48" x 36"	No Passing Zone							1	1	
156R	1275+25	STH 131, Right	W14-3	48" x 36"	No Passing Zone							1	1	
Sheet Totals							0	0	0	0	0	56	39	

STATE PROJECT NO: 5112-06-61

HWY: STH 131

COUNTY: VERNON

MISCELLANEOUS QUANTITIES

SHEET NO: 19

E

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PERMANENT SIGNING

SIGN NUMBER	STATION	LOCATION	SIGN CODE	SIZE	DESCRIPTION	ORDER LINES	634.0612	634.0614	634.0616	634.0618	637.0202	638.2602	638.3000	NOTES
							POSTS WOOD 4X6- INCH X 12-FT EACH	POSTS WOOD 4X6- INCH X 14-FT EACH	POSTS WOOD 4X6- INCH X 16-FT EACH	POSTS WOOD 4X6- INCH X 18-FT EACH	SIGNS REFLECTIVE TYPE II SF	REMOVING SIGNS TYPE II EACH	REMOVING SMALL SIGN SUPPORTS EACH	
302R	1291+90	STH 131, Right	W13-1	18" x 18"	Advisory Speed Plate	50						1		Mounted with 301R
303	1294+00	STH 131, Right	W1-2L	30" x 30"	Left Curve					1	6.25			
304	1299+00	STH 131, Left	W1-2R	30" x 30"	Right Curve					1	6.25			
305R	1301+20	STH 131, Left	W1-2R	30" x 30"	Right Curve								1	
306R	1301+20	STH 131, Left	W13-1	18" x 18"	Advisory Speed Plate	50						1		Mounted with 305R
307R	1317+30	STH 131, Right	W1-2R	30" x 30"	Right Curve							1	1	
308R	1317+30	STH 131, Right	W13-1	18" x 18"	Advisory Speed Plate	45						1		Mounted with 307R
309	1318+20	STH 131, Left	W1-2L	30" x 30"	Left Curve				1		6.25			
310	1318+20	STH 131, Left	W13-1	18" x 18"	Advisory Speed Plate	50					2.25			Mount with 309
311R	1318+85	STH 131, Left	R1-1	30" x 30"	Stop							1	1	
312	1318+85	STH 131, Left	R1-1	30" x 30"	Stop			1			5.18			
313R	1321+10	STH 131, Left	W1-2L	30" x 30"	Left Curve							1	1	
314R	1321+10	STH 131, Left	W13-1	18" x 18"	Advisory Speed Plate	45						1		Mounted with 313R
315R	1323+00	STH 131, Right	R1-1	30" x 30"	Stop							1	1	
316	1323+00	STH 131, Right	R1-1	30" x 30"	Stop			1			5.18			
317R	1330+40	STH 131, Left	W2-2	30" x 30"	Side Road (90 Degrees)							1	1	
318	1330+40	STH 131, Left	W2-2	30" x 30"	Side Road (90 Degrees)				1		6.25			
319R	1331+30	STH 131, Right	W1-1L	36" x 36"	Left Turn							1	1	
320R	1331+30	STH 131, Right	W13-1	24" x 24"	Advisory Speed Plate	30						1		Mounted with 319R
321R	1332+30	STH 131, Left	W1-2L	30" x 30"	Left Curve							1	1	
322R	1332+30	STH 131, Left	W13-1	18" x 18"	Advisory Speed Plate	50						1		Mounted with 321R
323	1333+00	STH 131, Right	W1-2L	30" x 30"	Left Curve				1		6.25			
324	1333+00	STH 131, Right	W13-1	18" x 18"	Advisory Speed Plate	35					2.25			Mount with 323
325	1337+30	STH 131, Right	W1-8	18" x 24"	Chevron, to the Left		1				3.00			4' Mounting Height
326	1337+40	STH 131, Right	W1-8	18" x 24"	Chevron, to the Right		1				3.00			4' Mounting Height
327R	1338+00	STH 131, Right	W1-6	48" x 24"	Night Arrow (Single)	Arrow Right						1	1	
328	1338+10	STH 131, Right	W1-8	18" x 24"	Chevron, to the Left		1				3.00			4' Mounting Height
329	1338+20	STH 131, Right	W1-8	18" x 24"	Chevron, to the Right		1				3.00			4' Mounting Height
330R	1338+65	STH 131, Right	W1-6	48" x 24"	Night Arrow (Single)	Arrow Left						1	1	
331	1338+90	STH 131, Right	W1-8	18" x 24"	Chevron, to the Left		1				3.00			4' Mounting Height
332	1339+00	STH 131, Right	W1-8	18" x 24"	Chevron, to the Right		1				3.00			4' Mounting Height
333	1339+70	STH 131, Right	W1-8	18" x 24"	Chevron, to the Left		1				3.00			4' Mounting Height
334	1339+80	STH 131, Right	W1-8	18" x 24"	Chevron, to the Right		1				3.00			4' Mounting Height
335R	1342+50	STH 131, Right	W1-2L	30" x 30"	Left Curve							1	1	
336	1343+00	STH 131, Left	W1-2R	30" x 30"	Right Curve				1		6.25			
337	1343+00	STH 131, Left	W13-1	18" x 18"	Advisory Speed Plate	40					2.25			Mount with 336
338R	1343+90	STH 131, Left	S3-1	36" x 36"	School Bus Stop Ahead							1	1	
339	1345+00	STH 131, Left	S3-1	36" x 36"	School Bus Stop Ahead				1		9.00			
340R	1351+00	STH 131, Left	W1-1R	36" x 36"	Right Turn							1	1	
341R	1351+00	STH 131, Left	W13-1	24" x 24"	Advisory Speed Plate	35						1		Mounted with 340R
401	1361+00	STH 131, Left	W1-2R	30" x 30"	Right Curve				1		6.25			
402R	1363+00	STH 131, Right	W1-2L	30" x 30"	Left Curve							1	1	
403R	1363+00	STH 131, Left	W1-2R	30" x 30"	Right Curve							1	1	
404	1367+00	STH 131, Right	W1-4L	30" x 30"	Left Reverse Curve				1		6.25			
405R	1373+00	STH 131, Right	W1-2R	30" x 30"	Right Curve							1	1	
406R	1373+00	STH 131, Right	W13-1	18" x 18"	Advisory Speed Plate	50						1		Mounted with 405R
407R	1374+00	STH 131, Left	W11-4	30" x 30"	Cattle Crossing Symbol							1	1	
408R	1377+80	STH 131, Left	W1-2R	30" x 30"	Right Curve							1	1	
409R	1378+90	STH 131, Left	R1-1	30" x 30"	Stop							1	1	
410	1378+90	STH 131, Left	R1-1	30" x 30"	Stop				1		5.18			
411R	1379+60	STH 131, Right	M3-1	24" x 12"	North Cardinal Route Marker							1	1	
412R	1379+60	STH 131, Right	M1-6	24" x 24"	State Route Marker	131						1		Mounted with 411R
413R	1379+75	STH 133, Left	M3-3	24" x 12"	South Cardinal Route Marker							1	1	
414R	1379+75	STH 133, Left	M1-6	24" x 24"	State Route Marker	131						1		Mounted with 413R
415	1384+50	STH 133, Left	W1-4L	30" x 30"	Left Reverse Curve				1		6.25			
416R	1388+40	STH 131, Left	W1-2L	30" x 30"	Left Curve							1	1	
417R	1388+40	STH 131, Left	W13-1	18" x 18"	Advisory Speed Plate	50						1		Mounted with 416R
418R	1391+20	STH 131, Right	W1-2R	30" x 30"	Right Curve							1	1	
419R	1391+20	STH 131, Right	W13-1	18" x 18"	Advisory Speed Plate	35						1		Mounted with 418R
420	1393+00	STH 131, Right	W1-2R	30" x 30"	Right Curve				1		6.25			
421	1393+00	STH 131, Right	W13-1	18" x 18"	Advisory Speed Plate	45					2.25			Mount with 420
422	1400+25	STH 131, Left	W1-6	48" x 24"	Night Arrow (Single)	Arrow Left		1.00			8.00			
423R	1403+60	STH 131, Left	R1-1	30" x 30"	Stop							1	1	
424	1403+60	STH 131, Left	R1-1	30" x 30"	Stop									
Sheet Totals							8	4	10	2	133.22	36	24	

STATE PROJECT NO: 5112-06-61

HWY: STH 131

COUNTY: VERNON

MISCELLANEOUS QUANTITIES

SHEET NO: 21

E

PERMANENT SIGNING

SIGN NUMBER	STATION	LOCATION	SIGN CODE	SIZE	DESCRIPTION	ORDER LINES	634.0612	634.0614	634.0616	634.0618	637.0202	638.2602	638.3000	NOTES
							POSTS WOOD 4X6-INCH X 12-FT EACH	POSTS WOOD 4X6-INCH X 14-FT EACH	POSTS WOOD 4X6-INCH X 16-FT EACH	POSTS WOOD 4X6-INCH X 18-FT EACH	SIGNS REFLECTIVE TYPE II SF	REMOVING SIGNS TYPE II EACH	REMOVING SMALL SIGN SUPPORTS EACH	
431R	1409+75	STH 131, Right	W14-3	48" x 36"	No Passing Zone							1	1	
432	1409+75	STH 131, Right	W14-3	48" x 36"	No Passing Zone				1		6.00			
433R	1410+50	STH 131, Left	W1-2L	30" x 30"	Left Curve							1	1	
434R	1410+50	STH 131, Left	W13-1	18" x 18"	Advisory Speed Plate	35						1		Mounted with 431R
435R	1411+00	STH 131, Left	R1-1	30" x 30"	Stop							1	1	
436	1411+00	STH 131, Left	R1-1	30" x 30"	Stop			1			5.18			
437R	1411+30	STH 131, Right	R1-1	30" x 30"	Stop							1	1	
438	1411+30	STH 131, Right	R1-1	30" x 30"	Stop			1			5.18			
Sheet Totals							0	2	1	0	16.36	5	4	
Signing Totals							12	29	25	6	453.47	100	69	

643.0900 TRAFFIC CONTROL SIGNS

CATEGORY	SIDE ROAD	MAINLINE		LOCATION	DAYS	NO. OF		SIGN	SIDEWALK CLOSED	USE OTHER	SIZE	CODE
		STA					SIGNS					
10		1224+00		LT	50		1	SIDE			24"X12"	R5-8A
10		1225+00		LT	50		1	SIDEWALK CLOSED			24"X12"	R5-8
10		1227+70		LT	50		1	SIDEWALK CLOSED			24"X12"	R5-8
10		1228+20		LT	50		1	SIDEWALK CLOSED USE OTHER			24"X12"	R5-8A
10		1224+60		RT	50		1	SIDEWALK CLOSED USE OTHER			24"X12"	R5-8A
10		1225+50		RT	50		1	SIDE			24"X12"	R5-8
10		1226+76		RT	50		1	SIDEWALK CLOSED			24"X12"	R5-8
10		1227+00		RT	50		1	SIDEWALK CLOSED USE OTHER			24"X12"	R5-8A
10	EAST RAILROAD ST	1231+30		LT	100		2	SIDE			48"X48"	W20-1
10	NORTH CUSHMON AVE	1231+80		LT	50		1	ROAD WORK AHEAD			48"X48"	W20-1
10	EAST EXCHANGE STREET	1233+20		LT	50		1	ROAD WORK AHEAD			48"X48"	W20-1
10	NORTH MCKINNELLY AVE	1235+80		LT	100		2	ROAD WORK AHEAD			48"X48"	W20-1
10	EAST WISCONSIN STREET	1240+60		LT	100		2	ROAD WORK AHEAD			48"X48"	W20-1
10	EAST YORK STREET	1246+30		LT	50		1	ROAD WORK AHEAD			48"X48"	W20-1
10	CHADWICK HOLLOW RD	1319+10		LT	50		1	ROAD WORK AHEAD			48"X48"	W20-1
10	SIMMONS FLAT RD	1322+50		RT	50		1	ROAD WORK AHEAD			48"X48"	W20-1
10	ABELT LANE	1379+00		LT	50		1	ROAD WORK AHEAD			48"X48"	W20-1
10	SKI HILL ROAD	1403+80		LT	50		1	ROAD WORK AHEAD			48"X48"	W20-1
10	HYBINE LANE	1411+20		LT	50		1	ROAD WORK AHEAD			48"X48"	W20-1
10	RIVER DRIVE	1411+20		RT	50		1	ROAD WORK AHEAD			48"X48"	W20-1
10	MAIN LINE - END OF PROJE	1425+00		LT	50		1	ROAD WORK NEXT 11 MILES			60"X24"	G20-1
10	MAIN LINE - END OF PROJE	1425+00		LT	50		1	ROAD WORK 250 FT			48"X48"	W20-1E
10	MAIN LINE - END OF PROJE	1425+00		LT	50		1	ROAD WORK 500 FT			48"X48"	W20-1
10	MAIN LINE - END OF PROJE	1425+00		LT	50		1	ROAD WORK 1000 FT			48"X48"	W20-1
10	MAIN LINE - END OF PROJE	1425+00		LT	50		1	ROAD WORK AHEAD			48"X48"	W20-1
10	MAIN LINE - END OF PROJE	1425+00		RT	50		1	END ROAD WORK			48"X24"	G20-2A
10	PLACED AT 2 MILE INTERVALS			RT	300		6	NO CENTER STRIPE			48"X48"	W8-12
10	PLACED AT 2 MILE INTERVALS			LT	300		6	NO CENTER STRIPE			48"X48"	W8-12
10	PLACED AT 2 MILE INTERVALS			RT	300		6	LOOSE GRAVEL			48"X48"	W8-7
10	PLACED AT 2 MILE INTERVALS			LT	300		6	LOOSE GRAVEL			48"X48"	W8-7
10					50		1	FINES DOUBLE IN WORK ZONES			96"X48"	W21-62
10				TOTAL	200		4	DO NOT PASS			24"X30"	R4-1
					2,900							

3

204.0110 REMOVING ASPHALTIC SURFACE SY

CATEGORY	STATION	LOCATION	SY	REMARKS
10	1227+86	RT	20	P.E.
10	1228+20	RT	20	P.E.
10	1232+50	LT	233	E. EXCHANGE ST
10	1239+20	RT	20	CEMETRY
10	1240+00	LT	236	E. WISCONSIN AVE
10	1240+62	LT	20	P.E.
10	1241+02	LT	20	P.E.
10	1241+25	RT	32	CEMETRY
10	1242+43	RT	32	CEMETRY
10	1242+57	LT	20	P.E.
10	1244+00	LT	20	P.E.
10	1245+28	RT	32	C.E
10	1245+28	LT	20	P.E.
10	1247+00	LT	20	P.E.
10	1322+62	RT	200	SIMMONS FLAT RD.
10	1379+00	LT	260	ABELT RD.
10	1381+50	RT	20	P.E.
10	1403+80	LT	181	SKI HILL RD.
10	1411+00	LT	200	RIVER DR.
10	1411+40	RT	200	HYBINE LN.
TOTAL			1,806	

204.0150 REMOVING CURB & GUTTER

CATEGORY	STATION	-	STATION	LOCATION	LF
10	1225+06	-	1229+20	LT	414
10	1225+60	-	1226+66	RT	106
TOTAL					520

204.0155 REMOVING CONCRETE SIDEWALK

CATEGORY	STATION	-	STATION	LOCATION	SY
10	1225+06	-	1227+62	LT	171
10	1225+60	-	1226+66	RT	71
TOTAL					242

204.0165 REMOVING GUARD RAIL

CATEGORY	STATION	-	STATION	LOCATION	LF	REMARKS
10	1270+70	-	1282+01	RT	1,131.00	
10	1288+49	-	1306+81	RT	1,832.00	
10	1353+00	-	1360+81	RT	781.00	
10	1365+97	-	1379+43	RT	1,346.00	
10	1405+57	-	1406+62	LT	105.00	B-52-52
10	1405+66	-	1406+71	RT	105.00	B-52-52
10	1408+01	-	1409+94	RT	193.00	
10	1408+01	-	1409+44	LT	143.00	
TOTAL					5,636	

305.0110 BASE AGGREGATE DENSE 3/4 -INCH

CATEGORY	STATION	-	STATION	LOCATION	LENGTH LF	TON	REMARKS
10	1248+00	-	1315+53	LT	6,753	388.00	* INCLUDES CHADWICK HOLLOW RD RADIUS
10	1252+25	-	1322+00	RT	6,975	841.00	**
10	1270+70	-	1282+01	RT	1,130	162.00	SHOULDERING PRIOR TO MILLING
10	1288+49	-	1306+81	RT	1,832	250.00	SHOULDERING PRIOR TO MILLING
10	1315+53	-	1323+55	LT	802	91.00	**
10	1323+55	-	1340+70	LT	1,715	99.00	*
10	1323+23	-	1379+38	RT	5,615	655.00	**
10	1340+70	-	1352+30	LT	1,160	132.00	**
10	1352+30	-	1363+65	LT	1,135	61.00	*
10	1353+00	-	1360+81	RT	781	112.00	SHOULDERING PRIOR TO MILLING
10	1363+65	-	1365+30	LT	165	19.00	**
10	1365+97	-	1379+43	RT	1,346	200.00	SHOULDERING PRIOR TO MILLING
10	1378+05	-	1384+92	LT	133	15.00	**
10	1379+38	-	1383+35	RT	397	21.00	*
10	1383+35	-	1406+62	RT	2,327	264.50	**
10	1384+92	-	1390+72	LT	1,127	61.00	*
10	1390+72	-	1403+60	LT	1,174	134.00	**
10	1404+00	-	1406+62	LT	262	30.00	**
10	1408+00	-	1411+00	LT	300	34.00	**
10	1408+00	-	1410+70	RT	270	31.00	**
10	1411+43	-	1419+70	RT	827	94.00	** TO CONCRETE BARRIER
10	1412+00	-	1423+55	LT	1,155	131.00	**
10	1422+50	-	1423+55	RT	105	12.00	** END OF PROJECT
					100.00		UNDISTRIBUTED
TOTAL					3,937.50		

* Note this is for the area behind the curb & gutter Type J
** Note This is for shoulder in rural area not where C&G is located to be placed after asphalt

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305.0500 SHAPING SHOULDERS

CATEGORY	STATION	-	STATION	LT/RT	STA	REMARKS
10	1270+70	-	1282+00	RT	11.50	PRIOR TO MILL & RELAY
10	1288+49	-	1306+81	RT	18.50	PRIOR TO MILL & RELAY
10	1353+00	-	1360+81	RT	8.00	PRIOR TO MILL & RELAY
10	1365+50	-	1379+50	RT	14.00	PRIOR TO MILL & RELAY
TOTAL					52	

330.0100 MILL AND RELAY

CATEGORY	STATION	-	STATION	LOCATION	WIDTH FT	LENGTH FT	DEPTH IN	SY
10	1228+00	-	1393+00	ML	32	16,500	5	58,667
10	1393+00	-	1406+68	ML	40	1,368	5	6,080
10	1407+00	-	1425+00	ML	40	1,800	5	8,000
TOTAL								72,747

465.0475.S ASPHALT CENTER LINE RUMBLE STRIP 2-LANE RURAL

CATEGORY	STATION	-	STATION	LF	REMARKS
10	1255+00	-	1317+17	6,217	
10	1324+78	-	1376+00	5,122	
10	1381+00	-	1401+85	2,085	
10	1413+53	-	1425+00	1,147	
TOTAL				14,571	

REMOVING ASPHALTIC SURFACE BUTT JOINT

CATEGORY	STATION	STATION	SY	REMARKS
10	1405+74	1406+62	391	B-52-52
10	1408+01	1408+89	391	B-52-52
10	1425+37	1425+00	391	END PROJECT
TOTAL			1,173	

416.1010 CONCRETE SURFACE DRAINS

CATEGORY	STATION	LOCATION	WIDTH FT	LENGTH FT	DEPTH IN	CY	REMARKS
10	1231+50	RT	10	5	6	0.90	
10	1236+40	LT	10	10	6	1.85	
10	1238+72	LT	10	10	6	1.85	
10	1238+72	RT	10	10	6	1.85	
10	1239+60	LT	10	10	6	1.85	
10	1240+30	RT	10	10	6	1.85	
10	1257+30	LT	10	10	6	1.85	
10	1268+98	LT	10	10	6	1.85	
10	1270+98	LT	20	25	6	9.26	LOW POINT
10	1273+24	LT	10	10	6	1.85	
10	1278+71	LT	10	10	6	1.85	
10	1282+25	LT	10	10	6	1.85	
10	1291+10	LT	20	25	6	9.26	LOW POINT
10	1294+79	LT	10	10	6	1.85	
10	1308+04	LT	10	10	6	1.85	
10	1315+53	LT	10	10	6	1.85	
10	1319+00	LT	10	5	6	0.90	
10	1323+55	LT	10	10	6	1.85	
10	1325+33	LT	10	10	6	1.85	
10	1333+86	LT	10	10	6	1.85	
10	1340+70	LT	10	10	6	1.85	
10	1352+30	LT	10	10	6	1.85	
10	1365+30	LT	10	10	6	1.85	
10	1371+30	LT	20	25	6	9.26	LOW POINT
10	1371+70	LT	10	10	6	1.85	
10	1378+05	LT	10	10	6	1.85	
10	1383+35	RT	10	10	6	1.85	
10	1384+00	LT	10	5	6	0.90	
10	1384+92	LT	10	10	6	1.85	
10	1390+72	LT	10	10	6	1.85	
TOTAL						74.92	

614.0920 SALVAGED RAIL

CATEGORY	STATION	-	STATION	LOCATION	LF	REMARKS
10	1409+44	-	1409+94	LT	50.00	
TOTAL					50	

455.0105	460.1101
ASPHALTIC	HMA
MATERIAL	PAVEMENT
PG 58-28	TYPE E-1

CATEGORY	STATION	-	STATION	LOCATION	LF	REMARKS
10	1225+06	-	1227+62	LT	256	
10	1225+60	-	1226+66	RT	106	
10	1229+15	-	1230+85	LT	170	
10	1231+00			LT	32	NW EAST RAILROAD ST
10	1231+00			LT	30	NE EAST RAILROAD ST
10	1231+28	-	1232+15	LT	87	
10	1232+37	-	1232+64	LT	100	
10	1232+67			LT	56	NW EAST EXCHANGE ST
10	1232+67			LT	58	NE EAST EXCHANGE ST
10	1233+29	-	1235+65	LT	236	
10	1236+00	-	1248+00	LT	1,200	
10	1241+00			LT	42	NW EAST WISCONSIN AVE
10	1241+00			LT	60	NE EAST WISCONSIN AVE
10	1245+50			LT	40	NW EAST YORK ST
10	1246+00			LT	40	NE EAST YORK ST
10					50	UNDISTRIBUTED
				TOTAL	2,563	

465.0120				
CATEGORY	STATION	LT/RT	TON	REMARKS
10	1227+86	RT	10	P.E.
10	1228+20	RT	10	P.E.
10	1239+20	RT	15	CEMETRY
10	1240+62	LT	10	P.E.
10	1241+02	LT	10	P.E.
10	1241+25	RT	15	CEMETRY
10	1242+43	RT	15	CEMETRY
10	1242+57	LT	10	P.E.
10	1244+00	LT	10	P.E.
10	1245+28	RT	15	C.E
10	1245+28	LT	10	P.E.
10	1247+00	LT	10	P.E.
10	1381+50	RT	10	P.E.
			50	UNDISTRIBUTED
		TOTAL	200	

CATEGORY	STATION - STATION	LOCATION	WIDTH	LENGTH	DEPTH	SY	REMARKS
			FT	FT	IN		
10	1224+65 - 1228+27	ML	24	362	3.5	965	VILLAGE OF VIOLA DRIVING LANES
10	1224+65 - 1228+27	LT & RT	20	362	2	1,609	VILLAGE OF VIOLA PARKING LANES
10	1228+27 - 1229+86	LT	44-40	159	2	742	VILLAGE OF VIOLA PARKING LANE
					TOTALS	3,316	

601.0415 CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J

CATEGORY	STATION	- STATION	LOCATION	LF	REMARKS
10	1248+00	- 1319+20	LT	7,120	CONTINUES ON CHADWICK HOLLOW RADIUS
10	1235+15	- 1252+25	RT	1,525	
10	1323+55	- 1340+70	LT	1,836	
10	1352+30	- 1363+83	LT	1,153	
10	1365+30	- 1379+18	LT	1,388	ABELT LANE
10	1379+40	- 1383+44	RT	404	
10	1379+40	- 1384+44	LT	504	BEGINS ON CHADWICK HOLLOW RADIUS
10	1384+92	- 1390+72	LT	580	
			TOTAL	13,930	

SILT FENCE

		628.1520	
	628.1504	SILT	
	SILT	FENCE	
	FENCE	MAINTENANCE	
CATEGORY	LF	LF	REMARKS
10	100	100	UNDISTRIBUTED

602.0405 CONCRETE SIDEWALK 4-INCH

CATEGORY	STATION	- STATION	LOCATION	SF	WIDTH	LENGTH
					LF	LF
10	1225+06	- 1227+62	LT	1,536	6	256
10	1225+60	- 1226+66	RT	636	6	106
			TOTAL	2,172		

643.0410 TRAFFIC CONTROL BARRICADES TYPE II

CATEGORY	STATION	LOCATION	#	DAYS
			BARRICADES	
10	1224+00	LT	1	50
10	1225+00	LT	3	150
10	1227+70	LT	3	150
10	1228+20	LT	1	50
10	1224+60	RT	1	50
10	1225+50	RT	3	150
10	1226+76	RT	3	150
10	1227+00	RT	1	50
			TOTAL	800

643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A

CATEGORY	STATION	LOCATION	#	DAYS	REMARKS
			LIGHTS		
10	1224+00	LT	1	50	
10	1225+00	LT	3	150	
10	1227+70	LT	3	150	
10	1228+20	LT	1	50	
10	1224+60	RT	1	50	
10	1225+50	RT	3	150	
10	1226+76	RT	3	150	
10	1227+00	RT	1	50	
			TOTAL	800	

603.1236 CONCRETE BARRIER TYPE S36A

CATEGORY	STATION	- STATION	LOCATION	LENGTH
				LF
10	1419+70	- 1422+50	RT	280

ADJUSTING MANHOLES COVERS AND WATER VALVES

				SPV.0060.01	
			611.8110	ADJUST	
			ADJUSTING	WATER	
			MANHOLE	VALVE	
		*RT/	COVERS	BOX	
CATEGORY	STATION	LT	EACH	EACH	REMARKS
20	1228+67	LT	1	2	SANITARY MANHOLE
20	1229+92	LT	1		SANITARY MANHOLE
20	1240+00	LT	1		E. WISCONSIN ST. - STORM MANHOLE
20	1240+50	LT		1	
		TOTAL	3	3	

* RT/LT IS WITH RESPECT TO THE CL OF STH 131N
NOTE ALL LOCATIONS WILL BE VARIFIED IN THE FIELD

614.0920 SALVAGED RAIL

CATEGORY	STATION	- STATION	LOCATION	LF	REMARKS
10	1409+44	- 1409+94	LT	50.00	
			TOTAL	50	

3

3

MGS GUARDRAIL

CATEGORY	STATION - STATION		LT / RT	LOCATION	614.2300	614.2330	614.2500	614.2610	REMARKS
					MGS GUARDRAIL 3 LF	MGS GUARDRAIL 3K LF	MGS THRIE BEAM TRANSITION LF	MGS GUARDRAIL TERMINAL EAT EACH	
10	1271+06.5	- 1271+59.5	RT					1	15 ft to face
10	1271+59.5	- 1281+72	RT		1012.5				15 ft to face
10	1281+72	- 1282+25	RT					1	15 ft to face
10	1285+92	- 1286+45	RT					1	
10	1286+45	- 1306+28	RT			1983			
10	1306+28	- 1306+81	RT					1	
10	1351+82	- 1352+35	RT					1	
10	1352+35	- 1360+47.5	RT		812.5				
10	1360+47.5	- 1361+00.5	RT					1	
10	1365+82	- 1366+35	RT					1	
10	1366+35	- 1378+47.5	RT		1212.5				
10	1378+47.5	- 1379+00.5	RT					1	
10	1405+52.1	- 1406+05.1	LT	B-52-52				1	
10	1406+05.1	- 1406+17.6	LT	B-52-52	12.5				
10	1406+17.6	- 1406+57	LT	B-52-52			39.4		*
10	1405+73.1	- 1406+26.1	RT	B-52-52				1	
10	1406+26.1	- 1406+38.6	RT	B-52-52	12.5				
10	1406+38.6	- 1406+78	RT	B-52-52			39.4		*
10	1407+89	- 1408+28.4	LT	B-52-52			39.4		*
10	1408+28.4	- 1408+90.9	LT	B-52-52	62.5				
10	1408+90.9	- 1409+43.9	LT	B-52-52				1	
10	1408+11	- 1408+50.4	RT	B-52-52			39.4		*
10	1408+50.4	- 1408+87.9	RT	B-52-52	37.5				
10	1408+87.9	- 1409+40.9	RT	B-52-52				1	
10	1418+65.1	- 1419+18.1	RT					1	
10	1419+18.1	- 1419+30.6	RT		12.5				
10	1419+30.6	- 1419+70	RT				39.4		
10	1422+50	- 1422+89.4	RT				39.4		
10	1422+89.4	- 1423+01.9	RT		12.5				
10	1423+01.9	- 1423+55	RT					1	
TOTALS					3,187.50	1,983	236	14	

* HOLES NEED TO BE DRILLED INTO PARAPET

3

WATER					
		ML	624.0100		
CATEGORY	STATION - STATION	LT/RT	MGAL	REMARKS	
10	1228+00 - 1393+00	ML	184.00		*
10	1252+25 - 1322+00	RT	7.75		**
10	1270+70 - 1282+00	RT	1.50	PRIOR TO MILL & RELAY	**
10	1288+49 - 1306+81	RT	2.00	PRIOR TO MILL & RELAY	**
10	1315+53 - 1323+55	LT	1.00		**
10	1323+23 - 1379+38	RT	6.50		**
10	1340+70 - 1352+30	LT	1.50		**
10	1353+00 - 1360+81	RT	1.00	PRIOR TO MILL & RELAY	**
10	1365+50 - 1379+50	RT	2.00	PRIOR TO MILL & RELAY	**
10	1378+05 - 1384+92	LT	2.00		**
10	1383+35 - 1406+62	RT	3.00		**
10	1390+72 - 1403+60	LT	1.50		**
10	1393+70 - 1395+70	ML	2.00		*
10	1395+70 - 1406+68	ML	12.00		*
10	1404+00 - 1406+62	LT	1.00		**
10	1408+00 - 1411+00	LT	1.00		**
10	1408+00 - 1410+70	RT	1.00		**
10	1408+00 - 1425+00	ML	19.00		*
10	1411+43 - 1419+70	RT	2.00	TO CONCRETE BARRIER	**
10	1412+00 - 1423+55	LT	2.50		**
10	1422+50 - 1423+55	RT	0.50	END OF PROJECT	**
10			50.00	PE, FE,CE,& SIDE ROADS	
10			50.00	UNDISTRUBTED	
TOTAL			170.75		

* Note this is Mill & Relay portions
** Note This is for shoulder in rural area not where C&G is located

650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE

CATEGORY	STATION - STATION	LOCATION	LF
10	1224+70 - 1425+00	MAINLINE	20,030

690.0250 SAWING CONCRETE

CATEGORY	STATION	LOCATION	LF
10	1225+06	LT	2.50
10	1227+62	LT	2.50
10	1225+60	RT	2.50
10	1226+66	RT	2.50
TOTAL			10.00

690.0150 SAWING ASPHALT					
		C/L,			
CATEGORY	STATION	RT, LT	LOCATION	LF	REMARKS
10	1227+86	RT		10	P.E.
10	1228+20	RT		10	P.E.
10	1232+50	LT	E. EXCHANGE ST	30	END OF RADIUS
10	1239+20	RT		15	CEMETRY
10	1240+00	LT	E. WISCONSIN ST.	30	END OF RADIUS
10	1240+62	LT		10	P.E.
10	1241+02	LT		10	P.E.
10	1241+25	RT		15	CEMETRY
10	1242+43	RT		15	CEMETRY
10	1242+57	LT		10	P.E.
10	1244+00	LT		10	P.E.
10	1245+28	RT		15	C.E
10	1245+28	LT		10	P.E.
10	1247+00	LT		10	P.E.
10	1322+62	RT	SIMMONS FLAT RD.	30	END OF RADIUS
10	1379+00	LT	ABELT RD.	30	END OF RADIUS
10	1381+50	RT		10	P.E.
10	1403+80	LT	SKI HILL RD.	30	END OF RADIUS
10	1411+00	LT	RIVER DR.	30	END OF RADIUS
10	1411+40	RT	HYBINE LN.	30	END OF RADIUS
10	1423+55	C/L	MAINLINE	30	END OF PROJECT
TOTAL				390	

3

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643.0300 TRAFFIC CONTROL DRUMS

CATEGORY	STATION	-	STATION	LT/RT	LENGTH	#	DAYS	REMARKS
					FT	DRUMS		
10	1224+06	-	1320+20	LT	9,614	385	19,228	C&G PLACEMENT
10	1225+50	-	1227+00	RT	150	6	300	C&G PLACEMENT
10	1229+00	-	1315+53	LT	8,653	346	17,306	C&G PLACEMENT
10	1237+00	-	1252+50	RT	1,550	62	3,100	C&G PLACEMENT
10	1323+55	-	1341+75	LT	1,820	73	3,640	C&G PLACEMENT
10	1352+00	-	1363+75	LT	1,175	47	2,350	C&G PLACEMENT
10	1365+00	-	1378+25	LT	1,325	53	2,650	C&G PLACEMENT
10	1379+00	-	1383+50	RT	450	18	900	C&G PLACEMENT
10	1384+50	-	1391+00	LT	650	26	1,300	C&G PLACEMENT
10	1260+50	-	1282+25	RT	2,175	87	4,350	BEAM GUARD REMOVAL AND REPLACEMENT
10	1285+40	-	1307+00	RT	2,160	86	4,320	BEAM GUARD REMOVAL AND REPLACEMENT
10	1351+50	-	1361+50	RT	850	34	1,700	BEAM GUARD REMOVAL AND REPLACEMENT
10	1362+50	-	1379+50	RT	1,700	68	3,400	BEAM GUARD REMOVAL AND REPLACEMENT
10	1405+50	-	1411+17	LT	567	23	3,900	BEAM GUARD REMOVAL AND REPLACEMENT
10	1405+50	-	1424+00	RT	1,850	74	3,900	BEAM GUARD REMOVAL AND REPLACEMENT
10			1411+17	LT	100	4	200	BEAM GUARD REMOVAL ON HYINE RD.
10			1411+25	RT	100	4	200	BEAM GUARD REMOVAL ON RIVER DR.
10						50	2,500	UNDISTRIBUTED
10						20	1,000	UNDISTRIBUTED FOR MANHOLE/ WATER VALVE BOX ADJUSTMENTS IN VIOLA
TOTAL						76,244		

649.0200 TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH

CATEGORY	STATION	-	STATION	LOCATION	C/L DASHED YELLOW LT. L.F.	C/L DASHED YELLOW RT. L.F.	C/L SOLID NO PASSING YELLOW LT. L.F.	C/L SOLID NO PASSING YELLOW RT. L.F.	REMARKS
10	1224+70	-	1239+00	ML			1,430	1,430	STAGE I
10	1239+00	-	1243+70	ML		38	470		STAGE I
10	1243+70	-	1251+48	ML	63			778	STAGE I
10	1251+48	-	1266+44	ML			1,496	1,496	STAGE I
10	1266+44	-	1277+80	ML		91	1,136		STAGE I
10	1277+80	-	1285+00	ML	58			720	STAGE I
10	1285+00	-	1403+80	ML			11,880	11,880	STAGE I
10	1403+80	-	1408+00	ML		34	420		STAGE I
10	1408+00	-	1410+00	ML			200	200	STAGE I
10	1410+00	-	1415+00	ML	40			500	STAGE I
10	1415+00	-	1425+00	ML			953	953	STAGE I
10	1224+70	-	1239+00	ML			1,430	1,430	STAGE II
10	1239+00	-	1243+70	ML		38	470		STAGE II
10	1243+70	-	1251+48	ML	63			778	STAGE II
10	1251+48	-	1266+44	ML			1,496	1,496	STAGE II
10	1266+44	-	1277+80	ML		91	1,136		STAGE II
10	1277+80	-	1285+00	ML	58			720	STAGE II
10	1285+00	-	1403+80	ML			11,880	11,880	STAGE II
10	1403+80	-	1408+00	ML		34	420		STAGE II
10	1408+00	-	1410+00	ML			200	200	STAGE II
10	1410+00	-	1415+00	ML	40			500	STAGE II
10	1415+00	-	1425+00	ML			953	953	STAGE II
SUBTOTAL					322.0	326.0	35,970.0	35,914.0	

TOTAL 72,532.0

STAGE I: FIRST LIFT OF HMA PAVEMENT TYPE E-1
STAGE II: FINAL LIFT OF HMA PAVEMENT TYPE E-1

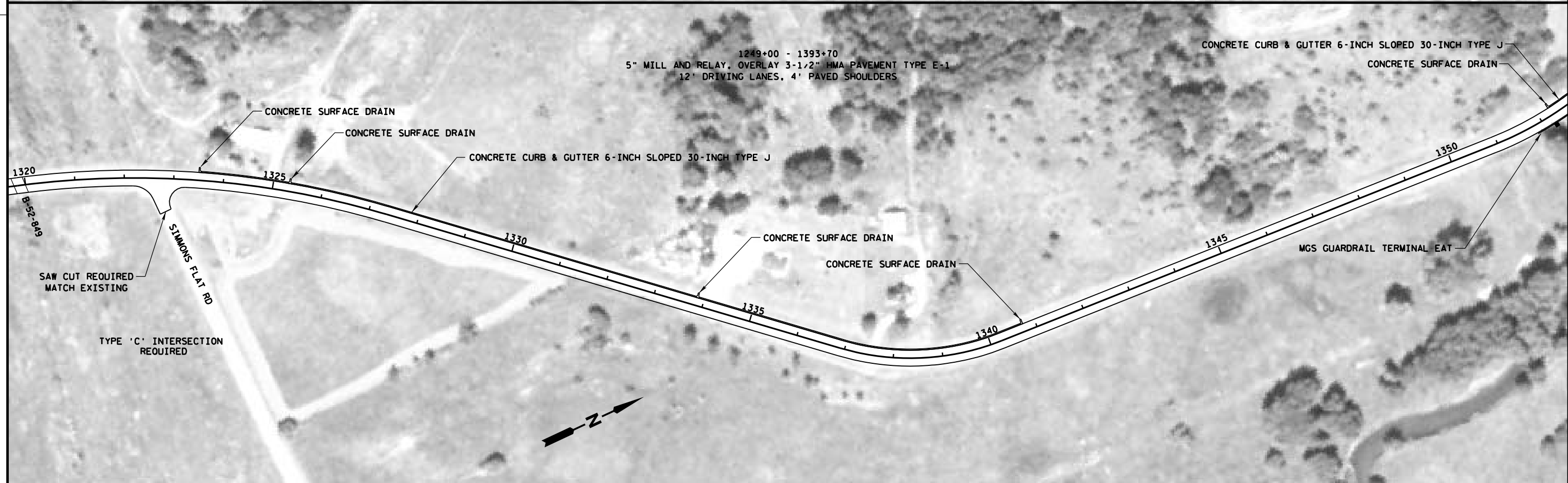
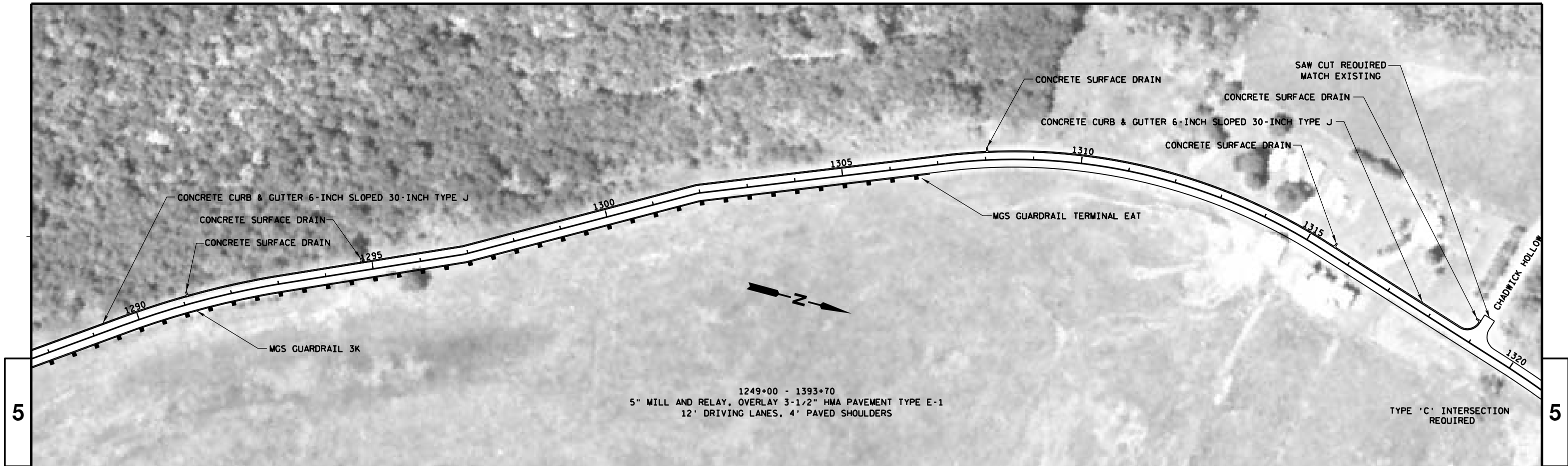
3

3

646.0106 PAVEMENT MARKING EPOXY 4-INCH

CATEGORY	STATION -	STATION	LOCATION	EDGE LINE	EDGE LINE	C/L	C/L	C/L	C/L	REMARKS
				SOLID WHITE LT. L.F.	SOLID WHITE RT. L.F.	DASHED YELLOW LT. L.F.	DASHED YELLOW RT. L.F.	SOLID NO PASSING YELLOW LT. L.F.	SOLID NO PASSING YELLOW RT. L.F.	
10	1224+70 -	1239+00	ML					1,430	1,430	
10	1228+21 -	1322+00	ML		9,379					
10	1239+00 -	1243+70	ML				117.5	470		
10	1243+70 -	1251+48	ML			194.5			778	
10	1246+40 -	1318+50	ML	7,244						BEGINS AT NE CORNER OF E. YORK ST. AND ENDS AT NW CORNER OF CHADWICH HOLLOW RD.
10	1251+48 -	1266+44	ML					1,496	1,496	
10	1266+44 -	1277+80	ML				284	1,136		
10	1277+80 -	1285+00	ML			180			720	
10	1285+00 -	1403+80	ML					11,880	11,880	
10	1319+84 -	1378+20	ML	5,836						BEGINS AT NE CORNER OF CHADWICH HOLLOW RD. & ENDS AT NW OF ABELT RD.
10	1323+00 -	1410+50	ML		8,750					BEGINS AT SE CORNER OF SIMMONS FLAT RD. & ENDS AT SW CORNER OF RIVER DR.
10	1379+72 -	1403+50	ML	2,378						BEGINS AT NE CORNER OF ABELT RD. AND ENDS AT NW CORNER OF SKI HILL RD.
10	1403+80 -	1408+00	ML				105	420		STAGE I
10	1404+00 -	1411+00	ML	700						BEGINS AT NE CORNER OF SKI HILL RD. AND ENDS AT NW CORNER OF HYBINE RD.
10	1408+00 -	1410+00	ML					200	200	STAGE I
10	1410+00 -	1415+00	ML			125			500	STAGE I
10	1412+00 -	1424+53	ML	1,253						BEGINS AT NE CORNER OF HYBINE RD. AND ENDS AT PROJECT LIMITS
10	1412+00 -	1424+53	ML		1,253					BEGINS AT THE SE CONER OF RIVER DR AND ENDS AT PROJECT LIMITS
10	1415+00 -	1425+00	ML					953	953	
SUBTOTAL				17,411	19,382	499.50	506.50	17,985	17,957	
TOTAL				73,741.00						

3



PROJECT NO: 5112-06-61

HWY: STH 131

COUNTY: RICHLAND

PLANSHEET

SHEET 33

E

FILE NAME : P:\State\s131\51120631\Cad\ep\plans\050233.pn.dgn

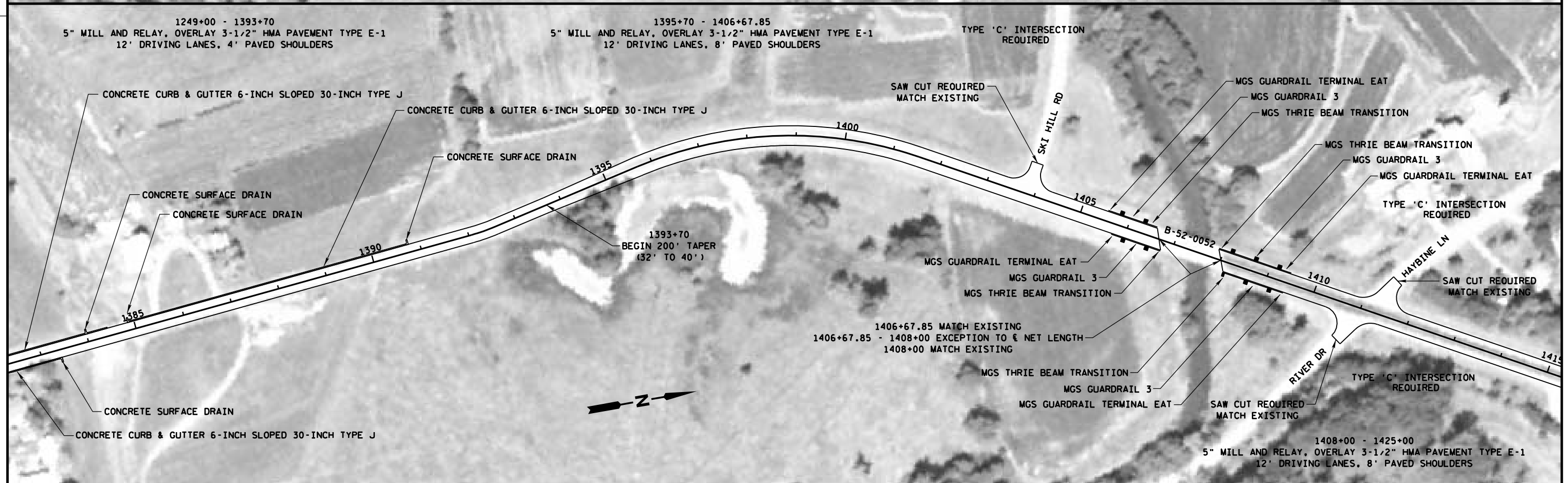
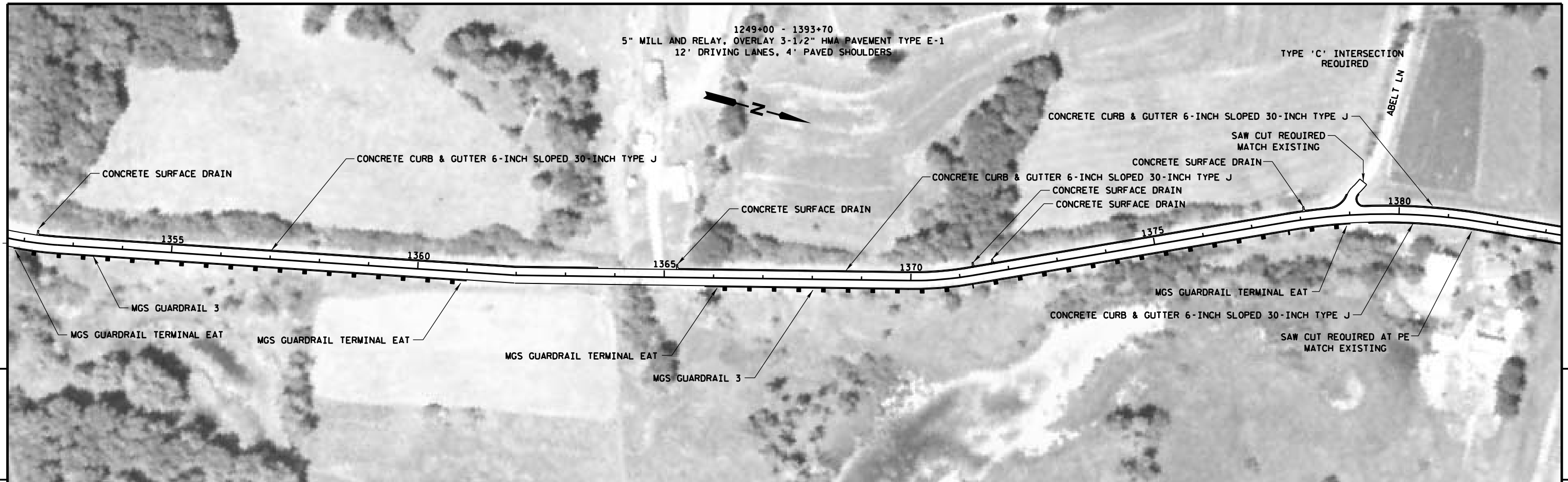
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PLOT BY : dotwov

PLOT NAME :

PLOT SCALE : 200.000000:1.000000

WISDOT/CADDs SHEET 44



PROJECT NO: 5112-06-61

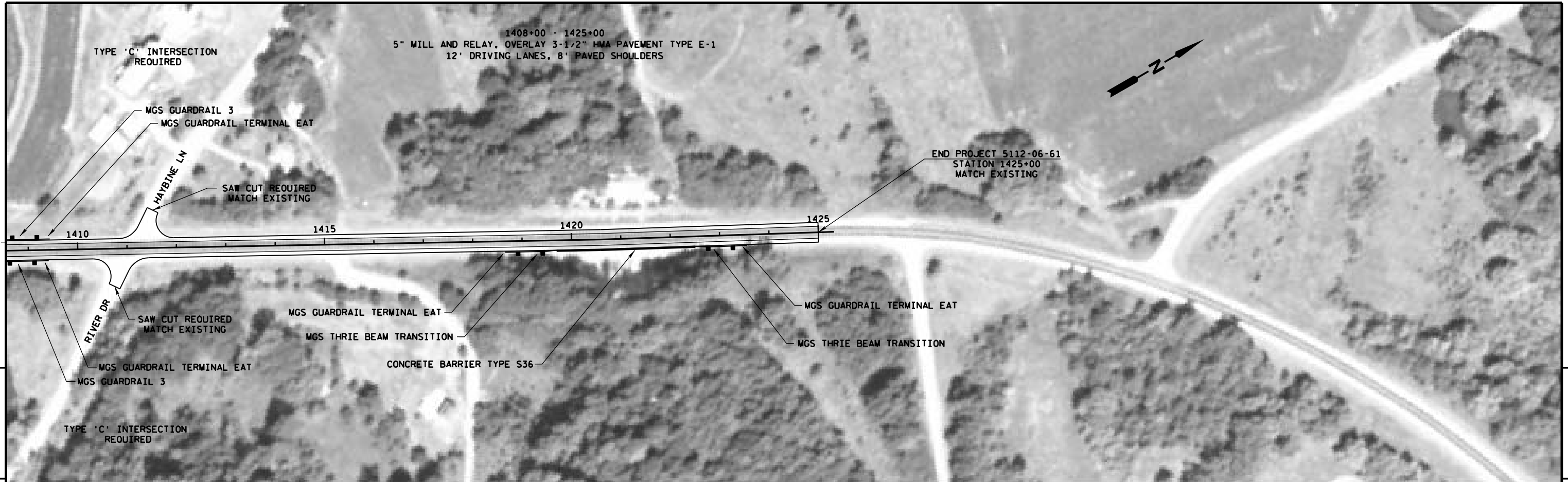
HWY: STH 131

COUNTY: RICHLAND

PLANSHEET

SHEET 34

E

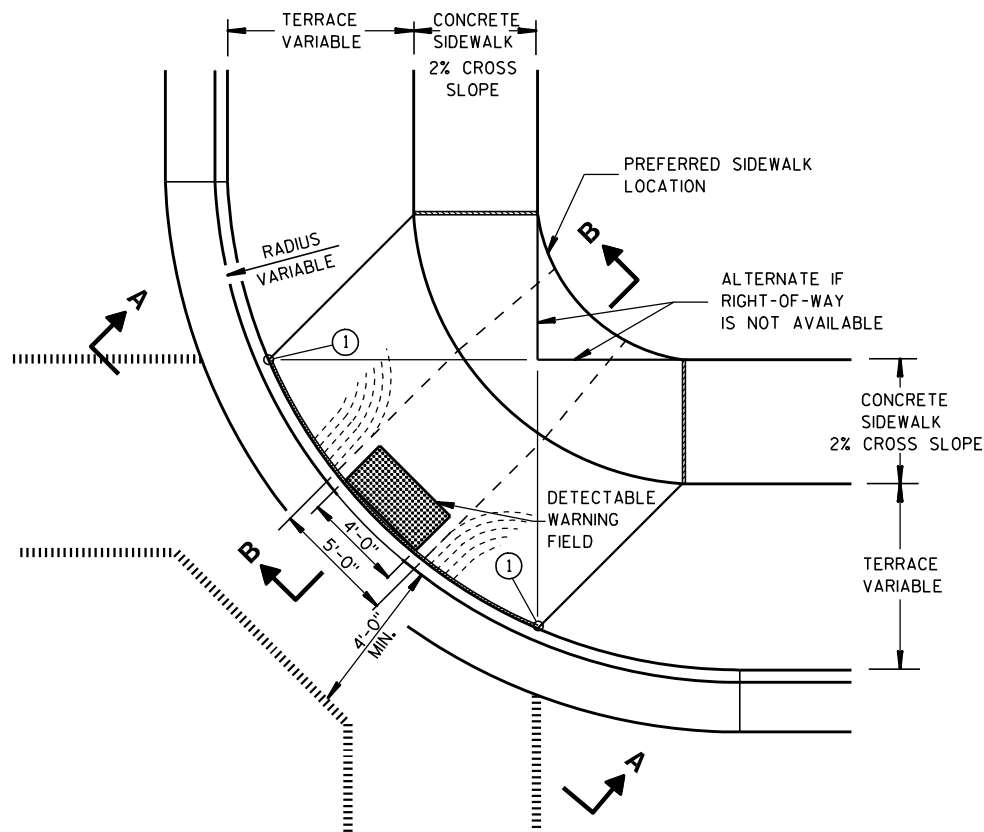


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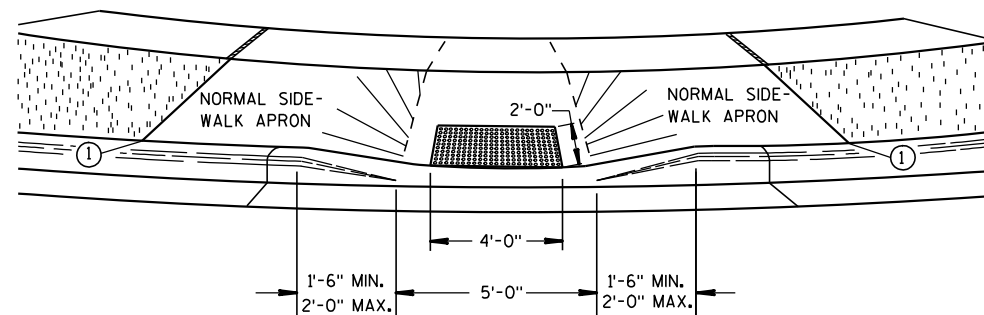
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Standard Detail Drawing List

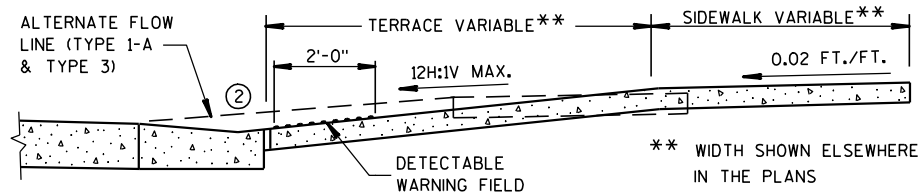
08D05-14A	CURB RAMPS TYPES 1 AND 1-A
08D16-10	CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES
08D17-06	MANHOLES, MANHOLE & INLET COVERS
08E09-06	SILT FENCE
09A01-12A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
09A01-12B	AT-GRADE SIDE ROAD INTERSECTION, TYPE "A1" & "A2"
13A11-01A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-01B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
14B32-01A	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-01B	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-01C	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-01D	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B42-02A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-02B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-02C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-01A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-01B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-01C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-03A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
15C04-01	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-15A	PAVEMENT MARKING (MAINLINE)
15C08-15B	PAVEMENT MARKING (INTERSECTIONS)
15C08-15C	PAVEMENT MARKING (CLIMBING LANE & PASSING LANE)
15C08-15F	PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)
15C12-03	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15D12-02	TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H.
15D28-01	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D30-01	TRAFFIC CONTROL, SIDEWALK CLOSURE



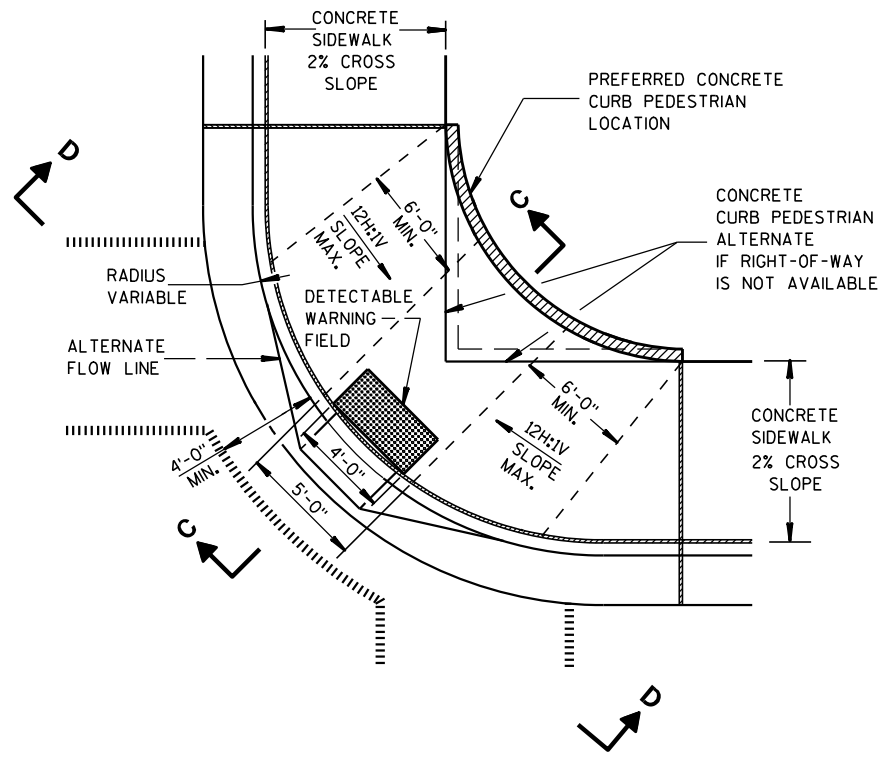
PLAN VIEW
TYPE 1 RAMP
(CENTER OF CORNER RADIUS)



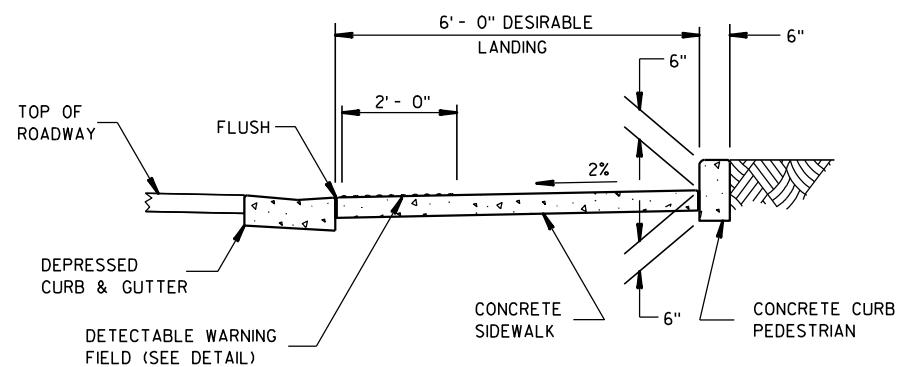
VIEW A-A



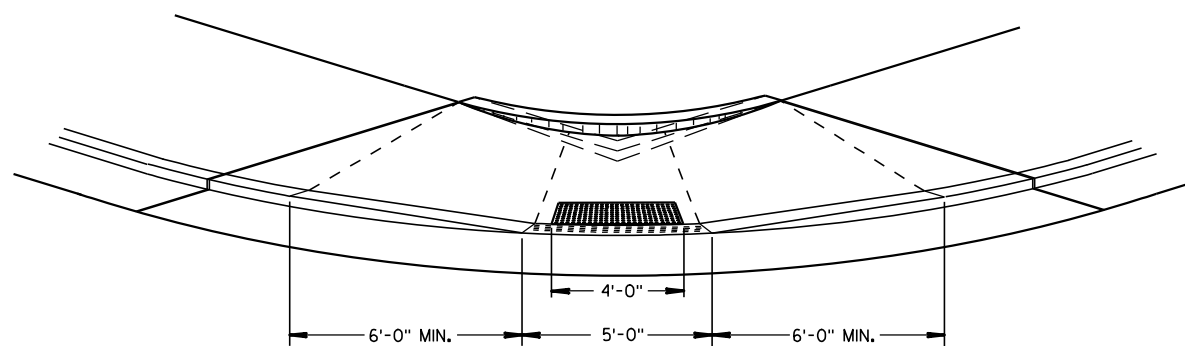
SECTION B-B



PLAN VIEW
TYPE 1-A RAMP
(NO TERRACE)



SECTION C-C



VIEW D-D

GENERAL NOTES

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

RAMPS SHALL BE BUILT AT 12H:1V OR FLATTER. WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAL FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD".

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

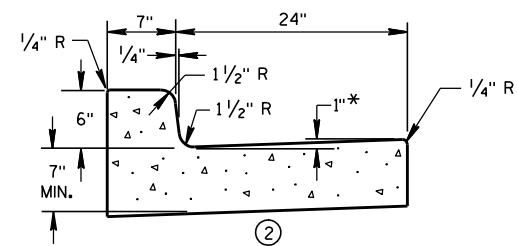
- ① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.

LEGEND

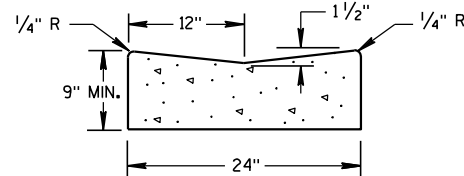
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

CURB RAMPS TYPES 1 AND 1-A

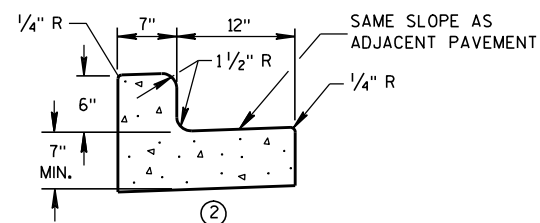
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



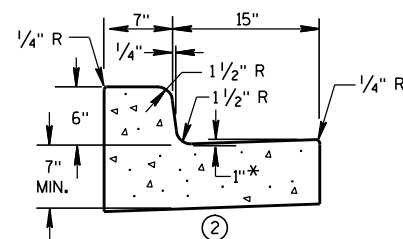
① CONCRETE CURB & GUTTER 31"



① CONCRETE GUTTER 24"

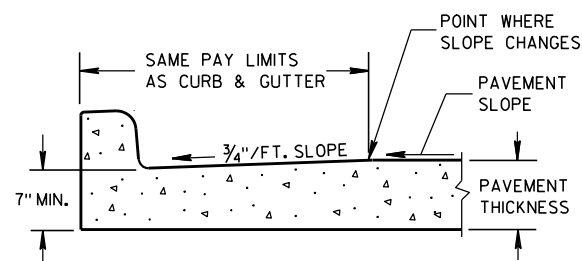


① CONCRETE CURB & GUTTER 19"

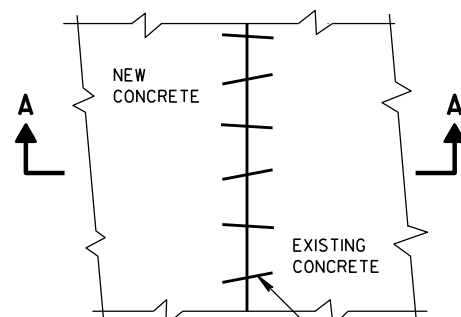


① CONCRETE CURB & GUTTER 22"

* TO BE MEASURED TO A MAXIMUM OF 3" WHERE DRAINAGE PROBLEMS EXIST.



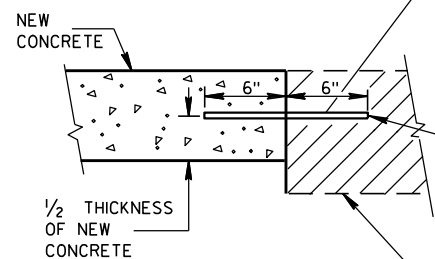
PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



PLAN VIEW

EXISTING AND NEW CONCRETE MAY BE CURB & GUTTER, SURFACE DRAIN, PAVEMENT OR OTHER CONCRETE STRUCTURE.

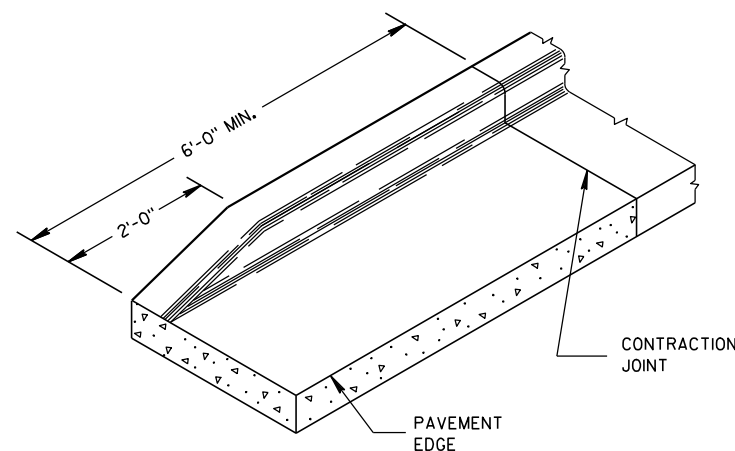
NO. 6 X 12" DEF. BARS SPACED 3'-0" C-C, INSTALLED ON 6:1 SKEW HORIZONTALLY. DIRECTION OF SKEW ALTERNATING AFTER EVERY ONE OR TWO BARS.



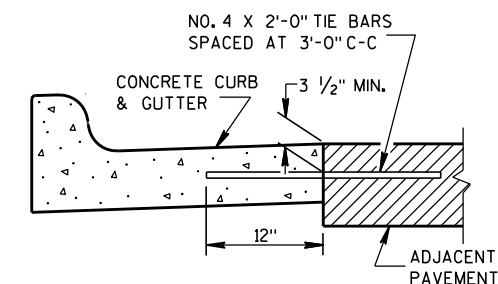
SECTION A-A
PAVEMENT TIES

THE HOLE FOR THE BAR SHALL BE DRILLED TO A DEPTH OF 7" AND TO A DIAMETER TO PROVIDE A TIGHT DRIVEN FIT.

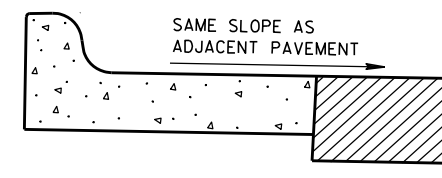
EXISTING CONCRETE



END SECTION CURB & GUTTER



① TYPICAL TIE BAR LOCATION



③ HIGH SIDE SECTION
(TYPICAL FOR ALL CURB & GUTTER)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS 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 & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE COURSE AND UNCLASSIFIED EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURB.

- ① WHEN PLACED ADJACENT TO NEW CONCRETE, TIE BARS ARE REQUIRED FOR CURB AND GUTTER 31", 22", 19" AND CONCRETE GUTTER 24".
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE COURSE PROVIDED A 7" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ WHEN HIGH SIDE CURB SECTION IS REQUIRED, THE LOCATION(S) WILL BE NOTED ON THE PLAN.

CONCRETE GUTTER, CURB AND
GUTTER AND PAVEMENT TIES
(For Optional Use in Milwaukee Co. Only)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/2/2010
DATE

FHWA

/S/ Jerry Zonn
ROADWAY STANDARDS 38
ENGINEER

ENT

S.D.D. 8 D 17-6



6



6



6

6

6

6



6



6

FIG. 1

FIG. 2

Diagram illustrating the features of a circular manhole cover:

- $\frac{1}{4}$ " FLUSH LETTERS
- TYPE "C" PERMAGRIP SURFACE DESIGN
- 2 $\frac{1}{2}$ " LETTERS RAISED $\frac{1}{8}$ " HIGH
- (8) 1" DIA. VENT HOLE
- (2) 1" OPEN PICK HOLE

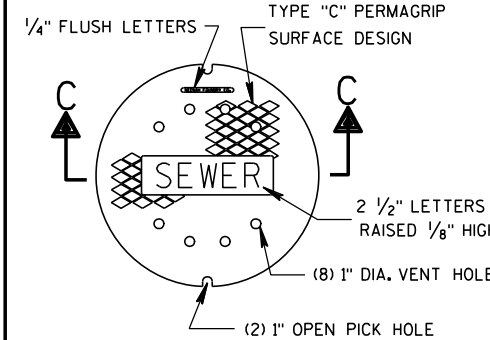
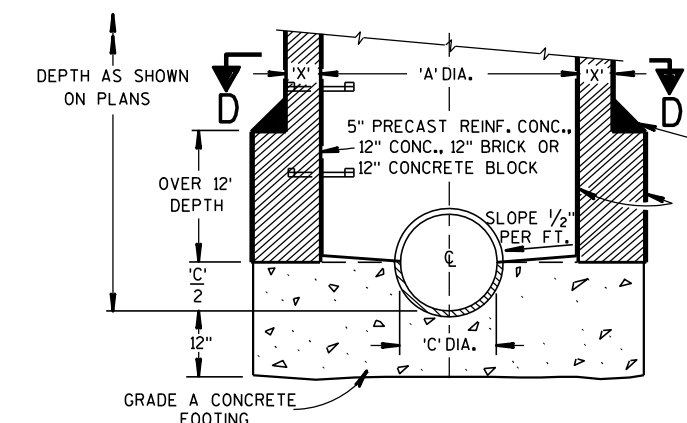


Diagram illustrating the design of a circular manhole cover with the following features:

- $\frac{1}{4}$ " FLUSH LETTERS
- TYPE "C" PERMAGRIP SURFACE DESIGN
- 2 $\frac{1}{2}$ " LETTERS RAISED $\frac{1}{8}$ " HIGH
- (8) 1" DIA. VENT HOLES
- (2) 1" OPEN PICK HOLES

Diagram illustrating the design of a circular manhole cover with the following features:

- $\frac{1}{4}$ " FLUSH LETTERS
- TYPE "C" PERMAGRIP SURFACE DESIGN
- 2 $\frac{1}{2}$ " LETTERS RAISED $\frac{1}{8}$ " HIGH
- (8) 1" DIA. VENT HOLES
- (2) 1" OPEN PICK HOLES
- Labels "C" with arrows pointing to the cover edges.

[illegible][illegible]

DEPTH AS SHOWN ON PLANS

OVER 12' DEPTH

5" PRECAST REINF. CONC., 12" CONC., 12" BRICK OR 12" CONCRETE BLOCK

SLOPE 1/2" PER FT.

GRADE A CONCRETE FOOTING

'A' DIA.

'C' DIA.

'C' / 2

12"

D

D

Diagram Description: This is a cross-sectional diagram of a manhole. At the base is a 'GRADE A CONCRETE FOOTING' with a thickness of '12"'. Above this is a layer of '5" PRECAST REINF. CONC., 12" CONC., 12" BRICK OR 12" CONCRETE BLOCK'. The top of this block layer is labeled 'OVER 12' DEPTH'. The top of the manhole structure is shown with a 'SLOPE 1/2" PER FT.' on the sides. The top opening is labeled 'A' DIA.' and the bottom opening is labeled 'C' DIA.'. The vertical distance from the top of the block layer to the bottom opening is labeled 'C' / 2'. The overall depth from the top of the block layer to the bottom opening is labeled 'DEPTH AS SHOWN ON PLANS'. The diagram also shows a 'D' at the top and bottom of the structure, likely representing the ground level or the top of the manhole cover.

DEPTH AS SHOWN ON PLANS

OVER 12' DEPTH

5" PRECAST REINF. CONC., 12" CONC., 12" BRICK OR 12" CONCRETE BLOCK

SLOPE 1/2" PER FT.

GRADE A CONCRETE FOOTING

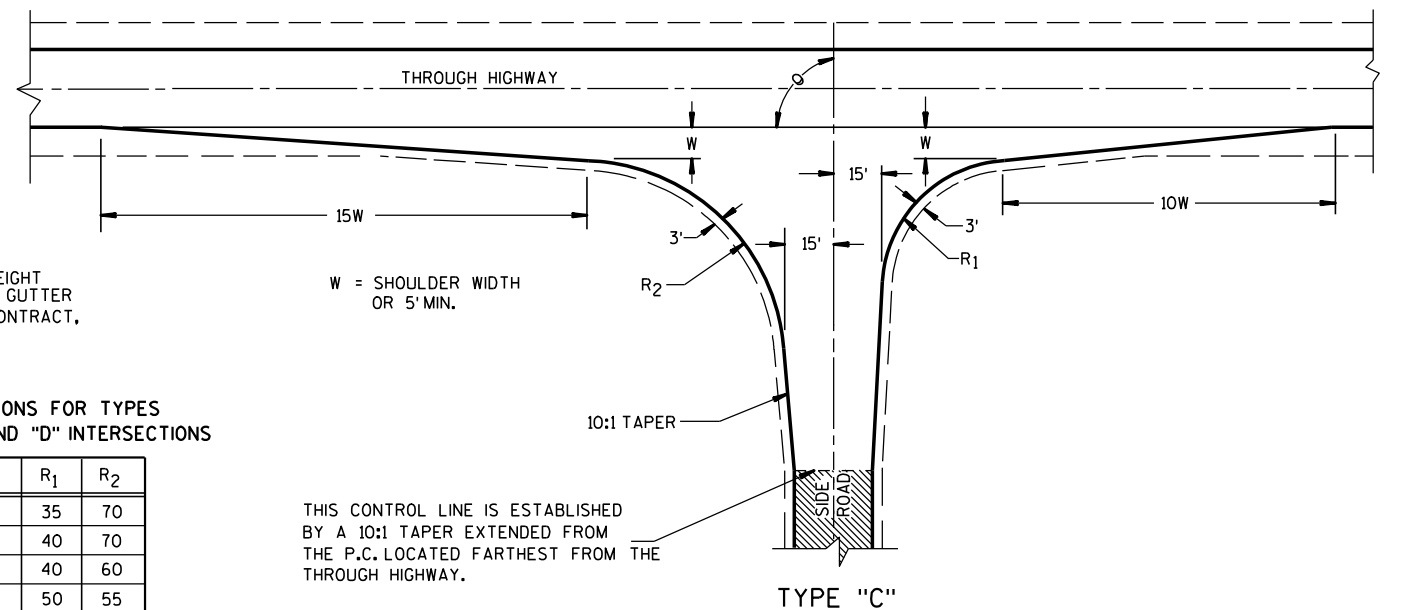
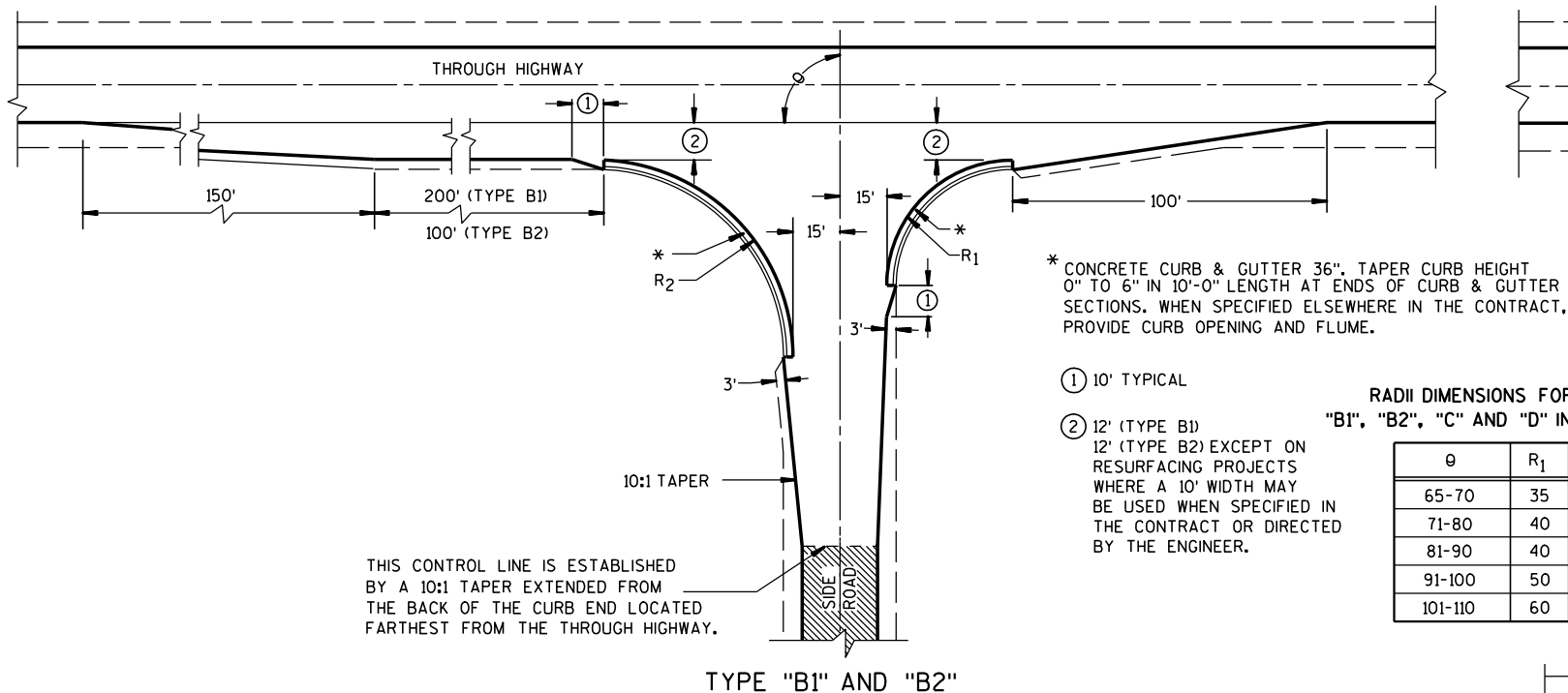
'X' 'A' DIA. 'C' DIA.



- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1½" X 1½" OF OAK OR HICKORY.
- ④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- ⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



SILT FENCE
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED <u>4-29-05</u> DATE <u>/S/ Beth Conn*****</u> CHIEF ROADWAY DEVELOP 40 INEER FHWA



GENERAL NOTES

DESIGNS MAY BE USED INTERCHANGEABLY IN COMBINATION OR SEPARATELY FOR ANY ONE COMPLETE INTERSECTION DEPENDING UPON INTERSECTION ANGLE AND SURFACING OF EACH APPROACH ROADWAY.

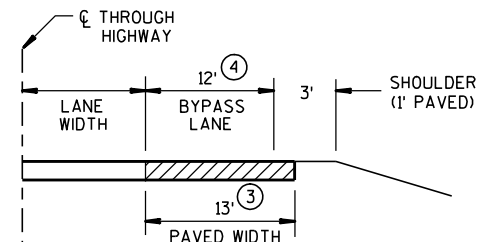
SIDE ROAD SURFACING NOTE

WHEN THE SIDE ROAD IS NOT PRESENTLY PAVED, PAVEMENT SHALL BE PLACED TO THE LIMITS SHOWN UNLESS OTHERWISE PROVIDED IN THE CONTRACT. WHERE THE CONSTRUCTION LIMITS ARE BEYOND THE PAVING LIMITS, CRUSHED AGGREGATE SURFACING SHALL BE PLACED BETWEEN THE PAVING LIMITS AND CONSTRUCTION LIMITS.

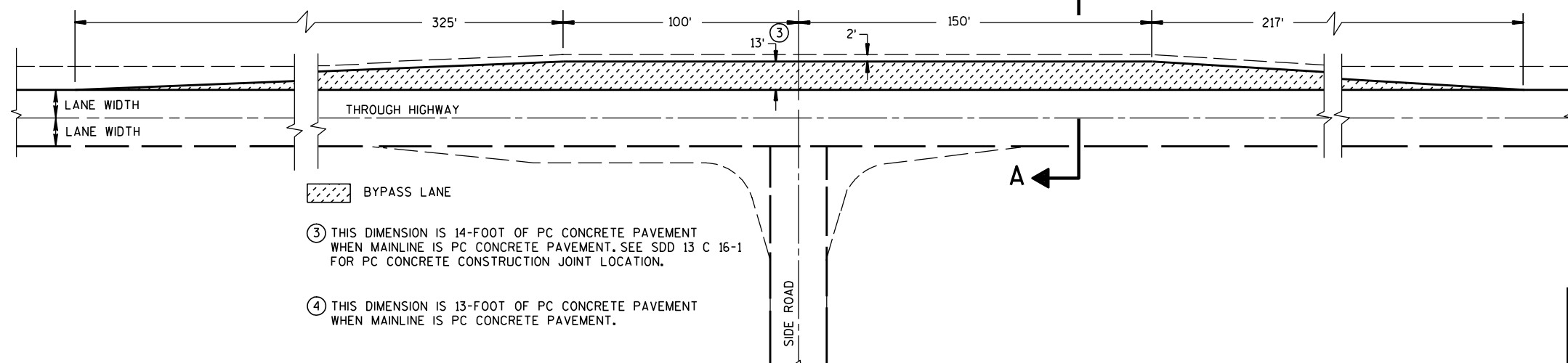
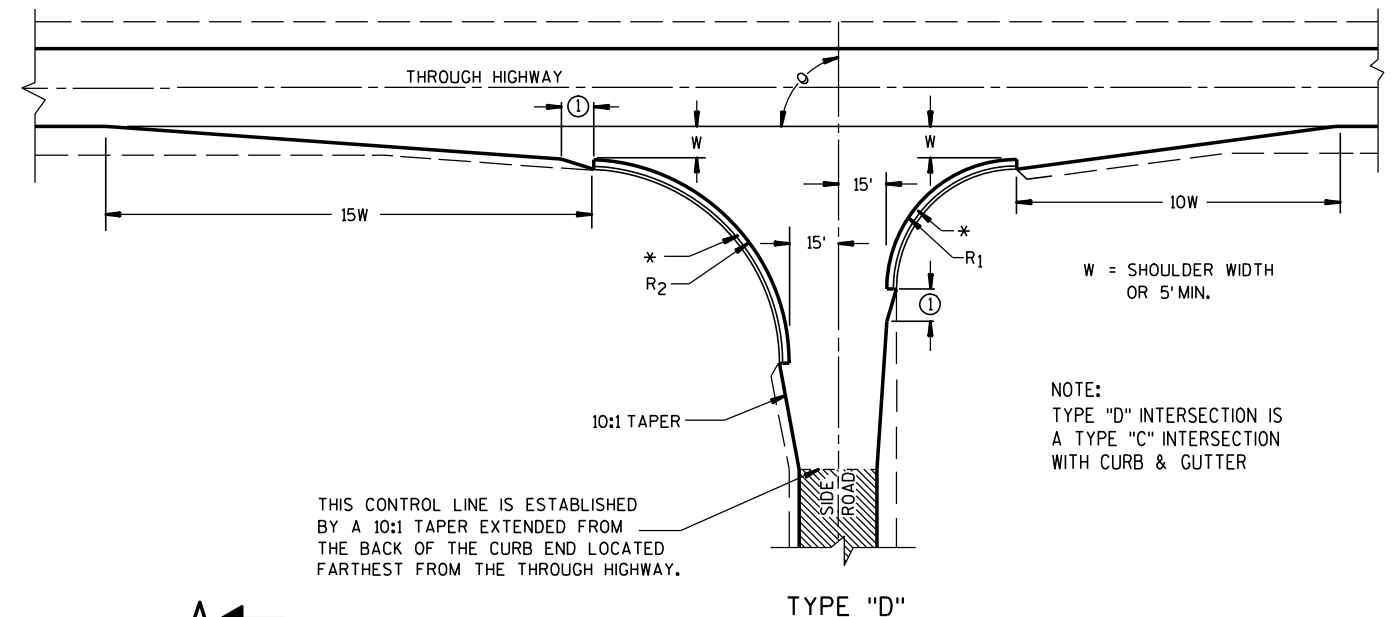
WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

WHEN THE SIDE ROAD IS THE CONSTRUCTION PROJECT, THE INTERSECTION SURFACING SHALL BE THE SAME AS FOR THE PROJECT.

EXISTING SURFACE



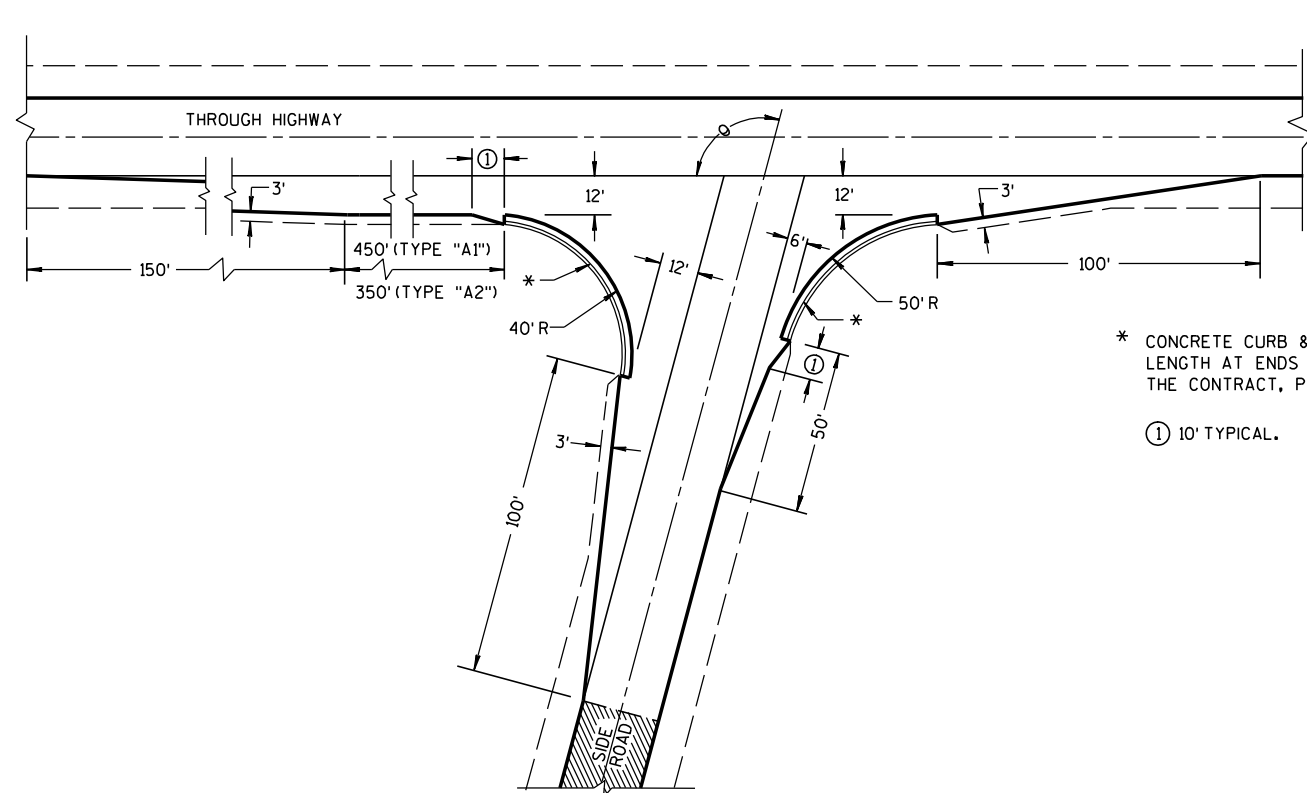
SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)



TEE INTERSECTION BYPASS LANE DETAIL

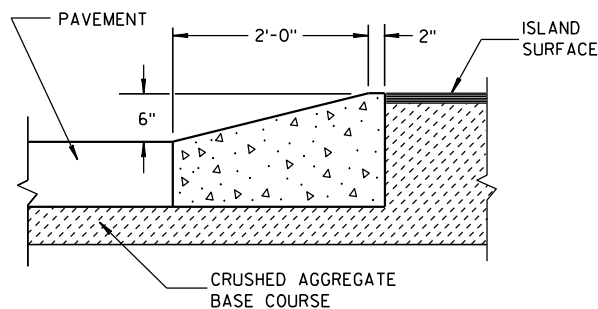
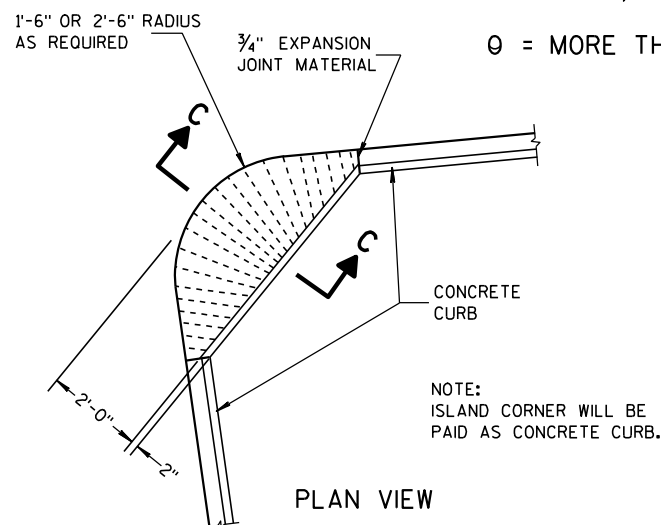
AT-GRADE SIDE ROAD
INTERSECTION, TYPES "B1", "B2",
"C" AND "D" AND TEE
INTERSECTION BYPASS LANE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

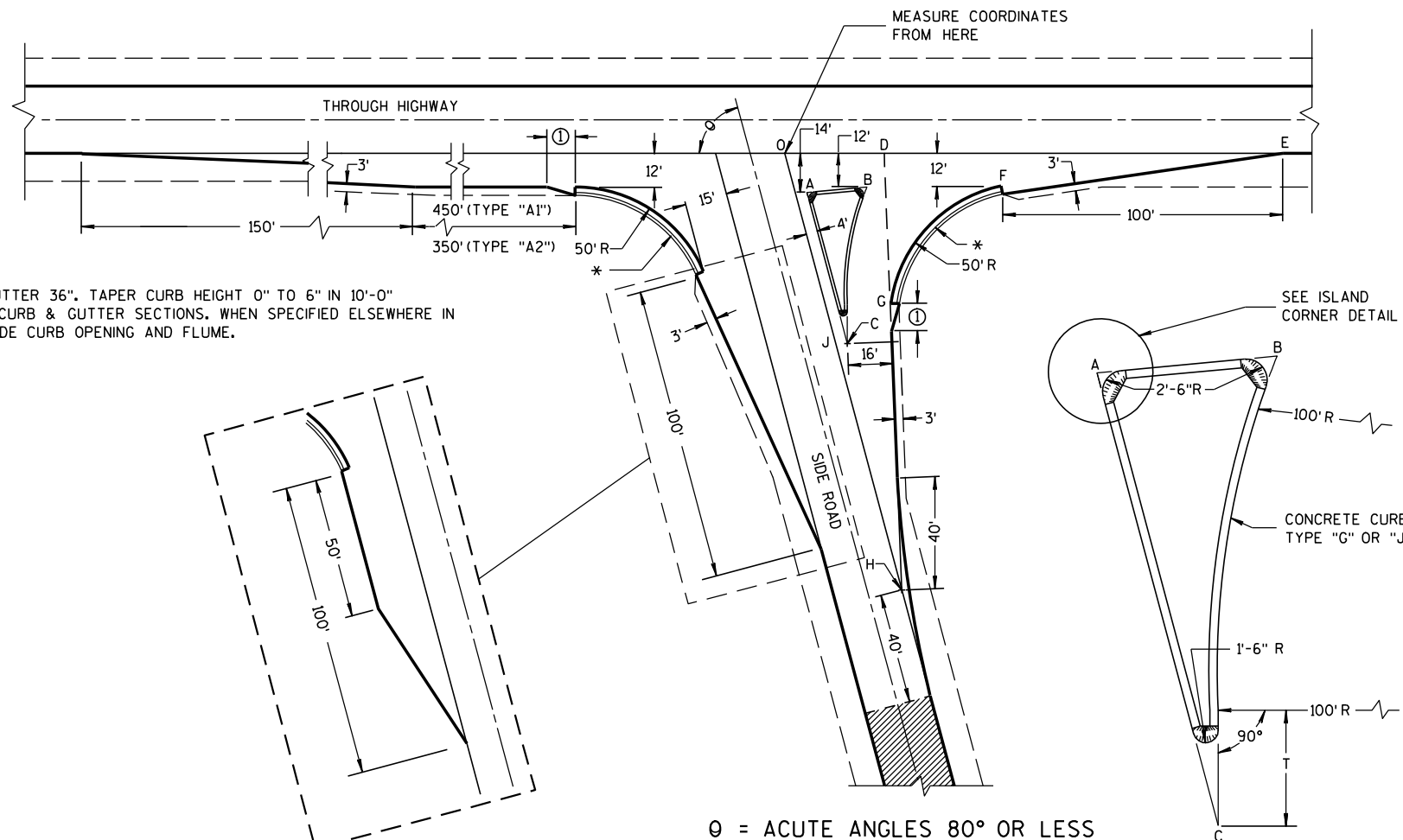


* CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

① 10' TYPICAL.



