

EAU

Nov 09, 2021

PROJECT ID:  
WITH: N/A

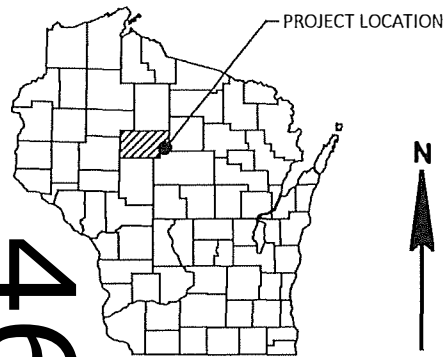
9535-00-75

COUNTY:  
TAYLOR

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 = 76



DESIGN DESIGNATION 9535-00-05

A.A.D.T. (2021)	=	950
A.A.D.T. (2041)	=	1100
D.H.V.	=	140
D.D.	=	0.5
T.	=	9.9%
DESIGN SPEED	=	55 MPH
ESALS	=	250,000

CONVENTIONAL SYMBOLS

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

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

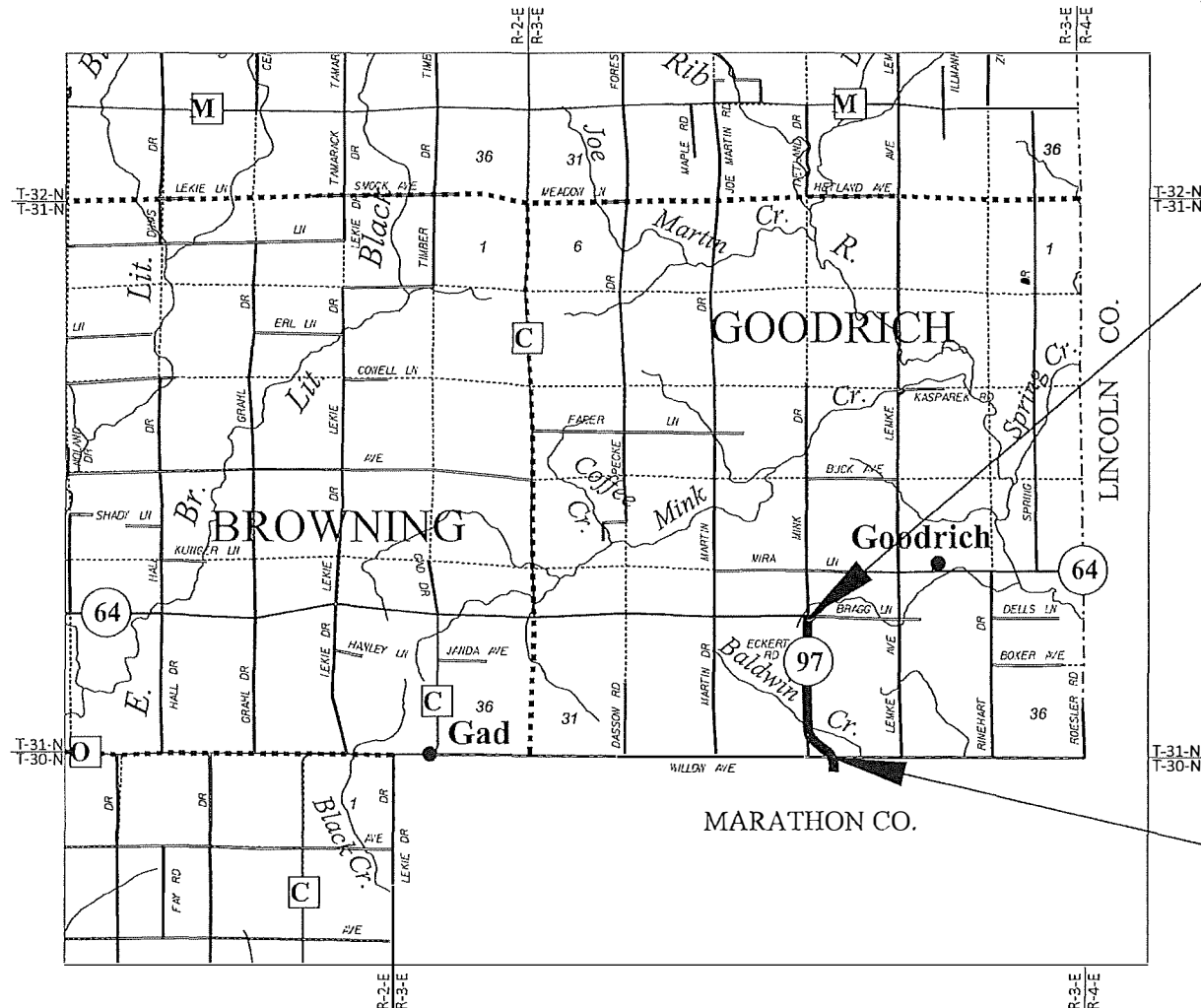
STRATFORD - GOODRICH

(SOUTH COUNTY LINE TO STH 64)

STH 97

TAYLOR COUNTY

STATE PROJECT NUMBER  
9535-00-75



LAYOUT  
SCALE 0 2.0 MI  
TOTAL NET LENGTH OF CENTERLINE = 1.737

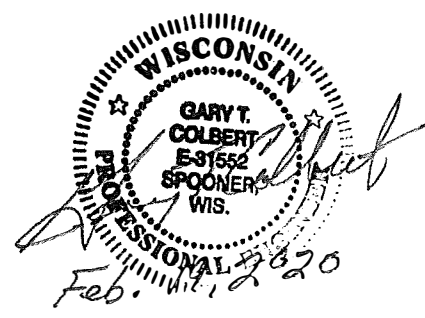
HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), TAYLOR COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES. ELEVATIONS ARE REFERENCED TO NAVD 88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

END PROJECT  
STA 93+33.43

BEGIN PROJECT  
STA 8+57.56  
Y=332,774.41  
X=712,934.07

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
9535-00-75	WISC 2022038	1

ORIGINAL PLANS PREPARED BY  
**NWBE**  
NORTHERN WISCONSIN-BASED ENGINEERS, INC.



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

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	SEH, INC/NWBE, INC.
Designer	NWBE, INC.
Project Manager	MOHAMAD HAYEK, PE
Regional Examiner	TOU YANG, PE
Regional Supervisor	TARA WEISS, PE

APPROVED FOR THE DEPARTMENT  
DATE: *[Signature]*  
(Signature)

E

**GENERAL NOTES**

THE LOCATIONS OF EXISTING UTILITY FACILITIES AS SHOWN ON THE PLAN ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. THE CONTRACTOR SHALL COORDINATE ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.

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

THE EXACT LOCATION OF THE EROSION CONTROL DEVICES SHALL BE DETERMINED IN THE FIELD.

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE SEEDED, FERTILIZED, AND COVERED WITH MULCH OR EMAT.

CURVE DATA ON THE PLAN IS "ARC DEFINITION".

COORDINATES ON THIS PLAN ARE REFERENCED TO TAYLOR COUNTY, WISCRS, NAD83(2011).

ELEVATIONS SHOWN ON THE PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (2012).

**GENERAL NOTES FOR TRAFFIC CONTROL**

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

DURING HOURS OF DARKNESS, ALL BARRICADES USED TO SHIELD A HAZARD SHALL BE EQUIPPED WITH TYPE "A" (LOW INTENSITY FLASHING) LIGHTS.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND SHALL BE ORANGE. ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

ANY TYPE III 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.

**DESIGN CONTACT**

NORTHERN WISCONSIN-BASED ENGINEERS, INC.  
ATTN: GARY COLBERT, PE  
P.O. BOX 328  
HAYWARD, WI 54843  
PHONE: (715) 634-4334 OFFICE  
EMAIL: gcolbert@nwbeinc.com

WISCONSIN DEPARTMENT OF TRANSPORTATION  
ATTN: MOHAMAD HAYEK - PROJECT MANAGER  
NW REGION - EAU CLAIRE  
718 W. CLAIREMONT AVENUE  
EAU CLAIRE, WI 54701  
PHONE: (715) 836-2065 OFFICE  
EMAIL: mohamad.hayek@dot.wi.gov

**WDNR LIAISON CONTACT**

WDNR - NORTHERN REGION HEADQUARTERS  
ATTN: WENDY HENNIGES  
107 SUTLIFF AVE.  
RHINELANDER, WI 54501  
PHONE: (715) 365-8916 OFFICE  
EMAIL: wendy.henniges@wisconsin.gov

**UTILITIES**

TDS TELECOM - COMMUNICATION LINE  
ATTN: JEFF SHAW  
202 OGDEN ST.  
MEDFORD, WI 54451  
PHONE: (715) 748-6970 OFFICE  
EMAIL: jeff.shaw@tdstelecom.com

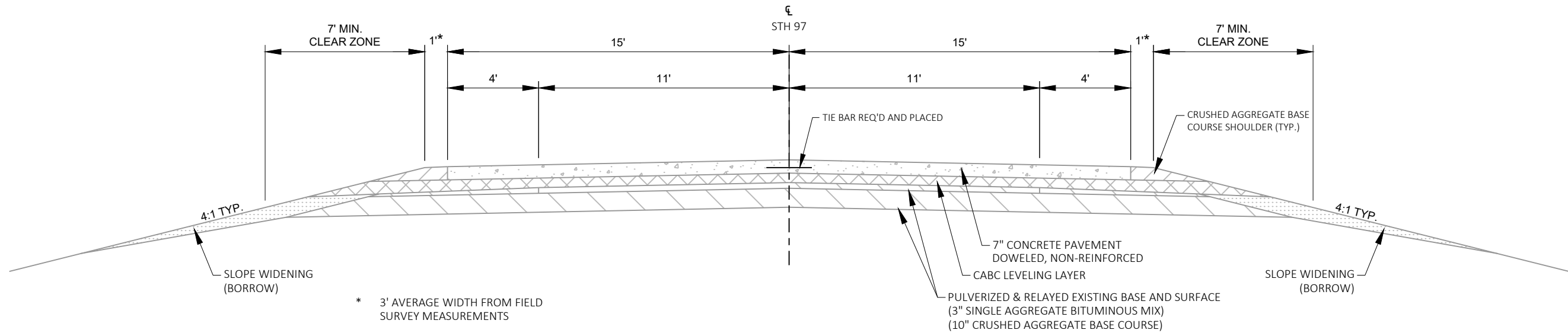
TAYLOR COUNTY ELECTRIC COOPERATIVE  
ATTN: WADE MATYKA  
N. 1831 HWY 13  
MEDFORD, WI 54451  
PHONE: (715) 678-2411 OFFICE  
(715) 965-1312 CELL  
EMAIL: wade@taylorelectric.org



**LIST OF STANDARD ABBREVIATIONS**

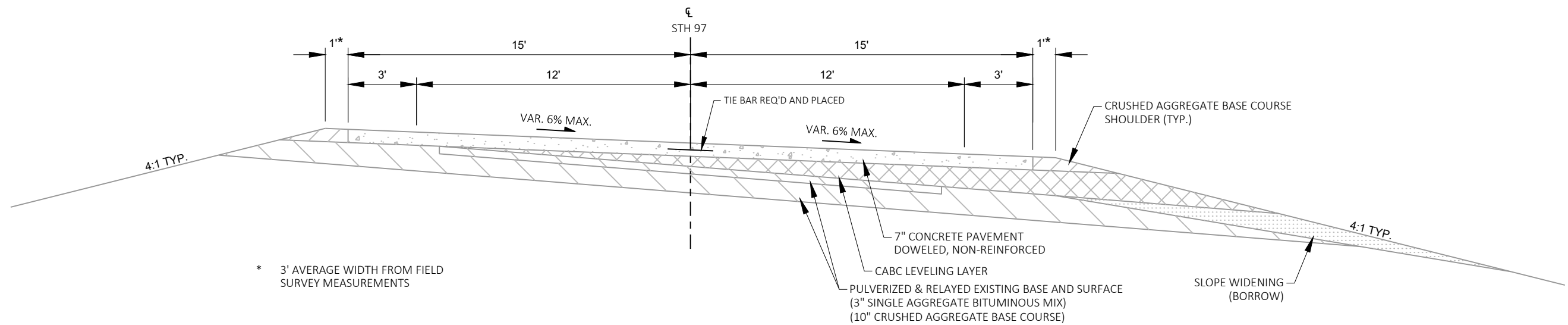
ABUT.A.	ABUTMENT	ELEC.	ELECTRIC	P.E.	PRIVATE ENTRANCE
AGG.	AGGREGATE	EL. OR ELEV.	ELEVATION	PROJ.	PROJECT
AH.	AHEAD	ESALS	EQUIVALENT SINGLE AXLE LOADS	R.	RANGE
AADT	ANNUAL AVERAGE DAILY TRAFFIC	E.B.S.	EXCAVATION BELOW SUBGRADE	REQD.	REQUIRED
APPROX.	APPROXIMATE	EXIST.	EXISTING	R/L	REFERENCE LINE
A.E.W.	APRON END WALL	FERT.	FERTILIZE	RT.	RIGHT
ASPH.F.	ASPHALTIC	F.E.	FIELD ENTRANCE	R.H.F.	RIGHT-HAND FORWARD
BK.	BACK	FIN.	FINISHED	R/W	RIGHT-OF-WAY
BEG.	BEGIN	F.L. OR FL	FLOW LINE	RD.	ROAD
B.M.	BENCH MARK	HORIZ.	HORIZONTAL	SHLD.	SHOULDER
C/L OR CL	CENTER LINE	INL.	INLET	S.	SOUTH
C.E.	COMMERCIAL ENTRANCE	INT.	INTERSECTION	S.D.D.	STANDARD DETAIL DRAWINGS
CONC.	CONCRETE	INV.	INVERT	S.T.H.	STATE TRUNK HIGHWAYS
CONSTR.	CONSTRUCTION	LT.	LEFT	STA.	STATION
CO.	COUNTY	L.H.F.	LEFT-HAND FORWARD	STRUCT.	STRUCTURE
C.T.H.	COUNTY TRUNK HIGHWAY	L.I.	LINEAR FOOT	TEL.	TELEPHONE
X-SEC.	CROSS SECTION	L.S.	LUMP SUM	TEMP.	TEMPORARY
CR.	CRUSHED	MAX.	MAXIMUM	TN.	TOWN
CULV.	CULVERT	MISC.	MISCELLANEOUS	T.	TRUCKS (PERCENT OF)
C.P.	CULVERT PIPE	N.	NORTH	TYP.	TYPICAL
D.O.T.	DEPARTMENT OF TRANSPORTATION	Y	NORTH GRID COORDINATE	U.G.	UNDERGROUND
D.H.V.	DESIGN HOUR VOLUME	N.E.	NORTHEAST	VAR.	VARIABLE
DIA.	DIAMETER	N.W.	NORTHWEST	V.	VELOCITY OR DESIGN SPEED
DISCH. OR DIS.	DISCHARGE	PAVT.	PAVEMENT	V.C.	VERTICAL CURVE
E.	EAST	P.C.	POINT OF CURVATURE	W.	WEST
X	EAST GRID COORDINATE	P.I.	POINT OF INTERSECTION	WB	WESTBOUND
EB	EASTBOUND	P.T.	POINT OF TANGENCY	W.A.	WORKING DAY
EA.	EACH	P.O.T.	POINT ON TANGENT	WZ	WORK ZONE

CORE NO.	STATION	OFFSET		RECOVERED CORE THICKNESS		CORE DIAMETER	MATERIAL BELOW CORE	PAVEMENT TYPE	DATE
		FT	INCH	INCH	INCH				
C-1	8+10	3.50	LT	7.50	4.0	BASE	CONCRETE	8/27/2018	
C-2	21+30	8.50	RT	7.00	4.0	BASE	CONCRETE	8/27/2018	
C-3	34+50	8.00	LT	6.00/3.75	4.0	REC. ASPHALT	CONCRETE/ASPHALT	8/27/2018	
C-4	48+00	4.50	RT	3.25	4.0	REC. ASPHALT	CONCRETE	8/27/2018	
C-5	60+90	3.50	LT	4.50	4.0	REC. ASPHALT	CONCRETE	8/27/2018	
C-6	74+10	9.00	RT	4.00	4.0	REC. ASPHALT	CONCRETE	8/27/2018	
C-7	87+30	8.00	LT	5.00/5.75	4.0	REC. ASPHALT	CONCRETE/ASPHALT	8/27/2018	



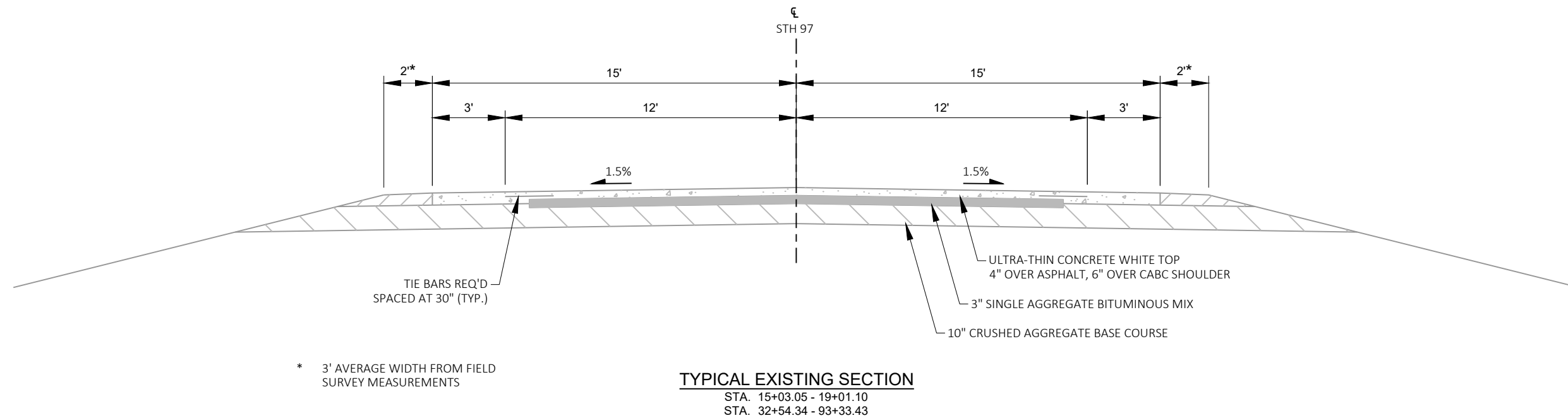
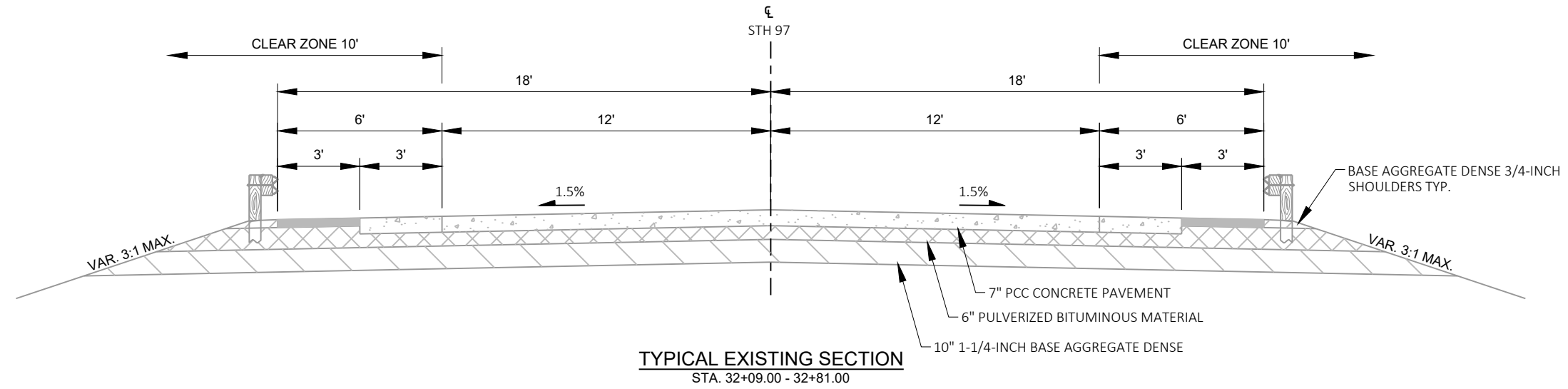
**TYPICAL EXISTING SECTION**

STA. 1+64.39 - 15+03.05  
STA. 19+01.10 - 32+09.00



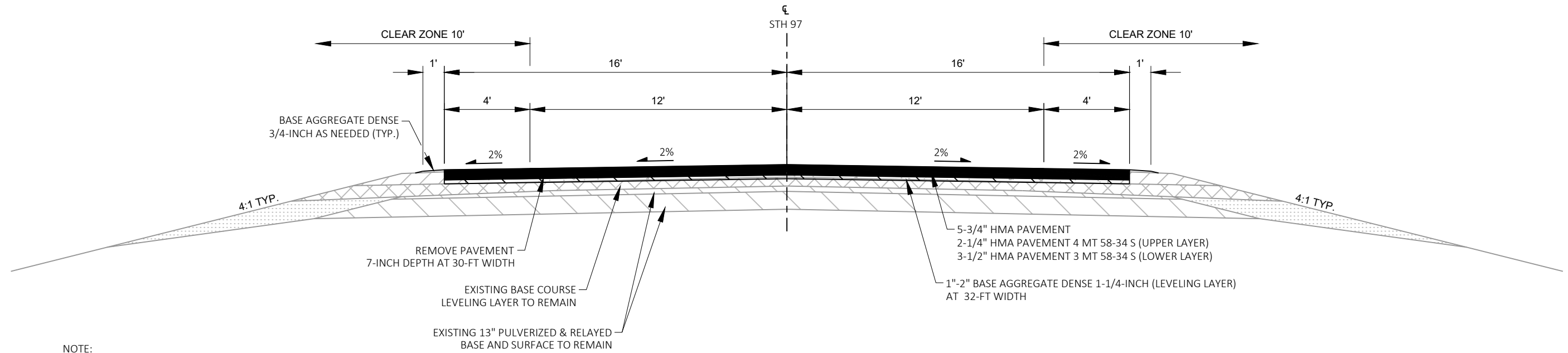
**TYPICAL EXISTING SUPER-ELEVATED SECTION**

STA. 1+64.39 - 15+03.05  
STA. 19+01.10 - 32+09.00



\* 3' AVERAGE WIDTH FROM FIELD SURVEY MEASUREMENTS



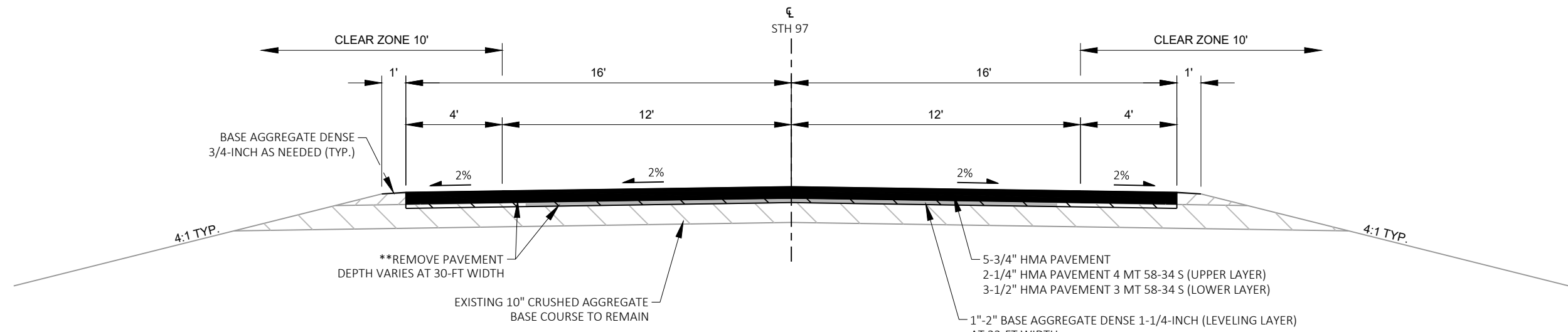


NOTE:

STA. 31+59 - 32+09  
 TRANSITION CROSS SLOPE FROM 2% TO 1.5% TO MATCH EXISTING  
 CONCRETE PAVEMENT

TYPICAL PROPOSED SECTION

STA. 1+64.39 - 15+03.05  
 STA. 19+01.10 - 32+09.00



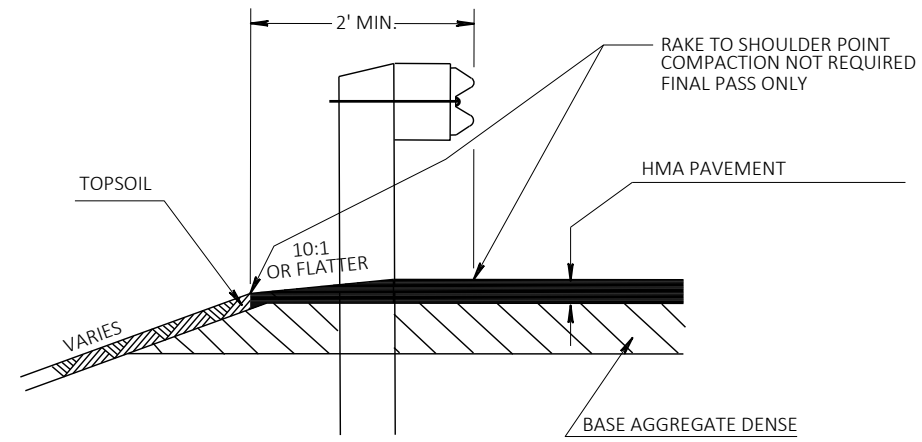
NOTE:

STA. 32+81 - 33+31  
 TRANSITION CROSS SLOPE FROM 1.5% AT EXISTING CONCRETE  
 PAVEMENT TO 2%

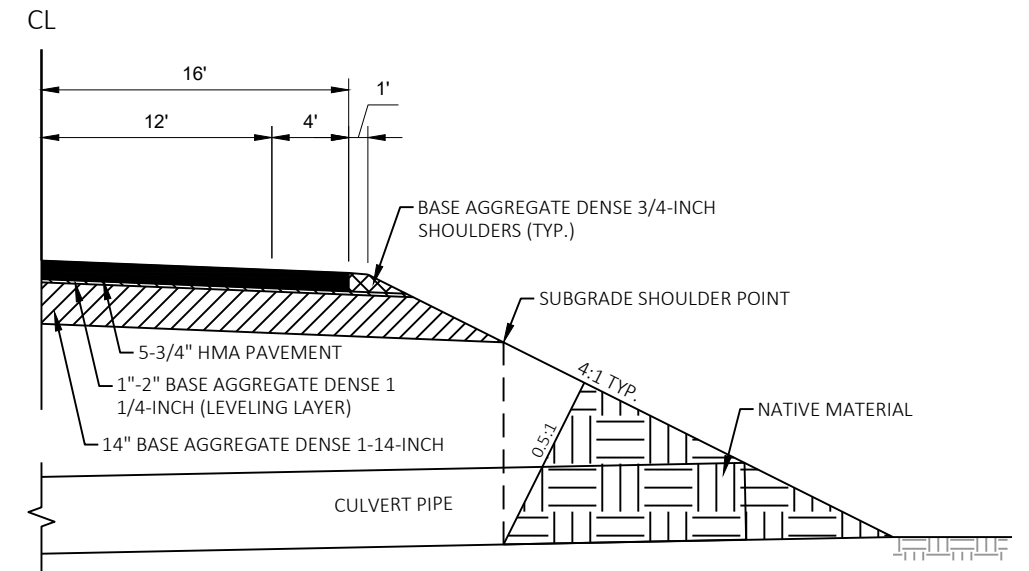
\*\*REMOVING PAVEMENT INCLUDES UNDERLYING 3" DEPTH  
 ASPHALTIC PAVEMENT AT 22-FT WIDTH

TYPICAL PROPOSED SECTION

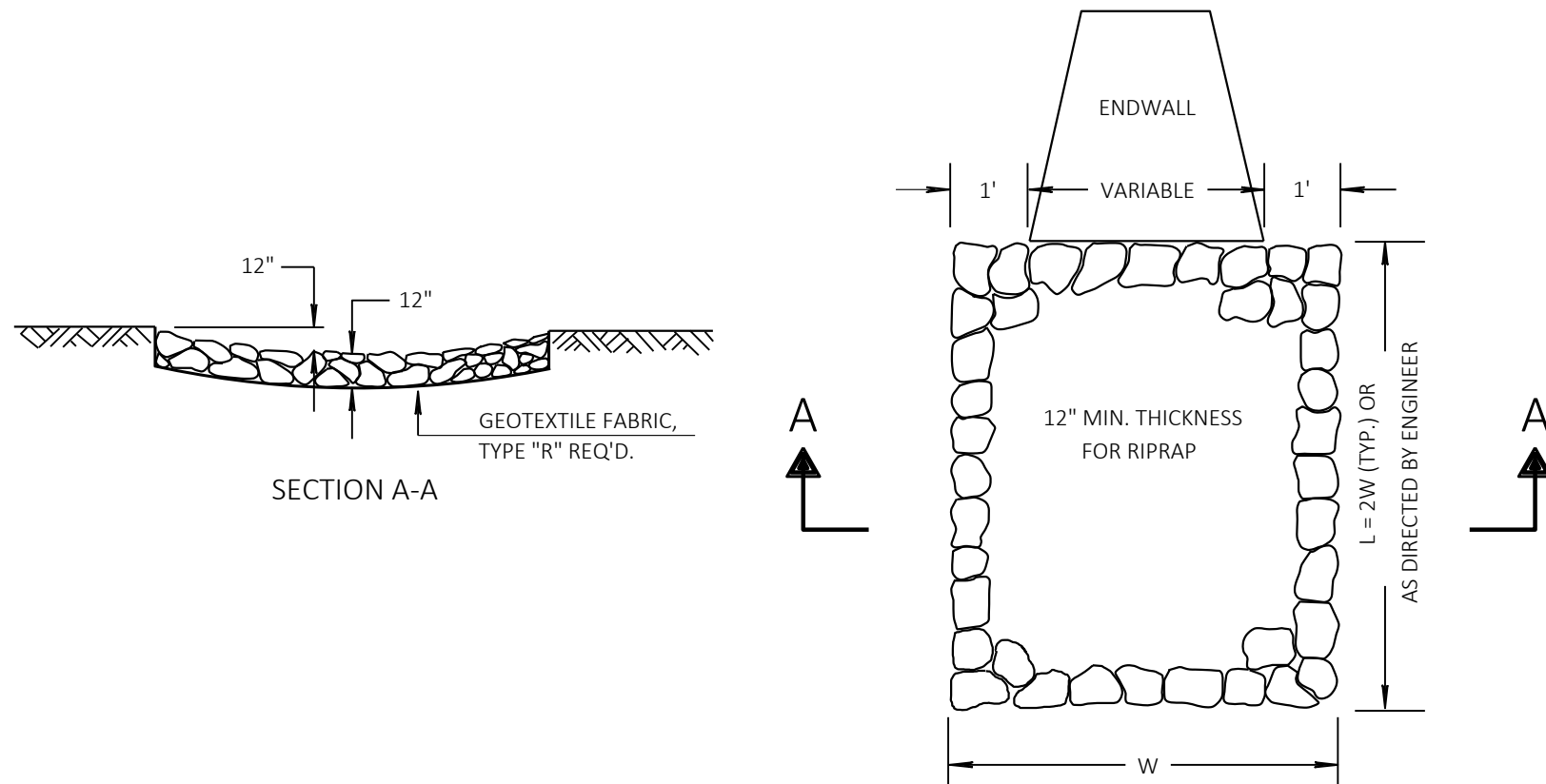
STA. 15+03.05 - 19+01.10  
 STA. 32+81.00 - 93+33.43



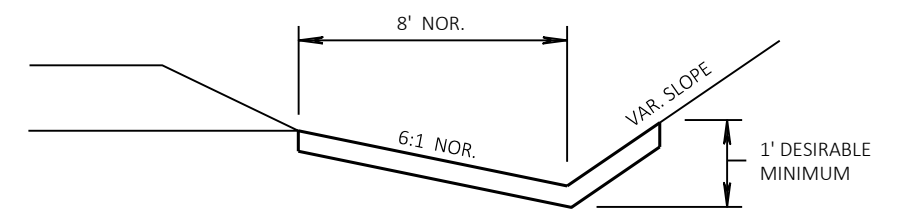
ASPHALTIC SHOULDER AT GUARD RAIL



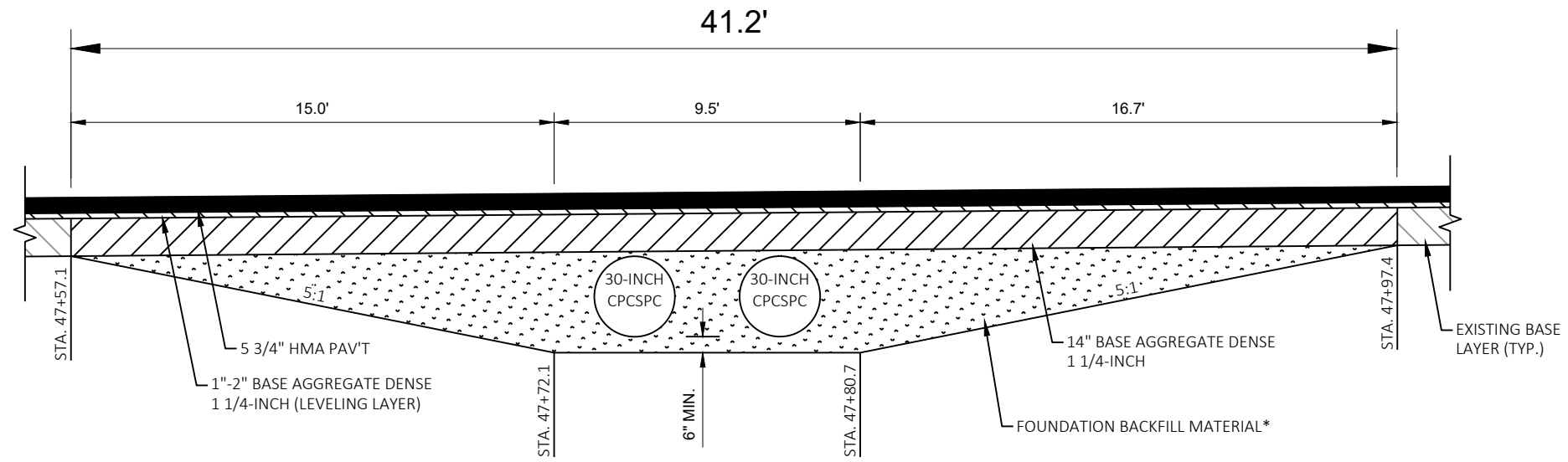
TYPICAL 1/2 SECTION AT CULVERT INSTALLATION



RIPRAP TREATMENT AT CULVERTS



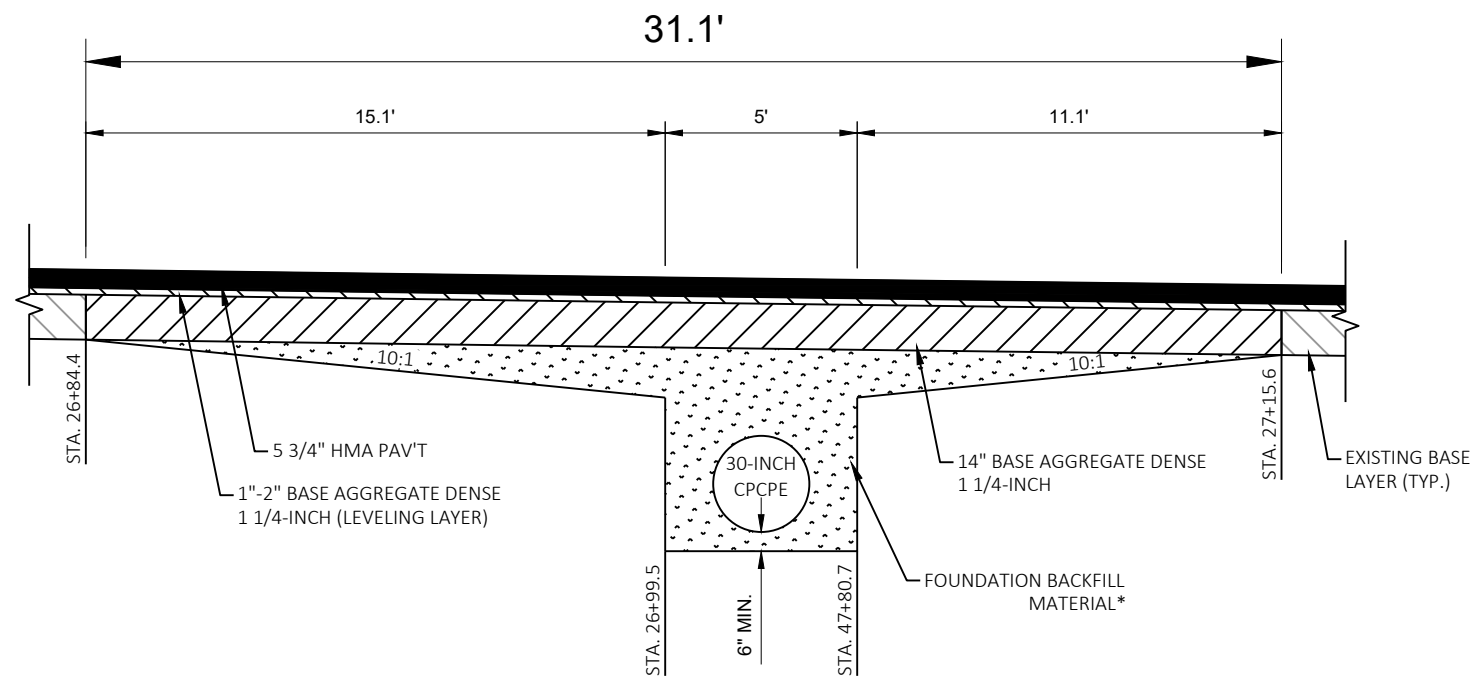
EROSION MAT DETAIL FOR DITCHES



\* INCIDENTAL TO CONSTRUCTION

**CULVERT PIPE INSTALLATION DETAIL**

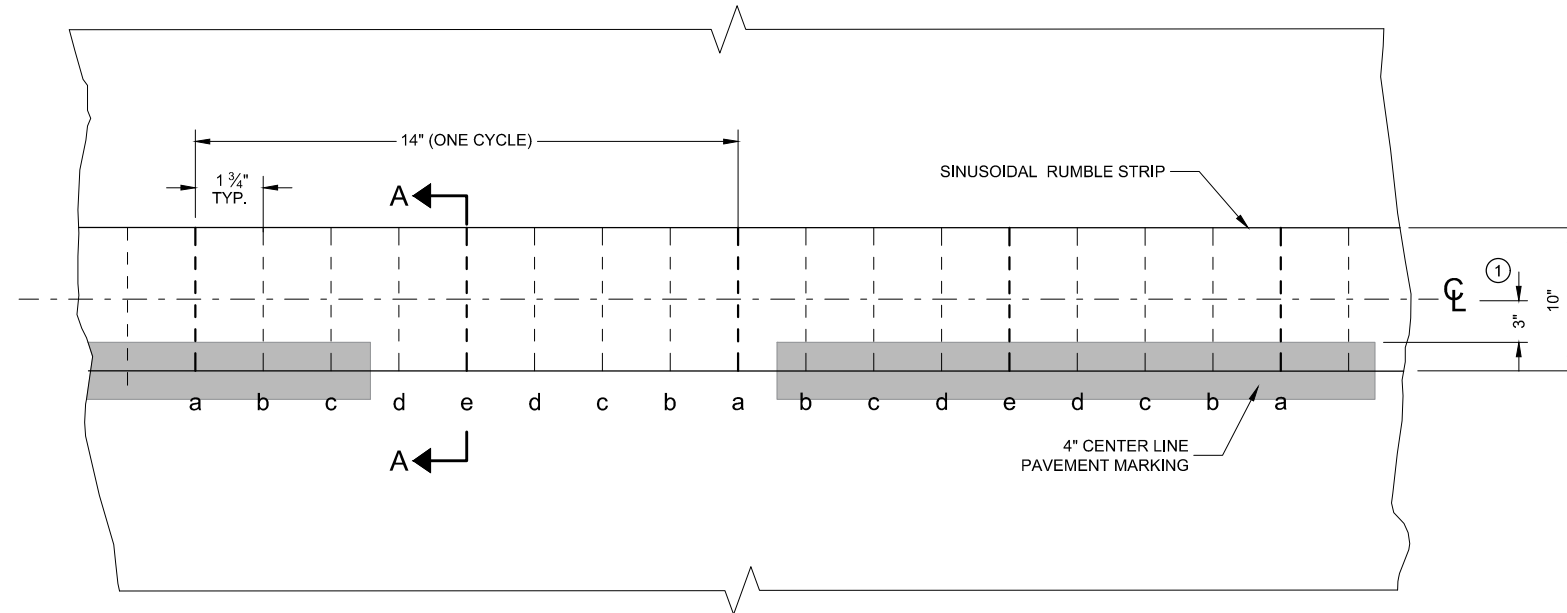
STA 47+57.1 - 47+97.4



\* INCIDENTAL TO CONSTRUCTION

**CULVERT PIPE INSTALLATION DETAIL**

STA 27+02



**PLAN VIEW  
SINUSOIDAL CENTER LINE RUMBLE STRIPS**

**GENERAL NOTES**

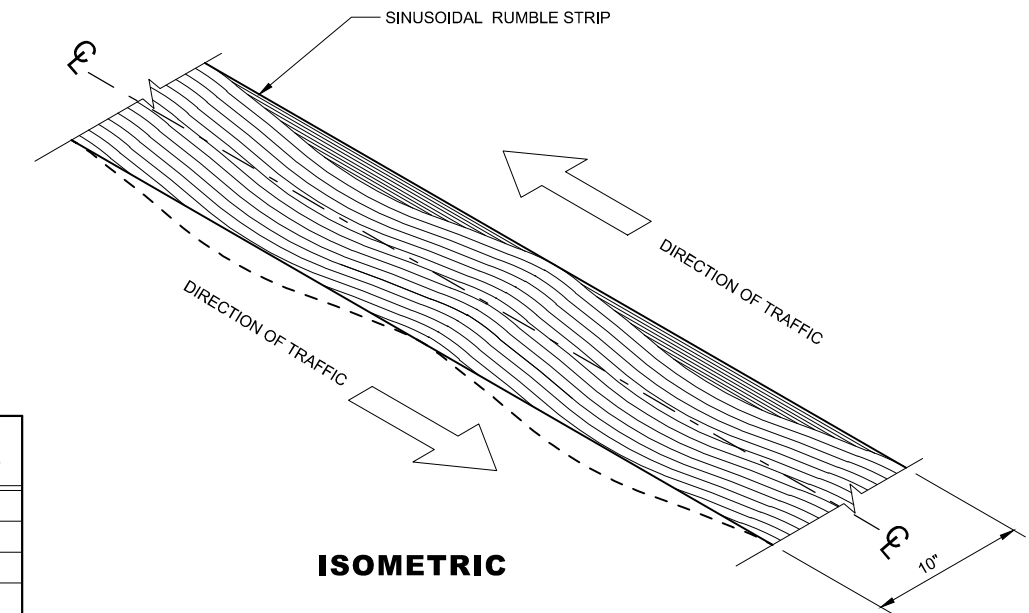
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

GAP SINUSOIDAL RUMBLE STRIPS AT INTERSECTIONS, BRIDGE AND APPROACH SLABS, RAILROADS, DRIVEWAYS, PASSING AND CLIMBING LANES, AND OTHER MISCELLANEOUS CROSSINGS

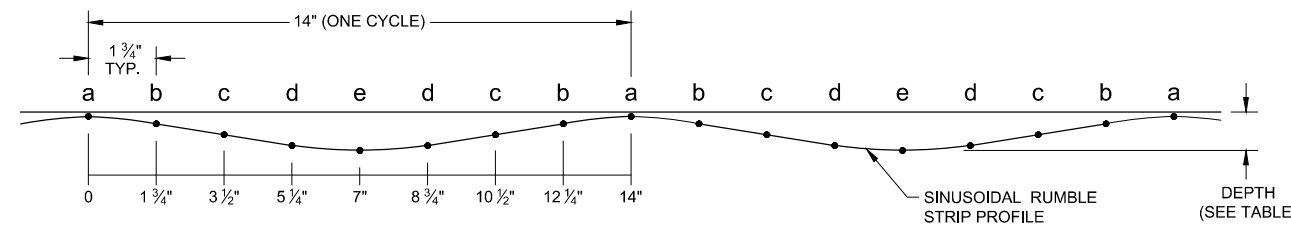
SHOULDER RUMBLE STRIPS MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.

TEMPORARY PAVEMENT MARKINGS ARE TYPICALLY PLACED PRIOR TO RUMBLE STRIP INSTALLATION. PERMANENT MARKINGS ARE INSTALLED AFTER RUMBLE STRIP INSTALLATION.

① REFER TO SDD 15C8 - SHEET "a" LONGITUDINAL MARKINGS (MAINLINE).

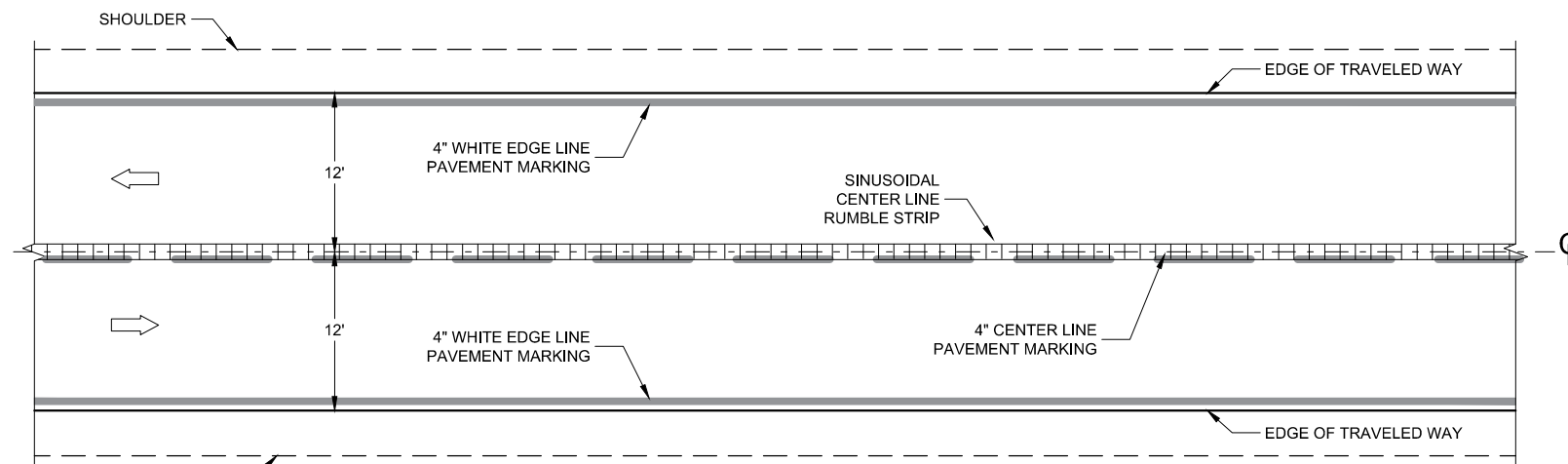


**ISOMETRIC**

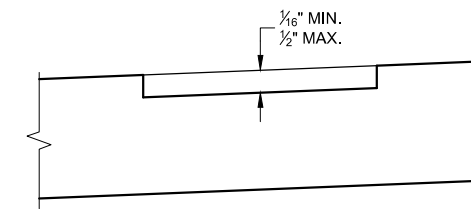


**PROFILE VIEW  
SINUSOIDAL SHOULDER RUMBLE STRIPS**

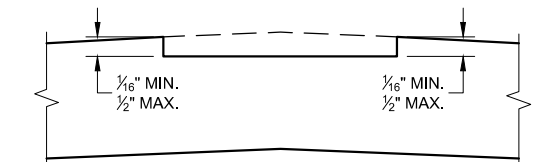
LOCATION	DEPTH (INCHES)
a	1/16"
b	5/32"
c	9/32"
d	7/16"
e	1/2"



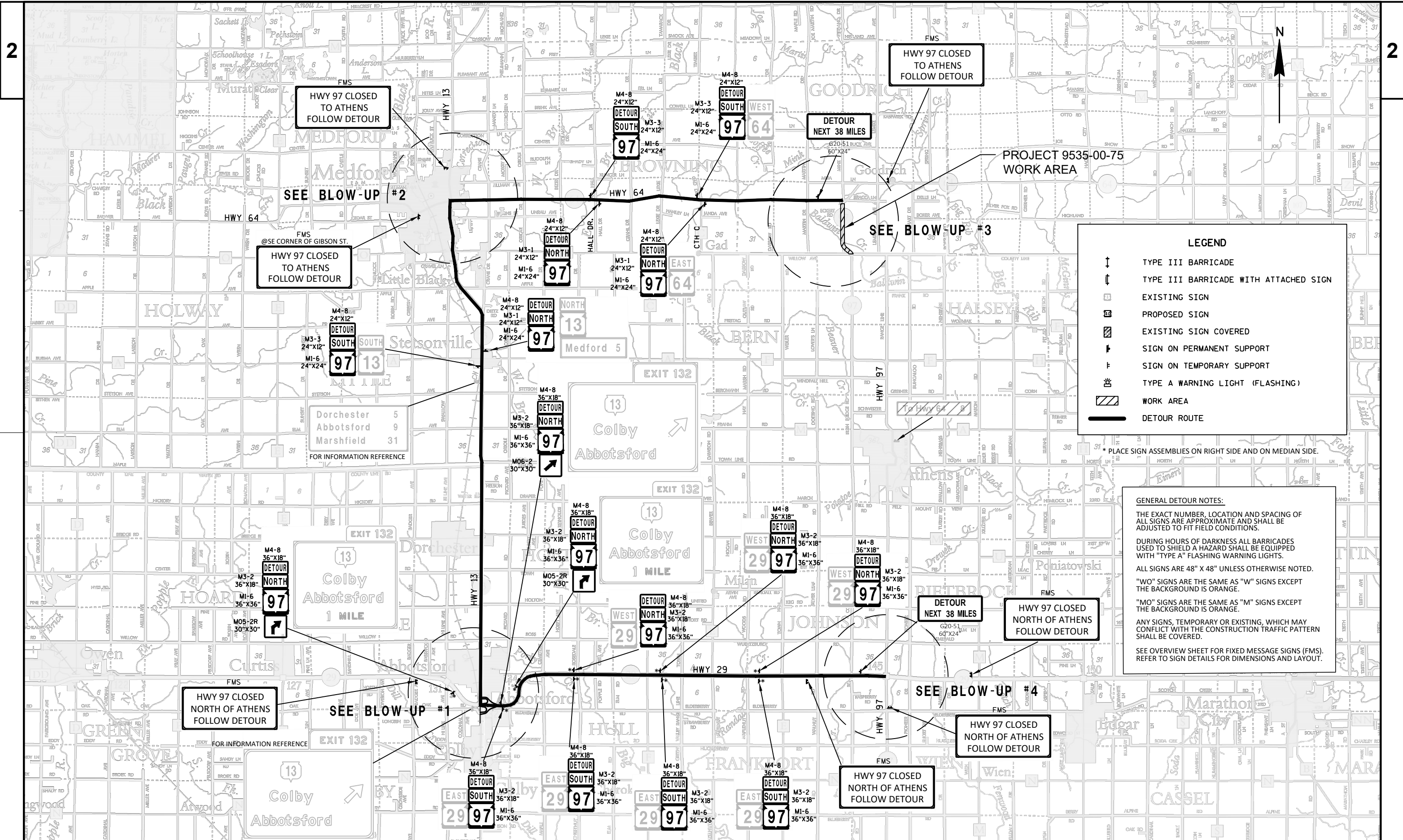
**SINUSOIDAL CENTER LINE RUMBLE STRIPS,  
2-LANE ASPHALTIC ROADWAY**



**SECTION A - A  
SUPERELEVATED ROADWAY**



**SECTION A - A  
CROWNED ROADWAY**



**LEGEND**

- ↑ TYPE III BARRICADE
- ↑ TYPE III BARRICADE WITH ATTACHED SIGN
- EXISTING SIGN
- PROPOSED SIGN
- ▨ EXISTING SIGN COVERED
- ↑ SIGN ON PERMANENT SUPPORT
- ↑ SIGN ON TEMPORARY SUPPORT
- ⚡ TYPE A WARNING LIGHT (FLASHING)
- ▨ WORK AREA
- DETOUR ROUTE

**GENERAL DETOUR NOTES:**

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

DURING HOURS OF DARKNESS ALL BARRICADES USED TO SHIELD A HAZARD SHALL BE EQUIPPED WITH "TYPE A" FLASHING WARNING LIGHTS.

