

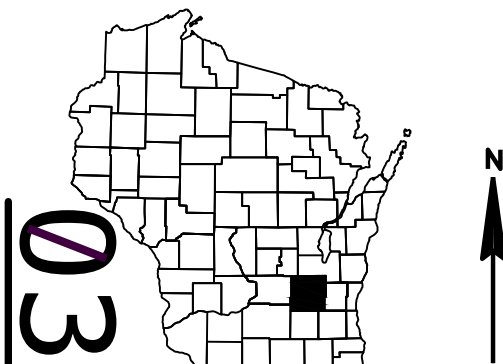
PROJECT WITH: N/A

3020-00-70

COUNTY:

DODGE

TOTAL SHEETS = 160



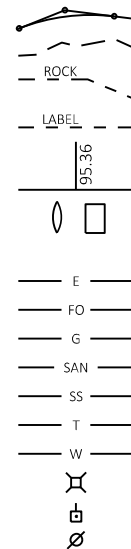
A.A.D.T.	2026	=	4100
A.A.D.T.	2046	=	4100
D.H.V.		=	468
D.D.		=	60/40
T.		=	16.1%
DESIGN SPEED		=	35 MPH / 50 MPH / 60 MPH
ESALS		=	1,300,000

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

GRADE LINE
ORIGINAL GROUND
MARSH OR ROCK PROFILE
(To be noted as such)
SPECIAL DITCH

GRADE ELEVATION

CULVERT (Profile View)
UTILITIES
ELECTRIC
FIBER OPTIC
GAS
SANITARY SEWER
STORM SEWER
TELEPHONE
WATER
UTILITY PEDESTAL
POWER POLE
TELEPHONE POLE



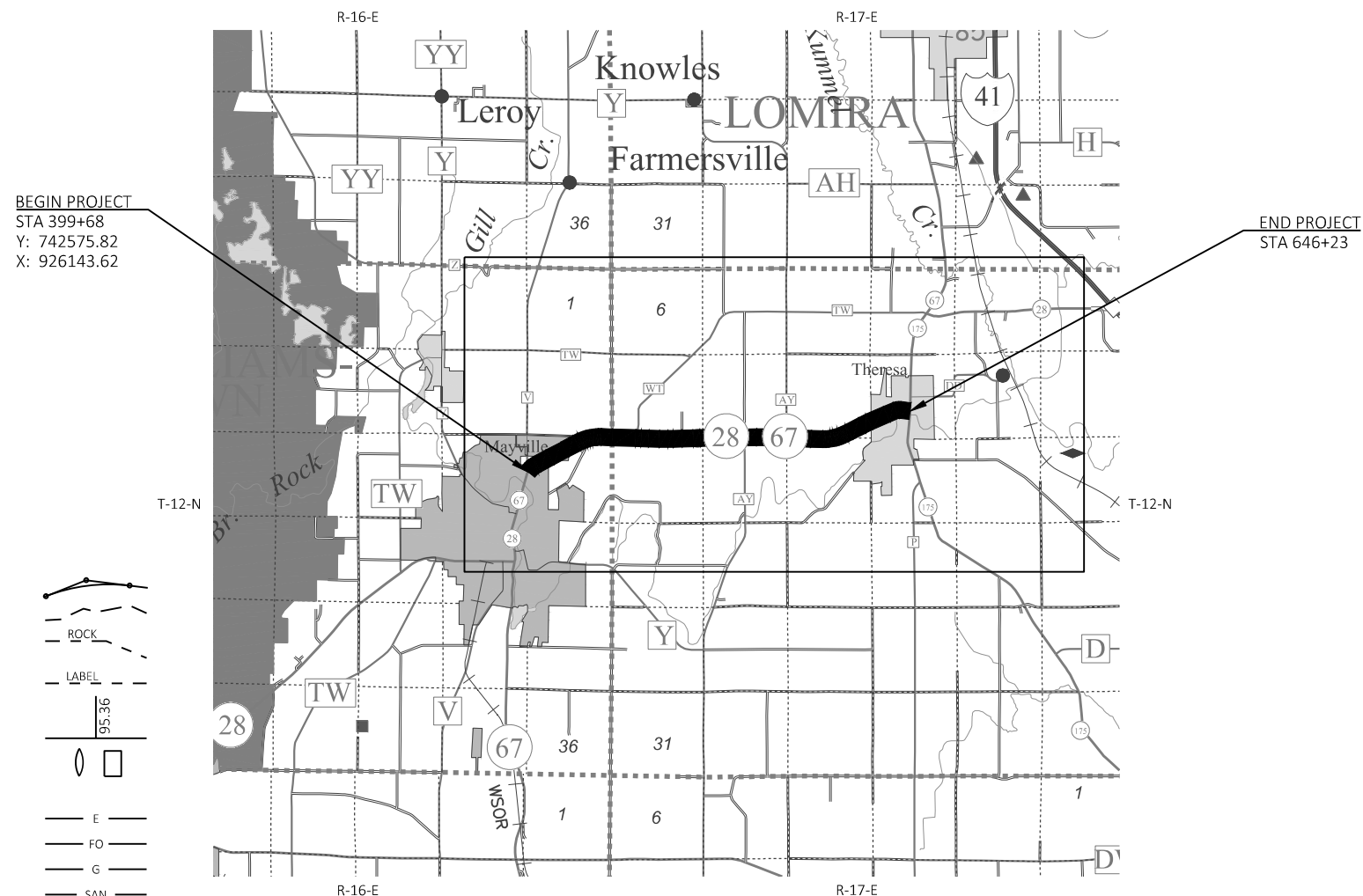
PLAN OF PROPOSED IMPROVEMENT

CTH V TO STH 175

STH 28

DODGE COUNTY

STATE PROJECT NUMBER
3020-00-70



SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 4.670 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), DODGE 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.

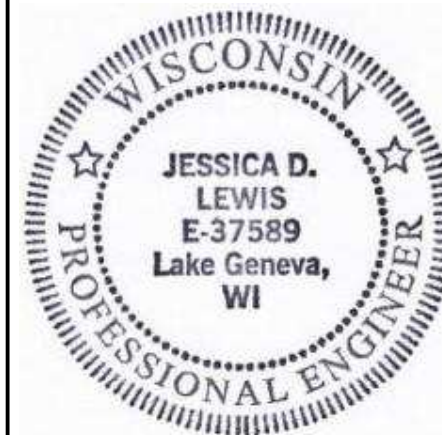
STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
3020-00-70	WISC 2025358	1

ORIGINAL PLANS PREPARED BY

CORRE

ENGINEERING

MADISON | OCONOMOWOC | EAU CLAIRE | GREEN BAY | WITTENBERG



DATE: 10/14/24 _____ (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY	
Surveyor	CORRE, INC.
Designer	CORRE, INC.
Project Manager	MIKE RAMPETSREITER
Regional Examiner	SW REGION
Regional Supervisor	JUSTIN KUTSCHENREUTER

APPROVED FOR THE DEPARTMENT

DATE: _____

Mike Rampetsreiter

Digitally signed by Mike Rampetsreiter
DN: C=US,
E=michael.rampetsreiter@dot.il.gov,
O=Illinois Department of Transportation,
OU=DTSD, **Signature (PDS)**,
CN=Mike Rampetsreiter
Location: DTSD-SWR
Reason: I am approving this document
Contact Info: 1.608.245.7917
Date: 2024.10.14.08:48:47-0500T

GENERAL NOTES

TREES OR SHRUBS THAT ARE NOT MARKED ON THE PLAN TO BE REMOVED SHALL NOT BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER IN THE FIELD.

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

CONTRACTOR TO VERIFY ELEVATIONS OF THE EXISTING PAVEMENT TO REMAIN IN PLACE, PRIOR TO STAKING.

ALL NEW AND RELAIAD CONCRETE PIPES SHALL HAVE THE APRON ENDWALL AND FIRST TWO PIPE JOINTS TIED.

HMA PAVEMENT AND WEIGHT CALCULATIONS ARE BASED ON 112 LB/SY/IN.

APPLY TACK COAT BETWEEN LAYERS OF ASPHALT PAVEMENT AND TO MILLED SURFACES. THE APPLICATION RATE IS 0.05 GAL/SY BETWEEN LAYERS OF NEW HMA PAVEMENT AND 0.07 GAL/SY PLACED ON EXISTING ASPHALT, MILLED SURFACES, AND CONCRETE PAVEMENT OR AS DIRECTED BY THE ENGINEER.

SAWCUTS, AS SHOWN ON THE PLANS, ARE SUGGESTED LOCATIONS AND MAY BE ADJUSTED AT THE DISCRETION OF THE ENGINEER TO BETTER SUIT FIELD CONDITIONS.

EXACT SIGN LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND THE LOCATIONS OF SIGNS ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

THE EROSION CONTROL DEVICES AS SHOWN ON THE EROSION CONTROL SHEETS ARE AT SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER. EROSION CONTROL DEVICES SHALL BE PLACED IN SEQUENCE WITH CONSTRUCTION OPERATIONS OR AS DETERMINED BY THE ENGINEER.

ALL OPENINGS OF HOLES BELOW SUBGRADE RESULTING FROM REMOVALS OR ABANDONMENTS SHALL BE BACKFILLED WITH GRANULAR MATERIAL AND COMPACTED. GRANULAR MATERIAL IS INCIDENTAL TO THE REMOVAL ITEM.

ALL PROPERTY LINES ON PLANS ARE APPROXIMATE.

ASPHALT PAVING LIMITS AT INTERSECTIONS ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER AND SHALL HAVE BUTT JOINTS.

CURB AND GUTTER PLAN GRADES ARE AT THE FLANGE LINE UNLESS OTHERWISE NOTED.

RADIUS DIMENSIONS FOR THE CURB AND GUTTER ARE TO THE FLANGE OF CURB.

UTILITY LINES IN CROSS SECTIONS ARE FOR HORIZONTAL REFERENCE ONLY.

RIGHT OF WAY LINES SHOWN ON THE CROSS SECTIONS ARE APPROXIMATE.

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

CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES EXCEPT WHEN PAVING OR PIPE LAYING OPERATIONS REQUIRE THE DRIVEWAY TO BE CLOSED. ACCESS TO DRIVEWAY SHALL BE RE-ESTABLISHED IMMEDIATELY AFTER PAVEMENT OR PIPE IN DRIVEWAY AREA IS INSTALLED. ACCESS SHALL BE PROVIDED DURING ALL NON-WORKING HOURS.

THE CONTRACTOR'S PAVING OPERATIONS SHALL BE CONSISTENT WITH THE PLAN TYPICAL SECTION AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, OR BIKE LANE.

CONTRACTOR SHALL NOTIFY TIMM PUNZEL AT TIMM.PUNZEL@DOT.WI.GOV OR JEFF HOLLOWAY AT JEFFREY.HOLLOWAY@DOT.WI.GOV AT LEAST THREE WORKING DAYS PRIOR TO THE BEGINNING OF PAVEMENT MARKING OPERATIONS."

SECTION 2 ORDER OF SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
CURB RAMP DETAILS
PAVEMENT MARKING & PERMANENT SIGNING
TRAFFIC CONTROL
DETOURS

WISDOT CONTACT

MIKE RAMPETSREITER
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2101 WRIGHT STREET
MADISON, WI 53701
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EMAIL: MIKE.RAMPETSREITER@DOT.WI.GOV

WISCONSIN DNR LIAISON

SHELLY NELSON
DNR FITCHBURG SERVICE CENTER
3911 FISH HATCHERY ROAD
FITCHBURG, WI 53711
PHONE: (608)-444-2835
EMAIL: SHELLY.NELSON@WISCONSIN.GOV

DESIGN PROJECT LEADER

JESSICA LEWIS
CORRE, INC.
20900 SWENSON DRIVE, SUITE 800
WAUKESHA, WI 53186
PHONE: (262) 393-1508
EMAIL: JLEWIS@CORREINC.COM

STANDARD ABBREVIATIONS

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

UTILITY CONTACTS

AT&T WISCONSIN - COMMUNICATION LINE
CHUCK BARTELT
70 E. DIVISION ST
FOND DU LAC, WI 54935
(920)410-5104
CB1461@ATT.COM

ALLIANT ENERGY - GAS/PETROLEUM
NATE ROLLIN
120 E. MAPLE AVE.
BEAVER DAM, WI 53916
(608)671-0413
NATHANIELROLLIN@ALLIANTENERGY.COM

CITY OF MAYVILLE WATER & WASTEWATER UTILITIES - WATER
COURTNEY STEGER
400 KEKOSKEE STREET
MAYVILLE, WI 53050
(920)387-7906 (OFFICE) / (920)212-0355 (MOBILE)
CSTEGE@MAYVILLECITY.COM

FRONTIER COMMUNICATIONS OF WI LLC - COMMUNICATION LINE
CHRIS BLUMER
451 BROADWAY STREET
SUN PRAIRIE, WI 53590
(608)622-3807
CHRISTOPHER.BLUMER@FTR.COM

SPECTRUM - COMMUNICATION LINE
THAD HANSEN
165 KNIGHTS WAY
FOND DU LAC, WI 54935
(920)579-9594
THAD.HANSEN@CHARTER.COM

THERESA MUNICIPAL WATER & SEWER - WATER
COREY CLARK
292 MAYVILLE STREET
THERESA, WI 53091
(920)488-4003 (OFFICE) / (920)212-0484 (MOBILE)
THERESADPW@GMAIL.COM

ALLIANT ENERGY - ELECTRICITY
MATT SCHMITZ
883 W. SCOTT STREET
FOND DU LAC, WI 54937
(920)322-6683 (OFFICE) / (920)238-1137 (MOBILE)
MATTHEWSCHMITZ@ALLIANTENERGY.COM

CITY OF MAYVILLE WATER & WASTEWATER UTILITIES - SEWER
COURTNEY STEGER
400 KEKOSKEE STREET
MAYVILLE, WI 53050
(920)387-7906 (OFFICE) / (920)212-0355 (MOBILE)
CSTEGE@MAYVILLECITY.COM

FLINT HILLS RESOURCES - GAS/PETROLEUM
TIM KAROW
N 4240 HWY 26
WAUPUN, WI 53963
(920)324-9300 (OFFICE) / (920)296-8899 (MOBILE)
TIM.KAROW@FHR.COM

GUARDIAN PIPELINE - GAS/PETROLEUM
JUDE MENGEL
128 M-B LANE
CHILTON, WI 53014
(262)374-2758
JUDE.MENGEL@ONEOK.COM

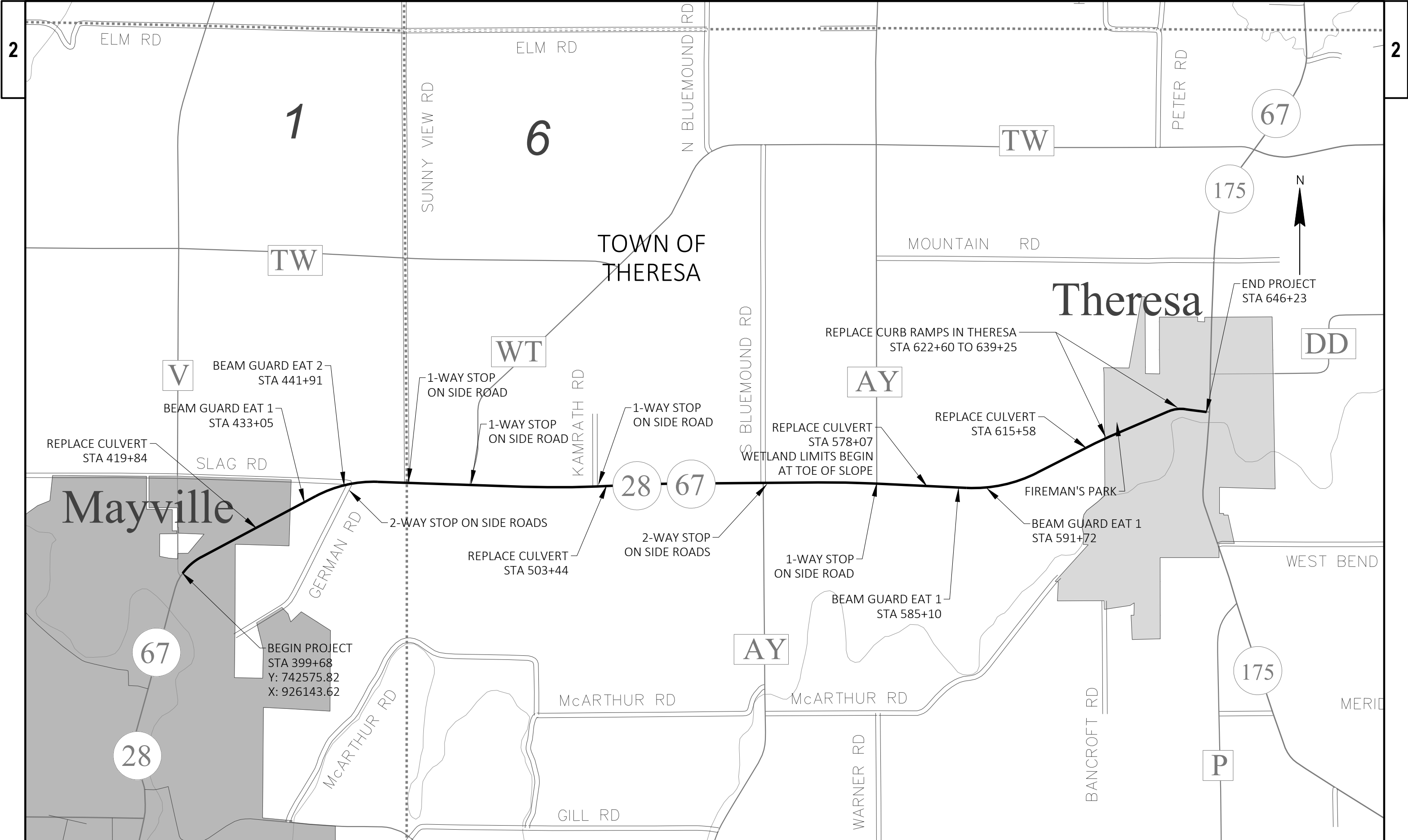
THERESA MUNICIPAL WATER & SEWER - SEWER
COREY CLARK
292 MAYVILLE STREET
THERESA, WI 53091
(920)488-4003 (OFFICE) / (920)212-0484 (MOBILE)
THERESADPW@GMAIL.COM

WE ENERGIES - ELECTRICITY
JOE FELLEENZ
W140 N9100 LILLY ROAD
MENOMONEE FALLS, WI 53051
(262)502-6831 (OFFICE) / (414)322-8928 (MOBILE)
JOSEPH.FELLEENZ@WE-ENERGIES.COM

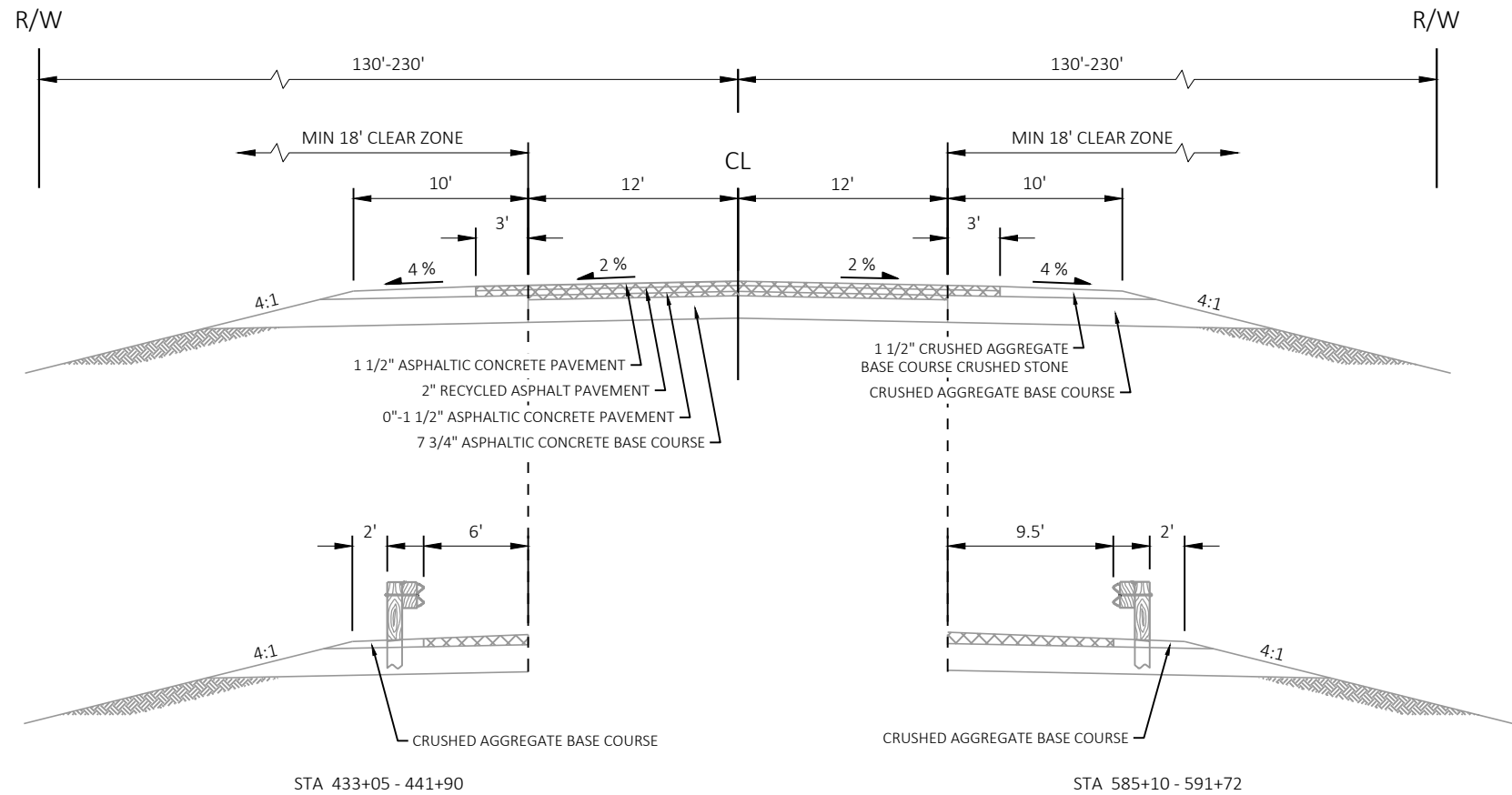
RUNOFF COEFFICIENT TABLE

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS:	.08	.16	.22	.12	.20	.27	.15	.24	.33	.19	.28	.38
	.22	.30	.38	.26	.34	.44	.30	.37	.50	.34	.41	.56
MEDIAN STRIPTURF:	.19	.20	.24	.19	.22	.26	.20	.23	.30	.20	.25	.30
	.24	.26	.30	.25	.28	.33	.26	.30	.37	.27	.32	.40
SIDE SLOPETURF:			.25			.27			.28			.30
			.32			.34			.36			.38
PAVEMENT:												
ASPHALT:	.70 - .95											
CONCRETE:	.80 - .95											
BRICK:	.70 - .80											
DRIVES, WALKS:	.75 - .85											
ROOFS:	.75 - .95											
GRAVEL ROADS, SHOULDERS:	.40 - .60											

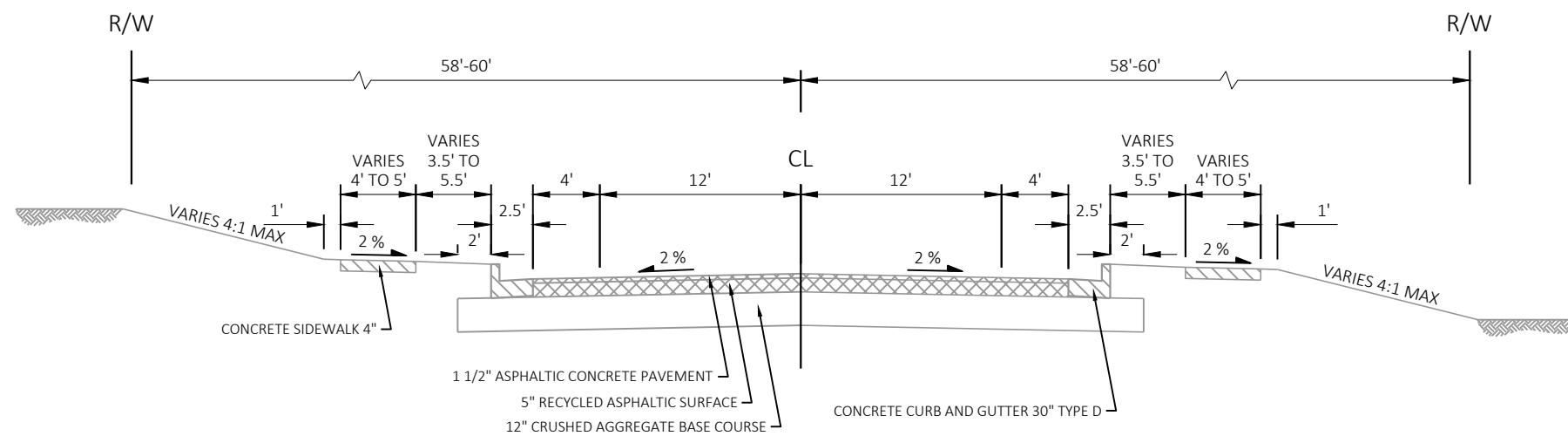
TOTAL PROJECT AREA = 91.34 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 1.92 ACRES



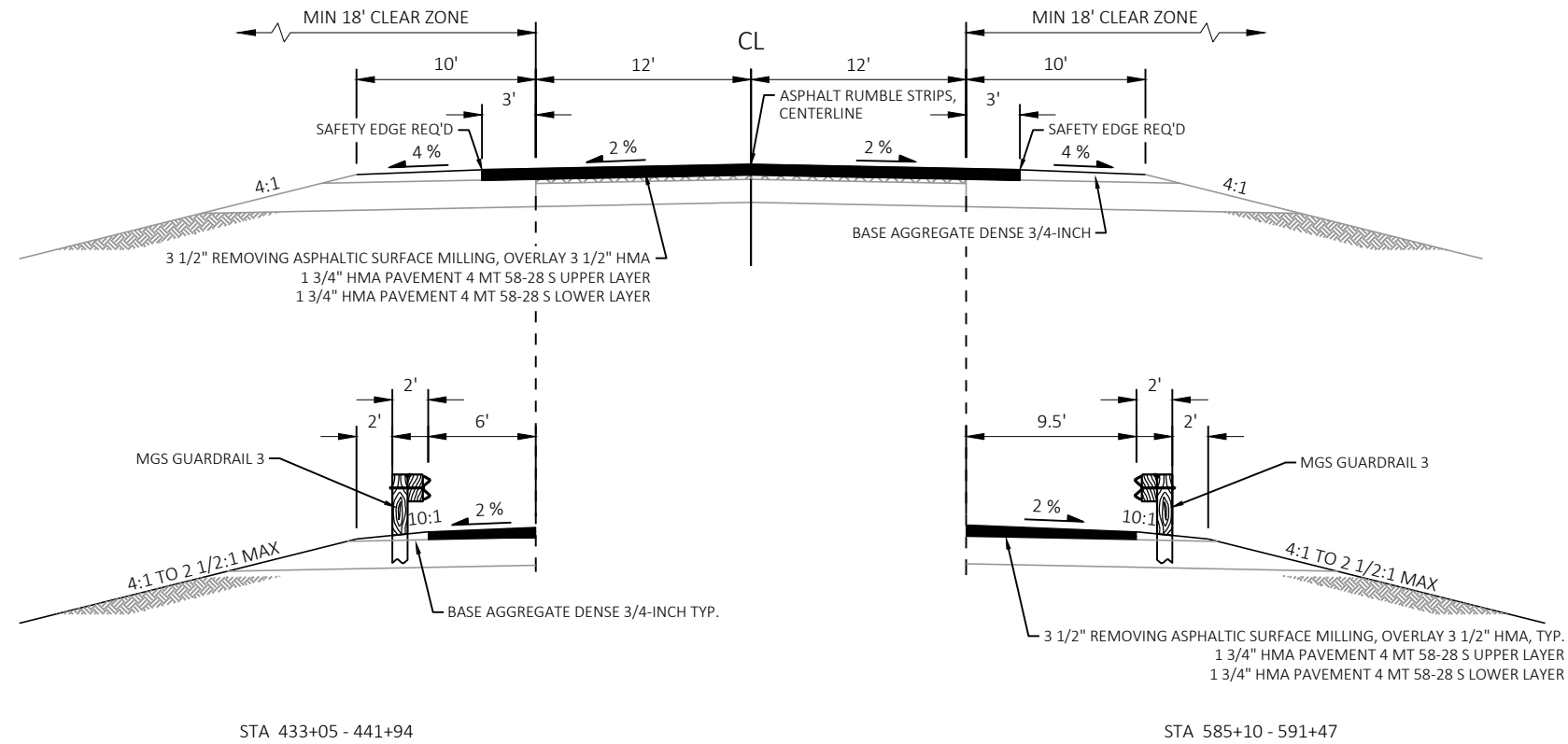
PROJECT NO: 3020-00-70	HWY: STH 28	COUNTY: DODGE	PROJECT OVERVIEW	SHEET 3	E
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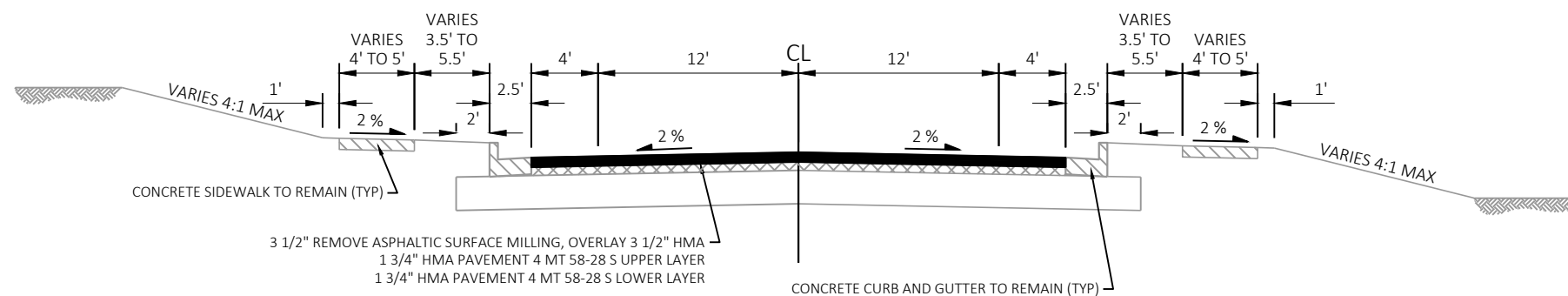
EXISTING TYPICAL SECTION
STA 399+68 - 620+90



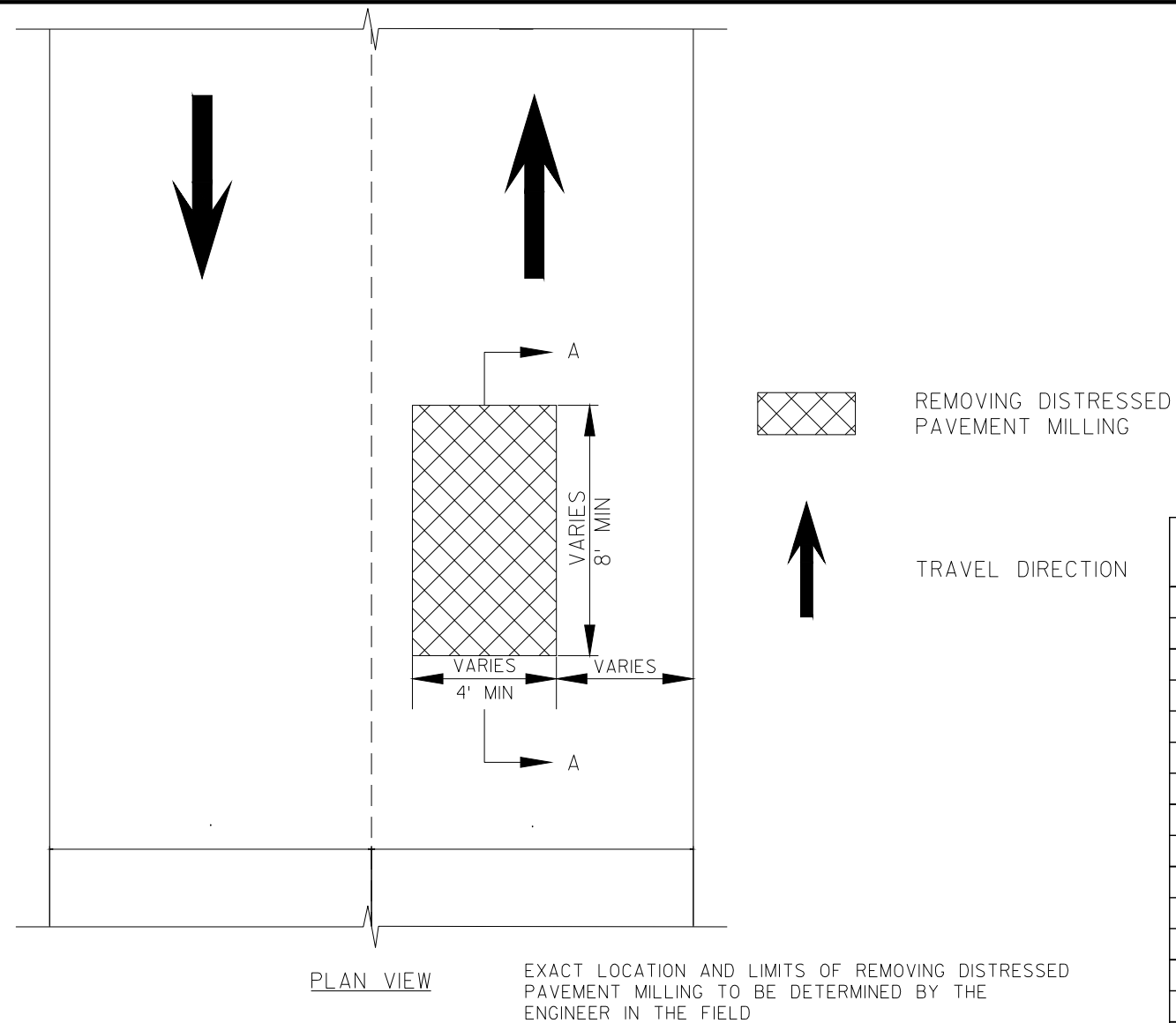
EXISTING TYPICAL SECTION
STA 620+90 - 646+23

**FINISHED TYPICAL SECTION**

STA 399+68 - 620+90

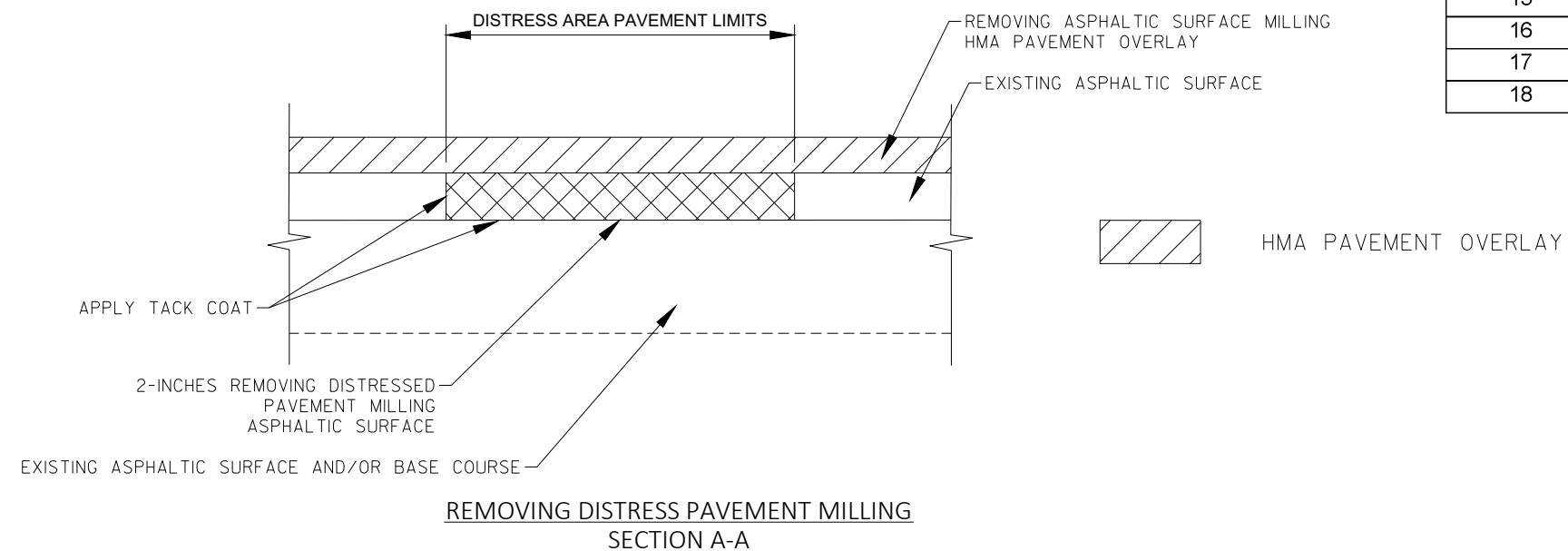
**FINISHED TYPICAL SECTION**

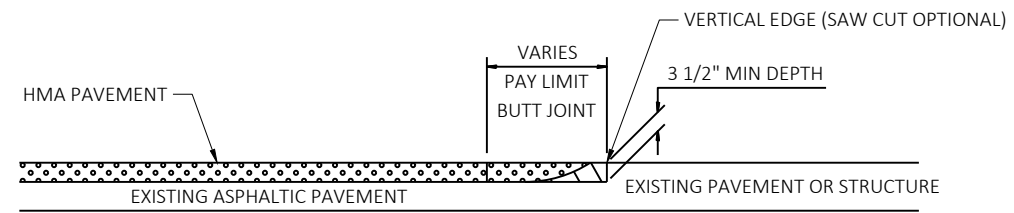
STA 620+90 - 646+23



EXACT LOCATION AND LIMITS OF REMOVING DISTRESSED PAVEMENT MILLING TO BE DETERMINED BY THE ENGINEER IN THE FIELD

CORING SUMMARY LOG STH 28				
CORE #	STATION	OFFSET FROM C/L	HMA THCKNESS (INCHES)	MATERIAL BELOW HMA mat
1	384+75	6R	4.5	BASE
2	397+95	6L	3.5	BASE
3	424+35	9R	6	BASE OR RECYCLED ASPHALT
4	424+35	9L	8	UNKNOWN
5	437+55	11R	8	BASE
6	450+75	11L	6.5	BASE
7	463+95	6R	11	UNKNOWN
8	485+07	6L	13	UNKNOWN
9	503+55	9R	8.5	BASE
10	566+00	9L	7	BASE
11	579+20	11R	7.0+	UNKNOWN
12	593+46	6L	6.5+	UNKNOWN
13	607+71	9R	9	UNKNOWN
14	618+80	9L	9.0+	UNKNOWN
15	632+00	11R	9.0+	UNKNOWN
16	645+20	6L	6	BASE
17	658+40	6R	6.5	BASE
18	667+90	9R	8.5	BASE

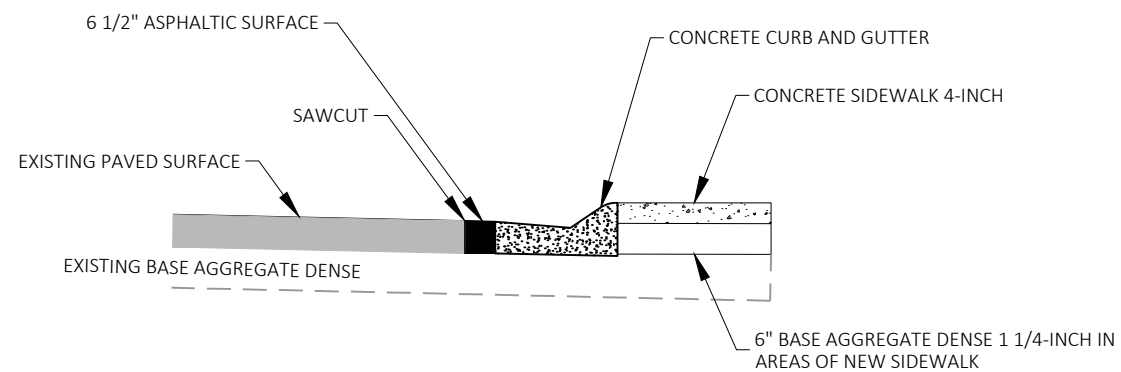


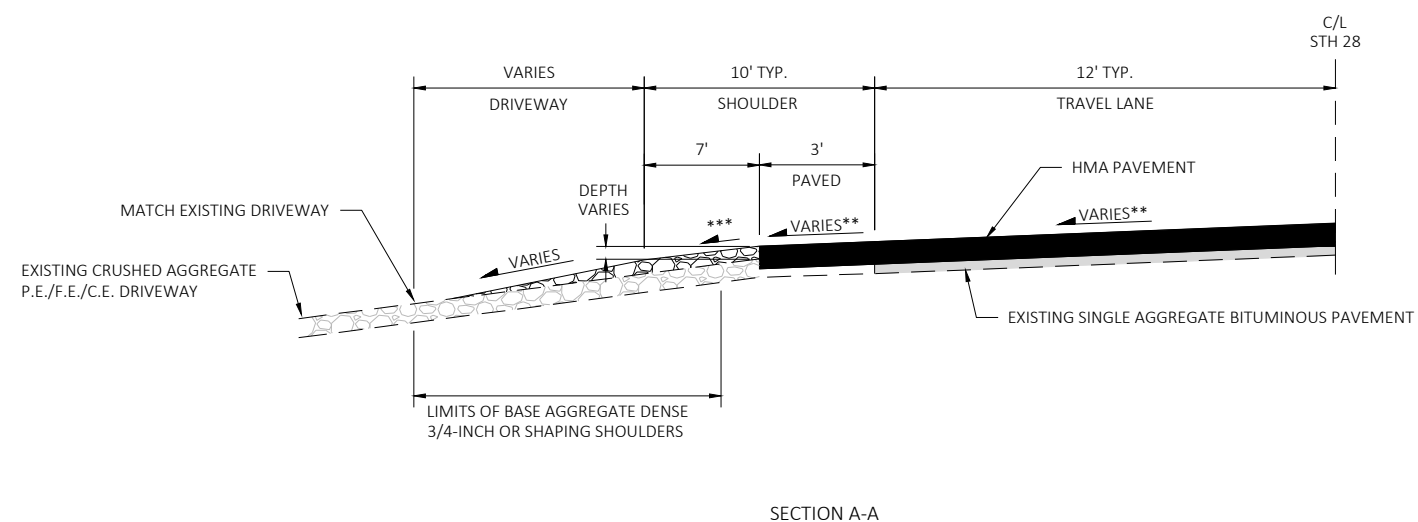
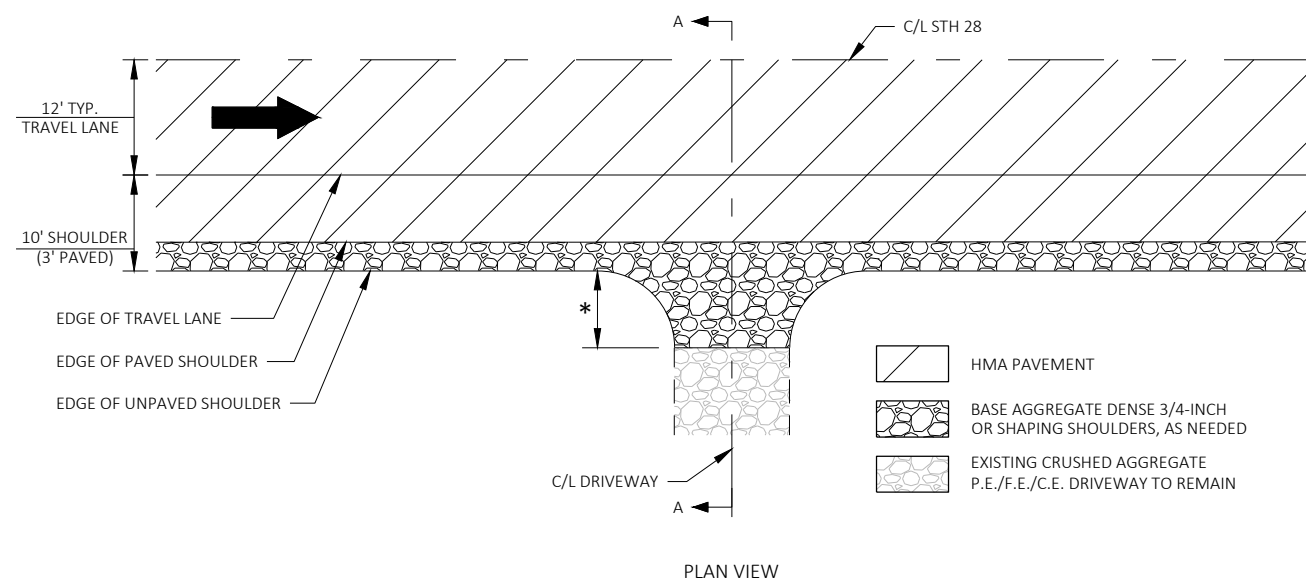


REMOVING ASPHALTIC SURFACE, MILLING



TEMPORARY PAPER JOINT PLACED AFTER MILLING TO BE REMOVED PRIOR TO PAVING

BUTT JOINT DETAIL FOR ASPHALTIC PAVEMENTS (NO PROFILE CHANGE)CURB RAMP & ASPHALTIC SURFACE DETAIL

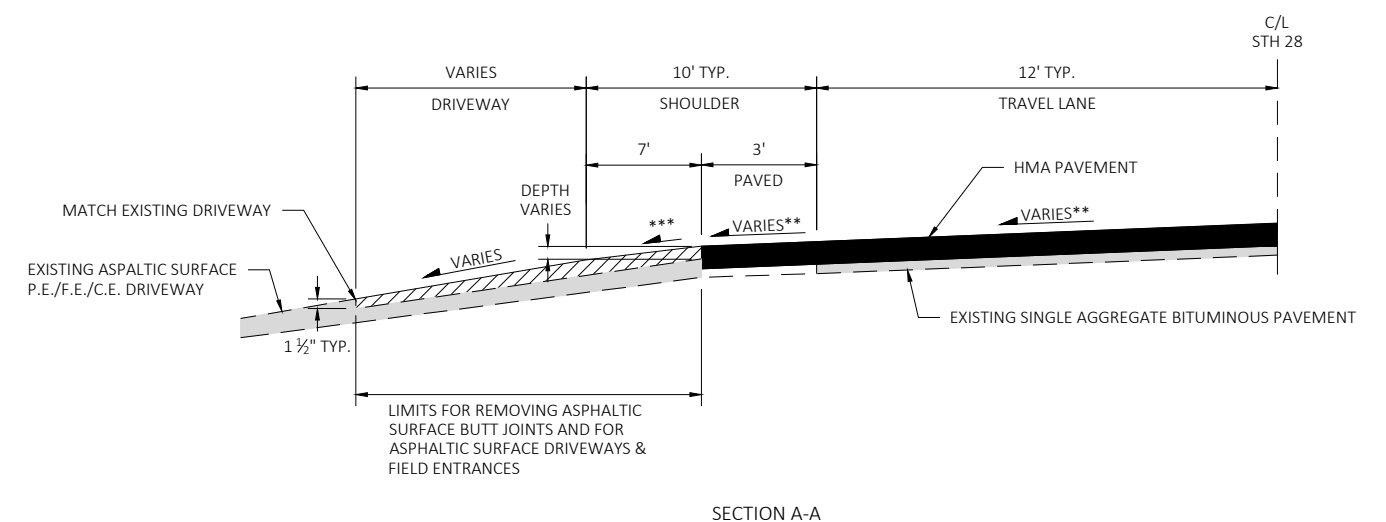
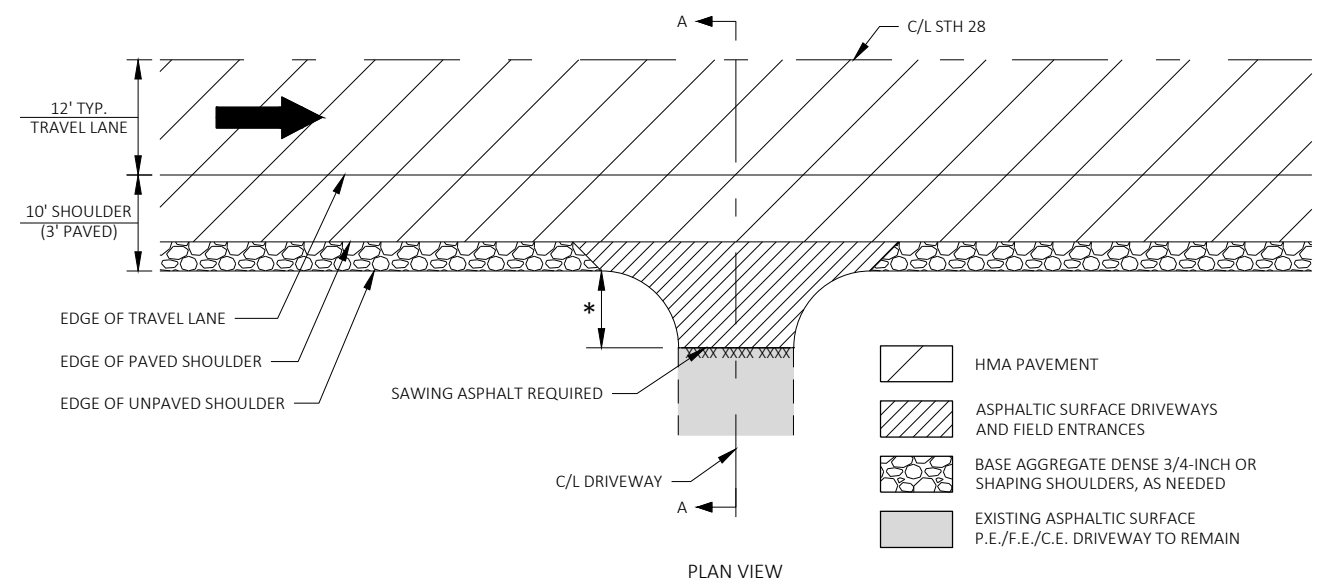


P.E./F.E./C.E. DRIVEWAY DETAIL - EXISTING CRUSHED AGGREGATE

*REPLACE TO THE DRIVEWAY RADIUS POINTS OR AS DIRECTED BY THE FIELD ENGINEER

**MATCH EXISTING PAVEMENT CROSS SLOPE

***6% TYPICAL; MATCH S.E. SLOPE AT LOW END OF S.E. CURVE; 8% MAX. ROLLOVER RATE AT HIGH END OF S.E. CURVE

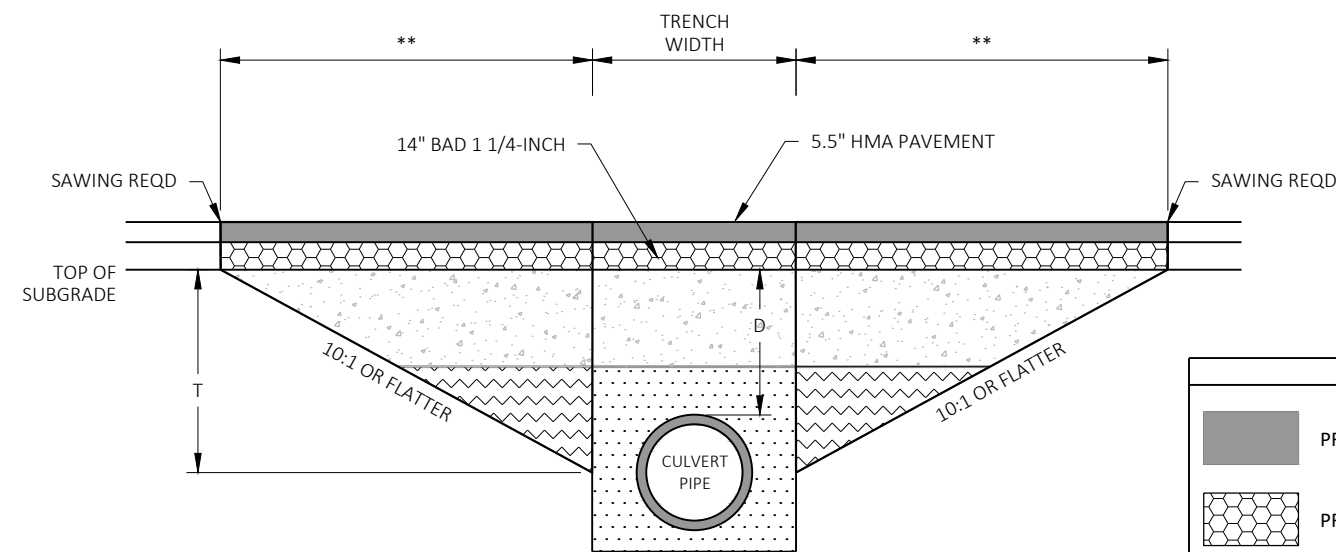


P.E./F.E./C.E. DRIVEWAY DETAIL - EXISTING ASPHALT

*REPLACE TO THE EXISTING PAVEMENT JOINT OR AS DIRECTED BY THE FIELD ENGINEER

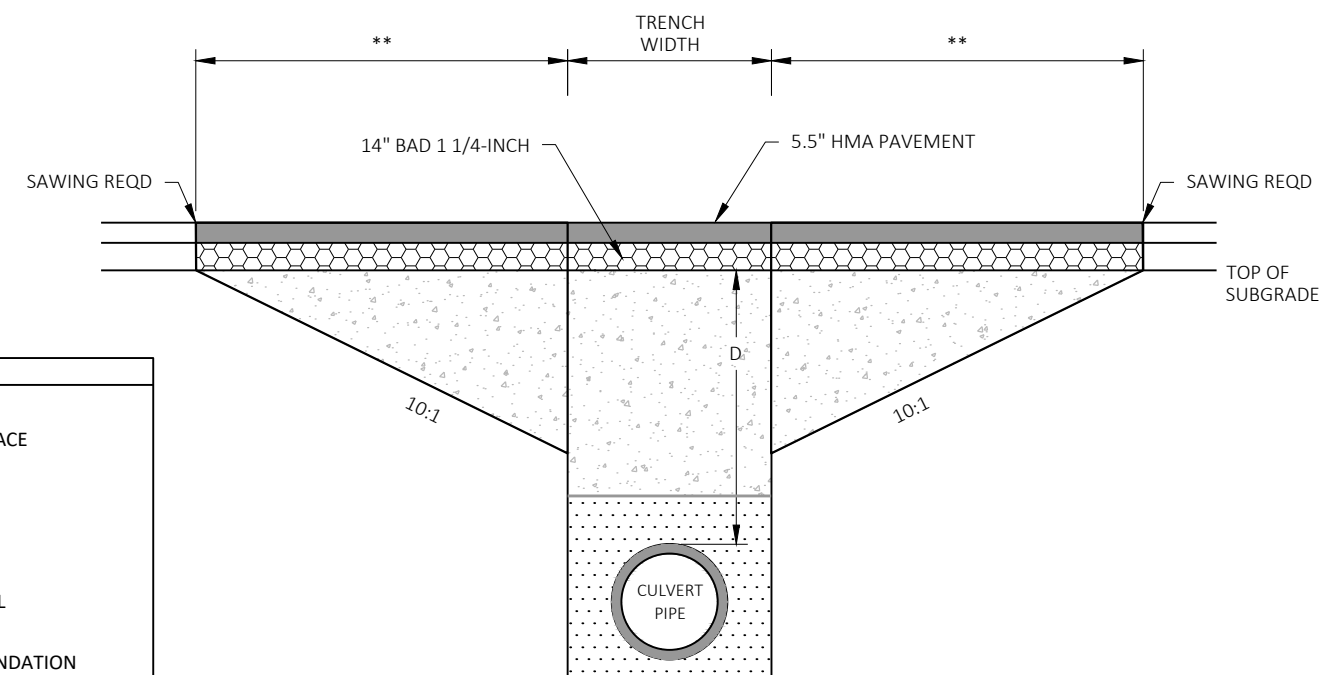
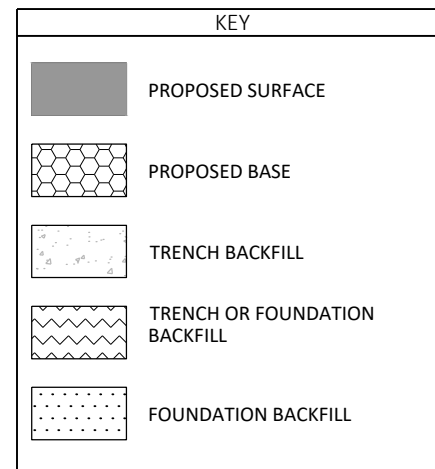
**MATCH EXISTING PAVEMENT CROSS SLOPE

***6% TYPICAL; MATCH S.E. SLOPE AT LOW END OF S.E. CURVE; 8% MAX. ROLLOVER RATE AT HIGH END OF S.E. CURVE



DEPTH (T) = THE LESSER OF DEPTH TO CENTER OF PIPE OR 5 FT.
DO NOT EXTEND BELOW HORIZONTAL CENTER OF PIPE.

DEPTH D < 6 FT



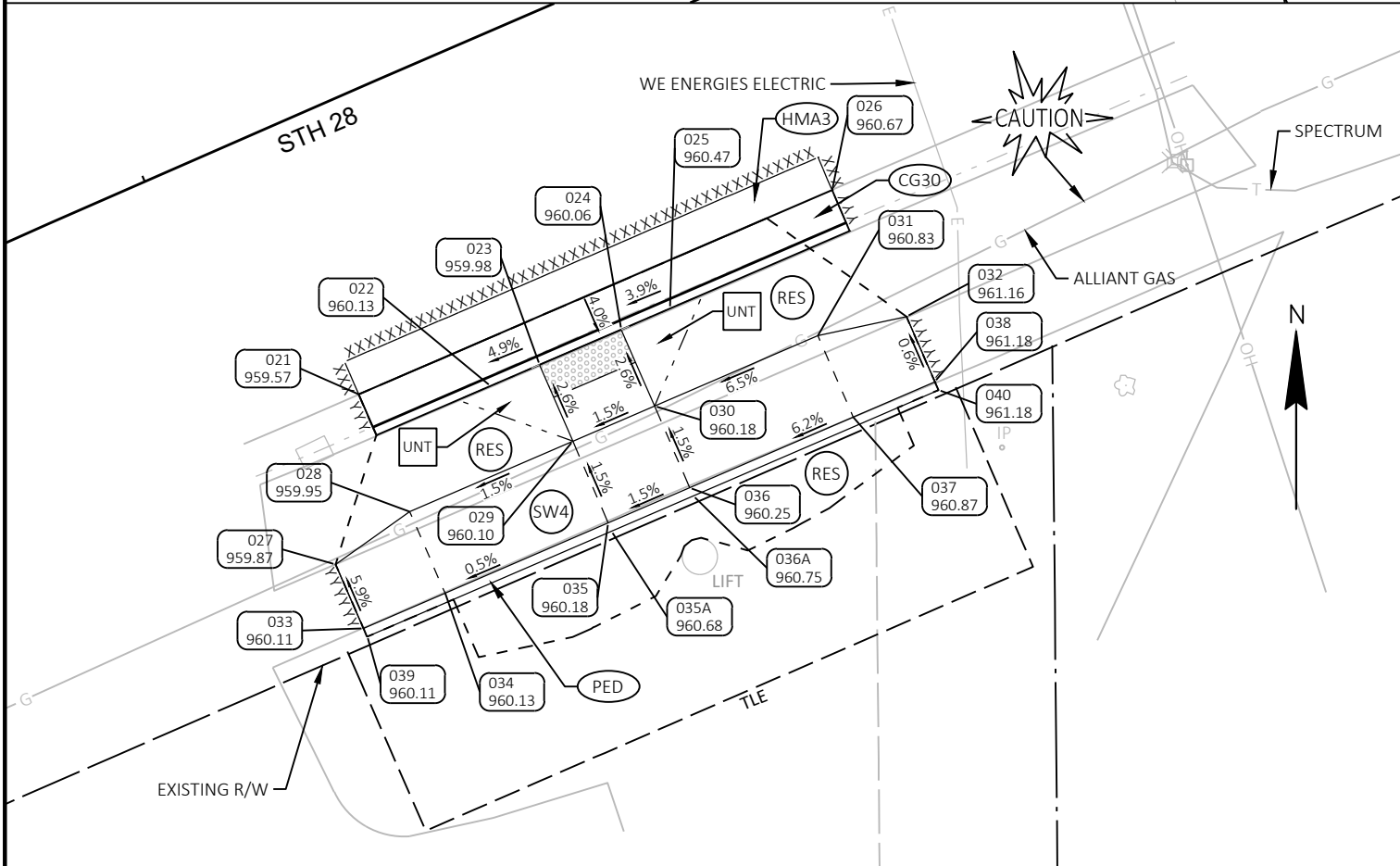
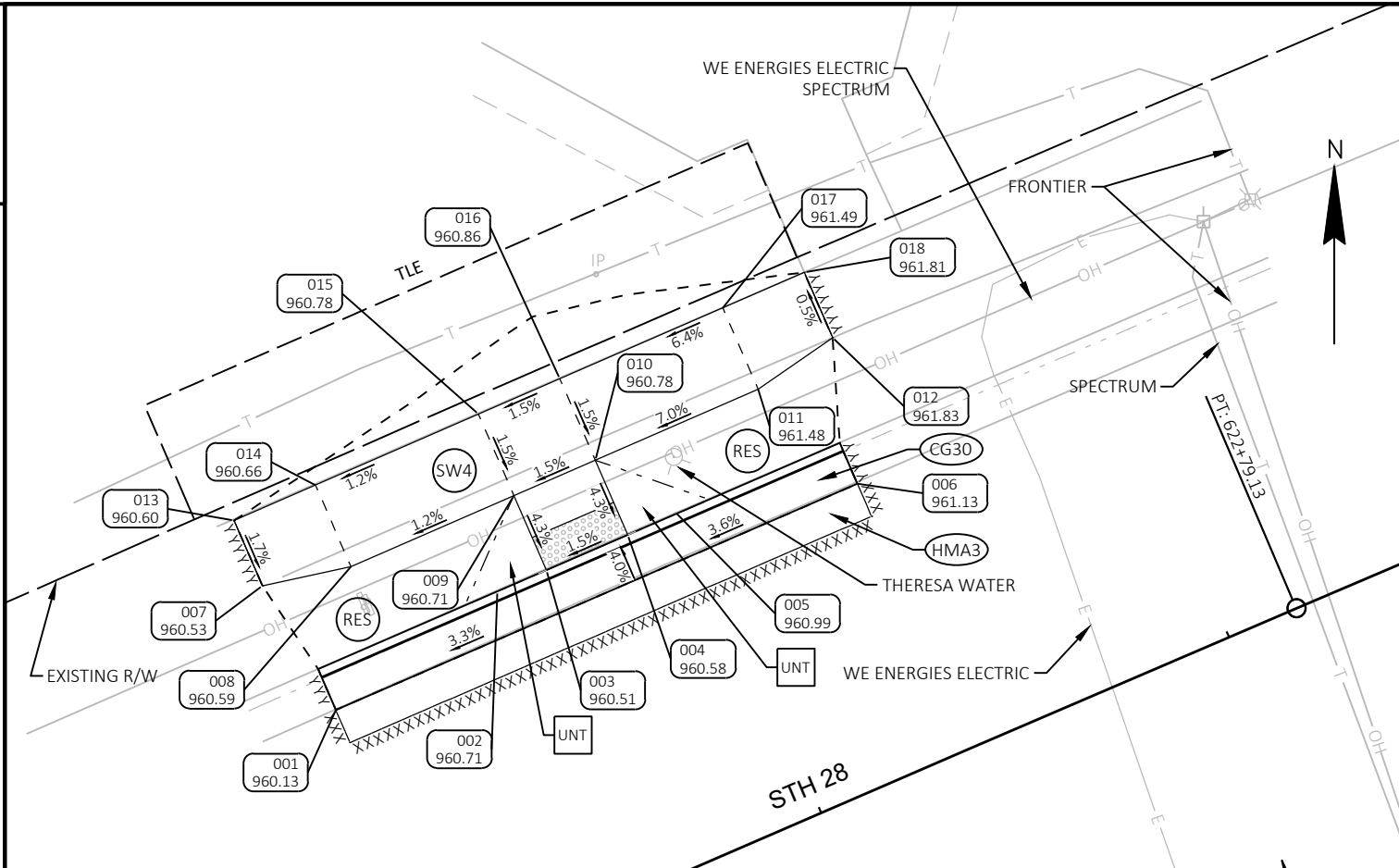
DEPTH D ≥ 6 FT

** DIMENSION DETERMINED BY ENGINEER IN FIELD

NOTE: EXCAVATION AND MATERIAL COSTS ARE INCIDENTAL TO CULVERT PIPE

CULVERT REPLACEMENT DETAIL

ROUTE	STA (CL)	DEPTH D (FT)	PIPE DIA (IN)
STH 28	419+84	3.3'	30"
STH 28	503+44	6.6'	30"
STH 28	578+07	12.6'	30"
STH 28	616+62	2.2'	30"



FIREMAN'S PARK NORTH- CURB RAMP TYPE 7B						FIREMAN'S PARK NORTH- CURB RAMP TYPE 7B					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
001	622+27.30	16.22' LT	960.13	745744.90	947586.67	010	622+46.24	23.26' LT	960.78	745758.95	947601.28
002	622+38.27	18.69' LT	960.71	745751.57	947595.77	011	622+56.20	23.28' LT	961.48	745762.94	947610.45
003	622+41.26	18.69' LT	960.51	745752.76	947598.52	012	622+61.17	24.29' LT	961.83	745765.85	947614.64
004	622+46.24	18.68' LT	960.58	745754.75	947603.11	013	622+26.33	28.28' LT	960.60	745755.56	947580.94
005	622+49.23	18.68' LT	960.99	745755.94	947605.86	014	622+31.30	28.27' LT	960.66	745757.55	947585.53
006	622+59.21	16.19' LT	961.13	745757.63	947616.03	015	622+41.26	28.26' LT	960.78	745761.54	947594.70
007	622+26.32	24.28' LT	960.53	745751.89	947582.54	016	622+46.23	28.26' LT	960.86	745763.53	947599.28
008	622+31.30	23.27' LT	960.59	745752.97	947587.52	017	622+56.18	28.28' LT	961.49	745767.52	947608.45
009	622+41.26	23.26' LT	960.71	745756.96	947596.69	018	622+61.16	28.29' LT	961.81	745769.52	947613.04

LEGEND

CG30D

CONCRETE CURB & GUTTER

HMA3

30-INCH TYPE D REMOVING ASPHALTIC SURFACE AND PAVE ASPHALTIC SURFACE

PED

CONCRETE CURB PEDESTRIAN

MEF

MAXIMUM EXTENT FEASIBLE

RES

TOPSOIL, FERTILIZER, SEED, EROSION MAT CLASS I TYPE B

SW4

CONCRETE SIDEWALK 4-INCH

UNT

UNPAVED NON-TRAVERSABLE 6:1 FLARE

PNT

PAVED NON-TRAVERSABLE 6:1 FLARE

YYYYY

SAWING CONCRETE

XXXXX

SAWING ASPHALT

XX
XXX.XX

POINT NUMBER & ELEVATION

DETECTABLE WARNING FIELD

- NOTES
1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.

2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION.

3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.

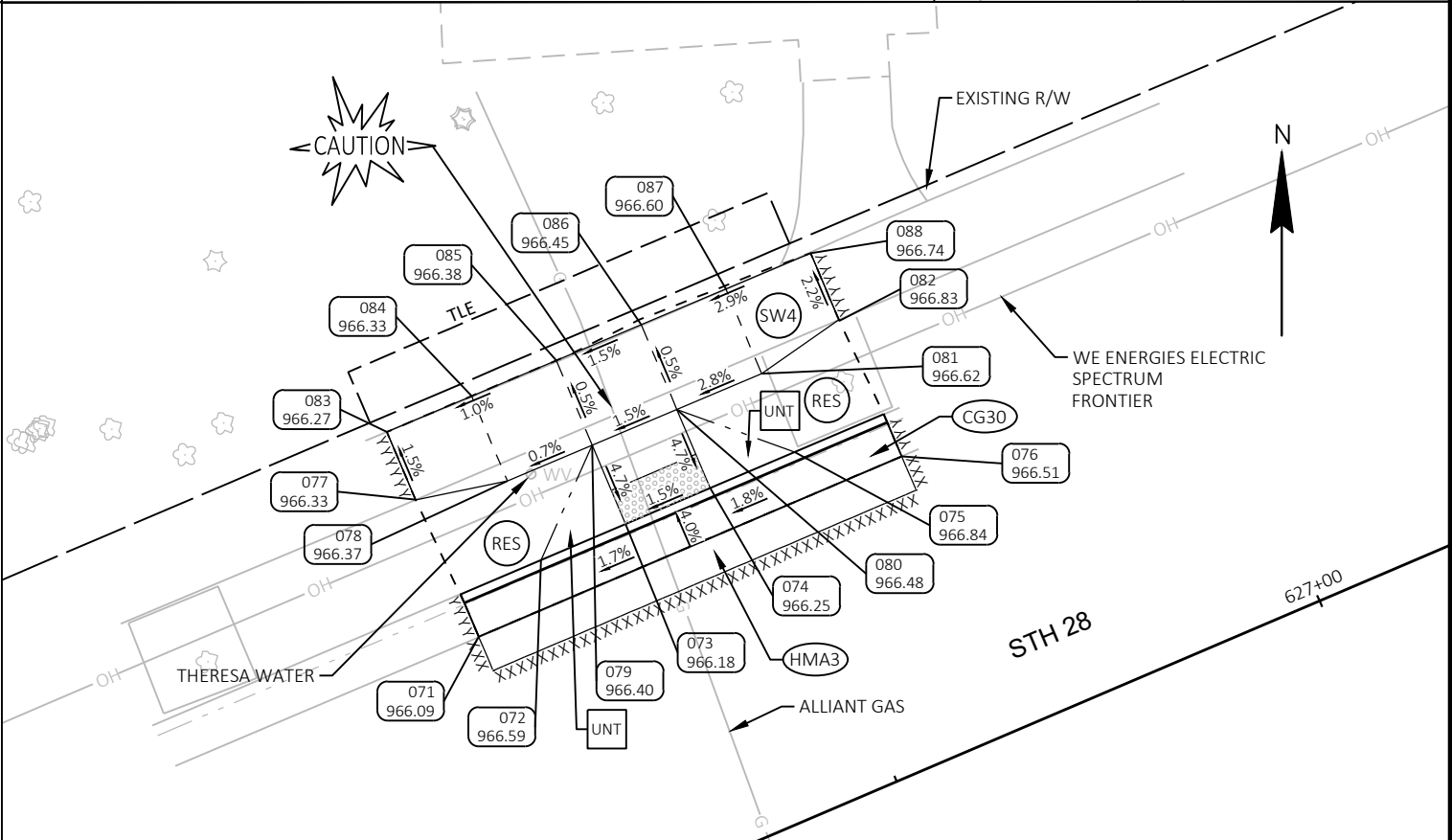
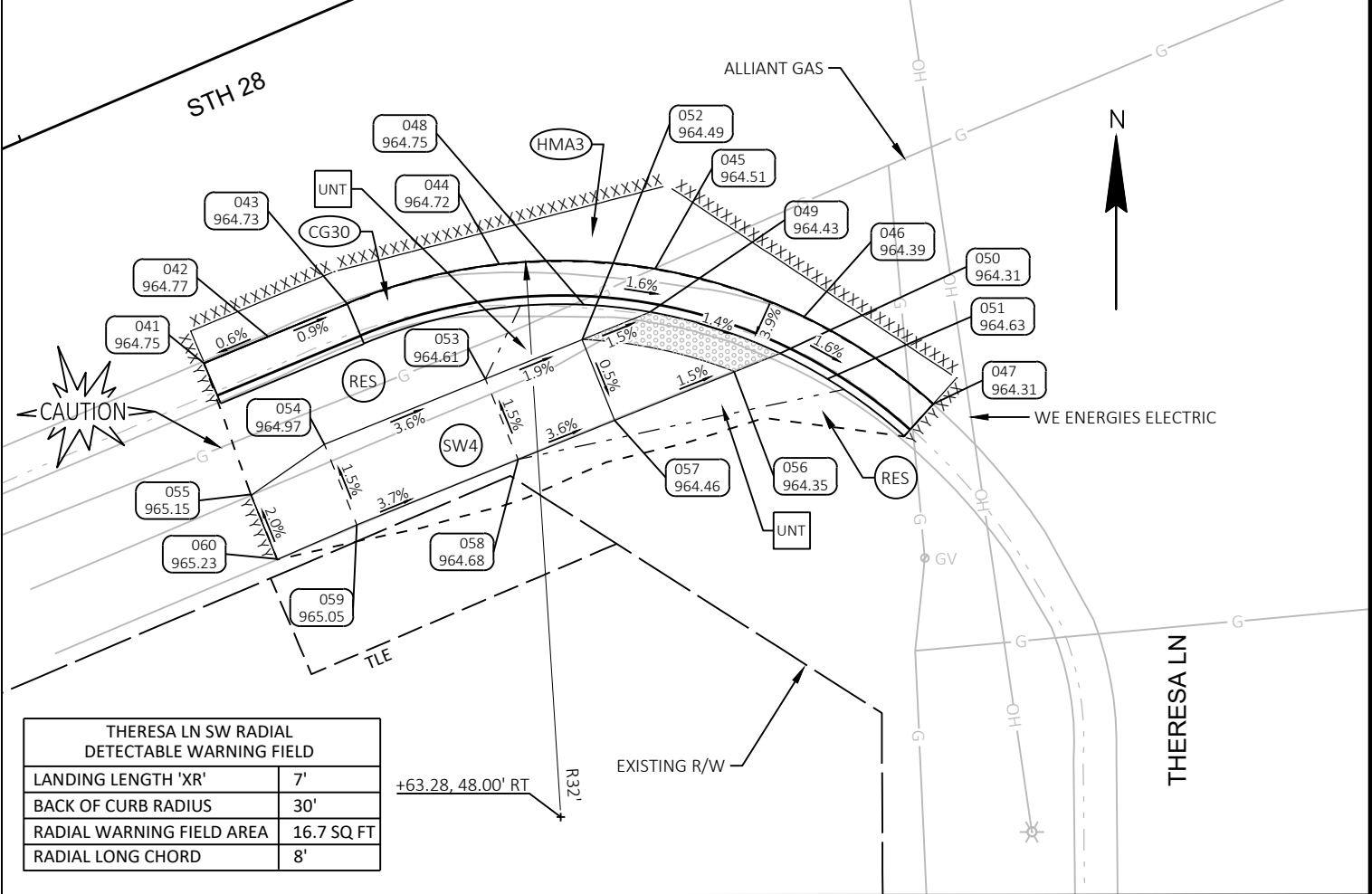
4. SEE THE STANDARD DETAIL DRAWING'S FOR COMPLETE CURB RAMP REQUIREMENTS.

5. ALL STATION AND OFFSET INFORMATION REFERENCE STH 28.

FIREMAN'S PARK SOUTH- CURB RAMP TYPE 7A						FIREMAN'S PARK SOUTH- CURB RAMP TYPE 7A					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
021	622+31.23	15.79' RT	959.57	745717.15	947603.10	032	622+61.34	24.04' RT	961.16	745721.53	947633.91
022	622+38.24	18.31' RT	960.13	745717.63	947610.52	033	622+26.18	27.95' RT	960.11	745703.99	947603.37
023	622+41.25	18.32' RT	959.98	745718.82	947613.27	034	622+31.21	27.98' RT	960.13	745705.97	947607.96
024	622+46.27	18.34' RT	960.06	745720.80	947617.86	035	622+41.24	28.01' RT	960.18	745709.93	947617.13
025	622+49.28	18.34' RT	960.47	745721.99	947620.62	035A	622+41.23	28.52' RT	960.68	745709.46	947617.32
026	622+60.31	15.85' RT	960.67	745728.64	947629.73	036	622+46.27	28.03' RT	960.25	745711.91	947621.72
027	622+26.19	24.02' RT	959.87	745707.60	947601.80	036A	622+46.27	28.53' RT	960.75	745711.45	947621.92
028	622+31.22	22.98' RT	959.95	745710.56	947605.97	037	622+56.33	28.04' RT	960.87	745715.88	947630.92
029	622+41.26	23.01' RT	960.10	745714.52	947615.15	038	622+61.36	28.04' RT	961.18	745717.86	947635.51
030	622+46.28	23.03' RT	960.18	745716.50	947619.74	039	622+26.21	28.43' RT	960.11	745703.57	947603.59
031	622+56.32	23.04' RT	960.83	745720.46	947628.92	040	622+61.36	28.54' RT	961.18	745717.40	947635.71

THERESA LANE SW- CURB RAMP TYPE 4B1					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
041	625+54.66	15.92' RT	964.75	745844.18	947900.39
042	625+58.66	15.96' RT	964.77	745845.72	947904.09
043	625+63.59	16.00' RT	964.73	745847.61	947908.64
044	625+72.52	17.38' RT	964.72	745849.86	947917.39
045	625+80.63	21.12' RT	964.51	745849.60	947926.32
046	625+87.43	27.03' RT	964.39	745846.84	947934.90
047	625+92.31	34.55' RT	964.31	745841.83	947942.34
048	625+76.09	21.43' RT	964.75	745847.53	947922.27
049	625+79.39	23.29' RT	964.43	745847.11	947926.04
050	625+85.33	28.41' RT	964.31	745844.74	947933.50

THERESA LANE SW- CURB RAMP TYPE 4B1					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
051	625+87.26	30.83' RT	964.63	745843.27	947936.23
052	625+75.19	23.22' RT	964.49	745845.53	947922.14
053	625+69.19	23.11' RT	964.61	745843.28	947916.58
054	625+59.19	22.92' RT	964.97	745839.52	947907.31
055	625+54.17	23.92' RT	965.15	745836.63	947903.09
056	625+82.51	28.35' RT	964.35	745843.69	947930.90
057	625+75.10	28.22' RT	964.46	745840.90	947924.02
058	625+69.10	28.11' RT	964.68	745838.65	947918.46
059	625+59.10	27.92' RT	965.05	745834.89	947909.19
060	625+54.10	27.92' RT	965.23	745832.92	947904.59



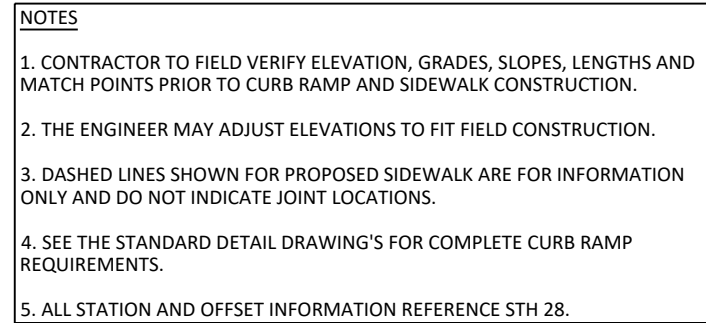
LEGEND

- CG30D CONCRETE CURB & GUTTER 30-INCH TYPE D
- HMA3 REMOVING ASPHALTIC SURFACE AND PAVE ASPHALTIC SURFACE
- PED CONCRETE CURB PEDESTRIAN
- MEF MAXIMUM EXTENT FEASIBLE
- RES TOPSOIL, FERTILIZER, SEED, EROSION MAT CLASS I TYPE B
- SW4 CONCRETE SIDEWALK 4-INCH
- UNT UNPAVED NON-TRAVERSABLE 6:1 FLARE
- PNT PAVED NON-TRAVERSABLE 6:1 FLARE
- YYYYY SAWING CONCRETE
- XXXXX SAWING ASPHALT
- XX XXX.XX POINT NUMBER & ELEVATION
- DETECTABLE WARNING FIELD

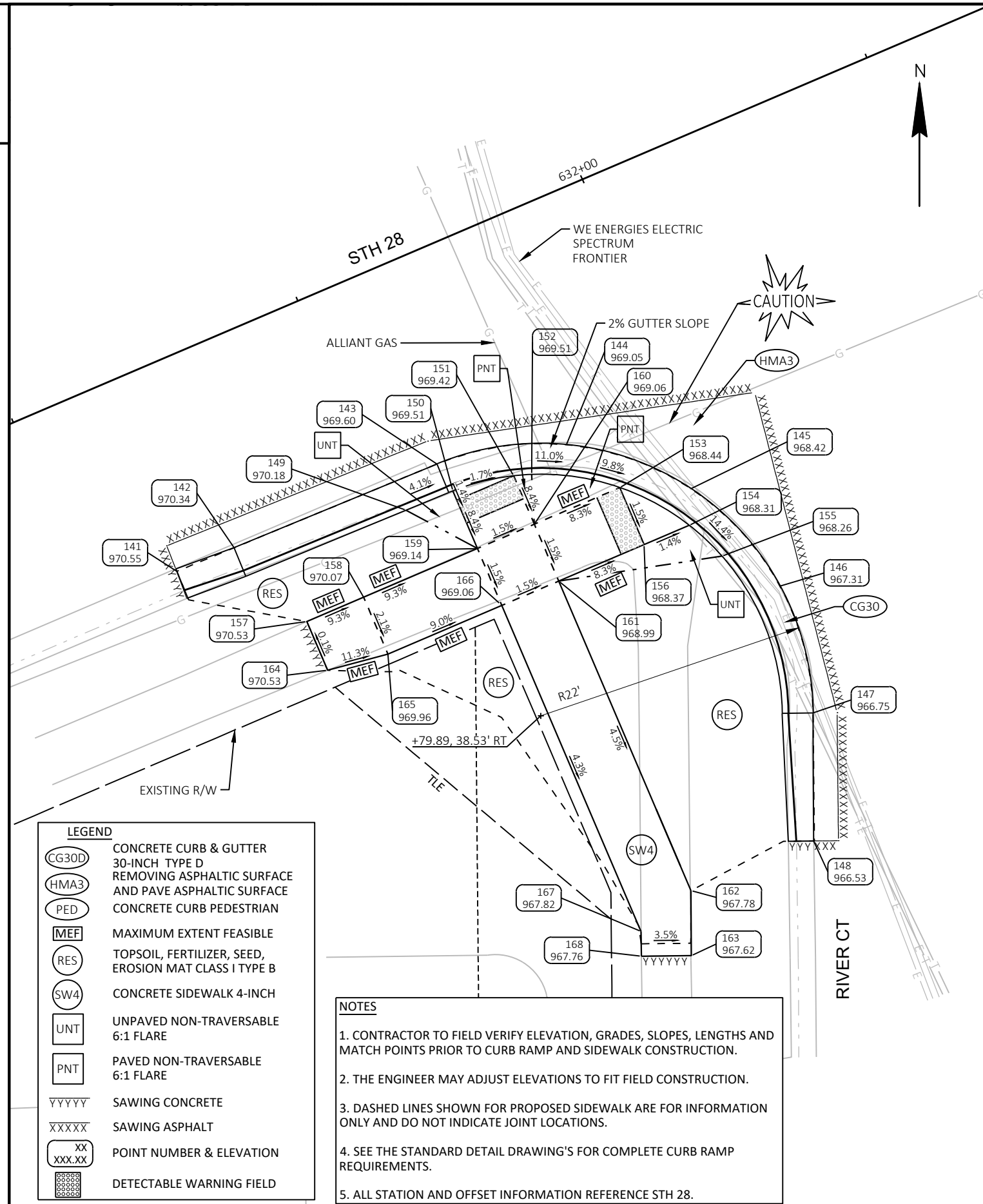
- NOTES**
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THERESA LANE NE- CURB RAMP TYPE 7B					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
071	626+57.19	16.18' LT	966.09	745913.97	947982.08
072	626+61.93	18.67' LT	966.59	745918.12	947985.46
073	626+66.93	18.67' LT	966.18	745920.08	947990.06
074	626+71.93	18.66' LT	966.25	745922.05	947994.66
075	626+76.93	18.66' LT	966.84	745924.00	947999.26
076	626+82.19	16.16' LT	966.51	745923.77	948005.08
077	626+56.96	24.37' LT	966.33	745921.41	947978.65
078	626+61.95	23.35' LT	966.37	745922.43	947983.65
079	626+66.95	23.33' LT	966.40	745924.38	947988.25

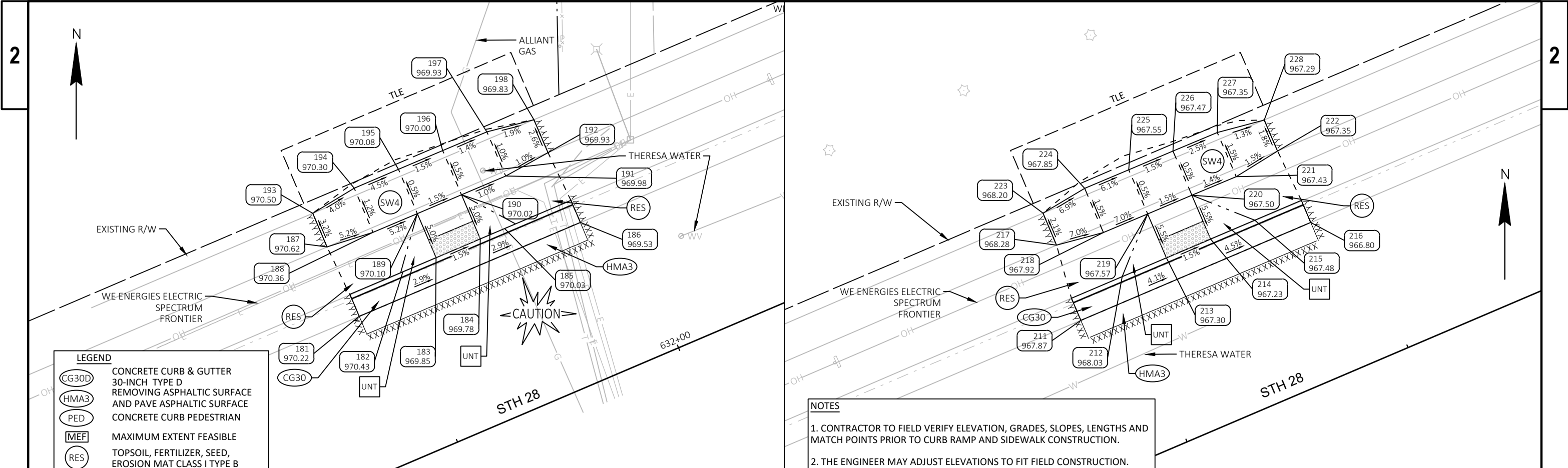
THERESA LANE NE- CURB RAMP TYPE 7B					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
080	626+71.95	23.31' LT	966.48	745926.32	947992.86
081	626+76.95	23.29' LT	966.62	745928.27	947997.47
082	626+81.96	24.26' LT	966.83	745931.13	948001.68
083	626+56.98	28.37' LT	966.27	745925.10	947977.10
084	626+61.98	28.35' LT	966.33	745927.04	947981.70
085	626+66.98	28.33' LT	966.38	745928.98	947986.31
086	626+71.98	28.30' LT	966.45	745930.93	947990.92
087	626+76.97	28.28' LT	966.60	745932.87	947995.52
088	626+81.97	28.26' LT	966.74	745934.81	948000.13



THERESA LANE SE- CURB RAMP TYPE 3 & 4B1					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
101	626+33.38	39.69' RT	964.74	745853.24	947982.12
102	626+40.28	29.92' RT	965.23	745864.93	947984.63
103	626+49.55	22.37' RT	965.58	745875.52	947990.19
104	626+60.51	17.58' RT	965.98	745884.23	947998.40
105	626+72.48	15.92' RT	966.32	745890.45	948008.75
106	626+86.36	15.93' RT	966.65	745895.89	948021.52
107	626+42.88	30.81' RT	965.70	745865.14	947987.37
108	626+46.15	27.82' RT	965.39	745869.17	947989.21
109	626+53.79	22.86' RT	965.56	745876.74	947994.28
110	626+61.52	19.89' RT	966.24	745882.50	948000.23
111	626+64.01	19.29' RT	966.29	745884.03	948002.28
112	626+66.76	18.82' RT	966.14	745885.55	948004.63
113	626+71.76	18.84' RT	966.23	745887.49	948009.24
114	626+74.77	18.43' RT	966.60	745889.05	948011.84
115	626+58.75	22.88' RT	965.64	745878.66	947998.85
116	626+66.75	22.91' RT	966.18	745881.77	948006.22
117	626+71.75	22.94' RT	966.26	745883.71	948010.83
118	626+81.75	22.98' RT	966.84	745887.60	948020.04
119	626+86.74	24.11' RT	967.14	745888.52	948025.08
120	626+49.41	27.84' RT	965.43	745870.44	947992.22
121	626+58.72	27.88' RT	965.57	745874.05	948000.79
122	626+66.72	27.91' RT	966.11	745877.16	948008.16
123	626+71.72	27.94' RT	966.18	745879.11	948012.77
124	626+81.72	27.98' RT	966.86	745882.99	948021.99
125	626+86.72	28.00' RT	967.21	745884.94	948026.59



RIVER COURT SW- CURB RAMP TYPE 2					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
141	631+57.44	16.24' RT	970.55	746080.61	948454.87
142	631+62.44	16.31' RT	970.34	746082.52	948459.49
143	631+80.17	16.53' RT	969.60	746089.28	948475.89
144	631+90.38	19.21' RT	969.05	746090.82	948486.33
145	631+98.27	26.42' RT	968.42	746087.29	948496.42
146	632+01.76	36.47' RT	967.31	746079.42	948503.57
147	632+00.22	46.96' RT	966.75	746069.17	948506.27
148	631+96.21	56.48' RT	966.53	746058.84	948506.33
149	631+76.40	18.98' RT	970.18	746085.54	948473.39
150	631+80.49	19.04' RT	969.51	746087.10	948477.17
151	631+85.49	19.85' RT	969.42	746088.32	948482.09
152	631+86.86	20.31' RT	969.51	746088.43	948483.53
153	631+93.00	24.08' RT	968.44	746087.37	948490.65
154	631+96.95	29.08' RT	968.31	746084.33	948496.25
155	631+98.41	32.41' RT	968.26	746081.84	948498.90
156	631+93.00	29.08' RT	968.37	746082.77	948492.62
157	631+65.50	24.10' RT	970.53	746076.55	948465.36
158	631+70.50	24.10' RT	970.07	746078.52	948469.96
159	631+80.50	24.09' RT	969.14	746082.45	948479.16
160	631+85.50	24.09' RT	969.06	746084.42	948483.75
161	631+85.50	29.09' RT	968.99	746079.82	948485.72
162	631+85.51	56.27' RT	967.78	746054.83	948496.41
163	631+83.48	61.11' RT	967.62	746049.58	948496.44
164	631+65.50	28.38' RT	970.53	746072.62	948467.05
165	631+70.50	29.10' RT	969.96	746073.92	948471.93
166	631+80.50	29.09' RT	969.06	746077.86	948481.12
167	631+80.51	57.71' RT	967.82	746051.54	948492.38
168	631+79.75	59.57' RT	967.76	746049.53	948492.40



RIVER COURT NW- CURB RAMP TYPE 7B					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
181	631+70.72	16.06' LT	970.22	746115.54	948454.40
182	631+76.73	18.55' LT	970.43	746120.19	948458.94
183	631+80.47	18.55' LT	969.85	746121.66	948462.39
184	631+85.47	18.54' LT	969.78	746123.61	948466.99
185	631+88.23	18.54' LT	970.03	746124.69	948469.53
186	631+95.72	16.03' LT	969.53	746125.33	948477.41
187	631+70.48	24.03' LT	970.62	746122.77	948451.05
188	631+75.48	23.54' LT	970.36	746124.29	948455.84
189	631+80.48	23.54' LT	970.10	746126.25	948460.44

