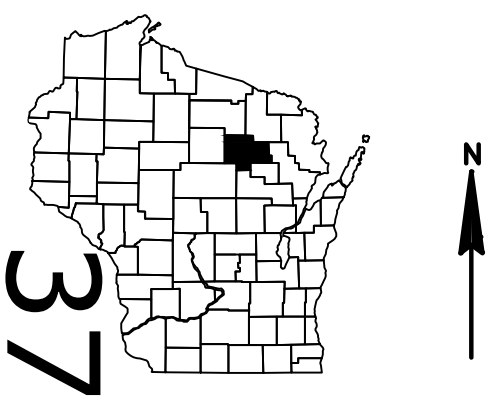


RHI
WITH: PROJECT ID: 9155-14-70

COUNTY: LANGLEADE

APR 2016	
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 = 132



DESIGN DESIGNATION	STH 55
A.A.D.T. 2014	= 830
A.A.D.T. 2034	= 1000
D.H.V.	= -
D.D.	= -
T.	= 12.8%
DESIGN SPEED	= 55 MPH
ESALS	= 255,500

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	----
FIBER OPTIC	----
GAS	----
SANITARY SEWER	----
STORM SEWER	----
TELEPHONE	----
WATER	----
UTILITY PEDESTAL	----
POWER POLE	----
TELEPHONE POLE	----

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

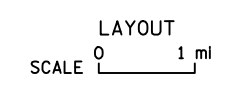
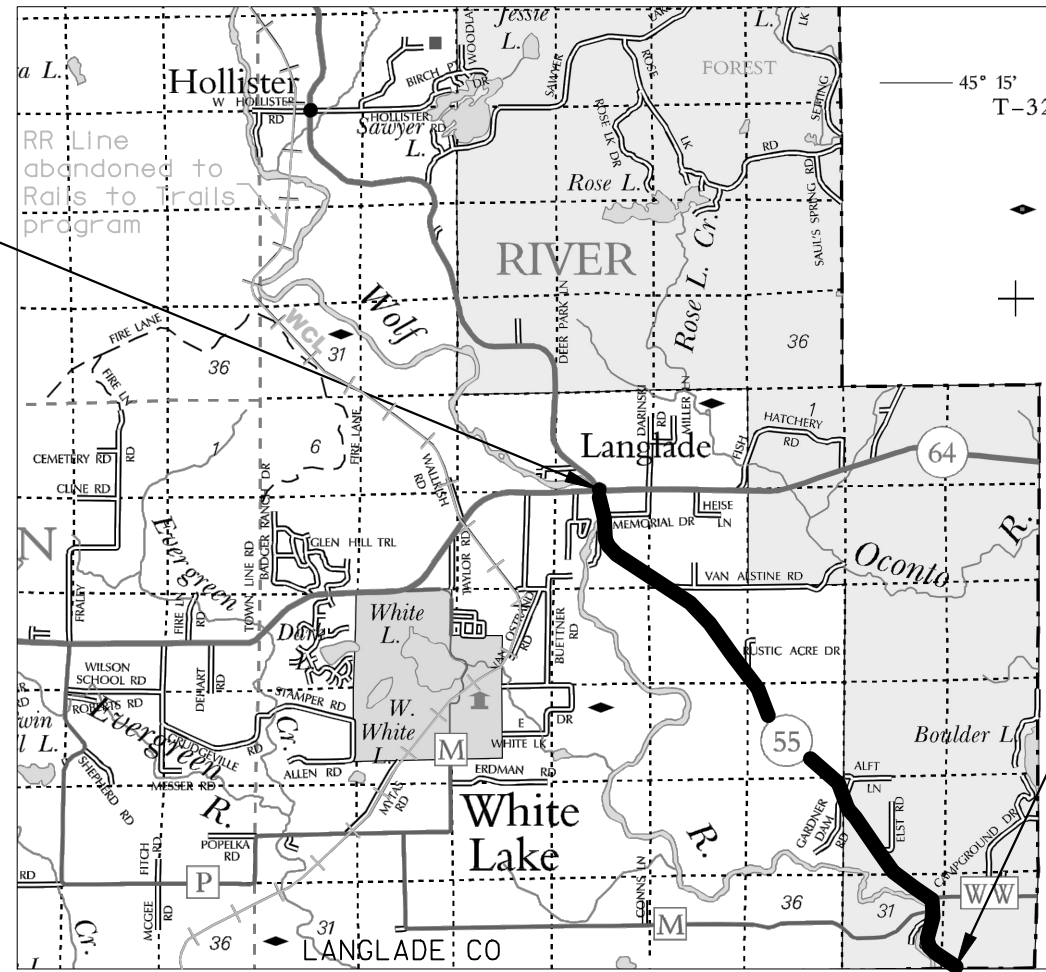
PLAN OF PROPOSED IMPROVEMENT

PICKEREL - ARGONNE

SOUTH COUNTY LINE TO STH 64

STH 55
LANGLADE

STATE PROJECT NUMBER
9155-14-70



TOTAL NET LENGTH OF CENTERLINE = 6.63

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

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
9155-14-70	WISC 2016201	1

BEGIN PROJECT 9155-14-70
STA 3+60 (STH 55)
X = 748100
Y = 332200

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
PREPARED BY	
Surveyor	AL OLENIK
Designer	TED SMITH
Project Manager	DAN ERVA
Regional Examiner	CHERYL SIMON
Regional Supervisor	ROBIN STAFFORD
C.O. Examiner	
APPROVED FOR THE DEPARTMENT	
DATE: 1/22/16	(Signature)

GENERAL NOTES

1. WHEN THE QUANTITY OF THE ITEM HMA PAVEMENT IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS OF THE LAYER SHOWN ON THE PLAN IS APPROXIMATE & THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION ON THE MATERIAL AS DIRECTED BY THE ENGINEER.
2. THE LOCATION OF EXISTING & PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLAN.
3. NOT ALL UTILITIES ARE PART OF DIGGERS HOTLINE AND WILL NEED TO BE CONTACTED DIRECTLY.
4. LENGTHS OF TRANSITIONS SHALL BE COMPUTED WITH TWO-THIRDS OF THE RUNOFF ON THE TANGENT APPROACH AND ONE-THIRD WITHIN THE CURVE. SEE PLAN FOR RATE OF THE SUPERELEVATION AND RELATED DATA. ST IS THE SUPERELEVATION TRANSITION LENGTH. RO IS THE LENGTH OF RUNOFF.
5. PERMANENT SIGNING STATIONING WAS CALCULATED FROM THE PHOTOLOG & MAY BE PLUS OR MINUS 75 FEET.
6. SIDE ROAD STATIONING IN PLAN IS APPROXIMATE. SIDE ROAD STATIONING IS BASED ON AS-BUILTS.
7. PRESENCE OF CRACK FILLED MATERIAL CONTAINING RUBBER ADDITIVE MAY STILL BE PRESENT AFTER MILLING. RUBBER CRACK FILL MATERIAL MUST BE REMOVED AS SPECIFIED IN PREPERATION OF FOUNDATION FOR ASPHALTIC PAVING.
8. 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.

GENERAL NOTES

UNEVEN LANS

W8-11
36" X 36"

GROOVED PAVEMENT

W8-52
30" X 30"

LOW SHOULDERS

W8-9
30" X 30"

USE THESE SIGNS AS NEEDED AND DIRECTED BY THE ENGINEER.

CONTACTS

DEPARTMENT OF NATURAL RESOURCES
NORTH CENTRAL DISTRICT 107 SUTLIFF
AVENUE RHINELANDER, WI. 54501 JON
SIMONSEN 715-365-8916

ALLIANT ENERGY – ELECTRICITY
708 N.E. 7TH STREET
MARION, WI 54950
DAVE BERTRAM
715-754-4323
715-903-0173 MOBILE

FRONTIER COMMUNICATIONS OF WI
1851 N. 14TH AVENUE
WAUSAU, WI 54401
CALVIN KLADE
715-847-1525

WISCONSIN PUBLIC SERVICE CORP – GAS
1505 STATE ROAD 32
WABENO, WI 54566
ROBERT SMITH
715-473-7809
920-606-6465 MOBILE

AS-BUILT PLANS USED

T-0188(1)

T-0188(2)

T-0188(3)

7094

9081-04-60

9140-10-60

BORING LOG DATA

STATION (*)	OFFSET FROM C/L	BORING LOG BORING NUMBER	ASPHALT THICKNESS (INCHES)	BASE AGGREGATE THICKNESS (INCHES)
8+35	6' LT	D1	6	12
23+75	6.5' RT	D2	7	4.5
37+50	7' LT	D3	7.75	10
51+90	6' RT	D4	6	8
66+20	6.5' LT	D5	6	10.5
79+30	6' RT	D6	5.5	5.5
94+75	4.5 LT	D7	5.5	0
109+35	6' RT	D8	7	0
120+90	5.5' LT	D9	4	10
132+45	4.5' RT	D10	7.5	0
147+45	5.5' LT	D11	4.5	7.5
160+05	5.5' RT	D12	8	10
176+80	6' LT	D13	8	6
188+15	6' RT	D14	7	8
203+75	4.5' LT	D15	8.75	8
219+40	6' RT	D16	7	7
231+00	5' LT	D17	8	6
246+10	4.5' RT	D18	6.5	7.5
260+90	4' LT	D19	9.5	4
272+40	6' RT	D20	10	4.5
287+15	4.5' LT	D21	8.75	5
302+20	5' RT	D22	9.75	4.5
314+95	5' LT	D23	8	8
329+30	6' RT	D24	7	8.5
344+20	4' LT	D25	9.5	9

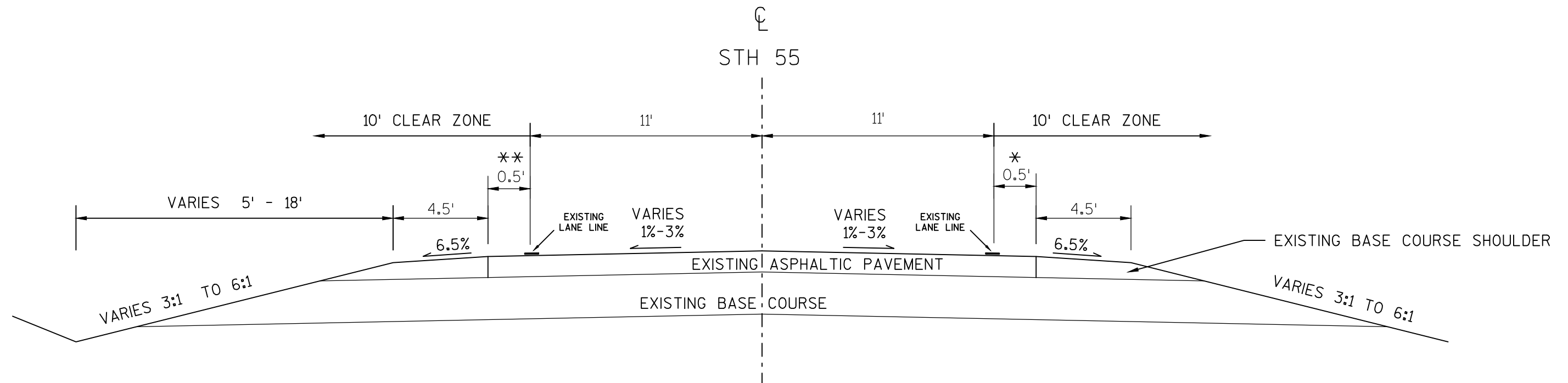
(*) NOTE: STATION ACCURACY +/- 100'

BORING LOG DATA OCTOBER 2013

DIGGERSHOTLINE

Dial 811 or (800)242-8511

www.DiggersHotline.com



* VARIES

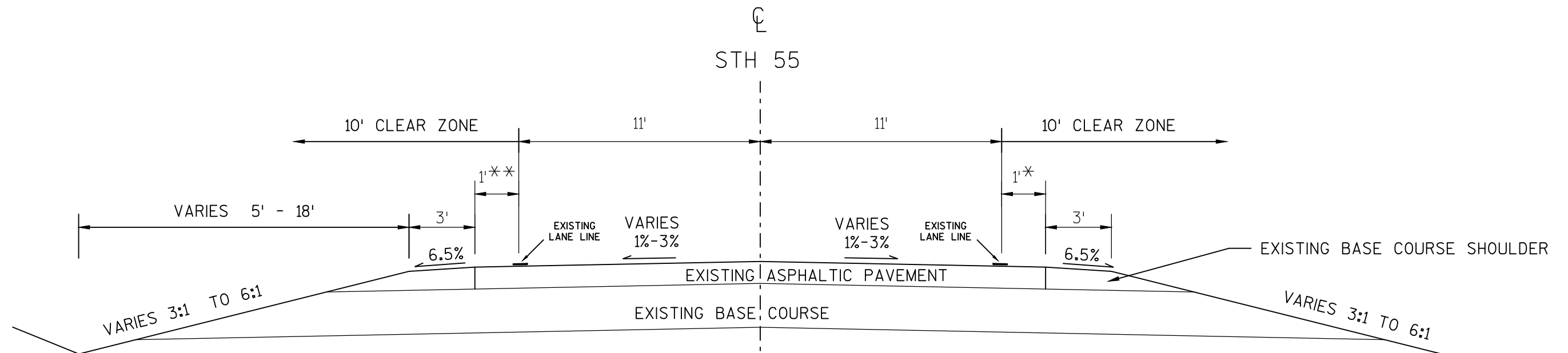
7'	STA 10+50 RT - STA 37+40 RT
2'	STA 37+40 RT - STA 51+25 RT
13'	STA 51+25 RT - STA 53+80 RT
1.5'	STA 53+80 RT - STA 57+75 RT

** VARIES

1'	STA 37+40 LT - STA 46+90 LT
6.5'	STA 46+90 LT - STA 53+80 LT
5'	STA 53+80 LT - STA 56+50 LT

EXISTING TYPICAL SECTION

STATION 3+60 - STA 148+00

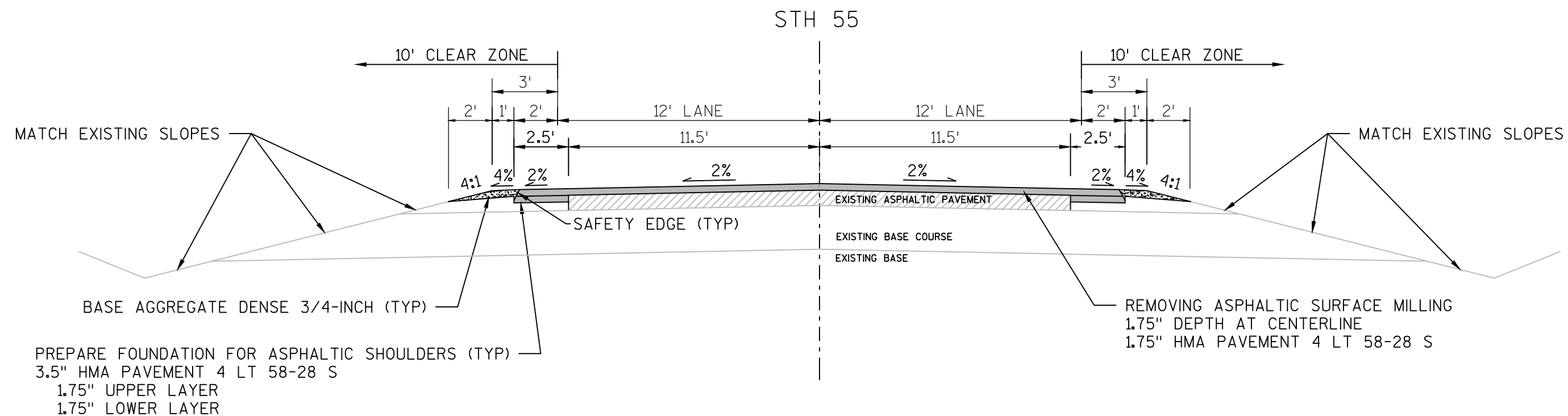
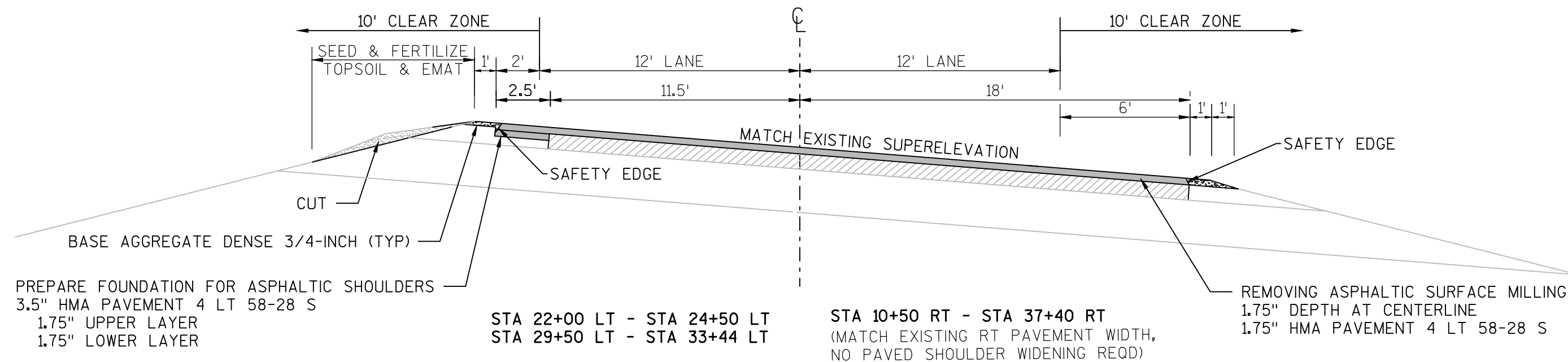


* VARIES
4' STA 317+00 RT - STA 331+00 RT
8' STA 337+50 RT - STA 339+00 RT
13' STA 351+80 RT - STA 353+34 RT

** VARIES
3' STA 317+00 LT - STA 331+00 LT

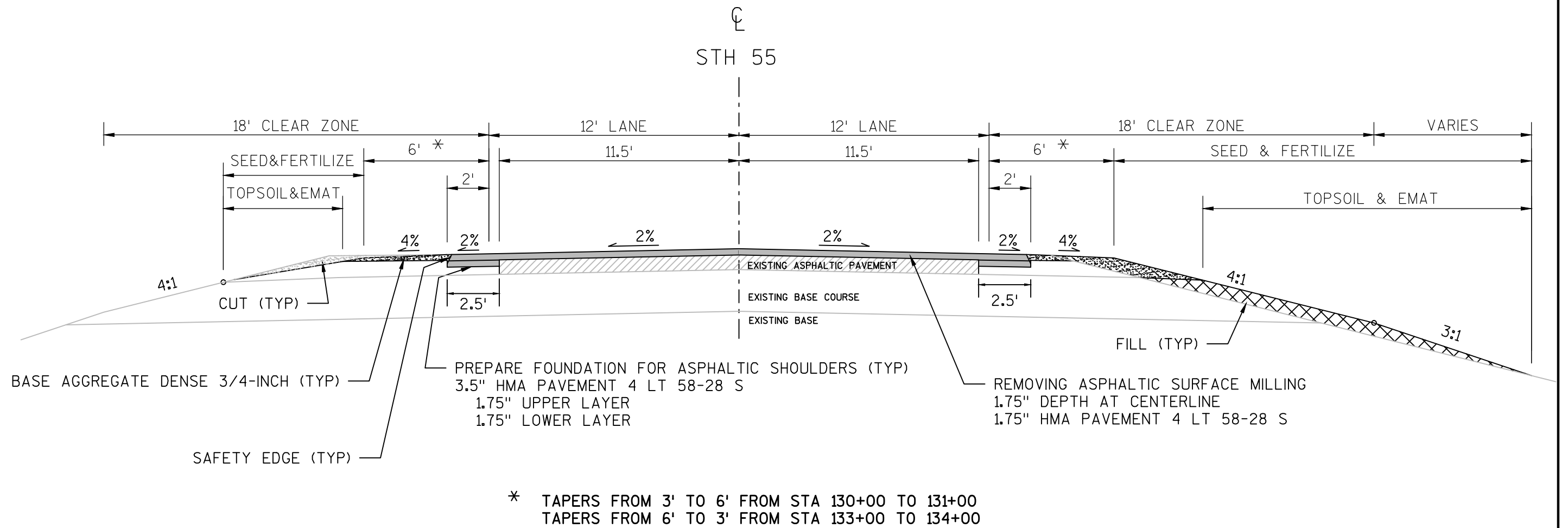
EXISTING TYPICAL SECTION

STATION 148+00 - STA 353+34



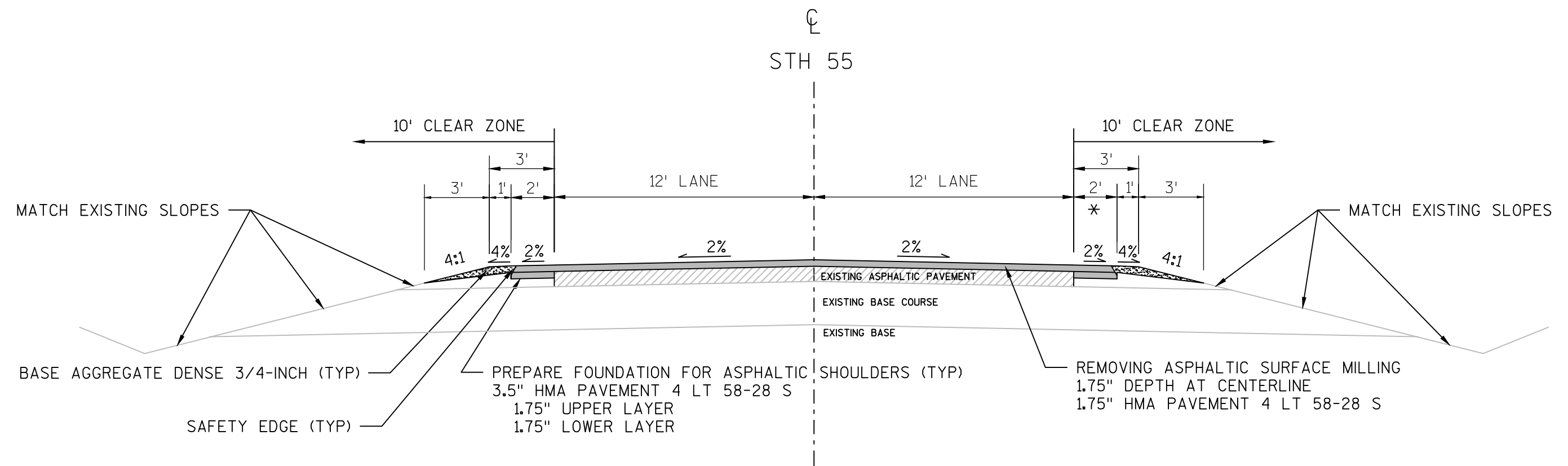
PROPOSED TYPICAL SECTION

STA 3+60 - STA 130+00
STA 134+00 - STA 148+00



PROPOSED TYPICAL SECTION

STA 130+00 - STA 134+00



PROPOSED TYPICAL SECTION

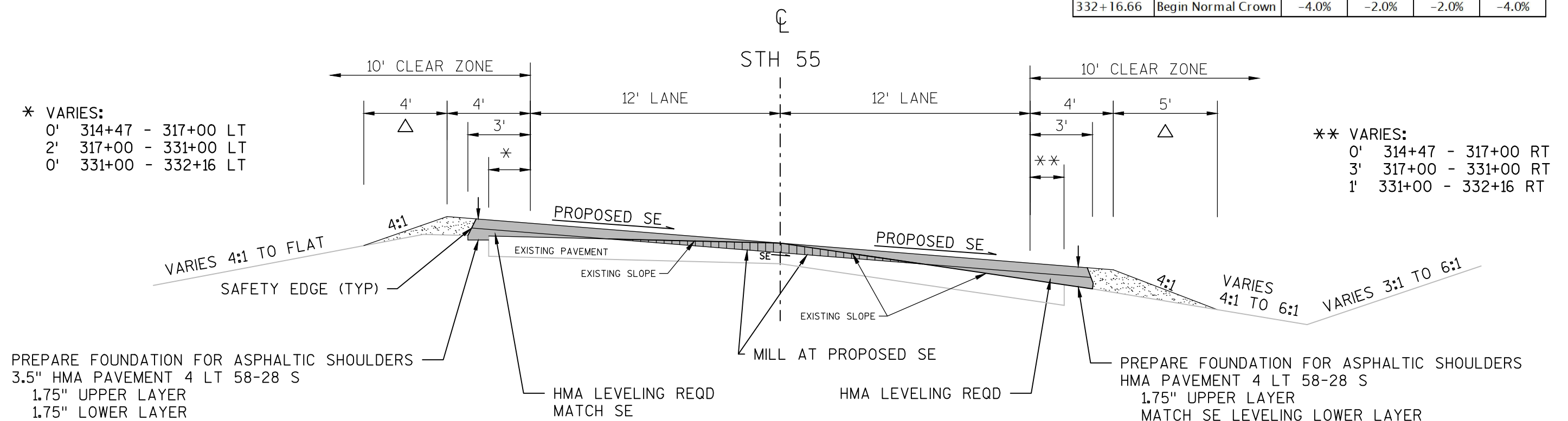
STA 148+00 - STA 314+48
STA 332+16 - STA 353+34

* STA 351+80 RT - STA 353+34 RT
MATCH EXISTING PAVEMENT WIDTH (12' + 12')

STA 337+50 RT - STA 339+00 RT
MATCH EXISTING PAVEMENT WIDTH (12' + 7')

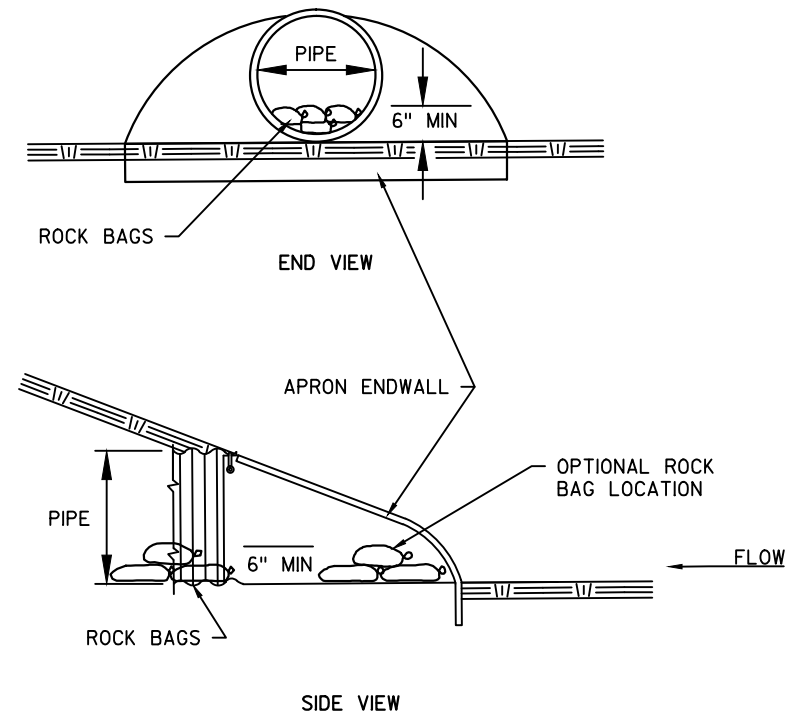
- REMOVING ASPHALTIC SURFACE MILLING
(1.75" DEPTH AT CENTERLINE, MILL AT NEW SE SLOPE)
- HMA PAVEMENT 4 LT 59-28 S
(1.75" UPPER LAYER, VARIABLE THICKNESS LEVELING LOWER LAYER)
- BASE AGGREGATE DENSE 3/4-INCH
- △ SEED AND FERTILIZE

SUPERELEVATION TABLE					
STATION	DESCRIPTION	LT SHOULDER	LT LANE	RT LANE	RT SHOULDER
314+47.58	End Normal Crown	-4.0%	-2.0%	-2.0%	-4.0%
314+73.20		-2.0%	-1.0%	-1.0%	-4.0%
314+98.81	Level Crown	0.0%	0.0%	-2.0%	-4.0%
314+24.43		1.0%	1.0%	-1.0%	-4.0%
315+50.04	Reverse Crown	2.0%	2.0%	-2.0%	-4.0%
315+73.10		3.0%	3.0%	-3.0%	-4.0%
315+96.15	PC	4.0%	3.8%	-3.8%	-4.0%
316+01.27	Low Shoulder Match	4.0%	4.0%	-4.0%	-4.0%
316+23.04		5.0%	5.0%	-5.0%	-5.0%
316+44.81	Begin Full Super	5.7%	5.7%	-5.7%	-5.7%
330+19.44	End Full Super	5.7%	5.7%	-5.7%	-5.7%
330+41.21		5.0%	5.0%	-5.0%	-5.0%
330+62.98	Low Shoulder Match	4.0%	4.0%	-4.0%	-4.0%
330+68.10	PT	4.0%	3.8%	-3.8%	-4.0%
330+91.16		3.0%	3.0%	-3.0%	-3.0%
331+14.21	Reverse Crown	2.0%	2.0%	-2.0%	-4.0%
331+39.83		1.0%	1.0%	-1.0%	-4.0%
331+65.44	Level Crown	0.0%	0.0%	-2.0%	-4.0%
331+91.05		-2.0%	-1.0%	-1.0%	-4.0%
332+16.66	Begin Normal Crown	-4.0%	-2.0%	-2.0%	-4.0%

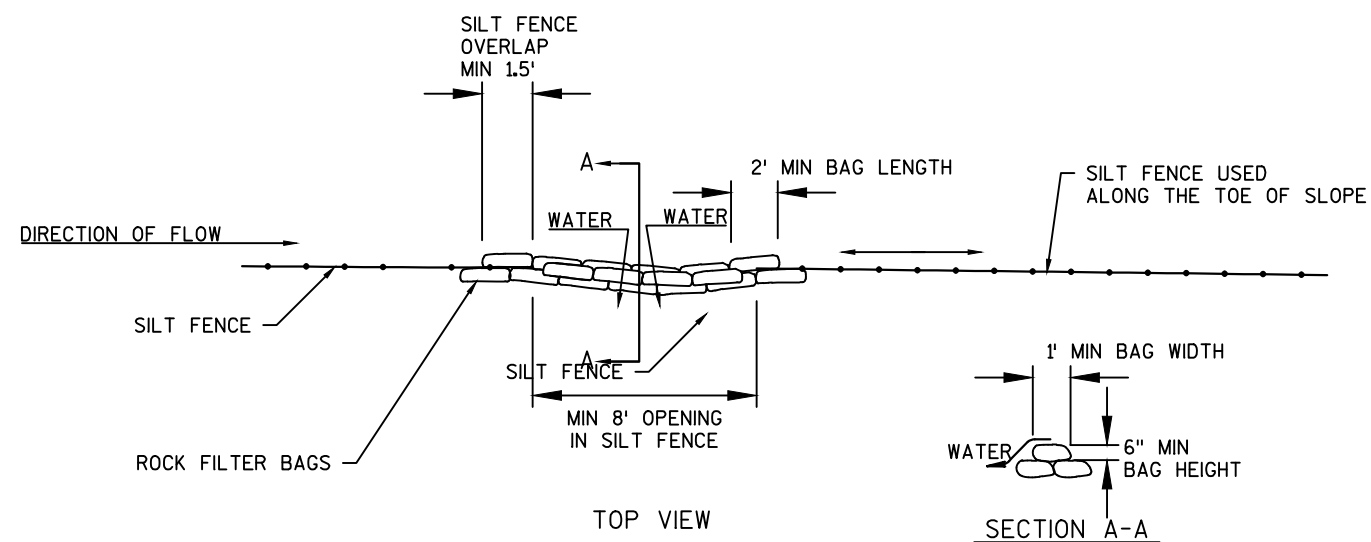


PROPOSED TYPICAL SECTION

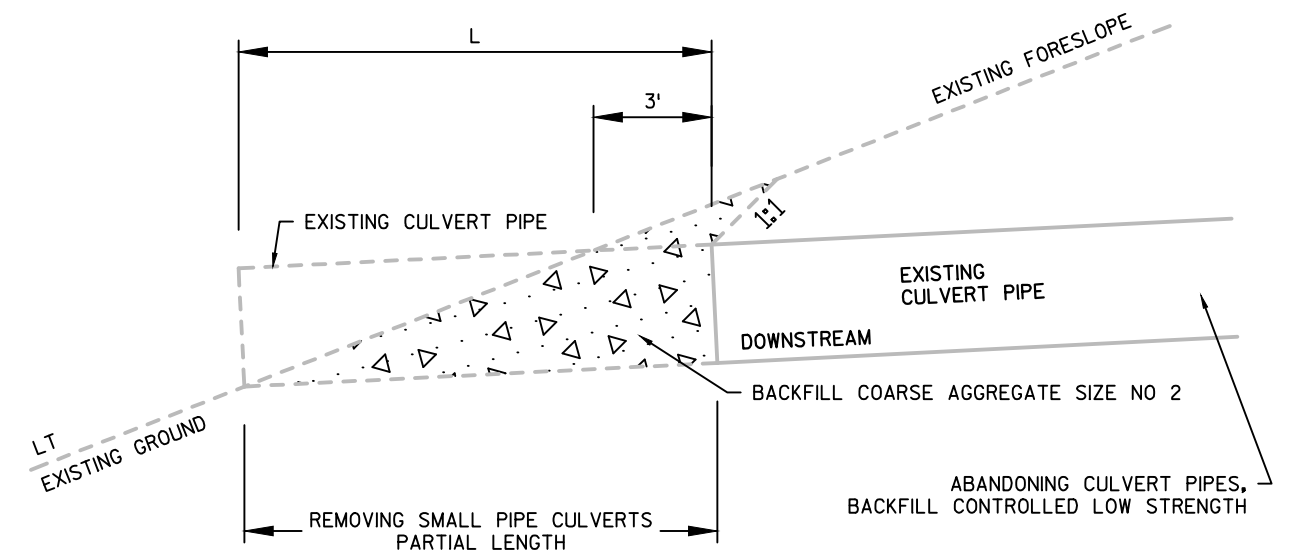
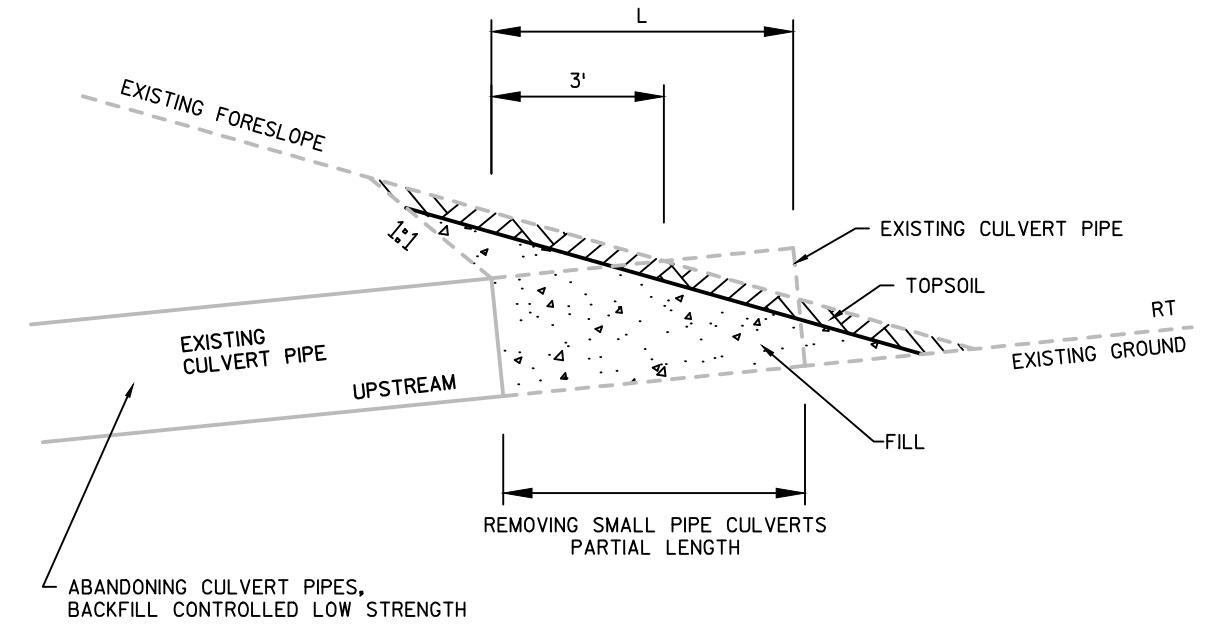
STA 314+48 - STA 332+16



CULVERT PIPE CHECK
(INSTALL ON INLET END ONLY)

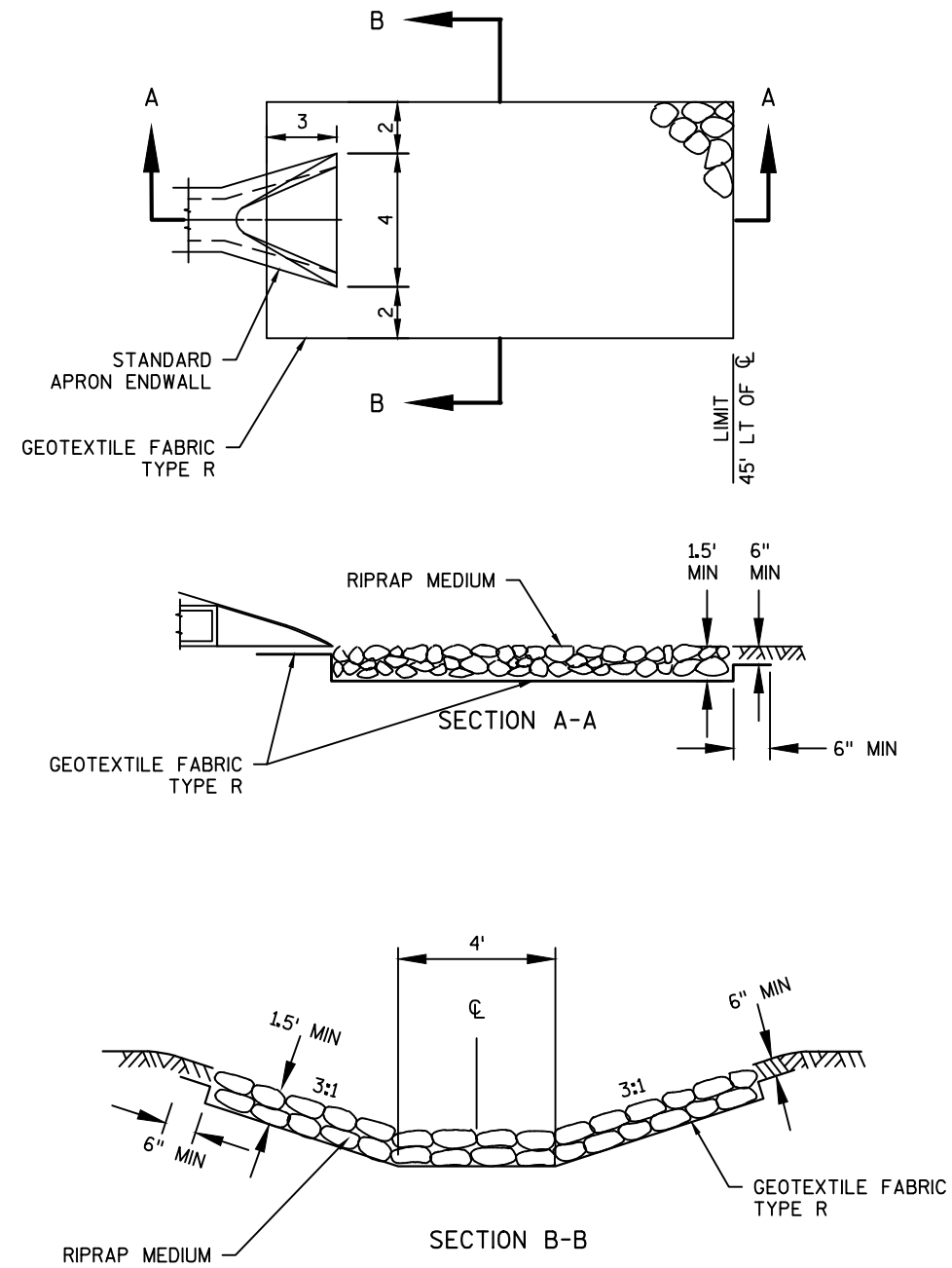


ROCK BAGS USED FOR SILT FENCE RELIEF



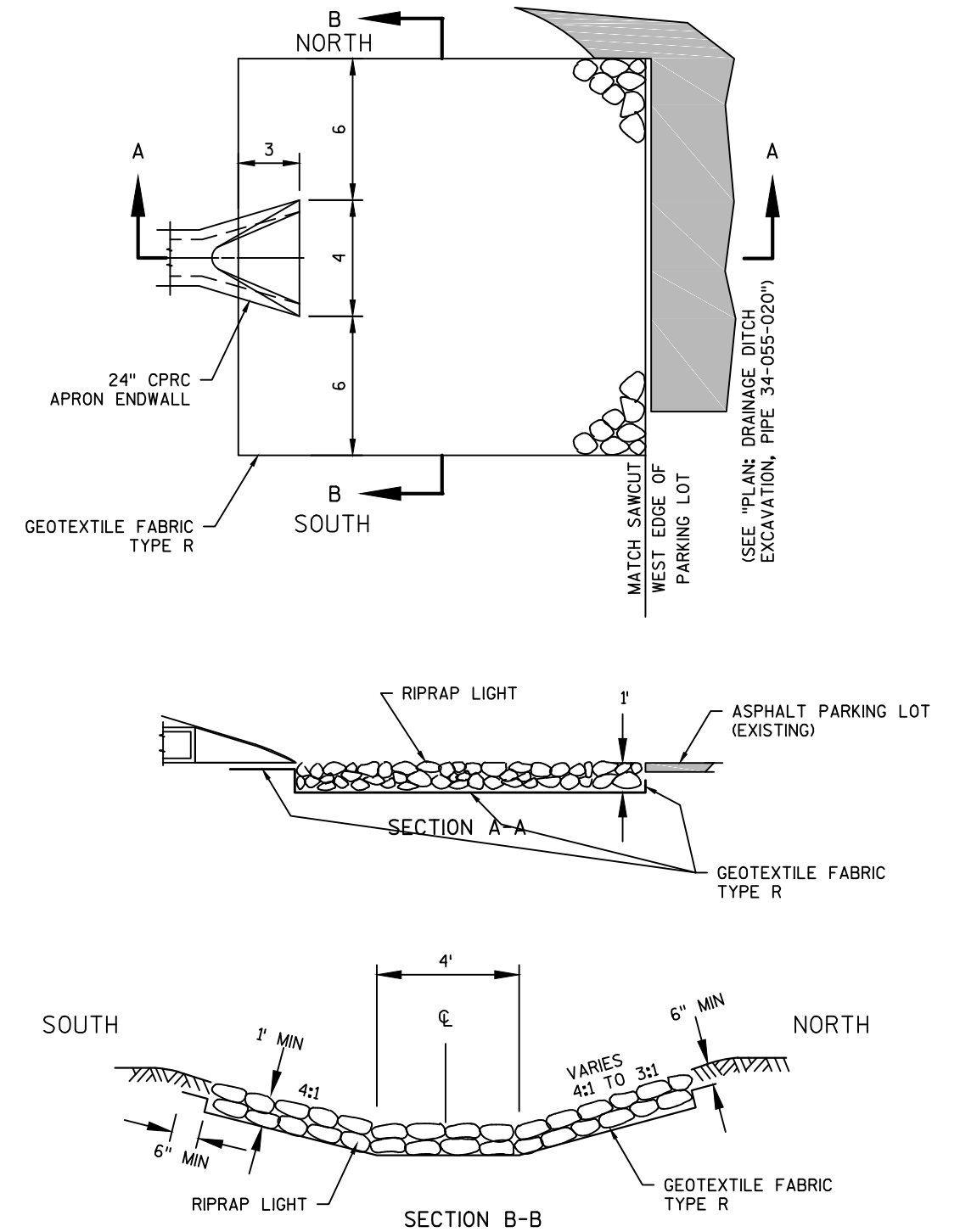
REMOVING SMALL PIPE CULVERTS
PARTIAL LENGTH

			L
STA 49+34	LT (18" DIA PIPE)	DOWNSTREAM	5'
STA 49+53	LT (24" DIA PIPE)	DOWNSTREAM	23'
STA 49+53	RT (24" DIA PIPE)	UPSTREAM	5'



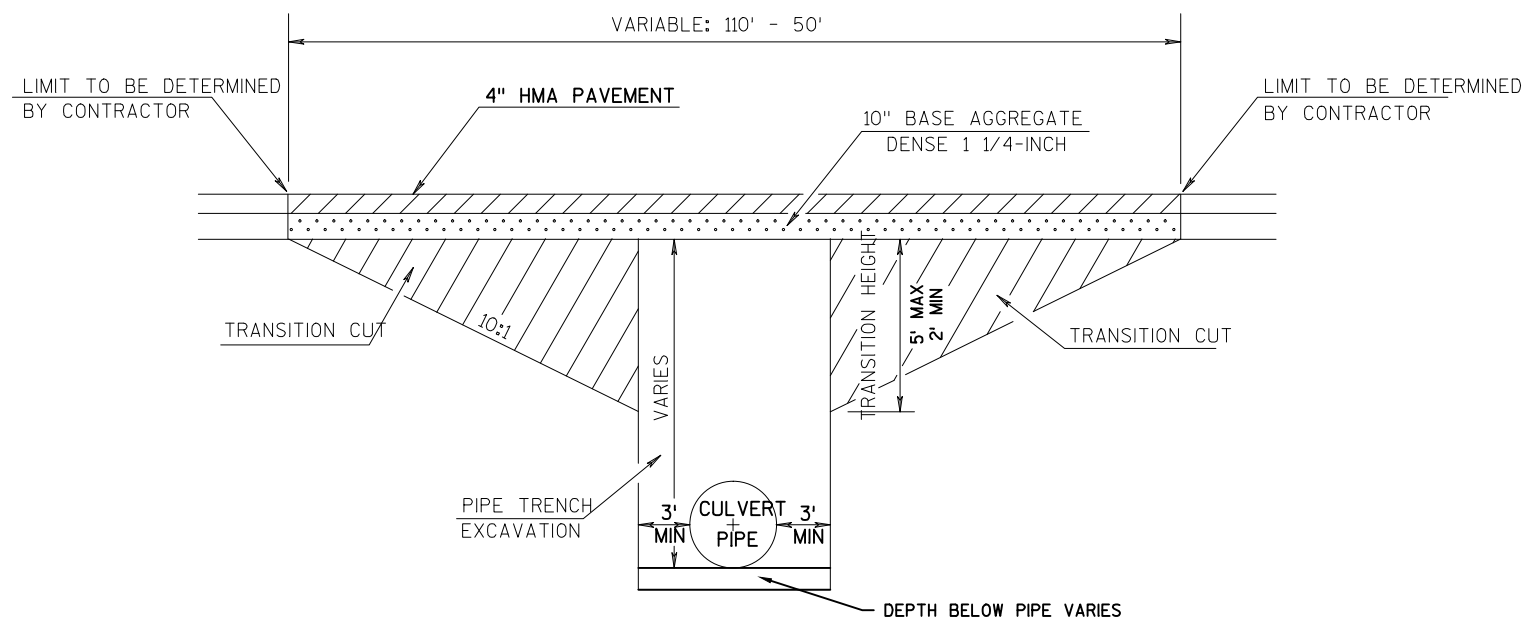
RIP RAP AND GEOTEXTILE FABRIC

STA 49+58 LT



RIP RAP AND GEOTEXTILE FABRIC

STA 338+54 RT
(CULVERT 34-055-020, EAST END)



LOCATIONS	CULVERT ID *	SIZE	TRANSITION HEIGHT	LENGTH OF TRANSITION CUT	CUT VOLUME
STA 49+58	34-055-004	24"	5'	110'	284 CY
STA 132+02	C-34-11	53"x83"HE	5'	110'	328 CY
STA 338+58	34-055-020	24"	2.7'	64'	85 CY

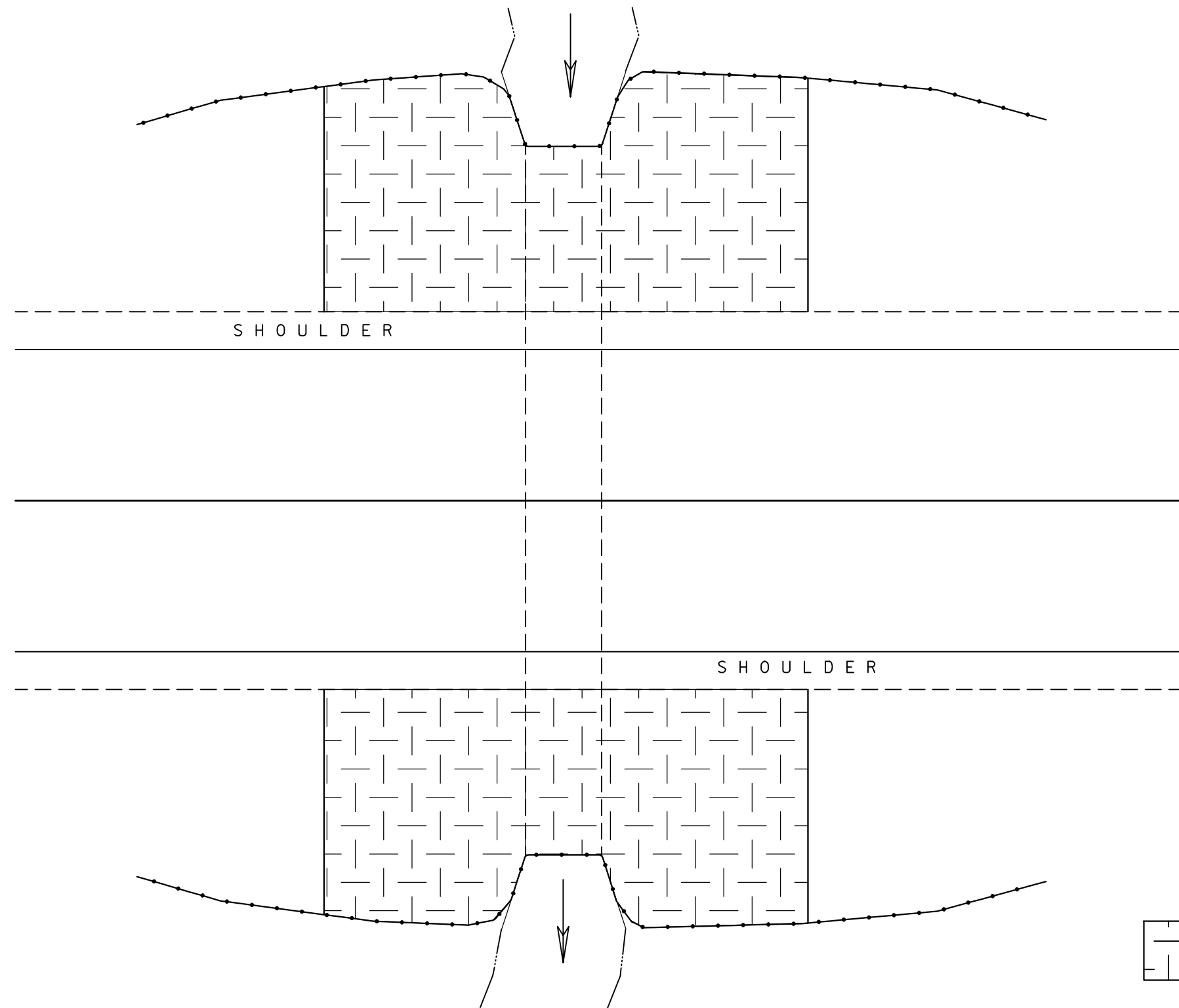
CULVERT PIPE TRANSITION

NOTE: REUSE MATERIAL REMOVED IN TRANSITION CUT AND PIPE TRENCH EXCAVATIONS AS BACKFILL UNLESS OTHERWISE DIRECTED BY THE ENGINEER TO USE BACKFILL GRANULAR

PIPE TRENCH EXCAVATION, EXCLUDING TRANSITION CUT IS CONSIDERED INCIDENTAL TO PIPE INSTALLATION. TRANSITION CUT WILL BE PAID FOR AS CULVERT PIPE TRANSITION.

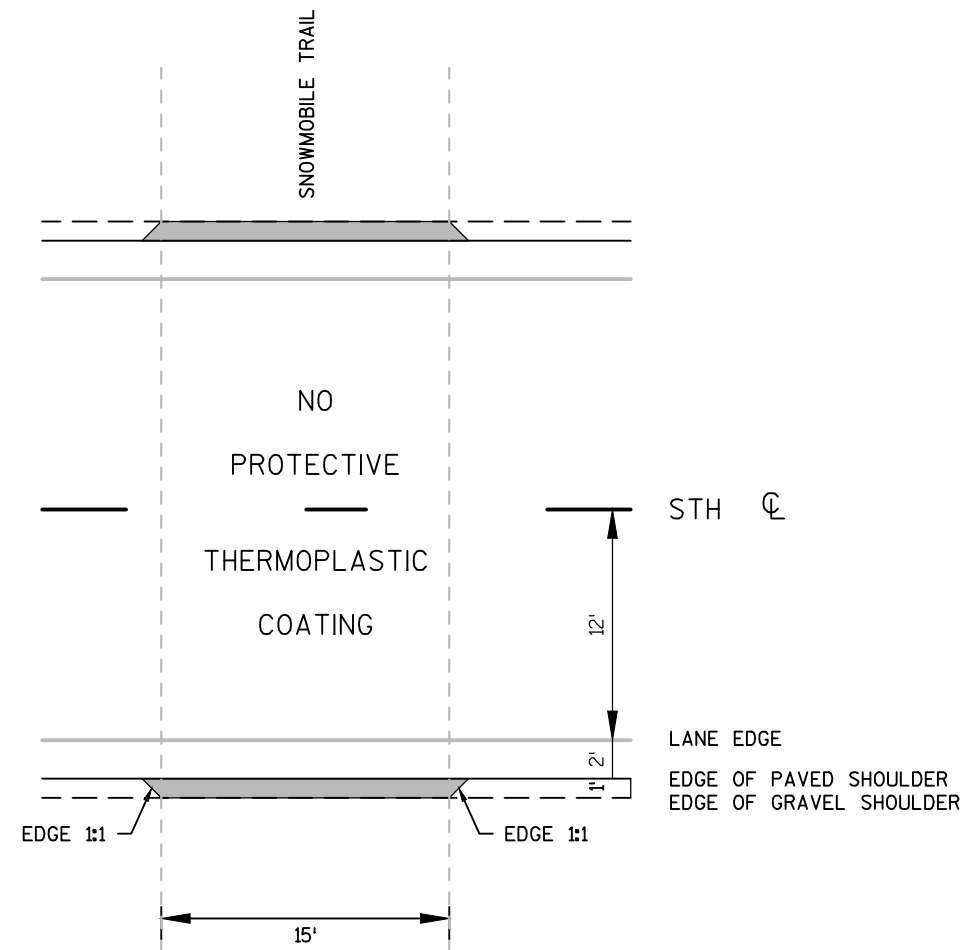
TRANSITION CUT WILL BE TO EDGE OF SHOULDER ON EACH SIDE OF CENTERLINE.

COMPLETE PIPE TRANSITION THROUGH ASPHALTIC SURFACE PATCHING PRIOR MILLING AND OVERLAYING OF EXISTING PAVEMENT.



DETAIL FOR EROSION CONTROL AT CULVERT PIPES

STA 49+59 LT&RT
STA 132+02 LT&RT
STA 338+58 LT&RT

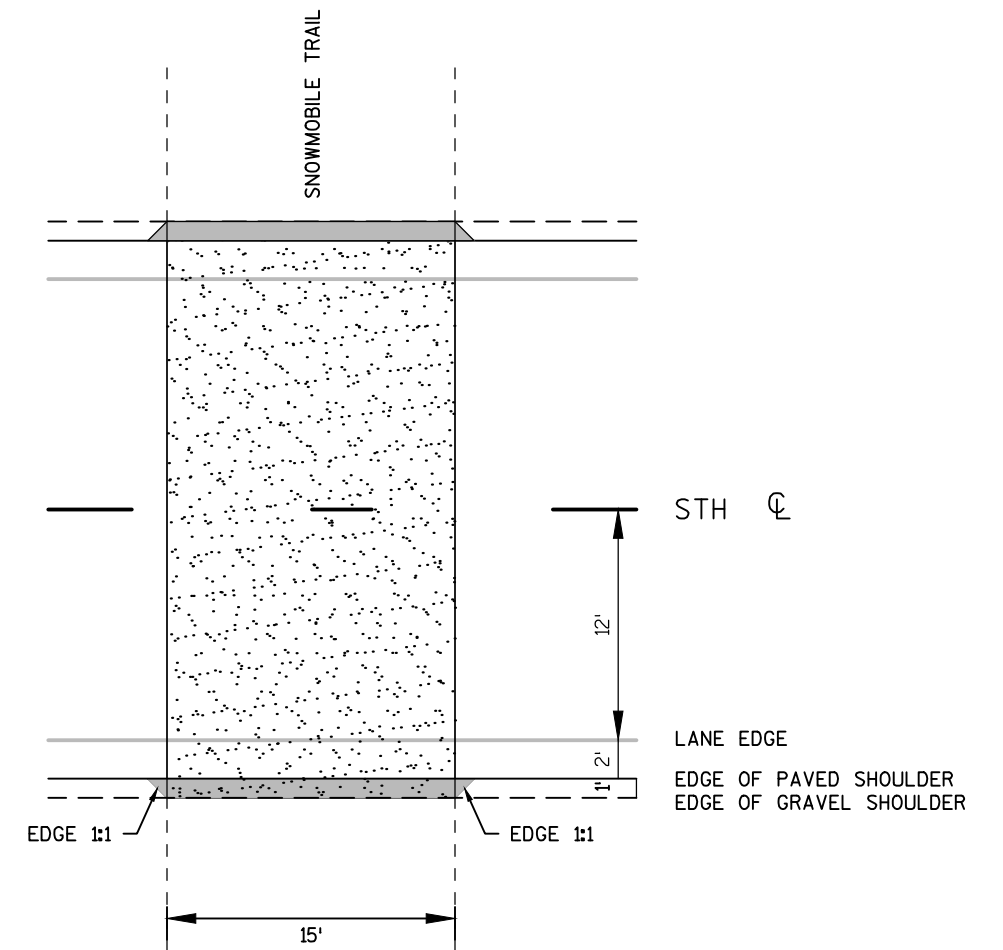


HMA PAVEMENT WIDENING
3.5-INCHES FOR SNOWMOBILE TRAIL CROSSING

NOTE: PREPARATION FOR PAVEMENT WIDENING
FALLS UNDER PREPARE FOUNDATION
FOR ASPHALTIC SHOULDERS

PAVING FULL WIDTH SHOULDERS AT
SNOWMOBILE TRAIL CROSSING

STA 19+25



PROTECTIVE THERMOPLASTIC COATING
AT SNOWMOBILE TRAIL CROSSING

HMA PAVEMENT WIDENING
3.5-INCHES FOR SNOWMOBILE TRAIL CROSSING

NOTE: PREPARATION FOR PAVEMENT WIDENING
FALLS UNDER PREPARE FOUNDATION
FOR ASPHALTIC SHOULDERS

SNOWMOBILE TRAIL CROSSING
WITH FULL WIDTH SHOULDERS AND PROTECTIVE COATING

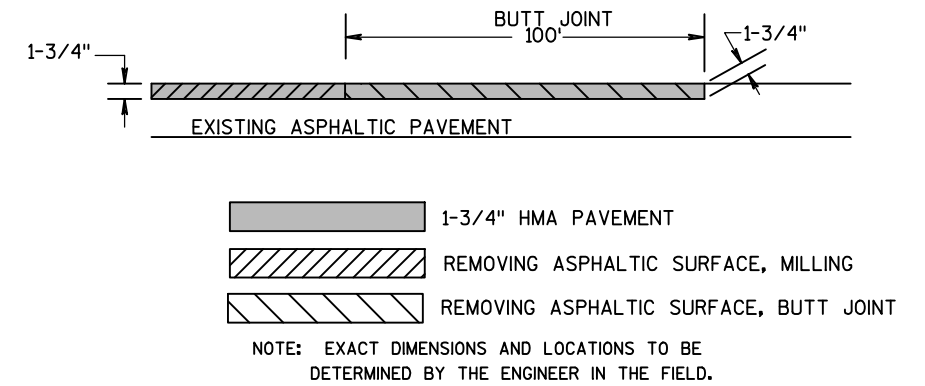
STA 349+30

Diagram illustrating the cross-section of a shoulder and pavement structure. The diagram shows a vertical section with the following components and dimensions:

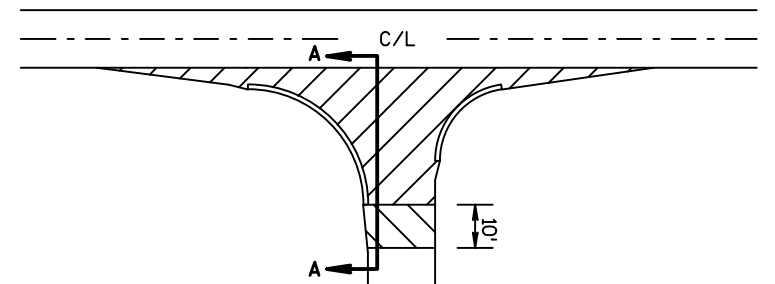
- Centerline (CL):** Indicated by a vertical line on the left.
- Horizontal Dimensions:**
 - 15' (feet) from the CL to the start of the shoulder.
 - 1' (foot) from the start of the shoulder to the shoulder point.
 - VARIES (varies) from the shoulder point to the end of the shoulder.
- Vertical Dimensions:**
 - 1.75" (inches) for the HMA Pavement Upper Layer.
 - VARIES (varies) for the HMA Pavement Leveling Lower Layer.
 - EXISTING PAVT (existing pavement) is shown below the leveling layer.
- Grades and Slopes:**
 - FULL SE (5.7%) (Full Section Elevation) for the main pavement section.
 - 7% (1:14.3) slope for the shoulder.
 - HOLD 7% SLOPE (Hold 7% Slope) for the shoulder section.
- Shoulder Point:** Indicated by a circle on the shoulder slope.
- Base Aggregate Shoulder:** Indicated by a stippled area below the shoulder slope.

STA 315+70 RT (*: 2')

STA 317+95 RT (*: 0')



STA 3+60 - STA 4+60
STA 352+44 - STA 353+44

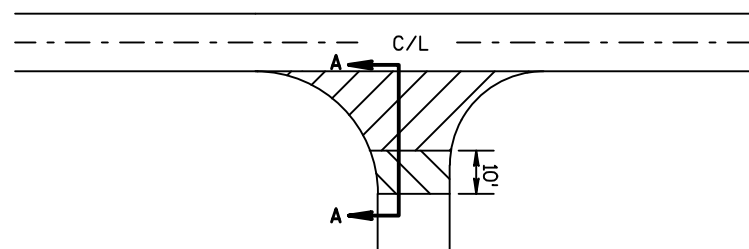


 REMOVING ASPHALTIC SURFACE MILLING

 REMOVING ASPHALTIC SURFACE BUTT JOINT

NOTE: EXACT DIMENSIONS AND LOCATIONS TO BE
DETERMINED BY THE ENGINEER IN THE FIELD.

SIDE ROADS WITH CURB AND GUTTER

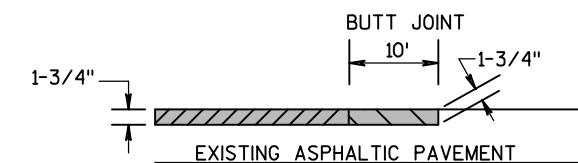


 REMOVING ASPHALTIC SURFACE MILLING

 REMOVING ASPHALTIC SURFACE BUTT JOINT

NOTE: EXACT DIMENSIONS AND LOCATIONS TO BE
DETERMINED BY THE ENGINEER IN THE FIELD.

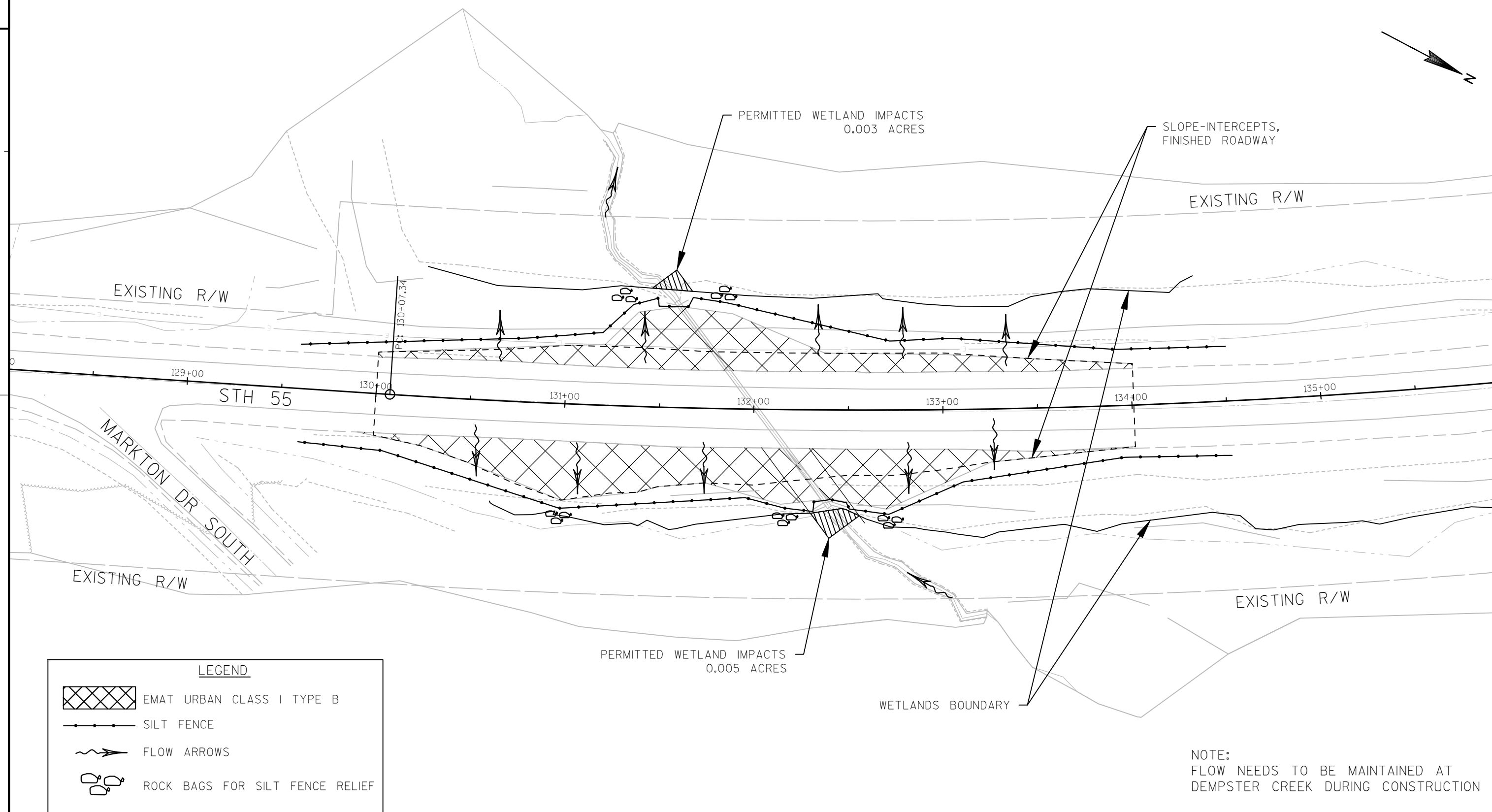
SIDE ROADS WITHOUT CURB AND GUTTER AND DRIVEWAYS

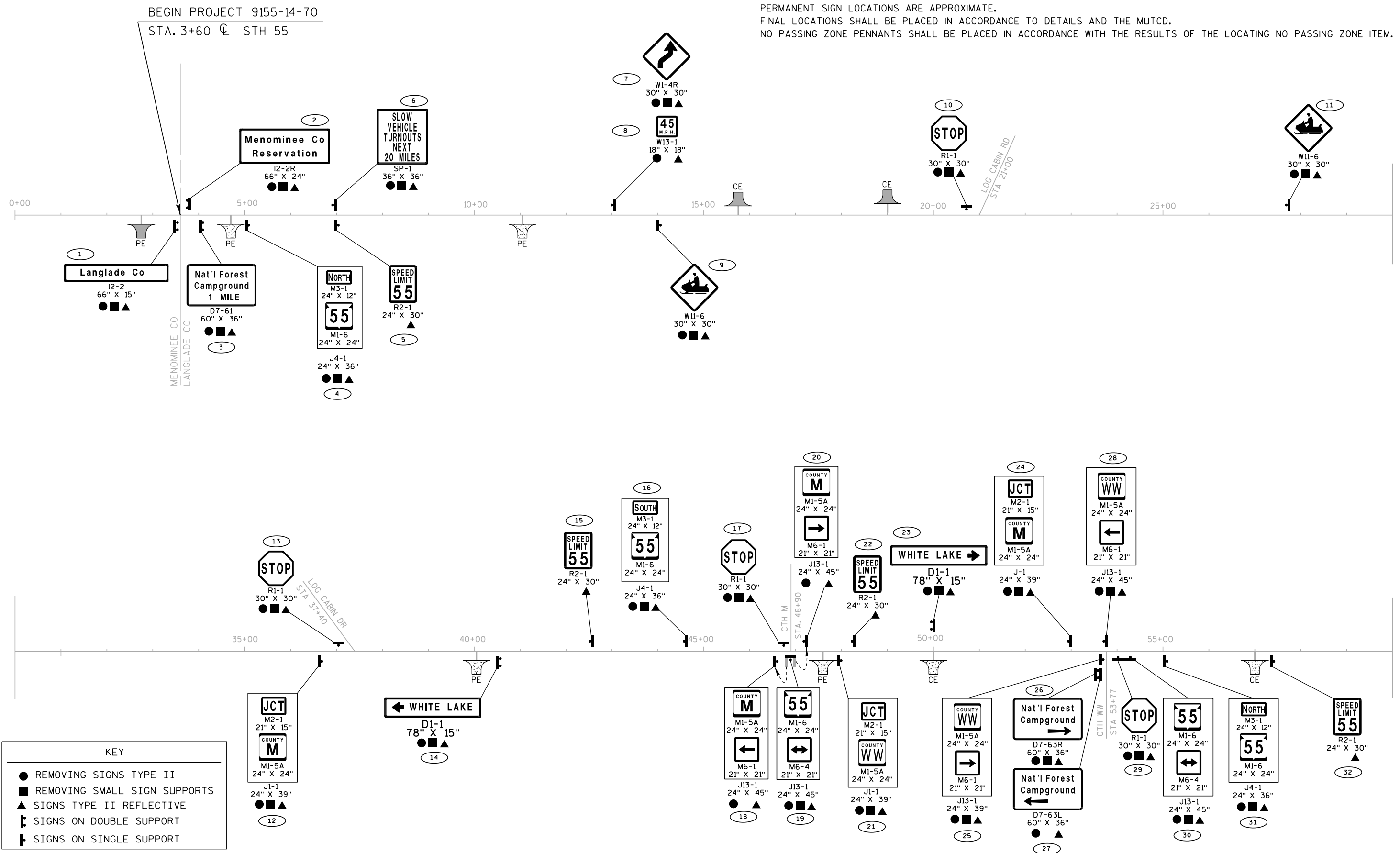


 1-3/4" HMA PAVEMENT
 REMOVING ASPHALTIC SURFACE MILLING
 REMOVING ASPHALTIC SURFACE BUTT JOINT

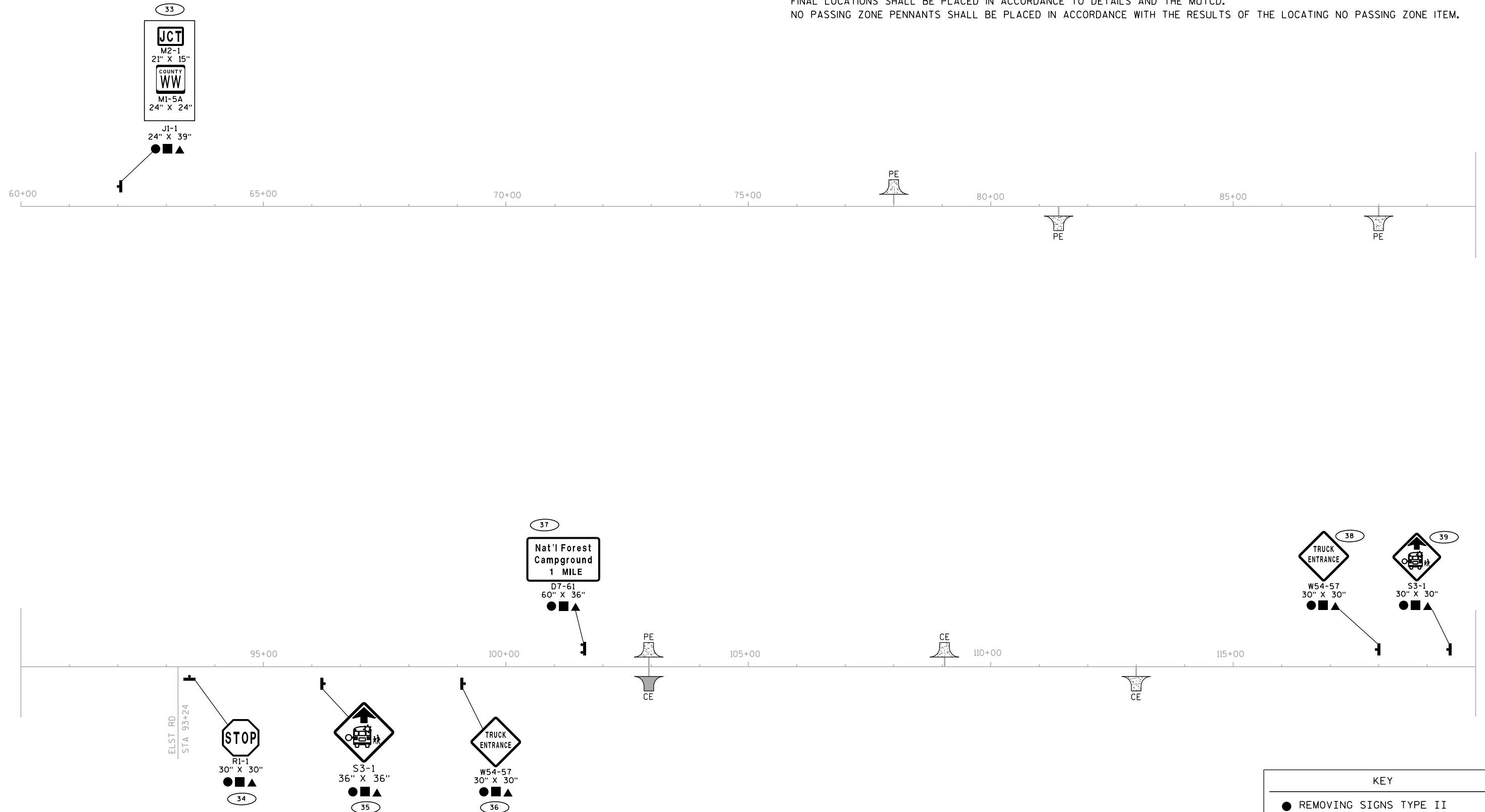
NOTE: EXACT DIMENSIONS AND LOCATIONS TO BE
DETERMINED BY THE ENGINEER IN THE FIELD.

SECTION A - A

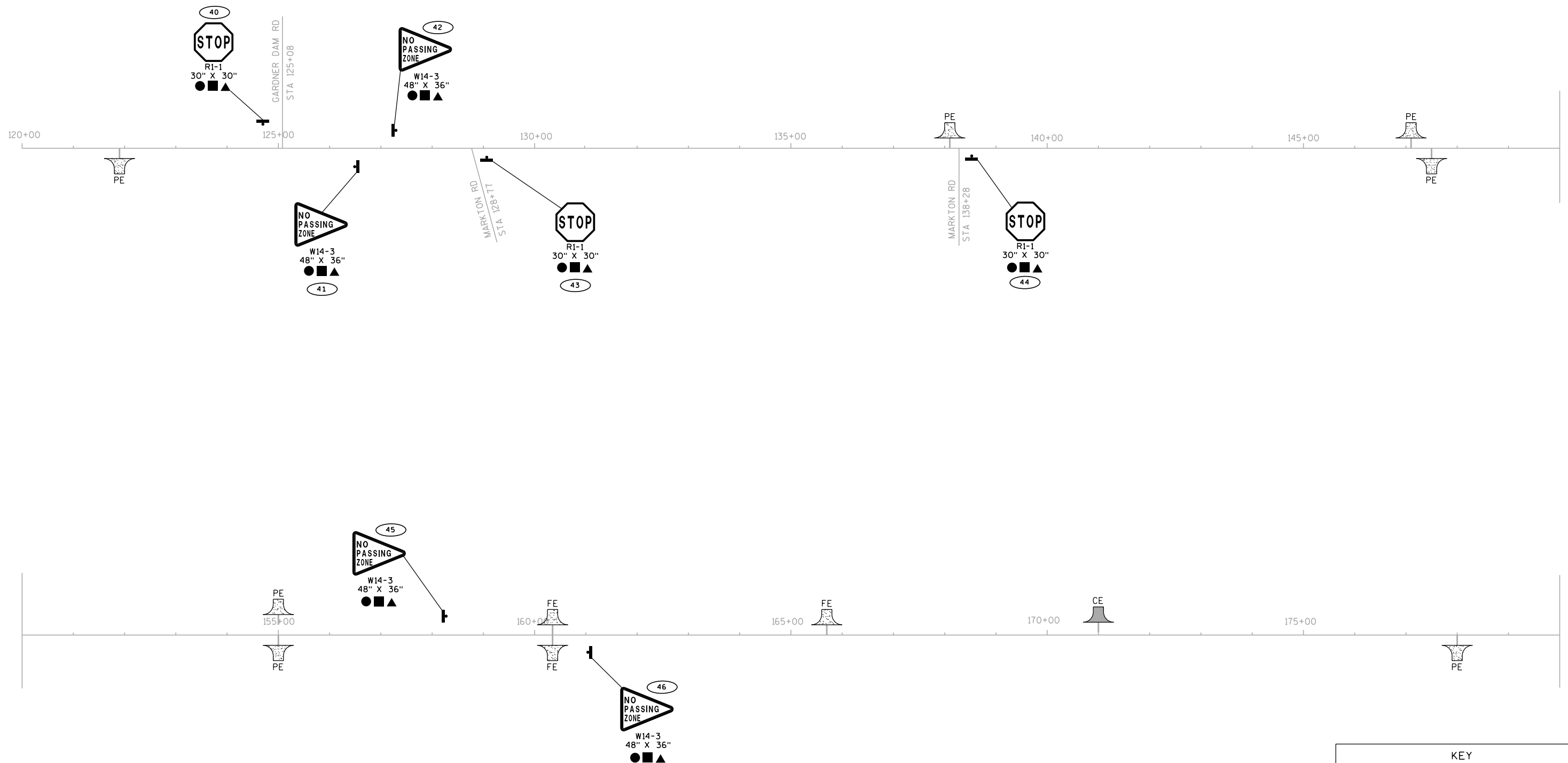




PERMANENT SIGN LOCATIONS ARE APPROXIMATE.
FINAL LOCATIONS SHALL BE PLACED IN ACCORDANCE TO DETAILS AND THE MUTCD.
NO PASSING ZONE PENNANTS SHALL BE PLACED IN ACCORDANCE WITH THE RESULTS OF THE LOCATING NO PASSING ZONE ITEM.



