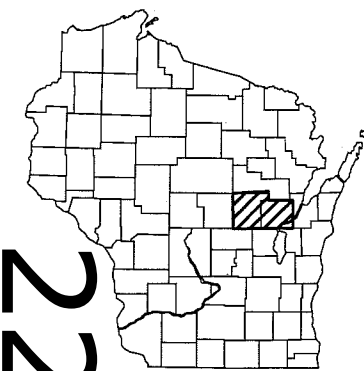


## ORDER OF SHEETS

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

TOTAL SHEETS = 126



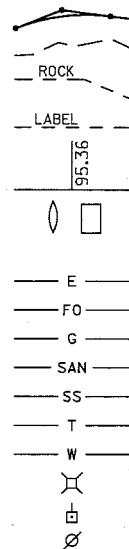
## DESIGN DESIGNATION

A.A.D.T.	2015	=	6,200
A.A.D.T.	2035	=	7,200
D.H.V.		=	778 (2035)
D.D.		=	60/40
T.		=	25.3%
DESIGN SPEED		=	60 MPH
ESALS		=	3,014,900

## CONVENTIONAL SYMBOLS

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

PROFILE	
GRADE LINE	----
ORIGINAL GROUND	----
MARSH OR ROCK PROFILE (To be noted as such)	----
SPECIAL DITCH	----
GRADE ELEVATION	95.36
CULVERT (Profile View)	----
UTILITIES	
ELECTRIC	E
FIBER OPTIC	FO
GAS	G
SANITARY SEWER	SAN
STORM SEWER	SS
TELEPHONE	T
WATER	W
UTILITY PEDESTAL	----
POWER POLE	----
TELEPHONE POLE	----

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

## PLAN OF PROPOSED IMPROVEMENT

## WINCHESTER - NEW LONDON

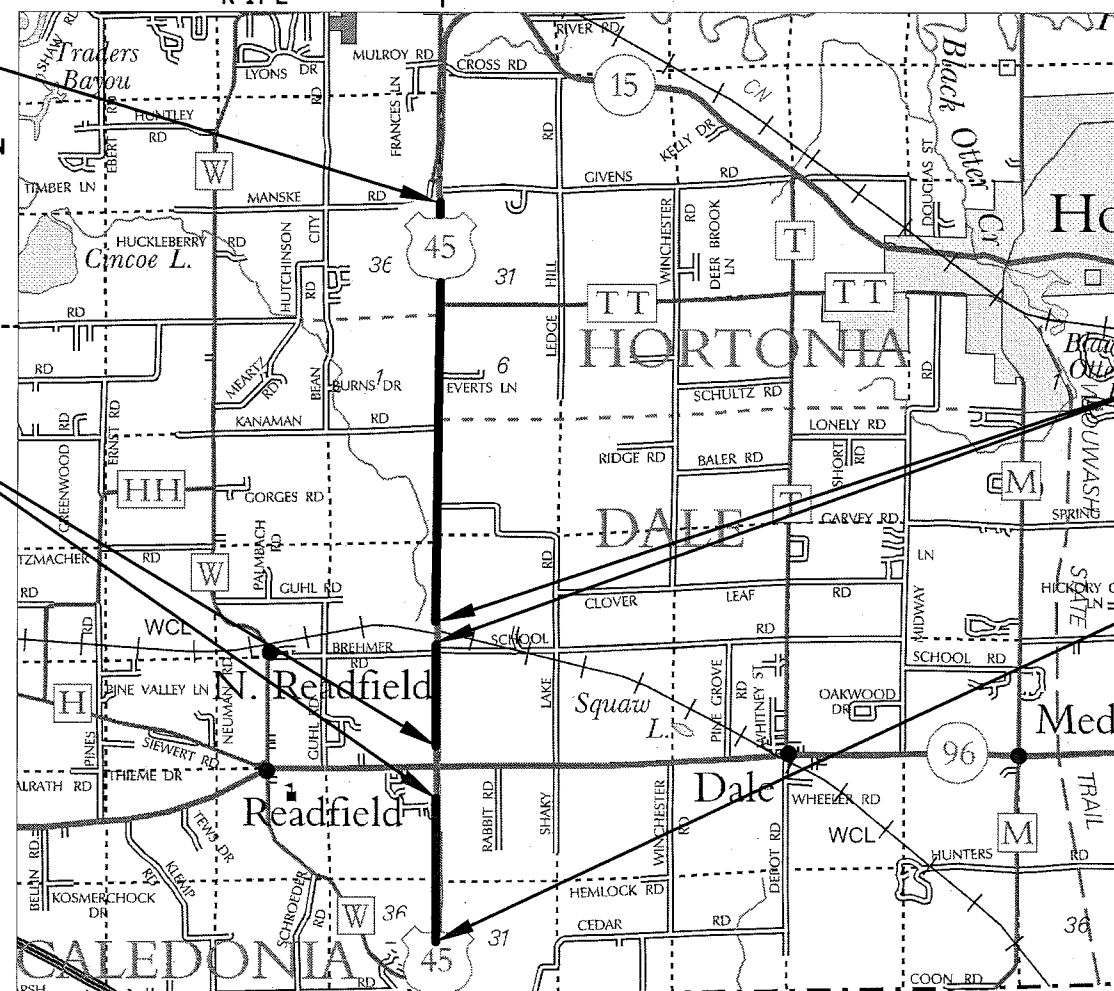
CTH W TO CTH D

USH 45

WAUPACA COUNTY

STATE PROJECT NUMBER

6430-07-60

END PROJECT  
STA 386+95  
X = 740817.322  
Y = 592276.013NET EXCEPTION TO C/L LENGTH  
STA 116+40 - STA 134+85NET EXCEPTION TO C/L LENGTH  
STA 186+76 - STA 188+28BEGIN PROJECT  
STA 40+10  
X = 740032.954  
Y = 557613.583

LAYOUT

SCALE 0 1 MI

TOTAL NET LENGTH OF CENTERLINE = 6.020 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, OUTAGAMIE COUNTY, NAD83 (2007), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

## PREPARED BY

Surveyor	NC REGION
Designer	ERIN CHRISTIANSON
Project Manager	MARK STEIDL
Regional Examiner	CHERYL SIMON
Regional Supervisor	SHANNON RILEY

## APPROVED FOR THE DEPARTMENT

DATE: 11/11/15

**GENERAL NOTES**

CONTRACTOR WILL BE RESPONSIBLE FOR RESHAPING AND SEEDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY THEIR OPERATION OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS.

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

PURSUANT TO CHAPTER 59 OF THE WISCONSIN STATUTES, THE CONTRACTOR SHALL CAREFULLY MAKE A SEARCH FOR EVIDENCE OF A LANDMARK IN ALL AREAS WHERE SUCH A LANDMARK MAY EXIST. NOTIFY THE ENGINEER OF THE RESULTS OF THE SEARCH.

THE CONTRACTOR IS TO WORK WITH UTMOST CARE AND PROTECT ALL SURVEY MARKERS. REMOVAL OF ANY SURVEY MARKER IS TO BE WITH THE APPROVAL OF THE ENGINEER.

**DNR LIAISON**

BOBBI JO FISCHER  
427 EAST TOWER DRIVE, SUITE 100  
WAUTOMA WI 54982  
PHONE: (920) 787-4686 (EXT. 3007)



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

**UTILITIES**

**ANR PIPE LINE COMPANY - GAS/PETROLEUM**

MATT HISCHKE  
NORTH 4956 OAKCREST DRIVE  
BONDUEL, WI 54107  
PHONE: (715) 758-3345  
MOBILE: (715) 460-4042  
E-MAIL: Matthew\_Hischke@transcanada.com

**AT&T WISCONSIN - COMMUNICATION LINE**

JOE KASSAB  
221 W EASHINGTON STREET FLR 4  
APPLETON, WI 54911  
PHONE: (920) 735-3206  
E-MAIL: JK572K@ATT.com

**CENTURYLINK - COMMUNICATION LINE**

ROSS HARTWIG  
236 LEFFERT STREET  
BERLIN, WI 54923  
PHONE: (920) 361-8425  
MOBILE: (920) 896-2867  
E-MAIL: ross.hartwig@centurylink.com

**WE ENERGIES - ELECTRIC**

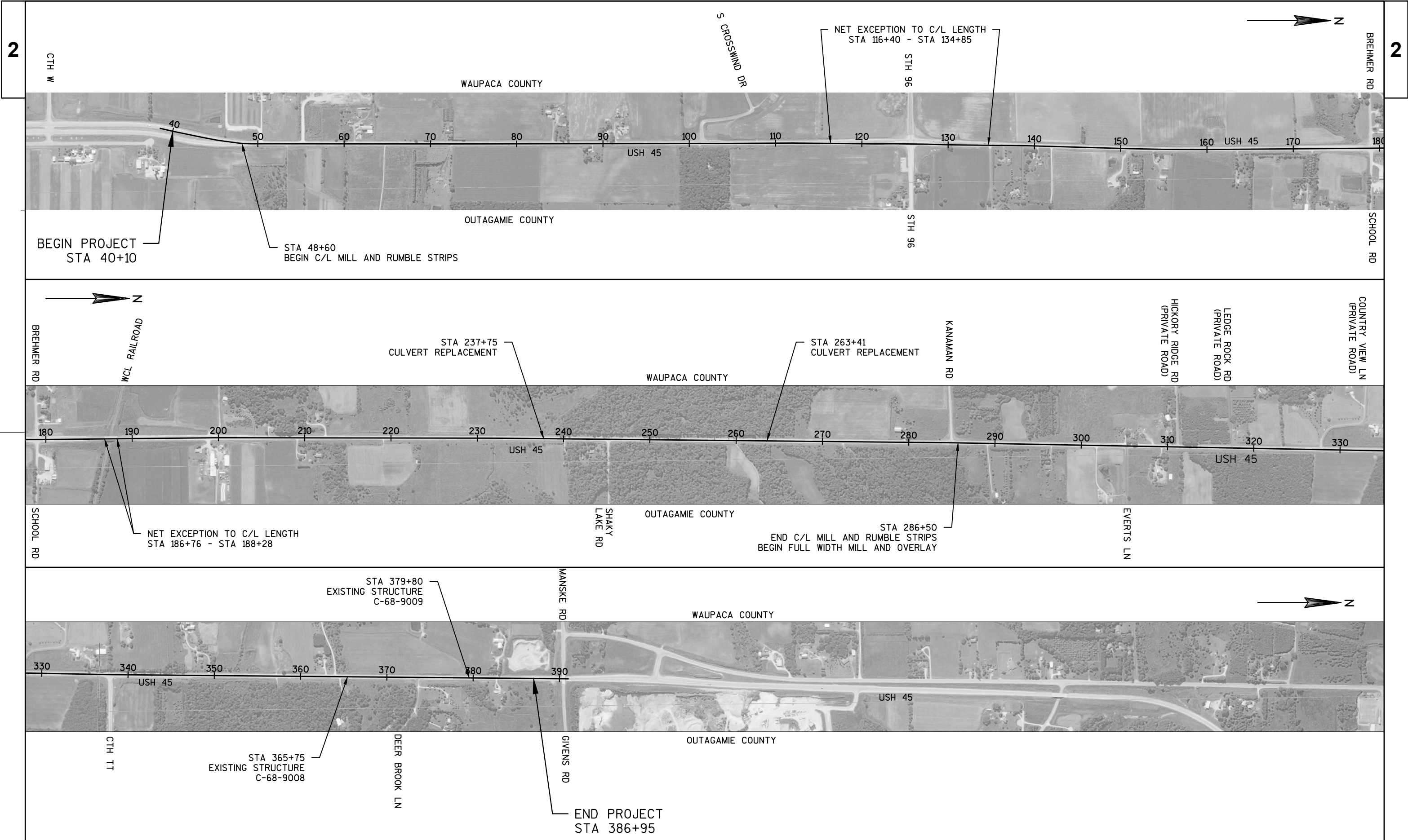
KENNETH VAN OSS  
800 S LYNNDALE DRIVE  
APPLETON, WI 54912  
PHONE: (920) 380-3318  
E-MAIL: kenneth.van-oss@we-energies.com

**WE ENERGIES - GAS/PETROLEUM**

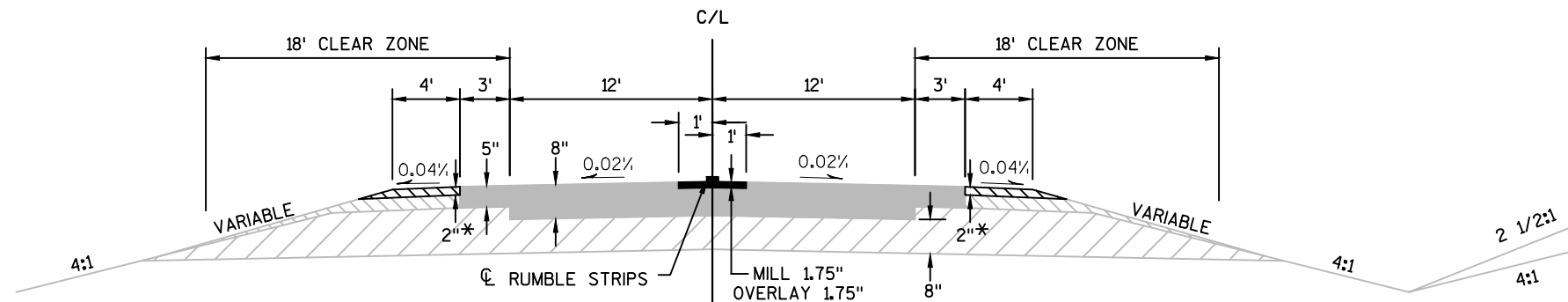
THOMAS BORCHART  
800 S LYNNDALE DRIVE  
APPLETON, WI 54912  
PHONE: (920) 380-3449  
MOBILE: (920) 858-8473  
E-MAIL: thomas.borchart@we-energies.com

**Send all WE Energies Correspondence to:**

WE ENERGIES - ELECTRIC & GAS  
ATTN: LATROY BRUMFIELD  
ROOM A299  
333 W EVERETT ST  
MILWAUKEE, WI 53203  
PHONE: (414) 221-5617  
E-MAIL: latroy.brumfield@we-energies.com

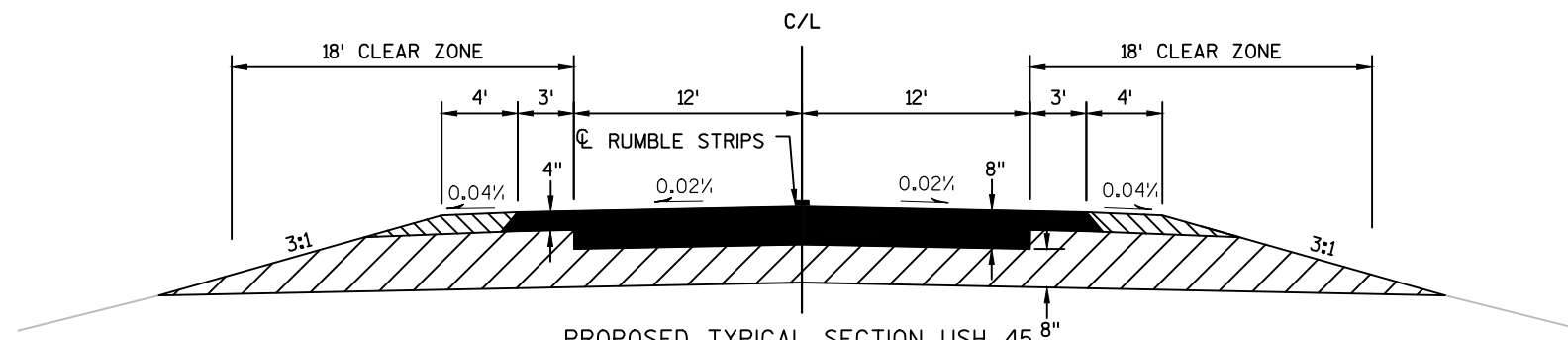


NOTE: STA 40+10 TO STA 48+60 SEE CONSTRUCTION  
DETAIL FOR MORE INFORMATION.



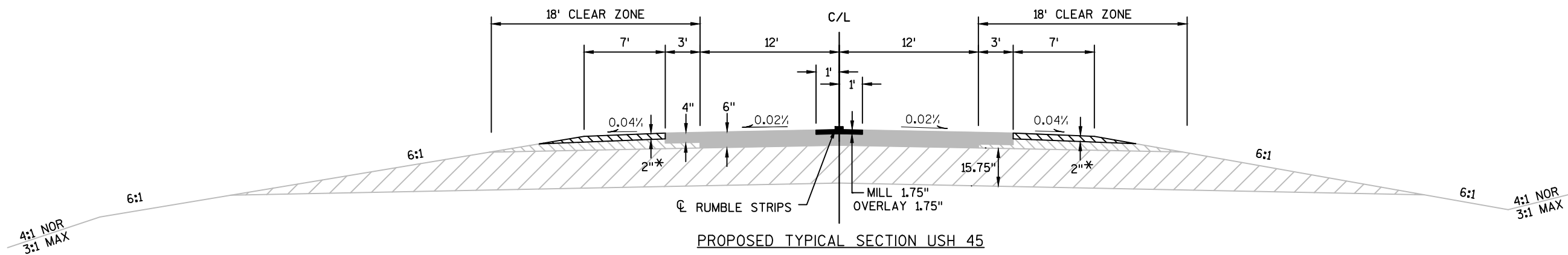
PROPOSED TYPICAL SECTION USH 45

STA 48+60 TO STA 116+40      STA 238+20 TO STA 263+00  
STA 134+85 TO STA 169+85      STA 263+85 TO STA 267+38  
STA 206+15 TO STA 237+45      STA 267+58 TO STA 286+50



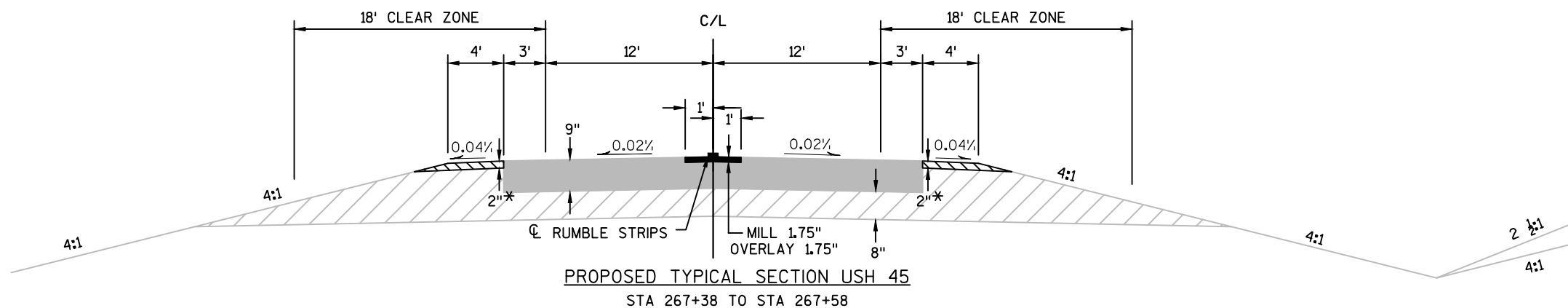
PROPOSED TYPICAL SECTION USH 45

STA 237+45 TO STA 238+20  
STA 263+00 TO STA 263+85



PROPOSED TYPICAL SECTION USH 45

STA 169+85 TO STA 186+76  
STA 188+28 TO STA 206+15



PROPOSED TYPICAL SECTION USH 45

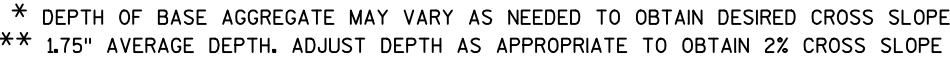
STA 267+38 TO STA 267+58

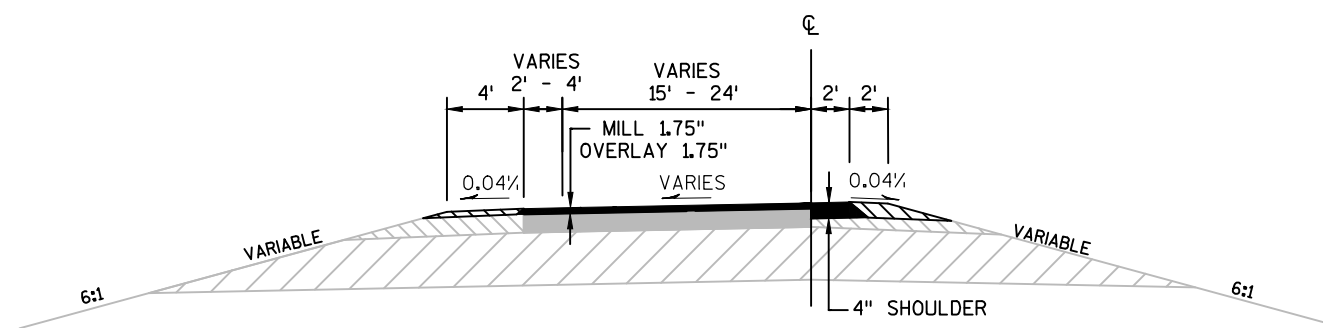
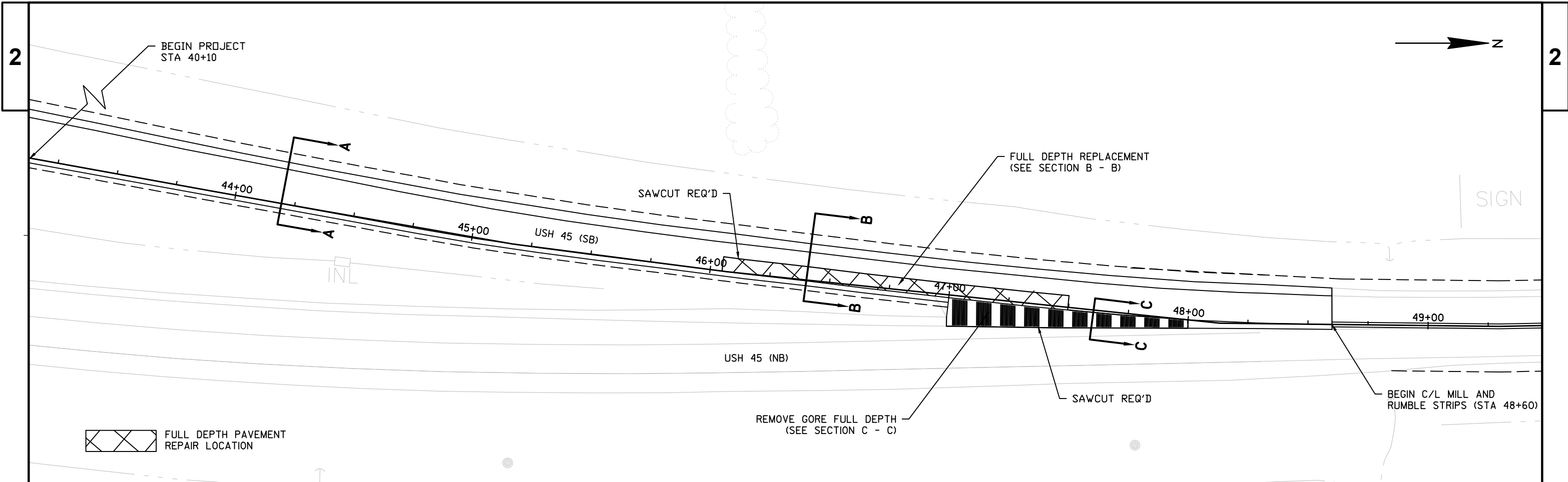
#### LEGEND

- EXISTING BASE AGGREGATE DENSE COURSE, 3/4-INCH (SHOULDER)
- EXISTING BASE COURSE AGGREGATE DENSE 1 1/4-INCH
- EXISTING GRANULAR SUBBASE
- EXISTING ASPHALTIC CONCRETE PAVEMENT
- BASE AGGREGATE DENSE, 3/4-INCH (SHOULDER)
- BASE AGGREGATE DENSE, 1 1/4-INCH
- HMA PAVEMENT TYPE E-3

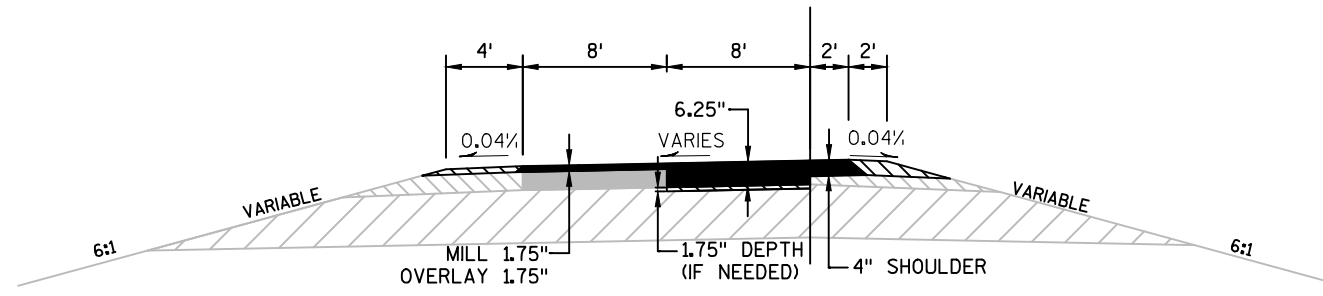
\* 2" OR AS NEEDED TO OBTAIN DESIRED CROSS SLOPE

# E

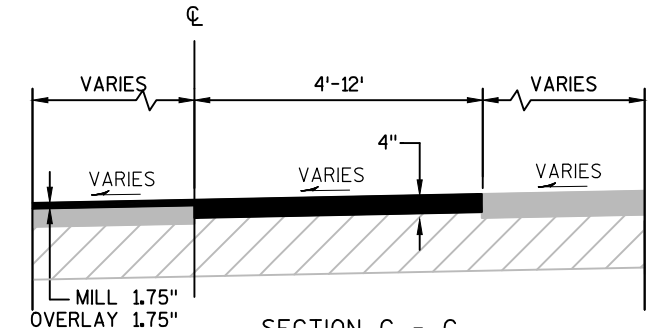




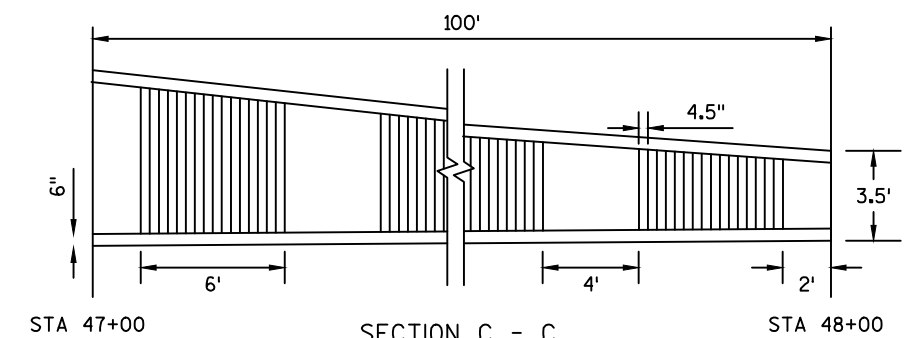
SECTION A - A  
MILL AND OVERLAY (SB)  
STA 40+10 TO STA 46+05  
STA 47+50 TO STA 48+60



SECTION B - B  
PAVEMENT REPAIR (SB)  
STA 46+05 TO STA 47+50



SECTION C - C  
GORE AREA  
STA 47+00 TO STA 48+00

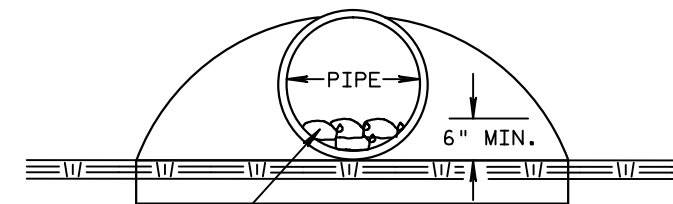


SECTION C - C  
(TOP VIEW)  
GORE AREA  
STA 47+00 TO STA 48+00

- LEGEND
- BASE AGGREGATE DENSE 3/4-INCH
  - HMA PAVEMENT TYPE E-3

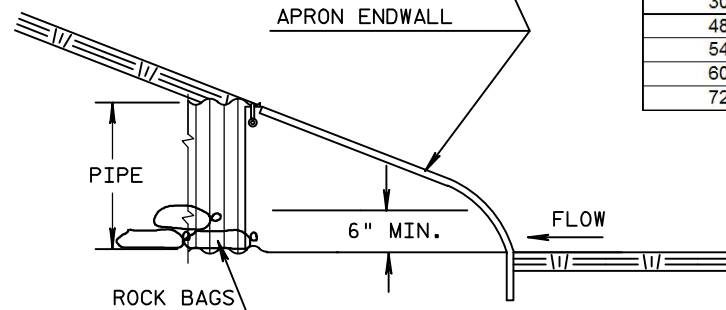
NOTE: SEE SDD ASPHALTIC RUMBLE STRIPS AT INTERSECTION, FOR GROOVE DIMENSIONS.

USH 45 SB TRANSITION PAVEMENT REPAIR



ROCK BAGS

END VIEW



APRON ENDWALL

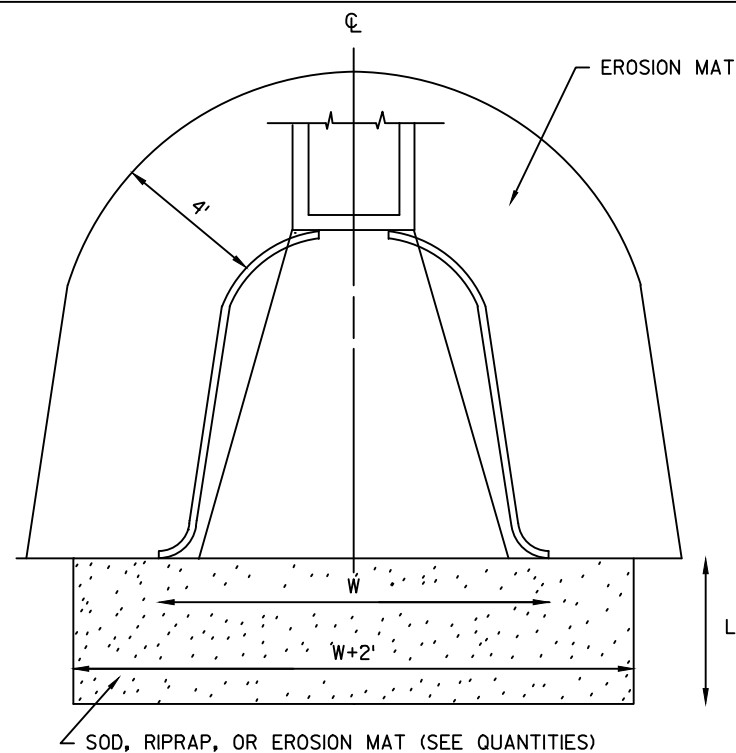
PIPE

ROCK BAGS

SIDE VIEW

CULVERT PIPE CHECKS

ESTIMATED BAG SIZE = 24" X 12" X 6"	
PIPE SIZE	ESTIMATED NO OF BAGS
18"	2
24"	3
30"	5
48"	10
54"	10
60"	13
72"	16

EROSION CONTROL AT PIPE ENDS

L = 3 TIMES DIAMETER OR 10' MIN.  
INCREASE IF WARRANTED

NOTE: IF THE EXISTING SIDEROAD CONSISTS OF A BASE COURSE SURFACE, THE NEW ASPHALT SHALL BE PLACED TO THE ENDS OF THE EXISTING SIDEROAD RADIUS'.

MILL & OVERLAY MAINLINE LIMITS  
(PAID FOR AS REMOVING ASPHALTIC  
SURFACE MILLING BY THE TON)

USH

MILL & OVERLAY SIDEROAD LIMITS  
(PAID FOR AS REMOVING ASPHALTIC  
SURFACE MILLING BY THE SY)

SIDE ROAD

L

SAWCUT REQUIRED (1 3/4" DEPTH)

15'

SIDE ROAD DETAIL - NO CURB & GUTTER

MILL & OVERLAY MAINLINE LIMITS  
(PAID FOR AS REMOVING ASPHALTIC  
SURFACE MILLING BY THE TON)

USH

MILL & OVERLAY SIDEROAD LIMITS  
(PAID FOR AS REMOVING ASPHALTIC  
SURFACE MILLING BY THE SY)

SIDE ROAD

L

SAWCUT REQUIRED (1 3/4" DEPTH)

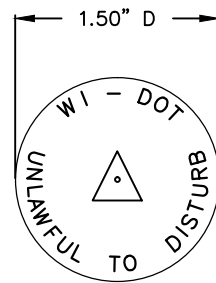
15'

SIDEROAD DETAIL - CURB & GUTTER TO REMAIN

L = VARIABLE, SEE INTERSECTION DETAILS  
FOR APPROXIMATE LIMITS.

REMOVING ASPHALTIC SURFACE MILLING LIMITS

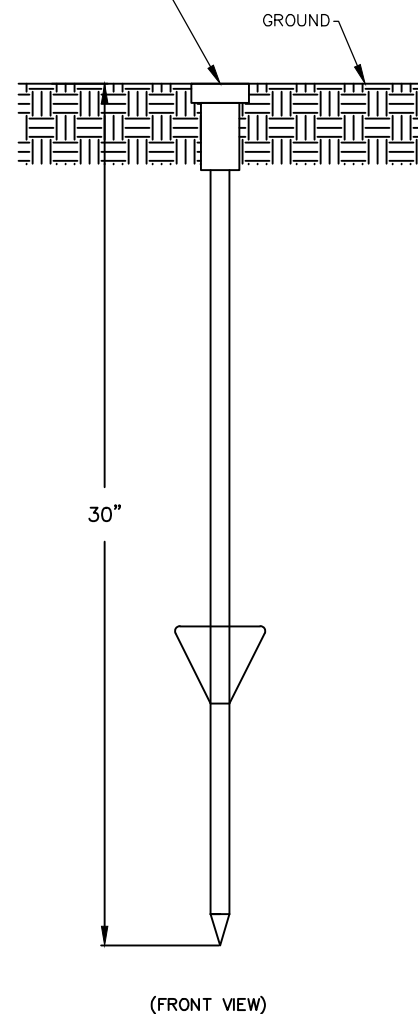
EVERTS LN  
HICKORY RIDGE RD  
LEDGE ROCK RD  
COUNTRY VIEW LN  
CTH TT  
DEEK BROOK LN



## ② WIS DOT MONUMENT CAP MARKER LOGO (SSDR130)

CONTRACTOR TO ORDER LANDMARK REFERENCE MONUMENTS WITH THE ABOVE STAMPING

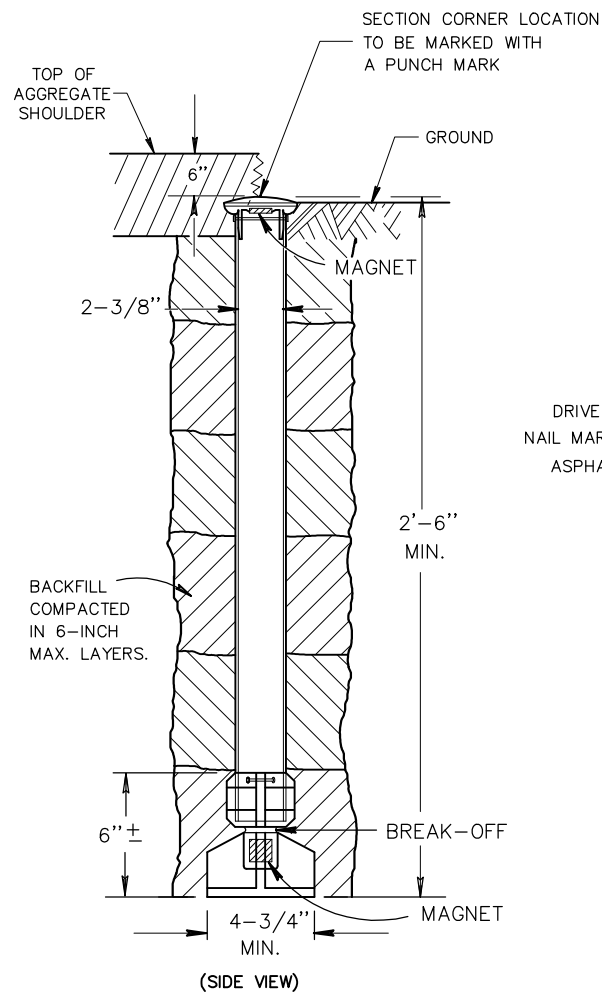
② MONUMENT MARKER FURNISHED BY CONTRACTOR TO BE FLUSH WITH GROUND SURFACE OR DEPRESSED IN PAVED SURFACE.



(FRONT VIEW)

BERNSTEN DRIVABLE MONUMENT SSDR130

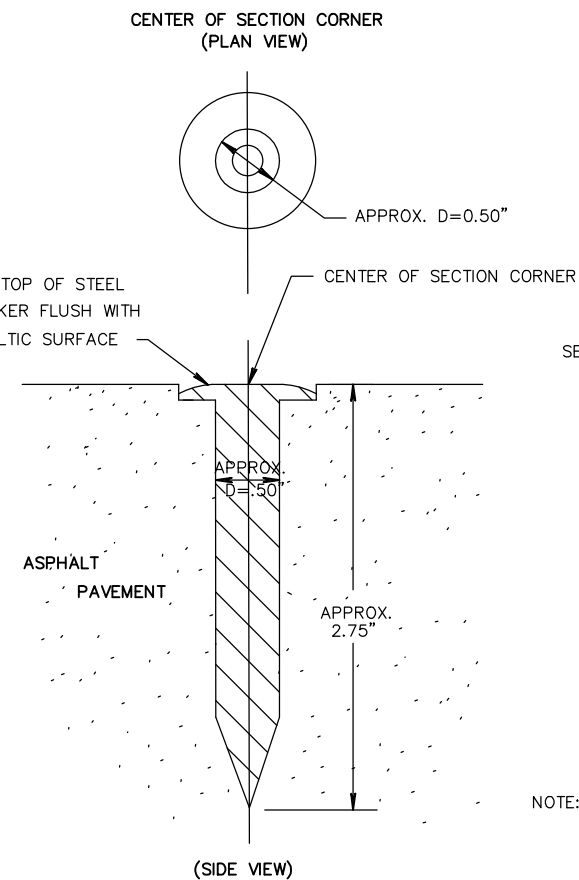
LANDMARK REFERENCE MONUMENT (TIES ONLY)



(SIDE VIEW)

OUTSIDE OF PAVEMENT

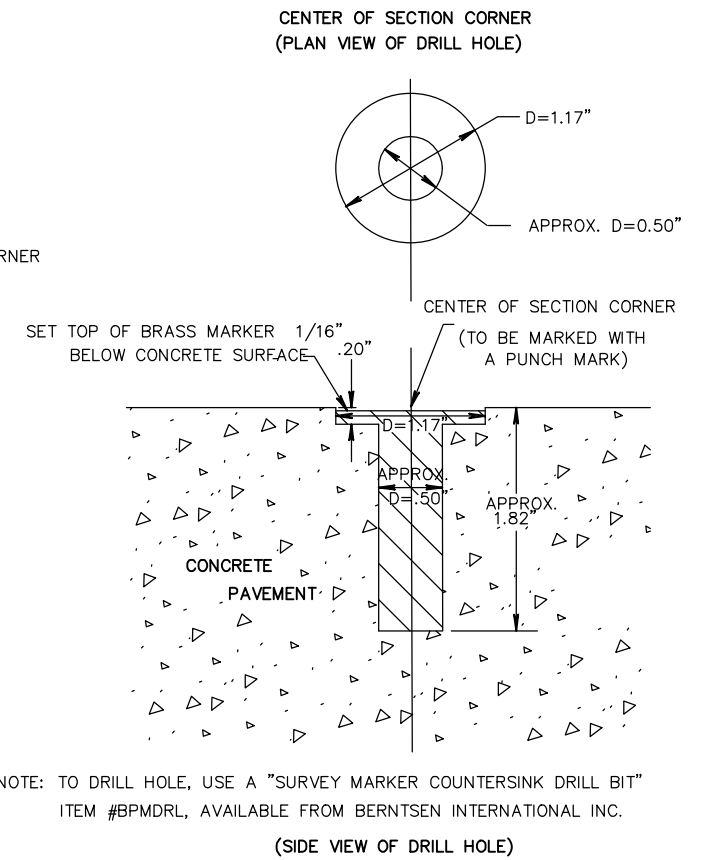
① BERNTSEN A1BR30 ALUMINUM BREAK-OFF MONUMENT



(SIDE VIEW)

IN ASPHALTIC PAVEMENT

① BERNTSEN SNM1 STEEL NAIL MARKER



(SIDE VIEW OF DRILL HOLE)

IN CONCRETE PAVEMENT

① BERNTSEN BP - 1 BRASS MARKER WITH ANCHOR PLUG

## SECTION CORNER MONUMENTS

### GENERAL NOTES

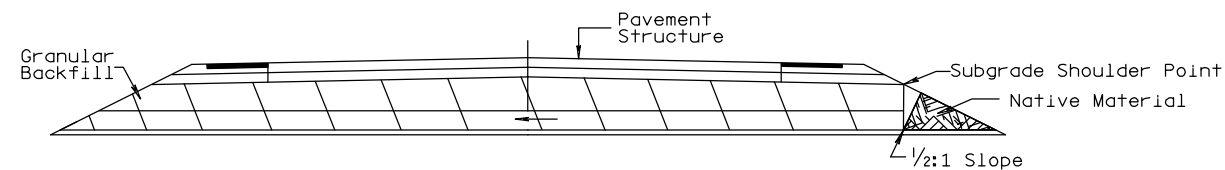
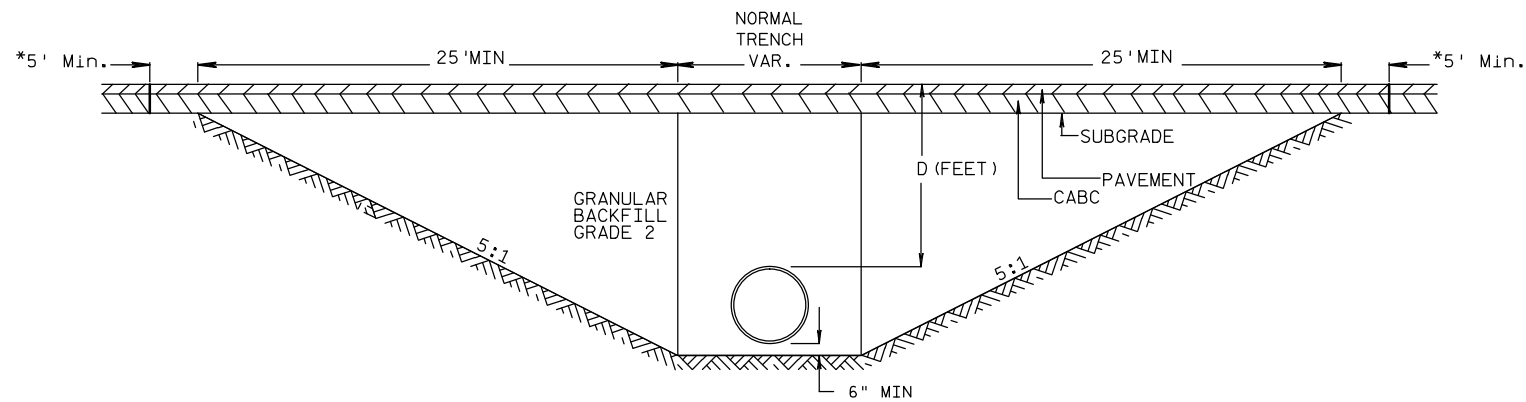
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

LOCATE LANDMARK REFERENCE MONUMENTS OUTSIDE THE CONSTRUCTION LIMITS AND WITHIN WISDOT RIGHT OF WAY. LOCATION TO BE APPROVED BY THE ENGINEER.

① THE REGIONAL SURVEY COORDINATOR WILL SUPPLY.

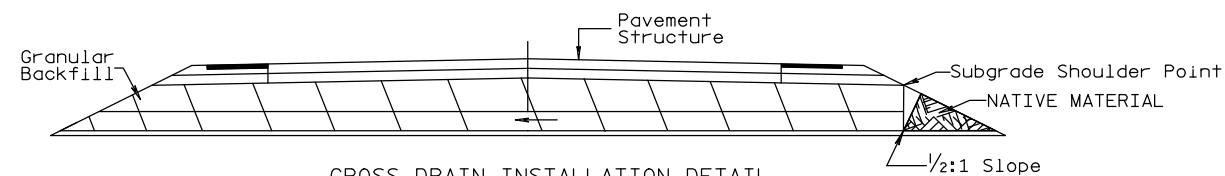
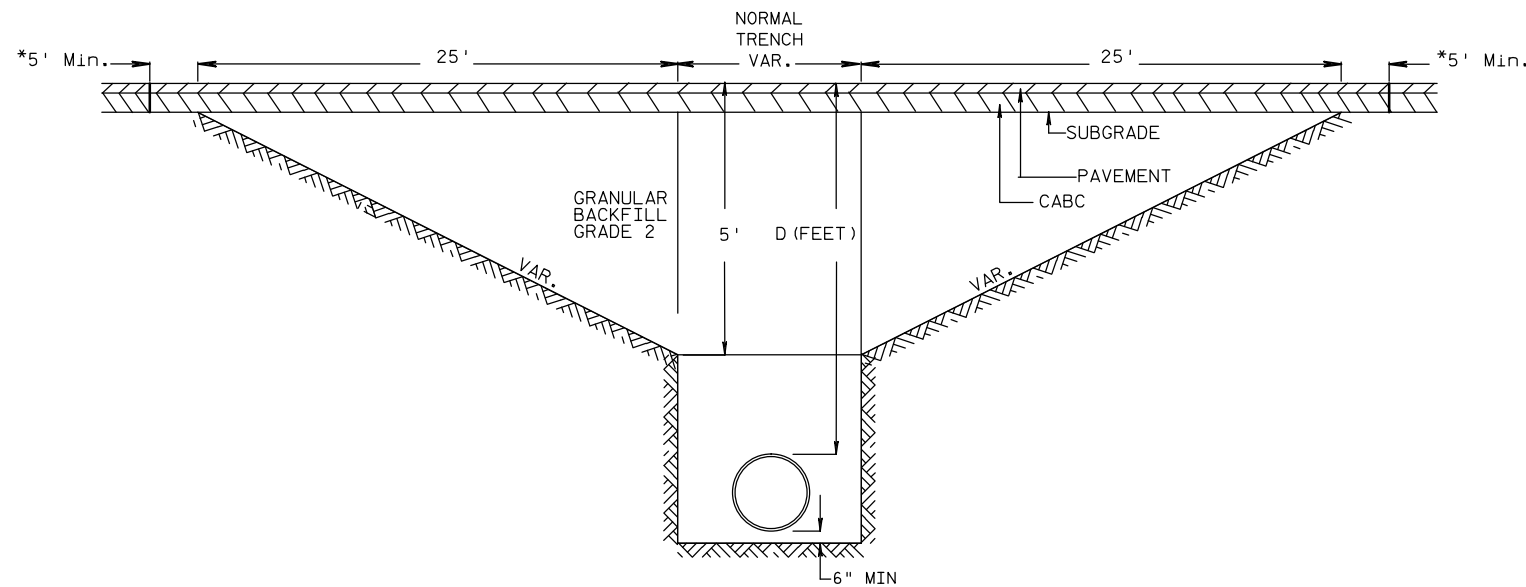
② CONTRACTOR WILL SUPPLY.

## SECTION CORNER MONUMENT AND LANDMARK REFERENCE MONUMENT DETAIL

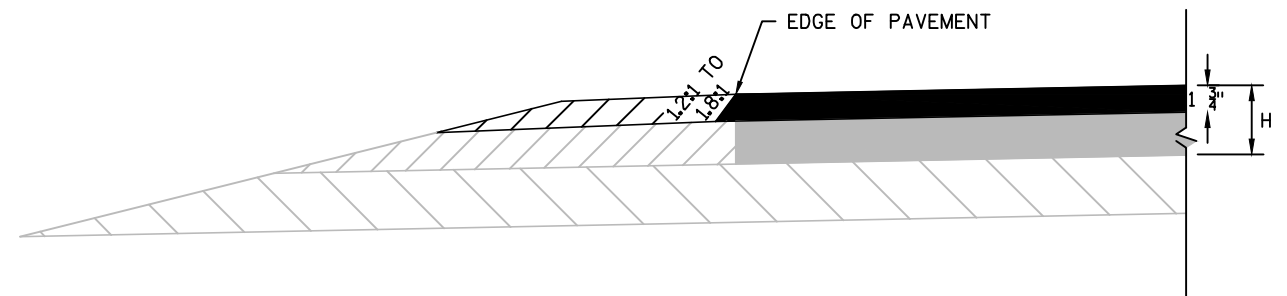


CROSS DRAIN INSTALLATION DETAIL  
FOR  $D \leq 5'$

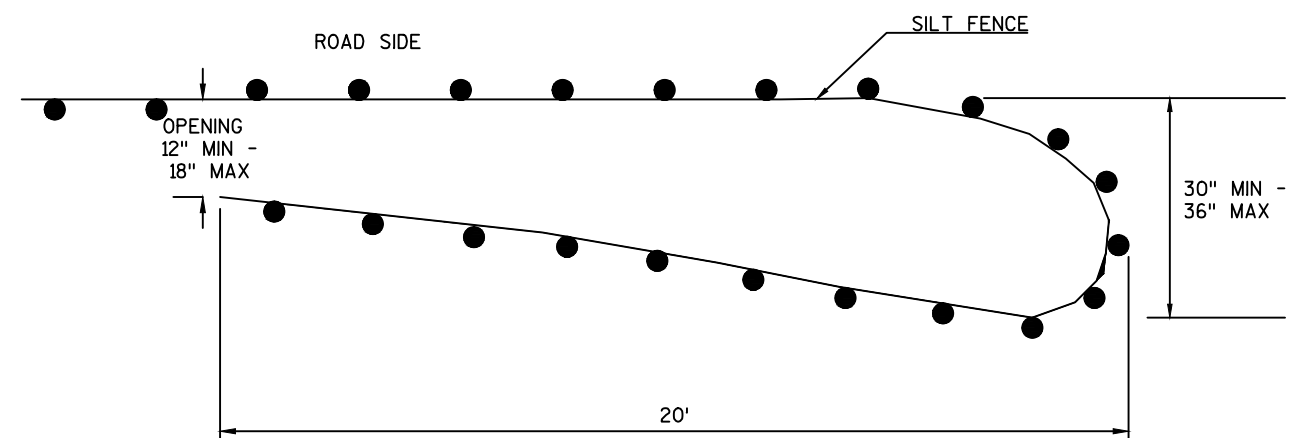
\* Pavement Removal Limits (Typical)



CROSS DRAIN INSTALLATION DETAIL  
FOR  $D \geq 5'$



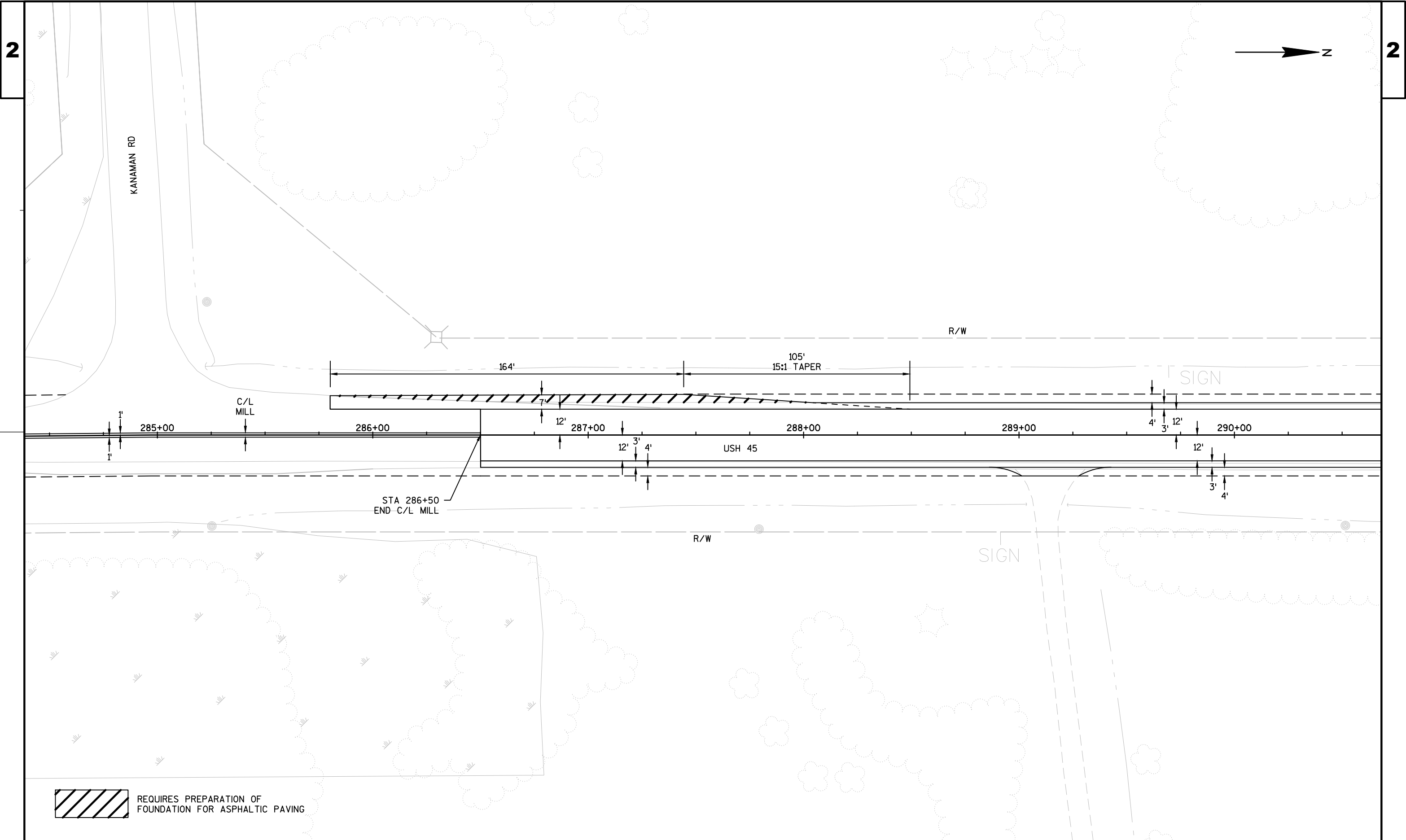
SAFETY EDGE  
STA 307+75 TO STA 308+40  
STA 334+50 TO STA 341+05

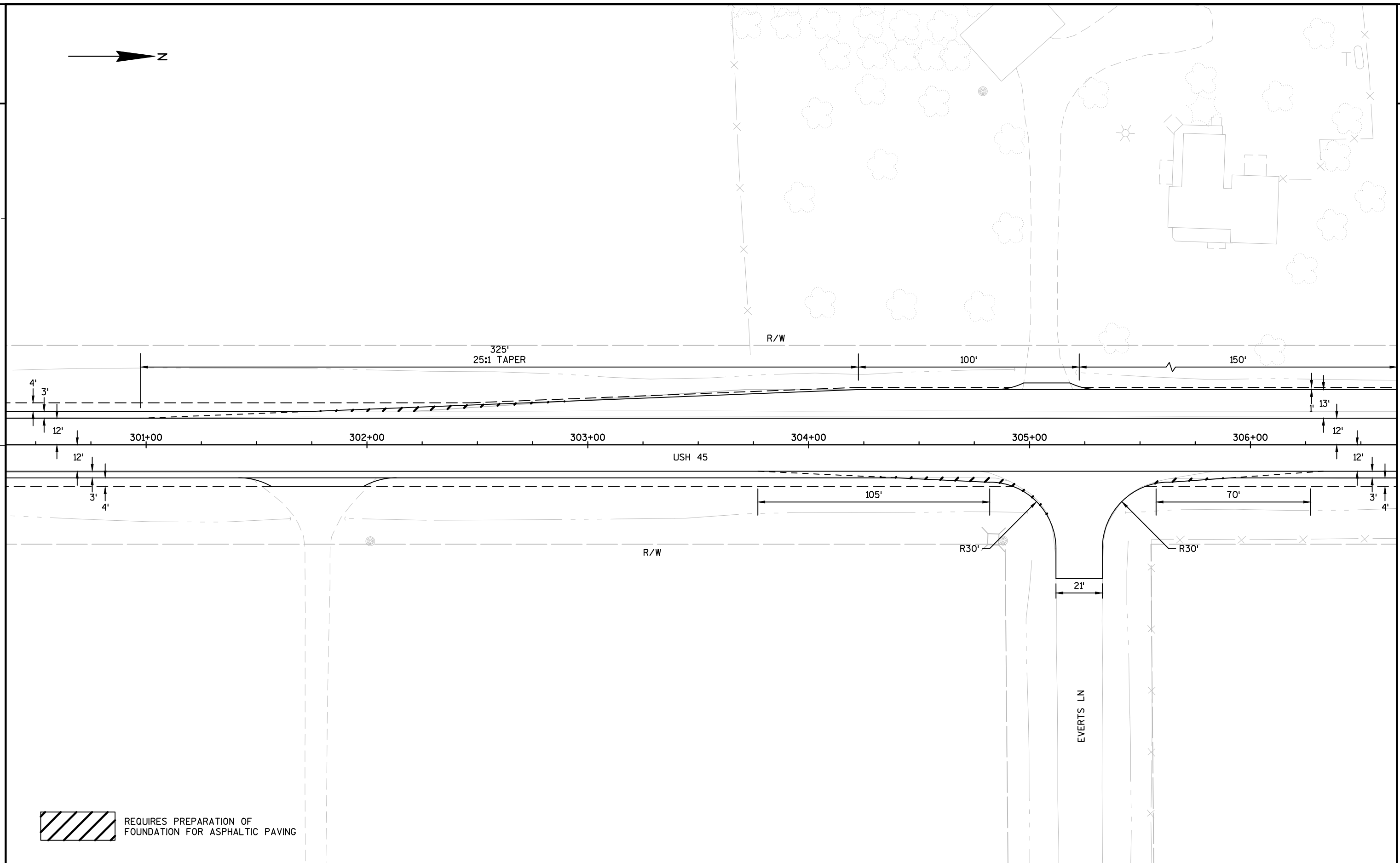
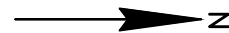


PLAN VIEW

TEMPORARY SMALL ANIMAL TURN-AROUND

NOTES: SILT FENCE POSTS FOR THE TURN-AROUND SHOULD BE ON THE OUTSIDE OF THE TURN-AROUND. AND TRENCHED IN ACCORDING TO SILT FENCE REQUIREMENTS.





REQUIRES PREPARATION OF  
FOUNDATION FOR ASPHALTIC PAVING

PROJECT NO: 6430-07-60

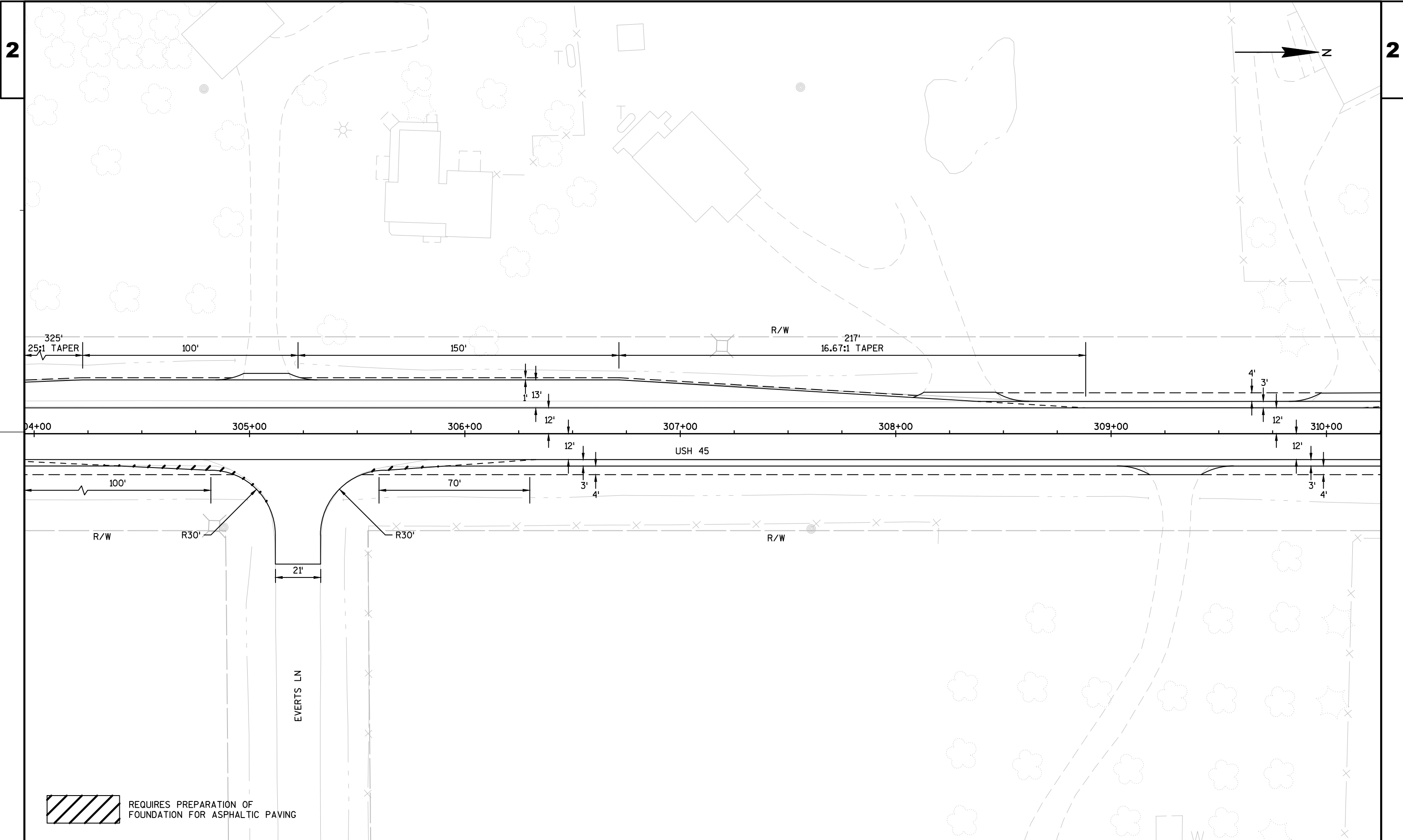
HWY: USH 45

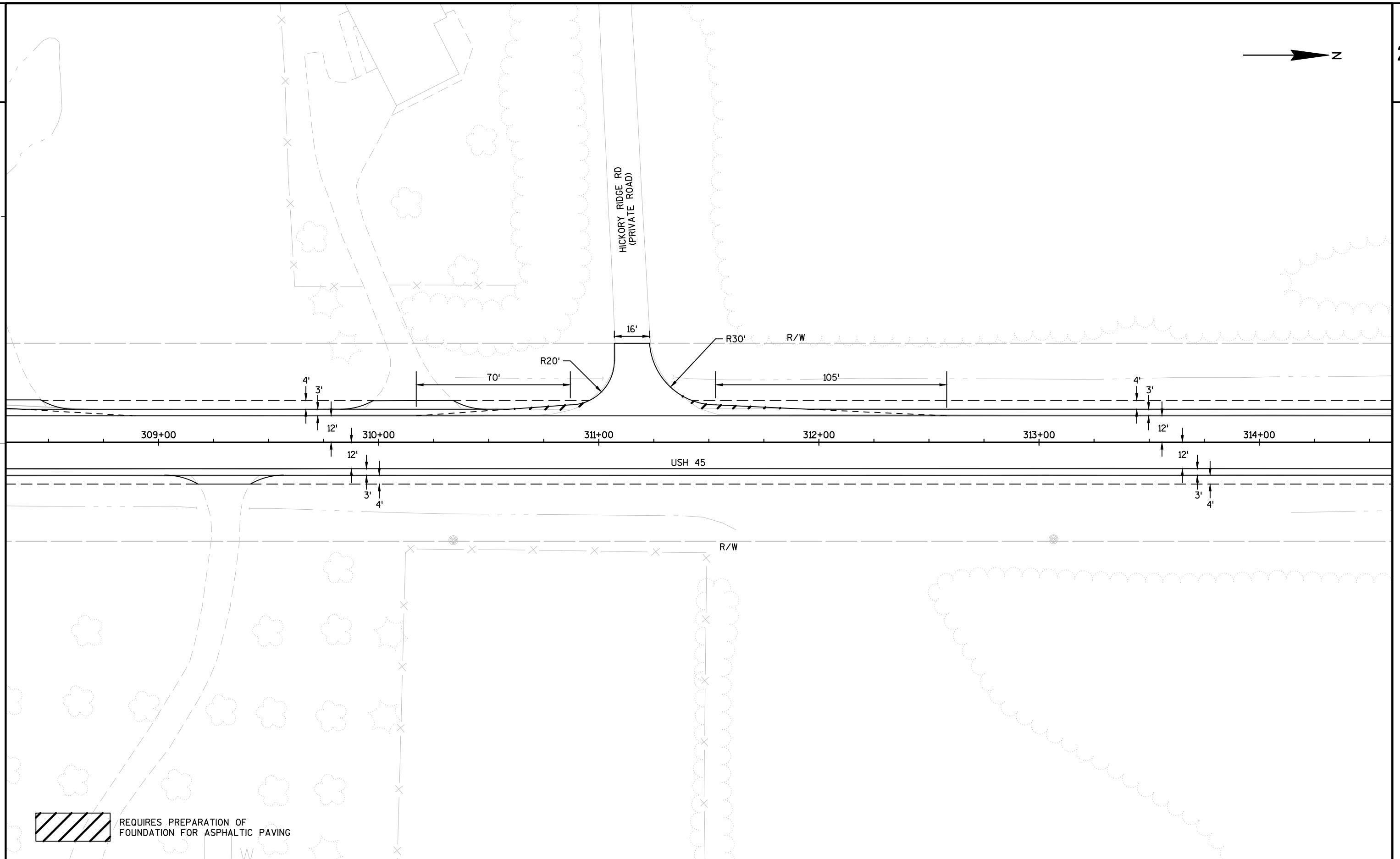
COUNTY: WAUPACA

INTERSECTION DETAIL - EVERTS LN (TYPE C MODIFIED)

SHEET

E



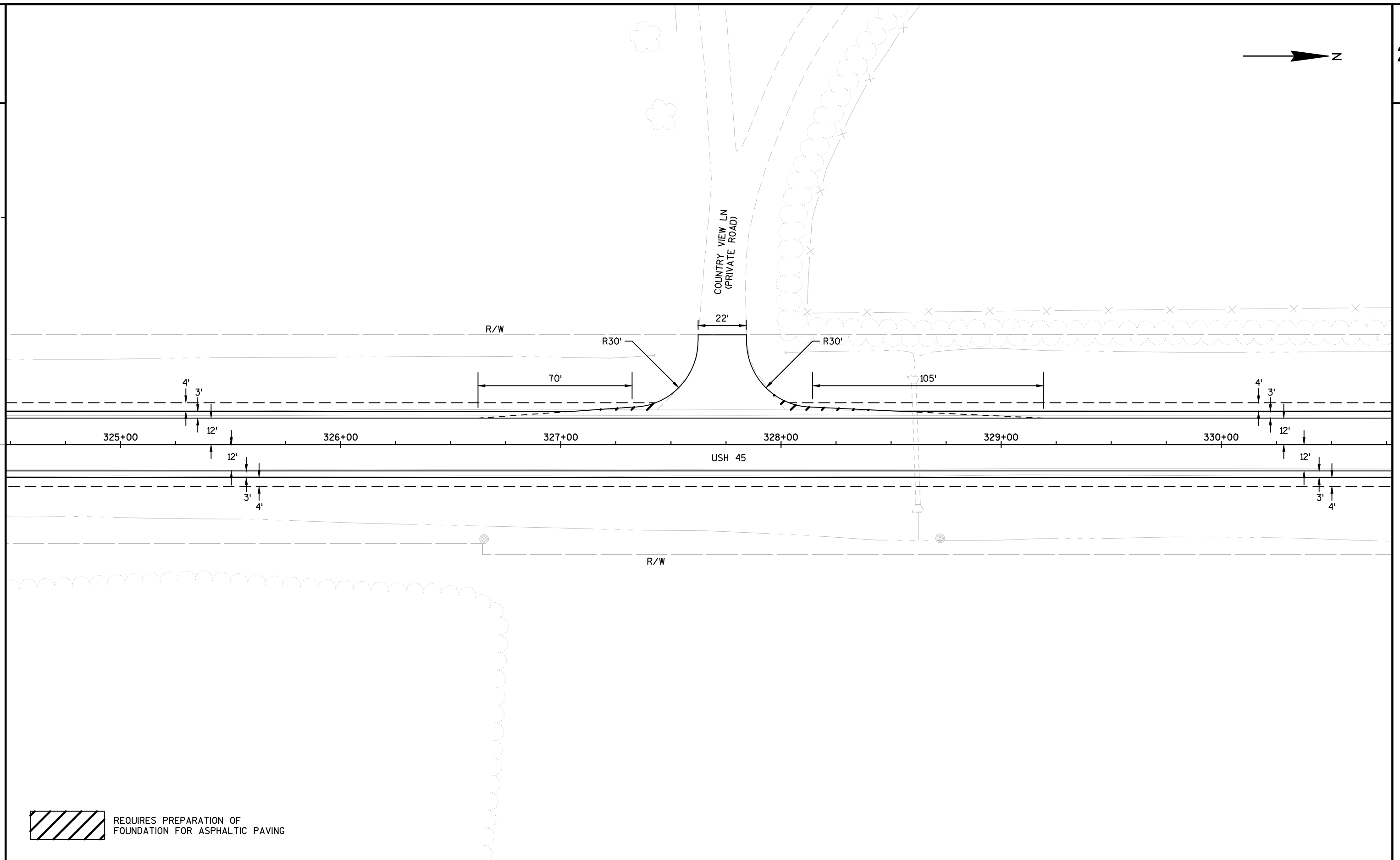


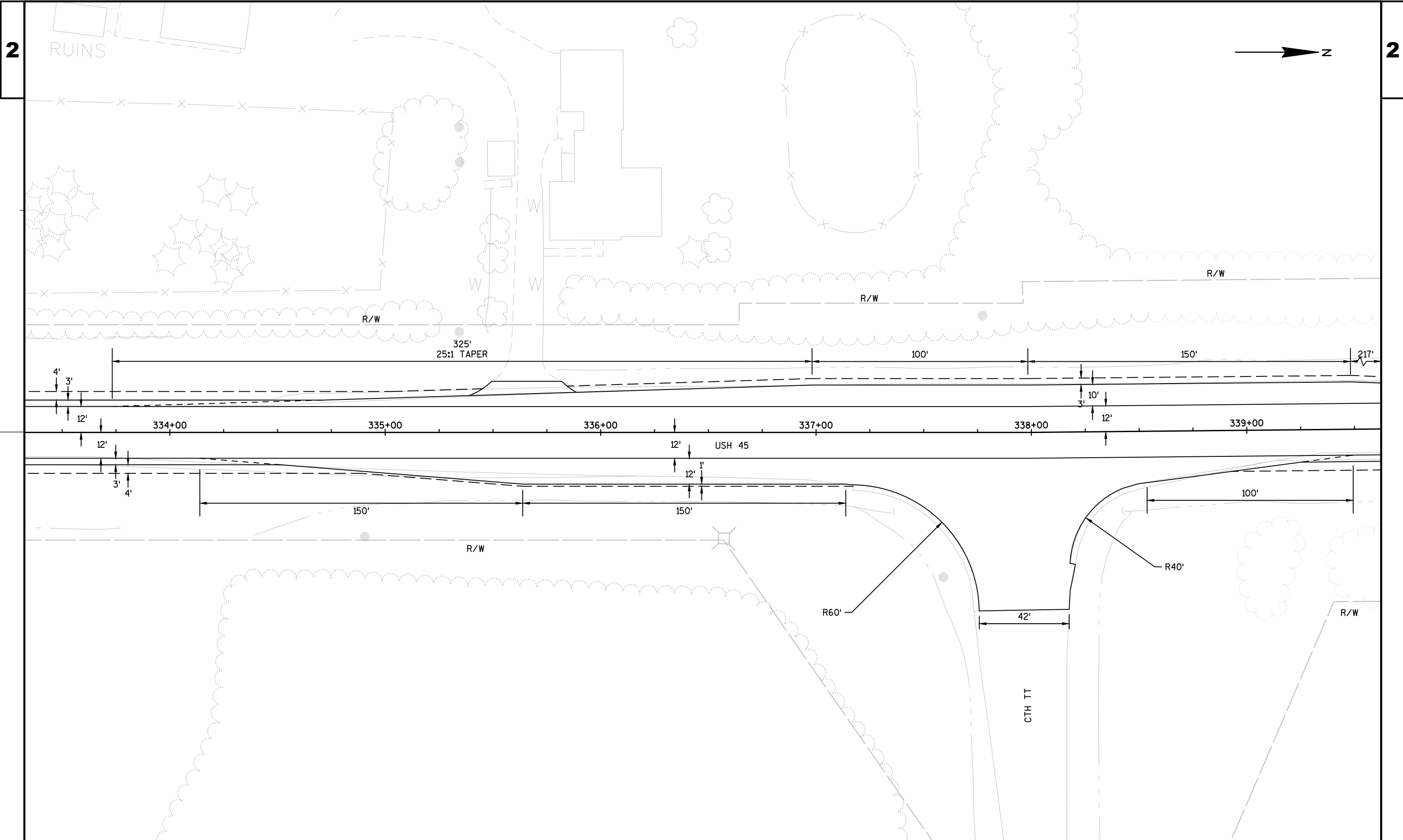
PROJECT NO:6430-07-60	HWY:USH 45	COUNTY:WAUPACA	INTERSECTION DETAIL - HICKORY RIDGE RD (TYPE C MODIFIED)	SHEET	E
-----------------------	------------	----------------	--	-------	---

2

2

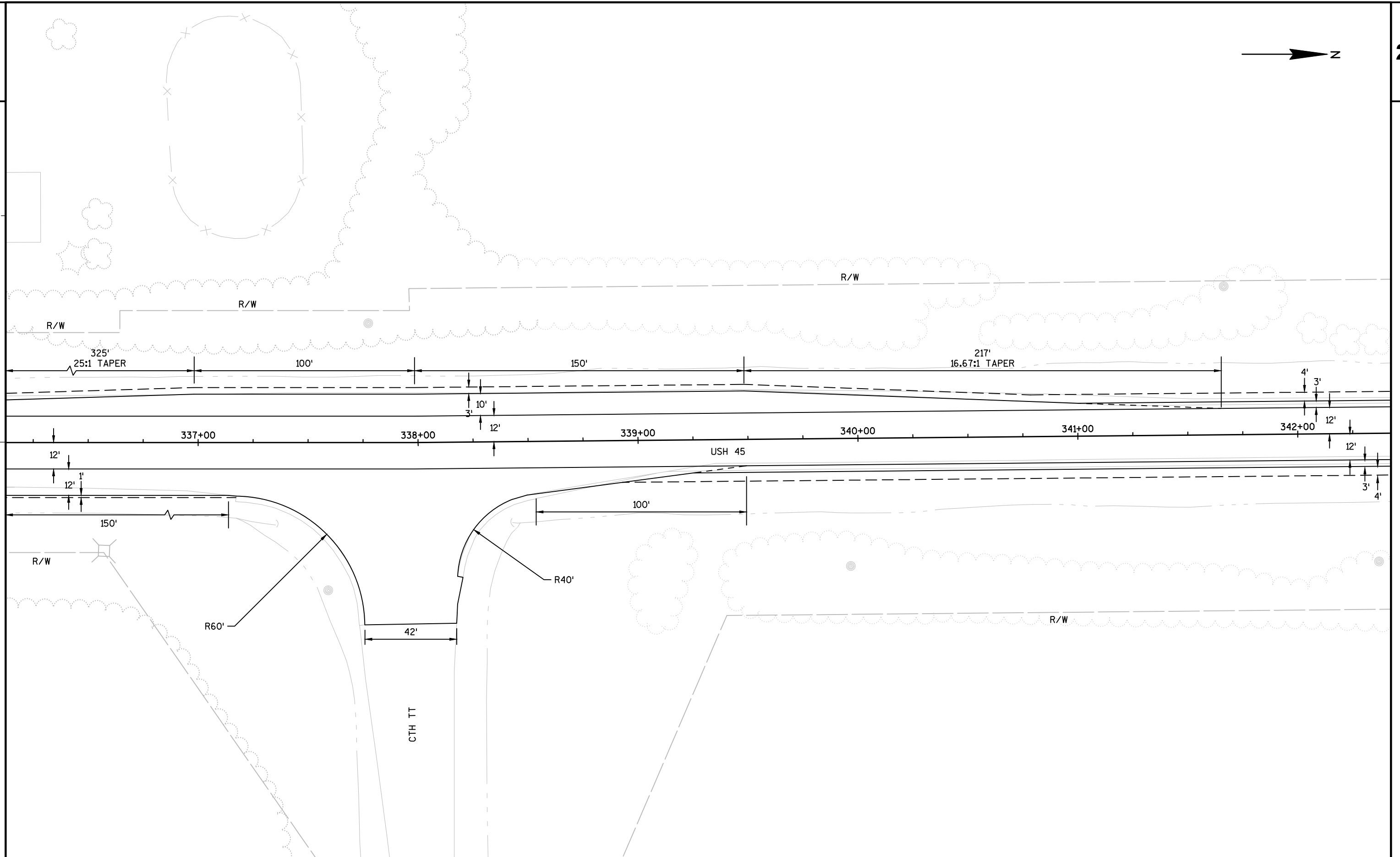






2

2



PROJECT NO:6430-07-60	HWY:USH 45	COUNTY:WAUPACA	INTERSECTION DETAIL - CTH TT (TYPE B2 MODIFIED)	SHEET	<b>E</b>
-----------------------	------------	----------------	---	-------	----------

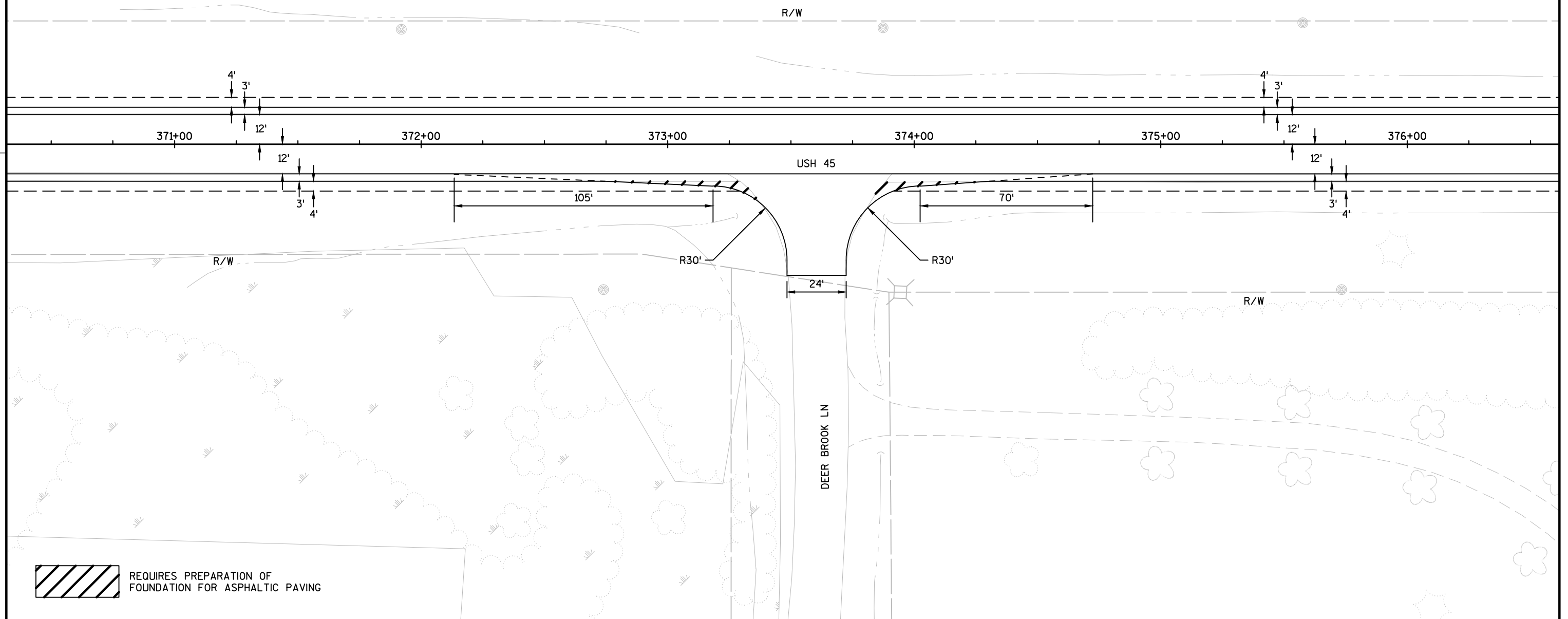
FILE NAME : N:\PDS\C3D\64300760\SHEETSP\PLAN\021101-ID.DWG  
021101-Id - 08