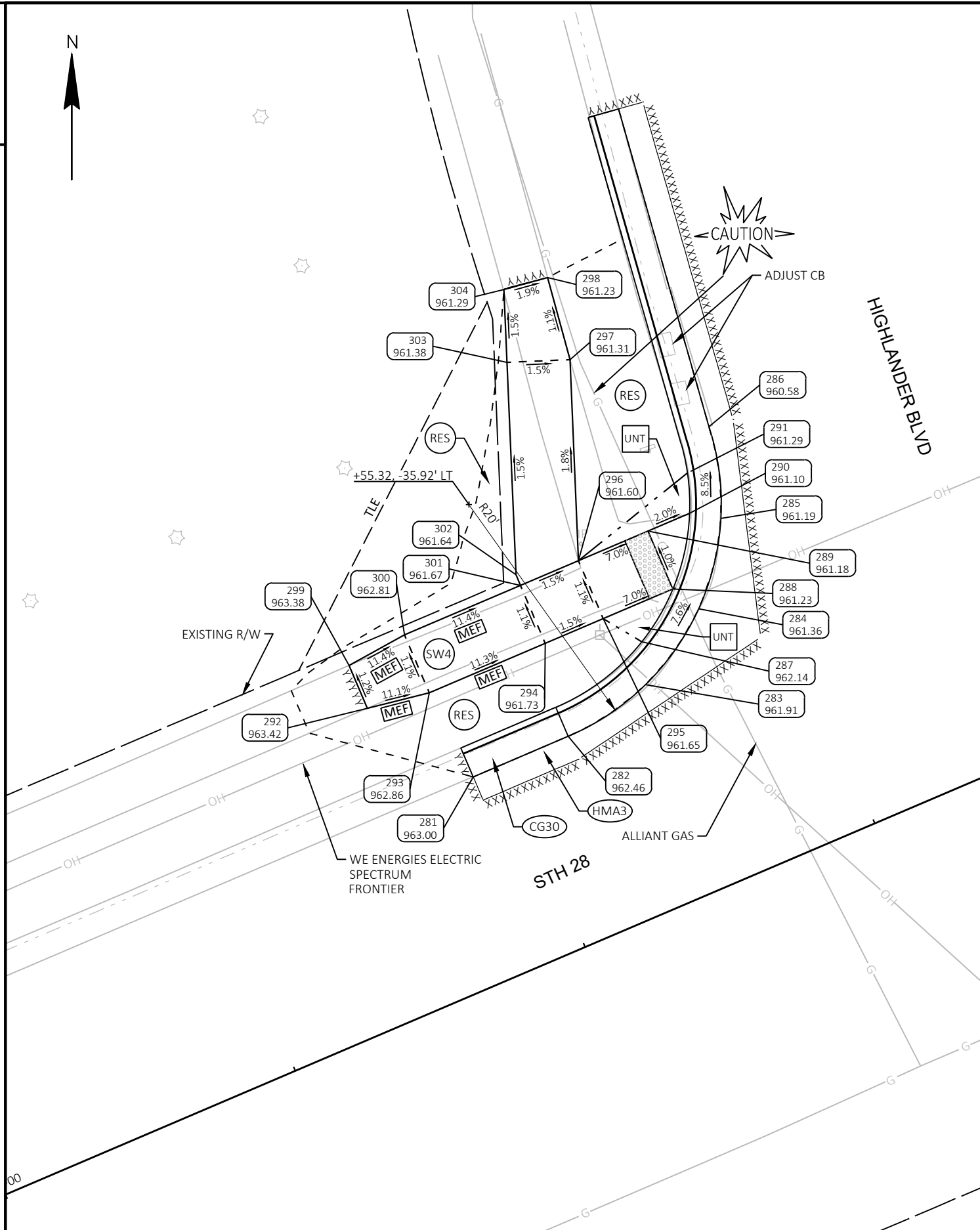
RIVER COURT NW- CURB RAMP TYPE 7B					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
190	631+85.48	23.53' LT	970.02	746128.20	948465.04
191	631+90.48	23.52' LT	969.98	746130.16	948469.64
192	631+95.48	24.03' LT	969.93	746132.59	948474.04
193	631+70.49	27.83' LT	970.50	746126.27	948449.56
194	631+75.49	28.54' LT	970.30	746128.89	948453.88
195	631+80.49	28.54' LT	970.08	746130.85	948458.48
196	631+85.49	28.53' LT	970.00	746132.80	948463.09
197	631+90.49	28.52' LT	969.93	746134.76	948467.69
198	631+95.49	27.76' LT	969.83	746136.03	948472.58

RIVER COURT NE- CURB RAMP TYPE 7B					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
211	632+44.80	15.98' LT	967.87	746144.56	948522.56
212	632+50.54	18.48' LT	968.03	746149.11	948526.86
213	632+55.55	18.48' LT	967.30	746151.08	948531.46
214	632+60.55	18.47' LT	967.23	746153.04	948536.06
215	632+65.54	18.47' LT	967.48	746154.99	948540.66
216	632+70.80	15.97' LT	966.80	746154.76	948546.47
217	632+45.55	24.18' LT	968.28	746152.40	948520.02
218	632+50.54	23.47' LT	967.92	746153.70	948524.90
219	632+55.54	23.45' LT	967.57	746155.65	948529.50

RIVER COURT NE- CURB RAMP TYPE 7B					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
220	632+60.54	23.44' LT	967.50	746157.60	948534.11
221	632+65.54	23.40' LT	967.43	746159.53	948538.72
222	632+70.54	24.17' LT	967.35	746162.20	948543.02
223	632+45.56	27.79' LT	968.20	746155.72	948518.62
224	632+50.56	28.47' LT	967.85	746158.31	948522.95
225	632+55.54	28.45' LT	967.55	746160.25	948527.54
226	632+60.54	28.44' LT	967.47	746162.20	948532.14
227	632+65.54	28.40' LT	967.35	746164.13	948536.76
228	632+70.54	27.68' LT	967.29	746165.43	948541.64

LEGEND	
	CONCRETE CURB & GUTTER 30-INCH TYPE D
	REMOVING ASPHALTIC SURFACE AND PAVE ASPHALTIC SURFACE
	CONCRETE CURB PEDESTRIAN
	MAXIMUM EXTENT FEASIBLE
	TOPSOIL, FERTILIZER, SEED, EROSION MAT CLASS I TYPE B
	CONCRETE SIDEWALK 4-INCH
	UNPAVED NON-TRAVERSABLE 6:1 FLARE
	PAVED NON-TRAVERSABLE 6:1 FLARE
	SAWING CONCRETE
	SAWING ASPHALT
	POINT NUMBER & ELEVATION
	DETECTABLE WARNING FIELD

-



HIGHLAND BOULEVARD NW- CURB RAMP TYPE 4					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
281	633+47.14	15.91' LT	963.00	746184.68	948616.71
282	633+55.34	15.92' LT	962.46	746187.91	948624.24
283	633+62.57	17.28' LT	961.91	746192.01	948630.35
284	633+68.82	21.16' LT	961.36	746198.03	948634.58
285	633+73.24	27.05' LT	961.19	746205.18	948636.33
286	633+75.25	34.12' LT	960.58	746212.47	948635.40
287	633+63.65	20.53' LT	962.14	746195.41	948630.07
288	633+67.56	23.41' LT	961.23	746199.60	948632.53
289	633+67.56	28.41' LT	961.18	746204.20	948630.57
290	633+71.12	28.41' LT	961.10	746205.60	948633.85
291	633+72.23	31.41' LT	961.29	746208.79	948633.69
292	633+41.56	24.21' LT	963.42	746190.13	948608.30
293	633+46.56	23.41' LT	962.86	746191.36	948613.22
294	633+56.56	23.41' LT	961.73	746195.28	948622.42
295	633+61.56	23.41' LT	961.65	746197.24	948627.01
296	633+61.56	28.41' LT	961.60	746201.84	948625.05
297	633+67.20	43.34' LT	961.31	746217.79	948624.38
298	633+68.13	50.03' LT	961.23	746224.30	948622.60
299	633+41.56	27.91' LT	963.38	746193.53	948606.86
300	633+46.56	28.41' LT	962.81	746195.95	948611.26
301	633+56.56	28.41' LT	961.67	746199.88	948620.45
302	633+56.56	29.32' LT	961.64	746200.72	948620.09
303	633+62.52	45.10' LT	961.38	746217.58	948619.39
304	633+64.57	50.52' LT	961.29	746223.36	948619.14

LEGEND

CG30D

30-INCH TYPE D
REMOVING ASPHALTIC SURFACE
AND PAVE ASPHALTIC SURFACE

HMA3

CONCRETE CURB PEDESTRIAN

PED

MAXIMUM EXTENT FEASIBLE

MEF

TOPSOIL, FERTILIZER, SEED,
EROSION MAT CLASS I TYPE B

RES

CONCRETE SIDEWALK 4-INCH

SW4

UNPAVED NON-TRAVERSABLE
6:1 FLARE

UNT

PAVED NON-TRAVERSABLE
6:1 FLARE

PNT

SAWING CONCRETE

YYYYY

SAWING ASPHALT

XXXXX

POINT NUMBER & ELEVATION

XX
XXX.XX

DETECTABLE WARNING FIELD

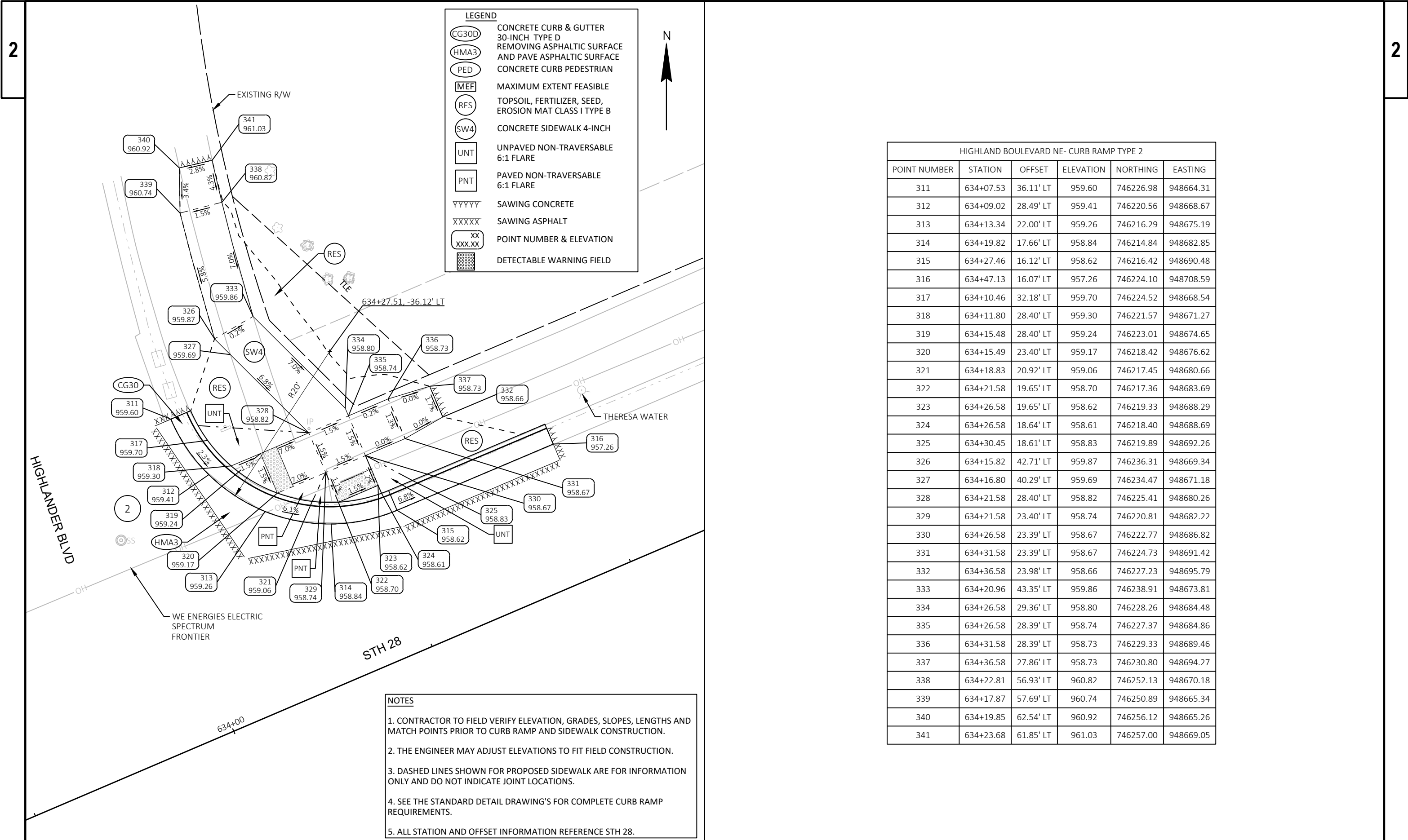
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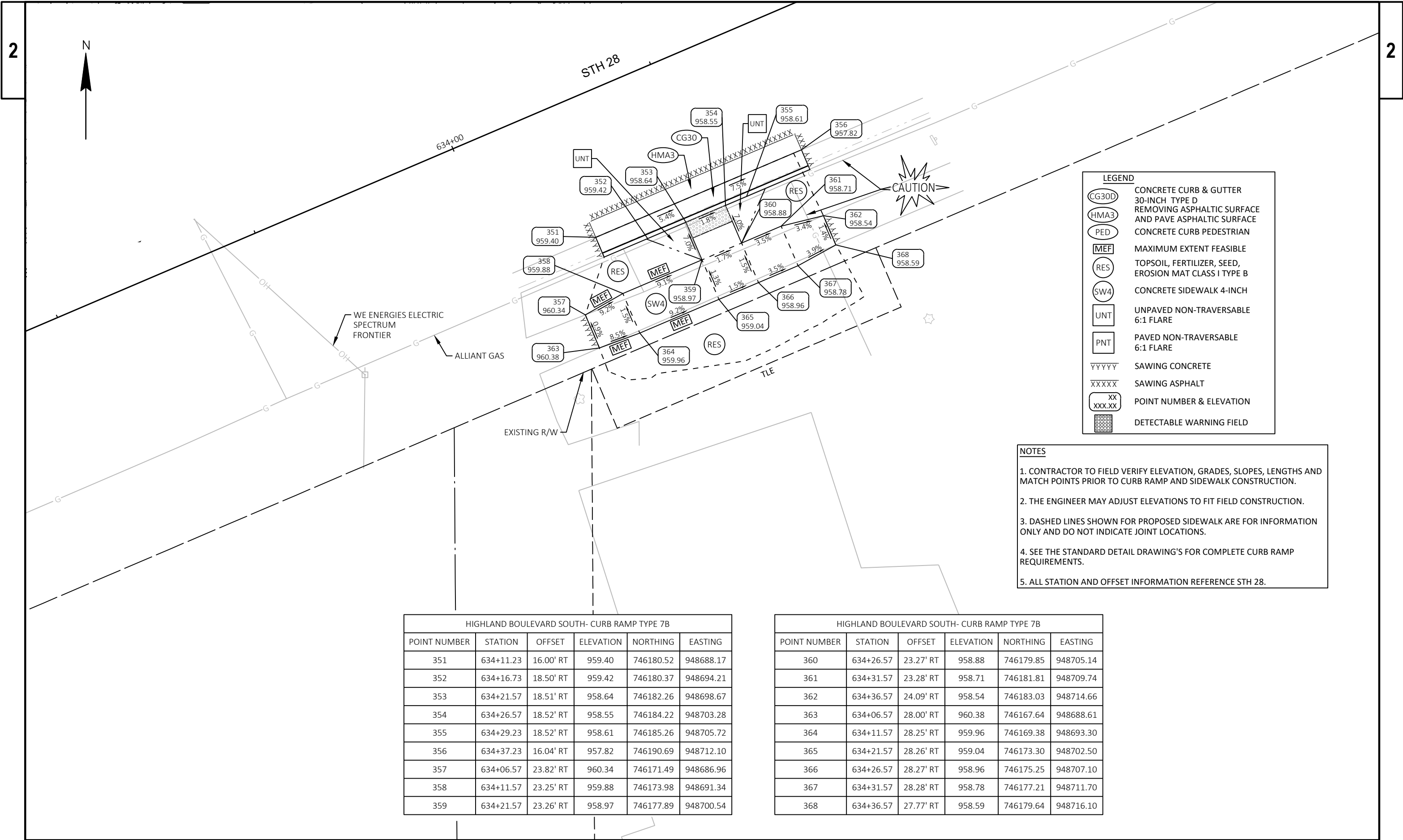


LEGEND

- CG30D CONCRETE CURB & GUTTER 30-INCH TYPE D
- HMA3 REMOVING ASPHALTIC SURFACE AND PAVE ASPHALTIC SURFACE
- PED CONCRETE CURB PEDESTRIAN
- MEF MAXIMUM EXTENT FEASIBLE
- RES TOPSOIL, FERTILIZER, SEED, EROSION MAT CLASS I TYPE B
- SW4 CONCRETE SIDEWALK 4-INCH
- UNT UNPAVED NON-TRAVERSABLE 6:1 FLARE
- PNT PAVED NON-TRAVERSABLE 6:1 FLARE
- YYYYY SAWING CONCRETE
- XXXXX SAWING ASPHALT
- XX
XXX.XX POINT NUMBER & ELEVATION
- DETECTABLE WARNING FIELD

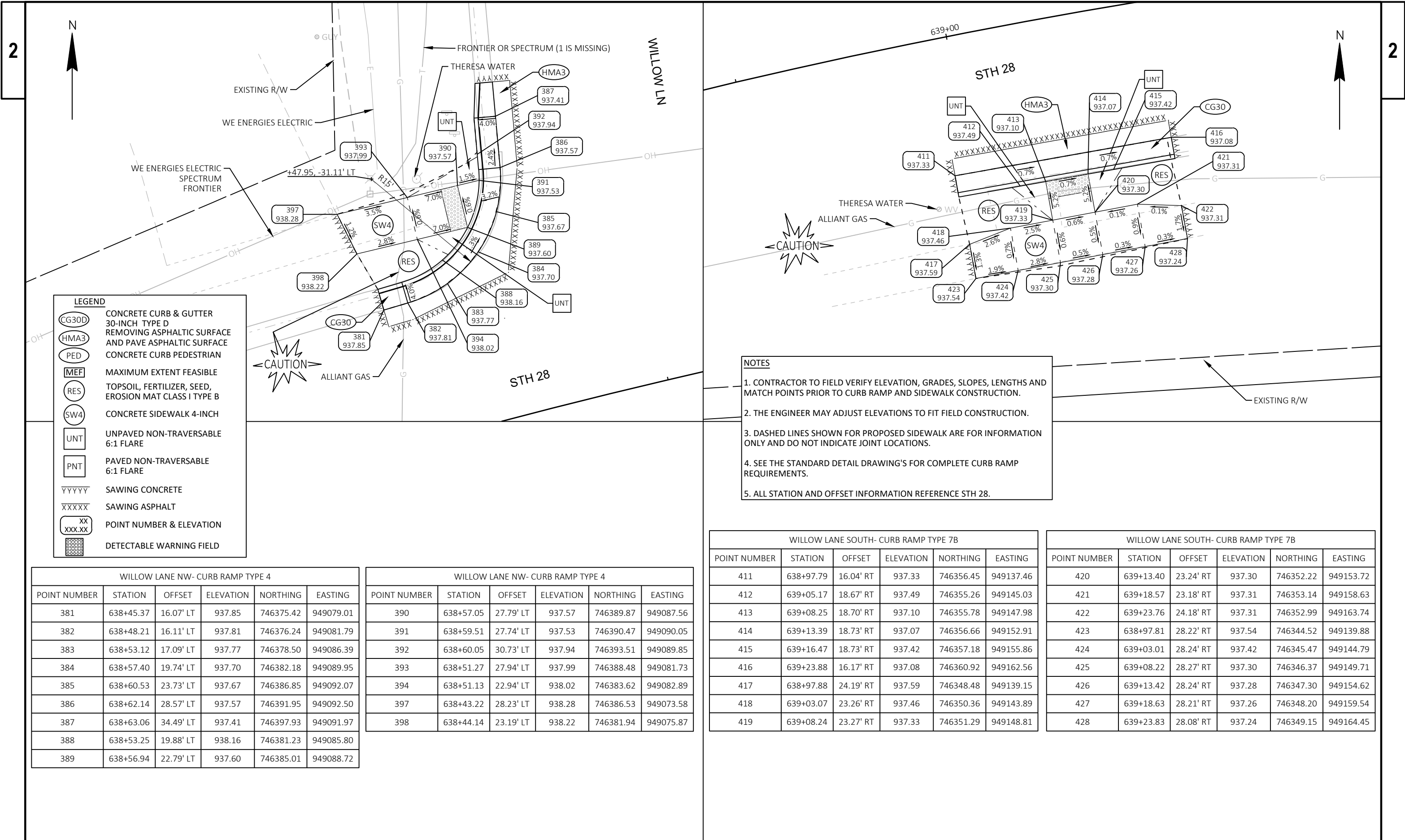
HIGHLAND BOULEVARD NE- CURB RAMP TYPE 2					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
311	634+07.53	36.11' LT	959.60	746226.98	948664.31
312	634+09.02	28.49' LT	959.41	746220.56	948668.67
313	634+13.34	22.00' LT	959.26	746216.29	948675.19
314	634+19.82	17.66' LT	958.84	746214.84	948682.85
315	634+27.46	16.12' LT	958.62	746216.42	948690.48
316	634+47.13	16.07' LT	957.26	746224.10	948708.59
317	634+10.46	32.18' LT	959.70	746224.52	948668.54
318	634+11.80	28.40' LT	959.30	746221.57	948671.27
319	634+15.48	28.40' LT	959.24	746223.01	948674.65
320	634+15.49	23.40' LT	959.17	746218.42	948676.62
321	634+18.83	20.92' LT	959.06	746217.45	948680.66
322	634+21.58	19.65' LT	958.70	746217.36	948683.69
323	634+26.58	19.65' LT	958.62	746219.33	948688.29
324	634+26.58	18.64' LT	958.61	746218.40	948688.69
325	634+30.45	18.61' LT	958.83	746219.89	948692.26
326	634+15.82	42.71' LT	959.87	746236.31	948669.34
327	634+16.80	40.29' LT	959.69	746234.47	948671.18
328	634+21.58	28.40' LT	958.82	746225.41	948680.26
329	634+21.58	23.40' LT	958.74	746220.81	948682.22
330	634+26.58	23.39' LT	958.67	746222.77	948686.82
331	634+31.58	23.39' LT	958.67	746224.73	948691.42
332	634+36.58	23.98' LT	958.66	746227.23	948695.79
333	634+20.96	43.35' LT	959.86	746238.91	948673.81
334	634+26.58	29.36' LT	958.80	746228.26	948684.48
335	634+26.58	28.39' LT	958.74	746227.37	948684.86
336	634+31.58	28.39' LT	958.73	746229.33	948689.46
337	634+36.58	27.86' LT	958.73	746230.80	948694.27
338	634+22.81	56.93' LT	960.82	746252.13	948670.18
339	634+17.87	57.69' LT	960.74	746250.89	948665.34
340	634+19.85	62.54' LT	960.92	746256.12	948665.26
341	634+23.68	61.85' LT	961.03	746257.00	948669.05

- NOTES**
- CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
 - THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION.
 - DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
 - SEE THE STANDARD DETAIL DRAWING'S FOR COMPLETE CURB RAMP REQUIREMENTS.
 - ALL STATION AND OFFSET INFORMATION REFERENCE STH 28.



HIGHLAND BOULEVARD SOUTH- CURB RAMP TYPE 7B					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
351	634+11.23	16.00' RT	959.40	746180.52	948688.17
352	634+16.73	18.50' RT	959.42	746180.37	948694.21
353	634+21.57	18.51' RT	958.64	746182.26	948698.67
354	634+26.57	18.52' RT	958.55	746184.22	948703.28
355	634+29.23	18.52' RT	958.61	746185.26	948705.72
356	634+37.23	16.04' RT	957.82	746190.69	948712.10
357	634+06.57	23.82' RT	960.34	746171.49	948686.96
358	634+11.57	23.25' RT	959.88	746173.98	948691.34
359	634+21.57	23.26' RT	958.97	746177.89	948700.54

HIGHLAND BOULEVARD SOUTH- CURB RAMP TYPE 7B					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
360	634+26.57	23.27' RT	958.88	746179.85	948705.14
361	634+31.57	23.28' RT	958.71	746181.81	948709.74
362	634+36.57	24.09' RT	958.54	746183.03	948714.66
363	634+06.57	28.00' RT	960.38	746167.64	948688.61
364	634+11.57	28.25' RT	959.96	746169.38	948693.30
365	634+21.57	28.26' RT	959.04	746173.30	948702.50
366	634+26.57	28.27' RT	958.96	746175.25	948707.10
367	634+31.57	28.28' RT	958.78	746177.21	948711.70
368	634+36.57	27.77' RT	958.59	746179.64	948716.10



WILLOW LANE NE- CURB RAMP TYPE 2					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
441	638+98.63	42.24' LT	936.33	746413.76	949126.80
442	638+98.56	40.97' LT	936.38	746412.50	949126.98
443	638+98.36	36.98' LT	936.53	746408.54	949127.56
444	638+98.06	30.99' LT	936.75	746402.61	949128.43
445	638+98.07	29.26' LT	936.85	746400.92	949128.79
446	638+98.84	25.59' LT	936.88	746397.48	949130.29
447	639+01.53	20.88' LT	937.01	746393.40	949133.93
448	639+05.84	17.66' LT	937.22	746391.07	949138.88
449	639+11.02	16.38' LT	937.33	746390.78	949144.34
450	639+14.65	16.26' LT	937.34	746391.33	949148.01
451	639+17.09	16.20' LT	937.34	746391.70	949150.48
452	639+19.54	16.14' LT	937.33	746392.06	949152.95
453	639+00.50	31.78' LT	937.09	746403.89	949130.77
454	639+00.53	28.78' LT	936.76	746400.95	949131.39
455	639+02.46	28.76' LT	936.79	746401.31	949133.37
456	639+02.40	23.76' LT	936.86	746396.39	949134.26
457	639+05.42	20.73' LT	937.23	746394.00	949137.89
458	639+08.38	19.32' LT	937.22	746393.19	949141.15
459	639+13.26	18.81' LT	937.27	746393.58	949146.16
460	639+17.15	18.70' LT	937.76	746394.17	949150.11
461	639+04.96	41.91' LT	936.65	746414.72	949133.45
462	639+08.42	28.71' LT	937.16	746402.42	949139.46
463	639+08.40	23.71' LT	937.23	746397.51	949140.36
464	639+13.24	23.71' LT	937.30	746398.40	949145.28
465	639+27.77	23.22' LT	937.52	746400.42	949160.16
466	639+10.05	41.04' LT	936.74	746414.86	949138.90
467	639+13.22	28.71' LT	937.22	746403.32	949144.38
468	639+27.66	28.23' LT	937.46	746405.35	949159.25

WILLOW LN

LEGEND

CG30D

CONCRETE CURB & GUTTER

HMA3

30-INCH TYPE D

PED

REMOVING ASPHALTIC SURFACE

MEF

AND PAVE ASPHALTIC SURFACE

RES

CONCRETE CURB PEDESTRIAN

SW4

MAXIMUM EXTENT FEASIBLE

UNT

TOPSOIL, FERTILIZER, SEED,

PNT

EROSION MAT CLASS I TYPE B

XXXX

CONCRETE SIDEWALK 4-INCH

XXXX

UNPAVED NON-TRAVERSABLE

XXXX

6:1 FLARE

XXXX

PAVED NON-TRAVERSABLE

XXXX

6:1 FLARE

XXXX

SAWING CONCRETE

XXXX

SAWING ASPHALT

XXXX

POINT NUMBER & ELEVATION

XXXX

DETECTABLE WARNING FIELD

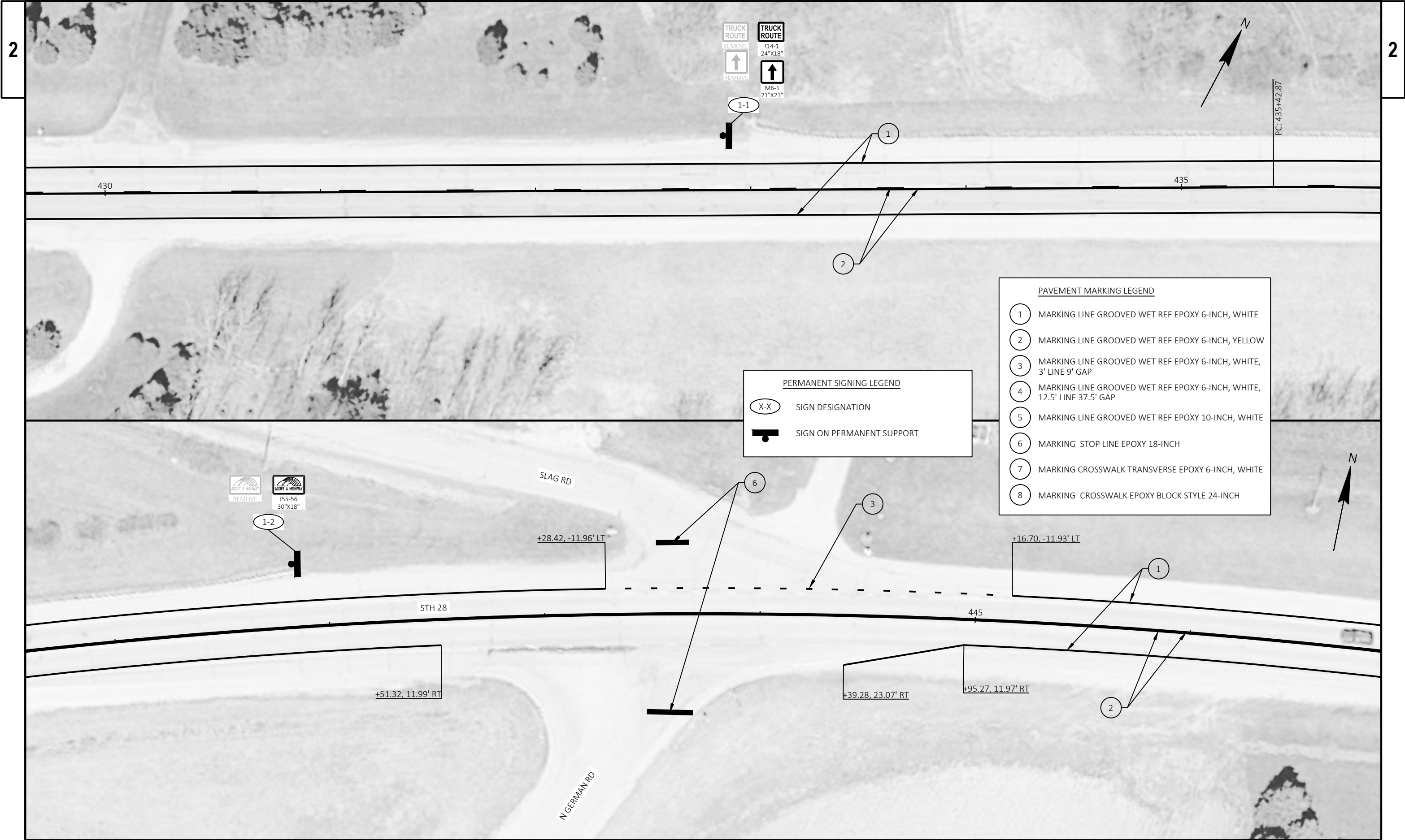
- NOTES
1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.

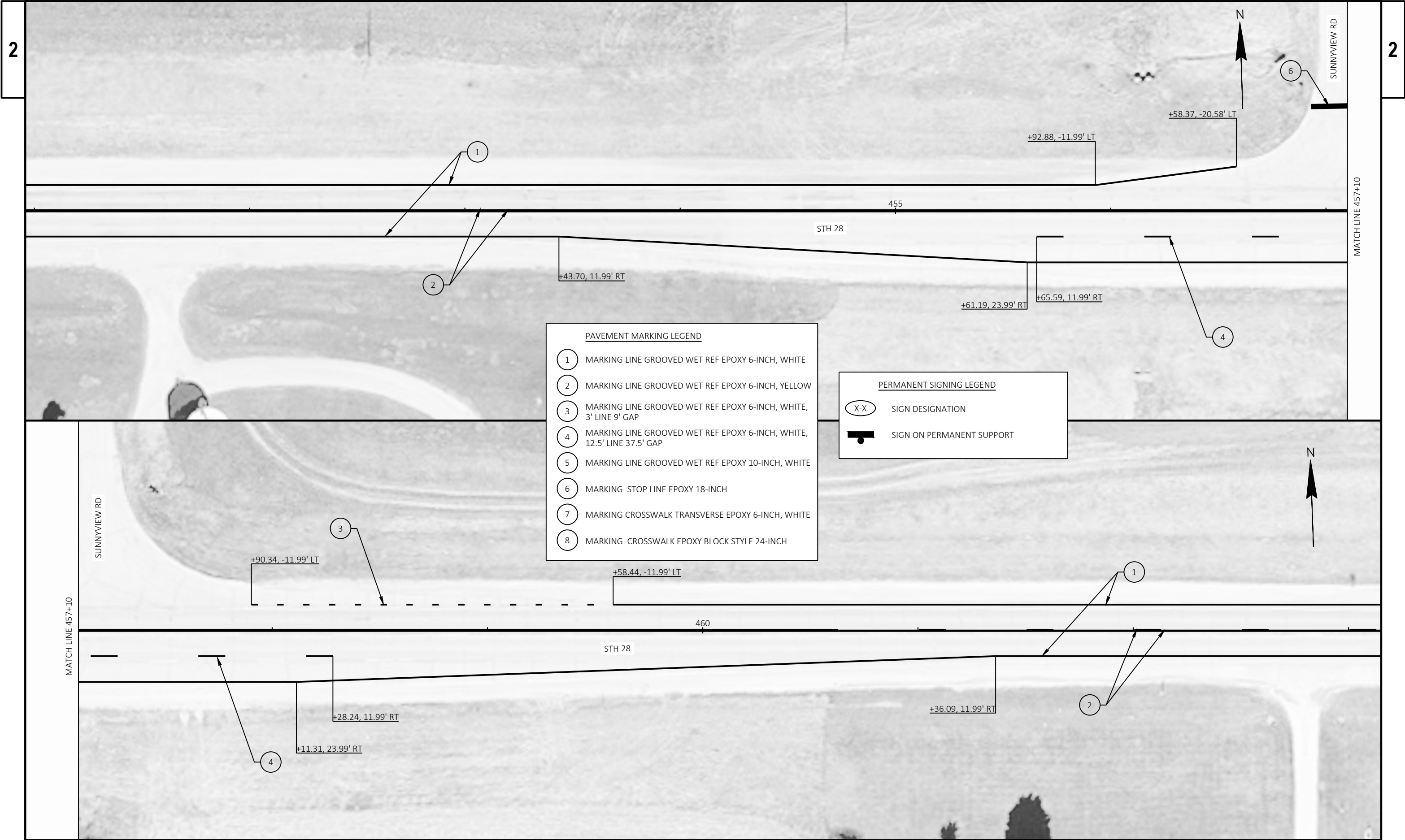
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION.

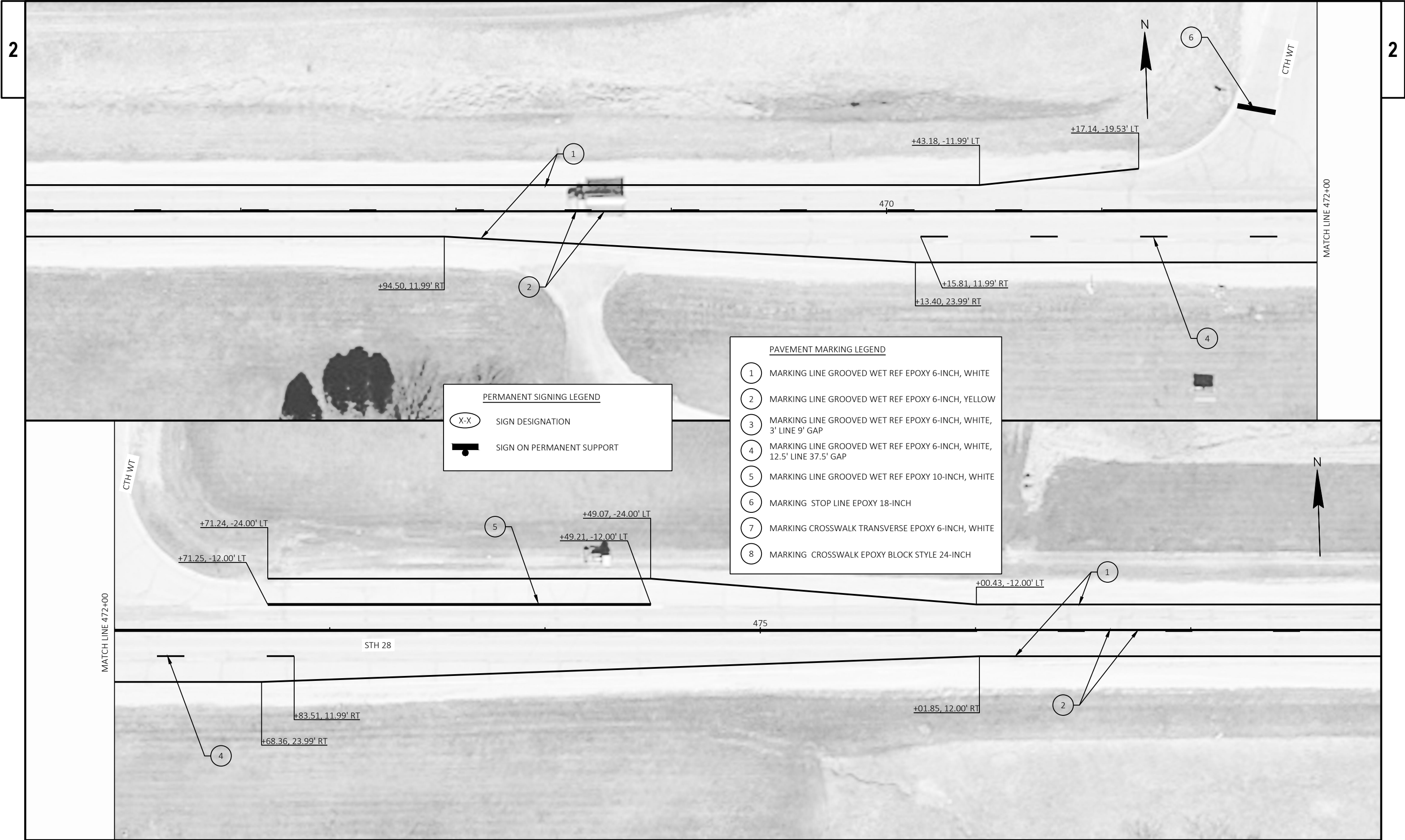
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.

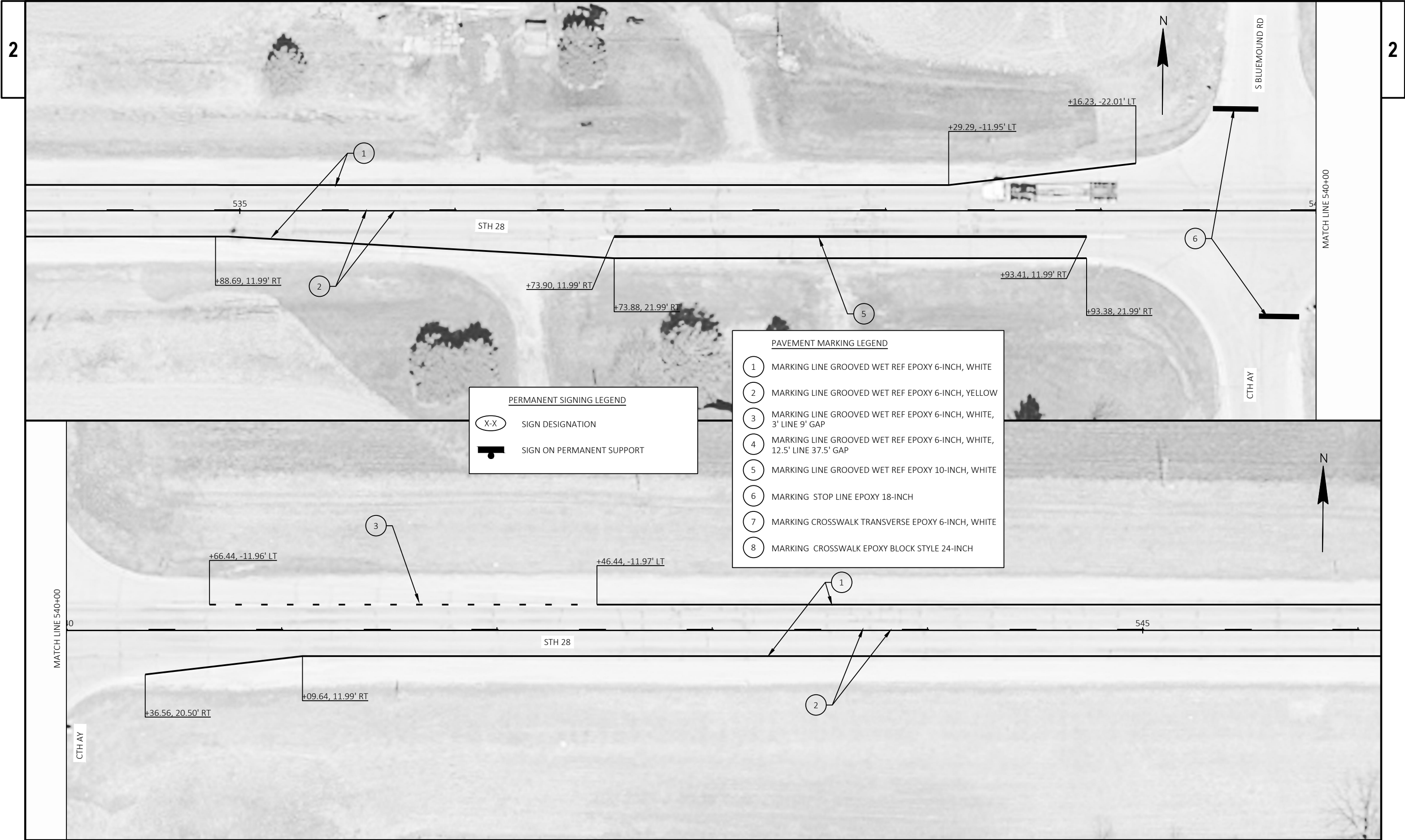
4. SEE THE STANDARD DETAIL DRAWING'S FOR COMPLETE CURB RAMP REQUIREMENTS.

5. ALL STATION AND OFFSET INFORMATION REFERENCE STH 28.









PERMANENT SIGNING LEGEND

 SIGN DESIGNATION

 SIGN ON PERMANENT SUPPORT

PAVEMENT MARKING LEGEND

1 MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE

2 MARKING LINE GROOVED WET REF EPOXY 6-INCH, YELLOW

3 MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE, 3' LINE 9' GAP

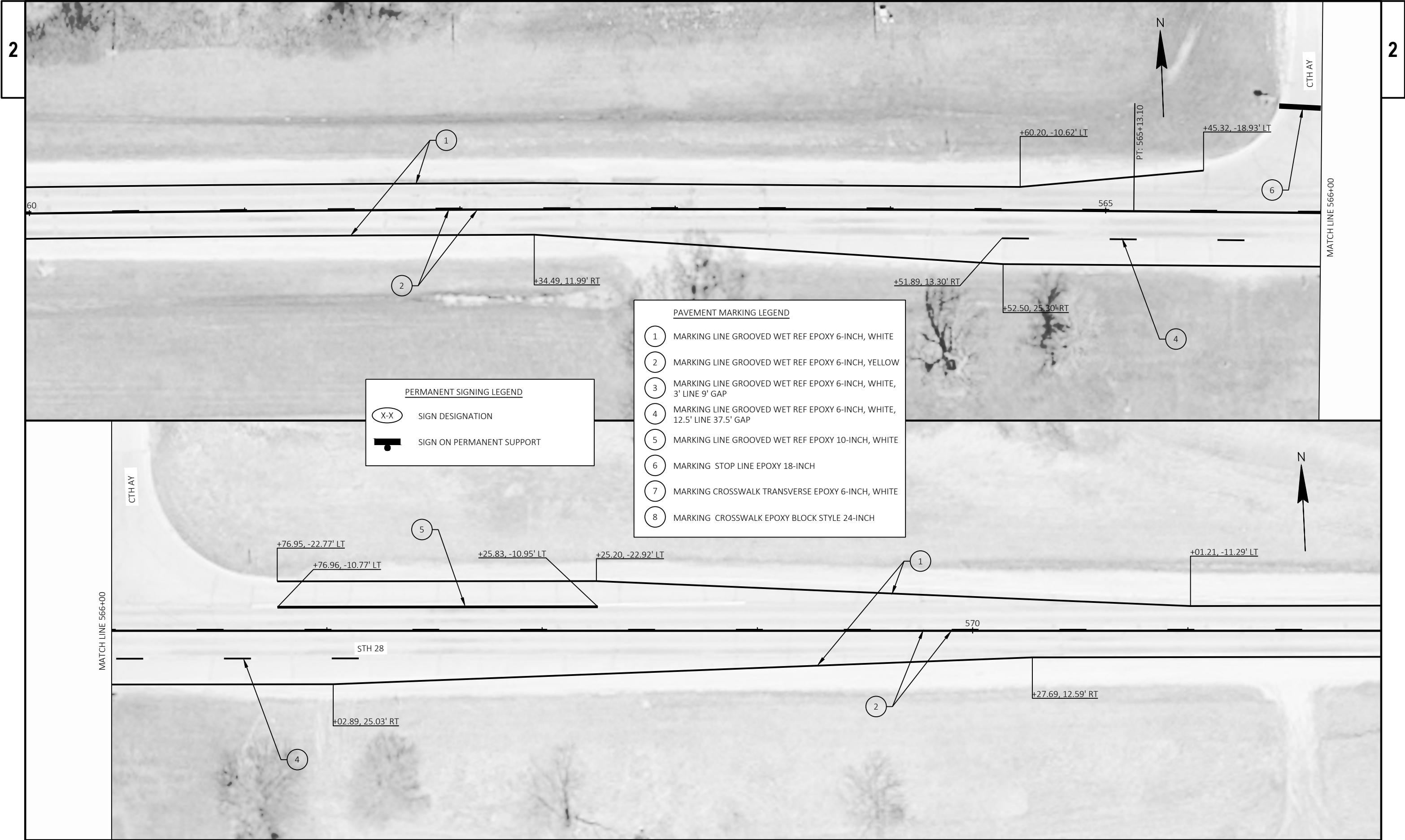
4 MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE, 12.5' LINE 37.5' GAP

5 MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE

6 MARKING STOP LINE EPOXY 18-INCH

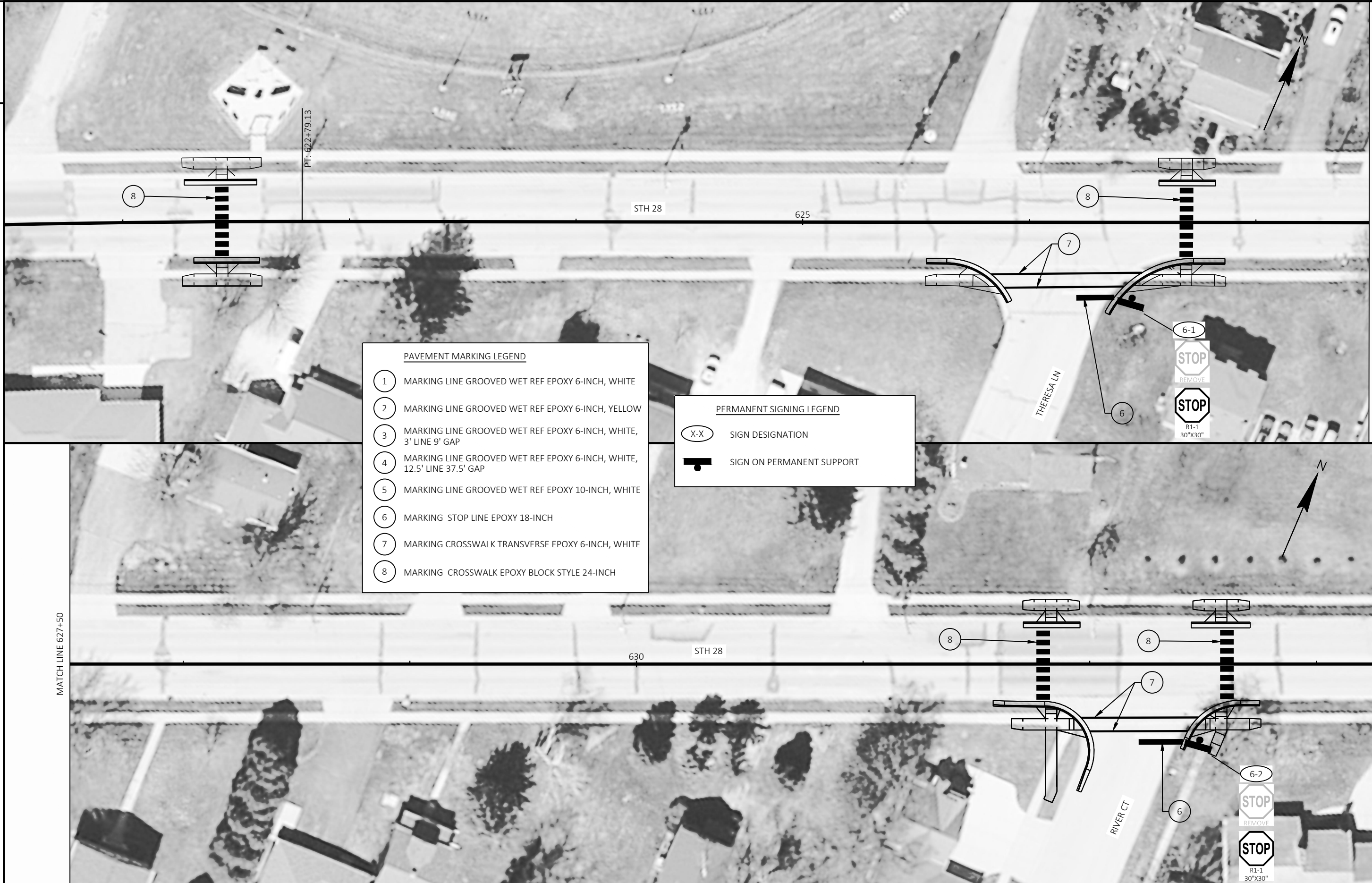
7 MARKING CROSSWALK TRANSVERSE EPOXY 6-INCH, WHITE

8 MARKING CROSSWALK EPOXY BLOCK STYLE 24-INCH



2

2



PROJECT NO: 3020-00-70

HWY: STH 28

COUNTY: DODGE

PAVEMENT MARKING & PERMANENT SIGNING

SHEET 26

E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\3020-00-00_STH 28_DODGE COUNTY\500_CADD\501_C3D_2020\30200000\SHEETSP\PLAN\024501-PM.DWG
LAYOUT NAME - 06

PLOT DATE : 10/10/2024 11:29 AM

PLOT BY : MATT KOSKI

PLOT NAME :

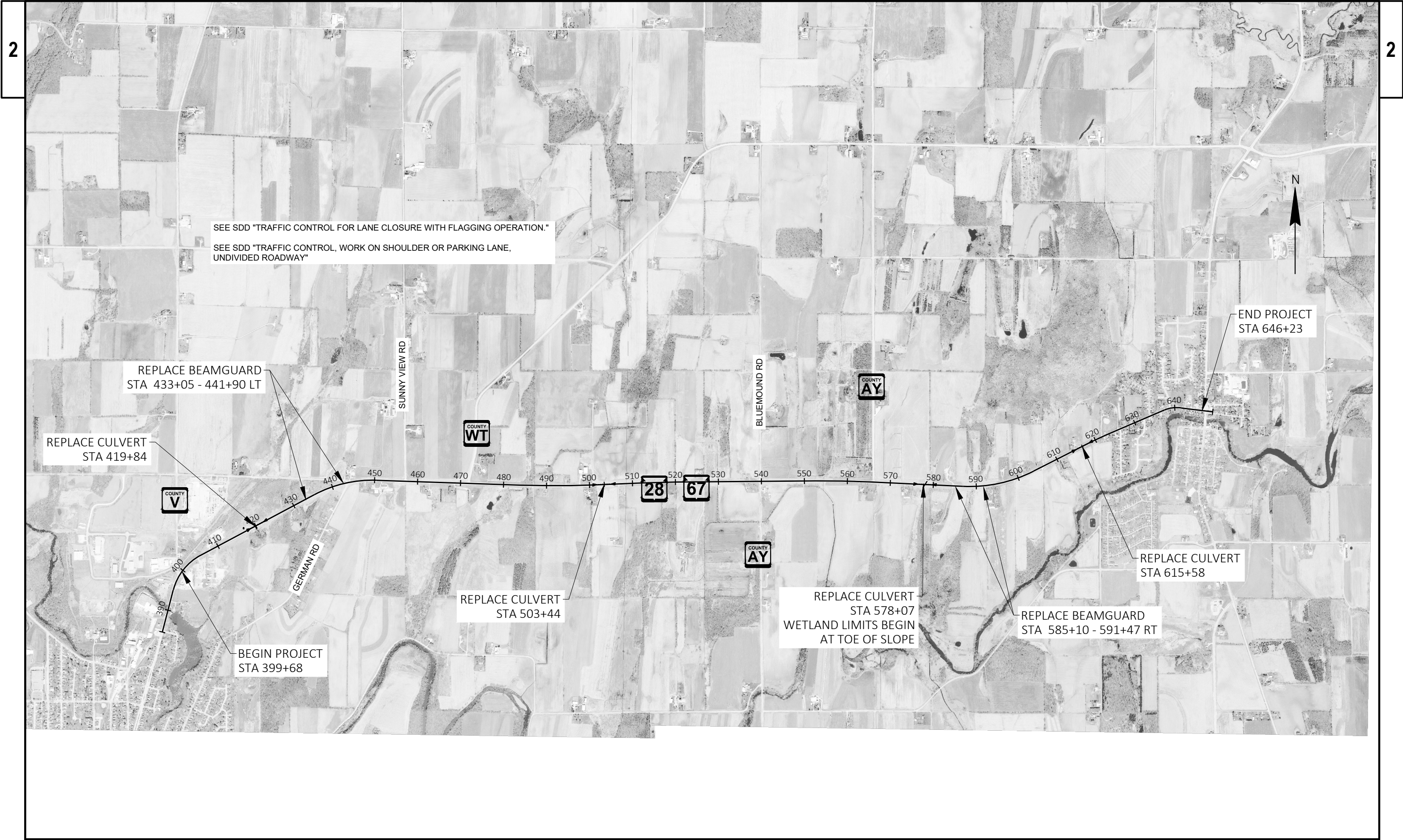
PLOT SCALE : 1 IN:40 FT

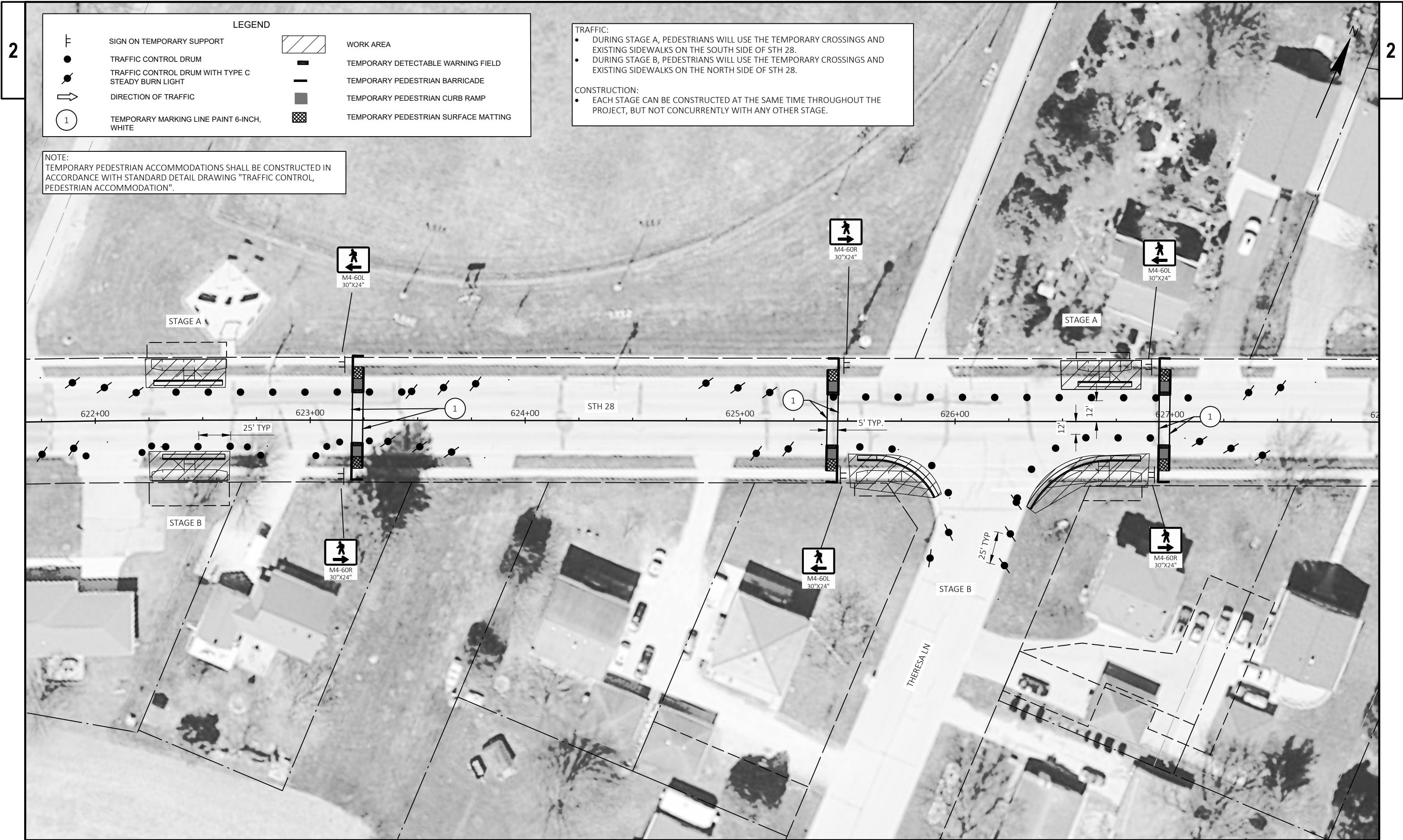
WISDOT/CADDS SHEET 44



PAVEMENT MARKING LEGEND	
1	MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE
2	MARKING LINE GROOVED WET REF EPOXY 6-INCH, YELLOW
3	MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE, 3' LINE 9' GAP
4	MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE, 12.5' LINE 37.5' GAP
5	MARKING LINE GROOVED WET REF EPOXY 10-INCH, WHITE
6	MARKING STOP LINE EPOXY 18-INCH
7	MARKING CROSSWALK TRANSVERSE EPOXY 6-INCH, WHITE
8	MARKING CROSSWALK EPOXY BLOCK STYLE 24-INCH

PERMANENT SIGNING LEGEND	
X-X	SIGN DESIGNATION
	SIGN ON PERMANENT SUPPORT





LEGEND

⊥

SIGN ON TEMPORARY SUPPORT

●

TRAFFIC CONTROL DRUM

●

TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT

➡

DIRECTION OF TRAFFIC

1

TEMPORARY MARKING LINE PAINT 6-INCH, WHITE

▨

WORK AREA

■

TEMPORARY DETECTABLE WARNING FIELD

—

TEMPORARY PEDESTRIAN BARRICADE

■

TEMPORARY PEDESTRIAN CURB RAMP

▨

TEMPORARY PEDESTRIAN SURFACE MATTING

TRAFFIC:

- DURING STAGE A, PEDESTRIANS WILL USE THE TEMPORARY CROSSINGS AND EXISTING SIDEWALKS ON THE SOUTH SIDE OF STH 28.
- DURING STAGE B, PEDESTRIANS WILL USE THE TEMPORARY CROSSINGS AND EXISTING SIDEWALKS ON THE NORTH SIDE OF STH 28.

CONSTRUCTION:

- EACH STAGE CAN BE CONSTRUCTED AT THE SAME TIME THROUGHOUT THE PROJECT, BUT NOT CONCURRENTLY WITH ANY OTHER STAGE.

NOTE:
TEMPORARY PEDESTRIAN ACCOMMODATIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD DETAIL DRAWING "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION".

PROJECT NO: 3020-00-70

HWY: STH 28

COUNTY: DODGE

TRAFFIC CONTROL PEDESTRIAN ACCOMODATIONS

SHEET 29

E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\3020-00-00_STH 28_DODGE COUNTY\500_CADD\501_C3D_2020\30200000\026501-TCPED.DWG

LAYOUT NAME : 01

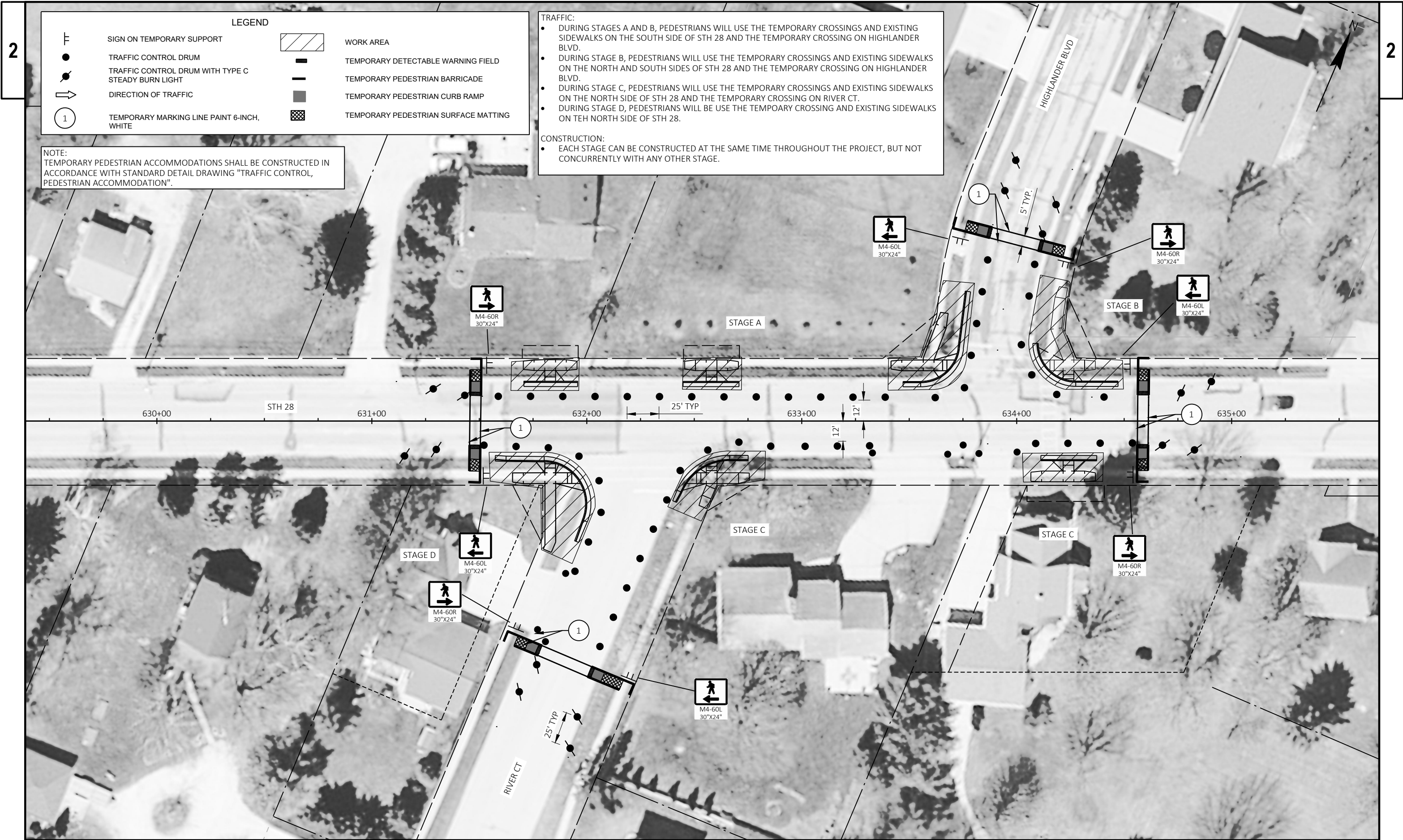
PLOT DATE : 10/10/2024 11:30 AM

PLOT BY : MATT KOSKI

PLOT NAME :

PLOT SCALE : 1 IN=40 FT

WISDOT/CADD SHEET 42



LEGEND

⊥

SIGN ON TEMPORARY SUPPORT

●

TRAFFIC CONTROL DRUM

●

TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT

➡

DIRECTION OF TRAFFIC

1

TEMPORARY MARKING LINE PAINT 6-INCH, WHITE

▨

WORK AREA

—

TEMPORARY DETECTABLE WARNING FIELD

—

TEMPORARY PEDESTRIAN BARRICADE

■

TEMPORARY PEDESTRIAN CURB RAMP

▩

TEMPORARY PEDESTRIAN SURFACE MATTING

TRAFFIC:

- DURING STAGES A AND B, PEDESTRIANS WILL USE THE TEMPORARY CROSSINGS AND EXISTING SIDEWALKS ON THE SOUTH SIDE OF STH 28 AND THE TEMPORARY CROSSING ON HIGHLANDER BLVD.
- DURING STAGE B, PEDESTRIANS WILL USE THE TEMPORARY CROSSINGS AND EXISTING SIDEWALKS ON THE NORTH AND SOUTH SIDES OF STH 28 AND THE TEMPORARY CROSSING ON HIGHLANDER BLVD.
- DURING STAGE C, PEDESTRIANS WILL USE THE TEMPORARY CROSSINGS AND EXISTING SIDEWALKS ON THE NORTH SIDE OF STH 28 AND THE TEMPORARY CROSSING ON RIVER CT.
- DURING STAGE D, PEDESTRIANS WILL BE USE THE TEMPOARY CROSSING AND EXISTING SIDEWALKS ON TEH NORTH SIDE OF STH 28.

CONSTRUCTION:

- EACH STAGE CAN BE CONSTRUCTED AT THE SAME TIME THROUGHOUT THE PROJECT, BUT NOT CONCURRENTLY WITH ANY OTHER STAGE.

NOTE:
TEMPORARY PEDESTRIAN ACCOMMODATIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD DETAIL DRAWING "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION".

PROJECT NO: 3020-00-70

HWY: STH 28

COUNTY: DODGE

TRAFFIC CONTROL PEDESTRIAN ACCOMODATIONS

SHEET 30

E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - WI-SW REGION\3020-00-00_STH 28_DODGE COUNTY\500_CADD\501_C3D_2020\30200000\SHEETS\PLAN\026501-TCPED.DWG

LAYOUT NAME - 02

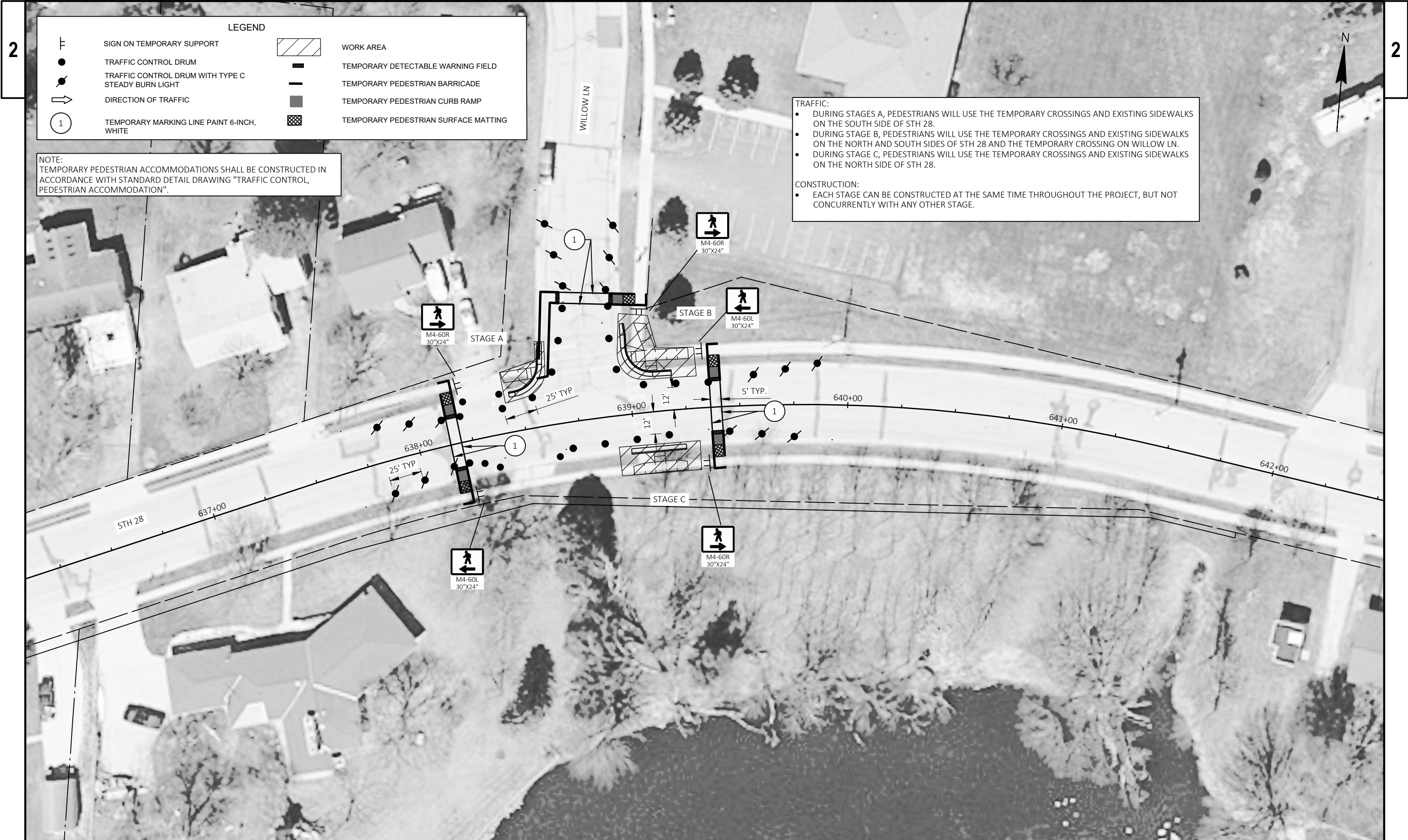
PLOT DATE : 10/10/2024 11:30 AM

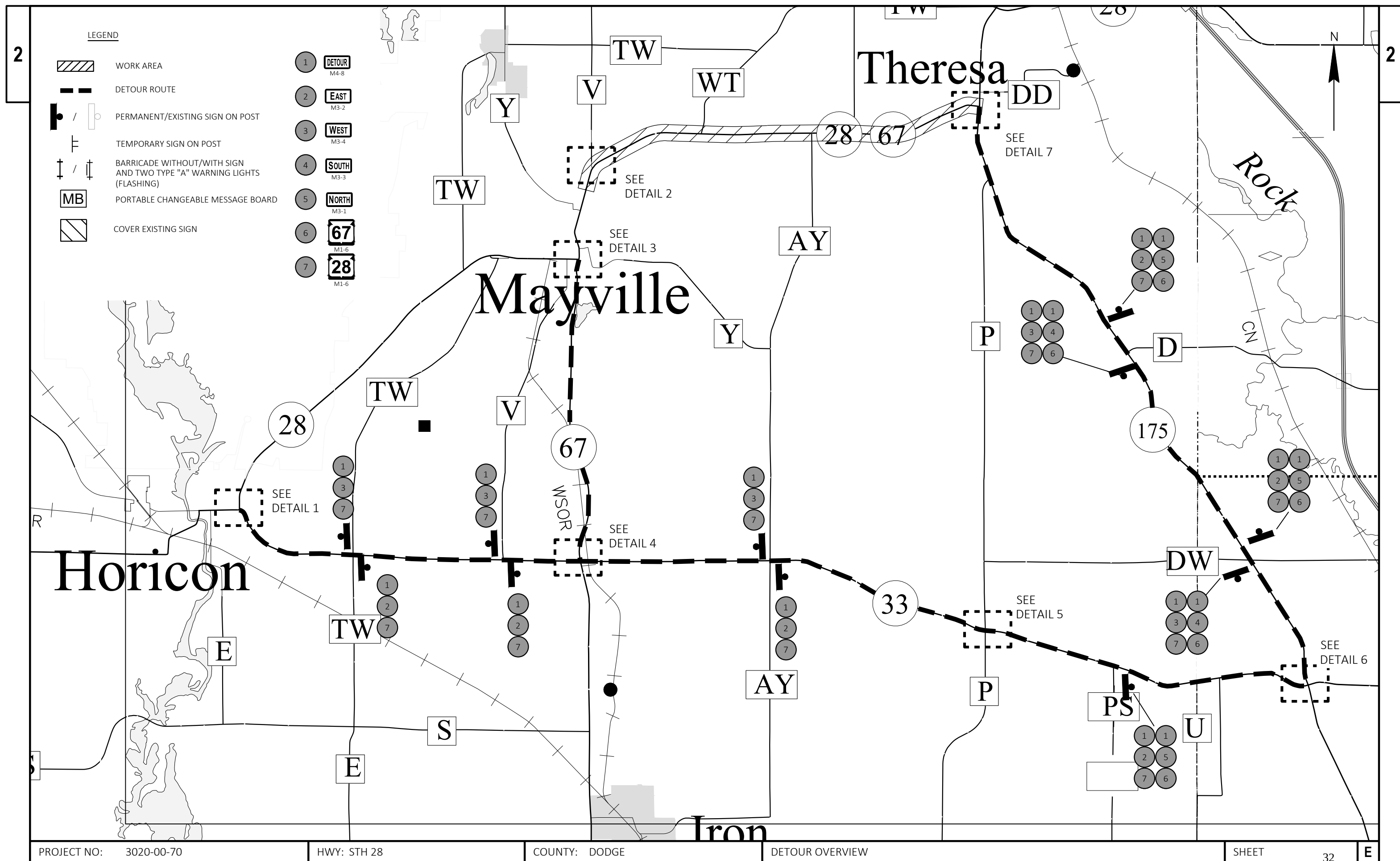
PLOT BY : MATT KOSKI

PLOT NAME :

PLOT SCALE : 1 IN=40 FT

WISDOT/CADDs SHEET 42

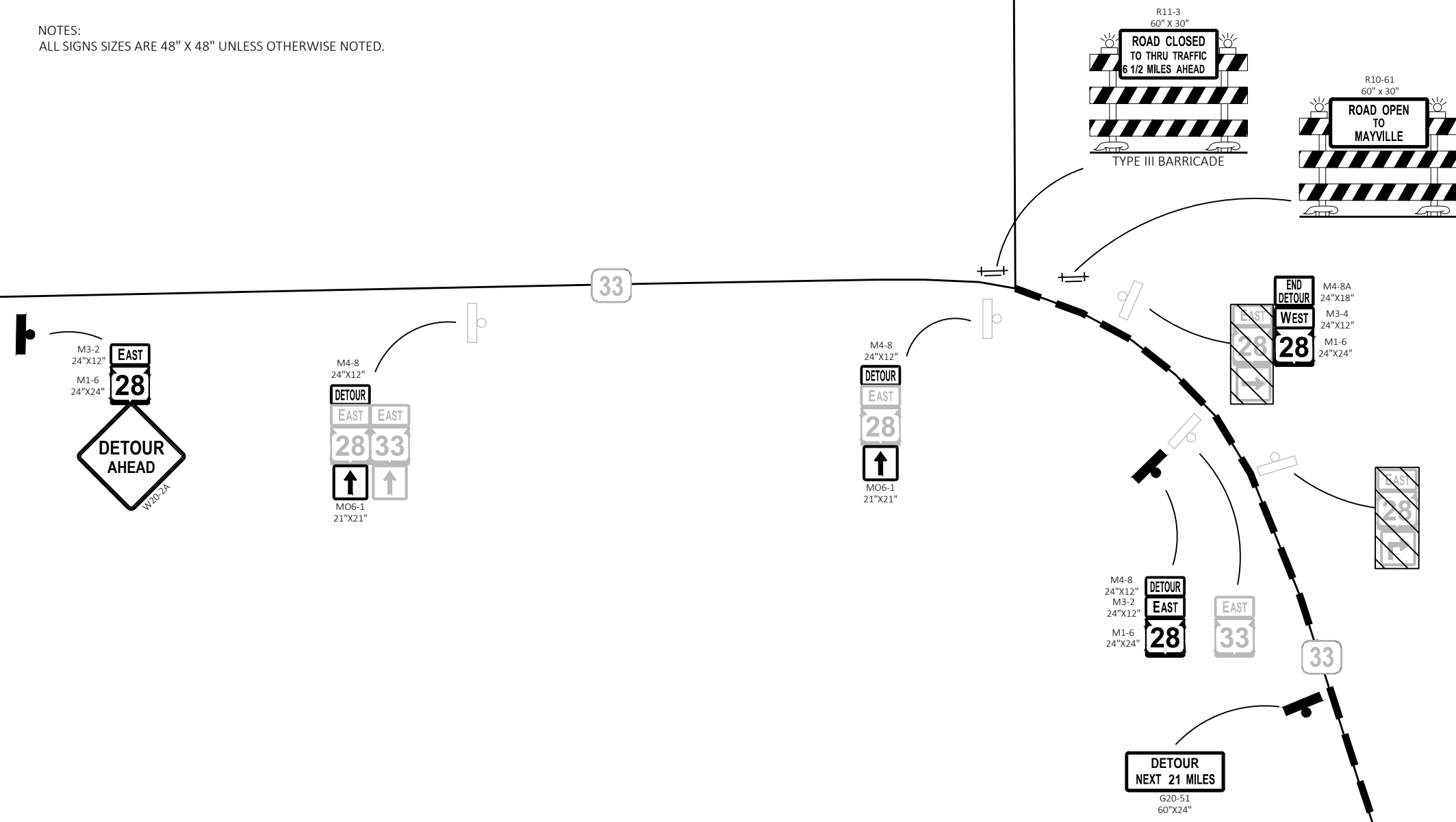




LEGEND

	WORK AREA
	DETOUR ROUTE
	PERMANENT/EXISTING SIGN ON POST
	TEMPORARY SIGN ON POST
	BARRICADE WITHOUT/WITH SIGN AND TWO TYPE "A" WARNING LIGHTS (FLASHING)
	PORTABLE CHANGEABLE MESSAGE BOARD
	COVER EXISTING SIGN

NOTES:
ALL SIGNS SIZES ARE 48" X 48" UNLESS OTHERWISE NOTED.



PROJECT NO: 3020-00-70

HWY: STH 28

COUNTY: DODGE

DETOUR - DETAIL 1

SHEET

33

E

LEGEND

-  WORK AREA
-  DETOUR ROUTE
-  PERMANENT/EXISTING SIGN ON POST
-  TEMPORARY SIGN ON POST
-  BARRICADE WITHOUT/WITH SIGN AND TWO TYPE "A" WARNING LIGHTS (FLASHING)
-  PORTABLE CHANGEABLE MESSAGE BOARD
-  COVER EXISTING SIGN

NOTES:
ALL SIGNS SIZES ARE 48" X 48" UNLESS OTHERWISE NOTED.

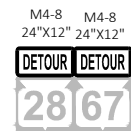
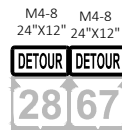
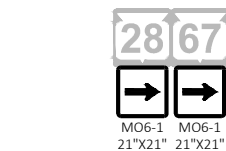
PLACE PORTABLE CHANGEABLE MESSAGE BOARDS SEVEN DAYS PRIOR TO ROAD CLOSURE AND REMOVE WHEN CONSTRUCTION BEGINS

PCMS FRAME 1
(7 DAY PREWARN)

ROAD
CLOSED
BEGINS

PCMS FRAME 2

DAY
MM/DD



28

V

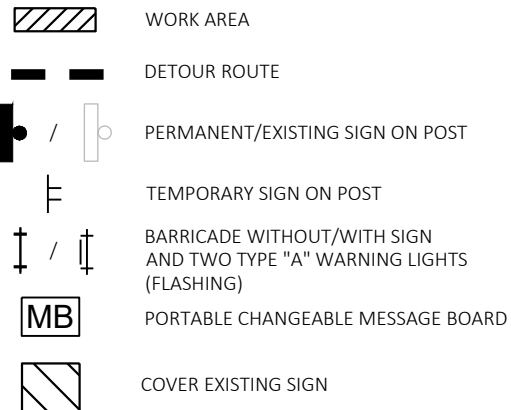


WORK ZONE



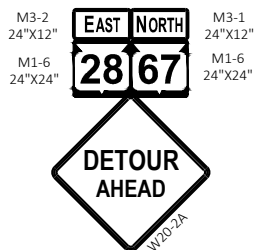


LEGEND

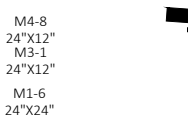
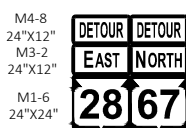
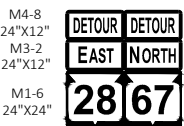
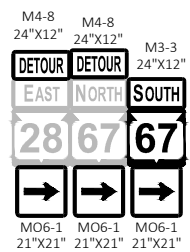


NOTES:
ALL SIGNS SIZES ARE 48" X 48" UNLESS OTHERWISE NOTED.

28



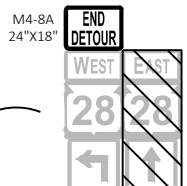
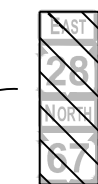
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67

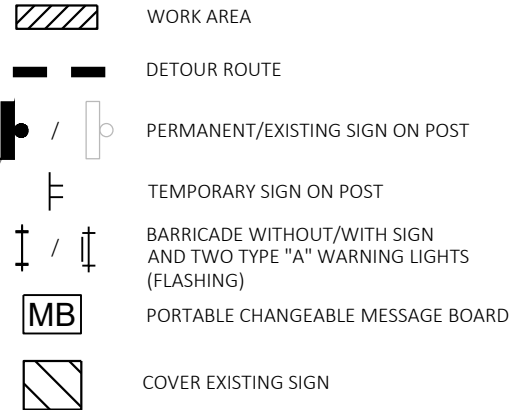
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67

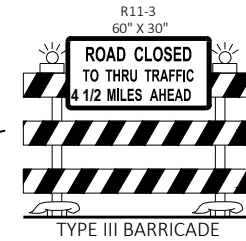


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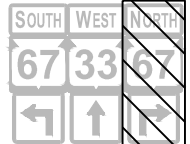
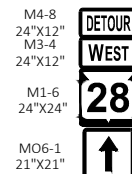
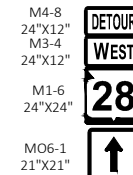
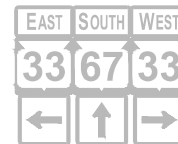
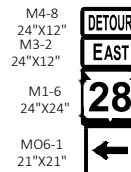
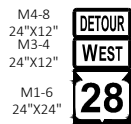
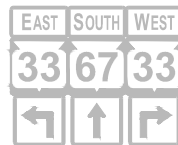
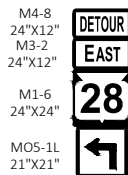
LEGEND



NOTES:
ALL SIGNS SIZES ARE 48" X 48" UNLESS OTHERWISE NOTED.

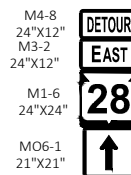
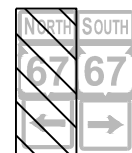
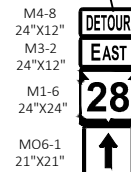
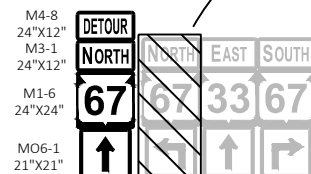
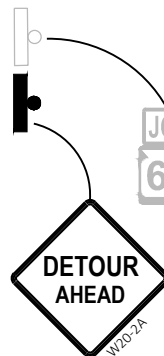


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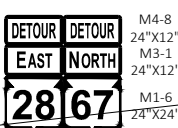
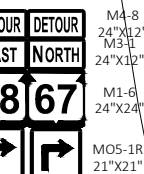
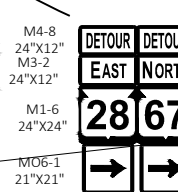
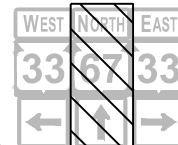


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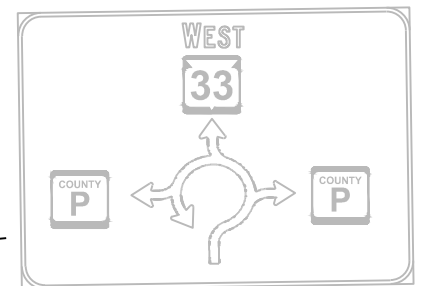
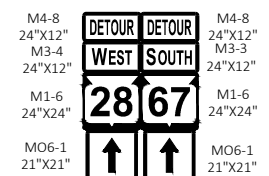
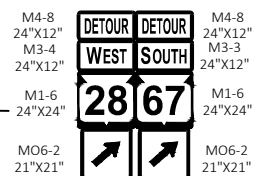
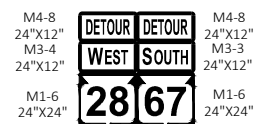
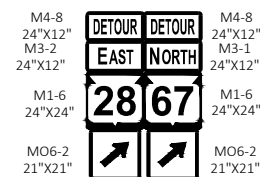


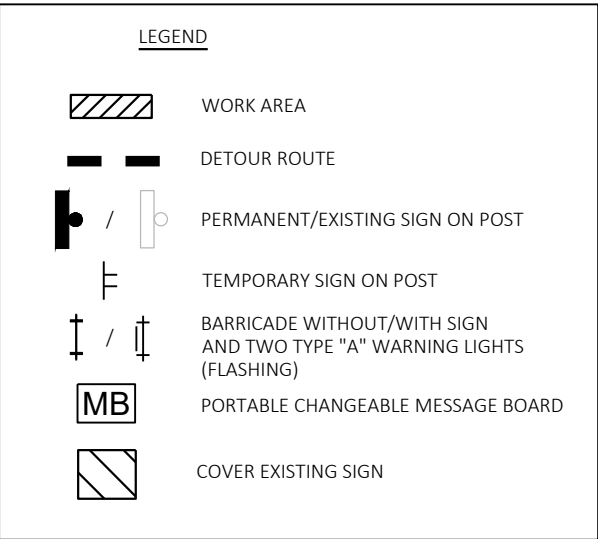
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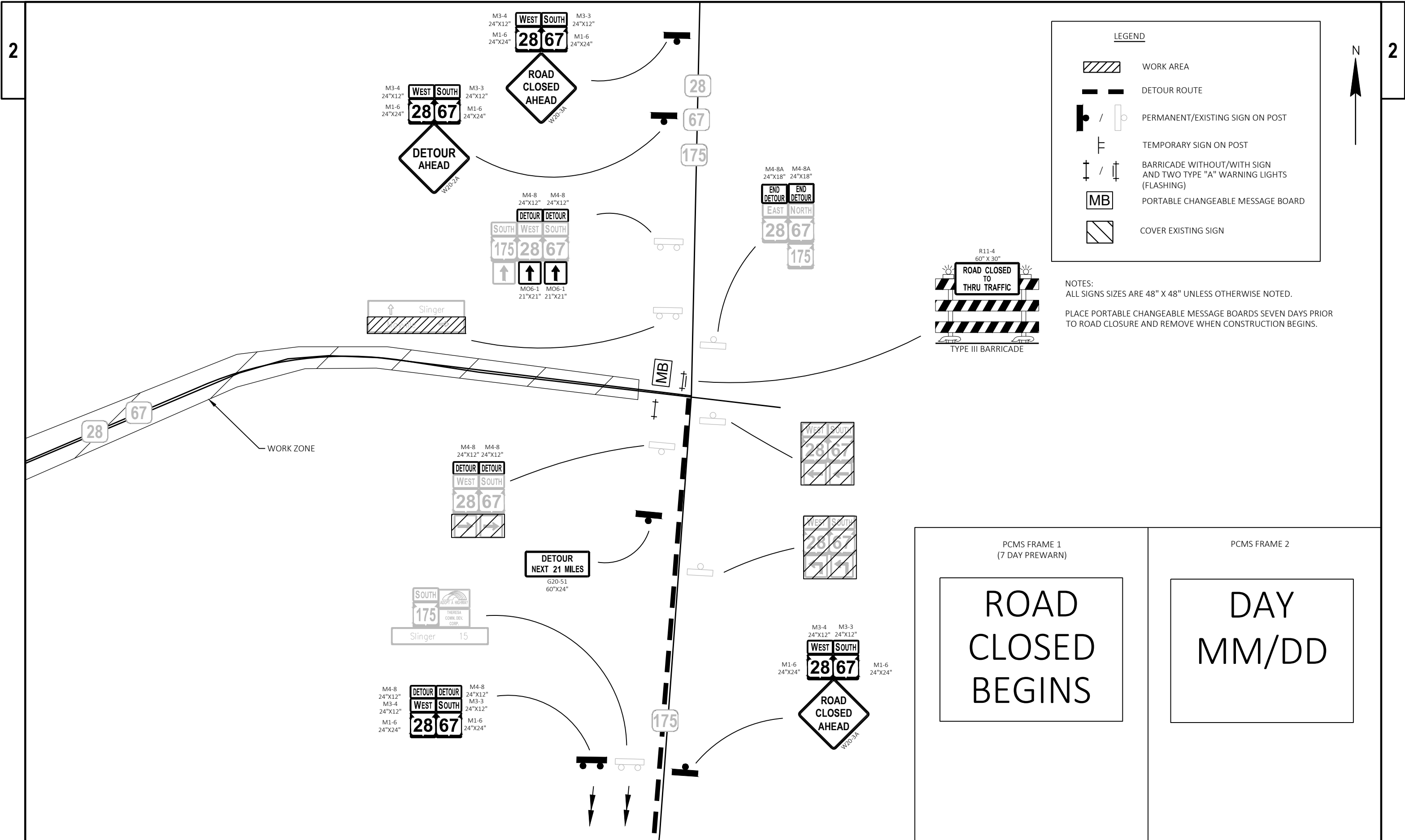


A diagram of a roundabout with four exits. The top exit is labeled "EAST" and "33". The left and right exits are labeled "COUNTY P".