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.



KEY

- REMOVING SIGNS TYPE II
- REMOVING SMALL SIGN SUPPORTS
- ▲ SIGNS TYPE II REFLECTIVE
- ┌ SIGNS ON DOUBLE SUPPORT
- └ SIGNS ON SINGLE SUPPORT

PROJECT NO: 9155-14-70

HWY: STH 55

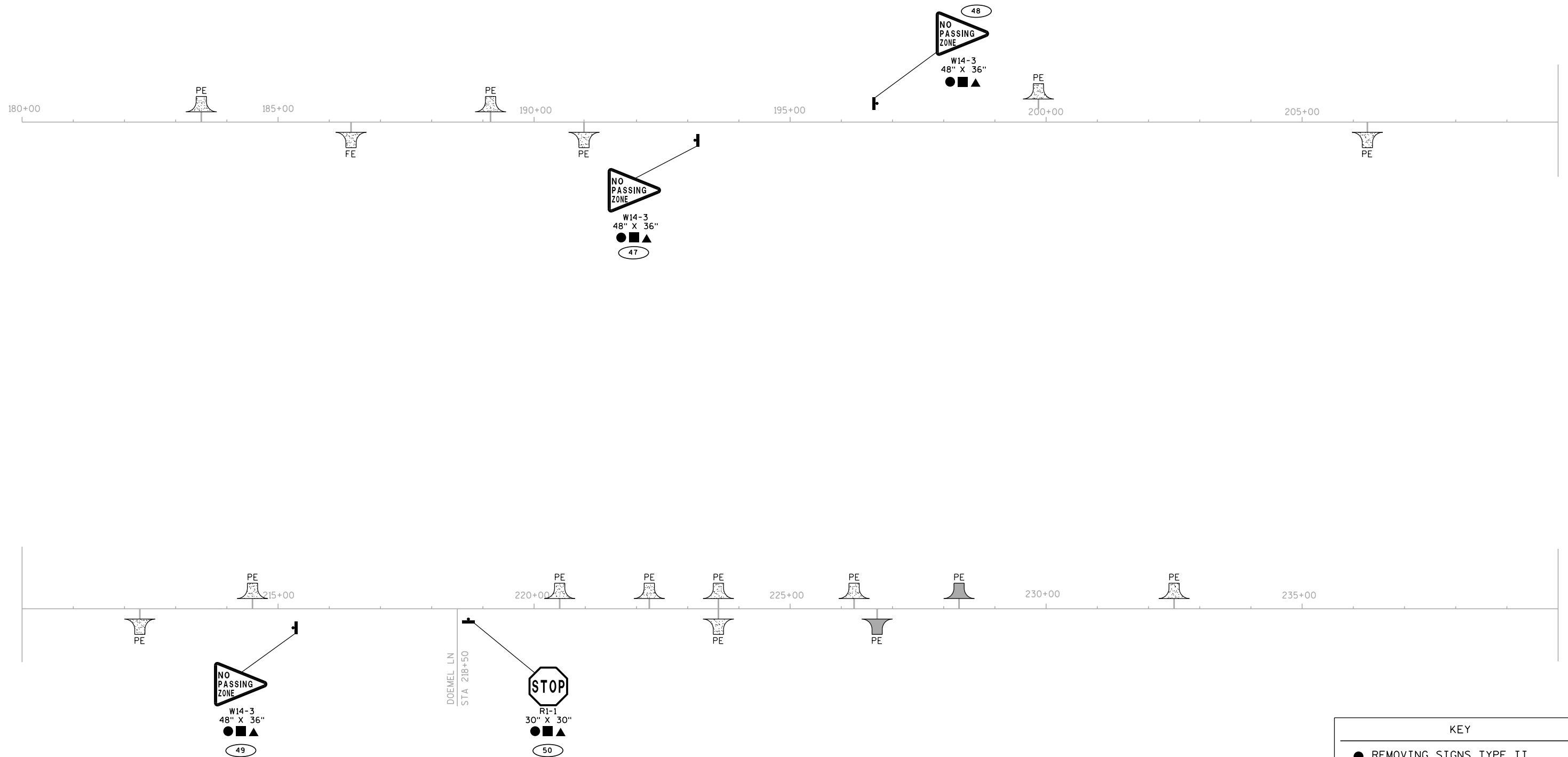
COUNTY: LANGLADE

PERMANENT SIGNING

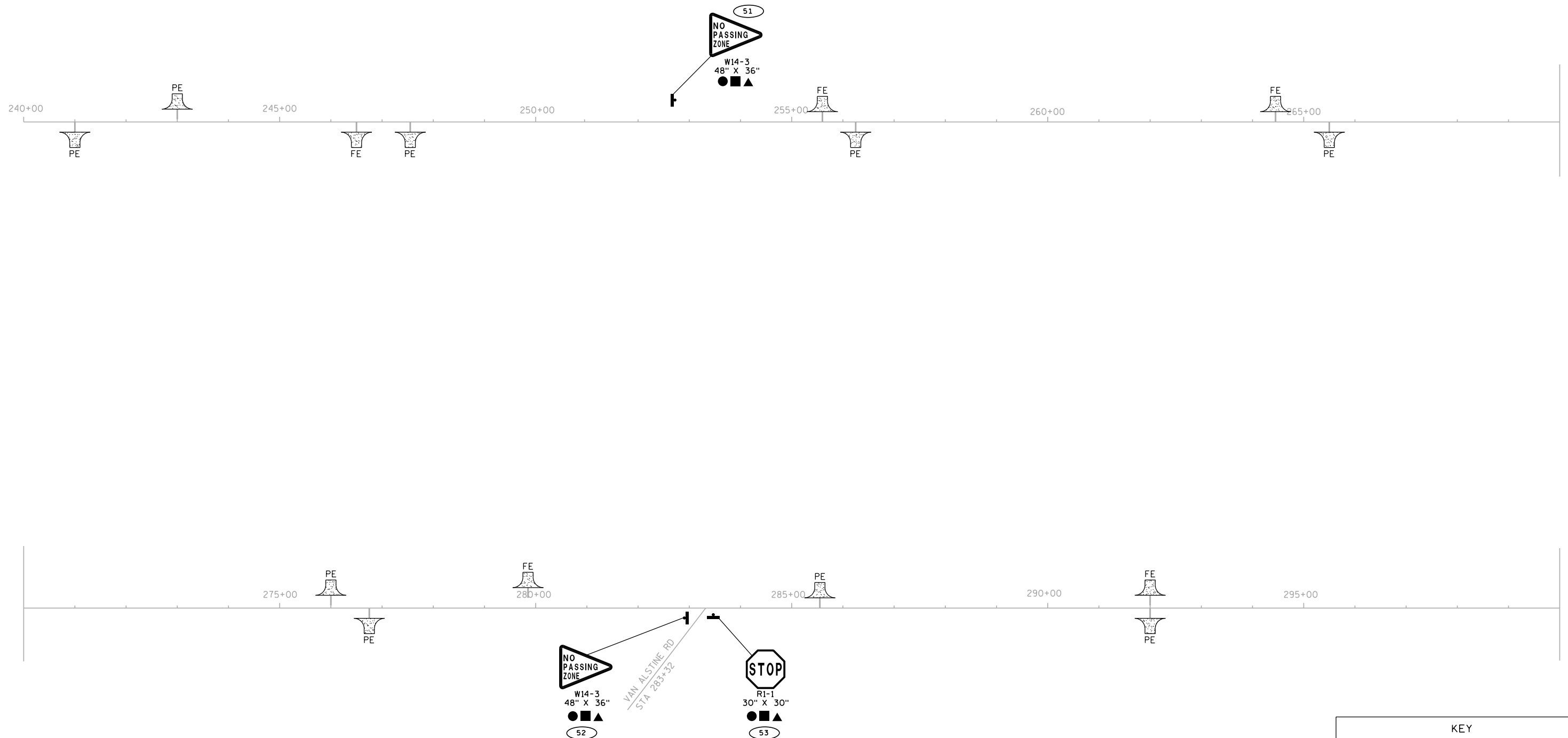
SHEET

E

PERMANENT SIGN LOCATIONS ARE APPROXIMATE.
FINAL LOCATIONS SHALL BE PLACED IN ACCORDANCE TO DETAILS AND THE MUTCD.
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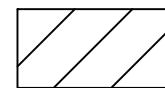
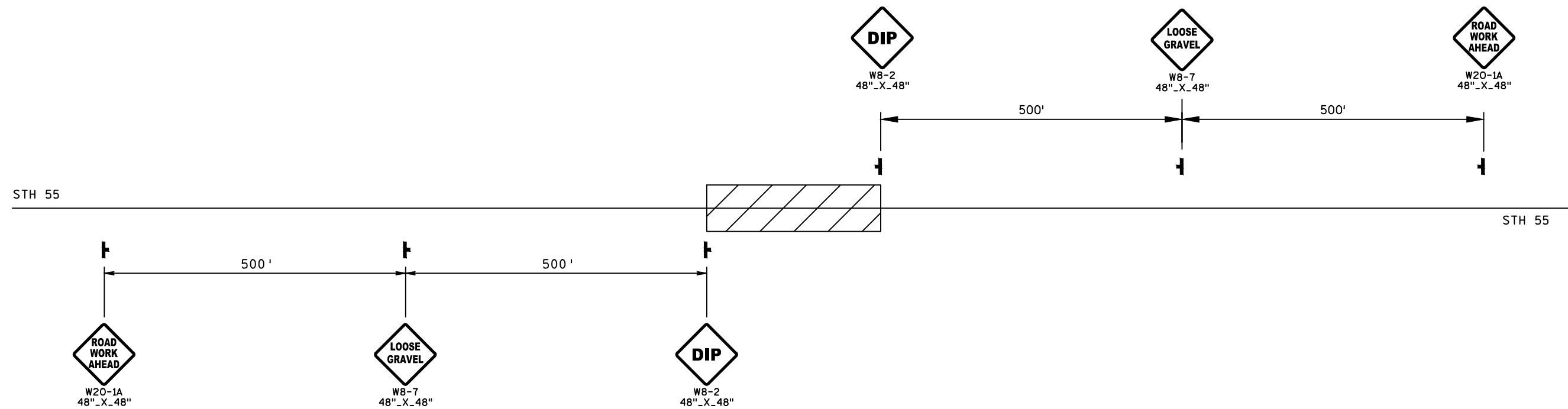
KEY	
●	REMOVING SIGNS TYPE II
■	REMOVING SMALL SIGN SUPPORTS
▲	SIGNS TYPE II REFLECTIVE
⌋	SIGNS ON DOUBLE SUPPORT
⌋	SIGNS ON SINGLE SUPPORT

- REMOVING SIGNS TYPE II
- REMOVING SMALL SIGN SUPPORTS
- ▲ SIGNS TYPE II REFLECTIVE
- ⌋ SIGNS ON DOUBLE SUPPORT
- ⌋ SIGNS ON SINGLE SUPPORT

[illegible]

*MOUNT NEW SIGN ON EXISTING BEACON POLE (TYP)

2



CULVERT PIPE TRANSITION AREA
48' MIN - 110' MAX

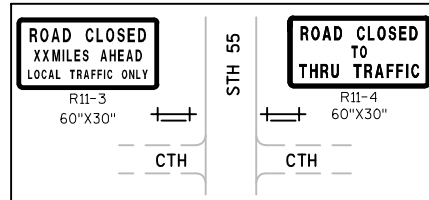
TEMPORARY SIGNING AT CULVERT PIPE REPLACEMENT

STA 49+58
STA 338+58

GENERAL NOTES

1. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER
2. ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED
3. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE
4. ALL TYPE III BARRICADES SHALL BE 8' WIDE, UNLESS OTHERWISE NOTED. EQUIP WITH TYPE "A" (LOW INTENSITY FLASHING) LIGHTS PER SDDS
5. MAINTAIN ALL EXITING STOP SIGNS AT ALL TIMES
6. FOR NIGHTTIME OPERATION, ALL DRUMS IN TAPERS SHALL HAVE A TYPE C WARNING LIGHT
7. A FLAGGER MAY BE REQUIRED WHERE CONSTRUCTION VEHICLES ENTER OR LEAVE WORK AREAS IF WARRANTED BY CONDITIONS OR AS DIRECTED BY THE ENGINEER

- A* SEE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" DETAIL A
- B* SEE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" DETAIL C
- C SEE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" DETAIL D
- D SEE SDD "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" DETAIL 4
- E* AS SHOWN HERE

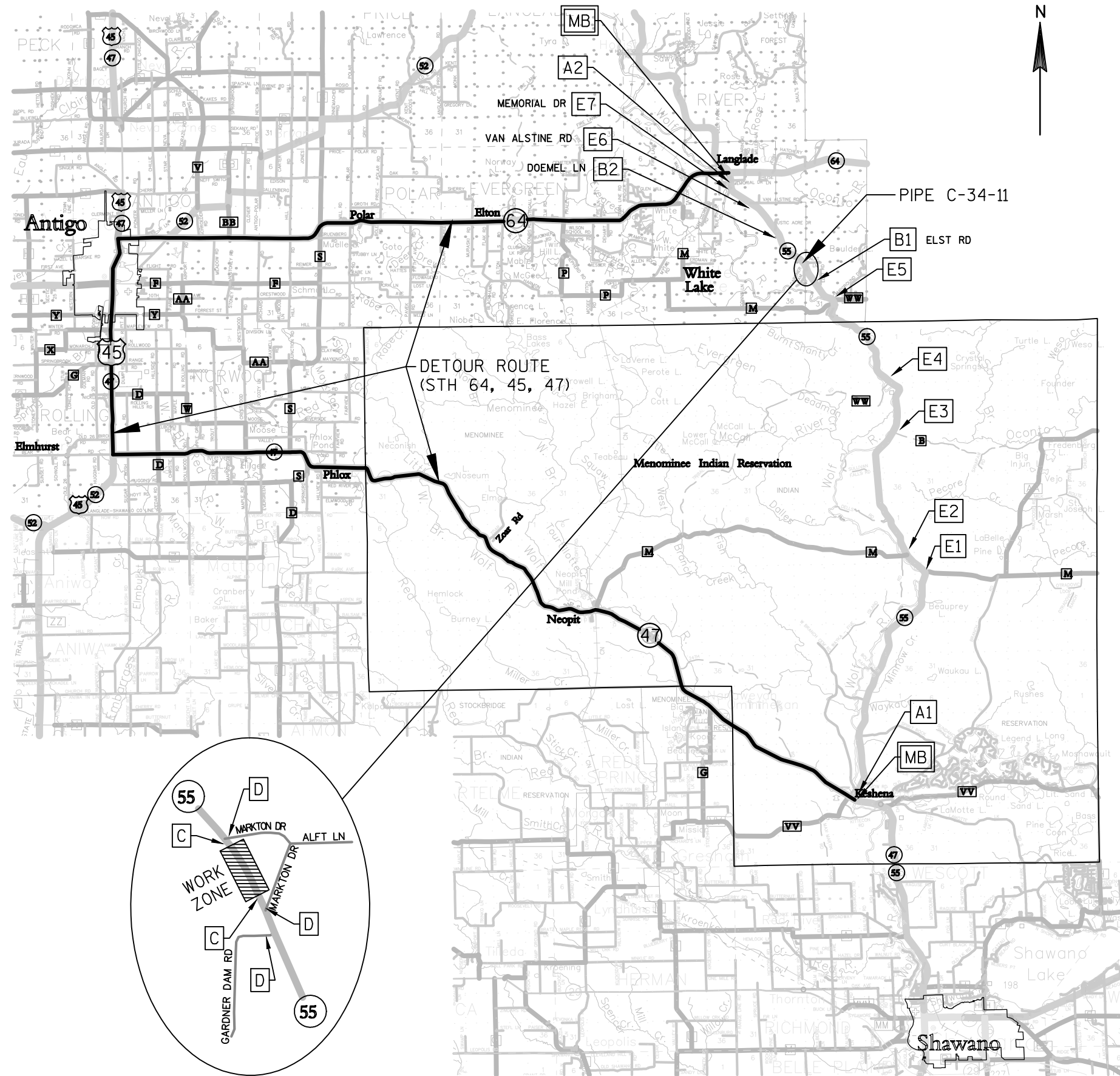


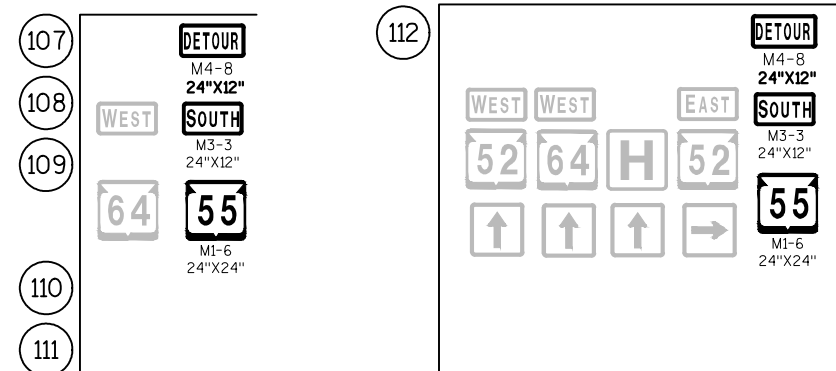
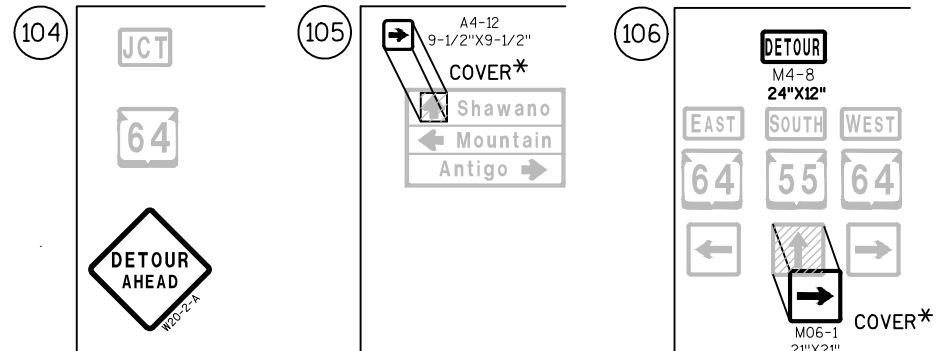
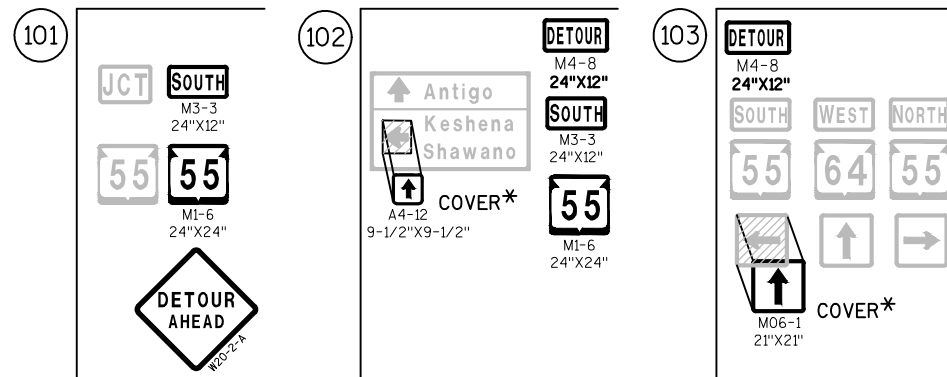
MB PLACE TRAFFIC CONTROL SIGNS PCMS AT THE DETOUR TERMINI ONE WEEK PRIOR TO THE START OF THE 5-DAY DETOUR

TYPE III BARRICADE WITH ATTACHED SIGN

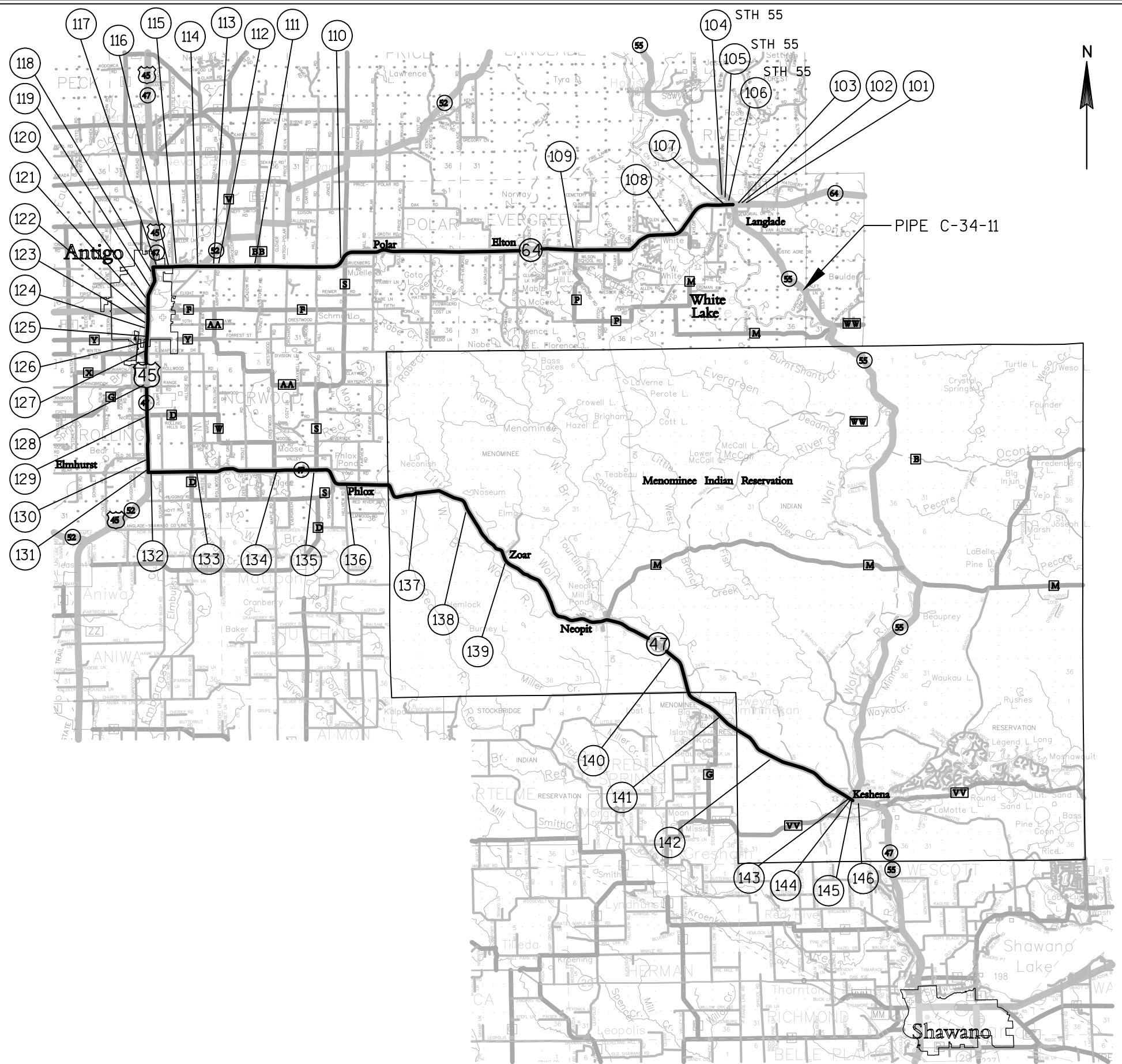
DISTANCES FOR
ROAD CLOSED SIGNS

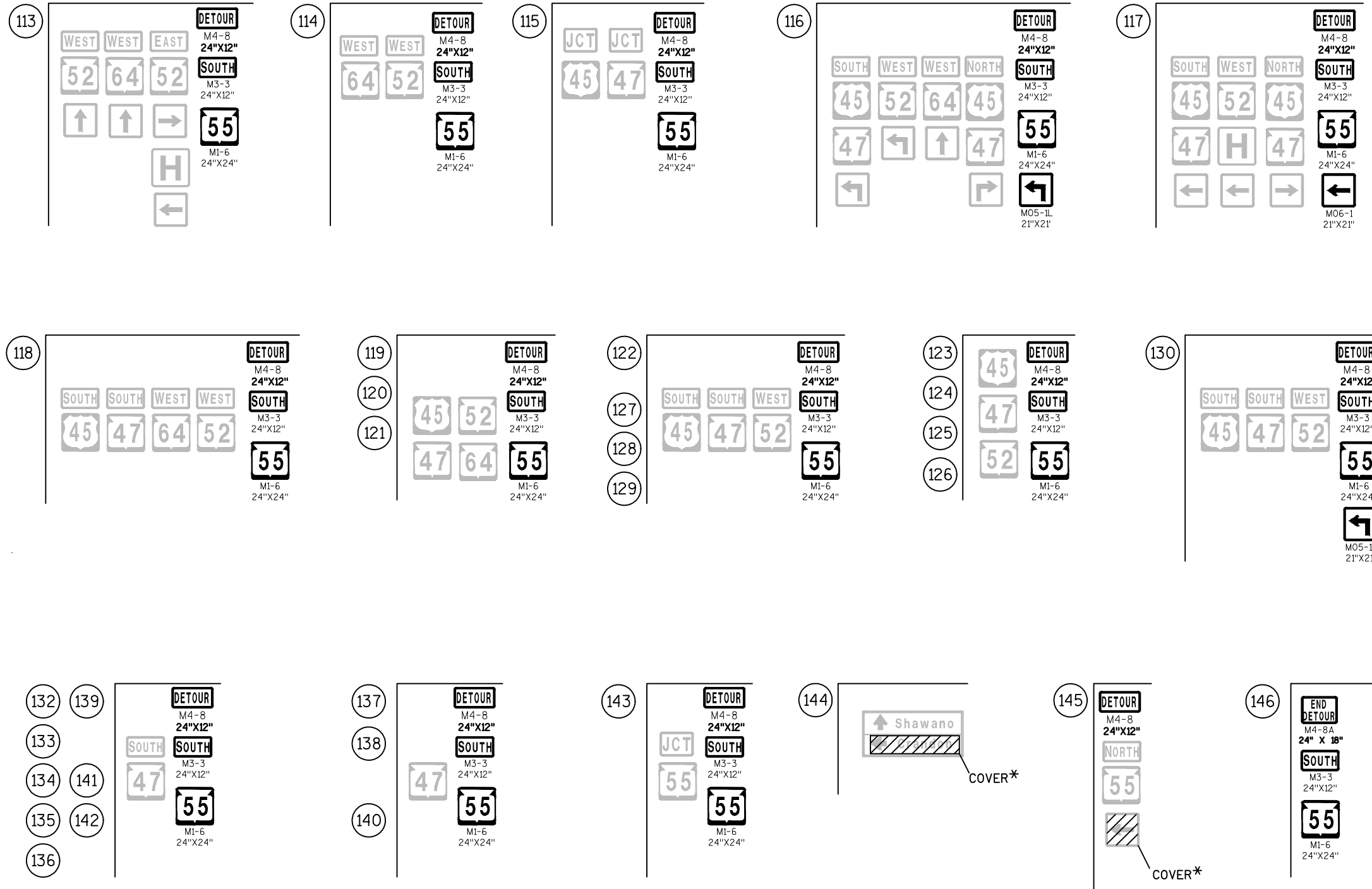
A1	21	MILES
A2	4.2	MILES
B1	0.7	MILES
B2	1.6	MILES
E1	12.6	MILES
E2	11.7	MILES
E3	7.2	MILES
E4	5.3	MILES
E5	1.5	MILES
E6	3	MILES
E7	4	MILES



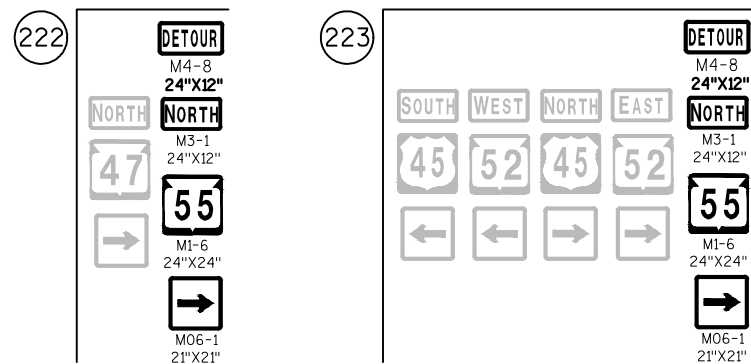
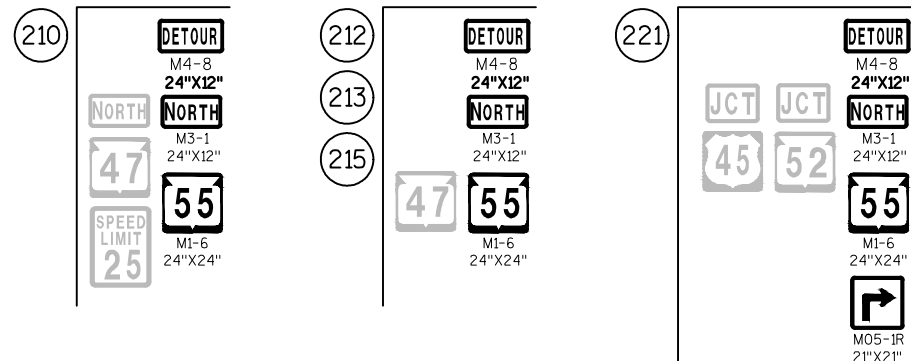
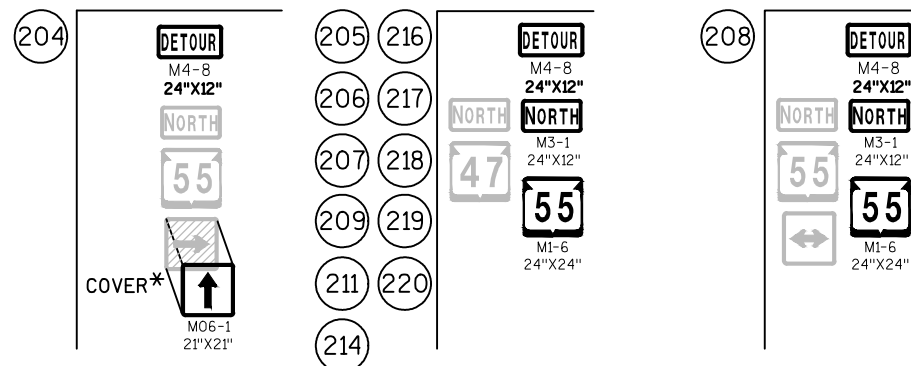
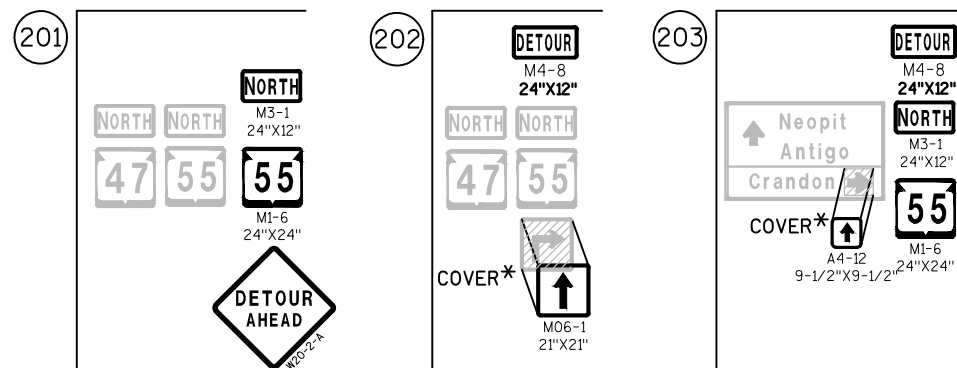


* PAID FOR AS TRAFFIC CONTROL DETOUR SIGN

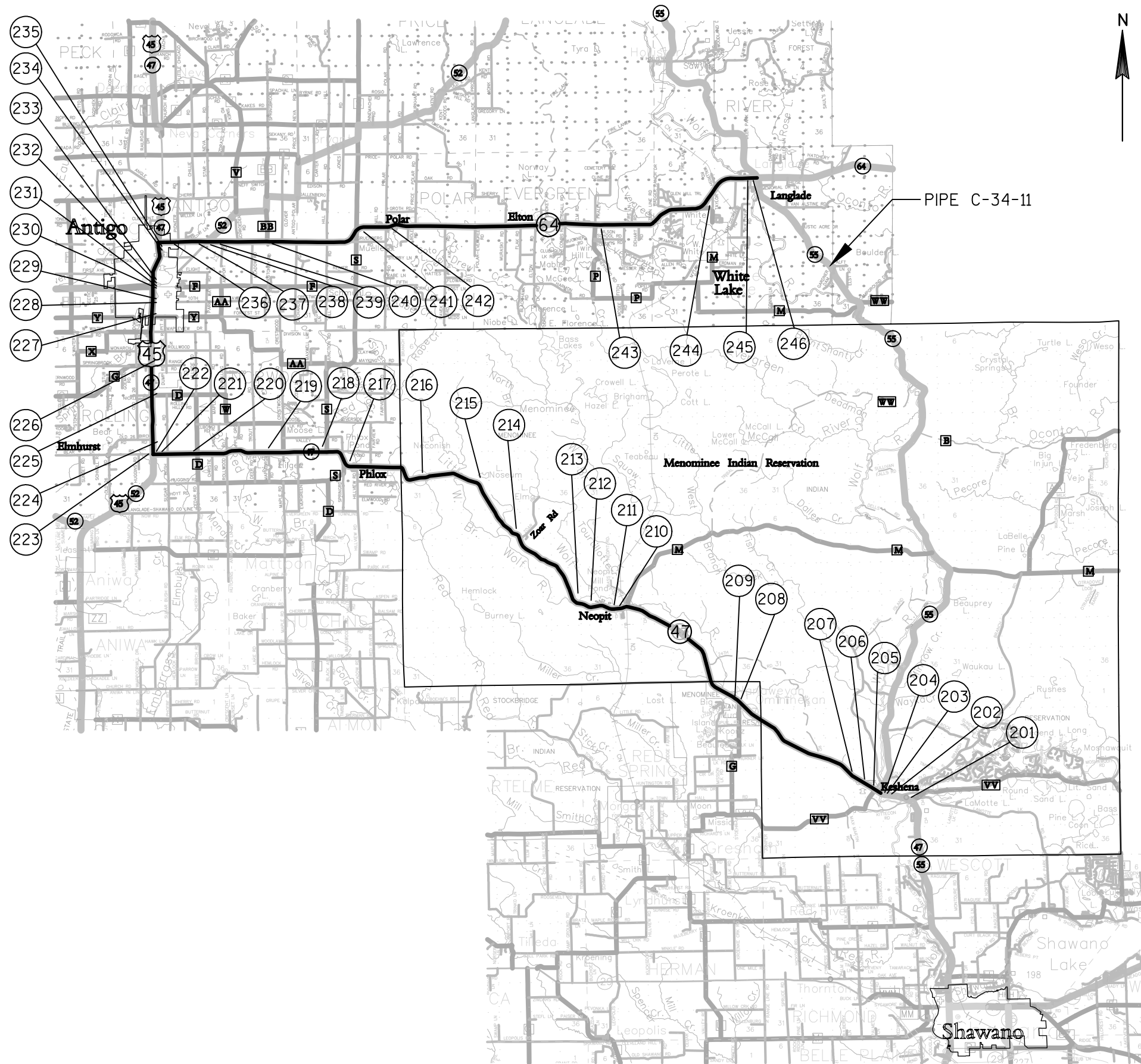


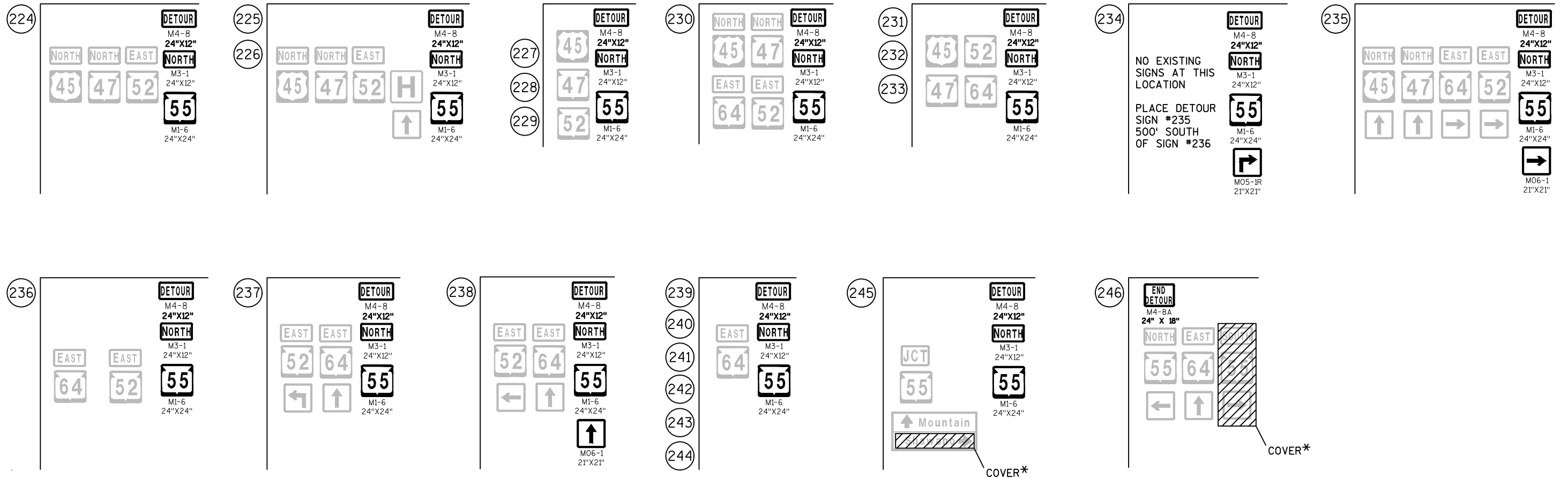


* PAID FOR AS TRAFFIC CONTROL DETOUR SIGN



* PAID FOR AS TRAFFIC CONTROL DETOUR SIGN





* PAID FOR AS TRAFFIC CONTROL DETOUR SIGN

DATE 23FEB16		E S T I M A T E O F Q U A N T I T I E S			
LINE				9155-14-70	
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0010	201.0205	Grubbing	STA	6.000	6.000
0020	203.0100	Removing Small Pipe Culverts	EACH	4.000	4.000
0030	204.0115	Removing Asphaltic Surface Butt Joints	SY	1,462.000	1,462.000
0040	204.0120	Removing Asphaltic Surface Milling	SY	98,600.000	98,600.000
0050	204.0180	Removing Delineators and Markers	EACH	62.000	62.000
0060	204.0270	Abandoning Culvert Pipes 01. 24-INCH	EACH	1.000	1.000
0070	204.0270	Abandoning Culvert Pipes 02. 12"	EACH	1.000	1.000
		UNDERDRAIN			
0080	204.0270	Abandoning Culvert Pipes 03. 18"	EACH	1.000	1.000
		Underdrain			
0090	205.0100	Excavation Common	CY	1,380.000	1,380.000
0100	208.0100	Borrow	CY	104.000	104.000
0110	209.0100	Backfill Granular	CY	100.000	100.000
0120	209.0200.S	Backfill Controlled Low Strength	CY	22.300	22.300
0130	209.0300.S	Backfill Coarse Aggregate (size) 01. NO	CY	3.000	3.000
		2			
0140	211.0100	Prepare Foundation for Asphaltic Paving	LS	1.000	1.000
		(project) 01. 9155-14-70			
0150	211.0400	Prepare Foundation for Asphaltic	STA	642.000	642.000
		Shoulders			
0160	213.0100	Finishing Roadway (project) 01.	EACH	1.000	1.000
		9155-14-70			
0170	305.0110	Base Aggregate Dense 3/4-Inch	TON	5,650.000	5,650.000
0180	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	900.000	900.000
0190	305.0500	Shaping Shoulders	STA	699.000	699.000
0200	440.4410	Incentive IRI Ride	DOL	26,520.000	26,520.000
0210	455.0605	Tack Coat	GAL	8,330.000	8,330.000
0220	460.2000	Incentive Density HMA Pavement	DOL	8,960.000	8,960.000
0230	460.4110.S	Reheating HMA Pavement Longitudinal	LF	34,984.000	34,984.000
		Joints			
0240	460.5224	HMA Pavement 4 LT 58-28 S	TON	14,225.000	14,225.000
0250	465.0110	Asphaltic Surface Patching	TON	40.000	40.000
0260	465.0475	Asphalt Center Line Rumble Strips	LF	26,870.000	26,870.000
		2-Lane Rural			
0270	522.0324	Culvert Pipe Reinforced Concrete Class	LF	124.000	124.000
		IV 24-Inch			
0280	522.1024	Apron Endwalls for Culvert Pipe	EACH	4.000	4.000
		Reinforced Concrete 24-Inch			
0290	523.0153	Culvert Pipe Reinforced Concrete	LF	128.000	128.000
		Horizontal Elliptical Class HE-III			
		53x83-Inch			
0300	523.0553	Apron Endwalls for Culvert Pipe	EACH	2.000	2.000
		Reinforced Concrete Horizontal			
		Elliptical 53x83-Inch			
0310	606.0100	Riprap Light	CY	15.000	15.000
0320	606.0200	Riprap Medium	CY	5.000	5.000
0330	618.0100	Maintenance And Repair of Haul Roads	EACH	1.000	1.000
		(project) 01. 9155-14-70			
0340	619.1000	Mobilization	EACH	1.000	1.000
0350	625.0100	Topsoil	SY	2,800.000	2,800.000
0360	628.1504	Silt Fence	LF	2,731.000	2,731.000
0370	628.1520	Silt Fence Maintenance	LF	2,731.000	2,731.000
0380	628.1905	Mobilizations Erosion Control	EACH	4.000	4.000
0390	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0400	628.2008	Erosion Mat Urban Class I Type B	SY	2,790.000	2,790.000
0410	628.7555	Culvert Pipe Checks	EACH	4.000	4.000

DATE 23FEB16		E S T I M A T E O F Q U A N T I T I E S			
LINE					9155-14-70
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0420	628.7570	Rock Bags	EACH	213.000	213.000
0430	629.0210	Fertilizer Type B	CWT	3.200	3.200
0440	630.0130	Seeding Mixture No. 30	LB	85.000	85.000
0450	633.0100	Delineator Posts Steel	EACH	19.000	19.000
0460	633.0500	Delineator Reflectors	EACH	19.000	19.000
0470	633.5200	Markers Culvert End	EACH	44.000	44.000
0480	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	88.000	88.000
0490	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	5.000	5.000
0500	634.0620	Posts Wood 4x6-Inch X 20-FT	EACH	8.000	8.000
0510	637.2210	Signs Type II Reflective H	SF	569.000	569.000
0520	637.2230	Signs Type II Reflective F	SF	132.000	132.000
0530	638.2602	Removing Signs Type II	EACH	93.000	93.000
0540	638.3000	Removing Small Sign Supports	EACH	82.000	82.000
0550	642.5201	Field Office Type C	EACH	1.000	1.000
0560	643.0100	Traffic Control (project) 01. 9155-14-70	EACH	1.000	1.000
0570	643.0300	Traffic Control Drums	DAY	3,250.000	3,250.000
0580	643.0420	Traffic Control Barricades Type III	DAY	236.000	236.000
0590	643.0705	Traffic Control Warning Lights Type A	DAY	230.000	230.000
0600	643.0900	Traffic Control Signs	DAY	2,975.000	2,975.000
0610	643.1050	Traffic Control Signs PCMS	DAY	28.000	28.000
0620	643.2000	Traffic Control Detour (project) 01. 9155-14-70	EACH	1.000	1.000
0630	643.3000	Traffic Control Detour Signs	DAY	1,830.000	1,830.000
0640	645.0120	Geotextile Fabric Type HR	SY	20.000	20.000
0650	645.0130	Geotextile Fabric Type R	SY	65.000	65.000
0660	646.0106	Pavement Marking Epoxy 4-Inch	LF	118,700.000	118,700.000
0670	646.0406	Pavement Marking Same Day Epoxy 4-Inch	LF	49,600.000	49,600.000
0680	647.0566	Pavement Marking Stop Line Epoxy 18-Inch	LF	15.000	15.000
0690	648.0100	Locating No-Passing Zones	MI	6.380	6.380
0700	649.0402	Temporary Pavement Marking Paint 4-Inch	LF	46,500.000	46,500.000
0710	650.6000	Construction Staking Pipe Culverts	EACH	3.000	3.000
0720	650.8000	Construction Staking Resurfacing Reference	LF	34,974.000	34,974.000
0730	650.9910	Construction Staking Supplemental Control (project) 01. 9155-14-70	LS	1.000	1.000
0740	650.9920	Construction Staking Slope Stakes	LF	644.000	644.000
0750	690.0150	Sawing Asphalt	LF	182.000	182.000
0760	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	1,200.000	1,200.000
0770	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	600.000	600.000
0780	SPV.0060	Special 01. CULVERT PIPE TRANSITIONS	EACH	3.000	3.000
0790	SPV.0105	Special 01. TEMPORARY WATER DIVERSION - DEMPSTER	LS	1.000	1.000
0800	SPV.0180	Special 01. PROTECTIVE THERMOPLASTIC COATING AT SNOWMOBILE TRAIL CROSSINGS	SY	50.000	50.000

<u>GRUBBING</u>					201.0205
					GRUBBING
STATION	STATION	LOCATION	COMMENTS	(STA)	
49+20 LT	49+80 LT	LT	CULVERT 34-055-004	1	
130+00	134+00	LT & RT	CULVERT C-34-11	4	
338+40 LT	338+80 LT	LT	CULVERT 34-055-020	1	
TOTALS:				6	

REMOVING ASPHALTIC SURFACE MILLING					204.0120
					REMOVING
					ASPHALTIC
					SURFACE
					MILLING
STATION		STATION	LOCATION	COMMENTS	(SY)
4+60	-	148+00	STH 55	MAINLINE	39400
148+00	-	352+34	STH 55	MAINLINE	55580
21+00 LT			LOG CABIN ROAD	SIDE ROAD	185
37+40 LT			LOG CABIN DRIVE	SIDE ROAD	185
46+90 LT			CTH M	SIDE ROAD	285
53+75 RT			CTH WW	SIDE ROAD	185
93+24 RT			ELST ROAD	SIDE ROAD	185
128+77 RT			MARKTON DRIVE – SOUTH	SIDE ROAD	185
138+28 RT			MARKTON DRIVE – NORTH	SIDE ROAD	185
218+50 RT			DOEMEL LANE	SIDE ROAD	185
283+32 RT			VAN ALSTINE ROAD	SIDE ROAD	185
312+39 LT			JAGLA LANE	SIDE ROAD	185
327+12 LT			ROCKY RIPS ROAD	SIDE ROAD	185
340+54 RT			MEMORIAL DRIVE	SIDE ROAD	185
347+19 RT			BLUE GOOSE DRIVE	SIDE ROAD	185
15+75 LT			CE	DRIVEWAY	136
19+00 LT			CE	DRIVEWAY	136
103+25 RT			PE	DRIVEWAY	110
171+44 LT			PE	DRIVEWAY	110
226+95 RT			PE	DRIVEWAY	110
228+53 LT			PE	DRIVEWAY	110
332+10 LT			CE	DRIVEWAY	136
351+94 RT			CE	DRIVEWAY	136
UNDISTRIBUTED					131
TOTAL:					98600

<u>REMOVING SMALL PIPE CULVERTS</u>					203.0100
					REMOVING
					SMALL
					PIPE
					CULVERTS
STATION	LOCATION	APPROXIMATE LENGTH (LF)	DIAMETER (INCHES)	DEPTH TO TOP OF PIPE (LF)	(EACH)
49+25	STH 55	5 (*)	18	3	1
49+50	STH 55	28 (*)	24	3	1
132+02	STH 55	135	30	13	1
338+58	STH 55	100	24	6	1
TOTAL					4
(*) NOTE: PARTIAL REMOVAL OF PIPE ENDS PRIOR TO PIPE GROUTING (SEE PLAN)					

REMOVING DELINEATORS AND MARKERS			204.0180
			REMOVING
			DELINEATORS
			AND MARKERS
STATION	LOCATION (CULVERT NO.)	COMMENTS	(EACH)
20+10	34-055-001	CULVERT END MARKERS	2
22+00 LT - 30+00 LT		ROADSIDE DELINEATORS	17
37+50	34-055-002	CULVERT END MARKERS	2
45+80	34-055-003	CULVERT END MARKERS	2
49+53	34-055-004	CULVERT END MARKERS	2
49+34	34-055-004-B	CULVERT END MARKERS	1
54+58	34-055-005	CULVERT END MARKERS	2
58+53	34-055-006	CULVERT END MARKERS	2
71+17	34-055-007	CULVERT END MARKERS	2
96+94	34-055-008	CULVERT END MARKERS	2
132+02	C-34-11	CULVERT END MARKERS	2
154+54	34-055-010	CULVERT END MARKERS	2
183+94	34-055-011	CULVERT END MARKERS	2
198+37	34-055-012	CULVERT END MARKERS	2
232+94	34-055-013	CULVERT END MARKERS	2
244+53	34-055-014	CULVERT END MARKERS	2
263+94	34-055-015	CULVERT END MARKERS	2
274+34	34-055-016	CULVERT END MARKERS	2
304+94	34-055-017	CULVERT END MARKERS	2
322+08	34-055-018	CULVERT END MARKERS	2
329+09	34-055-019	CULVERT END MARKERS	2
338+58	34-055-020	CULVERT END MARKERS	2
344+40	34-055-021	CULVERT END MARKERS	2
348+77	34-055-022	CULVERT END MARKERS	2
TOTAL			62

REMOVING ASPHALTIC SURFACE BUTT JOINTS			204.0115
			REMOVING
			ASPHALTIC
			SURFACE
			MILLING
			BUTT JOINTS
STATION		LOCATION	(SY)
MAINLINE			
3+60 -		4+60	STH 55
352+34 -		353+34	STH 55
SIDE ROADS			
21+00 LT		LOG CABIN ROAD	27
37+40 LT		LOG CABIN DRIVE	27
46+90 LT		CTH M	27
53+75 RT		CTH WW	27
93+24 RT		ELST ROAD	27
125+08 LT		GARDNER DAM ROAD	27
128+77 RT		MARKTON DRIVE - SOUTH	27
138+28 RT		MARKTON DRIVE - NORTH	27
218+50 RT		DOEMEL LANE	27
283+32 LT		VAN ALSTINE ROAD	27
312+39 LT		JAGLA LANE	27
327+12 LT		ROCKY RIPS ROAD	27
340+54 RT		MEMORIAL DRIVE	27
347+19 RT		BLUE GOOSE DRIVE	27
ENTRANCES			
15+75 LT		CE	31
19+00 LT		CE	31
103+25 RT		PE	22
171+44 LT		PE	22
226+95 RT		PE	22
228+53 LT		PE	22
332+10 LT		CE	180
351+94 RT		CE	31
TOTAL:			1462

ABANDONING CULVERT PIPES					204.0270.01	204.0270.02	204.0270.03	209.0200.S	209.0300.S
BACKFILL CONTROLLED LOW STRENGTH					ABANDONING	ABANDONING	ABANDONING	BACKFILL	BACKFILL
BACKFILL COUSRE AGGREGATE (SIZE) NO. 2					CULVERT	CULVERT	CULVERT	CONTROLLED	COARSE
					PIPES,	PIPES,	PIPES,	LOW	AGGEGATE
					24" CMCP	12" UNDERDRAIN	18" CMCP	STRENGTH	SIZE NO. 2
STATION	STATION	LOCATION	COMMENTS		(EACH)	(EACH)	(EACH)	(CY)	(CY)
49+53		STH 55	EXISITING 24" CMCP		1	-	-	9.3	-
49+34		STH 55	EXISTING 18" CMCP		-	-	1	8.0	-
48+45 RT	51+18 RT	STH 55	EXISTING 12" UNDERDRAIN CMCP		-	1	-	5.0	-
49+34 LT		STH 55	OUTFALL END OF 18" EXISITNG CMCP		-	-	-	-	1
49+53 LT		STH 55	OUTFALL END OF EXISTING 24" CMCP		-	-	-	-	2
TOTALS:					1	1	1	22.3	3
(*) NOTE: EXISTING 12" UNDERDRAIN IS COMPOSED OF A 12" CMCP (STA 48+45, 30' RT TO STA 51+18, 30' RT) CONNECTED TO A 18" CMCP (STA 49+34, 44' LT - 29' RT)									

PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS					211.0400
					PREPARE
					FOUNDATION
					FOR
					ASPHALTIC
					SHOULDERS
STATION	STATION	COMMENTS			(STA)
3+60 LT	- 51+75 LT	PAVED SHOULDER WIDENING			48
55+75 LT	- 317+00 LT	PAVED SHOULDER WIDENING			262
332+70 LT	- 353+34 LT	PAVED SHOULDER WIDENING			21
3+60 RT	- 10+50 RT	PAVED SHOULDER WIDENING			7
37+40 RT	- 51+75 RT	PAVED SHOULDER WIDENING			21
53+75 RT	- 317+00 RT	PAVED SHOULDER WIDENING			264
331+00 RT	- 337+50 RT	PAVED SHOULDER WIDENING			7
340+54 RT	- 351+80 RT	PAVED SHOULDER WIDENING			12
TOTAL					642

EARTHWORK					205.0100		209.0100
					EXCAVATION	208.0100	GRANULAR
					COMMON	BORROW	BACKFILL
STATION	STATION	LOCATION			(CY)	(CY)	(CY)
SLOPE EMBANKMENT (SEE CROSS SECTIONS)							
STA 22+00 LT	- STA 24+50 LT	STH 55			18	8	-
STA 29+50 LT	- STA 33+44 LT	STH 55			20	6	-
PIPE REPLACEMENTS (TRANSITION CUT AT CULVERT PIPE TRANSITIONS) (SEE CONSTRUCTION DETAIL)							
STA 49+59		PIPE 34-055-004			284	-	(**)
STA 132+02		PIPE C-34-11			328	-	(**)
STA 338+58		PIPE 34-055-020			85	-	(**)
STA 338+54 LT	(*)	DRAINAGE DITCH EXCAVATION (*)			70	-	-
PIPE REPLACEMENTS (EARTHWORK) (SEE CROSS SECTIONS AND CONSTRUCTION DETAIL)							
STA 49+04	- STA 50+14	EXCAVATION FOR NEW PAVEMENT STRUCTURE AND SHOULDER SLOPES			200	10	-
STA 130+00	- STA 134+00	EXCAVATION FOR NEW PAVEMENT STRUCTURE AND SHOULDER SLOPES			255	70	-
STA 338+26	- STA 338+90	EXCAVATION FOR NEW PAVEMENT STRUCTURE AND SHOULDER SLOPES			120	10	-
UNDISTRIBUTED					-	-	100
TOTALS:					1380	104	100
							(**)
(*) INCLUDES EXCAVATION TO BOTTOM OF PROPOSED RIPRAP. FINISHED ELEVATIONS ARE GIVEN IN "PLAN: PIPE 34-055-020".							
QUANTITIES.							
(**) NOTE: ITEM USAGE "AS NEEDED" IF TRENCH EXCAVATION MATERIAL IS INSUFFIECENT IN QUANTITY TO BACKFILL NEW PIPES. QUANTITY IS APPROXIMATE.							
NOTE: EXPANSION FACTOR OF 1.3 USED FOR BORROW.							

SHAPING SHOULDERS					305.0500
					SHAPING
					SHOULDERS
STATION	STATION	COMMENTS			(STA)
3+60 LT	- 353+34 LT	LT SHOULDER			350
3+60 RT	- 351+80 RT	RT SHOULDER			349
TOTAL					699

BASE AGGREGATE DENSE						305.0110	305.0120	
						BASE	BASE	
						AGGREGATE	AGGREGATE	
						DENSE	DENSE	
						³ / ₄ -INCH	1 ¹ / ₄ -INCH	
STATION			STATION			COMMENTS	(TON)	(TON)
3+60	LT	-	148+00	LT	LT SHOULDER	800	-	
3+60	RT	-	148+00	RT	RT SHOULDER	800	-	
148+00	LT	-	353+34	LT	LT SHOULDER	1070	-	
148+00	RT	-	351+80	LT	RT SHOULDER	1400	-	
21+00	LT		LOG CABIN ROAD		SIDE ROAD RADIUS RETURN	20	-	
37+40	LT		LOG CABIN DRIVE		SIDE ROAD RADIUS RETURN	20	-	
46+90	LT		CTH M		SIDE ROAD RADIUS RETURN	30	-	
49+59			PIPE 34-055-004		CULVERT PIPE TRANSITION	-	351	
53+75	RT		CTH WW		SIDE ROAD RADIUS RETURN	30	-	
93+24	RT		ELST ROAD		SIDE ROAD RADIUS RETURN	20	-	
128+77	RT		MARKTON DRIVE - SOUTH		SIDE ROAD RADIUS RETURN	20	-	
132+02			PIPE 34-055-009 (C-34-11)		CULVERT PIPE TRANSITION	-	312	
138+28	RT		MARKTON DRIVE - NORTH		SIDE ROAD RADIUS RETURN	20	-	
218+50	RT		DOEMEL LANE		SIDE ROAD RADIUS RETURN	20	-	
283+32	RT		VAN ALSTINE ROAD		SIDE ROAD RADIUS RETURN	20	-	
312+39	LT		JAGLA LANE		SIDE ROAD RADIUS RETURN	20	-	
327+12	LT		ROCKY RIPS ROAD		SIDE ROAD RADIUS RETURN	20	-	
338+58			PIPE 34-055-020		CULVERT PIPE TRANSITION	-	182	
340+54	RT		MEMORIAL DRIVE		SIDE ROAD RADIUS RETURN	20	-	
347+19	RT		BLUE GOOSE DRIVE		SIDE ROAD RADIUS RETURN	20	-	
PE/FE/CE						DRIVEWAYS	1200	-
UNDISTRIBUTED							100	55
						TOTALS:	5650	900

<u>RIPRAP</u>						645.0120	645.0130
<u>GEOTEXTILE FABRIC</u>				606.0100	606.0200	GEOTEXTILE	GEOTEXTILE
				RIPRAP	RIPRAP	FABRIC	FABRIC
				LIGHT	MEDIUM	TYPE HR	TYPE R
STATION		COMMENTS		(CY)	(CY)	(SY)	(SY)
STA 49+59	LT	DISCHARGE END OF PIPE 34-055-004		-	5	20	-
STA 338+54	RT	INLET END OF PIPE 34-055-020		15	-	-	65
TOTALS:				15	5	20	65

<u>CULVERT PIPE REINFORCED CONCRETE</u>						
<u>CUVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL</u>						
<u>APRON ENDWALLS FOR CULVERT PIPE REINFORCE CONCRETE</u>						
			522.1024	523.0153	523.0553	
			APRON	CULVERT PIPE	APRON	
		522.0324	ENDWALLS	REINFORCED	ENDWALLS	
		CULVERT PIPE	FOR	CONCRETE	FOR	
		REINFORCED	CULVERT PIPE	HORIZONTAL	CULVERT PIPE	
		CONCRETE	REINFORCED	ELLIPTICAL	CONCRETE	SPV.0060.01
		CLASS IV	CONCRETE	CLASS HE-III	HORIZONTAL	CULVERT
		24-INCH	24-INCH	53x83-INCH	ELLIPTICAL	PIPE
		(LF)	(EACH)	(LF)	HORIZONTAL	TRANSITIONS
STATION	COMMENTS	(LF)	(EACH)	(LF)	(EACH)	(EACH)
STA 49+59	CULVERT 34-055-004	56	2	-	-	1
STA 132+02	CULVERT C-34-11	-	-	128	2	1
STA 338+58	CULVERT 34-055-020	68	2	-	-	1
TOTALS:		124	4	128	2	3
JOINT TIES FOR CONCRETE PIPE TO BE PLACED AT ALL JOINTS. JOINT TIES INCIDENTAL TO CULVERT PIPE PAY ITEMS.						

LANDSCAPING							630.0130	629.0210	SEEDING	
							625.0100	FERTILIZER	MIXTURE	
							TOPSOIL	TYPE B	NO. 30	
							(SY)	(CWT)	(LB)	
STATION			STATION			LOCATION				
STA 22+00	LT	-	STA 24+50	LT		SLOPE EMBANKMENT	239	0.2	4.3	
STA 29+50	LT	-	STA 33+44	LT		SLOPE EMBANKMENT	447	0.3	8.0	
STA 48+50	LT	-	STA 50+50	LT		CULVERT 34-055-004	231	0.2	4.2	
STA 48+50	RT	-	STA 50+50	RT		CULVERT 34-055-004	175	0.1	3.2	
STA 130+00	LT	-	STA 134+00	LT		CULVERT C-34-11	566	0.4	10.2	
STA 130+00	RT	-	STA 134+00	RT		CULVERT C-34-11	889	0.6	16.0	
STA 314+48	LT	-	STA 332+16	RT		S.E. CORRECTION SECTION	-	0.5	14.1	
STA 314+48	LT	-	STA 332+16	RT		S.E. CORRECTION SECTION	-	0.6	17.7	
STA 338+00	LT	-	STA 339+00	LT		CULVERT 34-055-020	86	0.1	1.5	
STA 338+00	RT	-	STA 339+00	RT		CULVERT 34-055-020	63	0.1	1.1	
PROJECT LIMITS							UNDISTRIBUTED	104	0.3	4.7
							TOTALS:	2800	3.2	85.0

NOTES: TOPSOIL AREAS INCLUDE 3' FOR ROUNDING PAST THE SLOPE INTERCEPTS.
EROSION MAT, SEED, AND FERTILIZER AREAS EQUAL TOPSOIL AREAS.

HMA PAVEMENT

					460.5224	460.4110.S		
					HMA	REHEATING HMA	465.0110	
					PAVEMENT	PAVEMENT	ASPHALTIC	
					4 LT	LONGITUDINAL	SURFACE	
					58-28 S	JOINTS	PATCHING	
STATION	STATION	LOCATION	COMMENTS	COAT	(GAL)	(TON)	(LF)	(TON)
3+60	-	21+00	STH 55	MAINLINE (*)	412	680	1740	-
21+00	-	37+40	STH 55	MAINLINE (*)	408	650	1640	-
37+40	-	46+90	STH 55	MAINLINE (*)	210	360	950	-
46+90	-	53+75	STH 55	MAINLINE (*)	168	270	685	-
53+75	-	93+24	STH 55	MAINLINE (*)	862	1510	3949	-
93+24	-	125+08	STH 55	MAINLINE (*)	695	1220	3184	-
125+08	-	138+28	STH 55	MAINLINE (*)	288	500	1320	-
138+28	-	148+00	STH 55	MAINLINE (*)	212	380	972	-
148+00	-	218+50	STH 55	MAINLINE (*)	1535	2550	7050	-
218+50	-	283+32	STH 55	MAINLINE (*)	1412	2350	6482	-
283+32	-	312+39	STH 55	MAINLINE (*)	634	1050	2907	-
312+39	-	314+48	STH 55	MAINLINE (*)	46	80	219	-
314+48	-	327+12	STH 55	S.E. CORRECTIVE LEVELING	92	250	-	-
314+48	-	327+12	STH 55	MAINLINE (*)	316	460	1264	-
327+12	-	332+16	STH 55	S.E. CORRECTIVE LEVELING	48	50	-	-
327+12	-	332+16	STH 55	MAINLINE (*)	126	180	504	-
332+16	-	340+54	STH 55	MAINLINE (*)	190	305	838	-
340+54	-	347+16	STH 55	MAINLINE (*)	144	240	662	-
347+16	-	353+34	STH 55	MAINLINE (*)	148	250	618	-
21+00 LT		LOG CABIN ROAD	SIDE ROAD		26	40	-	-
37+40 LT		LOG CABIN DRIVE	SIDE ROAD		26	40	-	-
46+90 LT		CTH M	SIDE ROAD		26	40	-	-
53+75 RT		CTH WW	SIDE ROAD		26	40	-	-
93+24 RT		ELST ROAD	SIDE ROAD		26	40	-	-
128+77 RT		MARKTON DR. - SOUTH	SIDE ROAD		26	40	-	-
138+28 RT		MARKTON DR. - NORTH	SIDE ROAD		26	40	-	-
218+50 RT		DOEMEL LANE	SIDE ROAD		26	40	-	-
283+32 RT		VAN ALSTINE ROAD	SIDE ROAD		26	40	-	-
312+39 RT		JAGLA LANE	SIDE ROAD		26	40	-	-
318+20 RT		C.E. (ONLY IF CE IS PAVED)	CE		0	80	-	-
327+12 LT		ROCKY RIPS ROAD	SIDE ROAD		26	40	-	-
340+54 RT		MEMEORIAL DRIVE	SIDE ROAD		26	40	-	-
347+19 RT		BLUE GOOSE DRIVE	SIDE ROAD		26	40	-	-
49+59		PIPE 34-055-004	TRANSITION CUT PATCHING		-	65	-	-
132+02		PIPE C-34-11	TRANSITION CUT PATCHING		-	65	-	-
338+58		PIPE 34-055-020	TRANSITION CUT PATCHING		-	50	-	-
UNDISTRIBUTED		PROJECT LIMITS			46	110	-	40
TOTALS:					8330	14225	34984	40

(*) INCLUDES PAVED SHOULDER WIDENING

(**) AS NEEDED AFTER MILLING FOR POTHOLES

ASPHALTIC CENTER LINE RUMBLE STRIP 2-LANE RURAL
PAVEMENT MARKING

ASPHALTIC CENTER LINE RUMBLE STRIP 2-LANE RURAL									646.0406	647.0566		649.0402			
PAVEMENT MARKING									PAVEMENT MARKING	PAVEMENT MARKING		TEMPORARY PAVEMENT MARKING			
									465.0475 ASPHALTIC CENTER LINE RUMBLE STRIP 2-LANE RURAL (LF)	646.0106 PAVEMENT MARKING EPOXY 4-INCH (YELLOW) (LF)	646.0106 PAVEMENT MARKING EPOXY 4-INCH (WHITE) (LF)	646.0406 PAVEMENT MARKING SAME DAY EPOXY 4-INCH (YELLOW) (LF)	647.0566 PAVEMENT MARKING STOP LINE EPOXY 18-INCH (WHITE) (LF)	648.0100 LOCATING NO-PASSING ZONES (MI)	649.0402 PAVEMENT MARKING PAINT 4-INCH (YELLOW) (LF)
STATION		STATION		LOCATION		COMMENTS									
3+60		-	353+76		CENTERLINE	TEMPORARY PAVT MRKG (AFTER MILLING ASPH PAVT)		-	-	-	-	-	-	46478	
3+60		-	353+76		CENTERLINE	SAME DAY PERMANENT PAVT MRKG (BEFORE CUTTING RUMBLE STRIPS)		-	-	-	49558	-	-	-	
3+60		-	353+76		CENTERLINE	PERMANENT PAVT MRKG (AFTER CUTTING RUMBLE STRIPS)		-	49558	-	-	-	-	-	
3+60	LT	-	353+76	LT	EDGE LINE	PERMANENT PAVEMENT MARKING (DEDUCT 450' FOR SIDEROADS)		-	-	34566	-	-	-	-	
3+60	RT	-	353+76	RT	EDGE LINE	PERMANENT PAVEMENT MARKING (DEDUCT 500' FOR SIDE ROADS)		-	-	34516	-	-	-	-	
353+76	RT		STH 64 INTERSECTION			18" STOP BAR (PERMANENT PAVEMENT MARKING)		-	-	-	-	15	-	-	
3+60	-		340+30		CENTERLINE (RUMBLE STRIP)	ASPHALTIC CENTER LINE RUMBLE STRIP 2-LANE RURAL		26870	-	-	-	-	6.38	-	
UNDISTRIBUTED									-	42	18	42	-	-	22
SUB-TOTALS:									26870	49600	69100	49600	15	6.38	46500
TOTALS:									26870	118700		49600	15	6.38	46500

NOTES:

STATIONING IS APPROXIMATE.

PAVEMENT MARKING TO BE APPLIED AS PER THE APPROPRIATE STANDARD DETAIL DRAWING (SDD) AND AS PER "SPOTTING" FOR LOCATING NO-PASSING ZONES PAY ITEM.

EROSION CONTROL

						628.1910							
						628.1504	628.1520	628.1905	MOBILIZATIONS	628.2008	628.7555		
						SILT	SILT	MOBILIZATIONS	EMERGENCY	EROSION MAT	CULVERT	628.7570	
						FENCE	FENCE	EROSION	EROSION	URBAN	PIPE	ROCK	
						(LF)	(LF)	CONTROL	CONTROL	CLASS I TYPE B	CHECKS	BAGS	
						(LF)	(LF)	(EACH)	(EACH)	(SY)	(EACH)	(EACH)	
PROJECT LIMITS						-	-	4	3	-	-	-	
STA 22+00	LT	-	STA 24+50	LT	SLOPE EMBANKMENT	260	260	-	-	239	-	-	
STA 29+50	LT	-	STA 33+44	LT	SLOPE EMBANKMENT	405	405	-	-	447	-	-	
STA 49+00	LT	-	STA 24+50	LT	CULVERT 34-055-004	110	110	-	-	231	-	-	
STA 49+00	RT	-	STA 24+50	RT	CULVERT 34-055-004	110	110	-	-	175	1	10	
STA 129+50	LT	-	STA 134+50	LT	CULVERT C-34-11	570	570	-	-	566	-	60	
STA 129+50	RT	-	STA 134+50	RT	CULVERT C-34-11	570	570	-	-	889	-	90	
STA 338+25	LT	-	STA 339+00	LT	CULVERT 34-055-020	80	80	-	-	86	-	-	
STA 338+25	RT	-	STA 339+00	RT	CULVERT 34-055-020	80	80	-	-	63	1	10	
UNDISTRIBUTED						546	546	-	-	94	2	43	
TOTALS:						2,731	2731	4	3	2790	4	213	

NOTES: ROCK BAGS TO BE USED AS SHOWN IN CONSTRUCTION DETAILS AS A CULVERT PIPE CHECK OR USED AS SILT FENCE RELIEF.

ROCK BAGS USED AS CULVERT PIPE CHECK WILL BE PLACED AT THE INLET SIDE OF THE PIPE, AS SHOWN IN THE CONSTRUCTION DETAIL.