PLOT DATE : 10/6/2015 10:18 AM

PLOT BY : CHRISTIANSON, ERIN M PLOT NAME :

PLOT SCALE : 1 IN:40 FT

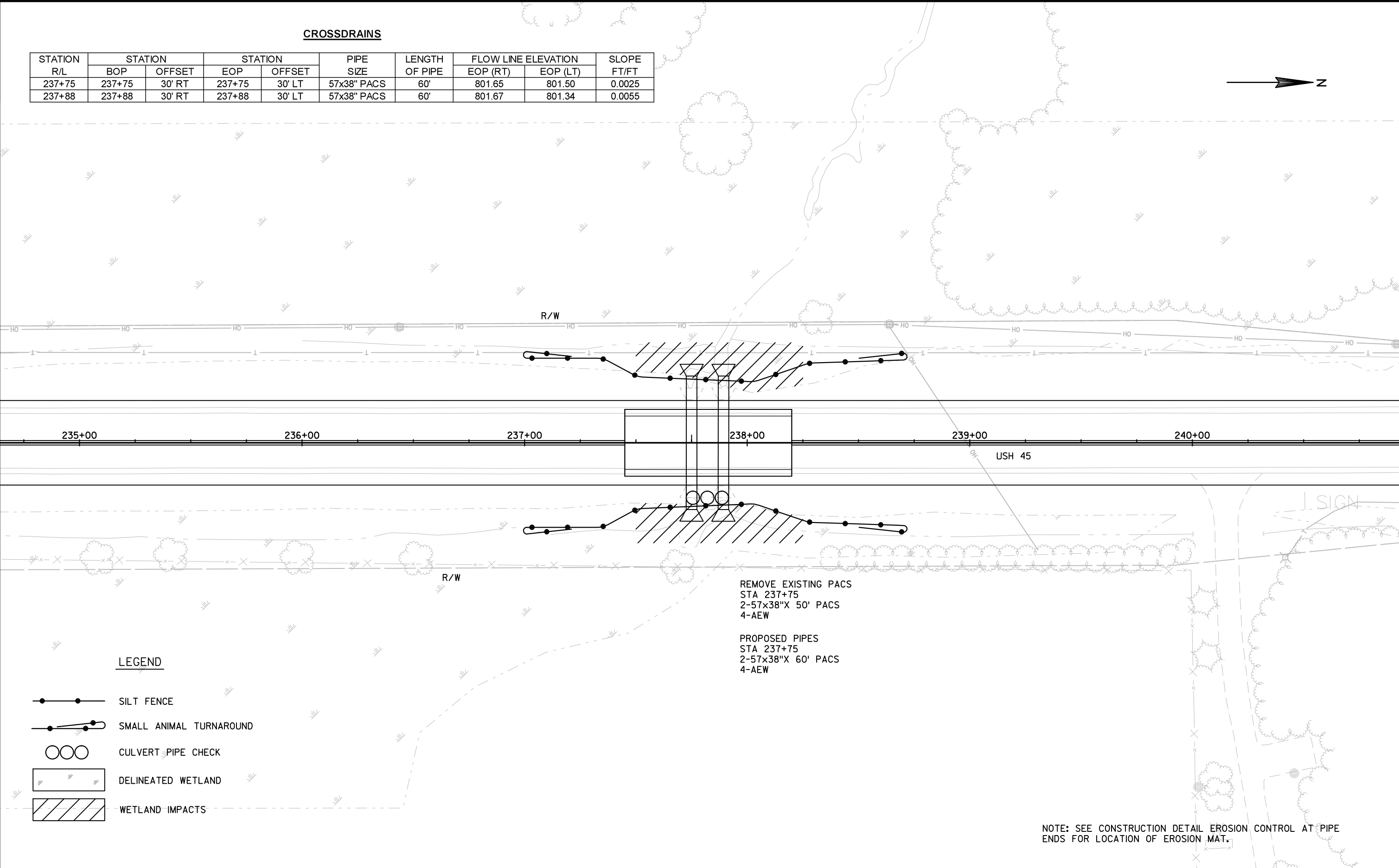
WISDOT/CADDS SHEET 42



REQUIRES PREPARATION OF  
FOUNDATION FOR ASPHALTIC PAVING

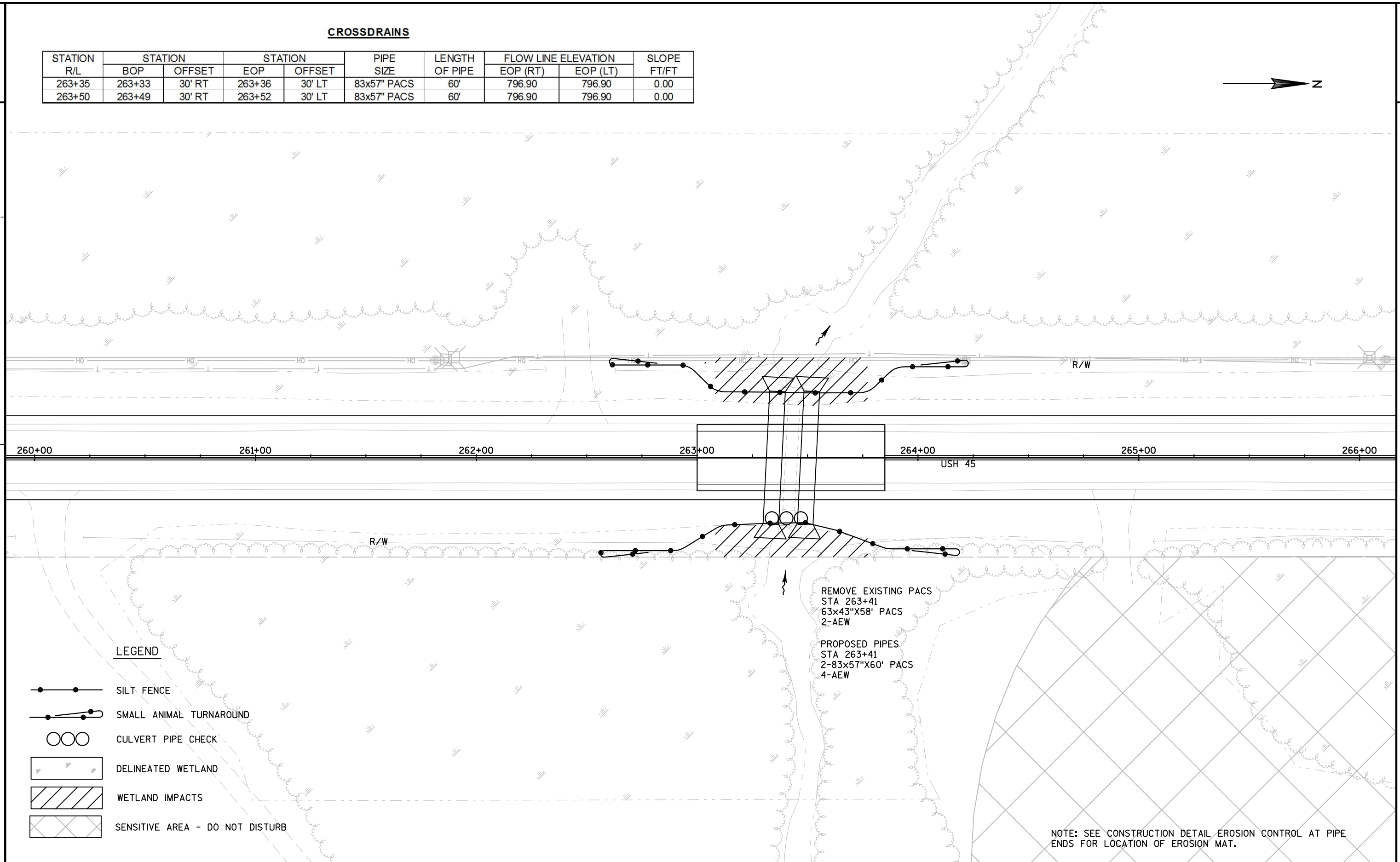
CROSSDRAINS

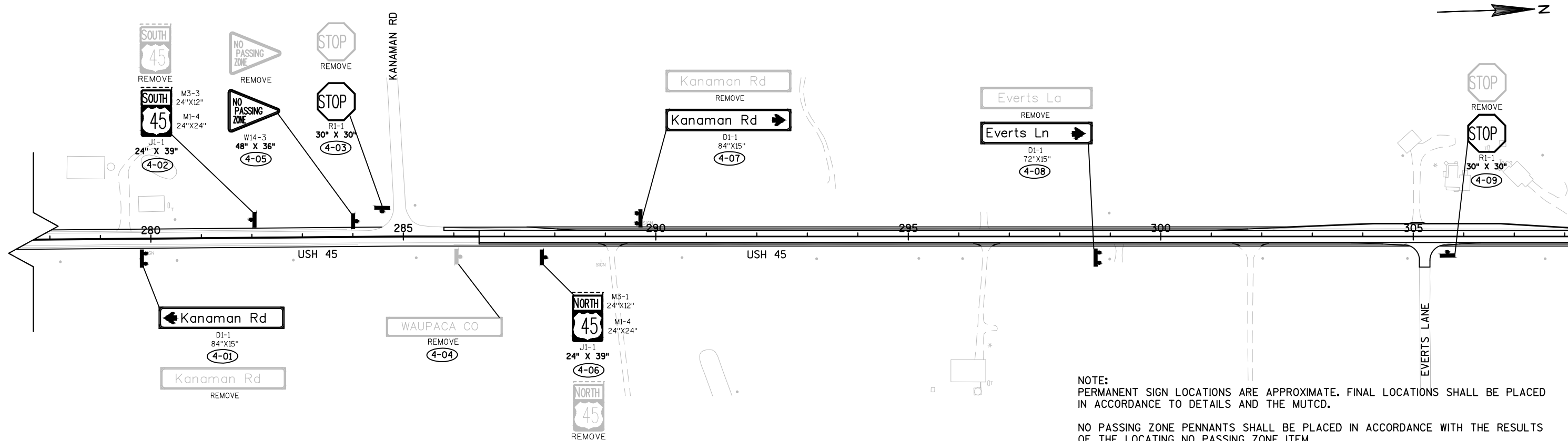
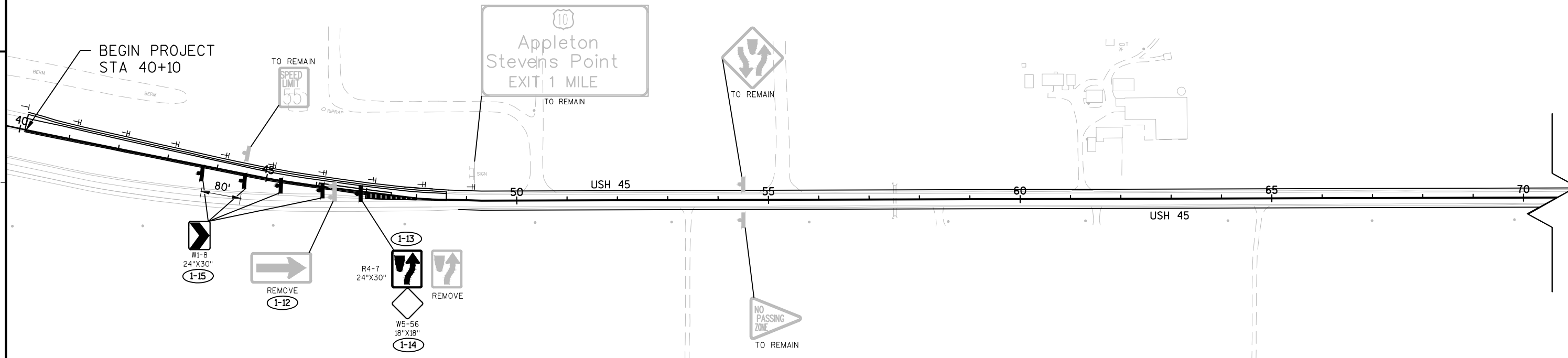
STATION R/L	STATION		STATION		PIPE SIZE	LENGTH OF PIPE	FLOW LINE ELEVATION		SLOPE FT/FT
	BOP	OFFSET	EOP	OFFSET			EOP (RT)	EOP (LT)	
237+75	237+75	30' RT	237+75	30' LT	57x38" PACS	60'	801.65	801.50	0.0025
237+88	237+88	30' RT	237+88	30' LT	57x38" PACS	60'	801.67	801.34	0.0055

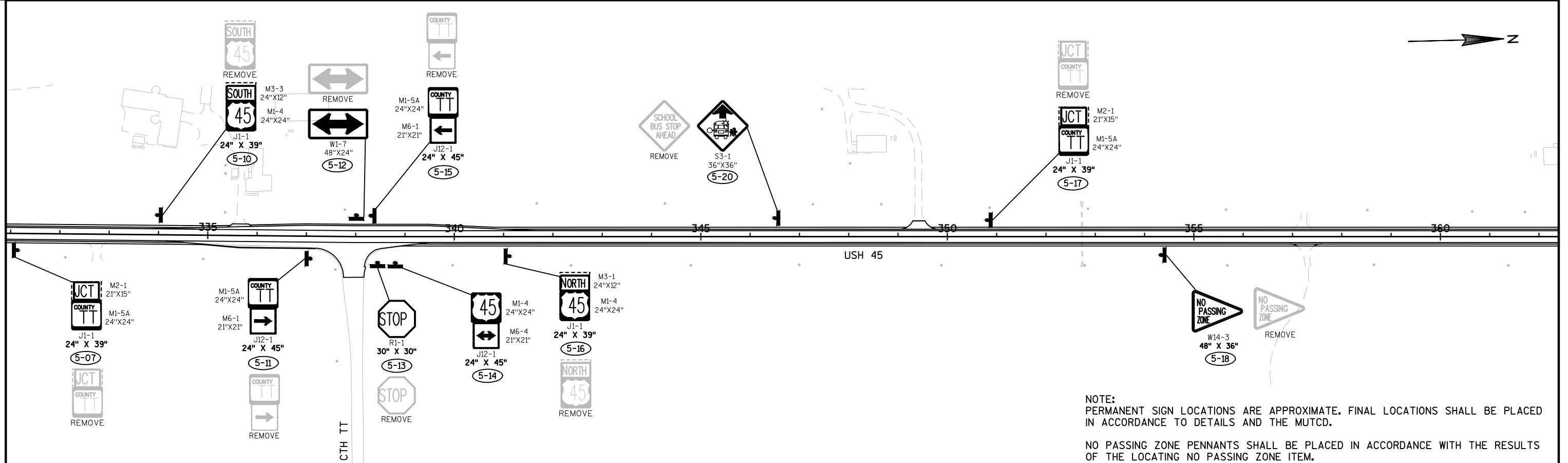
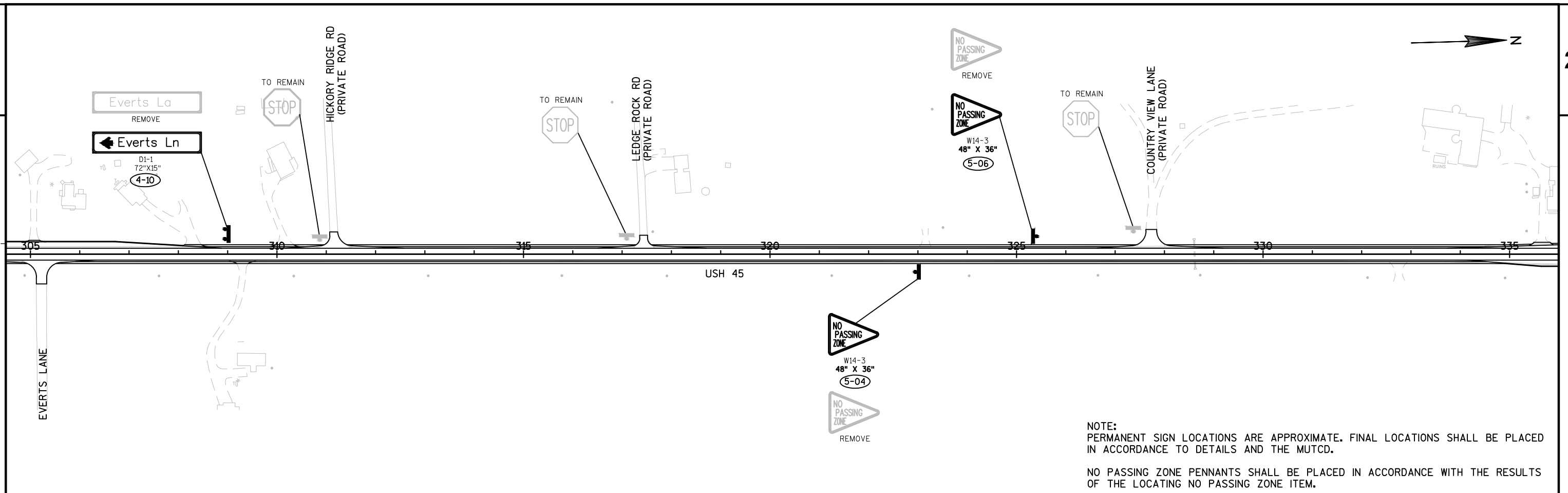


# 2

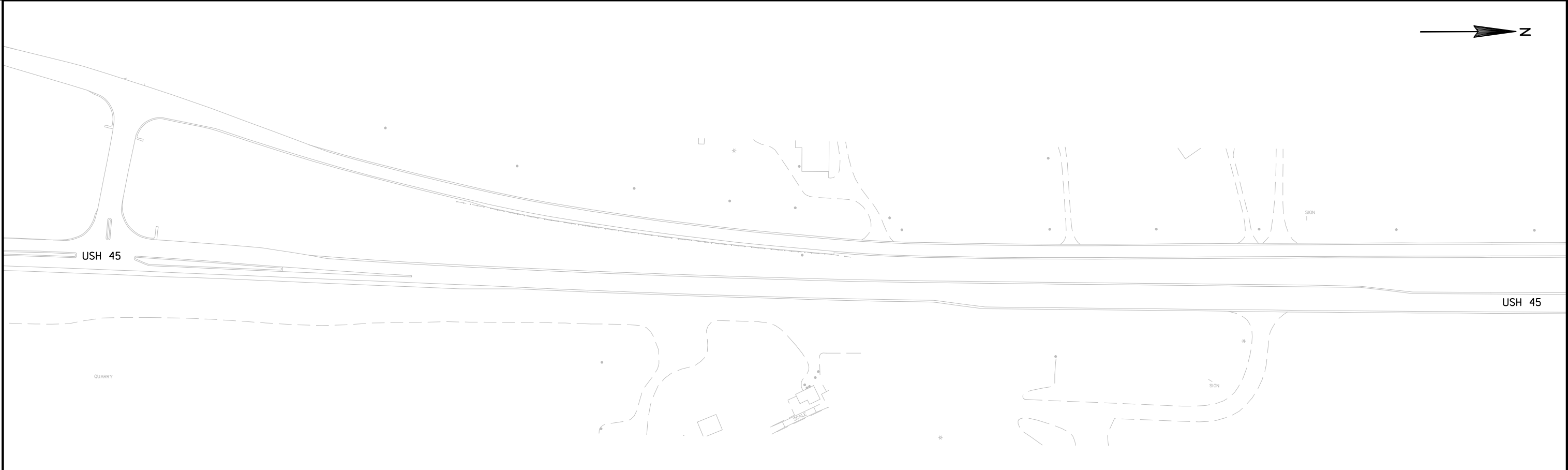
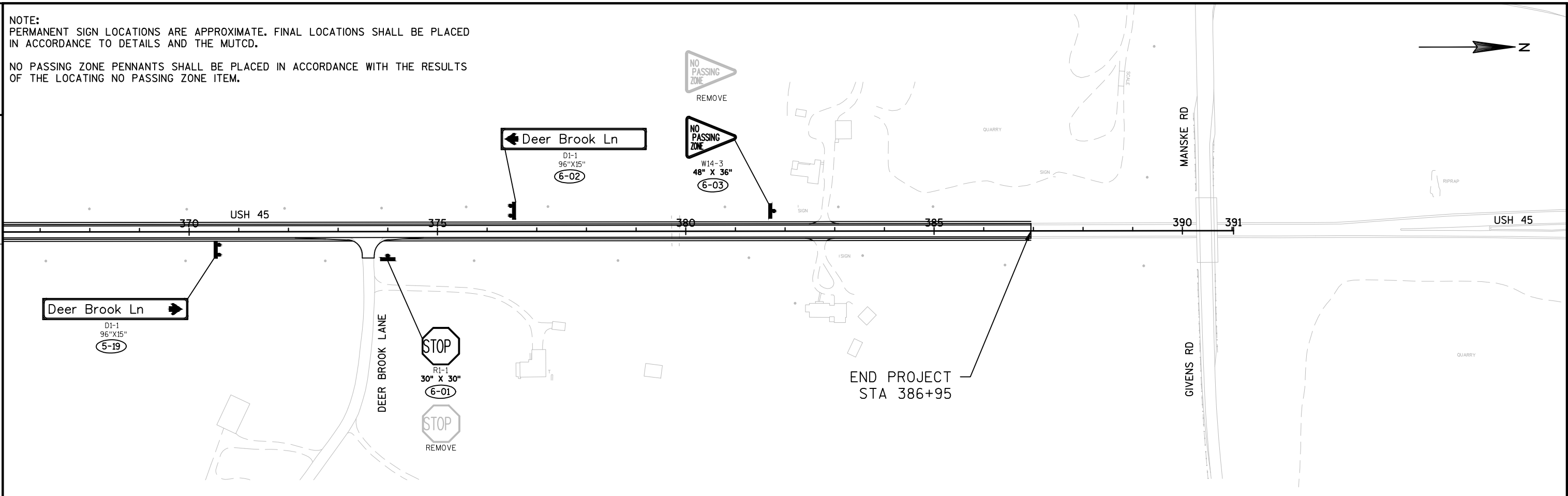
STATION R/L	STATION		STATION		PIPE SIZE	LENGTH OF PIPE	FLOW LINE ELEVATION		SLOPE FT/FT
	BOP	OFFSET	EOP	OFFSET			EOP (RT)	EOP (LT)	
263+35	263+33	30' RT	263+36	30' LT	83x57" PACS	60'	796.90	796.90	0.00
263+50	263+49	30' RT	263+52	30' LT	83x57" PACS	60'	796.90	796.90	0.00

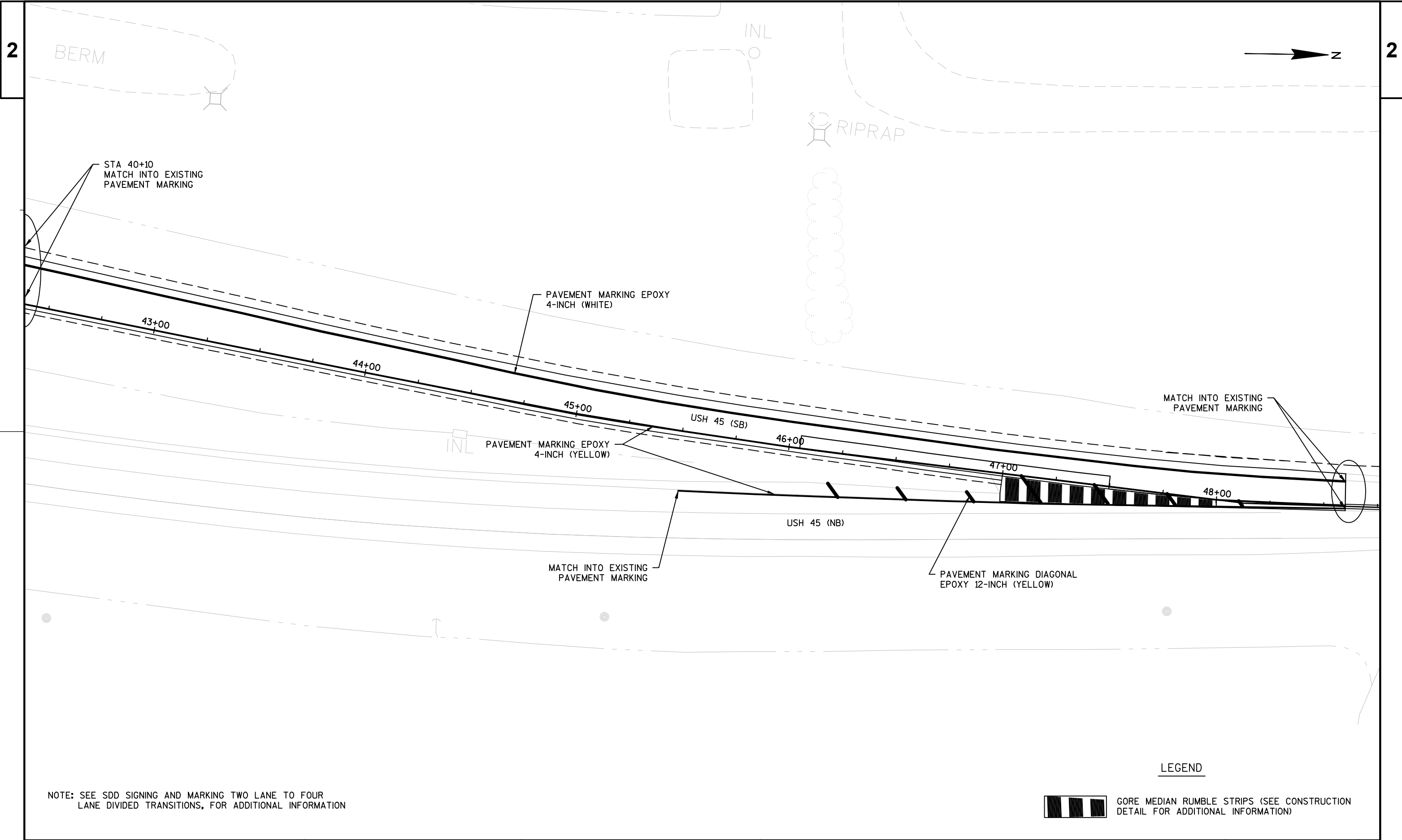


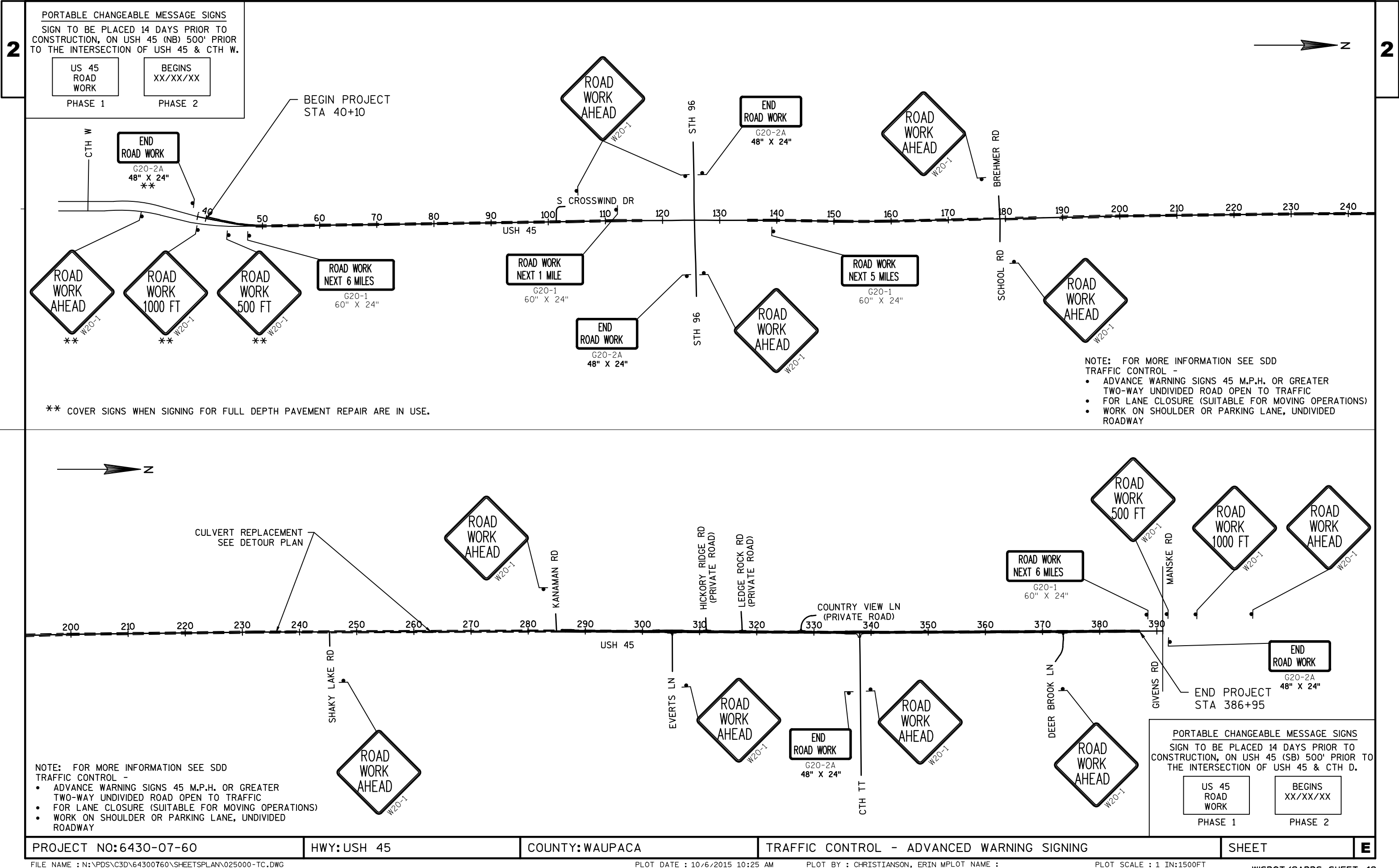




NOTE:  
PERMANENT SIGN LOCATIONS ARE APPROXIMATE. FINAL LOCATIONS SHALL BE PLACED  
IN ACCORDANCE TO DETAILS AND THE MUTCD.  
NO PASSING ZONE PENNANTS SHALL BE PLACED IN ACCORDANCE WITH THE RESULTS  
OF THE LOCATING NO PASSING ZONE ITEM.



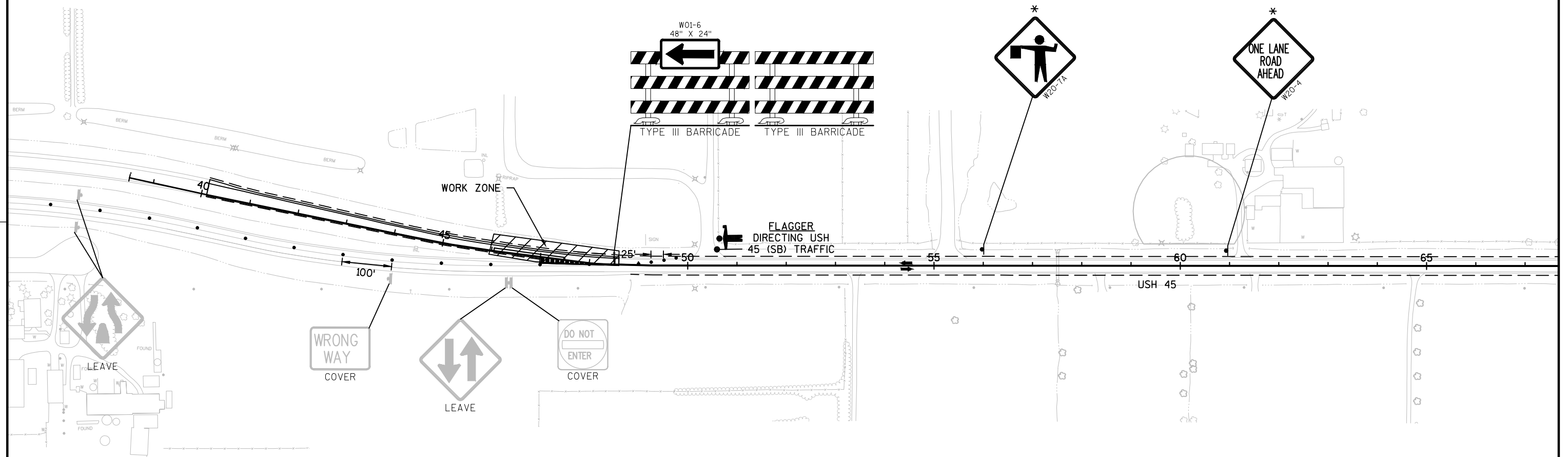




NOTE: FOR MORE INFORMATION SEE SDD  
TRAFFIC CONTROL -  
• ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER  
TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC  
• FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)  
• WORK ON SHOULDER OR PARKING LANE, UNDIVIDED  
ROADWAY

NOTE: FOR MORE INFORMATION SEE SDD  
TRAFFIC CONTROL -  
• ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER  
TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC  
• FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)  
• WORK ON SHOULDER OR PARKING LANE, UNDIVIDED  
ROADWAY



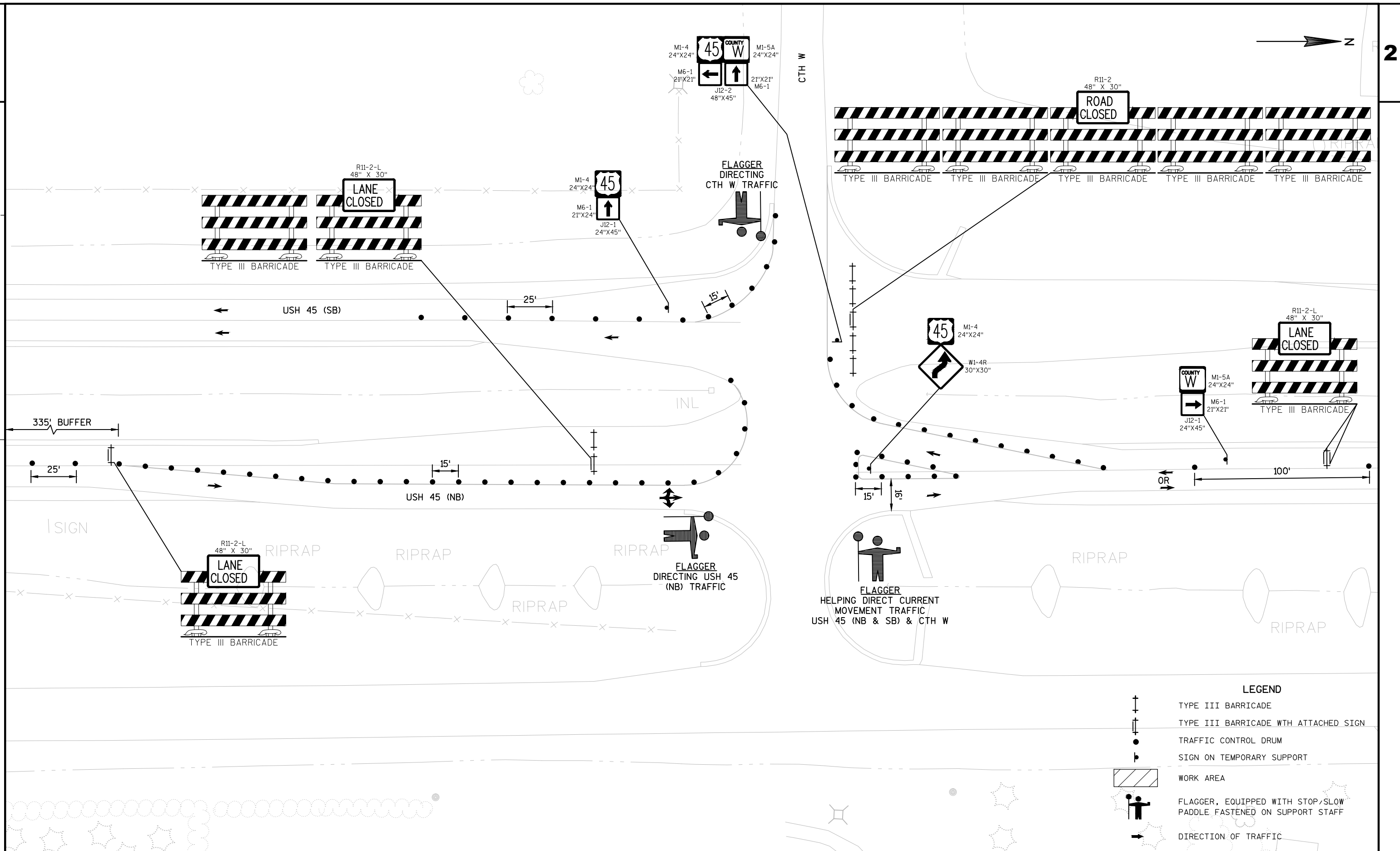


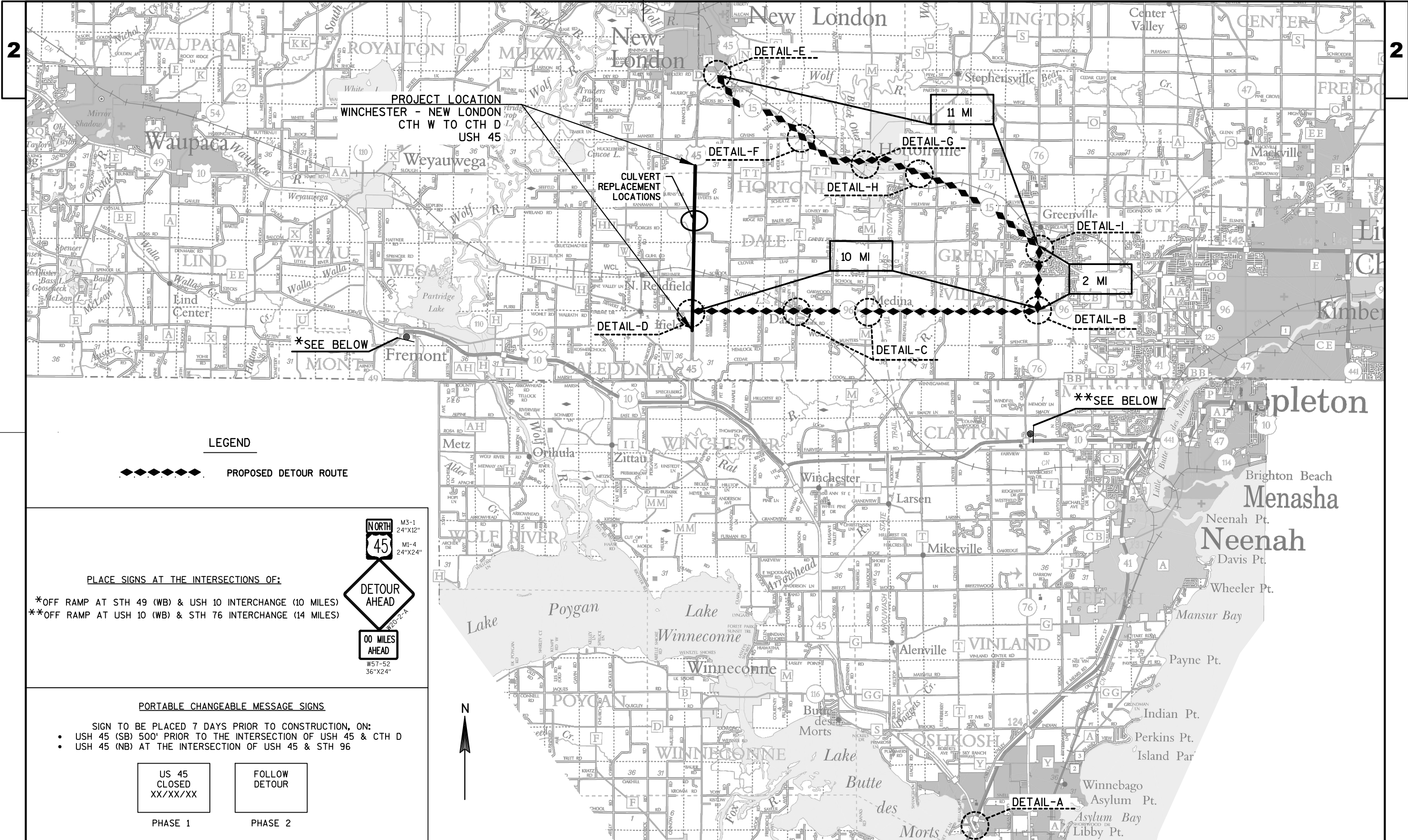
LEGEND

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

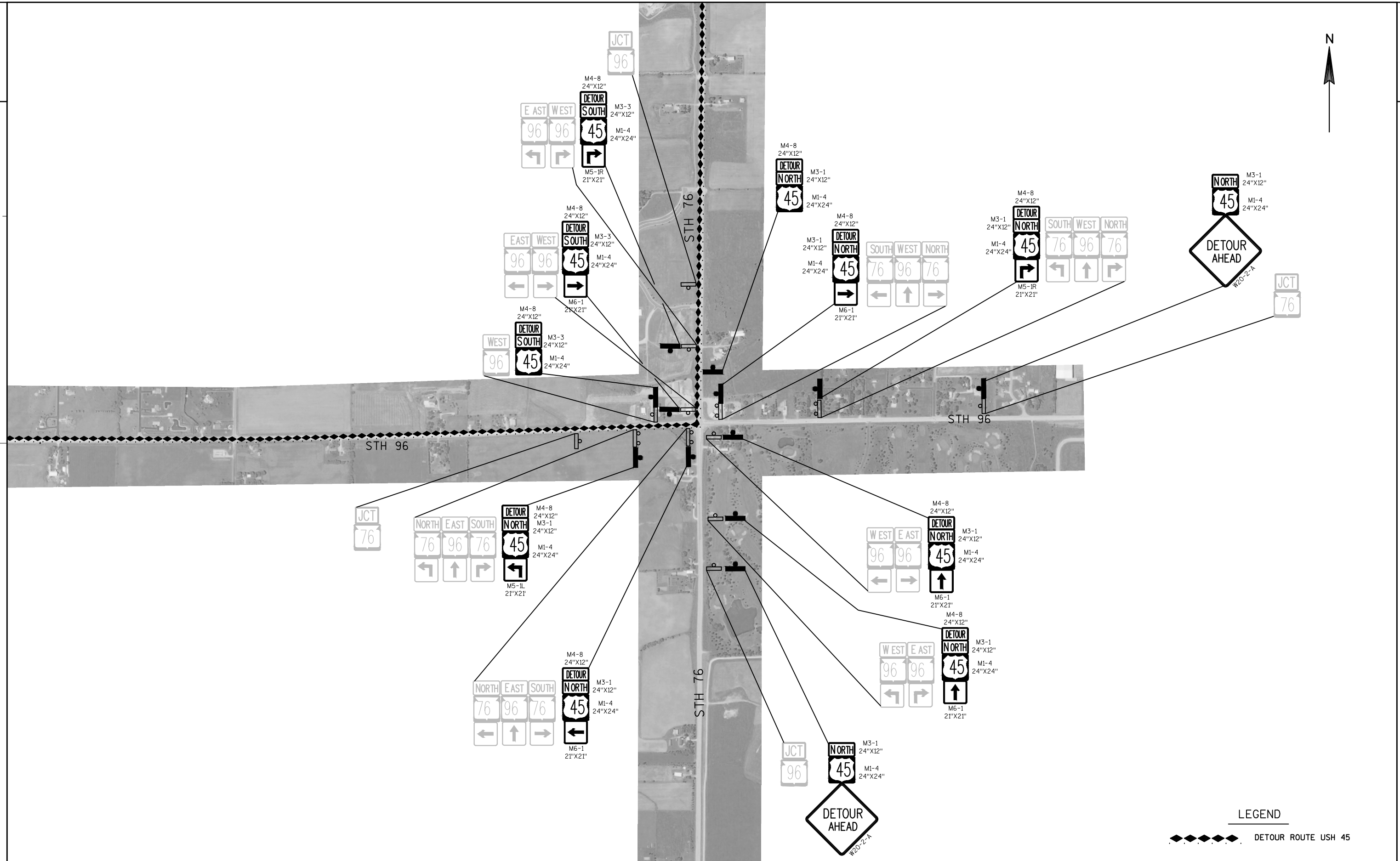
NOTE: FOR MORE INFORMATION SEE SDD  
TRAFFIC CONTROL -  
• FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)  
• LANE CLOSURE  
• INTERSECTION WITHIN SINGLE LANE CLOSURE

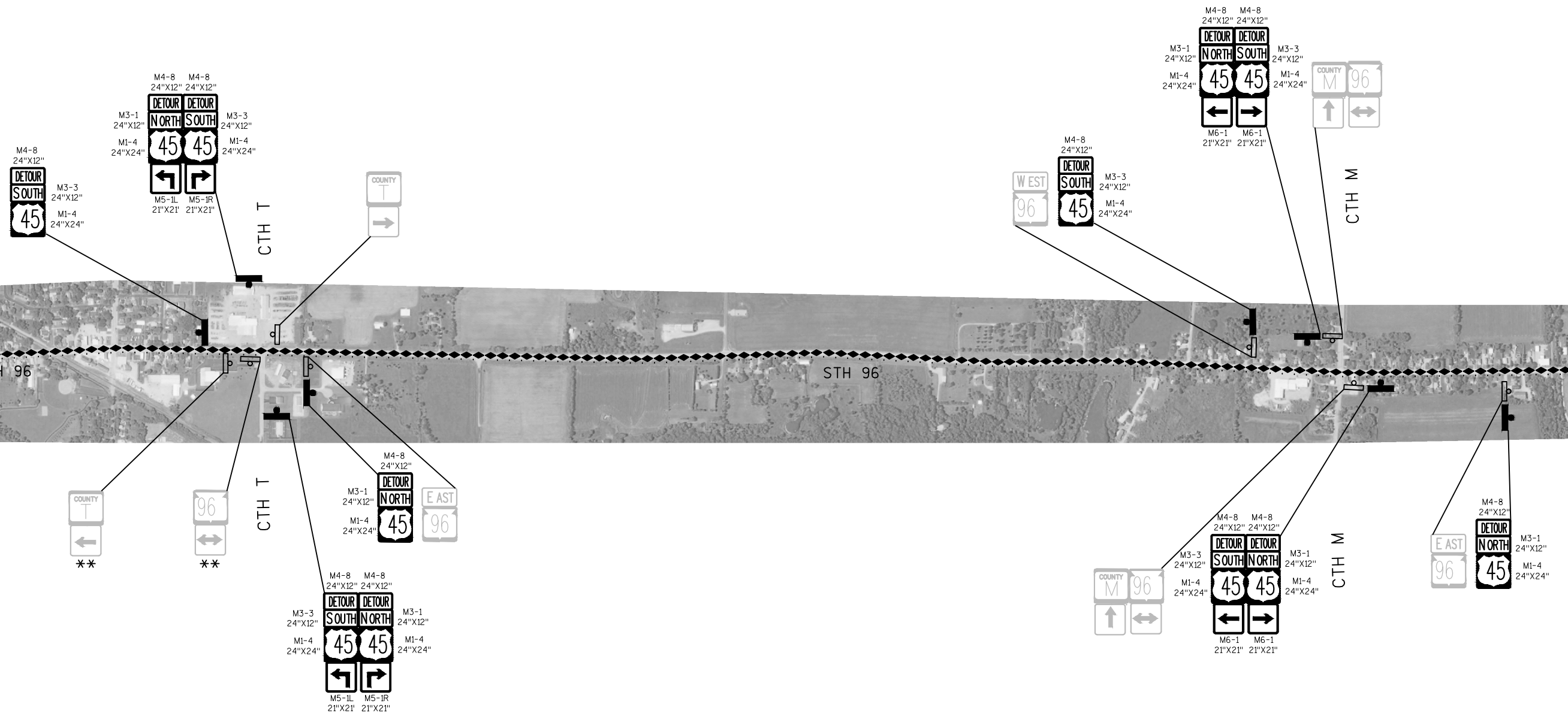
\* SIGNS ARE INCIDENTAL. SEE SDD TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS). SIGN LOCATIONS MAY BE ADJUSTED IN THE FIELD BASED UPON CONDITIONS.








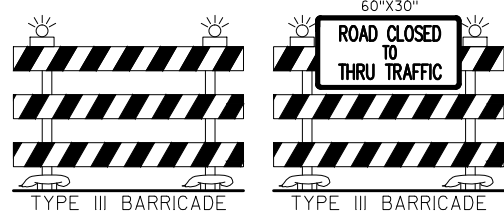




LEGEND

 DETOUR ROUTE USH 45

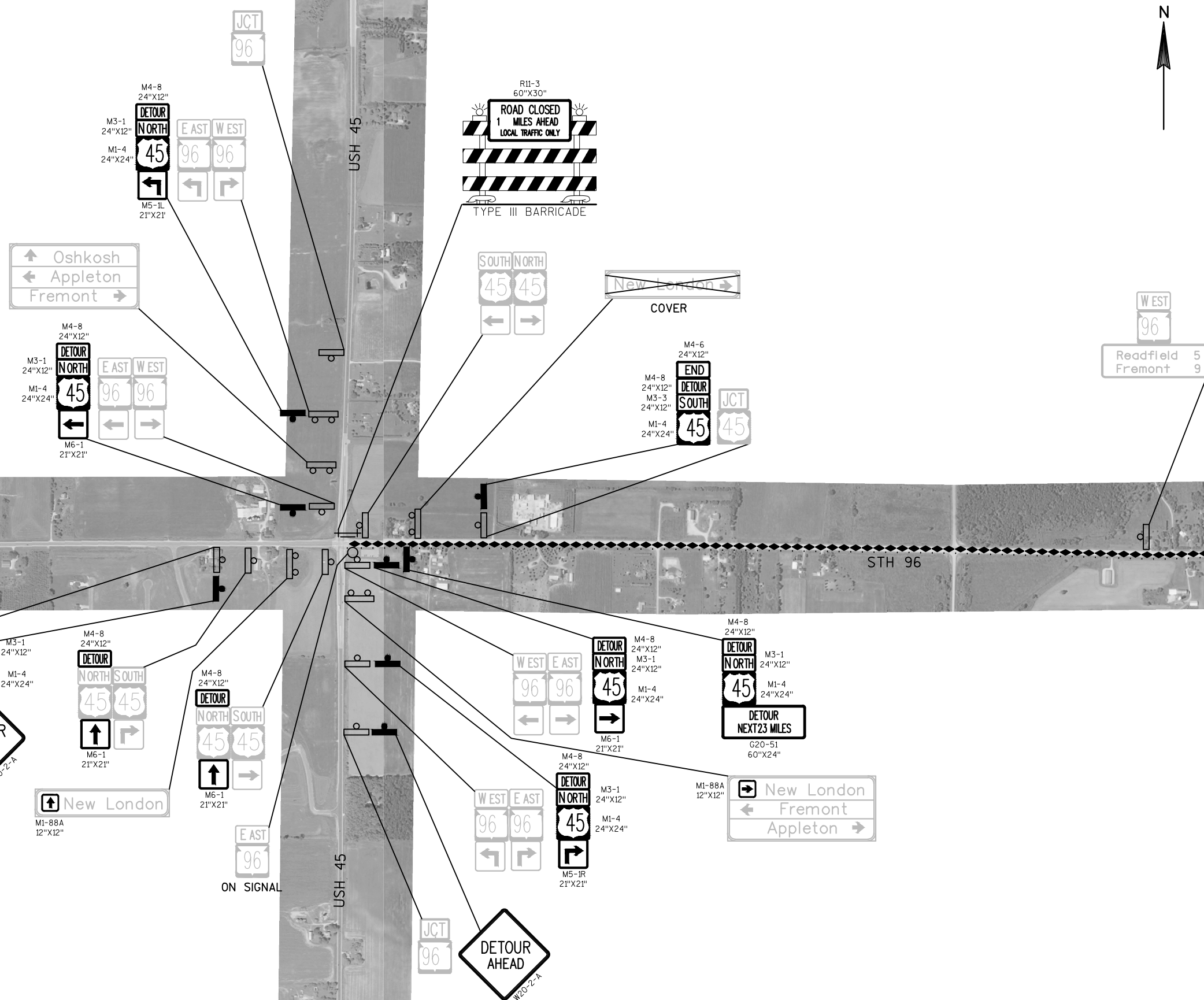
2



INSTALL AT THE INTERSECTIONS OF USH 45 & SCHOOL  
RD/BREHMER RD AND AT USH 45 & KANAMAN RD.

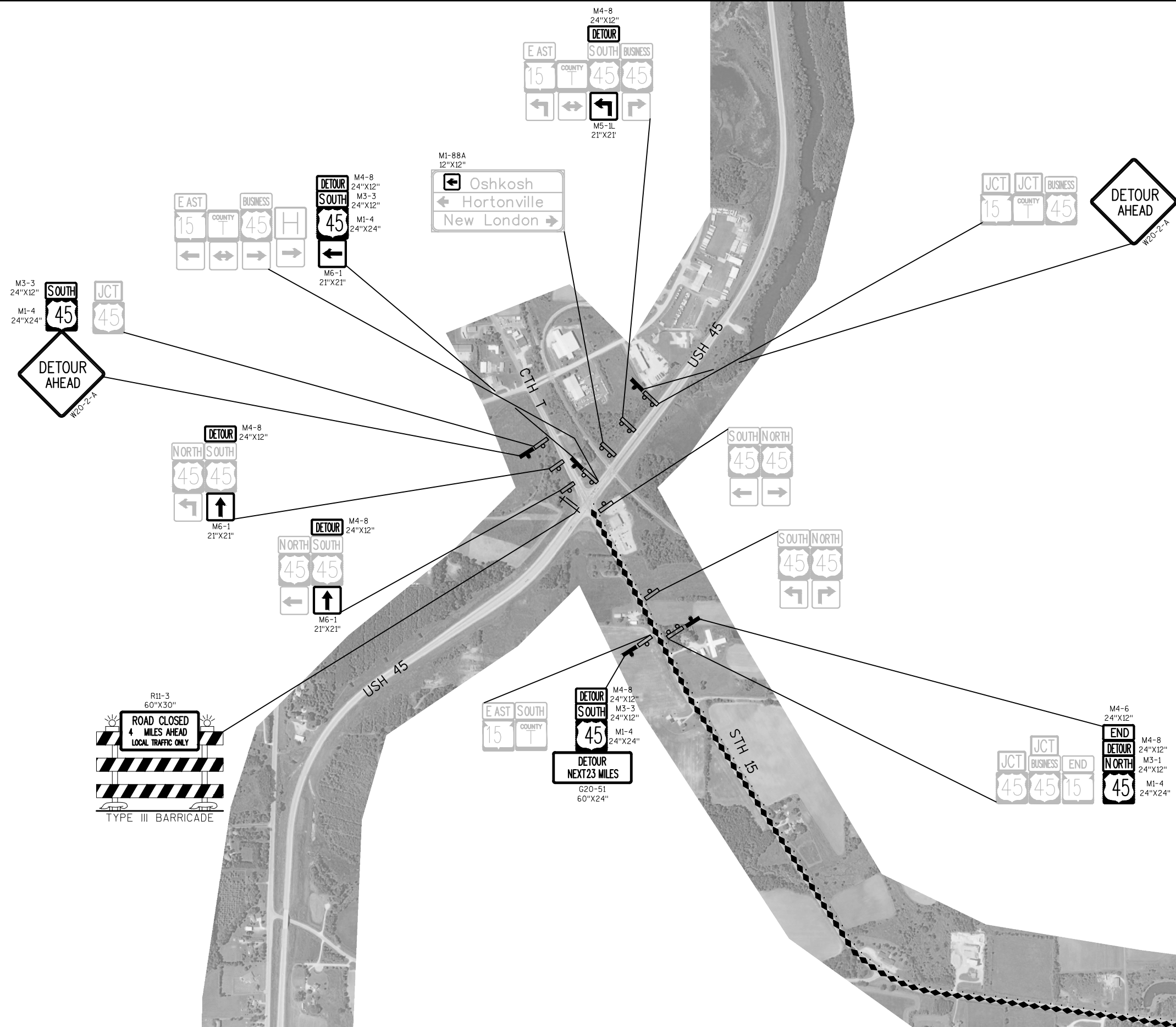
SEE SDD BARRICADES AND SIGNS FOR MAINLINE CLOSURES  
FOR MORE INFORMATION.

2



LEGEND

◆◆◆◆◆ DETOUR ROUTE USH 45



LEGEND

◆◆◆◆◆◆◆◆◆◆ DETOUR ROUTE USH 45

PROJECT NO: 6430-07-60

HWY: USH 45

COUNTY: WAUPACA

DETOUR - DETAIL E

SHEET

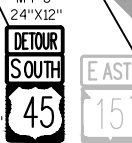
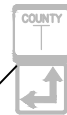
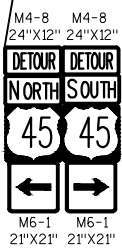
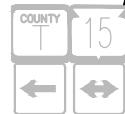
E



STH 15



CTH T



STH 15

## LEGEND

 DETOUR ROUTE USH 45

PROJECT NO:6430-07-60

HWY:USH 45

COUNTY:WAUPACA

DETOUR - DETAIL F

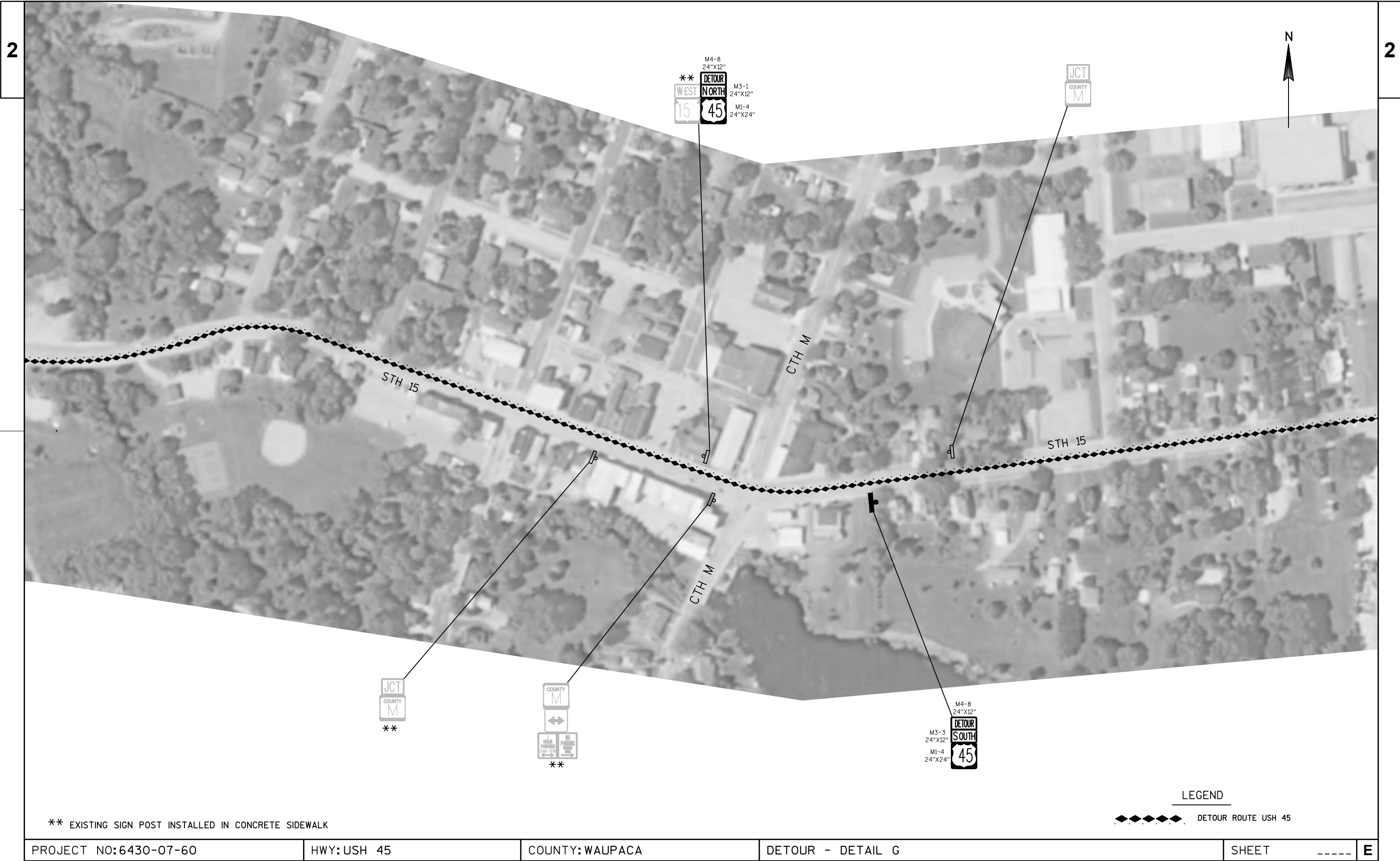
SHEET ----- E

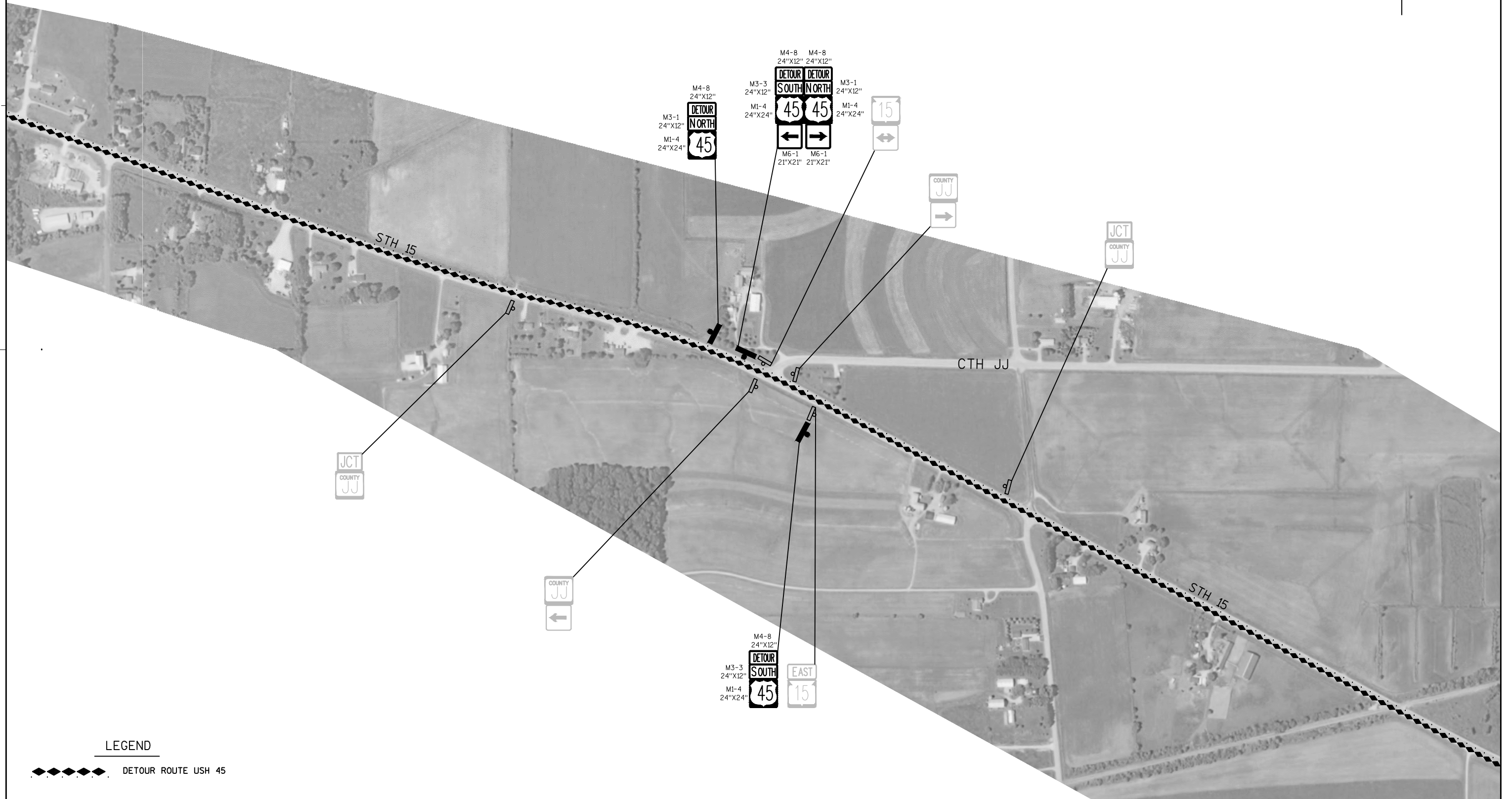
FILE NAME : N:\PDS\C3D\64300760\SHEETPLAN\027002-DT.DWG  
LAYOUT NAME - \*\*\*\*\*

PLOT DATE : 10/6/2015 10:31 AM

PLOT BY : CHRISTIANSON, ERIN M  
PLOT NAME : ----- PLOT SCALE : 1 IN:500 FT

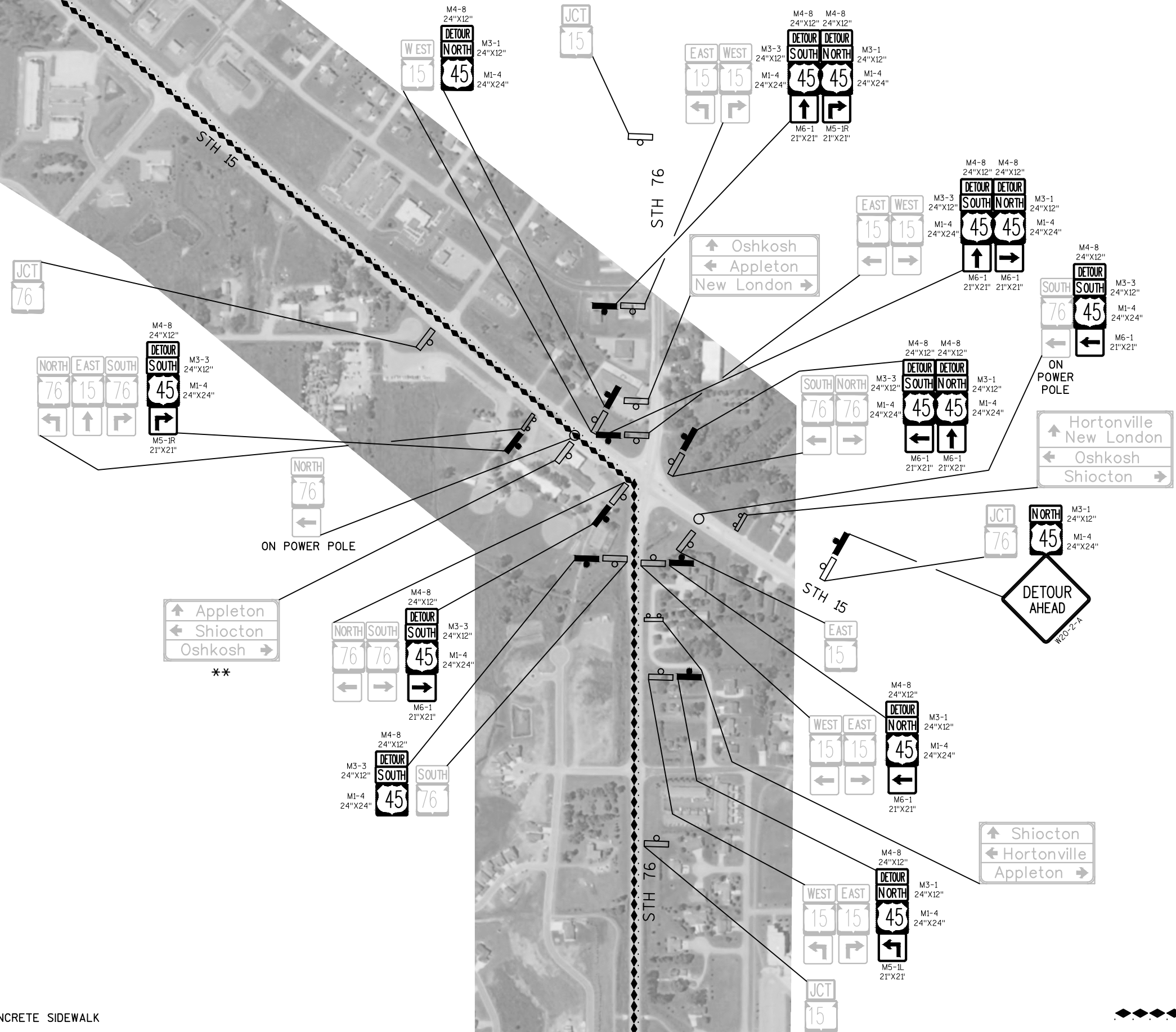
WISDOT/CADDs SHEET 42





LEGEND

DETOUR ROUTE USH 45



\*\* EXISTING SIGN POST INSTALLED IN CONCRETE SIDEWALK

LEGEND

◆◆◆◆◆ DETOUR ROUTE USH 45

DATE 04FEB16		E S T I M A T E O F Q U A N T I T I E S			
LINE					6430-07-60
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTI TY
0010	203.0100	Removing Small Pipe Culverts	EACH	3.000	3.000
0020	204.0110	Removing Asphaltic Surface	SY	9,266.000	9,266.000
0030	204.0120	Removing Asphaltic Surface Milling 01. Sideroad	SY	2,228.000	2,228.000
0040	204.0120	Removing Asphaltic Surface Milling 02. C/L Mill	SY	4,808.000	4,808.000
0050	204.0125	Removing Asphaltic Surface Milling	TON	2,540.000	2,540.000
0060	204.0180	Removing Delineators and Markers	EACH	14.000	14.000
0070	205.0100	Excavation Common	CY	984.000	984.000
0080	209.0100	Backfill Granular	CY	600.000	600.000
0090	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 6430-07-60	LS	1.000	1.000
0100	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	207.000	207.000
0110	213.0100	Finishing Roadway (project) 01. 6430-07-60	EACH	1.000	1.000
0120	305.0110	Base Aggregate Dense 3/4-Inch	TON	5,620.000	5,620.000
0130	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	418.000	418.000
0140	305.0500	Shaping Shoulders	STA	202.000	202.000
0150	440.4410	Incentive IRI Ride	DOL	7,600.000	7,600.000
0160	455.0105	Asphaltic Material PG58-28	TON	321.700	321.700
0170	455.0605	Tack Coat	GAL	3,068.000	3,068.000
0180	460.1103	HMA Pavement Type E-3	TON	5,848.000	5,848.000
0190	460.2000	Incentive Density HMA Pavement	DOL	3,760.000	3,760.000
0200	465.0475	Asphalt Center Line Rumble Strips 2-Lane Rural	LF	27,580.000	27,580.000
0210	521.0757	Pipe Arch Corrugated Steel 57x38-Inch	LF	120.000	120.000
0220	521.0783	Pipe Arch Corrugated Steel 83x57-Inch	LF	120.000	120.000
0230	521.1257	Apron Endwalls for Pipe Arch Steel 57x38-Inch	EACH	4.000	4.000
0240	521.1283	Apron Endwalls for Pipe Arch Steel 83x57-Inch	EACH	4.000	4.000
0250	618.0100	Maintenance And Repair of Haul Roads (project) 01. 6430-07-60	EACH	1.000	1.000
0260	619.1000	Mobilization	EACH	1.000	1.000
0270	621.0100	Landmark Reference Monuments	EACH	32.000	32.000
0280	624.0100	Water	MGAL	15.000	15.000
0290	625.0500	Salvaged Topsoil	SY	500.000	500.000
0300	627.0200	Mulching	SY	500.000	500.000
0310	628.1504	Silt Fence	LF	1,000.000	1,000.000
0320	628.1520	Silt Fence Maintenance	LF	1,000.000	1,000.000
0330	628.1905	Mobilizations Erosion Control	EACH	3.000	3.000
0340	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0350	628.2008	Erosion Mat Urban Class I Type B	SY	650.000	650.000
0360	628.7555	Culvert Pipe Checks	EACH	60.000	60.000
0370	629.0210	Fertilizer Type B	CWT	0.350	0.350
0380	630.0160	Seeding Mixture No. 60	LB	7.000	7.000
0390	633.0100	Delineator Posts Steel	EACH	10.000	10.000
0400	633.0500	Delineator Reflectors	EACH	19.000	19.000
0410	633.5200	Markers Culvert End	EACH	12.000	12.000
0420	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	5.000	5.000
0430	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	20.000	20.000
0440	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	12.000	12.000
0450	637.2210	Signs Type II Reflective H	SF	163.470	163.470
0460	637.2230	Signs Type II Reflective F	SF	47.000	47.000

DATE 04FEB16		E S T I M A T E O F Q U A N T I T I E S				
LINE					6430-07-60	
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY	
0470	638.2102	Moving Signs Type II	EACH	6.000	6.000	
0480	638.2602	Removing Signs Type II	EACH	26.000	26.000	
0490	638.3000	Removing Small Sign Supports	EACH	29.000	29.000	
0500	642.5201	Field Office Type C	EACH	1.000	1.000	
0510	643.0100	Traffic Control (project) 01. 6430-07-60	EACH	1.000	1.000	
0520	643.0300	Traffic Control Drums	DAY	420.000	420.000	
0530	643.0420	Traffic Control Barricades Type III	DAY	31.000	31.000	
0540	643.0900	Traffic Control Signs	DAY	774.000	774.000	
0550	643.0910	Traffic Control Covering Signs Type I	EACH	1.000	1.000	
0560	643.0920	Traffic Control Covering Signs Type II	EACH	4.000	4.000	
0570	643.1050	Traffic Control Signs PCMS	DAY	31.000	31.000	
0580	643.2000	Traffic Control Detour (project) 01. 6430-07-60	EACH	1.000	1.000	
0590	643.3000	Traffic Control Detour Signs	DAY	741.000	741.000	
0600	646.0106	Pavement Marking Epoxy 4-Inch	LF	26,329.500	26,329.500	
0610	646.0406	Pavement Marking Same Day Epoxy 4-Inch	LF	23,761.500	23,761.500	
0620	646.2304.S	Pavement Marking Grooved Wet Reflective Epoxy 4-Inch	LF	67,120.000	67,120.000	
0630	647.0726	Pavement Marking Diagonal Epoxy 12-Inch	LF	55.000	55.000	
0640	648.0100	Locating No-Passing Zones	MI	6.420	6.420	
0650	649.0403	Temporary Pavement Marking Epoxy 4-Inch	LF	5,000.000	5,000.000	
0660	650.6000	Construction Staking Pipe Culverts	EACH	4.000	4.000	
0670	650.8000	Construction Staking Resurfacing Reference	LF	10,895.000	10,895.000	
0680	650.9910	Construction Staking Supplemental Control (project) 01. 6430-07-60	LS	1.000	1.000	
0690	690.0150	Sawing Asphalt	LF	920.000	920.000	
0700	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	1,200.000	1,200.000	
0710	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	600.000	600.000	
0720	SPV.0060	Special 01. Reestablish Section Corner Monuments	EACH	8.000	8.000	
0730	SPV.0105	Special 01. Gore Median Rumble Strips	LS	1.000	1.000	

3

REMOVING SMALL PIPE CULVERTS

203.0100			
STATION	LOCATION	EACH	REMARKS
CATEGORY 0010			
237+75	USH 45	1	CROSSDRAIN
237+89	USH 45	1	CROSSDRAIN
263+41	USH 45	1	CROSSDRAIN
TOTAL		3	

REMOVING ASPHALTIC SURFACE

204.0110			
STATION - STATION	LOCATION	SY	REMARKS
CATEGORY 0010			
46+05 - 47+50	USH 45 (SB)	129	FULL DEPTH
47+00 - 48+00	USH 45 (GORE)	86	FULL DEPTH
285+80 - 288+00	USH 45 (LT)	122	RT TURN LANE
286+50 - 386+95	USH 45 (LT & RT)	8929	FULL DEPTH SHLD
TOTAL		9266	

REMOVING ASPHALTIC SURFACE MILLING

		204.0120	
STATION - STATION	LOCATION	01. SIDEROAD SY	02. C/L MILL SY
<b><u>CATEGORY 0010</u></b>			
302+18 - 308+70	USH 45 (LT)	527	---
304+87 - 305+64	EVERTS LN	159	---
310+90 - 311+47	HICKORY RIDGE RD	104	---
317+25 - 317+64	LEDGE ROCK RD	59	---
327+42 - 328+04	COUNTRY VIEW LN	134	---
334+45 - 340+94	USH 45 (LT)	410	---
334+45 - 339+08	CTH TT (LT)	686	---
373+28 - 373+89	DEER BROOK LN	149	---
<b>CATEGORY 0010 TOTALS</b>		<b>2228</b>	<b>0</b>
<b><u>CATEGORY 0020</u></b>			
48+00 - 116+40	USH 45 C/L	---	1507
134+85 - 186+76	USH 45 C/L	---	1154
188+28 - 286+50	USH 45 C/L	---	2147
<b>CATEGORY 0020 TOTALS</b>		<b>0</b>	<b>4808</b>
<b>GRAND TOTALS</b>		<b>2228</b>	<b>4808</b>

EARTHWORK SUMMARY

DIVISION	FROM/TO STATION	LOCATION	205.0100	SALVAGED/	AVAILABLE	UNEXPANDED	EXPANDED	MASS	WASTE	209.0100
			COMMON EXCAVATION CY	UNUSABLE PAVEMENT CY	MATERIAL CY	FILL CY	FILL FACTOR 1.25 CY			ORDINATE +/- CY
<b>CATEGORY 0010</b>										
DIVISION 1-USH 45	237+45 - 238+20	USH 45	420	56	364	47	59	305	305	260
	263+00 - 263+85	USH 45	564	63	501	1	1	500	500	340
TOTALS			984	119	865	48	60	805	805	600

- 1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100  
2) Salvaged/Unsuable Pavement Material is included in Cut.  
5) Available Material = Cut - Salvaged/Unusuable Pavement Material  
13) Expanded Fill Factor = 1.25  
14) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division.  
Minus indicates a shortage of material within the Division.