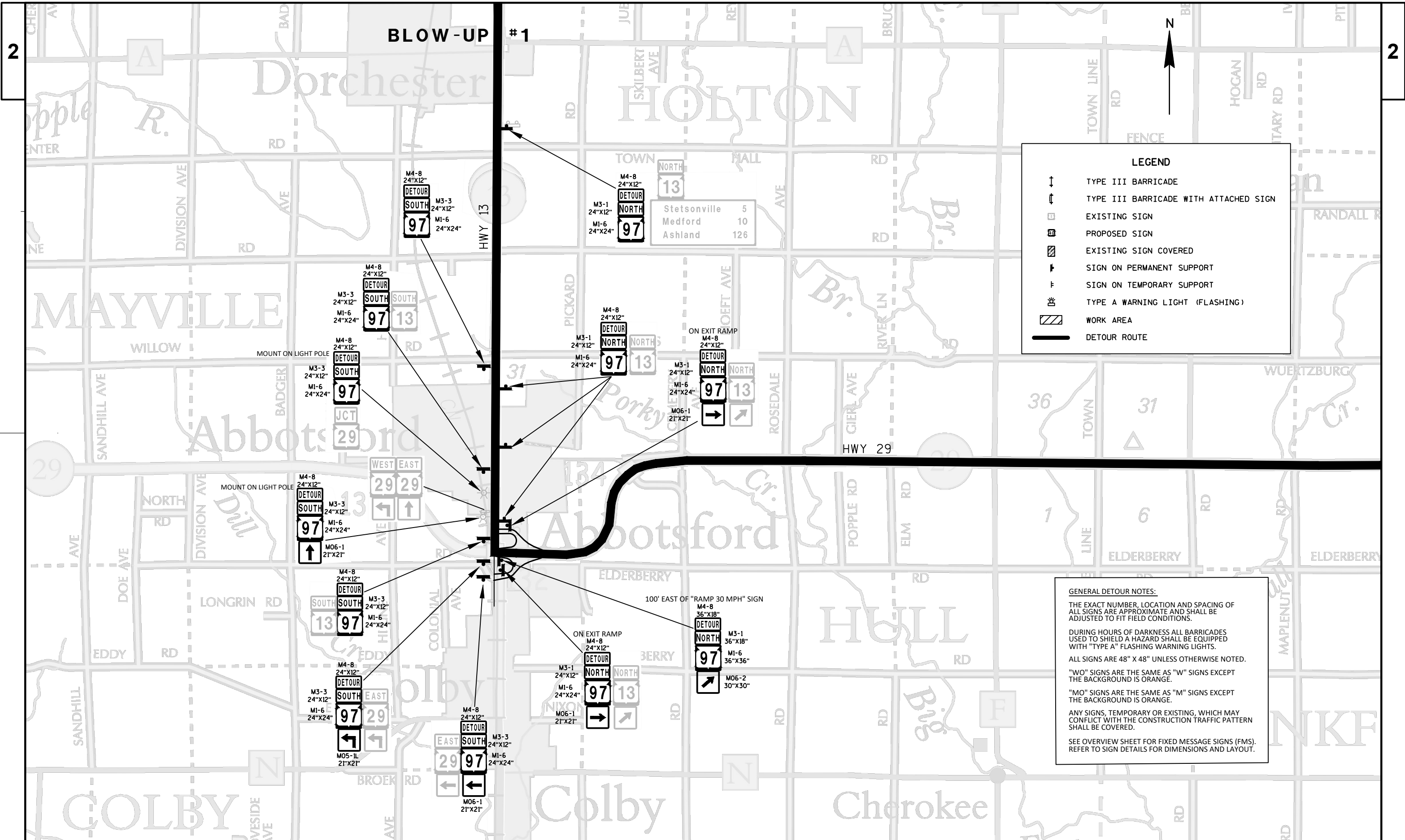
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

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

ANY SIGNS, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE COVERED.

SEE OVERVIEW SHEET FOR FIXED MESSAGE SIGNS (FMS). REFER TO SIGN DETAILS FOR DIMENSIONS AND LAYOUT.

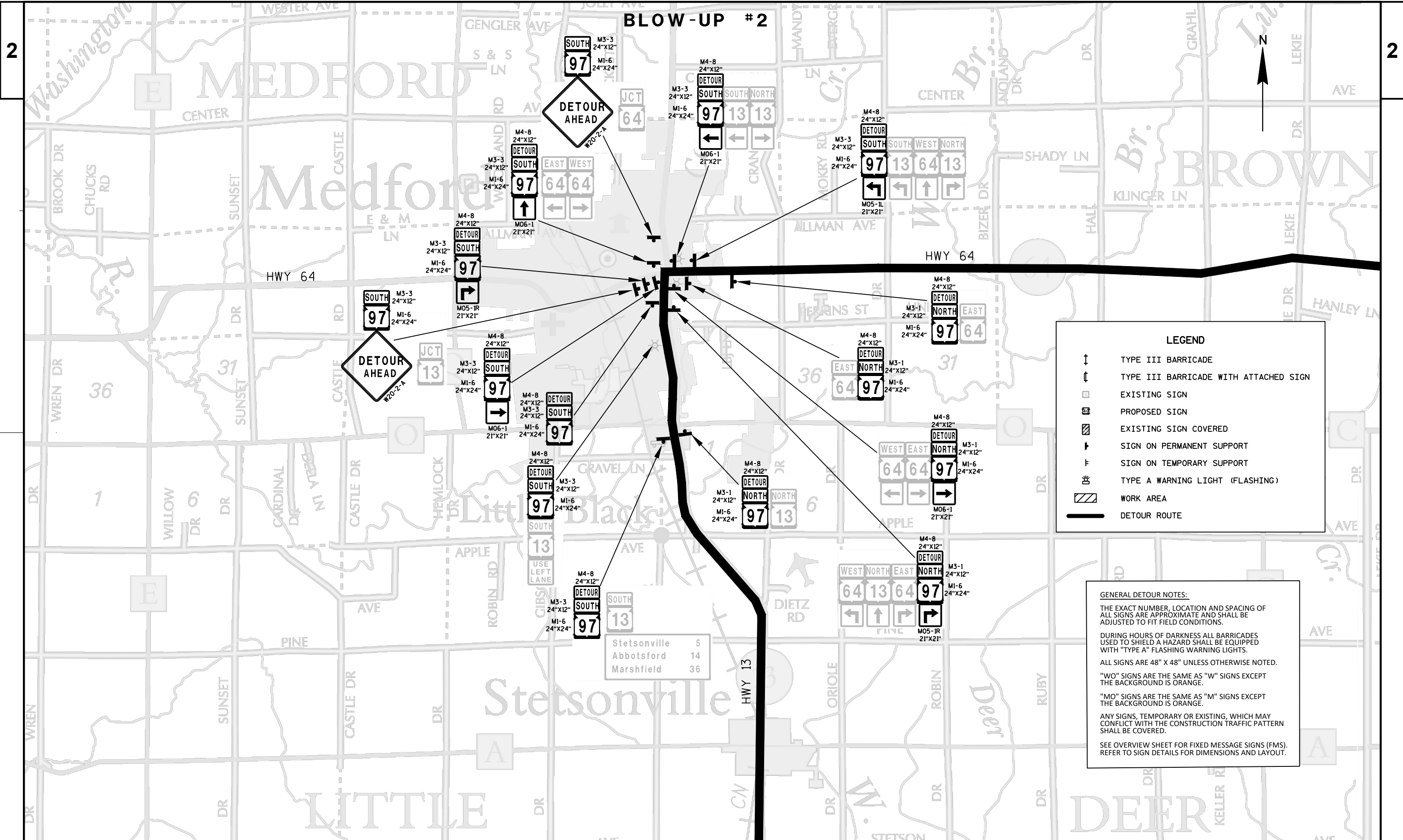


**LEGEND**

- ↑ TYPE III BARRICADE
- ↑↓ TYPE III BARRICADE WITH ATTACHED SIGN
- EXISTING SIGN
- ▣ PROPOSED SIGN
- ▨ EXISTING SIGN COVERED
- ⊥ SIGN ON PERMANENT SUPPORT
- ⊥ SIGN ON TEMPORARY SUPPORT
- ⚡ TYPE A WARNING LIGHT (FLASHING)
- ▨ WORK AREA
- DETOUR ROUTE

**GENERAL DETOUR NOTES:**  
 THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.  
 DURING HOURS OF DARKNESS ALL BARRICADES USED TO SHIELD A HAZARD SHALL BE EQUIPPED WITH "TYPE A" FLASHING WARNING LIGHTS.  
 ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.  
 "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.  
 "MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.  
 ANY SIGNS, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE COVERED.  
 SEE OVERVIEW SHEET FOR FIXED MESSAGE SIGNS (FMS). REFER TO SIGN DETAILS FOR DIMENSIONS AND LAYOUT.





**LEGEND**

- † TYPE III BARRICADE
- †† TYPE III BARRICADE WITH ATTACHED SIGN
- EXISTING SIGN
- ▣ PROPOSED SIGN
- ▨ EXISTING SIGN COVERED
- ††† SIGN ON PERMANENT SUPPORT
- †††† SIGN ON TEMPORARY SUPPORT
- ⚡ TYPE A WARNING LIGHT (FLASHING)
- ▨▨▨ WORK AREA
- DETOUR ROUTE

**GENERAL DETOUR NOTES:**

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

DURING HOURS OF DARKNESS ALL BARRICADES USED TO SHIELD A HAZARD SHALL BE EQUIPPED WITH "TYPE A" FLASHING WARNING LIGHTS.

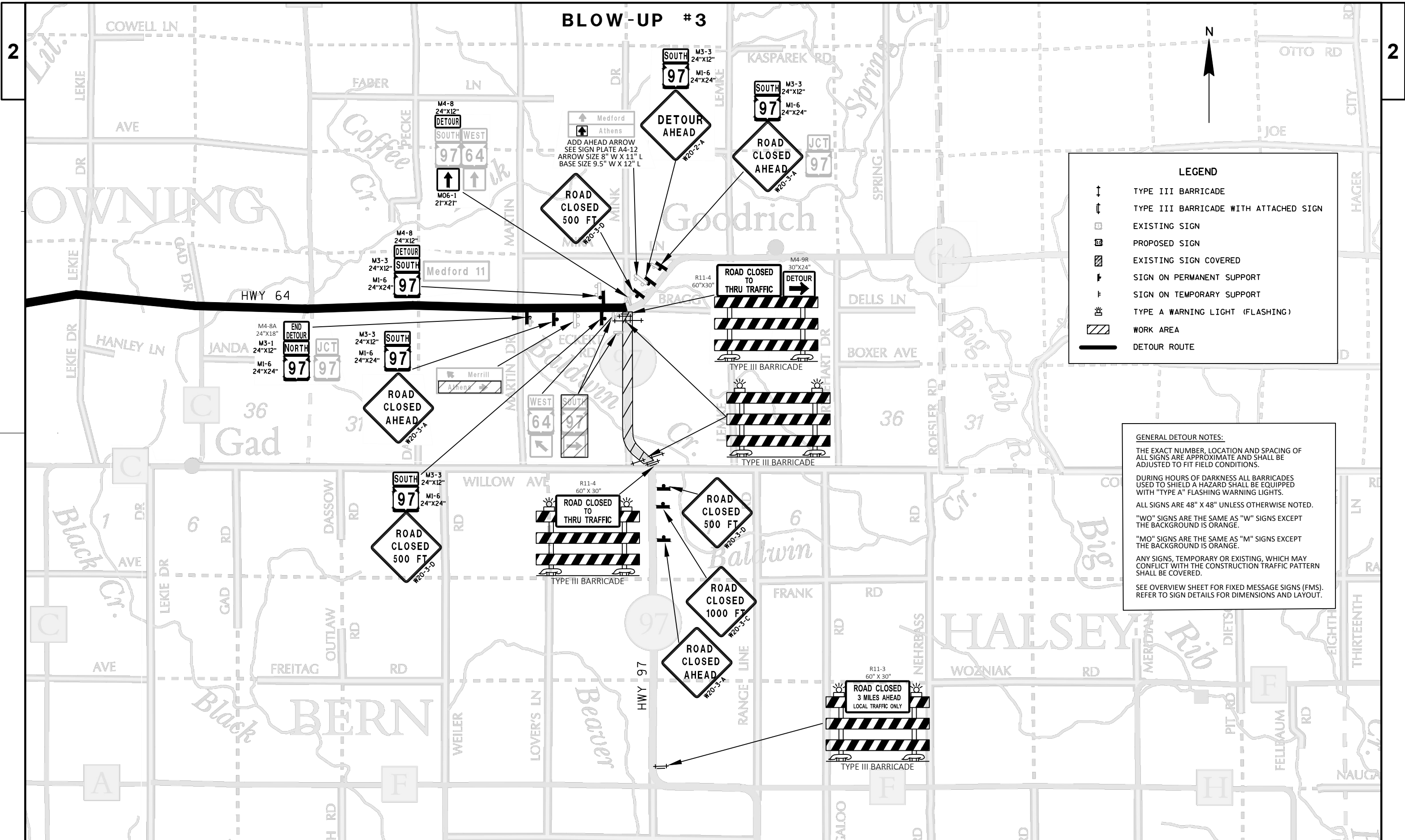
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

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

ANY SIGNS, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE COVERED.

SEE OVERVIEW SHEET FOR FIXED MESSAGE SIGNS (FMS). REFER TO SIGN DETAILS FOR DIMENSIONS AND LAYOUT.



**LEGEND**

- ↑ TYPE III BARRICADE
- ↑↓ TYPE III BARRICADE WITH ATTACHED SIGN
- EXISTING SIGN
- PROPOSED SIGN
- ▨ EXISTING SIGN COVERED
- ⊥ SIGN ON PERMANENT SUPPORT
- ⊥ SIGN ON TEMPORARY SUPPORT
- ⊙ TYPE A WARNING LIGHT (FLASHING)
- ▨ WORK AREA
- DETOUR ROUTE

**GENERAL DETOUR NOTES:**

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

DURING HOURS OF DARKNESS ALL BARRICADES USED TO SHIELD A HAZARD SHALL BE EQUIPPED WITH "TYPE A" FLASHING WARNING LIGHTS.

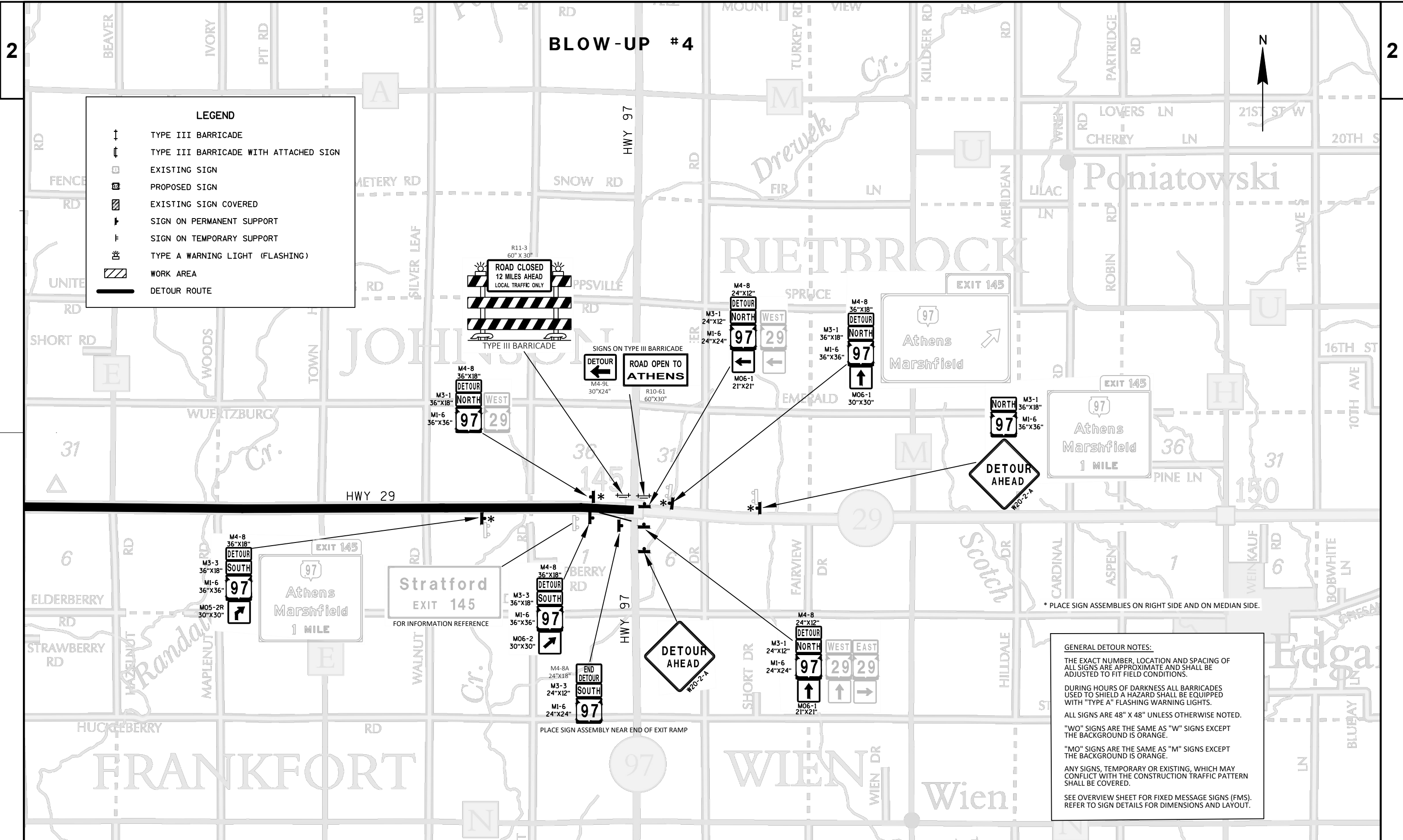
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

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

ANY SIGNS, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE COVERED.

SEE OVERVIEW SHEET FOR FIXED MESSAGE SIGNS (FMS). REFER TO SIGN DETAILS FOR DIMENSIONS AND LAYOUT.



**LEGEND**

- ↑ TYPE III BARRICADE
- ↑ TYPE III BARRICADE WITH ATTACHED SIGN
- EXISTING SIGN
- ▣ PROPOSED SIGN
- ▨ EXISTING SIGN COVERED
- ↑ SIGN ON PERMANENT SUPPORT
- ↑ SIGN ON TEMPORARY SUPPORT
- ⚡ TYPE A WARNING LIGHT (FLASHING)
- ▨ WORK AREA
- DETOUR ROUTE

**GENERAL DETOUR NOTES:**

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

DURING HOURS OF DARKNESS ALL BARRICADES USED TO SHIELD A HAZARD SHALL BE EQUIPPED WITH "TYPE A" FLASHING WARNING LIGHTS.

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

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

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

ANY SIGNS, TEMPORARY OR EXISTING, WHICH MAY CONFLICT WITH THE CONSTRUCTION TRAFFIC PATTERN SHALL BE COVERED.

SEE OVERVIEW SHEET FOR FIXED MESSAGE SIGNS (FMS). REFER TO SIGN DETAILS FOR DIMENSIONS AND LAYOUT.

Estimate Of Quantities

9535-00-75

Line	Item	Item Description	Unit	Total	Qty
0002	203.0100	Removing Small Pipe Culverts	EACH	2.000	2.000
0004	204.0100	Removing Concrete Pavement	SY	30,324.000	30,324.000
0006	204.0110	Removing Asphaltic Surface	SY	347.000	347.000
0008	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	7.000	7.000
0010	213.0100	Finishing Roadway (project) 01. 9535-00-75	EACH	1.000	1.000
0012	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,558.000	1,558.000
0014	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	3,105.000	3,105.000
0016	305.0500	Shaping Shoulders	STA	184.000	184.000
0018	455.0605	Tack Coat	GAL	1,941.000	1,941.000
0020	460.2000	Incentive Density HMA Pavement	DOL	6,670.000	6,670.000
0022	460.6243	HMA Pavement 3 MT 58-34 S	TON	6,341.000	6,341.000
0024	460.6244	HMA Pavement 4 MT 58-34 S	TON	4,077.000	4,077.000
0026	460.9000.S	Material Transfer Vehicle 01. 9535-00-75	EACH	1.000	1.000
0028	465.0105	Asphaltic Surface	TON	97.000	97.000
0030	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	7.000	7.000
0032	465.0450	Asphaltic Intersection Rumble Strips	SY	75.000	75.000
0034	504.0900	Concrete Masonry Endwalls	CY	4.100	4.100
0036	521.5130	Culvert Pipe Corrugated Steel Polymer Coated 30-Inch	LF	178.000	178.000
0038	525.0330	Apron Endwalls for Culvert Pipe Aluminum 30-Inch	EACH	2.000	2.000
0040	606.0100	Riprap Light	CY	13.000	13.000
0042	618.0100	Maintenance And Repair of Haul Roads (project) 01. 9535-00-75	EACH	1.000	1.000
0044	619.1000	Mobilization	EACH	1.000	1.000
0046	624.0100	Water	MGAL	49.000	49.000
0048	625.0500	Salvaged Topsoil	SY	260.000	260.000
0050	627.0200	Mulching	SY	160.000	160.000
0052	628.1104	Erosion Bales	EACH	20.000	20.000
0054	628.1504	Silt Fence	LF	500.000	500.000
0056	628.1520	Silt Fence Maintenance	LF	500.000	500.000
0058	628.1905	Mobilizations Erosion Control	EACH	2.000	2.000
0060	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0062	628.2004	Erosion Mat Class I Type B	SY	399.000	399.000
0064	628.7555	Culvert Pipe Checks	EACH	36.000	36.000
0066	629.0210	Fertilizer Type B	CWT	0.500	0.500
0068	630.0110	Seeding Mixture No. 10	LB	9.000	9.000
0070	630.0200	Seeding Temporary	LB	18.000	18.000
0072	633.5200	Markers Culvert End	EACH	8.000	8.000
0074	642.5001	Field Office Type B	EACH	1.000	1.000
0076	643.0420	Traffic Control Barricades Type III	DAY	433.000	433.000
0078	643.0705	Traffic Control Warning Lights Type A	DAY	686.000	686.000
0080	643.0900	Traffic Control Signs	DAY	11,920.000	11,920.000
0082	643.0920	Traffic Control Covering Signs Type II	EACH	6.000	6.000
0084	643.1000	Traffic Control Signs Fixed Message	SF	274.500	274.500
0086	643.5000	Traffic Control	EACH	1.000	1.000
0088	645.0130	Geotextile Type R	SY	50.000	50.000
0090	646.1020	Marking Line Epoxy 4-Inch	LF	28,885.000	28,885.000
0092	646.4520	Marking Line Same Day Epoxy 4-Inch	LF	11,006.000	11,006.000
0094	649.0105	Temporary Marking Line Paint 4-Inch	LF	9,918.000	9,918.000
0096	650.5000	Construction Staking Base	LF	9,097.000	9,097.000
0098	650.6000	Construction Staking Pipe Culverts	EACH	3.000	3.000

Estimate Of Quantities

9535-00-75

Line	Item	Item Description	Unit	Total	Qty
0100	650.8000	Construction Staking Resurfacing Reference	LF	9,097.000	9,097.000
0102	650.9910	Construction Staking Supplemental Control (project) 01. 9535-00-75	LS	1.000	1.000
0104	690.0150	Sawing Asphalt	LF	111.000	111.000
0106	690.0250	Sawing Concrete	LF	60.000	60.000
0108	740.0440	Incentive IRI Ride	DOL	6,900.000	6,900.000
0110	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	1,200.000	1,200.000
0112	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	300.000	300.000
0114	SPV.0060	Special 01. Re-establish Section Corner Monuments	EACH	2.000	2.000
0116	SPV.0090	Special 01. Regrade Ditch	LF	124.000	124.000
0118	SPV.0090	Special 02. Sinusoidal Center Line Rumble Strips 2-Lane Asphaltic Roadway	LF	7,475.000	7,475.000

**REMOVING PAVEMENT**

STATION	-	STATION	LOCATION	REMOVAL WIDTH LF	204.0100 REMOVING PAVEMENT SY	COMMENTS
1+64	-	15+03	STH 97	30	4,462	CONCRETE ONLY
15+03	-	19+01	STH 97	30	1,327	CONCRETE AND ASPHALT LAYERS
19+01	-	32+09	STH 97	30	4,360	CONCRETE ONLY
32+81	-	93+33	STH 97	30	20,175	CONCRETE AND ASPHALT LAYERS
PROJECT TOTAL					30,324	

**FINISHING ROADWAY**

LOCATION	213.0100 FINISHING ROADWAY 01.9535-00-75 EACH
PROJECT LIMITS	1
PROJECT TOTAL	1

**REMOVING ASPHALTIC SURFACE**

STATION	-	STATION	LOCATION	SY	204.0110 REMOVING ASPHALTIC SURFACE	COMMENTS
7+93	-	8+80	STH 97 RT	43		WILLOW AVE.
30+40	-	32+09	STH 97 LT	58		MGS SHOULDER
30+34	-	32+09	STH 97 RT	62		MGS SHOULDER
32+81	-	34+43	STH 97 LT	57		MGS SHOULDER
32+81	-	34+43	STH 97 RT	57		MGS SHOULDER
52+83	-		STH 97 LT	26		PRIVATE ENTRANCE
91+55	-	92+17	STH 97	44		BRAGG LANE
PROJECT TOTAL					347	

**BASE AGGREGATE DENSE 3/4-INCH**

STATION	-	STATION	LOCATION	TON	305.0110 BASE AGGREGATE DENSE 3/4-INCH	COMMENTS
1+64	-	32+09	STH 97 LT & RT	457		
32+81	-	93+33	STH 97 LT & RT	908		
26+84	-	27+16	STH 97 LT & RT	10		CULVERT PIPE REPLACEMENT
47+57	-	47+97	STH 97 LT & RT	13		CULVERT PIPE REPLACEMENT
PROJECT LIMITS DRIVEWAYS				170		17 DRIVEWAYS @ 10 TON EACH
PROJECT TOTAL					1558	

**PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS**

STATION	-	STATION	LOCATION	STA	211.0400 PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS	COMMENTS
7+96	-	9+78	STH 97 LT	2		WILLOW AVE.
7+63	-	8+98	STH 97 RT	2		WILLOW AVE.
27+91	-	30+05	STH 97 LT	3		MINK DRIVE
PROJECT TOTAL					7	

**BASE AGGREGATE DENSE 1 1/4-INCH**

STATION	-	STATION	LOCATION	TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH	MGAL	624.0100 WATER	COMMENTS
1+64	-	32+09	STH 97	880		14		MAINLINE - 1.5" LEVELING LAYER
32+81	-	93+33	STH 97	1749		27		MAINLINE - 1.5" LEVELING LAYER
26+84	-	27+16	STH 97	95		2		PIPE REPLACEMENT - 14" BASE LAYER
47+57	-	47+97	STH 97	118		2		PIPE REPLACEMENT - 14" BASE LAYER
UNDISTRIBUTED				263		4		
PROJECT TOTALS					3105	49		

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

PROJECT NO: 9535-00-75

HWY: STH 97

COUNTY: TAYLOR

MISCELLANEOUS QUANTITIES

SHEET

E



**SHAPING SHOULDERS**

305.0500 SHAPING SHOULDERS				
STATION	-	STATION	LOCATION	STA
1+64	-	32+09	STH 97 LT	31
1+64	-	32+09	STH 97 RT	31
32+81	-	93+33	STH 97 LT	61
32+81	-	93+33	STH 97 RT	61
PROJECT TOTAL				184

**CONCRETE MASONRY ENDWALLS**

504.0900 CONCRETE MASONRY ENDWALLS			
STATION	LOCATION		CY
47+75.8	STH 97 27.9' LT		2.0
47+80.3	STH 97 25.7' RT		2.1
PROJECT TOTAL			4.1

**ASPHALTIC INTERSECTION RUMBLE STRIPS**

465.0450 ASPHALTIC INTERSECTION RUMBLE STRIPS				
STATION	-	STATION	LOCATION	SY
84+39	-	84+64	STH 97 LT	25
87+89	-	88+14	STH 97 LT	25
90+14	-	90+39	STH 97 LT	25
PROJECT TOTAL				75

**HMA PAVEMENT ITEMS**

460.6243    460.6244    455.0605 HMA PAVEMENT    HMA PAVEMENT    TACK COAT 3 MT 58-34 S    4 MT 58-34 S					
STATION	-	STATION	LOCATION	TON	GAL
1+64	-	32+09	STH 97	2,123	650
32+81	-	93+33	STH 97	4,218	1,291
PROJECT TOTALS				6,341	1,941

**ASPHALTIC SURFACE ITEMS**

465.0105    465.0120 DEPTH    ASPHALTIC SURFACE    ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES						
STATION	-	STATION	LOCATION	INCH	TON	TON
7+96	-	9+78	LT WILLOW AVE.	5.75	31	-
8+63	-	8+98	RT WILLOW AVE.	5.75	22	-
27+91	-	30+05	LT MINK DRIVE	5.75	43	-
52+83	-		LT P.E.	2.5	-	4
91+11	-	92+47	RT BRAG LANE	5.75	22	-
				UNDISTRIBUTED	10	3
PROJECT TOTALS					97	7

**CULVERT PIPE ITEMS**

521.5130    525.0330    650.6000 CULVERT PIPE    APRON ENDWALLS FOR    CONSTRUCTION STAKING CORRUGATED STEEL    CULVERT PIPE ALUMINUM    PIPE CULVERTS    *STEEL    **ELEVATIONS POLYMER COATED 30-INCH    30-INCH							
STATION	LOCATION	LF	EACH	EACH	THICKNESS (INCHES)	INLET	OUTLET
27+02.27	STH 97	70	2	1	0.109	1445.85	1444.85
47+75.78	STH 97	54	-	1	0.109	1456.50	1455.50
47+80.30	STH 97	54	-	1	0.109	1456.50	1455.50
PROJECT TOTALS		178	2	3			

\* NON-BID ITEM: FOR INFORMATION ONLY  
\*\* PIPE INVERT AT END OF PIPE: FOR INFORMATION ONLY. FIELD VERIFY

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

**RIPRAP ITEMS**

STATION	LOCATION		606.0100	645.0130
			RIPRAP LIGHT CY	GEOTEXTILE TYPE R SY
16+02.0	STH 97	LT	3	14
27+02.3	STH 97	LT	2	8
27+02.3	STH 97	RT	2	8
47+78.2	STH 97	LT	3	12
47+78.2	STH 97	RT	3	8
PROJECT TOTALS			13	50

**MAINTENANCE AND REPAIR OF HAUL ROADS**

LOCATION		618.0100
		MAINTENANCE AND REPAIR OF HAUL ROADS EACH
PROJECT	STH 97	1
PROJECT TOTAL		1

**MOBILIZATION**

LOCATION		619.1000
		MOBILIZATION EACH
PROJECT	STH 97	1
PROJECT TOTAL		1

**LANDSCAPING ITEMS**

STATION - STATION	LOCATION	625.0500	627.0200	629.0210	630.0110	630.0200	COMMENTS
		SALVAGED TOPSOIL SY	MULCHING SY	FERTILIZER TYPE B CWT	SEEDING MIXTURE NO. 10 LB	SEEDING TEMPORARY LB	
26+88 - 27+16	STH 97 LT	57	32	0.1	2	4	CULVERT REPLACEMENT
26+88 - 27+16	STH 97 RT	57	32	0.1	2	4	CULVERT REPLACEMENT
47+62 - 47+90	STH 97 LT	57	32	0.1	2	4	CULVERT REPLACEMENT
47+62 - 47+90	STH 97 RT	37	32	0.1	1	2	CULVERT REPLACEMENT
UNDISTRIBUTED		52	32	0.1	2	4	
PROJECT TOTALS		260	160	0.5	9	18	

**SILT FENCE**

STATION - STATION	LOCATION	628.1504	628.1520	COMMENTS
		SILT FENCE LF	SILT FENCE MAINTENANCE LF	
26+55 - 27+45	STH 97 LT	100	100	CULVERT REPLACEMENT
26+55 - 27+45	STH 97 RT	100	100	CULVERT REPLACEMENT
47+35 - 48+15	STH 97 LT	100	100	CULVERT REPLACEMENT
47+65 - 48+15	STH 97 RT	60	60	CULVERT REPLACEMENT
UNDISTRIBUTED		140	140	
PROJECT TOTALS		500	500	

**MOBILIZATIONS EROSION CONTROL**

LOCATION		628.1905	628.1910
		MOBILIZATIONS EROSION CONTROL EACH	MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
PROJECT LIMITS	STH 97	2	3
PROJECT TOTALS		2	3

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

**CULVERT PIPE CHECKS**

STATION	LOCATION		628.7555 CULVERT PIPE CHECKS EACH
27+02.3	STH 97	LT	7
36+76.6	STH 97	RT	5
47+75.9	STH 97	RT	7
47+80.4	STH 97	RT	7
92+89.9	STH 97	LT	3
UNDISTRIBUTED			7
PROJECT TOTAL			36

**CULVERT END MARKERS**

STATION	LOCATION	633.5200 MARKERS CULVERT END EACH
3+76	RT & LT	2
27+02	RT & LT	2
36+77	RT & LT	2
47+75	RT & LT	2
PROJECT TOTAL		8

**FIELD OFFICE**

LOCATION	642.5001 FIELD OFFICE TYPE B EACH
PROJECT STH 97	1
PROJECT TOTAL	1

**EROSION MAT CLASS I TYPE B**

STATION - STATION	LOCATION		628.2004 EROSION MAT CLASS I TYPE B SY	COMMENTS
37+06 - 37+23	STH 97	RT	18	REGRADE DITCH
47+75 - 47+75	STH 97	LT	16	REGRADE DITCH
92+12 - 92+99	STH 97	LT	77	REGRADE DITCH
27+02 -	STH 97	LT	57	CULVERT REPLACEMENT
27+02 -	STH 97	RT	57	CULVERT REPLACEMENT
47+78 -	STH 97	LT	57	CULVERT REPLACEMENT
47+78 -	STH 97	RT	37	CULVERT REPLACEMENT
UNDISTRIBUTED			80	
PROJECT TOTAL			399	

**TRAFFIC CONTROL FIXED MESSAGE SIGNS**

LOCATION	MESSAGE	ITEMIZATION	643.1000 TRAFFIC CONTROL SIGNS FIXED MESSAGE SF
SOUTHBOUND DETOUR	HWY 97 CLOSED TO ATHENS FOLLOW DETOUR	# OF SIGNS = 3 AT 19.50 S.F./SIGN	58.50
NORTHBOUND DETOUR	HWY 97 CLOSED NORTH OF ATHENS FOLLOW DETOUR	# OF SIGNS = 4 AT 54.00 S.F./SIGN	216.00
PROJECT TOTAL			274.50

**TRAFFIC CONTROL ITEMS**

LOCATION	DAYS (CALENDAR)	643.0420 TRAFFIC CONTROL BARRI- CADES (COUNT)	643.0420 TRAFFIC CONTROL TYPE III DAY	643.0705 TRAFFIC CONTROL WARNING LIGHTS (COUNT)	643.0705 TRAFFIC CONTROL TYPE A DAY	643.0900 TRAFFIC CONTROL SIGNS (COUNT)	643.0900 TRAFFIC CONTROL SIGNS DAY	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH	643.5000 TRAFFIC CONTROL EACH	COMMENTS
PROJECT	-	-	-	-	-	-	-	-	1	--
PROJECT DETOUR	45	9	405	14	630	256	11,520	5	-	SEE PLAN DETOUR SHEETS
PROJECT, SIDE ROAD WARNING	45	-	-	-	-	5	225	-	-	SEE SIDE ROAD WARNING SIGN LAYOUT ON SDD 15C4-5
PROJECT AS NEEDED	7	-	-	-	-	9	63	-	-	SEE PLAN TC DETAIL FOR HMA PAVEMENT SURFACES
UNDISTRIBUTED	14	2	28	4	56	8	112	1	-	--
PROJECT TOTALS			433		686		11,920	6	1	

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE NOTED



**MARKING LINES**

STATION	- STATION	LOCATION	646.1020	646.4520	649.0105	COMMENTS
			MARKING LINE EPOXY 4-INCH LF	MARKING LINE SAME DAY EPOXY 4-INCH LF	TEMPORARY MARKING LINE PAINT 4-INCH LF	
1+64	- 4+35	STH 97 CENTERLINE	339	339	293	PASSING ONE DIRECTON
4+35	- 29+17	STH 97 CENTERLINE	4964	4964	4964	NO PASSING
29+17	- 40+25	STH 97 CENTERLINE	1385	1385	1197	PASSING ONE DIRECTON
40+25	- 59+80	STH 97 CENTERLINE	489	489	156	PASSING BOTH DIRECTONS
59+80	- 70+35	STH 97 CENTERLINE	1319	1319	1139	PASSING ONE DIRECTON
70+35	- 71+93	STH 97 CENTERLINE	316	316	316	NO PASSING
71+93	- 83+02	STH 97 CENTERLINE	1386	1386	1198	PASSING ONE DIRECTON
83+02	- 88+83	STH 97 CENTERLINE	145	145	46	PASSING BOTH DIRECTONS
88+83	- 92+00	STH 97 CENTERLINE	396	396	342	PASSING ONE DIRECTON
92+00	- 93+33	STH 97 CENTERLINE	267	267	267	NO PASSING
1+64	- 93+33	STH 97 RT EDGELINE	9169	---	---	---
1+64	- 93+33	STH 97 LT EDGELINE	8711	---	---	LESS FOR GAPS AT ALL INTERSECTIONS
PROJECT TOTALS			28,885	11,006	9,918	

**CONSTRUCTION STAKING REFERENCE & BASE**

STATION	- STATION	LOCATION	650.5000	650.8000
			CONSTRUCTION STAKING BASE LF	CONSTRUCTION STAKING RESURFACING REFERENCE LF
1+64	- 32+09	STH 97	3,045	3,045
32+81	- 93+33	STH 97	6,052	6,052
PROJECT TOTALS			9,097	9,097

**CONSTRUCTION STAKING SUPPLEMENTAL CONTROL**

LOCATION	650.9910
	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL LF
PROJECT STH 97	01.9535-00-75 1
PROJECT TOTAL	1

**SAWING ASPHALT AND CONCRETE**

STATION	LOCATION	690.0150	690.0250	COMMENTS
		SAWING ASPHALT LF	SAWING CONCRETE LF	
8+57	STH 97	30	---	BEGINNING OF PROJECT
32+09	STH 97	6	30	SOUTH END OF TWIN CULVERTS
32+81	STH 97	6	30	NORTH END OF TWIN CULVERTS
52+52	P.E. LEFT	15	---	ASPHALT DRIVEWAY
50+50	BRAGG LANE	24	---	MILLING STATION ON SIDE ROAD
93+34	STH 97	30	---	END OF PROJECT
PROJECT TOTALS		111	60	

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

**ASPHALTIC CENTER LINE RUMBLE STRIPS**

SPV.0090.02  
SINUSOIDAL CENTER LINE  
RUMBLE STRIPS 2-LANE  
ASPHALTIC ROADWAY

STATION	-	STATION	LF	COMMENTS
1+64	-	7+39	575	BOP TO WILLOW AVE.
9+69	-	27+65	1,796	WILLOW AVE TO MINK DRIVE
29+65	-	31+84	219	MINK DRIVE TO 25' SOUTH OF BEGINNING OF DECK
33+06	-	35+16	210	25' NORTH OF END OF DECK TO CE
37+16	-	46+57	941	CE TO CE
48+57	-	65+81	1,724	CE TO ECKERT ROAD
69+81	-	89+91	2,010	ECKERT ROAD TO BRAGG LANE
PROJECT TOTAL			7,475	

**MATERIAL TRANSFER VEHICLE**

460.9000.S  
MATERIAL TRANSFER  
VEHICLE  
EACH

LOCATION		
PROJECT	STH 97	1
PROJECT TOTAL		1

**REGRADE DITCH**

SPV.0090.01

REGRADE DITCH

STATION	-	STATION	LOCATION	LF	EXCAVATION COMMON*	FILL ADJUSTED (X1.25)*	BORROW*	SALVAGED TOPSOIL*	FERTILIZER TYPE B*	SEEDING MIX. NO. 10*	TEMP SEED*	MULCH*
					CY	CY	CY	SY	CWT	LB	LB	SY
37+06	-	37+23	STH 97 RT	17	15	-	-	47	0.1	1	2	30
47+75	-		STH 97 LT	20	7	-	-	22	0.1	1	1	10
92+12	-	92+99	STH 97 LT	87	45	-	-	136	0.1	2	4	60
PROJECT TOTAL				124	68	0	0	205	0	4	7	100

\*FOR INFORMATION ONLY.

**RE-ESTABLISH SECTION CORNER MONUMENTS**

SPV-0060.01  
RE-ESTABLISH SECTION  
CORNER MONUMENTS

STATION	LOCATION	EACH	COMMENTS
40±81	STH 97 C/L (APPROX.)	1	EXACT LOCATION TO BE DETERMINED BY WI RLS
67±80	STH 97 C/L (APPROX.)	1	EXACT LOCATION TO BE DETERMINED BY WI RLS
PROJECT TOTAL		2	

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

P.I. STA. 0+06.83  
Y=331,945.043  
X=713,066.581

PI STA = 8+43.53  
Y = 332781.75  
X = 713063.70  
DELTA = 50°08'20"  
D = 4°59'38"  
T = 536.69'  
L = 1004.00'  
R = 1147.31'  
PC STA = 3+06.84  
Y = 332245.05  
X = 713065.55  
PT STA = 13+10.84  
Y = 333124.31  
X = 712650.55  
BK = N00°11'51"W  
AH = N50°20'11"W  
SE = 6.0%

STA. 7+96 - 9+78 LT (WILLOW AVE.)  
ASPHALTIC SURFACE  
5.75" DEPTH, 0' - 6' WIDTH AS  
DIRECTED BY THE ENGINEER.

STA. 8+63 - 8+98 RT (WILLOW AVE.)  
ASPHALTIC SURFACE  
5.75" DEPTH, 0' - 6' WIDTH AS  
DIRECTED BY THE ENGINEER.

