GRE

DECEMBER 2026

PROJECT ID: **1500-68-71**

WITH: 1500-75-71

COUNTY: **MANITOWOC**

ORDER OF SHEETS

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

TOTAL SHEETS = 126



29

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

BRILLION - REEDSVILLE

BRILLION ECPL TO CTH W

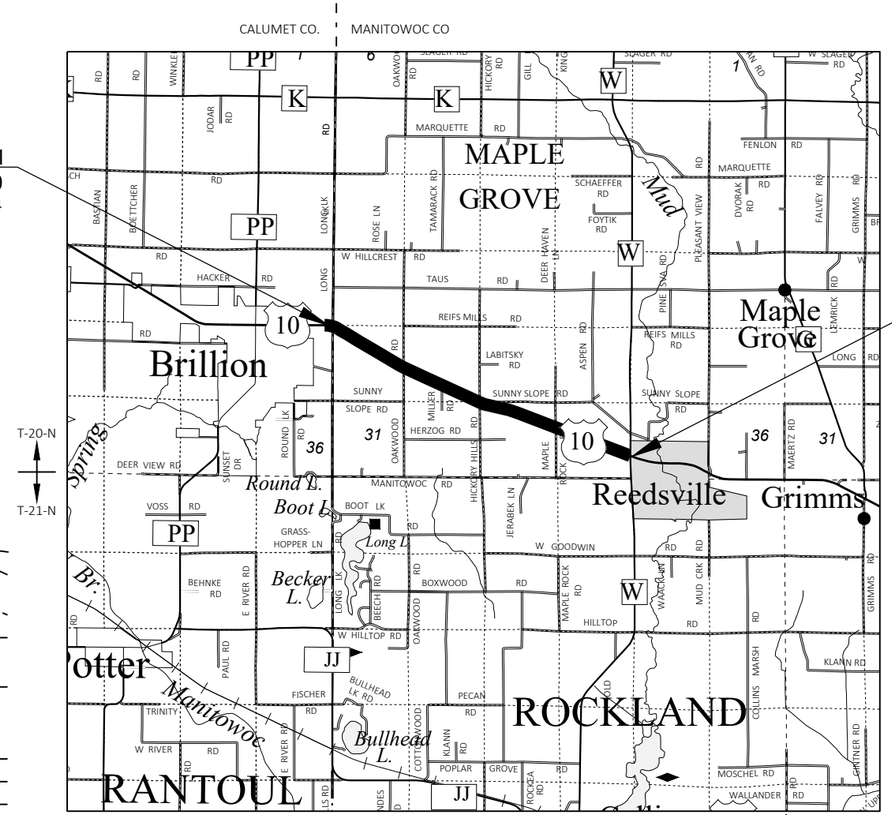
USH 10
MANITOWOC COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1500-68-71	WISC 2027082	1

STATE PROJECT NUMBER

1500-68-71

BEGIN PROJECT 1500-68-71
STA 781+60
Y= 334,195.634
X= 128,534.161



LAYOUT

SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 4.932 MI

END PROJECT 1500-68-71
STA 1042+00

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), MANITOWOC 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.

DESIGN DESIGNATION	1500-68-71	LONG LAKE ROAD
A.A.D.T. 2027	= 7060	710
A.A.D.T. 2047	= 8110	866
D.H.V.	= 875	
D.D.	= 60/40	
T.	= 13.8%	
DESIGN SPEED	= 55 MPH	
ESALS	= 2,570,000	

CONVENTIONAL SYMBOLS

PLAN
- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE (300'EB')
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE
- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES
- ELECTRIC (E)
- FIBER OPTIC (FO)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

ORIGINAL PLANS PREPARED BY

GREMMER & ASSOCIATES, INC.
CONSULTING ENGINEERS
Stevens Point • Fond du Lac
120 Wilshire Boulevard North • Stevens Point, WI 54481
(715) 341-4363 • fax (715) 341-1256

WISCONSIN
JARED T. HALBUR
E-100484
WISCONSIN RAPIDS, WI
PROFESSIONAL ENGINEER

7/21/2026
DATE

JARED T. HALBUR, PE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	NE REGION
Designer	GREMMER & ASSOCIATES, INC.
Project Manager	B. HAEN
Regional Examiner	REGIONAL EXAMINER
Regional Supervisor	K. BERG

APPROVED FOR THE DEPARTMENT

DATE: 7/22/26 (Signature)

E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-68-00_BRILLION-REEDSVILLE MILL-FILL\DESIGN\C3D FILES\SHEETSPLAN\010101-TI.DWG

PLOT DATE : 7/22/2026 9:14 AM

PLOT BY : DEXTER KAETTERHENRY

PLOT NAME :

2

GENERAL NOTES

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

ORDER OF SECTION 2 DETAIL SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
INTERSECTION DETAIL
EROSION CONTROL
PERMANENT SIGNING
TRAFFIC CONTROL
DETOUR PLAN
ALIGNMENT PLAN

DNR LIASION

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
MATT SCHAEVE
2984 SHAWANO AVENUE
GREEN BAY, WI 54313
920-366-1544
.....

MANITOWOC COUNTY HIGHWAY COMMISSIONER

GREG GROTEGUT
STATE ROAD
MANITOWOC WI 222
2
greggrotegut@co.manitowoc.wi.us

NE REGION SURVEY COORDINATOR

CORMAC MCINNIS RLS
VANDERPERREN WAY
GREEN BAY WI
22
cormac.mcinnis@dot.wi.gov

CONSULTANT PROJECT MANAGER

BRIAN HAEN PE
VANDERPERREN WAY
GREEN BAY WI
2
brian.haen@dot.wi.gov

UTILITIES CONTACTS

COMMUNICATIONS

BUG TUSSEL WIRELESS
ATTN: ERIN WINCHMANN
417 PINE STREET
GREEN BAY, WI 54301
PHONE: 920-940-0012 x102
EMAIL: erin.wichmann@btussel.com

FRONTIER COMMUNICATIONS
ATTN: CHRISTOPHER BLUMER
451 BROADWAY
SUN PRAIRIE, WI 53590
PHONE: 608-622-3807
EMAIL: christopher.blumer@ftr.com

GAS/PETROLEUM

WEST SHORE PIPELINE
ATTN: CASEY SCHWANDT
11115 W. COUNTY LINE ROAD
MILWAUKEE, WI 53224
PHONE: 920-655-1428
EMAIL: cschwandt@buckeye.com

WISCONSIN PUBLIC SERVICE
ATTN MATT GABODAÈ
933 S WILDWOOD AVENUE
SHEBOYGAN, WI 53081
PHONE: 920-451-3743
EMAIL: matt.gaboda@wisconsinpublicservice.com

ELECTRICITY

ATC MANAGEMENT - TRANSMISSION
ATTN: DOUG VOSBERG
2489 RINDEN ROAD
COTTAGE GROVE, WI 53527
PHONE: 608-877-7650
EMAIL: dvoxberg@atcllc.com

WISCONSIN PUBLIC SERVICE
ATTN: CHUCK WINDUS
227 W CALUMET STREET
CHILTON, WI 53014
PHONE: 920-617-5281
CELL: 920-606-1141
EMAIL: charles.windus@wisconsinpublicservice.com

2

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 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIP- TURF	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
SIDE SLOPE TURF			2 2			2			2 `			.30 .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 = 40.59 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 1.46 ACRES

DIGGERS HOTLINE
Dial 811 or (800)242-8511
www.DiggersHotline.com

EMERGENCY CONTACT NUMBERS FOR WISCONSIN POWER AND LIGHT COMPANY

ELECTRIC 24 HOUR EMERGENCY SERVICE: 1-800-862-6261
GAS 24 HOUR EMERGENCY SERVICE: 1-800-862-6263

EMERGENCY CONTACT NUMBERS FOR WISCONSIN PUBLIC SERVICE

ELECTRIC 24 HOUR EMERGENCY SERVICE: 1-800-450-7240
GAS 24 HOUR EMERGENCY SERVICE: 1-800-450-7280

EMERGENCY CONTACT NUMBERS FOR WE ENERGIES

ELECTRIC 24 HOUR EMERGENCY SERVICE: 1-800-662-4797
GAS 24 HOUR EMERGENCY SERVICE: 1-800-261-5325

2

CONTROL POINTS / BENCHMARKS TABLE

POINT NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
102	334163.423	129945.464	837.79	CP 1-2 INCH IB GRAEF CAP
103	334162.907	130444.049	828.40	CP 1-2 INCH IB GRAEF CAP
104	334175.646	131112.399	845.86	CP 1-2 INCH IB GRAEF CAP
105	333531.598	133468.364	878.32	CP 1-2 INCH IB GRAEF CAP
106	333488.386	133638.848	883.93	CP 1-2 INCH IB GRAEF CAP
107	333321.814	133789.520	885.83	CP 1-2 INCH IB GRAEF CAP
108	328768.108	142689.502	862.21	CP 1-2 INCH IB GRAEF CAP
109	328696.622	142912.504	862.69	CP 1-2 INCH IB GRAEF CAP
110	328600.484	143254.733	865.47	CP 1-2 INCH IB GRAEF CAP
111	328532.999	143538.927	866.17	CP 1-2 INCH IB GRAEF CAP
112	328295.330	144559.231	865.19	CP 1-2 INCH IB GRAEF CAP
113	328309.455	144789.137	865.02	CP 1-2 INCH IB GRAEF CAP
114	328170.773	145028.632	860.06	CP 1-2 INCH IB GRAEF CAP
115	327725.514	146383.835	868.54	CP 1-2 INCH IB GRAEF CAP
116	327619.898	146469.625	868.69	CP 1-2 INCH IB GRAEF CAP
117	327624.489	146673.397	873.73	CP 1-2 INCH IB GRAEF CAP
905	324591.457	155864.178	826.44	CP
906	324598.635	155549.376	825.75	CP 906
907	324637.049	155219.414	825.63	CP 907
908	325750.377	151541.801	842.08	CP 908
909	325981.392	150938.026	841.83	CP 909
910	331090.118	137683.240	885.80	CP 910
911	331231.758	137372.231	886.31	CP 911
912	330931.021	137424.431	882.48	CP 912
913	324599.448	155471.897	826.20	CP
914	324553.615	155403.638	826.73	CP
920	325768.705	151358.123	842.25	CP
921	331059.955	137551.925	882.75	CP
50930	334198.965	132413.671	874.69	CP 930
50931	333775.844	132504.244	854.20	CP 931
50932	333967.022	132708.276	865.12	CP 932
600	334243.516	130175.849	832.14	BM RRSPIKE S FACE
601	334244.204	131105.650	843.59	BM RRSPIKE S FACE
602	334614.200	132498.700	873.61	BM RRSPIKE SW FACE
603	333432.400	132495.000	847.08	BM RRSPIKE W FACE
604	333946.700	132931.300	865.23	BM RRSPIKE S FACE
605	333568.740	133537.607	880.62	BM RRSPIKE SW FACE
606	333404.260	133803.902	890.51	BM RRSPIKE SW FACE
607	331100.200	137431.500	885.43	BM RRSPIKE W FACE
608	328881.273	142738.339	861.44	BM RRSPIKE SW FACE
609	328821.988	142853.905	863.42	BM RRSPIKE SW FACE
610	328692.944	143237.039	864.93	BM RRSPIKE SW FACE
611	328629.723	143501.888	866.87	BM RRSPIKE SW FACE
612	328379.891	144551.205	868.04	BM RRSPIKE SW FACE
613	328317.003	144815.597	865.88	BM RRSPIKE SW FACE
614	327747.997	146363.590	868.21	BM RRSPIKE SW FACE
615	327661.735	146589.098	875.35	BM RRSPIKE SW FACE
616	325119.000	153249.600	840.48	BM RRSPIKE W FACE
617	325677.600	153302.700	839.28	BM CHIS X SW TOP OF BOLT
618	324652.000	155170.000	826.17	BM RRSPIKE S FACE
619	324625.700	155694.100	826.36	BM RRSPIKE S FACE UPPER
1002	325827.097	151414.162	838.78	BM RR SPIKE
1003	325945.299	151098.396	838.89	BM RR SPIKE
1004	331186.737	137666.814	885.79	BM RR SPIKE
51010	334206.072	132491.285	875.90	BM RR SPIKE
51012	334238.583	131981.921	868.12	BM RR SPIKE

2

CALUMET COUNTY | MANITOWOC COUNTY

BEGIN PROJECT 1500-68-71
STA 781+60

INTERSECTION REALIGNMENT

790 800 810 820 830 840 850 860 870 880 890 900 910 920 930 940 950 960 970 980 990 1000 1010 1020 1030 1040 1050 1060 1070 1080 1090 1100 1110

USH 10

LONG LAKE RD

OAKWOOD RD

MILLER LN

HICKORY HILLS RD

MAPLE ROCK RD

TOWN OF BRILLION

TOWN OF MAPLE GROVE

CULVERT REPLACEMENT
STA 937+26

CULVERT REPLACEMENT
STA 943+79

ENDWALL REPLACEMENT
STA 976+19

END PROJECT 1500-68-71
STA 1042+00

GUARDRAIL REPLACEMENT
STA 1025+02 - STA 1028+36

UNNAMED ARCH SITE
47MN333

USH 10/MAIN ST

CTH W

N 6TH ST

N 5TH ST

N 4TH ST

N 3RD ST

N 2ND ST

MUD CREEK

VILLAGE OF REEDSVILLE

ROUND LAKE

TOWN OF RANTOUL

LONG LAKE

TOWN OF ROCKLAND

N

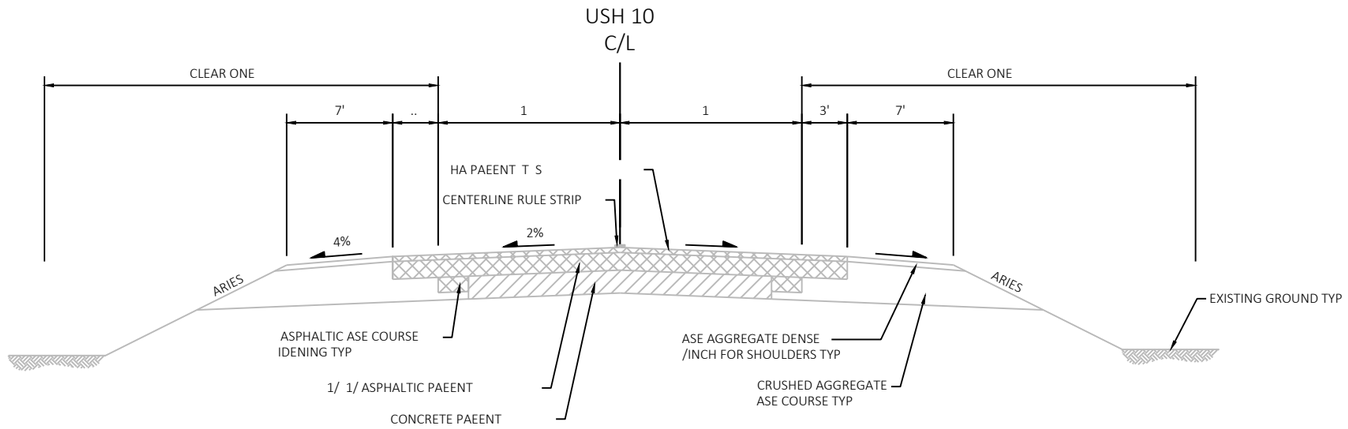
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PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	PROJECT OVERVIEW	SHEET 4	E

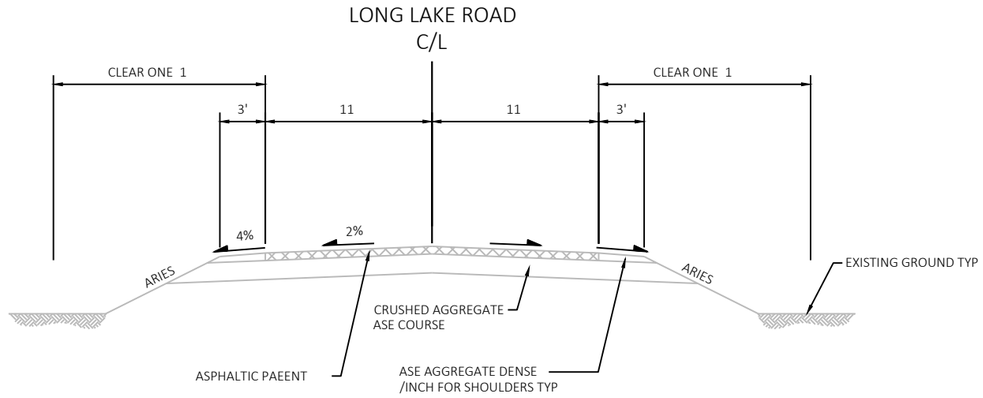
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LAYOUT NAME - 020201-po-68

PLOT DATE : 5/29/2026 8:04 AM PLOT BY : JARED HALBUR PLOT NAME : PLOT SCALE : 1 IN:2000 FT

WISDOT/CADDS SHEET 42



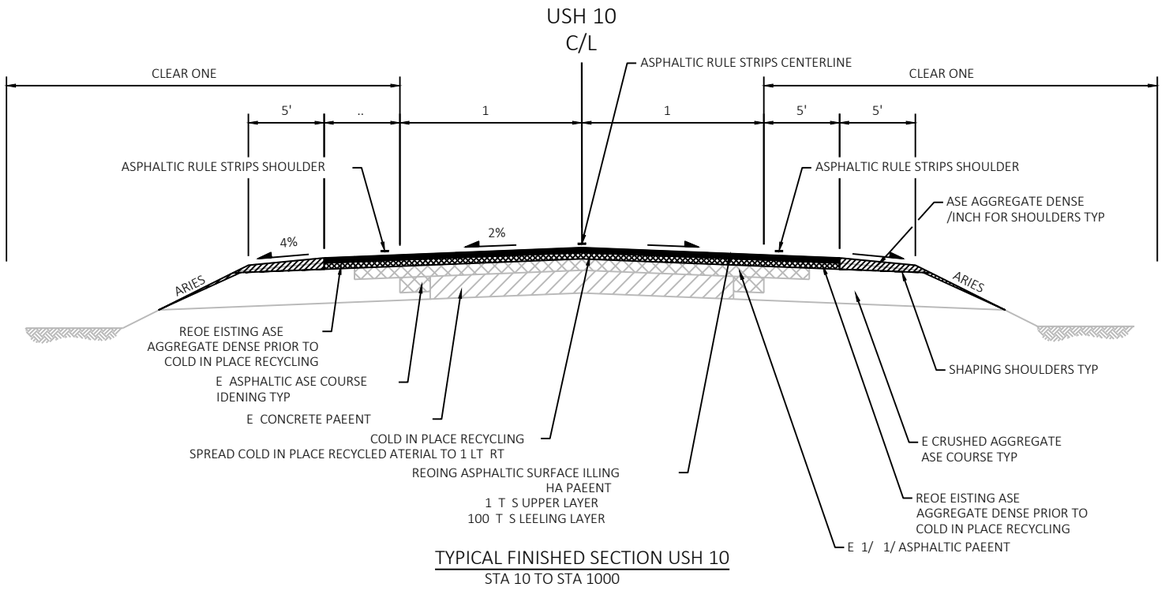
TYPICAL EXISTING SECTION USH 10
STA 10 TO STA 1000



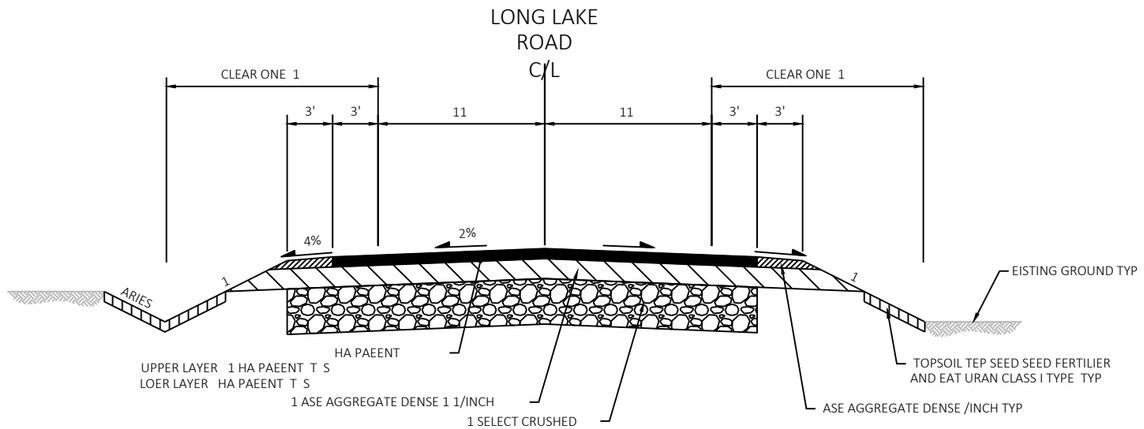
TYPICAL EXISTING SECTION LONG LAKE ROAD
STA 1000 TO STA 1

PROECT NO 1001	HY USH 10	COUNTY ANITOOC	TYPICAL SECTIONS	SHEET 5	E

FILE NAE PPROECTSCURRENTANITOOCISDOTUSH 10 010000RILLIONREEDSILLE ILLFILLDESIGNCD FILESSHEETSPLAN0001TSDG
LAYOUT NAE 0001
PLOT DATE //0 P
PLOT Y ARED HALUR
PLOT NAE
PLOT SCALE 1IN10 FT
ISDOT/CADDS SHEET



TYPICAL FINISHED SECTION USH 10
STA 10 TO STA 1000



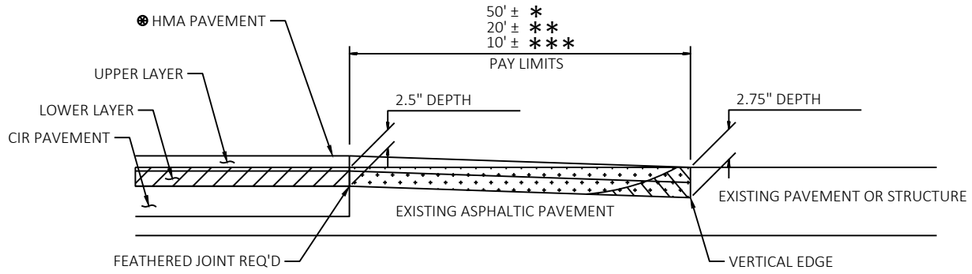
TYPICAL FINISHED SECTION LONG LAKE ROAD
STA 1000 TO STA 1

NOTES
* SELECT CRUSHED TO E PLACED HERE
PROPOSED ALIGNENT DEIATES FRO
EISTING ROAD ED APPROIATELY STA
100 STA 1 ENGINEER IN FIELD AY
ALTER REAKER RUN LOCATIONS AS NEEDED

PROECT NO 1001	HY USH 10	COUNTY ANITOOC	TYPICAL SECTIONS	SHEET 6	E

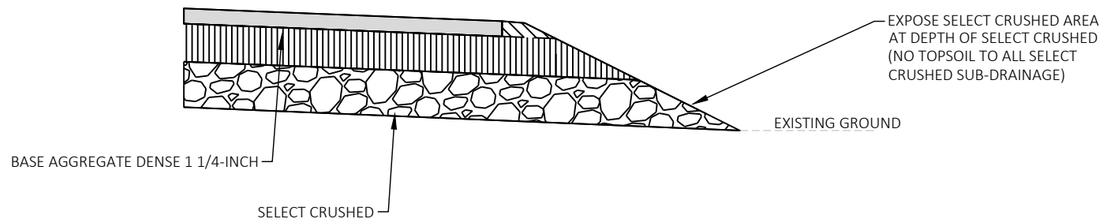
FILE NAE PPROECTSCURRENTANITOOCISDOTUSH 10 010000RILLIONREEDSILLE ILLFILLDESIGNCD FILESSHEETSPLAN0001TSDG
LAYOUT NAE 000
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PLOT Y ARED HALUR
PLOT NAE
PLOT SCALE 1IN10 FT
ISDOT/CADDS SHEET

2



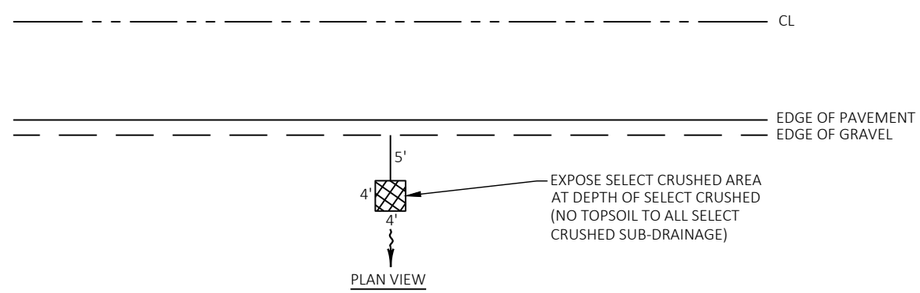
BUTT JOINT DETAIL FOR MILLED ASPHALTIC PAVEMENTS (PROFILE CHANGE)

* MAINLINE
** SIDEROADS
*** PRIVATE ENTRANCES



CROSS SECTION VIEW

NOTES:
SELECT CRUSHED WEEP TO BE AT LOW POINT OF SELECT CRUSHED LAYER APPROXIMATELY STA 13+00.

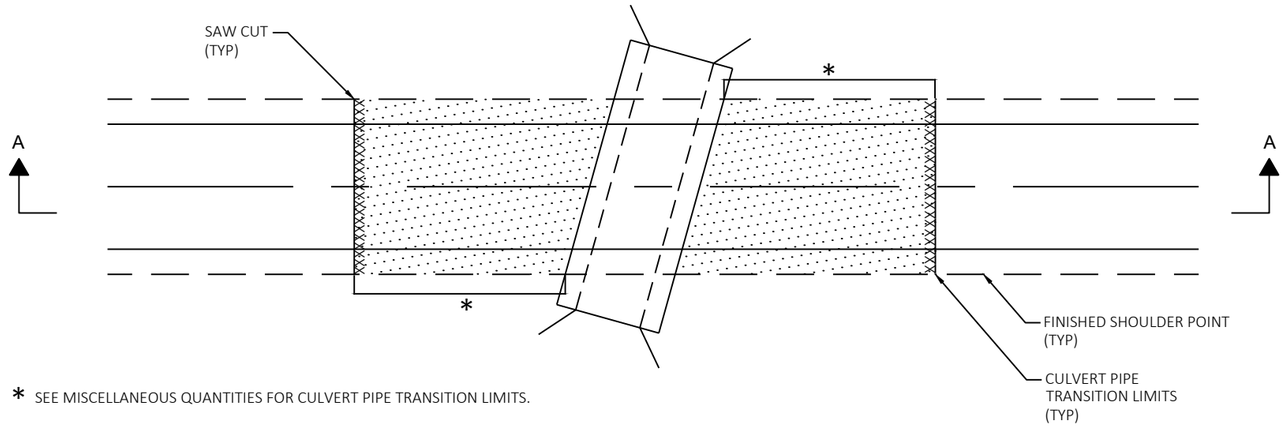


PLAN VIEW

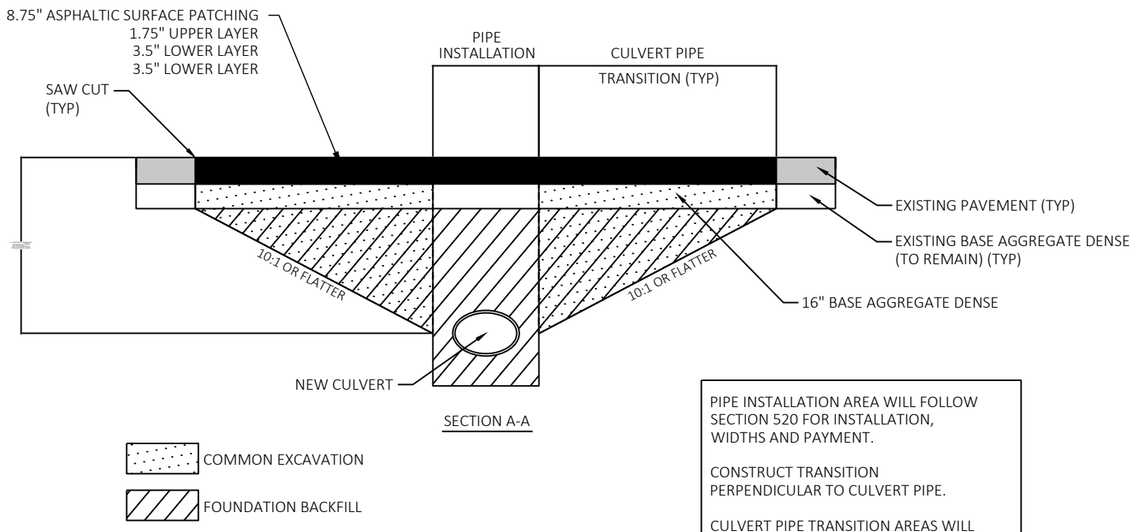
SELECT CRUSHED WEAPS

PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	CONSTRUCTION DETAILS	SHEET 7	E

2



* SEE MISCELLANEOUS QUANTITIES FOR CULVERT PIPE TRANSITION LIMITS.



PIPE INSTALLATION AREA WILL FOLLOW SECTION 520 FOR INSTALLATION, WIDTHS AND PAYMENT.

CONSTRUCT TRANSITION PERPENDICULAR TO CULVERT PIPE.

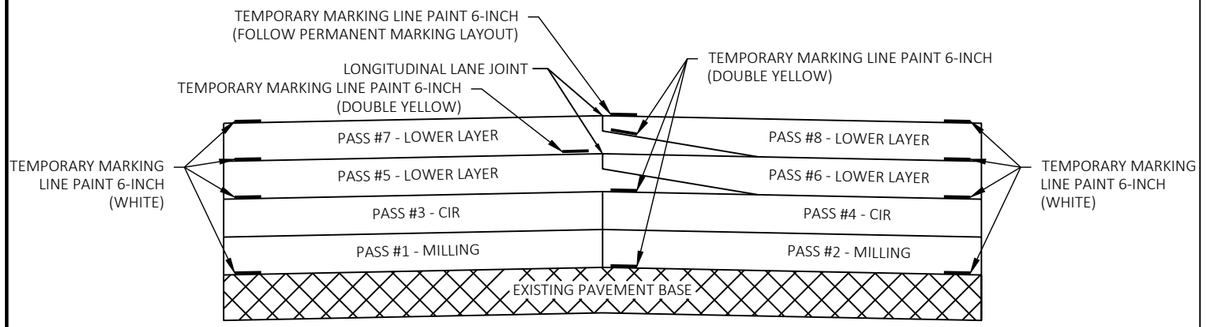
CULVERT PIPE TRANSITION AREAS WILL BE PAID BY COMMON EXCAVATION & SPV FOUNDATION BACKFILL.

PAVEMENT SAW CUT TO BE PERPENDICULAR TO ROADWAY ALIGNMENT.

NEW CULVERT PIPES WITH TRANSITION

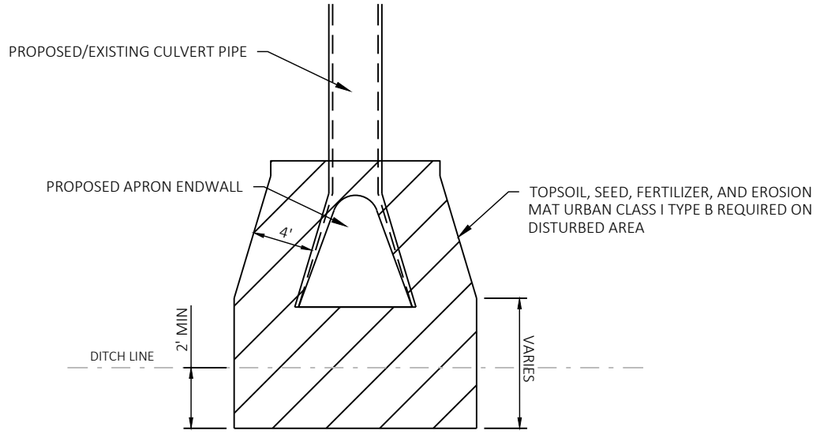
NOTES

ROADWAY SHALL HAVE TEMPORARY OR PERMANENT CENTERLINE MARKINGS AT ALL TIMES.

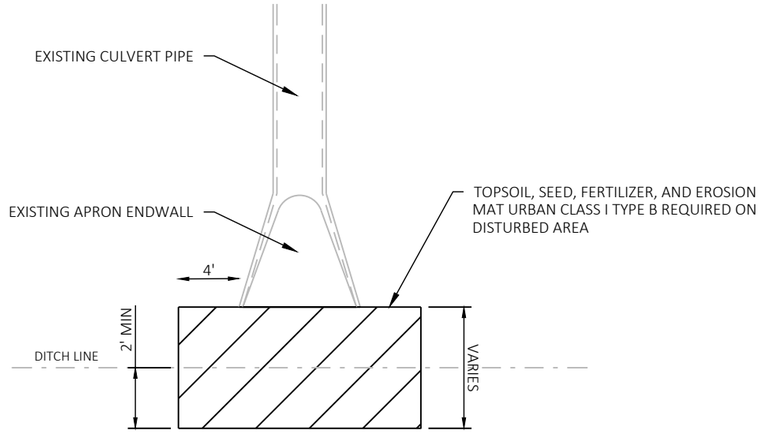


PAVEMENT MARKING DETAIL FOR TAPERED OVERLAPPING JOINTS IN HMA PAVEMENTS

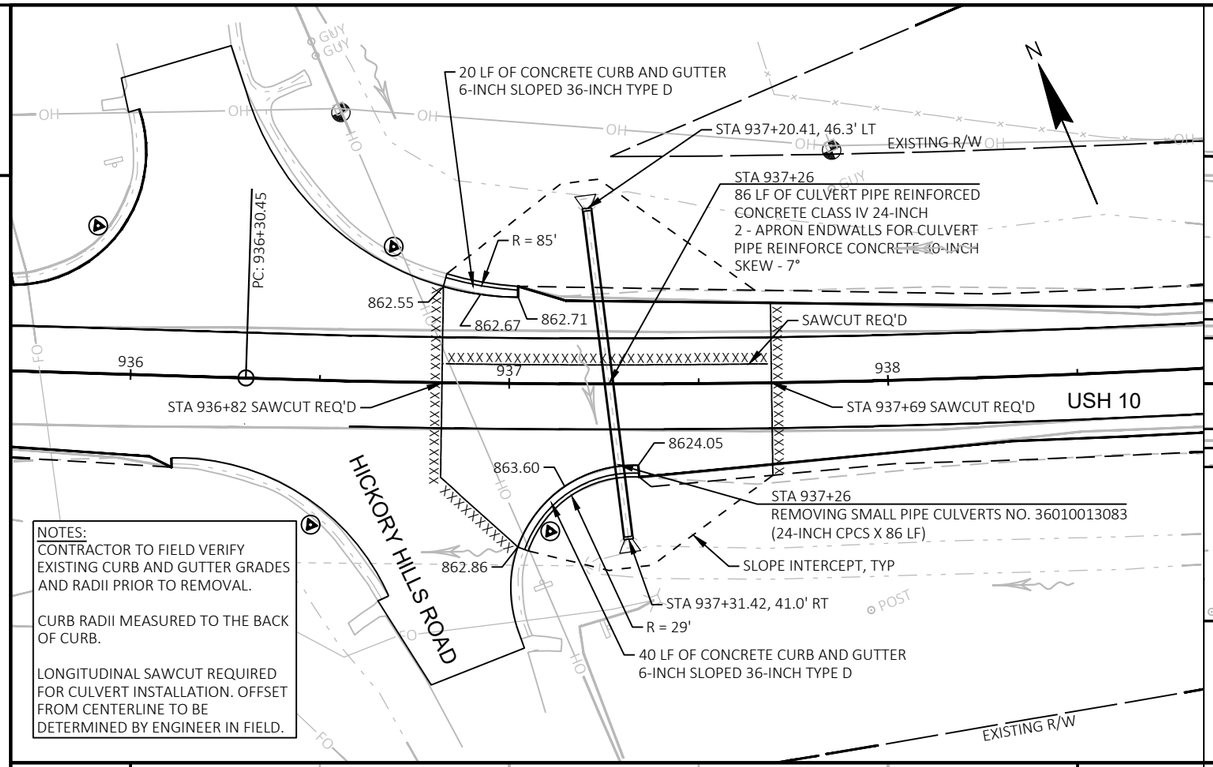
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GRADING, SHAPING AND FINISHING CULVERT PIPES AND APRON ENDWALLS DETAIL



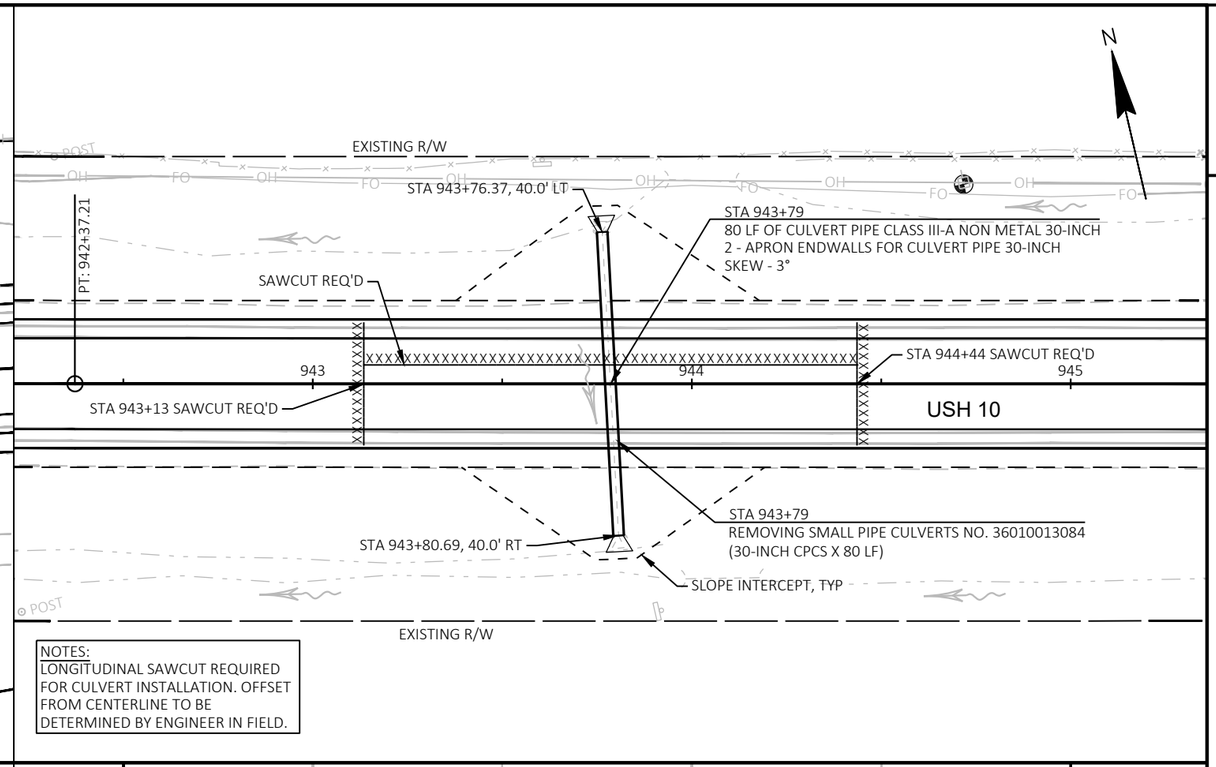
GRADING, SHAPING AND FINISHING DITCH DETAIL



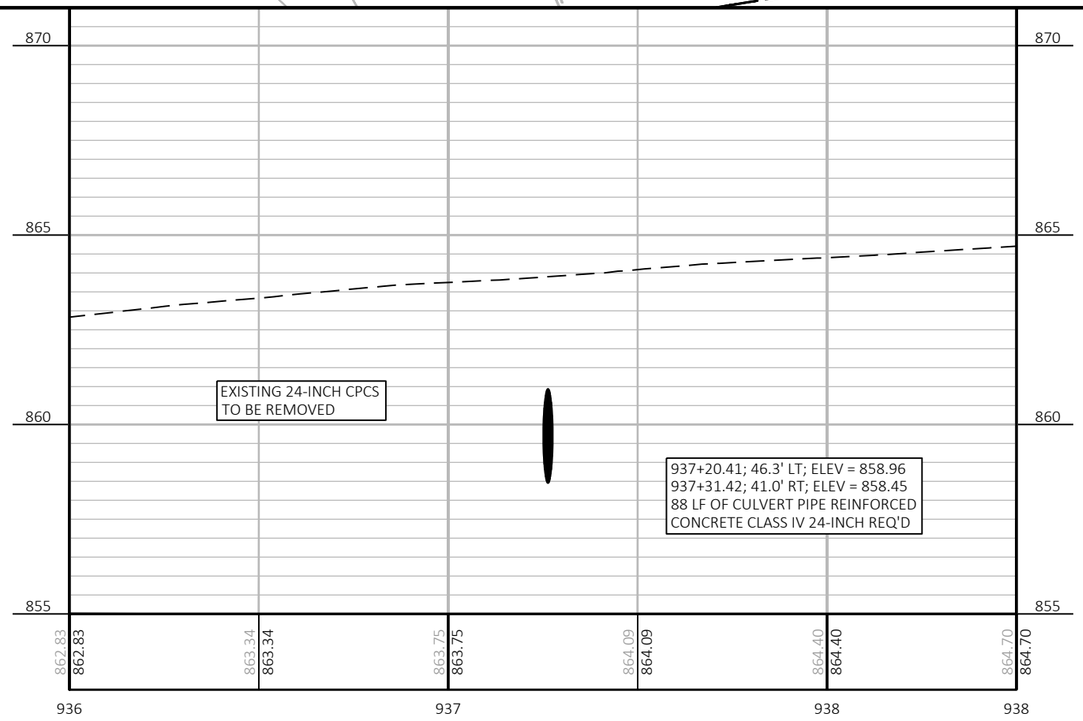
NOTES:
CONTRACTOR TO FIELD VERIFY EXISTING CURB AND GUTTER GRADES AND RADII PRIOR TO REMOVAL.

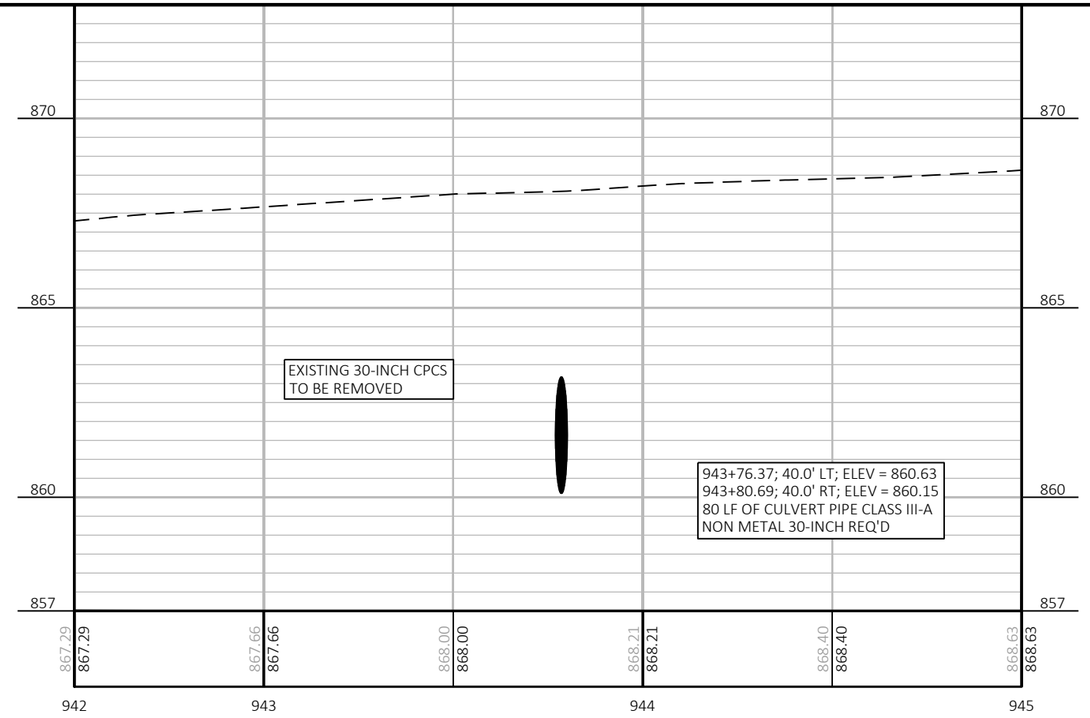
CURB RADII MEASURED TO THE BACK OF CURB.

LONGITUDINAL SAWCUT REQUIRED FOR CULVERT INSTALLATION. OFFSET FROM CENTERLINE TO BE DETERMINED BY ENGINEER IN FIELD.



NOTES:
LONGITUDINAL SAWCUT REQUIRED FOR CULVERT INSTALLATION. OFFSET FROM CENTERLINE TO BE DETERMINED BY ENGINEER IN FIELD.





PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	CONSTRUCTION DETAILS - CULVERTS	SHEET 10	E

2

2

N

SLOPE INTERCEPT, TYP

EXISTING R/W

POST #1 +39.85 24' LT

POST #5 +64.81 23' LT

POST #9 +89.82 22' LT

10:1 TAPER

15:1 TAPER

12.5' CENTER TO CENTER

100 LF MGS GUARDRAIL 3 L

MGS GUARDRAIL TERMINAL EAT

25 LF MGS GUARDRAIL 3

62.5 LF MGS GUARDRAIL 3

POST #9 +83.55 22' LT

POST #5 +08.54 23' LT

POST #1 +23.94 24' LT

10:1 TAPER

15:1 TAPER

1024 1025 1026 1027 1028 1029

USH 10

MGS GUARDRAIL TERMINAL EAT

62.5 LF MGS GUARDRAIL 3

100 LF MGS GUARDRAIL 3 L

25 LF MGS GUARDRAIL 3

MGS GUARDRAIL TERMINAL EAT

15:1 TAPER

10:1 TAPER

12.5' CENTER TO CENTER

POST #1 +03.62 24' RT

POST #5 +28.60 23' RT

POST #9 +53.59 22' RT

POST #9 +47.31 22' RT

POST #5 +72.29 23' RT

POST #1 +97.28 24' RT

15:1 TAPER

10:1 TAPER

EXISTING R/W

PARCEL LINE

PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	CONSTRUCTION DETAILS - GUARDRAIL	SHEET 11	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-68-00_BRILLION-REEDSVILLE MILL-FILL\DESIGN\C3D FILES\SHEETSPLAN\021002_CD.DWG
LAYOUT NAME - 01

PLOT DATE : 5/28/2026 3:48 PM PLOT BY : JARED HALBUR PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

2

END CONSTRUCTION
STA 21+45
MATCH EXISTING
SAWCUT REQ'D

STA 821+01.18 =
STA 20 +00.00
TYPE B1 INTERSECTION
72° INTERSECTION ANGLE

CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D

R = 70'

R = 40'

ASPHALTIC FLUME, TYP

ASPHALT FLUME

STA 823+03.82
STA 17+64.28
TYPE B1 INTERSECTION
90° INTERSECTION ANGLE

824+57.91
26.00' LT

826+07.31
17.00' LT

EXISTING R/W

USH 10

819+24.52
26.00' RT

817+99.86
17.00' RT

866.80

PC: 815+75.31

869.00

R = 60'

862.69
859.28
858.25
100+31.70
12.86' RT

PT: 824+79.01

EXISTING PROPERTY LINE

CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D

PROPOSED R/W

32 LF
CULVERT PIPE
CLASS III-A NON-METAL 18-INCH

STA 15+82
16' PE
ASPHALT

855.33

TEMPORARY LIMITED EASEMENT

858.00
100+29.25
13.05' LT

STA 14+84
15' FE
GRAVEL

32 LF
CULVERT PIPE
CLASS III-A NON-METAL 18-INCH

SLOPE INTERCEPT, TYP

843.91

LONG LAKE ROAD

BEGIN CONSTRUCTION
STA 10+00
MATCH EXISTING
SAWCUT REQ'D

NOTES:
UTILIZE SDD AT GRADE SIDE ROAD INTERSECTION TYPES B1 AND B2 FOR MORE INFORMATION.

LONG LAKE ROAD DESIGN SPEED = 45 MPH
LONG LAKE ROAD POSTED SPEED = 45 MPH

RADIUS MEASURED TO EDGE OF PAVEMENT OR FLAG LINE OF CURB AND GUTTER.