REMOVING ASPHALTIC SURFACE MILLING

204.0125		
STATION - STATION	LOCATION	TON
CATEGORY 0010		
40+10 - 46+05	USH 45 (SB)	146
46+05 - 48+60	USH 45 (SB)	31
286+50 - 386+95	USH 45	2363
TOTAL		2540

REMOVING DELINEATORS AND MARKERS

204.0180		
STATION - STATION	LOCATION	EACH
CATEGORY 0010		
40+10 - 48+60	USH 45 (SB)	8
267+37	USH 45 (LT & RT)	2
328+61	USH 45 (LT & RT)	2
379+80	USH 45 (LT & RT)	2
TOTAL		14

PREPARE FOUNDATION

STATION - STATION	LOCATION	211.0100	211.0400	REMARKS
		ASPHALTIC PAVING LS	ASPHALTIC SHOULDERS STA	
<b>CATEGORY 0010</b>				
47+00 - 48+00	USH 45 GORE	1	---	SEE CONSTRUCTION DETAIL
285+75 - 386+95	SIDEROADS			SEE INTERSECTION DETAILS
40+10 - 47+00	USH 45 (SB) RT	---	7	SHOULDER WIDENING
288+00 - 386+95	USH 45 (LT)	---	99	FULL DEPTH SHLD REMOVAL
286+50 - 386+95	USH 45 (RT)	---	101	FULL DEPTH SHLD REMOVAL
<b>TOTALS</b>		<b>1</b>	<b>207</b>	

3

3

SHAPING SHOULDERS		
STATION - STATION	LOCATION	305.0500 STA
CATEGORY 0010		
285+80 - 386+95	USH 45 LT & RT	202
TOTAL		202

BASE AGGREGATE DENSE			
STATION - STATION	LOCATION	305.0110 3/4-INCH 1	305.0120 1/4-INCH
CATEGORY 0010			
40+10 - 47+50	USH 45 (SB) LT & RT	74	---
46+05 - 47+05	USH 45 (SB)	11	---
48+60 - 116+40	USH 45 (LT & RT)	753	---
134+85 - 186+75	USH 45 (LT & RT)	718	---
188+28 - 286+50	USH 45 (LT & RT)	1222	---
237+45 - 238+20	USH 45 CROSSDRAIN	20	196
263+00 - 263+85	USH 45 CROSSDRAIN	23	222
286+50 - 386+95	USH 45 (LT & RT)	2595	---
UNDISTRIBUTED	PROJECT LIMITS	204	---
TOTALS		5620	418

TACK COAT		
STATION - STATION	LOCATION	455.0605 GAL
CATEGORY 0010		
40+10 - 46+05	USH 45 (SB)	106
46+05 - 47+50	USH 45 (SB)	27
47+00 - 48+00	USH 45 (GORE)	6
47+50 - 48+60	USH 45 (SB)	14
237+45 - 238+20	USH 45 CROSSDRAIN	32
263+00 - 263+85	USH 45 CROSSDRAIN	36
286+50 - 386+95	USH 45 (LT & RT)	2344
285+80 - 288+00	USH 45 RT TURN LANE	7
304+87 - 305+64	EVERTS LN	49
310+90 - 311+47	HICKORY RIDGE RD	8
317+25 - 317+64	LEDGE ROCK RD	5
327+42 - 328+04	COUNTRY VIEW LN	10
334+45 - 338+08	CTH TT	75
373+28 - 373+89	DEER BROOK LN	12
CATEGORY 0010 TOTAL		2731
CATEGORY 0020		
48+60 - 116+40	USH 45 C/L	106
134+85 - 186+76	USH 45 C/L	81
188+28 - 286+50	USH 45 C/L	150
CATEGORY 0020 TOTAL		337
GRAND TOTAL		3068

HMA PAVEMENT TYPE E-3			
STATION - STATION	LOCATION	460.1103 HMA PAVEMENT TYPE E-3 TON	455.0105 ASPHALTIC MATERIAL PG58-28 TON
CATEGORY 0010			
40+10 - 46+05	USH 45 (SB)	153	8.4
40+10 - 46+95	USH 45 (SB) RT SHLD	35	1.9
46+05 - 47+50	USH 45 (SB)	59	3.2
47+00 - 48+00	USH 45 (GORE)	19	1.0
47+50 - 48+60	USH 45 (SB)	20	1.1
237+45 - 238+20	USH 45 CROSSDRAIN	107	5.9
263+00 - 263+85	USH 45 CROSSDRAIN	121	6.7
286+50 - 386+95	USH 45 (LT & RT)	4597	252.8
285+75 - 288+00	USH 45 RT TURN LANE	23	1.3
304+87 - 305+64	EVERTS LN	71	3.9
310+90 - 311+47	HICKORY RIDGE RD	11	0.6
317+25 - 317+64	LEDGE ROCK RD	7	0.4
327+42 - 328+04	COUNTRY VIEW LN	15	0.8
334+45 - 338+08	CTH TT	108	5.9
373+28 - 373+89	DEER BROOK LN	17	0.9
CATEGORY 0010 TOTALS		5363	295.0
CATEGORY 0020			
48+60 - 116+40	USH 45 C/L	153	8.4
134+85 - 186+76	USH 45 C/L	116	6.4
188+28 - 286+50	USH 45 C/L	216	11.9
CATEGORY 0020 TOTALS		485	26.7
GRAND TOTALS		5848	321.6

3

EROSION CONTROL											
STATION	LOCATION	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	628.7555 CULVERT PIPE CHECKS EACH	629.0210 FERTILIZER TYPE B CWT	630.0160 SEEDING MIXTURE NO. 60 LB
CATEGORY 0010											
237+00 - 238+75	USH 45 CROSSDRAIN	198	198	470	470	---	---	300	20	0.12	2.7
262+50 - 264+35	USH 45 CROSSDRAIN	250	250	475	475	---	---	275	34	0.16	3.4
UNDISTRIBUTED	PROJECT LIMITS	52	52	55	55	3	2	75	6	0.07	1.0
TOTALS		500	500	1000	1000	3	2	650	60	0.35	7.0

PROJECT NO: 6430-07-60	HWY: USH 45	COUNTY: WAUPACA	MISCELLANEOUS QUANTITIES - 2	SHEET:	E
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3

ASPHALTIC CENTERLINE  
RUMBLE STRIP 2-LANE RURAL

STATION - STATION		LOCATION	465.0475 LF
<b>CATEGORY 0010</b>			
286+95 - 303+25	USH 45 C/L		1630
307+25 - 309+15	USH 45 C/L		190
313+15 - 315+40	USH 45 C/L		225
319+40 - 325+73	USH 45 C/L		633
329+73 - 336+00	USH 45 C/L		627
340+00 - 371+60	USH 45 C/L		3160
375+60 - 386+95	USH 45 C/L		1135

CATEGORY 0010 7600

<b>CATEGORY 0020</b>			
48+60 - 99+50	USH 45 C/L		5090
103+50 - 116+40	USH 45 C/L		1290
134+85 - 177+00	USH 45 C/L		4215
181+00 - 186+50	USH 45 C/L		550
188+60 - 197+85	USH 45 C/L		925
199+85 - 243+25	USH 45 C/L		4340
247+25 - 282+95	USH 45 C/L		3570

CATEGORY 0020 TOTAL 19980

GRAND TOTAL 27580

PIPE ARCH CORRUGATED STEEL & APRON ENDWALLS

STATION LOCATION		PIPE ARCH CORRUGATED STEEL		MINIMUM THICKNESS (INCHES)		APRON ENDWALLS PIPE ARCH STEEL	
		521.0757 57x38-INCH	521.0783 83x57-INCH			521.1257 57x38-INCH	521.1283 83x57-INCH
		LF	LF	STEEL	ALUMINUM	EACH	EACH
<b>CATEGORY 0010</b>							
237+75	USH 45	120	---	0.109	0.105	4.0	---
263+40	USH 45	---	120	0.109	0.105	---	4.0
TOTALS		120	120			4.0	4.0

WATER

STATION - STATION		LOCATION	624.0100 MGAL
<b>CATEGORY 0010</b>			
40+10 - 48+60	USH 45		5
286+50 - 386+95	USH 45		10
TOTAL			15

MARKERS CULVERT END

STATION		LOCATION	633.5200 EACH	REMARKS
<b>CATEGORY 0010</b>				
237+75	USH 45	(LT & RT)	2	CULVERT
263+40	USH 45	(LT & RT)	2	CULVERT
328+61	USH 45	(LT & RT)	2	CULVERT
352+72	USH 45	(LT & RT)	2	CULVERT
365+75	USH 45	(LT & RT)	2	C-68-9008
379+80	USH 45	(LT & RT)	2	C-68-9009
TOTAL			12	

LANDMARK REFERENCE MONUMENTS

LANDMARK		621.0100	SPV.0060.01	REMARKS
STATION	LOCATION	REFERENCE MONUMENTS	REESTABLISH SECTION CORNER MONUMENTS	
		EACH	EACH	
CATEGORY 0010				
99+16.08	USH 45 C/L	4	1	HARRISON MONUMENT; WAUPACA CTY
152+46.55	USH 45 C/L	4	1	PK NAIL; OUTAGAMIE CTY
179+08.25	USH 45 C/L	4	1	RAILROAD SPIKE; OUTAGAMIE CTY
232+05.28	USH 45 C/L	4	1	HARRISON MONUMENT; WAUPACA CTY
284+97.09	USH 45 C/L	4	1	SECTION CORNER NOT FOUND; OUTAGAMIE CTY
311+52.09	USH 45 C/L	4	1	PK NAIL; OUTAGAMIE CTY
337+98.35	USH 45 C/L	4	1	HARRISON MONUMENT; WAUPACA CTY
364+50.10	USH 45 C/L	4	1	HARRISON MONUMENT; WAUPACA CTY
TOTALS		32	8	

DELINEATOR

		633.0100	
		POSTS	633.0500
STATION - STATION	LOCATION	STEEL EACH	REFLECTORS EACH
<b><u>CATEGORY 0010</u></b>			
40+10 - 49+10	USH 45 (SB) RT	10	19
<b>TOTALS</b>		<b>10</b>	<b>19</b>

SIGN LISTING												
SIGN NO.	SIGN CODE	MESSAGE	SIZE	POSTS WOOD			637.2210	637.2230	638.2102	638.2602	638.3000	REMARKS
				4" X 6"			SIGNS	SIGNS	MOVING	REMOVING	REMOVING	
				634.0612	634.0614	634.0616	TYPE II	TYPE II	SIGNS	SIGNS	SMALL SIGN	
				12-FT	14-FT	16-FT	REFLECTIVE H	REFLECTIVE F	TYPE II	TYPE II	SUPPORTS	
				EACH	EACH	EACH	SF	SF	EACH	EACH	EACH	
CATEGORY 0010												
1-12	---	NIGHT ARROW	---	---	---	---	---	---	---	1	2	
1-13	R4-7	KEEP RIGHT SYMBOL	24" x 30"	---	1	---	6.50	---	---	1	1	
1-14	W5-56	END OF ROAD MARKER	18" x 18"	---	---	---	2.25	---	---	---	---	SAME POST AS 1-13
1-15	W1-8	CHEVRON	24" x 30"	---	4	---	20.00	---	---	---	---	
4-01	D1-1	KANAMAN RD	84" x 15"	---	1	1	8.75	---	---	1	2	
4-02	J1-1	SOUTH/USH 45	24" x 39"	---	1	---	6.50	---	---	1	1	
4-03	R1-1	STOP	30" x 30"	1	---	---	5.18	---	---	1	1	
4-04	---	WAUPACA CO	---	---	---	---	---	---	---	1	1	
4-05	W14-3	NO PASSING ZONE	48" x 36"	---	1	---	---	6.00	---	1	1	
4-06	J1-1	NORTH/USH 45	24" x 39"	---	1	---	6.50	---	---	1	1	
4-07	D1-1	KANAMAN RD	84" x 15"	---	---	2	8.75	---	---	1	2	
4-08	D1-1	EVERTS LN	72" x 15"	---	---	2	7.50	---	---	1	1	
4-09	R1-1	STOP	30" x 30"	1	---	---	5.18	---	---	1	1	
4-10	D1-1	EVERTS LN	72" x 15"	---	---	2	7.50	---	---	1	1	
5-04	W14-3	NO PASSING ZONE	48" x 36"	1	---	---	---	6.00	---	1	1	
5-06	W14-3	NO PASSING ZONE	48" x 36"	---	1	---	---	6.00	---	1	1	
5-07	J1-1	JCT/CTH TT	24" x 39"	---	1	---	6.50	---	---	1	1	
5-10	J1-1	SOUTH/USH 45	24" x 39"	---	1	---	6.50	---	---	1	1	
5-11	J12-1	CTH TT/ARROW	24" x 45"	---	1	---	7.50	---	---	1	1	
5-12	W1-7	TWO-DIRECTION LARGE ARROW	48" x 24"	1	---	---	---	8.00	---	1	1	
5-13	R1-1	STOP	30" x 30"	---	1	---	5.18	---	---	1	1	
5-14	J12-1	USH 45/ARROW	24" x 45"	---	---	1	7.50	---	---	---	---	
5-15	J12-1	CTH TT/ARROW	24" x 45"	---	1	---	7.50	---	---	1	1	
5-16	J1-1	NORTH/USH 45	24" x 39"	---	1	---	6.50	---	---	1	1	
5-17	J1-1	JCT/CTH TT	24" x 39"	---	1	---	6.50	---	---	1	1	
5-18	W14-3	NO PASSING ZONE	48" x 36"	---	1	---	---	6.00	---	1	1	
5-19	D1-1	DEER BROOK LN	96" x 15"	---	---	2	10.00	---	---	---	---	
5-20	S3-1	SCHOOL BUS STOP AHEAD	36" x 36"	---	1	---	---	9.00	---	1	1	
6-1	R1-1	STOP	30" x 30"	1	---	---	5.18	---	---	1	1	
6-2	D1-1	DEER BROOK LN	96" x 15"	---	---	2	10.00	---	---	---	---	
6-3	W14-3	NO PASSING ZONE	48" x 36"	---	1	---	---	6.00	---	1	1	
---	W14-3	NO PASSING ZONE	---	---	---	---	---	---	6	---	---	LOCATE NO PASSING ZONES
GRAND TOTALS				5	20	12	163.47	47.00	6	26	29	

3

TRAFFIC CONTROL DRUMS				
NUMBER DAYS 643.0300				
STATION / LOCATION	REQUIRED	NEEDED	DAYS	REMARKS
CATEGORY 0010				
USH 45 (NB)	107	1	107	FULL DEPTH PAVEMENT
USH 45 (SB)	13	1	13	FULL DEPTH PAVEMENT
48+60 - 286+50	50	6	300	C/L RUMBLE STRIPS
TOTAL			420	

TRAFFIC CONTROL BARRICADES TYPE III				
NUMBER DAYS 643.0420				
LOCATION	REQUIRED	NEEDED	DAYS	REMARKS
CATEGORY 0010				
USH 45 (NB)	6	1	6	FULL DEPTH PAVEMENT
USH 45 (SB)	7	1	7	FULL DEPTH PAVEMENT
STH 96 & USH 45 INTERSECTION	1	3	3	SEE DETOUR - DETAIL D SHEET
STH 15 & USH 45 INTERSECTION	1	3	3	SEE DETOUR - DETAIL E SHEET
SCHOOL RD/BREHMER RD	2	3	6	BEGINNING OF CLOSURE
KANAMAN RD	2	3	6	END OF CLOSURE
TOTAL			31	

TRAFFIC CONTROL SIGNS PCMS					
LOCATION	MESSAGE	DAYS 643.1050		REMARKS	
		NEEDED	DAYS		
CATEGORY 0010					
USH 45 (NB) & CTH W INTERSECTION	US 45 ROAD WORK	BEGINS XX/XX/XX	14	14	PRIOR TO STARTING PROJECT
USH 45 (SB) & CTH D INTERSECTION	US 45 ROAD WORK	BEGINS XX/XX/XX	14	14	PRIOR TO STARTING PROJECT
USH 45 (NB) & STH 96 INTERSECTION	US 45 CLOSED XX/XX/XX	FOLLOW DETOUR	7	7	CULVERT REPLACEMENT
USH 45 (SB) & CTH D INTERSECTION	US 45 CLOSED XX/XX/XX	FOLLOW DETOUR	7	7	CULVERT REPLACEMENT
USH 41 (NB) & STH 21 ENTRANCE RAMP	US 45 CLOSED AHEAD	7 MILES SOUTH OF N LONDON	3	3	CULVERT REPLACEMENT
TOTAL			31		

3

TRAFFIC CONTROL COVERING SIGNS						
NUMBER NUMBER 643.0910 643.0920						
LOCATION		DESCRIPTION	OF CYCLES EACH	OF SIGNS EACH	TYPE I EACH	TYPE II EACH
REMARKS						
CATEGORY 0010						
USH 45 (NB)	LEFT LANE ENDS	1	2	---	2	FULL DEPTH PAVEMENT REPAIR
USH 45 (NB)	WRONG WAY	1	1	---	1	FULL DEPTH PAVEMENT REPAIR
USH 45 (NB)	DO NOT ENTER	1	1	---	1	FULL DEPTH PAVEMENT REPAIR
STH 96 (WB)	NEW LONDON (ARROW)	1	1	1	---	SEE DETOUR - DETAIL D
TOTALS			1	4		

LOCATING NO-PASSING ZONE		
NUMBER 648.0100		
STATION - STATION	LOCATION	MI
CATEGORY 0010		
286+50 - 386+95	USH 45	1.90
CATEGORY 0010 TOTAL		1.90
CATEGORY 0020		
48+00 - 286+50	USH 45	4.52
CATEGORY 0020 TOTAL		4.52
TOTAL		6.42

TRAFFIC CONTROL SIGNS

LOCATION	SIGN CODE	MESSAGE	NUMBER REQUIRED	DAYS NEEDED	643.0900 DAYS	REMARKS
CATEGORY 0010						
USH 45 (NB)	W20-1	ROAD WORK AHEAD	2	1	2	FULL DEPTH PAVEMENT REPAIR
	W20-5	LEFT LANE CLOSED AHEAD	2	1	2	FULL DEPTH PAVEMENT REPAIR
	WO4-2L	LEFT LANE ENDS	2	1	2	FULL DEPTH PAVEMENT REPAIR
	WO1-6	NIGHT ARROW	2	1	2	FULL DEPTH PAVEMENT REPAIR
	R11-2	LANE CLOSED	4	1	4	FULL DEPTH PAVEMENT REPAIR
USH 45 (SB)	R11-2	ROAD CLOSED	1	1	1	FULL DEPTH PAVEMENT REPAIR
	WO1-6	NIGHT ARROW	1	1	1	FULL DEPTH PAVEMENT REPAIR
	M1-5A	CTH W	2	1	2	FULL DEPTH PAVEMENT REPAIR
	M6-1	ARROW	4	1	4	FULL DEPTH PAVEMENT REPAIR
	M1-4	USH 45	3	1	3	FULL DEPTH PAVEMENT REPAIR
	W1-4R	ROAD CURVES AHEAD	1	1	1	FULL DEPTH PAVEMENT REPAIR
BEGINNING OF PROJECT						
USH 45 (NB)	W20-1	ROAD WORK AHEAD	1	30	30	MILL/OVER & C/L RUMBLE STRIPS
	W20-1	ROAD WORK 1000 FT	1	30	30	MILL/OVER & C/L RUMBLE STRIPS
	W20-1	ROAD WORK 500 FT	1	30	30	MILL/OVER & C/L RUMBLE STRIPS
	G20-1	ROAD WORK NEXT 6 MILES	1	30	30	MILL/OVER & C/L RUMBLE STRIPS
USH 45 (SB)	G20-2A	END ROAD WORK	1	30	30	MILL/OVER & C/L RUMBLE STRIPS
USH 45 & STH 96 INTERSECTION						
USH 45 (SB)	G20-1	ROAD WORK NEXT 1 MILE	1	30	30	MILL/OVER & C/L RUMBLE STRIPS
USH 45 (NB)	G20-1	ROAD WORK NEXT 5 MILES	1	30	30	MILL/OVER & C/L RUMBLE STRIPS
STH 96 (WB)	W20-1	ROAD WORK AHEAD	1	30	30	MILL/OVER & C/L RUMBLE STRIPS
	G20-2A	END ROAD WORK	1	30	30	MILL/OVER & C/L RUMBLE STRIPS
STH 96 (EB)	W20-1	ROAD WORK AHEAD	1	30	30	MILL/OVER & C/L RUMBLE STRIPS
	G20-2A	END ROAD WORK	1	30	30	MILL/OVER & C/L RUMBLE STRIPS
END OF PROJECT						
USH 45 (SB)	W20-1	ROAD WORK AHEAD	1	30	30	MILL/OVER & C/L RUMBLE STRIPS
	W20-1	ROAD WORK 1000 FT	1	30	30	MILL/OVER & C/L RUMBLE STRIPS
	W20-1	ROAD WORK 500 FT	1	30	30	MILL/OVER & C/L RUMBLE STRIPS
	G20-1	ROAD WORK NEXT 6 MILES	1	30	30	MILL/OVER & C/L RUMBLE STRIPS
USH 45 (NB)	G20-2A	END ROAD WORK	1	30	30	MILL/OVER & C/L RUMBLE STRIPS
SIDEROADS						
S CROSSWIND DR	W20-1	ROAD WORK AHEAD	1	30	30	MILL/OVER & C/L RUMBLE STRIPS
SCHOOL RD	W20-1	ROAD WORK AHEAD	1	30	30	MILL/OVER & C/L RUMBLE STRIPS
BREHMER RD	W20-1	ROAD WORK AHEAD	1	30	30	MILL/OVER & C/L RUMBLE STRIPS
SHAKY LAKE RD	W20-1	ROAD WORK AHEAD	1	30	30	MILL/OVER & C/L RUMBLE STRIPS
KANAMAN RD	W20-1	ROAD WORK AHEAD	1	30	30	MILL/OVER & C/L RUMBLE STRIPS
EVERTS LN	W20-1	ROAD WORK AHEAD	1	30	30	MILL/OVER & C/L RUMBLE STRIPS
CTH TT	W20-1	ROAD WORK AHEAD	1	30	30	MILL/OVER & C/L RUMBLE STRIPS
CTH TT	G20-2A	END ROAD WORK	1	30	30	MILL/OVER & C/L RUMBLE STRIPS
DEER BROOK LN	W20-1	ROAD WORK AHEAD	1	30	30	MILL/OVER & C/L RUMBLE STRIPS
TOTAL			774			

TRAFFIC CONTROL DETOUR SIGNS

643.3000						
LOCATION	SIGN NUMBER	MESSAGE	NUMBER REQUIRED	DAYS NEEDED	TOTAL DAYS	REMARKS
CATEGORY 0010						
STH 49 (WB) & USH 10 INTERCHANGE	M3-1	NORTH	1	3	3	SEE DETOUR ROUTE OVERVIEW
	M1-4	USH 45	1	3	3	SEE DETOUR ROUTE OVERVIEW
	W20-2A	DETOUR AHEAD	1	3	3	SEE DETOUR ROUTE OVERVIEW
	W57-52	XX MILES AHEAD	1	3	3	SEE DETOUR ROUTE OVERVIEW
USH 10 (WB) & STH 76 INTERCHANGE	M3-1	NORTH	1	3	3	SEE DETOUR ROUTE OVERVIEW
	M1-4	USH 45	1	3	3	SEE DETOUR ROUTE OVERVIEW
	W20-2A	DETOUR AHEAD	1	3	3	SEE DETOUR ROUTE OVERVIEW
	W57-52	XX MILES AHEAD	1	3	3	SEE DETOUR ROUTE OVERVIEW
STH 76 & STH 96 INTERSECTION	M4-8	DETOUR	10	3	30	SEE DETOUR - DETAIL B
	M3-1	NORTH	9	3	27	SEE DETOUR - DETAIL B
	M3-3	SOUTH	3	3	9	SEE DETOUR - DETAIL B
	M1-4	USH 45	12	3	36	SEE DETOUR - DETAIL B
	M5-1L	ARROW	1	3	3	SEE DETOUR - DETAIL B
	M6-1	ARROW	5	3	15	SEE DETOUR - DETAIL B
	M5-1R	ARROW	2	3	6	SEE DETOUR - DETAIL B
	W20-2A	DETOUR AHEAD	2	3	6	SEE DETOUR - DETAIL B
STH 96 & CTH T / STH 96 & CTH M INTERSECTIONS	M4-8	DETOUR	12	3	36	SEE DETOUR - DETAIL C
	M3-1	NORTH	6	3	18	SEE DETOUR - DETAIL C
	M3-3	SOUTH	6	3	18	SEE DETOUR - DETAIL C
	M1-4	USH 45	12	3	36	SEE DETOUR - DETAIL C
	M5-1L	ARROW	2	3	6	SEE DETOUR - DETAIL C
	M6-1	ARROW	4	3	12	SEE DETOUR - DETAIL C
	M5-1R	ARROW	2	3	6	SEE DETOUR - DETAIL C
STH 96 & USH 45 INTERSECTION	M4-8	DETOUR	8	3	24	SEE DETOUR - DETAIL D
	M3-1	NORTH	7	3	21	SEE DETOUR - DETAIL D
	M3-3	SOUTH	1	3	3	SEE DETOUR - DETAIL D
	M4-6	END	1	3	3	SEE DETOUR - DETAIL D
	M1-4	USH 45	8	3	24	SEE DETOUR - DETAIL D
	M5-1L	ARROW	1	3	3	SEE DETOUR - DETAIL D
	M6-1	ARROW	4	3	12	SEE DETOUR - DETAIL D
	M5-1R	ARROW	1	3	3	SEE DETOUR - DETAIL D
	W20-2A	DETOUR AHEAD	2	3	6	SEE DETOUR - DETAIL D
	G20-51	DETOUR NEXT 23 MILES	1	3	3	SEE DETOUR - DETAIL D
	M1-88A	ARROW	2	3	6	SEE DETOUR - DETAIL D
	R11-4	ROAD CLOSED TO THRU TRAFFIC	2	3	6	SEE DETOUR - DETAIL D
	R11-3	ROAD CLOSED 1 MILE AHEAD	1	3	3	SEE DETOUR - DETAIL D
		LOCAL TRAFFIC ONLY				

CONT. ON NEXT PAGE

TRAFFIC CONTROL DETOUR SIGNS

643.3000

LOCATION	SIGN NUMBER	MESSAGE	NUMBER REQUIRED	DAYS NEEDED	TOTAL DAYS	REMARKS
CATEGORY 0010						
STH 15 & USH 45 INTERSECTION	M4-8	DETOUR	6	3	18	SEE DETOUR - DETAIL E
	M3-1	NORTH	1	3	3	SEE DETOUR - DETAIL E
	M3-3	SOUTH	4	3	12	SEE DETOUR - DETAIL E
	M4-6	END	1	3	3	SEE DETOUR - DETAIL E
	M1-4	USH 45	5	3	15	SEE DETOUR - DETAIL E
	M5-1L	ARROW	1	3	3	SEE DETOUR - DETAIL E
	M6-1	ARROW	3	3	9	SEE DETOUR - DETAIL E
	W20-2A	DETOUR AHEAD	2	3	6	SEE DETOUR - DETAIL E
	M1-88A	ARROW	1	3	3	SEE DETOUR - DETAIL E
	R11-3	ROAD CLOSED 4 MILES AHEAD LOCAL TRAFFIC ONLY	1	3	3	SEE DETOUR - DETAIL E
STH 15 & CTH T INTERSECTION	M4-8	DETOUR	4	3	12	SEE DETOUR - DETAIL F
	M3-1	NORTH	2	3	6	SEE DETOUR - DETAIL F
	M3-3	SOUTH	2	3	6	SEE DETOUR - DETAIL F
	M1-4	USH 45	4	3	12	SEE DETOUR - DETAIL F
	M6-1	ARROW	2	3	6	SEE DETOUR - DETAIL F
STH 15 & CTH M INTERSECTION	M4-8	DETOUR	2	3	6	SEE DETOUR - DETAIL G
	M3-1	NORTH	1	3	3	SEE DETOUR - DETAIL G
	M3-3	SOUTH	1	3	3	SEE DETOUR - DETAIL G
	M1-4	USH 45	2	3	6	SEE DETOUR - DETAIL G
STH 15 & CTH JJ INTERSECTION	M4-8	DETOUR	4	3	12	SEE DETOUR - DETAIL H
	M3-1	NORTH	2	3	6	SEE DETOUR - DETAIL H
	M3-3	SOUTH	2	3	6	SEE DETOUR - DETAIL H
	M1-4	USH 45	4	3	12	SEE DETOUR - DETAIL H
	M6-1	ARROW	2	3	6	SEE DETOUR - DETAIL H
STH 15 & STH 76 INTERSECTION	M4-8	DETOUR	13	3	39	SEE DETOUR - DETAIL I
	M3-1	NORTH	7	3	21	SEE DETOUR - DETAIL I
	M3-3	SOUTH	7	3	21	SEE DETOUR - DETAIL I
	M1-4	USH 45	14	3	42	SEE DETOUR - DETAIL I
	M5-1L	ARROW	1	3	3	SEE DETOUR - DETAIL I
	M6-1	ARROW	8	3	24	SEE DETOUR - DETAIL I
	M5-1R	ARROW	2	3	6	SEE DETOUR - DETAIL I
	W20-2A	DETOUR AHEAD	1	3	3	SEE DETOUR - DETAIL I

TOTAL 741

3

PAVEMENT MARKING EPOXY											
STATION - STATION	LOCATION	646.0106 4-INCH				646.0406 SAME DAY 4-INCH		646.2304.S GROOVED WET REFLECTIVE EPOXY 4-INCH	647.0726 DIAGONAL 12-INCH	649.0403 TEMPORARY EPOXY 4-INCH	REMARKS
		SOLID (YELLOW)	DASHED (YELLOW)	SOLID (WHITE)	DASHED (WHITE)	SOLID (YELLOW)	DASHED (YELLOW)	(WHITE)	(YELLOW)	(YELLOW)	
		LF	LF	LF	LF	LF	LF	LF	LF	LF	
CATEGORY 0010											
45+50 - 48+60	USH 45 (NB)	310	---	310	---	---	---	---	55	---	
40+10 - 48+60	USH 45 (SB)	860	---	860	---	---	---	---	---	---	
48+60 - 54+50	USH 45 (NB & SB)	590	150.0	---	---	590	150.0	---	---	---	
286+50 - 297+25	USH 45 (NB & SB)	1325	317.5	---	---	1325	317.5	---	---	---	
297+25 - 312+25	USH 45 (NB & SB)	3000	---	---	---	3000	---	---	---	---	
312+25 - 323+00	USH 45 (NB & SB)	1075	275.0	---	---	1075	275.0	---	---	---	
323+00 - 325+25	USH 45 (NB & SB)	---	62.5	---	---	---	62.5	---	---	---	
325+25 - 336+00	USH 45 (NB & SB)	1075	275.0	---	---	1075	275.0	---	---	---	
336+00 - 342+25	USH 45 (NB & SB)	1250	---	---	---	1250	---	---	---	---	
342+25 - 354+50	USH 45 (NB & SB)	1225	312.5	---	---	1225	312.5	---	---	---	
354+50 - 381+75	USH 45 (NB & SB)	---	687.5	---	---	---	687.5	---	---	---	
381+75 - 386+95	USH 45 (NB & SB)	520	125.0	---	---	520	125.0	---	---	---	
EVERTS LN	SIDEROAD	---	---	---	27.0	---	---	---	---	---	3' LINE, 9' GAP
USH 45 (LT)	SIDEROAD	---	---	---	62.5	---	---	---	---	---	12.5' LINE, 37.5' GAP
CTH TT	SIDEROAD	---	---	---	138.0	---	---	---	---	---	3' LINE, 9' GAP
UNDISTRIBUTED	USH 45	---	---	---	---	---	---	---	---	5000	
CATEGORY 0010 TOTALS		11230	2205.0	1170	228	10060	2205.0	0	55	5000	
CATEGORY 0020											
48+00 - 386+95	USH 45 (LT & RT)	---	---	---	---	---	---	67120	---	---	EDGE LINE
48+00 - 286+50	USH 45 C/L	6589	4907.5	---	---	6589	4907.5	---	---	---	CENTERLINE
CATEGORY 0020 TOTALS		6589	4907.5	0	0	6589	4907.5	67120	0	0	
GRAND TOTALS		26329.0				23761.5		67120	55	5000	

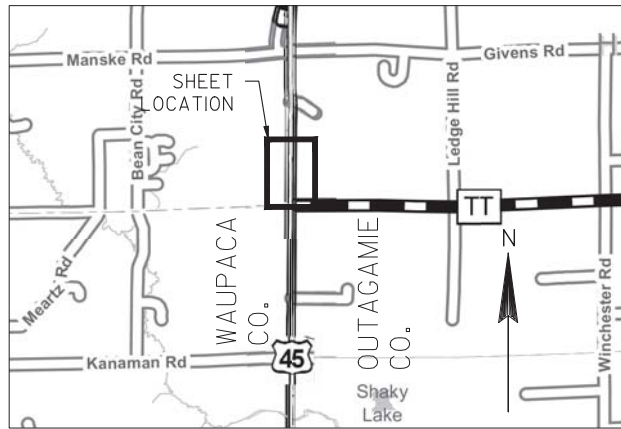
SAWING ASPHALT		
STATION - STATION	LOCATION	690.0150 LF
CATEGORY 0010		
40+10	USH 45 (SB)	28
46+05	USH 45 (SB)	8
46+05 - 47+50	USH 45 (SB)	156
47+00 - 48+00	USH 45 (SB) GORE	159
48+60	USH 45 (RT)	19
237+45	USH 45 CROSSDRAIN	30
238+20	USH 45 CROSSDRAIN	30
263+00	USH 45 CROSSDRAIN	30
263+85	USH 45 CROSSDRAIN	30
286+50	USH 45 (LT & RT)	30
386+95	USH 45 (LT & RT)	30
285+80 - 288+00	USH 45 RT TURN LANE	230
EVERTS LN	SIDEROAD	21
HICKORY RIDGE RD	SIDEROAD	16
LEDGE ROCK RD	SIDEROAD	16
COUNTRY VIEW LN	SIDEROAD	22
CTH TT	SIDEROAD	42
DEER BROOK LN	SIDEROAD	23
TOTAL		920

3

CONSTRUCTION STAKING			
STATION - STATION	650.6000	650.8000	650.9910
	CULVERT PIPE EACH	RESURFACING REFERENCE LF	SUPPLEMENTAL CONTROL LS
CATEGORY 0010			
40+10 - 48+60	---	850	---
40+10 - 386+95	---	---	1
237+75	1	---	---
237+89	1	---	---
263+35	1	---	---
263+51	1	---	---
286+50 - 386+95	---	10045	---
TOTALS	4	10895	1

GORE MEDIAN RUMBLE STRIPS		
STATION - STATION	LOCATION	SPV.0105.01 LS
CATEGORY 0010		
47+00 - 48+00	USH 45	1
TOTAL		1

## LOCATION MAP



COURSE TABLE			
POINT TO	POINT	BEARING	DISTANCE
SEC4	SEC7	N 01° 10' 53" E	2651.74'
SEC7	TRAV1	S 01° 10' 53" W	1200.09'
TRAV1	PLE10	N 88° 48' 39" W	54.80'
PLE10	PLE11	N 88° 48' 39" W	40.00'
PLE11	PLE12	N 01° 11' 21" E	50.00'
PLE12	PLE13	S 88° 48' 39" E	40.00'
PLE13	PLE10	S 01° 11' 21" W	50.00'

SE-SE  
SEC 36NE-SE  
SEC 36

## SCHEDULE OF LANDS &amp; INTERESTS REQUIRED

		FEE R/W ACRES OR (S.F.) REQUIRED				
PARCEL NUMBER	OWNER	INTEREST REQUIRED	NEW	EXISTING	TOTAL	PLE AREA
2	TERRY G. COONEY	PLE				(2,000)

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LANDS TO THE DEPARTMENT OF TRANSPORTATION

## TRANSPORTATION PROJECT PLAT NO: 6430-07-21-4.01

THAT PART OF THE NE-SE OF SECTION 36, TOWNSHIP 22 NORTH, RANGE 14 EAST, TOWN OF MUKWA, WAUPACA COUNTY, WISCONSIN

RELOCATION ORDER USH 45, WAUPACA COUNTY, WINCHESTER - NEW LONDON (CTH W TO CTH D)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:  
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.  
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (D) OR (2), WISCONSIN STATUTES.

ROAD NAME	BASIS OF EXISTING R/W	YEAR
USH 45	DOT PROJ. S 1449(01)	1963

TOWN OF MUKWA

WAUPACA COUNTY

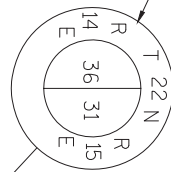
BLDG.

STA. 352+50  
95.00' LT.  
PLE11STA. 353+00  
95.00' LT.  
PLE12STA. 352+50  
55.00' LT.  
PLE10STA. 353+00  
55.00' LT.  
PLE13

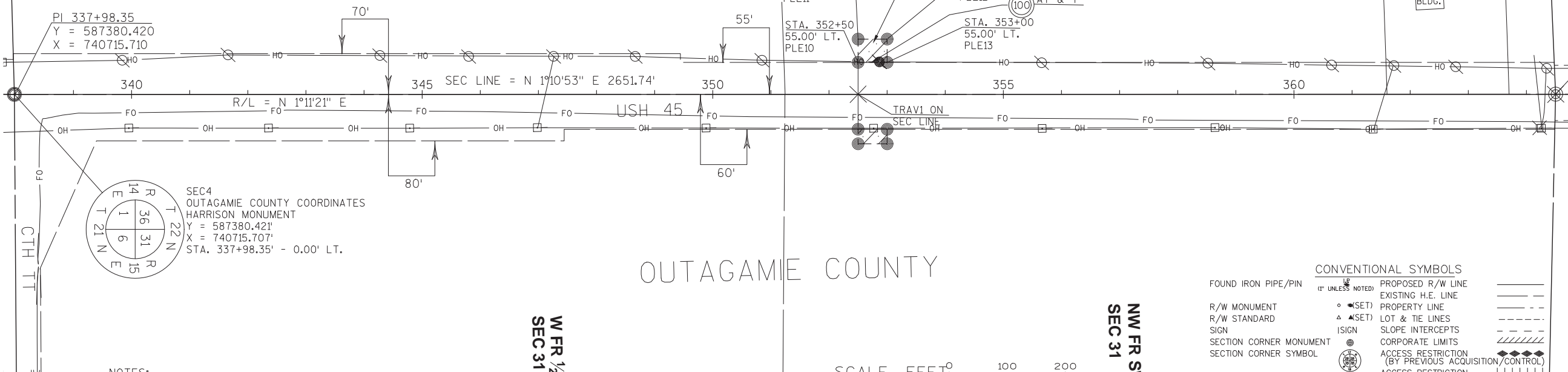
UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
100	WISCONSIN BELL INC., D/B/A - AT&T	RELEASE OF RIGHTS

AT &amp; T

OUTAGAMIE COUNTY COORDINATES  
HARRISON MONUMENT  
Y = 590031.601  
X = 740770.377  
STA. 364+50.09 - 0.36' LT.



PI 337+98.35  
Y = 587380.420  
X = 740715.710



## NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, OUTAGAMIE COUNTY, NAD83 (1991) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 (TYPICALLY 3/4" X 24" REBAR) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS OF PUBLIC RECORD".

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. EXCLUDING RIGHT-OF-WAY LINES, THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WISCONSIN RAPIDS.

A **PERMANENT LIMITED EASEMENT (PLE)** IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHT TO MAKE OR CONSTRUCT IMPROVEMENT ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.

## CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	RELEASE OF RIGHTS	ROR
ACCESS RIGHTS	AR	REMAINING	REM.
ACRES	AC.	RIGHT-OF-WAY	R/W
AND OTHERS	ET.AL.	SECTION	SEC.
CENTERLINE	C/L	STATION	STA.
CERTIFIED SURVEY MAP	CSM	TEMPORARY LIMITED EASEMENT	TLE
CORNER	COR.	VOLUME	V.
DOCUMENT	DOC.		
EASEMENT	EASE.		
HIGHWAY EASEMENT	H.E.		
LAND CONTRACT	LC		
MONUMENT	MON.		
PAGE	P.		
PERMANENT LIMITED EASEMENT	PLE		
PROPERTY LINE	PL		
RECORDED AS	(100')		
REFERENCE LINE	R/L		

## CONVENTIONAL UTILITY SYMBOLS

WATER	—W—
GAS	—G—
TELEPHONE	—T—
OVERHEAD	—OH—
TRANSMISSION LINES	—E—
ELECTRIC	—TV—
CABLE TELEVISION	—FO—
FIBER OPTIC	—SAN—
SANITARY SEWER	—SS—
STORM SEWER	—NON—
POWER POLE	⊕
TELEPHONE POLE	⊗
TELEPHONE PEDESTAL	⊗
ELECTRIC TOWER	⊗

## CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	(1" UNLESS NOTED)	PROPOSED R/W LINE
R/W MONUMENT	○ (SET)	EXISTING H.E. LINE
R/W STANDARD	△ (SET)	PROPERTY LINE
SIGN	ISIGN	LOT & TIE LINES
SECTION CORNER MONUMENT	●	SLOPE INTERCEPTS
SECTION CORNER SYMBOL	⊙	CORPORATE LIMITS
FEE (HATCH VARIES)	⊙	ACCESS RESTRICTION (BY PREVIOUS ACQUISITION/CONTROL)
TEMPORARY LIMITED EASEMENT	⊙	ACCESS RESTRICTION (BY ACQUISITION)
PERMANENT LIMITED EASEMENT	⊙	NO ACCESS (BY STATUTORY AUTHORITY)
R/W BOUNDARY POINT	⊙	SECTION LINE
PARCEL NUMBER	⊙	QUARTER LINE
UTILITY PARCEL NUMBER	⊙	SIXTEENTH LINE
SIGN NUMBER (OFF PREMISE)	⊙	EXISTING CENTERLINE
BUILDING	⊙	PROPOSED REFERENCE LINE
	⊙	PARALLEL OFFSET

## STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

I, JEFFREY T. BROCK PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

PRINT NAME: JEFFREY T. BROCK

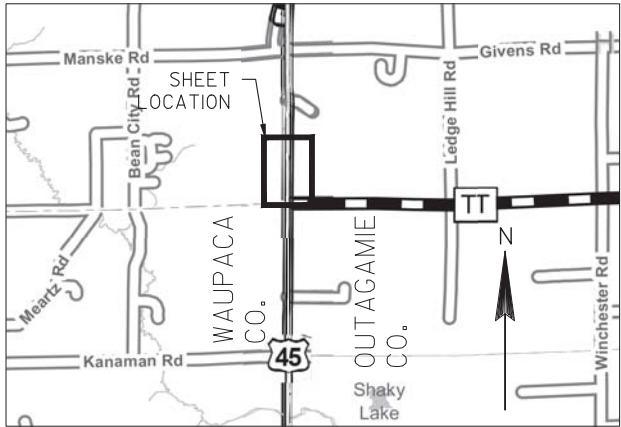
REGISTRATION NUMBER: S-2642

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION  
NC REGION - RHINELANDER, WI

SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

PRINT NAME: BRENT L. STELLA

LOCATION MAP



SE-SE  
SEC 36

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER	INTEREST REQUIRED	FEE R/W ACRES OR (S.F.) REQUIRED				PLE AREA
			NEW	EXISTING	TOTAL	PLE AREA	
1	MARC J. MILLER	PLE					(1,250)

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LANDS TO THE DEPARTMENT OF TRANSPORTATION

TRANSPORTATION PROJECT PLAT NO: 6430-07-21-4.02

THAT PART OF THE NW FR SW OF SECTION 31, TOWNSHIP 22 NORTH, RANGE 15 EAST, TOWN OF HORTONIA, OUTAGAMIE COUNTY, WISCONSIN

RELOCATION ORDER USH 45, OUTAGAMIE COUNTY, WINCHESTER - NEW LONDON, (CTH W TO CTH D)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:  
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RESERVED FOR REGISTER OF DEEDS  
PROJECT NUMBER 6430-07-21-4.02  
AMENDMENT NO:...

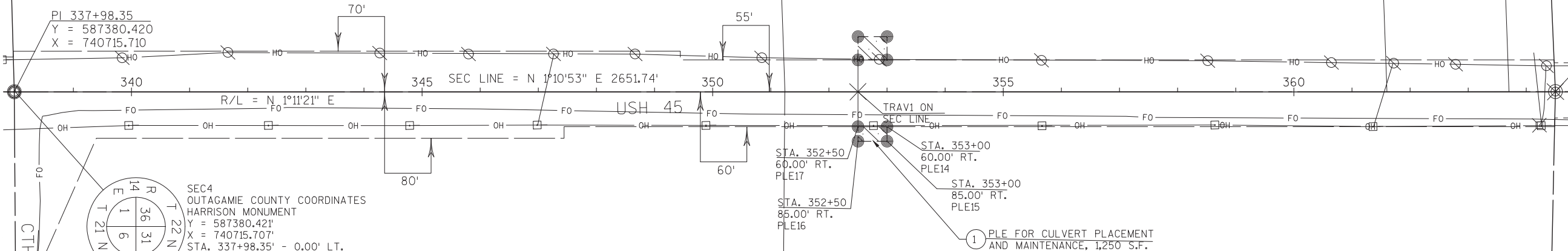
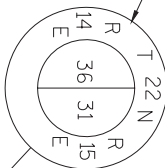
ROAD NAME	BASIS OF EXISTING R/W	YEAR
USH 45	DOT PROJ. S 1449(01)	1963

NE-SE  
SEC 36

WAUPACA COUNTY

SCALE, FEET 0 100 200

OUTAGAMIE COUNTY COORDINATES  
HARRISON MONUMENT  
Y = 590031.601  
X = 740770.377  
STA. 364+50.09 - 0.36' LT.



NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, OUTAGAMIE COUNTY, NAD83 (1991) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

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FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WISCONSIN RAPIDS.

A **PERMANENT LIMITED EASEMENT (PLE)** IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHT TO MAKE OR CONSTRUCT IMPROVEMENT ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.

OUTAGAMIE COUNTY  
OF  
TOWN OF HORTONIA

W FR 1/2 SW  
SEC 31

COURSE TABLE			
POINT TO	POINT	BEARING	DISTANCE
SEC4	SEC7	N 01° 10' 53" E	2651.74'
SEC7	TRAV1	S 01° 10' 53" W	1200.09'
TRAV1	PLE17	S 88° 48' 39" E	60.20'
PLE17	PLE14	N 01° 11' 21" E	50.00'
PLE14	PLE15	S 88° 48' 39" E	25.00'
PLE15	PLE16	S 01° 11' 21" W	50.00'
PLE16	PLE17	N 88° 48' 39" W	25.00'

NW FR SW  
SEC 31

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	RELEASE OF RIGHTS	ROR
ACCESS RIGHTS	AR	REMAINING	REM.
ACRES	AC.	RIGHT-OF-WAY	R/W
AND OTHERS	ET.AL.	SECTION	SEC.
CENTERLINE	C/L	STATION	STA.
CERTIFIED SURVEY MAP CORNER	CSM	TEMPORARY LIMITED EASEMENT	TLE
DOCUMENT	DOC.	VOLUME	V.
EASEMENT	EASE.		
HIGHWAY EASEMENT	H.E.		
LAND CONTRACT	LC		
MONUMENT	MON.		
PAGE	P.		
PERMANENT LIMITED EASEMENT	PLE		
PROPERTY LINE	PL		
RECORDED AS	(100')		
REFERENCE LINE	R/L		

CONVENTIONAL UTILITY SYMBOLS

WATER	— W —
GAS	— G —
TELEPHONE	— T —
OVERHEAD	— OH —
TRANSMISSION LINES	— E —
ELECTRIC	— TV —
CABLE TELEVISION	— FO —
FIBER OPTIC	— SAN —
SANITARY SEWER	— SS —
STORM SEWER	NON COMPENSABLE COMPENSABLE
POWER POLE	⊗
TELEPHONE POLE	⊗
TELEPHONE PEDESTAL	⊗
ELECTRIC TOWER	⊗

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	(1" UNLESS NOTED)	PROPOSED R/W LINE	—
R/W MONUMENT	⊙ (SET)	EXISTING H.E. LINE	—
R/W STANDARD	⊙ (SET)	PROPERTY LINE	—
SIGN	⊙ (SET)	LOT & TIE LINES	---
SECTION CORNER MONUMENT	⊙	SLOPE INTERCEPTS	---
SECTION CORNER SYMBOL	⊙	CORPORATE LIMITS	---
FEE (HATCH VARIES)	⊙	ACCESS RESTRICTION (BY PREVIOUS ACQUISITION/CONTROL)	---
TEMPORARY LIMITED EASEMENT	⊙	ACCESS RESTRICTION (BY ACQUISITION)	---
PERMANENT LIMITED EASEMENT	⊙	NO ACCESS (BY STATUTORY AUTHORITY)	---
R/W BOUNDARY POINT	⊙	SECTION LINE	---
PARCEL NUMBER	⊙	QUARTER LINE	---
UTILITY PARCEL NUMBER	⊙	SIXTEENTH LINE	---
SIGN NUMBER (OFF PREMISE)	⊙	EXISTING CENTERLINE	---
BUILDING	⊙	PROPOSED REFERENCE LINE	---
	⊙	PARALLEL OFFSET	---

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

I, JEFFREY T. BROCK PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

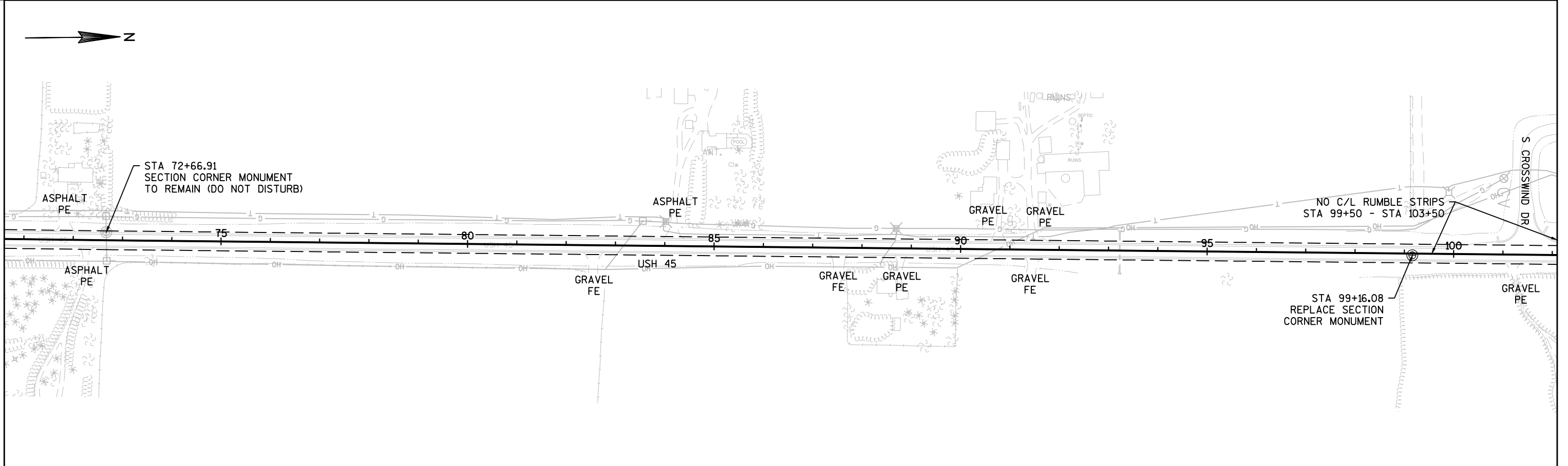
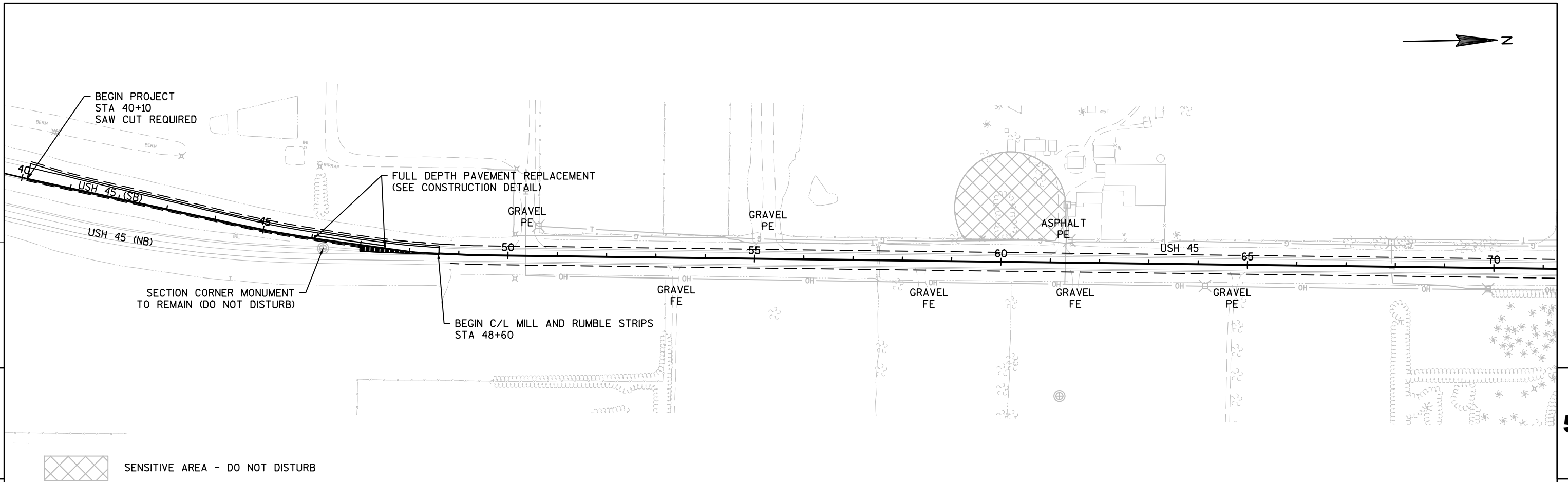
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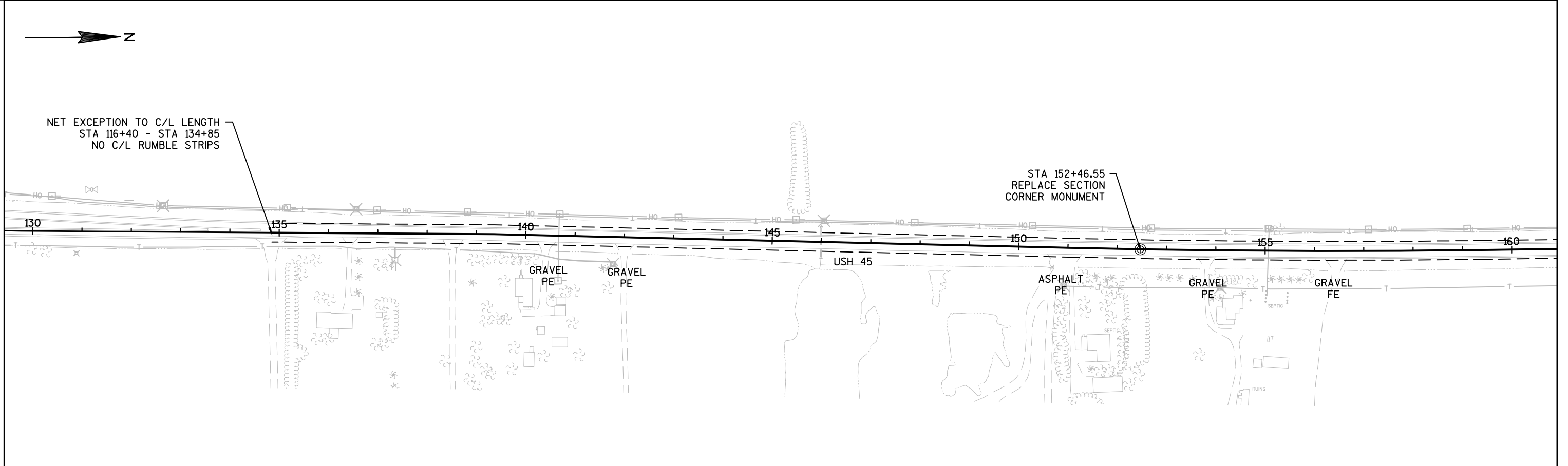
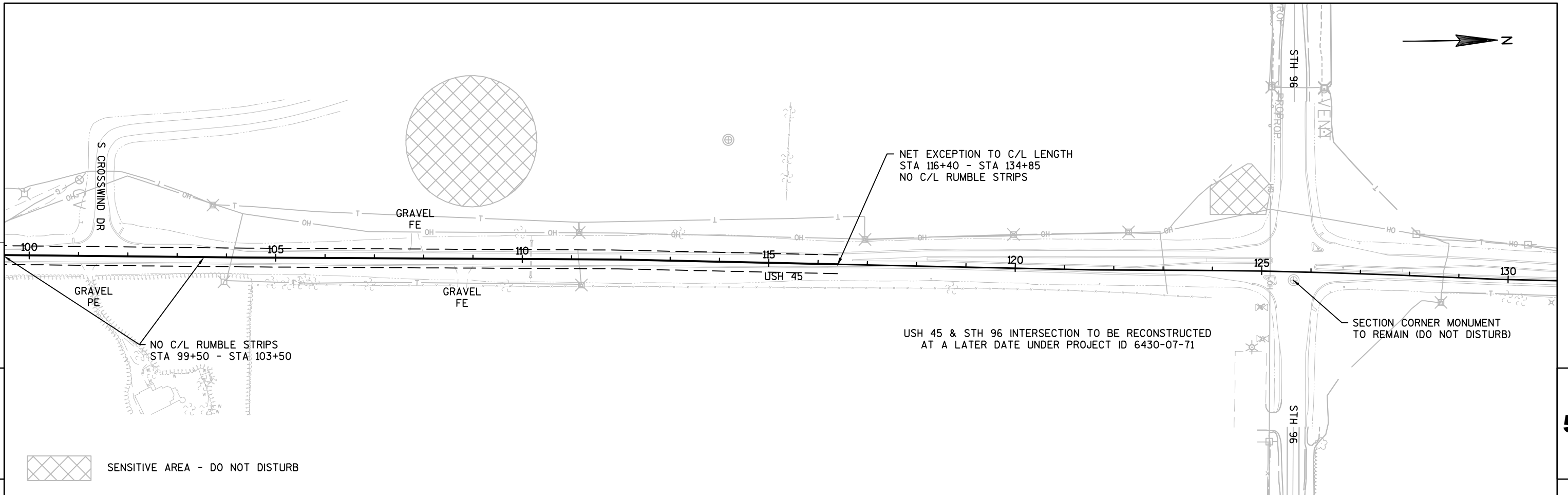
PRINT NAME: JEFFREY T. BROCK  
REGISTRATION NUMBER: S-2642

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION  
NC REGION - RHINELANDER, WI

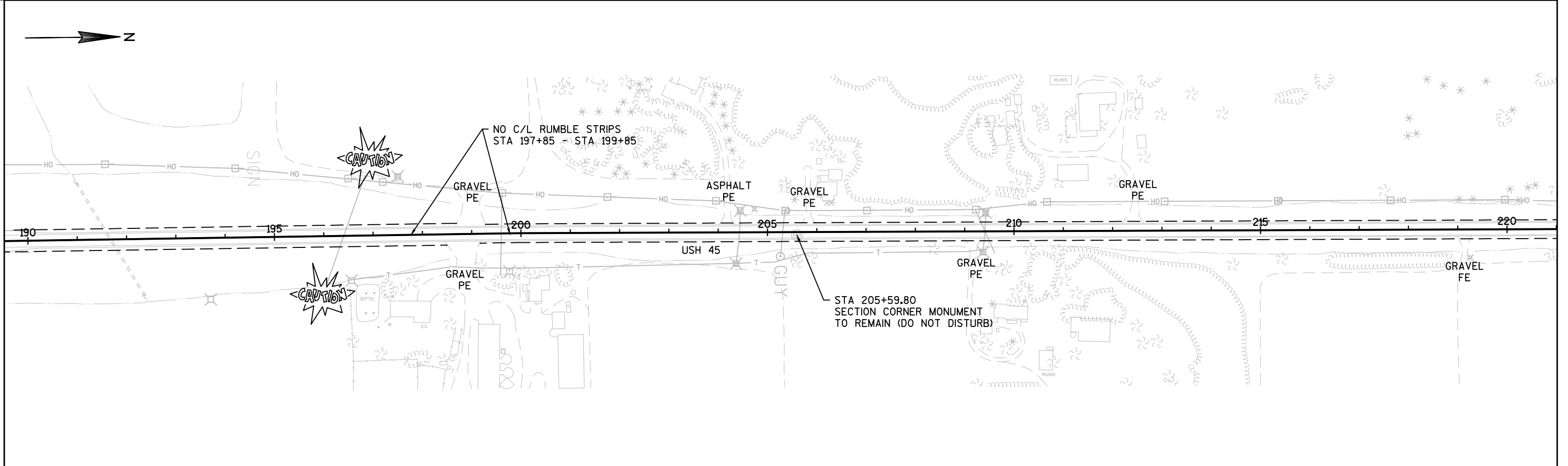
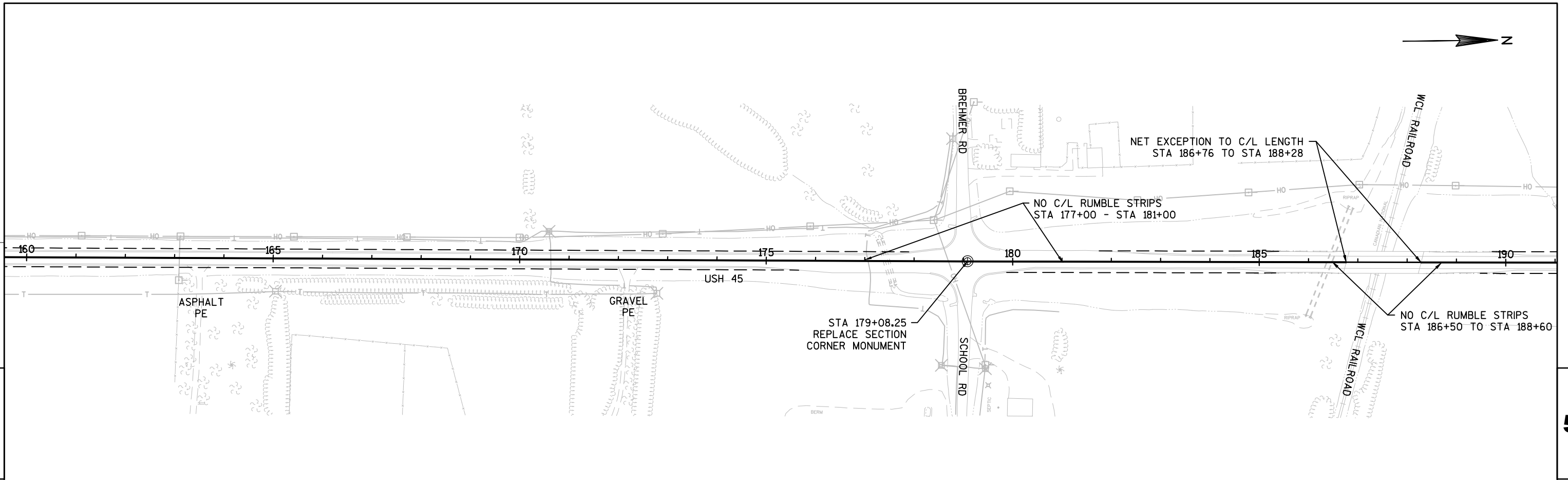
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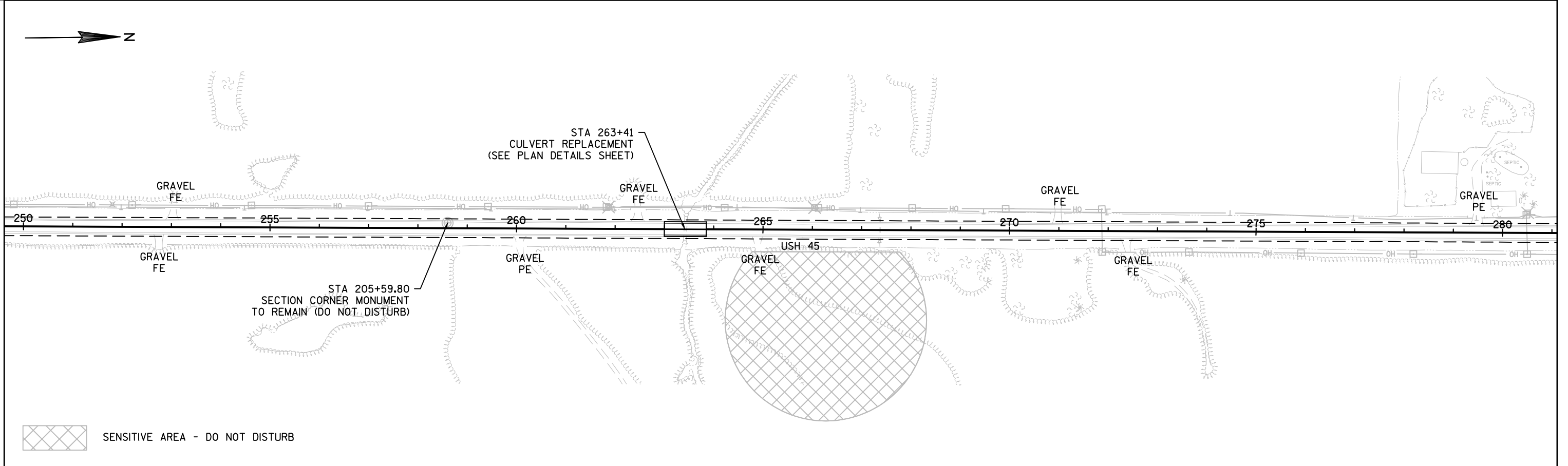
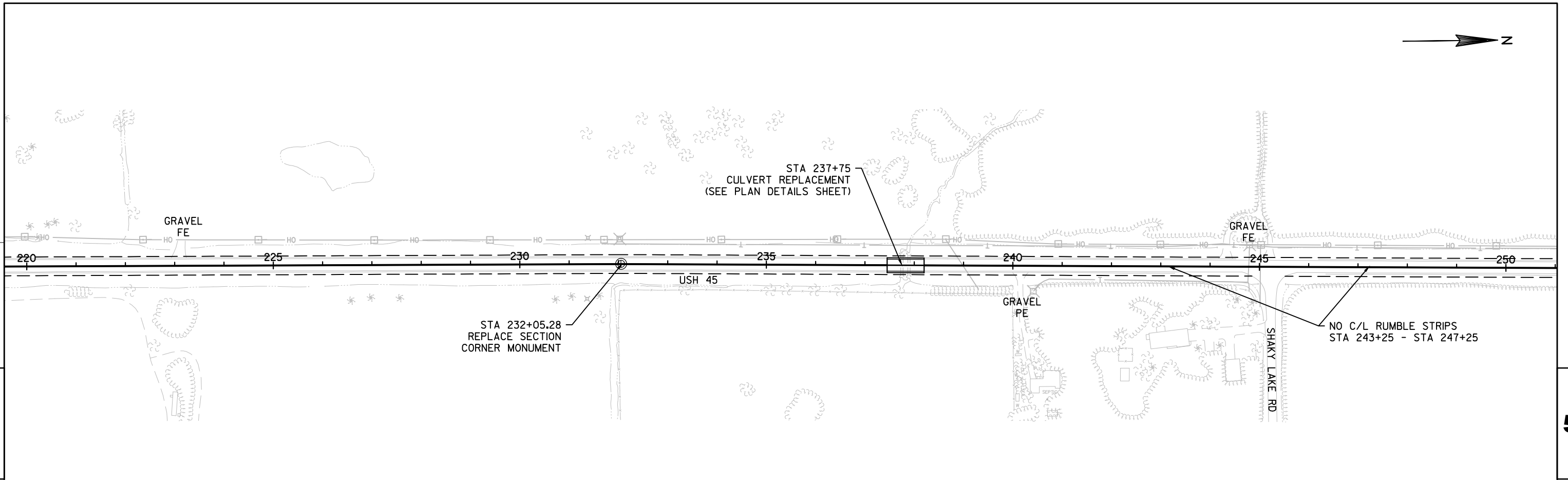
PRINT NAME: BRENT L. STELLA

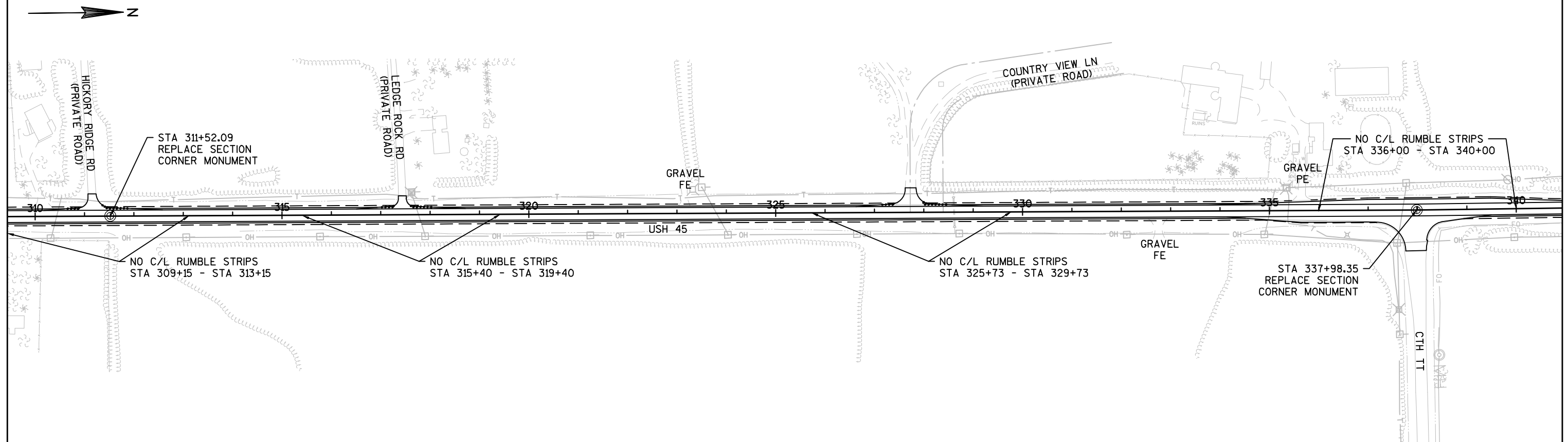
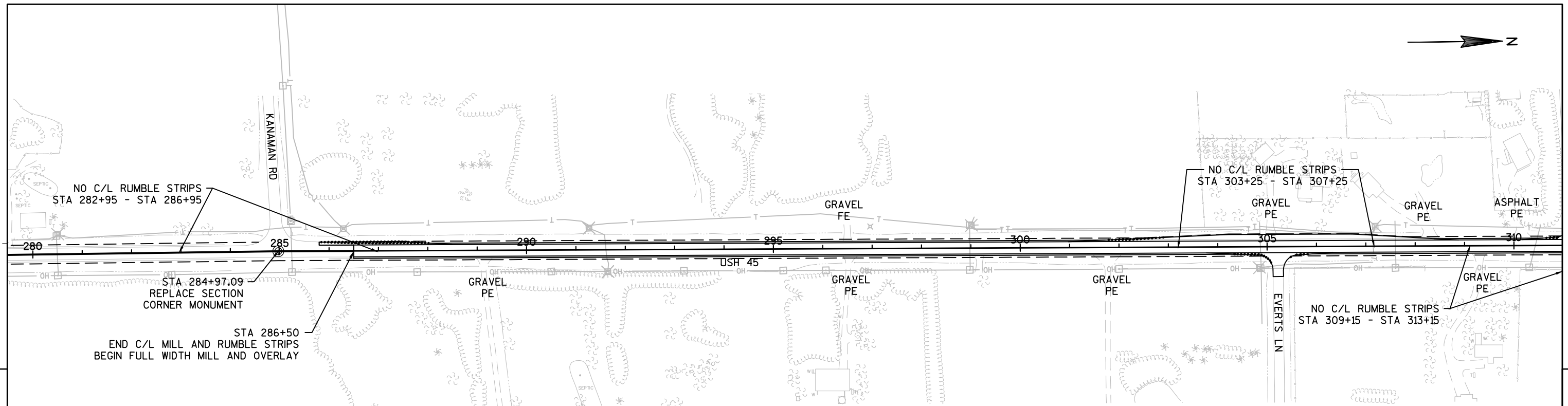




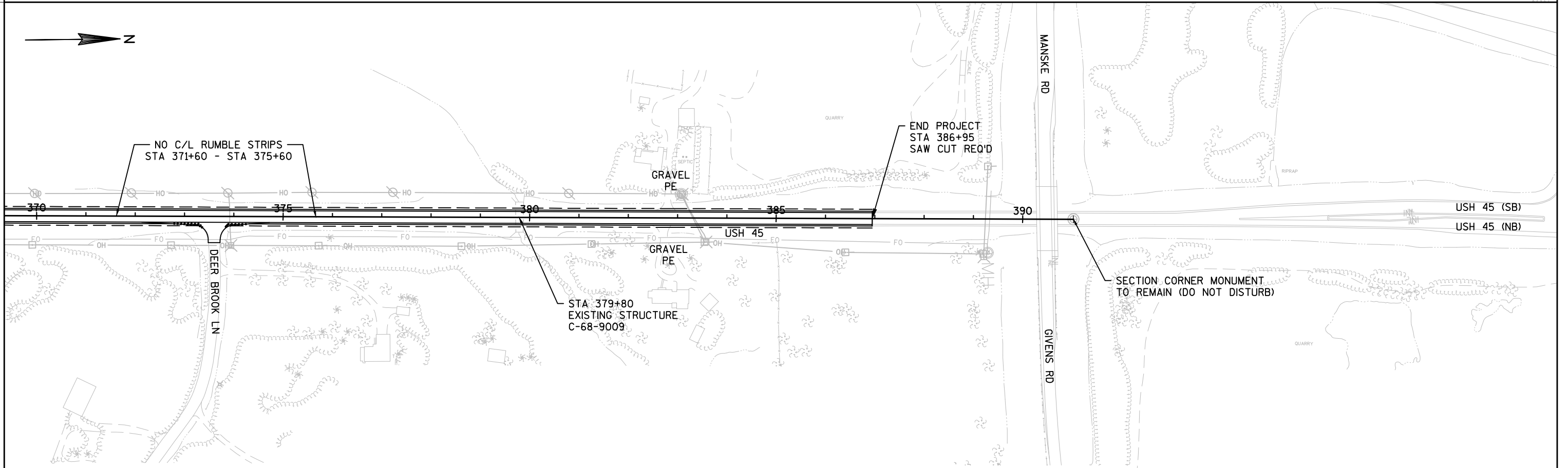
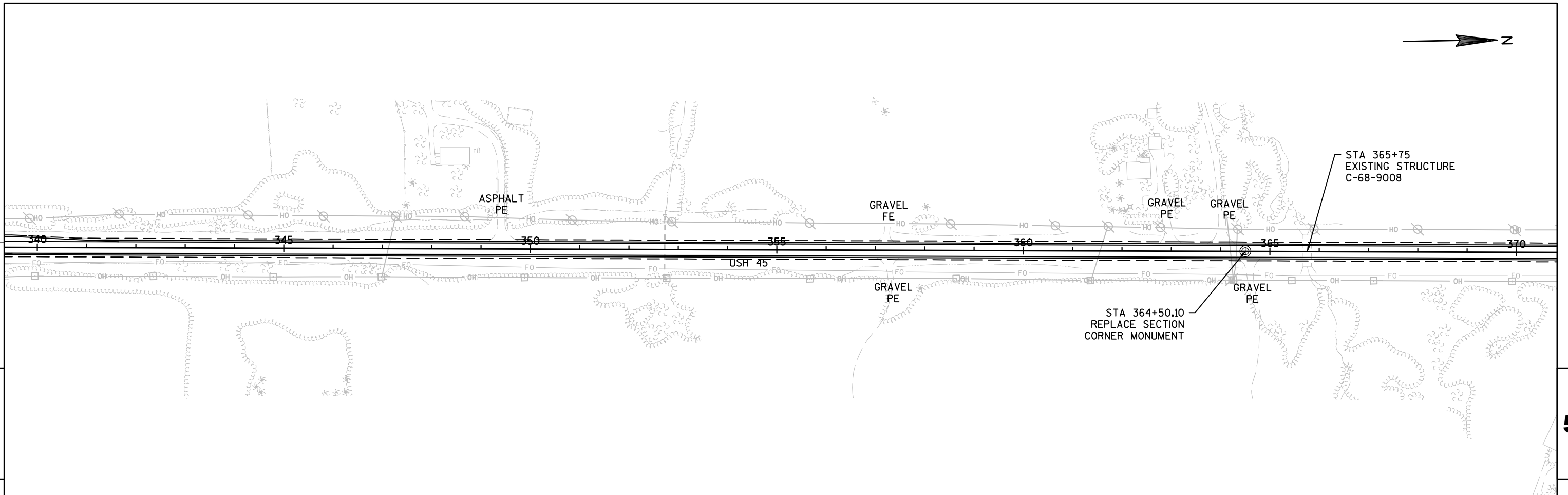
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PROJECT NO:6430-07-60	HWY:USH 45	COUNTY:WAUPACA/OUTAGAMIE	PLAN: PLAN SHEETS	SHEET	5
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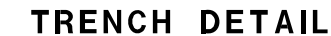
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Standard Detail Drawing List

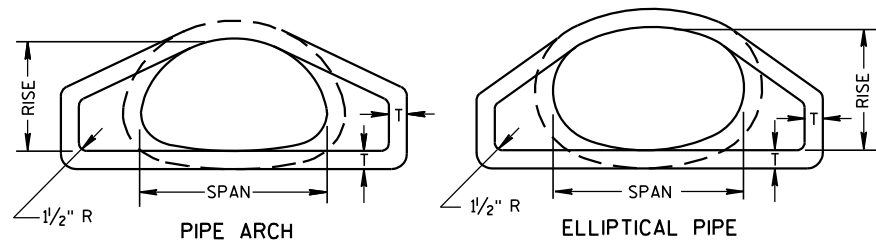
08E09-06	SILT FENCE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
09A01-13A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
13A08-01	ASPHALTIC RUMBLE STRIPS AT INTERSECTION
13A11-02A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-02B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
14B29-01	SAFETY EDGE
15A02-08	DELINEATOR POST, DELINEATOR, AND DELINEATOR BRACKET WITH REFLECTIVE SHEETING
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15A06-02	DELINEATOR LAYOUT
15C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-03	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-03	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M. P. H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C06-07	SIGNING & MARKING FOR TWO LANE BRIDGES
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16B	PAVEMENT MARKING (INTERSECTIONS)
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C21-06	SIGNING AND MARKING FOR TWO LANE TO FOUR LANE DIVIDED TRANSITIONS
15D21-03	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D38-01B	ATTACHMENT OF SIGNS TO POSTS



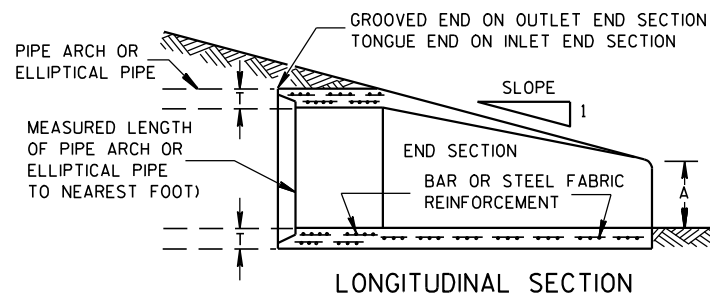
- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1 1/8" X 1 1/8" 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.