BEGIN CONSTRUCTION  
STA 1+64.09  
MATCH EXISTING  
SAW CUT REQ'D

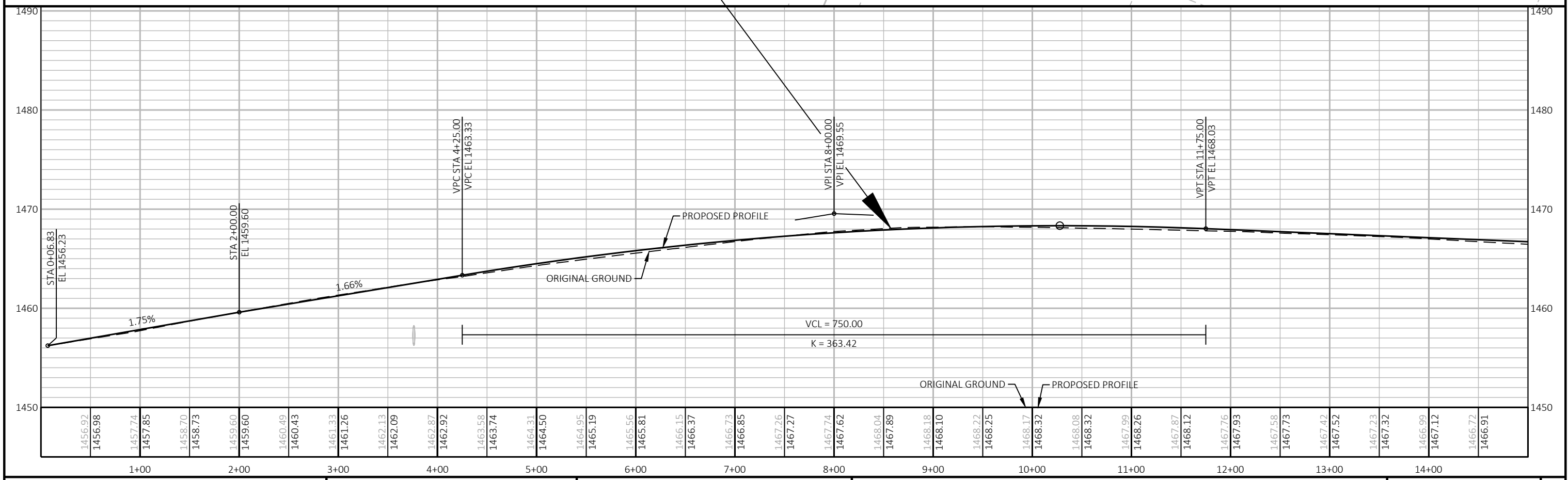
STA. 3+76.2  
EXISTING 24" X 74' CPCS TO REMAIN

BEGIN PROJECT  
STA 8+57.56  
Y=332,774.41  
X=712934.07

STA. 10+32  
RESTORE AGG. DWY

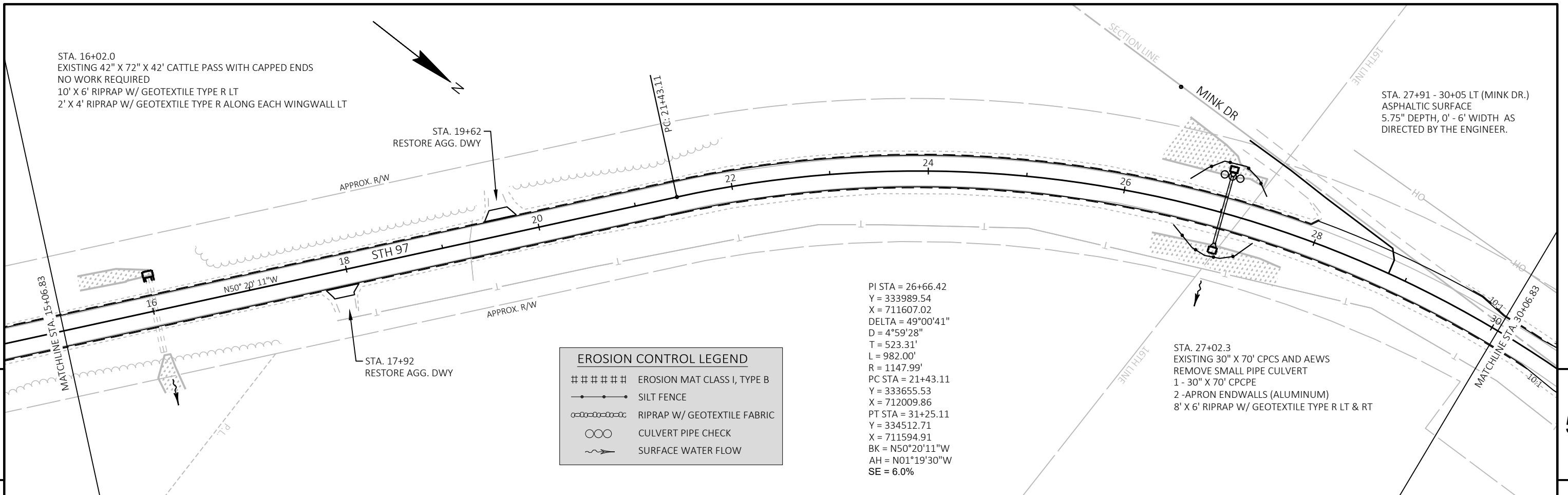
**EROSION CONTROL LEGEND**

- ##### EROSION MAT CLASS I, TYPE B
- SILT FENCE
- RIPRAP W/ GEOTEXTILE FABRIC
- ○ ○ ○ CULVERT PIPE CHECK
- ~> SURFACE WATER FLOW



PROJECT NO: 9535-00-75	HWY: STH 97	COUNTY: TAYLOR	PLAN AND PROFILE: STH 97
SHEET			<b>E</b>

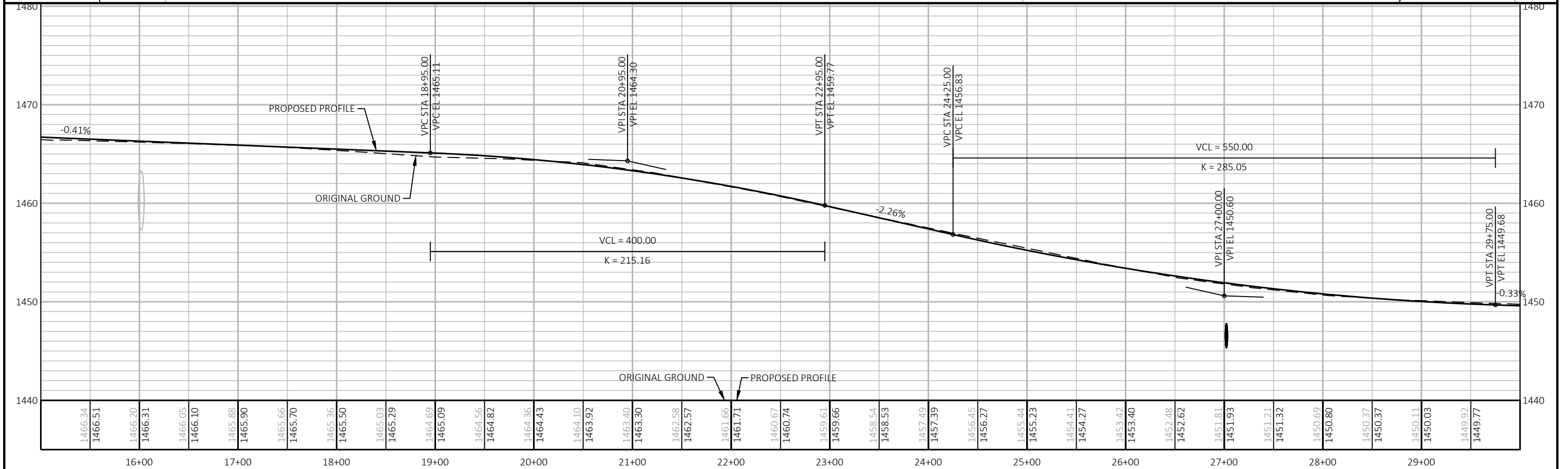




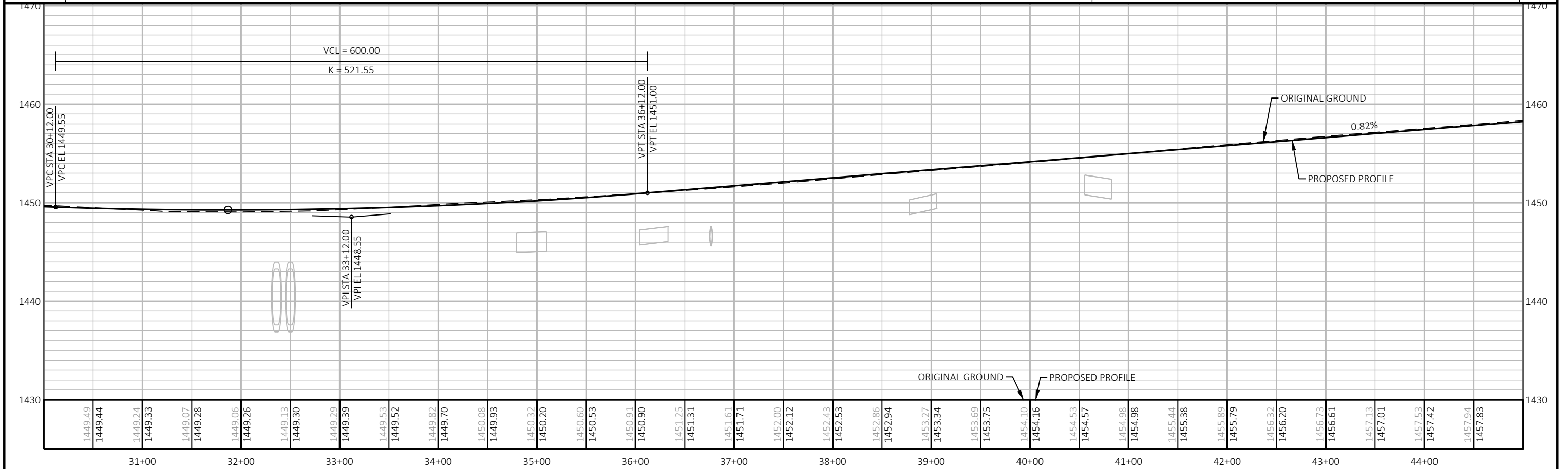
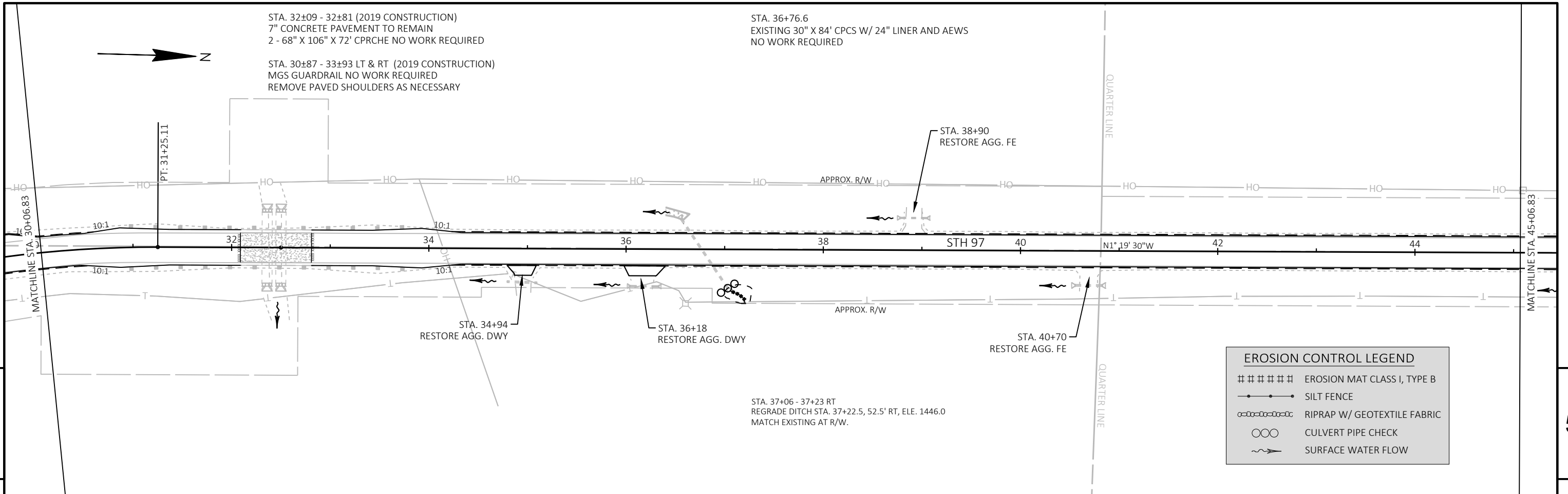
**EROSION CONTROL LEGEND**

- ##### EROSION MAT CLASS I, TYPE B
- SILT FENCE
- RIPRAP W/ GEOTEXTILE FABRIC
- ○ CULVERT PIPE CHECK
- ~> SURFACE WATER FLOW

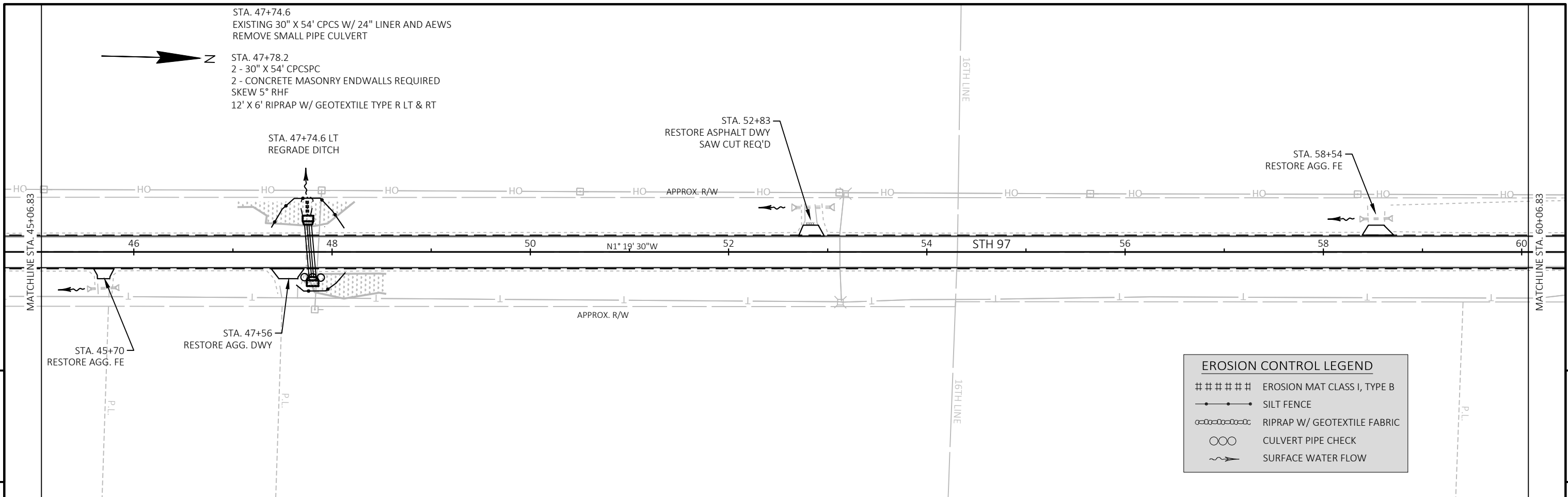
PI STA = 26+66.42  
 Y = 333989.54  
 X = 711607.02  
 DELTA = 49°00'41"  
 D = 4°59'28"  
 T = 523.31'  
 L = 982.00'  
 R = 1147.99'  
 PC STA = 21+43.11  
 Y = 333655.53  
 X = 712009.86  
 PT STA = 31+25.11  
 Y = 334512.71  
 X = 711594.91  
 BK = N50°20'11"W  
 AH = N01°19'30"W  
 SE = 6.0%



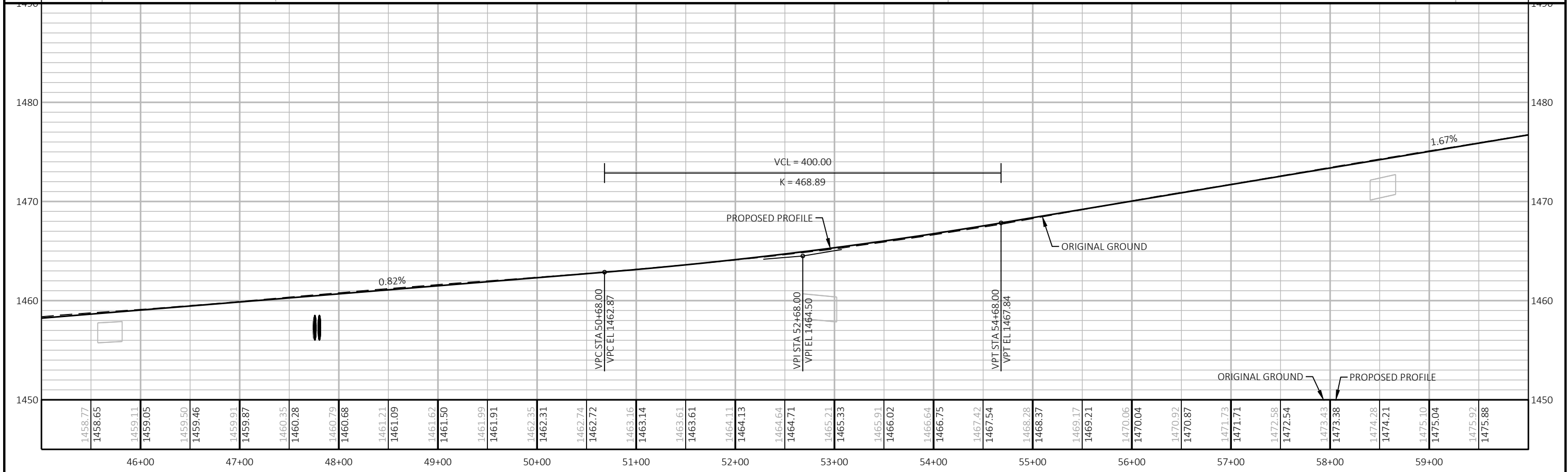
PROJECT NO: 9535-00-75	HWY: STH 97	COUNTY: TAYLOR	PLAN AND PROFILE: STH 97	SHEET	<b>E</b>
------------------------	-------------	----------------	--------------------------	-------	----------



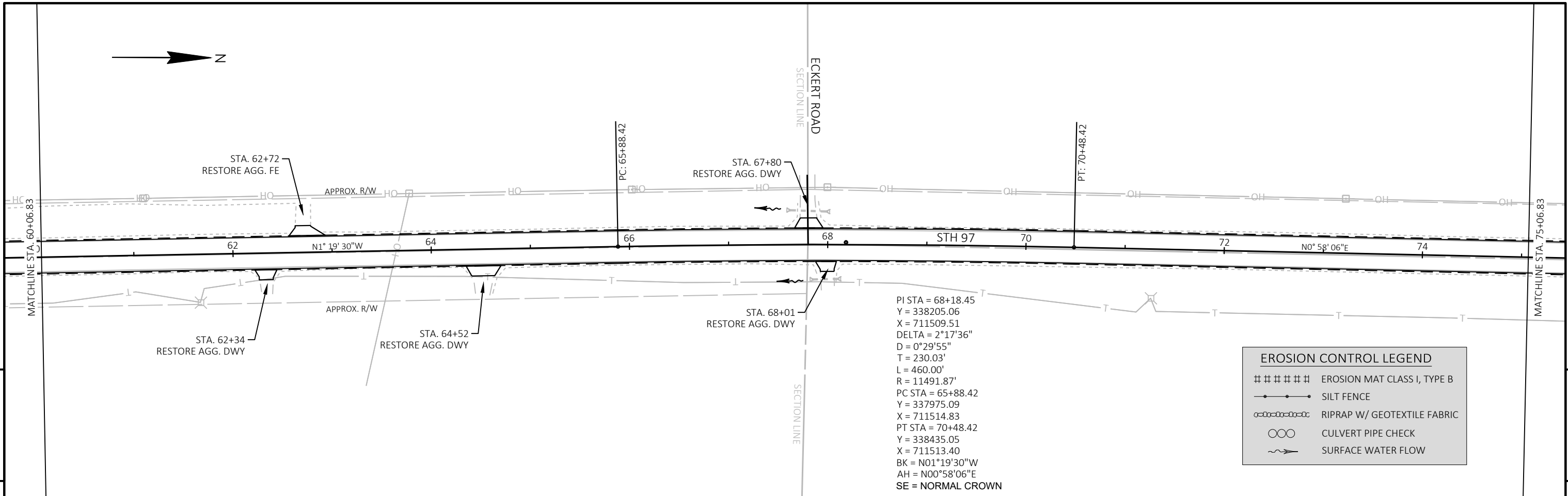
PROJECT NO: 9535-00-75      HWY: STH 97      COUNTY: TAYLOR      PLAN AND PROFILE: STH 97      SHEET: E



EROSION CONTROL LEGEND	
#####	EROSION MAT CLASS I, TYPE B
—●—●—●—●—●—	SILT FENCE
—○—○—○—○—○—○—	RIPRAP W/ GEOTEXTILE FABRIC
○ ○	CULVERT PIPE CHECK
~>	SURFACE WATER FLOW



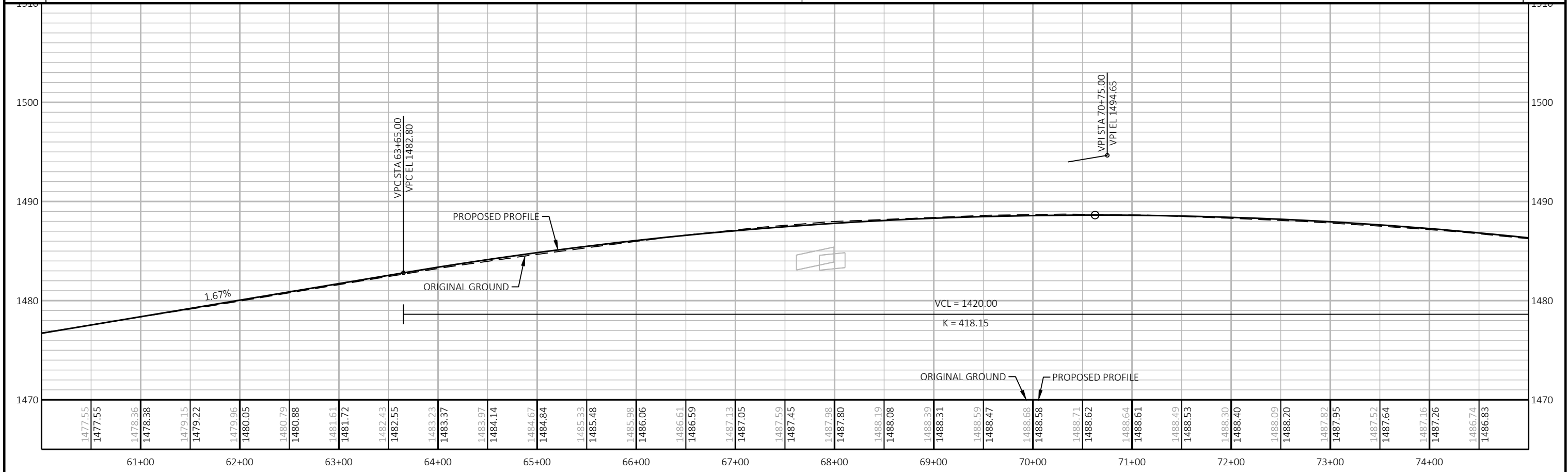
PROJECT NO: 9535-00-75	HWY: STH 97	COUNTY: TAYLOR	PLAN AND PROFILE: STH 97	SHEET	<b>E</b>
------------------------	-------------	----------------	--------------------------	-------	----------



PI STA = 68+18.45  
 Y = 338205.06  
 X = 711509.51  
 DELTA = 2°17'36"  
 D = 0°29'55"  
 T = 230.03'  
 L = 460.00'  
 R = 11491.87'  
 PC STA = 65+88.42  
 Y = 337975.09  
 X = 711514.83  
 PT STA = 70+48.42  
 Y = 338435.05  
 X = 711513.40  
 BK = N01°19'30"W  
 AH = N00°58'06"E  
 SE = NORMAL CROWN

**EROSION CONTROL LEGEND**

- ##### EROSION MAT CLASS I, TYPE B
- SILT FENCE
- RIPRAP W/ GEOTEXTILE FABRIC
- CULVERT PIPE CHECK
- ~> SURFACE WATER FLOW



PROJECT NO: 9535-00-75	HWY: STH 97	COUNTY: TAYLOR	PLAN AND PROFILE: STH 97	SHEET
------------------------	-------------	----------------	--------------------------	-------





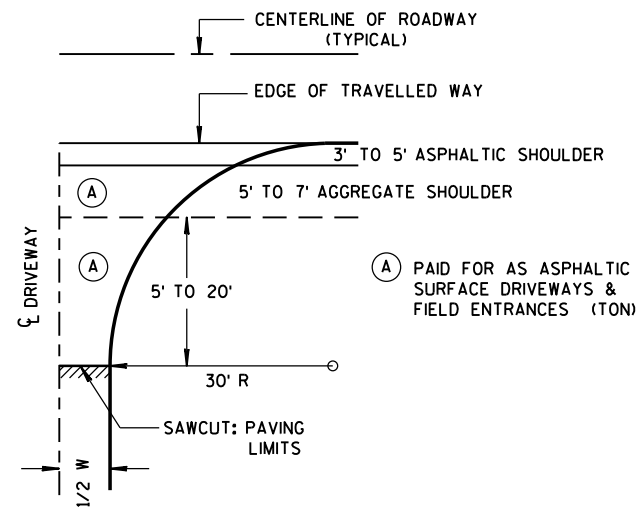


## Standard Detail Drawing List

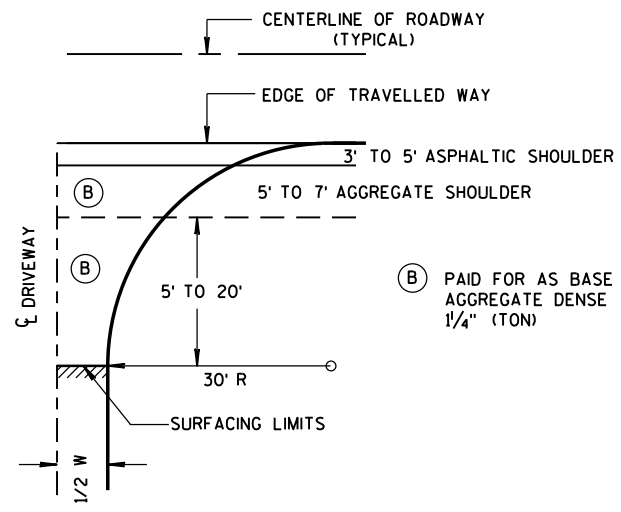
08D22-01	DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F10-01	CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH
13A08-01	ASPHALTIC RUMBLE STRIPS AT INTERSECTION
13C19-03	HMA LONGITUDINAL JOINTS
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-08C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M. P. H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C11-08B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-07	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C19-06A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C35-04A	PAVEMENT MARKING (INTERSECTIONS)
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING

**GENERAL NOTES**

- ① DESIGN WILL DETERMINE FINAL DRIVEWAY ASPHALTIC THICKNESS BASED ON TYPE OF USAGE AND LOADINGS.

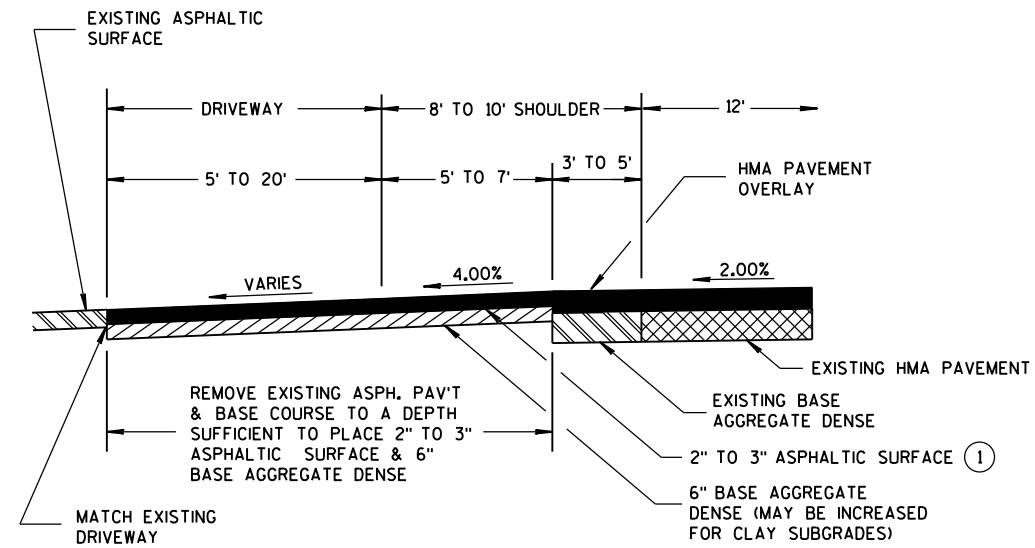


W MIN. = 16'  
W MAX. = 24'

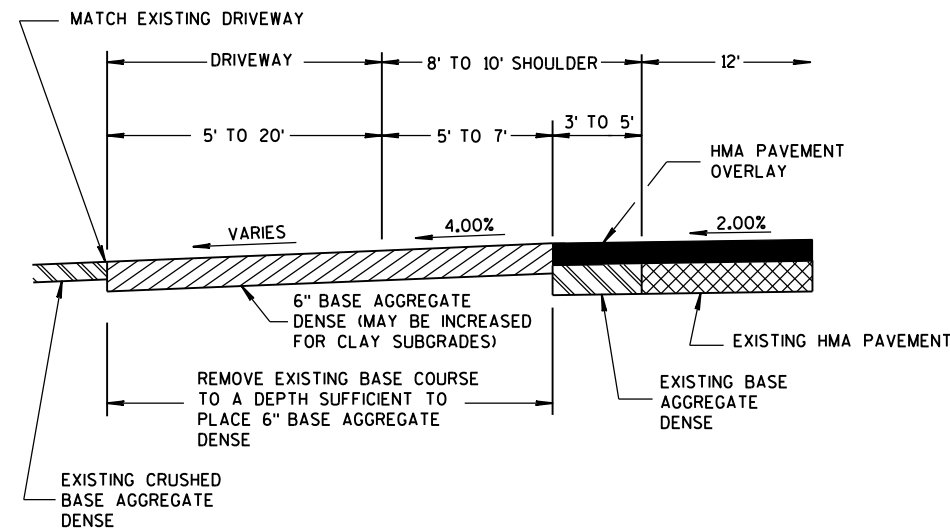


**PLAN VIEW  
HALF SECTION**

**PLAN VIEW  
HALF SECTION**



**PROFILE VIEW  
RURAL ENTRANCE  
WITH ASPHALTIC SURFACE  
RESURFACING PROJECTS**



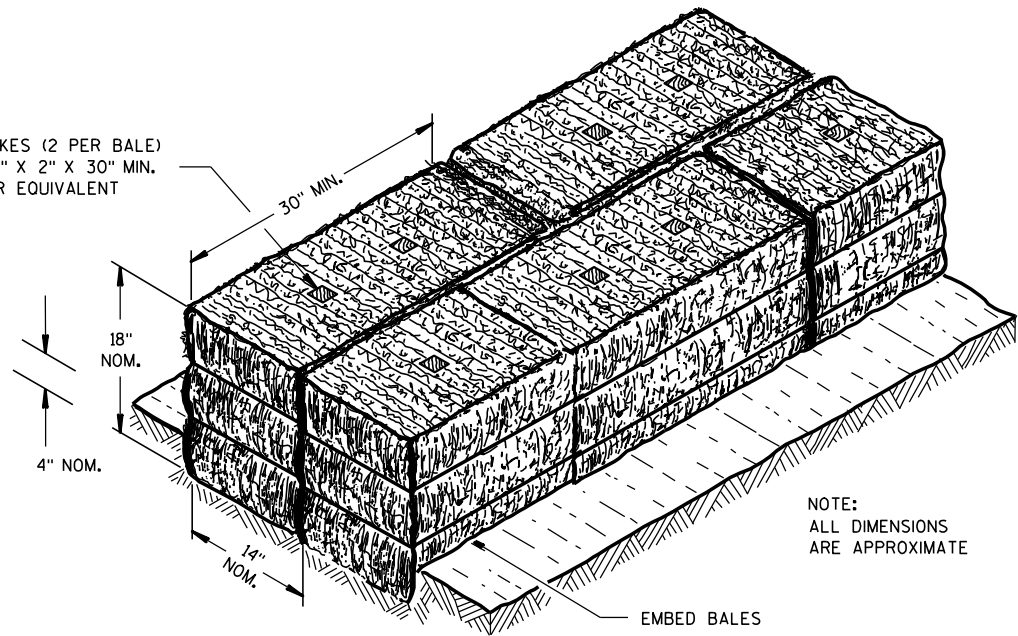
**PROFILE VIEW  
RURAL ENTRANCE  
WITH AGGREGATE SURFACE  
6" BASE AGGREGATE DENSE  
RESURFACING PROJECTS**

6

6

<b>DRIVEWAYS WITHOUT CURB &amp; GUTTER RESURFACING PROJECTS RURAL</b>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED December, 2016	/s/ Rodney Taylor ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
DATE	FHWA

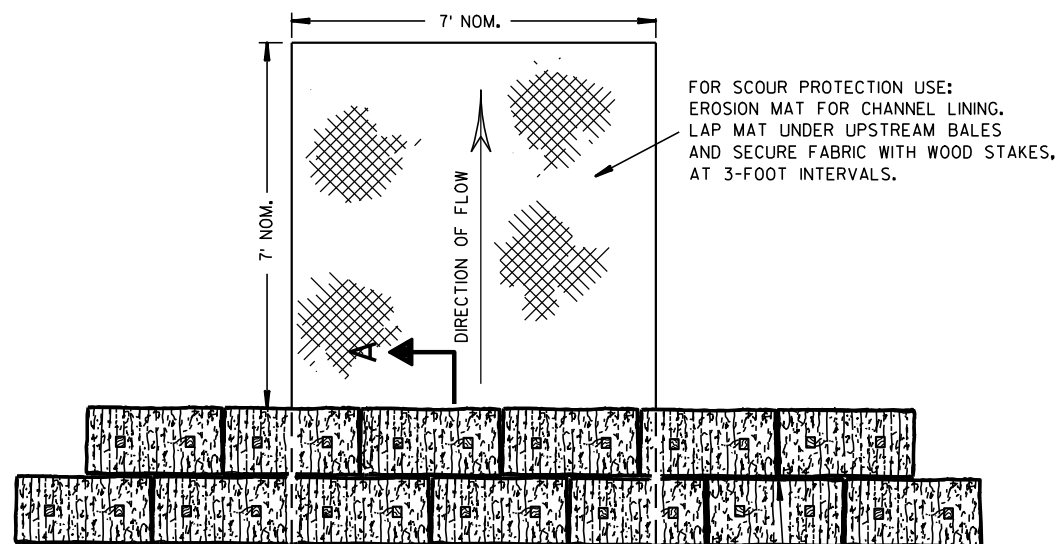
WOOD STAKES (2 PER BALE)  
NOMINAL 2" X 2" X 30" MIN.  
LENGTH OR EQUIVALENT



NOTE:  
ALL DIMENSIONS  
ARE APPROXIMATE

EMBED BALES

SECTION A-A

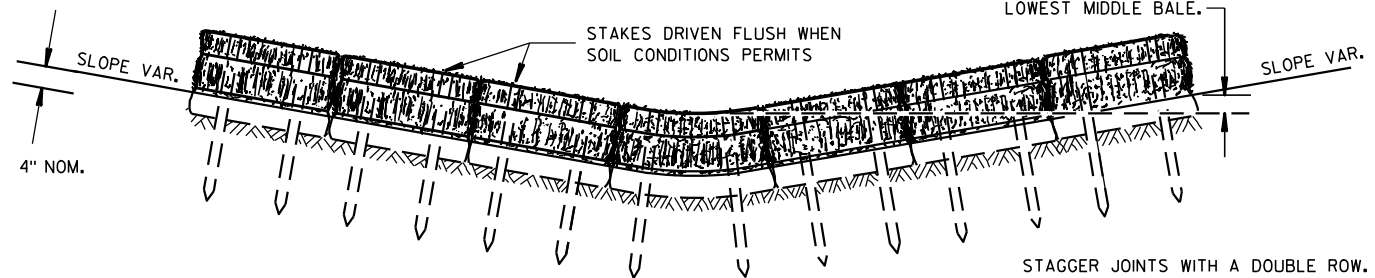


FOR SCOUR PROTECTION USE:  
EROSION MAT FOR CHANNEL LINING.  
LAP MAT UNDER UPSTREAM BALES  
AND SECURE FABRIC WITH WOOD STAKES,  
AT 3-FOOT INTERVALS.

STAGGER JOINTS BETWEEN ADJACENT  
ROWS OF BALES.

PLAN VIEW

BOTTOM ELEVATION OF END BALE SHALL  
BE EQUAL TO OR GREATER THAN TOP OF  
LOWEST MIDDLE BALE.



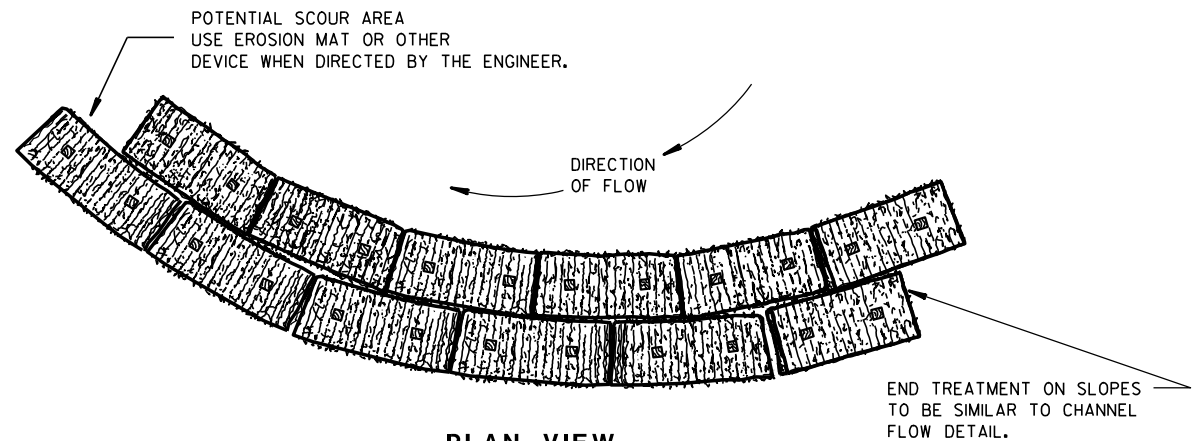
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

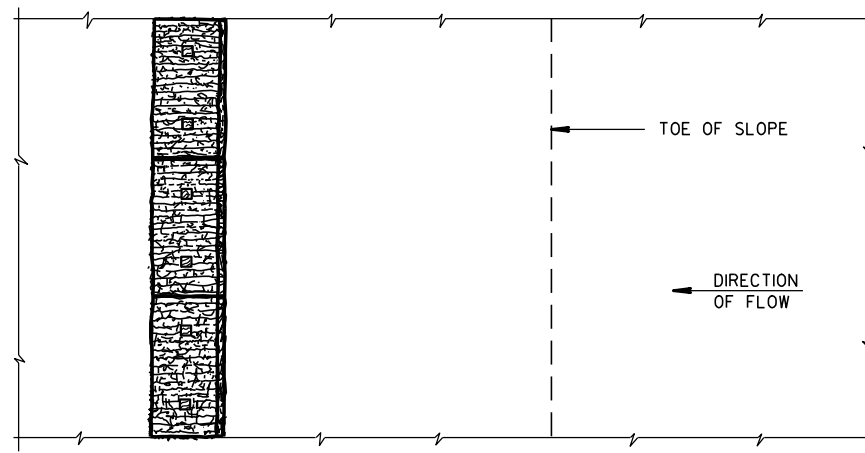
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

- ① TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

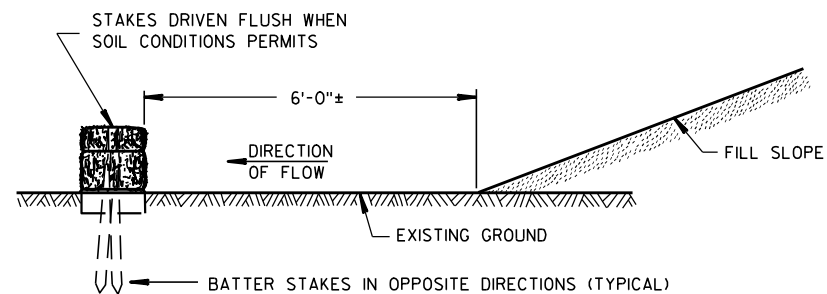


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

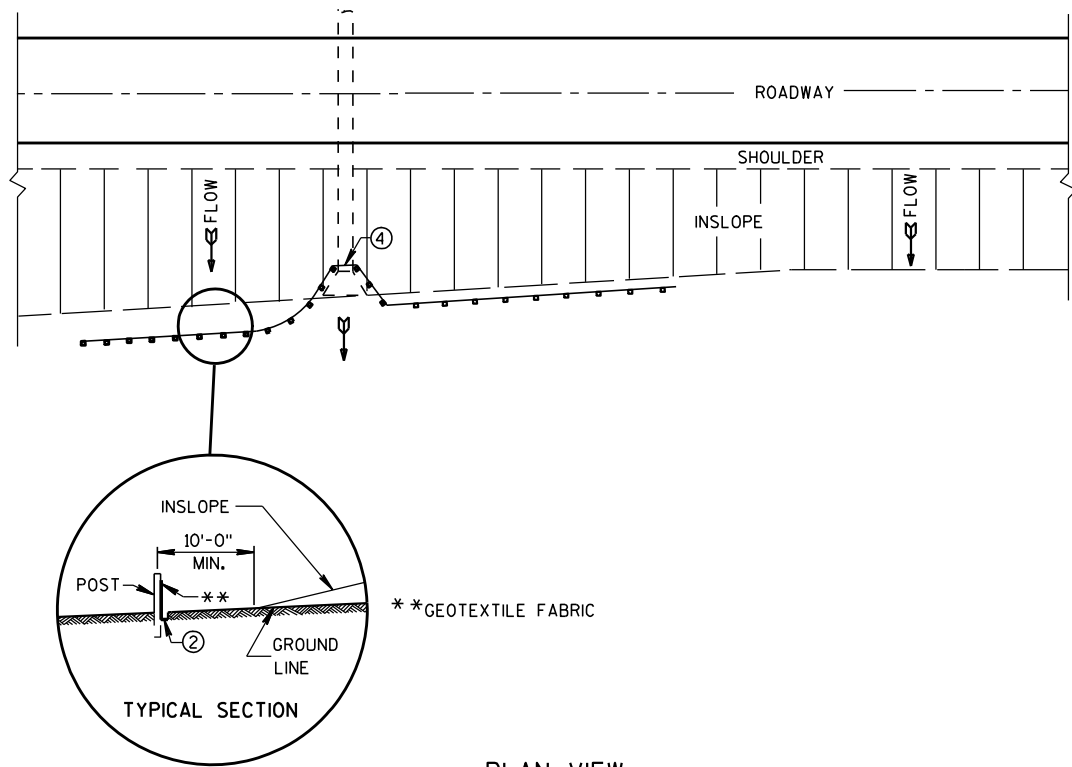
WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

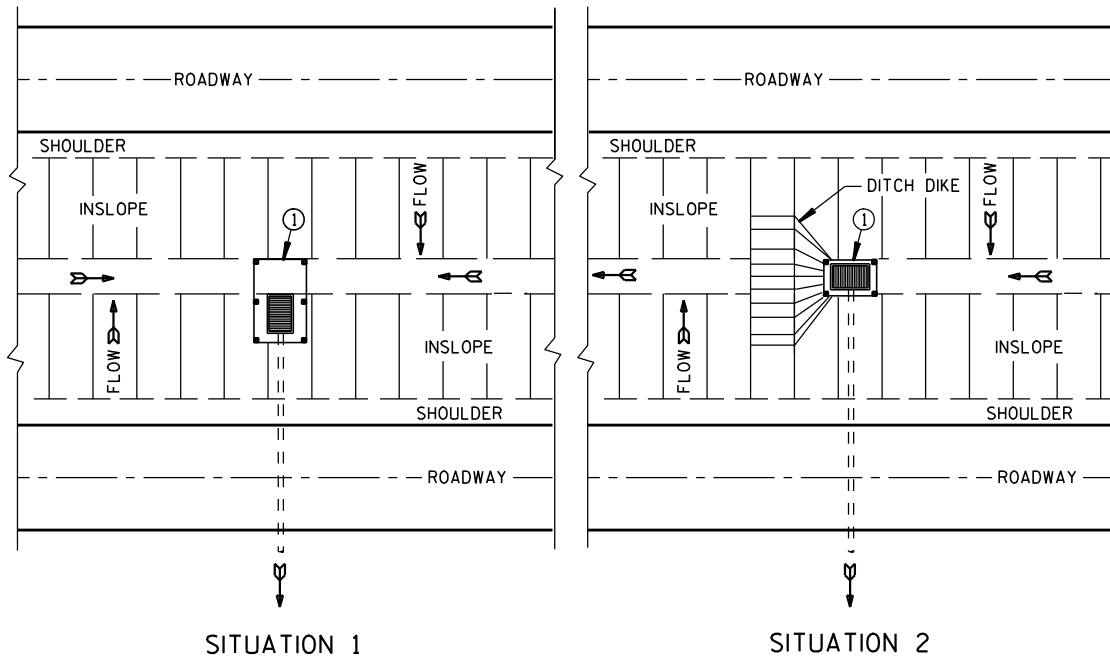
TYPICAL INSTALLATIONS OF  
EROSION BALES / TEMPORARY  
DITCH CHECKS

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
 6/04/02 /S/ Beth Canestra  
 DATE CHIEF ROADWAY DEVELOPMENT ENGINEER  
 FHWA



PLAN VIEW  
TYPICAL APPLICATION OF SILT FENCE

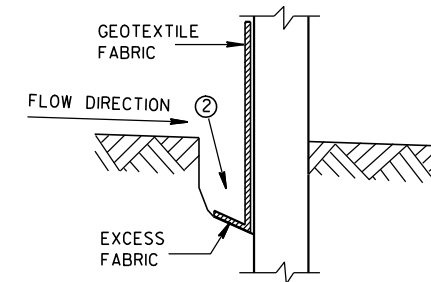


SITUATION 1 SITUATION 2  
PLAN VIEW  
SILT FENCE AT MEDIAN SURFACE DRAINS

**GENERAL NOTES**

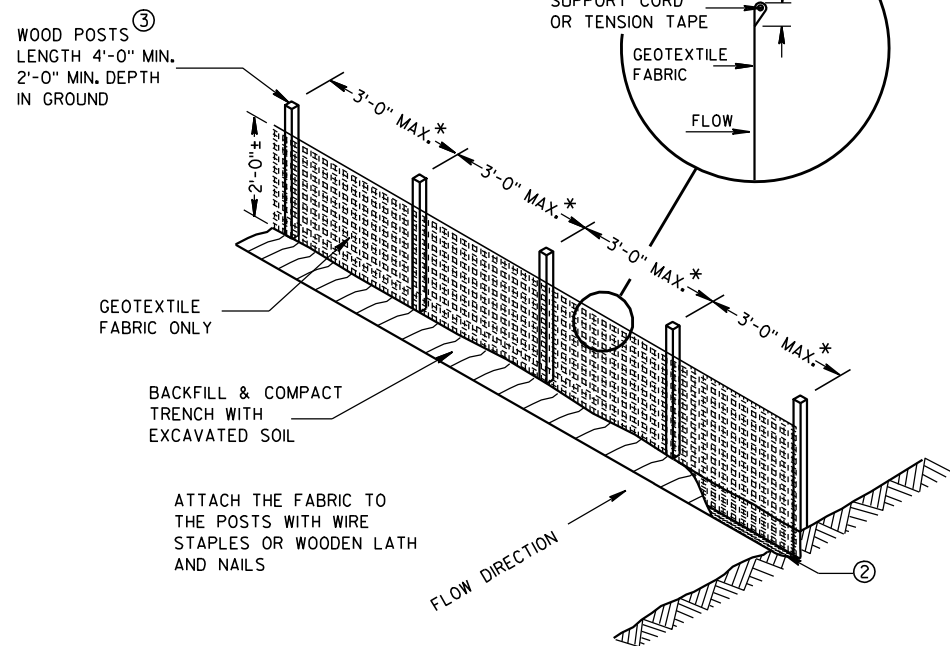
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

- 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.



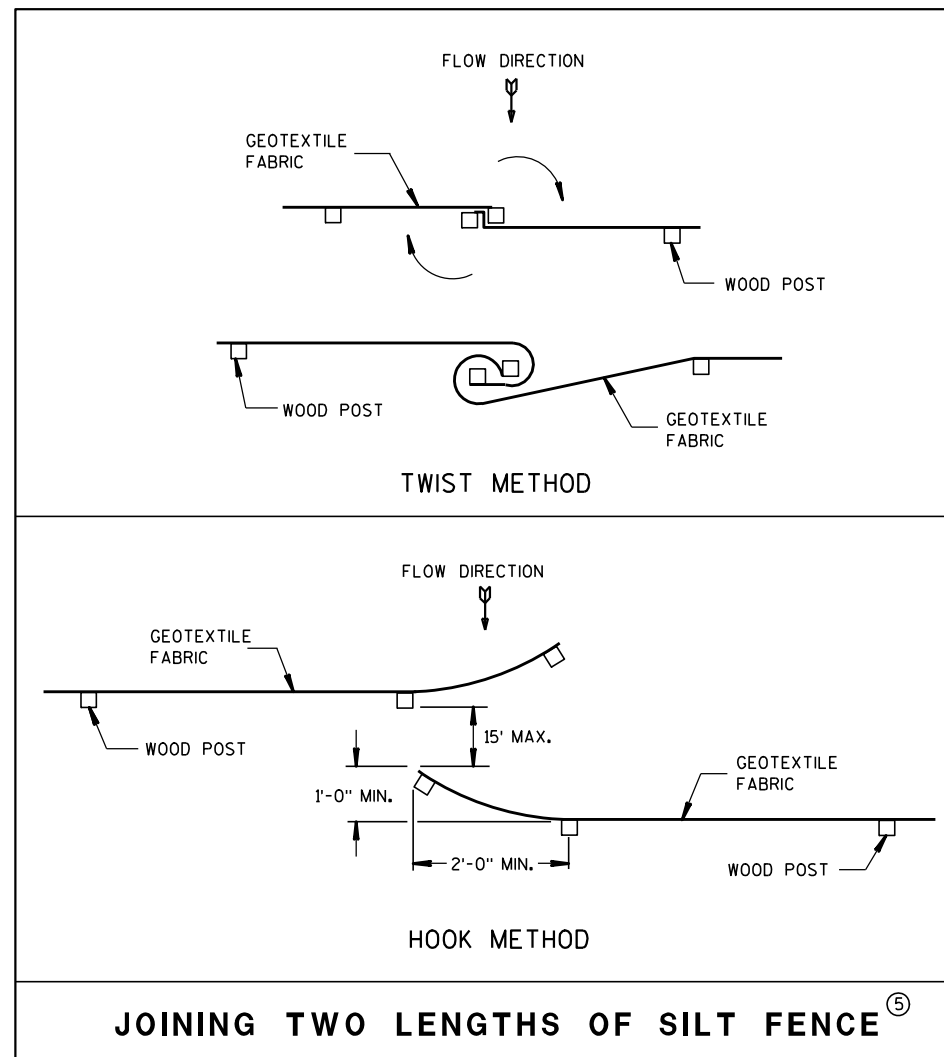
TRENCH DETAIL

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

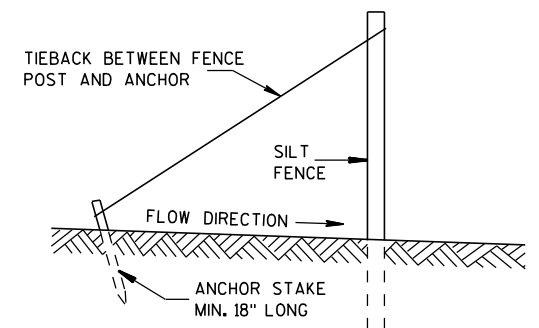


SILT FENCE

\* NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.