LEGEND

EXCAVATION COMMON (SEE CROSS SECTIONS)

REMOVING ASPHALTIC SURFACE

PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	INTERSECTION DETAILS: LONG LAKE ROAD (OVERVIEW)	SHEET 12	E

2

END CONSTRUCTION
STA 21+45
MATCH EXISTING
SAWCUT REQ'D

LONG LAKE ROAD

875.95

875.69
21+44.45
12.26' RT

875.63
21+44.45
11.80' LT

874.96

R = 70'
+57.91, 94' LT

874.66
20+82.43
15.00' LT

R = 40'
+26.95, 64' LT

874.74

874.44
20+70.81
15.00' RT

874.14
20+49.58
18.30' RT

873.58
821+37.03
27.43' LT

873.87
821+18.34
37.37' LT

874.41
20+50.75
30.59' LT

EXISTING R/W

EXISTING R/W

+65.36
17' LT

873.27

873.30
821+57.91
24.00' LT

+57.91
26' RT

874.16
820+26.95
24.00' LT

820 821 822 823 824 825

USH 10

USH 10

+24.52
26' RT

869.57
822+24.73
24.00' RT

866.27

867.87
823+61.07
24.00' RT

868.76
822+48.78
28.68' RT

867.96
822+69.32
42.02' RT

867.46
823+31.64
35.96' RT

+32.08
17' RT

867.35

867.16
17+02.10
19.85' LT

867.05
16+99.32
15.00' RT

PT: 824+79.01

R = 40'
+61.07, 64' RT

869.08
821+01.27
63.62' RT

868.18
101+82.02
28.50' RT

R = 60'
+24.73, 84' RT

866.36
16+78.47
15.00' LT

866.37
16+78.47
14.46' RT

EXISTING R/W

EXISTING R/W

864.85
16+38.47
14.00' LT

865.35
16+50.00
14.00' RT

866.80
101+38.87
10.52' RT

863.67
101+09.13
8.00' RT

863.05
100+14.00
18.00' RT

LONG LAKE ROAD

SLOPE INTERCEPT, TYP

EXISTING R/W

LONG LAKE ROAD

EXISTING R/W

PROPOSED R/W

866.85
101+61.83
8.00' LT

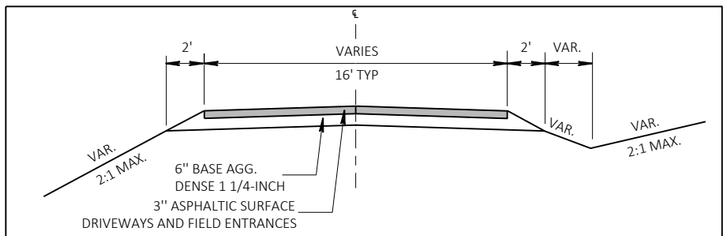
865.88
101+20.46
8.00' LT

18" CP

864.38
100+76.53
8.00'LT

861.88
100+14.00
18.00' LT

SEE TYPICAL SECTION DETAIL FOR MORE INFORMATION



TYPICAL SECTION DETAIL FOR DRIVEWAY

NOTES

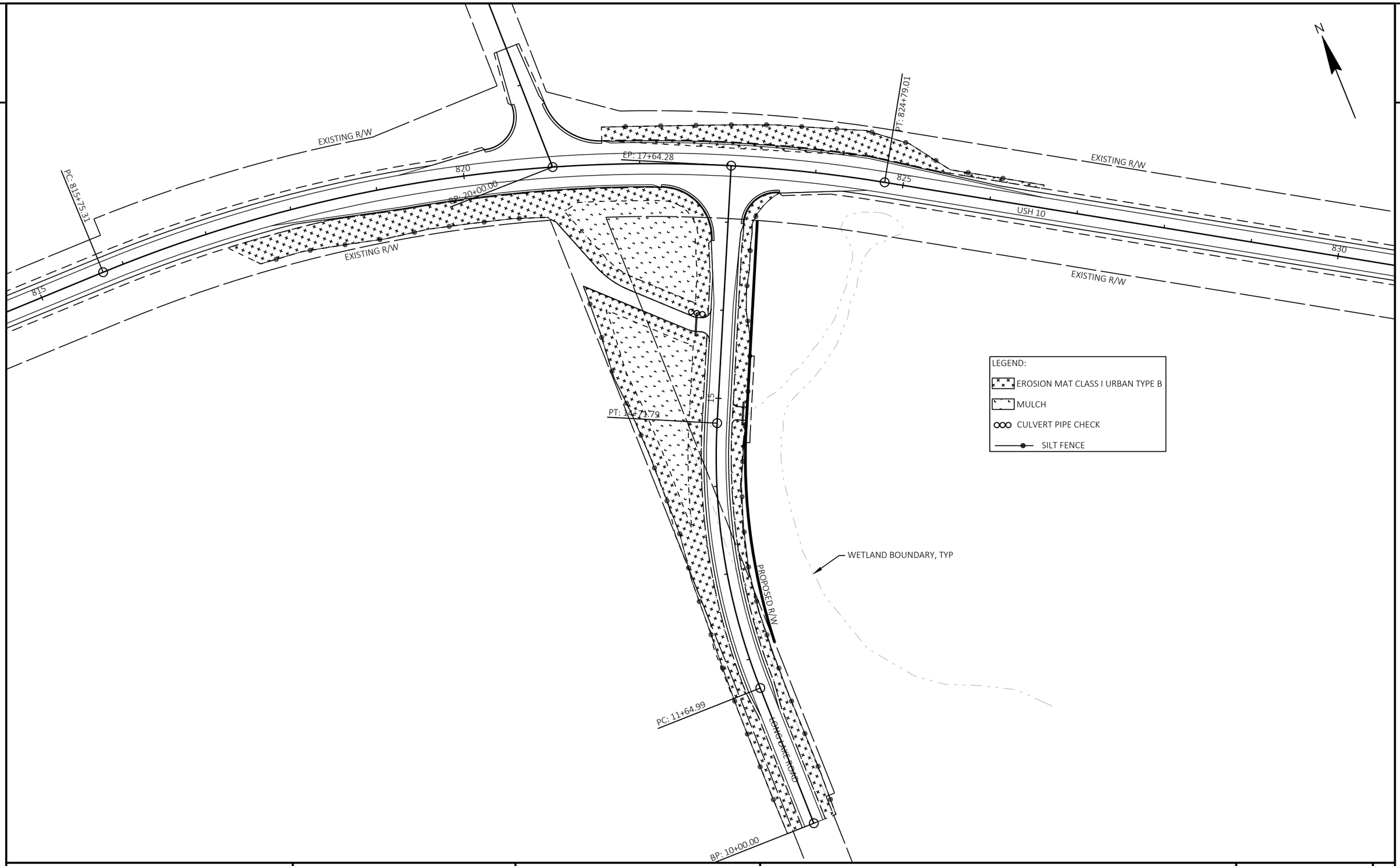
RADIUS MEASURED TO EDGE OF PAVEMENT OR FLAG LINE OF CURB & GUTTER

N

PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	INTERSECTION DETAILS: LONG LAKE ROAD	SHEET 13	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-68-00_BRILLION-REEDSVILLE MILL-FILL\DESIGN\C3D FILES\SHEETSPLAN\021101_ID.DWG
LAYOUT NAME - Sheet-01 (2)
PLOT DATE : 5/28/2026 3:56 PM
PLOT BY : JARED HALBUR
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

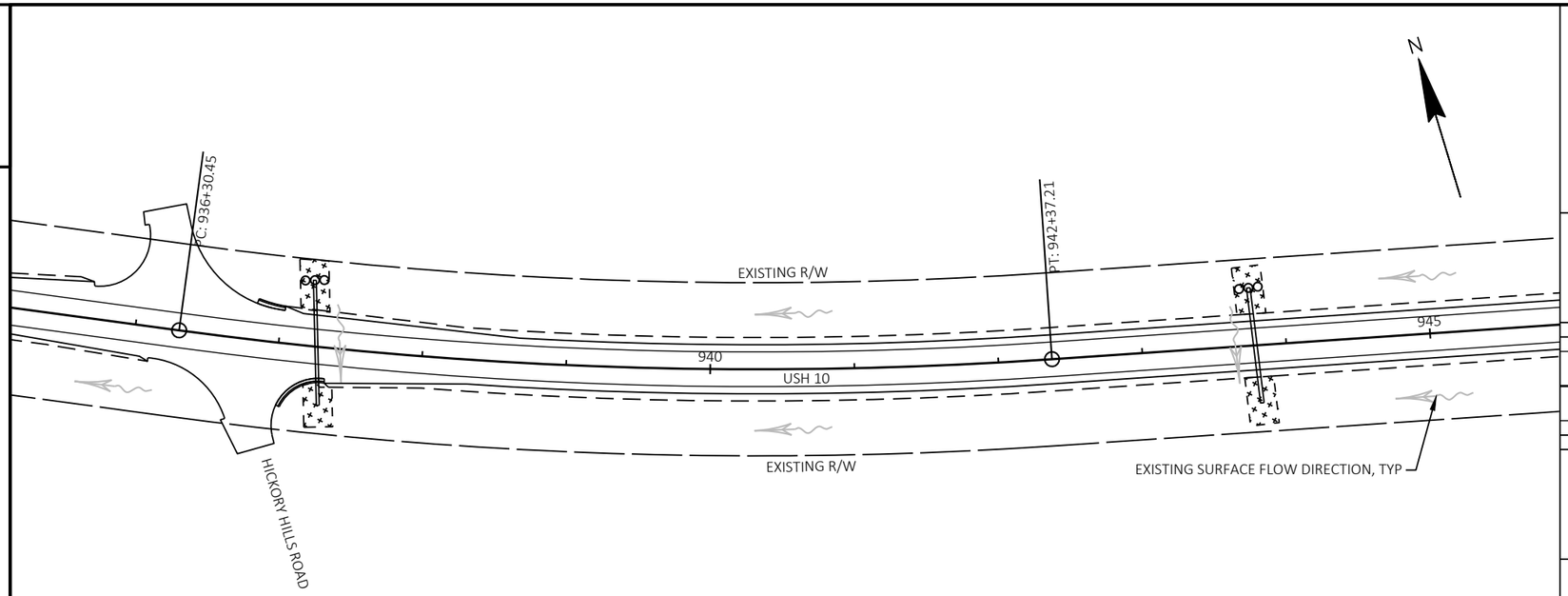


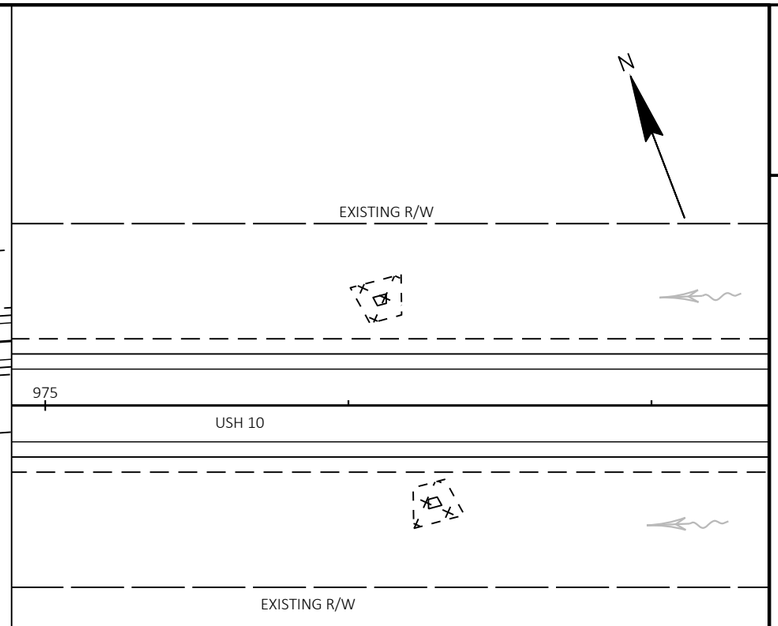
PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	EROSION CONTROL	SHEET 14	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-68-00_BRILLION-REEDSVILLE MILL-FILL\DESIGN\C3D FILES\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 01

PLOT DATE : 5/28/2026 3:58 PM PLOT BY : JARED HALBUR PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



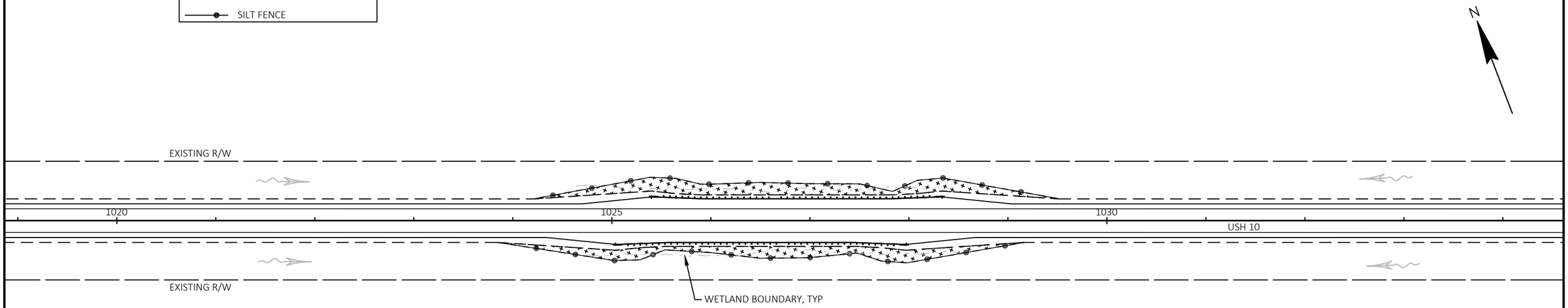


LEGEND:

EROSION MAT CLASS I URBAN TYPE B

CULVERT PIPE CHECK

SILT FENCE



2

PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	EROSION CONTROL	SHEET 15	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-68-00_BRILLION-REEDSVILLE MILL-FILL\DESIGN\C3D FILES\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 02

PLOT DATE : 5/28/2026 3:58 PM PLOT BY : JARED HALBUR PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

END CONSTRUCTION
STA 21+45

MOVING SIGNS TYPE II

MOVING SIGNS TYPE II

EXISTING R/W

EXISTING R/W

EXISTING R/W

EXISTING R/W

BP: 20+00.00

EP: 17+64.28

PC: 815+75.31

PT: 824+79.01

USH 10

STOP
R1-1
36"X36"

REMOVING SIGNS TYPE II

MOVING SIGNS TYPE II

PROPOSED R/W

PT: 14+71.79

EXISTING R/W

REMOVING SIGNS TYPE II

PC: 11+64.99

W3-1
36"X36"

LONG LAKE ROAD

EXISTING R/W

BEGIN CONSTRUCTION
STA 10+00

BP: 10+00.00

PLACE W1-4R SIGN APPROXIMATELY 500' BEFORE PC

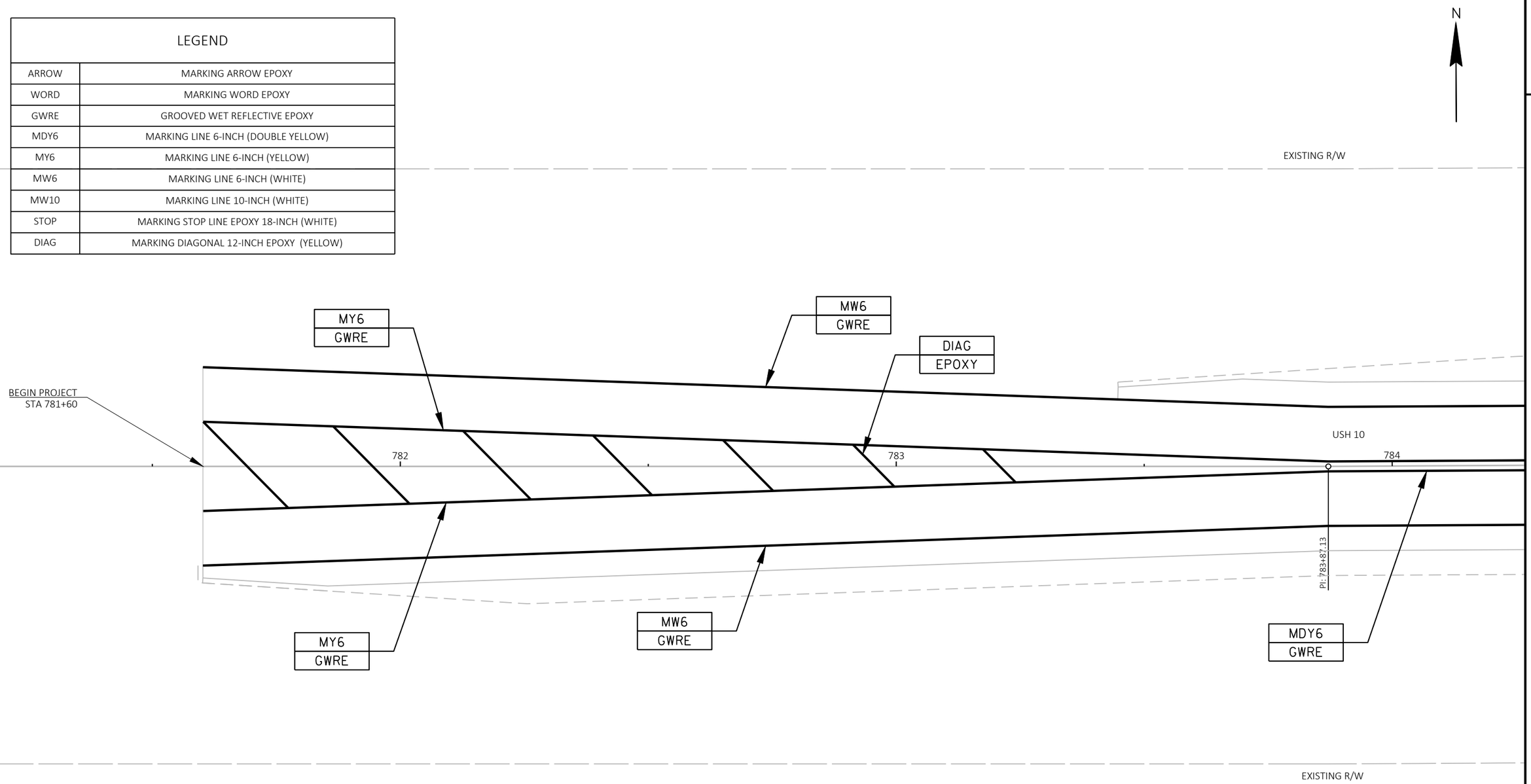
W1-4R
36"X36"

N

2

PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	PERMANENT SIGNING	SHEET 16	E

LEGEND	
ARROW	MARKING ARROW EPOXY
WORD	MARKING WORD EPOXY
GWRE	GROOVED WET REFLECTIVE EPOXY
MDY6	MARKING LINE 6-INCH (DOUBLE YELLOW)
MY6	MARKING LINE 6-INCH (YELLOW)
MW6	MARKING LINE 6-INCH (WHITE)
MW10	MARKING LINE 10-INCH (WHITE)
STOP	MARKING STOP LINE EPOXY 18-INCH (WHITE)
DIAG	MARKING DIAGONAL 12-INCH EPOXY (YELLOW)



2

END CONSTRUCTION
STA 21+45

MDY6 EPOXY

ARROW EPOXY

STOP EPOXY

WORD EPOXY

MDY6 GWRE

MW10 EPOXY

ARROW EPOXY

MW6 GWRE

EXISTING R/W

BP: 00+00.00

820 821 822 823 824 825 826 827 828 829 830 831

EP: 17+84.28

USH 10

PT: 824+79.01

MW6 GWRE

EXISTING R/W

EXISTING R/W

MW6 GWRE

PC: 815+75.31

ARROW EPOXY

MW10 EPOXY

WORD EPOXY

ARROW EPOXY

STOP EPOXY

EXISTING R/W

PROPOSED R/W

PT: 14+71.79

MDY6 EPOXY

MW6 EPOXY

MW6 EPOXY

PC: 11+64.99

LONG LAKE ROAD

EXISTING R/W

BEGIN CONSTRUCTION
STA 10+00

BP: 10+00.00

N

LEGEND	
ARROW	MARKING ARROW EPOXY
WORD	MARKING WORD EPOXY
GWRE	GROOVED WET REFLECTIVE EPOXY
MDY6	MARKING LINE 6-INCH (DOUBLE YELLOW)
MY6	MARKING LINE 6-INCH (YELLOW)
MW6	MARKING LINE 6-INCH (WHITE)
MW10	MARKING LINE 10-INCH (WHITE)
STOP	MARKING STOP LINE EPOXY 18-INCH (WHITE)
DIAG	MARKING DIAGONAL 12-INCH EPOXY (YELLOW)

PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	PAVEMENT MARKING	SHEET 18	E

NOTES:
CONTRACTOR MAY ALTER CONSTRUCTION SEQUENCE AND LIMITS WITH APPROVAL FROM ENGINEER IN FIELD.

SEE SDD TRAFFIC CONTROL FOR BARRICADES AND SIGNS FOR SIDEROAD CLOSURES AND WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY FOR MORE INFORMATION.

CONTRACTOR TO PROVIDE ACCESS TO RESIDENT ON MINIMUM OF GRAVEL SURFACE AT ALL TIMES.

CONSTRUCTION SEQUENCE:
STAGE 1 - CONSTRUCT STAGE 1 OF LONG LAKE ROAD ALONG NEW ALIGNMENT WHILE TRAFFIC IS MAINTAINED ON EXISTING ALIGNMENT OF LONG LAKE ROAD WITH SHOULDER CLOSURES.

STAGE 2 - CONSTRUCT STAGE 2 OF LONG LAKE ROAD WHERE NEW ALIGNMENT OVERLAPS WITH EXISTING ALIGNMENT, REMOVE EXISTING LONG LAKE ROAD AND INSTALL NEW DRIVEWAY APPROACH UNDER FULL SIDE STREET CLOSURE.

STAGE 1

END ROAD WORK
G20-2A
48"X24"

PLACE SIGN AT STA 817+00

PLACE SIGN AT STA 830+00

ROAD WORK AHEAD
W20-1A

EXISTING R/W

821 822 823 824 825

24'

500'

USH 10

EXISTING R/W

SHOULDER CLOSURE REQ'D

PROPOSED R/W

END ROAD WORK
G20-2A
48"X24"

PLACE SIGN AT STA 830+00

SHOULDER WORK
W21-5

PLACE SIGN AT STA 817+00

ROAD WORK AHEAD
W20-1A

PLACE SIGN AT STA 812+00

107 106 105 104 103 102 101 100

EXISTING R/W

EXISTING R/W

BEGIN CONSTRUCTION
STA 10+00

SEE SDD FOR ADVANCE SIGNING LOCATIONS
(LONG LAKE ROAD POSTED SPEED LIMIT = 45 MPH)

LONG LAKE RD

STAGE 2

CTH PP

FRANCIS ST

PARK AVE

CTH PP / MAIN ST

WATER ST

MADISON ST

USH 10

NATIONAL RD

LONG LAKE RD

ROAD CLOSED AHEAD
W20-3A

ROAD CLOSED 500 FT
W20-3D

ROAD WORK AHEAD
W20-1A

500'

ROAD CLOSED 500 FT
W20-3D

ROAD CLOSED AHEAD
W20-3A

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

TAUS RD

LONG LAKE RD

OAKWOOD RD

USH 10

NATIONAL RD

LONG LAKE RD

OAKWOOD RD

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE

N

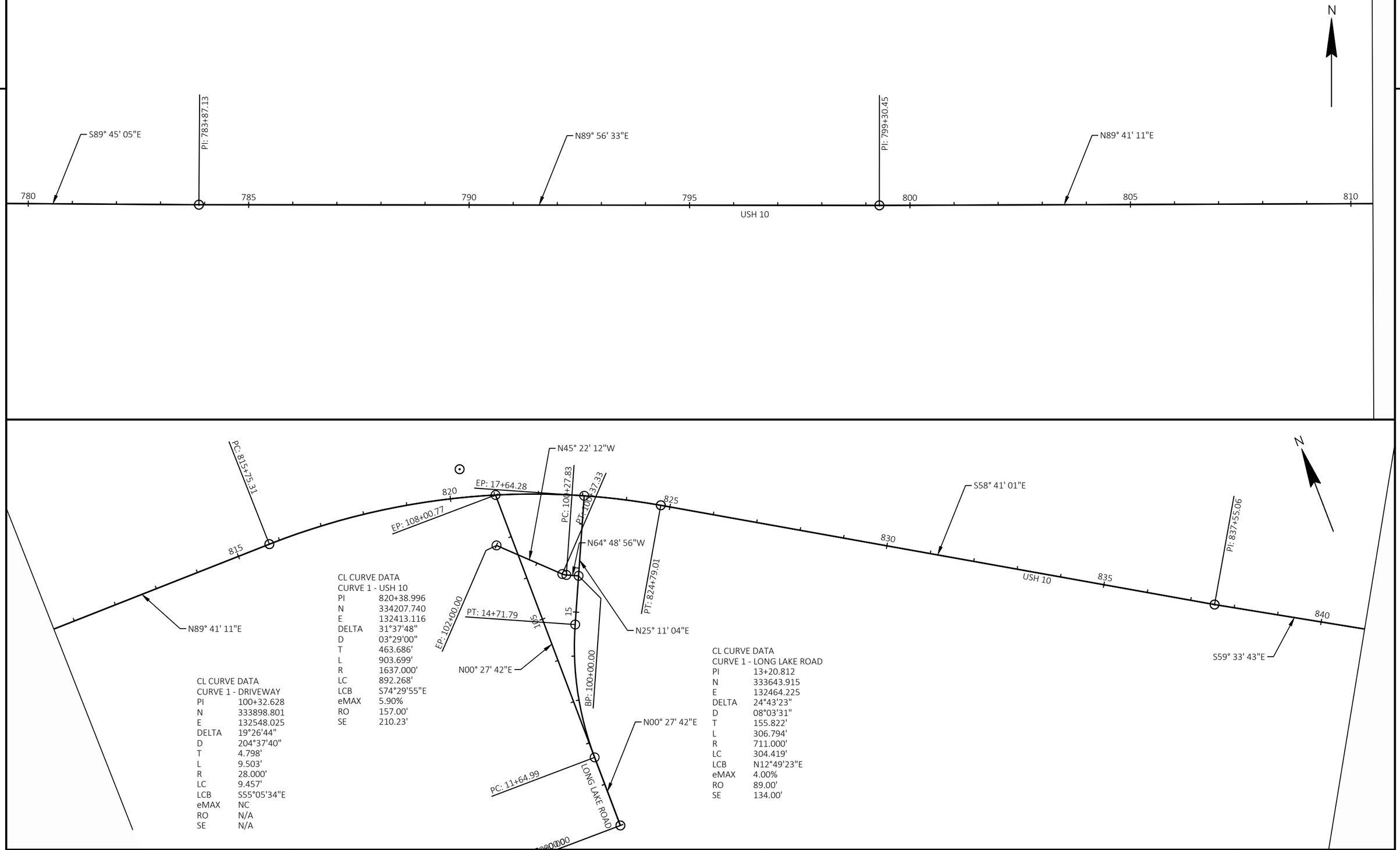
LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF
- DIRECTION OF TRAFFIC

PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	TRAFFIC CONTROL	SHEET 19	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-68-00_BRILLION-REEDSVILLE MILL-FILL\DESIGN\C3D FILES\SHEETSPLAN\025001_TC.DWG
LAYOUT NAME - Sheet-01 (2)
PLOT DATE : 10/26/2026 9:14 AM
PLOT BY : JARED HALBUR
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2



CL CURVE DATA
CURVE 1 - DRIVEWAY

PI	100+32.628
N	333898.801
E	132548.025
DELTA	19°26'44"
D	204°37'40"
T	4.798'
L	9.503'
R	28.000'
LC	9.457'
LCB	S55°05'34"E
eMAX	NC
RO	N/A
SE	N/A

CL CURVE DATA
CURVE 1 - USH 10

PI	820+38.996
N	334207.740
E	132413.116
DELTA	31°37'48"
D	03°29'00"
T	463.686'
L	903.699'
R	1637.000'
LC	892.268'
LCB	S74°29'55"E
eMAX	5.90%
RO	157.00'
SE	210.23'

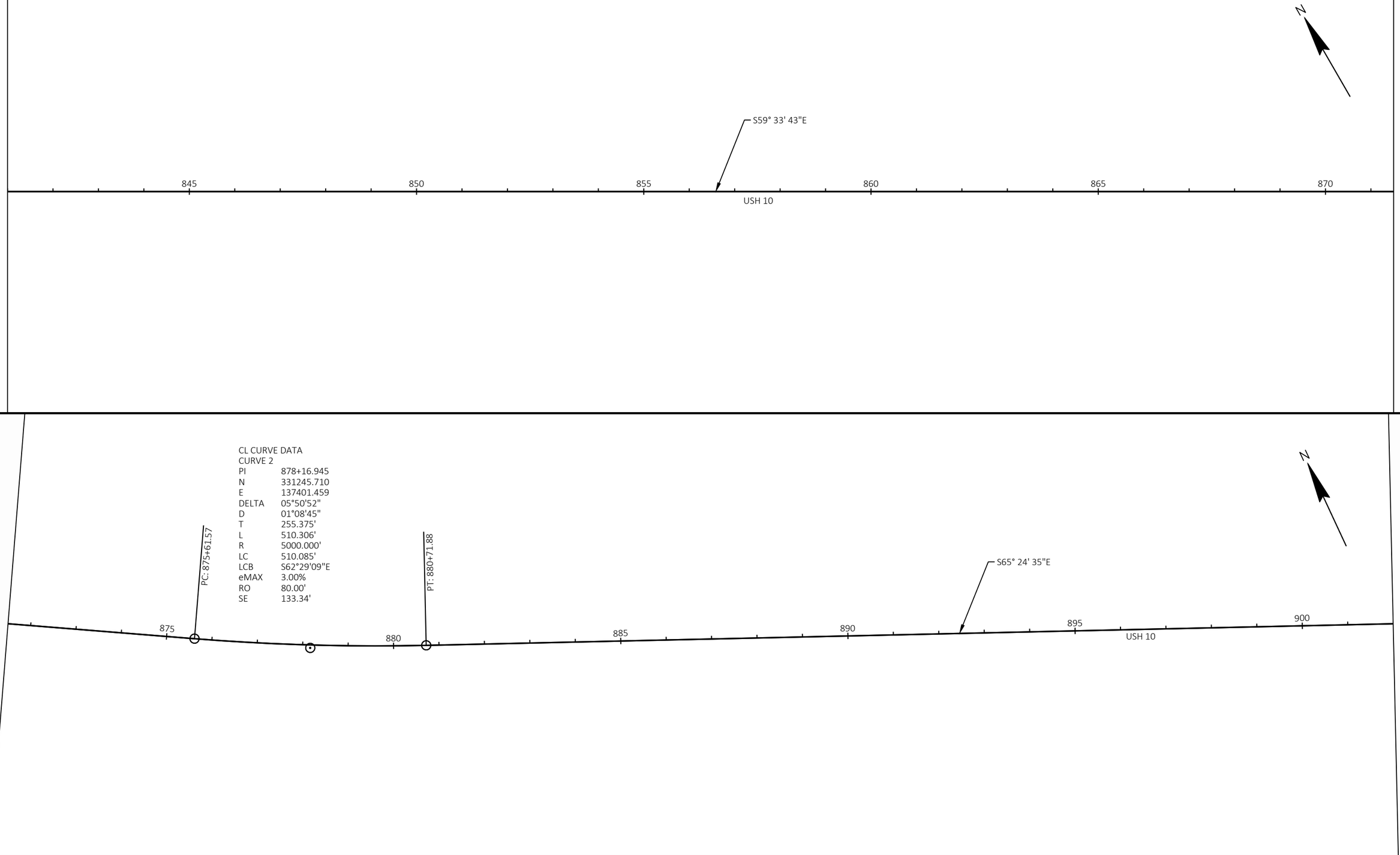
CL CURVE DATA
CURVE 1 - LONG LAKE ROAD

PI	13+20.812
N	333643.915
E	132464.225
DELTA	24°43'23"
D	08°03'31"
T	155.822'
L	306.794'
R	711.000'
LC	304.419'
LCB	N12°49'23"E
eMAX	4.00%
RO	89.00'
SE	134.00'

PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	ALIGNMENTS	SHEET 20	E

2

2



PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	ALIGNMENTS	SHEET 21	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-68-00_BRILLION-REEDSVILLE MILL-FILL\DESIGN\C3D FILES\SHEETSPLAN\027201_AD.DWG
LAYOUT NAME - 02

PLOT DATE : 5/28/2026 4:05 PM PLOT BY : JARED HALBUR PLOT NAME : PLOT SCALE : 1 IN:200 FT

2

N

S65° 24' 35"E

905 910 915 920 925 930

USH 10

N

S65° 24' 35"E

PC: 936+30.45

CL CURVE DATA
CURVE 3

PI	939+34.871
N	328699.683
E	142964.923
DELTA	11°35'18"
D	01°54'35"
T	304.421'
L	606.766'
R	3000.000'
LC	605.732'
LCB	S71°12'14"E
eMAX	4.40%
RO	117.00'
SE	170.19'

PT: 942+37.21

S76° 59' 53"E

PC: 955+65.73

935 940 945 950 955 960

USH 10

CL CURVE DATA
CURVE 4

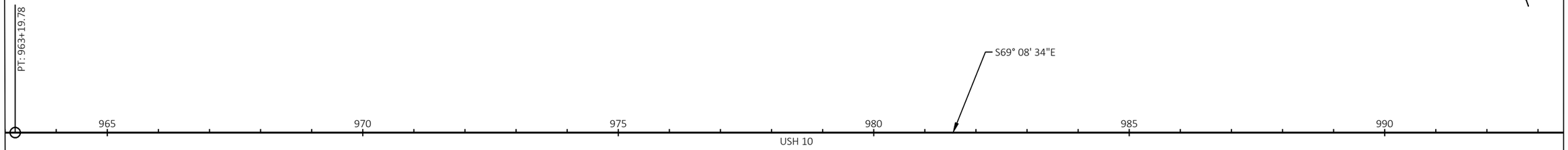
PI	959+43.344
N	328247.337
E	144923.932
DELTA	07°51'19"
D	01°02'30"
T	377.614'
L	754.045'
R	5500.000'
LC	753.455'
LCB	S73°04'13"E
eMAX	2.80%
RO	75.00'
SE	128.57'

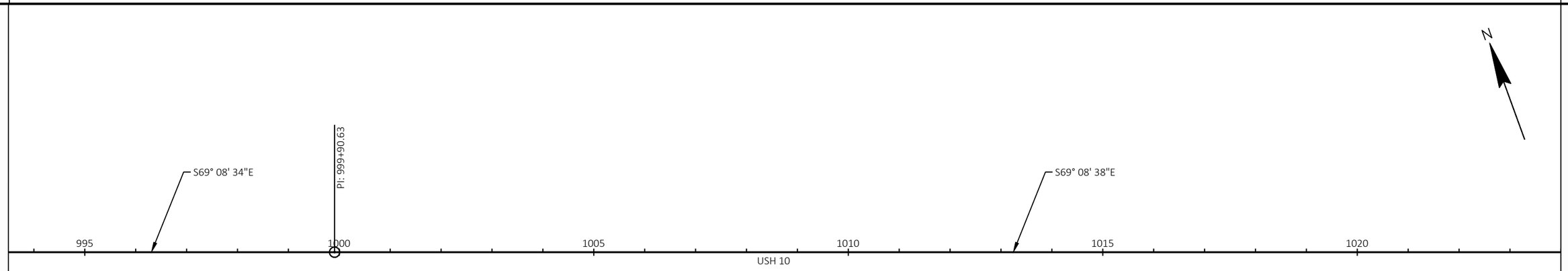
PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	ALIGNMENTS	SHEET 22	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-68-00_BRILLION-REEDSVILLE MILL-FILL\DESIGN\C3D FILES\SHEETSPLAN\027201_AD.DWG
LAYOUT NAME - 03

PLOT DATE : 5/28/2026 4:05 PM PLOT BY : JARED HALBUR PLOT NAME : PLOT SCALE : 1 IN:200 FT

2

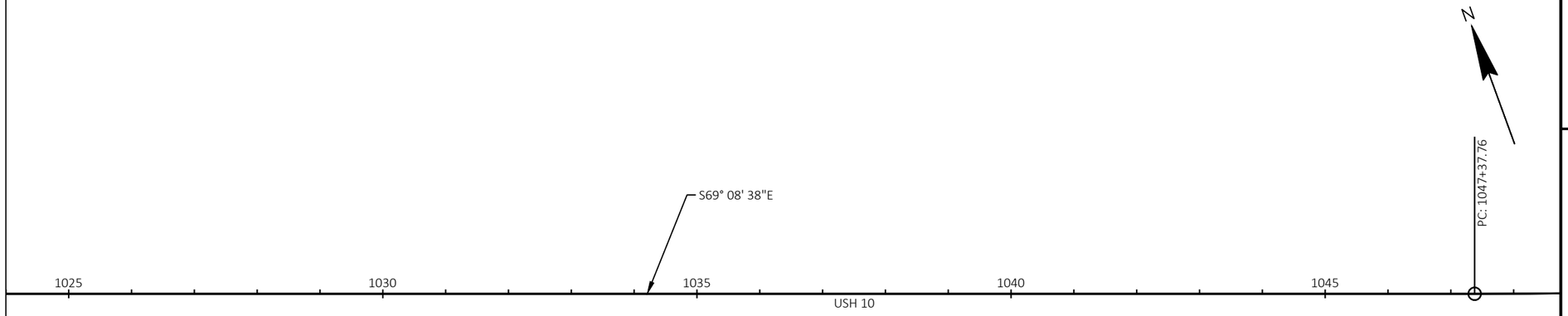




PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	ALIGNMENTS	SHEET 23	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-68-00_BRILLION-REEDSVILLE MILL-FILL\DESIGN\C3D FILES\SHEETSPLAN\027201_AD.DWG
LAYOUT NAME - 04

PLOT DATE : 5/28/2026 4:05 PM PLOT BY : JARED HALBUR PLOT NAME : PLOT SCALE : 1 IN:200 FT



2

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1500-68-71

Line	Item	Item Description	Unit	Total	Qty
0002	203.0100	Removing Small Pipe Culverts	EACH	2.000	2.000
0004	204.0115	Removing Asphaltic Surface Butt Joints	SY	890.000	890.000
0006	204.0120	Removing Asphaltic Surface Milling	SY	90,000.000	90,000.000
0008	204.0150	Removing Curb & Gutter	LF	330.000	330.000
0012	204.0165	Removing Guardrail	LF	510.000	510.000
0014	204.9060.S	Removing (item description) 01. Removing Apron Endwalls	EACH	2.000	2.000
0016	205.0100	Excavation Common	CY	3,860.000	3,860.000
0020	208.1500.S	Temporary Lane Shift During Culvert Work	EACH	2.000	2.000
0022	211.0700.S	Prepare Foundation for CIR Base Layer (project) 01. 1500-68-71	EACH	1.000	1.000
0024	211.0800.S	Base Repair for CIR Layer	CY	1,200.000	1,200.000
0026	213.0100	Finishing Roadway (project) 01. 1500-68-71	EACH	1.000	1.000
0030	305.0110	Base Aggregate Dense 3/4-Inch	TON	3,370.000	3,370.000
0032	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	3,000.000	3,000.000
0034	305.0500	Shaping Shoulders	STA	525.000	525.000
0036	312.0110	Select Crushed Material	TON	1,970.000	1,970.000
0038	327.1000.S	CIR Asphaltic Base Layer	SY	103,700.000	103,700.000
0040	455.0605	Tack Coat	GAL	10,650.000	10,650.000
0042	455.0770.S	Asphalt Stabilizing Agent	TON	480.000	480.000
0044	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	1.000	1.000
0046	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	1.000	1.000
0048	460.2000	Incentive Density HMA Pavement	DOL	215.000	215.000
0050	460.2005	Incentive Density PWL HMA Pavement	DOL	7,345.000	7,345.000
0052	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	5,210.000	5,210.000
0054	460.2010	Incentive Air Voids HMA Pavement	DOL	17,170.000	17,170.000
0056	460.6223	HMA Pavement 3 MT 58-28 S	TON	330.000	330.000
0058	460.6224	HMA Pavement 4 MT 58-28 S	TON	17,170.000	17,170.000
0060	465.0110	Asphaltic Surface Patching	TON	310.000	310.000
0062	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	95.000	95.000
0064	465.0315	Asphaltic Flumes	SY	32.000	32.000
0066	465.0520	Asphaltic Rumble Strips, Shoulder	LF	47,600.000	47,600.000
0068	465.0560	Asphaltic Rumble Strips, Centerline	LF	24,000.000	24,000.000
0072	520.1018	Apron Endwalls for Culvert Pipe 18-Inch	EACH	4.000	4.000
0074	520.1030	Apron Endwalls for Culvert Pipe 30-Inch	EACH	2.000	2.000
0076	520.3418	Culvert Pipe Class III-A Non-metal 18-Inch	LF	64.000	64.000
0078	520.3430	Culvert Pipe Class III-A Non-metal 30-Inch	LF	80.000	80.000
0082	522.0424	Culvert Pipe Reinforced Concrete Class IV 24-Inch	LF	88.000	88.000
0086	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	4.000	4.000
0092	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	370.000	370.000
0106	614.0010	Barrier System Grading Shaping Finishing	EACH	4.000	4.000
0108	614.2300	MGS Guardrail 3	LF	175.000	175.000
0110	614.2340	MGS Guardrail 3 L	LF	200.000	200.000
0112	614.2610	MGS Guardrail Terminal EAT	EACH	4.000	4.000
0114	618.0100	Maintenance and Repair of Haul Roads (project) 01. 1500-68-71	EACH	1.000	1.000
0118	619.1000	Mobilization	EACH	0.750	0.750
0120	624.0100	Water	MGAL	80.000	80.000
0122	625.0100	Topsoil	SY	5,130.000	5,130.000
0124	627.0200	Mulching	SY	2,325.000	2,325.000
0126	628.1504	Silt Fence	LF	3,940.000	3,940.000
0128	628.1520	Silt Fence Maintenance	LF	1,970.000	1,970.000

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Line	Item	Item Description	Unit	Total	Qty
0130	628.1905	Mobilizations Erosion Control	EACH	3.000	3.000
0132	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0134	628.2008	Erosion Mat Urban Class I Type B	SY	5,130.000	5,130.000
0140	628.7555	Culvert Pipe Checks	EACH	20.000	20.000
0144	629.0210	Fertilizer Type B	CWT	3.200	3.200
0146	630.0130	Seeding Mixture No. 30	LB	230.000	230.000
0148	630.0160	Seeding Mixture No. 60	LB	35.000	35.000
0150	630.0500	Seed Water	MGAL	130.000	130.000
0152	633.5200	Markers Culvert End	EACH	6.000	6.000
0154	634.0616	Posts Wood 4x6-Inch x 16-FT	EACH	3.000	3.000
0156	637.2210	Signs Type II Reflective H	SF	24.250	24.250
0158	638.2102	Moving Signs Type II	EACH	7.000	7.000
0160	638.2602	Removing Signs Type II	EACH	1.000	1.000
0162	638.3000	Removing Small Sign Supports	EACH	1.000	1.000
0164	643.0300	Traffic Control Drums	DAY	2,000.000	2,000.000
0166	643.0420	Traffic Control Barricades Type III	DAY	200.000	200.000
0168	643.0705	Traffic Control Warning Lights Type A	DAY	225.000	225.000
0170	643.0900	Traffic Control Signs	DAY	3,500.000	3,500.000
0172	643.1050	Traffic Control Signs PCMS	DAY	7.000	7.000
0176	643.3165	Temporary Marking Line Paint 6-Inch	LF	223,000.000	223,000.000
0178	643.5000	Traffic Control	EACH	0.750	0.750
0182	646.2020	Marking Line Epoxy 6-Inch	LF	2,800.000	2,800.000
0184	646.2040	Marking Line Grooved Wet Ref Epoxy 6-Inch	LF	82,500.000	82,500.000
0186	646.4020	Marking Line Epoxy 10-Inch	LF	600.000	600.000
0188	646.5020	Marking Arrow Epoxy	EACH	4.000	4.000
0190	646.5120	Marking Word Epoxy	EACH	2.000	2.000
0192	646.6120	Marking Stop Line Epoxy 18-Inch	LF	20.000	20.000
0194	646.7120	Marking Diagonal Epoxy 12-Inch	LF	63.000	63.000
0198	648.0100	Locating No-Passing Zones	MI	4.932	4.932
0202	650.4500	Construction Staking Subgrade	LF	750.000	750.000
0204	650.5000	Construction Staking Base	LF	750.000	750.000
0206	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	370.000	370.000
0208	650.6000	Construction Staking Pipe Culverts	EACH	2.000	2.000
0210	650.8000	Construction Staking Resurfacing Reference	LF	26,040.000	26,040.000
0216	650.9911	Construction Staking Supplemental Control (project) 01. 1500-68-71	EACH	1.000	1.000
0220	650.9920	Construction Staking Slope Stakes	LF	750.000	750.000
0222	690.0150	Sawing Asphalt	LF	420.000	420.000
0224	690.0250	Sawing Concrete	LF	265.000	265.000
0226	740.0440	Incentive IRI Ride	DOL	19,728.000	19,728.000
0228	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,100.000	2,100.000
0230	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	2,400.000	2,400.000
0232	SPV.0035	Special 01. Foundation Backfill	CY	555.000	555.000
0234	SPV.0060	Special 01. Grading, Shaping and Finishing Culvert Pipes and Apron Endwalls	EACH	3.000	3.000

3

REMOVING CULVERT ITEMS

STATION	LOCATION	203.0100 REMOVING SMALL PIPE CULVERTS EACH	204.9060.S REMOVING APRON ENDWALLS EACH	COMMENTS
CATEGORY CODE 0010				
937+26	USH 10 CL	1	--	24-INCH CPCS X 86 LF
943+79	USH 10 CL	1	--	30-INCH CPCS X 80 LF
976+11	USH 10 LT	--	1	24-INCH REINFORCED CONCRETE
976+28	USH 10 RT	--	1	24-INCH REINFORCED CONCRETE
TOTALS		**2**	**2**	

REMOVING CURB AND GUTTER

STATION - STATION	LOCATION	204.0150 LF	COMMENTS
CATEGORY CODE 0010			
820+36 - 821+72	USH 10 LT & RT	270	LONG LAKE INTERSECTION
934+54 - 937+34	USH 10 LT & RT	60	CULVERT REPLACEMENT
TOTAL		**330**	

REMOVING ASPHALTIC SURFACE MILLING

STATION - STATION	LOCATION	204.0120 SY	COMMENTS
CATEGORY CODE 0010			
781+60 - 1042+00	USH 10 LT & RT	90,000	2.5" MILL
TOTALS		**90,000**	

REMOVING GUARDRAIL

STATION - STATION	LOCATION	204.0165 LF
CATEGORY CODE 0010		
1025+43 - 1028+07	USH 10 LT & RT	510
TOTAL		**510**

REMOVING ASPHALTIC SURFACE BUTT JOINTS

STATION - STATION	LOCATION	204.0115 SY	COMMENTS
CATEGORY CODE 0010			
781+60	USH 10 CL	45	BEGIN PROJECT
820+62	USH 10 LT	30	LONG LAKE ROAD
10+00	CTH W CL	25	LONG LAKE ROAD
834+82	USH 10 LT	5	DRIVEWAY
838+81	USH 10 LT	5	DRIVEWAY
840+04	USH 10 LT	5	DRIVEWAY
877+71	USH 10 LT	150	OAKWOOD ROAD
878+60	USH 10 RT	95	OAKWOOD ROAD
879+57	USH 10 RT	5	DRIVEWAY
907+75	USH 10 RT	95	MILLER LANE
936+09	USH 10 LT	115	HICKORY HILLS ROAD
936+92	USH 10 RT	85	HICKORY HILLS ROAD
977+89	USH 10 RT	5	DRIVEWAY
992+14	USH 10 LT	95	MAPLE ROCK ROAD
992+74	USH 10 RT	95	MAPLE ROCK ROAD
1042+00	USH 10 CL	35	END PROJECT
TOTALS		**890**	

DIVISION	FROM/TO STATION	LOCATION	205.0100 COMMON EXCAVATION (1) CUT (2)	205.0100 COMMON EXCAVATION (1) EBS EXCAVATION (3)	SALVAGED/UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	UNEXPANDED FILL	EXPANDED FILL (13) FACTOR 1.25	MASS ORDINATE +/- (14)	WASTE	COMMENT
LONG LAKE ROAD	10+00 - 16+78.47	CL	1,970	0	0	1,970	1,398	1,398	572	572	
USH 10 TURN LANES	817+45.98 - 826+57.91	CL	1,414	0	0	1,414	633	633	781	781	
CULVERT REPLACEMENT	936+82 - 937+69	CL	176	0	0	176	0	0	176	176	
CULVERT REPLACEMENT	943+13 - 944+44	CL	300	0	0	300	0	0	300	300	
PROJECT TOTAL			3,860	0	0	3,860	2,031	2,031	1,829	1,829	
TOTAL COMMON EXC (CY)			3,860								

NOTES:

(1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100

(2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.

(4) SALVAGED/UNUSABLE PAVEMENT MATERIAL

5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL

(13) EXPANDED FILL FACTOR = 1.25. EXPANDED FILL = UNEXPANDED FILL * FILL FACTOR

(14) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

(15) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFORMATION ONLY.

TEMPORARY LANE SHIFT DURING CULVERT WORK

STATION - STATION	LOCATION	* FILL CY	208.1500.S EACH	COMMENTS
CATEGORY CODE 0010				
937+26	USH 10 LT & RT	25	1	24" CULVERT PIPE
943+79	USH 10 LT & RT	25	1	30" CULVERT PIPE
	TOTAL	**50**	**2**	

* FOR INFORMATIONAL PURPOSES ONLY

COLD-IN-PLACE RECYCLING (CIR) ITEMS

STATION	LOCATION	211.0700.S PREPARE FOUNDATION FOR CIR BASE LAYER EACH	211.0800.S BASE REPAIR FOR CIR LAYER CY	327.1000.S COLD IN-PLACE RECYCLING (CIR) ASPHALT BASE LAYER SY	455.0770.S ASPHALT STABILIZING AGENT TON
CATEGORY CODE 0010					
PROJECT	USH 10 CL	1	1,200	103,700	480
	TOTALS	**1**	**1,200**	**103,700**	**480**

BASE AGGREGATE DENSE AND BREAKER RUN ITEMS

STATION - STATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	305.0415 SHAPING SHOULDERS STA	312.0110 SELECT CRUSHED MATERIAL TON	COMMENTS
CATEGORY CODE 0010					
781+60 - 1042+00	3,240	--	525	--	USH 10 SHOULDERS
10+00 - 17+53.37	130	--	--	--	LONG LAKE SHOULDERS
10+00 - 17+53.37	--	2,200	--	1,970	LONG LAKE ROADWAY
15+75	--	130	--	--	LONG LAKE DRIVEWAY
820+50 - 821+50	--	100	--	--	USH 10 TURN LANES
937+26	--	340	--	--	CULVERT REPLACEMENT
943+79	--	230	--	--	CULVERT REPLACEMENT
	3,370	**3,000**	**525**	**1,970**	

ASPHALTIC ITEMS

STATION - STATION	LOCATION	455.0605 TACK COAT GAL	460.6223 HMA PAVEMENT 3 MT 58-28 S TON	460.6224 HMA PAVEMENT 4 MT 58-28 S TON	465.0100 ASPHALTIC SURFACE PATCHING TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	465.0520 ASPHALTIC RUMBLE STRIPS SHOULDER LF	465.0560 ASPHALTIC RUMBLE STRIPS CENTERLINE LF	460.0105.S HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP VOLUMETRICS EACH	460.0110.S HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP DENSITY EACH	COMMENTS
CATEGORY CODE 0010											
781+60 - 1042+00	USH 10 CL	10,500	--	16,900	310	25	47,600	24,000	1	1	USH 10
10+00 - 17+53.37	LONG LAKE CL	150	330	270	--	70	--	--	--	--	LONG LAKE ROAD
	TOTALS	**10,650**	**330**	**17,170**	**310**	**95**	**47,600**	**24,000**	**1**	**1**	

1500-68-71

PWL Mixture Use Table

LOCATION	STATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEM	TONS	THICKNESS	MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
12' Driving Lane	781+60 - 1042+00	Upper Layer	4 MT 58-28 S	4 MT 58-28 S	7,345	1.75	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
11' Driving Lane	10+00 - 17+53	Upper Layer	3 MT 58-28 S	4 MT 58-28 S	210	1.75	PWL Incentive Air Voids HMA Pavement 460.2010	Department Acceptance (SS 460.3.3.2) *Not Eligible for Incentive
3' Shoulder	10+00 - 17+53	Upper Layer	3 MT 58-28 S	4 MT 58-28 S	60	1.75	PWL Incentive Air Voids HMA Pavement 460.2010	Department Acceptance (SS 460.3.3.2) *Not Eligible for Incentive
Shoulder / Intersections	781+60 - 1042+00	Upper Layer	4 MT 58-28 S	4 MT 58-28 S	3,410	1.75	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance per SS 460.3.3.2 *Not Eligible for Incentive
12' Driving Lane	781+60 - 1042+00	Lower Layer	CIR Pavement	4 MT 58-28 S	4,200	1.00	PWL Incentive Air Voids HMA Pavement 460.2010	Ordinary Compaction (SS 450.3.2.6.2)
11' Driving Lane	10+00 - 17+53	Lower Layer	Base Aggregate	3 MT 58-28 S	260	2.25	QMP per SS 460.2.8	Incentive Density HMA Pavement 460.2000
3' Shoulder	10+00 - 17+53	Lower Layer	Base Aggregate	3 MT 58-28 S	70	2.25	QMP per SS 460.2.8	Incentive Density HMA Pavement 460.2000
Shoulder / Intersections	781+60 - 1042+00	Lower Layer	Milled Existing HMA Surface	4 MT 58-28 S	1,945	1.75	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance per SS 460.3.3.2 *Not Eligible for Incentive
Various	781+60 - 1042+00	Culvert Replacements	Base Aggregate	Asphaltic Surface Patching	310	6.00	Per SS 465	Acceptance By Ordinary Compaction (SS 450.3.2.6.2)

MISC. SHEET 2

CULVERT PIPE ITEMS

STATION	LOCATION	520.1018 APRON ENDWALLS FOR CULVERT PIPE 18-INCH EACH	520.1030 APRON ENDWALLS FOR CULVERT PIPE 30-INCH EACH	520.3418 CULVERT PIPE CLASS III-A NON-METAL 18-INCH LF	520.3430 CULVERT PIPE CLASS III-A NON-METAL 30-INCH LF	522.0424 CULVERT PIPE REINFORCED CONCRETE CLASS IV 24-INCH LF	522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	633.5200 MARKERS CULVERT END EACH	650.6000 CONSTRUCTION STAKING PIPE CULVERTS EACH
CATEGORY CODE 0010									
937+26	USH 10 LT/RT	--	--	--	--	88	2	2	1
943+79	USH 10 LT/RT	--	2	--	80	--	--	2	1
976+20	USH 10 LT/RT	--	--	--	--	--	2	2	--
14+84	LONG LAKE RT	2	--	32	--	--	--	--	--
15+82	LONG LAKE LT	2	--	32	--	--	--	--	--
	TOTALS	4	2	64	80	88	4	6	2

CONCRETE CURB AND GUTTER ITEMS

STATION - STATION	LOCATION	601.0557 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D LF	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF
CATEGORY CODE 0010			
820+27 - 823+61	USH 10 LT&RT	310	310
934+54 - 937+34	USH 10 LT&RT	60	60
		370	**370**

WATER

LOCATION	624.0100 WATER MGAL	COMMENTS
CATEGORY CODE 0010		
PROJECT	80	
TOTALS	**80**	

ASPHALTIC FLUME ITEMS

STATION	LOCATION	465.0315 ASPHALTIC FLUMES SY	COMMENTS
CATEGORY CODE 0010			
820+21 - 823+38	USH 10 LT	32	LONG LAKE ROAD
TOTALS		**32**	

BEAMGUARD ITEMS

STATION - STATION	LOCATION	614.0010 BARRIER SYSTEM GRADING SHAPING FINISHING EACH	614.2300 MGS GUARDRAIL 3 LF	614.2340 MGS GUARDRAIL 3 L LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH
CATEGORY CODE 0010					
1025+03 - 1028+24	USH 10 LT & RT	4	175	200	4
	TOTAL	**4**	**175**	**200**	**4**

STATION - STATION	LOCATION	* BORROW CY	* TOPSOIL SY	* EROSION MAT URBAN CLASS I TYPE B SY	* FERTILIZER TYPE B CWT	* SEED MIX NO. 30 LBS	* SEED WATER MGAL
CATEGORY CODE 0010							
1025+03 - 1028+24	USH 10 LT & RT	260	1,065	1,065	0.6	48	27
	TOTALS	**260**	**1,065**	**1,065**	**0.6**	**48**	**27**

* QUANTITIES GIVEN FOR INFORMATION PURPOSES ONLY AND ARE INCIDENTAL TO THE 614.0010 ITEM

MISC. SHEET 3

LANDSCAPING ITEMS

STATION - STATION	LOCATION	625.0100 TOPSOIL SY	627.0200 MULCHING SY	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	629.0210 FERTILIZER TYPE B CWT	630.0130 SEED MIX NO. 30 LBS	630.0160 SEED MIX NO. 60 LBS	630.0500 SEED WATER MGAL
CATEGORY CODE 0010										
10+00 - 17+53.37	LONG LAKE LT&RT	4,270	2,325	2,200	1,100	4,270	2.7	193	20	107
1023+85 - 1029+53	USH 10 LT&RT	--	--	1,080	540	--	--	--	--	--
UNDISTRIBUTED	PROJECT	860	--	660	330	860	0.5	37	15	23
	TOTALS	**5,130**	**2,325**	**3,940**	**1,970**	**5,130**	**3.2**	**230**	**35**	**130**

MOBILIZATIONS EROSON CONTROL

STATION - STATION	LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	COMMENTS
23+82 - 36+75	CTH W LT & RT	1	1	CTH W
1056+55	USH 10 LT & RT	1	1	CULVERT
1061+34 - 1085+01	USH 10 LT & RT	1	1	CURB RAMPS
	TOTALS	**3**	**3**	

TRAFFIC CONTROL ITEMS

LOCATION	643.0300 DRUMS DAYS	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A DAYS	643.0900 SIGNS DAYS	643.1050 SIGNS PCMS DAYS	643.3165 TEMPORARY MARKING LINE PAINT 6-INCH WHITE LF	643.3165 TEMPORARY MARKING LINE PAINT 6-INCH YELLOW LF
CATEGORY CODE 0010							
PROJECT	2,000	200	225	3,500	7	210,000	13,000
TOTALS	**2,000**	**200**	**225**	**3,500**	**7**	**223,000**	

SIGNING ITEMS

STATION	LOCATION	SIGN CODE	SIZE	638.2102 MOVING SIGNS TYPE II EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	634.0616 POSTS WOOD 4x6-INCH X 16-FT EACH	637.2210 SIGNS TYPE II RELFECTIVE H SF
CATEGORY CODE 0010								
821+03	LT	--	--	1	--	--	--	--
821+08	LT	--	--	1	--	--	--	--
821+46	RT	--	--	--	1	1	--	--
821+59	LT	--	--	1	--	--	--	--
822+50	RT	--	--	1	--	--	--	--
823+99	LT	--	--	1	--	--	--	--
824+38	RT	--	--	1	--	--	--	--
825+15	LT	--	--	1	--	--	--	--
10+25	RT	W1-4R	36"X36	--	--	--	1	9.00
13+50	RT	W3-1	36"X36	--	--	--	1	9.00
17+10	RT	R1-1	30"X30"	--	--	--	1	6.25
			TOTALS	**7**	**1**	**1**	**3**	**24.25**

PAVEMENT MARKING ITEMS

LOCATION	OFFSET	646.2020 MARKING LINE EPOXY 6-INCH WHITE LF	646.2020 MARKING LINE EPOXY 6-INCH YELLOW	646.2040 MARKING LINE GROOVED WET REF EPOXY 6-INCH WHITE LF	646.2040 MARKING LINE GROOVED WET REF EPOXY 6-INCH YELLOW	646.4020 MARKING LINE EPOXY 10-INCH LF	646.5020 MARKING ARROW EPOXY EACH	646.5120 MARKING WORD EPOXY EACH	646.6120 MARKING STOP LINE EPOXY 18-INCH LF	646.7120 MARKING DIAGONAL 12-INCH EPOXY LF	648.0100 LOCATING NO PASSING ZONES MI
CATEGORY CODE 0010											
PROJECT	USH 10 LT/RT/CL	--	--	69,000	13,500	600	4	2	--	63	4.932
PROJECT	LONG LAKE LT/RT/CL	1,400	1,400	--	--	--	--	--	20	--	--
	TOTALS	**2,800**		**82,500**		**600**	**4**	**2**	**20**	**63**	**4.932**

DITCH CHECK ITEMS

STATION	LOCATION	628.7555 CULVERT PIPE CHECKS EACH
CATEGORY CODE 0010		
937+26	USH 10 RT	10
943+79	USH 10 RT	10
		20

MISC. SHEET 4

PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	MISCELLANEOUS QUANTITIES	SHEET: 30	E

CONSTRUCTION STAKING ITEMS

STATION - STATION	LOCATION	650.4500 SUBGRADE LF	650.5000 BASE LF	650.8000 RESURFACING REFERENCE LF	650.9911 SUPPLEMENTAL CONTROL EACH	650.9920 SLOPE STAKES LF
CATEGORY CODE 0010						
PROJECT	LT/RT/CL	750	750	26,040	1	750
	TOTALS	**750**	**750**	**26,040**	**1**	**750**

STAKING ITEMS FOR CURB AND GUTTER, PIPE CULVERTS, AND BARRIER SHOWN ELSEWHERE

SAWING ITEMS

LOCATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF	COMMENTS
CATEGORY CODE 0010			
10+00	22	--	LONG LAKE ROAD
937+26	196	115	CULVERT REMOVAL
943+79	202	150	CULVERT REMOVAL
TOTALS	**420**	**265**	