<p style="text-align: center;"><b>SILT FENCE</b></p>	
<p style="text-align: center;"><b>STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION</b></p>	
<p><b>APPROVED</b></p> <p><u>4-29-05</u></p> <p><u>DATE</u></p>	<p><u>/S/ Beth Canestra</u></p> <p><b>CHIEF ROADWAY DEVELOPMENT ENGINEER</b></p>

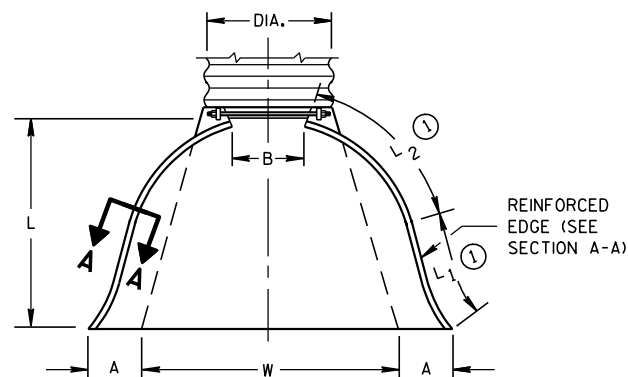


END VIEW



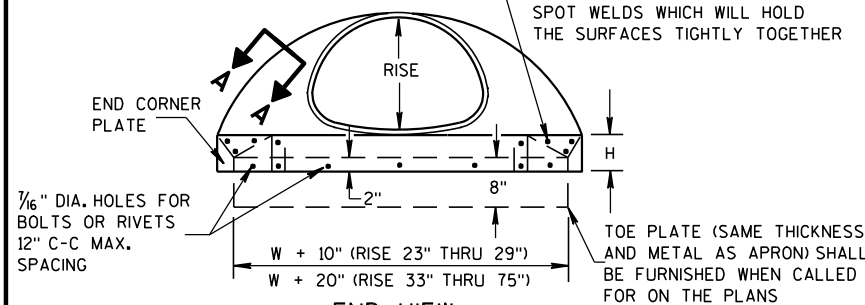
LONGITUDINAL SECTION

## CONCRETE ENDWALLS

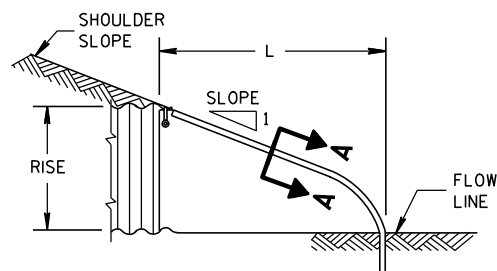
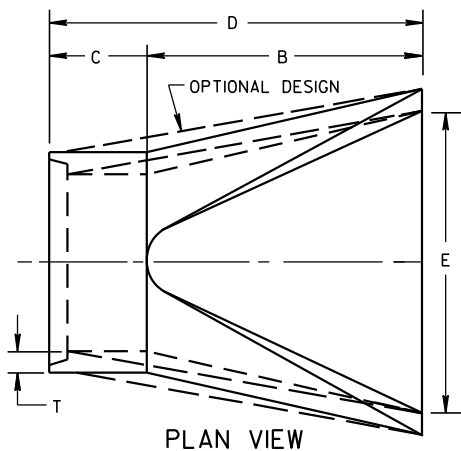


PLAN VIEW

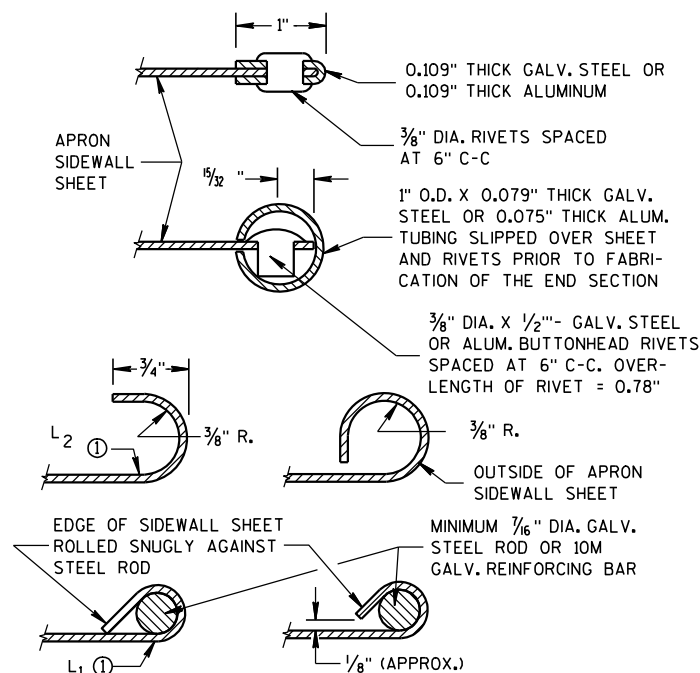
END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER



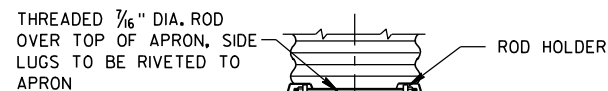
END VIEW

SIDE ELEVATION  
METAL ENDWALLS

PLAN VIEW

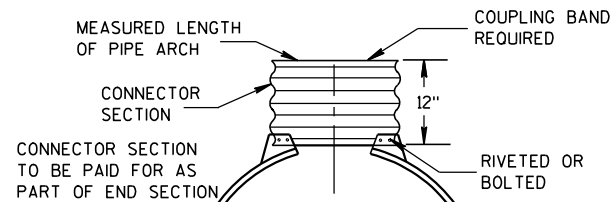


SECTION A-A



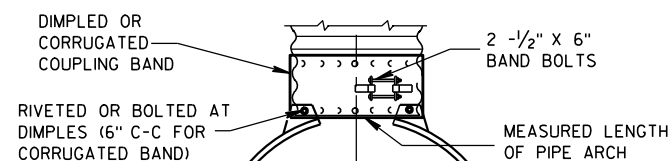
TYPE 2

FOR 17" X 13" THRU 112" X 75" PIPE ARCH



TYPE 3

FOR 64" X 43" THRU 112" X 75" PIPE ARCH



TYPE 5

ALTERNATE FOR:  
ALL SIZES CORRUGATED PIPE ARCHESNOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL,  
AND CORRUGATED BAND FITS INSIDE ENDWALL.

## CONNECTION DETAILS

## 2- 2/3" X 1/2" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches)		MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	SPAN	RISE	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")		
15	17	13	.064	.060	7	9	6	19	14	16	30	2 1/2 to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19 3/8	36	2 1/2 to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21 3/4	42	2 1/2 to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27 1/2	48	2 1/2 to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37 5/8	60	2 1/2 to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45 3/8	75	2 1/2 to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54 3/4	85	2 1/2 to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	2 1/2 to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	72 3/4	102	2 1/4 to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82 1/4	114	2 1/4 to 1	3 Pc.
66	77	52	.109*	.105*	18	36	12	77	—	—	126	2 to 1	3 Pc.
72	83	57	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.

## 3" X 1" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches)		MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	SPAN	RISE	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")		
48	53	41	.109	.105	18	26	12	63	24	72 3/4	90	2 1/2 to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82 1/4	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	1 1/2 to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1 1/2 to 1	3 Pc.
72	81	59	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.
78	87	63	.109*	.105*	22	38	12	77	—	—	148	1 1/2 to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1 1/2 to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1 1/2 to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1 1/2 to 1	3 Pc.

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

\* EXCEPT CENTER PANEL  
SEE GENERAL NOTES

## REINFORCED CONCRETE PIPE ARCH

EQUIV. DIA. (Inches)	DIMENSIONS (Inches)								APPROX. SLOPE
	** SPAN	** RISE	T	A	B	C	D	E	
24	29	18	3	8 1/2	39	33	72	48	3 to 1
30	36	22	3 1/2	9 1/2	50	46	96	60	3 to 1
36	44	27	4	11 1/8	60	36	96	72	3 to 1
42	51	31	4 1/2	15 1/16	60	36	96	78	3 to 1
48	58	36	5	21	60	36	96	84	3 to 1
54	65	40	5 1/2	25 1/2	60	36	96	90	3 to 1
60	73	45	6	31	60	36	96	96	3 to 1
72	88	54	7	31	60	39	99	120	2 to 1
84	102	62	8	28 1/2	83	19	102	144	2 to 1

## REINFORCED CONCRETE ELLIPTICAL PIPE

EQUIV. DIA. (Inches)	DIMENSIONS (Inches)								APPROX. SLOPE
	** SPAN	** RISE	T	A	B	C	D	E	
24	30	19	3 1/4	8 1/2	39	33	72	48	3 to 1
30	38	24	3 3/4	9 1/2	54	18	72	60	3 to 1
36	45	29	4 1/2	11 1/8	60	24	84	72	2 1/2 to 1
42	53	34	5	15 1/4	60	36	96	78	2 1/2 to 1
48	60	38	5 1/2	21	60	36	96	84	2 1/2 to 1
54	68	43	6	25 1/2	60	36	96	90	2 1/2 to 1
60	76	48	6 1/2	30	60	36	96	96	2 1/2 to 1

\*\*NOMINAL SIZE

## 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.

CONCRETE APRON ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM APRON ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE ARCH PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 77" X 52" THROUGH 112" X 75" APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

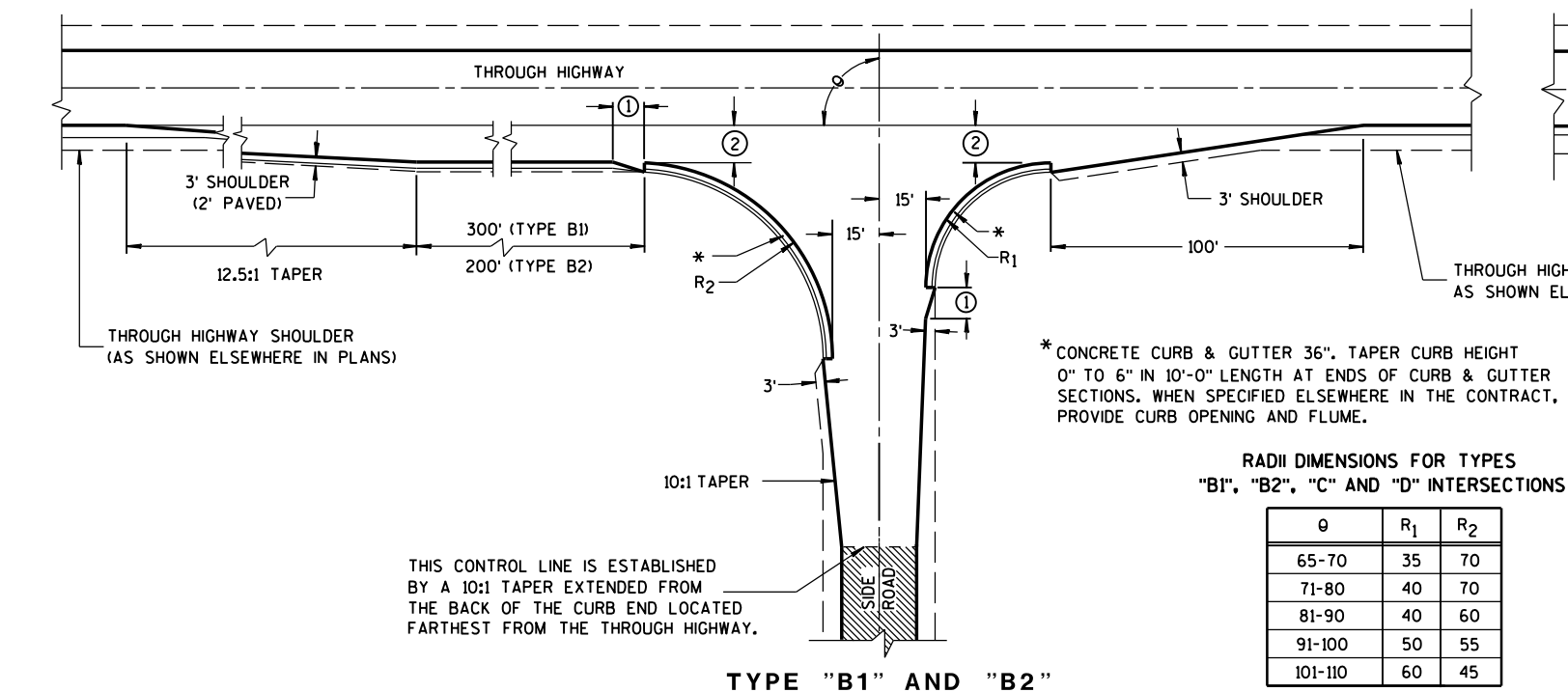
① FOR PIPE ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR  
PIPE ARCH AND  
ELLIPTICAL PIPESTATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/94  
DATE/S/ Rory L. Rhinesmith  
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.

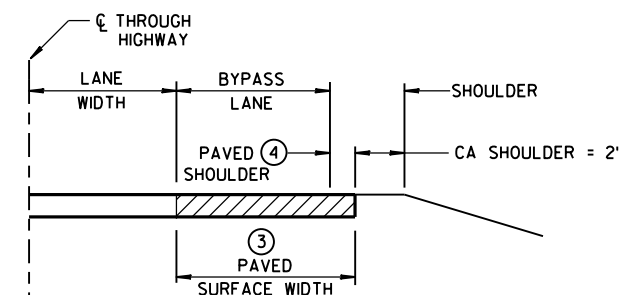
WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

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

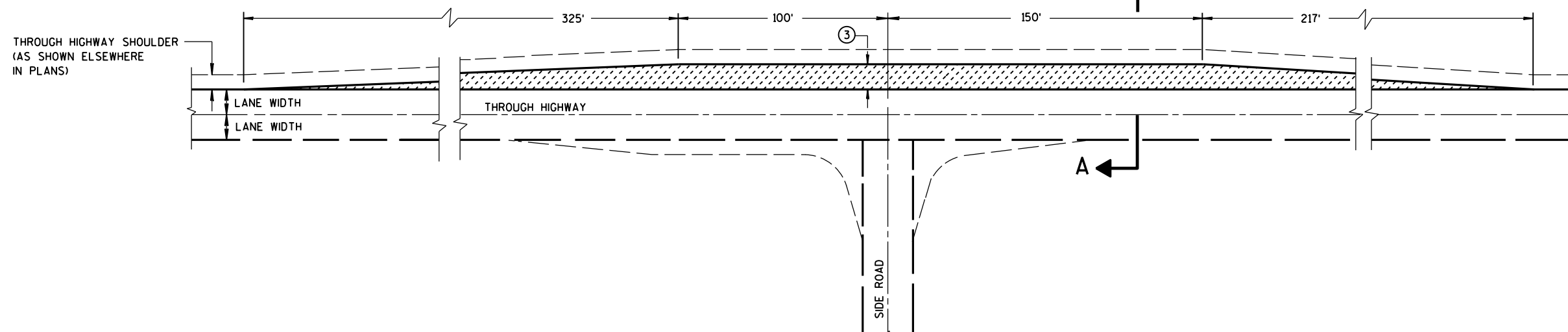
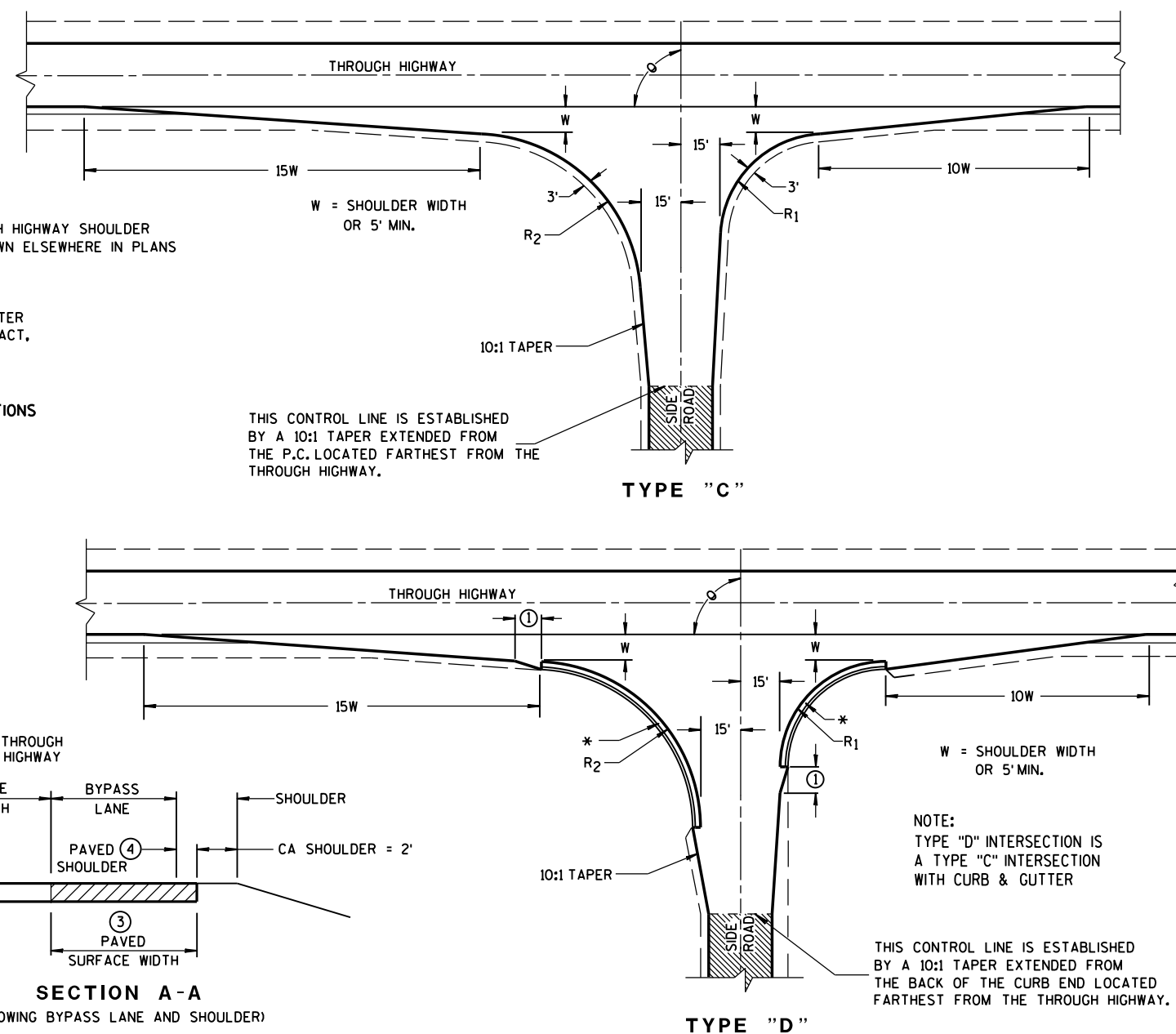
EXISTING PAVED SURFACE

BYPASS LANE

- ① 10-FT TYPICAL.
- ② 12-FT\*\* PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLAN.
- \*\*10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.
- ③ BYPASS LANE PAVED SURFACE WIDTH OUTSIDE OF TRAVEL LANE  
-ASPHALT = 12-FT PLUS PAVED SHOULDER WIDTH.  
-PC CONCRETE = 13-FT PLUS PAVED SHOULDER WIDTH.
- ④ BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.



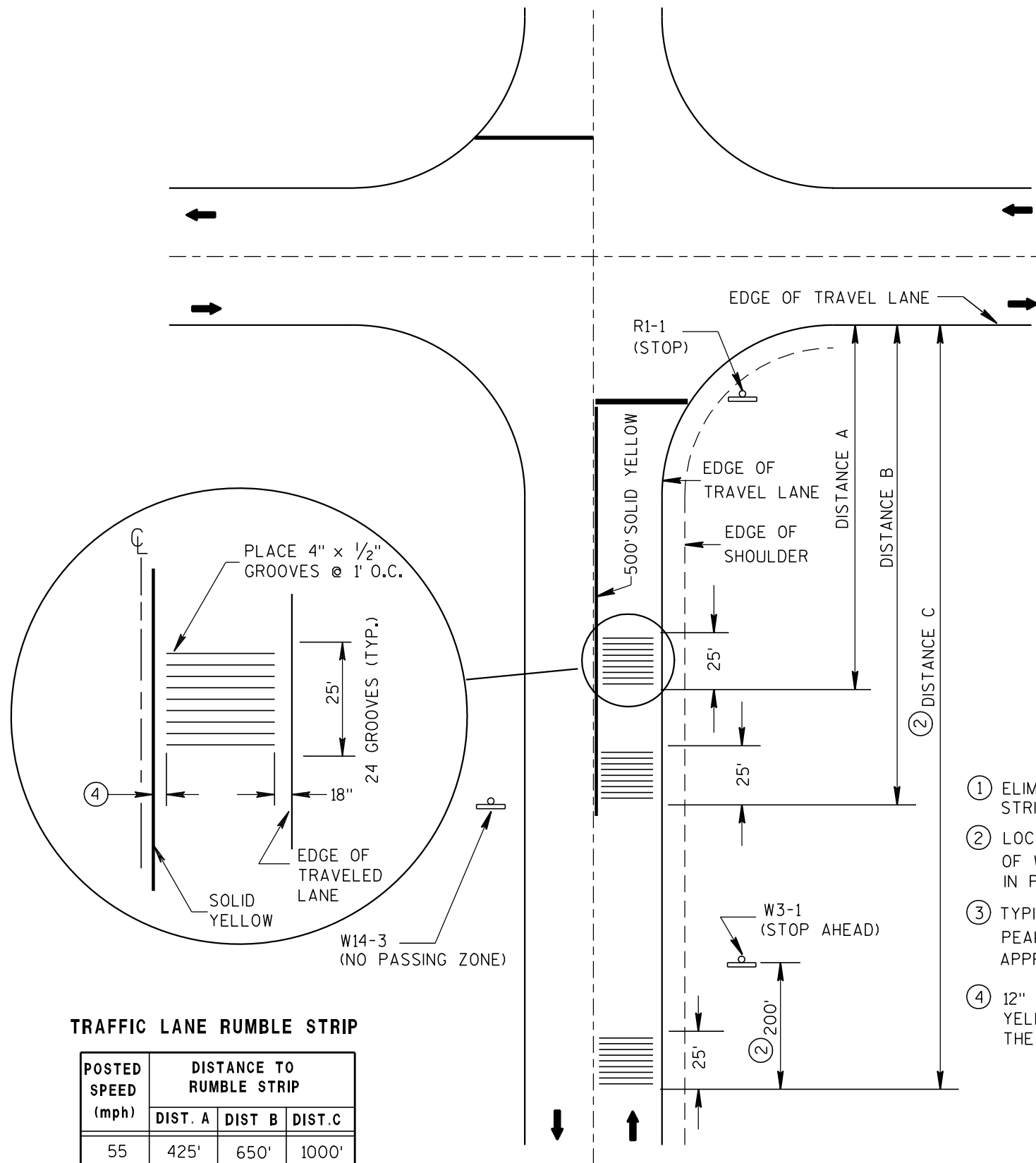
SECTION A-A  
(SHOWING BYPASS LANE AND SHOULDER)



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



PLAN VIEW  
RUMBLE STRIP LOCATION

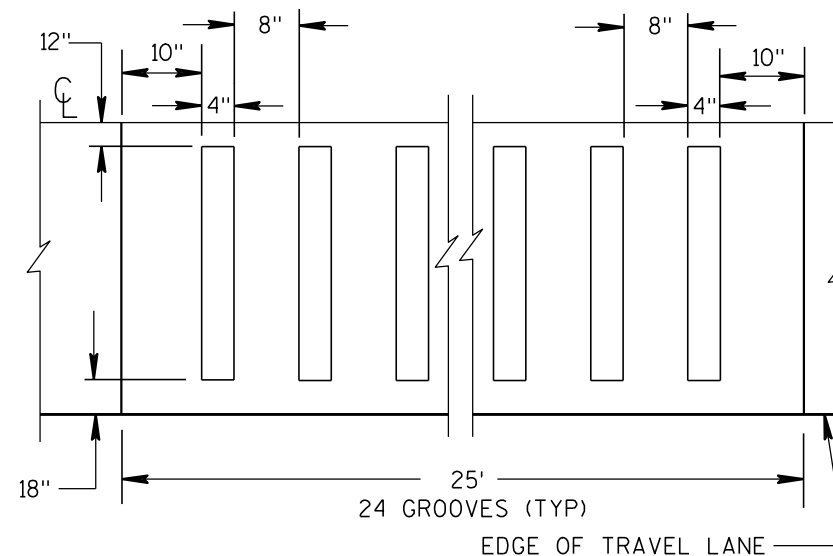
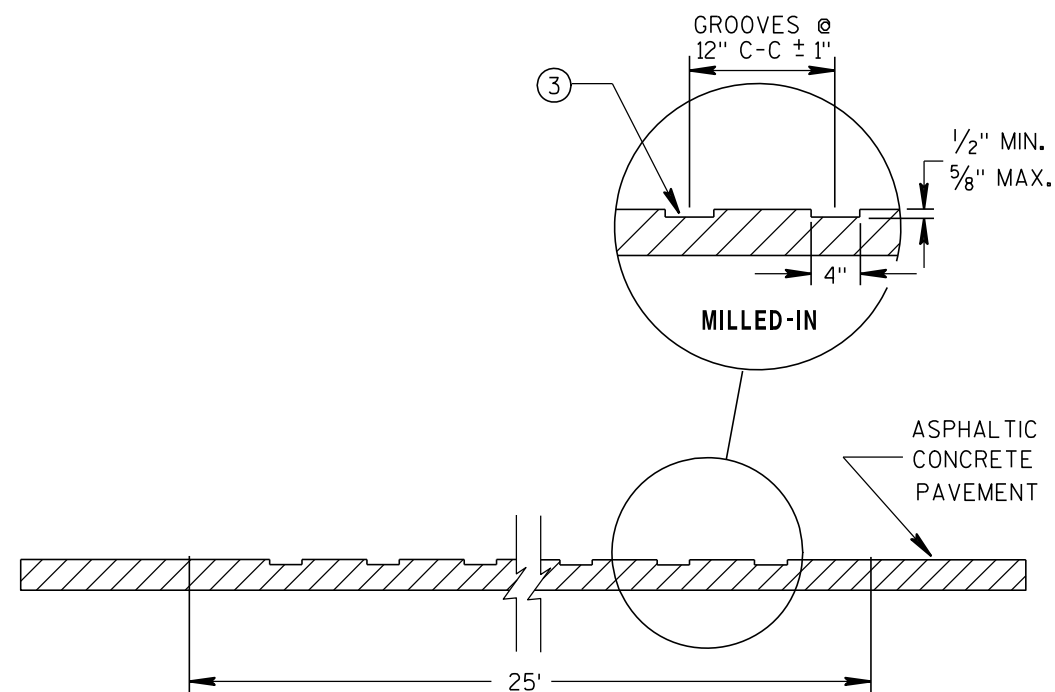
- ① ELIMINATE THE MIDDLE SET OF RUMBLE STRIPS.
- ② LOCATE RUMBLE STRIP 200' IN ADVANCE OF W3-1 SIGN AS SHOWN. IF W3-1 IS NOT IN PLACE, USE DISTANCE C.
- ③ TYPICAL VERTICAL VARIATION BETWEEN PEAKS AND VALLEYS WITHIN THE CUT APPROXIMATELY  $\frac{1}{16}$ "
- ④ 12" CLEAR BETWEEN THE SOLID YELLOW LINE AND THE EDGE OF THE RUMBLE.

#### GENERAL NOTES

CONTRACTOR SHALL CONFIRM RUMBLE STRIP LOCATION WITH THE ENGINEER PRIOR TO INSTALLATION. THE ENGINEER MAY MODIFY THE RUMBLE STRIP LOCATION AS FIELD CONDITIONS DICTATE.

WHEN ASPHALTIC PAVEMENT IS NEW IN THE RUMBLE AREA THE CONTRACTOR SHALL ALLOW THE PAVEMENT TO CURE A MINIMUM OF 7 DAYS PRIOR TO RUMBLE INSTALLATION.

PAVEMENT MARKING AND SIGNING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.



ASPHALTIC PAVEMENT  
MILLED-IN

#### ASPHALTIC RUMBLE STRIPS AT INTERSECTION

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED

8/17/2011

DATE

FHWA

/s/ Jerry H. Zogg

ROADWAY STANDARDS DEVELOPMENT

ENGINEER

GENERAL NOTES

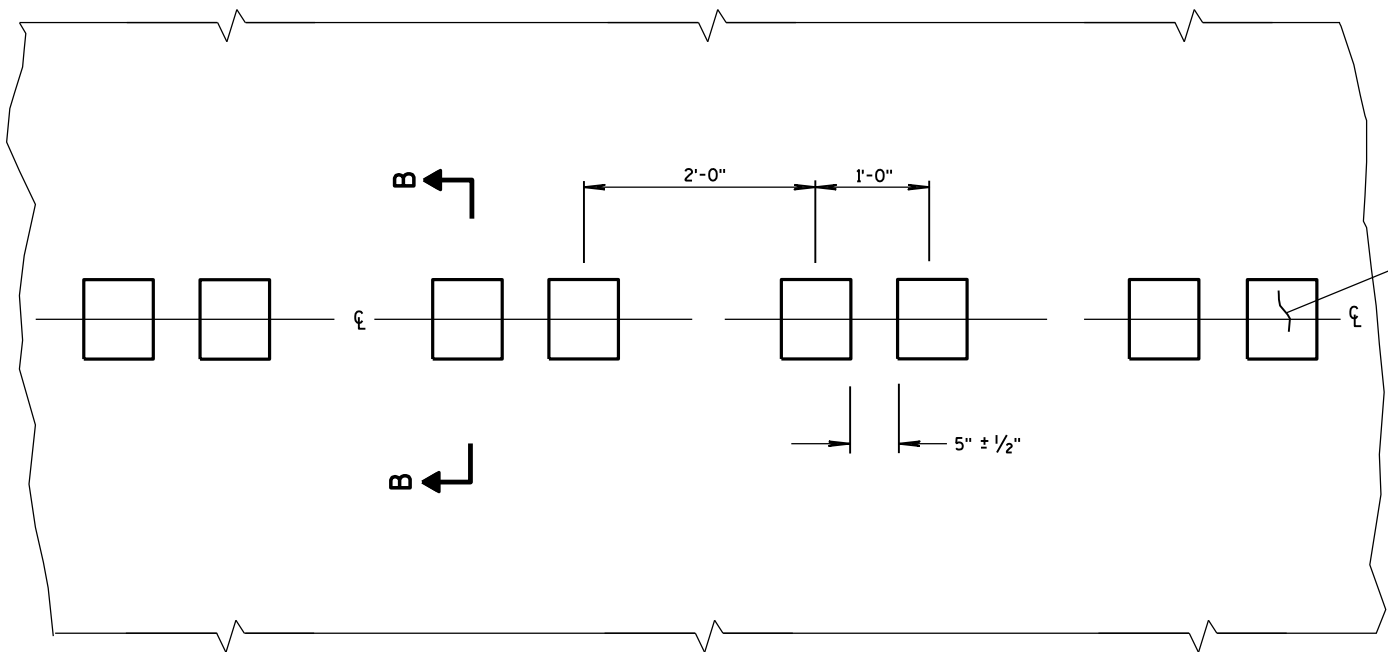
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

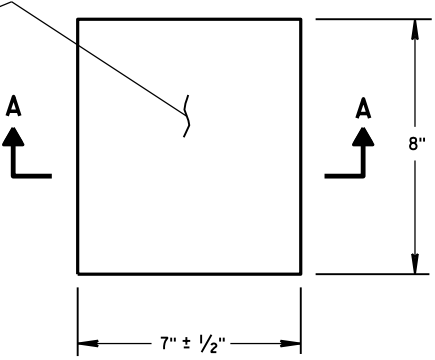
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

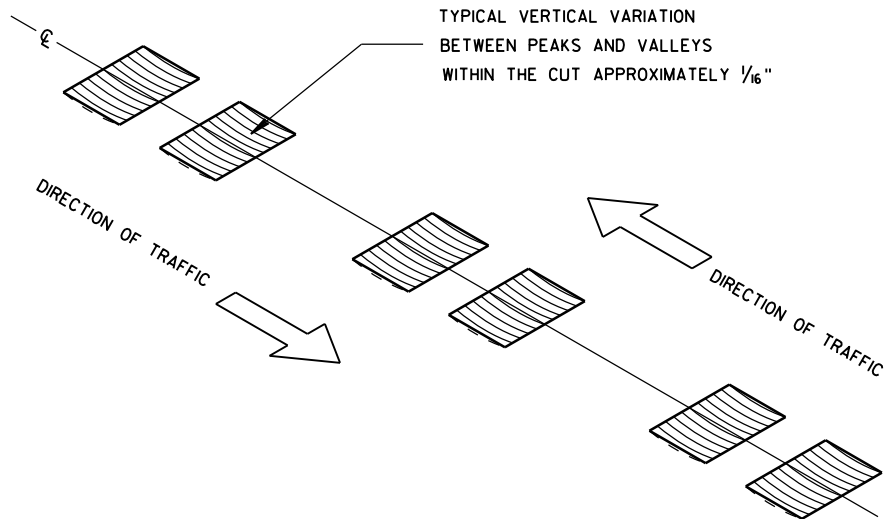
- ① CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



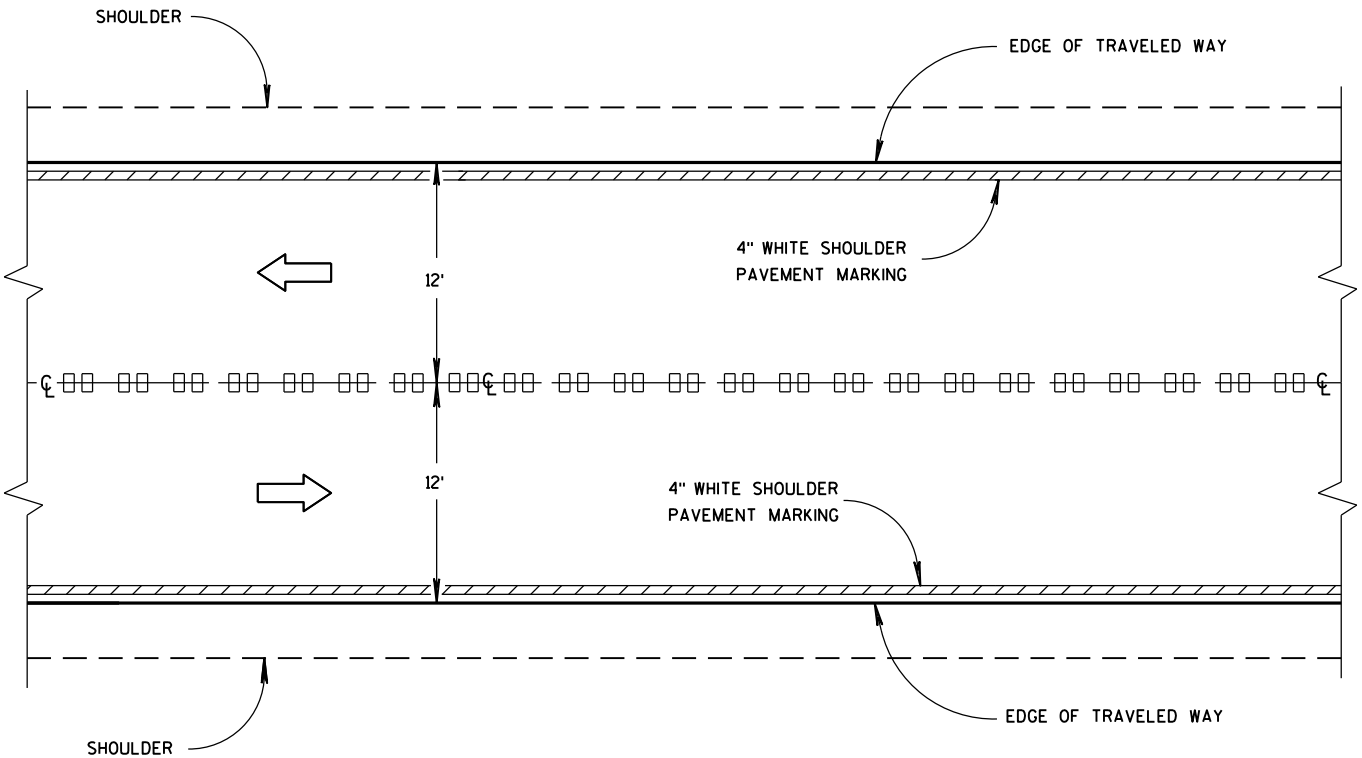
PLAN VIEW  
CENTER LINE WITH GROOVES



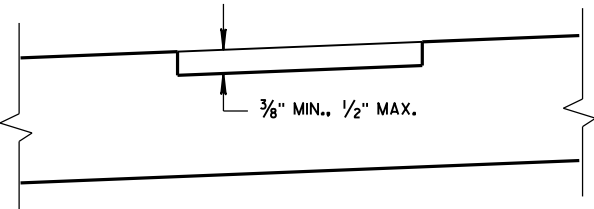
PLAN VIEW  
(SINGLE GROOVE)



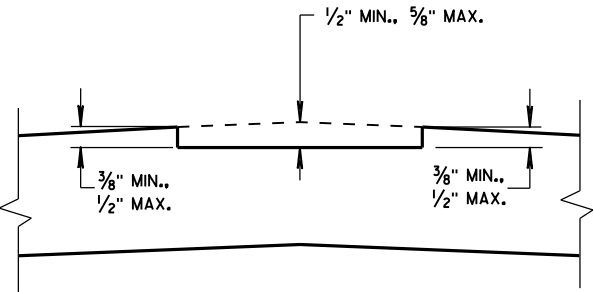
ISOMETRIC



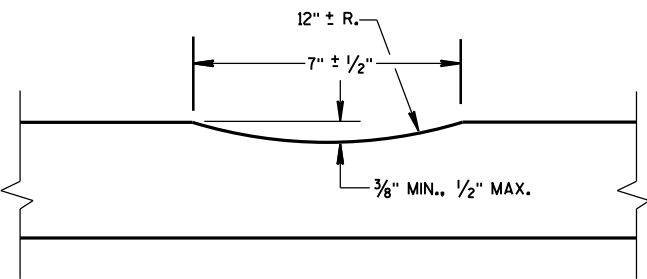
CENTER LINE GROOVES ON TWO-WAY ROADWAYS



SECTION B-B  
SUPERELEVATED ROADWAY



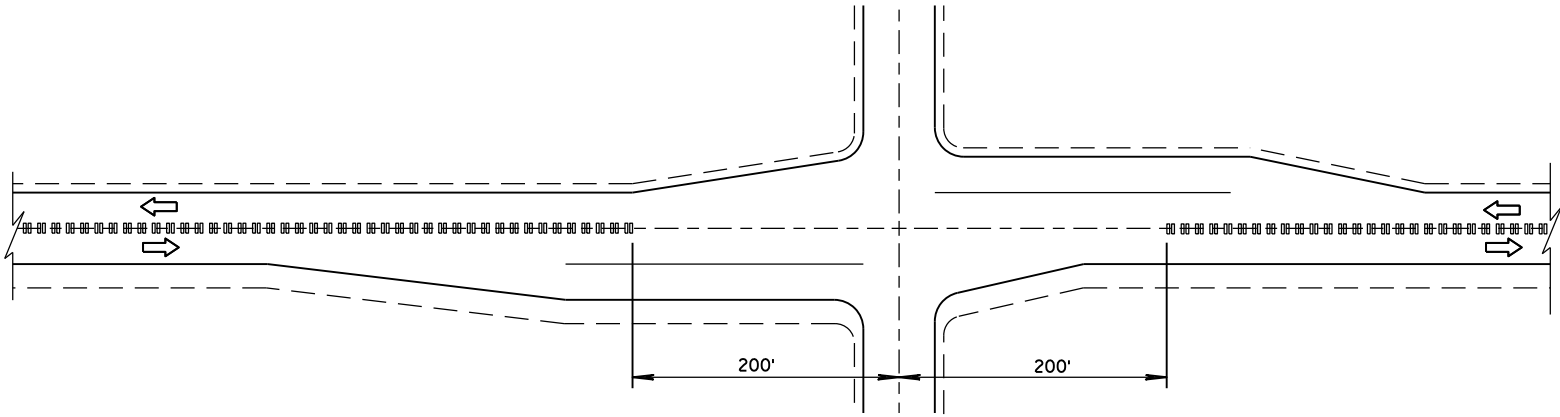
SECTION B-B  
CROWNED ROADWAY



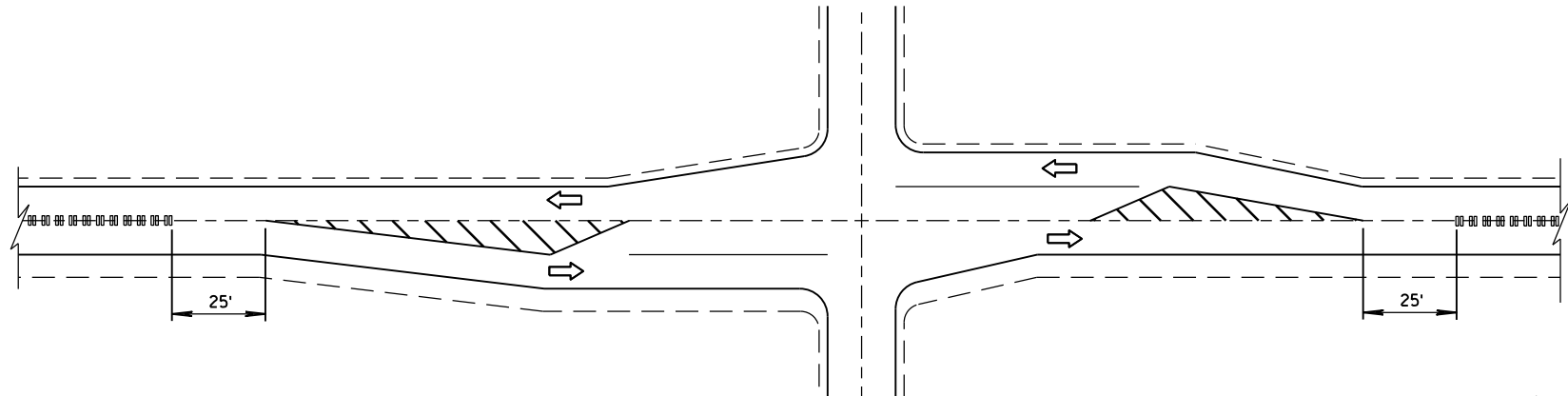
SECTION A-A

2-LANE RURAL  
CENTER LINE RUMBLE STRIP,  
MILLING

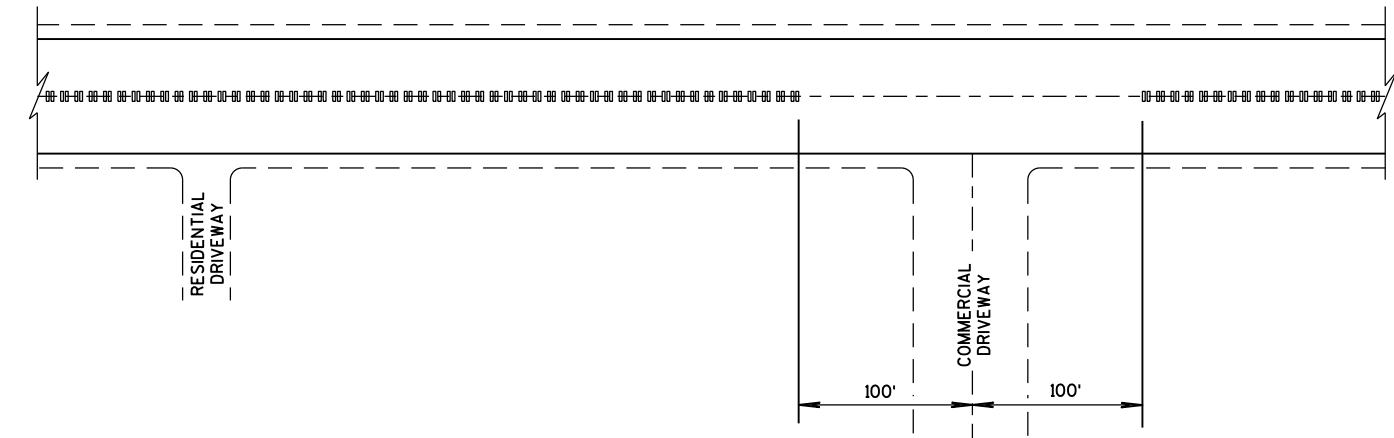
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



CENTER LINE GROOVES AT INTERSECTIONS

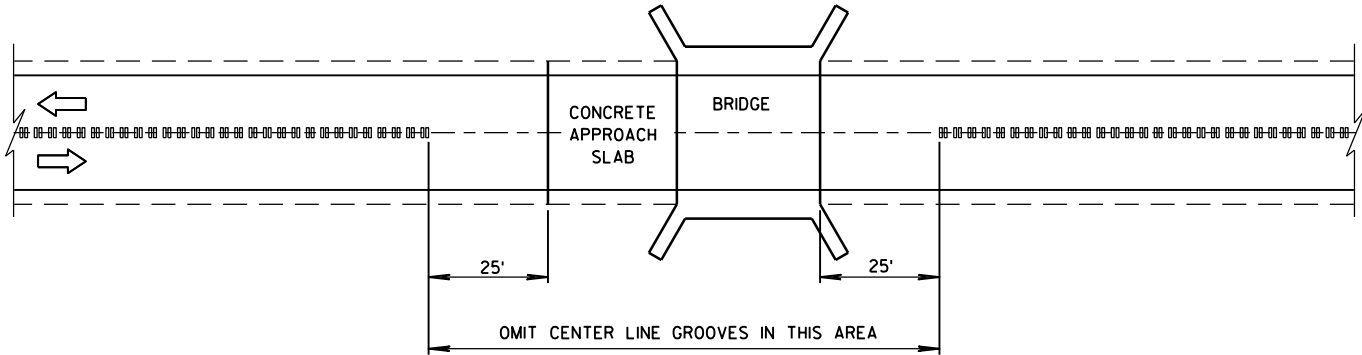


CENTER LINE GROOVES AT INTERSECTIONS  
(WITH LEFT TURN LANES)

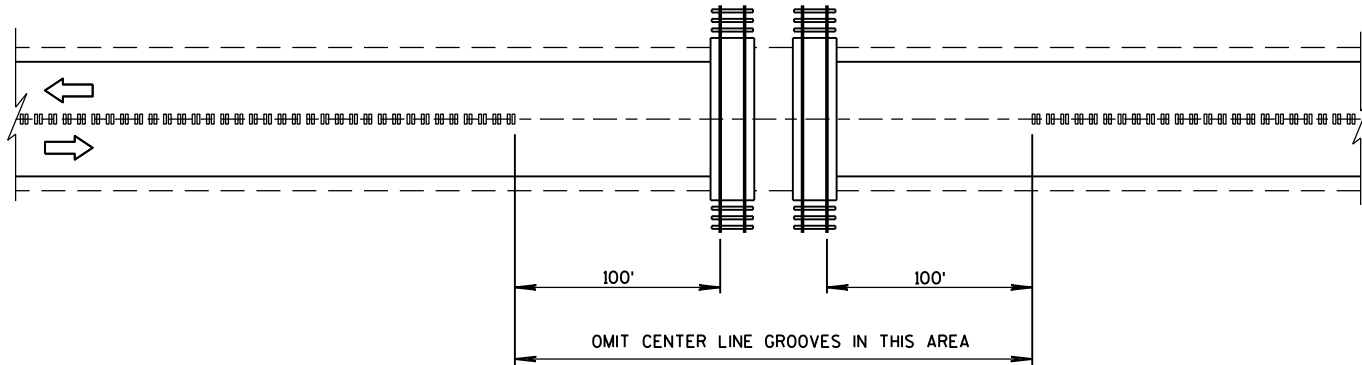


CENTER LINE GROOVES AT DRIVEWAYS<sup>①</sup>

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

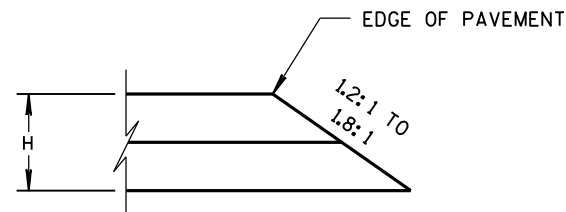


CENTER LINE GROOVES AT BRIDGES

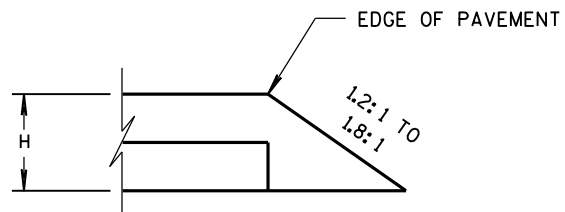


CENTER LINE GROOVES AT RAILROADS

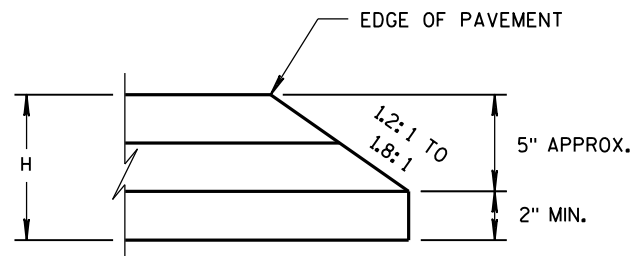
2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 5/15/2013 DATE	/S/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	



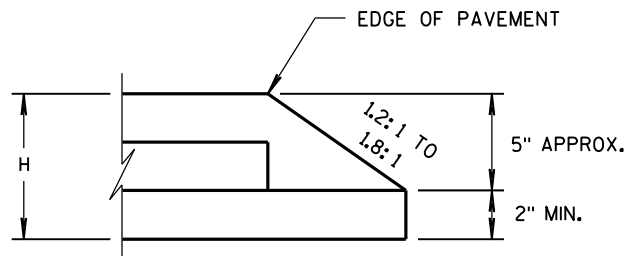
CONSTRUCTED WITH FINAL TWO LAYERS  
FOR H 5" OR LESS



CONSTRUCTED WITH FINAL LAYER  
FOR H 5" OR LESS

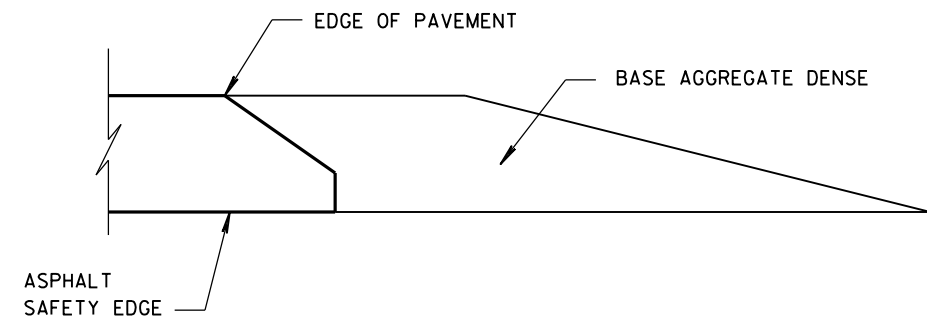


CONSTRUCTED WITH FINAL TWO LAYERS  
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER  
FOR H GREATER THAN 5"

### HMA PAVEMENT AND HMA OVERLAYS



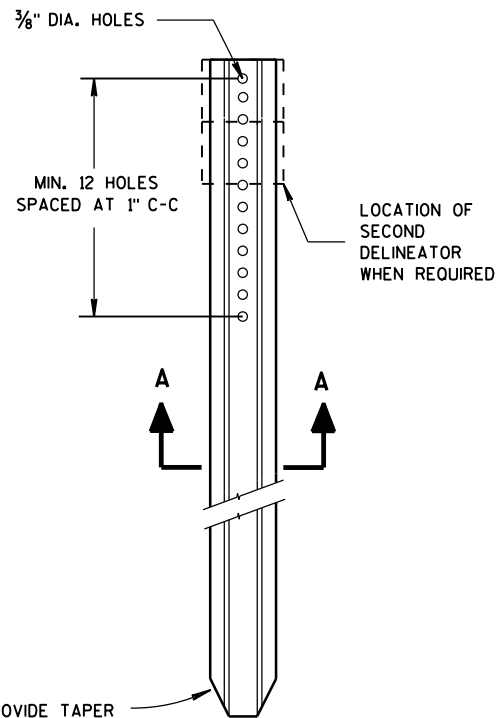
### FINISHED SHOULDER AGGREGATE PLACEMENT

SAFETY EDGE<sub>SM</sub>

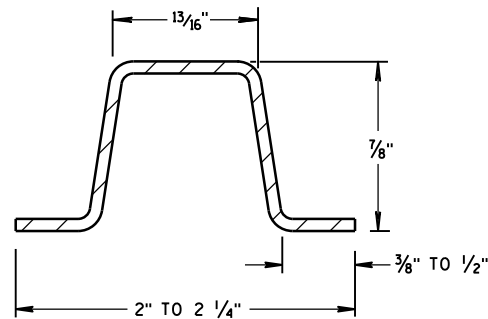
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
11/30/2012  
DATE  
FHWA

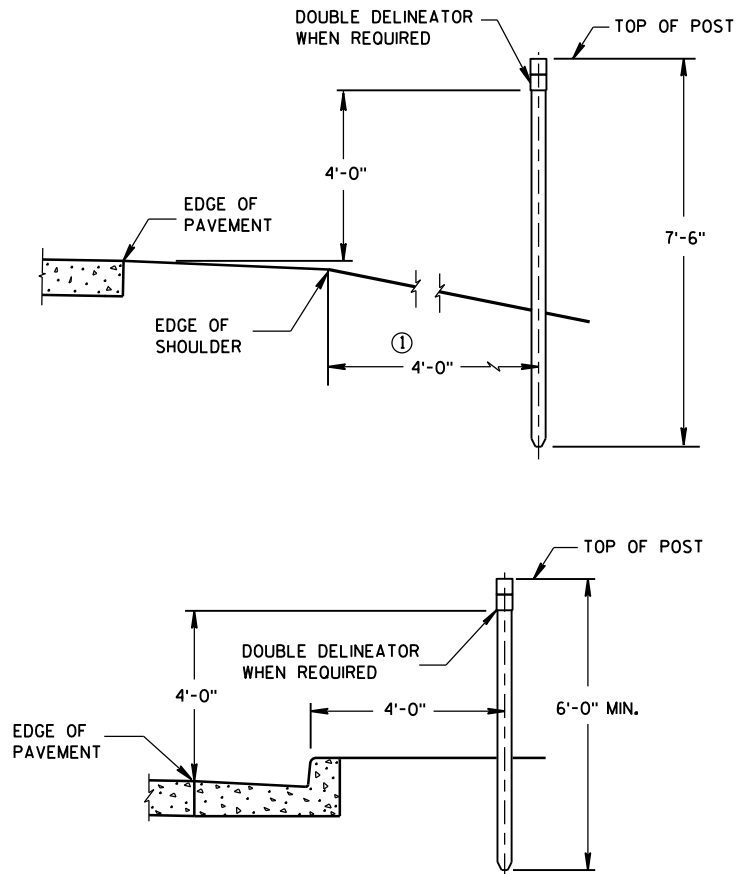
/s/ Jerry H. Zogg  
ROADWAY STANDARDS DEVELOPMENT  
ENGINEER



DELINEATOR POST



SECTION A-A  
WEIGHT 1.12 LBS PER FT. ± 0.1 LB.

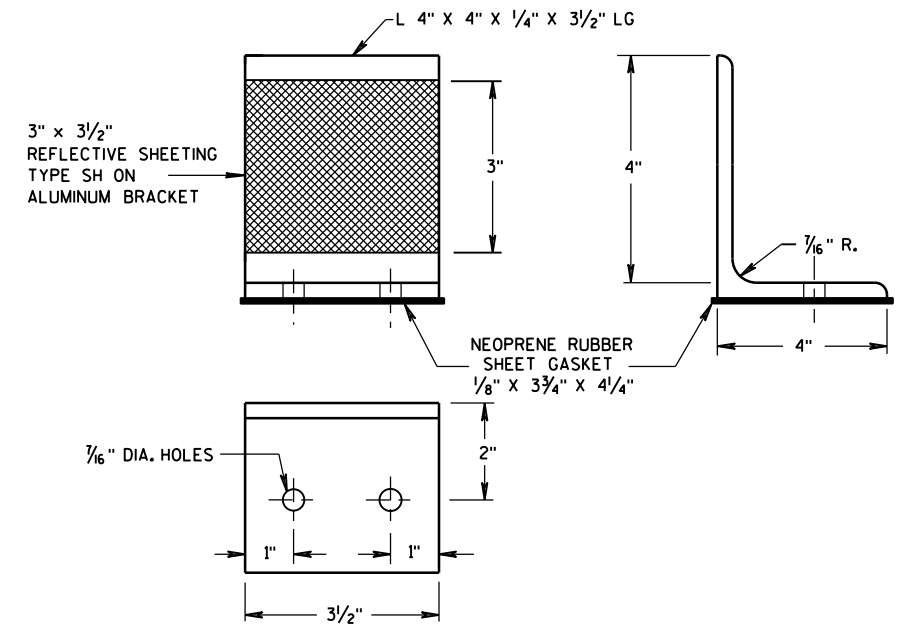


TYPICAL INSTALLATIONS OF DELINEATOR POSTS

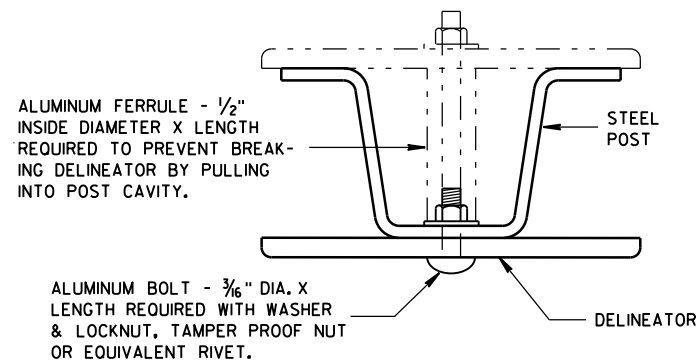
## GENERAL NOTES

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

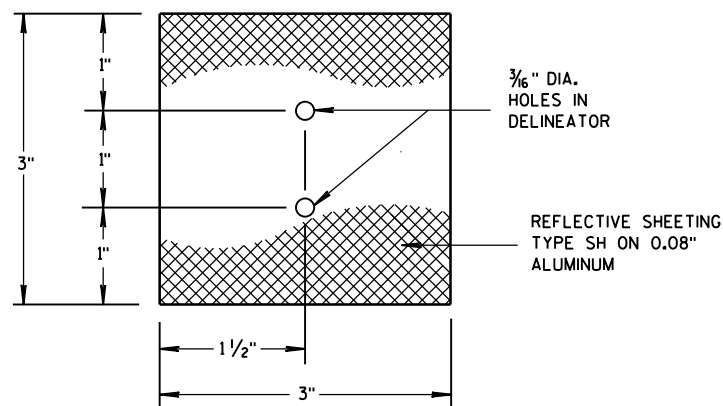
- ① DELINEATORS SHALL BE PLACED AT A CONSTANT DISTANCE FROM THE EDGE OF THE SHOULDER FOR THE LENGTH OF THE INSTALLATION.



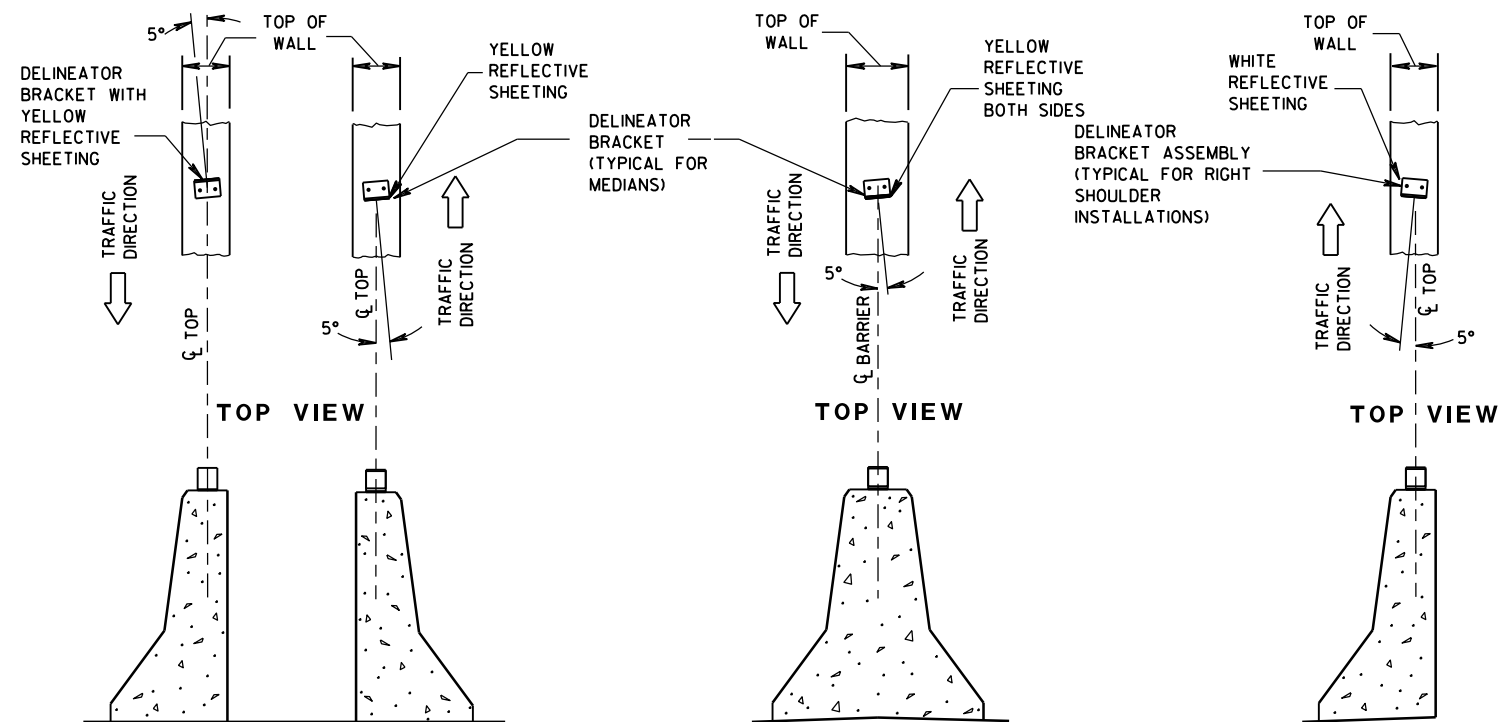
DELINEATOR BRACKET



MOUNTING DETAIL FOR DELINEATOR



3" x 3" DELINEATOR

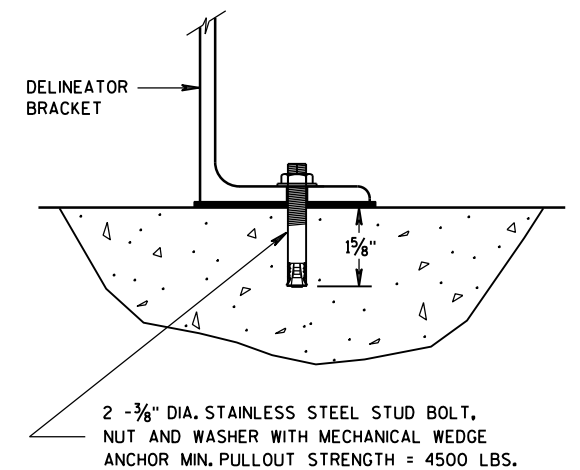


DOUBLE BARRIERS IN MEDIAN

MEDIAN BARRIER

BARRIER LOCATED  
TO RT. OF TRAFFIC FLOW

LOCATION AND AIMING DETAILS FOR DELINEATOR BRACKETS MOUNTED ON CONCRETE BARRIERS

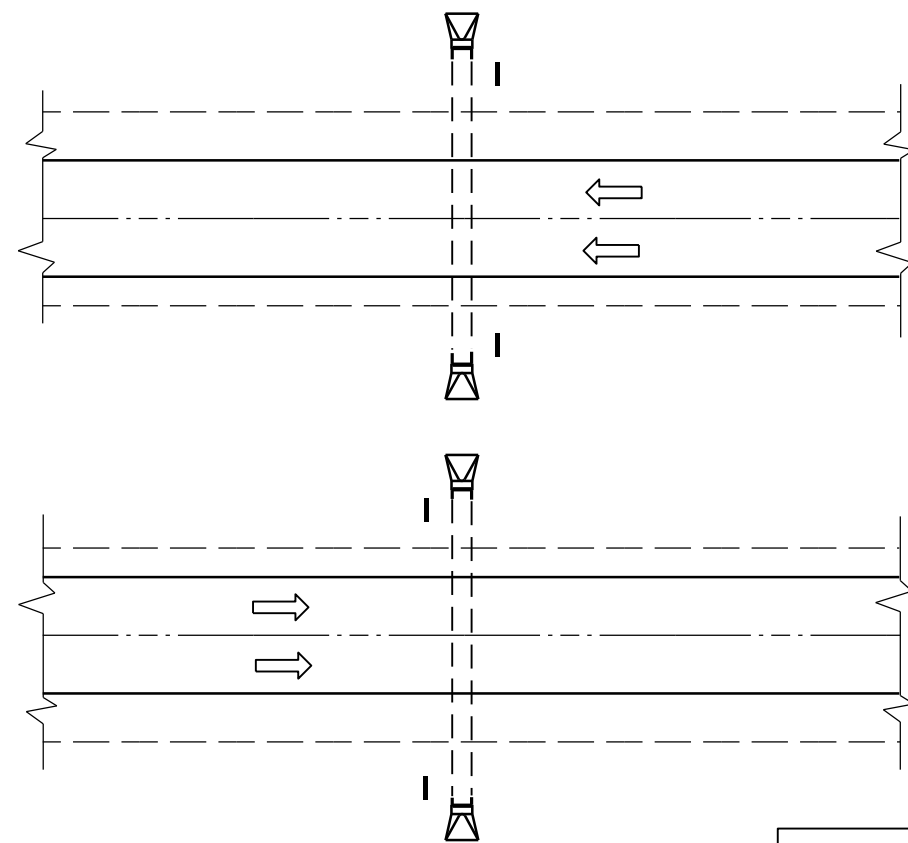


DELINEATOR BRACKET  
MOUNTING DETAIL

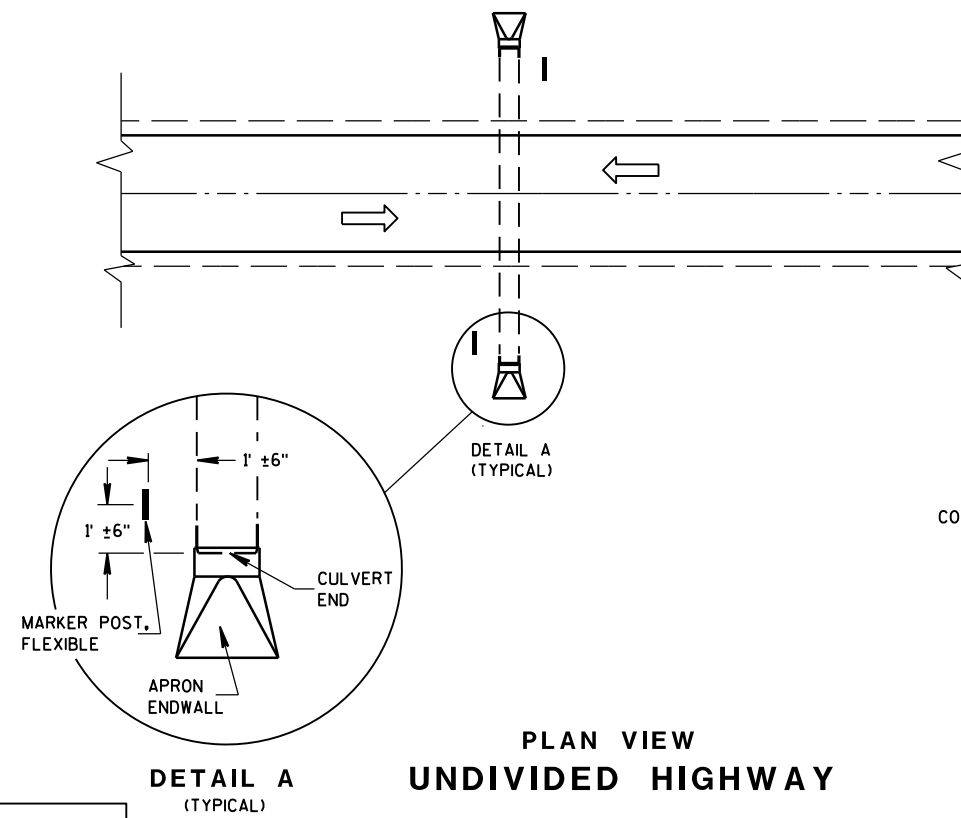
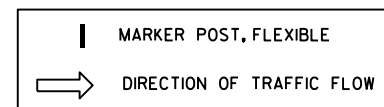
DELINEATOR POST, DELINEATOR,  
AND DELINEATOR BRACKET  
WITH REFLECTIVE SHEETING

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
7/2013 DATE /S/ Travis Feltes  
STATE TRAFFIC ENGINEER  
FHWA



PLAN VIEW  
DIVIDED HIGHWAY

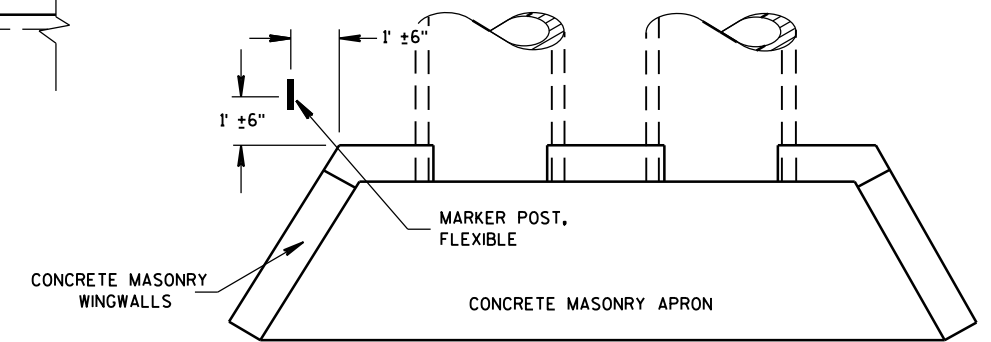


PLAN VIEW  
UNDIVIDED HIGHWAY

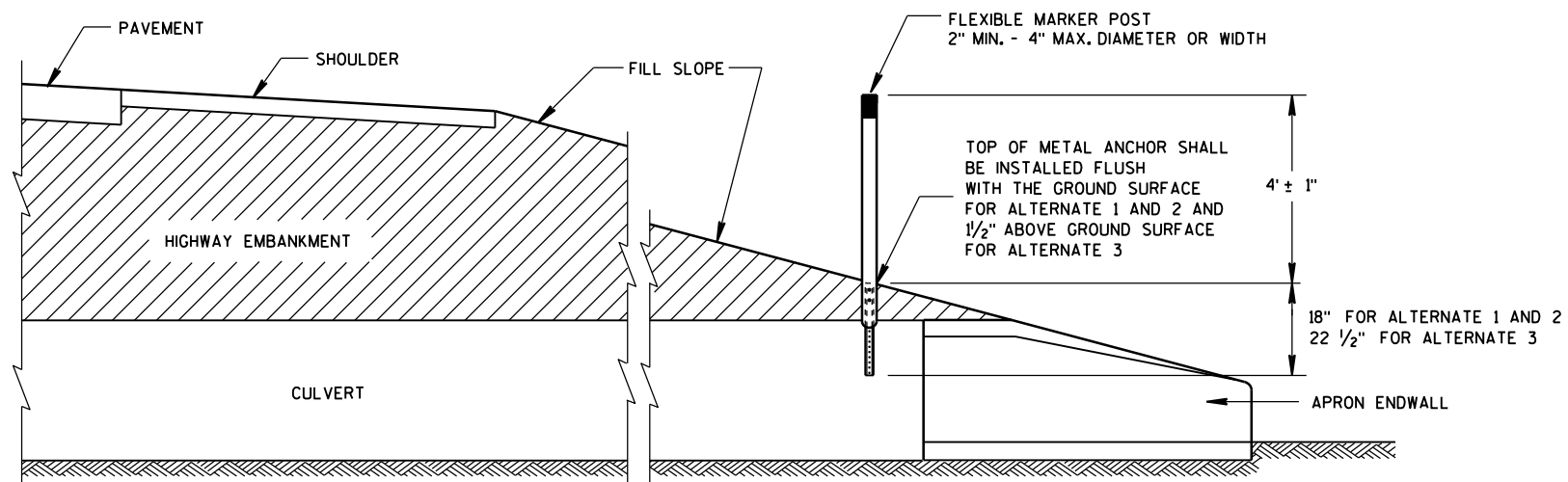
### FLEXIBLE MARKER POST LOCATION

### 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.



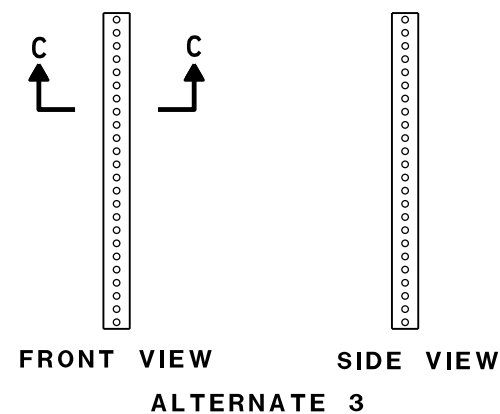
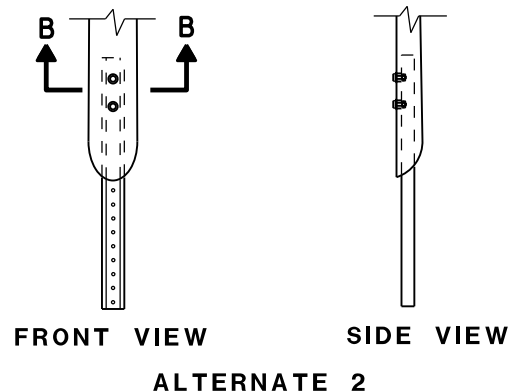
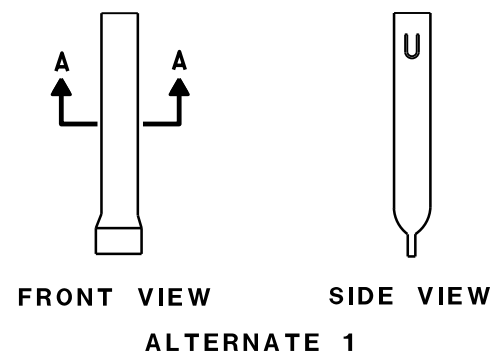
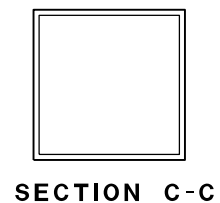
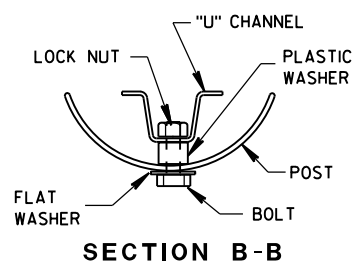
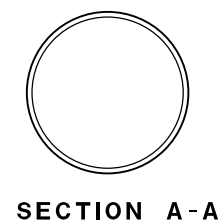
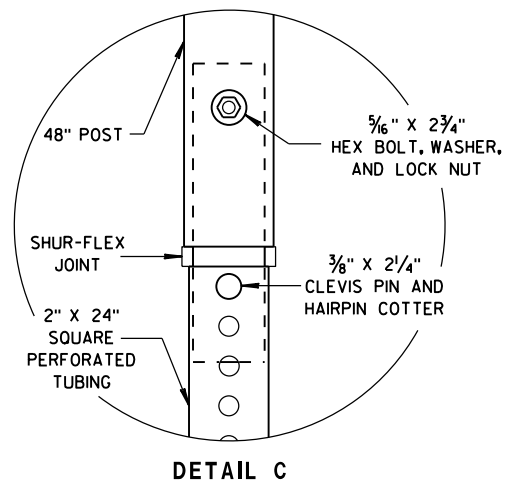
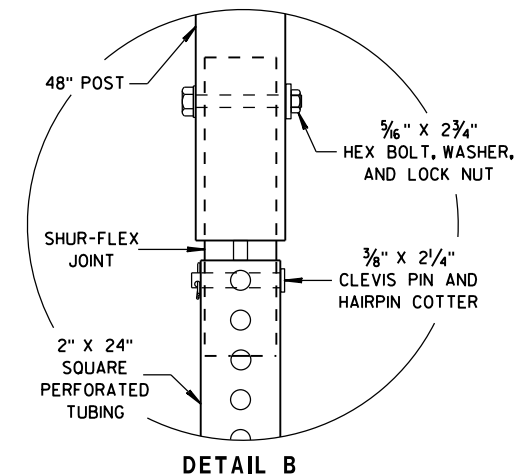
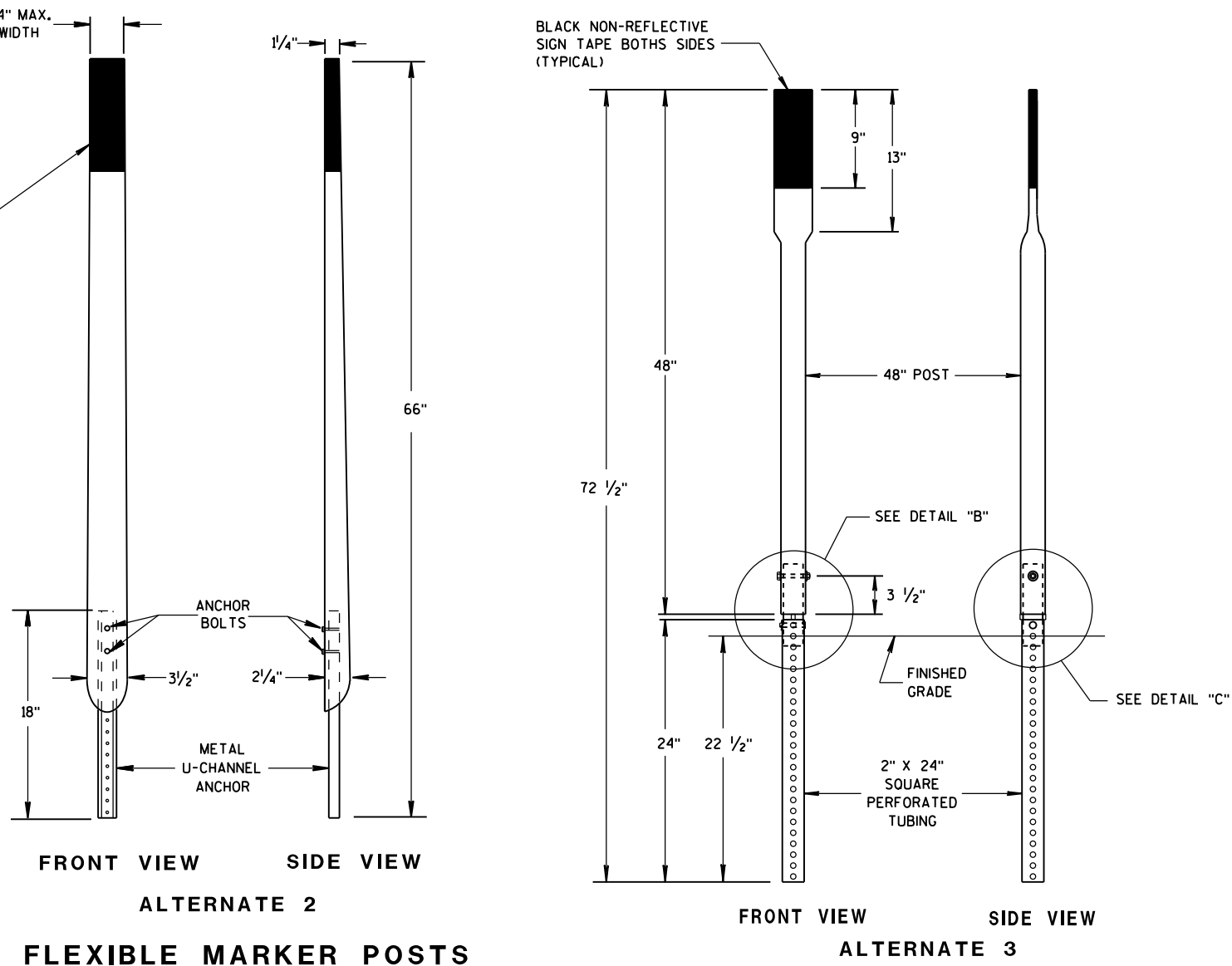
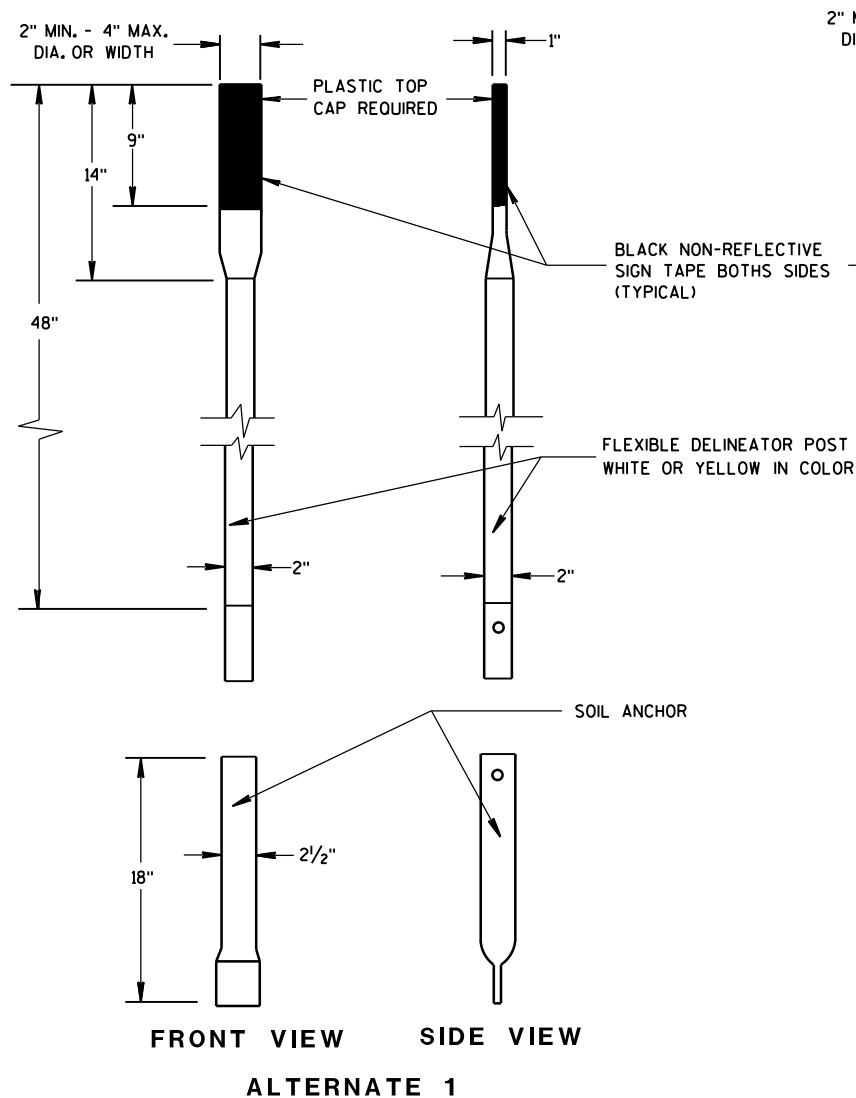
PLAN VIEW  
CONCRETE MASONRY ENDWALLS FOR  
CULVERT PIPE AND PIPE ARCH