ISLAND CORNER DETAIL
(TO BE CONSTRUCTED AT ALL ISLAND CORNERS)



SIDE ROAD WIDENING AND TAPER REQUIRED WHERE THE THROUGH HIGHWAY CARRIES TWO-WAY TRAFFIC
 θ = ACUTE ANGLES 70° OR LESS

TABLE OF DIMENSIONS FOR
VARIABLE SIDE ROAD INTERSECTION ANGLES
(INTERPOLATE VALUES FOR ANGLES NOT SHOWN)

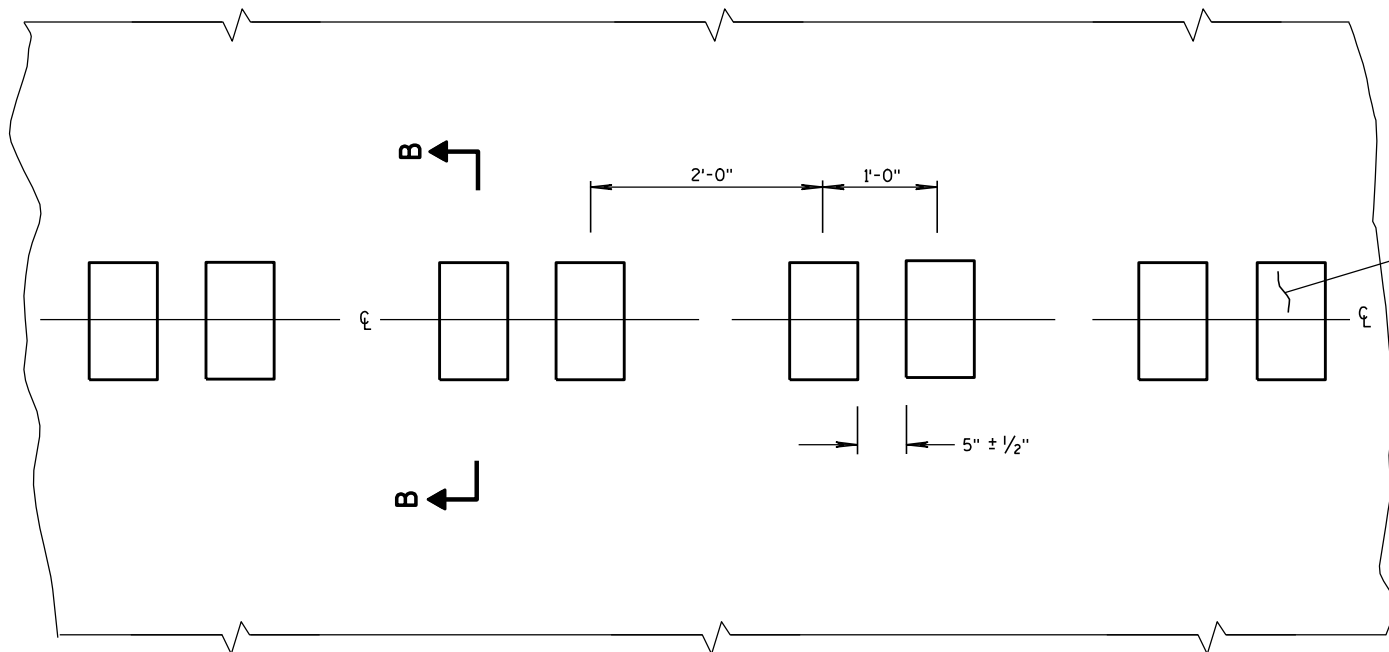
ANGLE θ DEGREES	COORDINATES IN FEET (MEASURED FROM POINT "O")								LENGTH IN FEET				
	A	B	C	D	E	F	G	H	AB	AC	T	OJ	OH
60	12.7	44.9	46.4	41.9	205.0	104.6	64.0	85.0	32.3	67.4	4.9	85.9	169.9
	-14.0	-12.0	-72.4	0.0	0.0	-12.0	-75.5	-147.1					
65	10.9	39.0	37.8	39.4	196.1	95.7	54.1	70.5	28.2	63.6	8.5	80.9	166.9
	-14.0	-12.0	-71.6	0.0	0.0	-12.0	-71.5	-151.3					
70	9.4	33.9	29.8	37.4	188.3	87.8	45.6	56.1	24.6	59.7	11.5	76.1	164.1
	-14.0	-12.0	-70.1	0.0	0.0	-12.0	-67.5	-154.2					
75	7.9	29.3	22.3	35.7	181.2	80.7	38.2	41.8	21.5	55.8	13.8	71.4	161.4
	-14.0	-12.0	-67.9	0.0	0.0	-12.0	-63.4	-155.9					
80	6.5	25.4	15.6	34.4	174.8	74.4	31.8	27.6	18.9	52.0	15.6	66.9	158.9
	-14.0	-12.0	-65.2	0.0	0.0	-12.0	-59.3	-156.5					

TYPE "A1" & "A2" SIDE ROAD INTERSECTION DETAILS

AT-GRADE SIDE ROAD
INTERSECTION, TYPE "A1" & "A2"

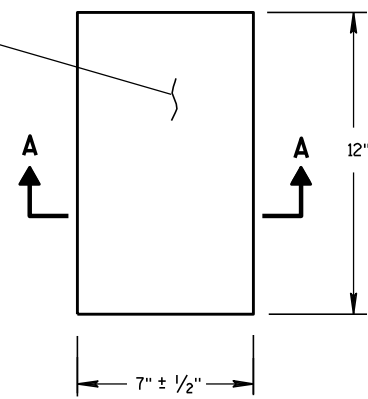
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/17/02 DATE /S/ Beth Conn-----
CHIEF ROADWAY DEVELOPER
FHWA



PLAN VIEW
CENTER LINE WITH GROOVES

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP



PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

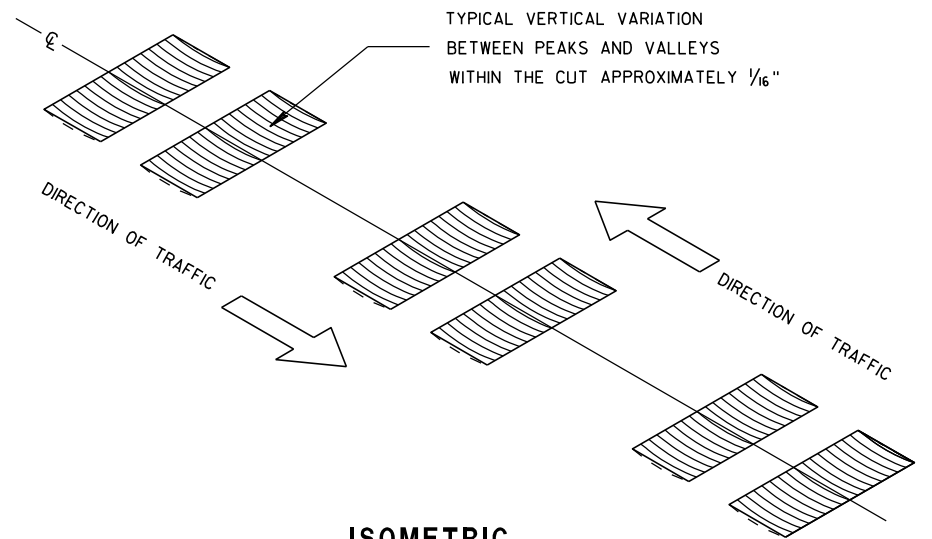
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

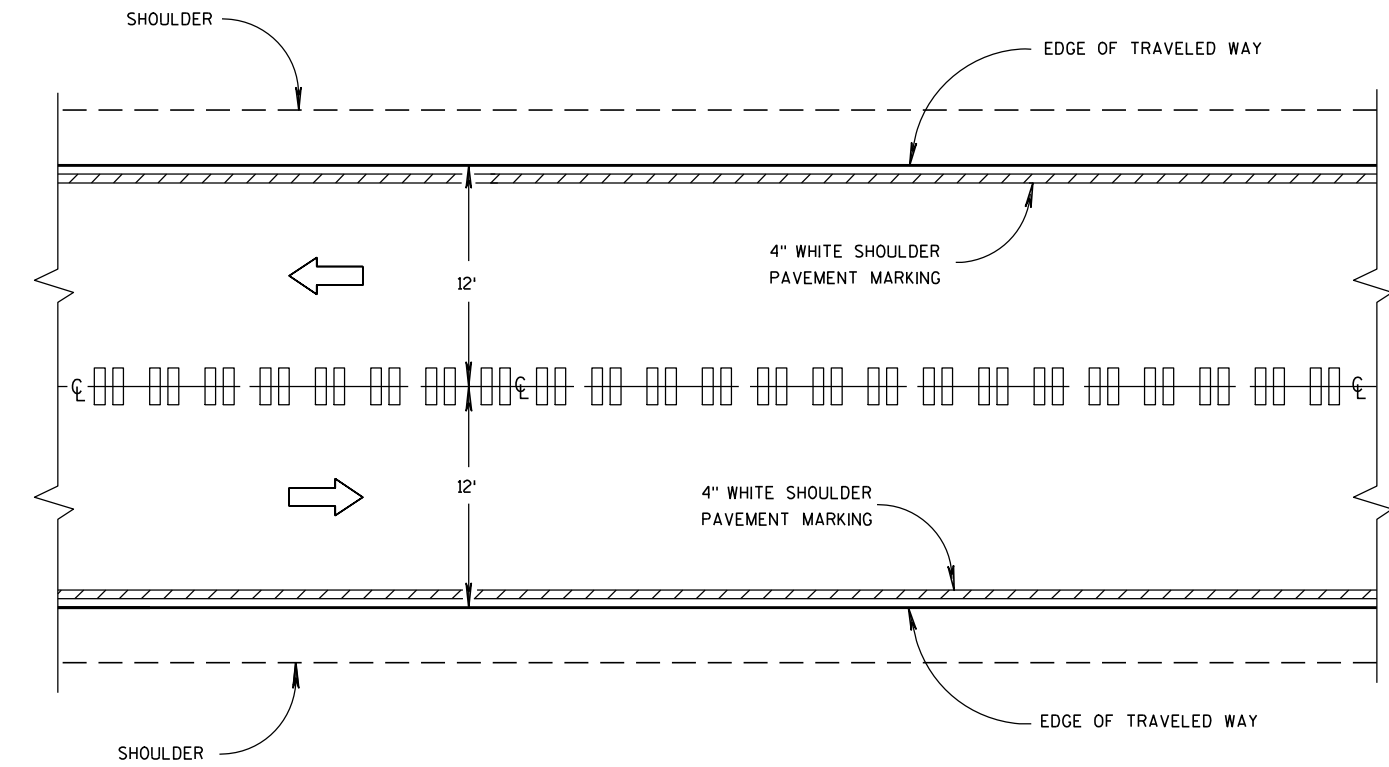
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

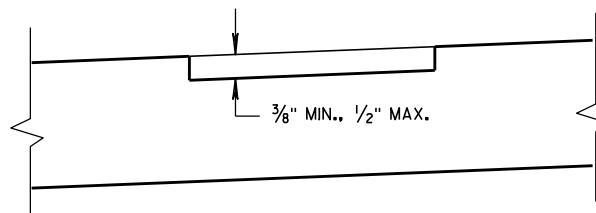
- ① CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



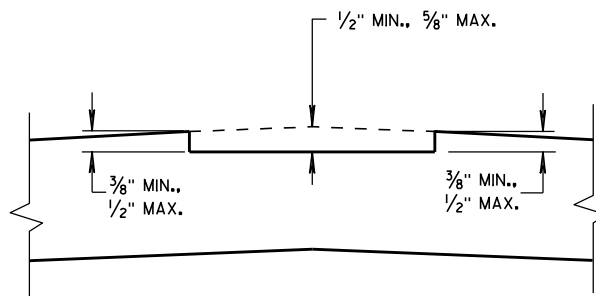
ISOMETRIC



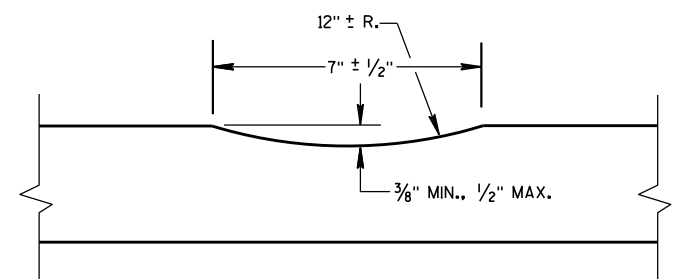
CENTER LINE GROOVES ON TWO-WAY ROADWAYS



SECTION B-B
SUPERELEVATED ROADWAY



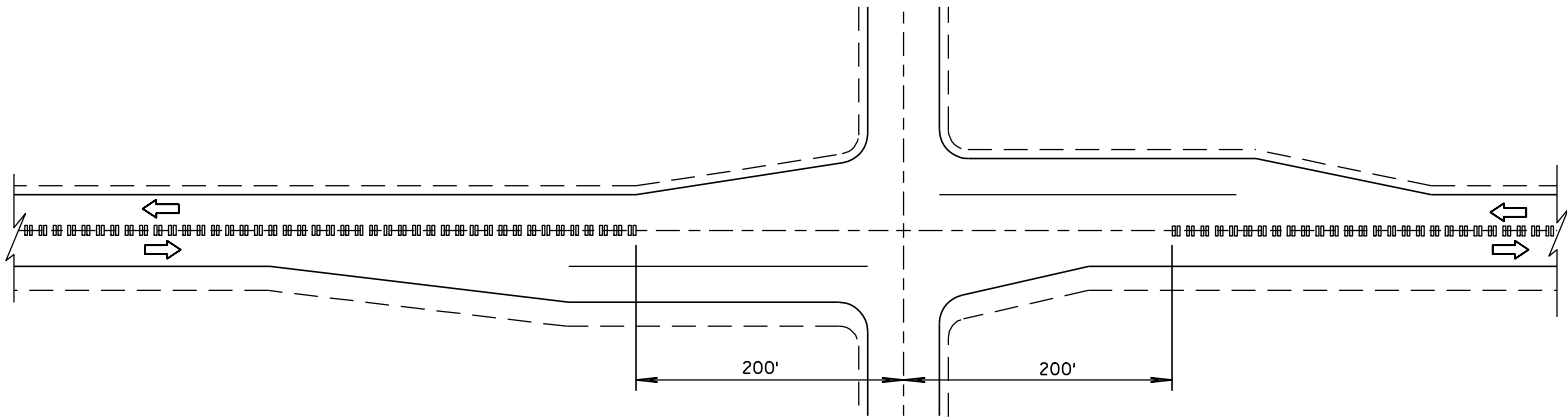
SECTION B-B
CROWNED ROADWAY



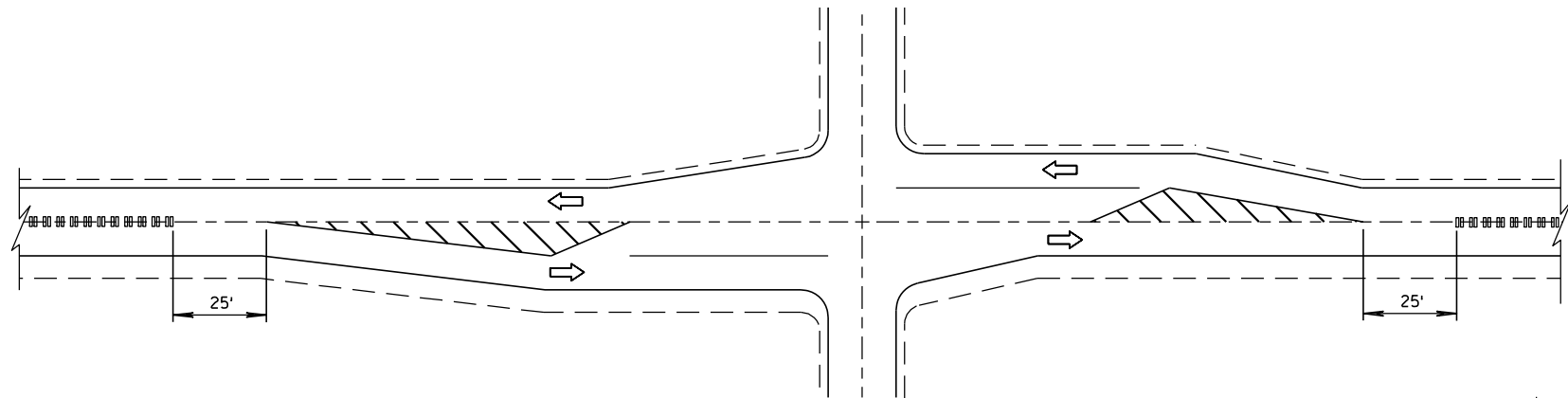
SECTION A-A

2-LANE RURAL
CENTER LINE RUMBLE STRIP,
MILLING

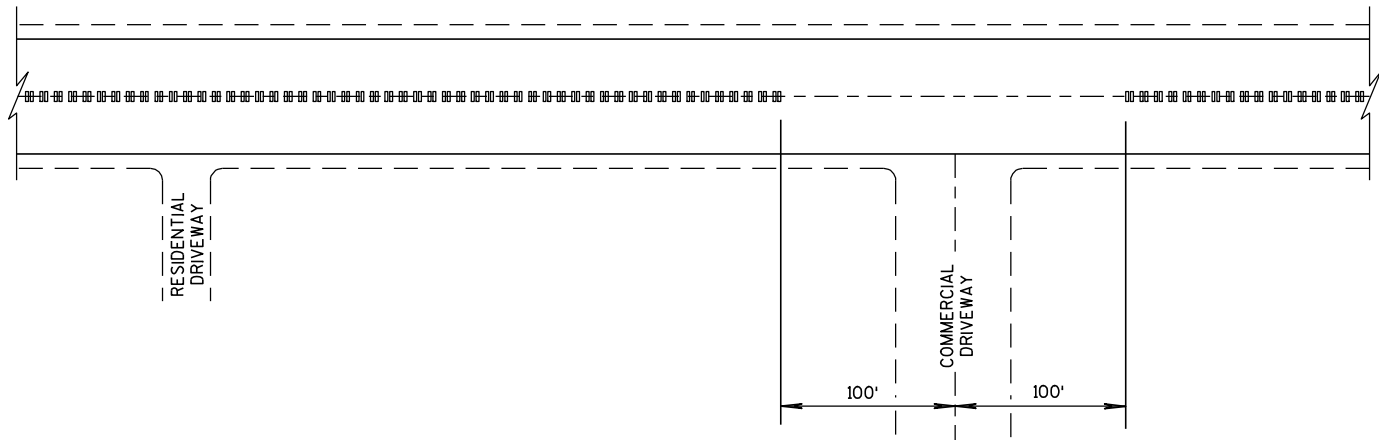
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CENTER LINE GROOVES AT INTERSECTIONS

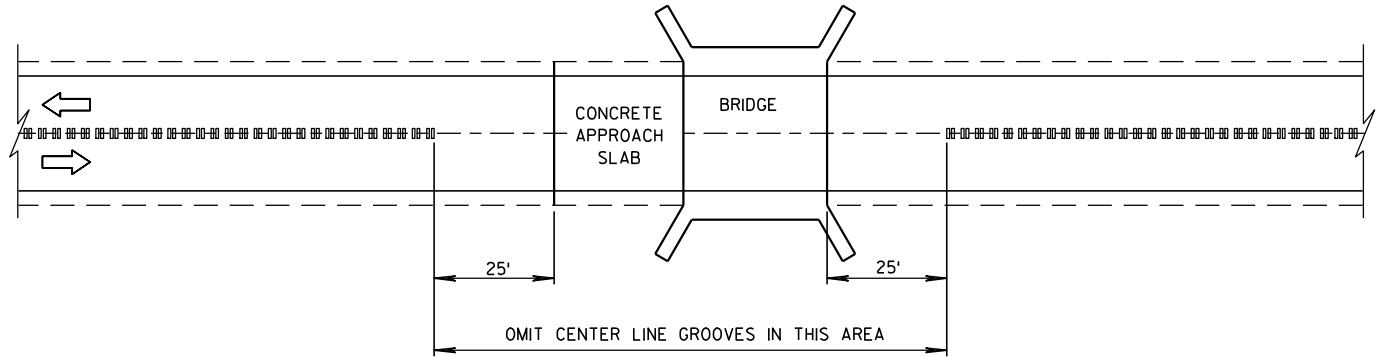


CENTER LINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)

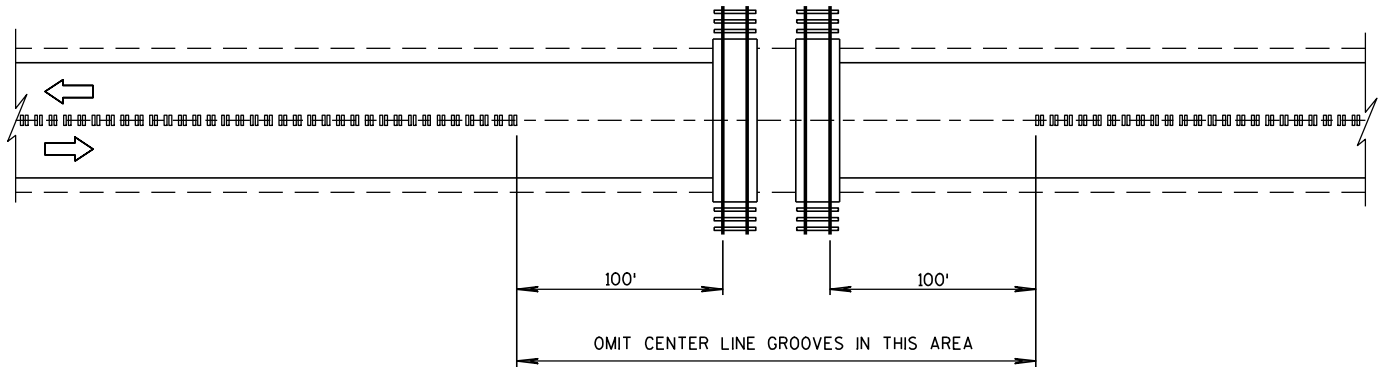


CENTER LINE GROOVES AT DRIVEWAYS¹

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

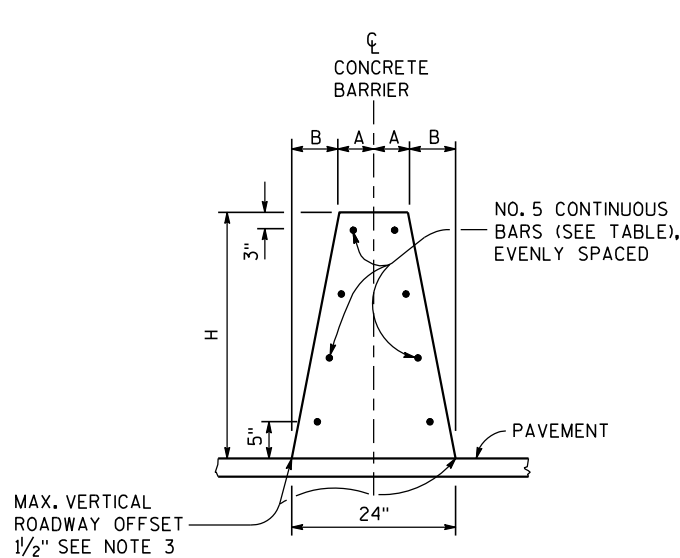


CENTER LINE GROOVES AT BRIDGES

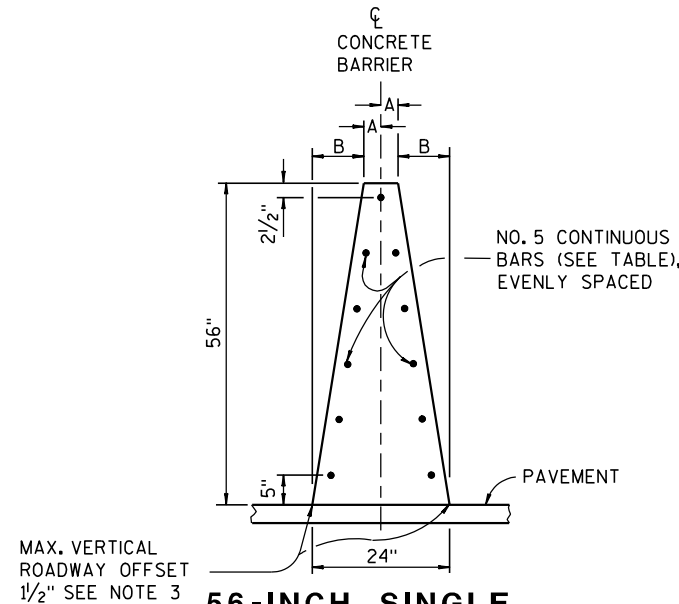


CENTER LINE GROOVES AT RAILROADS

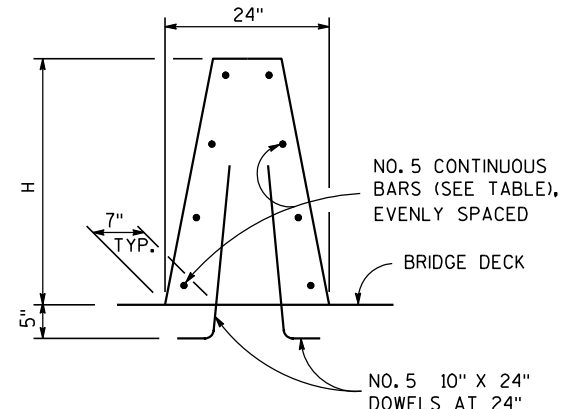
2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING		
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION		
APPROVED 8/28/2012 DATE	/S/ Jerry H. Zogg ROADWAY STANDARDS 144 ENGINEER	ENT
FHWA		



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



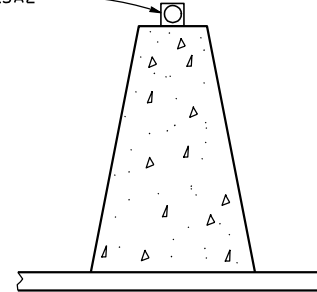
56-INCH SINGLE
SLOPE CONCRETE BARRIER
(TYPE S56)



SINGLE SLOPE
CONCRETE BARRIER
ON BRIDGE

SEE STANDARD
DETAIL DRAWING 15A2
FOR DELINEATOR
DETAILS

NON OUTER PARAPET APPLICATION



DELINEATION

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

GENERAL NOTES

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

DELINEATOR SPACING
ON HORIZONTAL CURVES

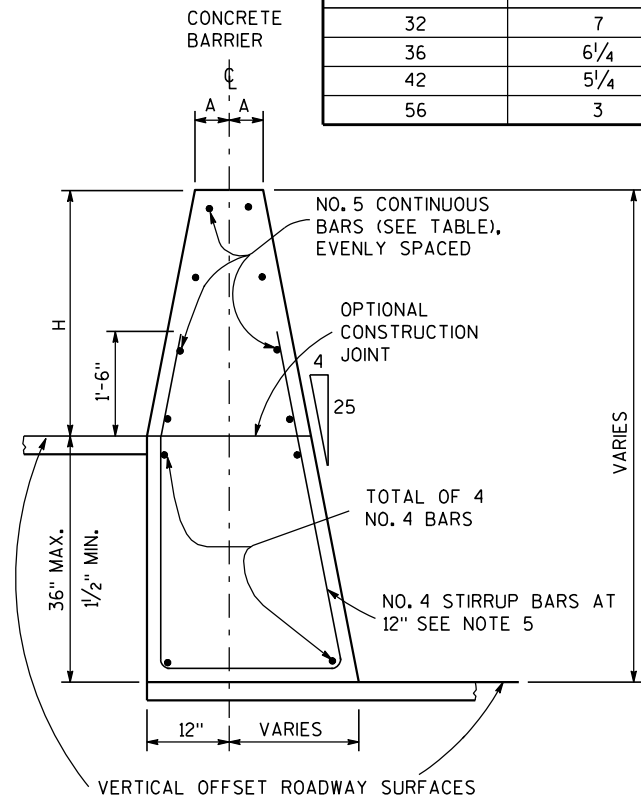
RADIUS OF CURVE	APPROXIMATE SPACING ON CURVE
50 FEET	20 FEET
115 FEET	25 FEET
180 FEET	35 FEET
250 FEET	40 FEET
300 FEET	50 FEET
400 FEET	55 FEET
500 FEET	65 FEET
600 FEET	70 FEET
700 FEET	75 FEET
800 FEET	80 FEET
900 FEET	85 FEET
1000 FEET	90 FEET

DELINEATOR SPACING ON RADIUS GREATER
THAN 1000 FEET OR TANGENT SECTIONS

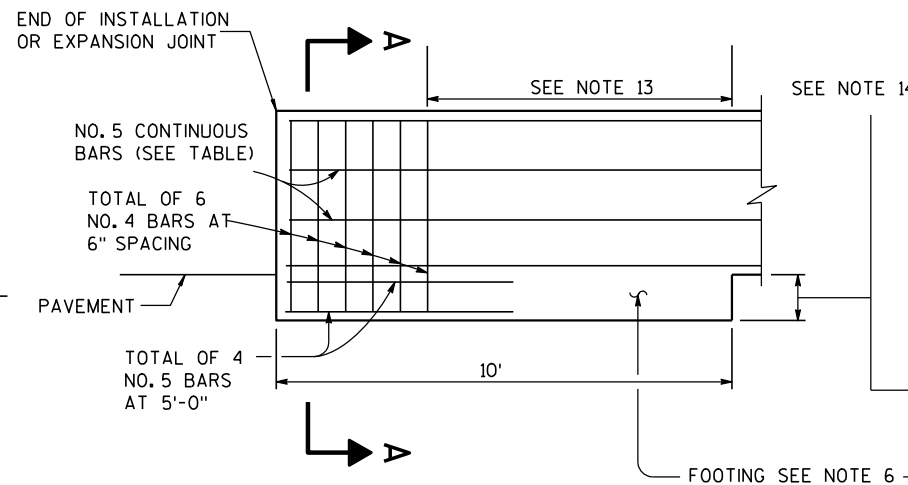
	LENGTH OF BARRIER	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	1 1	3
TWO WAY TRAFFIC	< 200' > 200'	25' C-C 50' C-C	1 1	6
TWO WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	2 2	3

CONCRETE BARRIER SINGLE SLOPE
(CBSS)

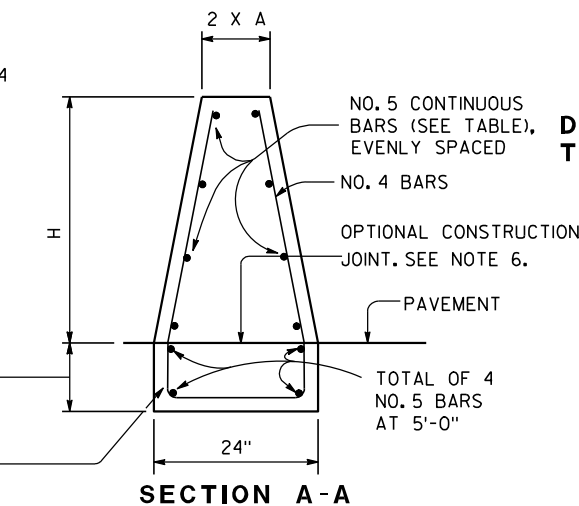
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

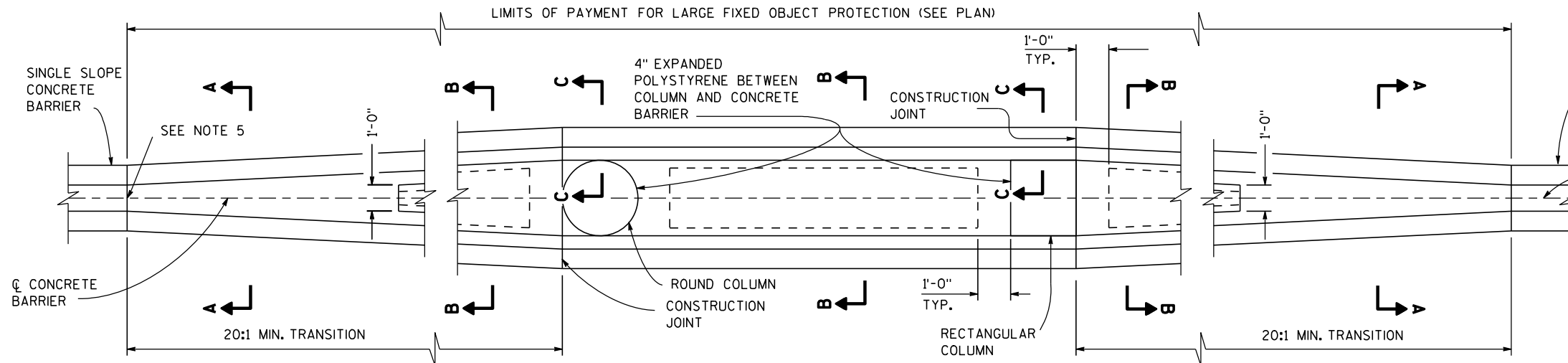


SINGLE SLOPE CONCRETE
BARRIER AND RETAINING WALL
(TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)
(BETWEEN ADJACENT ROADWAYS)

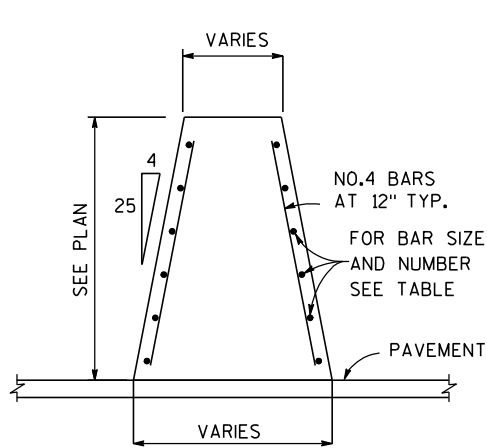


END ANCHOR SINGLE
SLOPE CONCRETE BARRIER
AT CONSTRUCTION JOINT

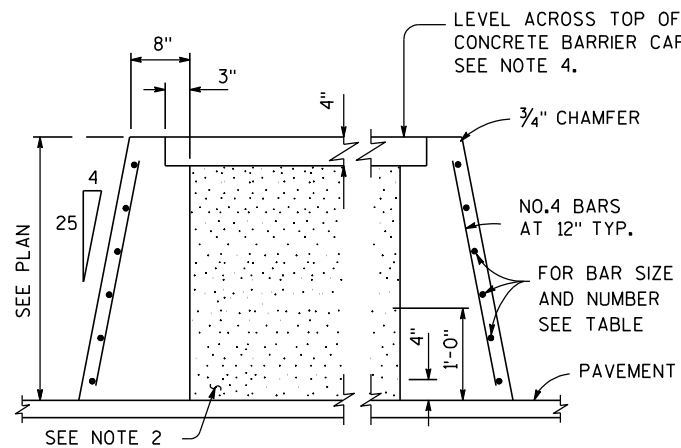




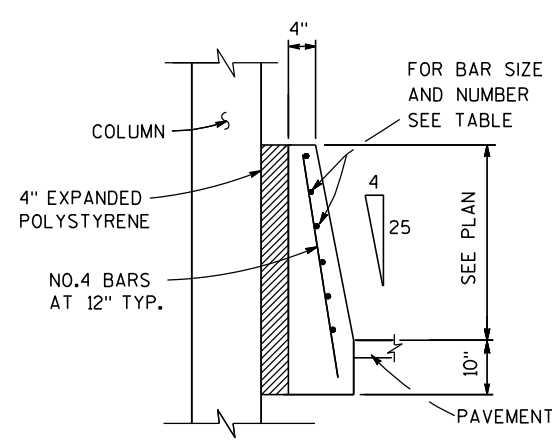
LARGE FIXED OBJECTS PROTECTION
TYPE S32, TYPE S36, TYPE S42, TYPE S56



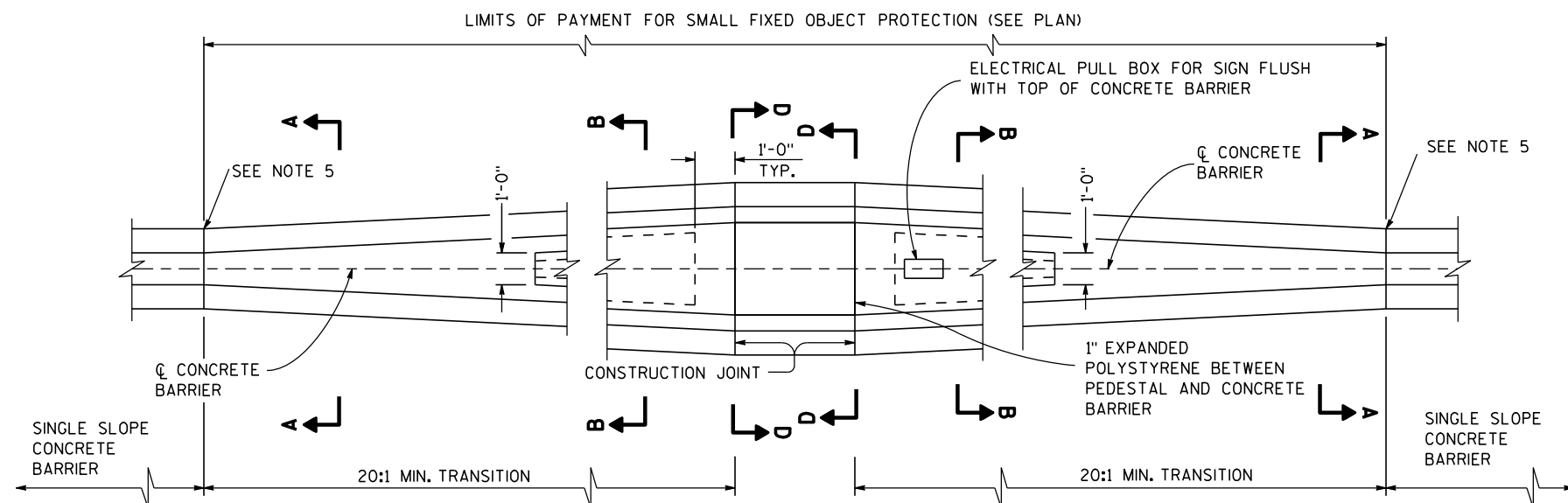
SECTION A-A



SECTION B-B



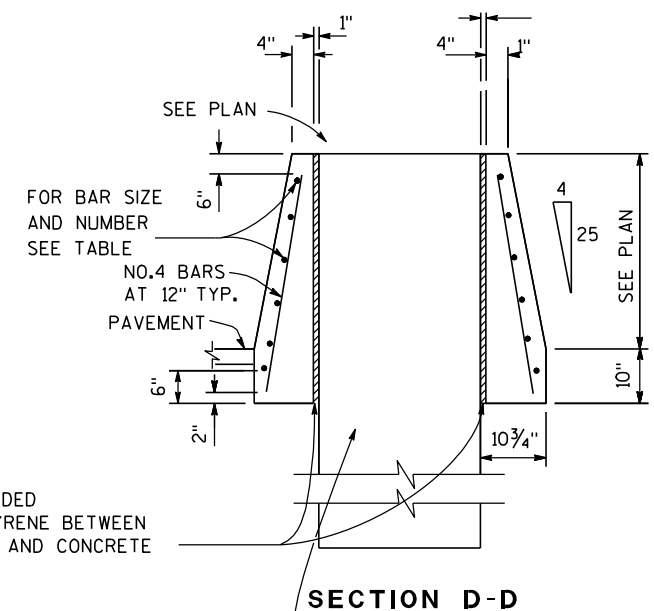
SECTION C-C



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

GENERAL NOTES

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

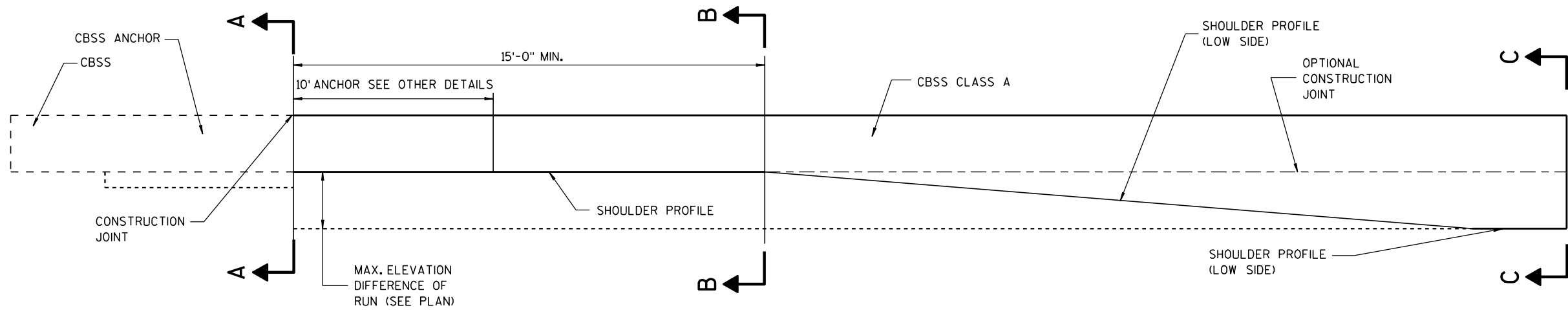


SECTION D-D

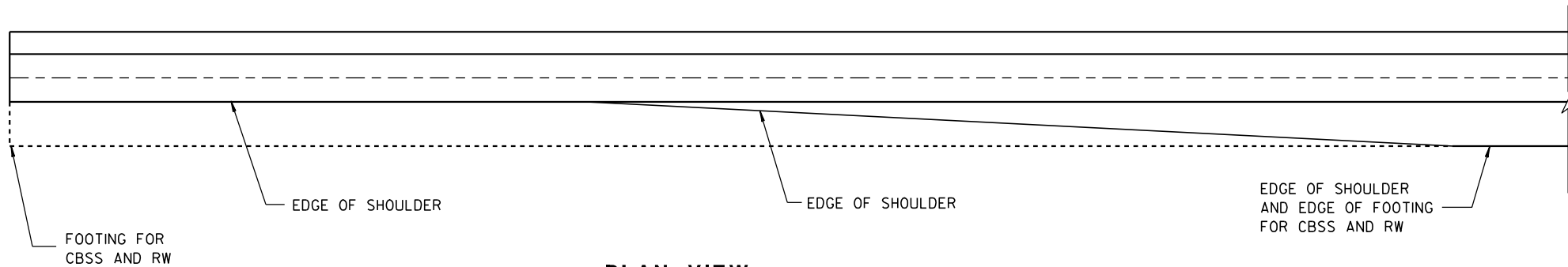
BARRIER HEIGHT H INCHES	BAR SIZE	NUMBER OF BARS EACH
32	4	6
36	4	6
42	5	6
56	5	9

**CONCRETE BARRIER SINGLE SLOPE
 (CBSS)**

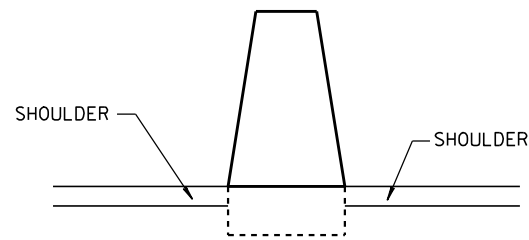
STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION



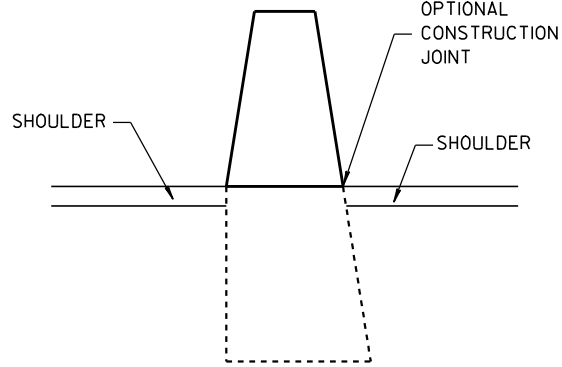
ELEVATION VIEW
TRANSITION TO CBSS CLASS A
(TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)



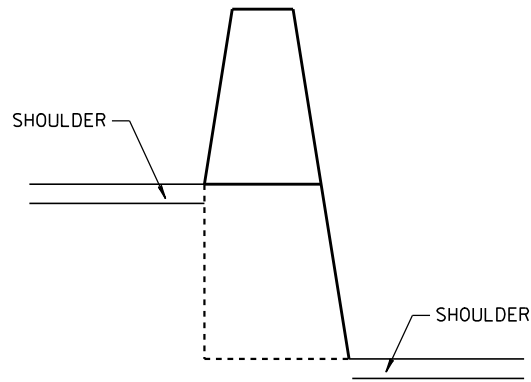
PLAN VIEW
TRANSITION TO CBSS CLASS A
(TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)



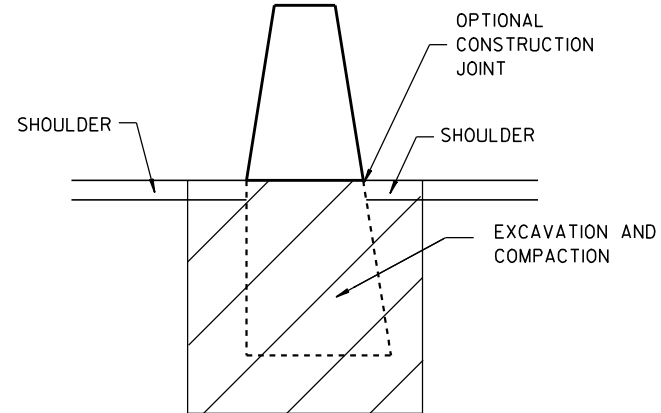
SECTION A-A



SECTION B-B

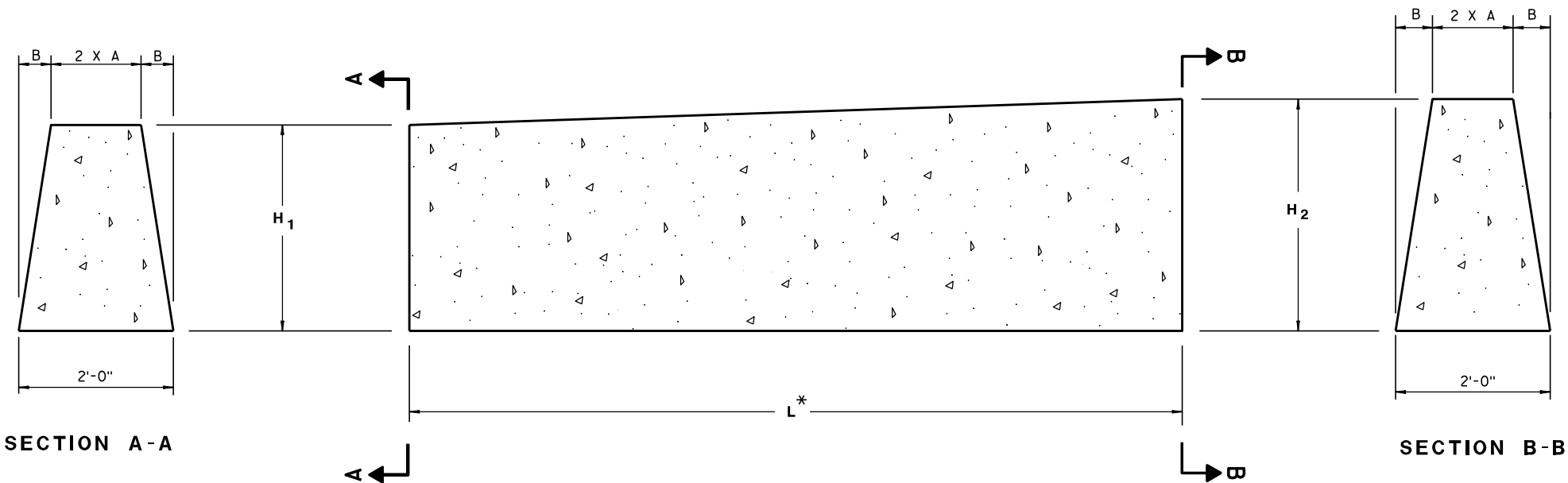


SECTION C-C



CONCRETE BARRIER SINGLE SLOPE
(CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



BARRIER DIMENSIONS

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

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

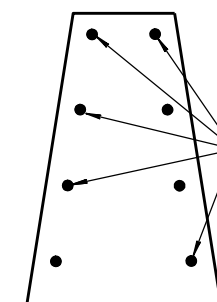
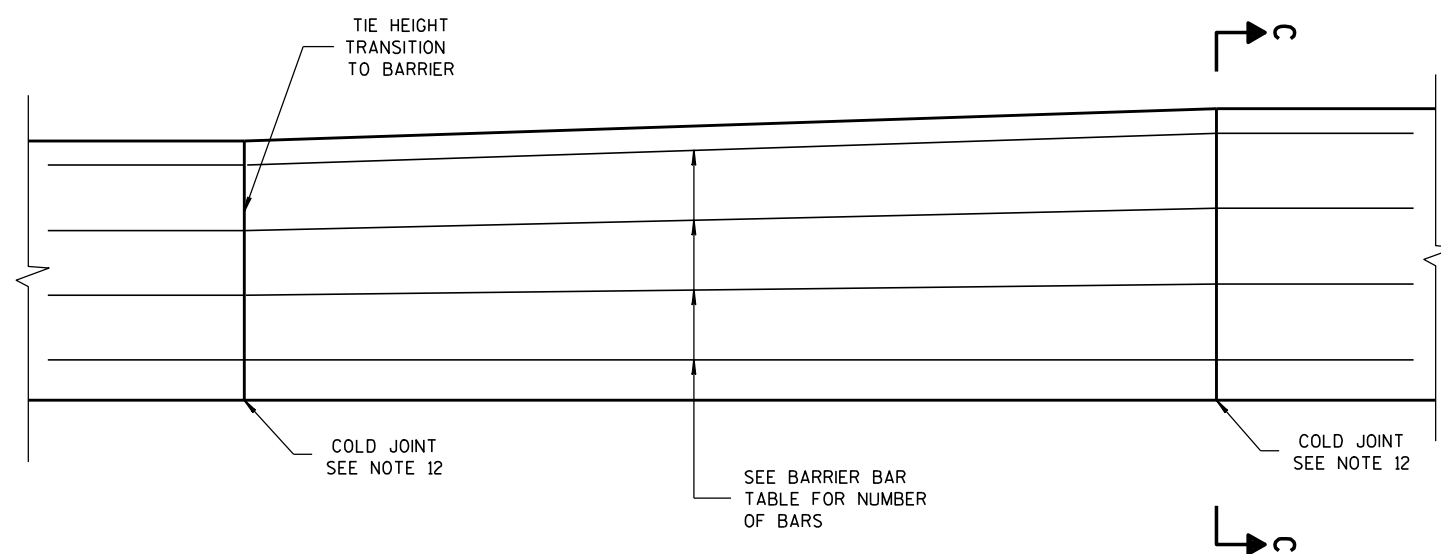
USE COLD JOINT TO CONNECT MULTIPLE HEIGHT TRANSITIONS.

DOUBLE COLD JOINT HEIGHT TRANSITION

BARRIER BARS

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

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



SECTION C-C

STEEL REINFORCEMENT DETAIL

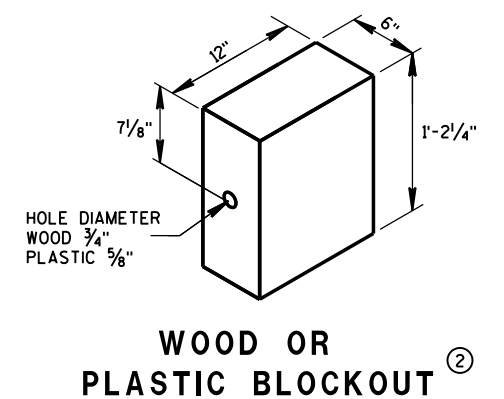
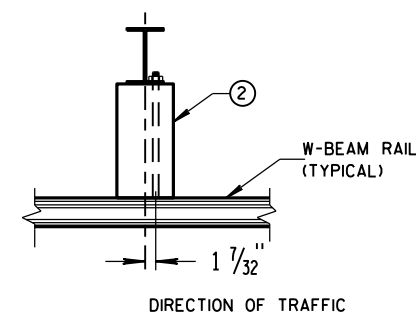
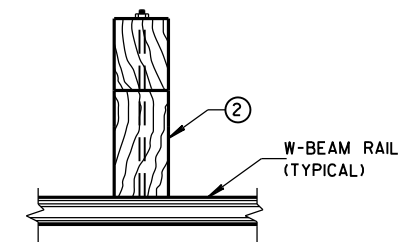
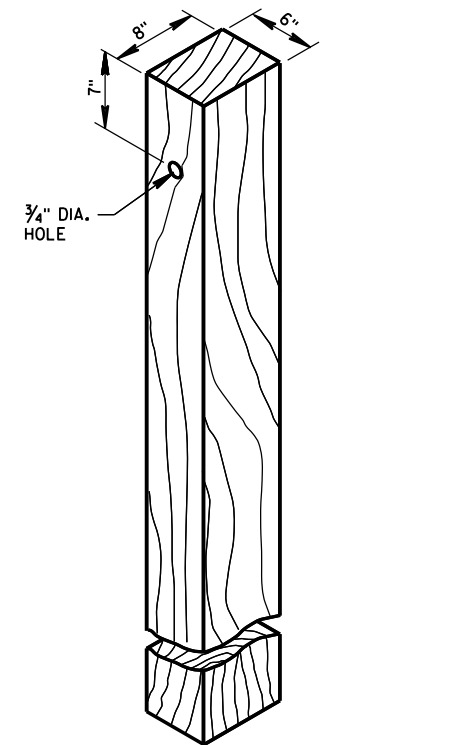
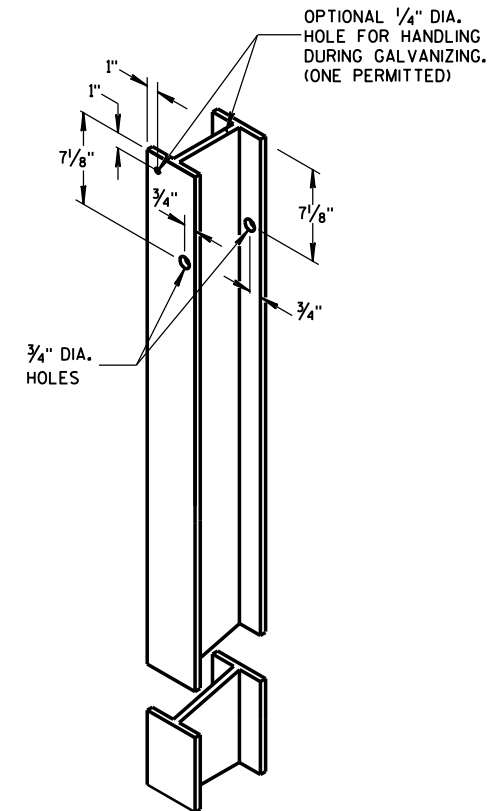
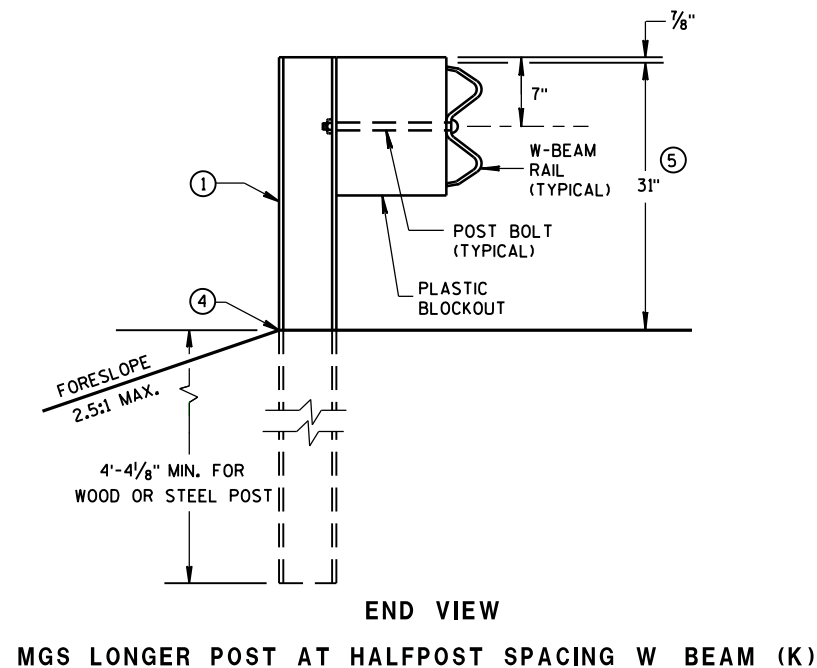
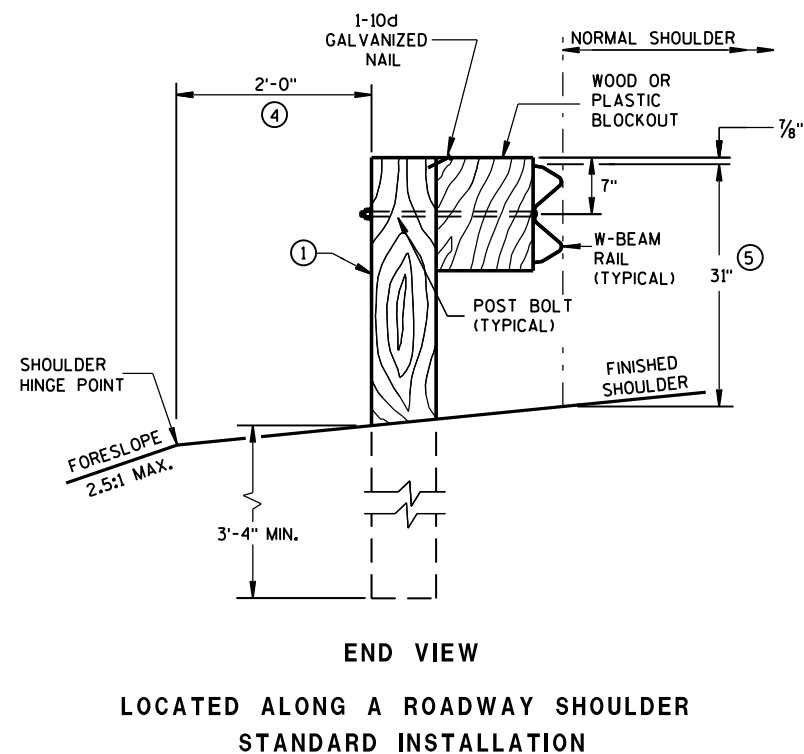
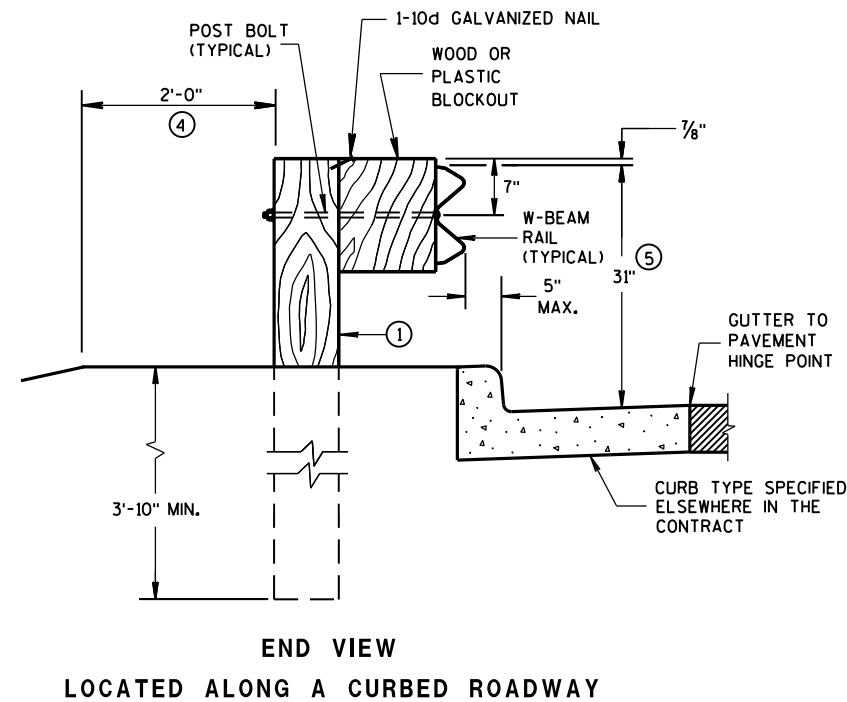
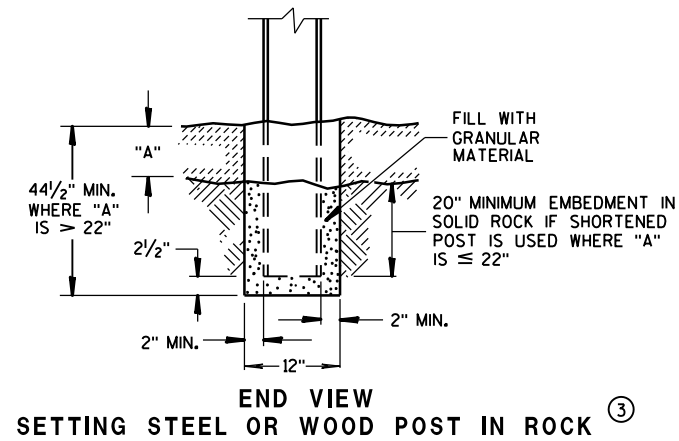
**CONCRETE BARRIER
SINGLE SLOPE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6-3-2010 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS 48 ENT
FHWA ENGINEER

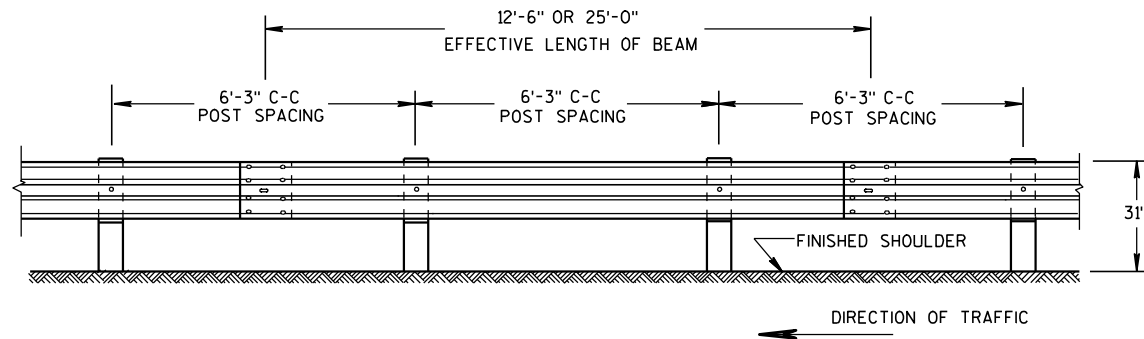
S.D.D. 14 B 42-2a

- S.D.D. 14 B 42-2a**



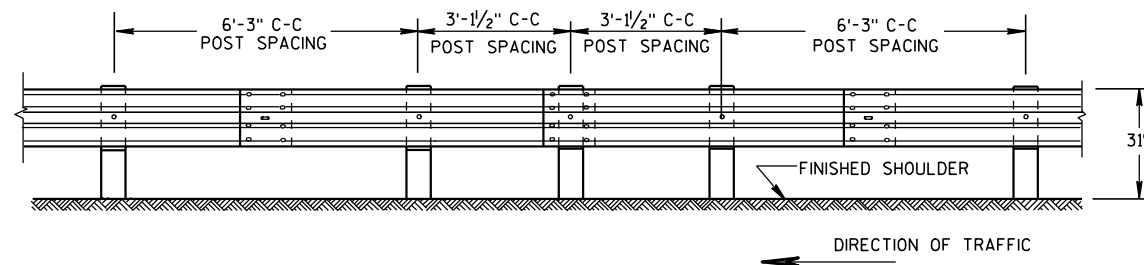
**MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION⁴⁹



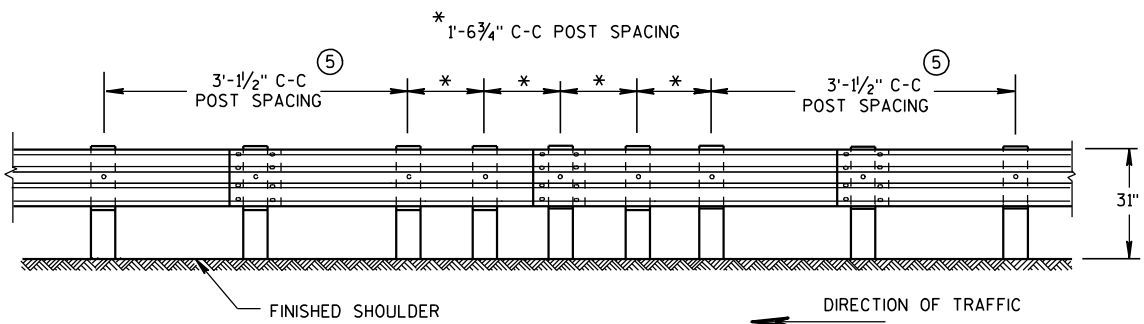
FRONT VIEW

POST SPACING STANDARD INSTALLATION



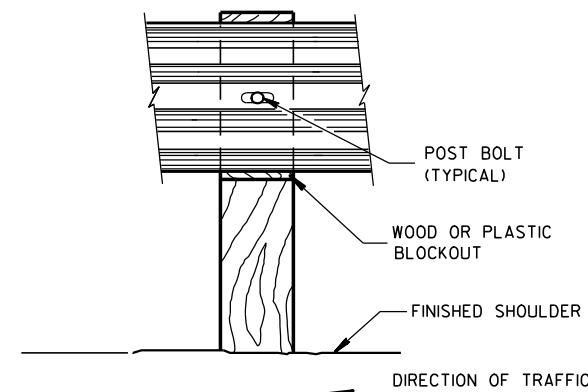
FRONT VIEW

HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)

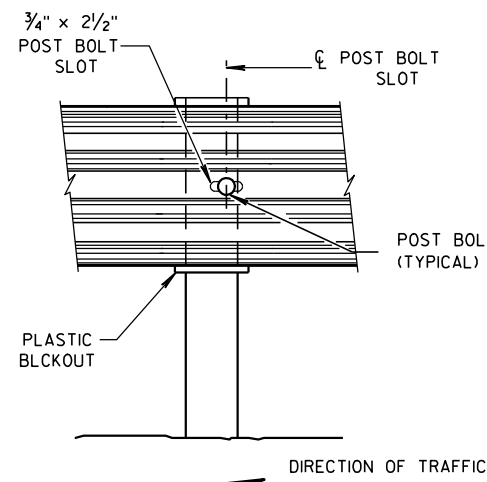


FRONT VIEW

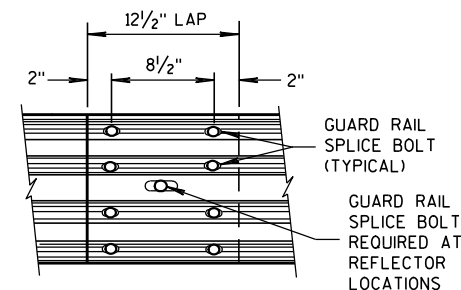
QUARTER POST SPACING (QS)



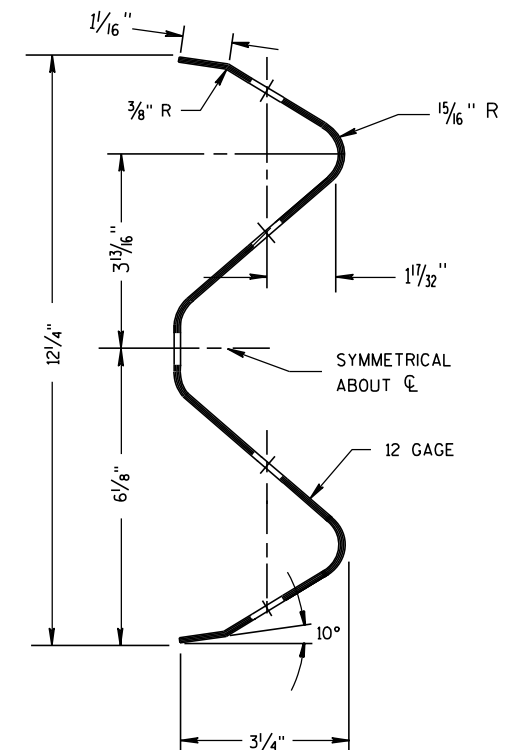
FRONT VIEW AT WOOD POST



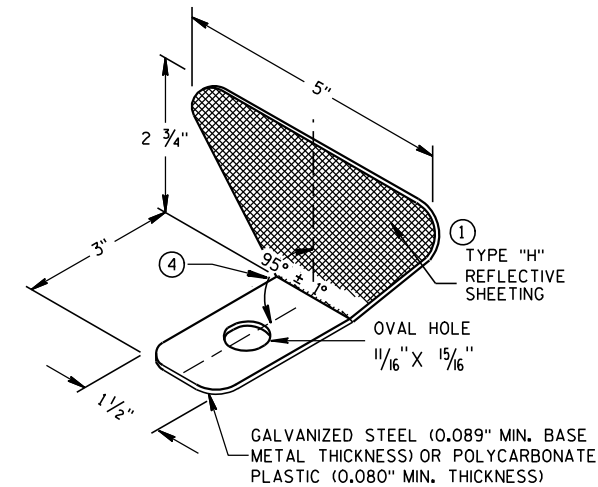
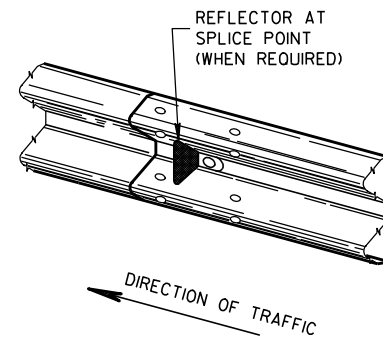
FRONT VIEW AT STEEL POST



FRONT VIEW
MID-SPAN BEAM SPLICE



SECTION THRU W-BEAM RAIL



ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

GENERAL NOTES

- ① PROVIDE TYPE "H" SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH TYPE "H" YELLOW REFLECTIVE SHEETING.
- ② DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL. RAIL SPLICE LOCATIONS ARE THE ONLY ACCEPTABLE LOCATIONS FOR REFLECTORS.
- ③ REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.
- ④ PROVIDE AN ANGLE OF BEND OF $90^\circ \pm 1^\circ$ FOR TWO-SIDED REFLECTORS.
- ⑤ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

POST BOLTS ARE A $\frac{5}{8}$ " DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES $\frac{5}{8}$ " DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND $\frac{5}{8}$ " DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

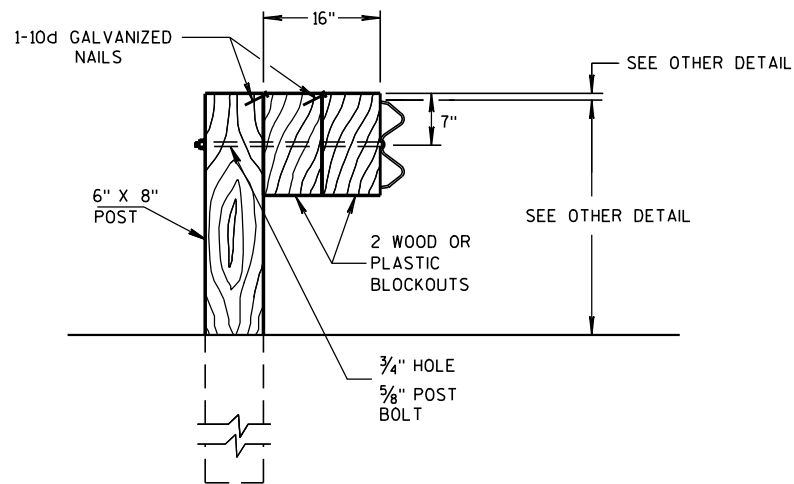
GUARD RAIL SPLICE BOLTS ARE A $\frac{5}{8}$ " DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES $\frac{5}{8}$ " DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

REFLECTOR SPACING

	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200'	50' C-C	1	3
	> 200'	100' C-C	1	
TWO WAY TRAFFIC	< 200'	25' C-C	1 ③	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2 ④	3
	> 200'	100' C-C	2	

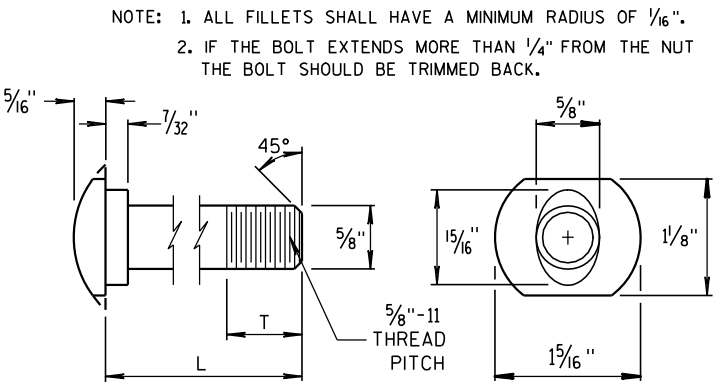
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

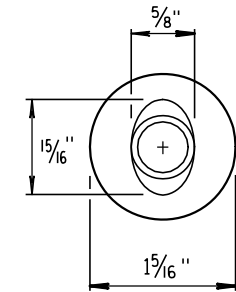


DETAIL FOR 16" BLOCKOUT DEPTH

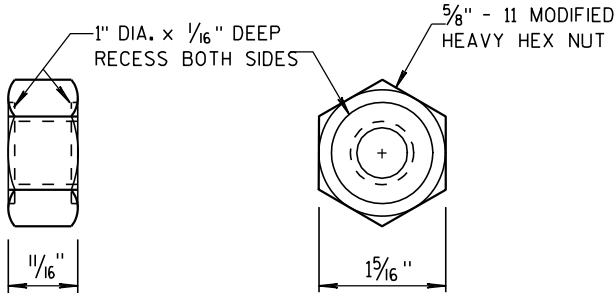
IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.



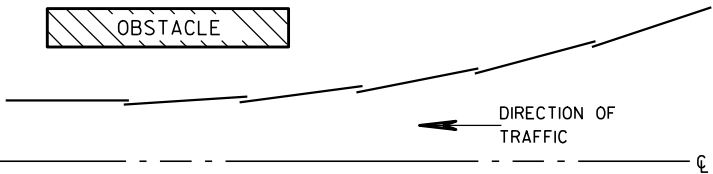
POST BOLT TABLE



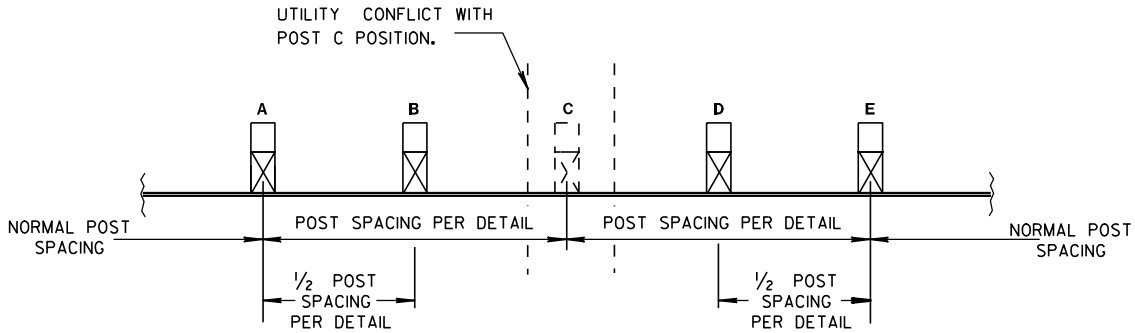
ALTERNATE BOLT HEAD



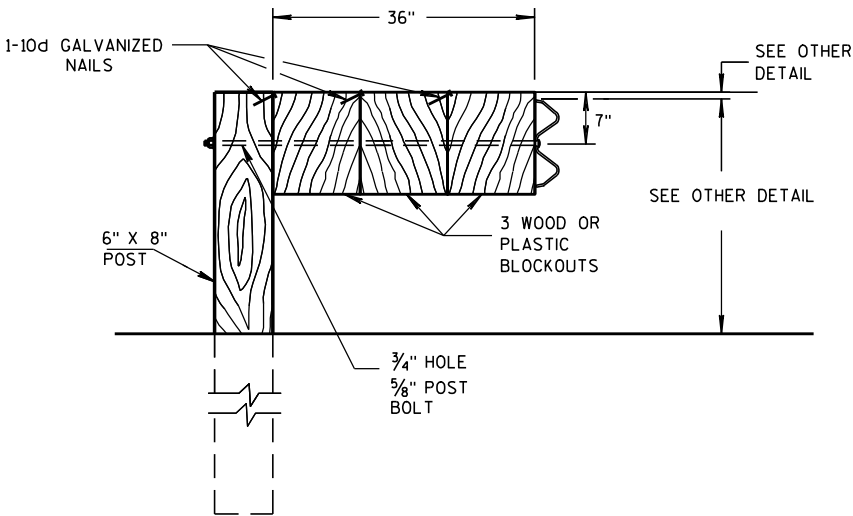
POST BOLT AND RECESS NUT



PLAN VIEW
BEAM LAPPING DETAIL



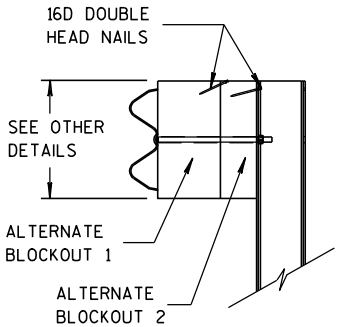
POST DRIVING FOR CONTINUOUS
UNDERGROUND OBSTRUCTION



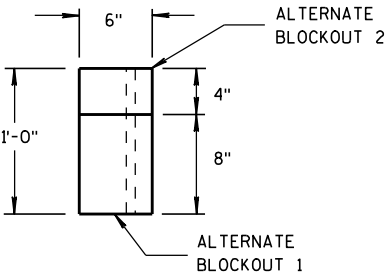
DETAIL FOR 36" BLOCKOUT DEPTH

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.



SIDE VIEW



TOP VIEW

ALTERNATE WOOD
BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
DATE 11/15/2011
FHW

15/ Jerry H. 3000
ROADWAY STANDARDS 51
ENGINEER ENT

GENERAL NOTES

- (A) THE SLOPE IN THE AREA BOUNDED BY THE EXTENDED VEHICLE RUNOUT PATH (EVRP), THE HINGE POINT LINE (HPL), AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.
- (B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED.
- (C) DIFFERENT MANUFACTURES REQUIRE DIFFERENT PERFORATED W-BEAM RAIL END PANELS. SEE MANUFACTURES INFORMATION.
- (D) THE TOP OF THE STEEL TUBE ON POST 1 AND POST 2 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.
- (E) SHEETING IS ATTACHED TO 0.040 ALUMINUM SHEET AND ATTACHED TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER OF E.A.T.
- (F) 1/2" DIAMETER X 3" LONG LAG BOLT AND WASHER.
- (G) HARDWARE VARIES BETWEEN DIFFERENT MANUFACTURES. SEE MANUFACTURE'S DRAWING FOR INFORMATION.
- (H) DIMENSIONS MAY VARY. SEE MANUFACTURE'S INFORMATION.

SEE SDD 14B42 FOR MORE INFORMATION.

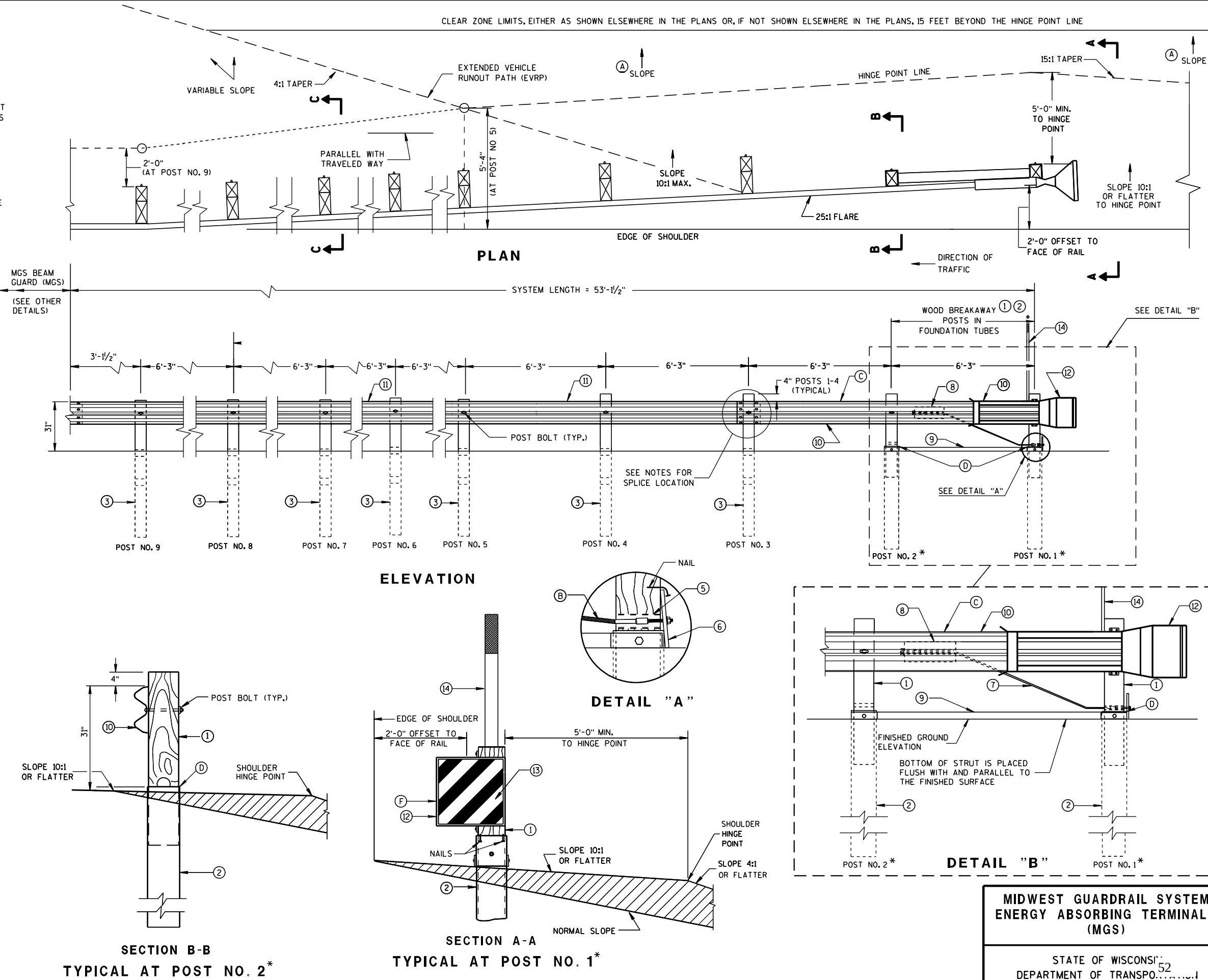
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

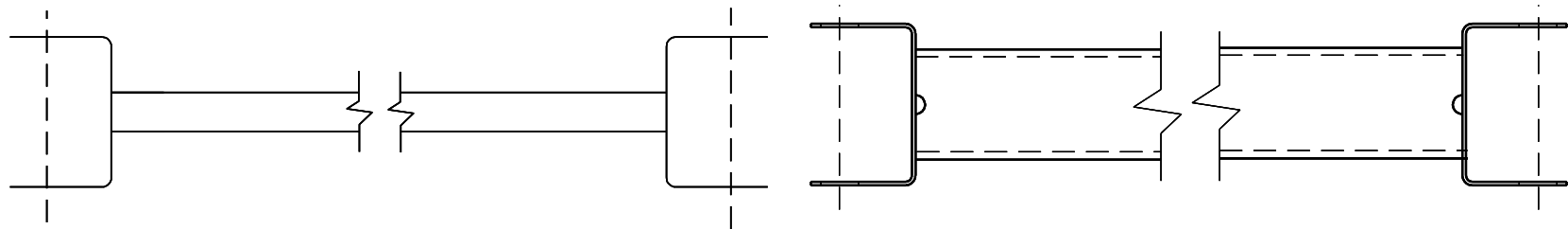
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

W-BEAM RAIL SPLICES ARE LOCATED AT POST NUMBER 3, AND BETWEEN POST 5 AND 6, BETWEEN POSTS 7 AND 8, AND MIDDLE OF THE SPAN AFTER POST 9.

PATTERN AND COLORS ON REFLECTIVE SHEETING TYPE H ARE TO CONFORM TO OM3-L OR OM3-R OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

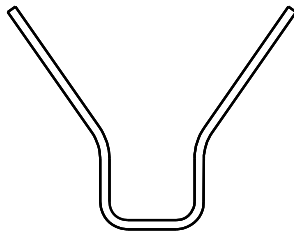
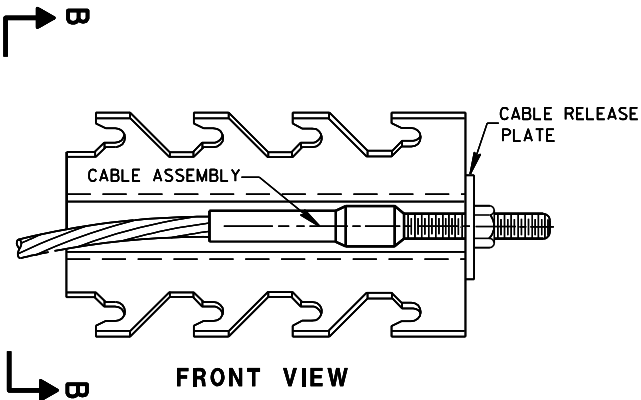
THE CENTER OF THE UPPER 3/2" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE ($\pm \frac{3}{4}$ ")



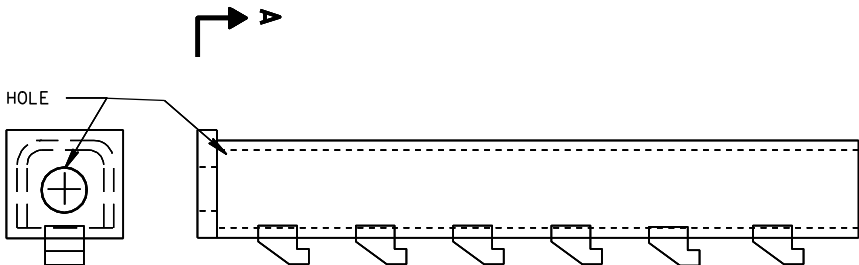


9 H

GENERIC GROUND STRUT



SECTION B-B



SECTION A-A

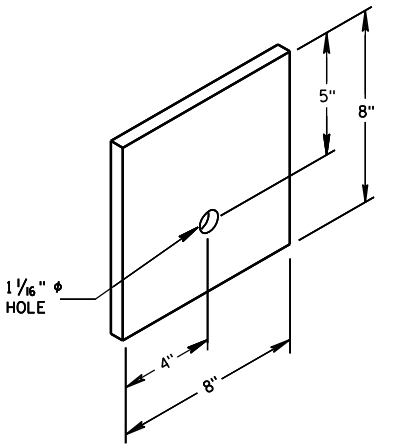
PLAN VIEW

8 H

GENERIC ANCHOR CABLE BOX

BILL OF MATERIALS

PART NO.	DESCRIPTION
MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.	
①	WOOD BREAKAWAY POST
②	6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE AT POSTS 1 AND 2
③	WOOD CRT
④	WOOD BLOCKOUT
⑤	PIPE SLEEVE
⑥	BEARING PLATE
⑦	BCT CABLE ASSEMBLY
⑧	ANCHOR CABLE BOX
⑨	GROUND STRUT
⑩	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
⑪	STANDARD W-BEAM RAIL, MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
⑫	END SECTION EAT
⑬	0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE H (ONLY THE SHEETING IS SUPPLIED BY THE MANUFACTURER)
⑭	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)

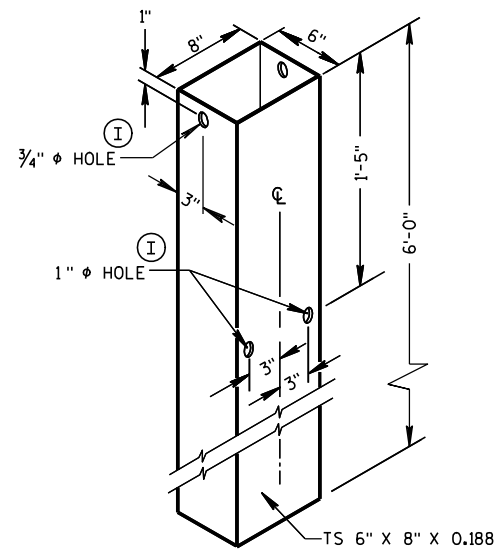


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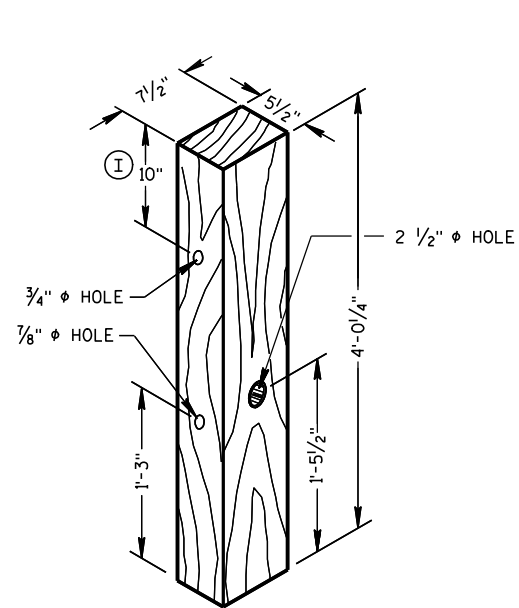
BEARING PLATE

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

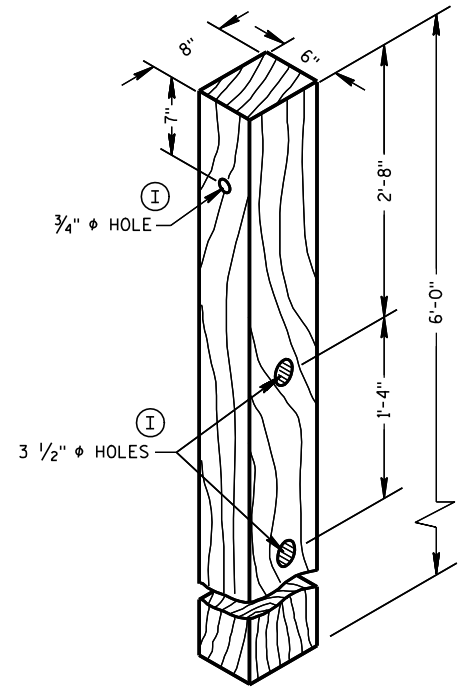
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



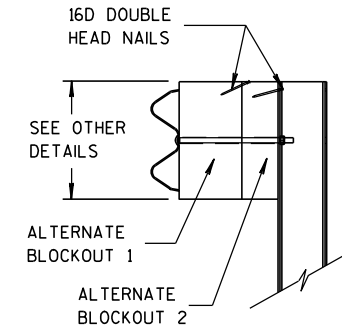
FOUNDATION TUBE ②



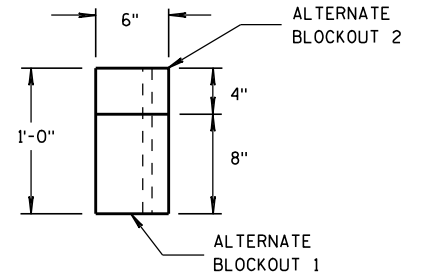
WOOD BREAKAWAY POST ①



WOOD CRT POST ③

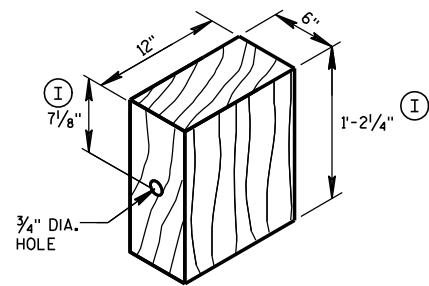


SIDE VIEW



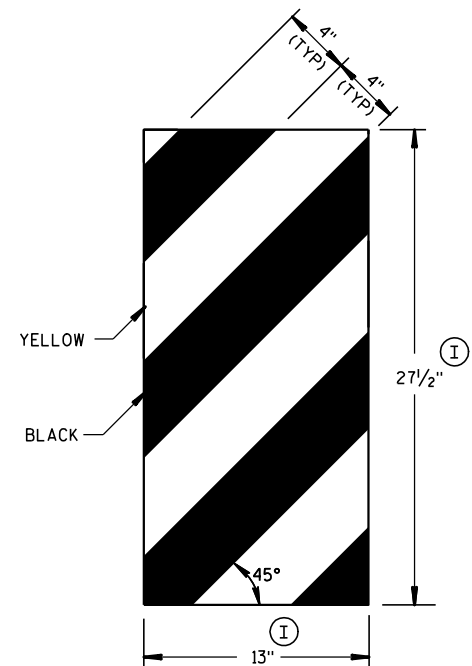
TOP VIEW

ALTERNATE WOOD
BLOCKOUT DETAIL

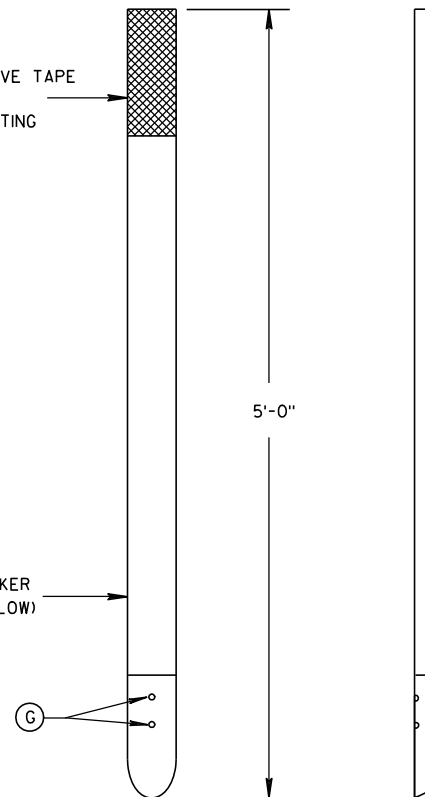
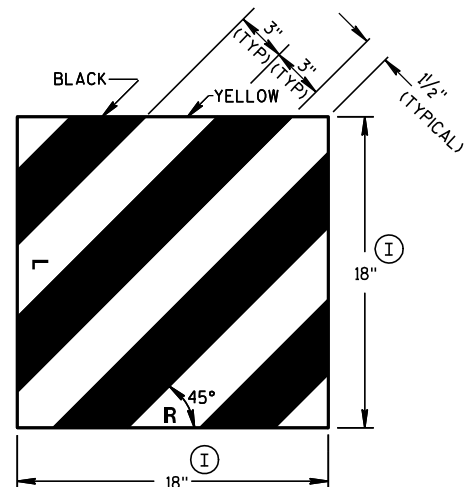


WOOD BLOCKOUT ④

YELLOW REFLECTIVE TAPE
3" X 9" TYPE H
REFLECTIVE SHEETING



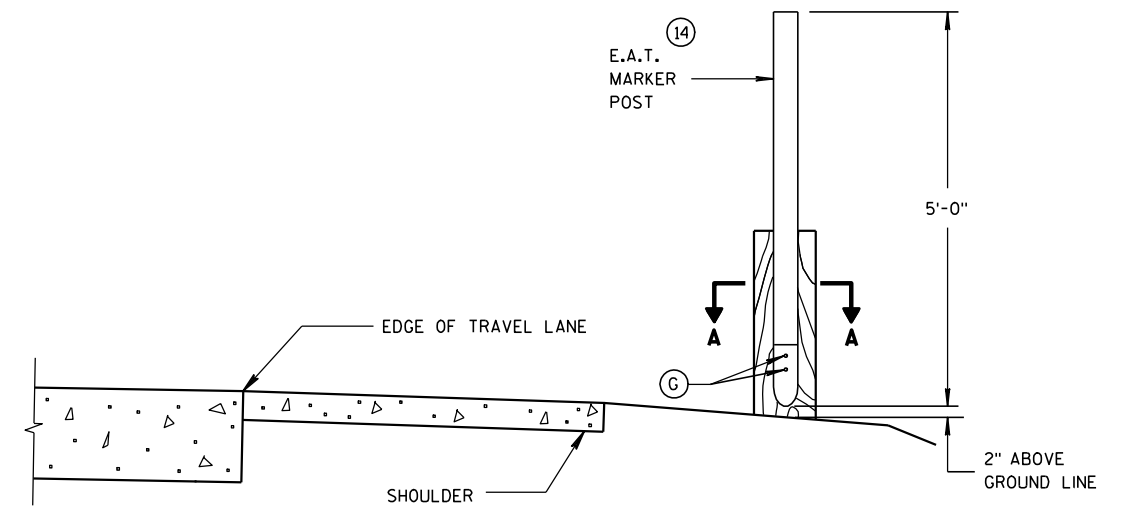
GENERIC REFLECTIVE SHEETING ⑬ ④



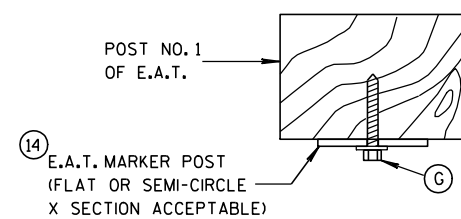
FRONT VIEW

SIDE VIEW

E.A.T. MARKER POST ⑭



TYPICAL INSTALLATION OF E.A.T.
MARKER POST BACKSIDE OF POST NO. 1
(E.A.T. AND RAIL REMOVED FOR CLARITY)

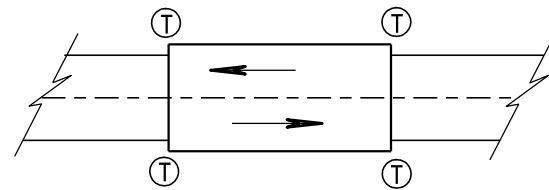


SECTION A-A

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

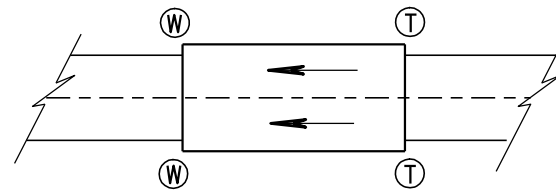
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/2011 /S/ Jerry H. 3000
DATE ROADWAY STANDARDS 54 ENT
FHWA ENGINEER



TWO WAY TRAFFIC

Ⓣ THRIE BEAM CONNECTION



ONE WAY TRAFFIC

Ⓦ W-BEAM CONNECTION WHEN REQUIRED

GENERAL NOTES

BOLT THE THRIE BEAM TO ALL POSTS AND BLOCKOUTS. DRILL OR PUNCH BOLT HOLES IN THE BEAM IF THE POST SPACING IS LESS THAN 6'-3".

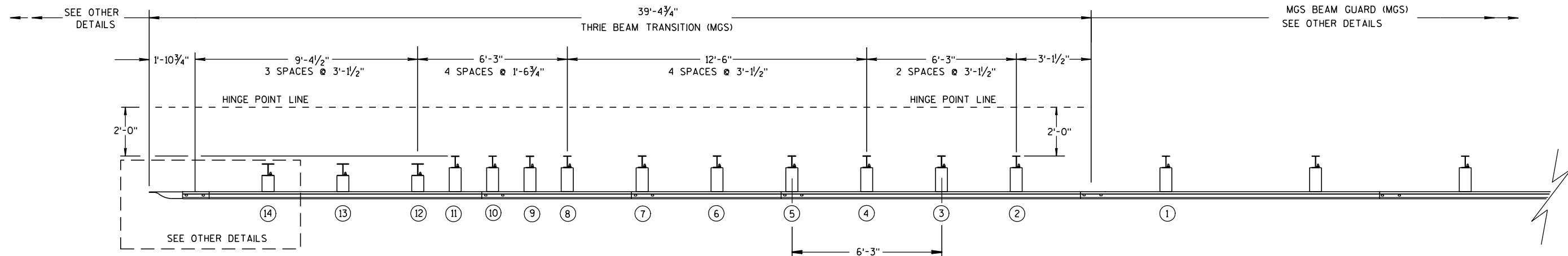
IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2 1/2", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

TRANSITION USES STEEL POSTS ONLY.