GRADING SHAPING AND FINISHING CULVERT PIPES AND APRON ENDWALLS

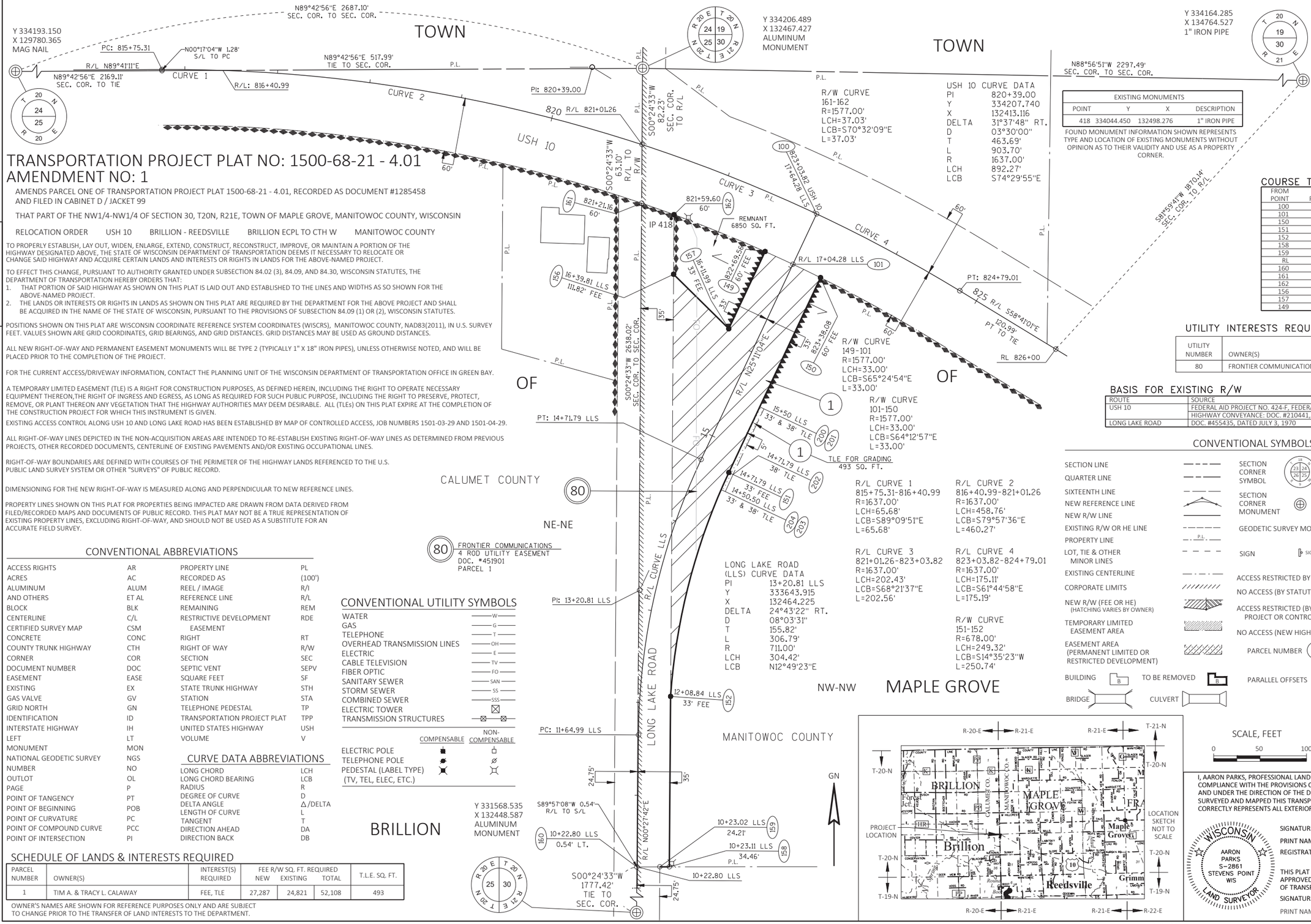
LOCATION	SPV.0060.01 GRADING SHAPING AND FINISHING CULVERT PIPES AND APRON ENDWALLS EACH	COMMENTS
CATEGORY CODE 0010		
937+26	1	USH 10 CULVERT
943+79	1	USH 10 CULVERT
976+10	1	USH 10 ENDWALLS
TOTALS	**3**	

STATION - STATION	* COMMON EXCAVATION CY	* TOPSOIL SY	* EROSION MAT URBAN CLASS I TYPE B SY	* FERTILIZER TYPE B CWT	* SEED MIX NO. 30 LBS	* SEED WATER MGAL
CATEGORY CODE 0010						
937+26	5	145	145	0.1	7	4
943+79	5	150	150	0.1	7	4
976+10	5	50	50	0.1	5	3
	15	**345**	**345**	**0.3**	**19**	**11**

* QUANTITIES ARE GIVEN FOR INFORMATIONAL PURPOSES ONLY AND ARE INCIDENTAL TO THE GRADING SPV

FOUNDATION BACKFILL

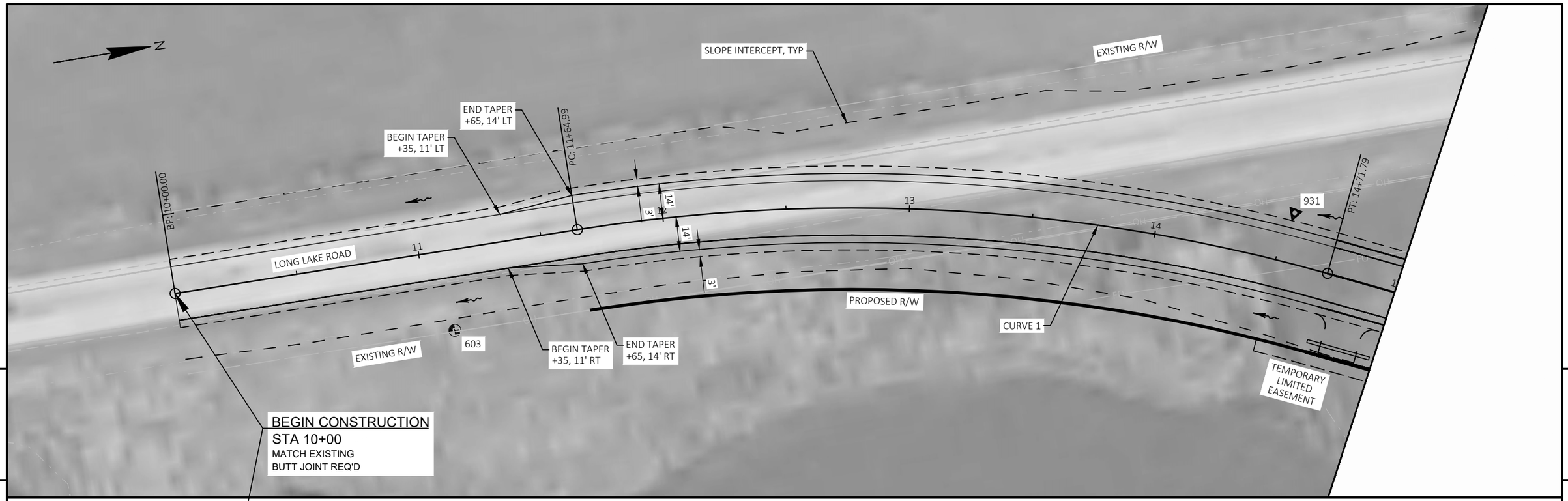
LOCATION	SPV.0035.01 FOUNDATION BACKFILL CY	COMMENTS
CATEGORY CODE 0010		
937+26	215	USH 10 CULVERT
943+79	340	USH 10 CULVERT
TOTALS	**555**	

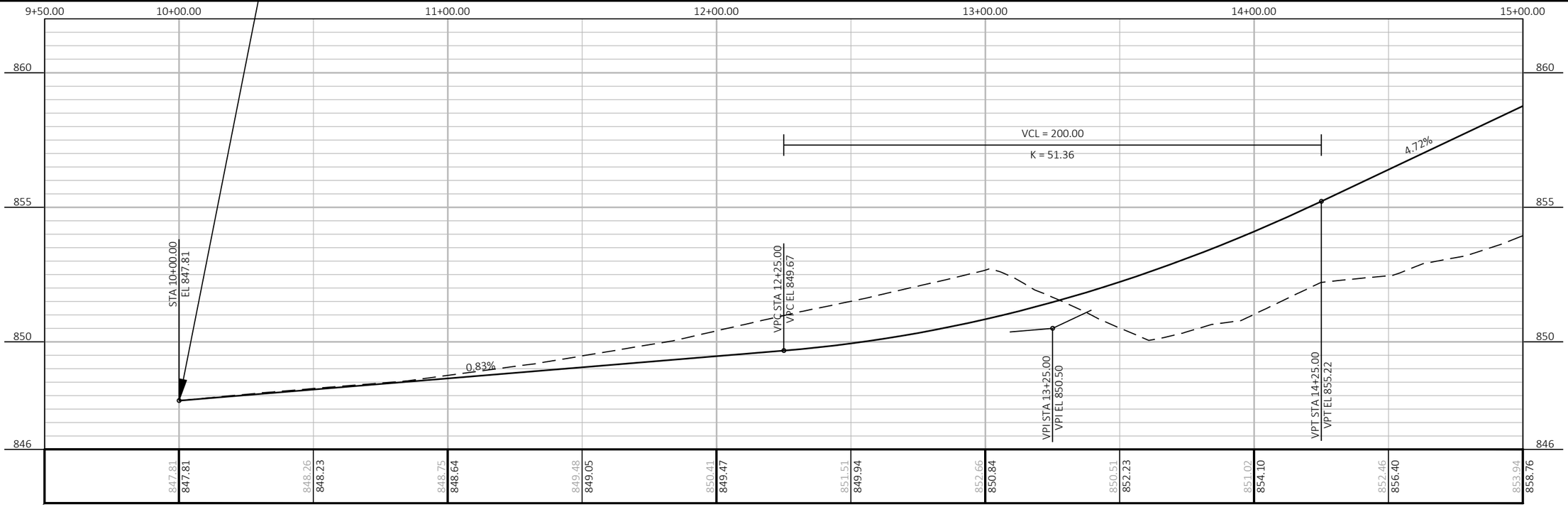


4

4

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-68-00_BRILLION-REEDSVILLE MILL-FILL\GA_SURVEY\1500-68-00_TPP-A1.DWG
PLOT DATE : 11/19/2025 12:56 PM PLOT BY : AARON PARKS PLOT NAME : PLOT SCALE :
APPRAISAL PLAT DATE : 7/10/2025

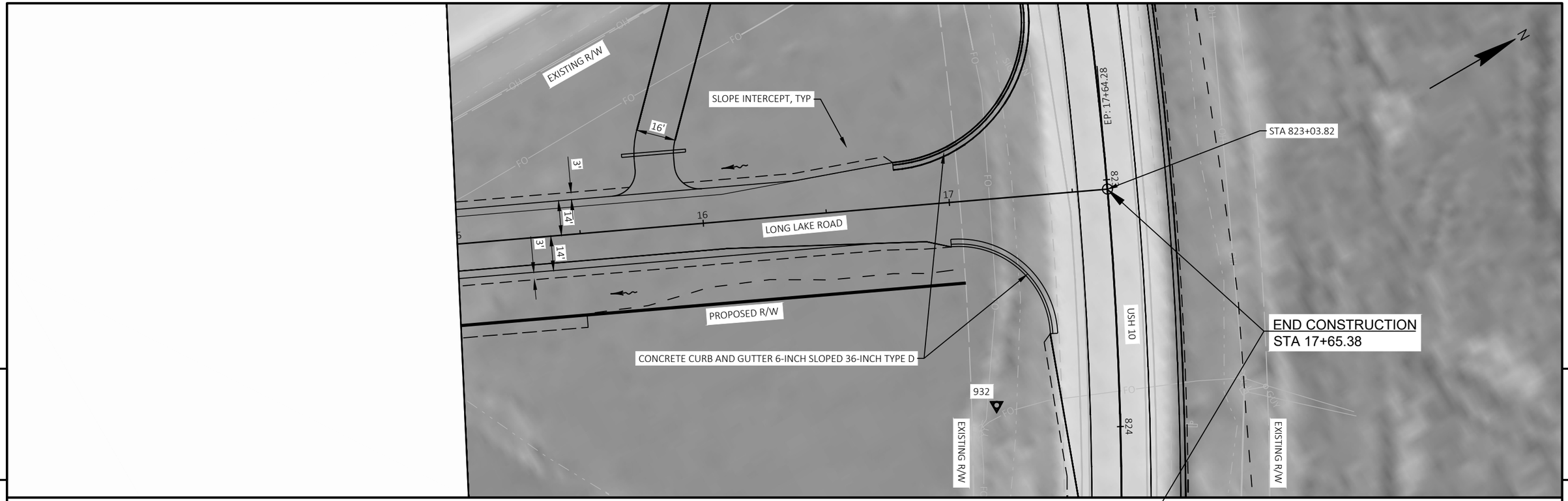


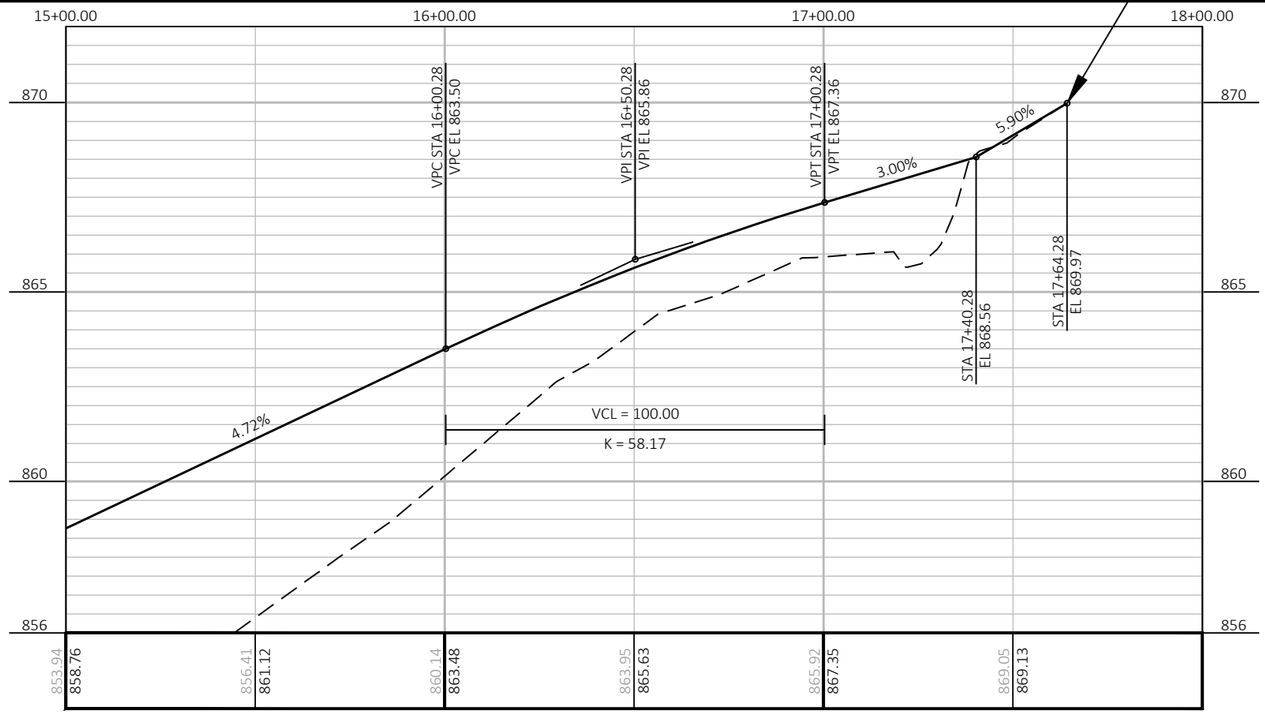


PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	PLAN AND PROFILE: LONG LAKE ROAD	SHEET 33	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-68-00_BRILLION-REEDSVILLE MILL-FILL\DESIGN\C3D FILES\SHEETSPLAN\050101_PP.DWG
LAYOUT NAME - 01

PLOT DATE : 7/29/2026 8:12 AM PLOT BY : JARED HALBUR PLOT NAME : PLOT SCALE : 1 IN:40 FT





PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	PLAN AND PROFILE: LONG LAKE ROAD	SHEET 34	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-68-00_BRILLION-REEDSVILLE MILL-FILL\DESIGN\C3D FILES\SHEETSPLAN\050101_PP.DWG
LAYOUT NAME - 02
PLOT DATE : 7/29/2026 8:12 AM PLOT BY : JARED HALBUR PLOT NAME : PLOT SCALE : ##########



PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	PLAN SHEETS	SHEET 35	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-68-00_BRILLION-REEDSVILLE MILL-FILL\DESIGN\C3D FILES\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050201-pn
PLOT DATE : 5/29/2026 7:56 AM PLOT BY : JARED HALBUR PLOT NAME : PLOT SCALE : 1 IN:200 FT

MATCH LINE 841+50

MATCH LINE 872+00

5

5

N

STA 852+93
GRAVEL FE

STA 857+31
GRAVEL PE

STA 858+26
GRAVEL PE

EXISTING R/W

845

850

855

860

865

870

USH 10

STA 844+46
GRAVEL FE

USH 10 R/L

STA 858+54
GRAVEL FE

EXISTING R/W

EXISTING 36-INCH CPRC
(TO REMAIN)

EXISTING 24-INCH CPRC
(TO REMAIN)

MATCH LINE 872+00

MATCH LINE 902+50

N

OAKWOOD RD

BUTT JOINT REQ'D

PC: 875+61.57

PT: 880+71.88

CURVE 2

1004

EXISTING R/W

875

880

885

890

895

900

911

910

USH 10

921

607

STA 879+57
ASPHALT PE
MATCH EXISTING

EXISTING R/W

BUTT JOINT REQ'D

USH 10 R/L

EXISTING 36-INCH CPRC
(TO REMAIN)

EXISTING 42" X 48" CONCRETE BOX CULVERT
(TO REMAIN)

OAKWOOD RD

912

EXISTING 42" X 48" CONCRETE BOX CULVERT
(TO REMAIN)

PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	PLAN SHEETS	SHEET 36	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-68-00_BRILLION-REEDSVILLE MILL-FILL\DESIGN\C3D FILES\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050202-pn

PLOT DATE : 5/29/2026 7:56 AM PLOT BY : JARED HALBUR PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 44

MATCH LINE 902+50

STA 902+92
GRAVEL FE

EXISTING 30-INCH CPRC
(TO REMAIN)

905

910

915

920

925

930

USH 10

STA 914+40
GRAVEL FE

STA 917+11
GRAVEL PE

STA 918+46
GRAVEL PE

STA 921+15
GRAVEL PE

EXISTING R/W

EXISTING R/W

USH 10 R/L

STA 917+32
GRAVEL FE

BUTT JOINT REQ'D

MILLER LN

EXISTING 42" X 48" CONCRETE BOX CULVERT
(TO REMAIN)

MATCH LINE 933+00

5

MATCH LINE 933+00

HICKORY HILLS RD

INV = 858.96

PC: 936+30.45

BUTT JOINT REQ'D

608

SM

608

CURVE 3

935

940

945

950

955

960

PT: 942+37.21

610

UP

SM

UP

611

INV = 860.63

EXISTING R/W

612

PC: 955+65.73

613

113

112

114

EXISTING 36-INCH CPRC
(TO REMAIN)

STA 957+82
GRAVEL PE

PT: 963+19.78

CURVE 4

STA 957+94
GRAVEL FE

108

109

110

SM

UP

111

UP

USH 10

EXISTING R/W

BUTT JOINT REQ'D

INV = 860.15

USH 10 R/L

REPLACE EXISTING 30-INCH CPCS
CULVERT PIPE CLASS III-A NON-METAL 30-INCH REQUIRED

REMOVE EXISTING 24-INCH CPCS
CULVERT PIPE REINFORCED CONCRETE CLASS IV 24-INCH REQUIRED

INV = 858.45

HICKORY HILLS RD

MATCH LINE 963+50

PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	PLAN SHEETS	SHEET 37	E

MATCH LINE 963+50

REPLACE NORTH AND SOUTH APRON ENDWALLS FOR CULVERT PIPE
REINFORCED CONCRETE 24-INCH
(GRADING, SHAPING AND FINISHING CULVERT PIPES
AND APRON ENDWALLS)

INV = 866.39

STA 978+19
GRAVEL PE

STA 979+36
GRAVEL PE

STA 982+23
GRAVEL PE

STA 985+05
GRAVEL PE

MAPLE ROCK RD

BUTT JOINT REQ'D

EXISTING R/W

614 115 UP

615 117

965 970 975 980 985 990

USH 10

116 UP

STA 964+73
GRAVEL FE

USH 10 R/L

STA 977+89
ASPHALT PE
MATCH EXISTING

INV = 866.59

STA 983+70
GRAVEL PE

EXISTING R/W

BUTT JOINT REQ'D

MAPLE ROCK RD

MATCH LINE 994+00

MATCH LINE 994+00

EXISTING 24-INCH CPRC
(TO REMAIN)

PI: 999+90.63

EXISTING R/W

995 1000 1005 1010 1015 1020

USH 10

909

EXISTING R/W

USH 10 R/L

STA 1013+53
GRAVEL PE

EXISTING HE PIPE
(TO REMAIN)

STA 1012+85
GRAVEL FE

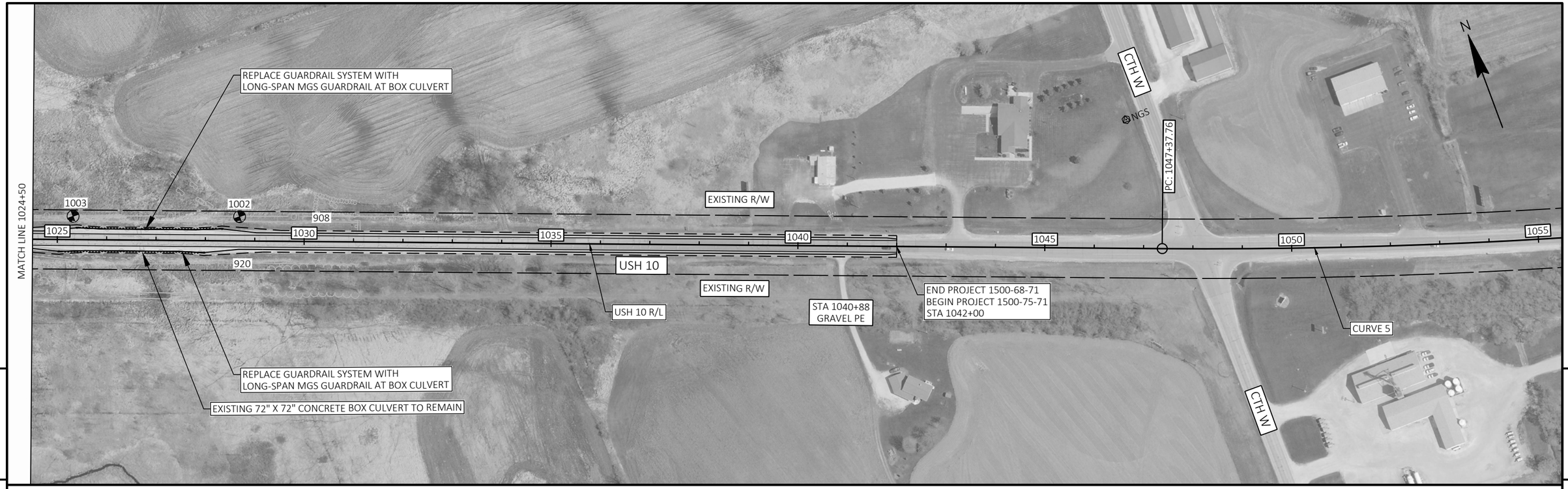
MATCH LINE 1024+50

PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	PLAN SHEETS	SHEET 38 E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-68-00_BRILLION-REEDSVILLE MILL-FILL\DESIGN\C3D FILES\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050204-pn

PLOT DATE : 5/29/2026 7:56 AM PLOT BY : JARED HALBUR PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 44



5

5

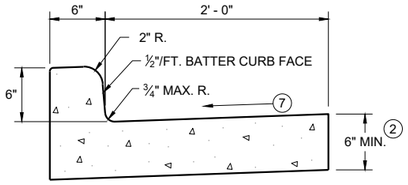
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PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	PLAN SHEETS	SHEET 39	E

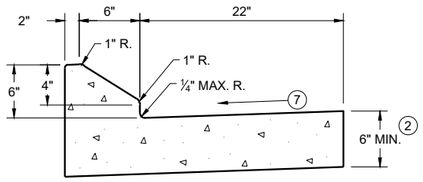
Standard Detail Drawing List

08D01-24A	CONCRETE CURB AND GUTTER
08D01-24B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-07	CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES
08E09-06	SILT FENCE
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09A01-14A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C", "D" AND TEE INTERSECTION BYPASS LANE
09A01-14B	AT-GRADE SIDE ROAD INTERSECTION, TYPES "A1" & "A2"
09A15-01	DRIVEWAYS WITHOUT CURB AND GUTTER RESURFACING PROJECTS RURAL
13A10-03A	SHOULDER RUMBLE STRIPS ASPHALT
13A10-03G	SHOULDER AND EDGE LINE RUMBLE STRIPS - CROSSINGS, INTERSECTIONS, BRIDGES, DRIVEWAYS
13A10-03H	SHOULDER AND EDGE LINE RUMBLE STRIPS - RAILROAD, PASSING, CLIMBING AND BYPASS LANES
13A11-04A	CENTERLINE RUMBLE STRIPS - ASPHALT
13A11-04D	CENTERLINE RUMBLE STRIPS - INTERSECTIONS, DRIVEWAYS, BRIDGES, RAILROADS
13C19-03	HMA LONGITUDINAL JOINTS
14B29-01	SAFETY EDGE
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
14B43-04A	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
14B43-04B	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
14B43-04C	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
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
15A04-08E	DELINEATOR POST WITH REFLECTIVE SHEETING
15C02-10A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-10B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C07-16B	PAVEMENT MARKING WORDS
15C07-16C	PAVEMENT MARKING ARROWS
15C08-24A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-24B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C08-24C	PAVEMENT MARKING (TURN LANES)
15C08-24D	PAVEMENT MARKING (TURN LANES)
15C11-11B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C18-09A	MEDIAN ISLAND PAVEMENT MARKINGS
15C19-11A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C33-05	STOP LINE AND CROSSWALK PAVEMENT MARKING
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)
15D28-06	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D48-01	TRAFFIC CONTROL, LANE SHIFT IN FLAGGING OPERATION
16A02-01	GEODETIC SURVEY MONUMENT

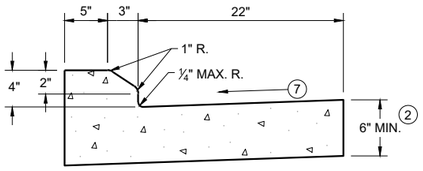
6



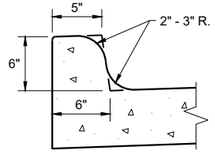
TYPES A (1) & D



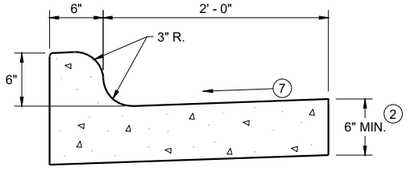
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

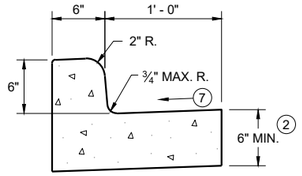


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



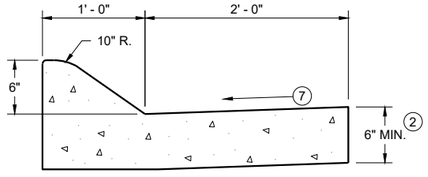
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

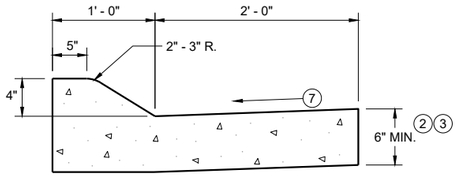


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

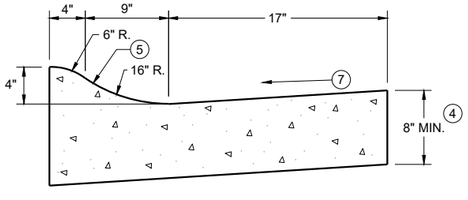


6" SLOPED CURB TYPES A (1) & D



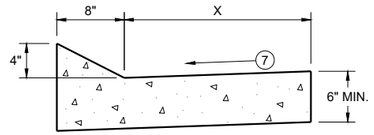
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T
CONCRETE CURB AND GUTTER 30"

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

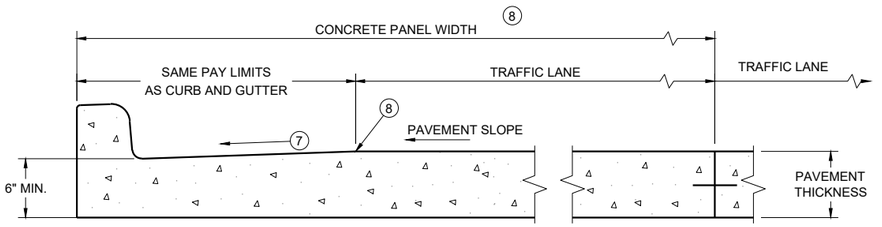


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

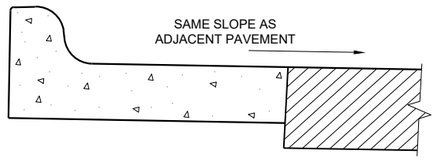
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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)

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.

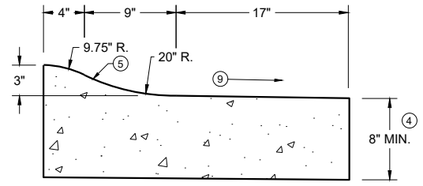
(5) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(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.

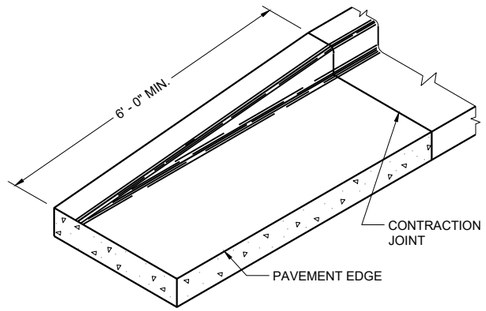
(9) SLOPE TO BE REVERSE SLOPE MATCHING THE SLOPE OF THE PAVEMENT AND THE CIRCULATORY ROADWAY



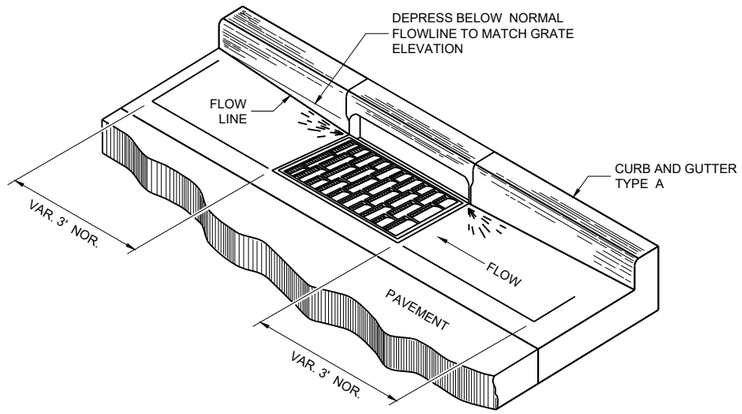
3" SLOPED CURB TYPES R (1) & T

CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



END SECTION CURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS

(TYPICAL H INLET COVER SHOWN)

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.

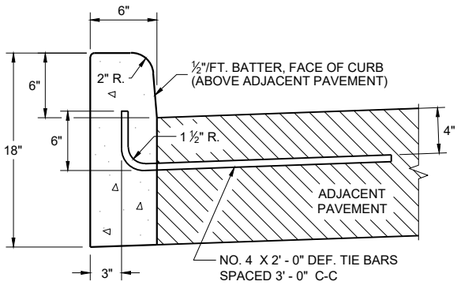
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

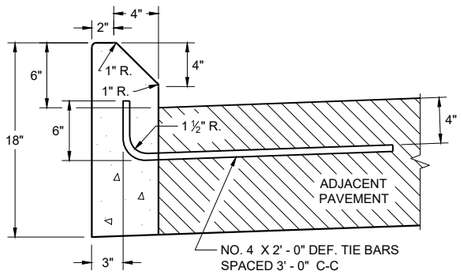
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(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.

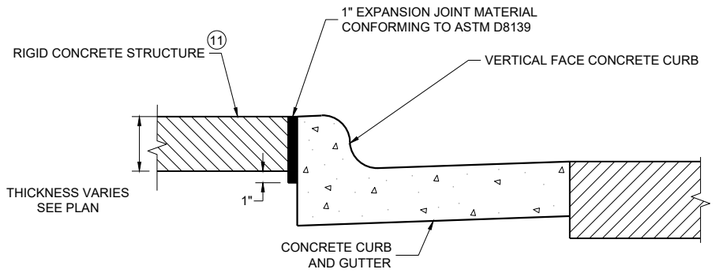


TYPES A (1) & D

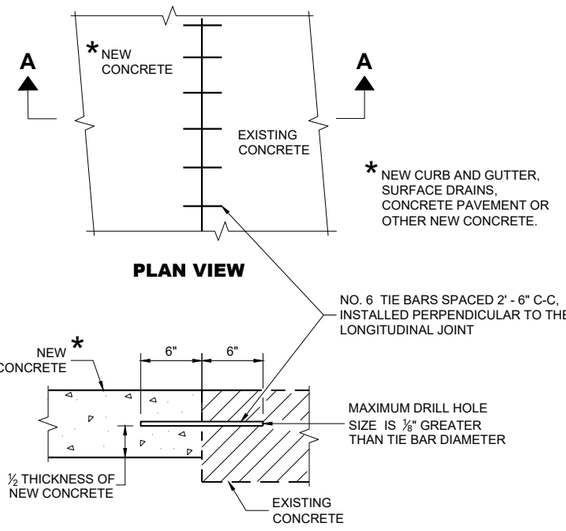


TYPES G (1) & J

CONCRETE CURB



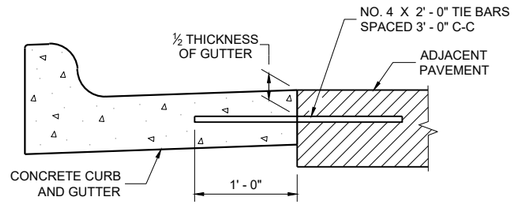
EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE (11)



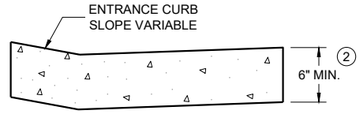
PLAN VIEW

SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (10)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

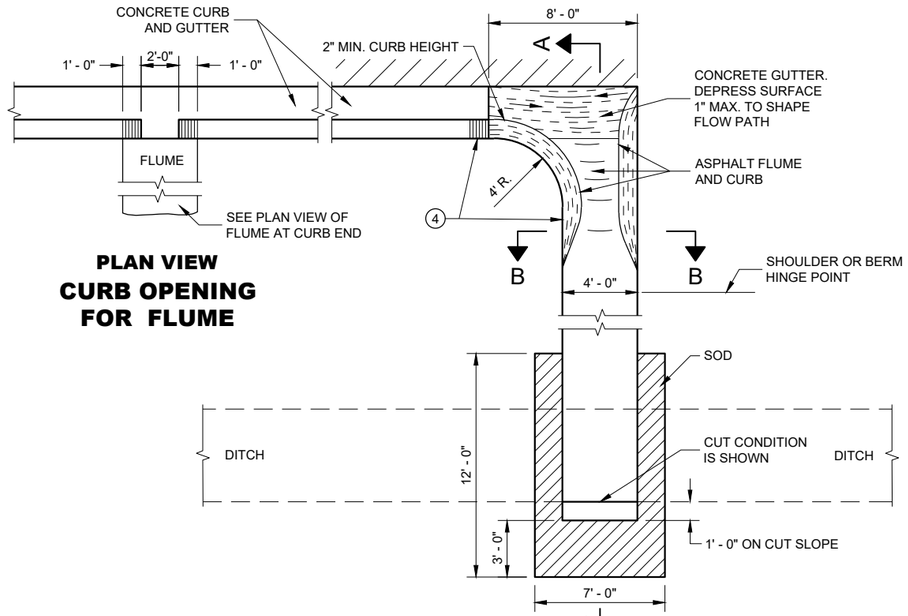
APPROVED
February 2025 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

6
SDD 08D01-24b

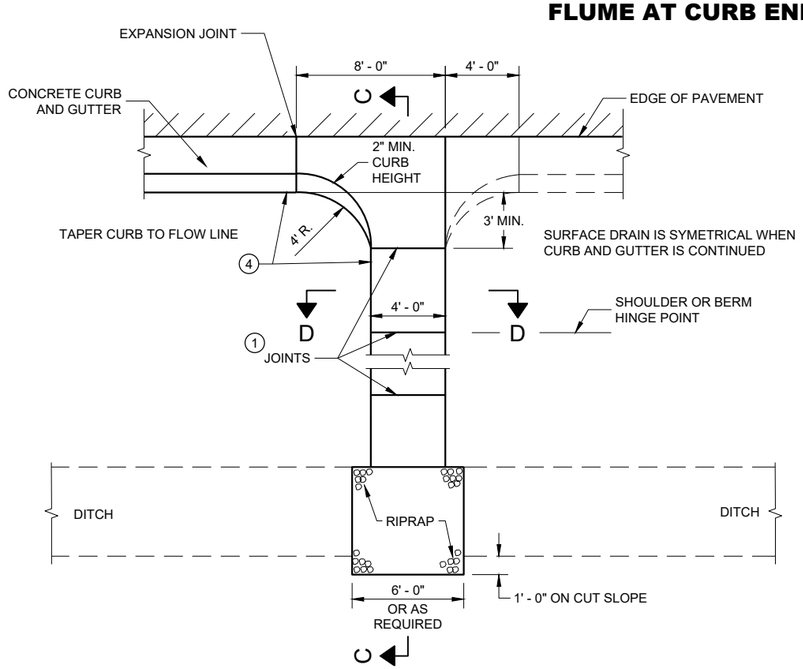
NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

ASPHALTIC FLUME



PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



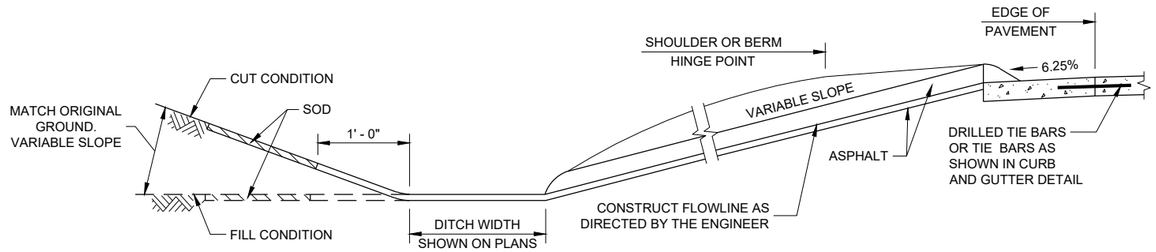
PLAN VIEW
CONCRETE SURFACE DRAIN

GENERAL NOTES

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

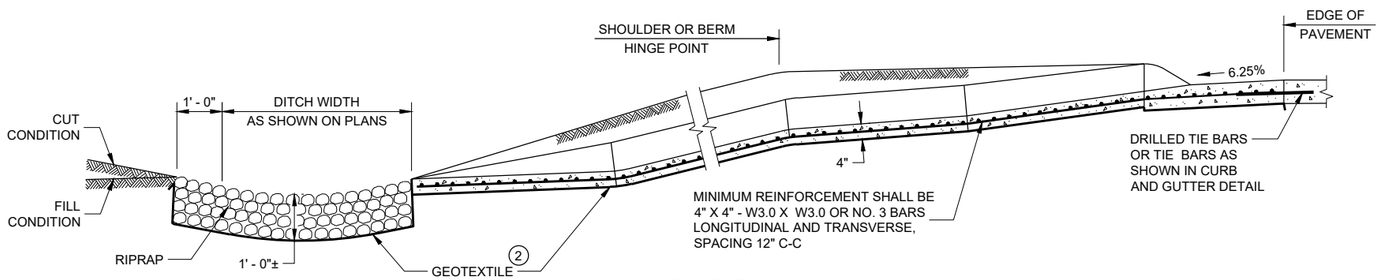
4" X 4" - W3.0 X W3.0 CONCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

1. JOINTS SHALL BE ⅛" TO ¼" WIDE BY 1½" DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
2. GEOTEXTILE TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
3. CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED.
4. ANGLE OF FLUME IN RELATION TO BACK OF CURB TO BE CONSTRUCTED PER THE PLAN DETAILS OR AS DIRECTED BY THE ENGINEER. ANGLE OF FLUME MAY BE OTHER THAN 90 DEGREES AS SHOWN.

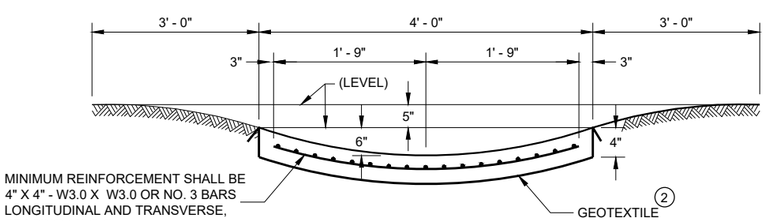


SECTION A - A

SECTION B - B



SECTION C - C



SECTION D - D

CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

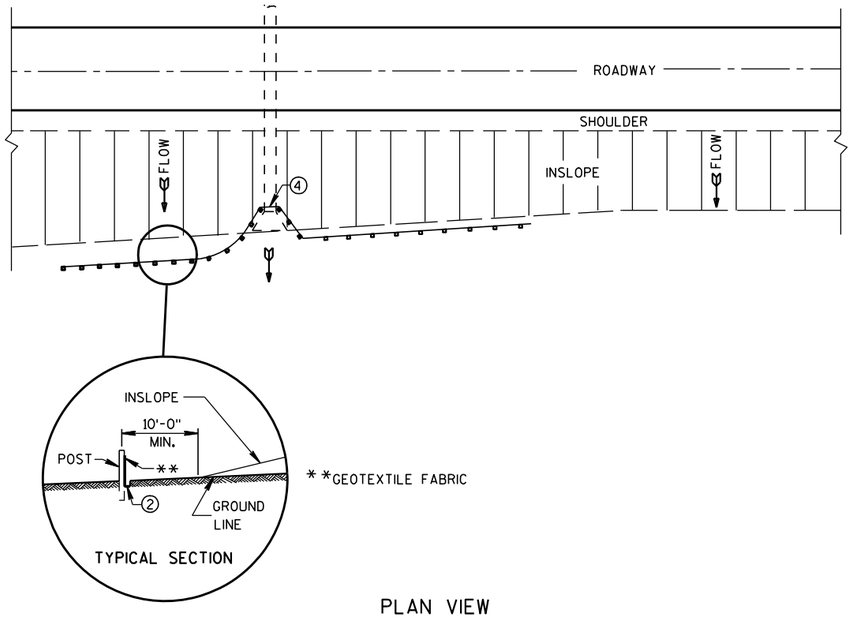
FHWA

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SDD 08D04 - 07

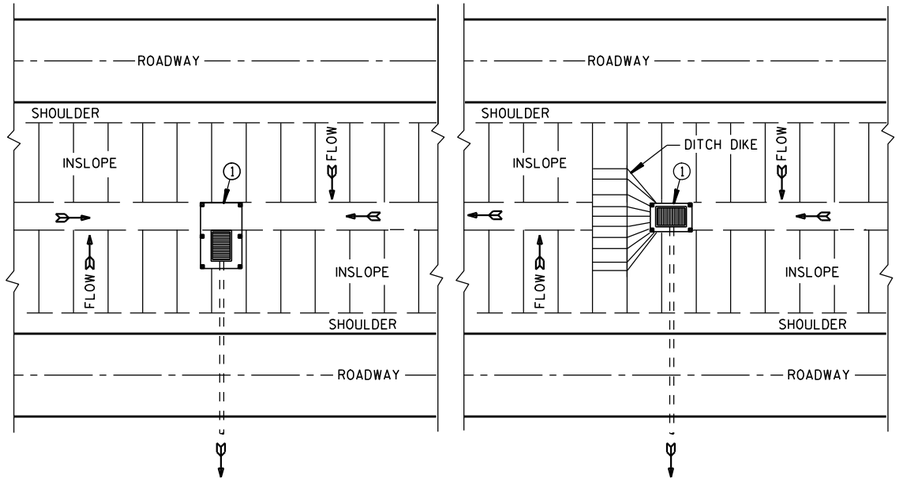
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SDD 08D04 - 07



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



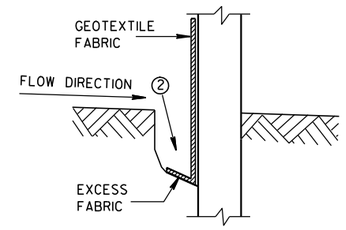
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

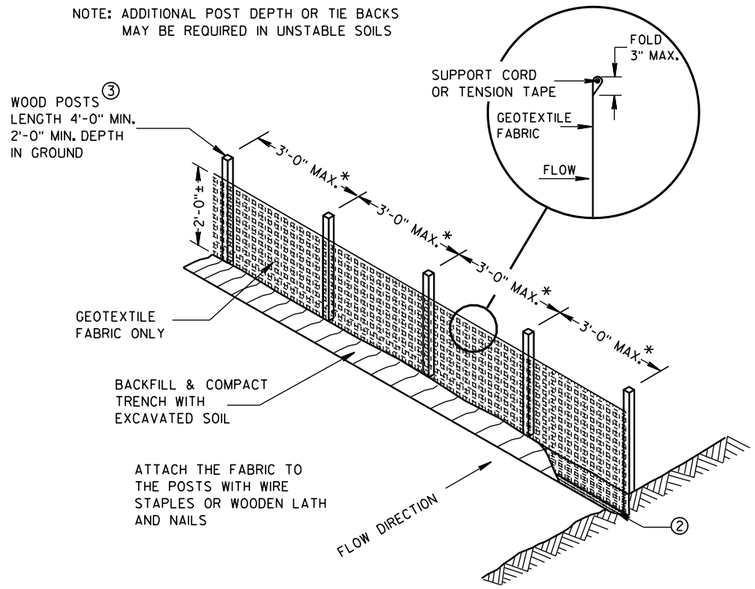
GENERAL NOTES

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

1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.

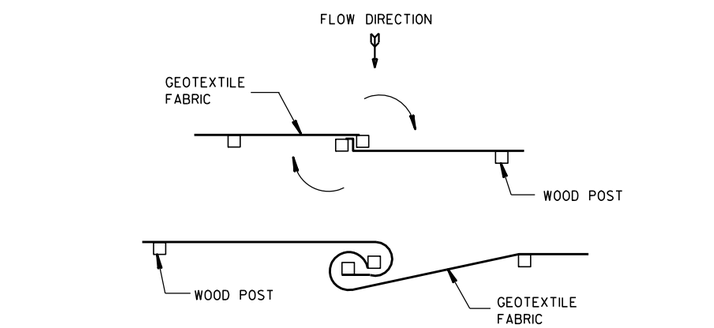


TRENCH DETAIL

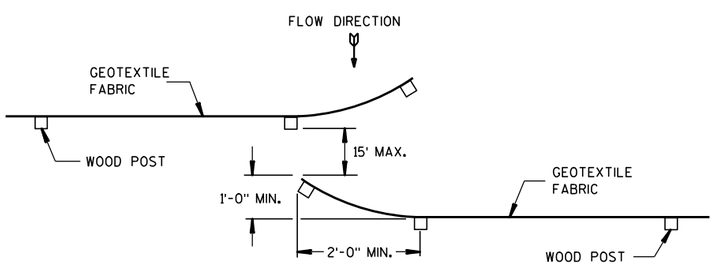


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

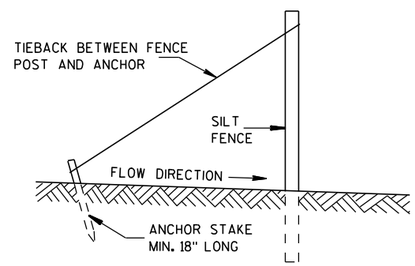


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

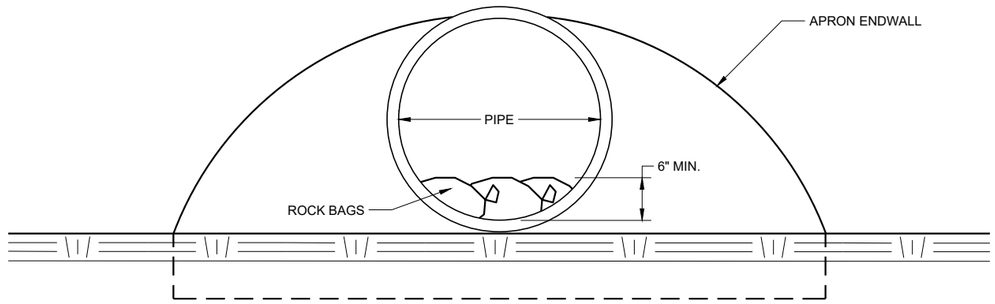
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

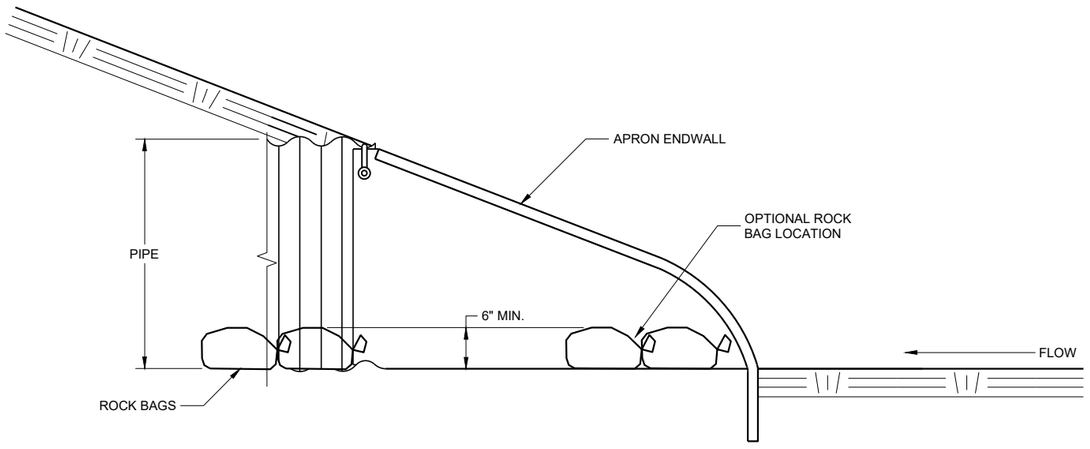
S.D.D. 8 E 9-6

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S.D.D. 8 E 9-6



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
EROSION CONTROL ENGI

FHWA

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SDD 08E15 - 01

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SDD 08E15 - 01

METAL APRON ENDWALLS

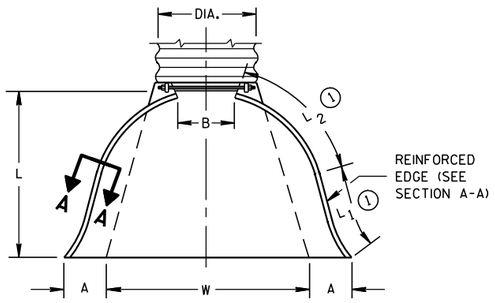
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4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

× EXCEPT CENTER PANEL SEE GENERAL NOTES

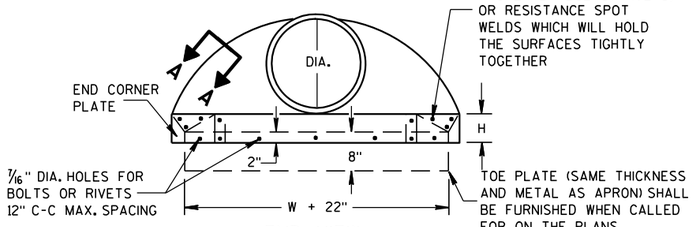
REINFORCED CONCRETE APRON ENDWALLS

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

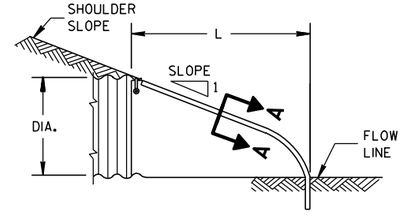
*MINIMUM
**MAXIMUM



PLAN VIEW

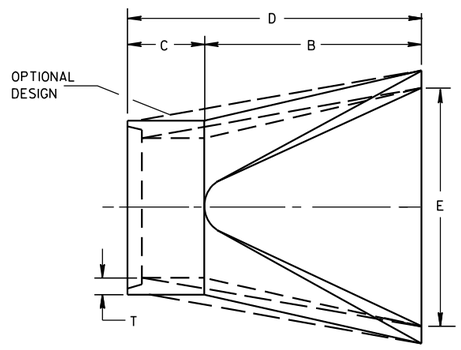


END VIEW

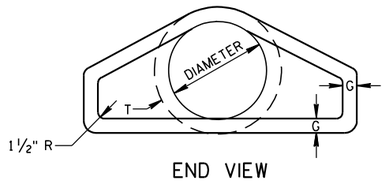


SIDE ELEVATION

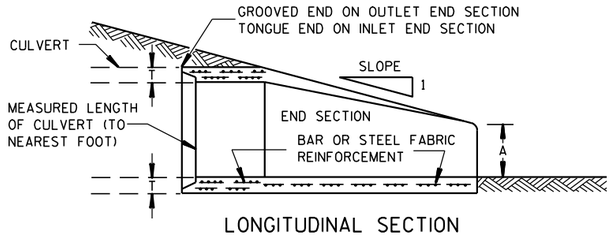
METAL ENDWALLS



PLAN

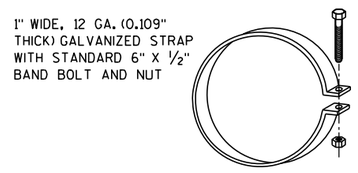


END VIEW



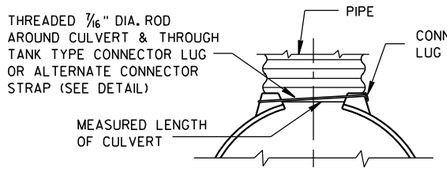
LONGITUDINAL SECTION

CONCRETE ENDWALLS

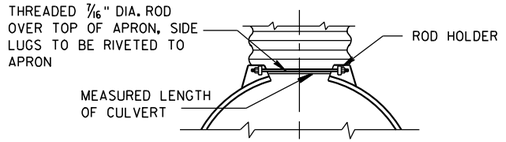


ALTERNATE FOR TYPE 1 CONNECTION

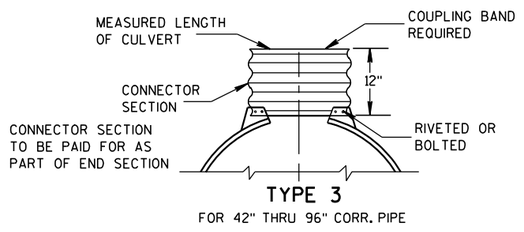
END SECTION CONNECTOR STRAP



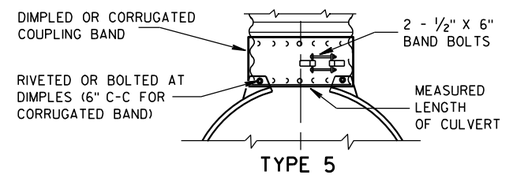
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

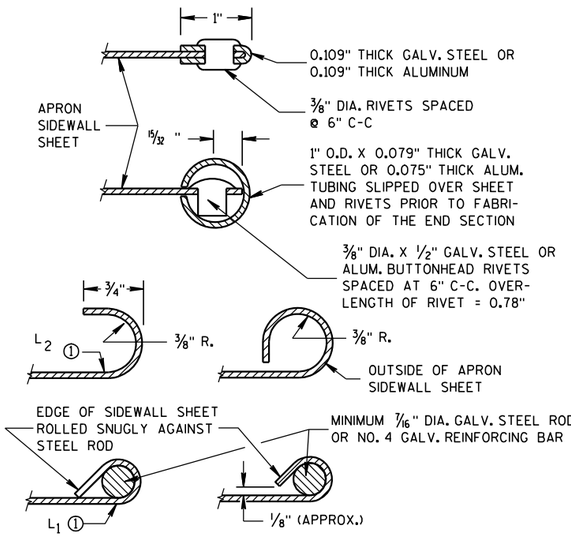
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

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

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

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

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

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

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

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

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

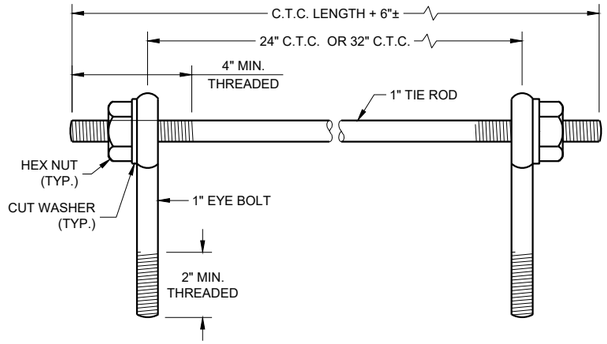
APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

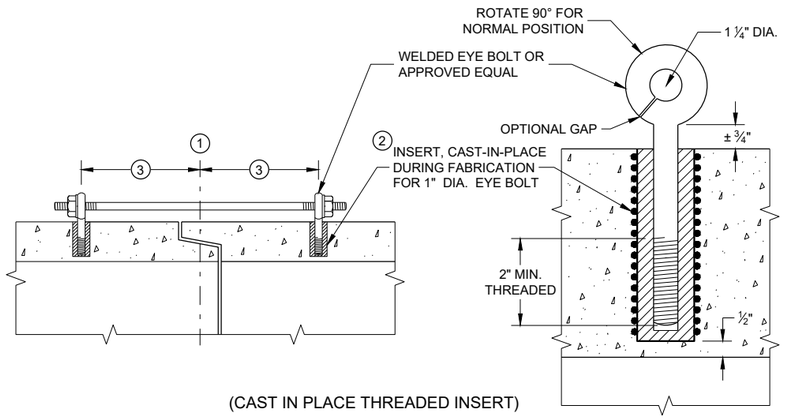
APPROVED
11/30/94 — DATE
/S/ Rory L. Rhinesmith — CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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S.D.D. 8 F 1-11



EYE BOLTS AND TIE ROD



(CAST IN PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

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

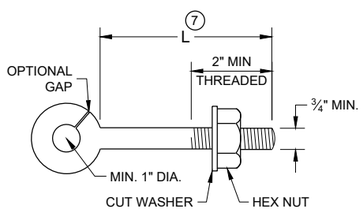
(3) HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.