PROJECT NO:	3020-00-70	HWY: STH 28	COUNTY: DODGE	DETOUR - DETAIL 6	SHEET	38	E
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Estimate Of Quantities

3020-00-70

Line	Item	Item Description	Unit	Total	Qty
0002	203.0100	Removing Small Pipe Culverts	EACH	4.000	4.000
0004	204.0110	Removing Asphaltic Surface	SY	160.000	160.000
0006	204.0115	Removing Asphaltic Surface Butt Joints	SY	265.000	265.000
0008	204.0120	Removing Asphaltic Surface Milling	SY	93,400.000	93,400.000
0010	204.0150	Removing Curb & Gutter	LF	615.000	615.000
0012	204.0155	Removing Concrete Sidewalk	SY	265.000	265.000
0014	204.0165	Removing Guardrail	LF	1,555.000	1,555.000
0016	211.0101	Prepare Foundation for Asphaltic Paving (project) 01. 3020-00-70	EACH	1.000	1.000
0018	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	1.000	1.000
0020	213.0100	Finishing Roadway (project) 01. 3020-00-70	EACH	1.000	1.000
0022	305.0110	Base Aggregate Dense 3/4-Inch	TON	2,050.000	2,050.000
0024	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	1,480.000	1,480.000
0026	416.0610	Drilled Tie Bars	EACH	60.000	60.000
0028	455.0605	Tack Coat	GAL	13,620.000	13,620.000
0030	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	1.000	1.000
0032	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	2.000	2.000
0034	460.2005	Incentive Density PWL HMA Pavement	DOL	13,820.000	13,820.000
0036	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	4,940.000	4,940.000
0038	460.2010	Incentive Air Voids HMA Pavement	DOL	19,610.000	19,610.000
0040	460.6224	HMA Pavement 4 MT 58-28 S	TON	19,610.000	19,610.000
0042	465.0105	Asphaltic Surface	TON	2,147.000	2,147.000
0044	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	472.000	472.000
0046	465.0560	Asphaltic Rumble Strips, Centerline	LF	18,700.000	18,700.000
0048	522.0430	Culvert Pipe Reinforced Concrete Class IV 30-Inch	LF	512.000	512.000
0050	522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	EACH	8.000	8.000
0052	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	615.000	615.000
0054	602.0405	Concrete Sidewalk 4-Inch	SF	3,380.000	3,380.000
0056	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	160.000	160.000
0058	602.0605	Curb Ramp Detectable Warning Field Radial Yellow	SF	37.000	37.000
0060	611.8105	Adjusting Catch Basin Covers	EACH	7.000	7.000
0062	614.0010	Barrier System Grading Shaping Finishing	EACH	2.000	2.000
0064	614.2300	MGS Guardrail 3	LF	1,312.500	1,312.500
0066	614.2610	MGS Guardrail Terminal EAT	EACH	4.000	4.000
0068	618.0100	Maintenance and Repair of Haul Roads (project) 01. 3020-00-70	EACH	1.000	1.000
0070	619.1000	Mobilization	EACH	1.000	1.000
0072	624.0100	Water	MGAL	14.000	14.000
0074	625.0500	Salvaged Topsoil	SY	5,294.000	5,294.000
0076	628.1504	Silt Fence	LF	1,000.000	1,000.000
0078	628.1520	Silt Fence Maintenance	LF	1,000.000	1,000.000
0080	628.1905	Mobilizations Erosion Control	EACH	3.000	3.000
0082	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0084	628.2004	Erosion Mat Class I Type B	SY	5,294.000	5,294.000
0086	628.7020	Inlet Protection Type D	EACH	10.000	10.000
0088	628.7555	Culvert Pipe Checks	EACH	25.000	25.000
0090	628.7570	Rock Bags	EACH	50.000	50.000
0092	629.0210	Fertilizer Type B	CWT	3.360	3.360
0094	630.0130	Seeding Mixture No. 30	LB	240.000	240.000
0096	630.0200	Seeding Temporary	LB	145.000	145.000
0098	633.5200	Markers Culvert End	EACH	8.000	8.000

Estimate Of Quantities

3020-00-70

Line	Item	Item Description	Unit	Total	Qty
0100	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	6.000	6.000
0102	637.2210	Signs Type II Reflective H	SF	34.810	34.810
0104	638.2602	Removing Signs Type II	EACH	6.000	6.000
0106	638.3000	Removing Small Sign Supports	EACH	6.000	6.000
0108	642.5001	Field Office Type B	EACH	1.000	1.000
0110	643.0300	Traffic Control Drums	DAY	6,330.000	6,330.000
0112	643.0420	Traffic Control Barricades Type III	DAY	3,600.000	3,600.000
0114	643.0705	Traffic Control Warning Lights Type A	DAY	7,200.000	7,200.000
0116	643.0715	Traffic Control Warning Lights Type C	DAY	2,520.000	2,520.000
0118	643.0900	Traffic Control Signs	DAY	38,050.000	38,050.000
0120	643.0920	Traffic Control Covering Signs Type II	EACH	28.000	28.000
0122	643.1050	Traffic Control Signs PCMS	DAY	38.000	38.000
0124	643.3165	Temporary Marking Line Paint 6-Inch	LF	49,880.000	49,880.000
0126	643.5000	Traffic Control	EACH	1.000	1.000
0128	644.1440	Temporary Pedestrian Surface Matting	SF	600.000	600.000
0130	644.1601	Temporary Pedestrian Curb Ramp	DAY	2,160.000	2,160.000
0132	644.1605	Temporary Pedestrian Detectable Warning Field	SF	190.000	190.000
0134	644.1810	Temporary Pedestrian Barricade	LF	780.000	780.000
0136	646.2040	Marking Line Grooved Wet Ref Epoxy 6-Inch	LF	92,500.000	92,500.000
0138	646.6120	Marking Stop Line Epoxy 18-Inch	LF	210.000	210.000
0140	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	380.000	380.000
0142	646.7520	Marking Crosswalk Epoxy Block Style 24-Inch	LF	290.000	290.000
0144	648.0100	Locating No-Passing Zones	MI	4.670	4.670
0146	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	615.000	615.000
0148	650.6000	Construction Staking Pipe Culverts	EACH	4.000	4.000
0150	650.8000	Construction Staking Resurfacing Reference	LF	24,660.000	24,660.000
0152	650.9000	Construction Staking Curb Ramps	EACH	15.000	15.000
0154	650.9500	Construction Staking Sidewalk (project) 01. 3020-00-70	EACH	1.000	1.000
0156	650.9911	Construction Staking Supplemental Control (project) 01. 3020-00-70	EACH	1.000	1.000
0158	690.0150	Sawing Asphalt	LF	1,025.000	1,025.000
0160	690.0250	Sawing Concrete	LF	185.000	185.000
0162	740.0440	Incentive IRI Ride	DOL	18,680.000	18,680.000
0164	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	2,000.000	2,000.000
0166	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	1,320.000	1,320.000
0168	SPV.0060	Special 01. Curb Ramp Grading Shaping Finishing	EACH	15.000	15.000
0170	SPV.0180	Special 01. Removing Distressed Pavement Milling	SY	9,340.000	9,340.000

3

REMOVING SMALL PIPE CULVERTS

CATEGORY	ROADWAY	STATION	O/S	203.0100 REMOVING SMALL PIPE CULVERTS EACH	DESCRIPTION
0010	STH 28	419+84	CL	1	30" CPCS
		503+44	CL	1	30" CPCS
		578+07	CL	1	30" CPCS
		616+63	CL	1	30" CPCS
TOTALS				4	

REMOVING ASPHALTIC SURFACE

CATEGORY	ROADWAY	LOCATION	204.0110 REMOVING ASPHALTIC SURFACE SY
0010	STH 28	FIREMAN'S PARK N	9
		FIREMAN'S PARK S	9
		THERESA LANE SW	12
		THERESA LANE SE	15
		THERESA LANE NE	7
		RIVER COURT SW	19
		RIVER COURT SE	12
		RIVER COURT NW	7
		RIVER COURT NE	7
		HIGHLANDER BLVD NW	16
		HIGHLANDER BLVD NE	13
		HIGHLANDER BLVD SE	7
		WILLOW LANE NW	9
		WILLOW LANE NE	11
		WILLOW LANE SE	7
TOTALS			160

REMOVING PAVEMENT BUTT JOINTS

CATEGORY	ROADWAY	STATION	TO	STATION	LOCATION	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY
0010	STH 28	399+68	-	400+68	BOP	11
		442+65	-	444+18	N. GERMAN RD	7
		443+28	-	444+57	SLAG RD	5
		456+58	-	457+85	SUNNNYVIEW RD	7
		471+21	-	472+42	CTH WT	7
		538+97	-	540+23	S. CTH AY	7
		539+23	-	540+47	S. BLUEMOUND RD	7
		565+46	-	566+73	N. CTY AY	7
		625+64	-	626+73	THERESA LN	9
		631+80	-	632+66	RIVER CT	8
		633+55	-	634+28	HIGHLANDER BLVD	7
		638+46	-	639+11	WILLOW LN	8
		645+23	-	646+23	EOP	8
					ASPHALT P.E.s (15 EACH)	167
TOTALS						265

MILLING

CATEGORY	ROADWAY	STATION	TO	STATION	LOCATION	204.0120 REMOVING ASPHALTIC SURFACE MILING SY	SPV.0180.01 REMOVING DISTRESSED PAVEMENT MILING SY
0010	STH 20	399+68	-	646+23	MAINLINE	93,400	-
					UNDISTRIBUTED	-	9,340
TOTALS						93,400	9,340

CURB & GUTTER REMOVALS

CATEGORY	ROADWAY	LOCATION	204.0150 REMOVING CURB & GUTTER LF
0010	STH 28	FIREMAN'S PARK N	32
		FIREMAN'S PARK S	32
		THERESA LANE SW	45
		THERESA LANE SE	62
		THERESA LANE NE	26
		RIVER COURT SW	76
		RIVER COURT SE	46
		RIVER COURT NW	26
		RIVER COURT NE	26
		HIGHLANDER BLVD NW	64
		HIGHLANDER BLVD NE	52
		HIGHLANDER BLVD SE	26
		WILLOW LANE NW	34
		WILLOW LANE NE	42
		WILLOW LANE SE	26
TOTALS			615

REMOVING CONCRETE SIDEWALK

CATEGORY	ROADWAY	LOCATION	204.0155 REMOVING CONCRETE SIDEWALK SY
0010	STH 28	FIREMAN'S PARK N	16
		FIREMAN'S PARK S	16
		THERESA LANE SW	14
		THERESA LANE SE	17
		THERESA LANE NE	13
		RIVER COURT SW	32
		RIVER COURT SE	18
		RIVER COURT NW	12
		RIVER COURT NE	10
		HIGHLANDER BLVD NW	22
		HIGHLANDER BLVD NE	28
		HIGHLANDER BLVD SE	18
		WILLOW LANE NW	8
		WILLOW LANE NE	25
		WILLOW LANE SE	16
TOTALS			265

REMOVING GUARDRAIL

CATEGORY	ROADWAY	STATION	TO	STATION	O/S	204.0165 REMOVING GUARDRAIL LF
0010	STH 28	433+05	-	441+91	LT	890
		585+10	-	591+72	RT	665
TOTAL						1,555

PREPARE FOUNDATION FOR ASPHALTIC PAVING

CATEGORY	ROADWAY	STATION	TO	STATION	LOCATION	211.0101 PREPARE FOUNDATION FOR ASPHALTIC PAVING EACH	211.0400 PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS STA
0010	STH 28	399+68	-	646+23	MAINLINE	1	-
		432+20	-	433+05	LT	-	1
TOTALS						1	1

PROJECT NO: 3020-00-70

HWY: STH 28

COUNTY: DODGE

MISCELLANEOUS QUANTITIES

SHEET

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E

BASE AGGREGATE ITEMS						305.0110 BASE AGGREGATE DENSE ¾-INCH TON	305.0120 BASE AGGREGATE DENSE 1½-INCH TON	624.0100 WATER MGAL
CATEGORY	ROADWAY	STATION	TO	STATION	LOCATION			
0010	STH 28	399+68	-	646+23	MAINLINE	2,050	1,480	14
TOTALS						2,050	1,480	14

ASPHALTIC PAVING						455.0605 TACK COAT GAL	460.6224 HMA PAVEMENT 4 MT 58-28 S TON	465.0105 ASPHALTIC SURFACE TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	465.0560 ASPHALTIC RUMBLE STRIPS, CENTERLINE LF
0010	STH 28	399+68	-	646+23	MAINLINE	13,080	19,610	1,960	--	18,700
		419+74	-	419+94	CULVERT LOWER LAYER	--	--	24	--	--
		503+24	-	503+64	CULVERT LOWER LAYER	--	--	26	--	--
		577+47	-	578+67	CULVERT LOWER LAYER	--	--	52	--	--
		616+42	-	616+82	CULVERT LOWER LAYER	--	--	18	--	--
ASPHALT P.E.s & EXISTING APRONS (55 TOTAL)						510	--	--	429	--
NEW GRAVEL ENTRANCE APRONS (8 TOTAL)						30	--	--	43	--
FIREMAN'S PARK N						--	--	4	--	--
FIREMAN'S PARK S						--	--	3	--	--
THERESA LANE SW						--	--	5	--	--
THERESA LANE SE						--	--	6	--	--
THERESA LANE NE						--	--	3	--	--
RIVER COURT SW						--	--	8	--	--
RIVER COURT SE						--	--	5	--	--
RIVER COURT NW						--	--	3	--	--
RIVER COURT NE						--	--	3	--	--
HIGHLANDER BLVD NW						--	--	7	--	--
HIGHLANDER BLVD NE						--	--	5	--	--
HIGHLANDER BLVD SE						--	--	3	--	--
WILLOW LANE NW						--	--	4	--	--
WILLOW LANE NE						--	--	5	--	--
WILLOW LANE SE						--	--	3	--	--
TOTALS						13,620	19,610	2,147	472	18,700

LOCATION	STATION	MIXTURE USE:	UNDERLAYING SURFACE	BID ITEM	TONS	THICKNESS	QUALITY MANAGEMENT PROGRAM TO BE USED FOR:	
							MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
12 FOOT DRIVING LANES	STA 399+68 - 646+23	UPPER LAYER	4 MT 58-28 S	4 MT 58-28 S	6,910	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVING LANES	STA 399+68 - 646+23	LOWER LAYER	MILLED EXISTING HMA SURFACE	4 MT 58-28 S	6,910	1 3/4"		
SHOULDERS & APPURTENANCES	STA 399+68 - 646+23	UPPER LAYER	4 MT 58-28 S	4 MT 58-28 S	2,895	1 3/4"		ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
SHOULDERS & APPURTENANCES	STA 399+68 - 646+23	LOWER LAYER	MILLED EXISTING HMA SURFACE	4 MT 58-28 S	2,895	1 3/4"		

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CULVERT PIPE							
CATEGORY	ROADWAY	STATION	O/S	522.0430	522.1030	633.5200	*
				CULVERT PIPE REINFORCED CONCRETE CLASS IV 30-INCH LF	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH EACH	MARKERS CULVERT END (EACH)	JOINT TIES (EACH)
0010	STH 28						
		419+84	CL	106	2	2	6
		503+44	CL	122	2	2	6
		578+07	CL	200	2	2	6
		616+62	CL	84	2	2	6
TOTALS				512	8	8	24 * FOR INFORMATION ONLY

CONCRETE CURB & GUTTER				
CATEGORY	ROADWAY	LOCATION	416.0610	601.0411
			DRILLED TIE BARS EACH	CONCRETE CURB & GUTTER 30-INCH TYPE D LF
0010	STH 28			
		FIREMAN'S PARK N	4	32
		FIREMAN'S PARK S	4	32
		THERESA LANE SW	4	45
		THERESA LANE SE	4	62
		THERESA LANE NE	4	26
		RIVER COURT SW	4	76
		RIVER COURT SE	4	46
		RIVER COURT NW	4	26
		RIVER COURT NE	4	26
		HIGHLANDER BLVD NW	4	64
		HIGHLANDER BLVD NE	4	52
		HIGHLANDER BLVD SE	4	26
		WILLOW LANE NW	4	34
		WILLOW LANE NE	4	42
		WILLOW LANE SE	4	26
TOTALS			60	615

CONCRETE SIDEWALK															
FOR INFORMATIONAL PURPOSES ONLY. THESE ITEMS INCLUDED IN ITEM SPV.0060.01.															
CATEGORY	ROADWAY	LOCATION	602.0405 CONCRETE SIDEWALK 4-INCH SF	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF	602.0605 CURB RAMP DETECTABLE WARNING FIELD RADIAL YELLOW SF	SPV.0060.01 CURB RAMP GRADING, SHAPING, AND FINISHING EACH	EXCAVATION COMMON CY	BASE AGGREGATE DENSE 1 1/4-INCH TON	TOPSOIL SY	EROSION MAT CLASS I TYPE B SY	FERTILIZER TYPE B CWT	SEEDING MIX. NO. 40 LB	SEED WATER MGAL		
0010	STH 28	FIREMAN'S PARK N	220	10	--	1	15	7	60	60	0.03	3	1.4		
		FIREMAN'S PARK S	220	10	--	1	18	7	70	70	0.04	4	1.6		
		THERESA LANE SW	185	--	17	1	24	6	50	50	0.03	3	1.2		
		THERESA LANE SE	280	--	20	1	24	8	70	70	0.04	4	1.6		
		THERESA LANE NE	170	10	--	1	19	5	40	40	0.02	2	0.9		
		RIVER COURT SW	370	10	--	1	10	11	120	120	0.08	6	2.7		
		RIVER COURT SE	235	20	--	1	9	7	60	60	0.04	3	1.4		
		RIVER COURT NW	165	10	--	1	15	5	40	40	0.02	2	0.9		
		RIVER COURT NE	170	10	--	1	35	5	40	40	0.02	2	0.9		
		HIGHLANDER BLVD NW	275	10	--	1	9	8	100	100	0.06	5	2.3		
		HIGHLANDER BLVD NE	360	20	--	1	18	11	90	90	0.05	5	2.1		
		HIGHLANDER BLVD SE	195	10	--	1	12	6	70	70	0.04	4	1.6		
		WILLOW LANE NW	100	10	--	1	14	3	30	30	0.02	2	0.7		
		WILLOW LANE NE	270	20	--	1	6	8	60	60	0.04	3	1.4		
		WILLOW LANE SE	165	10	--	1	8	5	40	40	0.02	2	0.9		
		TOTALS			3,380	160	37	15	232	102	940	940	0.54	50	21.6

ADJUSTING CATCH BASIN COVERS			
			611.8105
			ADJUSTING
CATEGORY	ROADWAY	LOCATION	CATCH BASIN COVERS
0010	STH 28		EA
		HIGHLANDER BLVD NW	2
SUBTOTAL			2
UNDISTRIBUTED			5
TOTALS			7

3

3

3

GUARDRAIL																
						614.0010 BARRIER SYSTEM GRADING, SHAPING	614.2300	614.2610	FOR INFORMATIONAL PURPOSES ONLY. THESE ITEMS INCLUDED IN ITEM 614.0010.							
CATEGORY	ROADWAY	STATION	TO	STATION	O/S	FINISHING EACH	MGS GUARDRAIL 3 LF	MGS GUARDRAIL TERMINAL EAT EACH	EXCAVATION COMMON CY	BORROW CY	SALVAGED TOPSOIL SY	EROSION MAT CLASS I TYPE B SY	FERTILIZER TYPE B CWT	SEEDING MIX. NO. 30 LB	SEEDING TEMPORARY LB	SEED WATER MGAL
0010	STH 28	433+05	-	441+94	LT	1	787.5	2	2	24	720	720	0.45	33	20	16.2
		585+19	-	591+47	RT	1	525.0	2	0	39	740	740	0.46	34	20	16.7
		TOTAL					2	1,312.5	4	2	63	1460	1460	1.0	67	40

EROSION CONTROL													
						628.1504	628.1520	628.1905 MOBILIZATIONS		628.1910	628.7020	628.7555	628.7570
						SILT FENCE LF	SILT FENCE MAINTENANCE LF	EROSION CONTROL EA	EMERGENCY EROSION CONTROL EA	INLET PROTECTION TYPE D EA	CULVERT PIPE CHECKS EA	ROCK BAGS EA	
CATEGORY	ROADWAY	STATION	TO	STATION	LOCATION								
0010	STH 28	399+68	-	646+23	MAINLINE	800	800	2	1	8	20	--	
SUBTOTAL						800	800	2	1	8	20	--	
UNDISTRIBUTED						200	200	1	1	2	5	50	
TOTALS						1,000	1,000	3	2	10	25	50	

				RESTORATION				
				625.0500 SALVAGED TOPSOIL	628.2004 EROSION MAT CLASS I TYPE B	629.0210 FERTILIZER TYPE B	630.0130 SEEDING MIXTURE NO. 30	630.0200 SEEDING TEMPORARY
CATEGORY	ROADWAY	STATION	LOCATION	SY	SY	CWT	LB	LB
0010	STH 28							
		419+84	CULVERT	882	882	0.56	40	24
		503+44	CULVERT	481	481	0.31	22	13
		578+07	CULVERT	2,300	2,300	1.45	104	63
		616+63	CULVERT	571	571	0.36	26	16
	SUBTOTAL			4,234	4,234	2.68	192	116
	UNDISTRIBUTED			1,060	1,060	0.68	48	29
	TOTAL			5,294	5,294	3.36	240	145

PERMANENT SIGNING							
CATEGORY	ROADWAY	STATION	LOCATION	634.0614	637.2210	638.2602	638.3000
				POSTS WOOD 4X6-INCH X 14-FT EACH	SIGNS TYPE II REFLECTIVE H SF	REMOVING SIGNS TYPE II EACH	REMOVING SMALL SIGN SUPPORTS EACH
0010	STH 28	632+90	LT	1	6.06	1	1
		441+86	LT	1	3.75	1	1
			THERESA LN	1	6.25	1	1
			RIVER CT	1	6.25	1	1
			HIGHLANDER BLVD	1	6.25	1	1
			WILLOW LN	1	6.25	1	1
		TOTALS		6	34.81	6	6

3

3

TRAFFIC CONTROL								
				643.0420 BARRICADES TYPE III DAY	643.0705 WARNING LIGHTS TYPE A DAY	* 643.0900 TRAFFIC CONTROL SIGNS DAY	643.0920 COVERING SIGNS TYPE II** EACH	643.1050 SIGNS PCMS DAY
CATEGORY	ROADWAY	STAGE	INTERSECTION					
0010	STH 28	MAINLINE	STH 28/CTH V	180	360	810	1	14
			STH 28/SLAG RD/N. GERMAN RD	360	720	540	-	-
			STH 28/SUNNYVIEW RD	180	360	270	-	-
			STH 28/CTH WT	180	360	270	-	-
			STH 28/BLUEMOUND RD/CTH AY SOUTH	360	720	540	-	-
			STH 28/CTH AY NORTH	180	360	270	-	-
			STH 28/THERESA LN	180	360	270	-	-
			STH 28/RIVER CT	180	360	270	-	-
			STH 28/HIGHLANDER BLVD	180	360	270	-	-
			STH 28/WILLOW LN	180	360	270	-	-
			SUBTOTAL	2160	4320	3780	1	14
0010	STH 28	DETOUR STH 33 HORICON TO STH 67	STH 28/STH 33	180	360	1260	2	-
			STH 33/CTH TW	-	-	540	-	-
			STH 33/CTH V	-	-	540	-	-
			SUBTOTAL	180	360	2340	2	-
0010	STH 28	DETOUR STH 67	STH 28/STH 67	180	360	2610	4	-
			STH 67/STH 33	180	360	5580	7	-
			SUBTOTAL	360	720	8190	11	-
0010	STH 28	DETOUR STH 33 - STH 67 TO STH 175	STH 33/CTH P	-	-	3960	-	-
			STH 33/CTH PS	-	-	540	-	-
			STH 33/STH 175	-	-	5040	-	-
			SUBTOTAL	-	-	9540	-	-
0010	STH 28	DETOUR STH 175	BETWEEN WATERCRESS RD & OHIO RD	-	-	1080	-	-
			STH 175/ALLEN RD	-	-	1080	-	-
			STH 175/STH 28	180	360	2700	4	14
			SUBTOTAL	180	360	4860	4	14
			UNDISTRIBUTED	720	1440	7180	10	10
			TOTAL	3600	7200	35890	28	38
*ADDITIONAL QTY SHOWN ELSEWHERE								
**NOTE: ONLY ONE CYCLE OF COVERING SIGNS REQUIRED FOR THE PROJECT.								

PEDESTRIAN ACCOMMODATIONS TRAFFIC CONTROL										
			643.0300	643.0715	643.0900	643.3165	644.1440	644.1601	644.1605	644.1810
			TRAFFIC CONTROL	WARNING	TRAFFIC CONTROL	TEMPORARY	TEMPORARY	TEMPORARY	TEMPORARY	TEMPORARY
			DRUMS	LIGHTS TYPE C	SIGNS	MARKING LINE	PEDESTRIAN	PEDESTRIAN	PEDESTRIAN	PEDESTRIAN
						PAINT 6-INCH	SURFACE	CURB	DETECTABLE	BARRICADES
CATEGORY	ROADWAY	LOCATION	DAY	DAY	DAY	LF	SF	RAMP	WARNING FIELD	LF
0010	STH 28							DAY	SF	
		FIREMAN'S PARK N	360	180	60	48	60	60	10	72
		FIREMAN'S PARK S	540	180	60	-	-	60	-	-
		THERESA LANE NE	420	180	120	96	120	120	40	144
		THERESA LANE SW	330	180	120	-	-	120	-	-
		THERESA LANE SE	300	180	120	-	-	120	-	-
		RIVER COURT NW	600	180	180	144	180	180	60	216
		RIVER COURT SE	690	180	240	48	60	240	20	72
		RIVER COURT SW	360	180	240	-	-	240	-	-
		HIGHLANDER BLVD NW	600	180	180	-	-	180	-	-
		HIGHLANDER BLVD NE	360	180	180	-	-	180	-	-
		HIGHLANDER BLVD SE	690	180	240	-	-	240	-	-
		WILLOW LANE NW	330	180	120	96	120	120	40	204
		WILLOW LANE NE	330	180	180	48	60	180	20	72
		WILLOW LANE SE	420	180	120	-	-	120	-	-
TOTALS			6330	2520	2160	480	600	2160	190	780
*ADDITIONAL QTY SHOWN ELSEWHERE										

3

3

PAVEMENT MARKING											
*											
643.3165 646.2040 646.6120 646.7420 646.7520 648.0100											
TEMPORARY MARKING LINE GROOVED WET REF STOP LINE CROSSWALK EPOXY CROSSWALK EPOXY LOCATING											
MARKING LINE EPOXY 6-INCH EPOXY 6-INCH 18-INCH TRANSVERSE LINE 6-INCH BLOCK STYLE NO PASSING											
ZONES											
CATEGORY	ROADWAY	STATION	TO	STATION	LOCATION	LF	LF	LF	LF	LF	MI
0010	STH 28	399+68	-	646+23	CENTERLINE	49,400	49,400	-	-	-	4.67
		399+68	-	646+23	FOG LINES	-	43,100	-	-	-	-
		622+00	-	639+20	SIDEROAD	-	-	210	-	-	-
		622+00	-	639+20	INTERSECTIONS	-	-	-	-	-	-
		622+00	-	639+20	SIDEWALKS	-	-	-	380	290	-
TOTALS						49,400	92,500	210	380	290	4.67
*ADDITIONAL QTY SHOWN ELSEWHERE											

CONSTRUCTION STAKING											
650.5500 650.6000 650.8000 650.9000 650.9500 650.9910											
CONSTRUCTION CONSTRUCTION CONSTRUCTION CONSTRUCTION CONSTRUCTION CONSTRUCTION											
STAKING CURB STAKING STAKING STAKING STAKING STAKING											
AND GUTTER PIPE CULVERTS RESURFACING REFERENCE CURB RAMPS (3020-00-70) CONSTRUCTION											
CONTROL											
CATEGORY	ROADWAY	STATION	TO	STATION	LOCATION	LF	EA	LF	EA	EACH	LS
0010	STH 28	399+68	-	646+23	MAINLINE	615	4	24,660	15	1	1
		TOTALS				615	4	24,660	15	1	1

SAWING EXISTING PAVEMENT					
690.0150 690.0250					
SAWING SAWING					
ASPHALT CONCRETE					
CATEGORY	ROADWAY	STATION	LOCATION	LF	LF
0010	STH 28	419+84	CULVERT REPLACEMENT	65	-
		503+44	CULVERT REPLACEMENT	65	-
		578+07	CULVERT REPLACEMENT	65	-
		616+62	CULVERT REPLACEMENT	65	-
			FIREMAN'S PARK N	40	13
			FIREMAN'S PARK S	40	13
			THERESA LANE SW	56	9
			THERESA LANE SE	72	9
			THERESA LANE NE	35	13
			RIVER COURT SW	88	13
			RIVER COURT SE	58	13
			RIVER COURT NW	34	13
			RIVER COURT NE	34	13
			HIGHLANDER BLVD NW	75	13
			HIGHLANDER BLVD NE	64	13
			HIGHLANDER BLVD SE	35	13
			WILLOW LANE NW	45	9
			WILLOW LANE NE	55	15
			WILLOW LANE SE	34	13
		TOTALS		1,025	185

ACCESS RIGHTS	AR	POINT OF COMPOUND CURVE	PCC
ACRES	AC	POINT OF INTERSECTION	PI
AHEAD	AH	PROPERTY LINE	PL
ALUMINUM	ALUM	RECORDED AS	(100)
AND OTHERS	ET AL	REEL / IMAGE	R/I
BACK	BK	REFERENCE LINE	R/L
BLOCK	BLK	REMAINING	REM
CENTERLINE	C/L	RESTRICTIVE DEVELOPMENT	RDE
CERTIFIED SURVEY MAP	CSM	EASEMENT	
CONCRETE	CONC	RIGHT	RT
COUNTY	CO	RIGHT OF WAY	R/W
COUNTY TRUNK HIGHWAY	CTH	SECTION	SEC
DISTANCE	DIST	SEPTIC VENT	SEP
CORNER	COR	SQUARE FEET	SF
DOCUMENT NUMBER	DOC	STATE TRUNK HIGHWAY	STH
EASEMENT	EASE	STATION	STA
EXISTING	EX	TELEPHONE PEDESTAL	TP
GAS VALVE	GV	TEMPORARY LIMITED	TLE
GRID NORTH	GN	EASEMENT	
HIGHWAY EASEMENT	HE	TRANSPORTATION PROJECT PLAT	TPP
IDENTIFICATION	ID	UNITED STATES HIGHWAY	USH
LAND CONTRACT	LC	VOLUME	V
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETIC SURVEY	NGS		
NUMBER	NO		
OUTLOT	OL		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	POB		
POINT OF CURVATURE	PC		

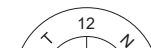
CURVE DATA ABBREVIATIONS

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	Δ
CENTRAL ANGLE	Δ/D
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB

SECTION LINE		SECTION CORNER SYMBOL		R/W MONUMENT (TO BE SET)	
QUARTER LINE		SECTION CORNER MONUMENT		NON-MONUMENTED R/W POINT	
SIXTEENTH LINE		GEODETIC SURVEY MONUMENT		FOUND IRON PIN (1-INCH UNLESS NOTED)	
NEW REFERENCE LINE		SIXTEENTH CORNER MONUMENT			
NEW R/W LINE		SIGN		OFF-PREMISE SIGN	
EXISTING R/W OR HE LINE					
PROPERTY LINE					
LOT, TIE & OTHER MINOR LINES					
SLOPE INTERCEPT					
CORPORATE LIMITS		ELECTRIC POLE		COMPENSABLE	NON-COMPENSABLE
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC.)		TELEPHONE POLE			
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)		PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)			
TEMPORARY LIMITED EASEMENT AREA		ACCESS RESTRICTED BY ACQUISITION			
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)		NO ACCESS (BY STATUTORY AUTHORITY)			
TRANSMISSION STRUCTURES		ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)			
BUILDING		NO ACCESS (NEW HIGHWAY)			
TO BE REMOVED		PARCEL NUMBER		UTILITY NUMBER	
BRIDGE		PARALLEL OFFSETS			
CULVERT					

CONVENTIONAL UTILITY SYMBOLS

WATER	
GAS	
TELEPHONE	
OVERHEAD TRANSMISSION LINES	
ELECTRIC	
CABLE TELEVISION	
FIBER OPTIC	
SANITARY SEWER	
STORM SEWER	
ELECTRIC TOWER	



LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE	Δ /DELTA
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB

WATER	_____	W
GAS	_____	G
TELEPHONE	_____	T
OVERHEAD TRANSMISSION LINES	_____	OH
ELECTRIC	_____	E
CABLE TELEVISION	_____	TV
FIBER OPTIC	_____	FO
SANITARY SEWER	_____	SAN
STORM SEWER	_____	SS
ELECTRIC TOWER	_____	☒

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DODGE COUNTY, NAD83(2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

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

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

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

ALL RIGHT-OF-WAY LINES DEPICTED IN THE NON-ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, CENTERLINE OF EXISTING PAVEMENTS AND/OR EXISTING OCCUPATIONAL LINES.

PARCEL AND UTILITY IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE TPP DETAIL PAGES.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON, THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE. ALL (TLEs) ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

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

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

FOR ENLARGEMENT, R/W STATION & OFFSET TABLE, TLE STATION & OFFSET TABLE, AND BEARINGS AND DISTANCES ALONG R/W. REFER TO EXTENSION SHEET. RECORDED AS SHEET 2 OF 2

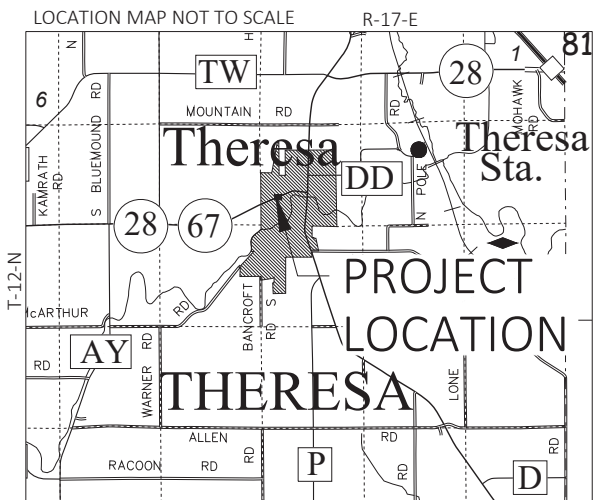
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 28 ESTABLISHED FROM PREVIOUS PROJECT 3021-03-22

EXISTING RIGHT-OF-WAY FOR HIGHLANDER BOULEVARD ESTABLISHED FROM PLAT OF HIGHLANDER ESTATES

EXISTING RIGHT-OF-WAY FOR RIVER COURT ESTABLISHED FROM PLAT OF ROCK RIVER ESTATES

EXISTING ACCESS CONTROL FOR STH 28 AND HIGHLANDER BOULEVARD ESTABLISHED FROM PLAT OF
HIGHLANDER ESTATES AND CSM 5538

SIXTEENTH LINES WERE ESTABLISHED BY SECTION BREAKDOWN OF OBSERVED PLSS MONUMENTS.



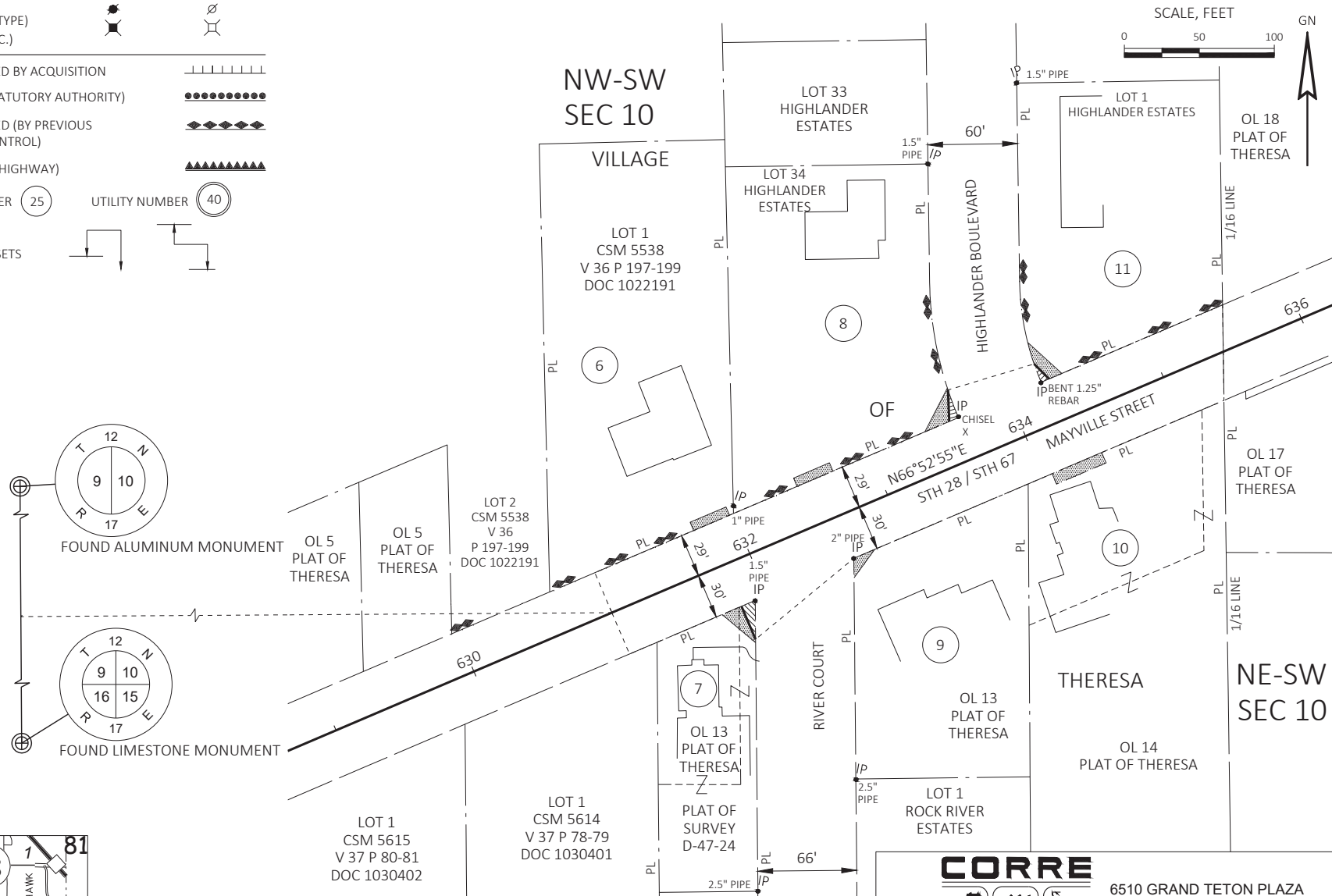
THAT PART OF THE LOT 1 AND LOT 34, HIGHLANDER ESTATES, AND LOT 1, CSM 5538, AND OL 13 AND OL 14, PLAT OF THERESA, ALL LOCATED IN THE NW 1/4 OF SW 1/4, SECTION 10, T12N, R17E, VILLAGE OF THERESA, DODGE COUNTY, WISCONSIN.

RELOCATION ORDER STH 28 HORICON - KEWASKUM (V THERESA W LIMIT TO HIGHLANDER BLV) DODGE COUNTY

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

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.



SCHEDULE OF LANDS AND INTERESTS REQUIRED		OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.				
PARCEL NUMBER	OWNER (S)	INTEREST(S) REQUIRED	R/W NEW (SQ.FT.)	R/W EXIST (SQ.FT.)	R/W TOTAL (SQ.FT.)	TLE (SQ.FT.)
6	SUSANNE R. MITCHELL	TLE				156
7	MICHAEL EHLERS	FEE & TLE	120		120	192
8	ERIK A. CARLSON AND BRITTANY M. CARLSON	FEE & TLE	63		63	346
9	DOREEN E. HYNES	TLE				91
10	DONALD C. MAXWELL, JR. AND JACQUELINE J. MAXWELL	TLE				269
11	DOUGLAS J. TESKA AND GAIL E. TESKA	FEE & TLE	38		38	182

CORRE

ENGINEERING

6510 GRAND TETON PLAZA
SUITE 314
MADISON, WI 53719
(608)828-1011
www.correinc.com

WISCONSIN
SCOTT
KOFFARNUS
S-2782-008
MADISON
WI
LAND SURVEYOR

SIGNATURE: Scott J. Koffman DATE: 03/27/2023

PRINT NAME: SCOTT J. KOFFARNUS

REGISTRATION NUMBER: S-2782

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR
THE DEPARTMENT OF TRANSPORTATION

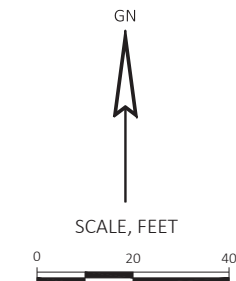
SIGNATURE: Cory Schlager DATE: 03/27/2023

PRINT NAME: CORY SCHLAGE

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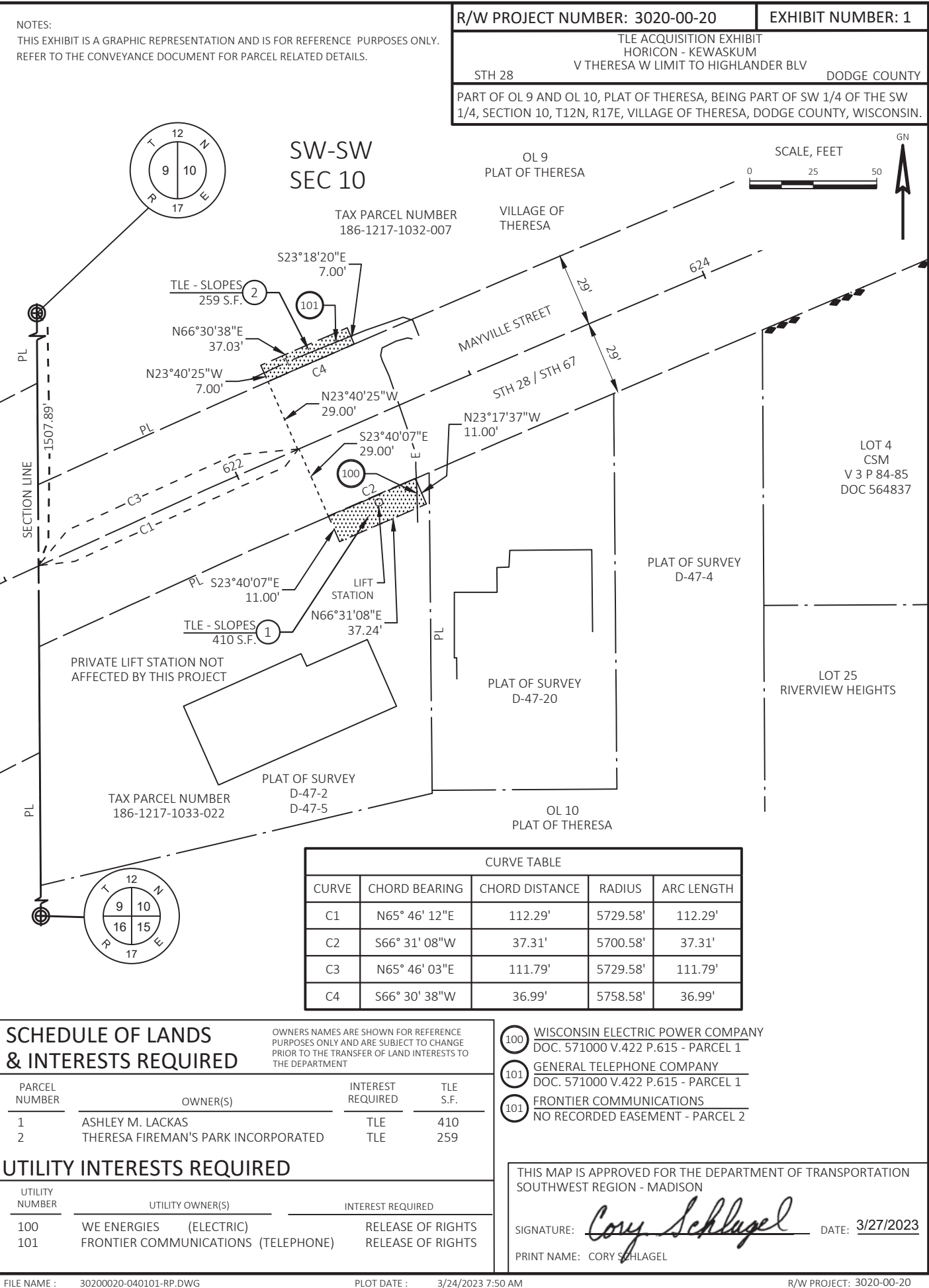
FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN MADISON.

RELOCATION ORDER STH 28 HORICON - KEWASKUM (V THERESA W LIMIT TO HIGHLANDER BLV) DODGE COUNTY



R/W STATION & OFFSET TABLE		
POINT	STATION	OFFSET
PRW27	631+00.00	0.00'
PRW28	631+00.00	29.00' LT
PRW29	633+57.08	29.00' LT
PRW30	633+64.50	48.62' LT
PRW31	634+24.18	42.08' LT
PRW32	634+29.44	29.00' LT
PRW33	635+55.28	29.00' LT
PRW34	635+43.39	0.00'
PRW35	635+31.10	30.00' RT
PRW36	632+62.68	30.00' RT
PRW37	631+81.20	53.99' RT
PRW38	631+81.18	30.00' RT
PRW39	631+00.00	30.00' RT

TLE STATION & OFFSET TABLE		
POINT	STATION	OFFSET
TLE40	631+71.70	29.00' LT
TLE41	631+71.70	35.00' LT
TLE42	631+97.70	35.00' LT
TLE43	631+97.70	30.00' LT
TLE44	631+67.20	29.00' RT
TLE45	631+80.36	56.00' RT
TLE46	632+46.70	29.00' LT
TLE47	632+46.70	35.00' LT
TLE48	632+72.70	35.00' LT
TLE49	632+72.70	29.00' LT
TLE50	633+39.40	29.00' LT
TLE51	633+64.62	50.00' LT
TLE52	632+57.69	42.00' RT
TLE53	632+77.80	30.00' RT
TLE54	634+06.50	30.00' RT
TLE55	634+06.50	37.50' RT
TLE56	634+42.40	37.50' RT
TLE57	634+42.40	30.00' RT
TLE58	634+25.88	57.00' LT
TLE59	634+38.70	29.00' LT



BENCHMARKS & CONTROL POINTS					
NO.	STATION	NORTHING	EASTING	DESCRIPTION	ELEV.
1100	395+50.65,81.6' RT	742180.427	926034.588	ALUM MONUMENT	908.437

BEGIN PROJECT
STA 399+68
MATCH EXISTING
2' BUTT JOINT REQ'D
Y: 742575.82
X: 926143.62

PI STA = 400+47.61
Y = 742686.128
X = 926080.332
DELTA = 47°22'18" RT
D = 4°30'00"
T = 558.53'
L = 1052.69'
R = 1273.22'
PC STA = 394+89.08
Y = 742145.583
X = 925939.738
PT STA = 405+41.77
Y = 742948.764
X = 926573.260
DB = N15°34'46"E
DA = N61°57'04"E

Curve	Station	Description	Left Shoulder	Left Lane	Right Lane	Right Shoulder
1	390+69.07'	End Normal Crown	-4.00%	-2.00%	-2.00%	-4.00%
1	392+19.07'	Level Crown	0.00%	0.00%	-2.00%	-4.00%
1	393+54.07'	Reverse Crown	2.00%	2.00%	-2.00%	-4.00%
1	396+24.07'	Begin Full Super	5.40%	5.40%	-5.40%	-5.40%
1	404+06.79'	End Full Super	5.40%	5.40%	-5.40%	-5.40%
1	406+76.79'	Reverse Crown	2.00%	2.00%	-2.00%	-4.00%
1	408+11.79'	Level Crown	0.00%	0.00%	-2.00%	-4.00%
1	409+61.79'	Begin Normal Crown	-4.00%	-2.00%	-2.00%	-4.00%

LEGEND

HMA3



HMIA5

RES

DWYA



XXXXX



1

REMOVE 3 1/2" ASPH SURFACE MILLING AND
REPLACE WITH 3 1/2" HMA PAVEMENT
5 1/2" HMA PAVEMENT
(SEE CULVERT REPLACEMENT DETAIL)
SALVAGED TOPSOIL, FERTILIZER, SEED,
EROSION MAT CLASS I TYPE B
DRIVEWAY ASPHALT

DRIVEWAY GRAVEL

SAWING ASPHALT
SILT FENCE

CULVERT PIPE CHECK
FLOW ARROW
INLET PROTECTION TYPE D

JEFFERY A HENNING

EXISTING R/W

STH 28

EXISTING R/W

BWL INVESTMENT PROPERTIES LLC

WILLIAM J THOMAS
CAROL J THOMAS

ENVIRONMENTAL SENSITIVE AREA

BWL HOLDINGS

REMOVE SMALL PIPE CULVERT

STA 419+84
106' - CPRC CLASS IV 30-INCH
2 - AEW FOR CPRC 30-INCH

BWL HOLDINGS

N61°57'04"E

DWYA

ALLIANT GAS

+83.9, 55.4' RT
IE = 923.67

CAUTION:

PROJECT NO:	3020-00-70
-------------	------------

HWY: STH 28

COUNTY: DODGE

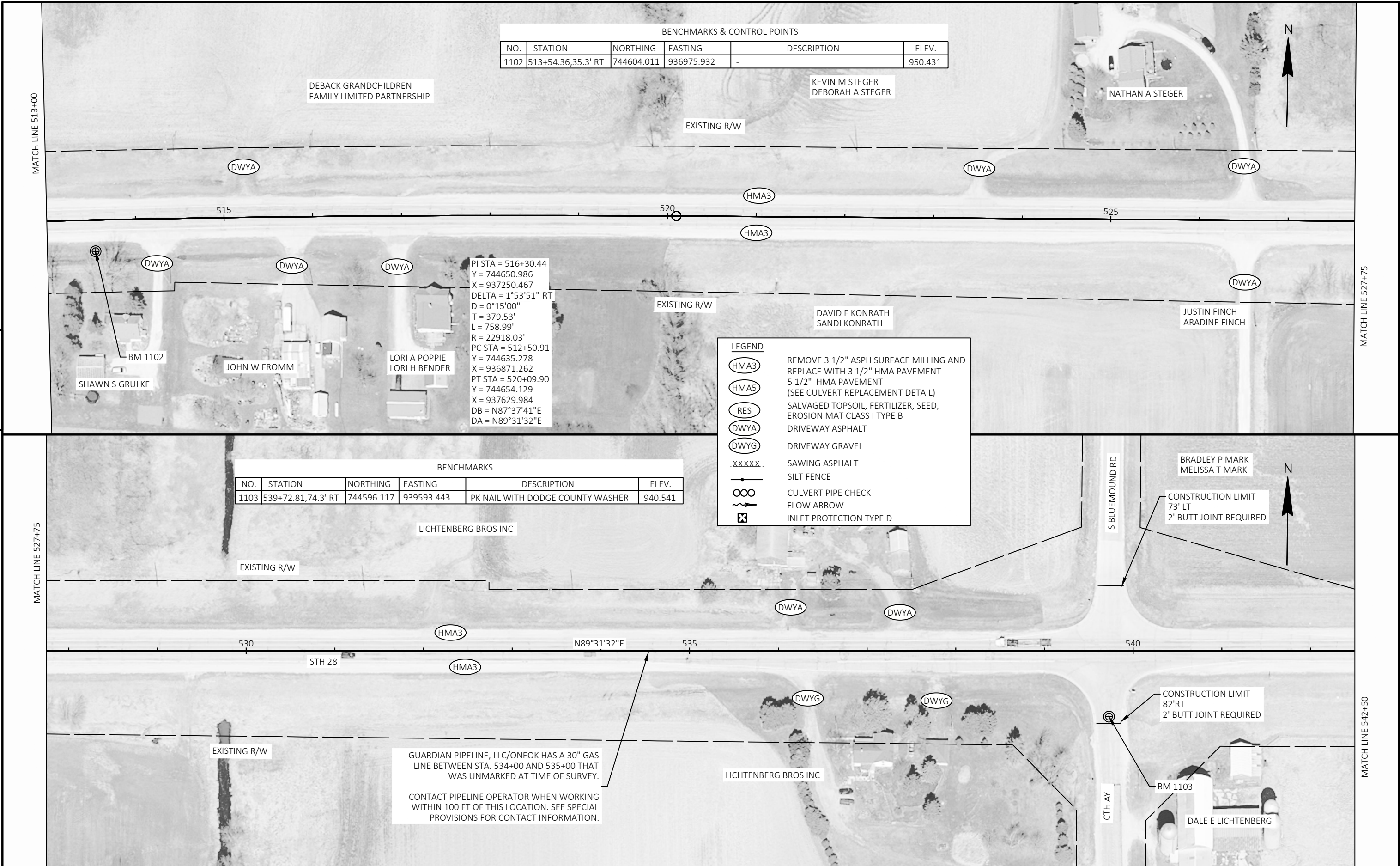
PLAN DETAILS

SHEET

51

1







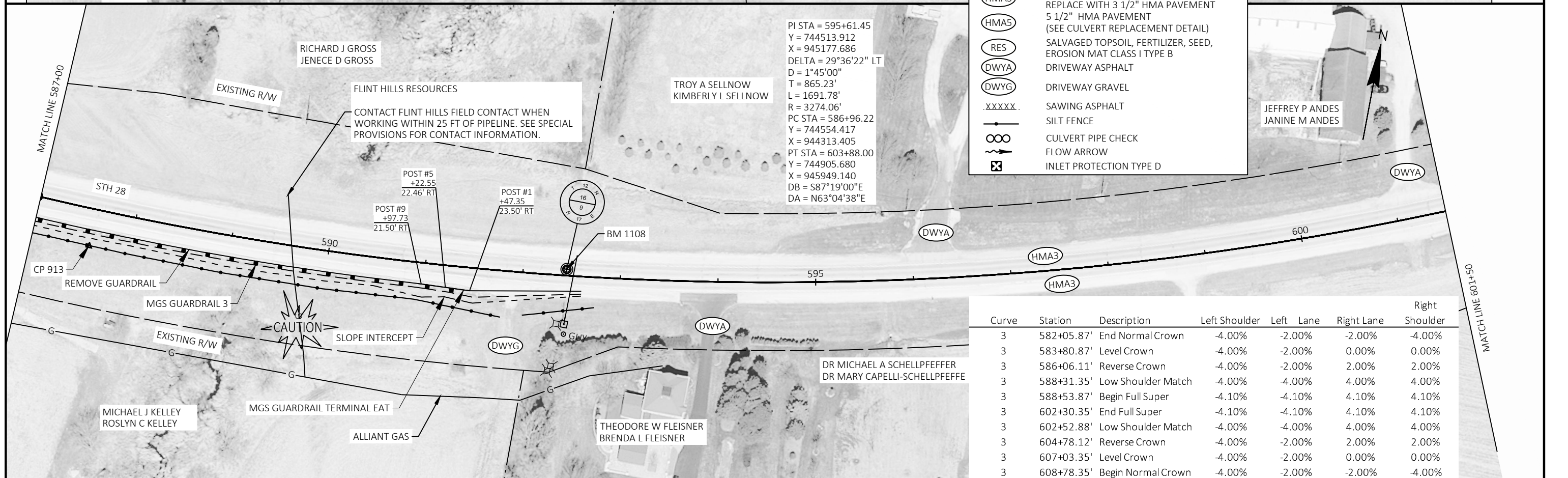
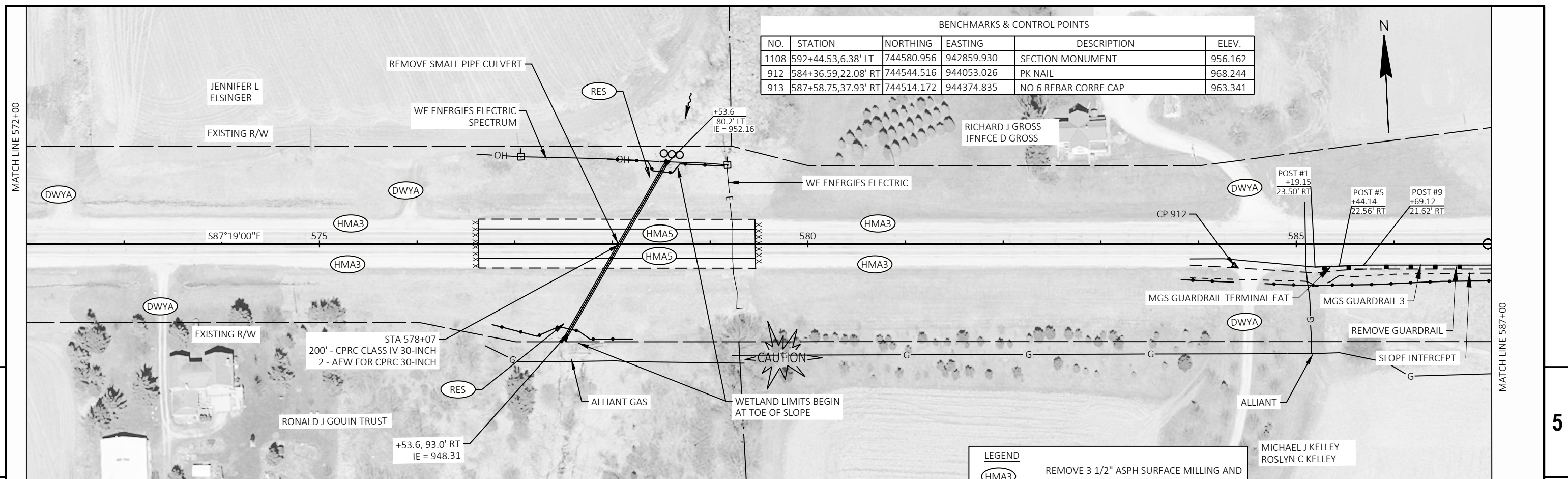
LEGEND

- HMA3** REMOVE 3 1/2" ASPH SURFACE MILLING AND REPLACE WITH 3 1/2" HMA PAVEMENT
- HMA5** 5 1/2" HMA PAVEMENT (SEE CULVERT REPLACEMENT DETAIL)
- RES** SALVAGED TOPSOIL, FERTILIZER, SEED, EROSION MAT CLASS I TYPE B
- DWYA** DRIVEWAY ASPHALT
- DWYG** DRIVEWAY GRAVEL
- .XXXXX.** SAWING ASPHALT
- |—** SILT FENCE
- ∞** CULVERT PIPE CHECK
- FLOW ARROW
- ⊠** INLET PROTECTION TYPE D

PI STA = 558+81.70
Y = 744686.194
X = 941501.651
DELTA = 3°09'28" RT
D = 0°15'00"
T = 631.72'
L = 1263.12'
R = 22918.48'
PC STA = 552+49.98
Y = 744680.962
X = 940869.953
PT STA = 565+13.10
Y = 744656.620
X = 942132.679
DB = N89°31'32"E
DA = S87°19'00"E

BENCHMARKS					
NO.	STATION	NORTHING	EASTING	DESCRIPTION	ELEV.
1104	566+06.39, 42.7' RT	744609.619	942223.867	-	946.817

NO.	STATION	NORTHING	EASTING	DESCRIPTION	ELEV.
1108	592+44.53,6.38' LT	744580.956	942859.930	SECTION MONUMENT	956.162
912	584+36.59,22.08' RT	744544.516	944053.026	PK NAIL	968.244
913	587+58.75,37.93' RT	744514.172	944374.835	NO 6 REBAR CORRE CAP	963.341



							Right
Curve	Station	Description	Left Shoulder	Left	Lane	Right Lane	Shoulder
3	582+05.87'	End Normal Crown	-4.00%	-2.00%	-2.00%	-4.00%	
3	583+80.87'	Level Crown	-4.00%	-2.00%	0.00%	0.00%	
3	586+06.11'	Reverse Crown	-4.00%	-2.00%	2.00%	2.00%	
3	588+31.35'	Low Shoulder Match	-4.00%	-4.00%	4.00%	4.00%	
3	588+53.87'	Begin Full Super	-4.10%	-4.10%	4.10%	4.10%	
3	602+30.35'	End Full Super	-4.10%	-4.10%	4.10%	4.10%	
3	602+52.88'	Low Shoulder Match	-4.00%	-4.00%	4.00%	4.00%	
3	604+78.12'	Reverse Crown	-4.00%	-2.00%	2.00%	2.00%	
3	607+03.35'	Level Crown	-4.00%	-2.00%	0.00%	0.00%	
3	608+78.35'	Begin Normal Crown	-4.00%	-2.00%	-2.00%	-4.00%	



BENCHMARKS & CONTROL POINTS					
NO.	STATION	NORTHING	EASTING	DESCRIPTION	ELEV.
915	623+49.42,27.91' LT	745803.884	947694.437	PK NAIL	963.768
907	621+81.80,29.92' LT	745738.946	947539.359	FENO MONUMENT	958.861
908	627+05.11,22.11' RT	745897.576	948041.190	FENO MONUMENT	967.421

LEGEND

HMA3

REMOVE 3 1/2" ASPH SURFACE MILLING AND REPLACE WITH 3 1/2" HMA PAVEMENT

HMA5

5 1/2" HMA PAVEMENT (SEE CULVERT REPLACEMENT DETAIL)

RES

SALVAGED TOPSOIL, FERTILIZER, SEED, EROSION MAT CLASS I TYPE B

DWYA

DRIVEWAY ASPHALT

DWYG

DRIVEWAY GRAVEL

.XXXXX.

SAWING ASPHALT

—●—

SILT FENCE

∞

CULVERT PIPE CHECK

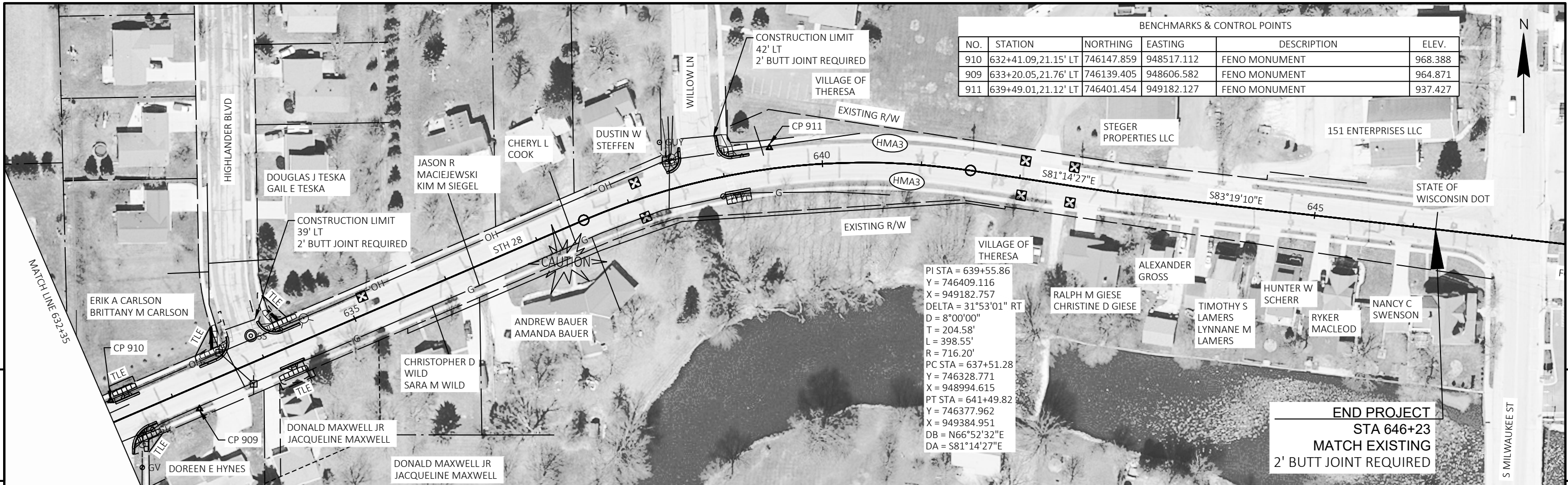
→

FLOW ARROW

⊠

INLET PROTECTION TYPE D

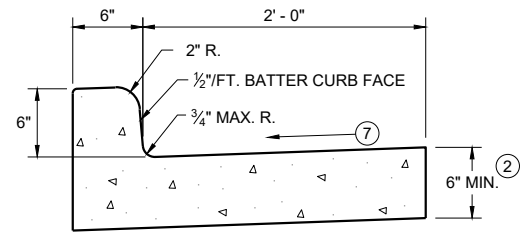
PI STA = 620+89.27
Y = 745675.998
X = 947466.022
DELTA = 3°47'54" RT
D = 1°00'00"
T = 189.99'
L = 379.84'
R = 5729.69'
PC STA = 618+99.28
Y = 745589.972
X = 947296.623
PT STA = 622+79.13
Y = 745750.613
X = 947640.747
DB = N63°04'38"E
DA = N66°52'32"E



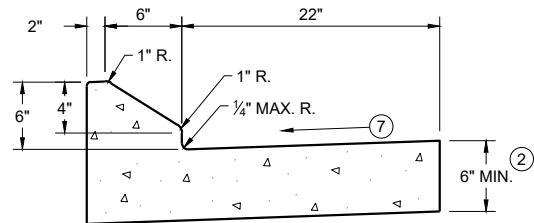
LEGEND	
(HMA3)	REMOVE 3 1/2" ASPH SURFACE MILLING AND REPLACE WITH 3 1/2" HMA PAVEMENT
(HMA5)	5 1/2" HMA PAVEMENT (SEE CULVERT REPLACEMENT DETAIL)
(RES)	SALVAGED TOPSOIL, FERTILIZER, SEED, EROSION MAT CLASS I TYPE B
(DWYA)	DRIVEWAY ASPHALT
(DWYG)	DRIVEWAY GRAVEL
.XXXXX.	SAWING ASPHALT
— —	SILT FENCE
∞	CULVERT PIPE CHECK
→	FLOW ARROW
⊠	INLET PROTECTION TYPE D

Standard Detail Drawing List

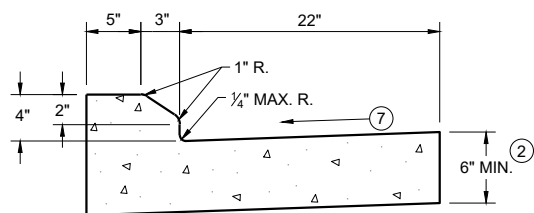
08D01-23A	CONCRETE CURB & GUTTER
08D01-23B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D05-21A	CURB RAMPS TYPES 1 AND 1-A
08D05-21B	CURB RAMPS TYPES 2 AND 3
08D05-21C	CURB RAMPS TYPES 4A AND 4A1
08D05-21D	CURB RAMPS TYPE 4B AND 4B1
08D05-21E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-21F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-21G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
13A11-04A	CENTERLINE RUMBLE STRIPS - ASPHALT
13A11-04D	CENTERLINE RUMBLE STRIPS - INTERSECTIONS, DRIVEWAYS, BRIDGES, RAILROADS
13C19-03	HMA LONGITUDINAL JOINTS
14B42-07A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-09C	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
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-23B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C08-23C	PAVEMENT MARKING (TURN LANES)
15C08-23D	PAVEMENT MARKING (TURN LANES)
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C35-06A	PAVEMENT MARKING (INTERSECTIONS)
15C35-06B	PAVEMENT MARKING AND SIGNING (CLIMBING LANE & PASSING LANE)
15C35-06C	PAVEMENT MARKING AND SIGNING (CLIMBING LANE & PASSING LANE)
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D30-09A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09B	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09D	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09E	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09F	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09G	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09H	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09I	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09J	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09K	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09L	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES
15D45-03	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH LOOSE GRAVEL
16A01-07	LANDMARK REFERENCE MONUMENTS AND COVERS



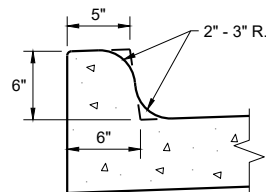
TYPES A^① & D



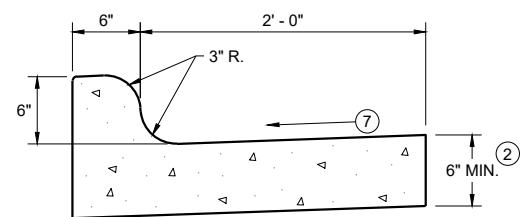
6" SLOPED CURB TYPES G^① & J



4" SLOPED CURB TYPES G^① & J

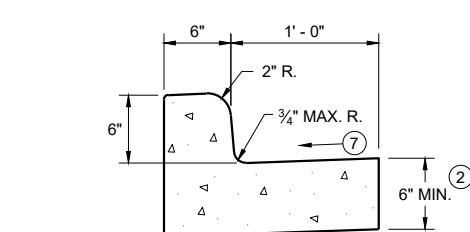


TYPES K^① & L
(OPTIONAL CURB SHAPE)



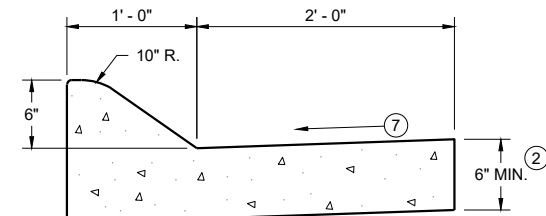
TYPES K^① & L

CONCRETE CURB AND GUTTER 30"

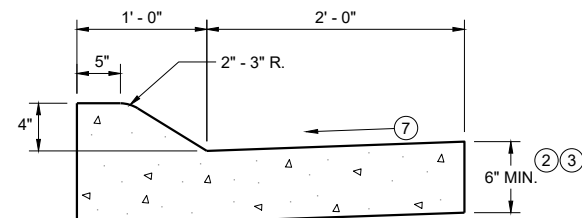


TYPES A^① & D

CONCRETE CURB AND GUTTER 18"

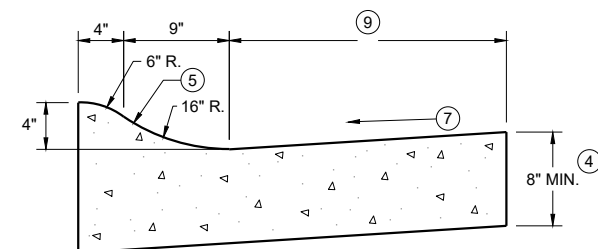


6" SLOPED CURB TYPES A^① & D



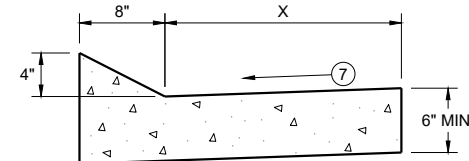
4" SLOPED CURB TYPES A^① & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R^① & T

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

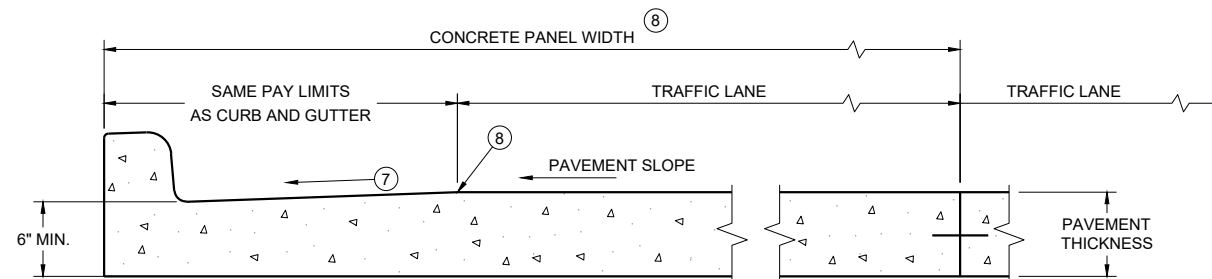


TYPES TBT & TBTT^①

CONCRETE CURB AND GUTTER

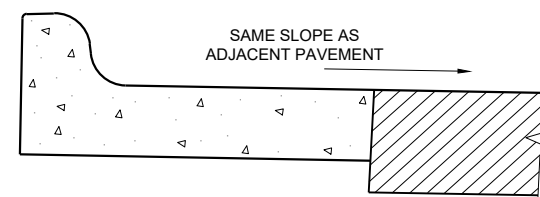
PAVEMENT THICKNESS
AND MAXIMUM CONCRETE
PANEL WIDTH TABLE

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



PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB AND GUTTER *

* BIKE LANE IS NOT SHOWN



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

CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

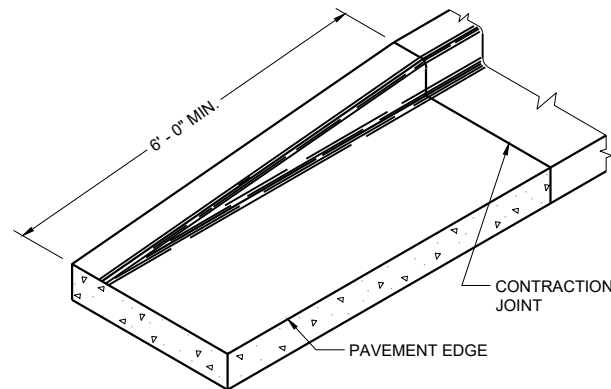
DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

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

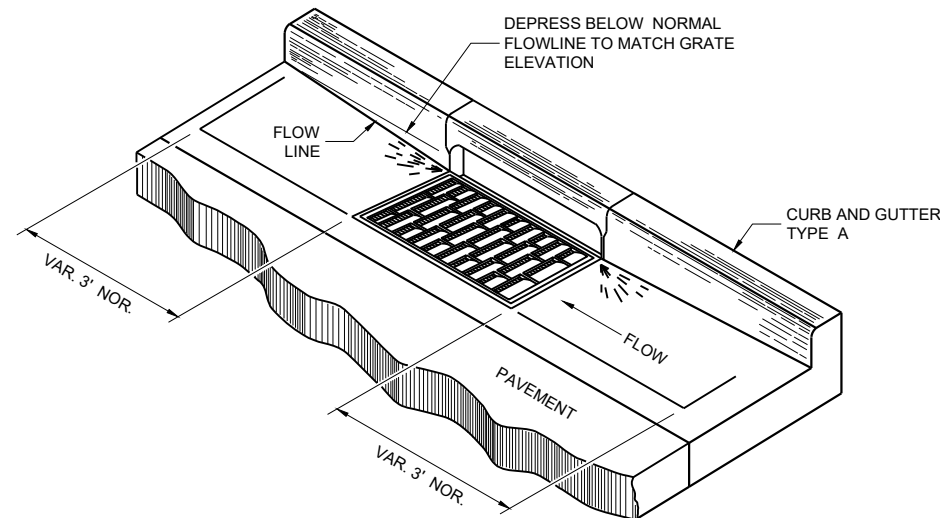
INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

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

- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.
- ④ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ⑤ UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
- ⑥ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.
- ⑦ USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.
- ⑧ INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.
- ⑨ CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

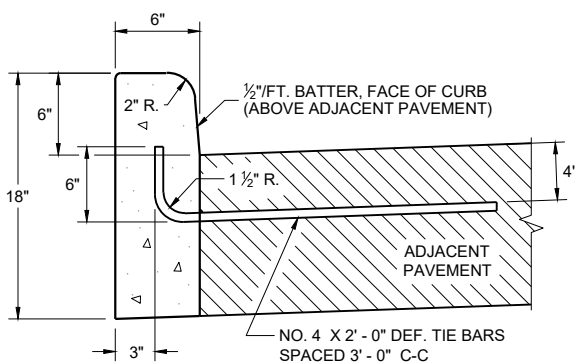


END SECTION CURB AND GUTTER

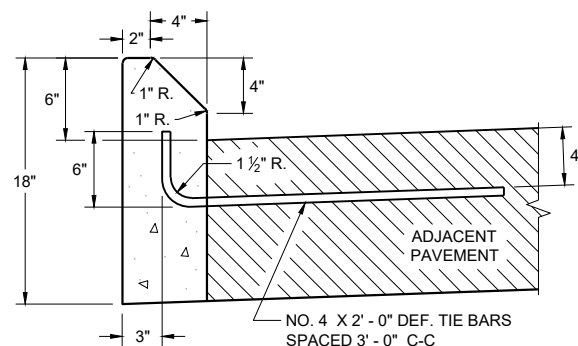


DETAIL OF CURB AND GUTTER AT INLETS

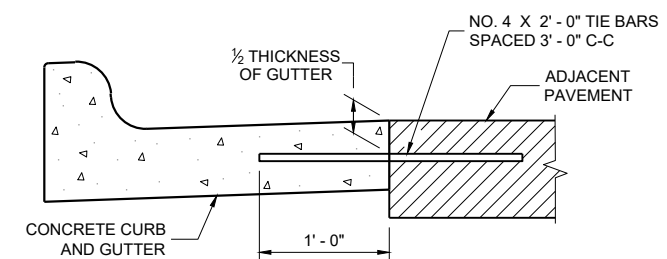
(TYPICAL H INLET COVER SHOWN)



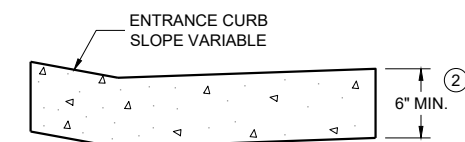
TYPES A^① & D



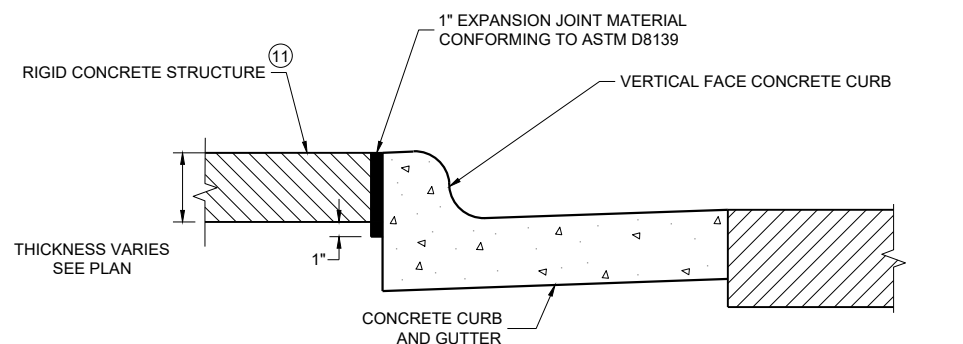
**TYPES G^① & J
CONCRETE CURB**



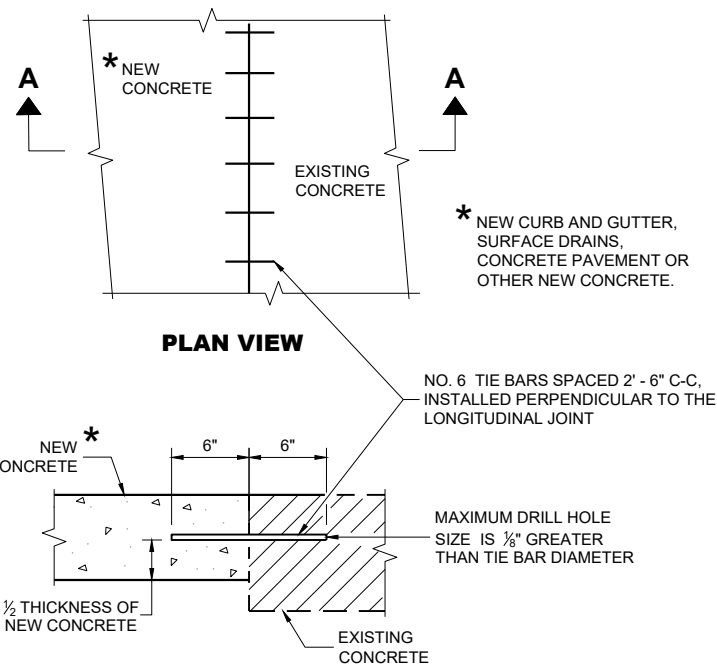
TYPICAL TIE BAR LOCATION^①



**DRIVEWAY ENTRANCE CURB^⑩
(WHEN DIRECTED BY THE ENGINEER)**



EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE^⑪



**SECTION A - A
TIE BARS DRILLED INTO EXISTING PAVEMENT**

GENERAL NOTES

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

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

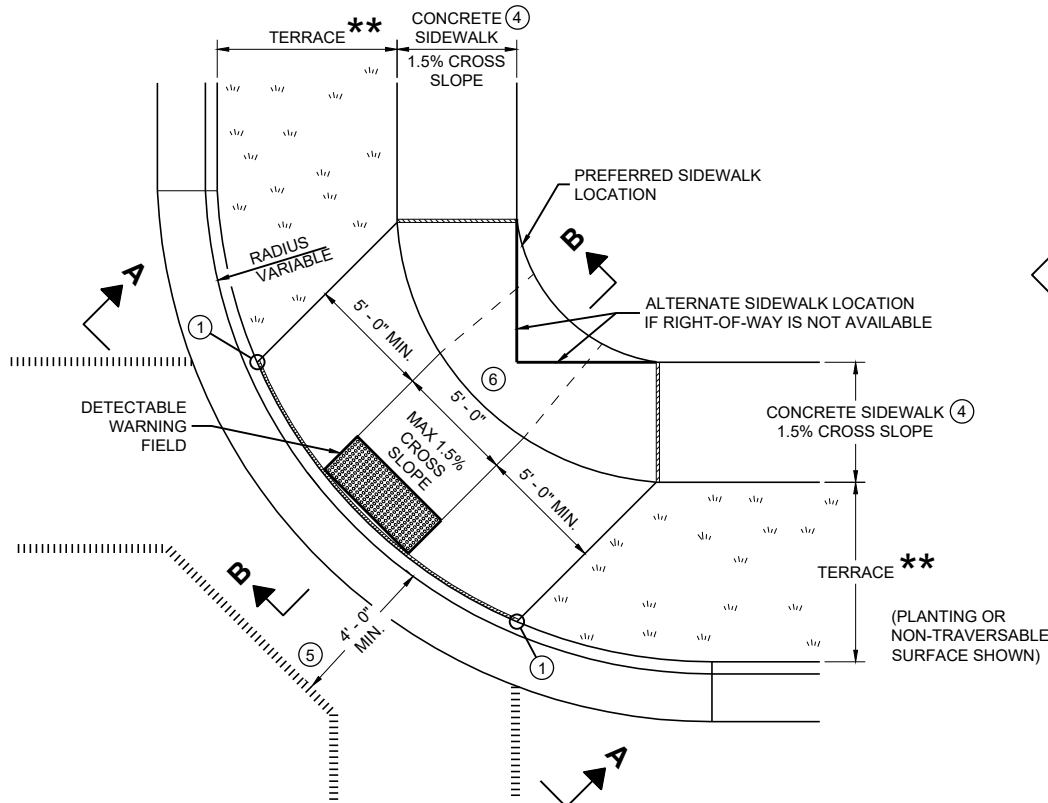
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ⑩ REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.
- ⑪ PLACE 1" THICK EXPANSION JOINT MATERIAL BETWEEN VERTICAL FACE CURB TYPES EXTENDING FROM THE TOP OF CURB TO 1 INCH BELOW THE ADJOINING CONCRETE SURFACE. RIGID CONCRETE STRUCTURES INCLUDE RAISED CONCRETE MEDIANS, CONCRETE SAFETY ISLANDS, SPLITTER ISLANDS, OR LOCATIONS IDENTIFIED ON THE PLANS.

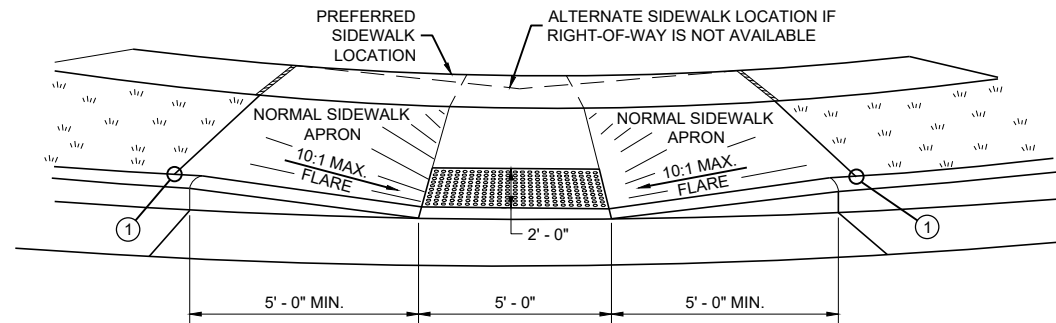
CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
FHWA UNIT SUPERVISOR

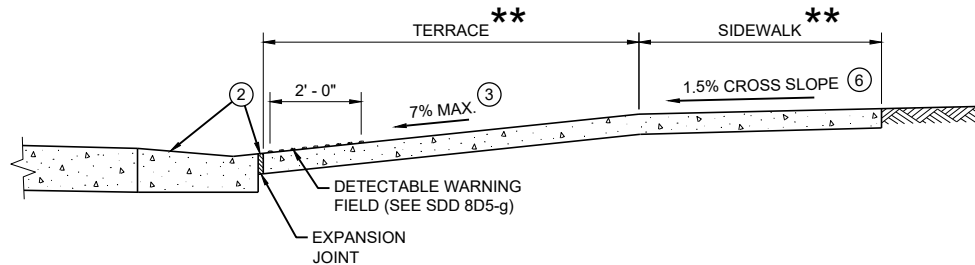


PLAN VIEW
CURB RAMP TYPE 1
(CENTER OF CORNER RADIUS)

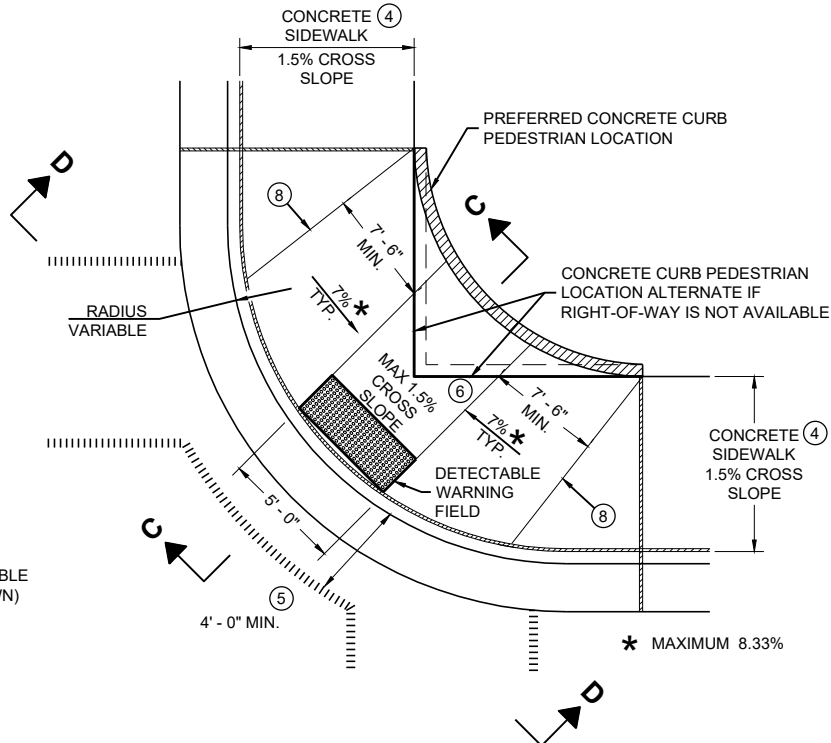


VIEW A - A FOR TYPE 1

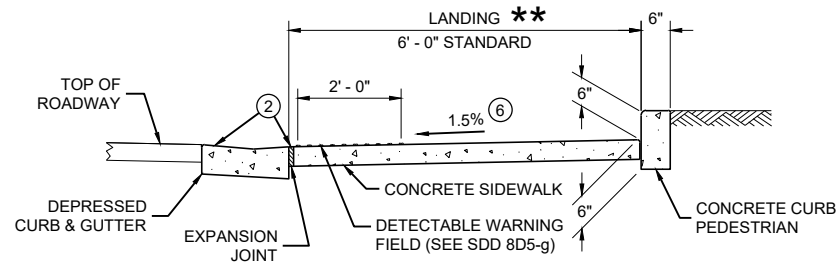
** WIDTH SHOWN ELSEWHERE
IN THE PLANS



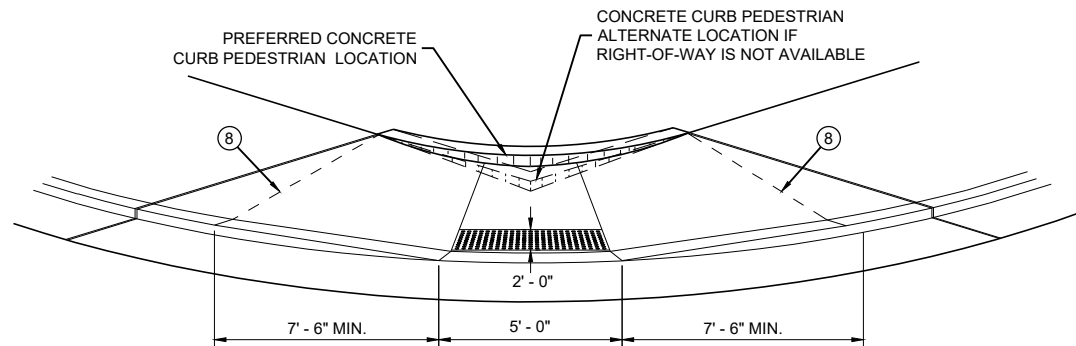
SECTION B - B FOR TYPE 1



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



SECTION C - C FOR TYPE 1 - A



VIEW D - D FOR TYPE 1 - A

GENERAL NOTES

- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- 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.
- WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.
- TYPE 1 CURB RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.
- DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAR FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.
- SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD"
- DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.
- SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.
- THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.
 - GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4 - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
 - MAXIMUM 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
 - ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
 - PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA. 4 FOOT WIDTH IS MEASURED FROM THE FLANGE LINE
 - PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.
 - PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

LEGEND

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

CURB RAMPS
TYPE 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



PLAN VIEW
CURB RAMP TYPE 3
(OUTSIDE OF CROSSWALK AREA)

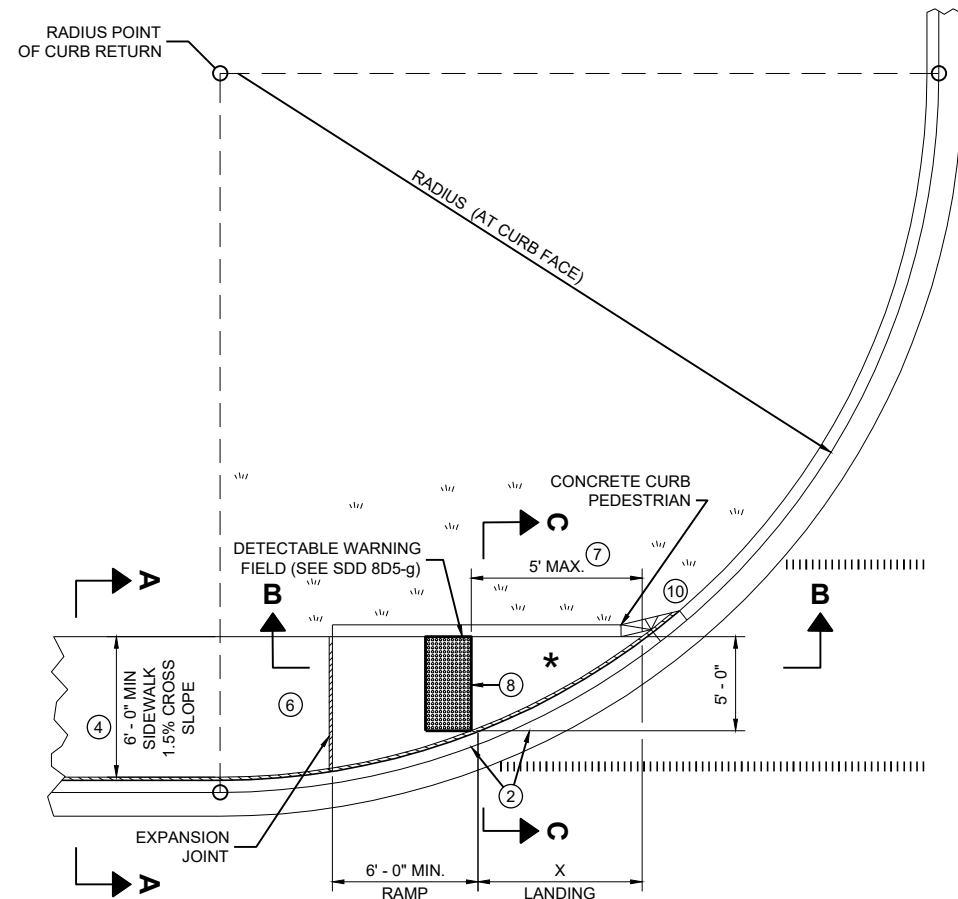


- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN $\frac{1}{4}$ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- ③ AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE (2.67% OR LESS) AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ $\pm 0.5\%$ CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET X 5 FEET.
- ⑦ WHEN GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.
- ⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- ⑨ WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.