JOINING TWO LENGTHS OF SILT FENCE ⑤

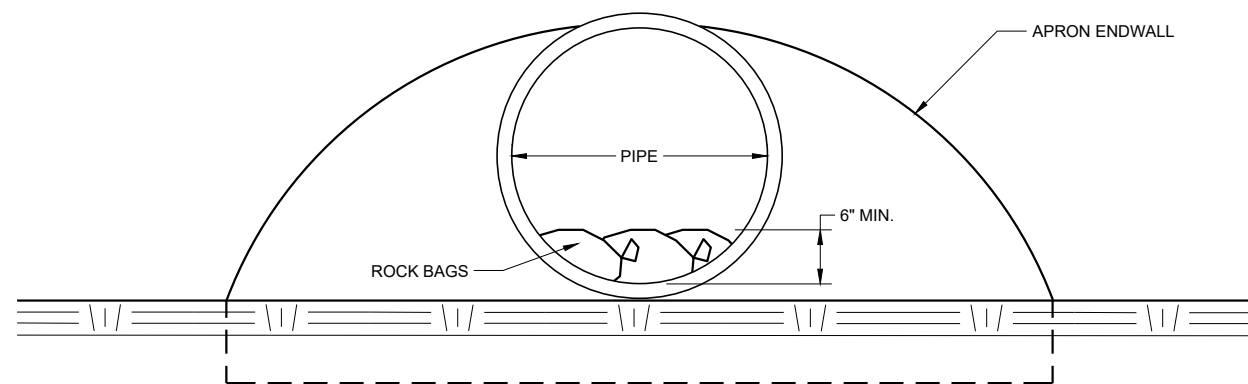


SILT FENCE TIE BACK  
(WHEN REQUIRED BY THE ENGINEER)

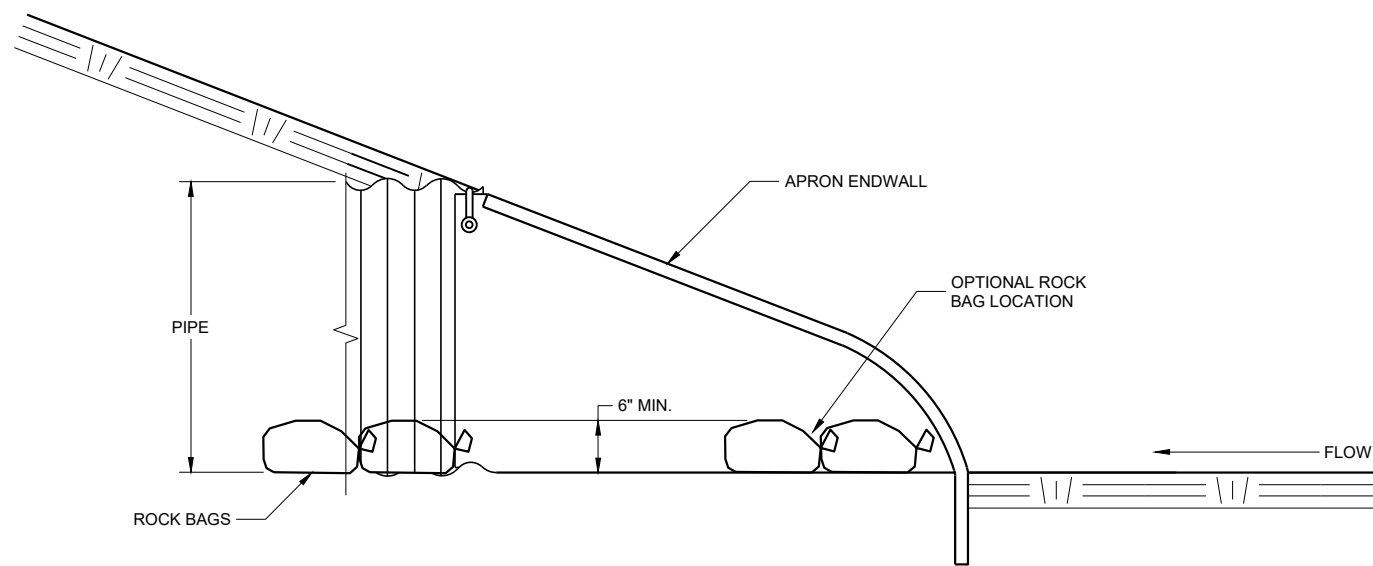
**SILT FENCE**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
4-29-05 /S/ Beth Canestra  
DATE CHIEF ROADWAY DEVELOPMENT ENGINEER  
FHWA



END VIEW



SIDE VIEW

**CULVERT PIPE CHECK**  
 (INSTALL ON INLET END ONLY)

**CULVERT PIPE CHECK**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
 May 2019 /S/ Daniel Schave  
 DATE EROSION CONTROL ENGINEER

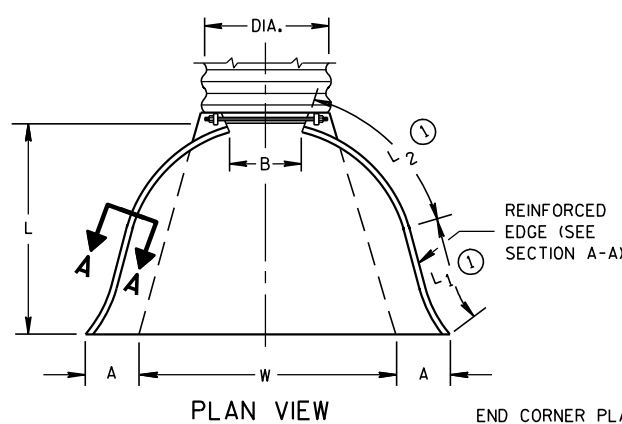
FHWA

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	L2	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.

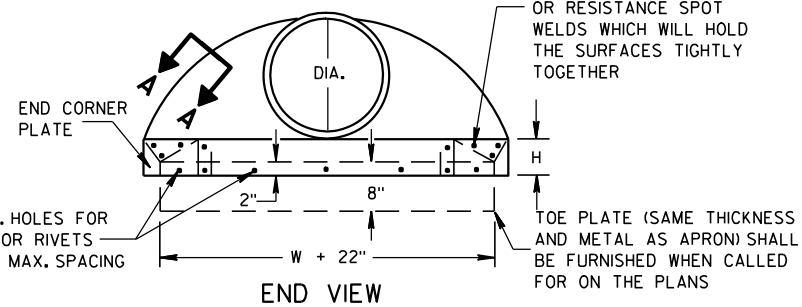
\* EXCEPT CENTER PANEL SEE GENERAL NOTES

REINFORCED CONCRETE APRON ENDWALLS									
PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE	
	T	A	B	C	D	E	G		
12	2	4	24	48 1/8	72 1/8	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 1/2 to 1	
60	6	30-35	60	39	99	96	5	2 to 1	
66	6 1/2	30-35	72-78	21-27	99	102	5 1/2	2 to 1	
72	7	30-35	78	21	99	108	6	2 to 1	
78	7 1/2	30-35	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	

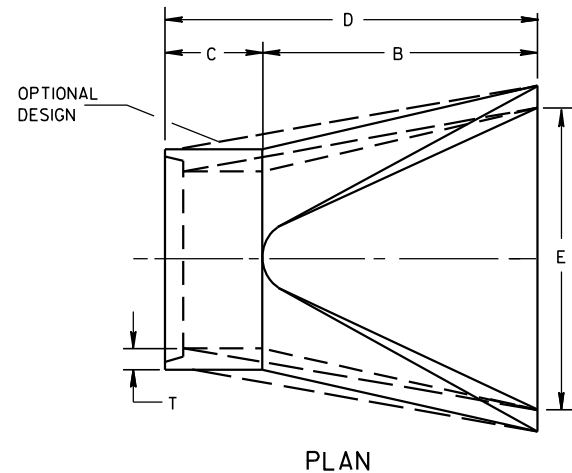
\* MINIMUM  
\*\* MAXIMUM



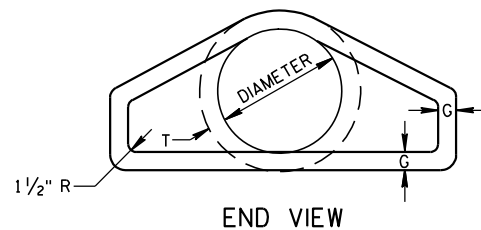
END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER



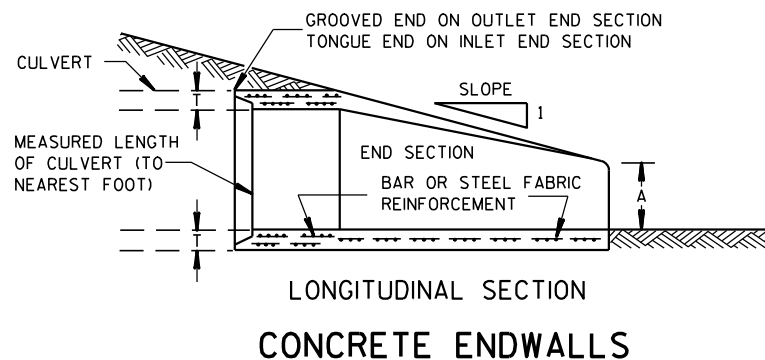
SIDE ELEVATION  
METAL ENDWALLS



PLAN

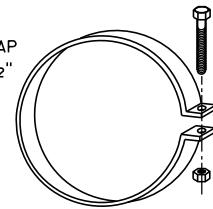


END VIEW

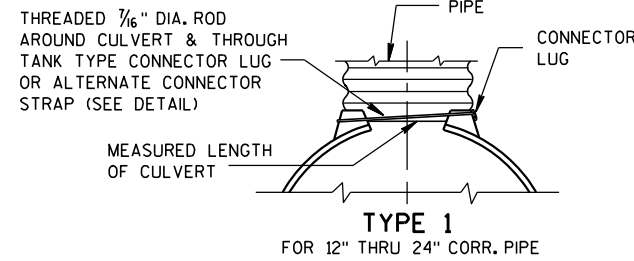


LONGITUDINAL SECTION  
CONCRETE ENDWALLS

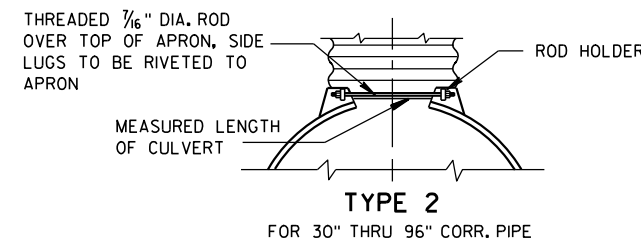
1" WIDE, 12 GA. (0.109" THICK) GALVANIZED STRAP WITH STANDARD 6" X 1/2" BAND BOLT AND NUT



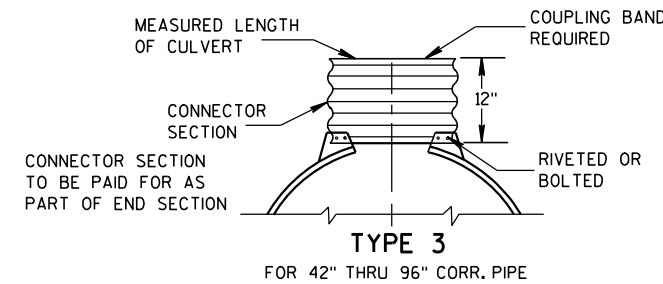
ALTERNATE FOR TYPE 1 CONNECTION  
END SECTION CONNECTOR STRAP



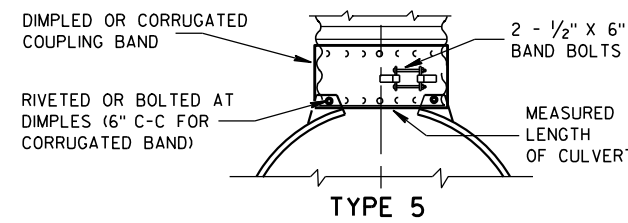
TYPE 1  
FOR 12" THRU 24" CORR. PIPE



TYPE 2  
FOR 30" THRU 96" CORR. PIPE



TYPE 3  
FOR 42" THRU 96" CORR. PIPE



ALTERNATE FOR:  
ALL SIZES CORRUGATED CIRCULAR PIPE

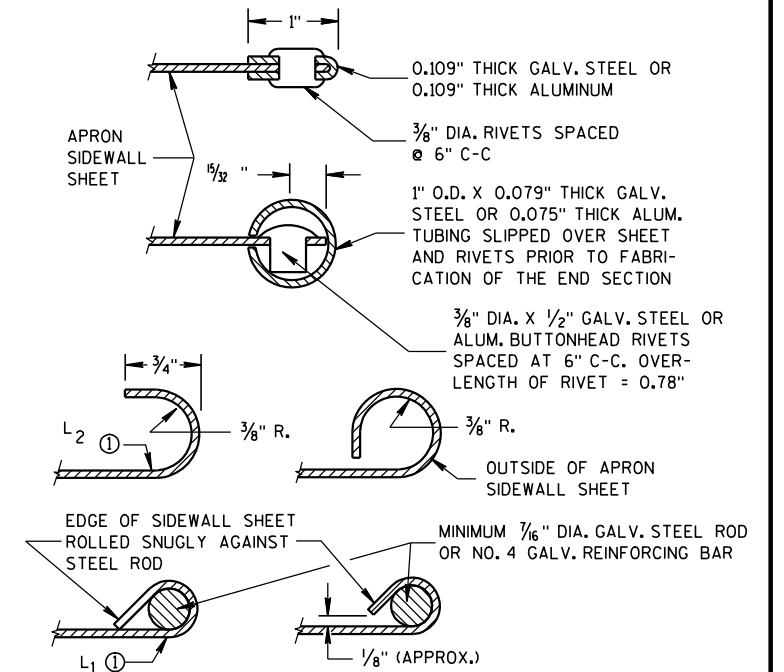
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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 VICE 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.

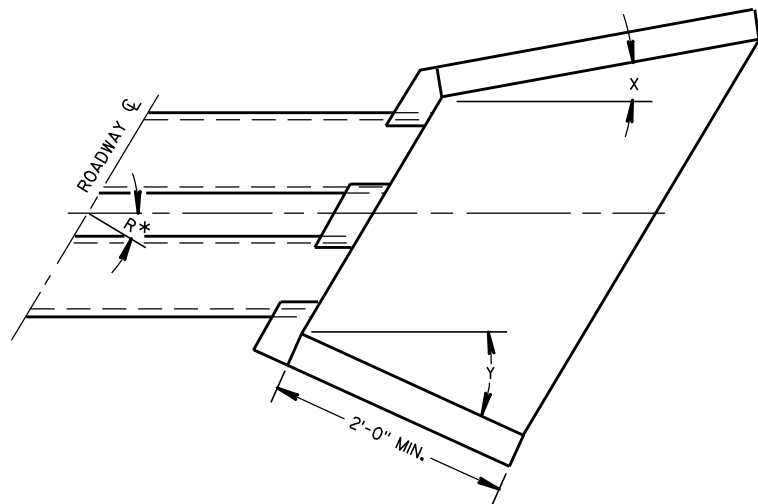
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR  
CULVERT PIPE

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

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





**WINGWALL ANGLE DETAILS**

INLET			OUTLET		
R*	X	Y	R*	X	Y
0 - 7°	30°	30°	0 - 15°	15°	15°
8 - 22°	25°	"	16 - 45°	10°	"
23 - 37°	20°	"	46 - 75°	5°	"
38 - 52°	15°	"	OVER 75°	0°	"
53 - 67°	10°	"			
68 - 82°	5°	"			
OVER 82°	0°	"			

\*R = NUMBER OF DEGREES RIGHT OR LEFT HAND FORWARD

**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.

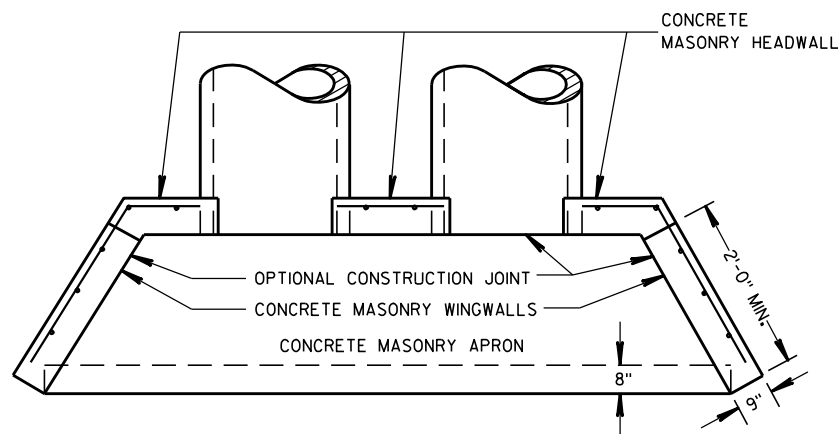
FILL SLOPES FLATTER THAN 2 1/2:1 SHALL BE WARPED TO MEET THE TOP OF THE WINGWALLS.

ALL STEEL REINFORCEMENT AND WELDED STEEL WIRE FABRIC SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE NOTED.

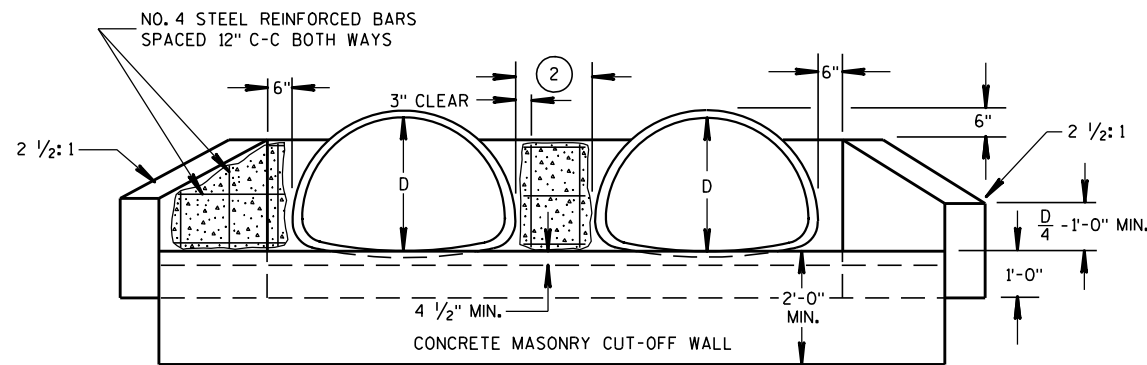
1 MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS SPACED 12" C-C IN BOTH DIRECTIONS.

2 THE SPACE BETWEEN PIPES SHALL BE AS FOLLOWS:

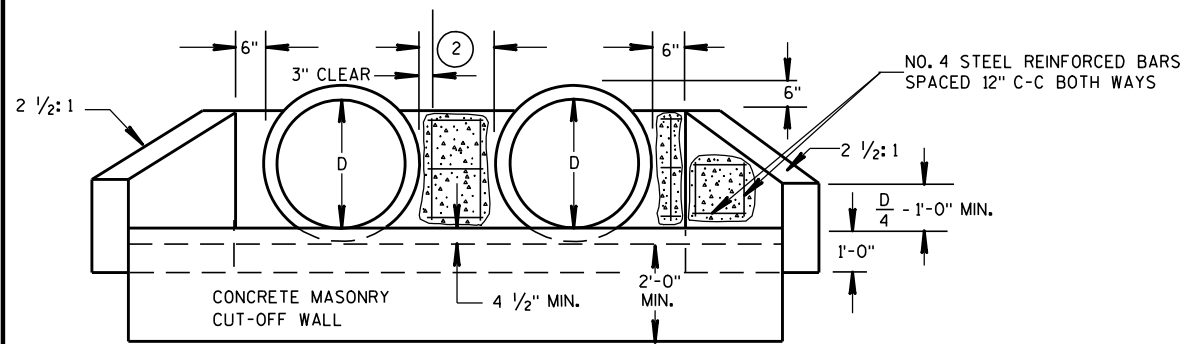
DIAMETER OR SPAN	SPACE
UP TO AND INCLUDING 48"	2'-0"
OVER 48" TO 72"	1/2 DIA. OR SPAN
OVER 72"	3'-0"



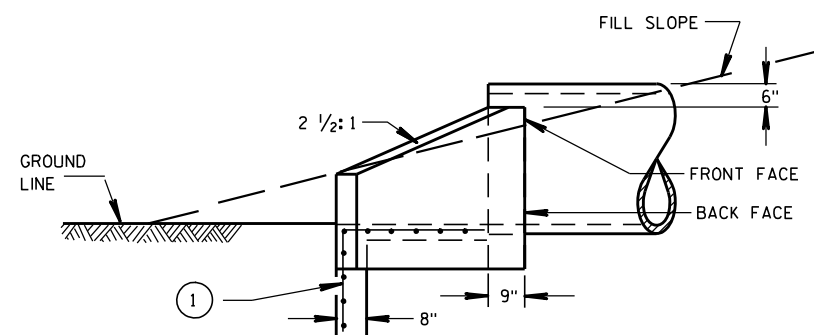
**PLAN VIEW  
CULVERT PIPE AND PIPE ARCH**



**END ELEVATION  
PIPE ARCH**



**END ELEVATION  
CULVERT PIPE**



**SIDE ELEVATION  
CULVERT PIPE AND PIPE ARCH**

6

6

S.D.D. 8 F 10-1

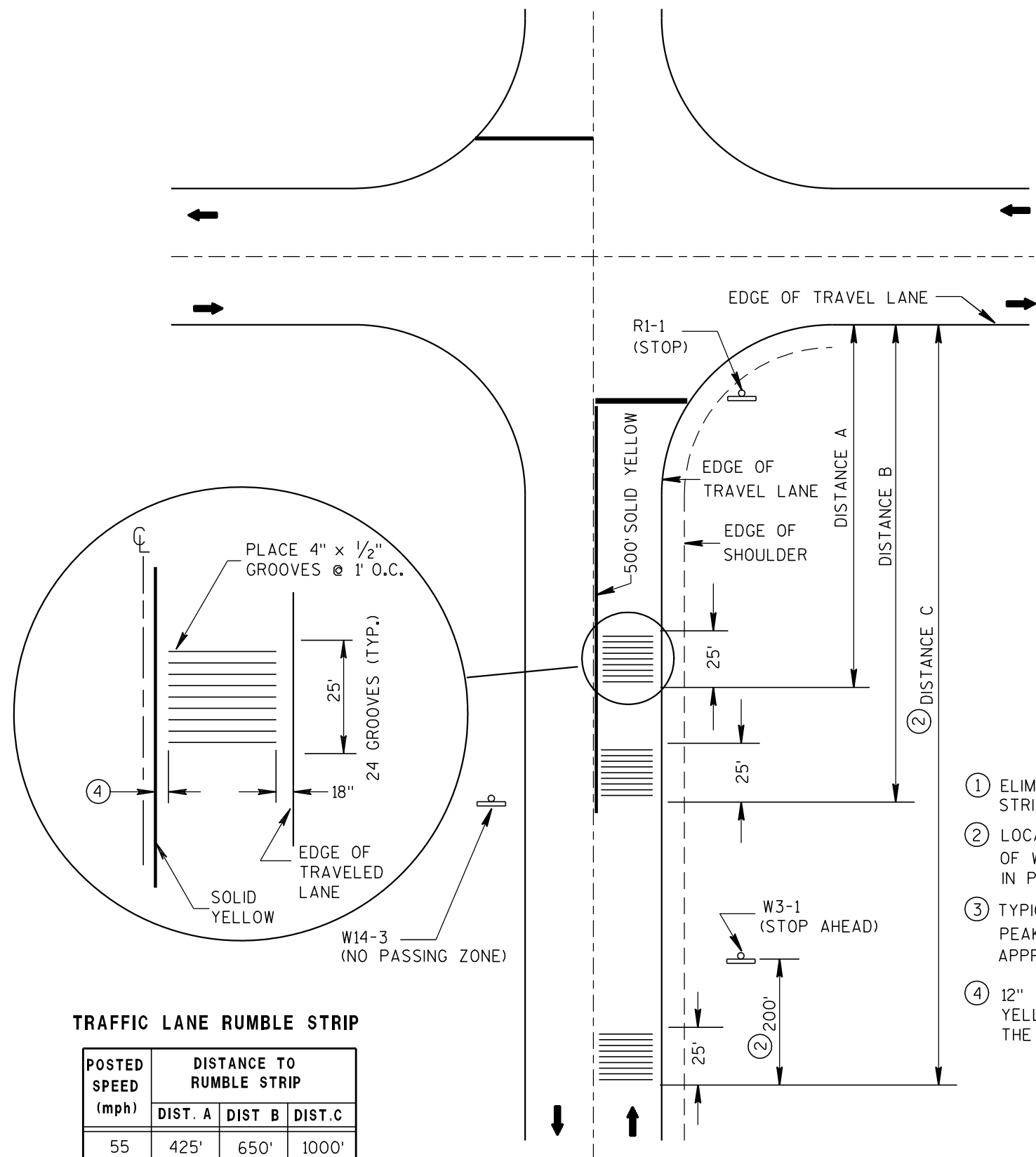
S.D.D. 8 F 10-1

**CONCRETE MASONRY ENDWALLS  
FOR CULVERT PIPE AND  
PIPE ARCH**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
9/14/98 /S/ Rory L. Rhinesmith  
DATE CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA



**TRAFFIC LANE RUMBLE STRIP**

POSTED SPEED (mph)	DISTANCE TO RUMBLE STRIP		
	DIST. A	DIST. B	DIST. C
55	425'	650'	1000'
50	325'	450'	800'
45	275'	400'	650'
40	225'	①	550'
35	175'	①	475'
≤ 30	125'	①	425'

ARROW SYMBOL (➔) SHOWS DIRECTION OF TRAVEL

**PLAN VIEW  
RUMBLE STRIP LOCATION**

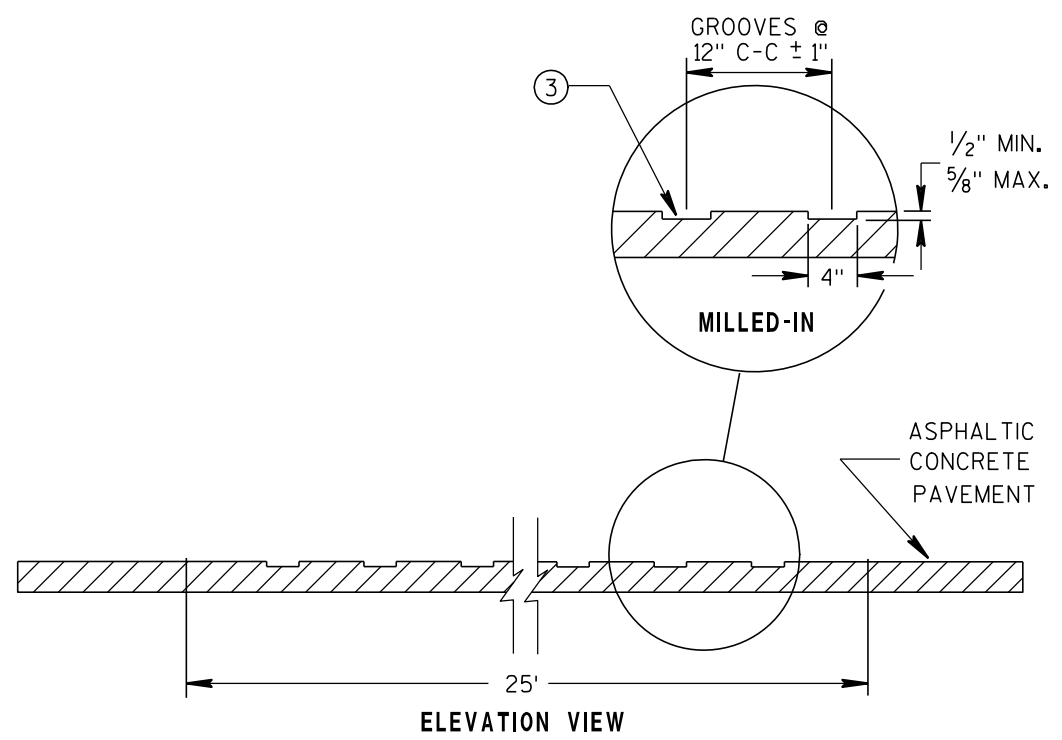
- ① ELIMINATE THE MIDDLE SET OF RUMBLE STRIPS.
- ② LOCATE RUMBLE STRIP 200' IN ADVANCE OF W3-1 SIGN AS SHOWN. IF W3-1 IS NOT IN PLACE, USE DISTANCE C.
- ③ TYPICAL VERTICAL VARIATION BETWEEN PEAKS AND VALLEYS WITHIN THE CUT APPROXIMATELY 1/16"
- ④ 12" CLEAR BETWEEN THE SOLID YELLOW LINE AND THE EDGE OF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

**GENERAL NOTES**

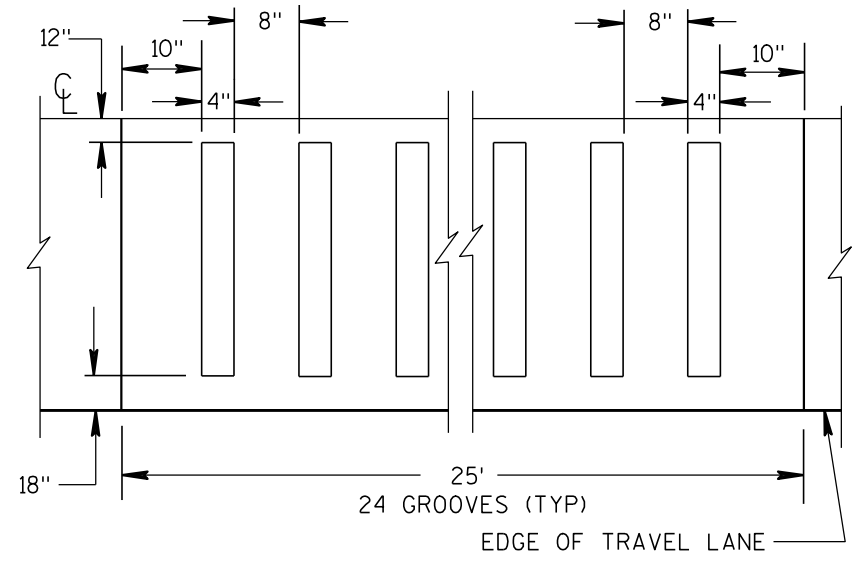
CONTRACTOR SHALL CONFIRM RUMBLE STRIP LOCATION WITH THE ENGINEER PRIOR TO INSTALLATION. THE ENGINEER MAY MODIFY THE RUMBLE STRIP LOCATION AS FIELD CONDITIONS DICTATE.

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

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

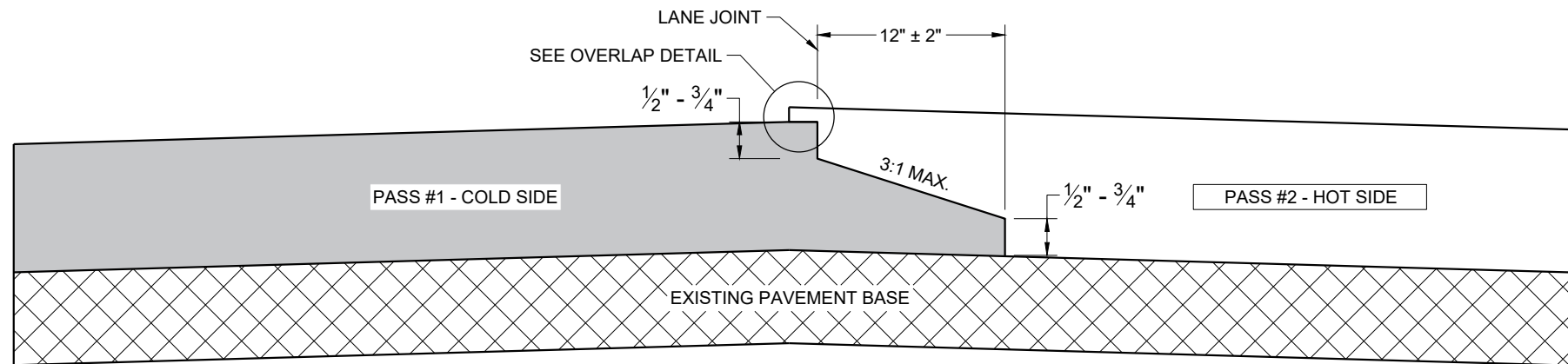


**ELEVATION VIEW**

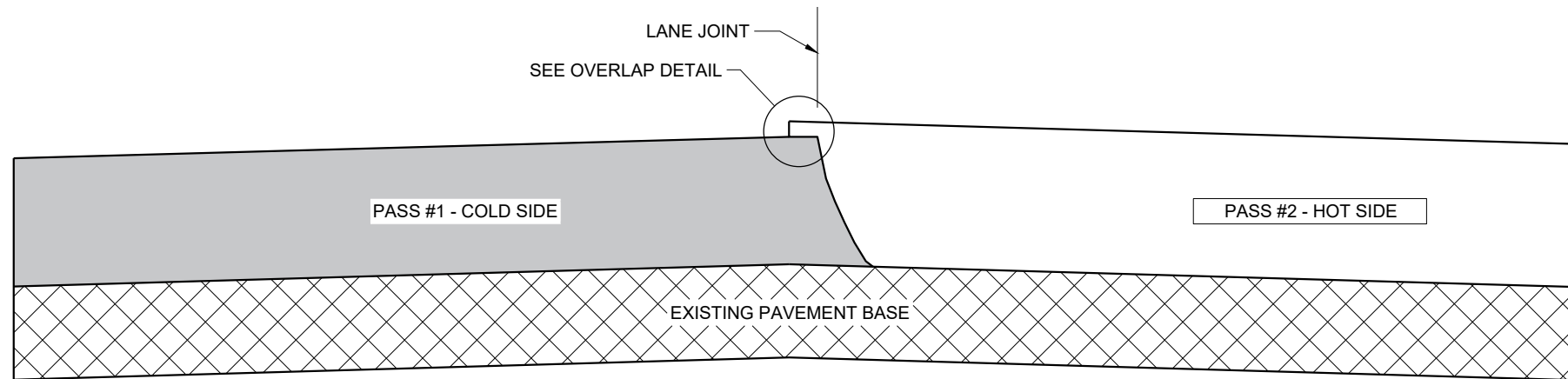


**PLAN VIEW  
ASPHALTIC PAVEMENT  
MILLED-IN**

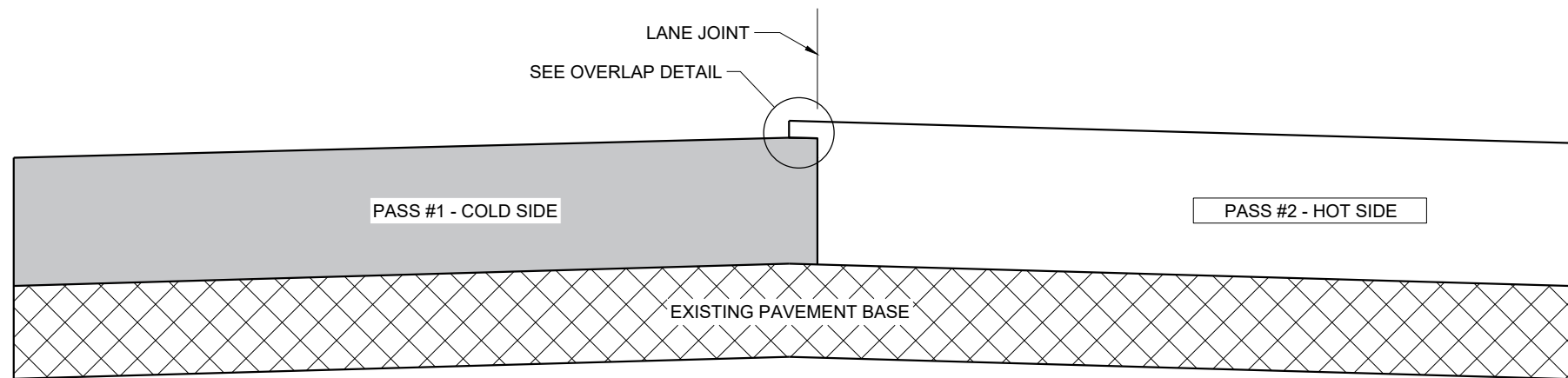
<b>ASPHALTIC RUMBLE STRIPS AT INTERSECTION</b>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 8/17/2011 DATE	/s/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	



**TYPICAL PAVEMENT CROSS SECTION  
NOTCHED WEDGE JOINT**



**TYPICAL PAVEMENT CROSS SECTION  
VERTICAL JOINT**



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

**GENERAL NOTES**

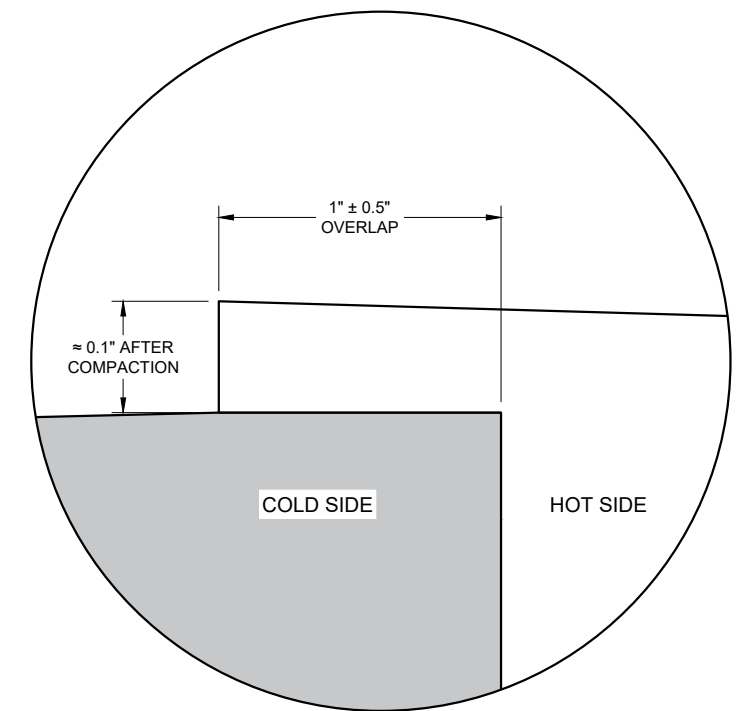
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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

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

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

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



**OVERLAP DETAIL (TYPICAL)**

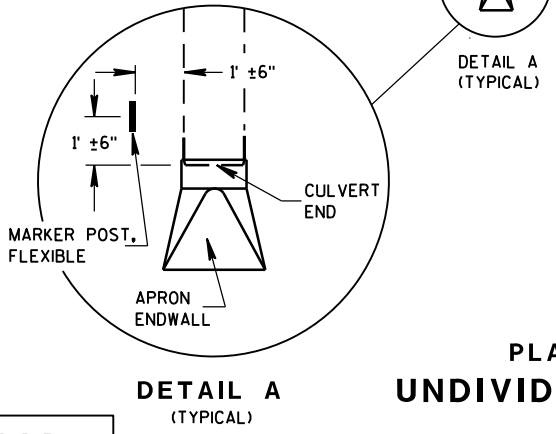
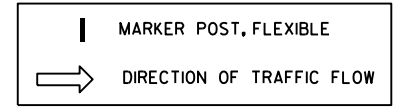
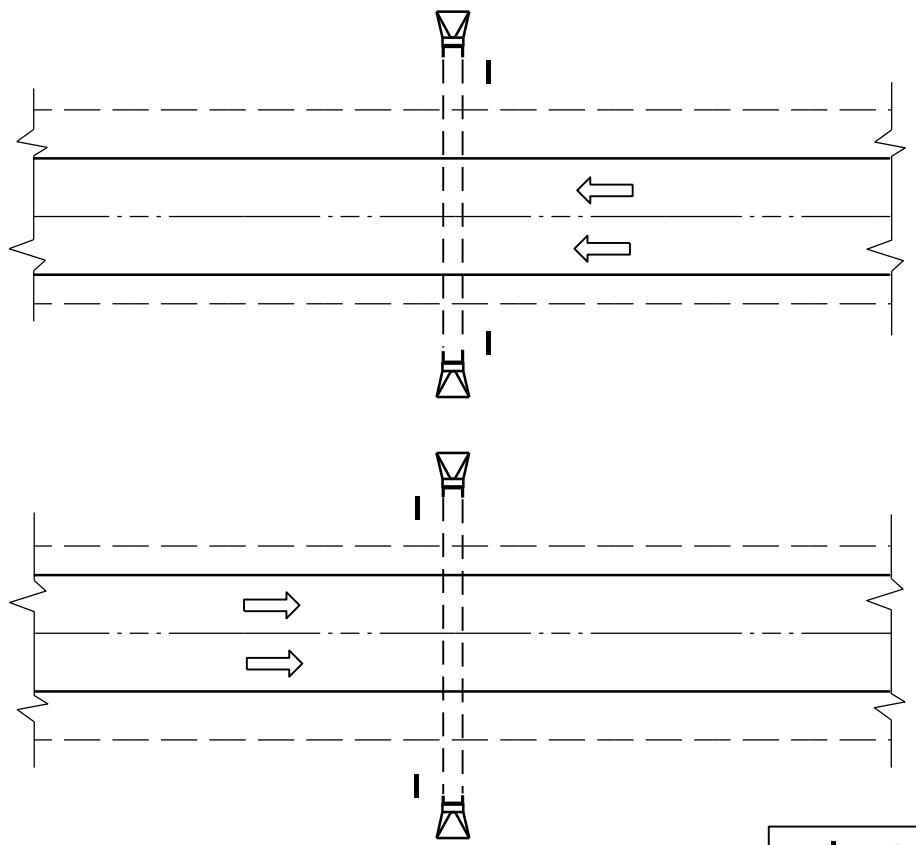
6

6

SDD 13C19 - 03

SDD 13C19 - 03

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

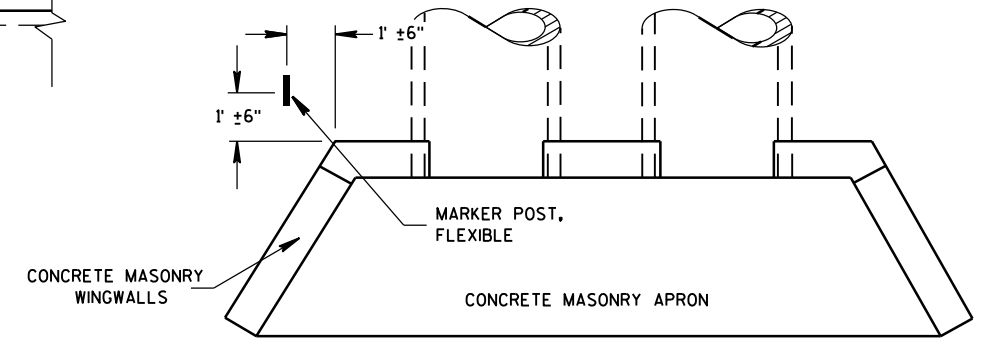


PLAN VIEW UNDIVIDED HIGHWAY

FLEXIBLE MARKER POST LOCATION

GENERAL NOTES

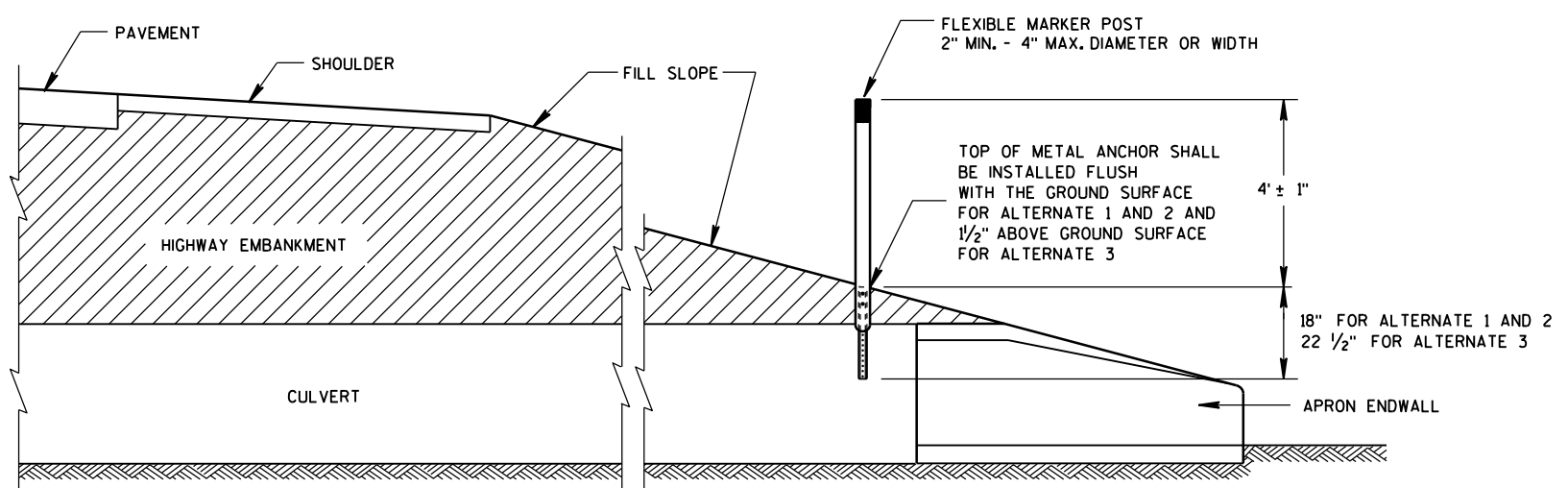
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

6

6



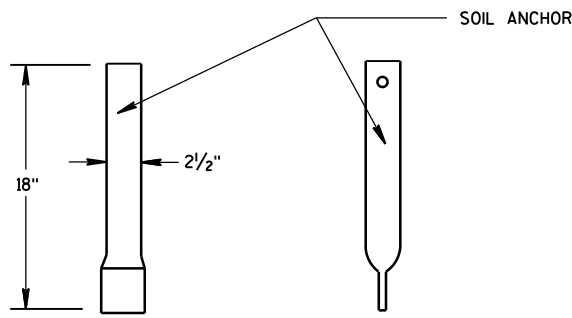
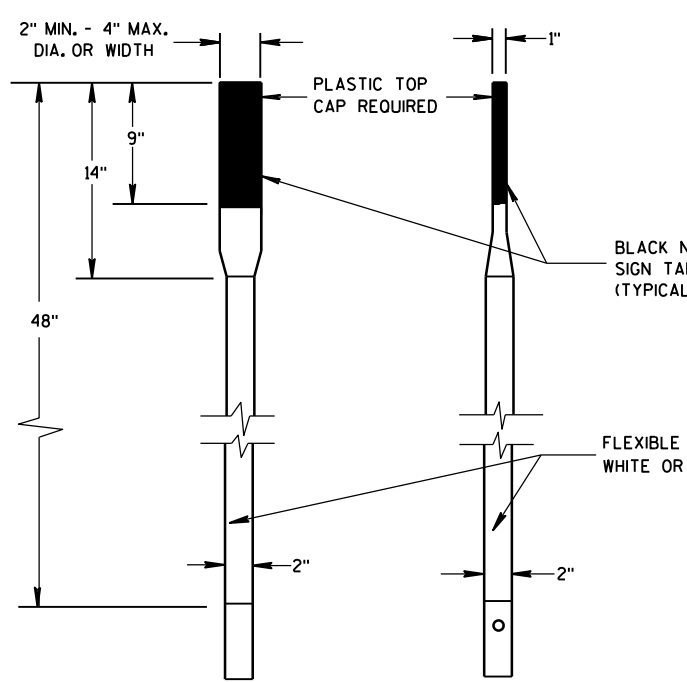
CROSS SECTION FLEXIBLE MARKER POST

FLEXIBLE MARKER POST FOR CULVERT END

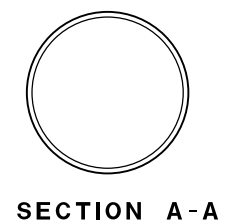
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

S.D.D. 15 A 3-2a

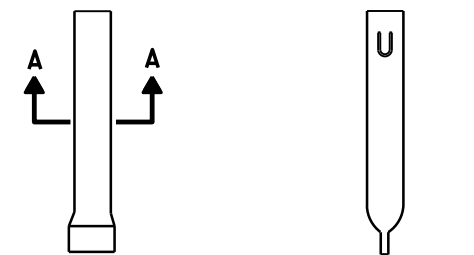
S.D.D. 15 A 3-2a



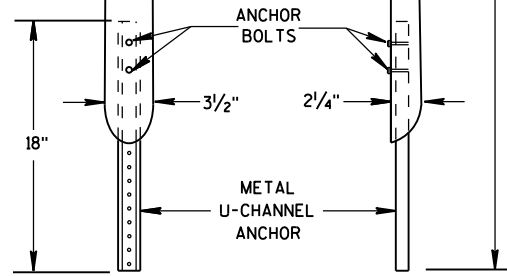
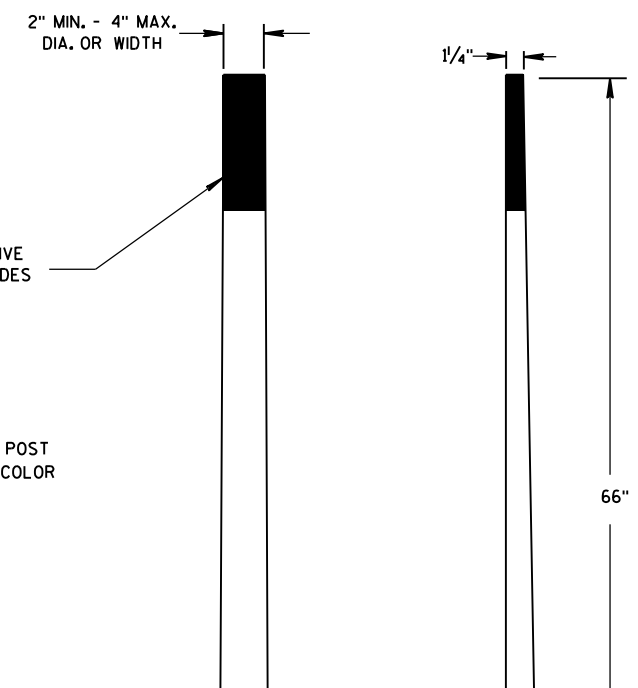
FRONT VIEW SIDE VIEW  
ALTERNATE 1



SECTION A-A

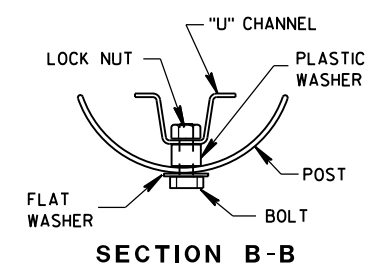


FRONT VIEW SIDE VIEW  
ALTERNATE 1

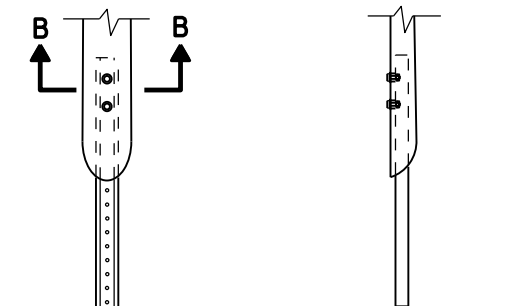


FRONT VIEW SIDE VIEW  
ALTERNATE 2

**FLEXIBLE MARKER POSTS**

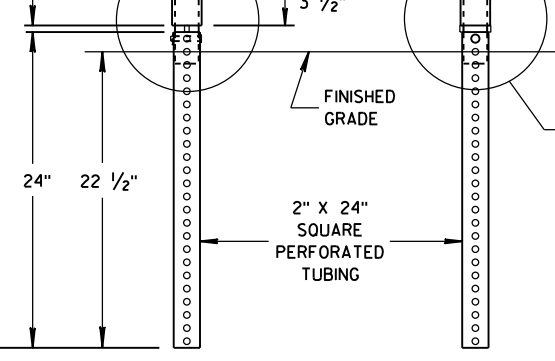
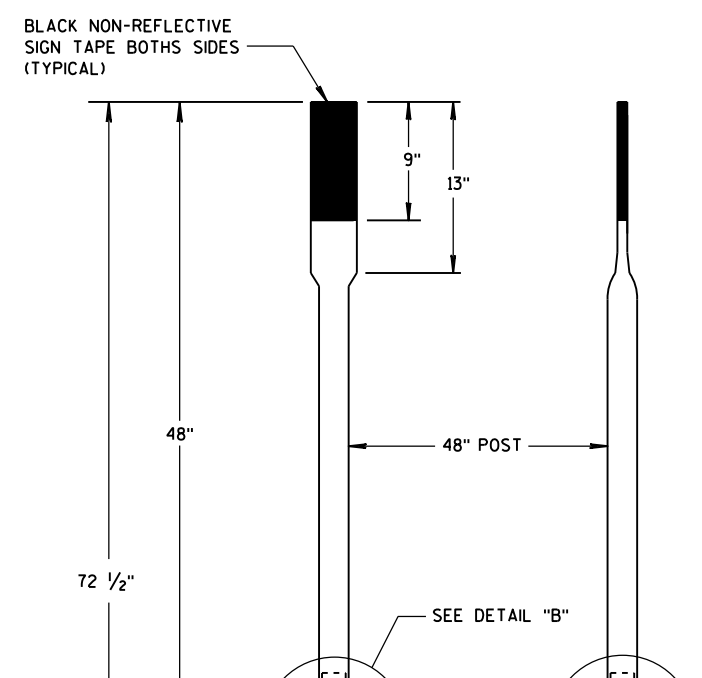