(4) BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

(5) OPENING TO BE ROD DIAMETER PLUS 1 INCH.

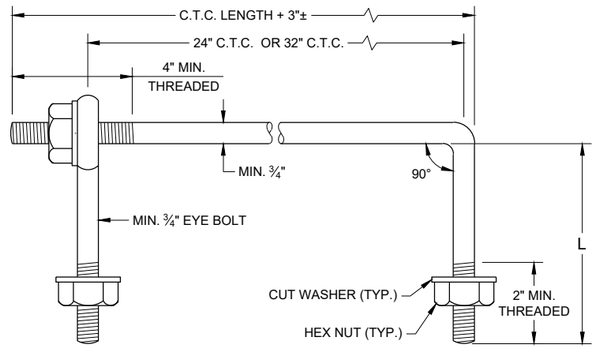
(6) LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.

(7) EYE BOLT LENGTH DETERMINED BY WALL THICKNESS, BELL THICKNESS AND BOLT PROJECTION INSIDE PIPE.

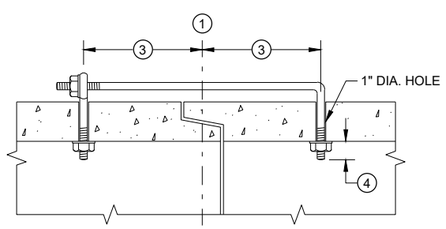


EYE BOLT (7)

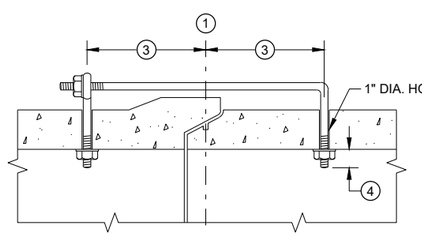
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD



(TONGUE AND GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

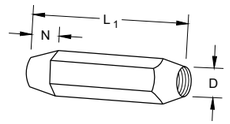
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

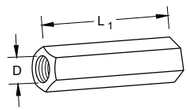
ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12 - 60	⅝	⅝	5	½
66 - 84	¾	¾	5	½
90 - 144	1	1	7	1 7/16

DIMENSIONS SHOWN ARE IN INCHES



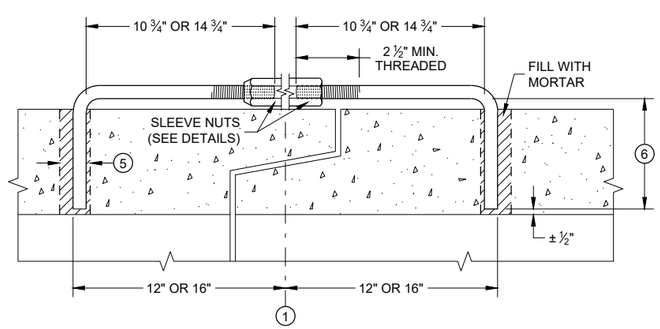
TAPERED



PLAIN

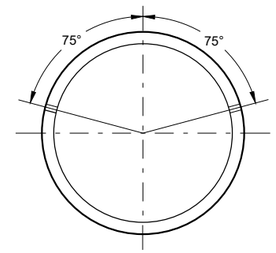
RIGHT AND LEFT THREADS

SLEEVE NUTS



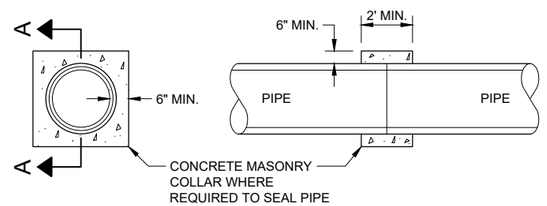
LONGITUDINAL SECTION

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

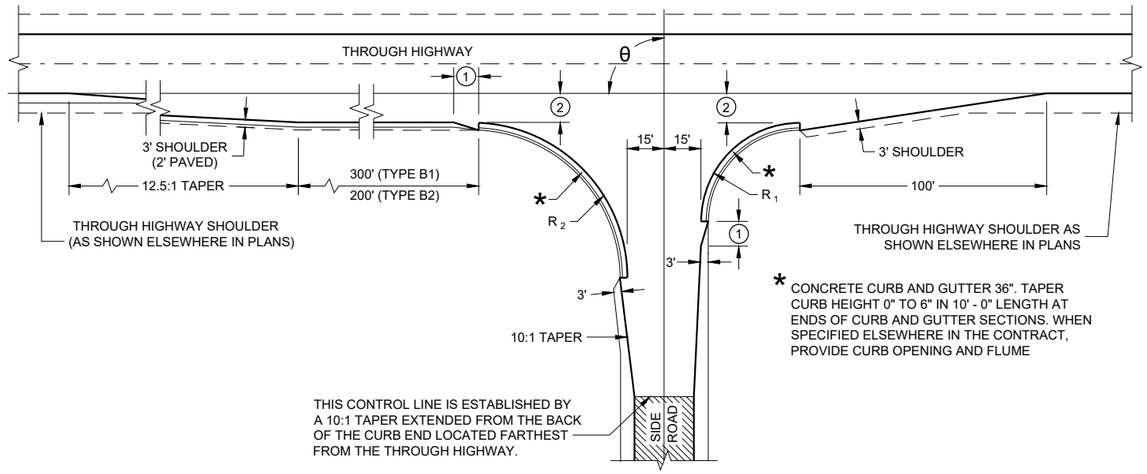
JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

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

TYPE "B1" AND "B2"

RADII DIMENSIONS FOR TYPES "B1", "B2", "C" AND "D" INTERSECTIONS

θ	R_1	R_2
65 - 70	35	70
71 - 80	40	70
81 - 90	40	60
91 - 100	50	55
101 - 110	60	45

GENERAL NOTES

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

SIDE ROAD SURFACING NOTE

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

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

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

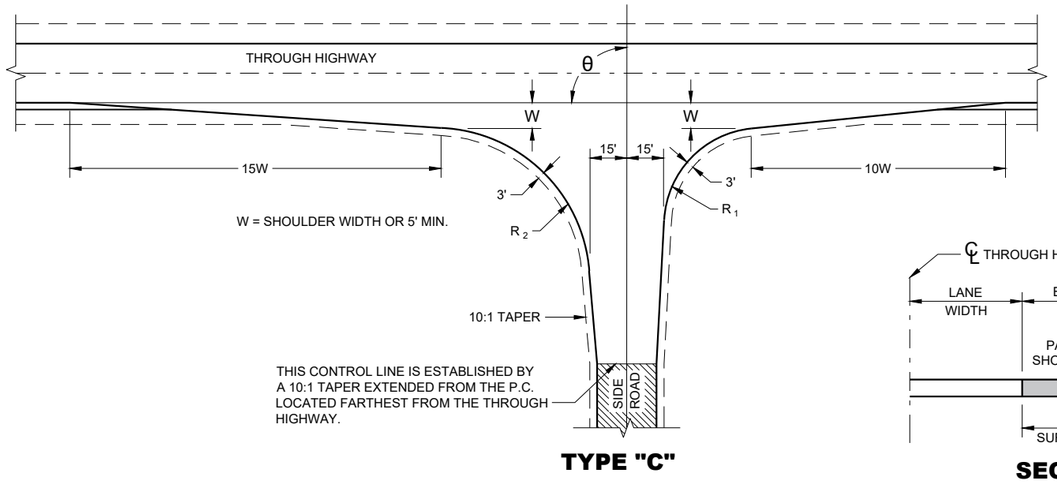
(1) 10-FT TYPICAL.

(2) 12-FT** PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLAN.

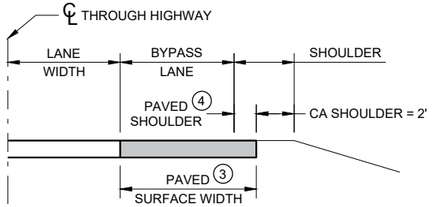
**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

(3) BYPASS LANE PAVED SURFACE WIDTH OUTSIDE OF TRAVEL LANE
- ASPHALT = 12-FT PLUS PAVED SHOULDER WIDTH
- PC CONCRETE = 13-FT PLUS PAVED SHOULDER WIDTH

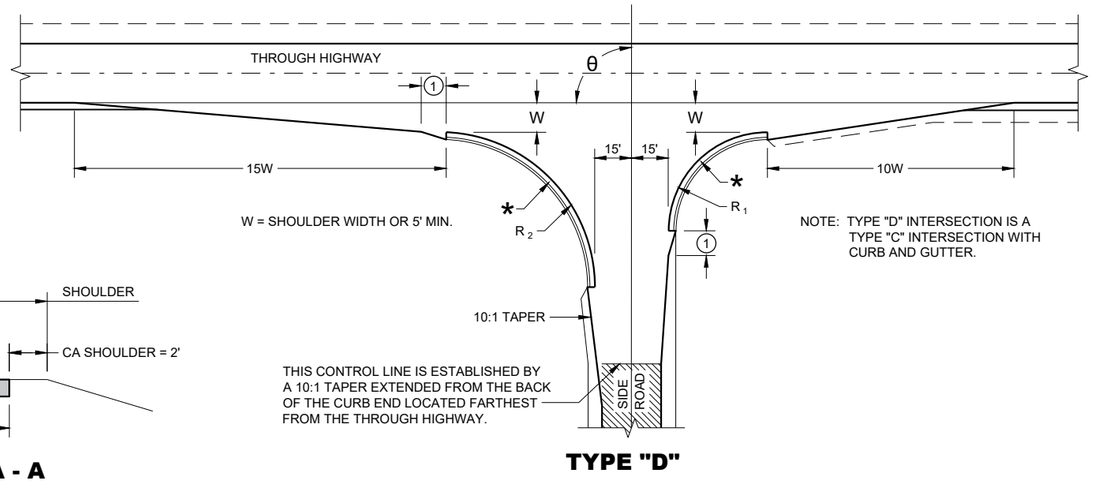
(4) BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.



TYPE "C"

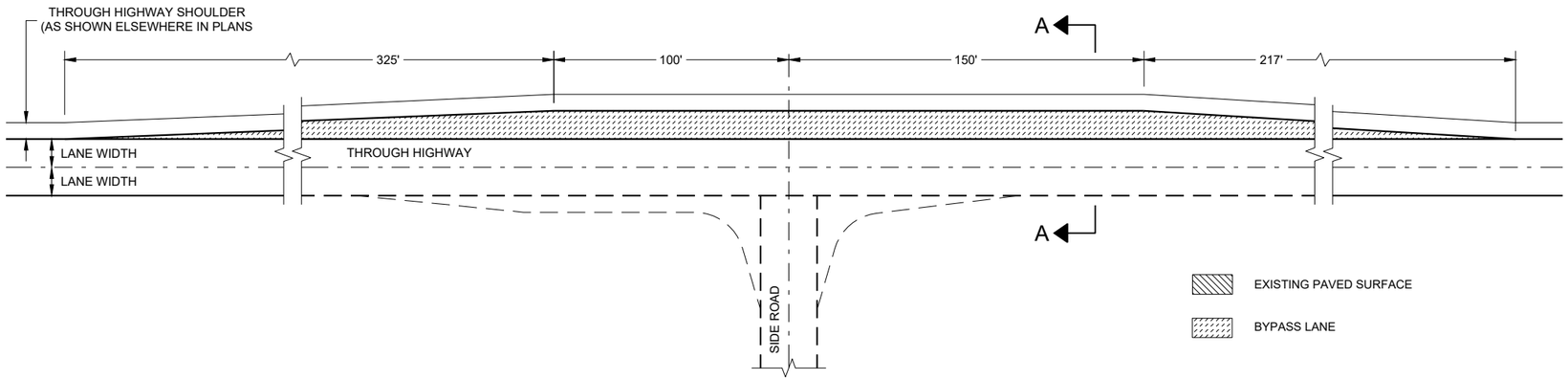


SECTION A - A
(SHOWING BYPASS LANE AND SHOULDER)



NOTE: TYPE "D" INTERSECTION IS A TYPE "C" INTERSECTION WITH CURB AND GUTTER.

TYPE "D"



TEE INTERSECTION BYPASS LANE DETAIL

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

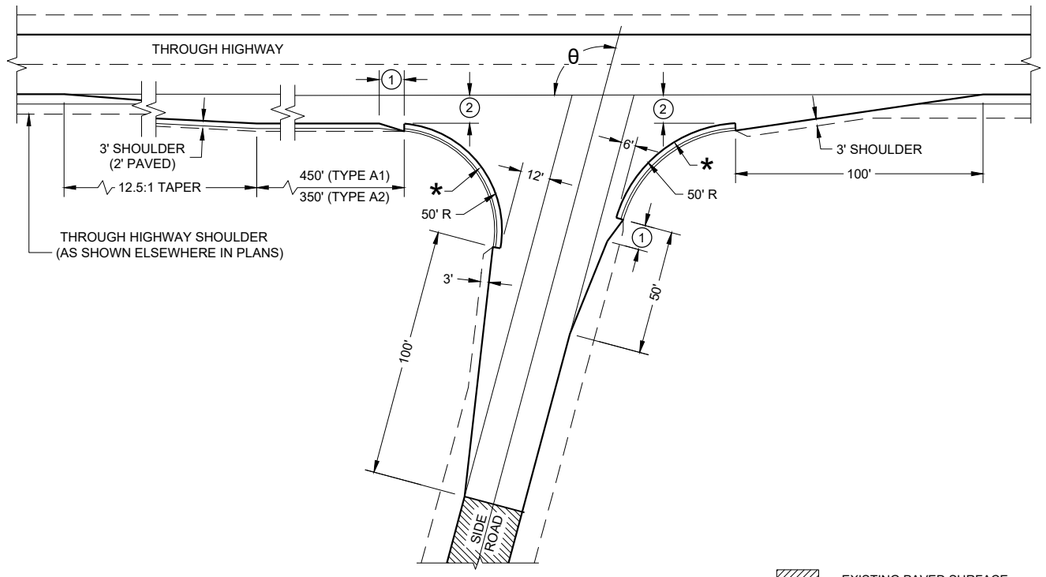
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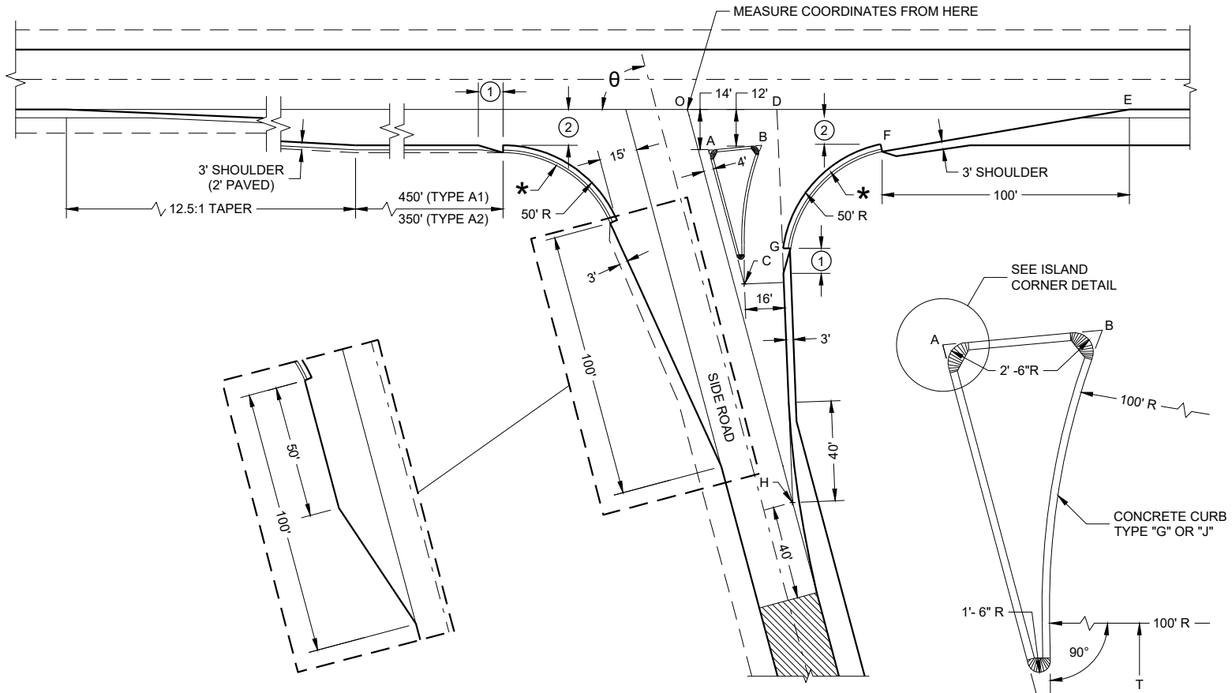
SDD 09A01 - 14a

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SDD 09A01 - 14a

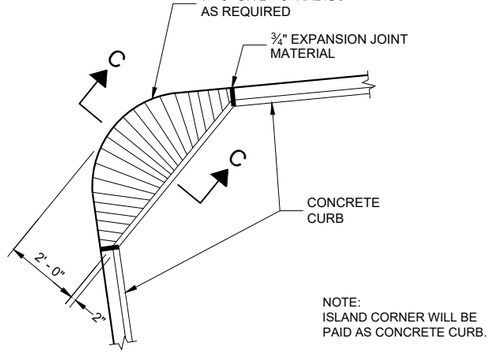


θ = MORE THAN 80°

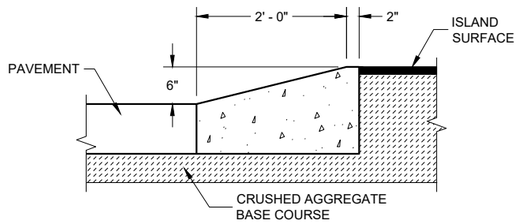


SIDE ROAD WIDENING AND TAPER REQUIRED WHERE
THE THROUGH HIGHWAY CARRIES TWO-WAY TRAFFIC
θ = ACUTE ANGLES 70° OR LESS

θ = ACUTE ANGLES 80° OR LESS



PLAN VIEW



SECTION C - C

ISLAND CORNER DETAIL

(TO BE CONSTUCTED AT ALL ISLAND CORNERS)

TABLE OF DIMENSIONS FOR VARIABLE SIDE ROAD INTERSECTION ANGLES

(INTERPOLATE VALUES FOR ANGLES NOT SHOWN)

ANGLE θ DEGREES	COORDINATES IN FEET (MEASURED FROM POINT 'O') X / Y								LENGTH IN FEET				
	A	B	C	D	E	F	G	H	AB	AC	T	OJ	OH
60	12.7 / -14.0	44.9 / -12.0	46.4 / -72.4	41.9 / 0.0	205.0 / 0.0	104.6 / -12.0	64.0 / -75.5	85.0 / -147.1	32.3	67.4	4.9	85.9	169.9
65	10.9 / -14.0	39.0 / -12.0	37.8 / -71.6	39.4 / 0.0	196.1 / 0.0	95.7 / -12.0	54.1 / -71.5	70.5 / -151.3	28.2	63.6	8.5	80.9	166.9
70	9.4 / -14.0	33.9 / -12.0	29.8 / -70.1	37.4 / 0.0	188.3 / 0.0	87.8 / -12.0	45.6 / -67.5	56.1 / -154.2	24.6	59.7	11.5	76.1	164.1
75	7.9 / -14.0	29.3 / -12.0	22.3 / -67.9	35.7 / 0.0	181.2 / 0.0	80.7 / -12.0	38.2 / -63.4	41.8 / -155.9	21.5	55.8	13.8	71.4	161.4
80	6.5 / -14.0	25.4 / -12.0	15.6 / -65.2	34.4 / 0.0	174.8 / 0.0	74.4 / -12.0	31.8 / -59.3	27.6 / -156.5	18.9	52.0	15.6	66.9	158.9

TYPE 'A1" AND "A2" SIDE ROAD INTERSECTION DETAILS

AT GRADE SIDE ROAD INTERSECTIONS
TYPES "A1" AND "A2"

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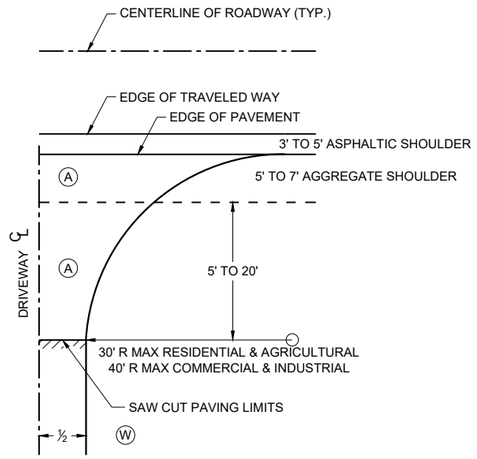
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SDD 09A01 - 14b

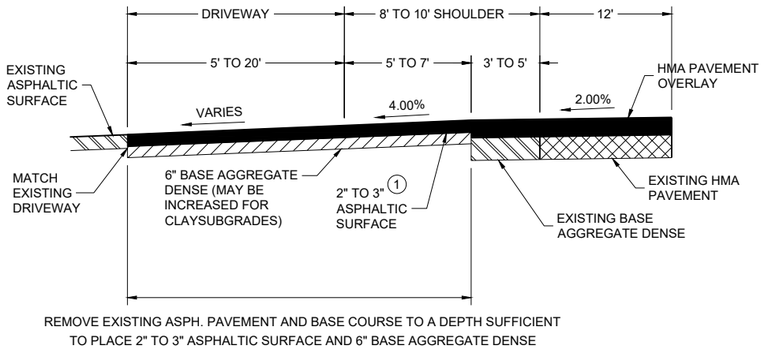
GENERAL NOTES

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



PLAN VIEW

HALF SECTION



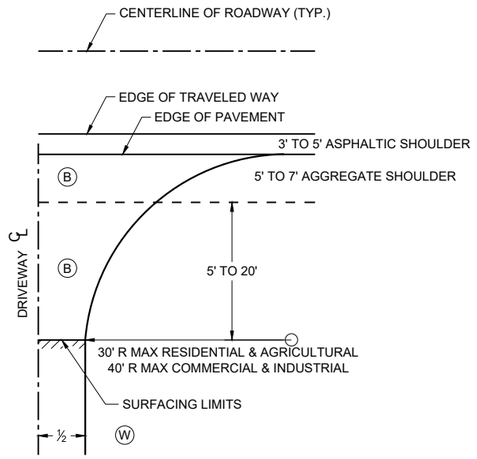
PROFILE VIEW

RURAL ENTRANCE WITH ASPHALTIC SURFACE RESURFACING PROJECTS

(A) : PAID FOR AS ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES. (TON)

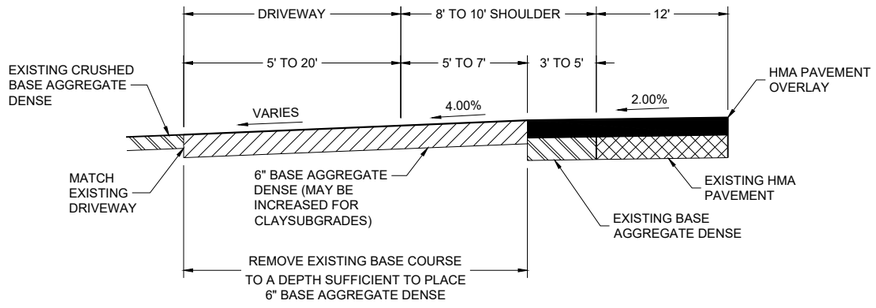
(B) : PAID FOR AS BASE AGGREGATE DENSE 1 1/4" (TON)

(W) : DRIVEWAY WIDTHS (MEASURED AT ROW LINE)
- ~ COMMERCIAL & INDUSTRIAL 16' MIN. - 35' MAX.
- ~ RESIDENTIAL & AGRICULTURAL (NONCOMMERCIAL) 16' MIN. - 24' MAX.



PLAN VIEW

HALF SECTION



PROFILE VIEW

RURAL ENTRANCE WITH AGGREGATE SURFACE 6" BASE AGGREGATE DENSE RESURFACING PROJECTS

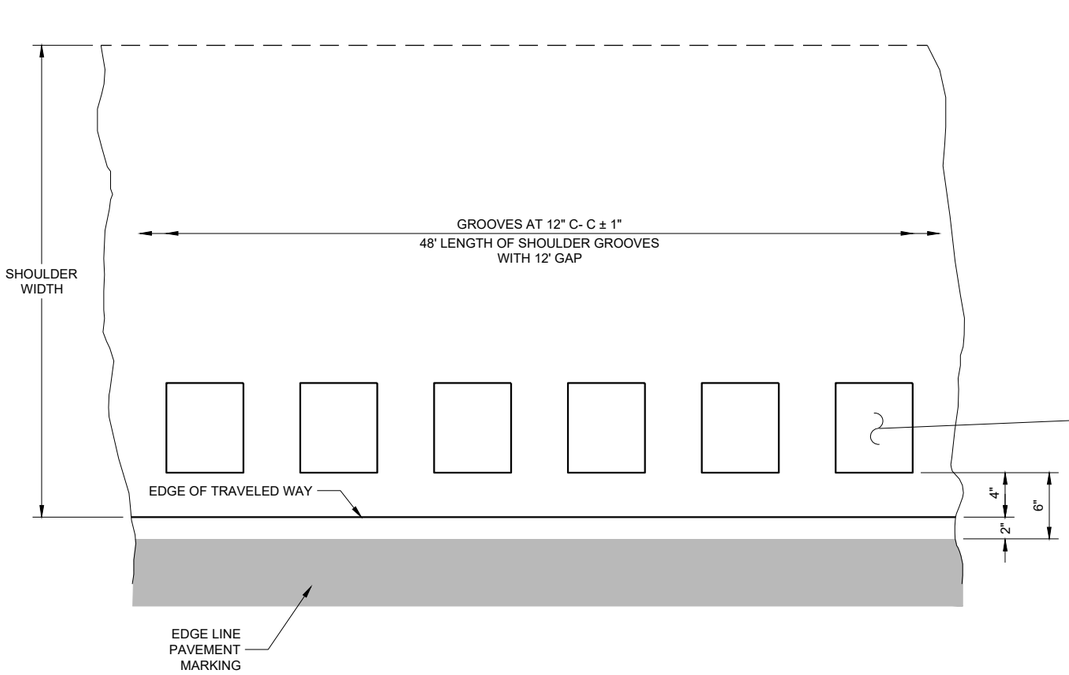
DRIVEWAYS WITHOUT CURB AND GUTTER RESURFACING PROJECTS RURAL

STATE OF WISCONSIN
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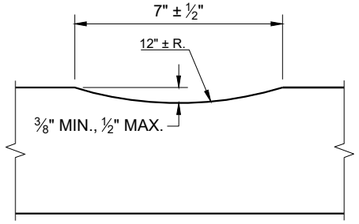
APPROVED
November 2025 (DATE)
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

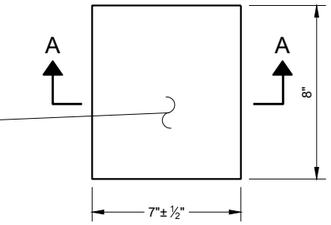
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SDD 09A15-01



PLAN DETAIL VIEW
SHOULDER WITH GROOVES



SECTION A - A

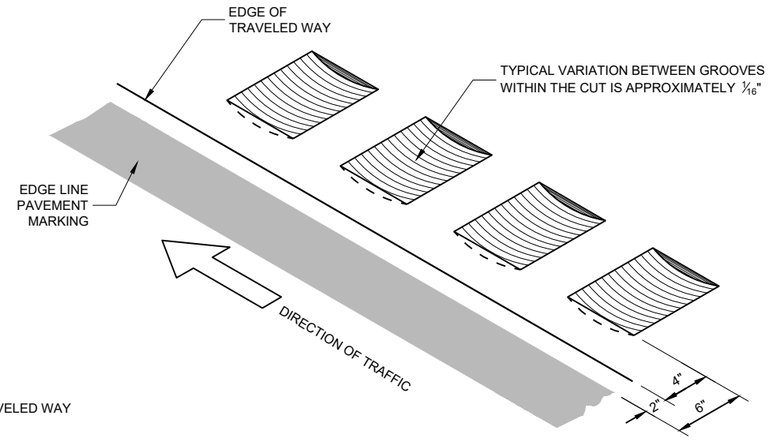


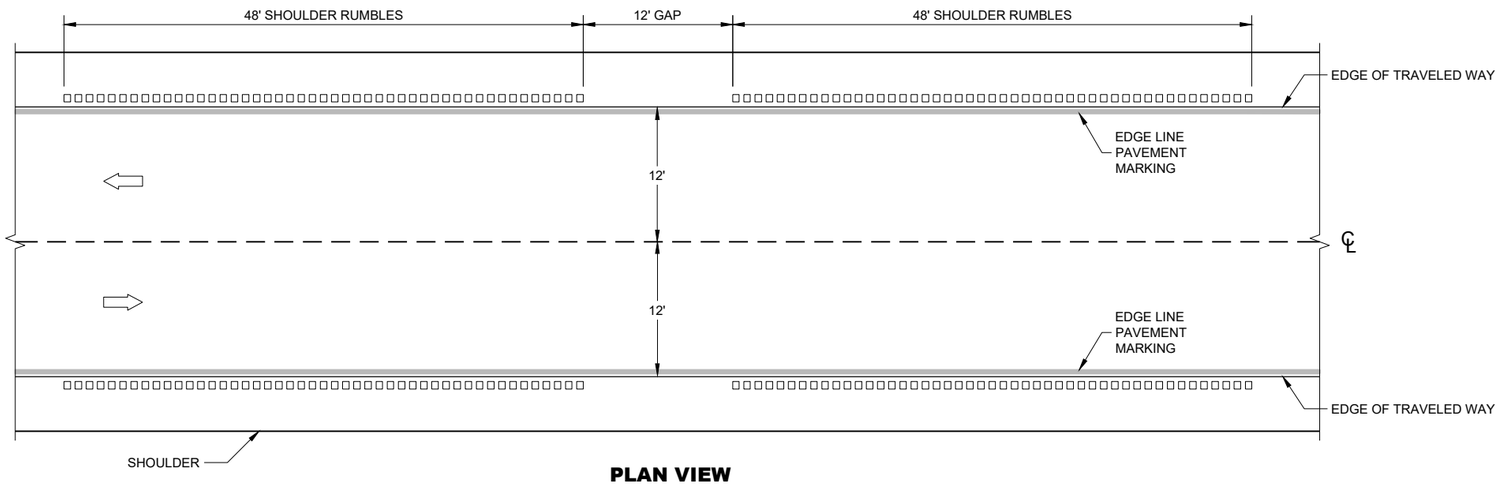
PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

DO NOT MILL SHOULDER GROOVES THROUGH INTERSECTIONS, MARKED CROSSWALKS, NON-MOTORIZED PATH CROSSINGS, ETC. REFER TO SDD 13A10 SHEETS "g" AND "h".

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





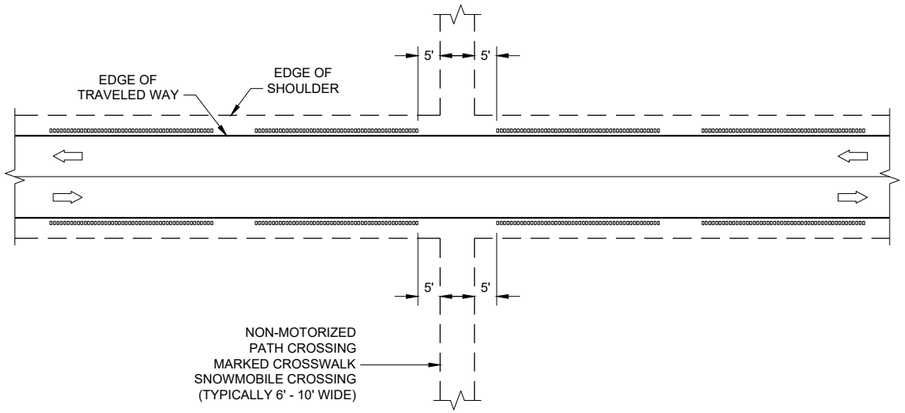
PLAN VIEW

SHOULDER RUMBLE STRIPS - ASPHALT

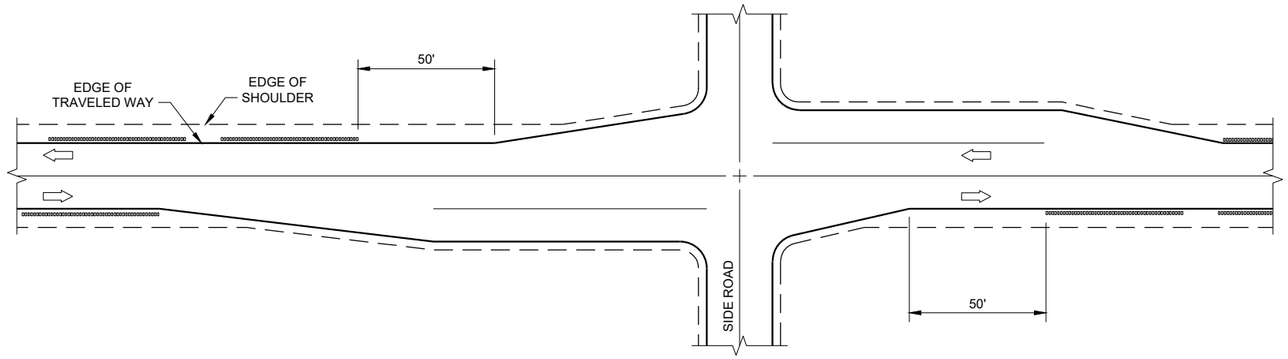
SHOULDER RUMBLE STRIPS ASPHALT

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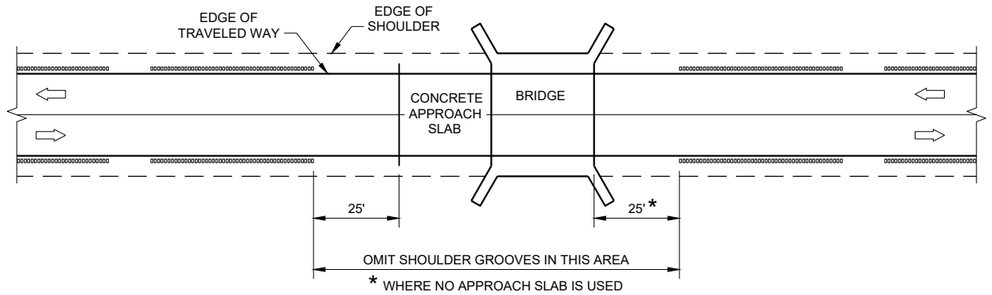
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SDD 13A10 - 03a



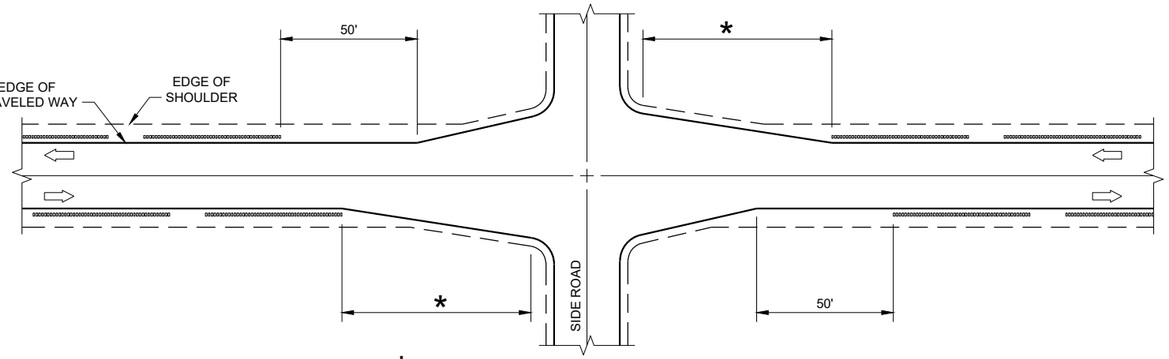
GROOVES AT MISCELLANEOUS CROSSINGS



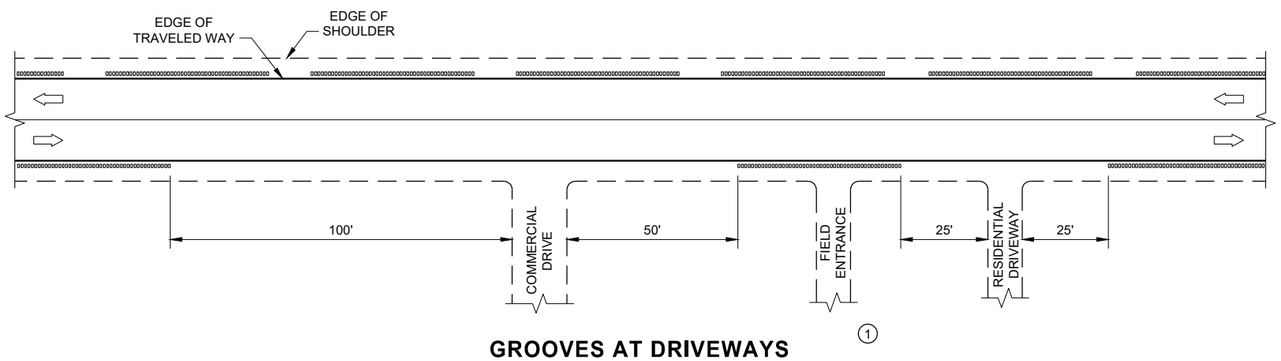
GROOVES AT RIGHT TURN LANE



GROOVES AT BRIDGES



GROOVES AT INTERSECTIONS WITH APPROACH TAPER



GROOVES AT DRIVEWAYS ①

GENERAL NOTES

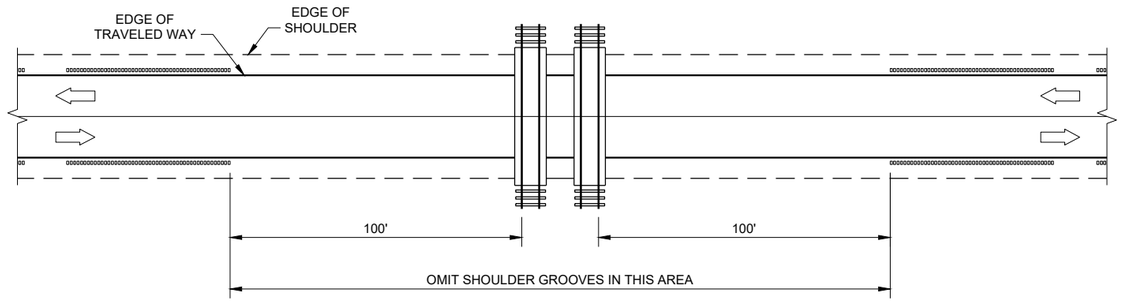
① SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.

SHOULDER AND EDGE LINE RUMBLE STRIPS CROSSINGS, INTERSECTIONS, BRIDGES, DRIVEWAYS

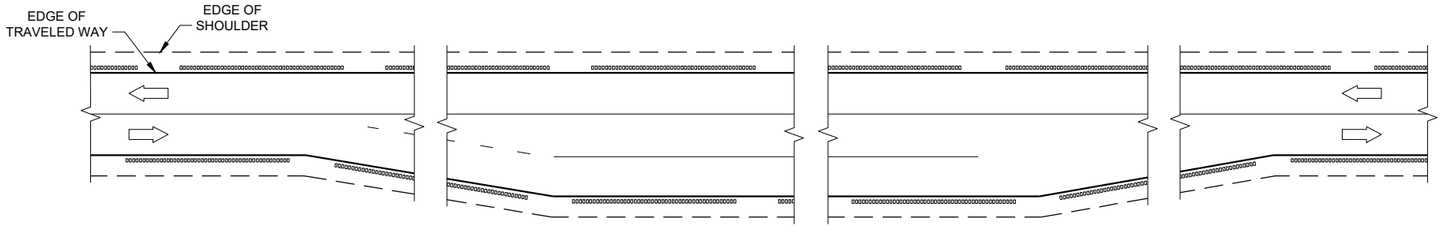
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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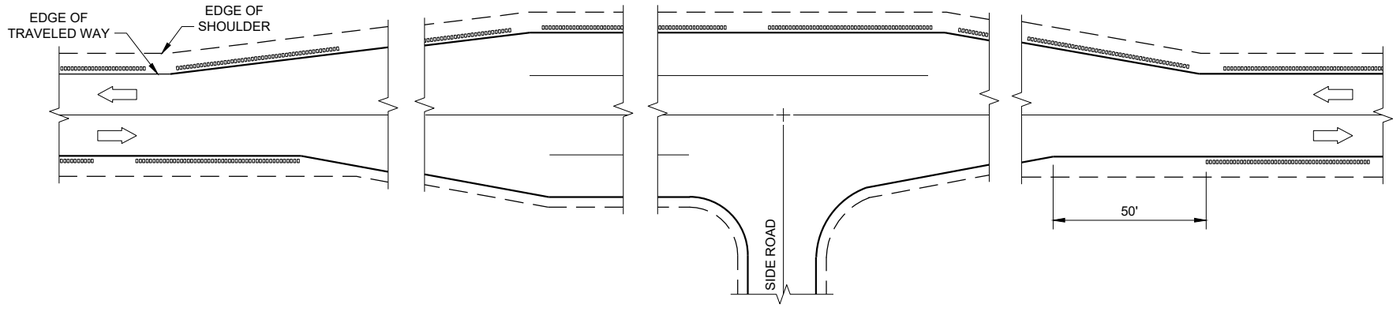
SDD 13A10 - 03g
SDD 13A10 - 03g



GROOVES AT RAILROADS



GROOVES AT PASSING AND CLIMBING LANES



GROOVES AT BYPASS LANES

6

SDD 13A10 - 03h

6

SDD13A10 - 03h

SHOULDER AND EDGE LINE RUMBLE STRIPS - RAILROAD, PASSING, CLIMBING AND BYPASS LANES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2023
DATE

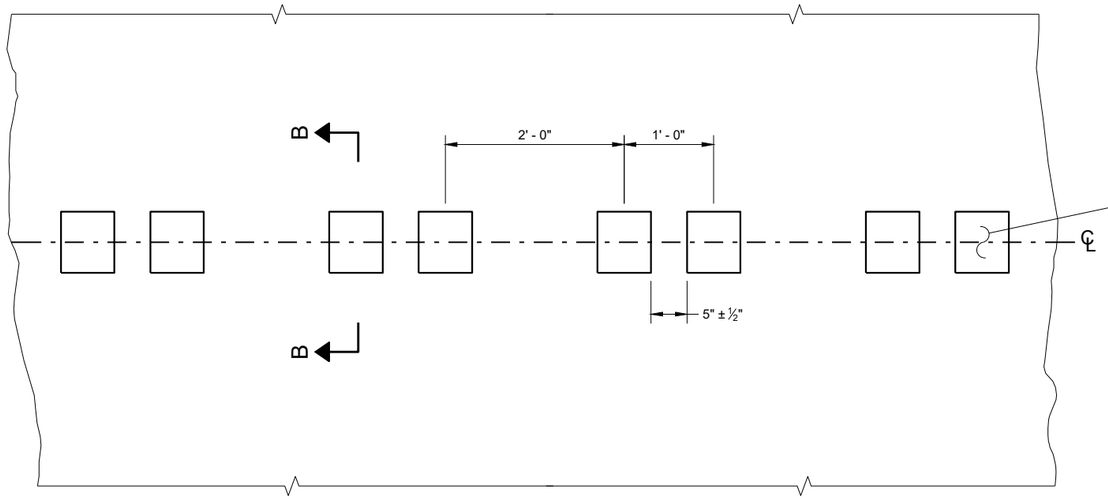
/S/ John Jenkins
ROADWAY STANDARDS DEVE ENGINEER

FHWA

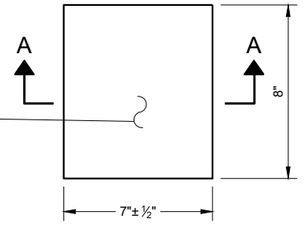
GENERAL NOTES

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

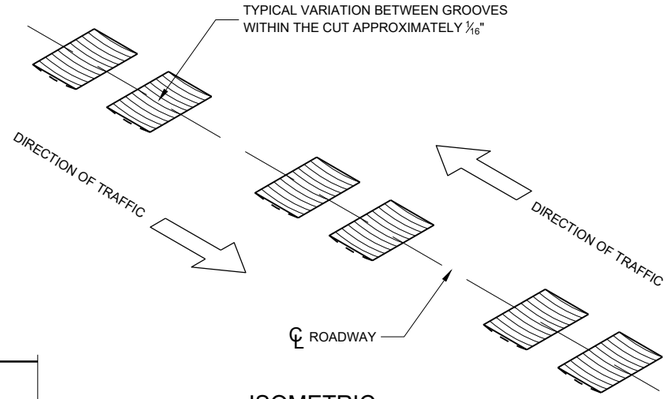
CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS WHEN DIRECTED BY THE ENGINEER.