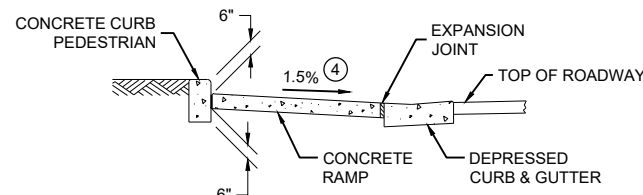
++ CONSTRUCT 6" WEDGE TO
AVOID CONCRETE BREAKAGE

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

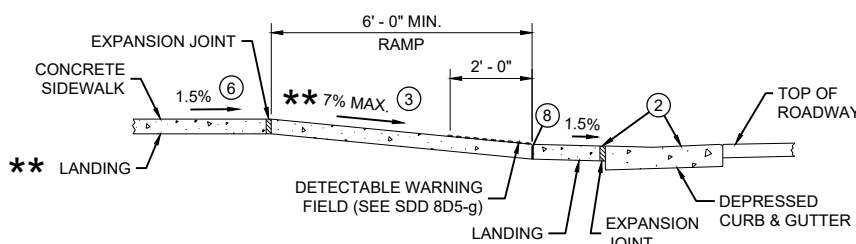
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



PLAN VIEW
CURB RAMP TYPE 4A



SECTION C - C FOR TYPE 4A

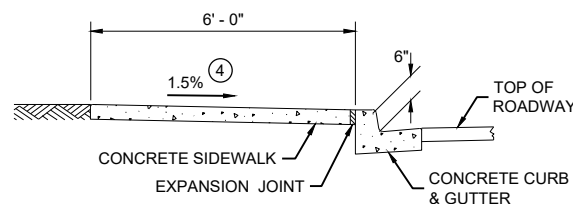


SECTION B - B FOR
TYPE 4A AND TYPE 4A1

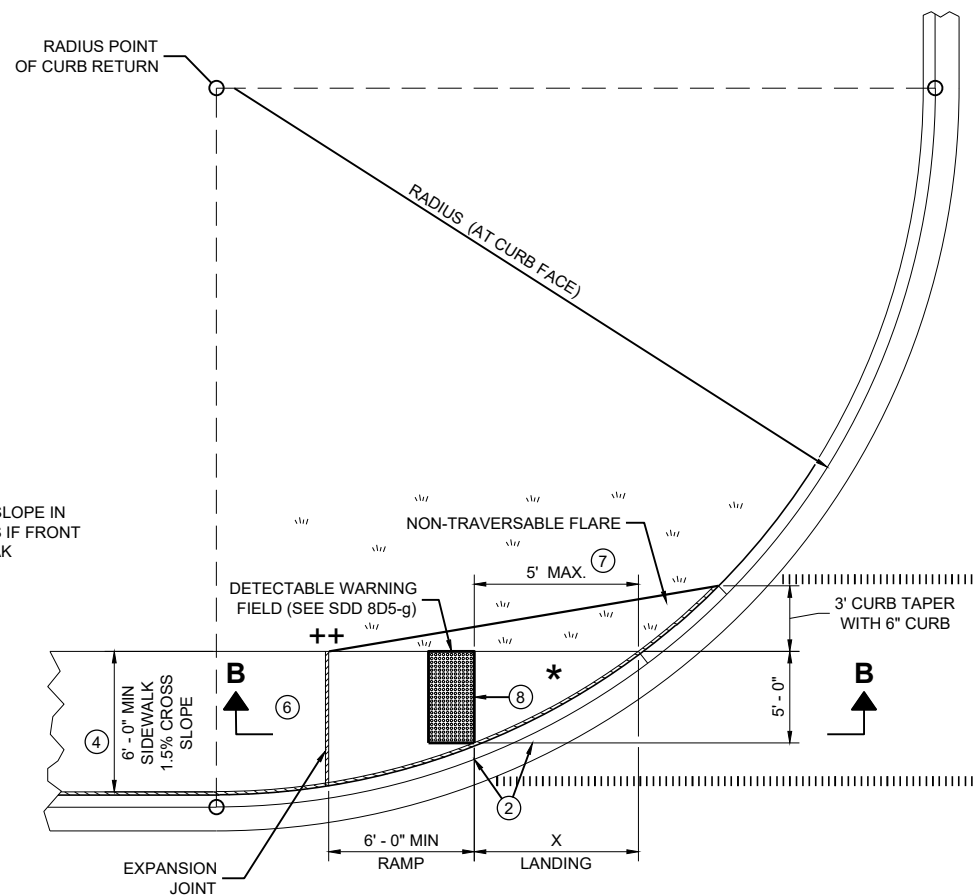
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A - A FOR TYPE 4A



PLAN VIEW
CURB RAMP TYPE 4A1

GENERAL NOTES

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

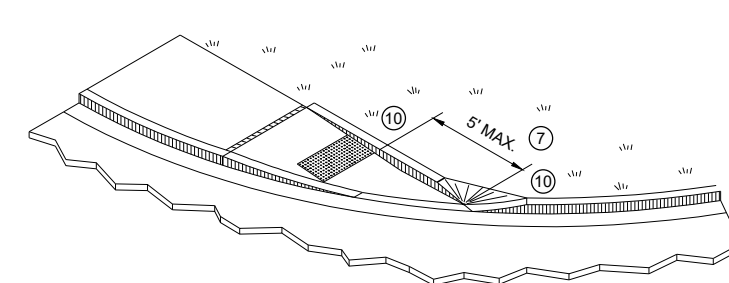
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

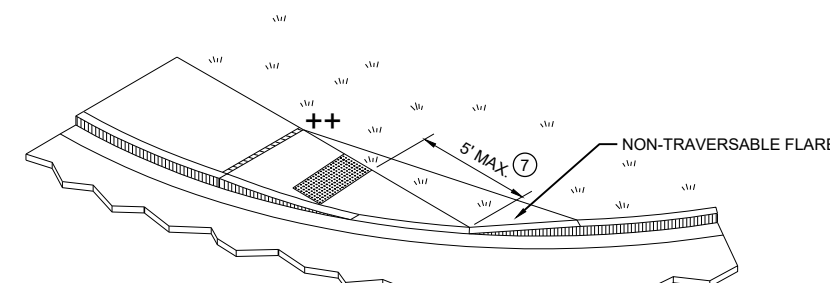
- GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4 - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.
- WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.
- PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

LEGEND

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



ISOMETRIC VIEW FOR TYPE 4A

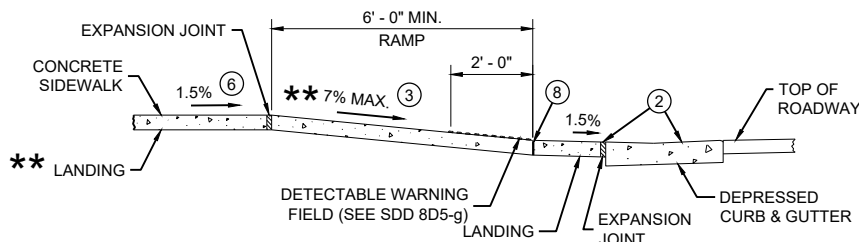
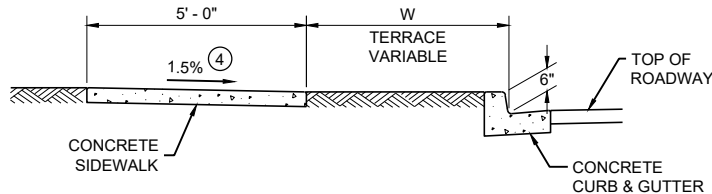
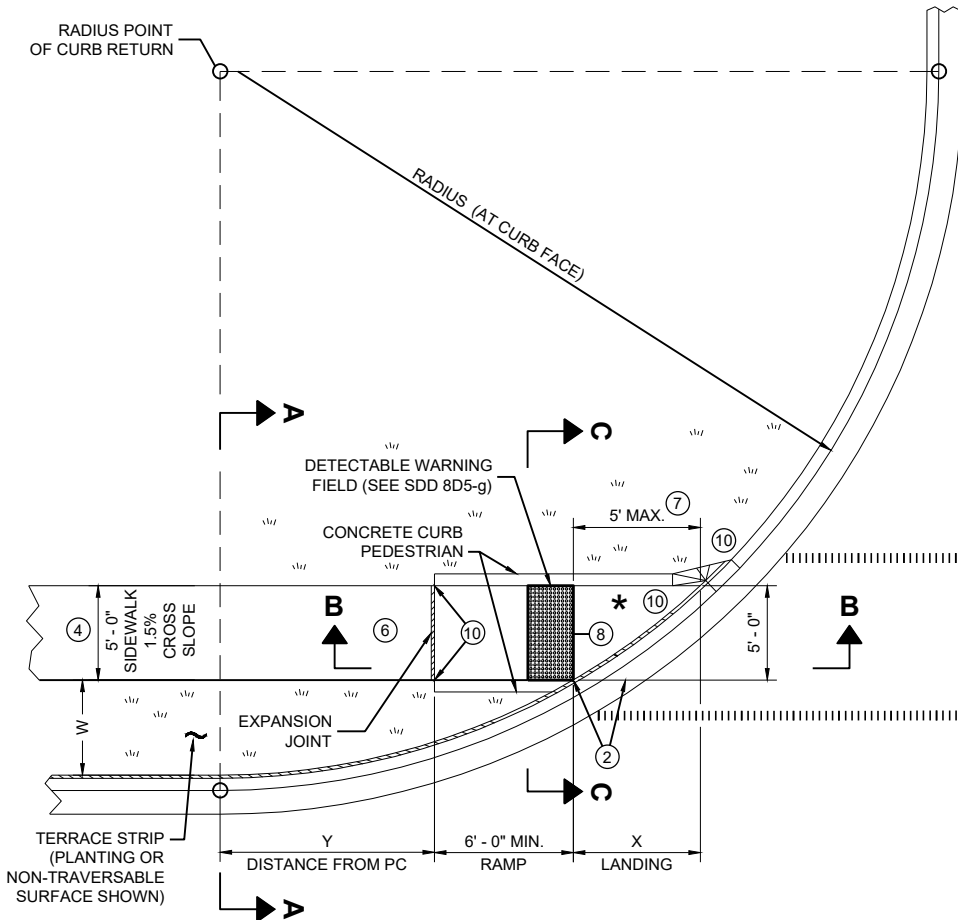


ISOMETRIC VIEW FOR TYPE 4A1

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

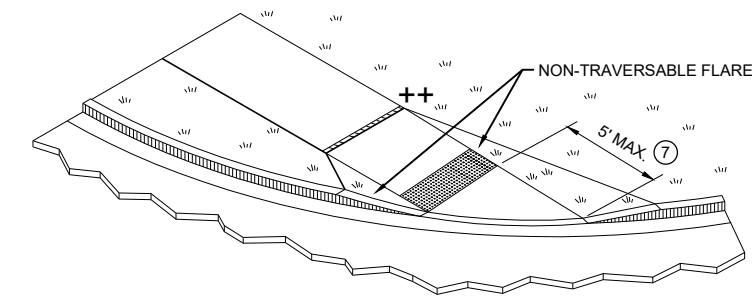
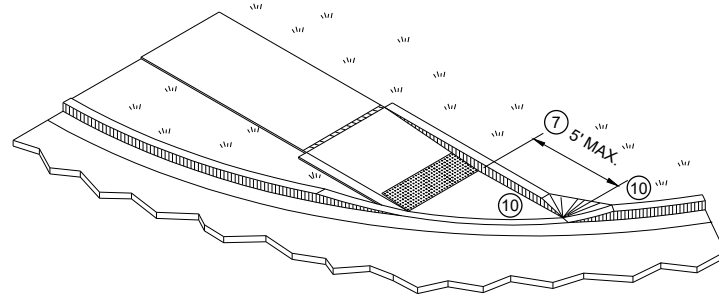
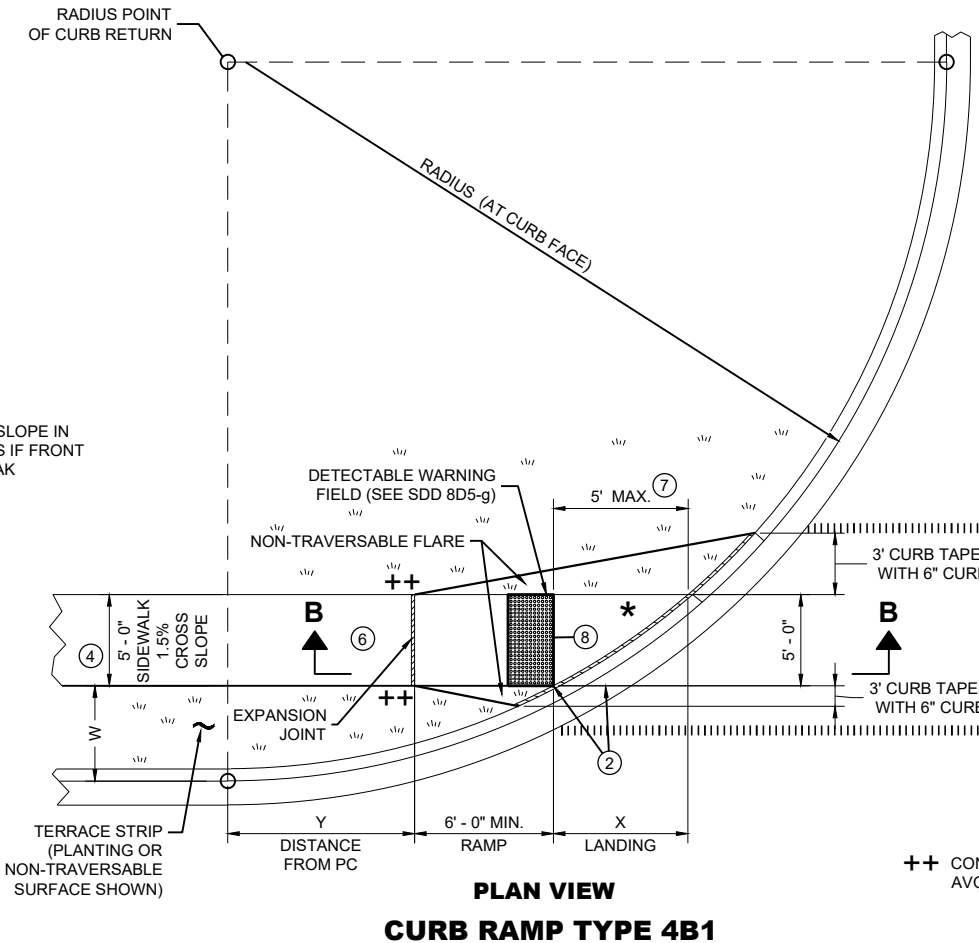
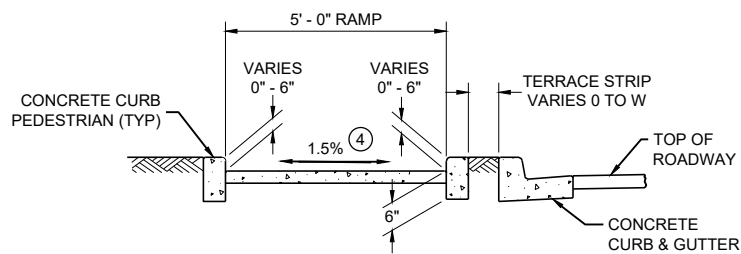
CURB RAMPS TYPE 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"		W = 8' - 0"		W = 9' - 0"		W = 10' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2' - 10 1/4"	0' - 5"	2' - 1"	1' - 4 1/2"	1' - 5"	2' - 1"	0' - 10"	2' - 7 1/2"	0' - 3 1/4"	3' - 0 1/4"						
15 FEET	4' - 6 3/4"	2' - 1 3/4"	3' - 9"	3' - 5 3/4"	3' - 1 1/4"	4' - 6"	2' - 6 3/4"	5' - 4 1/2"	2' - 1"	6' - 1"	1' - 8"	6' - 8 1/2"	1' - 3 1/4"	7' - 2 1/2"	0' - 10 3/4"	7' - 7 1/4"
20 FEET			4' - 11 1/2"	5' - 1 3/4"	4' - 3 1/4"	6' - 5 1/2"	3' - 8 3/4"	7' - 7"	3' - 3"	8' - 6 1/2"	2' - 10"	9' - 4 1/2"	2' - 5 1/2"	10' - 1 1/4"	2' - 1 1/4"	10' - 9"
30 FEET									4' - 10 3/4"	12' - 5 3/4"	4' - 5 1/2"	13' - 7 3/4"	4' - 0 3/4"	14' - 8 1/2"	3' - 8 1/2"	15' - 8 1/4"
40 FEET															4' - 10 3/4"	19' - 8 1/4"

INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH



LEGEND

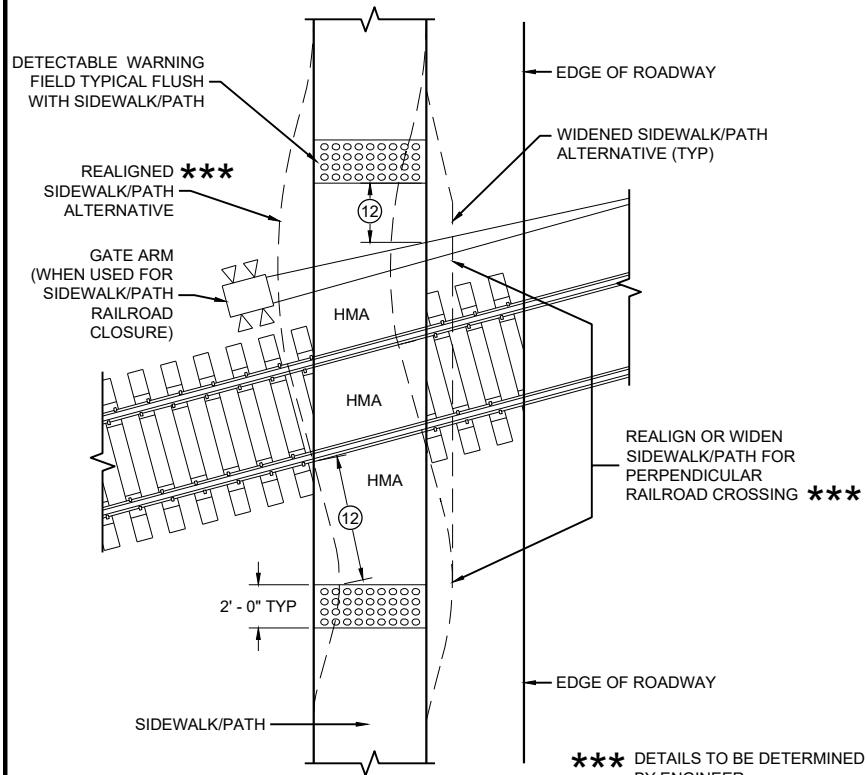
- 1/2" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

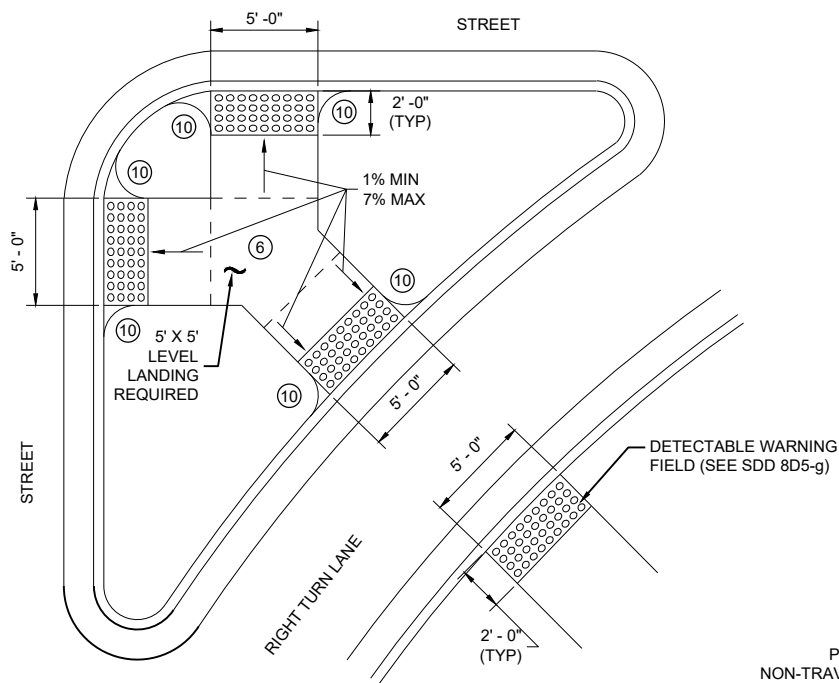
- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.
- DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.
- GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4" INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.
- WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.
- PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

CURB RAMPS
TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

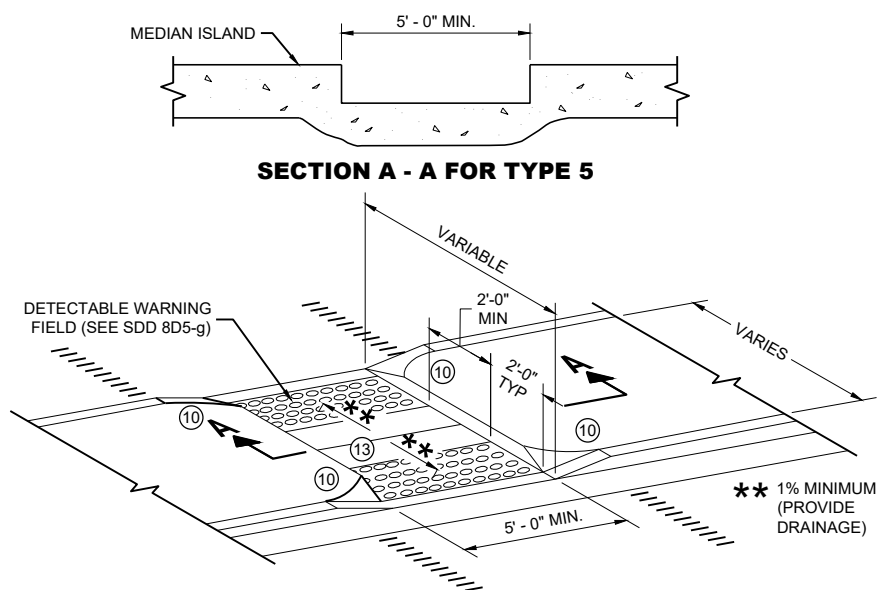


CURB RAMP TYPE 8
DETECTABLE WARNINGS
FOR SIDEWALKS OR SHARED USE PATHS
AT RAILROAD CROSSINGS

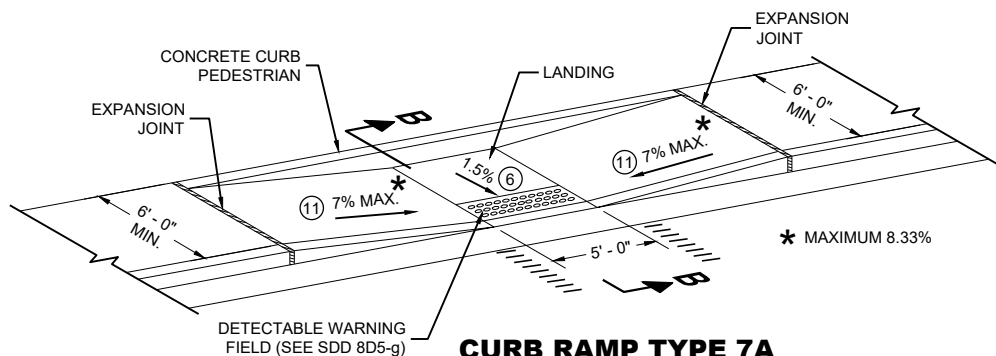


CURB RAMP TYPE 6
DETECTABLE WARNING AT ISLANDS

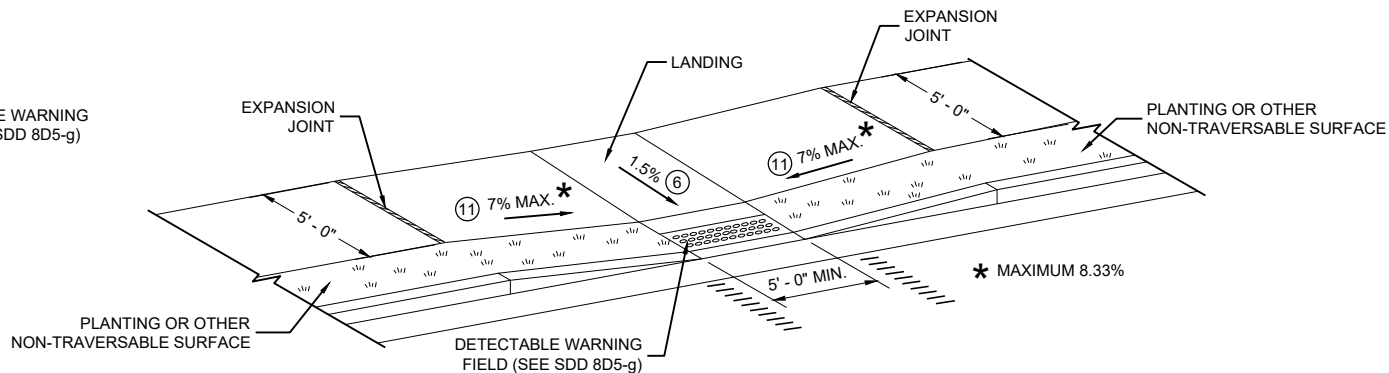
REFER TO GENERAL NOTES ② AND ③
FOR ALL ISLAND CURB RAMPS



CURB RAMP TYPE 5
MEDIAN ISLAND
NON-ELEVATED PEDESTRIAN CROSSING



CURB RAMP TYPE 7A
FOR INTERSECTIONS AND
MID BLOCK CROSSINGS



CURB RAMP TYPE 7B
FOR INTERSECTIONS AND
MID BLOCK CROSSINGS

GENERAL NOTES

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

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.

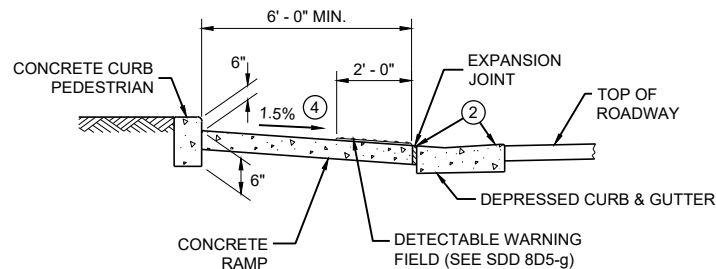
SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/8 - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- ③ AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.
- ⑩ INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.
- ⑪ SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.
- ⑫ THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ±0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK/PATH. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD TRACK IS 15 FEET MAXIMUM AND 12 FEET MINIMUM, 15 FEET TYPICAL FROM THE NEAREST RAIL.
- ⑬ DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STEET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

LEGEND

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

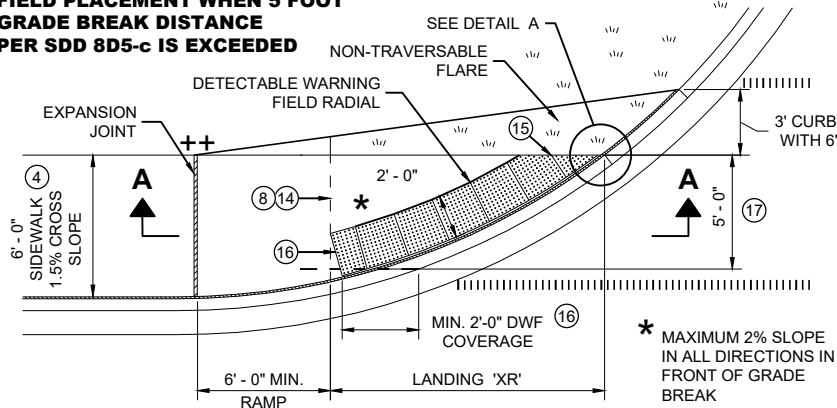


SECTION B - B FOR TYPE 7A

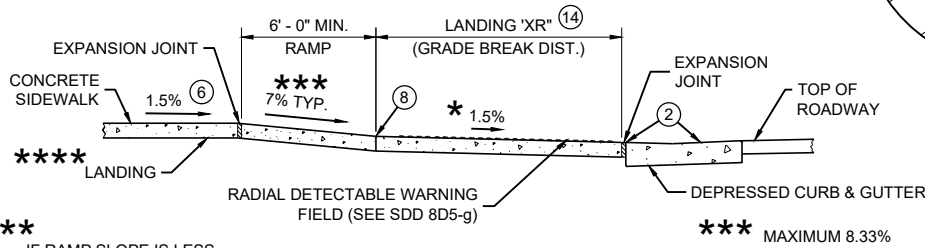
CURB RAMPS
TYPE 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

**RADIAL DETECTABLE WARNING
FIELD PLACEMENT WHEN 5 FOOT
GRADE BREAK DISTANCE
PER SDD 8D5-c IS EXCEEDED**



**PLAN VIEW
CURB RAMP TYPE 4A1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)**

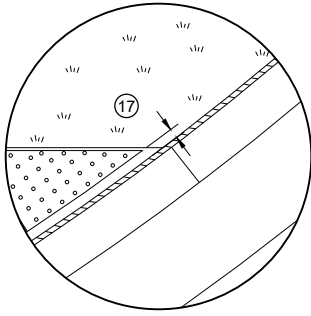


SECTION A - A FOR TYPE 4A1

IF RAMP SLOPE IS LESS
THAN 5.0%, THEN NO
ADJACENT UPHILL
LANDING IS REQUIRED

LEGEND

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



DETAIL A

GENERAL NOTES

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

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.

REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

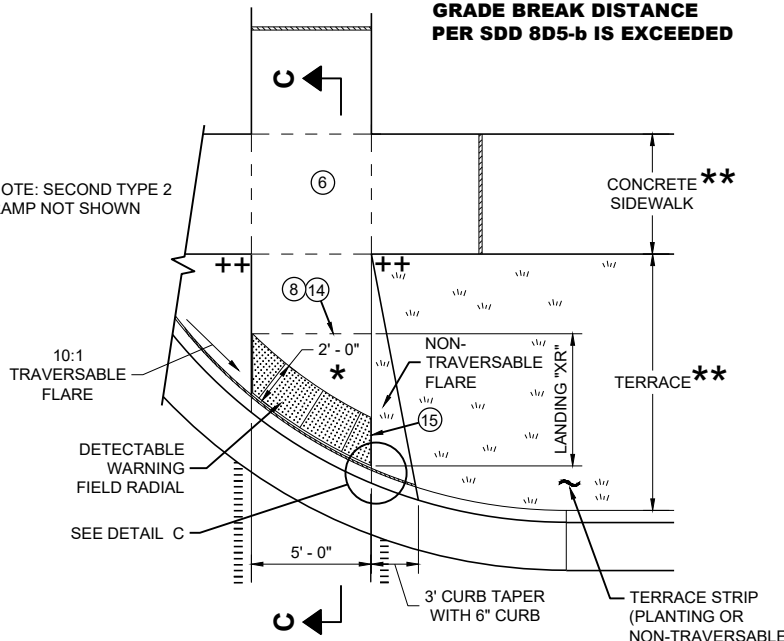
FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FIELD ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

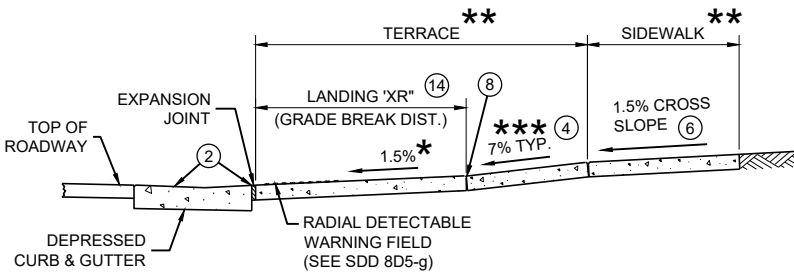
- (2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4" INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- (3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- (4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- (6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET BY 5 FEET.
- (8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- (14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.
- (15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN 1/2" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.
- (16) USE 1' X 2" RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2' - 0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.
- (17) A MAXIMUM 3 INCH CONCRETE BORDER WIDTH IS ALLOWABLE IN FRONT OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

**RADIAL DETECTABLE WARNING
FIELD PLACEMENT WHEN 5 FOOT
GRADE BREAK DISTANCE
PER SDD 8D5-b IS EXCEEDED**

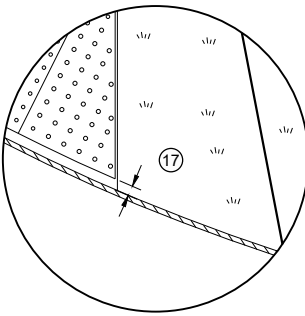
NOTE: SECOND TYPE 2
RAMP NOT SHOWN



**PLAN VIEW
CURB RAMP TYPE 2
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)
(ON LINE WITH SIDEWALK)**



SECTION C - C FOR TYPE 2



DETAIL C

*** MAXIMUM 2% SLOPE
IN ALL DIRECTIONS IN
FRONT OF GRADE
BREAK

** WIDTH SHOWN ELSEWHERE
IN THE PLANS

*** MAXIMUM 8.33%

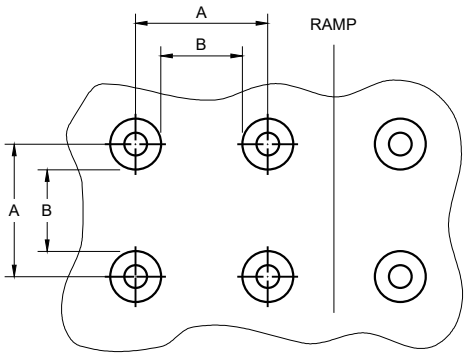
++ CONSTRUCT 6" WEDGE TO
AVOID CONCRETE BREAKAGE

**CURB RAMPS
RADIAL DETECTABLE WARNING**

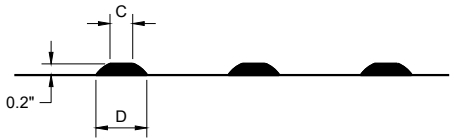
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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

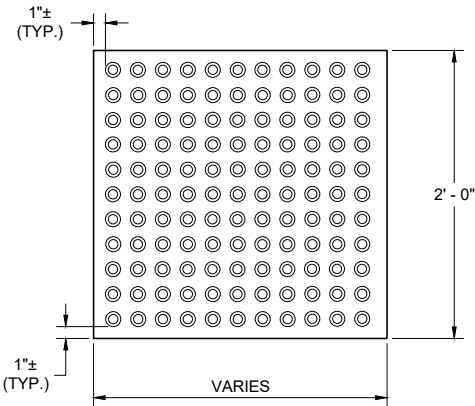


PLAN VIEW

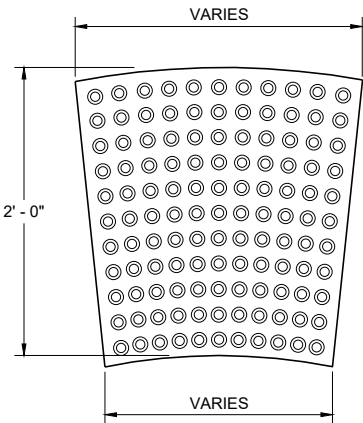


ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL

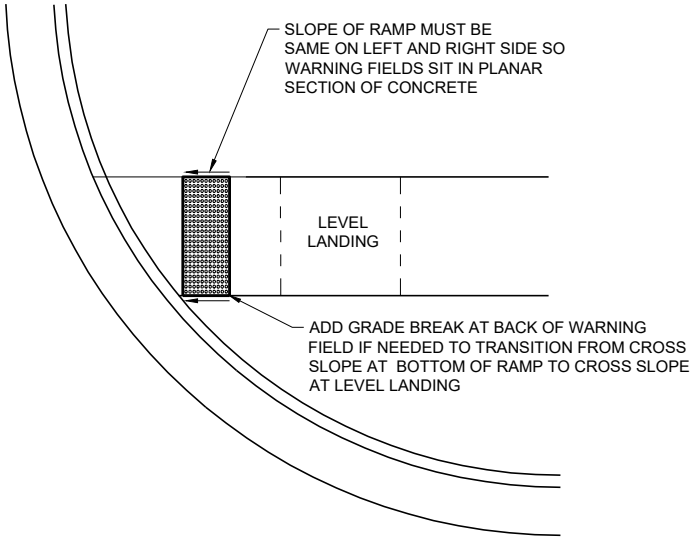


RECTANGULAR
PLATES

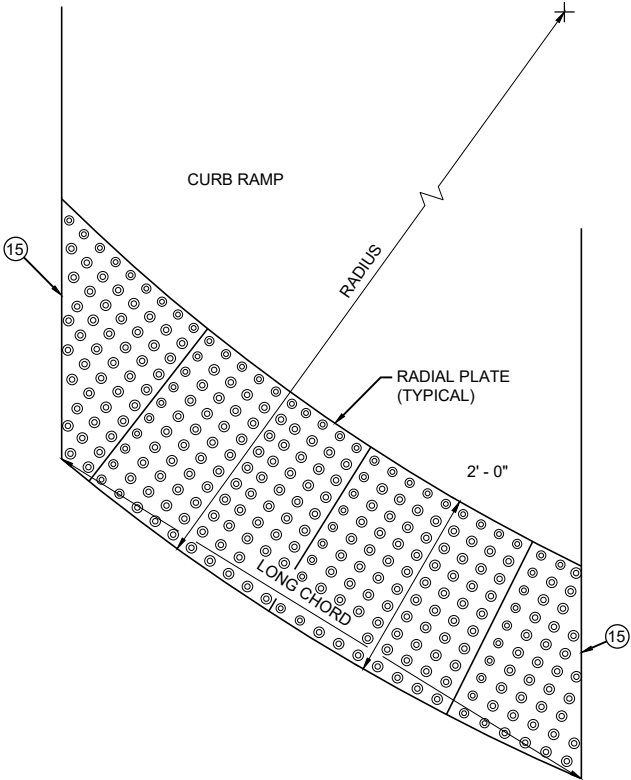


RADIAL
PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)



DETECTABLE WARNING FIELD
PLANAR INSTALLATION



PLAN VIEW
RADIAL DETECTABLE
WARNING FIELD ATTRIBUTES

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AT A CURB RAMP SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FIELD ARE PROHIBITED.

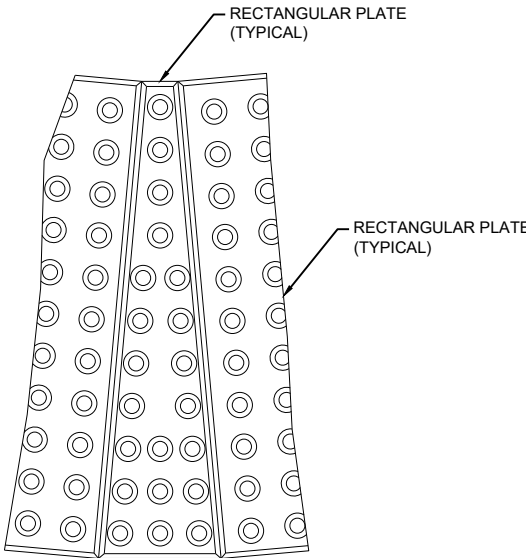
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

15 FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN 1/8\"/>



PLAN VIEW
RADIAL WEDGE PLATE
CONNECTION DETAIL

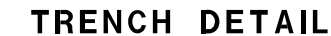
CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2023 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
FHWA UNIT SUPERVISOR



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

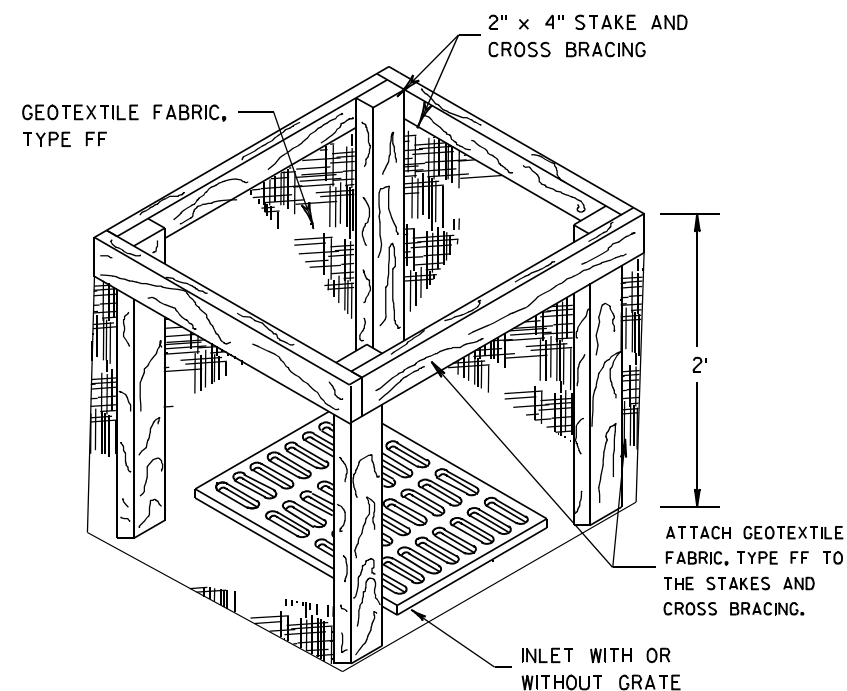
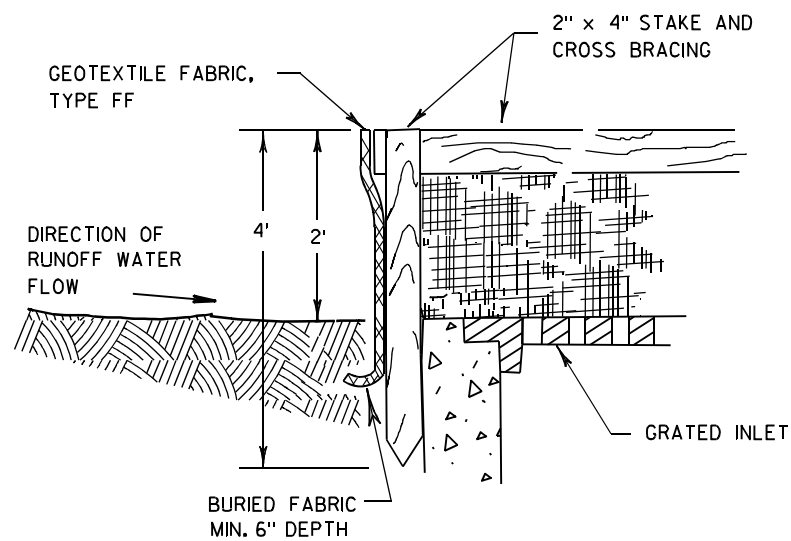


SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA



INLET PROTECTION, TYPE A

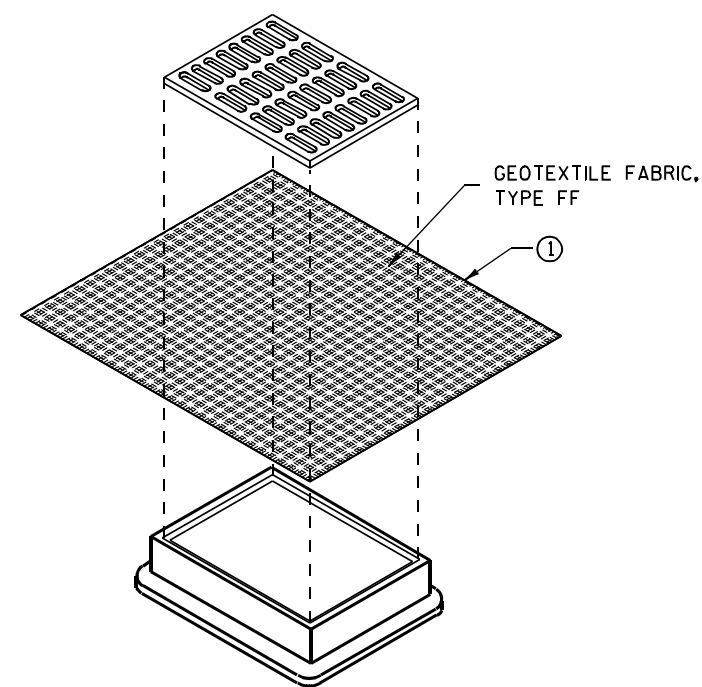
GENERAL NOTES

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

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

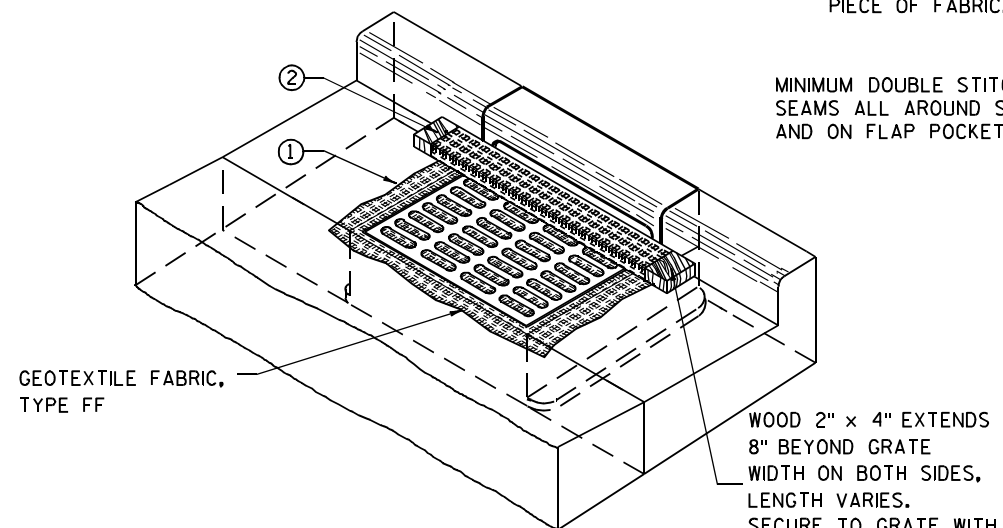
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

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



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

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

INSTALLATION NOTES

TYPE B & C

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

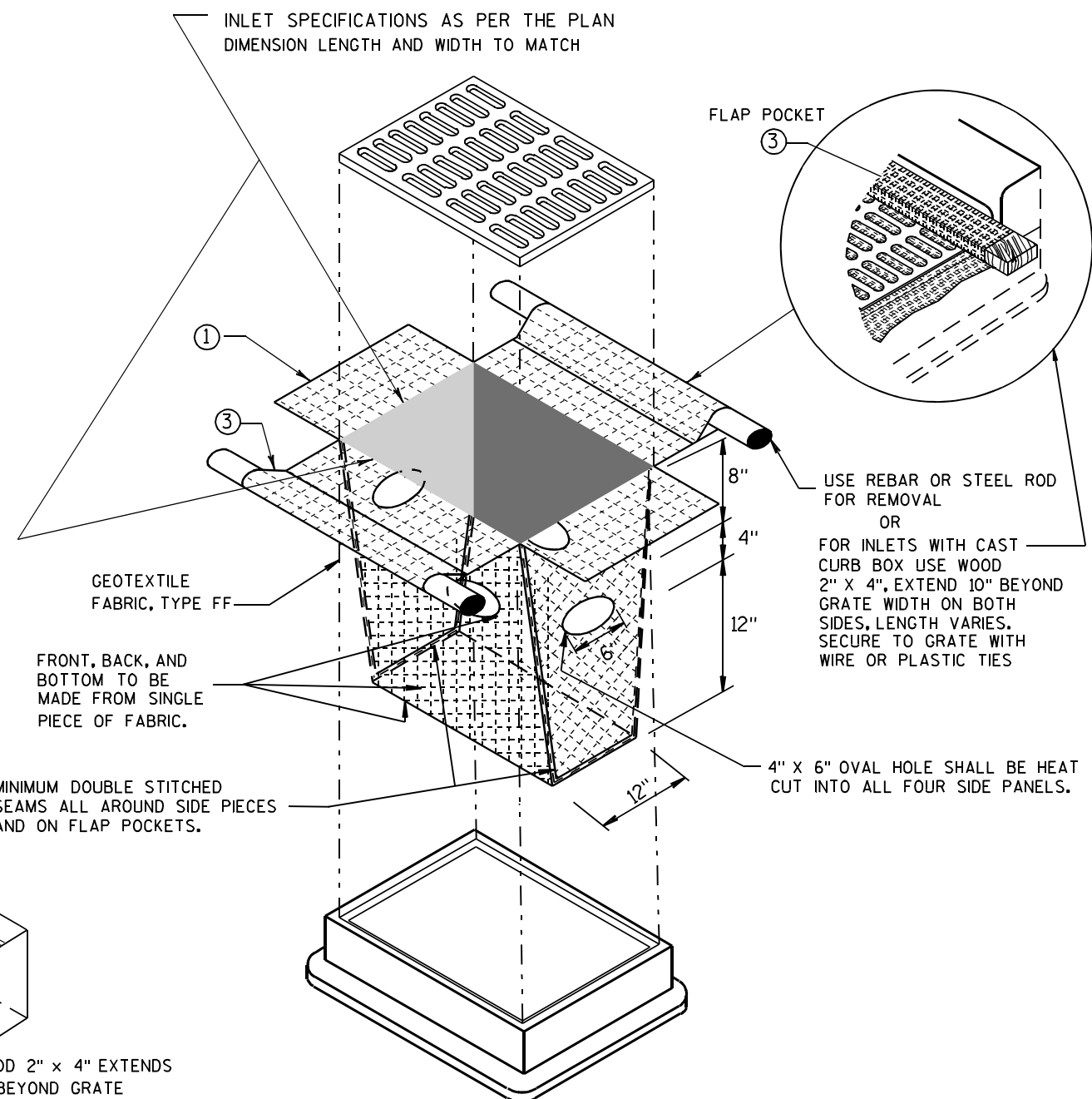
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

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

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

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



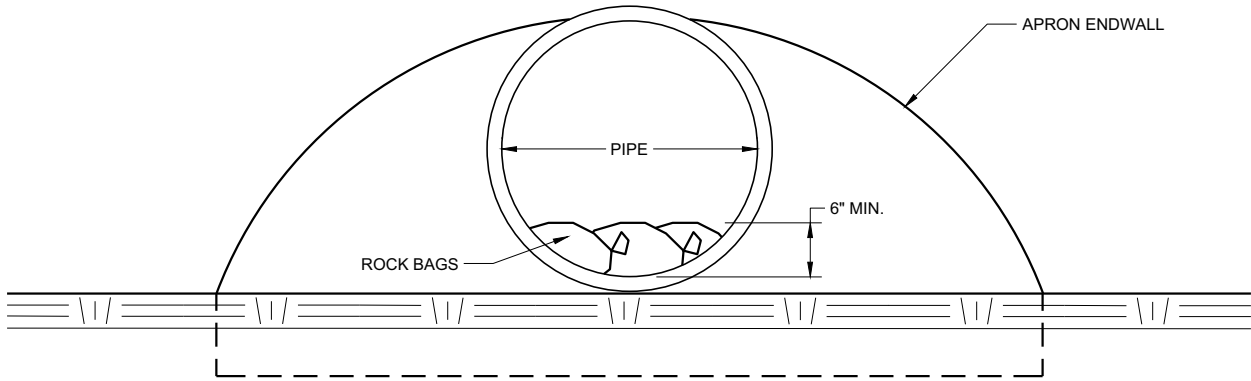
INLET PROTECTION, TYPE D

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

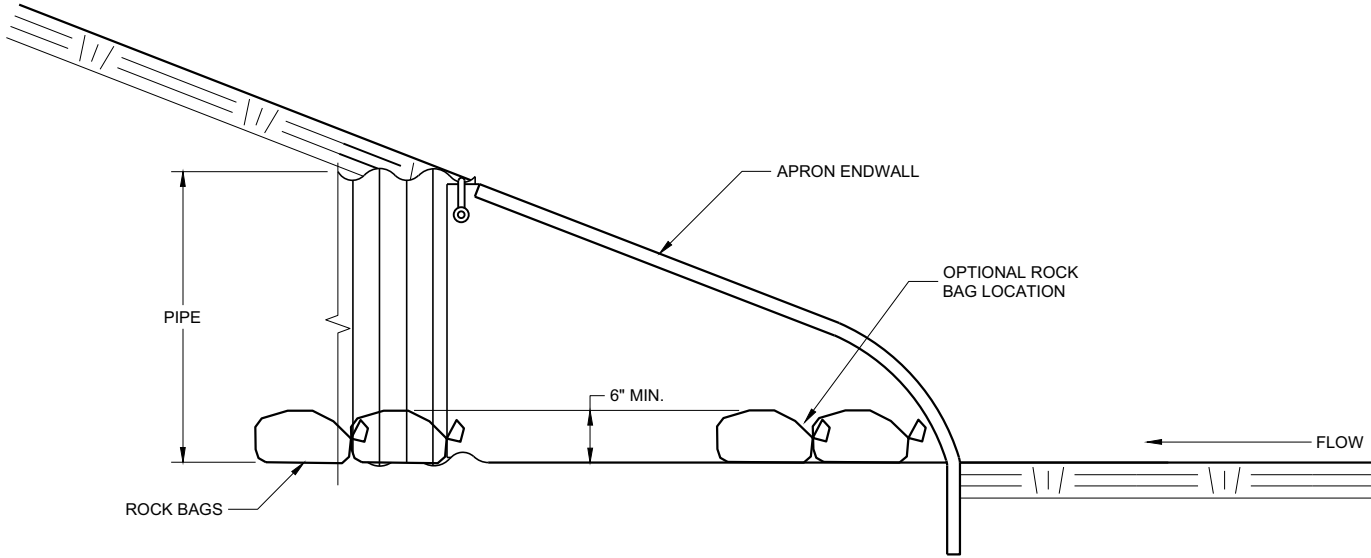
**INLET PROTECTION
TYPE A, B, C, AND D**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02 /S/ Beth Connolly
DATE 71
FHWA CHIEF ROADWAY DEVELOPMENT ENGINEER



END VIEW



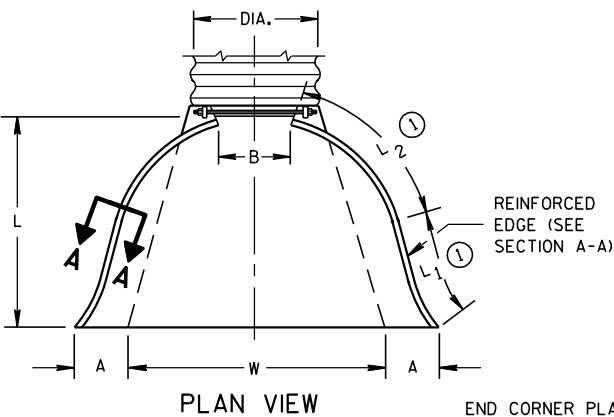
SIDE VIEW

CULVERT PIPE CHECK
(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK		
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION		
APPROVED May 2019 DATE	/S/ Daniel Schave	-
FHWA	EROSION CONTROL ENGI	72

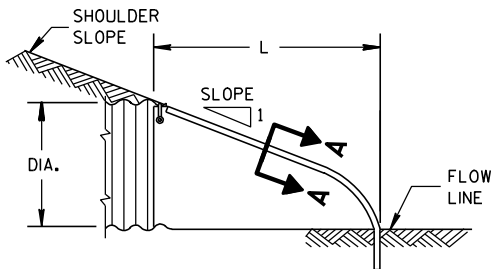
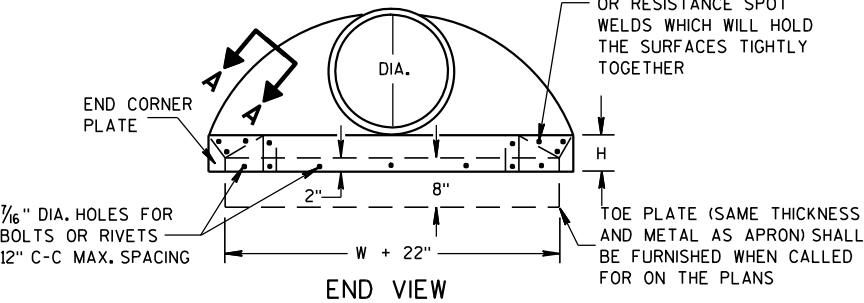
METAL APRON ENDWALLS											
PIPE DIA. (IN.)	MIN. THICK. (Inches)		DIMENSIONS (Inches)						APPROX. SLOPE	BODY	
	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1½")	L ₁ ①	L ₂ ①			W (±2")
12	.064	.060	6	6	6	21	12	17½	24	2½ to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21¾	30	2½ to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28¼	36	2½ to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29⅝	42	2½ to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37¼	48	2½ to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52¼	60	2½ to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59¾	72	2½ to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75⅝	84	2½ to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2¼ to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85½	102	2¼ 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	1½ to 1	3 Pc.
84	.109x	.105x	18	45	12	87	—	—	138	1½ to 1	3 Pc.
90	.109x	.105x	18	37	12	87	—	—	144	1½ to 1	3 Pc.
96	.109x	.105x	18	35	12	87	—	—	150	1½ to 1	3 Pc.

* EXCEPT CENTER PANEL
SEE GENERAL NOTES



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

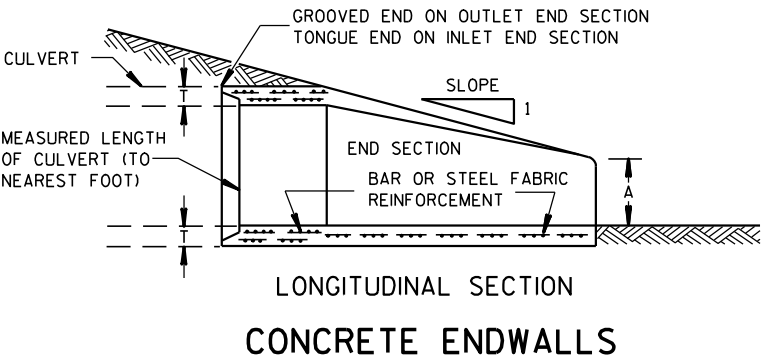
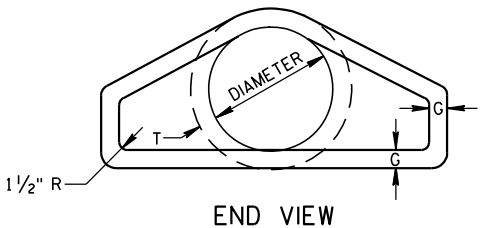
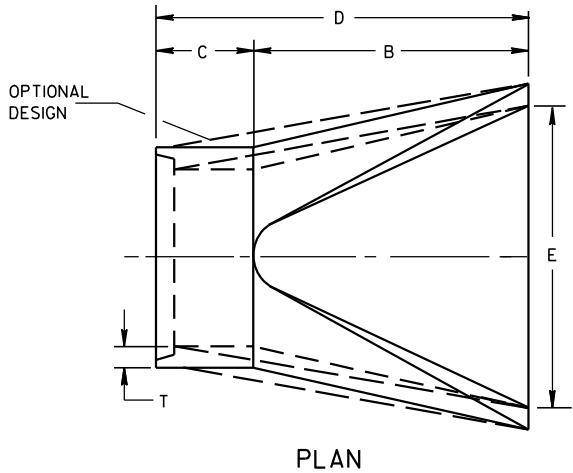
TOE PLATE (SAME THICKNESS AND METAL AS APRON) SHALL BE FURNISHED WHEN CALLED FOR ON THE PLANS



SIDE ELEVATION
METAL ENDWALLS

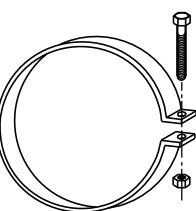
REINFORCED CONCRETE APRON ENDWALLS									
PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE	
	T	A	B	C	D	E	G		
12	2	4	24	48 ⁷ / ₈	72 ⁷ / ₈	24	2	3 to 1	
15	2 ¹ / ₄	6	27	46	73	30	2 ¹ / ₄	3 to 1	
18	2 ¹ / ₂	9	27	46	73	36	2 ¹ / ₂	3 to 1	
21	2 ³ / ₄	9	36	37 ¹ / ₂	73 ¹ / ₂	42	2 ³ / ₄	3 to 1	
24	3	9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

* MINIMUM
** MAXIMUM

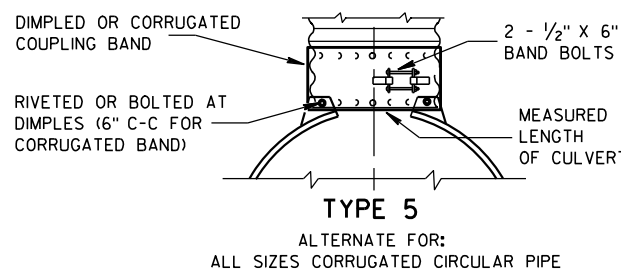
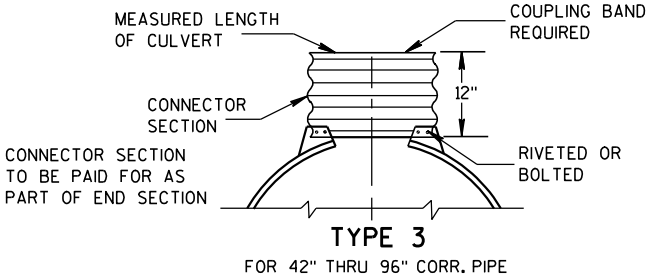
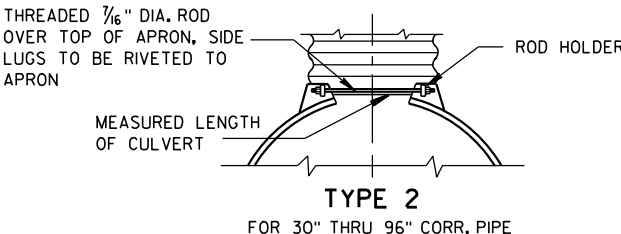
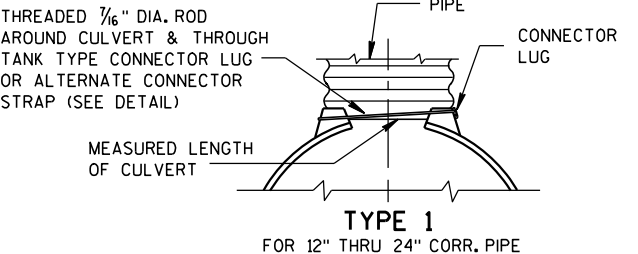


LONGITUDINAL SECTION
CONCRETE ENDWALLS

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



ALTERNATE FOR TYPE 1 CONNECTION
END SECTION CONNECTOR STRAP



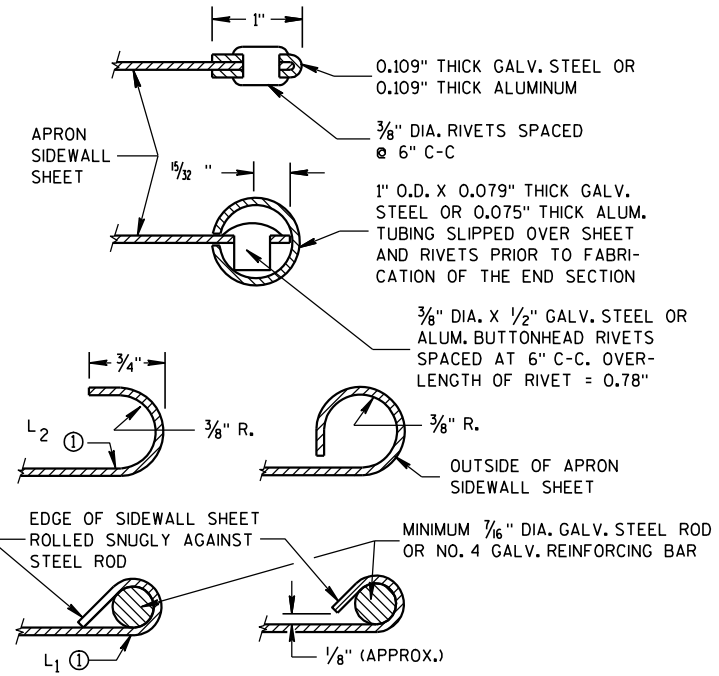
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

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

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

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

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

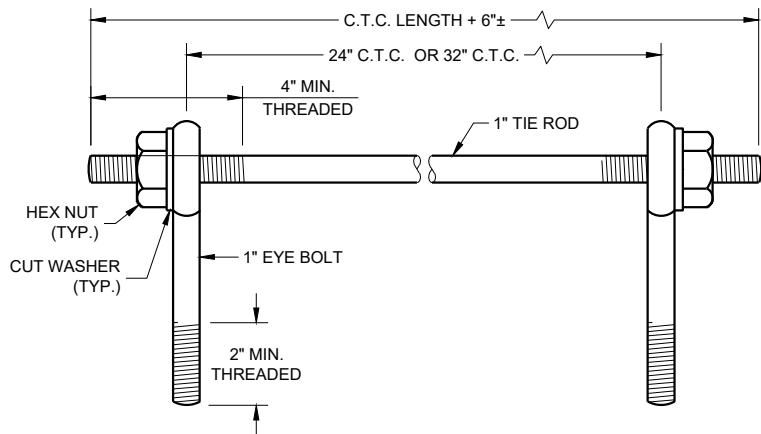
ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

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

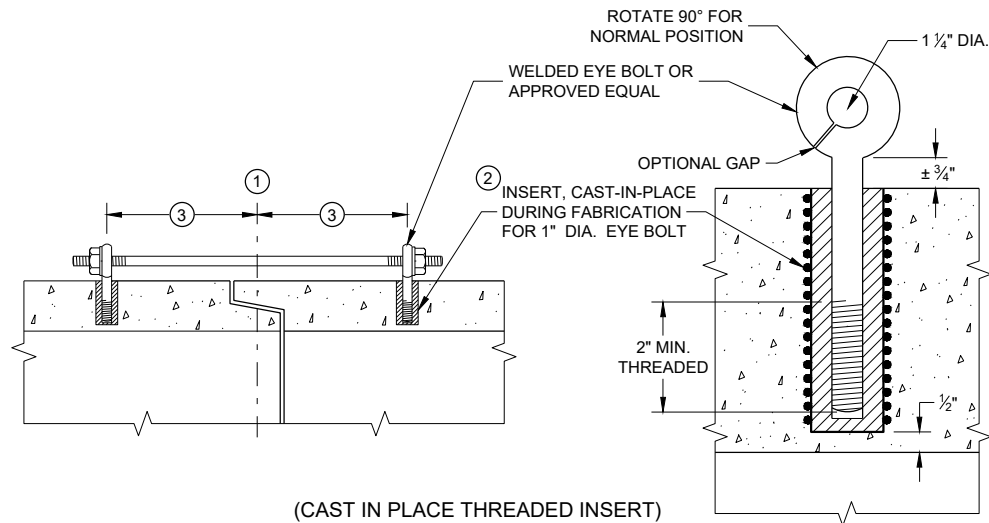
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
APPROVED	11/30/94	/S/ Rory L. Rhinehart	NEER
DATE		CHIEF ROADWAY DEVELOP	
FHWA			



Eye Bolts and Tie Rod

Eye Bolt and Tie Rod Assembly (Alternate No. 1)



(Cast in Place Threaded Insert)

Longitudinal Sections

GENERAL NOTES

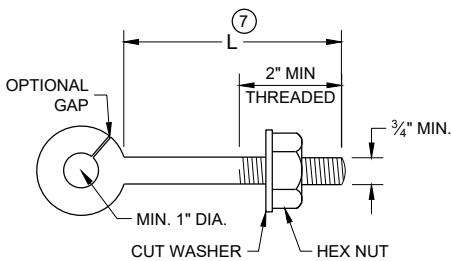
DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

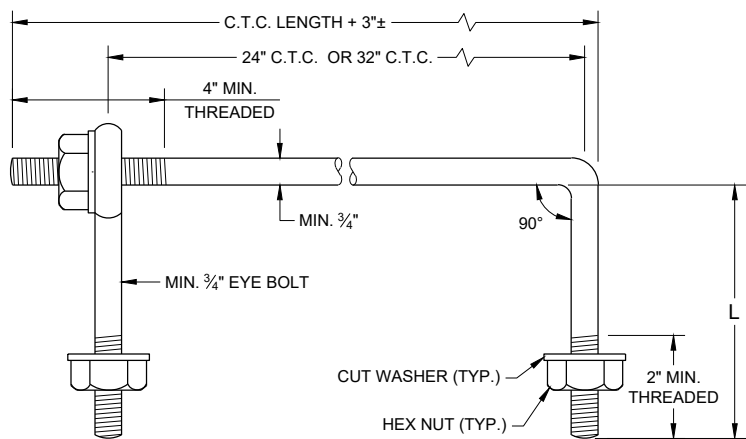
JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

- 1 CENTER LINE OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.
- 2 THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.
- 3 HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.
- 4 BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.
- 5 OPENING TO BE ROD DIAMETER PLUS 1 INCH.
- 6 LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.
- 7 EYE BOLT LENGTH DETERMINED BY WALL THICKNESS, BELL THICKNESS AND BOLT PROJECTION INSIDE PIPE.

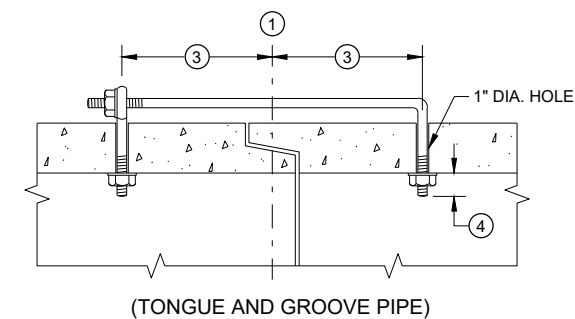


Eye Bolt

NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



Eye Bolt and Tie Rod

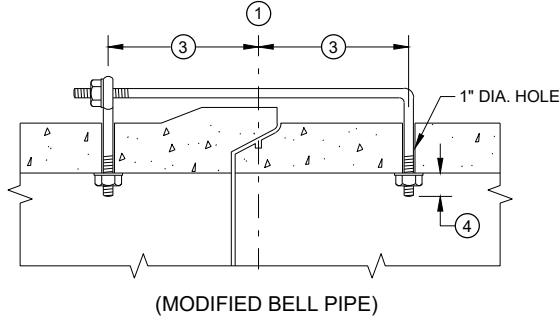


(Tongue and Groove Pipe)

Longitudinal Section

(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

Eye Bolt and Tie Rod Assembly (Alternate No. 2)

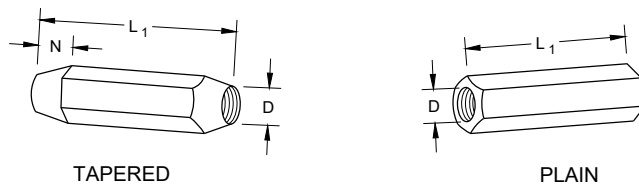


(Modified Bell Pipe)

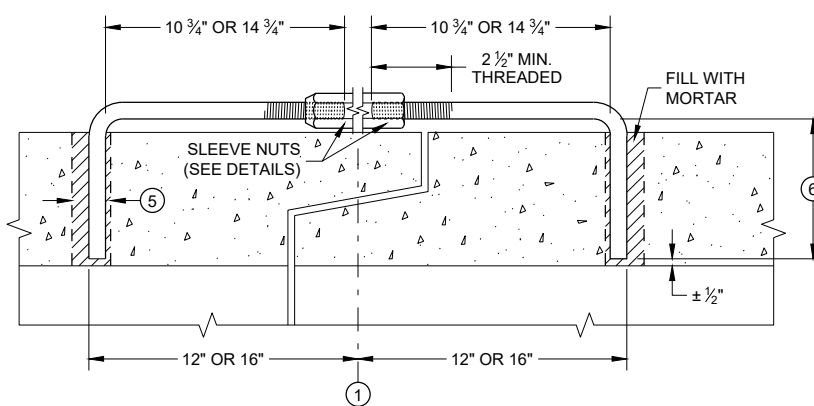
Adjustable Tie Rod Table

PIPE DIAMETER	TIE ROD DIAMETER	D	L ₁	N
12 - 60	5/8	5/8	5	1/2
66 - 84	3/4	3/4	5	1/2
90 - 144	1	1	7	1 1/16

DIMENSIONS SHOWN ARE IN INCHES

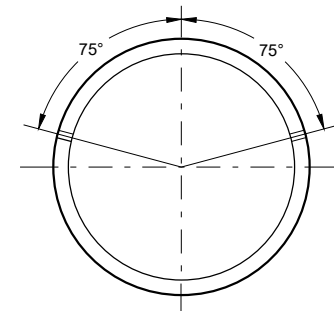


Right and Left Threads
Sleeve Nuts



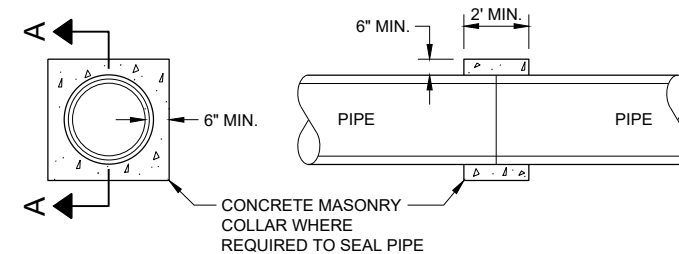
Longitudinal Section

Adjustable Tie Rod (Alternate No. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

Transverse Section



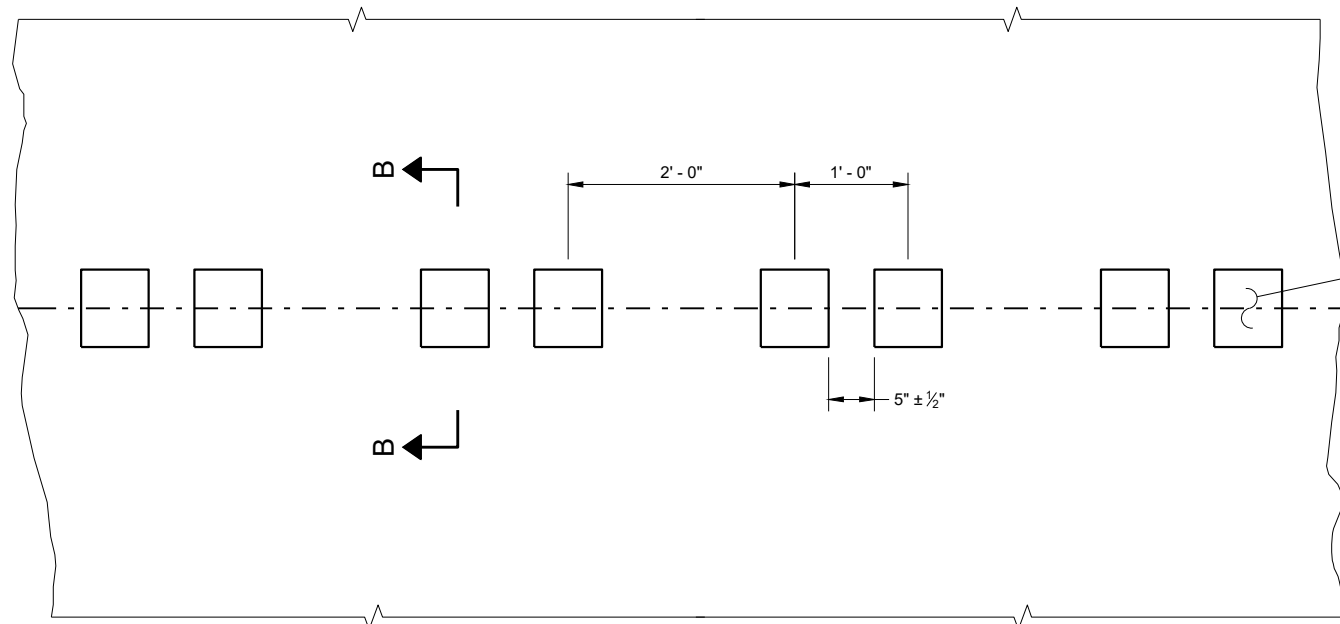
Section A - A

Concrete Collar Detail

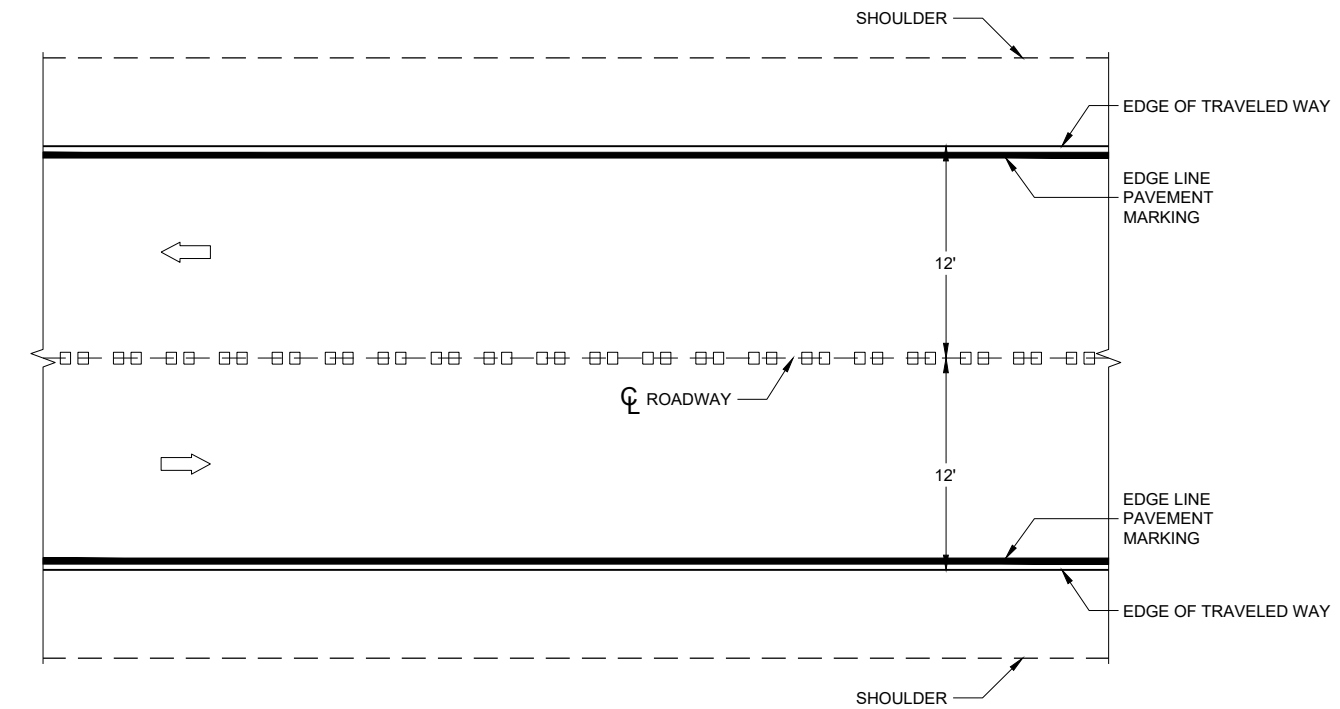
JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT ENGINEER 74
FHWA

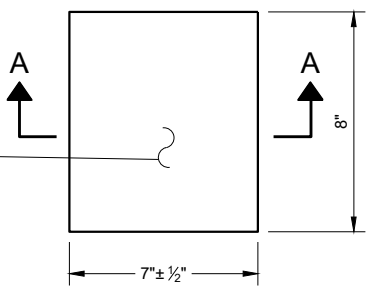


PLAN DETAIL VIEW

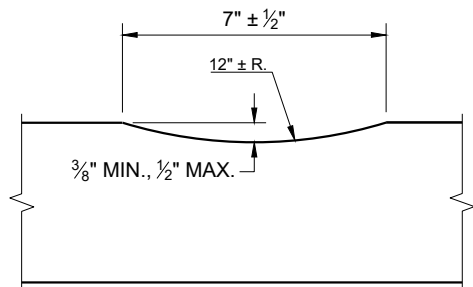


PLAN VIEW

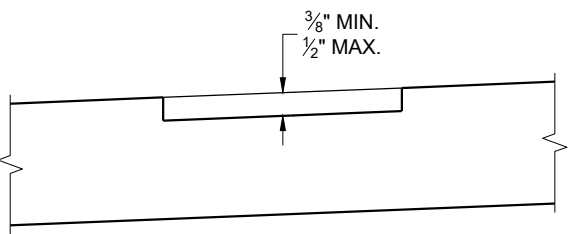
CENTERLINE RUMBLE STRIPS - ASPHALT



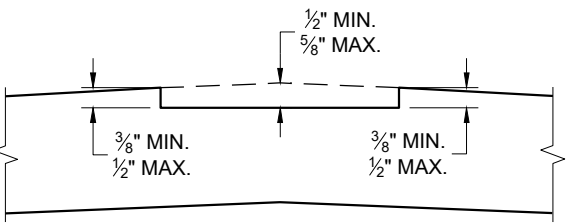
PLAN VIEW
(SINGLE GROOVE)



SECTION A - A



SECTION B - B
SUPERELEVATED ROADWAY

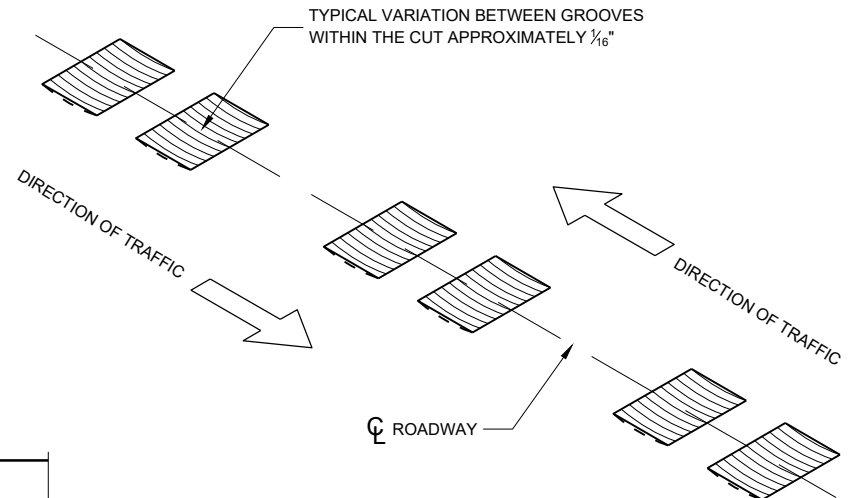


SECTION B - B
CROWNED ROADWAY

GENERAL NOTES

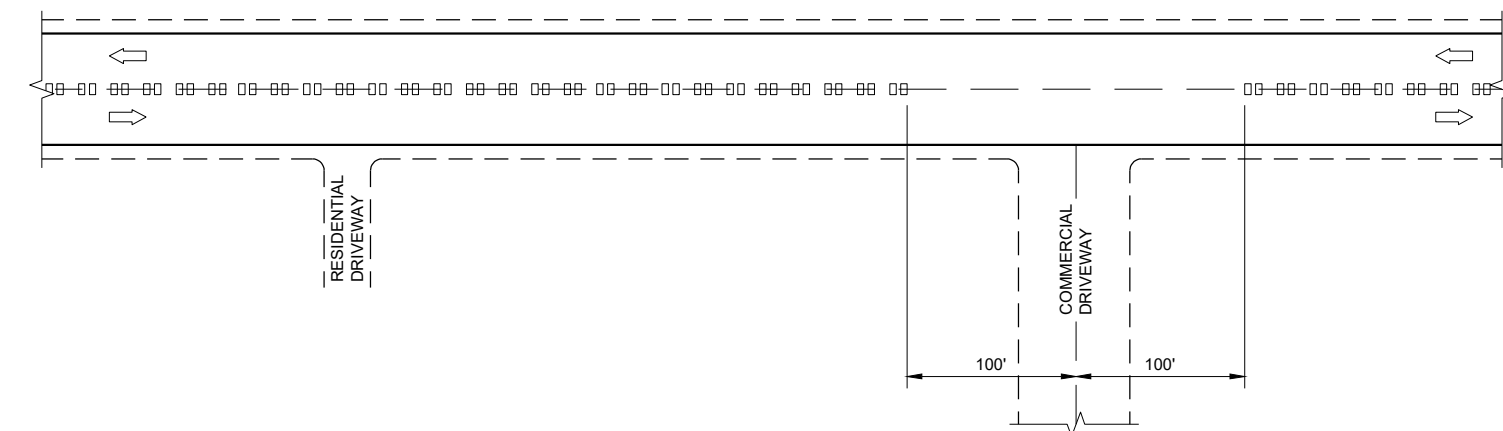
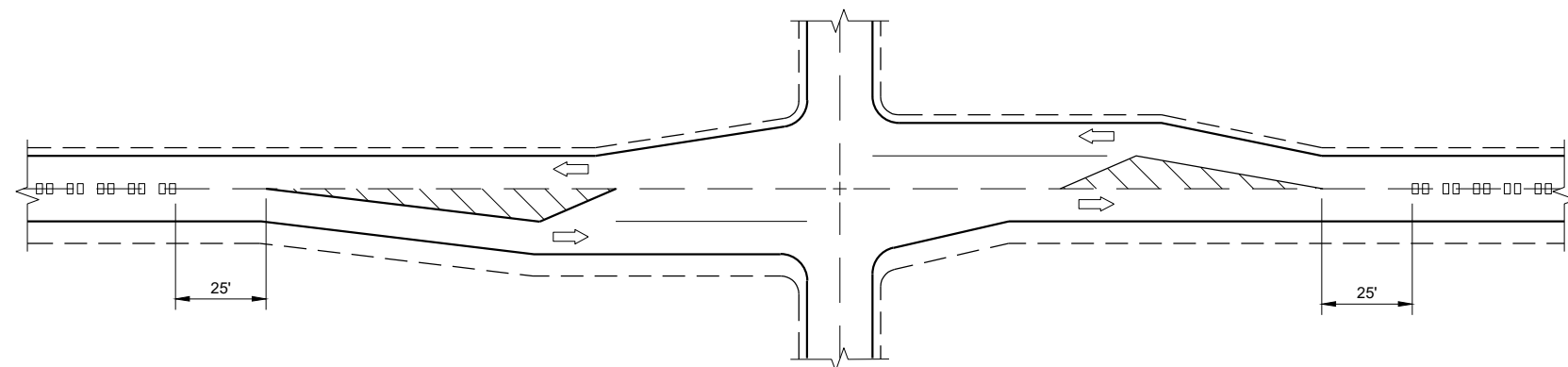
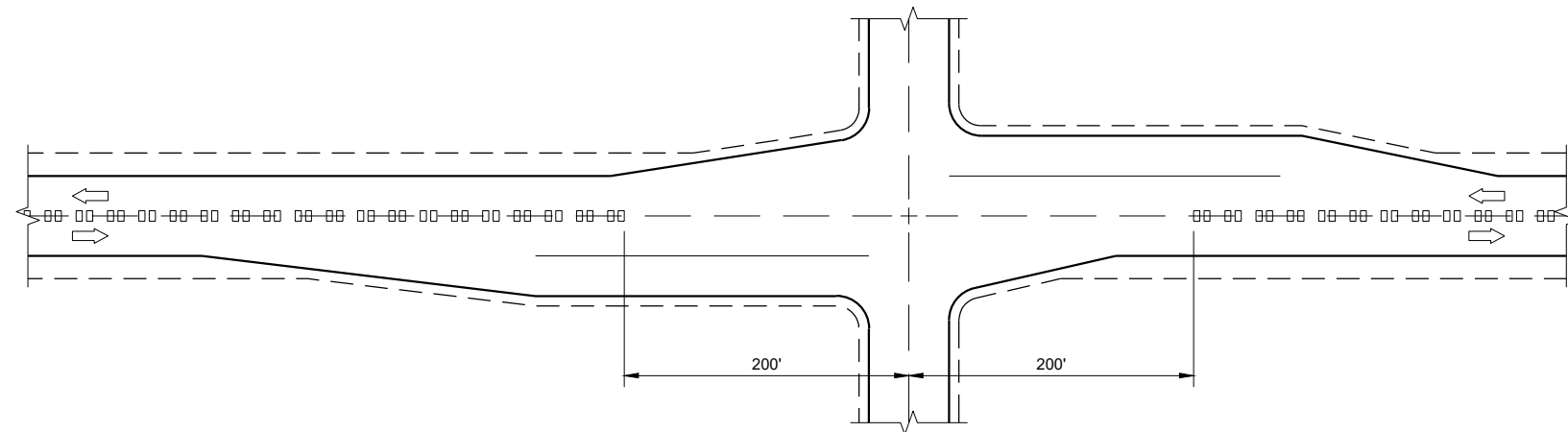
DO NOT MILL SHOULDER GROOVES THROUGH INTERSECTIONS, MARKED CROSSWALKS, NON-MOTORIZED PATH CROSSINGS, ETC. REFER TO SDD 13A11 SHEETS "d" AND "e".

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

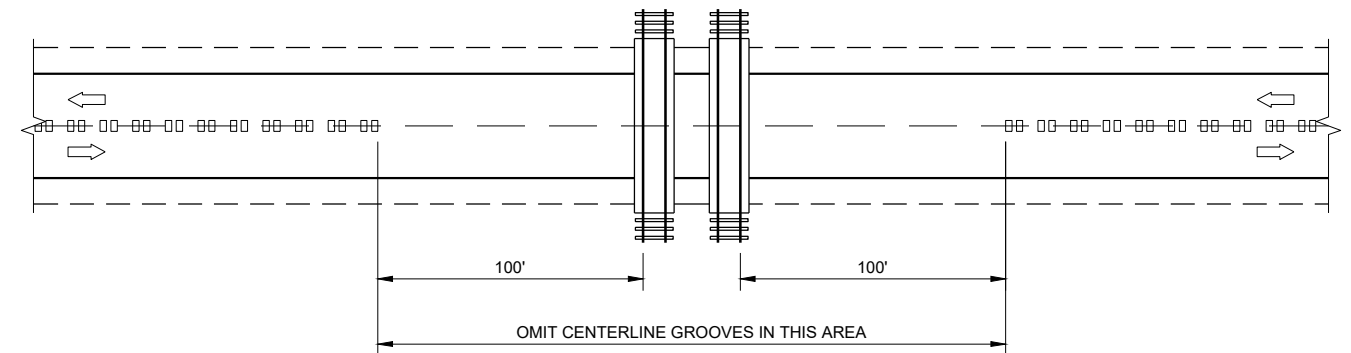
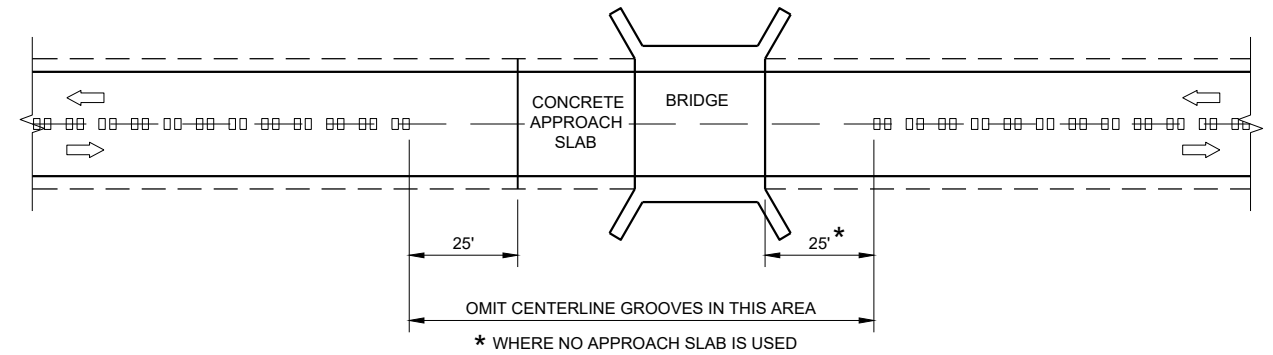


CENTERLINE RUMBLE STRIPS - ASPHALT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



GENERAL NOTES



**CENTER LINE
RUMBLE STRIPS -
INTERSECTIONS, DRIVEWAYS,
BRIDGES, RAIL ROADS**

APPROVED

May 2023

DATE _____

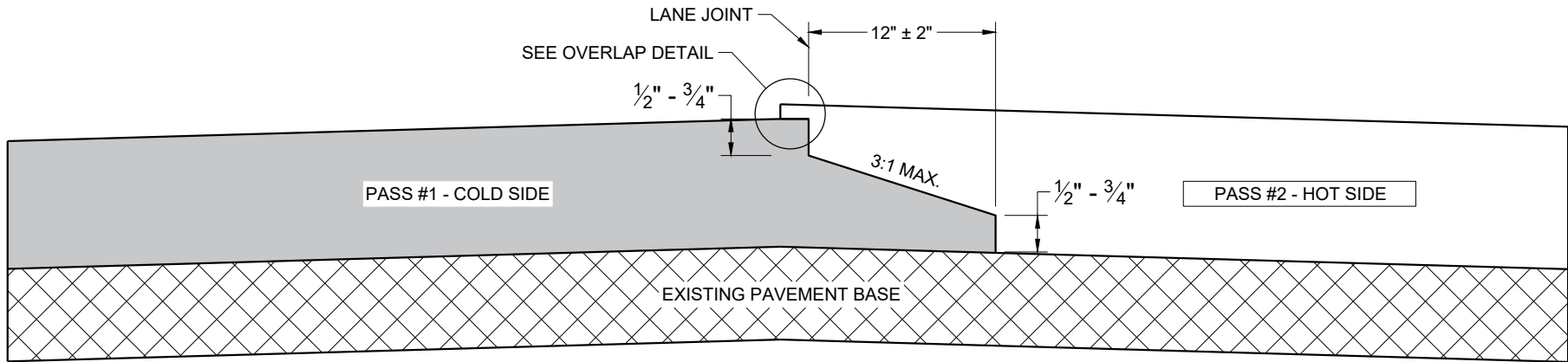
/S/ John Jenkins

ROADWAY STANDARDS DEVELOPMENT 76

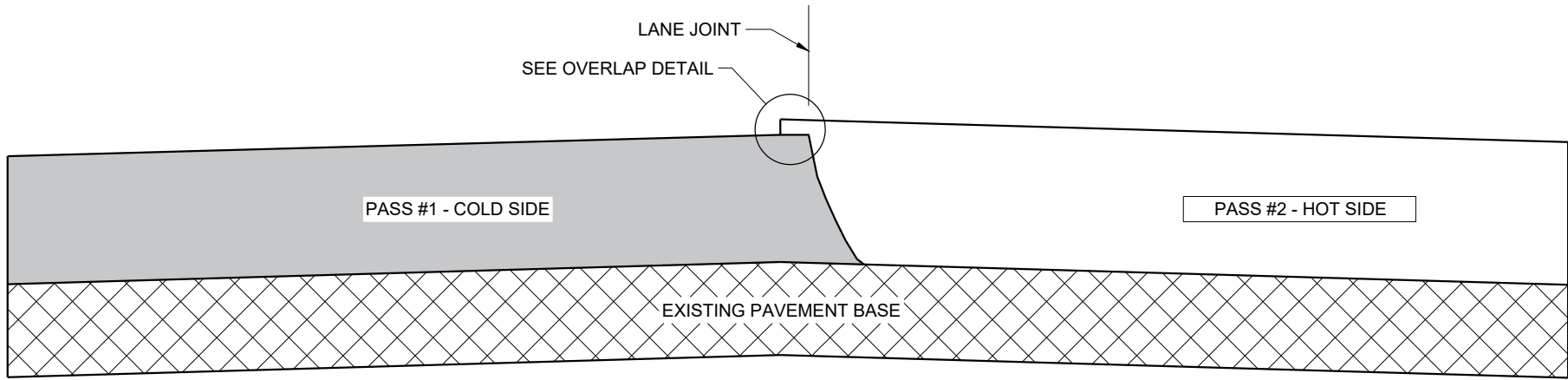
FHWA

STANDARDS DEVELOPMENT 76

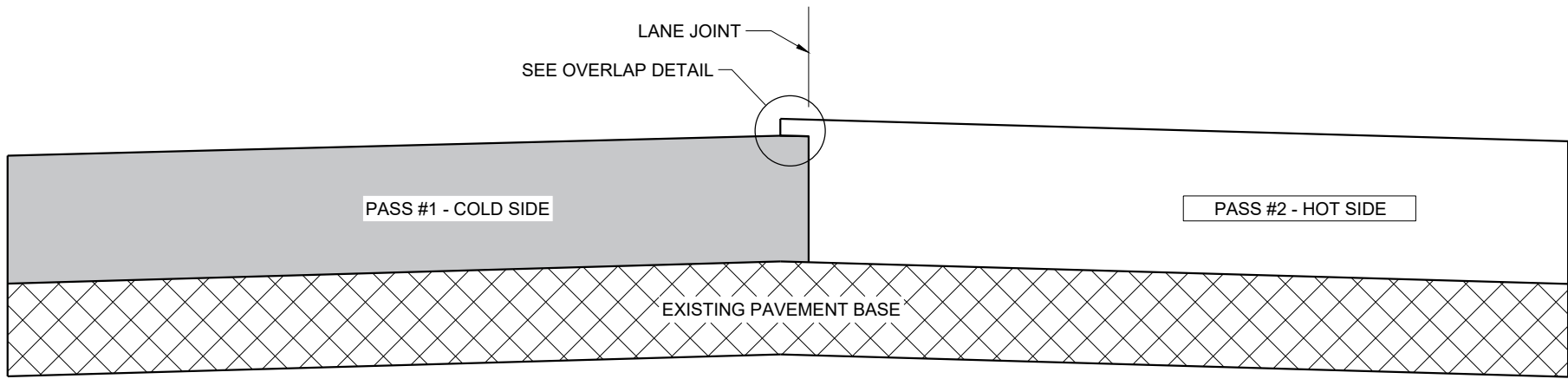
76



**TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT**



**TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT**



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

GENERAL NOTES

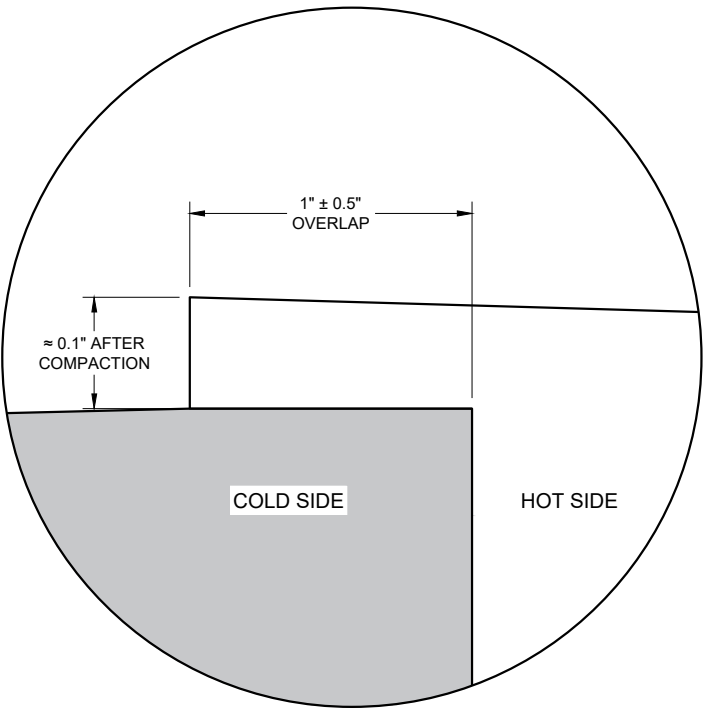
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY 1" ± 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.