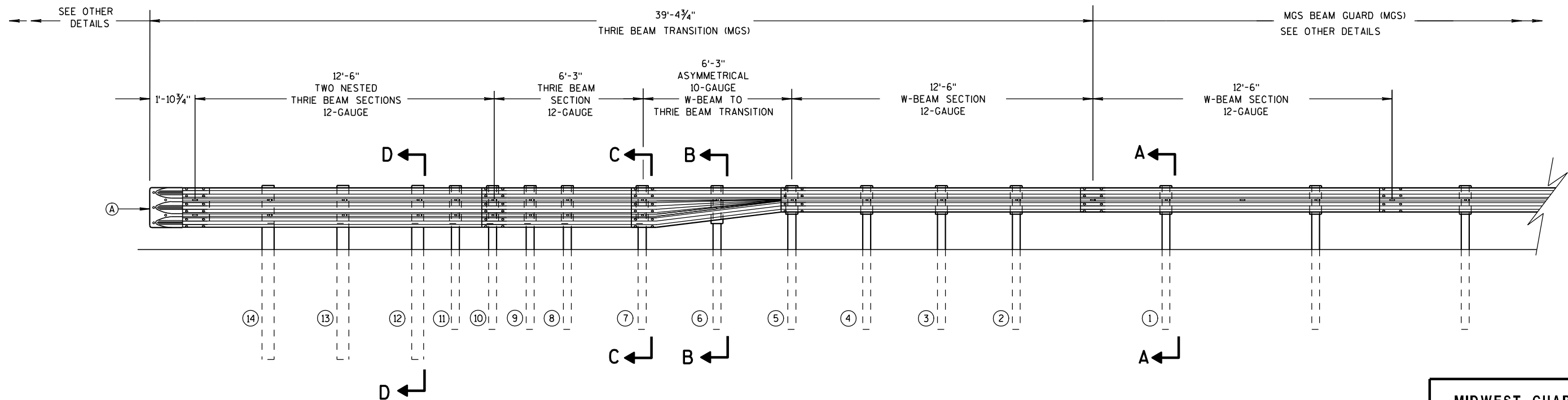
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

Ⓐ BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

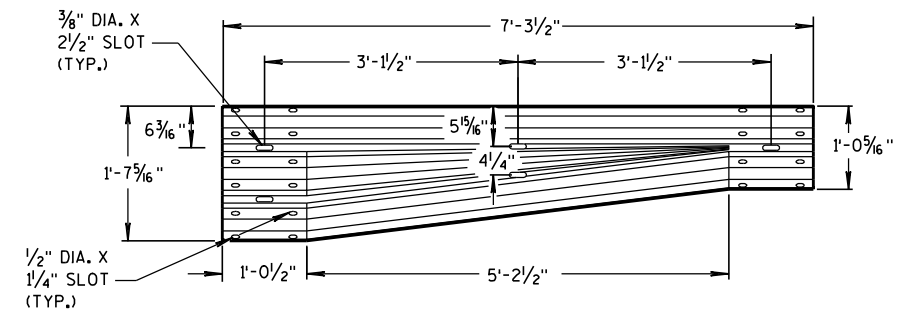
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S.D.D. 14 B 45-3b

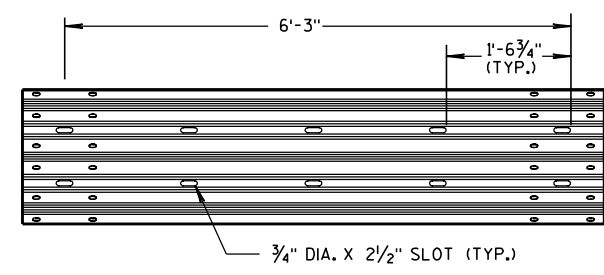


STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

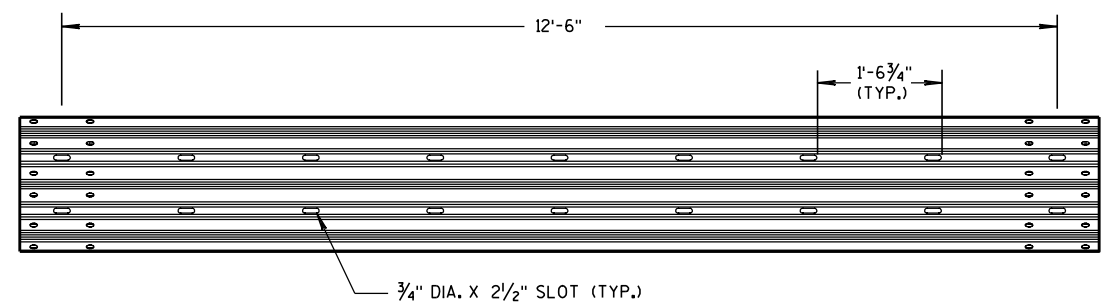
S.D.D. 14 B 45-3b



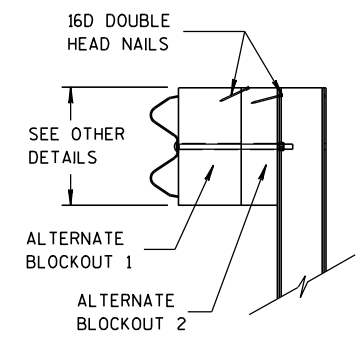
W-BEAM TO THRIE BEAM TRANSITION SECTION



6'-3" THRIE BEAM SECTION

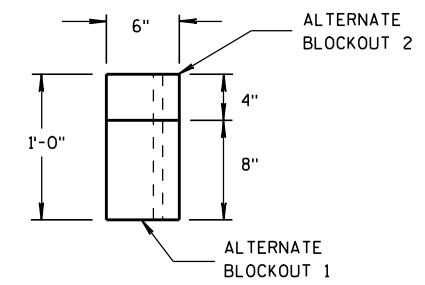


12'-6" THRIE BEAM SECTION

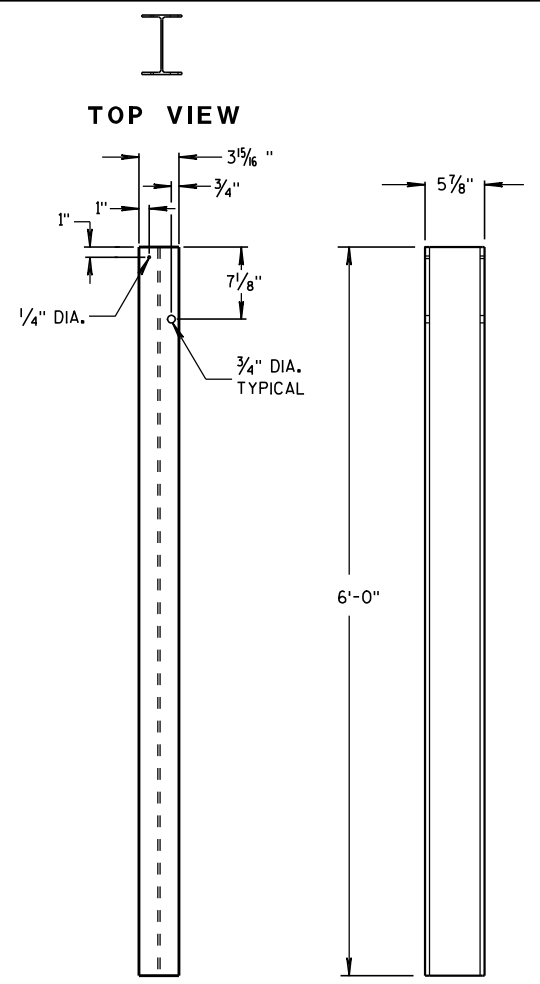


SIDE VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



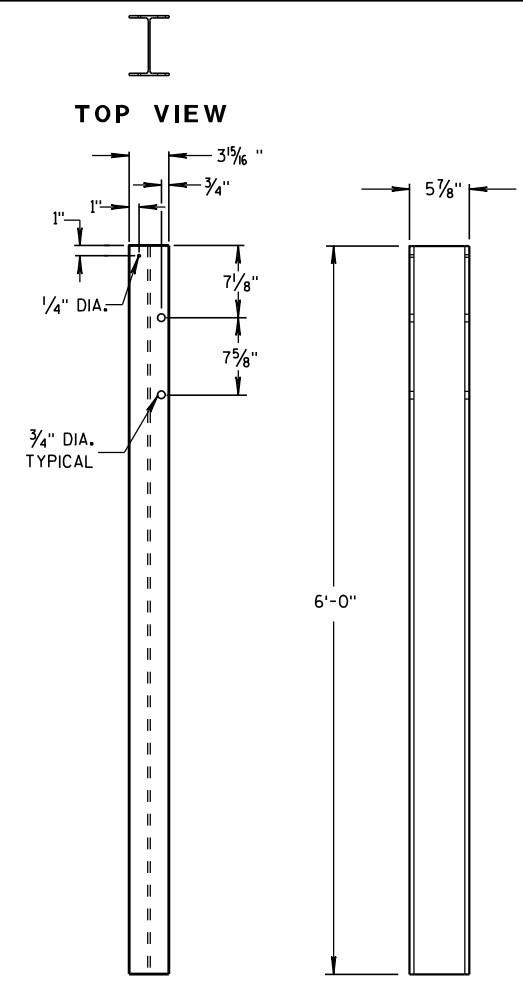
TOP VIEW



FRONT VIEW

SIDE VIEW

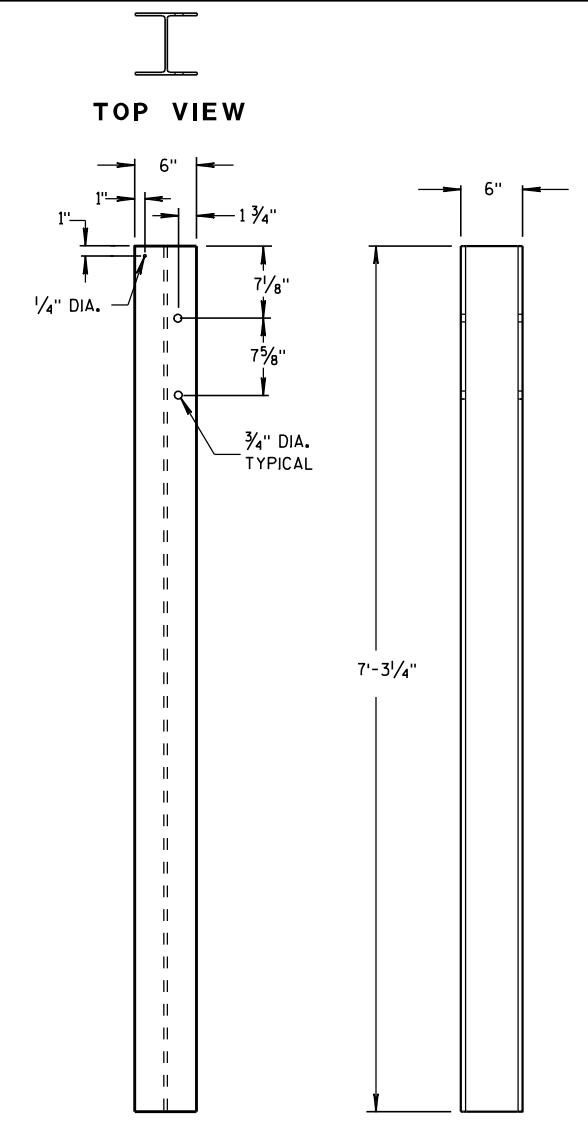
STEEL POSTS 1-5



FRONT VIEW

SIDE VIEW

STEEL POSTS 6-11

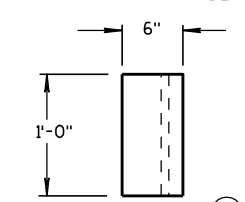


FRONT VIEW

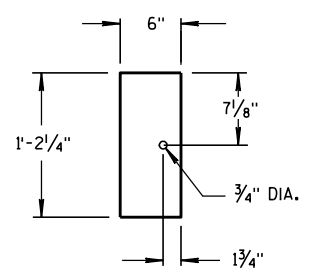
SIDE VIEW

STEEL POSTS 12-14

① WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.

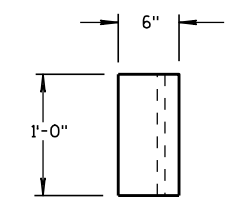


TOP VIEW

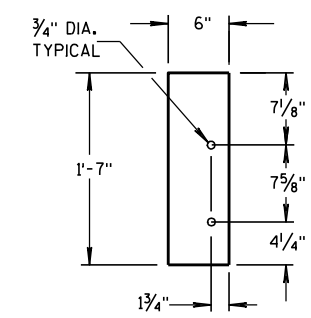


FRONT VIEW

BLOCKOUT POSTS 1-5

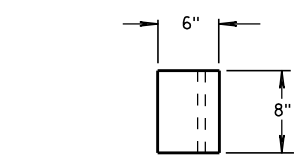


TOP VIEW

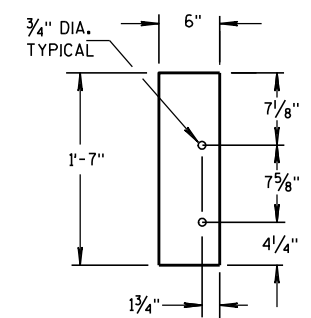


FRONT VIEW

BLOCKOUT POSTS 6-11



TOP VIEW



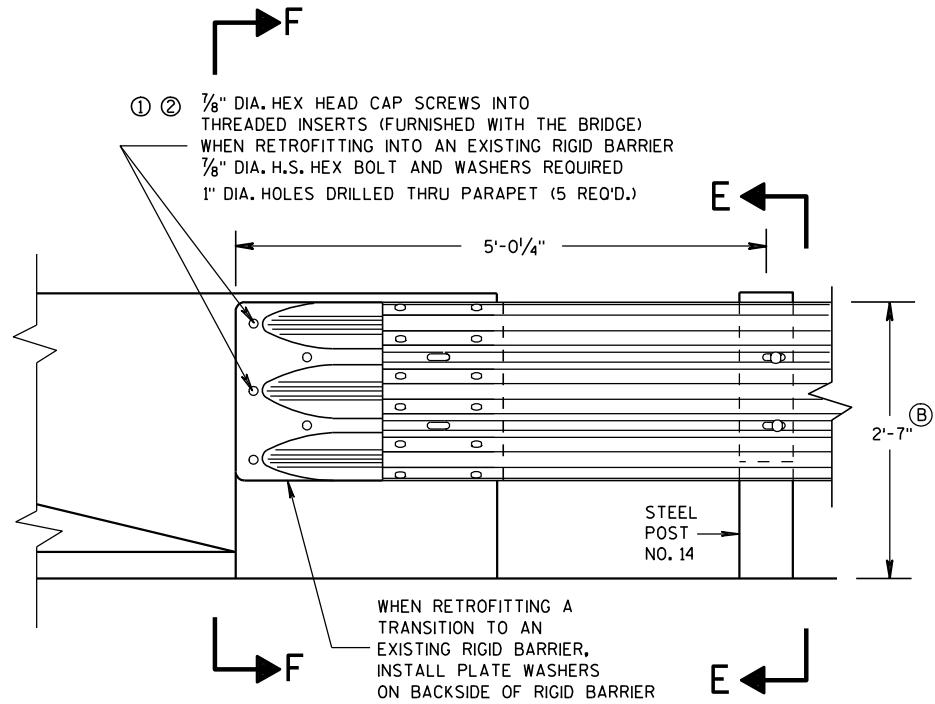
FRONT VIEW

BLOCKOUT POSTS 12-14

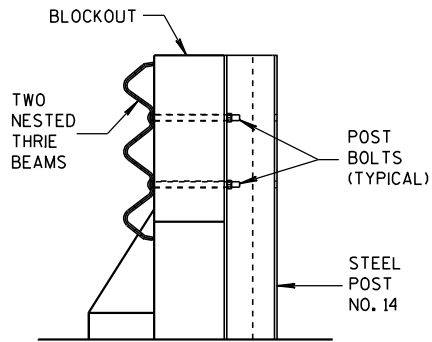
STEEL POST SIZES

POST NUMBER	SECTION TYPE	LENGTH
①	W6x9	72"
②	W6x9	72"
③	W6x9	72"
④	W6x9	72"
⑤	W6x9	72"
⑥	W6x9	72"
⑦	W6x9	72"
⑧	W6x9	72"
⑨	W6x9	72"
⑩	W6x9	72"
⑪	W6x9	72"
⑫	W6x15	87 1/8"
⑬	W6x15	87 1/8"
⑭	W6x15	87 1/8"

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)



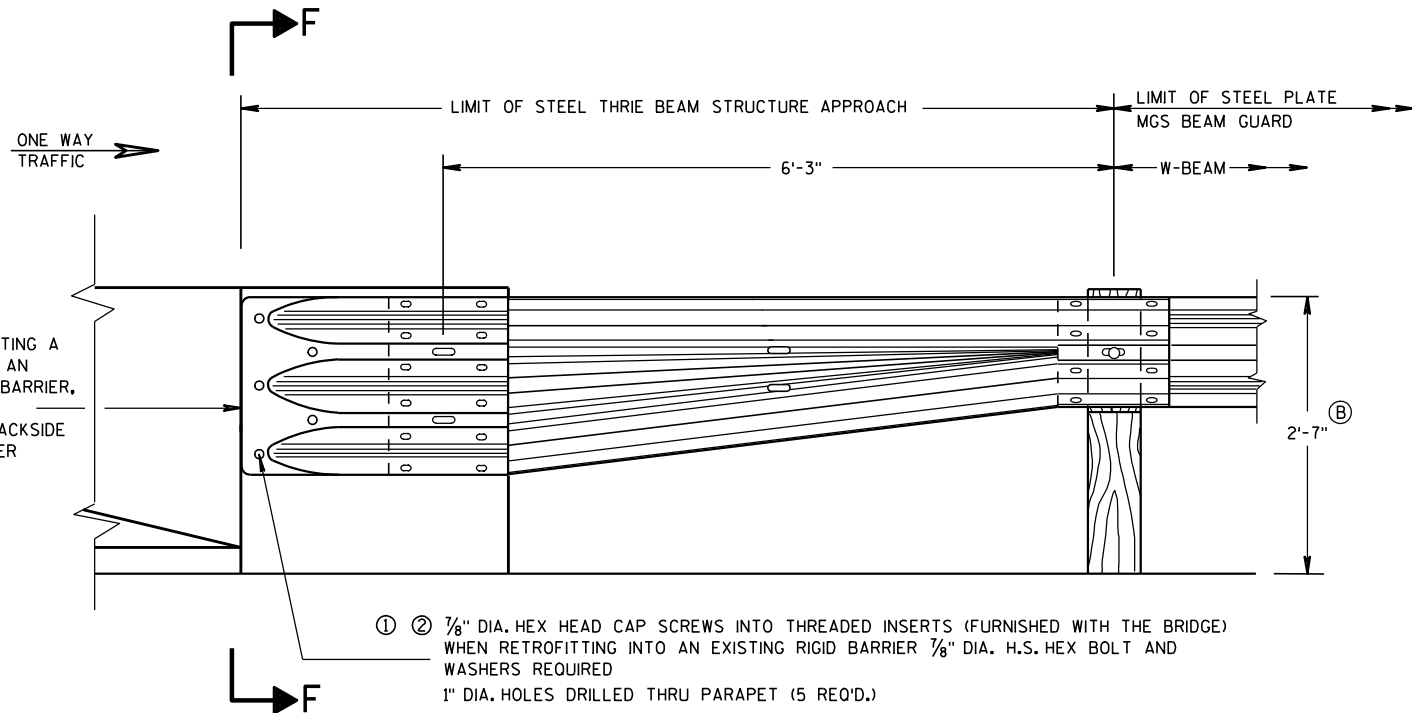
FRONT VIEW
THRIE BEAM CONNECTION TO BRIDGE
PARAPET WITH SQUARE ENDS



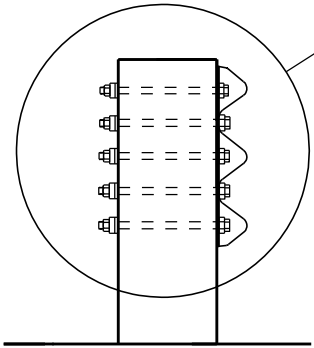
SECTION E-E

GENERAL NOTES

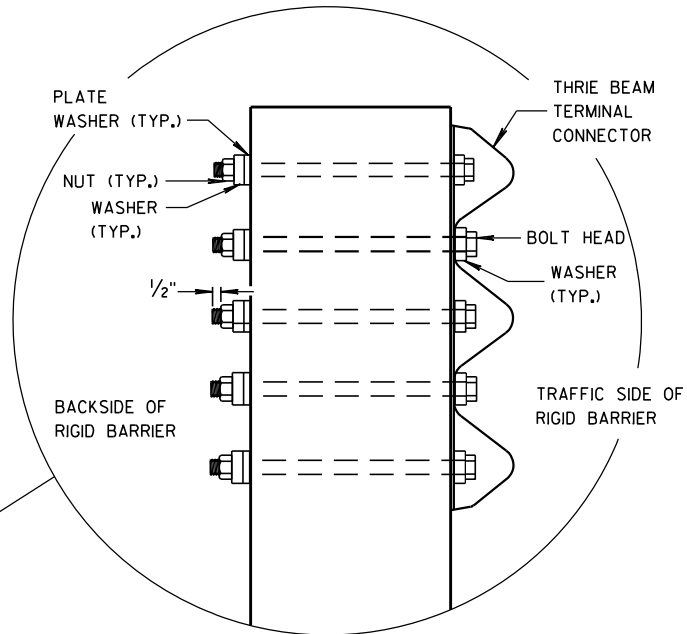
- THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.
- ① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.
 - ② BOLTS MAY BE A325 BOLTS OR A449 BOLTS, BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.
 - ③ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".
- ⓑ TOLERANCE FOR TOP OF BEAM IS ± 1".



FRONT VIEW
W BEAM TRANSITION AND CONNECTION TO
BRIDGE PARAPETS WITH SQUARE ENDS
(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)



SECTION F-F

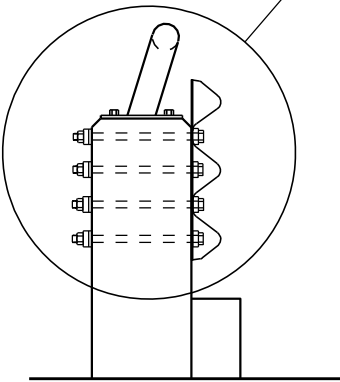
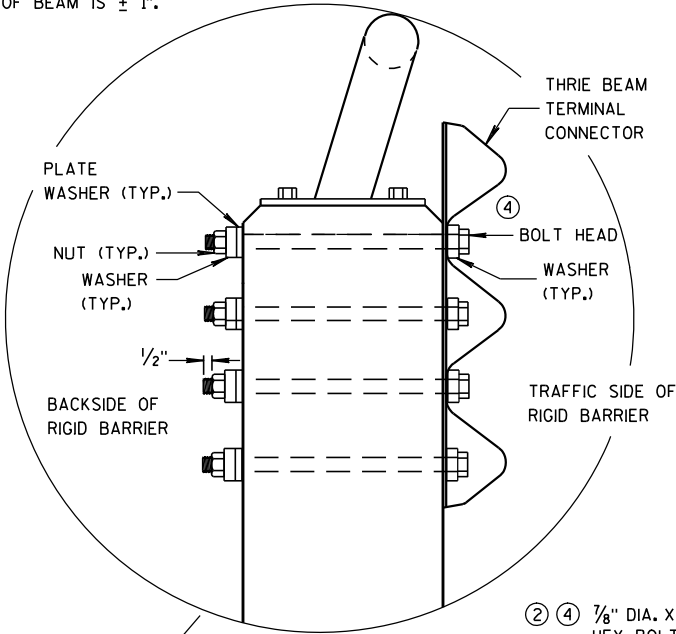


MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)		
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION		
APPROVED 8/31/2012 DATE	/S/ Jerry H. Zapp ROADWAY STANDARDS (58) ENGINEER	ENT
FHWA		

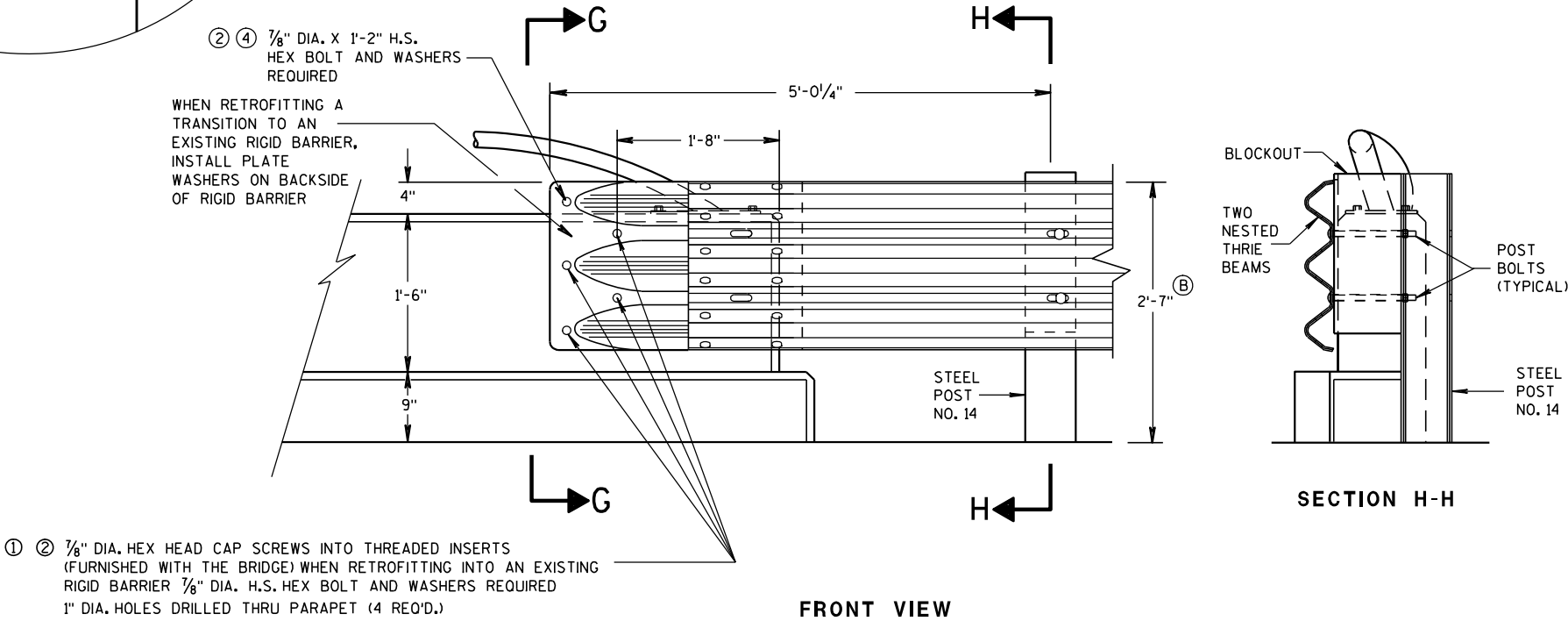
GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSITION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

- ① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.
- ② BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X $\frac{5}{8}$ " THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.
- ③ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 $\frac{1}{2}$ ". BLOCK IS INCIDENTAL TO THE CONTRACT.
- ④ BOLT, NUT AND WASHERS NOT REQUIRED FOR THIS LOCATION WHEN RETROFITTING AN EXISTING PAPAPET AND THE HOLE IS EITHER ABOVE PARAPET OR WITHIN 4 INCHES OF THE EDGE OF PARAPET.
- Ⓑ TOLERANCE FOR TOP OF BEAM IS $\pm 1"$.

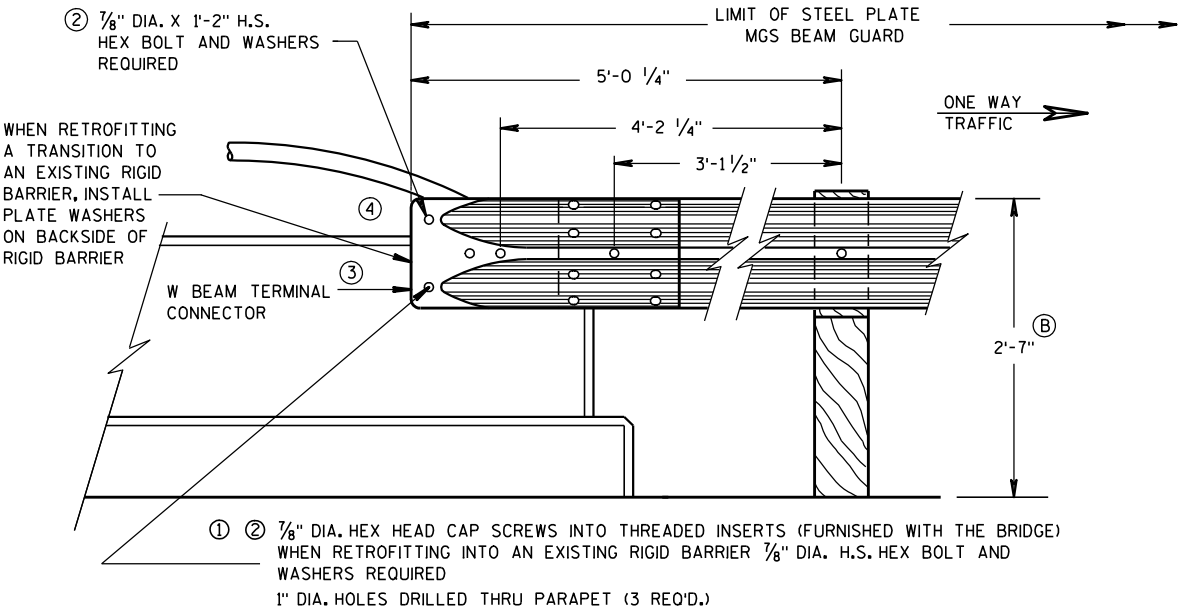


SECTION G-G



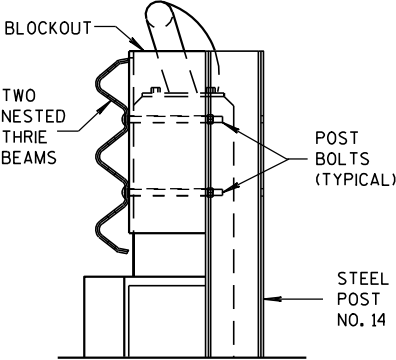
FRONT VIEW

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET
(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)



SECTION H-H

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8-31-2012 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS (59) ENT
FHWA ENGINEER

ONE WAY
TRAFFIC →

- ① ② 7/8" DIA. HEX HEAD CAP SCREWS INTO
THREADED INSERTS (FURNISHED WITH THE BRIDGE)
WHEN RETROFITTING INTO AN EXISTING RIGID BARRIER
7/8" DIA. H.S. HEX BOLT AND WASHERS REQUIRED
1" DIA. HOLES DRILLED THRU PARAPET
(4 REQ'D.)

W-BEAM
TERMINAL
CONNECTOR

WHEN RETROFITTING A TRANSITION
TO AN EXISTING RIGID BARRIER,
INSTALL PLATE WASHERS ON
BACKSIDE OF RIGID BARRIER.

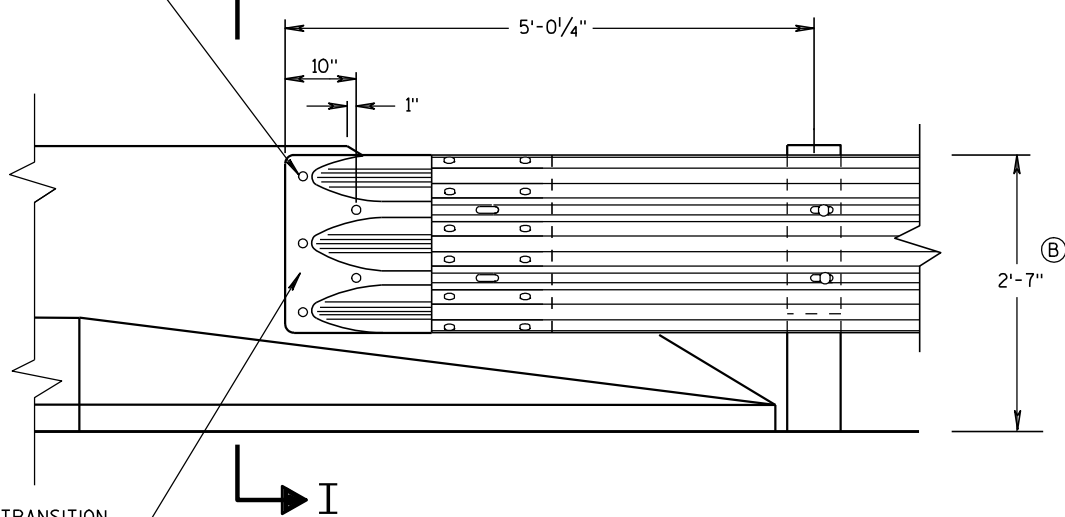
FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

- ① ② 7/8" DIA. HEX HEAD CAP SCREWS INTO
THREADED INSERTS (FURNISHED WITH THE BRIDGE)
WHEN RETROFITTING INTO AN EXISTING RIGID BARRIER
7/8" DIA. H.S. HEX BOLT AND WASHERS REQUIRED
1" DIA. HOLES DRILLED THRU PARAPET
(5 REQ'D.)

I



WHEN RETROFITTING A TRANSITION
TO AN EXISTING RIGID BARRIER,
INSTALL PLATE WASHERS ON
BACKSIDE OF RIGID BARRIER.

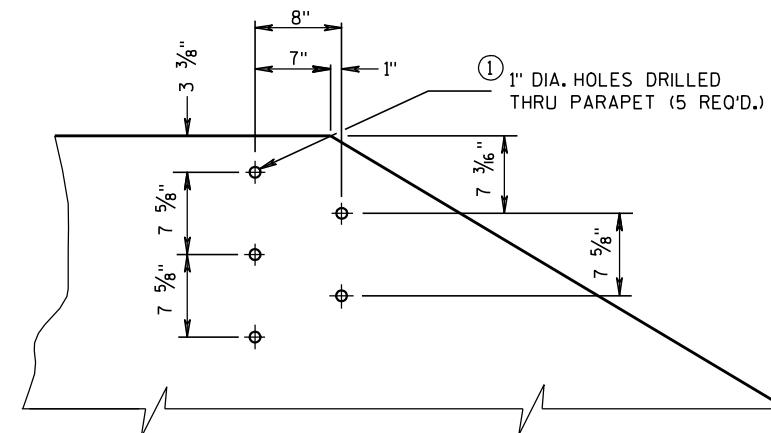
FRONT VIEW

THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

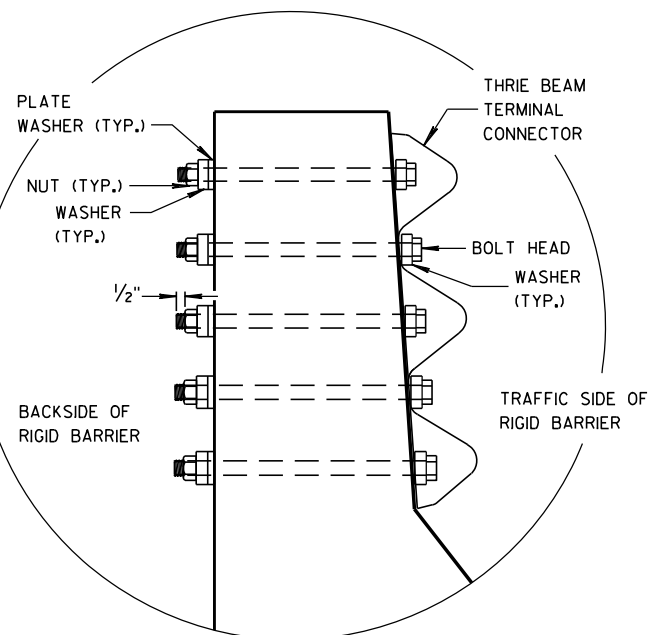
SECTION I-I

GENERAL NOTES

- ① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.
- ② BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.
- ③ TOLERANCE FOR TOP OF BEAM IS $\pm 1"$.



DRILL HOLE LOCATION AND PATTERN FOR THRIE BEAM CONNECTION



MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/31/2012

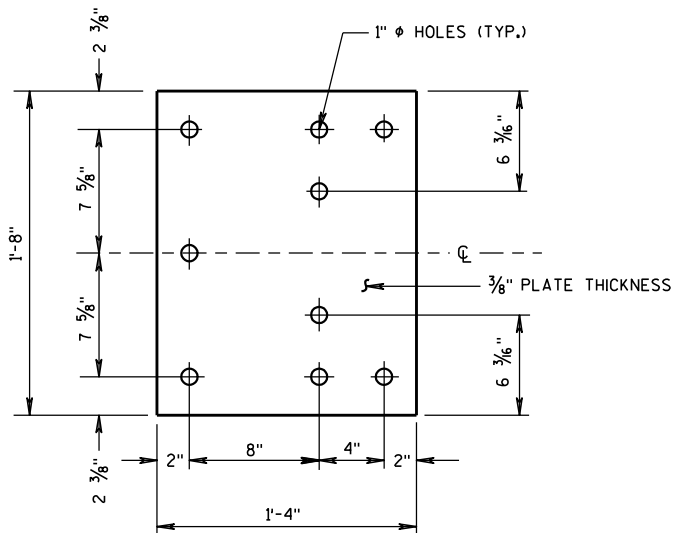
DATE

FHWA

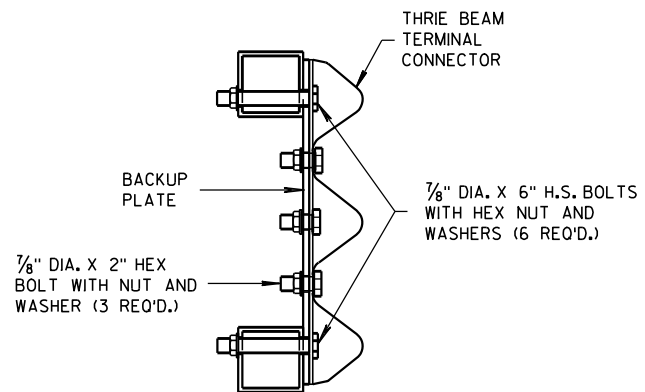
/S/ Jerry H. Zapp

ROADWAY STANDARDS 60

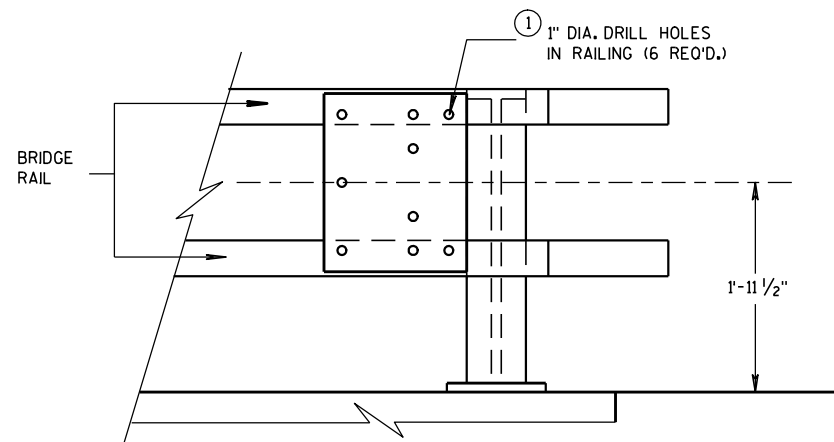
ENGINEER



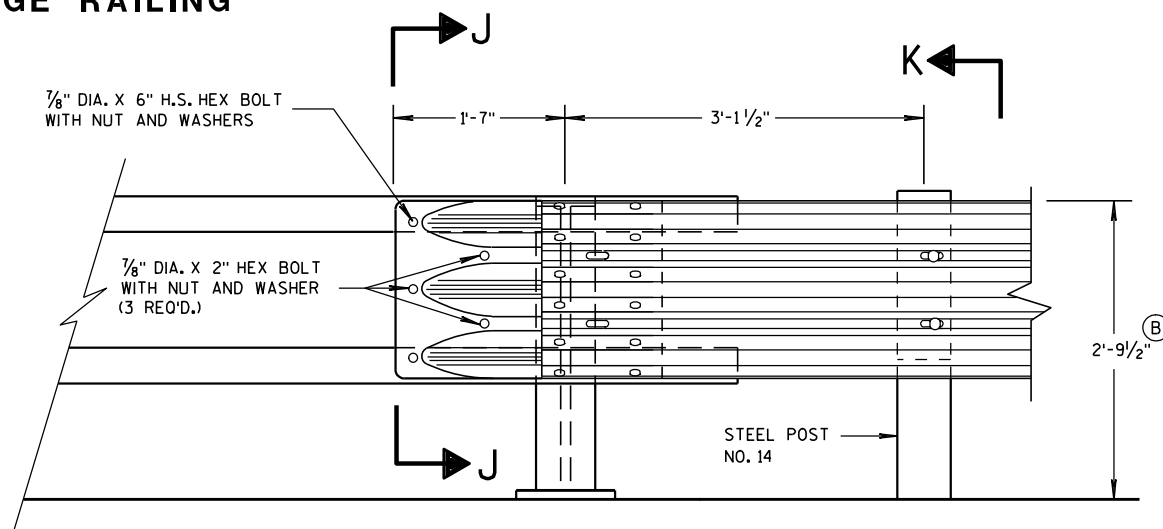
BACK-UP PLATE DETAIL



SECTION J-J

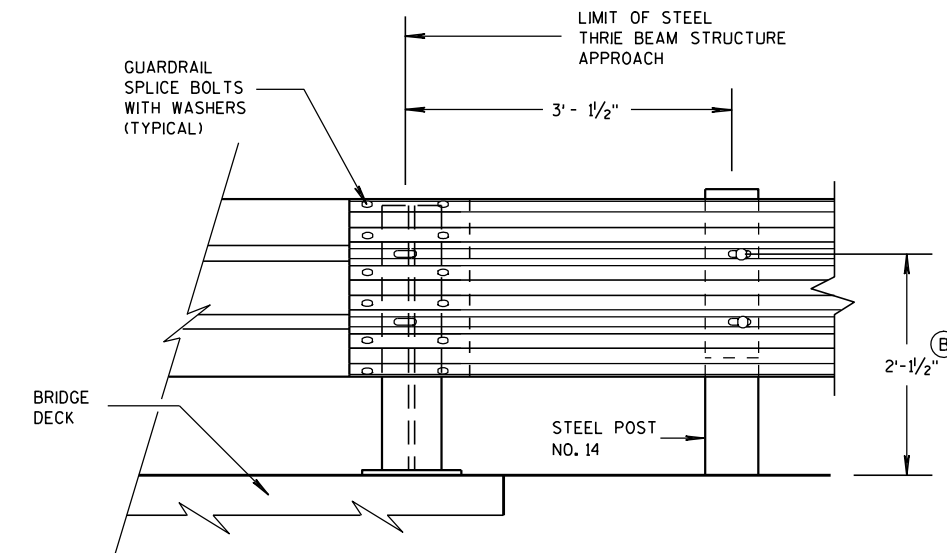


BACK-UP PLATE MOUNTING
ONTO BRIDGE RAILING

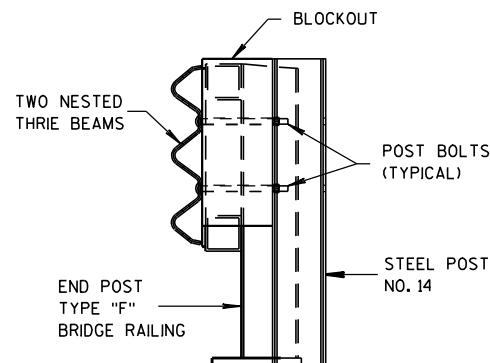


FRONT VIEW

THRIE BEAM CONNECTION TO
TUBULAR RAILING TYPE "F"



FRONT VIEW
THRIE BEAM CONNECTION TO
STEEL RAILING TYPE "W"



SECTION K-K

GENERAL NOTES

- ① DRILLING HOLES THROUGH THE PAPER, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.
- ② TOLERANCE FOR TOP OF BEAM IS $\pm 1"$.

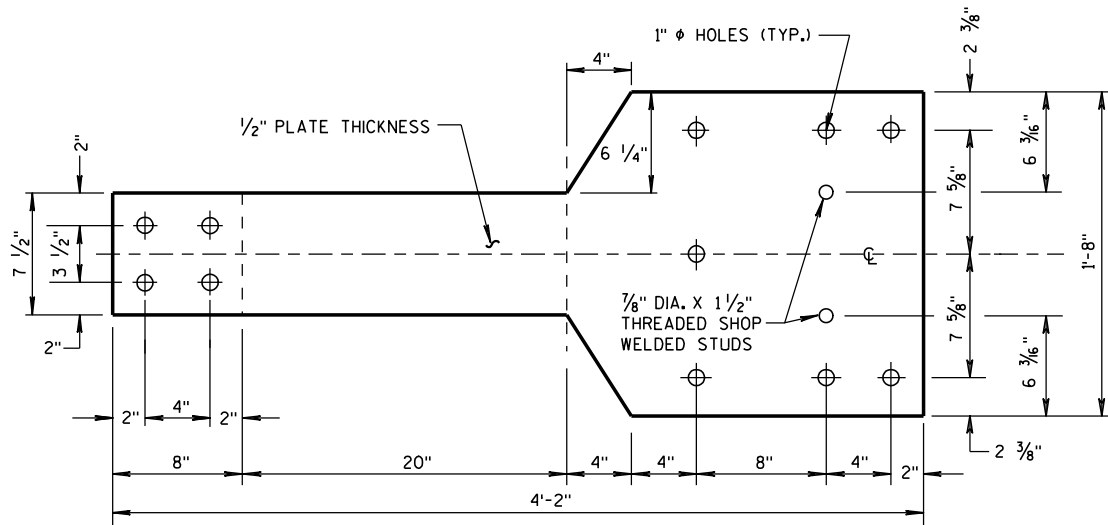
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

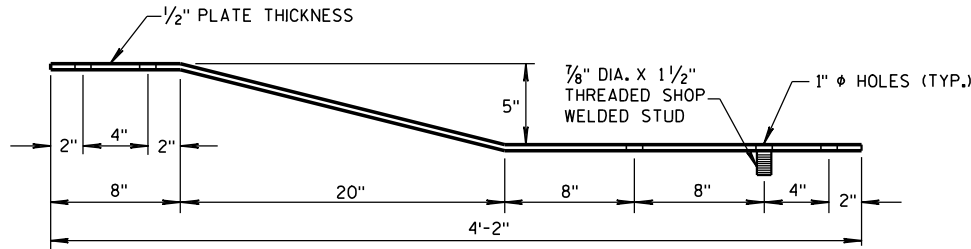
APPROVED
8/31/2012 DATE /S/ Jerry H. Zeng
ROADWAY STANDARDS [61] ENGINEER
FHWA

GENERAL NOTES

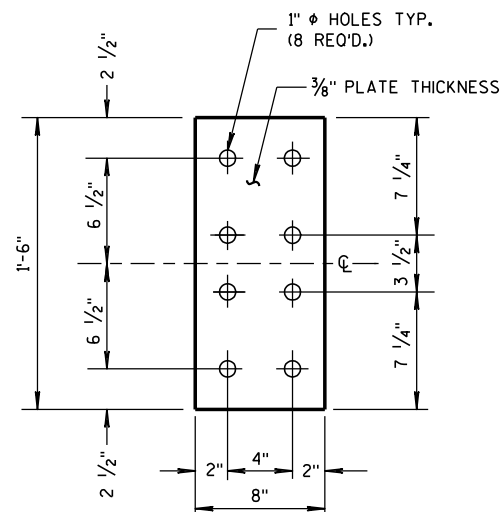
(B) TOLERANCE FOR TOP OF W-BEAM RAIL IS $\pm 1"$.



FRONT VIEW

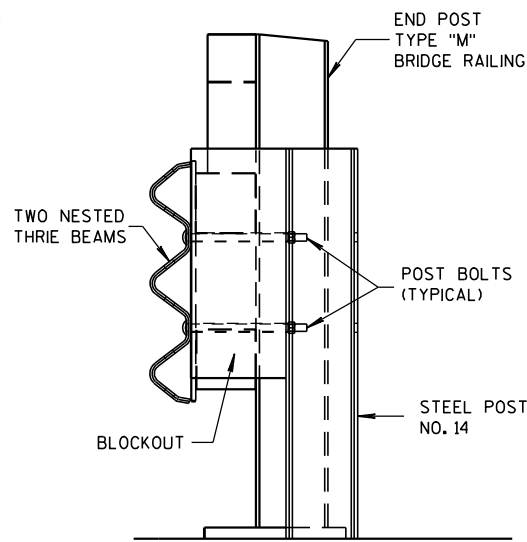


PLAN VIEW
BACK-UP PLATE DETAIL, TYPE "M"

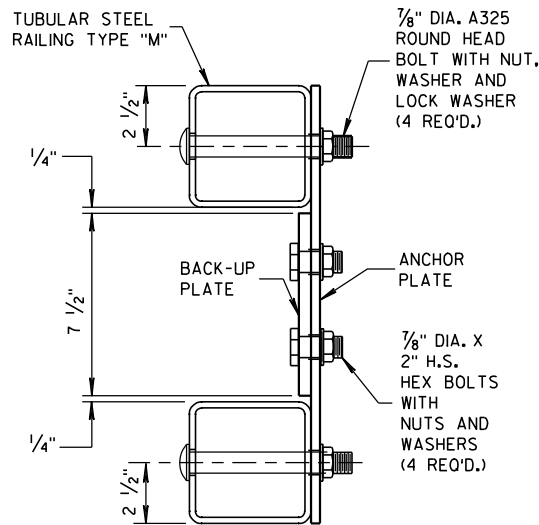


FRONT VIEW

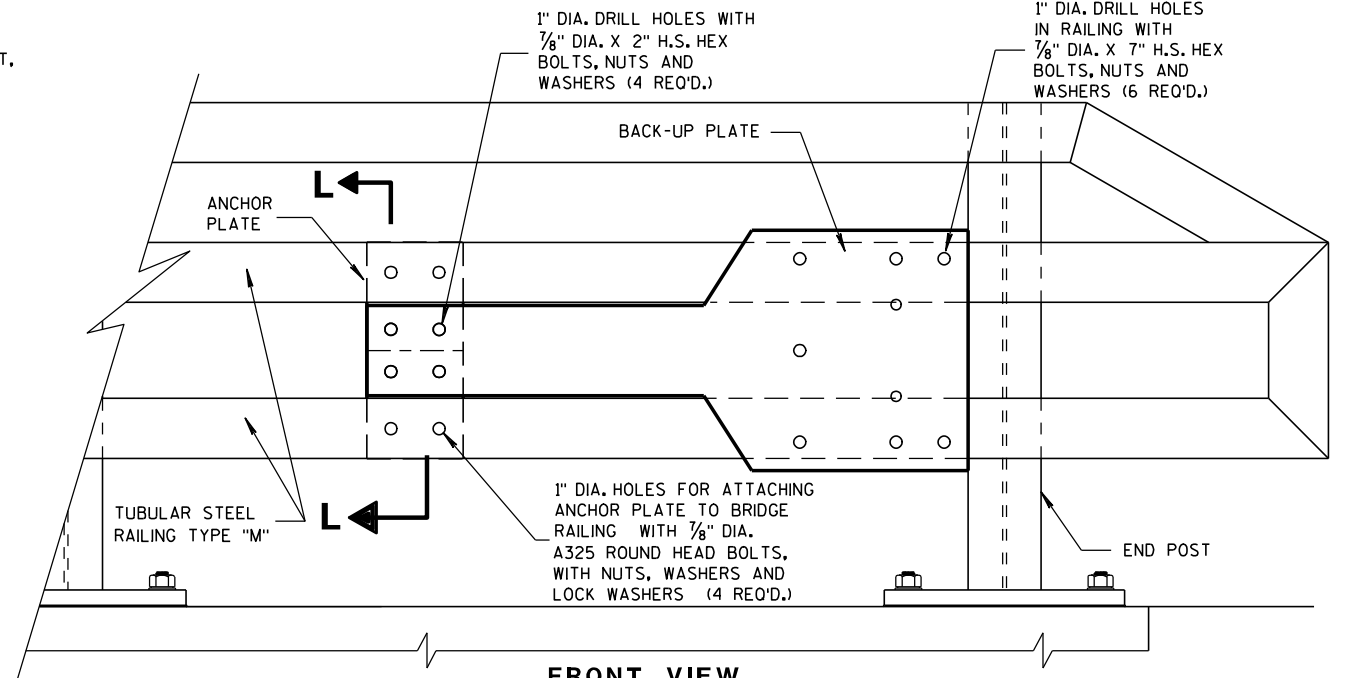
ANCHOR
PLATE DETAIL,
TYPE "M"



SECTION M-M

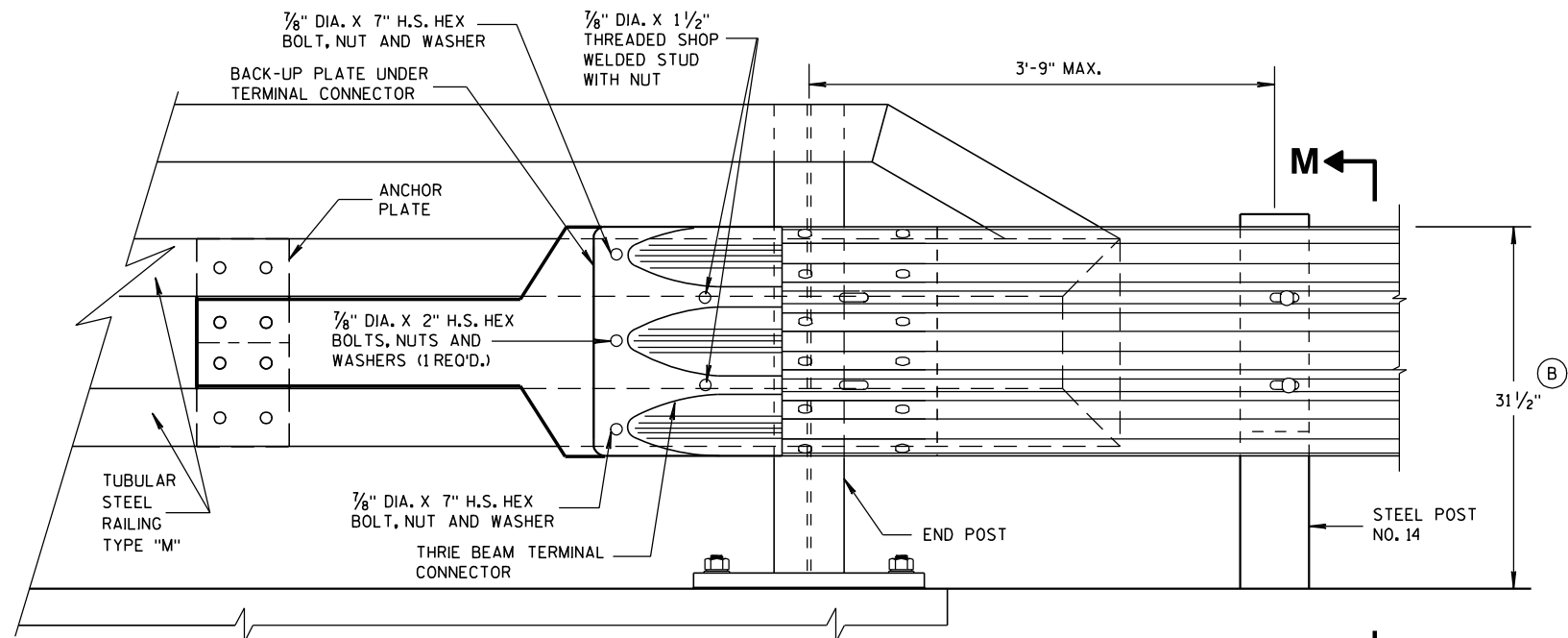


SECTION L-L

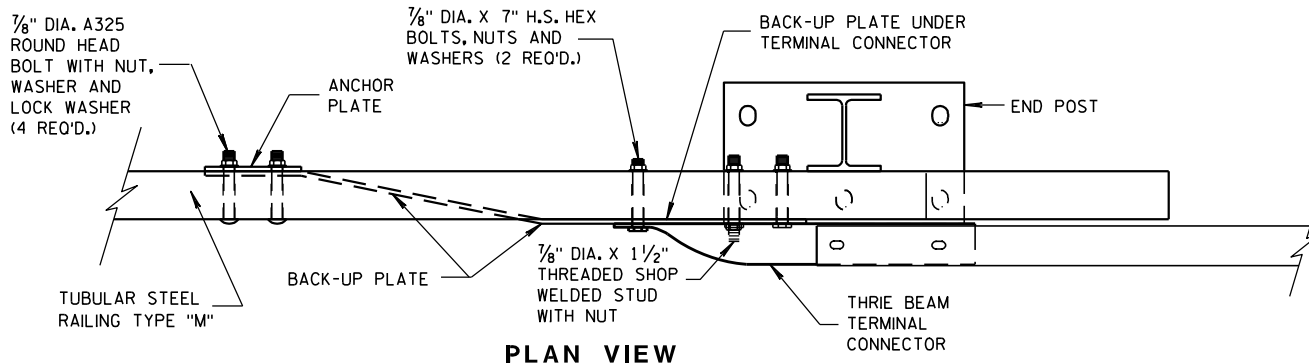


FRONT VIEW

ANCHOR AND BACK-UP PLATE MOUNTING TO BRIDGE RAILING, TYPE "M"



FRONT VIEW



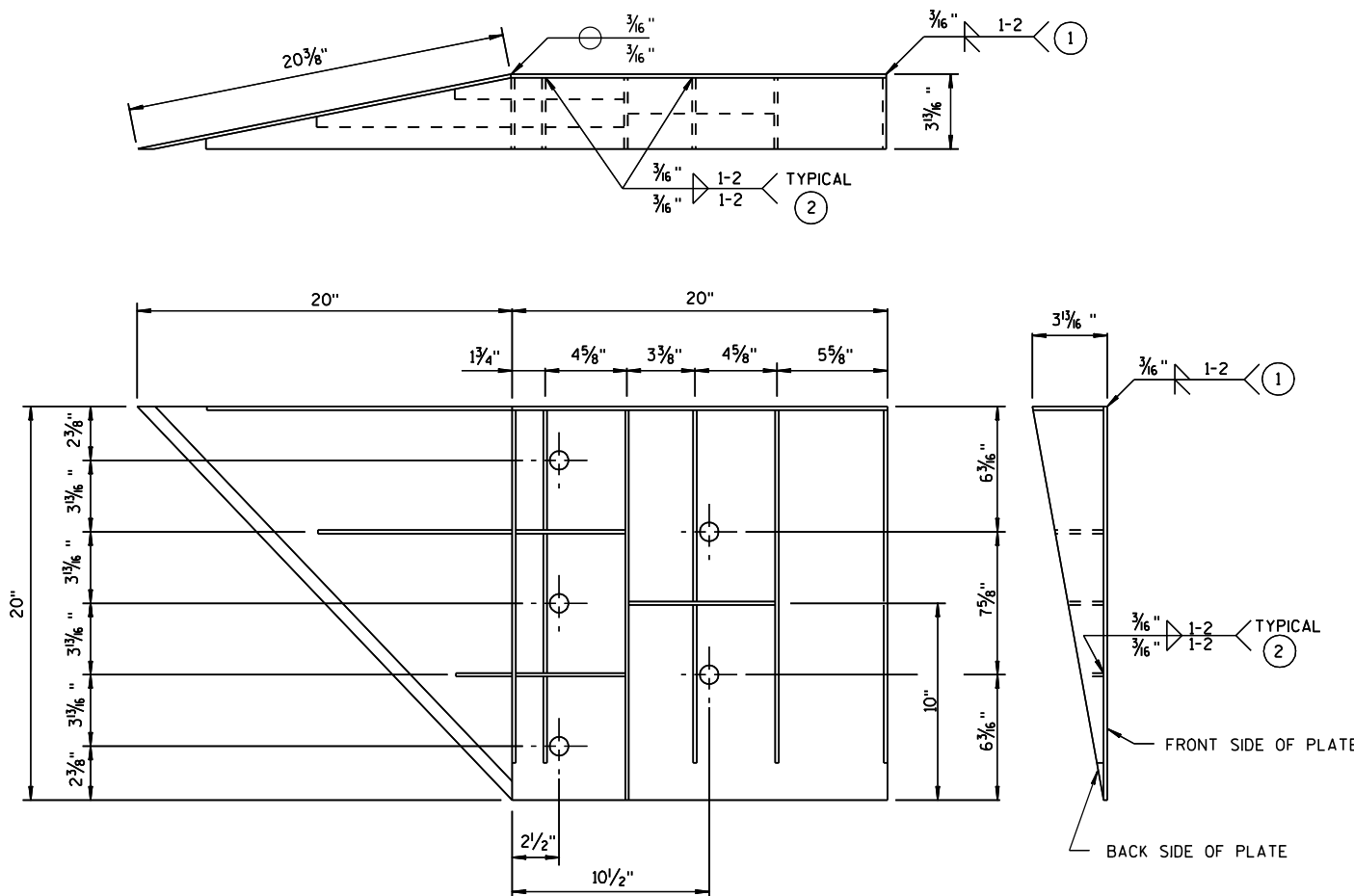
PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8-31-2012
DATE
/S/ Jerry H. Zoon
ROADWAY STANDARDS 62
ENGINEER
ENT

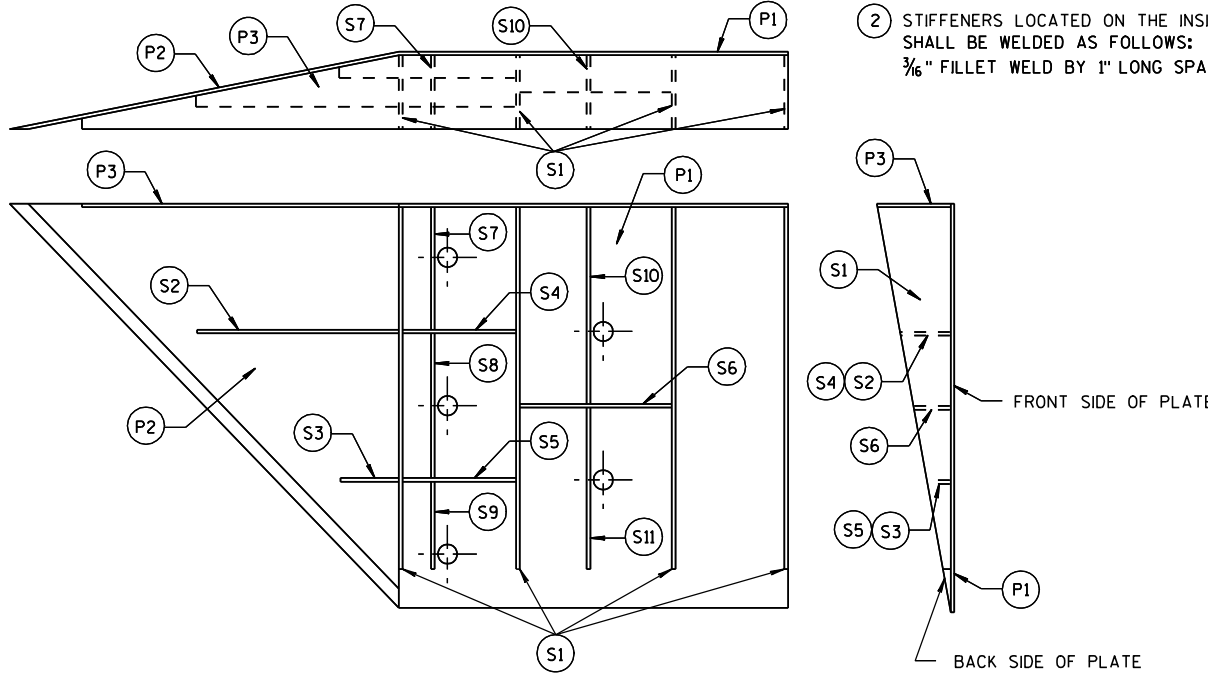


WELDING INSTRUCTION
(VIEWED FROM BACK SIDE OF PLATE)

SINGLE SLOPE CONNECTION PLATE

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)				
PLATE	QUANTITY	SHAPE	SIZE (A x B x C x D)	THICKNESS
P1	1		20" x 20"	3/16"
P2	1		20" x 20" x 28 5/16"	3/16"
P3	1		39" x 3 5/8" x 20" x 19 5/16"	3/16"
S1	4		18 7/16" x 3 5/8" x 18 3/4"	1/4"
S2	1		10 1/4" x 2 7/16" x 10 3/8" x 1/2"	1/4"
S3	1		3" x 1 1/16" x 3 1/8" x 1/2"	1/4"
S4	1		6 1/8" x 2 1/16"	1/4"
S5	1		6 1/8" x 1 1/16"	1/4"
S6	1		7 3/4" x 1 3/4"	1/4"
S7	1		2 9/16" x 6" x 3 5/8" x 5 7/8"	1/4"
S8	1		1 7/32" x 7 1/2" x 2 1/2" x 7 3/8"	1/4"
S9	1		6 1/16" x 6 3/16" x 1 1/32"	1/4"
S10	1		1 7/8" x 9 7/8" x 3 5/8" x 9 1/16"	1/4"
S11	1		8 1/2" x 8 3/4" x 1 1/16"	1/4"

PLATE AND STIFFENER IDENTIFICATION
(VIEWED FROM BACK SIDE OF PLATE)



GENERAL NOTES

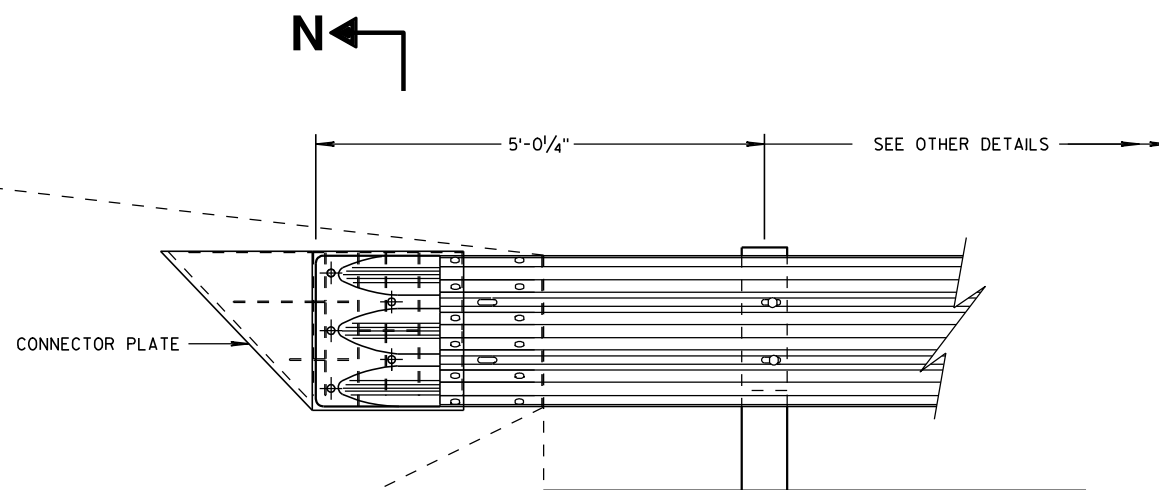
- COVER PLATE PANELS ARE 3/16" THICK.
- ALL STIFFENERS ARE 1/4" THICK.
- CONNECTOR PLATE SHALL BE FABRICATED FROM ASTM GRADE A36 STEEL AND GALVANIZED.
- FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.
- ALL HOLE DIAMETERS SHALL BE 1".
- FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

- 1 STIFFENERS LOCATED AT THE OUTSIDE EDGES OF THE COVER PLATES SHALL BE WELDED AS FOLLOWS:
SINGLE BEVEL GROOVE WELD ON EXTERNAL SIDES AND 3/16" FILLET WELD BY 1" LONG SPACED AT 2" ON INTERNAL SIDES.
- 2 STIFFENERS LOCATED ON THE INSIDE OF THE COVER PLATE SHALL BE WELDED AS FOLLOWS:
3/16" FILLET WELD BY 1" LONG SPACED AT 2".

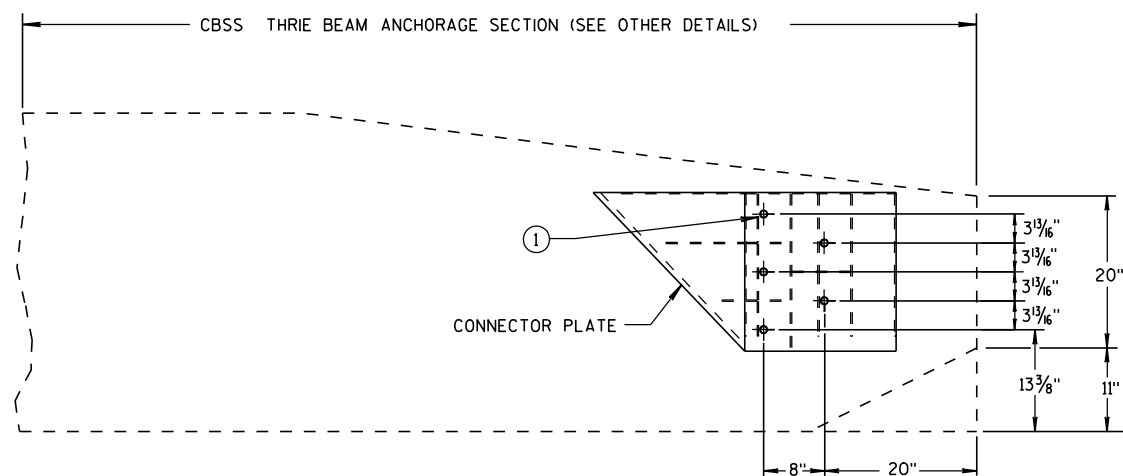
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/31/2012 DATE /S/ Jerry H. 7---
FHWA ROADWAY STANDARDS 63 ENGINEER WENT



THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER

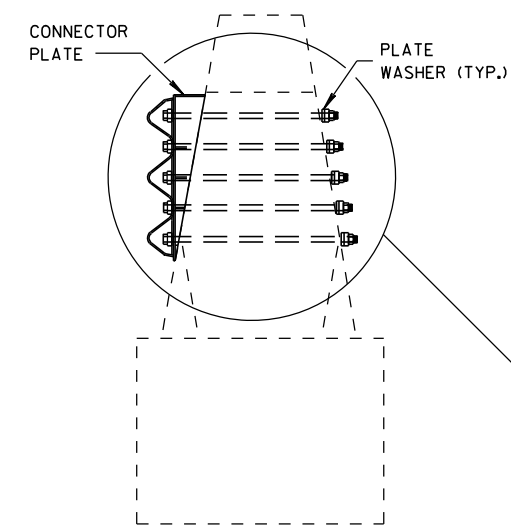


SINGLE SLOPE CONNECTION PLATE PLACEMENT

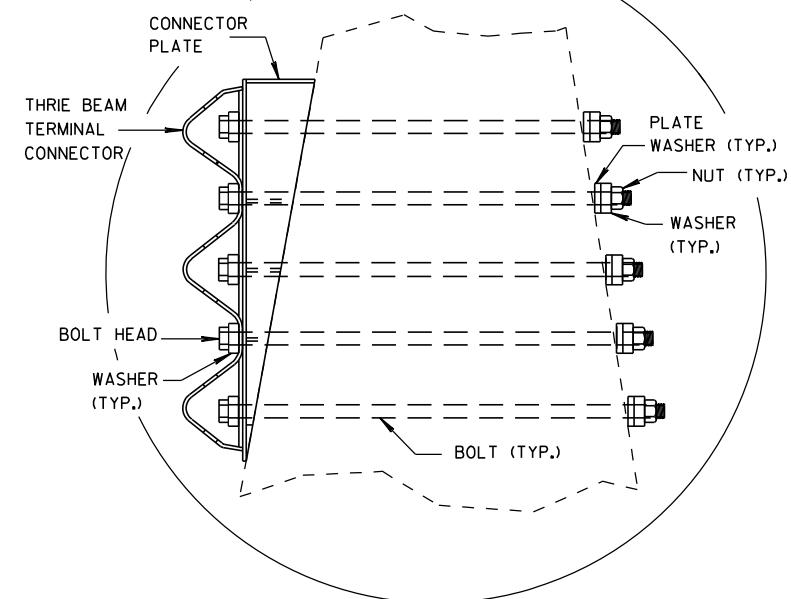
GENERAL NOTES

CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

- ① BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.



SECTION N-N



**MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/31/2012

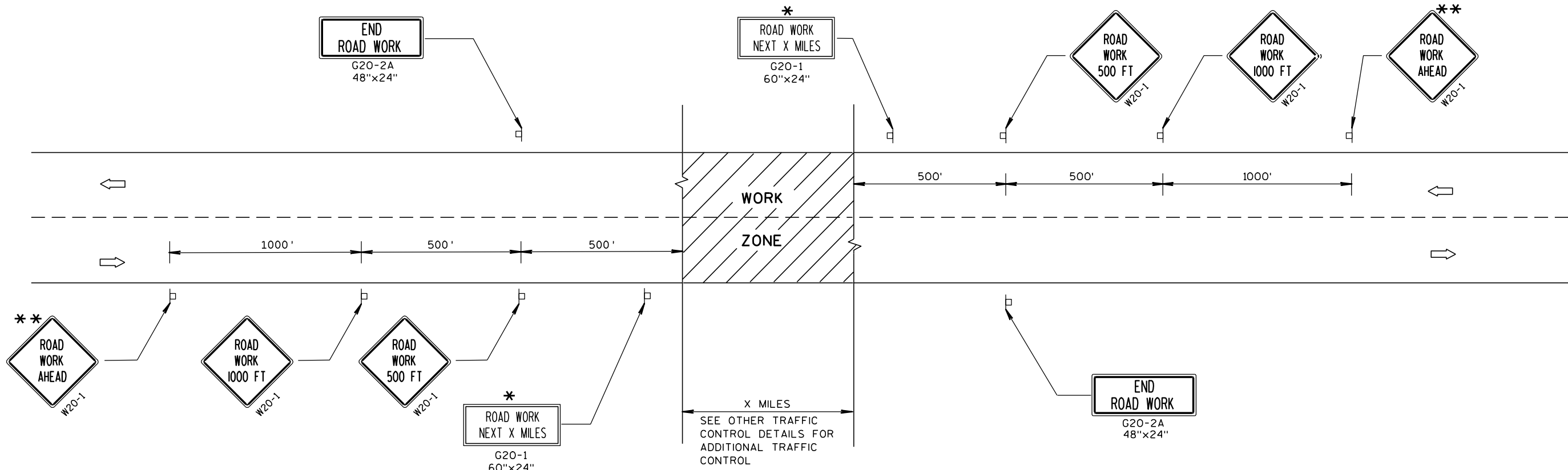
DATE

FHWA

/S/ Jerry H. [Signature]

ROADWAY STANDARDS (64 ENT

ENGINEER



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

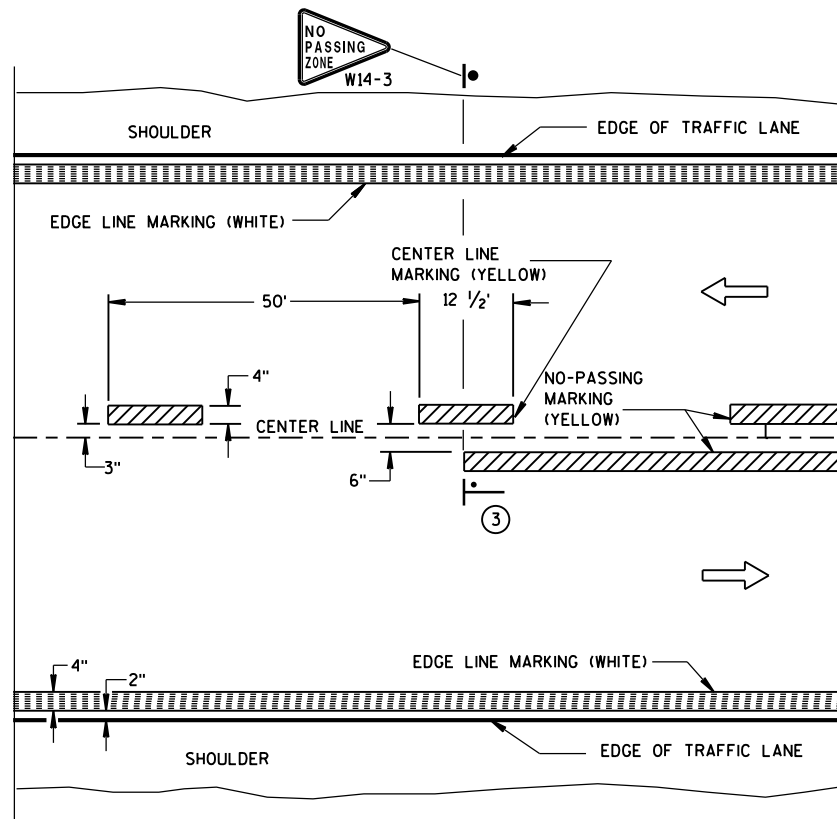
* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

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

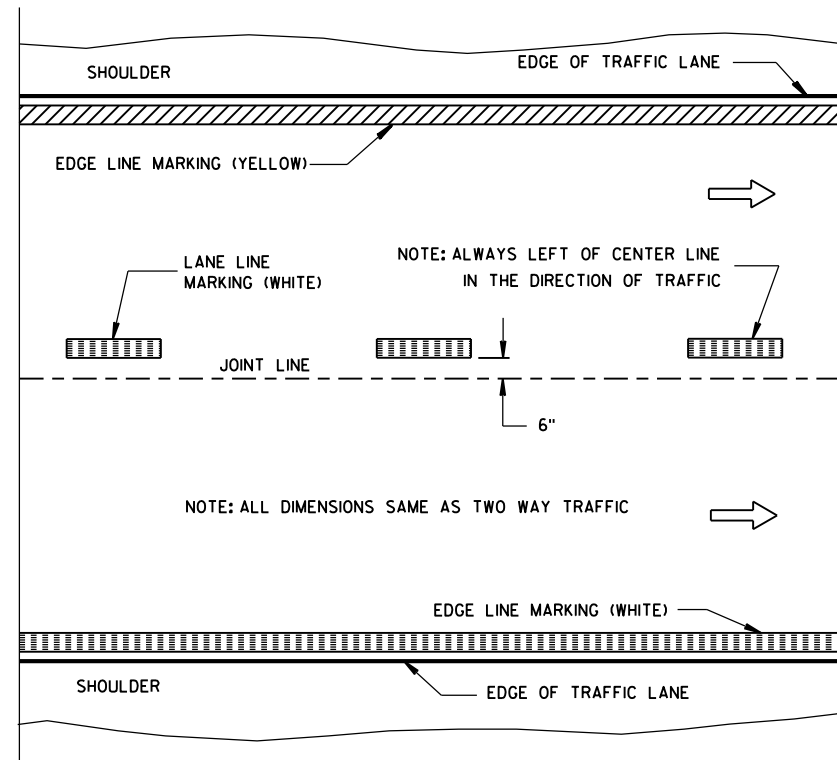
LEGEND

- POST MOUNTED SIGN
- DIRECTION OF TRAFFIC FLOW

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
APPROVED	5/23/00 /S/ Chester J. Neer		
DATE	CHIEF SIGNS AND MARKING		
FHWA			

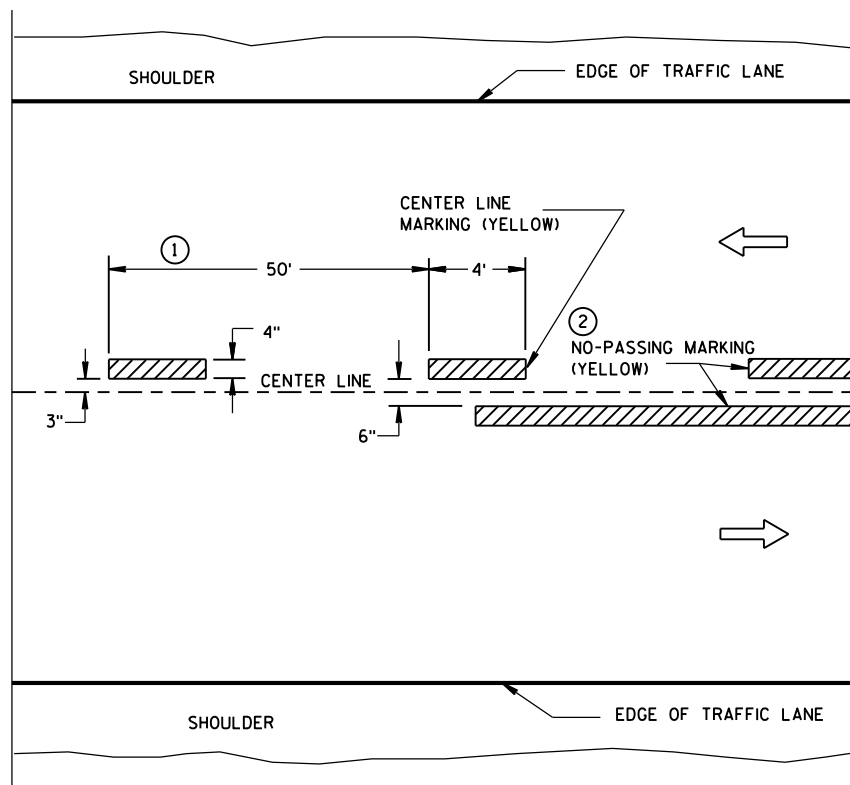


TWO WAY TRAFFIC

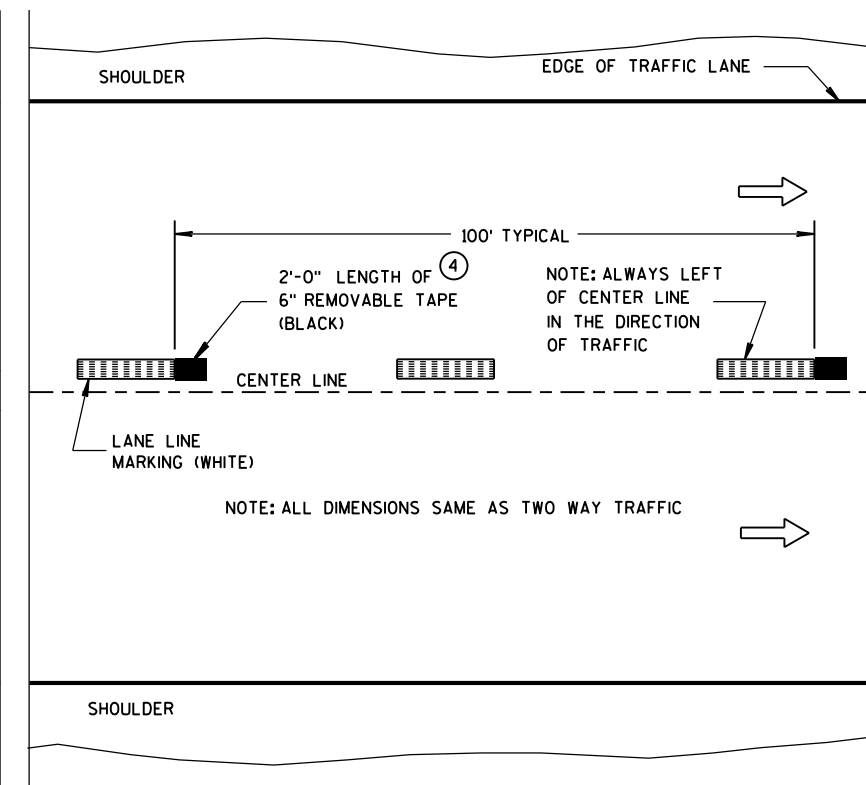


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

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

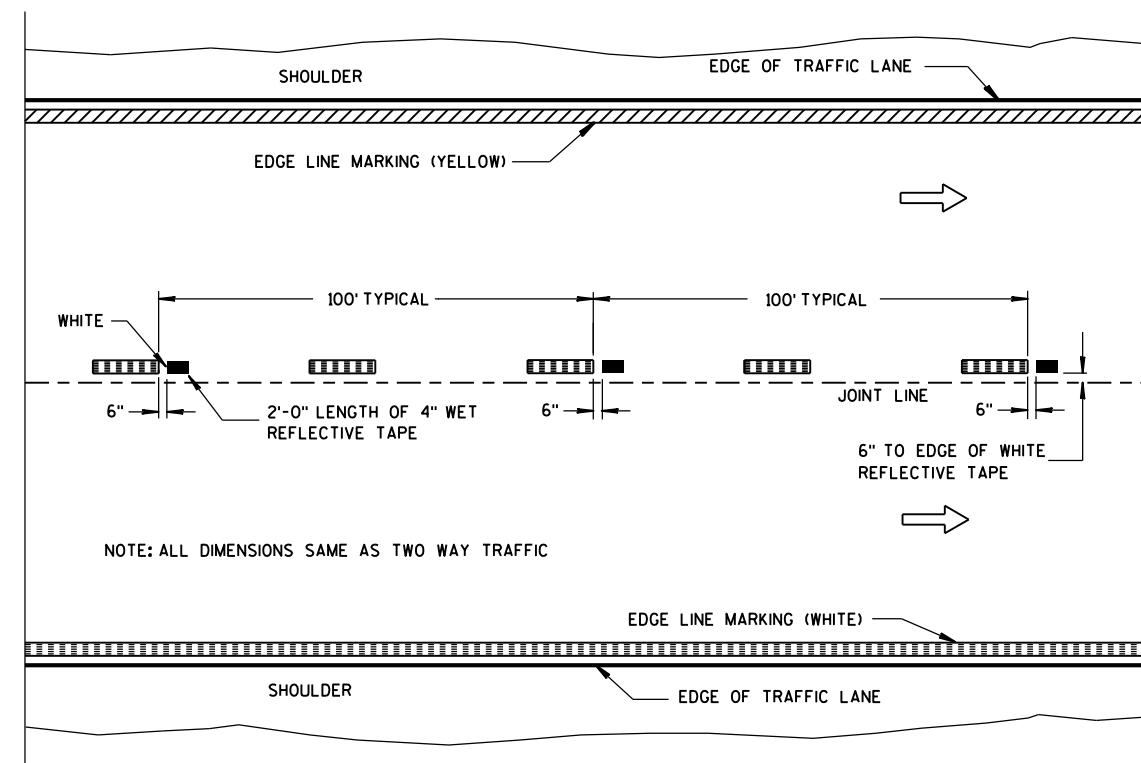
GENERAL NOTES

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

- ① HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
- ② NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
- ③ NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
- ④ CONCRETE ONLY.

NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL



WET REFLECTIVE TAPE SUPPLEMENT TO
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE

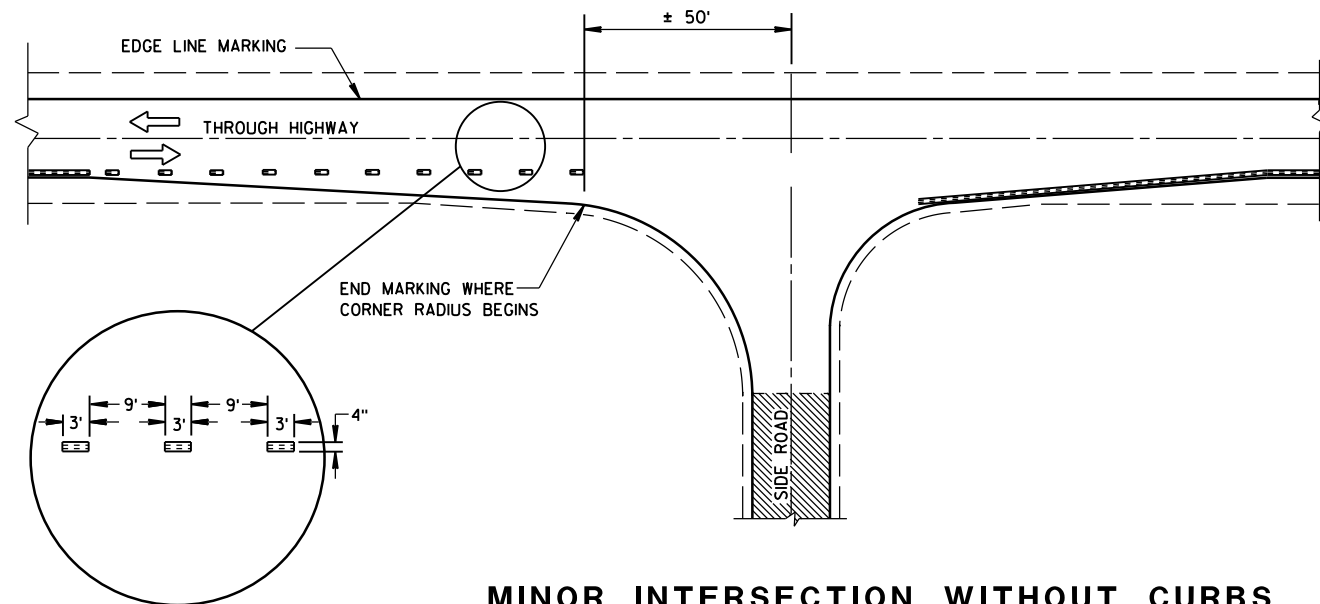
LEGEND

- "T" MARKING
- POST MOUNTED SIGN

PAVEMENT MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

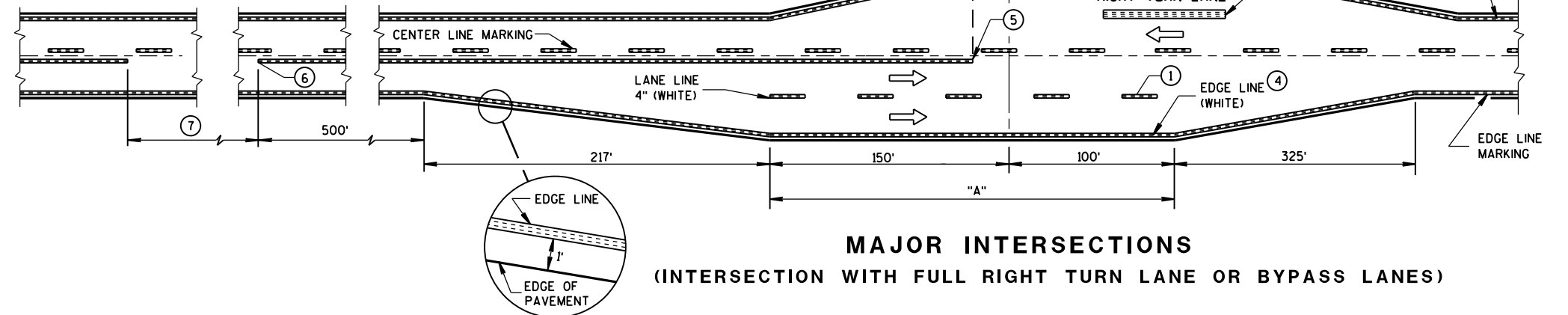
APPROVED
10-1-2012 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINE 66 :SIGN
FHWA



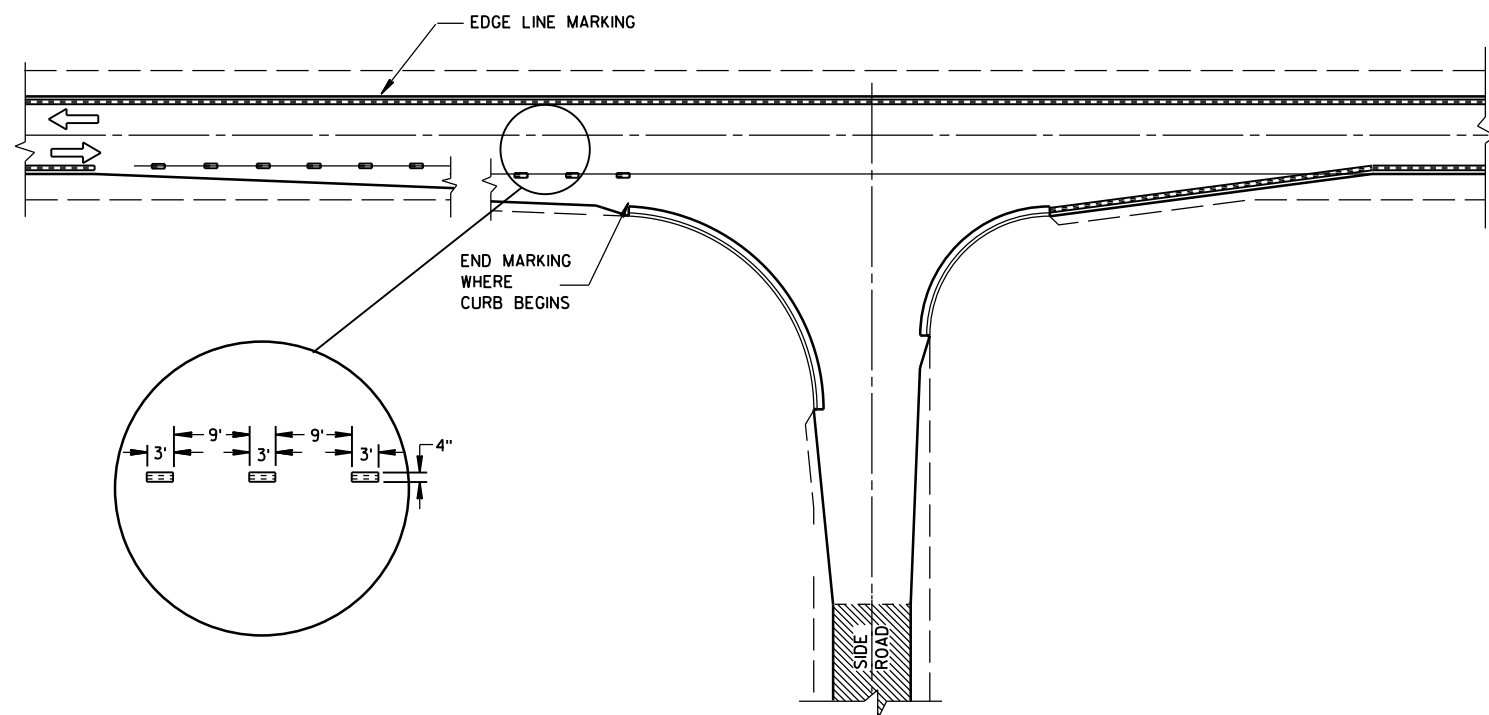
MINOR INTERSECTION WITHOUT CURBS

⑦

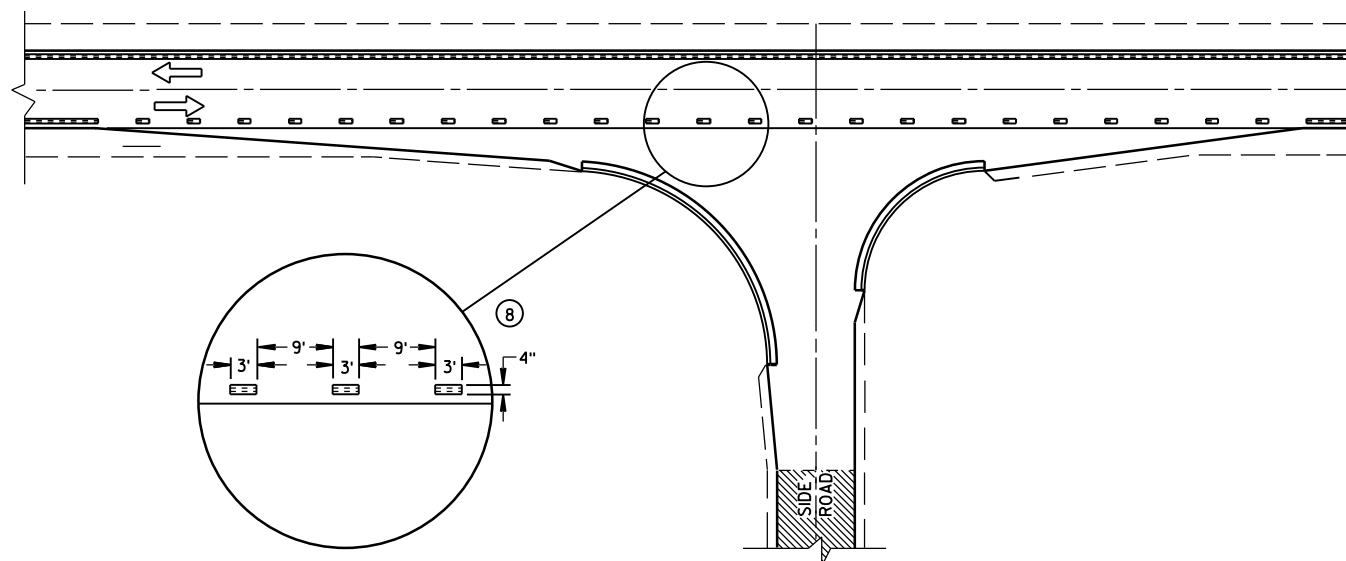
POSTED SPEED (MPH)	MINIMUM DISTANCE BETWEEN ZONES (FEET)
25 - 30	528
35 - 40	528
45 - 50	686
55	792



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



MINOR INTERSECTION WITH CURBS
(TYPICAL MARKING)



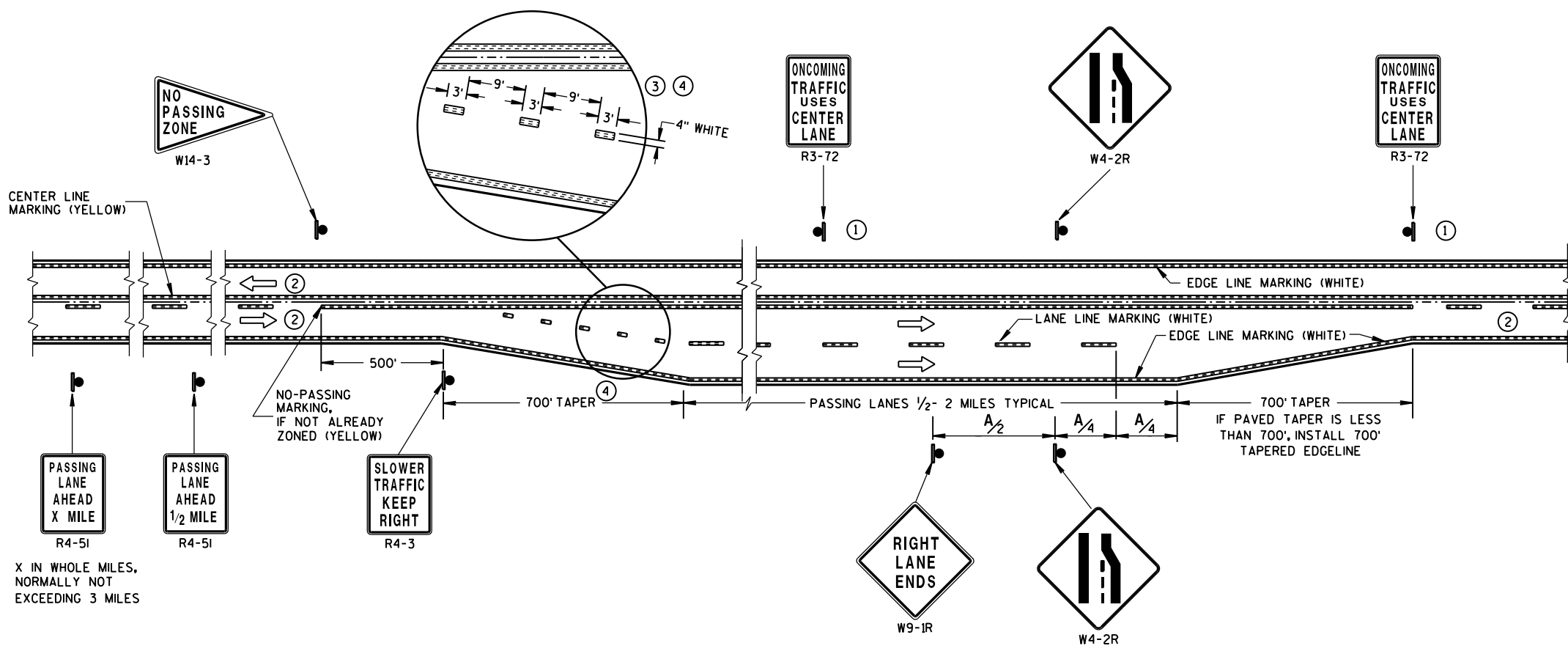
MINOR INTERSECTION WITH CURBS
③ (FOR SPECIAL CONDITIONS AS SPECIFIED)

GENERAL NOTES

- EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.
- ① WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
 - ② WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
 - ③ ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.
 - ④ THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.
 - ⑤ BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.
 - ⑥ BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
 - ⑦ IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.
 - ⑧ 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
- ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL

PAVEMENT MARKING
(INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



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

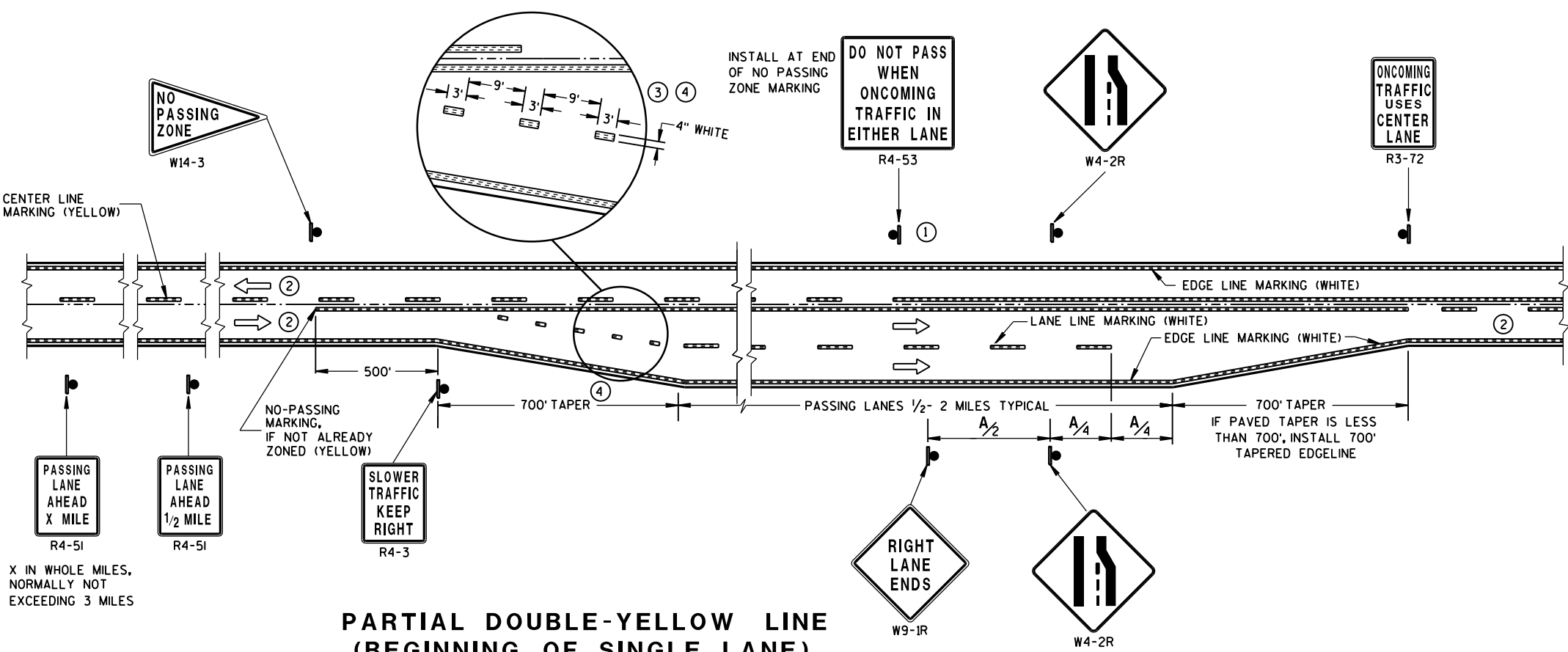
GENERAL NOTES

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

ARROW SYMBOL (➡) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

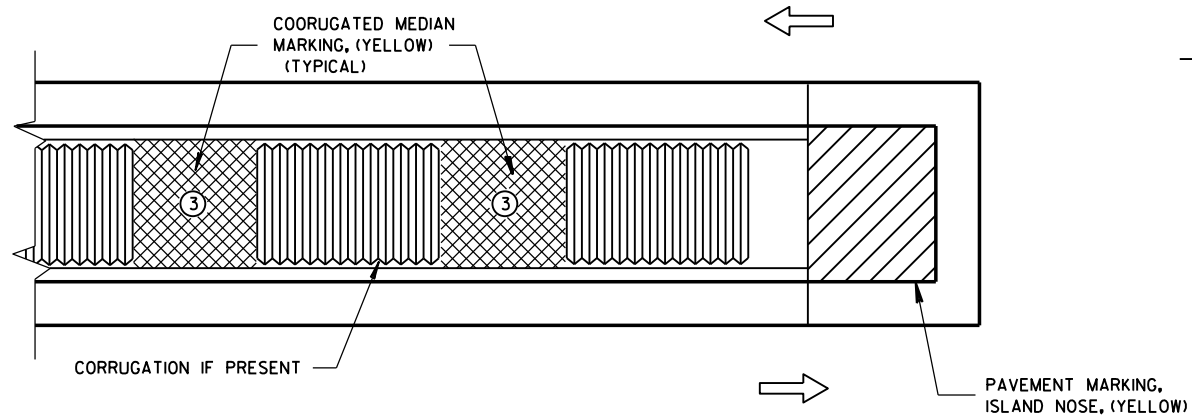
POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	750
50	850
55	950



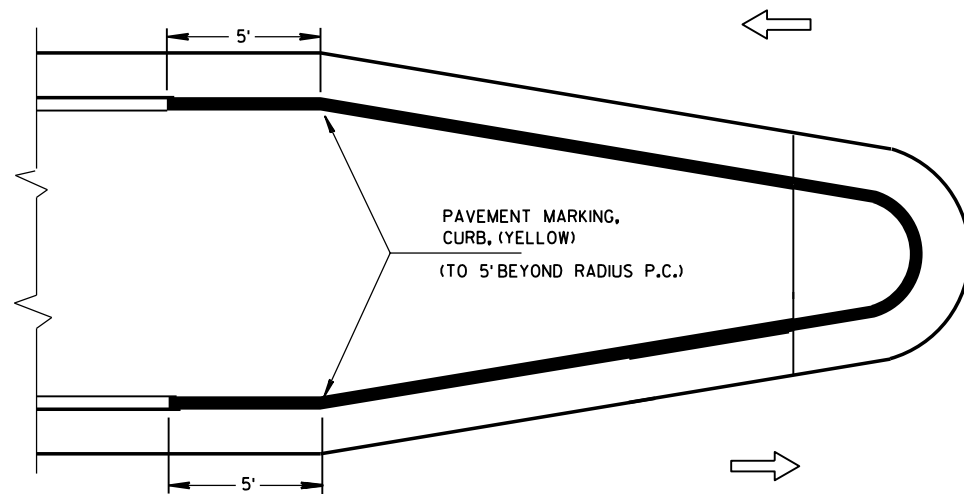
**PARTIAL DOUBLE-YELLOW LINE
(BEGINNING OF SINGLE LANE)**

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

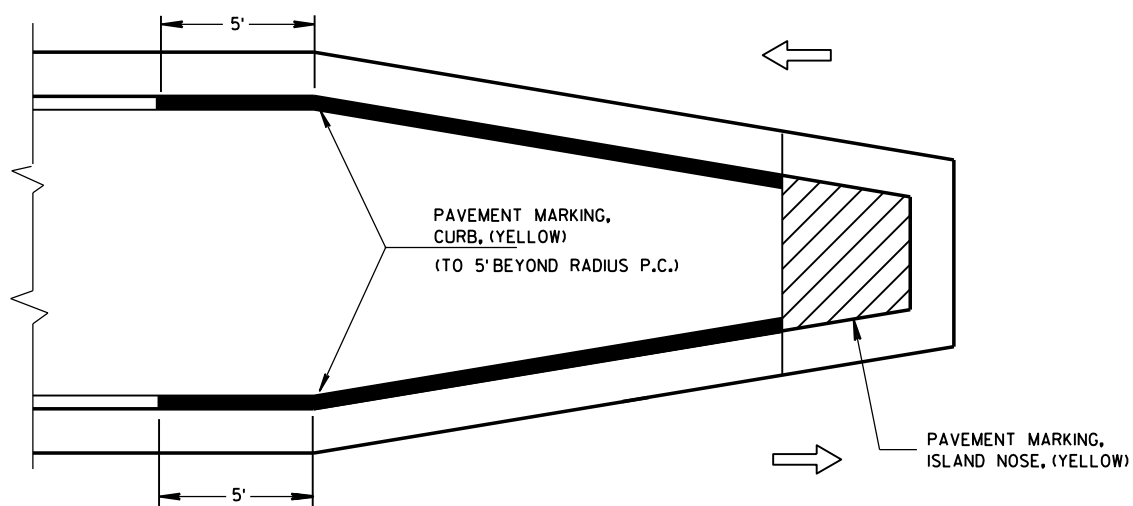
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

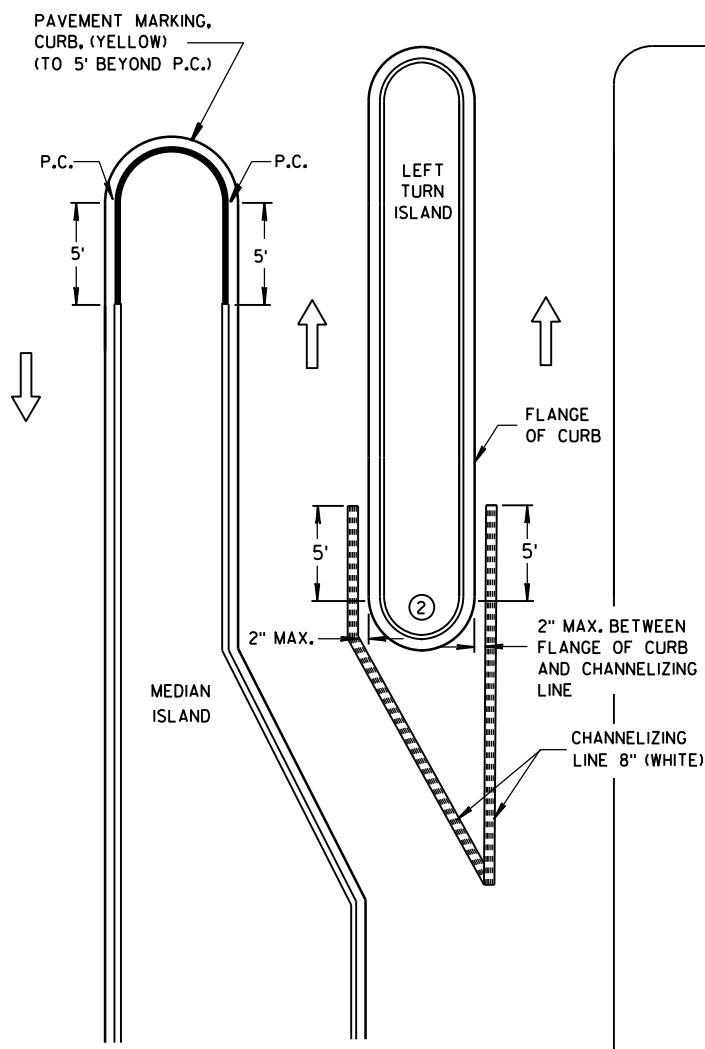


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

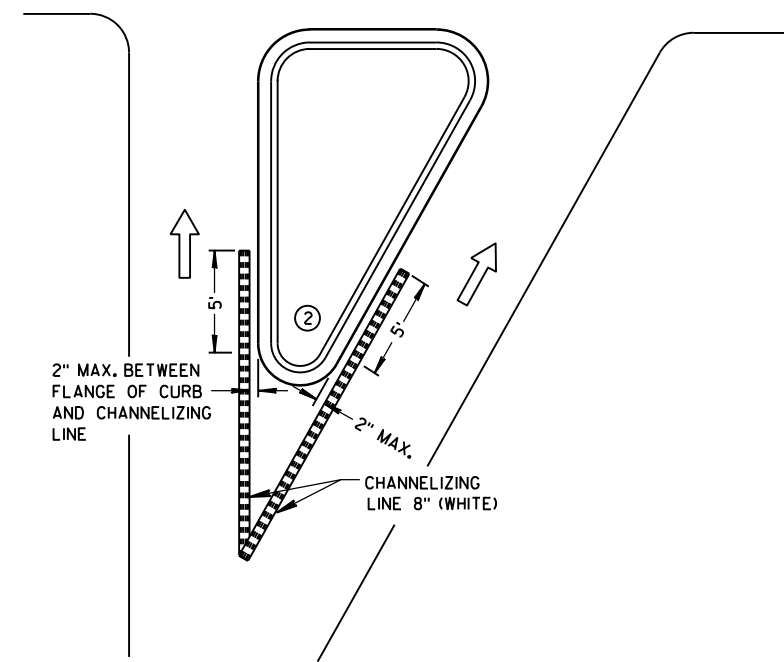
TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS



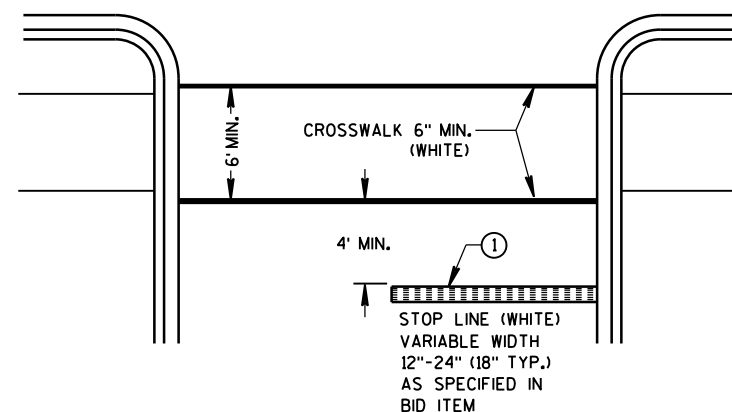
LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

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



RIGHT TURN ISLAND



STOP LINE AND CROSSWALK

LEGEND

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

PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

TWO-LANE ROADWAY

SYMBOLS



WORK AREA



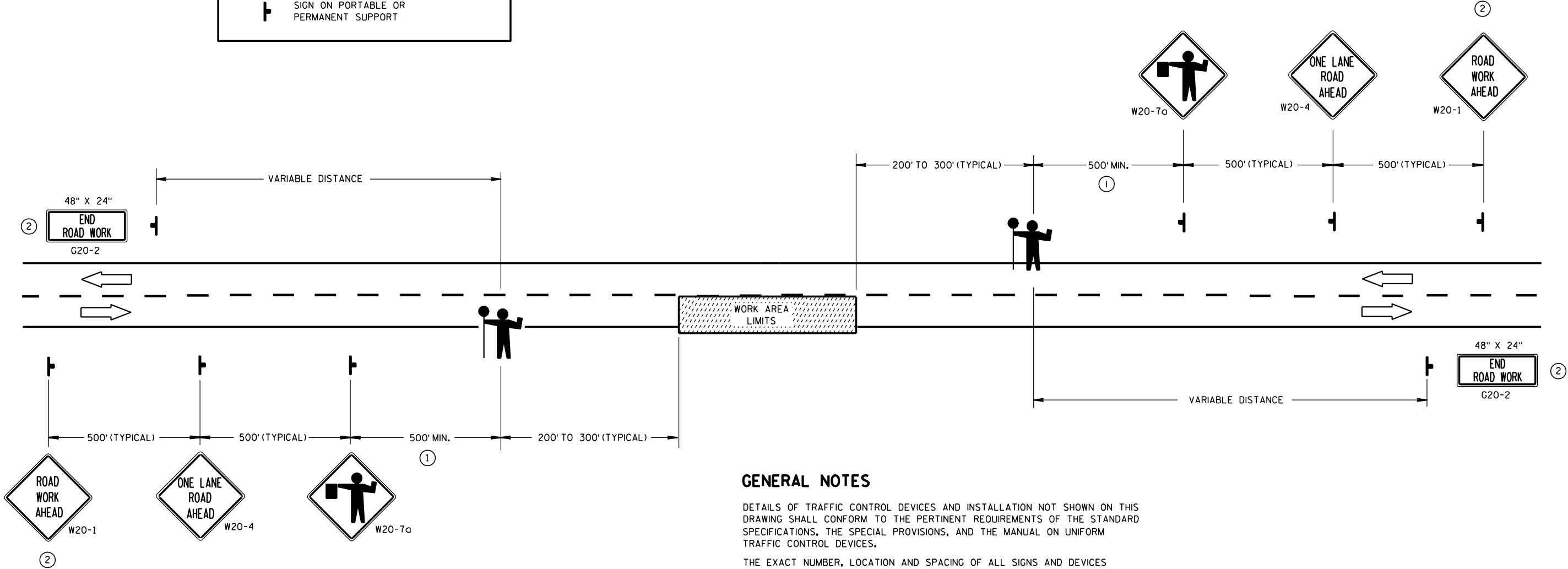
FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF



SIGN ON PORTABLE OR PERMANENT SUPPORT



USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



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.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES (AND THE 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.