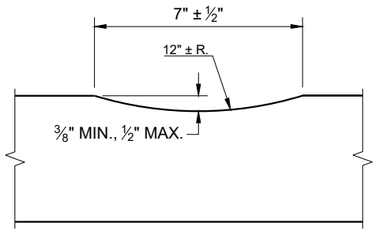
PLAN DETAIL VIEW



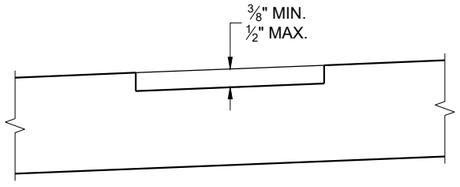
PLAN VIEW
(SINGLE GROOVE)



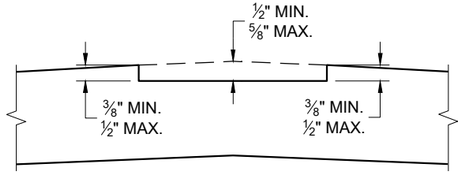
ISOMETRIC



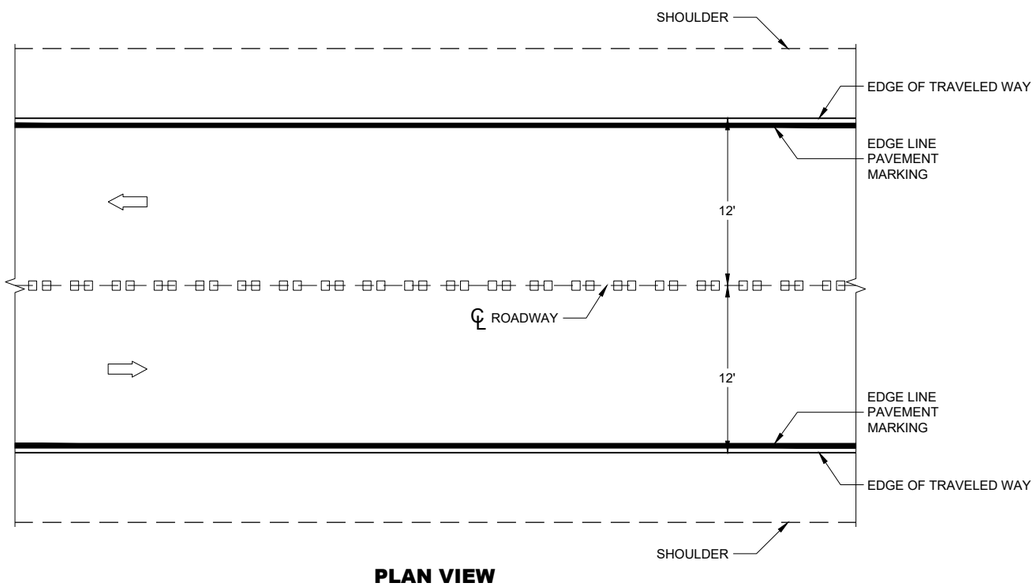
SECTION A - A



SECTION B - B
SUPERELEVATED ROADWAY



SECTION B - B
CROWNED ROADWAY



PLAN VIEW

CENTERLINE RUMBLE STRIPS - ASPHALT

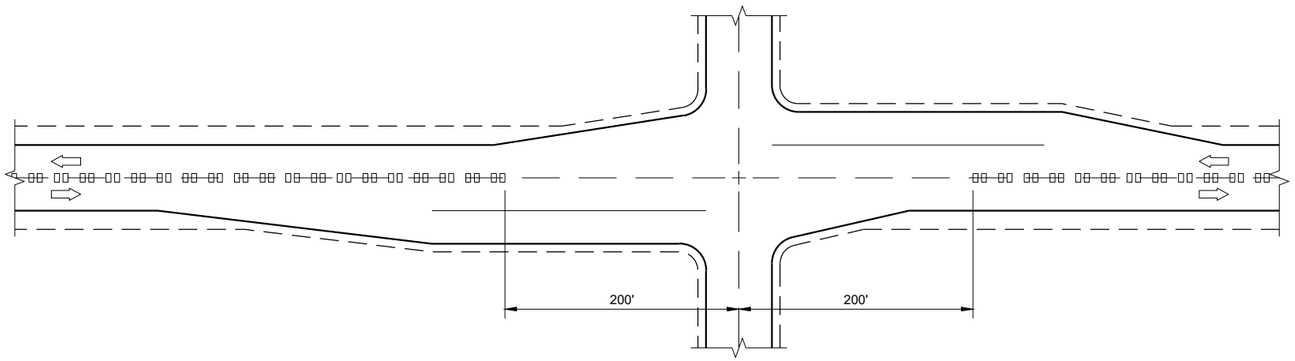
CENTERLINE RUMBLE STRIPS - ASPHALT	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	54

6

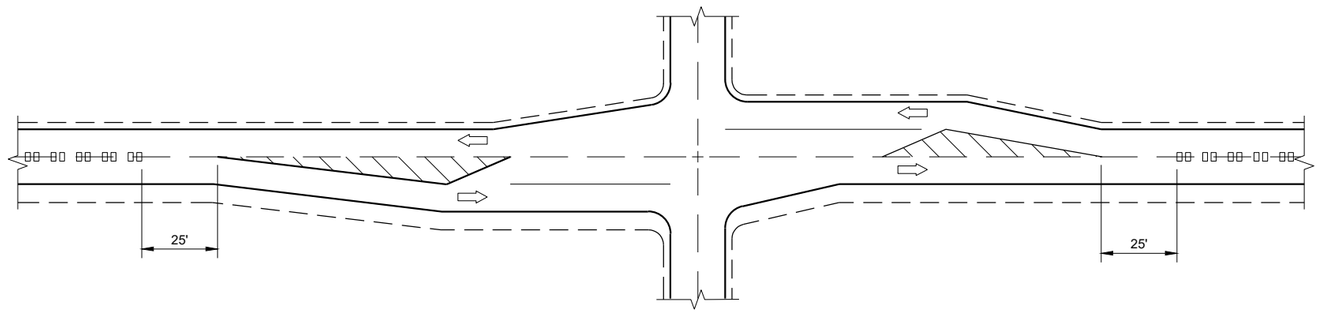
SDD 13A11 - 04a

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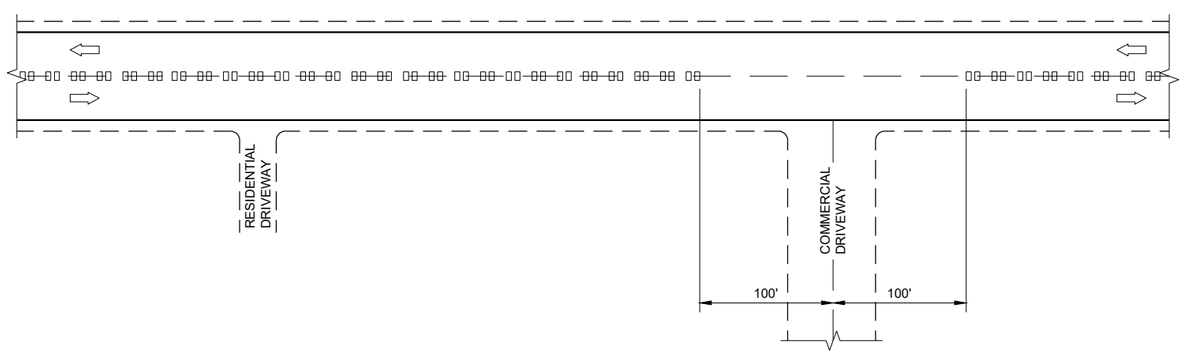
SDD 13A11 - 04a



CENTERLINE GROOVES AT INTERSECTIONS



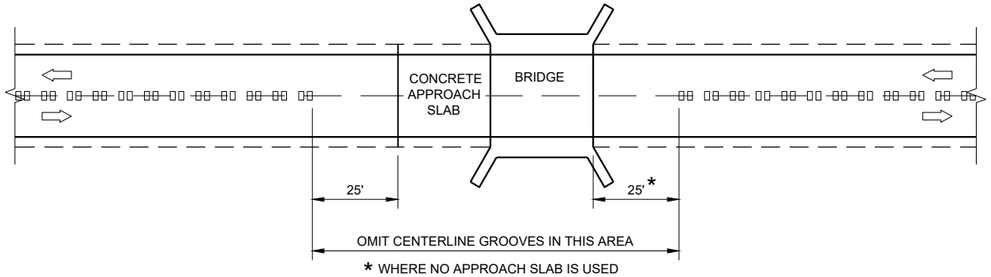
CENTERLINE GROOVES AT INTERSECTIONS (WITH LEFT TURN LANES)



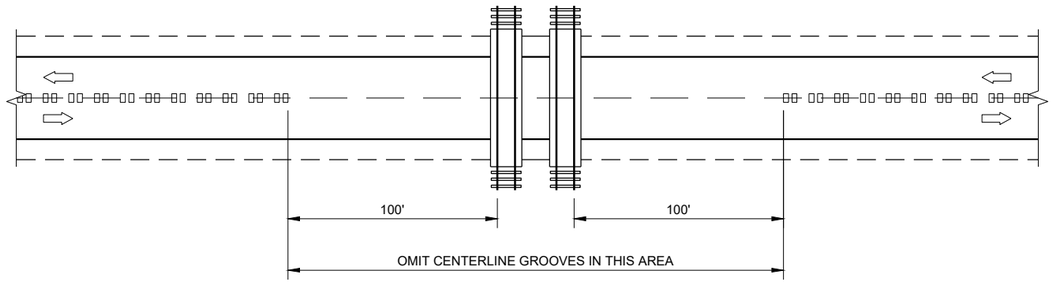
CENTERLINE GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

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



CENTERLINE GROOVES AT BRIDGES



CENTERLINE GROOVES AT RAILROADS

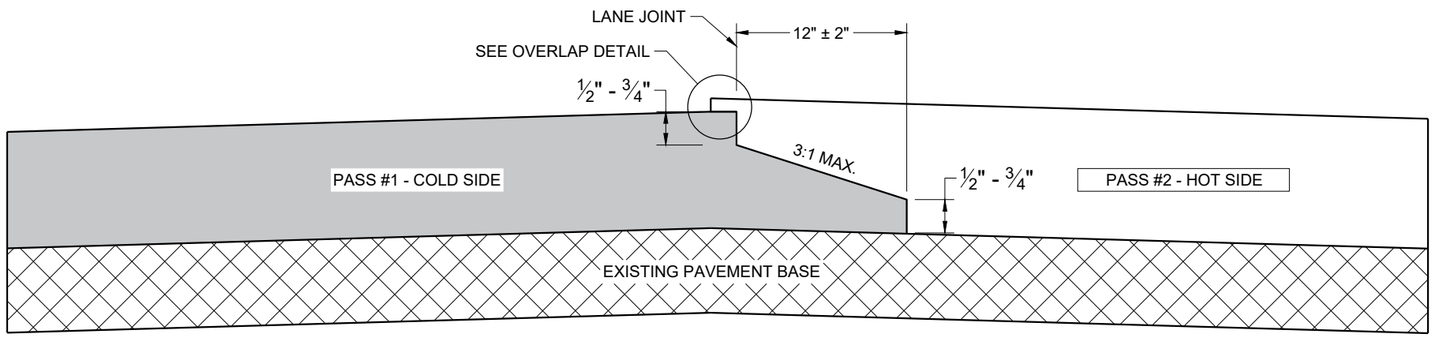
CENTER LINE RUMBLE STRIPS - INTERSECTIONS, DRIVEWAYS, BRIDGES, RAIL ROADS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

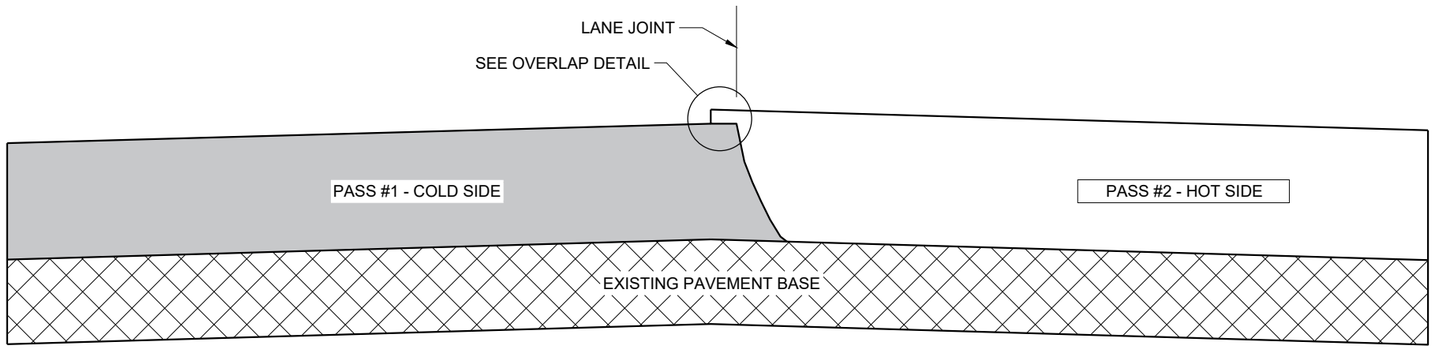
APPROVED
May 2023 — DATE
/S/ John Jenkins — ROADWAY STANDARDS DEVE ENGINEER

FHWA

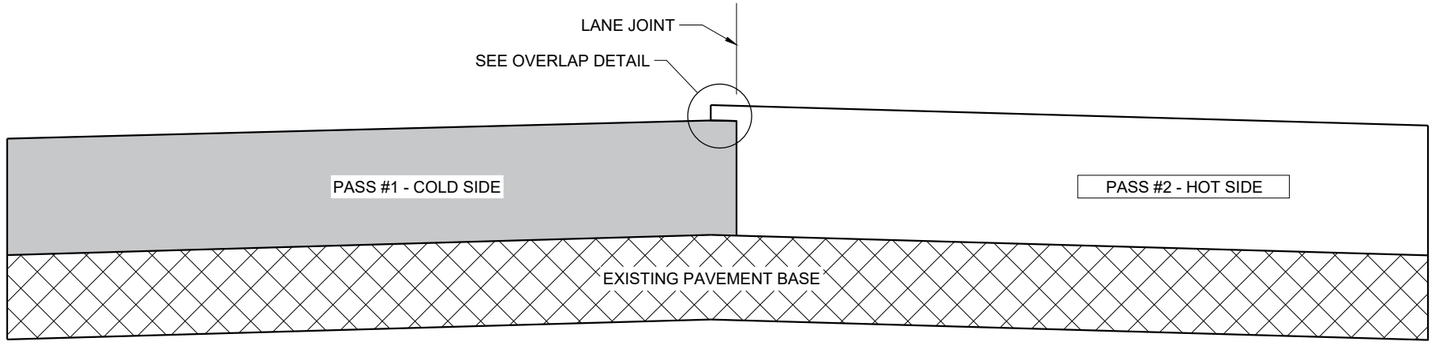
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SDD 13A11 - 04d



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

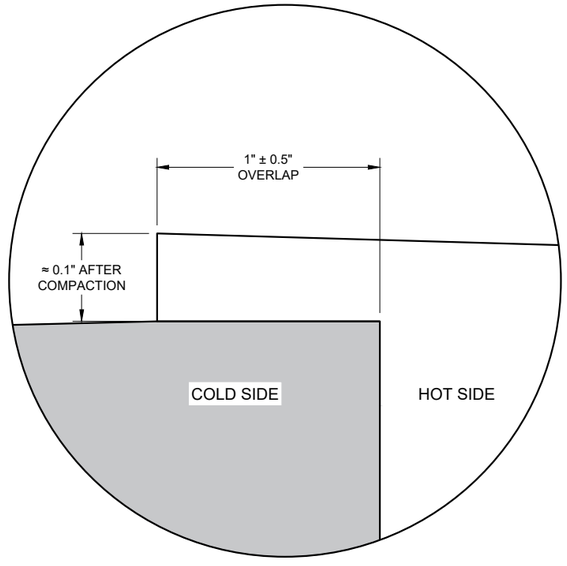
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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)

6

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SDD 13C19 - 03

SDD 13C19 - 03

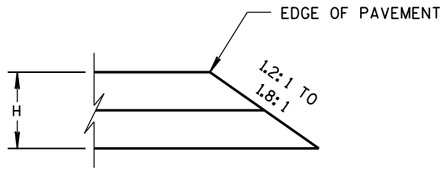
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

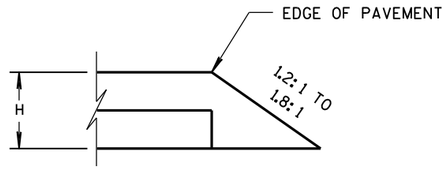
/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA



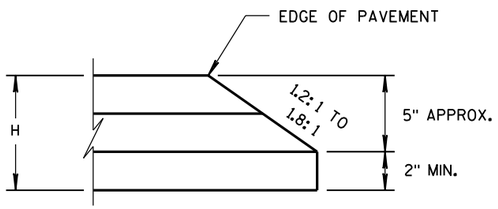
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



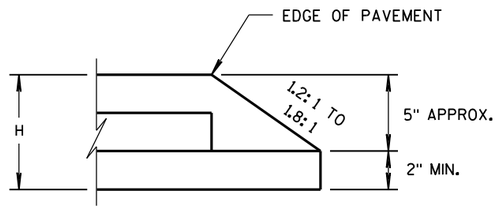
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

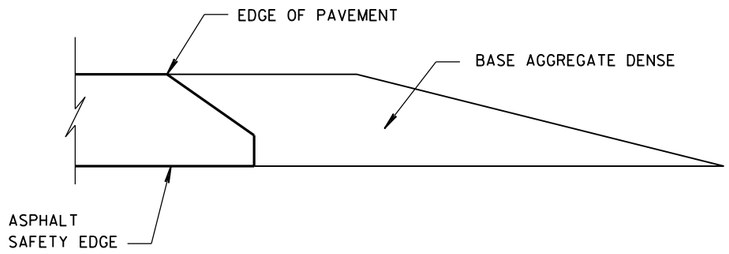
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

6

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S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

SAFETY EDGE SM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/2012
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

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.

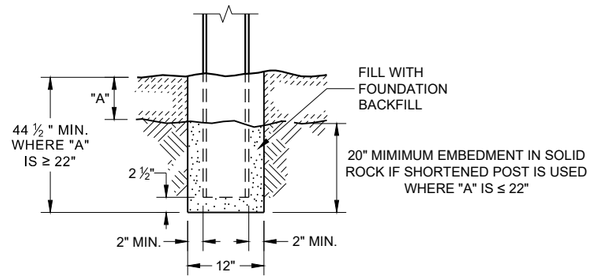
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL 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).

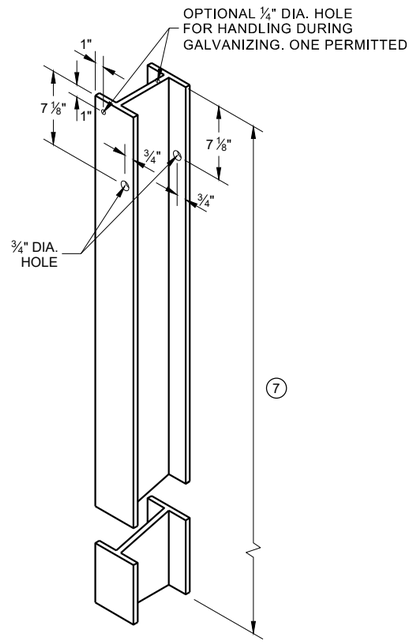
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(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.

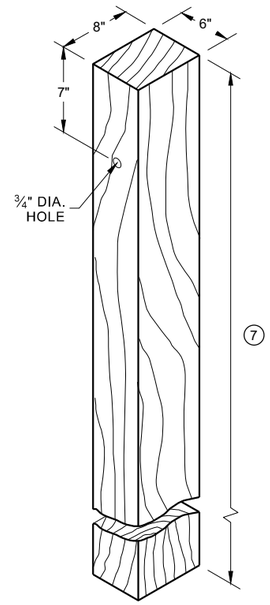
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



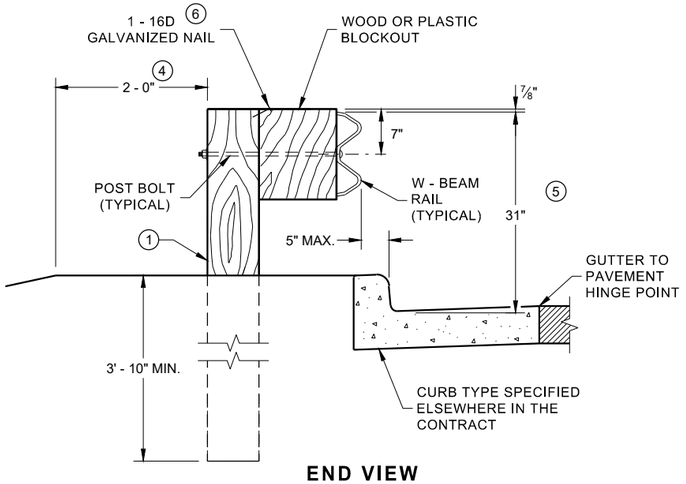
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



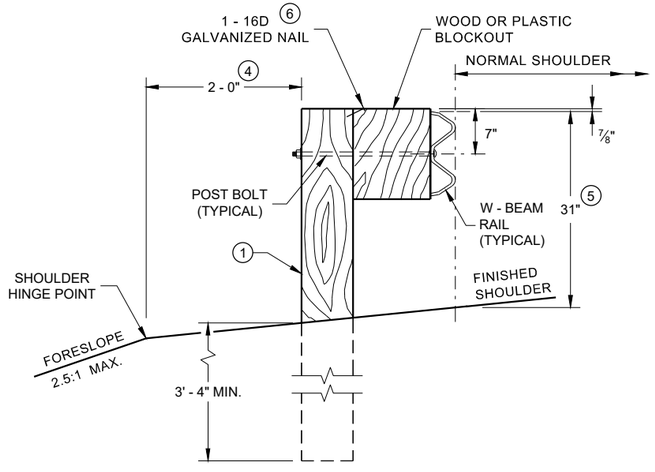
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



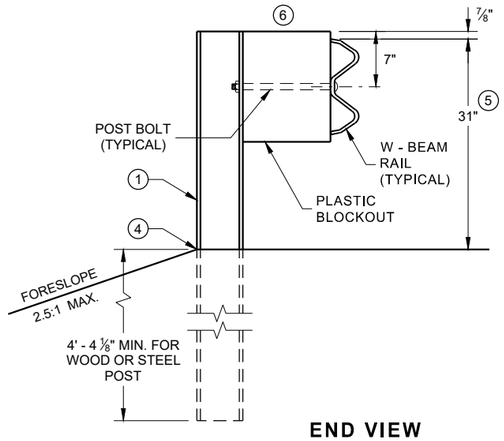
WOOD POST (6" X 8") NOMINAL (1)



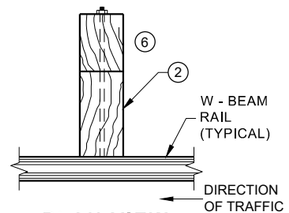
END VIEW
LOCATED ALONG A CURBED ROADWAY



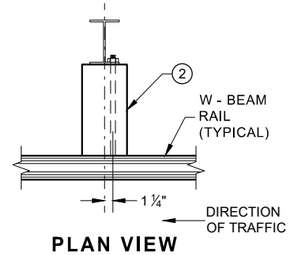
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



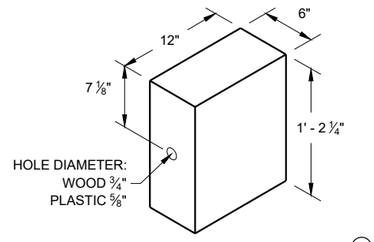
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



WOOD OR PLASTIC BLOCKOUT (2)

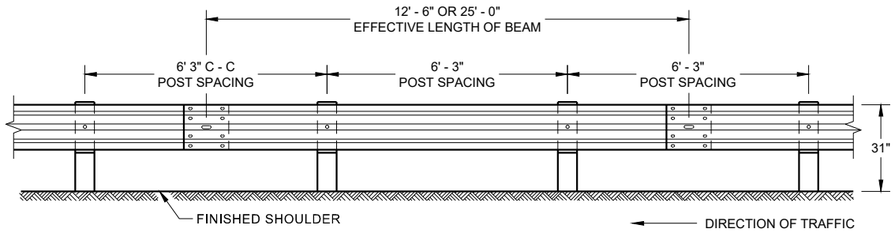
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

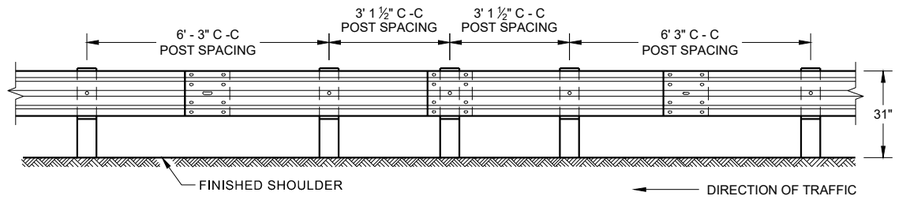
SDD 14B42 - 07a

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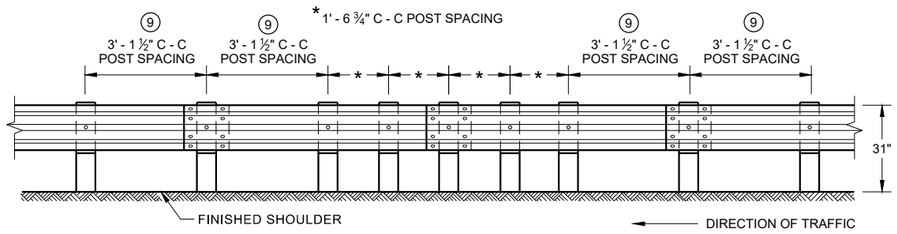
SDD 14B42 - 07a



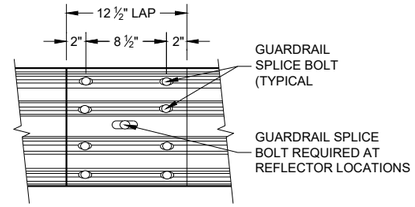
FRONT VIEW
POST SPACING STANDARD INSTALLATION



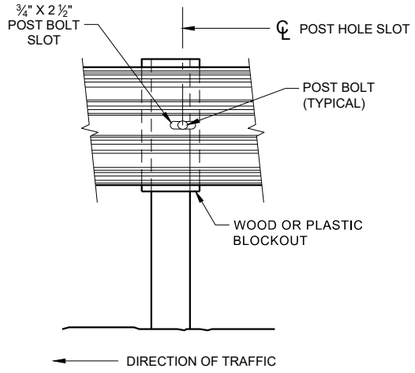
FRONT VIEW
HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)



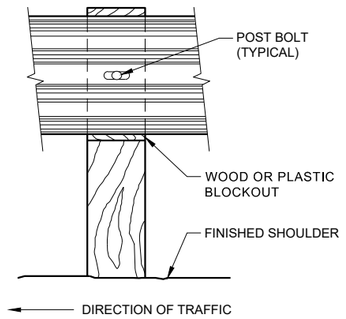
FRONT VIEW
QUARTER POST SPACING (QS)



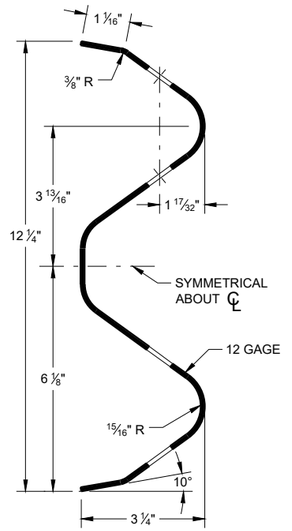
FRONT VIEW
MID-SPAN BEAM SPLICE



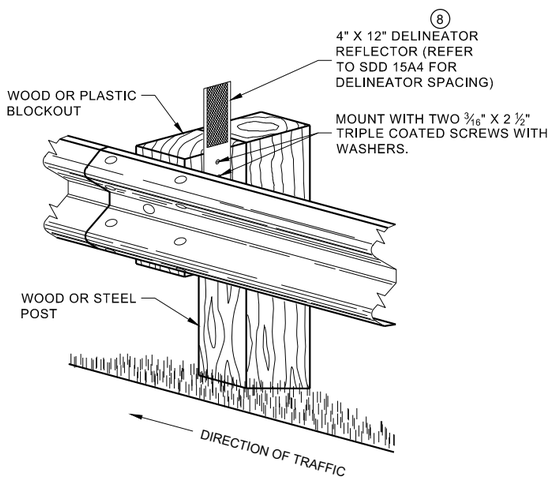
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



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.

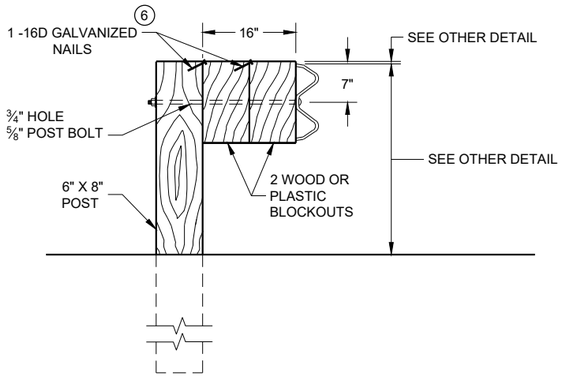
POST BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND ⅝" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

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SDD 14B42 - 07b

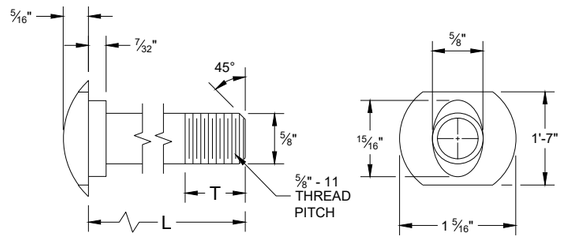


DETAIL FOR 16" BLOCKOUT DEPTH

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

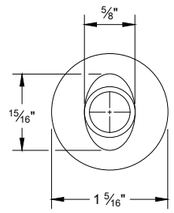
NOTE:

1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 3⁄16".
2. IF THE BOLT EXTENDS MORE THAN ¼" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

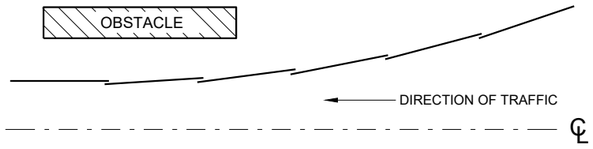


POST BOLT TABLE

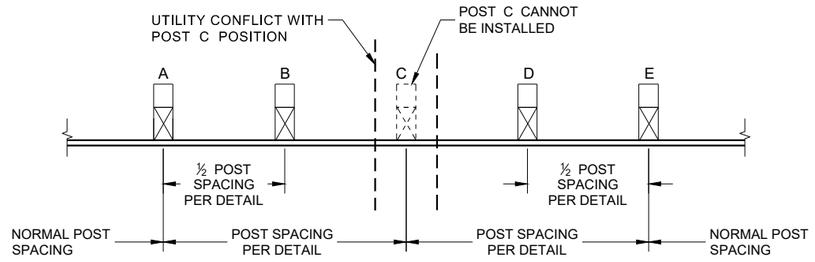
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1⁄16"
18"	4"
21"	4 1⁄16"
25"	4"



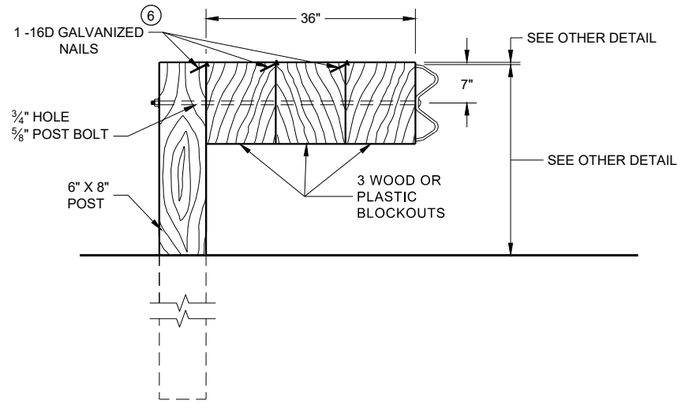
ALTERNATE BOLT HEAD



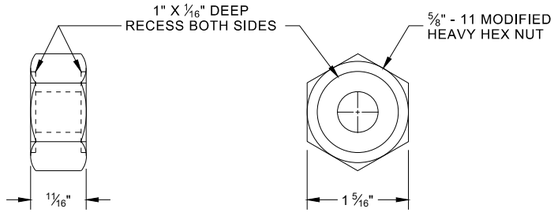
PLAN VIEW
BEAM LAPPING DETAIL



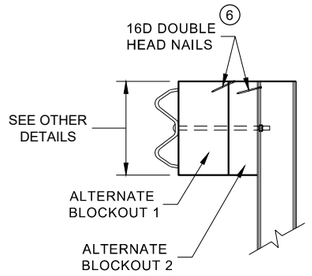
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



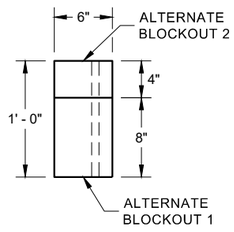
DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW



PLAN VIEW

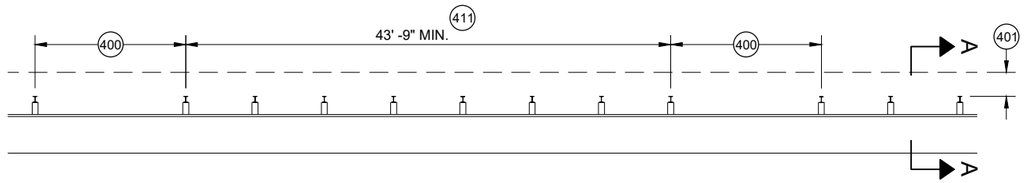
ALTERNATE WOOD BLOCKOUT DETAIL

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

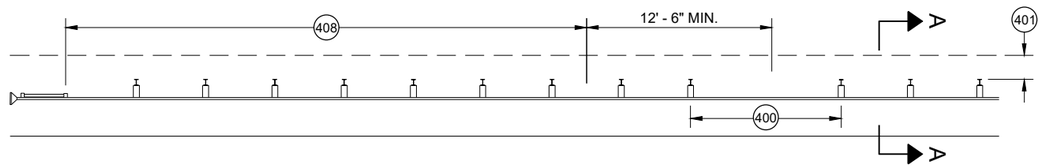
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

(6) WHEN USING STEEL POST AD 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.

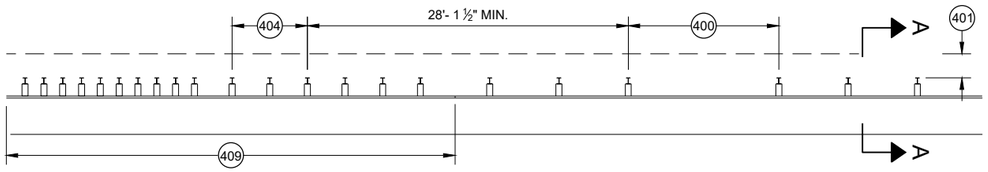
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL



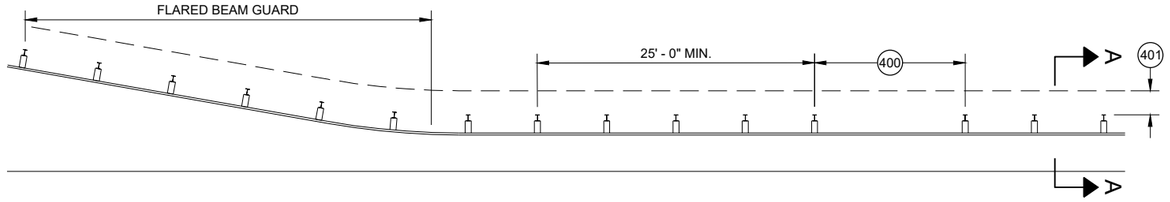
MISSING POST IN MGS GUARDRAIL



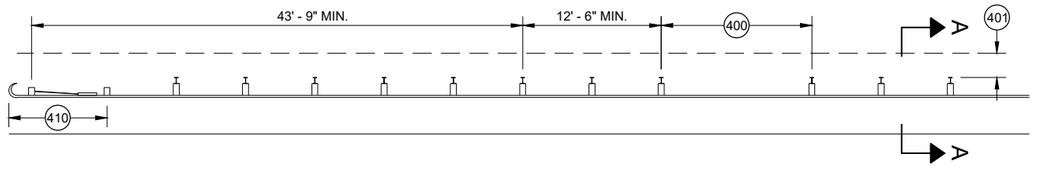
MISSING POST IN MGS GUARDRAIL NEAR EAT



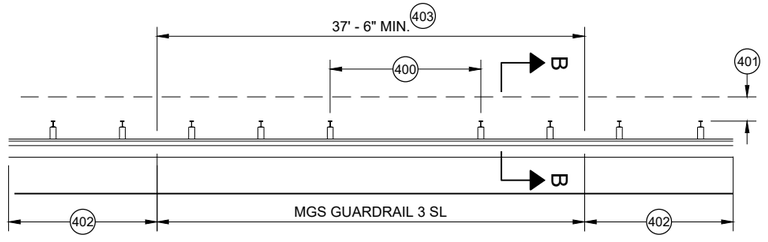
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

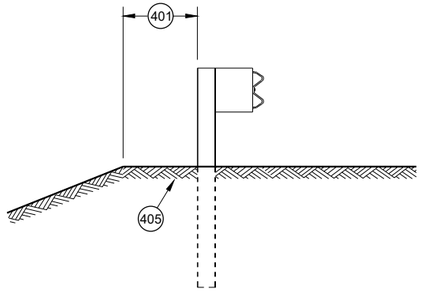


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

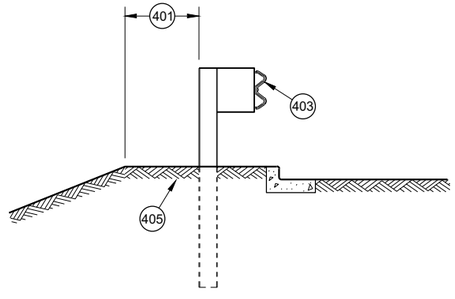


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

(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 406



SECTION B - B 406

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE
UNIT SUPERVISOR

FHWA

6

SDD 14B42 - 07d

6

SDD 14B42 - 07d

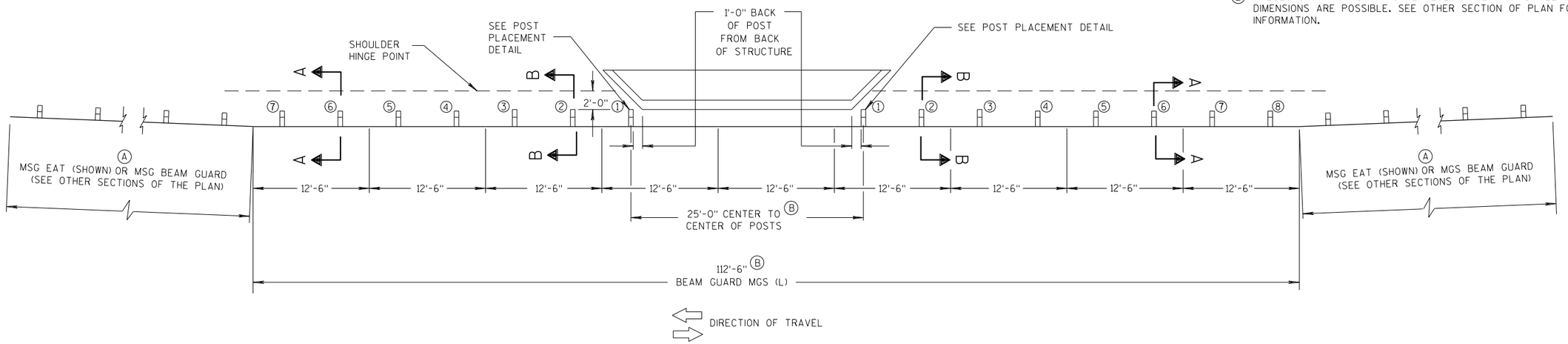
GENERAL NOTES

POSTS 1 THROUGH 3 ARE CRT POSTS.
ALL OTHER POSTS SHALL BE WOOD OR STEEL.

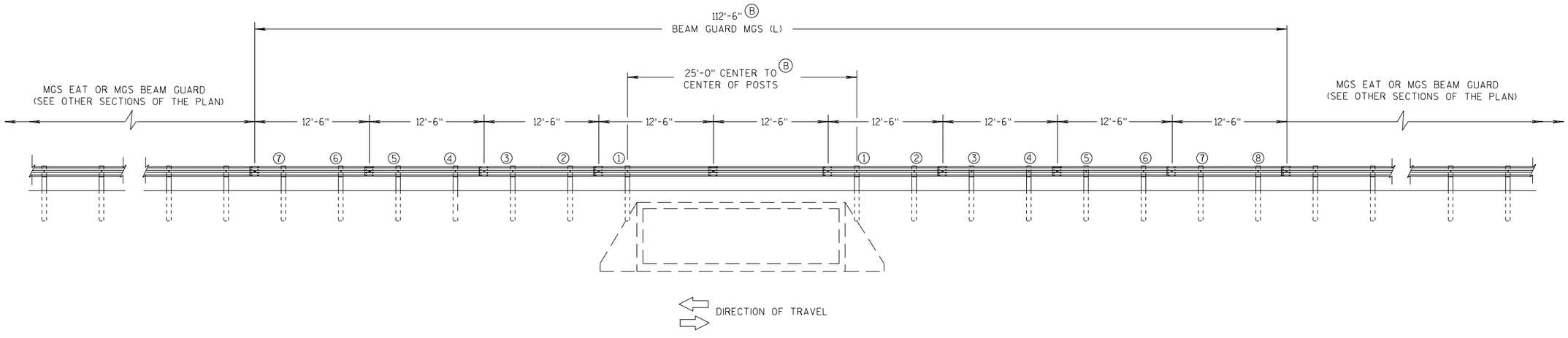
SEE SDD 14 B 42 FOR MORE DETAILS.

(A) FLARE FOR MGS EAT SHOWN. IF INSTALLING MGS NO FLARE NEEDED.

(B) VALUES SHOWN ON DRAWING REPRESENT THE MAXIMUM LENGTH. SHORTER DIMENSIONS ARE POSSIBLE. SEE OTHER SECTION OF PLAN FOR MORE INFORMATION.



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L) TWO-WAY TRAFFIC

MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 14 B 43-4a

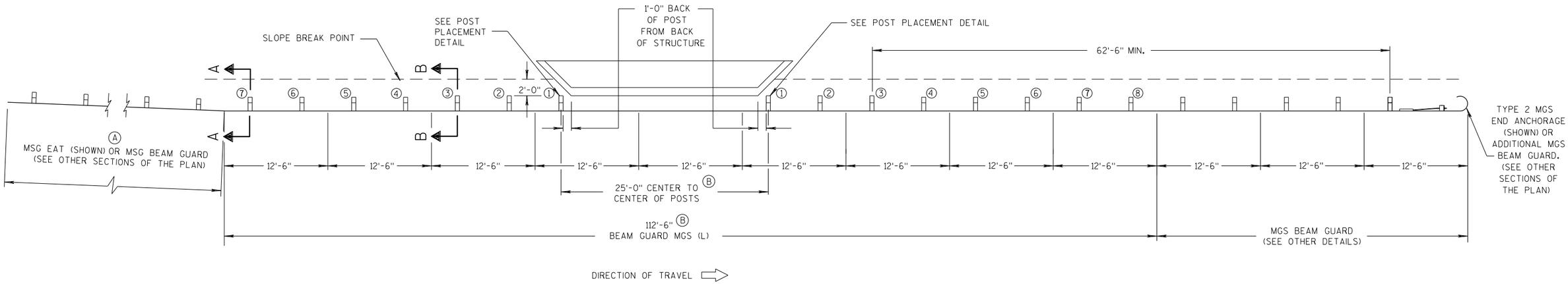
GENERAL NOTES

POSTS 1 THROUGH 3 ARE CRT POSTS.
ALL OTHER POSTS SHALL BE WOOD OR STEEL.

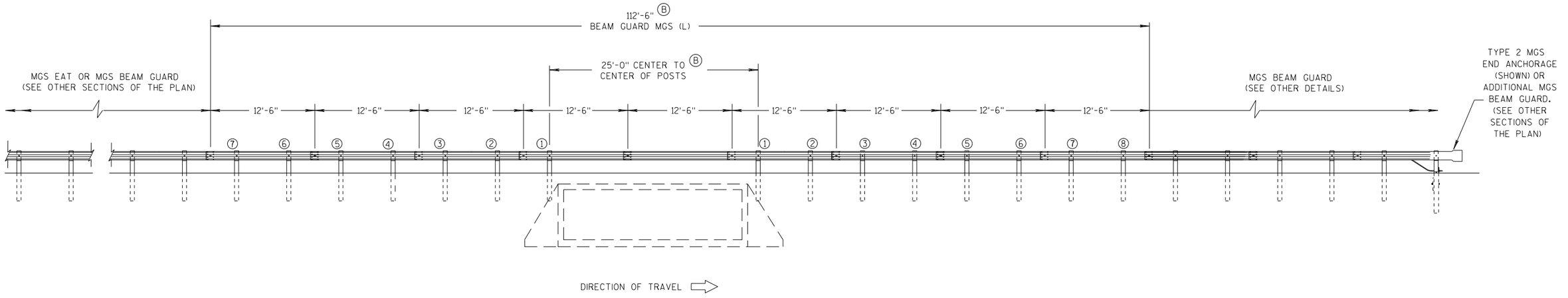
SEE SDD 14 B 42 FOR MORE DETAILS.

(A) FLARE FOR MGS EAT SHOWN. IF INSTALLING MGS NO FLARE NEEDED.

(B) VALUES SHOWN ON DRAWING REPRESENT THE MAXIMUM LENGTH. SHORTER DIMENSIONS ARE POSSIBLE. SEE OTHER SECTION OF PLAN FOR MORE INFORMATION.



PLAN VIEW



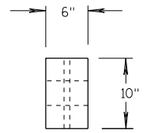
ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L) ONE-WAY TRAFFIC

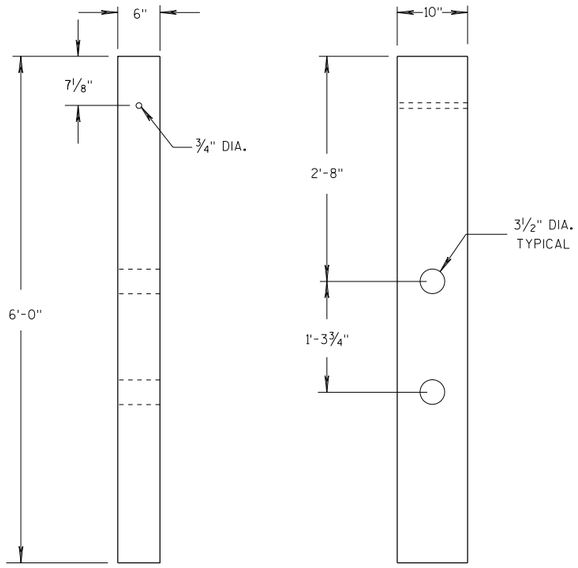
MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	63

6

S.D.D. 14 B 43-4b

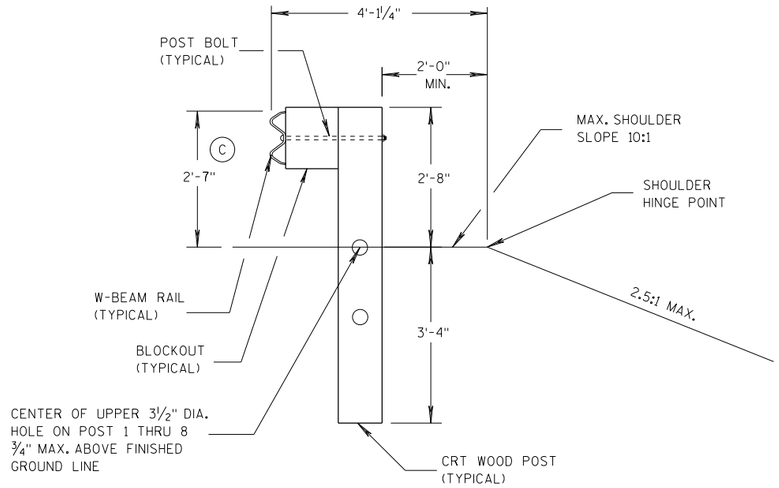


PLAN VIEW



FRONT VIEW SIDE VIEW

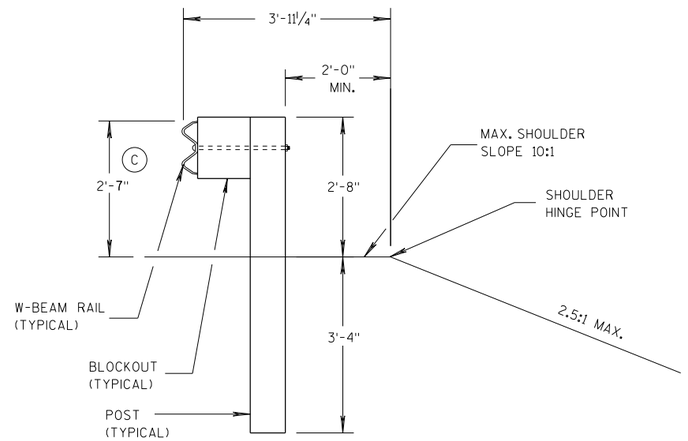
CRT WOOD POST



SECTION B-B

POSTS NO. 1-3

SEE OTHER DETAILS



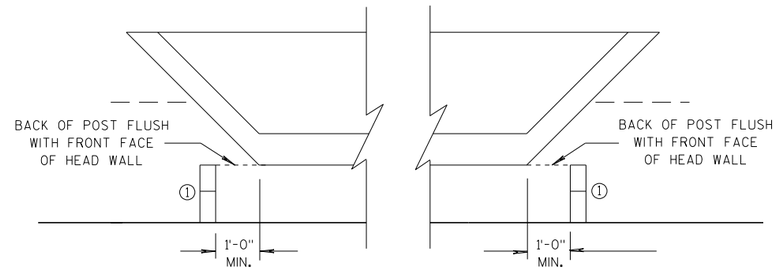
SECTION A-A

POSTS NO. 4-8

SEE OTHER DETAILS

GENERAL NOTES

(C) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".



POST PLACEMENT DETAIL

MIDWEST GUARDRAIL SYSTEM
LONG SPAN MGS (L)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS D 64 NT
ENGINEER

6

S.D.D. 14 B 43-4c

6

S.D.D. 14 B 43-4c

GENERAL NOTES

(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.

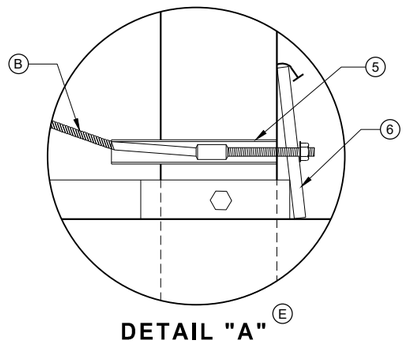
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

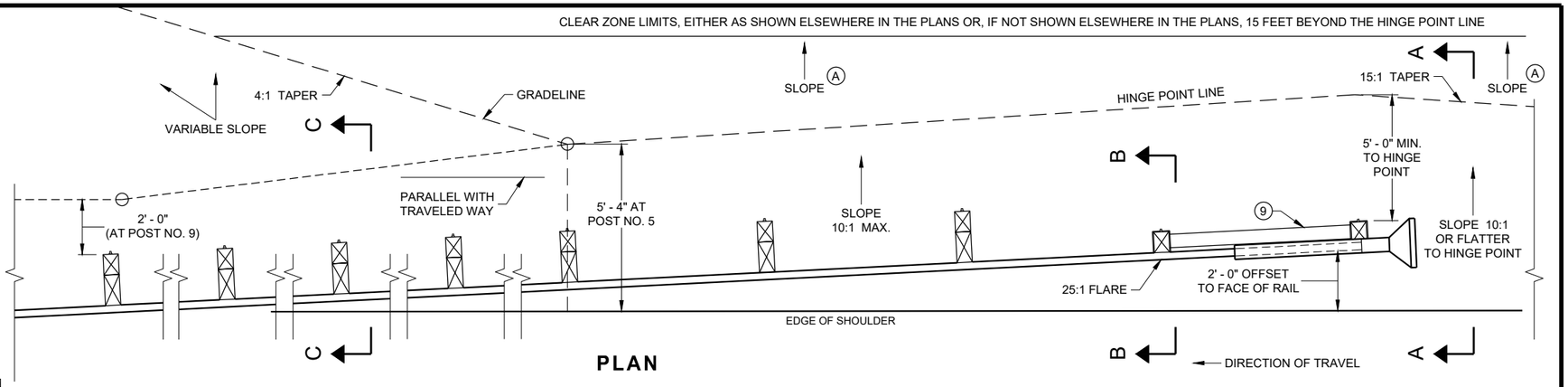
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

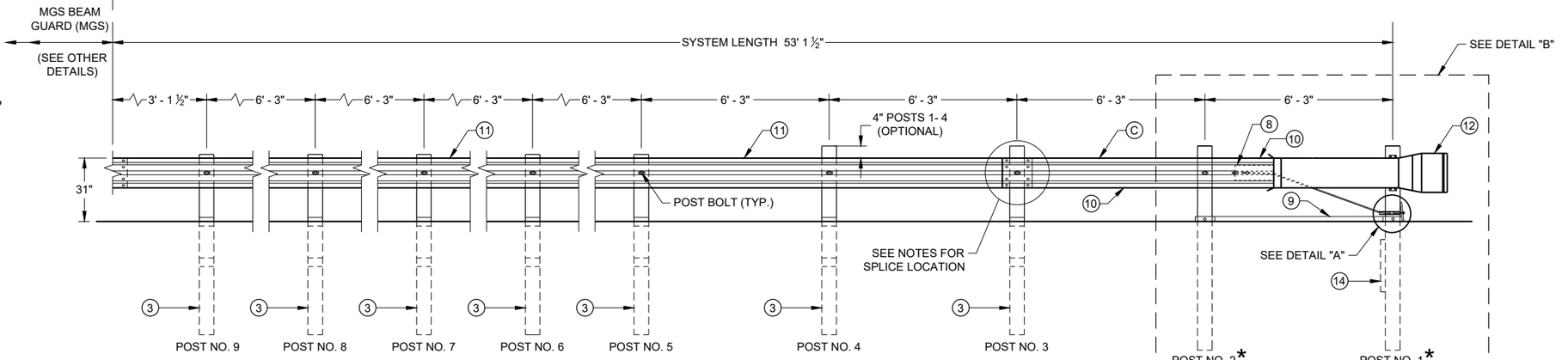
THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



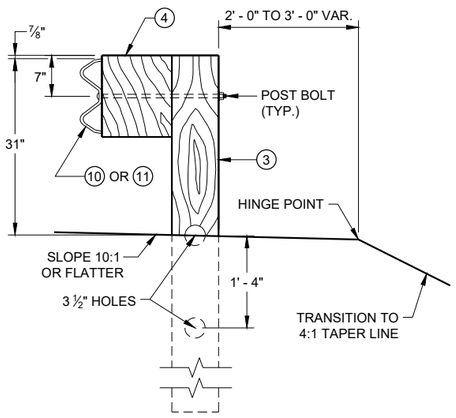
DETAIL "A" (E)



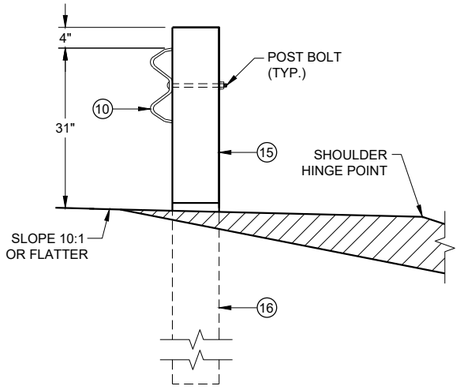
PLAN



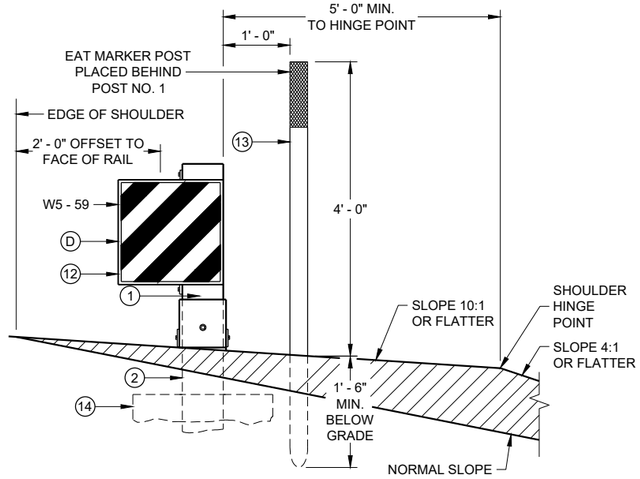
ELEVATION



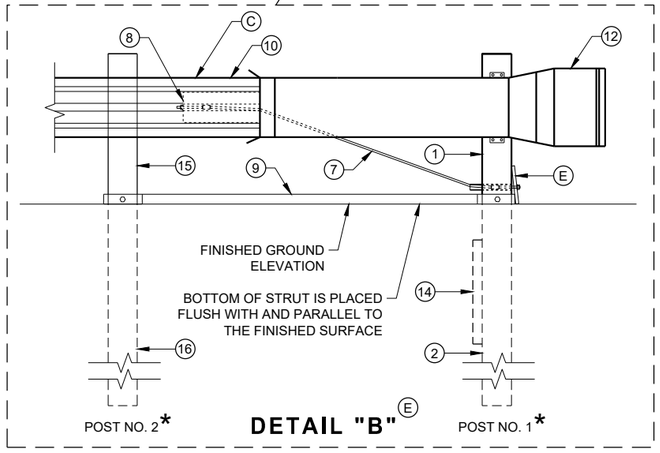
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



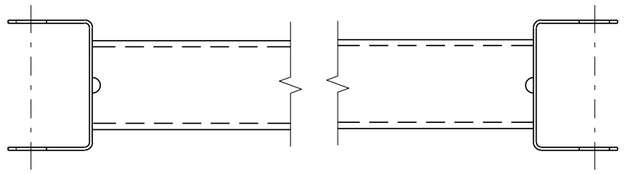
DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

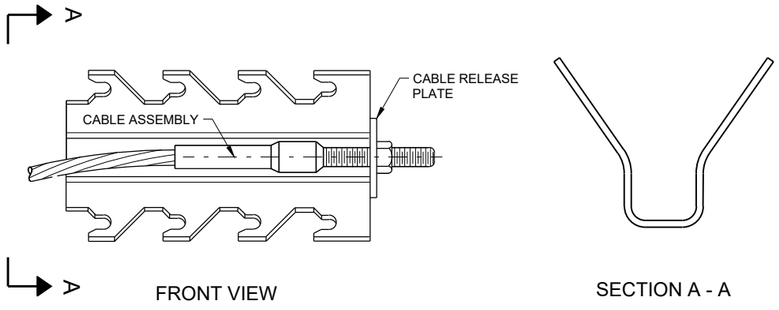
SDD 14B44 - 04a



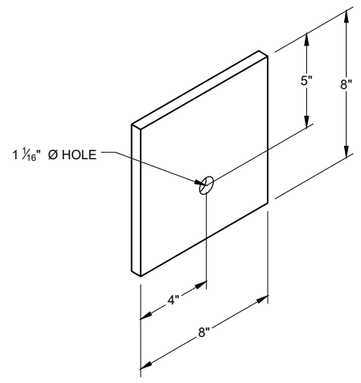
GENERIC GROUND STRUT ⑨ Ⓔ

BILL OF MATERIALS

PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUGACTURER'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 Ⓔ



BEARING PLATE ⑥ Ⓔ

6

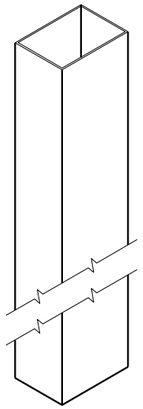
6

SDD 14B44 - 04b

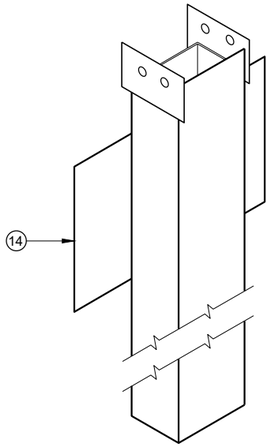
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

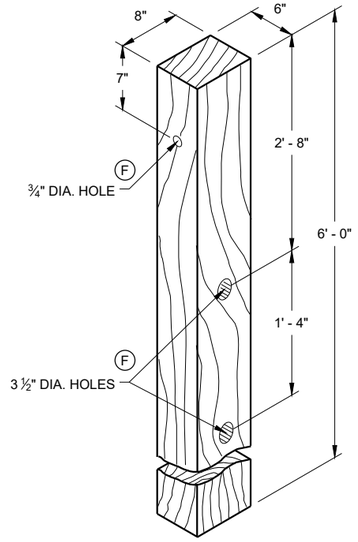
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



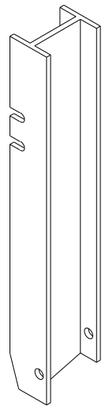
UPPER POST NO. 1 (1) (E)



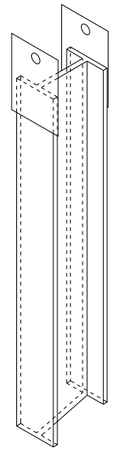
LOWER POST NO. 1 (2) (E)