TEMPORARY WATER DIVERSION - DEMSPTER CREEK

		SPV.0105.01
		TEMPORARY
		WATER
		DIVERSION -
		DEMPSTER
		CREEK
STATION	LOCATION	(LS)
STA 132+02	CULVERT C-34-11	1
TOTAL:		1

MARKERS CULVERT END

633.5200
MARKERS
CULVERT

STATION	LOCATION (CULVERT NO.)	COMMENTS	END (EACH)
20+10	34-055-001	CULVERT END MARKERS	2
37+50	34-055-002	CULVERT END MARKERS	2
45+80	34-055-003	CULVERT END MARKERS	2
49+59	34-055-004	CULVERT END MARKERS	2
54+58	34-055-005	CULVERT END MARKERS	2
58+53	34-055-006	CULVERT END MARKERS	2
71+17	34-055-007	CULVERT END MARKERS	2
96+94	34-055-008	CULVERT END MARKERS	2
132+02	C-34-11	CULVERT END MARKERS	2
154+54	34-055-010	CULVERT END MARKERS	2
183+94	34-055-011	CULVERT END MARKERS	2
198+37	34-055-012	CULVERT END MARKERS	2
232+94	34-055-013	CULVERT END MARKERS	2
244+53	34-055-014	CULVERT END MARKERS	2
263+94	34-055-015	CULVERT END MARKERS	2
274+34	34-055-016	CULVERT END MARKERS	2
304+94	34-055-017	CULVERT END MARKERS	2
322+08	34-055-018	CULVERT END MARKERS	2
329+09	34-055-019	CULVERT END MARKERS	2
338+58	34-055-020	CULVERT END MARKERS	2
344+40	34-055-021	CULVERT END MARKERS	2
348+77	34-055-022	CULVERT END MARKERS	2
TOTAL			44

DELINEATORS AND REFLECTORS

633.0100
DELINEATOR
POSTS
STEEL
633.0500
DELINEATOR
REFLECTORS

STATION	STATION	COMMENTS	(EACH)	(EACH)
22+00 LT	- 31+00 LT	ROADSIDE DELINEATOR	19	19
			19	19

NOTE: 50-FOOT SPACING

PROTECTIVE THERMOPLASTIC COATING AT
SNOWMOBILE TRAIL CROSSINGS

SPV.01 80.01
PROTECTIVE
THERMOPLASTIC
COATING AT
SNOWMOBILE
TRAIL
CROSSINGS

STATION	LOCATION	(SY)
STA 349+90	SNOWMOBILE TRAIL CROSSING	50
TOTAL:		50

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PERMANENT SIGNING				TABLE 1										TABLE 1	
						638.2602	638.3000	637.2210	637.2230	634.0616	634.0618	634.0620			
						REMOVING	REMOVING	SIGNS	SIGNS	WOOD POSTS	WOOD POSTS	WOOD POSTS			
						SIGNS	SMALL SIGN	TYPE II	TYPE II	4X6 INCH	4X6 INCH	4X6 INCH	MOUNT ON		
						TYPE II	SUPPORTS	REFLECTIVE H	REFLECTIVE F	16 F00T	18 F00T	20 F00T	SAME POST		
SIGN	#	STA	SIGN CODE	DESCRIPTION	SIZE (IN x IN)	(EACH)	(EACH)	(SF)	(SF)	(EACH)	(EACH)	(EACH)	AS SIGN #	COMMENTS	
1	3+60	RT	I2-2	LANGLADE CO	66" x 15"	1	1	6.88	-	2	-	-	-		
2	3+80	LT	I2-2R	MENOMINEE CO RESERVATION	66" x 24"	1	1	11.00	-	2	-	-	-		
3	4+00	RT	D7-61	NAT'L FOREST CAMPGROUND	60" x 36"	1	1	15.00	-	2	-	-	-		
4	5+00	RT	J4-1	NORTH 55	24" x 36"	1	1	6.00	-	1	-	-	-		
			M3-1		24" x 12"										
			M1-6		24" x 24"										
5	7+00	RT	R2-1	SPEED LIMIT 55	24" x 30"	-	-	5.00	-	1	-	-	-		
6	7+00	LT	SP-1	SLOW VEHICLE TURNOUTS NEXT 20 MILES	36" x 36"	1	1	9.00	-	1	-	-	-		
7	13+00	LT	W1-4R	ROAD CURVES AHEAD ARROW	30" x 30"	1	1	-	6.25	1	-	-	-	#7 & #8 ON	
8	13+00	LT	W13-1	45 MPH WARNING SIGN (YELLOW)	18" x 18"	1	-	-	2.25	-	-	-	8	SAME POST	
9	14+00	RT	W11-6	SNOWMOBILE CROSSING	30" x 30"	1	1	-	6.25	1	-	-	-		
10	20+80	LT	R1-1	STOP SIGN	30" x 30"	1	1	5.18	-	1	-	-	-		
LOG CABIN RD															
11	27+85	LT	W11-6	SNOWMOBILE CROSSING	30" x 30"	1	1		6.25	1	-	-	-		
12	36+70	RT	J1-1	JCT COUNTY M	24" x 39"	1	1	6.50	-	1	-	-	-		
			M2-1		21" x 15"										
			M1-5A		24" x 24"										
13	37+00	LT	R1-1	STOP SIGN	30" x 30"	1	1	5.18	-	1	-	-	-		
LOG CABIN RD															
14	40+50	RT	D1-1	WHITE LAKE W/LA	78" x 15"	1	1	8.13	-	2	-	-	-		
15	42+75	LT	R2-1	SPEED LIMIT 55	24" x 30"	-	-	5.00	-	1	-	-	-		
16	44+75	LT	J4-1	SOUTH 55	24" x 36"	1	1	6.00	-	1	-	-	-		
			M3-3		24" x 12"										
			M1-6		24" x 24"										
17	46+60	LT	R1-1	STOP	30" x 30"	1	1	5.18	-	1	-	-	-		
CTH M															
18	46+80	RT	J13-1	COUNTY M LA	24" x 45"	1	1	7.50	-	-	1	-	-		
			M1-5A		24" x 24"										
			M6-1		21" x 21"										
19	46+90	RT	J13-1	55 DA	24" x 45"	1	-	7.50	-	-	1	-	-	SIGN FACES CTH M	
			M1-6		24" x 24"										
			M6-4		21" x 21"										
20	47+20	LT	J13-1	COUNTY M RA	24" x 45"	0	-	7.50	-	-	1	-	-		
			M1-5A		24" x 24"										
			M6-1		21" x 21"										
21	47+75	RT	J1-1	JCT WW	24" x 39"	1	1	6.50	-	1	-	-	-		
			M2-1		21" x 15"										
			M1-5A		24" x 24"										
22	48+00	LT	R2-1	SPEED LIMIT 55	24" x 30"	-	-	5.00	-	1	-	-	-		
23	50+00	LT	D1-1	WHITE LAKE W/RA	78" x 15"	1	1	8.13	-	2	-	-	-		
24	53+00	LT	J1-1	JCT CTH M	24" x 39"	1	1	6.50	-	1	-	-	-		
			M2-1		21" x 15"										
			M1-5A		24" x 24"										
SHEET 1						SUB-TOTALS:	20	18	143	21	25	3	0		
PROJECT NO: 9155-14-70				HWY: STH 55			COUNTY: LANGLADE			MISCELLANEOUS QUANTITIES				SHEET:	E

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PERMANENT SIGNING				TABLE 2										TABLE 2	
					638.2602	638.3000	637.2210	637.2230	634.0616	634.0618	634.0620				
					REMOVING	REMOVING	SIGNS	SIGNS	WOOD POSTS	WOOD POSTS	WOOD POSTS				
					SIGNS	SMALL SIGN	TYPE II	TYPE II	4X6 INCH	4X6 INCH	4X6 INCH				
SIGN					TYPE II	SUPPORTS	REFLECTIVE H	REFLECTIVE F	16 F00T	18 F00T	20 F00T	MOUNT ON			
#	STA		SIGN CODE	DESCRIPTION	SIZE (IN x IN)	(EACH)	(EACH)	(SF)	(SF)	(EACH)	(EACH)	(EACH)	SAME POST	COMMENTS	
25	53+60	RT	J13-1 M1-5A M6-1	COUNTY WW RA	24" x 39" 24" x 24" 21" x 21"	1	1	6.50	-	1	-	-	-		
26	53+60	RT	D7-63R	NAT'L FOREST CAMPGROUND W/RA	60" x 36"	1	2	15.00	-	2	-	-	-	#26 & #27 ON	
27	53+60	RT	D7-63L	NAT'L FOREST CAMPGROUND W/LA	60" x 36"	1	-	15.00	-	-	-	-	26	SAME POST	
28	54+00	LT	J13-1 M1-5A M6-1	COUNTY WW LA	24" x 45" 24" x 24" 21" x 21"	1	1	7.50	-	-	1	-	-		
CTH W															
29	54+00	RT	R1-1	STOP	30" x 30"	1	1	5.18	-	1	-	-	-		
30	54+10	RT	J13-1 M1-6 M6-4	55 DA	24" x 45" 24" x 24" 21" x 21"	1	1	7.50	-	-	1	-	-		
31	55+00	RT	J4-1 M3-1 M1-6	NORTH 55	24" x 36" 24" x 12" 24" x 24"	1	1	6.00	-	1	-	-	-		
32	57+00	RT	R2-1	SPEED LIMIT 55	24" x 30"	-	-	5.00	-	1	-	-	-		
33	62+00	LT	J1-1 M2-1 M1-5A	JCT WW	24" x 39" 21" x 15" 24" x 24"	1	1	6.50	-	1	-	-	-		
ELST RD															
34	93+50	RT	R1-1	STOP	30" x 30"	1	1	5.18	-	1	-	-	-		
35	96+25	RT	S3-1	SCHOOL BUS STOP AHEAD	36" x 36"	1	1	-	9.00	1	-	-	-		
36	99+00	RT	W54-57	TRUCK ENTRANCE	30" x 30"	1	1	6.25	-	1	-	-	-		
37	101+50	LT	D7-61	NAT'L FOREST CAMPGROUND 1 MILE	60" x 36"	1	1	15.00	-	2	-	-	-		
38	118+00	LT	W54-57	TRUCK ENTRANCE	30" x 30"	1	1	6.25	-	1	-	-	-		
39	119+60	LT	S3-1	SCHOOL BUS STOP AHEAD	30" x 30"	1	1	-	6.25	1	-	-	-		
40	124+90	LT	R1-1	STOP	30" x 30"	1	1	5.18	-	1	-	-	-		
GARDNER DAM RD															
41	126+50	RT	W14-3	NO PASSING ZONE	48" x 36"	1	1	-	6.00	1	-	-	-		
42	127+20	LT	W14-3	NO PASSING ZONE	48" x 36"	1	1	6.00	-	1	-	-	-		
MARKTON RD															
43	129+00	RT	R1-1	STOP	30" x 30"	1	1	5.18	-	1	-	-	-		
MARKTON RD															
44	138+50	RT	R1-1	STOP	30" x 30"	1	1	5.18	-	1	-	-	-		
45	158+20	LT	W14-3	NO PASSING ZONE	48" x 36"	1	1	-	6.00	1	-	-	-		
46	161+00	RT	W14-3	NO PASSING ZONE	48" x 36"	1	1	-	6.00	1	-	-	-		
47	193+20	RT	W14-3	NO PASSING ZONE	48" x 36"	1	1	-	6.00	1	-	-	-		
48	196+70	LT	W14-3	NO PASSING ZONE	48" x 36"	1	1	-	6.00	1	-	-	-		
49	215+20	RT	W14-3	NO PASSING ZONE	48" x 36"	1	1	-	6.00	1	-	-	-		
DOEMEL LN															
50	218+70	RT	R1-1	STOP	30" x 30"	1	1	5.18	-	1	-	-	-		
51	252+70	LT	W14-3	NO PASSING ZONE	48" x 36"	1	1	-	6.00	1	-	-	-		
52	283+00	RT	W14-3	NO PASSING ZONE	48" x 36"	1	1	-	6.00	1	-	-	-		
SHEET 2					SUB-TOTALS:	27	27	134	63	27	2	0			
PROJECT NO: 9155-14-70				HWY: STH 55		COUNTY: LANGLADE			MISCELLANEOUS QUANTITIES					SHEET:	E

3

3

PERMANENT SIGNING					TABLE 3								TABLE 3	
					638.2602	638.3000	637.2210	637.2230	634.0616	634.0618	634.0620			
					REMOVING	REMOVING	SIGNS	SIGNS	WOOD POSTS	WOOD POSTS	WOOD POSTS			
					SIGNS	SMALL SIGN	TYPE II	TYPE II	4X6 INCH	4X6 INCH	4X6 INCH			
SIGN					TYPE II	SUPPORTS	REFLECTIVE H	REFLECTIVE F	16 F00T	18 F00T	20 F00T	MOUNT ON		
#	STA	SIGN CODE		DESCRIPTION	SIZE (IN x IN)	(EACH)	(EACH)	(SF)	(SF)	(EACH)	(EACH)	(EACH)	SAME POST	COMMENTS
VAN ALSTINE TOWN RD														
53	283+50	RT	R1-1	STOP	30" x 30"	1	1	5.18	-	1	-	-	-	
54	310+20	LT	W14-3	NO PASSING ZONE	48" x 36"	1	1	-	6.00	1	-	-	-	
55	311+20	RT	W1-4R	ROAD CURVES AHEAD ARROW	30" x 30"	1	1	-	6.25	1	-	-	-	#55 & #56 ON
56	311+20	RT	W13-1	45 MPH WARNING SIGN (YELLOW)	18" x 18"	1	-	-	2.25	-	-	-	55	SAME POST
57	312+30	LT	R1-1	STOP	30" x 30"	1	1	5.18	-	1	-	-	-	
JAGLA LN														
58	312+80	RT	I2-3	LANGLADE UNICORPORATED	60" x 24"	1	1	10.00	-	2	-	-	-	
59	314+80	RT	R59-51	STOP SCHOOL BUS FLASHING RED LIGHTS	36" x 36"	1	-	9.00	-	1	-	-	-	
60	316+20	RT	R7-1L	NO PARKING ANY TIME W/LA	18" x 24"	1	1	3.00	-	1	-	-	-	
61	320+00	RT	R7-1D	NO PARKING ANY TIME W/LA-RA	18" x 24"	1	1	3.00	-	1	-	-	-	
62	327+00	LT	R1-1	STOP	30" x 30"	1	1	5.18	-	1	-	-	-	
63	327+10	RT	R7-1R	NO PARKING ANY TIME W/RA	18" x 24"	1	1	3.00	-	1	-	-	-	
ROCKY RIPS RD														
64	330+00	RT	W3-5	SPEED REDUCTION AHEAD 45 M.P.H	36" x 36"	1	1	-	9.00	1	-	-	-	
65	331+00	RT	D5-63	HISTORICAL MARKER 1 /2 MILE	60" x 36"	1	1	15.00	-	2	-	-	-	
66	332+00	RT	R7-1L	NO PARKING ANY TIME W/LA	18" x 24"	1	1	3.00	-	1	-	-	-	
67	339+20	RT	R7-1R	NO PARKING RT	18" x 24"	1	1	3.00	-	1	-	-	-	
68	339+30	LT	R2-1	SPEED LIMIT 55	24" x 30"	1	1	5.00	-	1	-	-	-	
69	340+00	RT	R2-1	SPEED LIMIT 45	24" x 30"	1	1	5.00	-	1	-	-	-	
MEMORIAL DR														
70	340+70	RT	R1-1	STOP	30" x 30"	1	1	5.18	-	1	-	-	-	
71	341+00	LT	-	STOP AHEAD	-	1	1	-	-	-	-	-	-	REMOVAL ONLY
72	341+20	RT	-	STOP AHEAD	-	1	1	-	-	-	-	-	-	REMOVAL ONLY
73	344+40	RT	W3-1	STOP AHEAD	36" x 36"	1	1	-	9.00	1	-	-	-	
74	344+40	LT	W3-1	STOP AHEAD	36" x 36"	-	-	-	9.00	1	-	-	-	
75	345+90	LT	R2-1	SPEED LIMIT 45	24" x 30"	2	1	5.00	-	1	-	-	-	
76	346+90	RT	R7-1L	NO PARKING ANY TIME W/LA	18" x 24"	1	1	3.00	-	1	-	-	-	
BLUE GOOSE DR														
77	347+30	RT	R1-1	STOP	30" x 30"	1	1	5.18	-	1	-	-	-	
SHEET 3					SUB-TOTALS:	25	22	93	42	24	0	0		

PROJECT NO: 9155-14-70	HWY: STH 55	COUNTY: LANGLADE	MISCELLANEOUS QUANTITIES	SHEET:	E
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PERMANENT SIGNING				TABLE 4										TABLE 4	
					638.2602	638.3000	637.2210	637.2230	634.0616	634.0618	634.0620				
					REMOVING	REMOVING	SIGNS	SIGNS	WOOD POSTS	WOOD POSTS	WOOD POSTS				
					SIGNS	SMALL SIGN	TYPE II	TYPE II	4X6 INCH	4X6 INCH	4X6 INCH	MOUNT ON			
SIGN					TYPE II	SUPPORTS	REFLECTIVE H	REFLECTIVE F	16 F00T	18 F00T	20 F00T	SAME POST			
#	STA		SIGN CODE	DESCRIPTION	SIZE (IN x IN)	(EACH)	(EACH)	(SF)	(SF)	(EACH)	(EACH)	(EACH)	AS SIGN #	COMMENTS	
78	347+80	RT	J1-1 M2-1 M1-6	JCT 64	24" x 39" 24" x 15" 24" x 24"	-	-	6.00	-	1	-	-	-		
79	348+70	LT	W14-3	NO PASSING ZONE	48" x 36"	1	1	-	6.00	1	-	-	-		
80	349+00	LT	R7-1D	NO PARKING ANY TIME W/LA-RA	18" x 24"	1	1	3.00	-	1	-	-	-		
81	349+70	RT	J2-2 M3-4 M1-6 M5-1L M3-2 M1-6 M5-1R	WEST 64 ADVANCE LA EAST 64 ADVANCE RA	48" x 57" 24" x 12" 24" x 24" 21" x 21" 24" x 12" 24" x 24" 21" x 21"	-	-	6.00	-	1	-	-	-		
82	350+50	LT	R7-1D	NO PARKING ANY TIME W/LA-RA	18" x 24"	1	1	3.00	-	1	-	-	-		
83	351+00	RT	D1-2	ANTIGO LA, MOUNTAIN RA	66" x 30"	1	2	13.75	-	2	-	-	-	#83 & #84 ON	
84	351+00	RT	R7-1R	NO PARKING ANY TIME W/RA	18" x 24"	1	-	3.00	-	-	-	-	83	SAME POST	
85	351+40	LT	D2-2	KESHENA 24, SHAWNO 34	78" x 24"	1	1	13.00	-	2	-	-	-		
86	352+00	LT	R2-1	SPEED LIMIT 45	24" x 30"	1	-	5.00	-	1	-	-	-		
87	352+60	LT	J4-1 M3-3 M1-6	SOUTH 55	24" x 36" 24" x 12" 24" x 24"	1	1	6.00	-	1	-	-	-		
88	353+50	LT	R7-1D	NO PARKING ANY TIME W/LA-RA	18" x 24"	1	-	3.00	-	1	-	-	-		
89	353+70	LT	J3-3 M3-1 M1-6 M6-1 M3-2 M1-6 M6-1 M3-3 M1-6 M6-1	NORTH 55 LA EAST 64 STRAIGHT ARROW SOUTH 55 RA	72" x 57" 24" x 12" 24" x 24" 21" x 21" 24" x 12" 24" x 24" 21" x 21" 24" x 12" 24" x 24" 21" x 21"	1	2	28.50	-	-	-	2	-		
90	354+00	LT	R1-1	STOP	30" x 30"	1	-	5.18	-	-	-	-	91	ON EXISTING BEACON POLE	
91	354+00	LT	R1-3P	ALL WAY	18" x 6"	1	-	0.75	-	-	-	-	90	ON EXISTING BEACON POLE	
92	354+00	RT	R1-1	STOP	30" x 30"	1	-	5.18	-	-	-	-	93	ON EXISTING BEACON POLE	
93	354+00	RT	R1-3P	ALL WAY	18" x 6"	1	-	0.75	-	-	-	-	92	ON EXISTING BEACON POLE	
STH 64															

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TRAFFIC CONTROL

			643.0100		643.0420	643.0705		643.1050		643.2000	
			TRAFFIC	643.0300	TRAFFIC	CONTROL	643.0900	TRAFFIC	CONTROL	TRAFFIC	643.3000
			CONTROL	TRAFFIC	CONTROL	WARNING	TRAFFIC	CONTROL	DETOUR	CONTROL	
			(PROJECT)	CONTROL	BARRICADES	LIGHTS	CONTROL	SIGNS	(PROJECT)	DETOUR	
STATION	STATION	LOCATION	9155-14-70	DRUMS	TYPE III	TYPE A	SIGNS	PCMS	9155-14-70	SIGNS	
			(EACH)	(DAY)	(DAY)	(DAY)	(DAY)	(DAY)	(EACH)	(DAY)	
PROJECT LIMITS											
STA 3+60	- STA 353+34	STH 55	1	-	-	-	2664	-	-	-	
SLOPE EMBANKMENT											
STA 22+00 LT	- STA 24+50 LT	STH 55	-	504	-	-	-	-	-	-	
STA 29+50 LT	- STA 33+44 LT	STH 55	-	720	-	-	-	-	-	-	
PIPE REPLACEMENTS											
STA 49+59		PIPE 34-055-004	-	936	-	-	84	-	-	-	
STA 338+58		PIPE 34-055-020	-	936	-	-	84	-	-	-	
DETOUR											
PROJECT LIMITS AND DETOUR ROUTE			REPLACEMENT OF OLD PIPE 34-055-009 (C-34-11 NEW)		-	-	225	220	-	28	1740
UNDISTRIBUTED			-	154	11	10	143	-	-	90	
TOTALS:			1	3250	236	230	2975	28	1	1830	

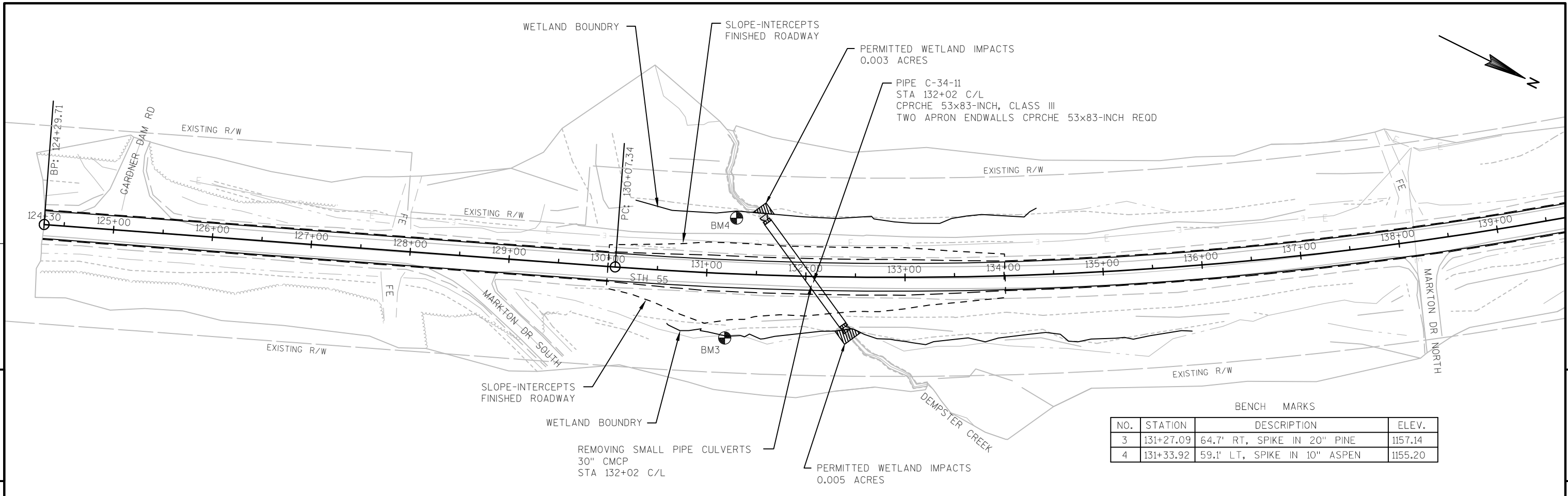
NOTES: TRAFFIC CONTROL SIGNS PCMS TO BE PLACED AND USED ONE WEEK PRIOR TO START OF DETOUR AND USED DURING THE WORK WEEK OF THE DETOUR.
AT THE PIPE REPLACEMENTS, PLACE ADDITIONAL SIGNING AS SHOWN IN "TRAFFIC CONTROL – TEMP SIGNING DETAIL", UNTIL ASPHALTIC SURFACE IS PLACED AT PIPE TRENCH.

CONSTRUCTION STAKING

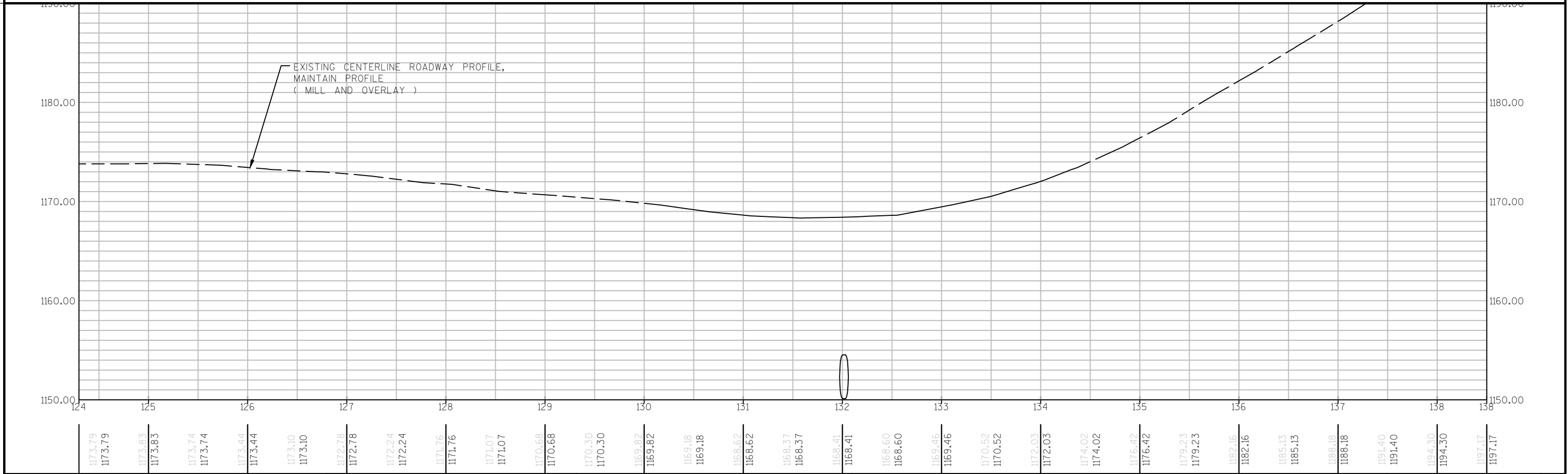
			650.6000		650.8000	650.9910		650.9920		690.0150
			CONSTRUCTION	CONSTRUCTION	STAKING	SUPPLEMENTAL	CONSTRUCTION	CONSTRUCTION	CONSTRUCTION	SAWING
			STAKING	STAKING	CONTROL	CONTROL	STAKING	STAKING	STAKING	ASPHALT
			PIPE	RESURFACING	(PROJECT)	(PROJECT)	SLOPE	SLOPE	SLOPE	
			CULVERTS	REFERENCE	9155-14-70	9155-14-70	STAKES	STAKES	STAKES	(LF)
STATION	STATION	LOCATION	(EACH)	(LF)	(LS)	(LS)	(LF)	(LF)	(LF)	
STA 3+60	- STA 353+34	STH 55 MAINLINE	-	34974	1	-	-	-	-	
STA 22+00 LT	- STA 24+50 LT	SLOPE EMBANKMENT	-	-	-	-	250	-	-	
STA 29+50 LT	- STA 33+44 LT	SLOPE EMBANKMENT	-	-	-	-	394	-	-	
STA 49+59		CULVERT 34-055-004	1	-	-	-	-	-	-	
STA 132+02		CULVERT C-34-11	1	-	-	-	-	-	-	
STA 338+58		CULVERT 34-055-020	1	-	-	-	-	-	-	
			3	34974	1	-	644	-	-	

SAWING ASPHALT

STATION	LOCATION	(LF)
STA 49+04	CULVERT 34-055-004	30
STA 50+14	CULVERT 34-055-004	30
STA 131+97	CULVERT C-34-11	22
STA 132+57	CULVERT C-34-11	22
STA 338+26	CULVERT 34-055-020	31
STA 338+90	CULVERT 34-055-020	31
STA 338+58 LT	EAST END CULV 34-055-020 AT PARKING LOT AND RIPRAP	16
TOTAL:		182

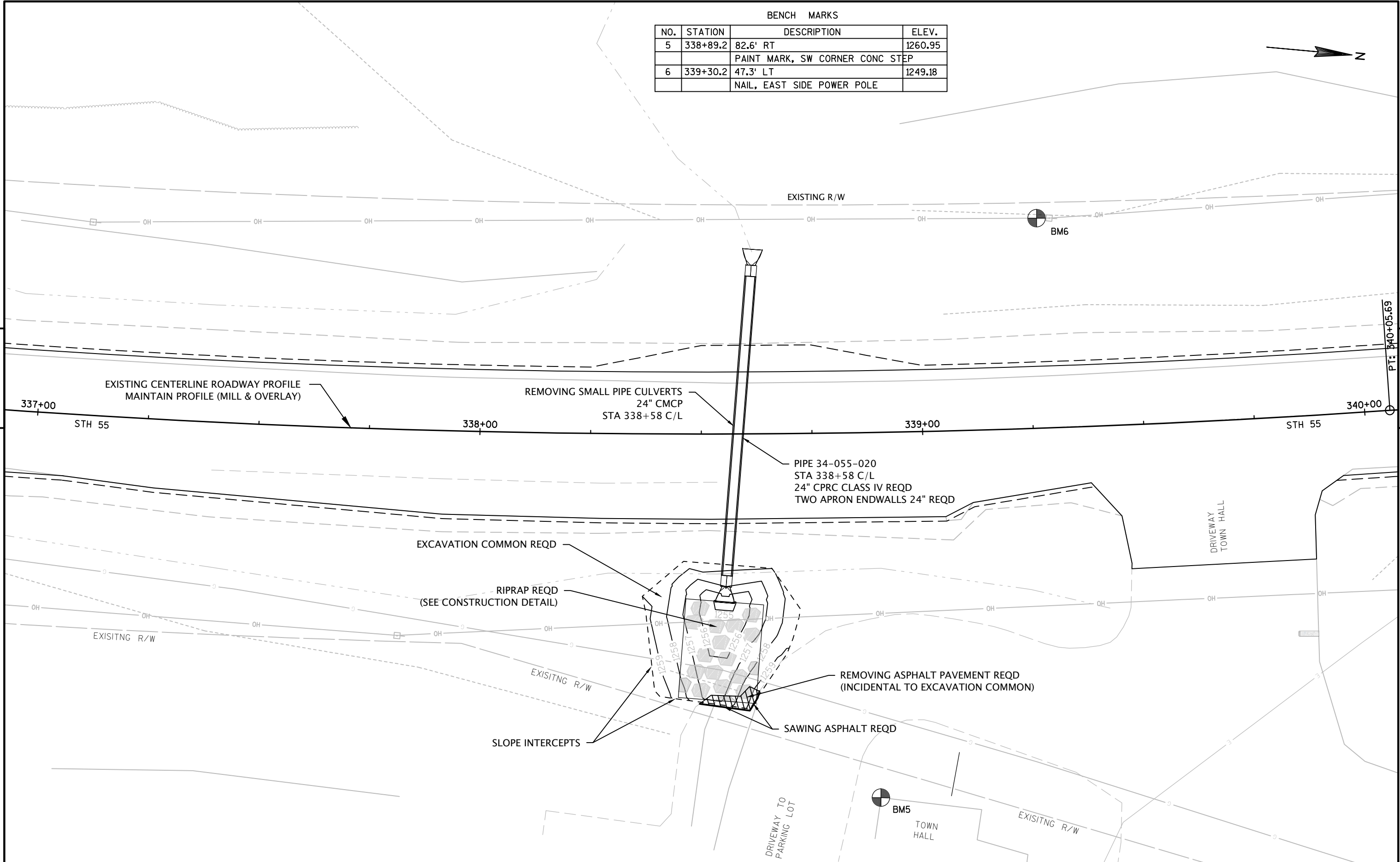


BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
3	131+27.09	64.7' RT, SPIKE IN 20" PINE	1157.14
4	131+33.92	59.1' LT, SPIKE IN 10" ASPEN	1155.20



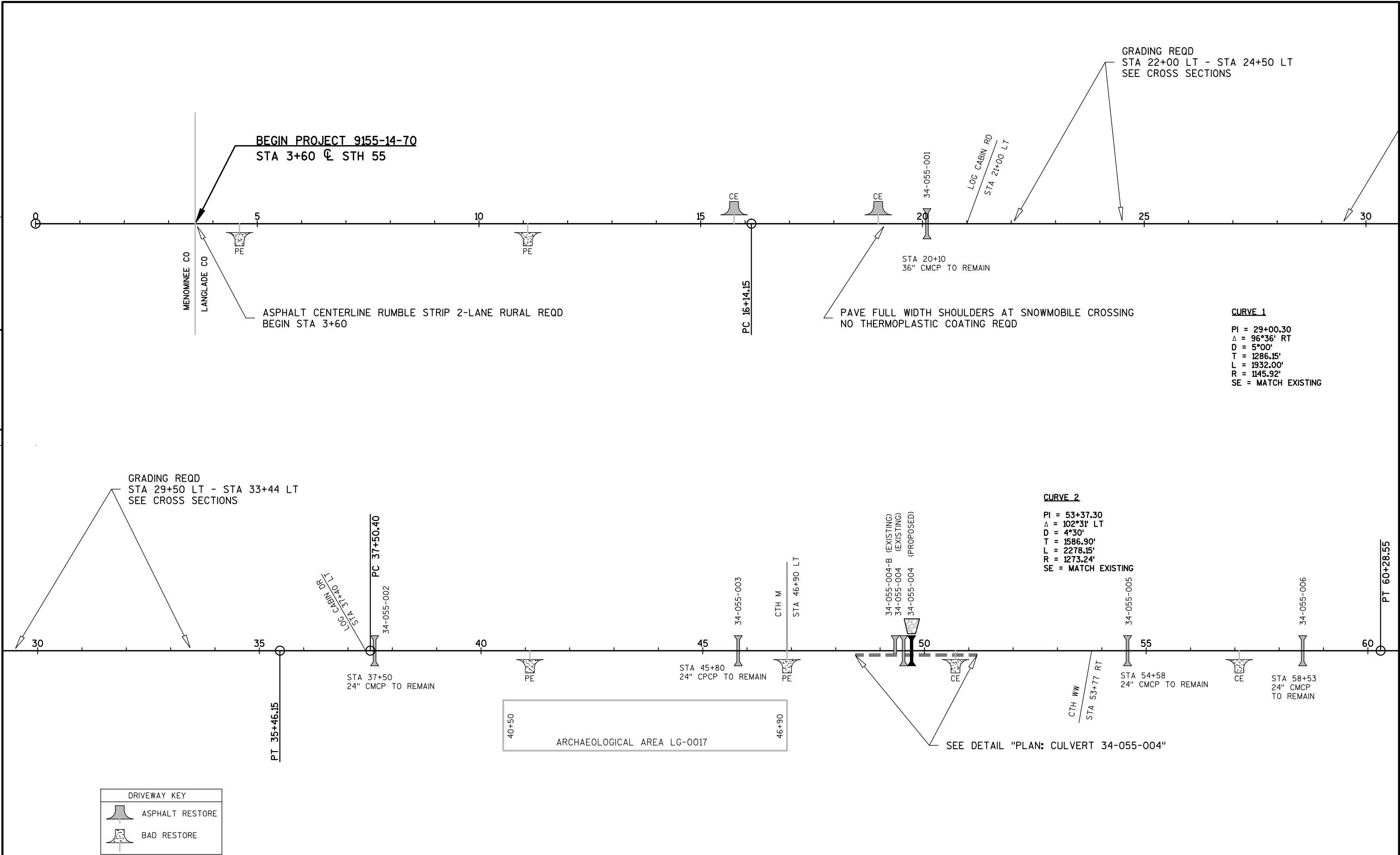
PROJECT NO: 9155-14-70	HWY: STH 55	COUNTY: LANGLADE	PLAN AND PROFILE: PIPE C-34-11	SHEET	E
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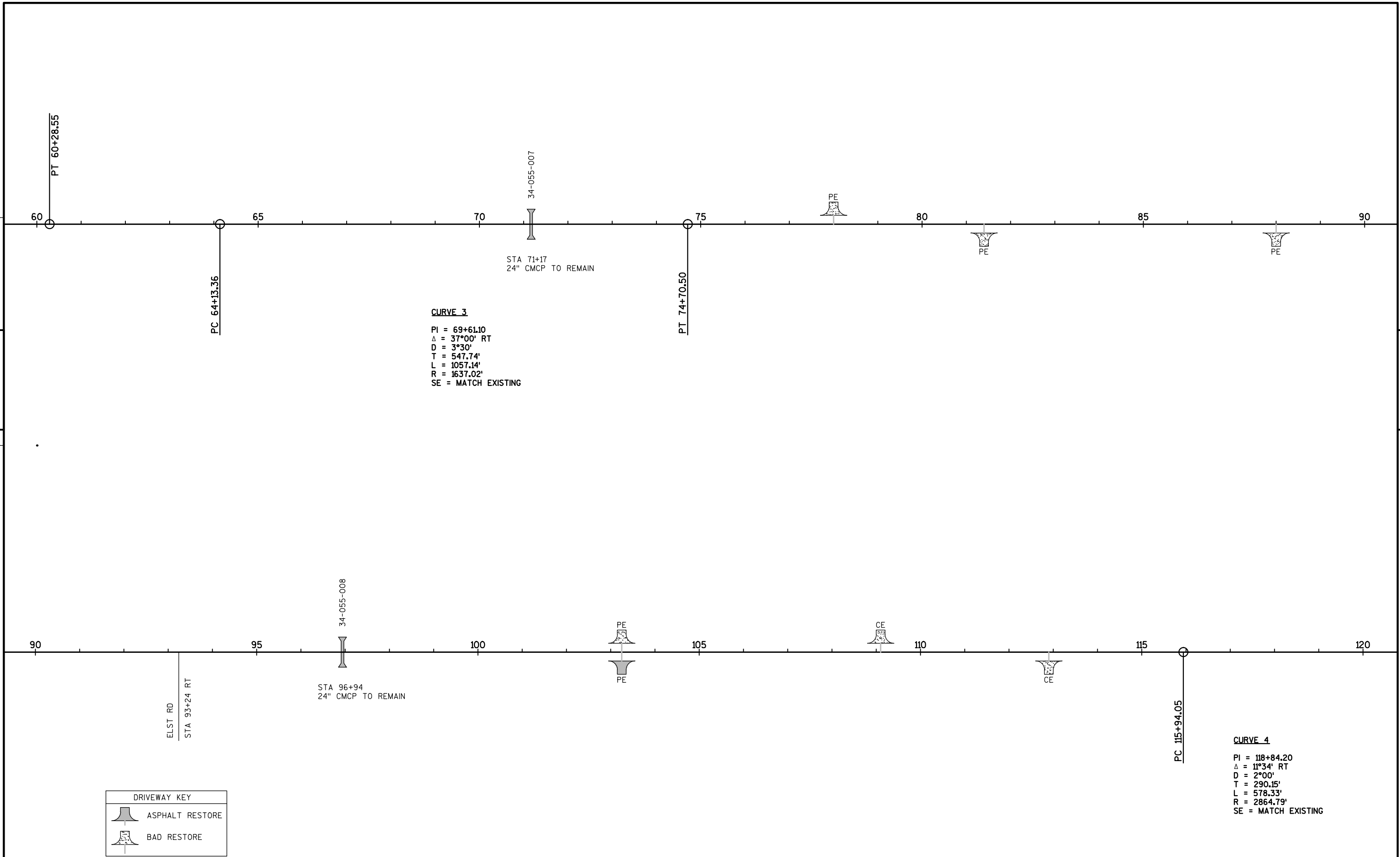
BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
5	338+89.2	82.6' RT	1260.95
		PAINT MARK, SW CORNER CONC STEP	
6	339+30.2	47.3' LT	1249.18
		NAIL, EAST SIDE POWER POLE	

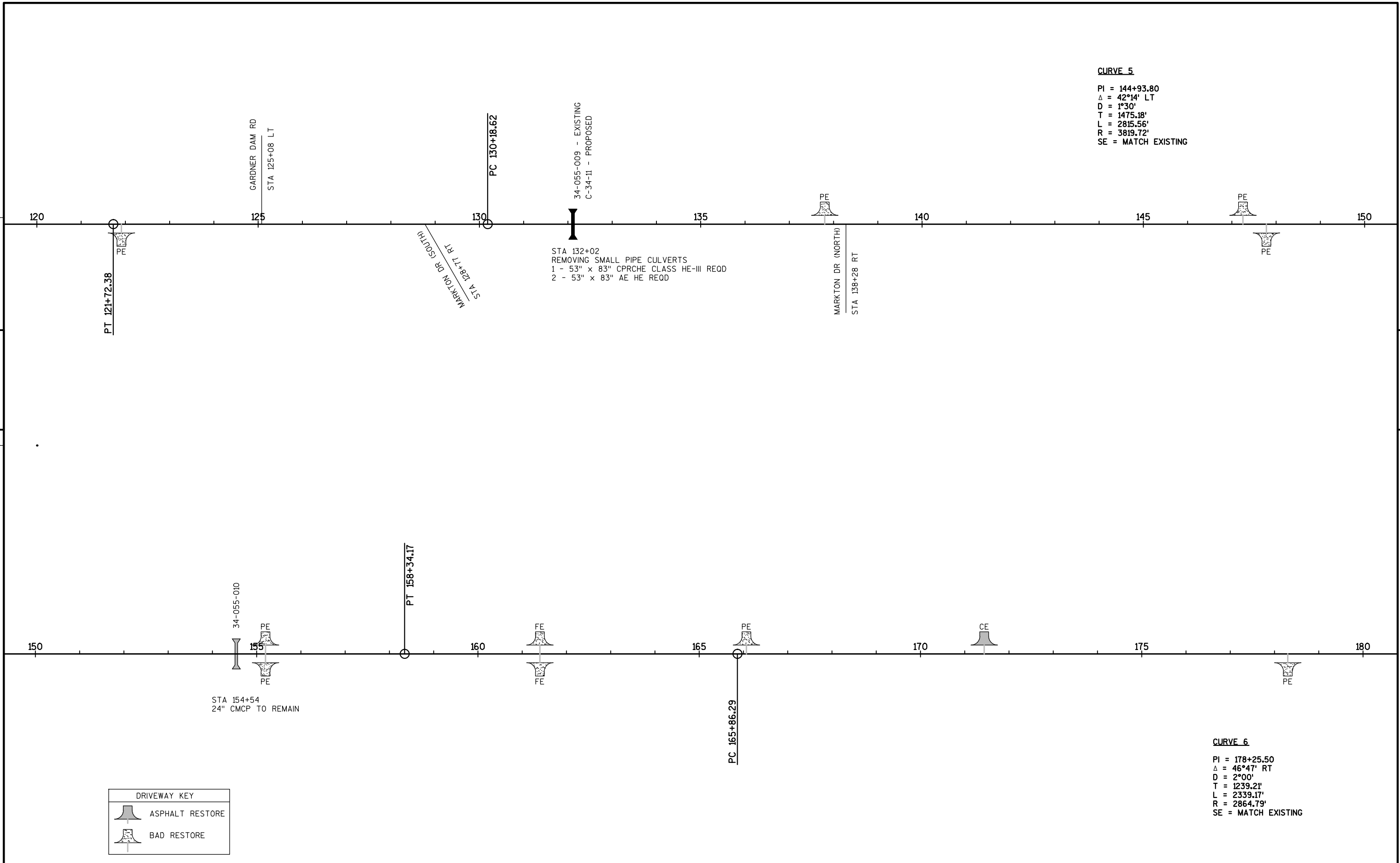


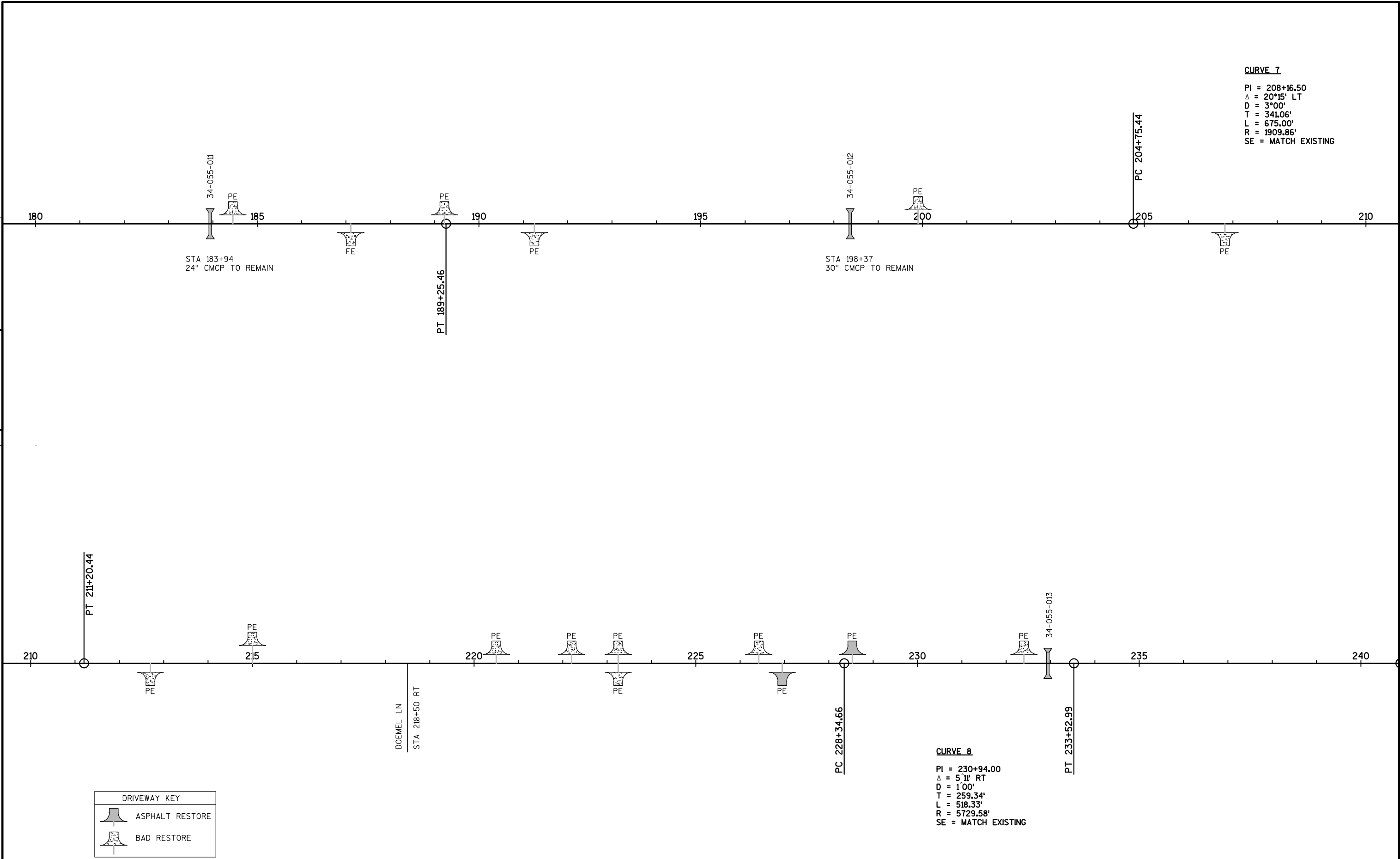
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5



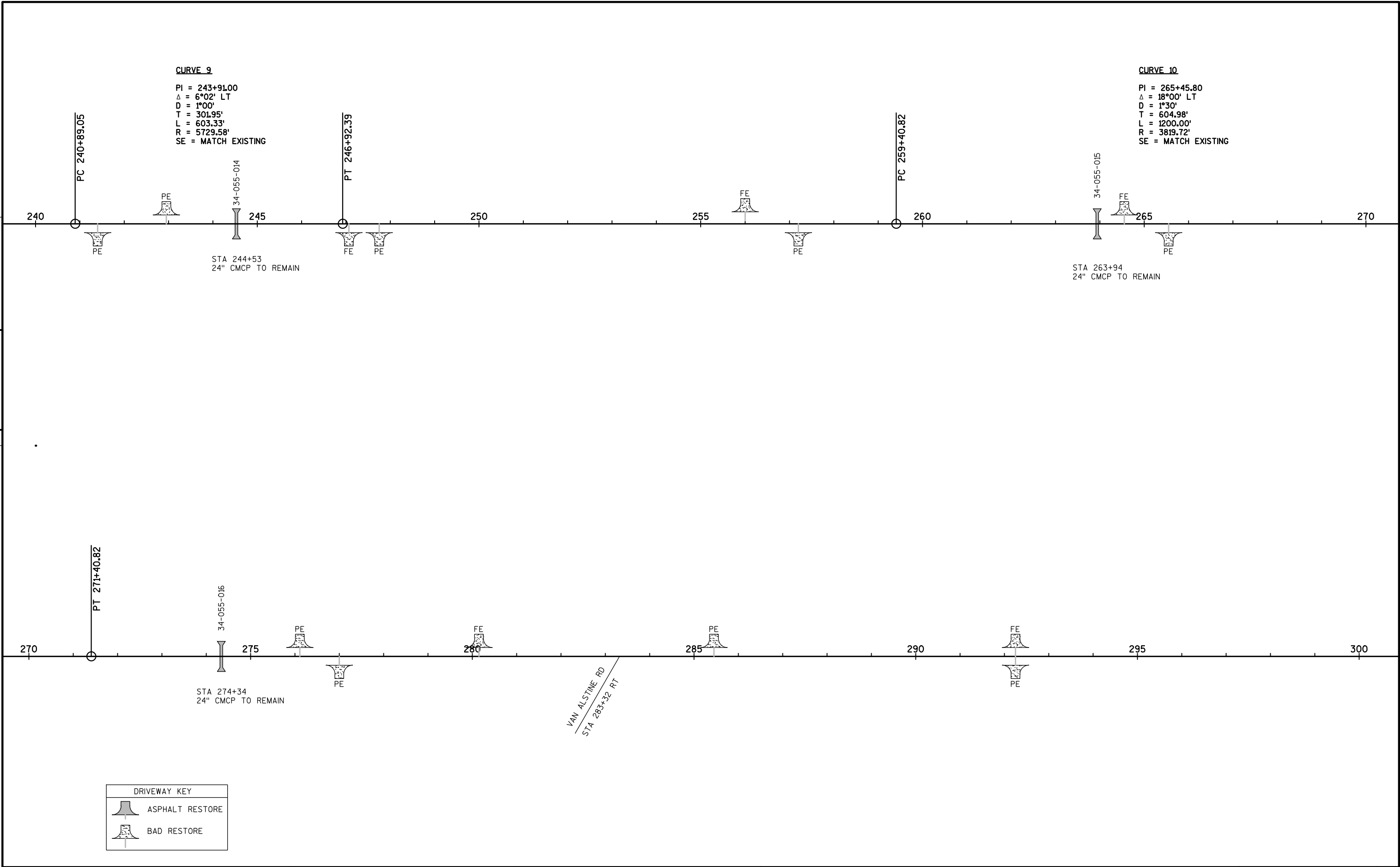






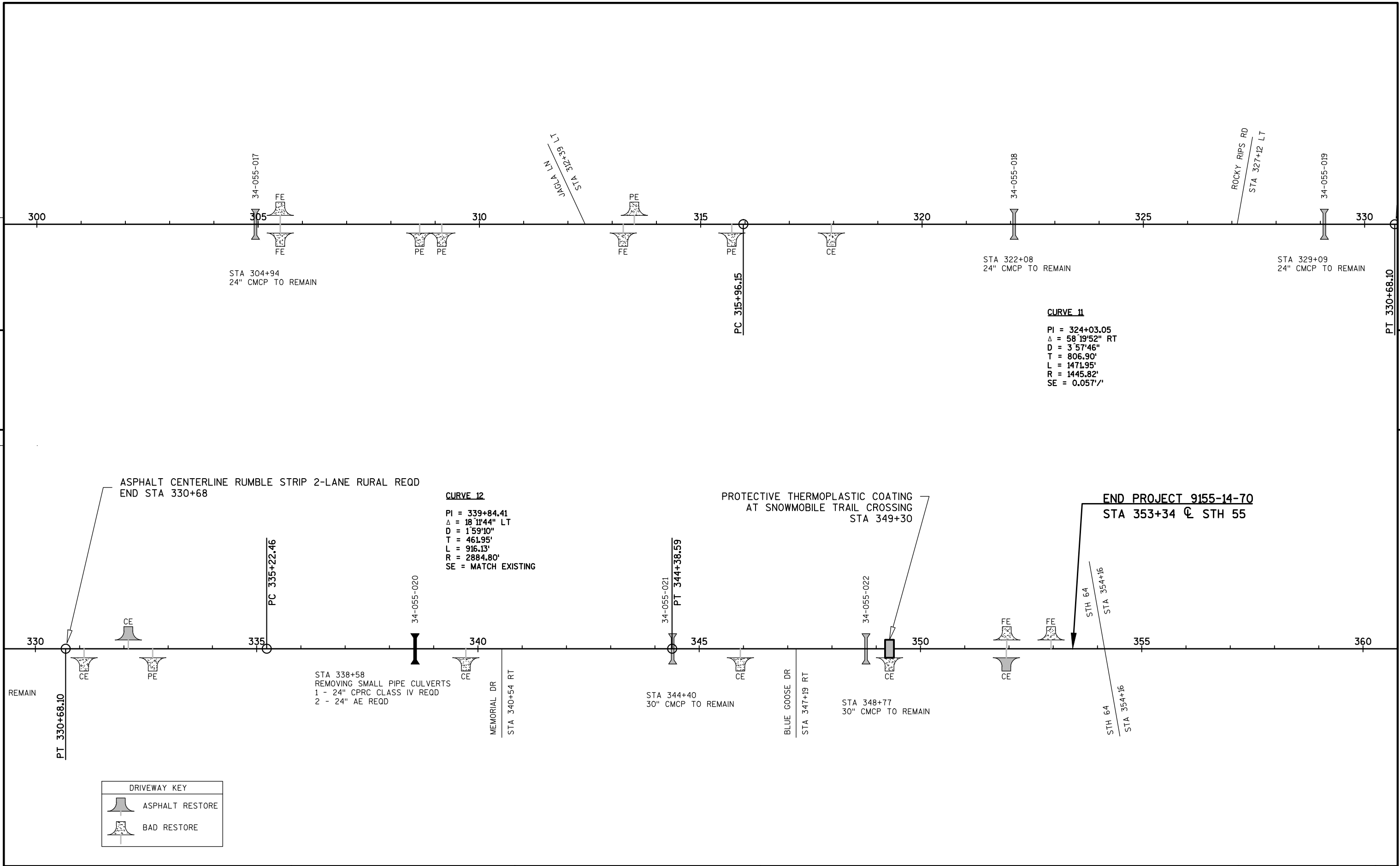
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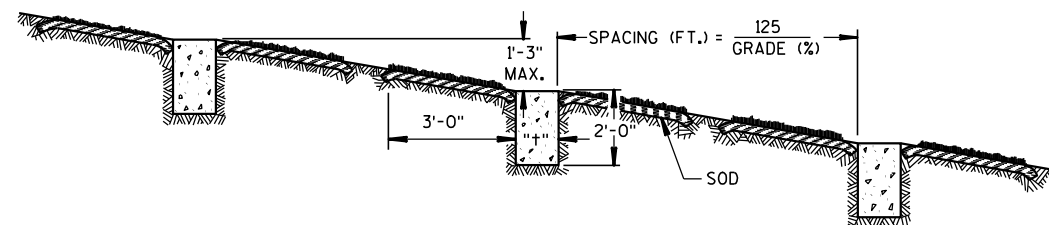
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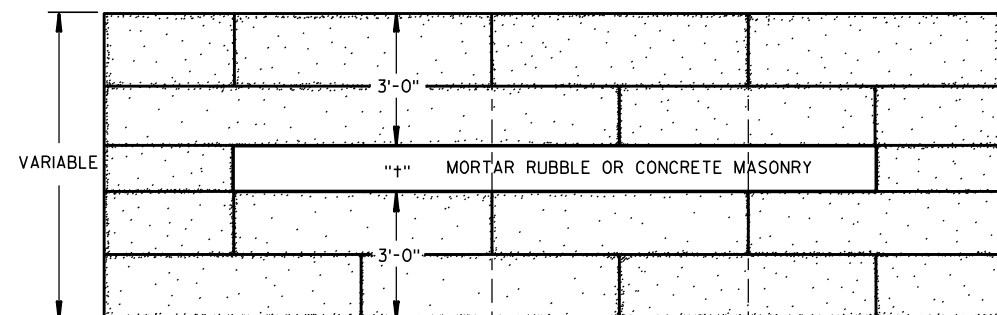


Standard Detail Drawing List

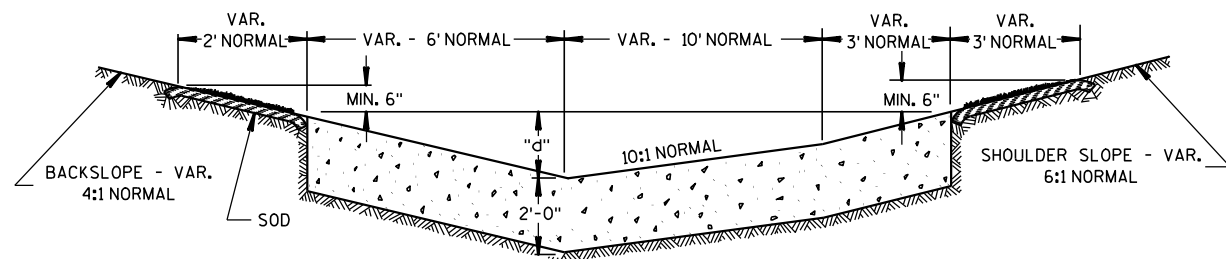
08E04-02	SOD OR MASONRY AND SOD DITCH CHECKS
08E09-06	SILT FENCE
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
13A11-02A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-02B	2-LANE 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
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
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C19-03A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D38-01B	ATTACHMENT OF SIGNS TO POSTS



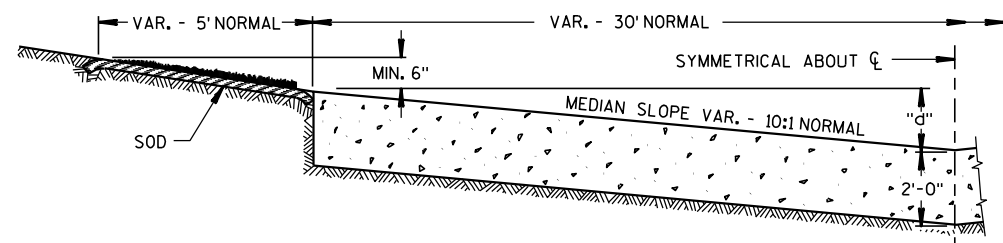
PROFILE OF DITCH GRADE

PLAN VIEW SHOWING
MASONRY AND SOD

"+" - MASONRY THICKNESS SHALL BE 0'-9" FOR CONCRETE AND 1'-0" FOR MORTAR RUBBLE.



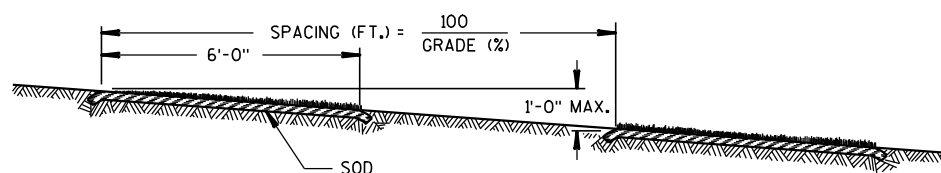
SIDE DITCH CROSS SECTION



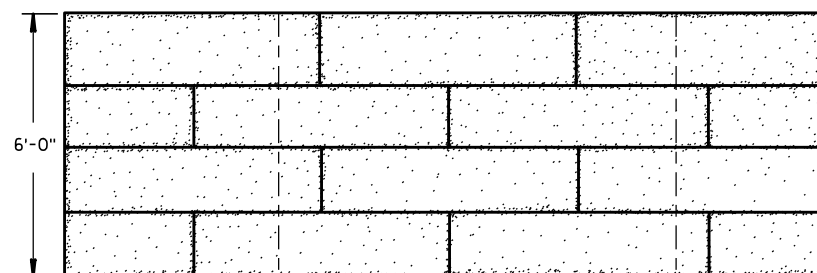
MEDIAN DITCH CROSS SECTION

"d" - THE MINIMUM DEPTH OF THE MASONRY PORTION OF THE DITCH CHECKS SHALL BE EQUAL TO THE MAXIMUM DEPTH OF FLOW. THE NORMAL "d" WILL BE 1'-6".

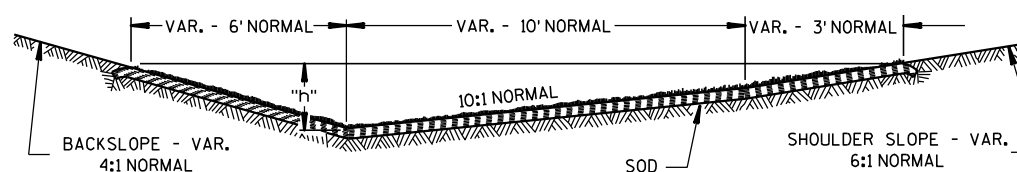
MASONRY AND SOD DITCH CHECKS



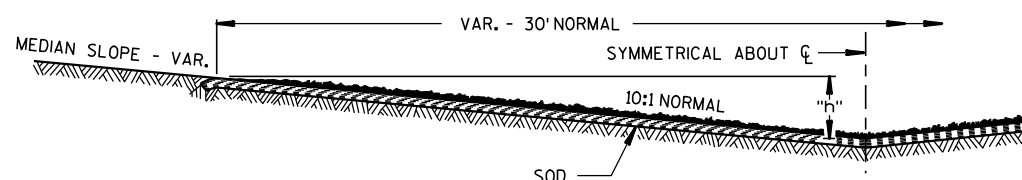
PROFILE OF DITCH GRADE



PLAN VIEW SHOWING SOD



SIDE DITCH CROSS SECTION



MEDIAN DITCH CROSS SECTION

"h" - THE MINIMUM HEIGHT OF DITCH TO BE SODDED SHALL BE EQUAL TO THE MAXIMUM DEPTH OF FLOW PLUS 6". THE NORMAL "h" WILL BE 1'-6".

SOD DITCH CHECKS

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.

ALTERNATE DESIGNS FOR DITCH CHECKS, OF THE MATERIAL OR COMBINATION OF MATERIALS SHOWN HEREON, MAY BE USED UPON WRITTEN PERMISSION OF THE ENGINEER.

SOD STRIPS FOR DITCH CHECKS MAY BE PLACED EITHER TRANSVERSELY OR LONGITUDINALLY TO THE DIRECTION OF WATER FLOW.

SOD OR MASONRY AND SOD
DITCH CHECKS

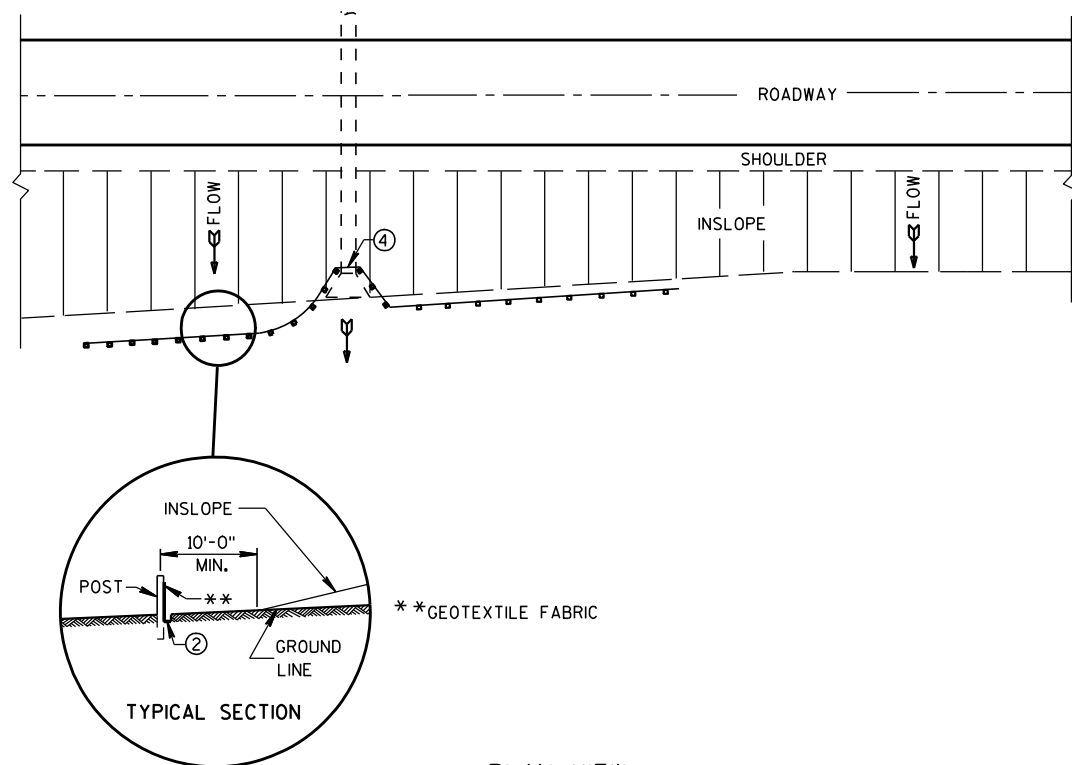
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9/7/71
DATE

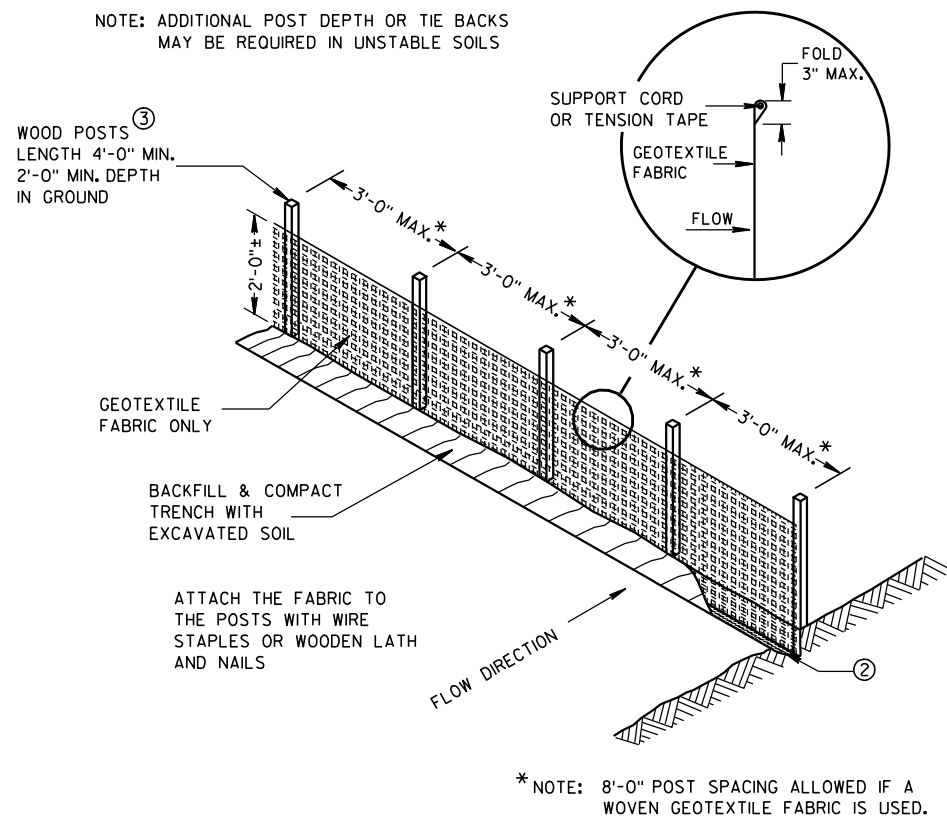
FHWA

/S/ L.C. Harried
ACTING CHIEF DESIGN ENGINEER

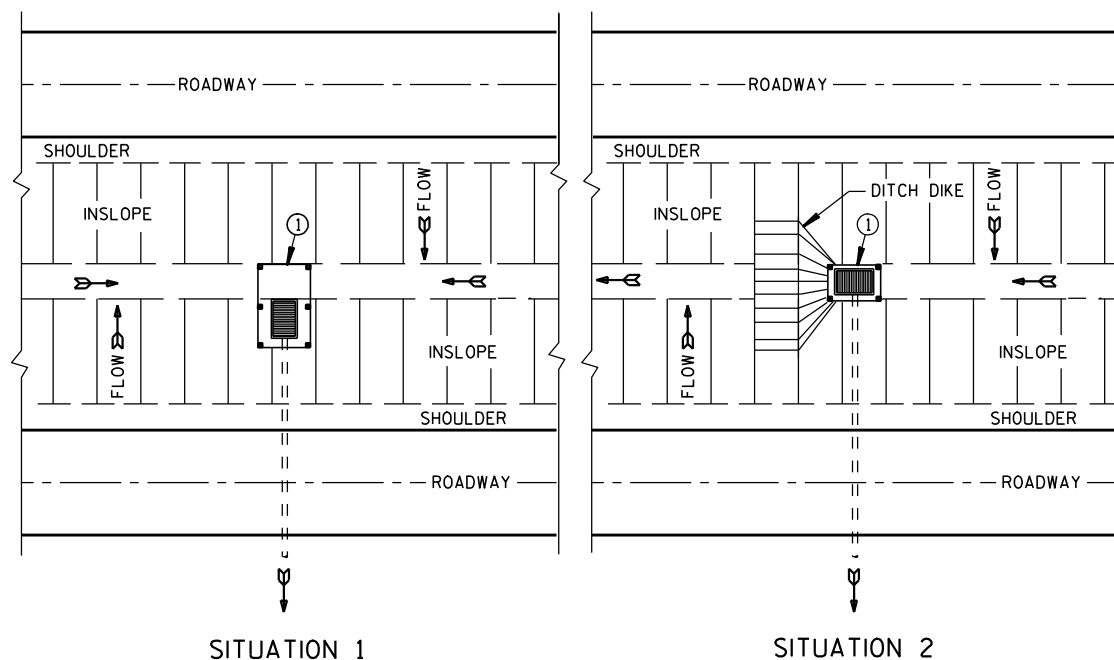


TYPICAL APPLICATION OF SILT FENCE

NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS

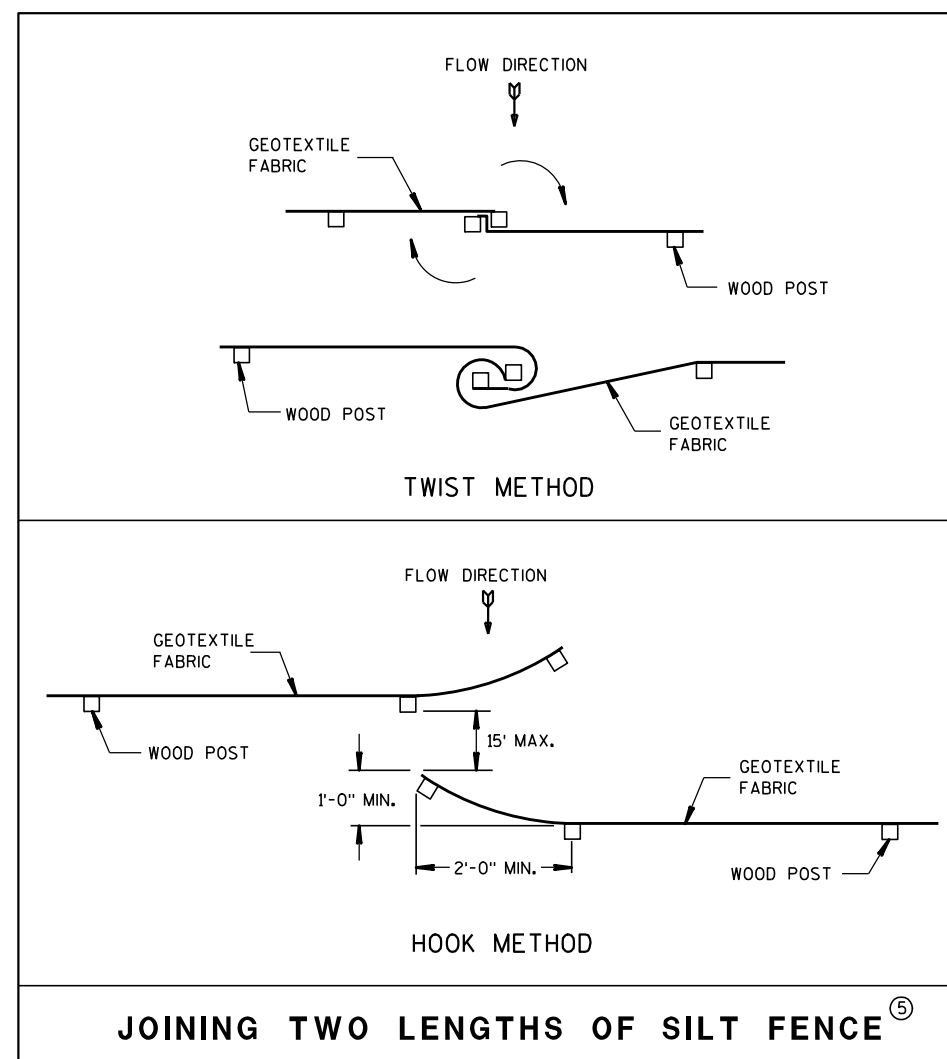


SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

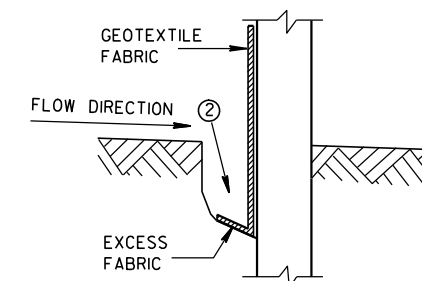


JOINING TWO LENGTHS OF SILT FENCE

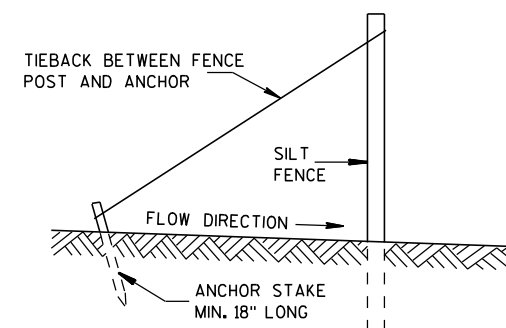
GENERAL NOTES

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

- 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.



TRENCH DETAIL



SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

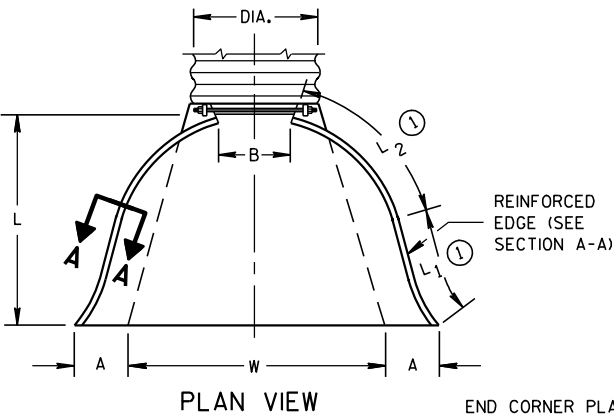
4-29-05
DATE

FHWA

/S/ Beth Canestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

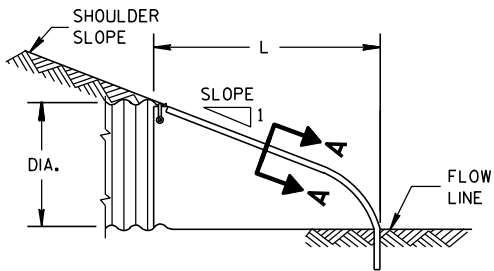
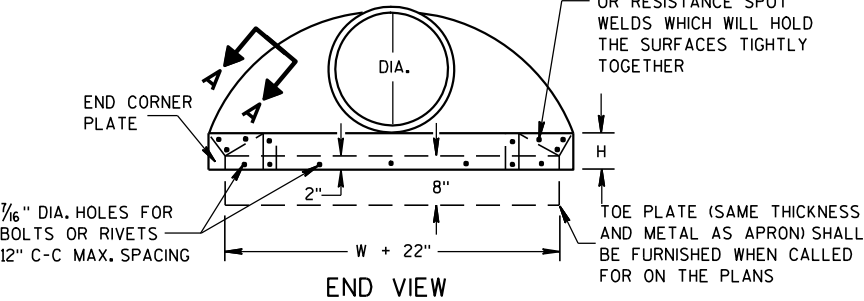
METAL APRON ENDWALLS												
PIPE DIA. (IN.)	MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE		BODY
	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")			
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1		1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1		1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1		1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1		1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1		1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1		1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1		2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1		2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1		3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1		3 Pc.
60	.109x	.105x	18	33	12	87	—	—	114	2 to 1		3 Pc.
66	.109x	.105x	18	36	12	87	—	—	120	2 to 1		3 Pc.
72	.109x	.105x	18	39	12	87	—	—	126	2 to 1		3 Pc.
78	.109x	.105x	18	42	12	87	—	—	132	1 1/2 to 1		3 Pc.
84	.109x	.105x	18	45	12	87	—	—	138	1 1/2 to 1		3 Pc.
90	.109x	.105x	18	37	12	87	—	—	144	1 1/2 to 1		3 Pc.
96	.109x	.105x	18	35	12	87	—	—	150	1 1/2 to 1		3 Pc.

* EXCEPT CENTER PANEL
SEE GENERAL NOTES



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

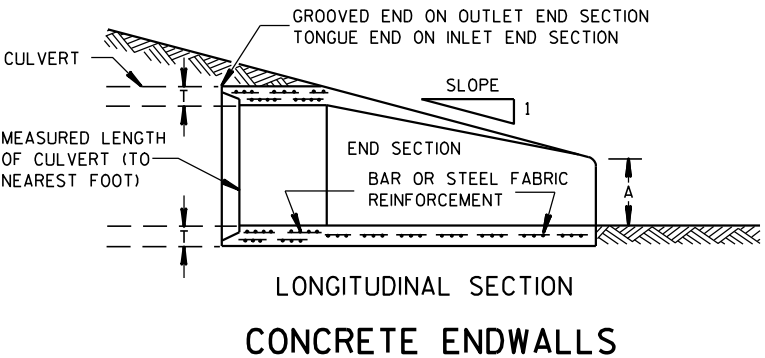
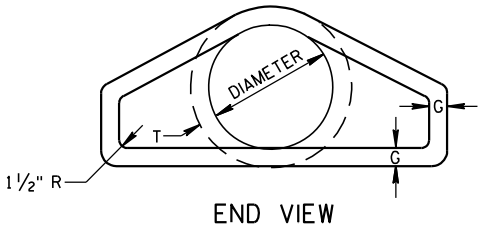
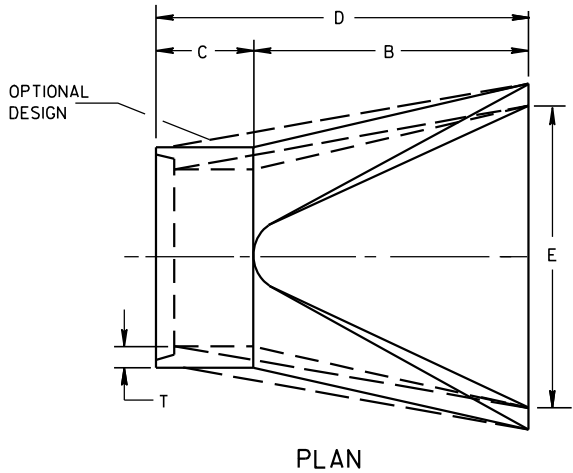
TOE PLATE (SAME THICKNESS AND METAL AS APRON) SHALL BE FURNISHED WHEN CALLED FOR ON THE PLANS



SIDE ELEVATION
METAL ENDWALLS

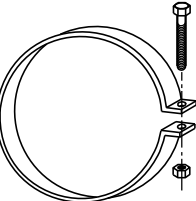
REINFORCED CONCRETE APRON ENDWALLS												
PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE				
	T	A	B	C	D	E	G					
12	2	4	24	48 7/8	72 7/8	24	2	3 to 1				
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1				
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1				
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1				
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1				
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1				
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1				
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1				
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1				
48	5	24	72	26	98	84	5	3 to 1				
54	5 1/2	27	65	33 1/4-35	98 1/4-100	90	5 1/2	2 2/5 to 1				
60	6	30-35	60	39	99	96	5	2 to 1				
66	6 1/2	24-30	72-78	21-27	99	102	5 1/2	2 to 1				
72	7	24-36	78	21	99	108	6	2 to 1				
78	7 1/2	24-36	78	21	99	114	6 1/2	2 to 1				
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1				
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1				

* MINIMUM
** MAXIMUM

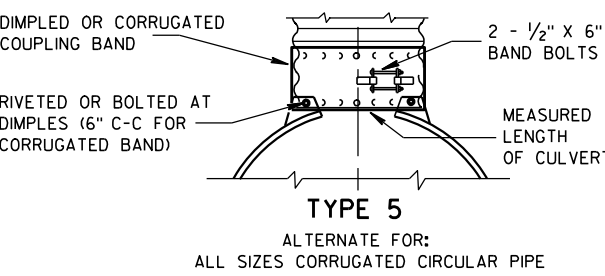
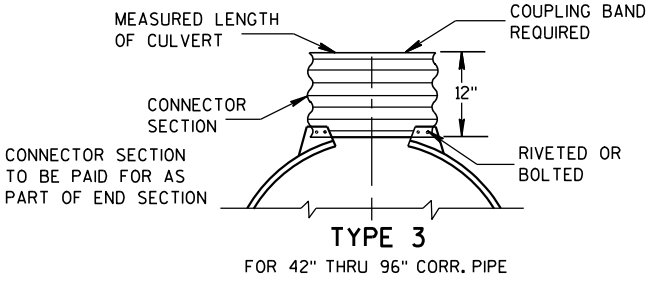
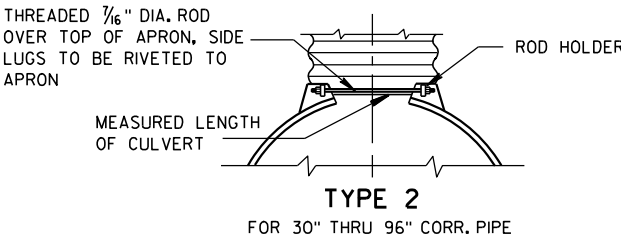
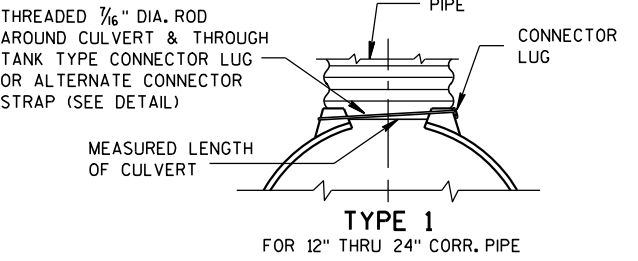


LONGITUDINAL SECTION
CONCRETE ENDWALLS

1" WIDE, 12 GA. (0.109" THICK) GALVANIZED STRAP WITH STANDARD 6" X 1/2" BAND BOLT AND NUT



ALTERNATE FOR TYPE 1 CONNECTION
END SECTION CONNECTOR STRAP



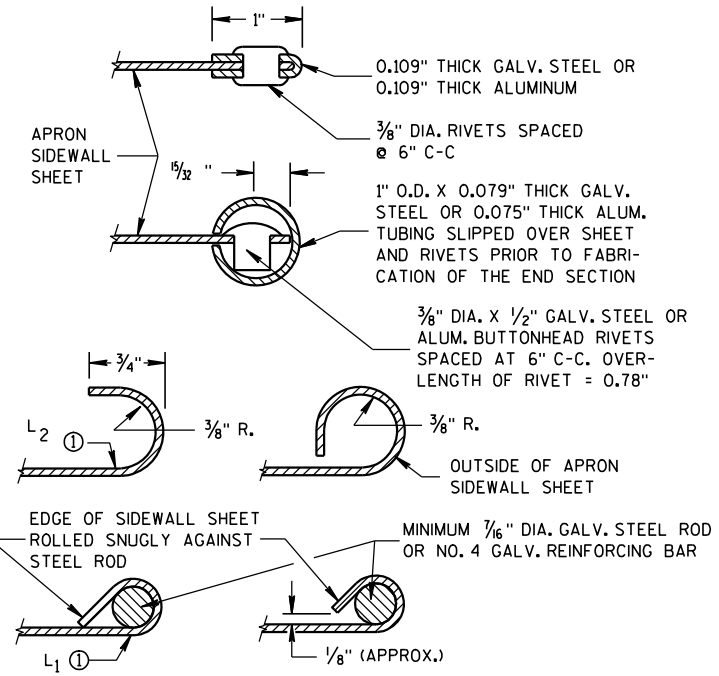
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

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

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE 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 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 60" THROUGH 96" DIAMETER 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.