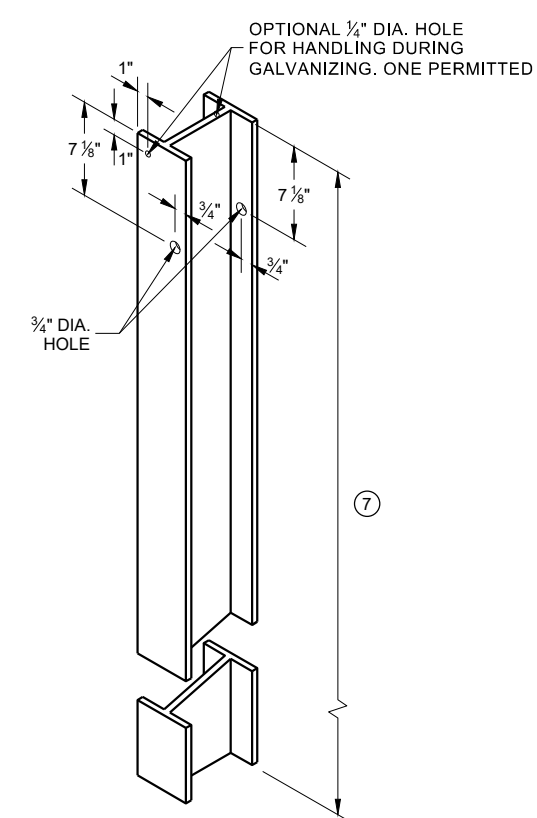
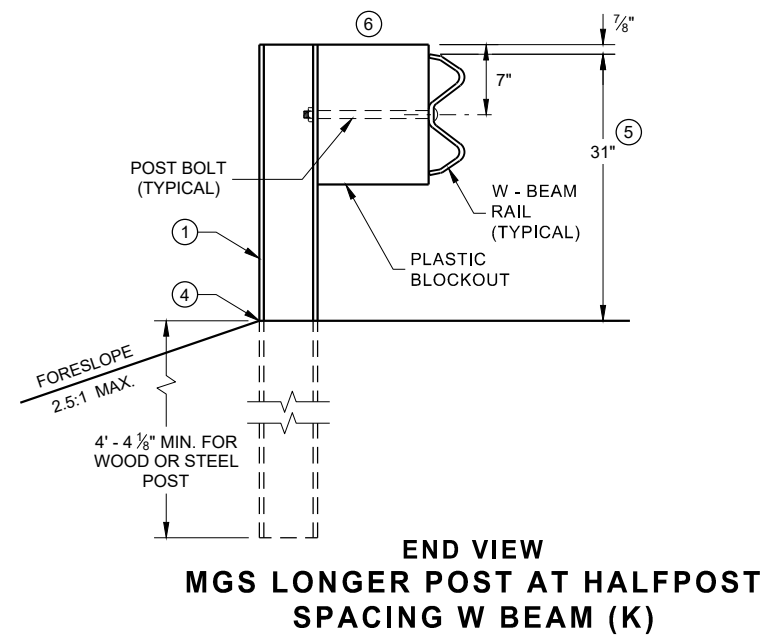
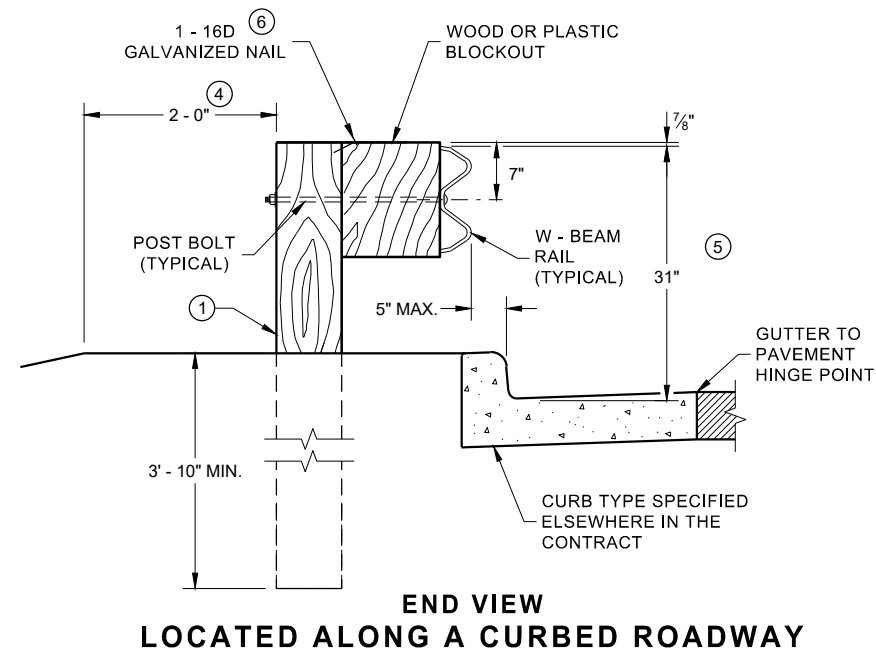
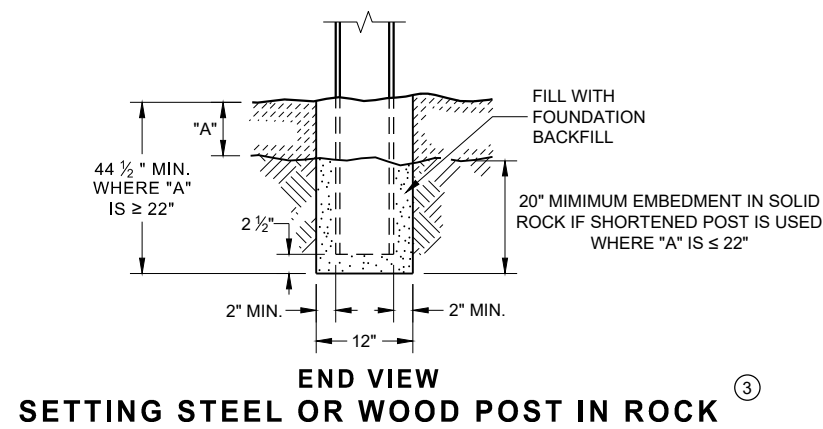
OVERLAP DETAIL (TYPICAL)

HMA LONGITUDINAL JOINTS

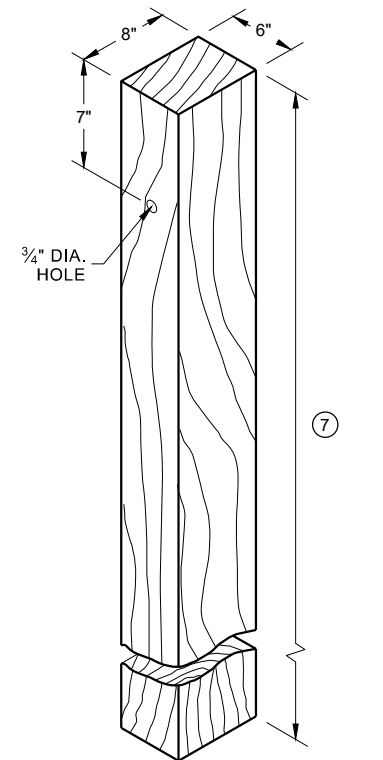
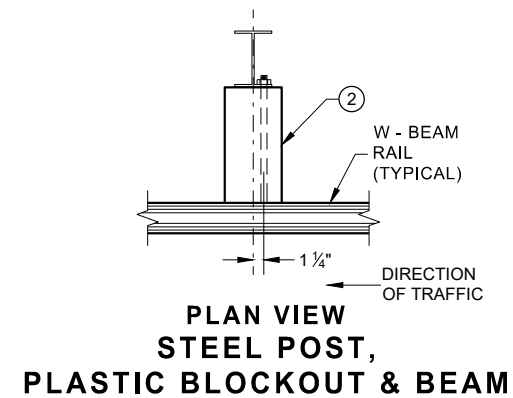
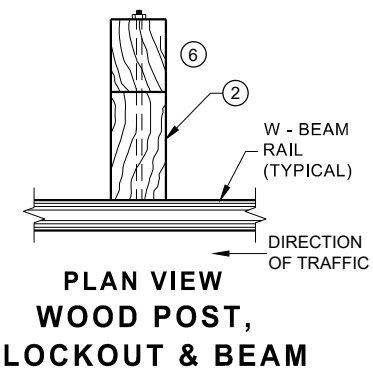
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020 /S/ Steven Hefel
DATE HMA PAVEMENT ENGIN 77
FHWA

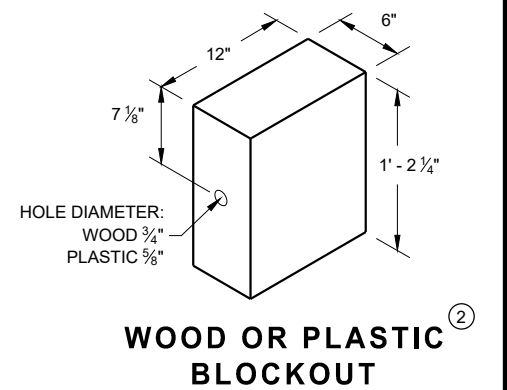
- ① WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.
- ② USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.
- ③ IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.
- ④ WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).
- ⑤ FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS $\pm 1"$. FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 3/4" TO 32".
- ⑥ WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.
- ⑦ TOTAL POST LENGTH FOR TYPE K IS 7' - 0". TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) ①



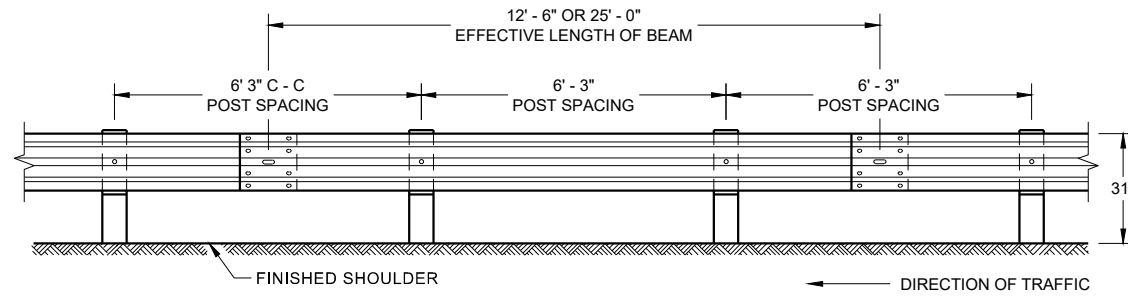
WOOD POST (6" X 8") NOMINAL ①



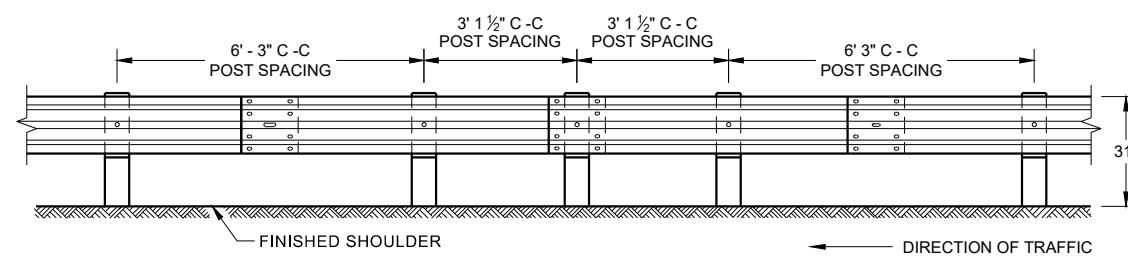
WOOD OR PLASTIC BLOCKOUT ②

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

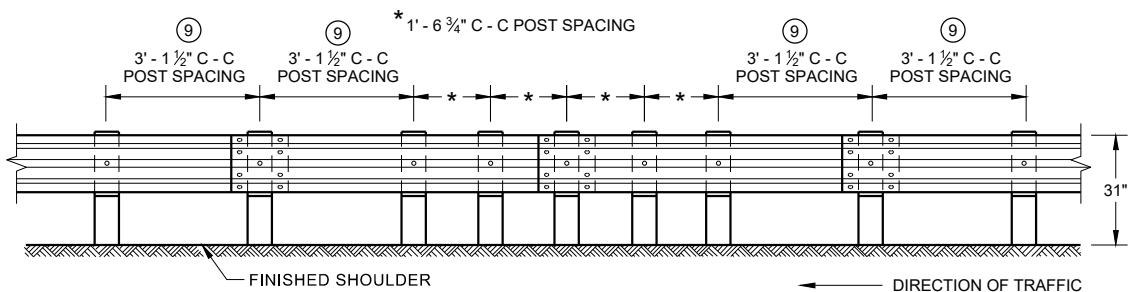
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 78



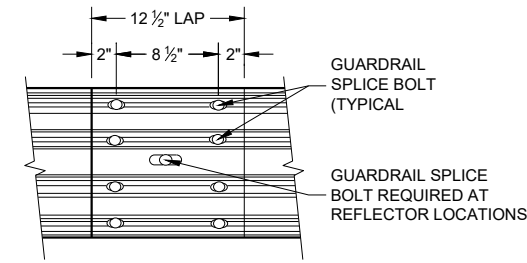
**FRONT VIEW
POST SPACING STANDARD INSTALLATION**



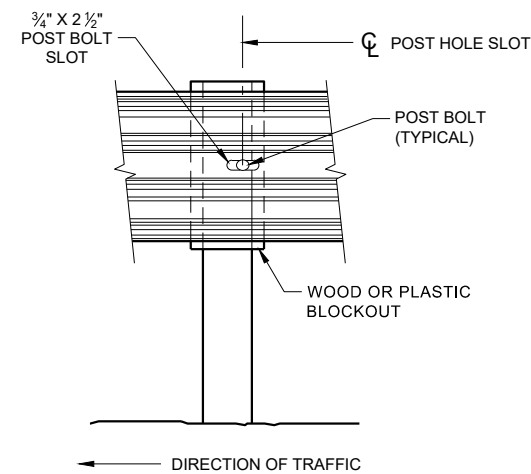
**FRONT VIEW
HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)**



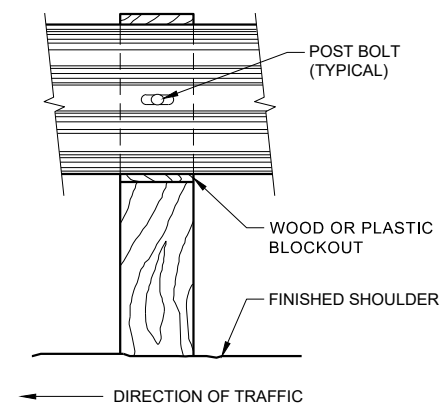
**FRONT VIEW
QUARTER POST SPACING (QS)**



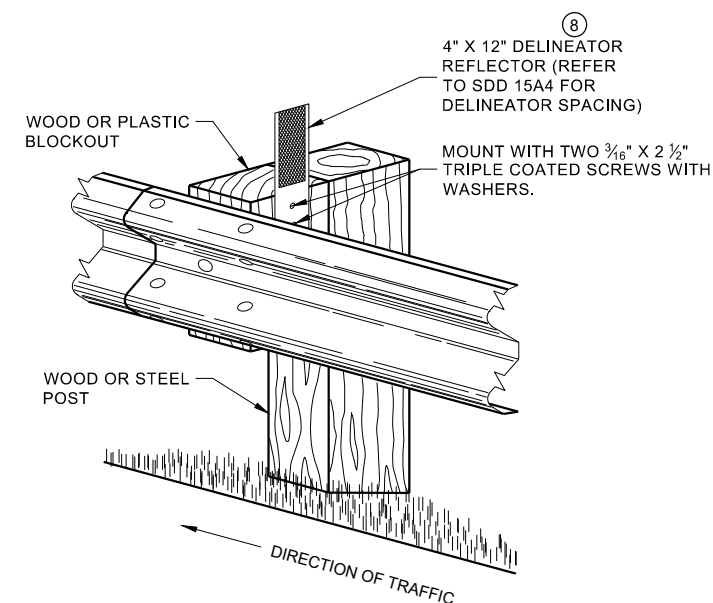
**FRONT VIEW
MID-SPAN BEAM SPLICE**



FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



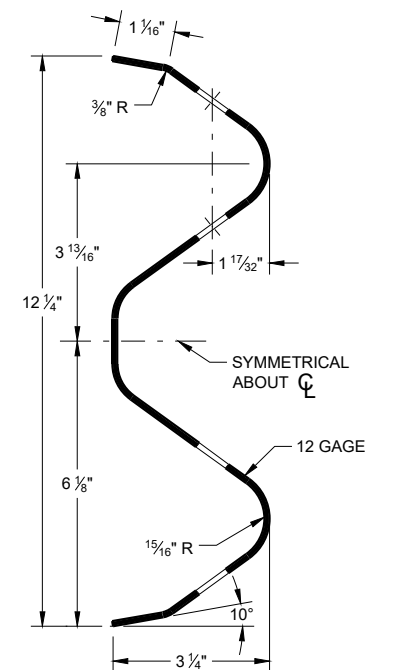
**ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION**

GENERAL NOTES

- 8 DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.
- 9 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

POST BOLTS ARE A $\frac{3}{8}$ " DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES $\frac{3}{8}$ " DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND $\frac{3}{8}$ " DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

GUARD RAIL SPLICE BOLTS ARE A $\frac{3}{8}$ " DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES $\frac{3}{8}$ " DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



SECTION THRU W-BEAM RAIL

**MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 79



NOTE:

-

POST BOLT TABLE

ALTERNATE BOLT HEAD



1" X $\frac{1}{16}$ " DEEP
RECESS BOTH SIDES

$\frac{5}{8}$ " - 11 MODIFIED
HEAVY HEX NUT

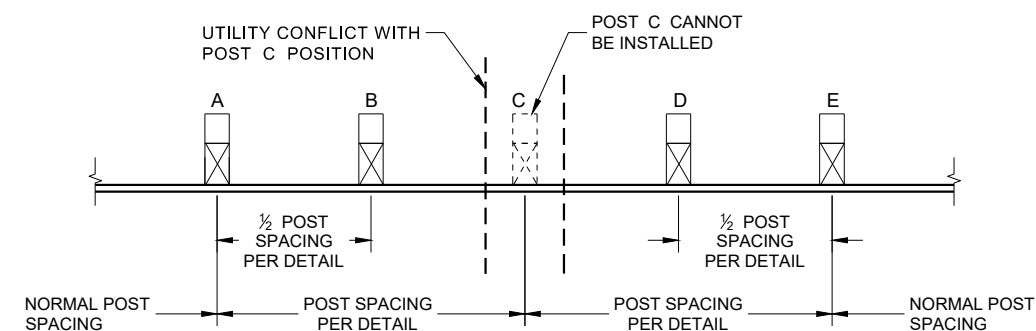
$\frac{1}{16}$ "

1 $\frac{5}{16}$ "

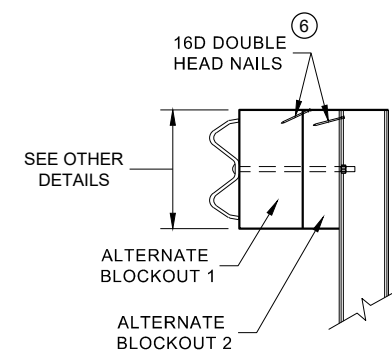
POST BOLT, SPLICE BOLT AND RECESS NUT

-
- A diagram showing a vehicle (represented by a rectangle with diagonal lines) approaching an obstacle (represented by a rectangle with diagonal lines) on a road. The road has a dashed center line. An arrow points to the right, labeled "DIRECTION OF TRAFFIC".

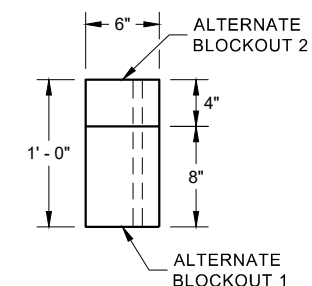
PLAN VIEW
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



SIDE VIEW

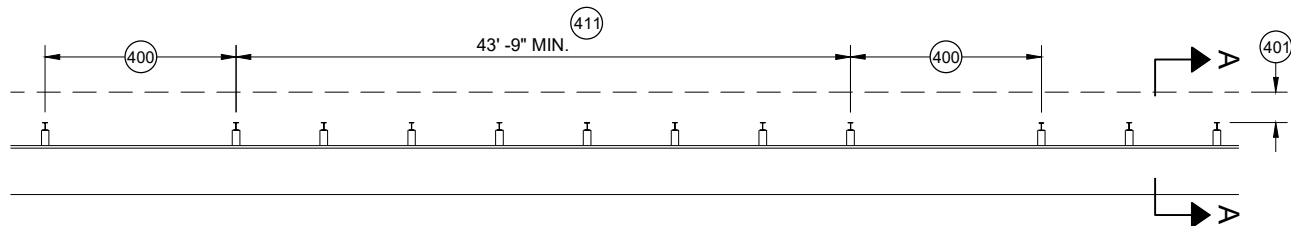


PLAN VIEW

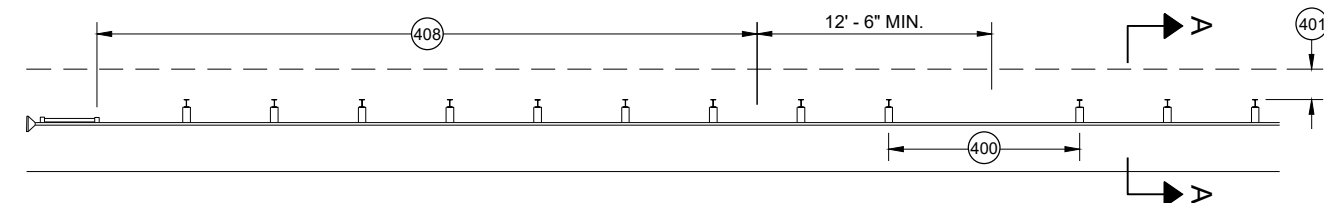
ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

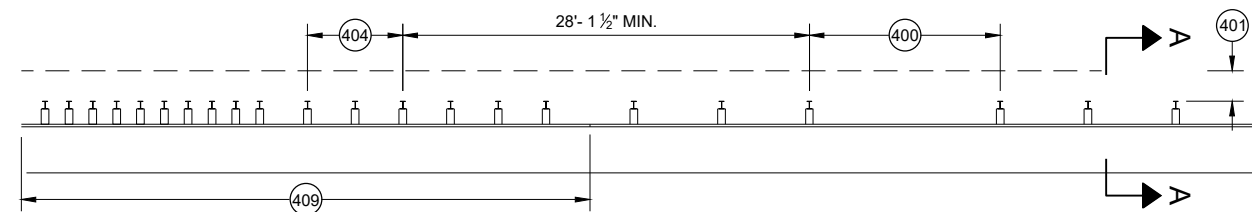
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 80



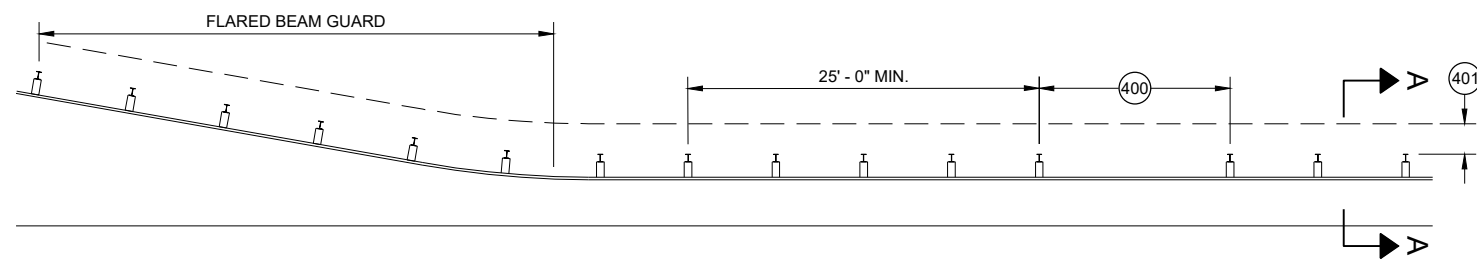
MISSING POST IN MGS GUARDRAIL



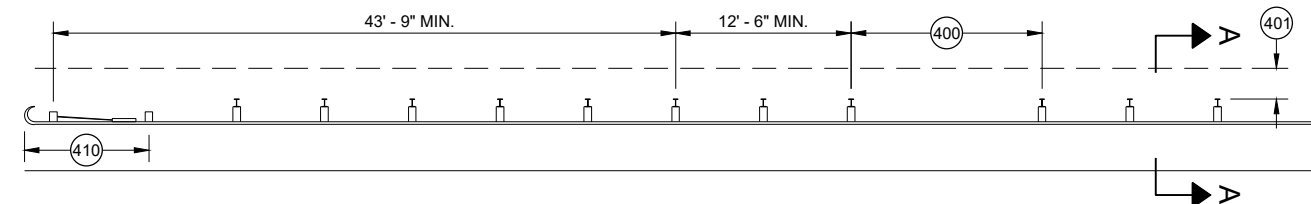
MISSING POST IN MGS GUARDRAIL NEAR EAT



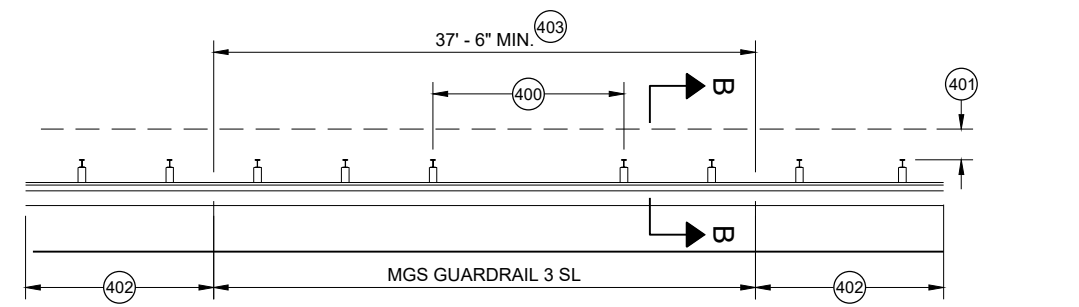
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

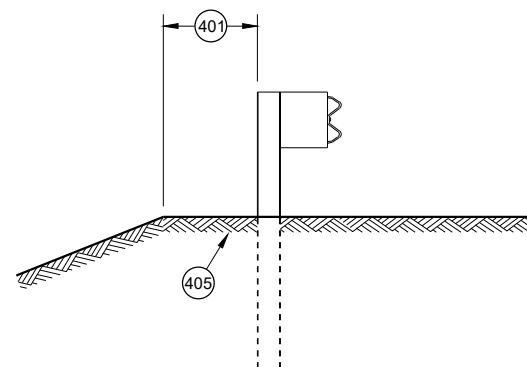


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

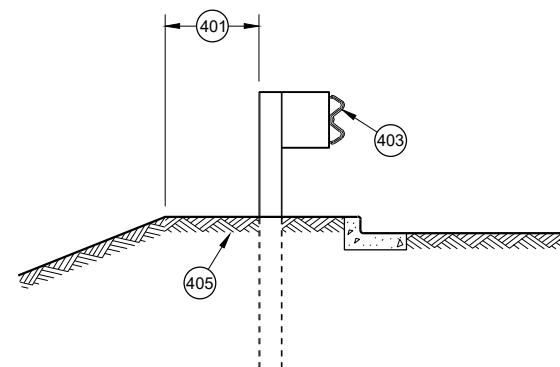


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL)

- (400) MAX SPAN 12' - 6"
- (401) 2' MIN.
- (402) MGS GUARDRAIL 3
- (403) NESTING BEAM GUARD
- (404) ASYMMETRIC TRANSITION
- (405) SOIL WELL DRAINED AND COMPACTED
- (406) SEE OTHER DRAWINGS IN THIS SDD
- (407) SEE OTHER DRAWINGS FOR MIN. SPACING BETWEEN SPANS
- (408) SEE SDD 14B44
- (409) SEE SDD 14B45
- (410) SEE SDD 14B47
- (411) MINIMUM DISTANCE BETWEEN MISSING POST SPANS.



SECTION A - A



SECTION B - B

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2021 DATE	/S/ Rodney Taylor ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA 81	

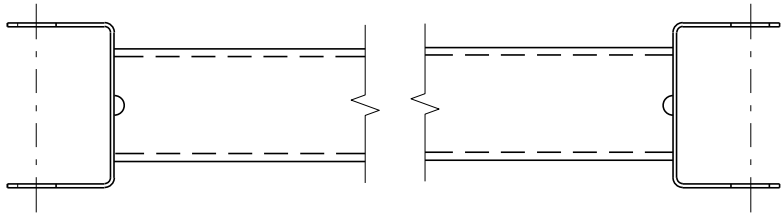
- (A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL) AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.
- (B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED
- (C) DIFFERENT MANUFACTURERS REQUIRE DIFFERENT PERFORATED W - BEAM RAIL END PANELS. SEE MANUFACTURER'S INFORMATION.
- (D) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF - TAPPING SCREWS. ONE SCREW PER CORNER.
- (E) HARDWARE MAY VARY BETWEEN MANUFACTURER. SEE MANUFACTURER'S DRAWING FOR INFORMATION.

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

THE CENTER OF THE UPPER 3 1/2" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.

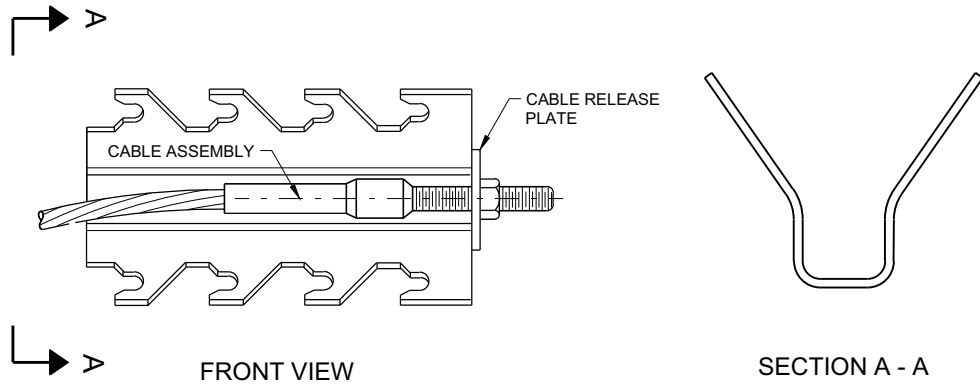


STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 82

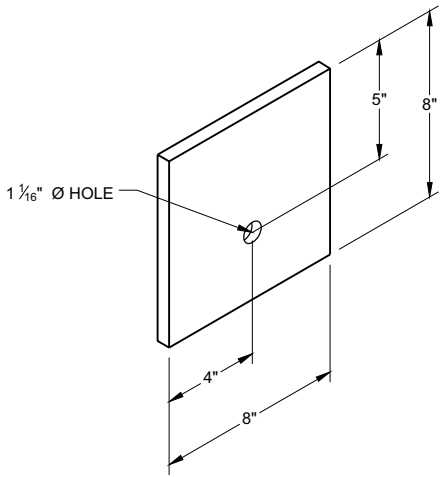


GENERIC GROUND STRUT 9 E

BILL OF MATERIALS	
PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.
1	UPPER POST NO. 1 6" X 6" TUBE
2	LOWER POST NO. 1
3	WOOD CRT
4	WOOD BLOCKOUT
5	PIPE SLEEVE
6	BEARING PLATE
7	BCT CABLE ASSEMBLY
8	ANCHOR CABLE BOX
9	GROUND STRUT
10	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
11	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
12	IMPACT HEAD
13	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)
14	SOIL PLATE
15	UPPER POST NO. 2
16	LOWER POST NO. 2



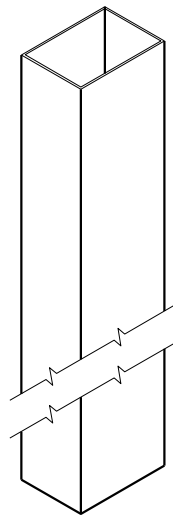
GENERIC ANCHOR CABLE BOX 9 E



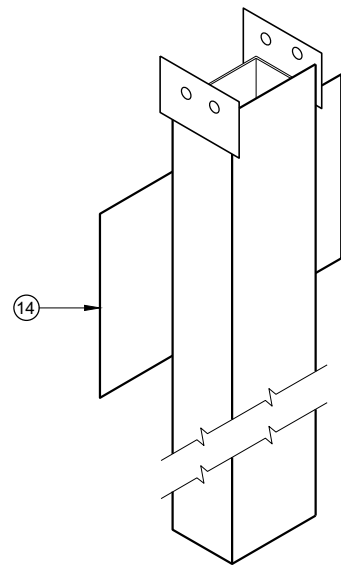
BEARING PLATE 6 E

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

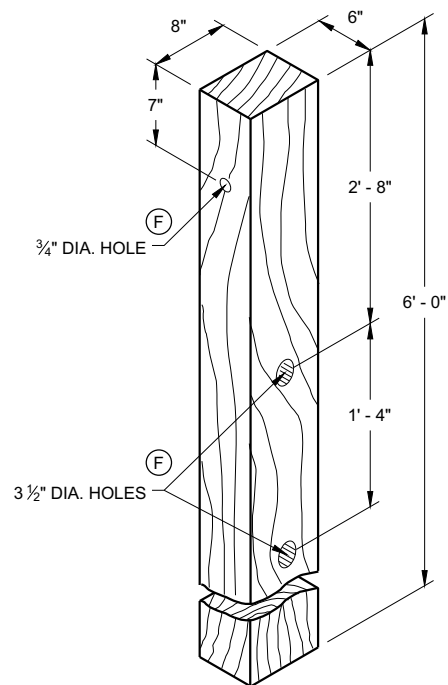
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



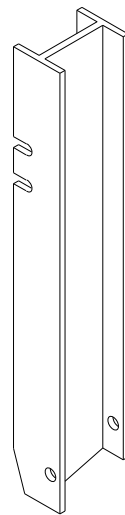
UPPER POST NO. 1 ⁽¹⁾ (E)



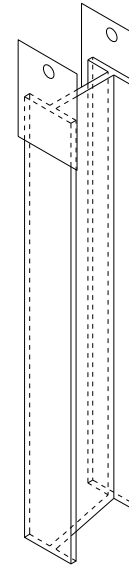
LOWER POST NO. 1 ⁽²⁾ (E)



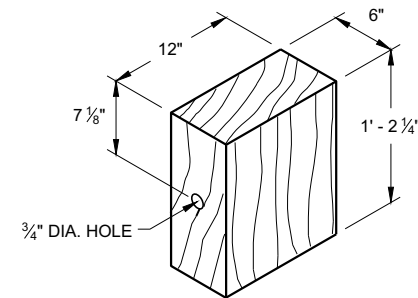
WOOD CRT POST ⁽³⁾ (E)
POSTS NUMBER 3-9



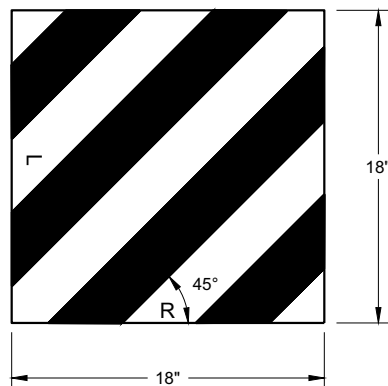
UPPER POST NO. 2 ⁽¹⁵⁾ (E)



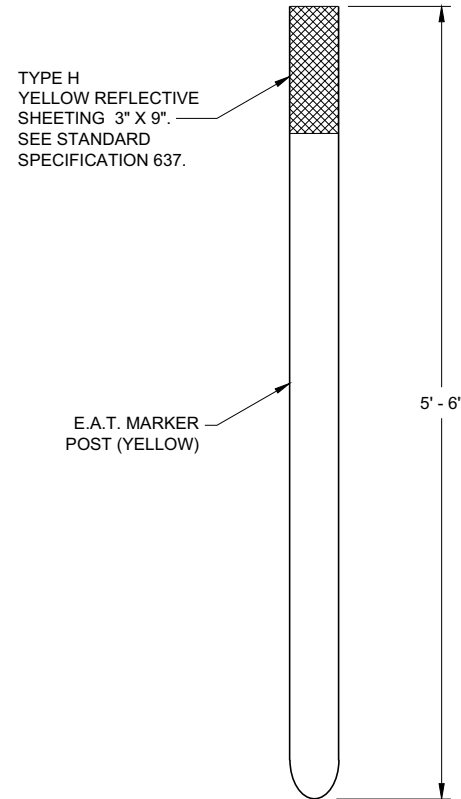
LOWER POST NO. 2 ⁽¹⁶⁾ (E)



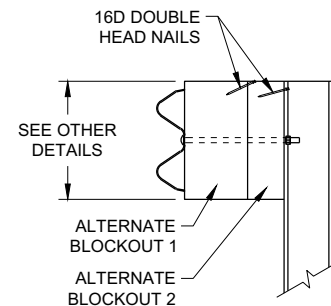
WOOD BLOCKOUT ⁽⁴⁾
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



REFLECTIVE SHEETING DETAIL ^(E)

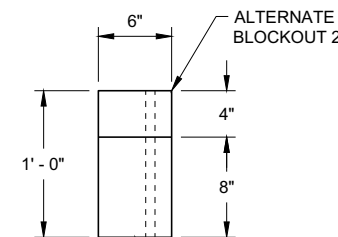


E.A.T. MARKER POST ⁽¹³⁾



SIDE VIEW

ALTERNATE WOOD
BLOCKOUT DETAIL

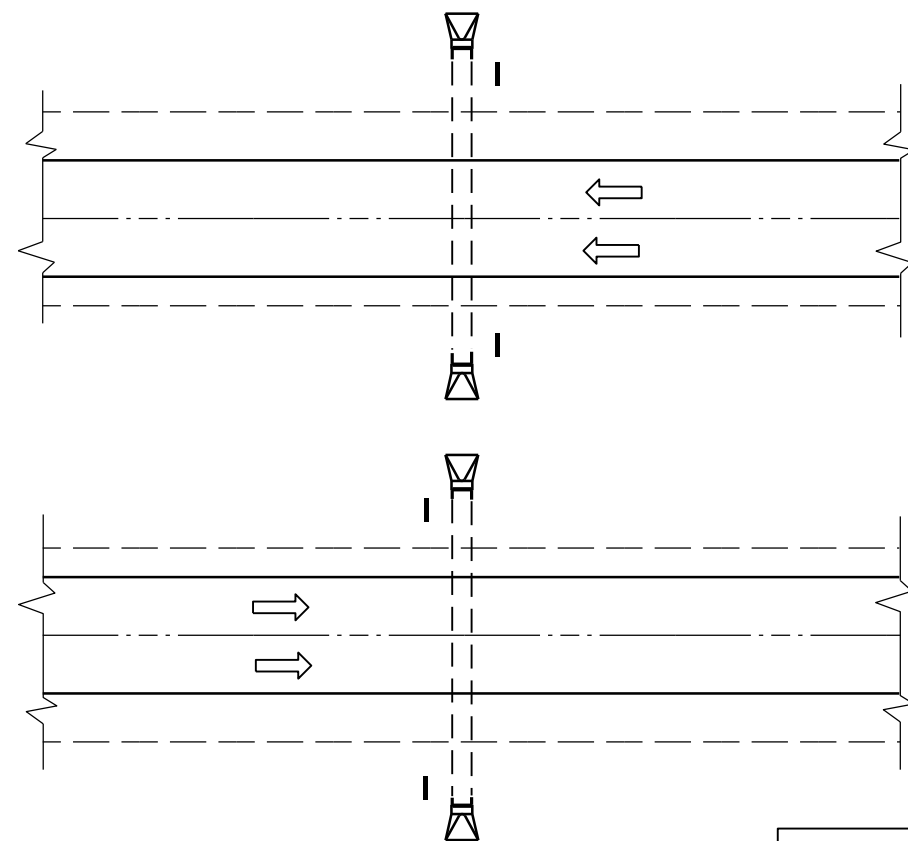


TOP VIEW

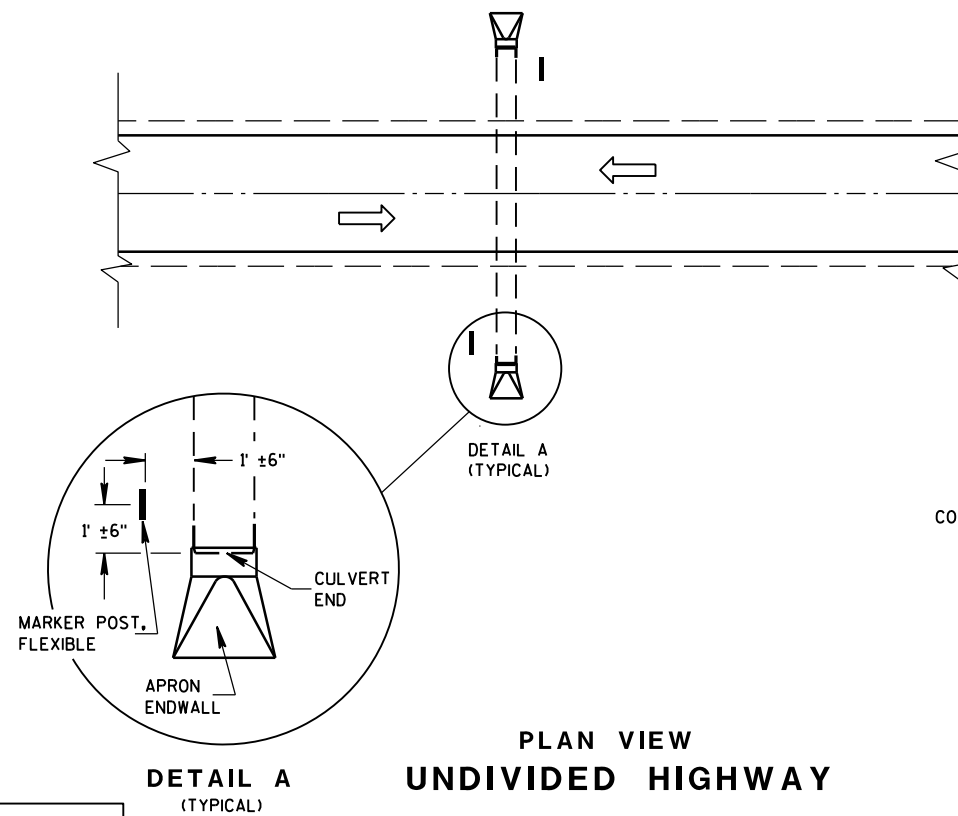
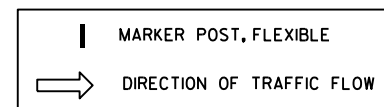
**MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 DATE /S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA



PLAN VIEW
DIVIDED HIGHWAY

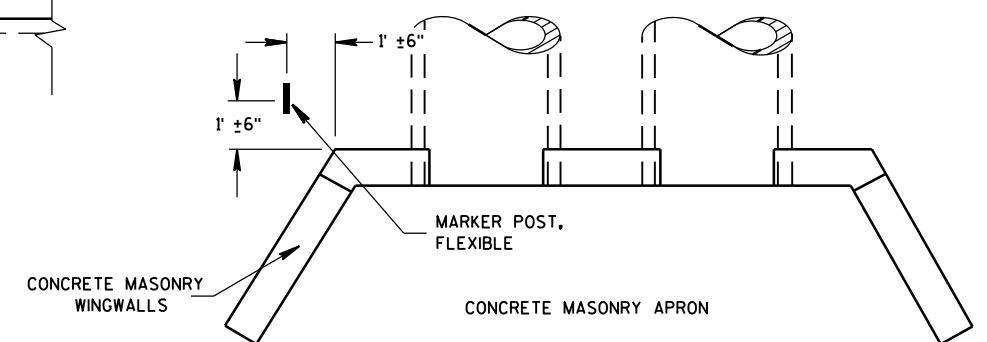


PLAN VIEW
UNDIVIDED HIGHWAY

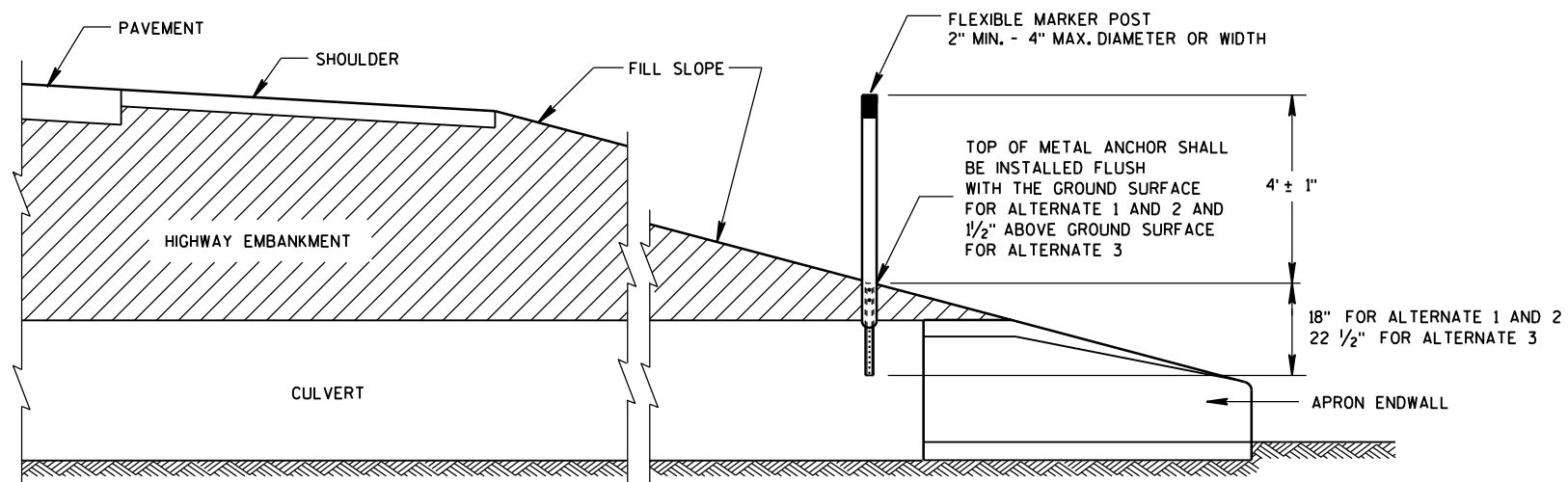
FLEXIBLE MARKER POST LOCATION

GENERAL NOTES

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



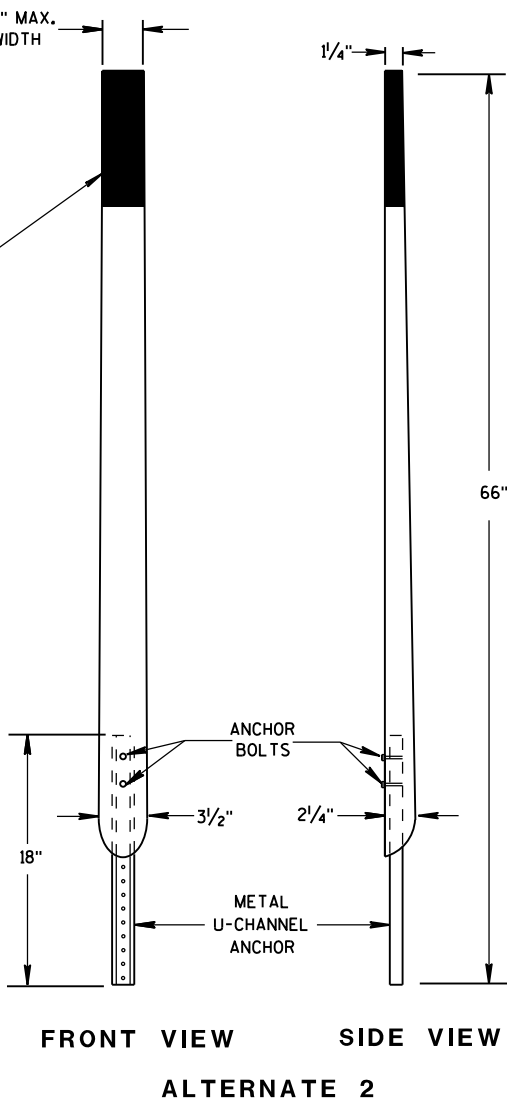
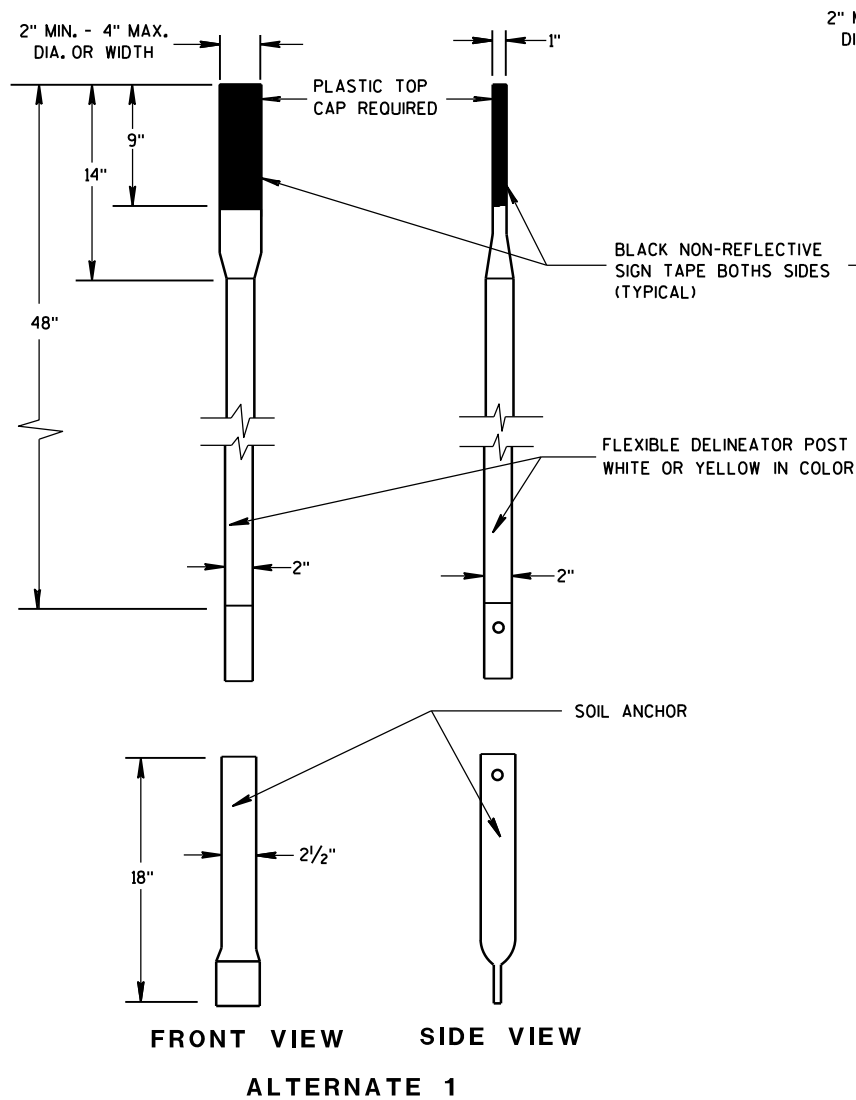
PLAN VIEW
CONCRETE MASONRY ENDWALLS FOR
CULVERT PIPE AND PIPE ARCH



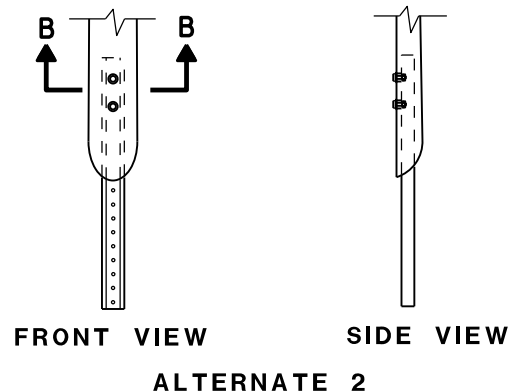
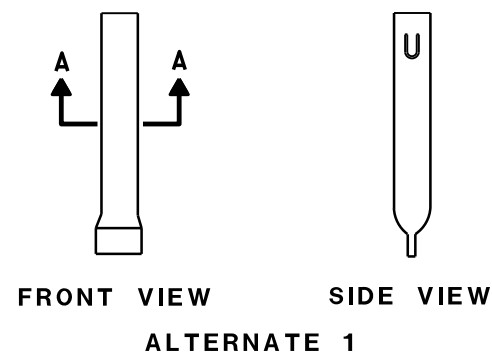
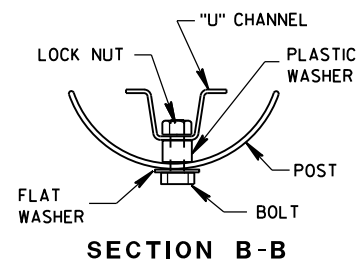
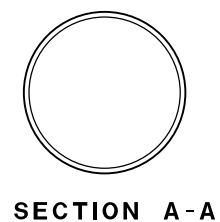
CROSS SECTION
FLEXIBLE MARKER POST

FLEXIBLE MARKER POST
FOR CULVERT END

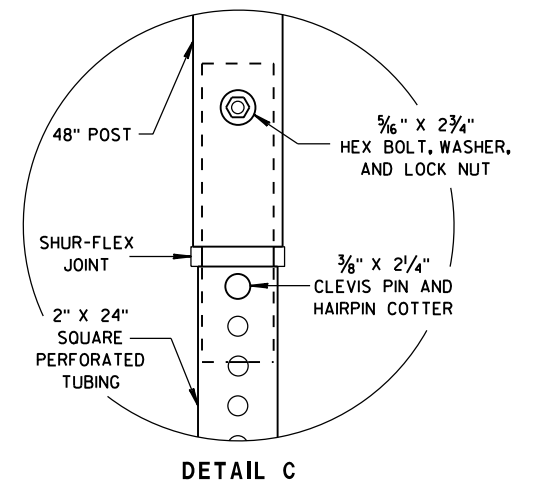
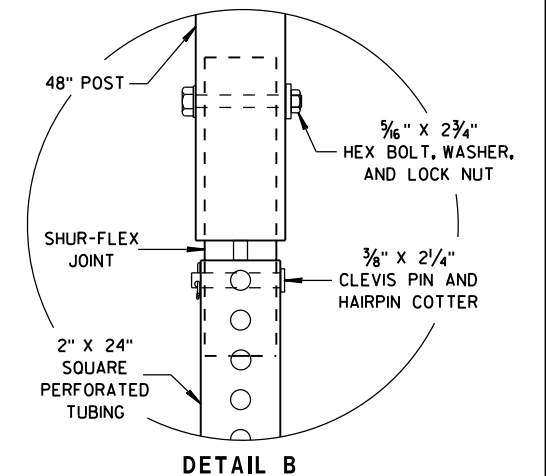
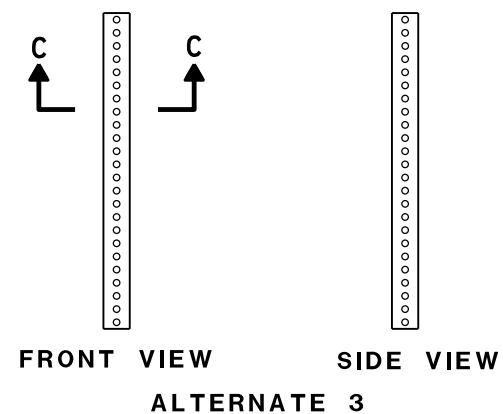
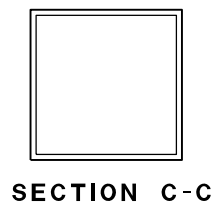
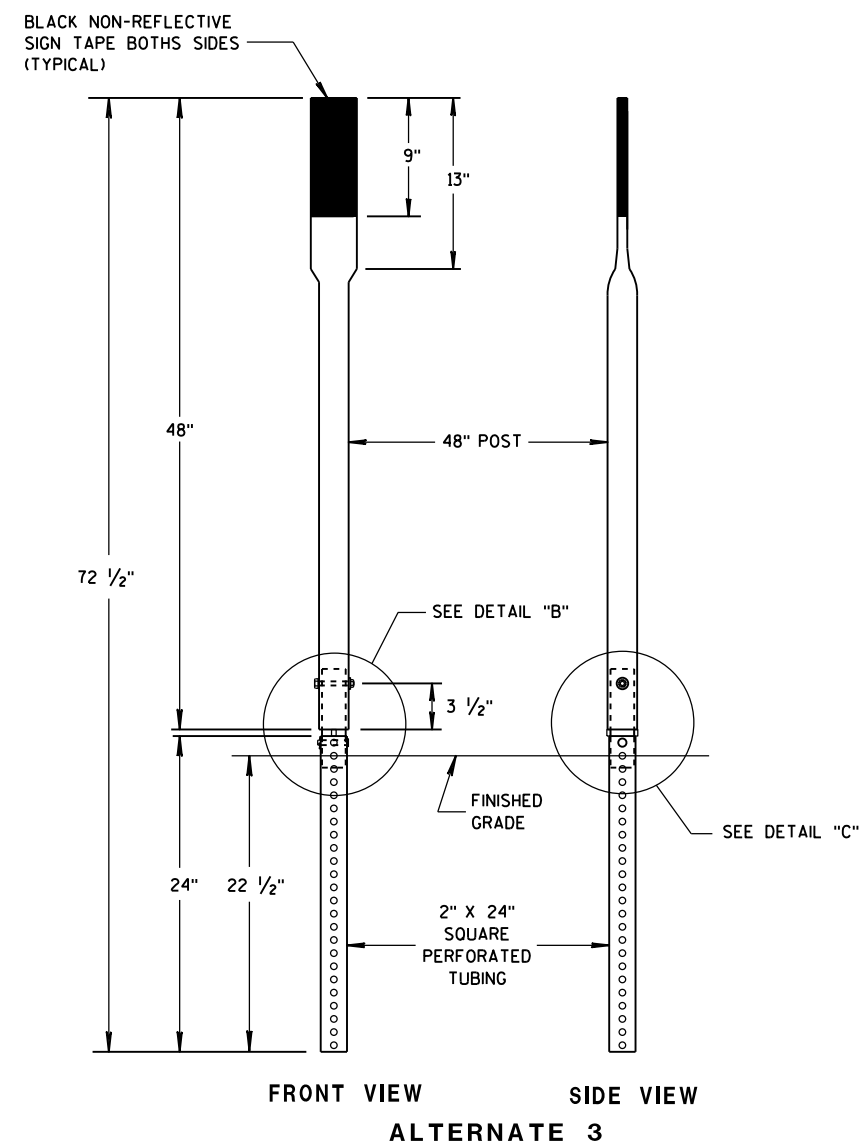
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



FLEXIBLE MARKER POSTS



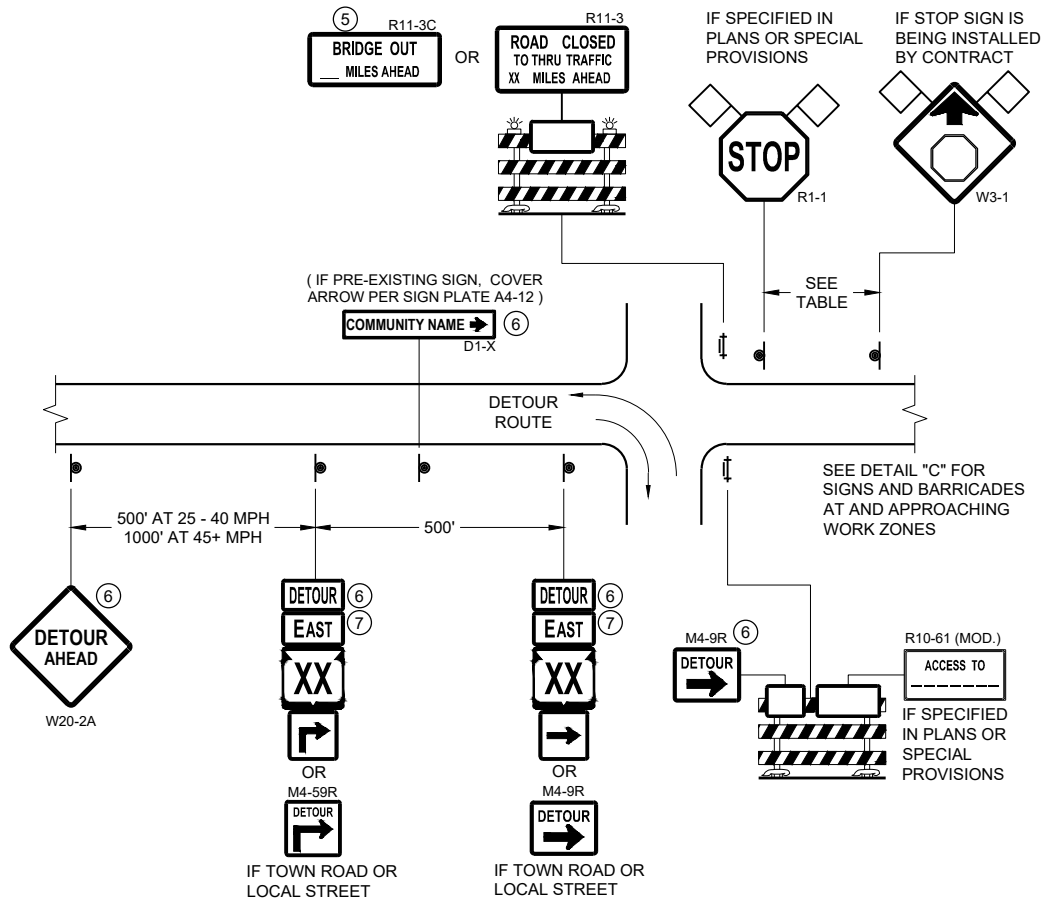
FLEXIBLE MARKER POST ANCHORS



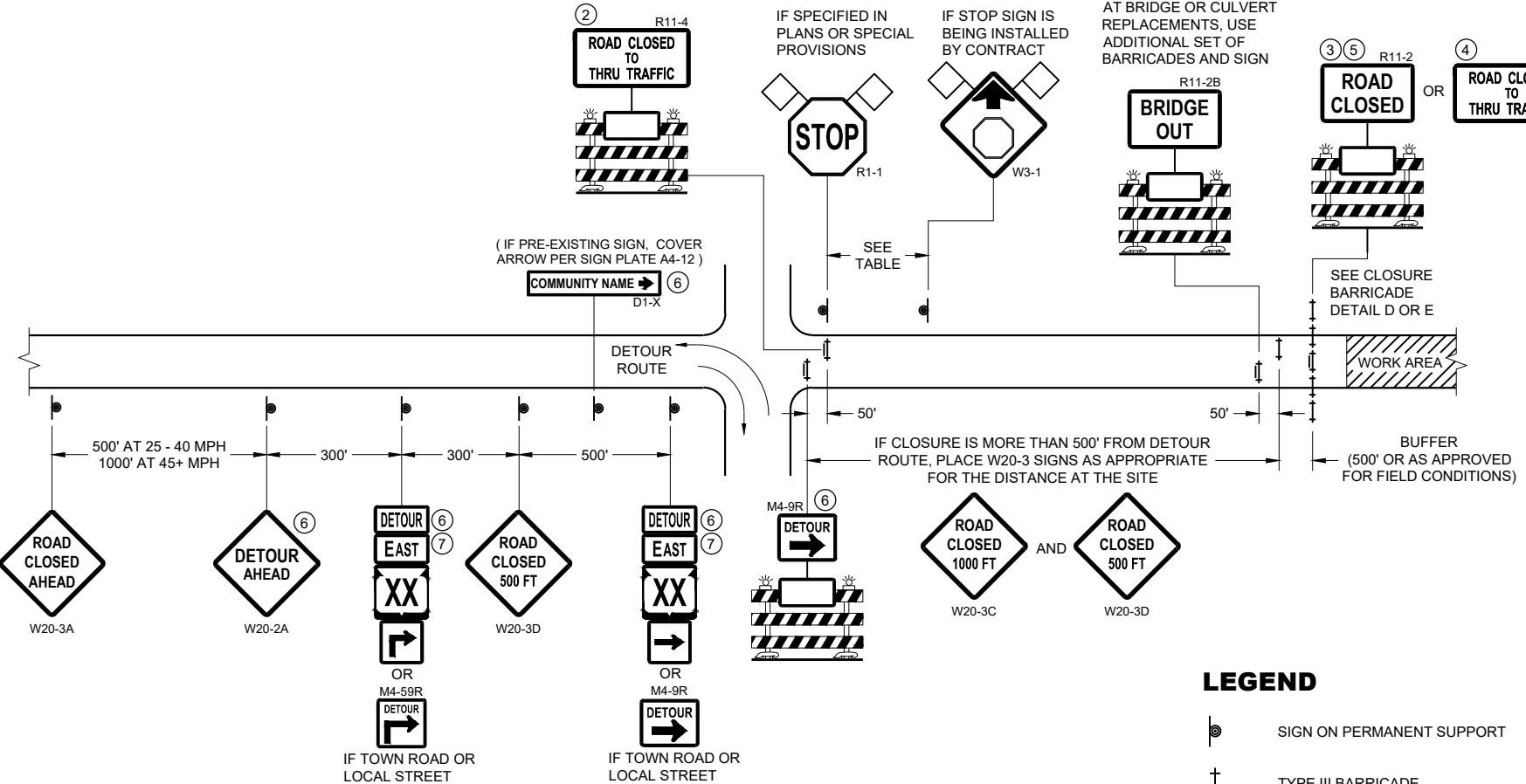
FLEXIBLE MARKER POST FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

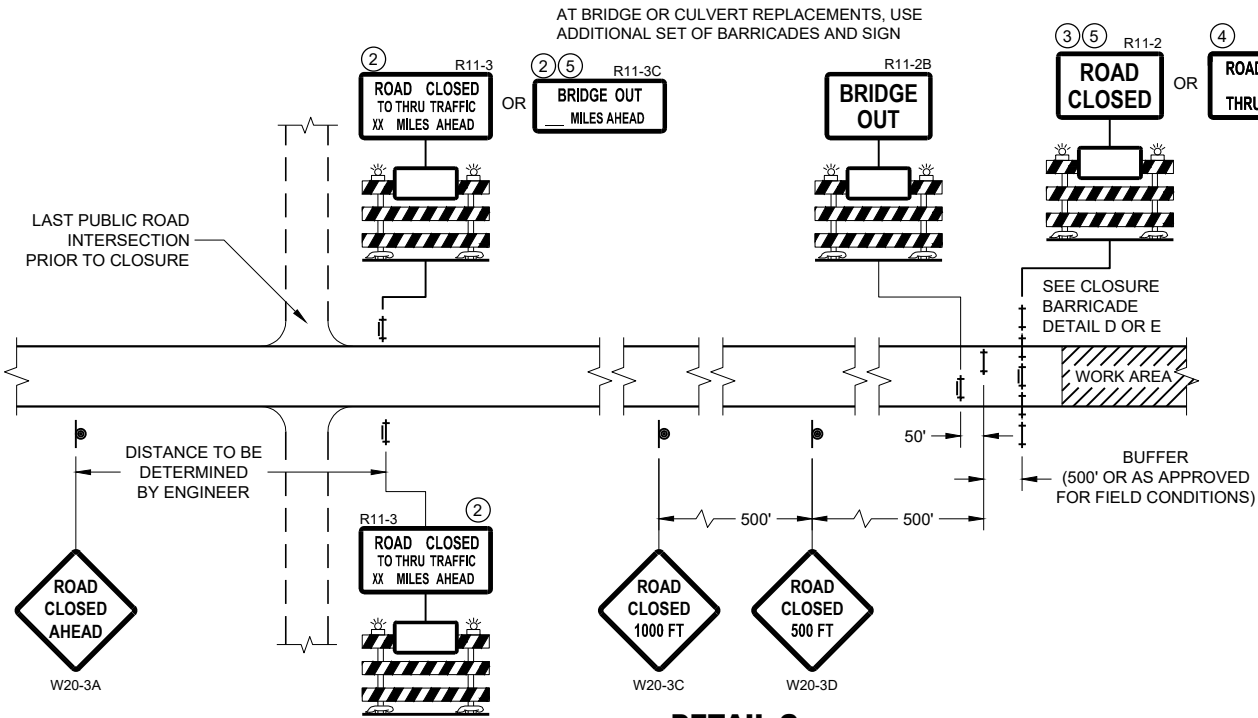
APPROVED
10/1/2012 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINEER 86 IGN
FHWA



DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM
DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE LESS THAN ½ MILE FROM
DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

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

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

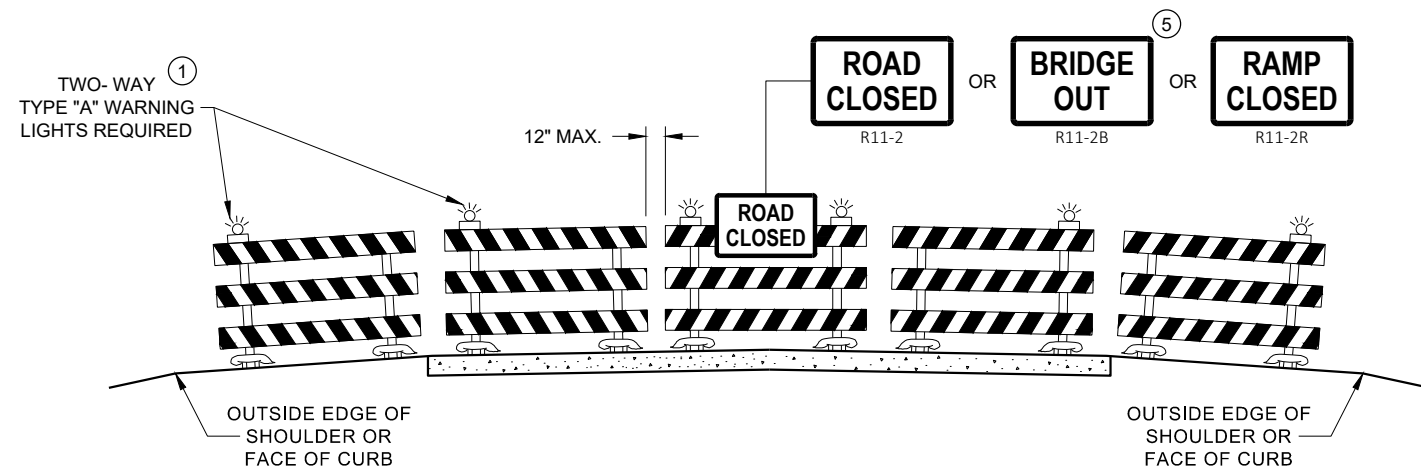
LEGEND

- 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)
- DETOUR M4 - 8
- EAST M3 - X
- XX M1 - 4 OR XX M1 - 6 OR COUNTY M1 - 5A
- OR M05 - 1 OR M06 - 1

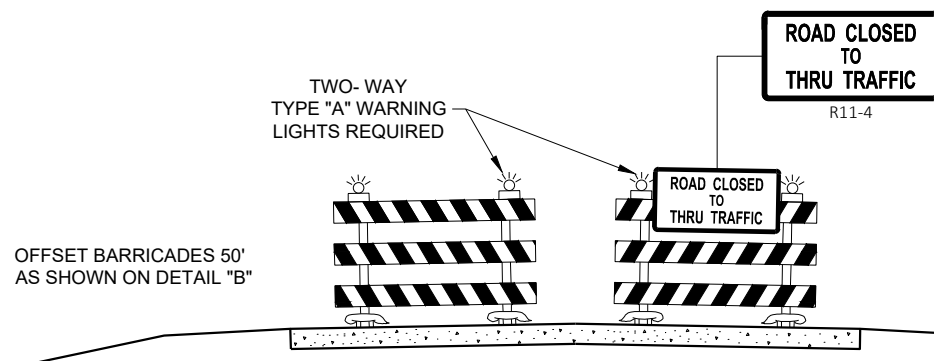
**BARRICADES AND SIGNS
FOR MAINLINE CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 87
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:

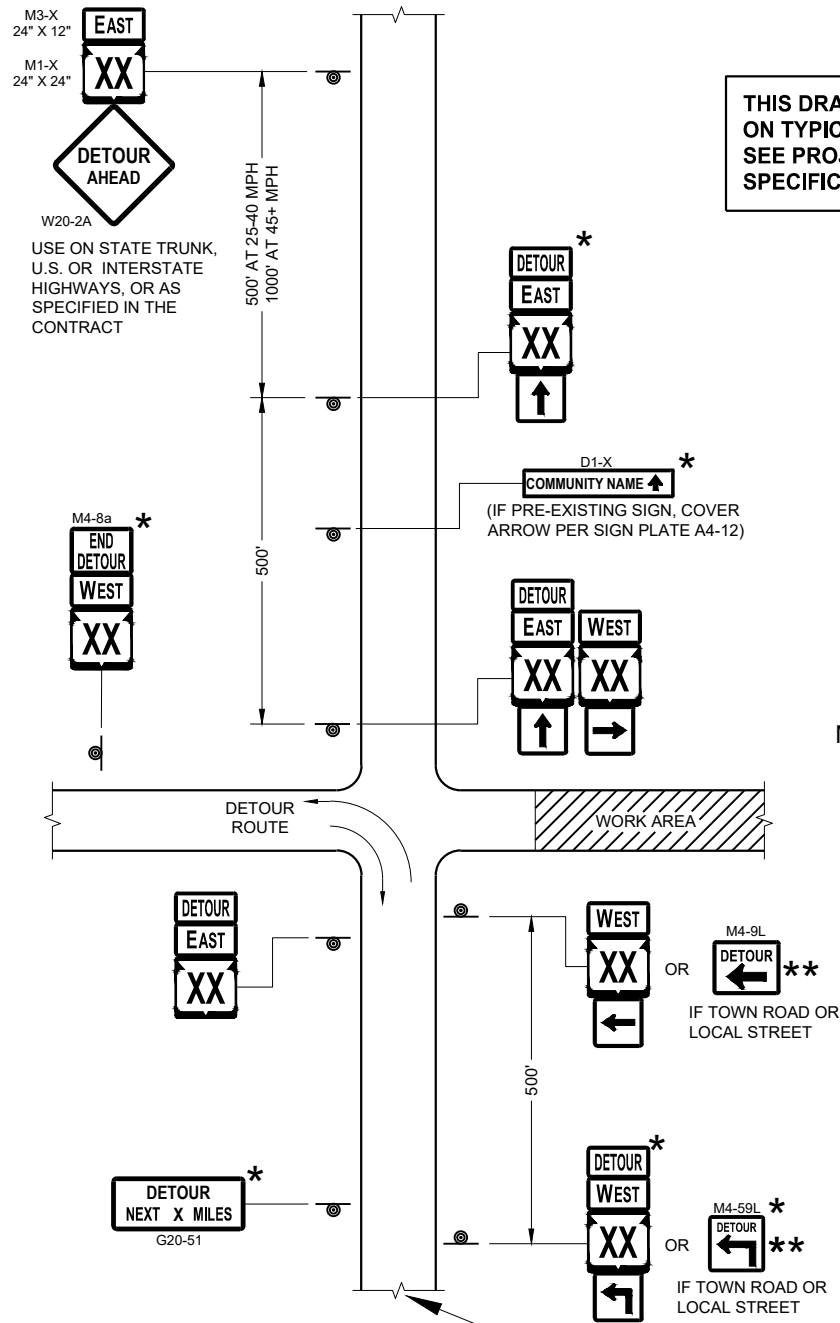
- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE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

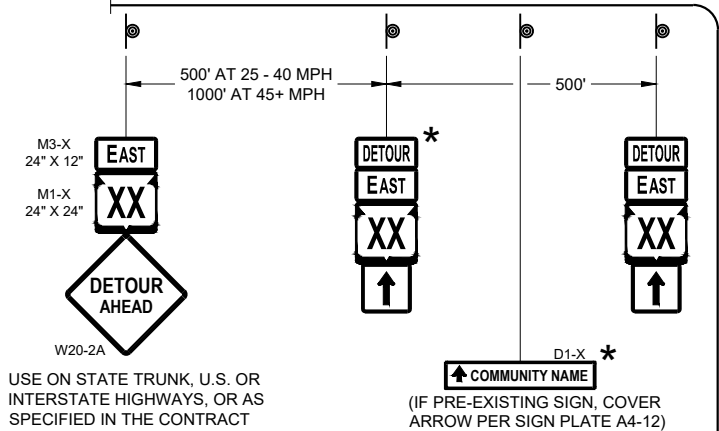
APPROVED
May 2023 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 88
FHWA



SEE SPECIFIC PROJECT DETOUR
SIGNING DETAIL SHEETS AND
DETAIL A OR B ON SDD SHEET 15C02 - SHEET "a"

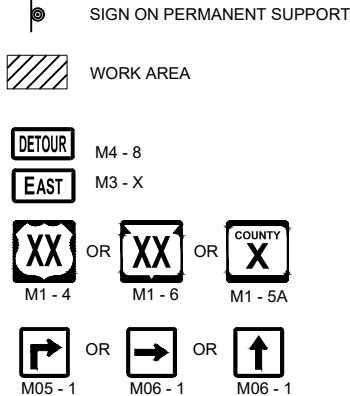
THIS DRAWING PROVIDES GENERAL GUIDANCE
ON TYPICAL DETOUR SIGN LAYOUT AND SPACING.
SEE PROJECT DETOUR SIGNING SHEETS FOR
SPECIFIC DETAILS FOR EACH PROJECT.

MATCH POINT



DETAIL F
DETOUR SIGNING

LEGEND



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.

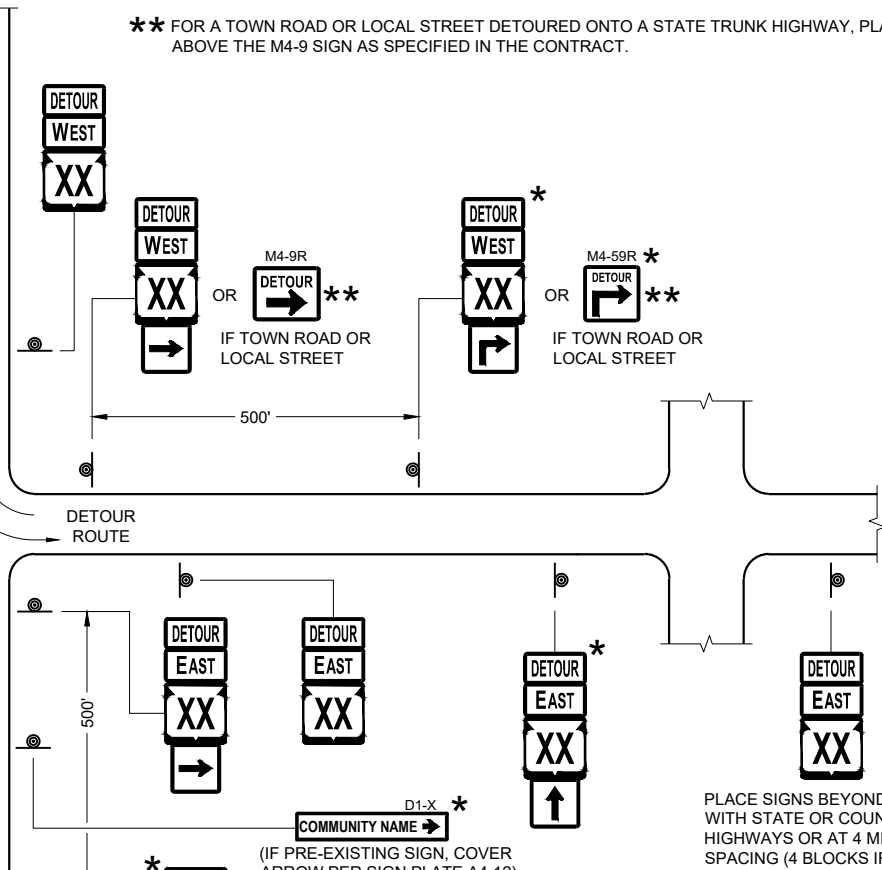
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

"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.



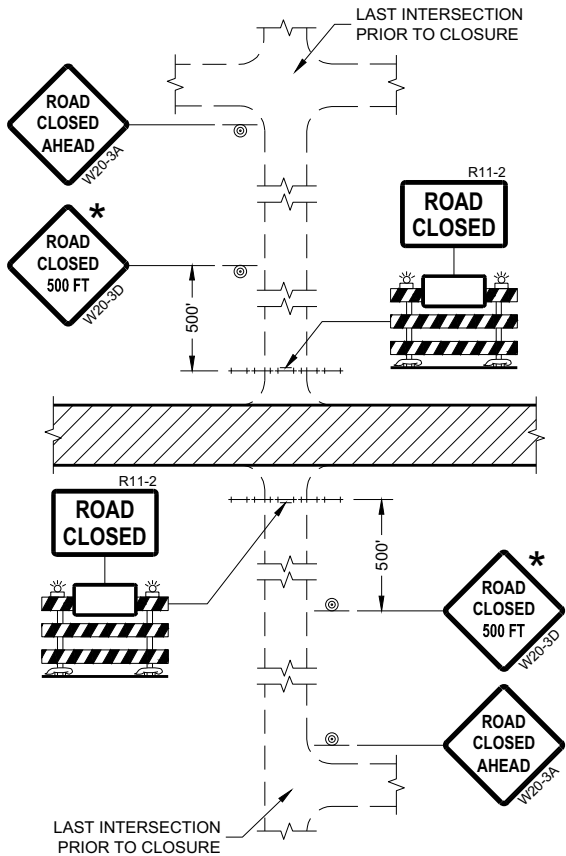
PLACE SIGNS BEYOND INTERSECTIONS
WITH STATE OR COUNTY TRUNK
HIGHWAYS OR AT 4 MILE MAXIMUM
SPACING (4 BLOCKS IF URBAN AREA)

DETOUR SIGNING
FOR MAINLINE CLOSURES

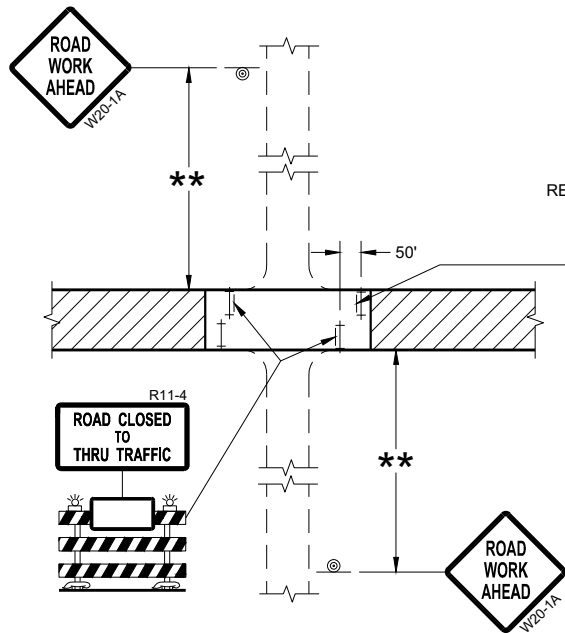
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 89

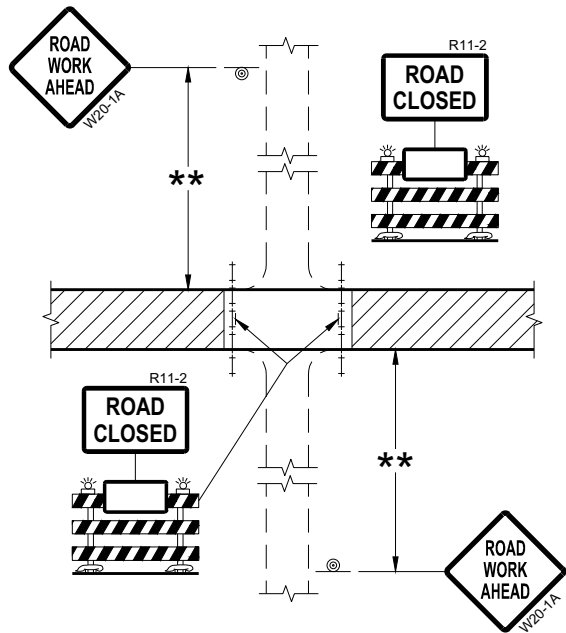
FHWA



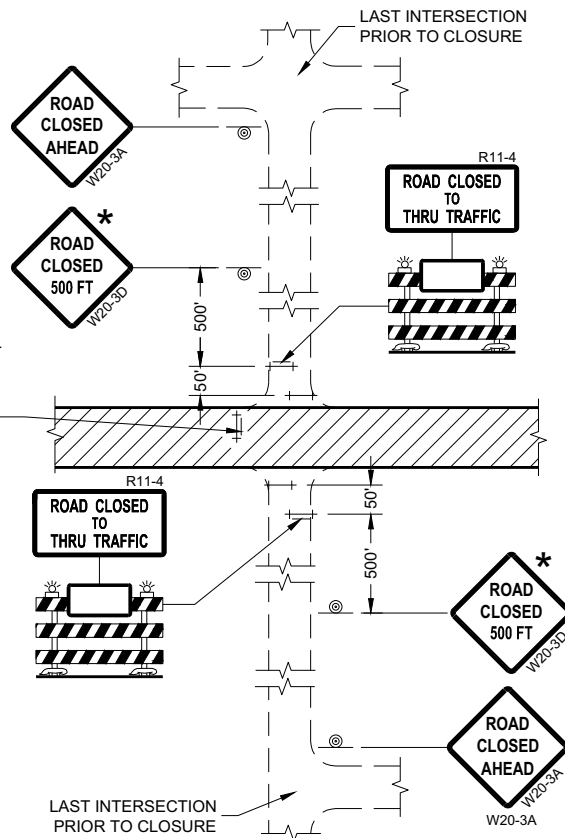
DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED.
CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)



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



DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

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

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

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE (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

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 90

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.

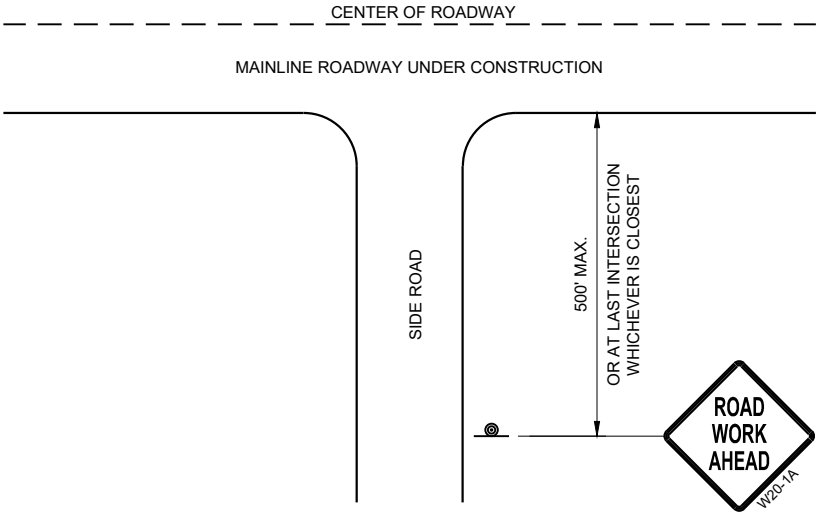
SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

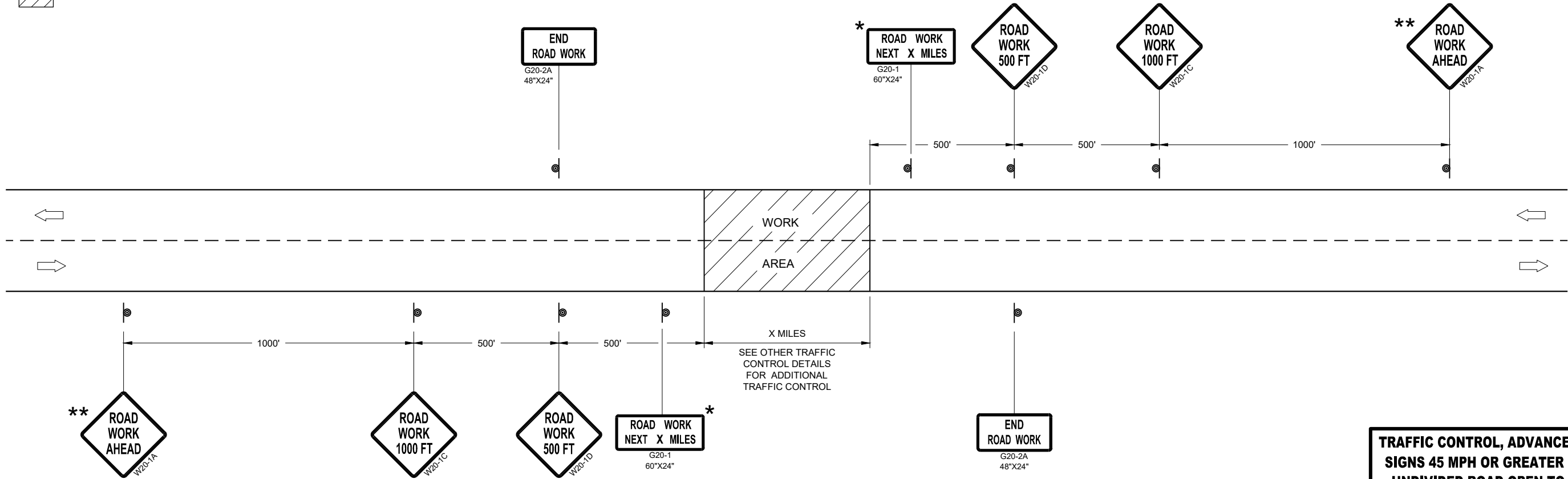
- * OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS
- ** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.