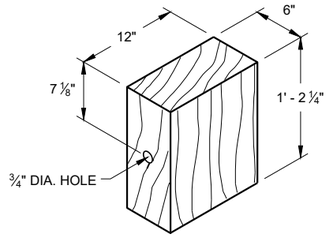
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



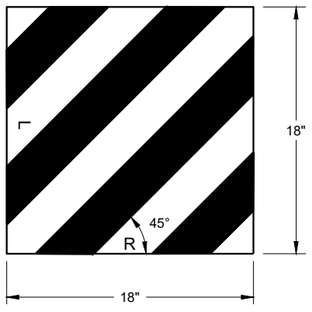
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

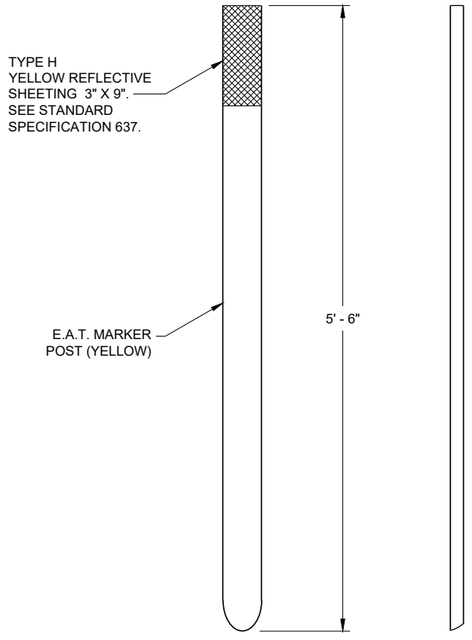


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



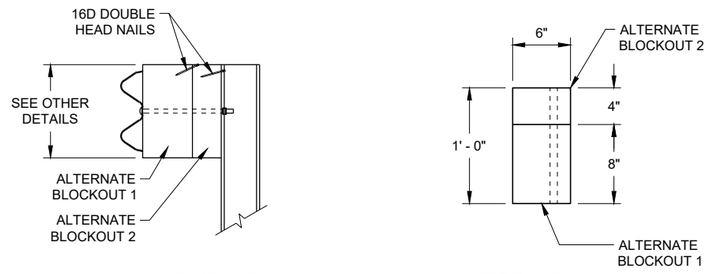
W5 - 59

REFLECTIVE SHEETING DETAIL (E)



FRONT VIEW SIDE VIEW

E.A.T. MARKER POST (13)



SIDE VIEW TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

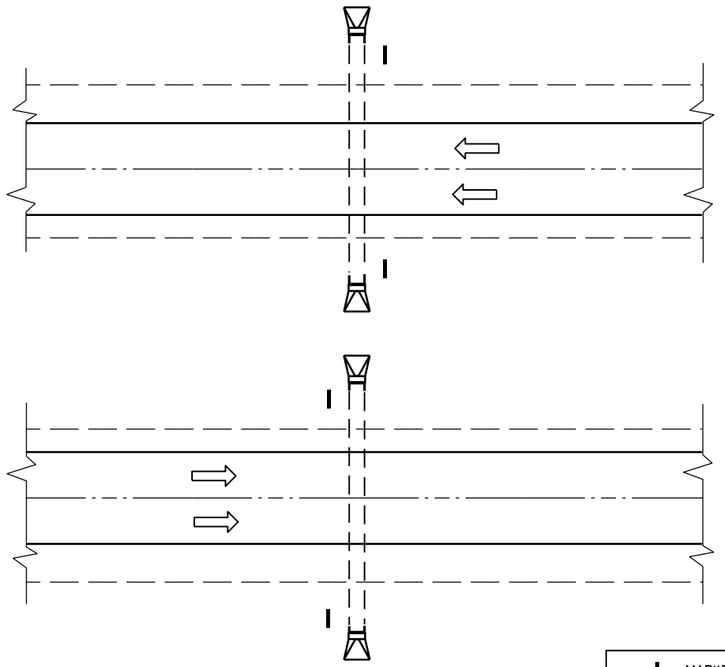
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR

FHWA

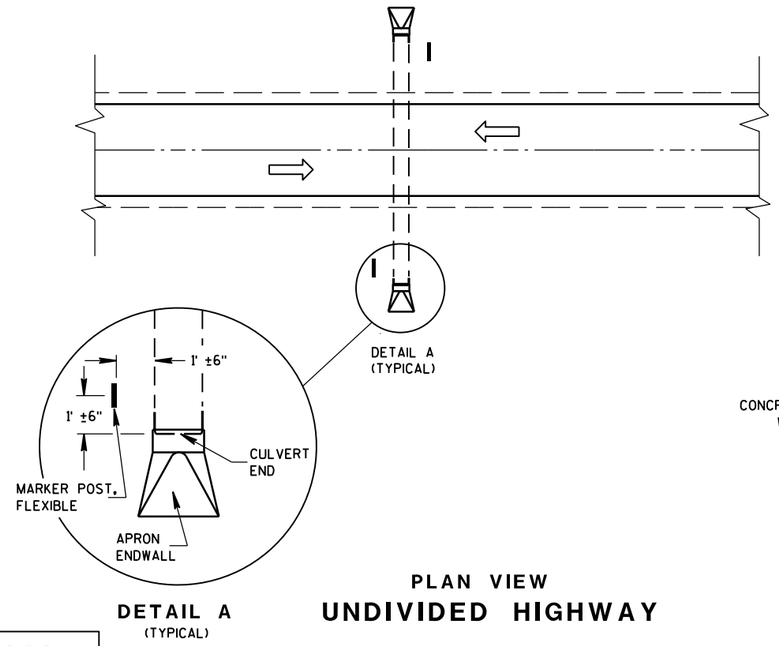
6

SDD 14B44 - 04c



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

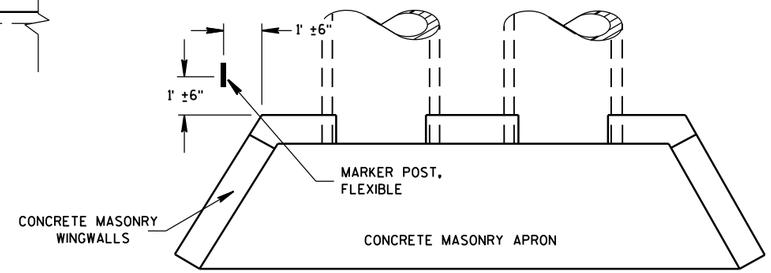
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

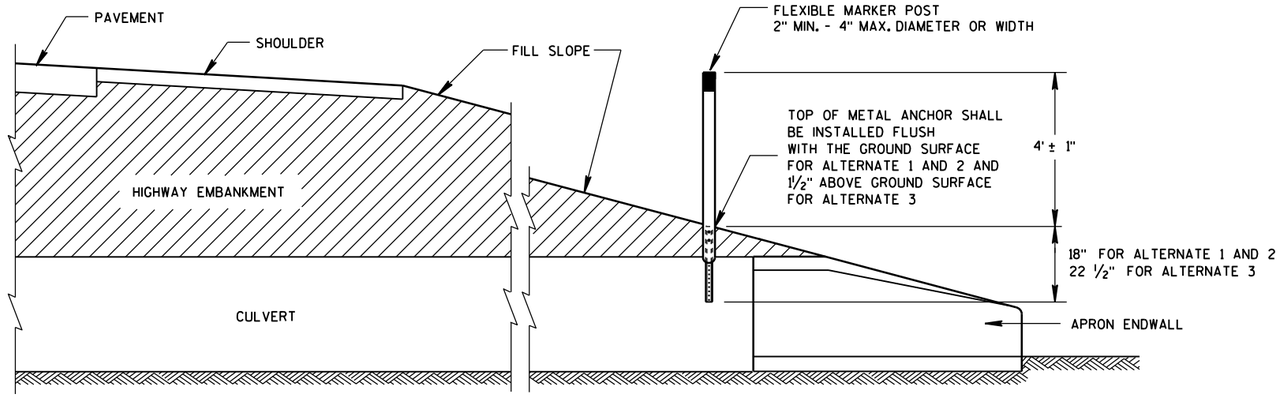
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST FOR CULVERT END

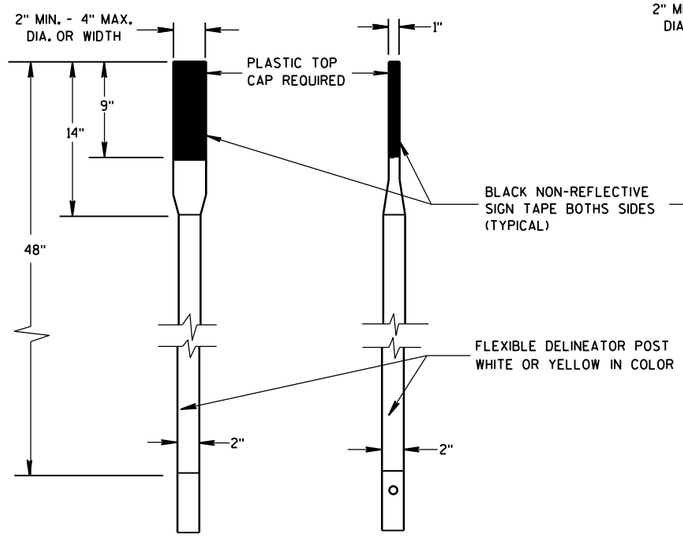
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

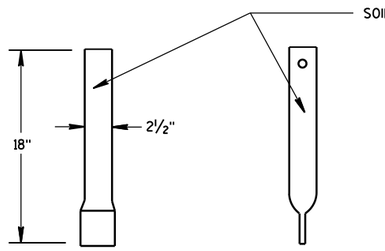
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S.D.D. 15 A 3-2a

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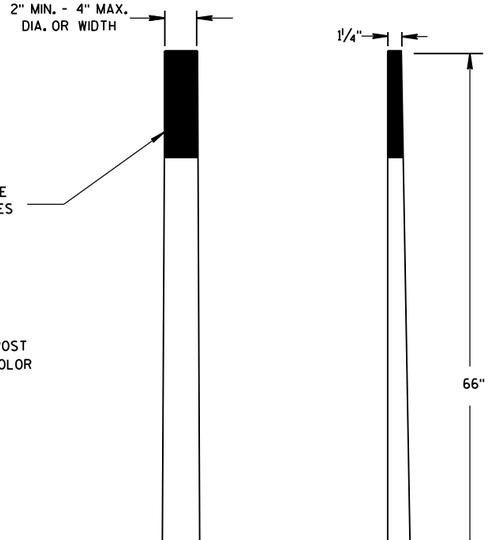
S.D.D. 15 A 3-2a





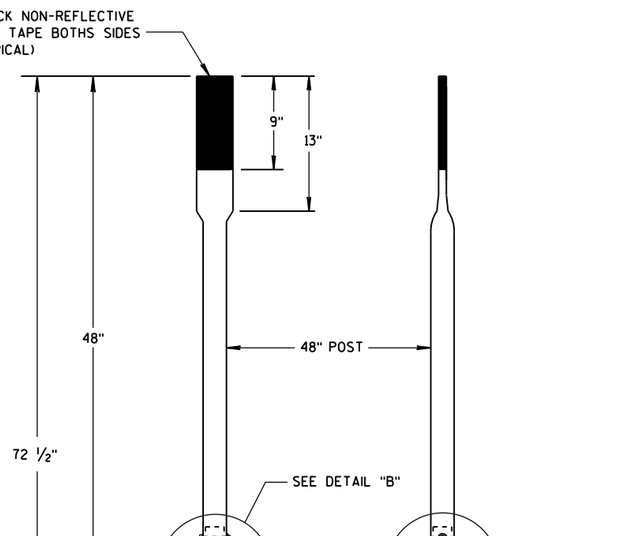
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

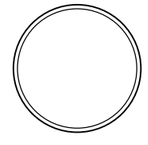
ALTERNATE 2



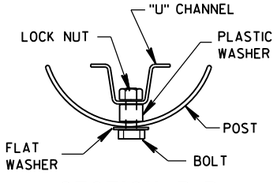
FRONT VIEW SIDE VIEW

ALTERNATE 3

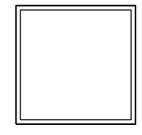
FLEXIBLE MARKER POSTS



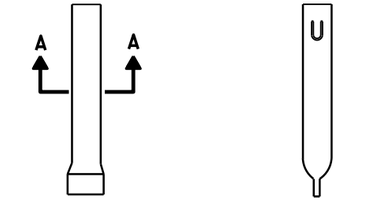
SECTION A-A



SECTION B-B

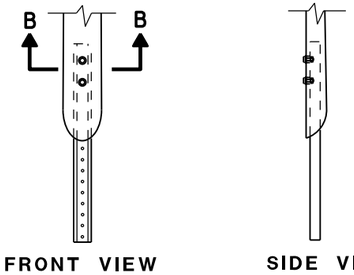


SECTION C-C



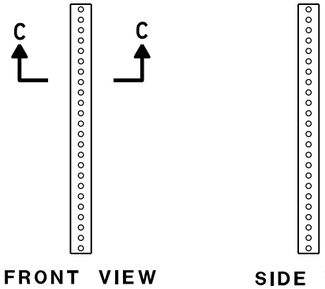
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

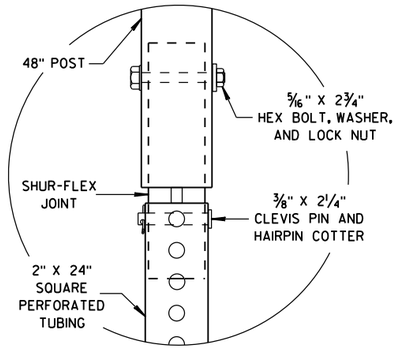
ALTERNATE 2



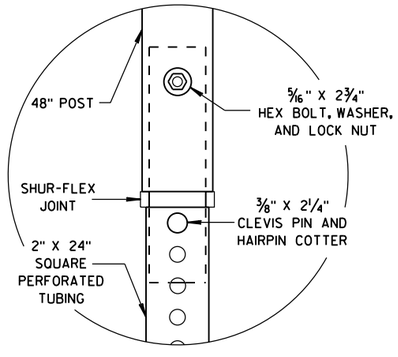
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



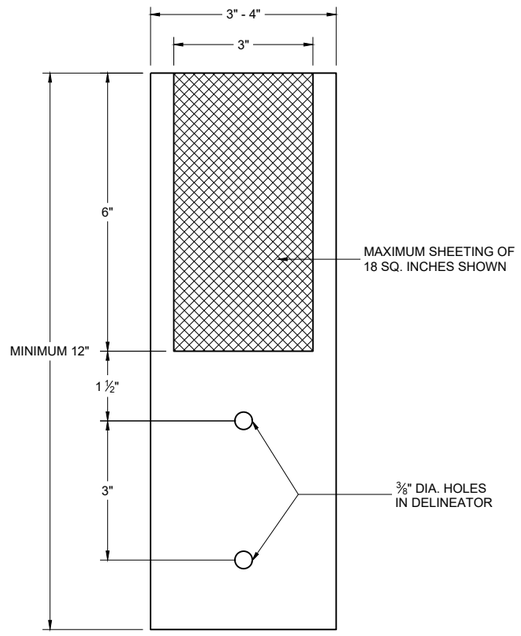
DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6
S.D.D. 15 A 3-2b



4" x 12" DELINEATOR
WITH REFLECTIVE SHEETING

REFLECTOR SPACING TABLE

REFLECTOR SPACING	MINIMUM NUMBER OF REFLECTORS
100' C-C	3

DELINEATOR POST
WITH REFLECTIVE SHEETING

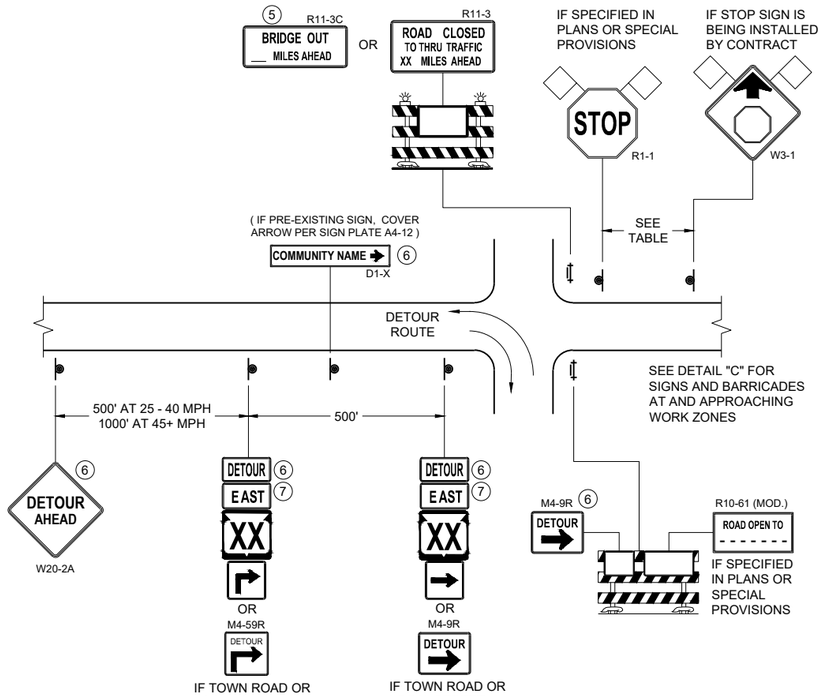
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2024
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

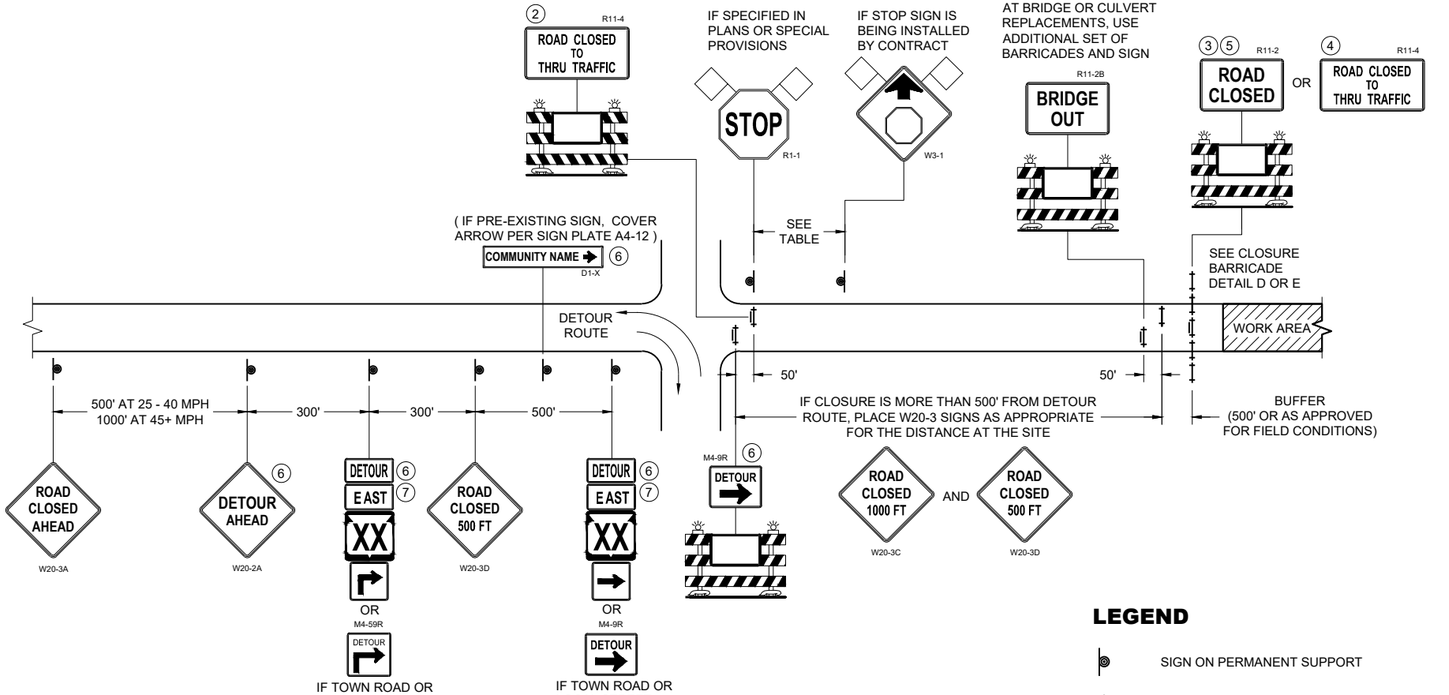
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SDD 15A04-08e



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)

LEGEND

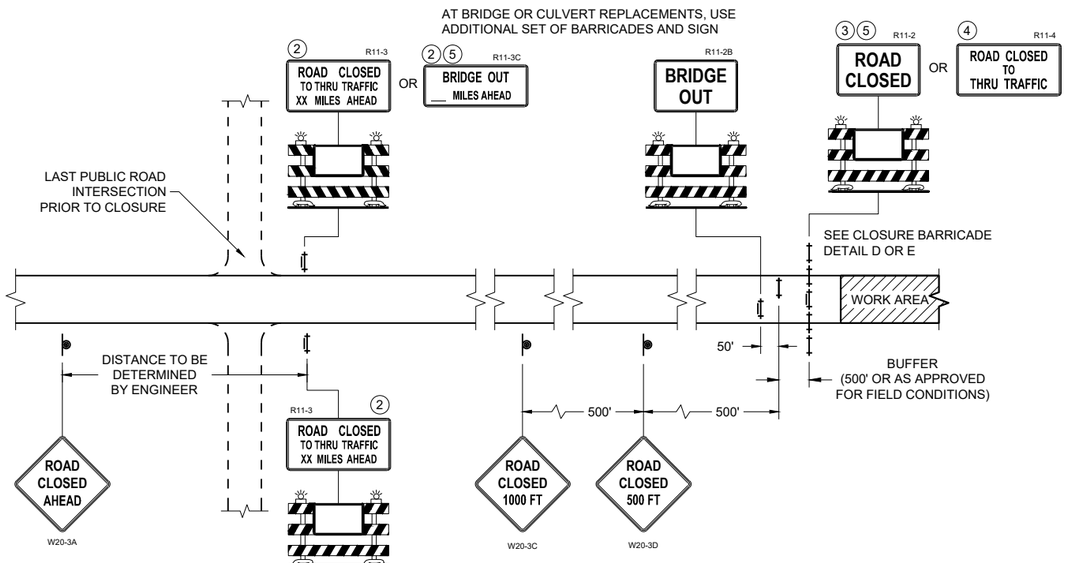
- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)

DETOUR M4 - 8

EAST M3 - X

XX M1 - 4 OR XX M1 - 6 OR COUNTY X M1 - 5A

M05 - 1 OR M06 - 1



DETAIL C

MAINLINE CLOSURE, NO POSTED DETOUR

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

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

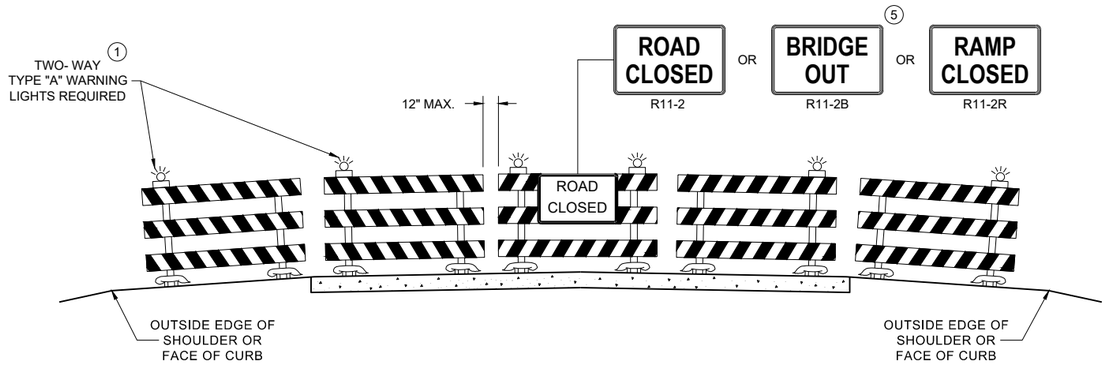
BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

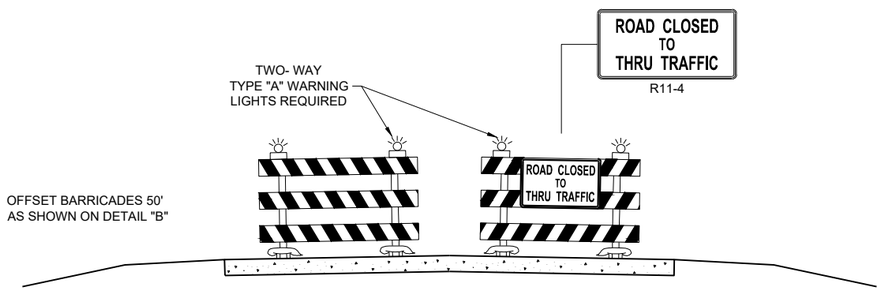
6
SDD 15C02-10a



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.

PARTIAL NUMBERS ON SIGNS SHALL BE DISPLAYED AS A WHOLE NUMBER(AS NEEDED) FOLLOWED BY A FRACTION. SIGNS SHALL NOT DISPLAY NUMBERS IN DECIMAL FORM.

"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"

SIGNS PLACED ON TYPE III BARRICADES THAT ARE SIZES OTHER THAN 48"X30" SHALL HAVE A CORRUGATED POLYPROPYLENE OR POLYETHYLENE PLASTIC SIGN BASE.

(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

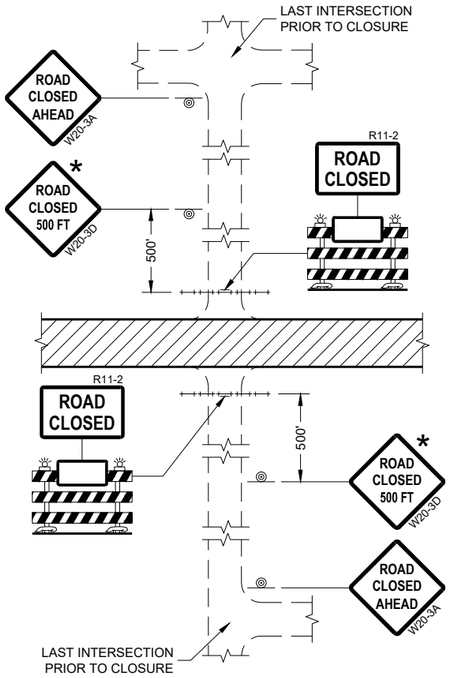
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

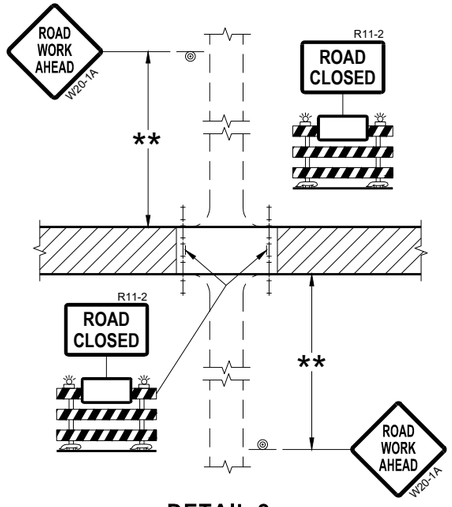
FHWA

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SDD 15C02-10b



DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO 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.

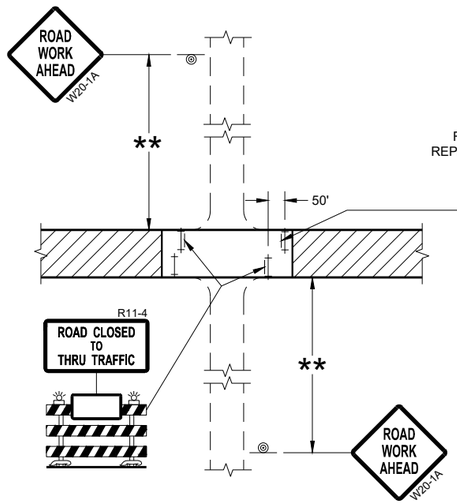
TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

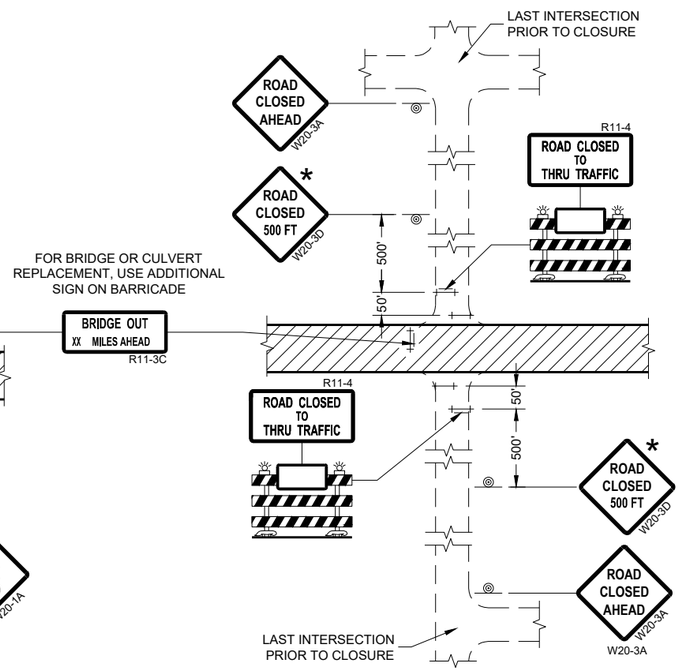
THE R11-2, R11-3, AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

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.





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

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

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

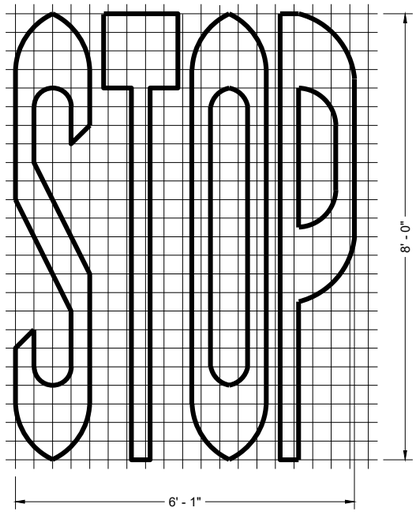
APPROVED
July 2018
DATE

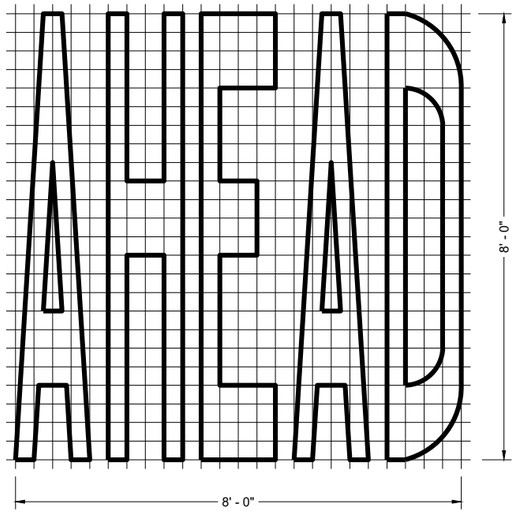
/S/ Andrew Heidtke
WORK ZONE ENGINEE

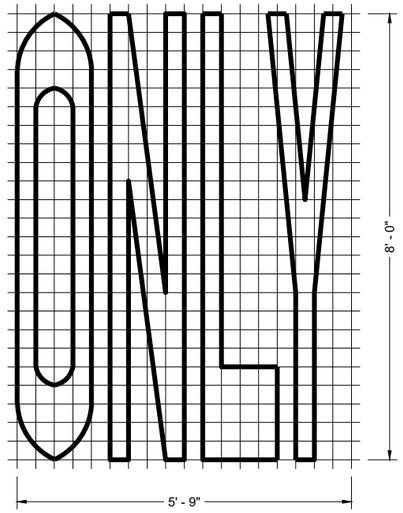
FHWA

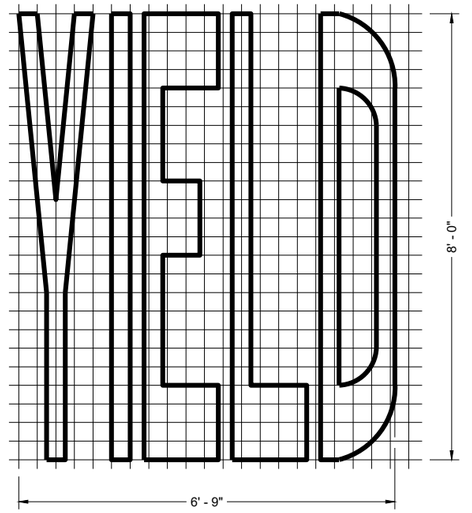
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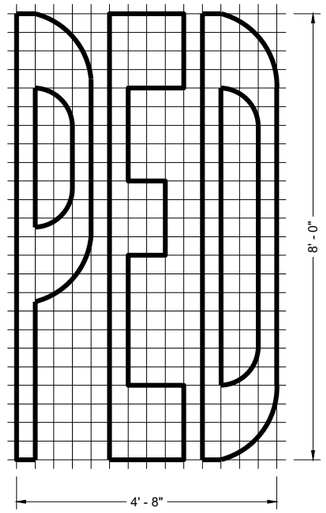
SDD 15C03 - 05

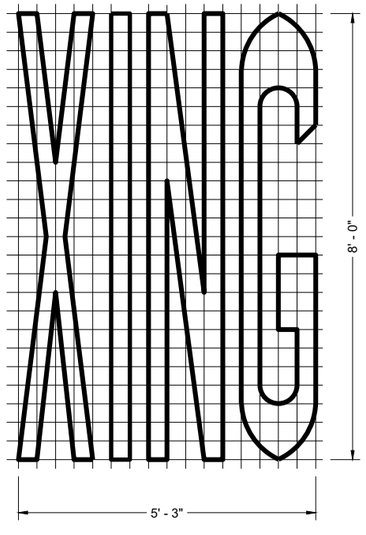


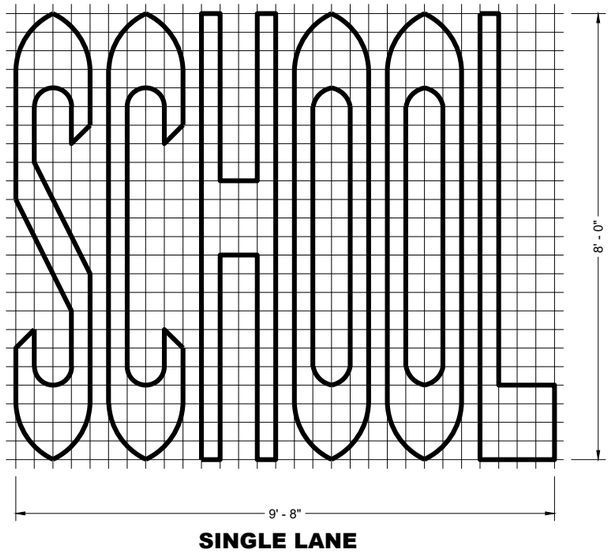




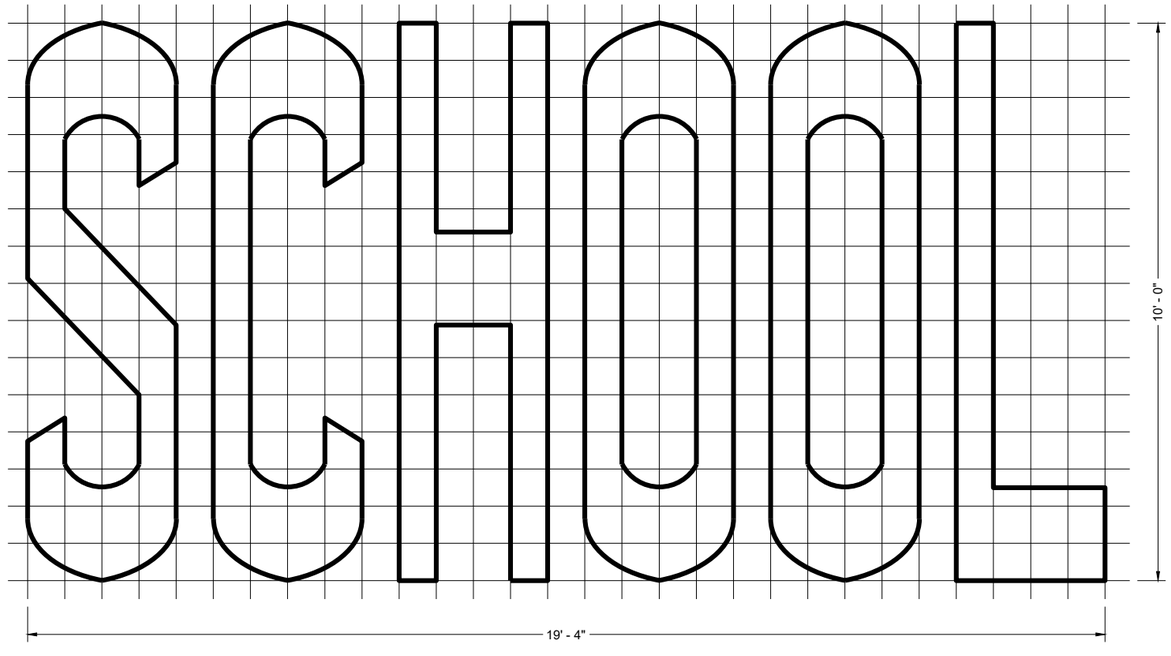








SINGLE LANE



TWO - LANE

GENERAL NOTES

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

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024 — DATE
/S/ Jeannie Silver — STATE SIGNING AND MARKING ENGINEER

FHWA

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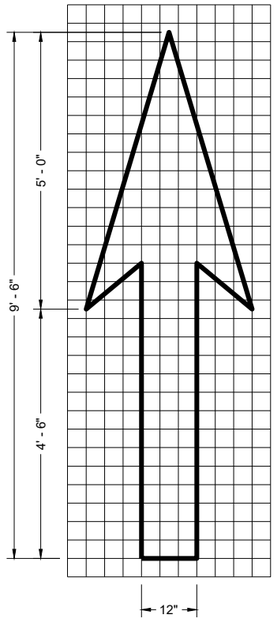
SDD 15C07-16b

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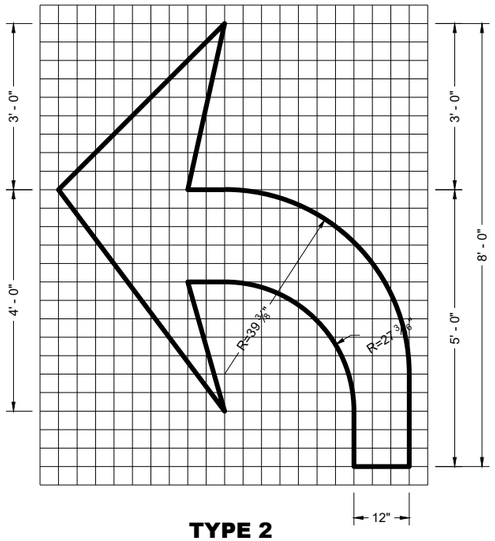
SDD 15C07-16b

GENERAL NOTES

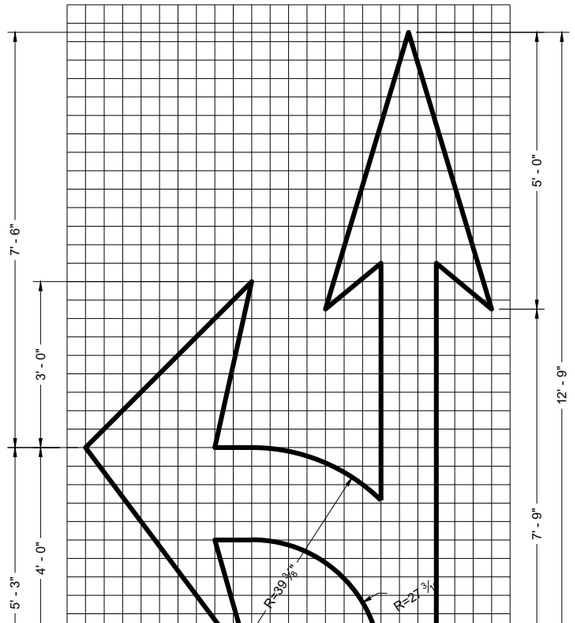
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



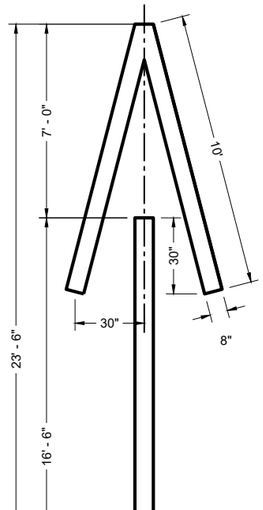
TYPE 1



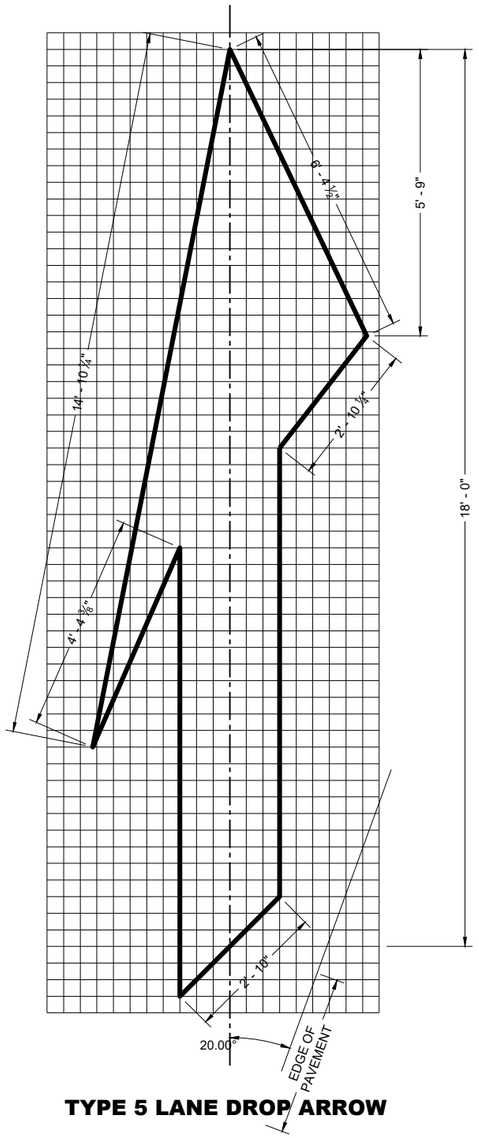
TYPE 2



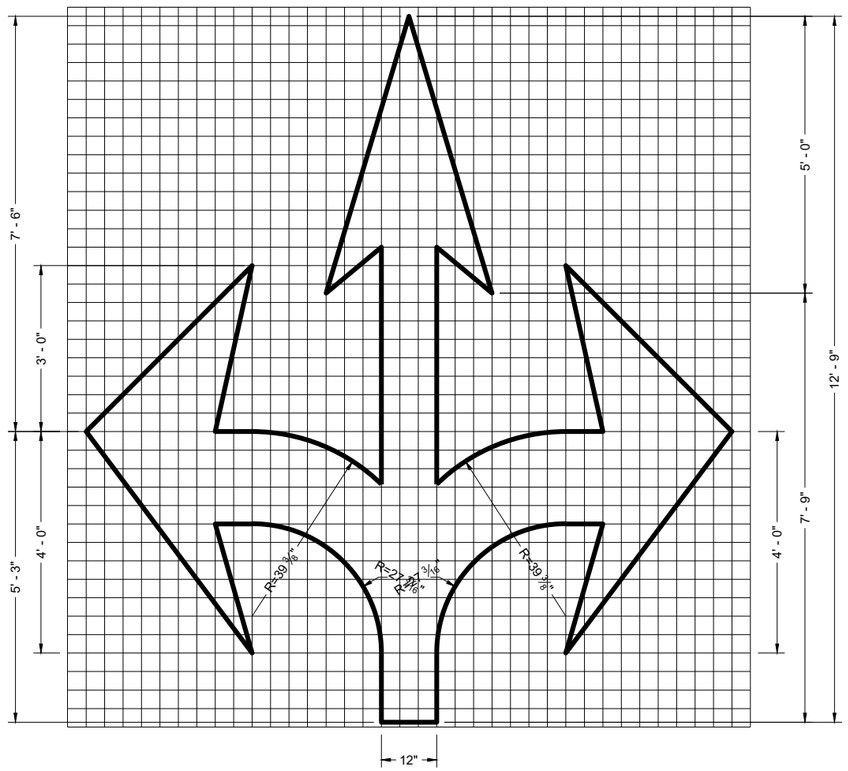
TYPE 3



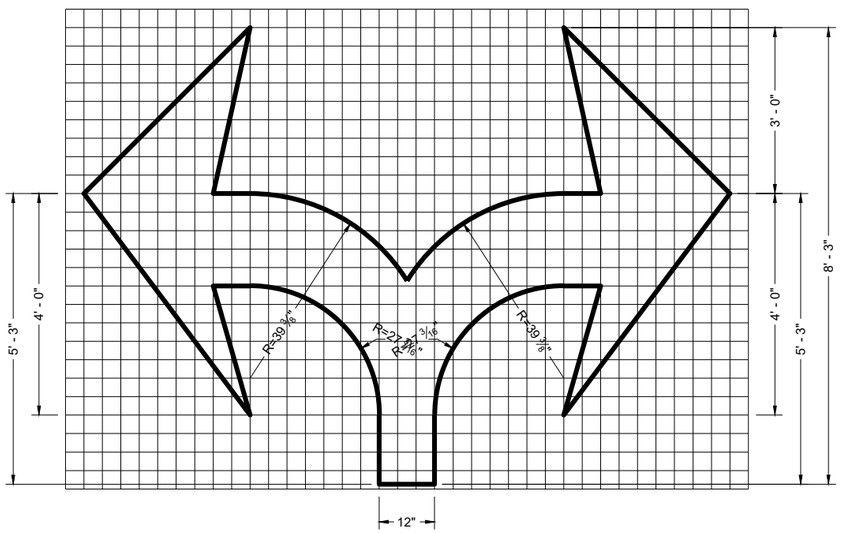
TYPE 4



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024 — DATE
/S/ Jeannie Silver — STATE SIGNING AND MARKING ENGINEER

FHWA

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SDD 15C07-16c

GENERAL NOTES

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

(1) LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING

(2) MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

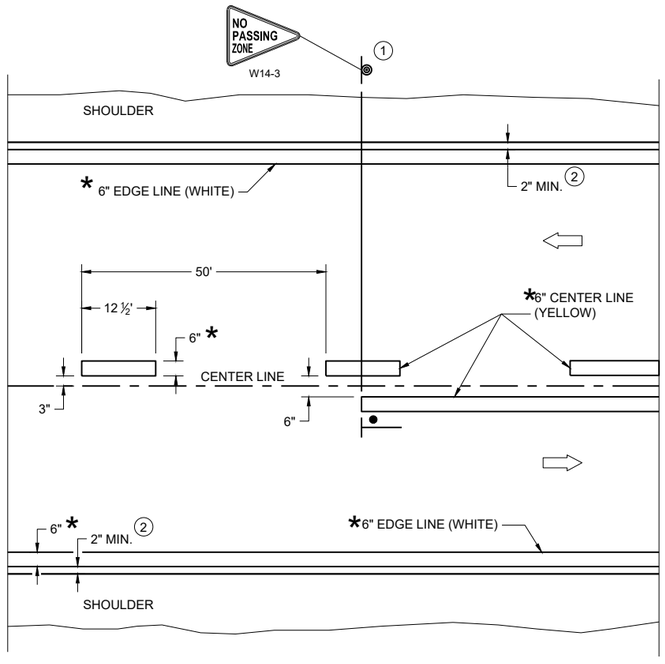
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

LEGEND

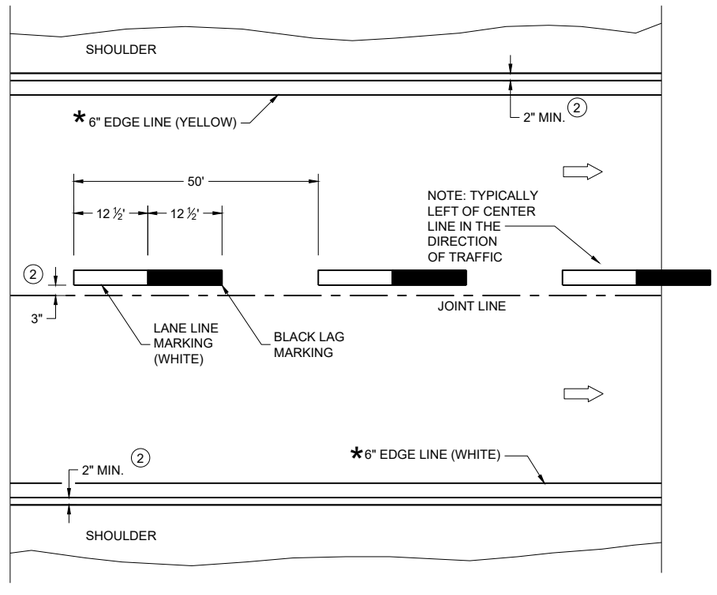
"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



TWO WAY TRAFFIC

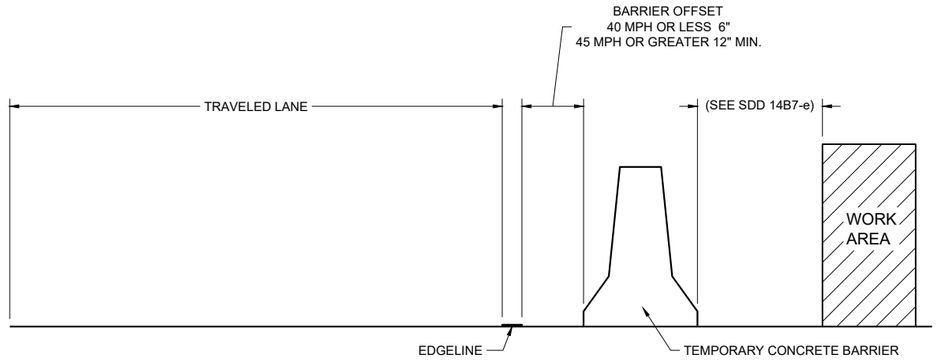


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

PERMANENT LONGITUDINAL PAVEMENT MARKINGS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED December 2024 DATE	/S/ Jeannie Silver Statewide Pavement Marking Engineer
FHWA	

6
SDD 15C08-24a



TEMPORARY BARRIER OFFSET FROM EDGELINE

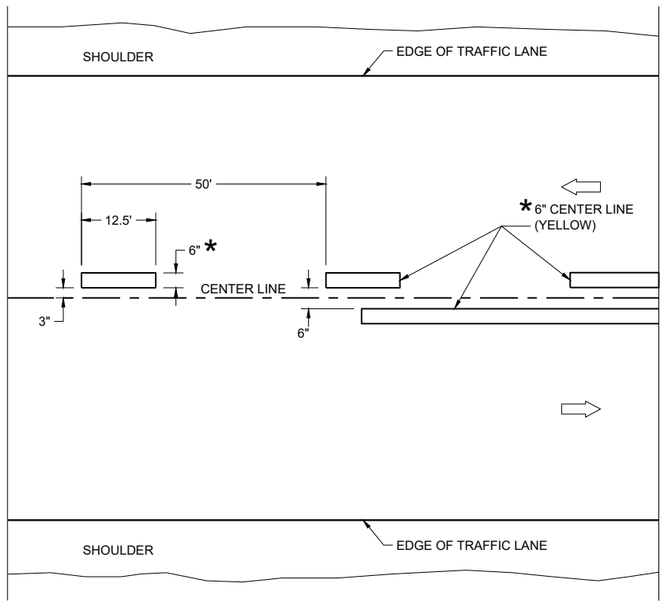
GENERAL NOTES

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

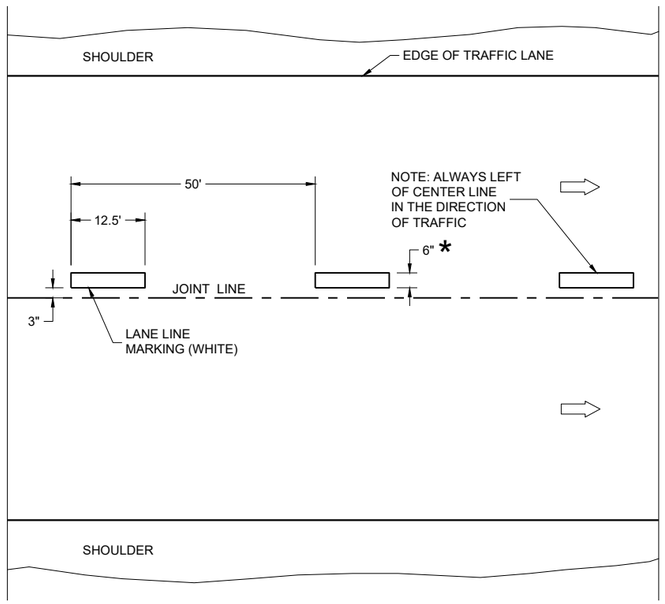
LEGEND

DIRECTION OF TRAFFIC

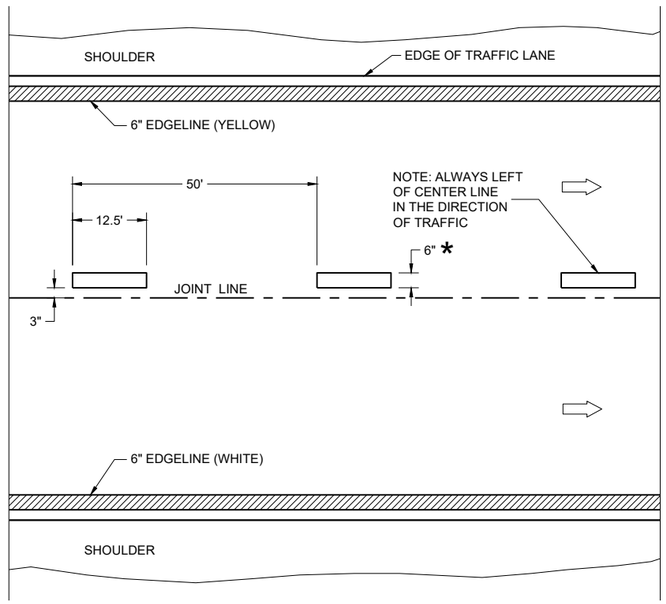
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

TEMPORARY PAVEMENT MARKING

TEMPORARY LONGITUDINAL PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2024
DATE
/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

6

SDD 15C08-24b

6

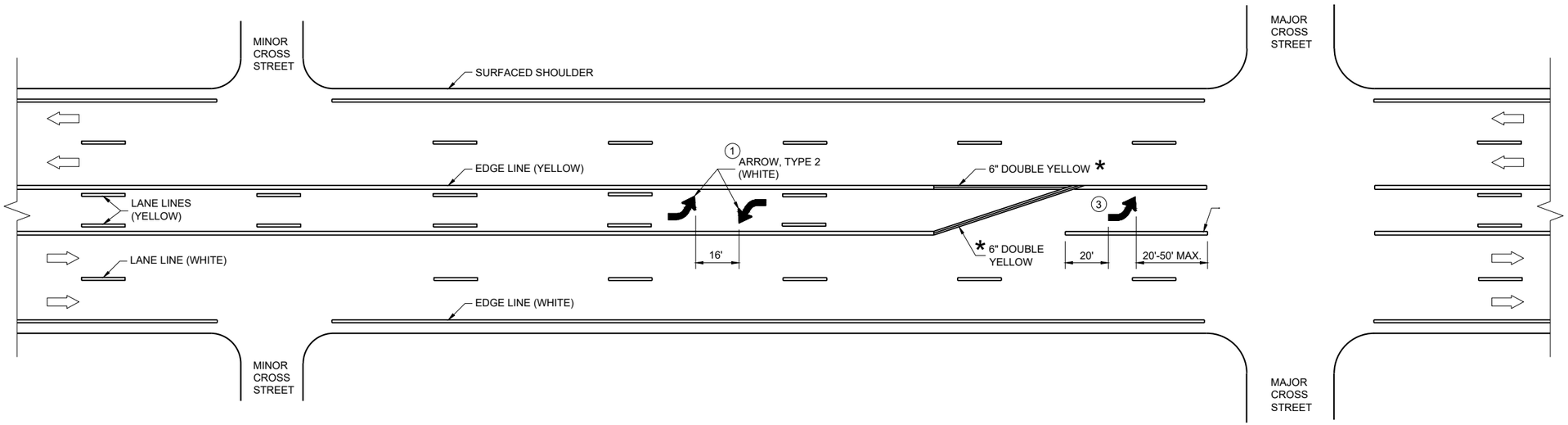
SDD 15C08-24b

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



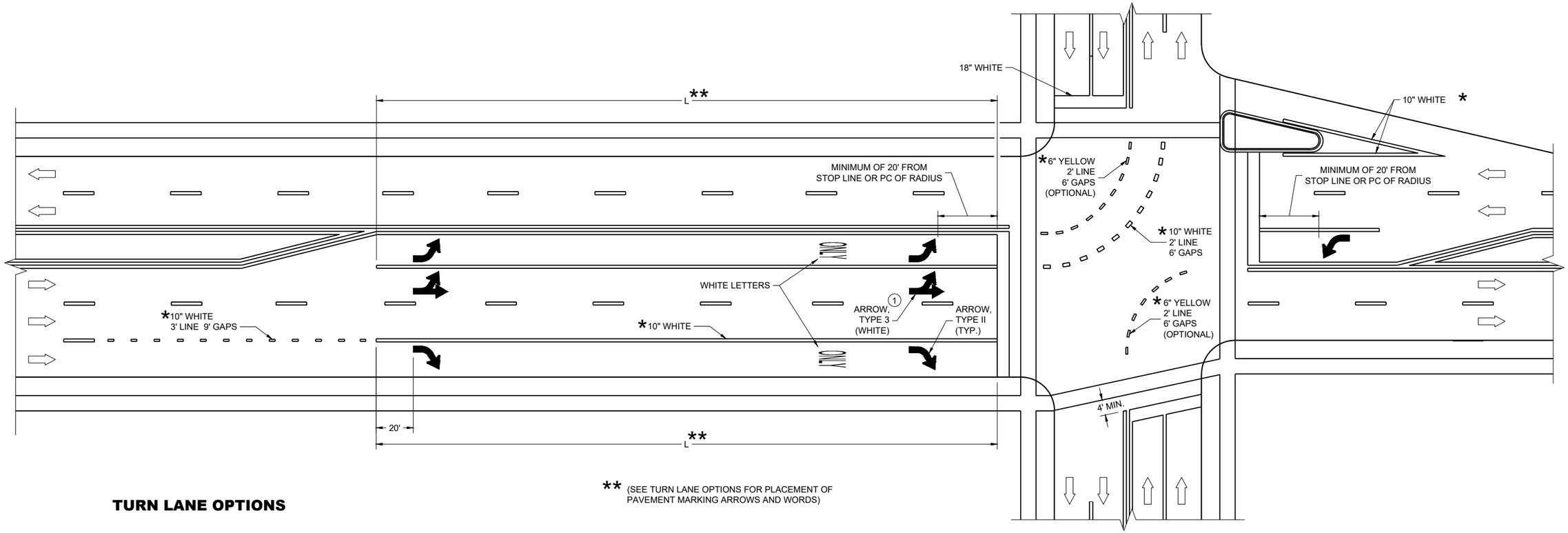
TWO WAY LEFT TURN LANE

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

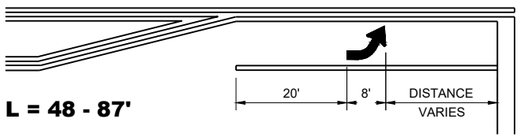
SDD 15C08-24c



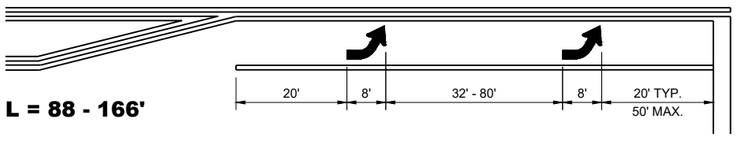
** (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

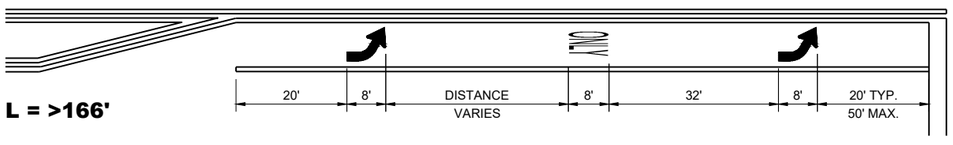
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT
REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

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

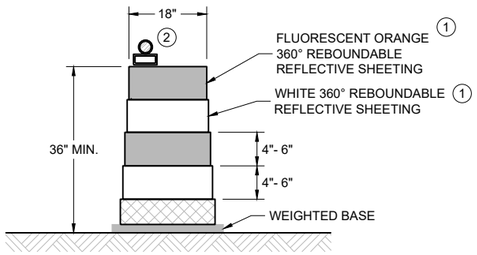
PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

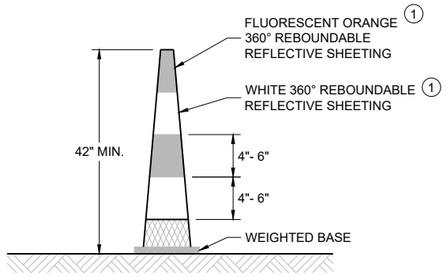
(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

(2) LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.