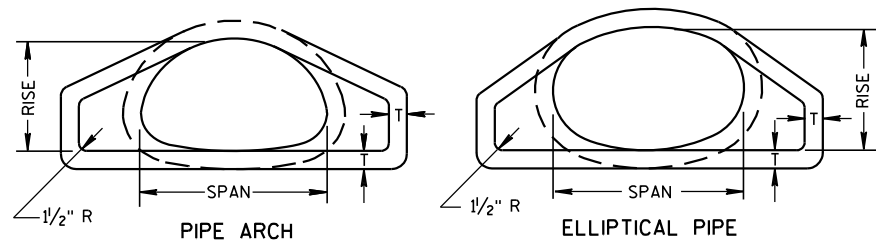
WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

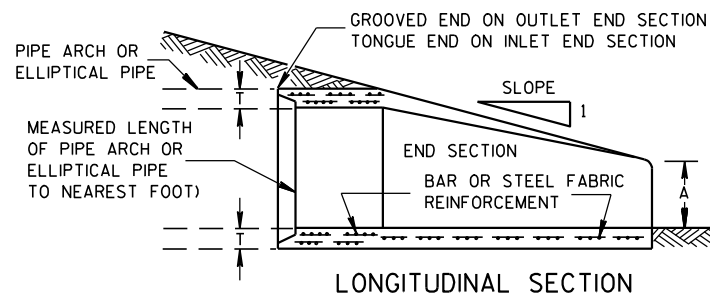
APRON ENDWALLS FOR
CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94
DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

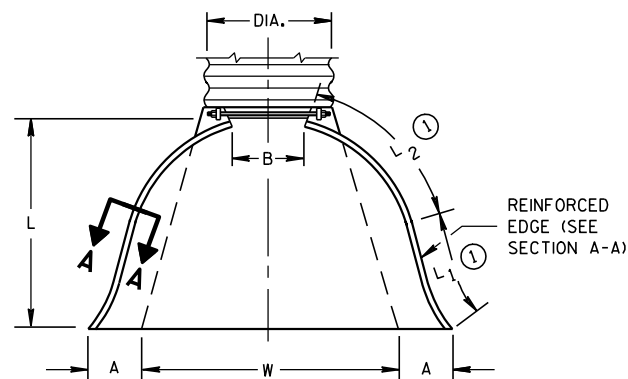


END VIEW

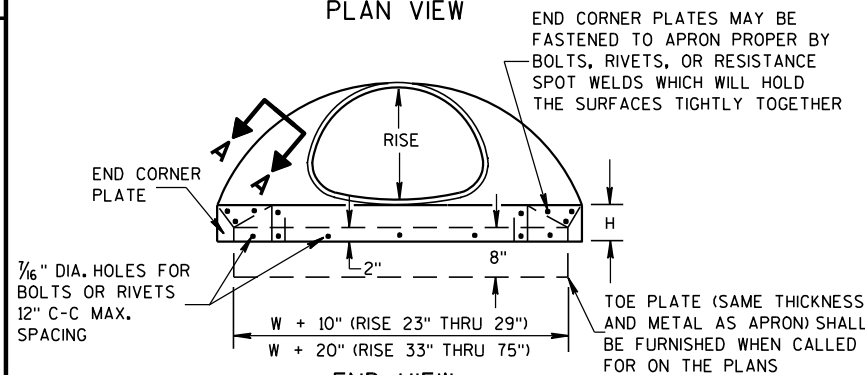


LONGITUDINAL SECTION

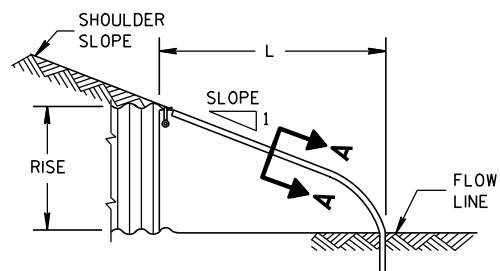
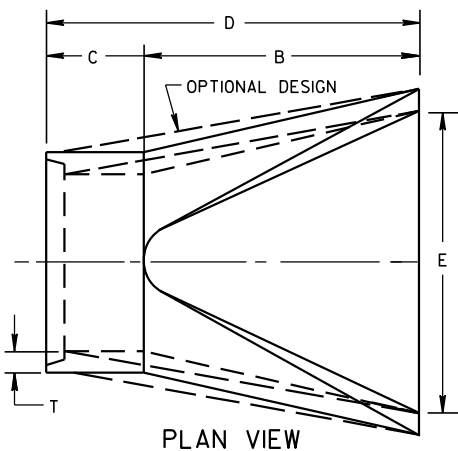
CONCRETE ENDWALLS



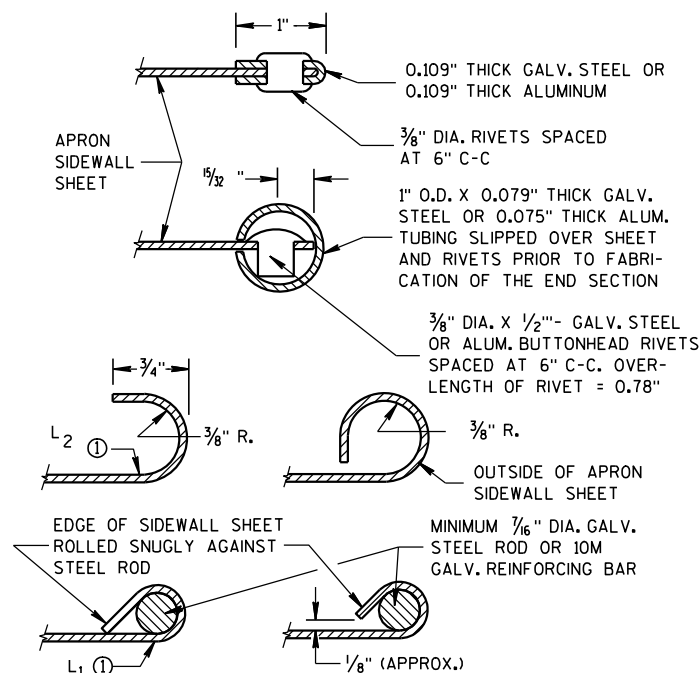
PLAN VIEW



END VIEW

SIDE ELEVATION
METAL ENDWALLS

PLAN VIEW



SECTION A-A

2- 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.

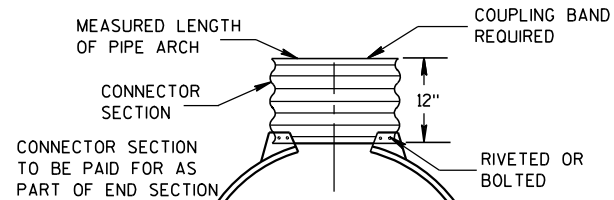
3" X 1" CORRUGATIONS													
EQUIV. DIA. (Inches)	(Inches)		MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	SPAN	RISE	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")		
48	53	41	.109	.105	18	26	12	63	24	72 3/4	90	2 1/2 to 1	2 Pc.
54	60	46	.109	.105	18	30	12	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

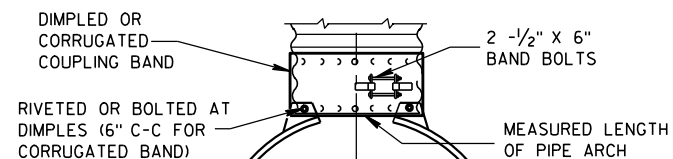
TYPE 2

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

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 1/8	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.

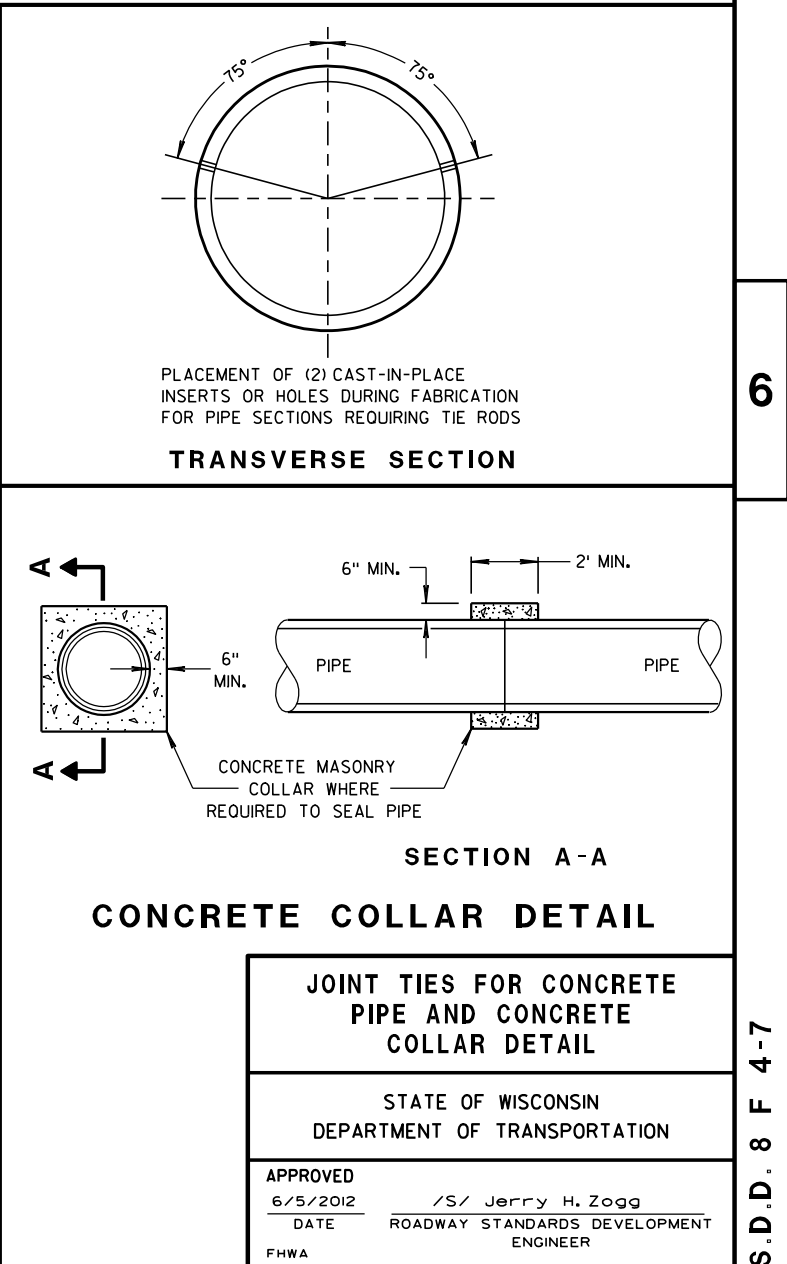
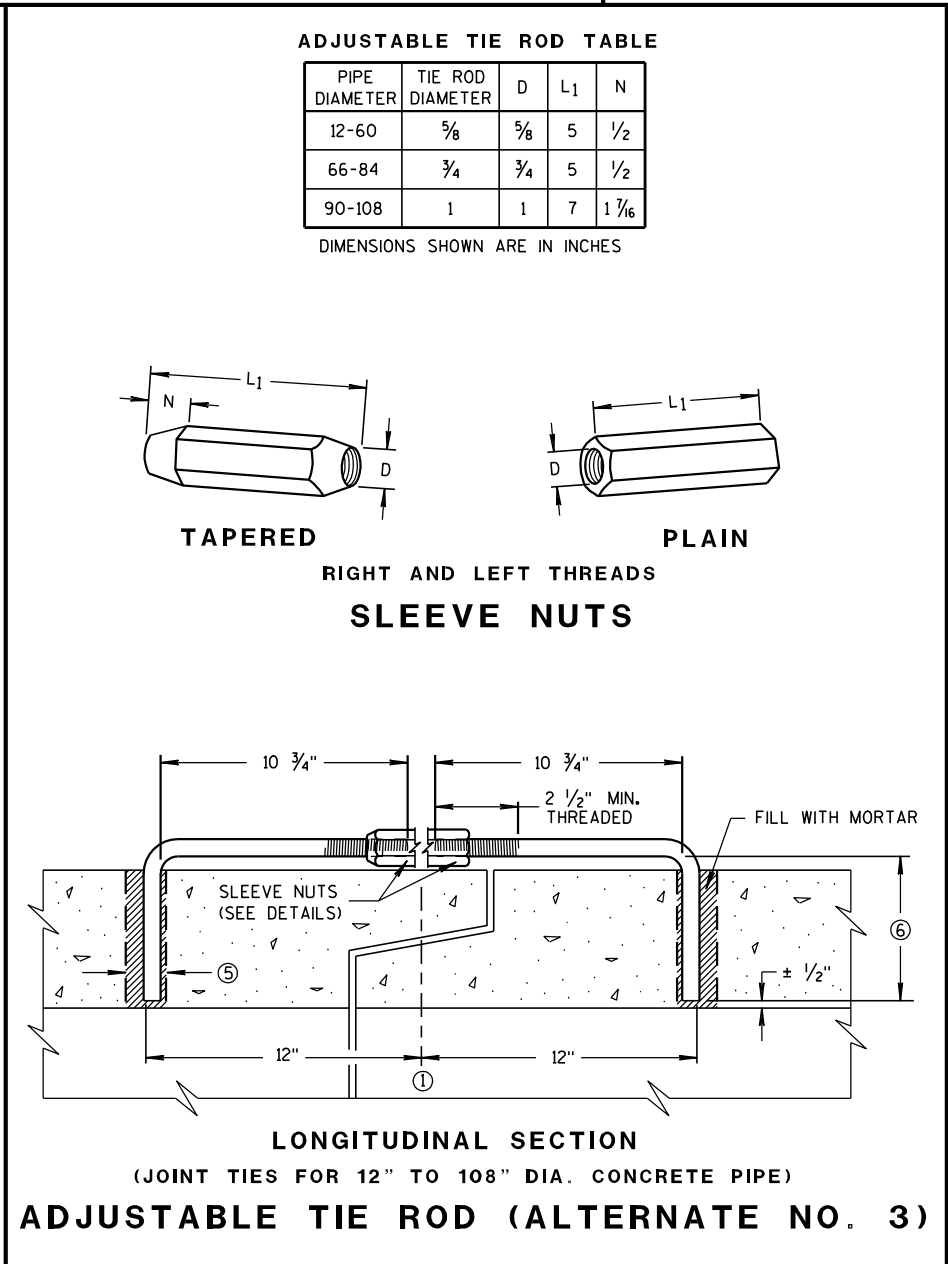
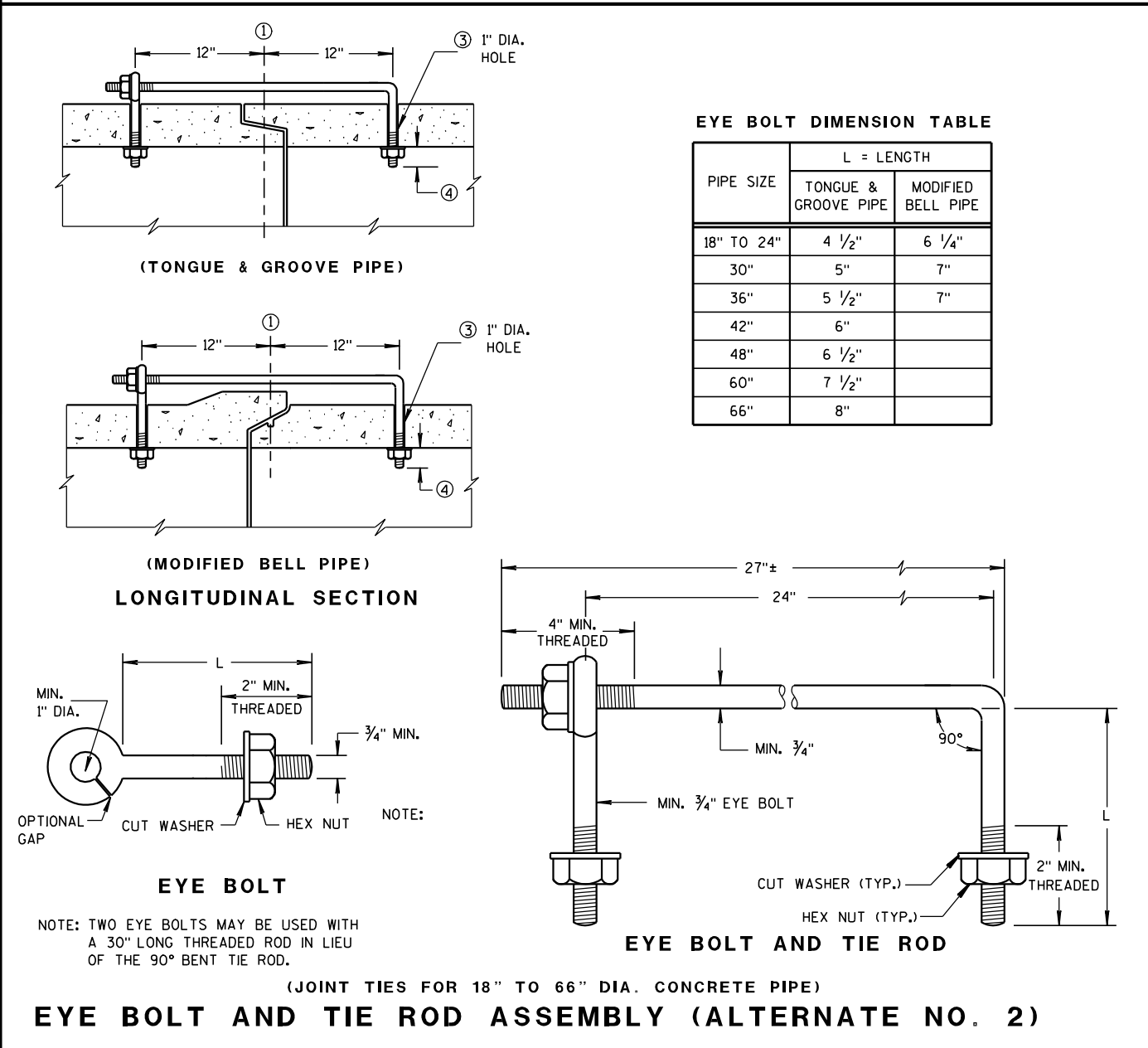
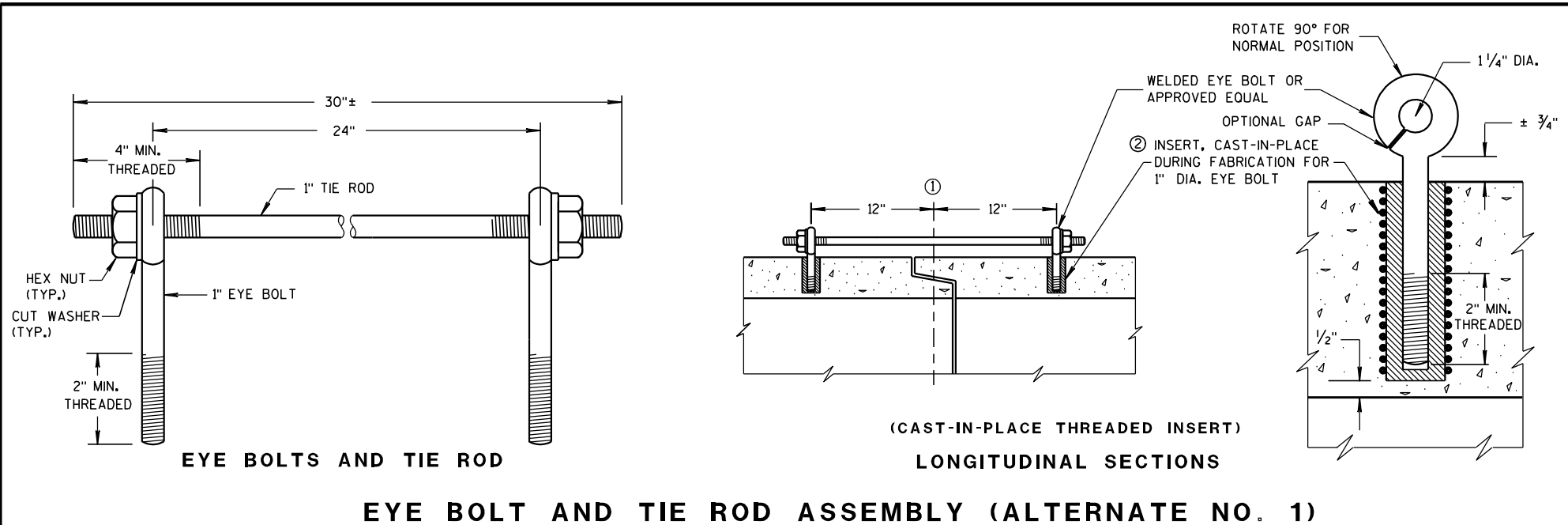
① FOR PIPE ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

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

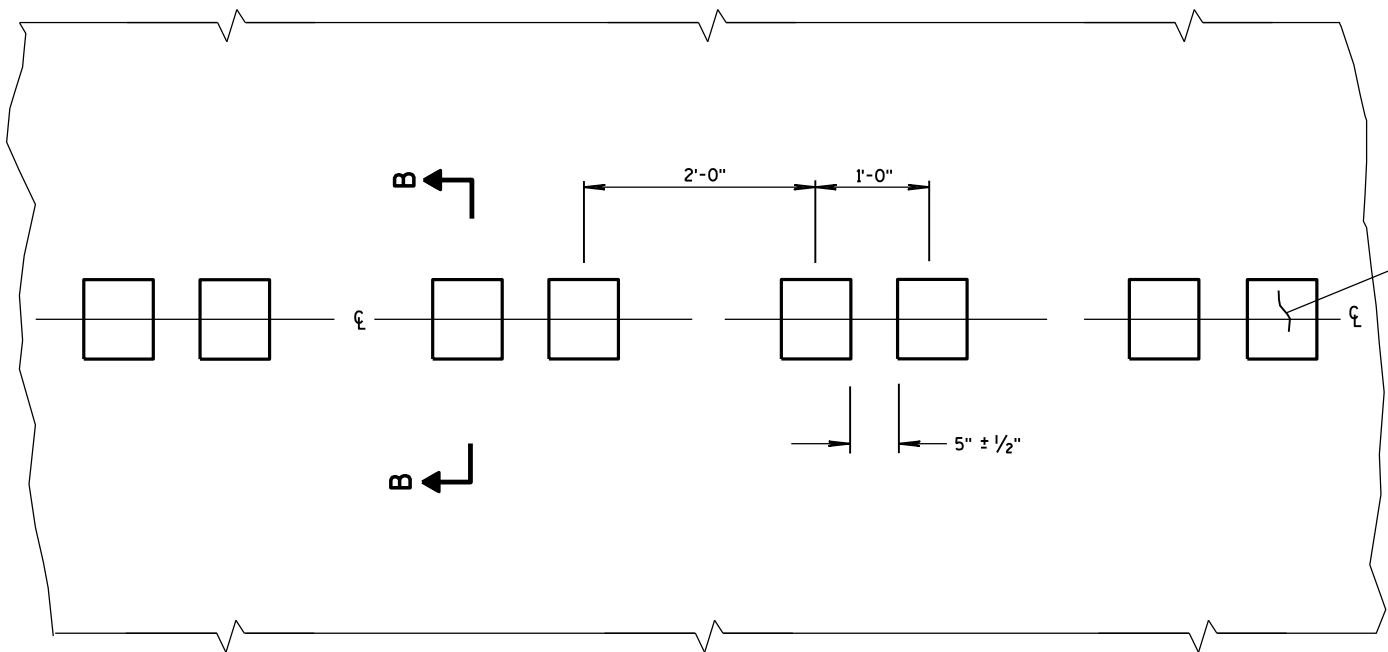
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

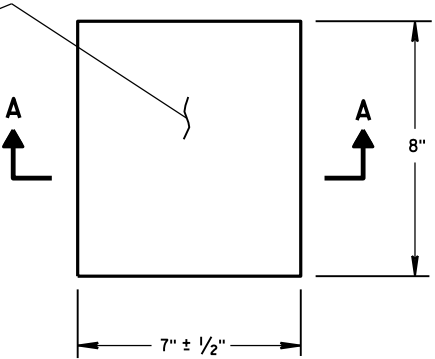
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

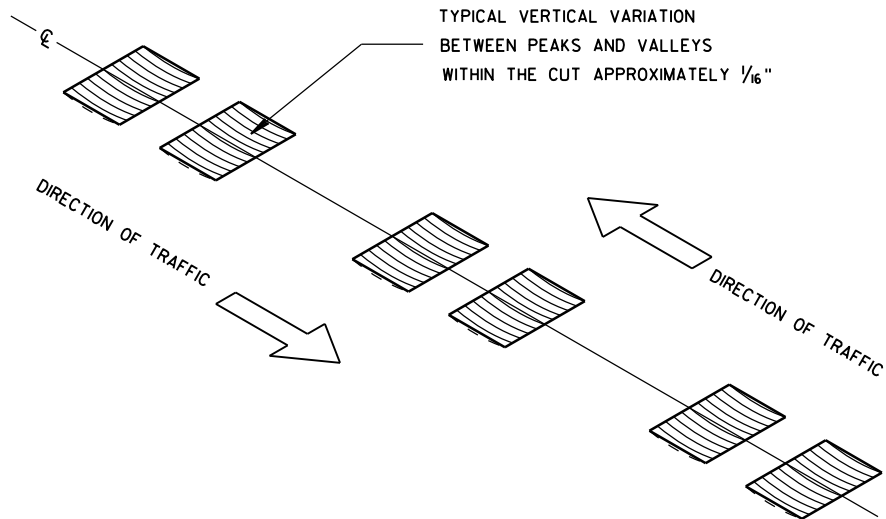
- ① CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



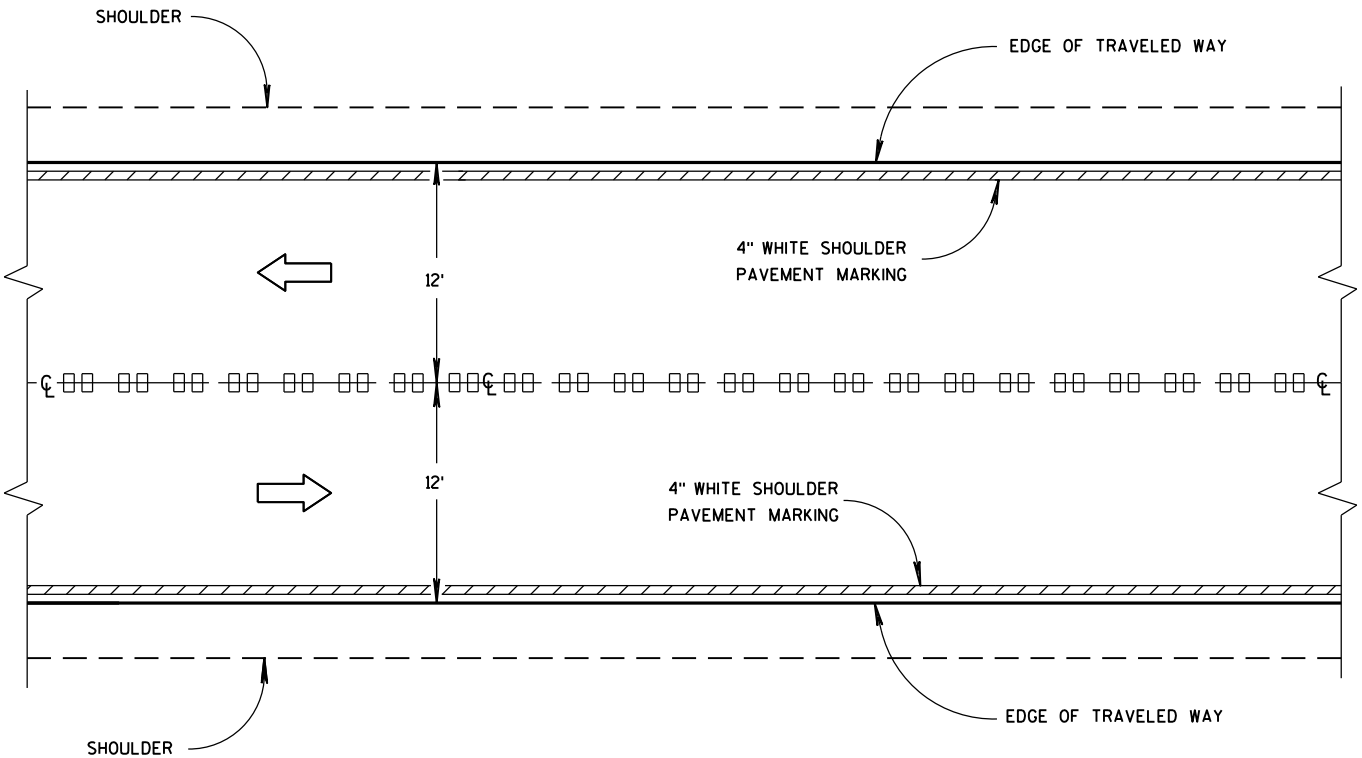
PLAN VIEW
CENTER LINE WITH GROOVES



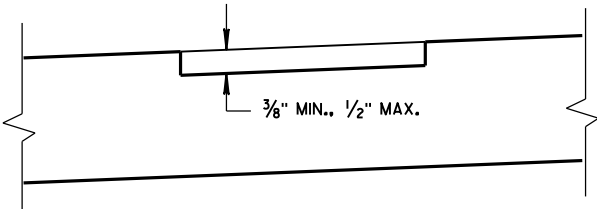
PLAN VIEW
(SINGLE GROOVE)



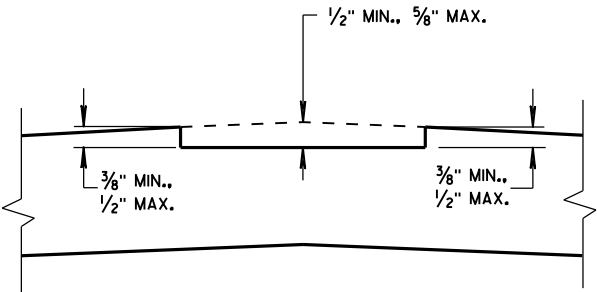
ISOMETRIC



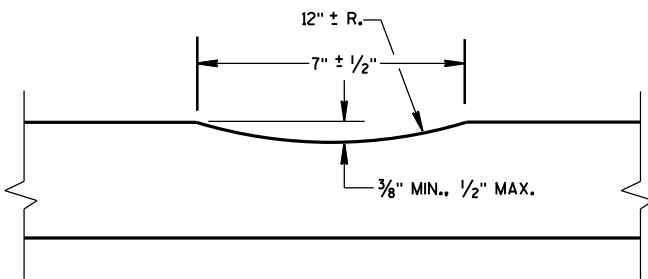
CENTER LINE GROOVES ON TWO-WAY ROADWAYS



SECTION B-B
SUPERELEVATED ROADWAY



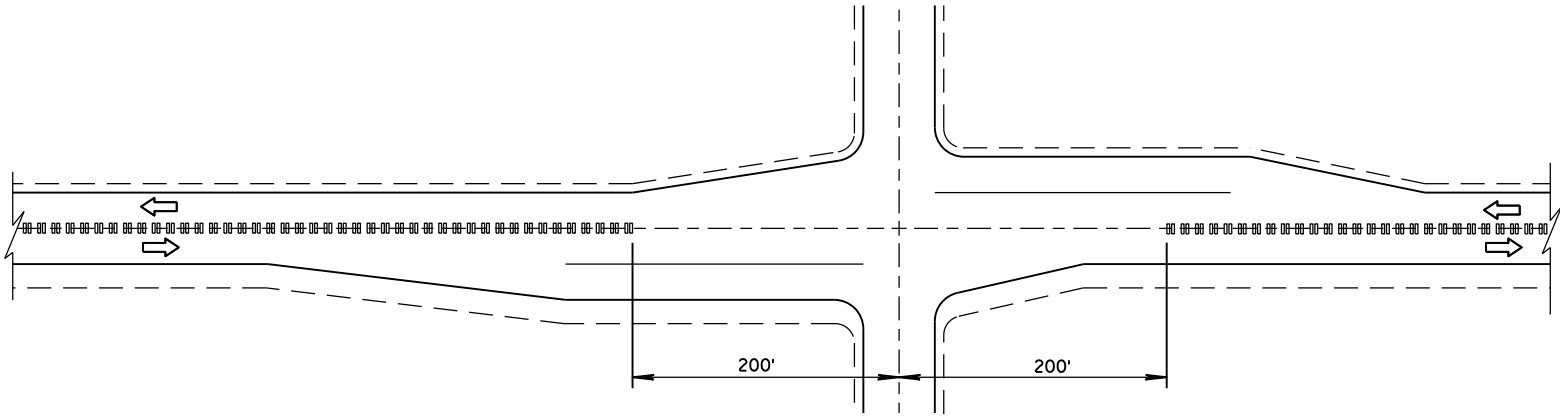
SECTION B-B
CROWNED ROADWAY



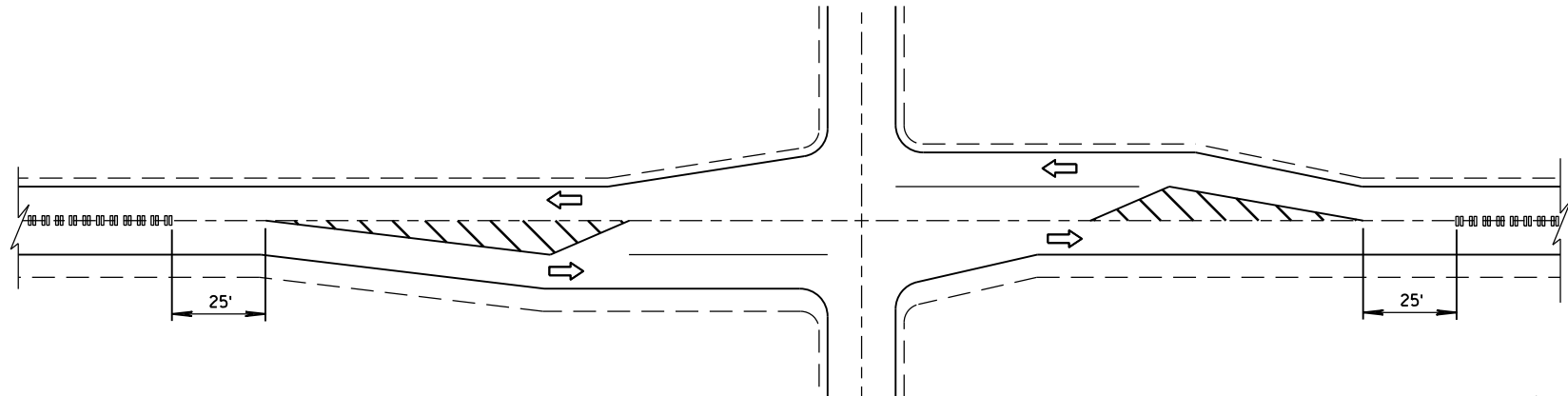
SECTION A-A

2-LANE RURAL
CENTER LINE RUMBLE STRIP,
MILLING

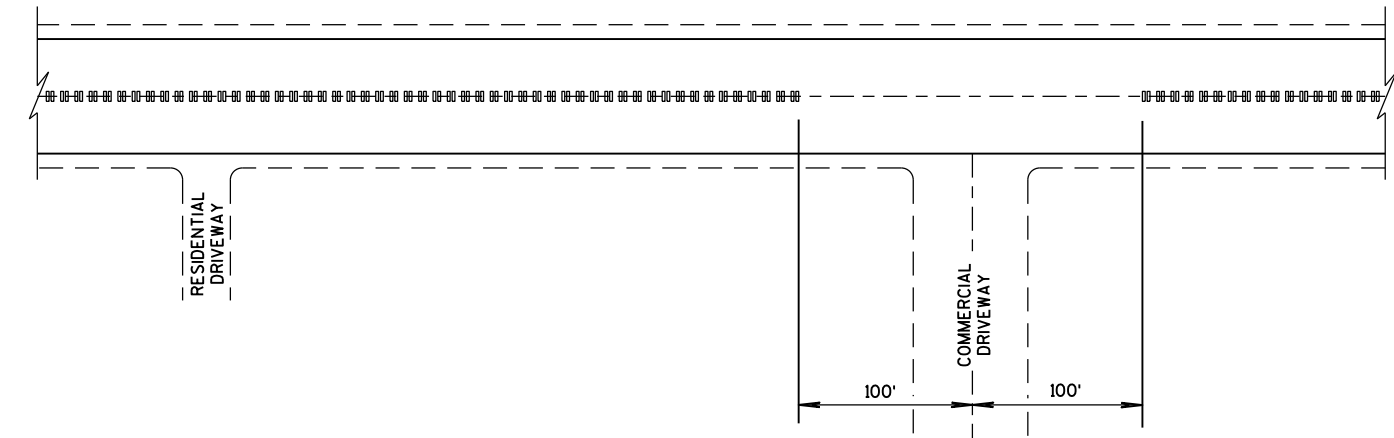
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CENTER LINE GROOVES AT INTERSECTIONS

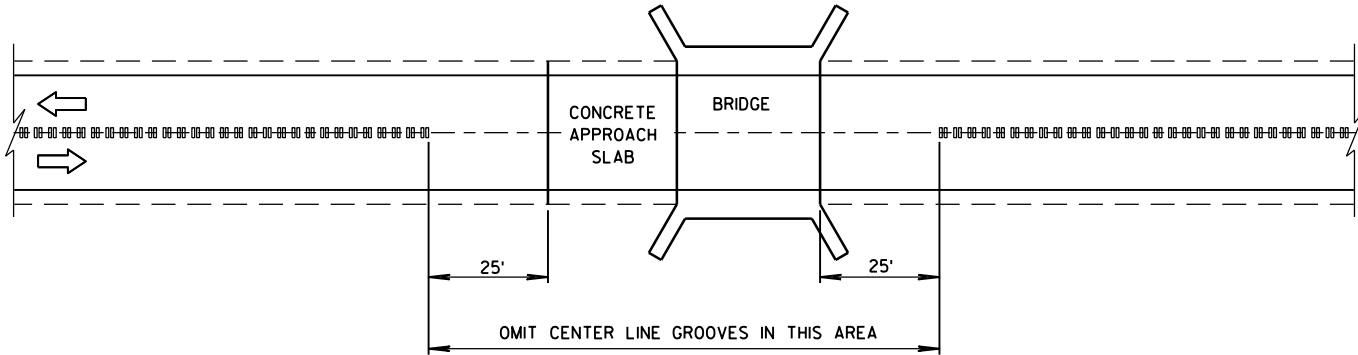


CENTER LINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)

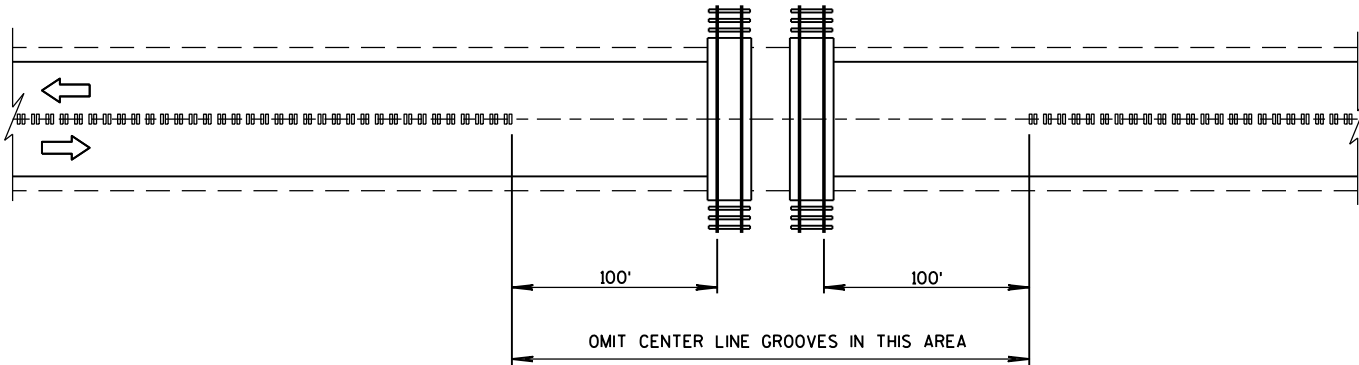


CENTER LINE GROOVES AT DRIVEWAYS^①

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

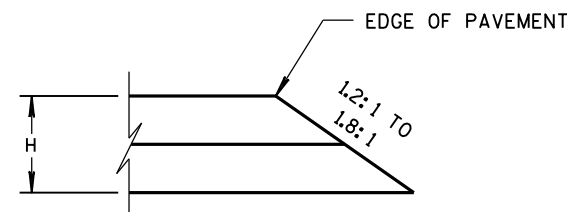


CENTER LINE GROOVES AT BRIDGES

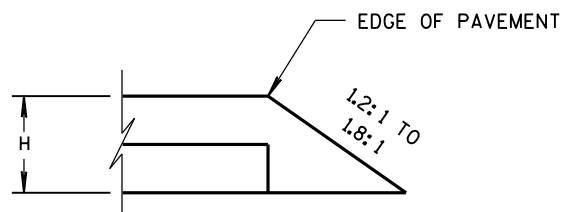


CENTER LINE GROOVES AT RAILROADS

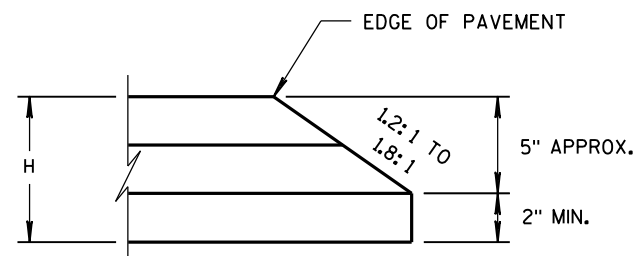
2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 5/15/2013 DATE	/S/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	



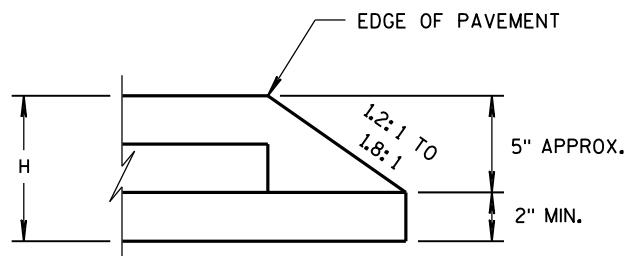
CONSTRUCTED WITH FINAL TWO LAYERS
FOR H 5" OR LESS



CONSTRUCTED WITH FINAL LAYER
FOR H 5" OR LESS

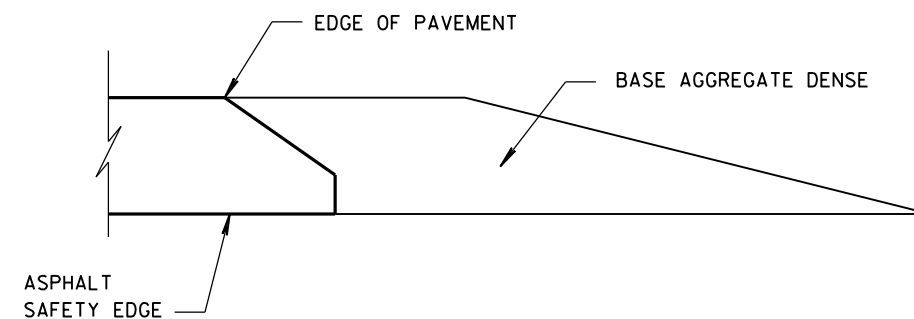


CONSTRUCTED WITH FINAL TWO LAYERS
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER
FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



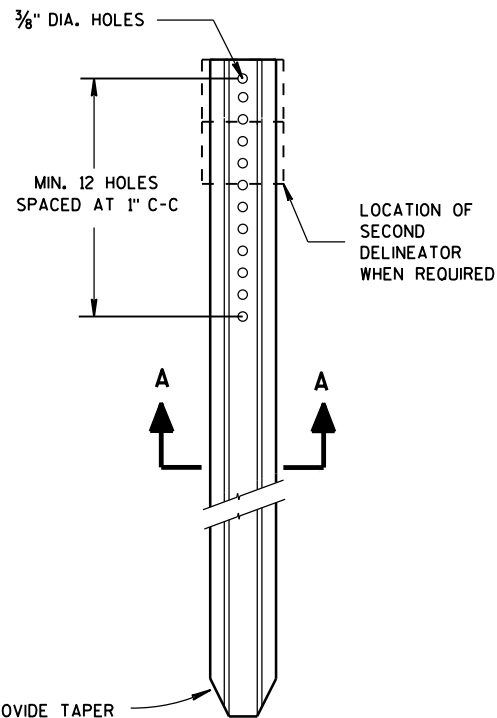
FINISHED SHOULDER AGGREGATE PLACEMENT

SAFETY EDGE_{SM}

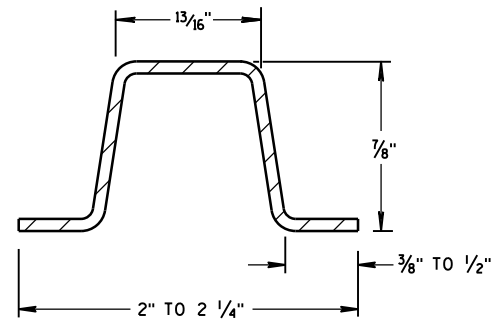
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/2012
DATE
FHWA

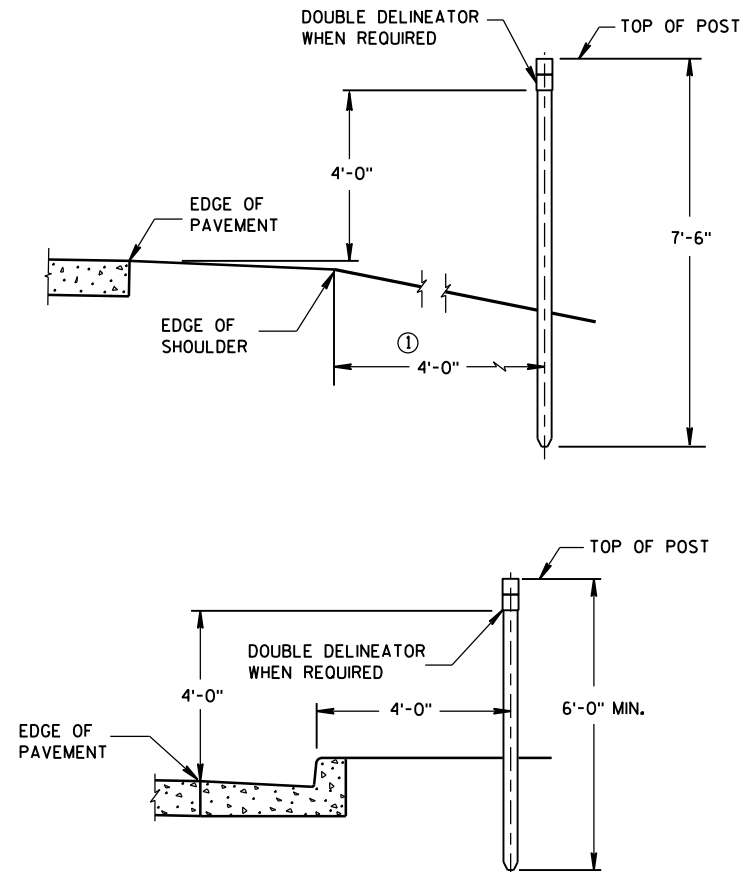
/s/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



DELINEATOR POST



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

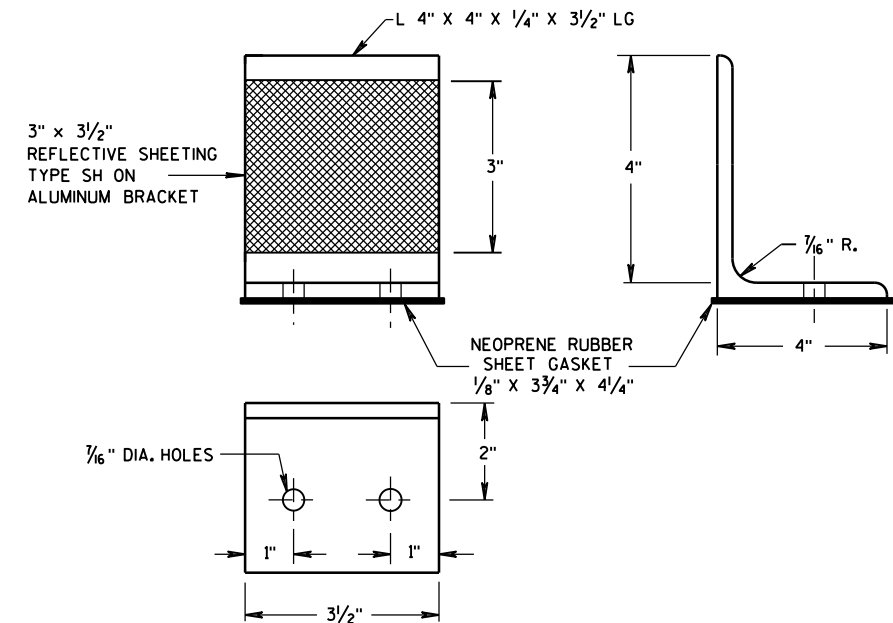


TYPICAL INSTALLATIONS OF DELINEATOR POSTS

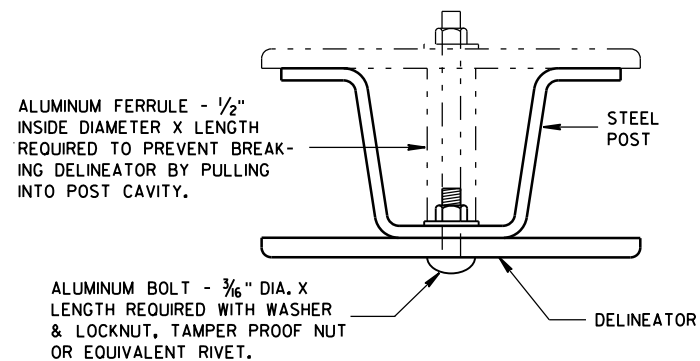
GENERAL NOTES

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

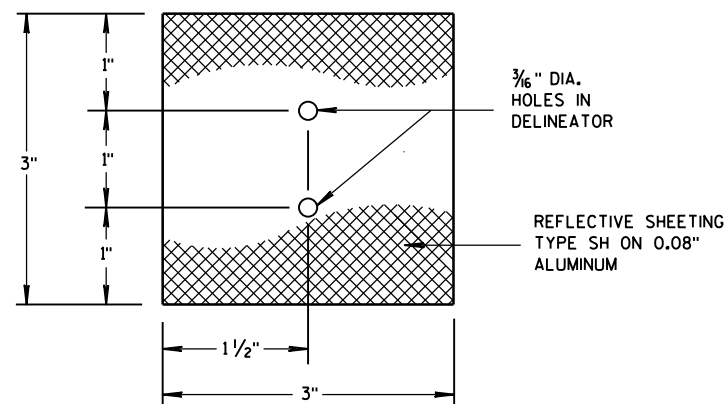
- ① DELINEATORS SHALL BE PLACED AT A CONSTANT DISTANCE FROM THE EDGE OF THE SHOULDER FOR THE LENGTH OF THE INSTALLATION.



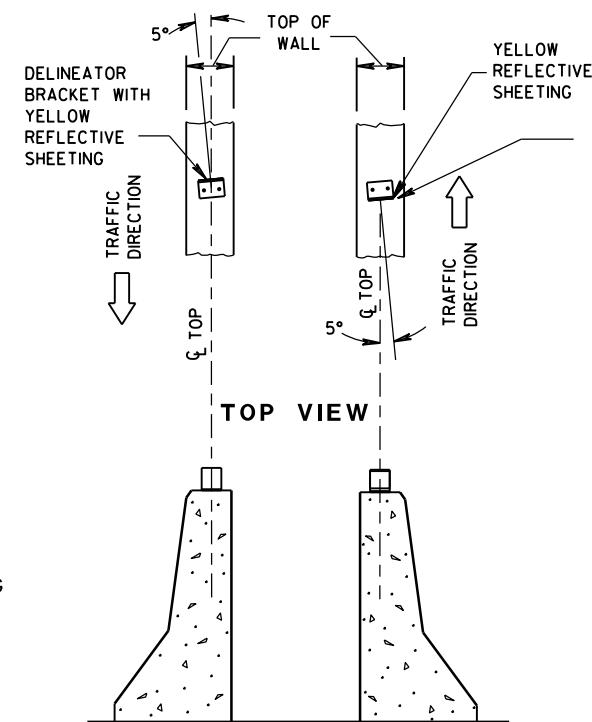
DELINEATOR BRACKET



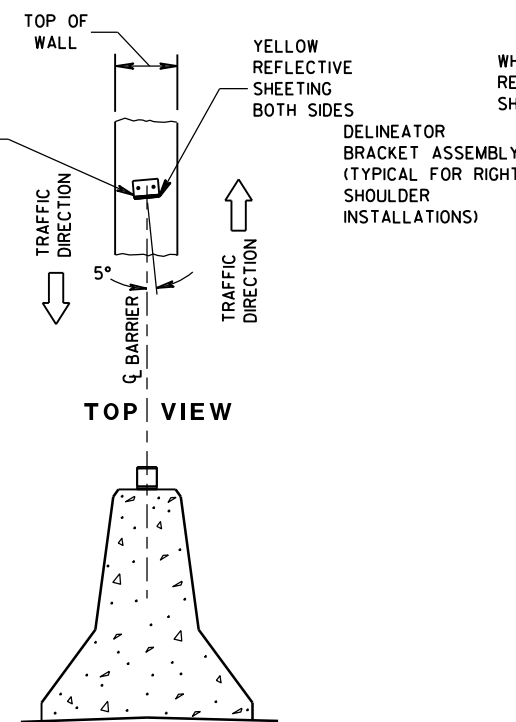
MOUNTING DETAIL FOR DELINEATOR



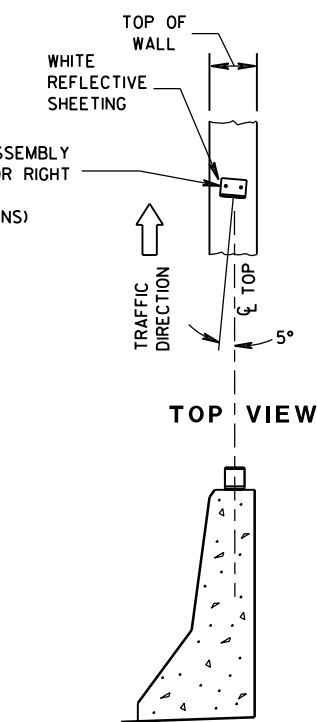
3" X 3" DELINEATOR



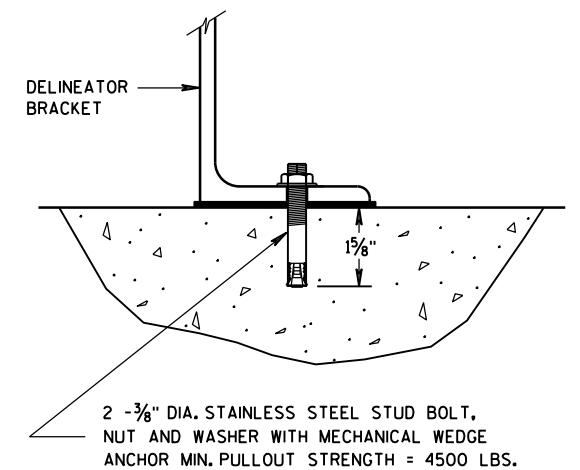
DOUBLE BARRIERS IN MEDIAN



MEDIAN BARRIER



BARRIER LOCATED TO RT. OF TRAFFIC FLOW



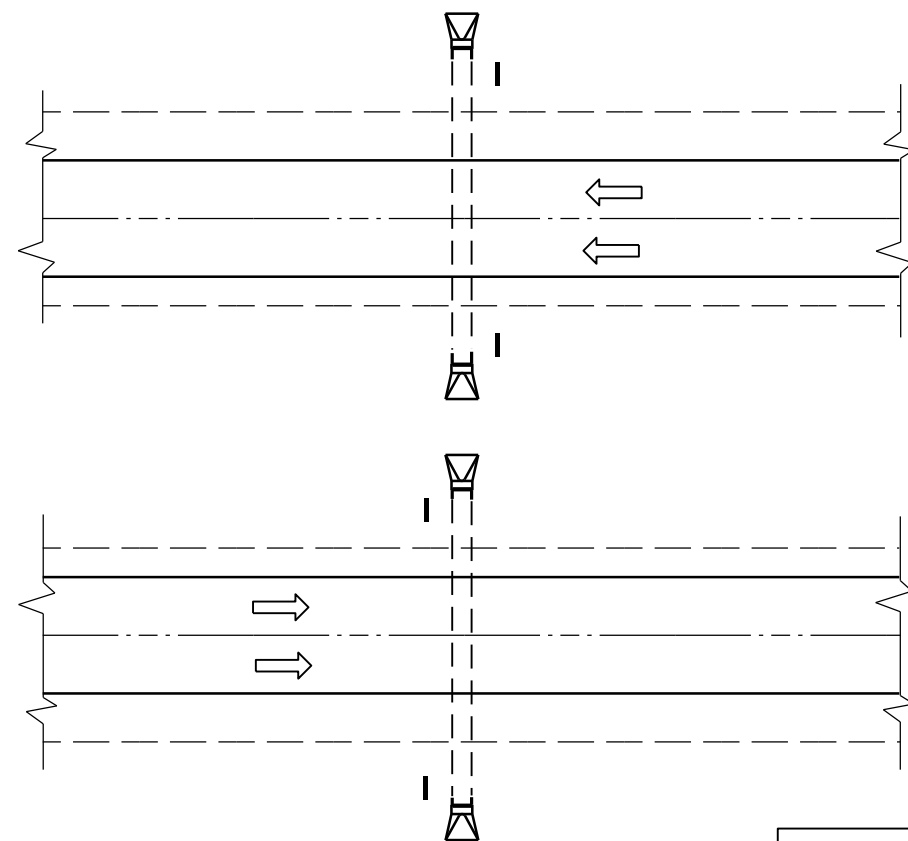
DELINEATOR BRACKET MOUNTING DETAIL

LOCATION AND AIMING DETAILS FOR DELINEATOR BRACKETS MOUNTED ON CONCRETE BARRIERS

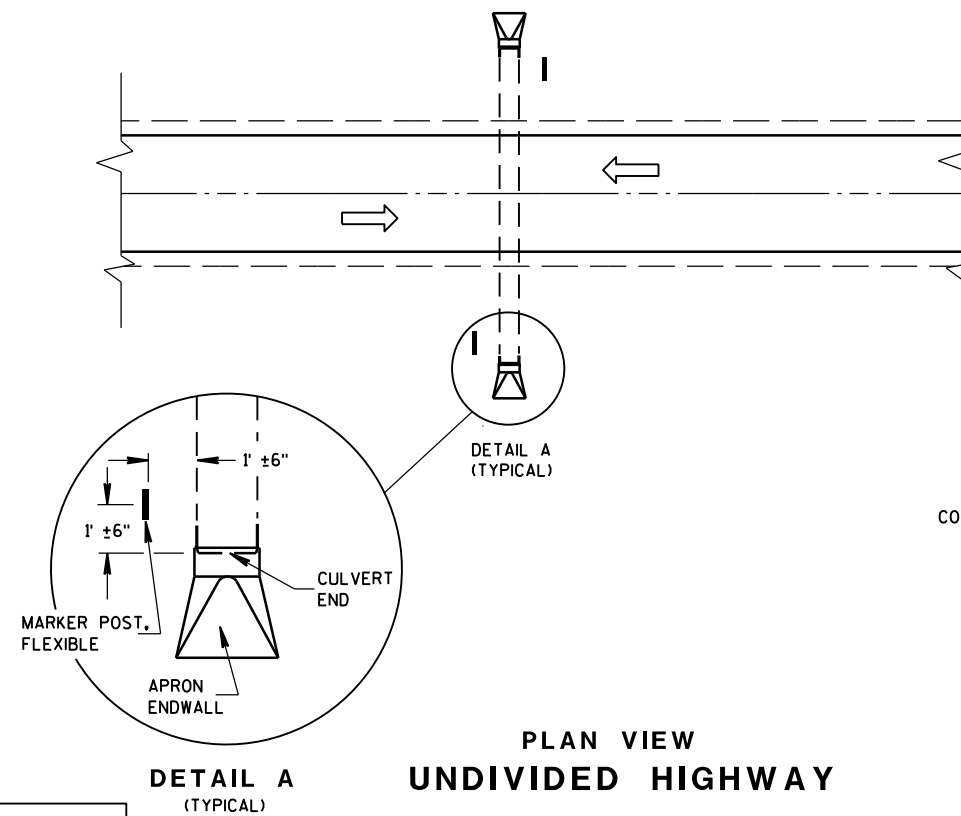
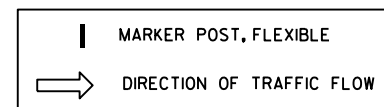
DELINEATOR POST, DELINEATOR, AND DELINEATOR BRACKET WITH REFLECTIVE SHEETING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



PLAN VIEW
DIVIDED HIGHWAY

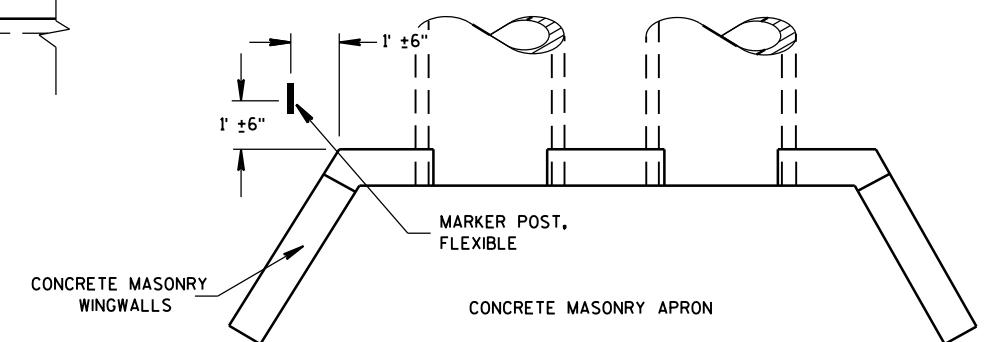


PLAN VIEW
UNDIVIDED HIGHWAY

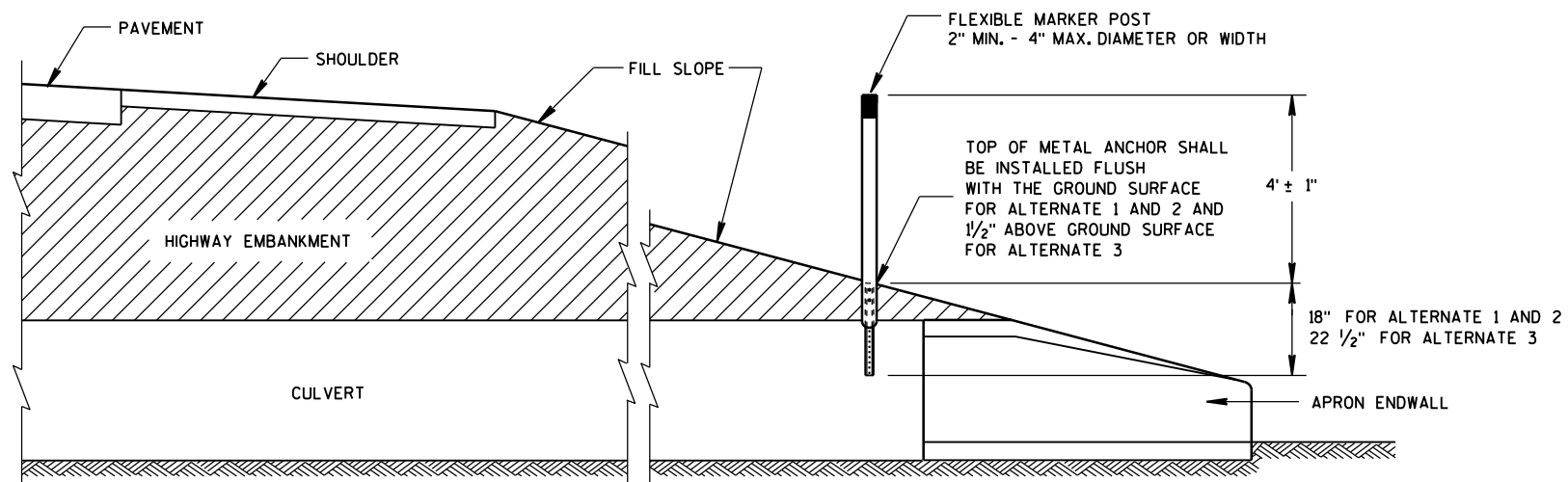
FLEXIBLE MARKER POST LOCATION

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.



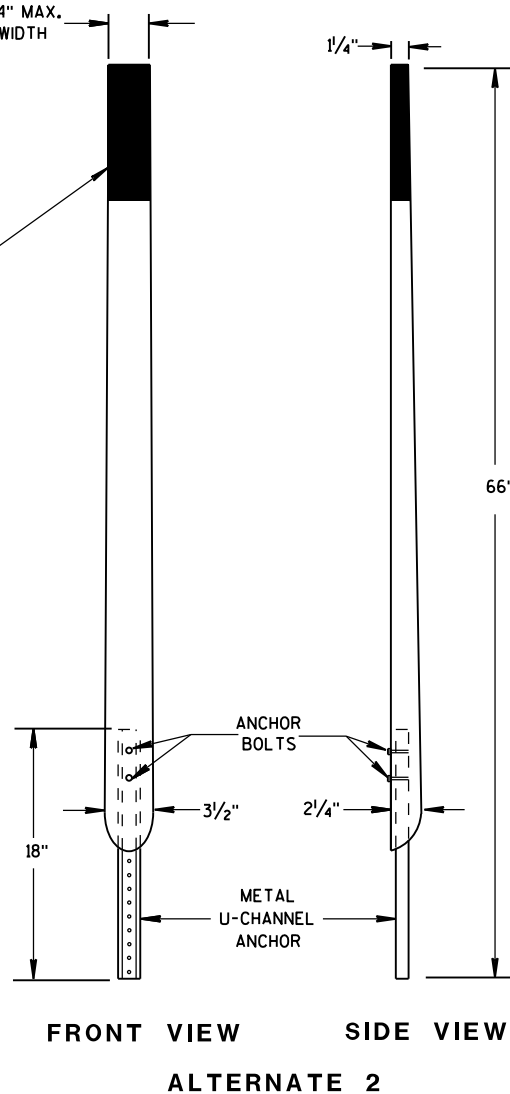
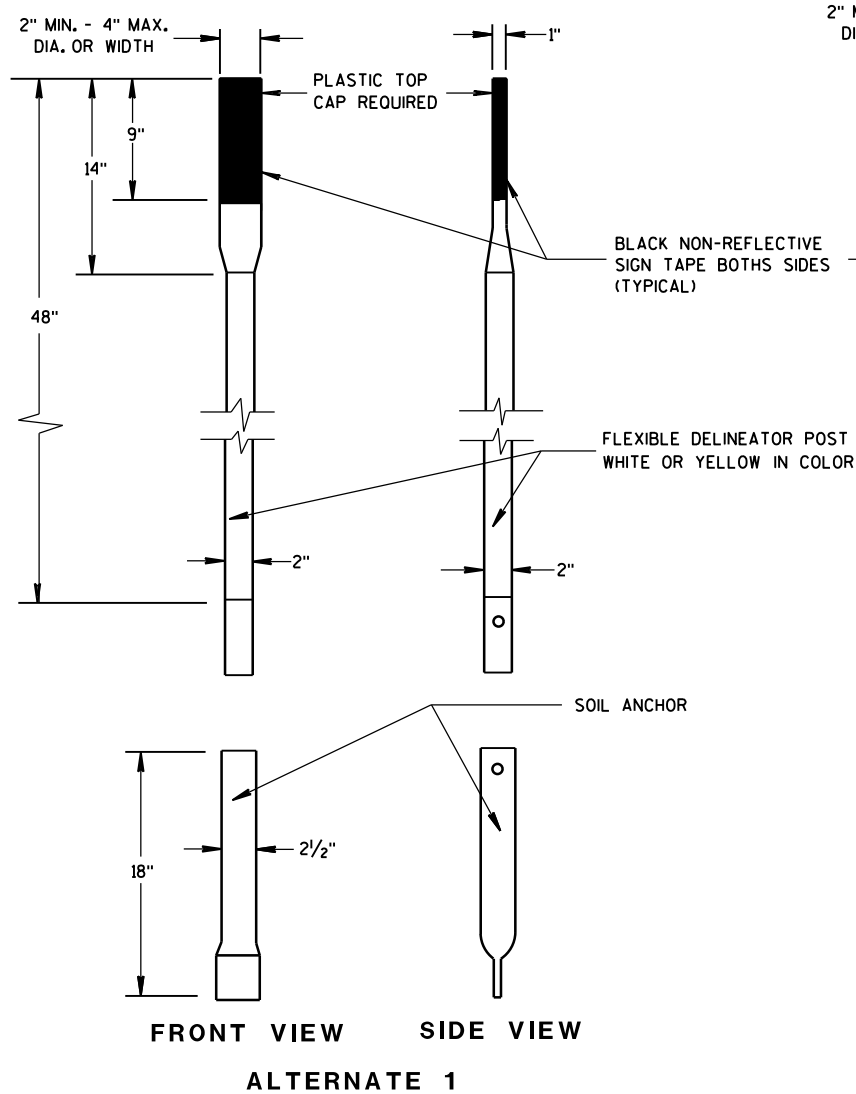
PLAN VIEW
CONCRETE MASONRY ENDWALLS FOR
CULVERT PIPE AND PIPE ARCH



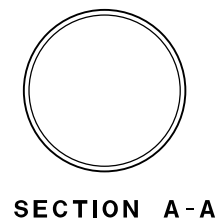
CROSS SECTION
FLEXIBLE MARKER POST

FLEXIBLE MARKER POST
FOR CULVERT END

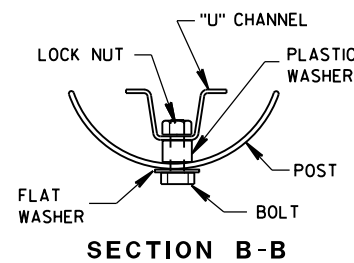
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



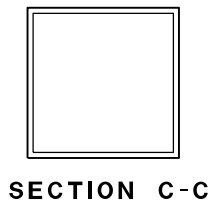
FLEXIBLE MARKER POSTS



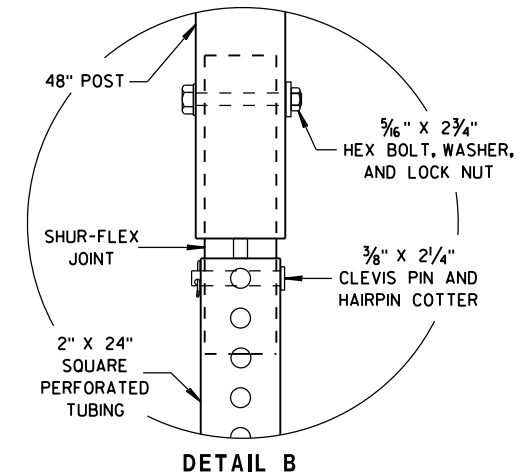
SECTION A-A



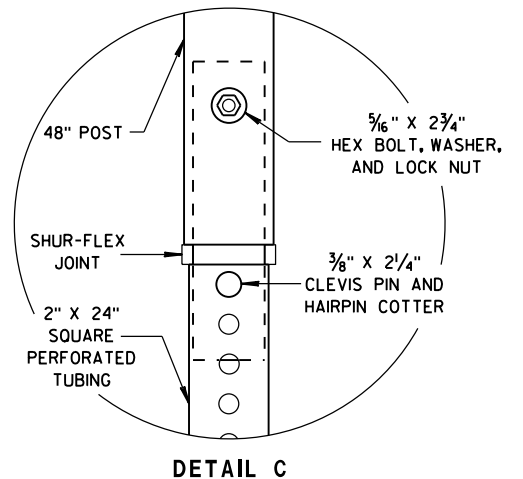
SECTION B-B



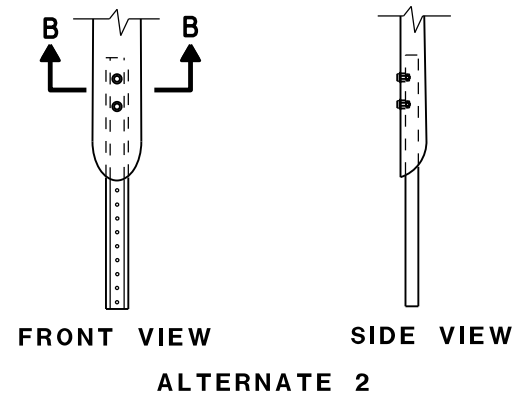
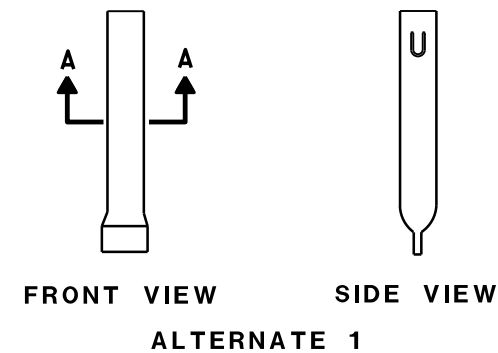
SECTION C-C



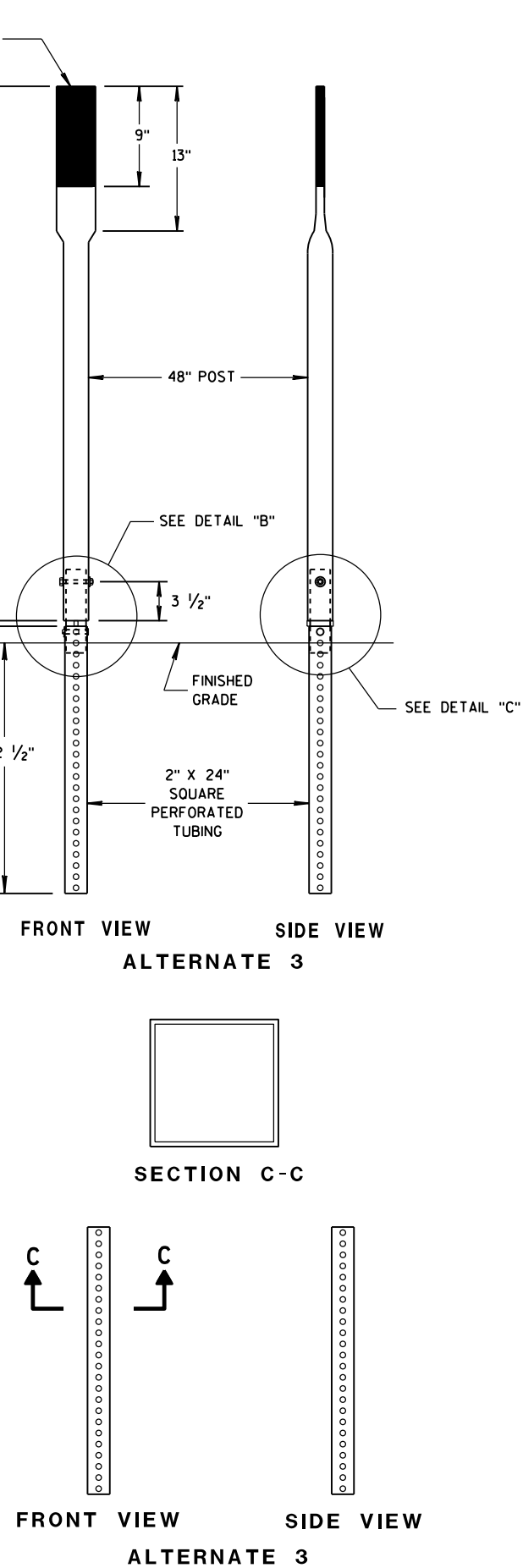
DETAIL B



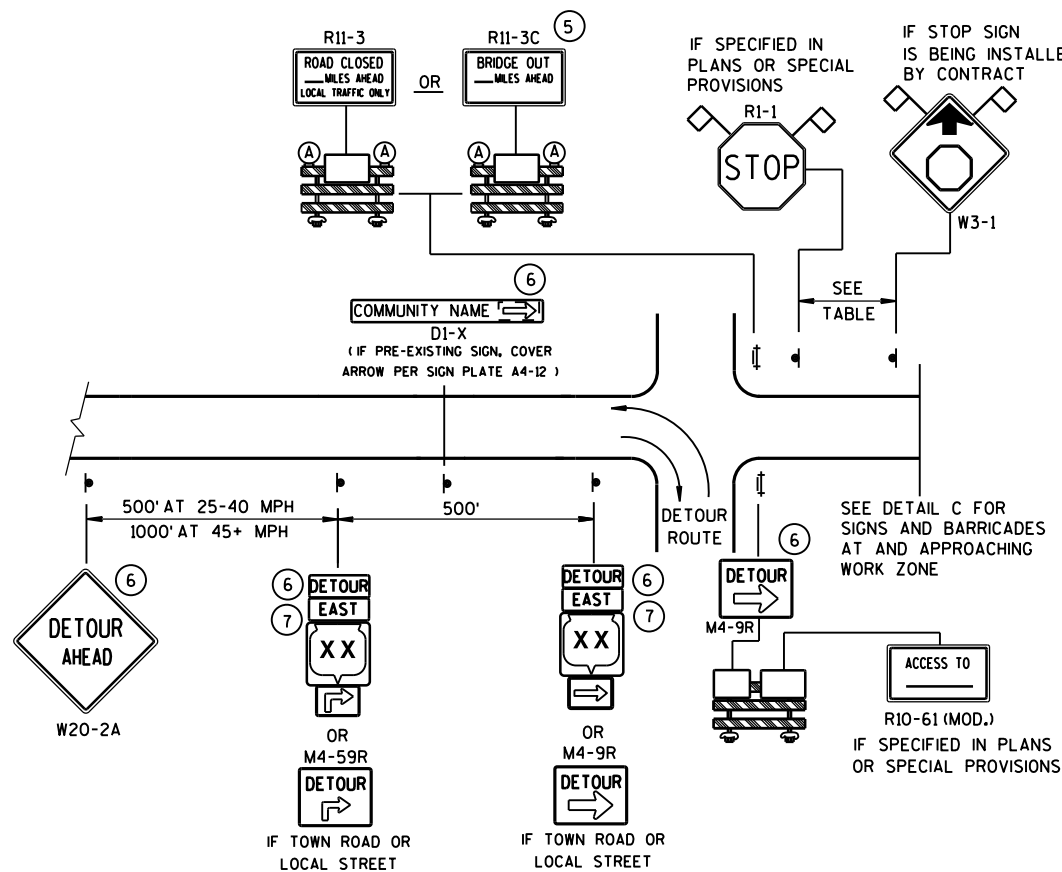
DETAIL C



FLEXIBLE MARKER POST ANCHORS

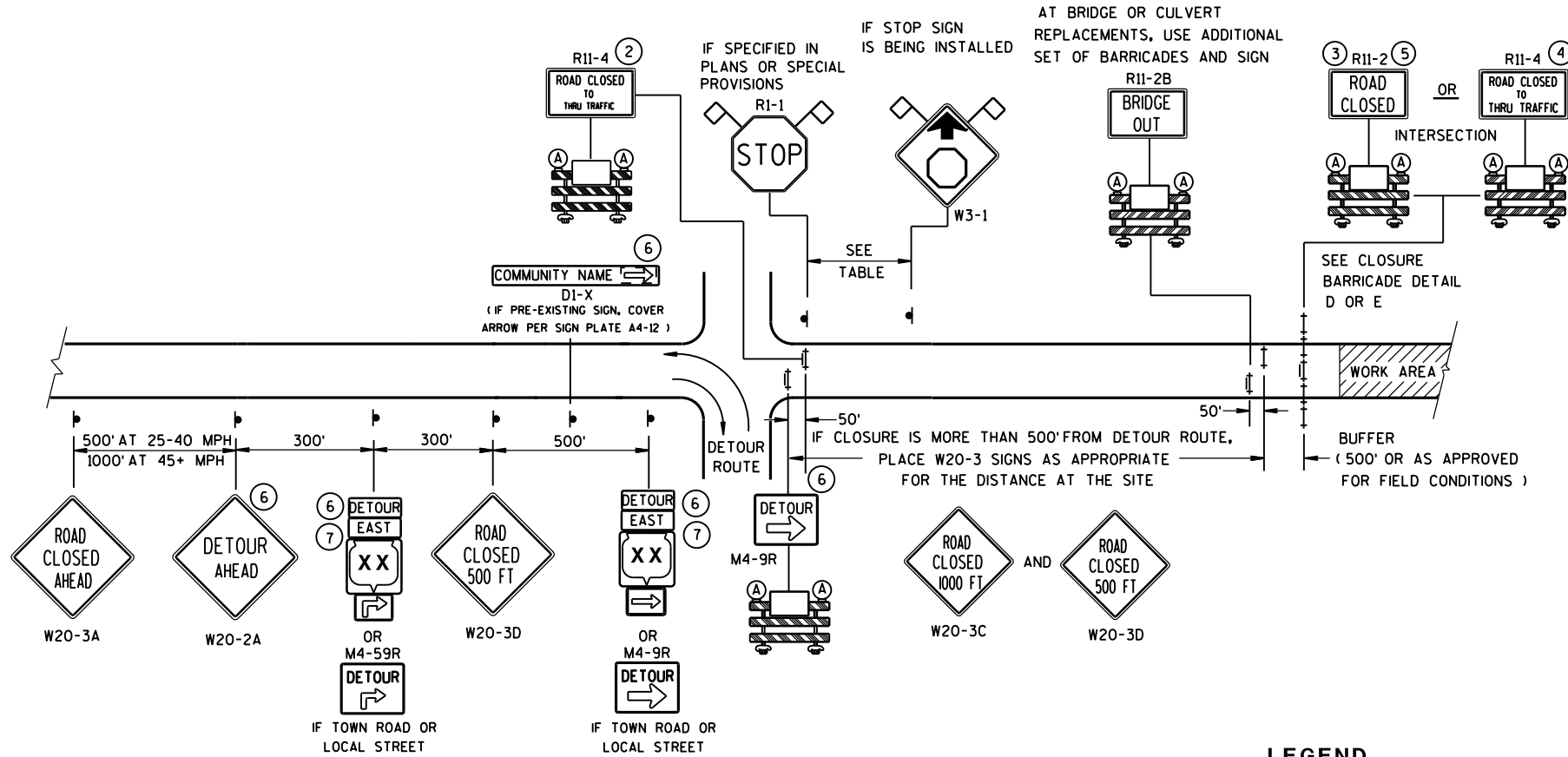


FLEXIBLE MARKER POST FOR CULVERT END	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 10/1/2012 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEER OF DESIGN
FHWA	



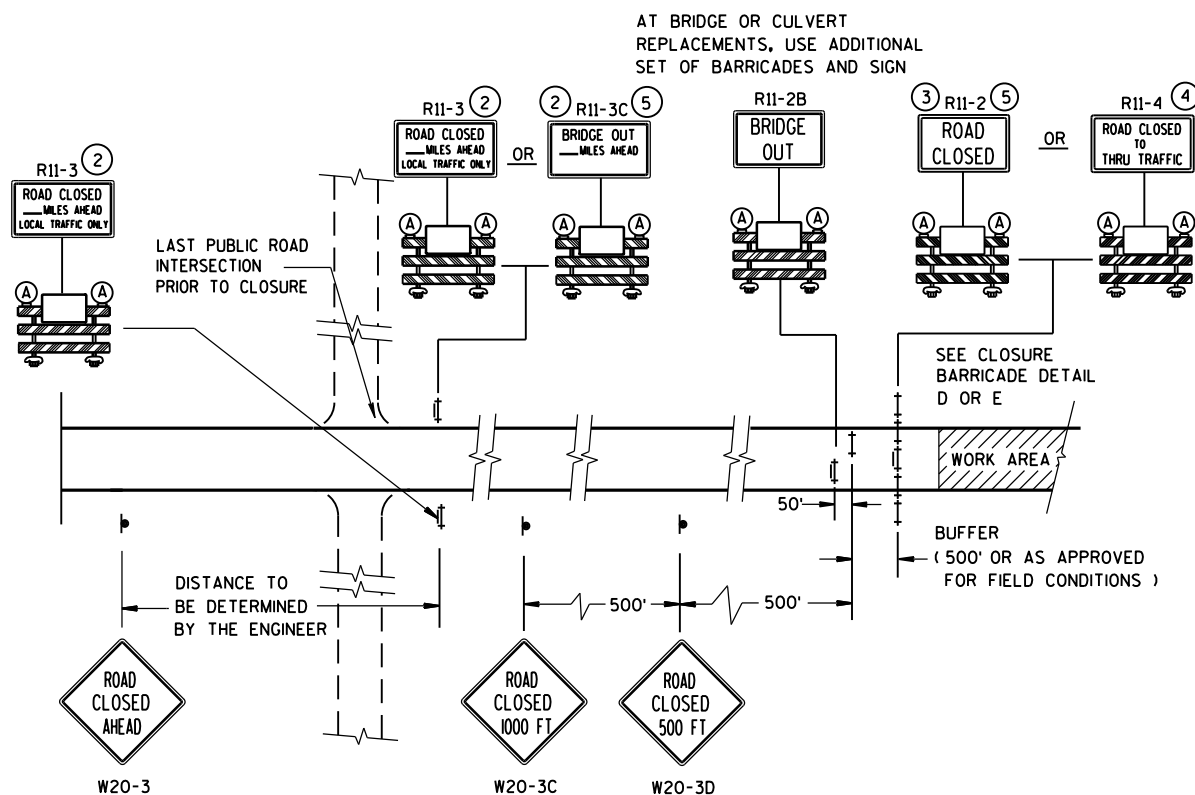
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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)

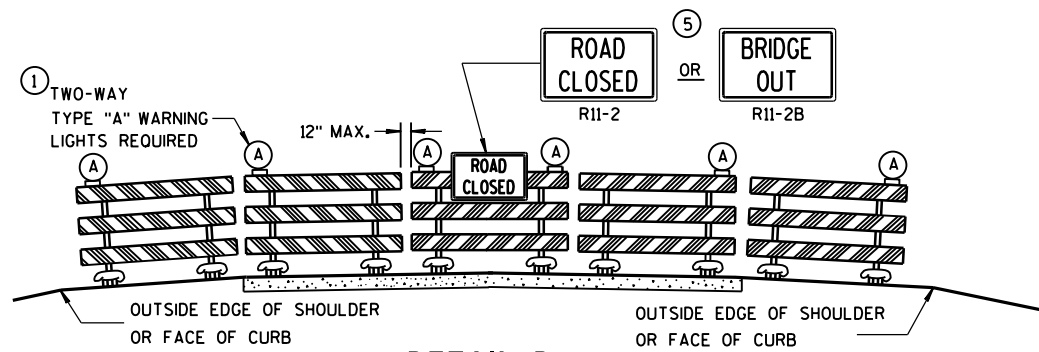


DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

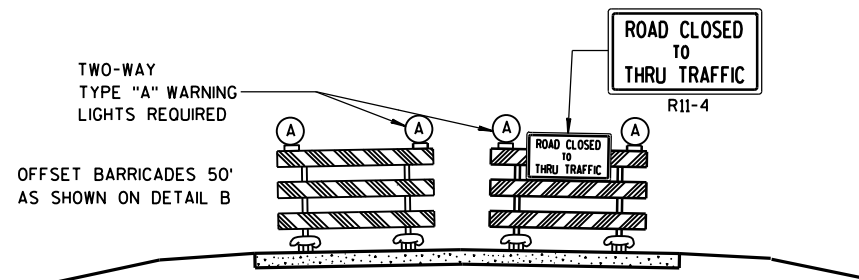
SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
Sept. 2015 DATE	/S/ Peter Amokobe Atepe STATEWIDE WORK ZONE TRAFFIC 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.)