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
July 2018 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 91
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. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"X36" SIGNS MAY BE USED INSTEAD OF 48" X 48" SIGNS.

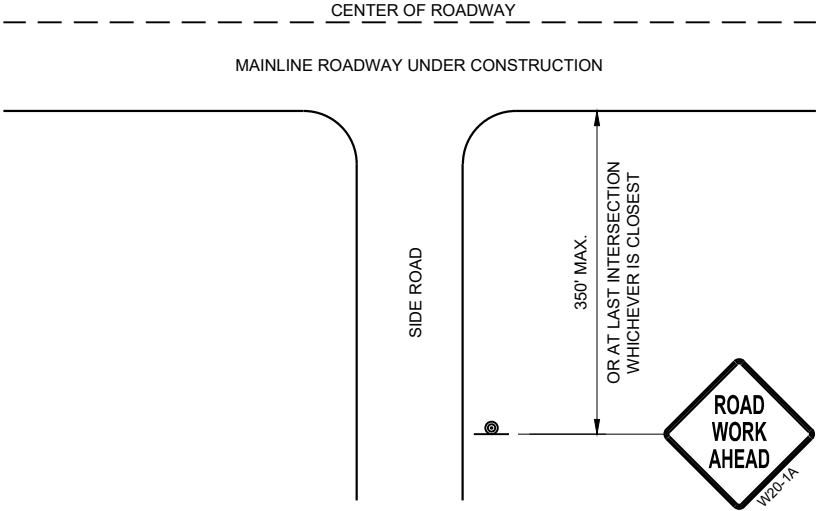
SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

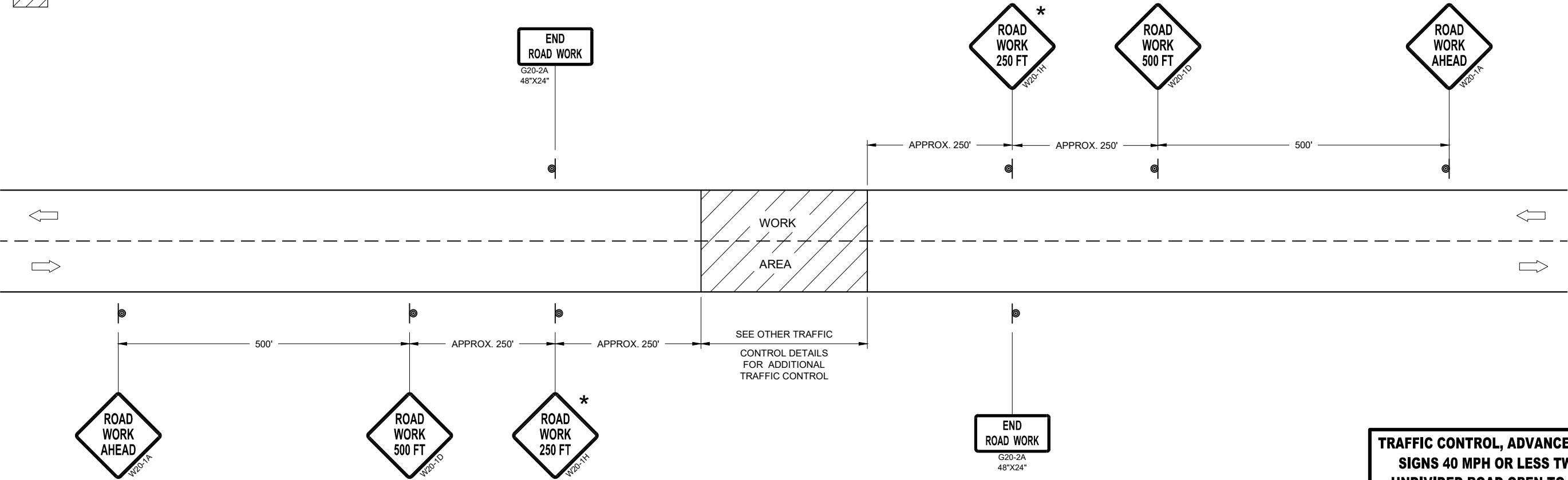
* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FEET" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.

LEGEND

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



TYPICAL SIDE ROAD APPROACH
WARNING SIGN DETAIL



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40MPH OR LESS

TRAFFIC CONTROL, ADVANCE WARNING
SIGNS 40 MPH OR LESS TWO-WAY
UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

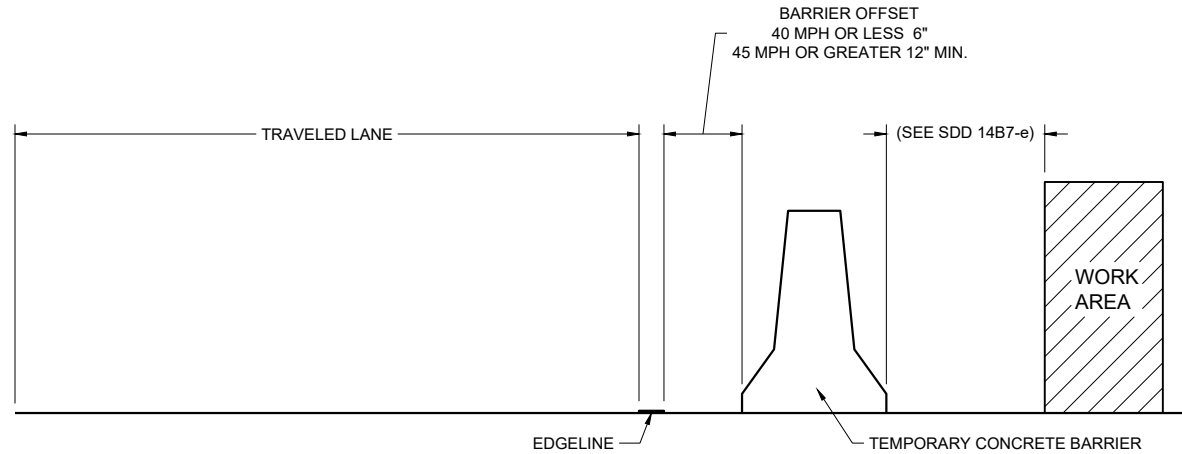
APPROVED
July 2018 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 92

FHWA



PERMANENT PAVEMENT MARKING

3



TEMPORARY BARRIER OFFSET FROM EDGE LINE

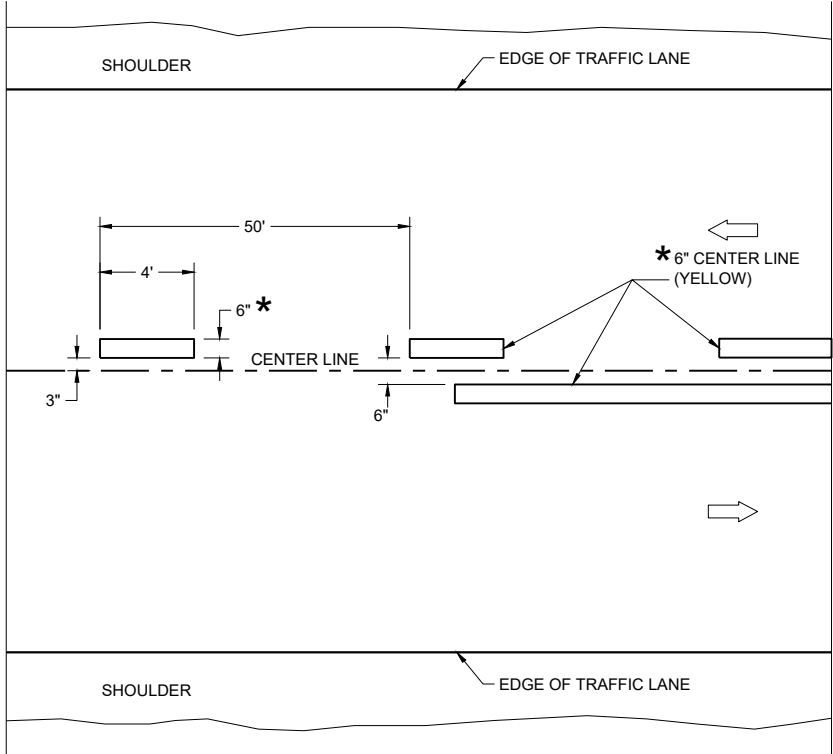
GENERAL NOTES

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

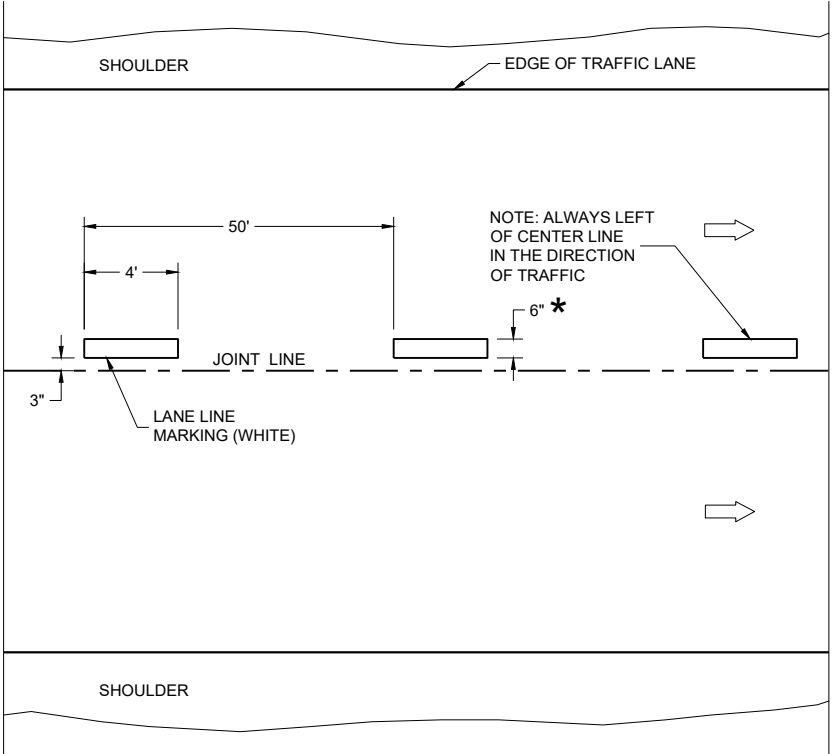
LEGEND

DIRECTION OF TRAFFIC

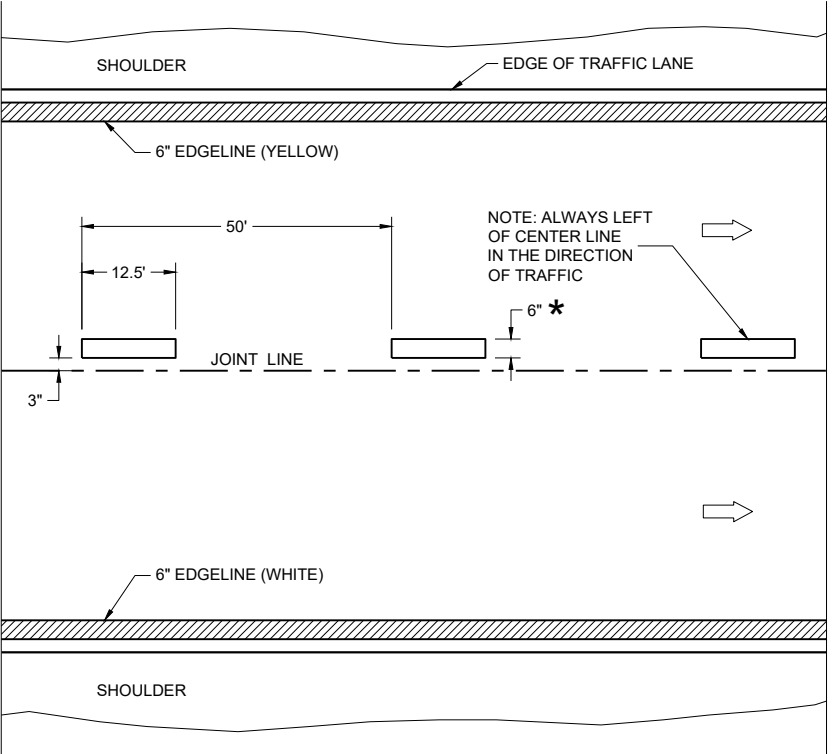
* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



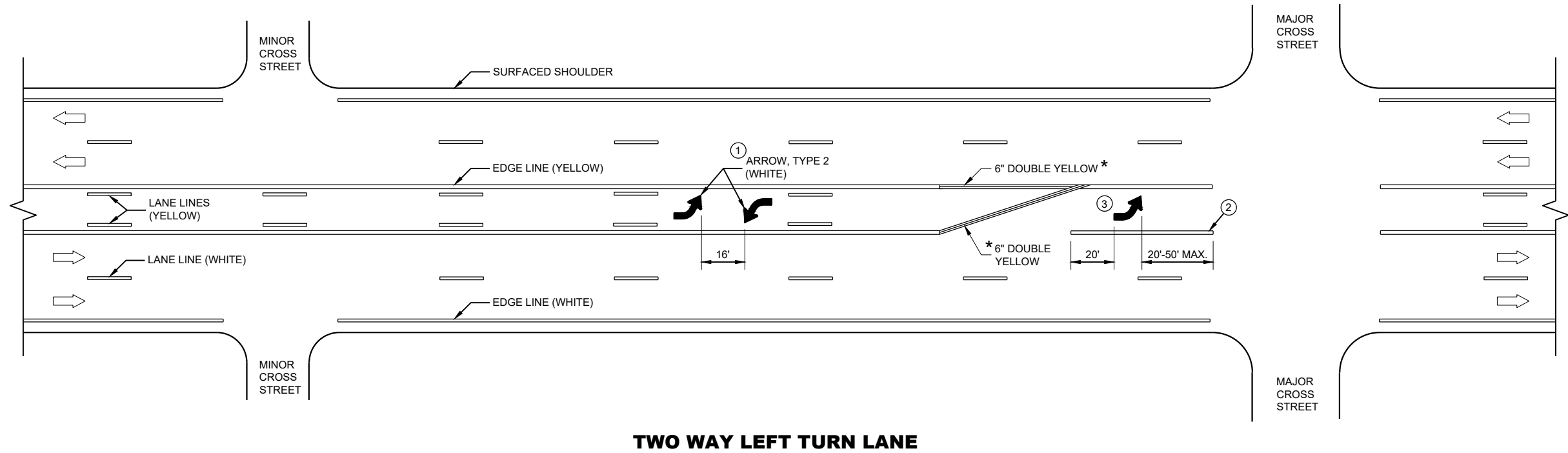
ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

TEMPORARY PAVEMENT MARKING

TEMPORARY LONGITUDINAL PAVEMENT MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2023 DATE	/S/ Jeannie Silver Statewide Pavement Marking Engineer
FHWA	



GENERAL NOTES

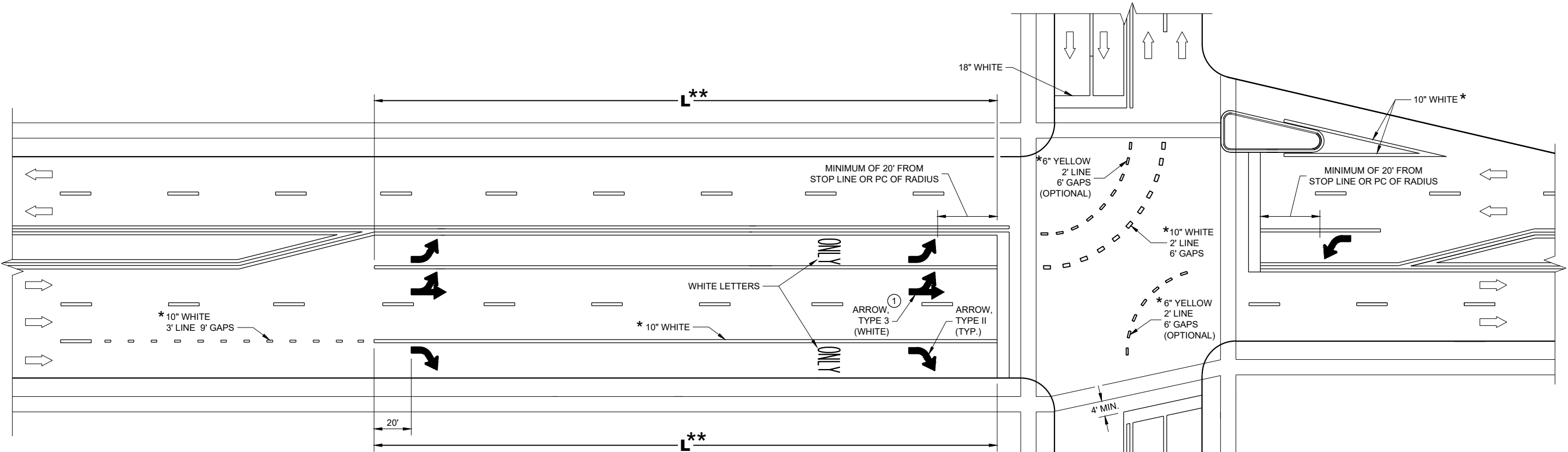
- ① A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
- ② 10" WHITE
- ③ TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

➡ DIRECTION OF TRAFFIC

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

PAVEMENT MARKING
(TURN LANES)

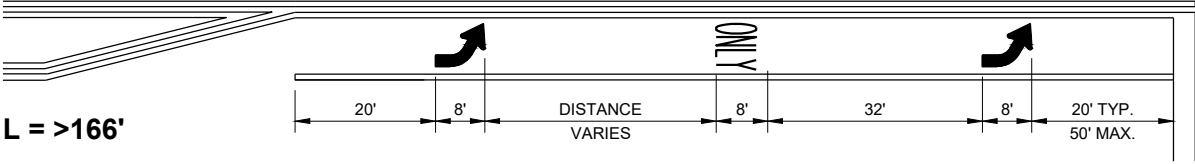
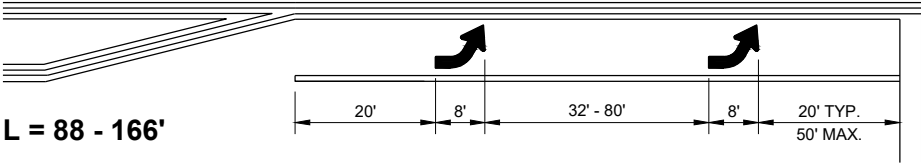
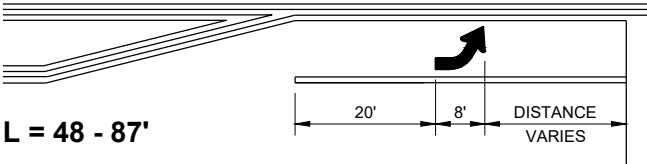
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 95



** (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

LENGTH OF TURN BAY (L) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



GENERAL NOTES

① QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

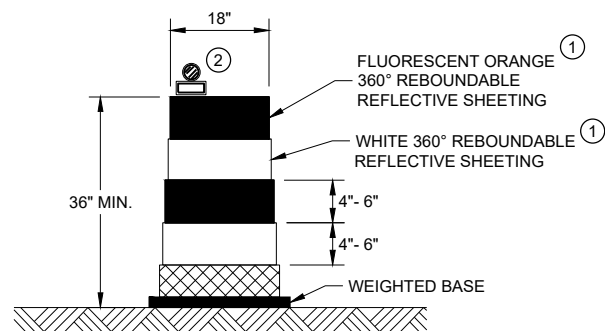
➡ DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

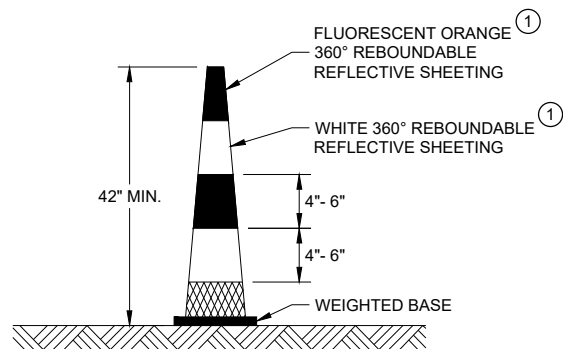
PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



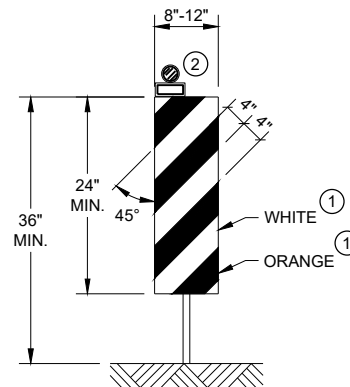
DRUM

BALLAST WIDTHS
RANGE FROM 24"-36"



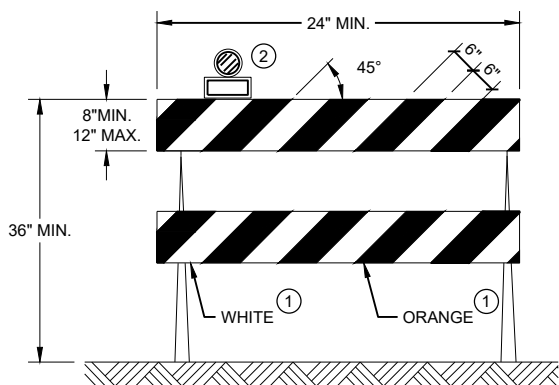
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS
BALLAST WIDTHS
RANGE FROM 14"-20"



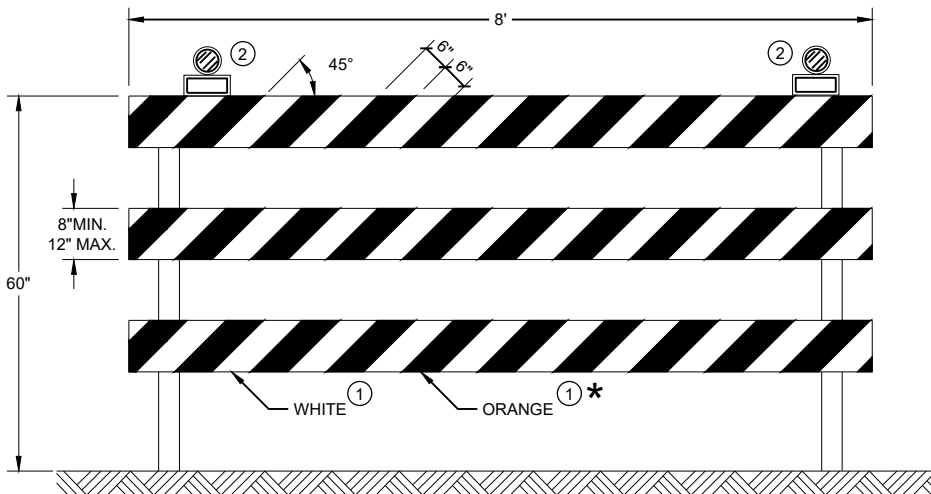
VERTICAL PANEL

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



TYPE II BARRICADE

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



TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

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.

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 97
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

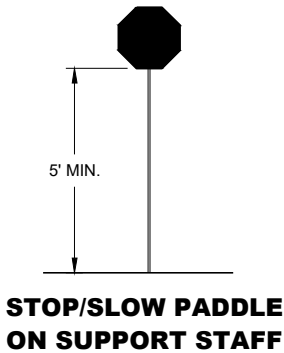
FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

- 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 PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER
- ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.
- INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.
- PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.
- DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.

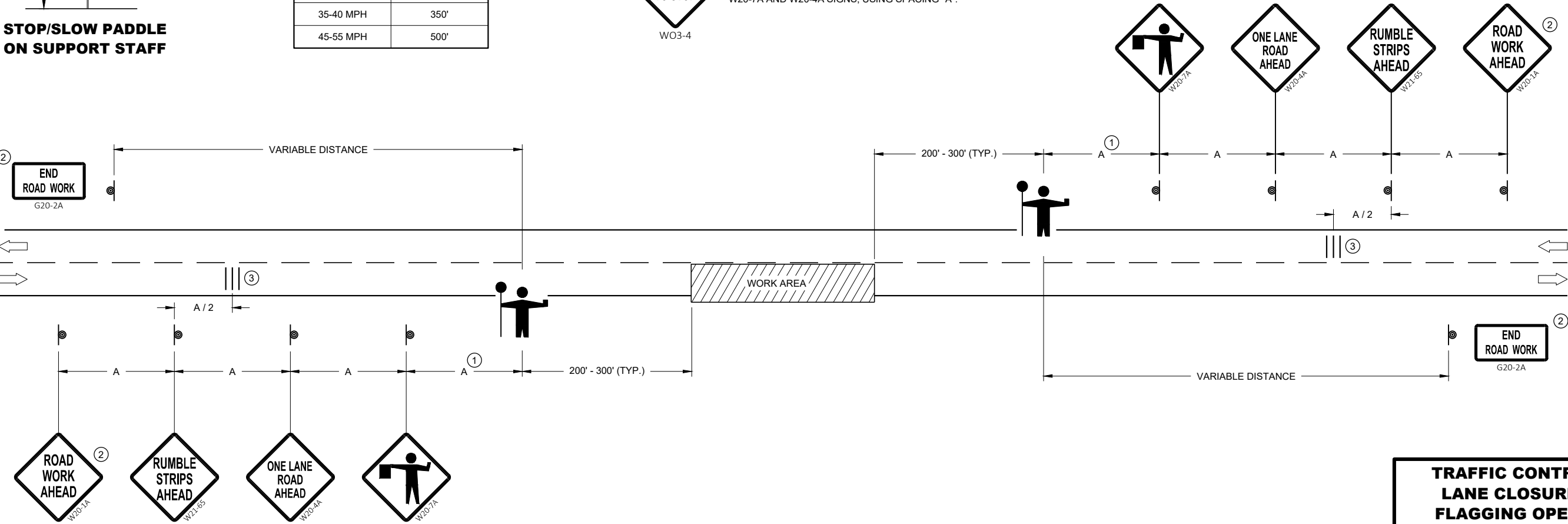


SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

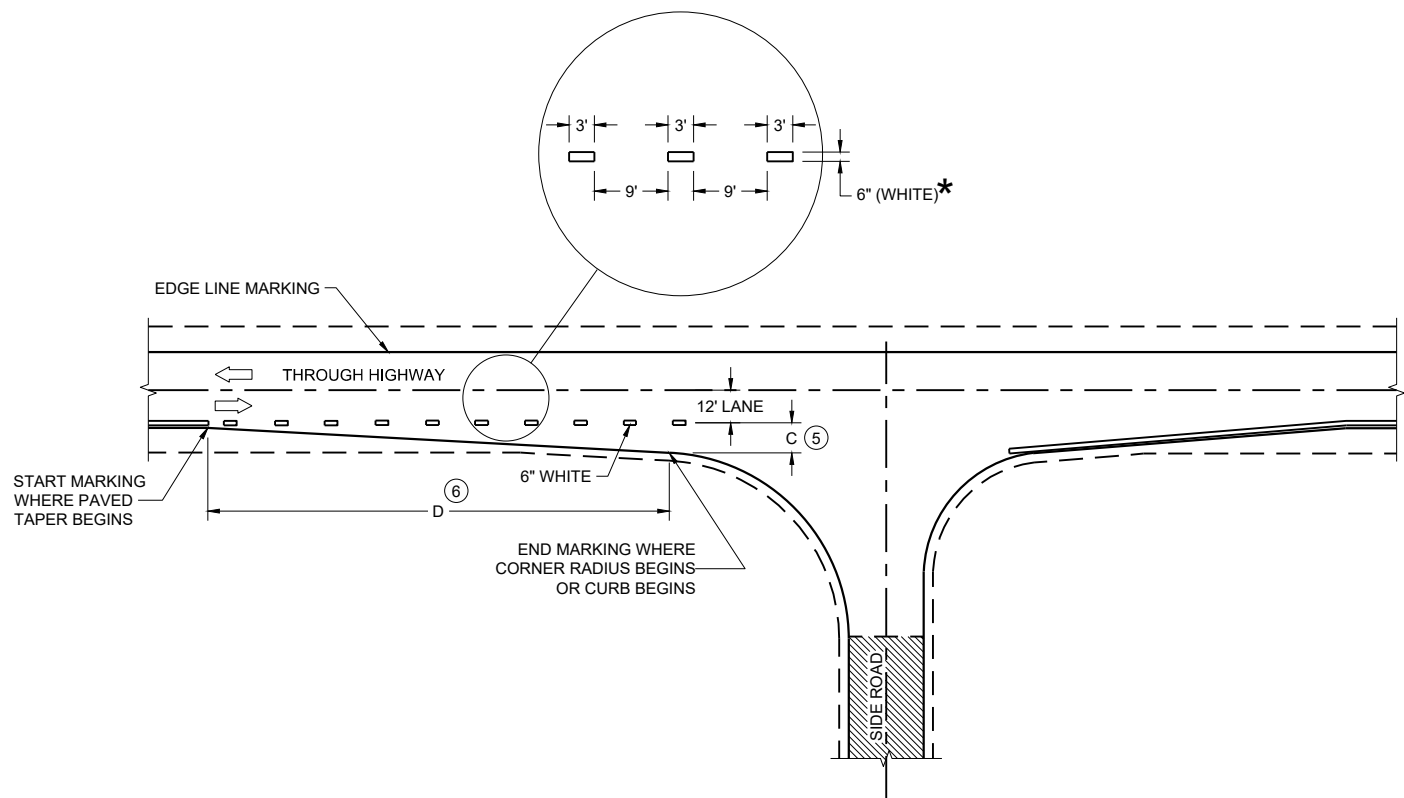
SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



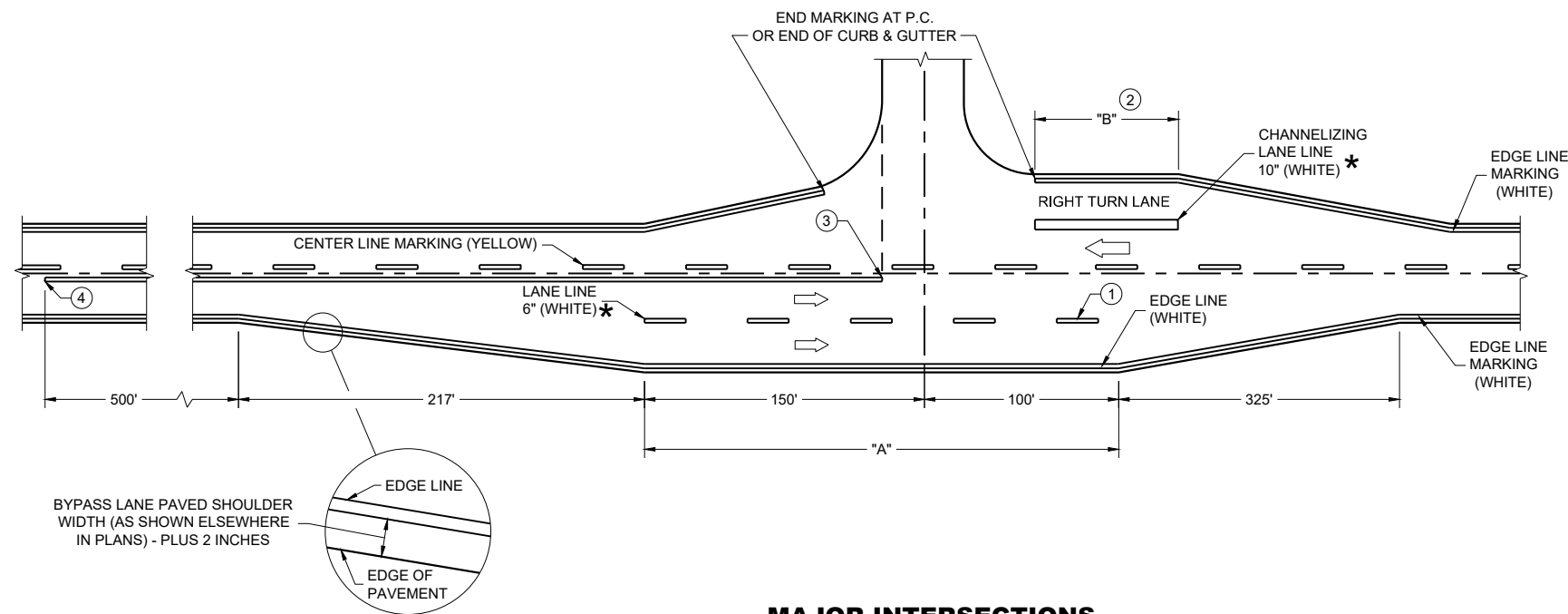
USE OF W03-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2022 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER 98
FHWA	



MINOR INTERSECTION



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

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

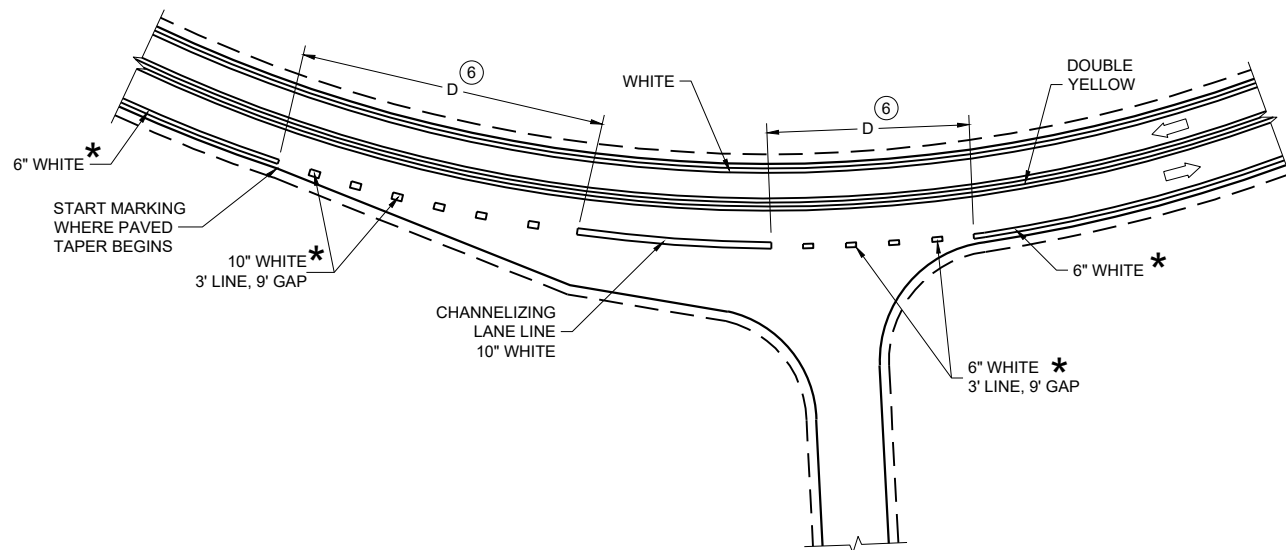
GENERAL NOTES

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.
- ⑤ WHEN DISTANCE "C" IS LESS THAN 4 FEET, OMIT DOTTED EXTENSION.
- ⑥ WHEN DISTANCE "D" IS LESS THAN 50 FEET, OMIT DOTTED EXTENSION.

LEGEND

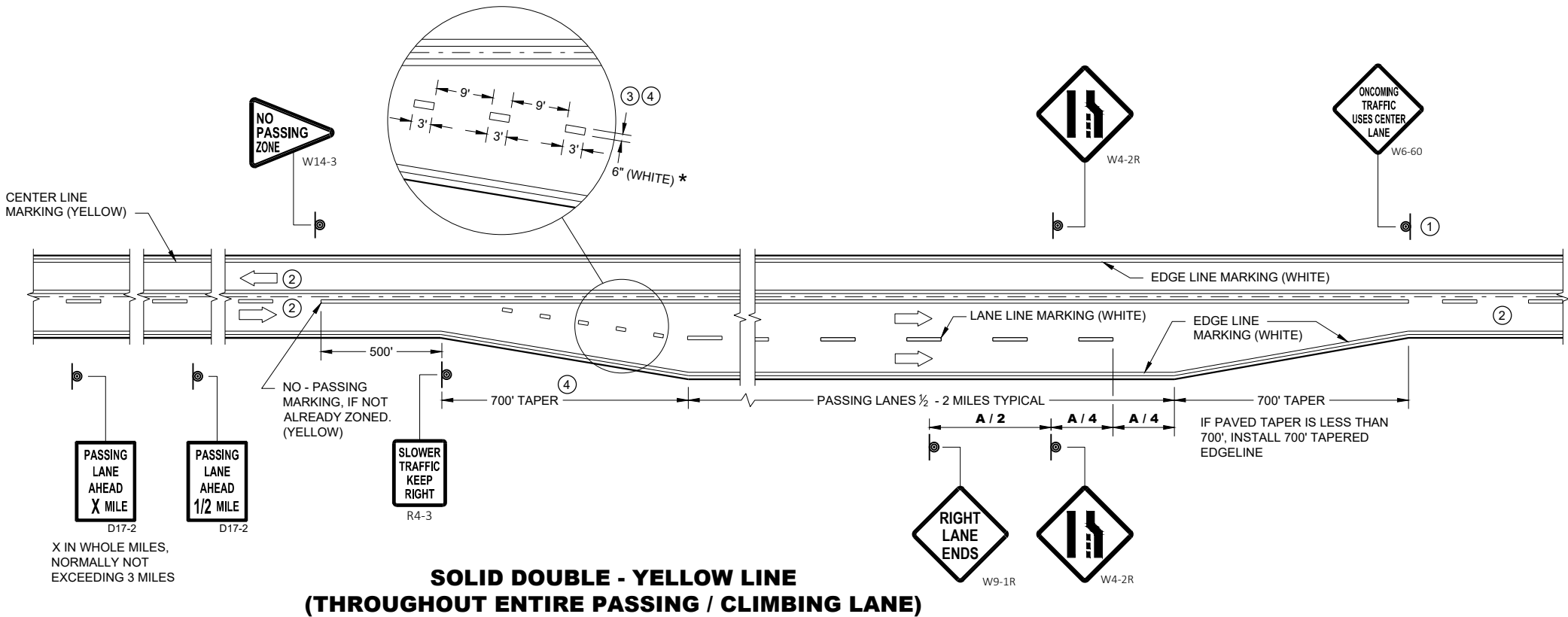
➡ DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE

PAVEMENT MARKING
(INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



GENERAL NOTES

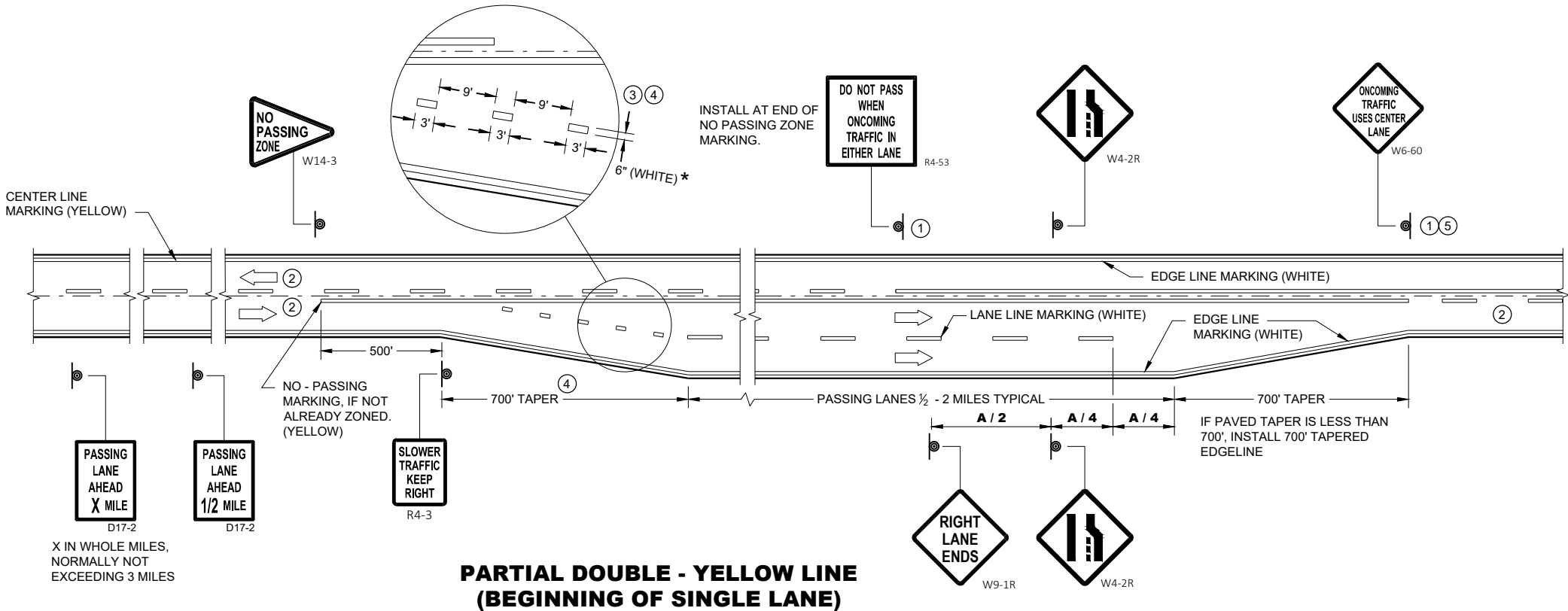
- ① SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
- ② THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
- ③ THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE, 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
- ④ WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING / CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.
- ⑤ REPEAT EVERY 1 MILE UP UNTIL R4-53.

ARROW SYMBOL (➡) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

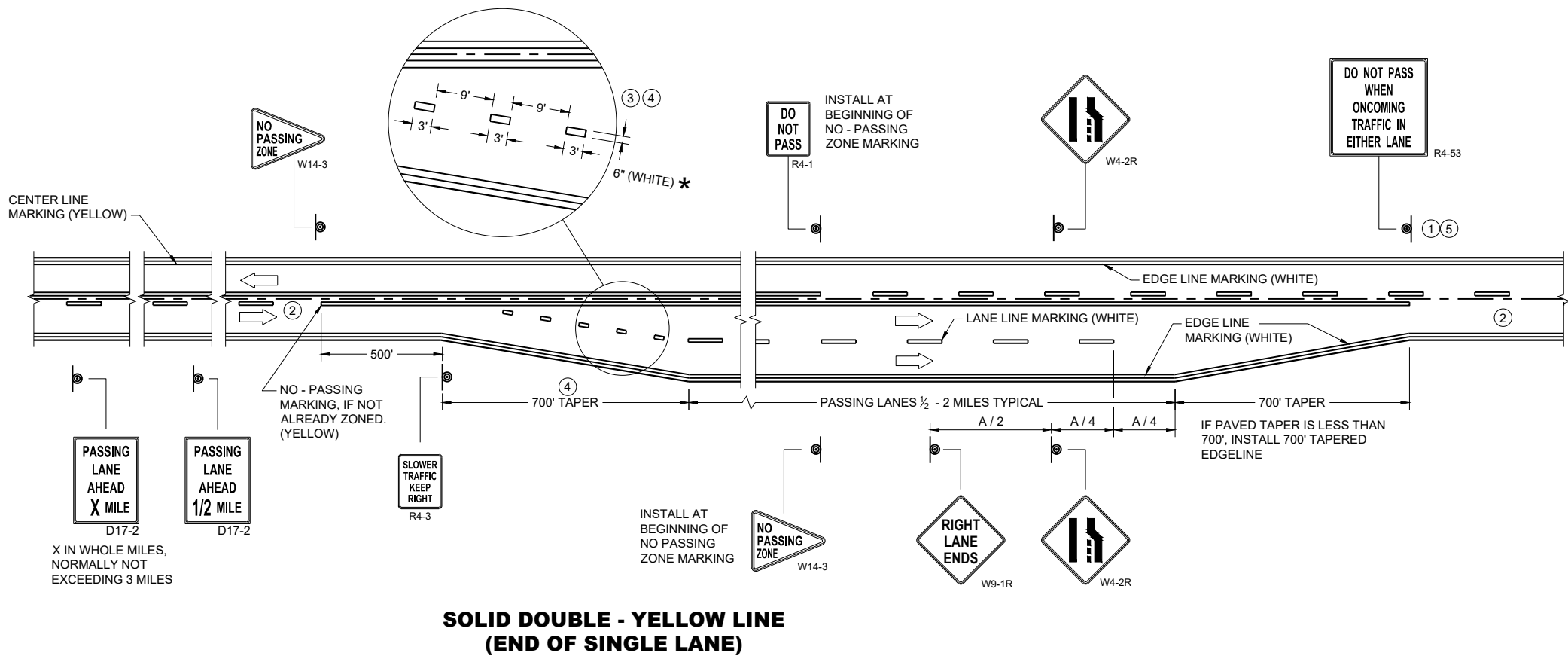
POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	775
50	885
55	990

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



PAVEMENT MARKING & SIGNING
(CLIMBING LANE & PASSING LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



GENERAL NOTES

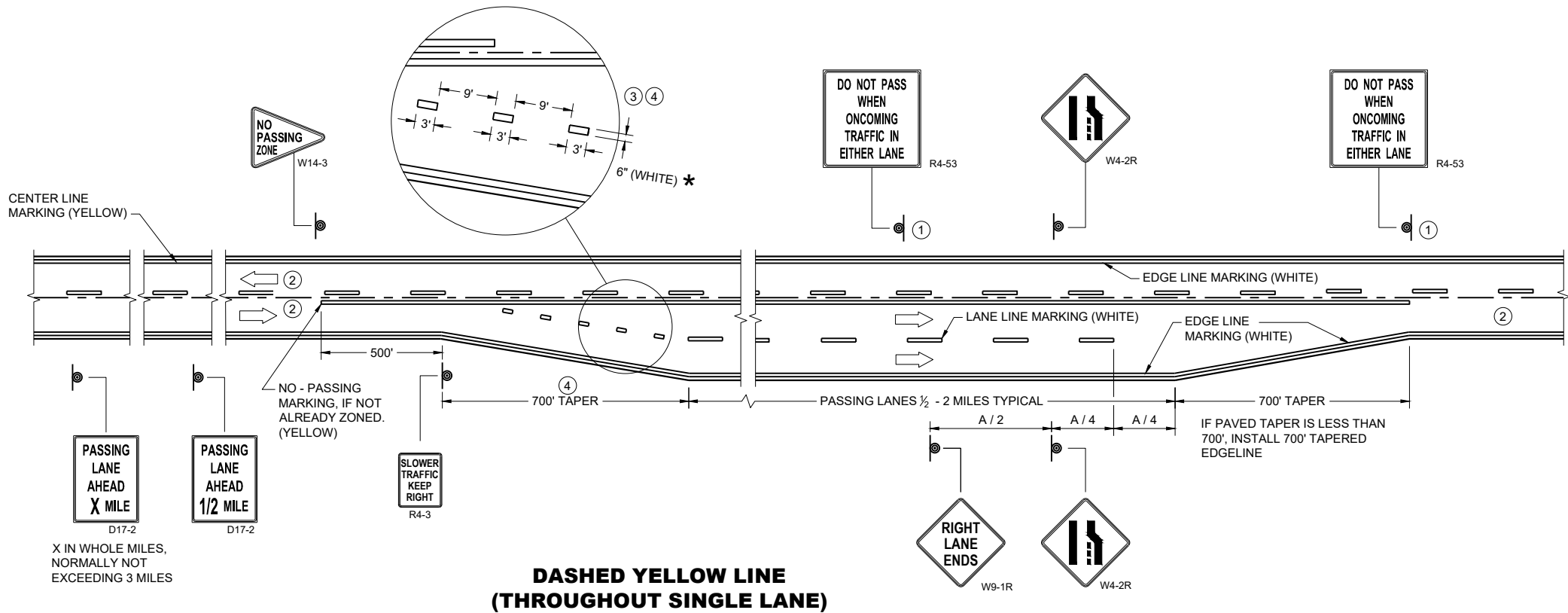
- 1 SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
- 2 THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
- 3 THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE, 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
- 4 WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING / CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.
- 5 REPEAT EVERY ONE MILE UP UNTIL NO PASSING ZONE.

ARROW SYMBOL () SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	775
50	885
55	990

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /S/ Jeannie Silver
DATE Statewide Pavement Marking Engineer
FHWA

LEGEND

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

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

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

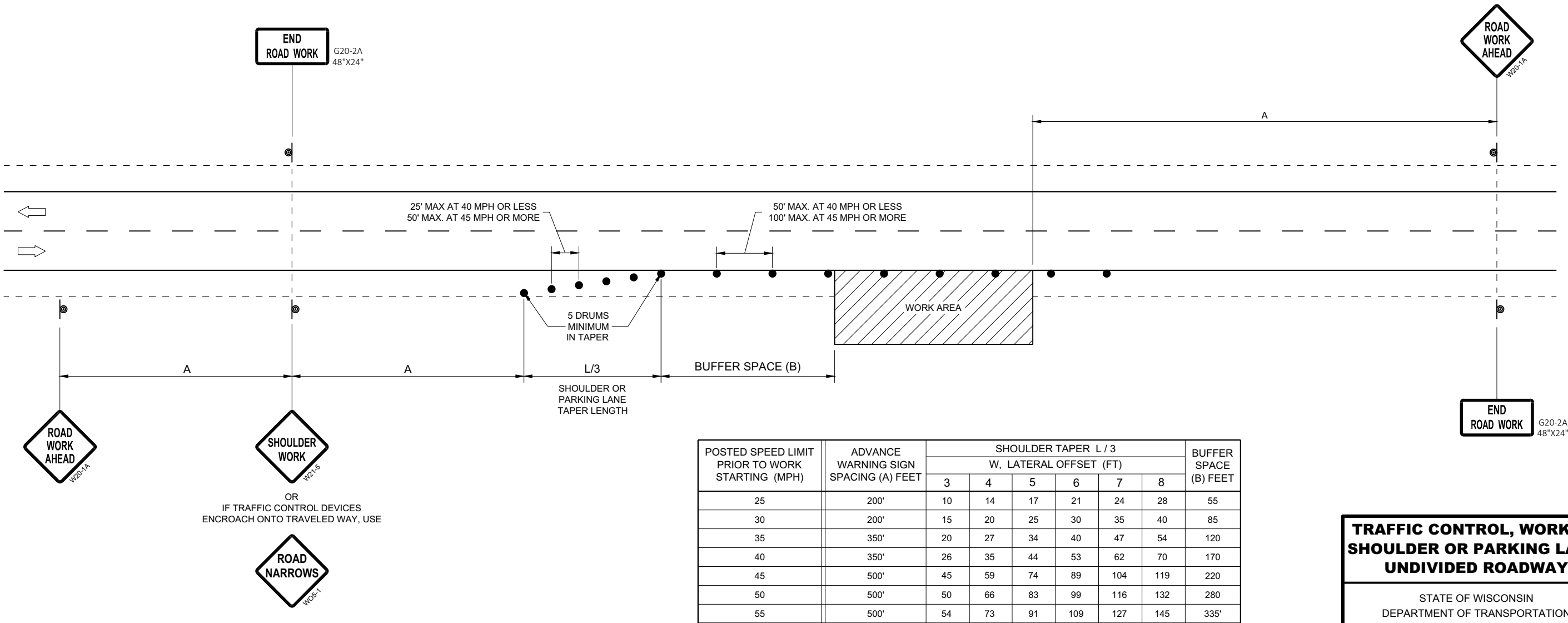
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

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

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

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

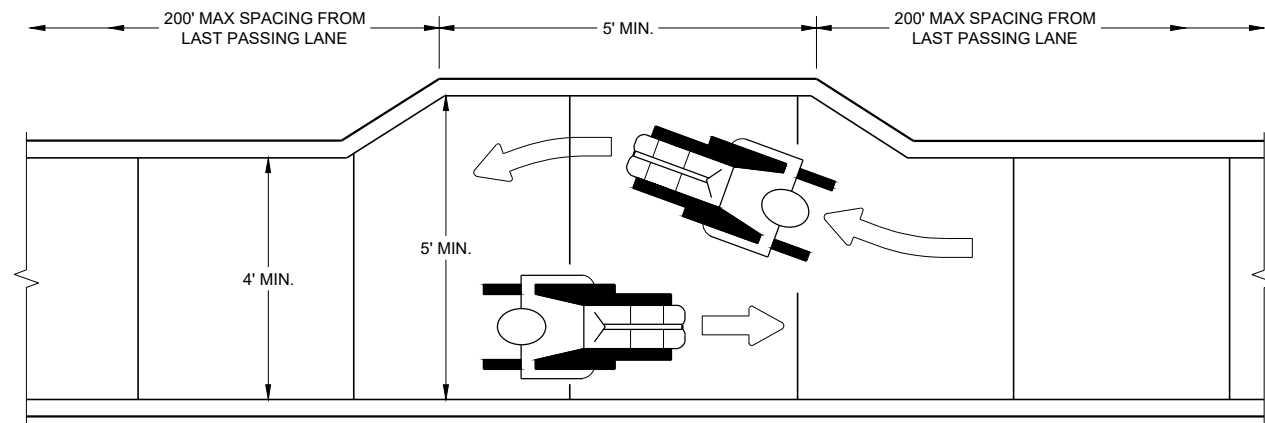


POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHOULDER TAPER L / 3 W, LATERAL OFFSET (FT)						BUFFER SPACE (B) FEET
		3	4	5	6	7	8	
25	200'	10	14	17	21	24	28	55
30	200'	15	20	25	30	35	40	85
35	350'	20	27	34	40	47	54	120
40	350'	26	35	44	53	62	70	170
45	500'	45	59	74	89	104	119	220
50	500'	50	66	83	99	116	132	280
55	500'	54	73	91	109	127	145	335'

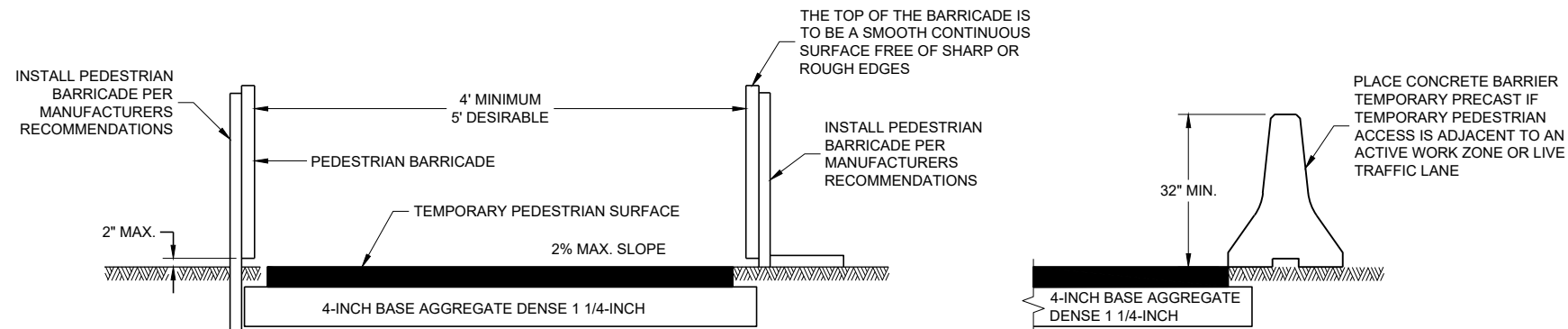
TRAFFIC CONTROL, WORK ON
SHOULDER OR PARKING LANE,
UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020 /S/ Andrew Heidtke
DATE STATEWIDE WORK ZONE T SAFETY ENGINEER 102
FHWA



NARROW SIDEWALK PASSING DETAIL



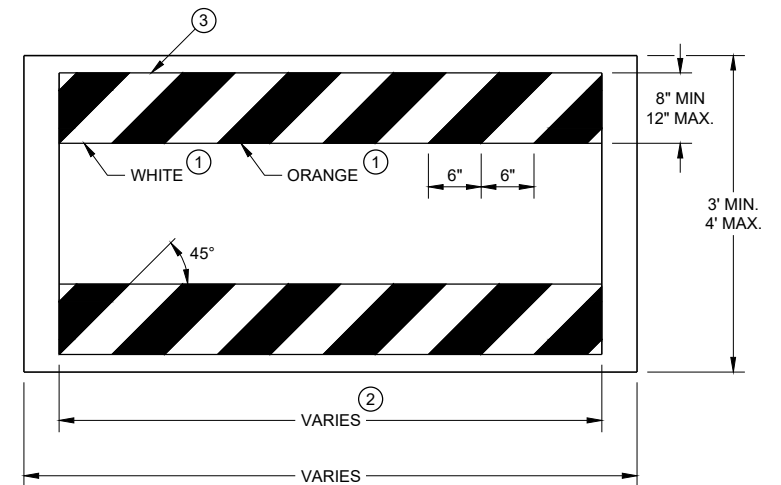
TEMPORARY PEDESTRIAN ACCESS

GENERAL NOTES

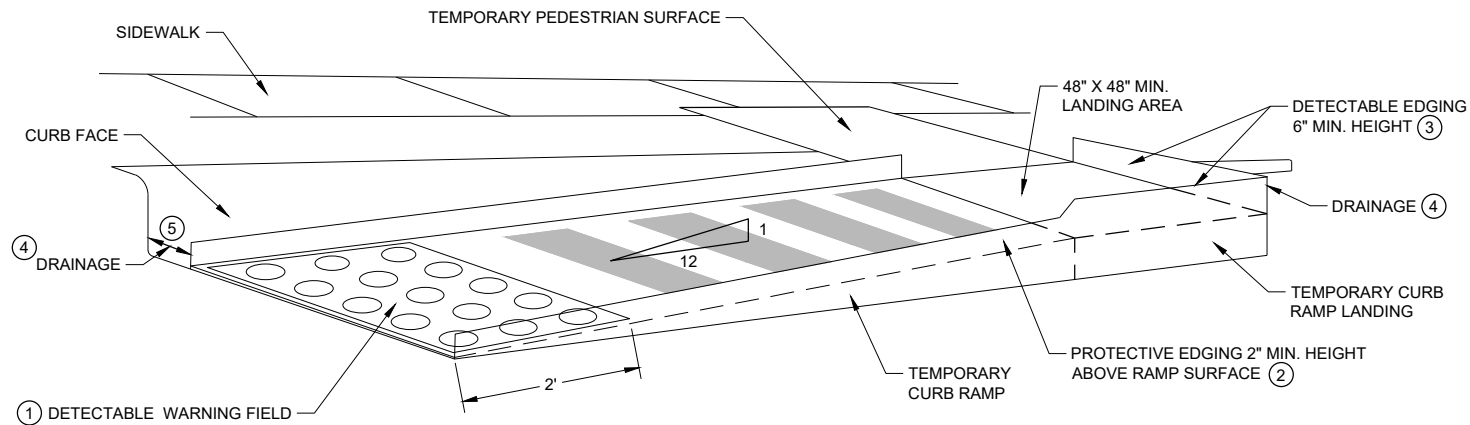
BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

- ① REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
- ② SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.
- ③ PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

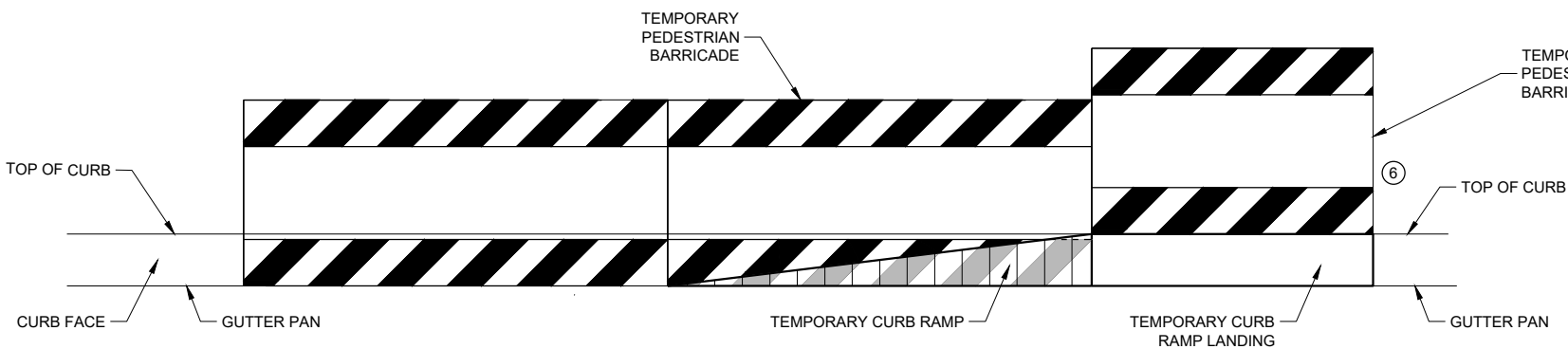
★ USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.



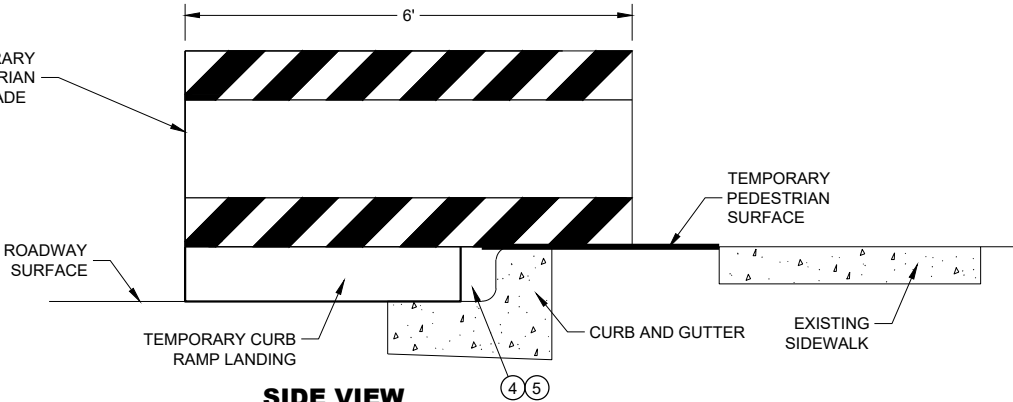
TEMPORARY PEDESTRIAN BARRICADE[★]



PERSPECTIVE VIEW



FRONT VIEW



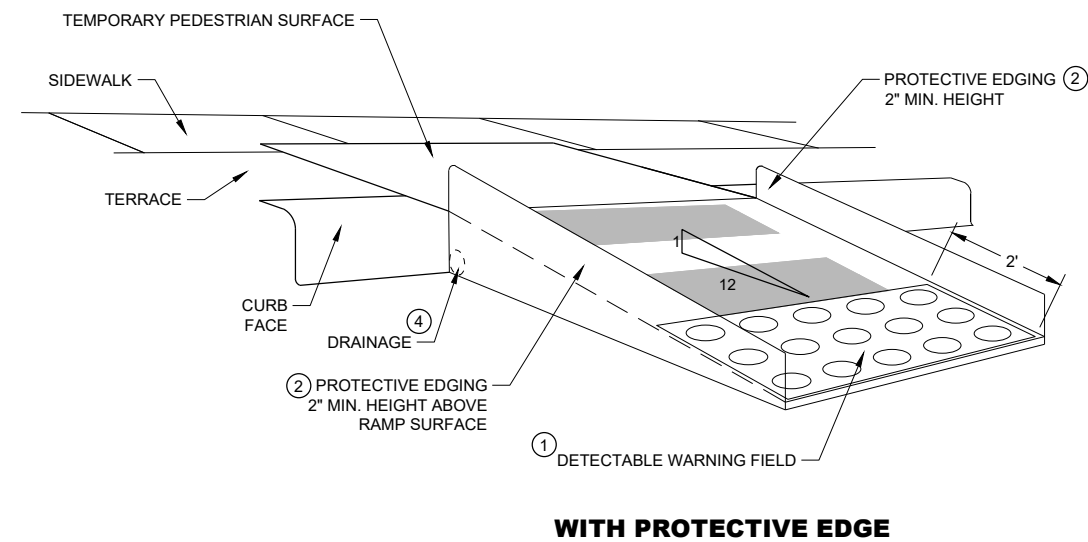
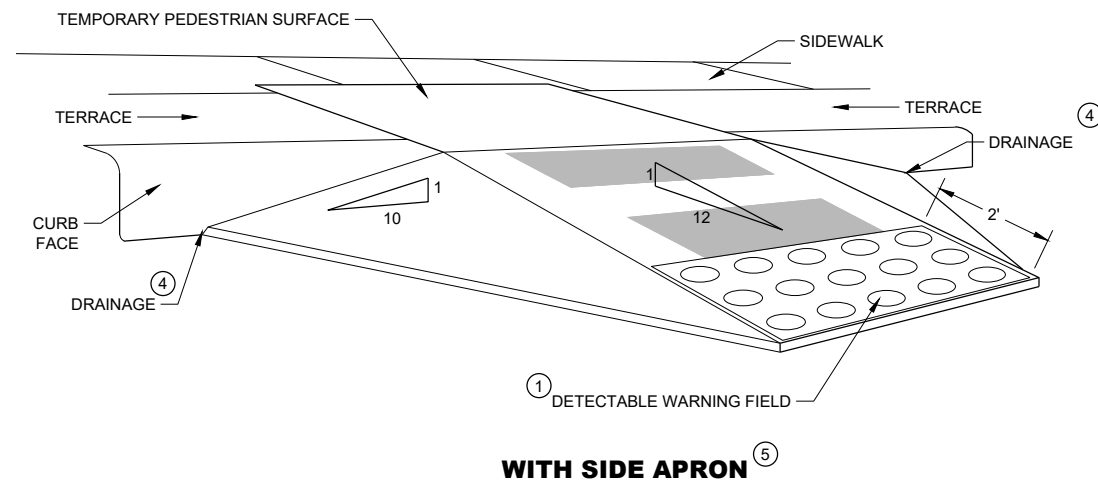
SIDE VIEW

TEMPORARY CURB RAMP PARALLEL TO CURB

GENERAL NOTES

- CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.
- CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.
- CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.
- CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED 1/2". LATERAL EDGES MAY BE VERTICAL UP TO 1/4" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN 1/4" AND 1/2".

- ① INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS.
- ② PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.
- ③ DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
- ④ DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
- ⑤ ENSURE CURB RAMP IS OUT OF THE GUTTER PAN.
- ⑥ IF ONLY PART OF THE END PANEL OF TEMPORARY PEDESTRIAN BARRICADE PANEL IS NEEDED, EXTEND EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL HERE.

**TEMPORARY CURB RAMP PERPENDICULAR TO CURB****GENERAL NOTES**

CURB RAMPS SHALL BE 48" MINIMUM WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

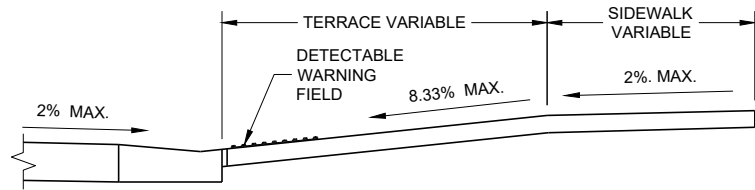
LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

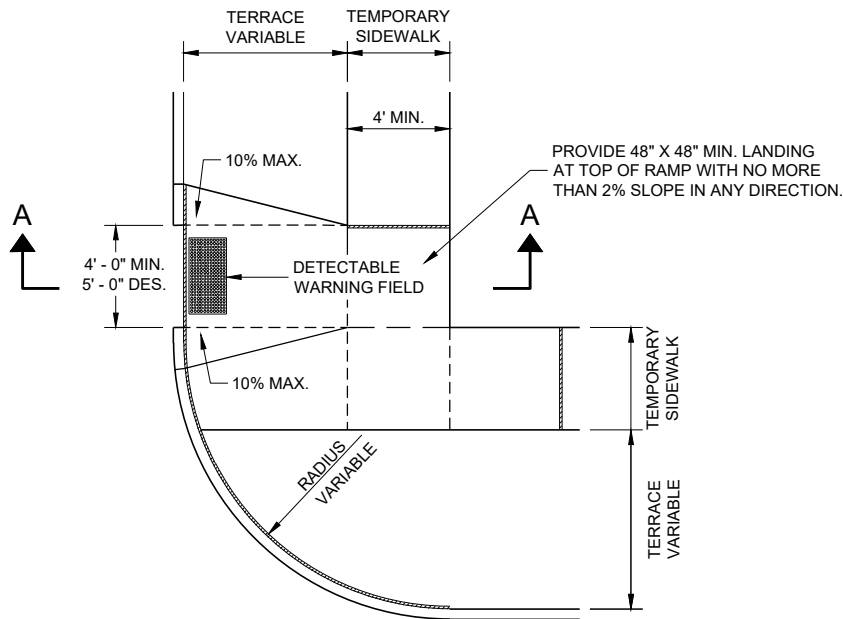
- ① INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS
- ② PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.
- ③ DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
- ④ DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
- ⑤ CAN ONLY BE USED FOR RAMPS WITH 6" OR LESS OF VERTICAL CHANGE.

**TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 105



SECTION A - A



PLAN VIEW
TEMPORARY TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

GENERAL NOTES

- BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST
- ① REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
 - ② SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.
 - ③ PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.
- ★ USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.

TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 106
FHWA



- ① DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
- ② 5' WIDE MIN. WITH TEMPORARY PEDESTRIAN BARRICADE, 10' WIDE MIN. WITHOUT TEMPORARY PEDESTRIAN BARRICADE.
- ③ PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE INTO THIS SPACE.

	TRAFFIC CONTROL DRUM
	TYPE III BARRICADE
	TEMPORARY PEDESTRIAN BARRICADE
	TEMPORARY DETECTABLE WARNING FIELD
	WORK AREA

LEGEND

-  SIGN ON PERMANENT SUPPORT
-  SIGN ON TEMPORARY SUPPORT
-  UNDER PEDESTRIAN TRAFFIC
-  WORK AREA
-  TEMPORARY PEDESTRIAN BARRICADE
-  DIRECTION OF TRAFFIC

GENERAL NOTES

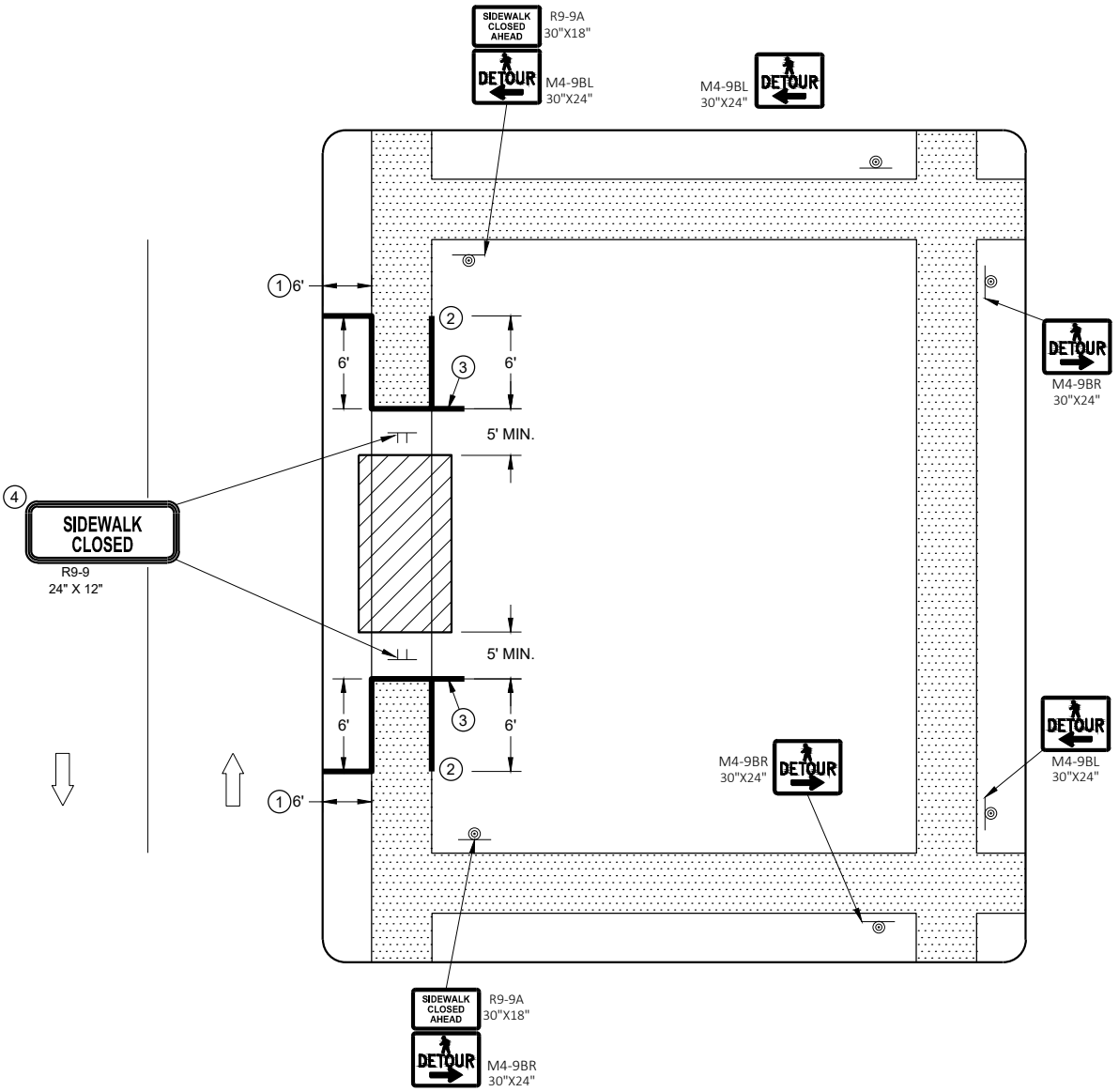
SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

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

PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICTS WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

- ① IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
- ② PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
- ③ IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
- ④ MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.



SIDEWALK DETOUR, SIDEWALK ONLY ON ONE SIDE

LEGEND

- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY PEDESTRIAN SURFACE
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

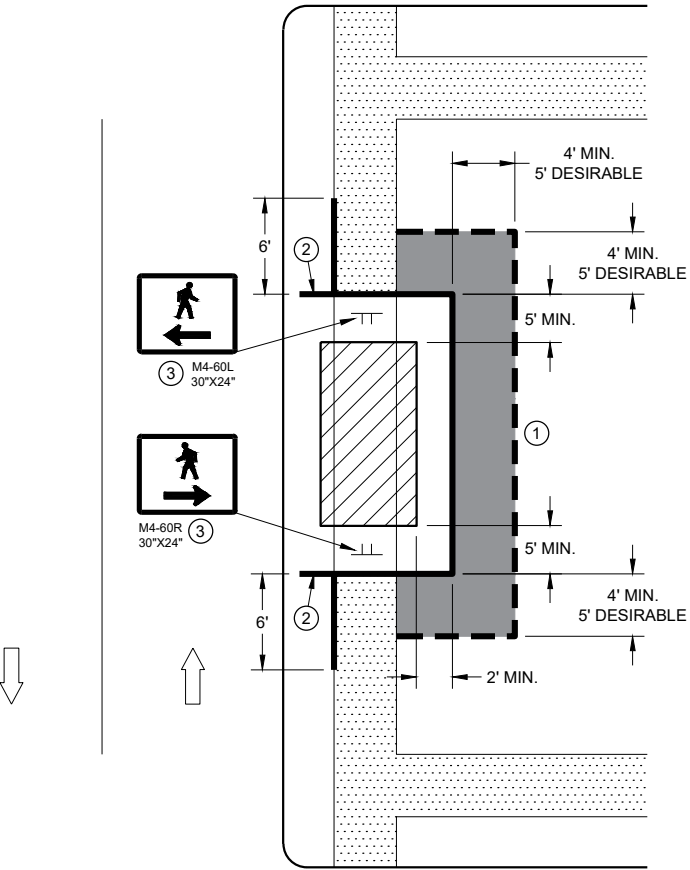
GENERAL NOTES

- TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.
- SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.
- WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.
- SIGNS THAT REMAIN IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.
- ①

USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
- ②

IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
- ③

MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.



SIDEWALK DIVERSION
SINGLE SIDE

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

GENERAL NOTES

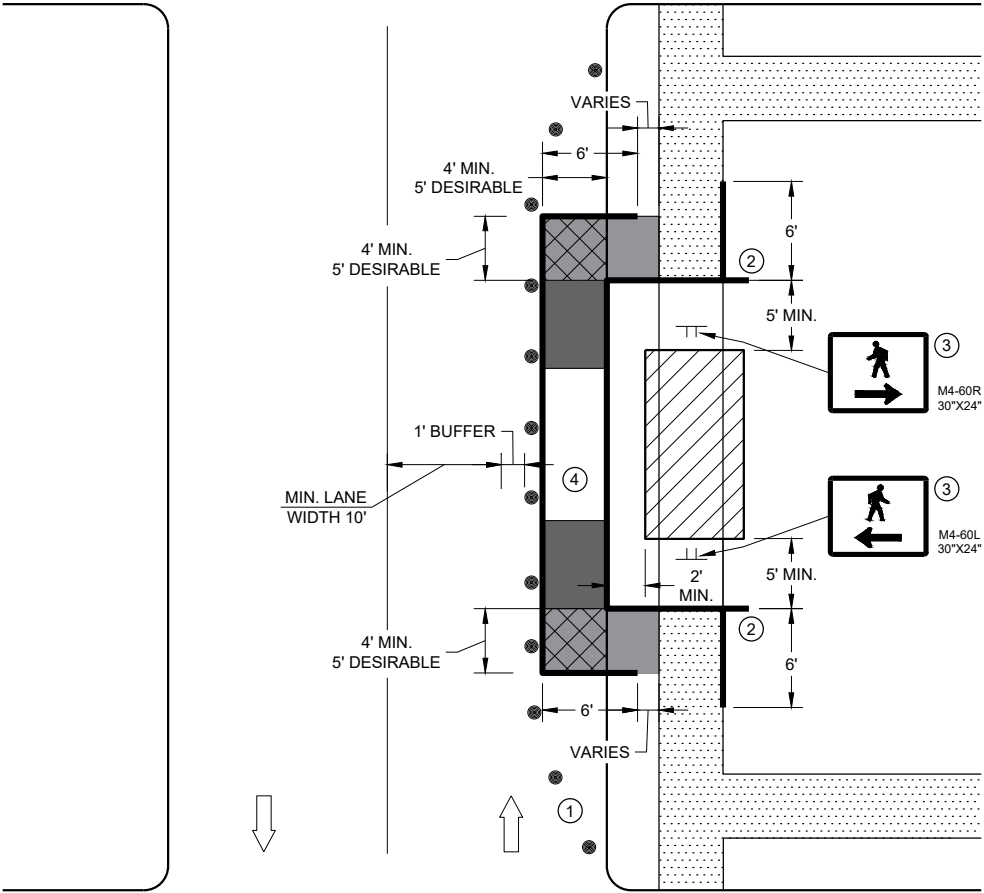
- TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.
- SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.
- WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.
- ①

SHOULDER OR LANE CLOSURE ADVANCE WARNING AND BUFFER SPACE REQUIRED.
- ②

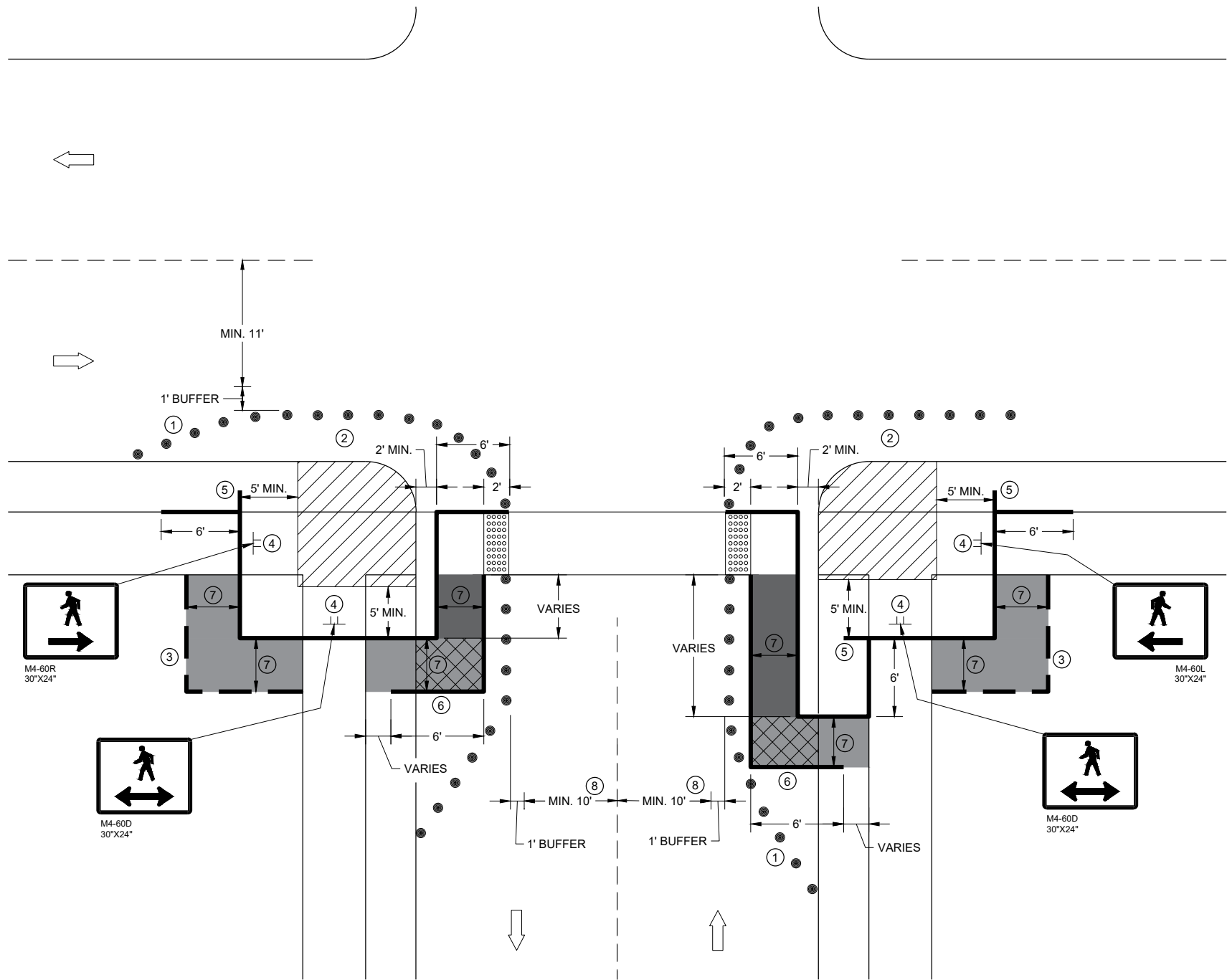
PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL PAST THE SIDEWALK ON THE SIDE AWAY FROM THE ROAD.
- ③

MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.
- ④

USE EXISTING PAVEMENT SURFACE. IF EXISTING PAVEMENT SURACE HAS BEEN REMOVED, USE A TEMPORARY PEDESTRIAN SURFACE.



SIDEWALK DIVERSION, SINGLE SIDE



**CURB RAMP PEDESTRIAN TRAFFIC CONTROL
SIDEWALK ON SINGLE SIDE**

GENERAL NOTES

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

- ① SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.
- ② PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS
- ③ USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
- ④ MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.
- ⑤ PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.
- ⑥ IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.
- ⑦ 4 FEET MINIMUM, 5 FEET DESIRABLE
- ⑧ IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

**TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

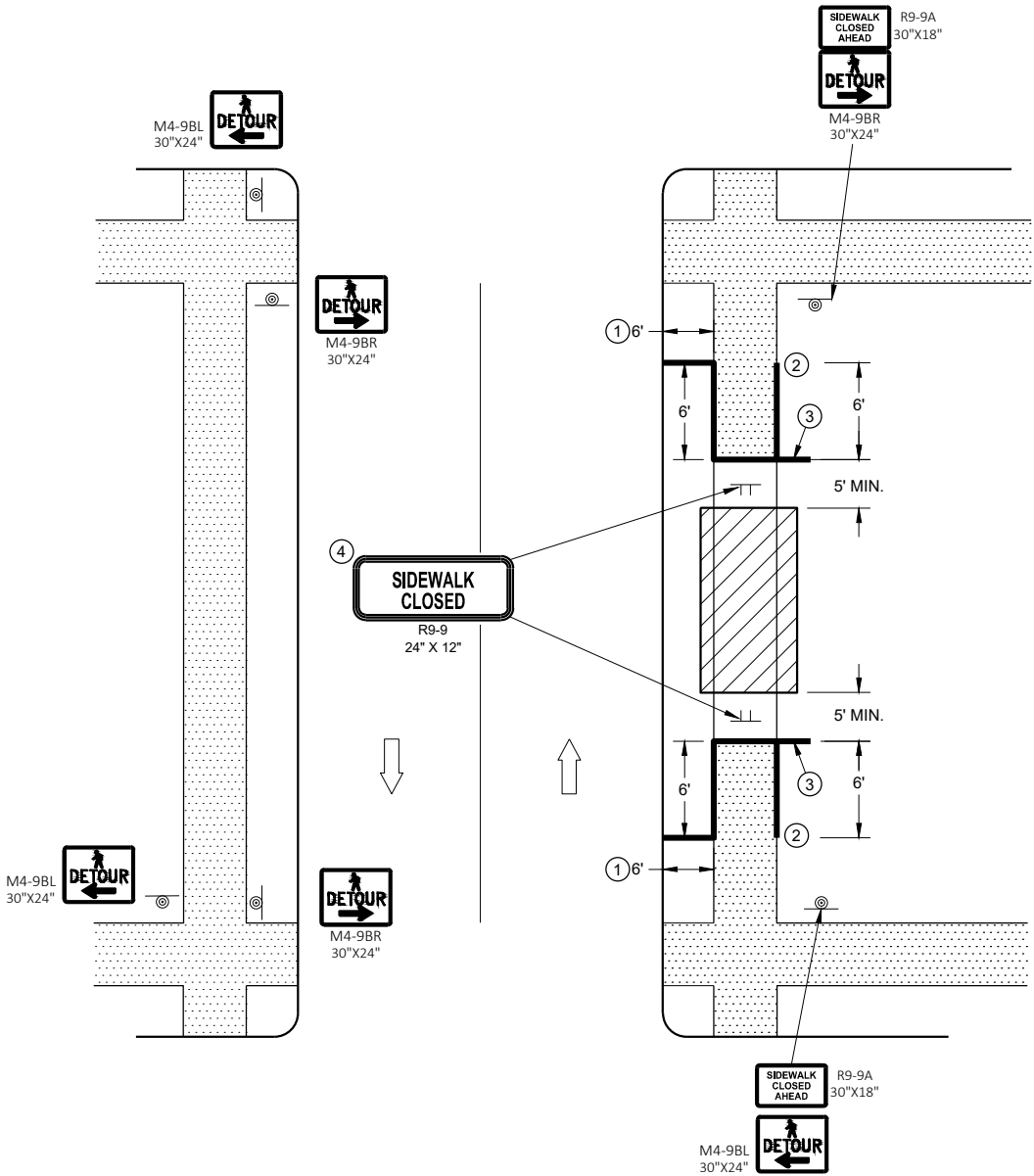


WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

-
- DIRECTION OF TRAFFIC

LEGEND

-  SIGN ON PERMANENT SUPPORT
-  SIGN ON TEMPORARY SUPPORT
-  UNDER PEDESTRIAN TRAFFIC
-  WORK AREA
-  TEMPORARY PEDESTRIAN BARRICADE
-  DIRECTION OF TRAFFIC

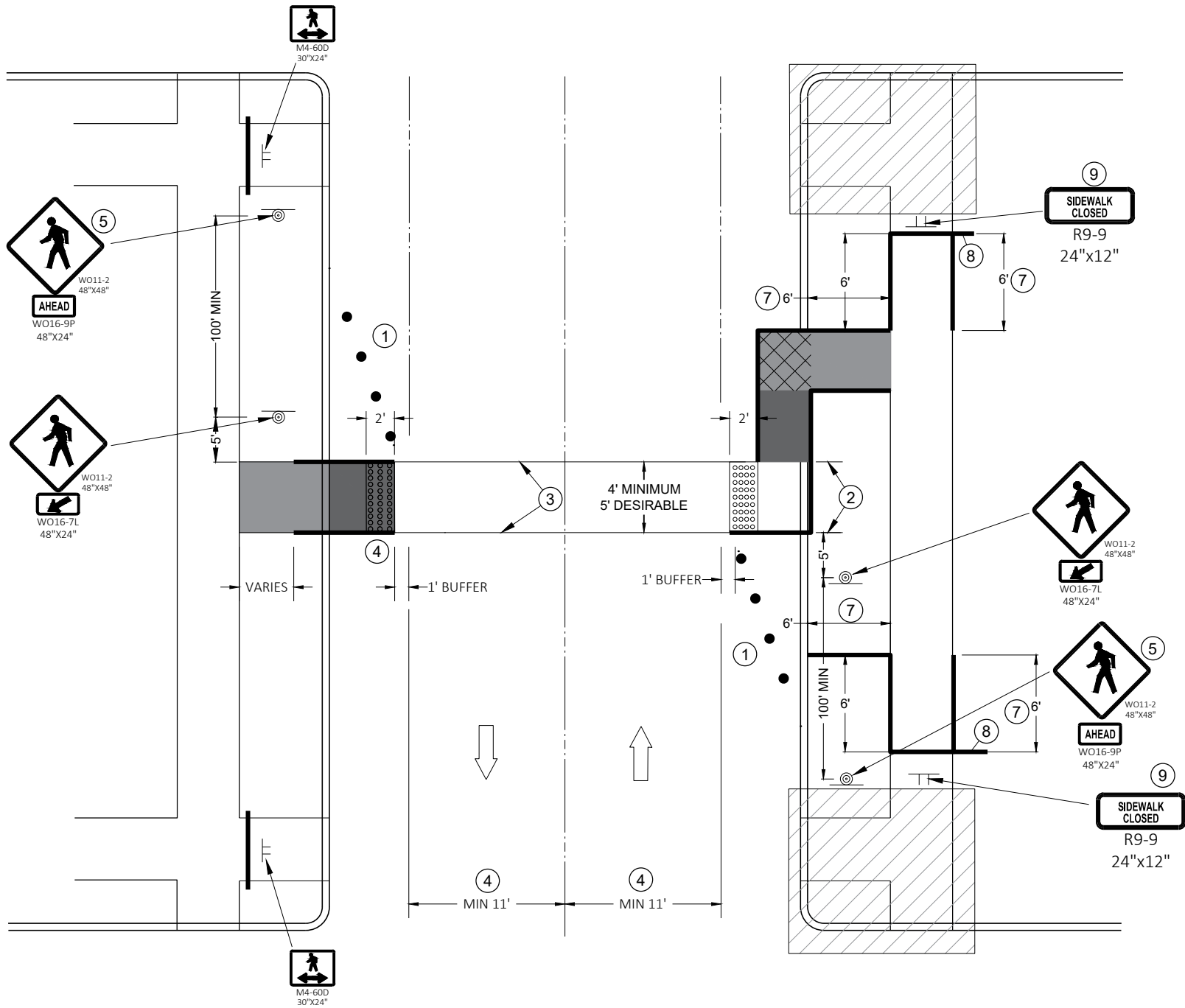


SIDEWALK DETOUR, SIDEWALK ON BOTH SIDES

GENERAL NOTES

- SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.
- WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.
- SIGNS THAT REMAIN IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.
- PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICT WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

- ① IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
- ② PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
- ③ IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
- ④ MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.



TEMPORARY PEDESTRIAN CROSSING

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

SEE OTHER PEDESTRIAN ACCOMMODATION DETAILS FOR SIGNING AND DEVICES FOR DIFFERENT PEDESTRIAN FACILITIES CLOSURES.

- 1 SHOULDER OR LANE CLOSURE ADVANCED WARNING AND PROPER BUFFER SPACE REQUIRED.
- 2 4 FEET MINIMUM, 5 FEET DESIRABLE.
- 3 WHITE 6" TEMPORARY PAVEMENT MARKING.
- 4 IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, PERPENDICULAR CURB RAMPS MAY NEED TO BE UTILIZED.
- 5 IF MINIMUM 100' SPACING FROM THE MID-BLOCK CROSSING CANNOT BE ATTAINED BEFORE THE INTERSECTION, REMOVE THIS SIGN ASSEMBLY.
- 6 IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
- 7 PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
- 8 IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF THE EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
- 9 MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF THE SIGN.