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, THE "FLAGGER AHEAD", THE "ROAD WORK AHEAD" AND THE ONE LANE ROAD AHEAD" SIGNS SHALL BE COVERED OR REMOVED AND THE HIGHWAY RESTORED TO NORMAL OPERATION.

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

- ① FOR A MOVING WORK OPERATION, SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT 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.

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/5/06
DATE

/S/ Thomas N. Nothnau
STATE TRAFFIC ENGINE 70
DESIGN

FHWA

LEGEND

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

GENERAL NOTES :

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

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

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

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

GENERAL NOTES CONTINUED:

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

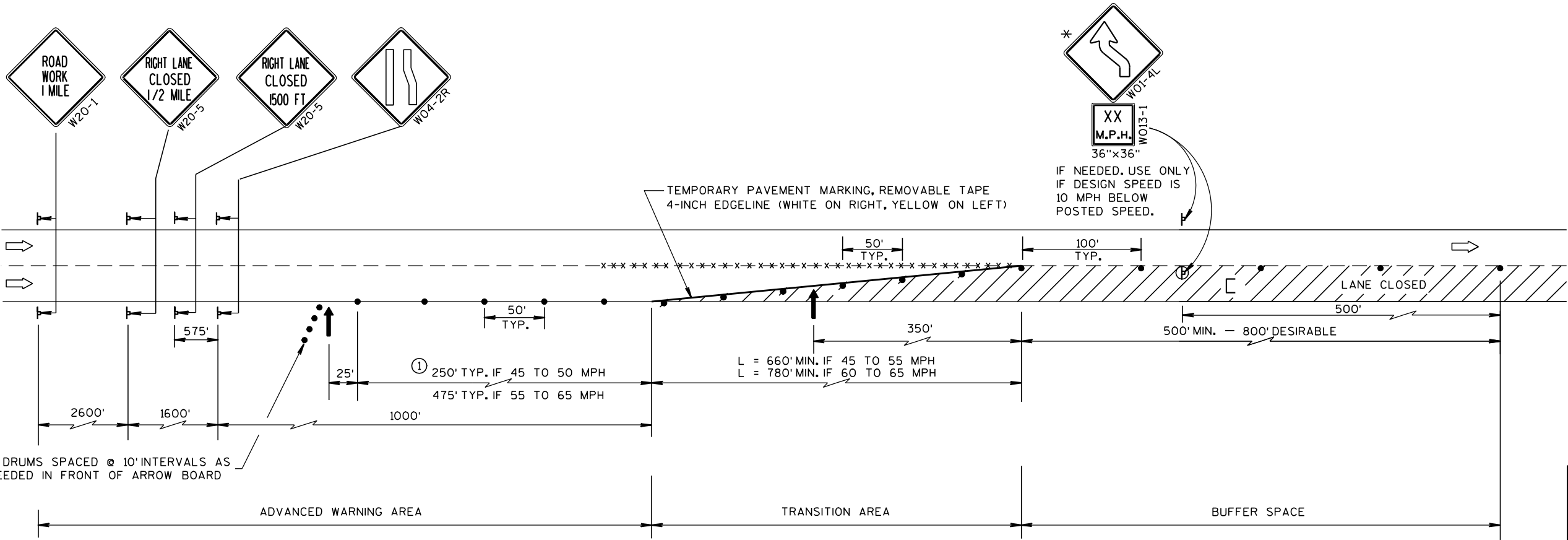
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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

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

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

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



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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8-7-95
DATE /S/ Chester J.
DIRECTOR, OFFICE OF 71 c
FHWA

GENERAL NOTES

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

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

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

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

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

W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.

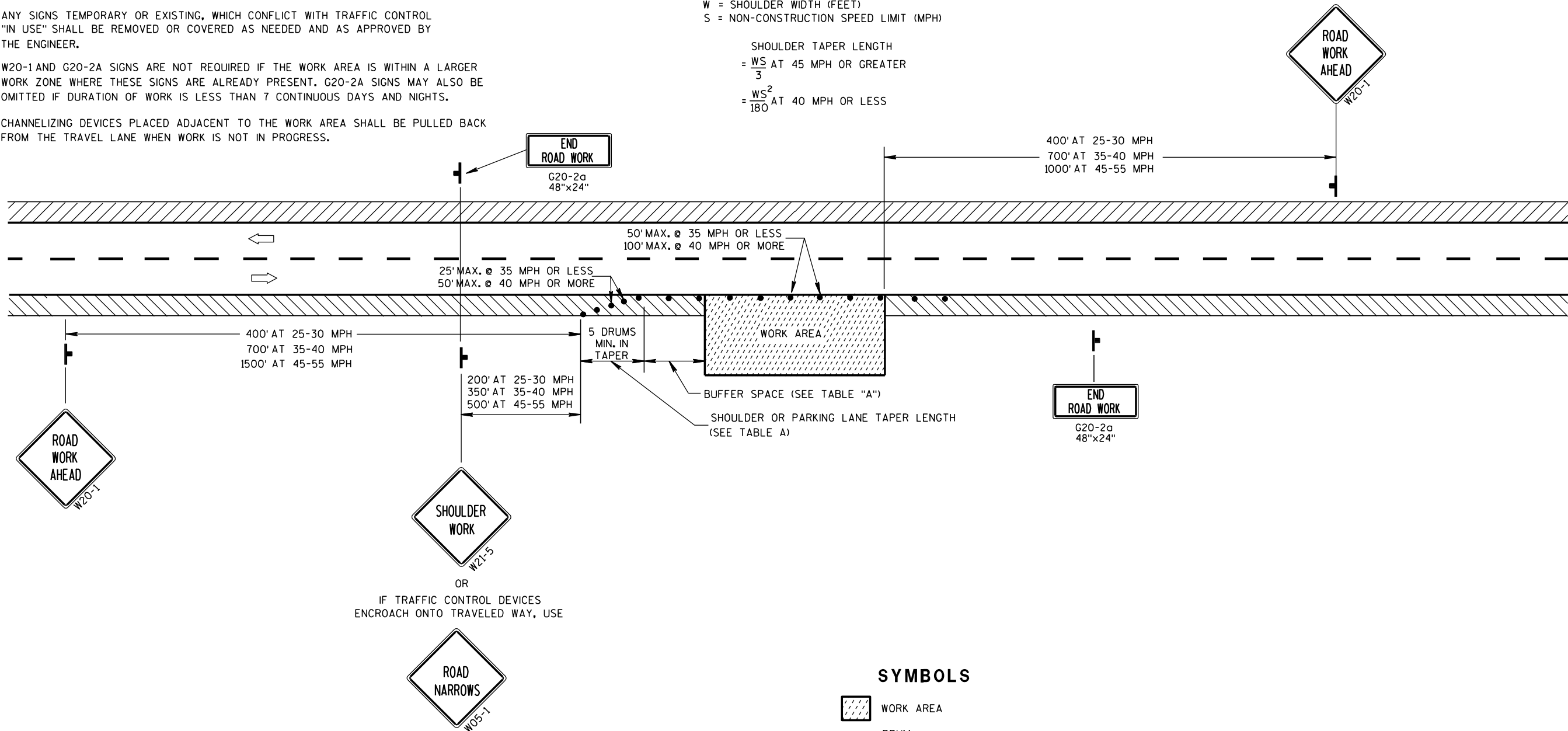
CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

TABLE A

SHOULDER TAPER LENGTH (FEET)					BUFFER SPACE (FEET)
S	W	4	6	8	
30	20	30	40	50	85
35	30	45	55	70	120
40	40	55	75	90	170
45	60	90	120	150	220
50	70	100	135	170	280
55	75	110	150	185	335

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

SHOULDER TAPER LENGTH
= $\frac{WS}{3}$ AT 45 MPH OR GREATER
= $\frac{WS^2}{180}$ AT 40 MPH OR LESS



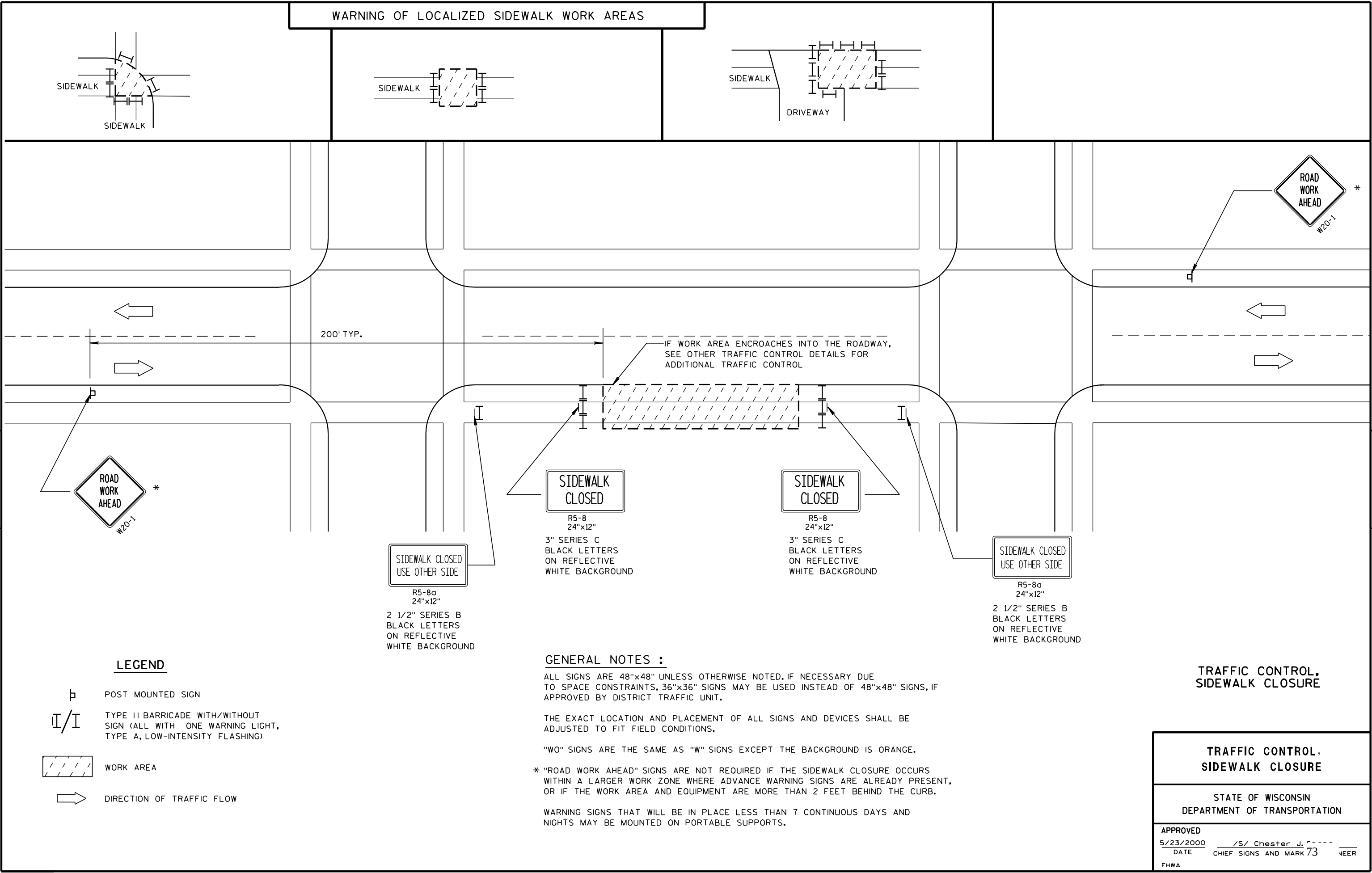
SYMBOLS

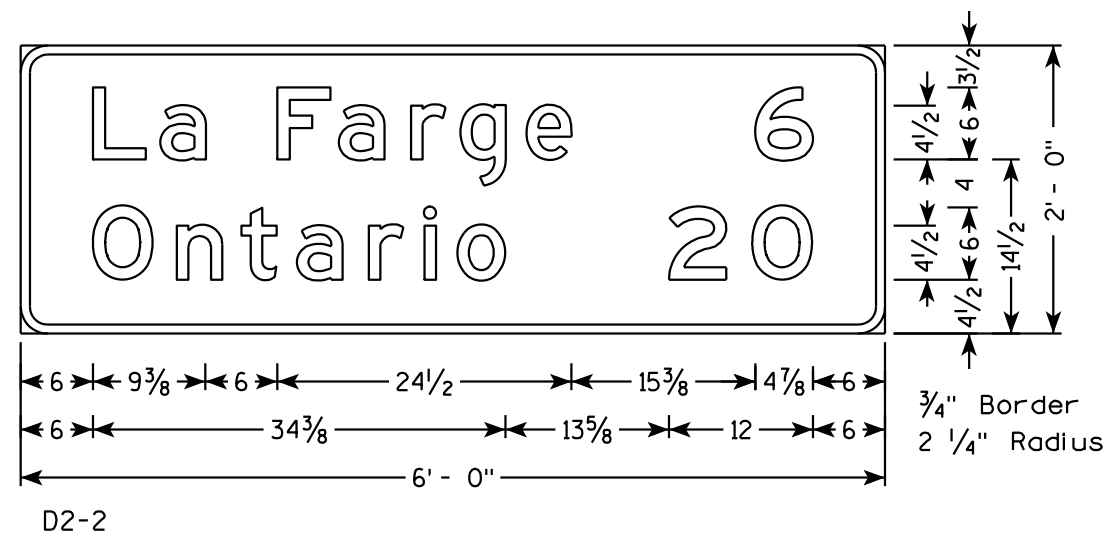
- WORK AREA
- DRUM
- POST MOUNTED SIGN
- DIRECTION OF TRAFFIC FLOW

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

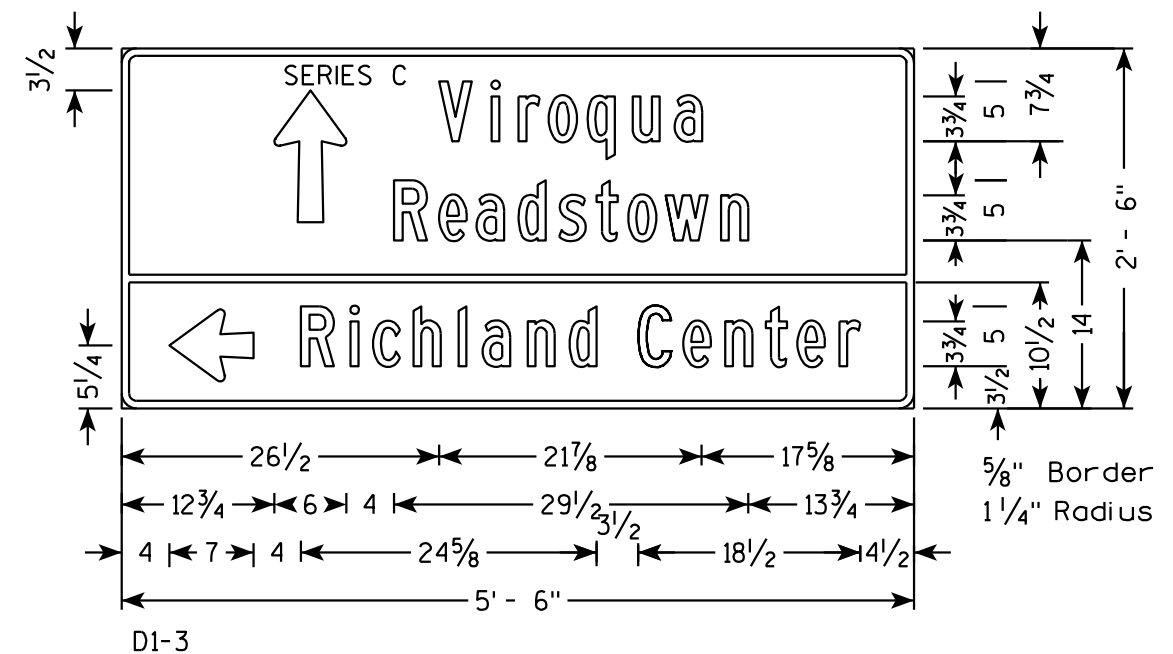
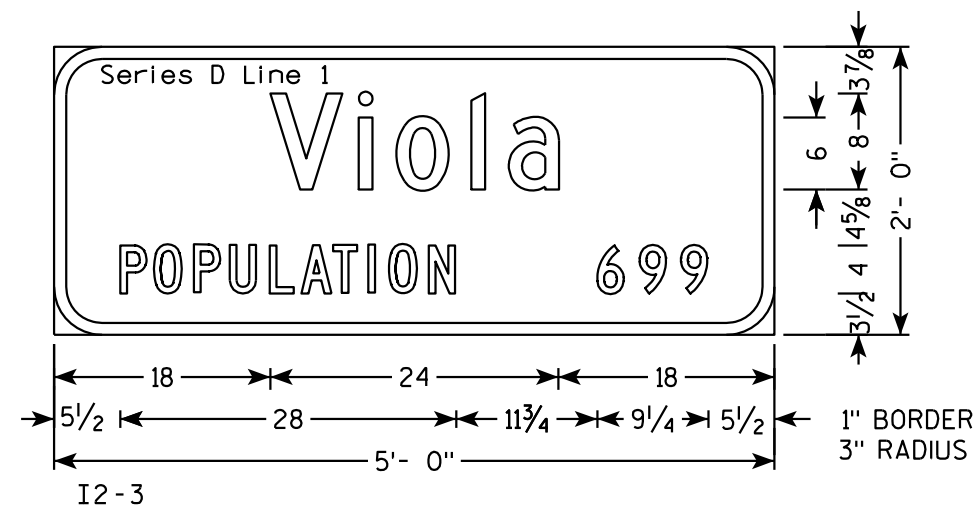
APPROVED
5/23/00 /S/ Chester J. NNEER
DATE CHIEF SIGNS AND MARK 72
FHWA



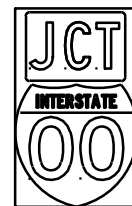


NOTES

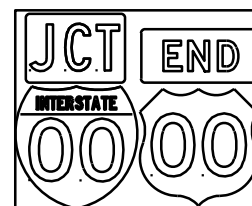
1. All Signs Type II- Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - GREEN
Message - WHITE
3. Message Series - E except as Shown



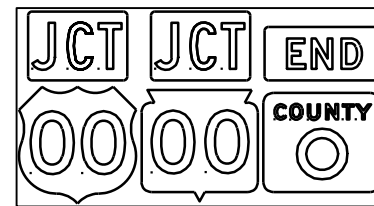
TYPICAL ASSEMBLIES



J1-1



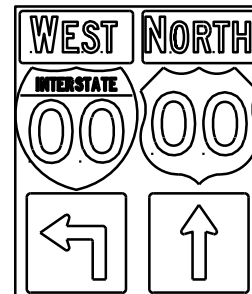
J1-2



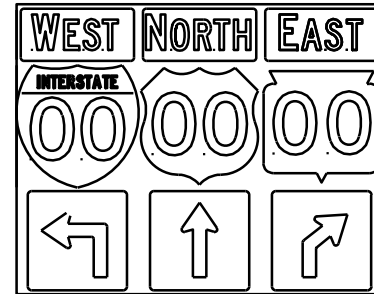
J1-3



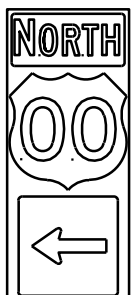
J2-1



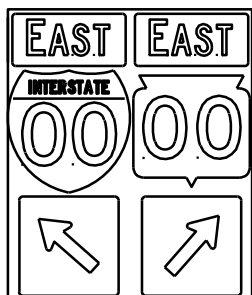
J2-2



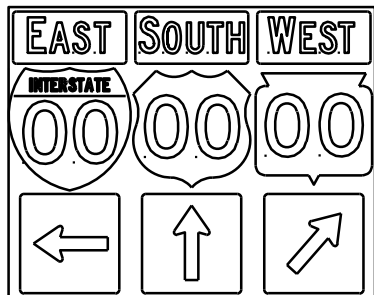
J2-3



J3-1



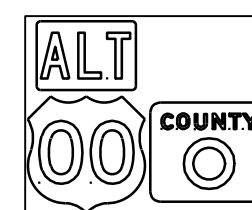
J3-2



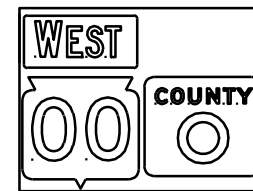
J3-3



J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1



J23-1



J22-1

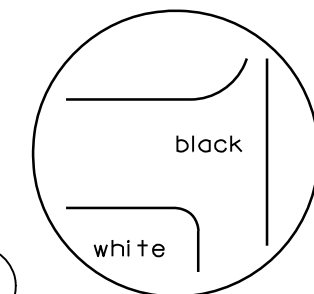
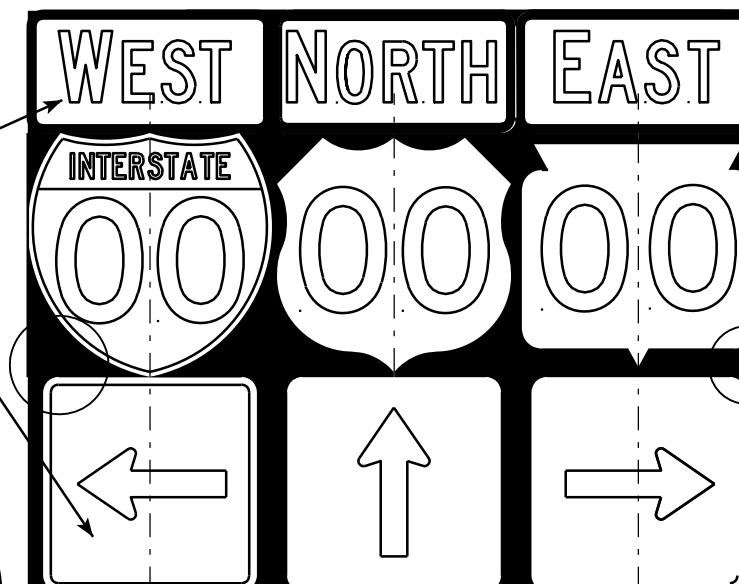
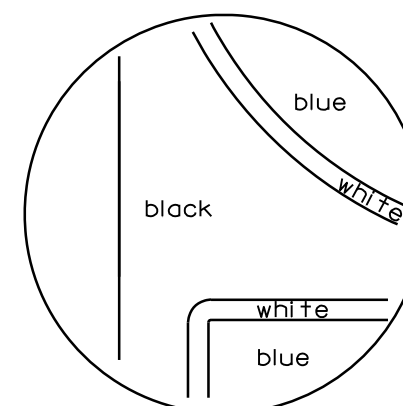


JV

NOTES

- Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - Black Non-reflective
Message - see Note 5
- Message Series - See Note 5
- Corners shall be square since base material is plywood.
- The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
- Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
- Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
- Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
- Route assemblies that have 36 inch shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.

[blue background with interstate]



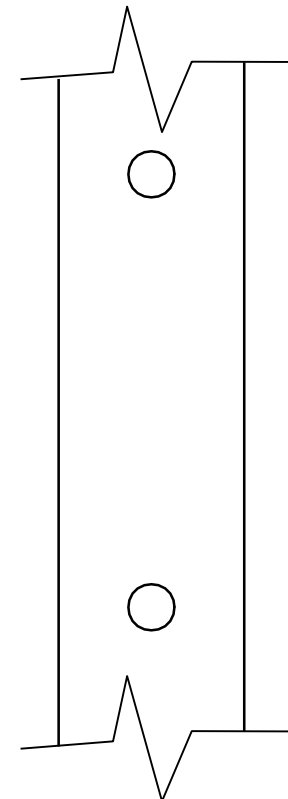
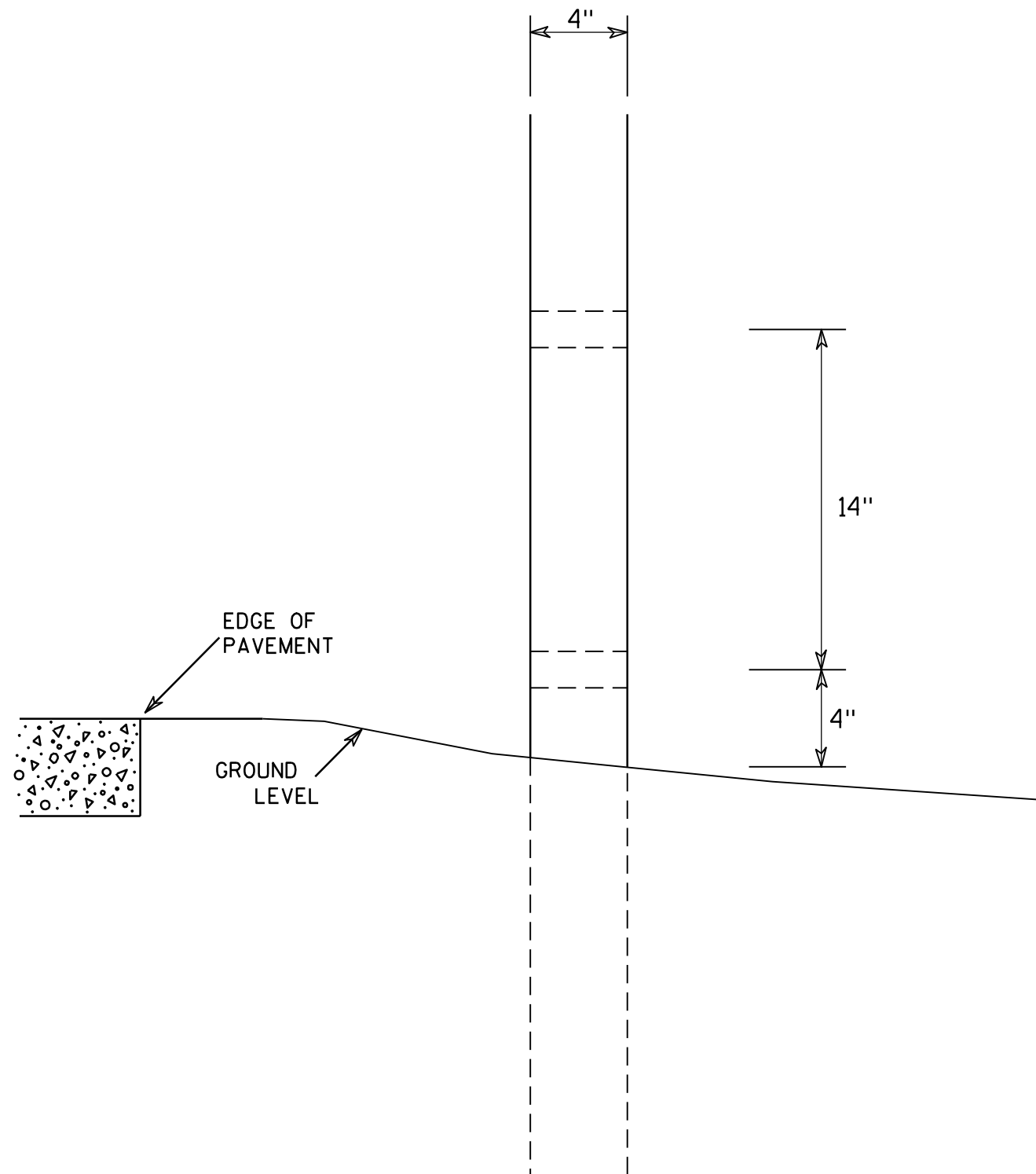
[black background]

ROUTE MARKERS & COMPONENTS IN TYPICAL ASSEMBLIES	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 10/21/09	PLATE NO. A2-1S.6

PROJECT NO:

SHEET NO: 75

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.

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:

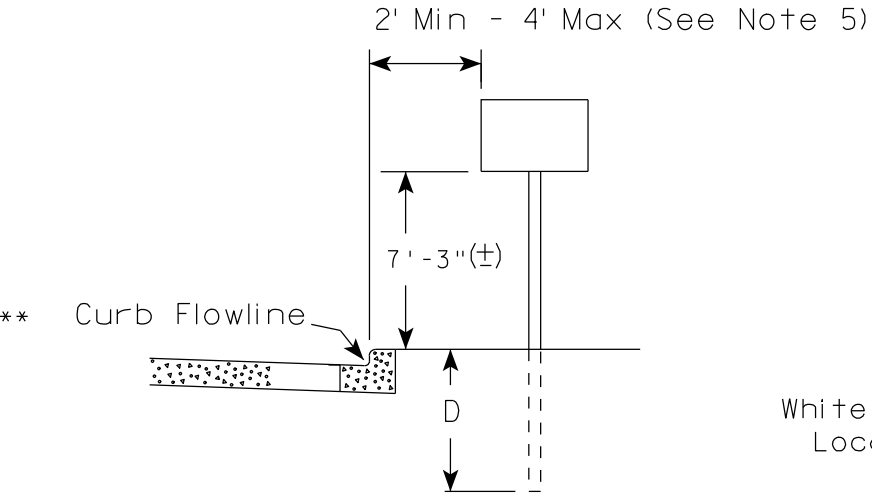
HWY:

COUNTY:

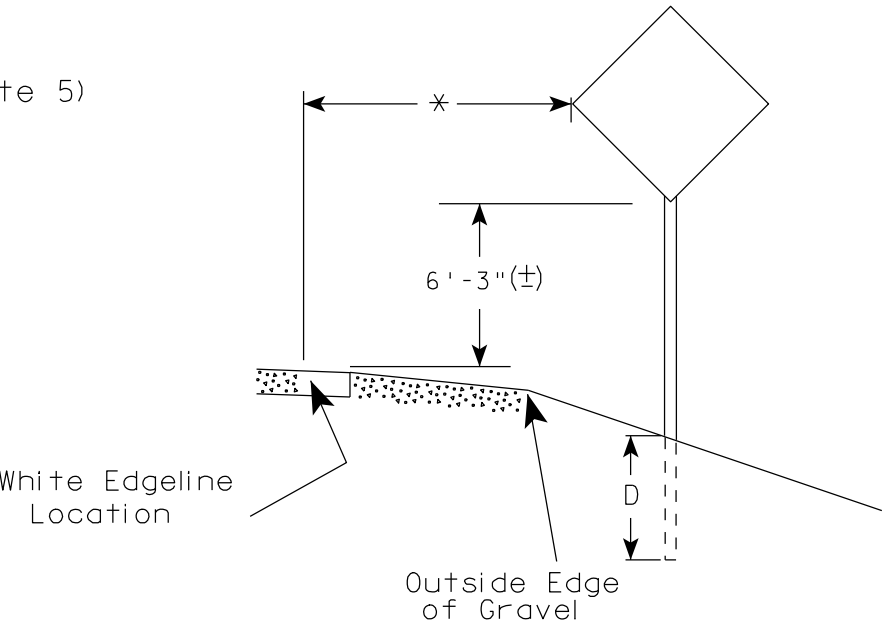
SHEET NO: 76

E

URBAN AREA



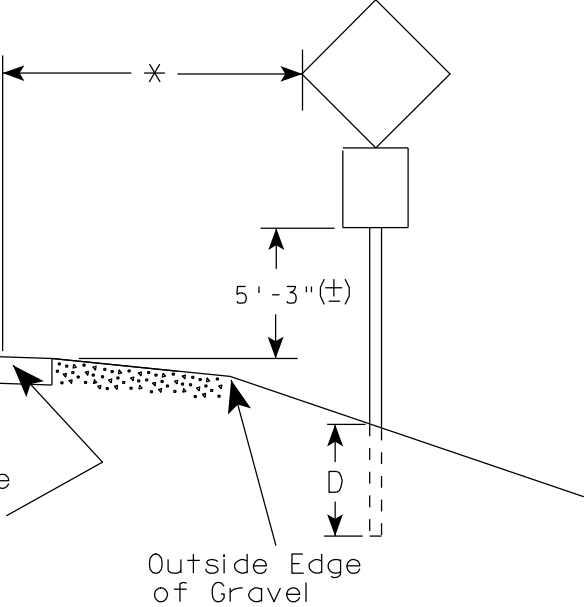
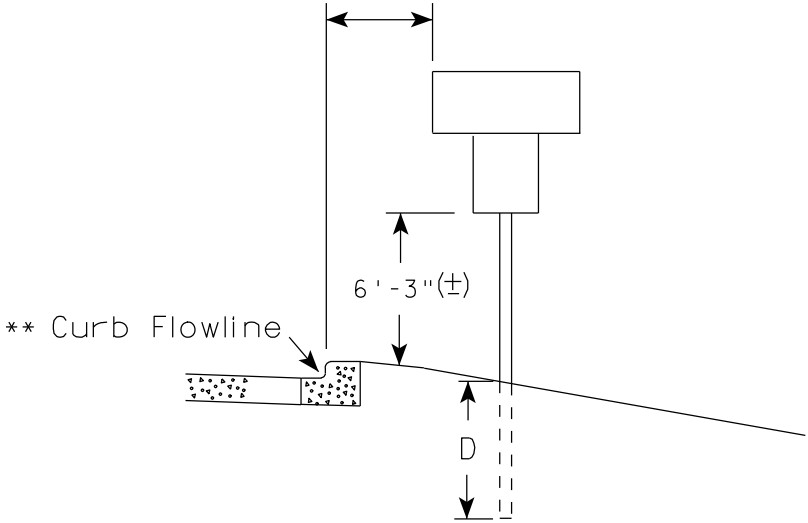
RURAL AREA (See Note 2)



GENERAL NOTES

1. Signs wider than 4 feet or larger than 20 sq. ft. shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
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 J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
9. 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) & End of Road Markers (W5-56 & W5-56A) shall be mounted at a height of 4'-3" (±).

2' Min - 4' Max (See Note 5)



POST EMBEDMENT DEPTH

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

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

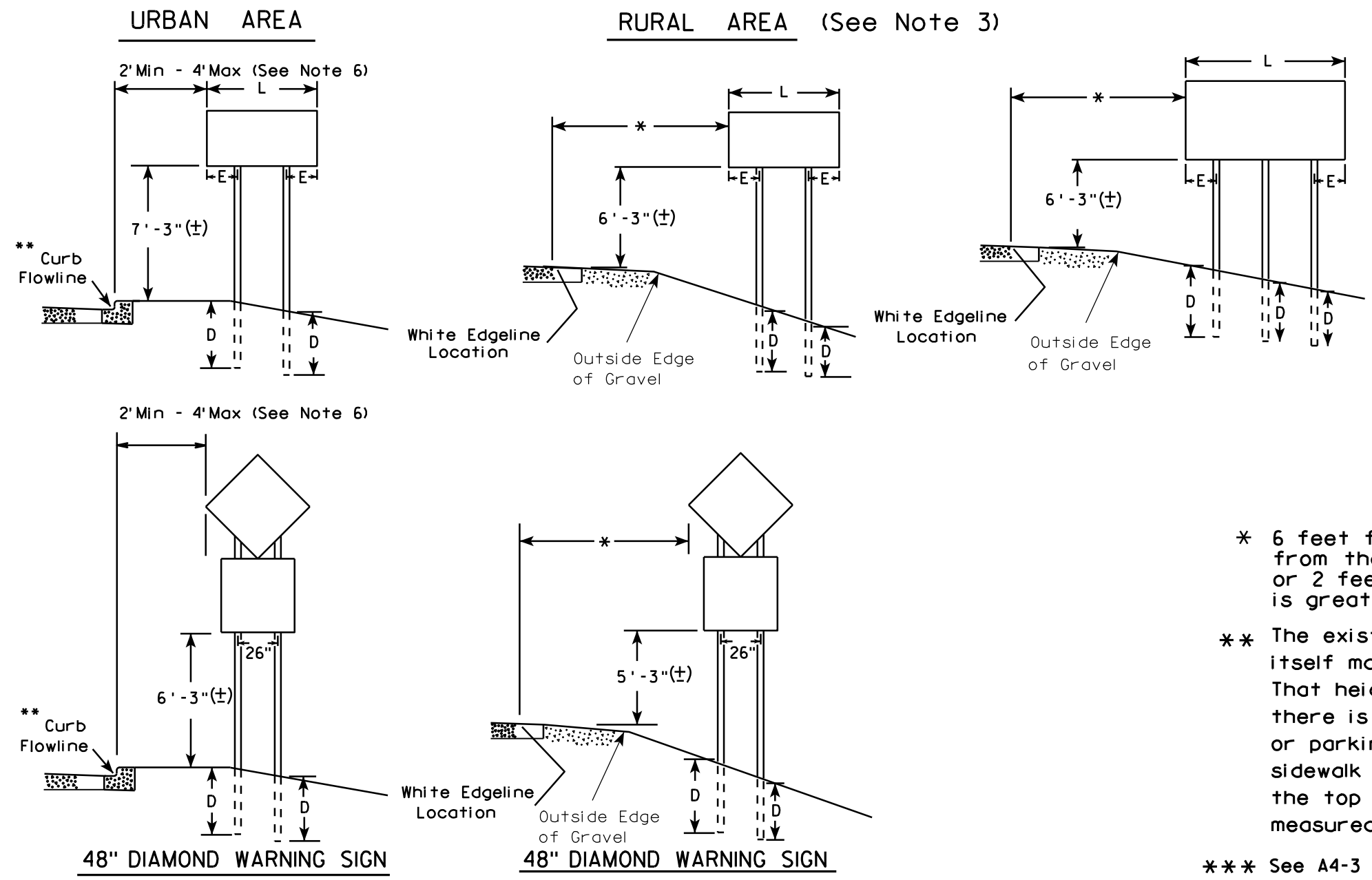
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 9/21/2011 PLATE NO. A4-3.16



GENERAL NOTES

1. For multiple 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. Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding stop signs (R1-1F) 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) & End of Road Markers (W5-56 & W5-56A) 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 or 20 S.F. or less in area.

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 120"	L/5

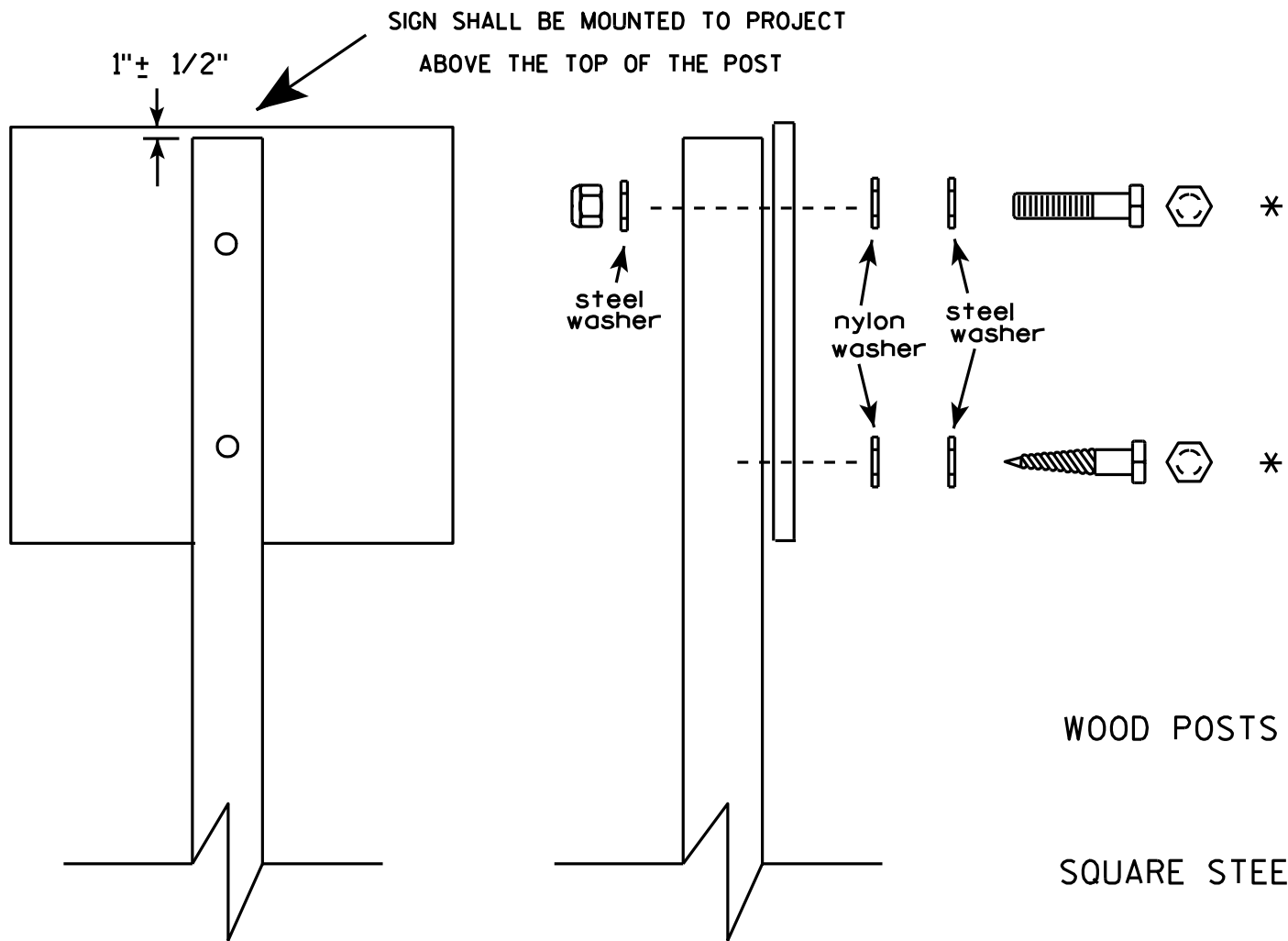
SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 120" less than 168"	12"

SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)	
L	E
168" and greater	12"

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

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 9/21/2011	PLATE NO. A4-4.11

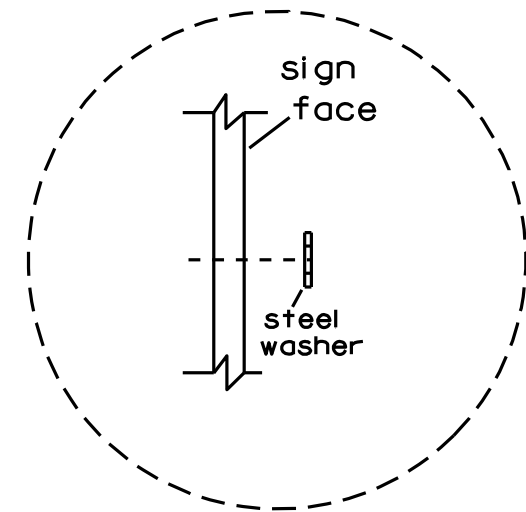
PROJECT NO:	HWY:	COUNTY:	SHEET NO: 78	E
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Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

- 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.



Washer Placement when Sign Has Other Than Type H or Type F Face

* 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.

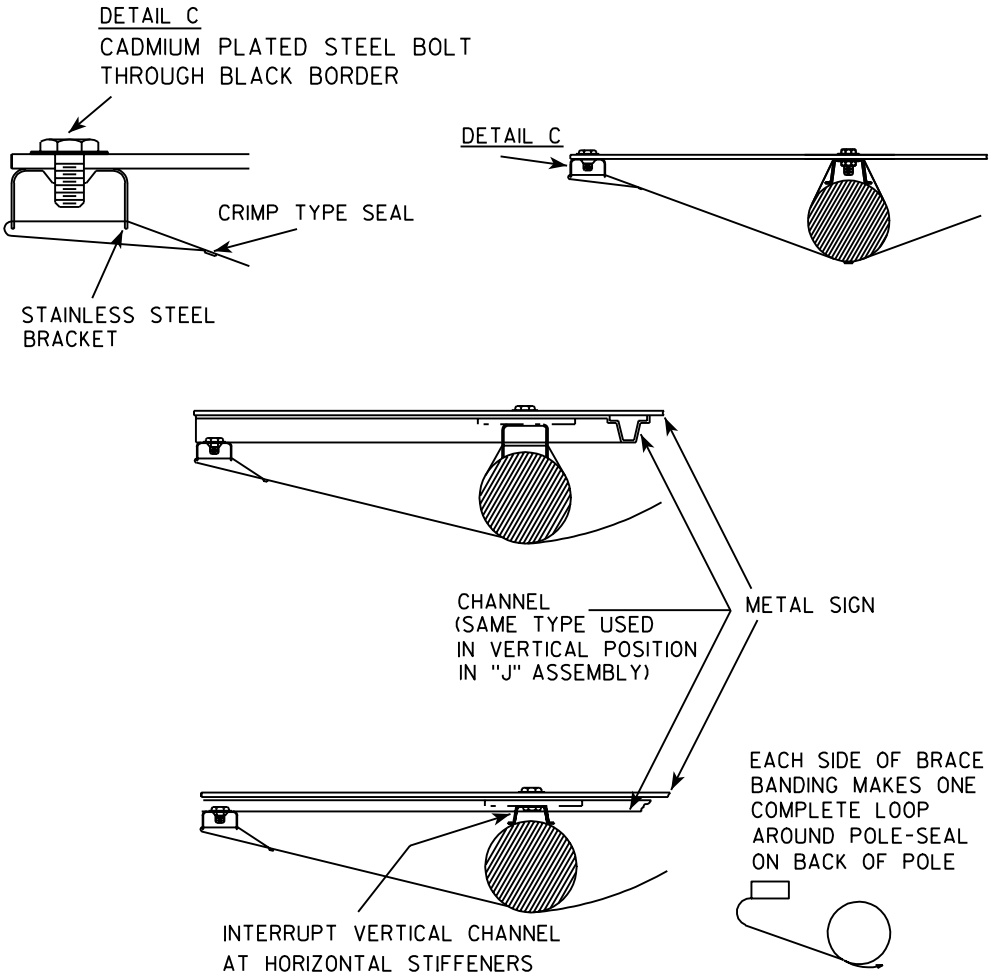
ATTACHMENT OF SIGNS
TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/23/10 PLATE NO. A4-8.7

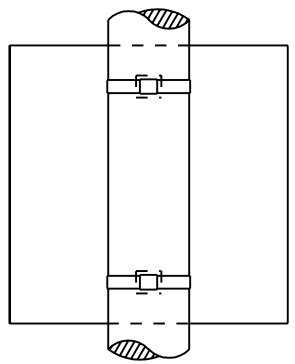
BRACE BANDING



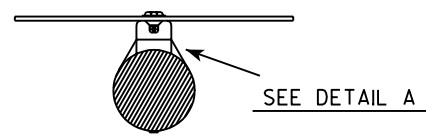
BRACE BANDING

BRACE BANDING SHALL BE TIGHTENED FIRMLY
BUT NOT SO TIGHT AS TO APPRECIABLY
CURVE FACE OF SIGN.

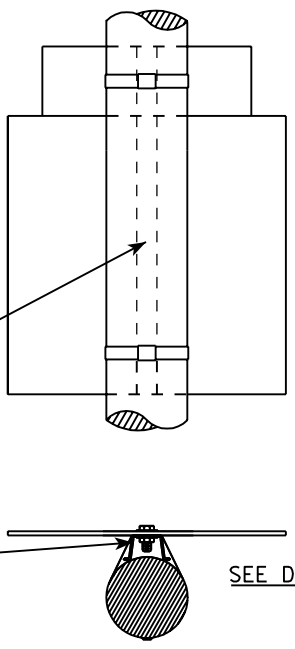
SINGLE SIGN



BRACKET BANDING

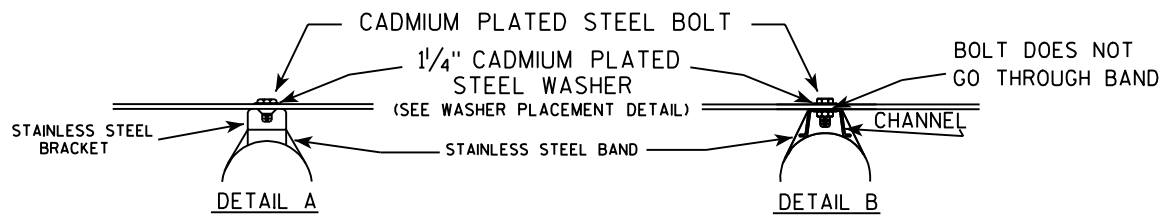


"J" ASSEMBLY



CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET

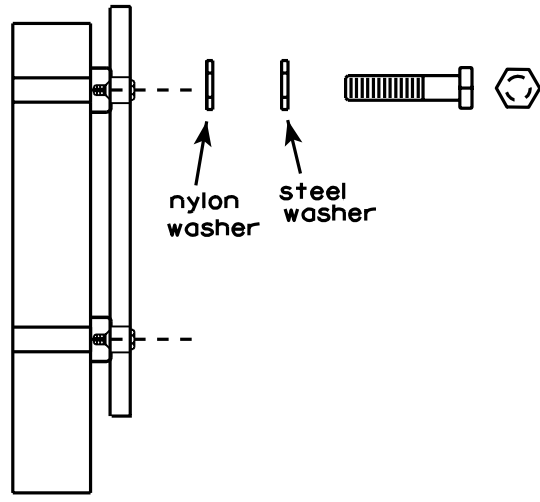
SEE DETAIL B



GENERAL NOTES

1. Signs 4' or greater in width shall have one brace band installed at the center of the sign.
2. Signs 3' or greater in height shall have three bracket bands installed. Signs less than 3' in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be 3/4" in width and 0.025" thickness.

WASHER PLACEMENT



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
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

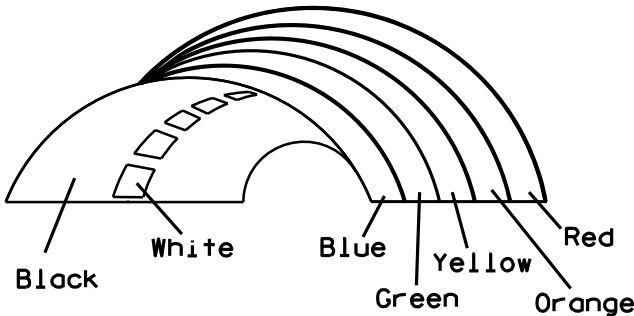
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 11/08/05 PLATE NO. A5-9.2



* VARIES

Background Colors of Symbol*



*1/4" Black Border between each color of rainbow and border of rainbow

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 - (See Note 5)
- 3. Message Series - (See Note 6)
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 5. Border - Blue
Line 1 - Red
Line 2 - Black
Line 3-5 - Blue
- 6. Line 1 - Dutch 8011L
Line 2 - Series E
Line 3-5 - Series C
- 7. Contractor shall provide and install a new post bracket in accordance with the I55-56B sign detail.

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																											
2	30	36	1 1/2	1/2	5/8	3	2	3 1/2	2 7/8	1	8	2 1/8	11 1/4	11 1/8	9 3/8	1 1/4		3/4	12 5/8	7 1/2							7.5
3																											
4																											
5																											

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 81

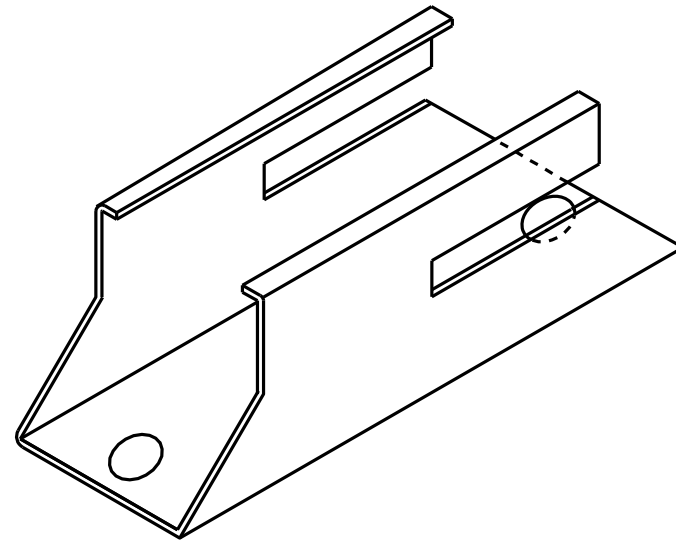
STANDARD SIGN
I55-56

WISCONSIN DEPT OF TRANSPORTATION

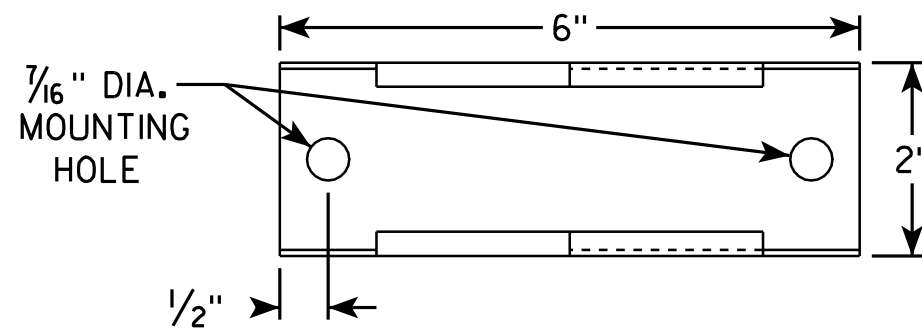
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 4/27/11 PLATE NO. I55-56.3

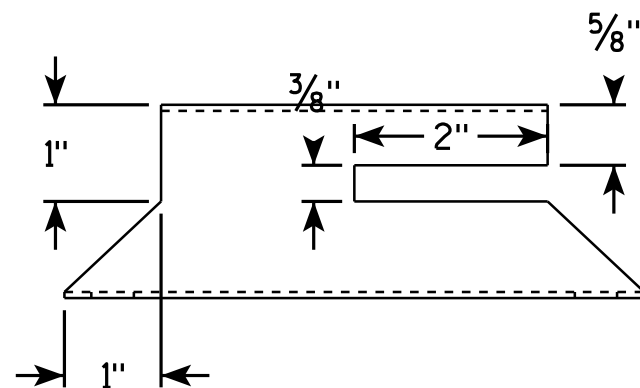
ISOMETRIC VIEW



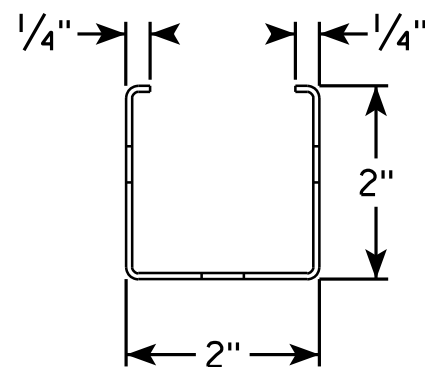
TOP VIEW



SIDE VIEW



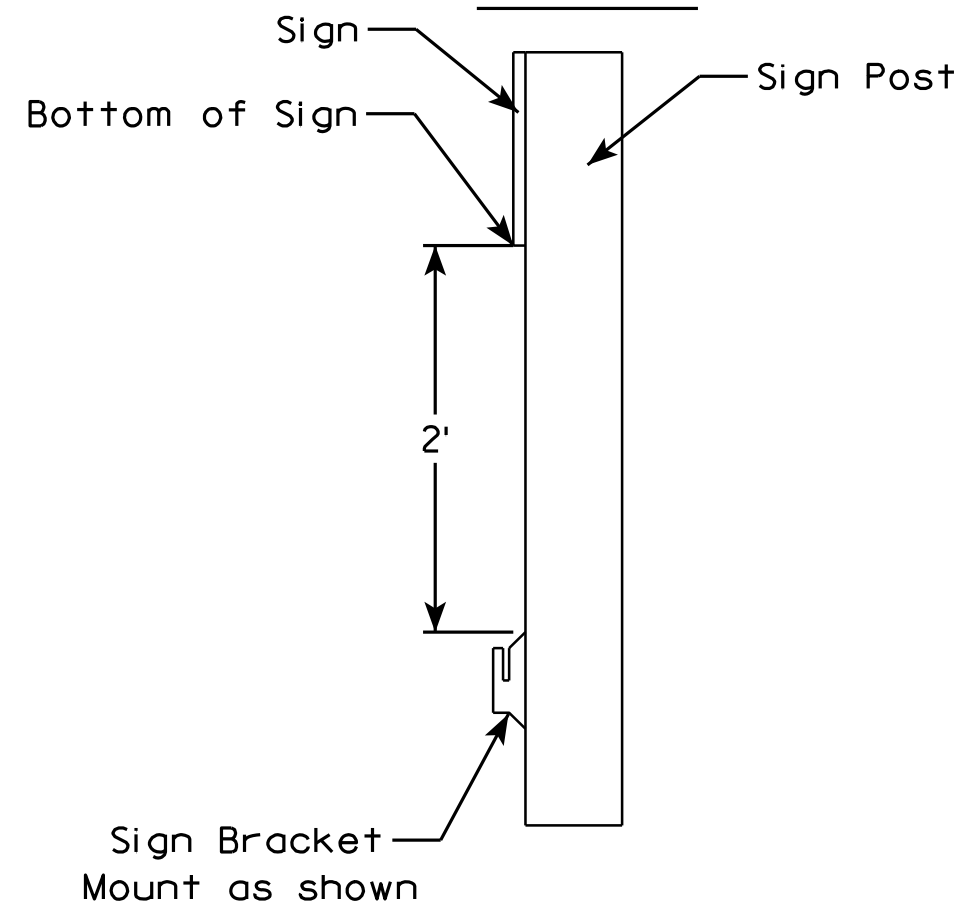
END VIEW



NOTES

1. Must be capable of permanent attachment to a wood or steel channel sign post utilizing the fastening hardware specified on the A4-8 sign plate.
2. Shall be entirely primed and painted with two coats of a black powder coated enamel paint.
3. Shall be made with 12 gauge steel, and incorporate no welds, no hinged components, no threaded lock-type components, and no parts which are loose or can be separated from the main body.
4. Shall have rounded edges with at least 1/8" radii.
5. Shall not have unrounded and uncoated metal edges which can contact the back surface of the roll-up sign.
6. Top of bracket shall be mounted 2' below the bottom of the I55-56 sign.
7. Cost of bracket and fastening hardware shall be incidental to the I55-56 sign.

SIDE VIEW



ROLLUP SIGN BRACKET
I55-56B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 2/5/10 PLATE NO. I55-56B.1

PROJECT NO:

HWY:

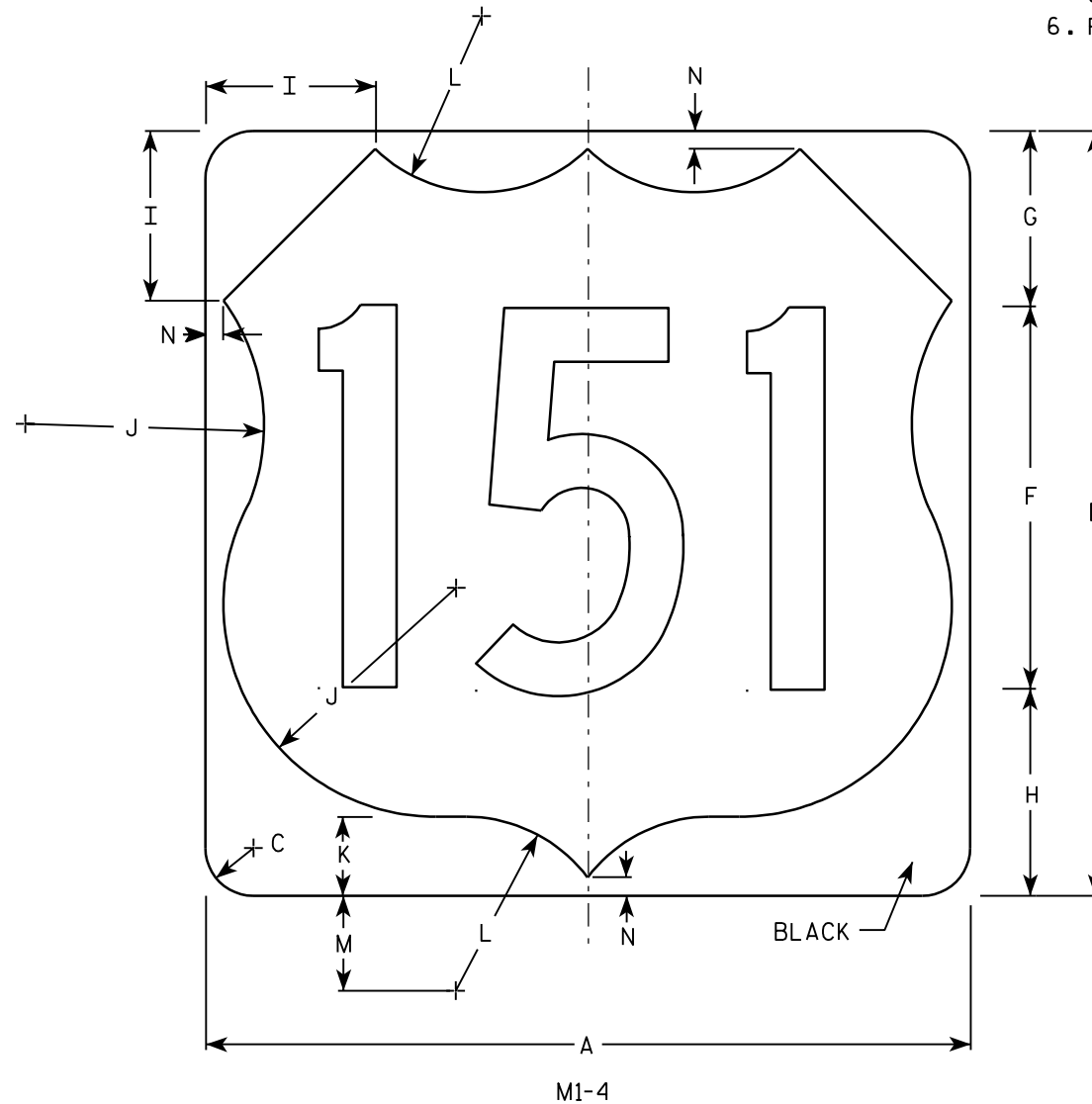
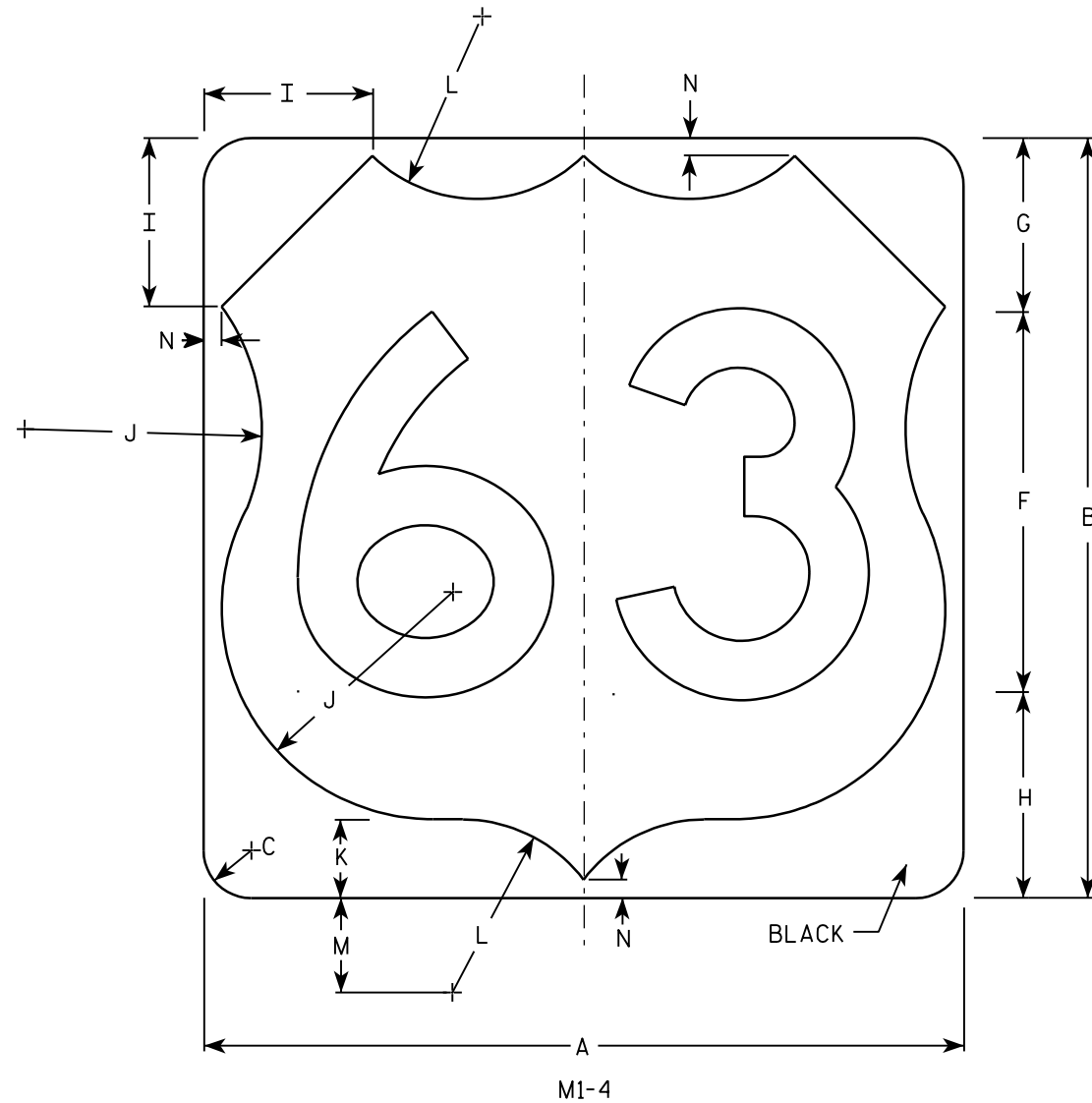
COUNTY:

SHEET NO: 82

E

NOTES

1. Sign is Type II - See Note 6 - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White & Black - See Note 6
Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base
material is plywood but borders shall be rounded
as shown. When base material is metal, the
corners and borders shall be rounded.
5. Substitute appropriate numerals and adjust
spacing as per Plate A10-1.
6. Permanent Signs
Background - Type H Reflective
Detour or other temporary signs
Background - Reflective



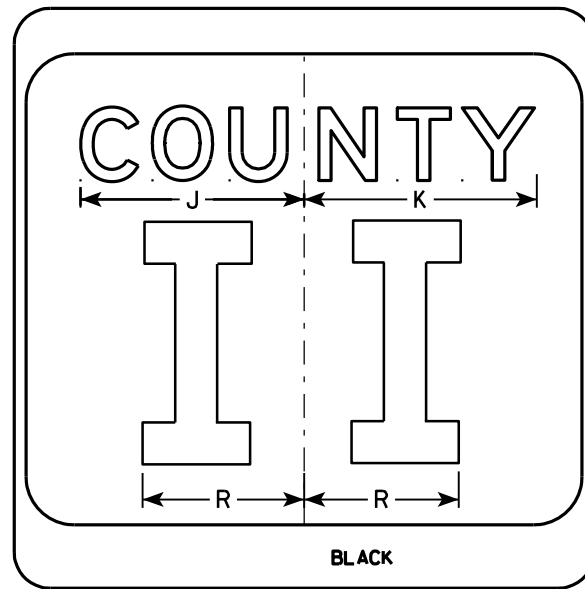
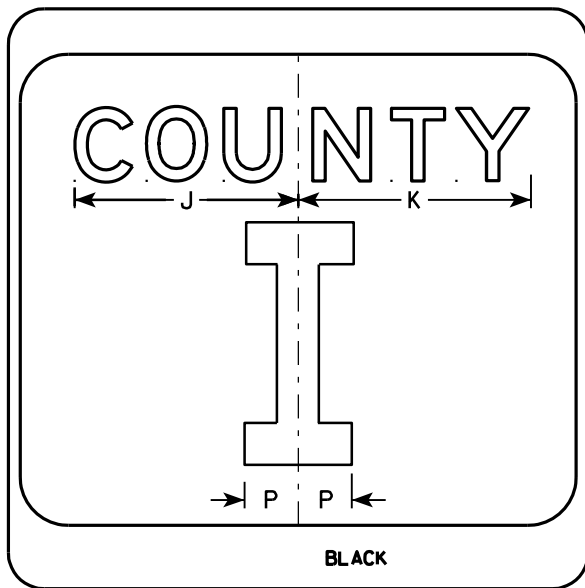
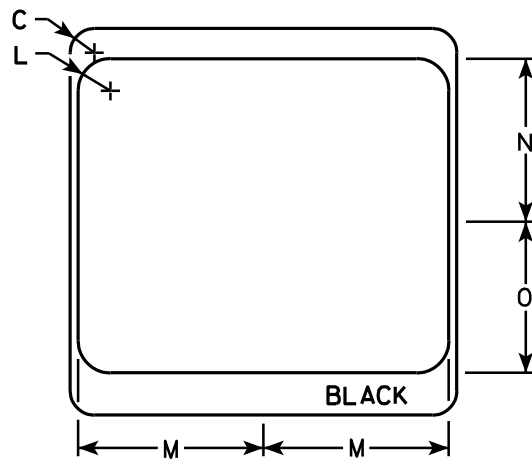
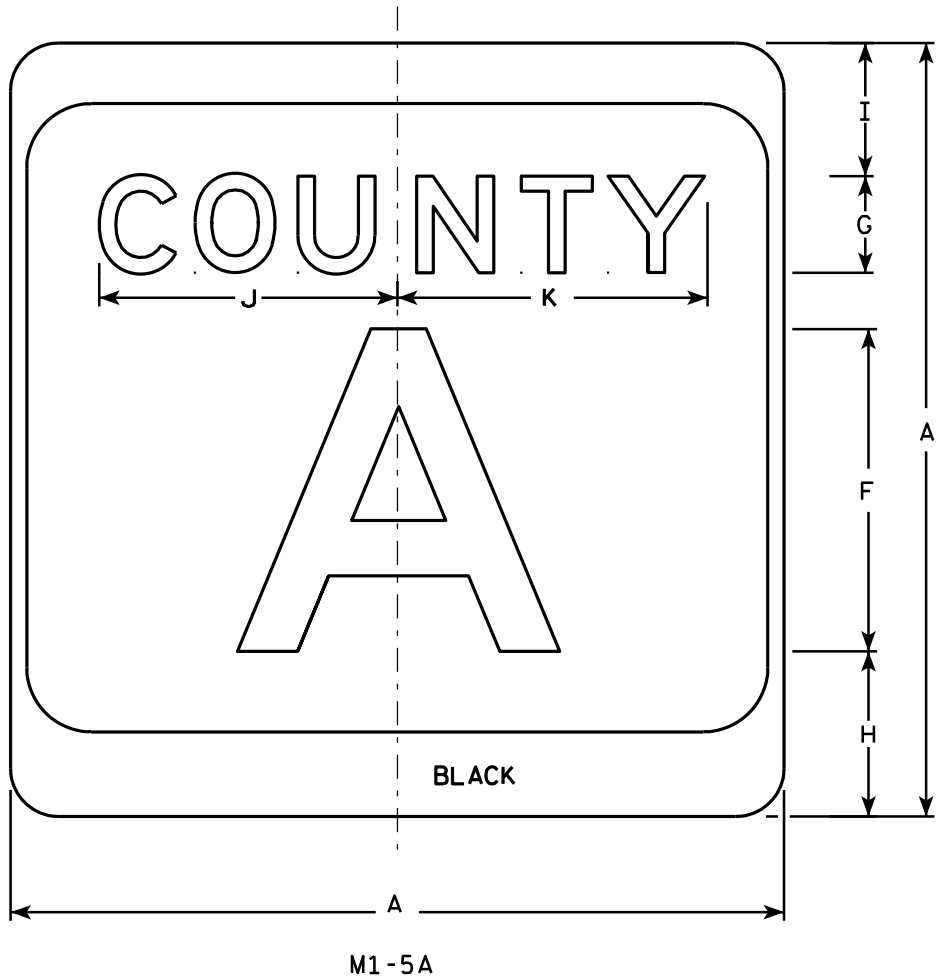
Metric equivalent
for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

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	Areq sq. ft.	Areq m ²
1																												
2	24	24	1 1/2			12	5 1/2	6 1/2	5	7 1/2	2 1/2	5 1/2	3	1/2													4.0	.36
3	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
4	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
5	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81

PROJECT NO: HWY: COUNTY: SHEET NO: 83 E

7



NOTES

- Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - White & Black - See Note 7
Message - Black
- Message Series - see Note 5
- 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.
- Message Series E for 1 letter.
Message Series D for 2 letters unless message is too big then Series C.
Message Series C for 3 letters unless message is too big then Series B.
- Substitute appropriate letters & optically center to achieve proper balance.
- Permanent Signs
Background - Type H Reflective
Detour or temporary Signs
Background - Reflective

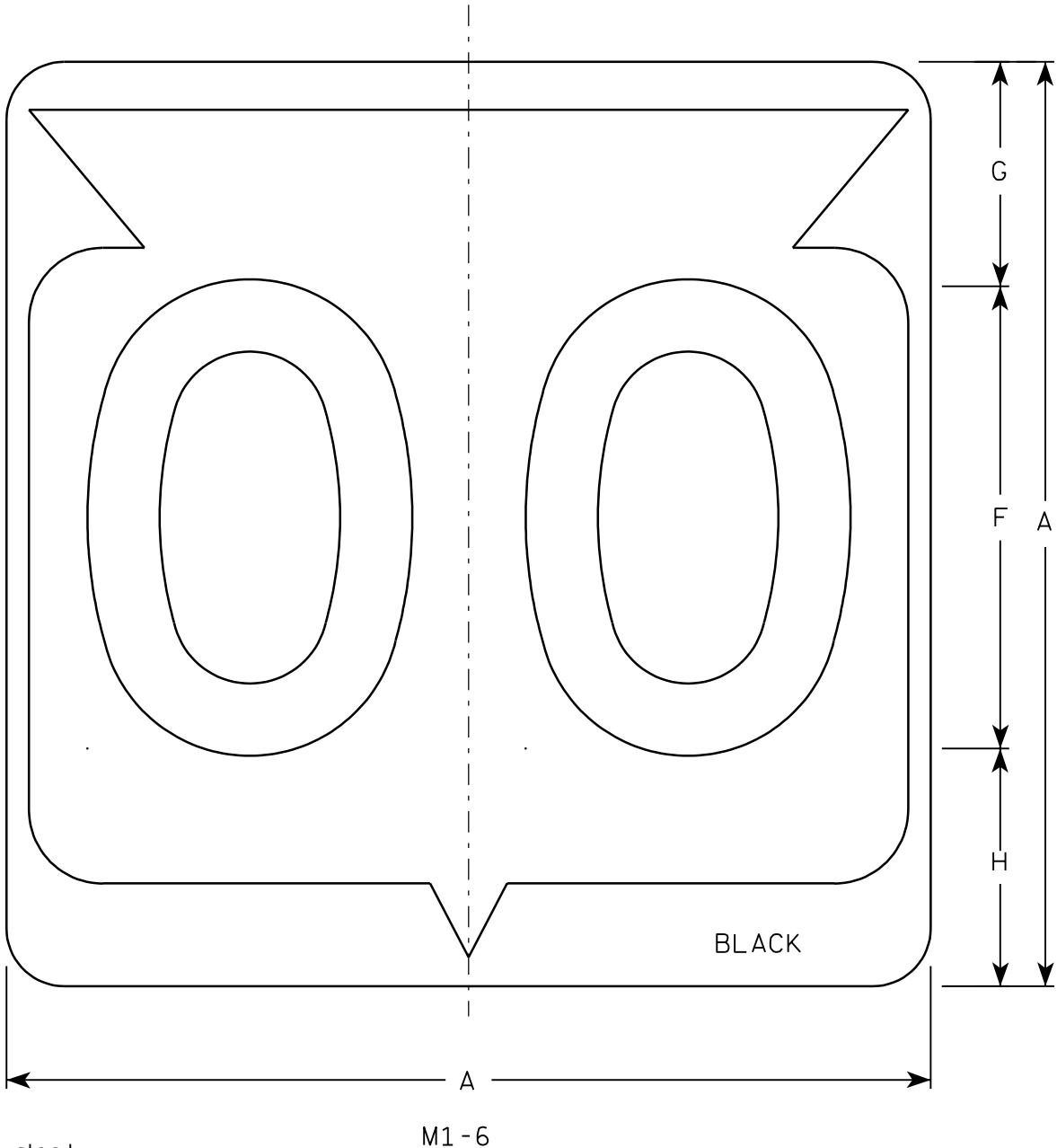
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

CTH MARKER	
M1-5A FOR ASSEMBLIES	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 9/27/11	PLATE NO. M1-5A.8

PROJECT NO:	HWY:	COUNTY:	SHEET NO: 84	E
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7

7



Metric equivalent
for this sign is:

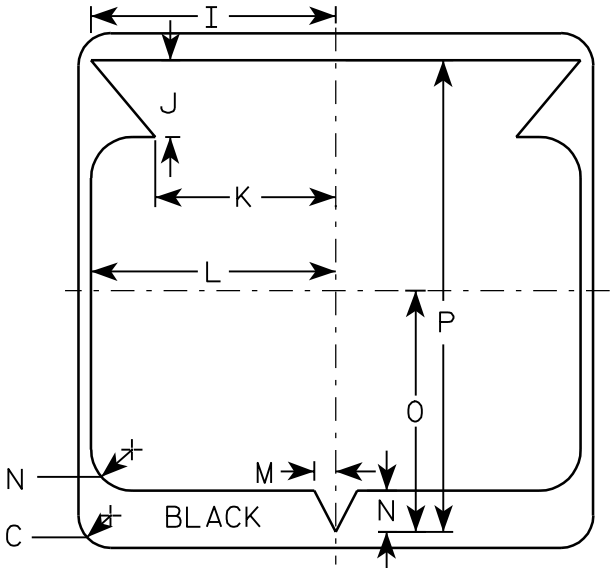
SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

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.	Area m ²
1																												
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0	.36
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81

PROJECT NO:		HWY:		COUNTY:		SHEET NO: 85		E
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NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White & Black - See Note 6
Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate Series numerals and adjust spacing as per plate A10-1.
6. Permanent Signs
Background - Type H Reflective
Detour or temporary Signs
Background - Reflective

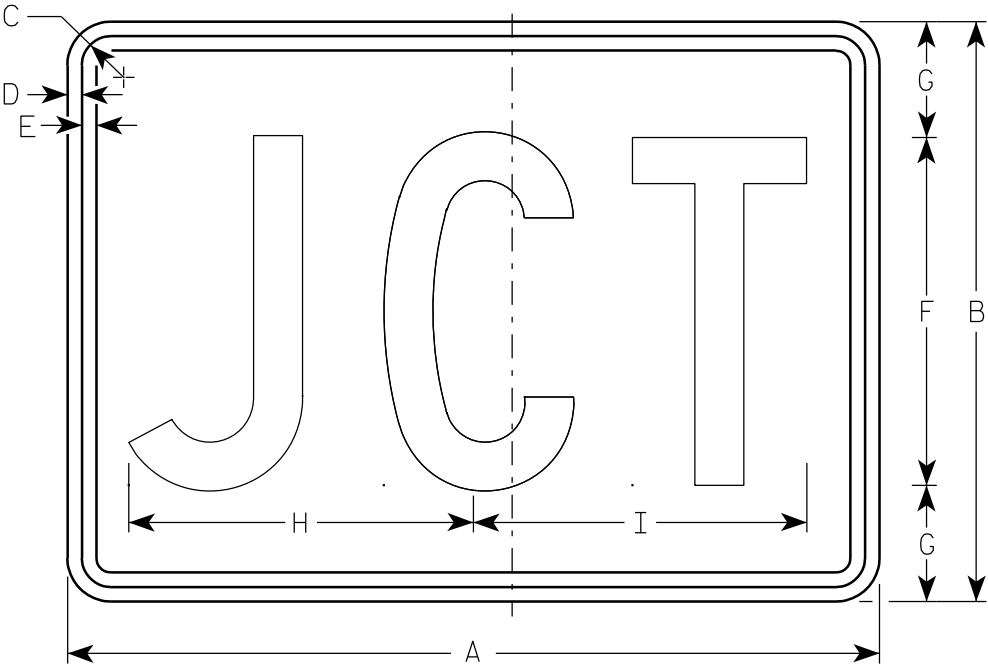


STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Chester J. Spang
for State Traffic Engineer
DATE 3/20/02 PLATE NO. M1-6.9

7



M2-1
MK2-1
MM2-1
MR2-1

Metric equivalent
for this sign is:

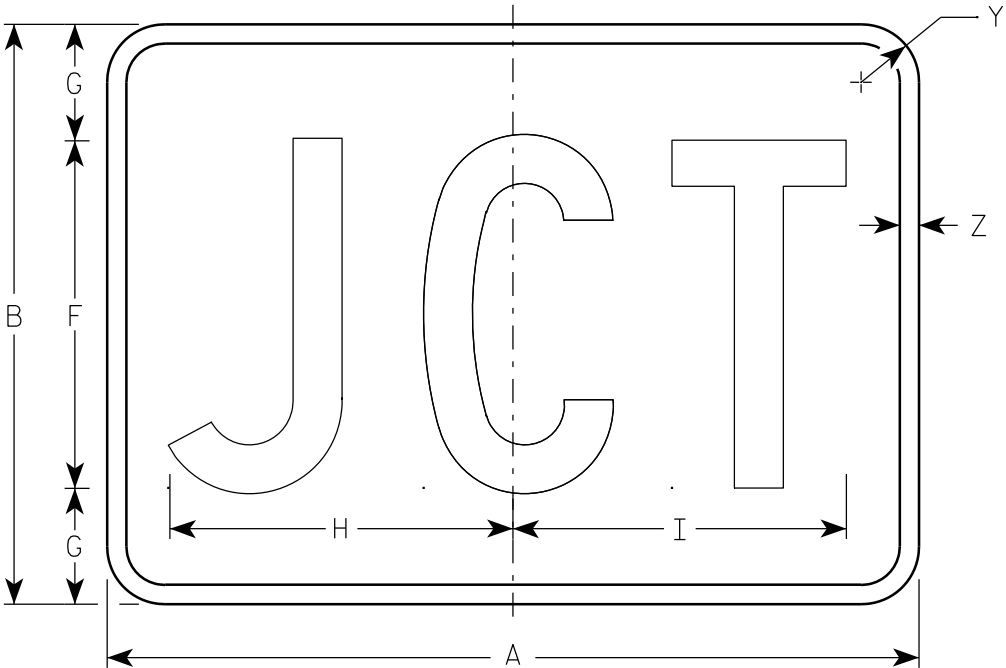
SIZE	
1	
2	525 mm X 375 mm
3	750 mm X 525 mm
4	750 mm X 525 mm
5	750 mm X 525 mm

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.	Area m ²
1																												
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20	0.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20

PROJECT NO:			HWY:			COUNTY:			SHEET NO: 86			E
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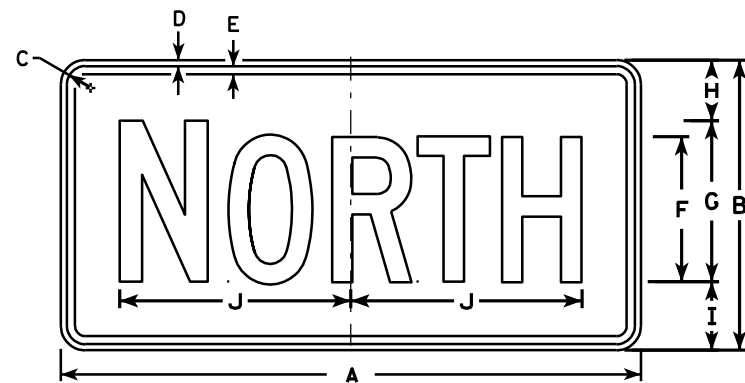
NOTES

1. Sign is Type II - See Note 5 - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - See note 5
Message - See note 5
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.
5. M2-1 Background - White - Type H Reflective
(Detour or temporary Signs - Reflective)
Message - Black
MB2-1 Background - Blue
Message - White - Type H Reflective
(Detour or temporary Signs - Reflective)
MG2-1 Background - Green
Message - White - Type H Reflective
MK2-1 Background - Green
Message - White - Type H Reflective
MM2-1 Background - White - Type H Reflective
Message - Green
MN2-1 Background - Brown
Message - White - Type H Reflective
MR2-1 Background - Brown
Message - Yellow - Type H Reflective



MB2-1
MG2-1
MN2-1

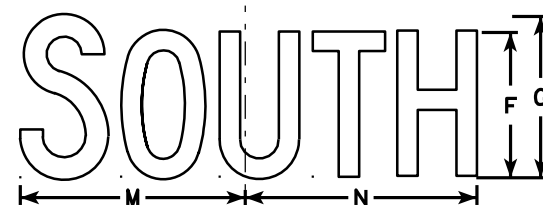
7



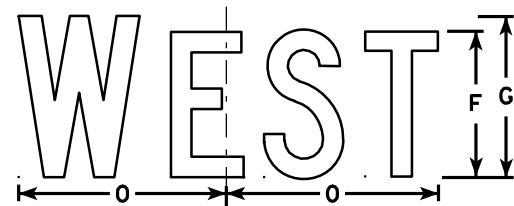
M3-1
MK3-1
M03-1



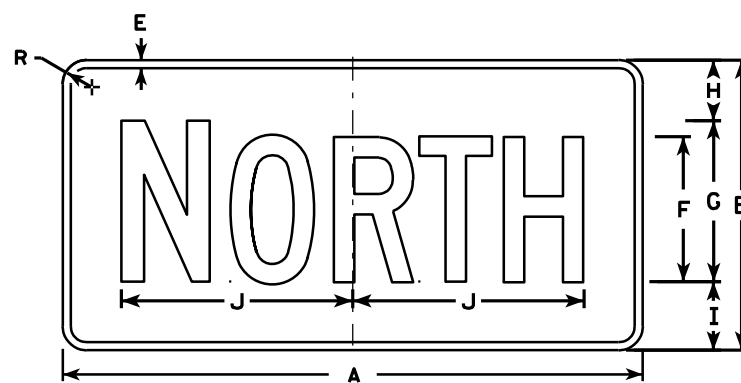
M3-2
MK3-2
M03-2



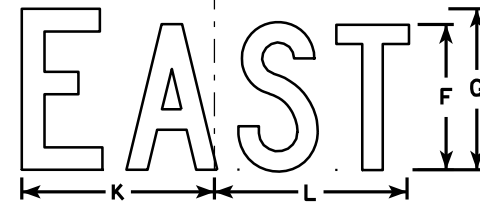
M3-3
MK3-3
M03-3



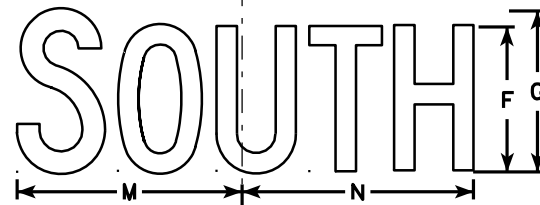
M3-4
MK3-4
M03-4



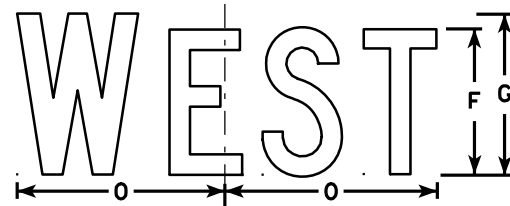
MB3-1
MG3-1
MM3-1
MN3-1



MB3-2
MG3-2
MM3-2
MN3-2



MB3-3
MG3-3
MM3-3
MN3-3



MB3-4
MG3-4
MM3-4
MN3-4

NOTES

1. All Signs Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - See note 5
Message - See note 5
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.
5. M3-1 thru M3-4 Background - White - Type H Reflective (Detour or temporary signs - Reflective)
Message - Black
MB3-1 thru MB3-4 Background - Blue
Message - White - Type H Reflective (Detour or temporary signs - Reflective)
MG3-1 thru MG3-4 Background - Green
Message - White - Type H Reflective
MK3-1 thru MK3-4 Background - Green
Message - White - Type H Reflective
MM3-1 thru MM3-4 Background - White - Type H Reflective
Message - Green
MN3-1 thru MN3-4 Background - Brown
Message - White - Type H Reflective
M03-1 thru M03-4 Background - Orange - Reflective
Message - Black
6. Note the first letter of each direction is larger than the remainder of the message.