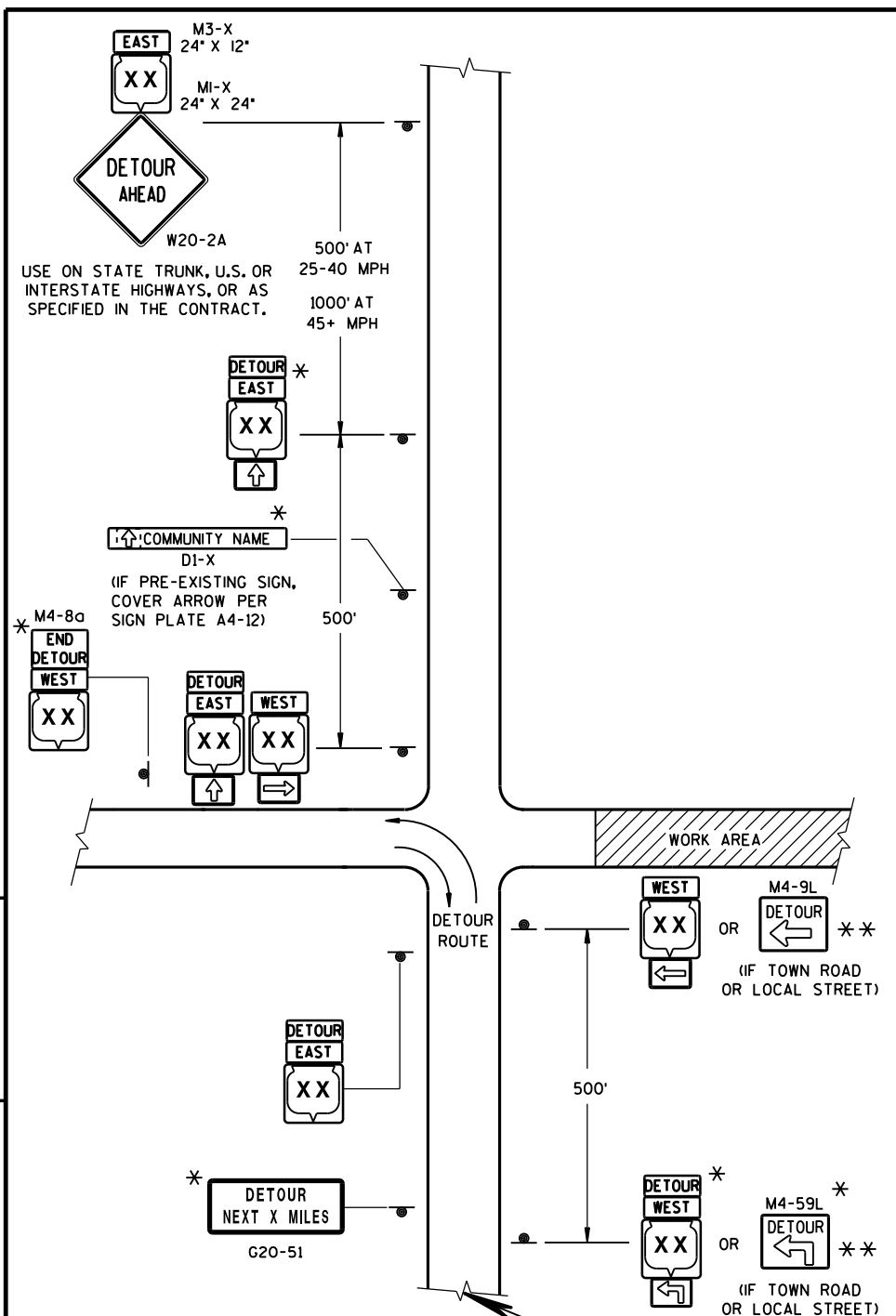
M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)

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



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.

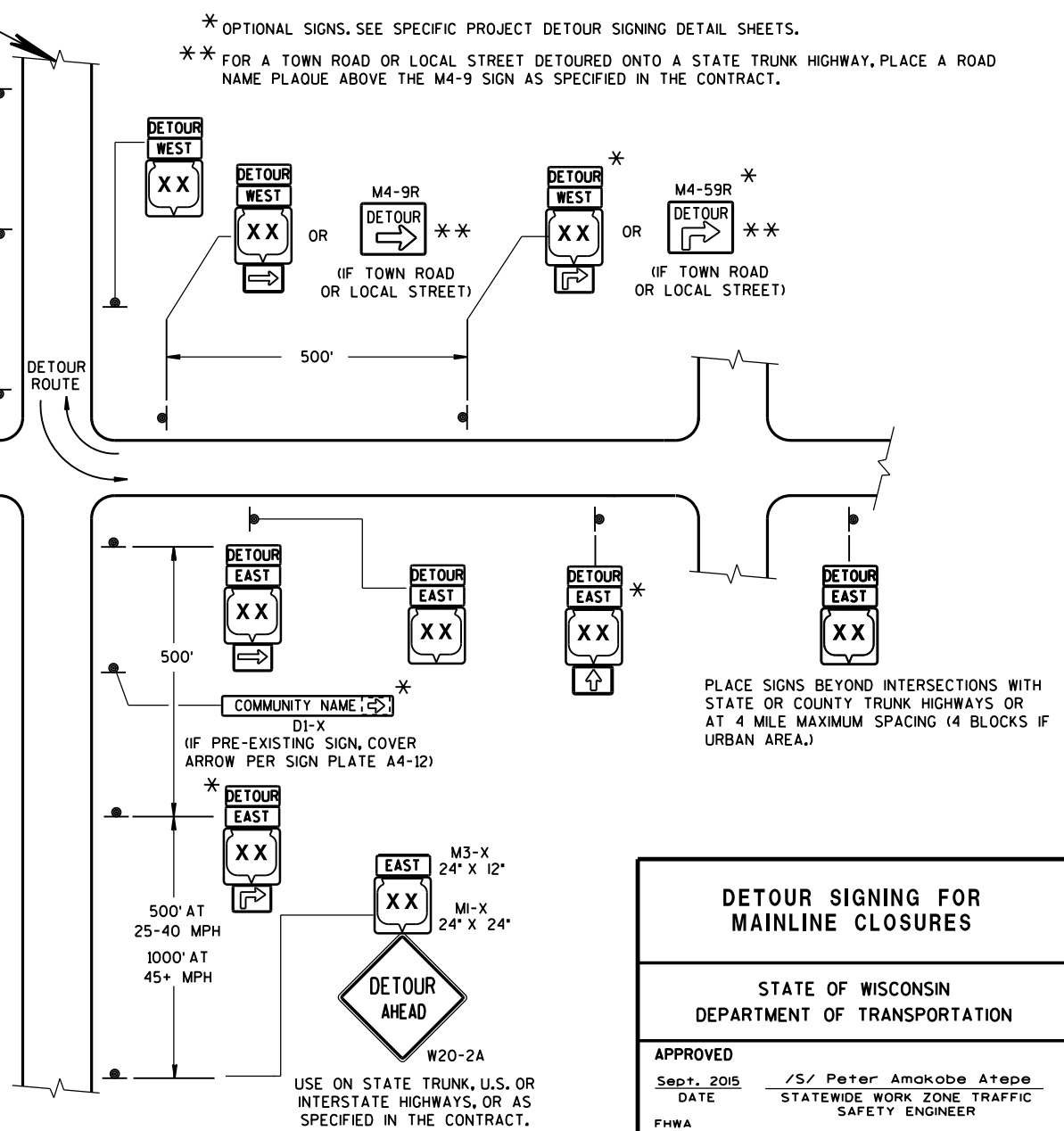
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

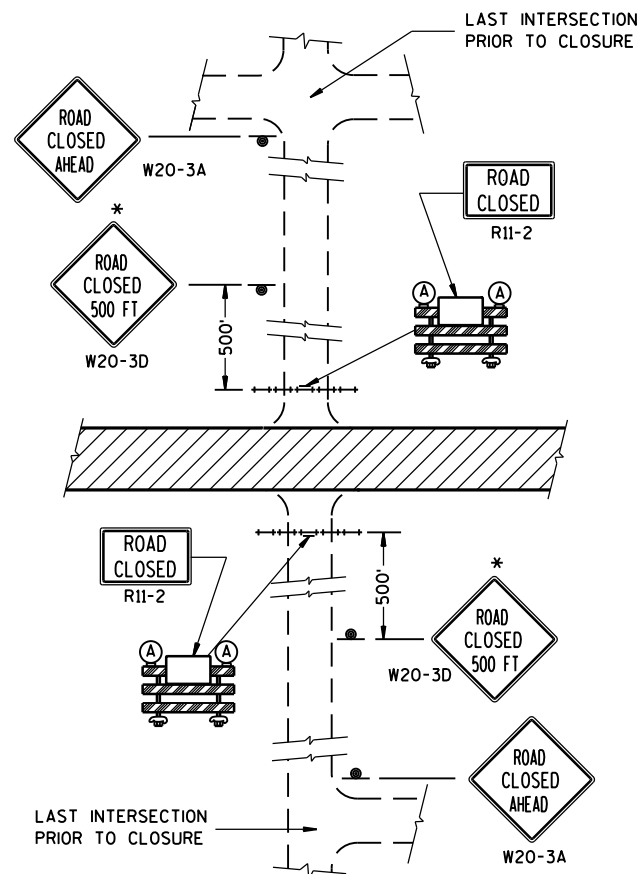
- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO 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.

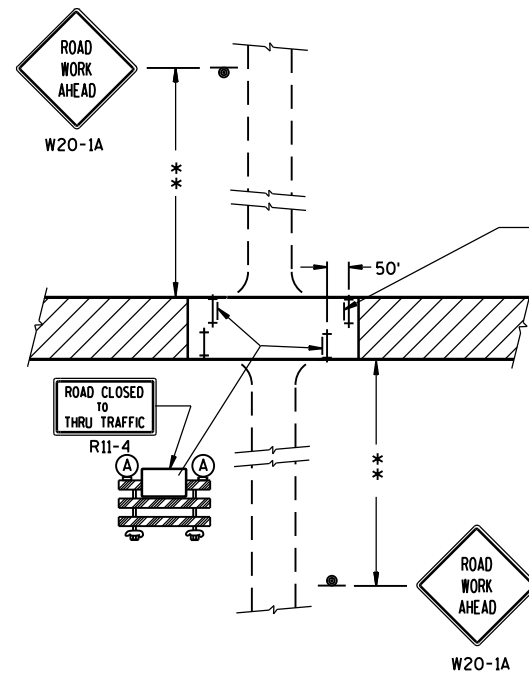
** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



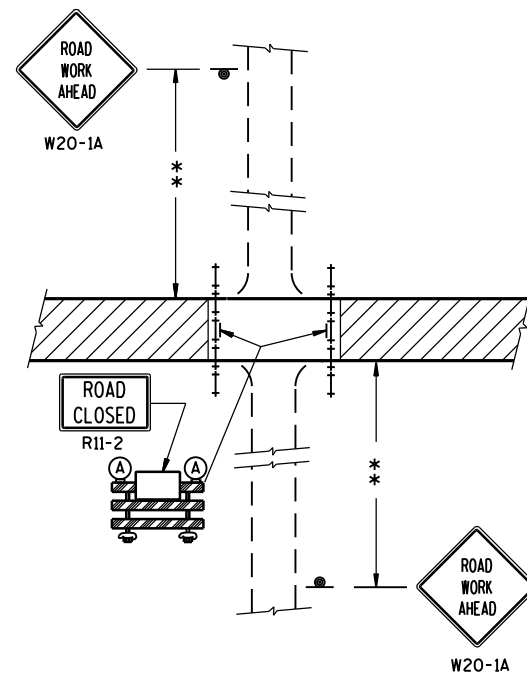
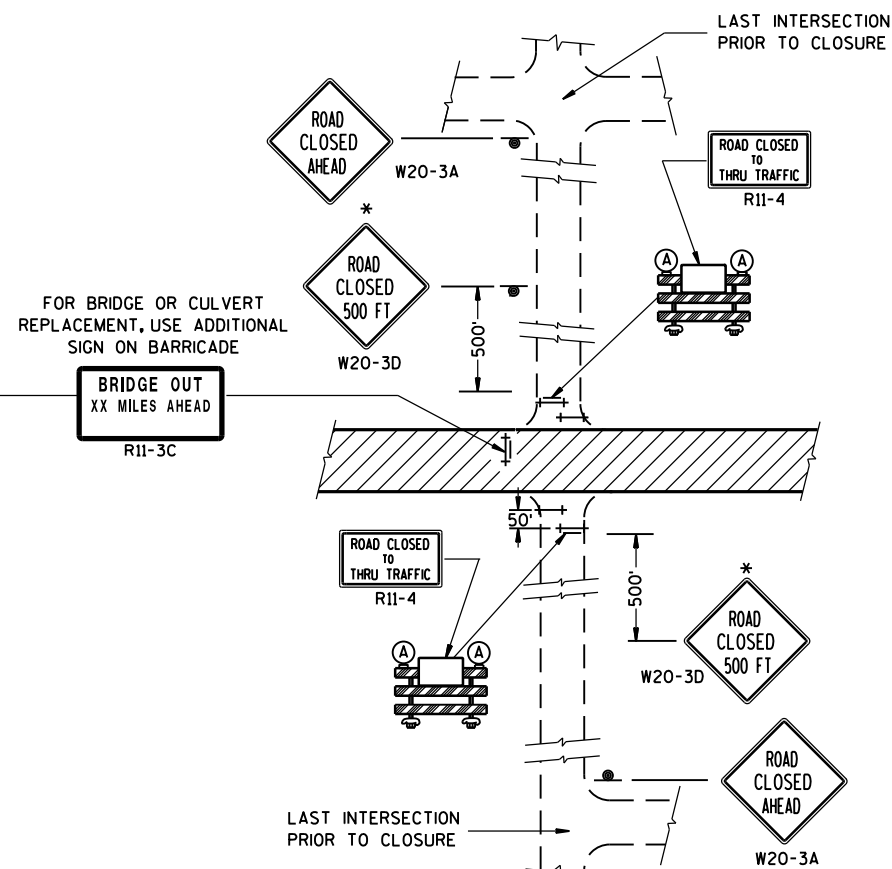
DETOUR SIGNING FOR MAINLINE CLOSURES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED DATE	/S/ Peter Amakobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA	

**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

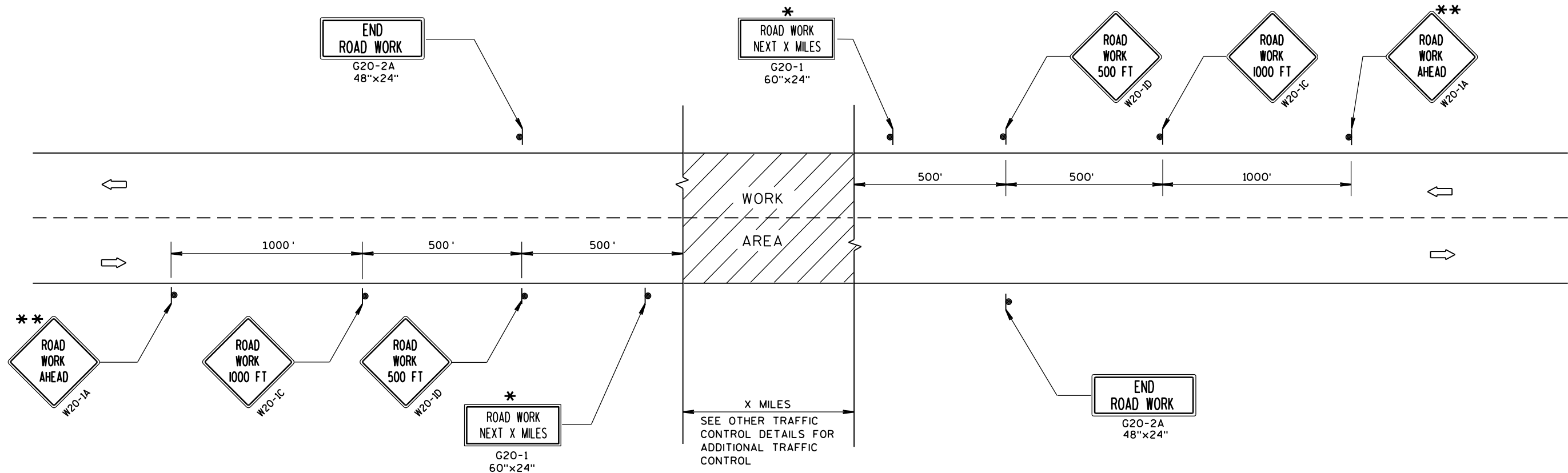
DATE

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.

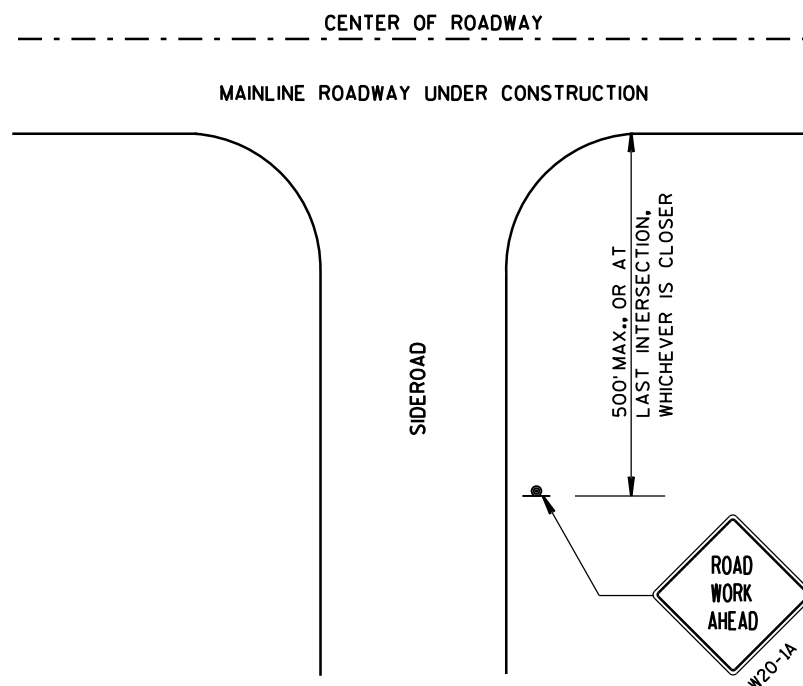
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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.



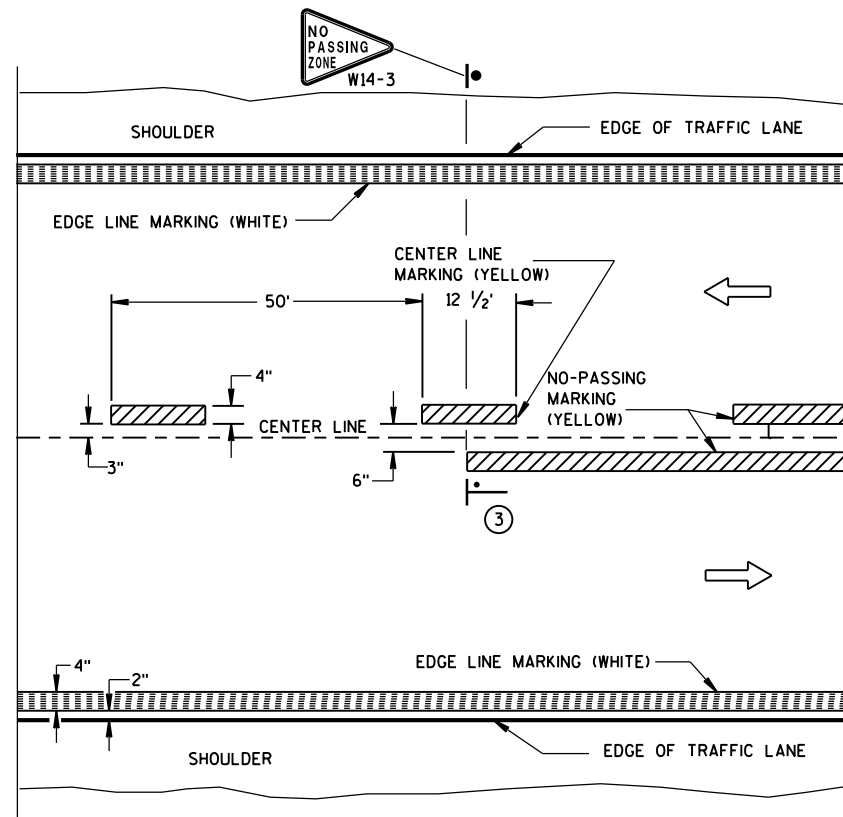
LEGEND

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

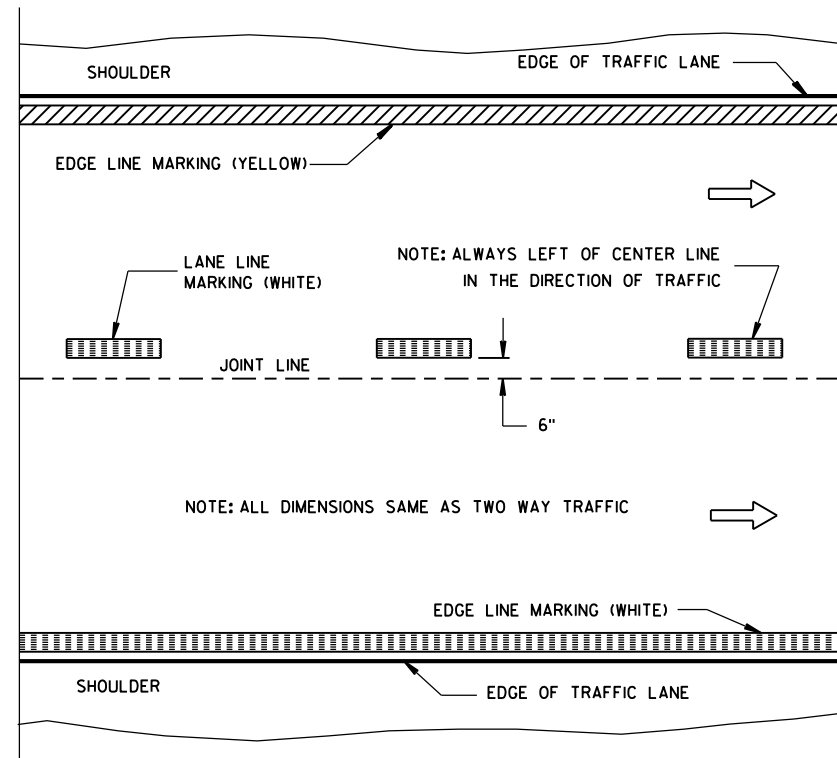
TRAFFIC CONTROL, ADVANCE
WARNING SIGNS 45 M.P.H.
OR GREATER TWO-WAY
UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

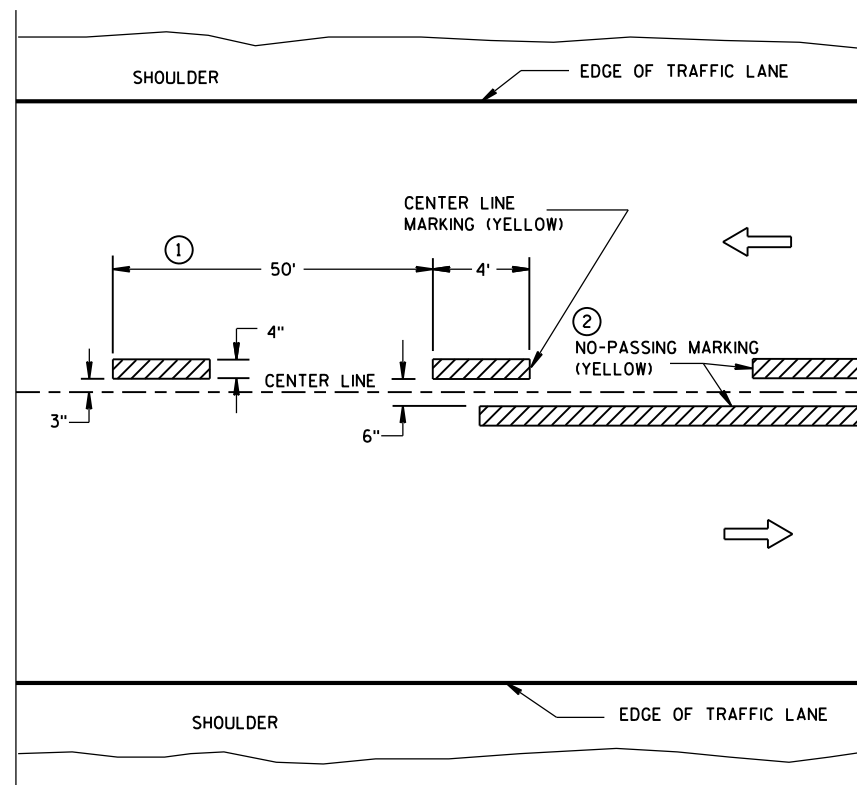


TWO WAY TRAFFIC

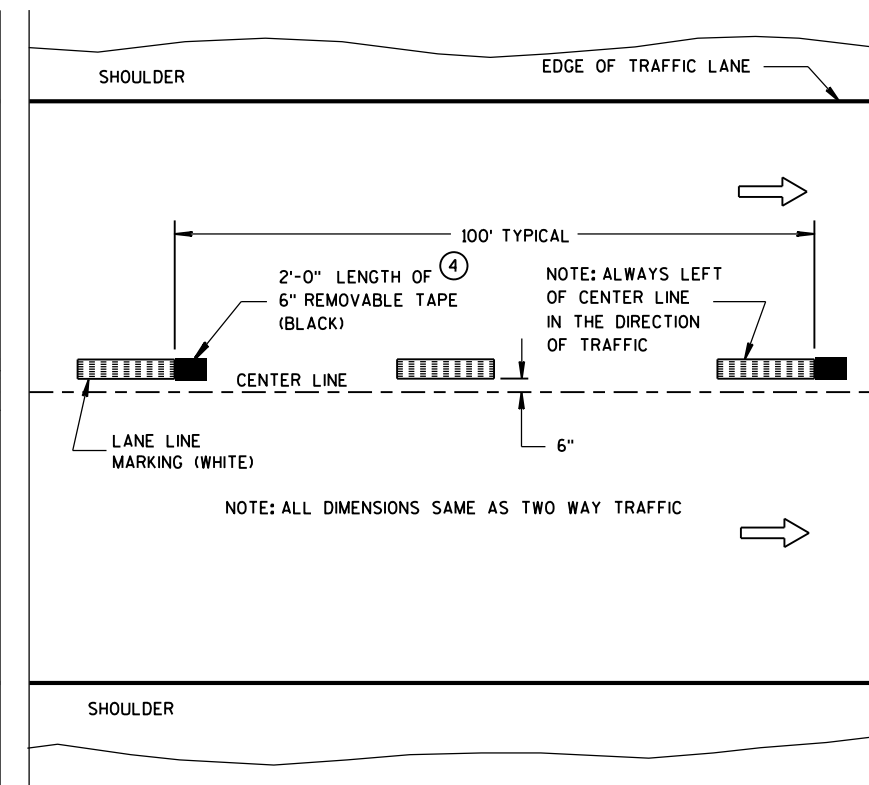


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

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

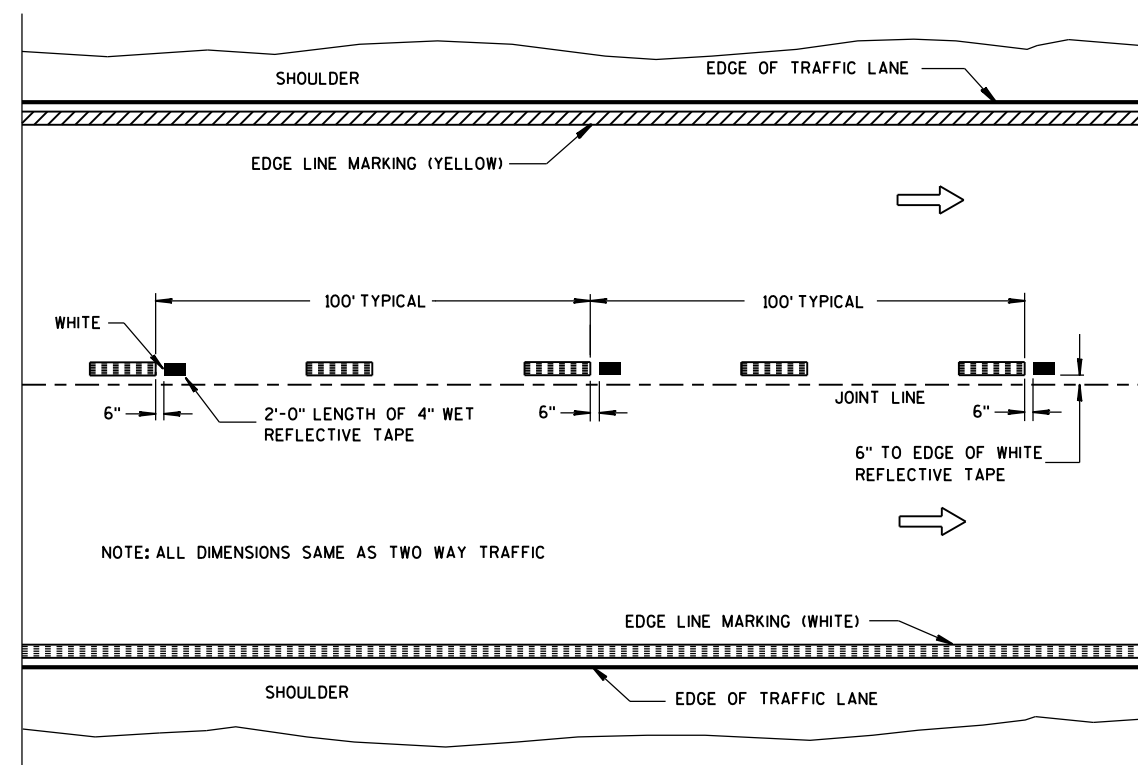
GENERAL NOTES

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

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

NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL

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

LEGEND

- "T" MARKING
- POST MOUNTED SIGN

PAVEMENT MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5-13-2013
DATE
FHWA

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

LEGEND

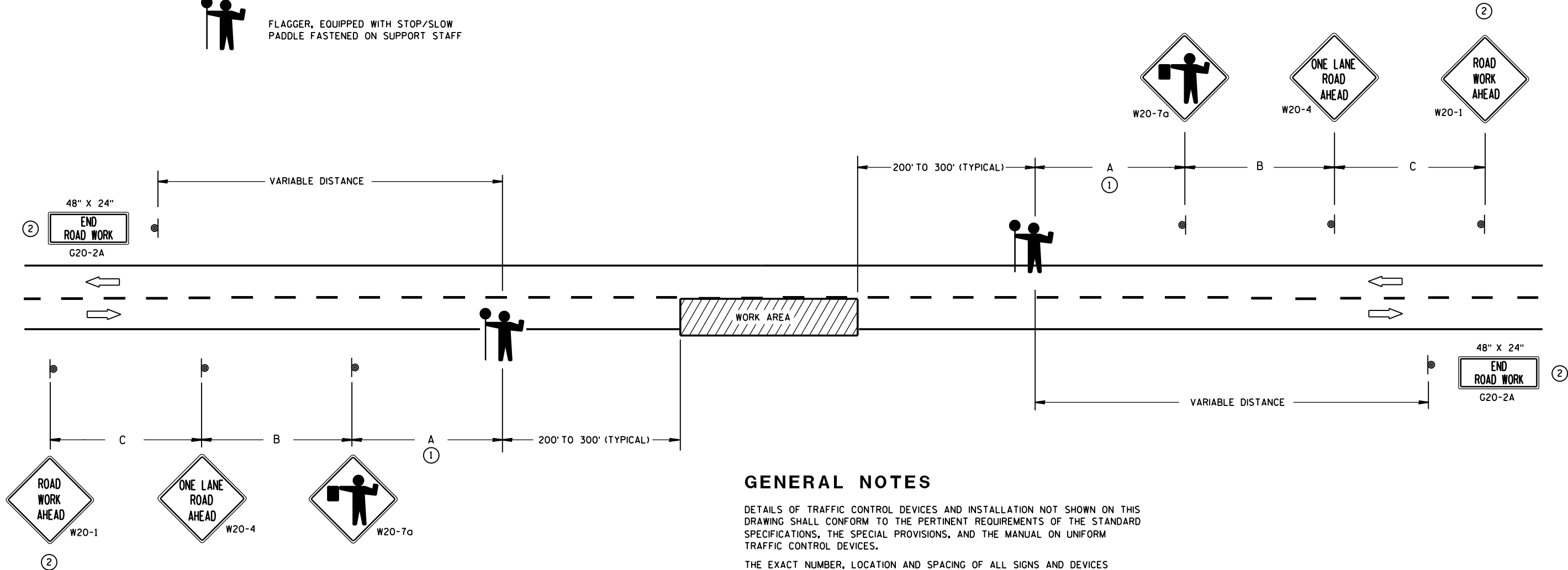
-  SIGN ON PORTABLE OR PERMANENT SUPPORT
-  DIRECTION OF TRAFFIC
-  WORK AREA
-  FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

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.

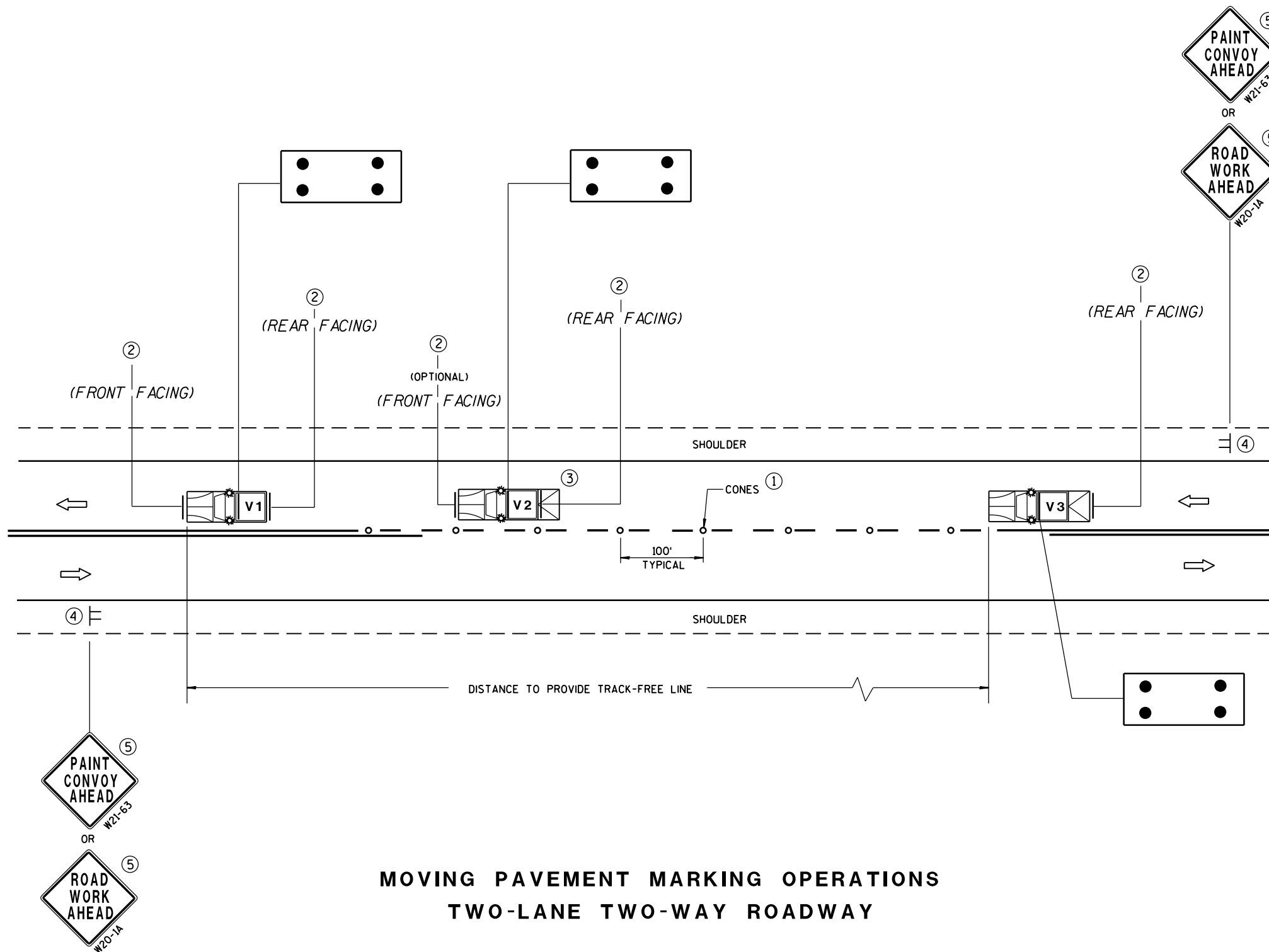
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

- 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



MOVING PAVEMENT MARKING OPERATIONS
TWO-LANE TWO-WAY ROADWAY

GENERAL NOTES

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

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

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

IF SPEED LIMIT IS 40 MPH OR LESS STATIONARY SIGNS MAY BE OMITTED IF CONES ARE USED.

ALTERNATE SIGN MESSAGES, SUCH AS "PAINT CREW AHEAD" OR "ROAD PAINTING AHEAD" MAY BE USED.

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

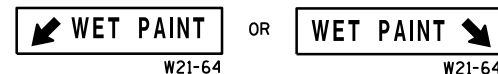
THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE MARKING.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR TURN THE STATIONARY WARNING SIGNS AWAY FROM TRAFFIC.

① CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

② USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.



③ OPTIONAL TRUCK-MOUNTED ATTENUATOR.

④ SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

⑤ IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

LEGEND

V1 LEAD VEHICLE

V2 SHADOW VEHICLE

V3 TRAIL VEHICLE WITH TMA

TMA TRUCK-MOUNTED ATTENUATOR

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

CONES

FLASHING ARROW PANEL (CAUTION)

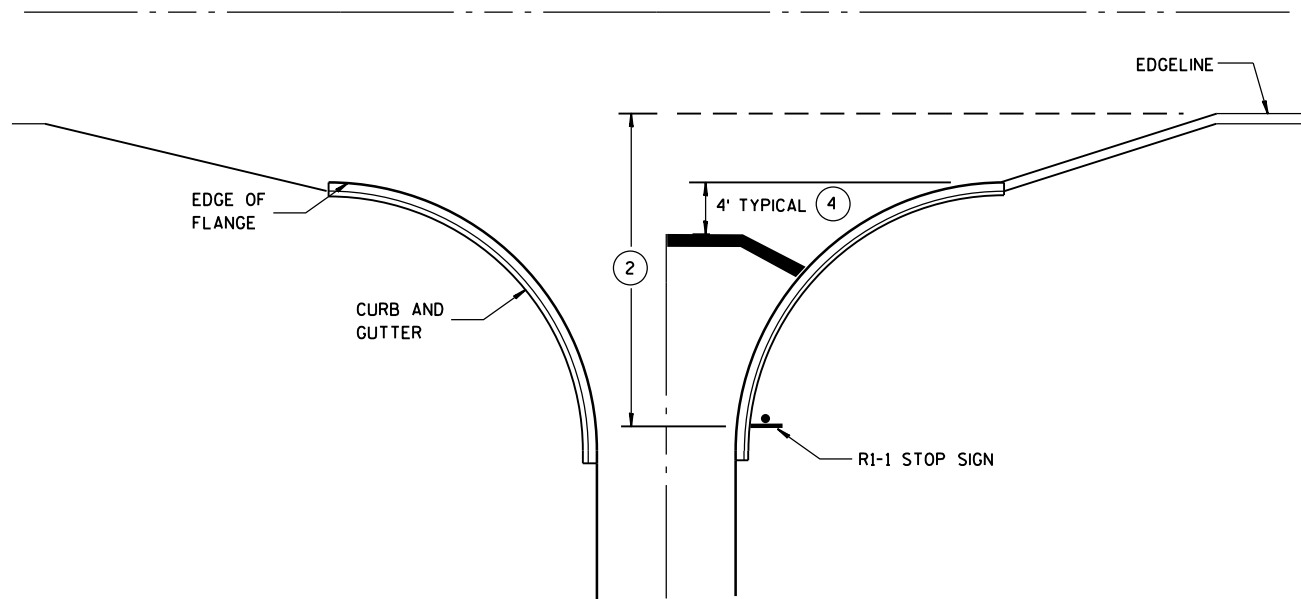
MOVING PAVEMENT MARKING
OPERATION
TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

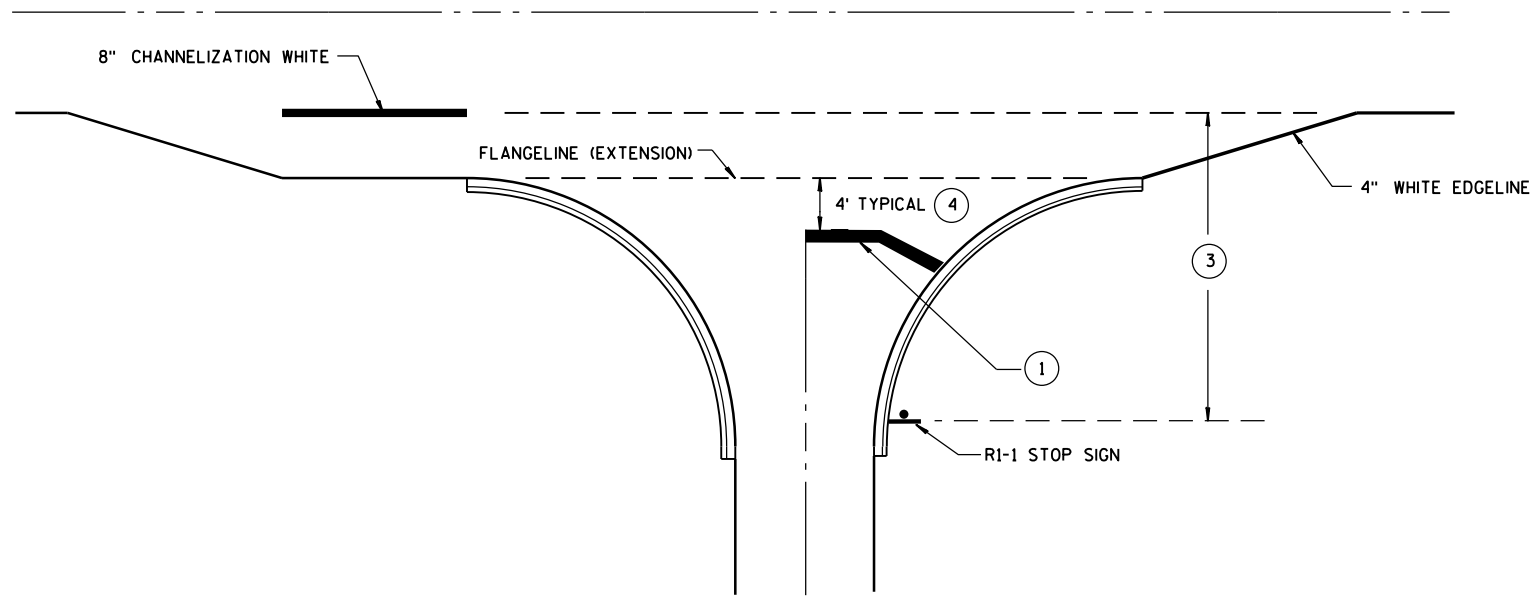
APPROVED

DATE /S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC
SAFETY ENGINEER

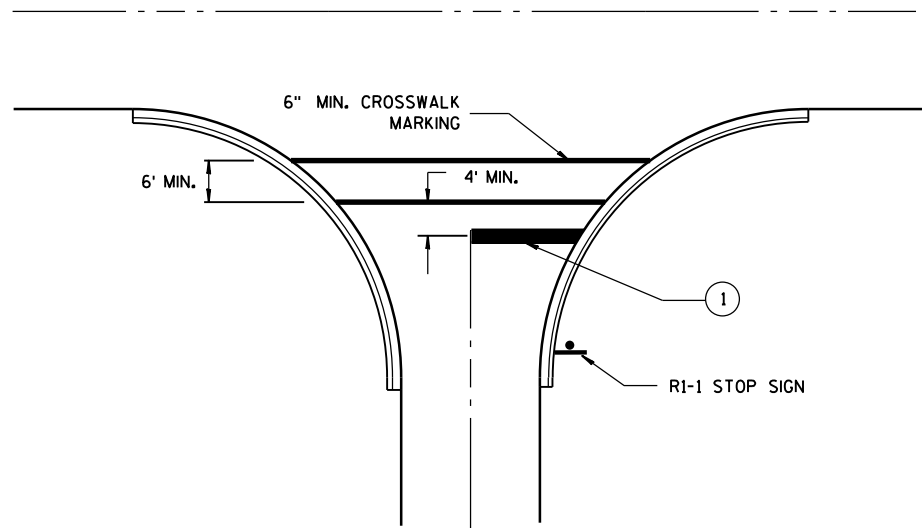
FHWA



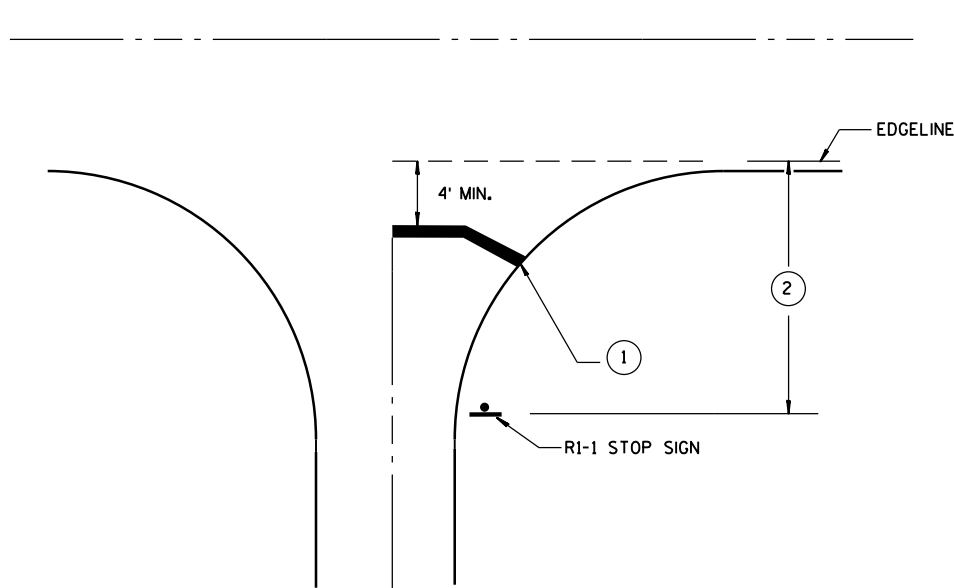
TYPICAL STOP LINE PAVEMENT MARKING
WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING
WITHOUT CURB AND GUTTER

GENERAL NOTES

- ① 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
- ② IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGE LINE THAN NO STOP LINE IS REQUIRED.
- ③ IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.
- ④ MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES.

STOP LINE AND CROSSWALK PAVEMENT MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 4/30/2013 DATE	/S/ Travis Feltz STATE TRAFFIC ENGINEER
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	
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

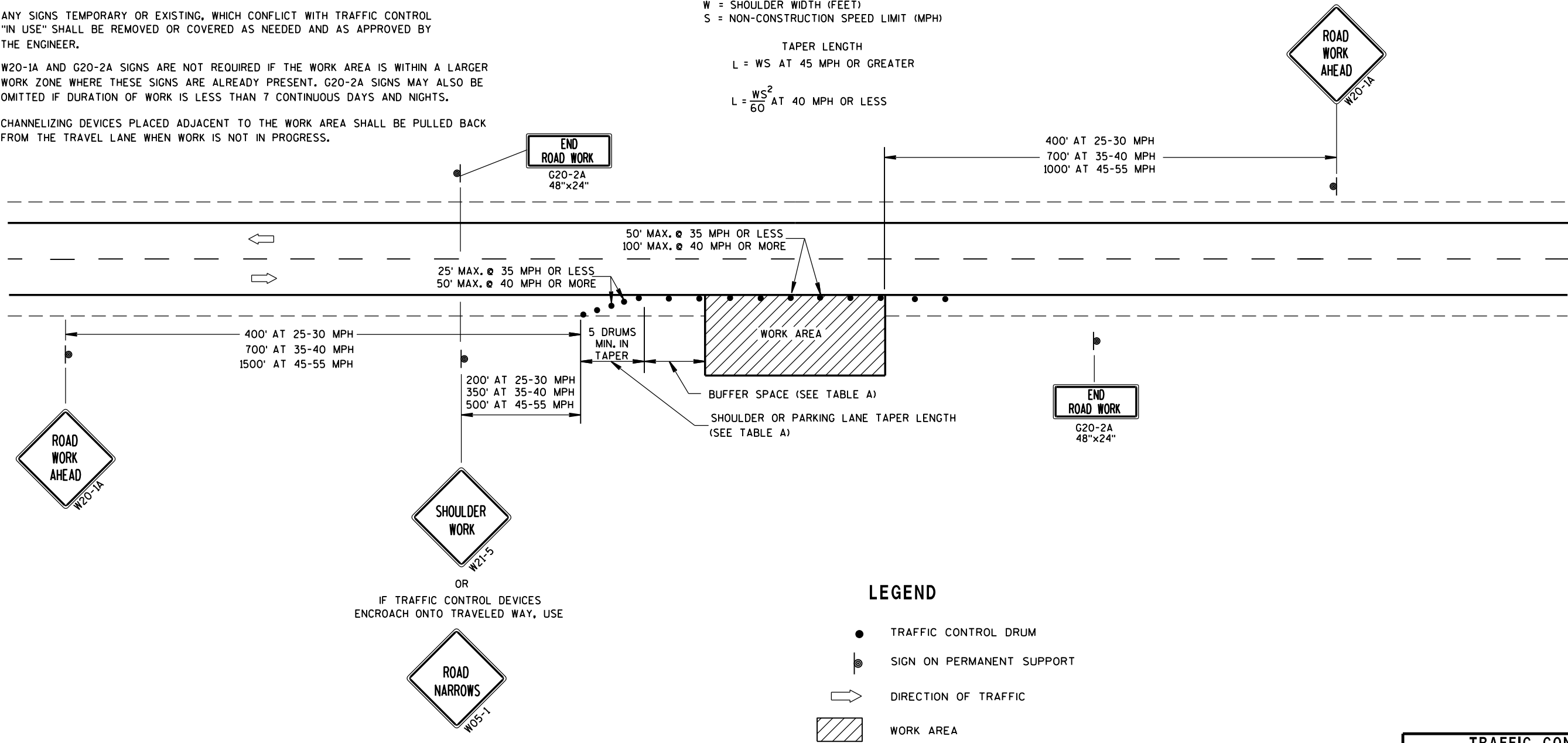
W = SHOULDER WIDTH (FEET)
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

TAPER LENGTH

L = WS AT 45 MPH OR GREATER

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

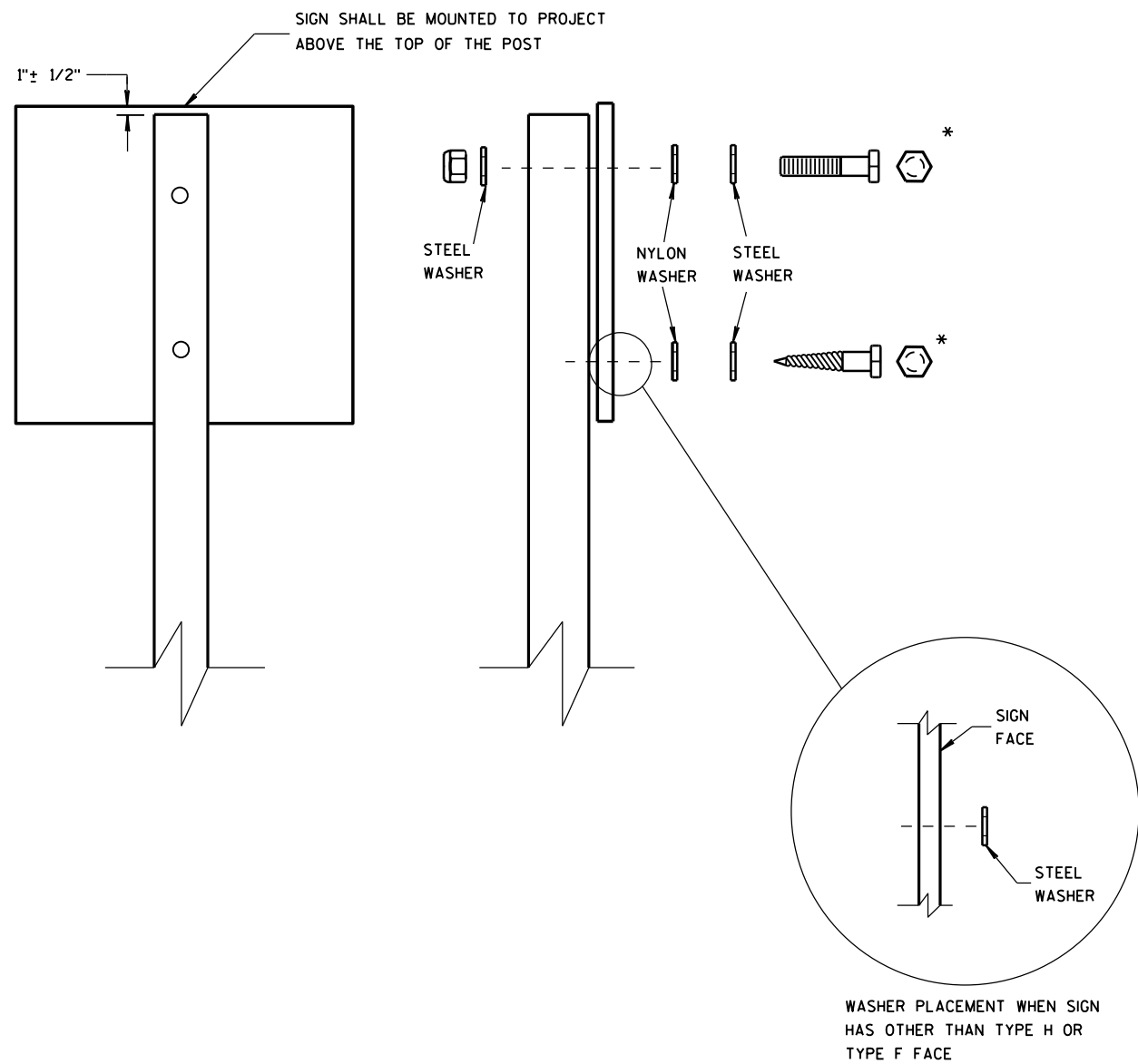
SHOULDER TAPER LENGTH = $\frac{1}{3}L$



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.

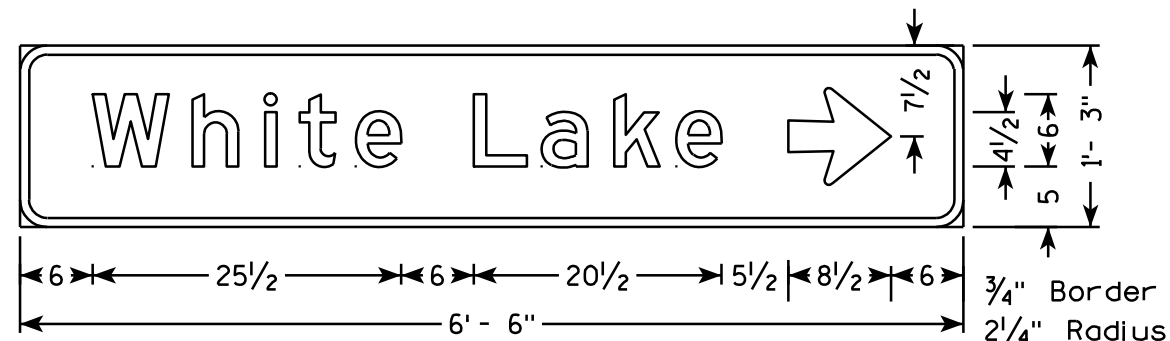
- WOOD POSTS (4" x 4" or 4" x 6")
- LAG SCREWS - 3/8" X 3"
 - MACHINE BOLTS - 5/16" X 6-1/2" OR 7" LENGTH W/ NUTS

- 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

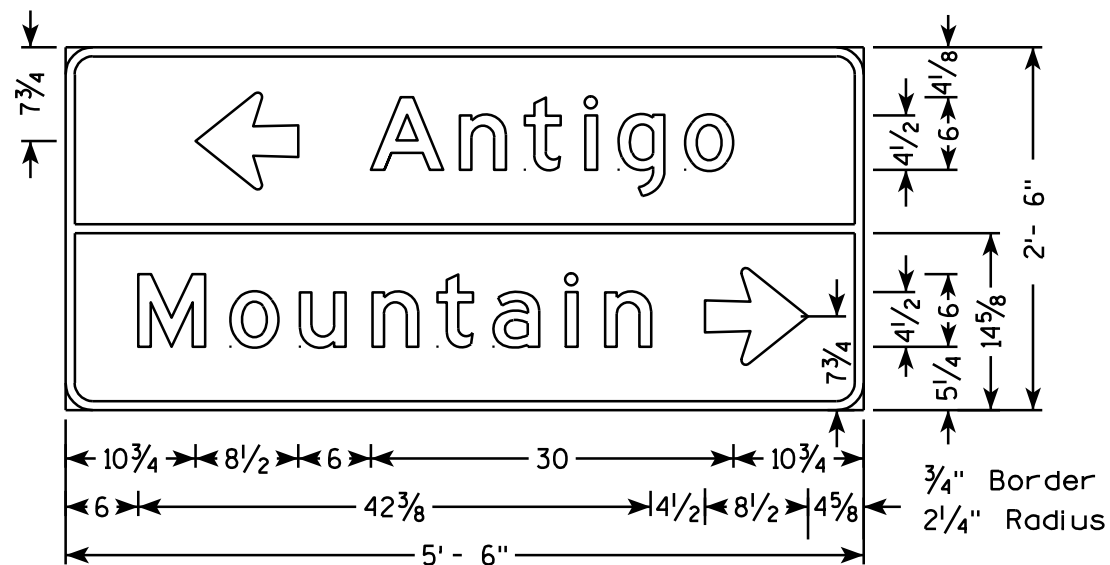
- WASHERS (ALL POSTS) -
- 1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
 - 1-1/4" O.D. X 3/8" I.D. X .080 NYLON FOR ALL TYPE H SIGNS

* 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.

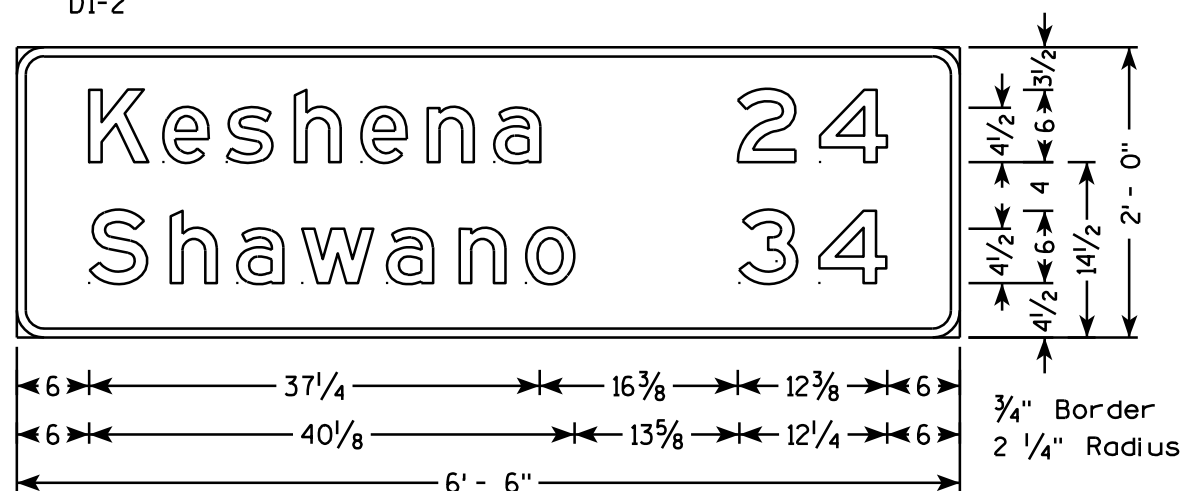
ATTACHMENT OF SIGNS TO POSTS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED Feb. 2015 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEER OF DESIGN
FHWA	



D1-1



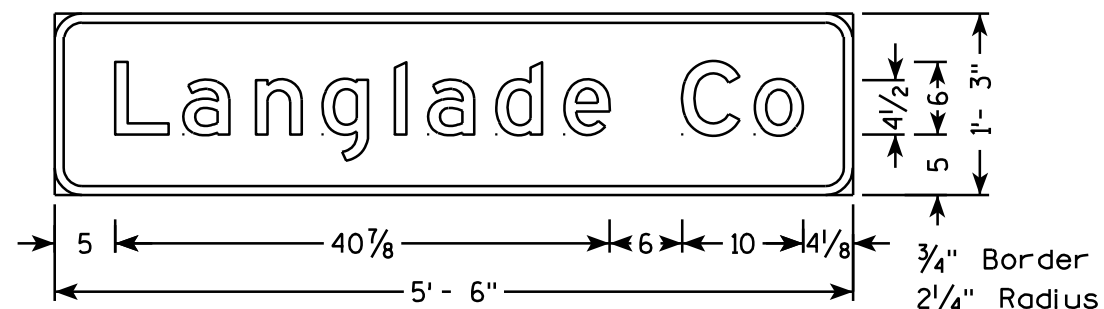
D1-2



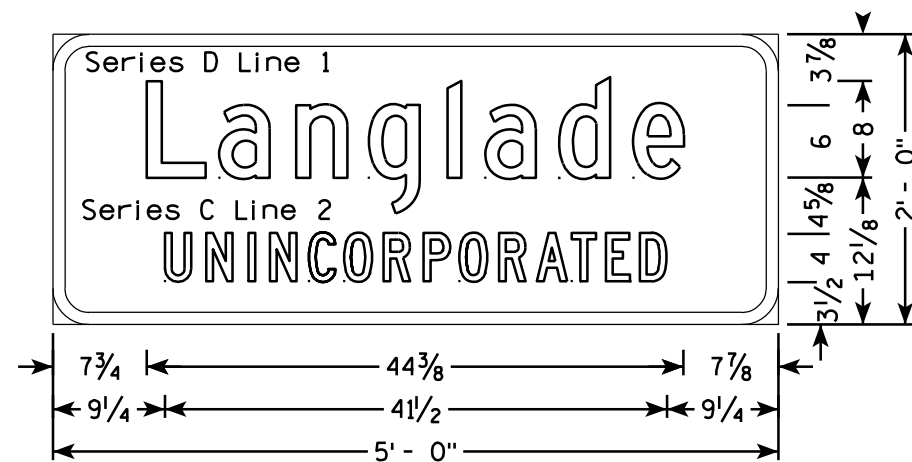
D2-2

NOTES

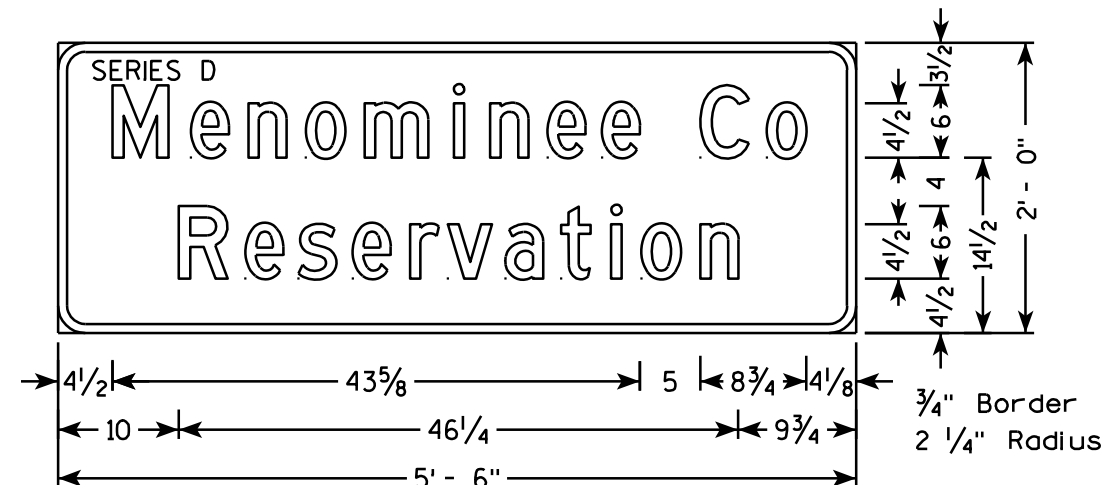
1. All Signs Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - GREEN
Message - WHITE
3. Message Series - E except as Shown



I2-2



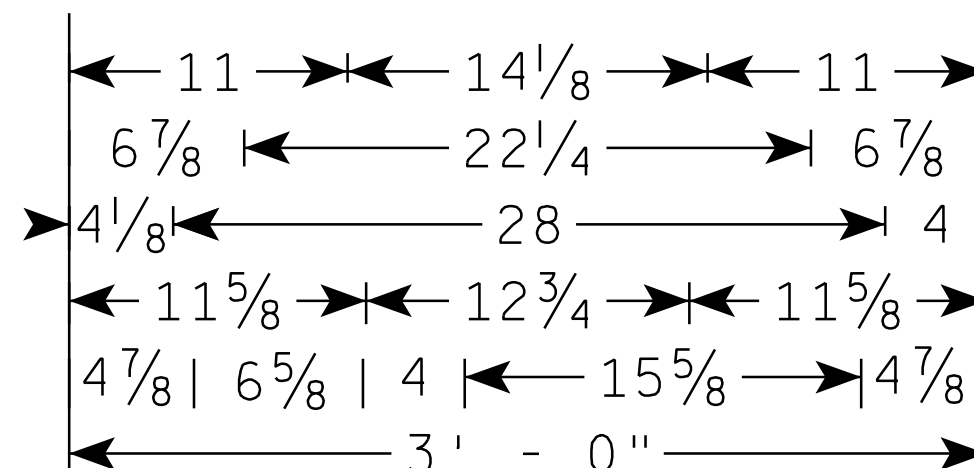
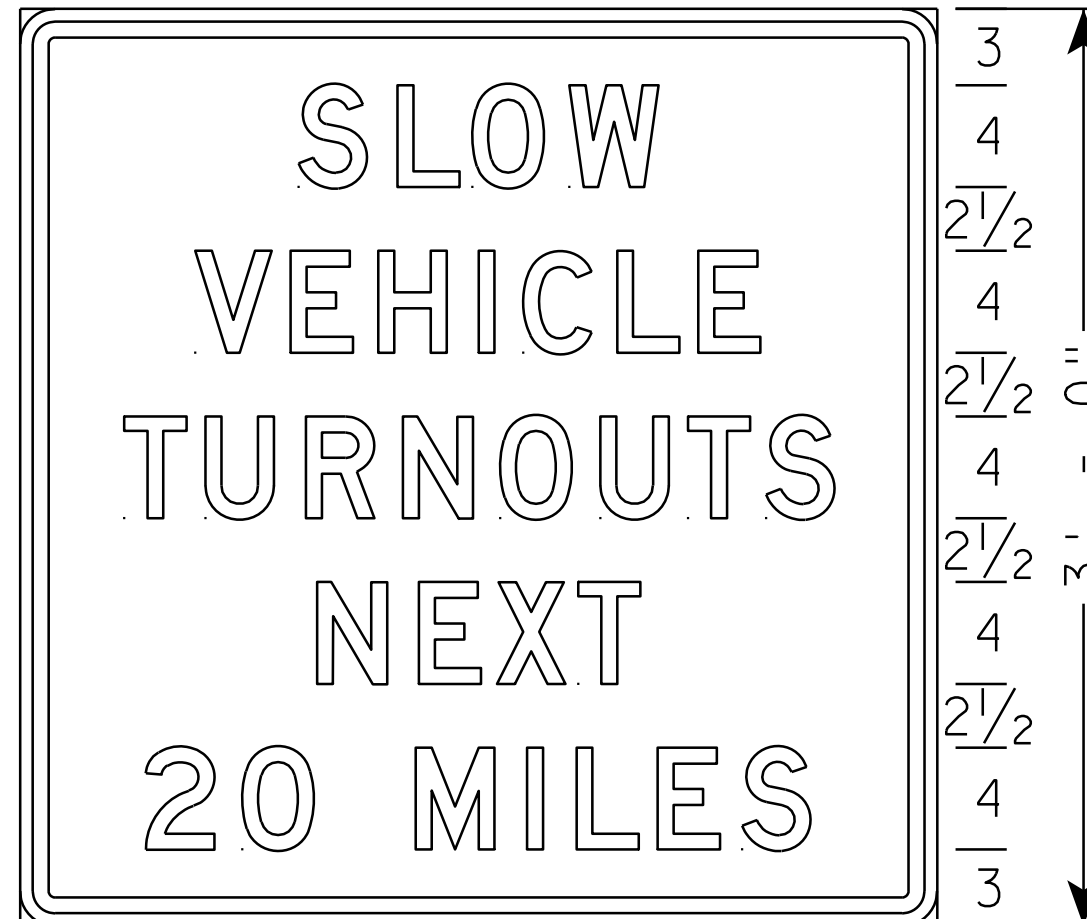
I2-3



I2-2R

NOTES

1. All Signs 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

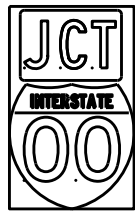


1/2" Margin
5/8" Border
1 3/8" Radius

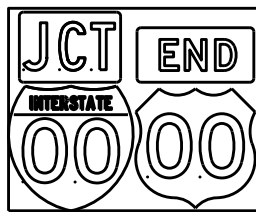
7

7

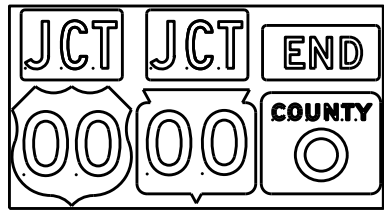
TYPICAL ASSEMBLIES



J1-1



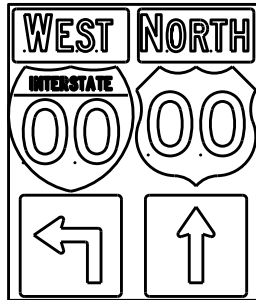
J1-2



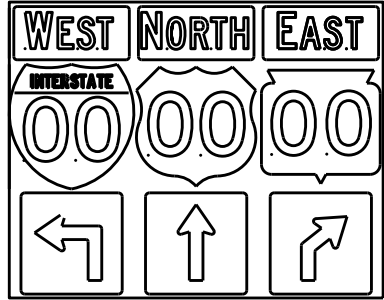
J1-3



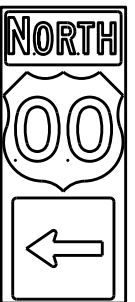
J2-1



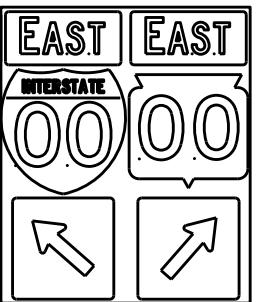
J2-2



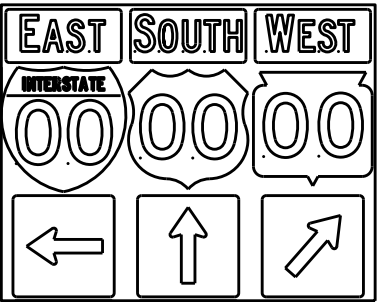
J2-3



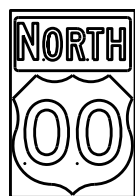
J3-1



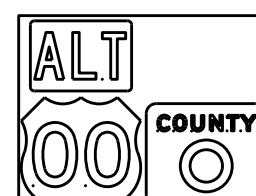
J3-2



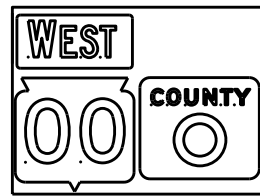
J3-3



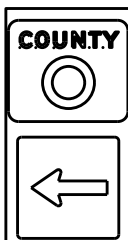
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1



J23-1

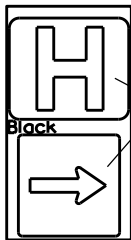


J22-1



JV

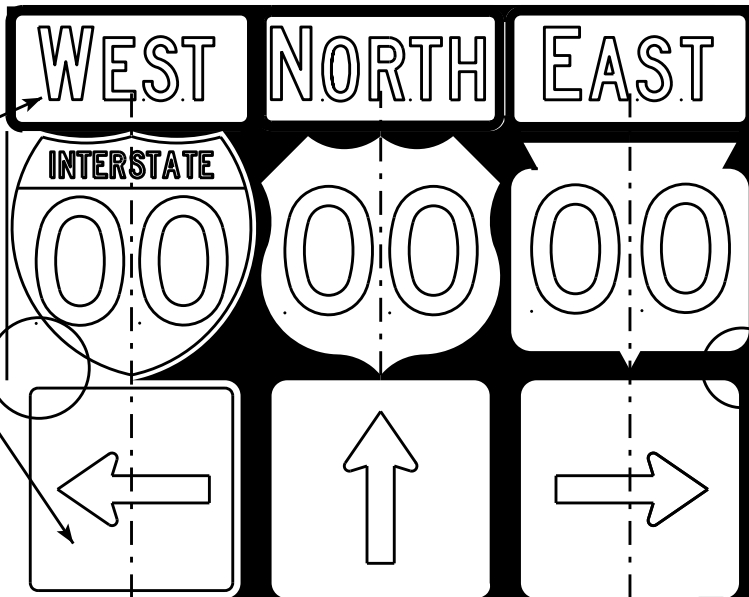
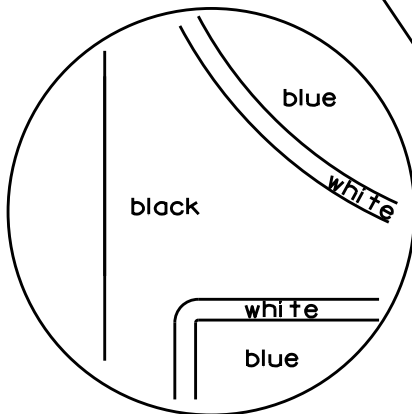
(Typical Vertical J-Assembly
See Note 10 and 11)



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.