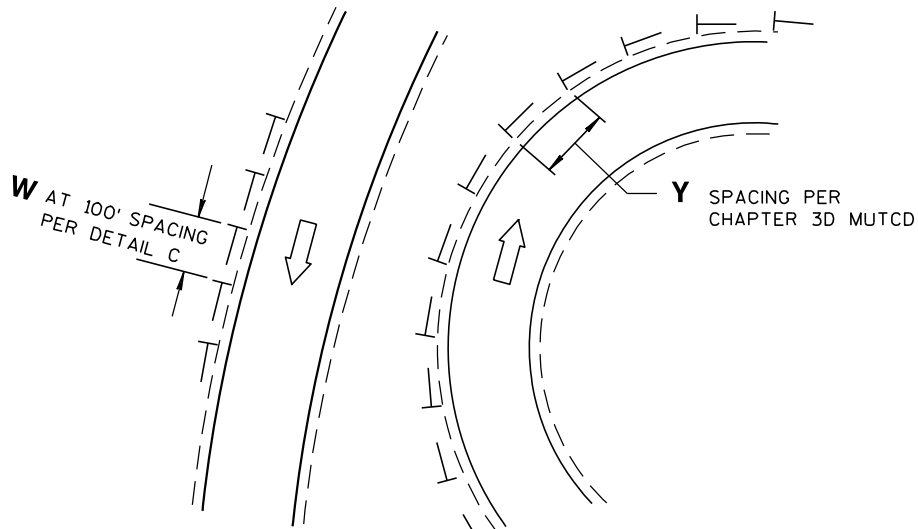
CROSS SECTION  
FLEXIBLE MARKER POST

FLEXIBLE MARKER POST  
FOR CULVERT END

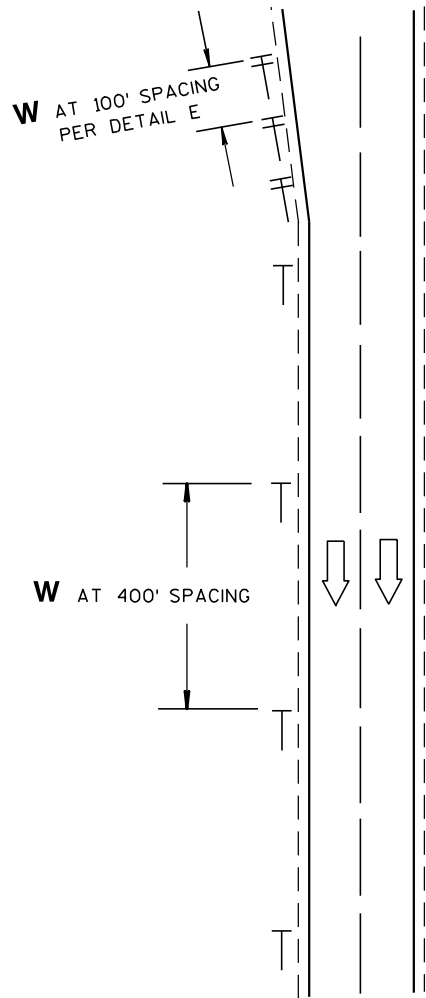
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



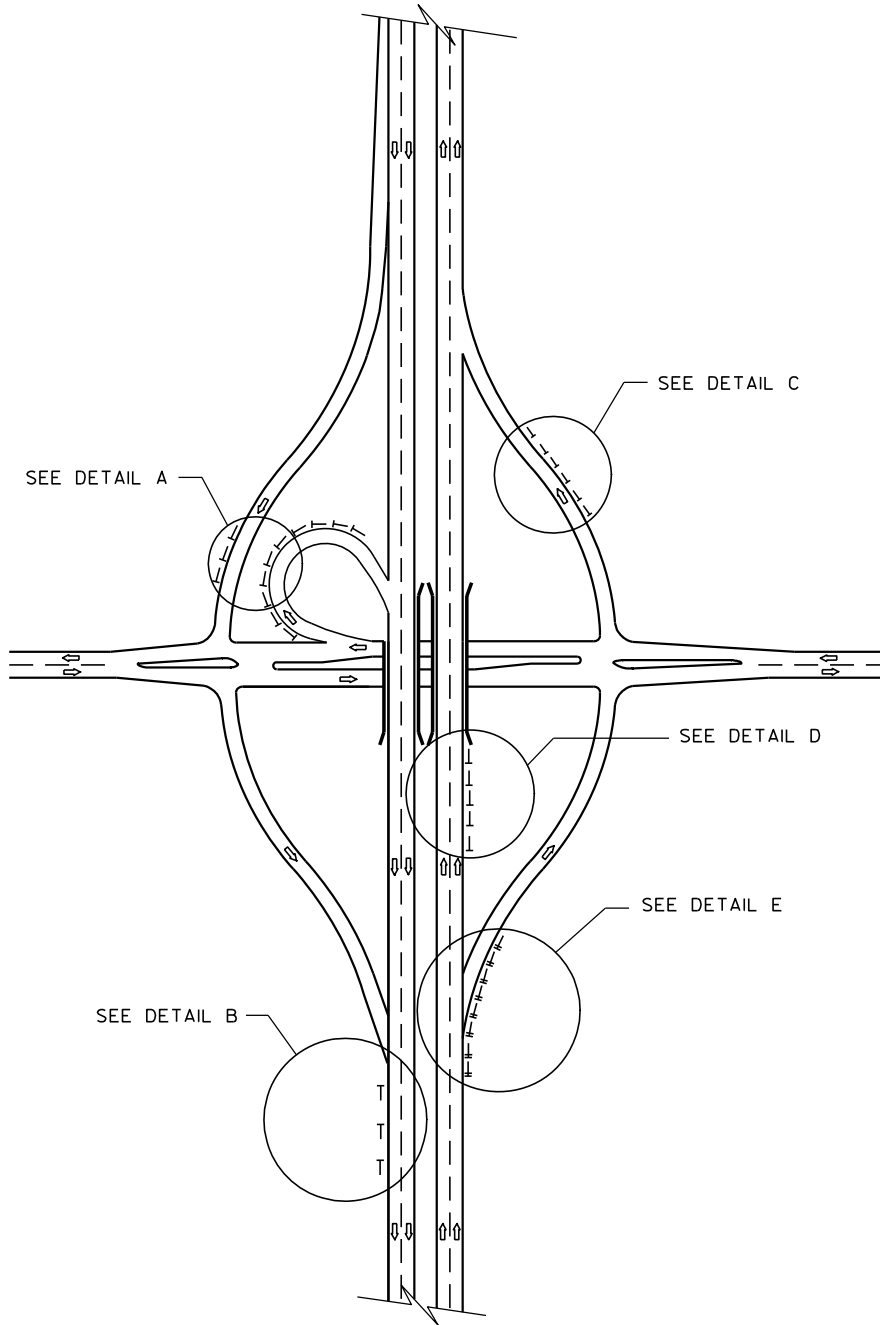
<b>FLEXIBLE MARKER POST FOR CULVERT END</b>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 10/1/2012 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEER OF DESIGN
FHWA	



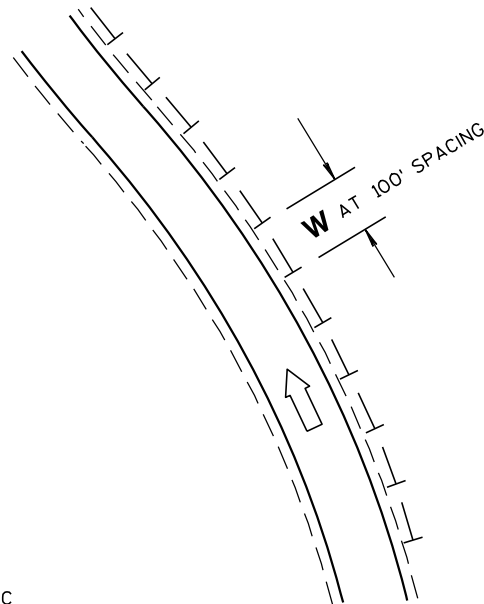
**DETAIL A**  
**DELINEATOR LAYOUT AT CURVED RAMP**



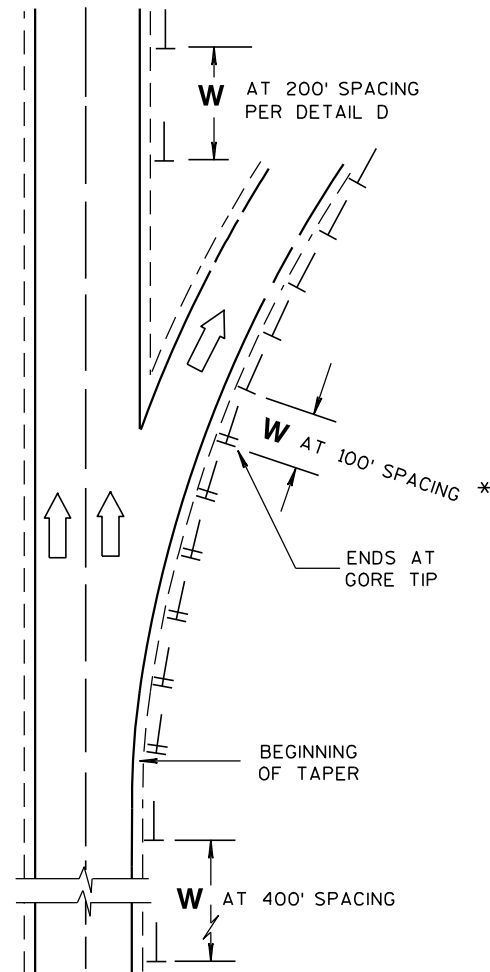
**DETAIL B**  
**DELINEATOR LAYOUT**  
**ALONG MAINLINE**



**DELINEATOR LAYOUT**



**DETAIL C**  
**DELINEATOR LAYOUT ALONG RAMP**



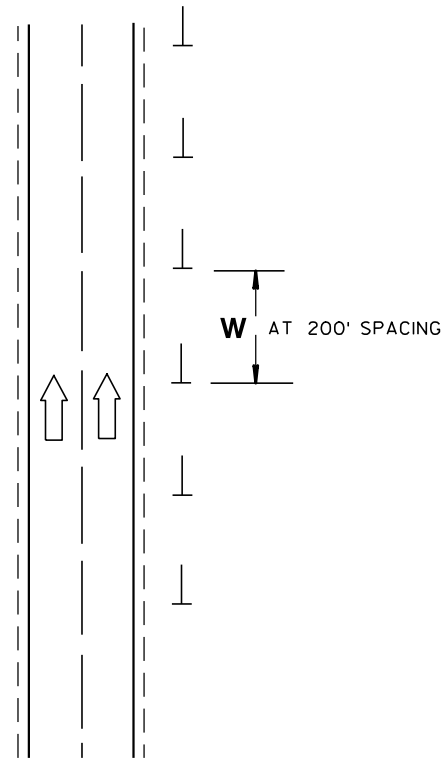
**DETAIL E**  
**DELINEATOR LAYOUT FOR ACCELERATION**  
**- DECELERATION LANES AND TAPERS AT RAMPS**

**GENERAL NOTES**

\* USE DOUBLE DELINEATOR ALONG ACCELERATION-DECELERATION LANES AND TAPERS.  
USE SINGLE DELINEATOR WHEN RAMP PAVEMENT IS FULL WIDTH.

**LEGEND**

- DIRECTION OF TRAFFIC FLOW
- SINGLE DELINEATOR
- DOUBLE DELINEATOR
- W** WHITE
- Y** YELLOW

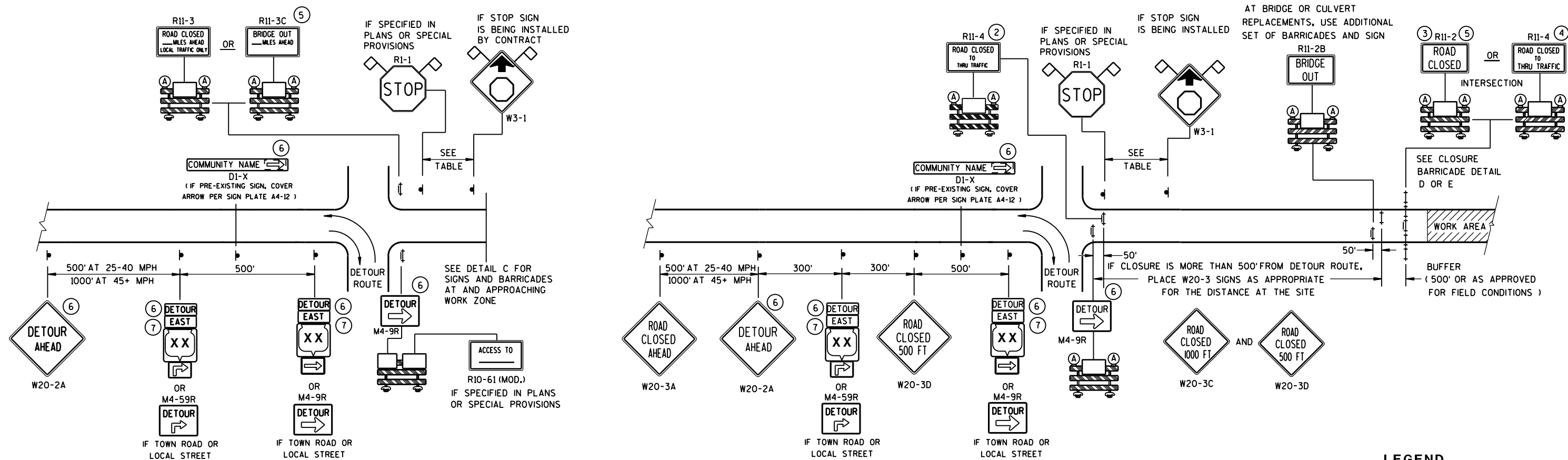


**DETAIL D**  
**DELINEATOR LAYOUT**  
**BETWEEN INTERCHANGE RAMPS**

**DELINEATOR LAYOUT**

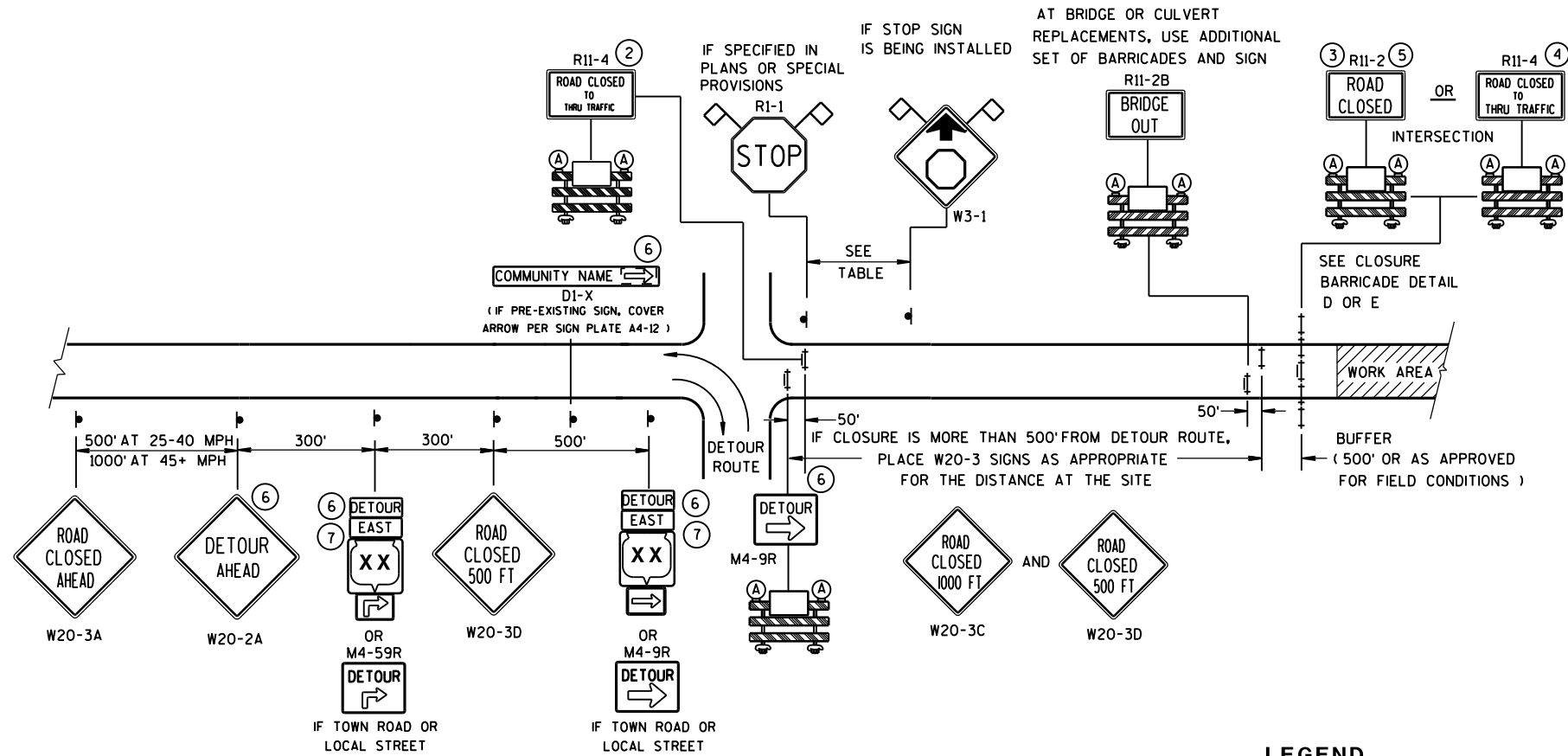
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
2/5/09 /S/ Thomas N. Notbohm  
DATE STATE TRAFFIC ENGINEER OF DESIGN  
FHWA



**DETAIL A**  
**MAINLINE CLOSURE WITH POSTED DETOUR**

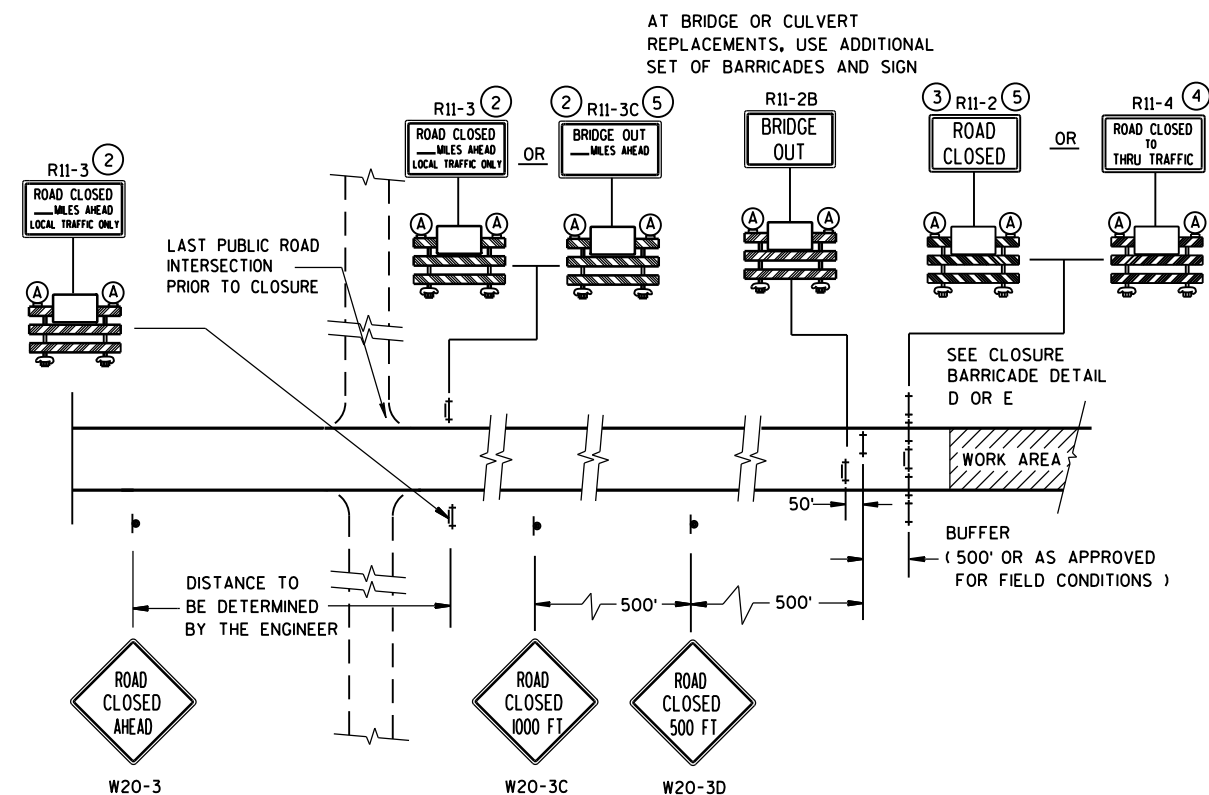
WORK ZONE GREATER THAN 1/2 MILE FROM DETOUR ROUTE ( 1000 FEET IF URBAN )



DETAIL B

**MAINLINE CLOSURE WITH POSTED DETOUR**













WORK ZONE LESS THAN 1/2 MILE FROM DETOUR ROUTE ( 1000 FEET IF URBAN )



**DETAIL C**  
**MAINLINE CLOSURE, NO POSTED DETOUR**

SEE SDD 15C2-SHEET "b"  
FOR GENERAL NOTES  
AND FOOTNOTES (1) THROUGH (7)

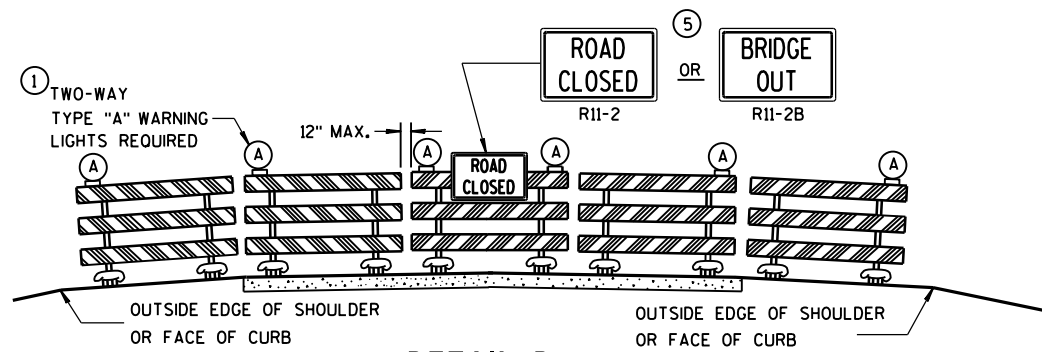
SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

- # LEGEND
-  SIGN ON PERMANENT SUPPORT
-  TYPE III BARRICADE
-  TYPE III BARRICADE WITH ATTACHED SIGN
-  TYPE "A" WARNING LIGHT (FLASHING)
-  WORK AREA
-  M4-8
-  M3-X
-  M1-4
-  M1-5A
-  M1-6
-  M05-1
-  M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

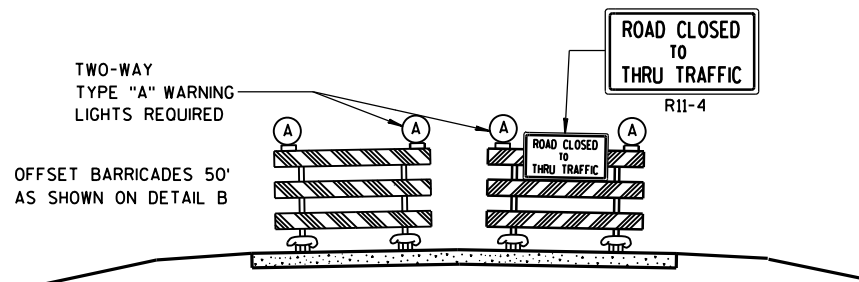
## BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

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



DETAIL D  
ROAD CLOSURE BARRICADE DETAIL  
APPROACH VIEW



DETAIL E  
LANE CLOSURE BARRICADE DETAIL  
APPROACH VIEW

SEE SDD 15C2-SHEET "a" FOR LEGEND

## GENERAL NOTES

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

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

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

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

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

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

R11-2 SHALL BE 48" X 30".

R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".

M4-9 SHALL BE 30" X 24".

M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)

M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)

M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)

M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)

D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

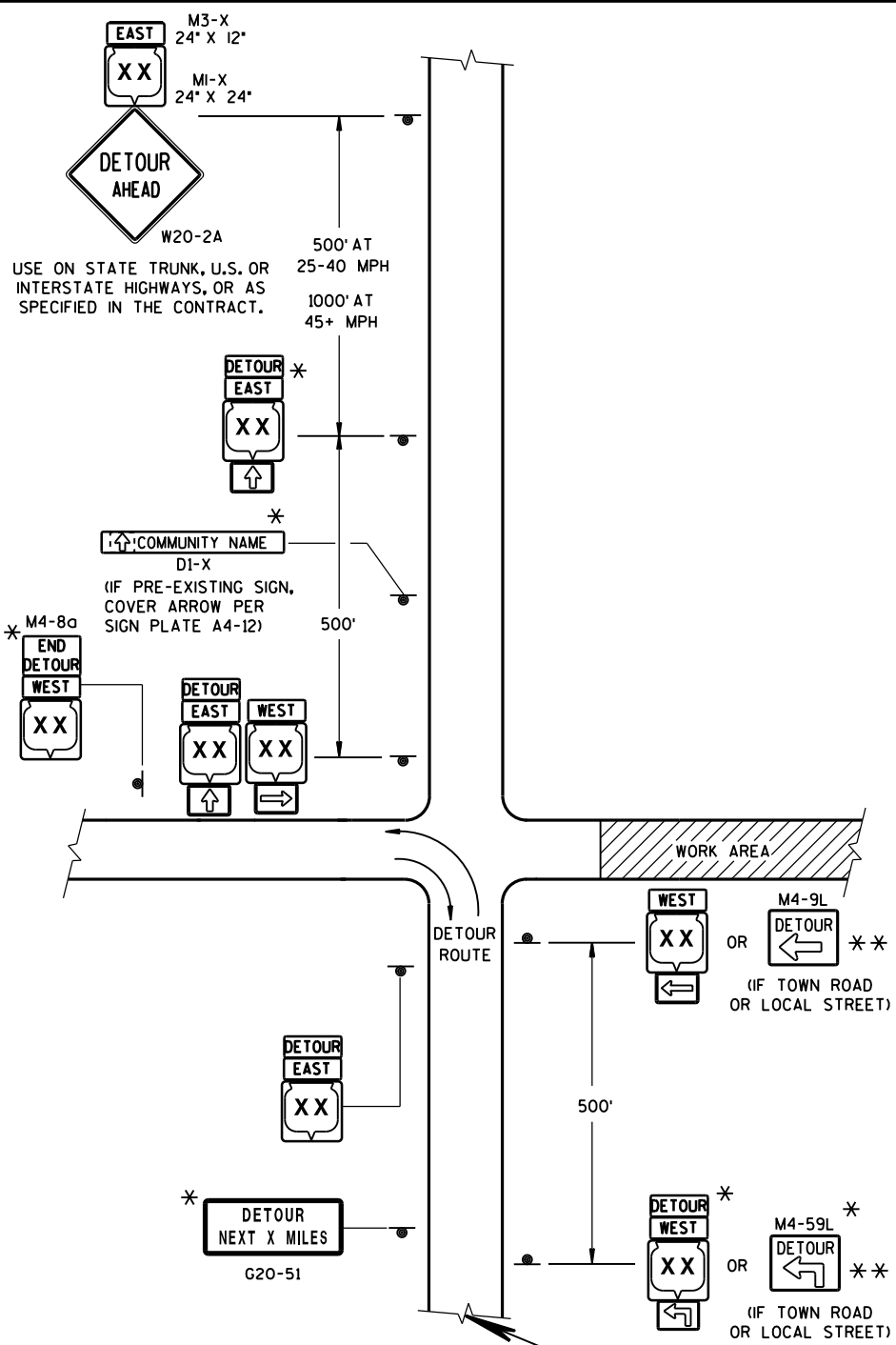
R1-1 SHALL BE 36" X 36".

- 1 TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).
- 2 THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.
- 3 FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.
- 4 FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.
- 5 FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.
- 6 INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.
- 7 "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

## BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

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



**LEGEND**

SIGN ON PERMANENT SUPPORT

WORK AREA

M4-8  
 M3-X

OR OR   
M1-4 M1-5A M1-6

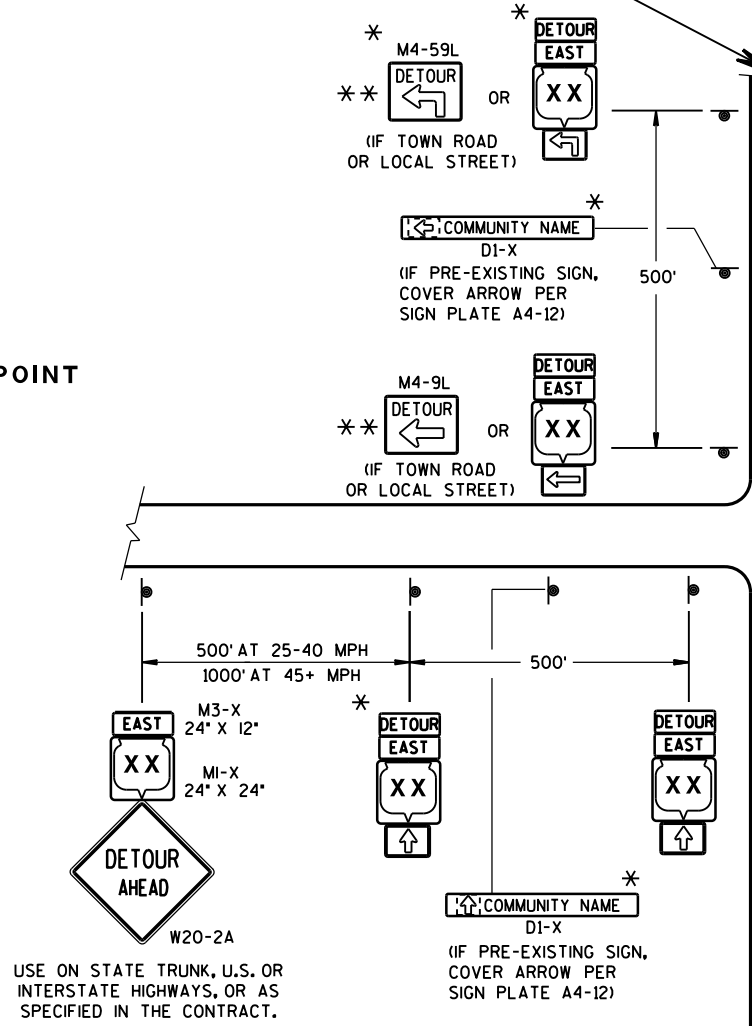
OR OR   
M05-1 M06-1 M06-1

SEE SPECIFIC PROJECT DETOUR  
SIGNING DETAIL SHEETS AND  
DETAIL A OR B ON SDD 15C2-SHEET "a"

THIS DRAWING PROVIDES GENERAL GUIDANCE  
ON TYPICAL DETOUR SIGN LAYOUT AND SPACING.  
SEE PROJECT DETOUR SIGNING SHEETS FOR  
SPECIFIC DETAILS FOR EACH PROJECT.

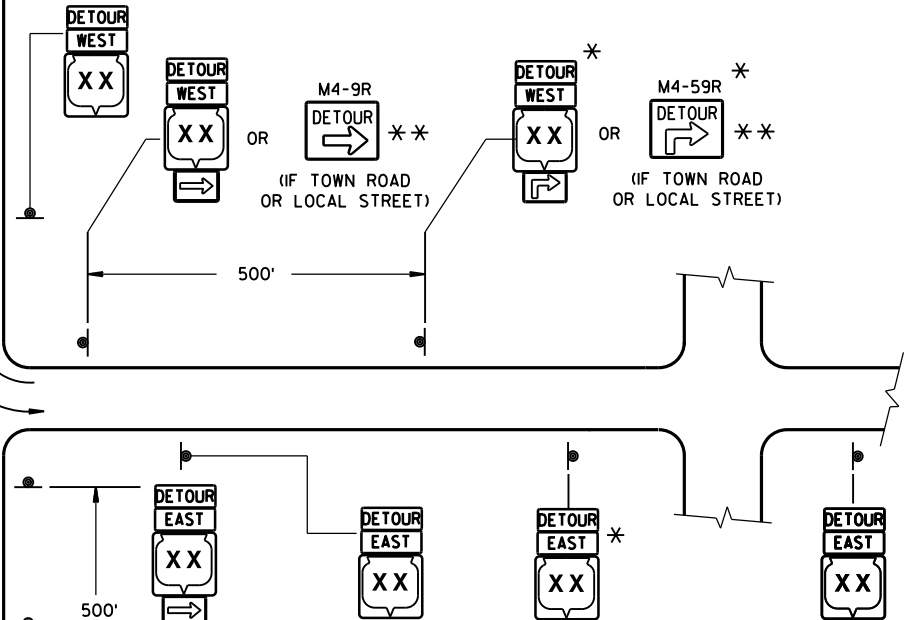
MATCH POINT

DETAIL F  
DETOUR SIGNING



GENERAL NOTES

- THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
- IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS, MODIFY EXISTING SIGNS WHERE POSSIBLE.
- THE SPACING BETWEEN TRAFFIC CONTROL AND DETOUR SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.
- 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.
- SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.
- "MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
- SIGN SIZES SHALL BE AS FOLLOWS:
- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
  - M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
  - M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
  - M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
  - M4-9 SHALL BE 30" X 24".
  - M4-8a SHALL BE 24" X 18".
  - G20-51 SHALL BE 60" X 24".
  - W20-2 SHALL BE 48" X 48".
  - D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- \* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.
- \*\* FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.

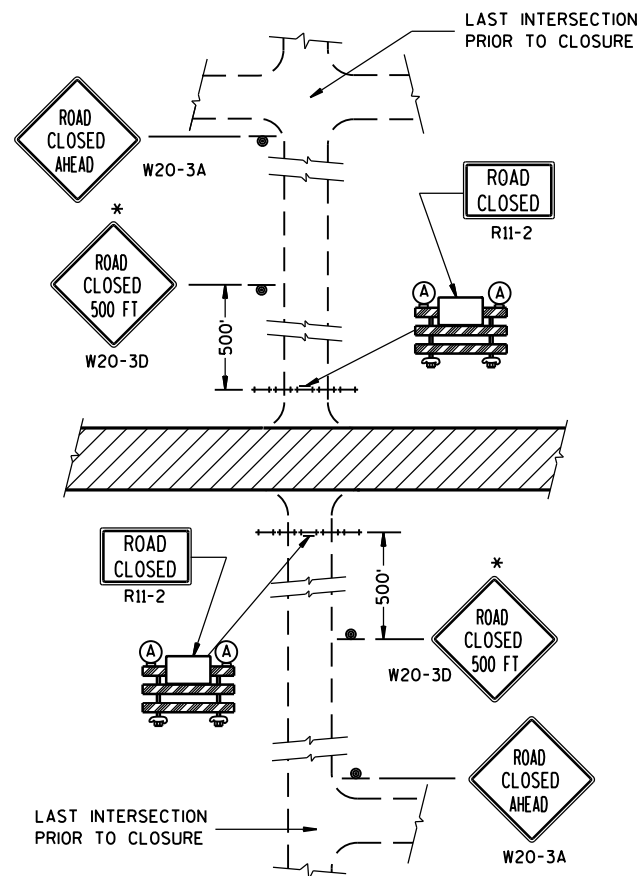


PLACE SIGNS BEYOND INTERSECTIONS WITH  
STATE OR COUNTY TRUNK HIGHWAYS OR  
AT 4 MILE MAXIMUM SPACING (4 BLOCKS IF  
URBAN AREA.)

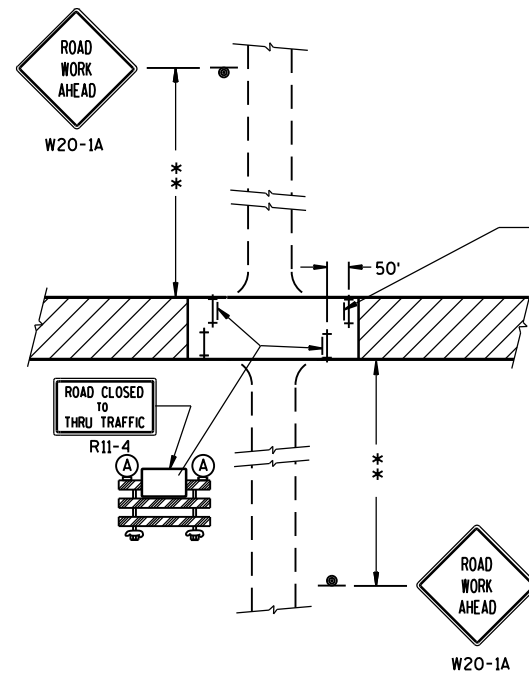
**DETOUR SIGNING FOR  
MAINLINE CLOSURES**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

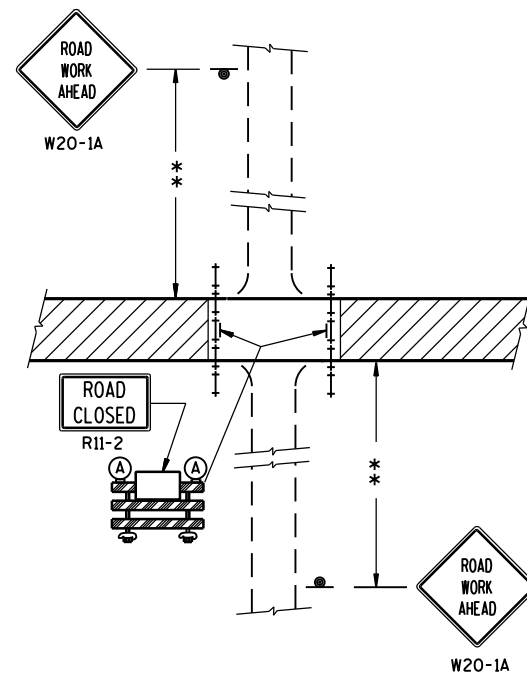
APPROVED  
DATE Sept. 2015 /S/ Peter Amakobe Atepe  
STATEWIDE WORK ZONE TRAFFIC  
SAFETY ENGINEER  
FHWA

**DETAIL 1**

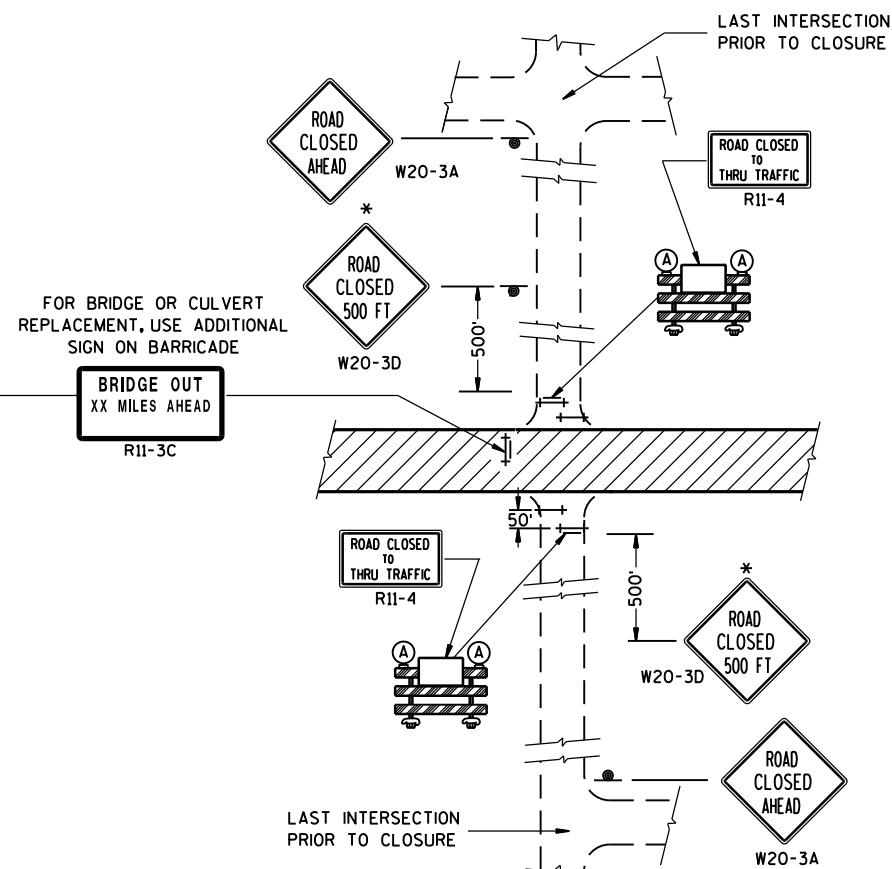
(NO ACCESS TO PROJECT)

**DETAIL 3**

(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS).

**DETAIL 2**

(PUBLIC CROSS-TRAFFIC MAINTAINED. NO ACCESS TO PROJECT).

**DETAIL 4**

(CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS TO PROJECT)

**GENERAL NOTES**

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

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

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

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.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3 AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

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

R11-2 SHALL BE 48" X 30".

R11-4 AND R11-3 SHALL BE 60" X 30".

\*OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FT. OR LESS FROM THE WORK ZONE.

\*\*500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSER.

**LEGEND**

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

**BARRICADES AND SIGNS  
FOR  
SIDEROAD CLOSURES**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

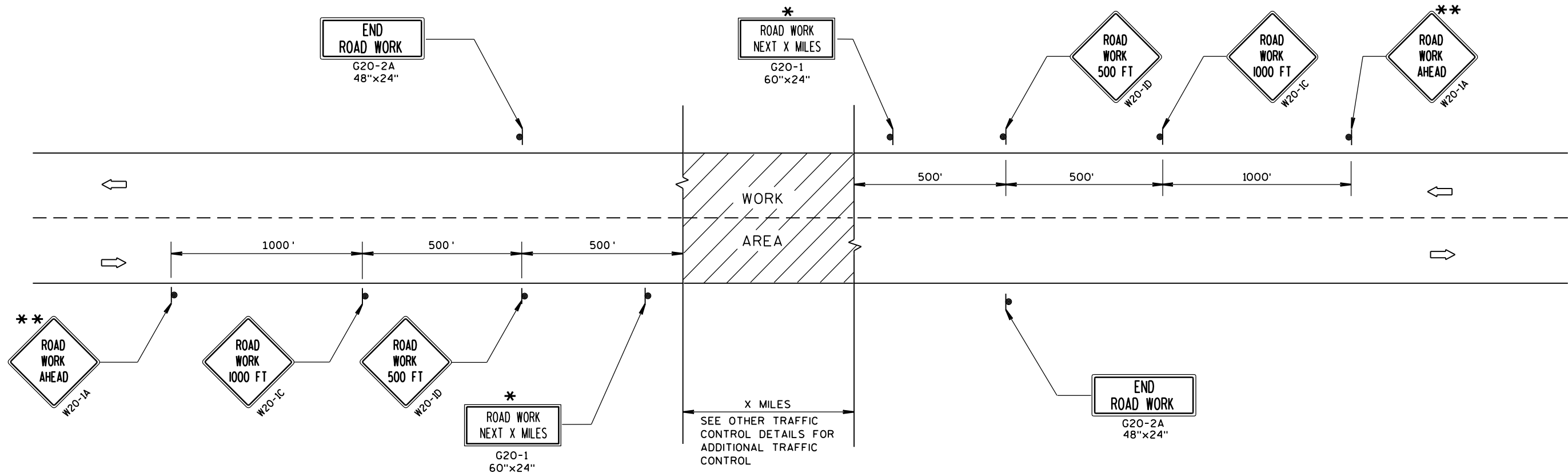
APPROVED

Sept. 2015

DATE

FHWA

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

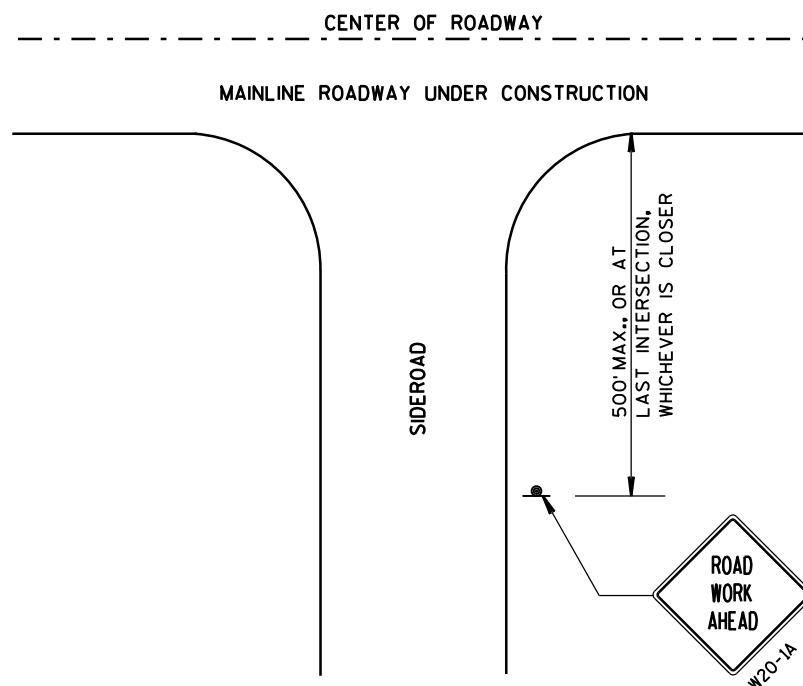
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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.

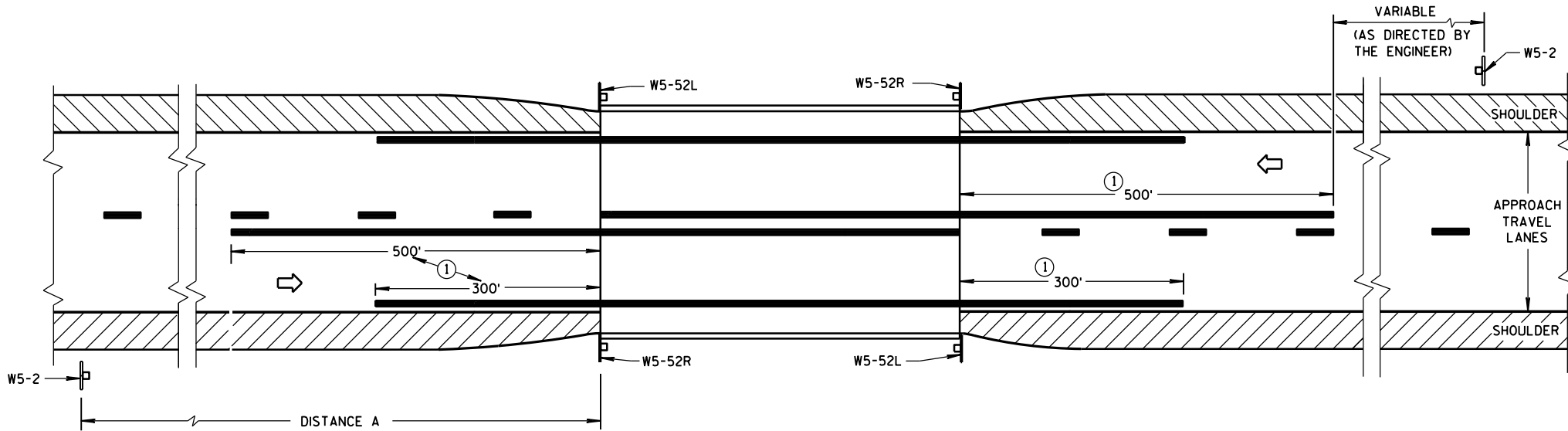
\*\* PLACE ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



## LEGEND

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

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



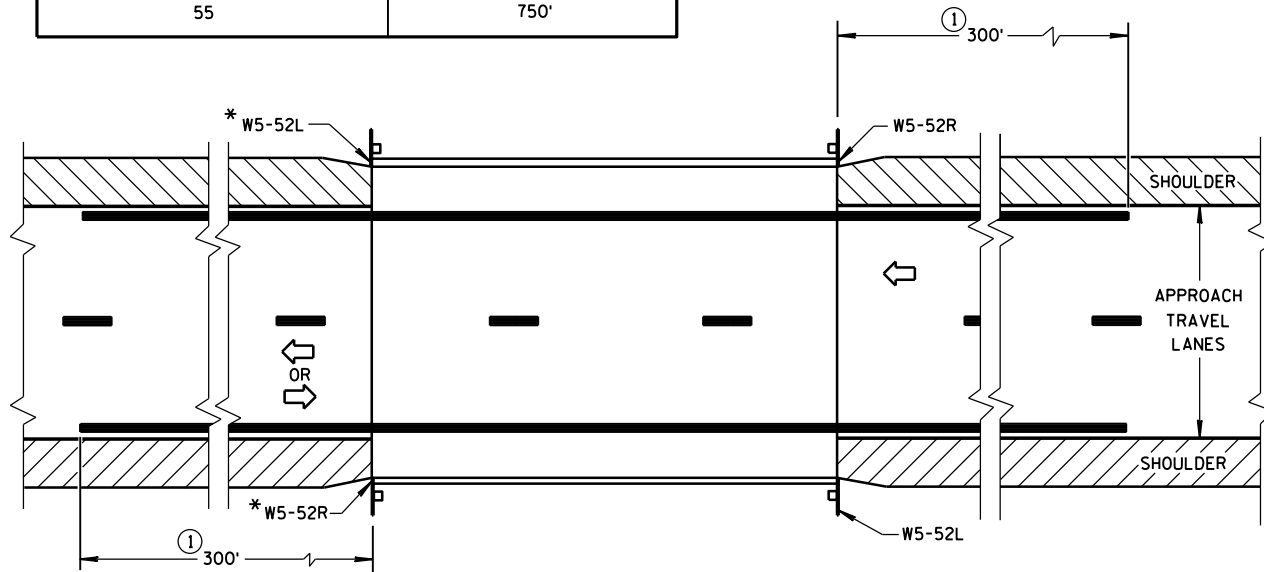
### SITUATION 1

WARRANTING CRITERIA:

BRIDGE WIDTH IS AT LEAST 16 FEET BUT LESS THAN 24 FEET

#### DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
25	150'
30	200'
35	250'
40	300'
45	400'
50	550'
55	750'

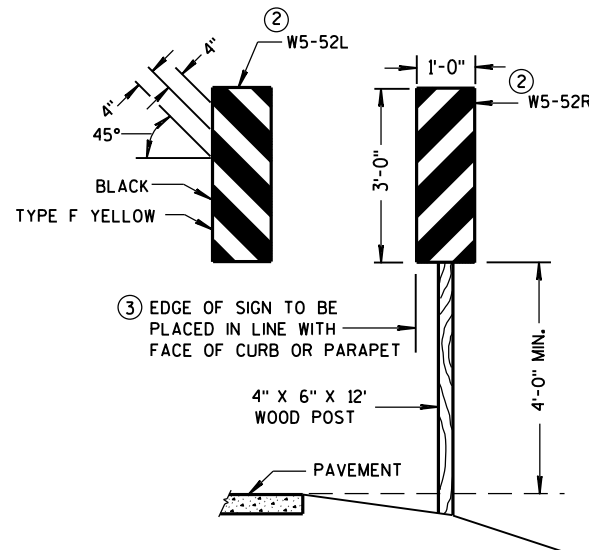


\*OMIT ON ONE-WAY TRAVELLED WAYS

### SITUATION 2

WARRANTING CRITERIA:

1. BRIDGE WIDTH IS AT LEAST 24 FEET AND
2. BRIDGE IS LESS THAN 6 FEET WIDER (ON EACH SIDE) THAN APPROACH TRAVEL LANES.



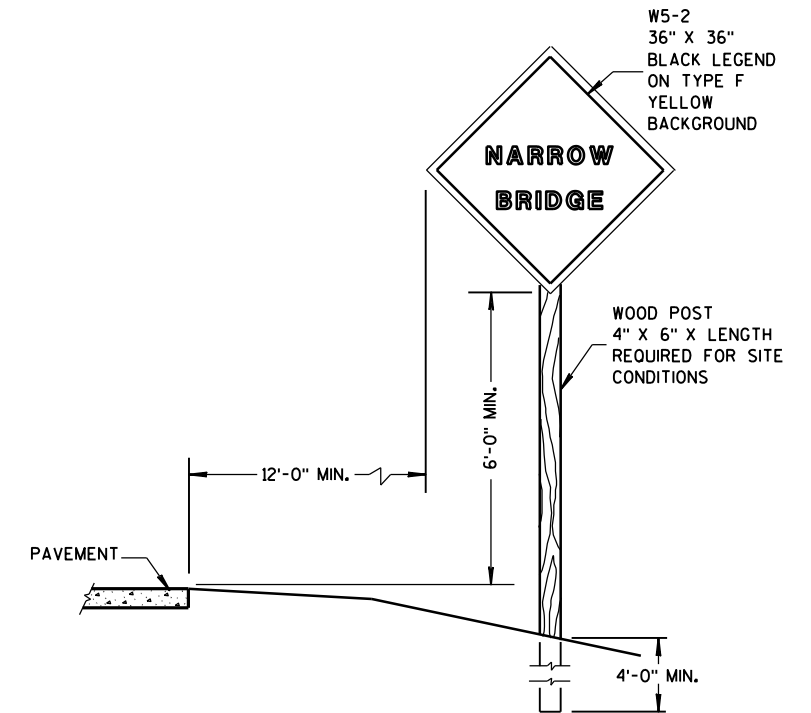
### OBJECT MARKER PLACEMENT

### 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.

PAVEMENT MARKING SHOWN ON THIS DRAWING IS NOT REQUIRED UNLESS OTHERWISE SPECIFIED IN THE CONTRACT. WHEN SPECIFIED, PAVEMENT MARKING SHALL CONFORM TO THIS DRAWING AND OTHER CONTRACT REQUIREMENTS.

- ① MINIMUM DISTANCE UNLESS OTHERWISE SHOWN ON THE PLAN.
- ② FACE OF OBJECT MARKERS W5-52R, AND W5-52L SHALL BE COVERED WITH TYPE F REFLECTIVE SHEETING.
- ③ LOCATE OBJECT MARKER POST(S) BEHIND GUARDRAIL WHEN PRESENT.



### SIGN PLACEMENT

#### SIGNING & MARKING FOR TWO LANE BRIDGES

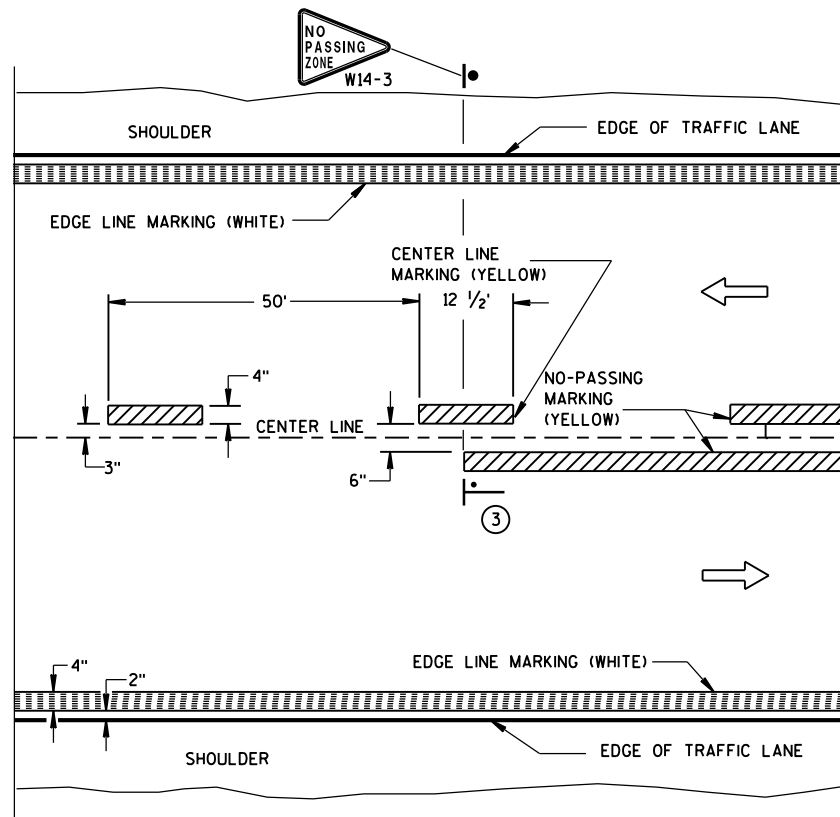
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED

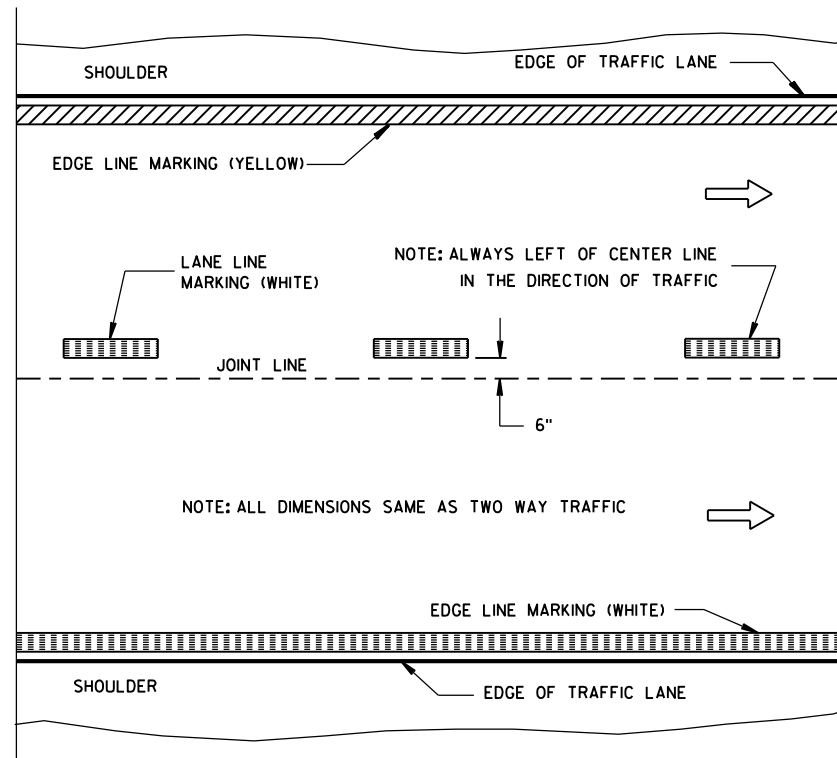
3-2014  
DATE

FHWA

/S/ Travis Fettes  
STATE TRAFFIC ENGINEER OF DESIGN

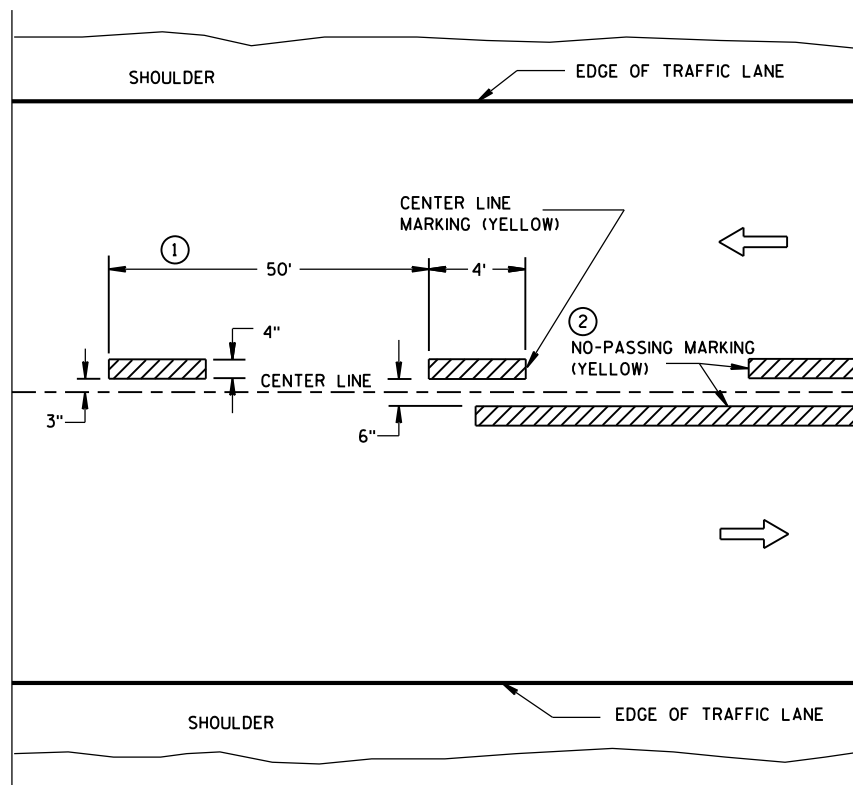


TWO WAY TRAFFIC

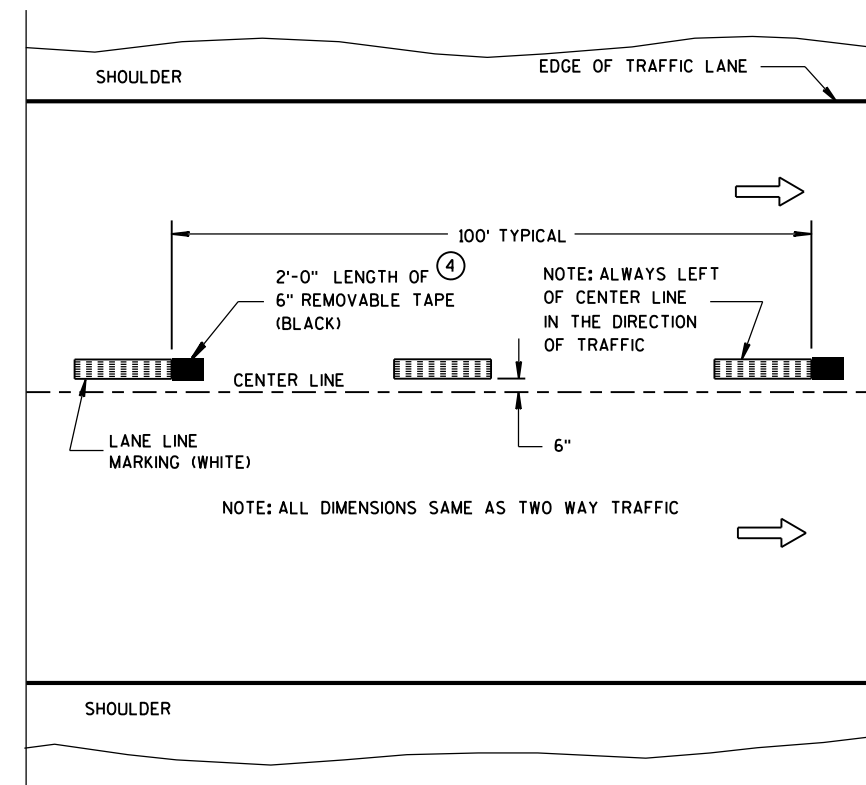


ONE WAY TRAFFIC

## PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

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

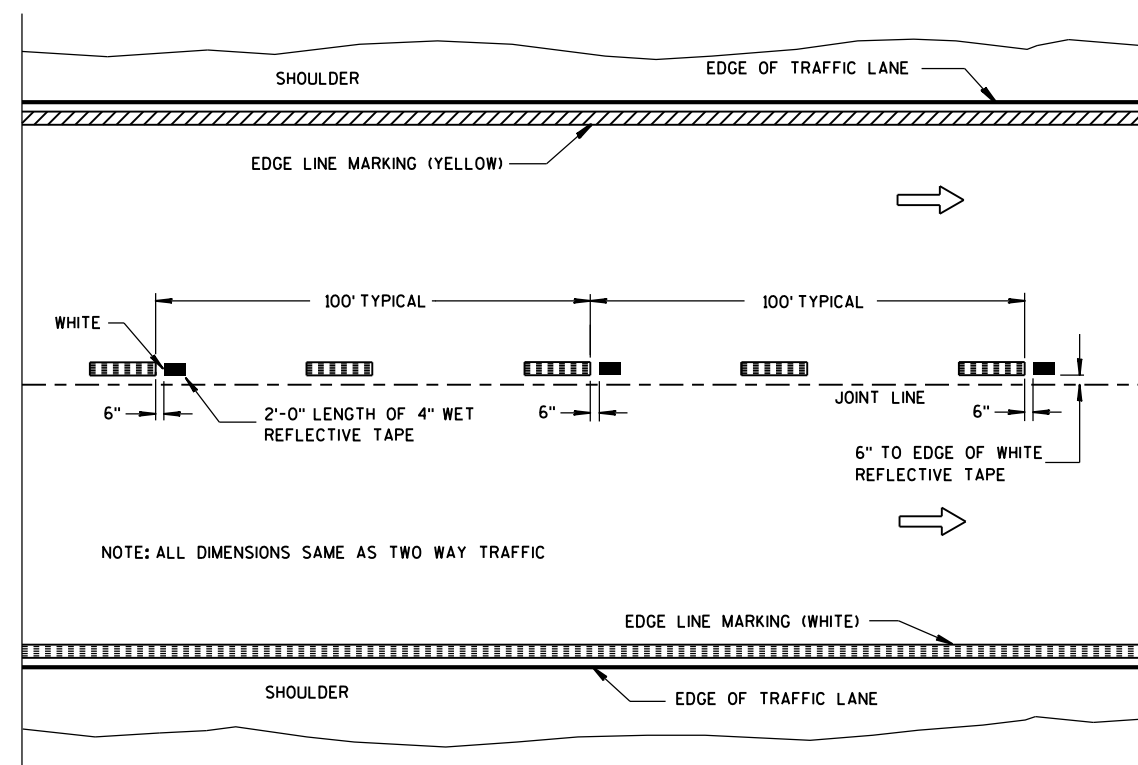
## GENERAL NOTES

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)

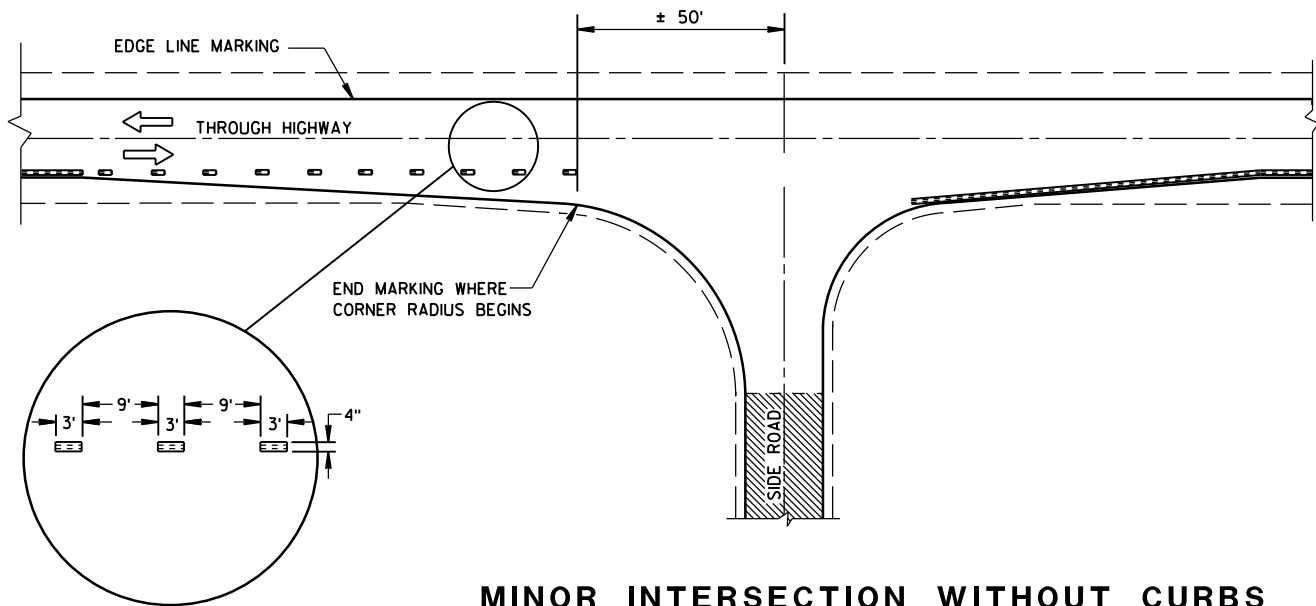
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED

5-13-2013  
DATE

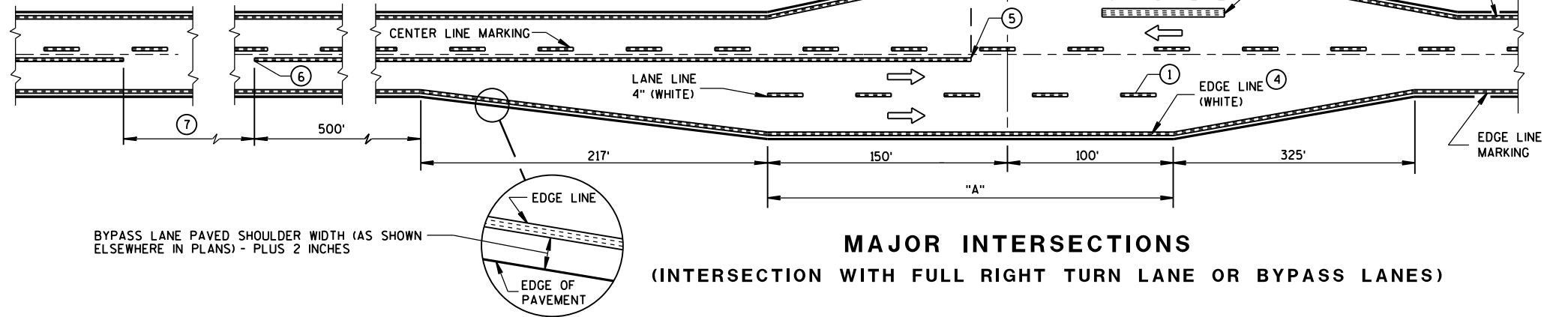
FHWA

/S/ Travis Feltes  
STATE TRAFFIC ENGINEER



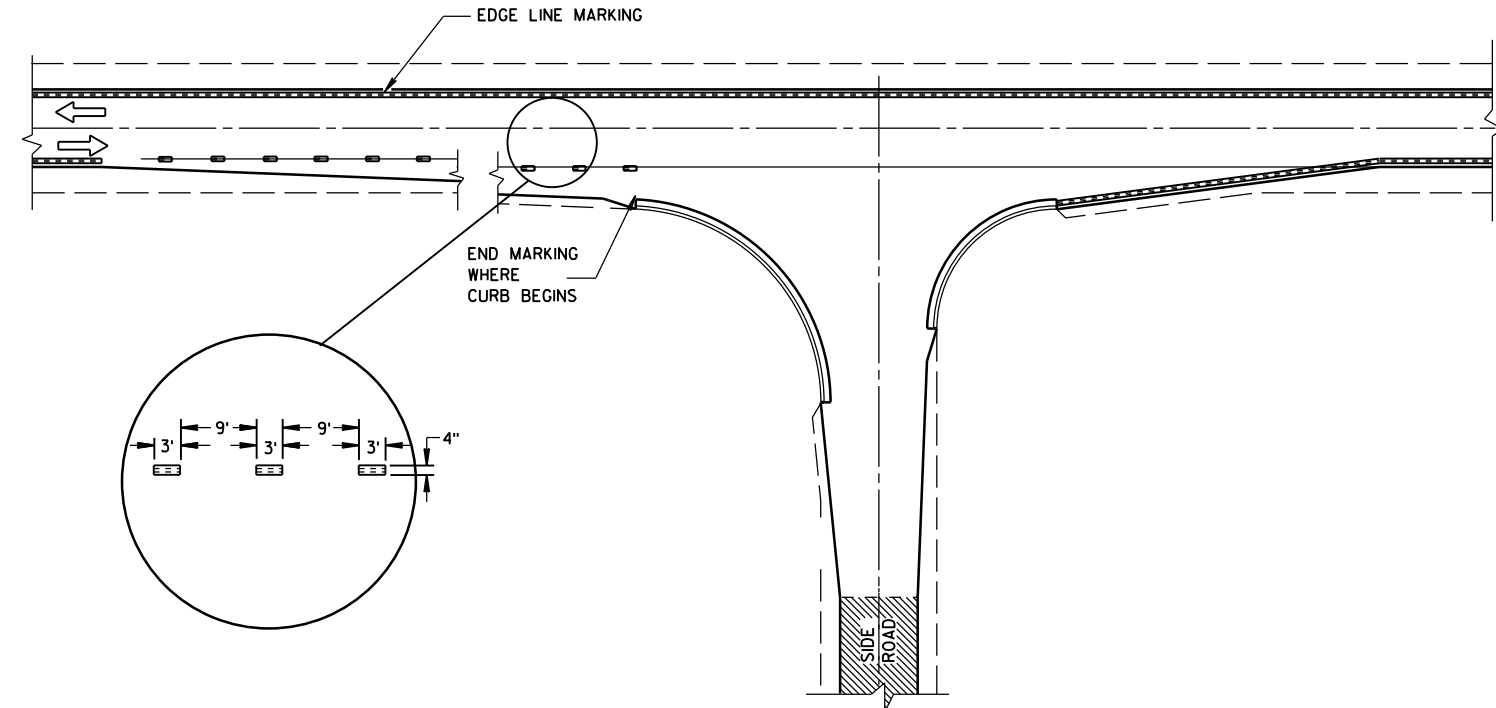
MINOR INTERSECTION WITHOUT CURBS

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

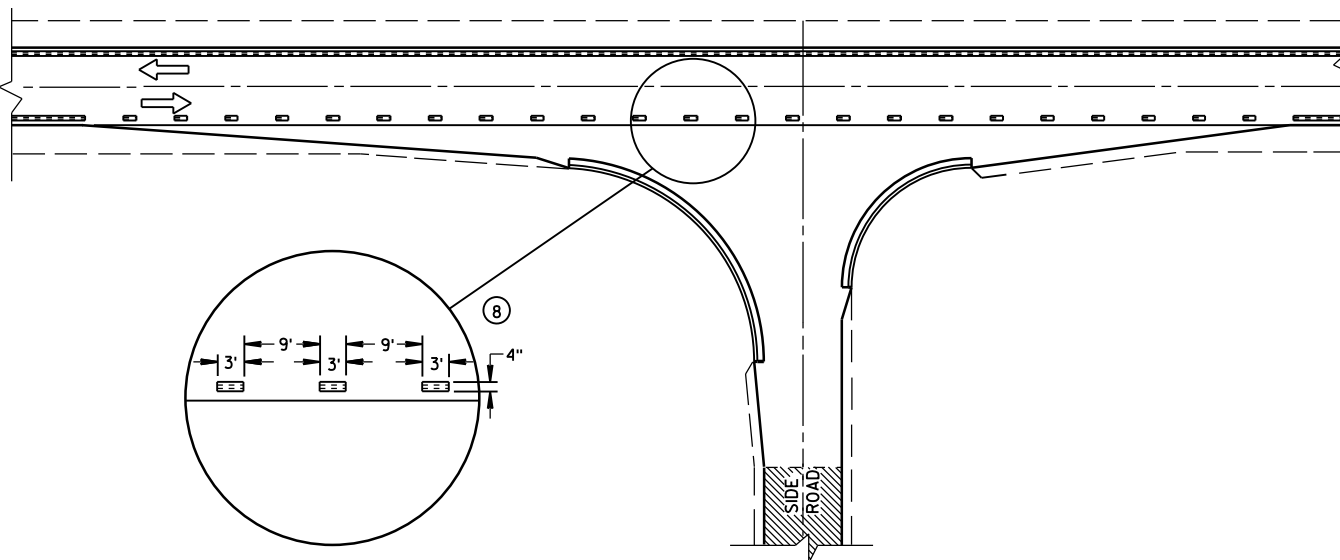


MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS  
(TYPICAL MARKING)







MINOR INTERSECTION WITH CURBS  
(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

LEGEND

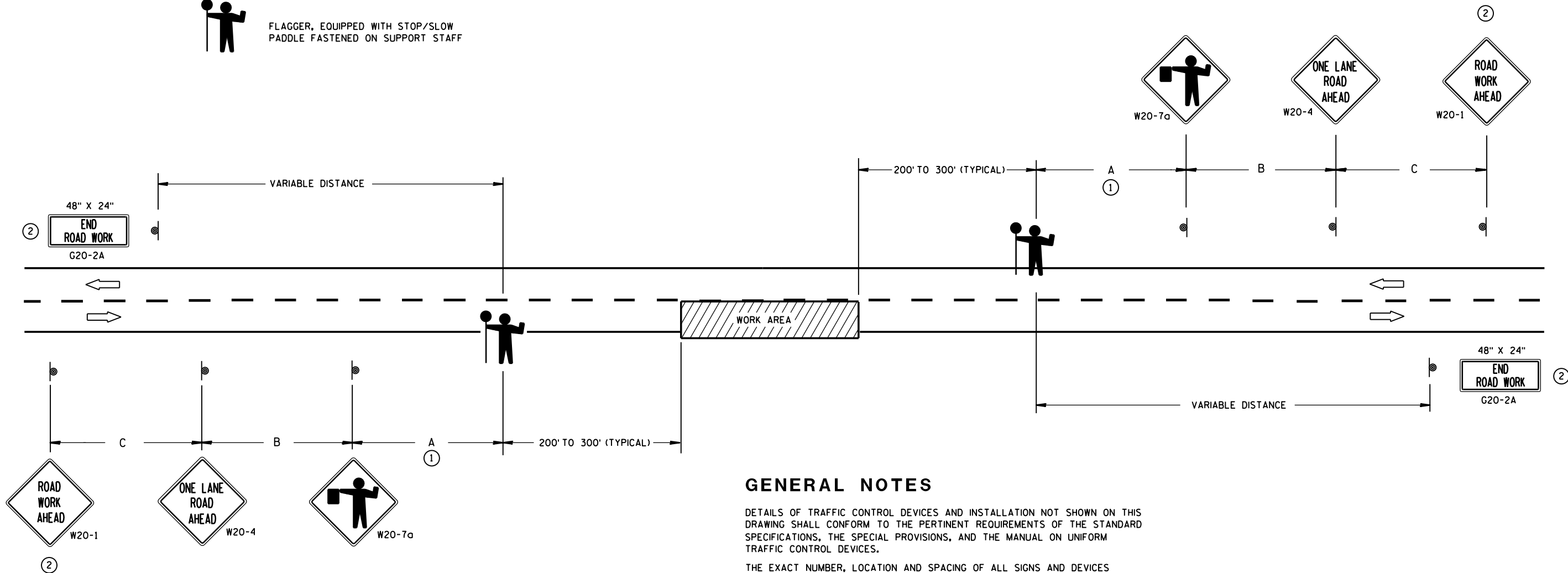
-  SIGN ON PORTABLE OR PERMANENT SUPPORT
-  DIRECTION OF TRAFFIC
-  WORK AREA
-  FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN SPACING TABLE

SPEED LIMIT	SIGN SPACING A,B,C
25-35 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



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, COVER OR REMOVE ALL TEMPORARY TRAFFIC CONTROL SIGNS.