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																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

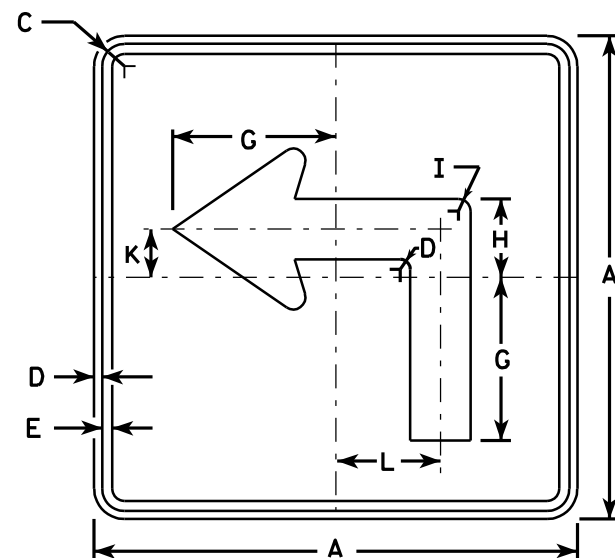
PROJECT NO: HWY: COUNTY: SHEET NO: 87 E

STANDARD SIGNS
M3-1 thru M3-4
SERIES

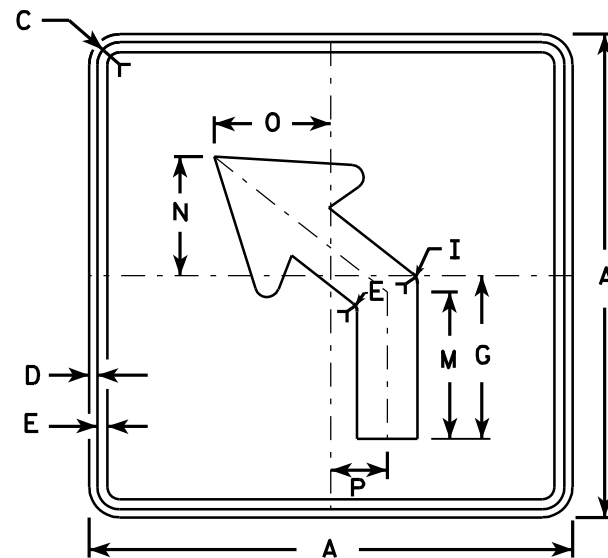
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

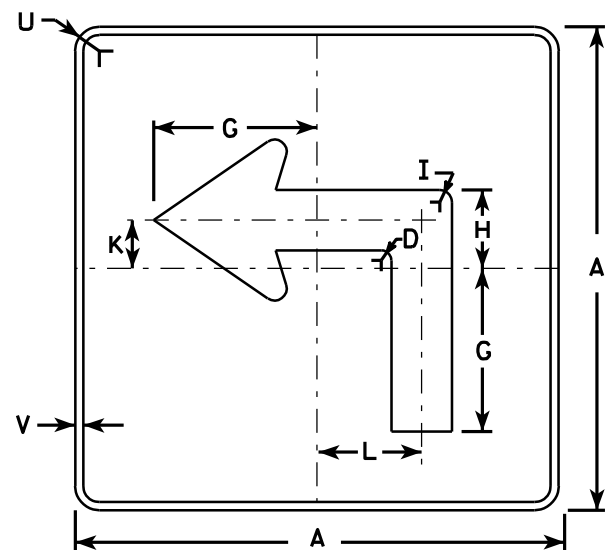
DATE 11/10/10 PLATE NO. M3-1.12



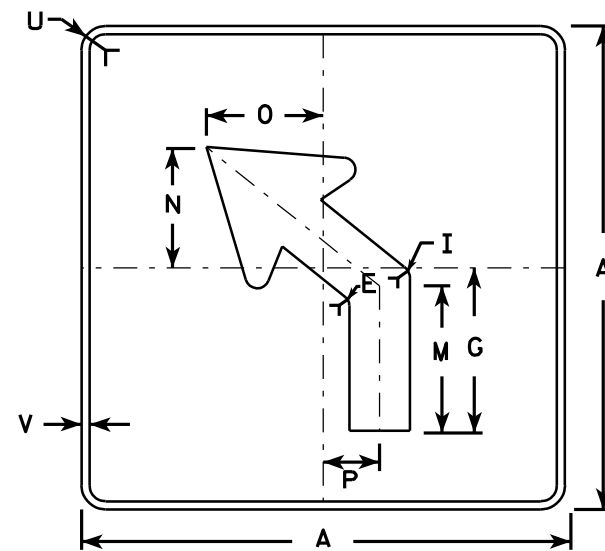
M5-1L
MK5-1L
MM5-1L
MO5-1L
MR5-1L



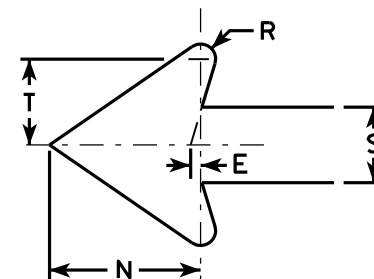
M5-2L
MK5-2L
MM5-2L
MO5-2L
MR5-2L



MB5-1L
MG5-1L
MN5-1L



MB5-2L
MG5-2L
MN5-2L



Metric equivalent
for this sign is:

SIZE	
1	
2	525 mm X 525 mm
3	750 mm X 750 mm
4	750 mm X 750 mm
5	750 mm X 750 mm

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.	Area m ²
1																												
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06	0.28
3	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25	0.56
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25	0.56
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25	0.56

PROJECT NO:	HWY:	COUNTY:	SHEET NO: 88	E
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NOTES

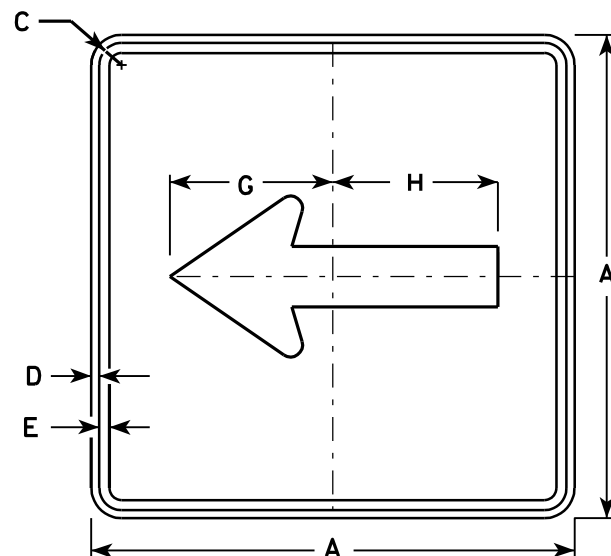
- Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - See note 4
Message - See note 4
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- M5-1 and M5-2 Background - White - Type H Reflective (Detour or temporary Signs - Reflective)
Message - Black
MB5-1 and MB5-2 Background - Blue
Message - White - Type H Reflective (Detour or temporary Signs - Reflective)
MG5-1 and MG5-2 Background - Green
Message - White - Type H Reflective
MK5-1 and MK5-2 Background - Green
Message - White Type H Reflective
MM5-1 and MM5-2 Background - White - Type H Reflective
Message - Green
MN5-1 and MN5-2 Background - Brown
Message - White - Type H Reflective
MO5-1 and MO5-2 Background - Orange - Reflective
Message - Black
MR5-1 and MR5-2 Background - Brown
Message - Yellow - Type H Reflective
- M5-1R same as M5-1L except arrow points right.
- M5-2R same as M5-2L except arrow tilts right.

STANDARD SIGN
M5-1 & M5-2

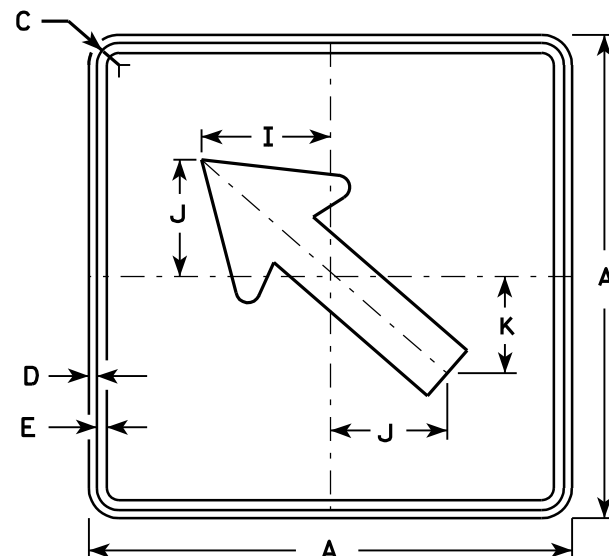
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

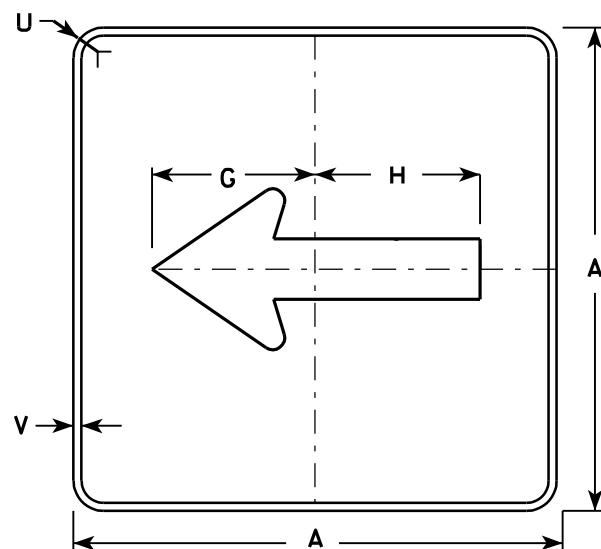
DATE 3/16/10 PLATE NO. M5-1.11



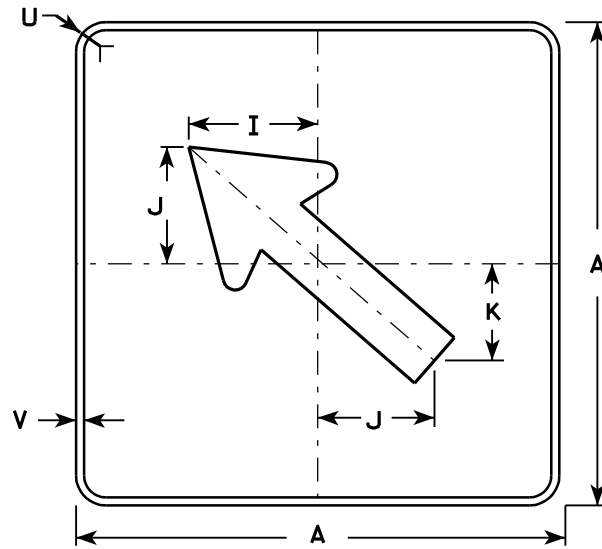
M6-1
MK6-1
MM6-1
MO6-1
MR6-1



M6-2
MK6-2
MM6-2
MO6-2
MR6-2



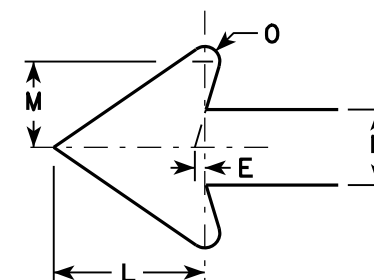
MB6-1
MG6-1
MN6-1



MB6-2
MG6-2
MN6-2

NOTES

- Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - See note 4
Message - See note 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.
- M6-1 and M6-2 Background - White - Type H Reflective
(Detour or temporary Signs - Reflective)
Message - Black
MB6-1 and MB6-2 Background - Blue
Message - White - Type H Reflective
(Detour or temporary Signs - Reflective)
MG6-1 and MG6-2 Background - Green
Message - White - Type H Reflective
MK6-1 and MK6-2 Background - Green
Message - White - Type H Reflective
MM6-1 and MM6-2 Background - White - Type H Reflective
Message - Green
MN6-1 and MN6-2 Background - Brown
Message - White - Type H Reflective
MO6-1 and MO6-2 Background - Orange - Reflective
Message - Black
MR6-1 and MR6-2 Background - Brown
Message - Yellow - Type H Reflective



Metric equivalent
for this sign is:

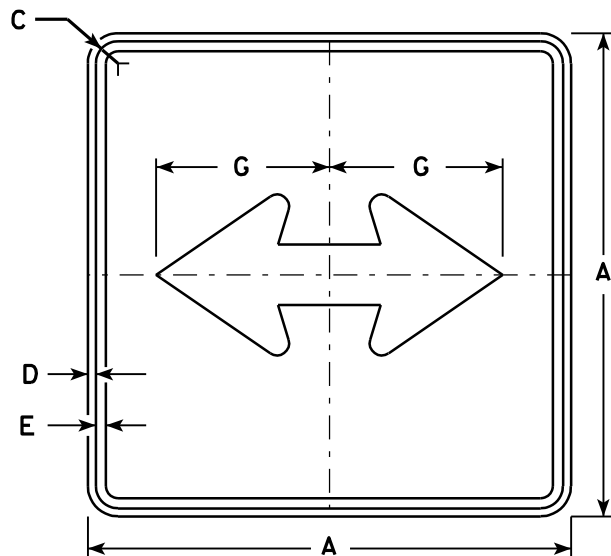
SIZE	
1	
2	525 mm X 525 mm
3	750 mm X 750 mm
4	750 mm X 750 mm
5	750 mm X 750 mm

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.	Area m2
1																												
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06	0.28
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56

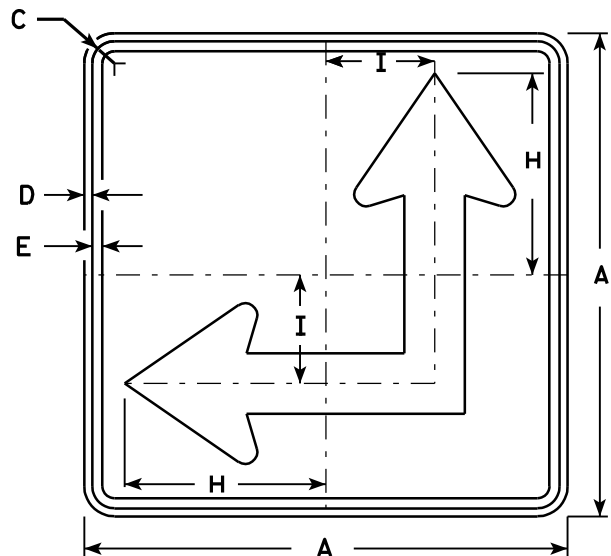
PROJECT NO: HWY: COUNTY: SHEET NO: 89 E

STANDARD SIGN M6-1 & M6-2 SERIES

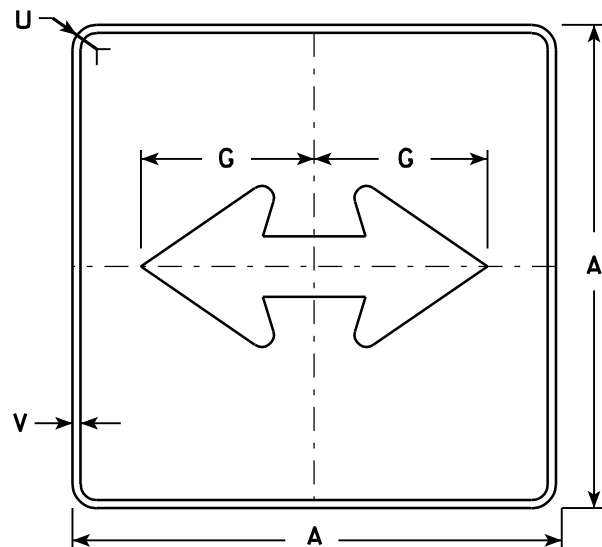
WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 3/16/10 PLATE NO. M6-1.12



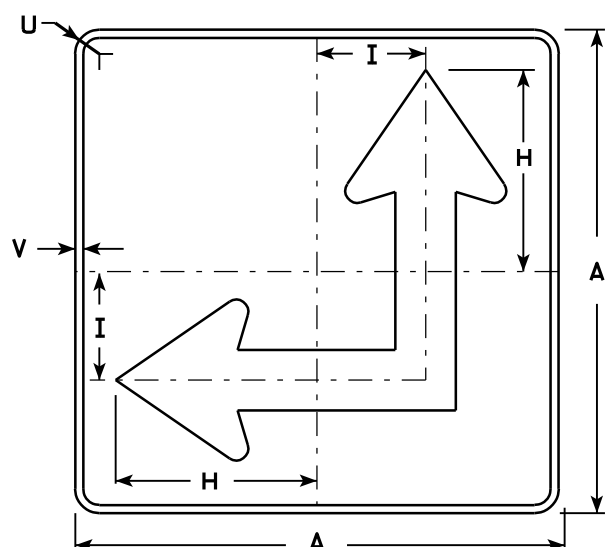
M6 - 4
MK6 - 4
MM6 - 4
MO6 - 4
MR6 - 4



M6 - 6
MK6 - 6
MM6 - 6
MO6 - 6
MR6 - 6



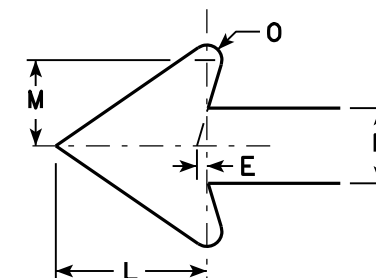
MB6 - 4
MG6 - 4
MN6 - 4



MB6 - 6
MG6 - 6
MN6 - 6

NOTES

- Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - See Note 4
Message - See Note 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.
- M6-4 and M6-6 Background - White - Type H Reflective
(Detour or temporary Signs - Reflective)
Message - Black
MB6-4 and MB6-6 Background - Blue
Message - White - Type H Reflective
(Detour or temporary Signs - Reflective)
MG6-4 and MG6-6 Background - Green
Message - White - Type H Reflective
MK6-4 and MK6-6 Background - Green
Message - White - Type H Reflective
MM6-4 and MM6-6 Background - White - Type H Reflective
Message - Green
MN6-4 and MN6-6 Background - Brown
Message - White - Type H Reflective
MO6-4 and MO6-6 Background - Orange - Reflective
Message - Black
MR6-4 and MR6-6 Background - Brown
Message - Yellow - Type H Reflective
- M6-6R same as M6-6L except arrow points ahead and right.



Metric equivalent
for this sign is:

SIZE	
1	
2	525 mm X 525 mm
3	750 mm X 750 mm
4	750 mm X 750 mm
5	750 mm X 750 mm

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.	Area m ²
1																												
2	21		1 1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06	0.28
3	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56
4	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56
5	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56

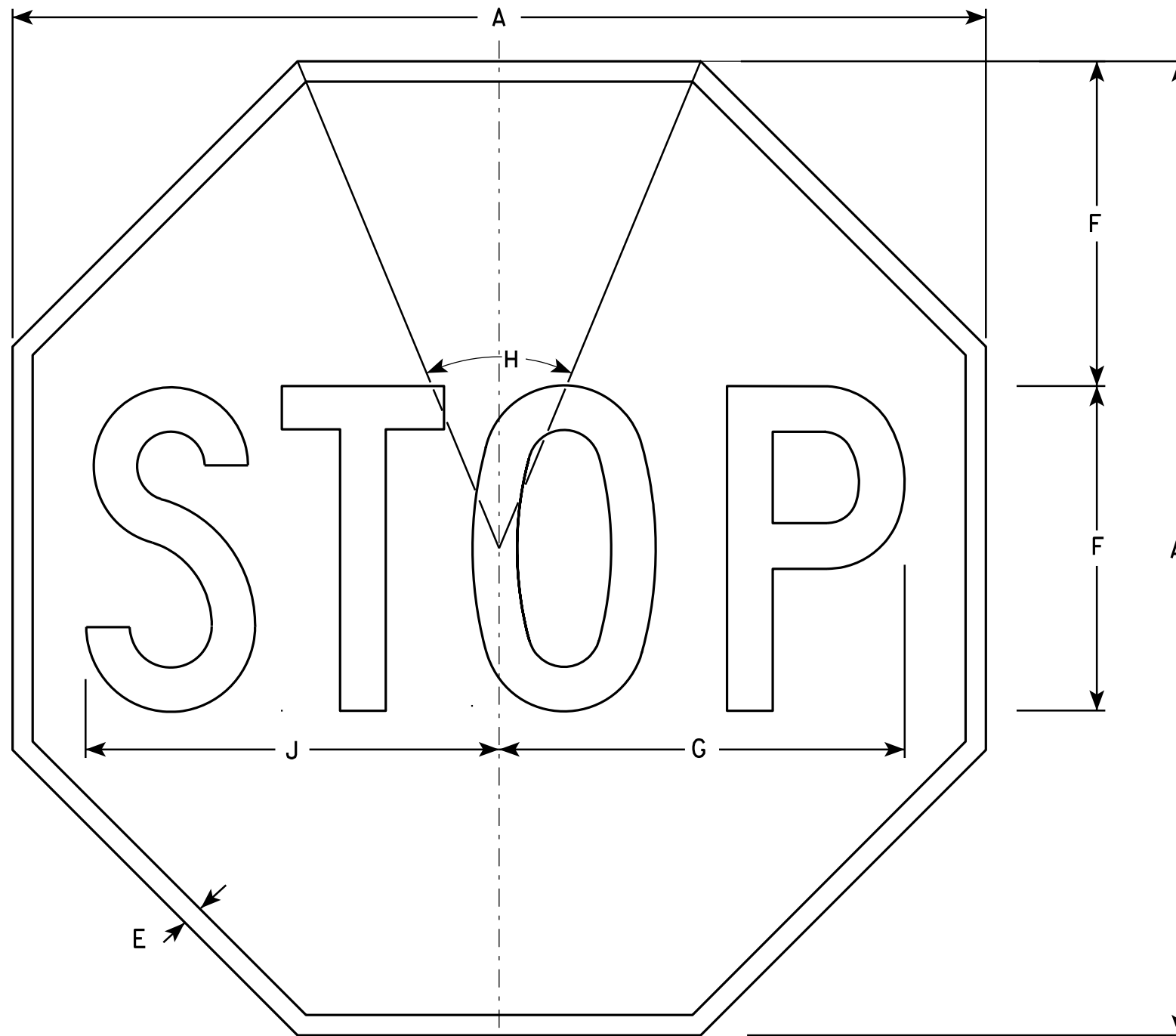
PROJECT NO:	HWY:	COUNTY:	SHEET NO: 90	E
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STANDARD SIGN
M6 - 4 & M6 - 6
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/16/10 PLATE NO. M6-4.7



NOTES

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

R1-1

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				3/8	8	10	45°		10 1/4																	3.31
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

STANDARD SIGN
R1 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1.12

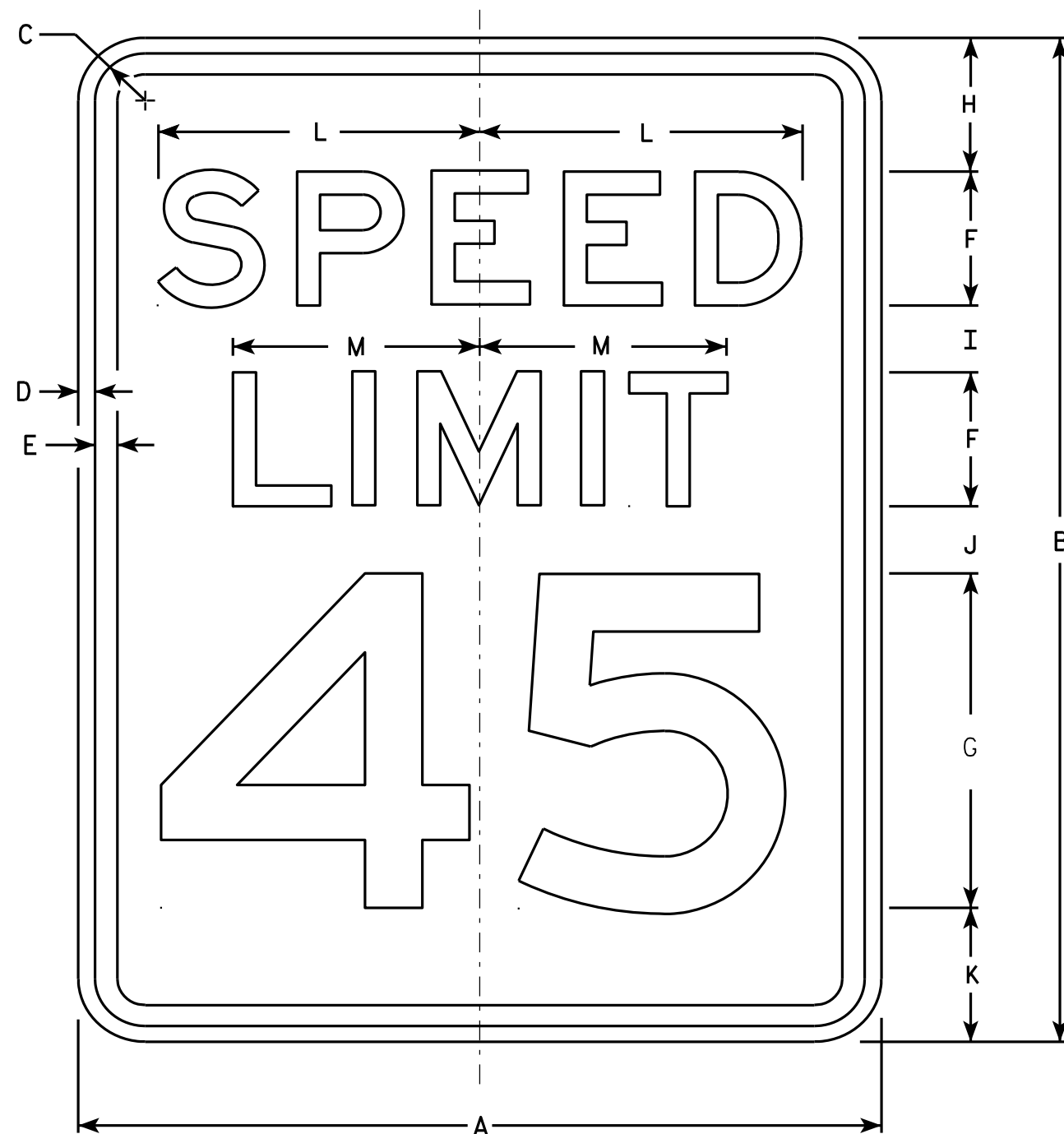
PROJECT NO:

HWY:

COUNTY:

SHEET NO: 91

E



R2-1

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 - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

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	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

STANDARD SIGN R2-1

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
For State Traffic Engineer
DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: HWY: COUNTY: SHEET NO: 92 E



R2-6P

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.

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	24	18	1 1/8	3/8	3/8	4	3 1/2	3	7 5/8	9 1/4																	3.0
2M	24	18	1 1/8	3/8	3/8	4	3 1/2	3	7 5/8	9 1/4																	3.0
3	36	24	1 1/8	3/8	1/2	6	4 1/8	3 3/4	12	14																	6.0
4	36	24	1 1/8	3/8	1/2	6	4 1/8	3 3/4	12	14																	6.0
5	48	36	1 3/8	1/2	5/8	8	7	6	15 1/8	19																	12.0

STANDARD SIGN
R2-6P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

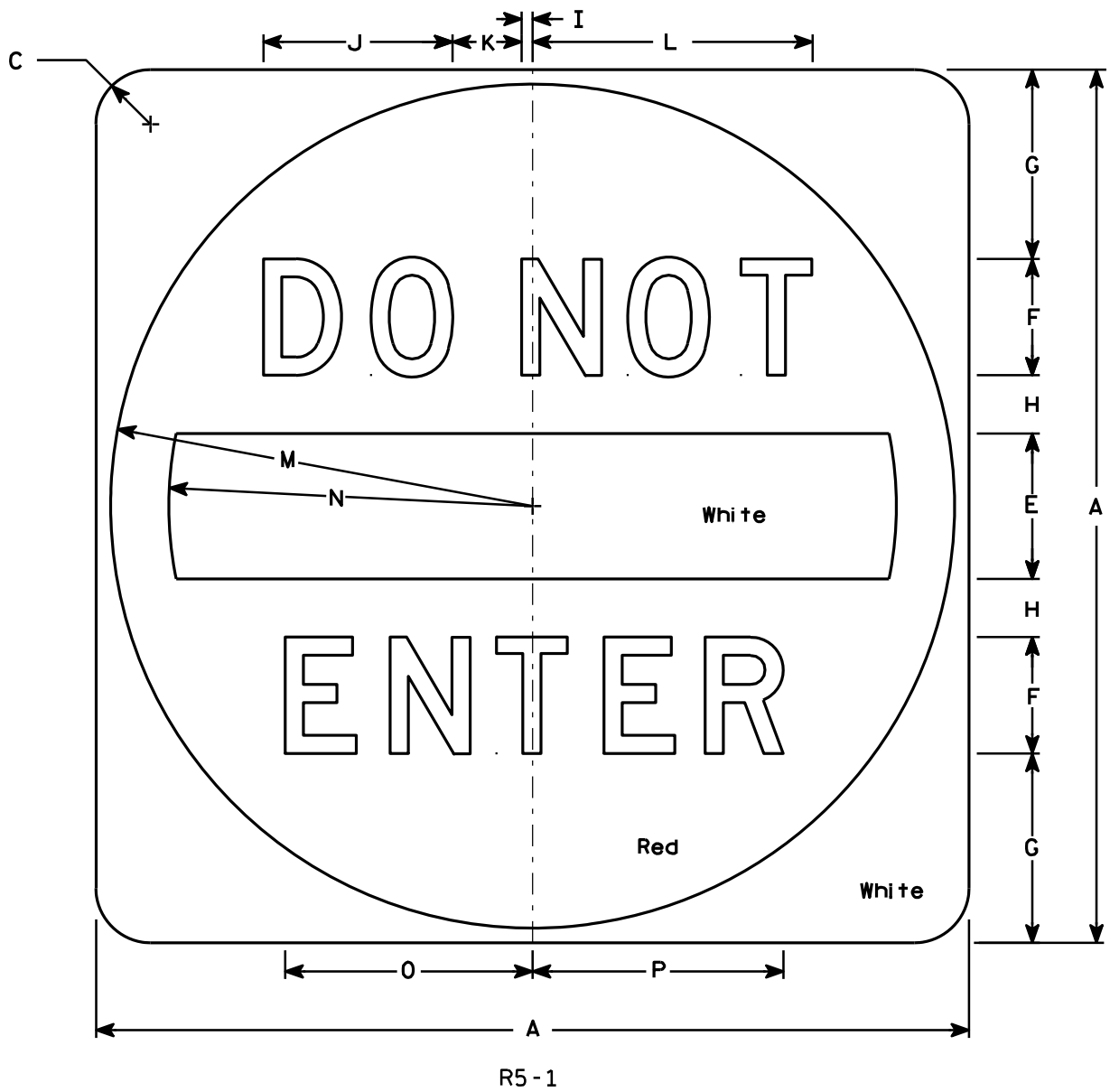
DATE 12/20/10 PLATE NO. R2-6P.2

NOTES

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

Background - See detail

Message - White - Type H Reflective
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but when base material is metal, the corners 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																											
2S	30		1 7⁄8		5	4	6 1⁄2	2	3⁄8	6 1⁄2	2 3⁄8	9 5⁄8	14 1⁄2	12 1⁄2	8 1⁄2	8 5⁄8											6.26
2M	36		2 1⁄4		6	5	7 1⁄2	2 1⁄2	1⁄2	8 1⁄8	3	12 1⁄8	17 1⁄2	15	10 5⁄8	10 3⁄4											9.0
3	36		2 1⁄4		6	5	7 1⁄2	2 1⁄2	1⁄2	8 1⁄8	3	12 1⁄8	17 1⁄2	15	10 5⁄8	10 3⁄4											9.0
4	36		2 1⁄4		6	5	7 1⁄2	2 1⁄2	1⁄2	8 1⁄8	3	12 1⁄8	17 1⁄2	15	10 5⁄8	10 3⁄4											9.0
5	48		3		8	6	11	3	5⁄8	9 3⁄4	3 5⁄8	14 1⁄2	23 1⁄2	20	12 3⁄4	12 7⁄8											16.0

STANDARD SIGN
R5 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

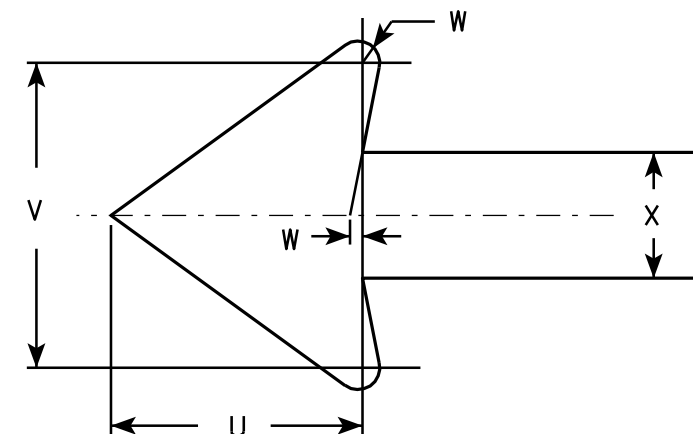
DATE 12/17/10 PLATE NO. R5-1.15



R7-1

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 - Red
3. Message Series - See Note 5
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. Lines 1, 3 and 4 are series C, line 2 is series B.
6. R7-1D (double arrow)
R7-1L (left arrow)
R7-1R (right arrow)



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	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	2 1/4	2 1/8	2 1/2	3 7/8	1 1/2	1 3/4	1/8	3/4			1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	2 3/4	2 5/8	3 1/8	5 7/8	2 1/4	2 5/8	1/4	1 1/8			3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
4																											
5																											

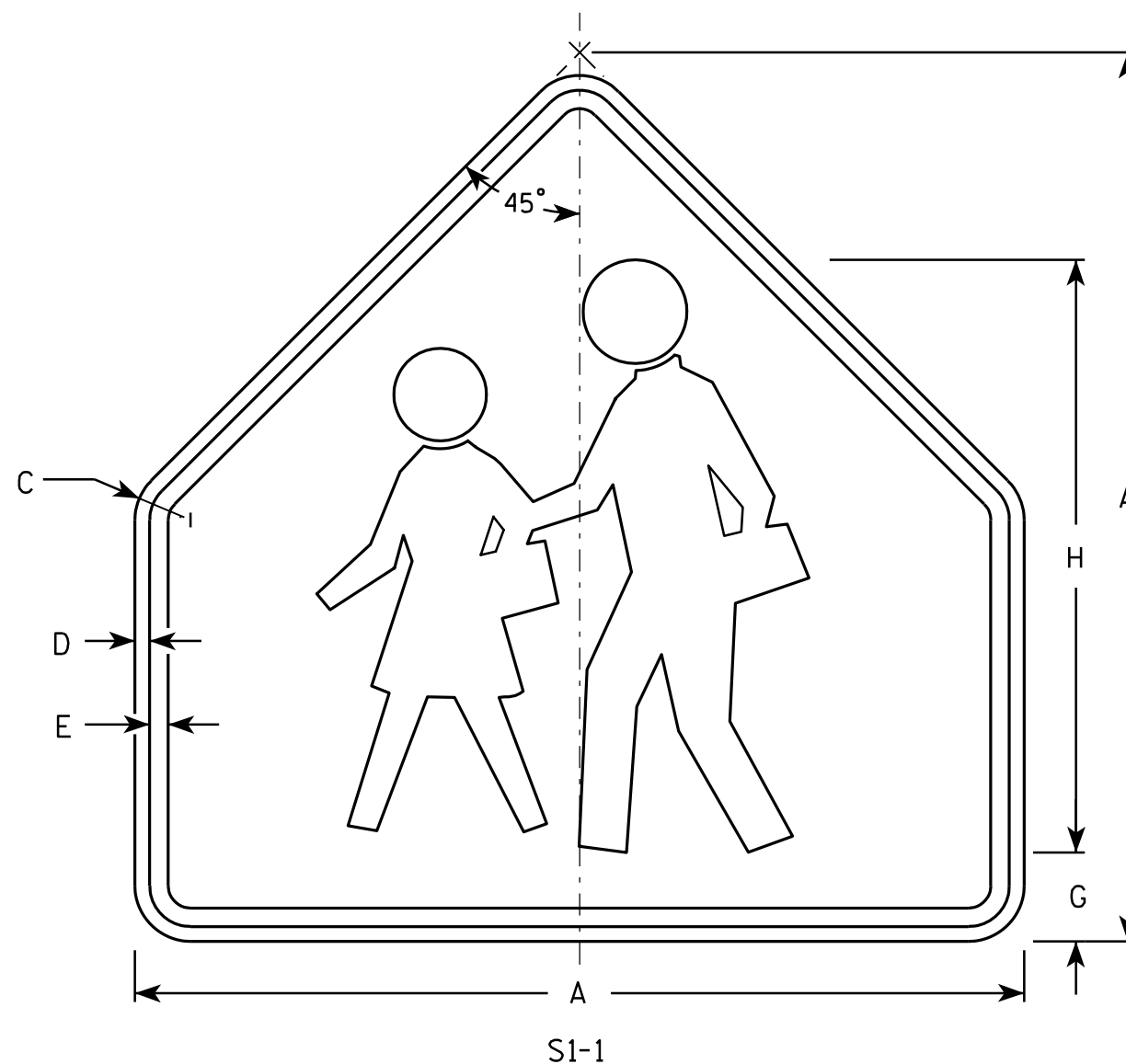
STANDARD SIGN R7-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-1.9

PROJECT NO: HWY: COUNTY: SHEET NO: 95 E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow-Green
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	30		1 3/8	1/2	5/8		3	20																			4.69
2	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
3	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
4	48		2 1/4	3/4	1		4 3/4	32																			12
5																											

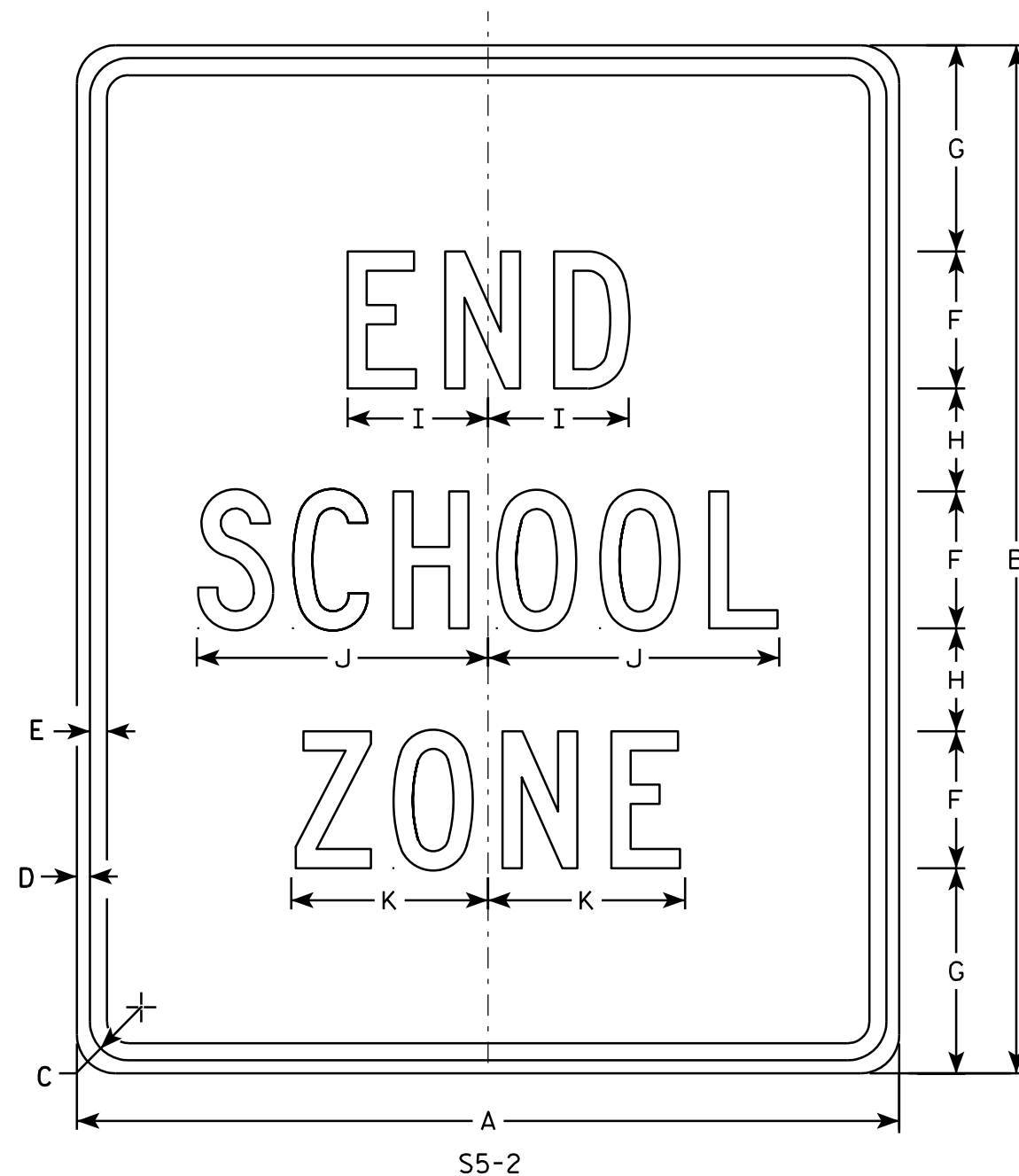
STANDARD SIGN S1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R. Rauch
for State Traffic Engineer
DATE 6/30/05 PLATE NO. S1-1.8

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: 96 **E**

7



NOTES

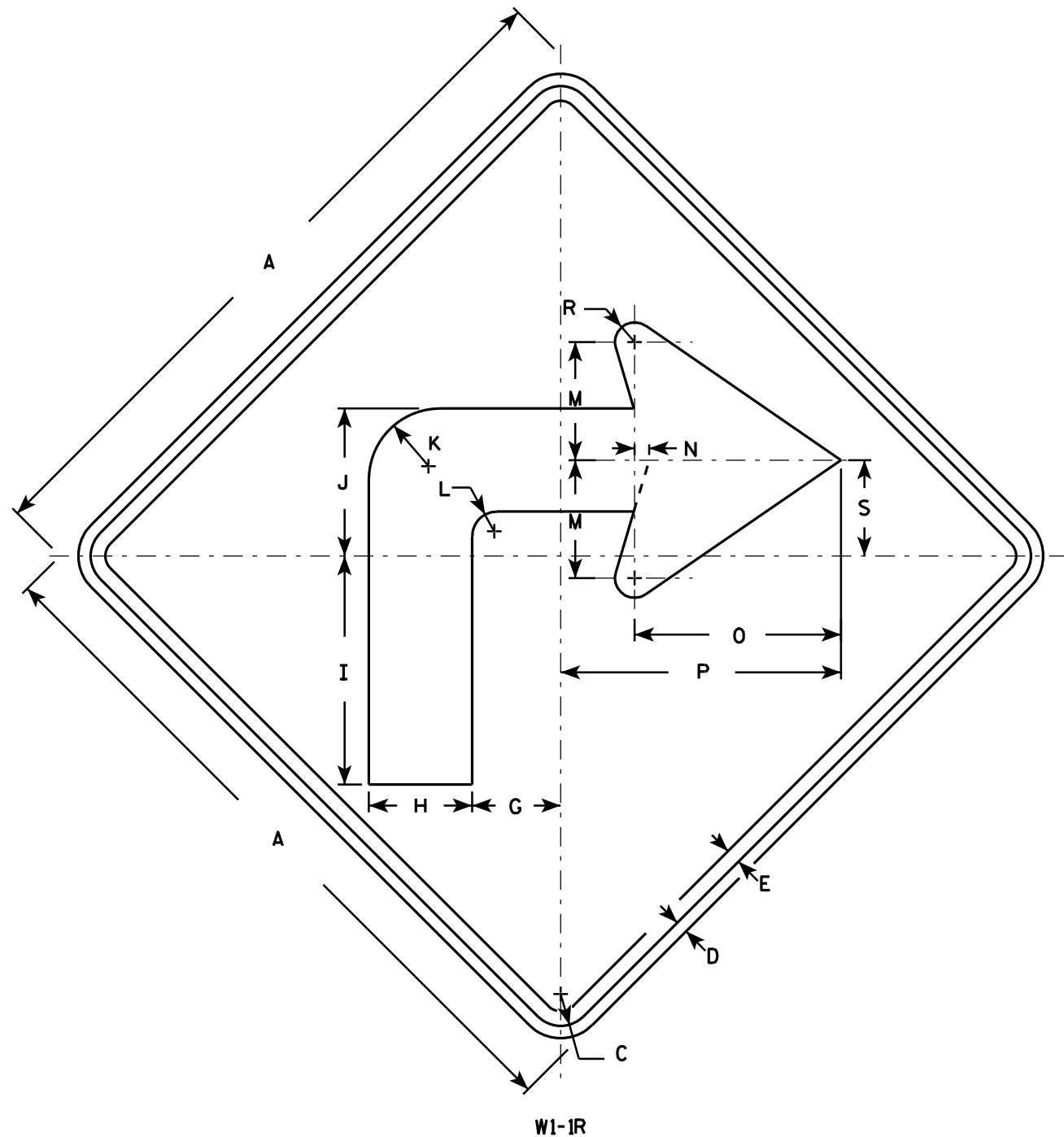
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as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

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	v	W	X	Y	Z	Area sq. ft.
1																											
2	24	30	1 1/8	3/8	1/2	4	6	3	4 1/8	8 1/2	5 3/4																5.0
3	36	42	1 5/8	5/8	3/4	6	7	5	6 1/8	12 5/8	8 5/8																10.5
4																											
5																											

STANDARD SIGN S5-2	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 3/8/11	PLATE NO. S5-2.2

PROJECT NO:	HWY:	COUNTY:	SHEET NO: 97	E
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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. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W1-1L is the same as W1-1R 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	24		1 1/8	3/8	1/2		3	3 1/2	7 3/4	5	2 1/2	7/8	4	1/2	7	9 1/2		5/8	3 1/4								4.0
2S	36		1 5/8	5/8	3/4		4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	1 1/4	6	3/4	10 1/2	14 1/4		1	4 7/8								9.0
2M	36		1 5/8	5/8	3/4		4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	1 1/4	6	3/4	10 1/2	14 1/4		1	4 7/8								9.0
3	36		1 5/8	5/8	3/4		4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	1 1/4	6	3/4	10 1/2	14 1/4		1	4 7/8								9.0
4	48		2 1/4	3/4	1		6	7	15 1/2	10	4 7/8	1 5/8	8	1	14	19		1 1/4	6 1/2								16.0
5	48		2 1/4	3/4	1		6	7	15 1/2	10	4 7/8	1 5/8	8	1	14	19		1 1/4	6 1/2								16.0

STANDARD SIGN

W1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/15/12 PLATE NO. W1-1.11

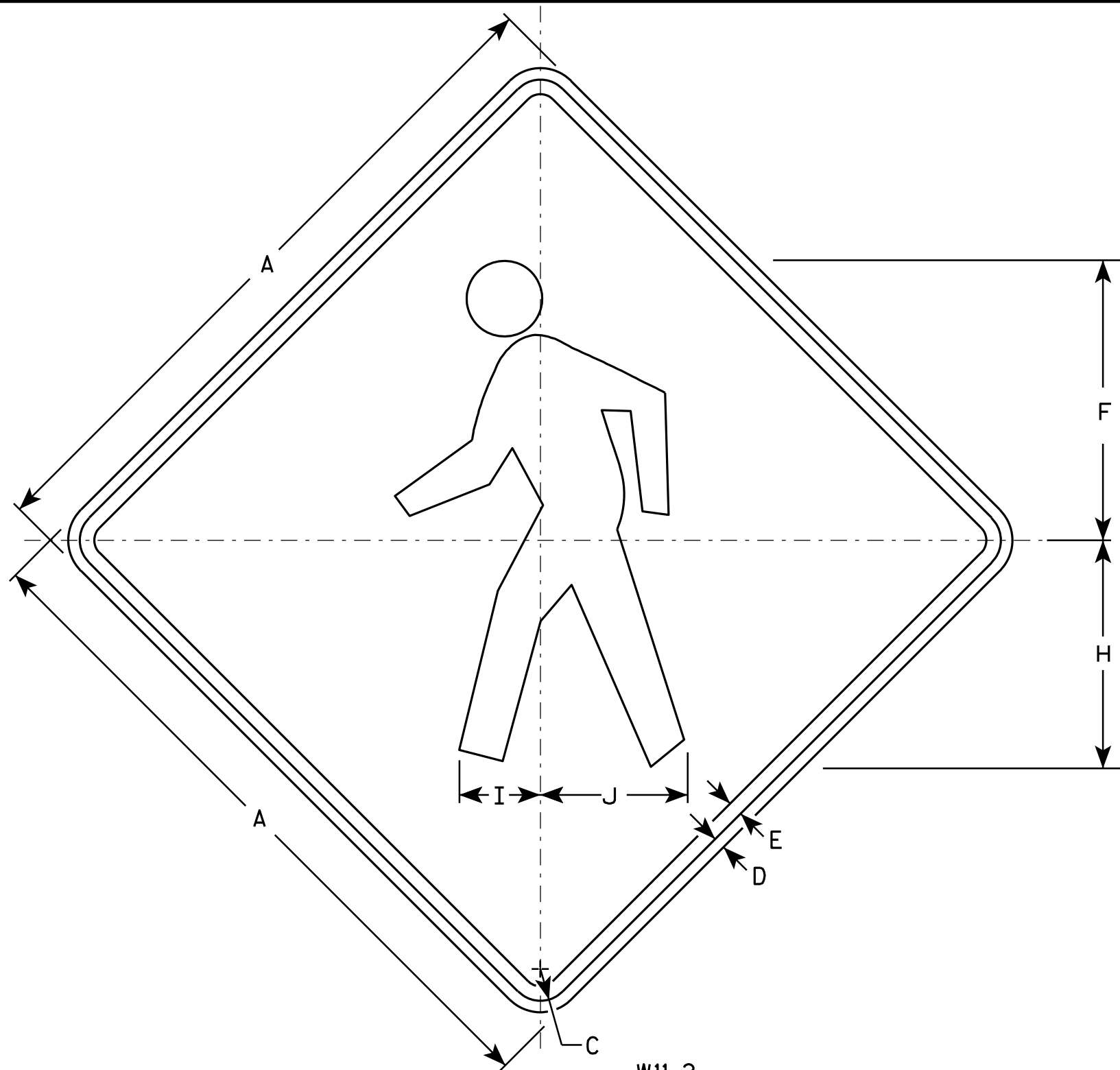
PROJECT NO:

HWY:

COUNTY:

SHEET NO: 98

E



W11-2

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. 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	1/2	9 3/4		7 7/8	2 7/8	5 1/8																	4.0
2S	30		1 3/8	1/2	5/8	12 1/8		9 7/8	3 1/2	6 3/8																	6.25
2M	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
3	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
4	48		2 1/4	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
5																											

STANDARD SIGN W11-2

WISCONSIN DEPT OF TRANSPORTATION

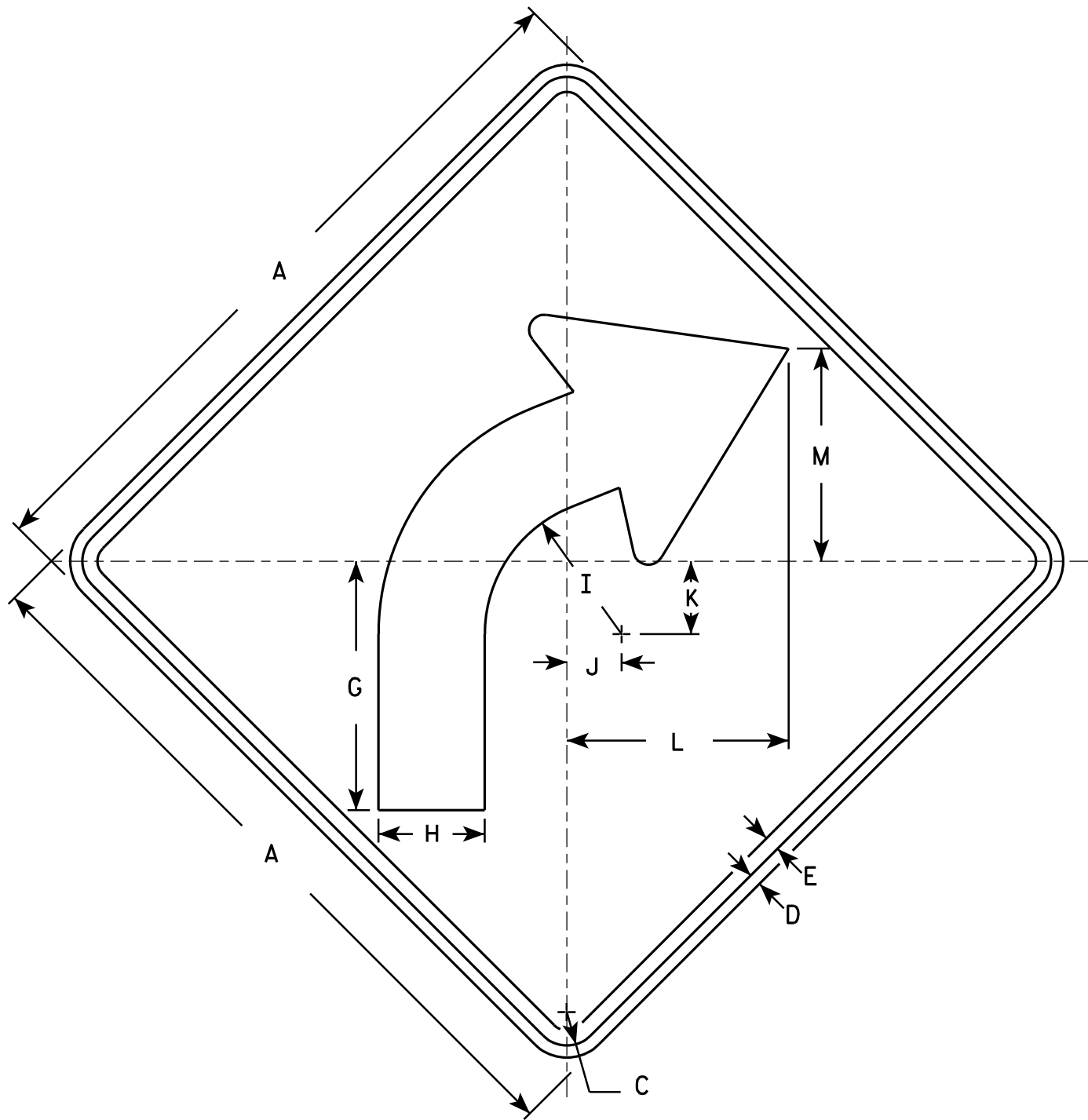
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W11-2.7

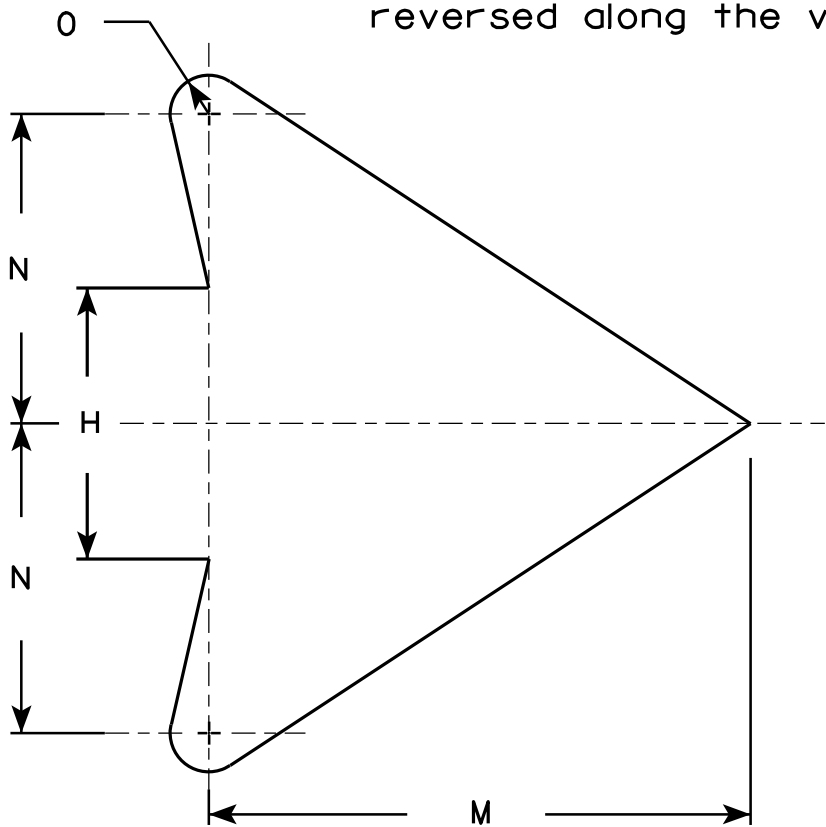
PROJECT NO: HWY: COUNTY: SHEET NO: 99 E

NOTES

1. Sign is Type II - Type F Reflective - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Corners may be square or rounded when base
material is plywood but borders shall be rounded
as shown. When base material is metal, the
corners and borders shall be rounded.
4. W1-2L is the same as W1-2R except the arrow is
reversed along the vertical centerline.



W1-2R



ARROW DETAIL

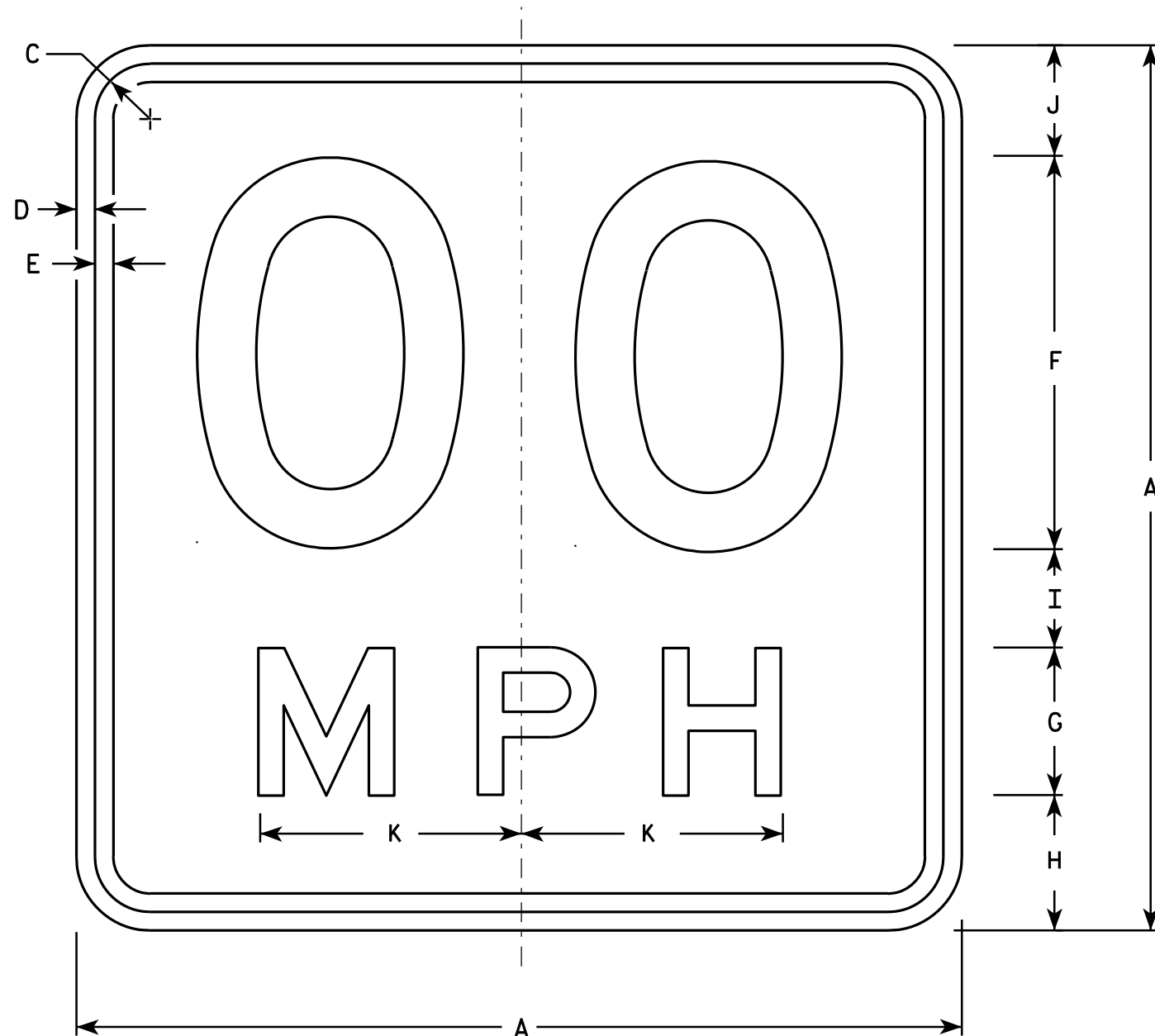
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		8 1/4	3 1/2	4 1/2	1 3/4	2 3/8	7 1/4	7	4	1/2												4.0
2S	30		1 3/8	1/2	5/8		10 1/4	4 3/8	5 5/8	2 1/4	3	9 1/8	8 3/4	5	5/8												6.25
2M	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
3	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
4	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
5	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0

STANDARD SIGN
W1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 5/15/12 PLATE NO. W1-2.10



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 - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
Line 2 is Series E

W13-1

- * For 30" x 30" Warning Signs, use 18" x 18" W13-1 signs.
For 36" x 36" Warning Signs, use 24" x 24" W13-1 signs.

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	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
* 2S	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
* 2M	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
3	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00
4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

STANDARD SIGN

W13-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 5/31/12 PLATE NO. W13-1.16

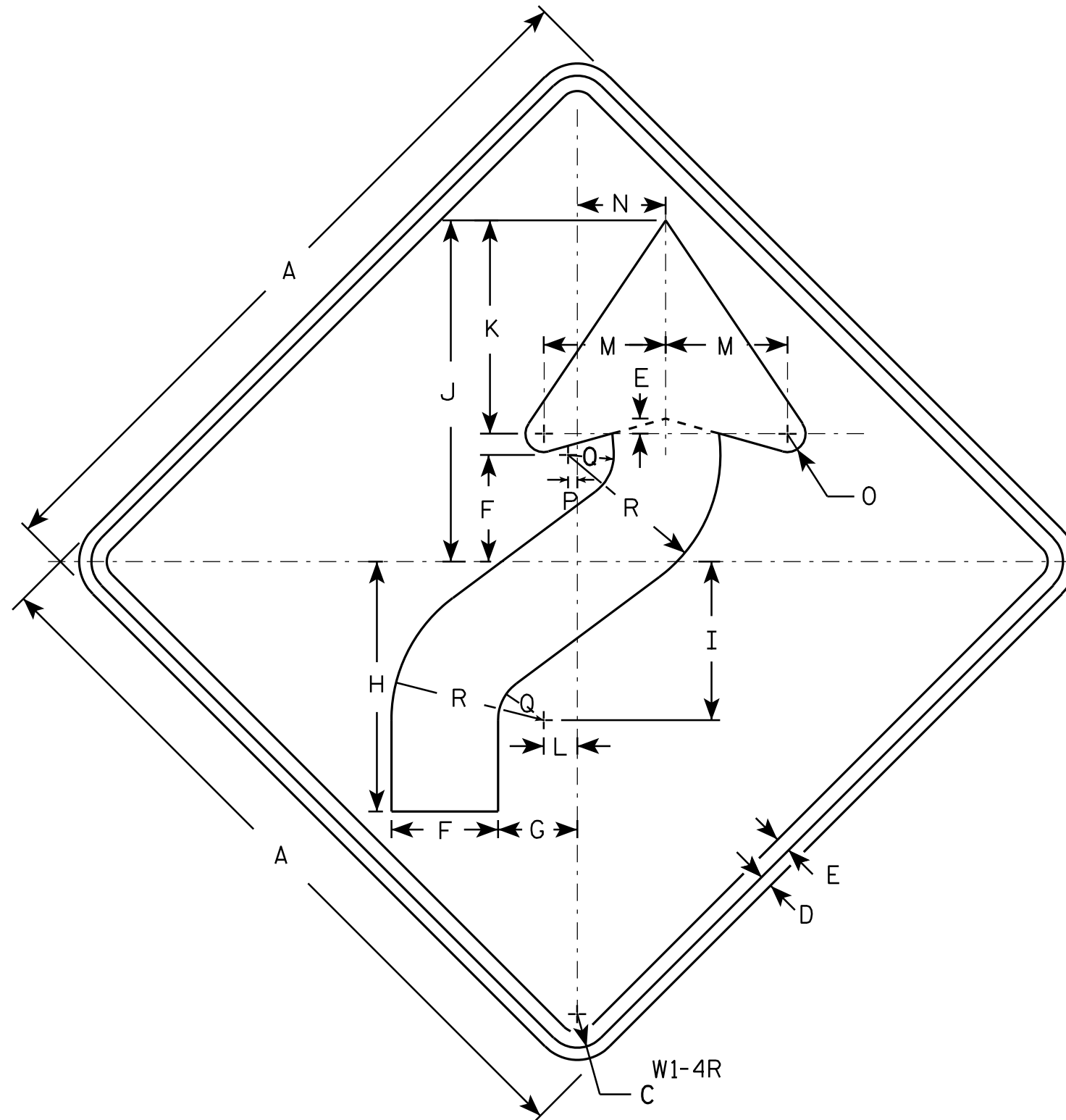
PROJECT NO:

HWY:

COUNTY:

SHEET NO: 101

E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W1-4L is the same as W1-4R 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	24		1 1/8	3/8	1/2	3 1/2	2 5/8	8 1/4	5 1/4	11 1/4	7	1 1/8	4	3	5/8	1/4	1 1/2	5									4.0
2S	30		1 3/8	1/2	5/8	4 3/8	3 1/4	10 1/4	6 1/2	14	8 3/4	1 3/8	5	3 5/8	3/4	3/8	1 7/8	6 1/4									6.25
2M	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
3	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
4	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
5	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

STANDARD SIGN W1 - 4

WISCONSIN DEPT OF TRANSPORTATION

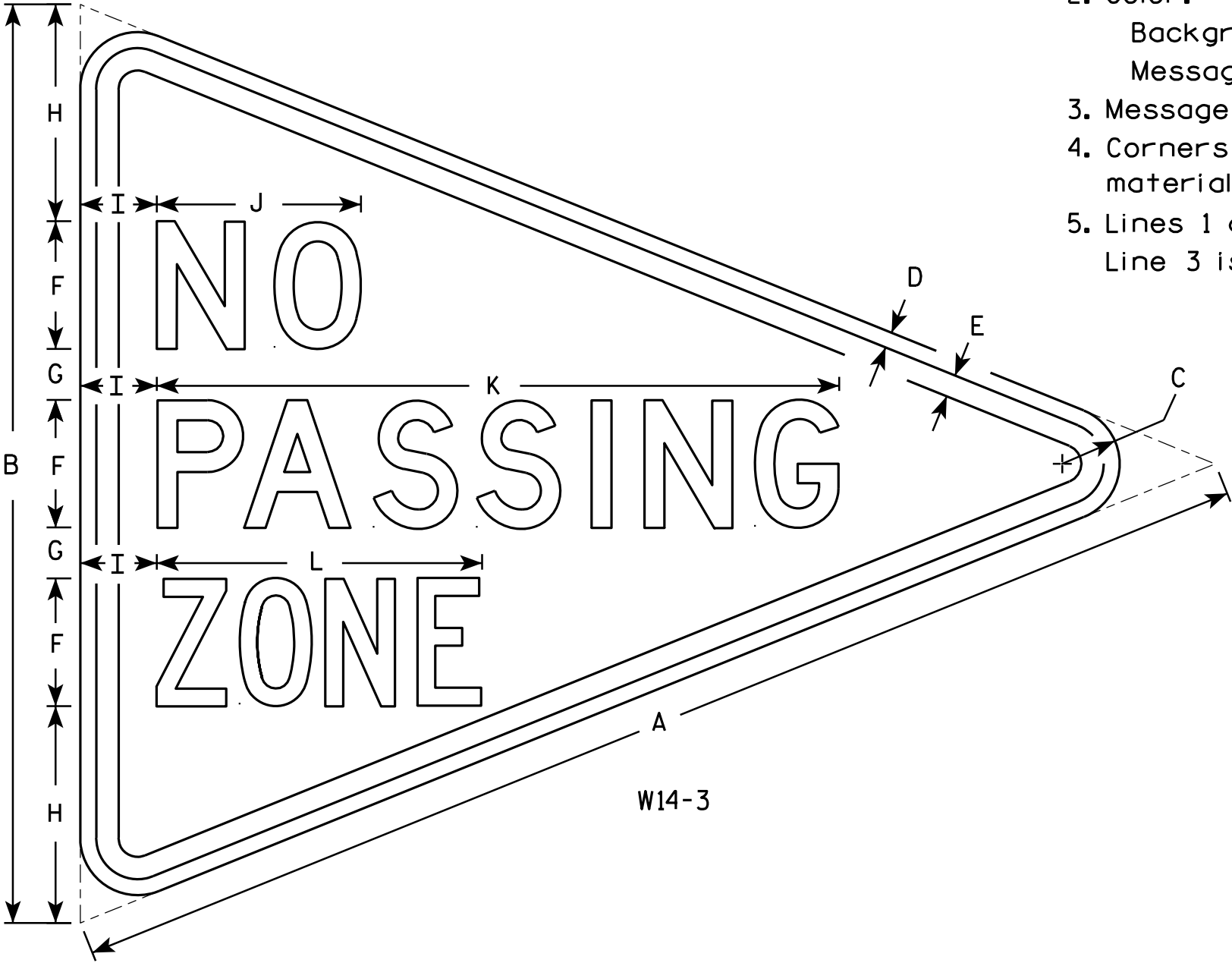
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/17/12 PLATE NO. W1-4.11

PROJECT NO:	HWY:	COUNTY:	SHEET NO: 102	E
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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 - See note 5
- 4. Corners and borders shall be rounded on all base materials for this sign.
- 5. Lines 1 and 2 are Series D.
Line 3 is series C.



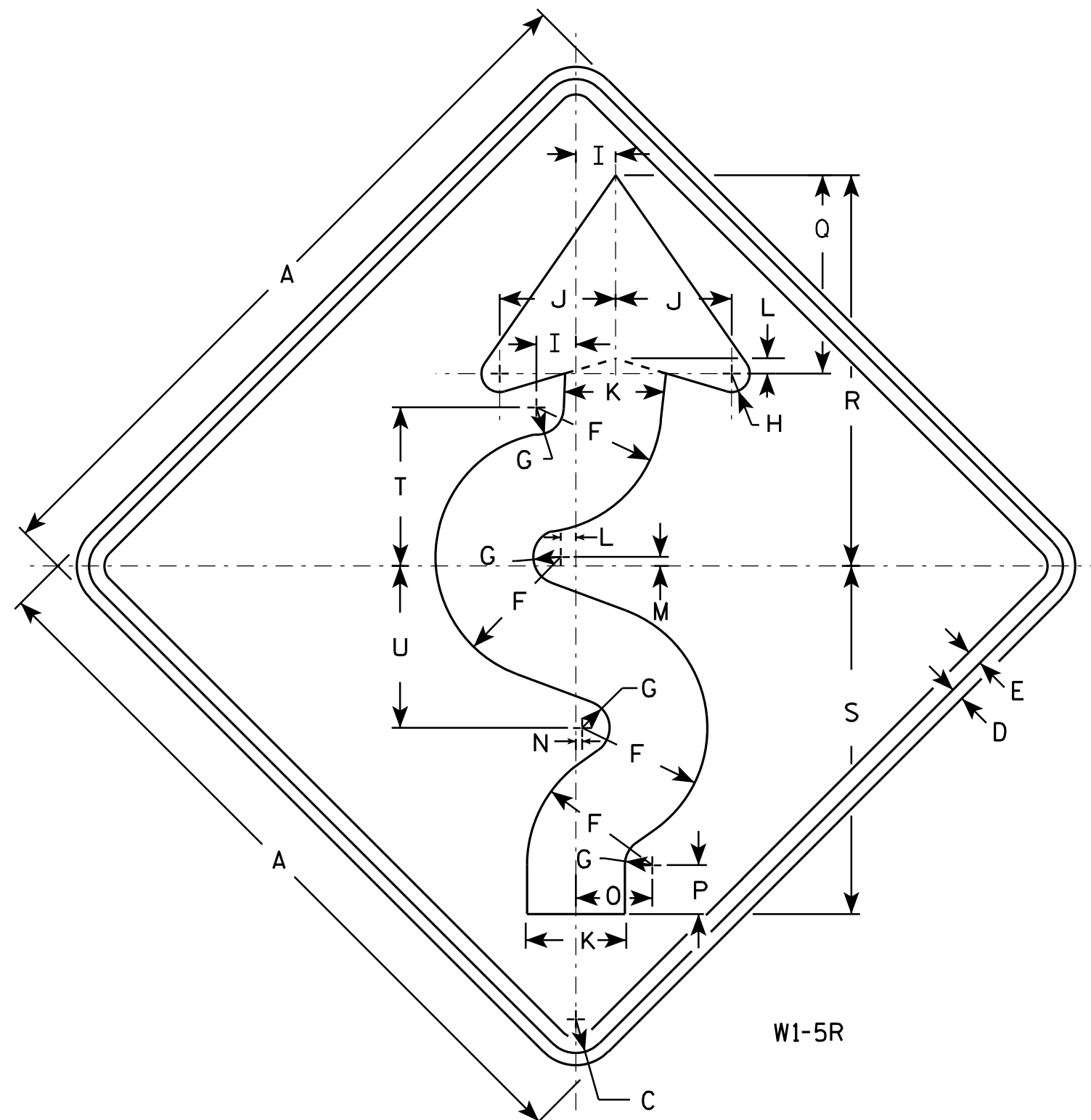
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
2M	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
3	64	48	3	3/4	1 1/4	6	3	12	4	10 3/4	33 5/8	16 1/2															10.7
4																											
5																											

STANDARD SIGN
W14-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 6/7/10 PLATE NO. W14-3.9



NOTES

- Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - Yellow
Message - Black
- 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.
- W1-5L is the same as W1-5R except the arrow is reversed along the vertical centerline.

W1-5R

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	1/2	4 1/8	7/8	5/8	1 1/4	3 3/4	3 1/4	1/2	1/4	1/8	2 1/2	1 5/8	6 1/2	12 3/4	11 3/8	5 1/4	5 1/4						4.0
2S	30		1 3/8	1/2	5/8	5 1/8	1 1/8	3/4	1 5/8	4 3/4	4 1/8	5/8	3/8	1/4	3 1/8	2	8 1/8	16	14 1/4	6 1/2	6 5/8						6.25
2M	36		1 5/8	5/8	3/4	6 1/4	1 3/8	1	1 7/8	5 5/8	4 7/8	3/4	3/8	1/4	3 3/4	2 7/8	9 3/4	19 1/8	17 1/8	7 3/4	7 7/8						9.0
3	36		1 5/8	5/8	3/4	6 1/4	1 3/8	1	1 7/8	5 5/8	4 7/8	3/4	3/8	1/4	3 3/4	2 7/8	9 3/4	19 1/8	17 1/8	7 3/4	7 7/8						9.0
4	36		1 5/8	5/8	3/4	6 1/4	1 3/8	1	1 7/8	5 5/8	4 7/8	3/4	3/8	1/4	3 3/4	2 7/8	9 3/4	19 1/8	17 1/8	7 3/4	7 7/8						9.0
5	48		2 1/4	3/4	1	8 1/4	1 3/4	1 1/4	2 1/2	7 1/2	6 1/2	1	1/2	3/8	5	3 1/4	13	25 1/2	22 3/4	10 3/8	10 1/2						16.0

STANDARD SIGN W1-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch
for State Traffic Engineer

DATE 5/18/12

PLATE NO. W1-5.8

PROJECT NO:

HWY:

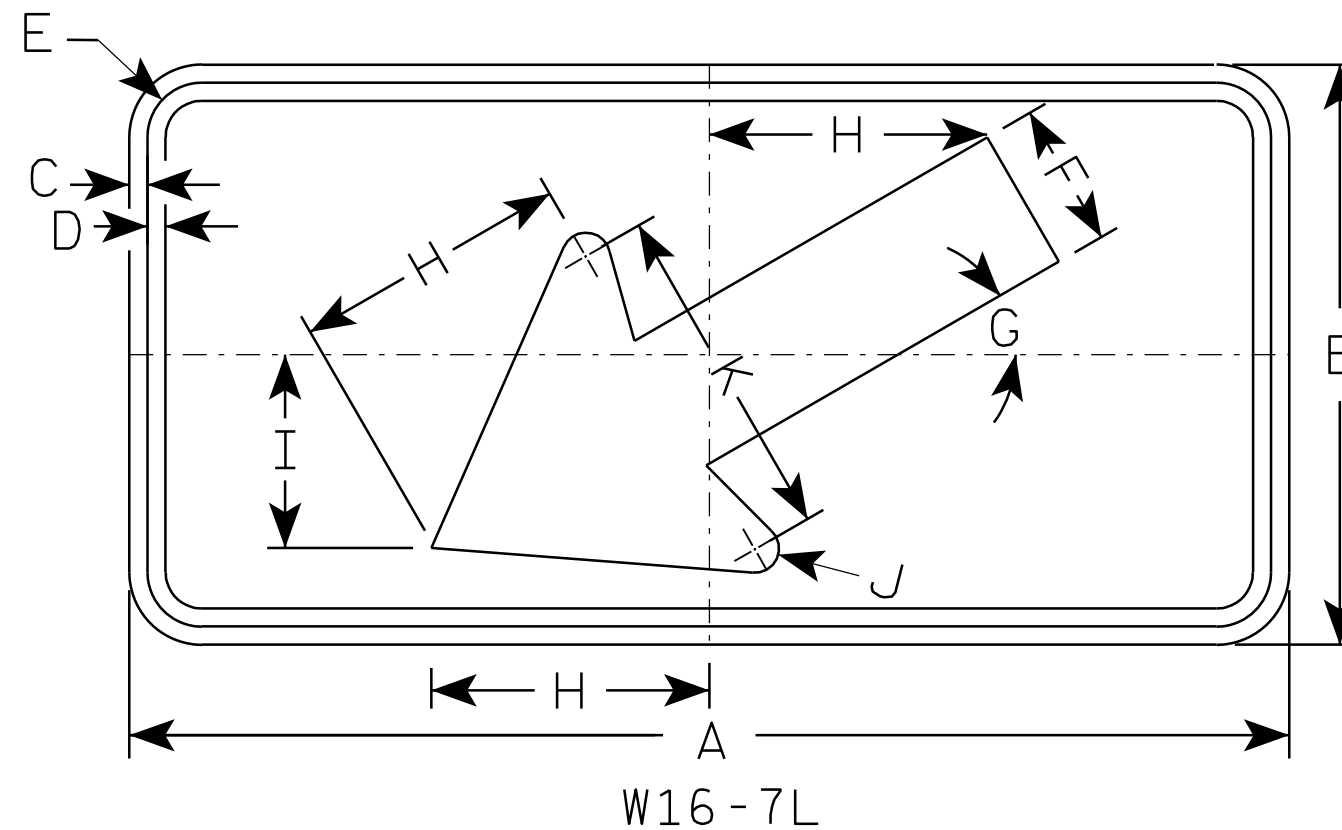
COUNTY:

SHEET NO: 104

E

NOTES

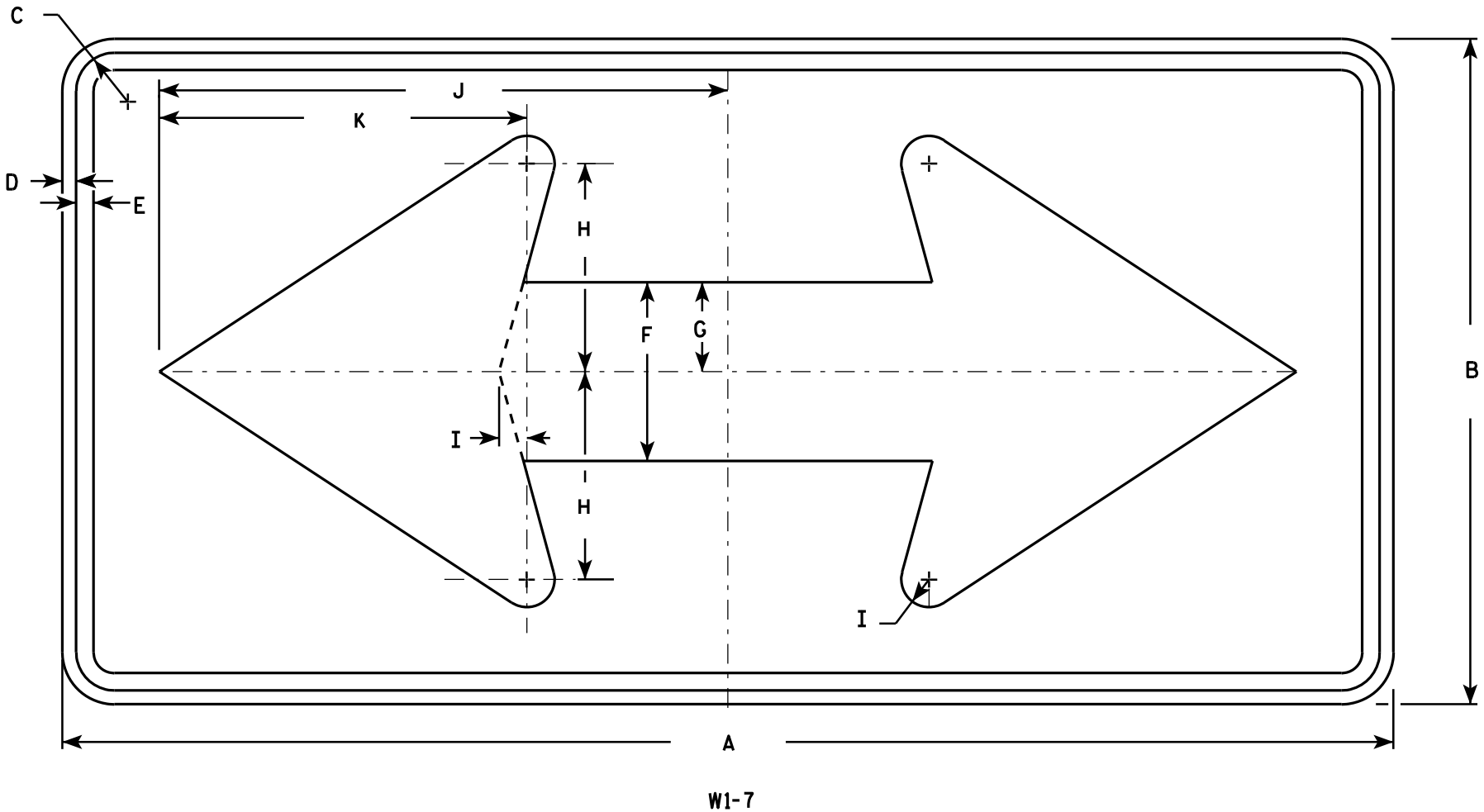
1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W16-7R is the same as W16-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																											
2S	24	12	$\frac{3}{8}$	$\frac{3}{8}$	1 $\frac{1}{8}$	3	30°	5 $\frac{3}{4}$	4	$\frac{1}{2}$	7																2.0
2M	30	18	$\frac{3}{8}$	$\frac{1}{2}$	1 $\frac{1}{8}$	4 $\frac{1}{2}$	30°	8 $\frac{1}{2}$	6	$\frac{5}{8}$	10 $\frac{1}{4}$																3.75
3	30	18	$\frac{3}{8}$	$\frac{1}{2}$	1 $\frac{1}{8}$	4 $\frac{1}{2}$	30°	8 $\frac{1}{2}$	6	$\frac{5}{8}$	10 $\frac{1}{4}$																3.75
4																											8
5																											8

STANDARD SIGN	
W16-7	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 11/02/10	PLATE NO. W16-7.5

PROJECT NO:	HWY:	COUNTY:	SHEET NO: 105	E
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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. 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	18	1 1/8	3/8	1/2	5	2 1/2	5 3/4	3/4	15 5/8	10 1/8																4.5
2S	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
2M	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
3	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
4	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
5	96	48	2 1/4	3/4	1	13	6 1/2	15	2	41	26 1/2																32.0

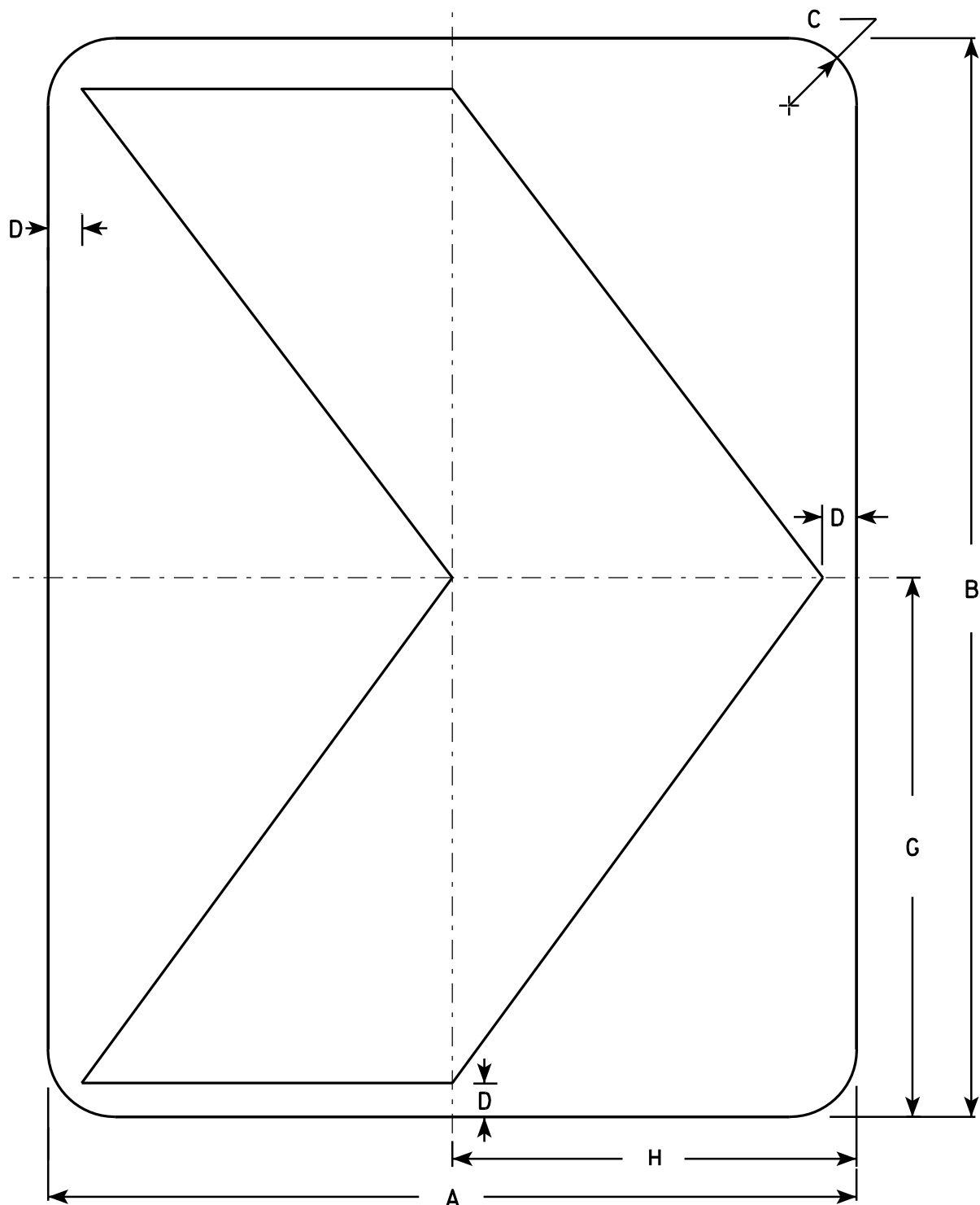
STANDARD SIGN

W1 - 7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-7.7



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. 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.