PROJECT NO:

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN

PLOT DATE : 06-FEB-2014 14:10

PLOT BY : mscs.ja

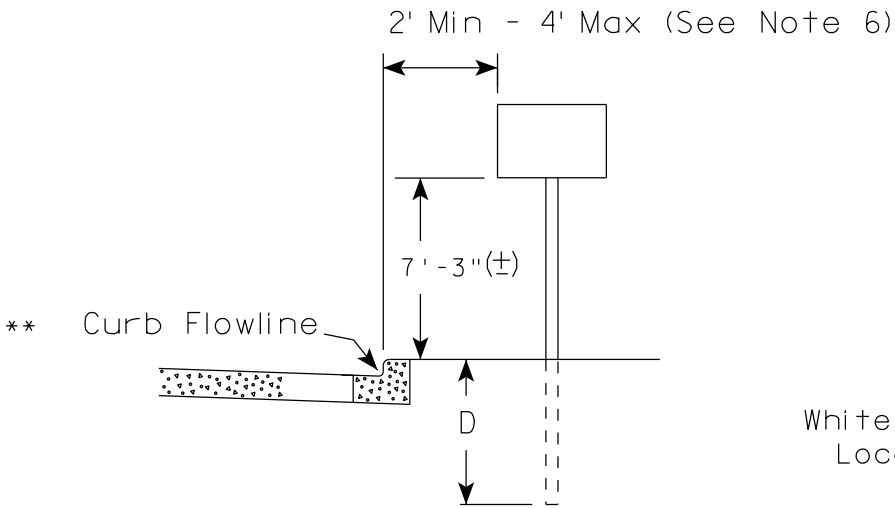
PLOT NAME :

SHEET NO:

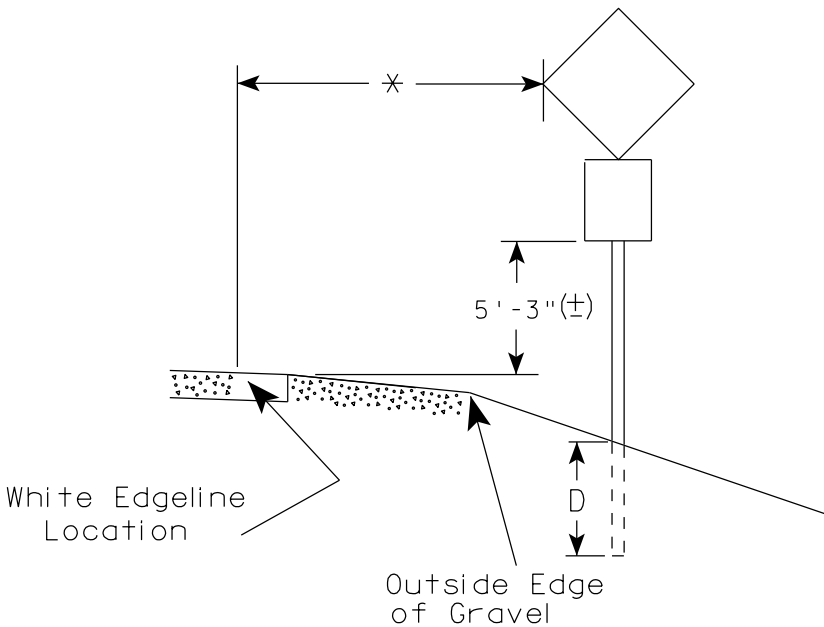
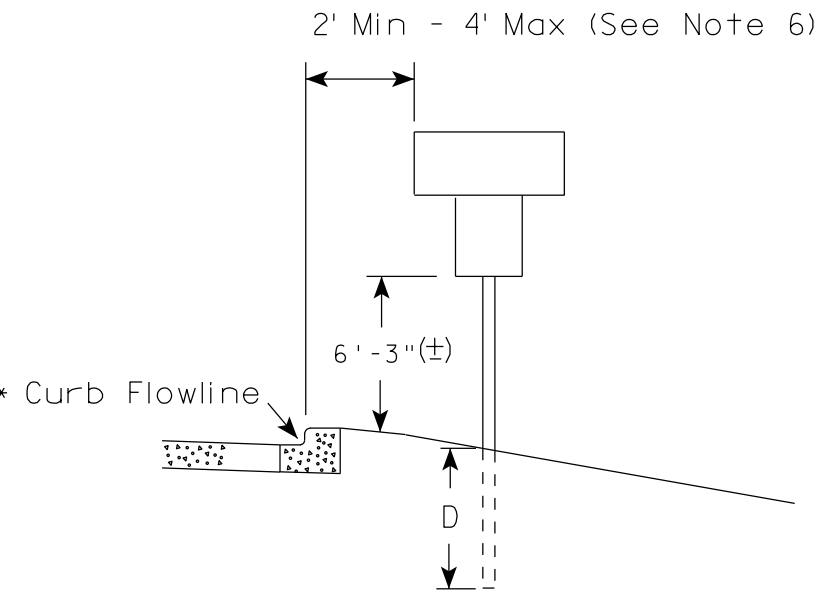
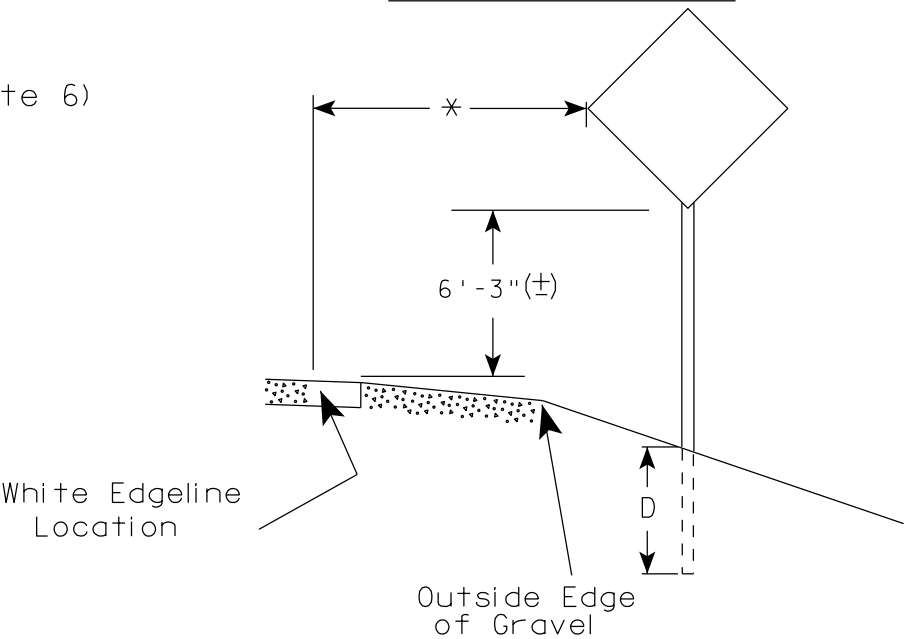
E

WISDOT/CADDs SHEET 42

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.

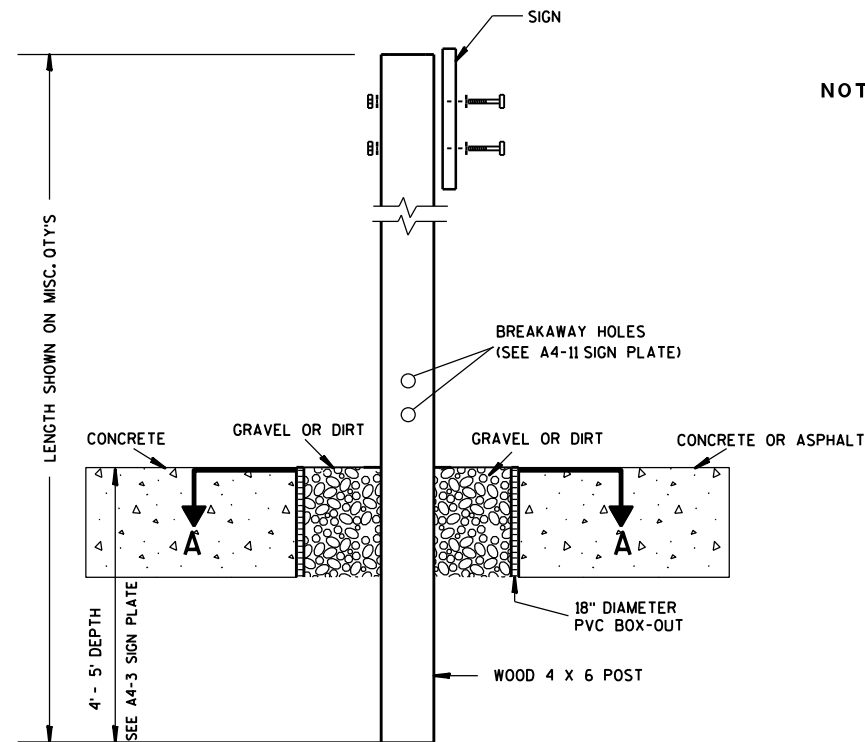
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

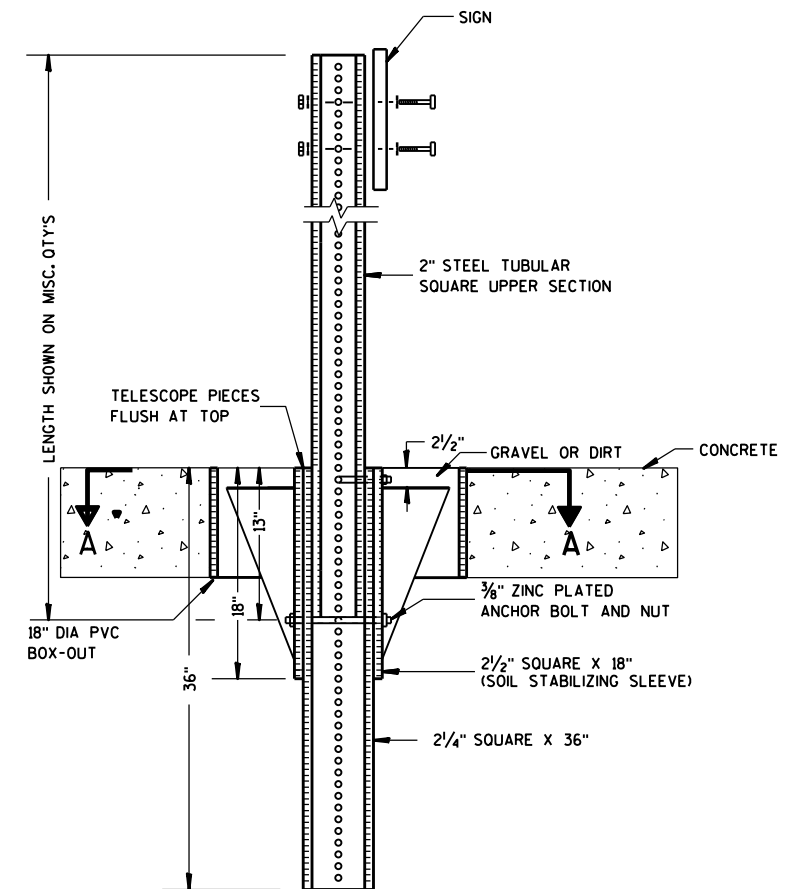
DATE 7/23/15 PLATE NO. A4-3.20



ELEVATION VIEW

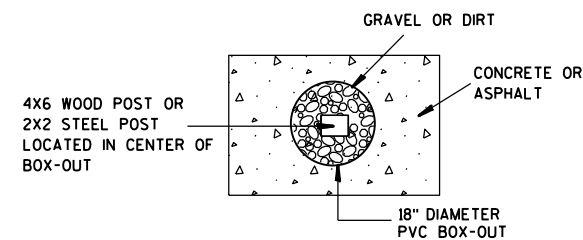
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

- 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

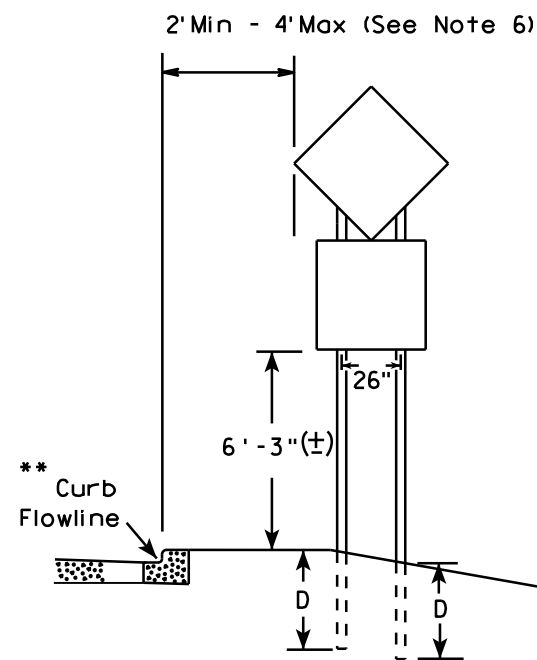
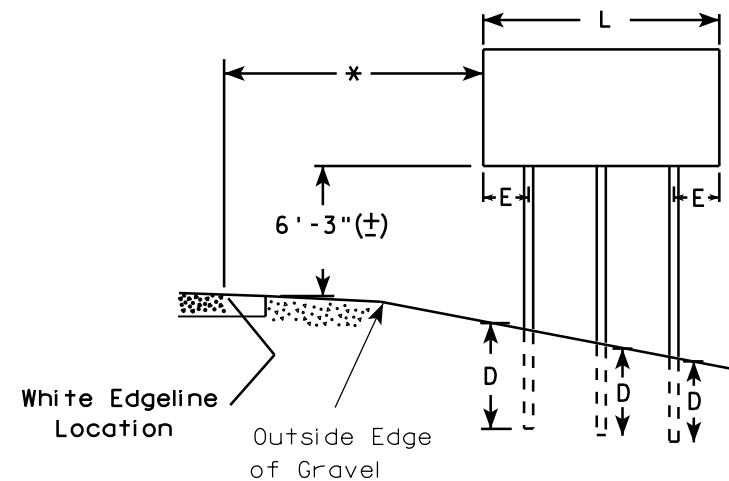
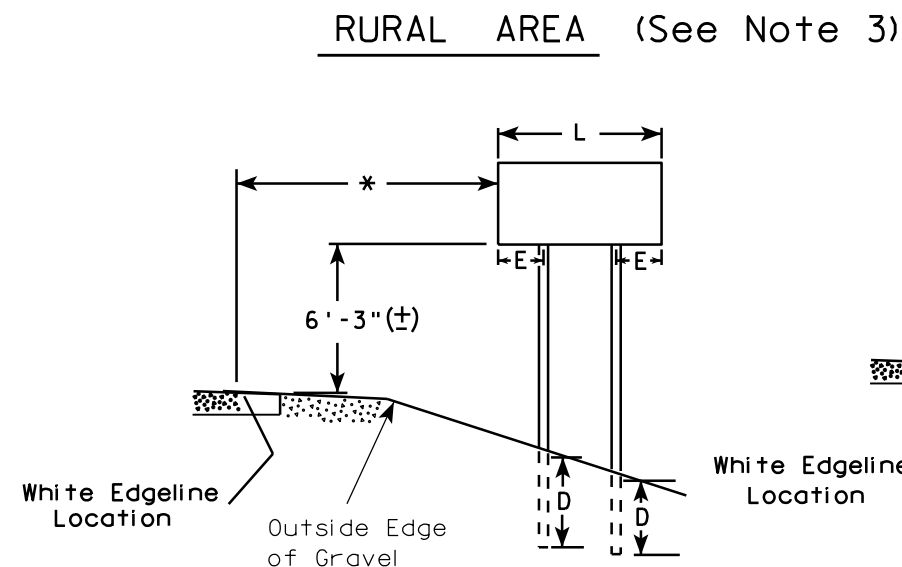
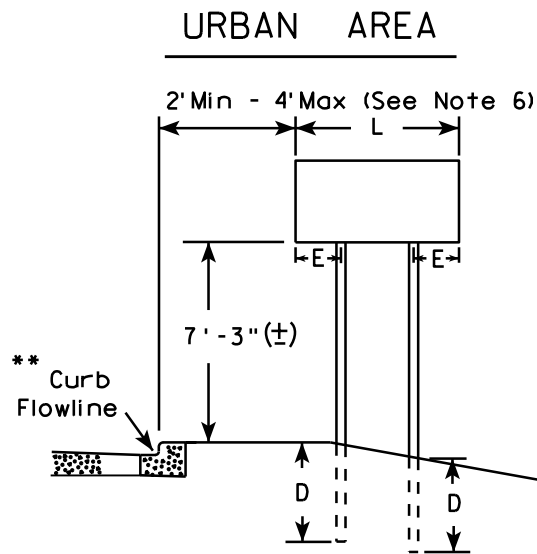
PROJECT NO:

HWY:

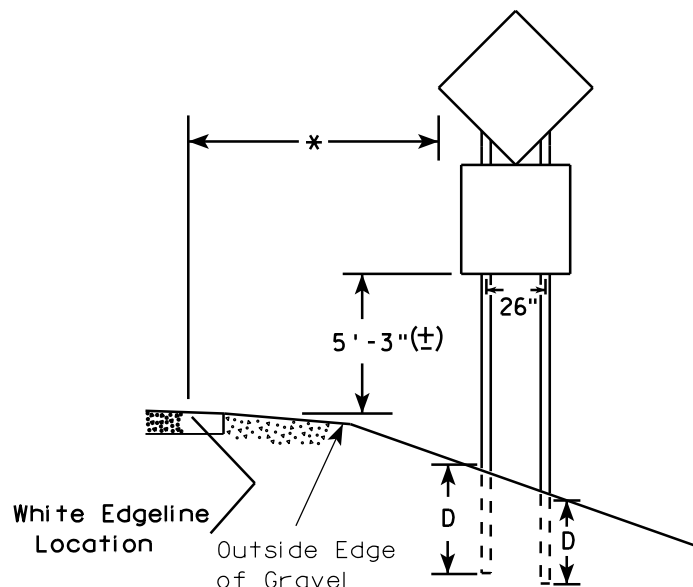
COUNTY:

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

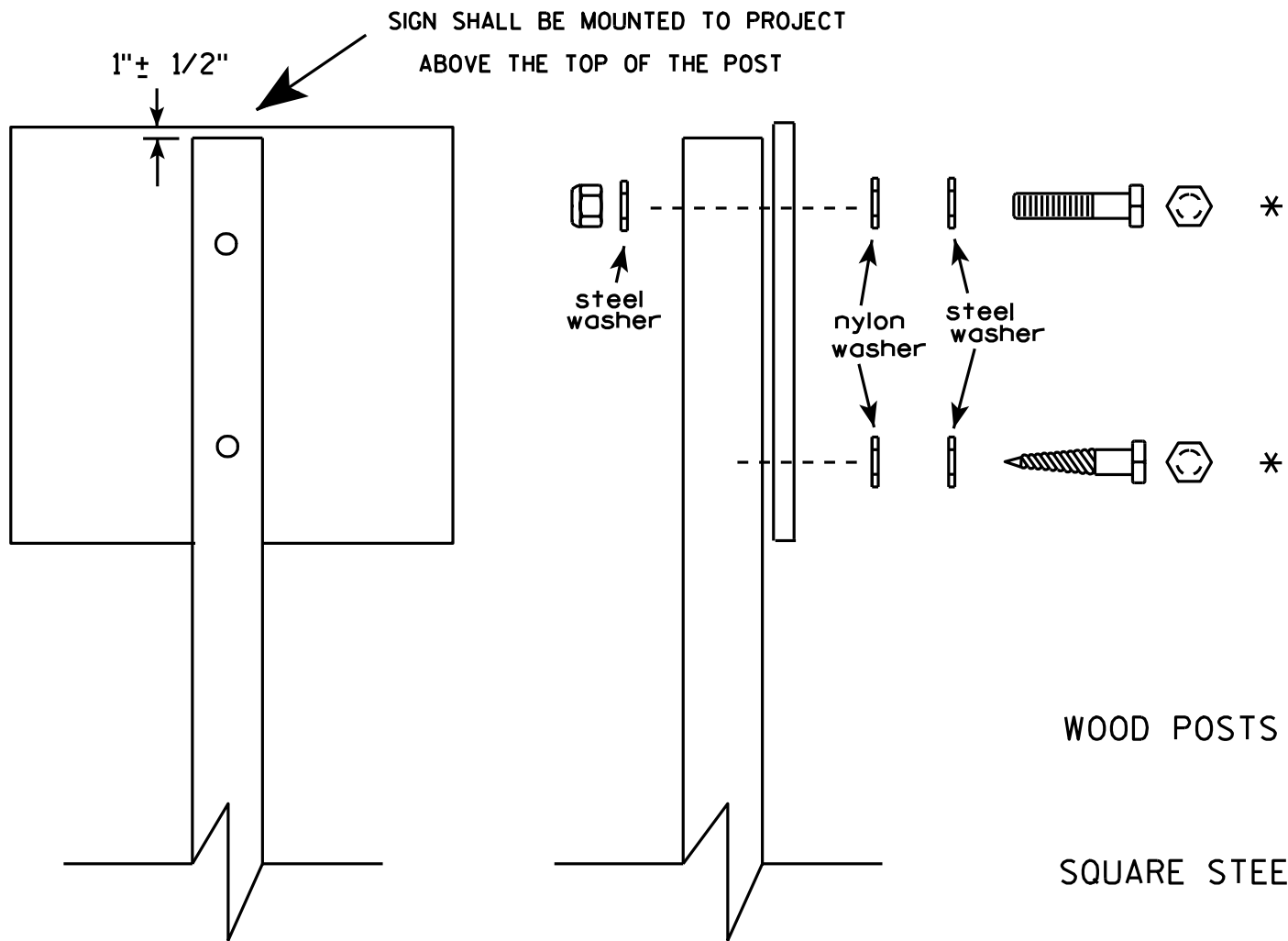
Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

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

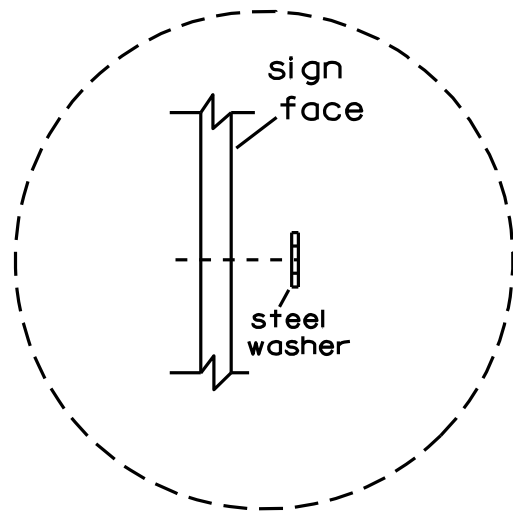


Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

- 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.

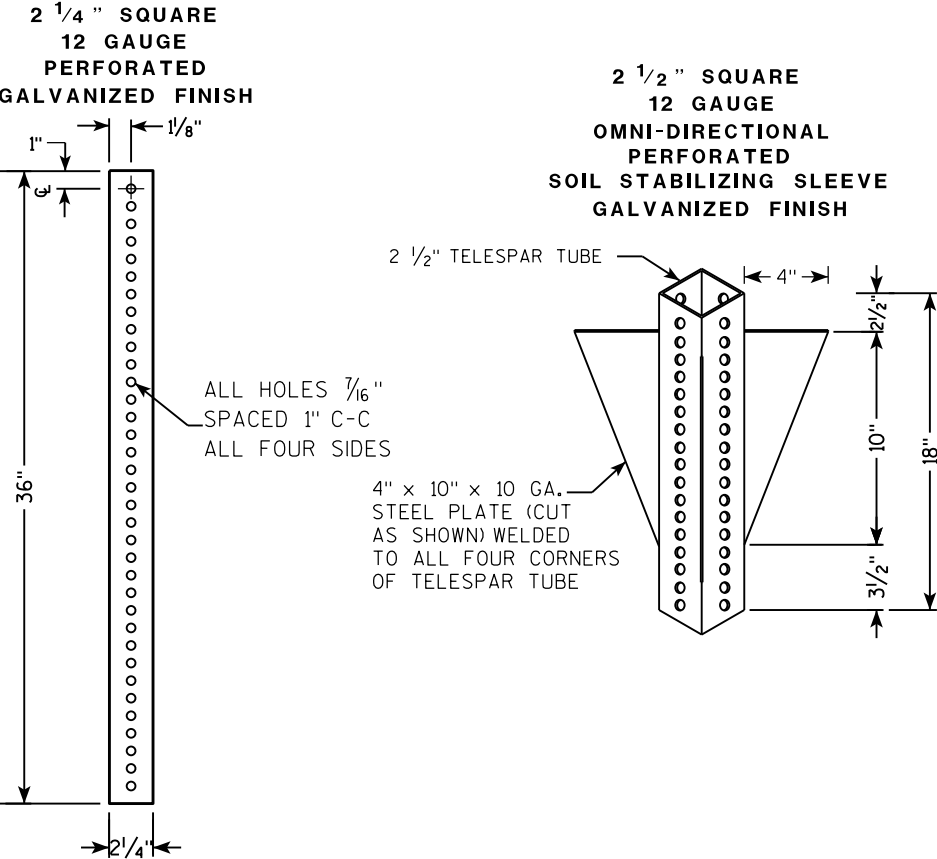


Washer Placement when Sign Has Other Than Type H or Type F Face

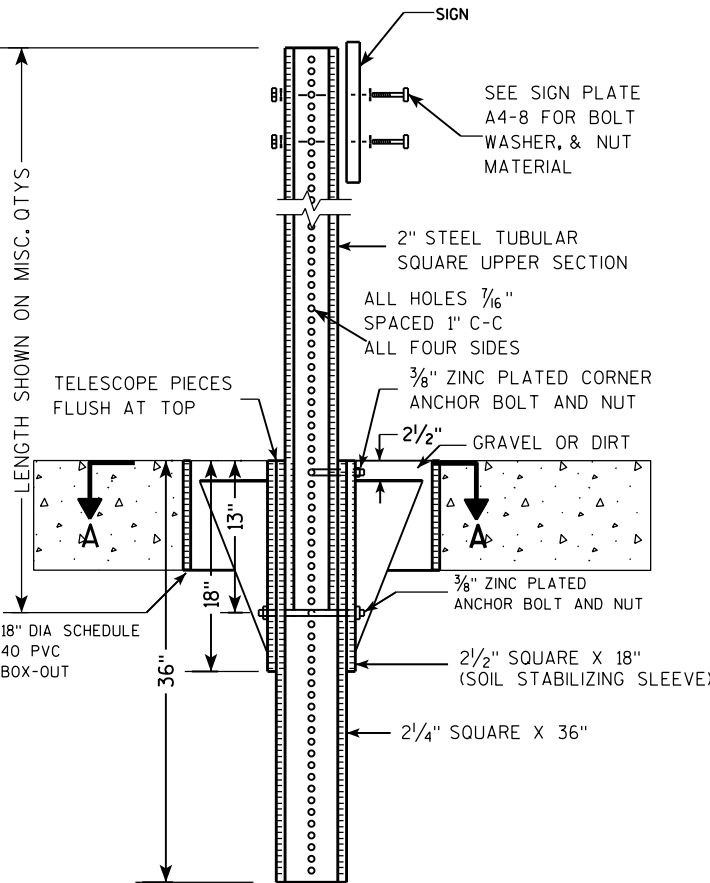
* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require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

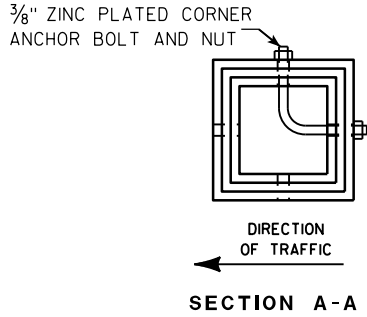
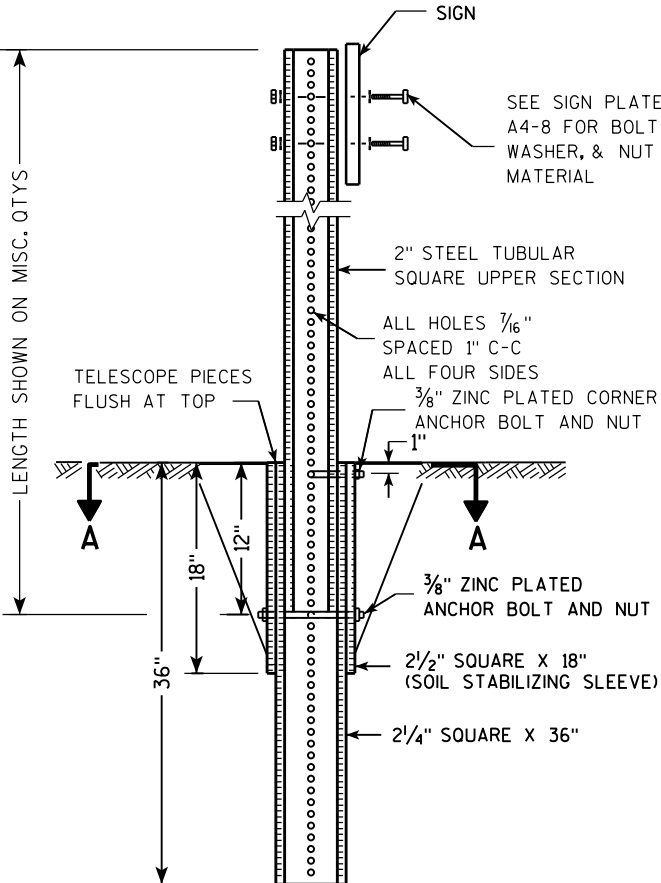
TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM



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).

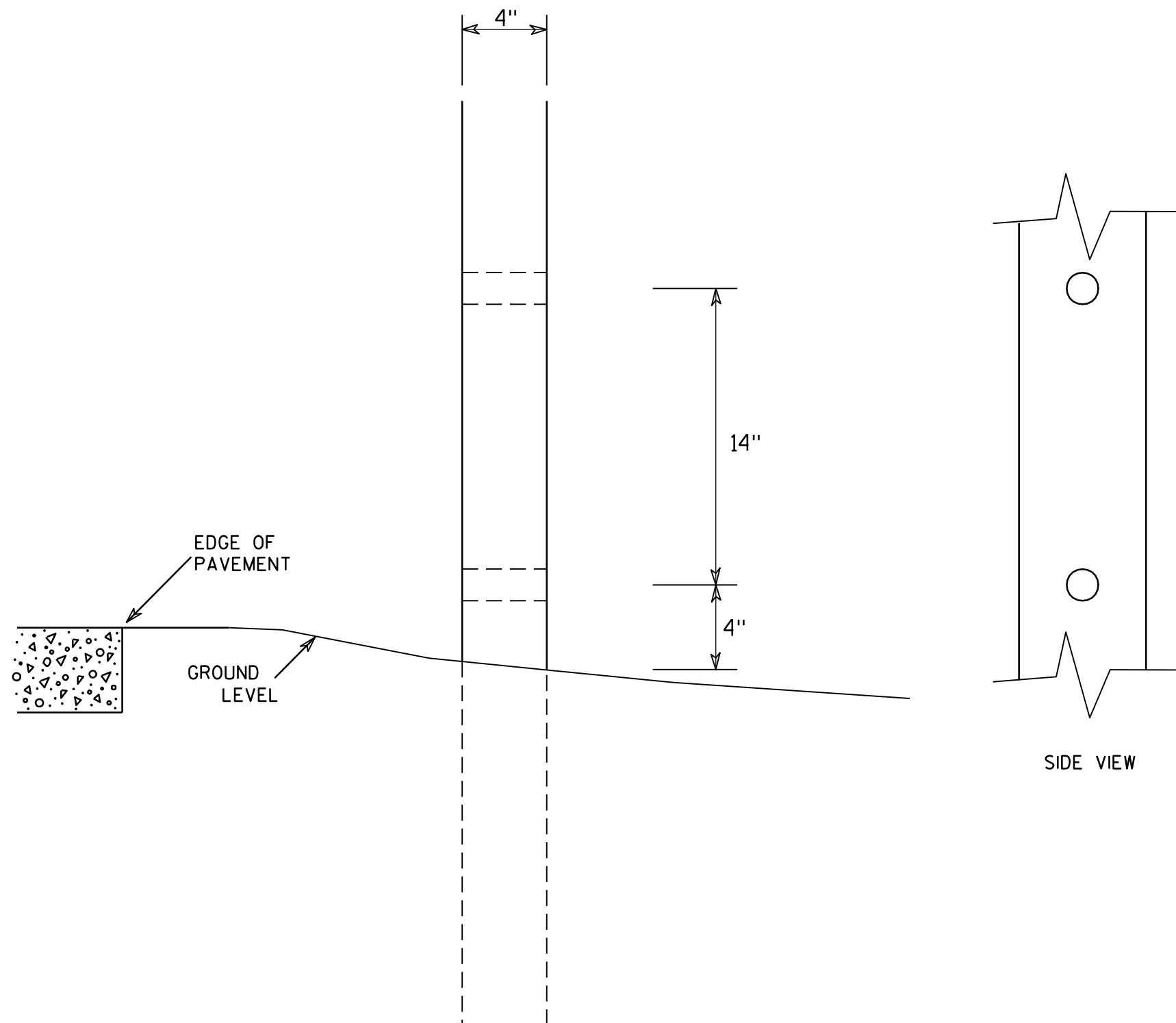
TUBULAR STEEL
SIGN POST
A4-9

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:

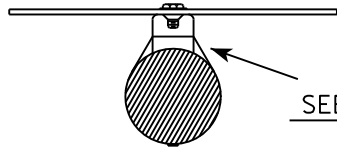
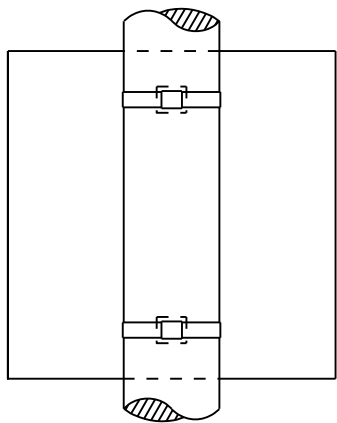
COUNTY:

SHEET NO:

E

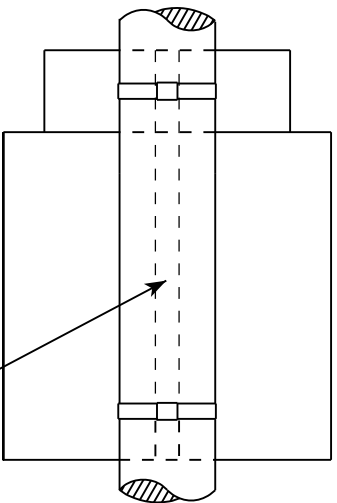
BANDING

SINGLE SIGN

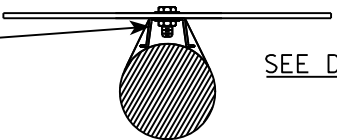


SEE DETAIL A

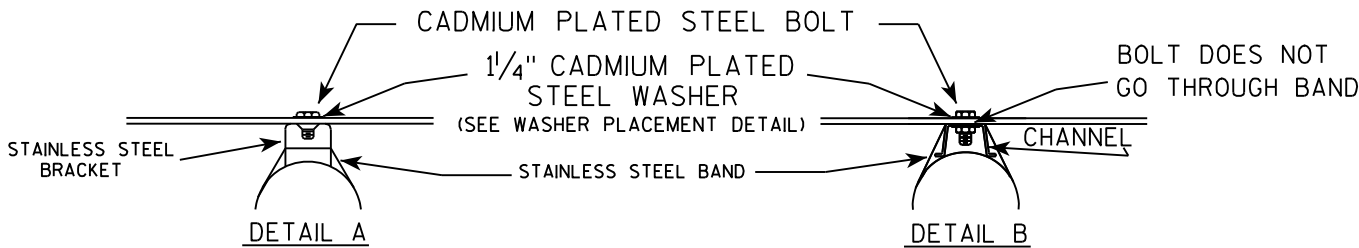
"J" ASSEMBLY



CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET



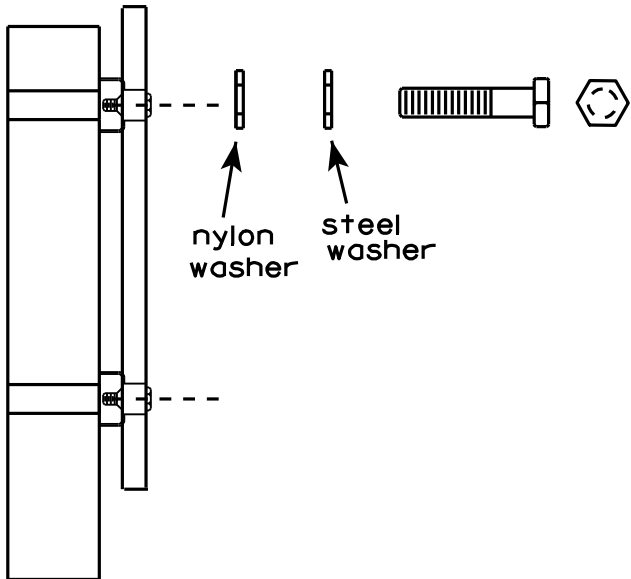
SEE DETAIL B



GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be $\frac{3}{4}$ " in width and 0.025" thickness.

WASHER PLACEMENT



nylon washer

steel washer

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

STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch
for State Traffic Engineer

DATE 8/16/13

PLATE NO. A5-9.3

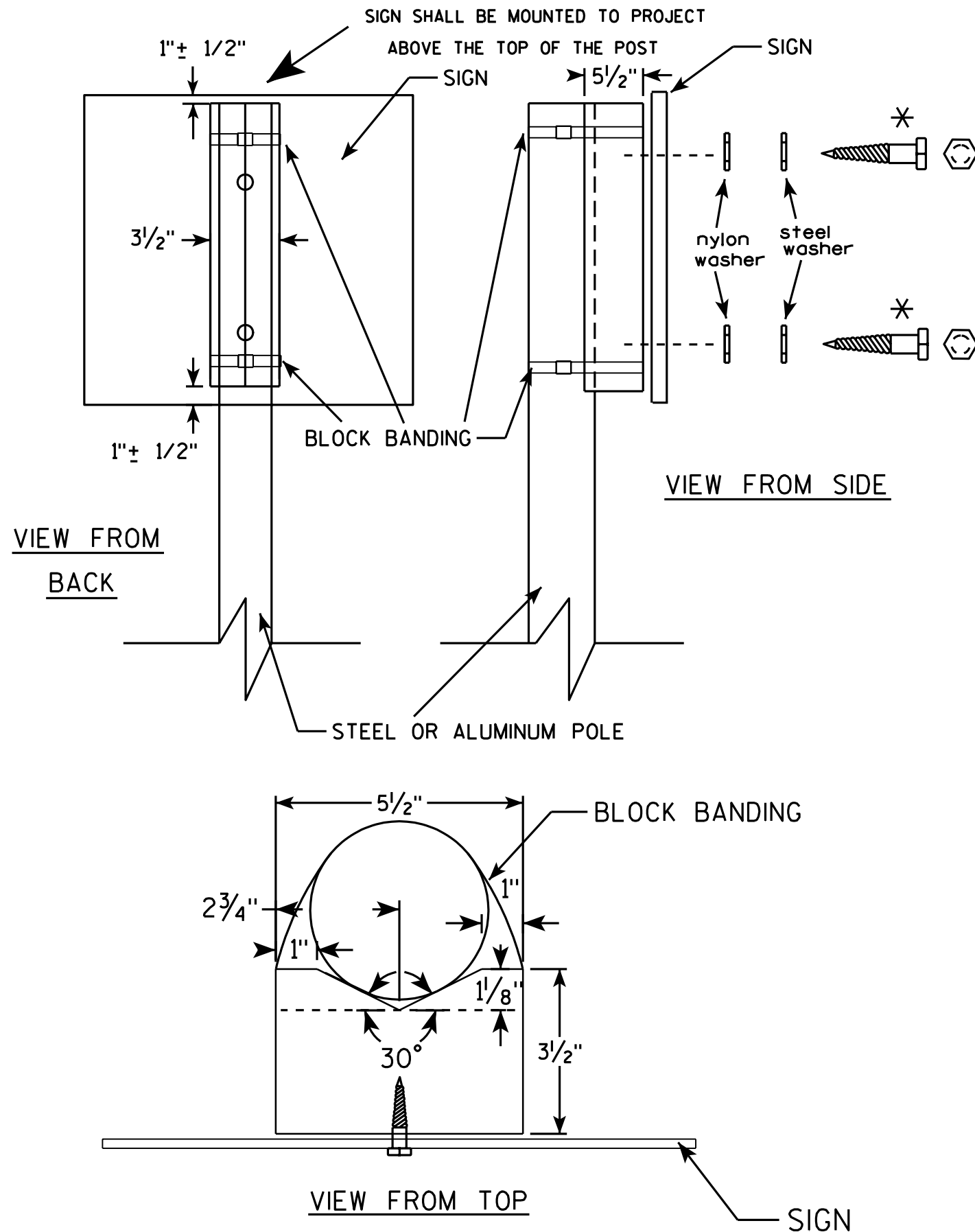
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



GENERAL NOTES

1. WOOD 4"x6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WISDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, $\frac{3}{4}$ " WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORMALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
 - a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D, or
 - b. Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
 - c. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE $\frac{1}{4}$ " O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ "
8. NYLON WASHERS SHALL BE $\frac{1}{4}$ " O.D. X $\frac{3}{8}$ " I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✱ LAG BOLTS SHALL BE $\frac{3}{8}$ " X $2\frac{1}{2}$ "

BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 7/12/07 PLATE NO. A5-10.1

PROJECT NO:

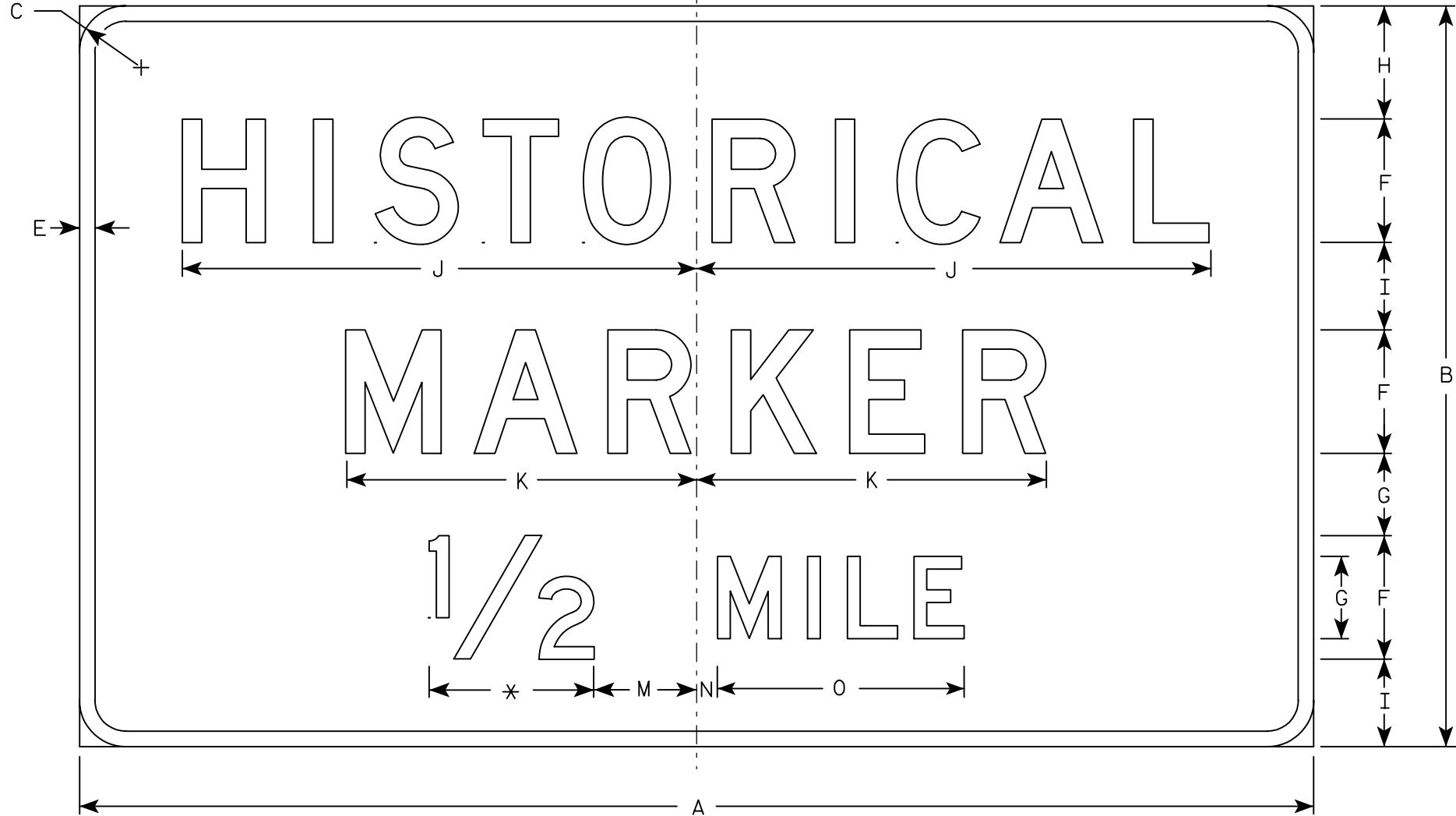
SHEET NO:

E

50, 59, 60, 61, 62, 63

7

LEVELS ON - 2, 3, 5, 6



D5-63 * See Note 5

Metric equivalent
for this sign is:

SIZE	
1	
2	1500 mm X 900 mm
3	
4	
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 m2
1																												
2	60	36	2 1/4		3/4	6	4	5 1/2	4 1/4	25	17		5	1	12												15.0	1.35
3																												
4																												
5																												

STATE PROJECT NUMBER:

FILE NAME : C:\Users\Projects\tr_std\plate\D563.DGN

PLOT DATE : 09-JAN-2002 13:18

ORG DATE : 3/23/99

Originator : Don Kluever

SHEET NO:

E

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Brown
Message - White
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

STANDARD SIGN
D5-63

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Christa J. Spang
for State Traffic Engineer

DATE 3/23/99 PLATE NO. D5-63.9

58, 59, 60, 61, 62, 63

7

LEVELS ON - 2, 3, 5, 6, 10,



D7-61

Metric equivalent
for this sign is:

SIZE	
1	
2	1500 mm X 900 mm
3	
4	
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 sq. m
1																												
2	60	36	2 1/4		3/4	4 1/2	6	5	5 1/2	4 1/4	16 7/8	1	23	24 1/2	1 1/4	4 3/8	10 5/8										15.0	1.35
3																												
4																												
5																												

STATE PROJECT NUMBER:

FILE NAME : C:\Users\Projects\tr_std\late\D761.DGN

PLOT DATE : 22-JAN-2002 08:24

ORG DATE : 12/12/00

Originator : Don Kluever

STANDARD SIGN
D7-61

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 1/14/02

PLATE NO. D7-61.5

SHEET NO:

E

WISDOT/CADDs SHEET 42

7

- NOTES**
- Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
 - Color:
Background - Brown
Message - White - Type H Reflective
 - Message Series - D
 - 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.

58,59,60,61,62,63

7

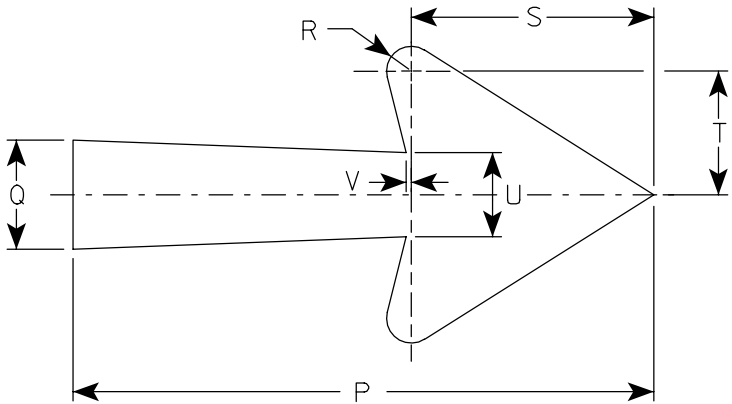
LEVELS ON - 2, 3, 5, 6, 10.



D7-63R

NOTES

- 1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Brown
Message - White - Type H Reflective
- 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. D7-63L is the same as D7-63R except that the arrow is reversed.



Arrow Detail

Metric equivalent for this sign is:

SIZE	
1	
2	1500 mm X 900 mm
3	
4	
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 ²
1																												
2	60	36	2 1/4		3/4	4 1/2	6	5 1/2	4 1/4	7	7 1/4	16 7/8	1	23	24 1/2	21	3 1/4	5/8	6 1/8	3 1/8	2 1/8	1/8	5				15.0	1.35
3																												
4																												
5																												

STANDARD SIGN
D7-63

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Christa J. Sperry
for State Traffic Engineer

DATE 1/14/02

PLATE NO. D7-63.4

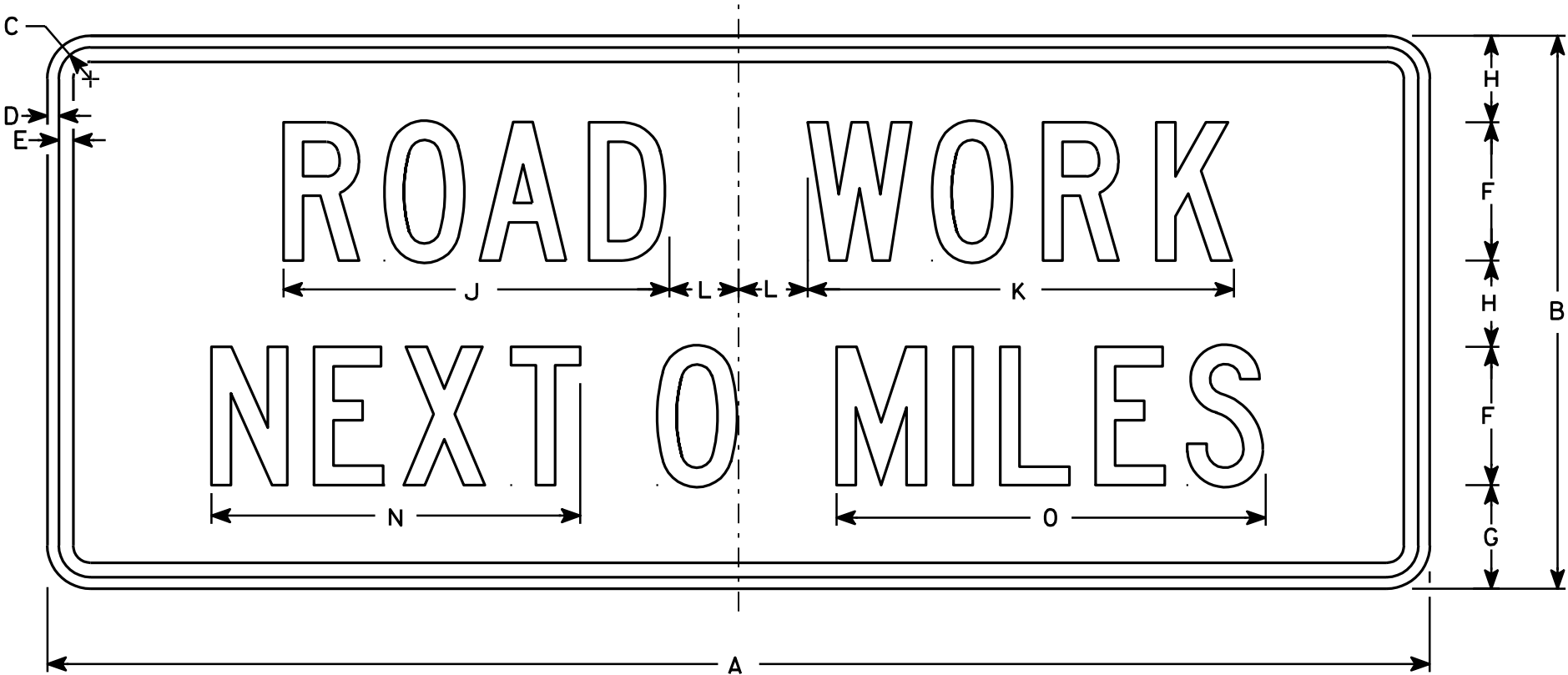
STATE PROJECT NUMBER:

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	

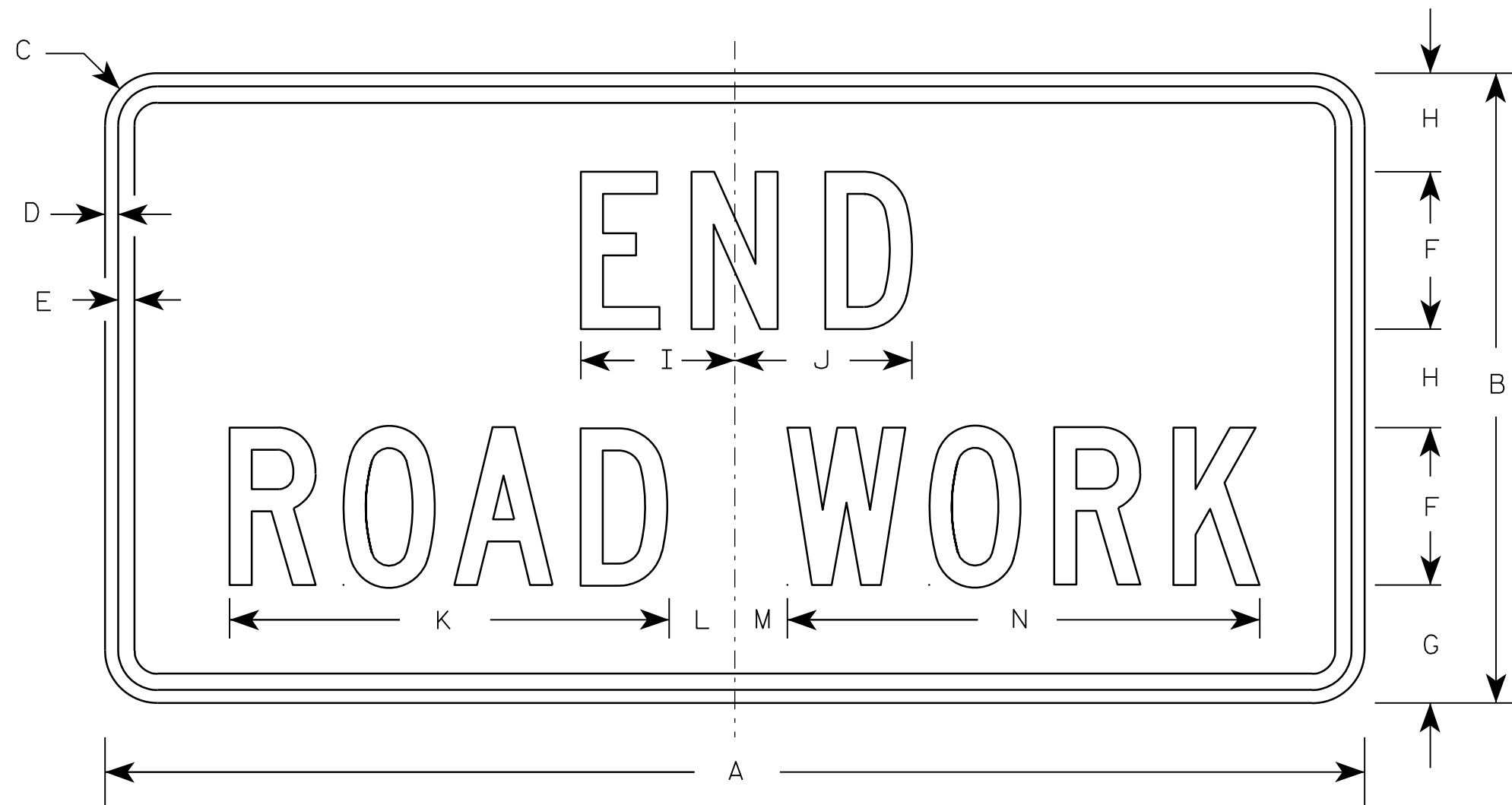
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2	60	24	1 3⁄8	1⁄2	5⁄8	6	4 1⁄2	3 3⁄4		16 3⁄4	18 1⁄2	3		16	18 5⁄8												10	.90
3																												
4	60	24	1 3⁄8	1⁄2	5⁄8	6	4 1⁄2	3 3⁄4		16 3⁄4	18 1⁄2	3		16	18 5⁄8												10	.90
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

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 sq. m.
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

PROJECT NO:

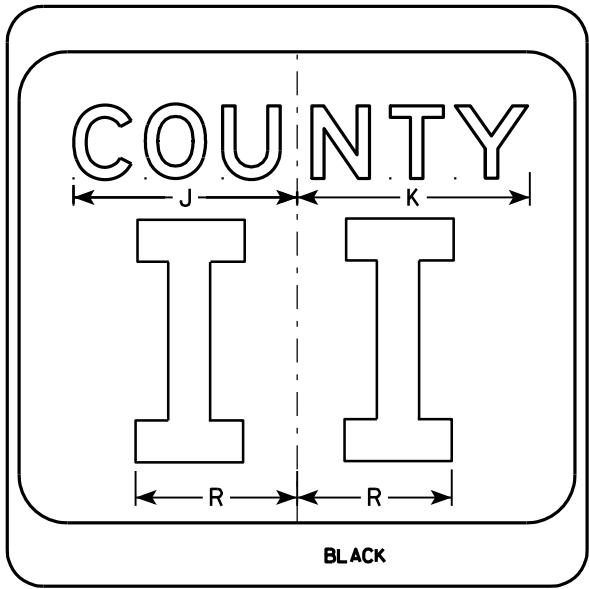
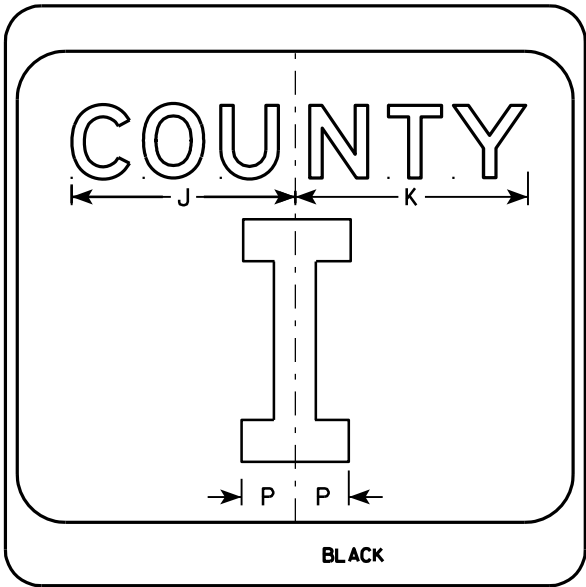
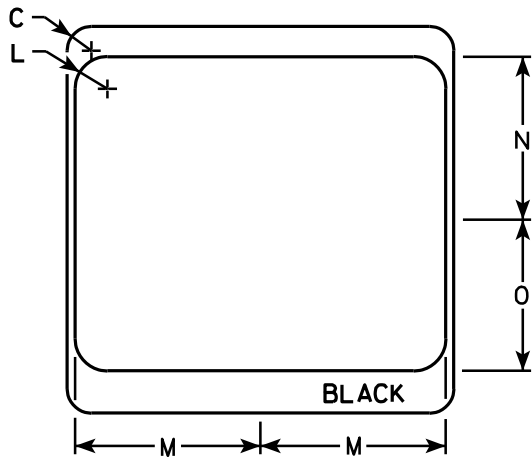
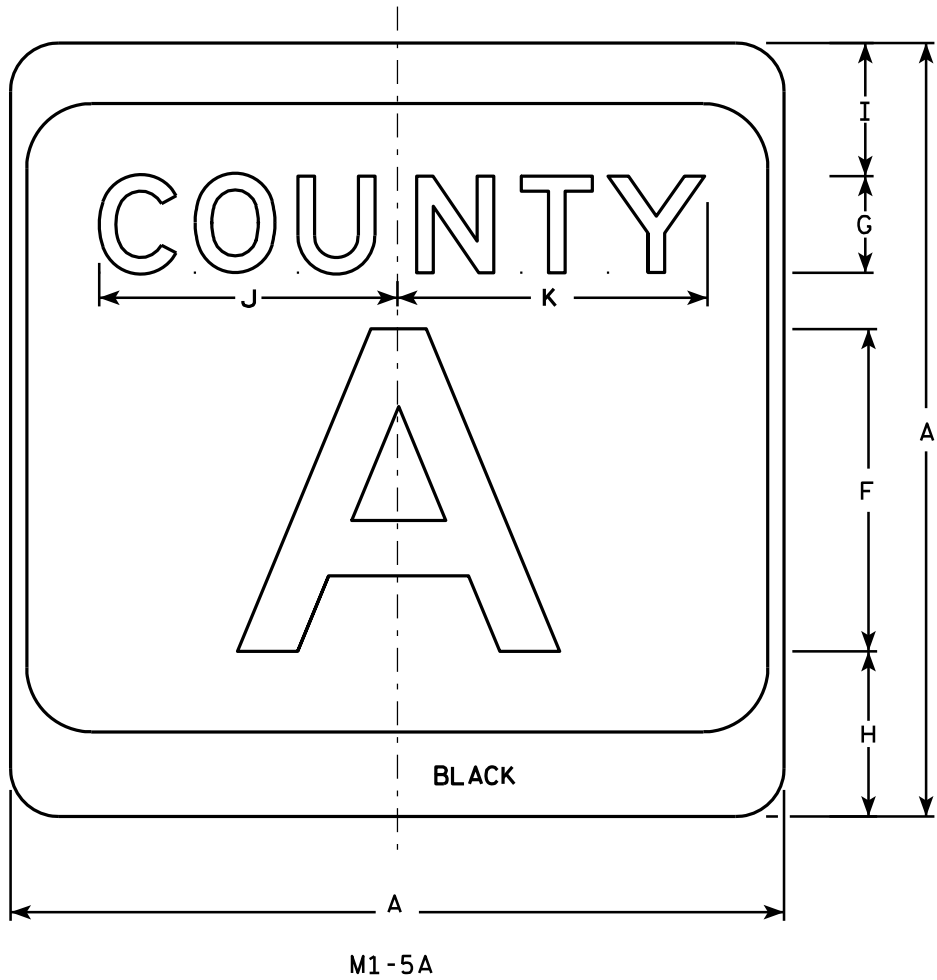
HWY:

COUNTY:

SHEET NO:

E

7



NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White & Black - See Note 7
Message - Black
3. Message Series - see Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Message Series E for 1 letter.
Message Series D for 2 letters unless message is too big then Series C.
Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
Background - Type H Reflective
Detour or temporary Signs
Background - Reflective

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

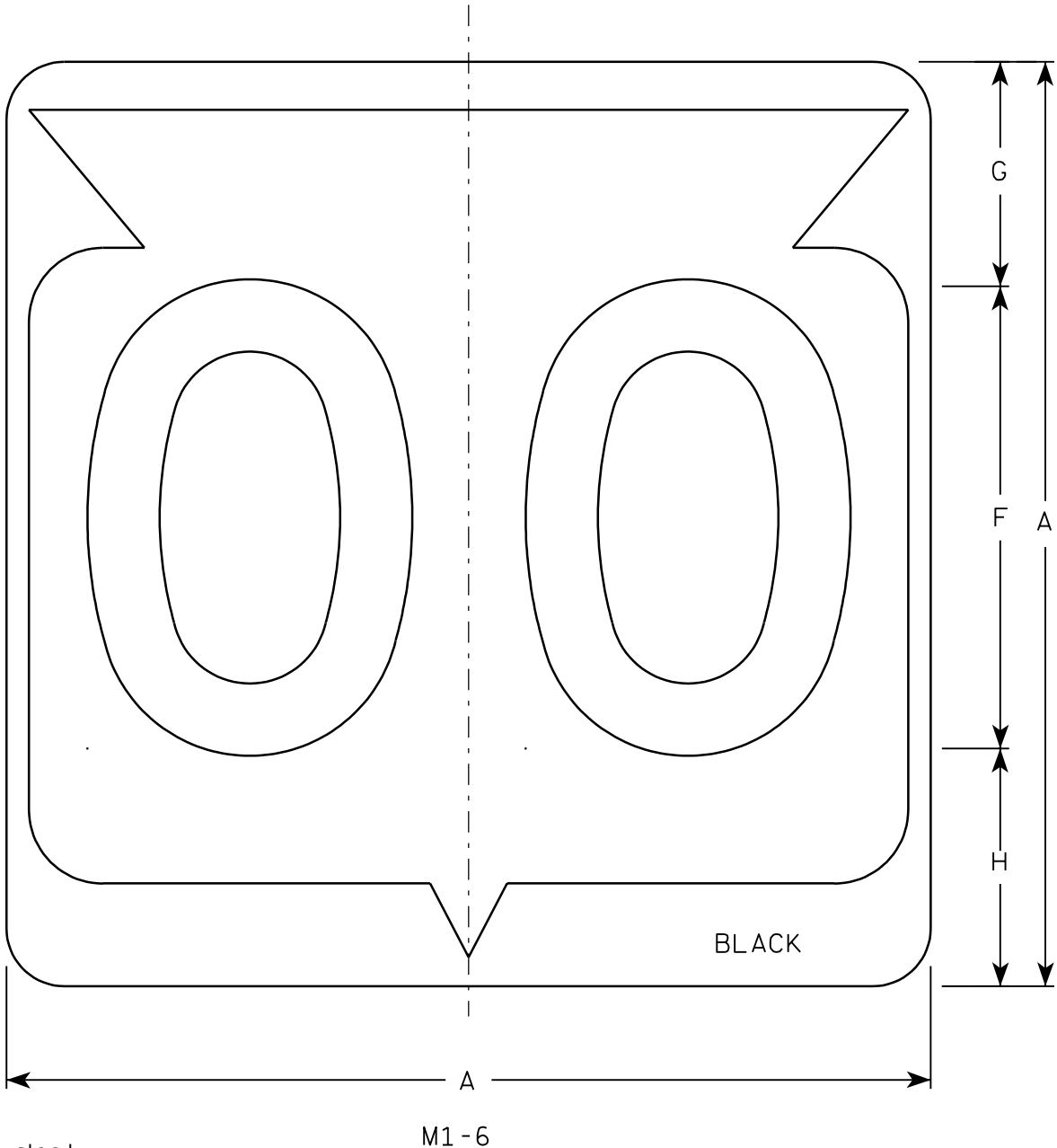
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

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

7



Metric equivalent
for this sign is:

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0	.36
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81

PROJECT NO:

HWY:

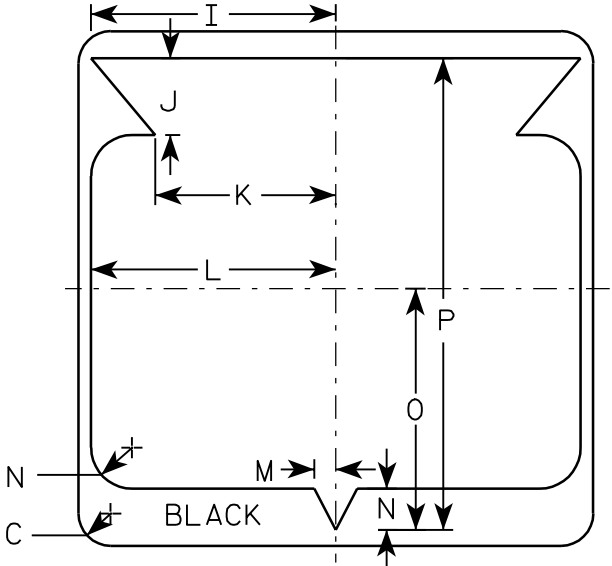
COUNTY:

SHEET NO:

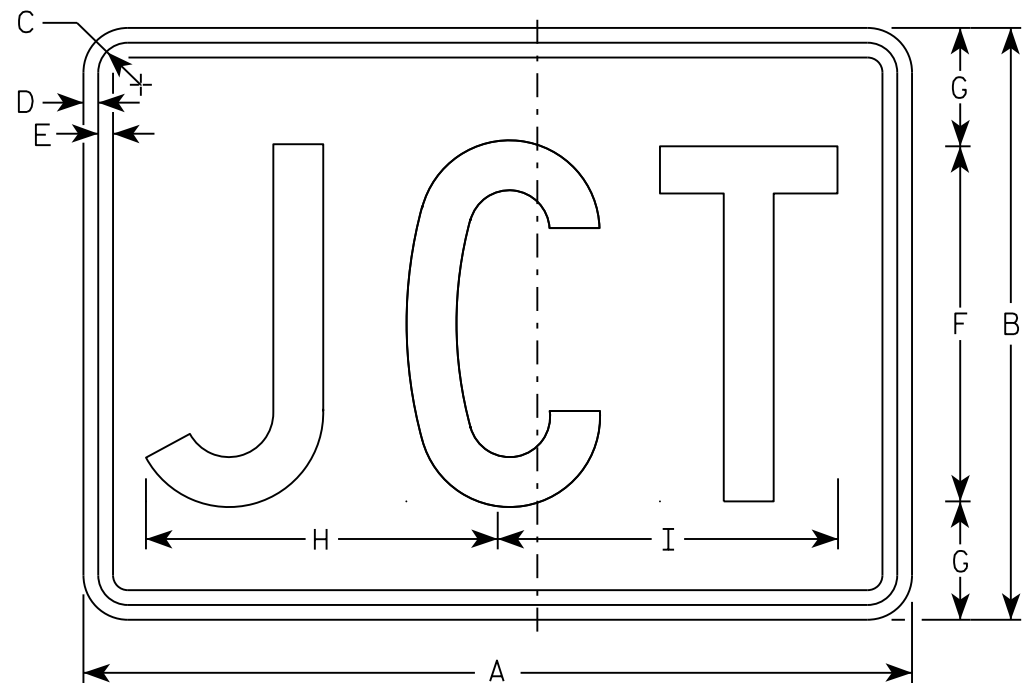
E

NOTES

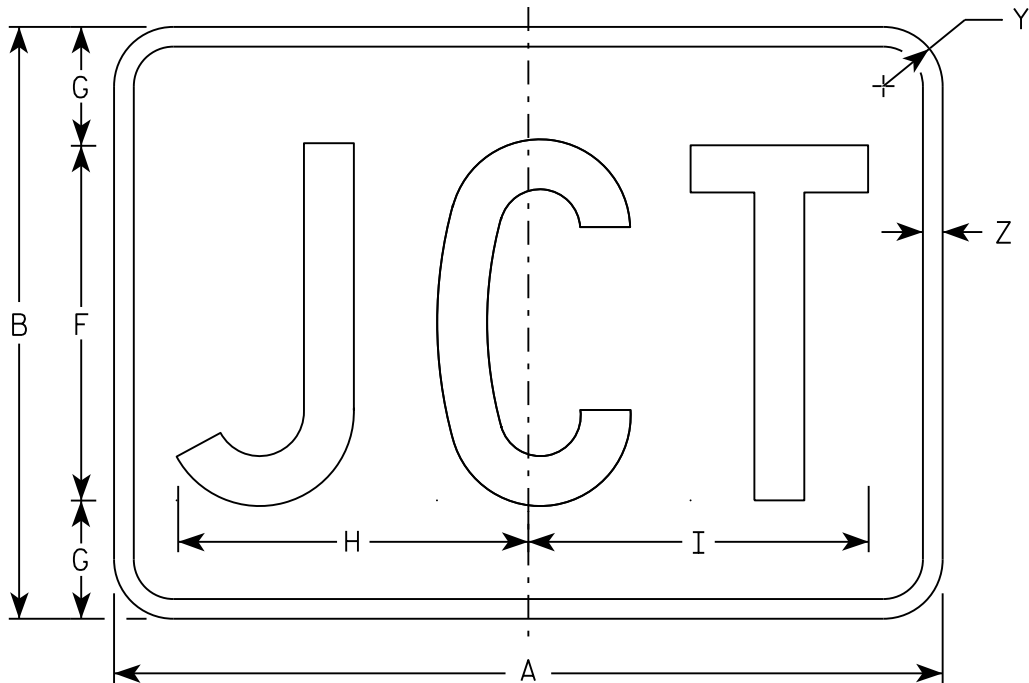
1. Sign is Type II - See Note 6 - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White & Black - See Note 6
Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base
material is plywood but borders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



7



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

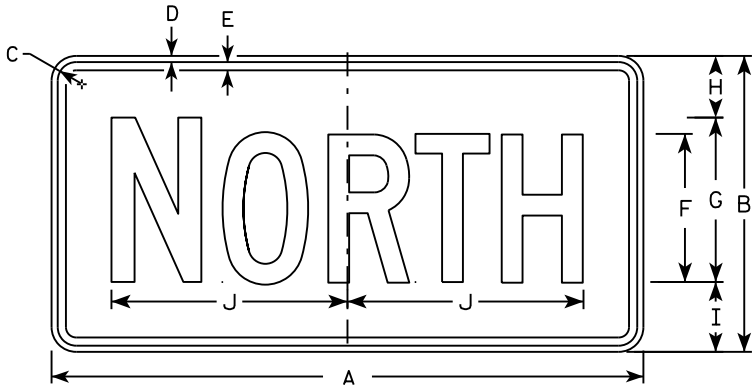
APPROVED

Matthew R. Rauch

For State Traffic Engineer

DATE 10/15/15

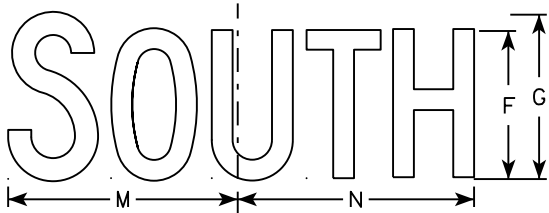
PLATE NO. M2-1.12



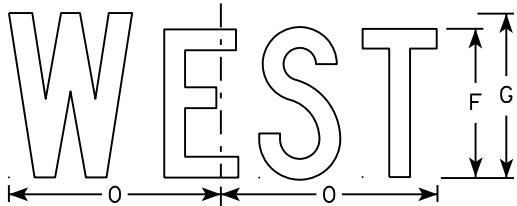
M3-1
MM3-1
MP3-1



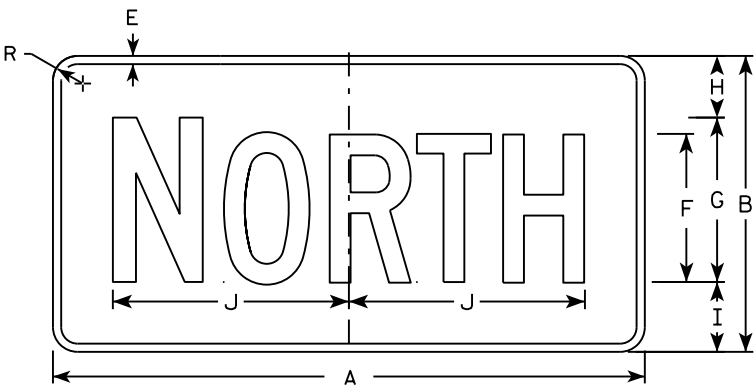
M3-2
MM3-2
MP3-2



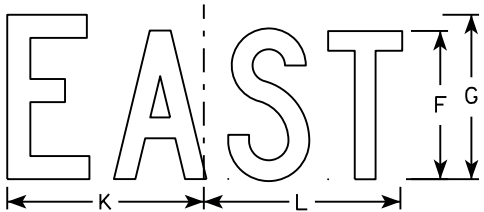
M3-3
MM3-3
MP3-3



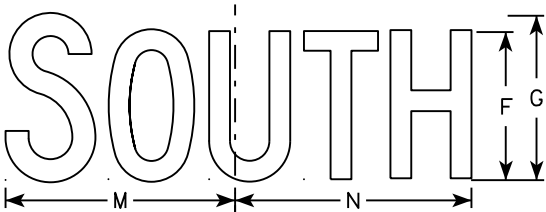
M3-4
MM3-4
MP3-4



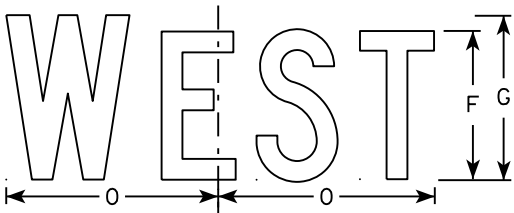
MB3-1
MK3-1
MN3-1



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

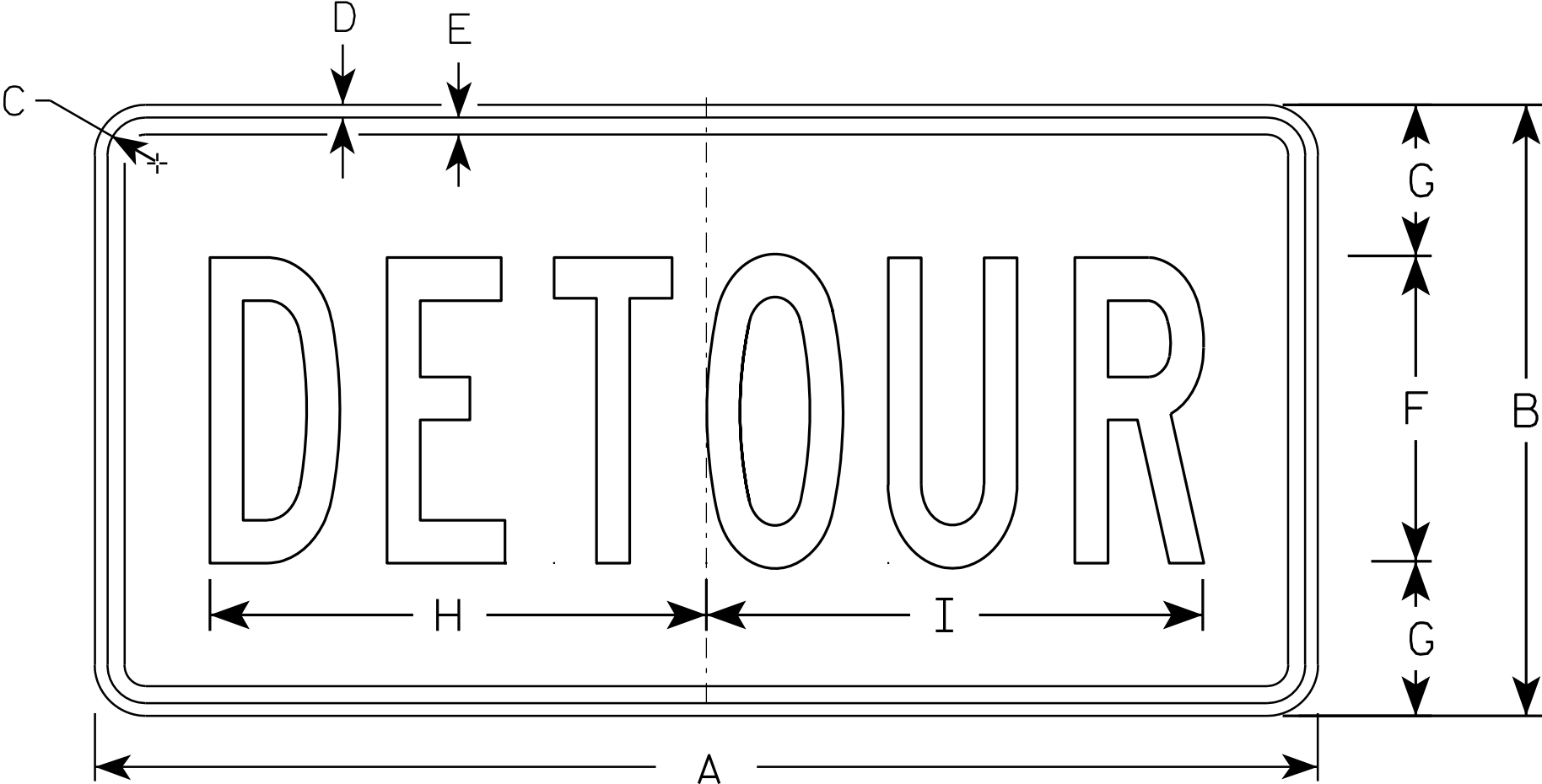
WISCONSIN DEPT OF TRANSPORTATION

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

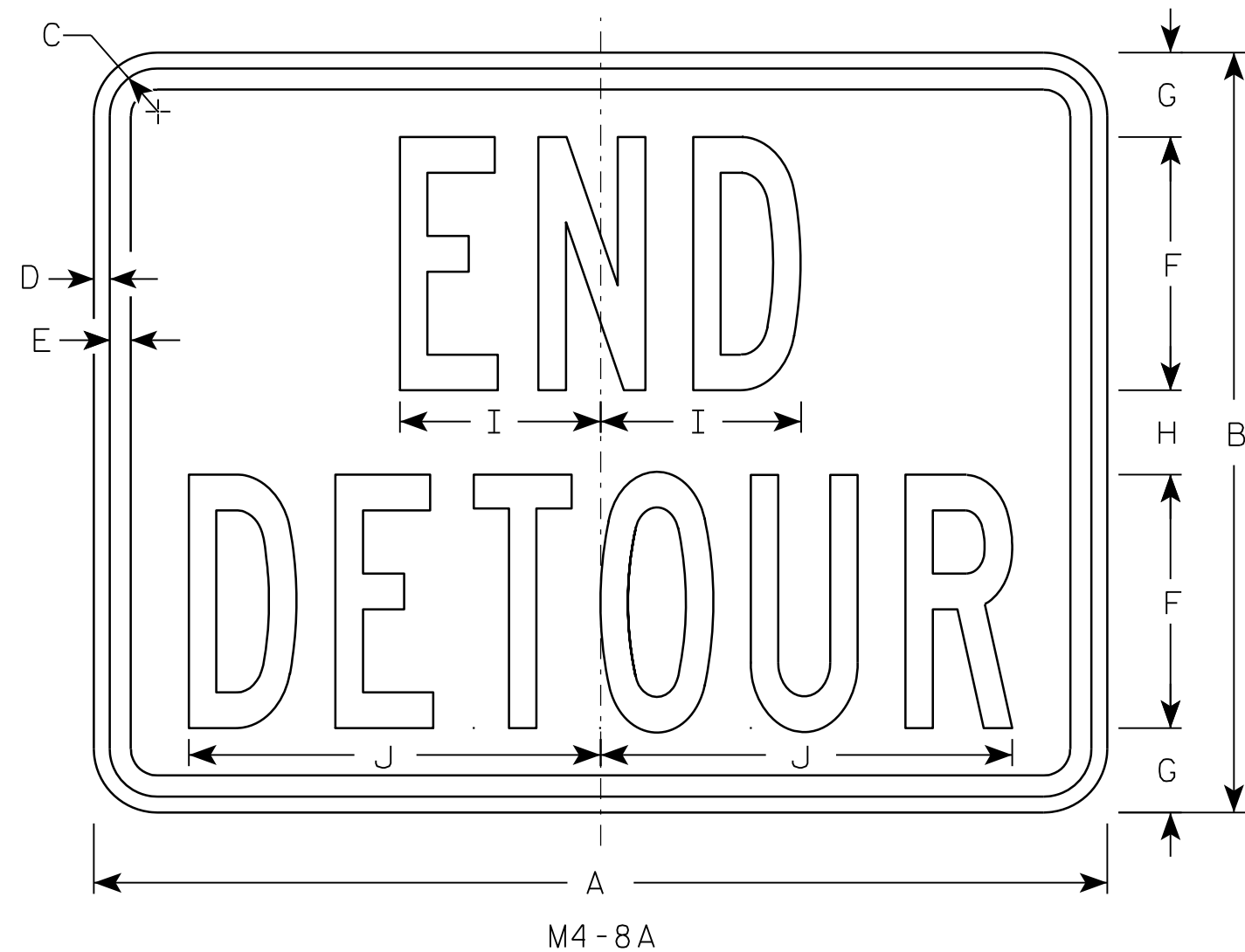
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

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



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.