SECTION B-B

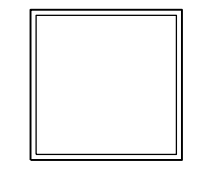


FRONT VIEW SIDE VIEW  
ALTERNATE 2

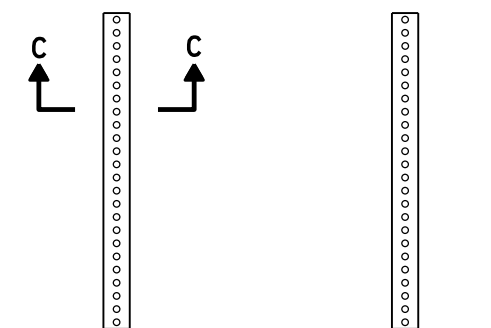
**FLEXIBLE MARKER POST ANCHORS**



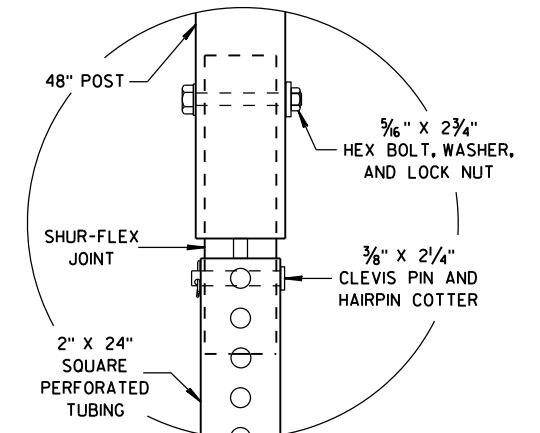
FRONT VIEW SIDE VIEW  
ALTERNATE 3



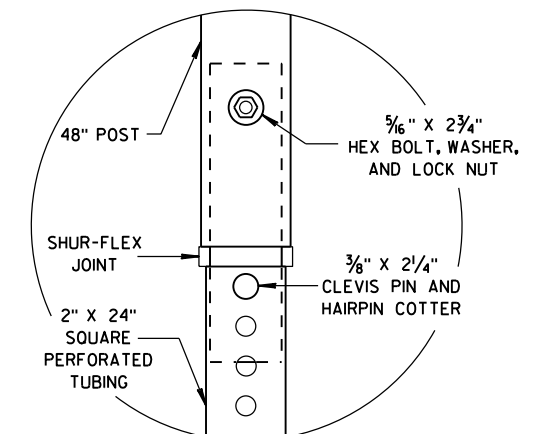
SECTION C-C



FRONT VIEW SIDE VIEW  
ALTERNATE 3



DETAIL B

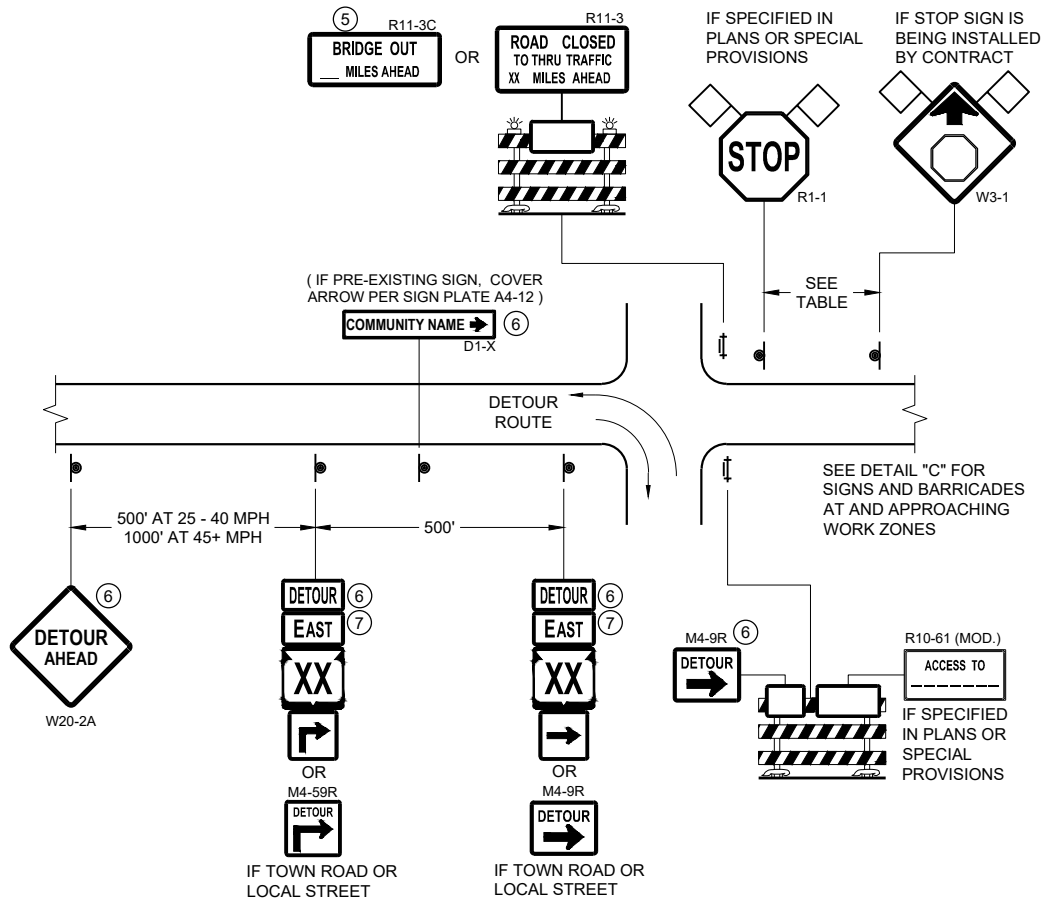


DETAIL C

**FLEXIBLE MARKER POST FOR CULVERT END**

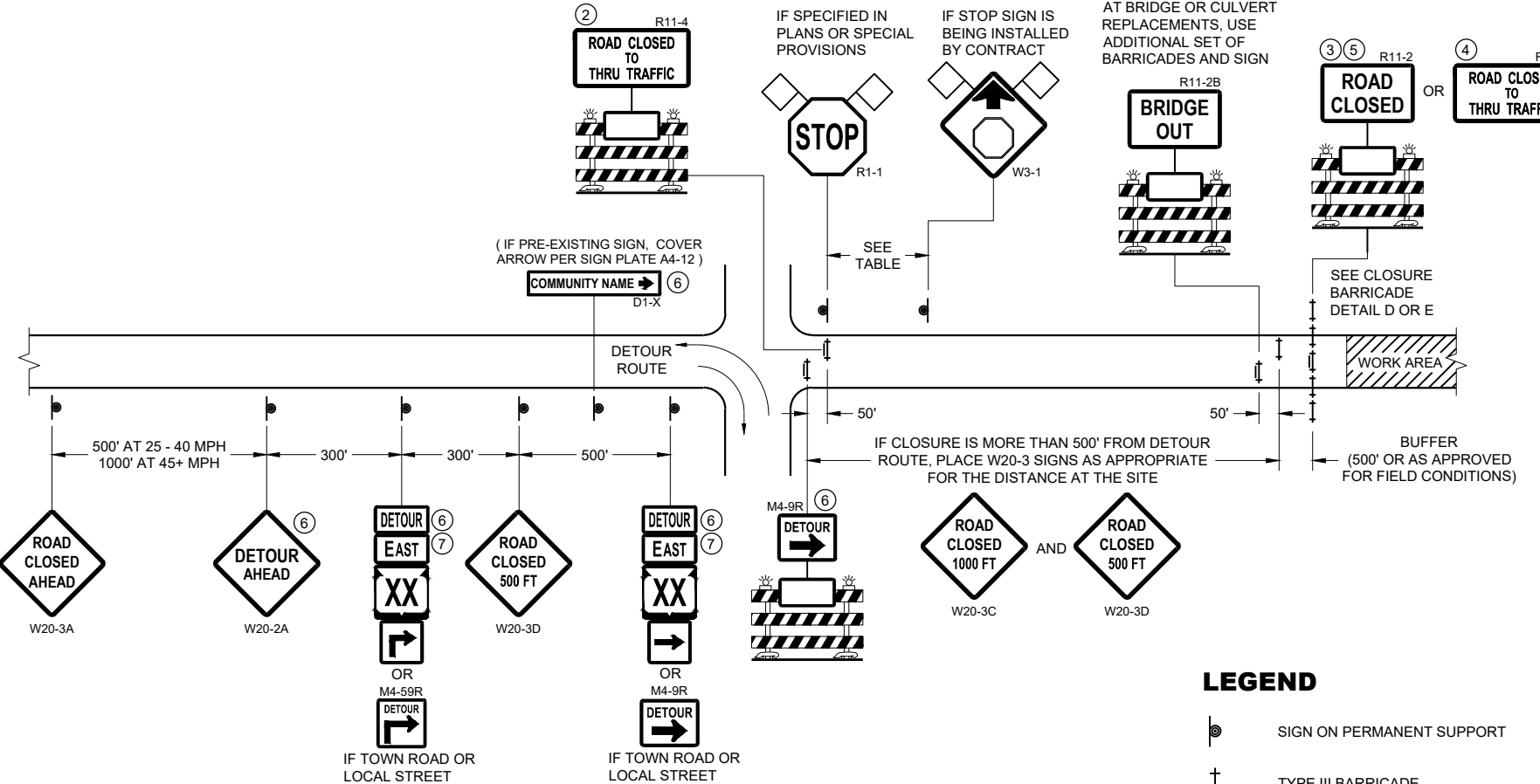
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
10/1/2012 DATE /S/ Travis Feltes  
STATE TRAFFIC ENGINEER OF DESIGN  
FHWA



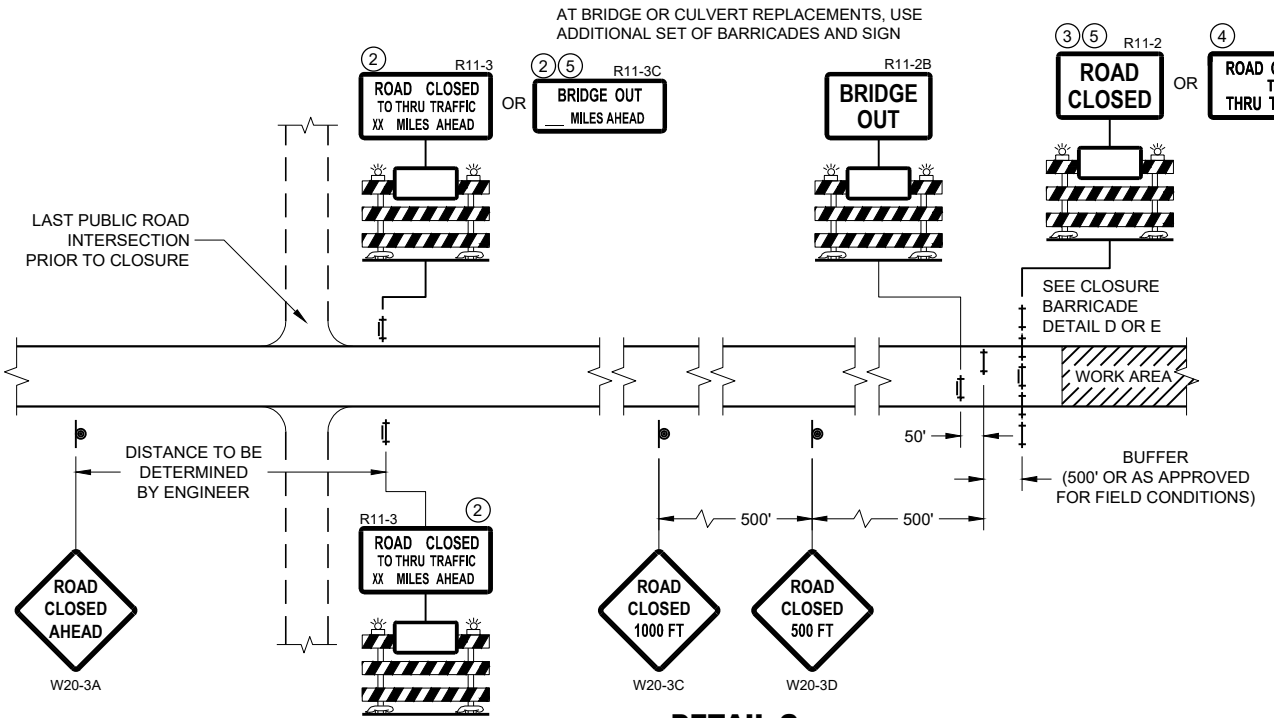
**DETAIL A  
MAINLINE CLOSURE WITH POSTED DETOUR**

WORK ZONE GREATER THAN OR EQUAL TO 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**

**LEGEND**

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

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

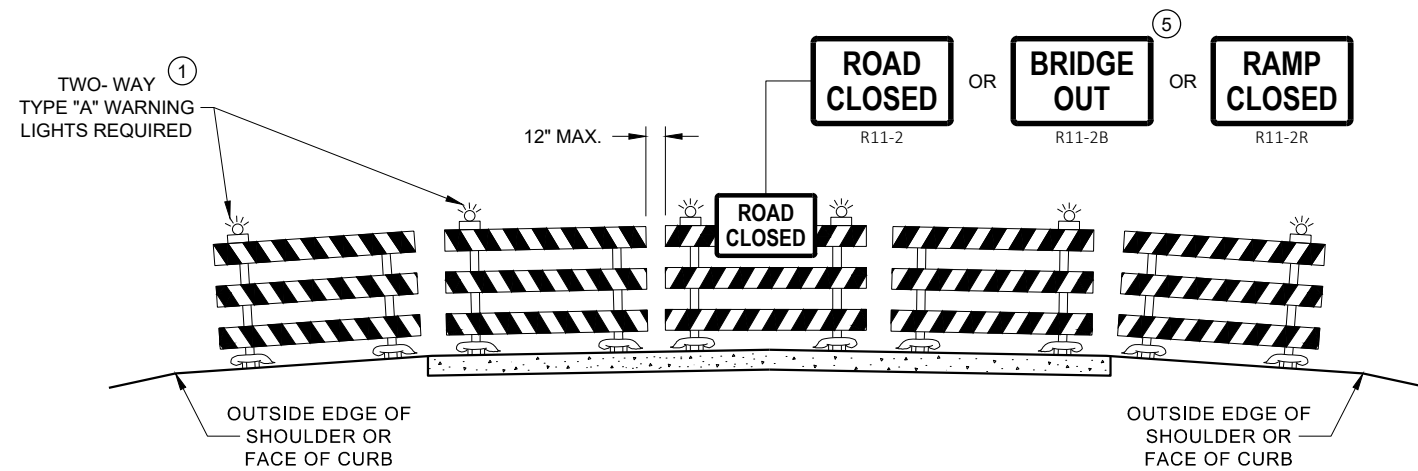
**BARRICADES AND SIGNS  
FOR MAINLINE CLOSURES**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

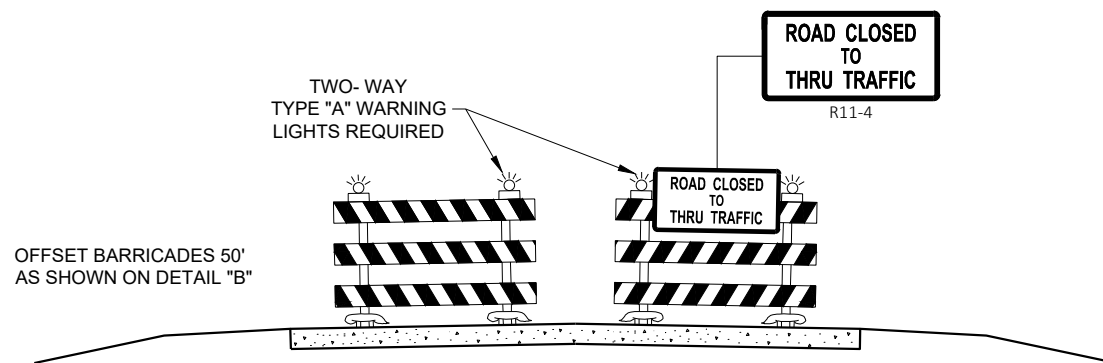
APPROVED  
February 2020 /S/ Andrew Heidtke  
DATE DATE WORK ZONE ENGINEER

FHWA





**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 THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL 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:

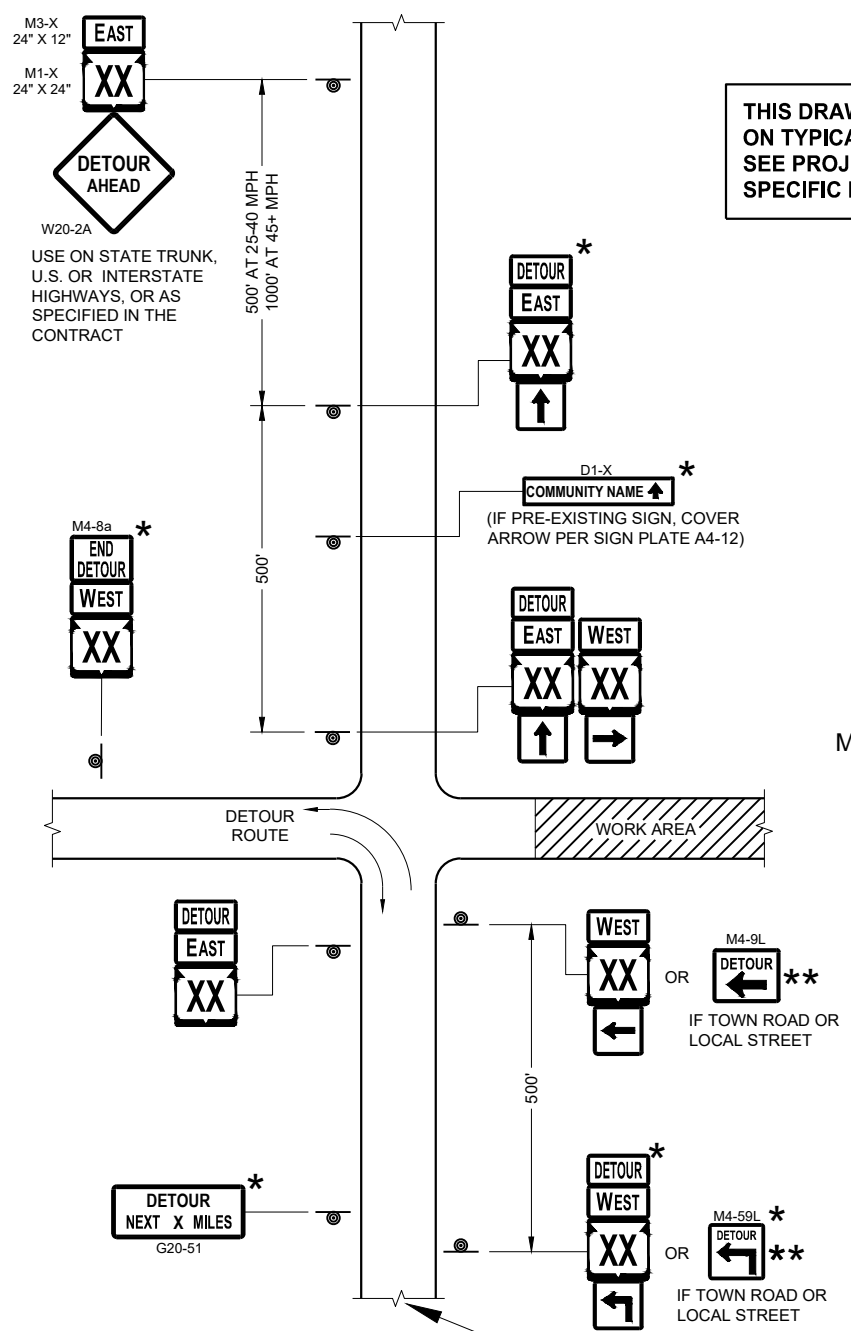
- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60" X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 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 AN 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 ROAD 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  
VARIOUS CLOSURES**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

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



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

**LEGEND**

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- M4 - 8
- M3 - X
- M1 - 4
- M1 - 6
- M1 - 5A
- M05 - 1
- M06 - 1
- M06 - 1

**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.

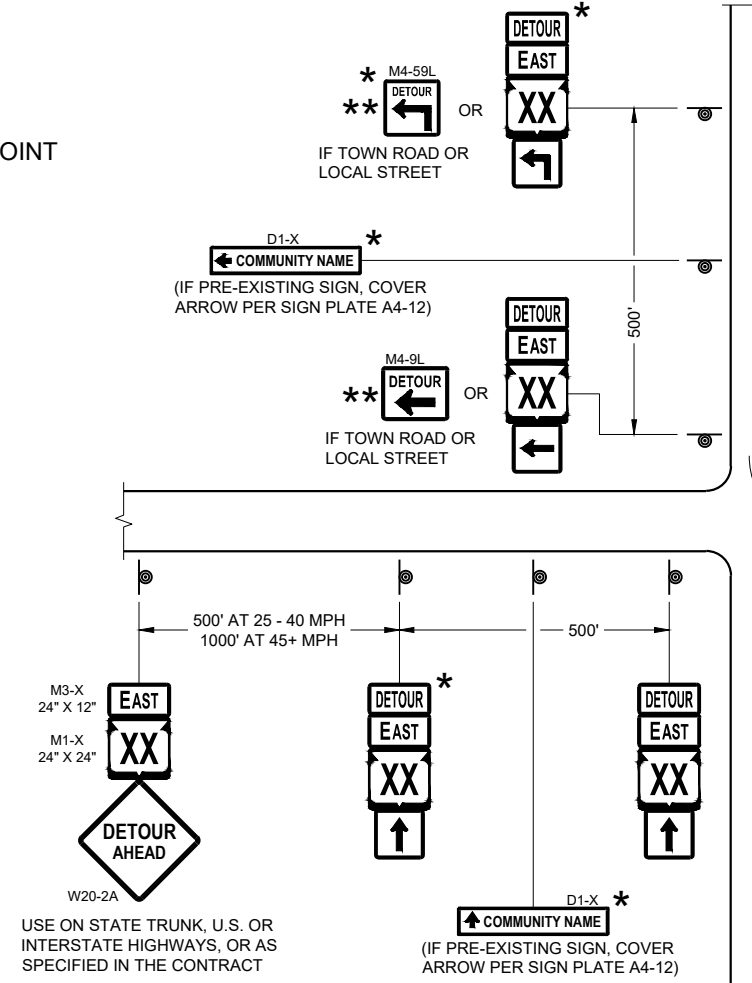
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

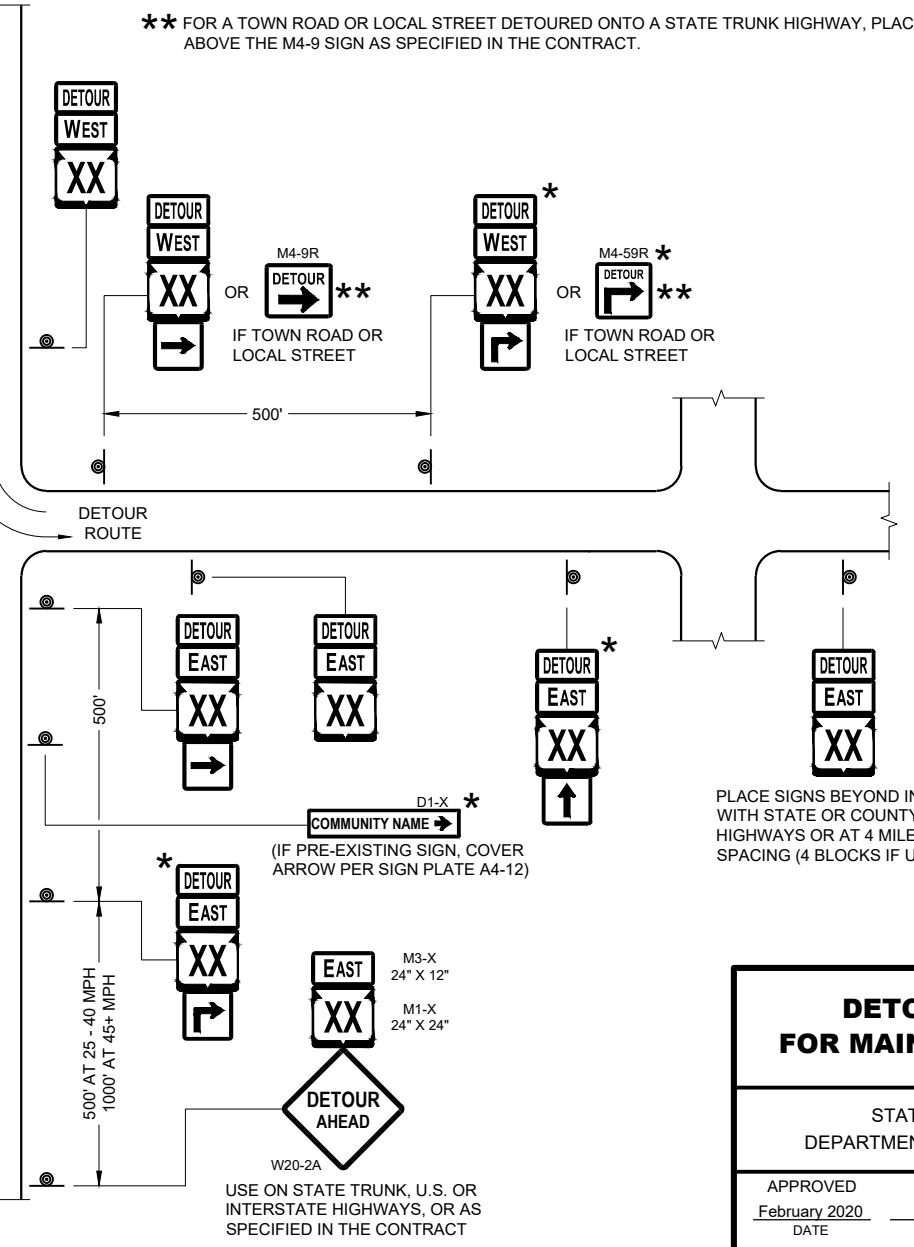
- M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-9 AND M4-59 SHALL BE 30" X 24"
- M4-8a SHALL BE 24" X 18"
- G20-51 SHALL BE 60" X 24"
- W20-2A 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.

MATCH POINT



**DETAIL F  
DETOUR SIGNING**

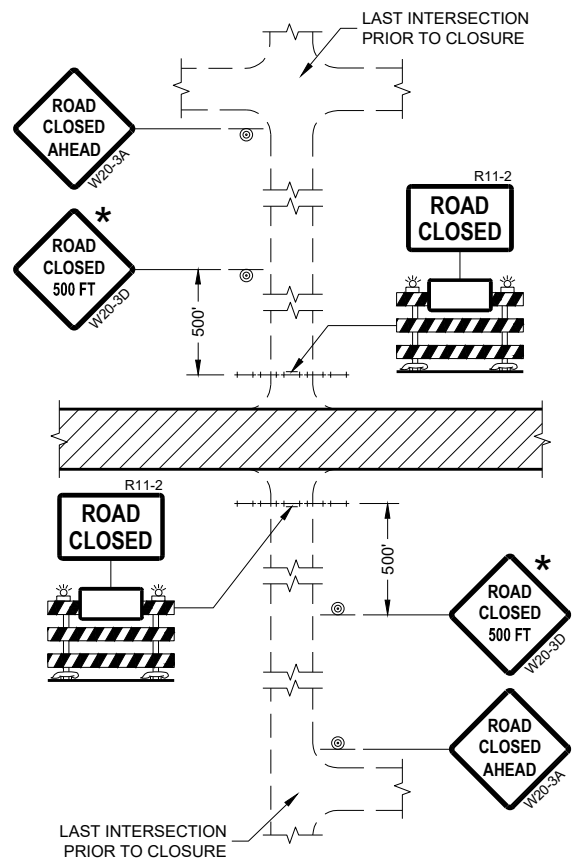


**DETOUR SIGNING  
FOR MAINLINE CLOSURES**

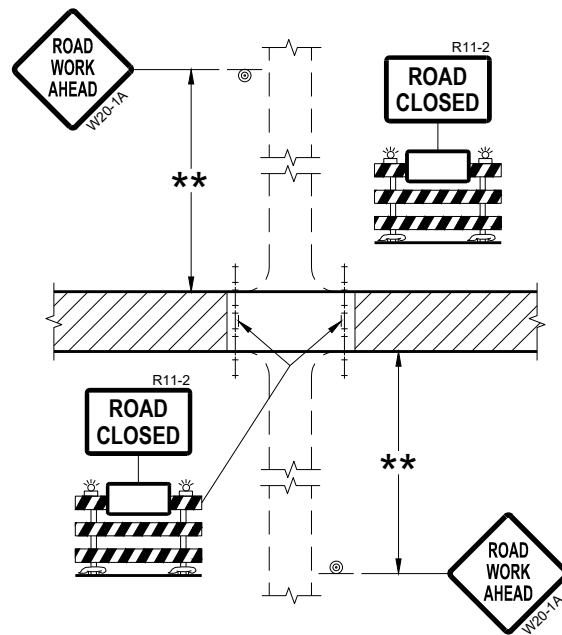
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

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

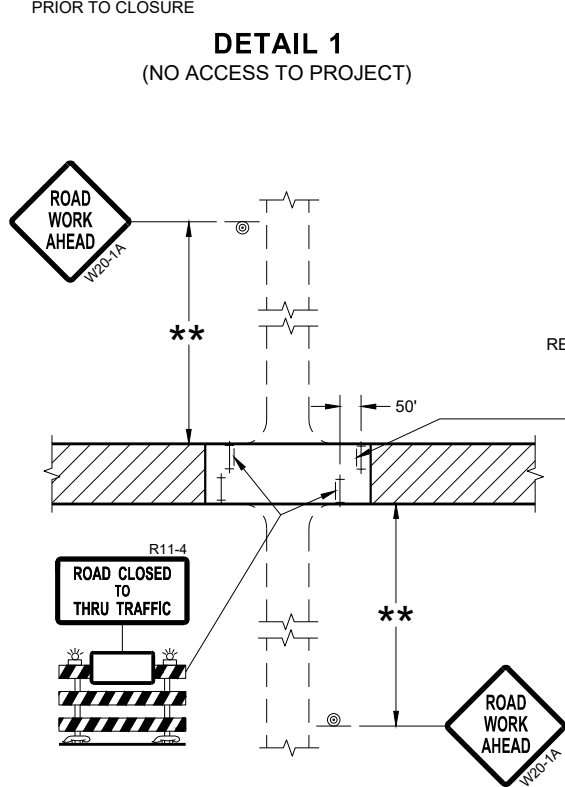
FHWA



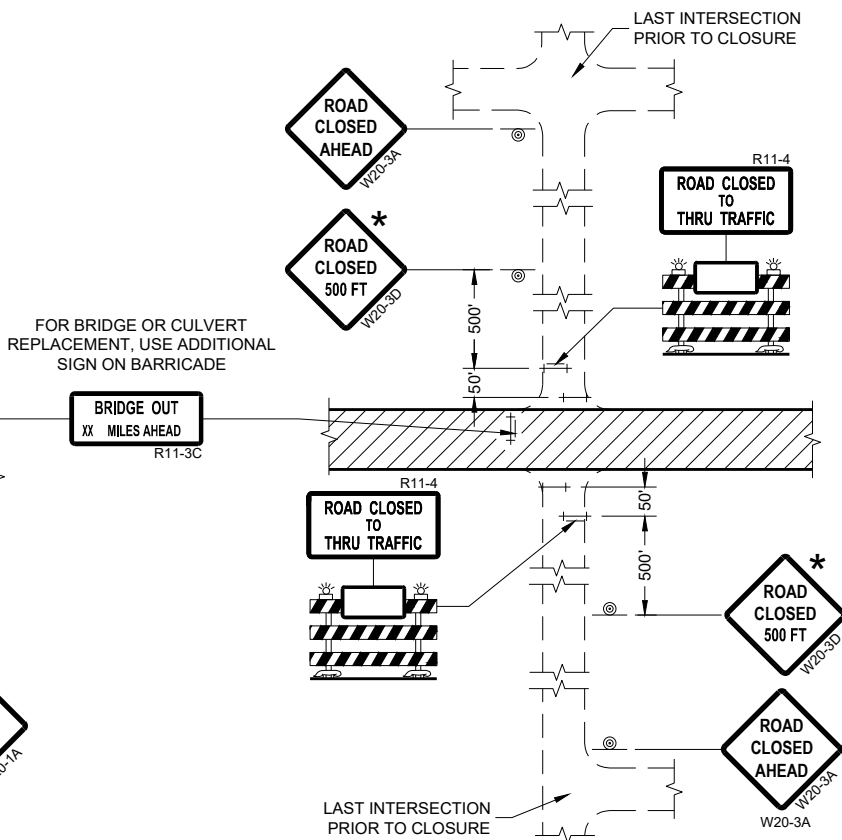
**DETAIL 1**  
(NO ACCESS TO PROJECT)



**DETAIL 2**  
(PUBLIC CROSS-TRAFFIC MAINTAINED.  
NO ACCESS TO PROJECT)



**DETAIL 3**  
(PUBLIC CROSS-TRAFFIC MAINTAINED.  
CONTRACTOR, LOCAL BUSINESS AND  
RESIDENT 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 (500 FEET DESIRABLE) 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 REESTABLISHED.

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

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN 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 FEET OR LESS FROM THE WORK ZONE.
- \*\* 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.

**LEGEND**

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

<b>BARRICADES AND SIGNS FOR SIDEROAD CLOSURES</b>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED July 2018 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

**GENERAL NOTES**

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

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




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

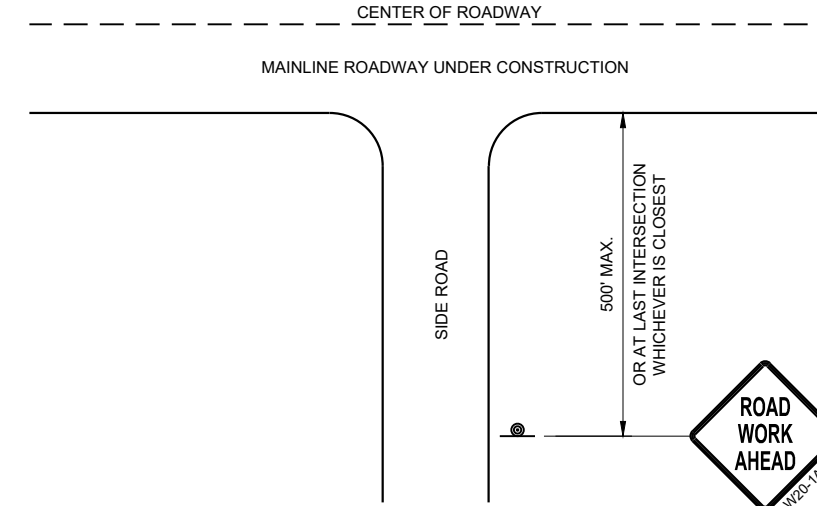
SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

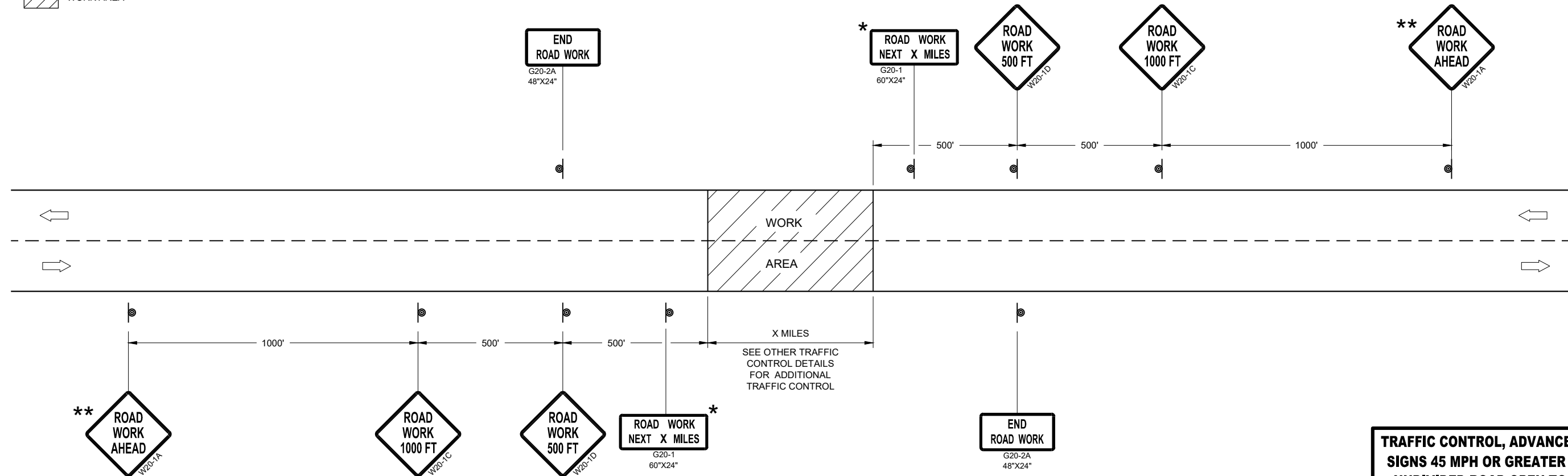
- \* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS
- \*\* PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.

**LEGEND**

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



**TYPICAL SIDE ROAD APPROACH  
WARNING SIGN DETAIL**



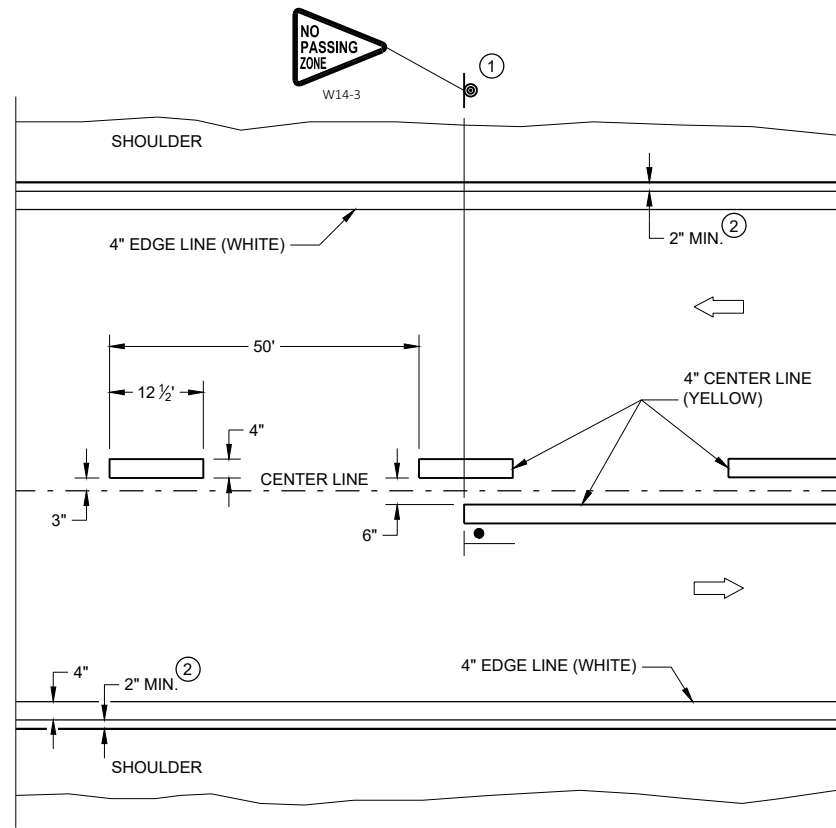
**TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER**

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

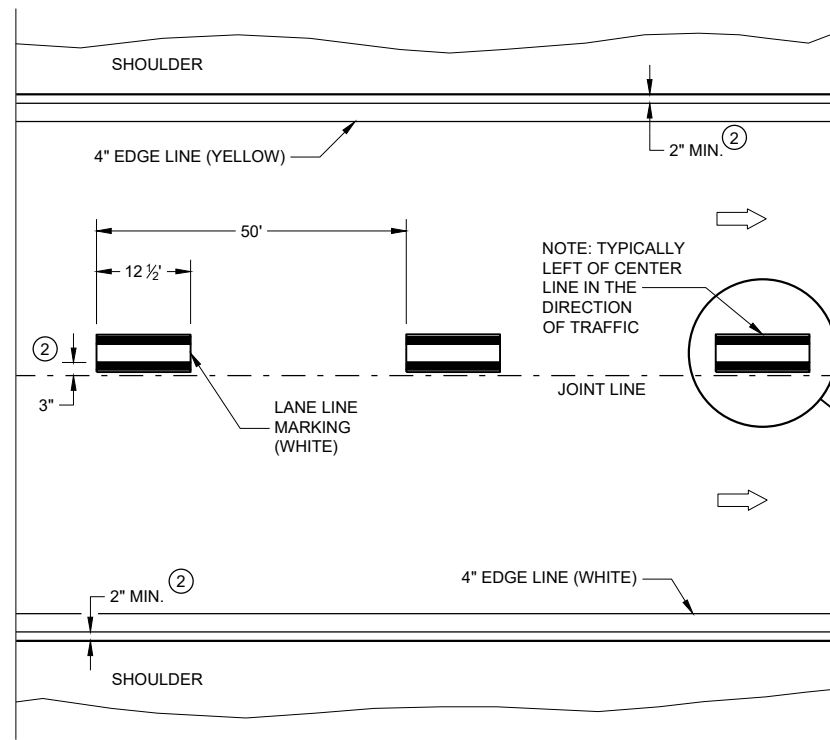
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

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

FHWA

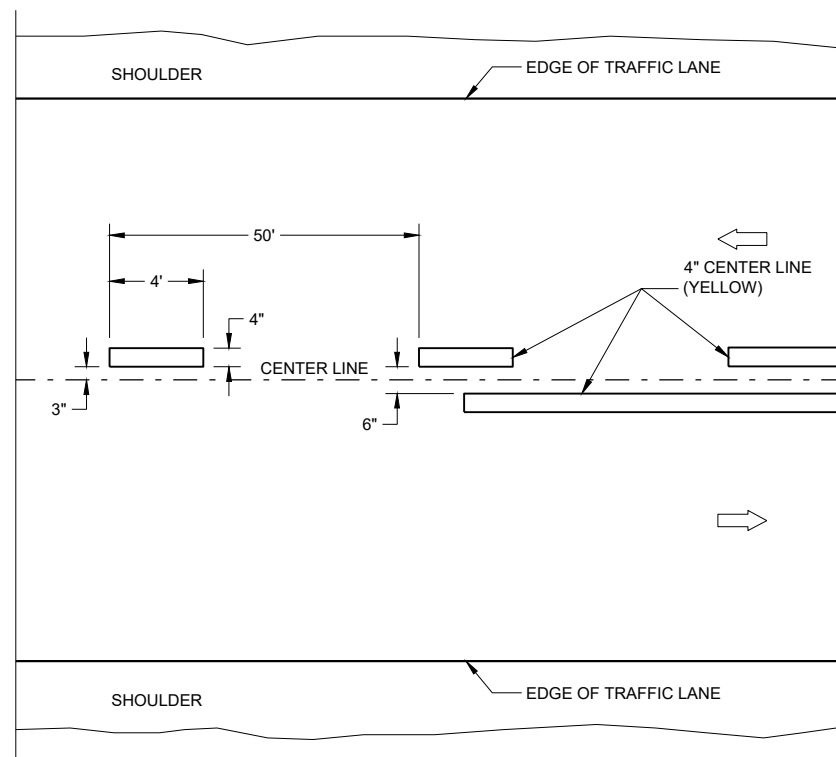


**TWO WAY TRAFFIC**

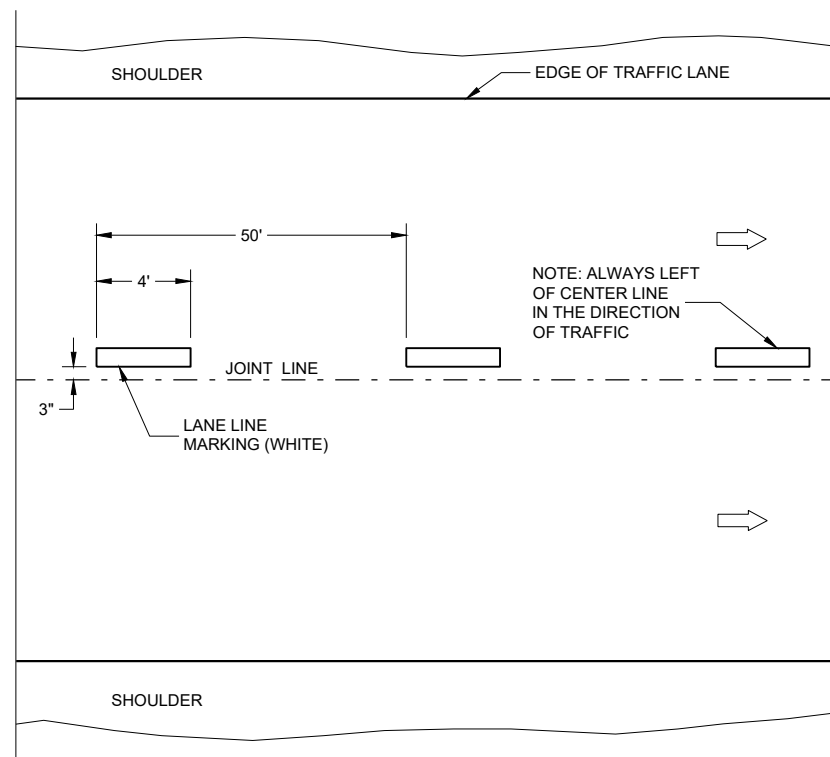


**ONE WAY TRAFFIC**

**PERMANENT PAVEMENT MARKING**



**TWO WAY TRAFFIC**



**ONE WAY TRAFFIC**

**TEMPORARY PAVEMENT MARKING**

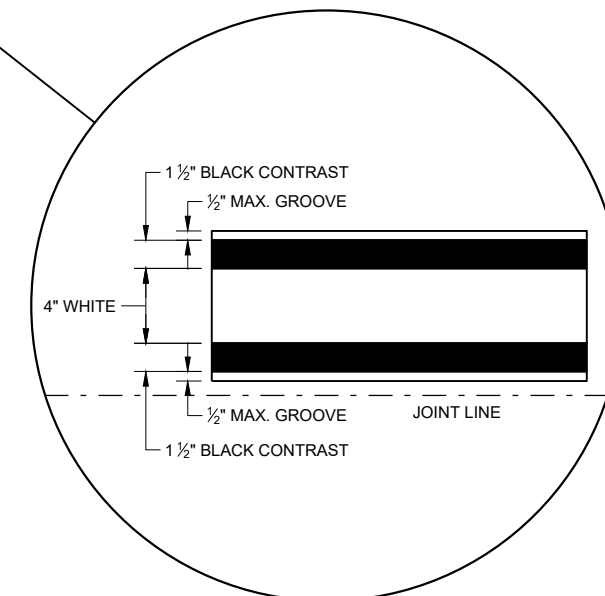
**GENERAL NOTES**

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

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

**LEGEND**

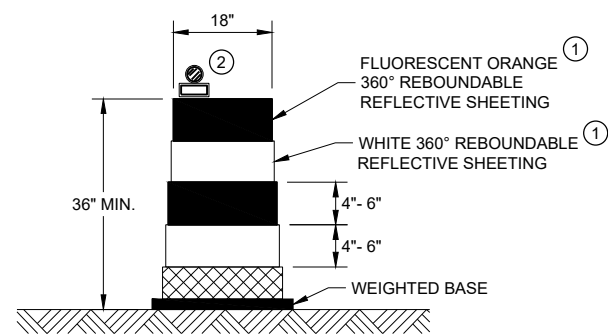
- |• "T" MARKING
- ⊙ SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC



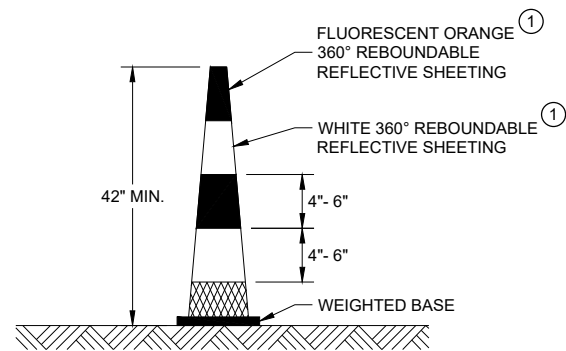
**LONGITUDINAL MARKING  
(MAINLINE)**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
February 2020 /S/ Matthew Rauch  
DATE STATEWIDE SIGNING AND MARKING  
ENGINEER

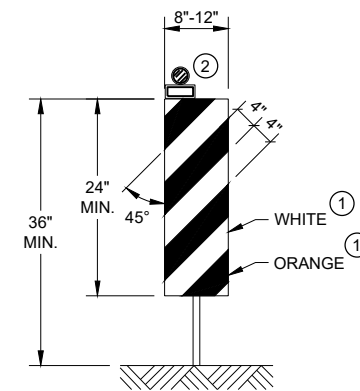


**DRUM**



**42" CONE**

DO NOT USE IN TAPERS  
1/2 SPACING OF DRUMS

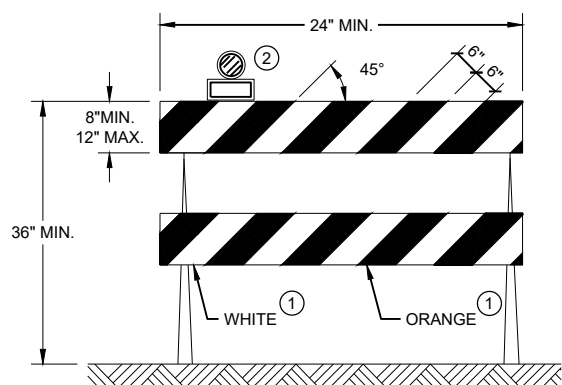


**VERTICAL PANEL**

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

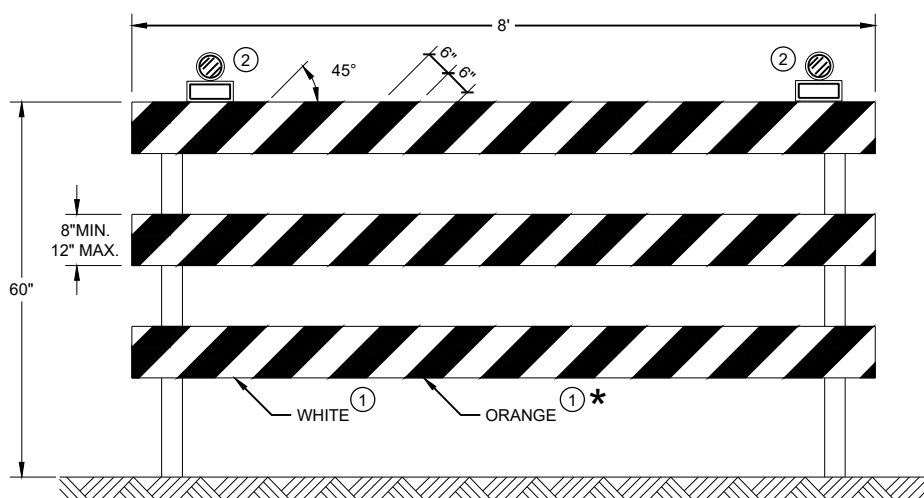
**GENERAL NOTES**

- ① REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
- ② LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.