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  
8/2013 /S/ Travis Feltes  
DATE STATE TRAFFIC ENGINEER OF DESIGN  
FHWA

GENERAL NOTES

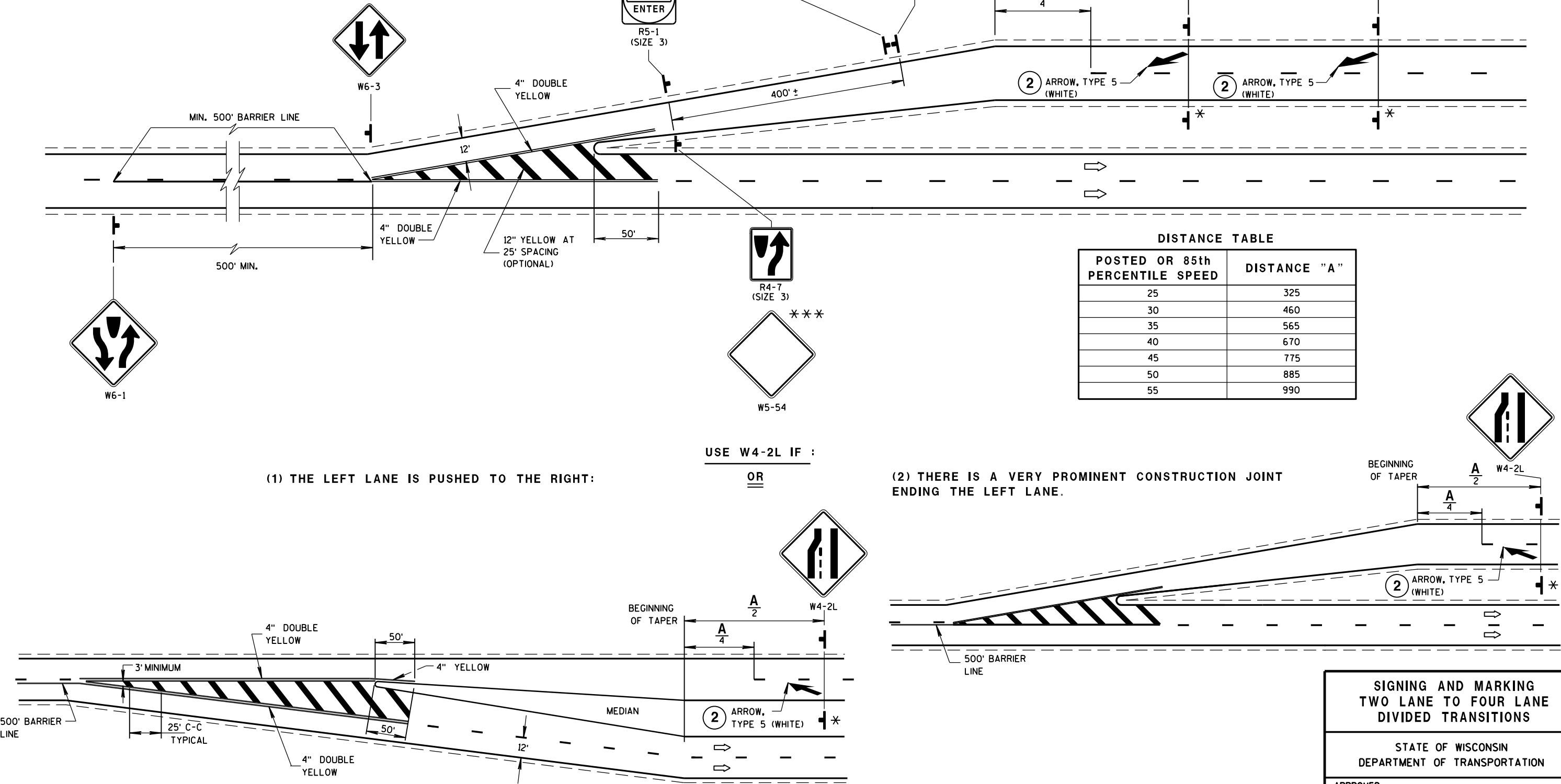
SIGNING AND MARKING IS SHOWN AS TYPICAL PLACEMENT. FIELD CONDITIONS MAY DICTATE CHANGES IN SIGNING AND MARKING PLACEMENT.

A DISTANCE DEPENDENT ON SPEED (SEE TABLE)

- 1 WRONG WAY PREVENTION SIGNS ARE DISCUSSED IN T G M 2-15-12
- 2 OPTIONAL - USED ONLY WHEN APPROVED BY REGION TRAFFIC ENGINEER.

SYMBOLS

- \* OPTIONAL SIGNS
- \*\* SIGNS MAY BE OMITTED IF SPACE DOES NOT PERMIT
- \*\*\* IF POSTED SPEED 45 MPH OR GREATER, PLACE W5-54 SIGN UNDER R4-7 SIGN. MOUNT W5-54 SIGN AT 4' MOUNTING HEIGHT (TOP OF ROADWAY TO BOTTOM OF SIGN)
- POST MOUNTED SIGN
- DIRECTION OF TRAFFIC FLOW



(1) THE LEFT LANE IS PUSHED TO THE RIGHT:

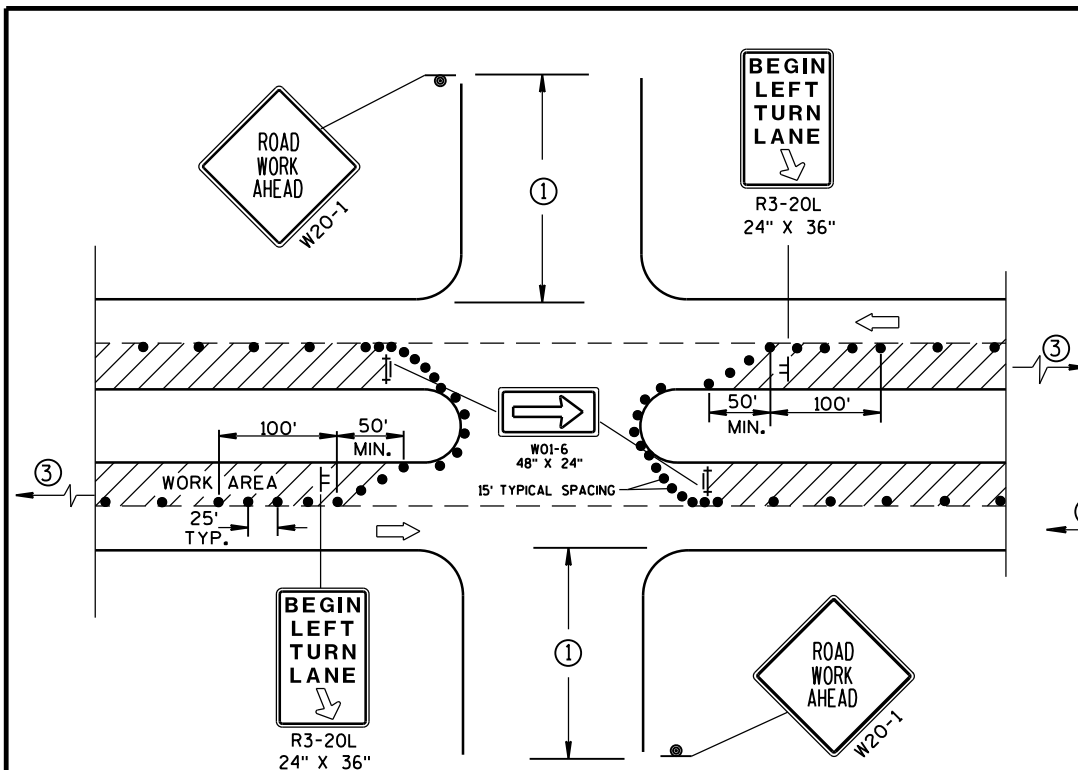
USE W4-2L IF :  
OR

(2) THERE IS A VERY PROMINENT CONSTRUCTION JOINT ENDING THE LEFT LANE.

SIGNING AND MARKING  
TWO LANE TO FOUR LANE  
DIVIDED TRANSITIONS

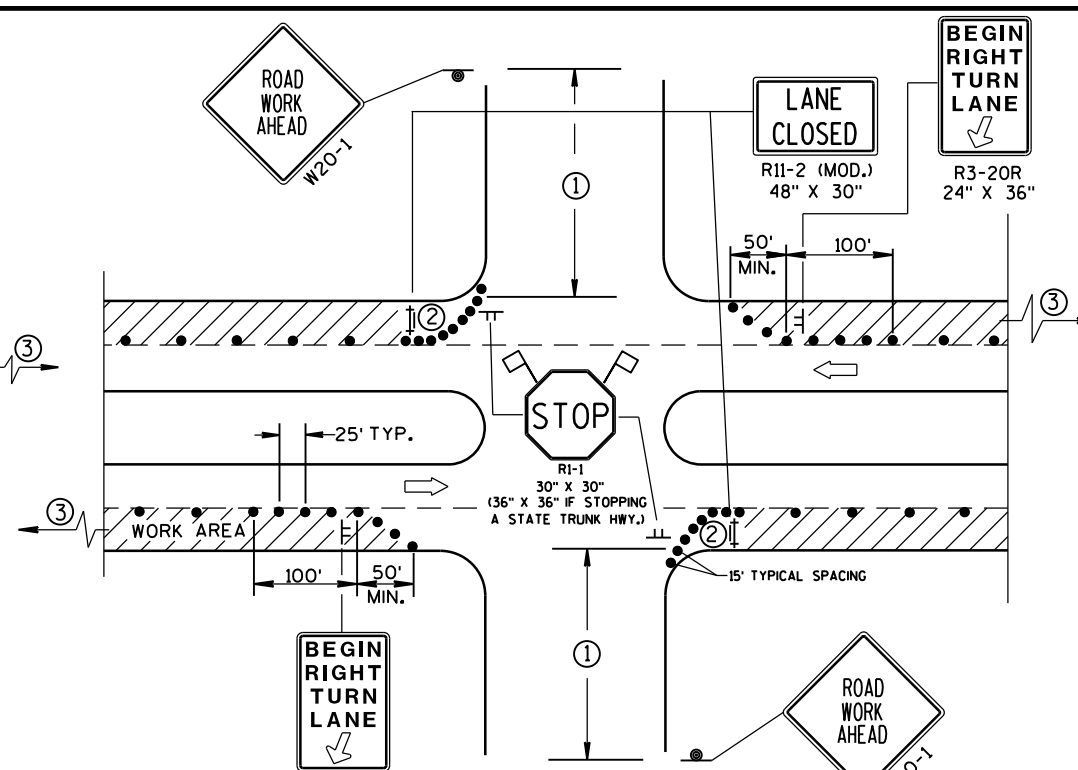
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
June, 2015 /S/ Travis Feltes  
DATE STATE TRAFFIC ENGINEER OF DESIGN  
FHWA

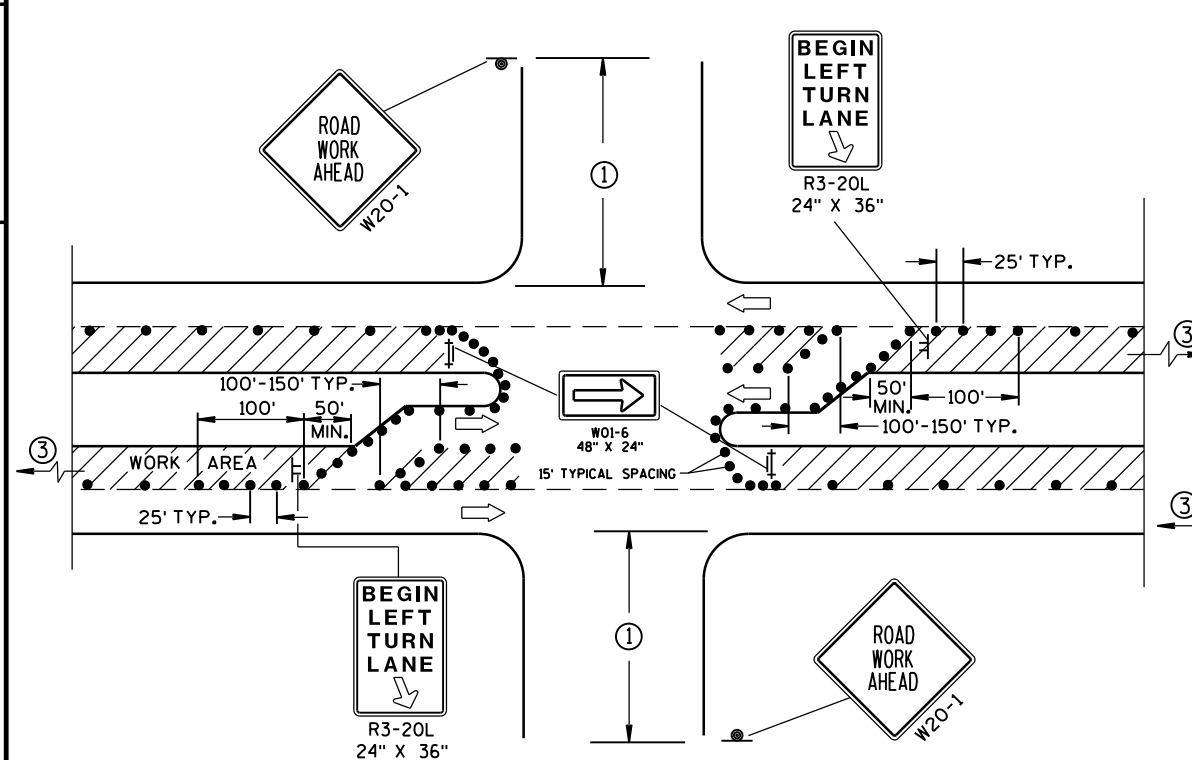


DETAIL A  
FOR LEFT LANE CLOSURE AT  
INTERSECTION OR MEDIAN OPENING

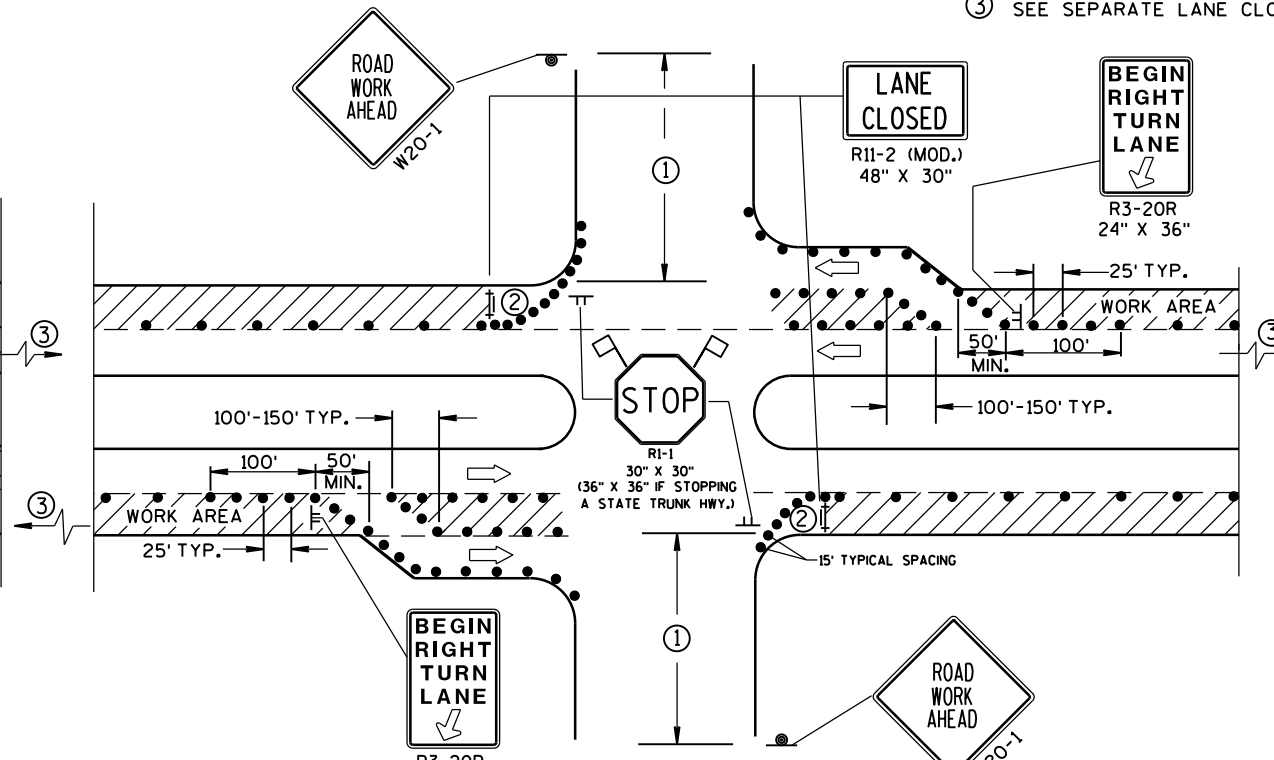
PROVIDE TURN LANES AT  
INTERSECTIONS WHENEVER  
STAGING OF WORK ALLOWS.  
TAPER AND TURN LANE  
LENGTHS BASED ON FIELD  
CONDITIONS AS APPROVED  
BY THE ENGINEER.



DETAIL B  
FOR RIGHT LANE CLOSURE  
AT INTERSECTION



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



DETAIL D  
FOR RIGHT LANE CLOSURE AT INTERSECTION  
(WITH RIGHT TURN BAY OPEN)

### 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 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 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.

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

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

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

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

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

- 1 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.  
350' IF 35-40 MPH.  
200' IF 25-30 MPH.
- 2 ALSO USE BARRICADE AND 15-FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS.
- 3 SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

### LEGEND

- TRAFFIC CONTROL DRUM
- ⊙ SIGN ON PERMANENT SUPPORT
- ⊢ SIGN ON TEMPORARY SUPPORT (5' MIN. MOUNTING HEIGHT)
- ⊢ TYPE III BARRICADE WITH ATTACHED SIGN AND TYPE "A" WARNING LIGHT (FLASHING)
- ➡ DIRECTION OF TRAFFIC
- 🚩 FLAGS, 16" X 16" MIN., (ORANGE)
- ▨ WORK AREA

### TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
Nov. 2014 /S/ Travis Feltes  
DATE STATE TRAFFIC ENGINEER OF DESIGN  
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.

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

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

TABLE A

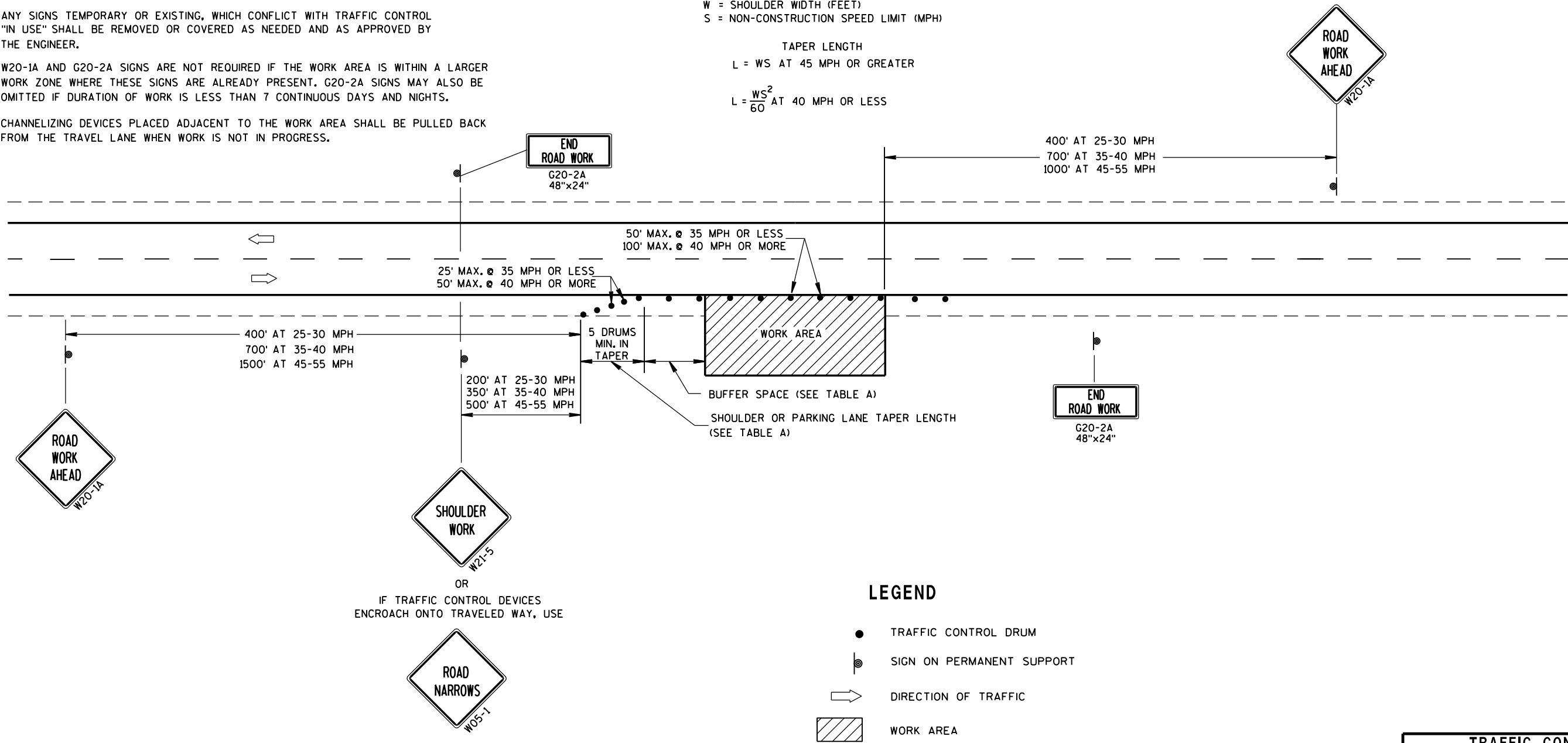
SHOULDER TAPER LENGTH (FEET)					BUFFER SPACE (FEET)
S \ W	4	6	8	10	
30	20	30	40	50	200
35	30	45	55	70	250
40	40	55	75	90	305
45	60	90	120	150	360
50	70	100	135	170	425
55	75	110	150	185	495

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

TAPER LENGTH  
L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$  AT 40 MPH OR LESS

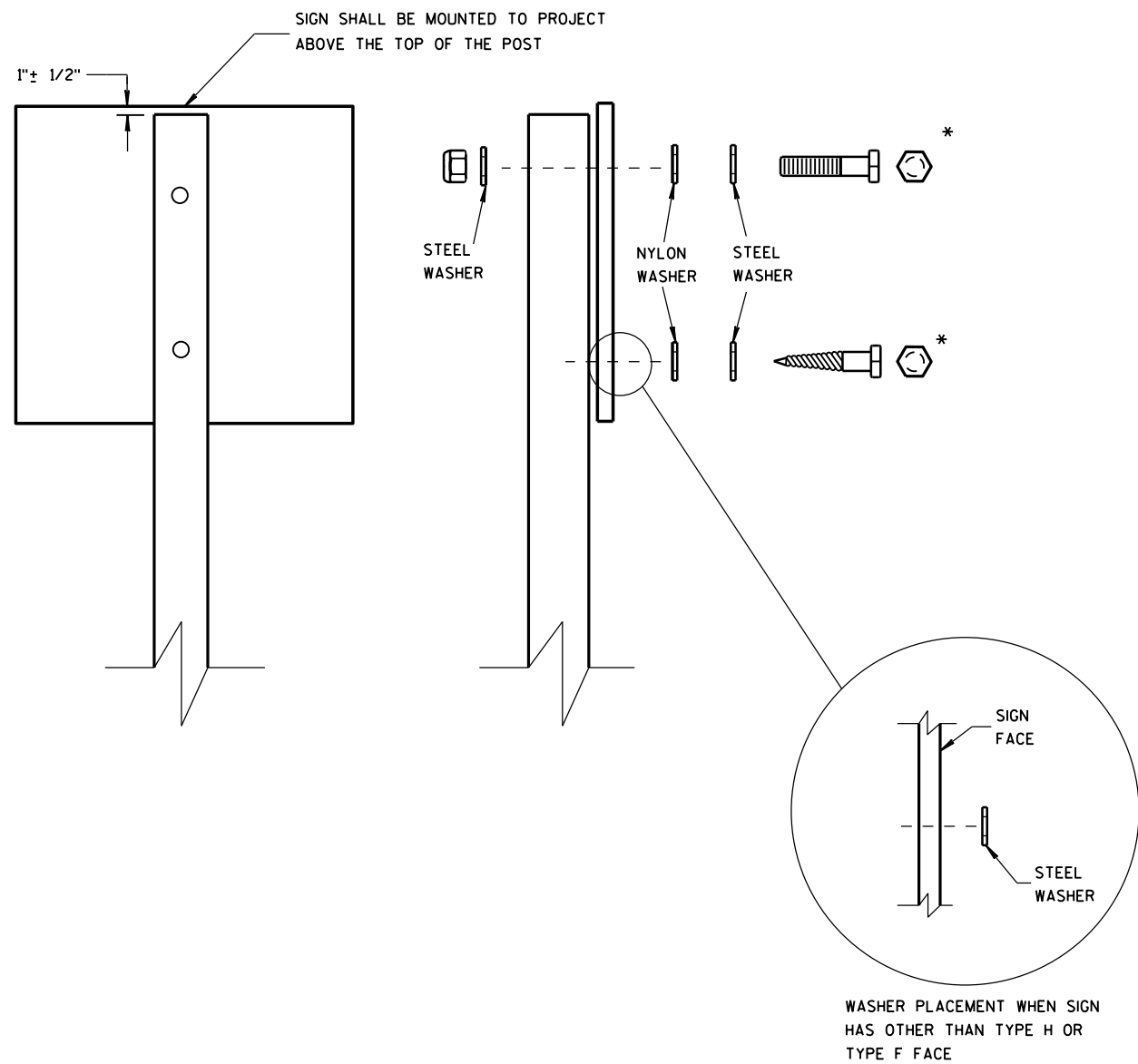
SHOULDER TAPER LENGTH =  $\frac{1}{3}L$



LEGEND

- TRAFFIC CONTROL DRUM
- ⦿ SIGN ON PERMANENT SUPPORT
- ➡ DIRECTION OF TRAFFIC
- ▨ WORK AREA

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED July 14, 2015 DATE	/S/ Peter Amakobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA	



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

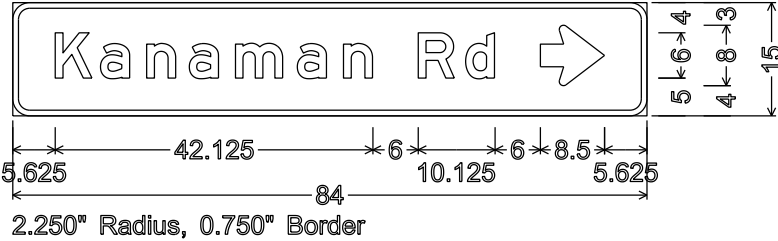
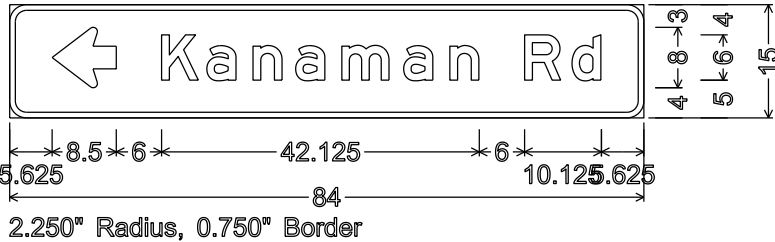
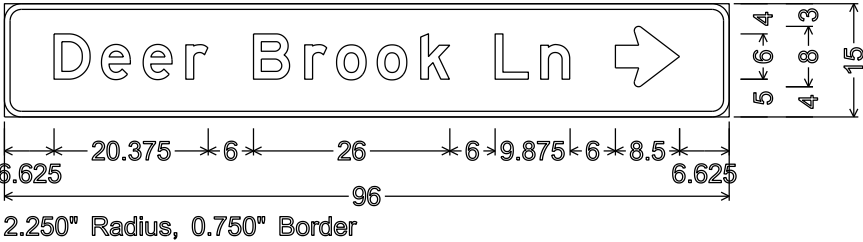
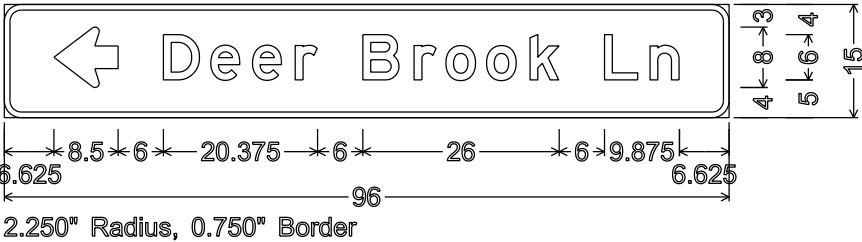
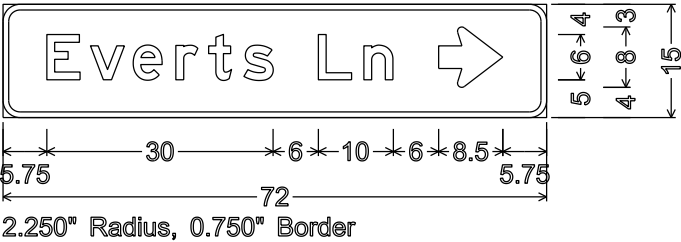
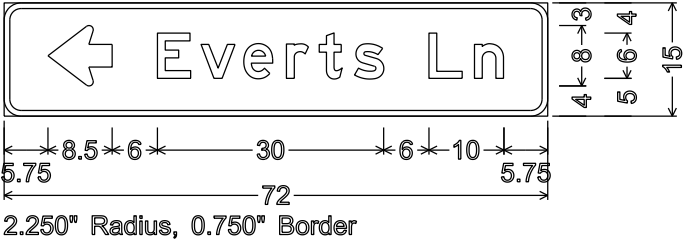
- WASHERS (ALL POSTS) -
- 1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
  - 1-1/4" O.D. X 3/8" I.D. X .080 NYLON FOR ALL TYPE H SIGNS

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

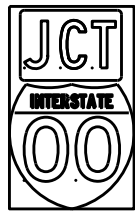
ATTACHMENT OF SIGNS TO POSTS		
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION		
APPROVED Feb. 2015	/S/ Travis Feltes	
DATE	STATE TRAFFIC ENGINEER OF DESIGN	
FHWA		

NOTES

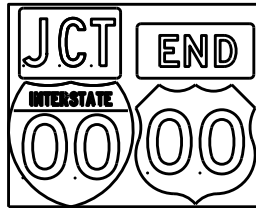
- 1. All Signs are Type II - Type H Reflective
- 2. Color:  
Background - Green  
Message - White
- 3. Message Series - E



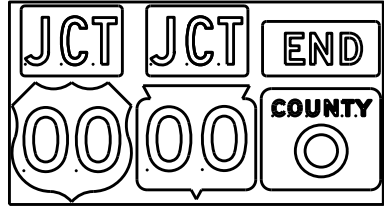
TYPICAL ASSEMBLIES



J1-1



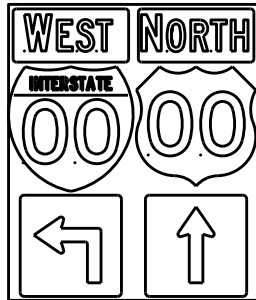
J1-2



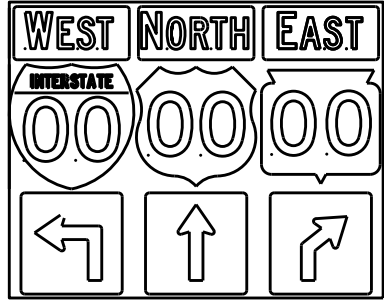
J1-3



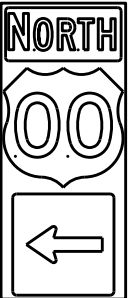
J2-1



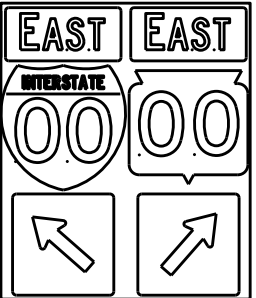
J2-2



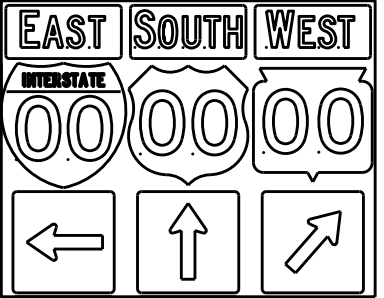
J2-3



J3-1



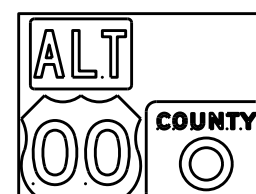
J3-2



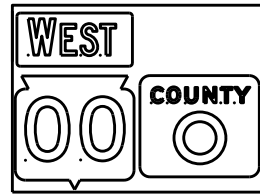
J3-3



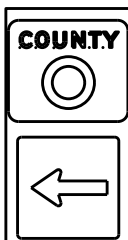
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1



J23-1

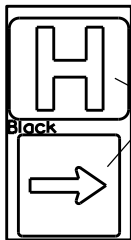


J22-1



JV

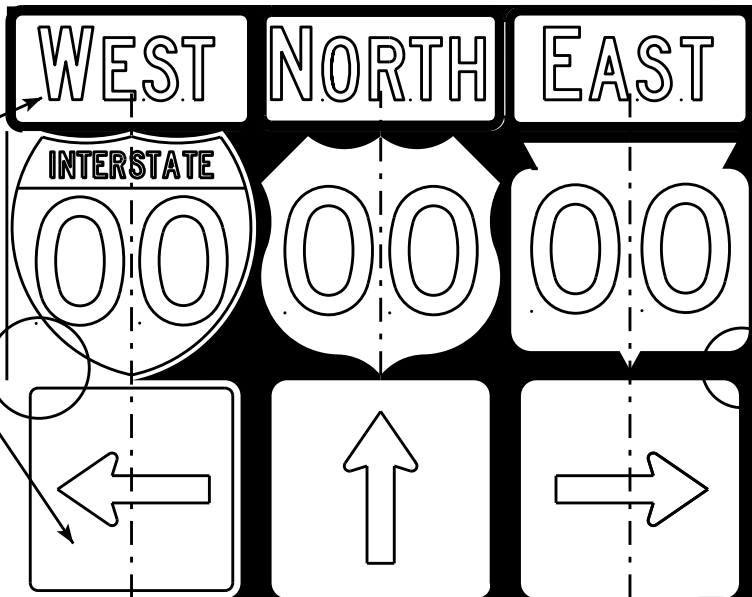
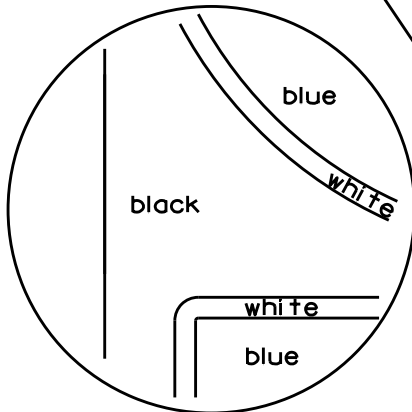
( Typical Vertical J-Assembly  
See Note 10 and 11)



JH-1

Blue Background

[blue background  
with interstate]



[black background]

ROUTE MARKERS & COMPONENTS  
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

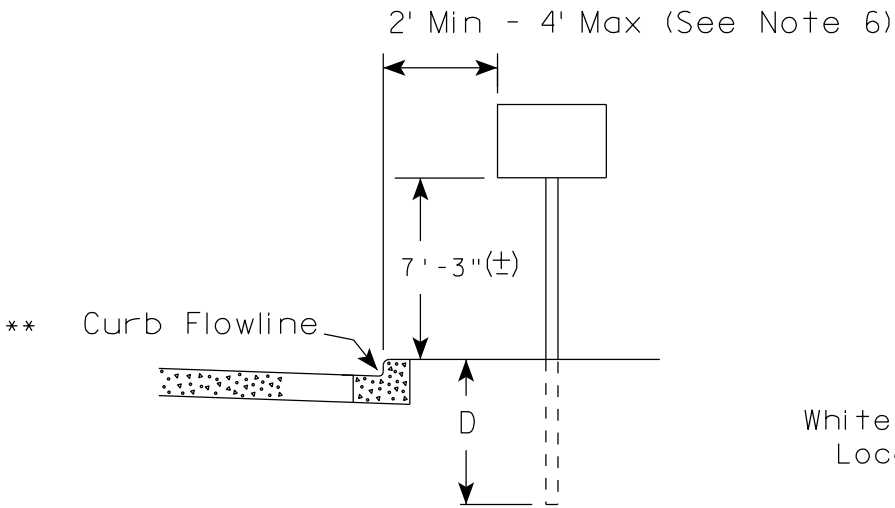
APPROVED *Matthew R. Rauch*  
For State Traffic Engineer

DATE 2/06/14 PLATE NO. A2-1S.8

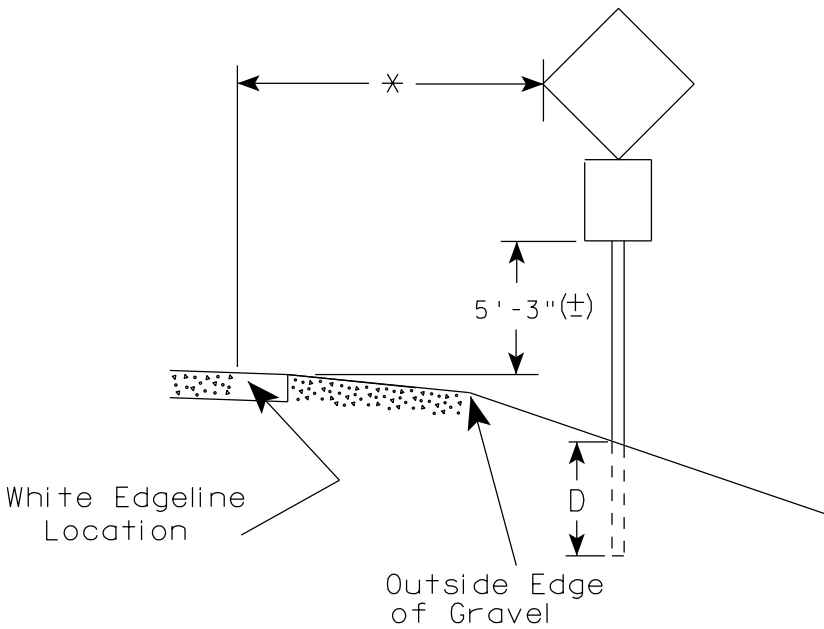
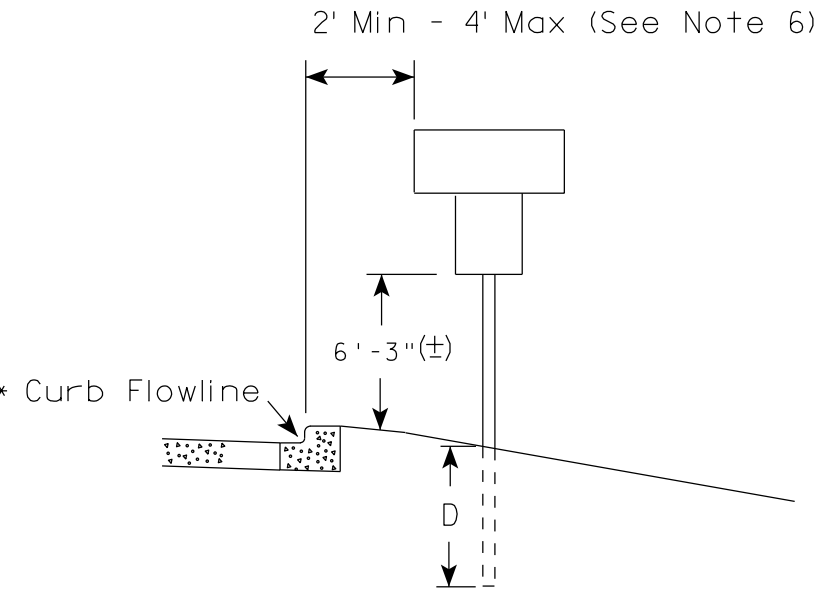
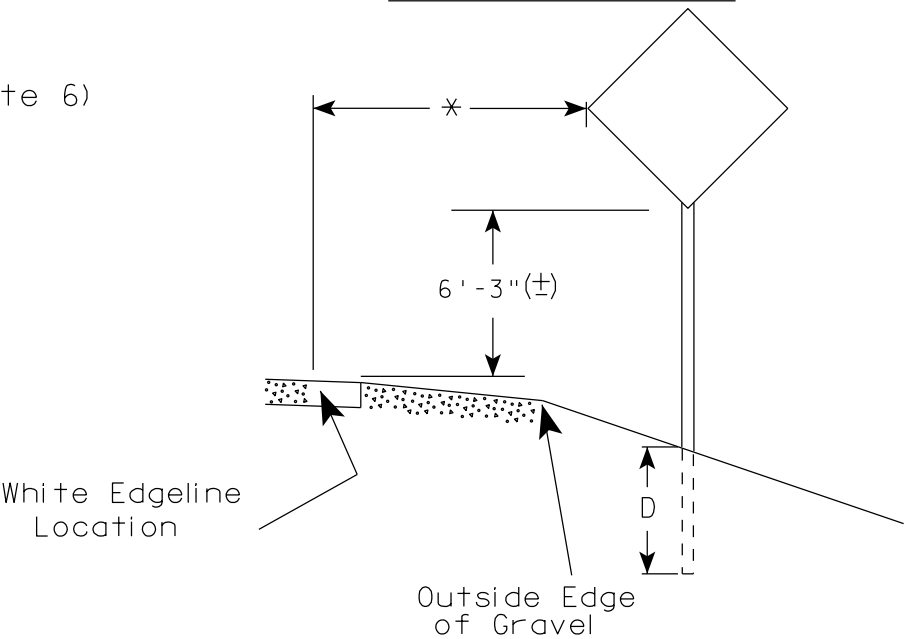
NOTES

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 or rounded if base material is plywood. If base material is metal the corners shall be rounded.
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.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

URBAN AREA



RURAL AREA (See Note 2)



GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on 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 (A2-1S) 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 signs 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), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

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.

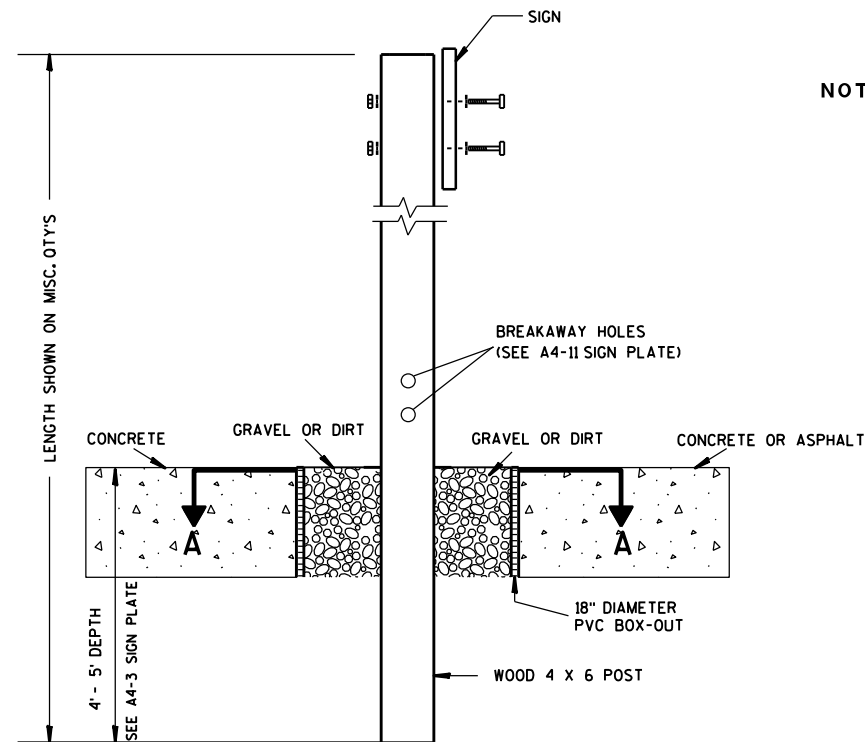
\* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION  
OF PERMANENT TYPE II  
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED  
*Matthew R. Rauch*  
for State Traffic Engineer

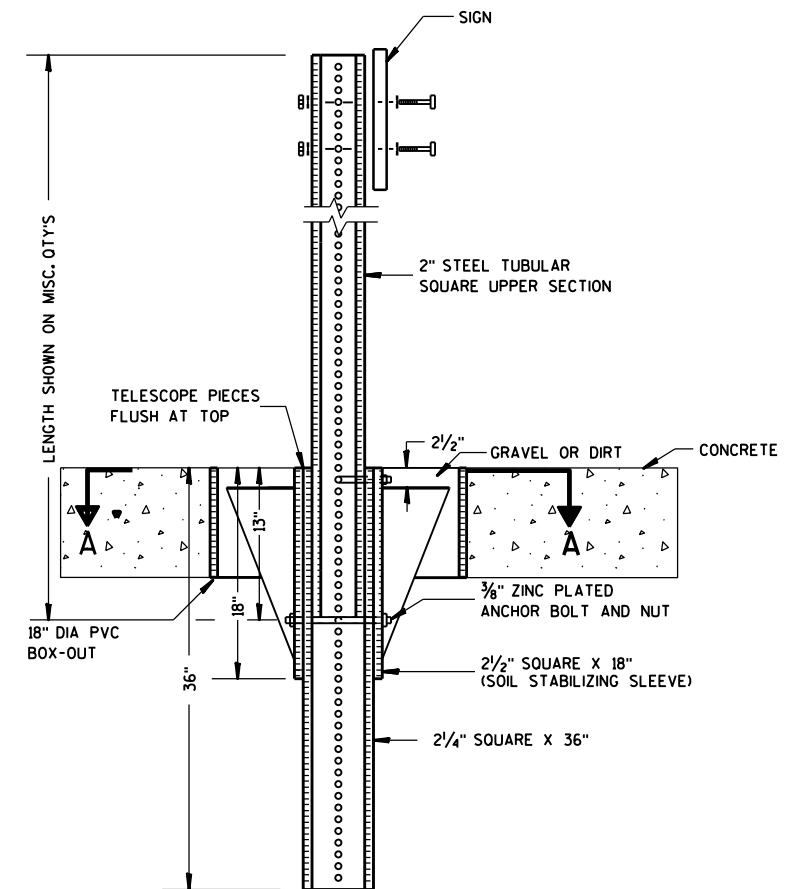
DATE 7/23/15 PLATE NO. A4-3.20



### ELEVATION VIEW

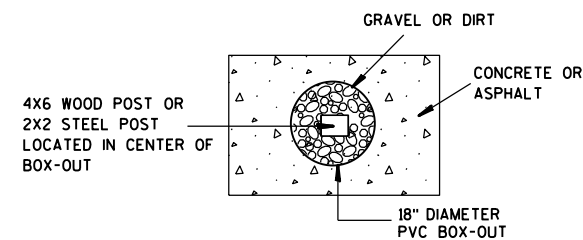
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



### ELEVATION VIEW

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



### PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST  
BOX-OUTS  
A4-3B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

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

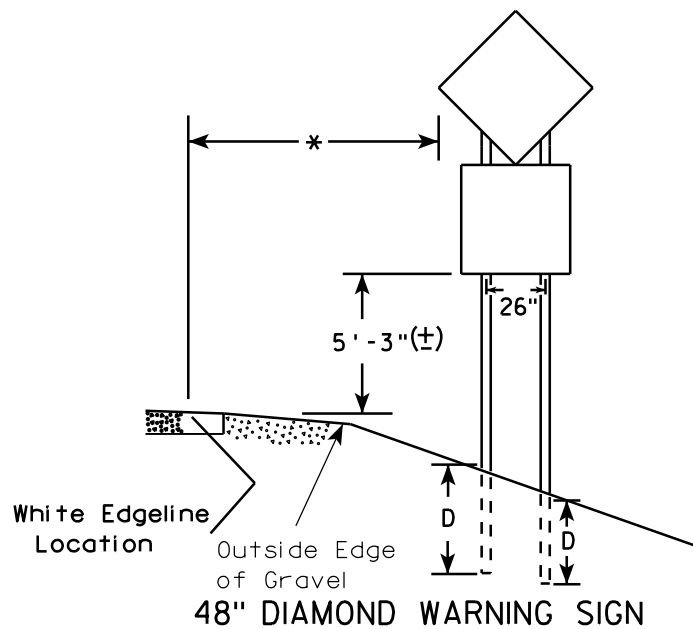
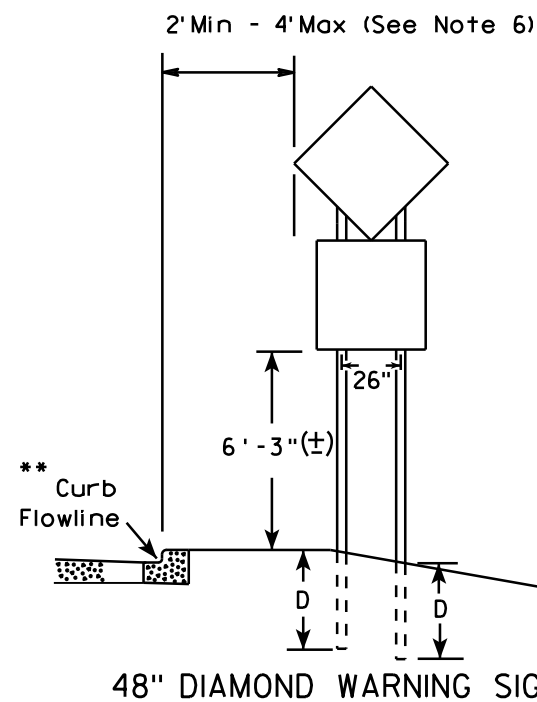
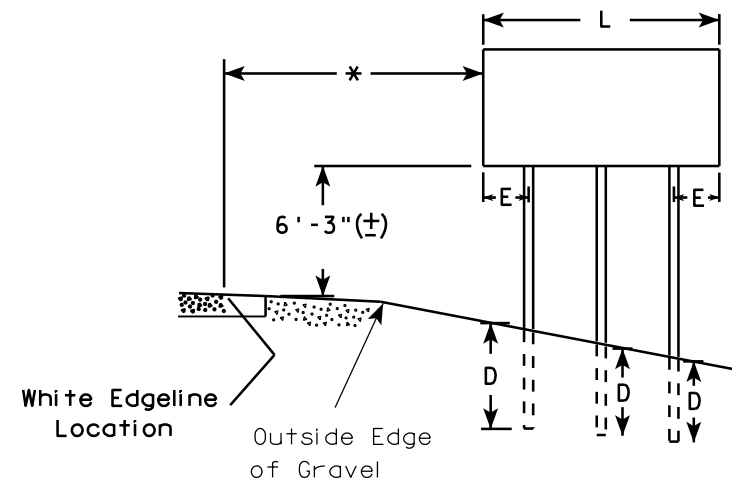
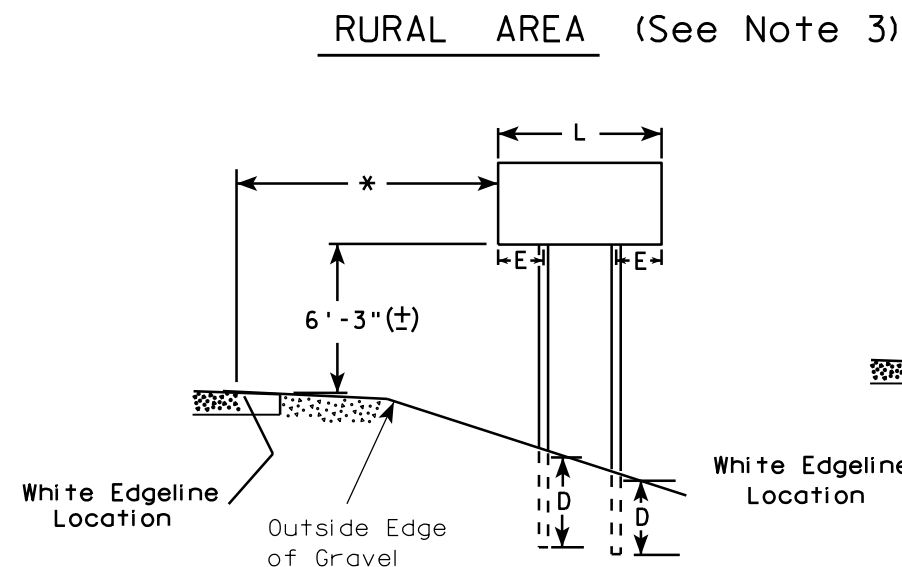
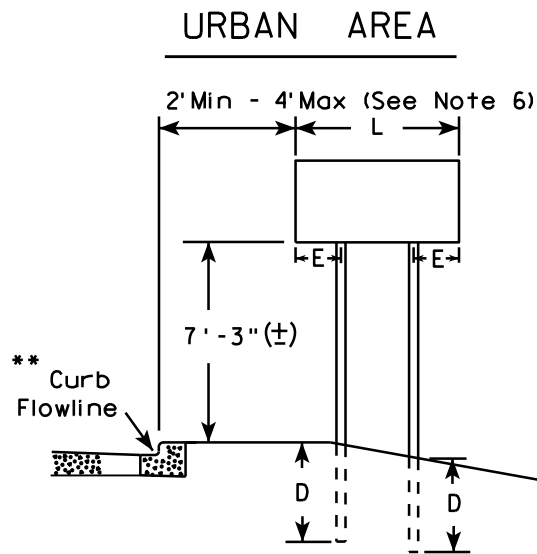
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



48" DIAMOND WARNING SIGN

48" DIAMOND WARNING SIGN

- GENERAL NOTES
1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
  2. See tables below for required number of posts.
  3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
  4. The (±) tolerance for mounting height is 3 inches.
  5. Minimum mounting height for J assemblies (A2-1S) 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 signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
  8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

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

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

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

\*\*\*

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

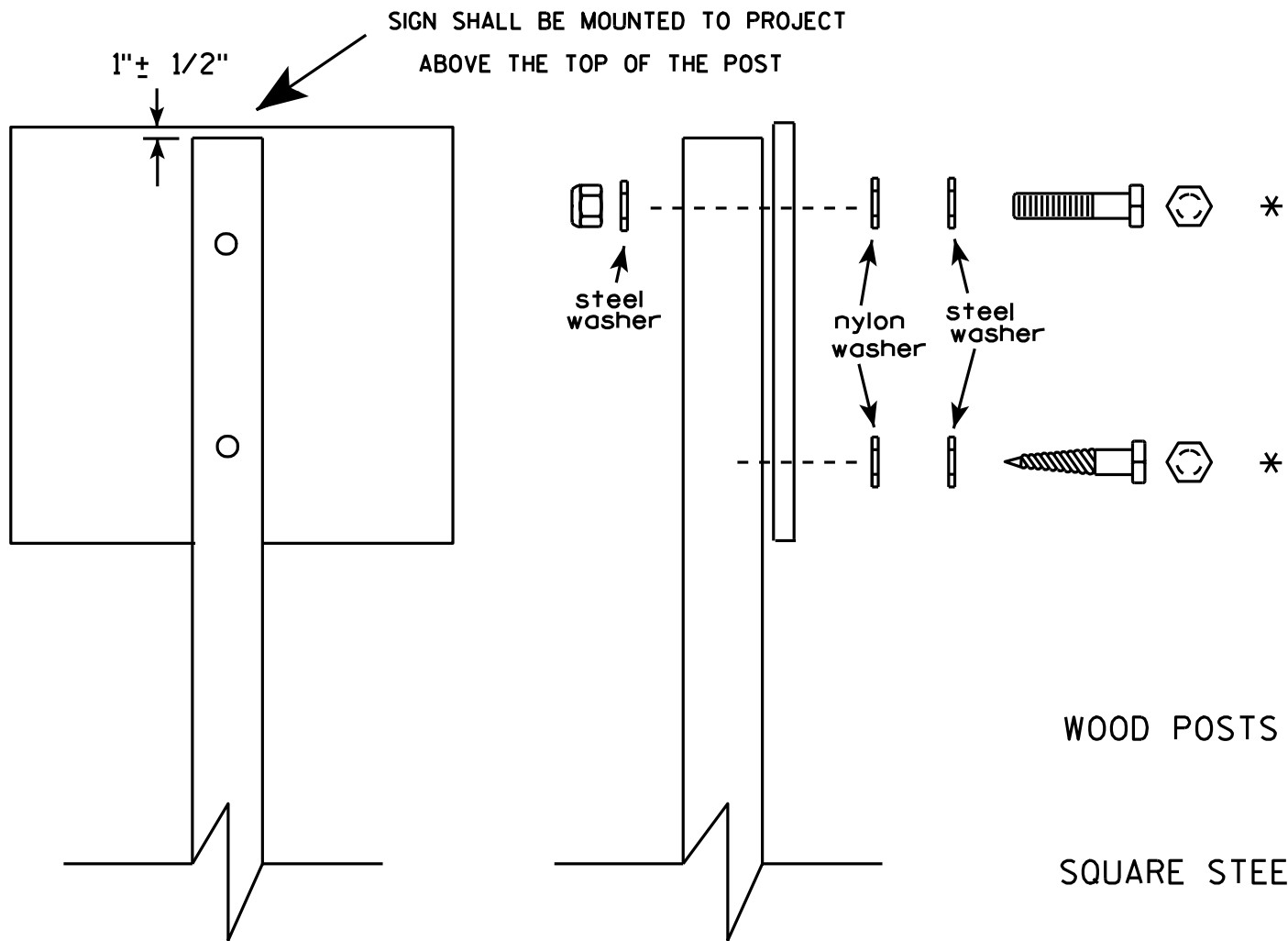
Area of Sign Installation ( Sq. Ft. )	D ( Min )
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION  
OF TYPE II SIGNS  
ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-4.14

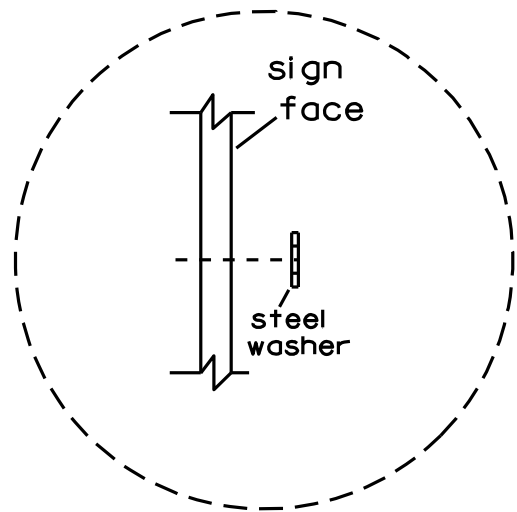


Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

- 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.

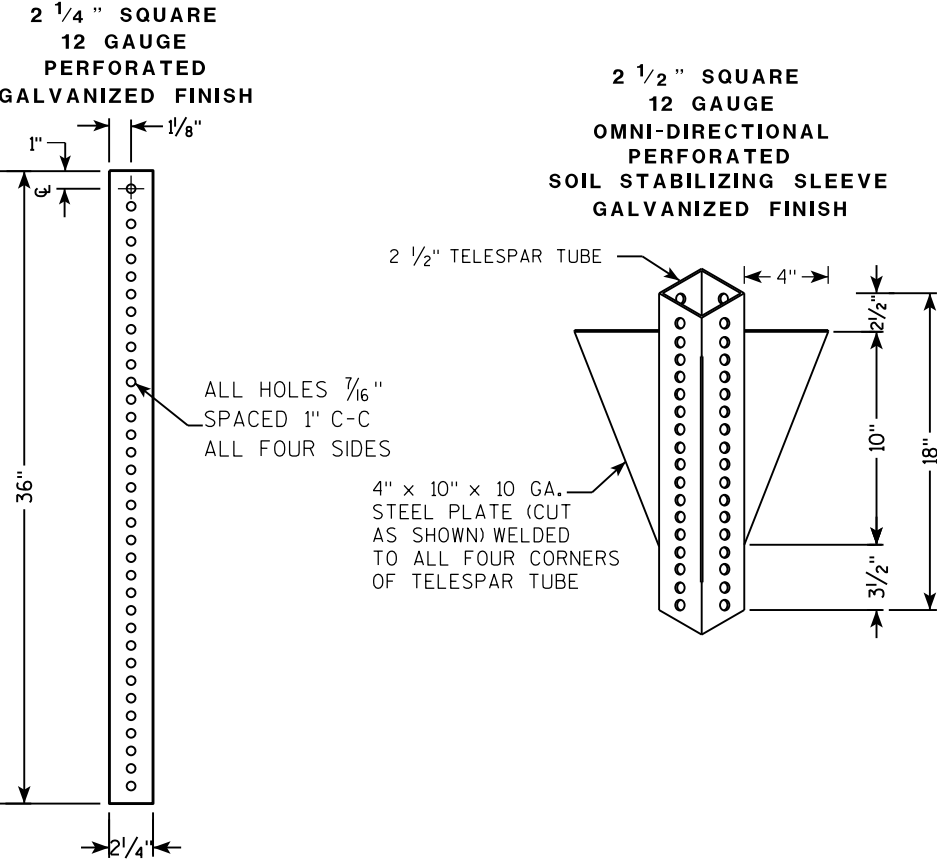


Washer Placement when Sign Has Other Than Type H or Type F Face

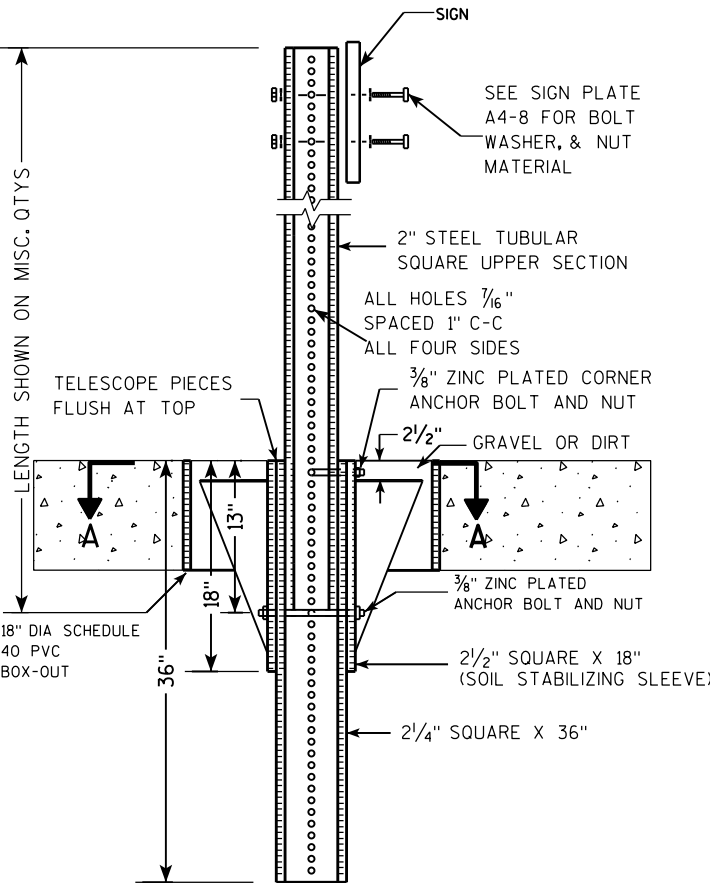
\* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require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

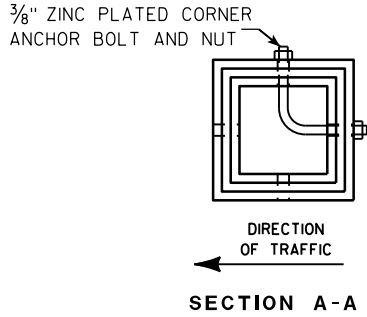
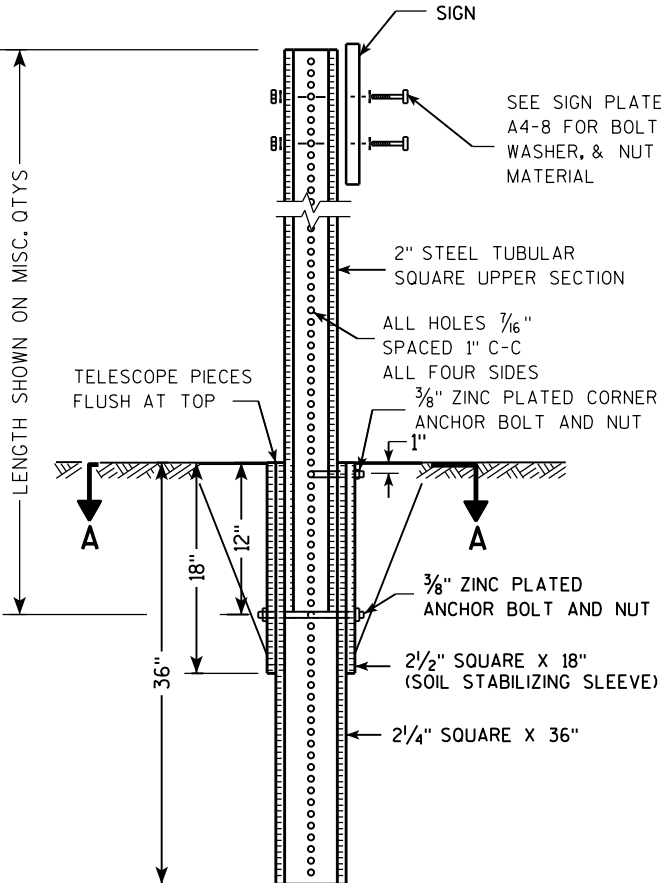
TELESCOPIC TUBING ANCHORS  
TWO PIECE SYSTEM



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



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



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

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

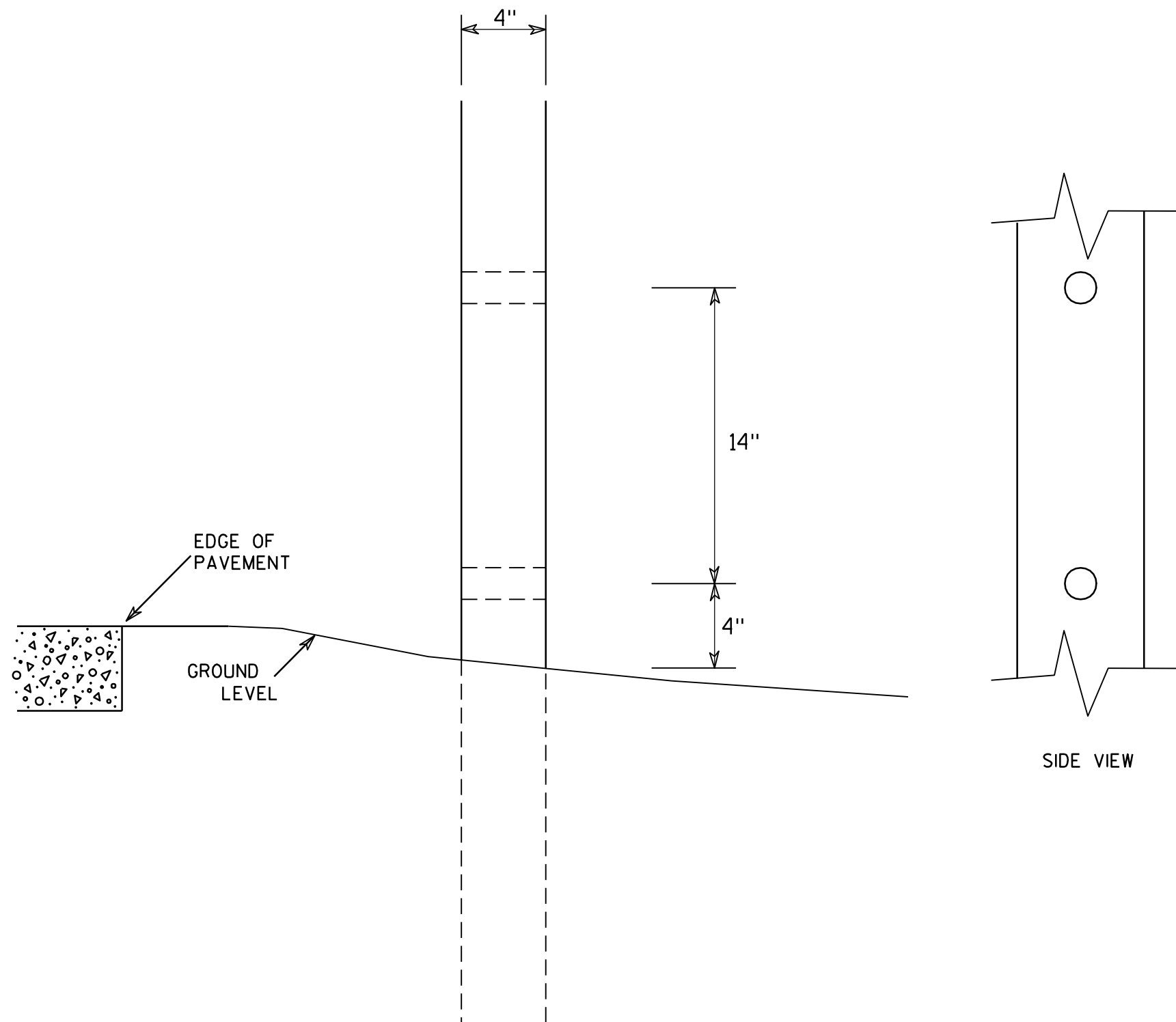
TUBULAR STEEL  
SIGN POST  
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

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

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:

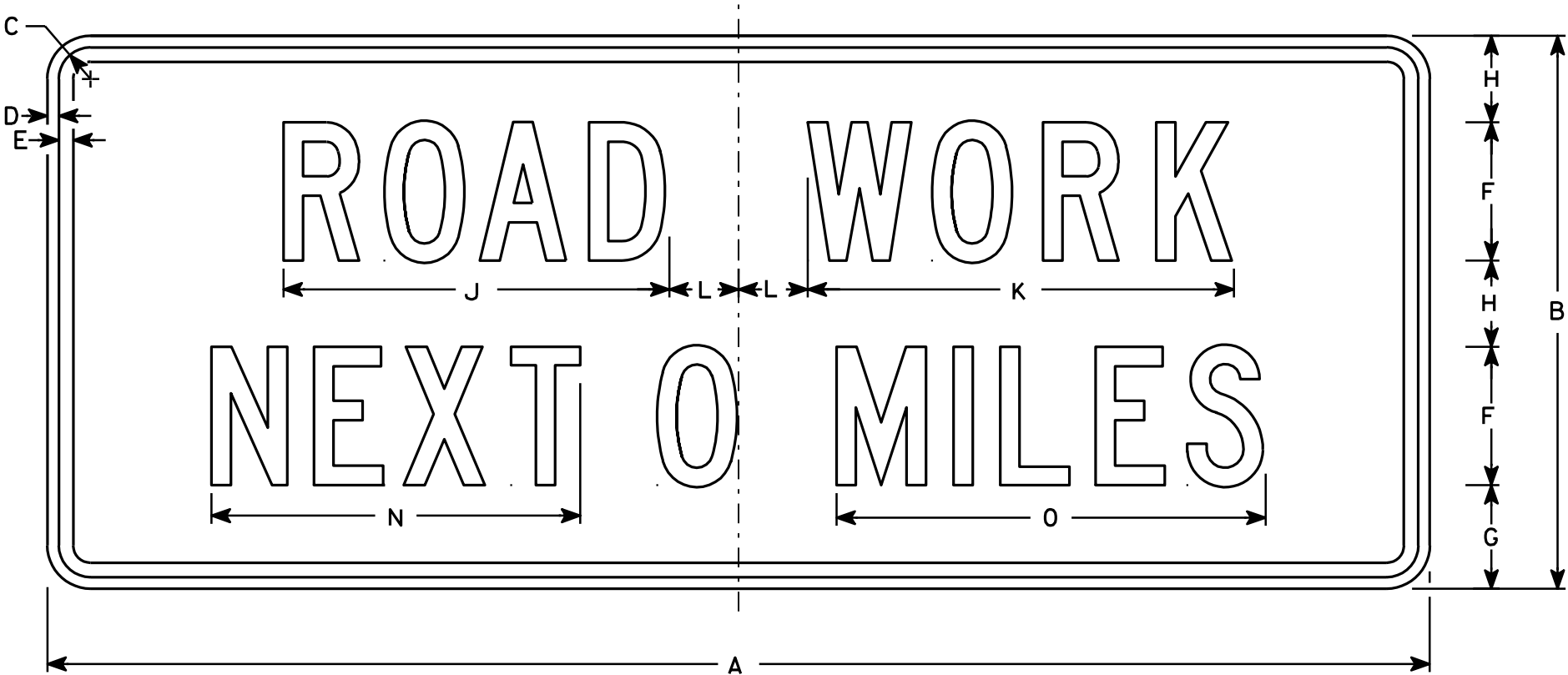
COUNTY:

SHEET NO:

E

NOTES

- 1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
  - Background - Orange
  - Message - Black
- 3. 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. Substitute appropriate numerals and optically adjust spacing to achieve proper balance



G20-1

Metric equivalent  
for this sign is:

SIZE	
1	
2	1500 mm X 600 mm
3	
4	1500 mm X 600 mm
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.	Area m <sup>2</sup>
1																												
2	60	24	1 3⁄8	1⁄2	5⁄8	6	4 1⁄2	3 3⁄4		16 3⁄4	18 1⁄2	3		16	18 5⁄8												10	.90
3																												
4	60	24	1 3⁄8	1⁄2	5⁄8	6	4 1⁄2	3 3⁄4		16 3⁄4	18 1⁄2	3		16	18 5⁄8												10	.90
5																												

STANDARD SIGN  
G20-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

*Chris J. Spay*  
State Traffic Engineer

DATE 4/8/97

PLATE NO. G20-1.7

PROJECT NO:

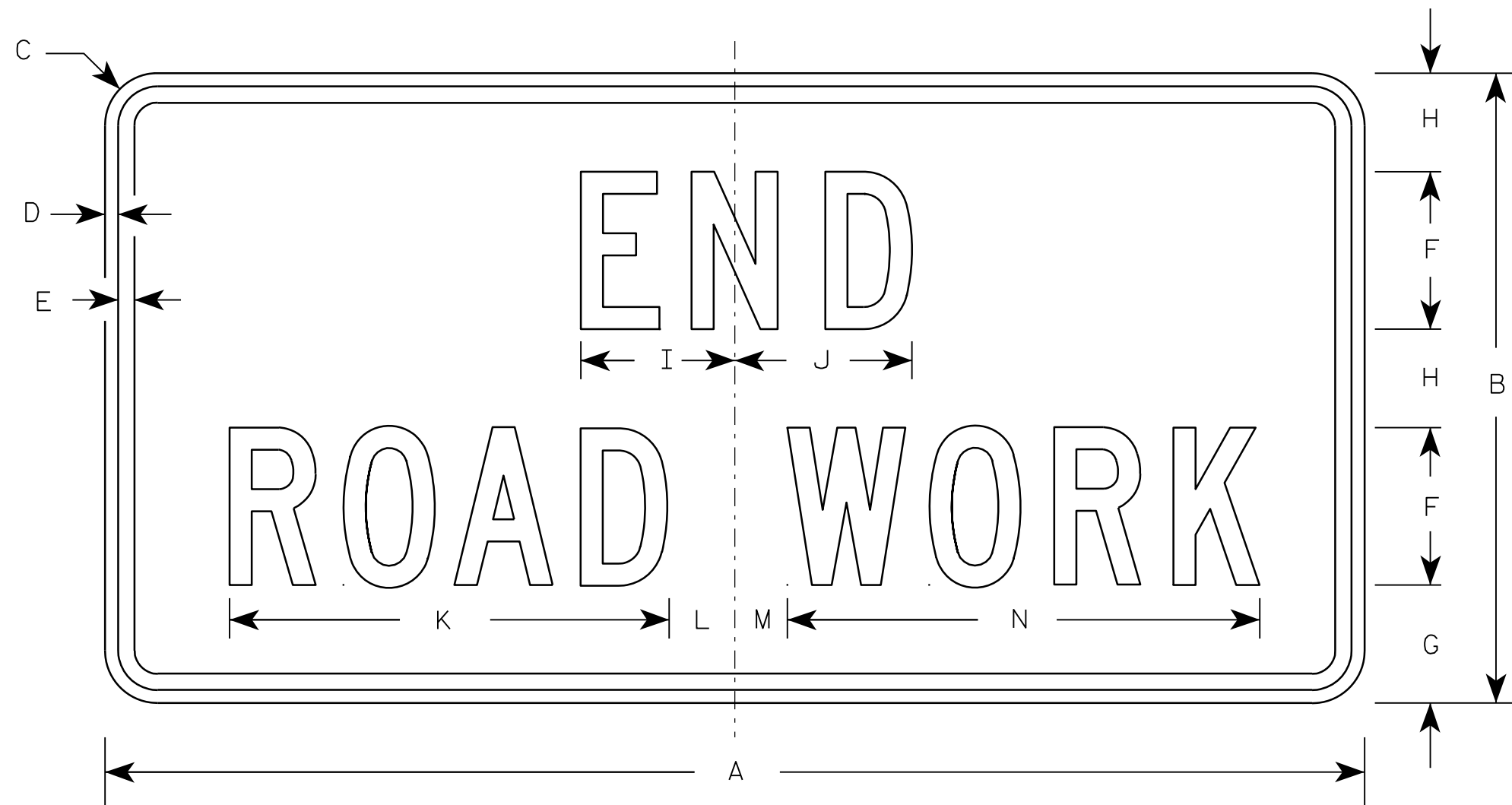
HWY:

COUNTY:

SHEET NO:

E

7



G20-2A

Metric equivalent  
for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 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 <sup>2</sup>
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