LEGEND

- TRAFFIC CONTROL DRUM
- ⊥ SIGN ON TEMPORARY SUPPORT
- TEMPORARY CURB RAMP
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- ▨ WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- ➡ DIRECTION OF TRAFFIC

GENERAL NOTES

DRAWING NOT TO SCALE. ALL SIGNS AND POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS WHICH ARE UNDER CONSTRUCTION OF CURB AND GUTTER AND/OR GRADING SHALL BE ADEQUATELY SIGNED.

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

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

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

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

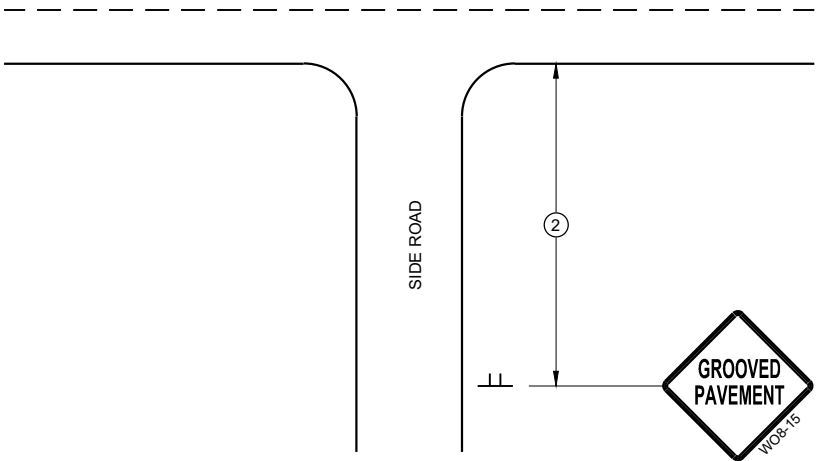
ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

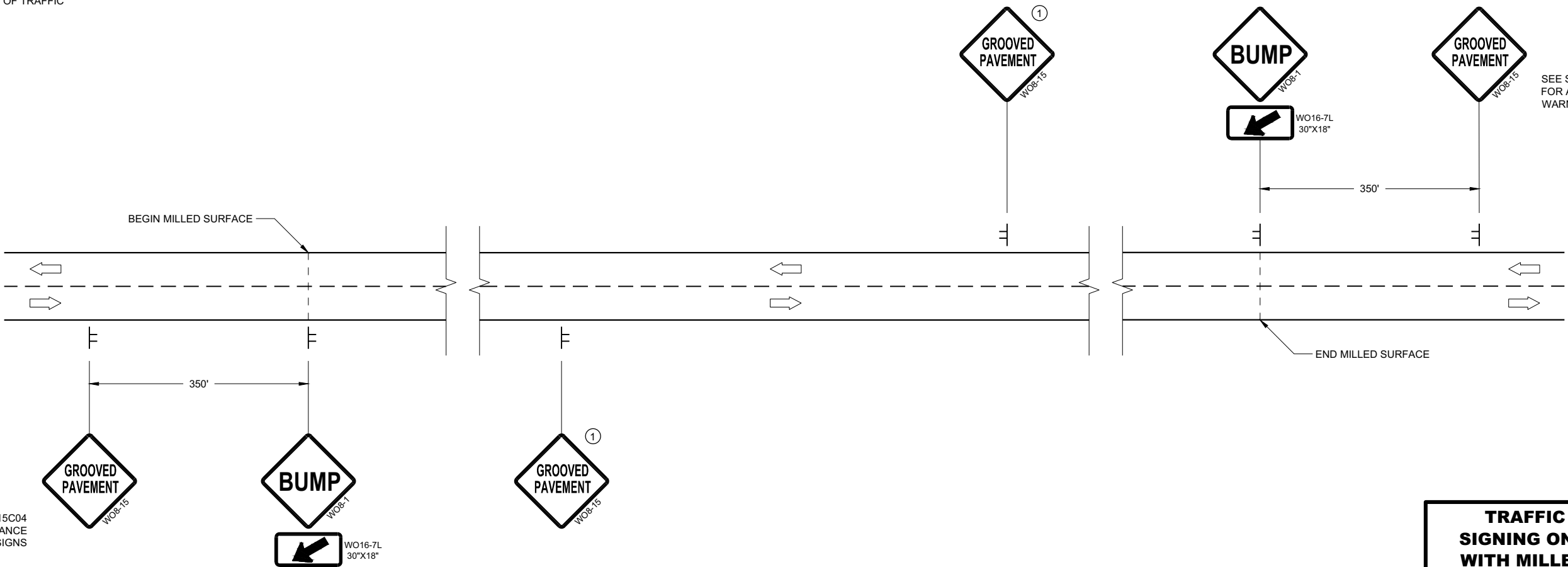
- 1 PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.
- 2 PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

LEGEND

-  SIGN ON TEMPORARY SUPPORT
-  DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH
SIGN DETAIL



DETAIL FOR SIGNING ON MILLED SURFACES

TRAFFIC CONTROL,
SIGNING ON ROADWAYS
WITH MILLED SURFACES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 115

FHWA

GENERAL NOTES

DRAWING NOT TO SCALE. ALL SIGNS AND POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS WHICH ARE UNDER CONSTRUCTION OF CURB AND GUTTER AND/OR GRADING SHALL BE ADEQUATELY SIGNED.

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

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

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

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

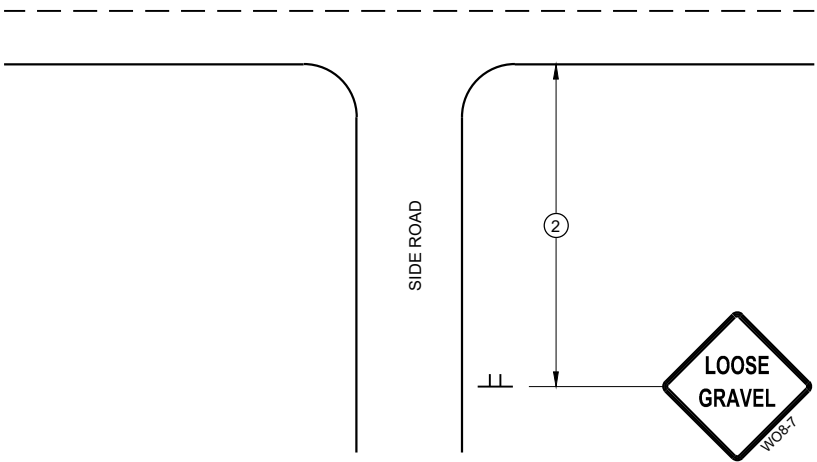
ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

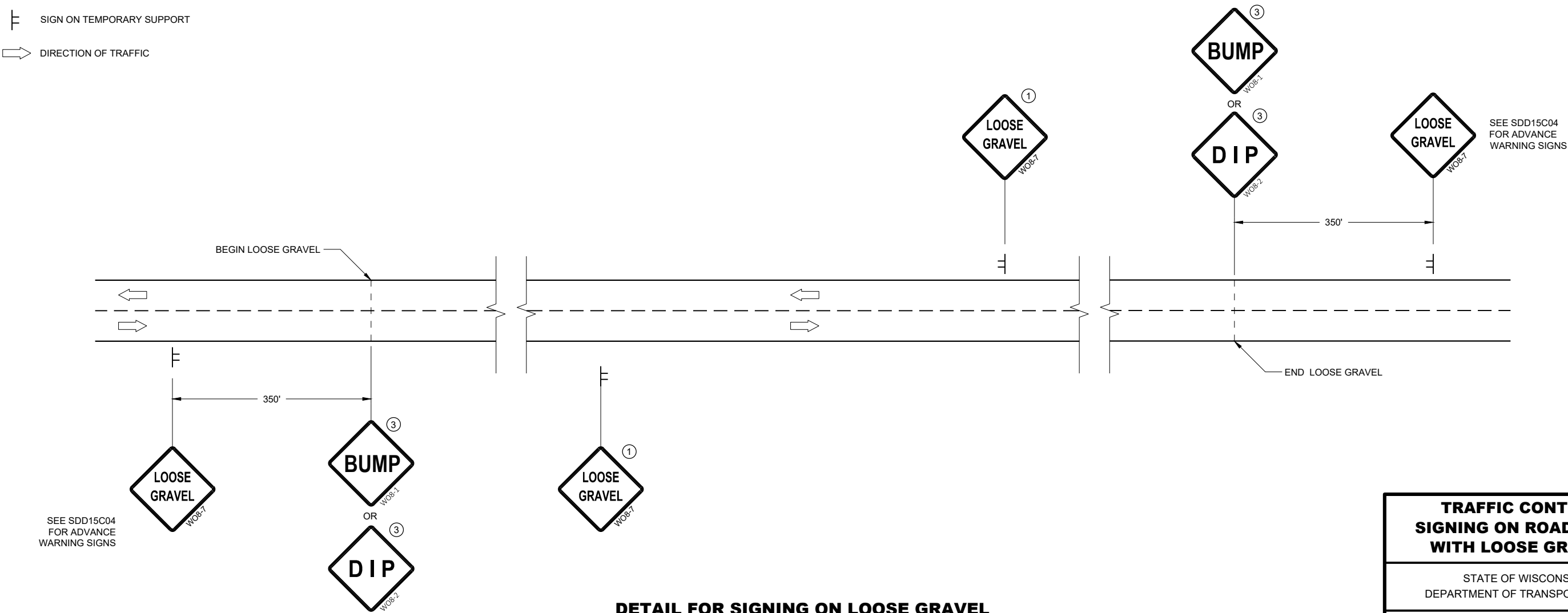
- ① PLACE SIGNS 350' IN ADVANCE OF CHIP SEALED OR LOOSE GRAVEL SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.
- ② PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.
- ③ ADD WO8-1 OR WO8-2 SIGN WHEN THE CONDITION IS PRESENT.

LEGEND

-  SIGN ON TEMPORARY SUPPORT
-  DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH
SIGN DETAIL



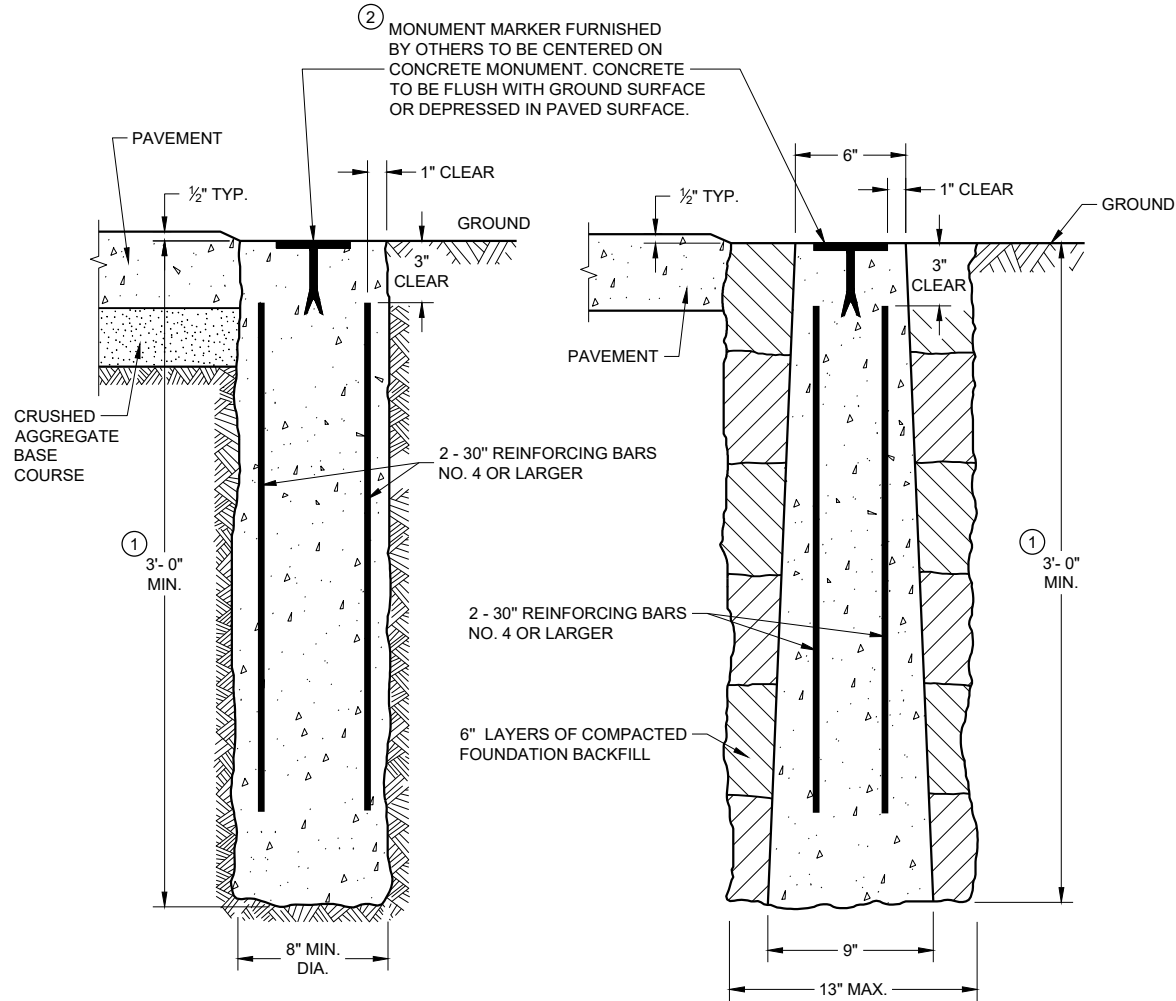
DETAIL FOR SIGNING ON LOOSE GRAVEL
OR CHIP SEALED SURFACES

TRAFFIC CONTROL
SIGNING ON ROADWAYS
WITH LOOSE GRAVEL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 116

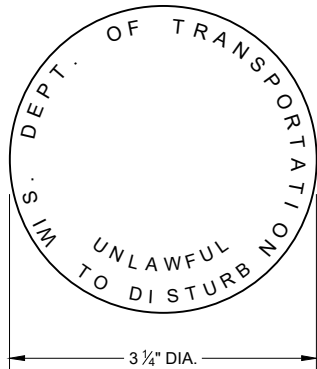
FHWA



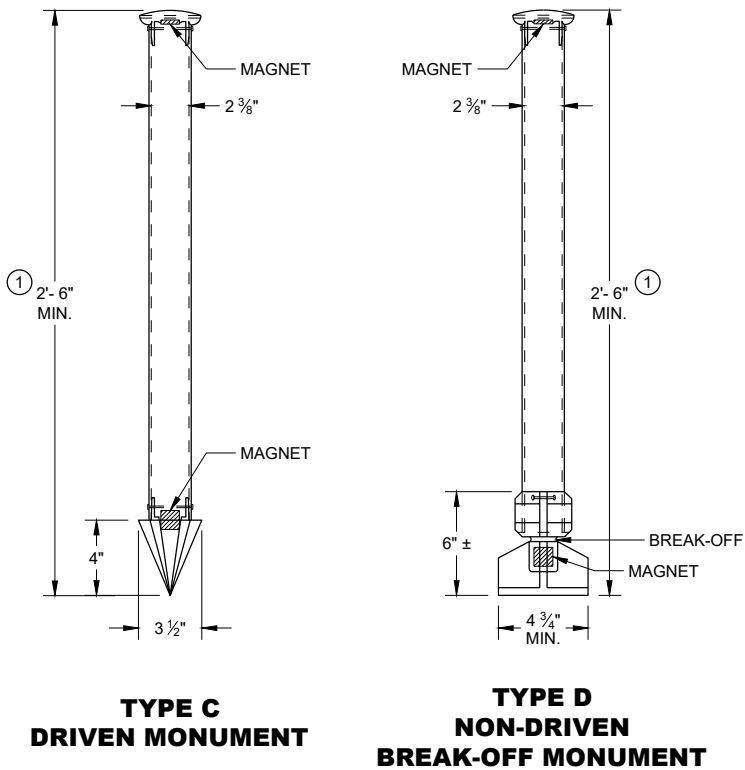
CAST-IN-PLACE

PRECAST

CONCRETE MONUMENTS
TYPE A



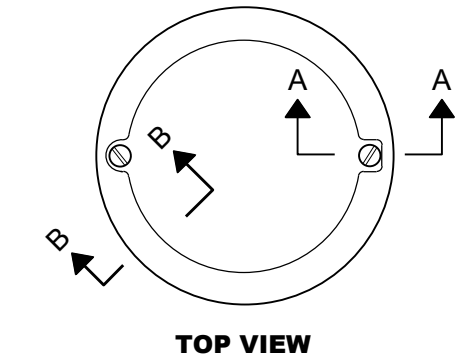
WIS DOT MONUMENT
MARKER LOGO
FOR TYPES "A", "C" & "D"



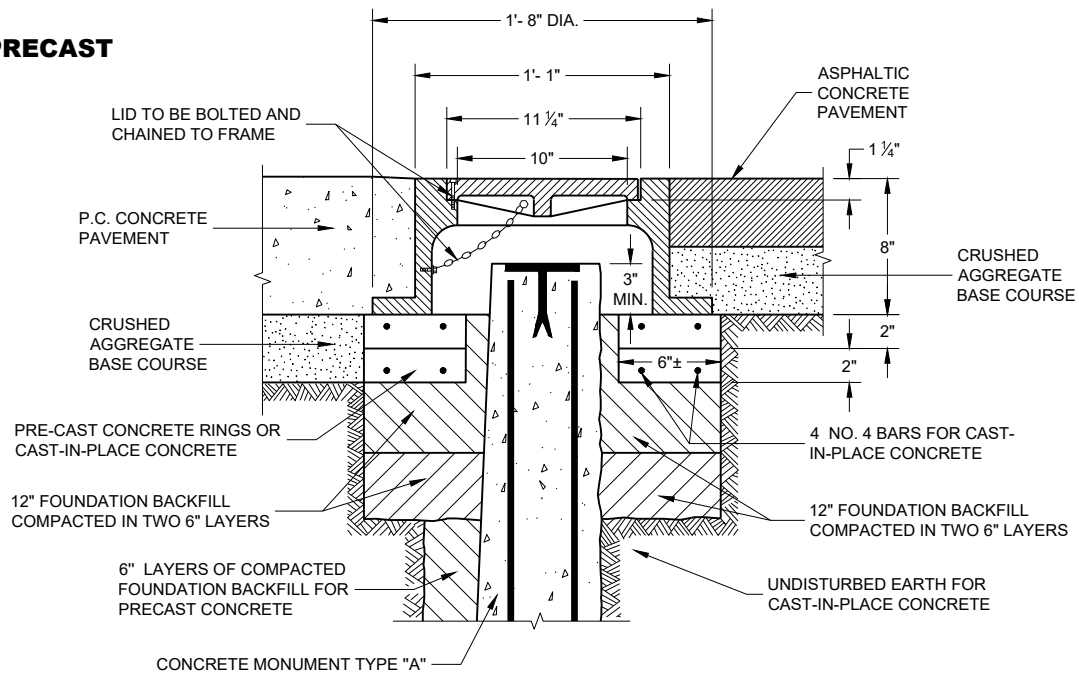
TYPE C
DRIVEN MONUMENT

TYPE D
NON-DRIVEN
BREAK-OFF MONUMENT

ALUMINUM MONUMENTS
(INCLUDES MARKER)

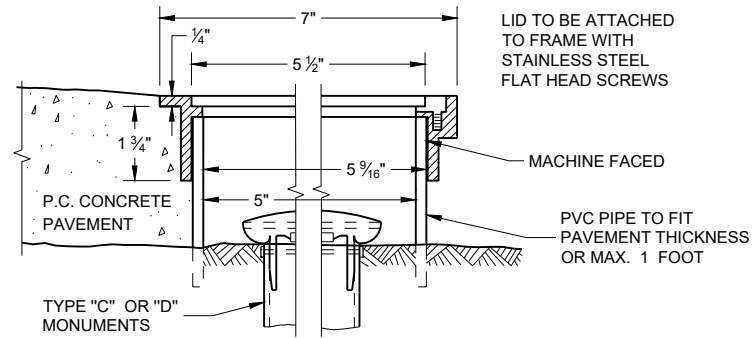


TOP VIEW



CAST IRON MONUMENT COVER

(APPROXIMATE WEIGHT 95 LBS)



SECTION B-B SECTION A-A

ALUMINUM MONUMENT COVER

(APPROXIMATE WEIGHT 2 LBS)
(FOR CONCRETE PAVEMENT ONLY)

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.

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

PERMANENT MAGNETS SHALL BE INSERTED NEAR THE TOP AND BOTTOM OF ALL ALUMINUM MONUMENTS SO THE MONUMENT CAN EASILY BE DETECTED BY A METAL DETECTOR.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER.

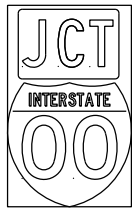
- ① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.
- ② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WISDOT MARKER.

LANDMARK REFERENCE
MONUMENTS AND COVERS

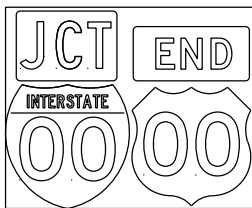
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 /S/ Raymond A. Kumapavii
DATE CHIEF SURVEYING AND MAPPING ENGINEER 117
FHWA

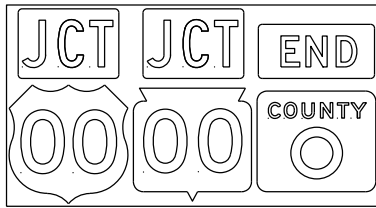
TYPICAL ASSEMBLIES



J1-1



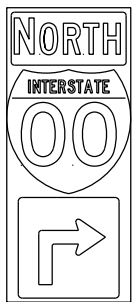
J1-2



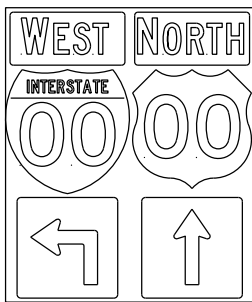
J1-3



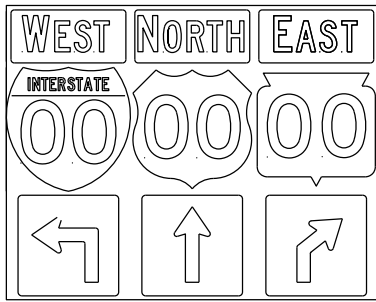
JR1-1



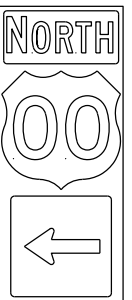
J2-1



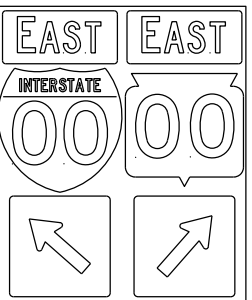
J2-2



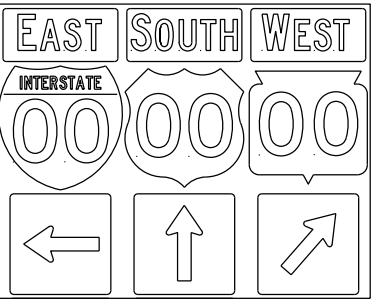
J2-3



J3-1



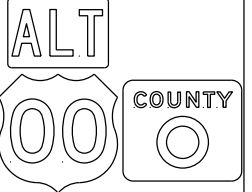
J3-2



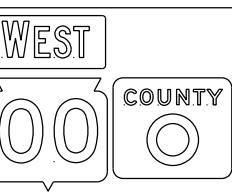
J3-3



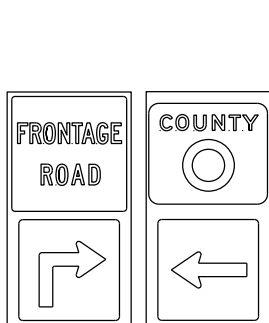
J4-1



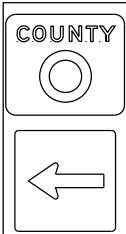
J4-2



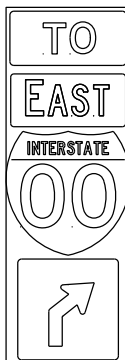
J4-2



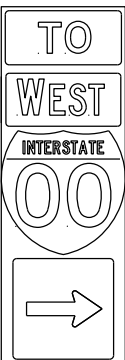
J12-1



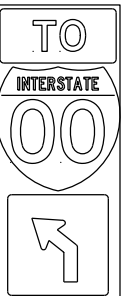
J13-1



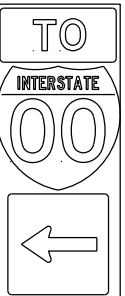
J32-1



J33-1



J22-1



J23-1



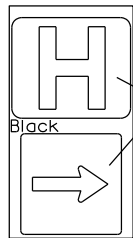
JR13-1



JR23-1



JR99-1

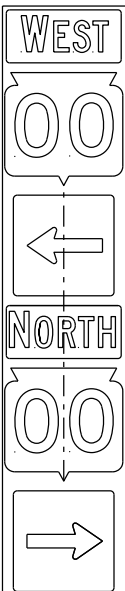
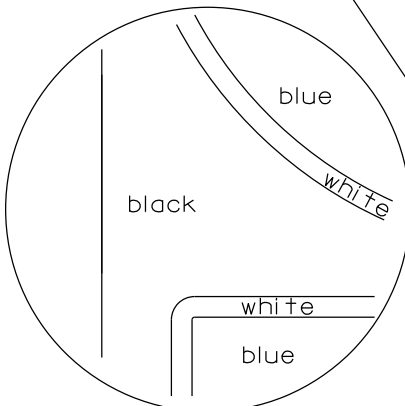


JH-1

Blue Background

Black

blue background with interstate

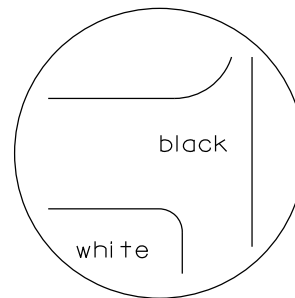
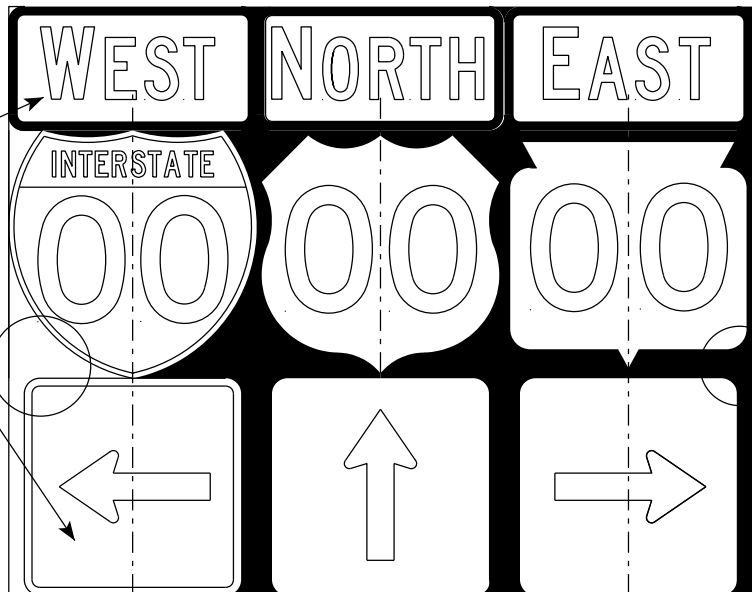


JV

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

NOTES

1. Signs are Type II - Type H Reflective
2. Color:
Background - Black Non-reflective
Message - see Note 4
3. Message Series - See Note 4
4. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
5. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
6. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
7. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
8. Route assemblies that have 36 inch shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. All Vertical J Assemblies are given a Sign Code of JV
10. For JV Assemblies that have a mixture of Interstate and Non-Interstate shields, arrows and cardinals shall be white on blue.
11. For JV Assemblies that have a mixture of Non-Interstate and Auto-Tour shields, arrows and cardinals shall be black on white.



black background

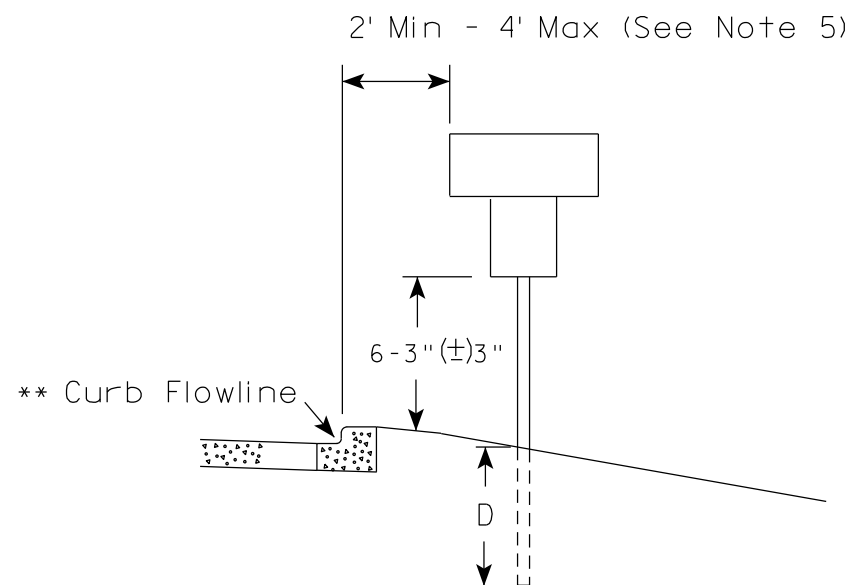
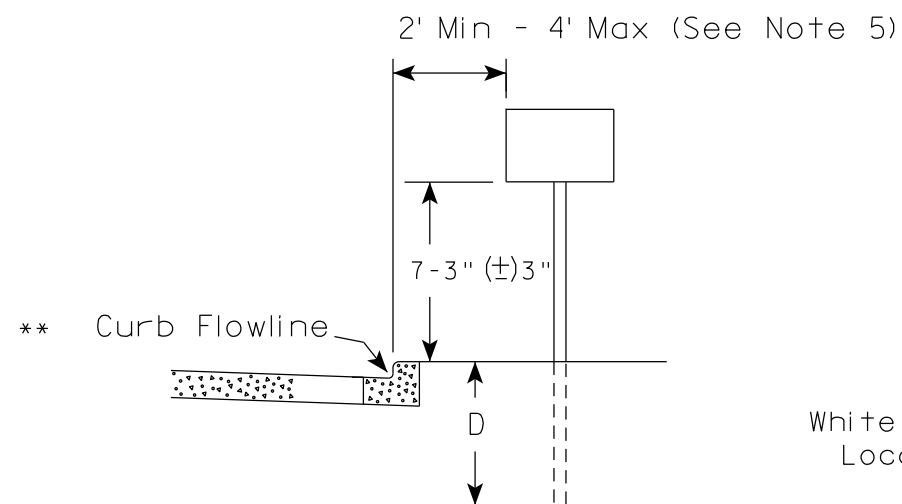
ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

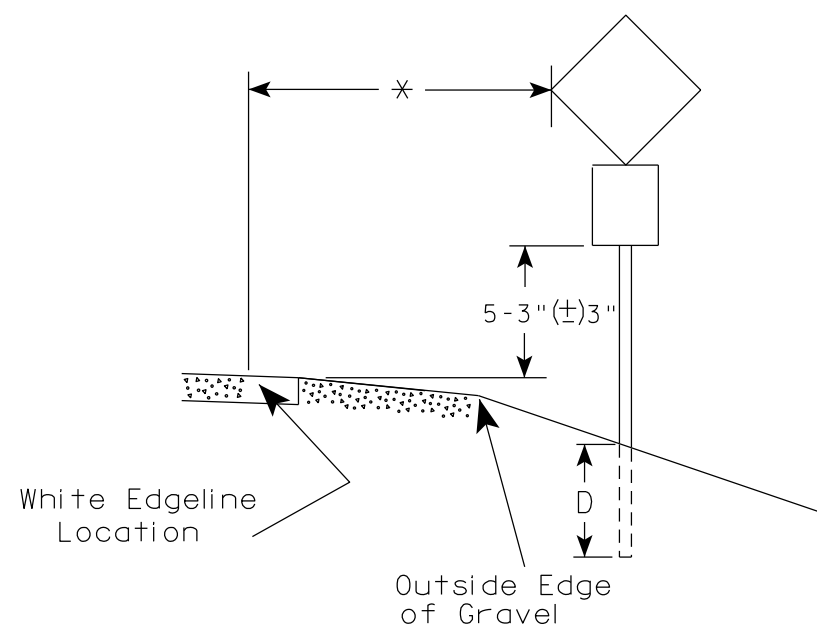
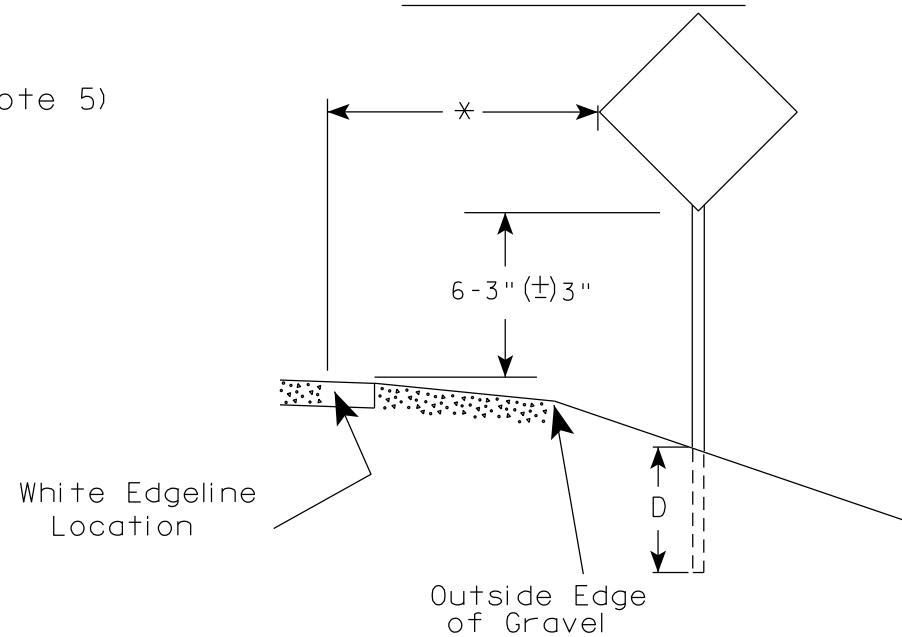
DATE 6/7/23 PLATE NO. A2-1S.10

URBAN AREA



* * 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.

RURAL AREA (See Note 2)



* 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.

GENERAL NOTES

- Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
- 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" (±) 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" (±) 3" or 6'-3" (±) 3" depending upon existence of a sub-sign.
- Minimum mounting height for signs mounted on traffic signal poles is 5'-3" (±) 3".
- Offset distance shall be consistent with existing signs or consistent throughout length of project.
- Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directed by the Engineer.

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch
for State Traffic Engineer

DATE 12/6/23

PLATE NO. A4-3.23

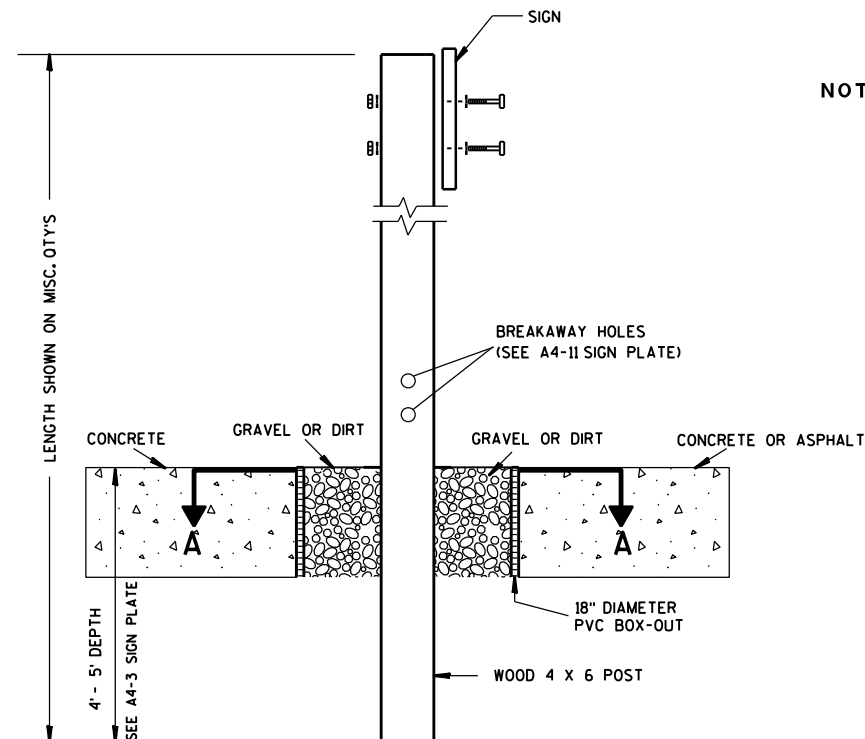
PROJECT NO:

HWY:

COUNTY:

SHEET NO: 119

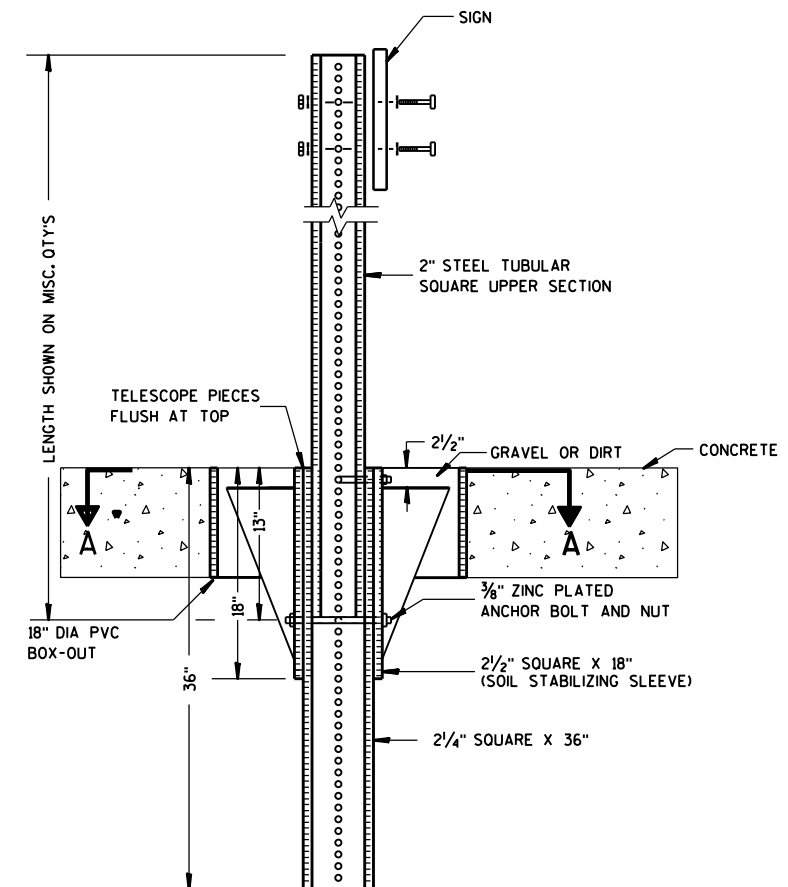
E



ELEVATION VIEW

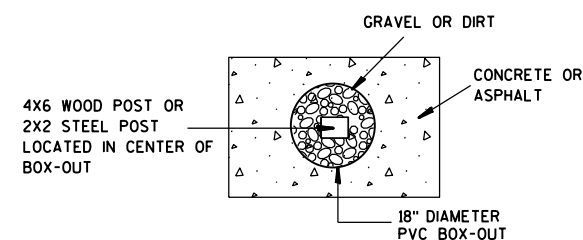
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

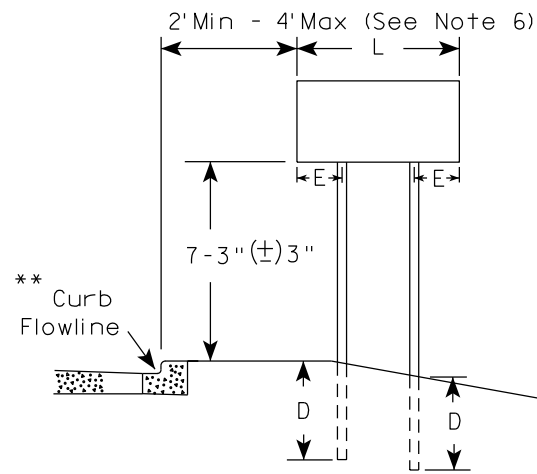
**SIGN POST
BOX-OUTS
A4-3B**

WISCONSIN DEPT OF TRANSPORTATION

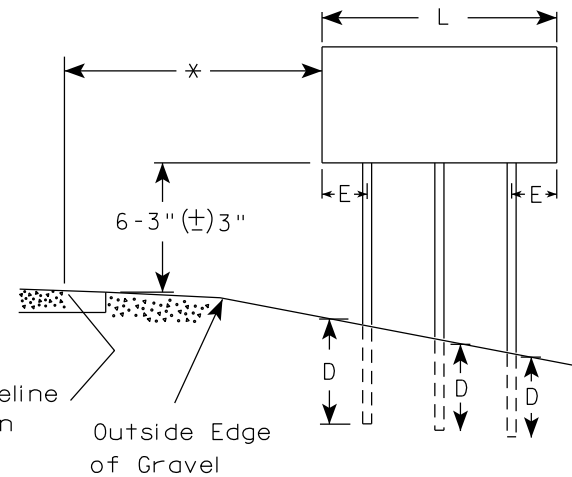
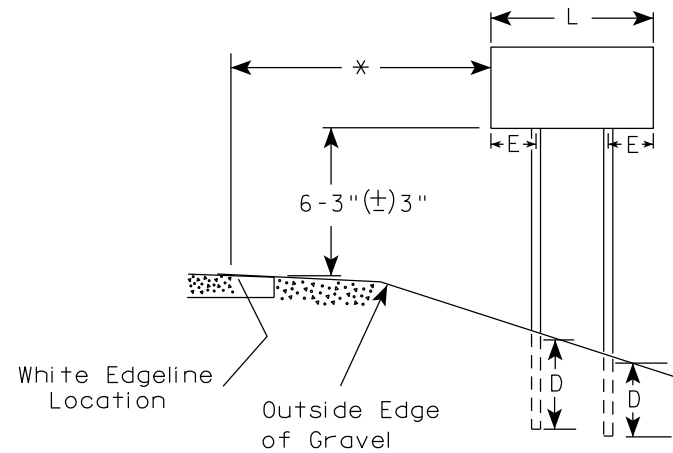
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 1/27/14 PLAT 120 A4-3B.1

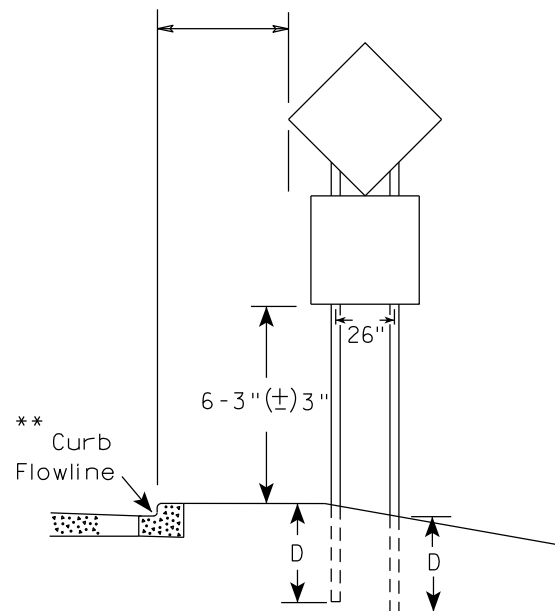
URBAN AREA



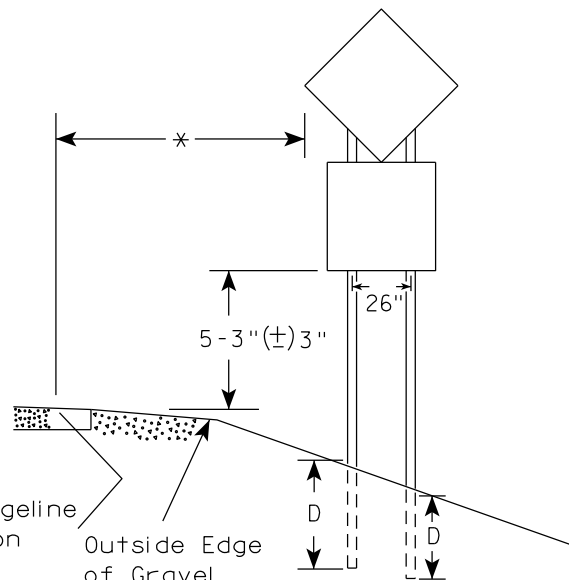
RURAL AREA (See Note 3)



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



48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 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	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 12/6/23	PLATE NO. A4-4.16

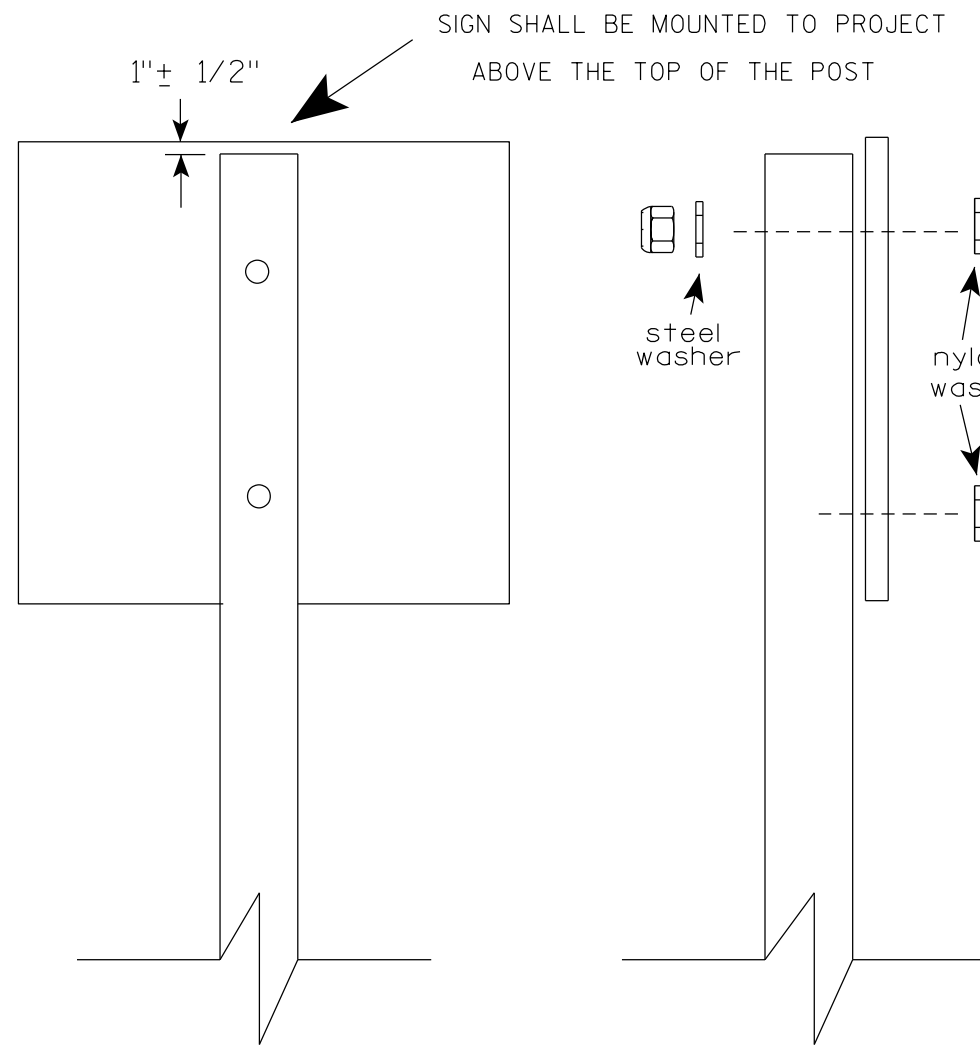
GENERAL NOTES

- For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
- See tables below for required number of posts.
- For expressways and freeways, mounting height is 7'-3" (±) 3" or 6'-3" (±) 3" depending upon existence of sub-sign.
- The (±) tolerance for mounting height is 3 inches.
- J-Assemblies are considered to be one sign for mounting height.
- Offset distance shall be consistent with existing signs or consistent throughout length of project.
- Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directed by the engineer.
- The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±) 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" (±) 3".

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

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

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



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

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

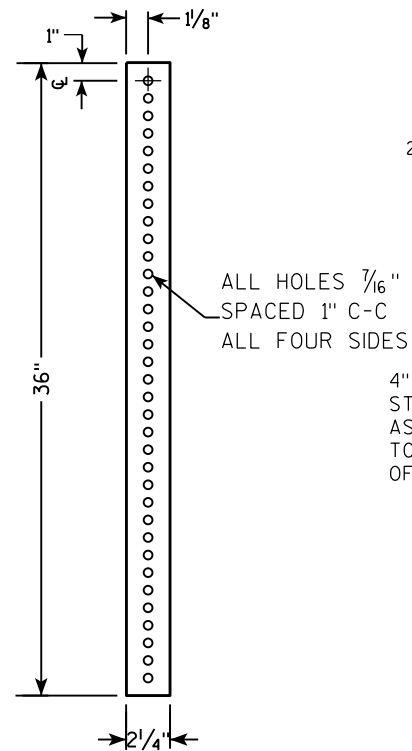
Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

- STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
- MACHINE BOLTS - $\frac{5}{16}$ " 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

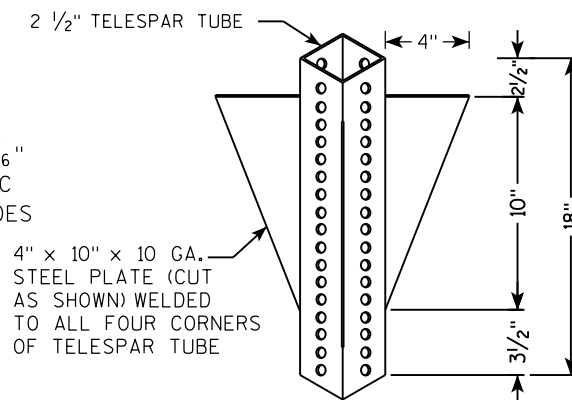
* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require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

**2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH**



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



LENGTH SHOWN ON MISC. QTY'S

18" DIA SCHEDULE 40 PVC BOX-OUT

TELESCOPE PIECES FLUSH AT TOP

2" STEEL TUBULAR SQUARE UPPER SECTION

ALL HOLES $\frac{7}{16}$ " SPACED 1" C-C ALL FOUR SIDES

$\frac{3}{8}$ " ZINC PLATED CORNER ANCHOR BOLT AND NUT

2 1/2" GRAVEL OR DIRT

$\frac{3}{8}$ " ZINC PLATED ANCHOR BOLT AND NUT

2 1/2" SQUARE X 18" (SOIL STABILIZING SLEEVE)

2 1/4" SQUARE X 36"

SIGN

SEE SIGN PLATE A4-8 FOR BOLT WASHER, & NUT MATERIAL

LENGTH SHOWN ON MISC. QTY'S

SIGN

SEE SIGN PLATE A4-8 FOR BOLT WASHER, & NUT MATERIAL

2" STEEL TUBULAR SQUARE UPPER SECTION

ALL HOLES $\frac{7}{16}$ " SPACED 1" C-C ALL FOUR SIDES

$\frac{3}{8}$ " ZINC PLATED CORNER ANCHOR BOLT AND NUT

TELESCOPE PIECES FLUSH AT TOP

1"

A

B

C

$\frac{3}{8}$ " ZINC PLATED ANCHOR BOLT AND NUT

2 $\frac{1}{2}$ " SQUARE X 18" (SOIL STABILIZING SLEEVE)

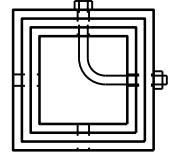
2 $\frac{1}{4}$ " SQUARE X 36"

36"

18"

12"

3/8" ZINC PLATED CORNER
ANCHOR BOLT AND NUT



DIRECTION
OF TRAFFIC

SECTION A-A

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

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

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthieu R. Rauch

for State Traffic Engineer

DATE 2/05/15 PLATI 123 14-9.9

SHEET NO: E

PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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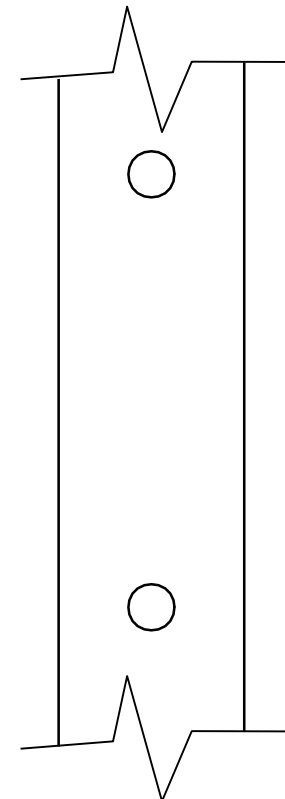
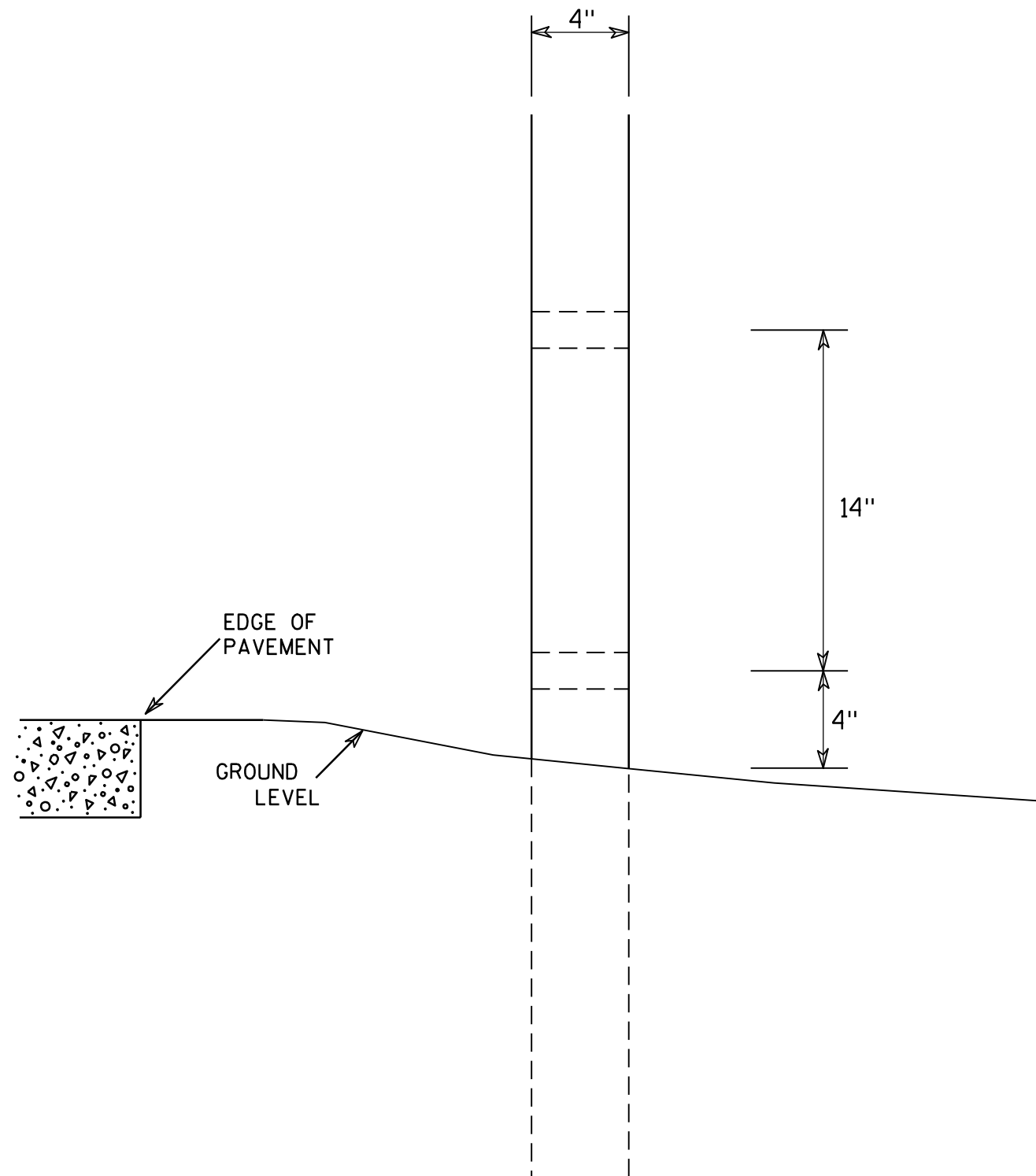
PLOT DATE : 05-FEB-2015 17:09

PLOT BY : mscs_ja

PLOT NAME :

PLOT SCALE : 13.659812:1.000000

WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1 1/2" diameter holes drilled perpendicular to the roadway centerline.

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 3/27/97

PLATE NO. A4-11.2

PROJECT NO:

HWY:

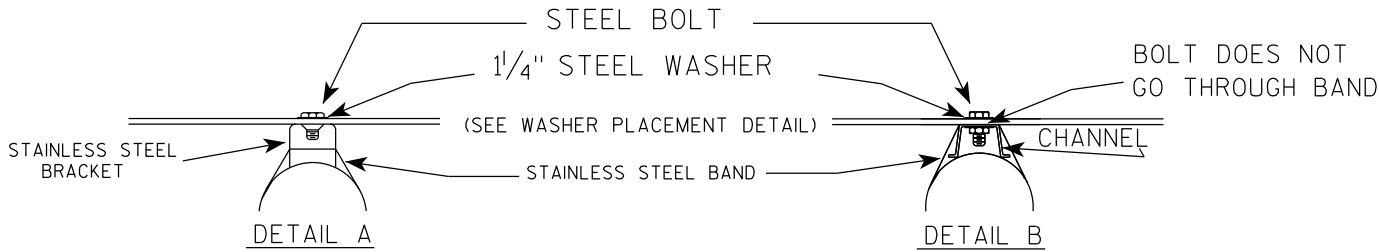
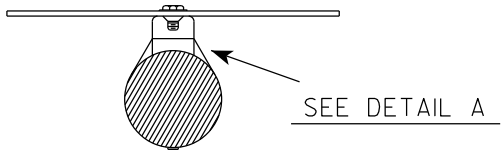
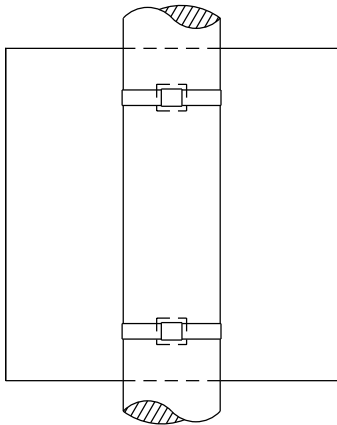
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SHEET NO: 124

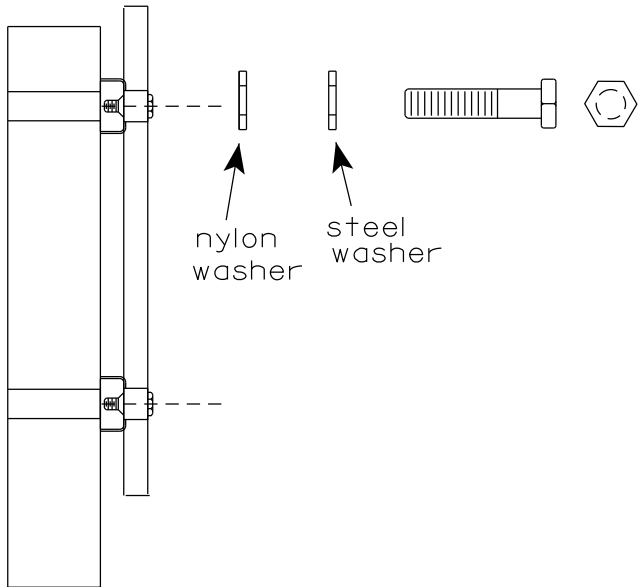
E

BANDING

SINGLE SIGN



WASHER PLACEMENT

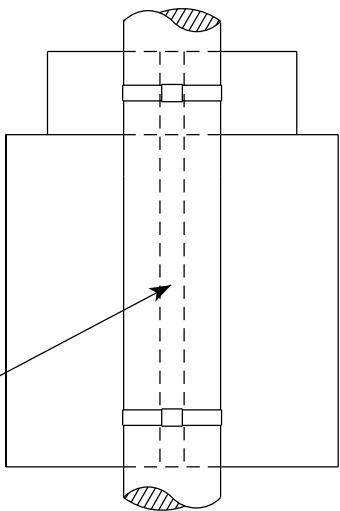


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

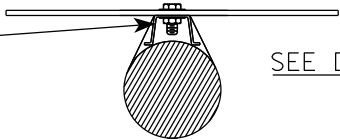
GENERAL NOTES

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 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

"J" ASSEMBLY



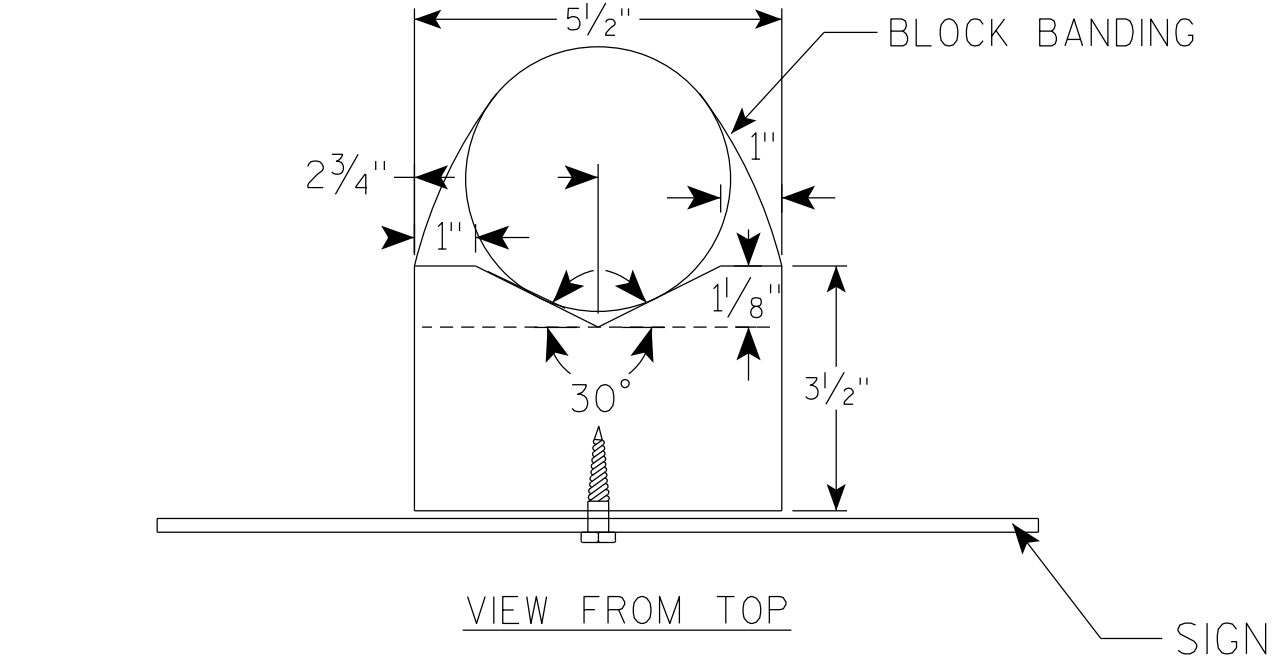
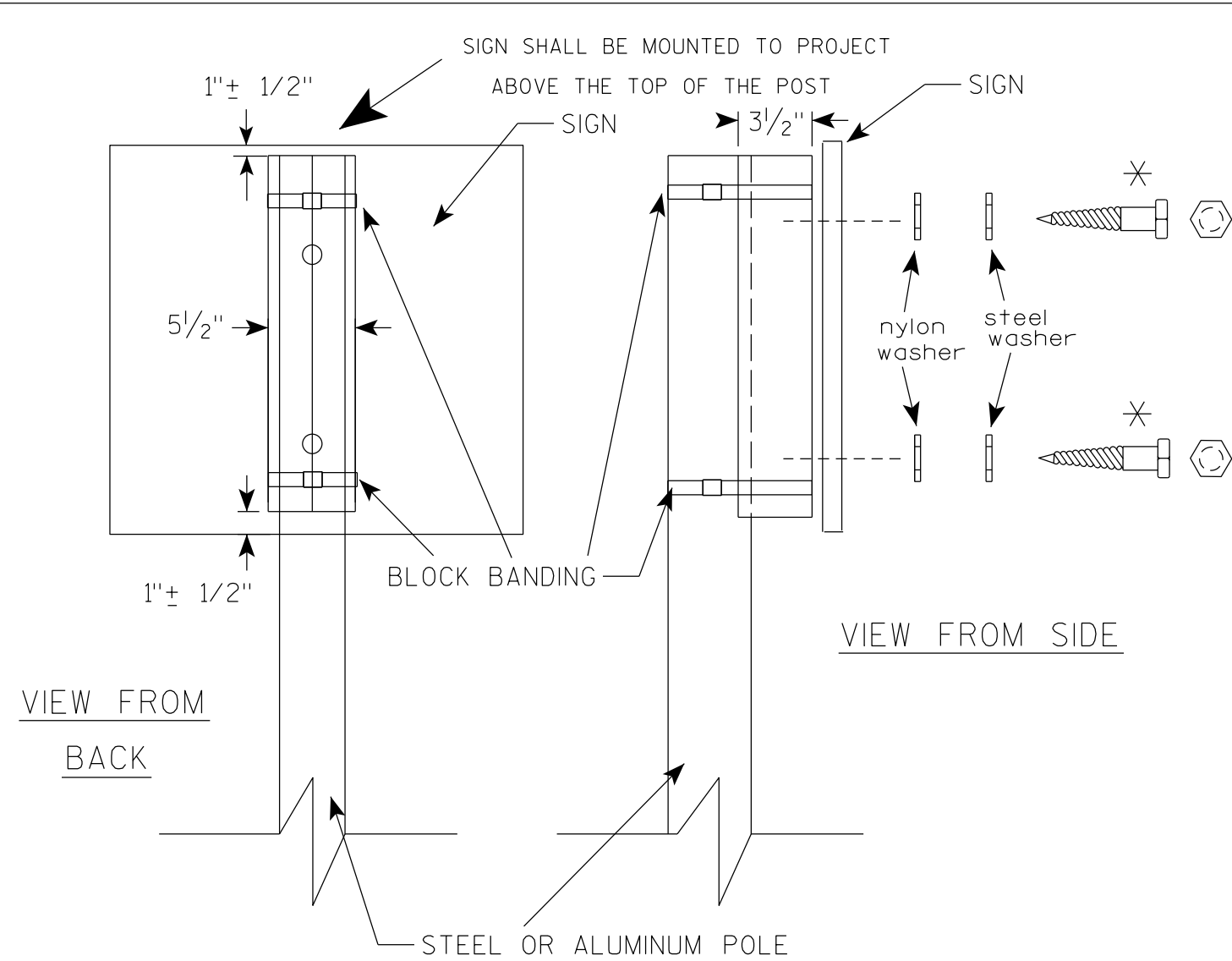
CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET



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, $\frac{3}{4}$ " WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORMALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
 - a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
 - 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 $\frac{1}{4}$ " O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ "
8. NYLON WASHERS SHALL BE $\frac{1}{4}$ " O.D. X $\frac{3}{8}$ " I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

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

BLOCK BANDING DETAIL
(V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

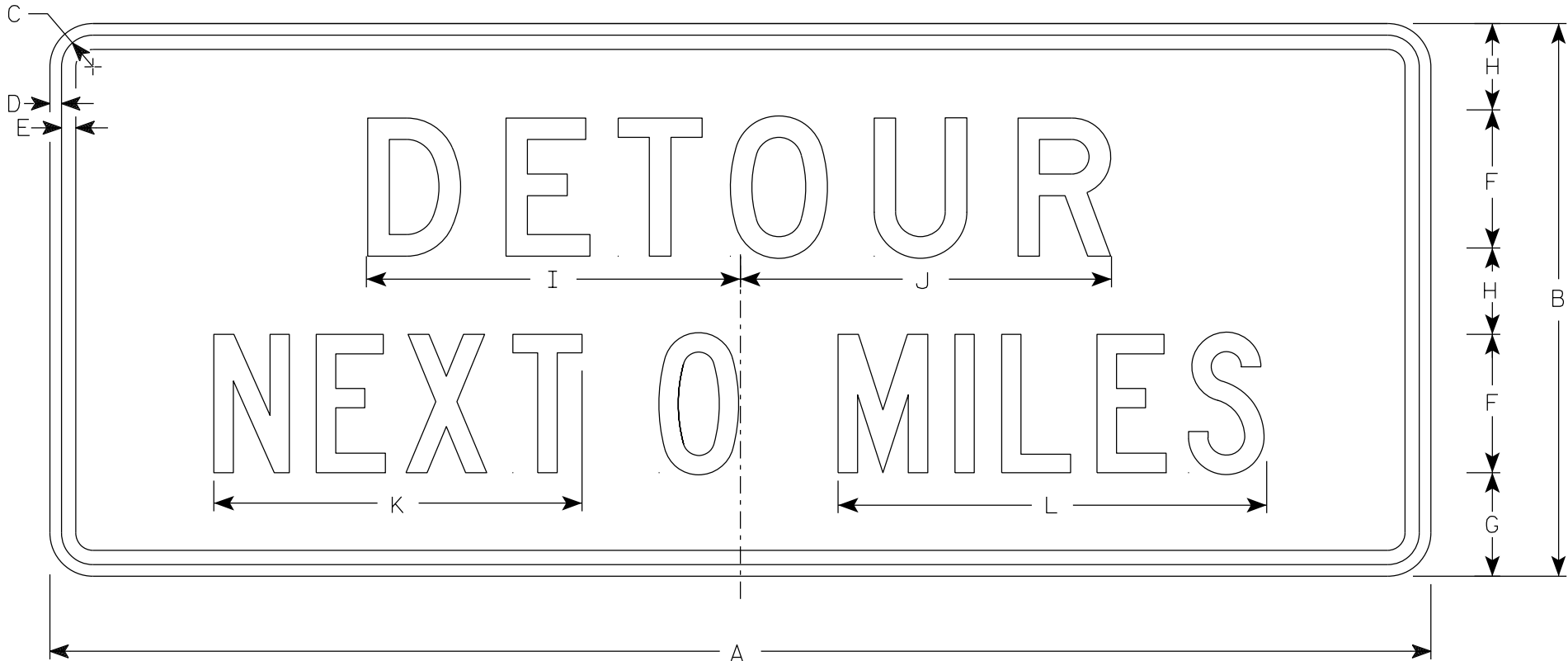
DATE 4/19/2022 PLATE NO. A5-10.3

7

7

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
Background - Orange
Message - Black
- 3. Message Series - Line 1 is D and Line 2 is 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



G20-51

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 7⁄8	1⁄2	5⁄8	6	4 1⁄2	3 3⁄4	16 1⁄4	16 1⁄8	16	18 5⁄8															10.0
2M	60	24	1 7⁄8	1⁄2	5⁄8	6	4 1⁄2	3 3⁄4	16 1⁄4	16 1⁄8	16	18 5⁄8															10.0
3	60	24	1 7⁄8	1⁄2	5⁄8	6	4 1⁄2	3 3⁄4	16 1⁄4	16 1⁄8	16	18 5⁄8															10.0
4	60	24	1 7⁄8	1⁄2	5⁄8	6	4 1⁄2	3 3⁄4	16 1⁄4	16 1⁄8	16	18 5⁄8															10.0
5	60	24	1 7⁄8	1⁄2	5⁄8	6	4 1⁄2	3 3⁄4	16 1⁄4	16 1⁄8	16	18 5⁄8															10.0

STANDARD SIGN

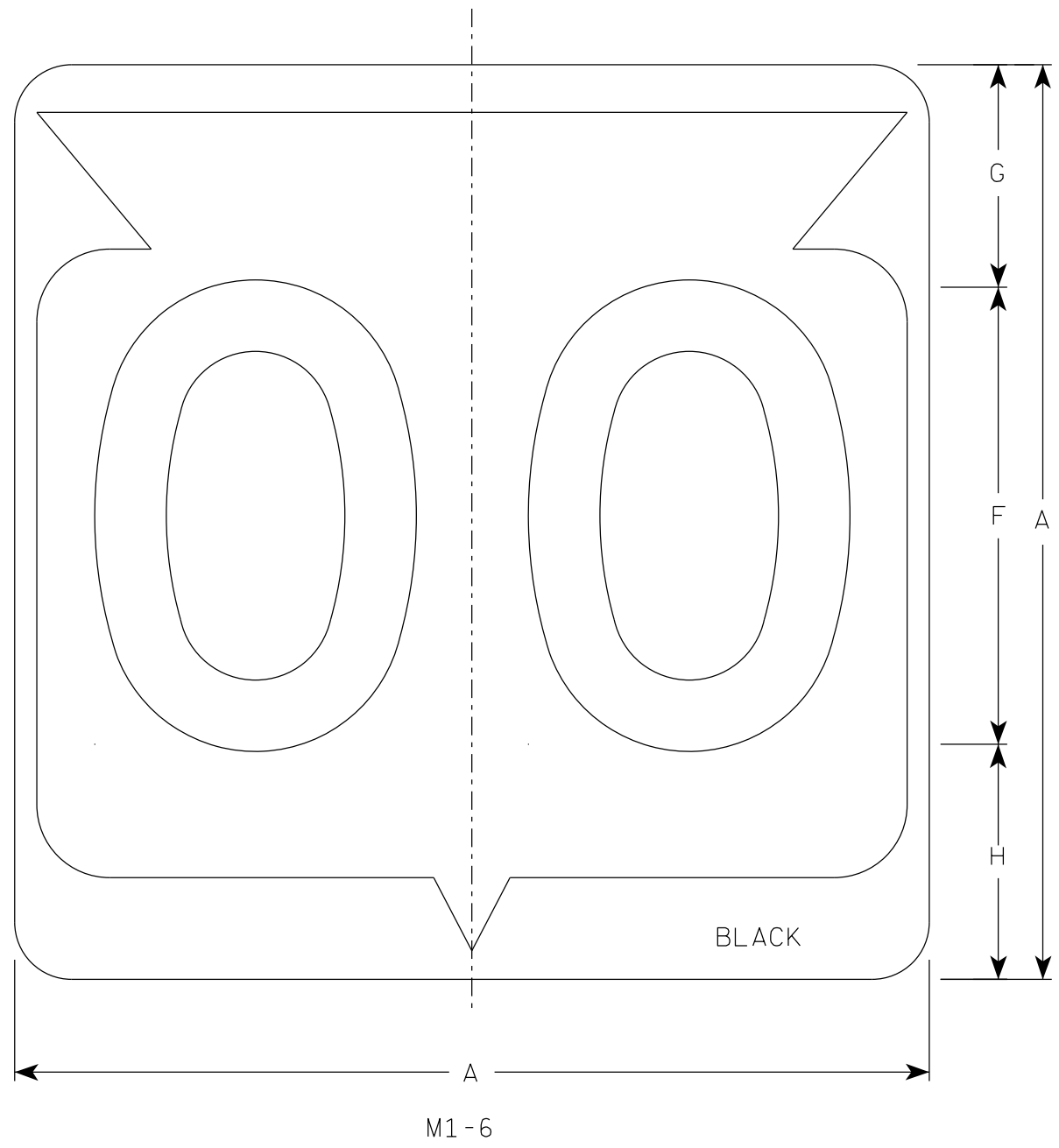
G20-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
State Traffic Engineer

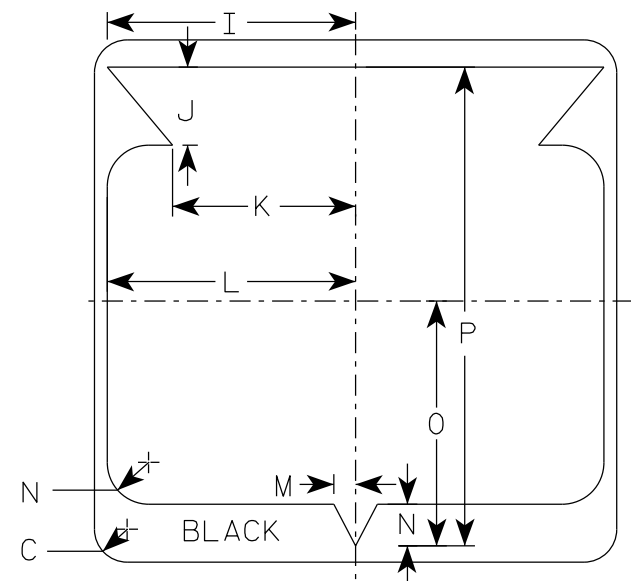
DATE 1/26/2023 PLATE NO. G20-51.3

7



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



7

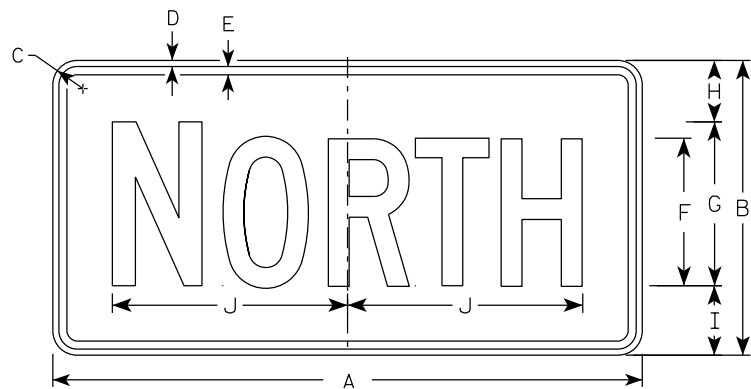
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1																											
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
2M	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	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

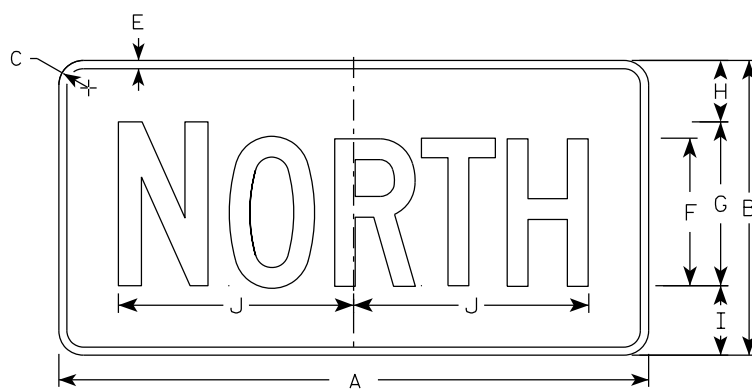
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

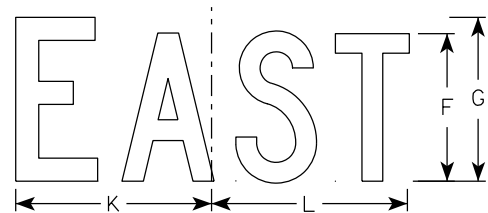
DATE 11/8/2022 PLATE NO. M1-6.11



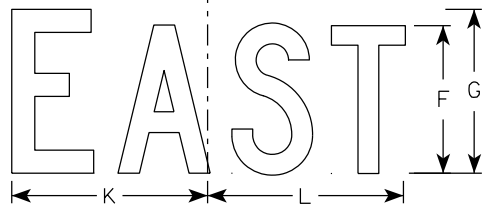
M3-1
MM3-1
MP3-1



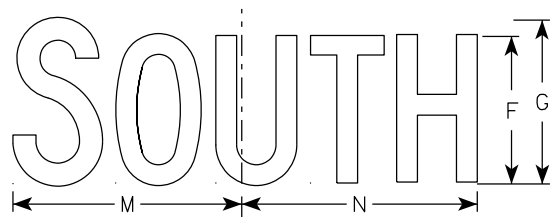
MB3-1
MK3-1
MN3-1



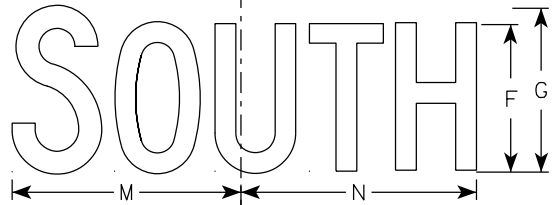
M3-2
MM3-2
MP3-2



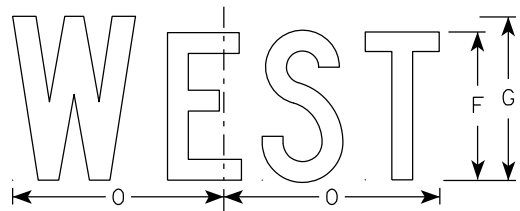
MB3-2
MK3-2
MN3-2



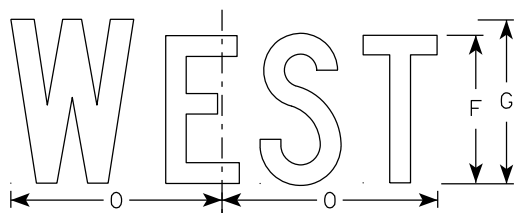
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

- All Signs Type II - Type H Reflective
- 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.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/2	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												2.00
2M	24	12	1 1/2	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												2.00
3	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5
4	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5
5	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5

STANDARD SIGNS M3-1 THRU M3-4 SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 2/8/2023 PLATE NO. M3-1.15

PROJECT NO: HWY: COUNTY: SHEET NO: 129 E

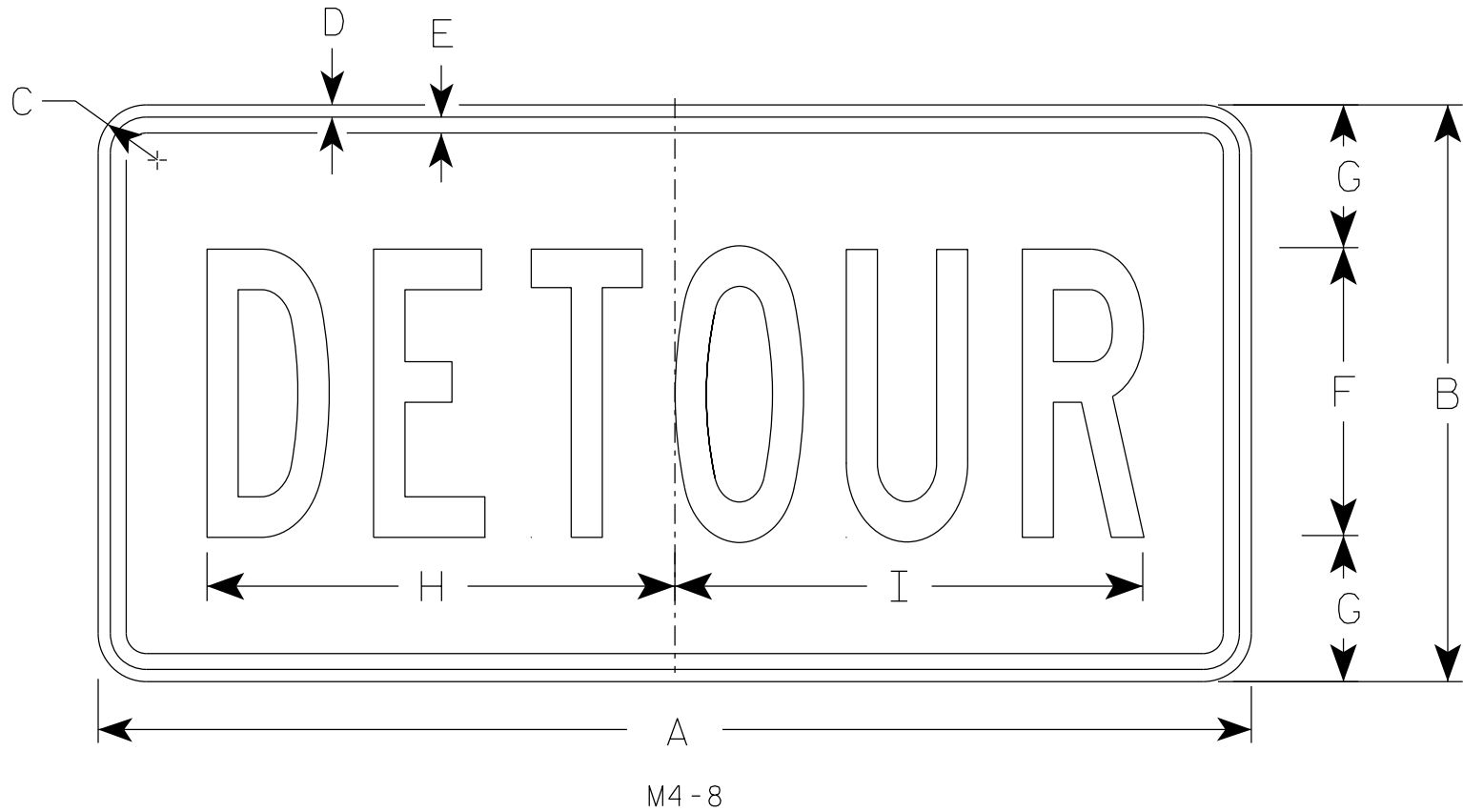
FILE NAME : C:\CAEfiles\Projects\tr_stdplate-M31.dgn PLOT DATE : 8-FEB 2023 11:00 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : \$\$.....plotscale.....\$\$WISDOT/CADDS SHEET 42

7

7

NOTES

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



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

STANDARD SIGN

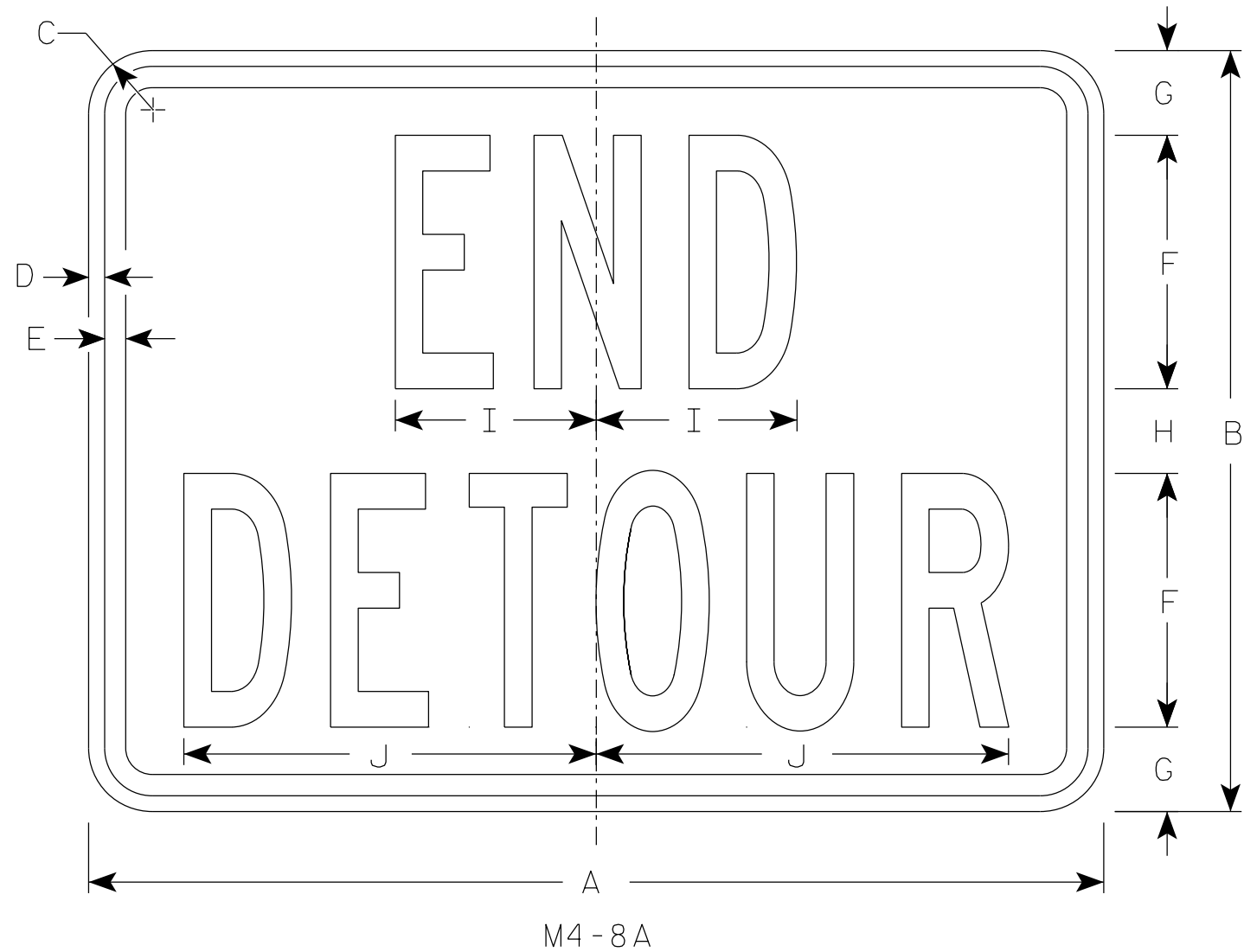
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-8.4

7



NOTES

1. Sign is Type II - Type F Reflective
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.

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

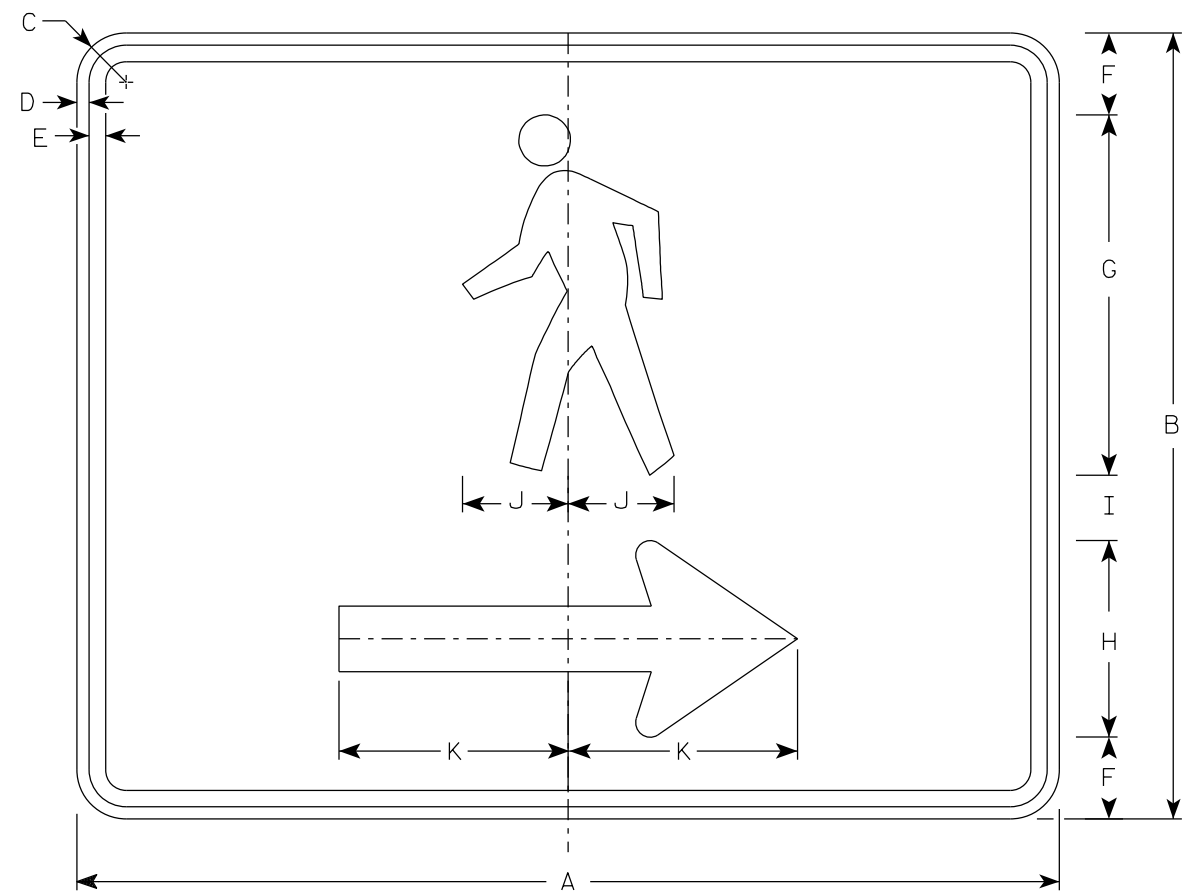
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-8A.4

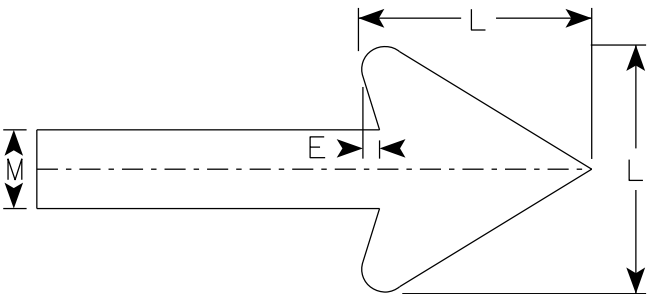
7



M4-60R

NOTES

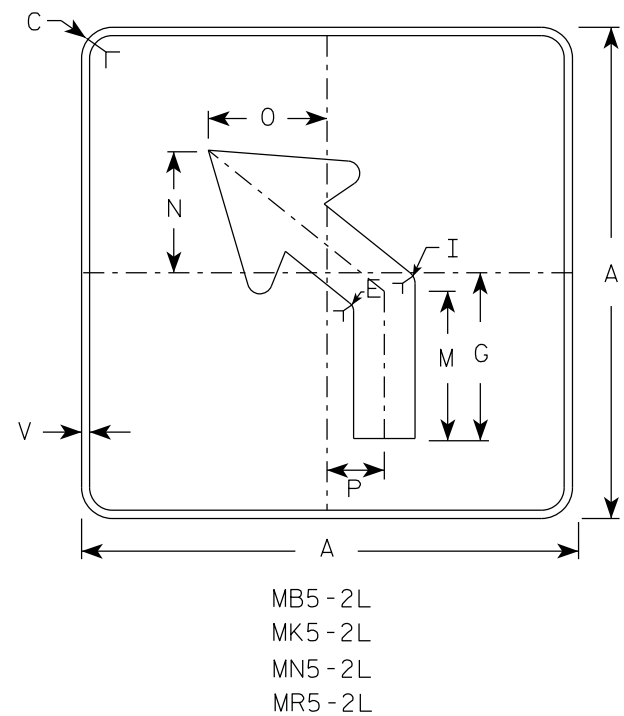
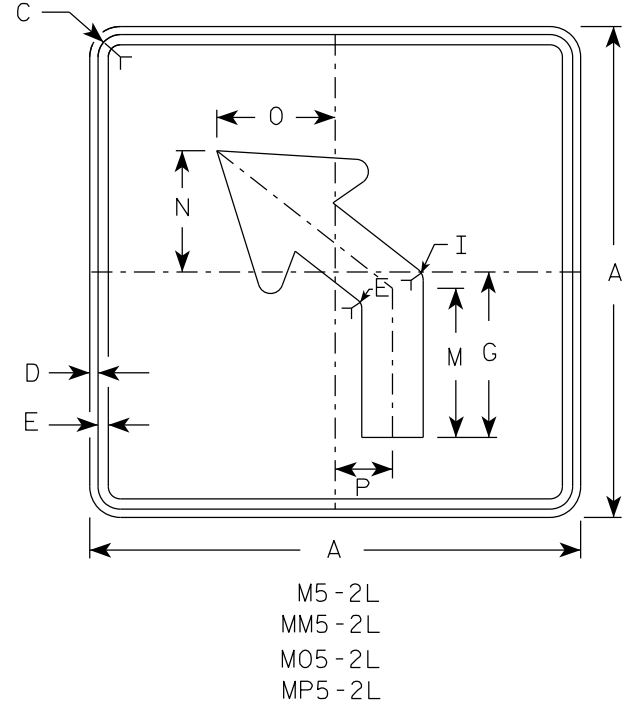
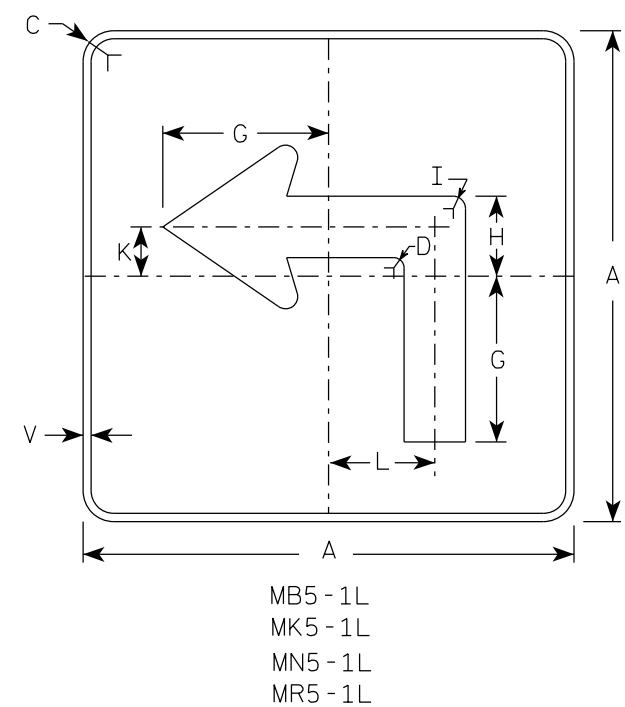
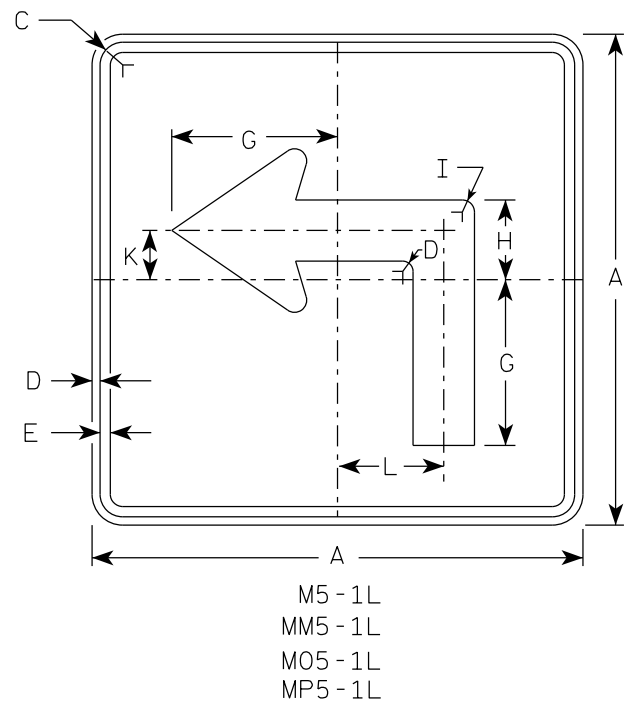
1. Sign is Type II- Type F Reflective
2. Color:
Background - Orange
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M4-60L is the same as M4-60R except the arrow is reversed.