DRUM

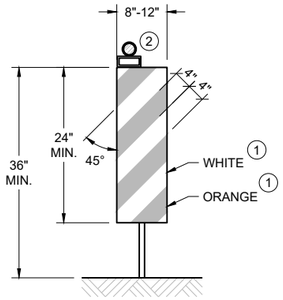
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

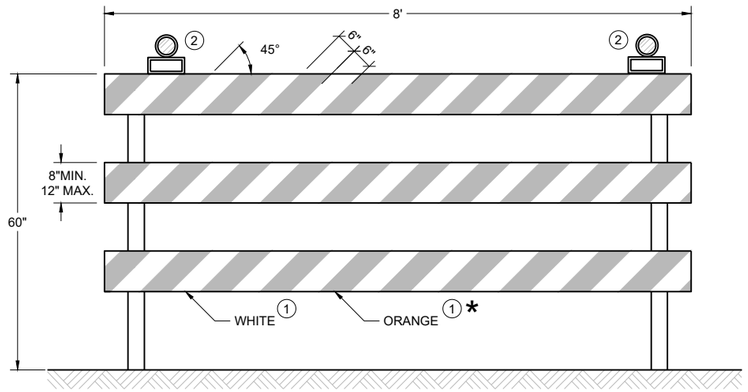
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



VERTICAL PANEL

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



TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2026 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

6
SDD 15C11-11b

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.

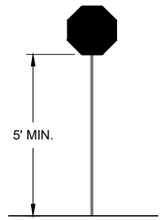
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

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.



STOP/SLOW PADDLE ON SUPPORT STAFF

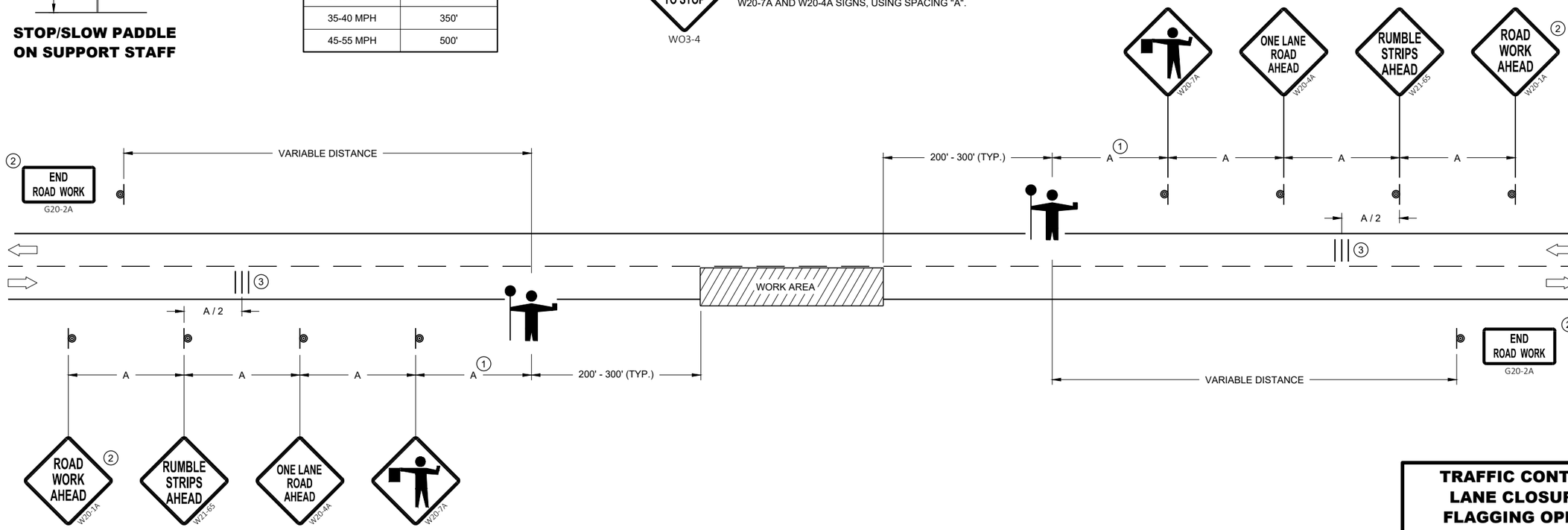
SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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



WO3-4

USE OF WO3-4 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 ENGINEE

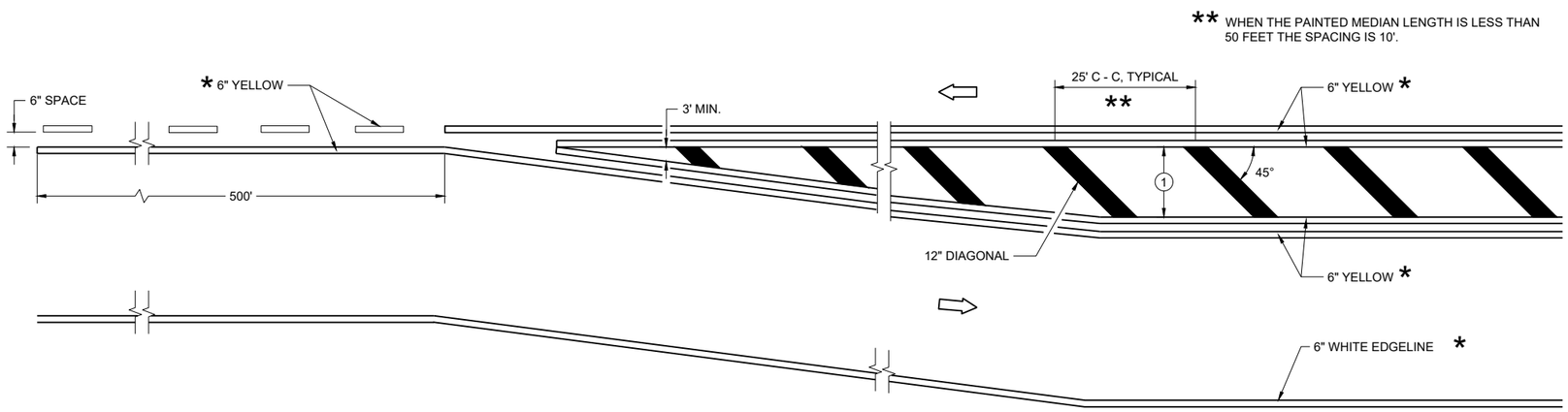
FHWA

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SDD 15C12 - 09a

6

SDD 15C12 - 09a



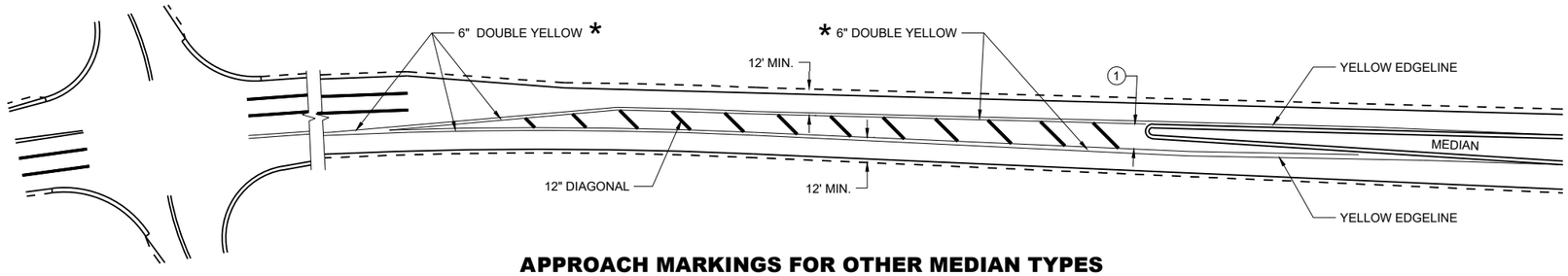
MEDIAN ISLAND DETAIL

GENERAL NOTES

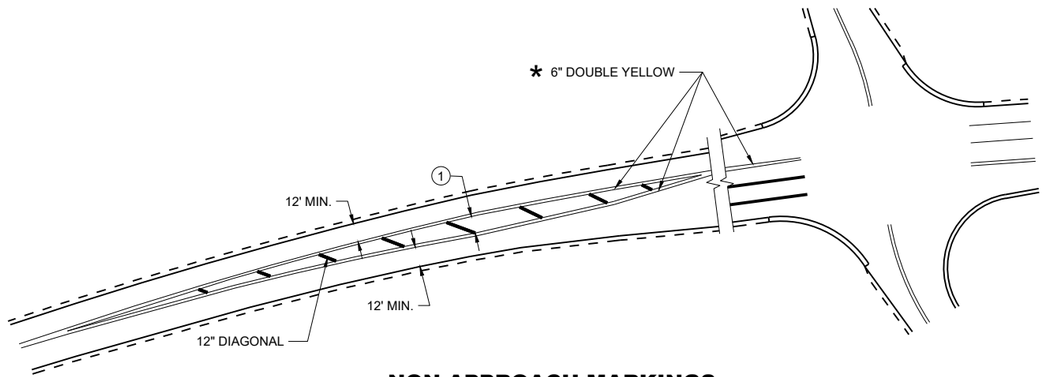
(1) DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT THE WIDEST POINT. OMIT DIAGONALS IF WIDTH IS LESS THAN 4 FEET.

DIRECTION OF TRAVEL

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON-APPROACH MARKINGS

MEDIAN ISLAND PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2024
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

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SDD 15C18-09a

SDD 15C18-09a

LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

GENERAL NOTES

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

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

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

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

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

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH

WORKERS SHALL NOT PERFORM WORK FROM ANY SHADOW OR PROTECTION VEHICLES.

UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

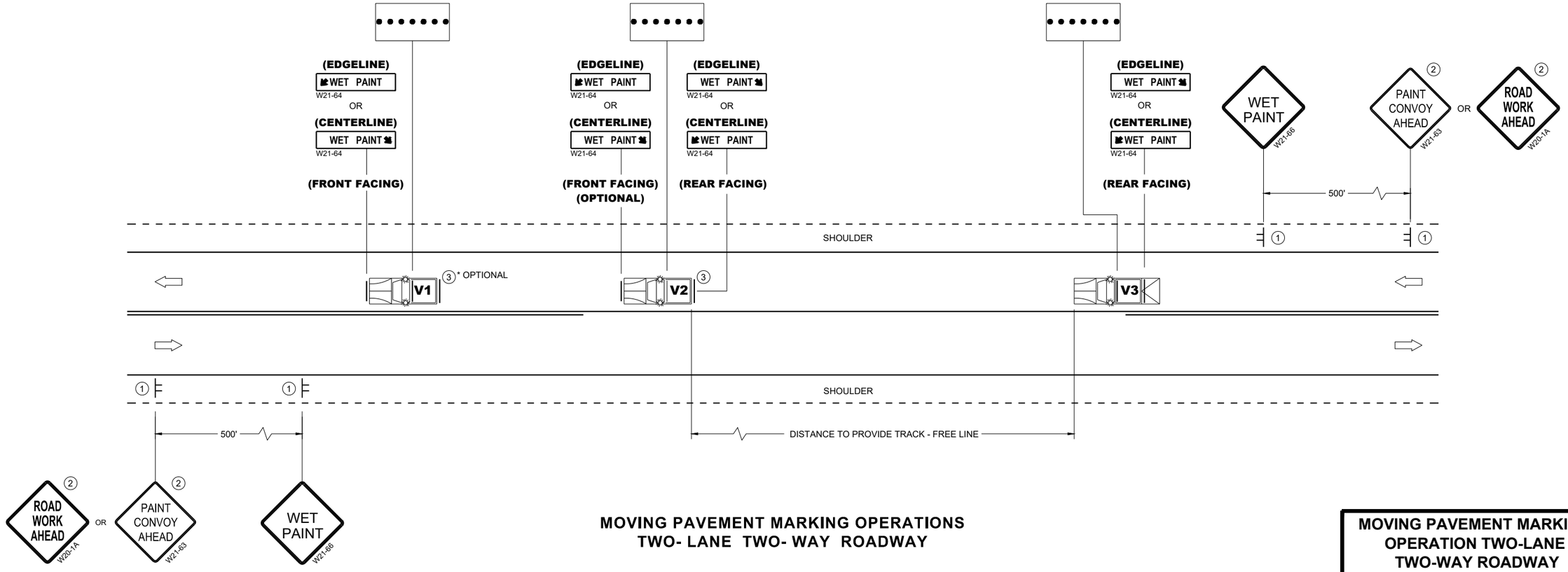
CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL BE A MINIMUM OF 28" FOR WET PAVEMENT MARKING .

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES AND AFTER EVERY MAJOR INTERSECTION.

(2) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.

(3) V1 AND V2 CAN BE SWITCHED SO THAT THE MARKER IS THE LEAD VEHICLE.



MOVING PAVEMENT MARKING OPERATIONS
TWO- LANE TWO- WAY ROADWAY

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025 — DATE
/S/ Andrew Heidtke — STATE ELECTRICAL ENGINEER

FHWA

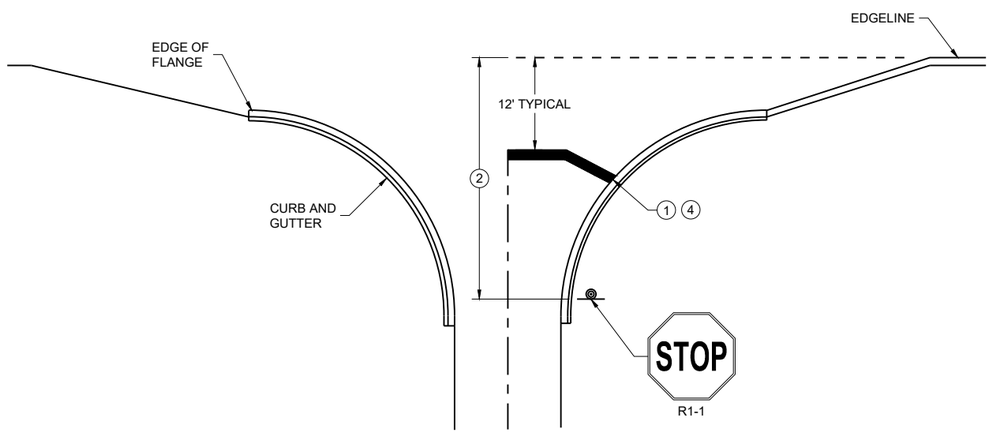
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SDD 15C19-11a

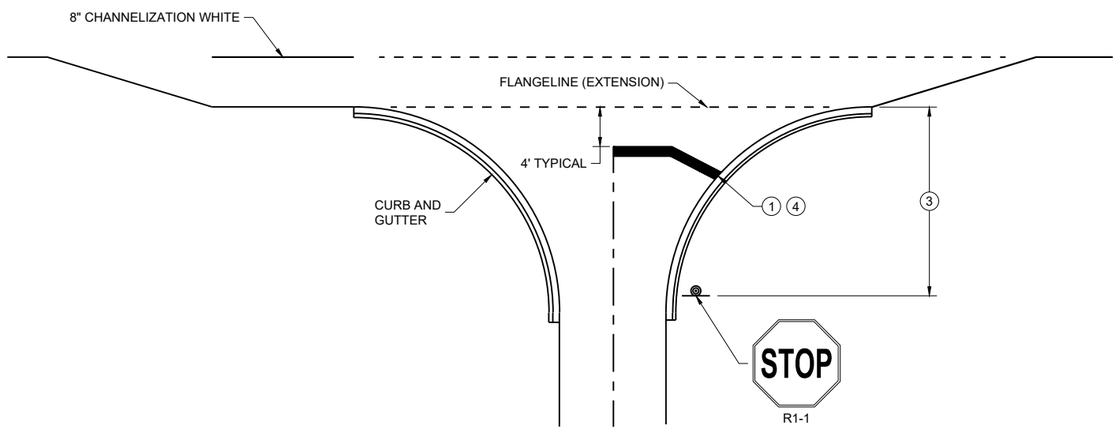
GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

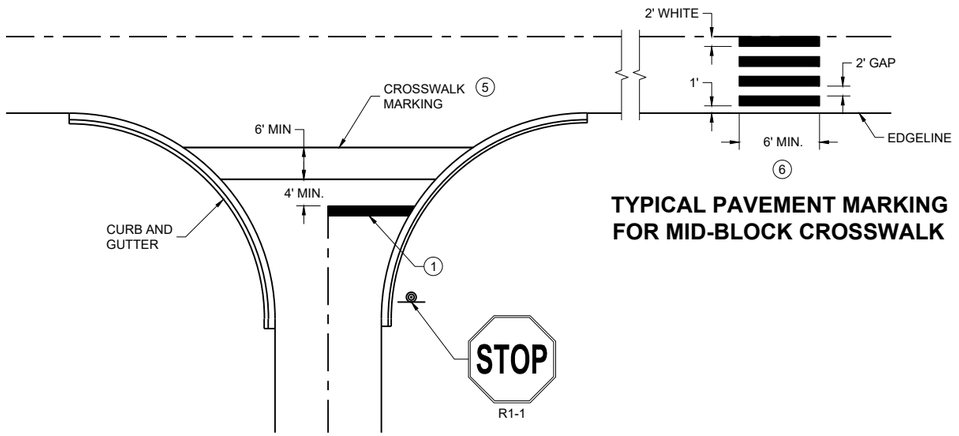
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGE LINE EXTENSION.
4. MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
5. LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES.
6. POSTED SPEED LIMITS OF 40 MPH OR GREATER USE A MINIMUM WIDTH OF 8' FOR MIDBLOCK CROSSWALKS



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

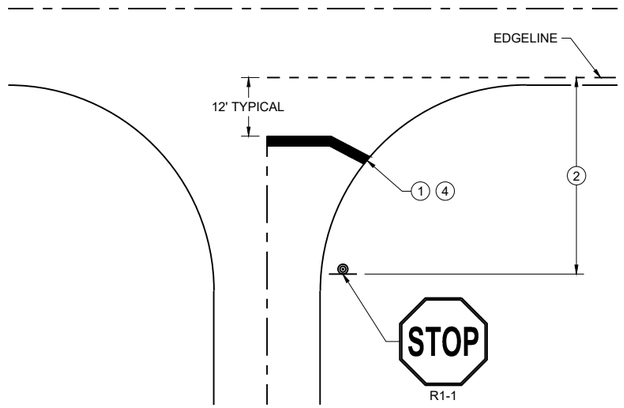


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDE ROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK 5

TYPICAL STOP LINE PAVEMENT MARKING FOR SIDE ROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

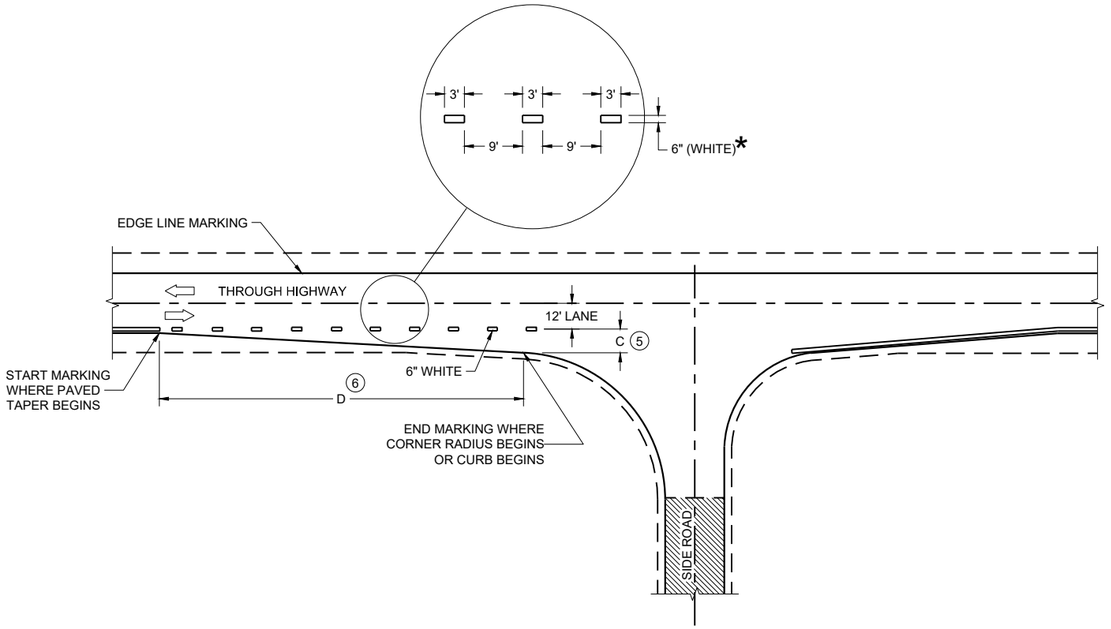
March 2024 — DATE

/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER

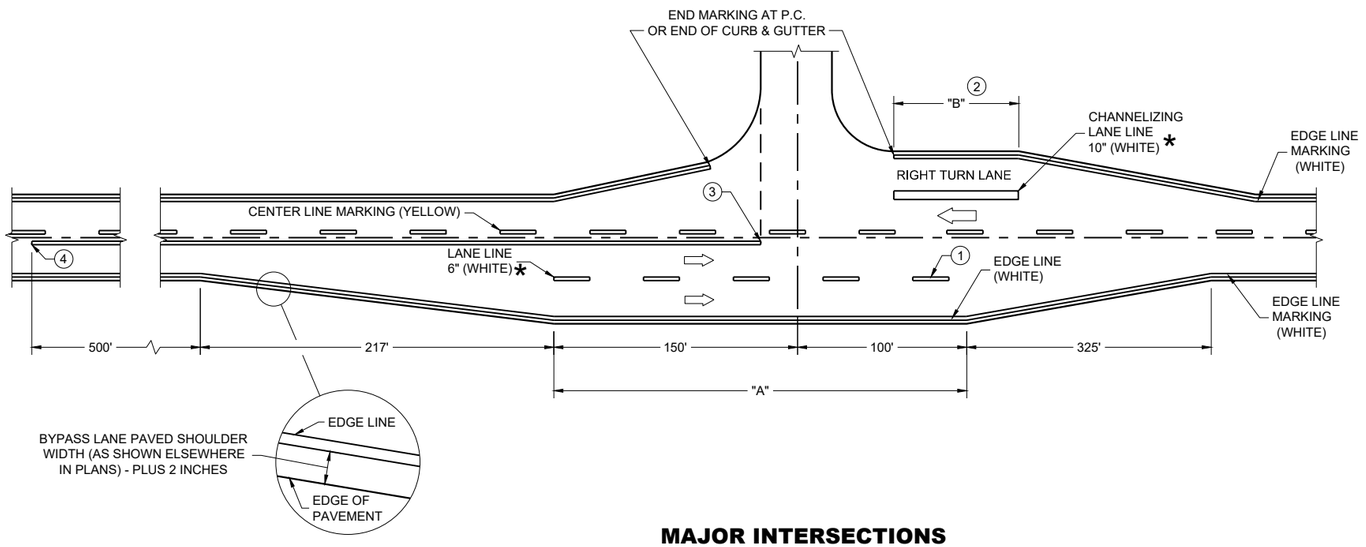
FHWA

6

SDD 15C33-05



MINOR INTERSECTION



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

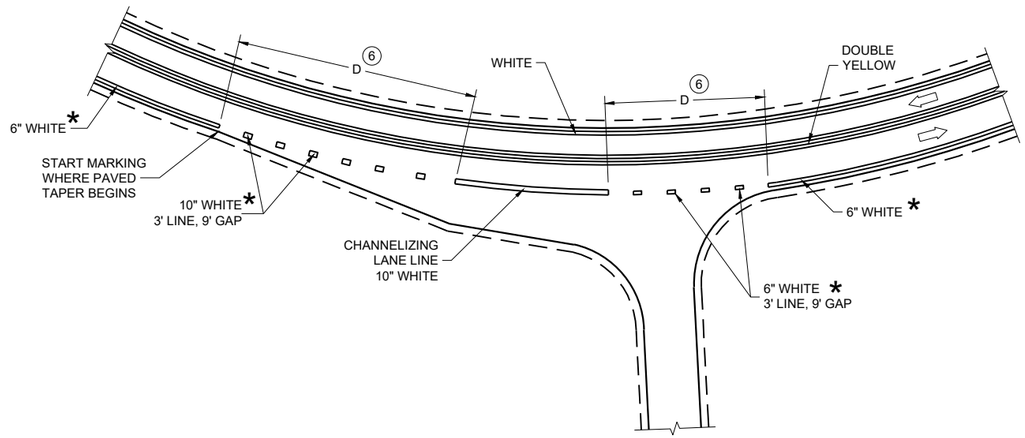
GENERAL NOTES

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

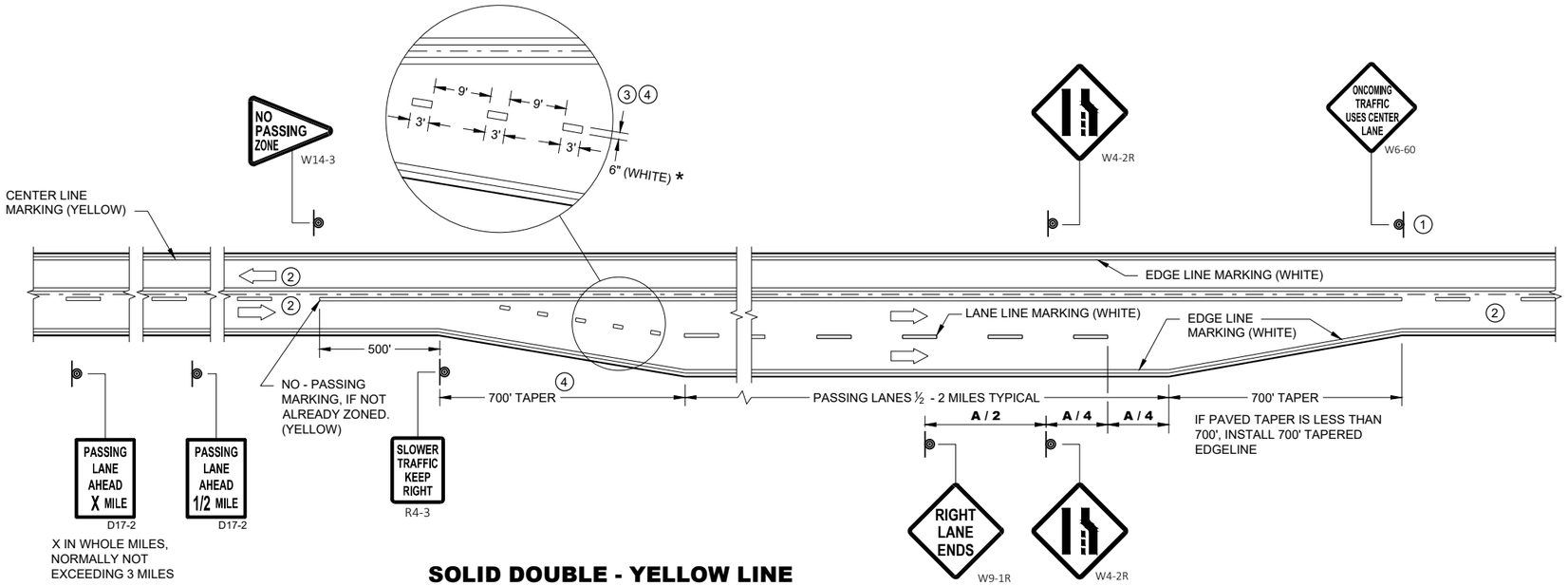
DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE

PAVEMENT MARKING (INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



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

GENERAL NOTES

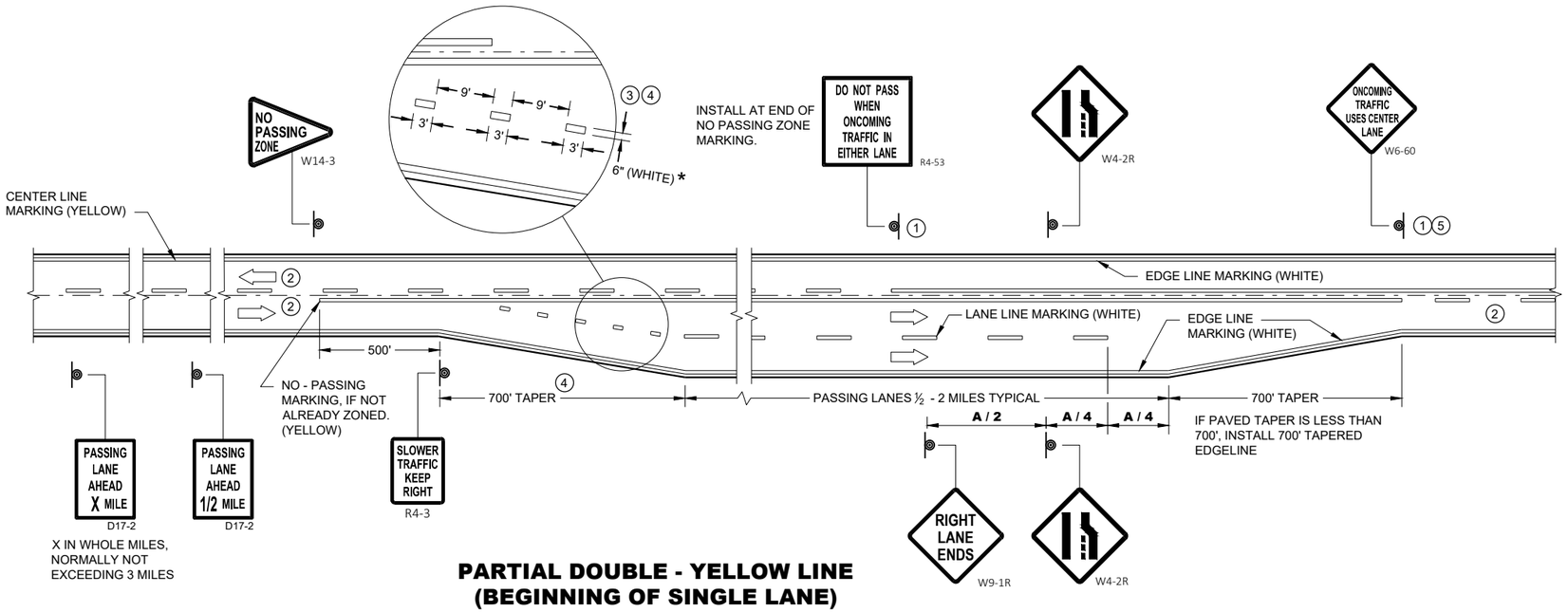
1. SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
2. THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
3. THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE, 9' GAP, EXCEPT RETRACE THE EXISTING LINE -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



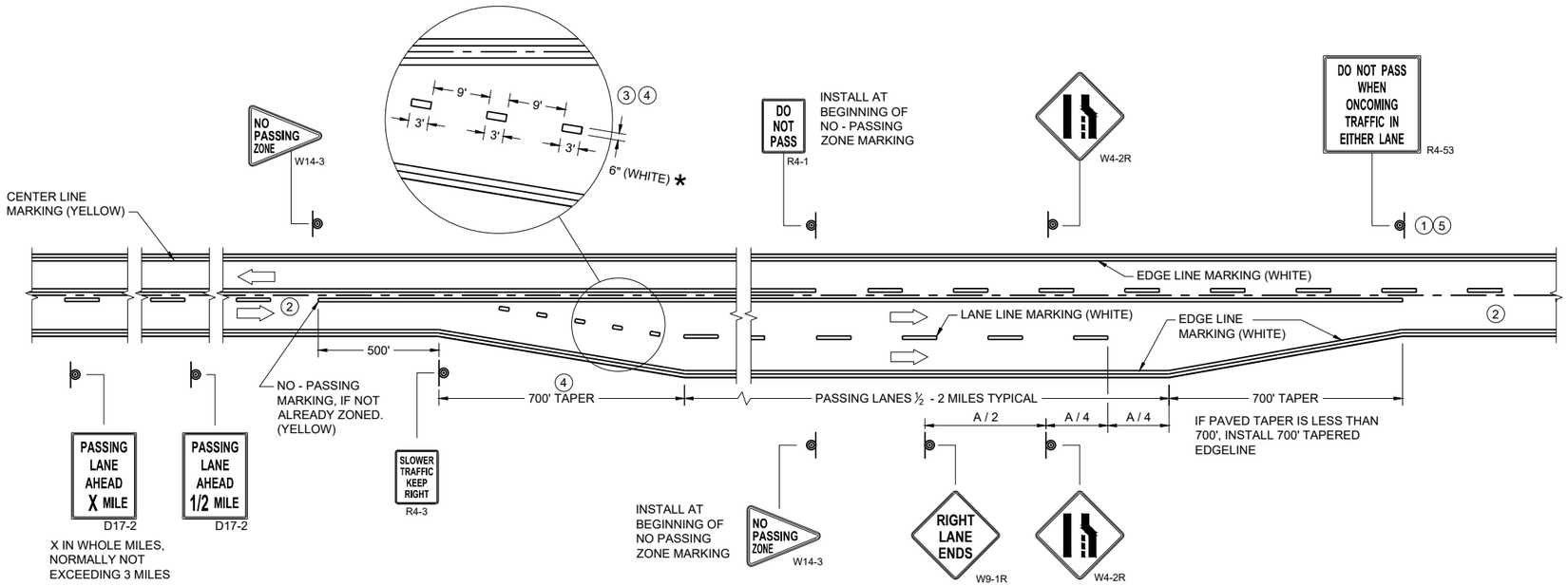
PARTIAL DOUBLE - YELLOW LINE
(BEGINNING OF SINGLE LANE)

PAVEMENT MARKING & SIGNING (CLIMBING LANE & PASSING LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C35-06b
SDD 15C35-06b



SOLID DOUBLE - YELLOW LINE
(END OF SINGLE LANE)

GENERAL NOTES

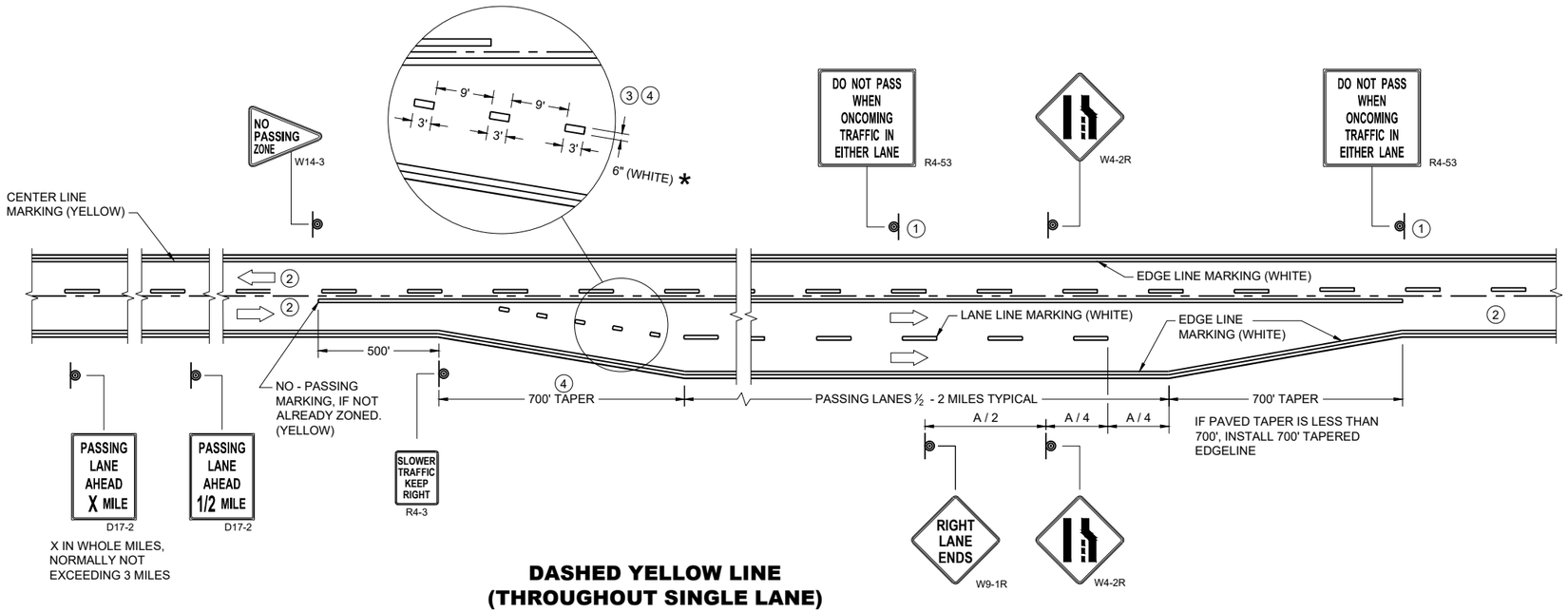
1. SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
2. THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
3. THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE, 9' GAP, EXCEPT RETRACE THE EXISTING LINE -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



DASHED YELLOW LINE
(THROUGHOUT SINGLE LANE)

PAVEMENT MARKING & SIGNING (CLIMBING LANE & PASSING LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

6

SDD 15C35-06c

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.

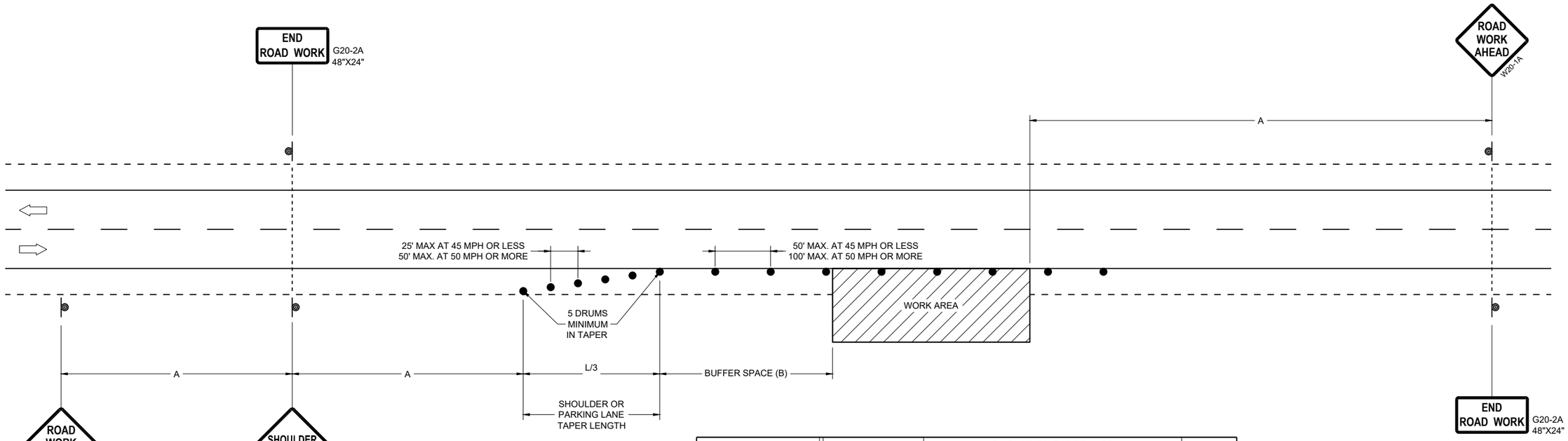
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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.



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	155
30	200'	15	20	25	30	35	40	200
35	350'	20	27	34	40	47	54	250
40	350'	26	35	44	53	62	70	305
45	500'	45	59	74	89	104	119	360
50	500'	50	66	83	99	116	132	425
55	500'	54	73	91	109	127	145	495

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

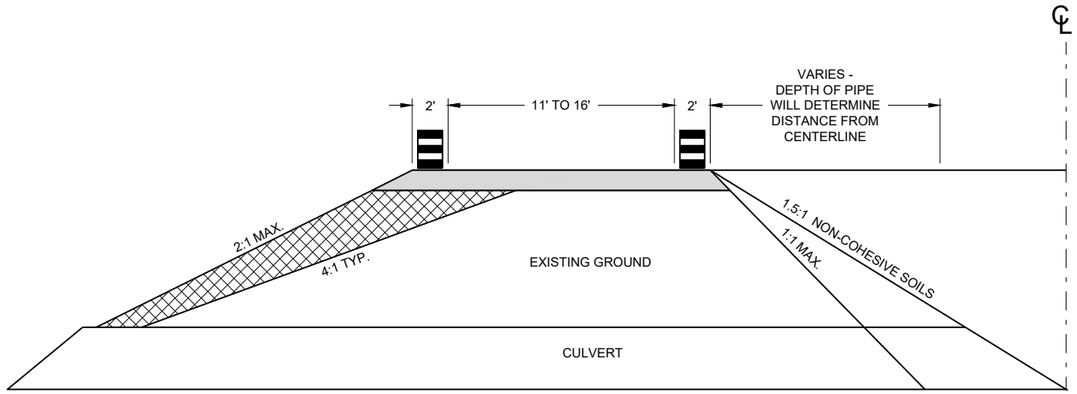
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2026
DATE

/S/ ANDREW HEIDTKE
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER

FHWA

6
SDD 15D28-06



CROSS SECTION

GENERAL NOTES

USE 1:1 FOR COHESIVE CLAYS AND SILTS, LOAMS, SANDY CLAYS AND ANGULAR GRAVEL SOILS.
USE 1.5:1 FOR NON-COHESIVE SOILS.

THE TAPER SHOULD EXTEND ACROSS THE SHOULDER UNLESS DOING SO WOULD GREATLY CONFLICT WITH THE WORK OPERATION.

ALL LANE CLOSURE SIGNS SHALL BE REMOVED OR COVERED AND ALL DEVICES REMOVED BEYOND THE SHOULDER WHEN WORK IS NOT IN PROGRESS AND THE LANE IS RESTORED TO A SAFE OPERATING CONDITION.

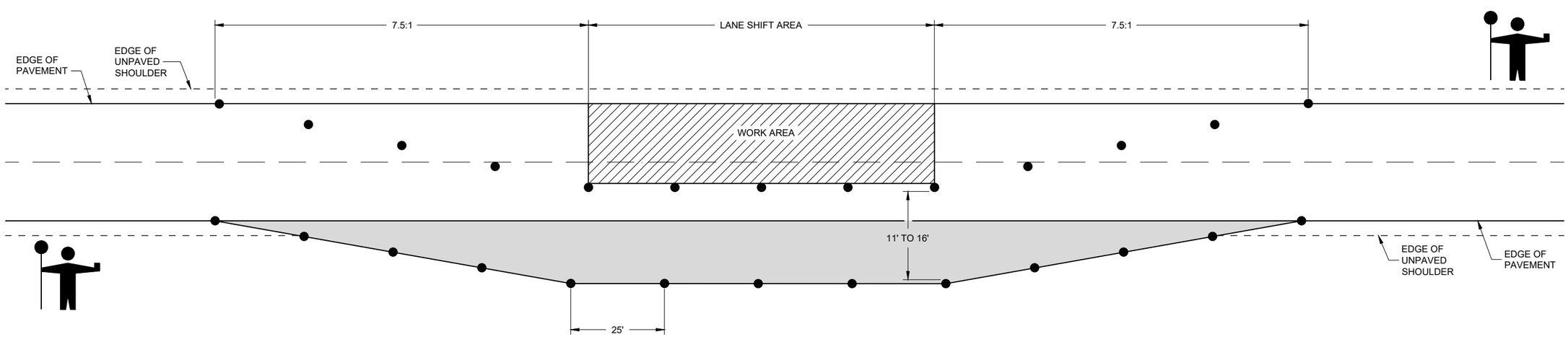
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

USE WITH SDD 15C12 "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATIONS"

USE WITH SDD 15D45 "SIGNING ON ROADWAYS WITH LOOSE GRAVEL"

LEGEND

- DRUM WITHOUT WARNING LIGHT
- 6" BASE AGGREGATE DENSE 1 ¼" -INCIDENTAL TO LANE SHIFT ITEM
- FILL - INCIDENTAL TO LANE SHIFT ITEM
- WORK AREA
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF



LANE SHIFT IN FLAGGING OPERATION

TRAFFIC CONTROL, TEMPORARY LANE SHIFT DURING CULVERT WORK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D48 - 01

6

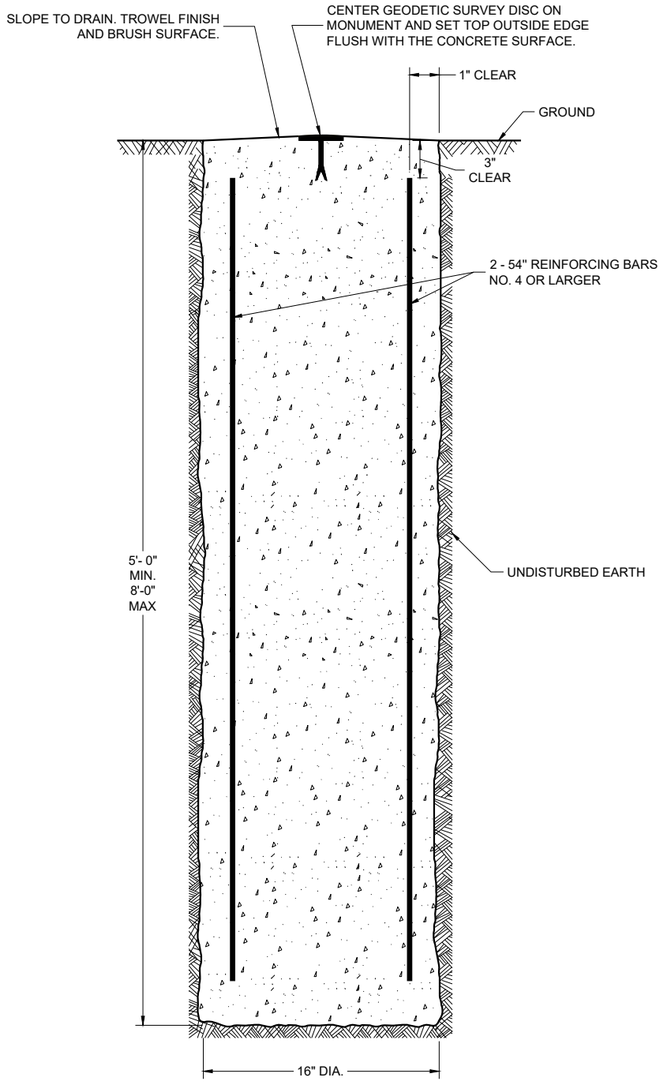
SDD 15D48 - 01

GENERAL NOTES

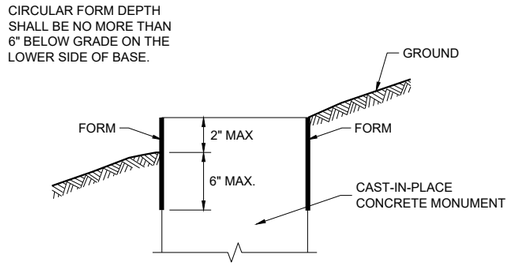
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

SURVEY MONUMENT SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

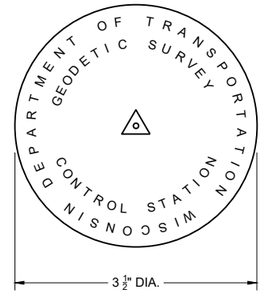
IF A SURVEY MONUMENT REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.