**TYPE II BARRICADE**

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



**TYPE III BARRICADE**

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

\* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.






**CHANNELIZING DEVICES  
DRUMS, CONES, BARRICADES  
AND VERTICAL PANELS**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

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

FHWA

**LEGEND**

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

**GENERAL NOTES**

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

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

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

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

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

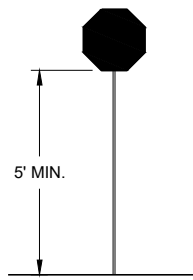
WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

**FLAGGING**

- FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.
- ① FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.
  - ② SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.
- WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

**TEMPORARY PORTABLE RUMBLE STRIPS**

- UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.
- ③ EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.
- ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FOR THE APPROVED PRODUCTS LIST.
- INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.
- PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.
- DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.



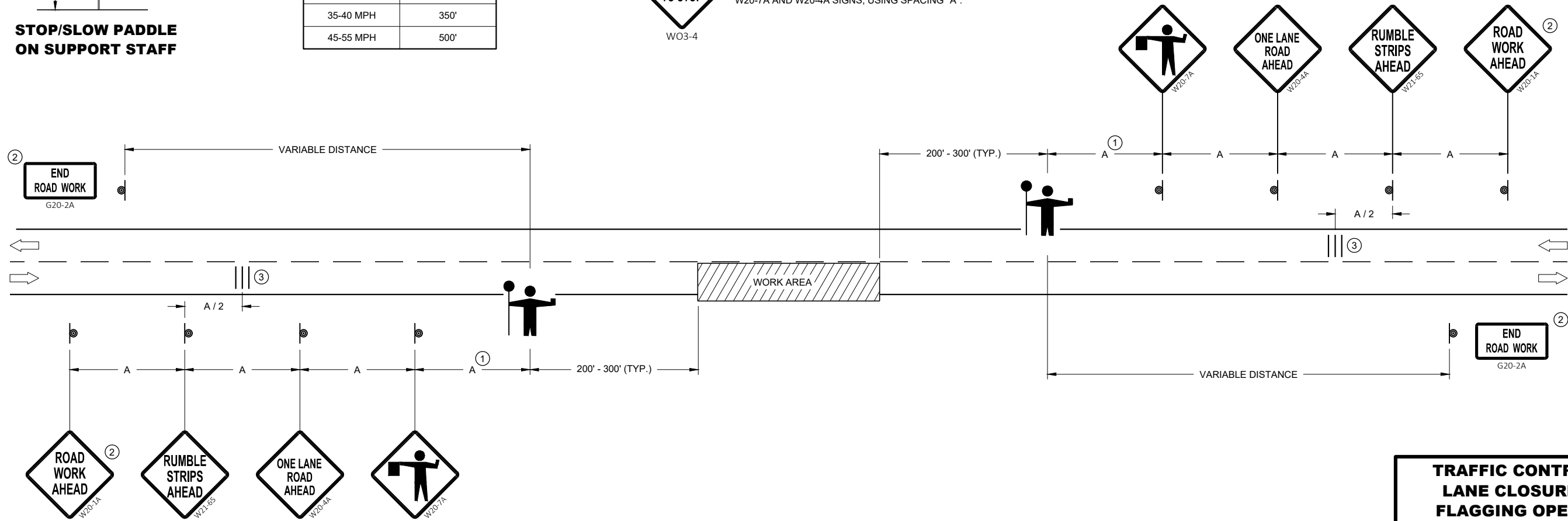
**STOP/SLOW PADDLE ON SUPPORT STAFF**

**SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE**

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



USE OF W03-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



**TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION**

**TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION**





STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
DATE: May 2019 /S/ Andrew Heidtke  
WORK ZONE ENGINEER

FHWA



**LEGEND**

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

**GENERAL NOTES**

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

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

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

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

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

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

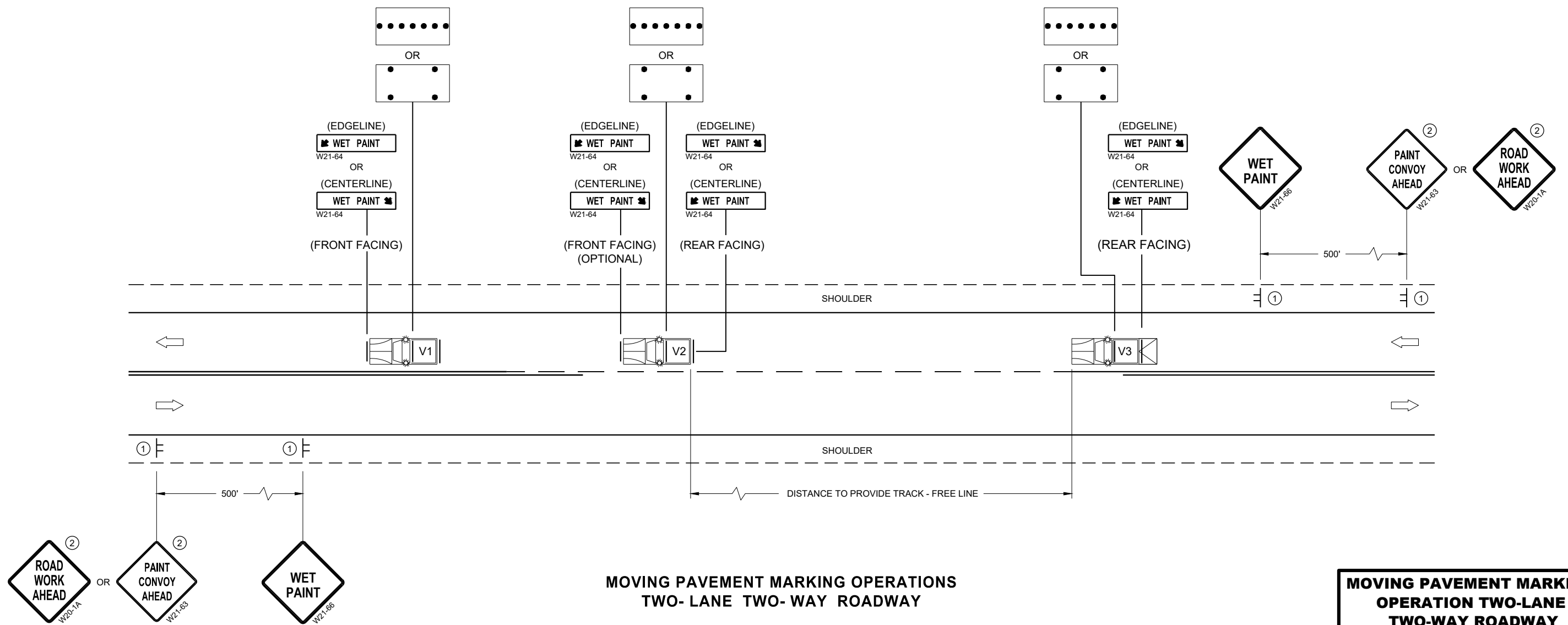
CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

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

- ① SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.
- ② IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.

6

6



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

SDD 15C19 - 06a

SDD 15C19 - 06a

<b>MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY</b>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2019 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

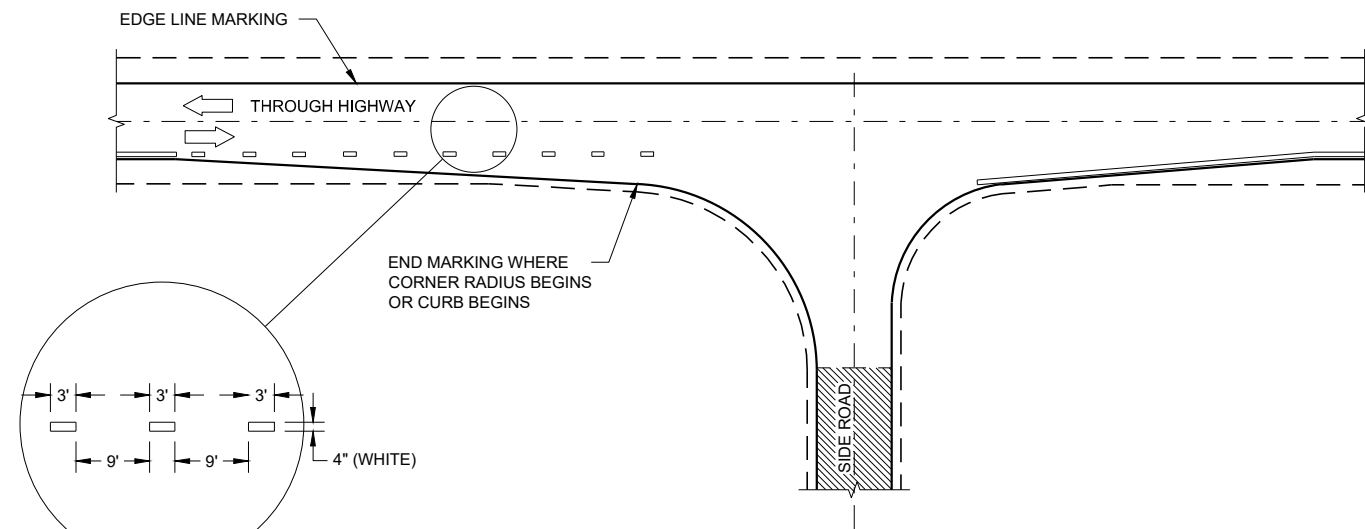
**GENERAL NOTES**

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

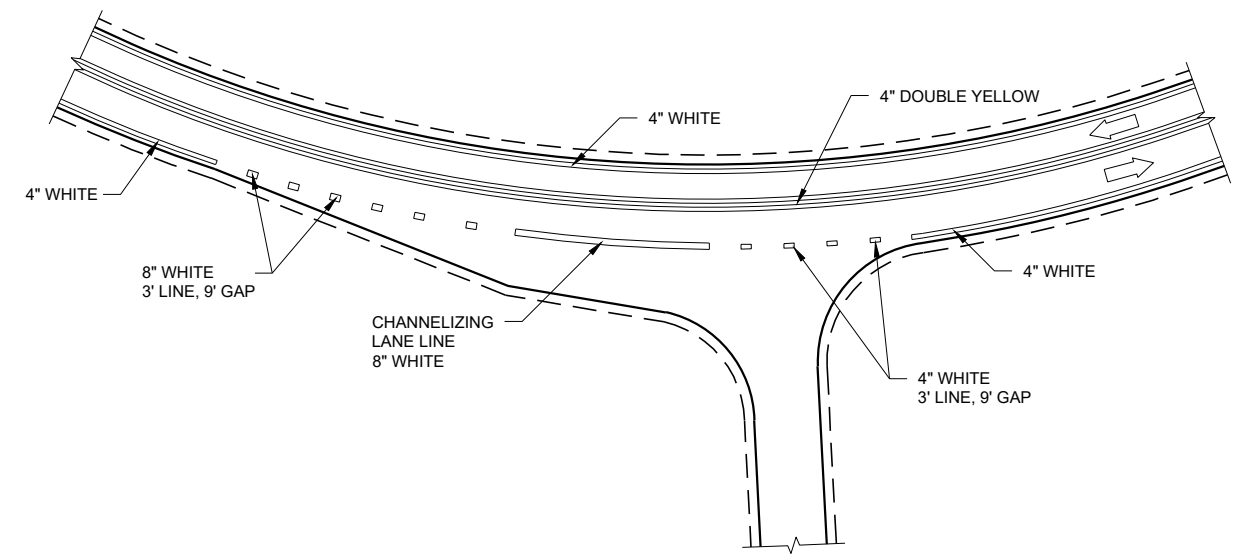
- ① WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
- ② WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
- ③ BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
- ④ BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.

**LEGEND**

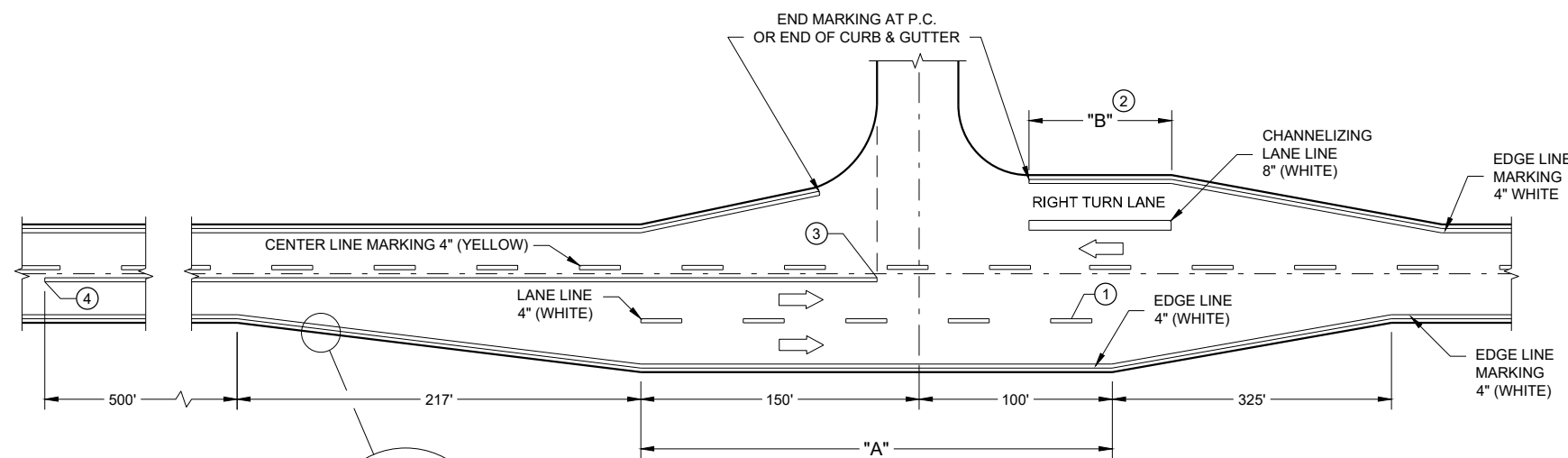
➡ DIRECTION OF TRAVEL



**MINOR INTERSECTION**



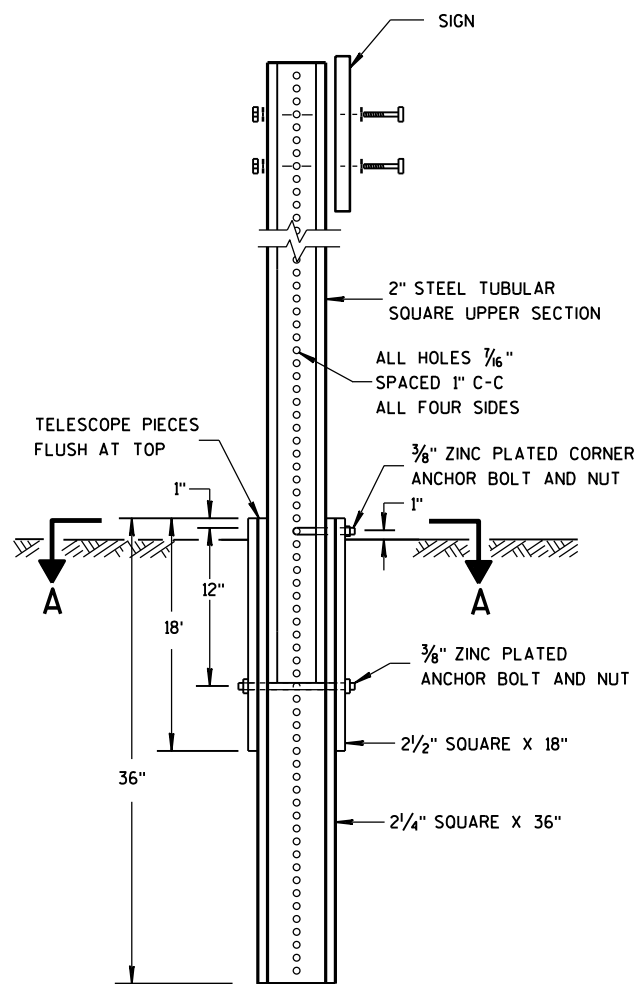
**INTERSECTION ON OUTSIDE OF CURVE**



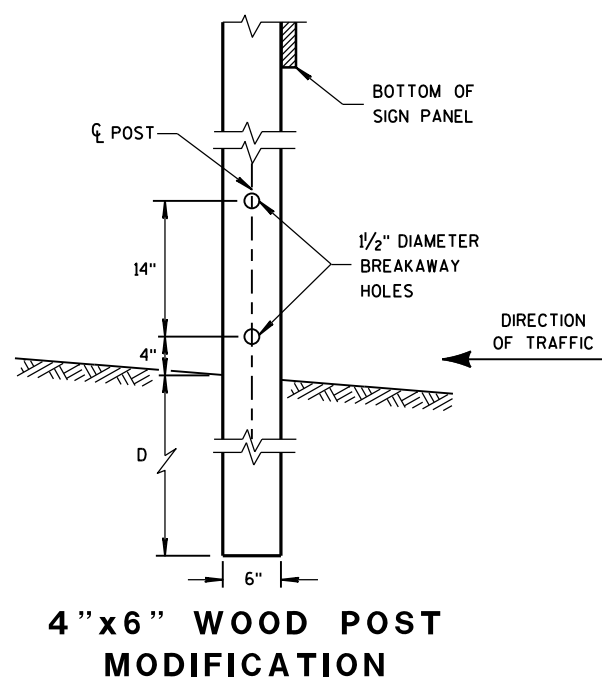
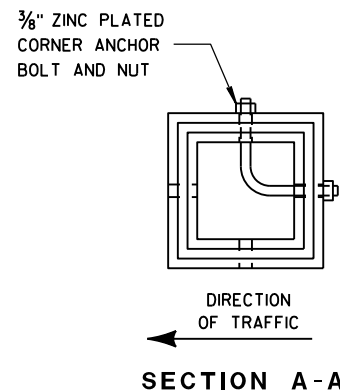
**MAJOR INTERSECTIONS  
(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)**

**PAVEMENT MARKING  
(INTERSECTIONS)**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

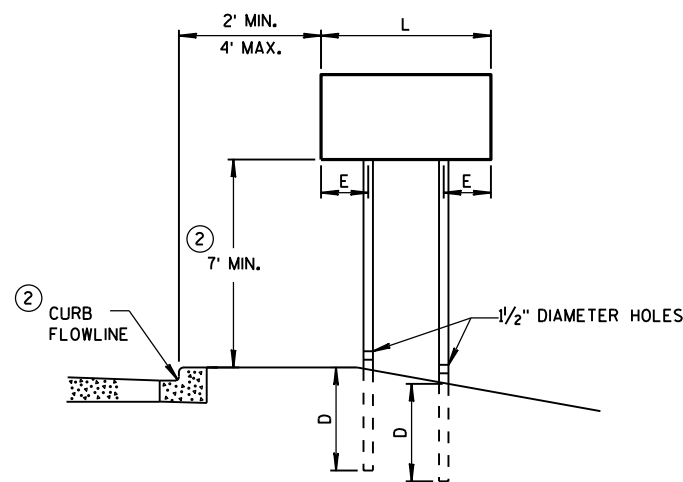


**DETAIL OF TUBULAR STEEL SIGN POST**

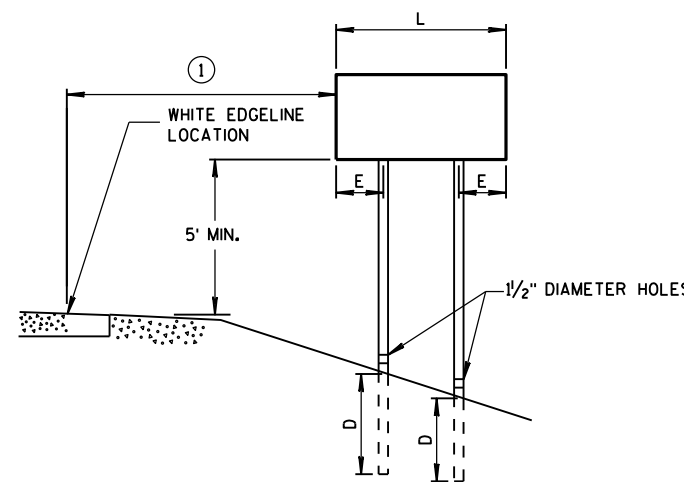


**GENERAL NOTES**

- ① 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.
- ② THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.
- ③ FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.



**URBAN AREA**



**RURAL AREA**

**POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS**

**TUBULAR STEEL POSTS**

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

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

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

**WOOD POST EMBEDMENT DEPTH**

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

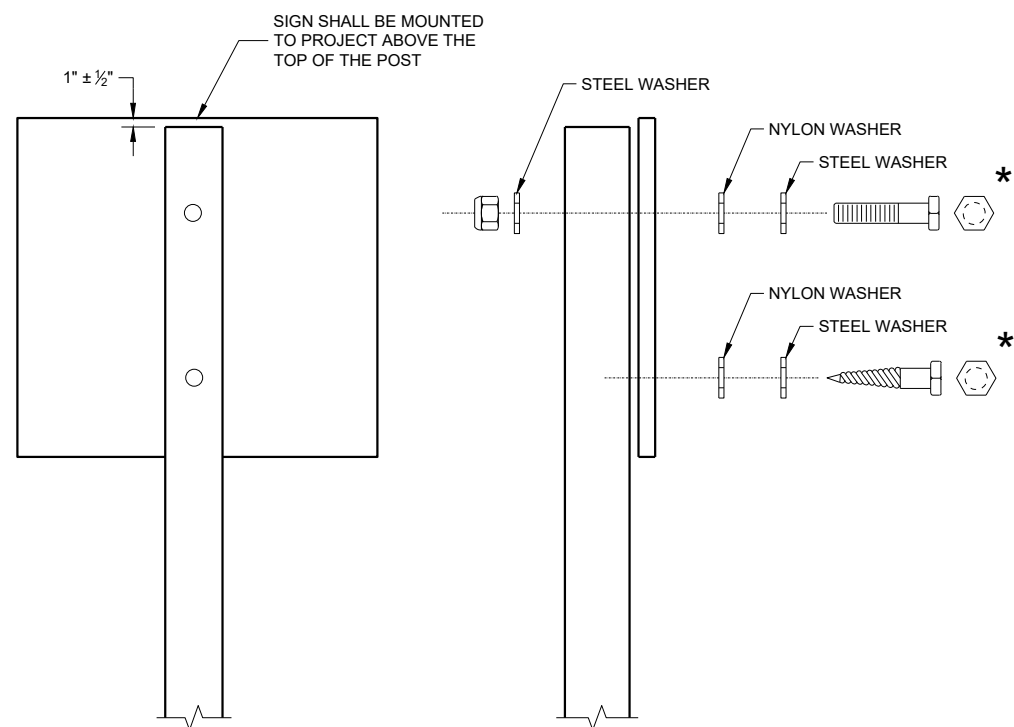
**4" X 6" WOOD POST**

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

SEE NOTE ③

**TEMPORARY TRAFFIC CONTROL SIGN MOUNTING**

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION



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

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

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

WOOD POST (4" x 6")

- LAG SCREWS - 3/8" x 3"
- MACHINE BOLTS - 5/16" x 6 1/2" OR 7" LENGTH W/NUTS

SQUARE STEEL POST (2" x 2")

- MACHINE BOLTS - 3/8" x 3 1/4" LENGTH W/NUTS
- RIVETS - 3/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE 0.720 - 0.765 INCH, GRIP RANGE 0.042 - 0.375 INCH

WASHERS (ALL POSTS) -

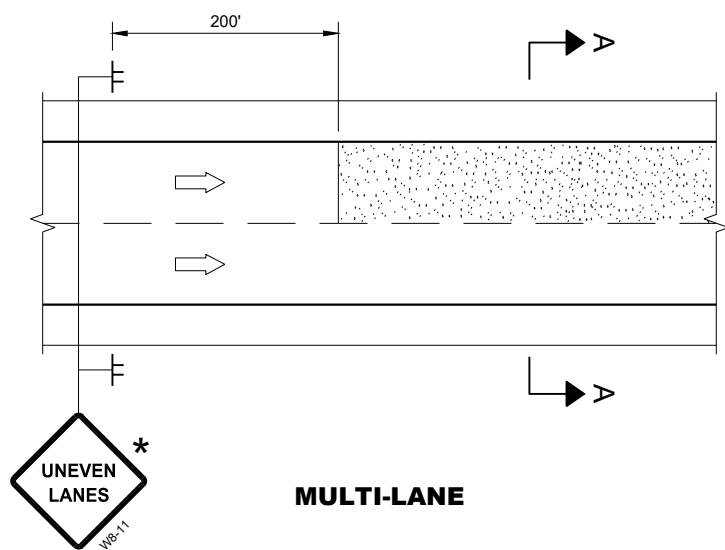
- 1 1/4" O.D. x 3/8" I.D. x 1/16" STEEL
- 1 1/4" O.D. x 3/8" I.D. x 0.080 NYLON

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

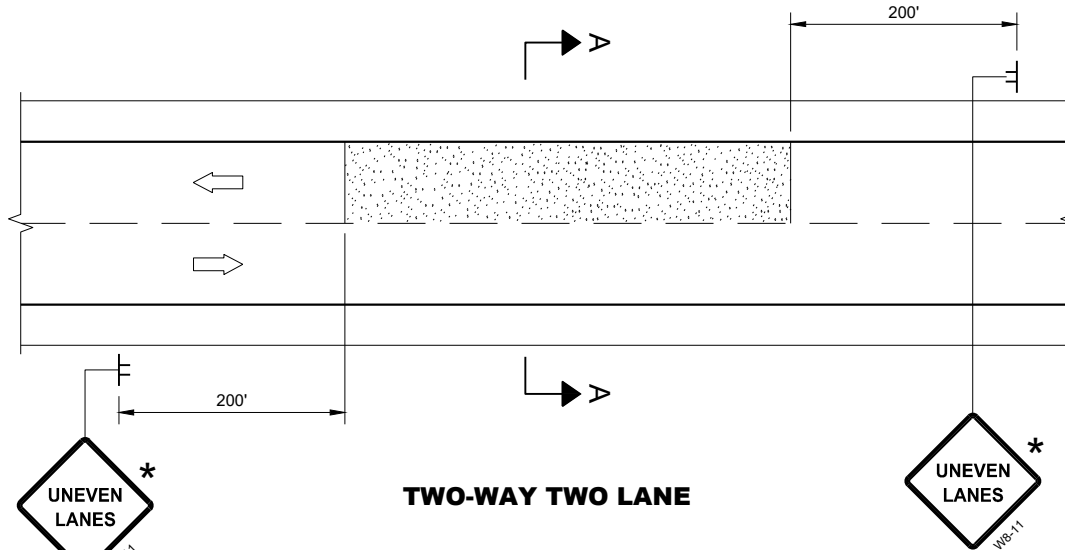
**ATTACHMENT OF SIGNS TO POSTS**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

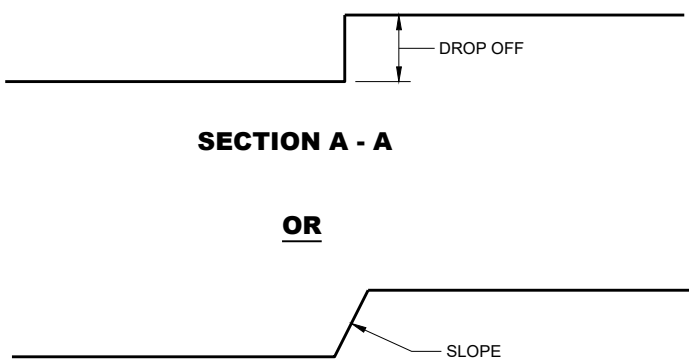
APPROVED  
June 2017 /S/ Andrew Heidtke  
DATE WORK ZONE ENGINEER



**MULTI-LANE**



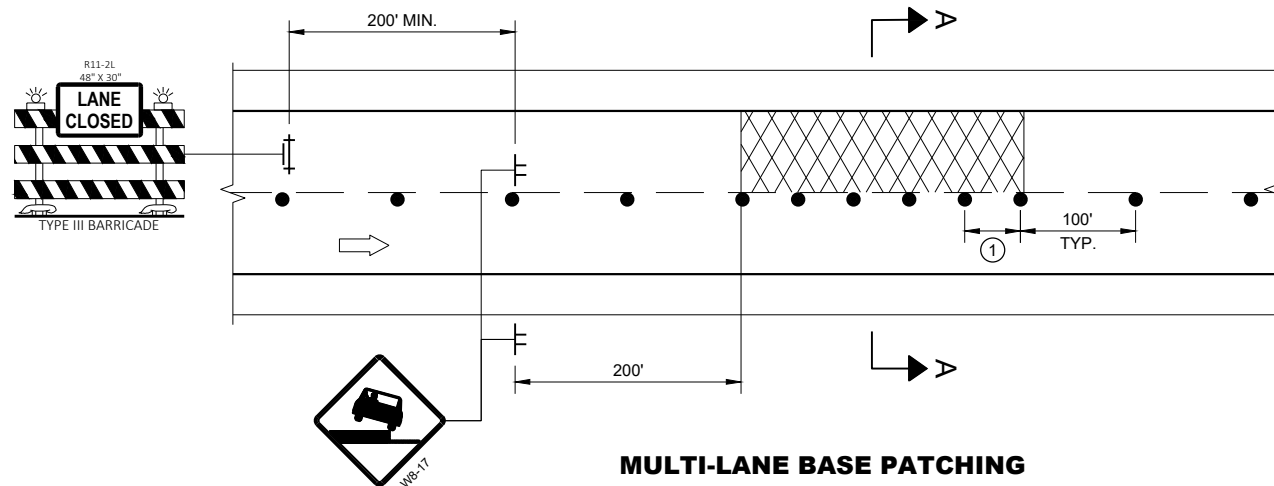
**TWO-WAY TWO LANE**



**SECTION A - A**

**OR**

**SECTION A - A**



**MULTI-LANE BASE PATCHING**

**ADJACENT LANE DROP-OFFS**

**GENERAL NOTES**

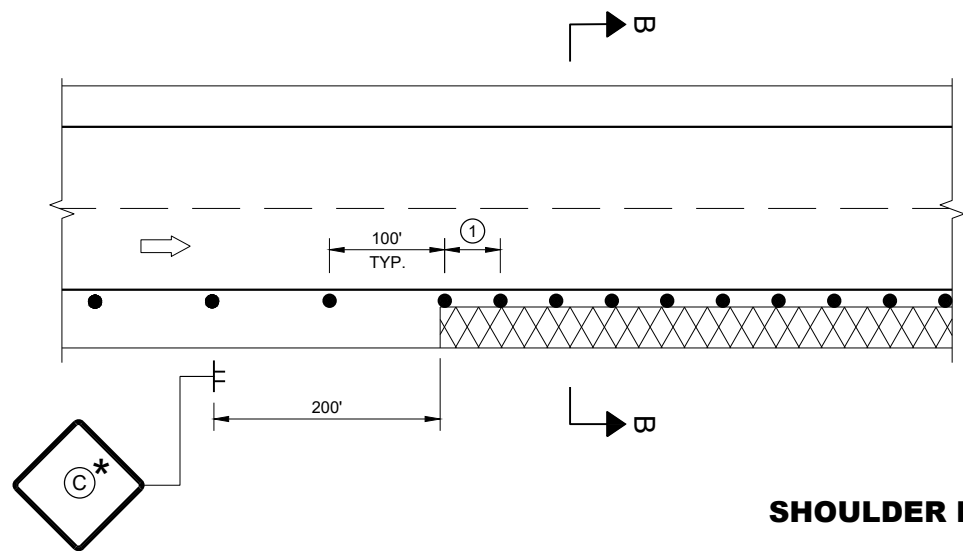
- FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
- "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
- WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.
- \* IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY 1 MILE AND AFTER EVERY ENTRANCE RAMP.
- ① USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

**LEGEND**

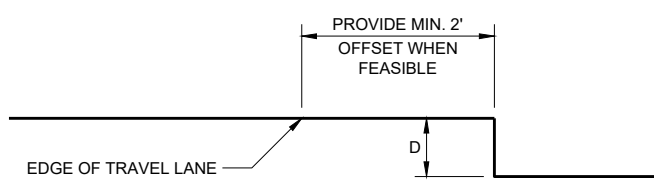
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA WITH DROP-OFF
- MILLED SURFACE

6

6



**SHOULDER DROP-OFFS**



**SECTION B - B**

D	SIGN (C)
< 2" WITH A SLOPE STEEPER THAN 3:1	LOW SHOULDER W08-9
2" < 6" WITH A SLOPE STEEPER THAN 3:1	SHOULDER DROP-OFF W8-9A PROVIDE A 3:1 OR FLATTER SLOPE OF MATERIAL ADJACENT TO THE PAVEMENT

SDD 15D39 - 02

SDD 15D39 - 02

**TRAFFIC CONTROL,  
DROP-OFF SIGNING**

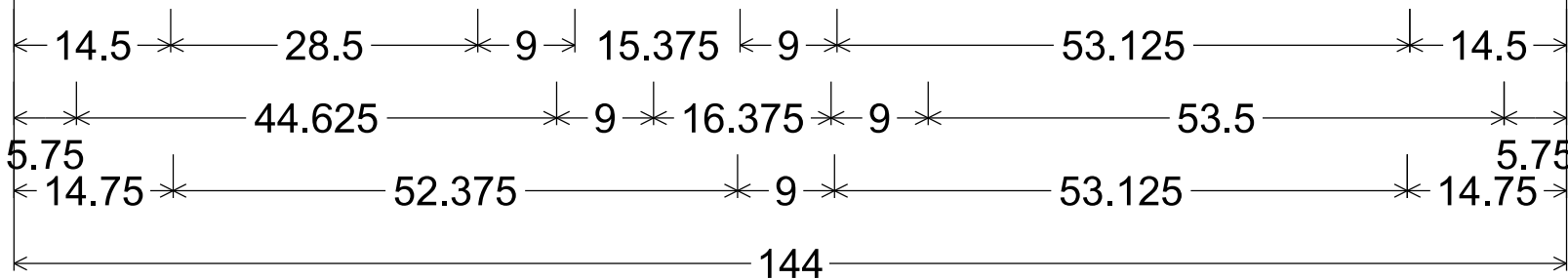
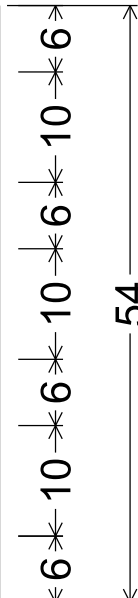
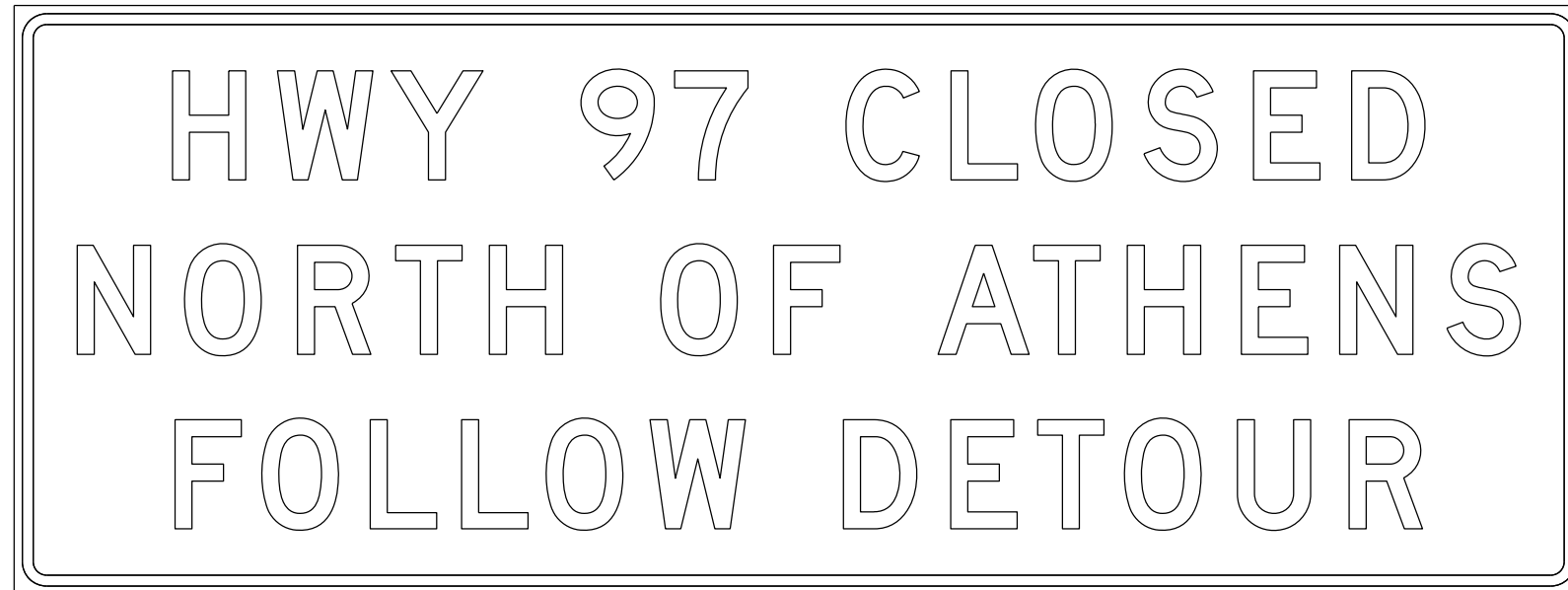
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

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

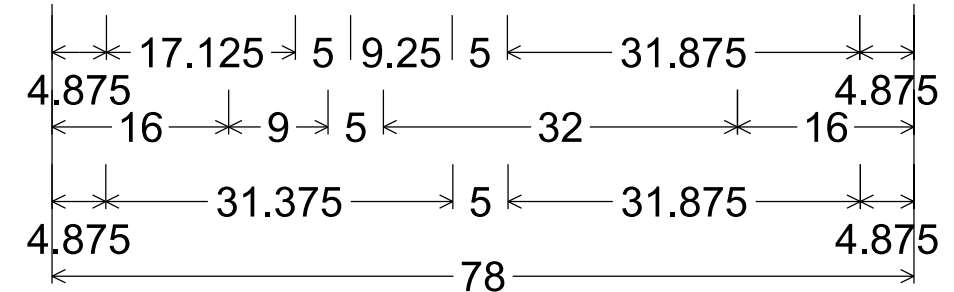
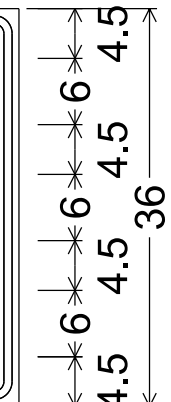
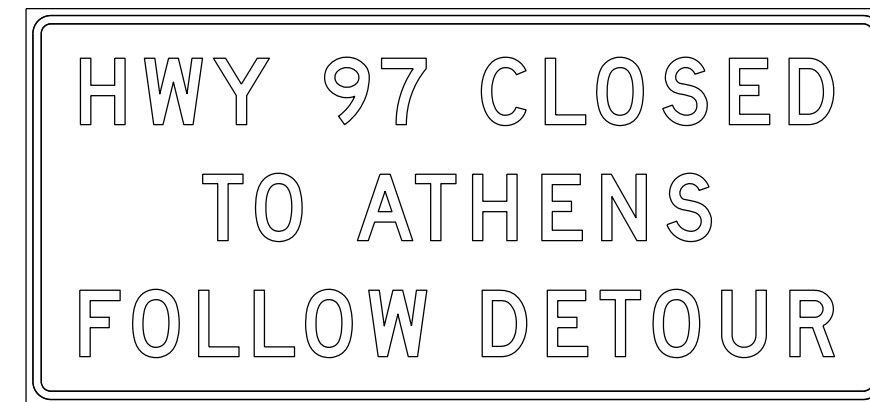
FHWA

NOTES

1. Fixed Message Type II Signs - Type F Reflective
2. Color:
  - Background - Orange
  - Message - Black
3. Message Series - D



3.000" Radius, 1.000" Border, 0.750" Indent



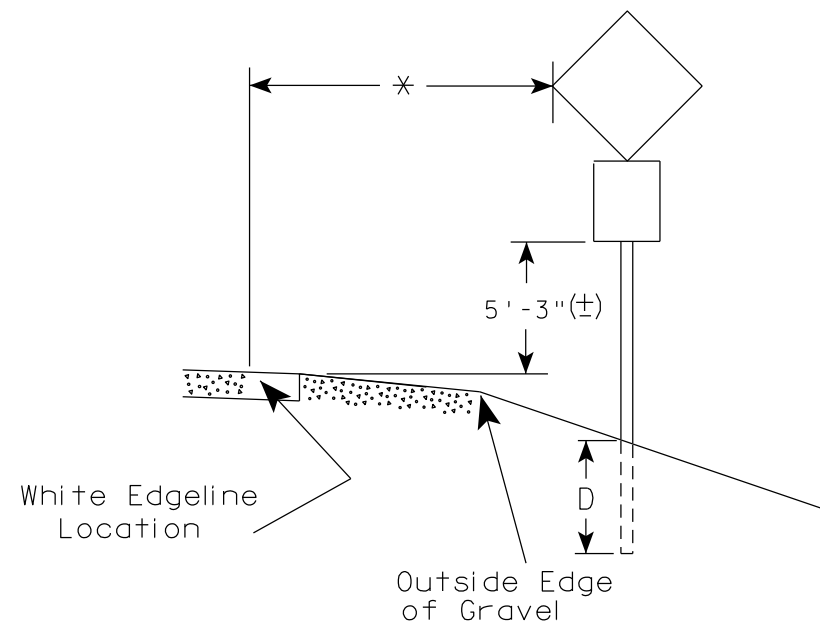
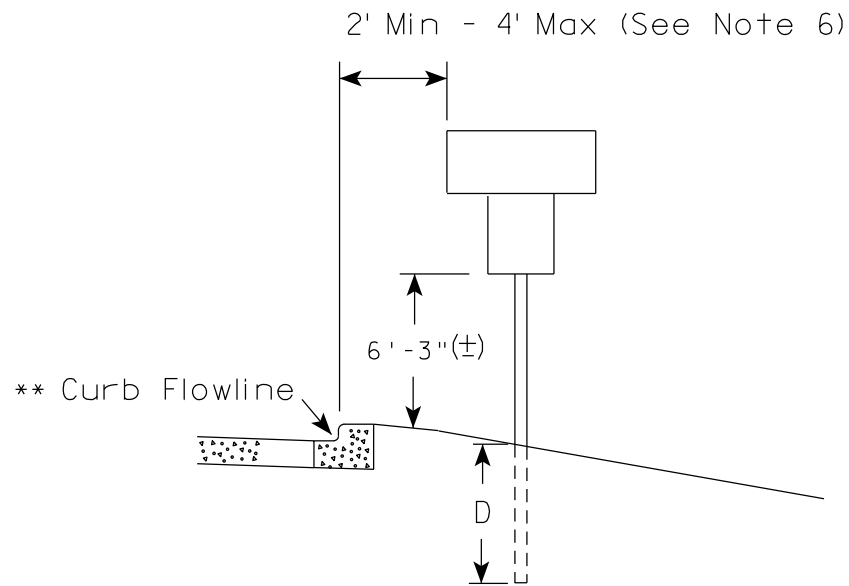
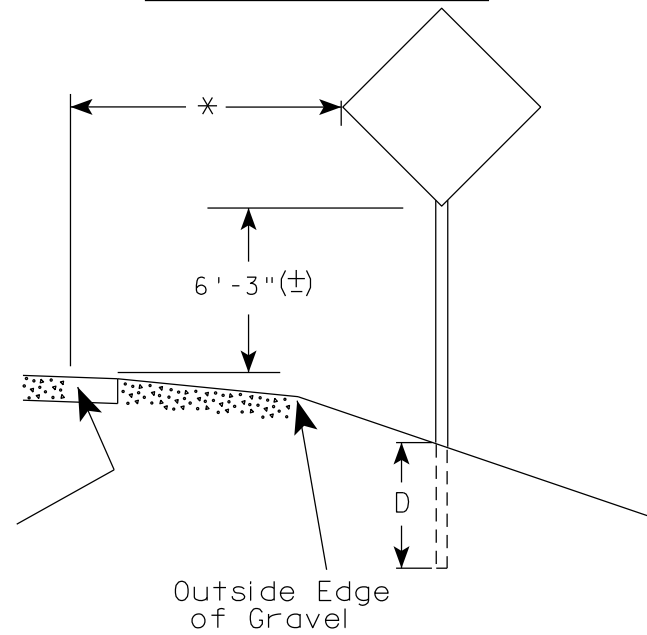
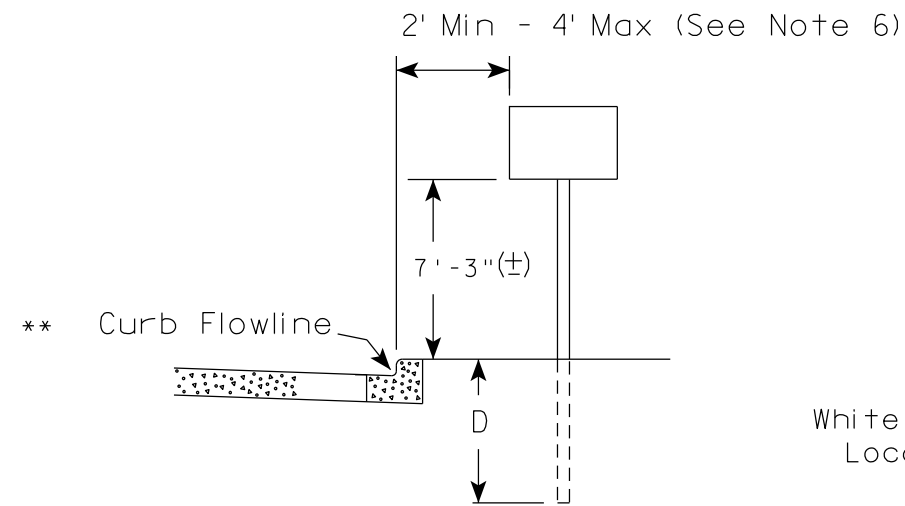
2.250" Radius, 0.750" Border, 0.625" Indent

7

7

URBAN AREA

RURAL AREA (See Note 2)



POST EMBEDMENT DEPTH

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

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

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

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

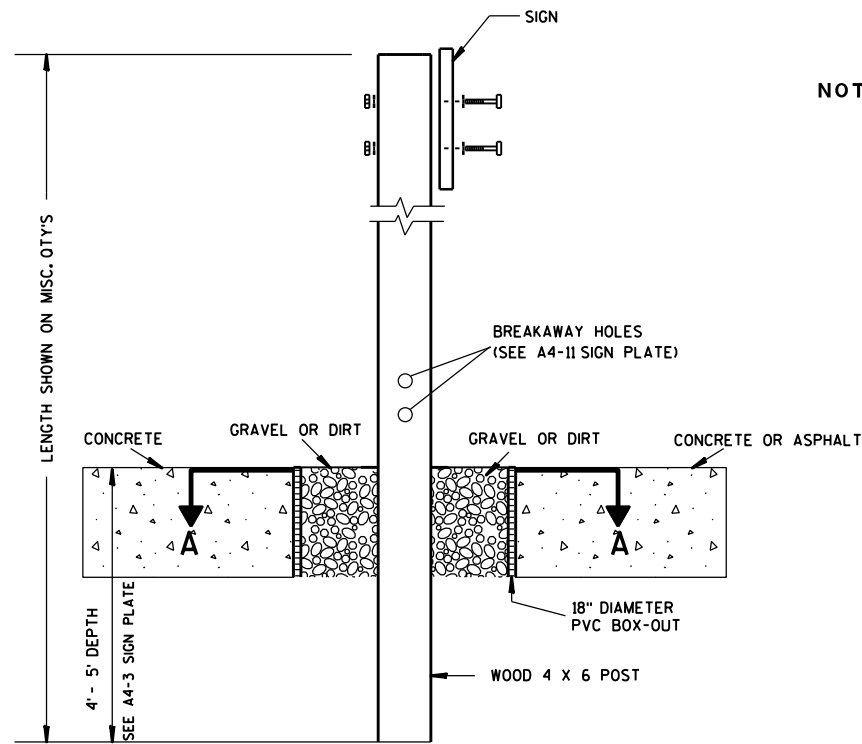
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