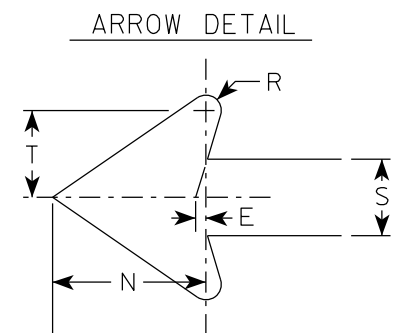
Arrow Detail

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

7

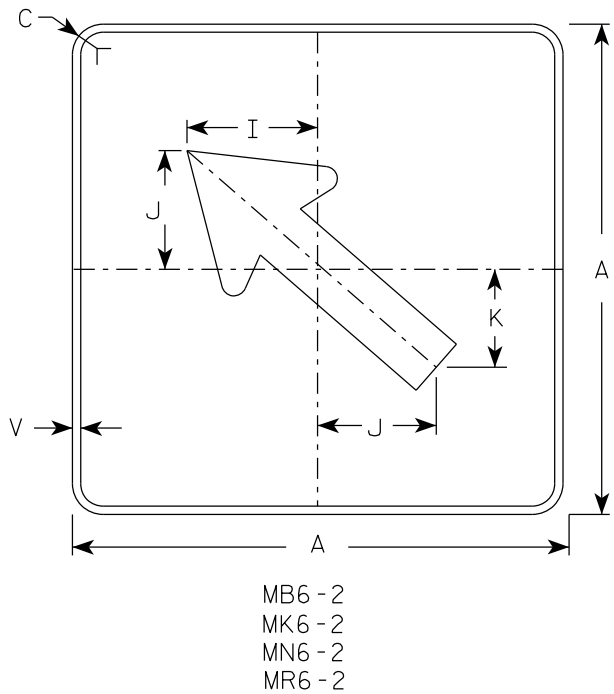
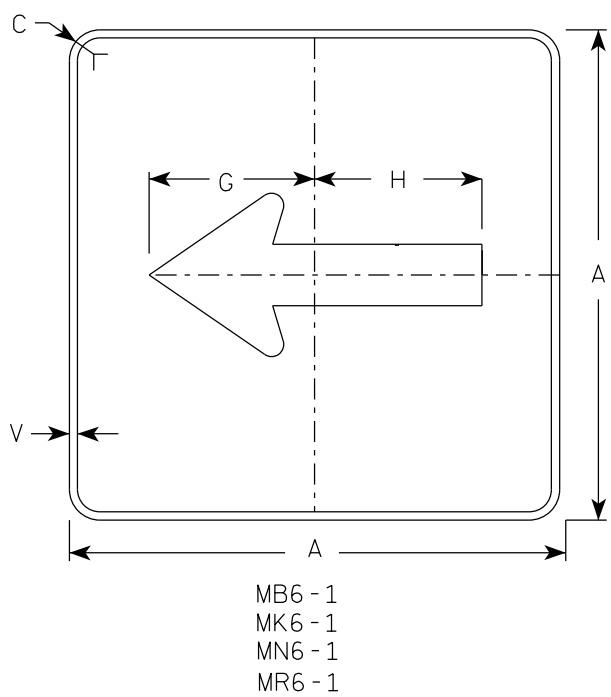
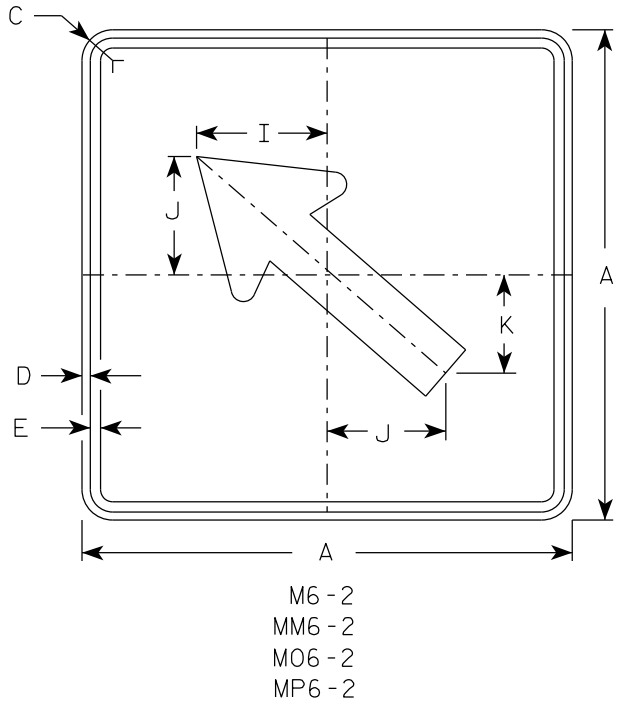
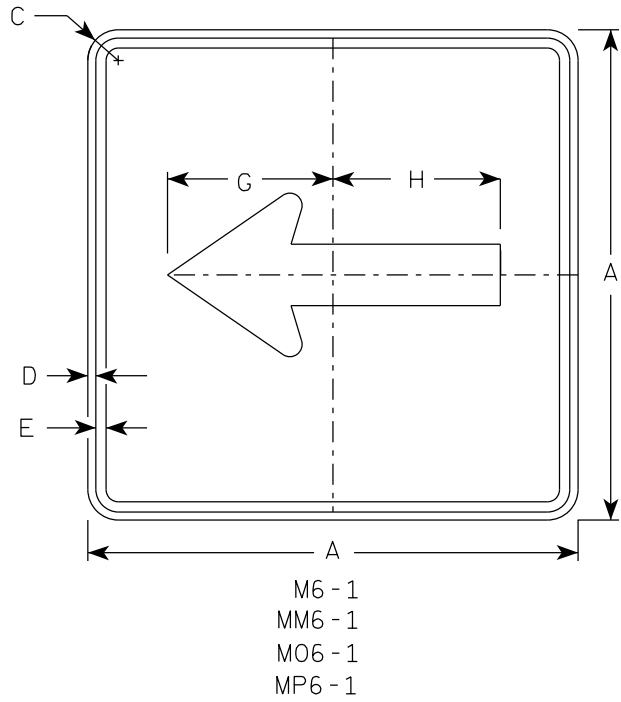


- NOTES
- Signs are Type II - Type H reflective except as shown
 - Color:
Background - See note 4
Message - See note 4
 - Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
 - | | | |
|-----------|-------|---|
| 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 |
| | | 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.

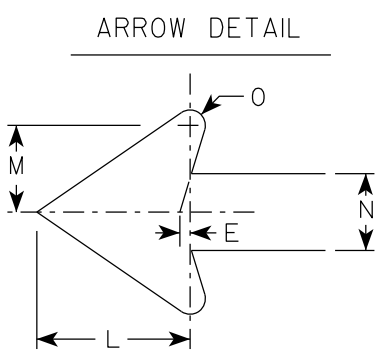


SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	21		1 1/2	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3		1/2					3.06
2M	21		1 1/2	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3		1/2					3.06
3	30		1 7/8	1/2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

PROJECT NO:		HWY:		COUNTY:		SHEET NO: 133		E
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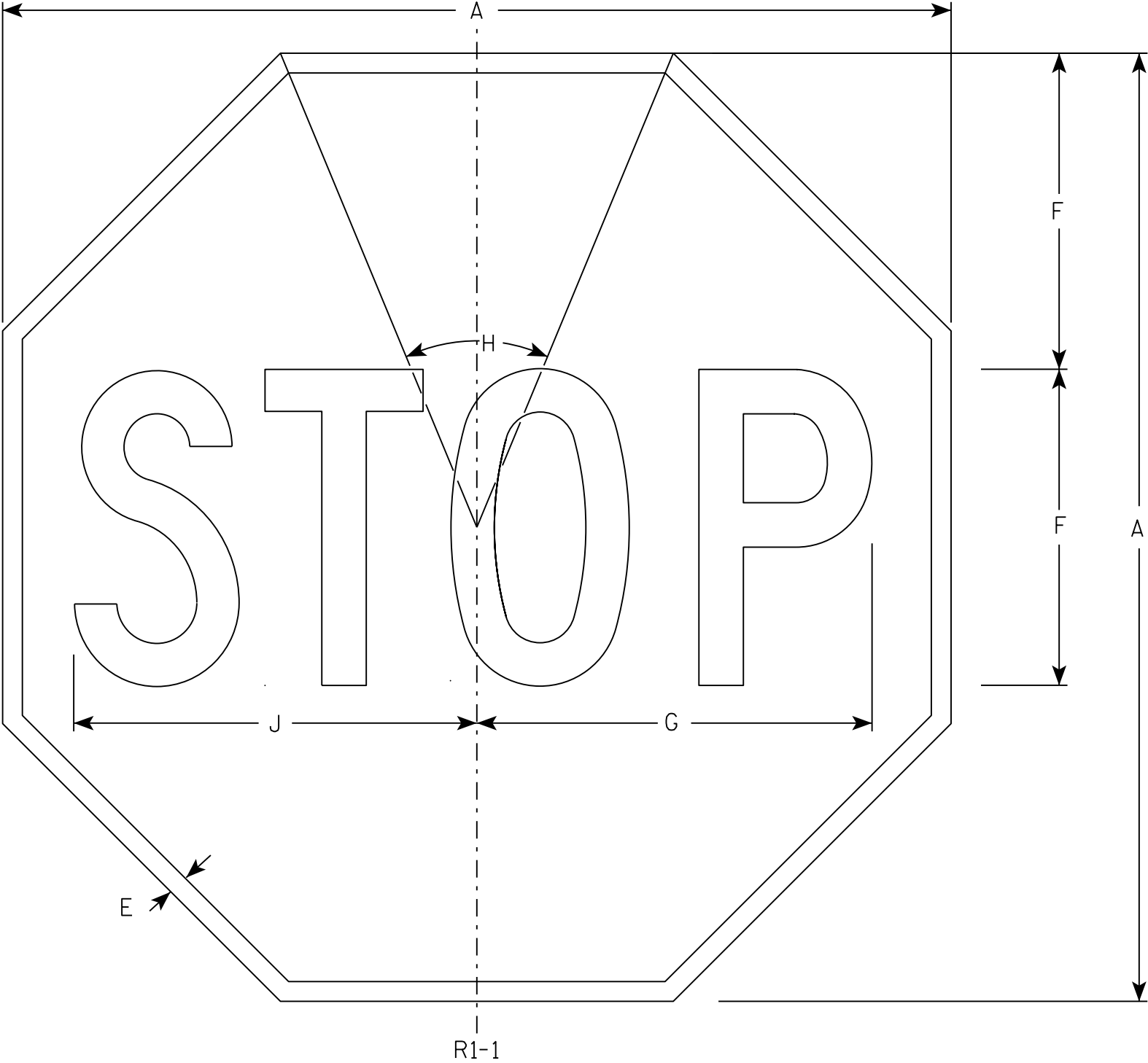


- NOTES
1. Signs are Type II - Type H Reflective except as Shown
 2. Color:
Background - See note 4
Message - See note 4
 3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
 4. M6-1 and M6-2 Background - White
Message - Black
MB6-1 and MB6-2 Background - Blue
Message - White
MK6-1 and MK6-2 Background - Green
Message - White
MM6-1 and MM6-2 Background - White
Message - Green
MN6-1 and MN6-2 Background - Brown
Message - White
M06-1 and M06-2 Background - Orange - Type F Reflective
Message - Black
MP6-1 and MP6-2 Background - White
Message - Blue
MR6-1 and MR6-2 Background - Brown
Message - Yellow



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

7



NOTES

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

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

STANDARD SIGN

R1 - 1

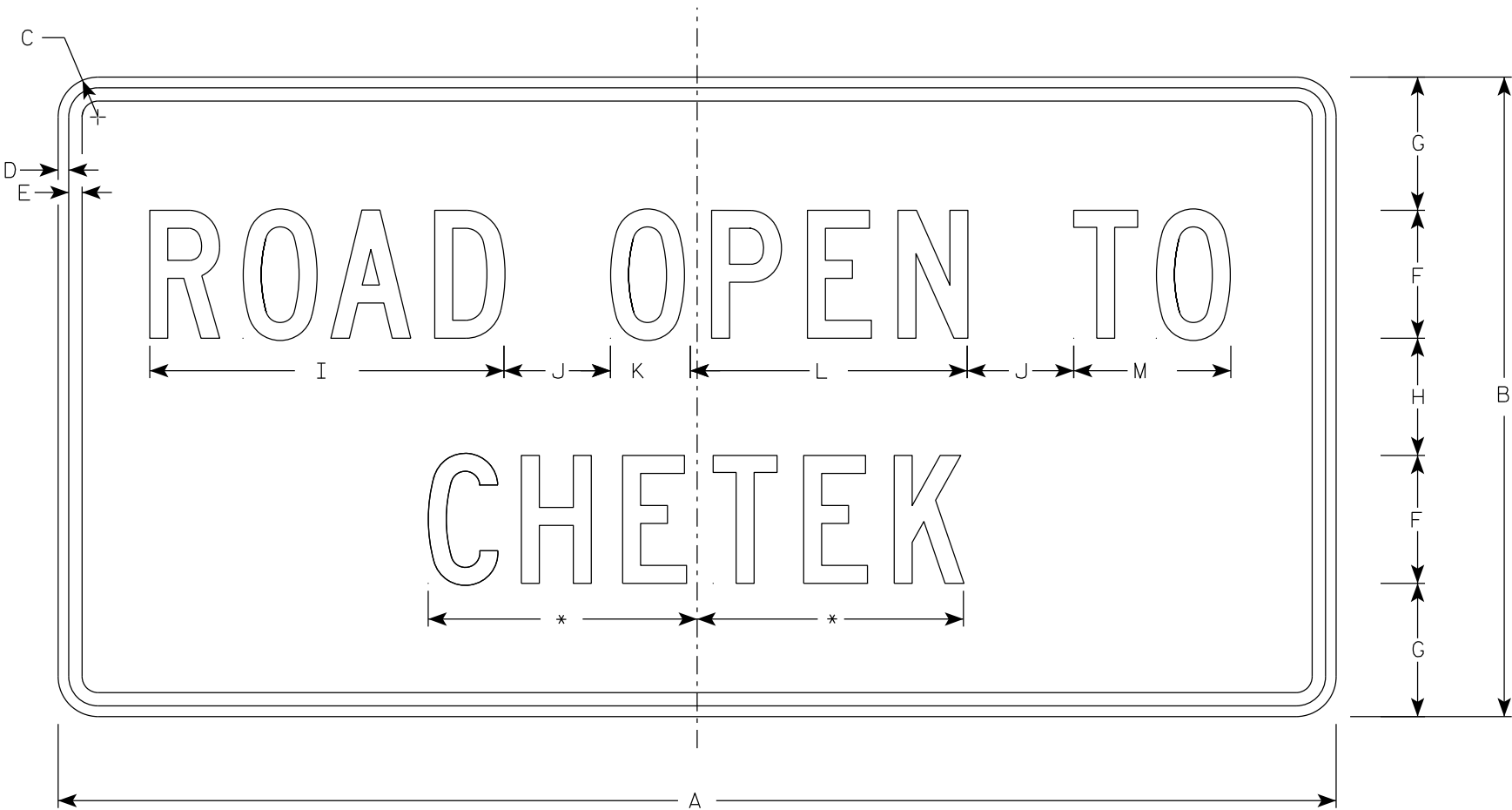
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

7

7



R10-61

*See note 5

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 message and optically balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	24	1 1/2	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 7/8	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 7/8	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

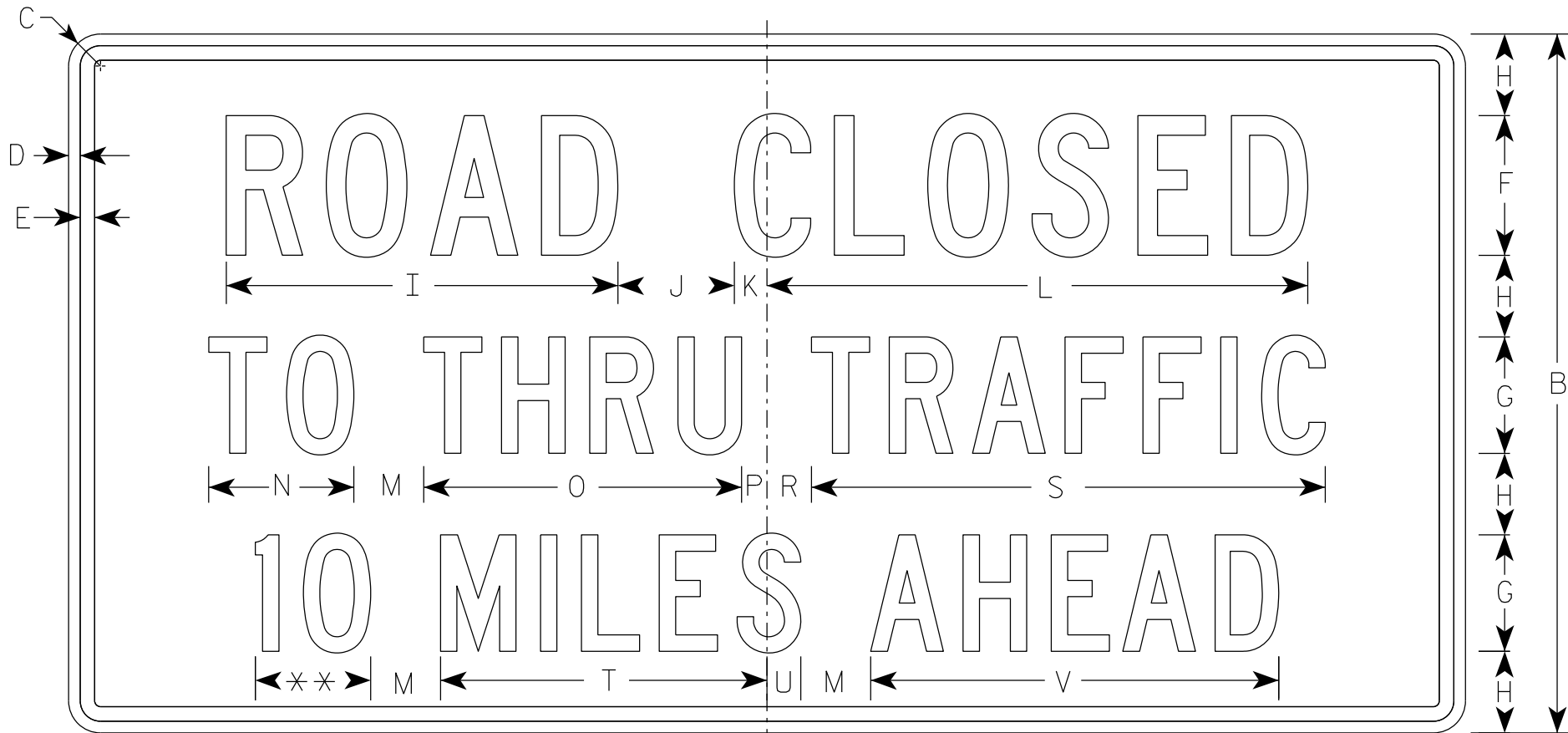
R10-61

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

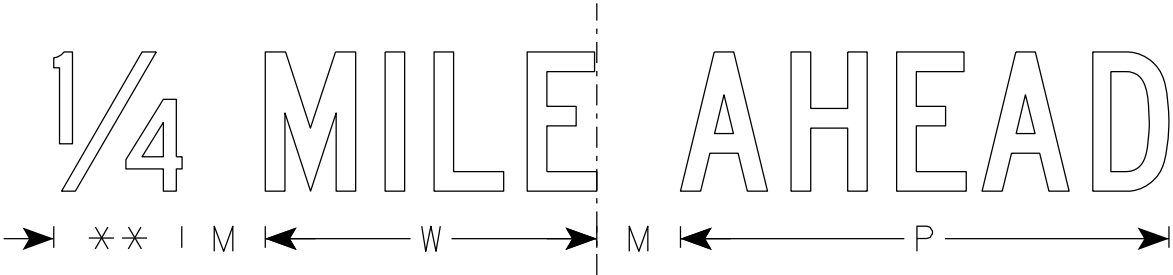
DATE 2/5/24 PLATE NO. R10-61.6

7



R11-3

** See Note 5



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.

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	18	1 1/2	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 7/8	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 7/8	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																											

PROJECT NO:

HWY:

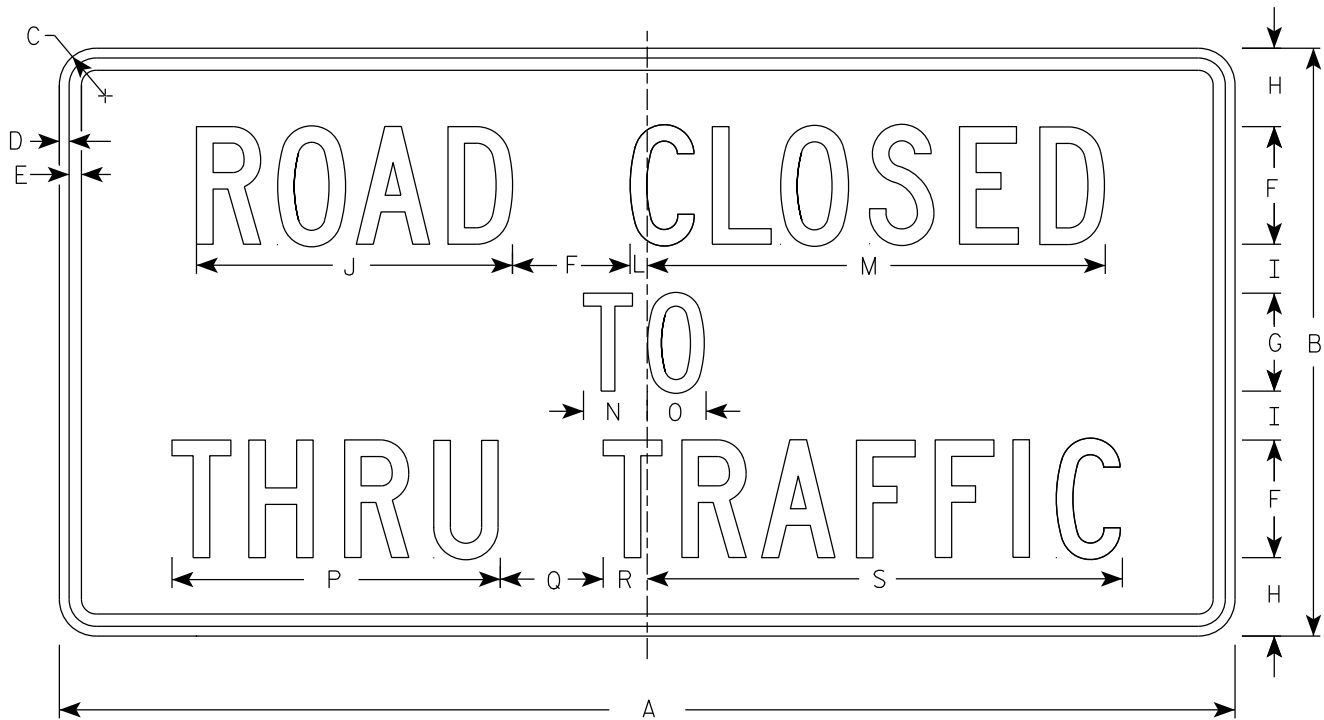
COUNTY:

SHEET NO: 137

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.



R11-4

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 7⁄8	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 7⁄8	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																											

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 138

E

STANDARD SIGN

R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

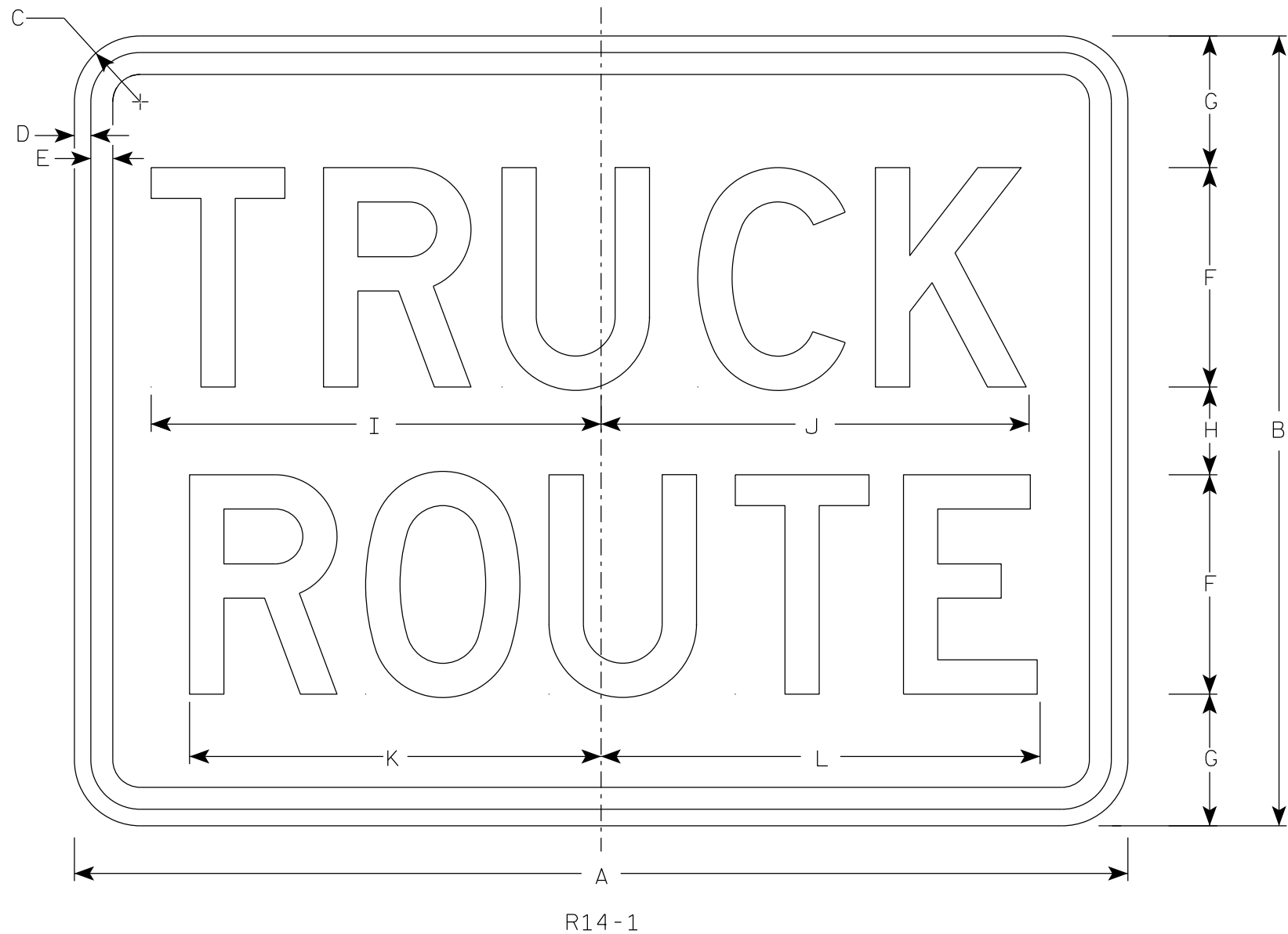
APPROVED

Matthew R. Rauch
for State Traffic Engineer

DATE 2/5/24

PLATE NO. R11-4.4

7



NOTES

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

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	24	18	1 1/2	3/8	1/2	5	3	2	10 1/4	9 3/4	9 3/8	10															3.0
2M	24	18	1 1/2	3/8	1/2	5	3	2	10 1/4	9 3/4	9 3/8	10															3.0
3	30	24	1 1/2	3/8	1/2	6	4	4	12 1/4	11 3/4	11 1/4	12															5.0
4																											
5																											

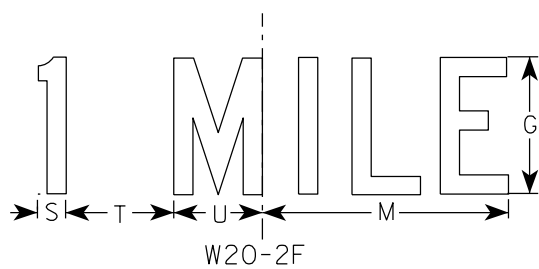
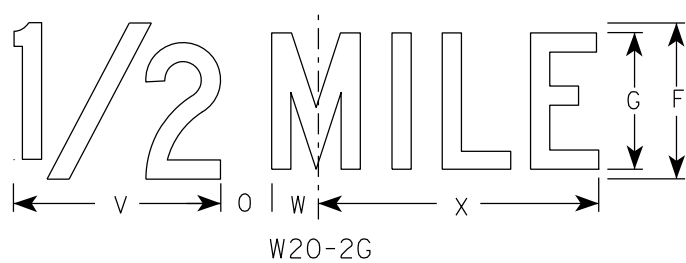
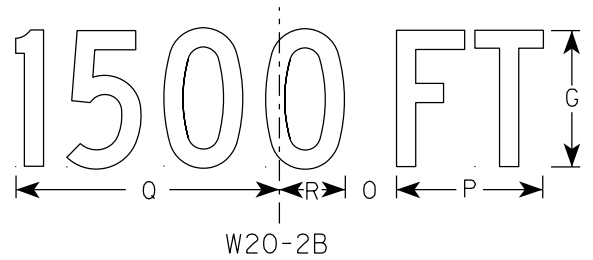
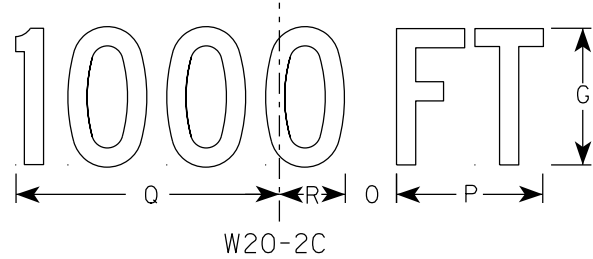
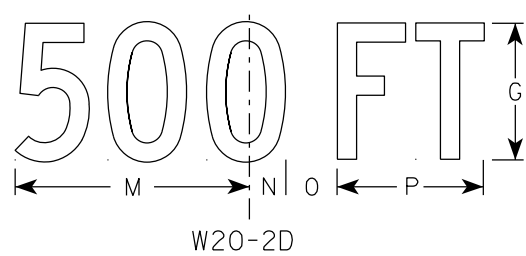
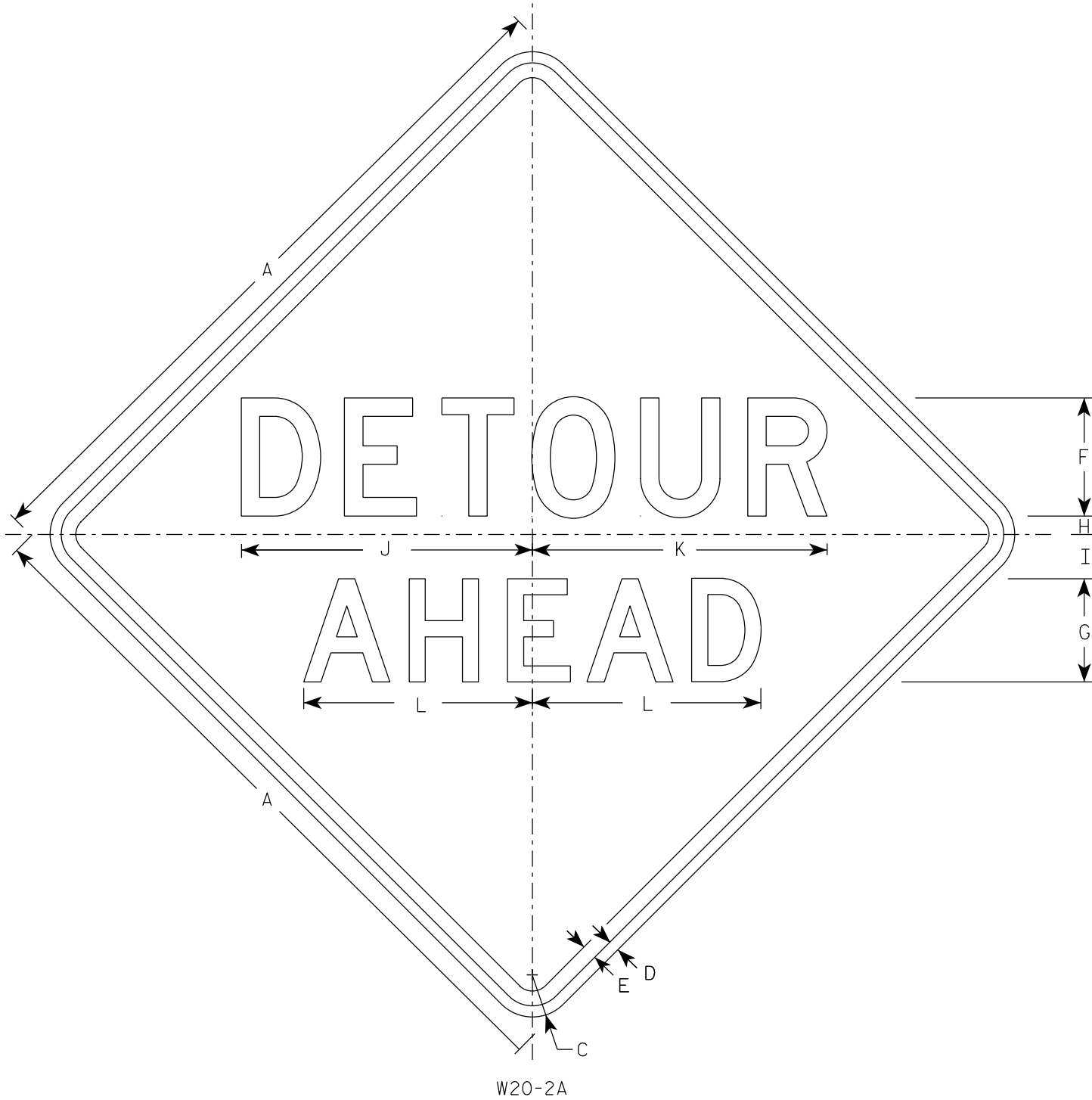
PROJECT NO:

HWY:

COUNTY:

SHEET NO: 139

E



NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
Background - Orange
Message - Black
- 3. Message Series - See note 5
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 5. Line 1 is Series D.
Line 2 is Series D for AHEAD and Series C for all other distances.

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

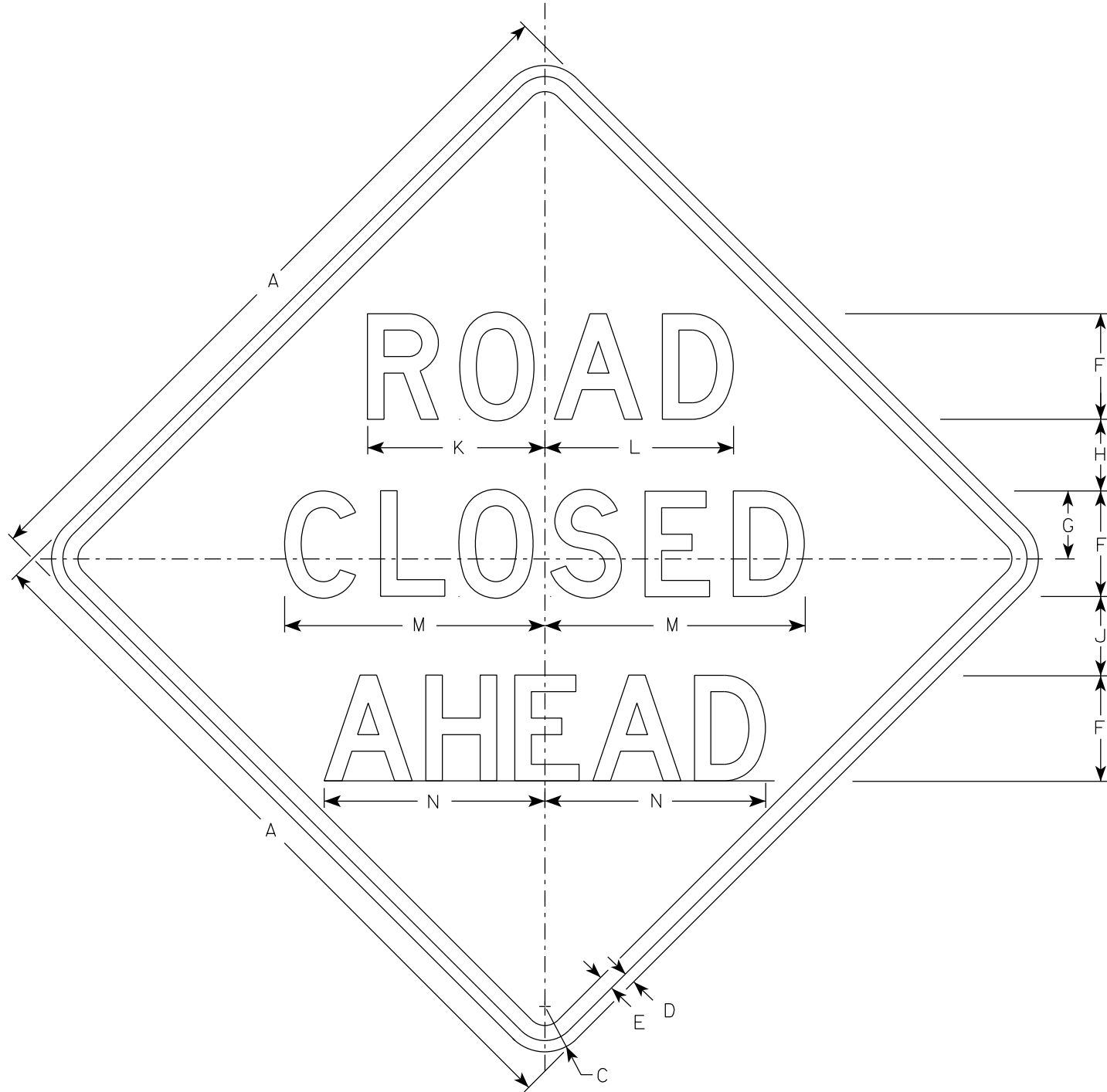
STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

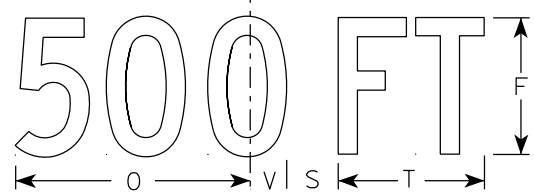
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 1/10/2024 PLATE NO. W20-2.7

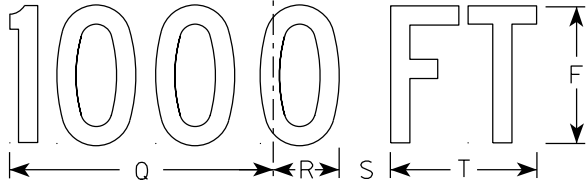
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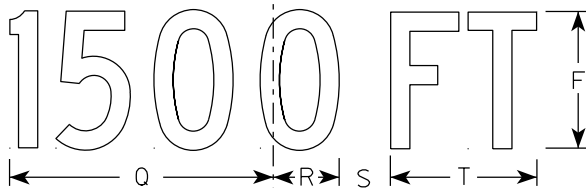
W20-3A



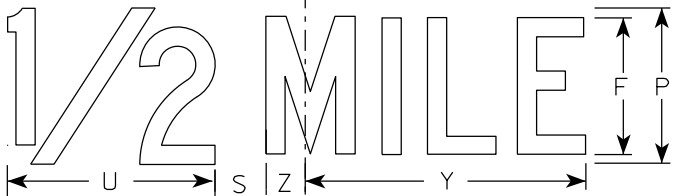
W20-3D



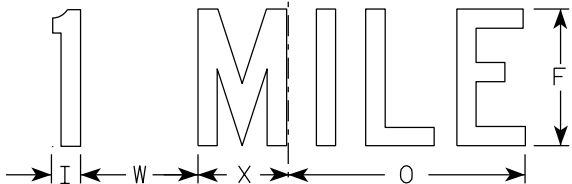
W20-3C



W20-3B



W20-3G



W20-3F

NOTES

1. Sign is Type II - Type F Reflective
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.

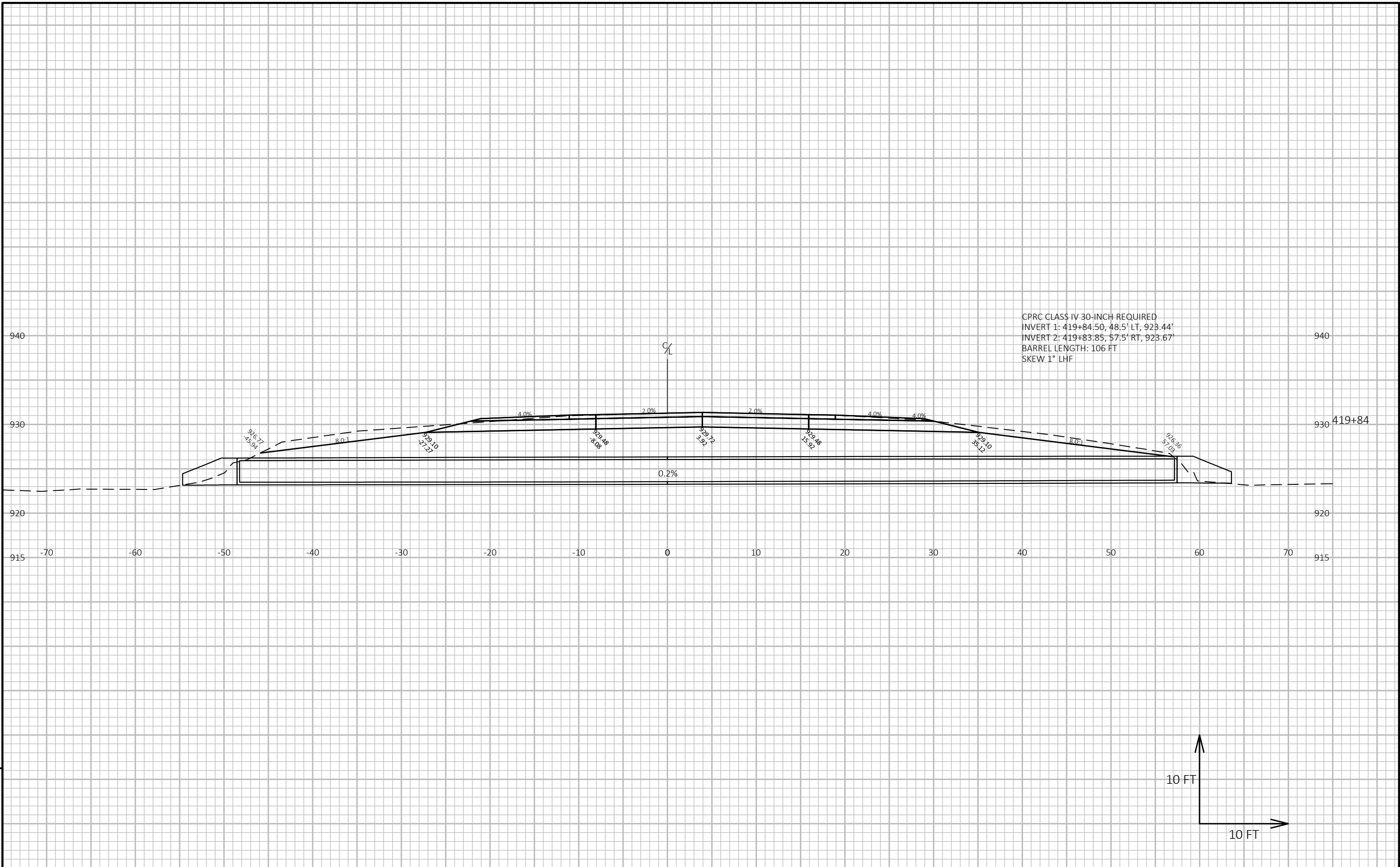
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	v	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10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

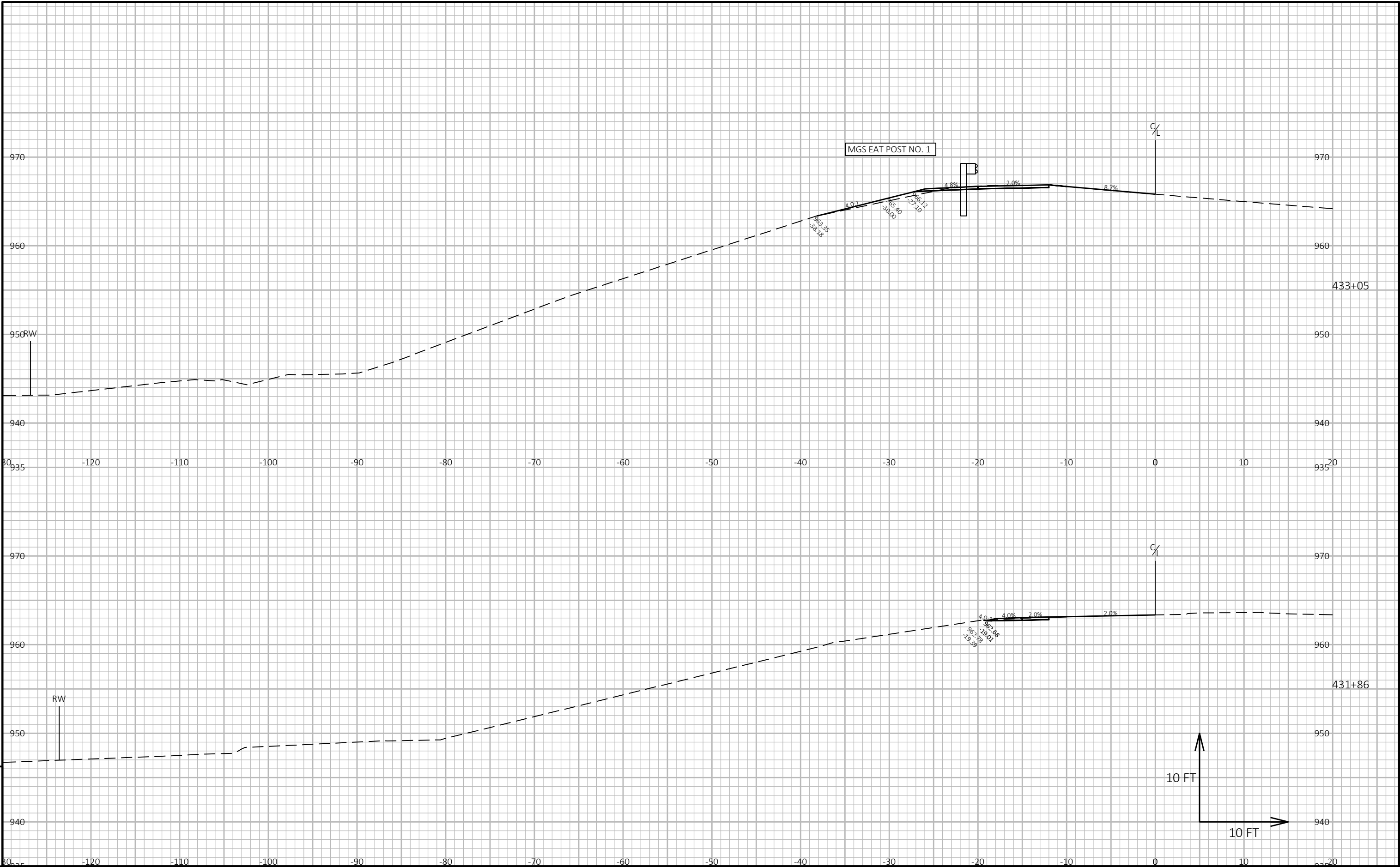
STANDARD SIGN
W20-3A, B, C, D, F & G

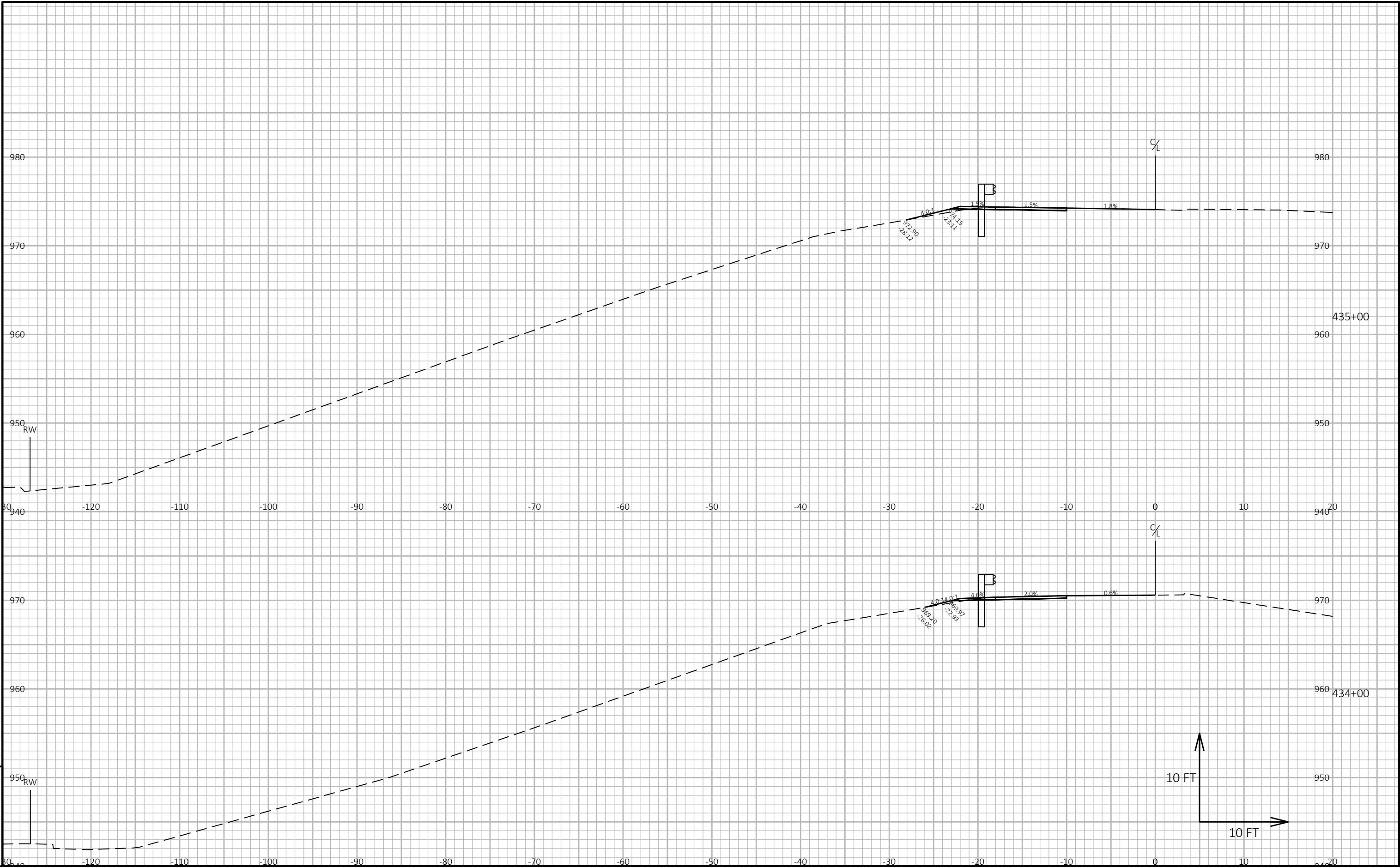
WISCONSIN DEPT OF TRANSPORTATION

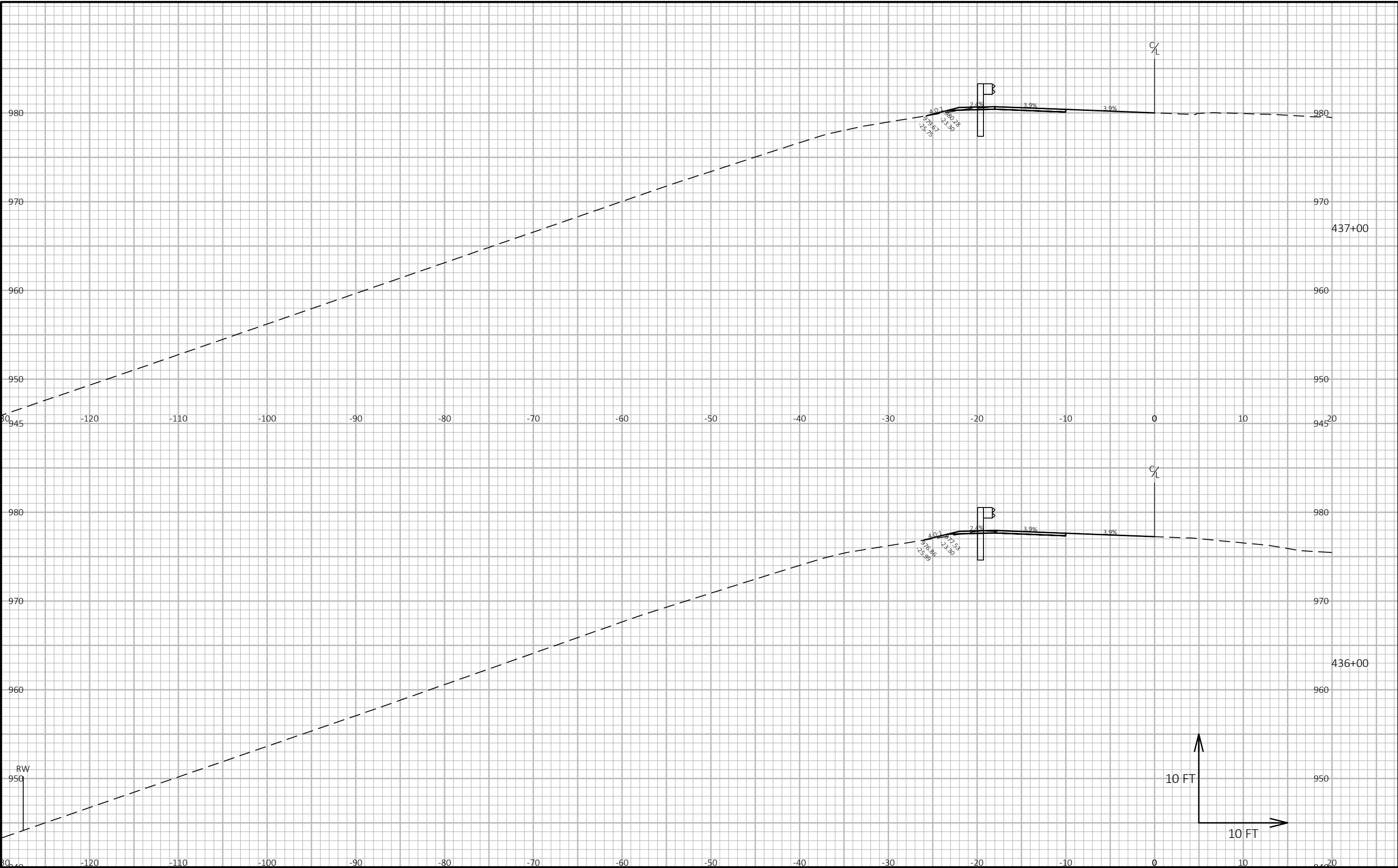
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

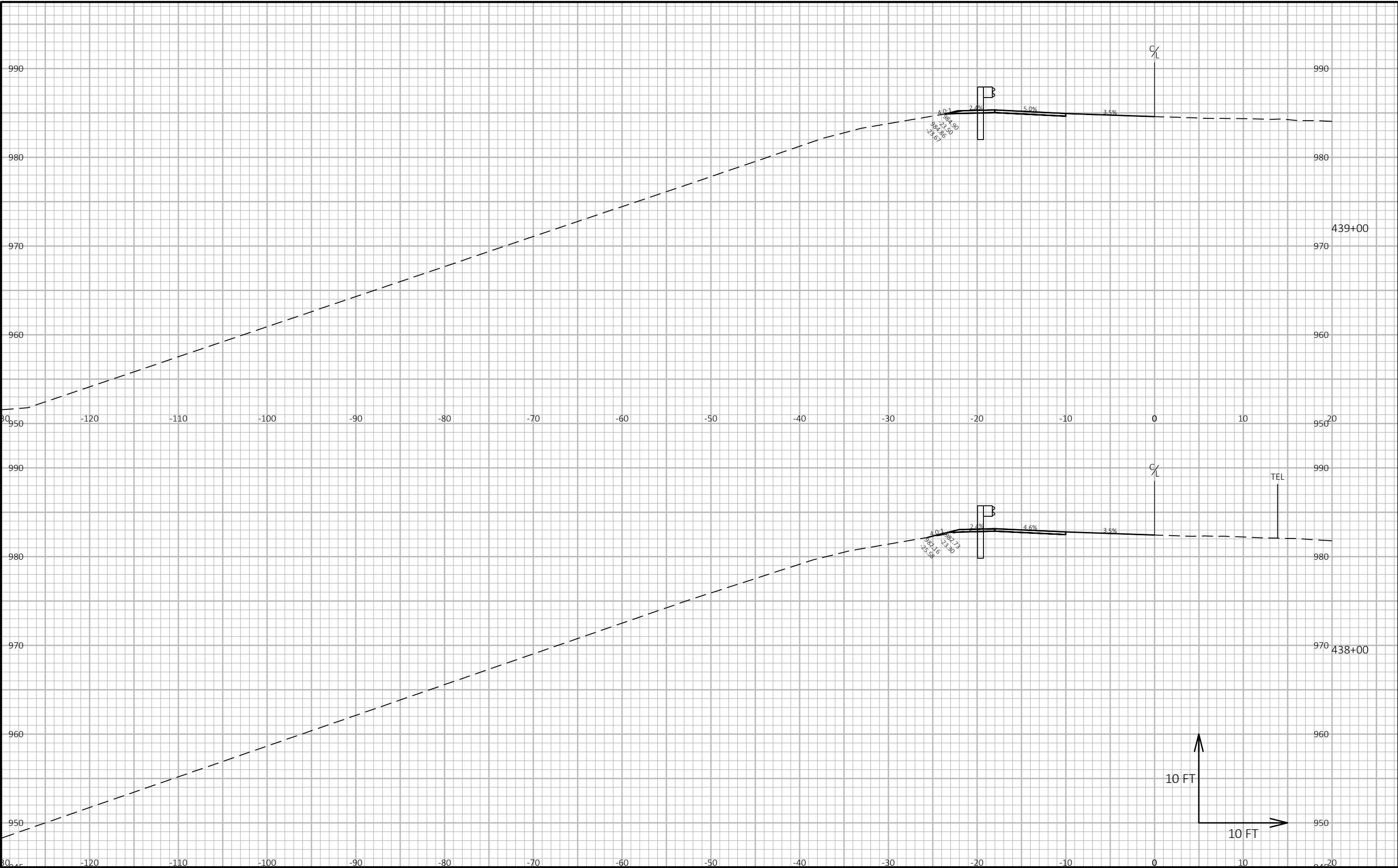
DATE 1/10/2024 PLATE NO. W20-3.8

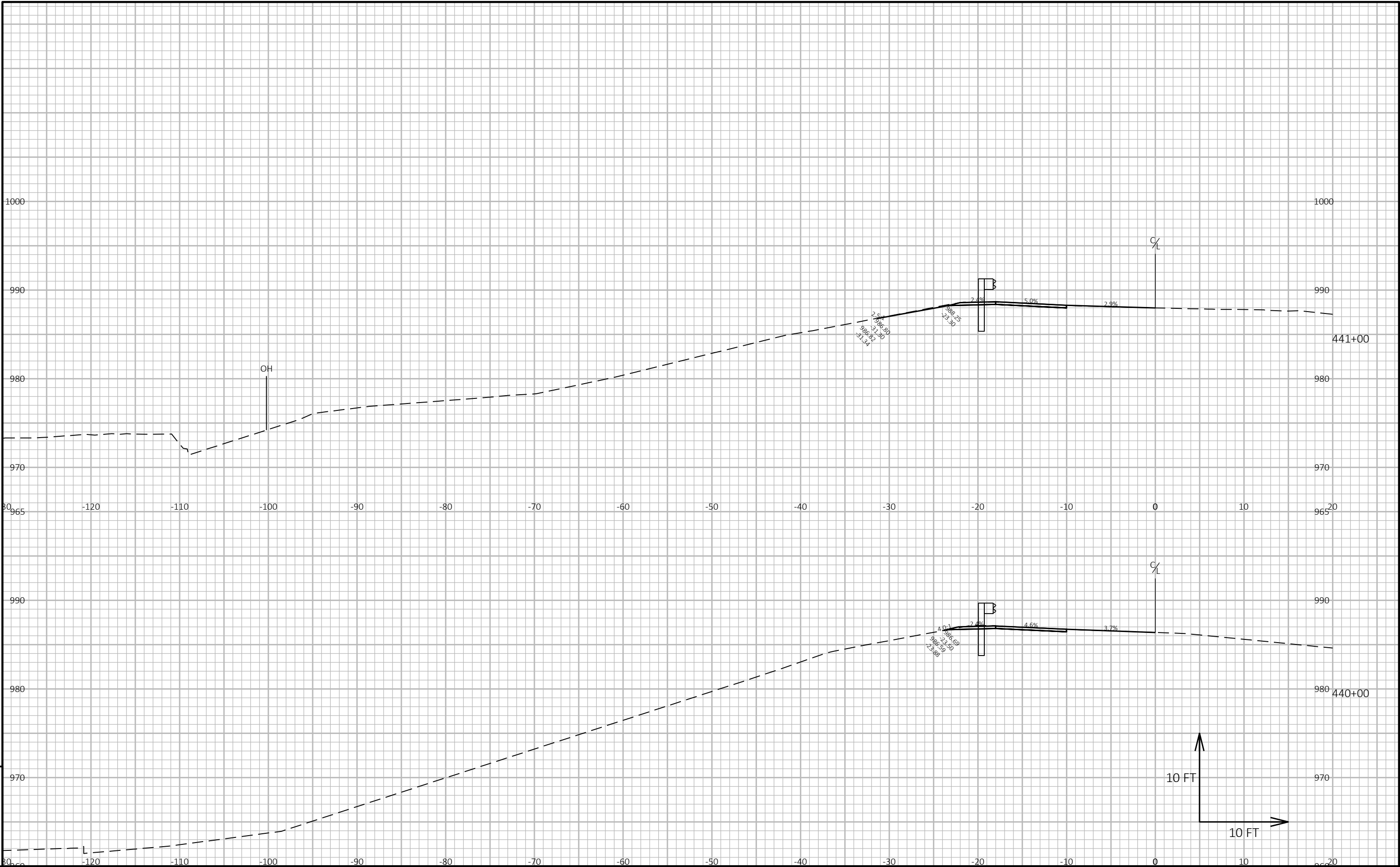


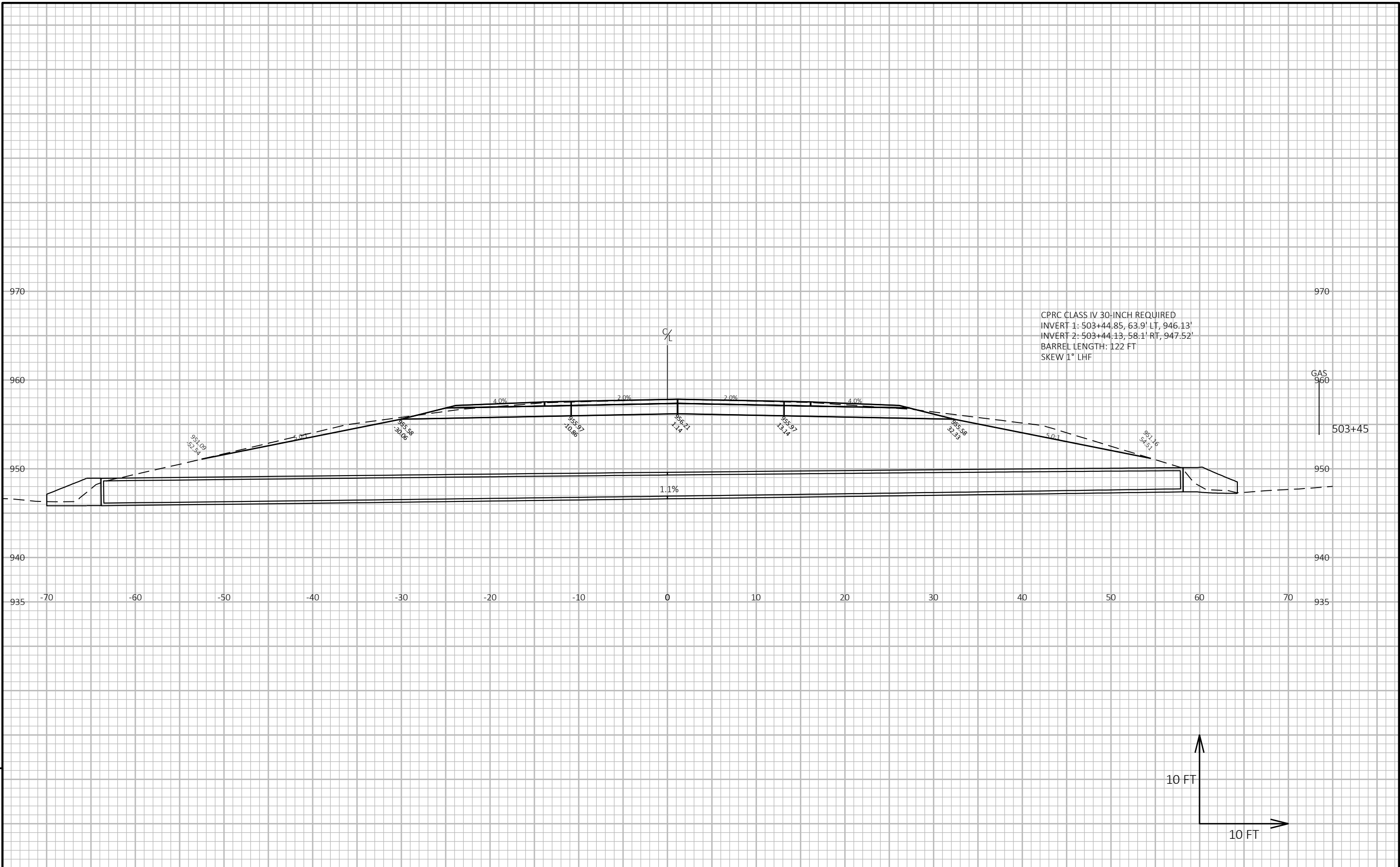






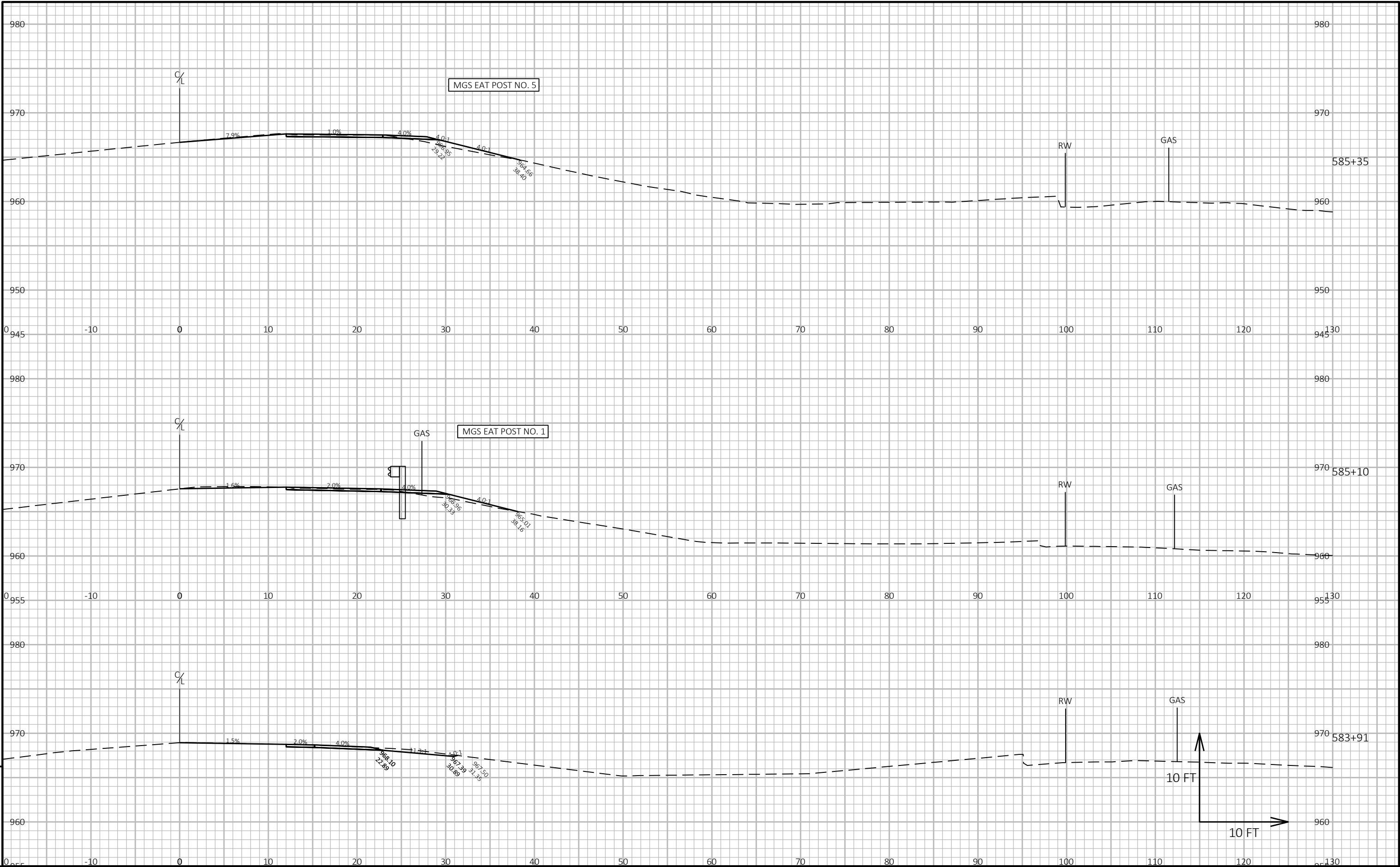


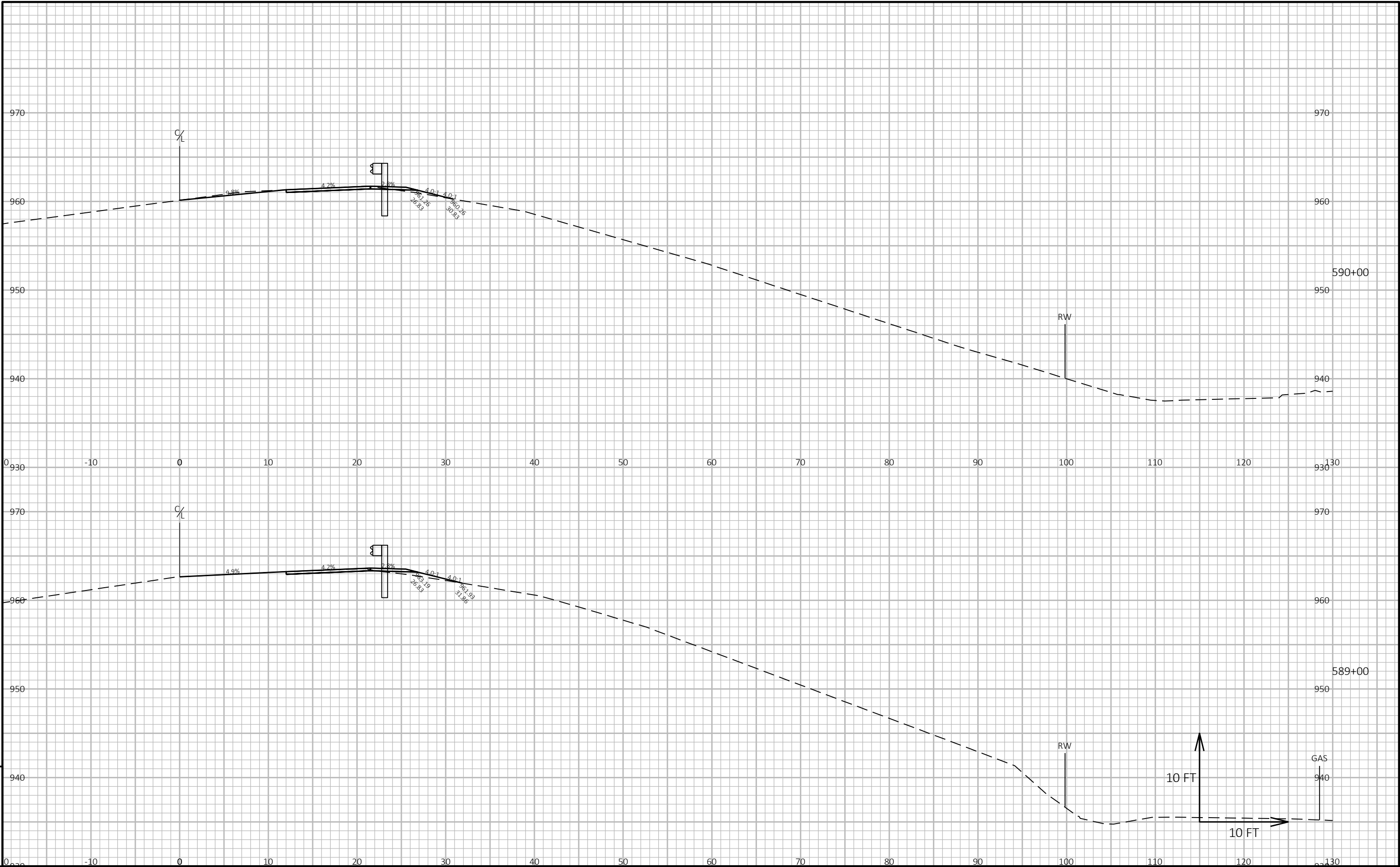


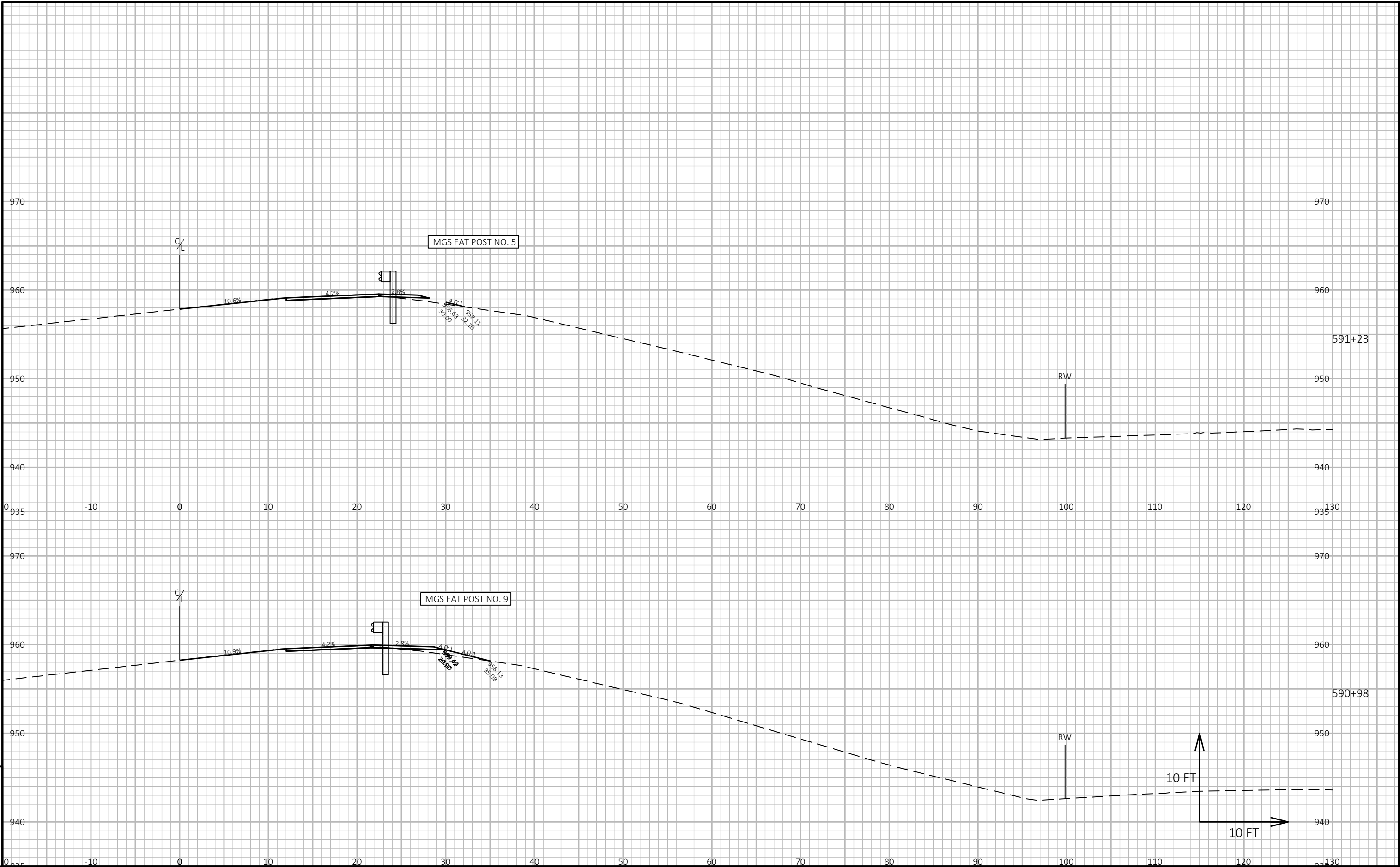


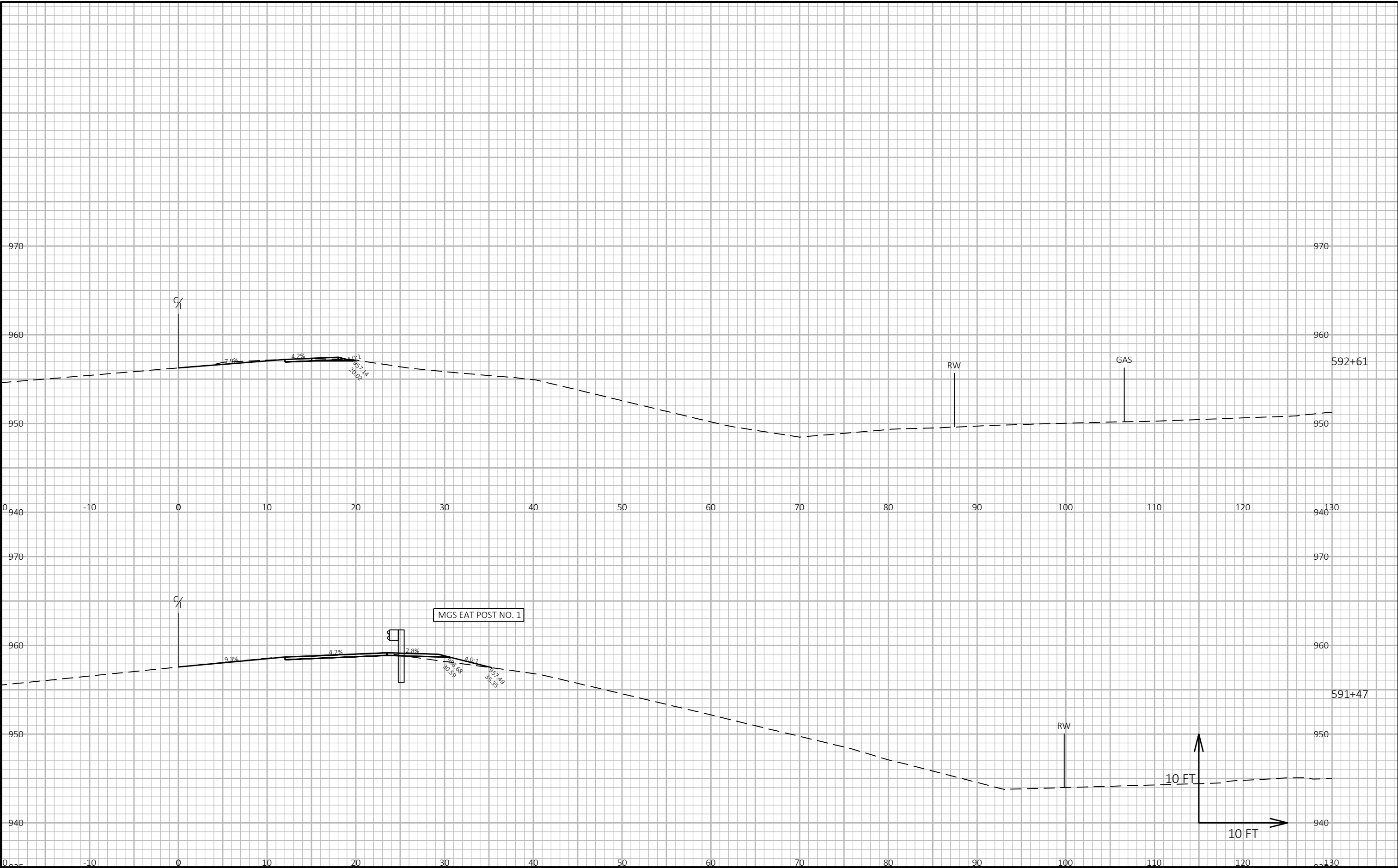
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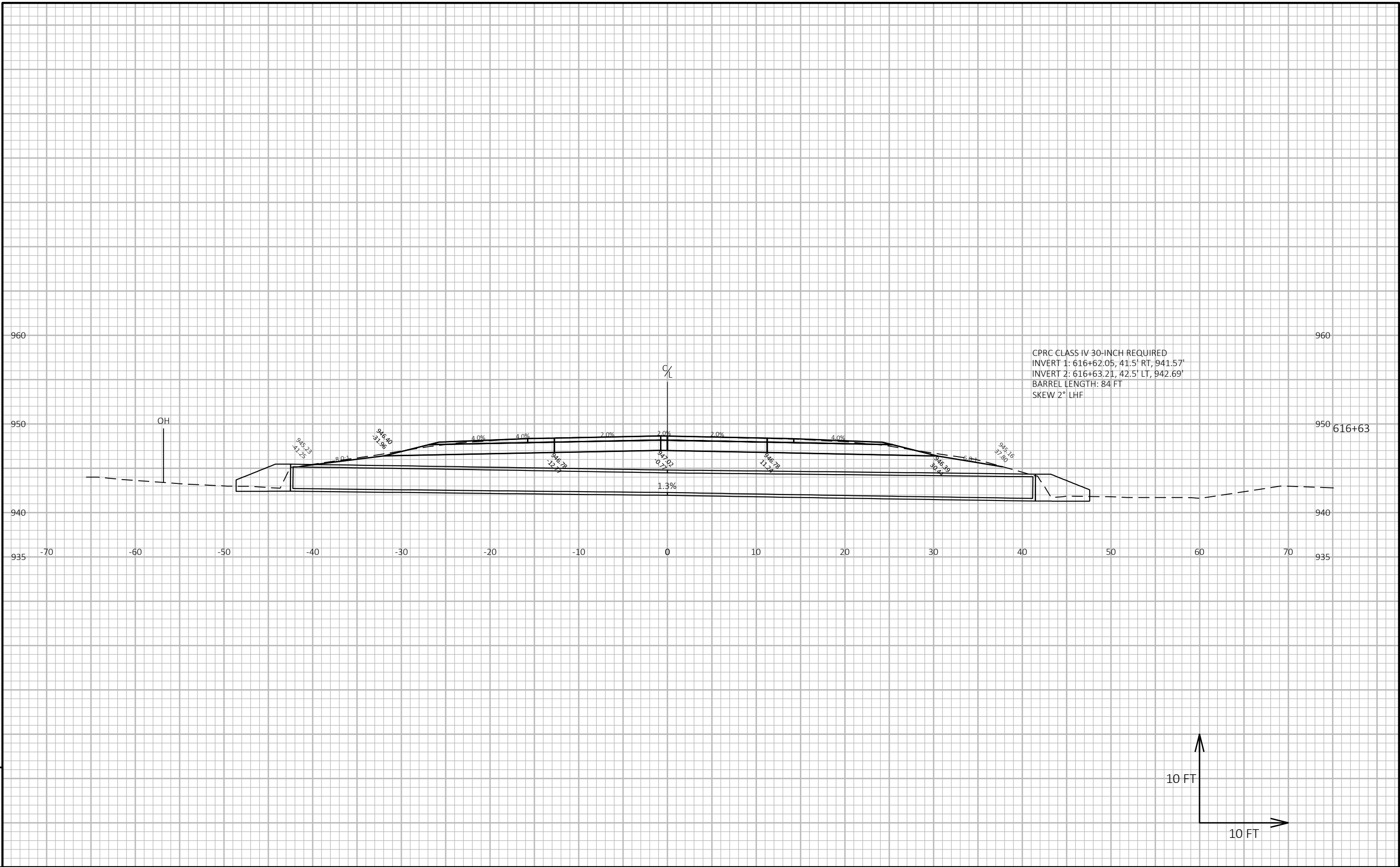
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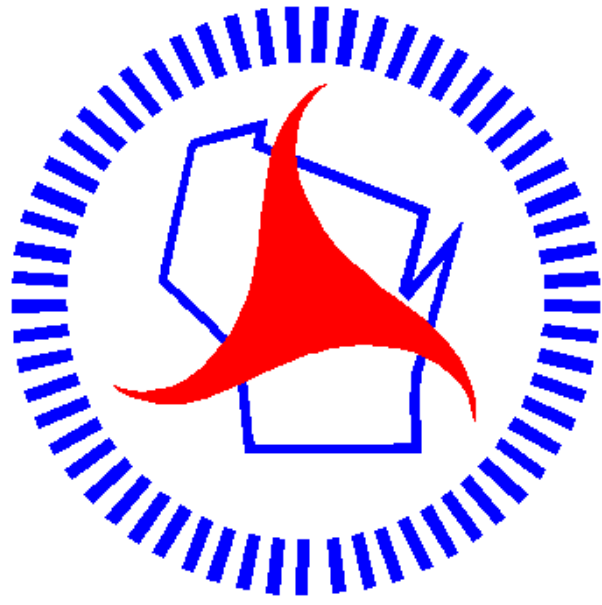












Wisconsin Department of Transportation

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