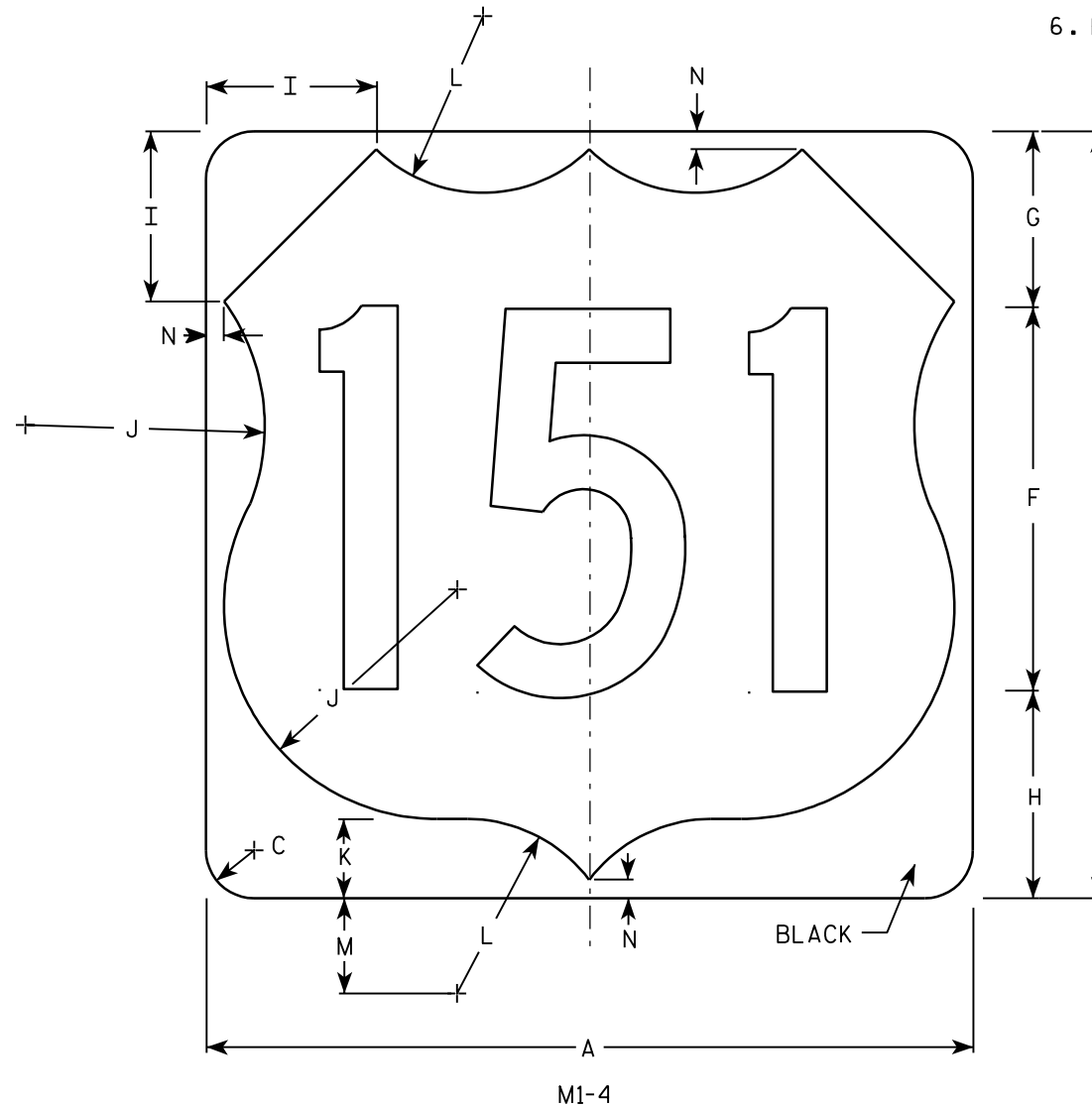
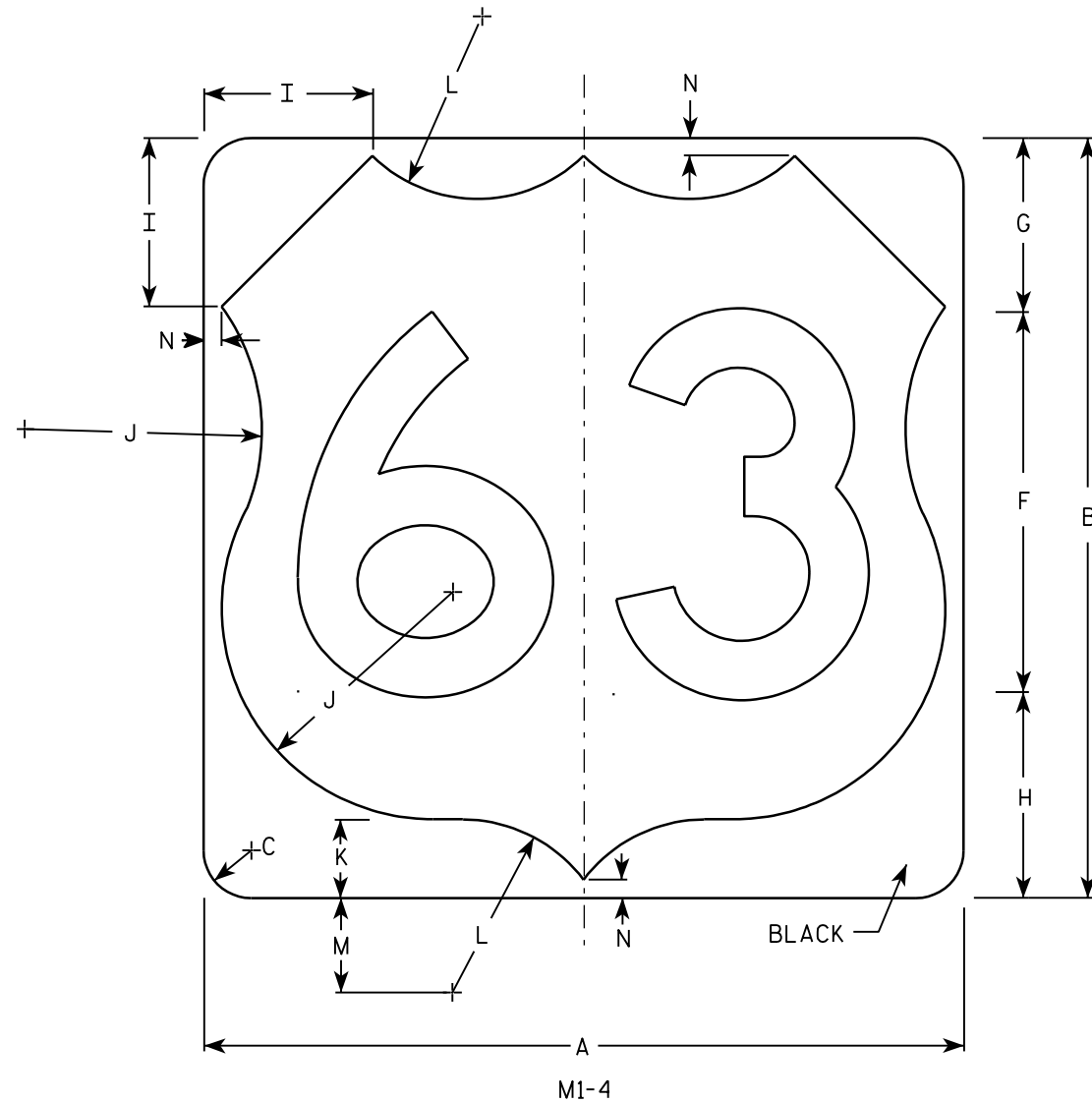
NOTES

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

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



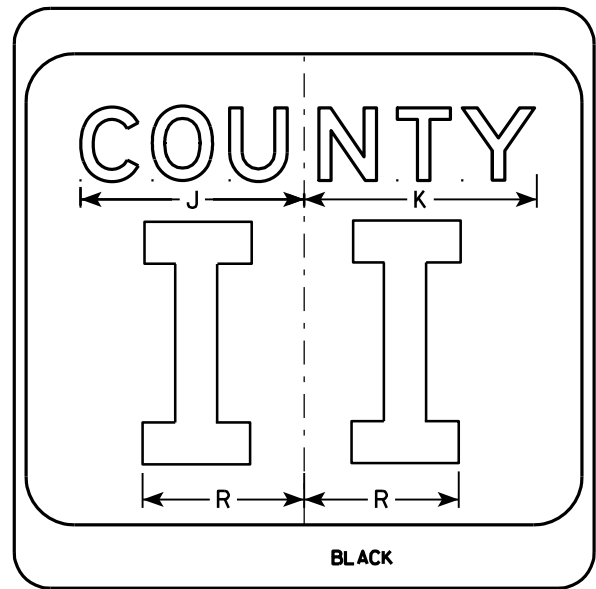
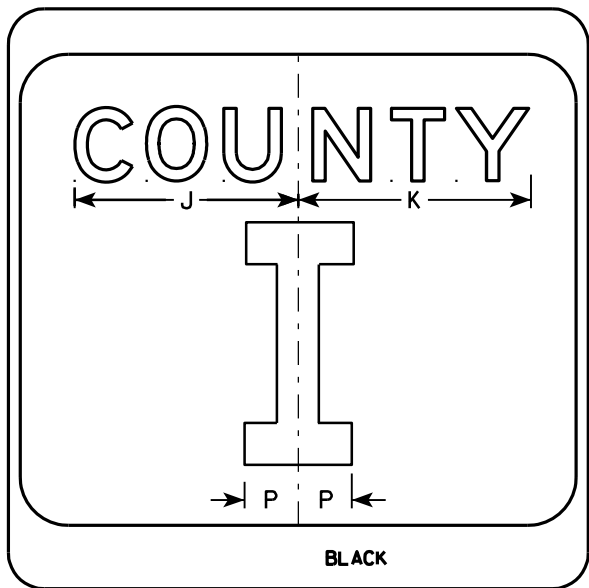
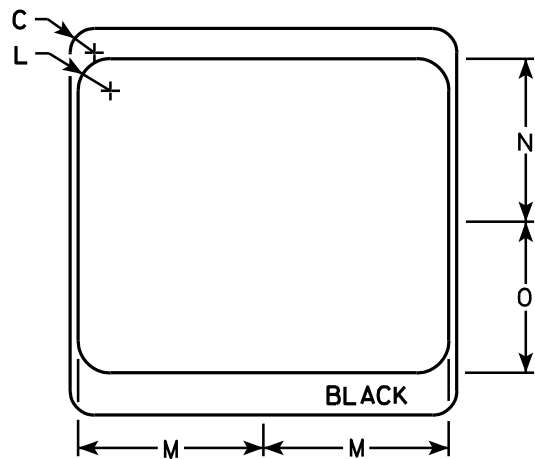
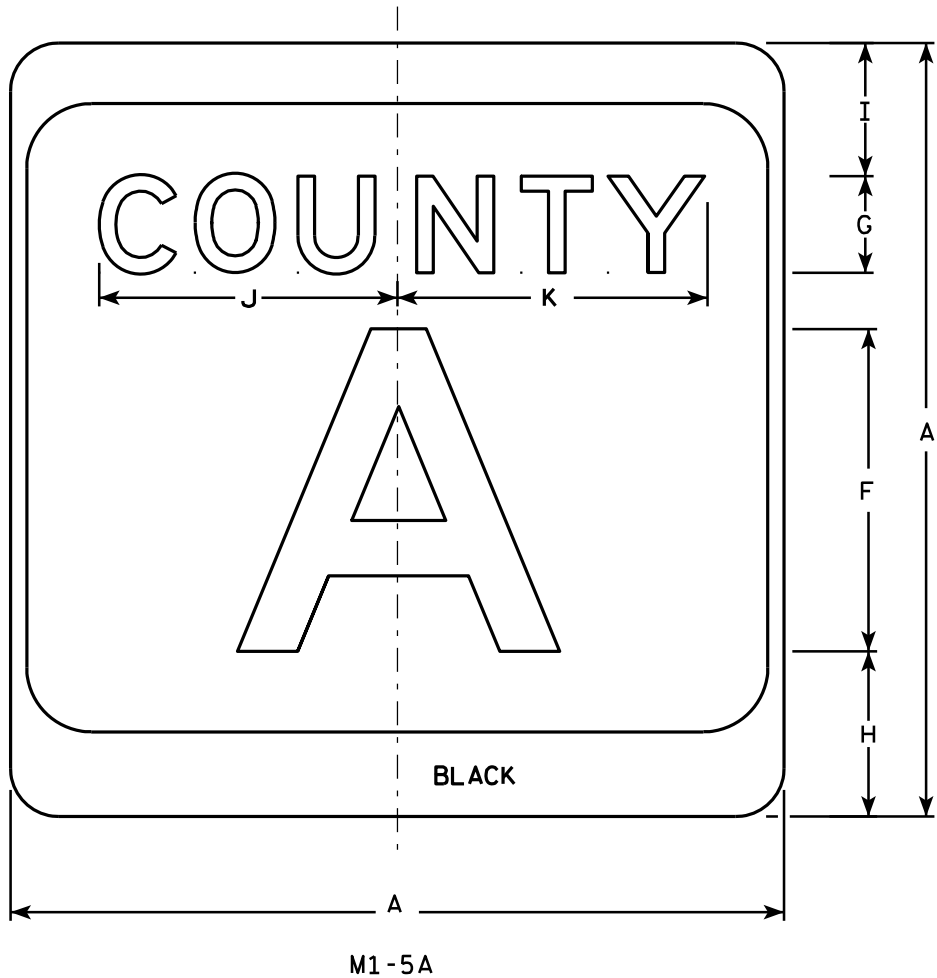
Metric equivalent  
for this sign is:

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 <sup>2</sup>
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:	E
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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

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:

E

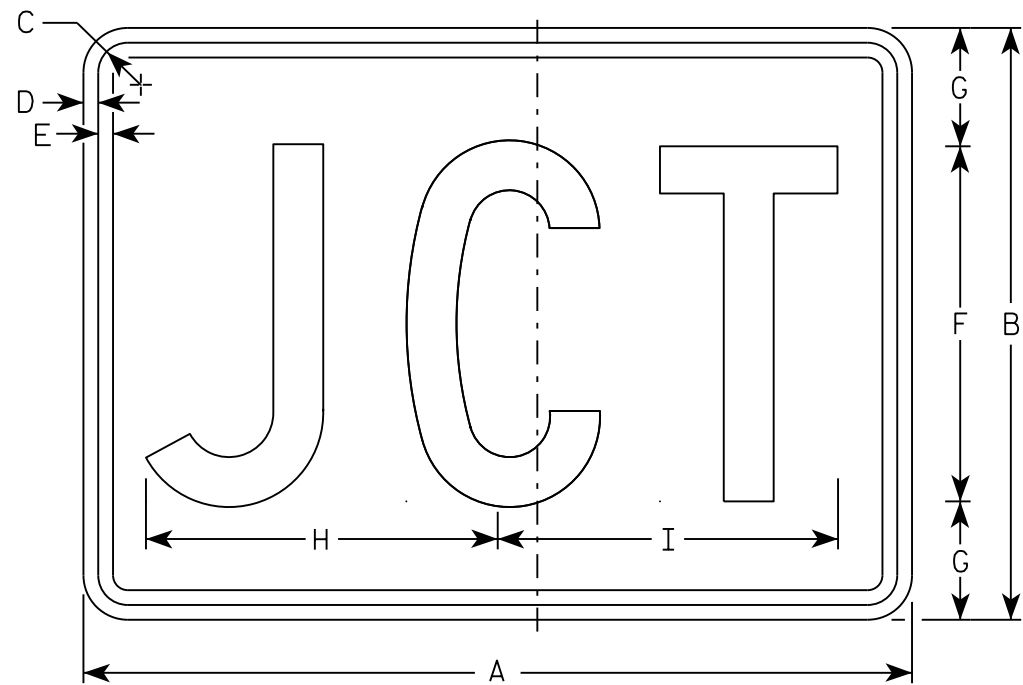
CTH MARKER

M1-5A FOR ASSEMBLIES

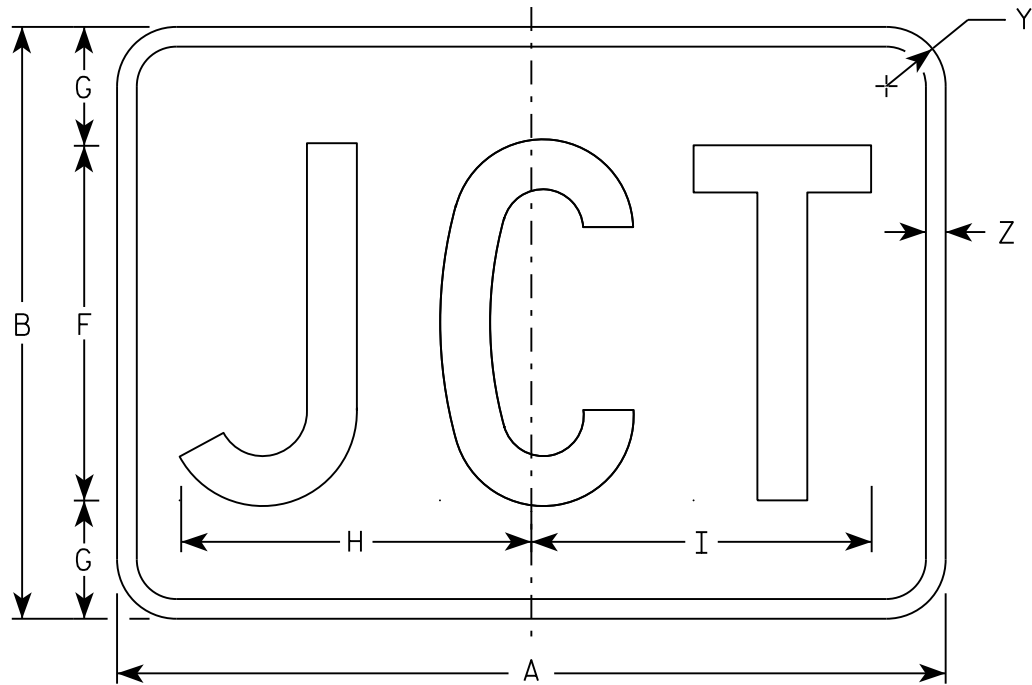
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

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



M2-1  
MM2-1  
MP2-1



MB2-1  
MK2-1  
MN2-1  
MR2-1

NOTES

- 1. Sign is Type II - Type H
- 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  
    Message - Black  
    MB2-1 Background - Blue  
    Message - White  
    MK2-1 Background - Green  
    Message - White  
    MM2-1 Background - White  
    Message - Green  
    MN2-1 Background - Brown  
    Message - White  
    MP2-1 Background - White  
    Message - Blue  
    MR2-1 Background - Brown  
    Message - Yellow

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	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20
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
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
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

STANDARD SIGN

M2 - 1

WISCONSIN DEPT OF TRANSPORTATION

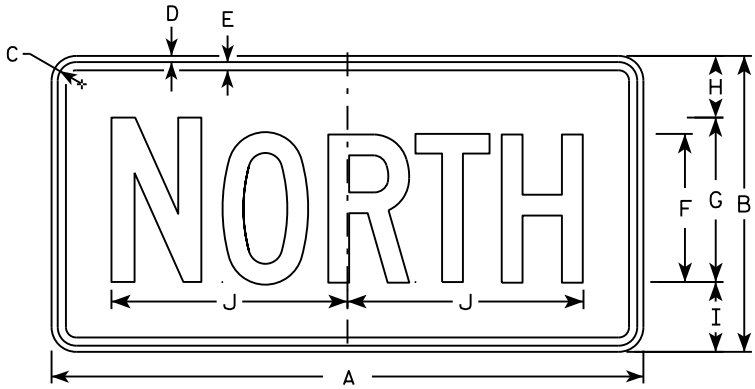
APPROVED

Matthew R. Rauch

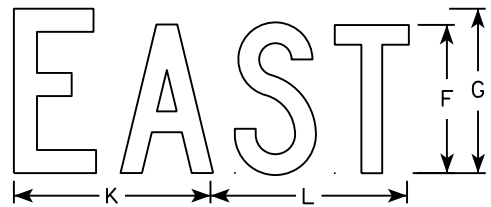
For State Traffic Engineer

DATE 10/15/15

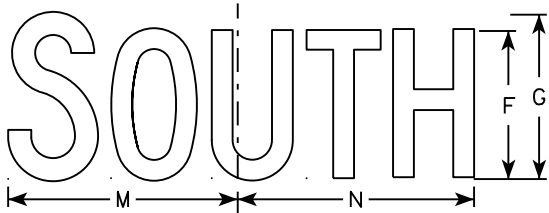
PLATE NO. M2-1.12



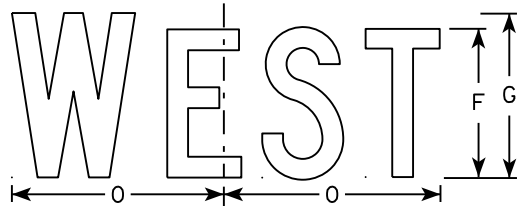
M3-1  
MM3-1  
MP3-1



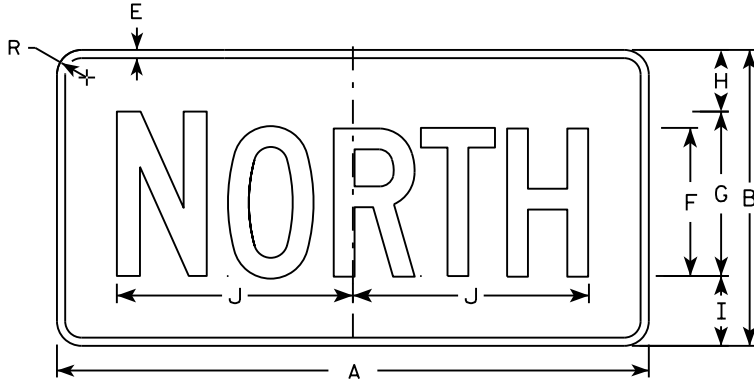
M3-2  
MM3-2  
MP3-2



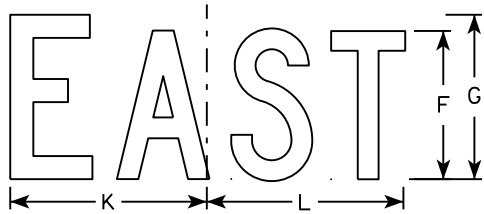
M3-3  
MM3-3  
MP3-3



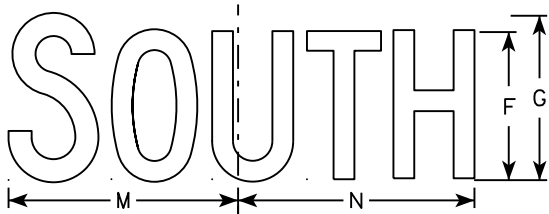
M3-4  
MM3-4  
MP3-4



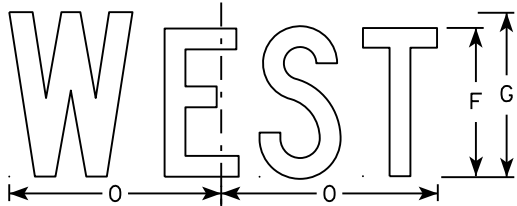
MB3-1  
MK3-1  
MN3-1



MB3-2  
MK3-2  
MN3-2



MB3-3  
MK3-3  
MN3-3



MB3-4  
MK3-4  
MN3-4

NOTES

1. All Signs Type II - Type H
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  
Message - Black  
MB3-1 thru MB3-4 Background - Blue  
Message - White  
MK3-1 thru MK3-4 Background - Green  
Message - White  
MM3-1 thru MM3-4 Background - White  
Message - Green  
MN3-1 thru MN3-4 Background - Brown  
Message - White  
MP3-1 thru MP3-4 Background - White  
Message - Blue
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

STANDARD SIGNS  
M3-1 thru M3-4  
SERIES

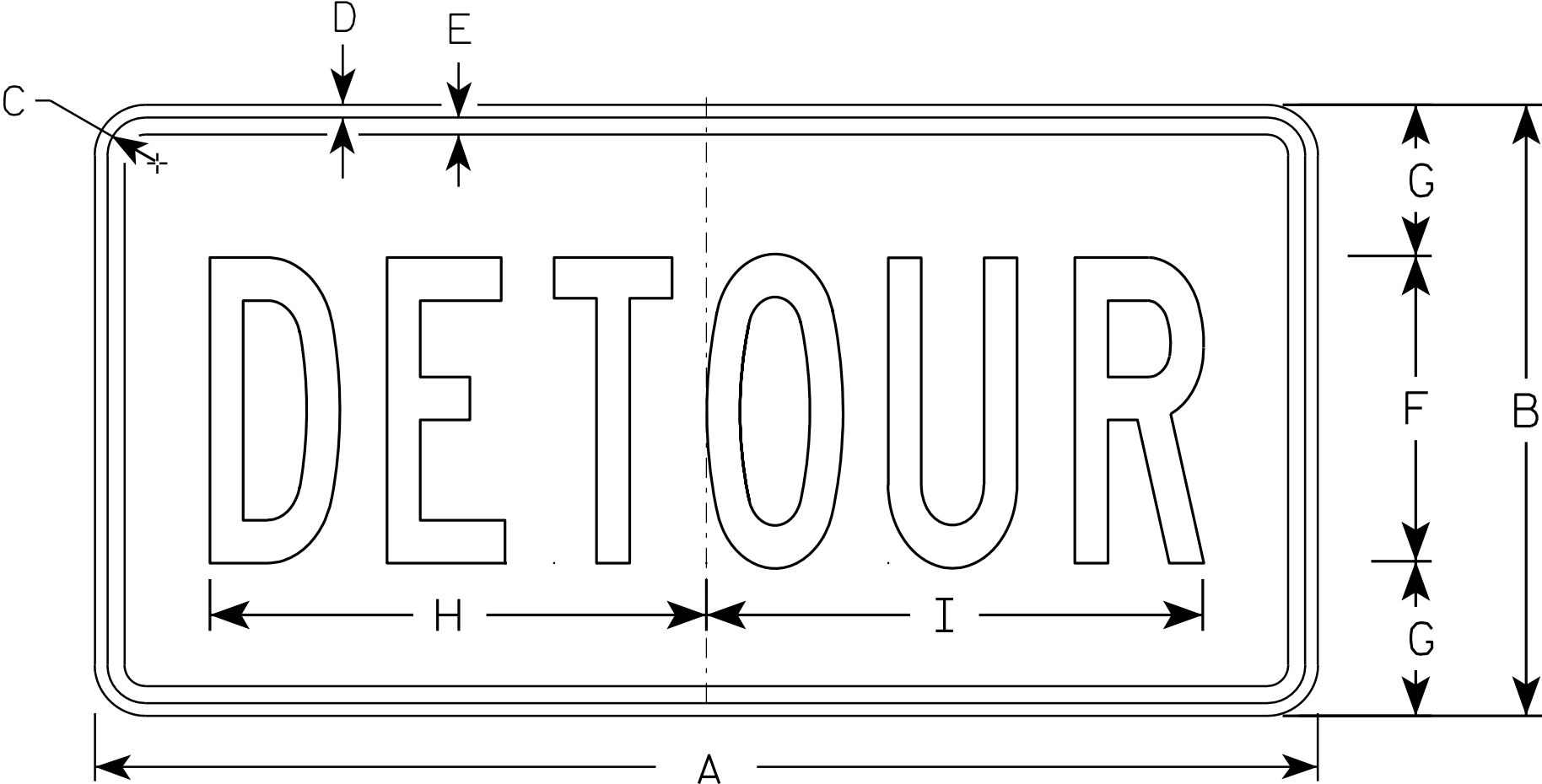
WISCONSIN DEPT OF TRANSPORTATION

APPROVED  
*Matthew R. Rauch*  
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M3-1.14

NOTES

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



M4 - 8

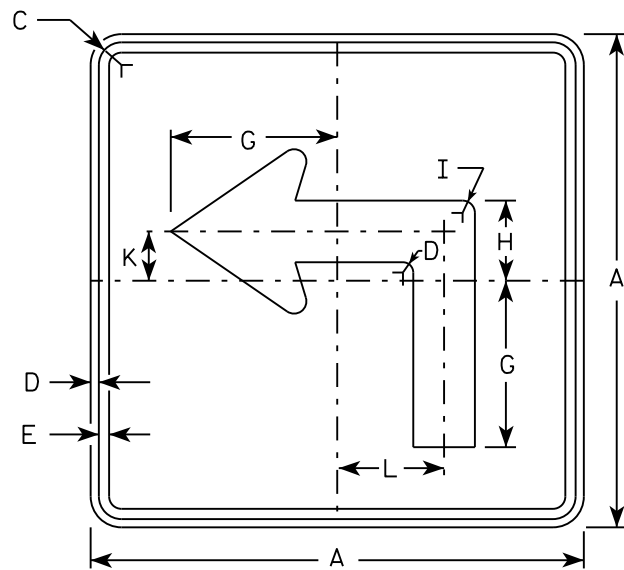
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

STANDARD SIGN  
M4 - 8

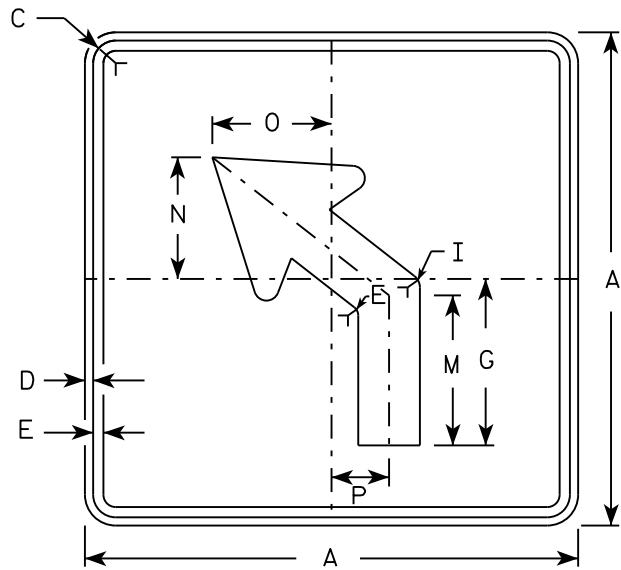
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

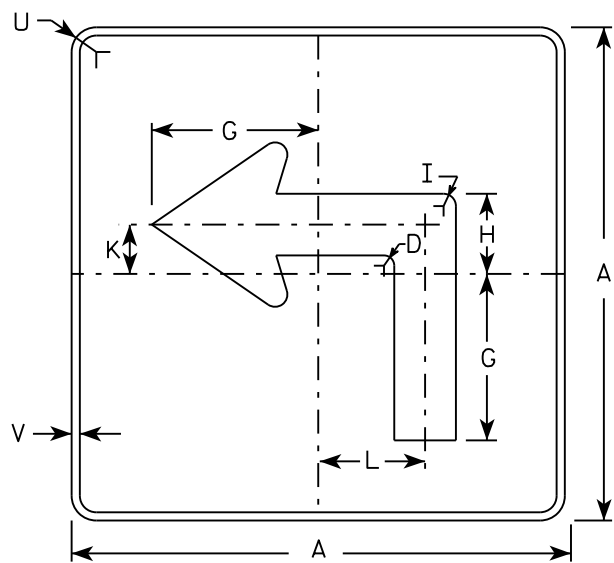
DATE 11/10/10 PLATE NO. M4-8.2



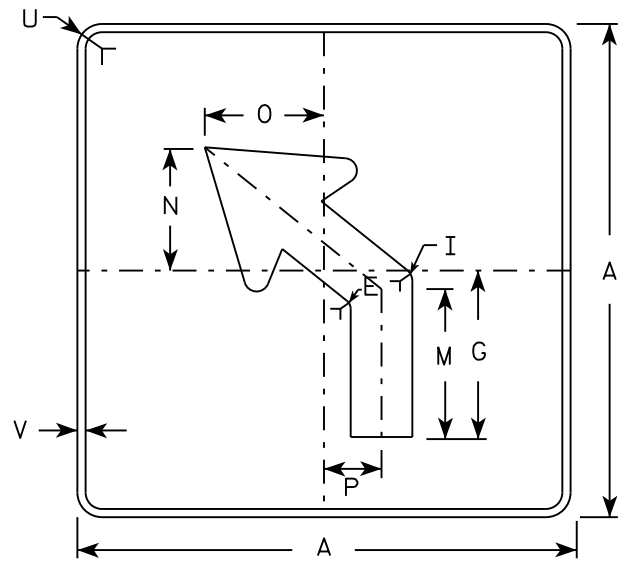
M5-1L  
MM5-1L  
M05-1L  
MP5-1L



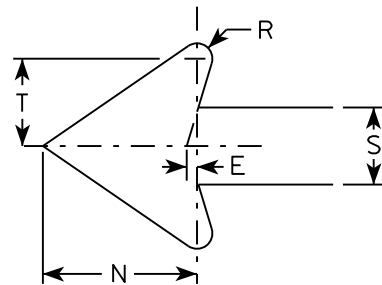
M5-2L  
MM5-2L  
M05-2L  
MP5-2L



MB5-1L  
MK5-1L  
MN5-1L  
MR5-1L



MB5-2L  
MK5-2L  
MN5-2L  
MR5-2L



NOTES

- Signs are Type II - Type H reflective except as shown
- 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                      |
|                 | Message - Black                         |
| MB5-1 and MB5-2 | Background - Blue                       |
|                 | Message - White                         |
| MK5-1 and MK5-2 | Background - Green                      |
|                 | Message - White                         |
| MM5-1 and MM5-2 | Background - White                      |
|                 | Message - Green                         |
| MN5-1 and MN5-2 | Background - Brown                      |
|                 | Message - White                         |
| M05-1 and M05-2 | Background - Orange - Type F Reflective |
|                 | Message - Black                         |
| MP5-1 and MP5-2 | Background - White - Type H Reflective  |
|                 | Message - Blue                          |
| MR5-1 and MR5-2 | Background - Brown                      |
|                 | Message - Yellow                        |
- M5-1R same as M5-1L except arrow points right.
- M5-2R same as M5-2L except arrow tilts right.

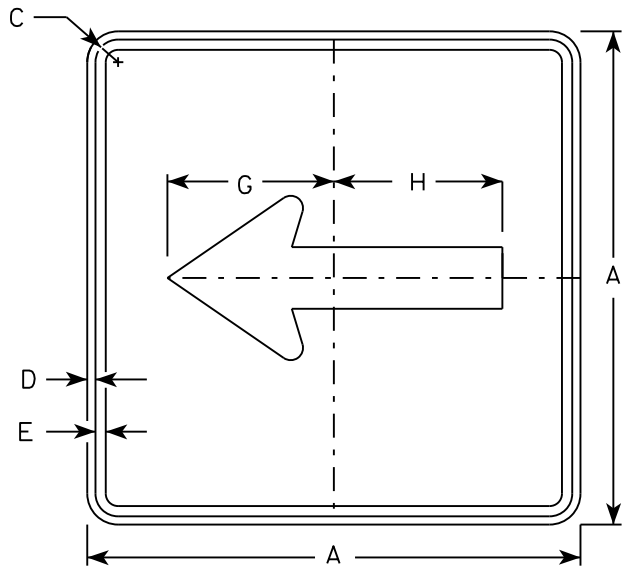
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
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
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

STANDARD SIGN  
M5-1 & M5-2

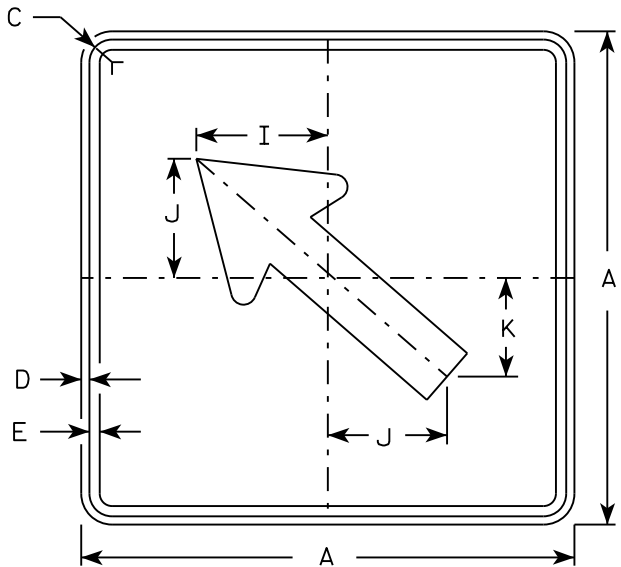
WISCONSIN DEPT OF TRANSPORTATION

APPROVED  
*Matthew R. Rauch*  
for State Traffic Engineer

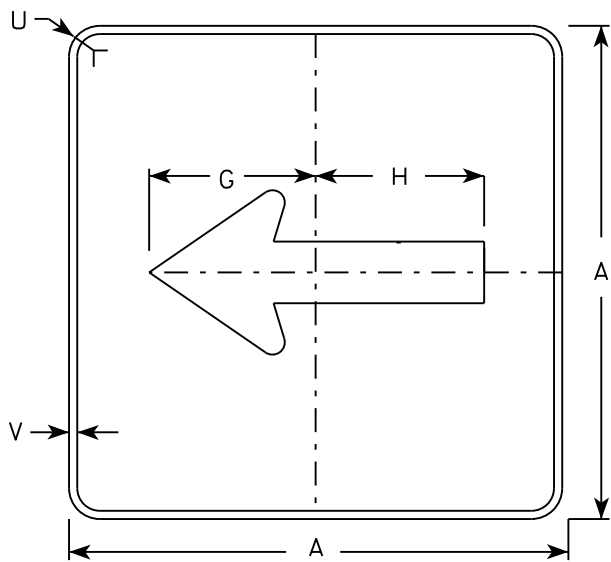
DATE 10/15/15 PLATE NO. M5-1.13



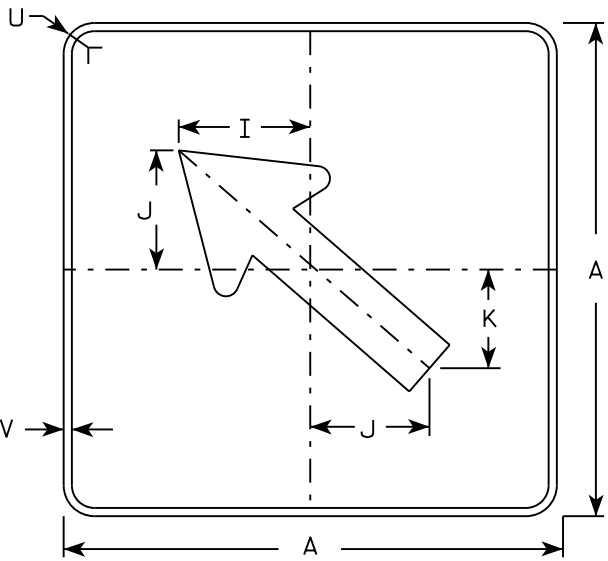
M6 - 1  
MM6 - 1  
M06 - 1  
MP6 - 1



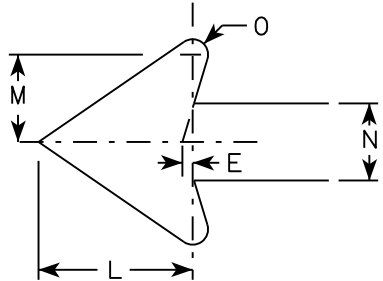
M6 - 2  
MM6 - 2  
M06 - 2  
MP6 - 2



MB6 - 1  
MK6 - 1  
MN6 - 1  
MR6 - 1



MB6 - 2  
MK6 - 2  
MN6 - 2  
MR6 - 2



NOTES

- 1. Signs are Type II - Type H except as Shown
- 2. Color:  
Background - See note 4  
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. M6-1 and M6-2 Background - White  
Message - Black  
MB6-1 and MB6-2 Background - Blue  
Message - White  
MK6-1 and MK6-2 Background - Green  
Message - White  
MM6-1 and MM6-2 Background - White  
Message - Green  
MN6-1 and MN6-2 Background - Brown  
Message - White  
M06-1 and M06-2 Background - Orange - Type F Reflective  
Message - Black  
MP6-1 and MP6-2 Background - White  
Message - Blue  
MR6-1 and MR6-2 Background - Brown  
Message - Yellow

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	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
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
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
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

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

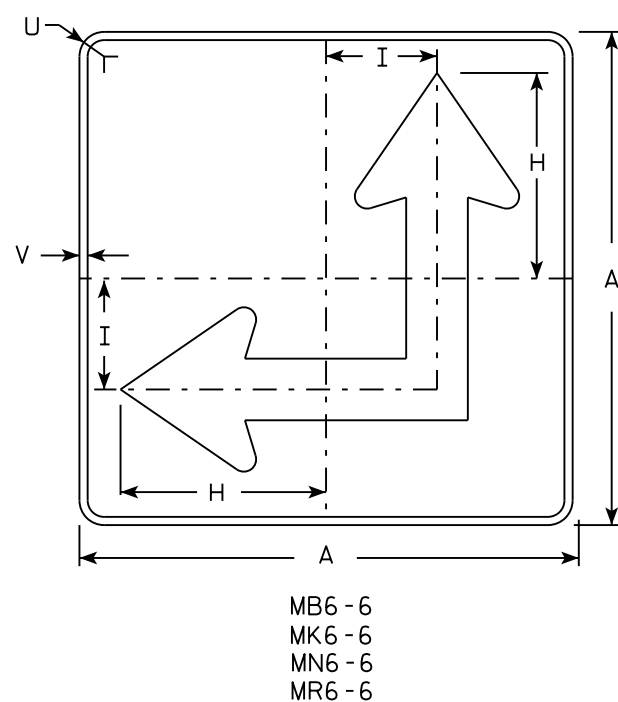
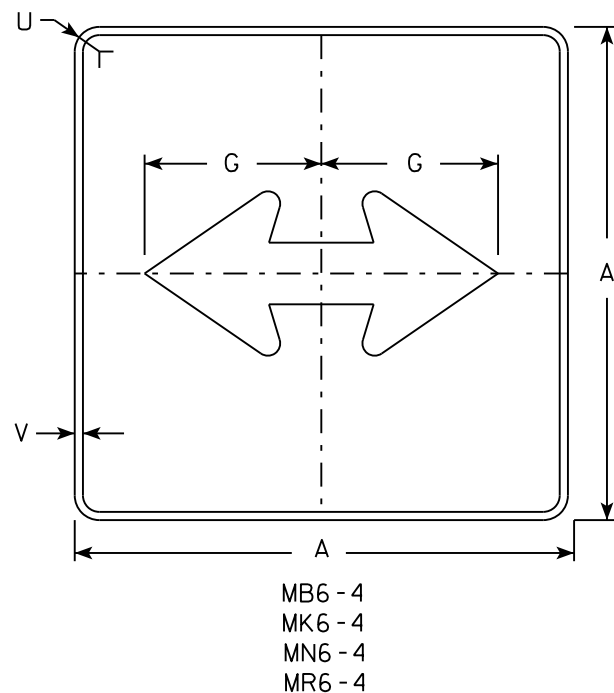
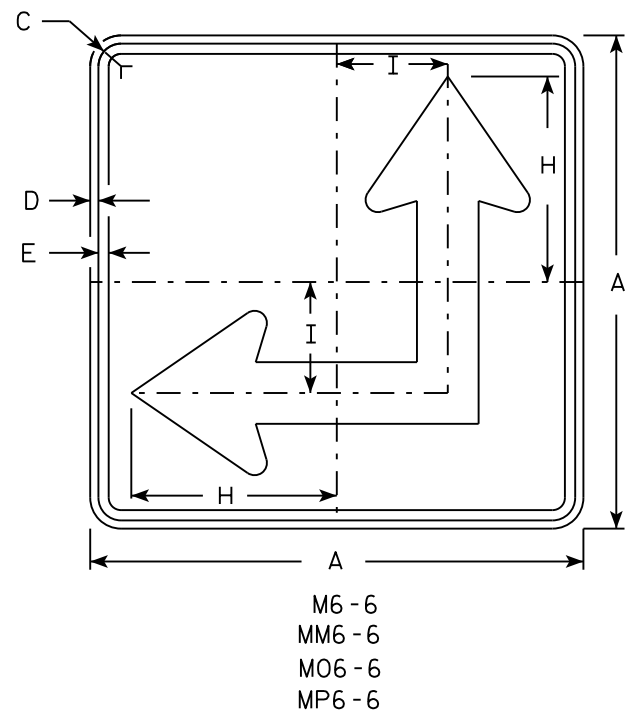
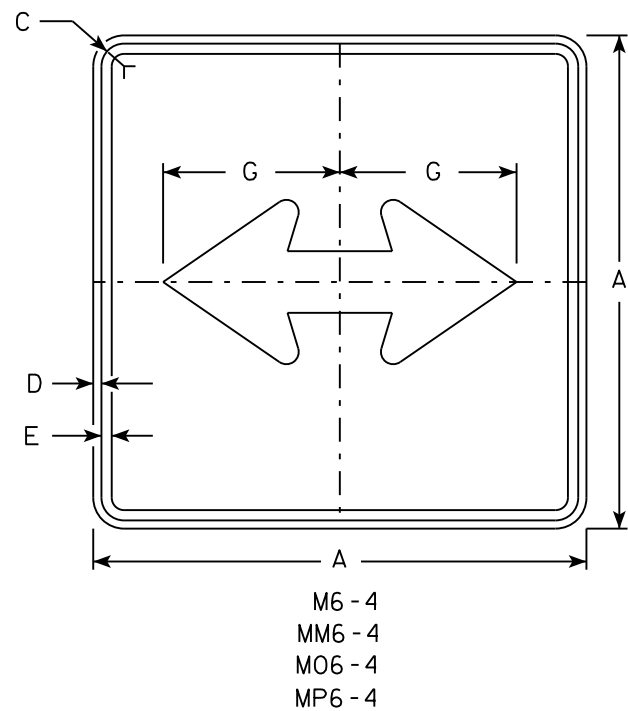
E

STANDARD SIGN  
M6 - 1 & M6 - 2  
SERIES

WISCONSIN DEPT OF TRANSPORTATION

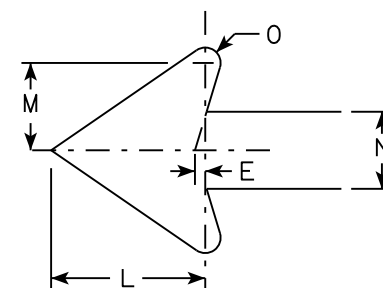
APPROVED  
*Matthew R. Rauch*  
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M6-1.15



NOTES

- Signs are Type II - Type H except as Shown
- 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  
Message - Black  
MB6-4 and MB6-6 Background - Blue  
Message - White  
MK6-4 and MK6-6 Background - Green  
Message - White  
MM6-4 and MM6-6 Background - White  
Message - Green  
MN6-4 and MN6-6 Background - Brown  
Message - White  
M06-4 and M06-6 Background - Orange - Type F Reflective  
Message - Black  
MP6-4 and MP6-6 Background - White  
Message - Blue  
MR6-4 and MR6-6 Background - Brown  
Message - Yellow
- M6-6R same as M6-6L except arrow points ahead and right.



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	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
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
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
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

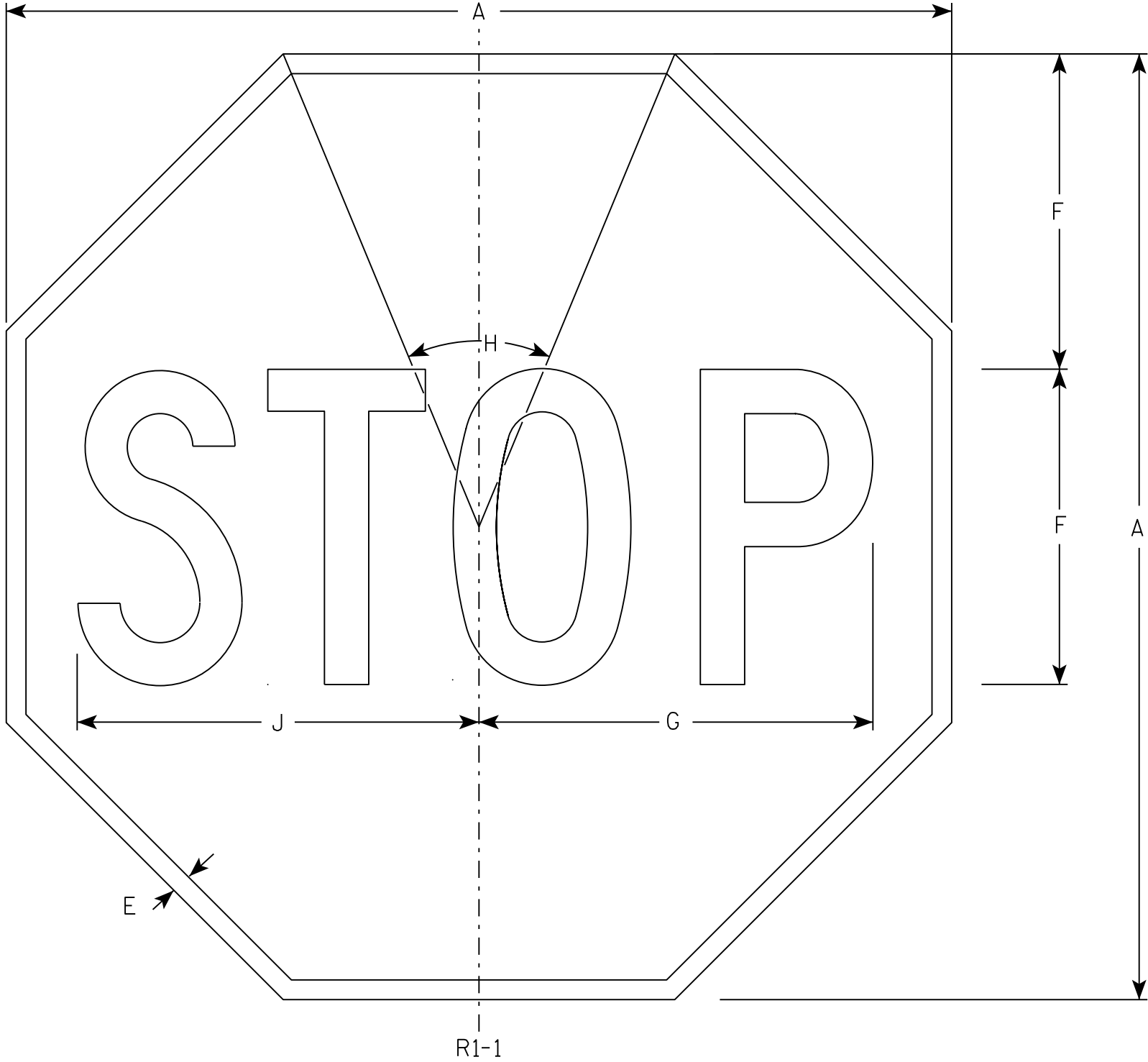
PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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STANDARD SIGN  
M6 - 4 & M6 - 6  
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 10/15/15      PLATE NO. M6-4.10



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

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				5/8	10	12 1/2	45°		12 3/4																	5.18
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

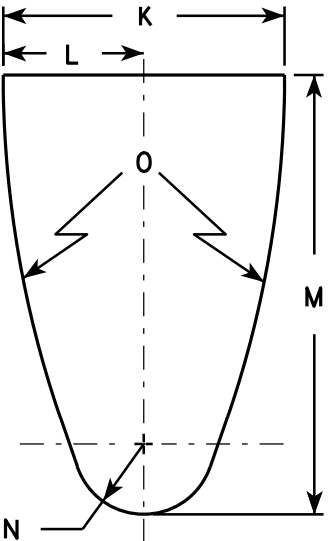
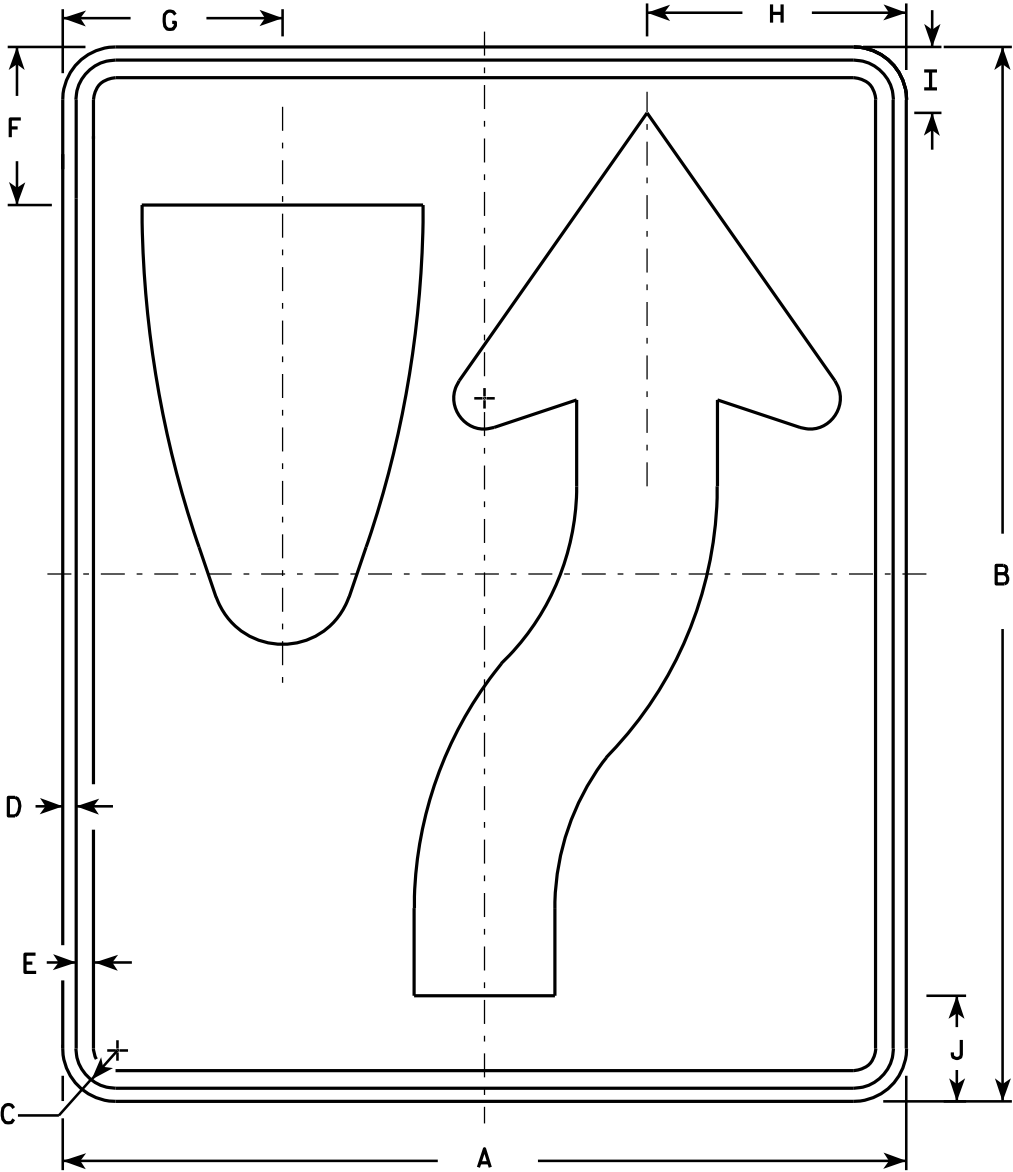
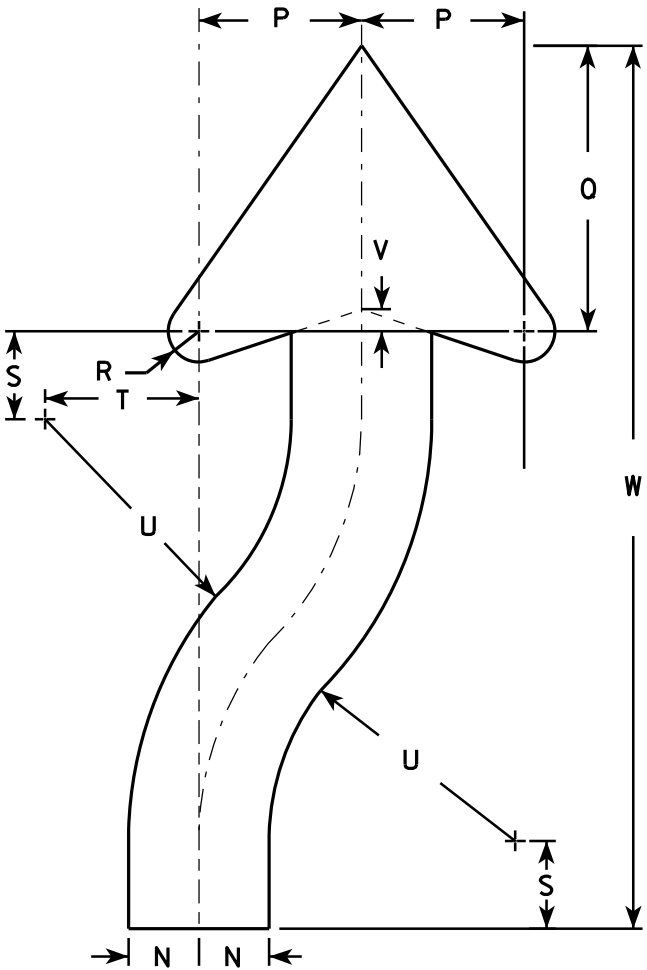
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

NOTES

- 1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
- 2. Color:  
Background - White  
Message - Black
- 3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
- 4. R4-8 is the same as R4-7 except Legend is reversed.



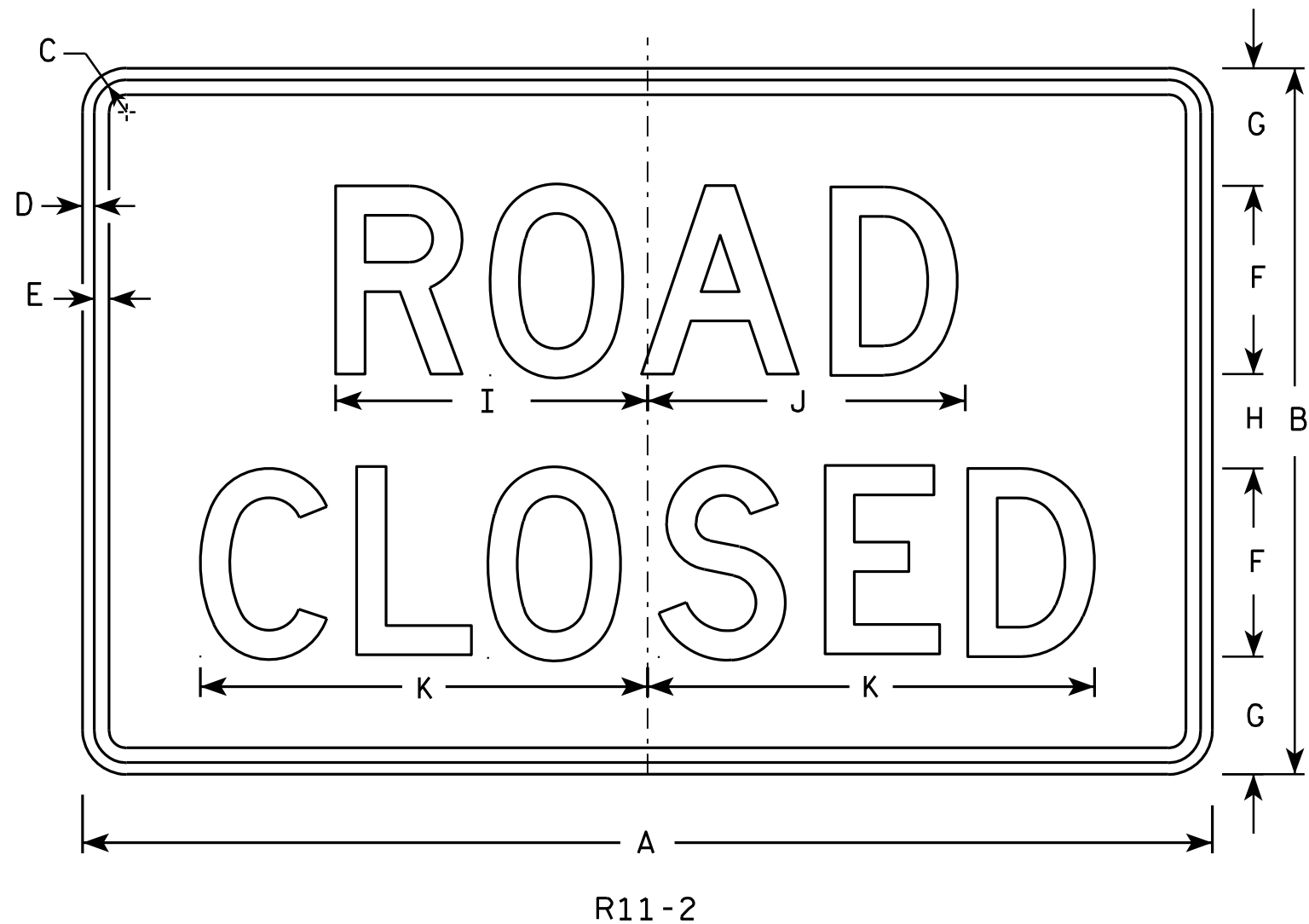
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

STANDARD SIGN  
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

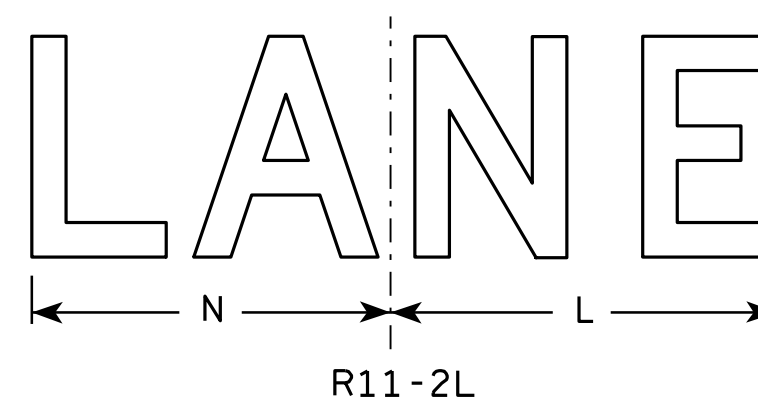
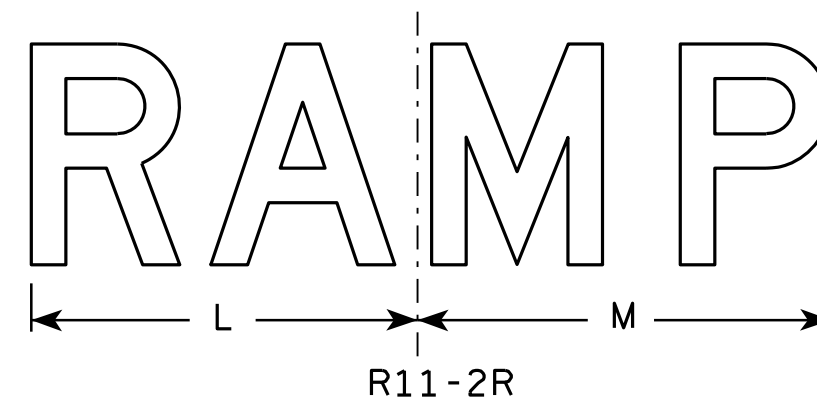
APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8



### NOTES

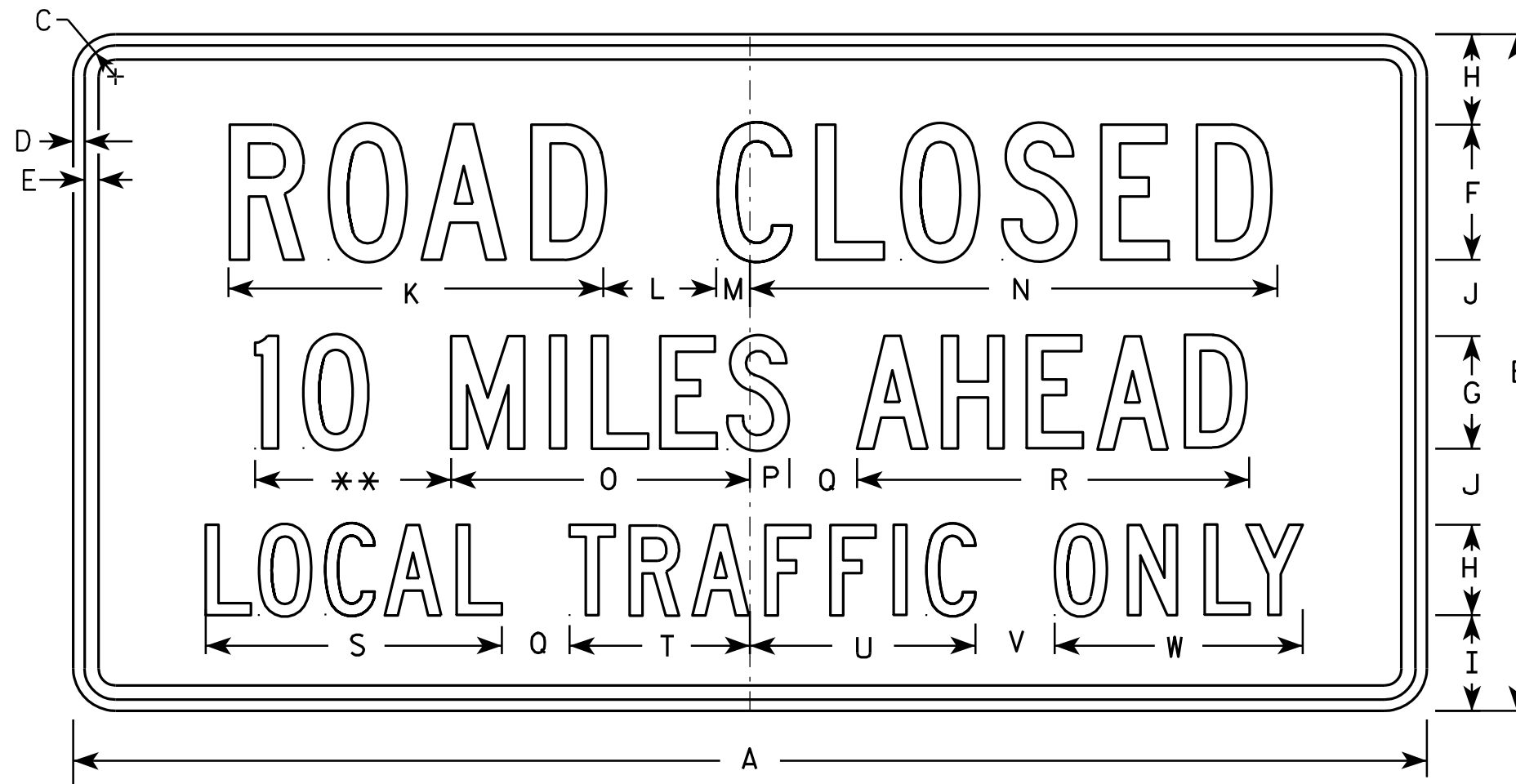
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:  
Background - White  
Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded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



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

<b>STANDARD SIGN</b>	
<b>R11-2</b>	
<small>WISCONSIN DEPT OF TRANSPORTATION</small>	
<small>APPROVED</small>	<i>Matthew R. Rauch</i> <small>for State Traffic Engineer</small>
<small>DATE</small> 4/1/11	<small>PLATE NO.</small> R11-2.10

PROJECT NO:	HWY:	COUNTY:	SHEET NO: <b>E</b>
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R11-3

#### 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.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

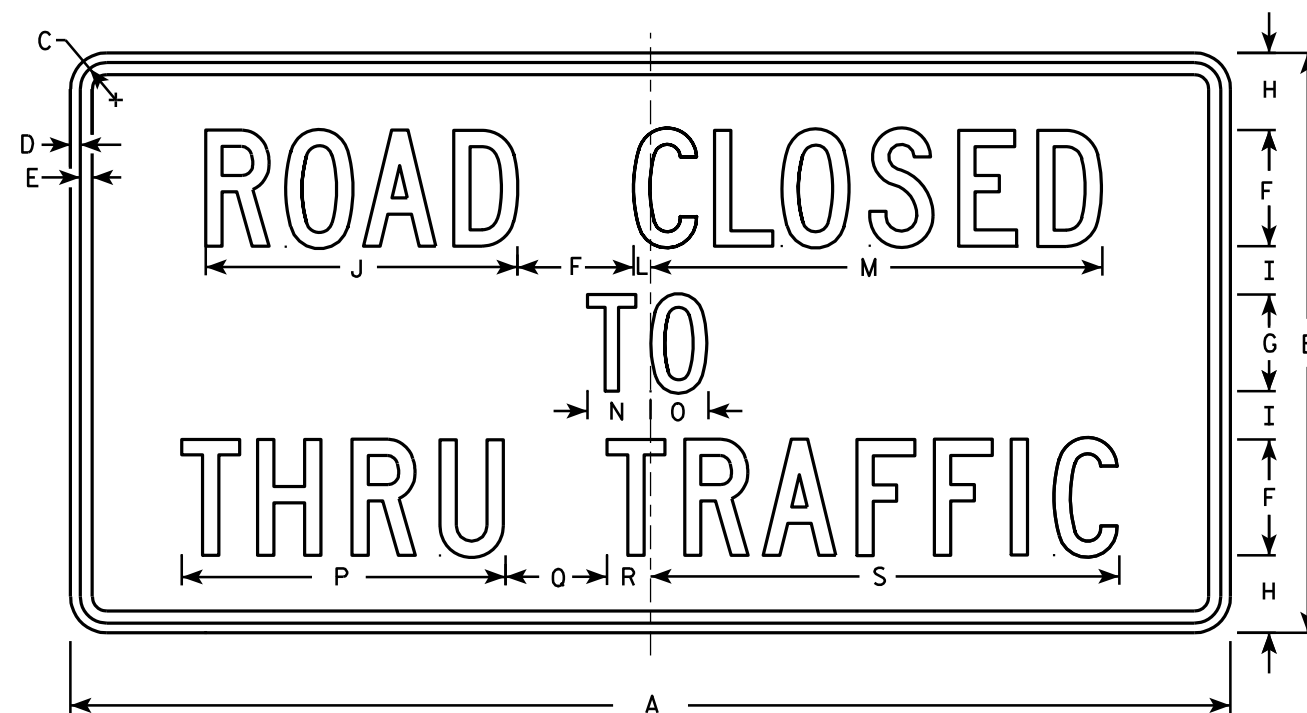
\*\* See Note 5

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	36	18	1 3/8	1/2	5/8	4	3	2 1/2	2	2	11 1/8	3	1 1/8	15 1/4	8	1 1/2	2	10 3/4	8 3/8	4 3/4	6 1/2	2	6 3/4				4.5
2S	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	16 5/8	5	1 1/2	23	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11				12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	16 5/8	5	1 1/2	23	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11				12.5
3																											
4																											
5																											

#### STANDARD SIGN R11-3

WISCONSIN DEPT OF TRANSPORTATION  
APPROVED *Matthew R. Rauch*  
For State Traffic Engineer  
DATE 4/1/11 PLATE NO. R11-3.6

PROJECT NO: HWY: COUNTY: SHEET NO: E



R11-4

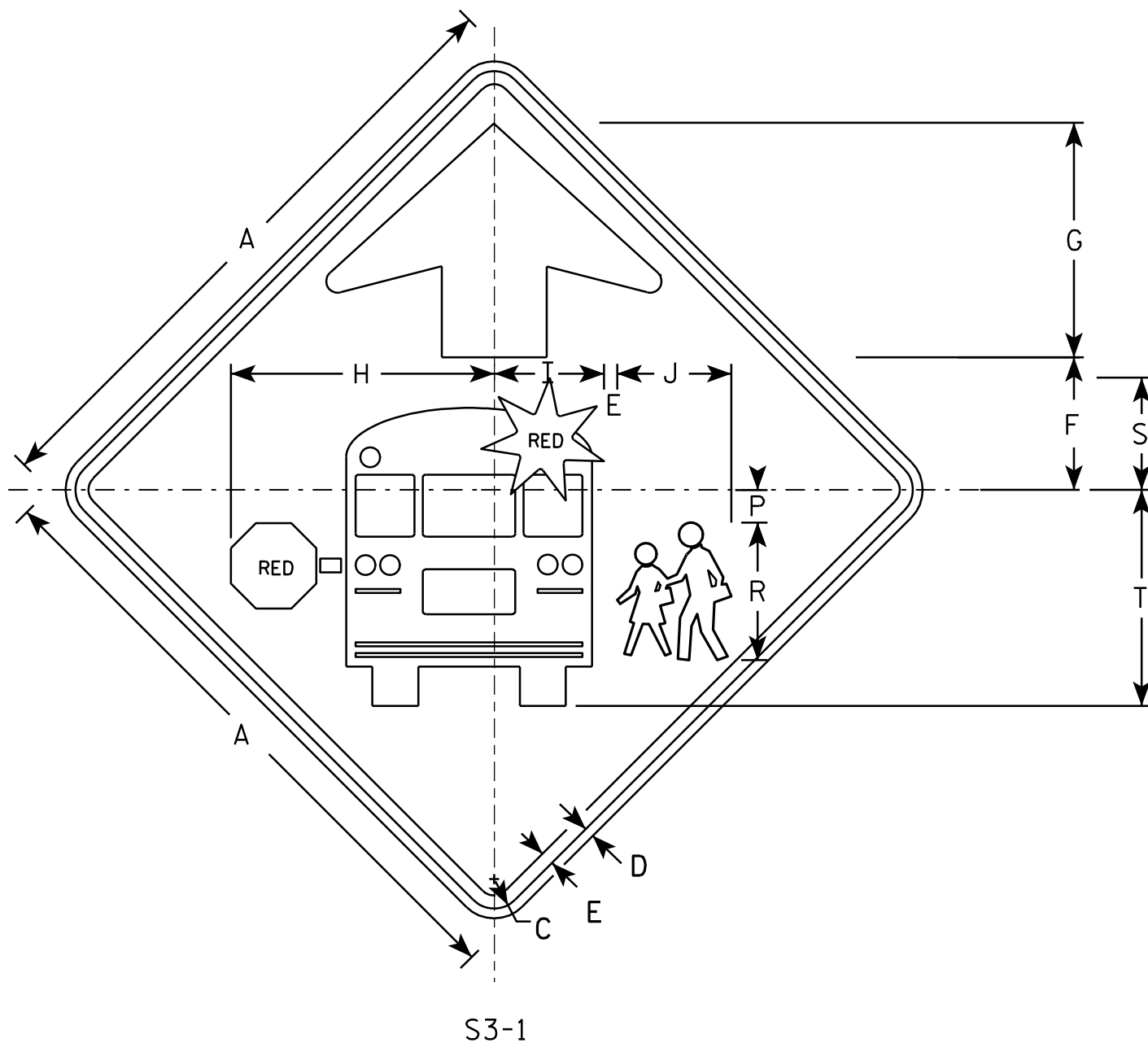
NOTES

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 - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	30	1 3⁄8	½	5⁄8	6	5	4	2 ½	16 ⅛		7⁄8	23 3⁄8	3 ¼	3	16 ¾	5 ¼	2 ¼	24 ¼								12.5
2M	60	30	1 3⁄8	½	5⁄8	6	5	4	2 ½	16 ⅛		7⁄8	23 3⁄8	3 ¼	3	16 ¾	5 ¼	2 ¼	24 ¼								12.5
3																											
4																											
5																											

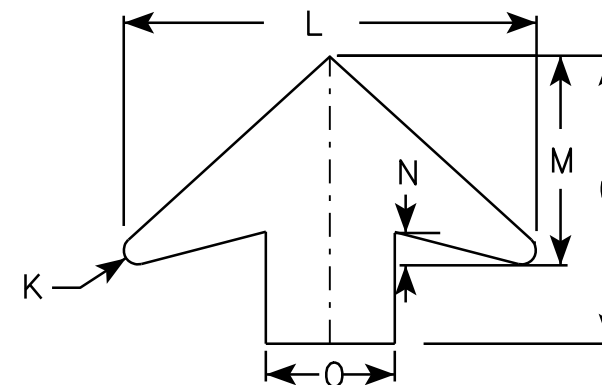
STANDARD SIGN	
R11 - 4	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 4/1/11	PLATE NO. R11-4.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E
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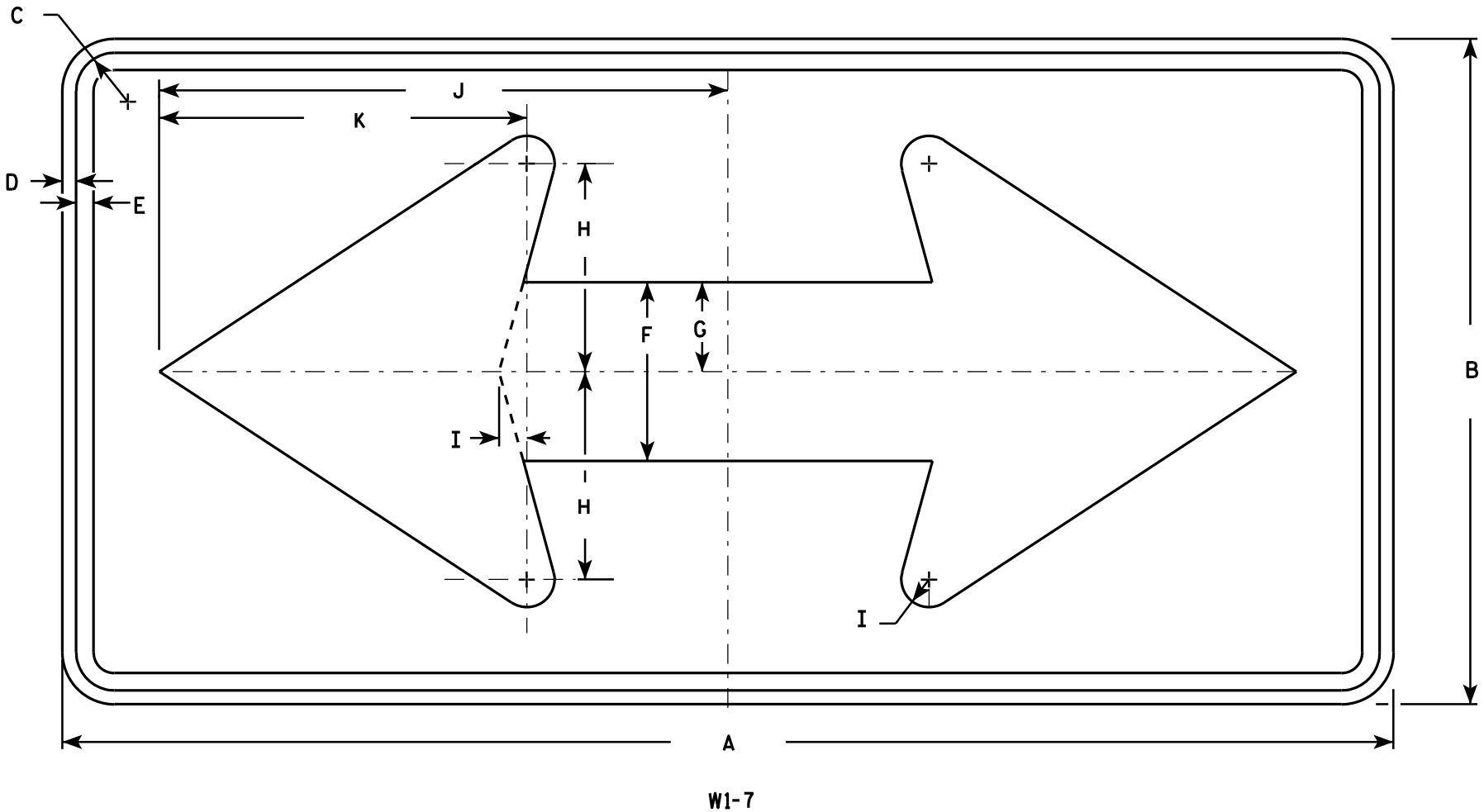


## NOTES

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

- 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.