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	18	1 1/8	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/8	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4																											
5																											

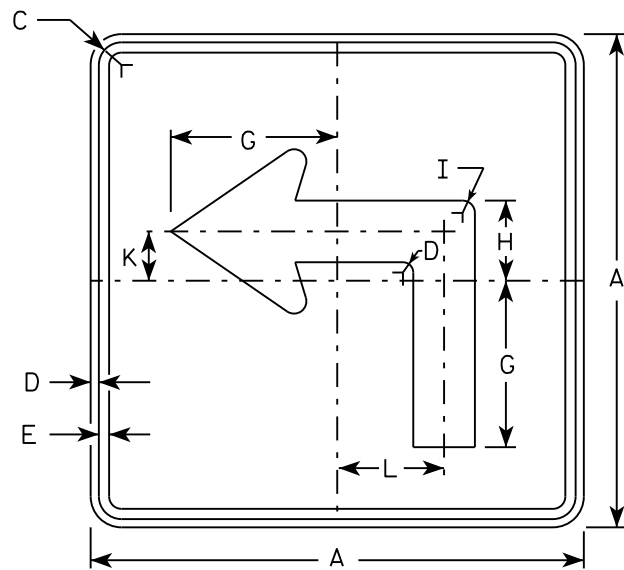
PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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STANDARD SIGN
M4-8A

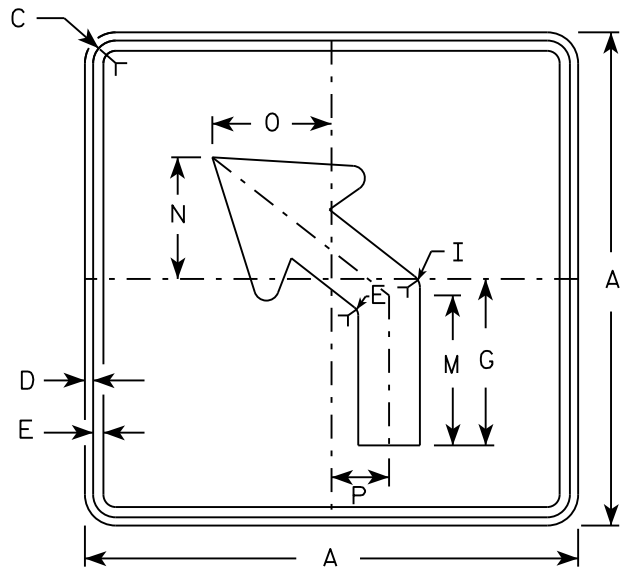
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

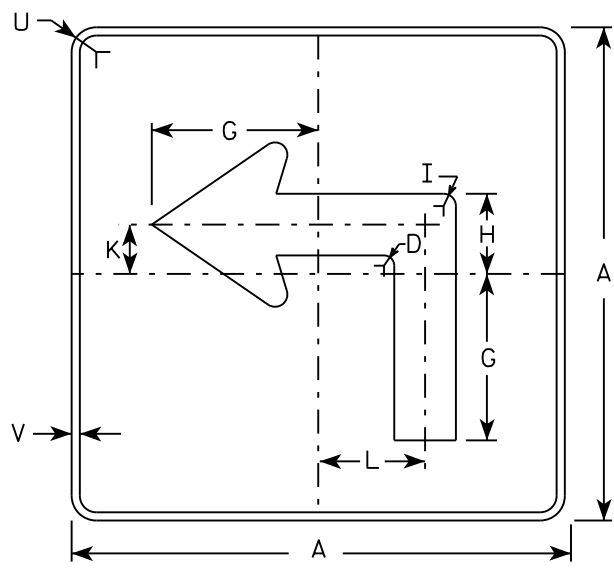
DATE 3/9/11 PLATE NO. M4-8A.2



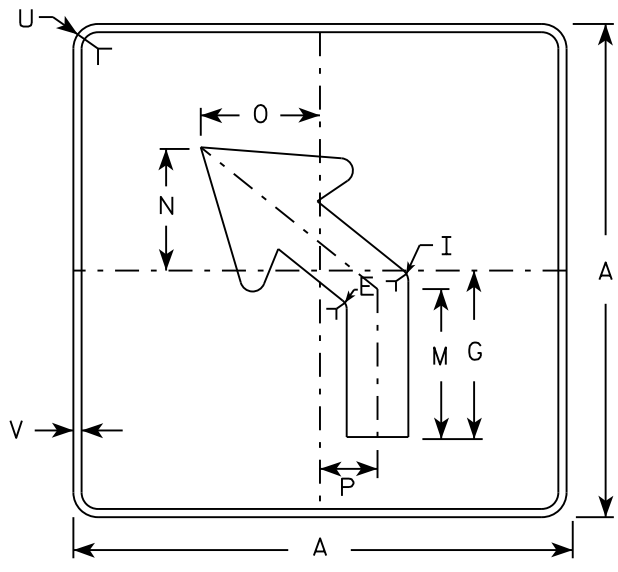
M5-1L
MM5-1L
M05-1L
MP5-1L



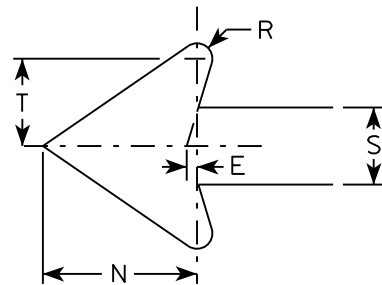
M5-2L
MM5-2L
M05-2L
MP5-2L



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

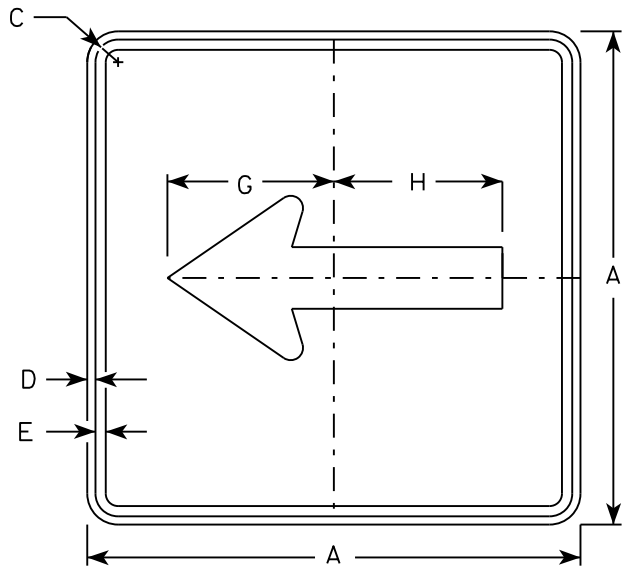
PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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STANDARD SIGN
M5-1 & M5-2

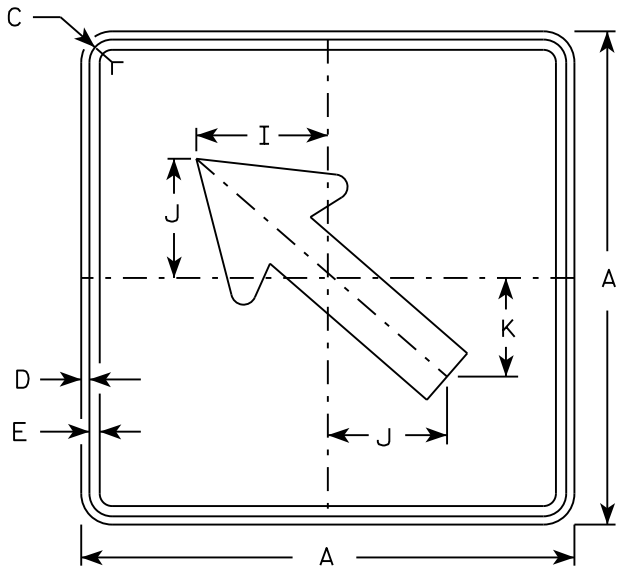
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

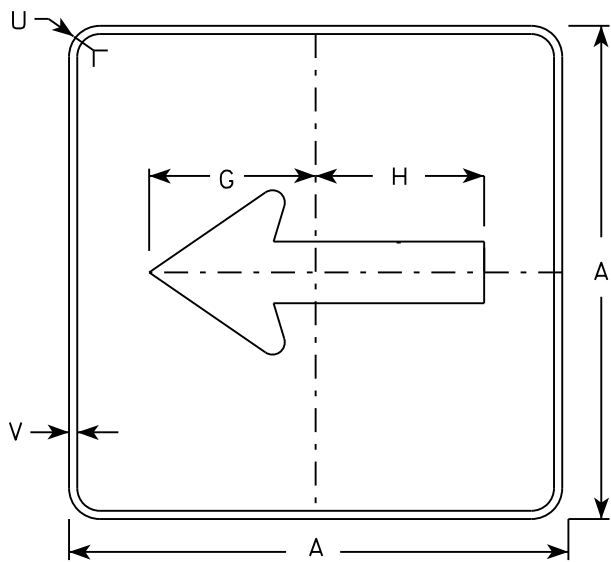
DATE 10/15/15 PLATE NO. M5-1.13



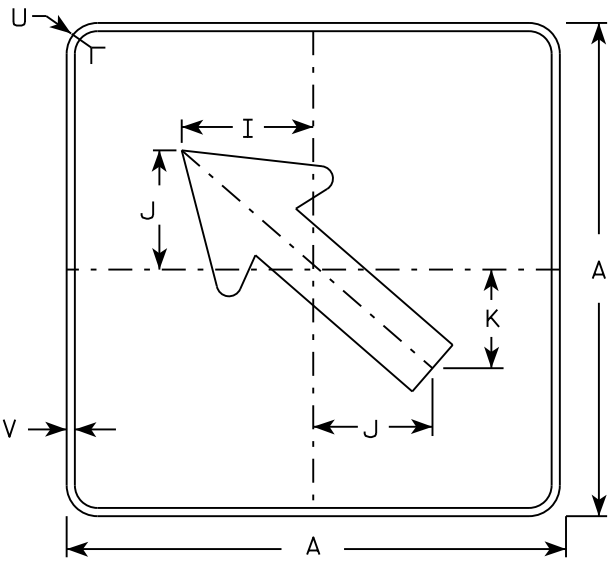
M6 - 1
MM6 - 1
M06 - 1
MP6 - 1



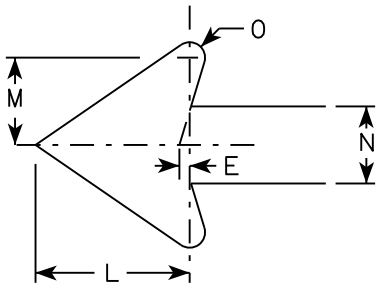
M6 - 2
MM6 - 2
M06 - 2
MP6 - 2



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



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



NOTES

- 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.
- M6-1 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:

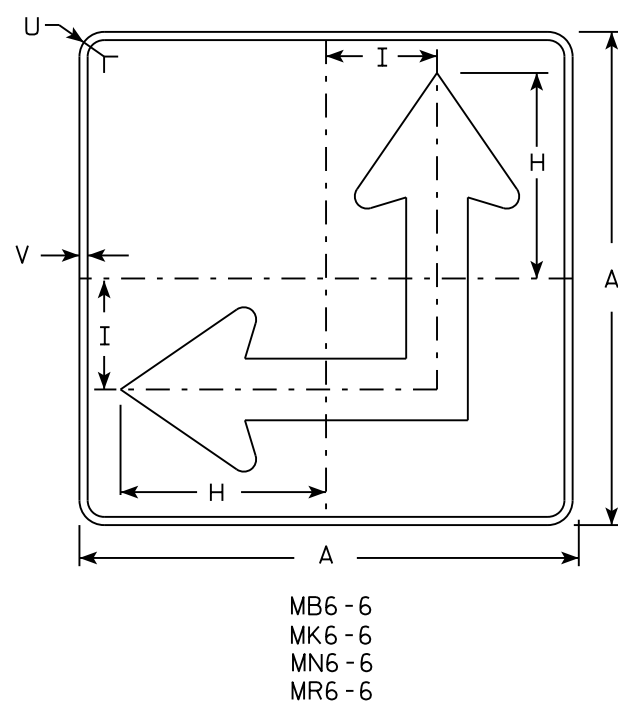
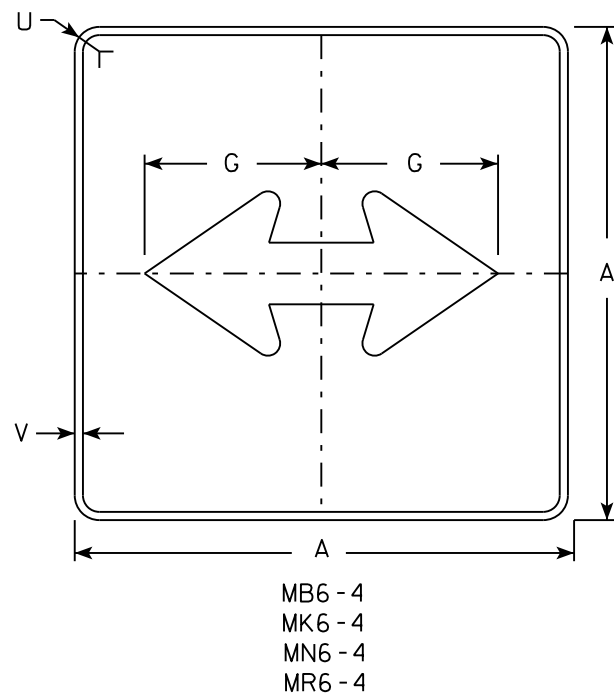
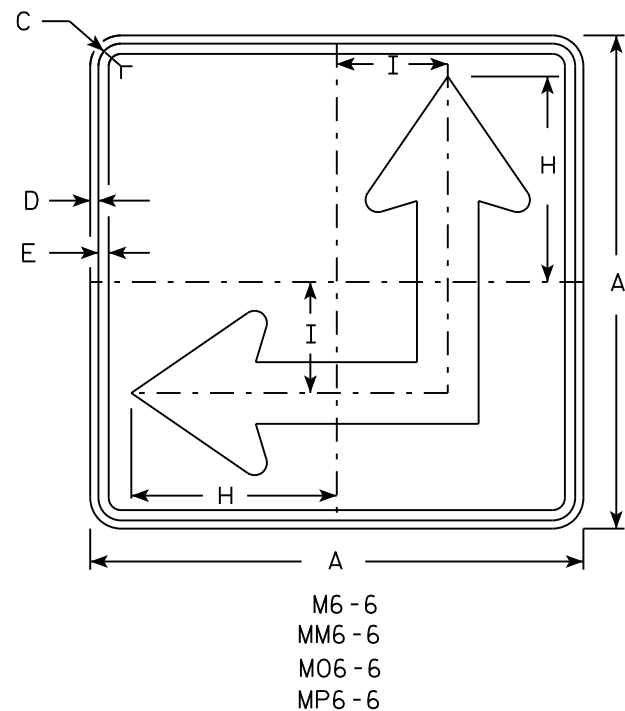
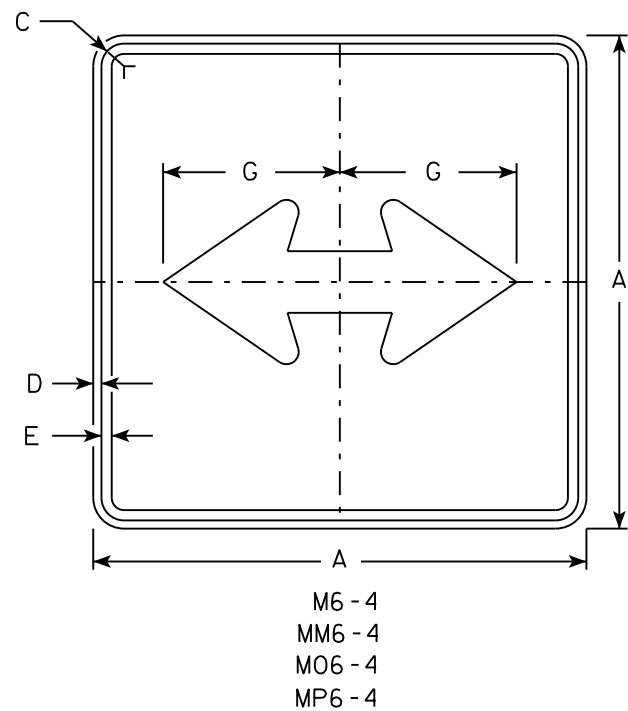
E

STANDARD SIGN
M6 - 1 & M6 - 2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

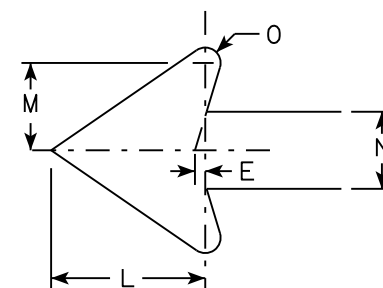
APPROVED
Matthew R. Rauch
for State Traffic Engineer

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

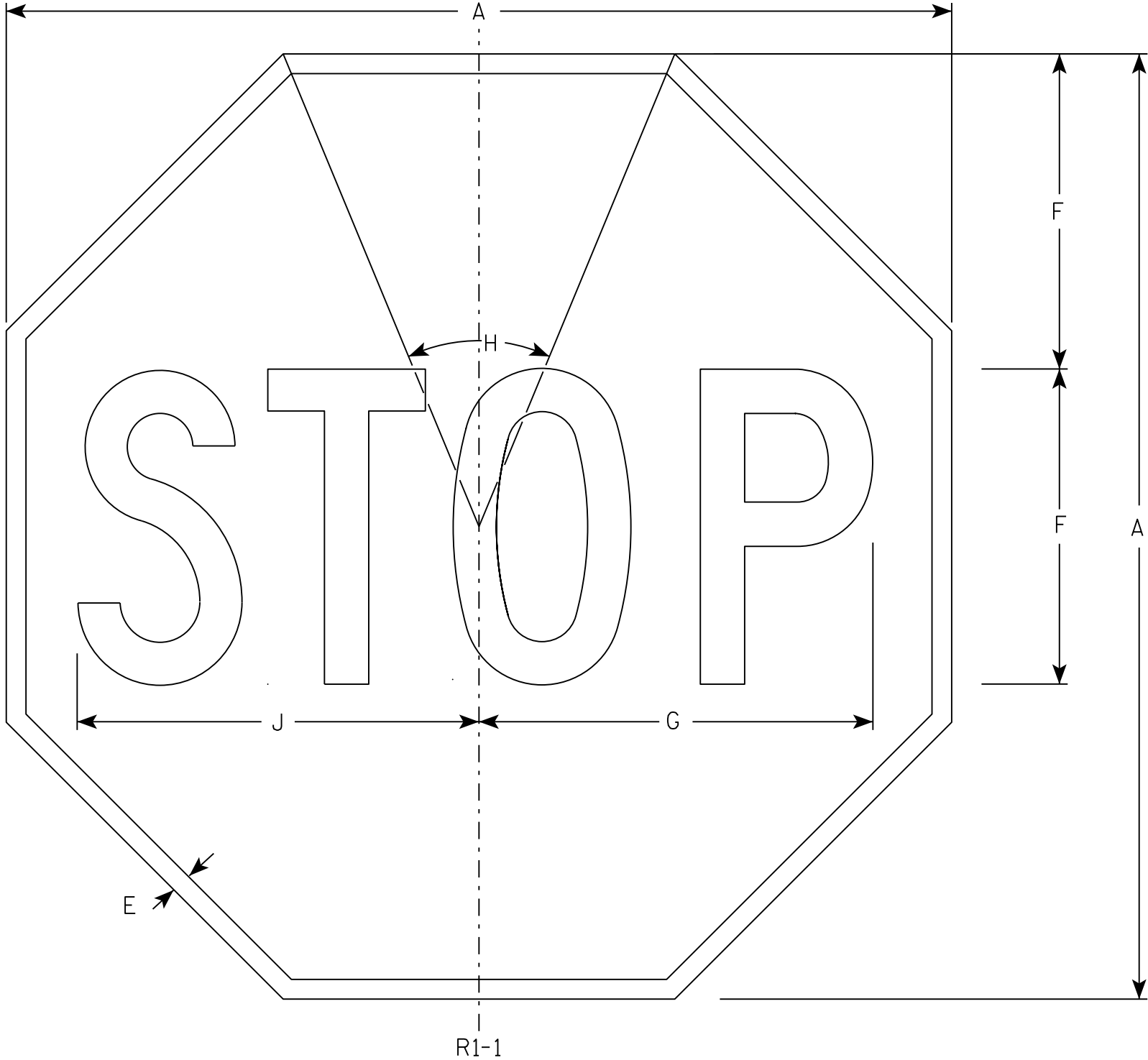
STANDARD SIGN
M6 - 4 & M6 - 6
SERIES

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

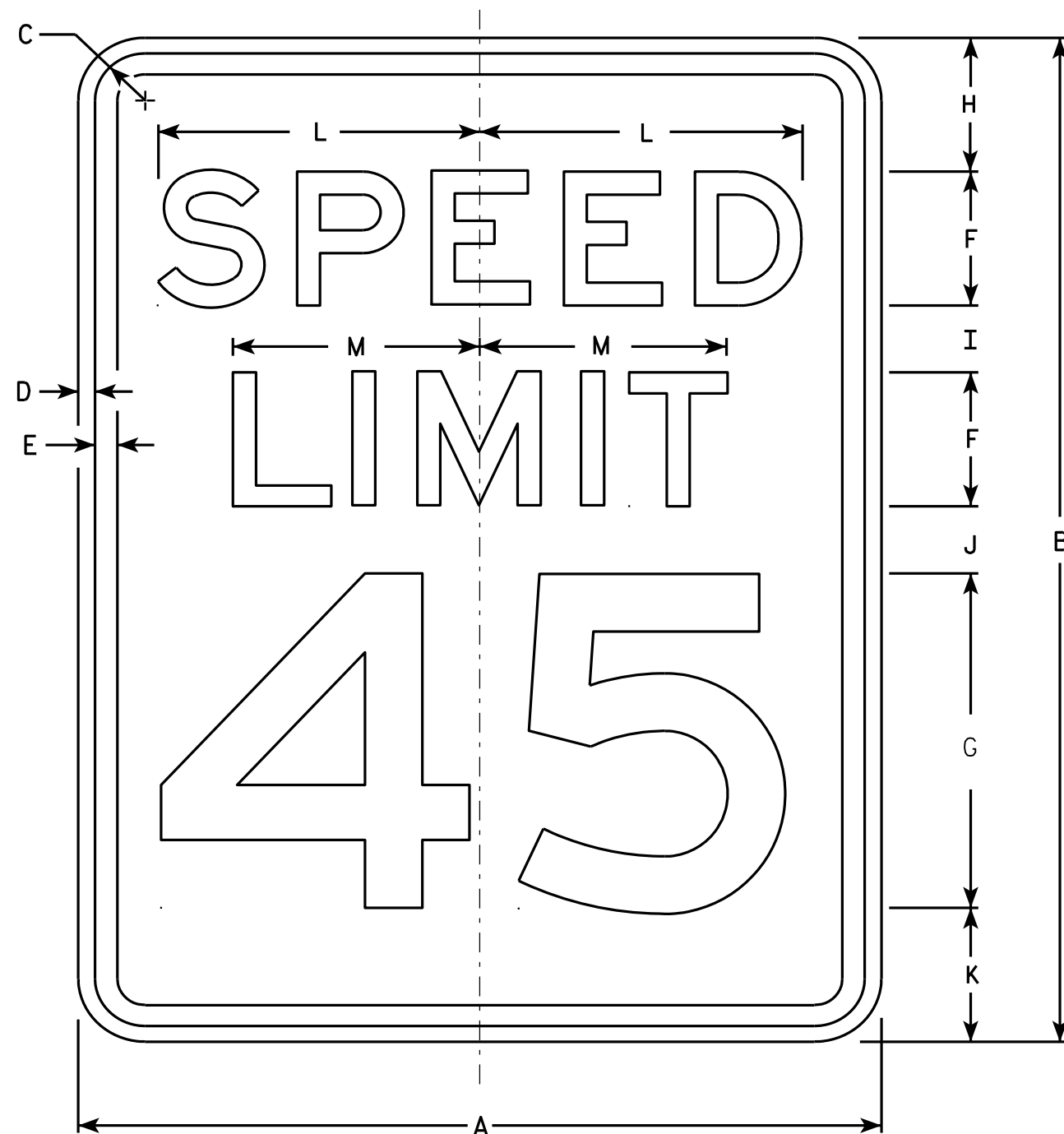
STANDARD SIGN

R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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



R2-1

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

STANDARD SIGN R2-1

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

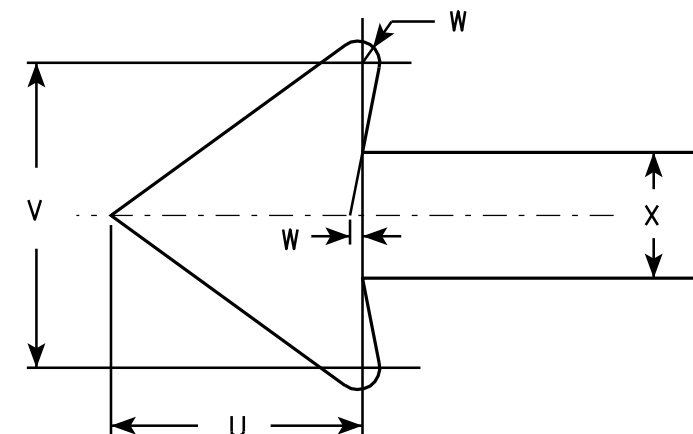
PROJECT NO: HWY: COUNTY: SHEET NO: E



R7-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Red
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1, 3 and 4 are series C, line 2 is series B.
6. R7-1D (double arrow)
R7-1L (left arrow)
R7-1R (right arrow)



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	2 1/4	2 1/8	2 1/2	3 7/8	1 1/2	1 3/4	1/8	3/4			1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	2 3/4	2 5/8	3 1/8	5 7/8	2 1/4	2 5/8	1/4	1 1/8			3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
4																											
5																											

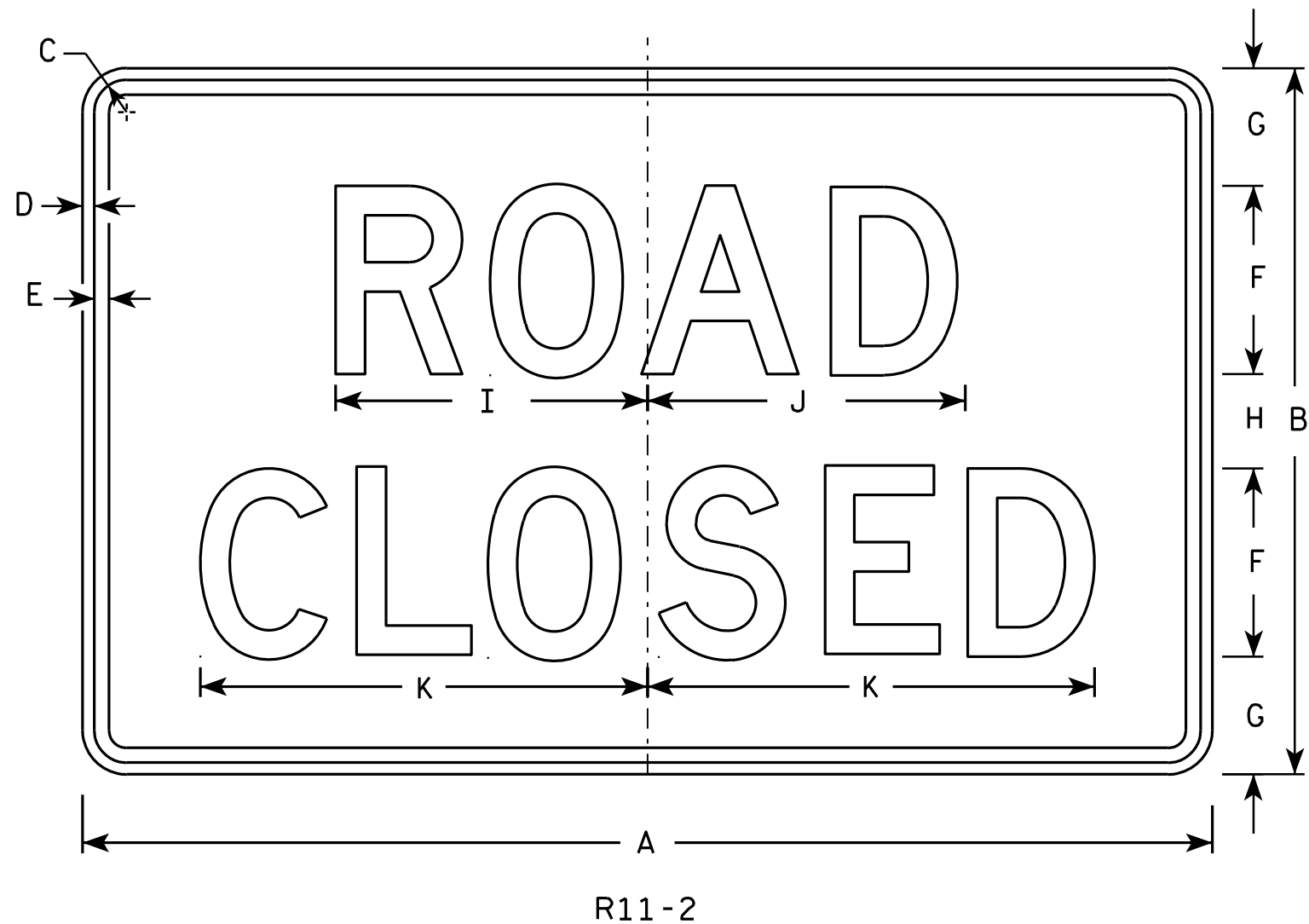
STANDARD SIGN R7-1

WISCONSIN DEPT OF TRANSPORTATION

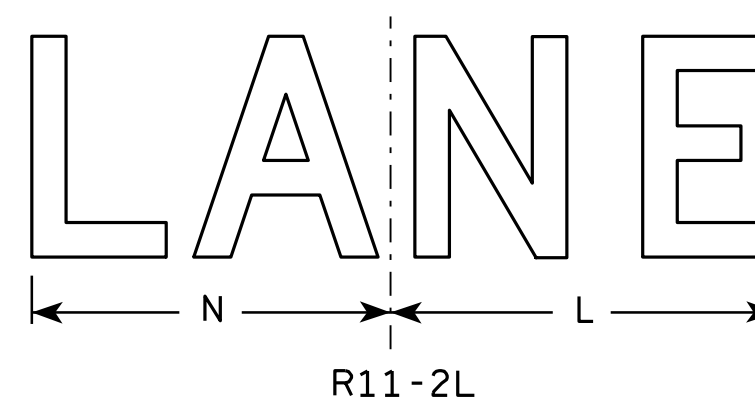
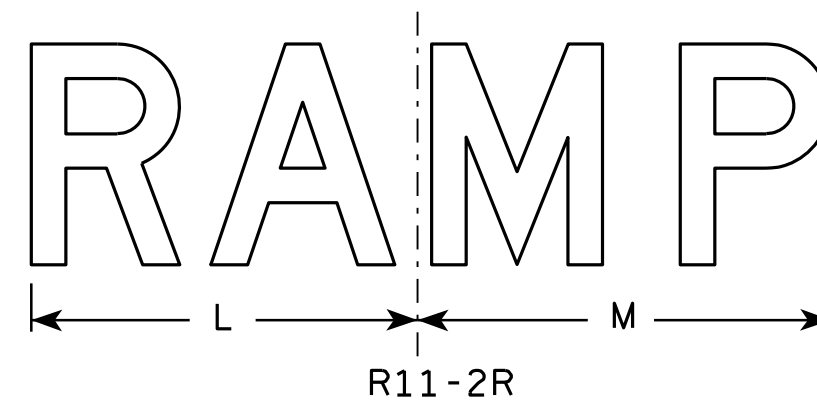
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

PROJECT NO: HWY: COUNTY: SHEET NO: E



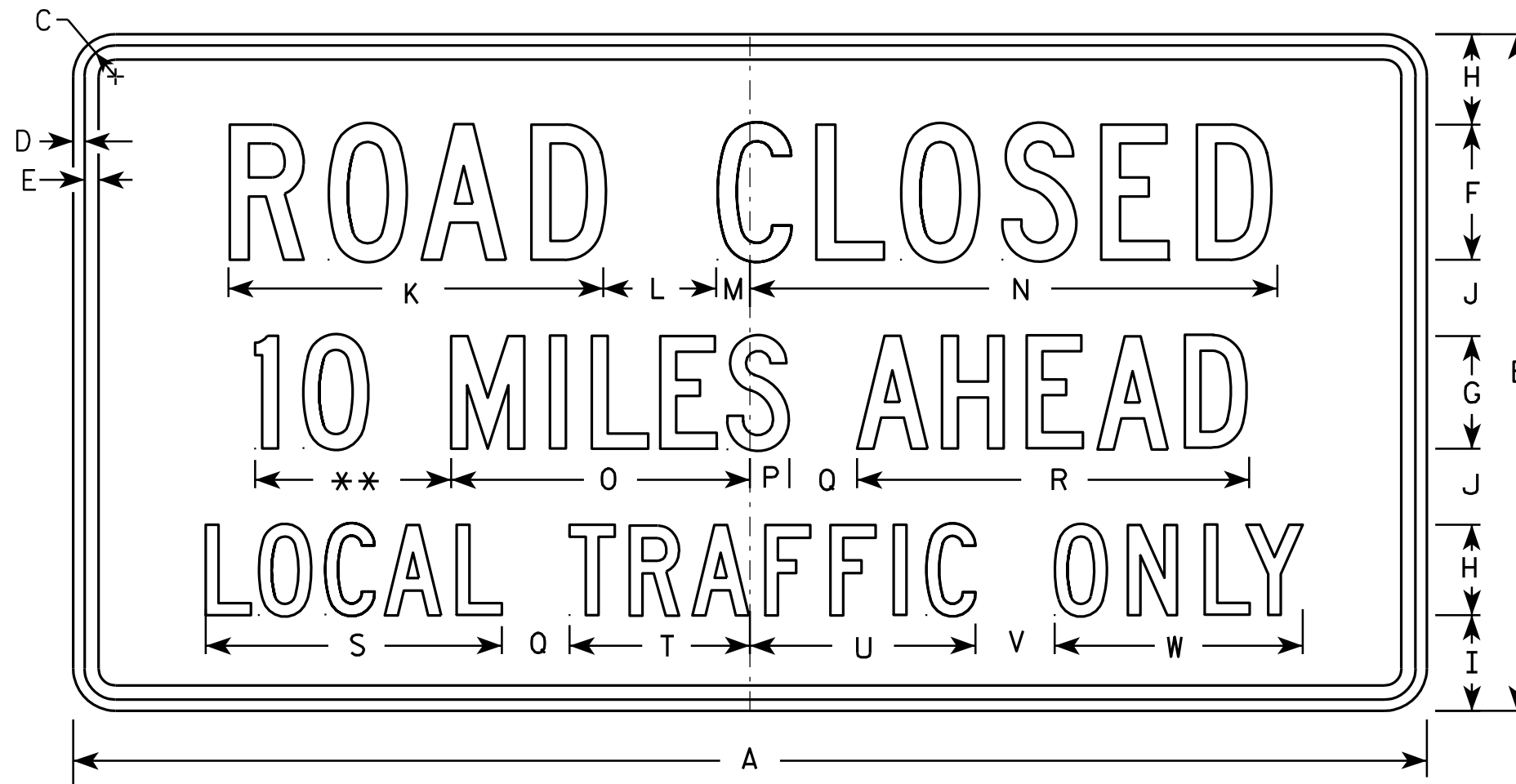
- NOTES**
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
 2. Color:
Background - White
Message - Black
 3. Message Series - D
 4. Corners may be square or rounded when base material is plywood but borders shall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

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

PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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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

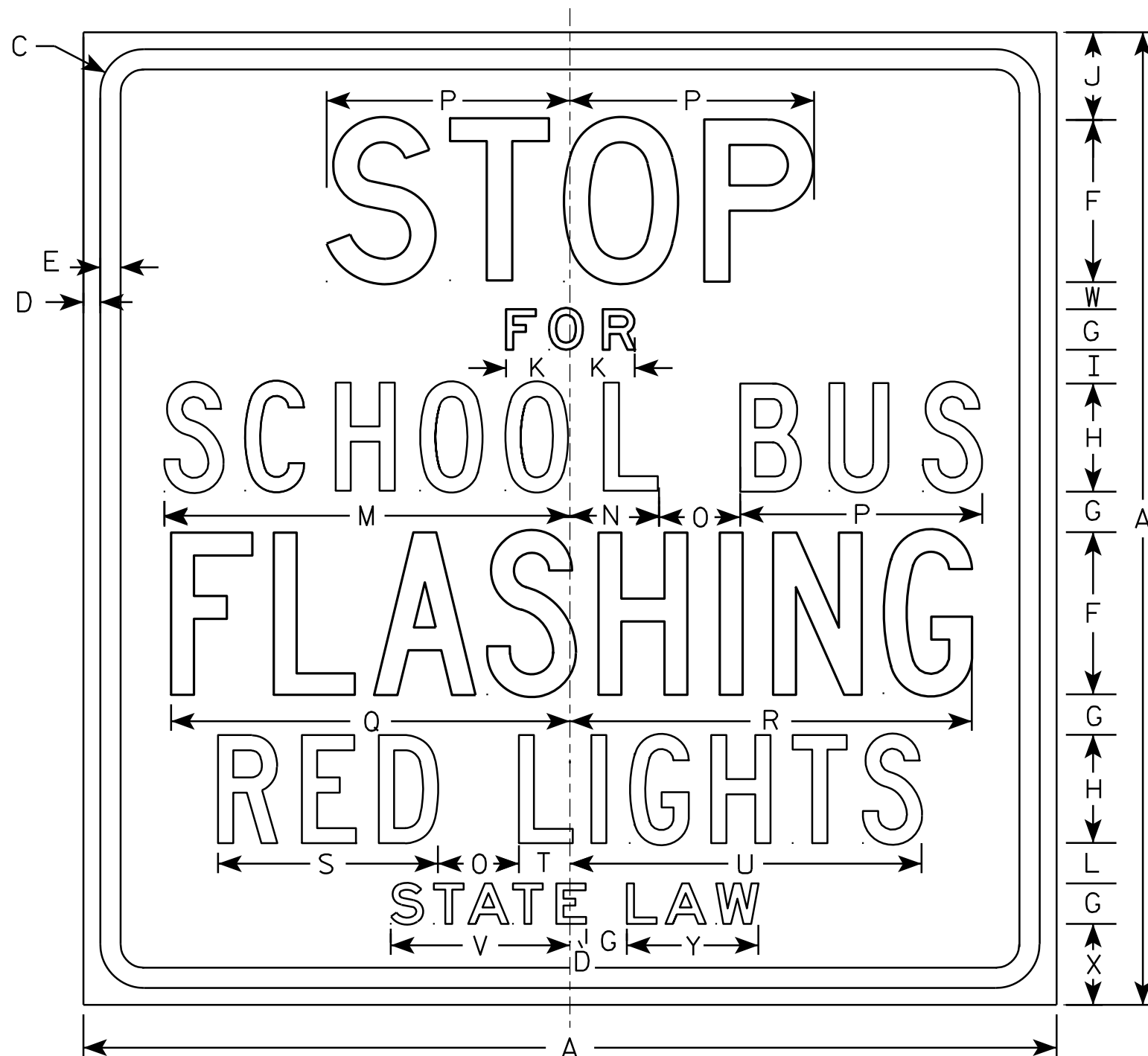
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 3/8	1/2	5/8	4	3	2 1/2	2	2	11 1/8	3	1 1/8	15 1/4	8	1 1/2	2	10 3/4	8 3/8	4 3/4	6 1/2	2	6 3/4				4.5
2S	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	16 5/8	5	1 1/2	23	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11				12.5
2M	60	30	1 3/8	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



R59-51

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D
Lines 2 & 6 are Series E
Line 3, 4 & 5 are Series C

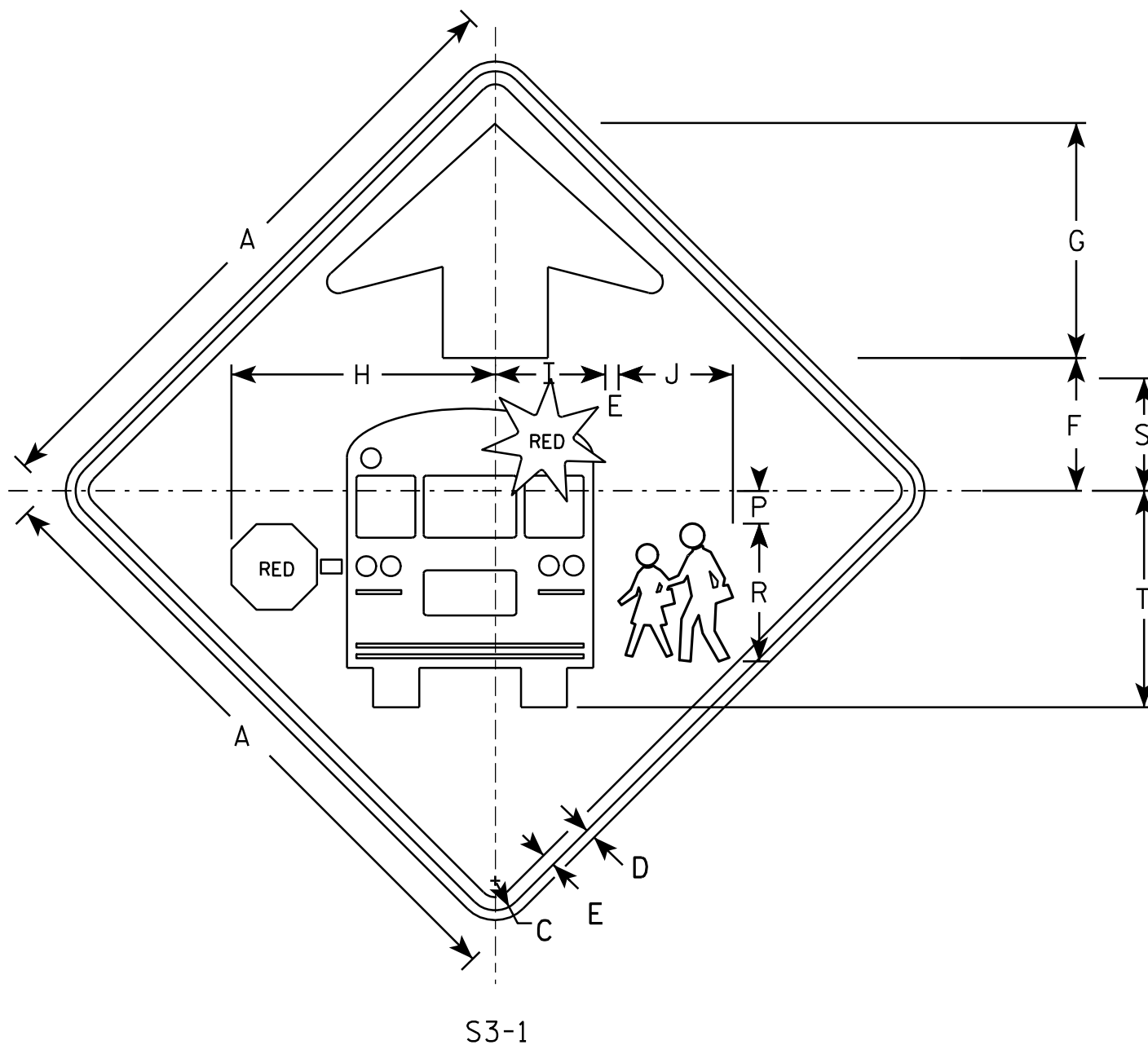
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36		1 5⁄8	5⁄8	¾	6	1 ½	4	1 ¼	3 ¼	2 ¾	1 ½	15	3 ¼	3	9	14 ¾	14 7⁄8	8 ⅛	1 7⁄8	13	6 5⁄8	1	3	4 7⁄8		9.0
2M	36		1 5⁄8	5⁄8	¾	6	1 ½	4	1 ¼	3 ¼	2 ¾	1 ½	15	3 ¼	3	9	14 ¾	14 7⁄8	8 ⅛	1 7⁄8	13	6 5⁄8	1	3	4 7⁄8		9.0
3	48		2 ¼	¾	1	8	2	6	1 ¼	4 ¾	3 ¼	1 ½	20 ¼	5	3 5⁄8	12	19 ½	20	11 5⁄8	3 ¾	19	9 ½	1	3 ½	6 ¾		16.0
4	48		2 ¼	¾	1	8	2	6	1 ¼	4 ¾	3 ¼	1 ½	20 ¼	5	3 5⁄8	12	19 ½	20	11 5⁄8	3 ¾	19	9 ½	1	3 ½	6 ¾		16.0
5																											

STANDARD SIGN
R59-51

WISCONSIN DEPT OF TRANSPORTATION

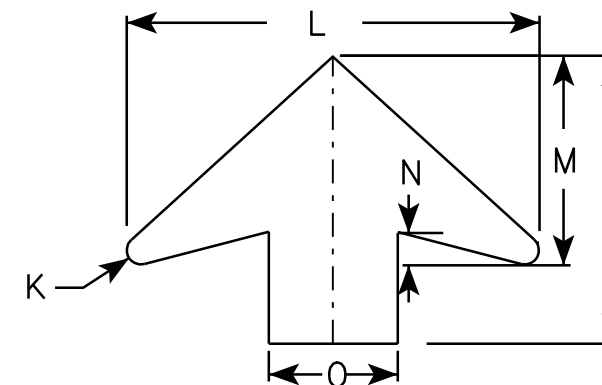
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/30/11 PLATE NO. R59-51.10

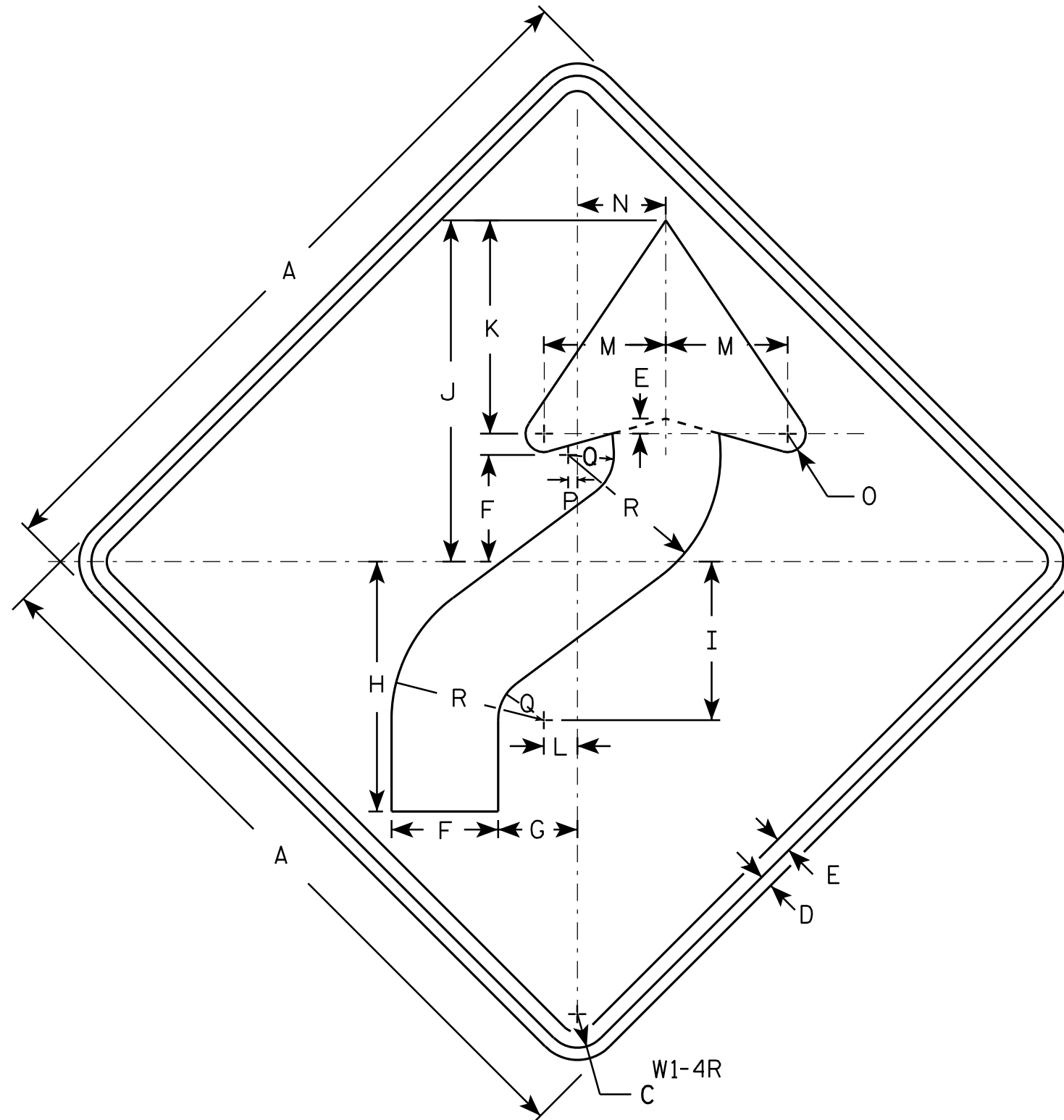


NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
 - Background - YELLOW-GREEN
 - Message - BLACK except as noted
 - Circles except PEDS- RED BACKGROUND
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

[illegible]

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



NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	3 1/2	2 5/8	8 1/4	5 1/4	11 1/4	7	1 1/8	4	3	5/8	1/4	1 1/2	5									4.0
2S	30		1 3/8	1/2	5/8	4 3/8	3 1/4	10 1/4	6 1/2	14	8 3/4	1 3/8	5	3 5/8	3/4	3/8	1 7/8	6 1/4									6.25
2M	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
3	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
4	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
5	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

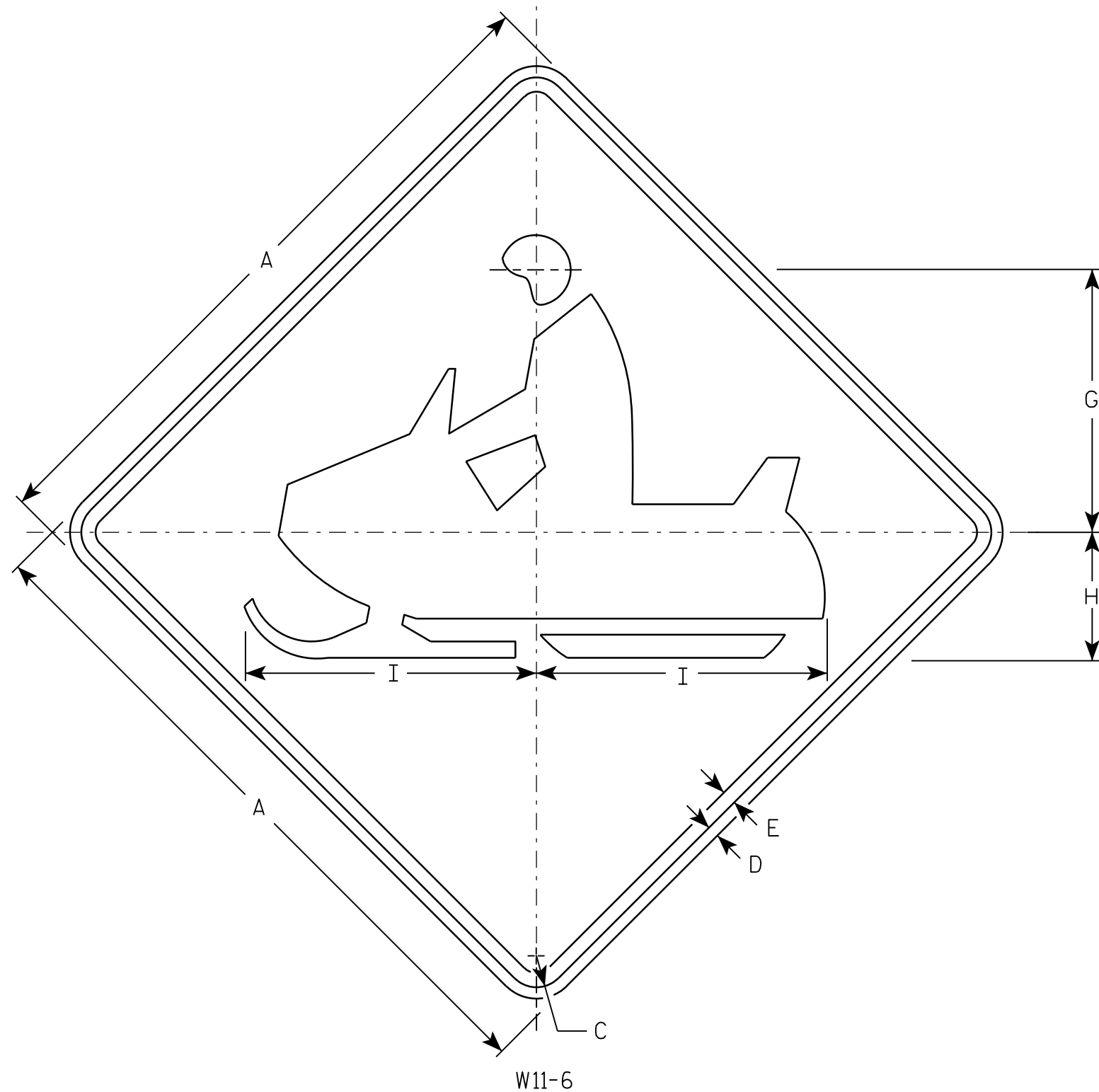
STANDARD SIGN W1 - 4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

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

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

W11-6

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		9 1/2	4 1/2	10 1/4																		4.0
2S	30		1 3/8	1/2	5/8		11 1/2	5 5/8	12 3/4																		6.25
2M	30		1 3/8	1/2	5/8		11 1/2	5 5/8	12 3/4																		6.25
3	36		1 5/8	5/8	3/4		14 1/8	6 3/4	15 1/4																		9.0
4	48		2 1/4	3/4	1		19	9	20 1/2																		16.0
5																											

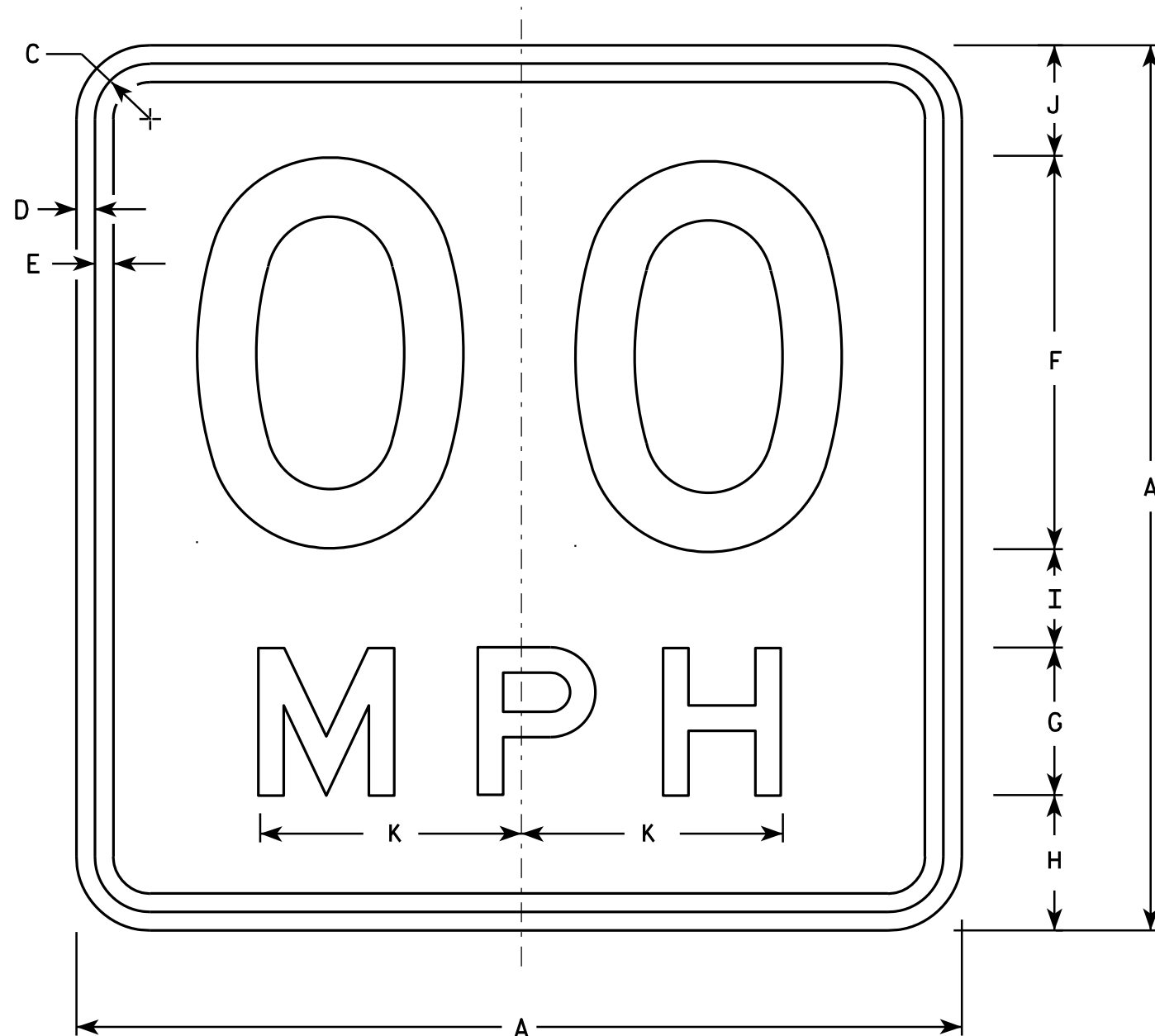
STANDARD SIGN
W11-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R. Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W11-6.8

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

W13-1

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area Sq. Ft.
1	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
* 2S	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
* 2M	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
3	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00
4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

STANDARD SIGN

W13-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

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

PROJECT NO:

HWY:

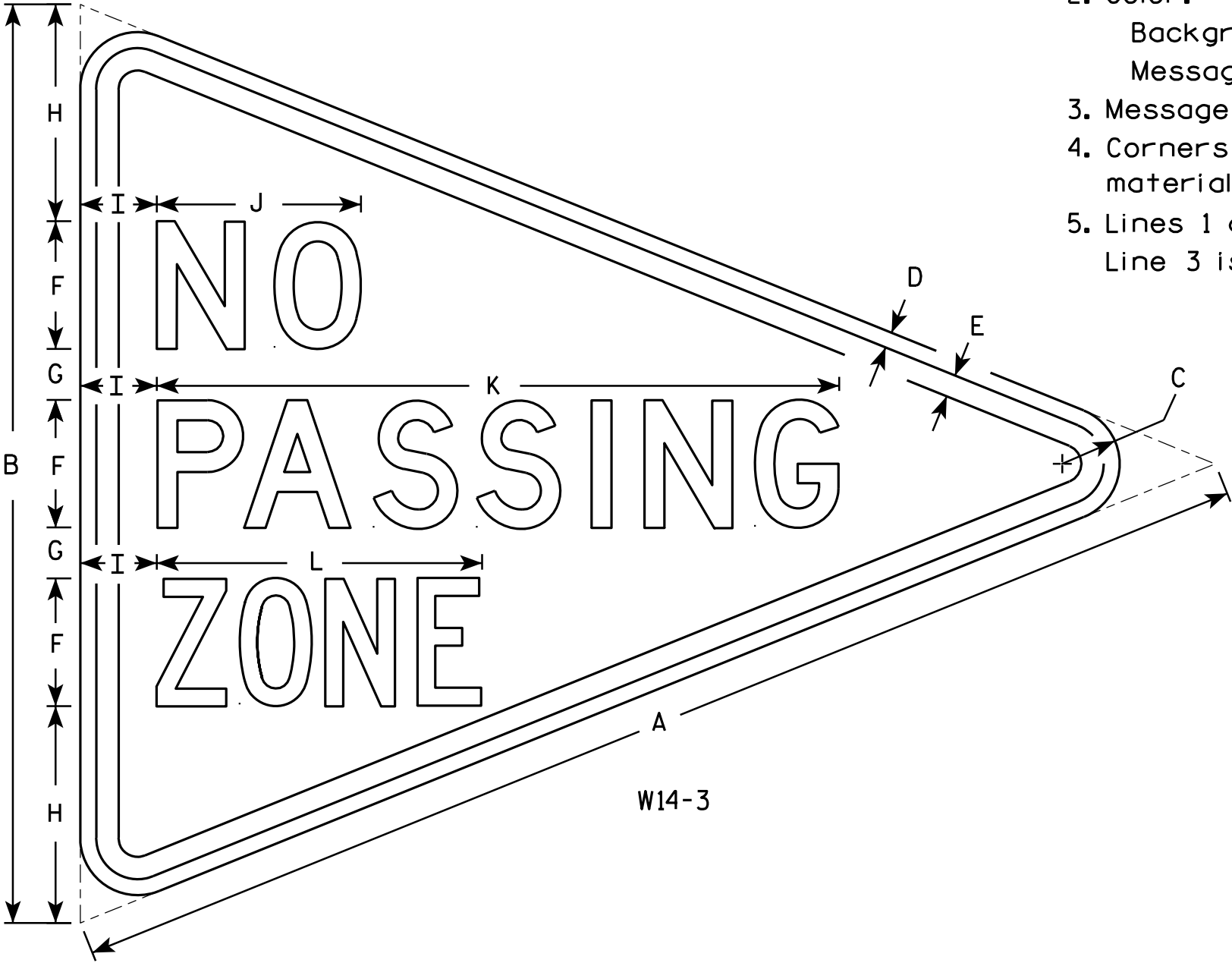
COUNTY:

SHEET NO:

E

NOTES

- 1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Yellow
Message - Black
- 3. Message Series - See note 5
- 4. Corners and borders shall be rounded on all base materials for this sign.
- 5. Lines 1 and 2 are Series D.
Line 3 is series C.



W14-3

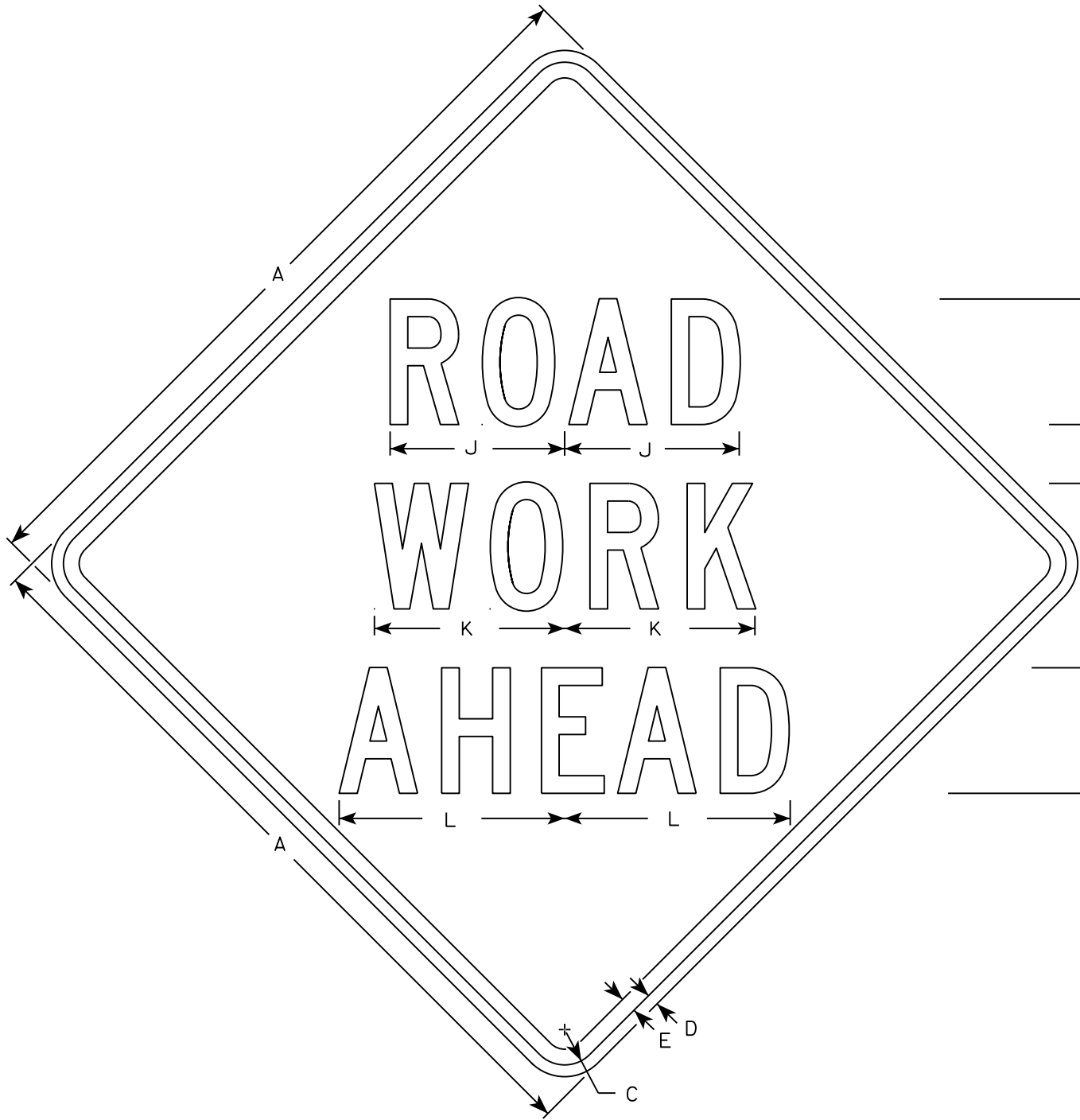
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
2M	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
3	64	48	3	3/4	1 1/4	6	3	12	4	10 3/4	33 5/8	16 1/2														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

STANDARD SIGN
W14-3

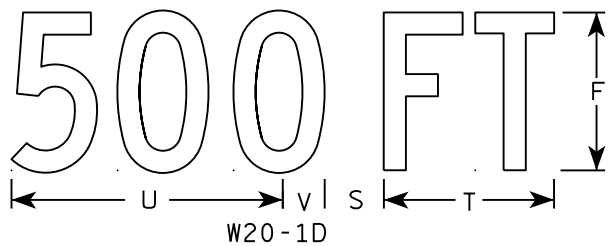
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

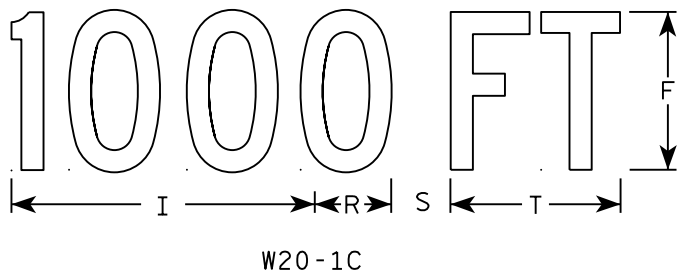
DATE 6/7/10 PLATE NO. W14-3.9



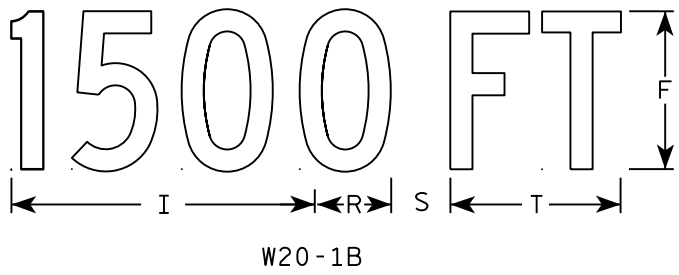
W20-1A



W20-1D



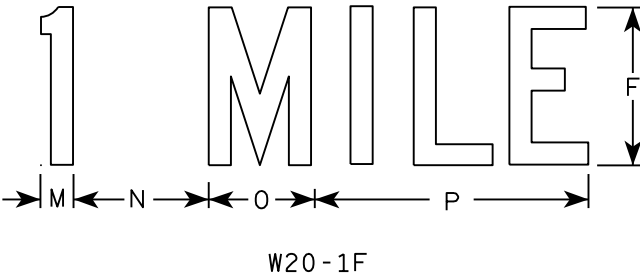
W20-1C



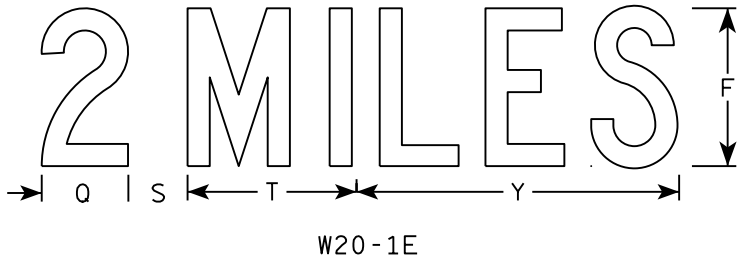
W20-1B



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.