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

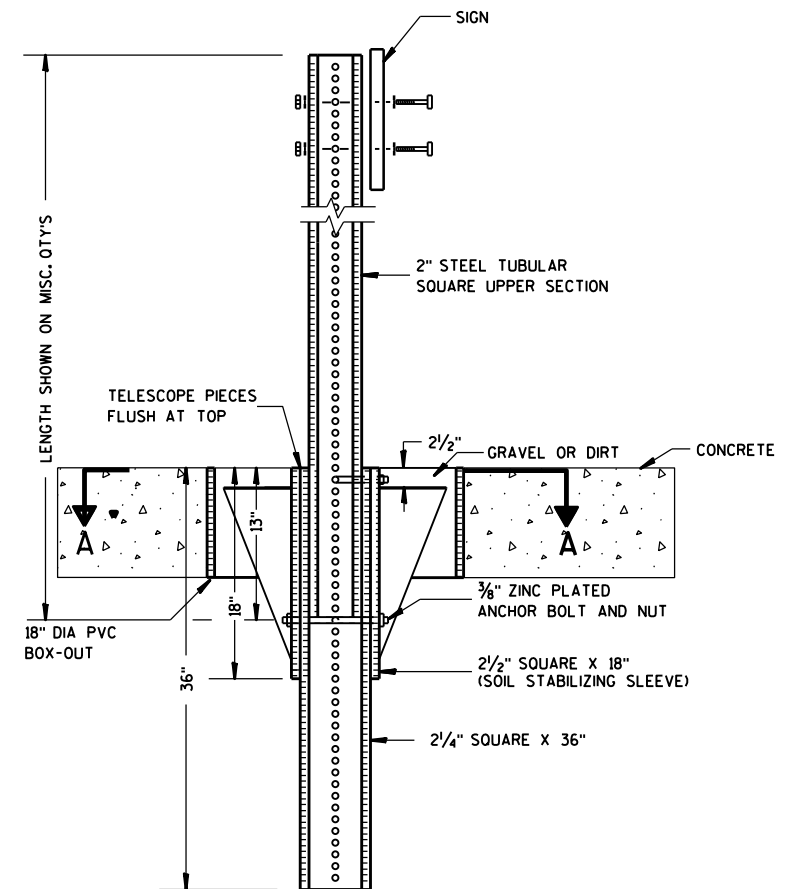




**ELEVATION VIEW**

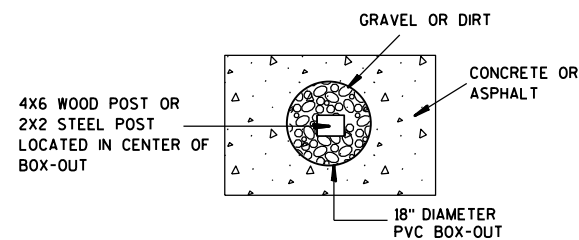
**DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT**

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



**ELEVATION VIEW**

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



**PLAN VIEW**

**FOR NEW CONCRETE/ ASPHALT INSTALLATIONS**

**SIGN POST  
BOX-OUTS  
A4-3B**

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

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

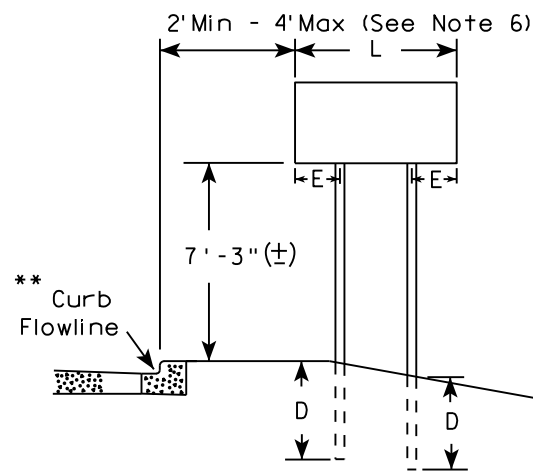
7

7

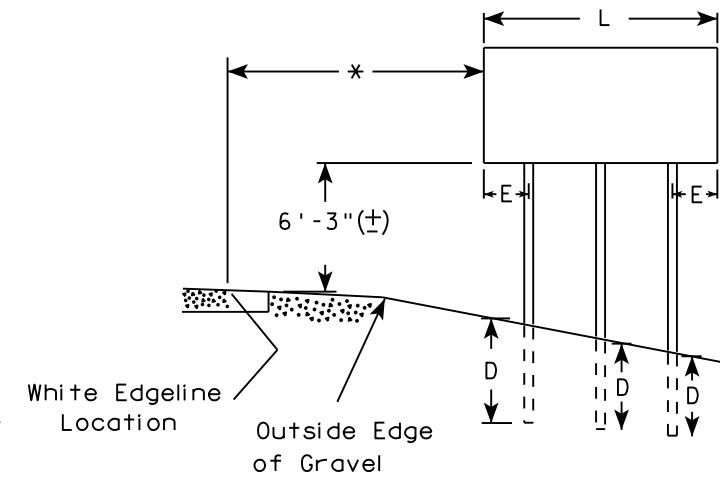
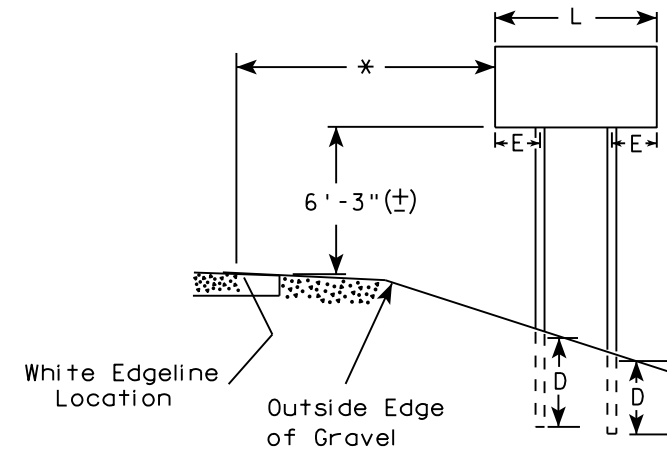
GENERAL NOTES

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

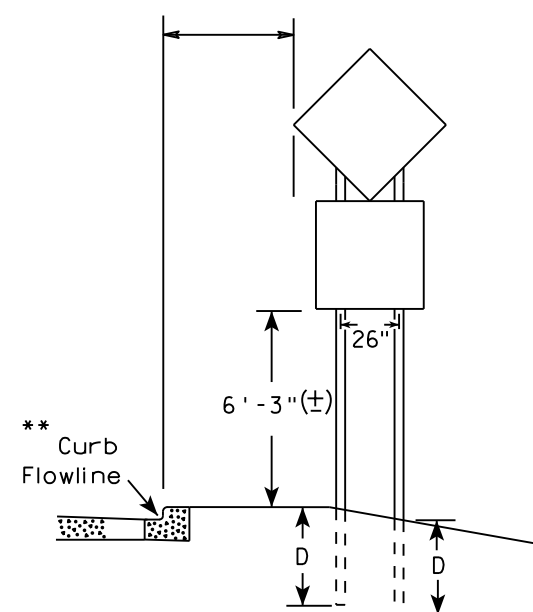
URBAN AREA



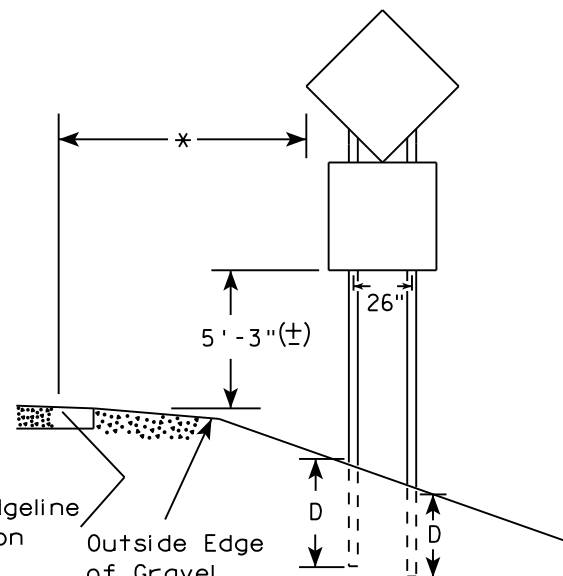
RURAL AREA (See Note 3)



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



48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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

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

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

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

\*\*\*

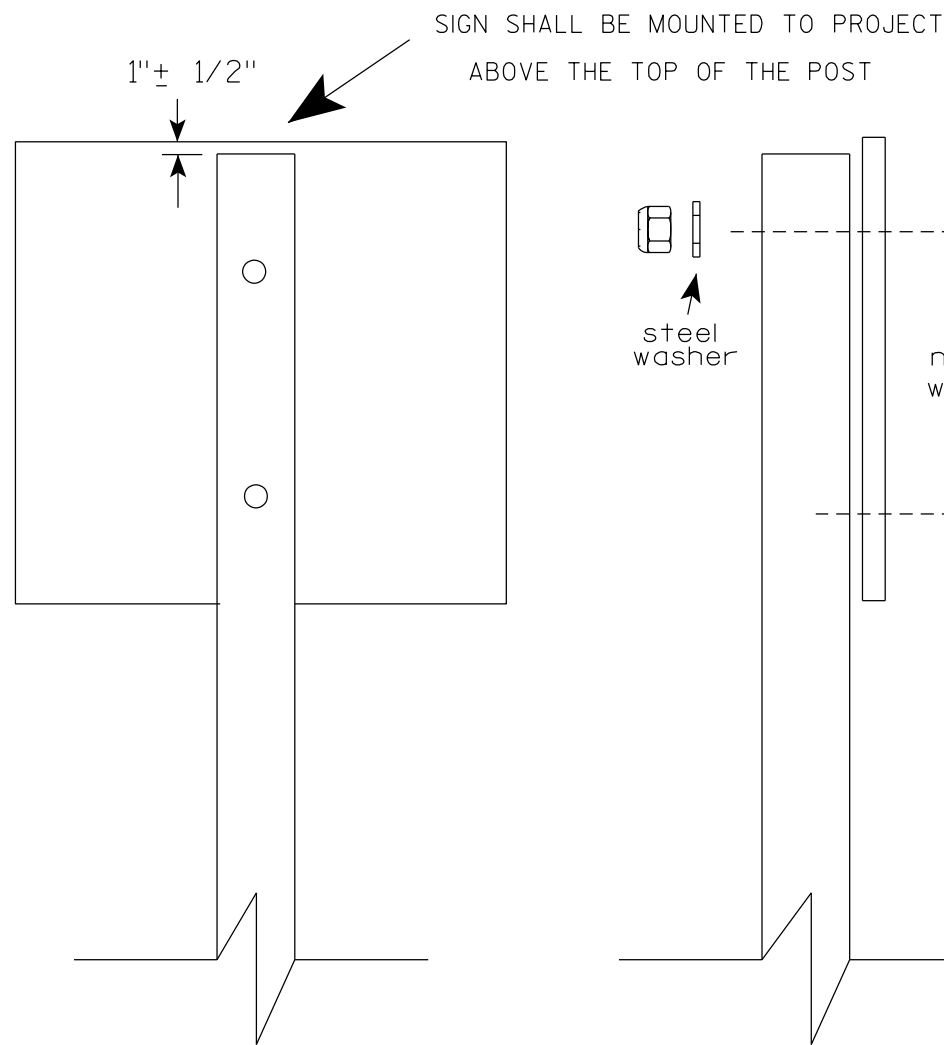
SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

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



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

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

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

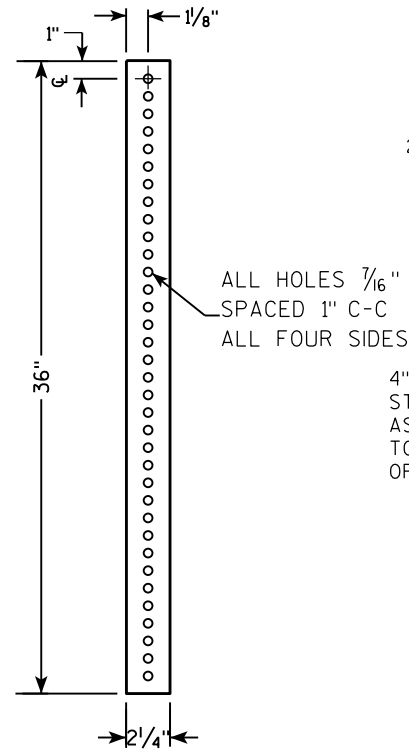
- STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
- MACHINE BOLTS -  $\frac{5}{16}$ " X 1-3/4" Length w/ lock nuts
- WOOD POSTS (4" x 6")
- LAG SCREWS -  $\frac{3}{8}$ " X 3" (NO STRINGERS ON BACK OF SIGN)
  - $\frac{3}{8}$ " X 4" (STRINGERS ON BACK OF SIGN)
- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS -  $\frac{3}{8}$ " X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
  - $\frac{3}{8}$ " X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)
- RIVETS -  $\frac{9}{32}$ " (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  $\frac{3}{8}$ " I.D. X  $\frac{1}{16}$ " STEEL
  - 1-1/4" O.D. X  $\frac{3}{8}$ " I.D. X .080 NYLON

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

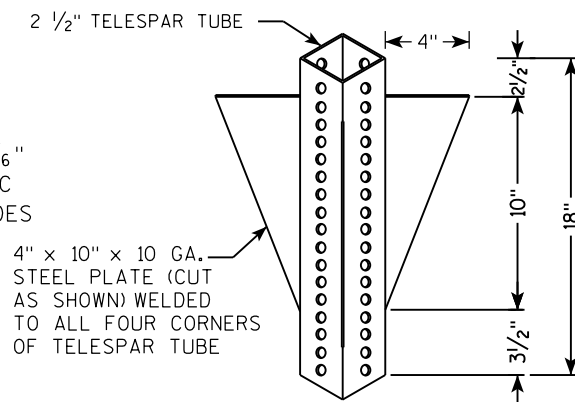
ATTACHMENT OF SIGNS TO POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R Rauch</i> For State Traffic Engineer
DATE 4/1/2020	PLATE NO. A4-8.9

**TELESCOPIC TUBING ANCHORS  
TWO PIECE SYSTEM**

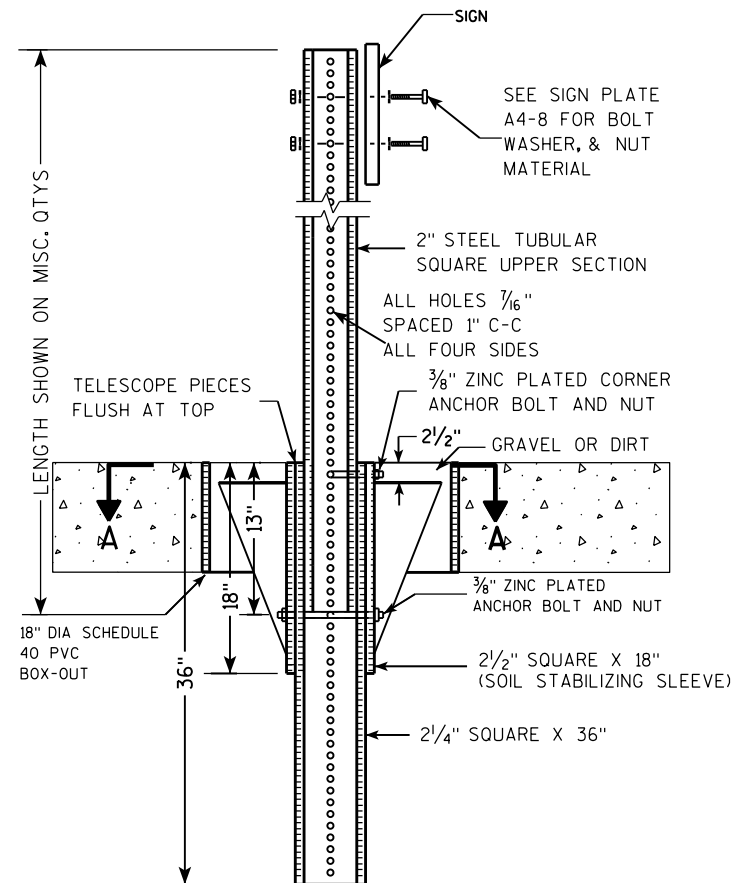
2 1/4" SQUARE  
12 GAUGE  
PERFORATED  
GALVANIZED FINISH



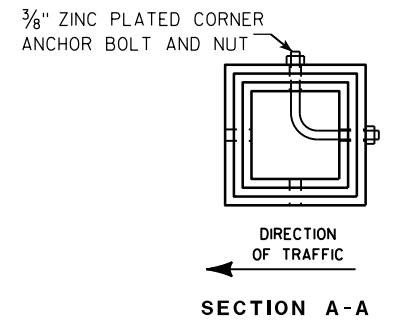
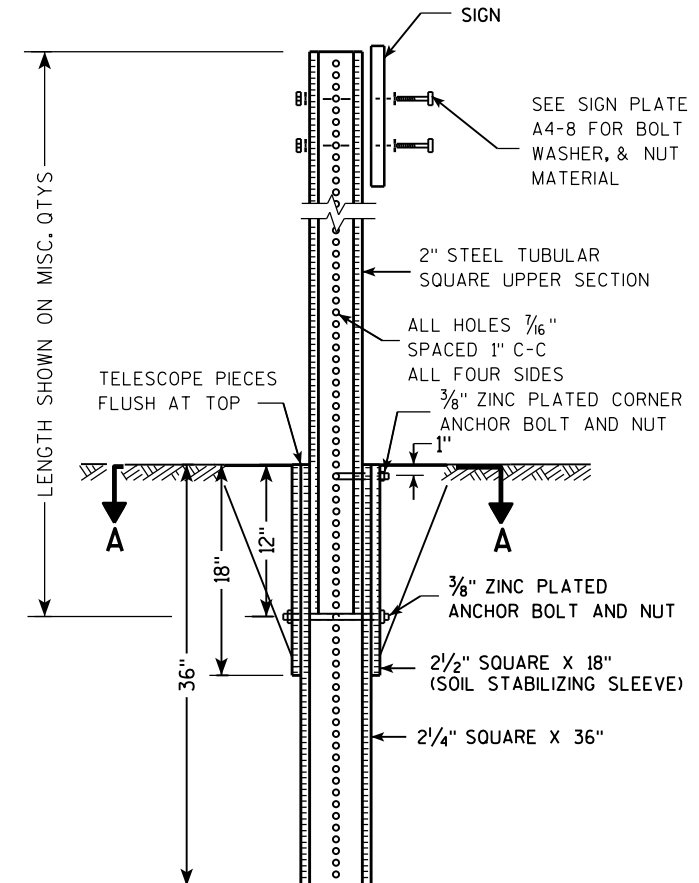
2 1/2" SQUARE  
12 GAUGE  
OMNI-DIRECTIONAL  
PERFORATED  
SOIL STABILIZING SLEEVE  
GALVANIZED FINISH



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



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



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

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

**TUBULAR STEEL  
SIGN POST  
A4-9**

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

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

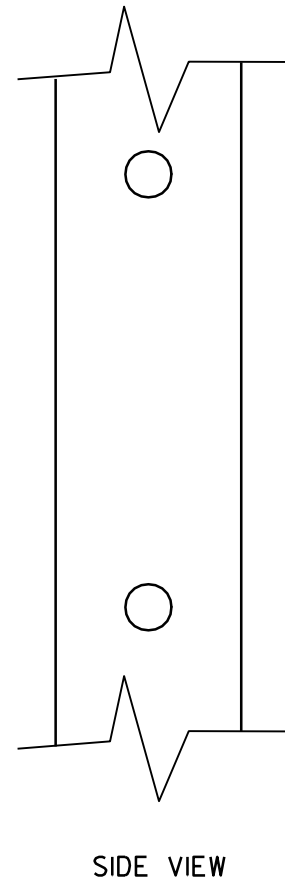
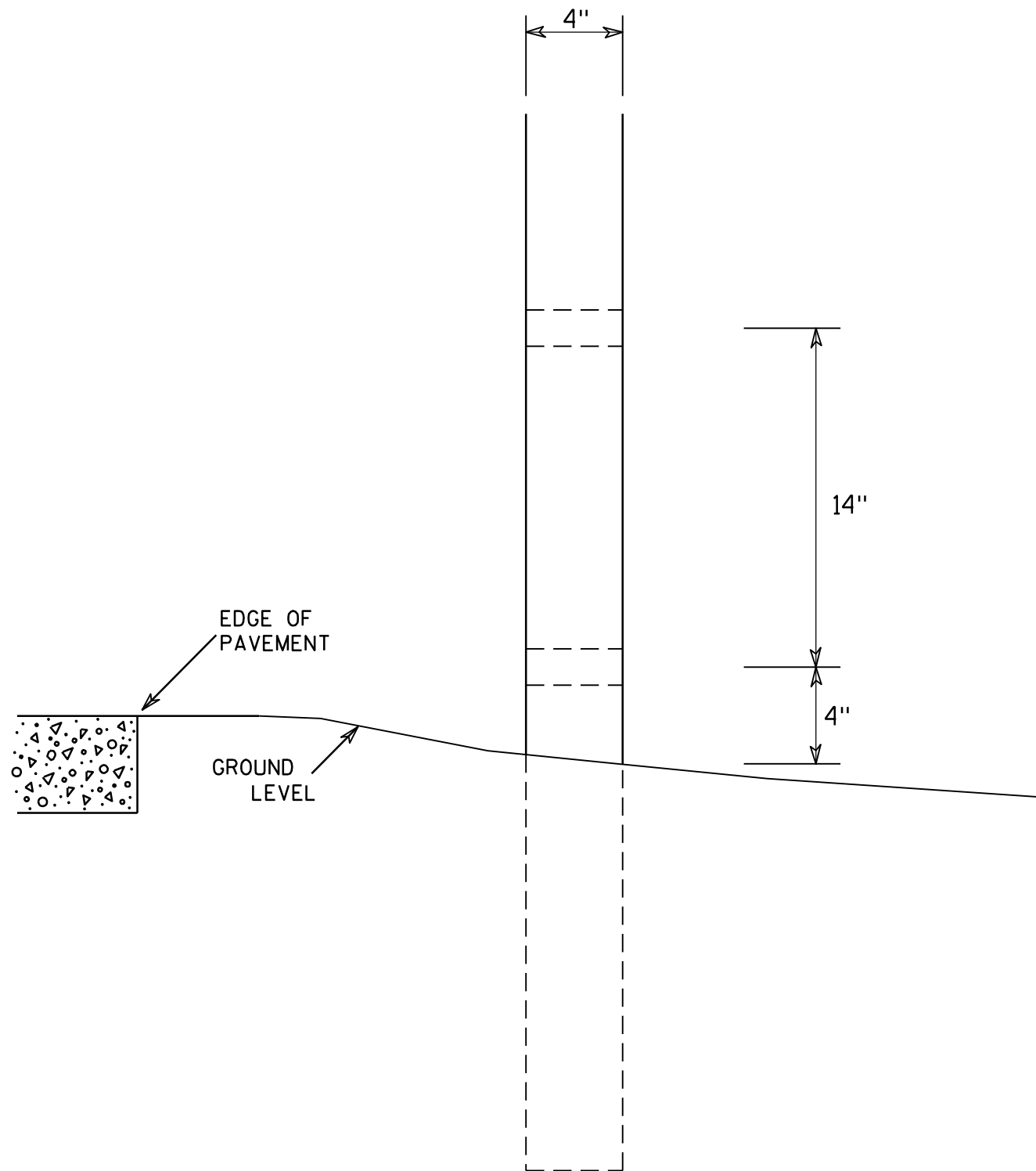
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



GENERAL NOTES

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

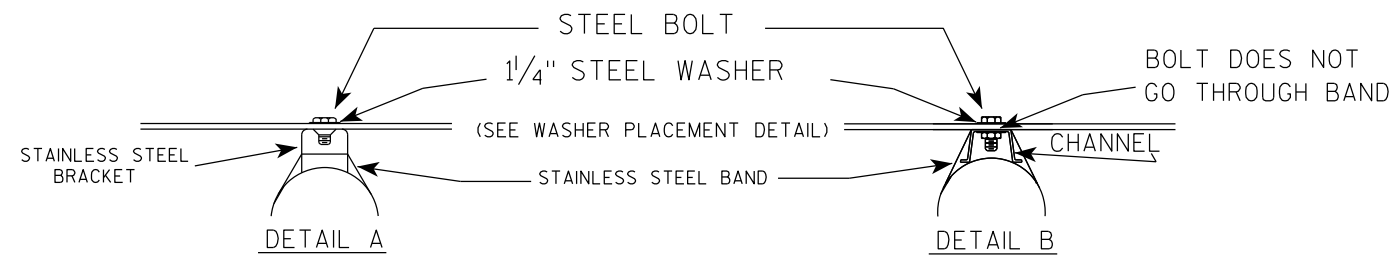
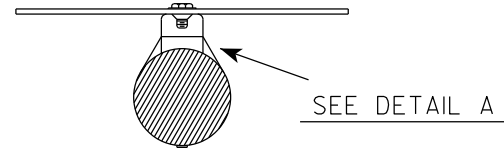
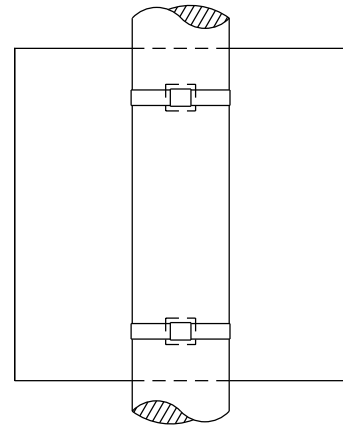
7

7

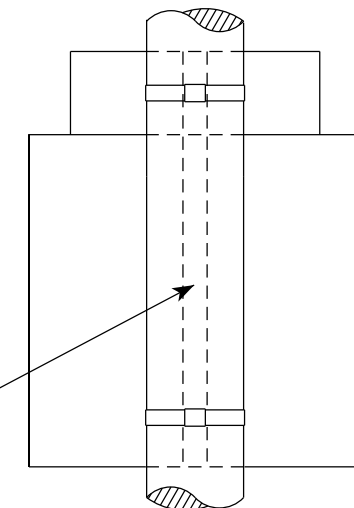
<b>4 X 6 WOOD POST MODIFICATIONS</b>	
<i>WISCONSIN DEPT OF TRANSPORTATION</i>	
APPROVED	<i>Chester J Spang</i> for State Traffic Engineer
DATE <u>3/27/97</u>	PLATE NO. <u>A4-11.2</u>

# BANDING

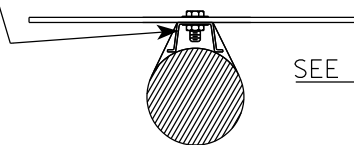
SINGLE SIGN



"J" ASSEMBLY

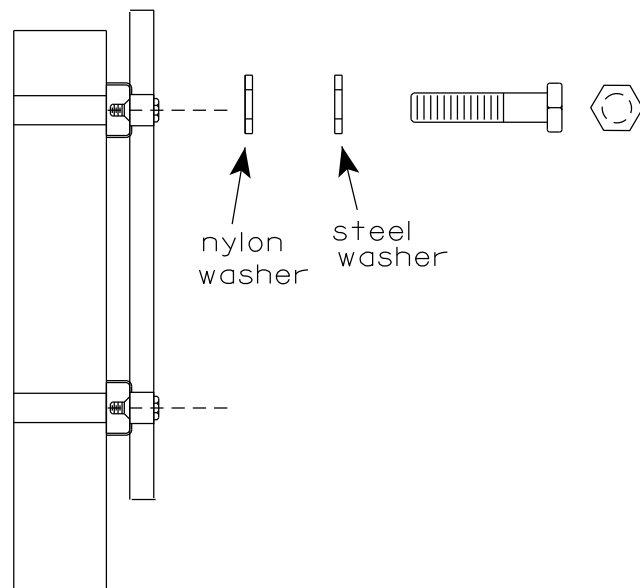


CHANNEL  
SEE TYPICAL PANEL  
INSTALLATION SHEET



- 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.
  4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
    - a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
    - b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

WASHER PLACEMENT



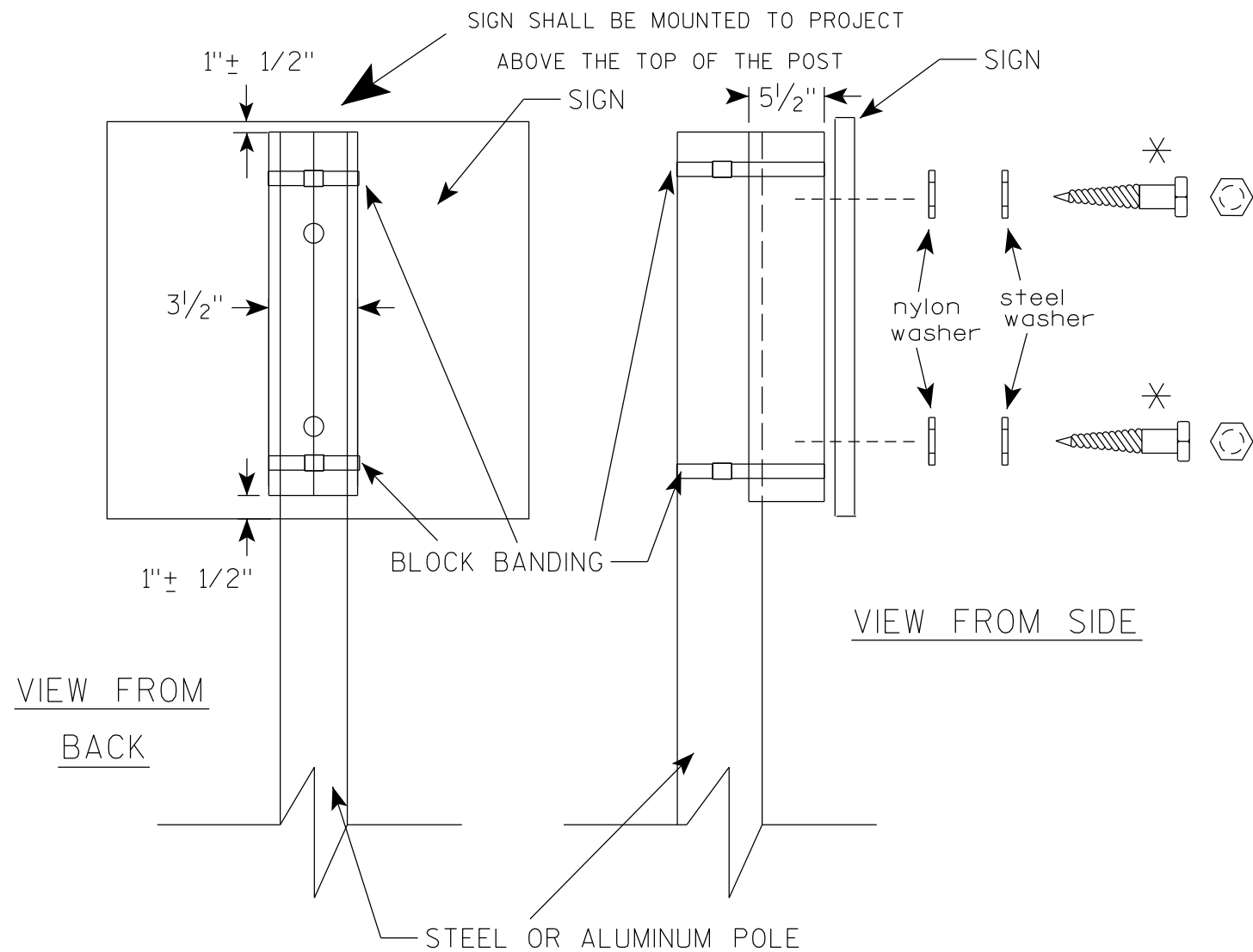
WASHERS (ALL POSTS) -  
 1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL  
 1-1/4" O.D. X 3/8" I.D. X .080 NYLON  
 FOR ALL TYPE H SIGNS

STANDARD SIGN  
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

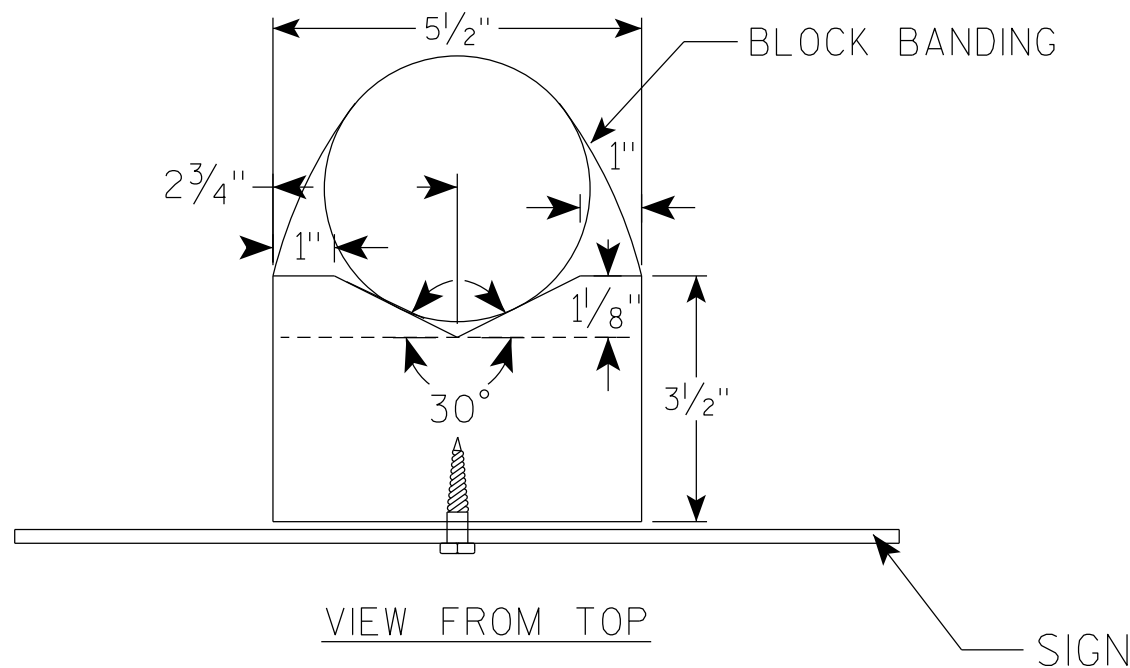
DATE 6/10/19 PLATE NO. A5-9.4



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, 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
  - b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1/4" O.D. X 3/8" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1/4" O.D. X 3/8" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

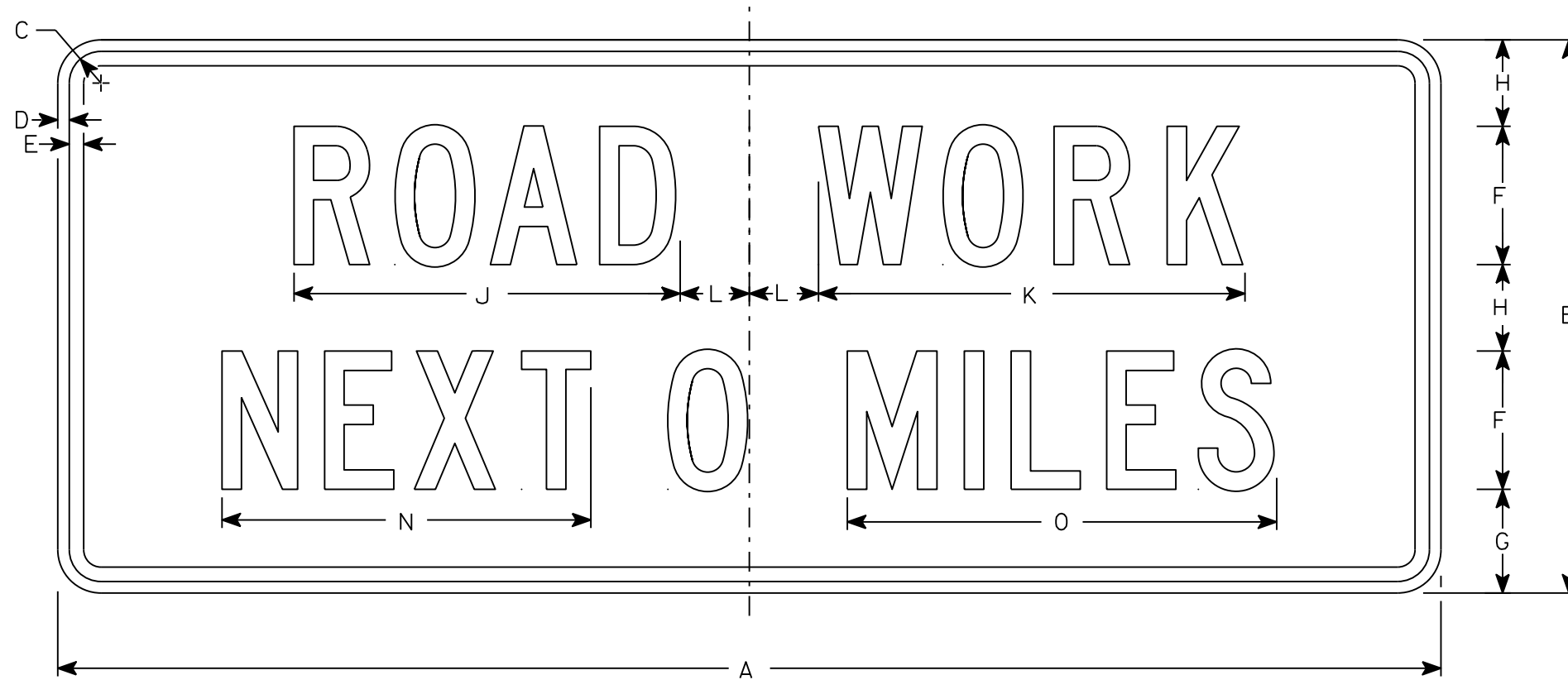
✱ LAG BOLTS SHALL BE 3/8" X 2 1/2"



BLOCK BANDING DETAIL ( V-BLOCK OPTION )	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R Rauch</i> for State Traffic Engineer
DATE 6/10/19	PLATE NO. A5-10.2

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.
5. Round distance to nearest whole Mile and substitute appropriate numerals and optically adjust spacing to achieve proper balance



G20-1

7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
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
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
5																											

STANDARD SIGN  
G20-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
For State Traffic Engineer

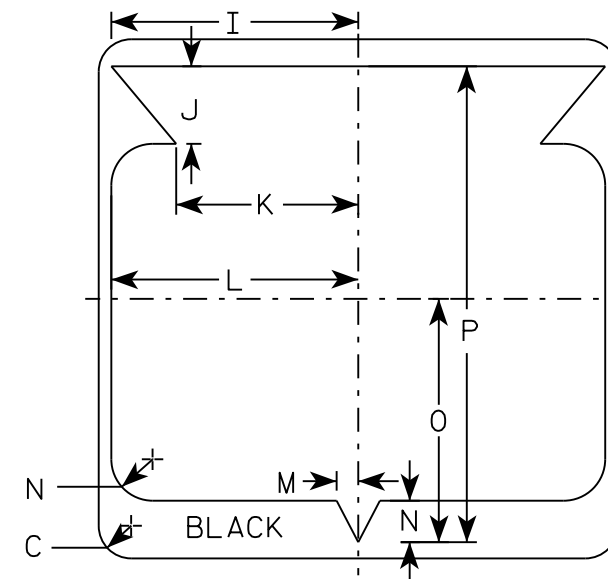
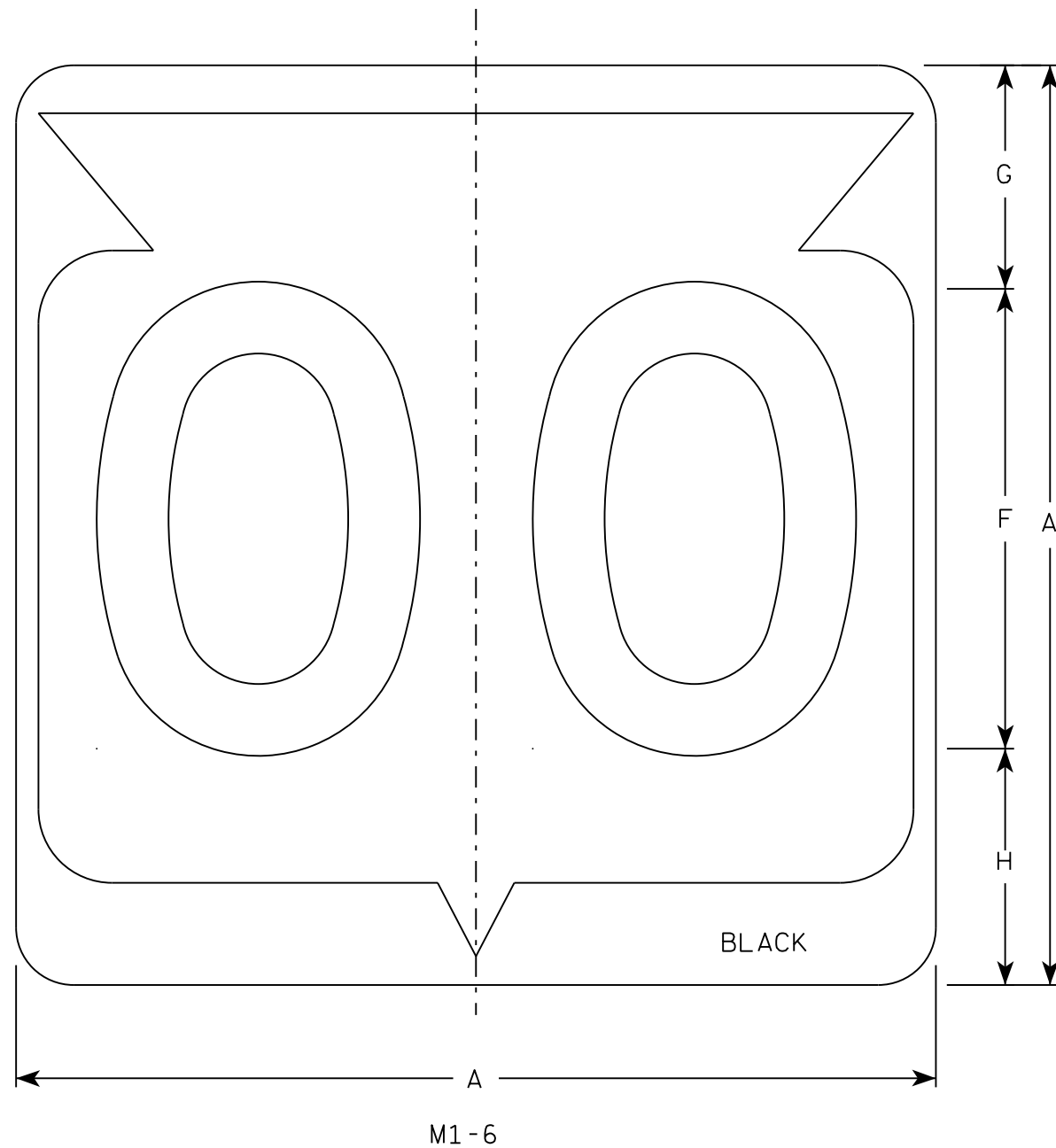
DATE 3/14/17 PLATE NO. G20-1.8

PROJECT NO: \_\_\_\_\_ HWY: \_\_\_\_\_ COUNTY: \_\_\_\_\_ SHEET NO: \_\_\_\_\_ **E**



NOTES

1. Sign is Type II - Type H Reflective
2. Color:  
Background - White  
Message - Black
3. Message Series - D except 3 number signs 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																											
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
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
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
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

STATE ROUTE MARKER  
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

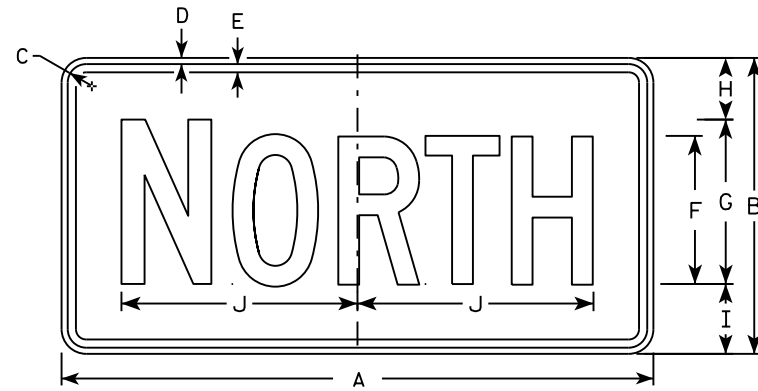
APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-6.10

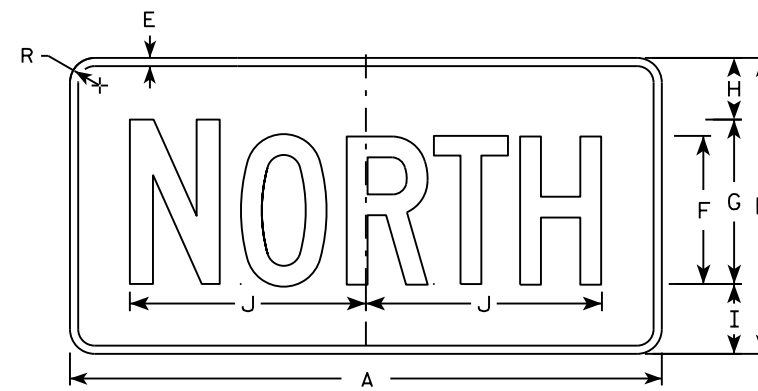
PROJECT NO: \_\_\_\_\_ HWY: \_\_\_\_\_ COUNTY: \_\_\_\_\_ SHEET NO: **E**

NOTES

- All Signs Type II - Type H
- Color:
  - Background - See note 5
  - Message - See note 5
- 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.
- 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
- Note the first letter of each direction is larger than the remainder of the message.