W1-8

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	12	18	1 1/2	1/2			9	6																			1.5
2S	18	24	1 1/2	3/4			12	9																			3.0
2M	18	24	1 1/2	3/4			12	9																			3.0
3	24	30	1 1/2	1			15	12																			5.0
4	30	36	1 7/8	1 1/4			18	15																			7.5
5	36	48	2 1/4	1 1/2			24	18																			12.0

STANDARD SIGN

W1-8

WISCONSIN DEPT OF TRANSPORTATION

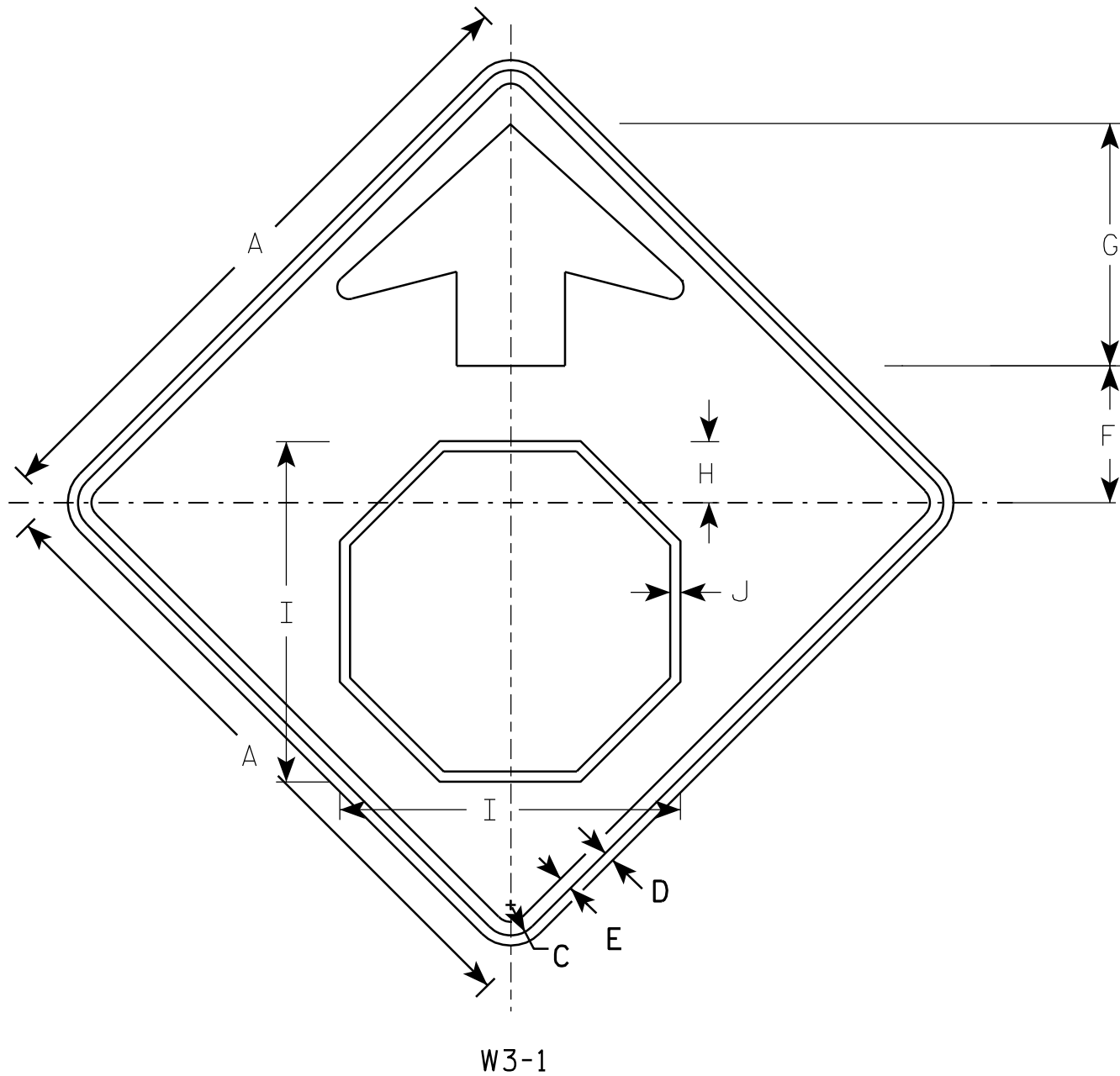
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-8.6

PROJECT NO:

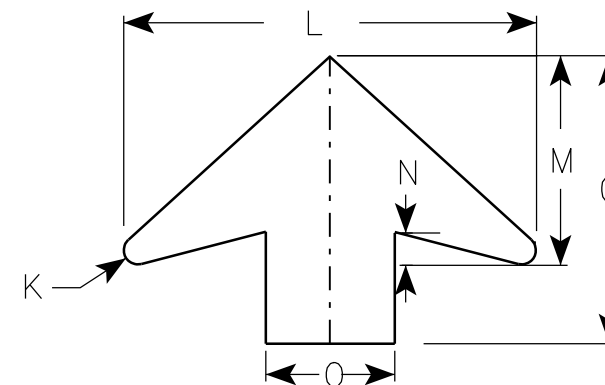
SHEET NO: 107

E



NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - YELLOW
Arrow & Border - BLACK
Stop Symbol - WHITE BORDER ON RED BACKGROUND



ARROW DETAIL

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		1 3/8	1/2	5/8	6 1/4	11 1/4	2 7/8	15 3/4	1/2	1/2	16	8	1 1/4	5												6.25
2S	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
2M	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
3	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0

PROJECT NO:

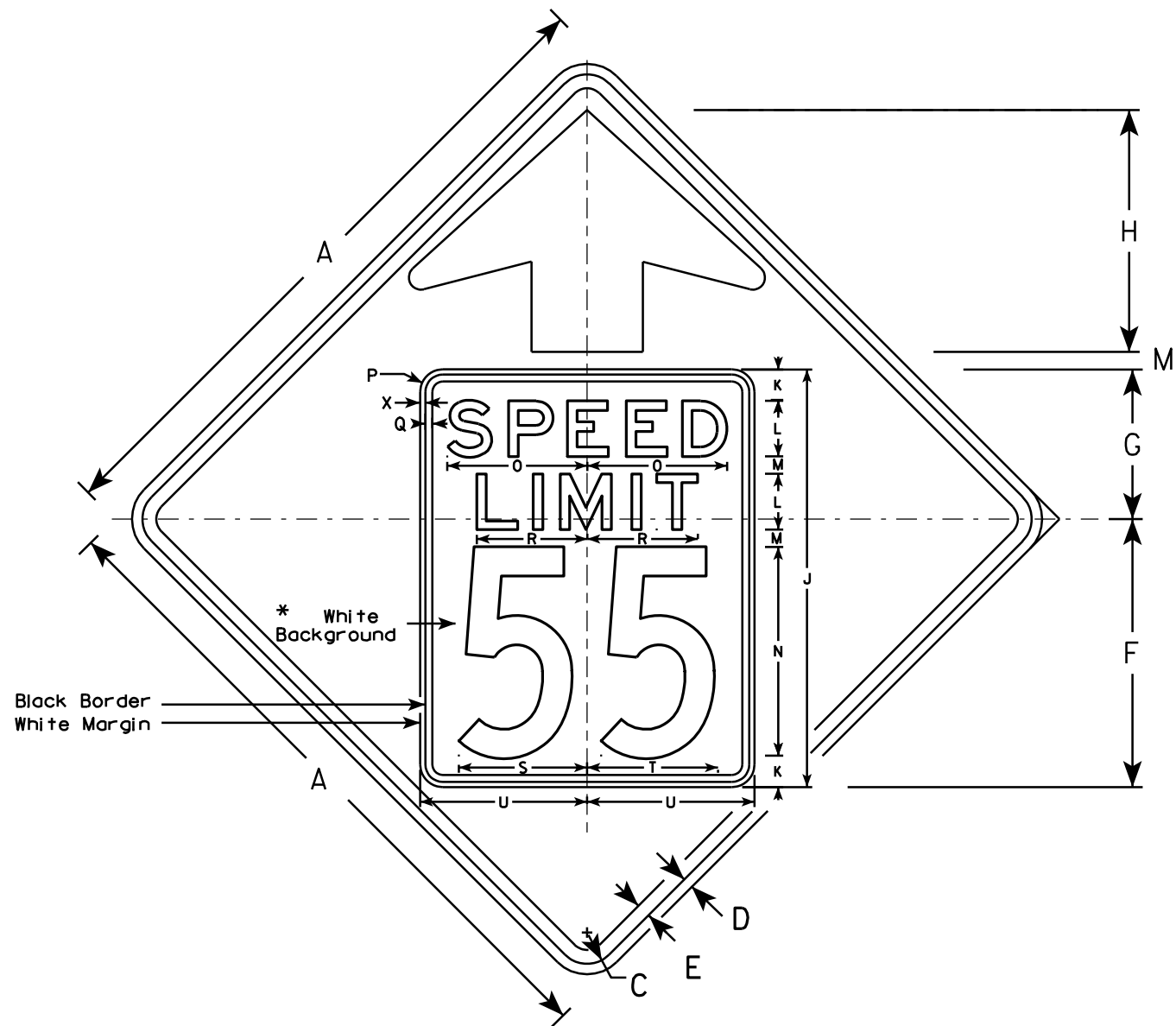
STANDARD SIGN
W3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 6/7/10 PLATE NO. W3-1.12

SHEET NO: 109

E

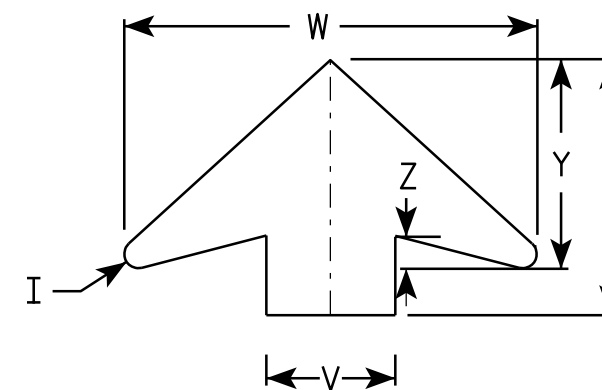


W3-5

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 for numbers Series E for wording
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

*Speed Limit Sign shall have a White Background



ARROW DETAIL

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	36		1 5⁄8	5⁄8	3⁄4	14 1⁄2	9 1⁄2	11 1⁄2	5⁄8	24	2	3	1	12	7 1⁄8	1 1⁄2	3⁄8	5 3⁄4	7 1⁄4	7 1⁄8	9	6	19 1⁄4	3⁄8	9 3⁄4	1 5⁄8	9.0
2M	36		1 5⁄8	5⁄8	3⁄4	14 1⁄2	9 1⁄2	11 1⁄2	5⁄8	24	2	3	1	12	7 1⁄8	1 1⁄2	3⁄8	5 3⁄4	7 1⁄4	7 1⁄8	9	6	19 1⁄4	3⁄8	9 3⁄4	1 5⁄8	9.0
3	36		1 5⁄8	5⁄8	3⁄4	14 1⁄2	9 1⁄2	11 1⁄2	5⁄8	24	2	3	1	12	7 1⁄8	1 1⁄2	3⁄8	5 3⁄4	7 1⁄4	7 1⁄8	9	6	19 1⁄4	3⁄8	9 3⁄4	1 5⁄8	9.0
4	48		2 1⁄4	3⁄4	1	19 1⁄4	10 3⁄4	17 3⁄8	7⁄8	30	2 1⁄4	4	1 1⁄4	15	10	1 5⁄8	1⁄2	8	9 1⁄4	9 3⁄8	12	8	25 5⁄8	3⁄8	13	2	16.0
5	48		2 1⁄4	3⁄4	1	19 1⁄4	10 3⁄4	17 3⁄8	7⁄8	30	2 1⁄4	4	1 1⁄4	15	10	1 5⁄8	1⁄2	8	9 1⁄4	9 3⁄8	12	8	25 5⁄8	3⁄8	13	2	16.0

STANDARD SIGN

W3-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch
for State Traffic Engineer

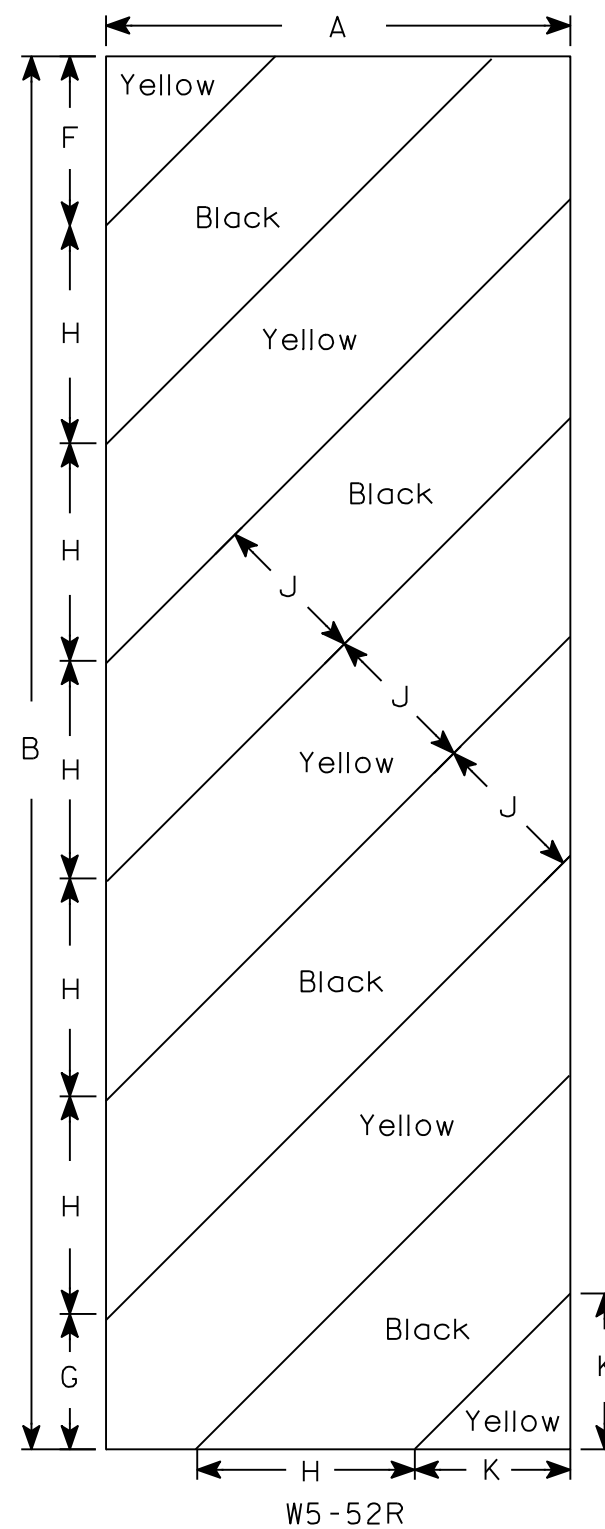
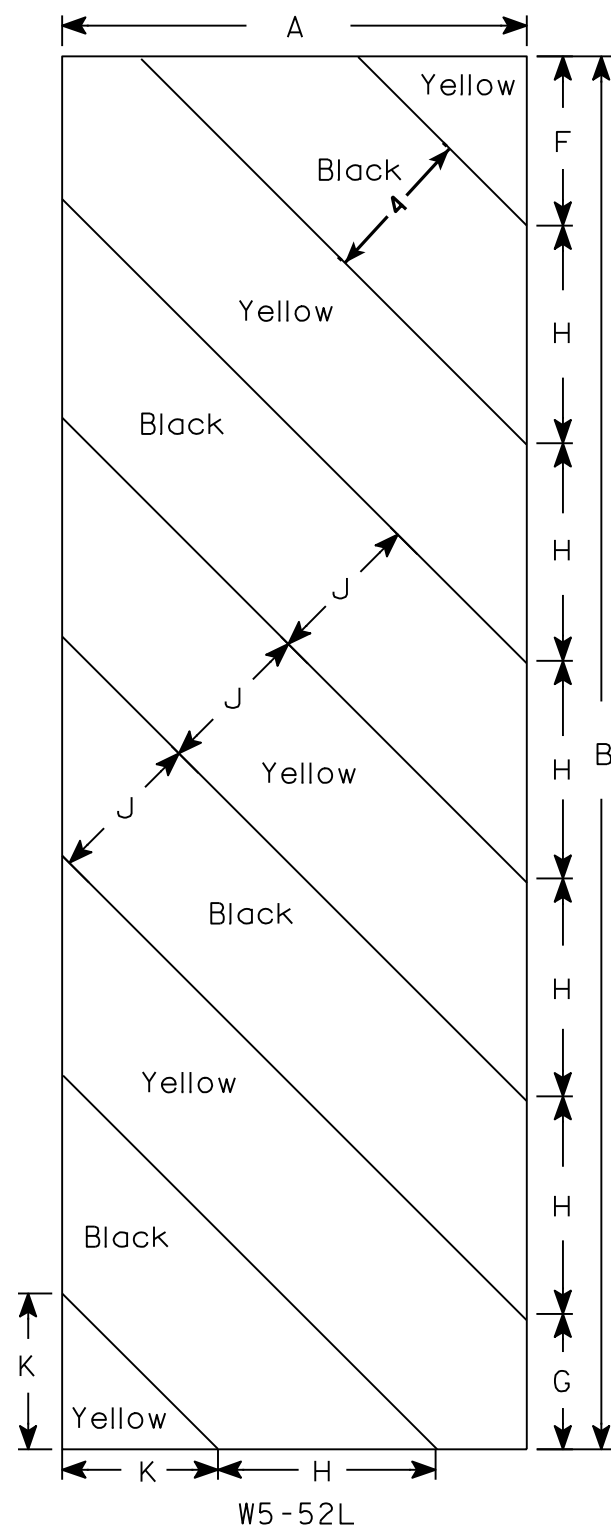
DATE 5/29/12

PLATE NO. W3-5.5

PROJECT NO:

SHEET NO: 110

E



NOTES

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

[illegible]

STANDARD SIGN
W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 5/29/12 PLATE NO. W5-52.9

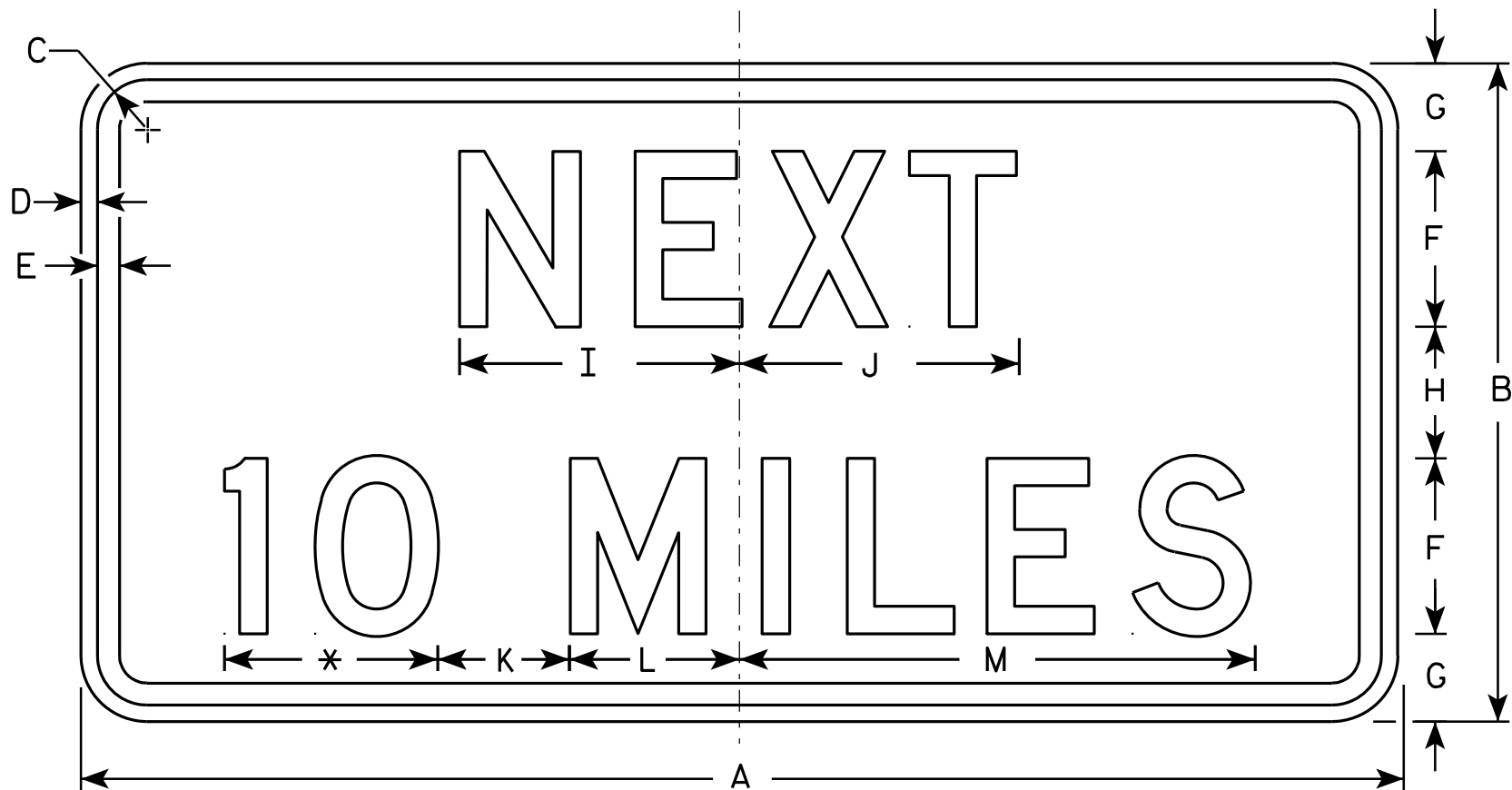
PROJECT NO:

HWY:

COUNTY:

SHEET NO: 111

E



W57-51

- NOTES**
- 1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
 - 2. Color:
Background - Yellow
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. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

* See note 5

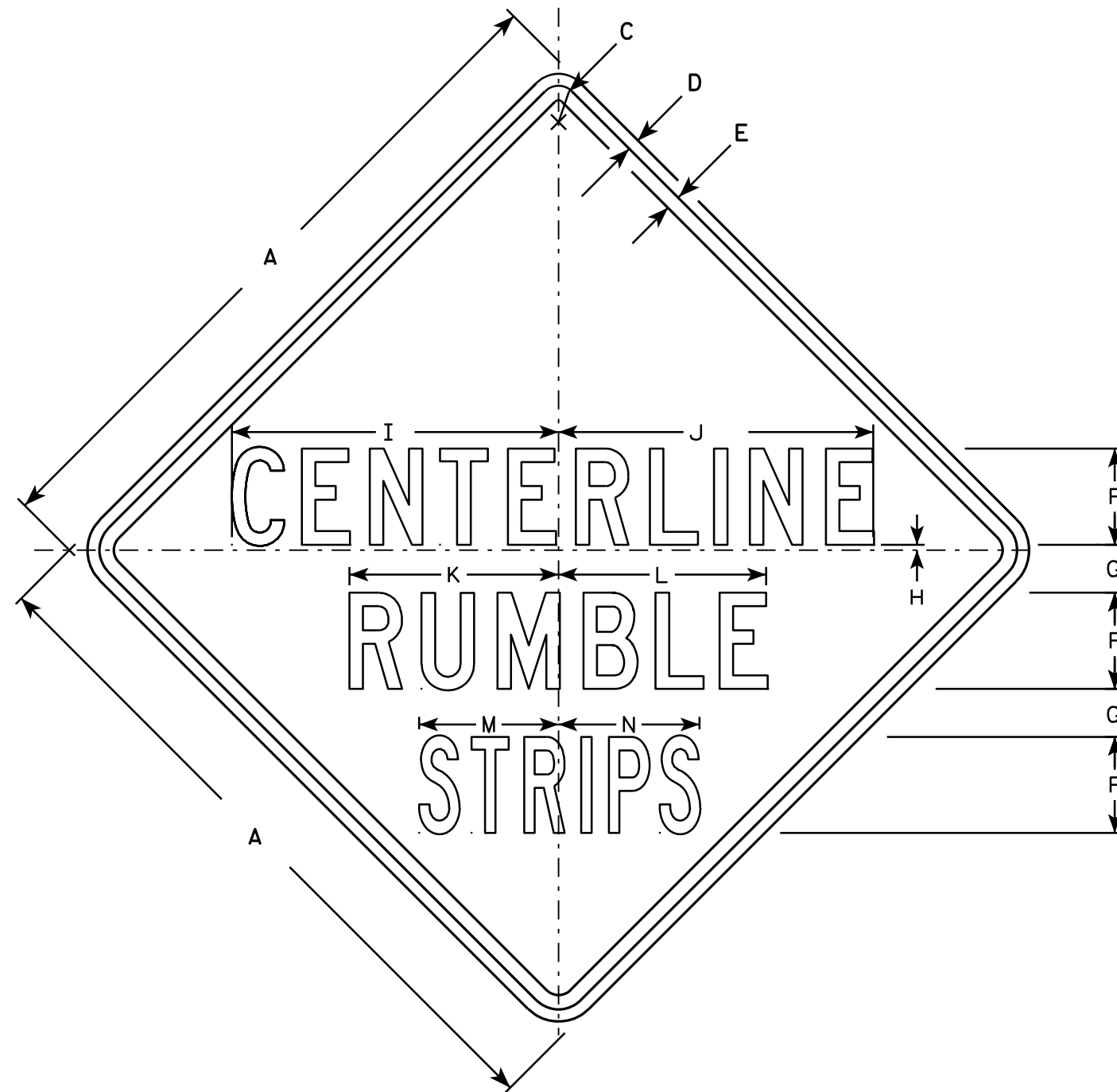
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24	12	1 1/8	3/8	3/8	3	1 3/4	2 1/2	5	5 1/8	3	2 3/4	9 5/8														2.0
2S	30	15	1 1/8	3/8	1/2	4	2	3	6 3/8	6 3/8	3	3 7/8	11 3/4														3.13
2M	36	18	1 1/8	3/8	1/2	5	2 5/8	2 3/4	7 7/8	8	5	4 1/8	15 3/8														4.5
3	36	18	1 1/8	3/8	1/2	5	2 5/8	2 3/4	7 7/8	8	5	4 1/8	15 3/8														4.5
4	48	24	1 3/8	1/2	5/8	6	3 1/2	5	10	10 1/8	6	5 5/8	19														8.0
5	48	24	1 3/8	1/2	5/8	6	3 1/2	5	10	10 1/8	6	5 5/8	19														8.0

STANDARD SIGN
W57-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 4/18/11 PLATE NO. W57-51.8



W8-70

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - YELLOW
Message - BLACK
3. Message Series - SEE NOTE 5.
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. Line 1 and 2 are Series C.
Line 3 is Series B.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36		1 5⁄8	5⁄8	3⁄4	5	2 1⁄2	1⁄4	17	16 3⁄8	10 7⁄8	10 3⁄4	7 1⁄4	7 3⁄8													9.0
2M	36		1 5⁄8	5⁄8	3⁄4	5	2 1⁄2	1⁄4	17	16 3⁄8	10 7⁄8	10 3⁄4	7 1⁄4	7 3⁄8													9.0
3	36		1 5⁄8	5⁄8	3⁄4	5	2 1⁄2	1⁄4	17	16 3⁄8	10 7⁄8	10 3⁄4	7 1⁄4	7 3⁄8													9.0
4																											
5																											

STANDARD SIGN
W8-70

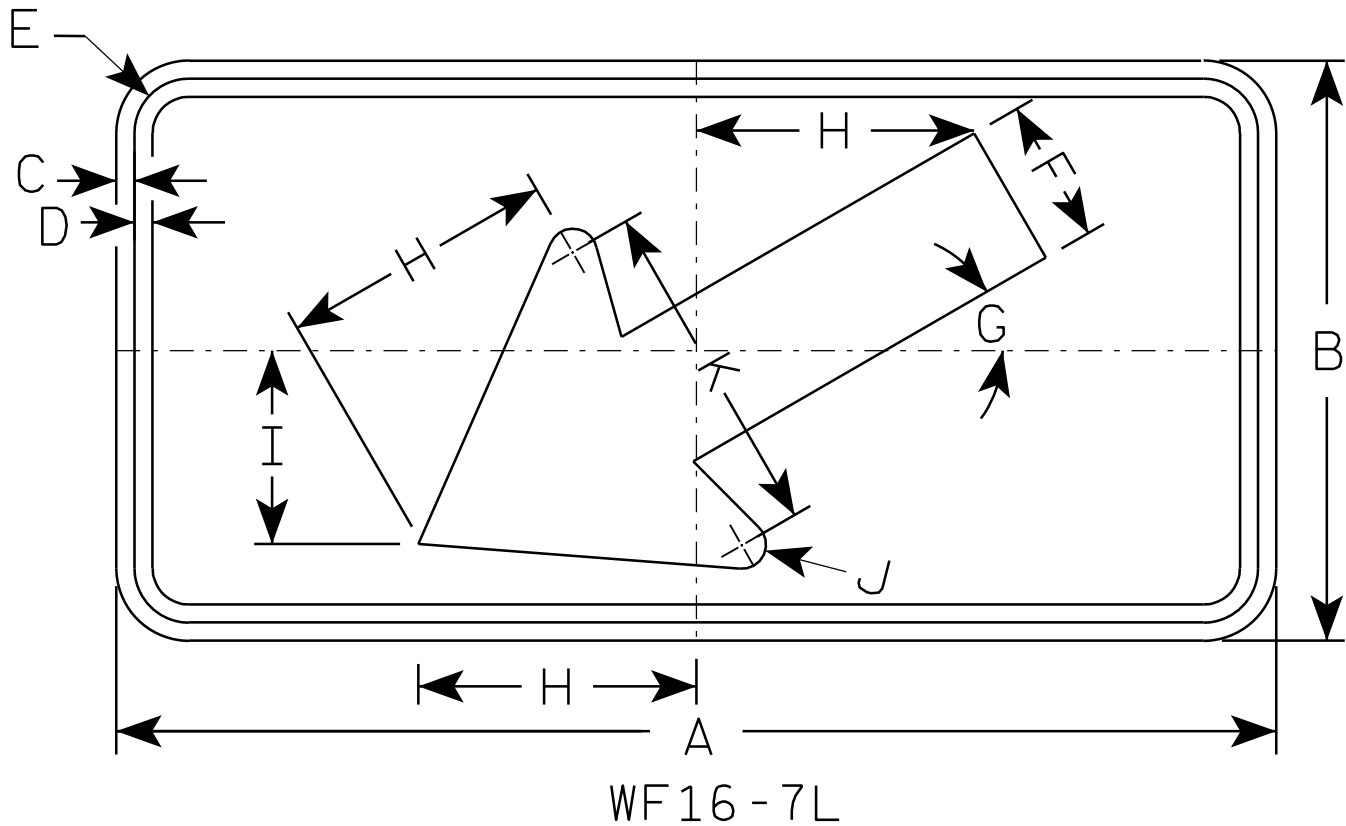
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/23/11 PLATE NO. W8-70.2

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-Green
Message - Black
3. Corners may be square or rounded when base
material is plywood but borders shall be rounded
as shown. When base material is metal, the
corners and borders shall be rounded.
4. WF16-7R are the same as
WF-16-7L except the arrow is reversed along
the vertical centerline.



7

7

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	12	3/8	3/8	1 1/8	3	30°	5 3/4	4	1/2	7																2.0
2S	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
2M	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
3	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
4	48	24	1/2	5/8	1 3/8	6	30°	11 1/2	8	1	14																8.0
5																											

PROJECT NO:	HWY:	COUNTY:	SHEET NO: 114	E
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STANDARD SIGN
WF16-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

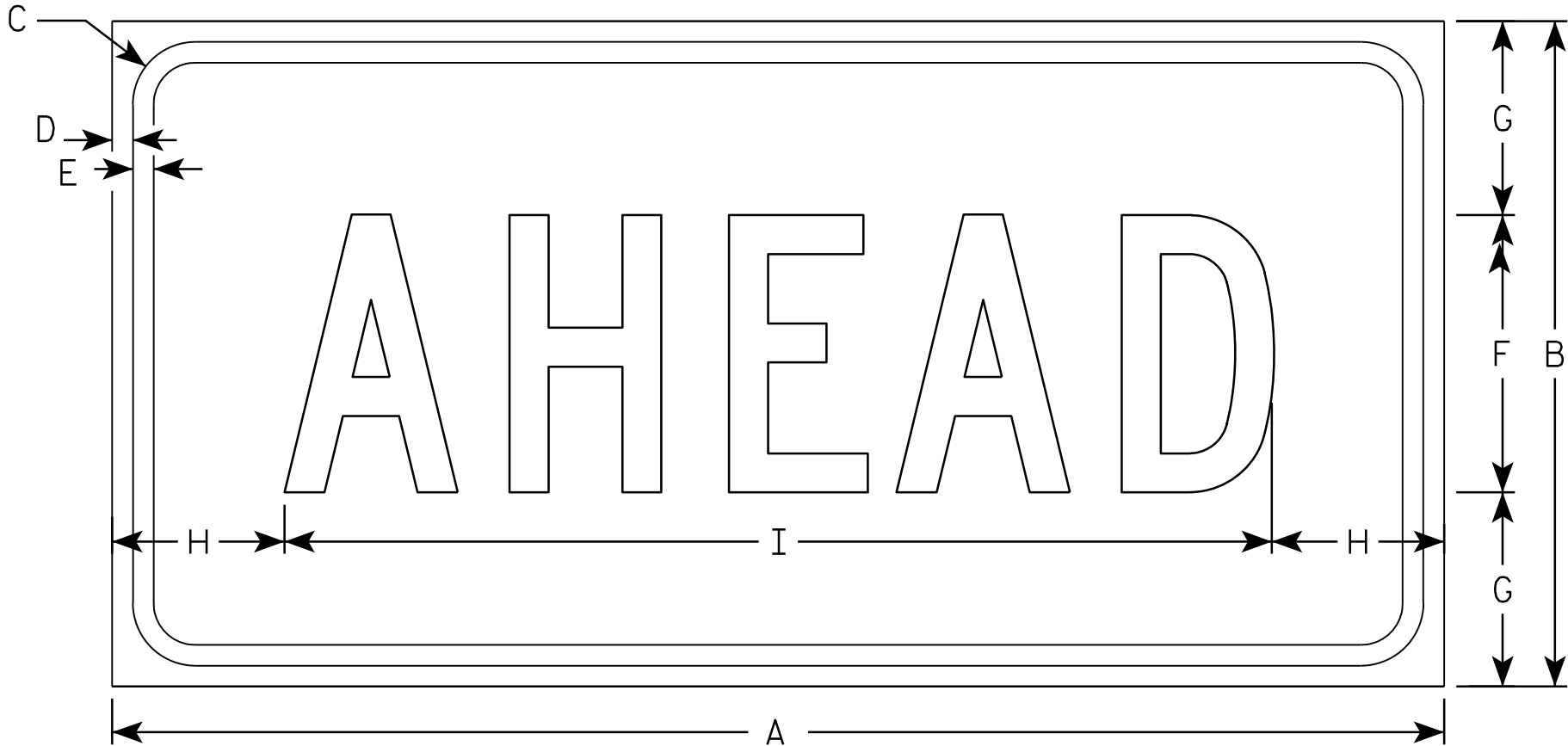
DATE 12/21/10 PLATE NO. WF16-7.3

7

7

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-Green
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.



WF16-9P

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	12	1 1/8	3/8	3/8	5	3 1/2	3 1/8	17 3/4																		2.0
2S	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
2M	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
3	30	18	1 1/8	3/8	1/2	7	3 1/2	2 3/4	24 1/2																		3.75
4	48	24	1 3/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
5																											

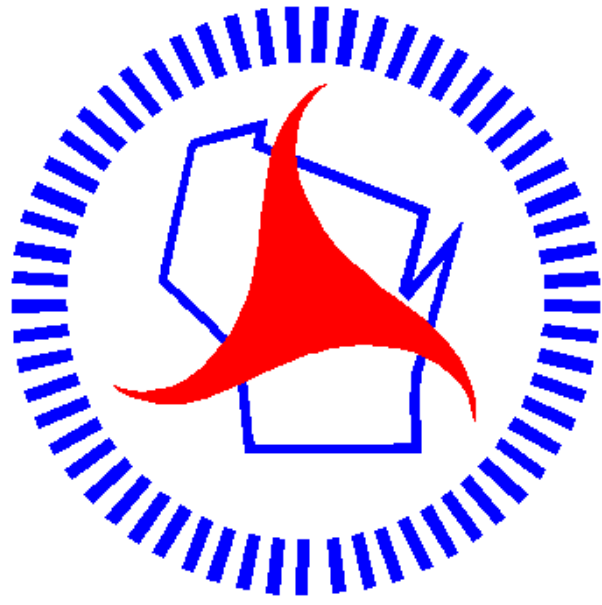
STANDARD SIGN

WF16-9P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/29/2012 PLATE NO. WF16-9P.4



Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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

ORDER OF SHEETS

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

TOTAL SHEETS = 50



04

DESIGN DESIGNATION

A.A.D.T. 2012	=	2180
A.A.D.T. 2032	=	2650
D.H.V.	=	
D.D.	=	60/40
T.	=	13%
DESIGN SPEED	=	25 MPH
ESALS	=	347,125

CONVENTIONAL SYMBOLS

PLAN

CORPORATE LIMITS

REFERENCE LINE

COMBUSTIBLE FLUIDS

UTILITIES

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STATE HIGHWAY REHABILITATION-MAINTENANCE PROJECT

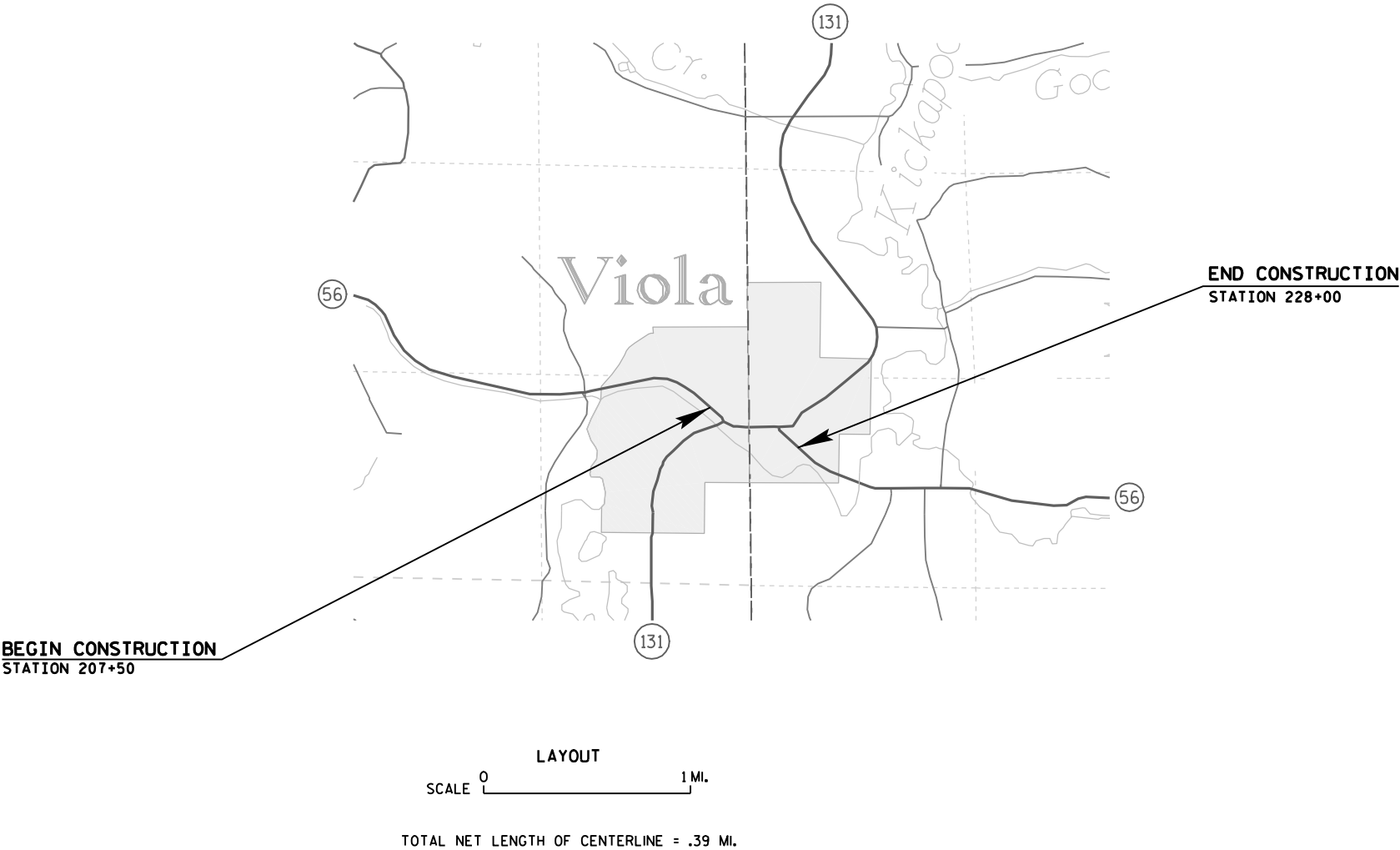
VIROQUA - RICHLAND CENTER

300' W STH 131S TO 450' E STH 131N

STH 56

VERNON COUNTY / RICHLAND COUNTY

STATE PROJECT NUMBER
5731-02-60



STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
5731-02-60	_____	_____

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
PREPARED BY	
Surveyor	_____
Designer	KATHLEEN KLUDY
Project Manager	DAN KLEINERTZ
Regional Examiner	_____
Regional Supervisor	STEPHEN FLOTTMEYER
C.O. Examiner	_____
APPROVED FOR THE DEPARTMENT	
DATE: 10/31/12	Stephen A. Flottmeyer (Signature)

GENERAL NOTES

- 1. THERE ARE UTILITIES WITHIN THE PROJECT LIMITS WHICH ARE NOT SHOWN ON PLANS.
- 2. ALL P.E.'S SHALL BE REPLACED IN KIND (AGGREGATE OR ASPHALT).
- 3. LOCATIONS OF PRIVATE AND FIELD ENTRANCES AS SHOWN ON PLAN ARE APPROXIMATE. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.
- 4. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES EXCEPT WHEN OPERATIONS REQUIRE THE DRIVEWAY TO BE CLOSED. ACCESS TO DRIVEWAY SHALL BE RE-ESTABLISHED IMMEDIATELY AFTER OPERATIONS ARE COMPLETE. ACCESS SHALL BE PROVIDED DURING ALL NON-WORKING HOURS.
- 5. THE CONTRACTOR SHALL MAINTIAN ACCESS TO ALL FIRE HYDRANTS, WATER AND GAS VALVES AND ALL SEWER, WATER AND UTILITY MANHOLES.
- 6. THE CONTRACT SHALL FIELD VERIFY ALL INVERT AND RIM ELEVATIONS OF EXISTING STORM SEWER AND SANITARY SEWER STRUCTURES PRIOR TO CONSTRUCTION.
- 7. THE RATE OF APPLICATION FOR TACK COAT IS COMPUTED AT 0.025 GAL/SY.
- 8. ASPHALTIC SURFACE WEIGHT CALCULATIONS ARE BASED ON 113 LB/SY/IN
- 9. WHEN THE QUANTITIES OF ASPHALTIC SURFACE IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OF THICKNESS OF THE MATERIAL THAT IS SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.
- 10. THE AVERAGE DEPTH OF "SALVAGED ASPHALTIC PAVEMENT MILLING" SHALL BE 3.5 INCHES ON THROUGH LANES AND 2.0 INCHES ON PARKING LANES.
- 11. THE 3.5 INCH HMA PAVEMENT TYPE E-1 SHALL BE PLACED IN TWO (2) 1.75 INCH LIFTS. BOTH LAYERS WILL USE A -1/2 INCH (12.5 mm) NOMINAL AGGREGATE SIZE MIXTURE.
- 12. ASPHALT MATERIAL FOR PLANT MIXES HAS BEEN ESTIMATED AT 5.5% OF THE HMA PAVEMENT.
- 13. ASPHALTIC CONCRETE PAVEMENT FOR SIDE ROAD PAVING SHALL BE A NOMINAL 3 INCH DEPTH, CONSTRUCTED WITH UPPER LAYER MATERIAL.
- 14. ALL RADII ARE MEASURED TO EDGE OF PAVEMENT OR FLAG OF CURB UNLESS OTHERWISE SHOWN OR NOTED ON THE PLAN.
- 15. EXPANSION JOINTS TO BE CONSTRUCTED AT ALL RADIUS POINTS IN CURB AND GUTTER OR AT LOCATIONS SHOWN ON THE PLAN. WHEN PORTIONS OF EXISTING ASPHALTIC SURFACES ARE TO BE REMOVED TO ACCOMMODATE NEW CONSTRUCTION, THE LINE OF SUCH REMOVAL SHALL BE NEATLY DELINEATED WITH A SAW CUT JOINT THROUGH THE ASPHALTIC SURFACE SO THAT REMOVAL OF THE ASPHALT SHALL BE ACCOMPLISHED WITHOUT DAMAGE TO REMAINING PORTIONS. THE LOCATION OF SAW JOINTS AND THE AMOUNT REMOVED AT SIDE ROADS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- 16. PAVEMENT REMOVAL WILL BE TO THE NEAREST JOINT OR A SAWED EDGE WILL BE REQUIRED AS DIRECTED BY THE ENGINEER.
- 17. TYPE 'D' INTERSECTIONS SHALL BE AS SHOWN ON THE STANDARD DETAIL DRAWING AND DETERMINED IN THE FIELD BY THE ENGINEER
- 18. AI SALVAGE ASPHALTIC PAVEMENT MILLING WILL REMAIN PROPERTY OF THE STATE. CONTACT JEFF FISH, PATOROL SUPERINTENDENT AT THE VERNON COUNTY HIGHWAY DEPARTMENT. THE PHONE NUMBER IS (608) 637-5452 FOR COORDINATION. HAUL TO COUNTY LOT LOCATED ON SW CORNER OF YORK ST AND CENTRAL ST IN VIOLA. THE VERNON COUNTY FORCES WILL STOCKPILE MATERIAL AS NEEDED.
- 19. THE CONTRACTOR'S PAVING OPERATIONS SHALL BE CONSISTENT WITH THE PLAN TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, PASSING OR PARKING LANE.

STANDARD ABBREVIATIONS

AC.	ACRE	MAX.	MAXIMUM
AGG.	AGGREGATE	MGAL	1000 GALLONS
AH	AHEAD	MIN.	MINIMUM
<	ANGLE	N.C.	NORMAL CROWN OR NO CHANGE
AE, AEW	APRON ENDWALL	N	NORTH
ASPH.	ASPHALTIC	NO.	NUMBER
A.D.T.	AVERAGE DAILY TRAFFIC	PAV'T	PAVEMENT
B.F.	BACK FACE	P.L.E.	PERMANENT LIMITED EASEMENT
BK.	BACK	P.C.	POINT OF CURVATURE
BEG.	BEGIN	P.I.	POINT OF INTERSECTION
B.M.	BENCH MARK	P.T.	POINT OF TANGENCY
C/L	CENTER LINE	V.P.C.	VERTICAL POINT OF CURVATURE
			VERTICAL POINT OF
D	CENTRAL ANGLE OR DELTA	V.P.I.	INTERSECTION
	CORRUGATED METAL CULVERT		
C.M.C.P.	PIPE	V.P.T.	VERTICAL POINT OF TANGENCY
C.M.P.	CORRUGATED METAL PIPE	PCC	PORTLAND CEMENT CONCRETE
CO.	COUNTY	P.E.	PRIVATE ENTRANCE
CTH	COUNTY TRUNK HIGHWAY	P.L.	PROPERTY LINE
CR.	CREEK	R	RADIUS OR RANGE
	CRUSHED AGGREGATE BASE		
C.A.B.C.	COURSE	R/L	REFERENCE LINE
		R.C.C.P	REINFORCED CONCRETE CULVERT
C.Y.	CUBIC YARD	.	PIPE
C.P.	CULVERT PIPE	RT	RIGHT
C. & G.	CURB AND GUTTER	REQ'D	REQUIRED
D	DEGREE OF CURVE	R.H.F.	RIGHT HAND FORWARD
D.H.V.	DESIGN HOUR VOLUME	R/W	RIGHT OF WAY
DIA.	DIAMETER	R.	RIVER
DISCH.	DISCHARGE	RD.	ROAD
EA	EACH	SHLD.	SHOULDER(S)
E	EAST	SHR.	SHRINKAGE
ELEC.	ELECTRIC(AL), ELEC. CABLE	S	SOUTH
EL.,			
ELEV.	ELEVATION	S.F.	SQUARE FOOT (FEET)
EXC.	EXCAVATION	SDD	STANDARD DETAIL DRAWING(S)
F.F.	FACE TO FACE	STH	STATE TRUNK HIGHWAY
FERT.	FERTILIZER	STA.	STATION
F.E.	FIELD ENTRANCE	S.E.	SUPERELEVATION
F/L, F.L.	FLOW LINE	S/L	SURVEY LINE
CWT.	HUNDRED WEIGHT	T	TANGENT
INL	INLET	TEL.	TELEPHONE
INTER.	INTERSECTION	TEMP.	TEMPORARY
JT.	JOINT	T.L.E.	TEMPORARY LIMITED EASEMENT
LT	LEFT	T.O.C.	TOP OF CURB
L.H.F.	LEFT HAND FORWARD	T.	(TRUCKS) PERCENT OF
L.	LENGTH OF CURVE	TYP.	TYPICAL
L.F.	LINEAR FOOT(FEET)	UNCL.	UNCLASSIFIED
LC.	LONG CHORD	U.G.	UNDERGROUND (CABLE)
LS	LUMP SUM	V.C.	VERTICAL CURVE
M.P.	MARKER POST	W	WEST

UTILITY COMPANIES & PERSONNEL

Tim Statz
Madison Gas And Electric Company - Gas/Petroleum
P.O. Box 1231
Madison, WI 53701-1231
(608) 252-4727
tstatz@mge.com

Doug Dickinson
Midwest Natural Gas Incorporated - Gas/Petroleum
3600 STH 157
P.O. Box 429
La Crosse, WI 54602
(608) 781-1011
dougd@midwestnaturalgas.com

Todd Tunks
Vernon Telephone Cooperative - Communication Line
103 N Main St
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Westby, WI 54667
(608) 634-2000
ttunks@vernontel.com

Beth Campbell
Viola Mun Water And Electric Utility - Water
106 W. Wisconsin St.
P.O. Box 38
Viola, Wi. 54664
(608) 627-1700
clerk@vi.viola.wi.gov

Tim Orcutt
Mediacom LLC Wisconsin - Communication Line
3033 Asbury Rd
Dubuque, WI 52001
(608) 326-0478
torcutt@mediacomllc.com

Craig Buros
Vernon Electric Cooperative - Electricity
110 N Main St
Westby, WI 54667-1199
(608) 634-3121
cburos@vernonelectric.org

Wisconsin Department of Transportation

Southwest Region - La Crosse Office
3550 Mormon Coulee Rd.
La Crosse, WI 54601
ATTN: Bob Gonia (Utilities Coordinator)
PHONE: (608) 785-9082
bob.gonia@dot.wi.gov

Southwest Region - La Crosse Office
3550 Mormon Coulee Rd.
La Crosse, WI 54601
Attn: Russ Frank (Soils Coordinator)
PHONE: (608) 785-9082
russell.frank@dot.wi.gov

Southwest Region - La Crosse Office
3550 Mormon Coulee Rd.
La Crosse, WI 54601
Attn: Kathleen Kludy (Designer)
PHONE: (608) 785-9948
kathleen.kludy@dot.wi.gov

PAVEMENT DESIGN ENGINEER CONTACT

Wisconsin Department of Transportation
Soutwest Region - Madison Office
Pavement Engineer
ATTN: Tim McCarthy
2101 Wright St.
Madison, WI 53704-2583
(608) 246-5623
timothy.mccarthy@dot.state.wi.us

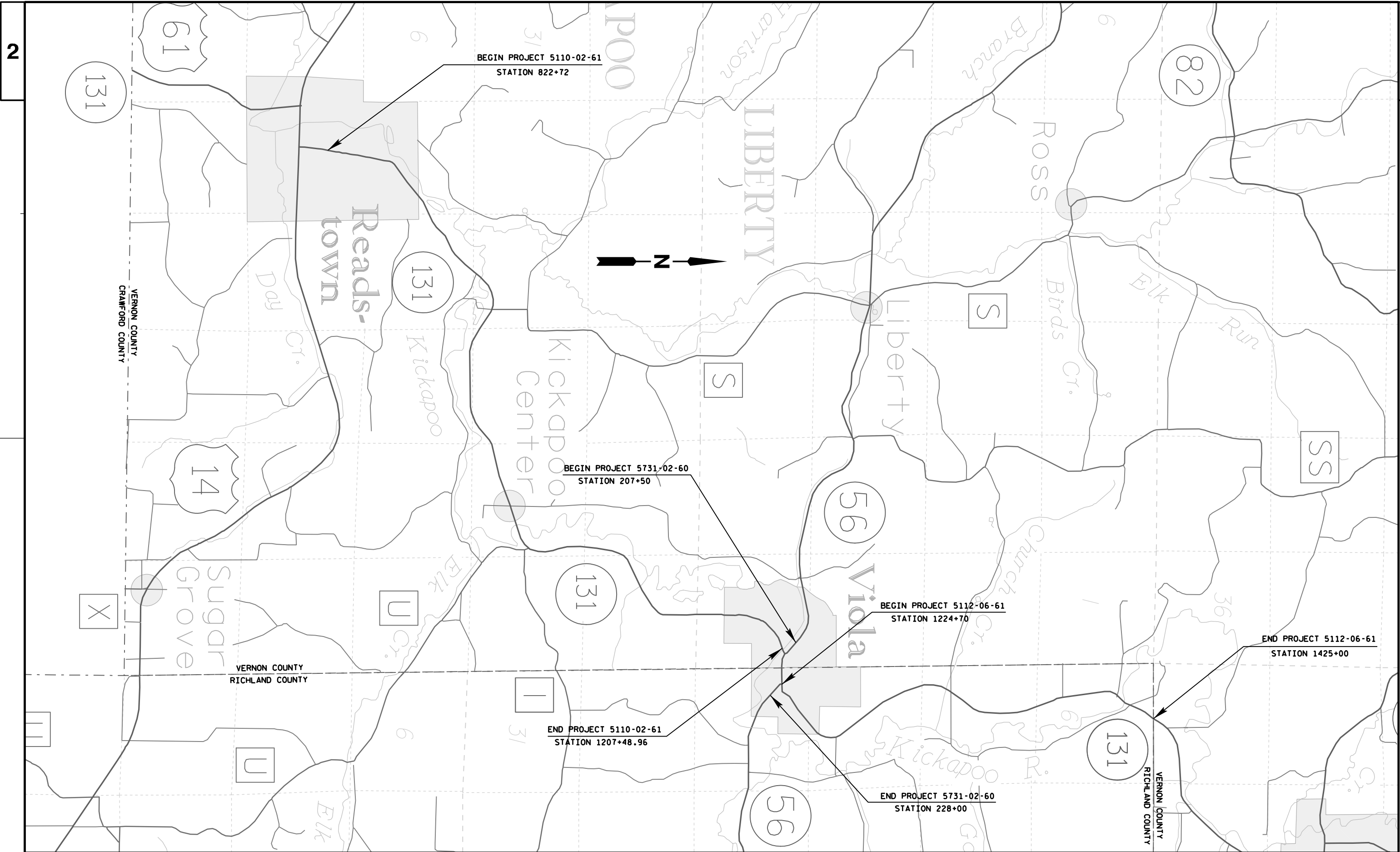
Wisconsin DNR

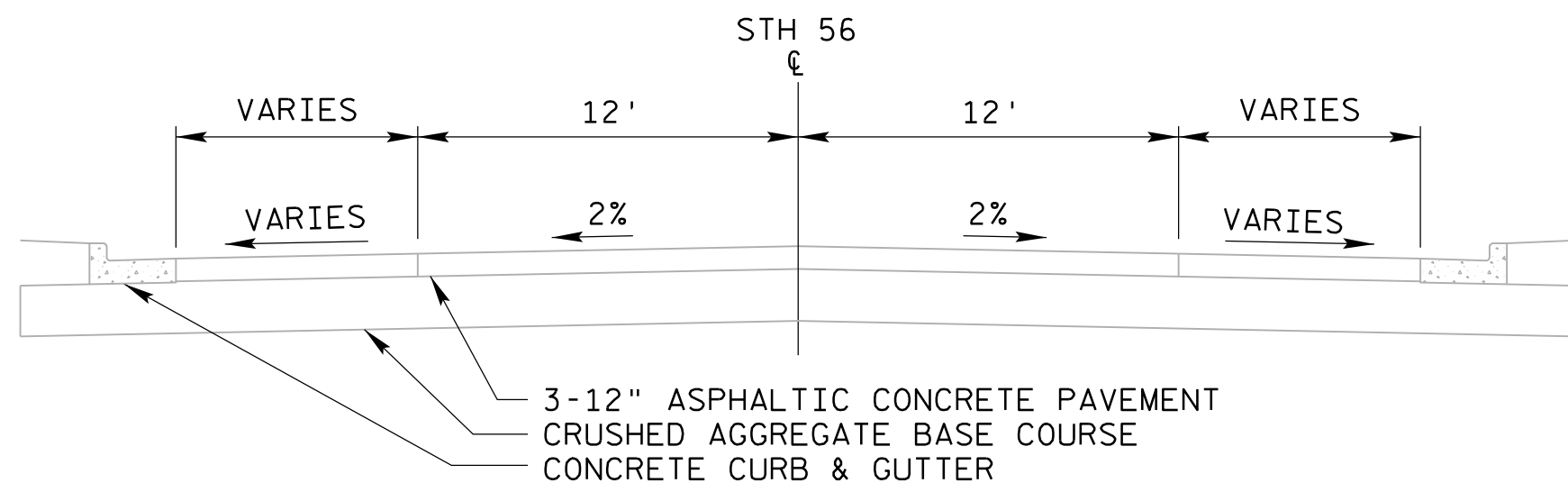
DNR South Central Headquarters
3911 Fish Hatchery Road
Fitchburg, WI 53711
ATTN: Cathy Bleser (Richland County)
(608) 275-3308
catherine.bleser@wisconsin.gov

DNR Service Center
3550 Mormon Coulee Rd.
La Crosse, WI 54601
ATTN: Karen Kalvelage (Vernon County)
(608) 785-9115
karen.kalvelage@wisconsin.gov



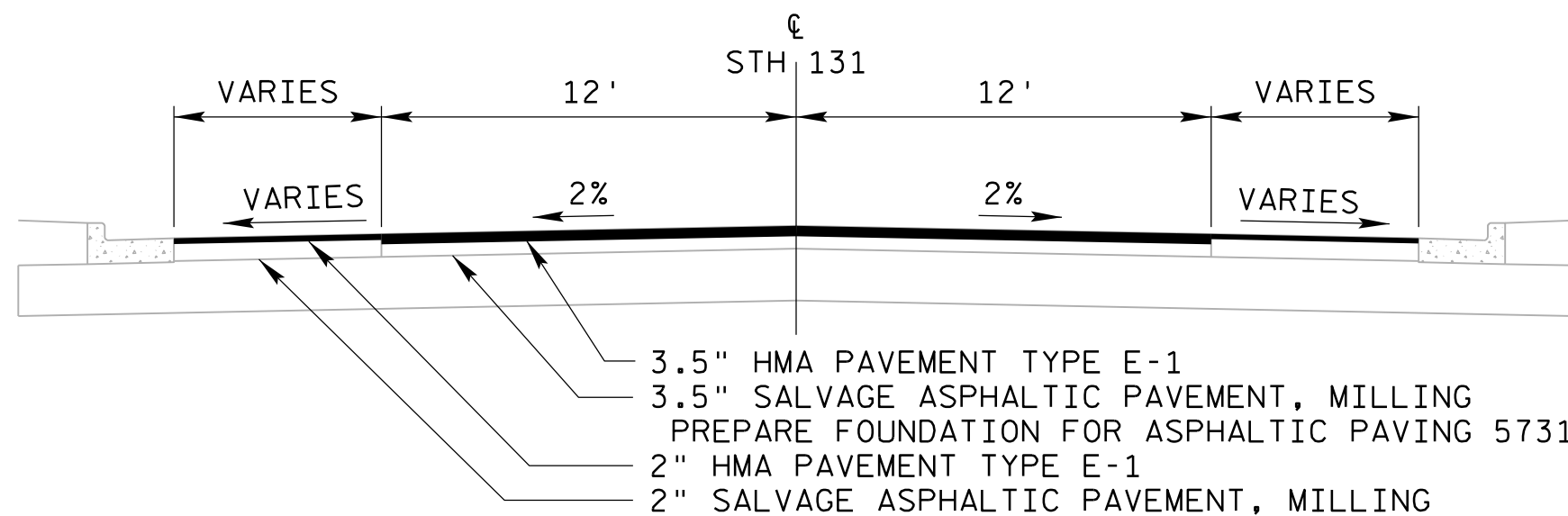
Call 811 3 Work Days Before You Dig
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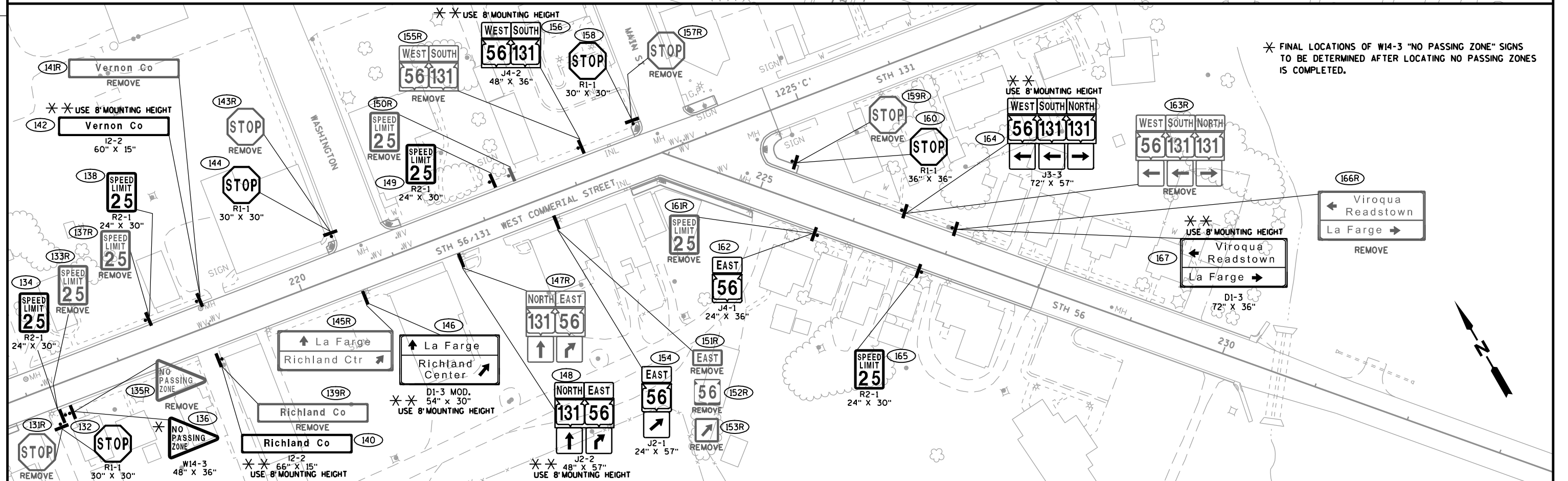
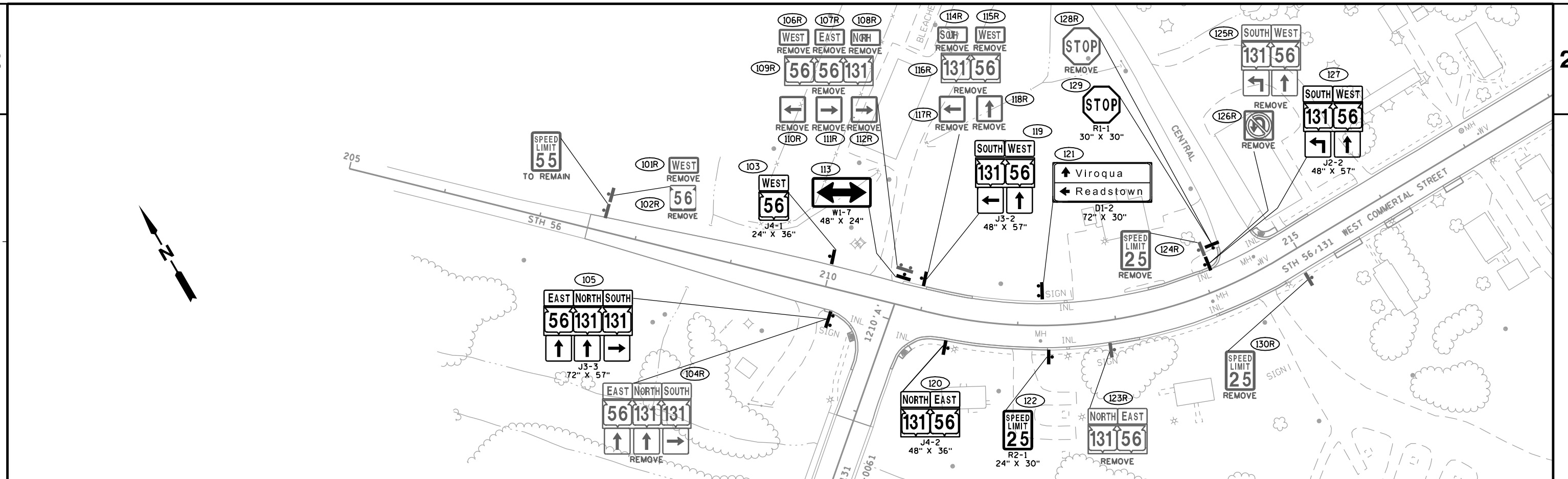
EXISTING URBAN TYPICAL SECTION

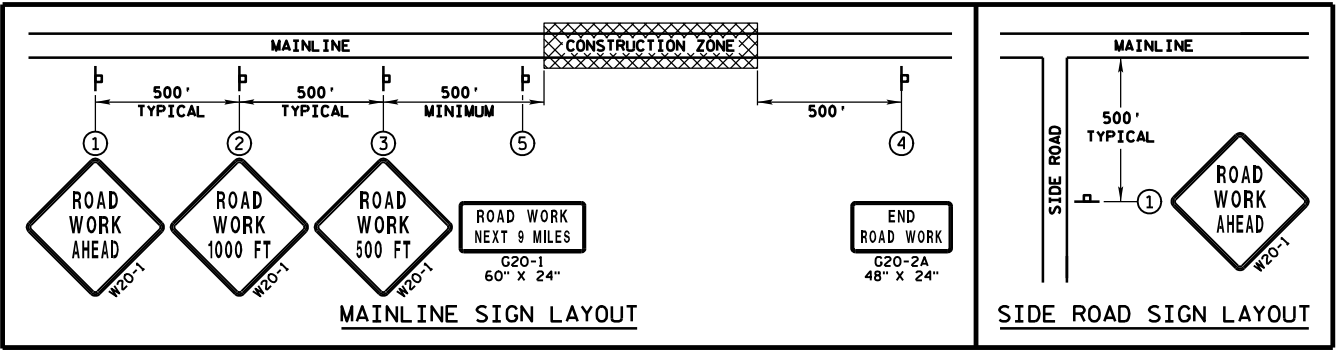
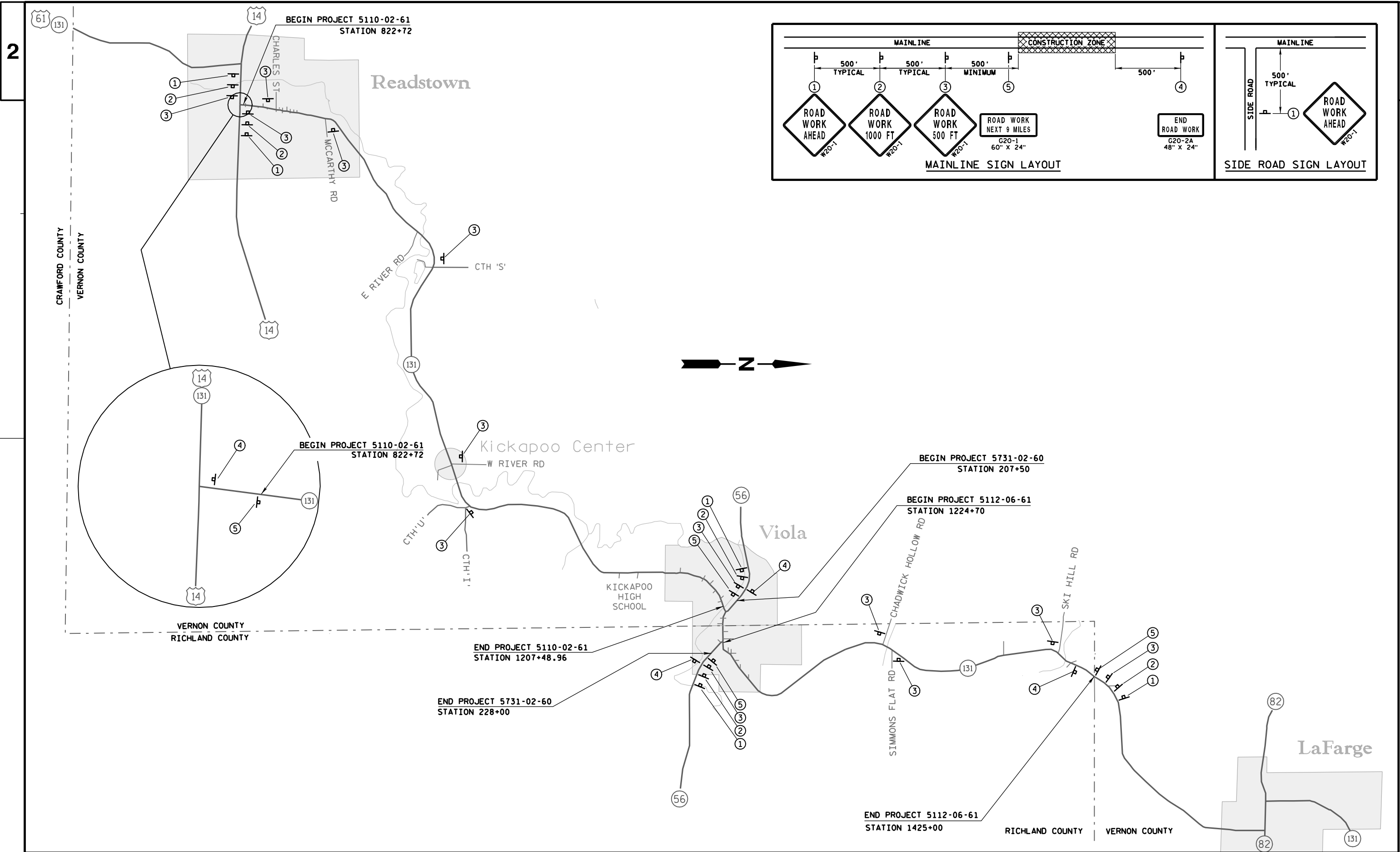
207+50 - 228+00

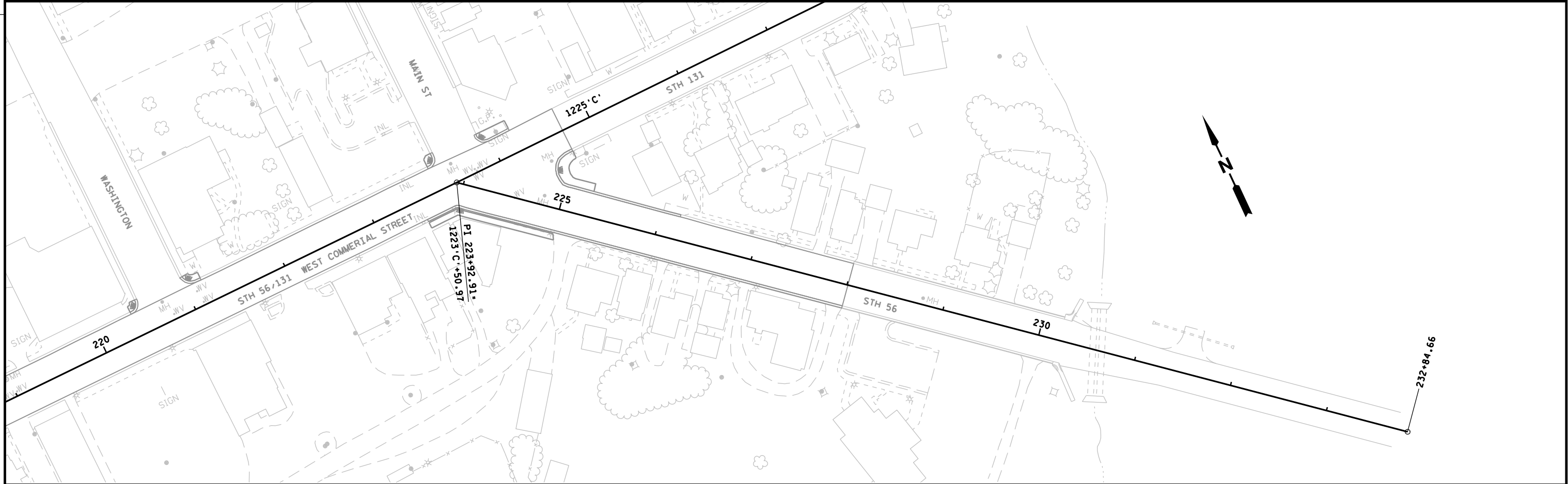
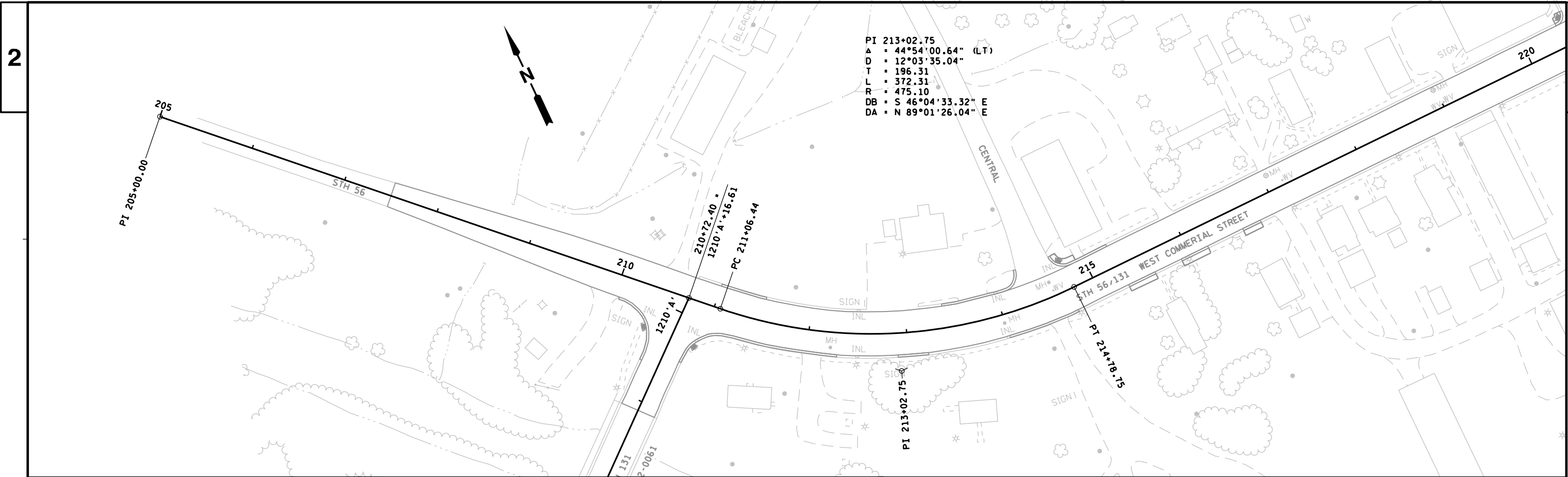


PROPOSED URBAN TYPICAL SECTION

207+50 - 228+00







3

DATE 08FEB13		E S T I M A T E O F Q U A N T I T I E S			
LINE				5731-02-60	
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0030	204.0150	REMOVING CURB & GUTTER	LF	1,412.000	1,412.000
0040	204.0155	REMOVING CONCRETE SIDEWALK	SY	294.000	294.000
0080	211.0100	PREPARE FOUNDATION FOR ASPHALTIC PAVING (PROJECT) 03. 5731-02-60	LS	1.000	1.000
0110	213.0100	FINISHING ROADWAY (PROJECT) 03. 5731-02-60	EACH	1.000	1.000
0170	455.0105	ASPHALTIC MATERIAL PG58-28	TON	106.000	106.000
0180	455.0605	TACK COAT	GAL	46.000	46.000
0190	460.1101	HMA PAVEMENT TYPE E-1	TON	1,896.000	1,896.000
0200	460.2000	INCENTIVE DENSITY HMA PAVEMENT	DOL	1,155.000	1,155.000
0230	490.0200	SALVAGED ASPHALTIC PAVEMENT MILLING	SY	10,136.000	10,136.000
0240	601.0411	CONCRETE CURB & GUTTER 30-INCH TYPE D	LF	1,412.000	1,412.000
0270	602.0405	CONCRETE SIDEWALK 4-INCH	SF	2,616.000	2,616.000
0280	602.0505	CURB RAMP DETECTABLE WARNING FIELD YELLOW	SF	72.000	72.000
0300	611.8110	ADJUSTING MANHOLE COVERS	EACH	5.000	5.000
0390	618.0100	MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 03. 5731-02-60	EACH	1.000	1.000
0400	619.1000	MOBILIZATION	EACH	0.100	0.100
0480	628.7015	INLET PROTECTION TYPE C	EACH	5.000	5.000
0500	634.0614	POSTS WOOD 4X6-INCH X 14-FT	EACH	15.000	15.000
0510	634.0616	POSTS WOOD 4X6-INCH X 16-FT	EACH	9.000	9.000
0520	634.0618	POSTS WOOD 4X6-INCH X 18-FT	EACH	2.000	2.000
0530	637.0202	SIGNS REFLECTIVE TYPE II	SF	287.810	287.810
0540	638.2602	REMOVING SIGNS TYPE II	EACH	42.000	42.000
0550	638.3000	REMOVING SMALL SIGN SUPPORTS	EACH	24.000	24.000
0560	642.5201	FIELD OFFICE TYPE C	EACH	0.100	0.100
0590	643.0100	TRAFFIC CONTROL (PROJECT) 03. 5731-02-60	EACH	1.000	1.000
0600	643.0300	TRAFFIC CONTROL DRUMS	DAY	12,100.000	12,100.000
0610	643.0410	TRAFFIC CONTROL BARRICADES TYPE II	DAY	2,050.000	2,050.000
0620	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	2,050.000	2,050.000
0630	643.0900	TRAFFIC CONTROL SIGNS	DAY	1,500.000	1,500.000
0650	646.0406	PAVEMENT MARKING SAME DAY EPOXY 4-INCH	LF	2,528.800	2,528.800
0660	647.0556	PAVEMENT MARKING STOP LINE EPOXY 12-INCH	LF	71.000	71.000
0670	647.0776	PAVEMENT MARKING CROSSWALK EPOXY 12-INCH	LF	206.000	206.000
0680	648.0100	LOCATING NO-PASSING ZONES	MI	0.390	0.390
0690	649.0200	TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH	LF	2,528.750	2,528.750
0700	650.8000	CONSTRUCTION STAKING RESURFACING REFERENCE	LF	2,091.000	2,091.000
0710	690.0150	SAWING ASPHALT	LF	92.000	92.000
0720	690.0250	SAWING CONCRETE	LF	1,034.000	1,034.000
0730	SPV.0060	SPECIAL 01. ADJUST WATER VALVE BOX	EACH	11.000	11.000

3

3

PERMANENT SIGNING

SIGN NUMBER	STATION	LOCATION	SIGN CODE	SIZE	DESCRIPTION	ORDER LINES	634.0614 POSTS WOOD 4X6-INCH X 14-FT EACH	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	634.0618 POSTS WOOD 4X6-INCH X 18-FT EACH	637.0202 SIGNS REFLECTIVE TYPE II SF	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	NOTES
101R	207+65	STH 56, Left	M3-4	24" x 12"	West Cardinal Route Marker						1		
102R	207+65	STH 56, Left	M1-6	24" x 24"	State Route Marker	56					1		Mounted with 101R
103	210+00	STH 56, Left	J4-1	24" x 36"	Reassurance Assem (1 Headed Rte Panel)	West STH 56		1		6.00			
104R	210+10	STH 56, Right	J3-3	72" x 57"	Directional Assembly (3 Headed Panel)	East, North, South STH 56, STH 131, STH 131 Arrow Ahead, Arrow Ahead, Arrow Right					2	2	
105	210+10	STH 56, Right	J3-3	72" x 57"	Directional Assembly (3 Headed Panel)	East, North, South STH 56, STH 131, STH 131 Arrow Ahead, Arrow Ahead, Arrow Right		2		28.50			
106R	210+75	STH 56, Left	M3-4	24" x 12"	West Cardinal Route Marker						1		Mounted with 109R
107R	210+75	STH 56, Left	M3-2	24" x 12"	East Cardinal Route Marker						1		Mounted with 109R
108R	210+75	STH 56, Left	M3-1	24" x 12"	North Cardinal Route Marker						1		Mounted with 109R
109R	210+75	STH 56, Left	M1-6	72" x 24"	State Route Marker (3 Headed Panel)	56, 56, 131					1	2	
110R	210+75	STH 56, Left	M6-1	21" X 21"	Arrow Left						1		Mounted with 109R
111R	210+75	STH 56, Left	M6-1	21" X 21"	Arrow Right						1		Mounted with 109R
112R	210+75	STH 56, Left	M6-1	21" X 21"	Arrow Right						1		Mounted with 109R
113	210+75	STH 56, Left	W1-7	48" X 24"	Night Arrow (Double)		1			8.00			
114R	210+95	STH 56, Left	M3-3	24" x 12"	South Cardinal Route Marker						1		Mounted with 116R
115R	210+95	STH 56, Left	M3-4	24" x 12"	West Cardinal Route Marker						1		Mounted with 116R
116R	210+95	STH 56, Left	M1-6	72" x 24"	State Route Marker (2 Headed Panel)	131, 56					1	1	
117R	210+95	STH 56, Left	M6-1	21" X 21"	Arrow Left						1		Mounted with 116R
118R	210+95	STH 56, Left	M6-1	21" X 21"	Arrow Ahead						1		Mounted with 116R
119	210+95	STH 56, Left	J3-2	48" x 57"	Directional Assembly (2 Headed Panel)	South, West STH 131, STH 56 Arrow Left, Arrow Ahead		1		19.00			
120	211+35	STH 56, Right	J4-2	48" x 36"	Reassurance Assem (2 Headed Rte Panel)	North, East STH 131, STH 56		1		12.00			
121	212+25	STH 56, Left	D1-2	72" x 30"	Two Destinations (Arrows)	Arrow Ahead, Viroqua Arrow Left, Readstown	2			15.00			
122	212+35	STH 56, Right	R2-1	24" x 30"	Speed Limit _ MPH	25	1			6.25			
123R	212+90	STH 56, Right	J4-2	48" x 36"	Reassurance Assem (2 Headed Rte Panel)	North, East STH 131, STH 56					1	1	
124R	214+10	STH 56, Left	R2-1	24" x 30"	Speed Limit _ MPH	25					1	1	
125R	214+10	STH 56, Left	J2-2	48" x 57"	Rte Turn Assem (2 Headed Route Panel)	South, West STH 131, STH 56 Advanced Arrow Left Turn, Arrow Ahead					1	1	
126R	214+10	STH 56, Left	R3-4	24" x 24"	No U Turn						1		Mounted with 125R
127	214+10	STH 56, Left	J2-2	48" x 57"	Rte Turn Assem (2 Headed Route Panel)	South, West STH 131, STH 56 Advanced Arrow Left Turn, Arrow Ahead			1	19.00			
128R	214+20	STH 56, Left	R1-1	30" x 30"	Stop						1	1	
129	214+20	STH 56, Left	R1-1	30" x 30"	Stop		1			5.18			
130R	214+95	STH 56, Right	R2-1	24" x 30"	Speed Limit _ MPH	25					1	1	
131R	217+20	STH 56, Right	R1-1	30" x 30"	Stop						1	1	
132	217+20	STH 56, Right	R1-1	30" x 30"	Stop		1			5.18			
133R	217+25	STH 56, Right	R2-1	24" x 30"	Speed Limit _ MPH	25					1	1	
134	217+25	STH 56, Right	R2-1	24" x 30"	Speed Limit _ MPH	25	1			6.25			
135R	217+35	STH 56, Right	W14-3	48" x 36"	No Passing Zone						1	1	
136	217+35	STH 56, Right	W14-3	48" x 36"	No Passing Zone			1		6.00			
137R	218+40	STH 56, Left	R2-1	24" x 30"	Speed Limit _ MPH	25					1	1	
138	218+40	STH 56, Left	R2-1	24" x 30"	Speed Limit _ MPH	25	1			6.25			
139R	218+95	STH 56, Right	I2-2	90" x 15"	County Line Name	Richland co					1	1	
140	218+95	STH 56, Right	I2-2	66" x 15"	County Line Name	Richland co	1			6.88			8 Foot Mounting Height
141R	219+00	STH 56, Left	I2-2	60" x 15"	County Line Name	Vernon Co					1	1	
142	219+00	STH 56, Left	I2-2	60" x 15"	County Line Name	Vernon Co	1			6.25			8 Foot Mounting Height
143R	220+50	STH 56, Left	R1-1	30" x 30"	Stop						1	1	
144	220+50	STH 56, Left	R1-1	30" x 30"	Stop		1			5.18			
145R	220+60	STH 56, Right	D1-2	54" x 24"	Two Destinations (Arrows)	Arrow Ahead, La Farge Richland Ctr, Arrow Tilt Right					1		Banded to Light Pole
146	220+60	STH 56, Right	D1-3 Mod	54" x 30"	Triple Destinations (Arrows)	Arrow Ahead, La Farge Richland , Arrow Tilt Right Center				8.75			Band to Light Pole 8 Foot Mounting Height
Sheet Totals							11	6	1	169.67	66	17	

STATE PROJECT NO: 5731-02-60

HWY: STH 56

COUNTY: VERNON

MISCELLANEOUS QUANTITIES

SHEET NO: 10

E

FILE NAME : _____

PLOT DATE : _____

PLOT BY : _____

PLOT NAME : _____

ORG DATE : _____

ORIGINATOR : DIST _

PLOT SCALE : 1:1

PERMANENT SIGNING

SIGN NUMBER	STATION	LOCATION	SIGN CODE	SIZE	DESCRIPTION	ORDER LINES	634.0614 POSTS WOOD 4X6-INCH X 14-FT EACH	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	634.0618 POSTS WOOD 4X6-INCH X 18-FT EACH	637.0202 SIGNS REFLECTIVE TYPE II SF	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	NOTES
147R	221+65	STH 56, Right	J2-2	48" x 57"	Rte Turn Assem (2 Headed Route Panel)	North, East STH 131, STH 56 Arrow Ahead, Advanced Arrow Right Bent					1		Banded to Light Pole
148	221+65	STH 56, Right	J2-2	48" x 57"	Rte Turn Assem (2 Headed Route Panel)	North, East STH 131, STH 56 Arrow Ahead, Advanced Arrow Right Bent				19.00			Band to Light Pole 8 Foot Mounting Height
149	222+20	STH 56, Left	R2-1	24" x 30"	Speed Limit _ MPH	25	1			6.25			
150R	222+40	STH 56, Left	R2-1	24" x 30"	Speed Limit _ MPH	25					1	1	
151R	222+70	STH 56, Right	M3-2	24" x 12"	East Cardinal Route Marker						1		Mounted with 152R
152R	222+70	STH 56, Right	M1-6	24" x 24"	State Route Marker	56					1		Banded to Light Pole
153R	222+70	STH 56, Right	M6-2	21" X 21"	Arrow Tilt Right						1		Mounted with 152R
154	222+70	STH 56, Right	J2-1	24" x 57"	Rte Turn Assem (1 Headed Route Panel)	East STH 56 Arrow Tilt Right				9.50			Band to Light Pole
155R	223+20	STH 56, Left	J4-2	48" x 36"	Reassurance Assem (2 Headed Rte Panel)	West, South STH 56, STH 131					1	1	
156	223+20	STH 56, Left	J4-2	48" x 36"	Reassurance Assem (2 Headed Rte Panel)	West, South STH 56, STH 131		1		12.00			8 Foot Mounting Height
157R	223+75	STH 56, Left	R1-1	30" x 30"	Stop		1			5.18	1	1	
158	223+75	STH 56, Left	R1-1	30" x 30"	Stop						1	1	
159R	225+25	STH 56, Left	R1-1	30" x 30"	Stop		1			7.46			
160	225+25	STH 56, Left	R1-1	36" x 36"	Stop						1	1	
161R	225+70	STH 56, Right	R2-1	24" x 30"	Speed Limit _ MPH	25							
162	225+70	STH 56, Right	J4-1	24" x 36"	Reassurance Assem (1 Headed Rte Panel)	East STH 56		1		6.00			
163R	226+45	STH 56, Left	J3-3	72" x 57"	Directional Assembly (3 Headed Panel)	West, South, North STH 56, STH 131, STH 131 Arrow Left, Arrow Left, Arrow Right					2	1	
164	226+45	STH 56, Left	J3-3	72" x 57"	Directional Assembly (3 Headed Panel)	West, South, North STH 56, STH 131, STH 131 Arrow Left, Arrow Left, Arrow Right			1	28.50			8 Foot Mounting Height
165	226+80	STH 56, Right	R2-1	24" x 30"	Speed Limit _ MPH	25	1			6.25			
166R	227+00	STH 56, Left	D1-3	48" x 30"	Triple Destinations (Arrows)	Arrow Left, Viroqua Readstown La Farge, Arrow Right					1	1	
167	227+00	STH 56, Left	D1-3	72" x 36"	Triple Destinations (Arrows)	Arrow Left, Viroqua Readstown La Farge, Arrow Right		1		18.00			8 Foot Mounting Height
Sheet Totals							4	3	1	118.14	12	7	
Signing Totals							15	9	2	287.81	42	24	

STATE PROJECT NO: 5731-02-60

HWY: STH 56

COUNTY: VERNON

MISCELLANEOUS QUANTITIES

SHEET NO: 11

E

FILE NAME :

PLOT DATE :

PLOT BY :

PLOT NAME :

ORG DATE :

ORIGINATOR : DIST _

PLOT SCALE : 1:1

3

204.0150 REMOVING CURB & GUTTER

CATEGORY	STATION - STATION	LOCATION	LF	REMARKS
10	210+04 RT - 1209'A'+38 LT		78	ML AROUND SW RADIUS OF STH 131S
10	1209'A'+53 RT - 212+30 RT		170	ML AROUND SE RADIUS AROUND STH 131S
10	211+00 - 211+50	LT	50	
10	212+90 - 213+20	RT	30	
10	213+40 - 214+20	LT	88	ML AROUND NW RADIUS OF CENTRAL ST.
10	214+00 - 214+73	RT	73	
10	214+60 - 215+27	LT	70	ML AROUND NE RADIUS OF CENTRAL ST.
10	215+30 - 215+60	RT	30	
10	215+90 - 216+20	RT	30	
10	216+60 - 216+80	RT	20	
10	220+40 - 220+48	LT	25	ML AROUND NW RADIUS OF WASHINGTON ST.
10	221+00 - 221+18	LT	25	ML AROUND NE RADIUS OF WASHINGTON ST.
10	223+74 - 223+84	LT	25	ML AROUND NW RADIUS OF MAIN ST.
10	1223'C'+13 - 1224'C'+19	LT	38	ML AROUND NE RADIUS OF MAIN ST.
10	223+50 - 228+00	RT	450	
10	1224'C'+70 - 226+20	LT	160	ML AROUND SE RADIUS OF STH 56
10			50	UNDISTRIBUTED
	TOTAL		1,412	

204.0155 REMOVING CONCRETE SIDEWALK

CATEGORY	STATION - STATION	LOCATION	SY	WIDTH	LENGTH	REMARKS
				LF	LF	
10	1209'A'+67 - 1209'A'+93	RT	12	6	18	
10	1209'A'+68 - 1209'A'+82	LT	7	6	10	
10	215+30 - 215+60	RT	20	6	30	
10	215+90 - 216+20	RT	20	6	30	
10	216+60 - 216+80	RT	14	6	20	
10	214+60 - 215+00	LT	17	6	25	NE CORNER OF CENTRAL ST.
10	220+39 - 220+51	LT	17	6	25	NE CORNER OF WASHINGTON ST.
10	220+97 - 221+15	LT	17	6	25	NW CORNER WASHINGTON ST
10	223+73 - 223+84	LT	17	6	25	NE CORNER MAIN ST
10	223+50 - 225+00	RT	86	6	128	
10	1223'C'+86 - 1224'C'+98	LT	17	6	25	NW CORNER MAIN ST
10	224'C'+70 RT - 225+30 LT		50	6	75	SE CORNER STH 56 / STH 131
	TOTAL		294.00			

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650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE

CATEGORY	STATION - STATION	LOCATION	LF
10	207+70 - 228+00	ML	2,030
10	1208'A'+91 - 1209'A'+50	STH 131S	61
	TOTAL		2,091

ASPHALTIC ITEMS

CATEGORY	STATION - STATION	LOCATION	LENGTH FT	WIDTH FT	DEPTH INCH	455.0105	455.0605	460.1101	REMARKS
						ASPHALTIC	TACK	HMA	
						MATERIAL PG 58-28	COAT GAL	PAVEMENT TYPE E-1 TON	
10	207+11.96 - 227+90.54	ML	2030	24	3.50	64	27	1,096	MAINLINE
10	207+50 - 210+50	ML RT	300	VAR.	2.00	1	1	29	RT TURN LANE EB
10	207+70 - 209+20	ML LT	150	VAR.	3.50	1	1	10	TAPER
10	209+21 - 227+90.54	ML LT	1879	10	2.00	14	6	236	PARKING LANES
10	210+50 - 227+90.54	ML RT	1450	10	2.00	13	6	319	PARKING LANES
10	224+25 - 225+00	ML	75	VAR.	3.50	1	1	13	RT TURN LANE NB
10	1209'A'+50 - 1210'A'+00	STH 131S	50	VAR.	3.50	1	1	7	RT TURN LANE NB
10	1208'A'+91 - 1209'A'+50	STH 131S	61	24	3.50	2	1	32	
10	1208'A'+91 - 1209'A'+50	STH 131S	61	16	2.00	1	1	9	PARKING
10	1224'C'+00 - 1224'C'+70	STH 131N	70	24	3.50	2	1	37	END OF PROJECT LIMIT
10	1224'C'+00 - 1224'C'+70	STH 131N	70	20	2.00	1	1	18	PARKING
10						5	2	90	UNDISTRIBUTED
	TOTALS					106	46	1,896	

690.0150 SAWING ASPHALT

CATEGORY	STATION	LOCATION	LF	REMARKS
10	207+70	ML	24	BEGINNING OF PROJECT
10	1208'A'+91	SIDEROAD	24	STH 131 BRIDGE
10	228+00	ML	44	END OF PROJECT
	TOTAL		92	

STATE PROJECT NO: 5731-02-60

HWY STH 56

COUNTY: RICHLAND/ VERNON

MISCELLANEOUS QUANTITIES

SHEET NO: 12

E

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490.0200 SALVAGED ASPHALTIC PAVEMENT MILLING

CATEGORY	STATION	-	STATION	LOCATION	DEPTH INCHES	WIDTH LF	LENGTH LF	SY	REMARKS
10	207+70	-	228+00	ML	3.50	24	2030	5,413	MAINLINE
10	207+50	-	210+50	ML RT	2.00	VAR.	VAR.	255	RT TURN LANE EB
10	207+70	-	209+21	ML LT	3.50	VAR.	VAR.	84	TAPER
10	209+21	-	228+00	ML LT	2.00	10	1879	2,088	PARKING LANES
10	210+50	-	228+00	ML RT	2.00	10	1450	1,611	PARKING LANES
10	1209'A'+54	-	1210'A'+00	STH 131S	3.50	VAR.	VAR.	35	RT TURN LANE NB
10	1208'A'+91	-	1209'A'+50	STH 131S	3.50	24	61	163	
10	1208'A'+91	-	1209'A'+50	STH 131S	2.00	12	61	81	PARKING
10	1224'C'+00	-	1224'C'+70	STH 131N	3.50	24	70	187	
10	1224'C'+00	-	1224'C'+70	STH 131N	2.00	20	70	156	PARKING
10	224+28	-	225+00	ML	3.50			63	RT TURN LANE NB
							TOTAL	10,136	

601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D

CATEGORY	STATION	-	STATION	LOCATION	LF	REMARKS
10	210+04 RT	-	1209'A'+38 LT		78	ML AROUND SW RADIUS OF STH 131S
10	1209'A'+53 RT	-	212+30 RT		170	ML AROUND SE RADIUS OF STH 131S
10	211+00	-	211+50	LT	50	
10	212+90	-	213+20	RT	30	
10	213+40	-	214+20	LT	88	ML AROUND NW RADIUS OF CENTRAL ST.
10	214+00	-	214+73	RT	73	
10	214+60	-	215+27	LT	70	ML AROUND NE RADIUS OF CENTRAL ST.
10	215+30	-	215+60	RT	30	
10	215+90	-	216+20	RT	30	
10	216+60	-	216+80	RT	20	
10	220+40	-	220+48	LT	25	ML AROUND NW RADIUS OF WASHINGTON ST.
10	221+00	-	221+18	LT	25	ML AROUND NE RADIUS OF WASHINGTON ST.
10	223+74	-	223+84	LT	25	ML AROUND NW RADIUS OF MAIN ST.
10	1223'C'+13	-	1224'C'+19	LT	38	ML AROUND NE RADIUS OF MAIN ST.
10	223+50	-	228+00	RT	450	
10	1224'C'+70	-	226+20	LT	160	ML AROUND SE RADIUS OF STH 56
10					50	UNDISTRIBUTED
				TOTAL	1,412	

602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW

CATEGORY	STATION	LOCATION	SF	WIDTH LF	LENGTH LF	REMARKS
10	1209'A'+75	LT	8	2	4	SW CORNER STH 56 / STH 131S
10	1209'A'+75	RT	8	2	4	SE CORNER STH 56 / STH 131S
10	214+65	LT	8	2	4	NE CORNER CENTRAL ST
10	220+78	LT	8	2	4	NW CORNER WASHINGTON ST
10	221+05	LT	8	2	4	NE CORNER WASHINGTON ST
10	223+73	LT	8	2	4	NW CORNER MAIN ST
10	1223'C'+91	LT	8	2	4	NE CORNER MAIN ST
10	224+00	RT	8	2	4	SW CORNER STH 56 / STH 131N
10	224+56	LT	8	2	4	SE CORNER STH 56 / STH 131N
		TOTAL	72			

602.0405 CONCRETE SIDEWALK 4-INCH

CATEGORY	STATION	-	STATION	LOCATION	SF	WIDTH LF	LENGTH LF	REMARKS
10	1209'A'+67	-	1209'A'+93	RT	108	6	18	SW CORNER STH 56 / STH 131S
10	1209'A'+68	-	1209'A'+82	LT	60	6	10	SE CORNER STH 56 / STH 131S
10	214+60	-	215+00	LT	150	6	25	NE CORNER OF CENTRAL ST.
10	215+30	-	215+60	RT	180	6	30	
10	215+90	-	216+20	RT	180	6	30	
10	216+60	-	216+80	RT	120	6	20	
10	220+39	-	220+51	LT	150	6	25	NE CORNER OF WASHINGTON ST.
10	220+97	-	221+15	LT	150	6	25	NW CORNER WASHINGTON ST
10	223+73	-	223+84	LT	150	6	25	NE CORNER MAIN ST
10	223+50	-	225+00	RT	768	6	128	
10	1223'C'+86	-	1224'C'+98	LT	150	6	25	NW CORNER MAIN ST
10	224+70 RT	-	225+30 LT		450	6	75	SE CORNER STH 56 / STH 131
				TOTAL	2,616			

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SPV.0060.01 WATER VALVE BOX

611.8110 ADJUSTING MANHOLES COVERS

CATEGORY	STATION	LOCATION	EACH	REMARKS
10	214+00	9 FT RT	1	
10	224+77	45 FT LT	1	
		SUBTOTAL	2	
20	212+24	16 FT RT	1	*
20	214+55	15 FT LT	1	*
20	223+97	6 FT RT	1	*
		SUBTOTAL	3	

*WATERPROOF SANITARY MANHOLE

TOTAL 5

* CL, RT/LT IS WITH RESPECT TO THE CL OF STH 131 & STH 56

CATEGORY	STATION	CL, RT/ LT	EACH
20	214+57	RT	1
20	217+18	LT	1
20	219+00	LT	2
20	220+79	LT	1
20	221+09	LT	1
20	221+11	LT	1
20	224+54	CL	1
20	1223'C'+75	LT	3
			11

628.7015 INLET PROTECTION TYPE C

CATEGORY	EACH	REMARKS
10	5	UNDISTRIBUTED

643.0410 TRAFFIC CONTROL BARRICADES TYPE II

CATEGORY	STATION	NO. BARRICADES	DAYS	REMARKS
10	214+70 LT	3	150	SIDEWALK ALONG RADIUS OF NE CORNER OF CENTRAL ST. & STH 56
10	214+70 LT	1	50	SIDEWALK ALONG RADIUS OF NE CORNER OF CENTRAL ST. & STH 56
10	214+75 LT	3	150	SIDEWALK ALONG RADIUS OF NE CORNER OF CENTRAL ST. & STH 56
10	215+05 LT	3	150	
10	215+20 LT	1	50	
10	215+25 RT	3	150	
10	215+00 RT	1	50	
10	216+85 RT	3	150	
10	217+20 RT	1	50	
10	223+30 RT	3	150	
10	223+00 RT	1	50	
10	225+40 RT	3	150	
10	224+00 RT	3	150	NW CORNER OF STH 56/131N & STH 56 RADIUS
10	225+65 RT	1	50	
10	1224'C'+80	3	150	NE CORNER OF STH 131N & STH 56
10	1225'C'+00	1	50	
10	224+85 LT	3	150	NE CORNER OF STH 131N & STH 56 RADIUS
10	225+40 LT	3	150	
10	225+85 LT	1	50	
	TOTAL		2,050	

643.0300 TRAFFIC CONTROL DRUMS

CATEGORY	STATION - STATION	NO. DRUMS	LOCATION	DAYS	REMARKS
10	1208'A'+20 RT - 217+00 RT	19	ML	950	SDD 15D28-1 STAGE I
10	205+50 RT - 1209'A'+40 LT	9	ML	450	SDD 15D28-1 STAGE I
10	211+00 LT - 216+95 LT	33	ML	1650	SDD 15D28-1 STAGE I
10	220+43 LT - 221+18 LT	18	WASHINGTON ST.	900	SDD 15D28-1 STAGE I
10	223+73 LT - 1224'C'+00 LT	18	MAIN ST.	900	SDD 15D28-1 STAGE I
10	221+60 LT - 228+00	19	ML	950	SDD 15D28-1 STAGE I
10	1208'A'+20 RT - 217+00 RT	19	ML	950	SDD 15D28-1 STAGE II
10	205+50 RT - 1209'A'+40 LT	9	ML	450	SDD 15D28-1 STAGE II
10	211+00 LT - 216+95 LT	33	ML	1650	SDD 15D28-1 STAGE II
10	220+43 LT - 221+18 LT	18	WASHINGTON ST.	900	SDD 15D28-1 STAGE II
10	223+73 LT - 1224'C'+00 LT	18	MAIN ST.	900	SDD 15D28-1 STAGE II
10	221+60 LT - 228+00	19	ML	950	SDD 15D28-1 STAGE II
10		10		500	UNDISTRIBUTED
	TOTAL			12,100	
	STAGE I: REMOVAL OF CURB & GUTTER				
	STAGE II: PLACEMENT OF CURB & GUTTER				

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643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A

CATEGORY	STATION /LOCATION	NO. LIGHTS	DAYS	REMARKS
10	214+70 LT	3	150	SIDEWALK ALONG RADIUS OF NE CORNER OF CENTRAL ST. & STH 56
10	214+70 LT	1	50	SIDEWALK ALONG RADIUS OF NE CORNER OF CENTRAL ST. & STH 56
10	214+75 LT	3	150	SIDEWALK ALONG RADIUS OF NE CORNER OF CENTRAL ST. & STH 56
10	215+05 LT	3	150	
10	215+20 LT	1	50	
10	215+25 RT	3	150	
10	215+00 RT	1	50	
10	216+85 RT	3	150	
10	217+20 RT	1	50	
10	223+30 RT	3	150	
10	223+00 RT	1	50	
10	225+40 RT	3	150	
10	224+00 RT	3	150	NW CORNER OF STH 56/131N & STH 56 RADIUS
10	225+65 RT	1	50	
10	1224'C'+80	3	150	NE CORNER OF STH 131N & STH 56
10	1225'C'+00	1	50	
10	224+85 LT	3	150	NE CORNER OF STH 131N & STH 56 RADIUS
10	225+40 LT	3	150	
10	225+85 LT	1	50	
TOTAL			2,050	

647.0556 PAVEMENT MARKING STOP LINE EPOXY 12-INCH

CATEGORY\	STATION	LOCATION	LF	REMARKS
10	1209'A'+65	RT	18	NORTH BOUND STH 131
10	224+46	LT	53	WEST BOUND STH 56
TOTAL			71	

647.0776 PAVEMENT MARKING CROSSWALK EPOXY 12-INCH

CATEGORY	STATION	LOCATION	LF	REMARKS
10	224+26	ML	206	STH 131N

646.0406 PAVEMENT MARKING SAME DAY EPOXY 4-INCH

CATEGORY	STATION - STATION	LOCATION	C/L DASHED YELLOW	C/L DASHED YELLOW	C/L SOLID NO PASSING YELLOW	C/L SOLID NO PASSING YELLOW	DASHED YELLOW	REMARKS
			LT. L.F.	RT. L.F.	LT. L.F.	RT. L.F.	CL. L.F.	
10	207+70 - 210+10	ML	60			240		STAGE II
10	210+90 - 214+79	ML			389	389		STAGE II
10	214+79 - 217+00	ML		55.25	221			STAGE II
10	217+00 - 219+50	ML	100			400	62.5	STAGE II
10	219+50 - 223+50	ML						STAGE II
10	224+40 - 228+00	ML	90			360		STAGE II
10	1208'A'+91 - 1209'A'+72	STH 131			81	81		STAGE II
SUBTOTAL			250	55.25	691	1,470	63	
TOTAL			2,528.8					

STAGE II: FINAL LIFT OF HMA PAVEMENT TYPE E-1

649.0200 TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH

CATEGORY	STATION - STATION	LOCATION	C/L DASHED YELLOW	C/L DASHED YELLOW	C/L SOLID NO PASSING YELLOW	C/L SOLID NO PASSING YELLOW	DASHED YELLOW	REMARKS
			LT. L.F.	RT. L.F.	LT. L.F.	RT. L.F.	CL. L.F.	
10	207+70 - 210+10	ML	60			240		STAGE I
10	210+90 - 214+79	ML			389	389		STAGE I
10	214+79 - 217+00	ML		55.25	221			STAGE I
10	217+00 - 219+50	ML	100			400	62.5	STAGE I
10	219+50 - 223+50	ML						STAGE I
10	224+40 - 228+00	ML	90			360		STAGE I
10	1208'A'+91 - 1209'A'+72	STH 131			81	81		STAGE I
SUBTOTAL			250	55.25	691	1,470	62.50	
TOTAL			2,528.75					

STAGE I: FIRST LIFT OF HMA PAVEMENT TYPE E-1

3

643.0900 TRAFFIC CONTROL SIGNS

CATEGORY	STATION	LOCATION	DAYS	REMARKS	SIGN	SIZE	CODE
10		SIDE ROAD	50	CENTRAL ST.	ROAD WORK AHEAD	48"X48"	W20-1
10		SIDE ROAD	50	STH 131S	ROAD WORK AHEAD	48"X48"	W20-1
10		SIDE ROAD	50	SOUTH A ST. - WB	ROAD WORK AHEAD	48"X48"	W20-1
10		SIDE ROAD	50	SOUTH A ST. - EB	ROAD WORK AHEAD	48"X48"	W20-1
10		SIDE ROAD	50	N. WASHINGTON ST.	ROAD WORK AHEAD	48"X48"	W20-1
10		SIDE ROAD	50	N MAIN ST.	ROAD WORK AHEAD	48"X48"	W20-1
10		ADVANCE OF PROJECT STH 56	50	BEGINNING OF PROJECT EAST BOUNI	ROAD WORK AHEAD	48"X48"	W20-1
10		ADVANCE OF PROJECT STH 56	50	BEGINNING OF PROJECT EAST BOUNI	ROAD WORK 1000 FT	48"X48"	W20-1
10		ADVANCE OF PROJECT STH 56	50	BEGINNING OF PROJECT EAST BOUNI	ROAD WORK 500 FT	48"X48"	W20-1
10		ADVANCE OF PROJECT STH 56	50	BEGINNING OF PROJECT WEST BOUN	END ROAD WORK	48"X24"	G20-2A
10		ADVANCE OF PROJECT STH 56	50	END OF PROJECT WEST BOUND	ROAD WORK AHEAD	48"X48"	W20-1
10		ADVANCE OF PROJECT STH 56	50	END OF PROJECT WEST BOUND	ROAD WORK 1000 FT	48"X48"	W20-1
10		ADVANCE OF PROJECT STH 56	50	END OF PROJECT WEST BOUND	ROAD WORK 500 FT	48"X48"	W20-1
10		ADVANCE OF PROJECT STH 56	50	END OF PROJECT EAST BOUND	END ROAD WORK	48"X24"	G20-2A
				SIDEWALK ALONG RADIUS OF NE			
10	214+70 LT	CENTRAL ST.	50	CORNER OF CENTRAL ST. & STH 56	SIDEWALK CLOSED	24"X12"	R5-8
				SIDEWALK ALONG RADIUS OF NE			
10	214+70 LT	CENTRAL ST.	50	CORNER OF CENTRAL ST. & STH 56	SIDEWALK CLOSED USE OTHER SIDE	24"X12"	R5-8A
10	215+05 LT		50		SIDEWALK CLOSED	24"X12"	R5-8
10	215+20 LT		50		SIDEWALK CLOSED USE OTHER SIDE	24"X12"	R5-8A
10	215+25 RT		50		SIDEWALK CLOSED	24"X12"	R5-8
10	215+00 RT		50		SIDEWALK CLOSED USE OTHER SIDE	24"X12"	R5-8A
10	216+85 RT		50		SIDEWALK CLOSED	24"X12"	R5-8
10	217+20 RT		50		SIDEWALK CLOSED USE OTHER SIDE	24"X12"	R5-8A
10	223+30 RT		50		SIDEWALK CLOSED	24"X12"	R5-8
10	223+00 RT		50		SIDEWALK CLOSED USE OTHER SIDE	24"X12"	R5-8A
10	225+40 RT		50		SIDEWALK CLOSED	24"X12"	R5-8
10	225+65 RT		50		SIDEWALK CLOSED USE OTHER SIDE	24"X12"	R5-8A
10	1224'C'+80		50	NE CORNER OF STH 131N & STH 56	SIDEWALK CLOSED	24"X12"	R5-8
10	1225'C'+00		50		SIDEWALK CLOSED USE OTHER SIDE	24"X12"	R5-8A
10	225+40 LT		50		SIDEWALK CLOSED	24"X12"	R5-8
10	225+85 LT		50		SIDEWALK CLOSED USE OTHER SIDE	24"X12"	R5-8A
TOTAL			1,500				