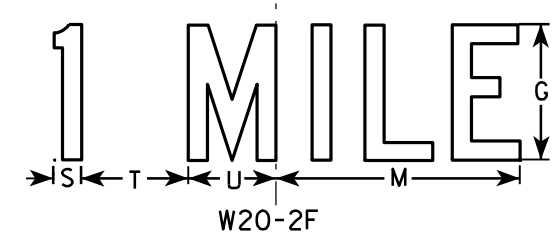
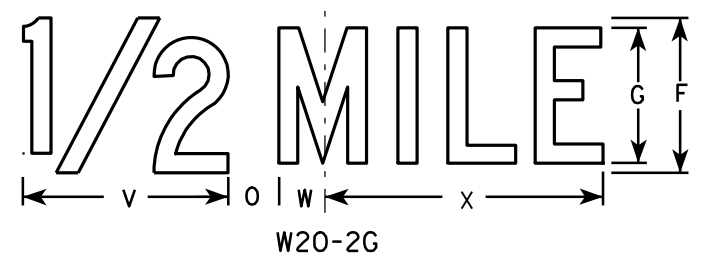
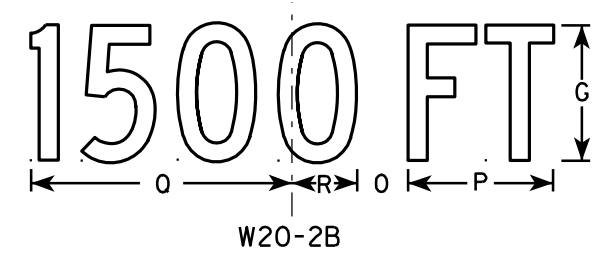
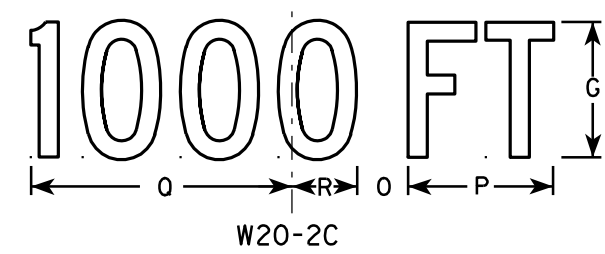
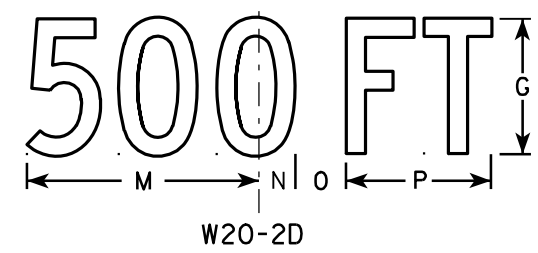
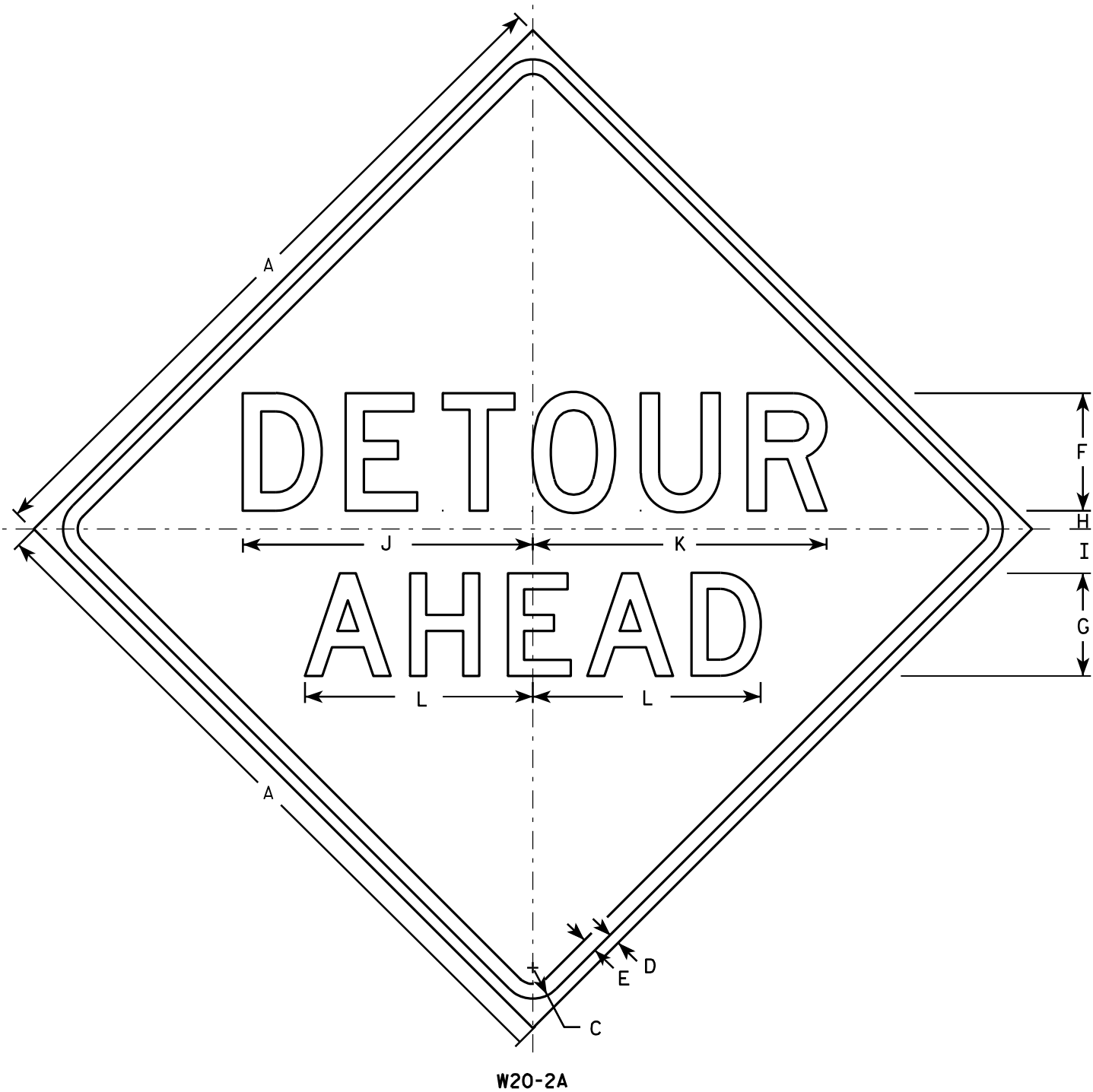
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 3/8	1/2	5/8	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9		2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13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

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. 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

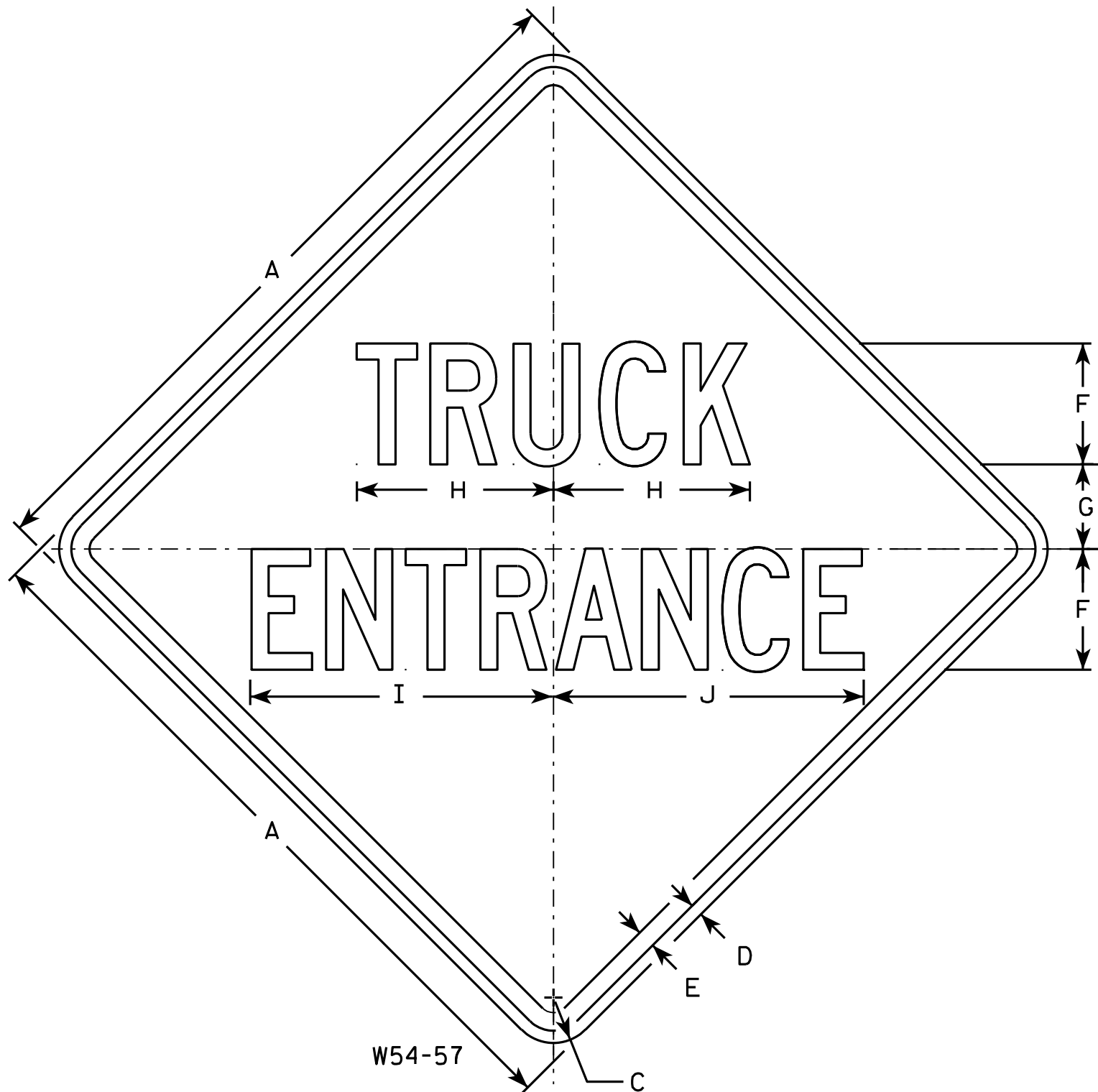
PROJECT NO:

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 3/8	1/2	5/8	5	3 1/2	8 1/8	12 1/2	12 7/8																	6.25
2M	36		1 5/8	5/8	3/4	6	4 1/4	9 5/8	15	15 3/8																	9.00
3	36		1 5/8	5/8	3/4	6	4 1/4	9 5/8	15	15 3/8																	9.00
4																											
5																											

STANDARD SIGN

W54-57

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 3/13/13 PLATE NO. W54-57.9

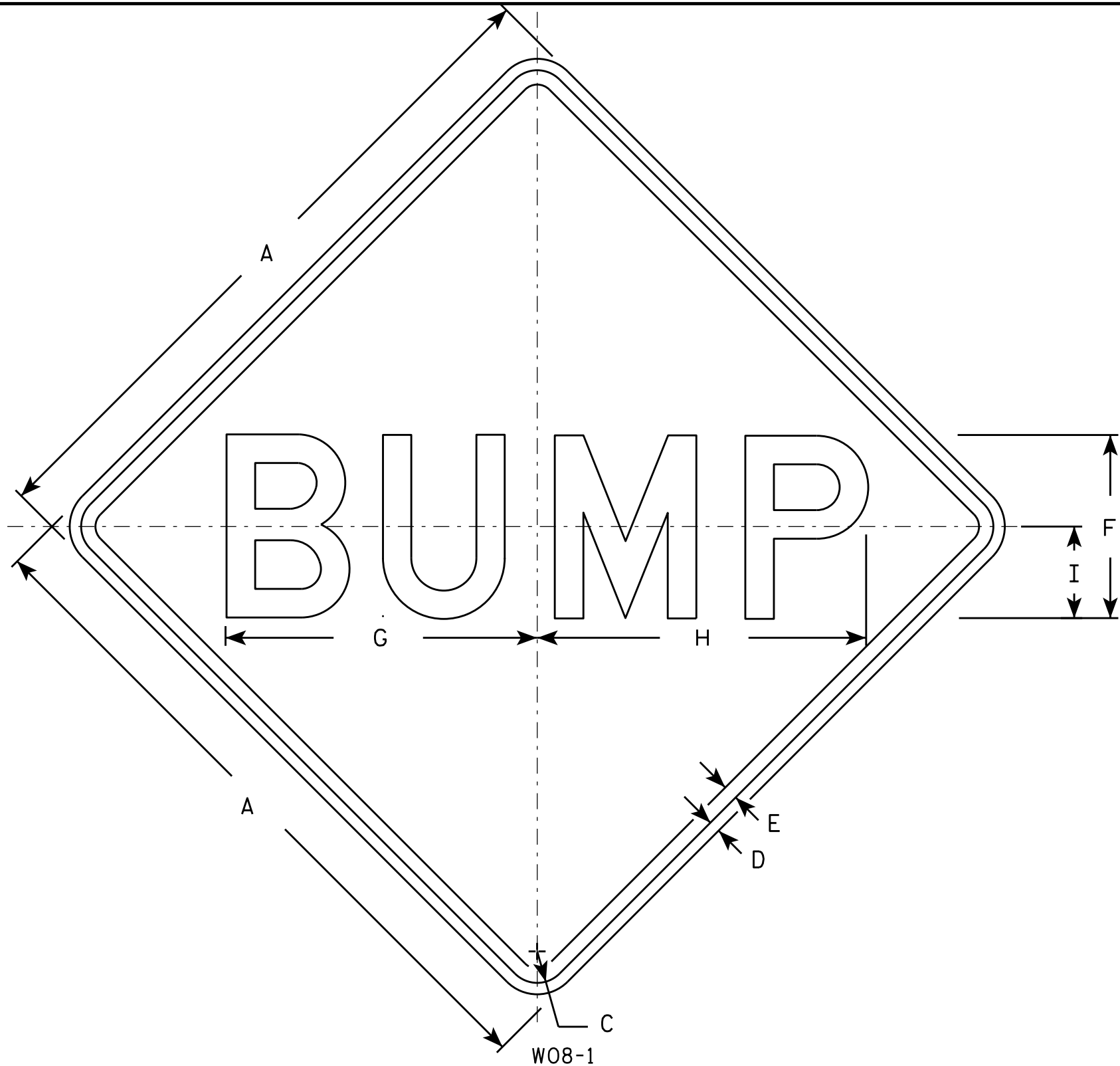
PROJECT NO:

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5⁄8	5⁄8	3⁄4	10	16 7⁄8	17 7⁄8	5																		9.0
2S	48		2 1⁄4	3⁄4	1	12	20 3⁄8	21 5⁄8	6																		16.0
2M	48		2 1⁄4	3⁄4	1	12	20 3⁄8	21 5⁄8	6																		16.0
3	48		2 1⁄4	3⁄4	1	12	20 3⁄8	21 5⁄8	6																		16.0
4	48		2 1⁄4	3⁄4	1	12	20 3⁄8	21 5⁄8	6																		16.0
5	48		2 1⁄4	3⁄4	1	12	20 3⁄8	21 5⁄8	6																		16.0

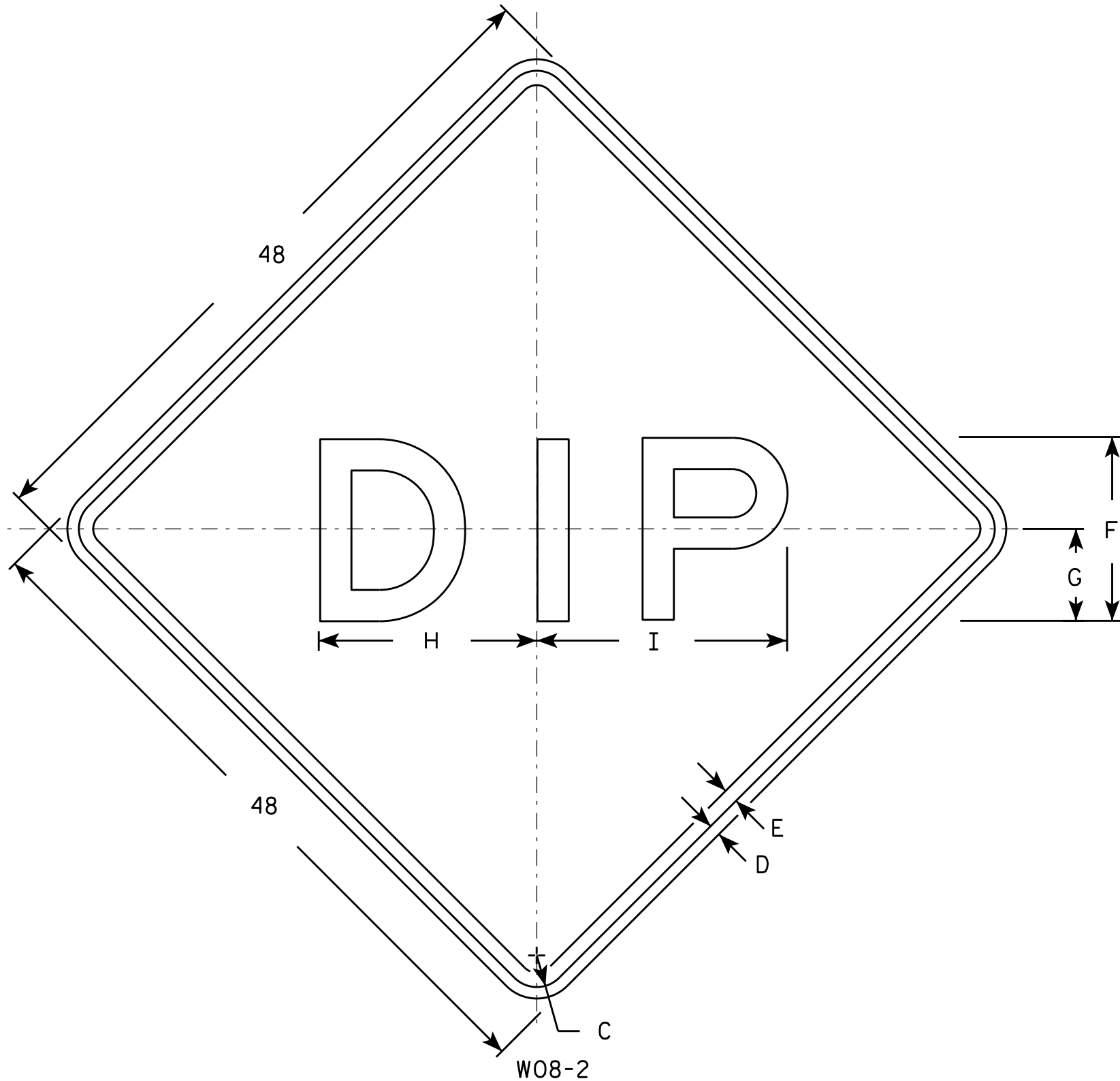
STANDARD SIGN

W08 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/20/13 PLATE NO. W08-1.1



NOTES

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

W08-2

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

STANDARD SIGN

W08-2

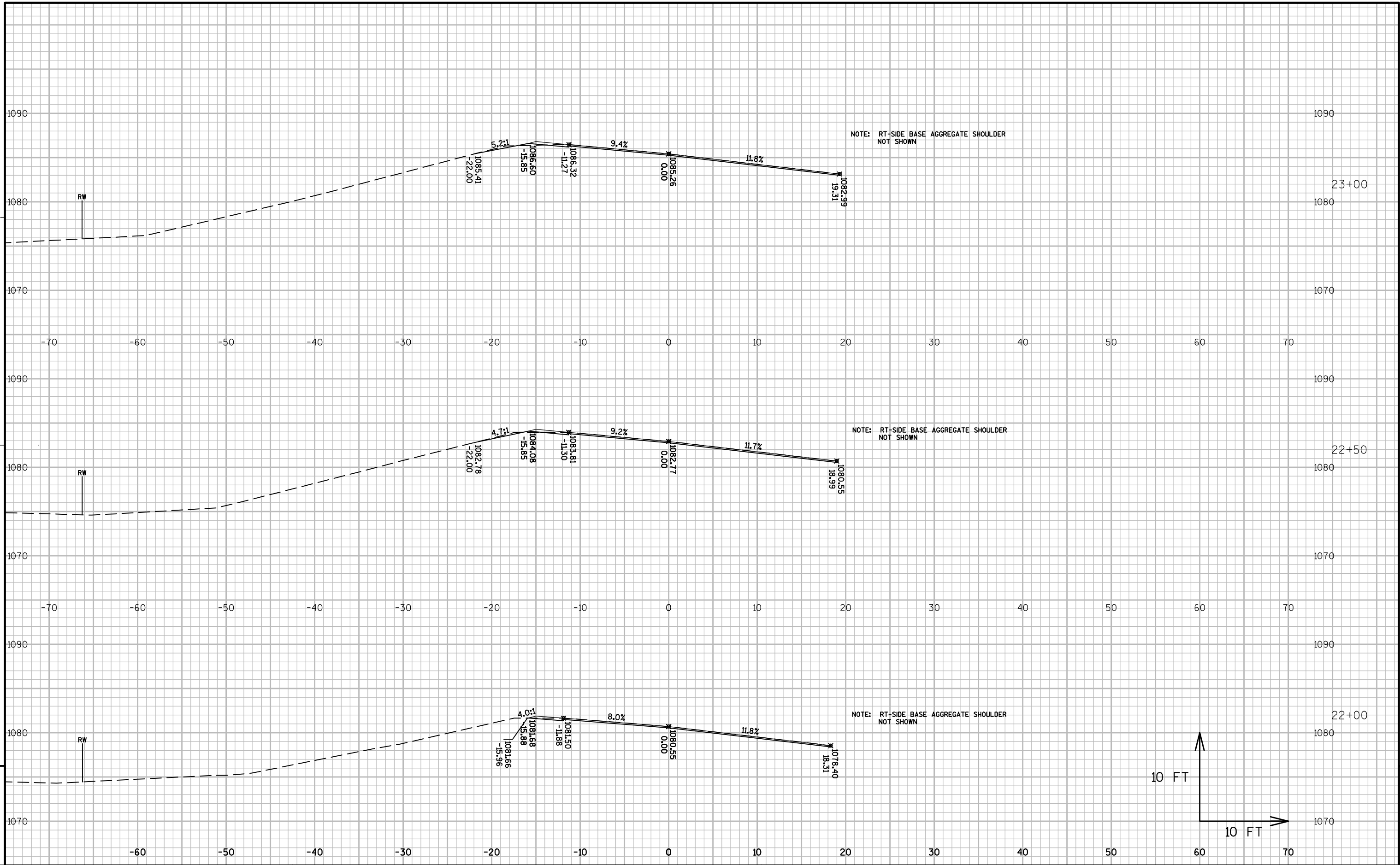
WISCONSIN DEPT OF TRANSPORTATION

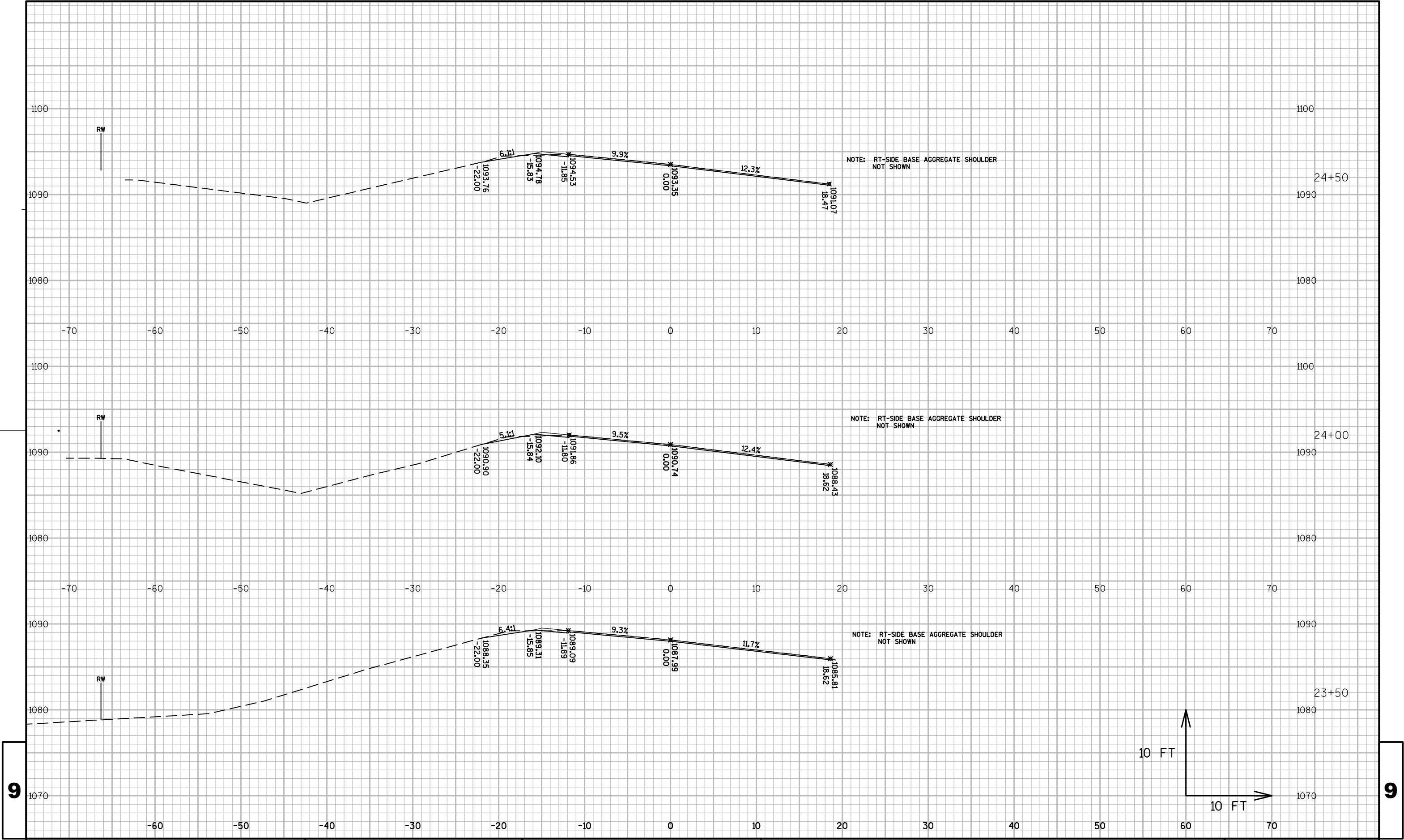
APPROVED

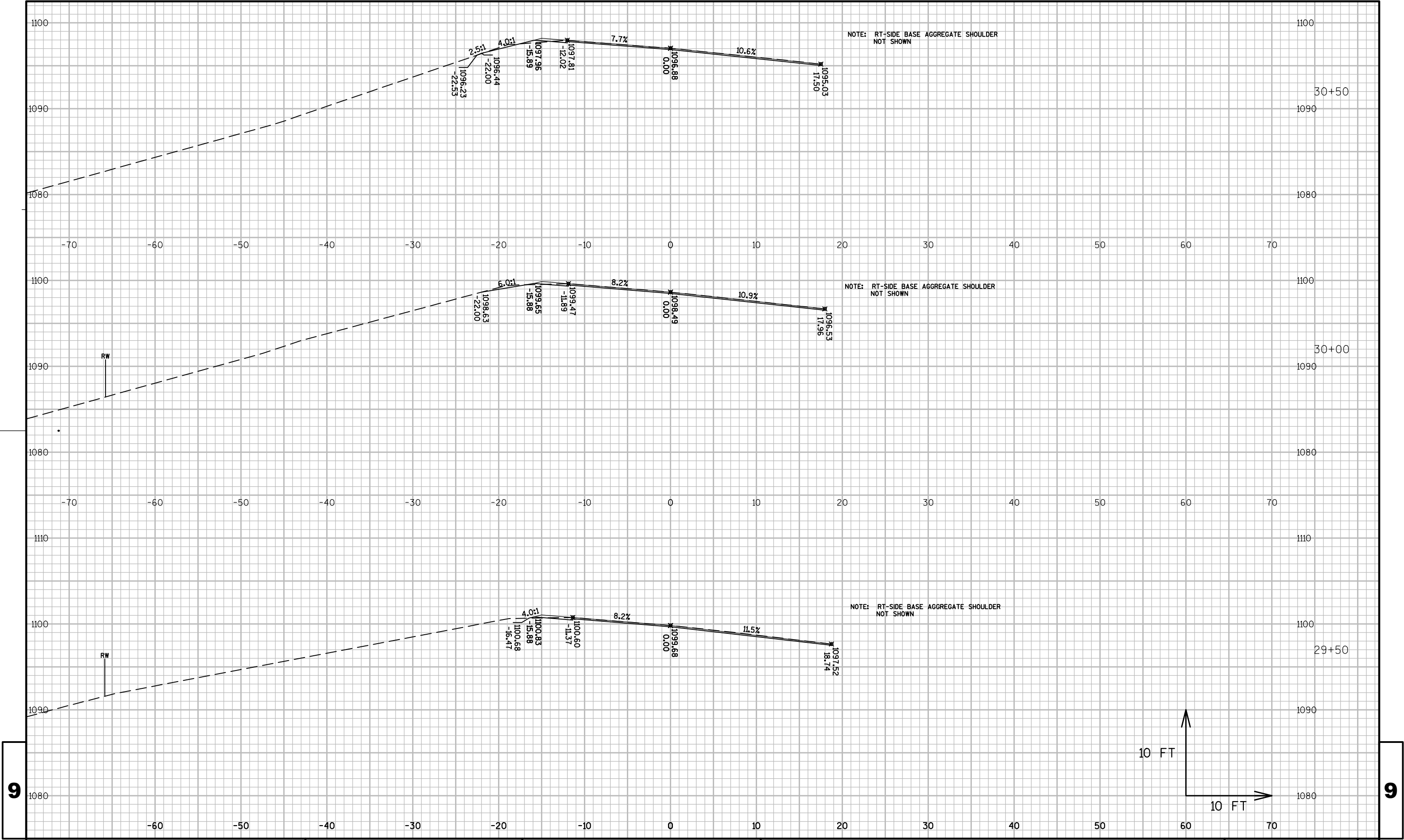
Matthew R. Rauch
for State Traffic Engineer

DATE 11/20/13

PLATE NO. W08-2.1







9

9

PROJECT NO: 9155-14-70

HWY: STH 55

COUNTY: LANGLADE

CROSS SECTIONS: SOUTH CURVE AT LOG CABIN DRIVE

SHEET

E

FILE NAME : N:\PDS\C3D\91551470\SHEETS\PLAN\090100.DWG

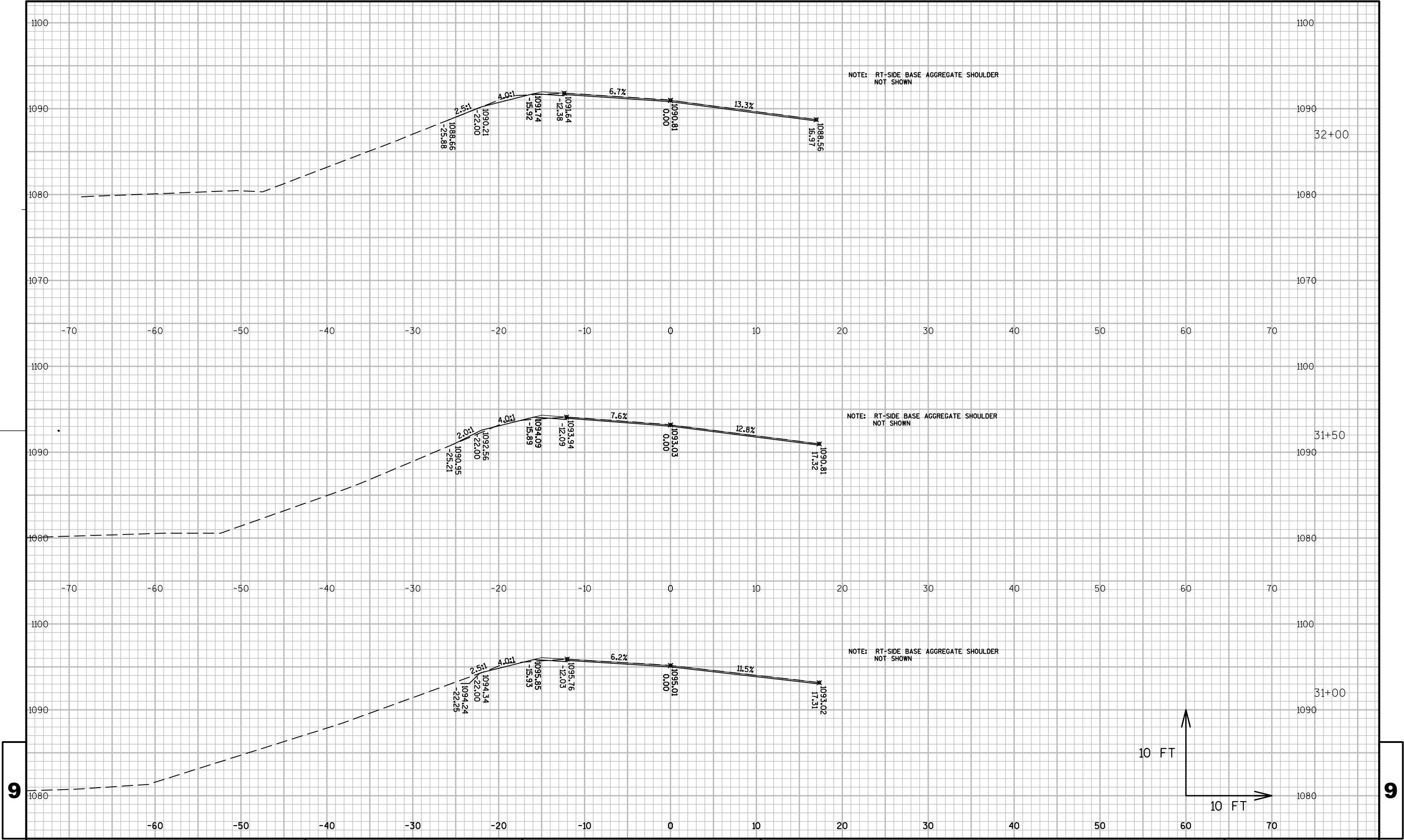
PLOT DATE : 9/19/2013 11:29 AM

PLOT BY : SMITH, THEODORE A

PLOT NAME :

PLOT SCALE : 1 IN:10 FT

WISDOT/CADDs SHEET 49



9

9

PROJECT NO: 9155-14-70

HWY: STH 55

COUNTY: LANGLADE

CROSS SECTIONS: SOUTH CURVE AT LOG CABIN DRIVE

SHEET

E

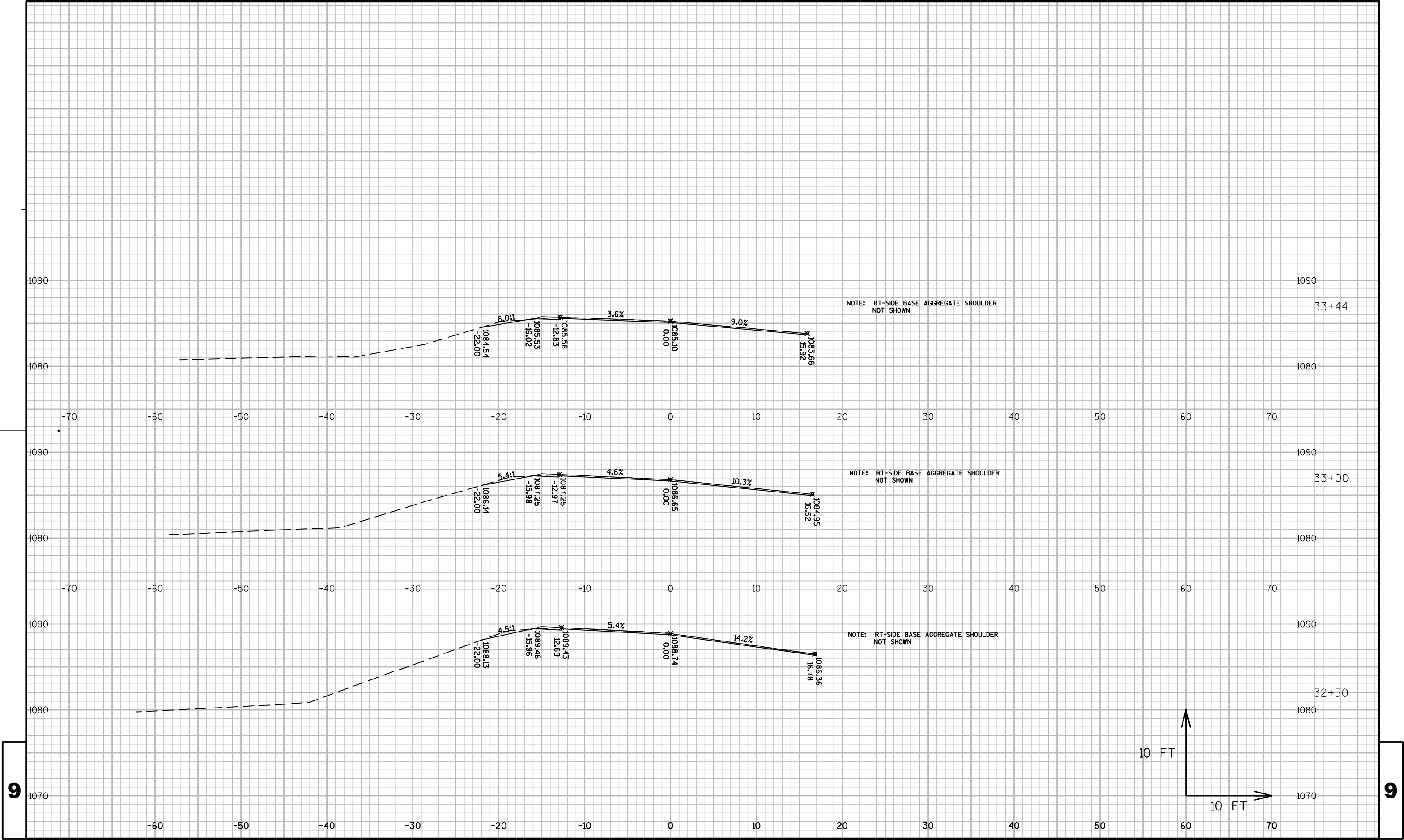
FILE NAME : N:\PDS\C3D\91551470\SHEETS\PLAN\090100.DWG

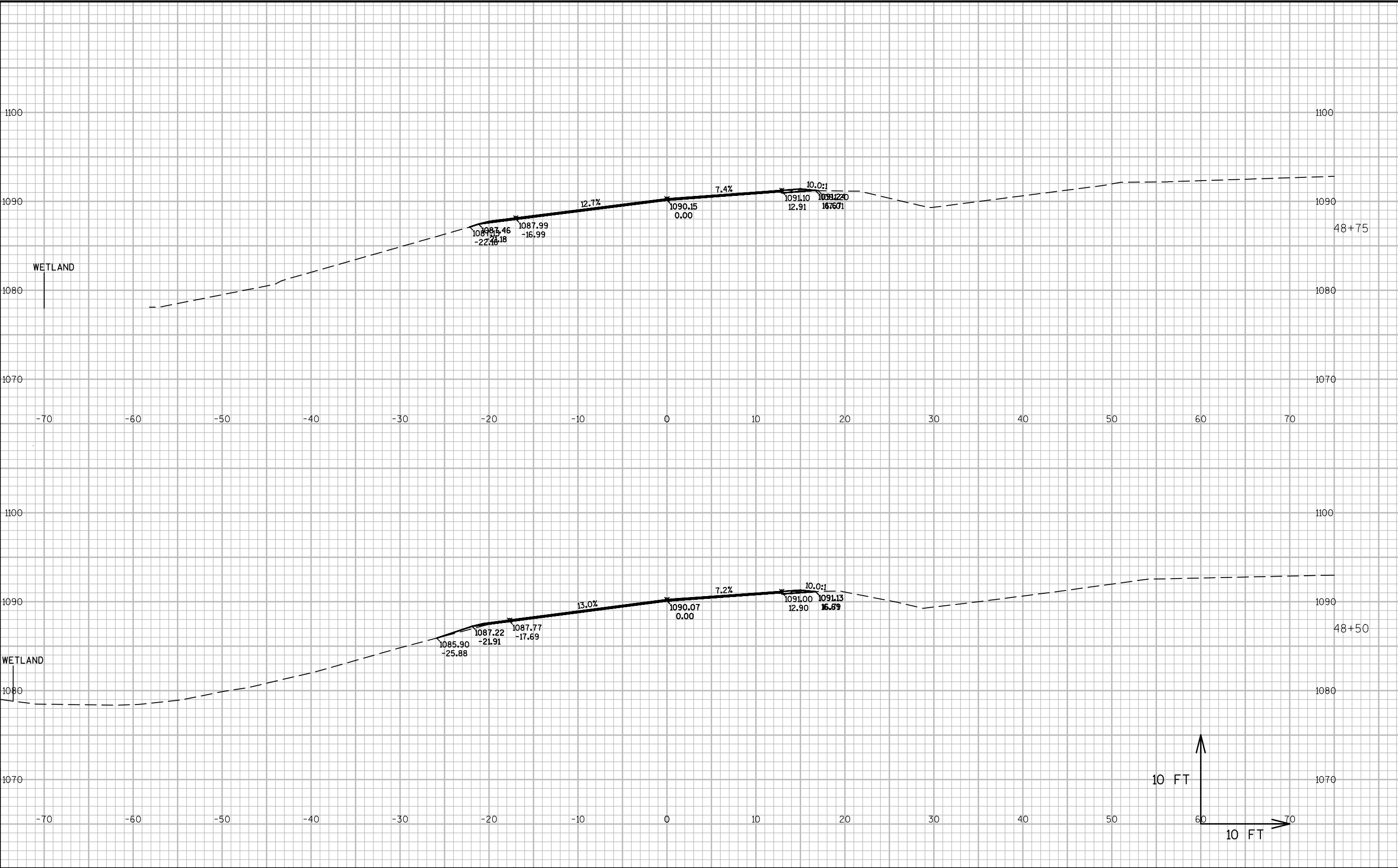
PLOT DATE : 9/19/2013 11:29 AM

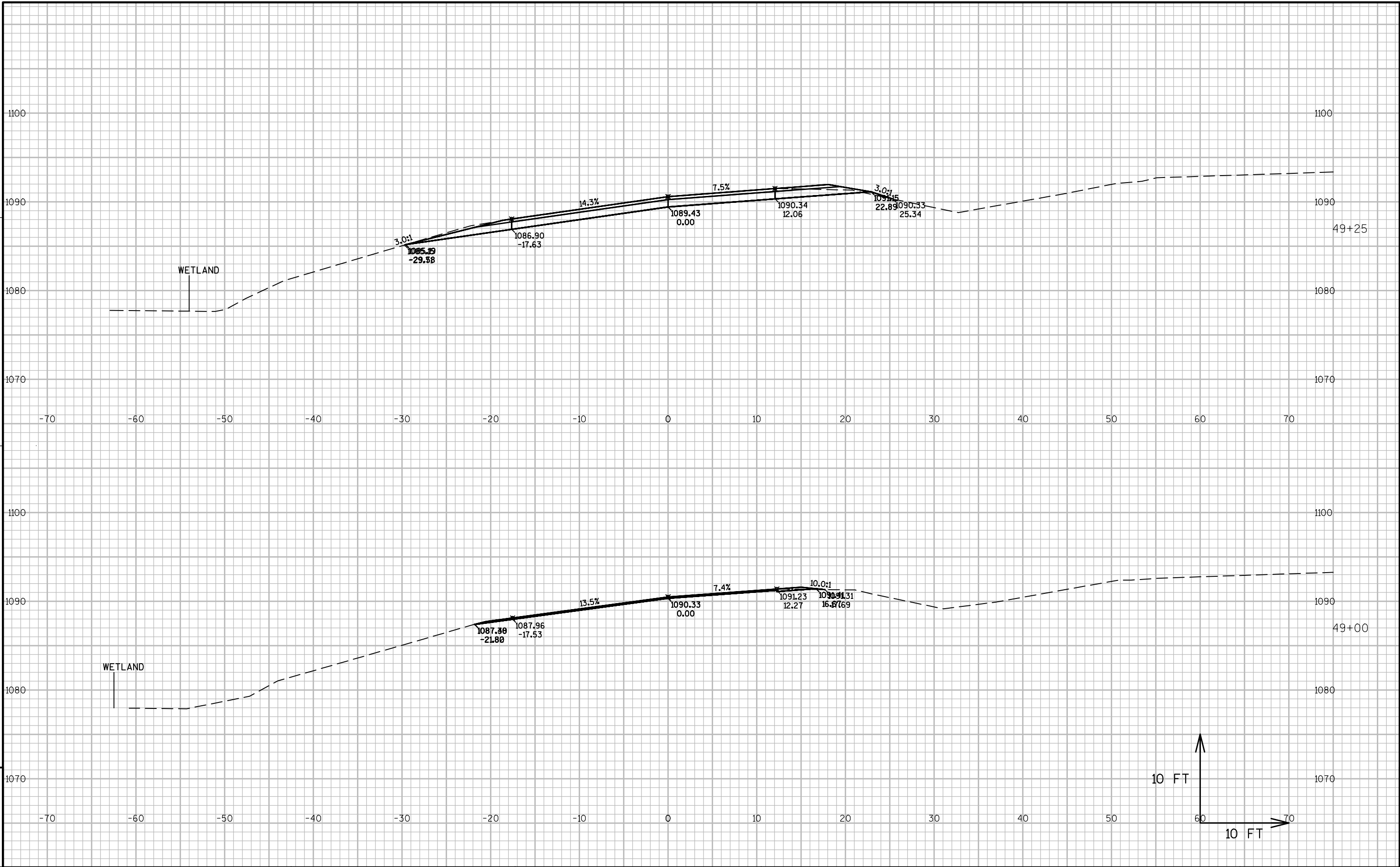
PLOT BY : SMITH, THEODORE A PLOT NAME :

PLOT SCALE : 1 IN:10 FT

WISDOT/CADDs SHEET 49







PROJECT NO: 9155-14-70

HWY: STH 55

COUNTY: LANGLADE

CROSS SECTIONS: CULVERT 34-055-004

SHEET

E

FILE NAME : N:\PDS\C3D\91551470\DESIGN\CORRIDORS\XS-CULV-34055004.DWG
LAYOUT NAME - SECTION SHEET - (2)

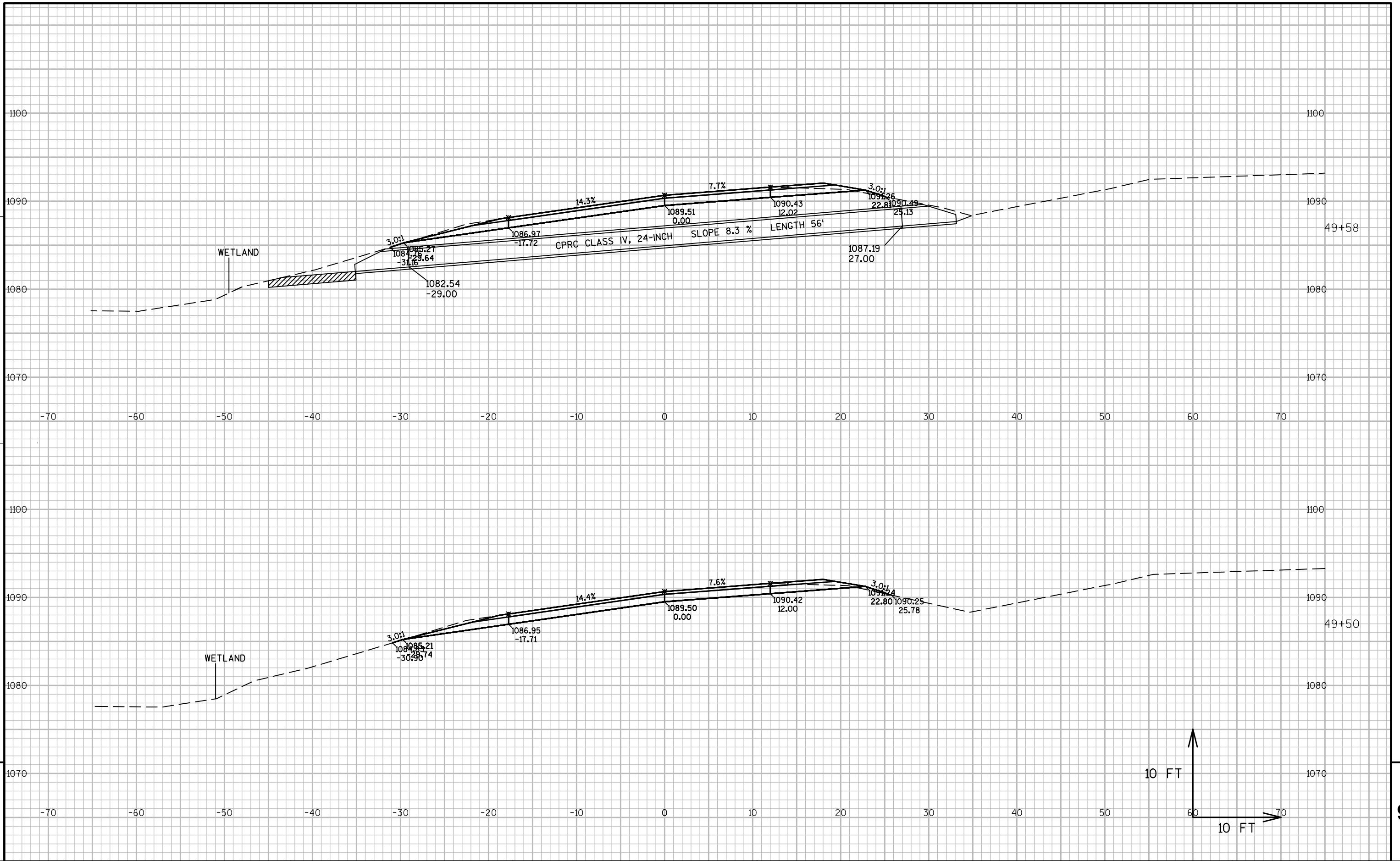
PLOT DATE : 4/9/2015 4:13 PM

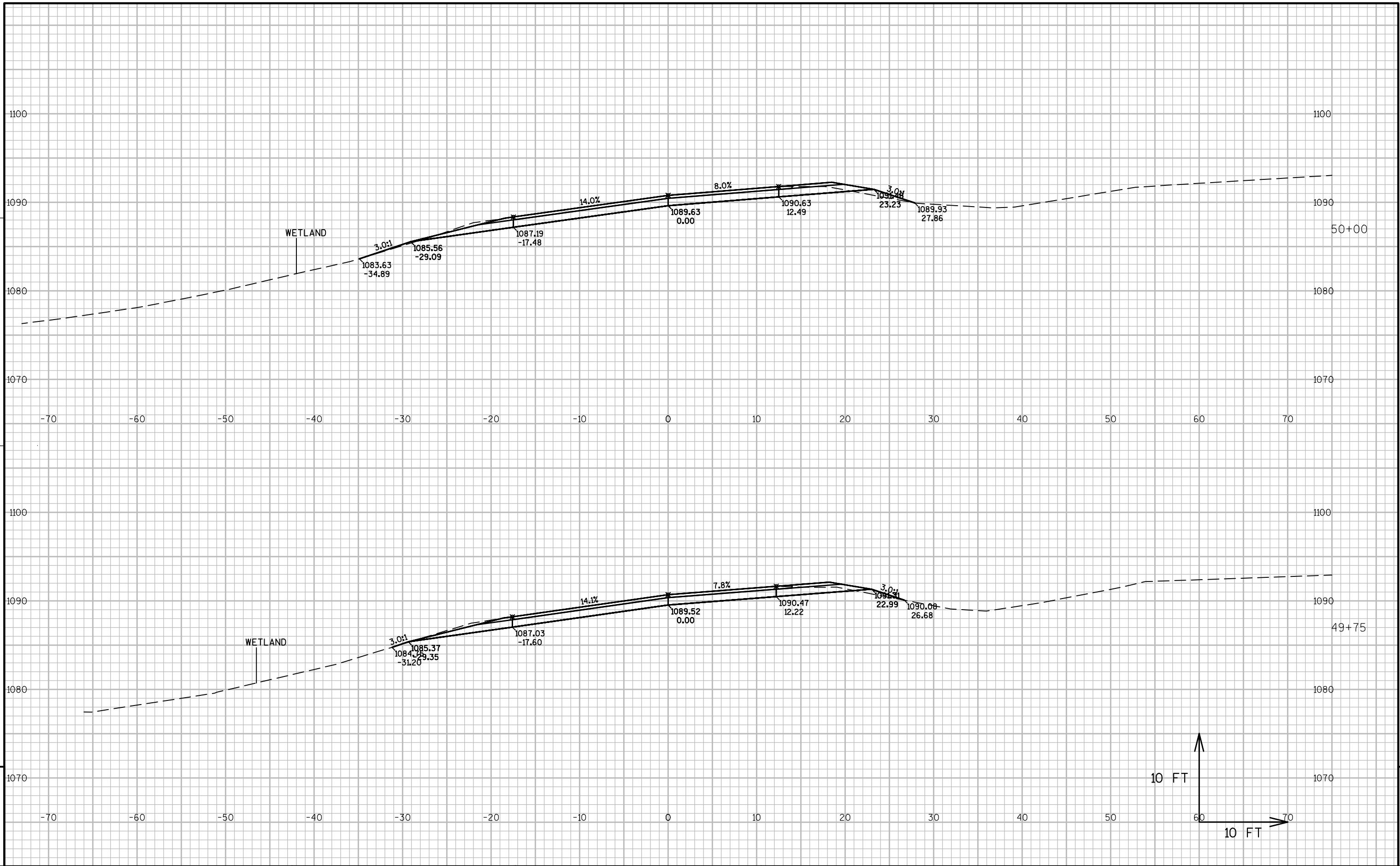
PLOT BY : SMITH, THEODORE A

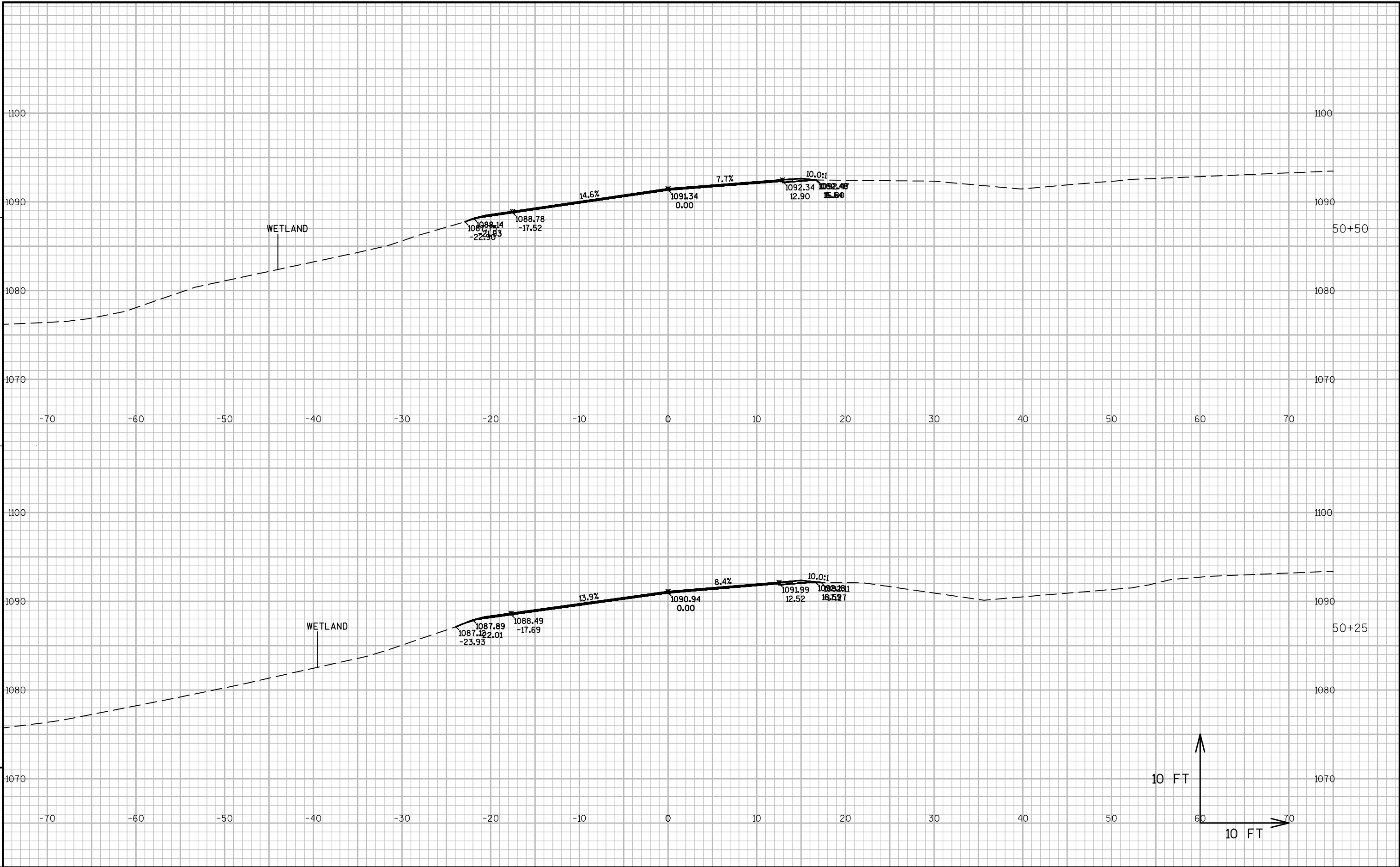
PLOT NAME :

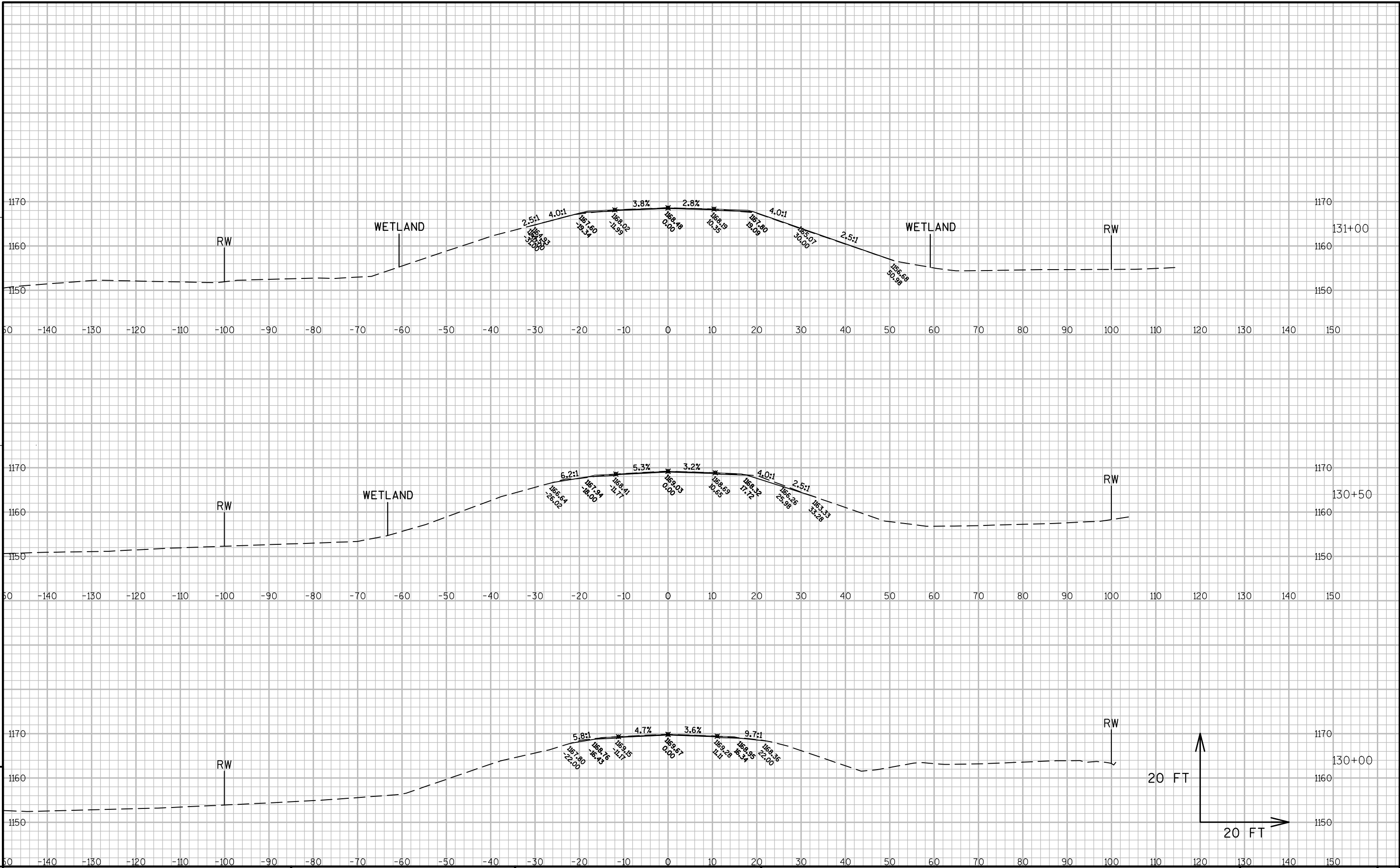
PLOT SCALE : 1:10_XREF

WISDOT/CADDs SHEET 49

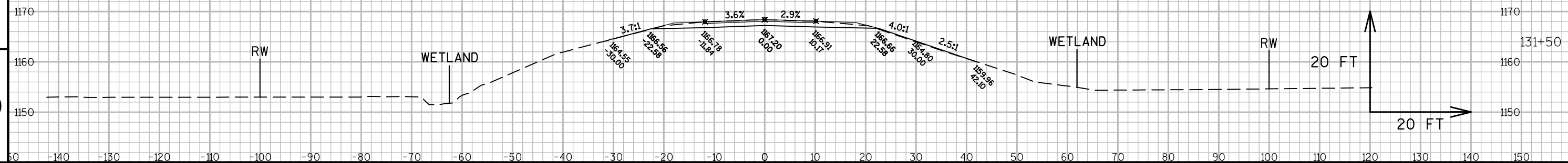
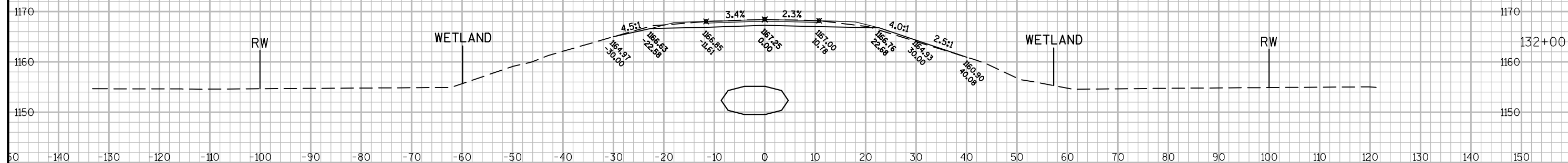
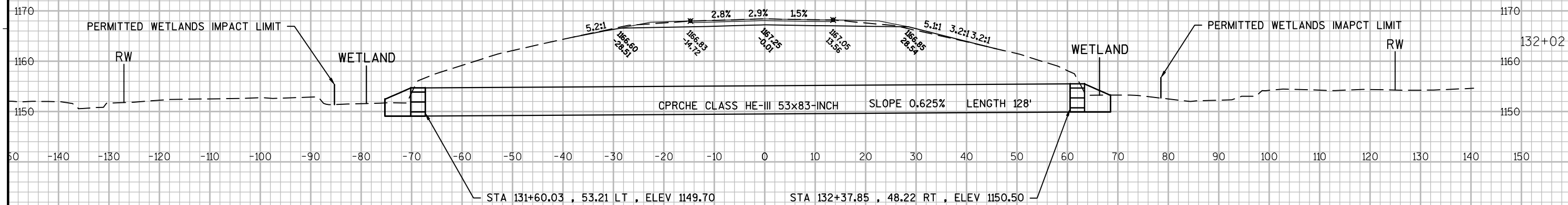








THIS CROSS SECTION CUT ALONG CENTERLINE OF PIPE.
PIPE IS SKEWED TO ROADWAY CENTERLINE ALIGNMENT.



PROJECT NO: 9155-14-70

HWY: STH 55

COUNTY: LANGLADE

CROSS SECTIONS: CULVERT C-34-11

SHEET

E

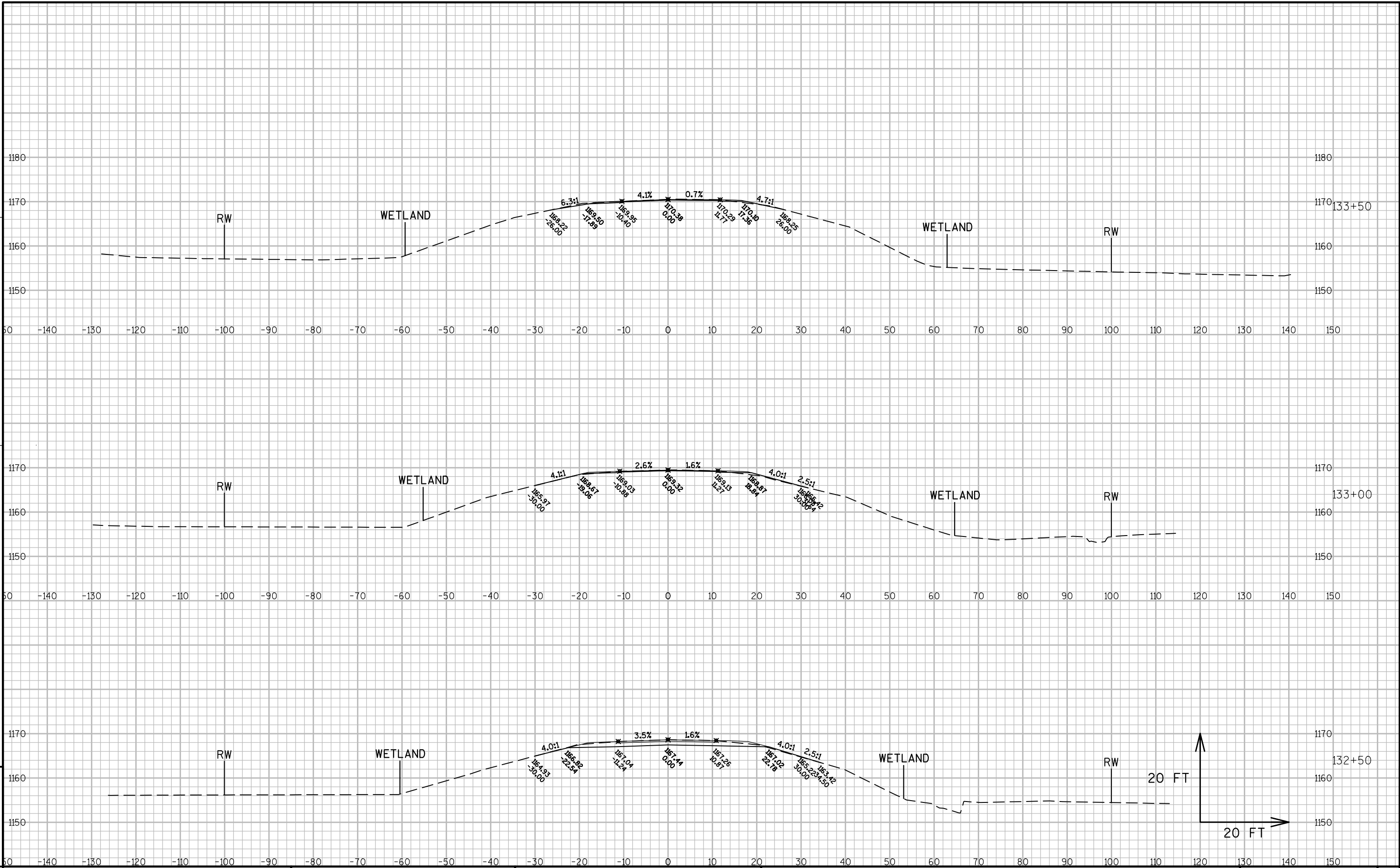
FILE NAME : N:\PDS\C3D\91551470\SHEETSPLAN\090101_XS.DWG
LAYOUT NAME - 90101- (2)

PLOT DATE : 2/10/2016 7:37 AM

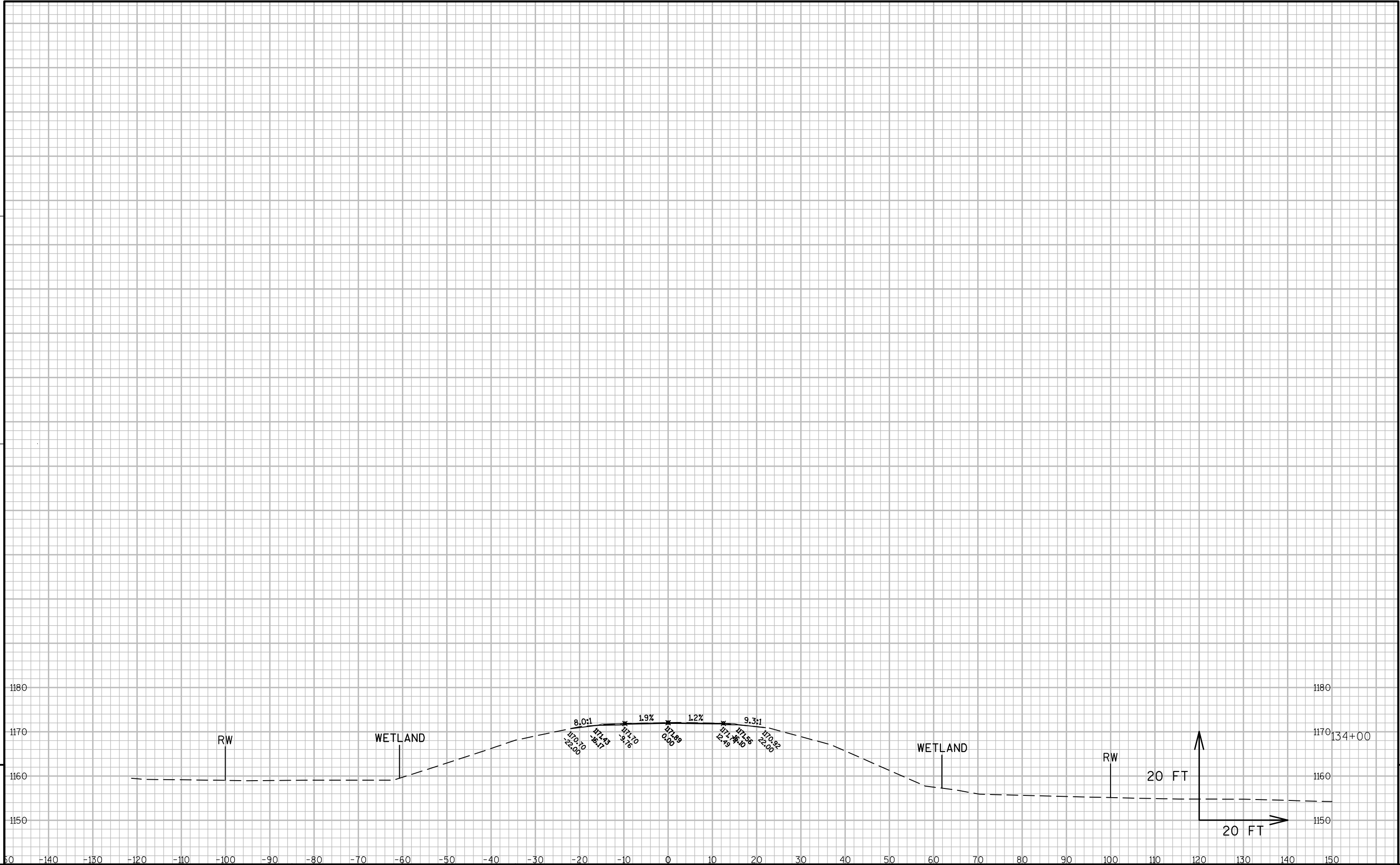
PLOT BY : SMITH, THEODORE A PLOT NAME :

PLOT SCALE : 1 IN:20 FT

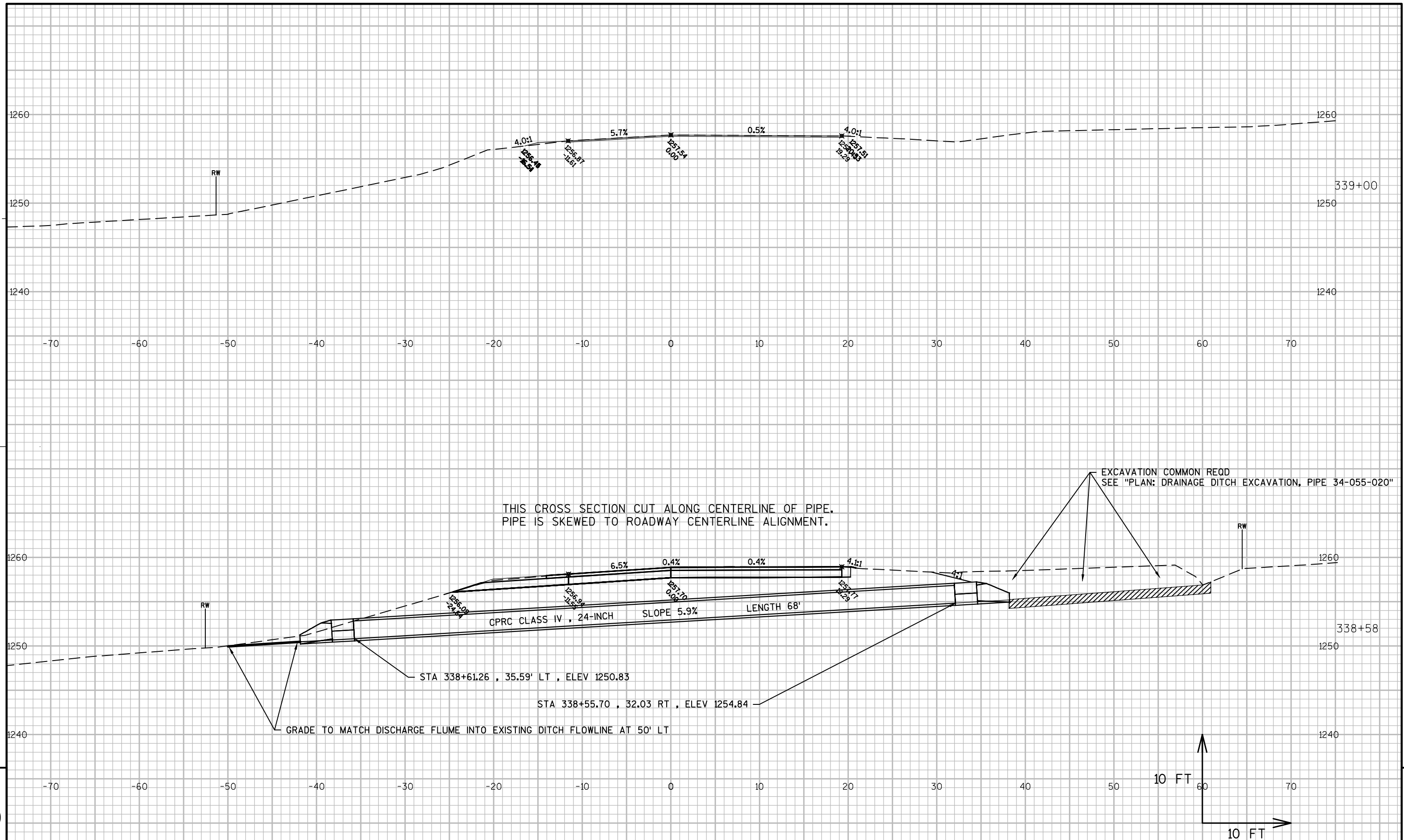
WISDOT/CADDs SHEET 49

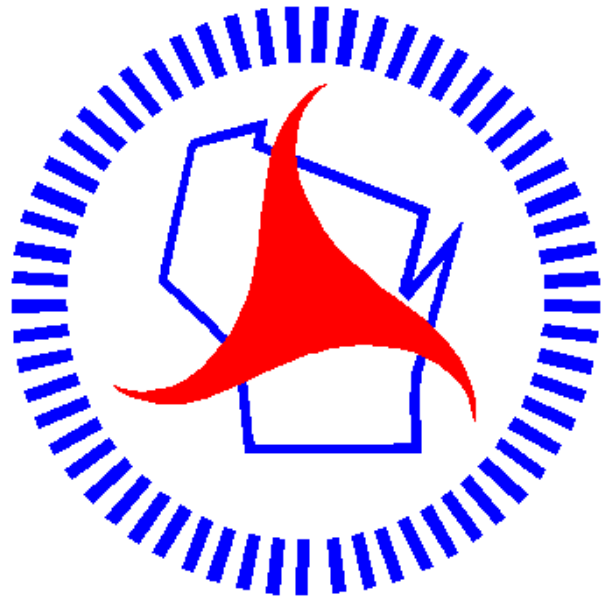


9



9





Wisconsin Department of Transportation

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through innovation and exceptional service.

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