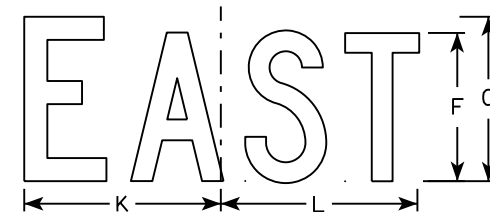
M3-1  
MM3-1  
MP3-1



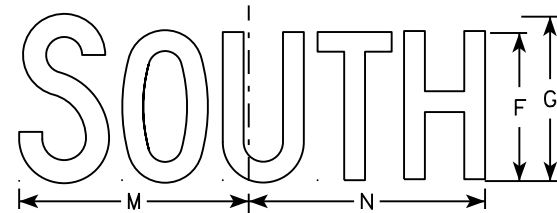
MB3-1  
MK3-1  
MN3-1



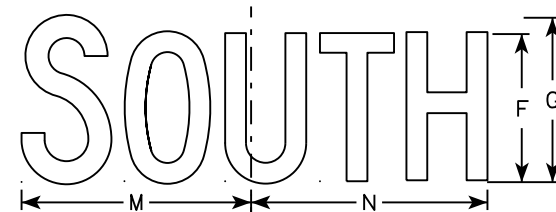
M3-2  
MM3-2  
MP3-2



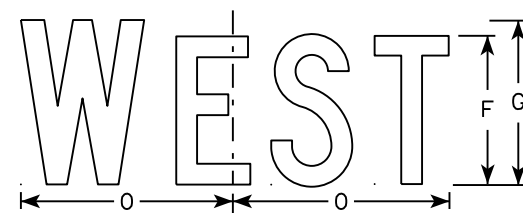
MB3-2  
MK3-2  
MN3-2



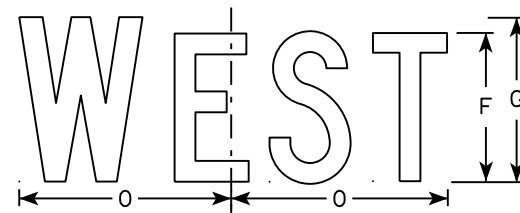
M3-3  
MM3-3  
MP3-3



MB3-3  
MK3-3  
MN3-3



M3-4  
MM3-4  
MP3-4



MB3-4  
MK3-4  
MN3-4

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	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

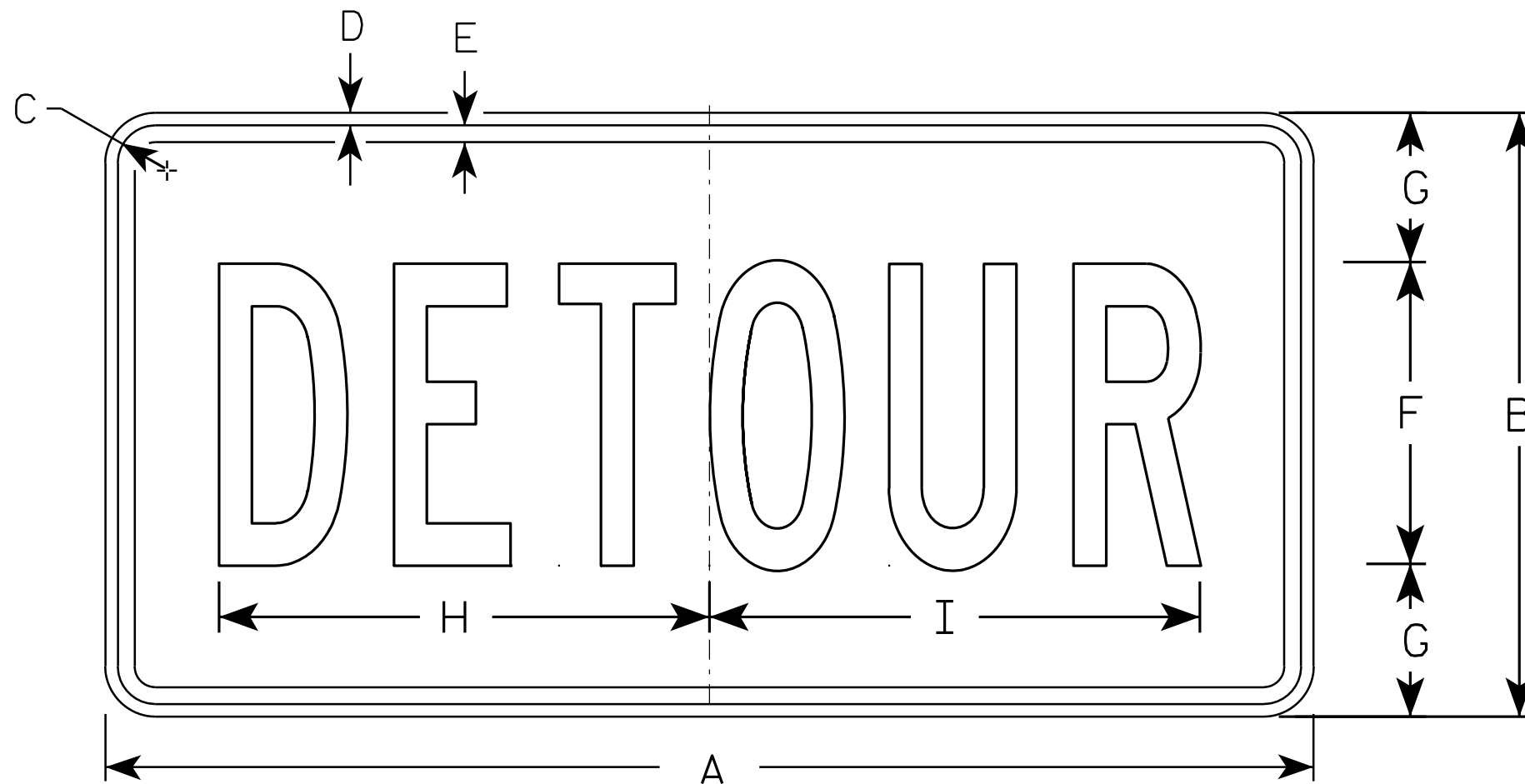
WISCONSIN DEPT OF TRANSPORTATION

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

7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
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

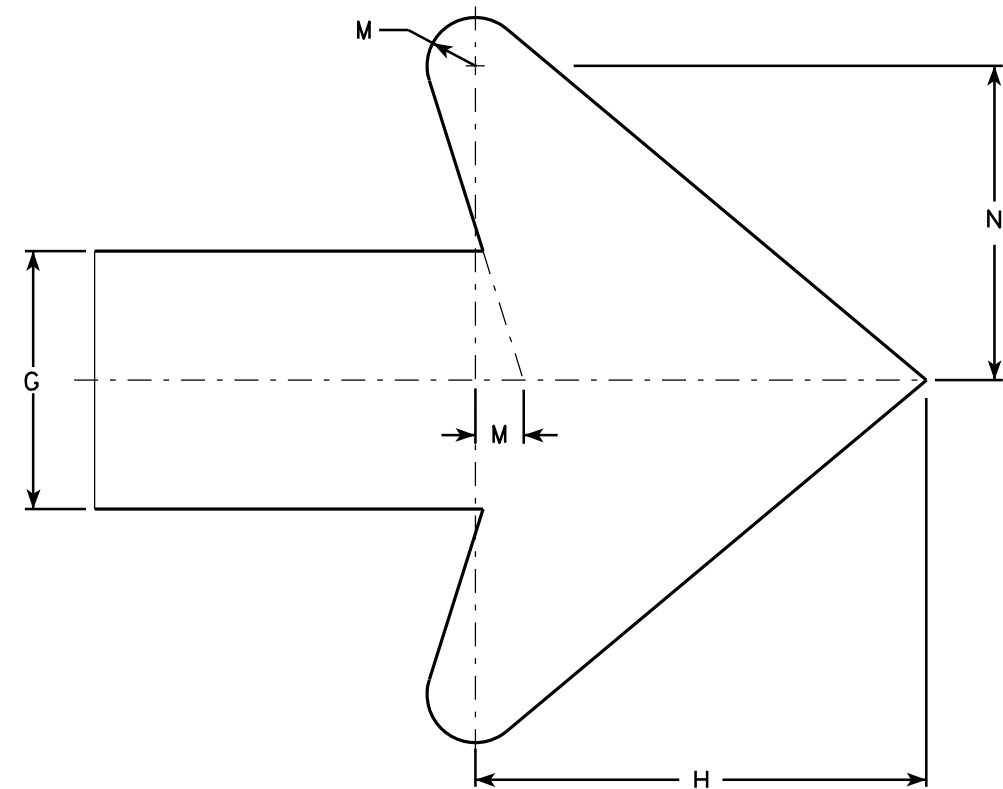
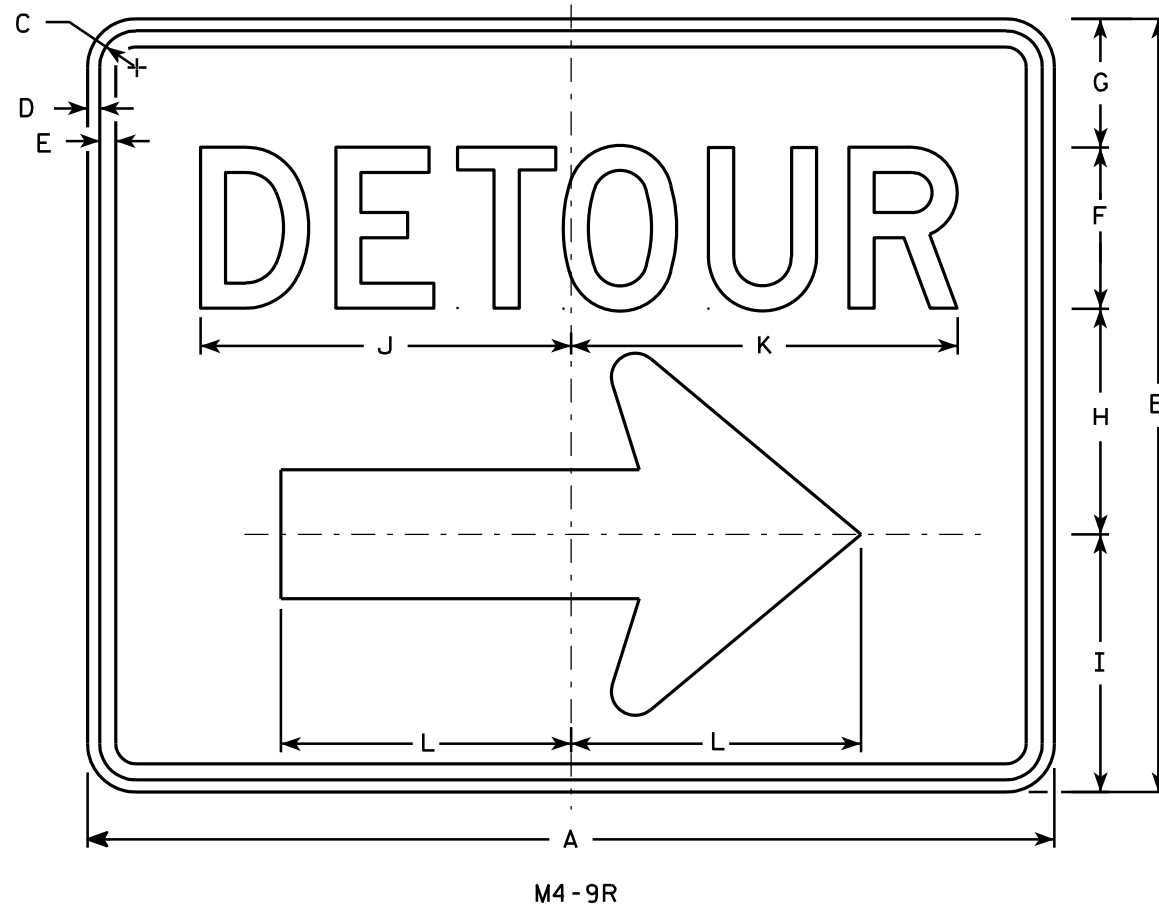
APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

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

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.
5. M4-9L is the same as M4-9R except the arrow is reversed.



Arrow Detail

7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	30	24	1 1/8	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
3	30	24	1 1/8	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
4	48	36	1 3/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0
5	48	36	1 3/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0

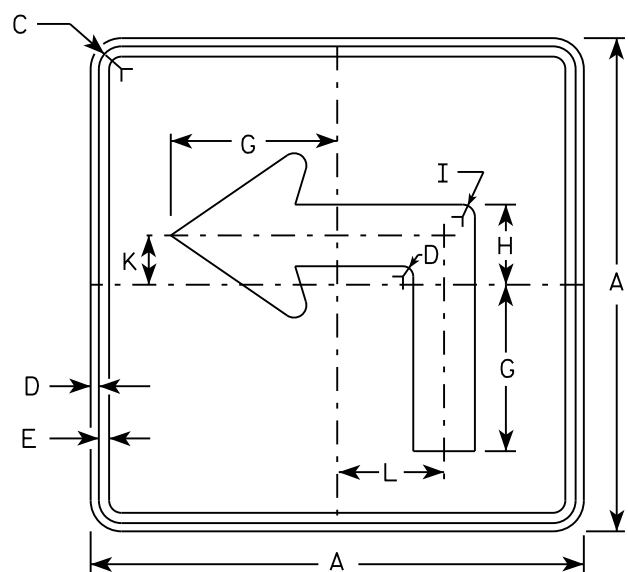
**STANDARD SIGN**  
**M4-9 R & L**

*WISCONSIN DEPT OF TRANSPORTATION*

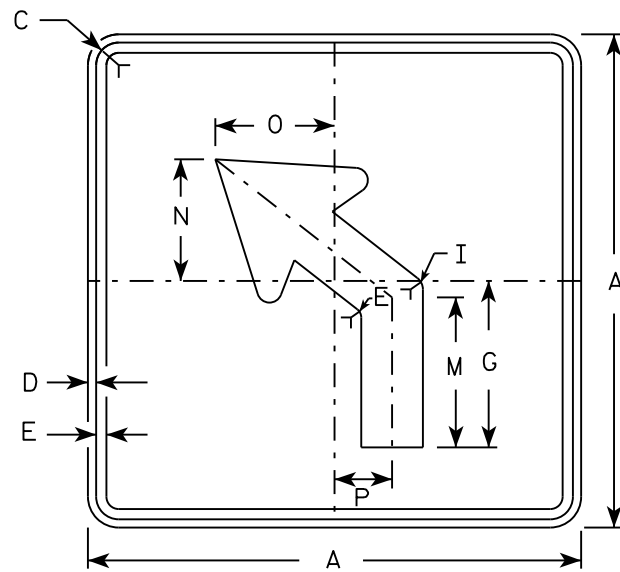
APPROVED *Matthew R. Rauch*  
For State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-9R.4

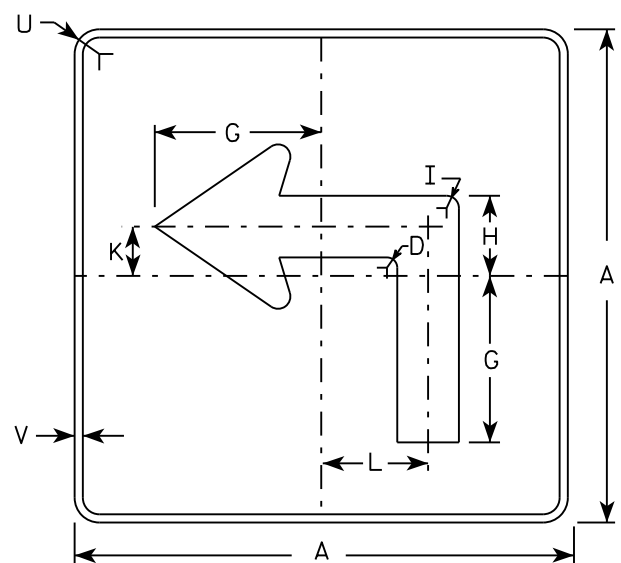
PROJECT NO: \_\_\_\_\_ HWY: \_\_\_\_\_ COUNTY: \_\_\_\_\_ SHEET NO: **E**



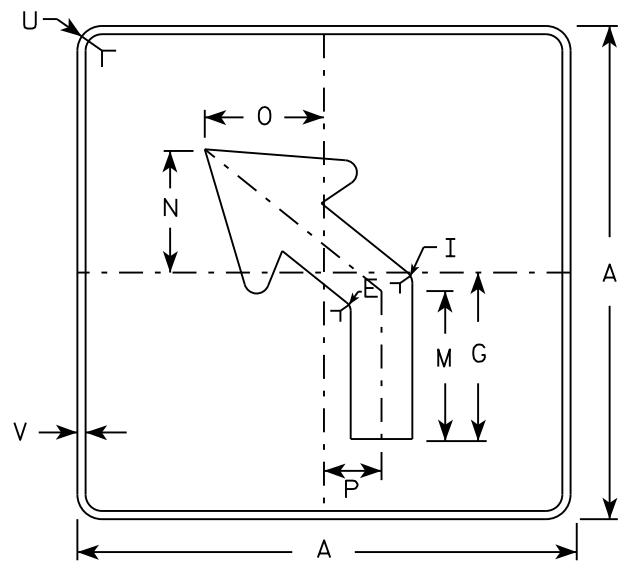
M5-1L  
MM5-1L  
M05-1L  
MP5-1L



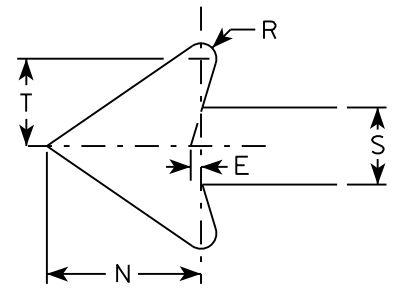
M5-2L  
MM5-2L  
M05-2L  
MP5-2L



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



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



NOTES

- Signs are Type II - Type H reflective except as shown
- Color:  
Background - See note 4  
Message - See note 4
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- |                 |   |
|-----------------|---|
| M5-1 and M5-2   | Background - White                      |
|                 | Message - Black                         |
| MB5-1 and MB5-2 | Background - Blue                       |
|                 | Message - White                         |
| MK5-1 and MK5-2 | Background - Green                      |
|                 | Message - White                         |
| MM5-1 and MM5-2 | Background - White                      |
|                 | Message - Green                         |
| MN5-1 and MN5-2 | Background - Brown                      |
|                 | Message - White                         |
| M05-1 and M05-2 | Background - Orange - Type F Reflective |
|                 | Message - Black                         |
| MP5-1 and MP5-2 | Background - White - Type H Reflective  |
|                 | Message - Blue                          |
| MR5-1 and MR5-2 | Background - Brown                      |
|                 | Message - Yellow                        |
- M5-1R same as M5-1L except arrow points right.
- M5-2R same as M5-2L except arrow tilts right.

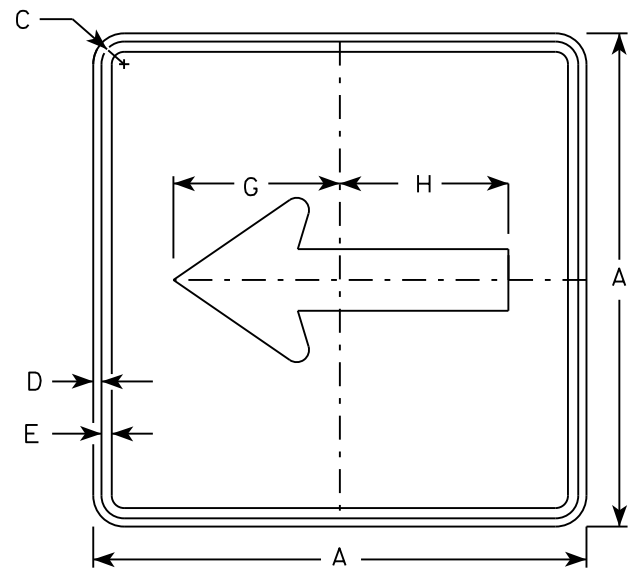
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25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

STANDARD SIGN  
M5-1 & M5-2

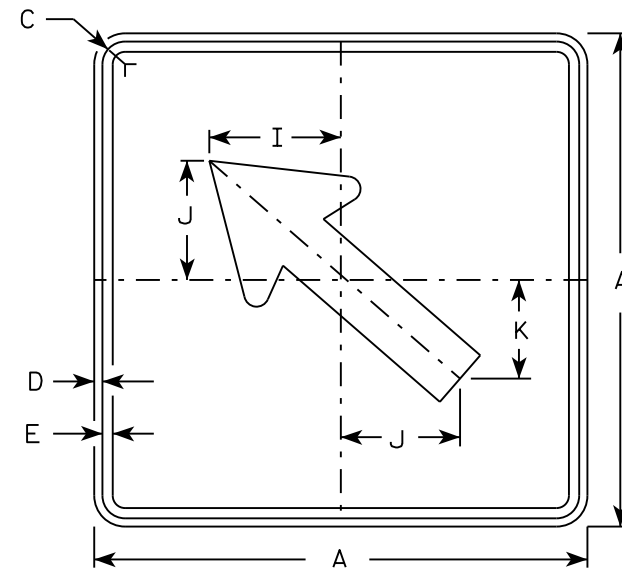
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

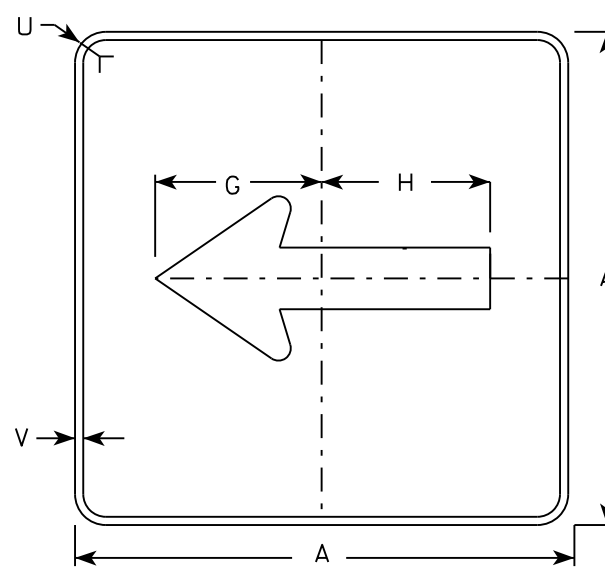
DATE 10/15/15 PLATE NO. M5-1.13



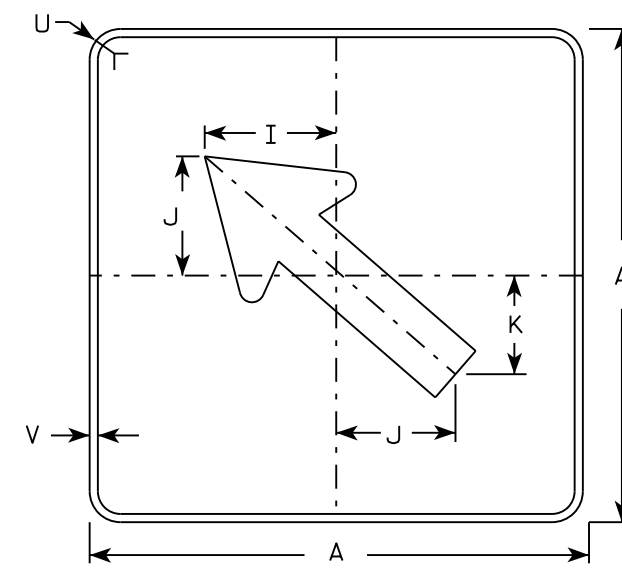
M6-1  
MM6-1  
M06-1  
MP6-1



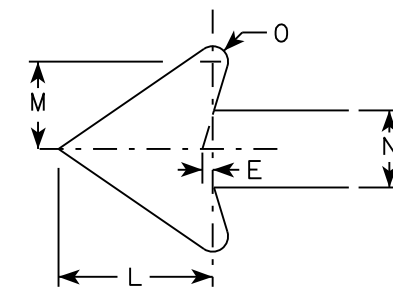
M6-2  
MM6-2  
M06-2  
MP6-2



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



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



NOTES

- 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

7

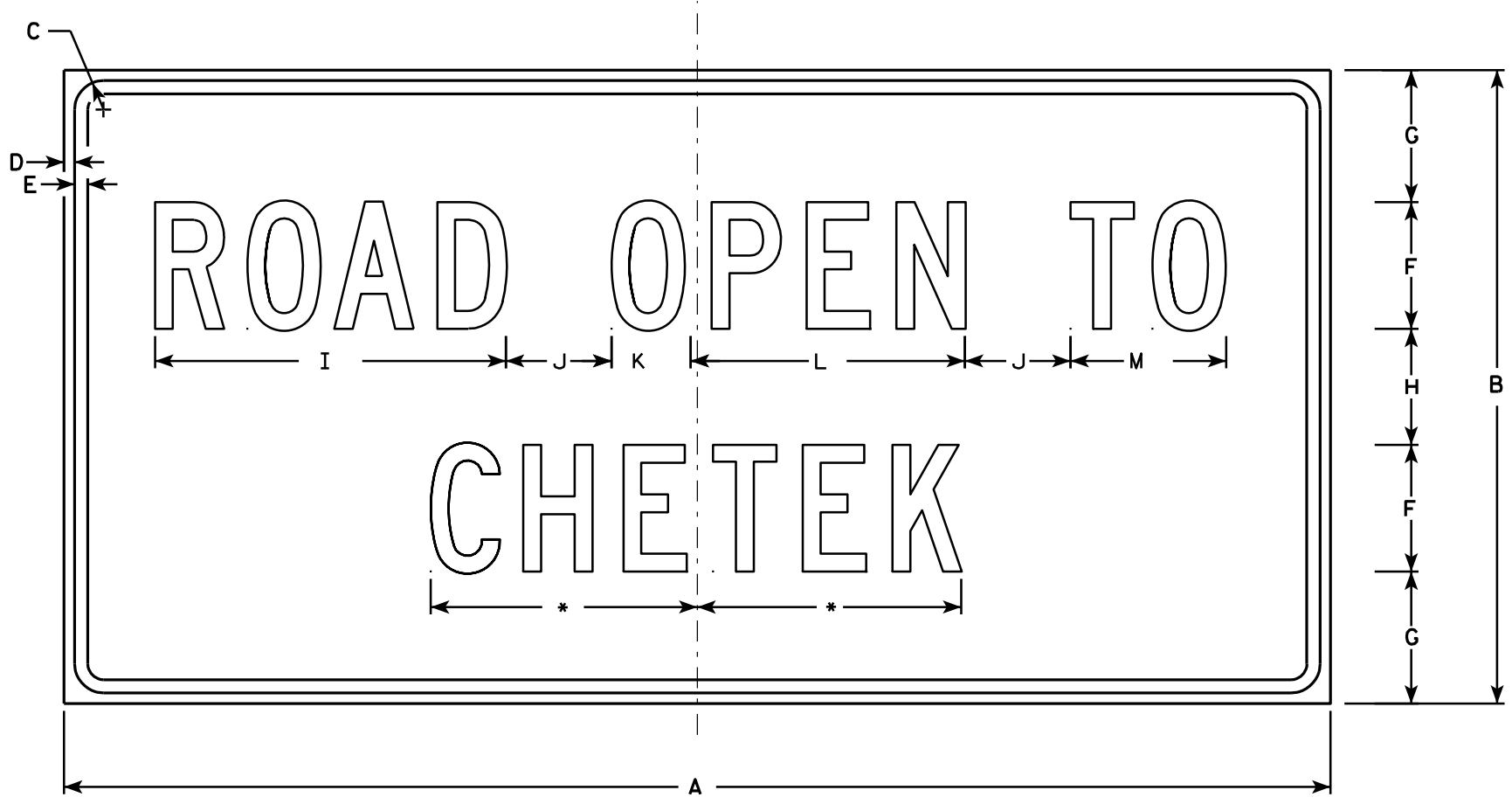
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10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

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



R10-61

\*See note 5

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 message and optically balance.

7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	24	1 3/8	1/2	5/8	4	5 1/2	5	10 3/4	2	2 1/8	8 3/8	4 5/8														6.0
2S	60	30	1 3/8	1/2	5/8	6	6 1/4	5 1/2	16 5/8	5	3 3/4	13	7 3/8														12.5
2M	60	30	1 3/8	1/2	5/8	6	6 1/4	5 1/2	16 5/8	5	3 3/4	13	7 3/8														12.5
3																											
4																											
5																											

**STANDARD SIGN**  
R10-61

WISCONSIN DEPT OF TRANSPORTATION

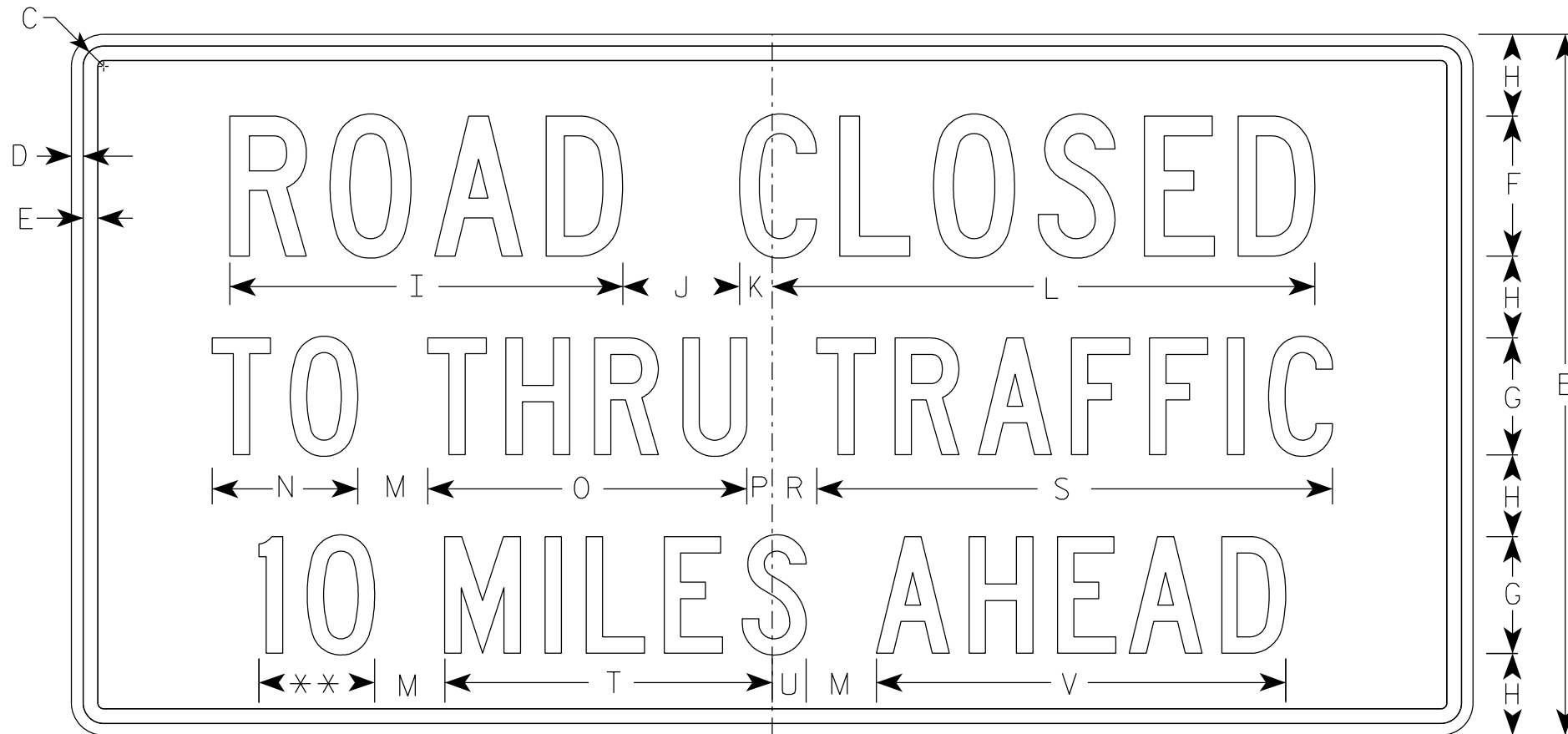
APPROVED *Matthew R. Rauch*  
For State Traffic Engineer

DATE 4/4/11 PLATE NO. R10-61.5

PROJECT NO: \_\_\_\_\_ HWY: \_\_\_\_\_ COUNTY: \_\_\_\_\_ SHEET NO: \_\_\_\_\_ E

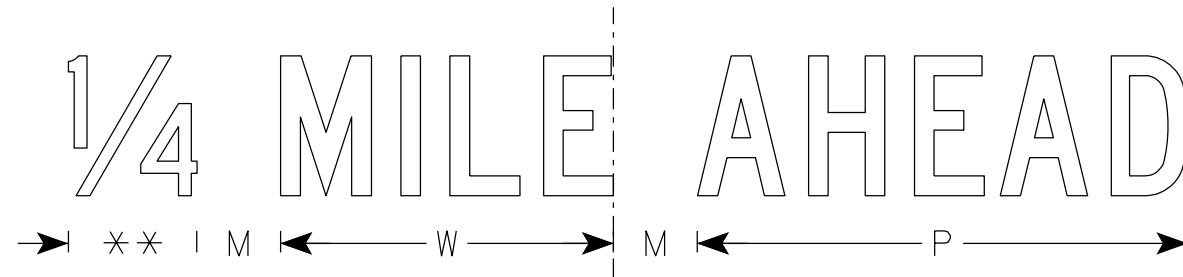
NOTES

1. Sign is Type II - Type H Reflective
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 to nearest quarter mile and optically adjust spacing to achieve proper balance.



R11-3

\*\* 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 1/4	3/8	3/8	4	3	2	11 1/4	3	1 1/8	15 3/8	2	3 3/4	8 1/4	5/8		1 3/8	13 1/4	8 3/8	7/8	10 1/2	7 1/8			4.5	
2S	60	30	1 3/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8			12.5	
2M	60	30	1 3/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8			12.5	
3																											
4																											
5																											

STANDARD SIGN  
R11-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

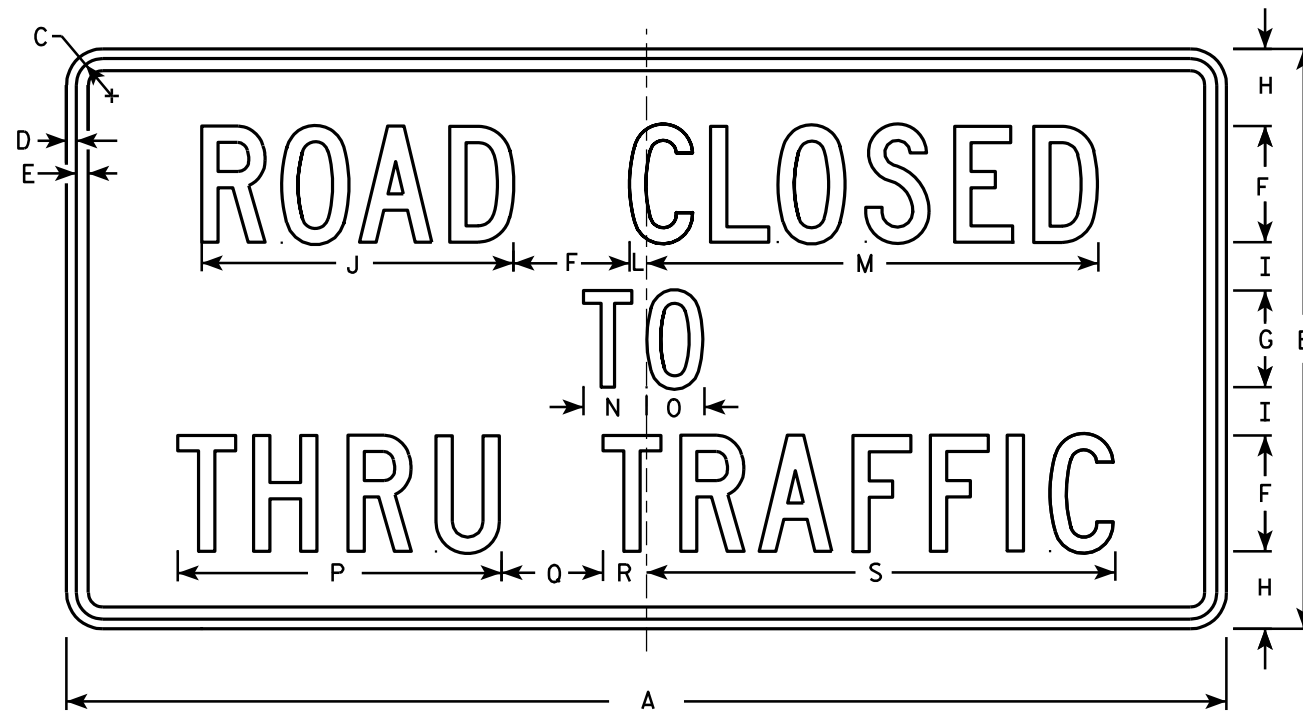
DATE 6/14/2021 PLATE NO. R11-3.9

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 - 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.



R11-4

7

7

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

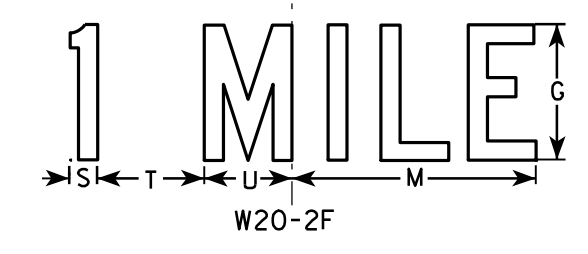
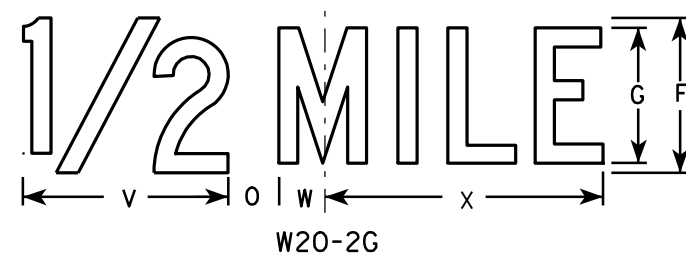
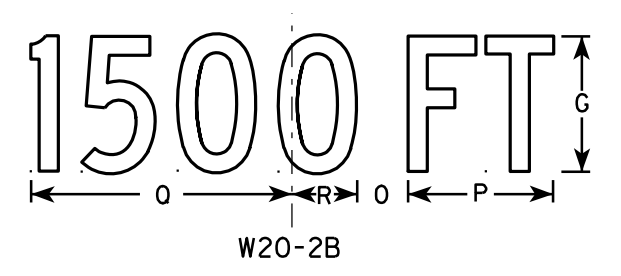
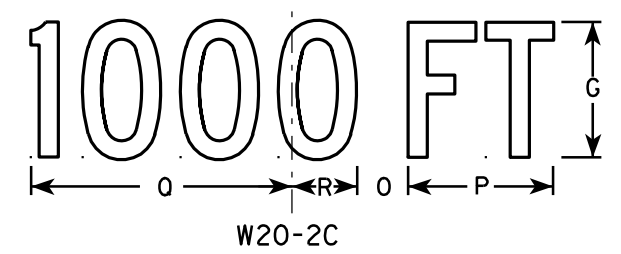
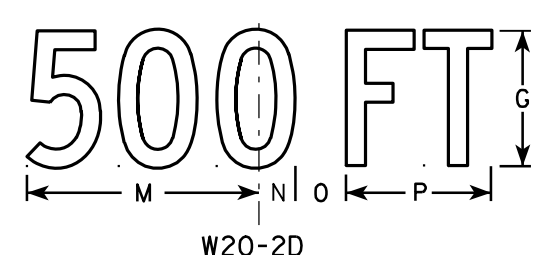
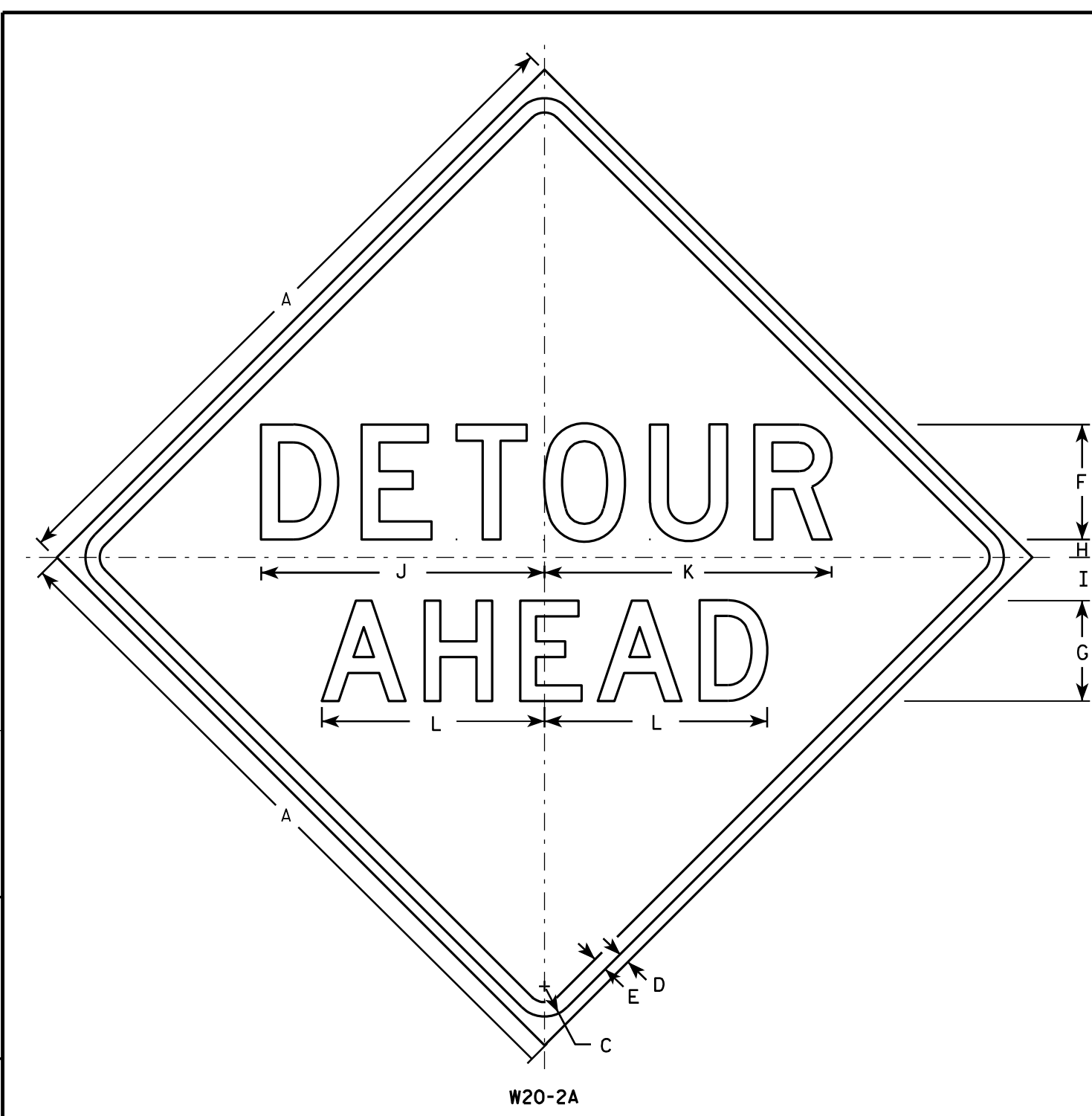
**STANDARD SIGN**  
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Raush*  
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-4.3

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 - 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.

7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	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

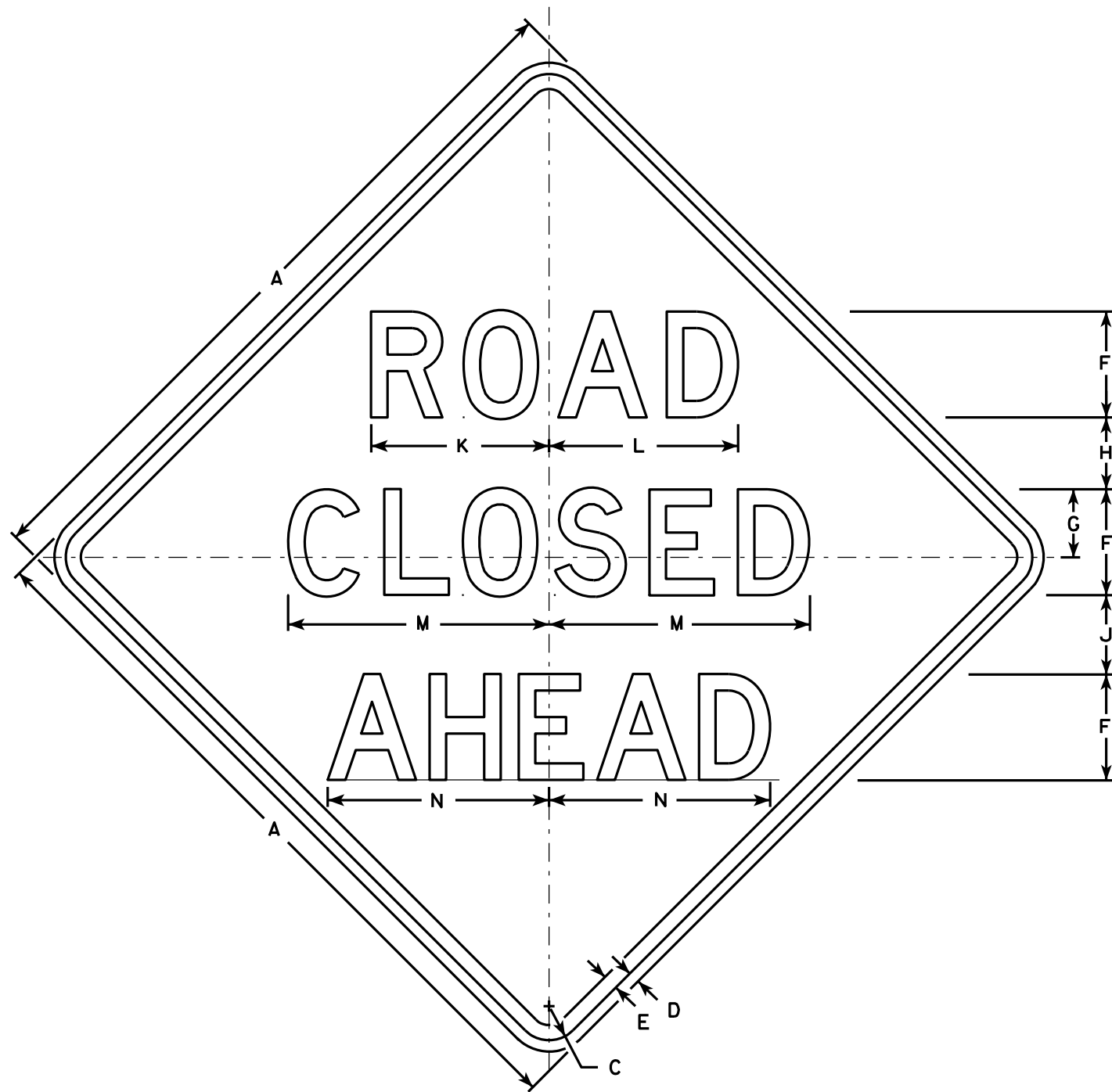
STANDARD SIGN  
W20-2A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

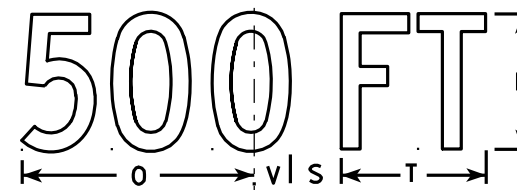
APPROVED *Matthew R. Raub*  
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

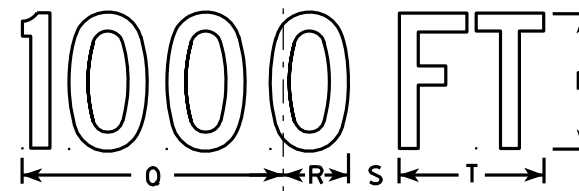
PROJECT NO: \_\_\_\_\_ HWY: \_\_\_\_\_ COUNTY: \_\_\_\_\_ SHEET NO: \_\_\_\_\_ E



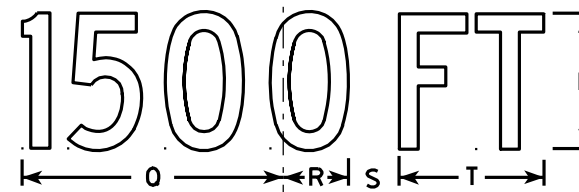
W20-3A



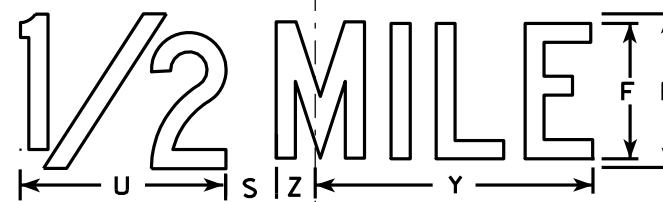
W20-3D



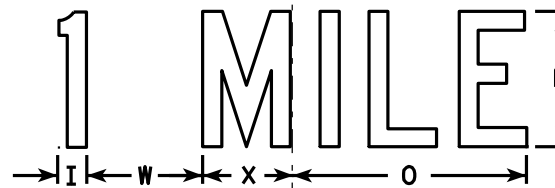
W20-3C



W20-3B



W20-3G



W20-3F

**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. Lines 1 and 2 are Series D.  
Line 3 is Series D for AHEAD and Series C for all other distances.

7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

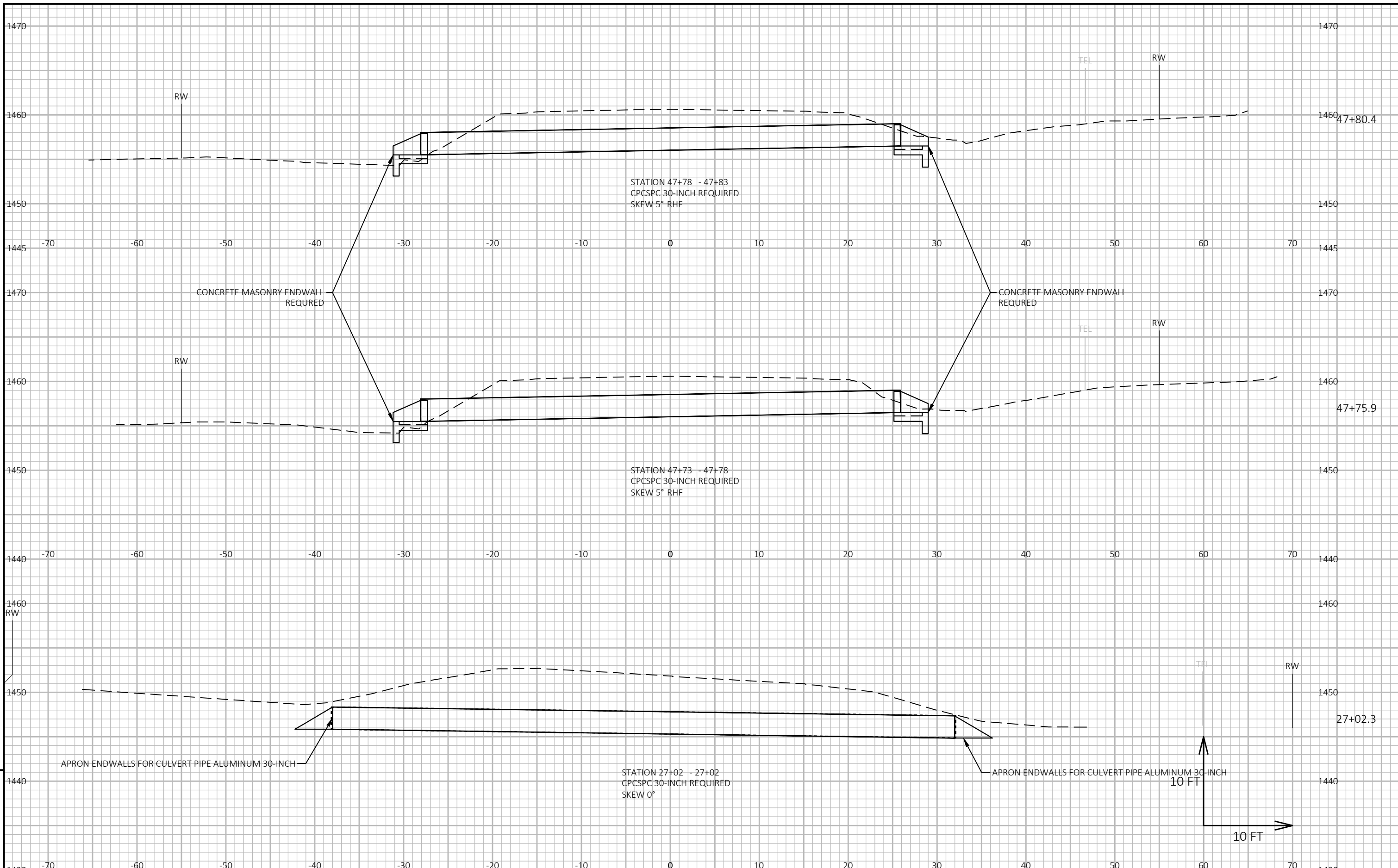
**STANDARD SIGN**  
W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
For State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-3.7

PROJECT NO: \_\_\_\_\_ HWY: \_\_\_\_\_ COUNTY: \_\_\_\_\_ SHEET NO: \_\_\_\_\_ E



9

9

PROJECT NO: 9535-00-75	HWY: STH 97	COUNTY: TAYLOR	CROSS SECTIONS: STH 97 - MAINLINE CULVERTS	SHEET	E
------------------------	-------------	----------------	--	-------	---

Notes



## *Wisconsin Department of Transportation*

Dedicated people creating transportation solutions through innovation and exceptional service.

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