3

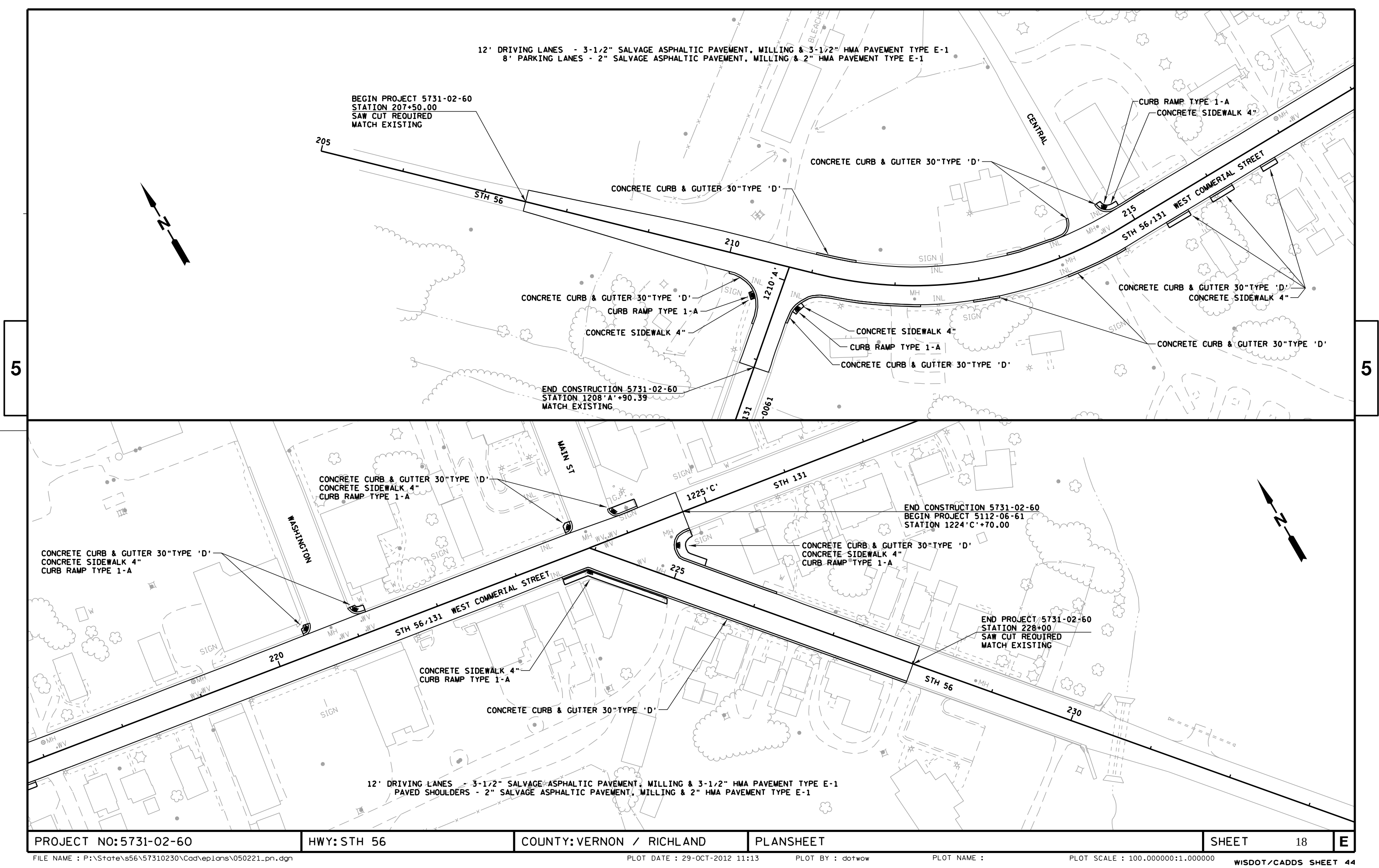
3

3

690.0250 SAWING CONCRETE

CATEGORY\	STATION - STATION	LOCATION	LF	REMARKS	
	210+04	RT	2.5		
10	1209+38	LT	2.5		
10	1209A'+53 RT - 212+30	RT	175	*	ML AROUND SE RADIUS OF STH 131S
10	211+00 - 211+50	LT	55	*	
10	212+30 - 212+80	LT	55	*	
10	212+90 - 213+20	RT	35	*	
10	213+40 - 214+20	LT	100	*	ML AROUND NW RADIUS OF CENTRAL ST.
10	214+00 - 214+73	RT	78	*	
10	214+60	LT	2.5		ML NE RADIUS OF CENTRAL ST.
10	215+00	LT	2.5		ML NE RADIUS OF CENTRAL ST.
10	215+00 - 215+27	LT	29.5	*	
10	215+30	RT	2.5		
10	215+60	RT	2.5		
10	215+90	RT	2.5		
10	216+20	RT	2.5		
10	216+60	RT	2.5		
10	216+80	RT	2.5		
10	220+40	LT	2.5		ML NW RADIUS OF WASHINGTON ST.
10	220+48	LT	2.5		ML NW RADIUS OF WASHINGTON ST.
10	221+00	LT	2.5		ML NE RADIUS OF WASHINGTON ST.
10	221+18	LT	2.5		ML NE RADIUS OF WASHINGTON ST.
10	223+74	LT	2.5		ML NW RADIUS OF MAIN ST.
10	223+84	LT	2.5		ML NW RADIUS OF MAIN ST.
10	1223'C'+13	LT	2.5		ML NE RADIUS OF MAIN ST.
10	1224'C'+19	LT	2.5		ML NE RADIUS OF MAIN ST.
10	223+50	RT	2.5		
10	225+00	RT	2.5		
10	225+00 - 228+00	RT	305	*	
10	1224'C'+70	LT	2.5		
10	225+29	LT	2.5		ML AROUND SE RADIUS OF STH 56
10	225+29 - 226+20	LT	96	*	
10			50		UNDISTRIBUTED
	TOTAL		1,034		

* THIS INCLUDES CUT OF CURB & GUTTER PLUS 1 FT BEHIND ENTIRE LENGTH



PROJECT NO: 5731-02-60

HWY: STH 56

COUNTY: VERNON / RICHLAND

PLANSHEET

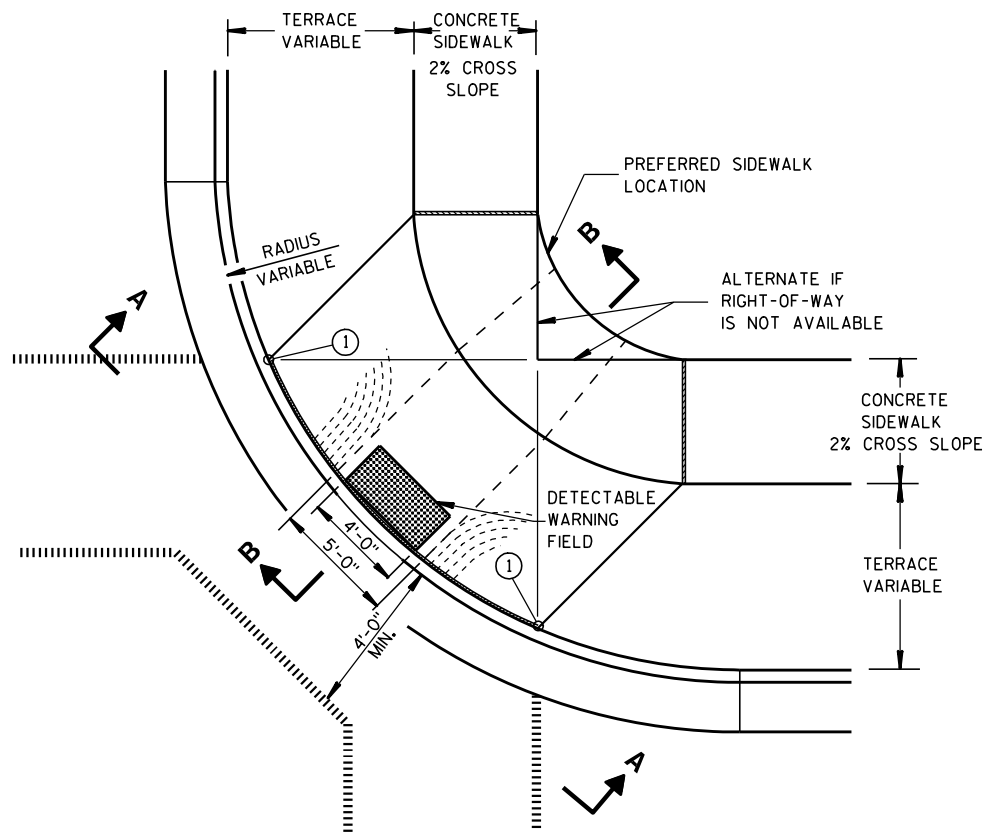
SHEET

18

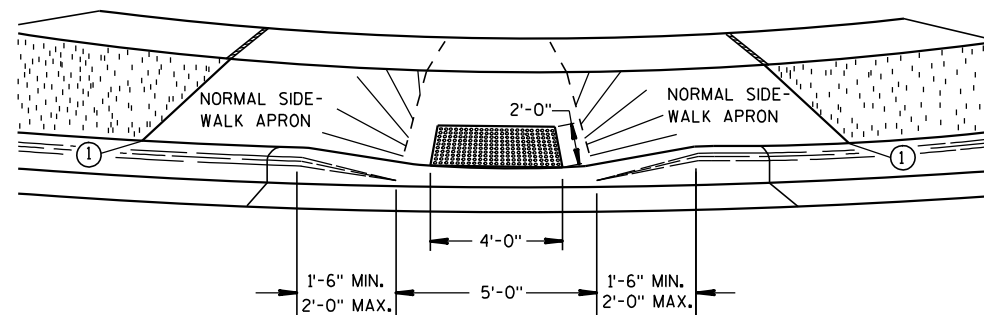
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Standard Detail Drawing List

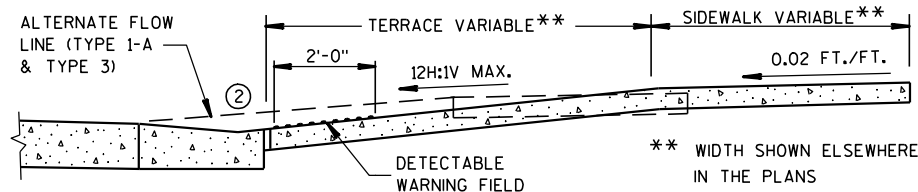
08D05-14A	CURB RAMPS TYPES 1 AND 1-A
08D05-14B	CURB RAMPS TYPES 2 AND 3
08D05-14C	CURB RAMPS TYPE 4A
08D05-14D	CURB RAMPS TYPE 4B
08D05-14E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D16-10	CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES
08E10-02	INLET PROTECTION TYPE A, B, C AND D
09A01-12A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
15C05-01	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C08-15A	PAVEMENT MARKING (MAINLINE)
15C08-15B	PAVEMENT MARKING (INTERSECTIONS)
15C08-15F	PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)
15C12-03	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15D28-01	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D30-01	TRAFFIC CONTROL, SIDEWALK CLOSURE



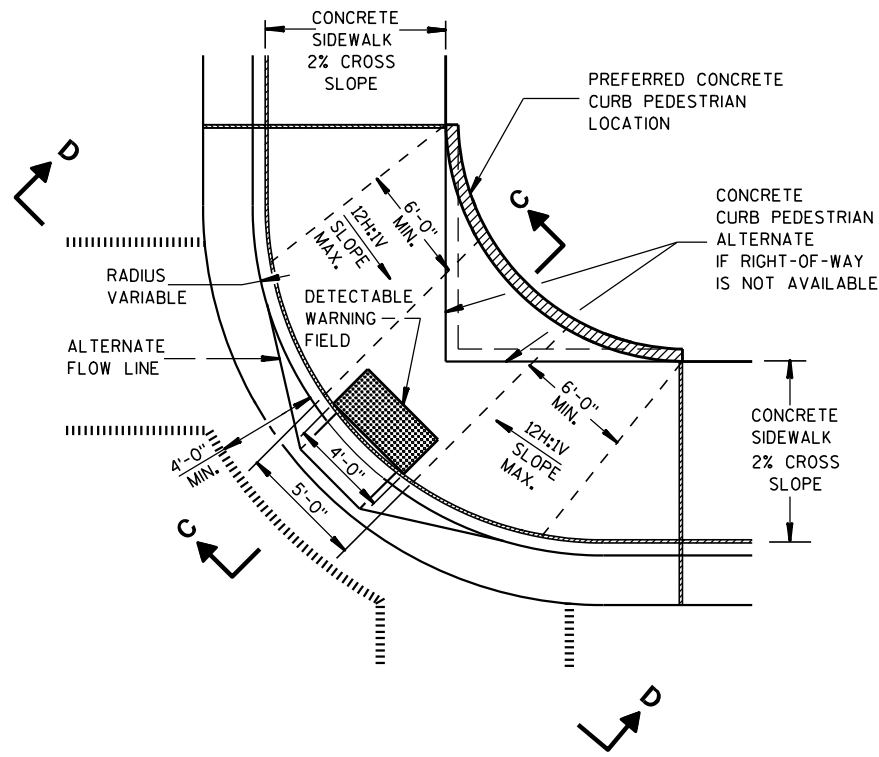
**PLAN VIEW
TYPE 1 RAMP**
(CENTER OF CORNER RADIUS)



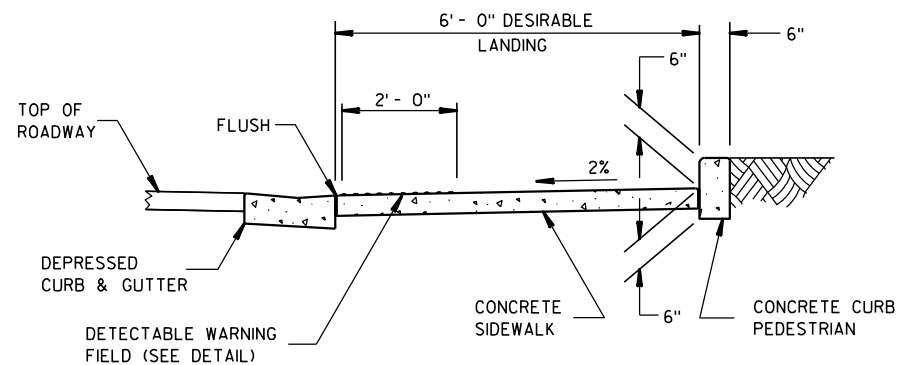
VIEW A-A



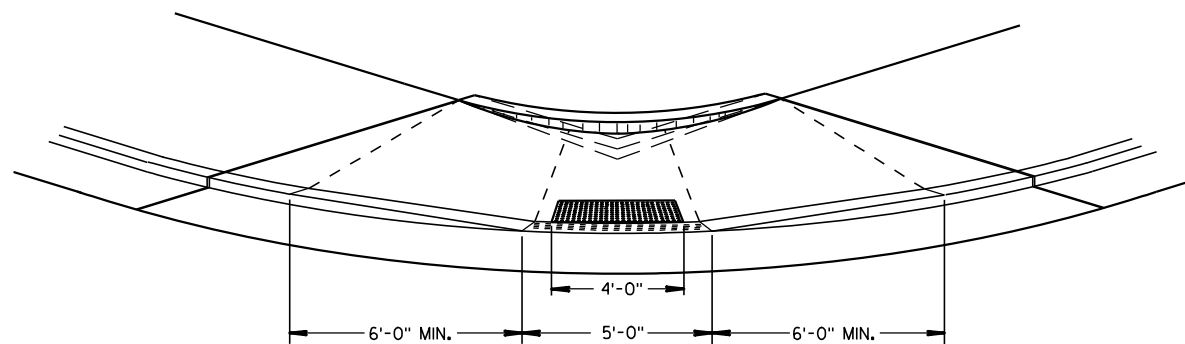
SECTION B-B



**PLAN VIEW
TYPE 1-A RAMP**
(NO TERRACE)



SECTION C-C



VIEW D-D

GENERAL NOTES

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

RAMPS SHALL BE BUILT AT 12H:1V OR FLATTER. WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAL FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD".

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

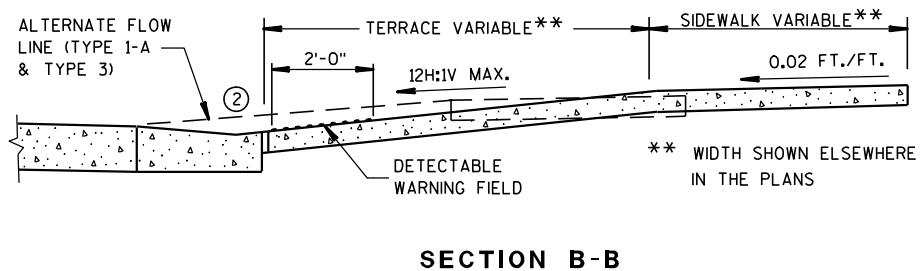
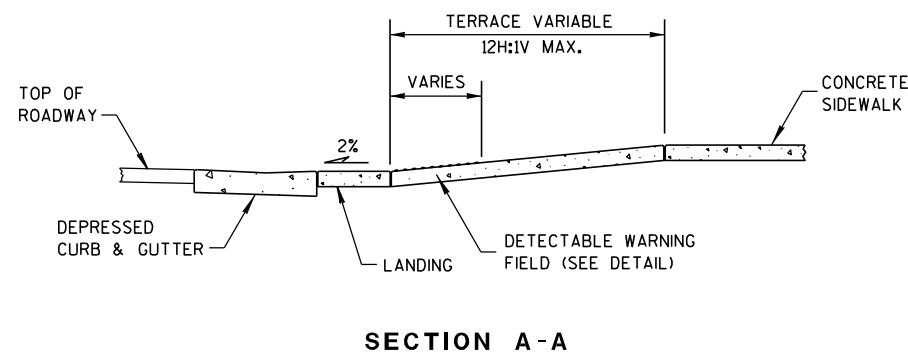
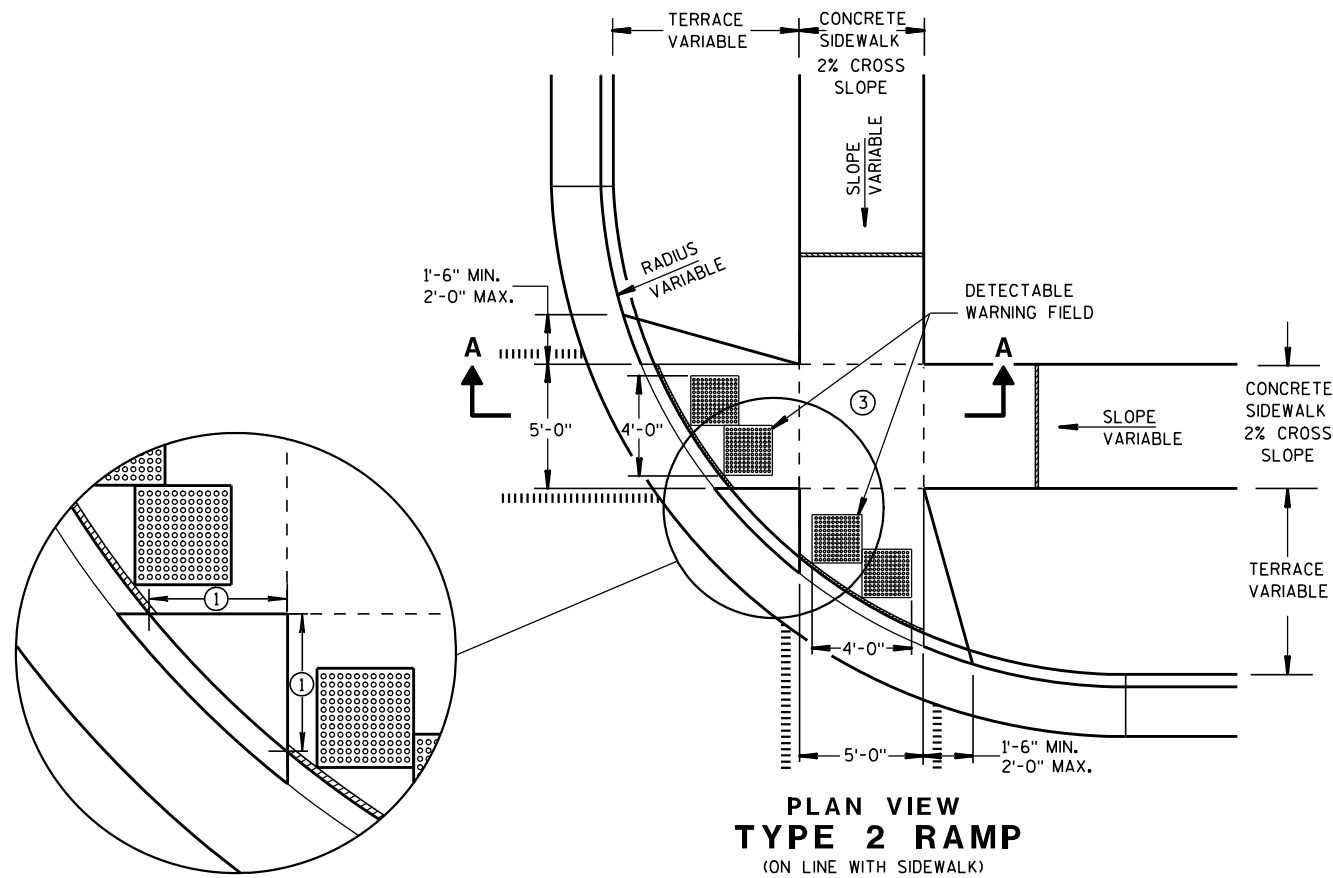
- THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.
- GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.

LEGEND

- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

**CURB RAMPS
TYPES 1 AND 1-A**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



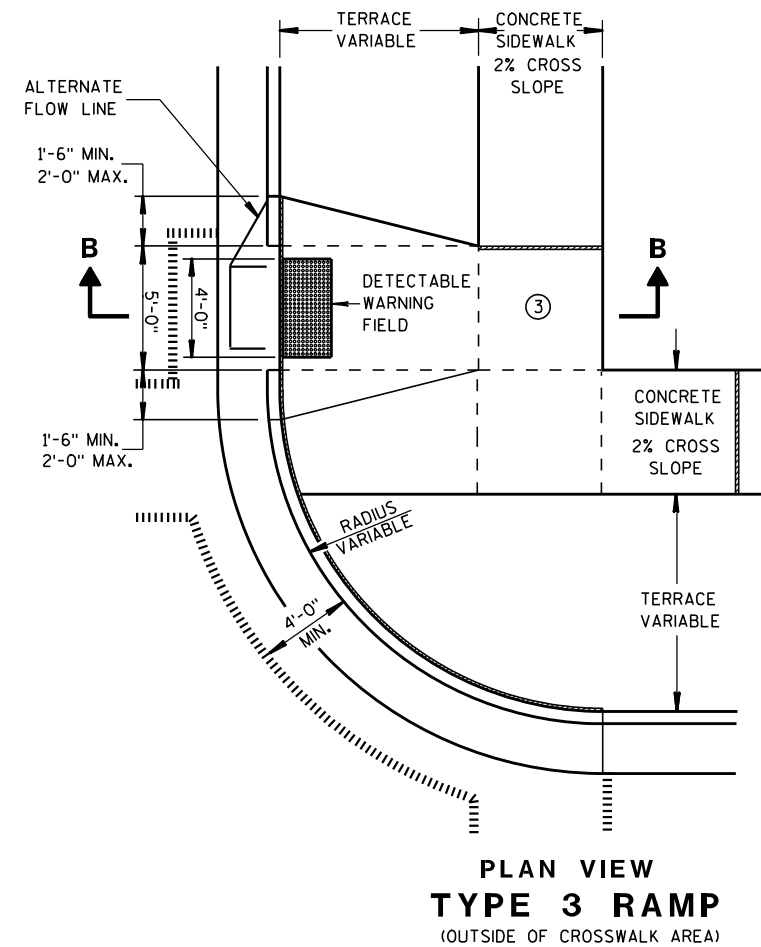
GENERAL NOTES

USE THE TYPE 3 RAMP ONLY WHEN A TYPE 1 OR TYPE 2 CANNOT BE ACHIEVED BECAUSE OF FIELD CONDITIONS.

- ① WHEN THIS DISTANCE IS LESS THAN 6'-0" IT MAY BE DIFFICULT TO ACHIEVE A 12H:1V SLOPE, OR FLATTER, ON THE RAMP, REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 12H:1V SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.
- ③ PROVIDE LANDING AT TOP OF RAMP WITH NO MORE THAN 2% SLOPE IN ANY DIRECTION.

LEGEND

- ===== 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- ||||| PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



CURB RAMPS TYPES 2 AND 3

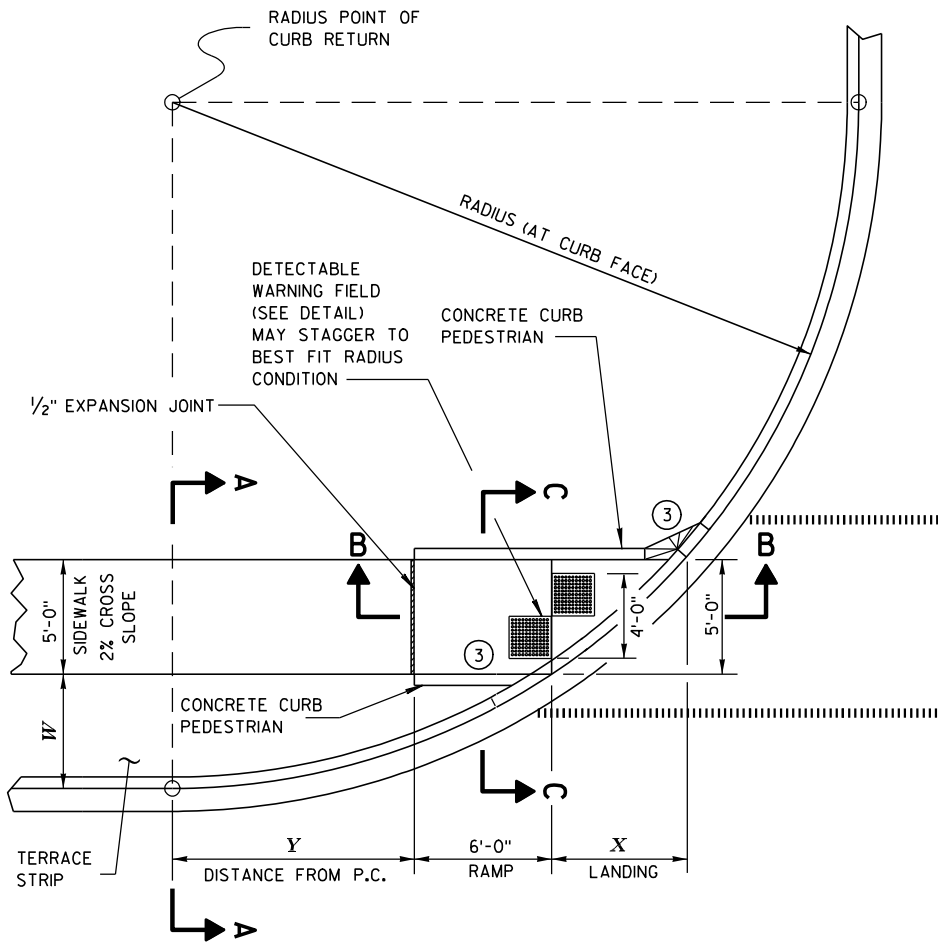
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



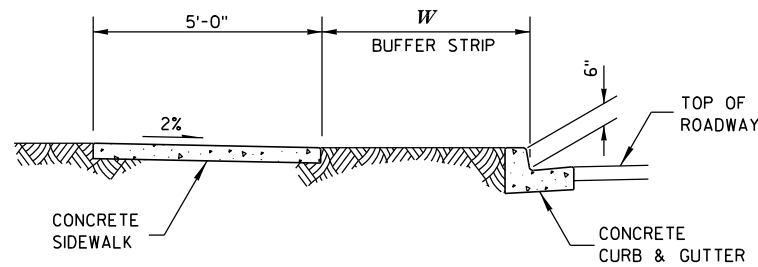
INTERMEDIATE RADII CAN BE INTERPOLATED



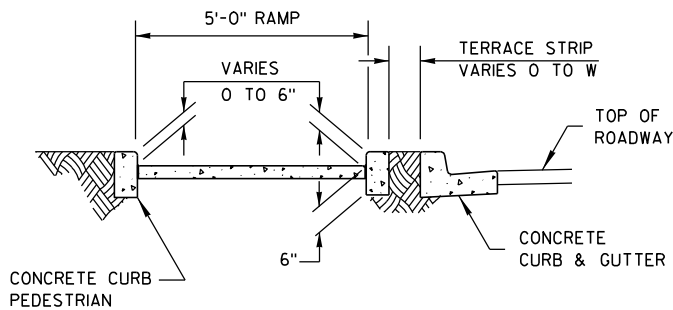
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



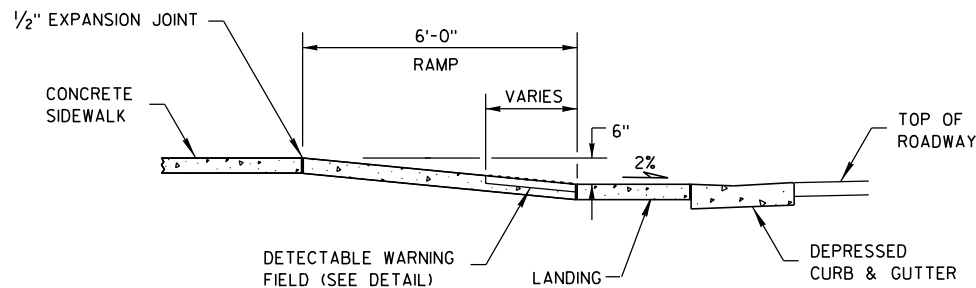
CURB RAMP TYPE 4B
PLAN VIEW



SECTION A-A



SECTION C-C



SECTION B-B

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

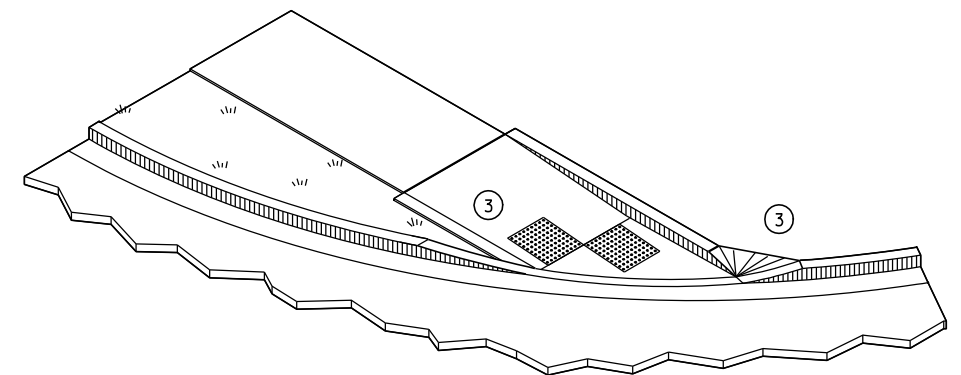
RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

- ③ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS).
DO NOT MARK TRANSITION NOSE.

RADIUS (AT CURB FACE)	W = 3'- 0"		W = 4'- 0"		W = 5'- 0"		W = 6'- 0"		W = 7'- 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y
20 FEET	5'-5½"	4'-6½"	4'-8½"	6'-0"	4'-1"	7'-2¾"	3'-7"	8'-3½"	3'-1½"	9'-2½"
30 FEET	7'-3¾"	7'-1"	6'-5½"	8'-11½"	5'-9¼"	10'-7"	5'-2½"	12'-0"	4'-8¾"	13'-3¼"
40 FEET	8'-9½"	9'-2½"	7'-10"	11'-5¼"	7'-1"	13'-4½"	6'-5¾"	15'-¾"	5'-11½"	16'-7¼"
50 FEET	10'-¾"	11'-¾"	9'-¼"	13'-7¼"	8'-2½"	15'-9½"	7'-6½"	17'-9"	6'-11¾"	19'-6¼"
60 FEET	11'-2½"	12'-8¾"	10'-¾"	15'-6½"	9'-2¼"	17'-11¾"	8'-5¾"	20'-1¾"	7'-10½"	22'-1½"
70 FEET	12'-2¾"	14'-3¼"	11'-¼"	17'-4"	10'-1"	19'-11¾"	9'-3¾"	22'-4¼"	8'-8¼"	24'-6¼"
80 FEET	13'-2"	15'-8½"	11'-10½"	18'-11¾"	10'-10¾"	21'-10"	10'-1"	24'-4¾"	9'-5"	26'-8¾"
90 FEET	14'-½"	17'-½"	12'-8¼"	20'-6½"	11'-7¾"	23'-7"	10'-9¾"	26'-3¾"	10'-1¼"	28'-9½"
100 FEET	14'-10½"	18'-3¾"	13'-5½"	22'-0"	12'-4¼"	25'-2¾"	11'-5¾"	28'-1½"	10'-9"	30'-9"

INTERMEDIATE RADII CAN BE INTERPOLATED



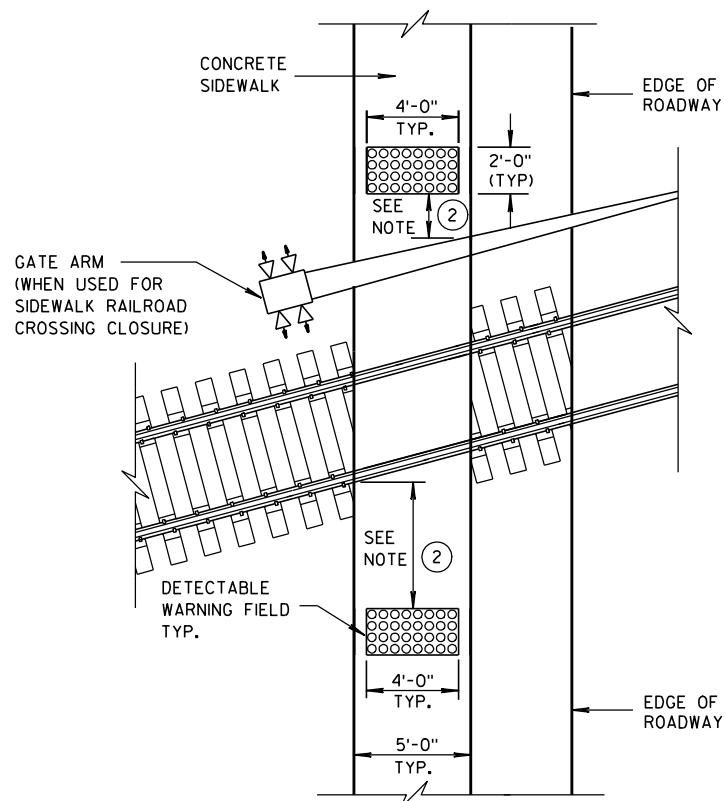
ISOMETRIC VIEW

LEGEND

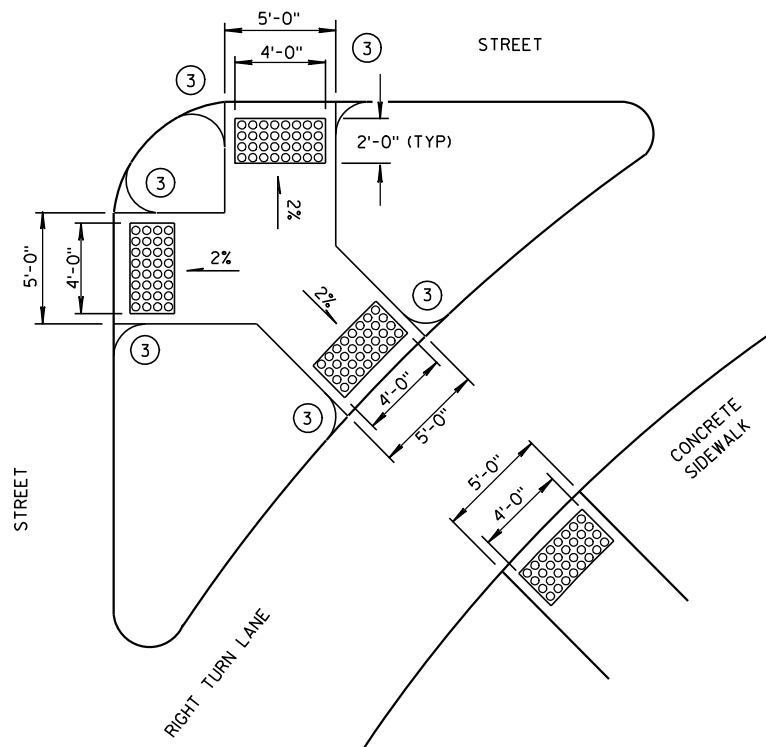
- 1/2" EXPANSION JOINT-SIDEWALK
- - - CONTRACTION JOINT FIELD LOCATED
- ||||| PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPE 4B

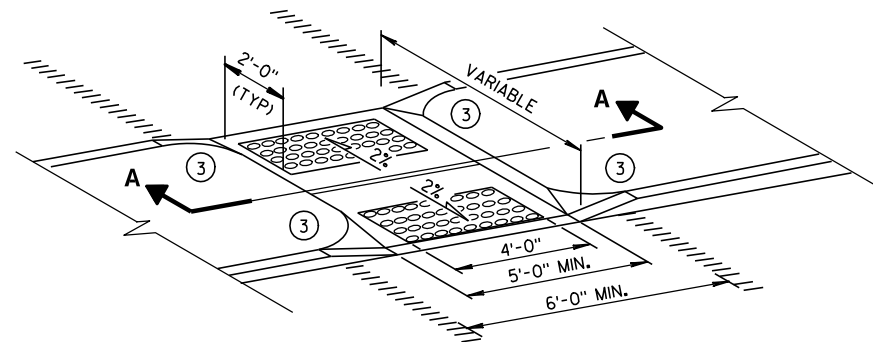
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



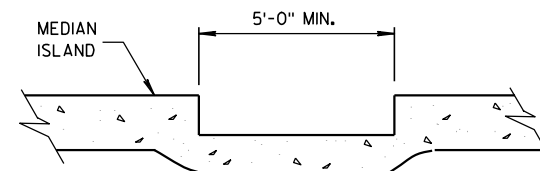
TYPE 8
DETECTABLE WARNINGS
AT RAILROAD CROSSING



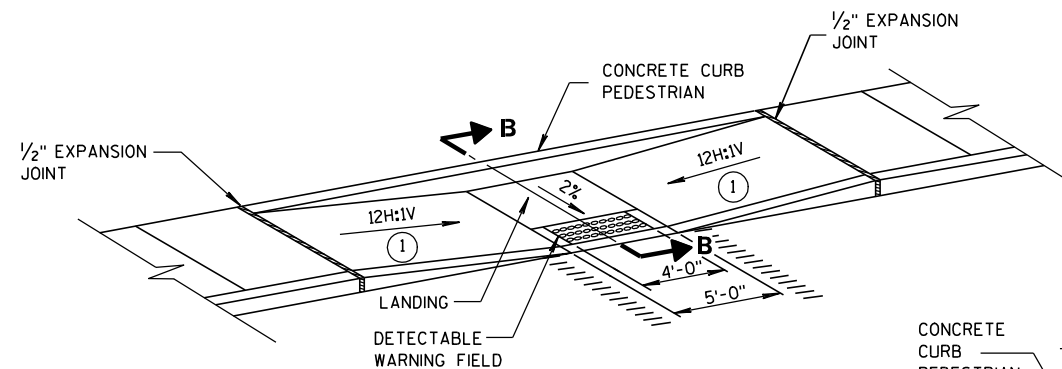
TYPE 6
DETECTABLE WARNING AT ISLANDS



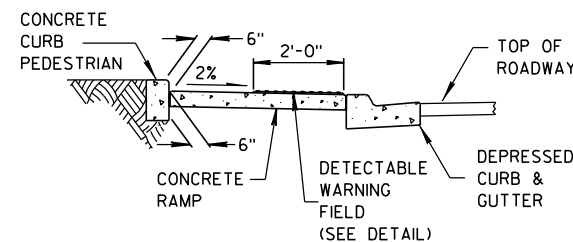
MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5



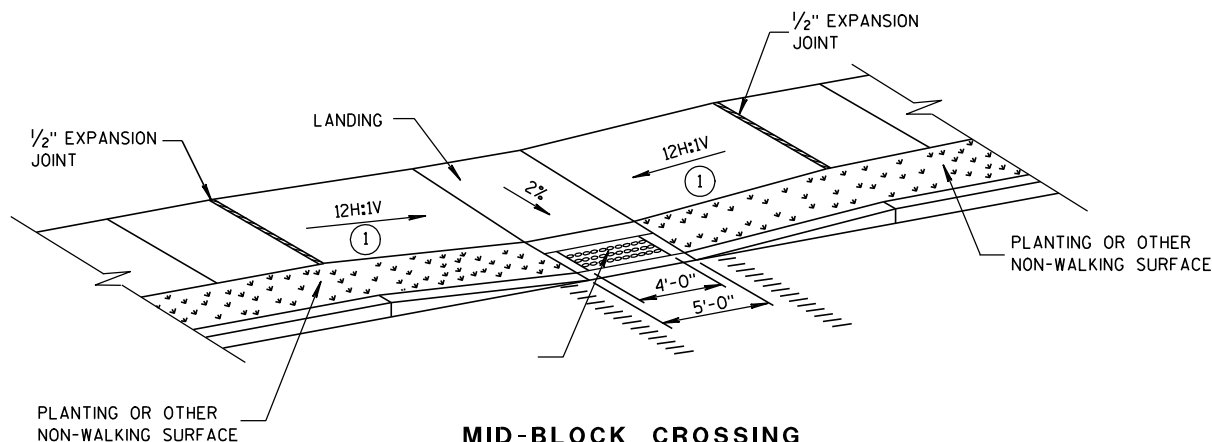
SECTION A-A



MID-BLOCK CROSSING
TYPE 7A



SECTION B-B



MID-BLOCK CROSSING
TYPE 7B

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS
MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

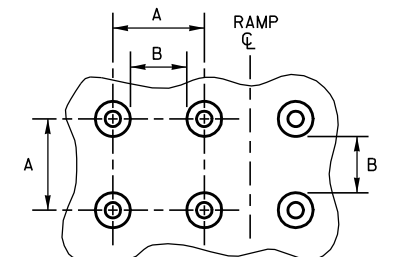
GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

- 1 SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.
- 2 THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET $\pm$ 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.
- 3 INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

LEGEND

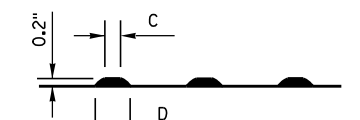
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



PLAN VIEW

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.

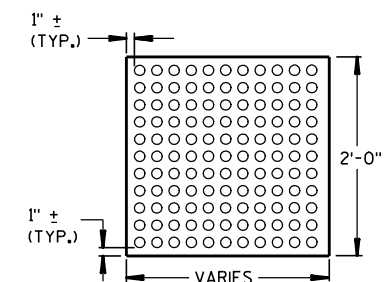


ELEVATION VIEW

TRUNCATED DOMES

DETECTABLE WARNING

PATTERN DETAIL



PLAN VIEW

DETECTABLE WARNING

FIELD (TYPICAL)

CURB RAMPS
TYPES 5, 6, 7A, 7B & 8

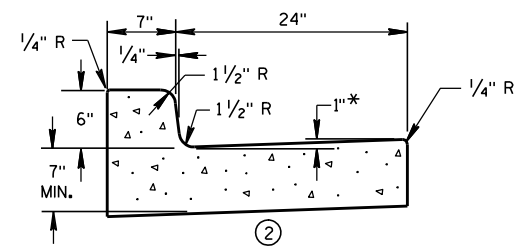
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

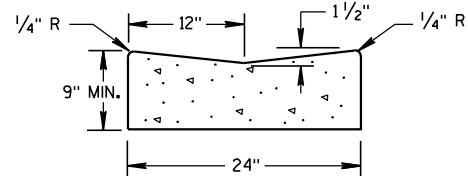
2-9-10
DATE

FHWA

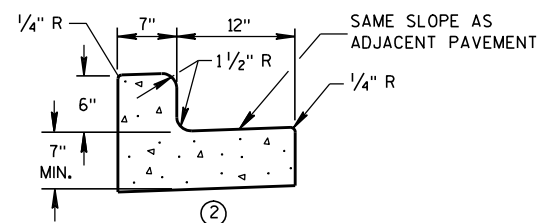
/s/ Jerry H. Zogg
ROADWAY STANDARDS 24 ENT
ENGINEER



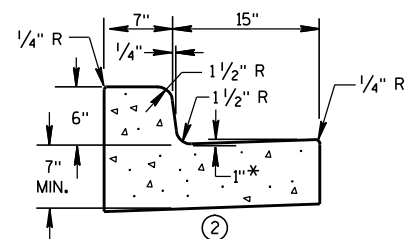
① CONCRETE CURB & GUTTER 31"



① CONCRETE GUTTER 24"

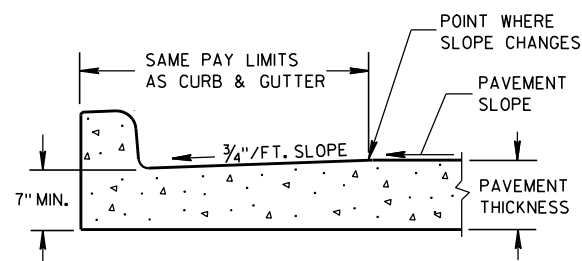


① CONCRETE CURB & GUTTER 19"

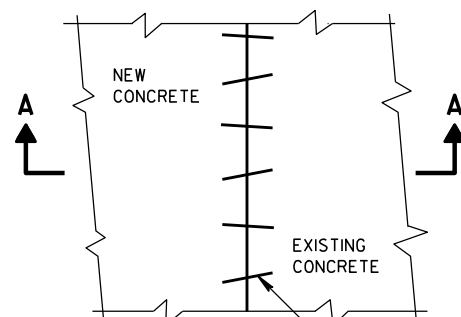


① CONCRETE CURB & GUTTER 22"

* TO BE MEASURED TO A MAXIMUM OF 3" WHERE DRAINAGE PROBLEMS EXIST.



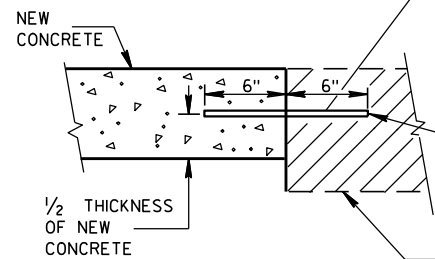
PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



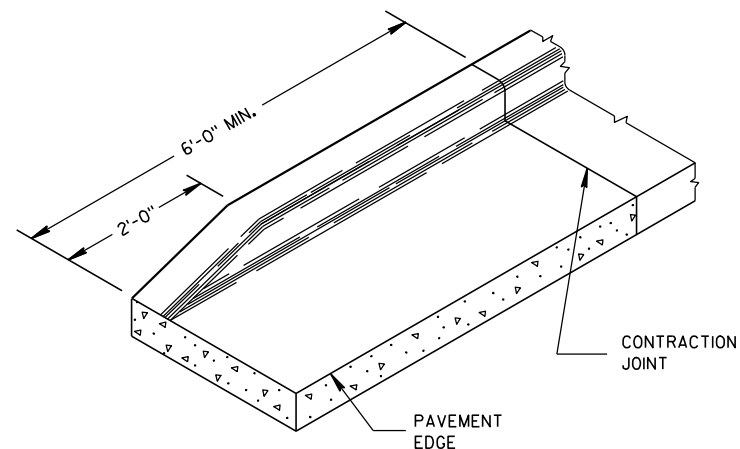
PLAN VIEW

EXISTING AND NEW CONCRETE MAY BE CURB & GUTTER, SURFACE DRAIN, PAVEMENT OR OTHER CONCRETE STRUCTURE.

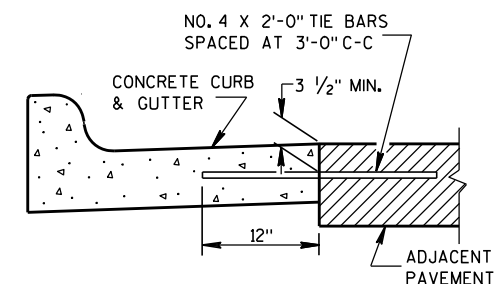
NO. 6 X 12" DEF. BARS SPACED 3'-0" C-C, INSTALLED ON 6:1 SKEW HORIZONTALLY. DIRECTION OF SKEW ALTERNATING AFTER EVERY ONE OR TWO BARS.



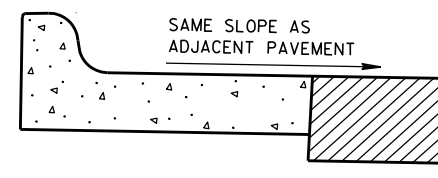
SECTION A-A
PAVEMENT TIES



END SECTION CURB & GUTTER



① TYPICAL TIE BAR LOCATION



③ HIGH SIDE SECTION
(TYPICAL FOR ALL CURB & GUTTER)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS 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 & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE COURSE AND UNCLASSIFIED EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURB.

- ① WHEN PLACED ADJACENT TO NEW CONCRETE, TIE BARS ARE REQUIRED FOR CURB AND GUTTER 31", 22", 19" AND CONCRETE GUTTER 24".
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE COURSE PROVIDED A 7" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ WHEN HIGH SIDE CURB SECTION IS REQUIRED, THE LOCATION(S) WILL BE NOTED ON THE PLAN.

CONCRETE GUTTER, CURB AND
GUTTER AND PAVEMENT TIES
(For Optional Use in Milwaukee Co. Only)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

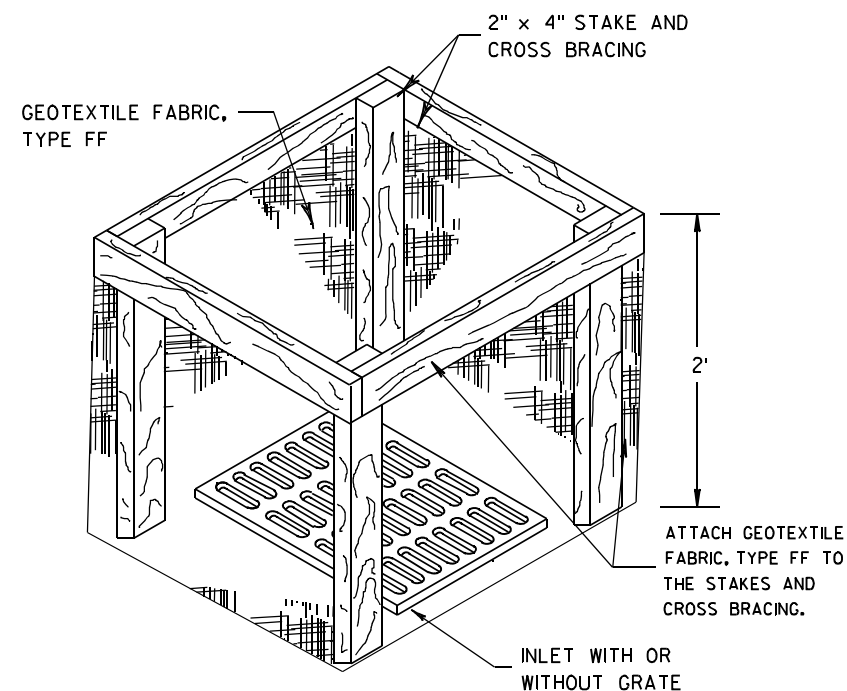
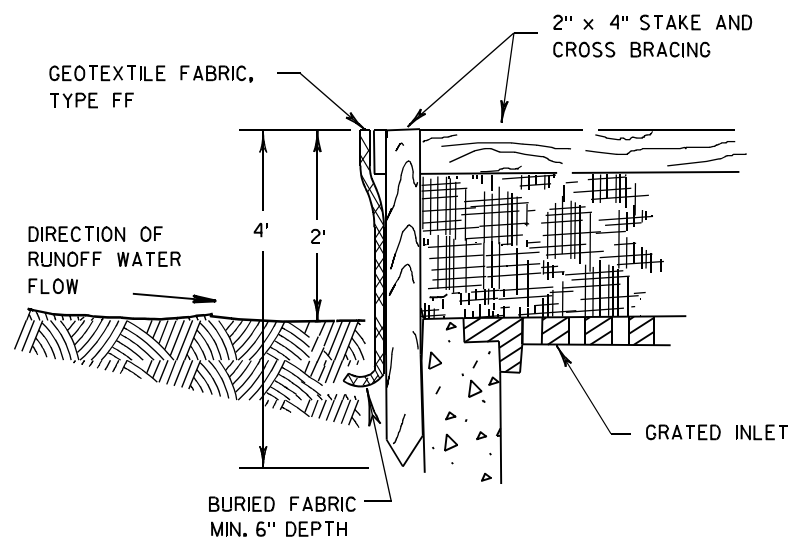
APPROVED

11/22/2010
DATE

FHWA

/S/ Jerry Zonn
ROADWAY STANDARDS 25
ENGINEER

ENT



INLET PROTECTION, TYPE A

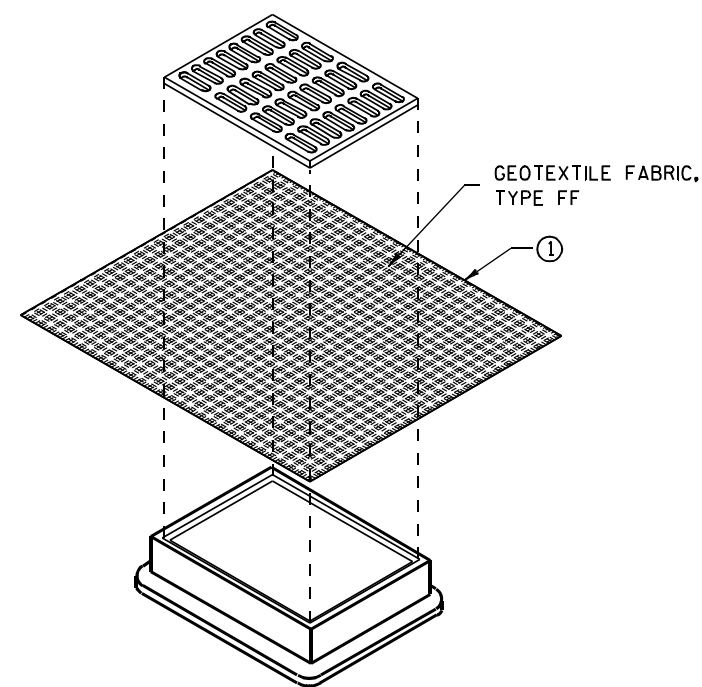
GENERAL NOTES

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

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

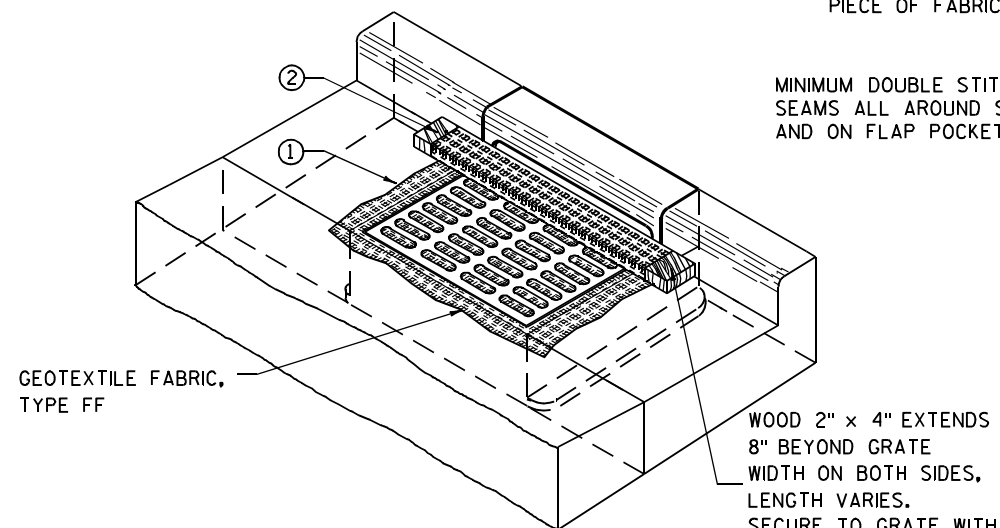
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

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



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

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

INSTALLATION NOTES

TYPE B & C

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

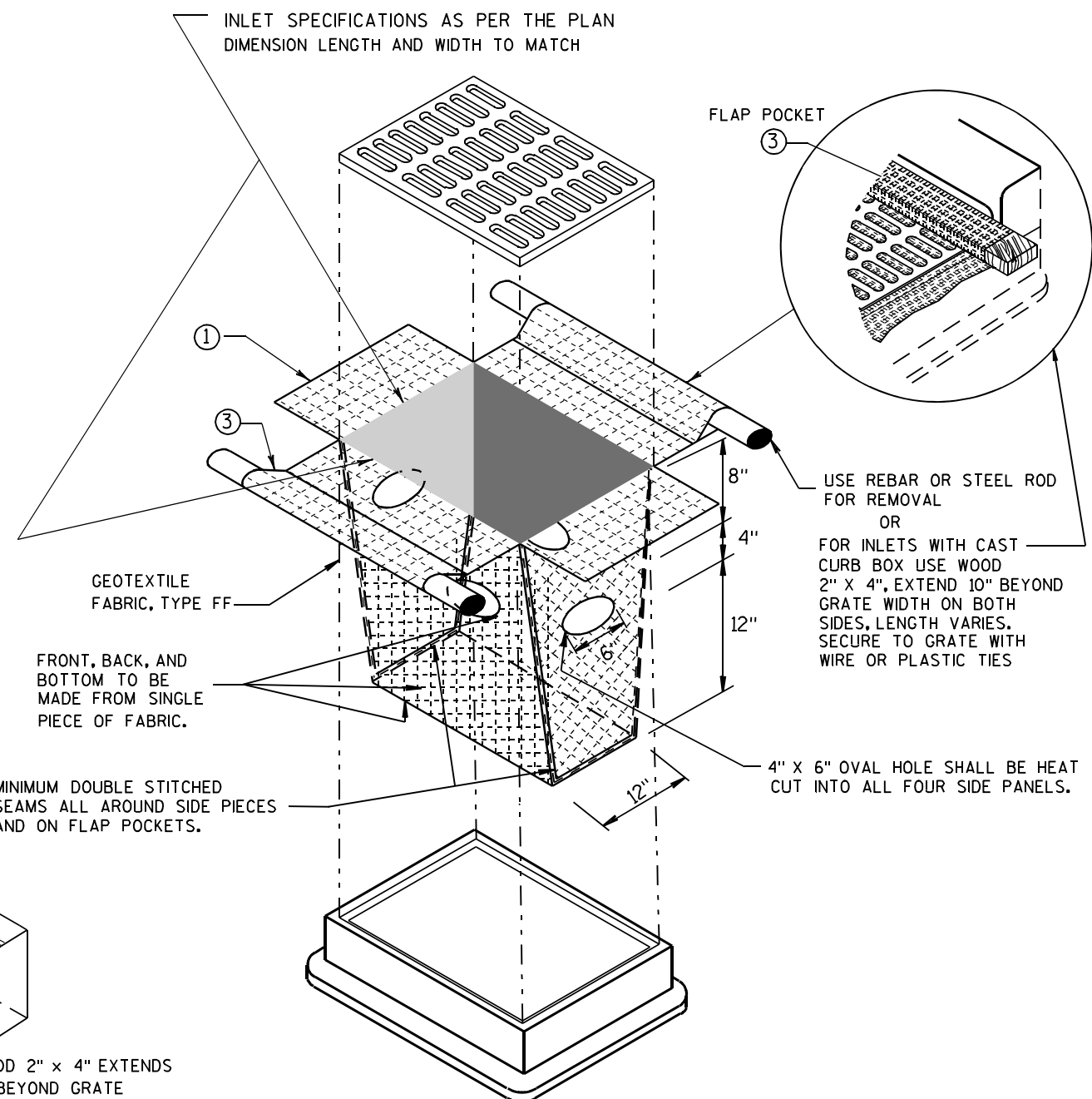
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

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

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

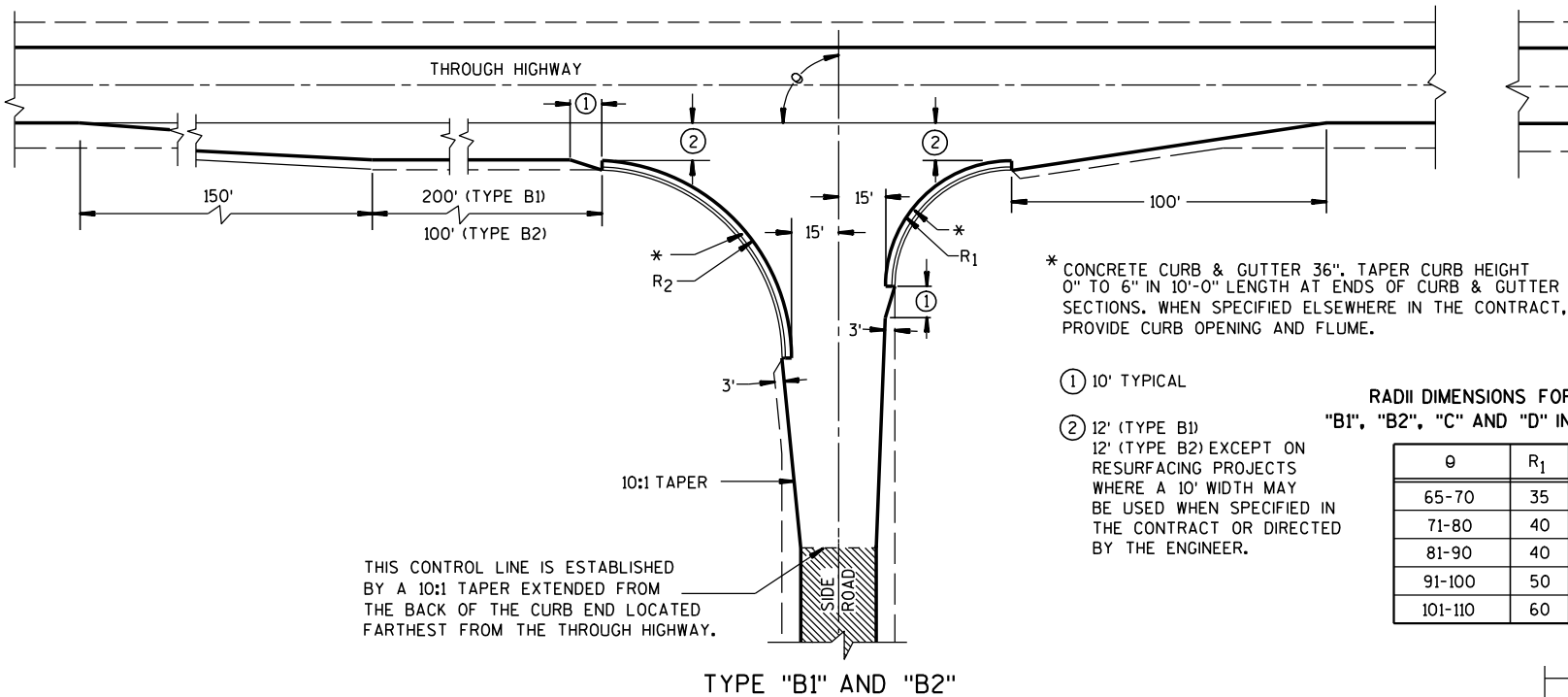
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE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



INLET PROTECTION, TYPE D

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

INLET PROTECTION TYPE A, B, C, AND D	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 10/16/02 DATE	/S/ Beth Connolly 26 CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA	



GENERAL NOTES

DESIGNS MAY BE USED INTERCHANGEABLY IN COMBINATION OR SEPARATELY FOR ANY ONE COMPLETE INTERSECTION DEPENDING UPON INTERSECTION ANGLE AND SURFACING OF EACH APPROACH ROADWAY.

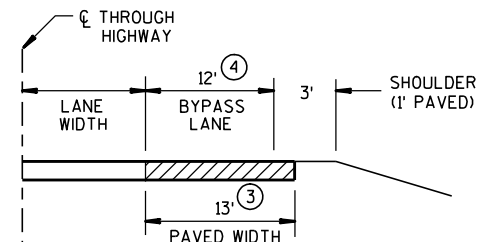
SIDE ROAD SURFACING NOTE

WHEN THE SIDE ROAD IS NOT PRESENTLY PAVED, PAVEMENT SHALL BE PLACED TO THE LIMITS SHOWN UNLESS OTHERWISE PROVIDED IN THE CONTRACT. WHERE THE CONSTRUCTION LIMITS ARE BEYOND THE PAVING LIMITS, CRUSHED AGGREGATE SURFACING SHALL BE PLACED BETWEEN THE PAVING LIMITS AND CONSTRUCTION LIMITS.

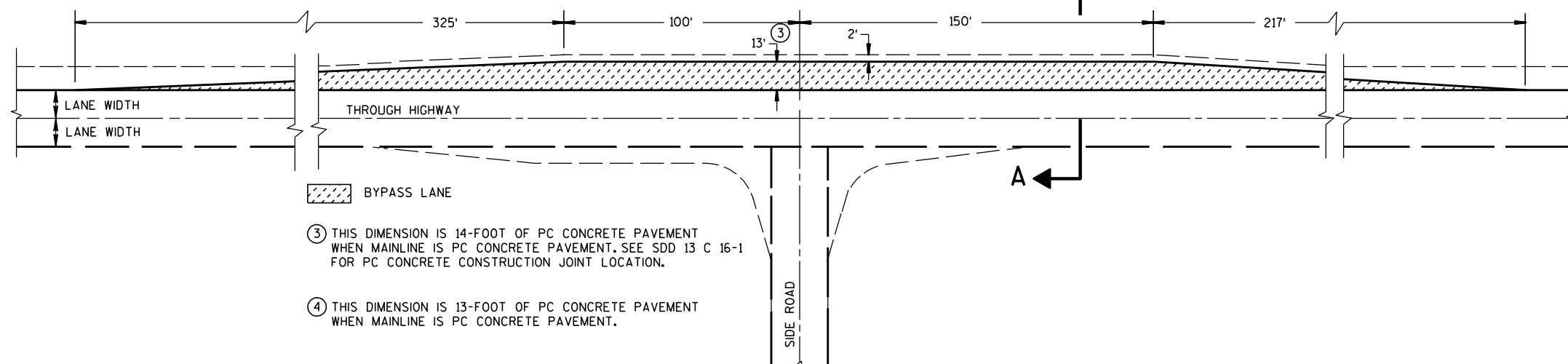
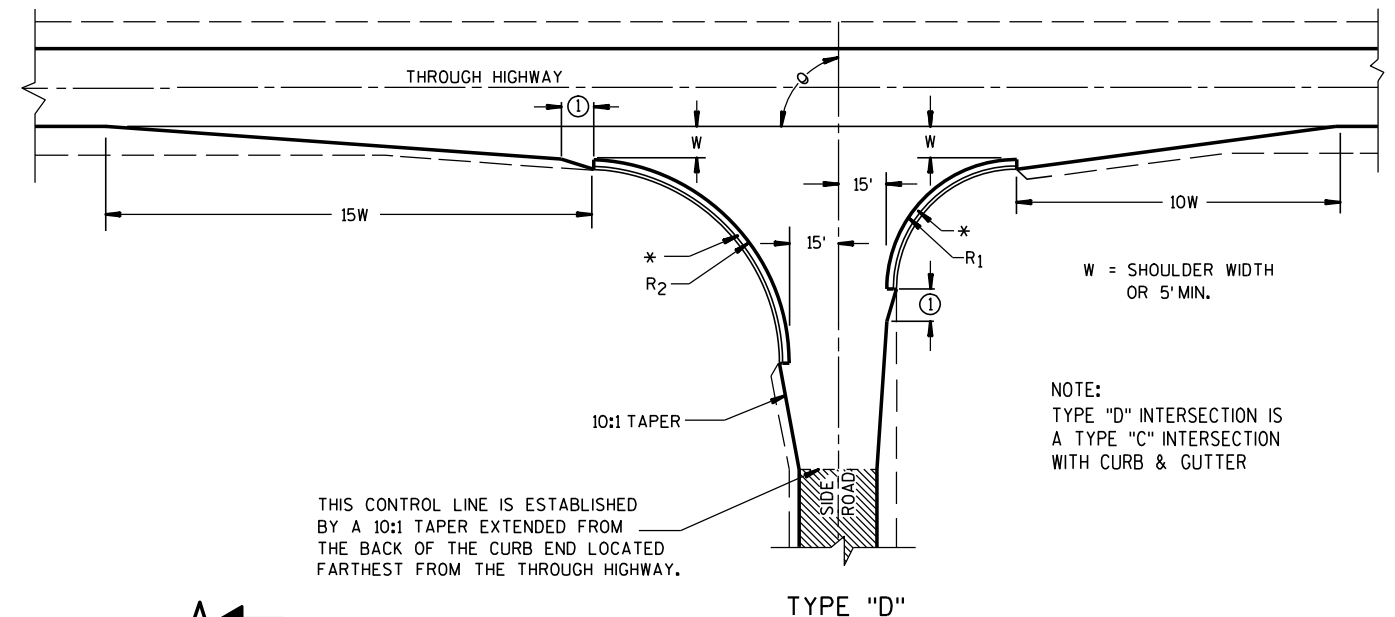
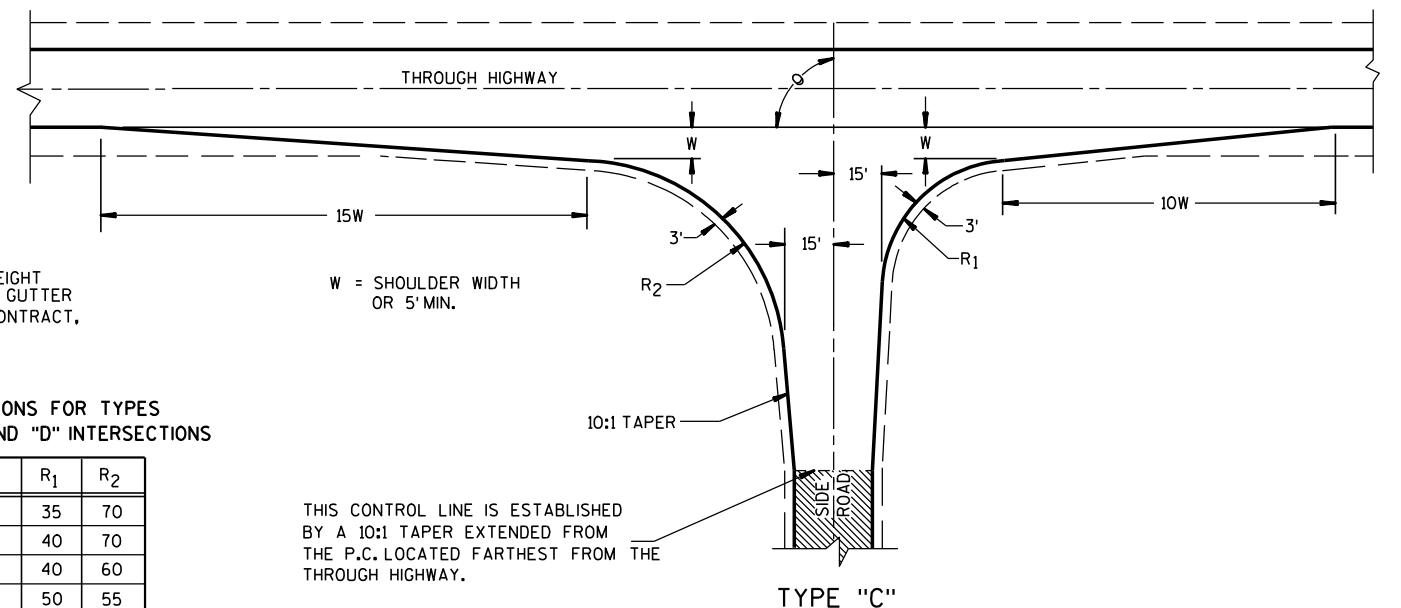
WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

WHEN THE SIDE ROAD IS THE CONSTRUCTION PROJECT, THE INTERSECTION SURFACING SHALL BE THE SAME AS FOR THE PROJECT.

EXISTING SURFACE



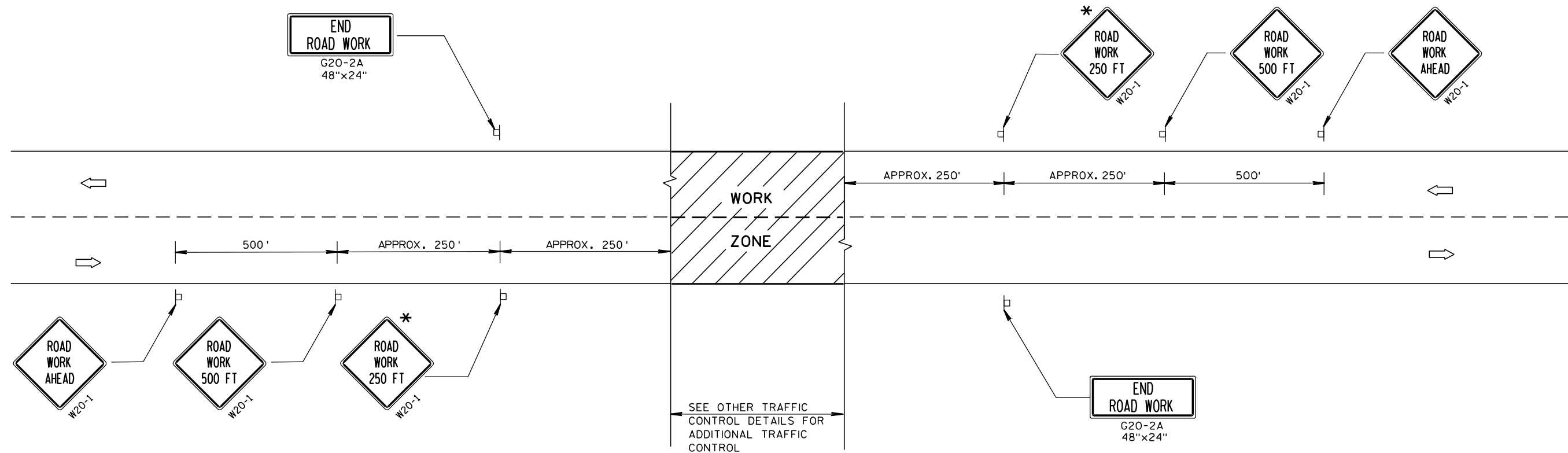
SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)



TEE INTERSECTION BYPASS LANE DETAIL

AT-GRADE SIDE ROAD
INTERSECTION, TYPES "B1", "B2",
"C" AND "D" AND TEE
INTERSECTION BYPASS LANE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

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

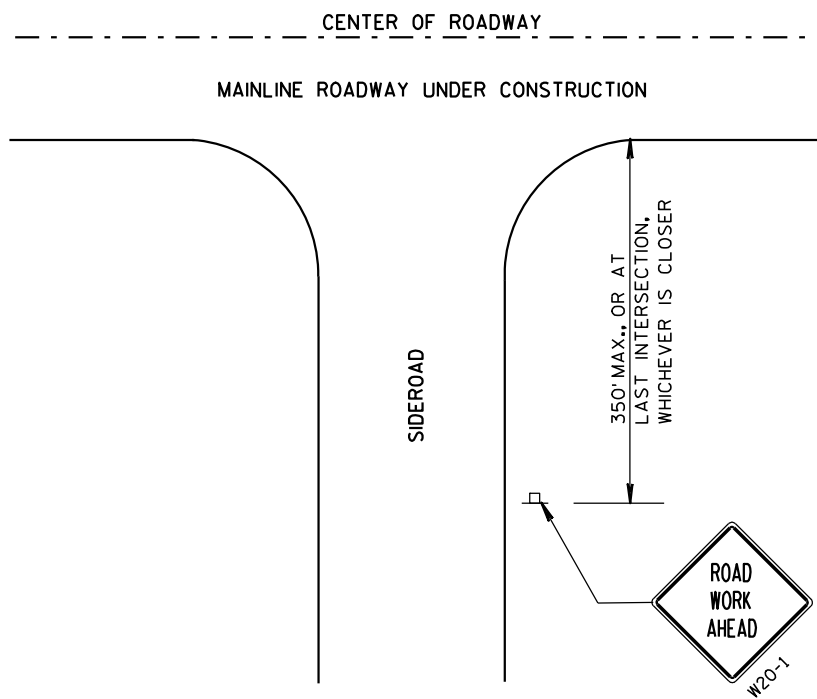
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

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

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

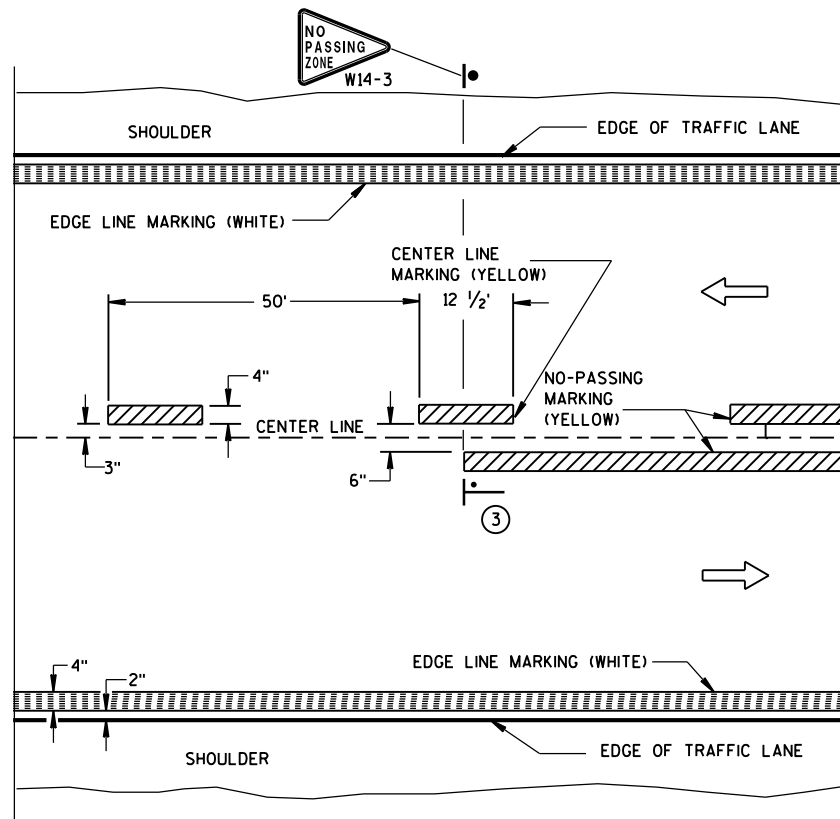
* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FT" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



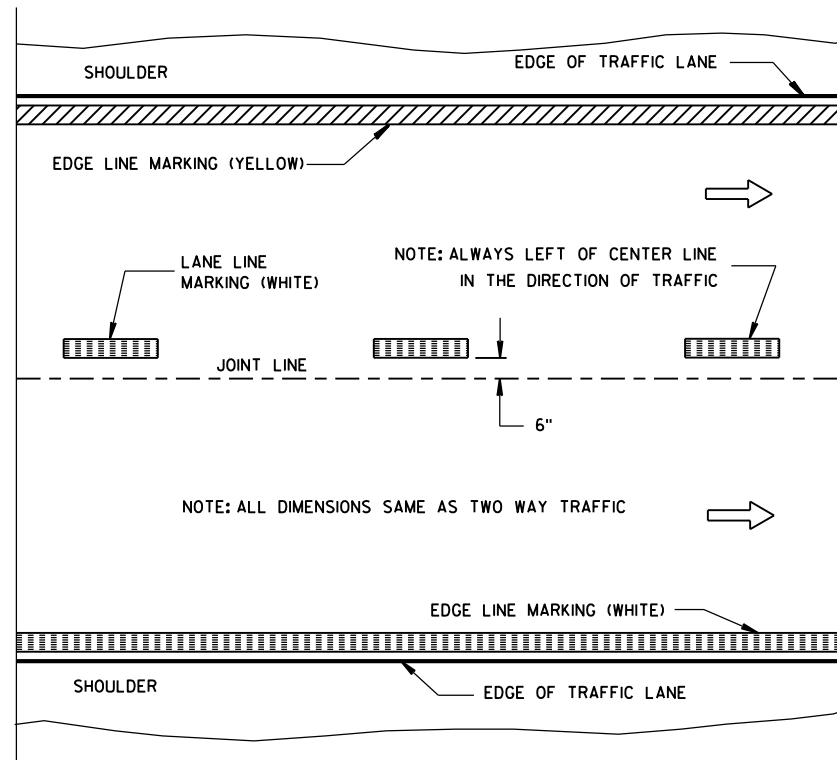
LEGEND

- POST MOUNTED SIGN
- ➡ DIRECTION OF TRAFFIC FLOW

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 5/23/00 DATE	/S/ Chester J. 28 CHIEF SIGNS AND MARKING ENGINEER
FHWA	

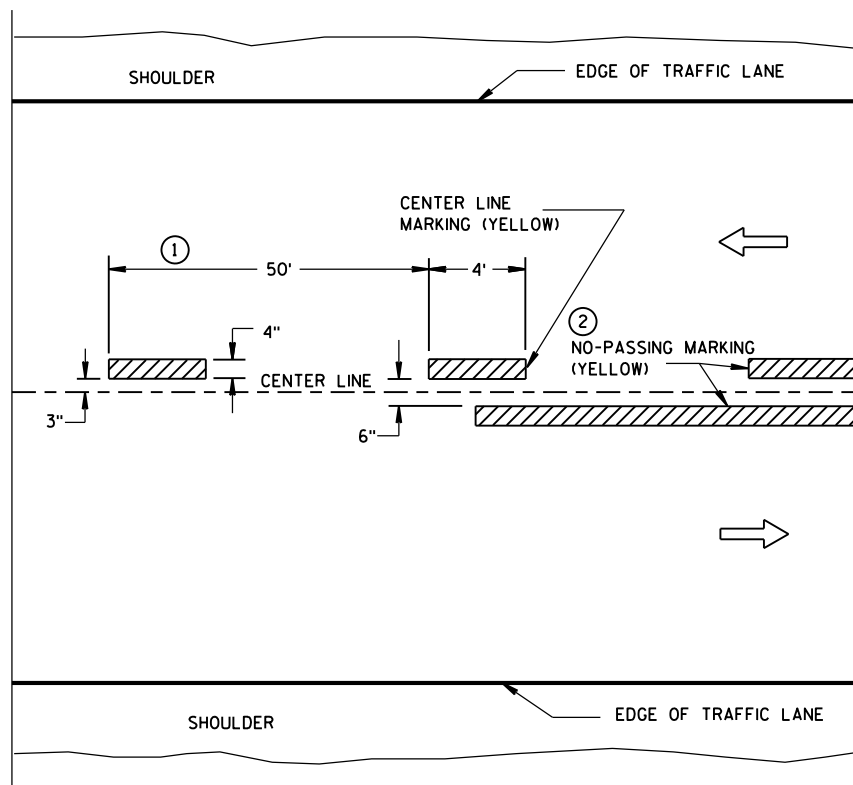


TWO WAY TRAFFIC

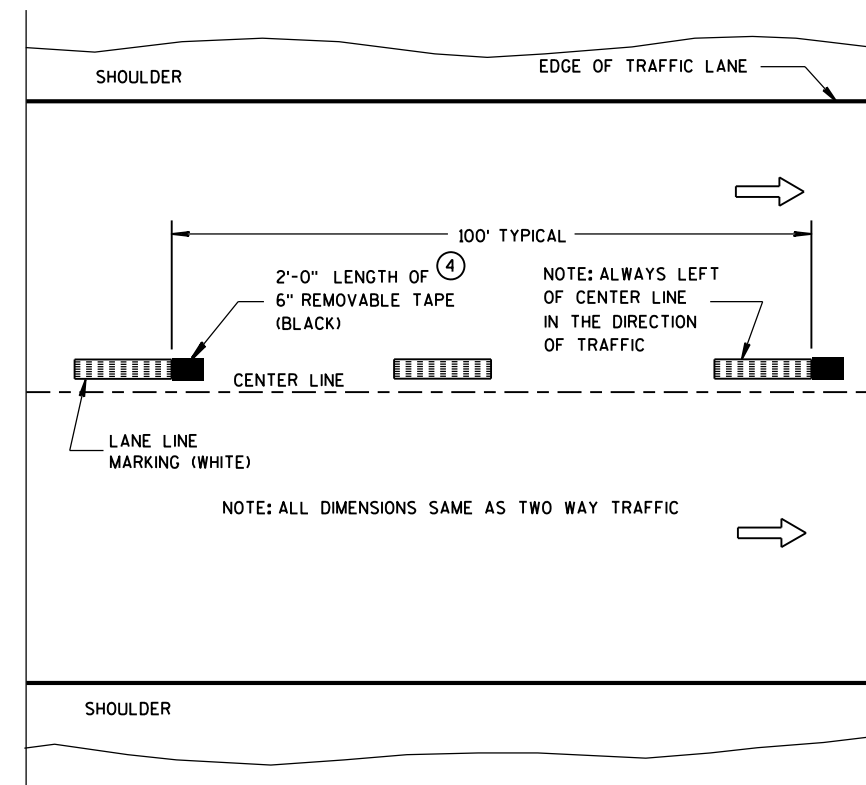


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

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

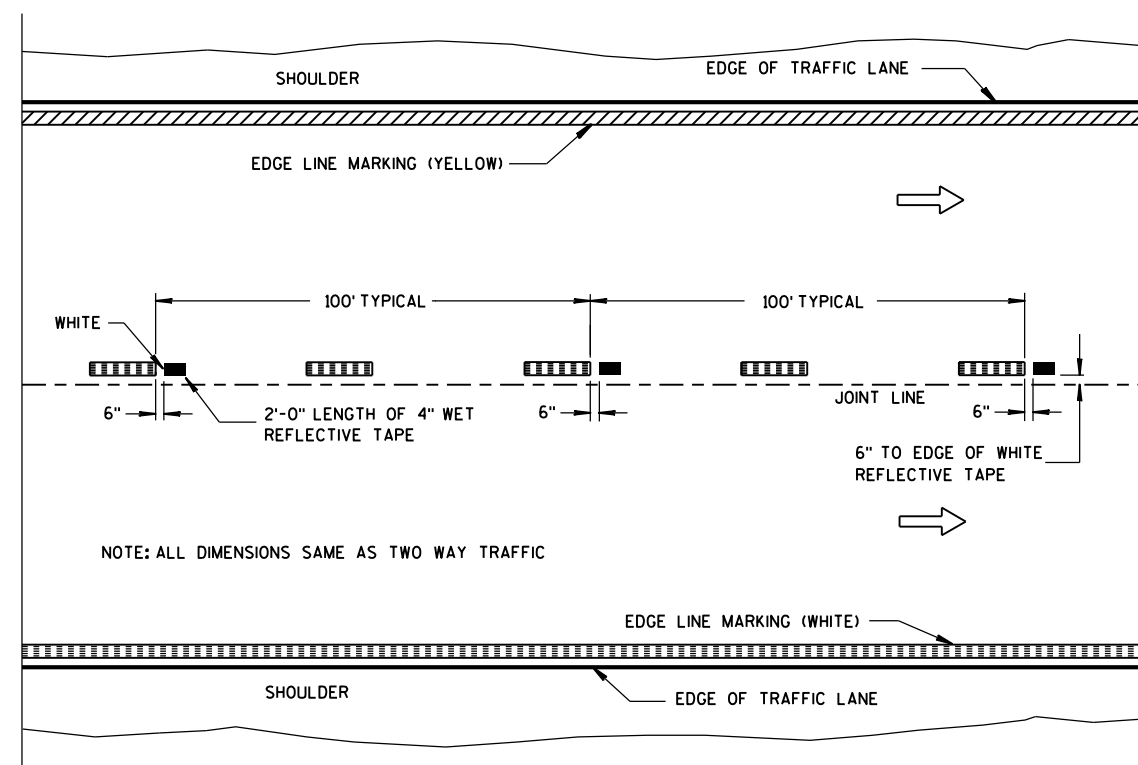
GENERAL NOTES

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

- ① HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
- ② NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
- ③ NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
- ④ CONCRETE ONLY.

NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL



WET REFLECTIVE TAPE SUPPLEMENT TO
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE

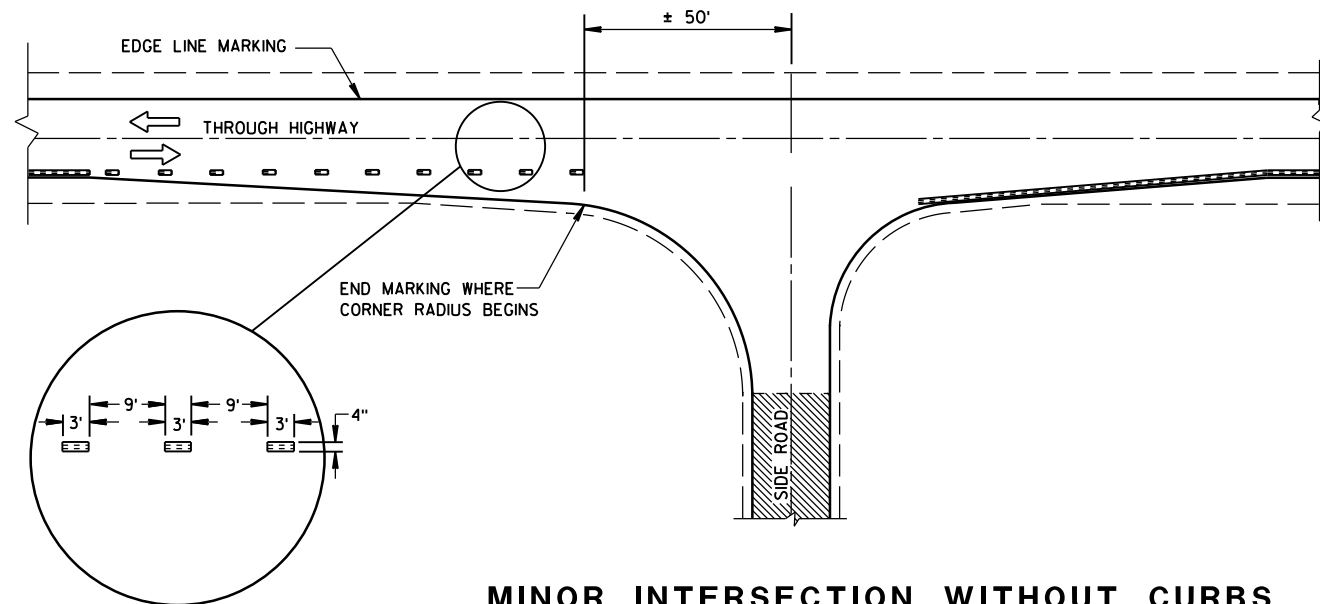
LEGEND

- "T" MARKING
- POST MOUNTED SIGN

PAVEMENT MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

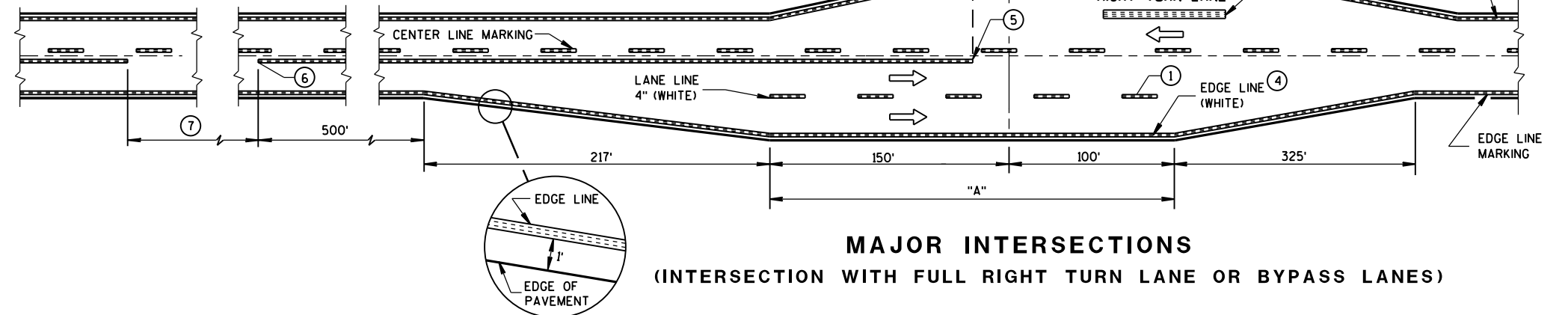
APPROVED
10-1-2012 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINE 29 :SIGN
FHWA



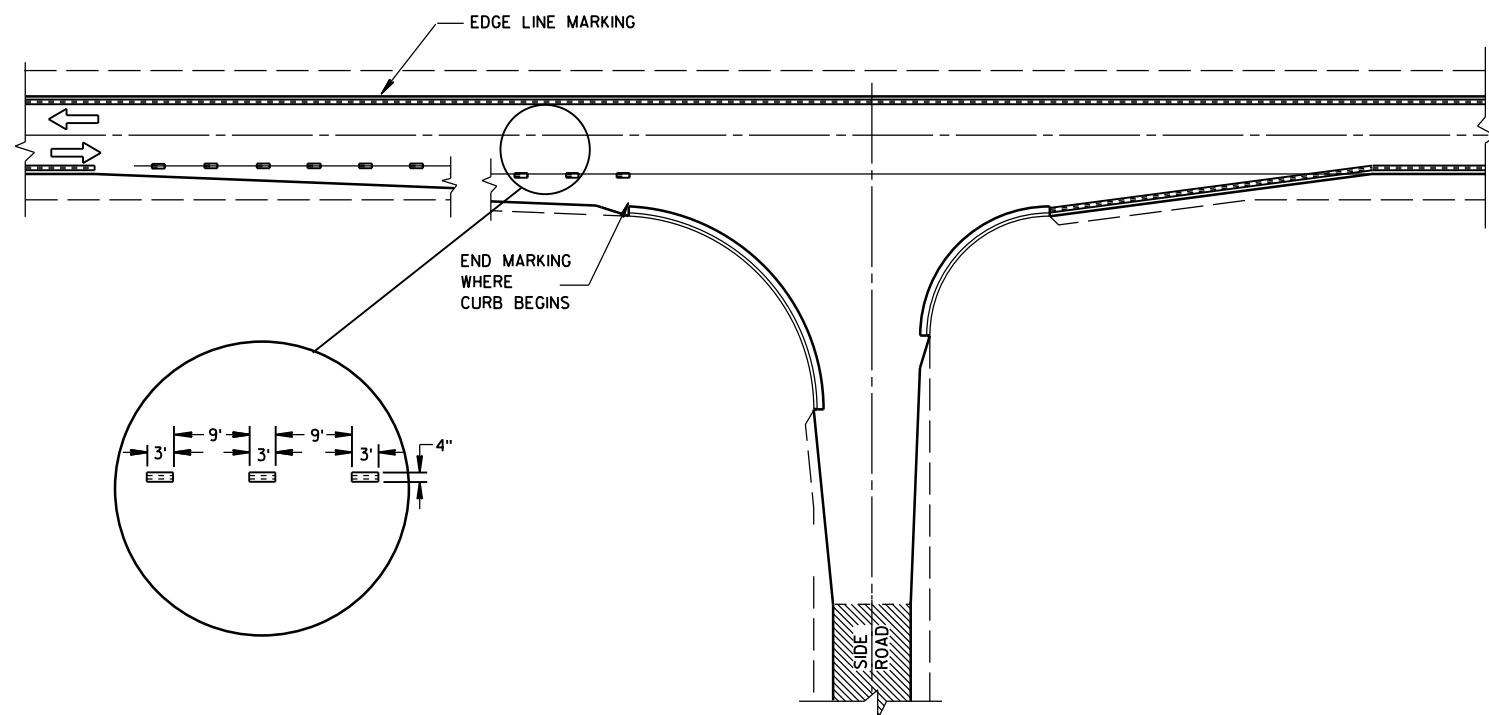
MINOR INTERSECTION WITHOUT CURBS

⑦

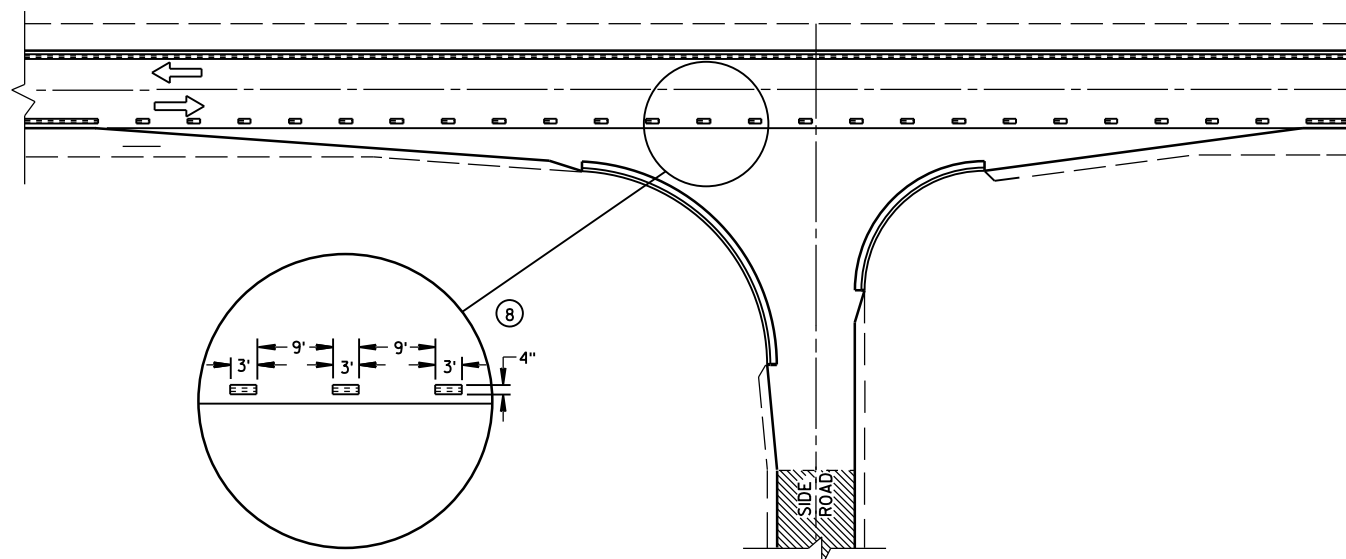
POSTED SPEED (MPH)	MINIMUM DISTANCE BETWEEN ZONES (FEET)
25 - 30	528
35 - 40	528
45 - 50	686
55	792



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



MINOR INTERSECTION WITH CURBS
(TYPICAL MARKING)



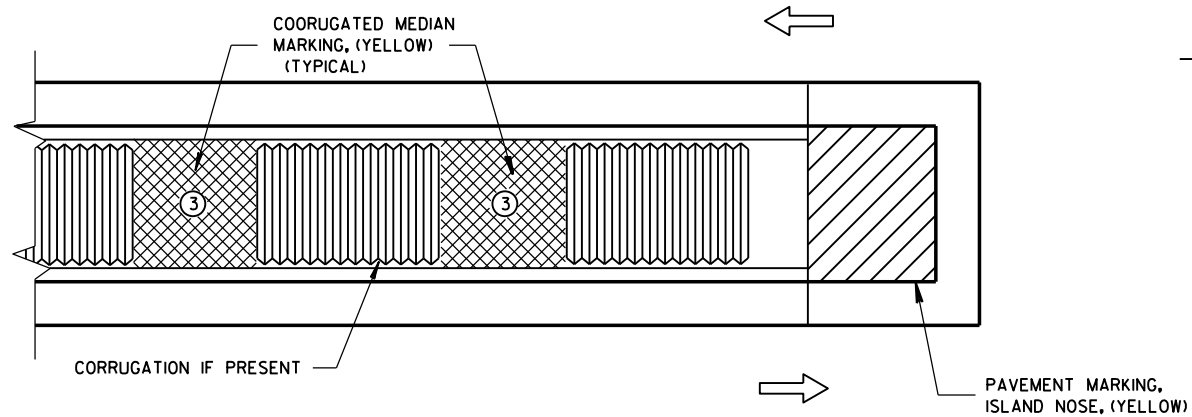
MINOR INTERSECTION WITH CURBS
③ (FOR SPECIAL CONDITIONS AS SPECIFIED)

GENERAL NOTES

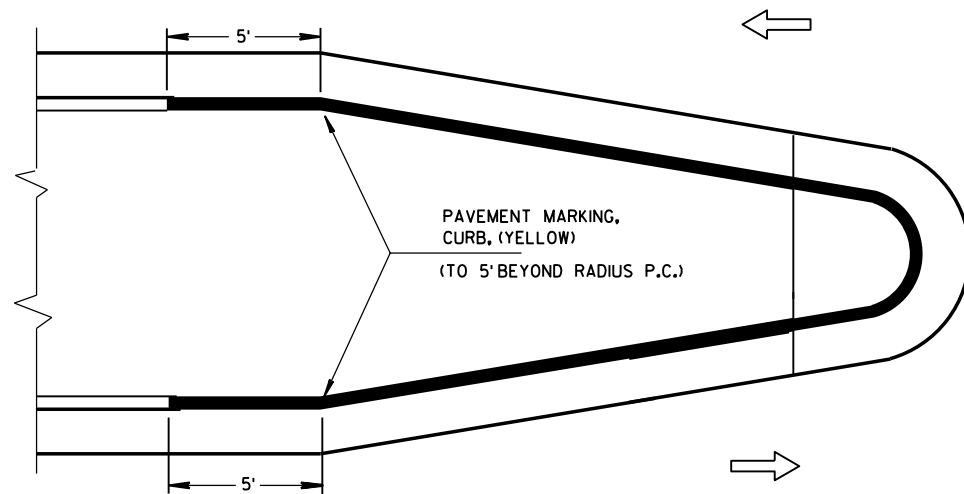
- EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.
- ① WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
 - ② WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
 - ③ ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.
 - ④ THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.
 - ⑤ BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.
 - ⑥ BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
 - ⑦ IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.
 - ⑧ 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
- ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL

PAVEMENT MARKING
(INTERSECTIONS)

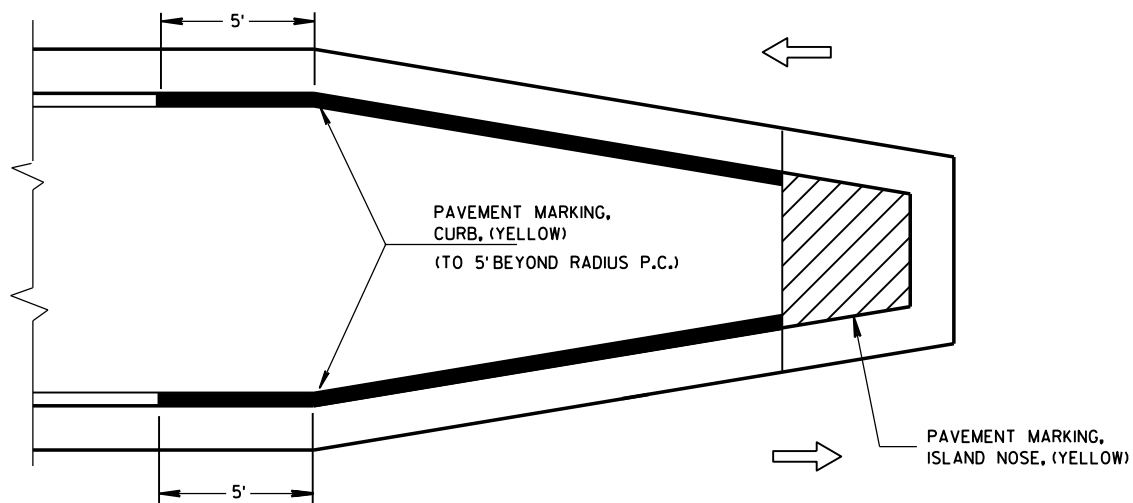
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

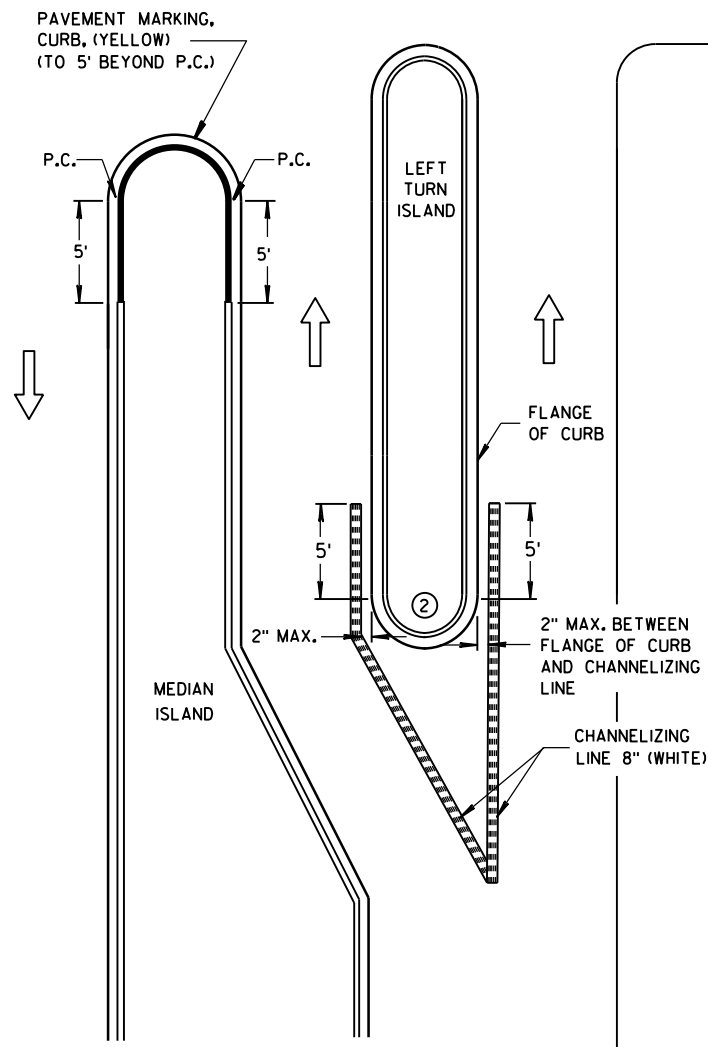


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

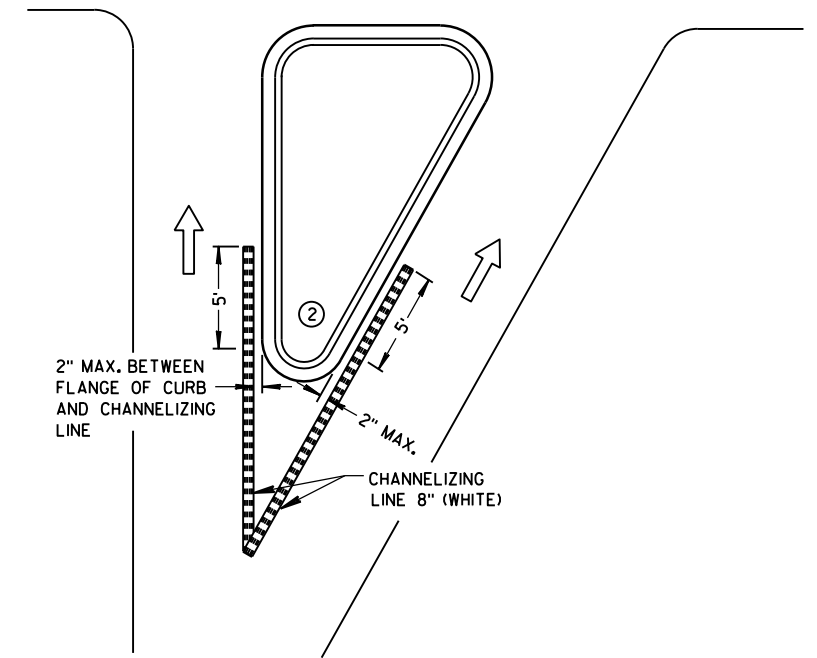
TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS



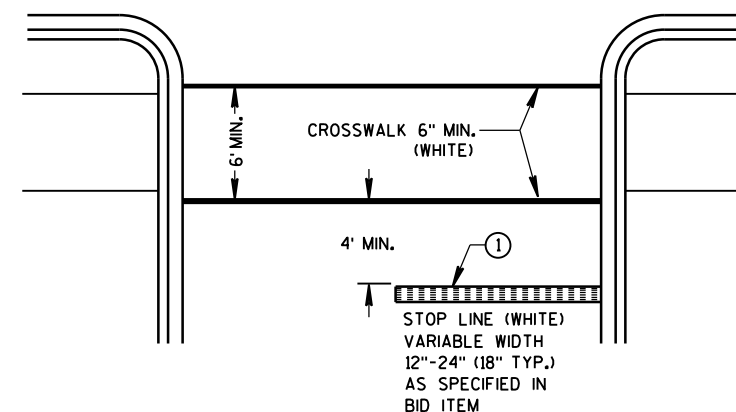
LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

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



RIGHT TURN ISLAND



STOP LINE AND CROSSWALK

LEGEND

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

PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

TWO-LANE ROADWAY

SYMBOLS



WORK AREA



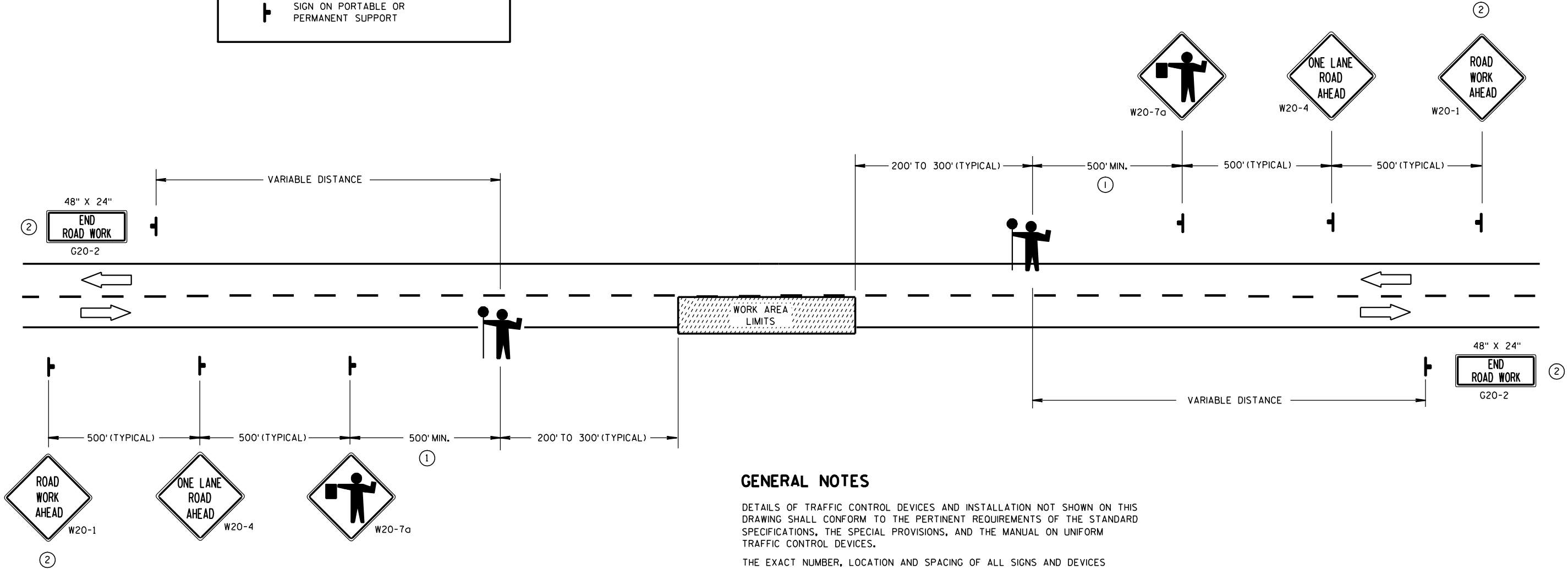
FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF



SIGN ON PORTABLE OR PERMANENT SUPPORT



USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



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.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES (AND THE 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.

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, THE "FLAGGER AHEAD", THE "ROAD WORK AHEAD" AND THE ONE LANE ROAD AHEAD" SIGNS SHALL BE COVERED OR REMOVED AND THE HIGHWAY RESTORED TO NORMAL OPERATION.

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

- ① FOR A MOVING WORK OPERATION, SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT 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.

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED	/S/ Thomas N. Nothnau	
9/5/06	DATE	STATE TRAFFIC ENGINE 32
FHWA	DESIGN	

GENERAL NOTES

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

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

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

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

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

W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.

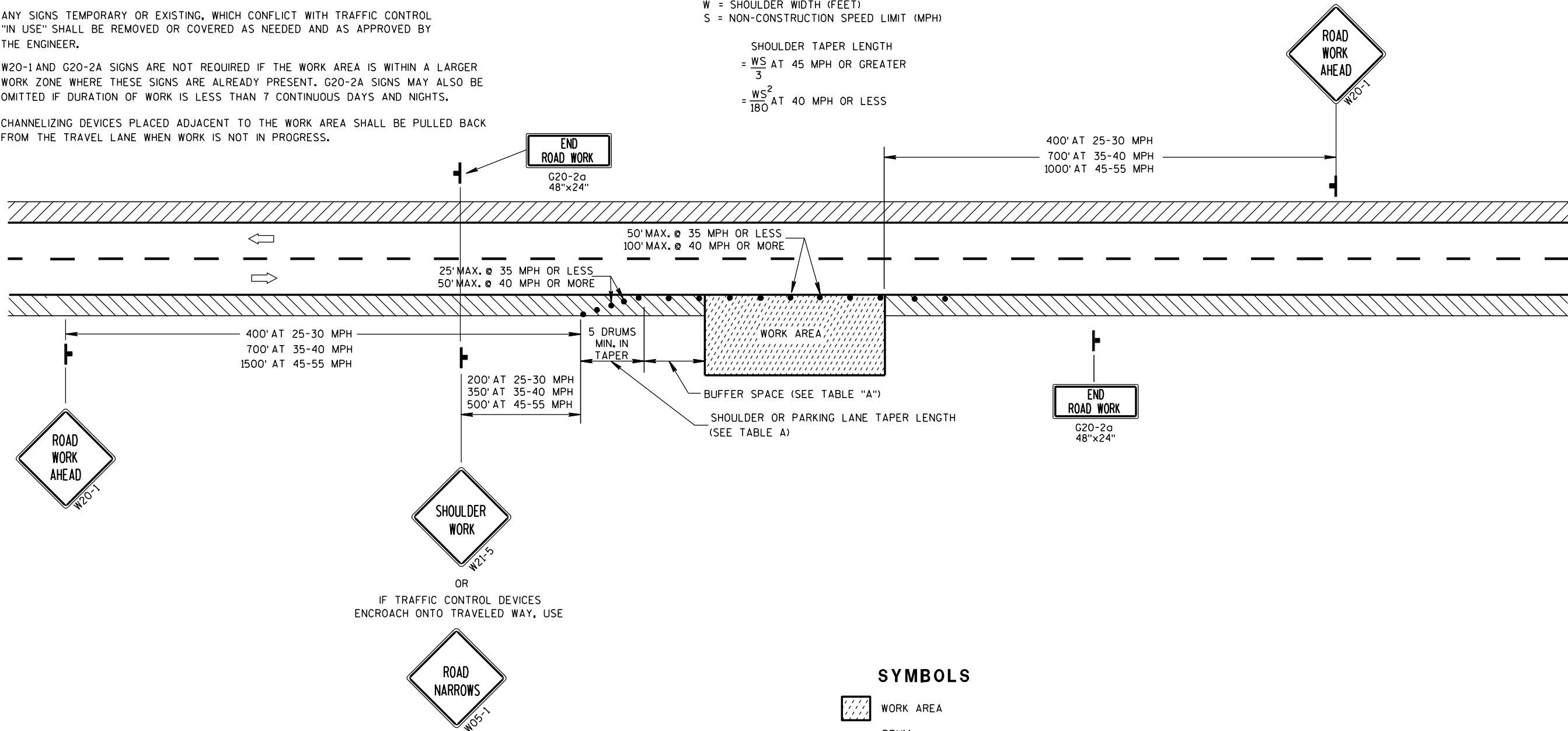
CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

TABLE A

SHOULDER TAPER LENGTH (FEET)					BUFFER SPACE (FEET)
S	W	4	6	8	
30	20	30	40	50	85
35	30	45	55	70	120
40	40	55	75	90	170
45	60	90	120	150	220
50	70	100	135	170	280
55	75	110	150	185	335

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

SHOULDER TAPER LENGTH
= $\frac{WS}{3}$ AT 45 MPH OR GREATER
= $\frac{WS^2}{180}$ AT 40 MPH OR LESS



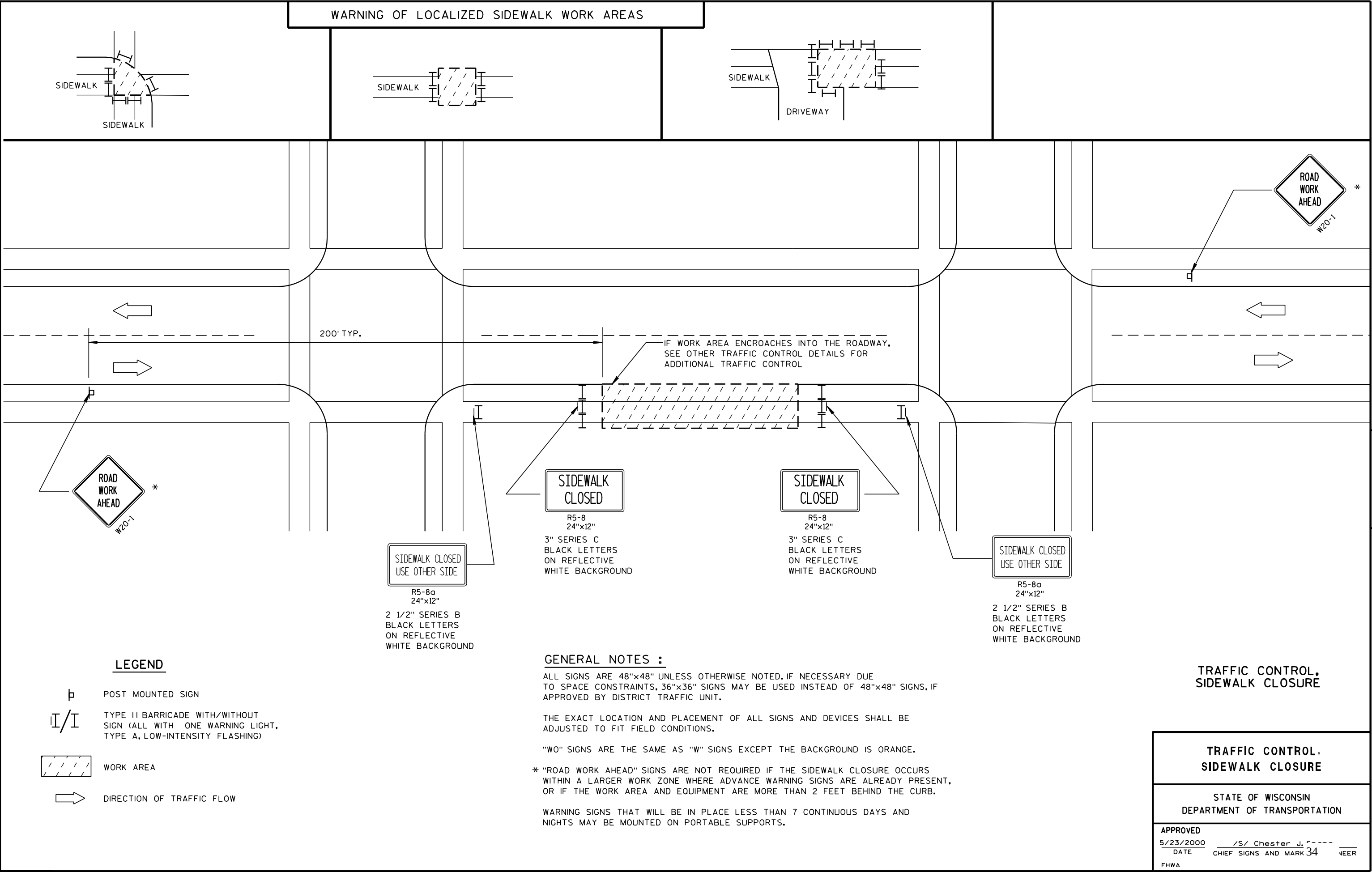
SYMBOLS

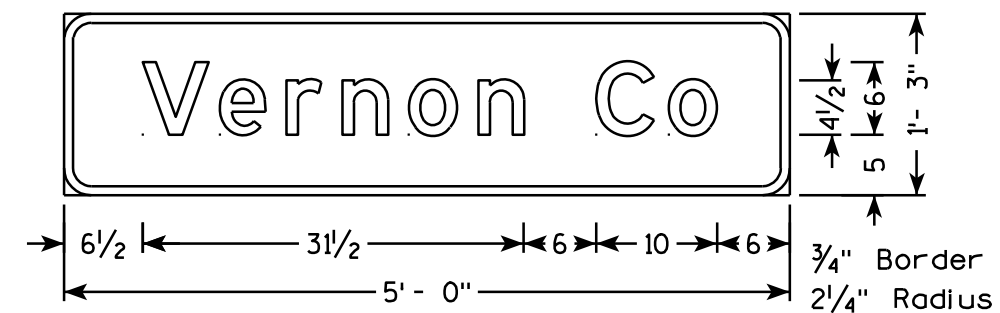
- WORK AREA
- DRUM
- POST MOUNTED SIGN
- DIRECTION OF TRAFFIC FLOW

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

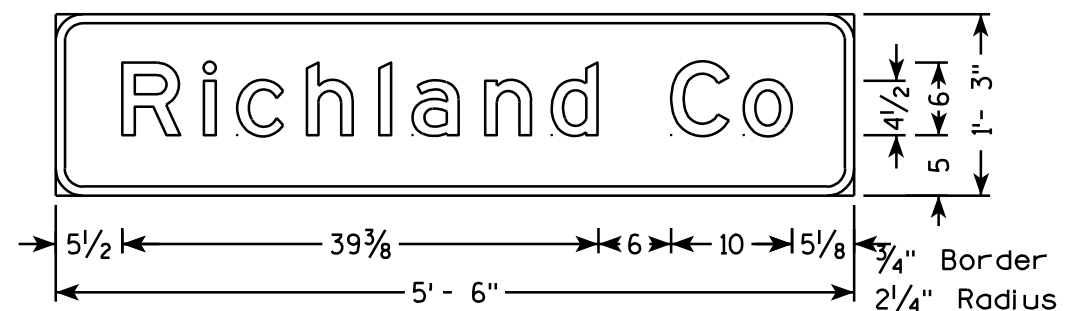
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/00 /S/ Chester J. NNEER
DATE CHIEF SIGNS AND MARK 33
FHWA

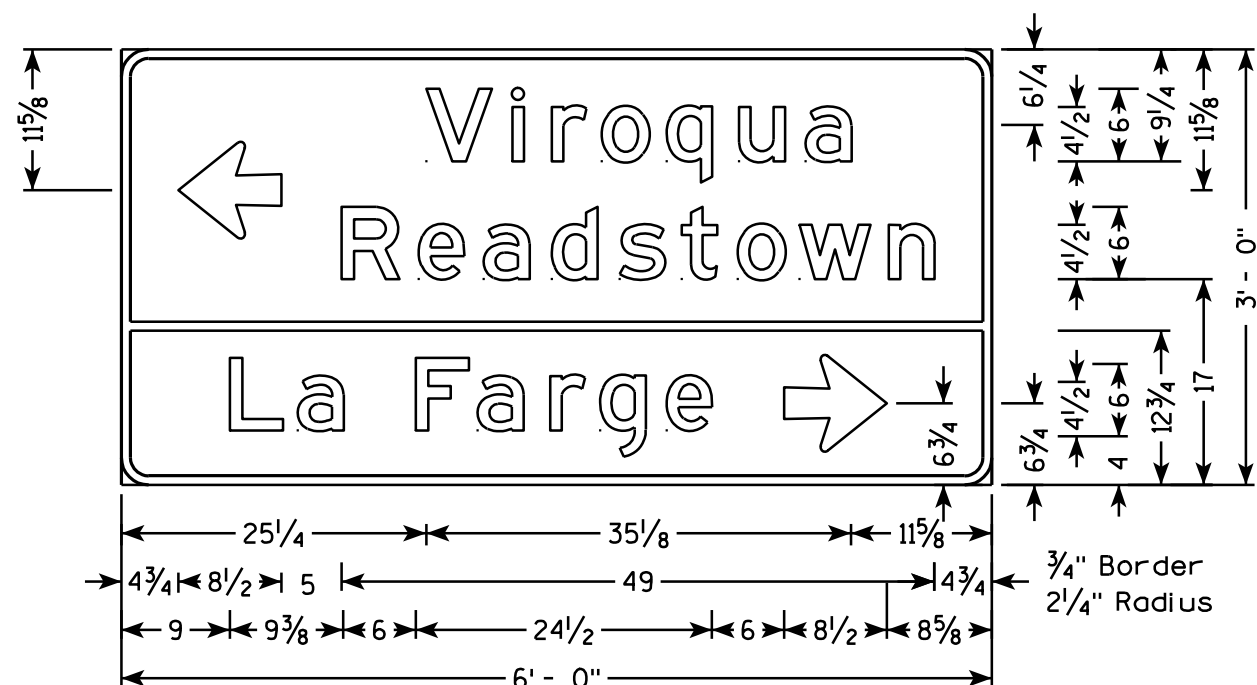




I2-2



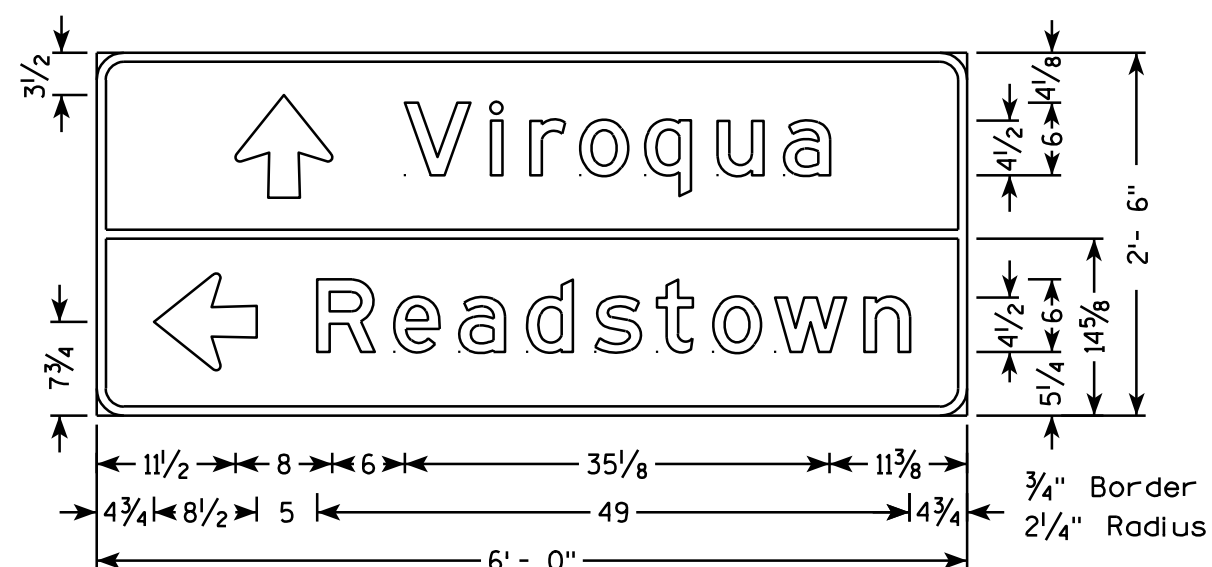
I2-2



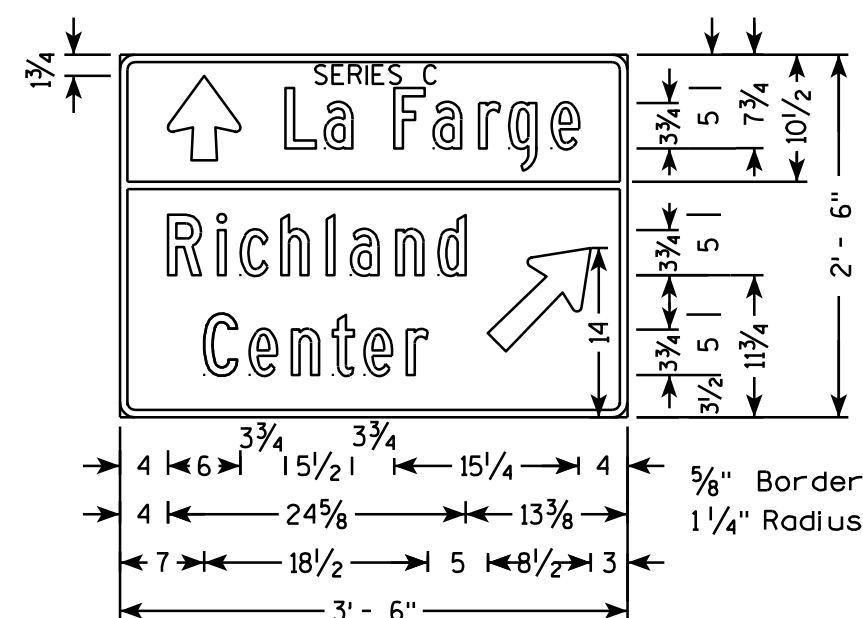
D1-3

NOTES

1. All Signs Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - GREEN
Message - WHITE
3. Message Series - E except as Shown

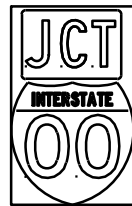


D1-2

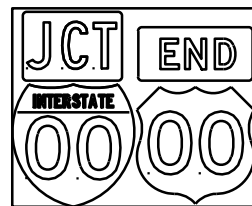


D1-3

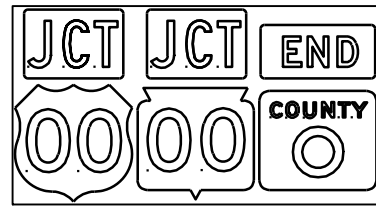
TYPICAL ASSEMBLIES



J1-1



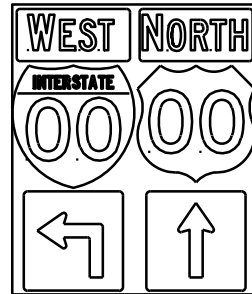
J1-2



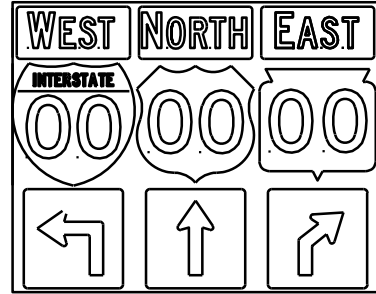
J1-3



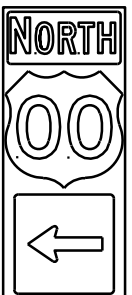
J2-1



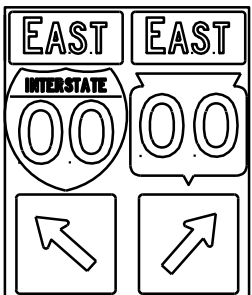
J2-2



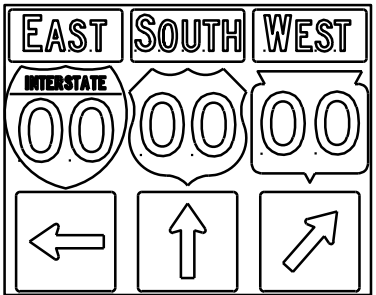
J2-3



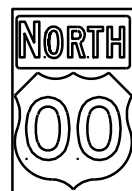
J3-1



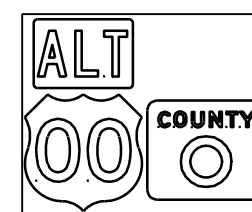
J3-2



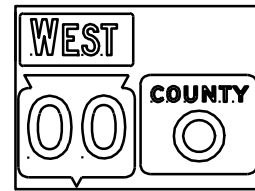
J3-3



J4-1



J4-2

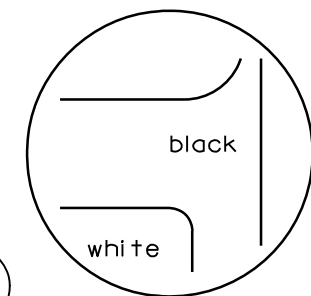
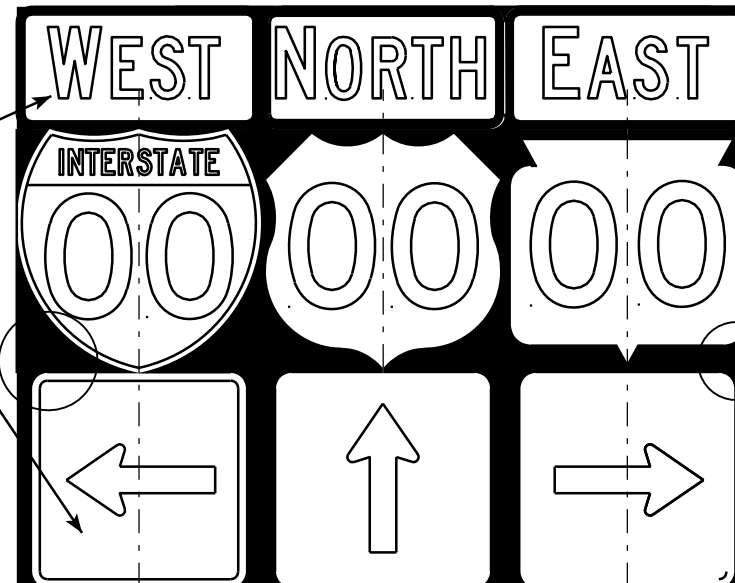
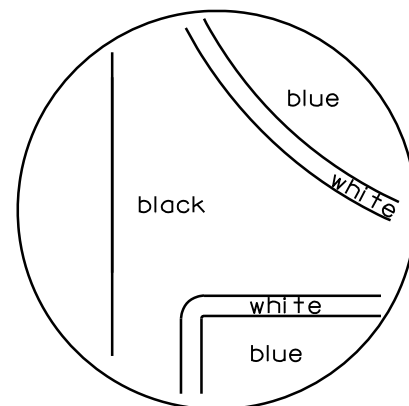


J4-2

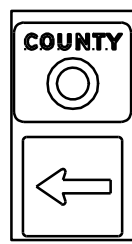


JV

[blue background with interstate]



[black background]



J13-1



J12-1



J32-1



J33-1



J23-1



J22-1

NOTES

- Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - Black Non-reflective
Message - see Note 5
- Message Series - See Note 5
- Corners shall be square since base material is plywood.
- The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
- Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
- Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
- Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
- Route assemblies that have 36 inch shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.

ROUTE MARKERS & COMPONENTS IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch
For State Traffic Engineer

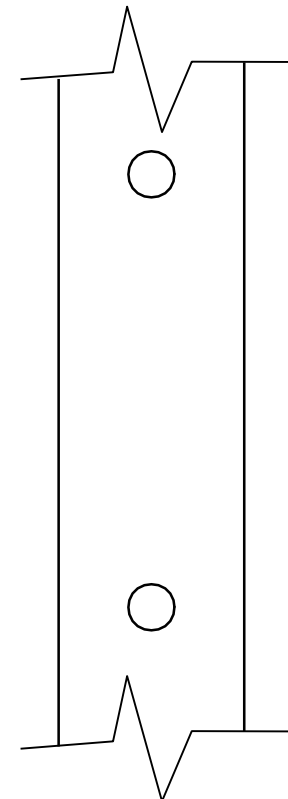
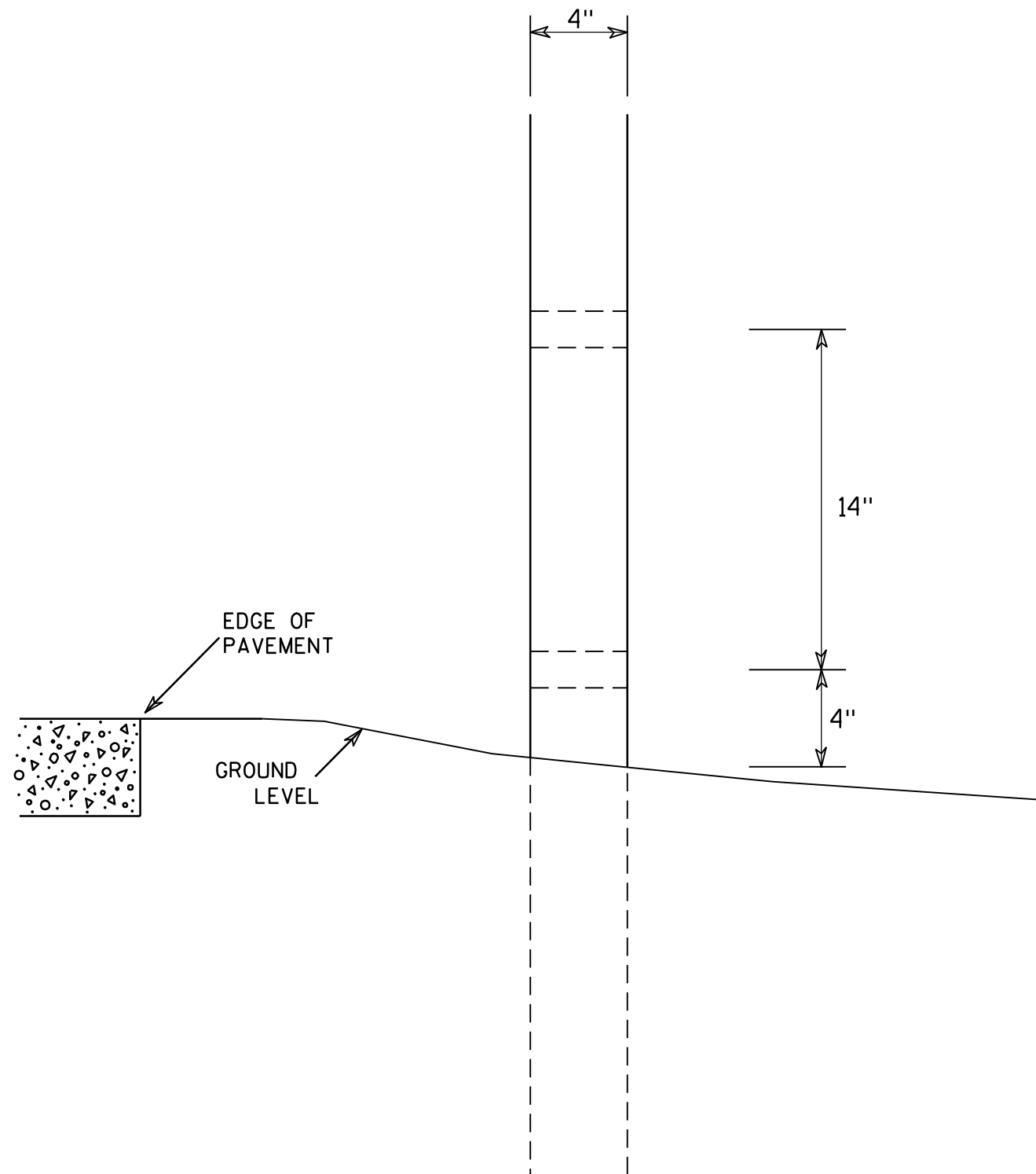
DATE 10/21/09

PLATE NO. A2-1S.6

PROJECT NO:

SHEET NO: 36

E



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1 1/2" diameter holes drilled perpendicular to the roadway centerline.

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:

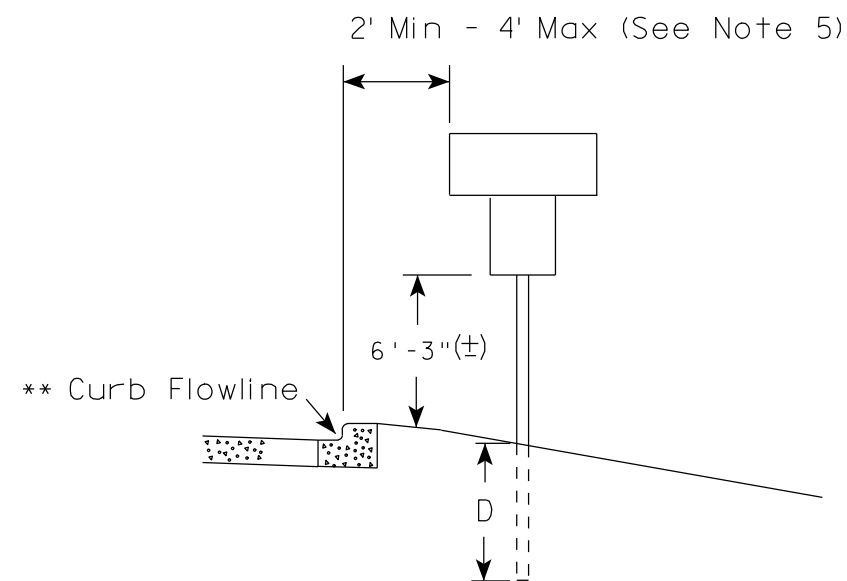
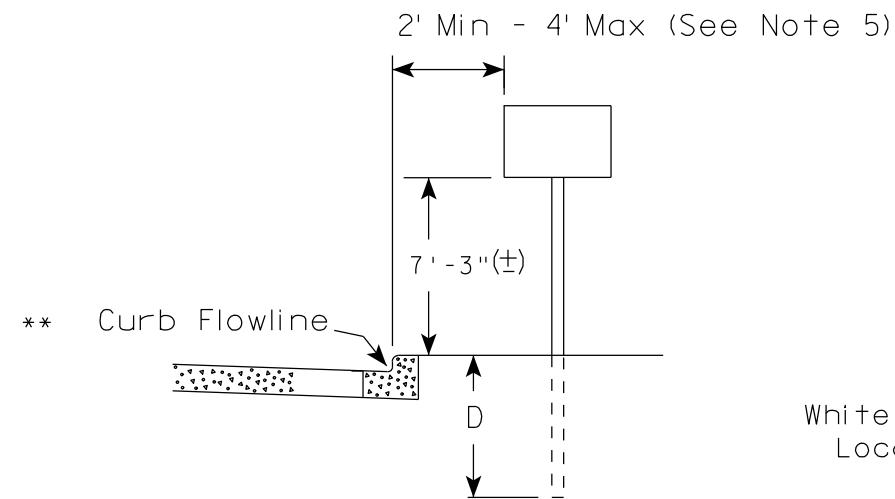
HWY:

COUNTY:

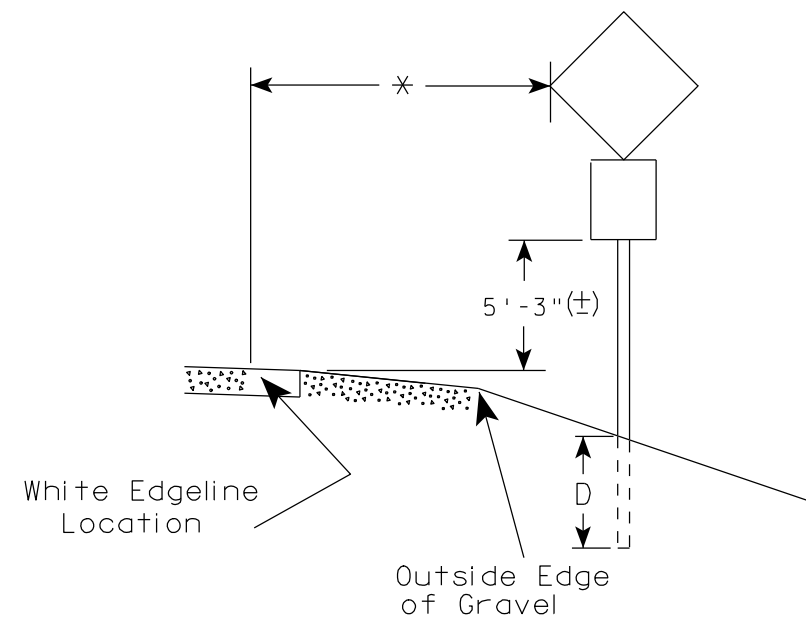
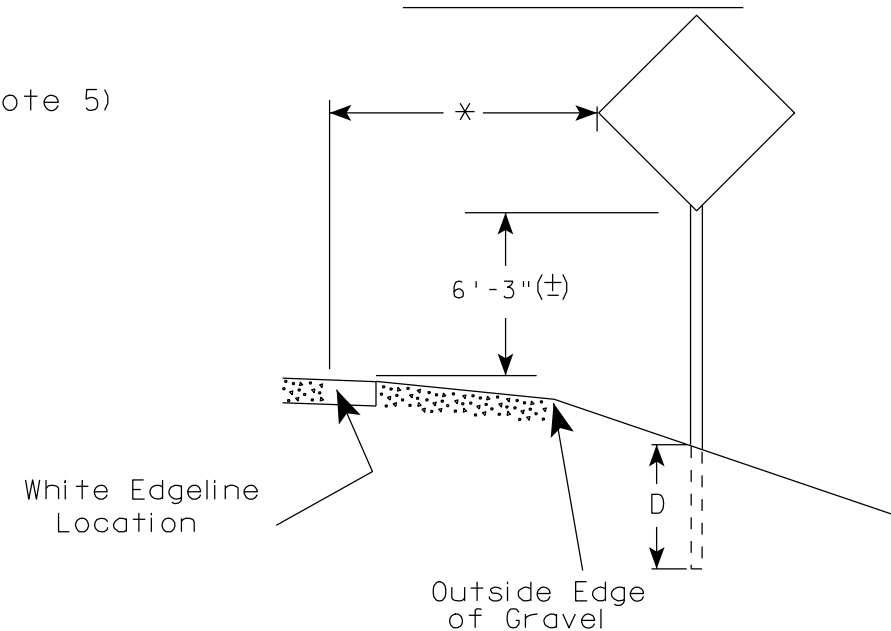
SHEET NO: 37

E

URBAN AREA



RURAL AREA (See Note 2)



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 larger than 20 sq. ft. shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
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 J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
9. 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) & End of Road Markers (W5-56 & W5-56A) shall be mounted at a height of 4'-3" (±).

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

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

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 9/21/2011 PLATE NO. A4-3.16

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 38

E

GENERAL NOTES

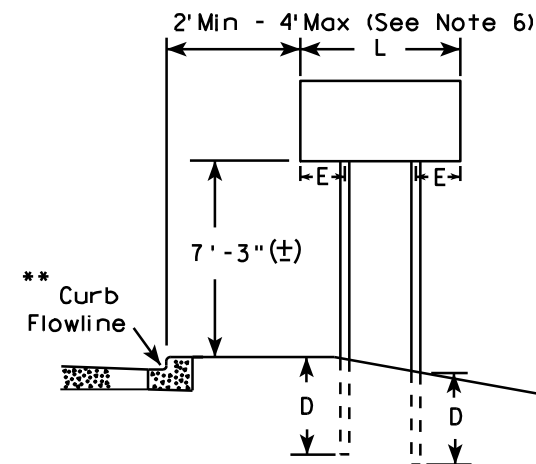
- For multiple post installations, individual post spacing shall be greater than 3'-6".
- See tables below for required number of posts.
- For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
- The (±) tolerance for mounting height is 3 inches.
- Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
- Offset distance shall be consistent with existing signs or consistent throughout length of project.
- Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
- 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) & End of Road Markers (W5-56 & W5-56A) 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.

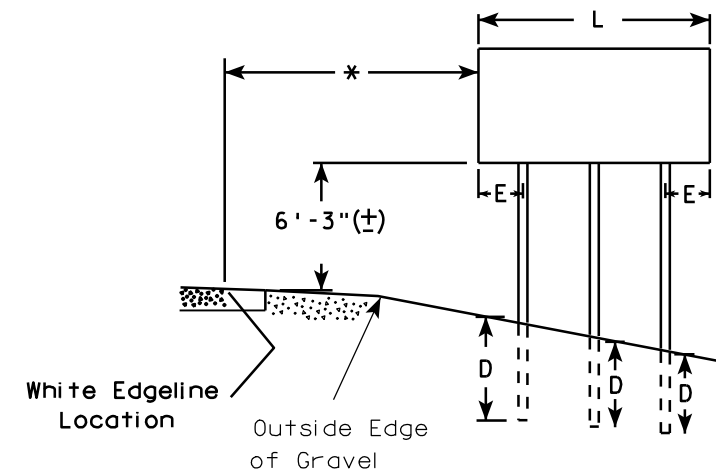
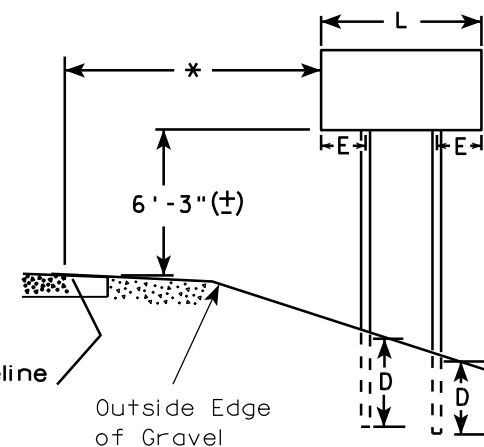
** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs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

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

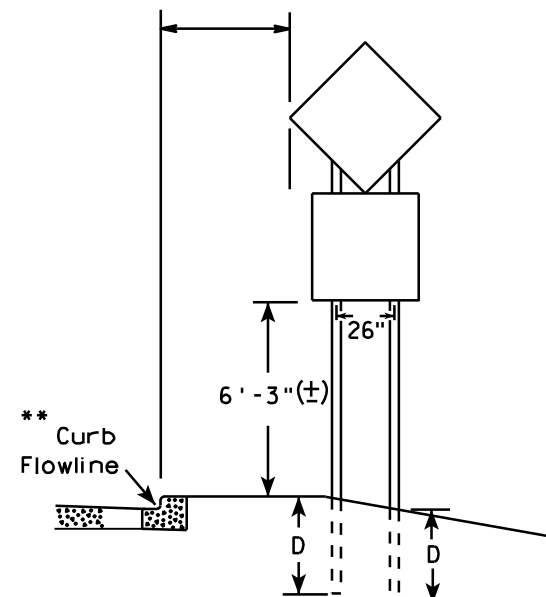
URBAN AREA



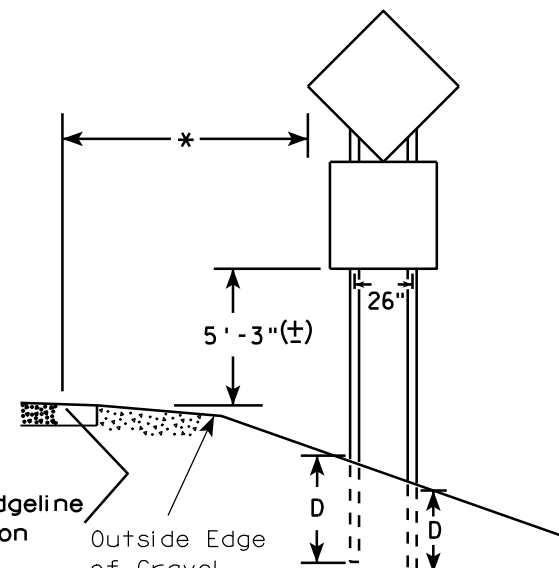
RURAL AREA (See Note 3)



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



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 120"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 120" less than 168"	12"

SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)	
L	E
168" and greater	12"

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION
OF TYPE II SIGNS
ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 9/21/2011 PLATE NO. A4-4.11

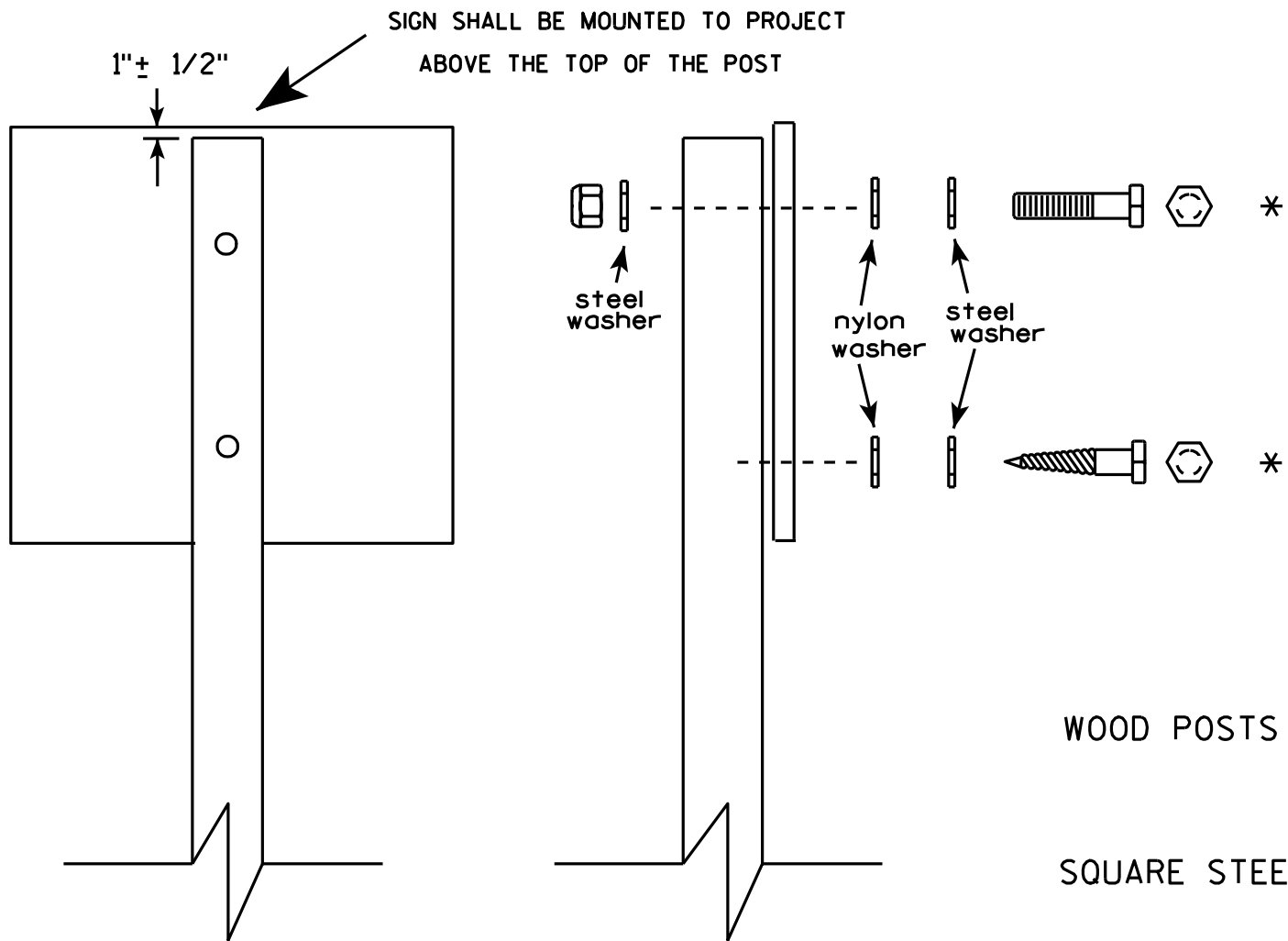
PROJECT NO:

HWY:

COUNTY:

SHEET NO: 39

E

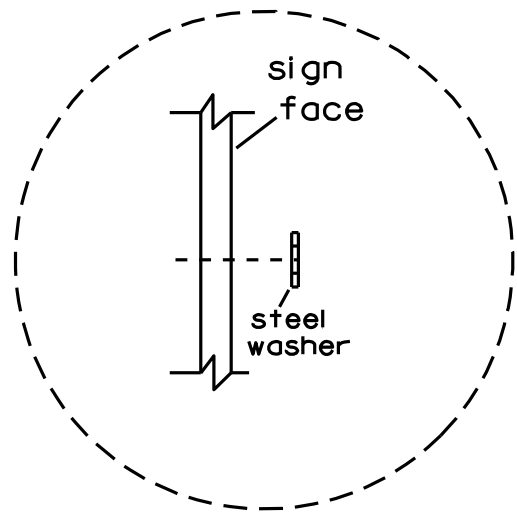


Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

- 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.

- WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3"
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts
- SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts
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 for all Type H signs.

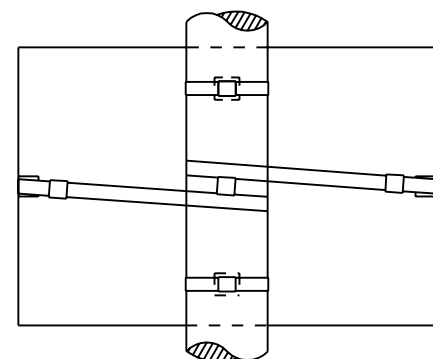
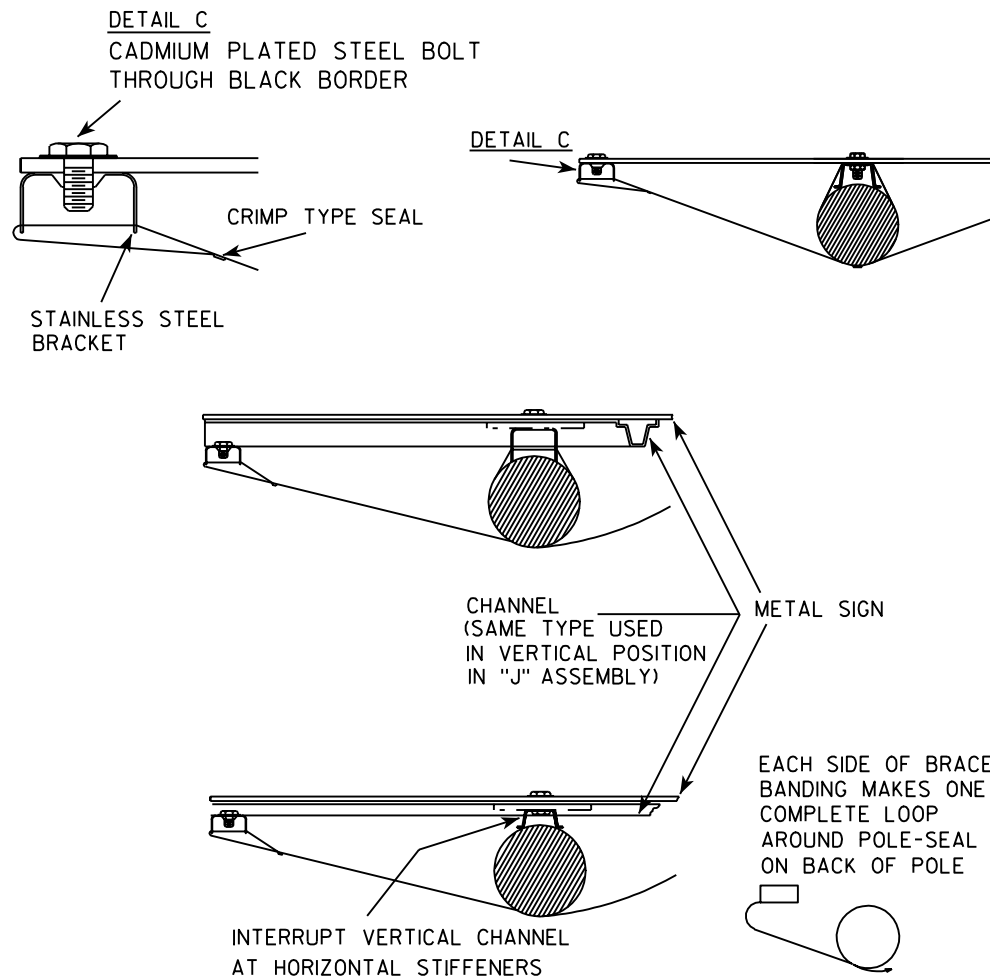


Washer Placement when Sign Has Other Than Type H or Type F Face

* 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	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 3/23/10	PLATE NO. A4-8.7

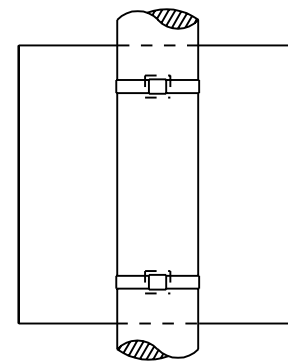
BRACE BANDING



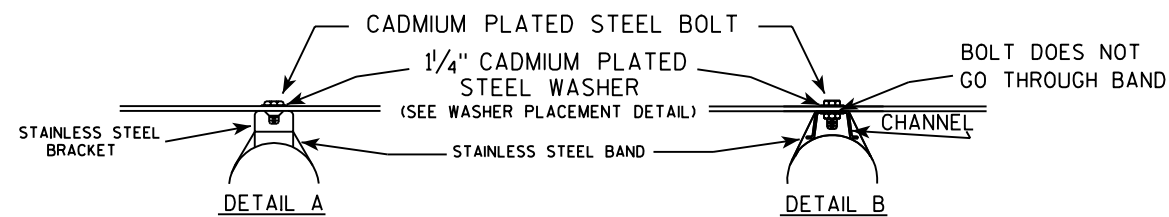
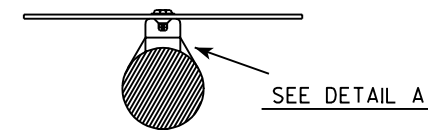
BRACE BANDING

BRACE BANDING SHALL BE TIGHTENED FIRMLY BUT NOT SO TIGHT AS TO APPRECIABLY CURVE FACE OF SIGN.

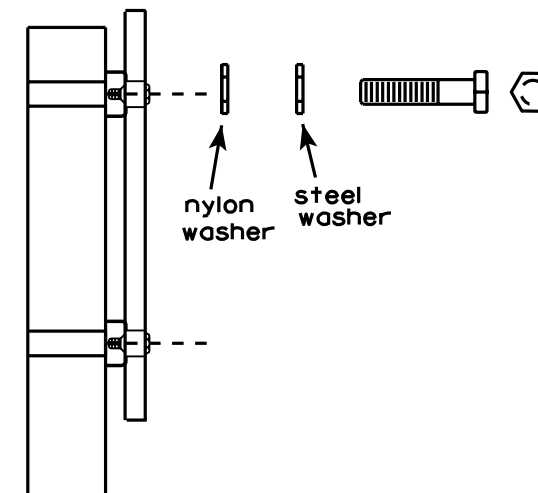
SINGLE SIGN



BRACKET BANDING



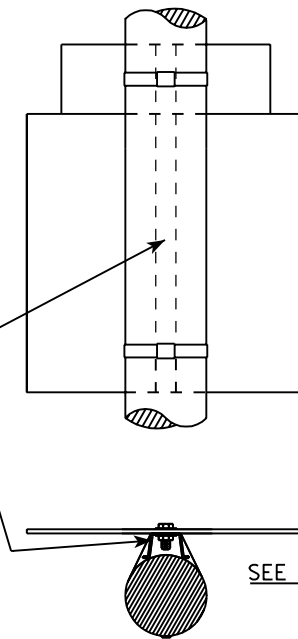
WASHER PLACEMENT



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
FOR ALL TYPE H SIGNS

"J" ASSEMBLY



GENERAL NOTES

1. Signs 4' or greater in width shall have one brace band installed at the center of the sign.
2. Signs 3' or greater in height shall have three bracket bands installed. Signs less than 3' in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be 3/4" in width and 0.025" thickness.

STANDARD SIGN SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 11/08/05 PLATE NO. A5-9.2

PROJECT NO:

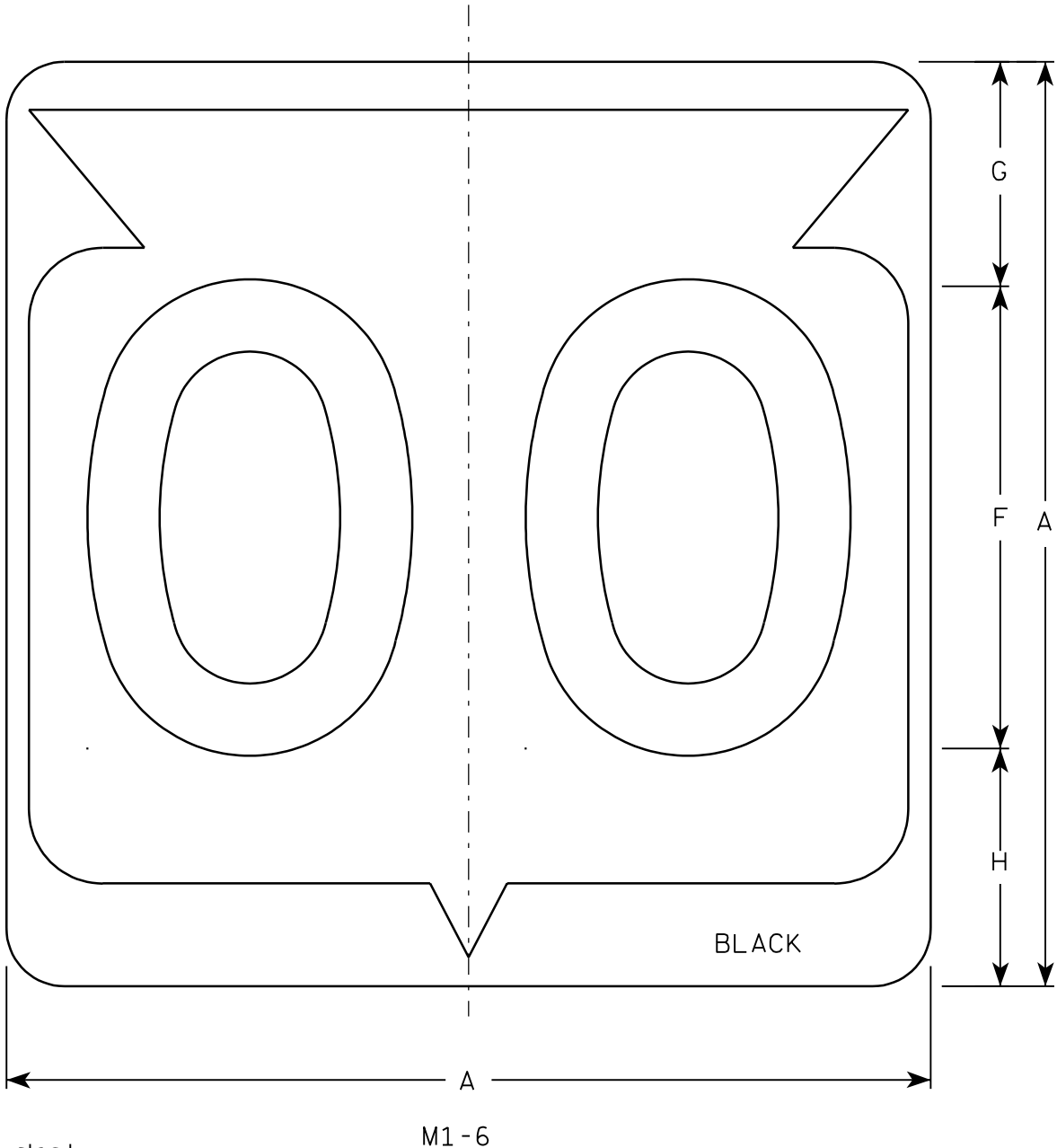
HWY:

COUNTY:

SHEET NO: 41

E

7



Metric equivalent
for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

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.	Area m ²
1																												
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0	.36
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81

PROJECT NO:

HWY:

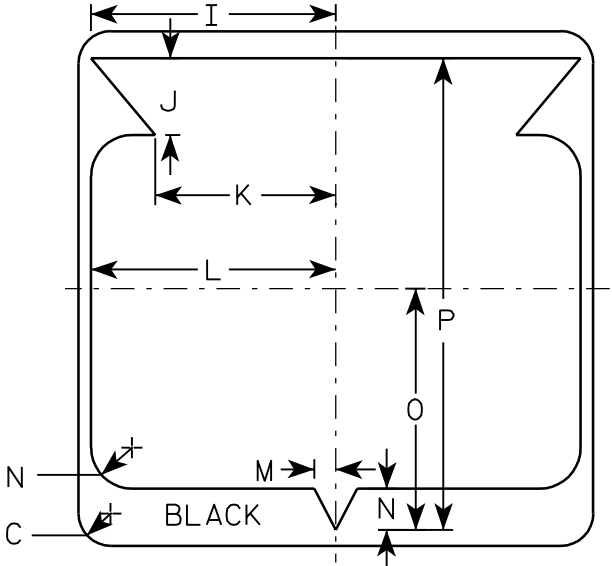
COUNTY:

SHEET NO: 42

E

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White & Black - See Note 6
Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate Series numerals and adjust spacing as per plate A10-1.
6. Permanent Signs
Background - Type H Reflective
Detour or temporary Signs
Background - Reflective



STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

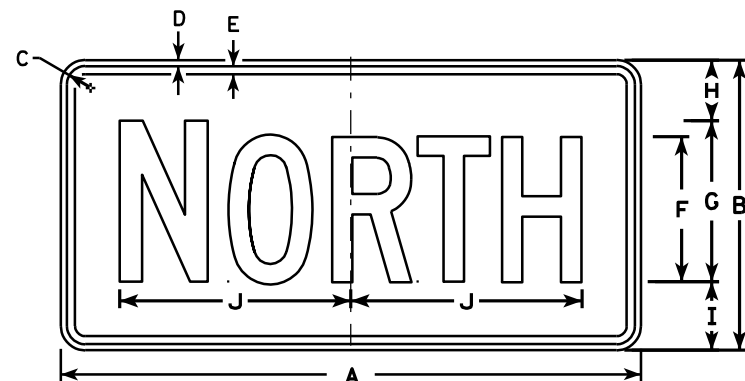
WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 3/20/02

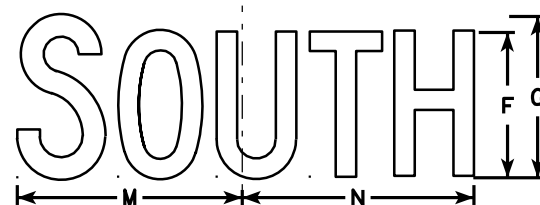
PLATE NO. M1-6.9



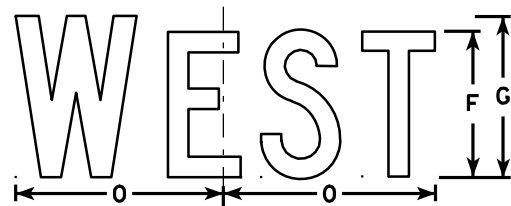
M3-1
MK3-1
M03-1



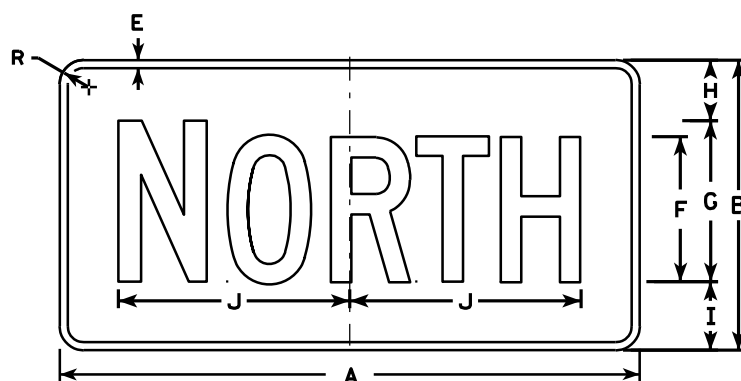
M3-2
MK3-2
M03-2



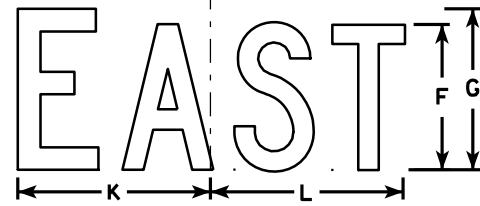
M3-3
MK3-3
M03-3



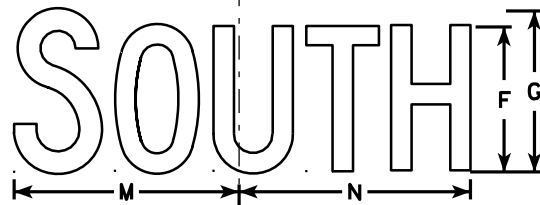
M3-4
MK3-4
M03-4



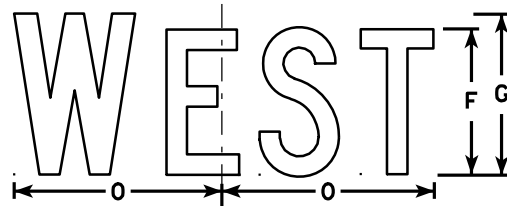
MB3-1
MG3-1
MM3-1
MN3-1



MB3-2
MG3-2
MM3-2
MN3-2



MB3-3
MG3-3
MM3-3
MN3-3



MB3-4
MG3-4
MM3-4
MN3-4

NOTES

1. All Signs Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - See note 5
Message - See note 5
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.
5. M3-1 thru M3-4 Background - White - Type H Reflective (Detour or temporary signs - Reflective)
Message - Black
MB3-1 thru MB3-4 Background - Blue
Message - White - Type H Reflective (Detour or temporary signs - Reflective)
MG3-1 thru MG3-4 Background - Green
Message - White - Type H Reflective
MK3-1 thru MK3-4 Background - Green
Message - White - Type H Reflective
MM3-1 thru MM3-4 Background - White - Type H Reflective
Message - Green
MN3-1 thru MN3-4 Background - Brown
Message - White - Type H Reflective
M03-1 thru M03-4 Background - Orange - Reflective
Message - Black
6. Note the first letter of each direction is larger than the remainder of the message.

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																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

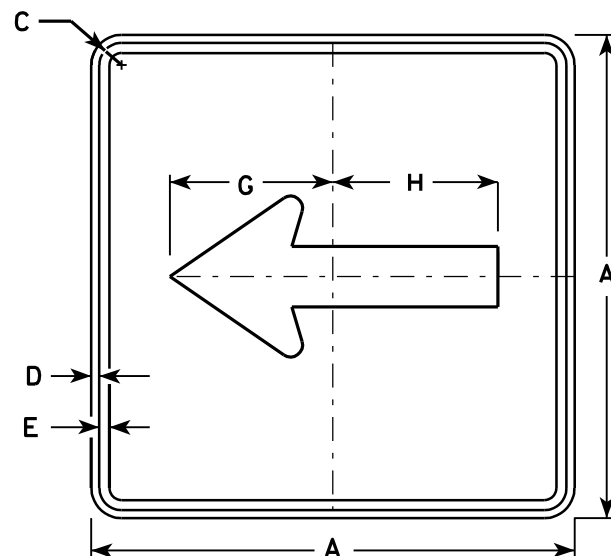
PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: 43 E

STANDARD SIGNS M3-1 thru M3-4 SERIES

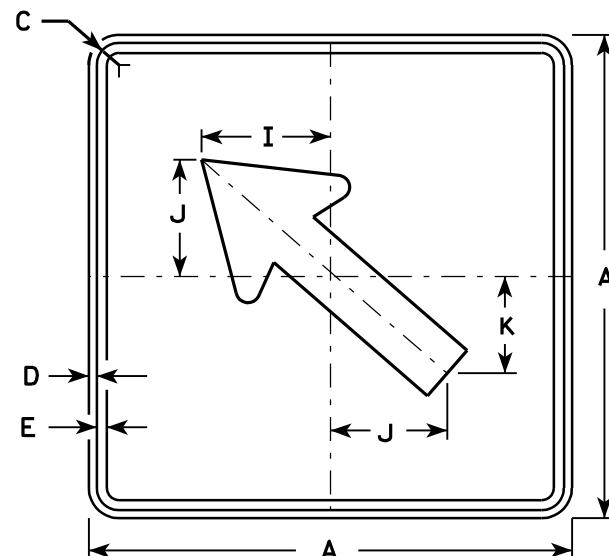
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

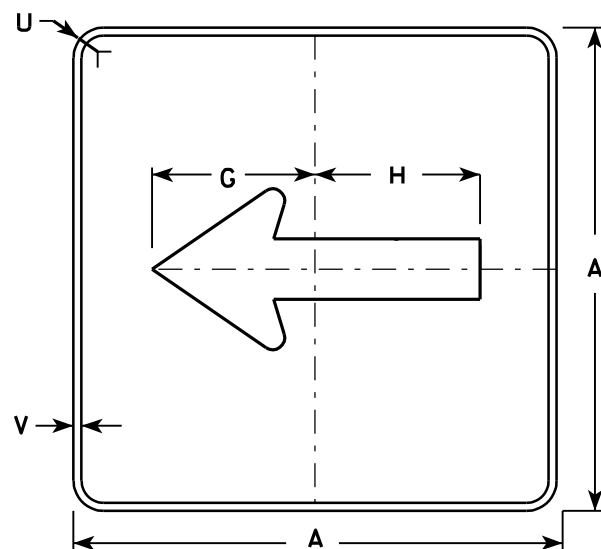
DATE 11/10/10 PLATE NO. M3-1.12



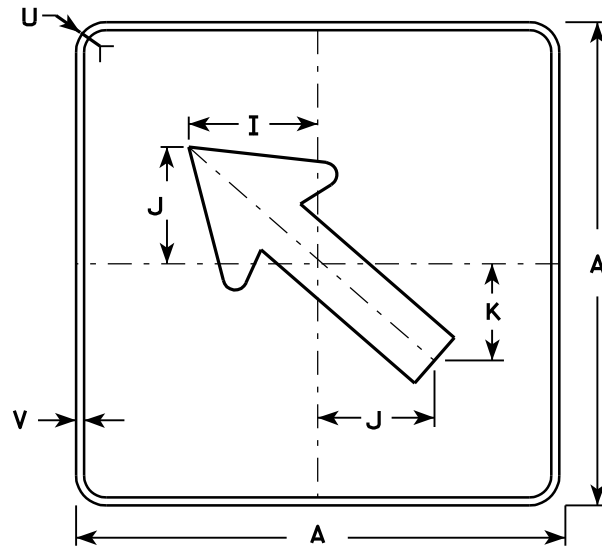
M6-1
MK6-1
MM6-1
MO6-1
MR6-1



M6-2
MK6-2
MM6-2
MO6-2
MR6-2



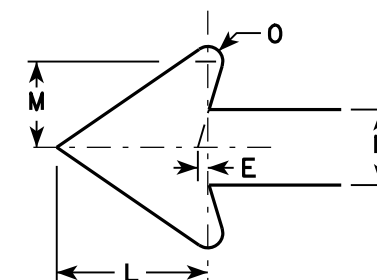
MB6-1
MG6-1
MN6-1



MB6-2
MG6-2
MN6-2

NOTES

- Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - See note 4
Message - See note 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.
- M6-1 and M6-2 Background - White - Type H Reflective
(Detour or temporary Signs - Reflective)
Message - Black
MB6-1 and MB6-2 Background - Blue
Message - White - Type H Reflective
(Detour or temporary Signs - Reflective)
MG6-1 and MG6-2 Background - Green
Message - White - Type H Reflective
MK6-1 and MK6-2 Background - Green
Message - White - Type H Reflective
MM6-1 and MM6-2 Background - White - Type H Reflective
Message - Green
MN6-1 and MN6-2 Background - Brown
Message - White - Type H Reflective
MO6-1 and MO6-2 Background - Orange - Reflective
Message - Black
MR6-1 and MR6-2 Background - Brown
Message - Yellow - Type H Reflective



Metric equivalent
for this sign is:

SIZE	
1	
2	525 mm X 525 mm
3	750 mm X 750 mm
4	750 mm X 750 mm
5	750 mm X 750 mm

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.	Area m2
1																												
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06	0.28
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56

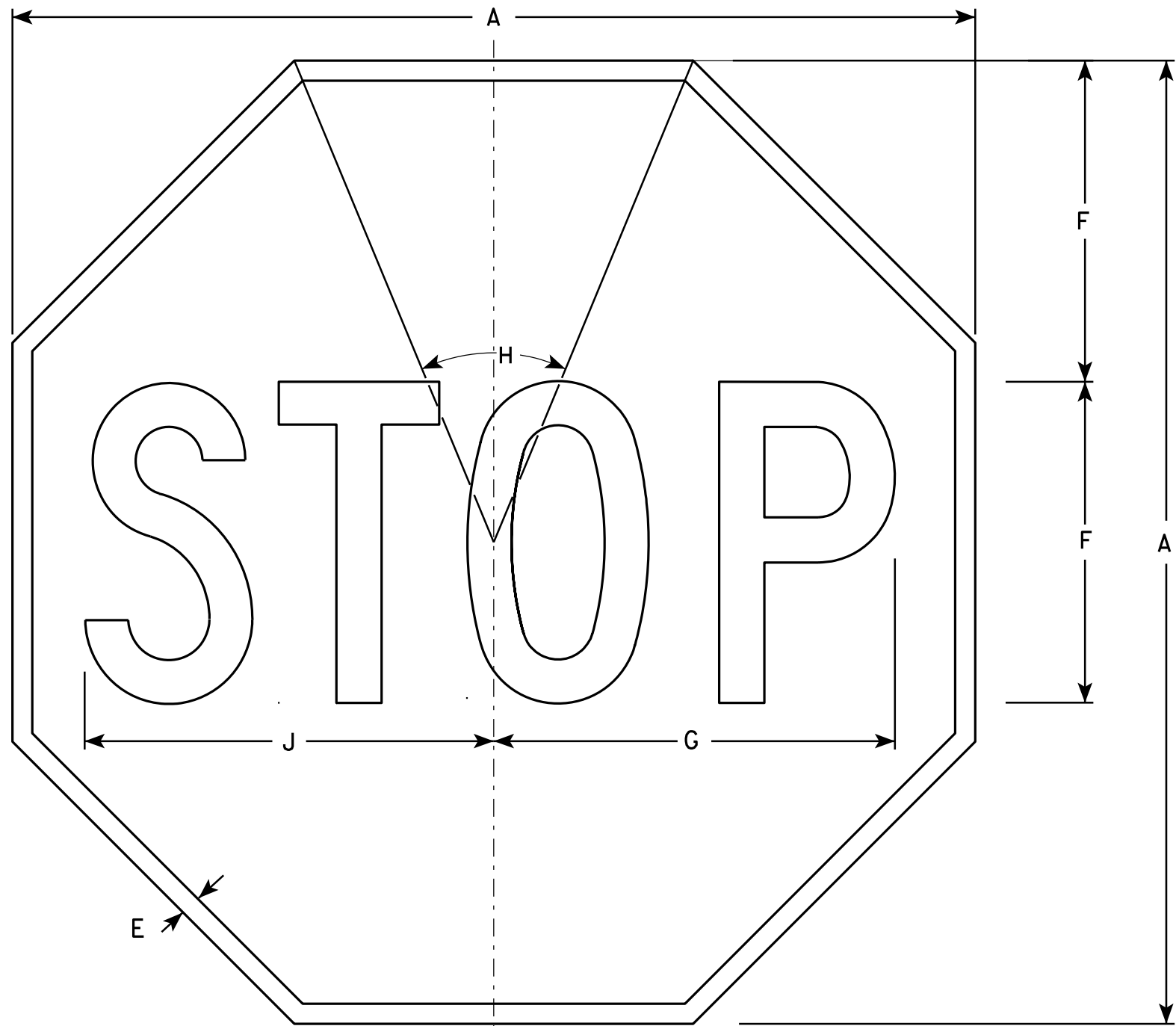
PROJECT NO: HWY: COUNTY: SHEET NO: 44 E

STANDARD SIGN M6-1 & M6-2 SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/16/10 PLATE NO. M6-1.12



NOTES

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

R1-1

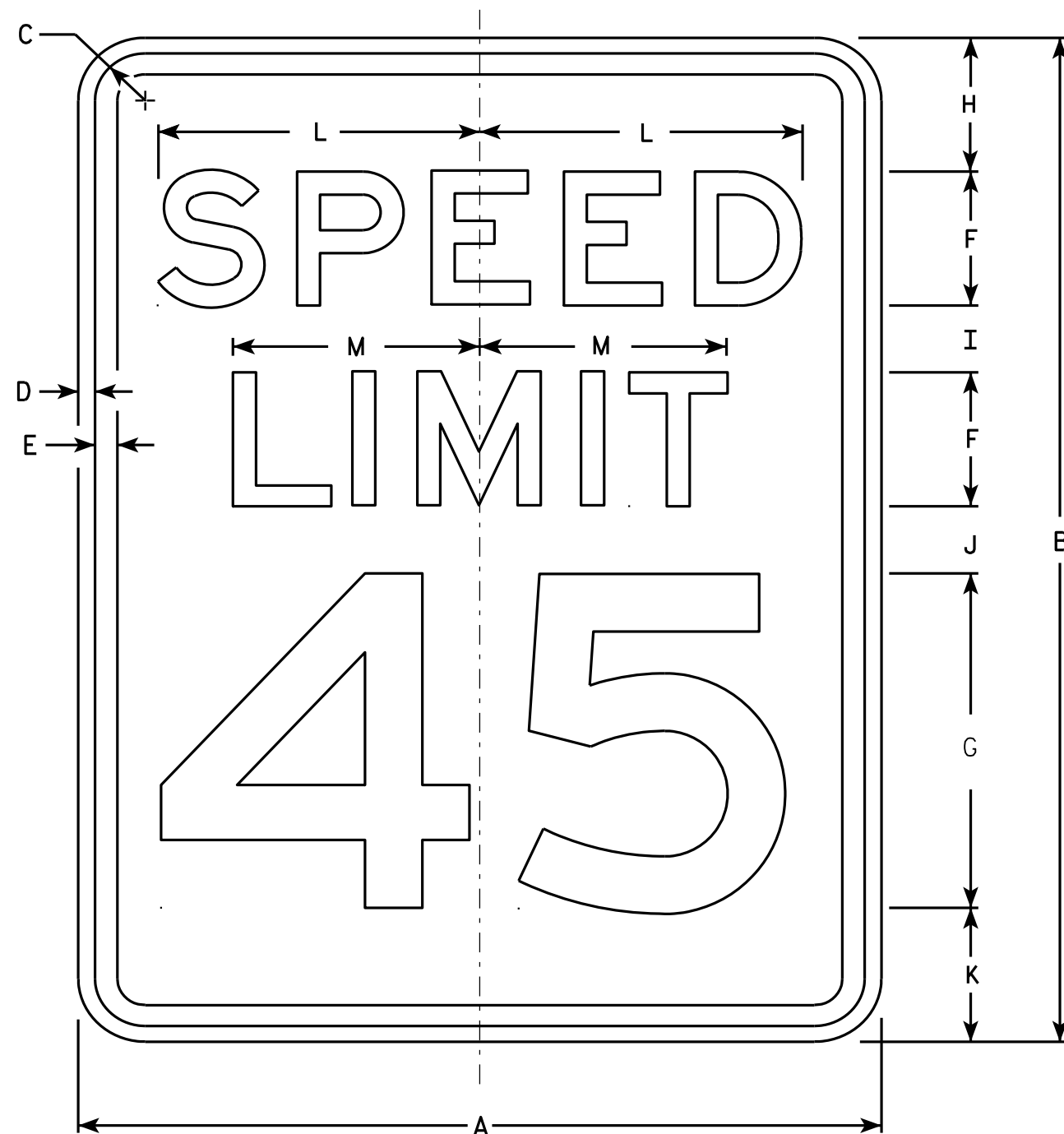
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24				3/8	8	10	45°		10 1/4																	3.31
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1.12



R2-1

NOTES

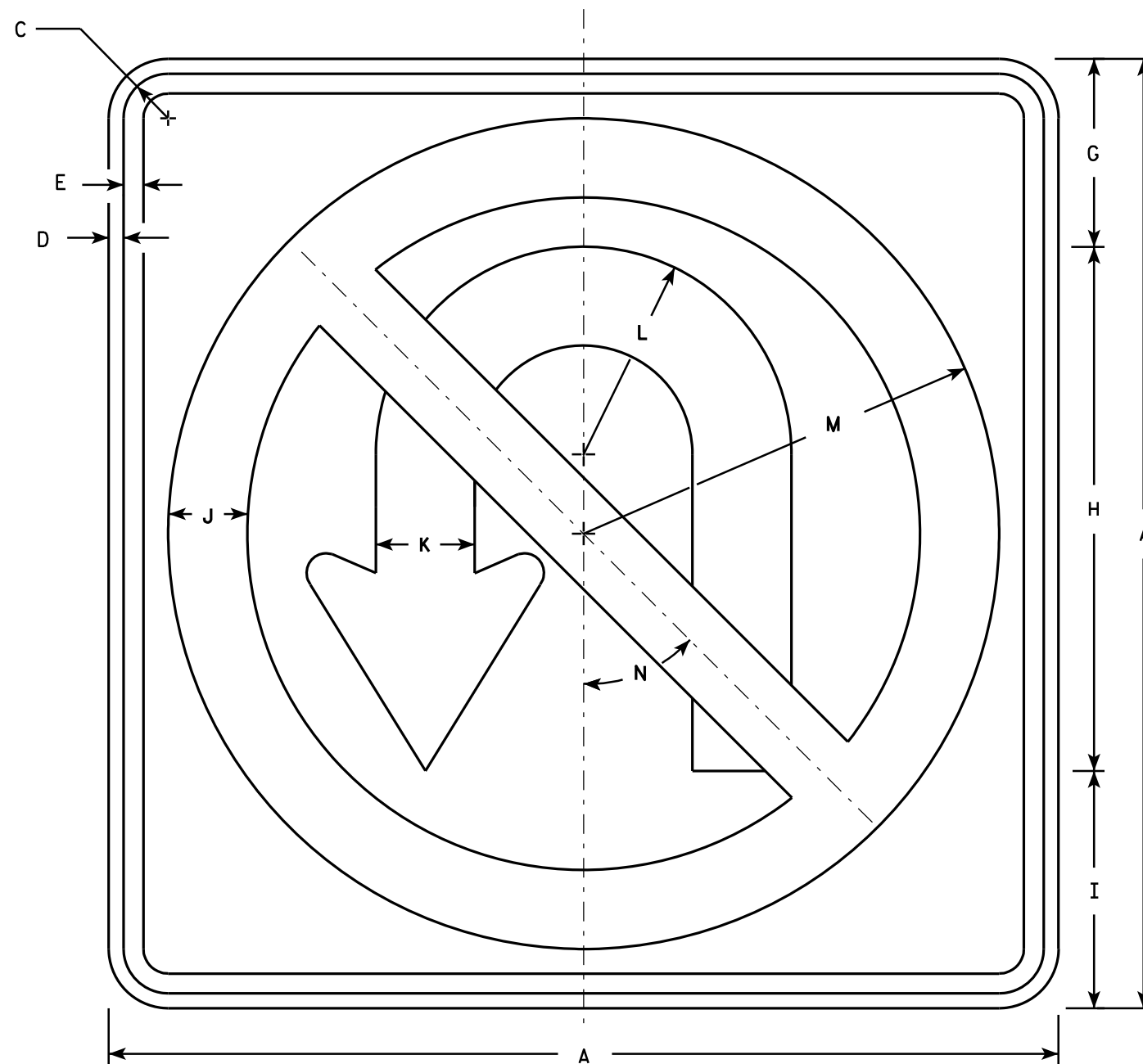
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as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

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	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

STANDARD SIGN R2-1

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
For State Traffic Engineer
DATE 5/26/10 PLATE NO. R2-1.13

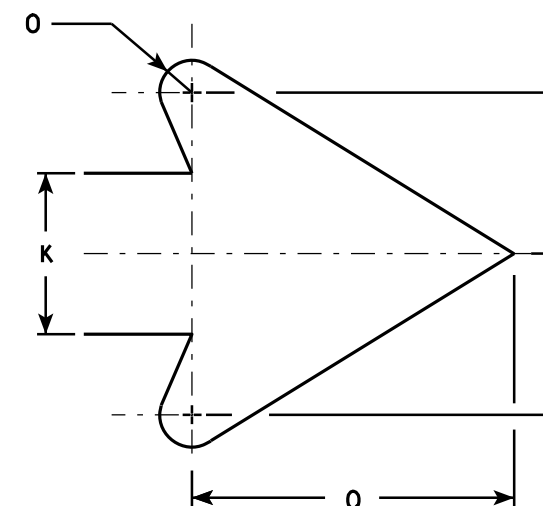
PROJECT NO: HWY: COUNTY: SHEET NO: 46 E



R3-4

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 - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

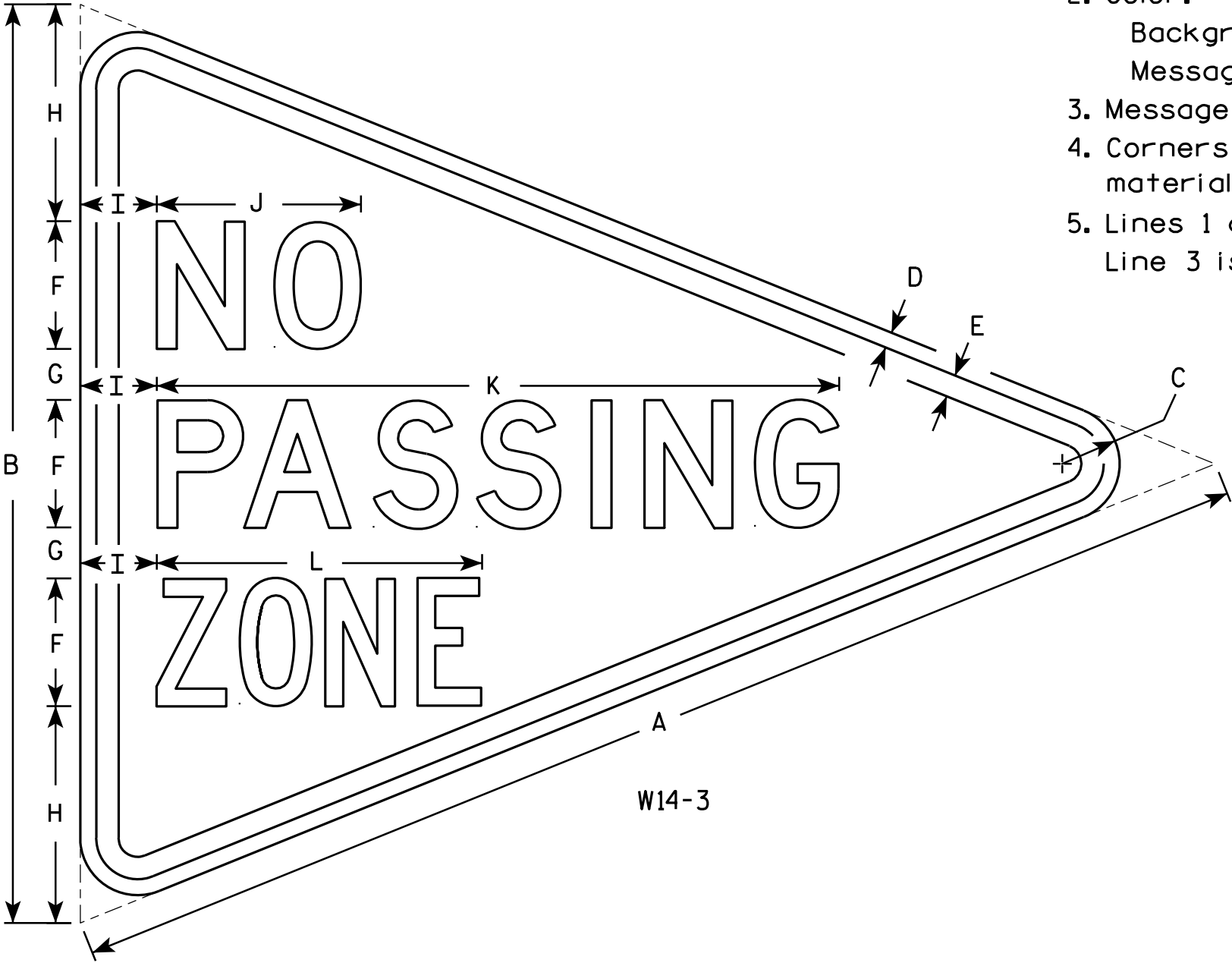
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	3/8	1/2		4 3/4	13 1/4	6	2	2 1/2	5 1/4	10 1/2	45°	1/2		5										4.0
2M	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0
3	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0
4	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0
5	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0

STANDARD SIGN	
R3-4	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 12/08/10	PLATE NO. R3-4.11

PROJECT NO:	HWY:	COUNTY:	SHEET NO: 47	E
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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 - See note 5
- 4. Corners and borders shall be rounded on all base materials for this sign.
- 5. Lines 1 and 2 are Series D.
Line 3 is series C.



W14-3

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	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
2M	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
3	64	48	3	3/4	1 1/4	6	3	12	4	10 3/4	33 5/8	16 1/2															10.7
4																											
5																											

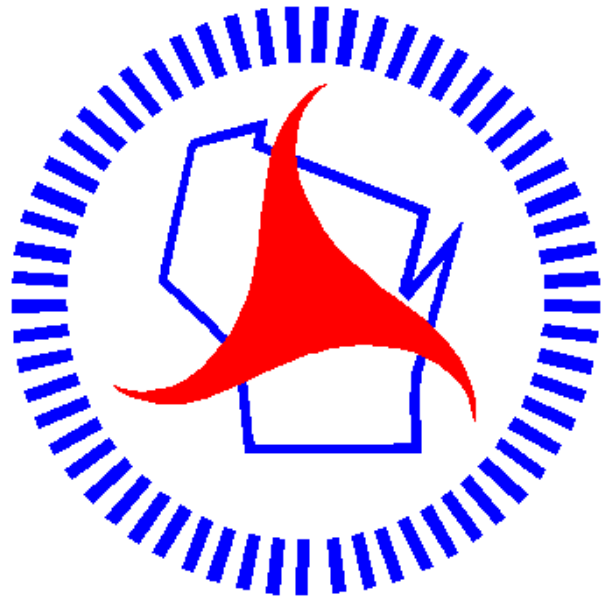
STANDARD SIGN
W14-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 6/7/10 PLATE NO. W14-3.9

Notes



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