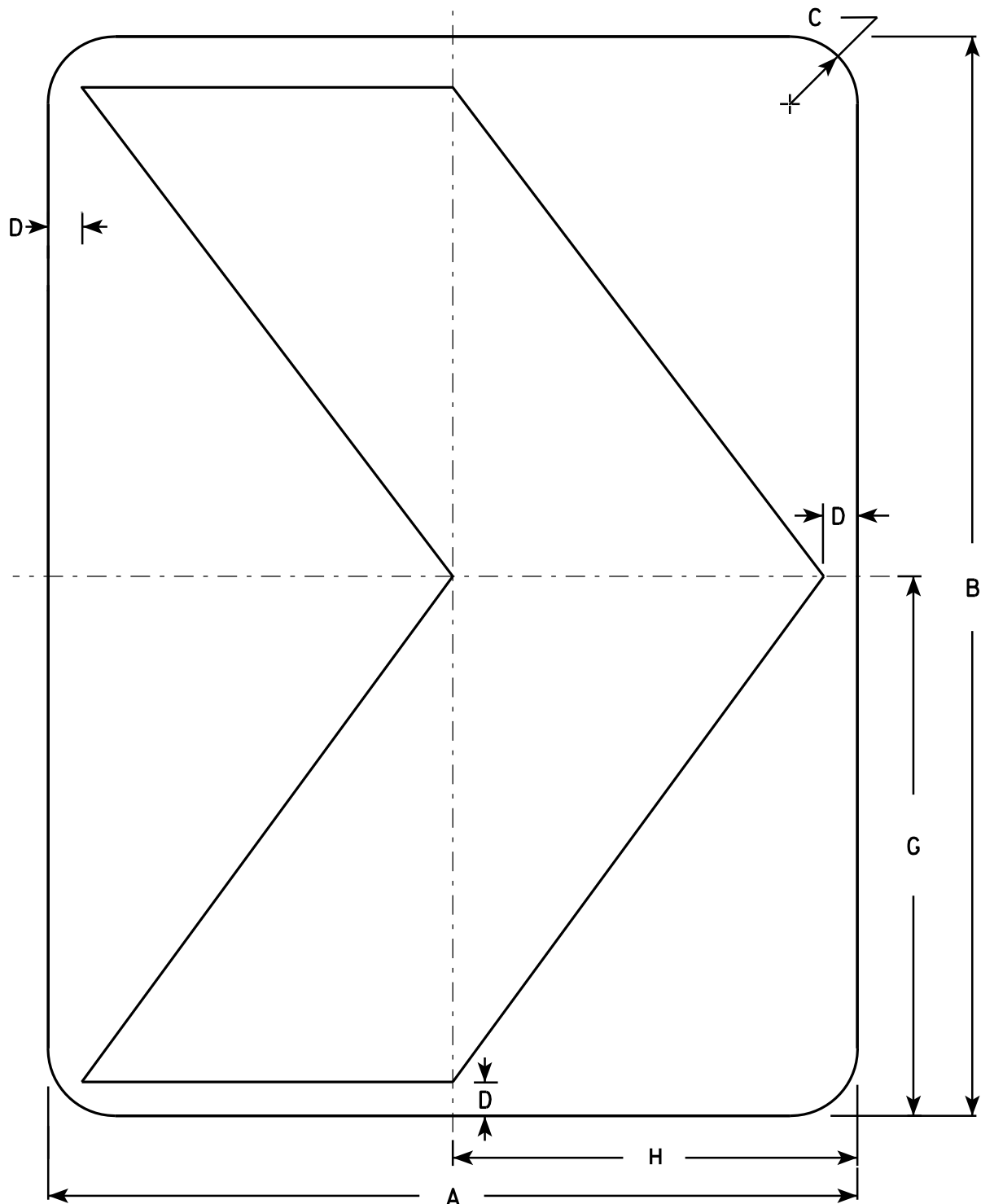
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/8	3/8	1/2	5	2 1/2	5 3/4	3/4	15 5/8	10 1/8																4.5
2S	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
2M	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
3	60	30	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

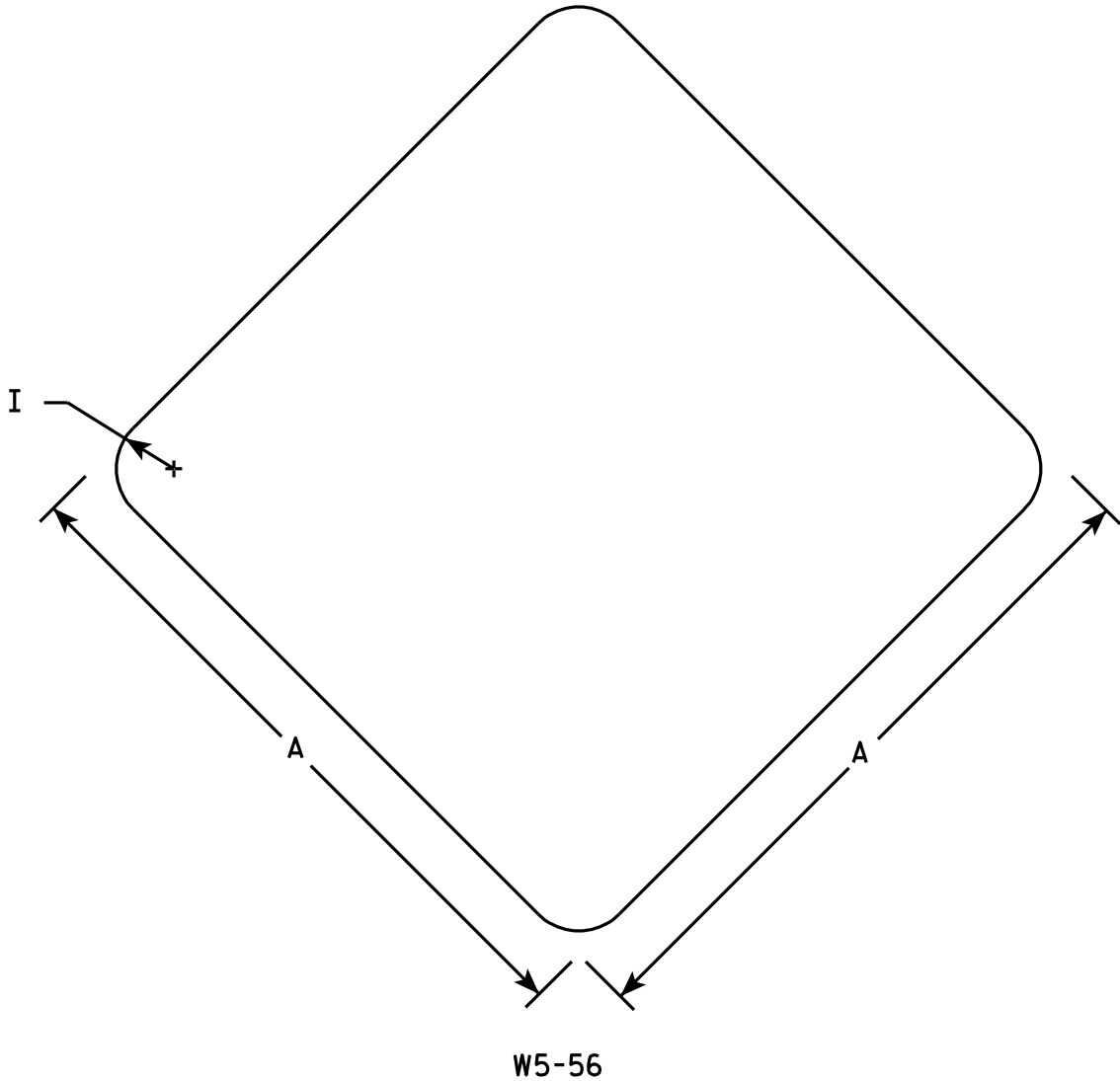
PROJECT NO:

SHEET NO:

E

NOTES

- 1. Sign is Type II - Type SH Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:  
Background - Red
- 3. Corners may be square or rounded when base material is plywood. When base material is metal the corners shall be rounded.



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	12								1																		1.0
2S	18								1 1/2																		2.25
2M	18								1 1/2																		2.25
3																											
4																											
5																											

STANDARD SIGN

W5 - 56

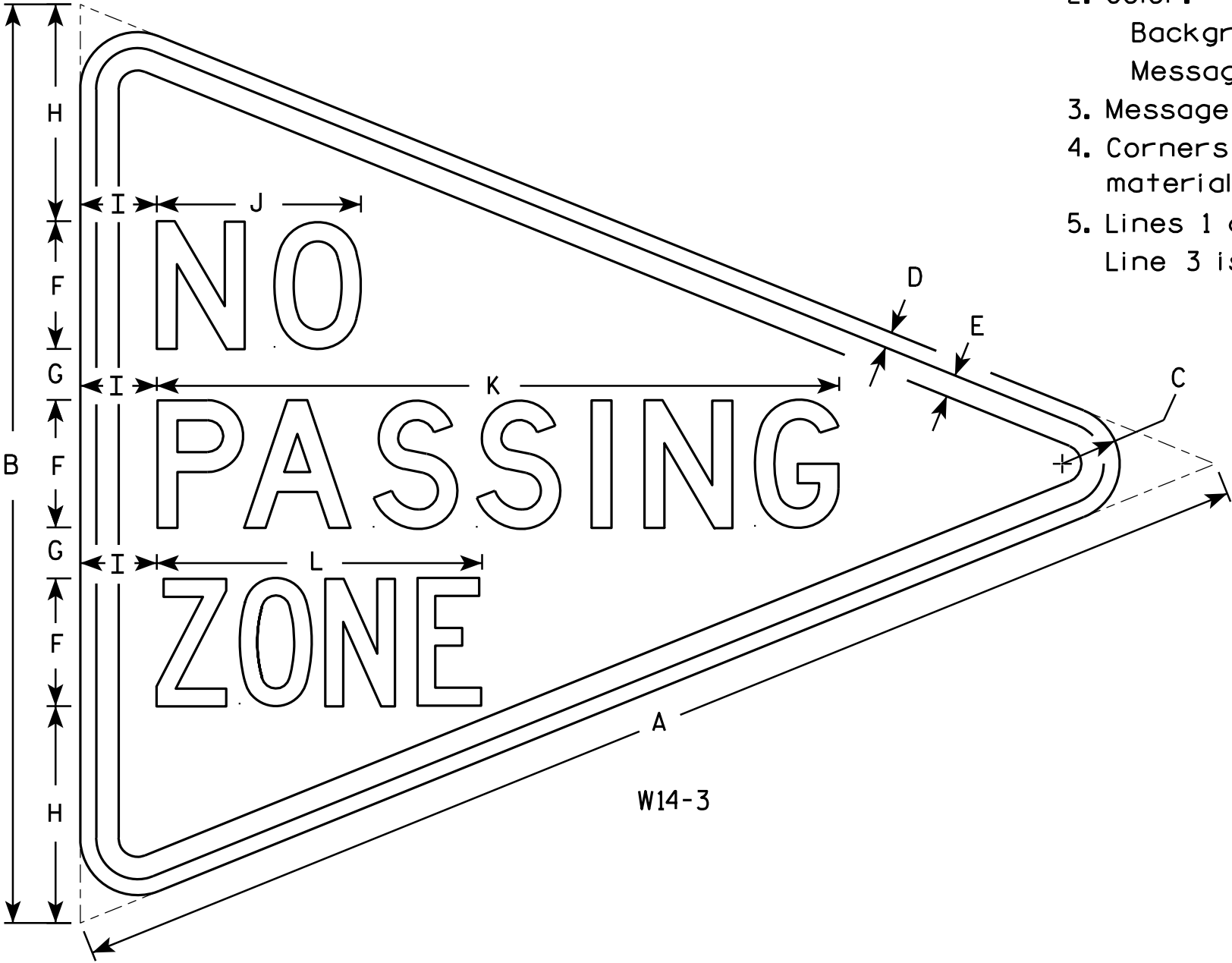
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 11/2/10 PLATE NO. W5-56.6

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.



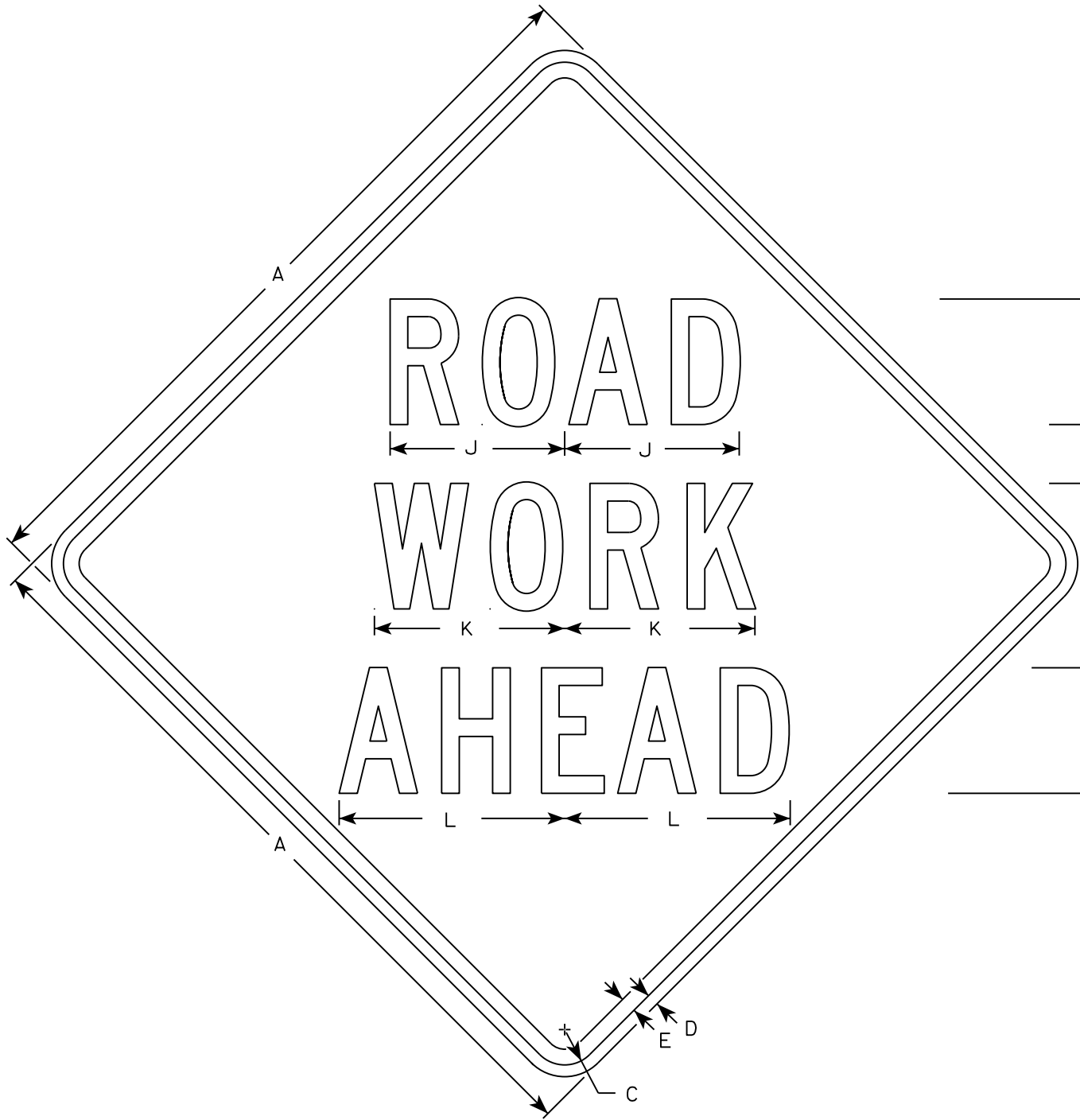
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
2M	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
3	64	48	3	3/4	1 1/4	6	3	12	4	10 3/4	33 5/8	16 1/2														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

STANDARD SIGN  
W14-3

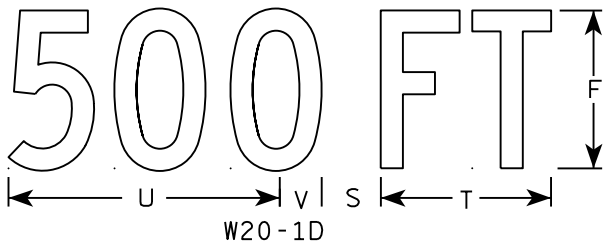
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
For State Traffic Engineer

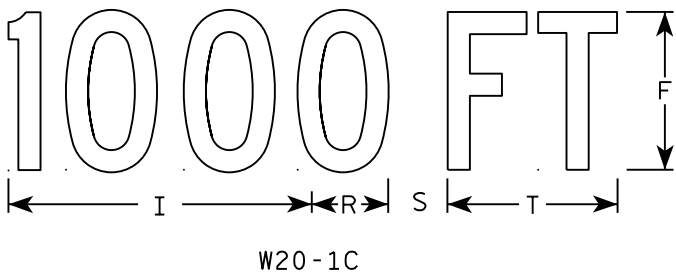
DATE 6/7/10 PLATE NO. W14-3.9



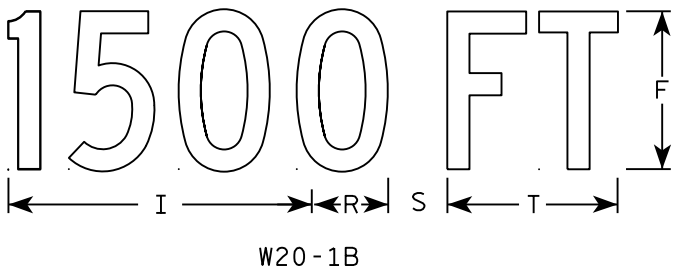
W20-1A



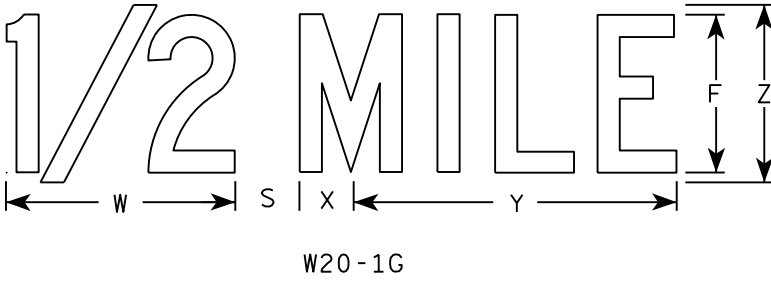
W20-1D



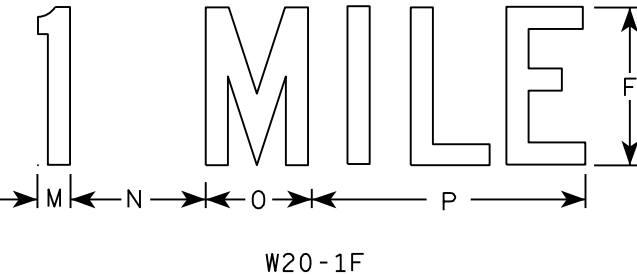
W20-1C



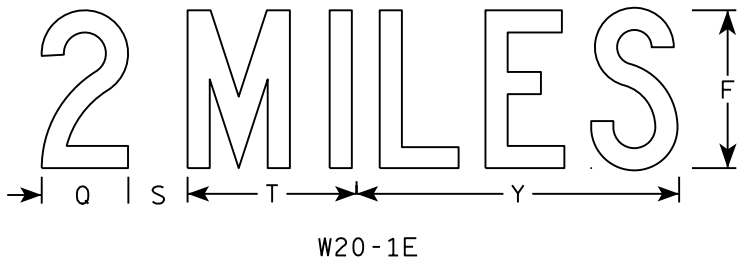
W20-1B



W20-1G



W20-1F



W20-1E

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:  
Background - Orange  
Message - Black
- 3. Message Series - C
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

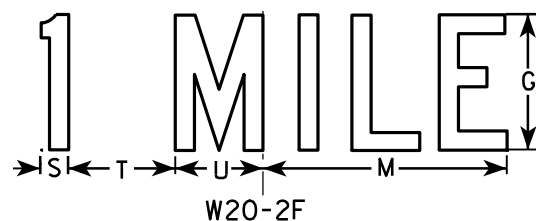
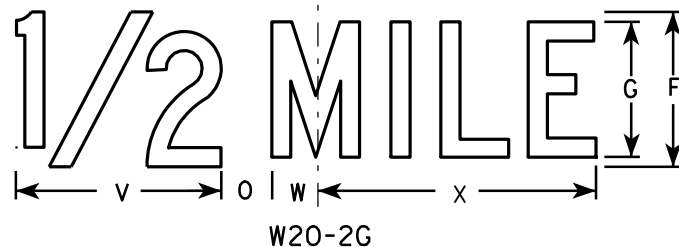
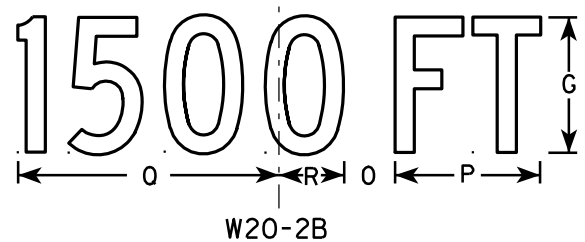
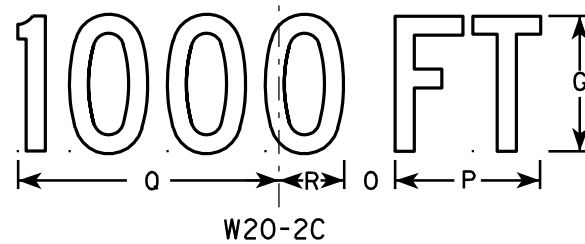
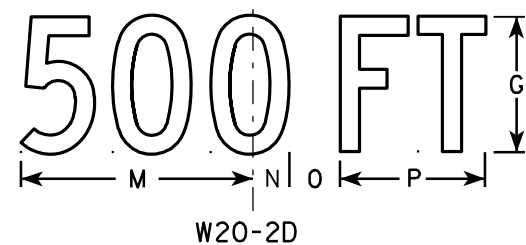
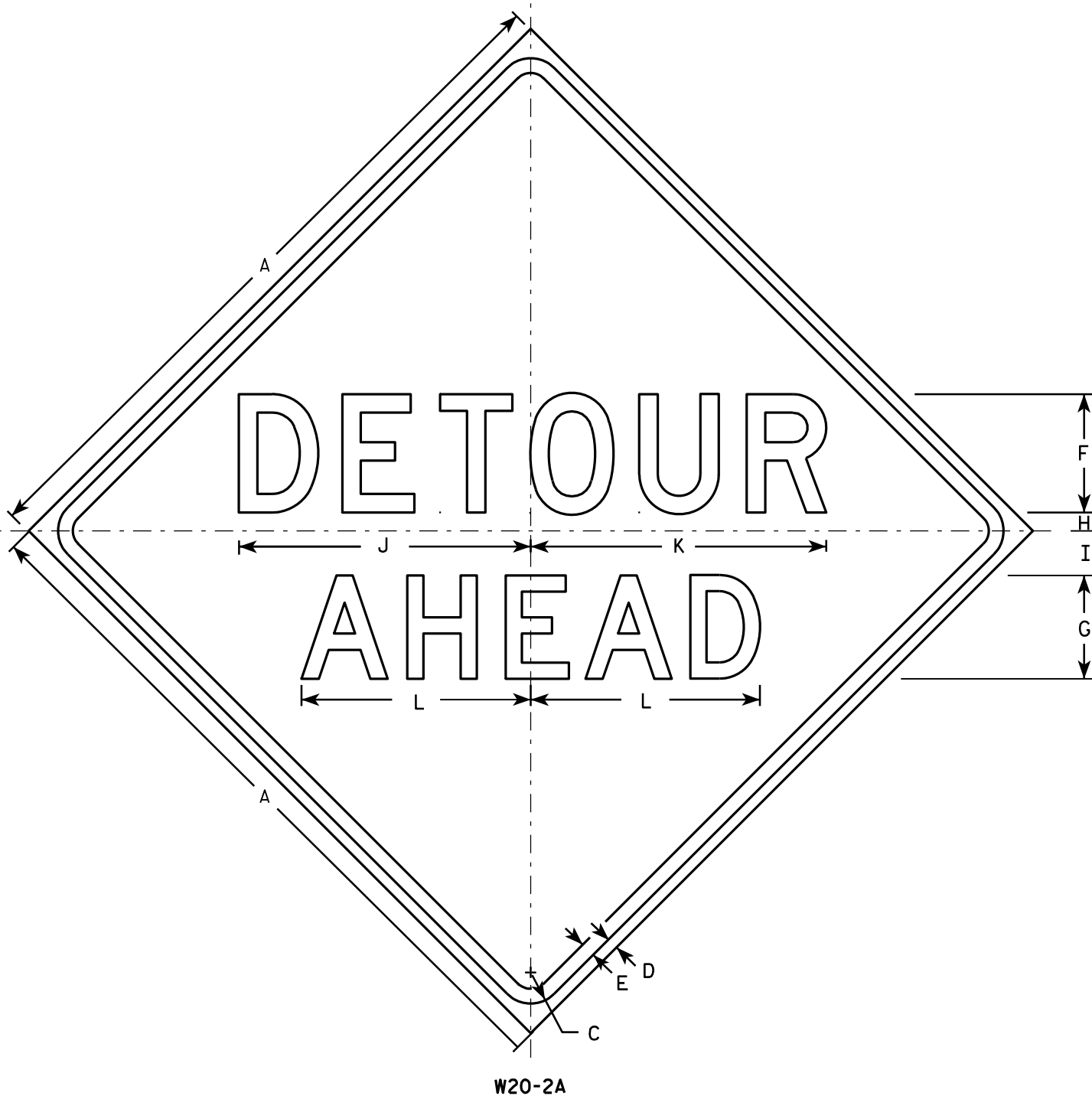
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 3/8	1/2	5/8	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9		2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN  
W20-1A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 5/07/15 PLATE NO. W20-1.10



# NOTES

- Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:  
Background - Orange  
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.
- Line 1 is Series D.  
Line 2 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

STANDARD SIGN  
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer  
DATE 3/18/11 PLATE NO. W20-2.6

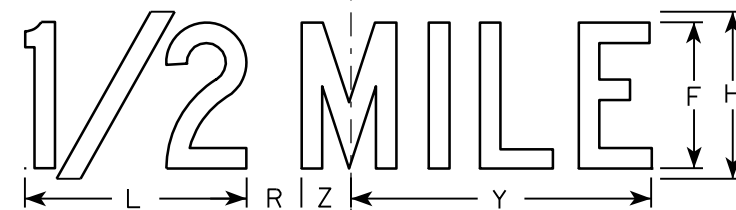
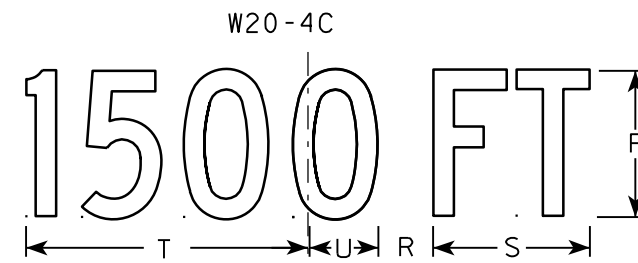
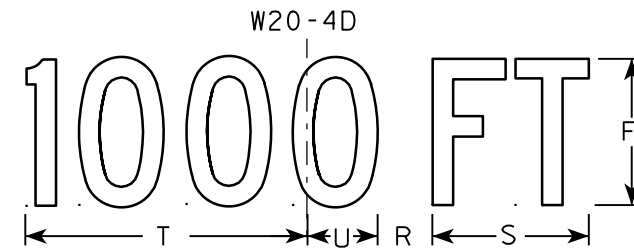
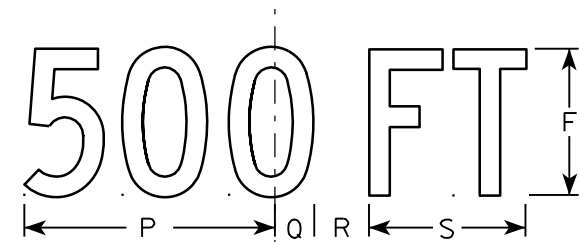
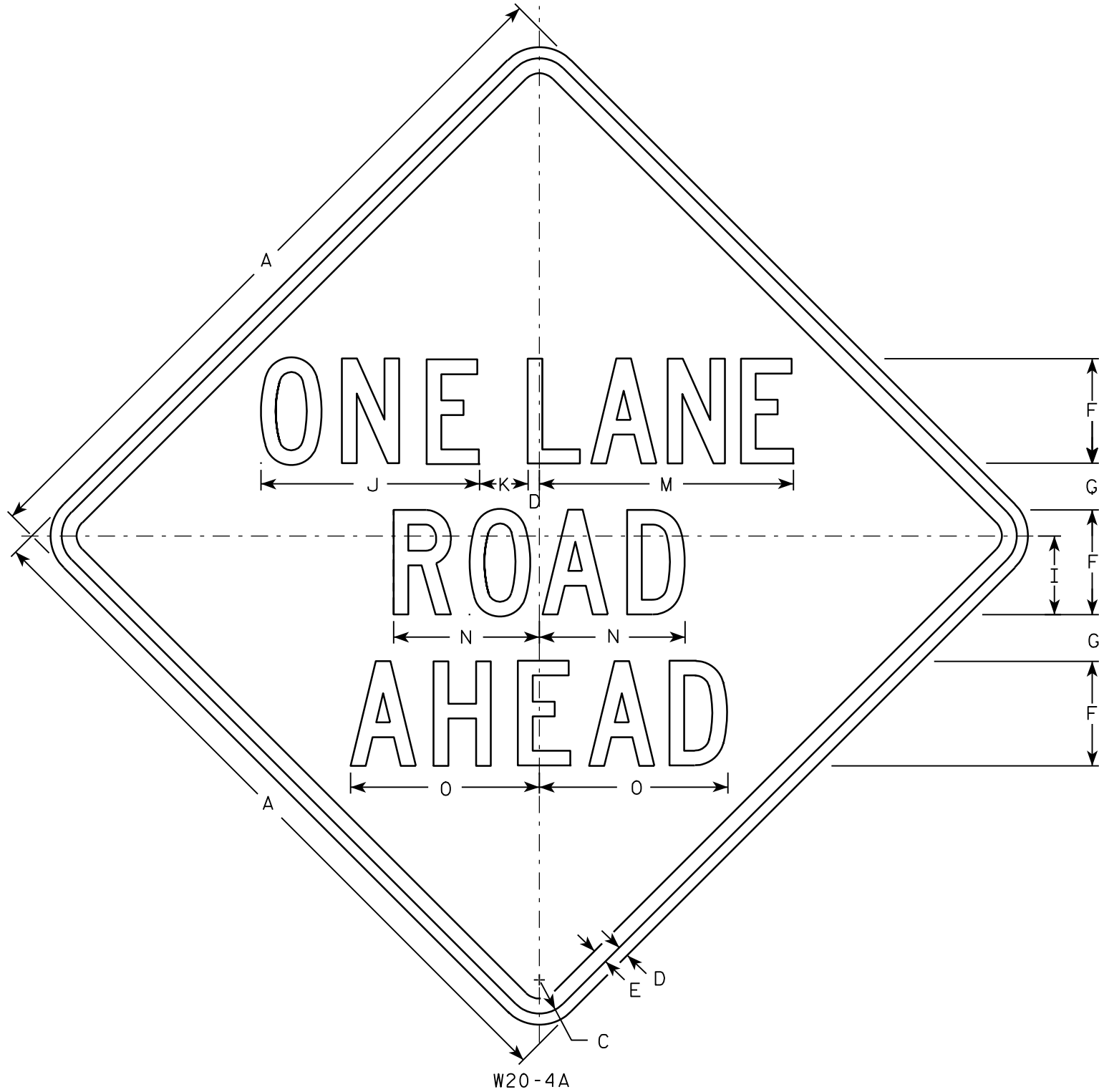
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	2 3/8	6	3 3/4	10 3/8	2 3/8	8	13 1/2	7	8 7/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	3 1/8	8	5 1/4	14 5/8	3 1/4	10 5/8	17 3/4	9 3/4	12 5/8	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	14 3/8	2 3/8	16.0

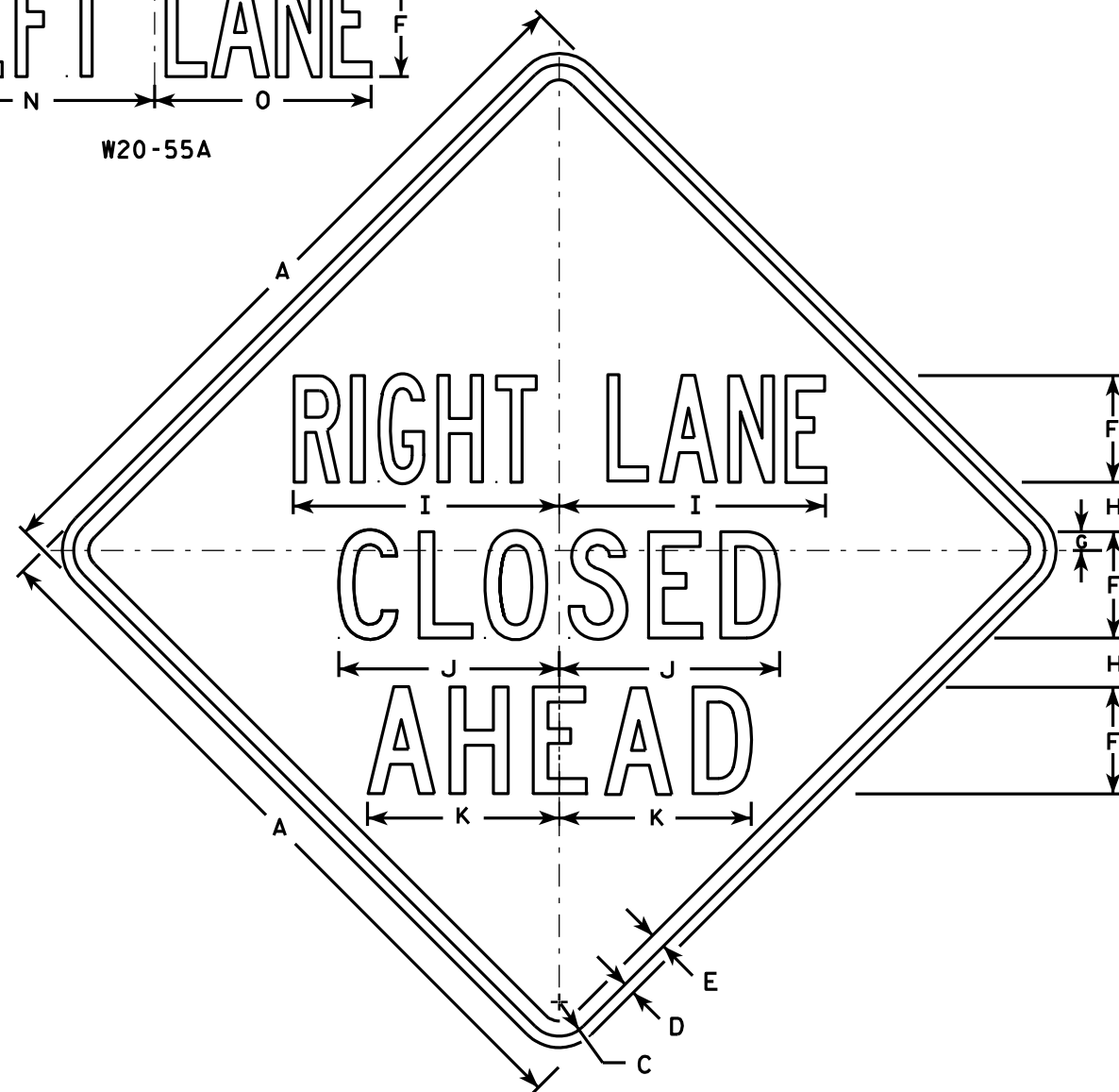
STANDARD SIGN	
W20-4A, B, C, D, F & G	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 3/18/11	PLATE NO. W20-4.9

CENTER LANE

W20-56A

LEFT LANE

W20-55A



W20-5A

500 FT

W20-5D

1000 FT

W20-5C

1500 FT

W20-5B

1/2 MILE

W20-5G

1 MILE

W20-5F

### NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:  
Background - Orange  
Message - Black
3. Message Series - See Note 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. "----- LANE" is Series B.  
All other copy 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	36	6	1 5/8	5/8	3/4	5	7/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 7/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
2M	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
3	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
4	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
5	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0

PROJECT NO:

HWY:

COUNTY:

STANDARD SIGN  
W20-5A, B, C, D, F & G

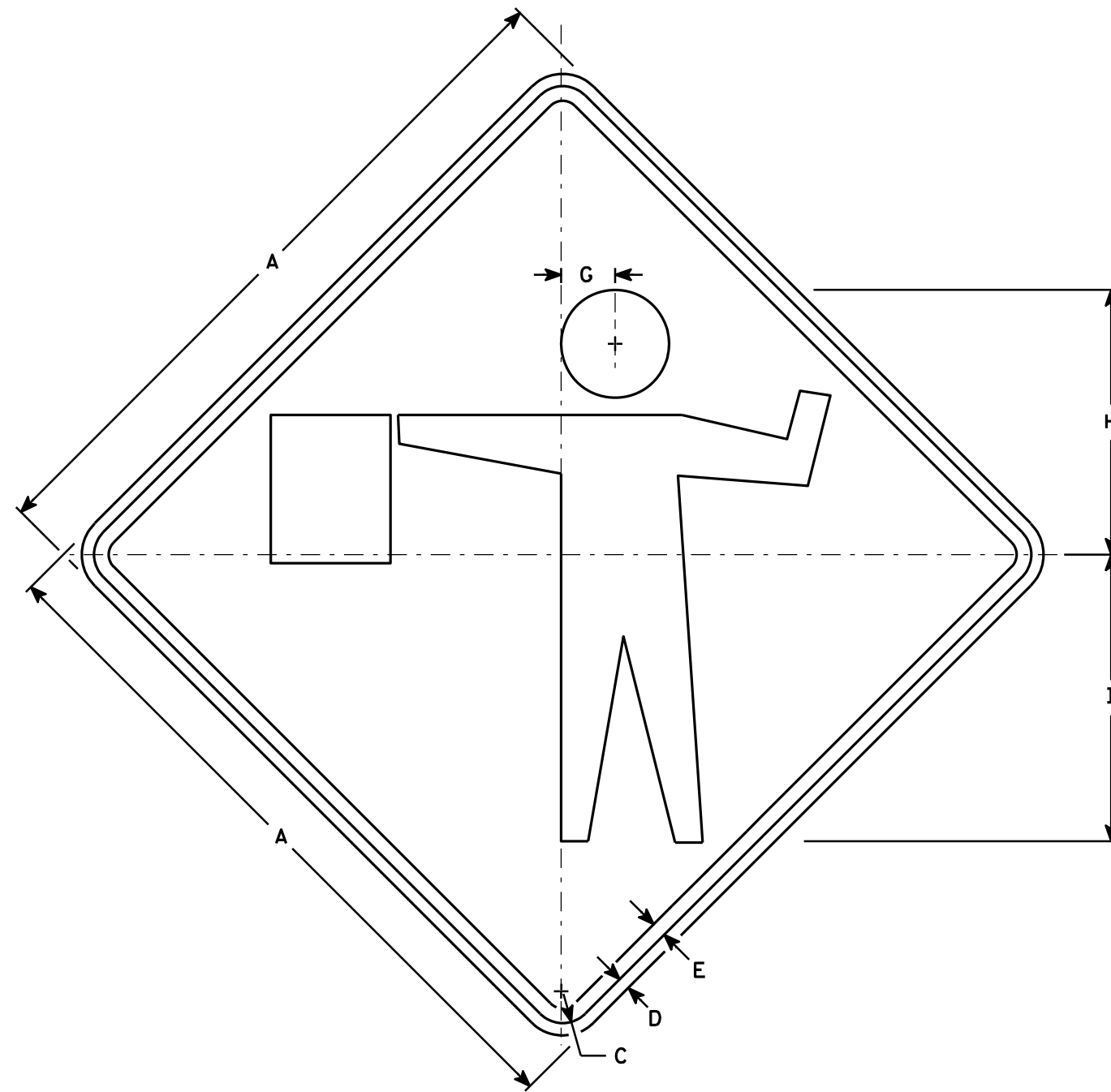
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-5.11

SHEET NO:

E



W20-7A

### NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4		2 3/4	13 1/2	14 5/8																		9.00
2S	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00
2M	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00
3	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00
4	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00
5	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00

### STANDARD SIGN W20-7A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-7A.5

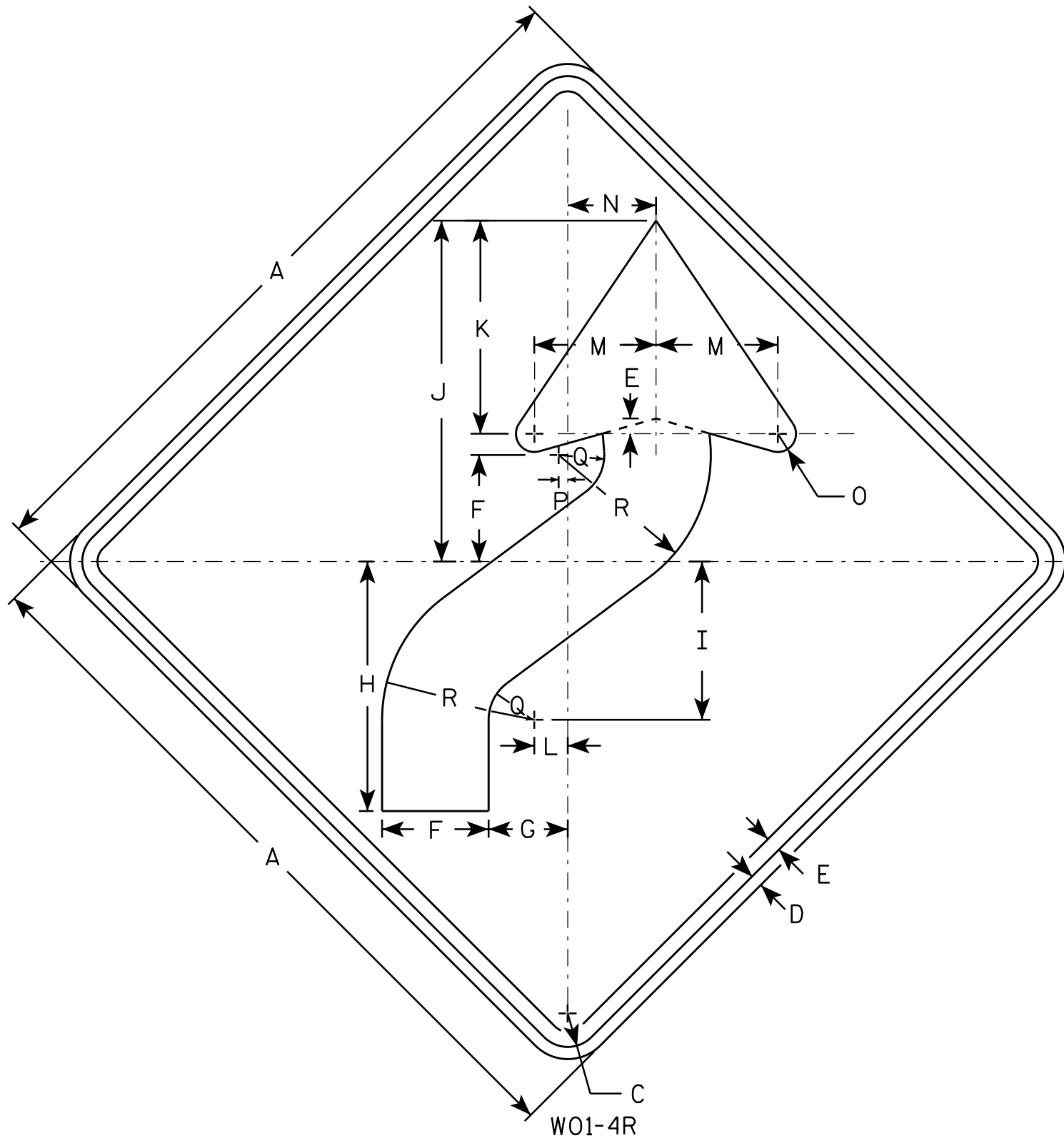
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



### NOTES

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

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

## STANDARD SIGN W01-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

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

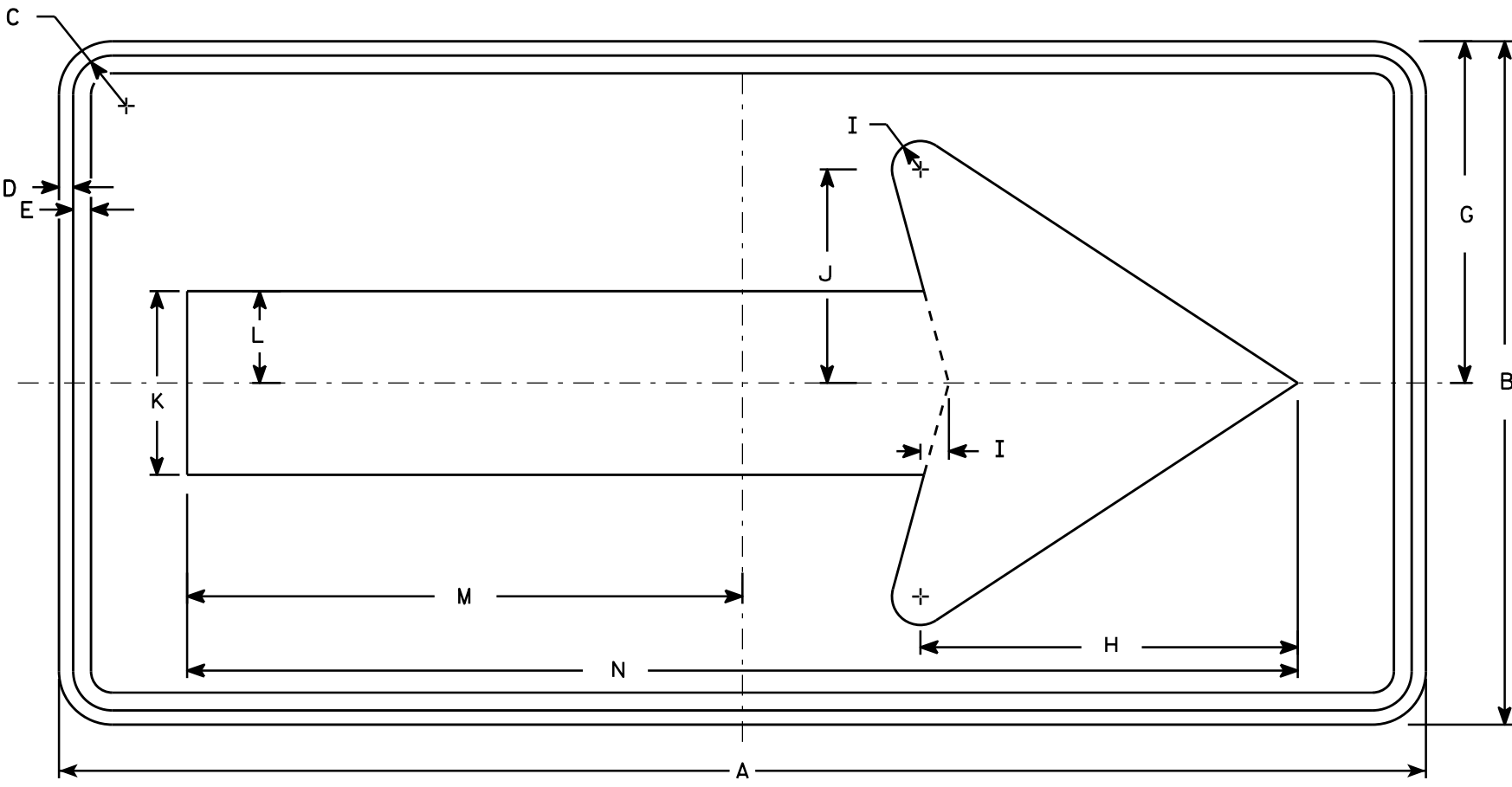
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



W01-6

NOTES

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

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

STANDARD SIGN

W01-6

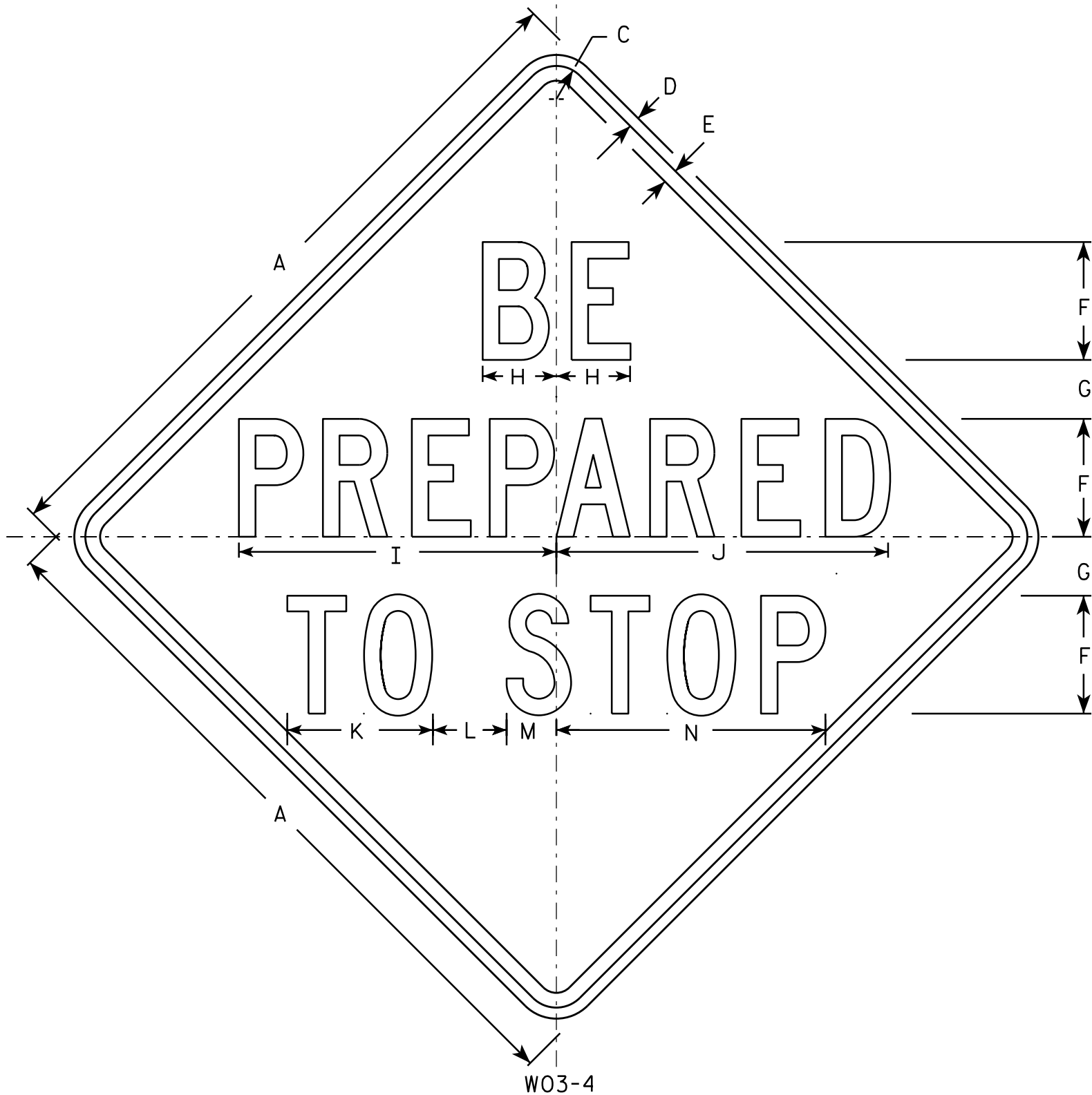
WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch  
for State Traffic Engineer

DATE 11/18/13

PLATE NO. W01-6.1



NOTES

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

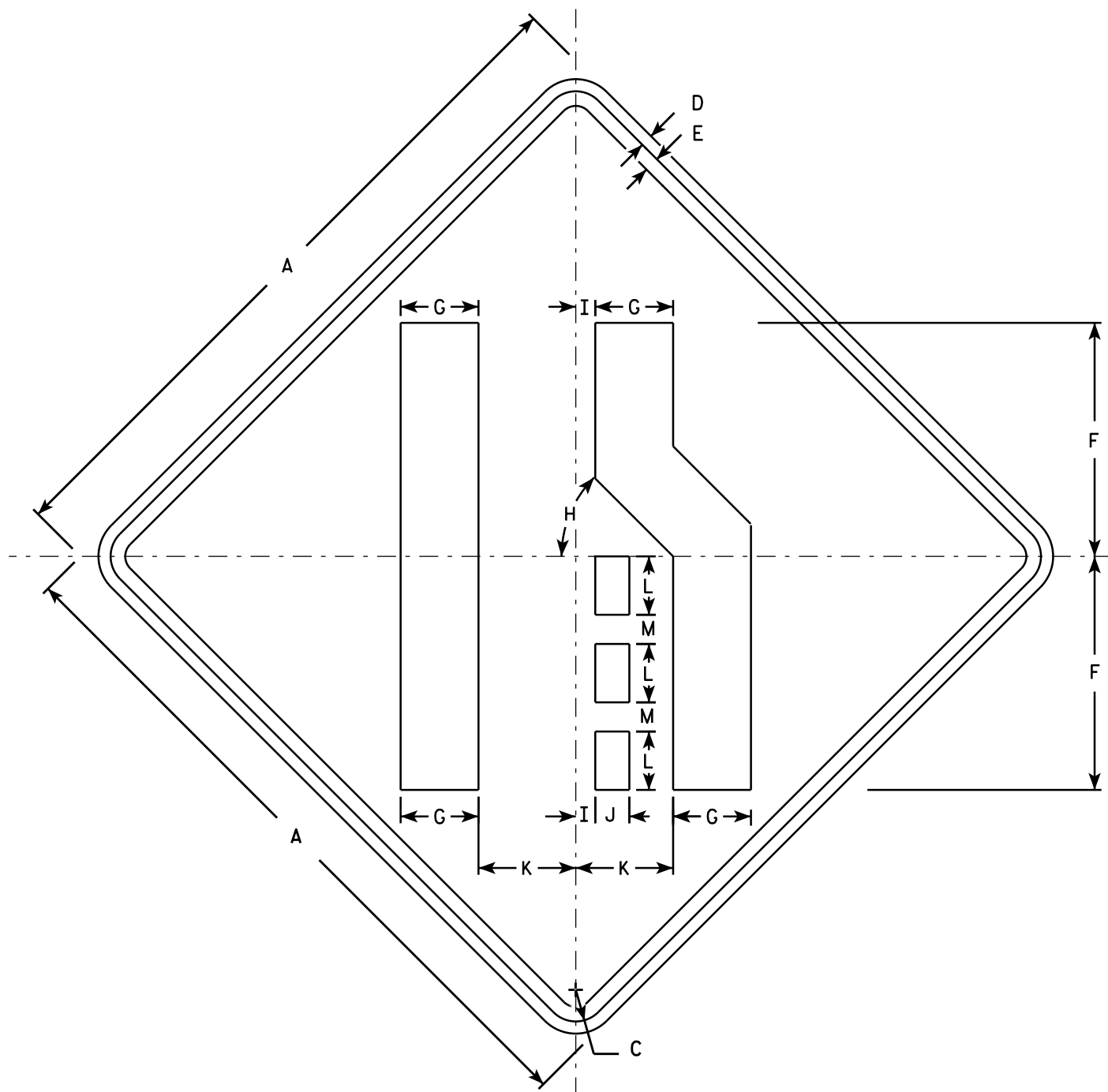
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 3/8	1/2	5/8	6	2 1/2	3 3/4	15 7/8	16 7/8	7 3/8	4	2 3/8	13 3/4													9.0
2S	48		2 1/4	3/4	1	8	4	5	21 1/2	22 1/2	9 7/8	5	3 3/8	18 1/4													16.0
2M	48		2 1/4	3/4	1	8	4	5	21 1/2	22 1/2	9 7/8	5	3 3/8	18 1/4													16.0
3	48		2 1/4	3/4	1	8	4	5	21 1/2	22 1/2	9 7/8	5	3 3/8	18 1/4													16.0
4	48		2 1/4	3/4	1	8	4	5	21 1/2	22 1/2	9 7/8	5	3 3/8	18 1/4													16.0
5	48		2 1/4	3/4	1	8	4	5	21 1/2	22 1/2	9 7/8	5	3 3/8	18 1/4													16.0

STANDARD SIGN  
W03-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 12/02/13 PLATE NO. W03-4.1



W04-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:  
Background - Orange  
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-2L is the same as W04-2R except the symbol 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	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN

W04-2

WISCONSIN DEPT OF TRANSPORTATION

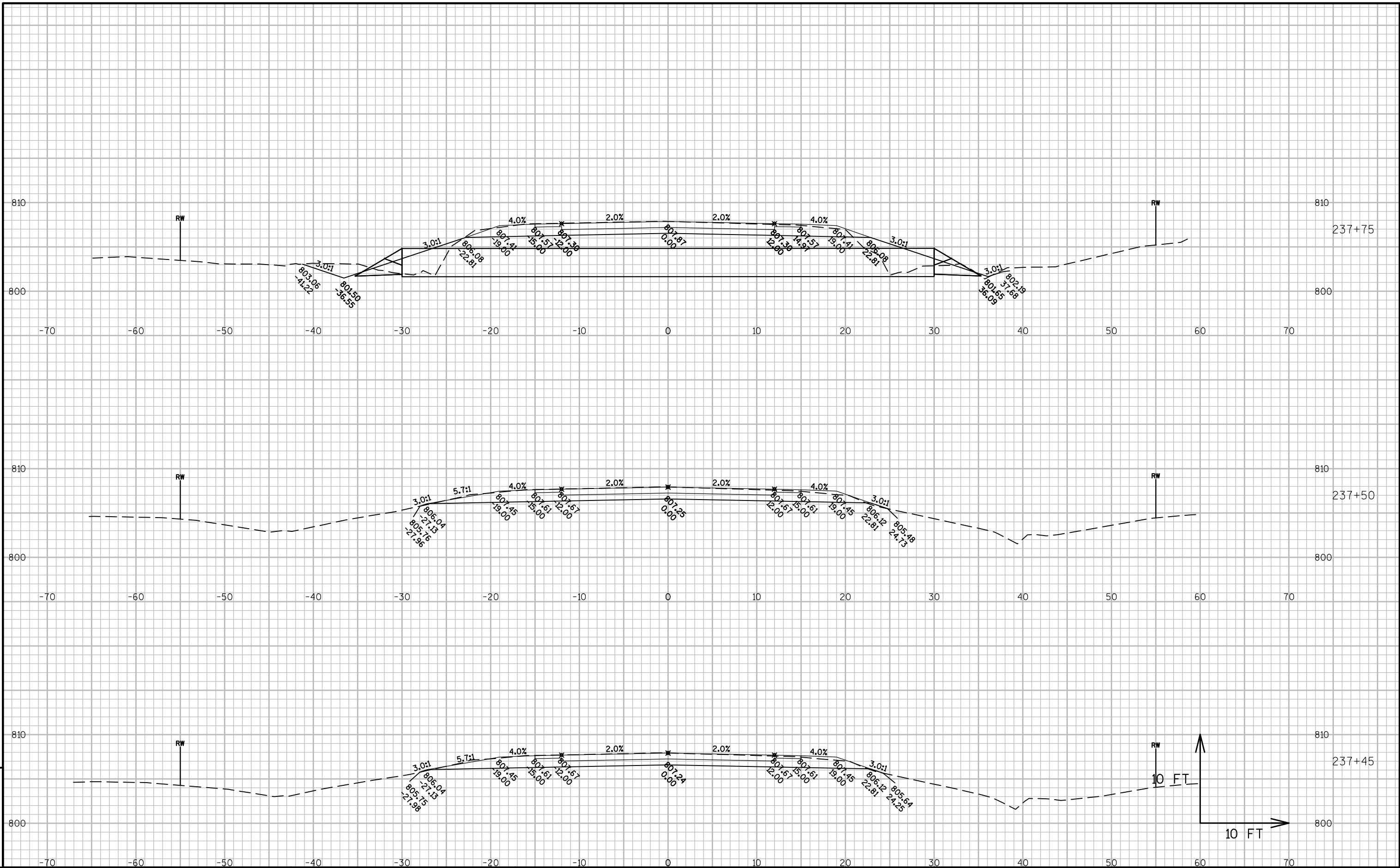
APPROVED

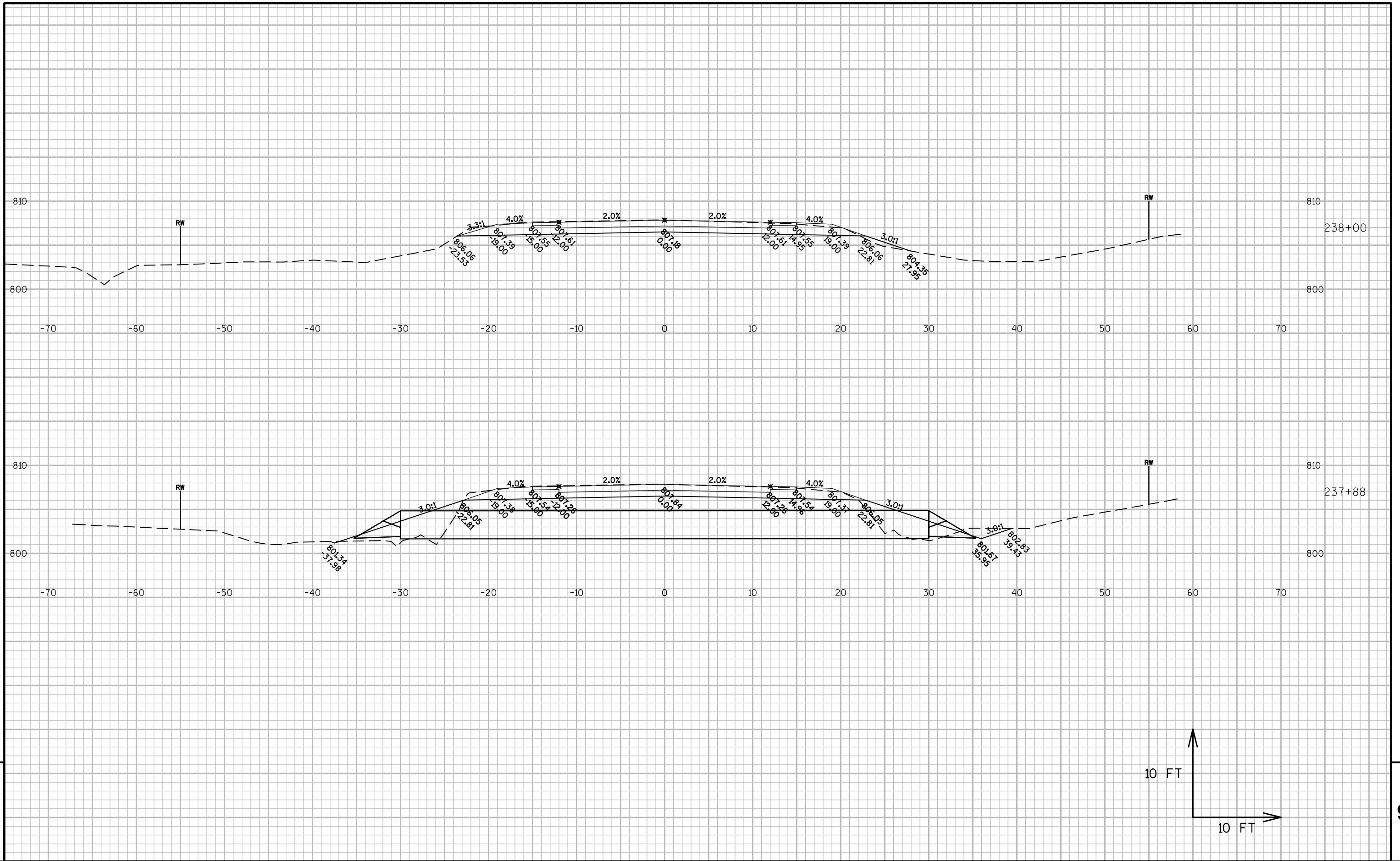
Matthew R. Rauch

For State Traffic Engineer

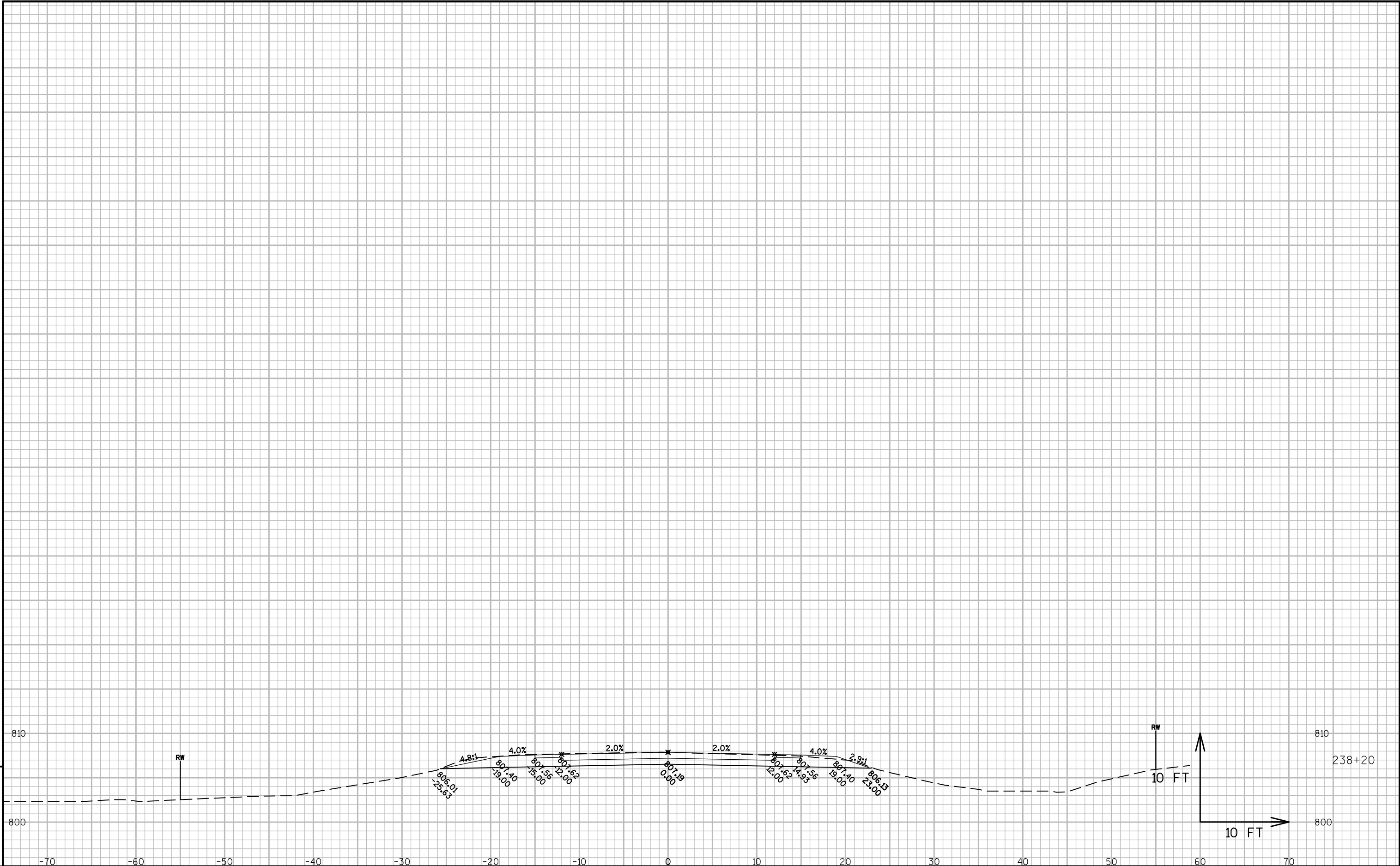
DATE 11/20/13

PLATE NO. W04-2.1

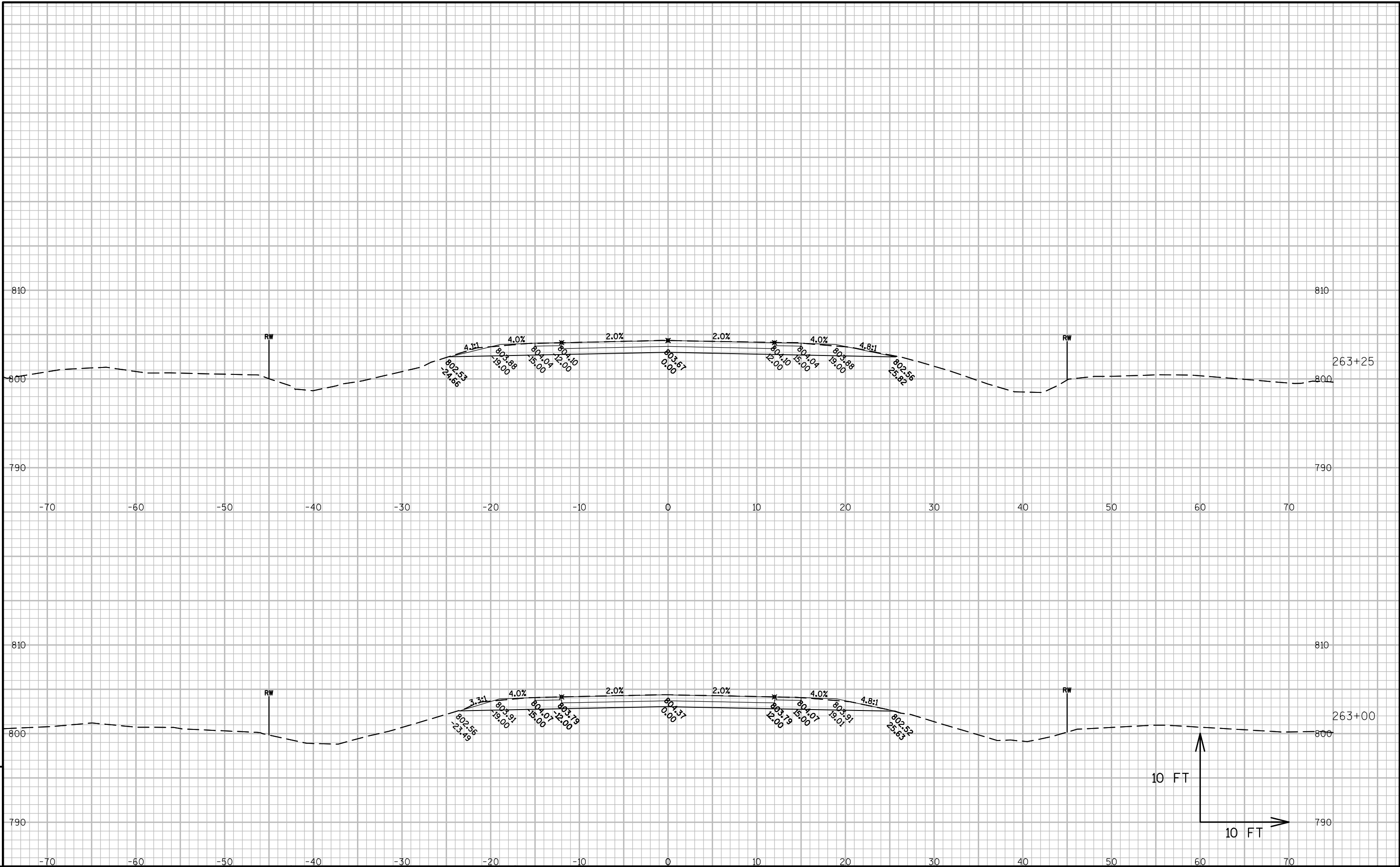


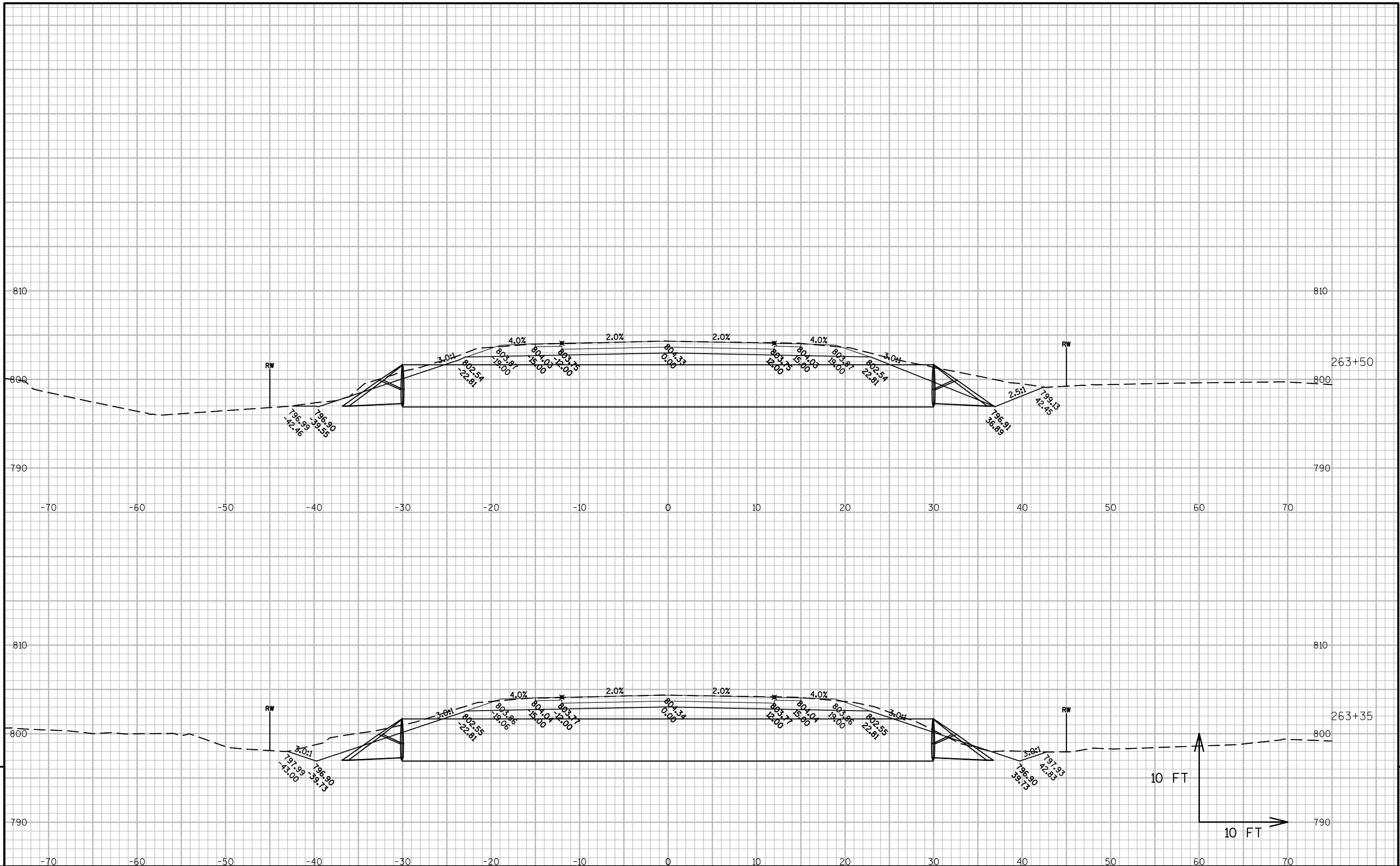


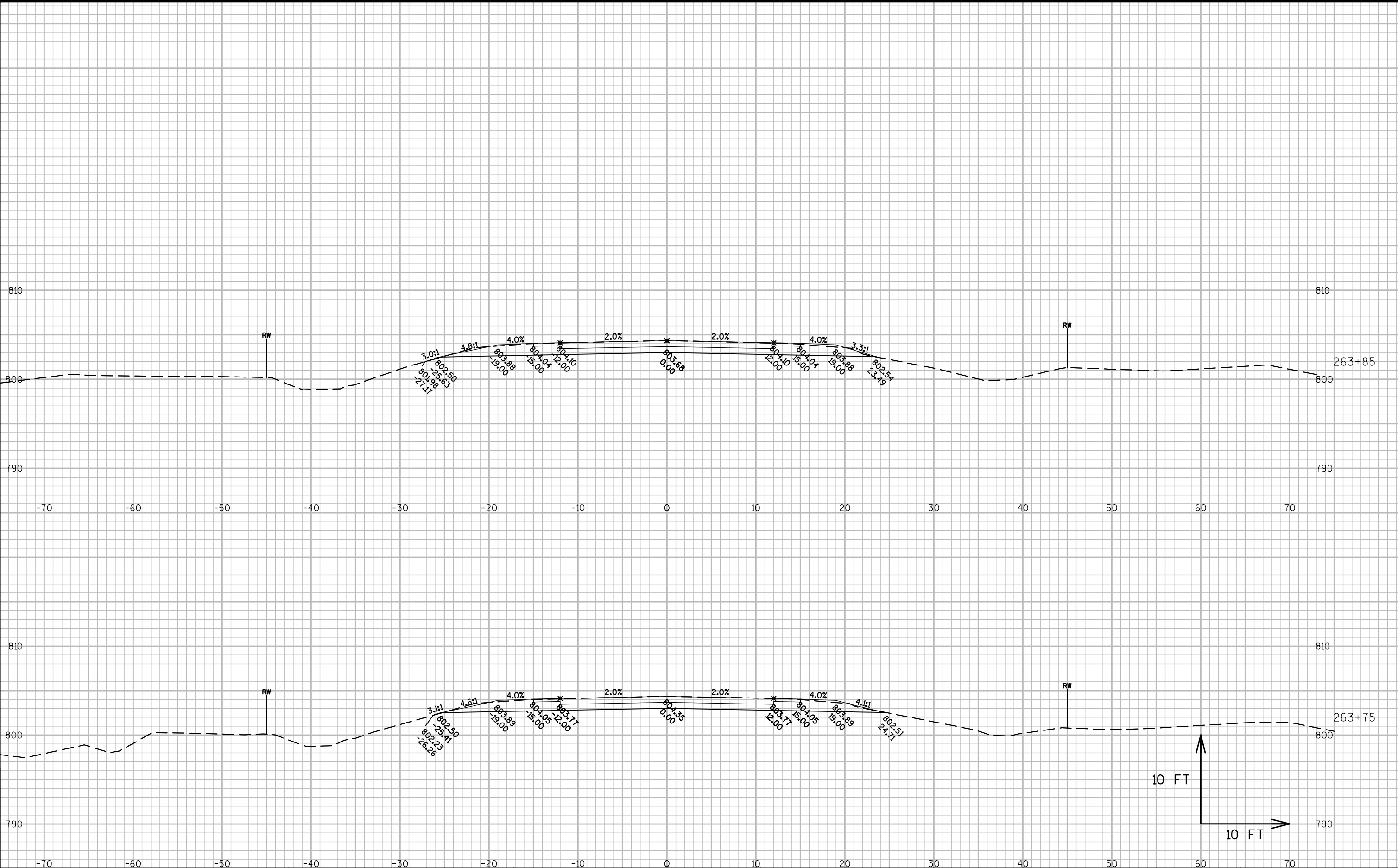
9

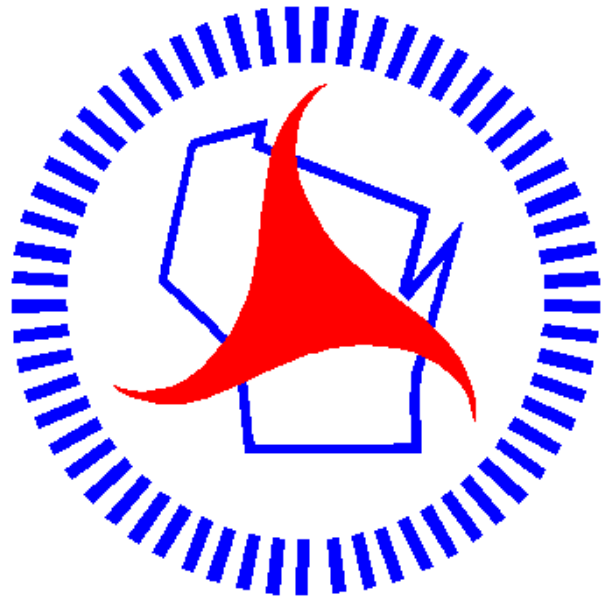


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## ***Wisconsin Department of Transportation***

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