CAST-IN-PLACE CONCRETE MONUMENT



FORMING DETAIL



GEODETIC SURVEY DISC
FURNISHED BY WISDOT

GEODETIC SURVEY MONUMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2025 — DATE
/S/ DAVID J. LAYTON — CHIEF SURVEY AND MAPPING ENGINEER

FHWA

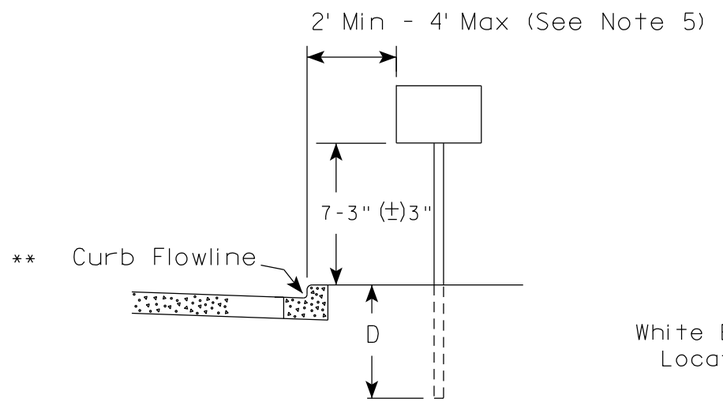
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SDD 16A02-01

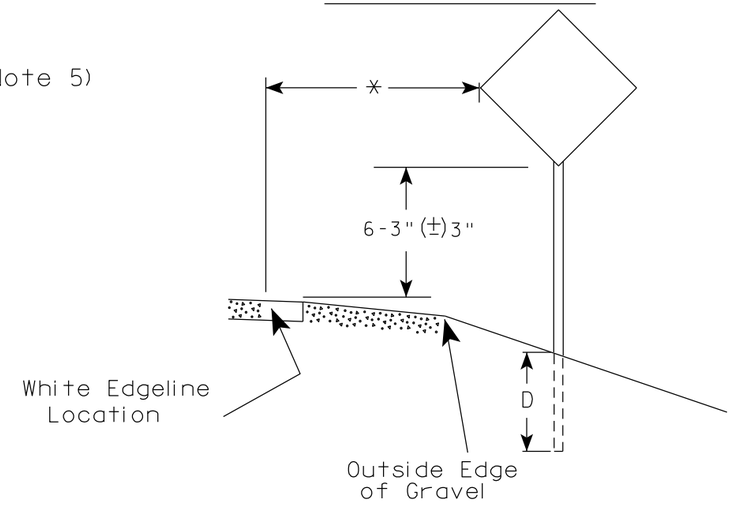
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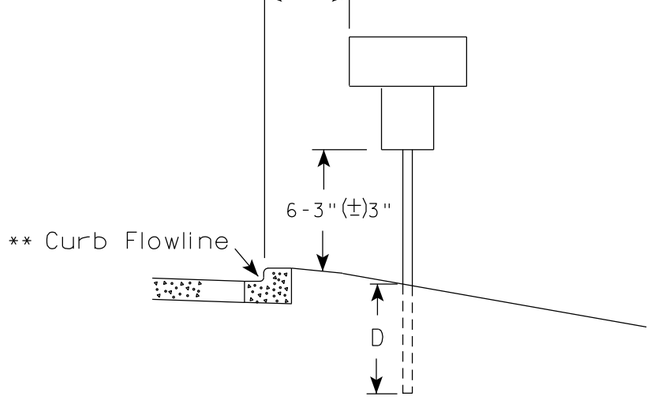
SDD 16A02-01

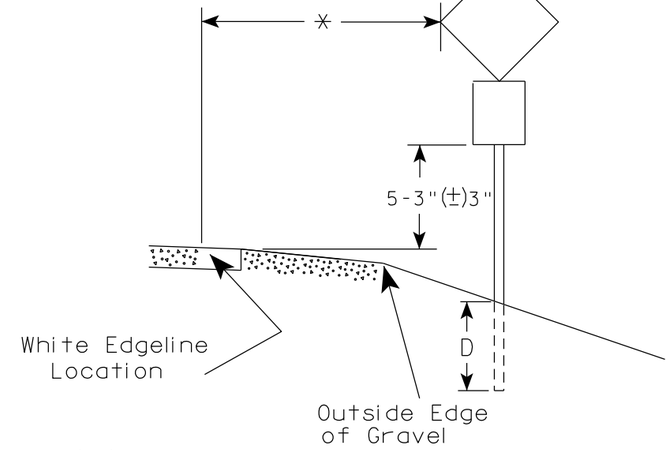
URBAN AREA



RURAL AREA (See Note 2)







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

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

POST EMBEDMENT DEPTH

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

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±) 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".
3. For expressways and freeways, mounting height is 7'- 3" (±) 3" or 6'-3" (±) 3" depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±) 3".
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directd by the Engineer.

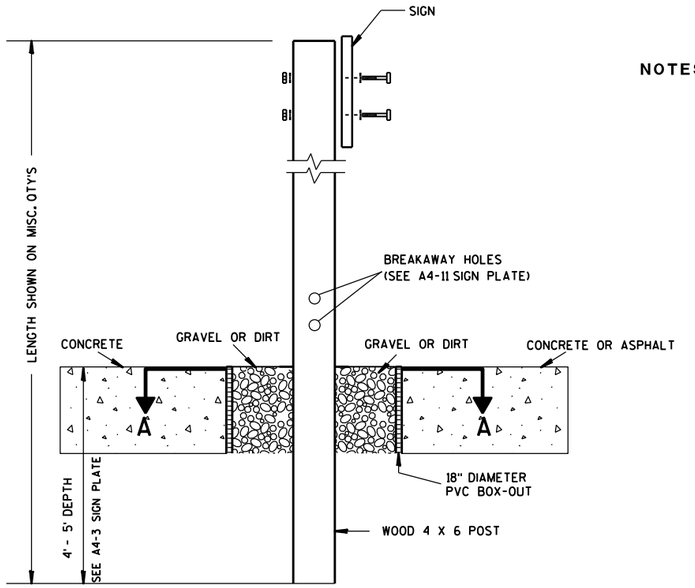
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-3.23

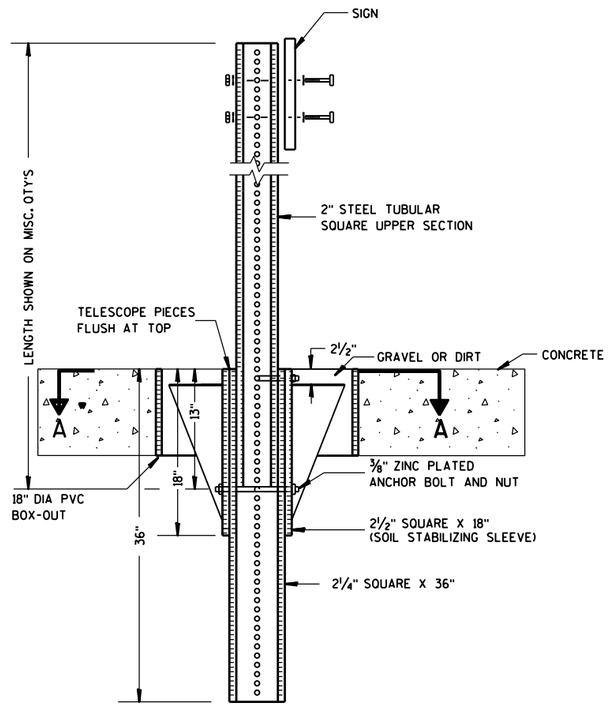
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 91	E



ELEVATION VIEW

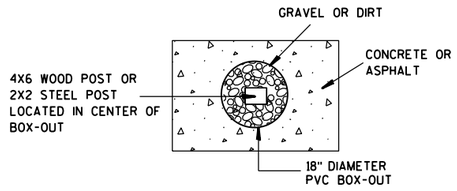
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

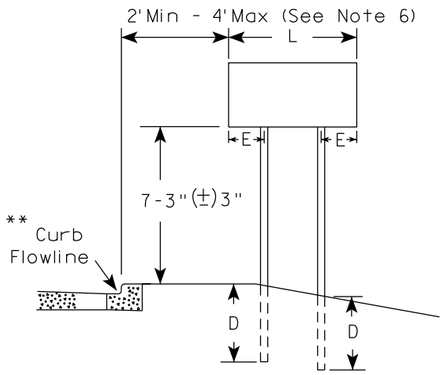
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

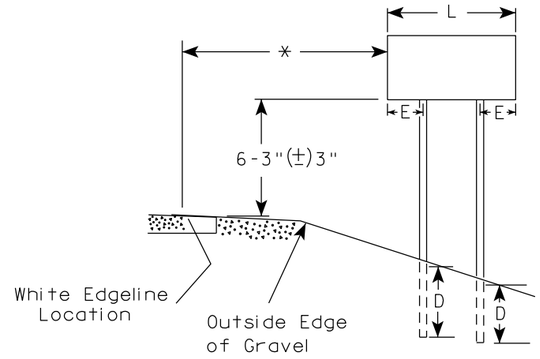
DATE 1/27/14 PLATE NO. A4-3B.1

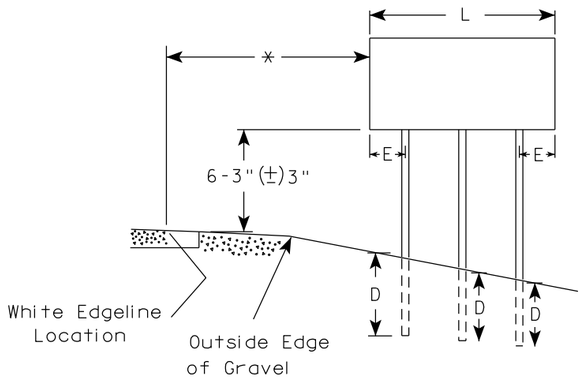
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

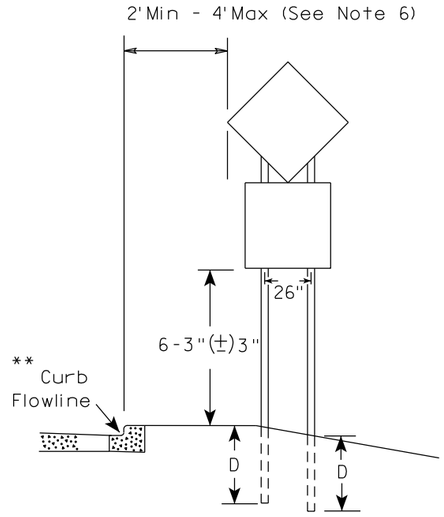
URBAN AREA



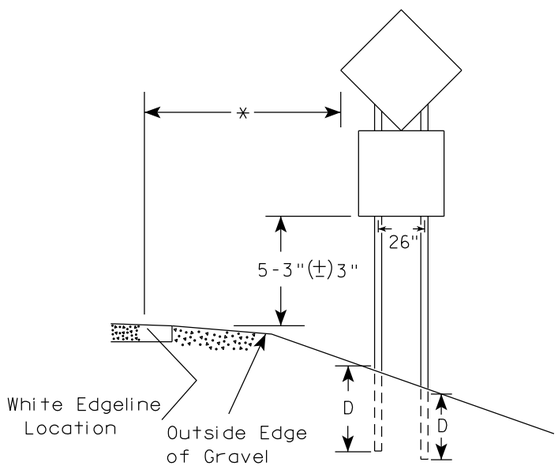
RURAL AREA (See Note 3)







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"

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) 3" or 6'-3" (±) 3" depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directed by the engineer.
8. 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.

POST EMBEDMENT DEPTH

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

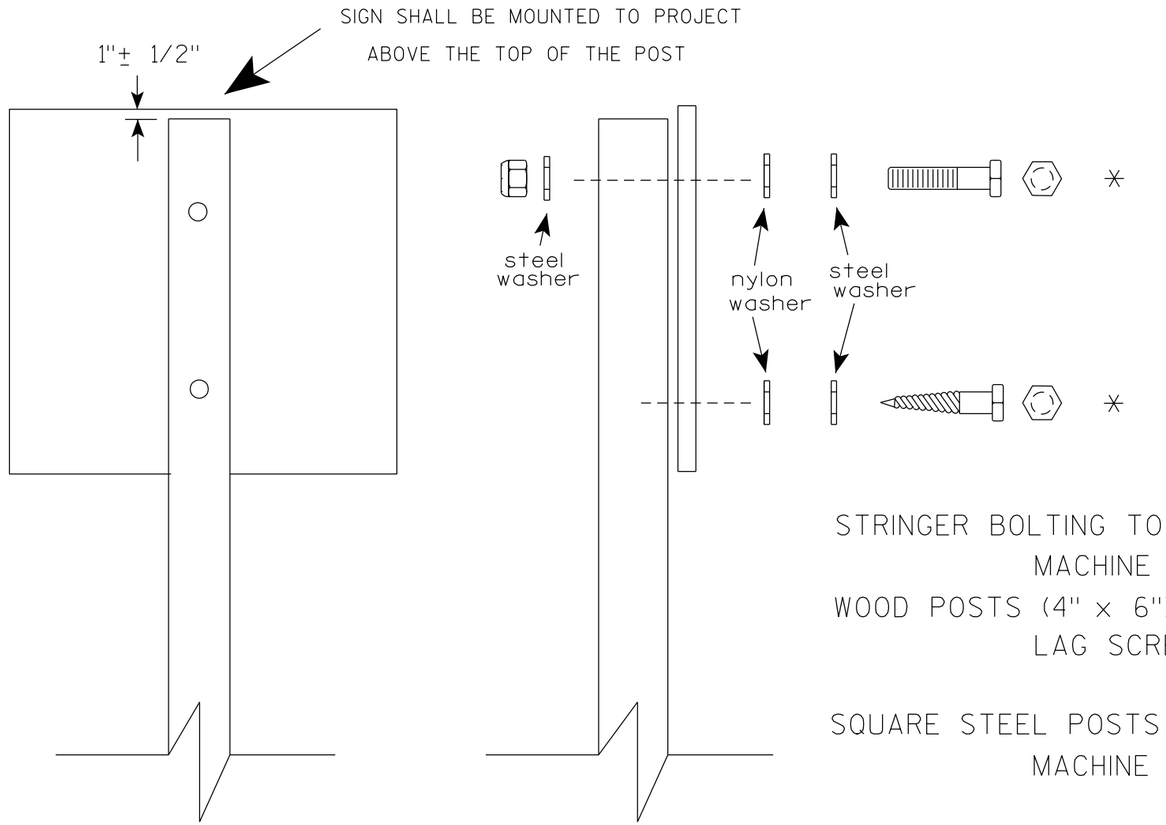
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-4.16

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 93	E



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

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

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

ATTACHMENT OF SIGNS TO POSTS

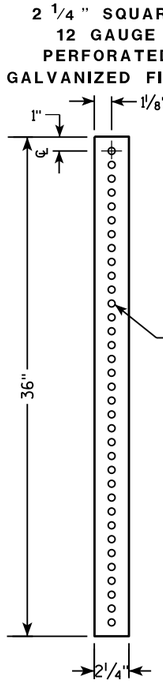
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

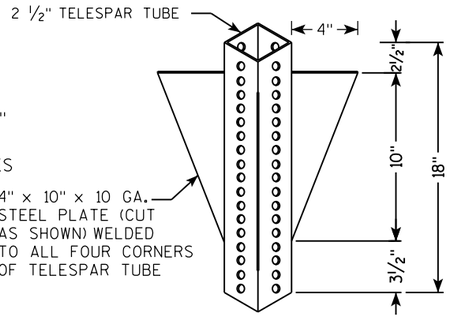
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

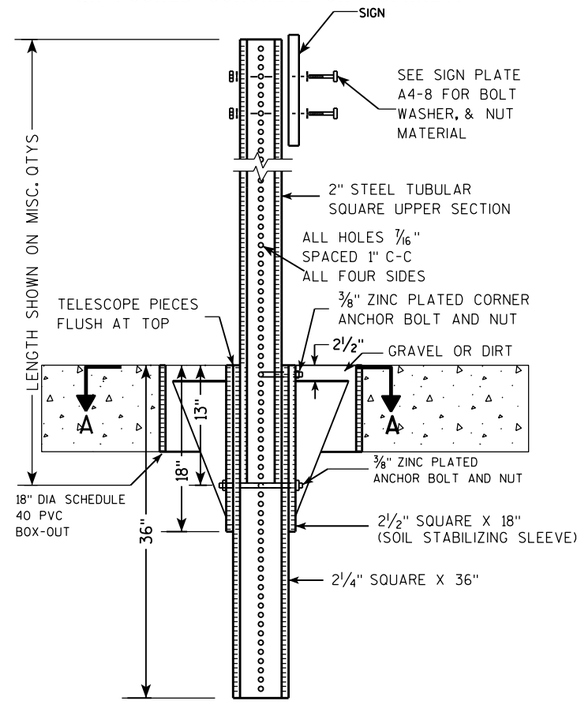
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



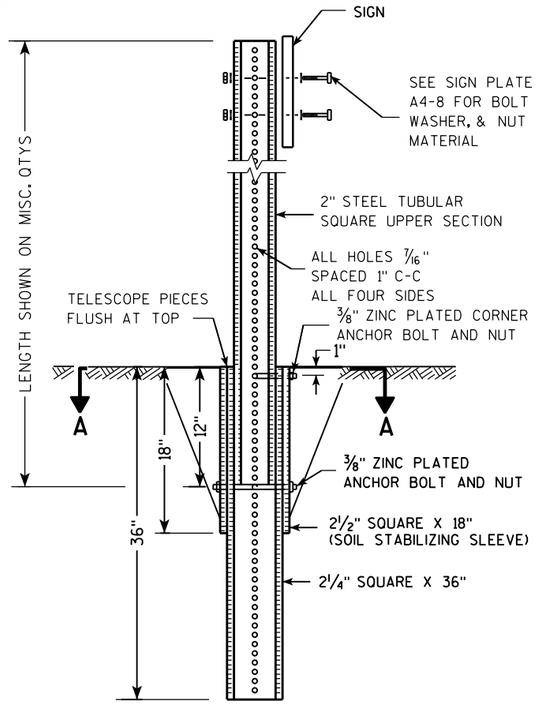
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

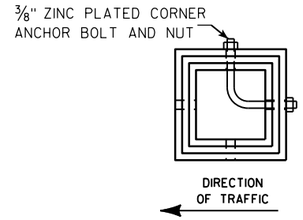


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





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

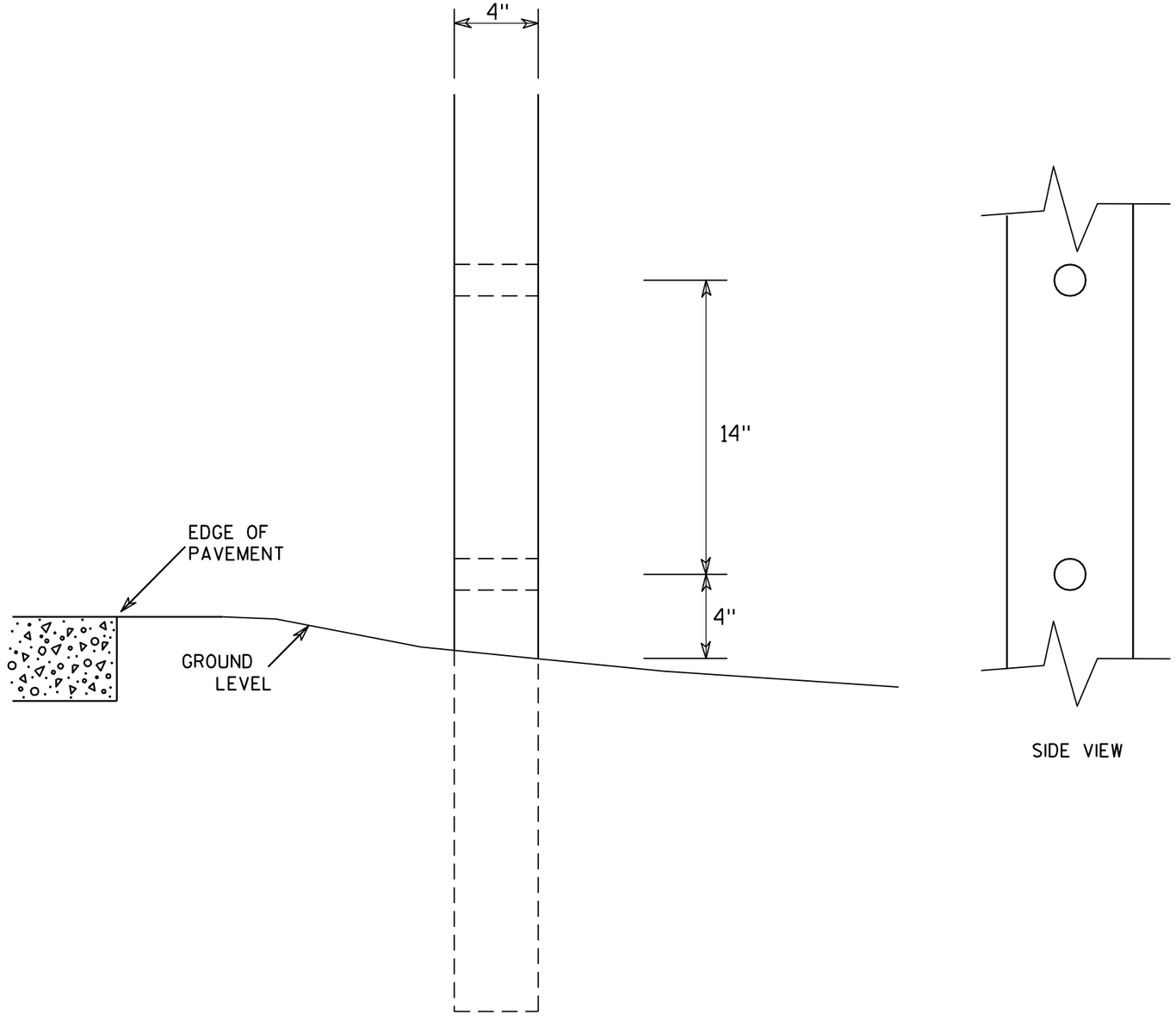
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 95 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja 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 1½" diameter holes drilled perpendicular to the roadway centerline.

7

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

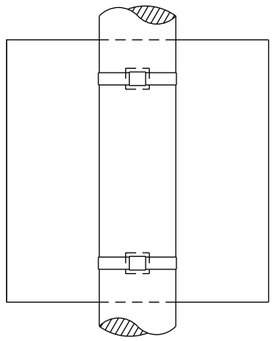
APPROVED Chester J Spang for State Traffic Engineer

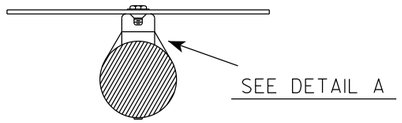
DATE 3/27/97 PLATE NO. A4-11.2

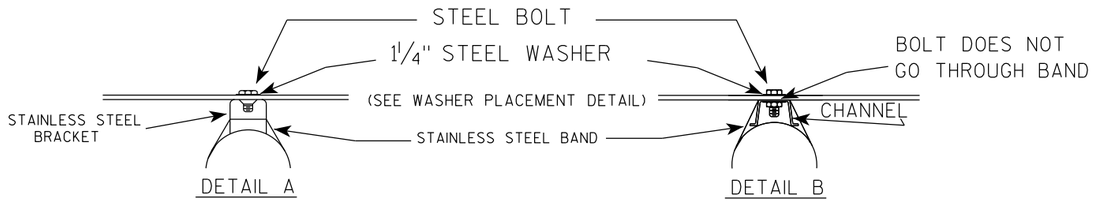
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 96	E

BANDING

SINGLE SIGN



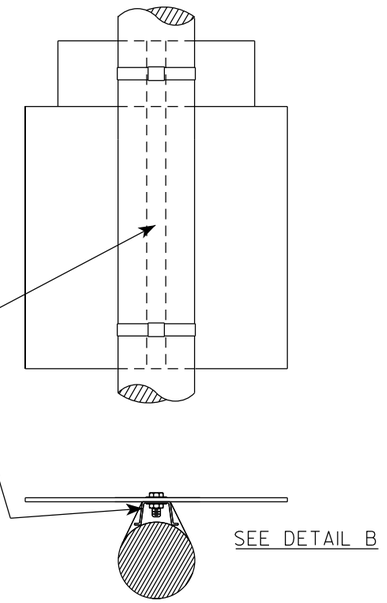




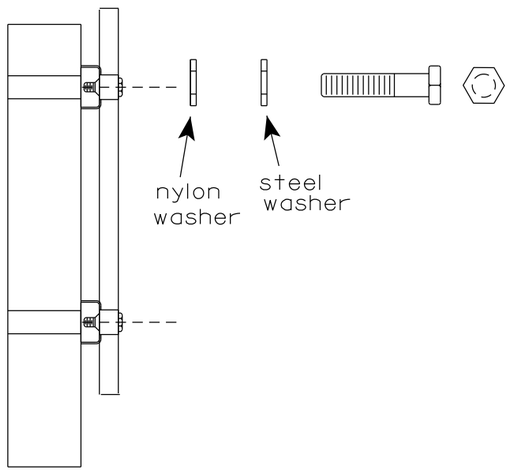
GENERAL NOTES

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 ¾" 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



WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X ⅜" I.D. X 1/16" STEEL
1-1/4" O.D. X ⅜" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

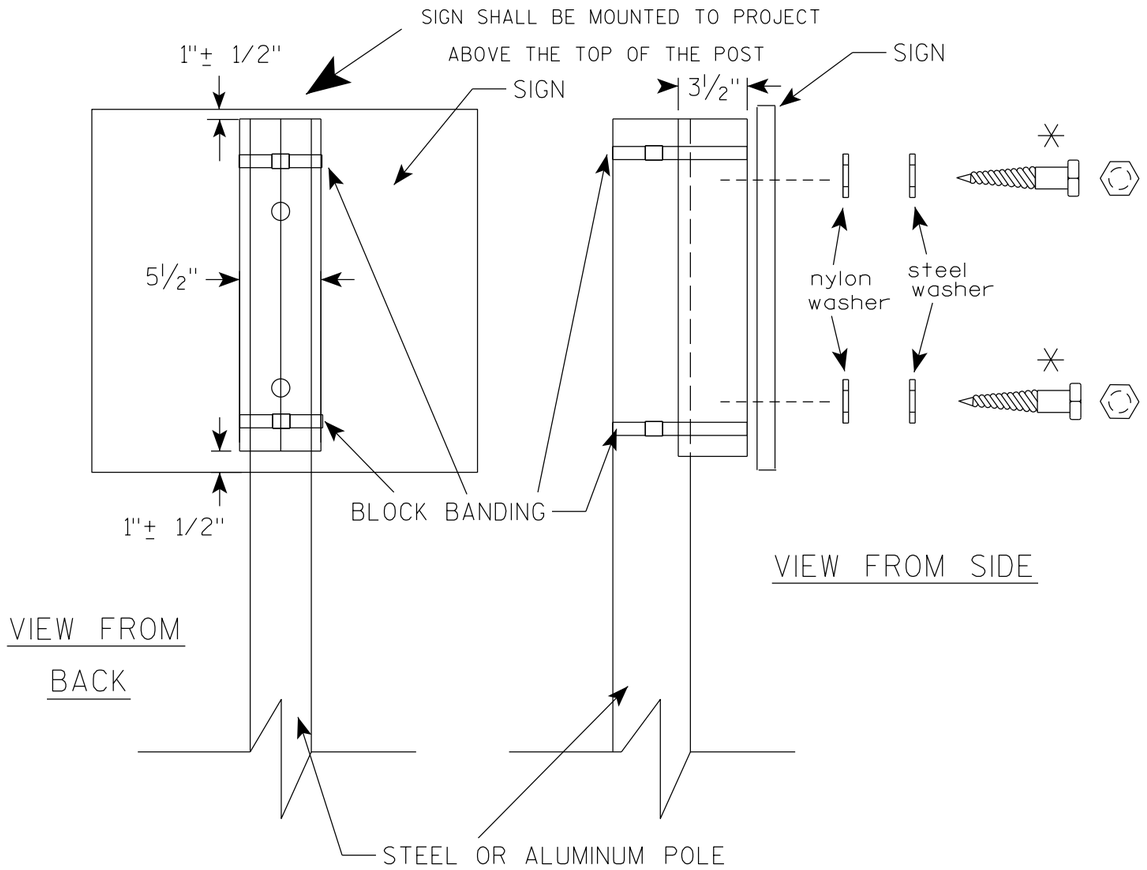
DATE 6/10/19 PLATE NO. A5-9.4

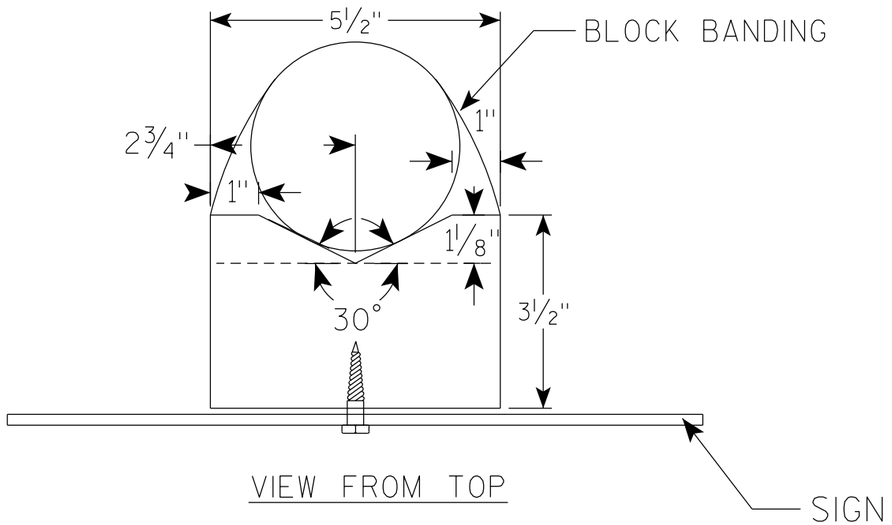
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 97	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7

7





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, ¾" 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 NORNALLY 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 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

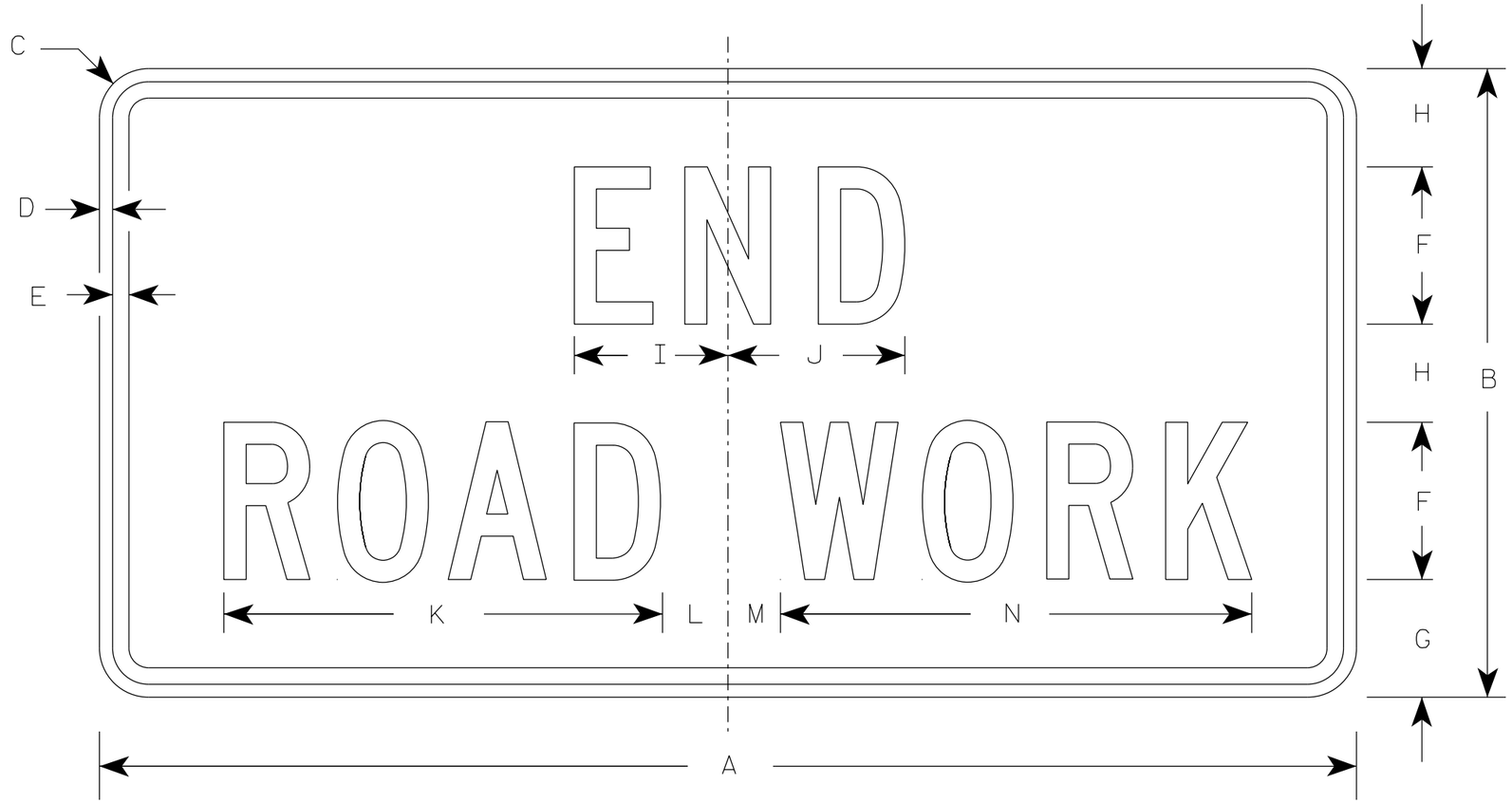
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:

SHEET NO: 98 E



G20-2A

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/2	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5
2	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
2M	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
3	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
4	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
5	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0

STANDARD SIGN

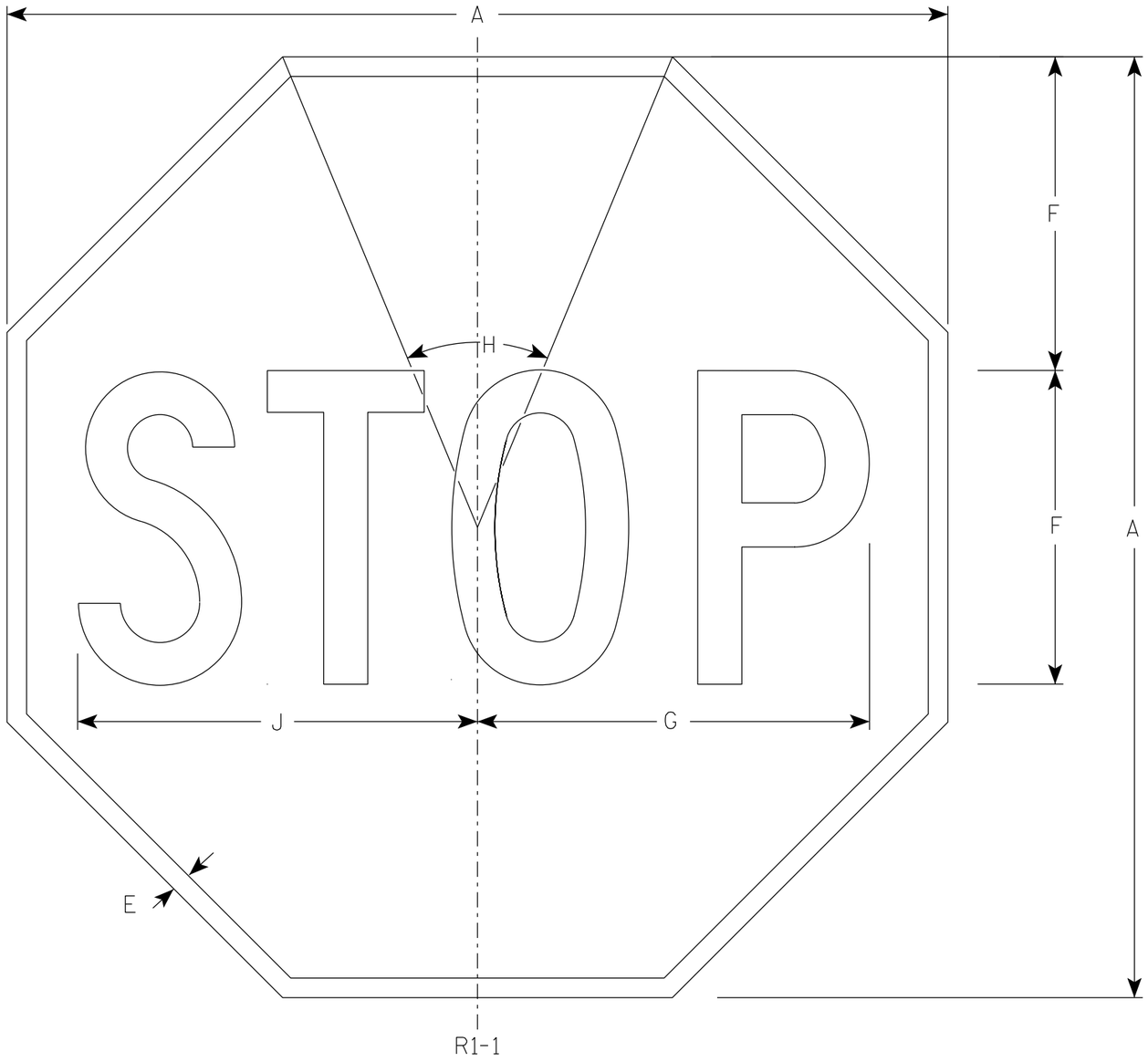
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/26/2023 PLATE NO. G20-2A.10

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



NOTES

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

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

STANDARD SIGN
R1-1

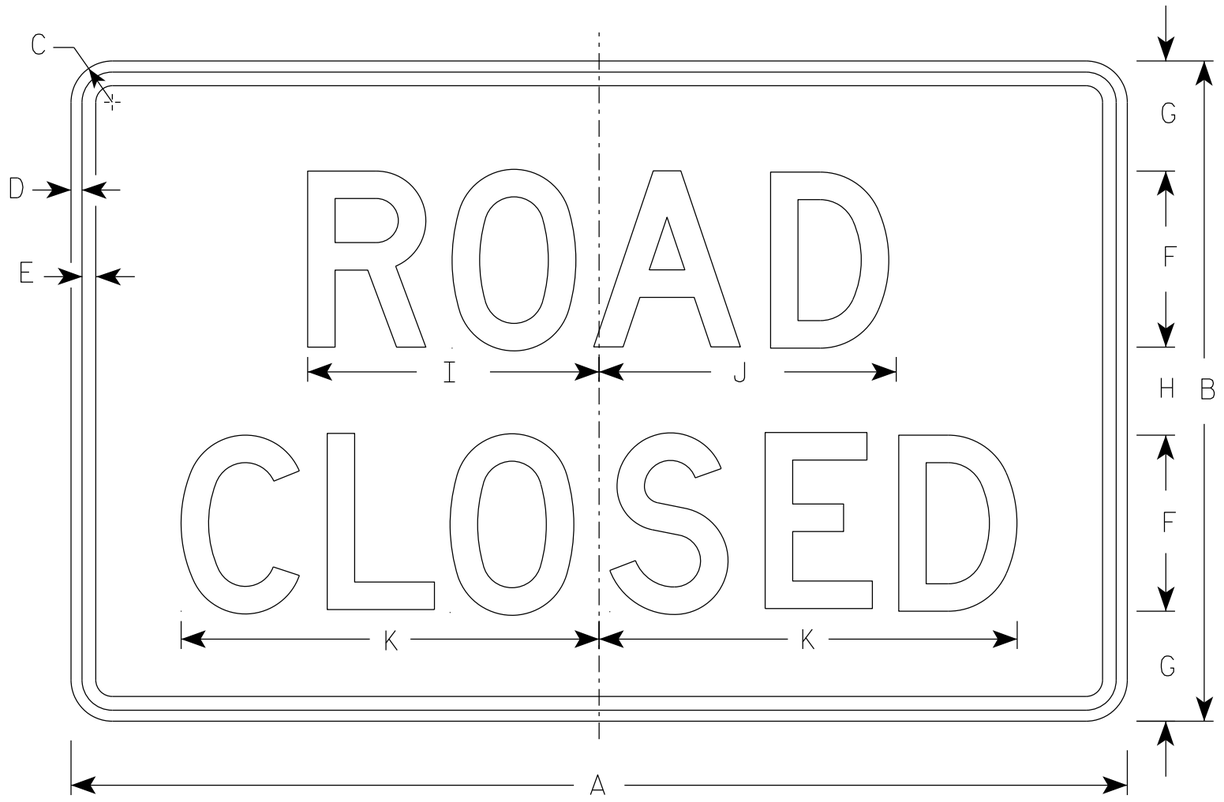
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/9/2025 PLATE NO. R1-1.14

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

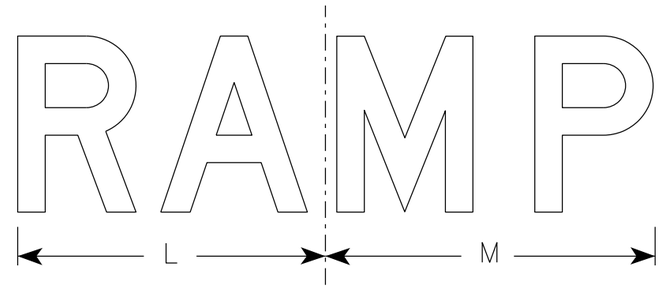
7



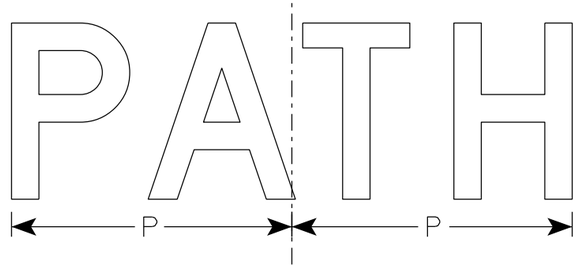
R11-2

NOTES

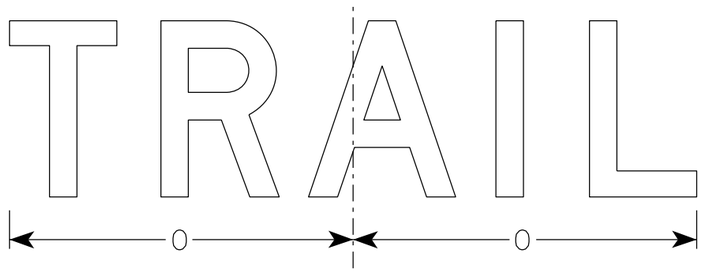
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the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



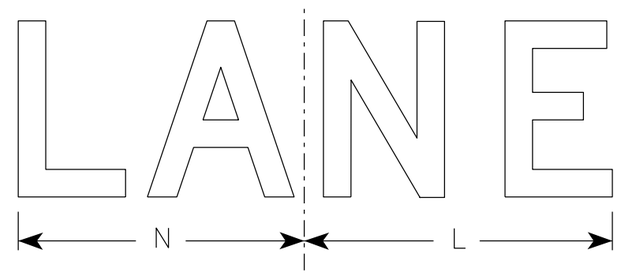
R11-2R



R11-2C



R11-2T



R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8	12 3/4											10.0
2M	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8	12 3/4											10.0
3	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8	12 3/4											10.0
4	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8	12 3/4											10.0
5	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8	12 3/4											10.0

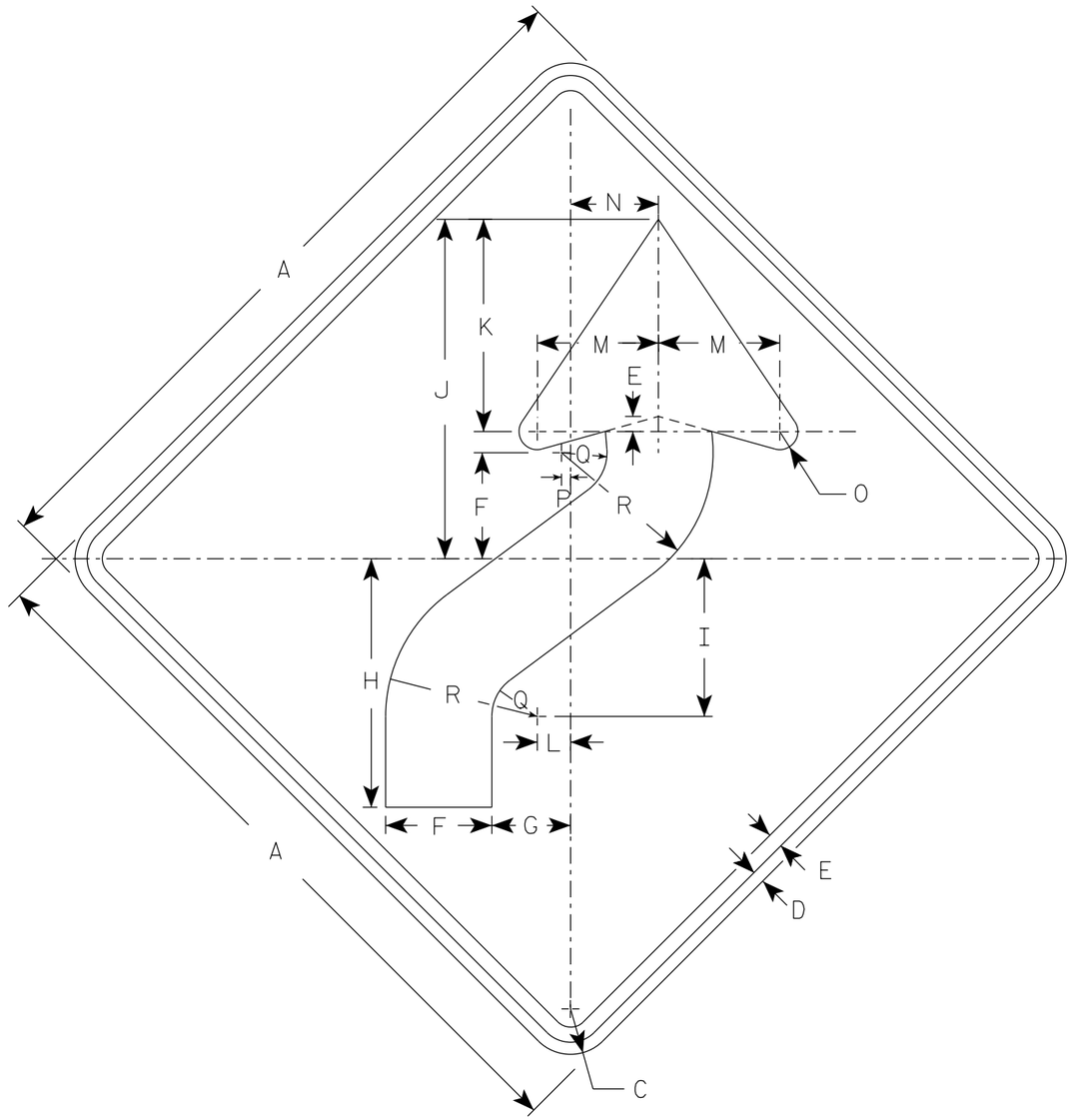
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/3/26 PLATE NO. R11-2.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



W1-4R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. W1-4L is the same as W1-4R except the arrow is reversed along the vertical centerline.

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

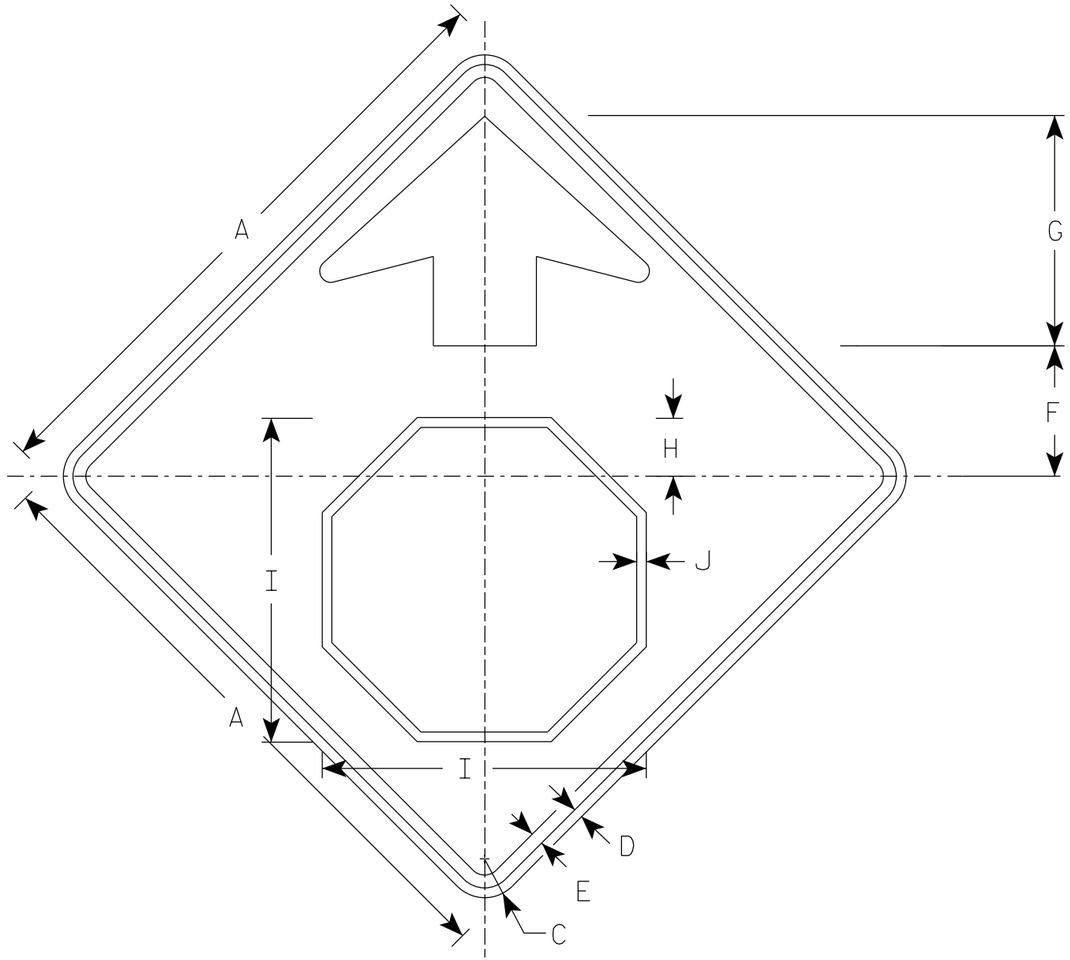
STANDARD SIGN
W1-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/23/2023 PLATE NO. W1-4.12

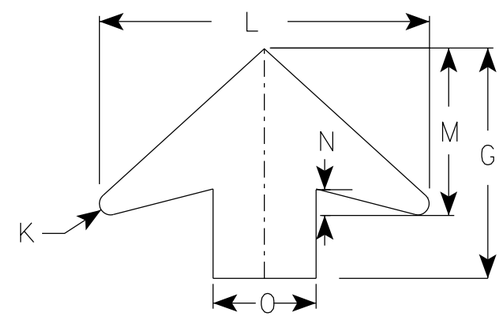
PROJECT NO:	HWY:	COUNTY:		SHEET NO: E



W3-1

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Arrow & Border - Black
   Stop Symbol - White Border on Red Background



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 7/8	1/2	5/8	6 1/4	11 1/4	2 7/8	15 3/4	1/2	1/2	16	8	1 1/4	5												6.25
2S	36		2 1/4	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
2M	36		2 1/4	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
3	36		2 1/4	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
4	48		3	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
5	48		3	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0

STANDARD SIGN
W3-1

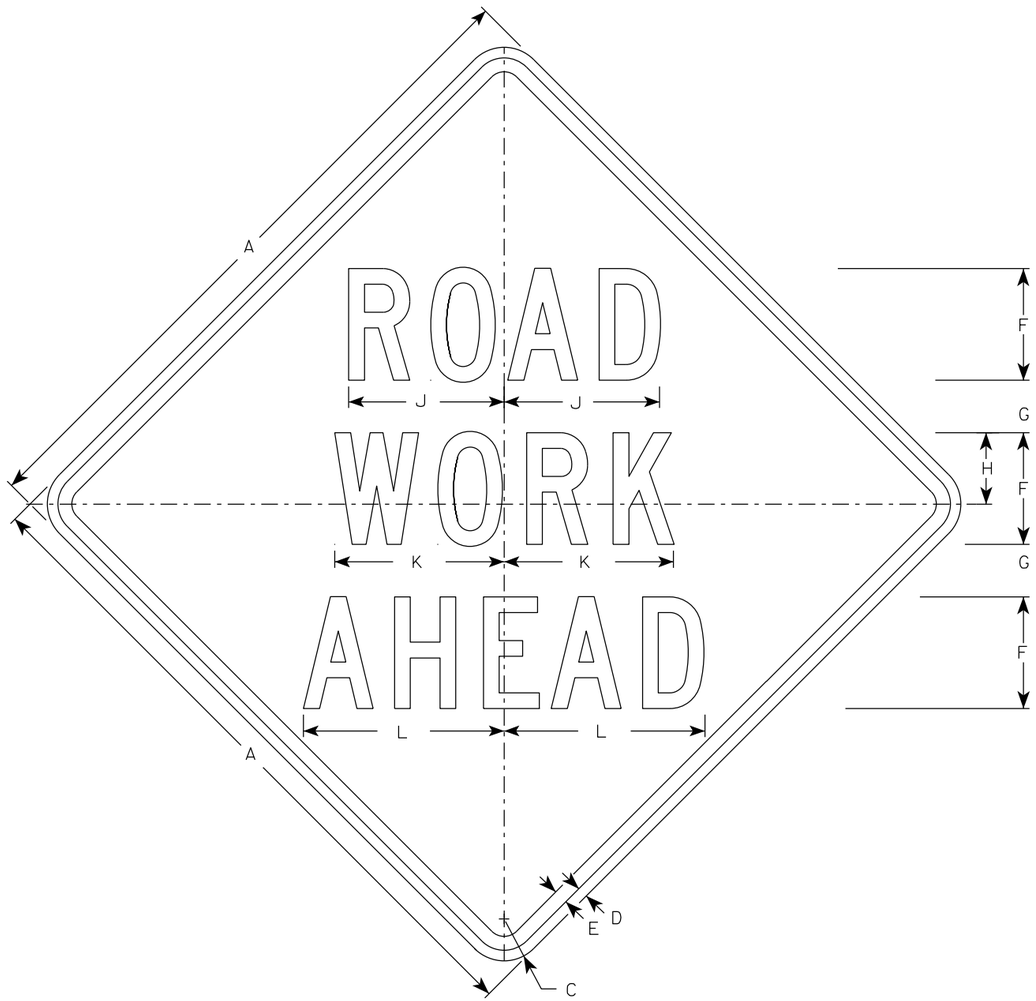
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

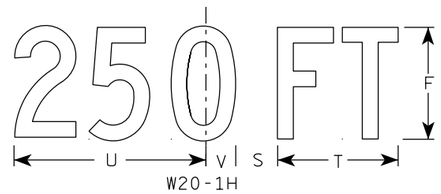
DATE 8/17/2023 PLATE NO. W3-1.13

PROJECT NO:

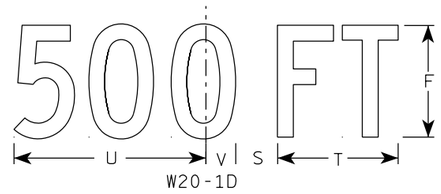
SHEET NO: 103 E



W20-1A



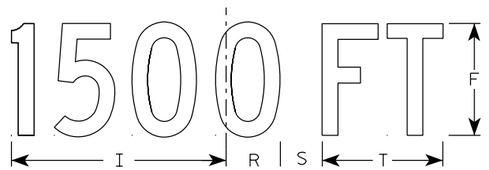
W20-1H



W20-1D



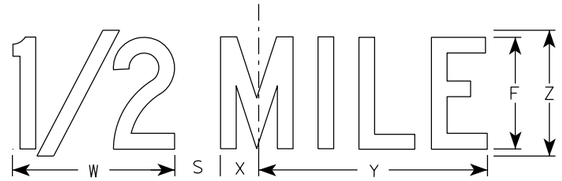
W20-1C



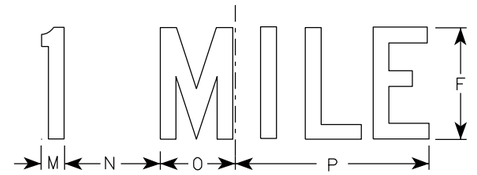
W20-1B

NOTES

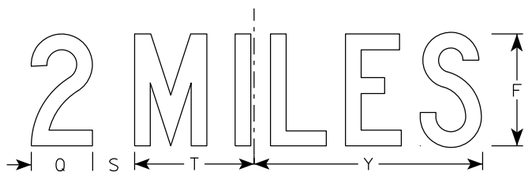
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W20-1G



W20-1F



W20-1E

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	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9	3 1/4	2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

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

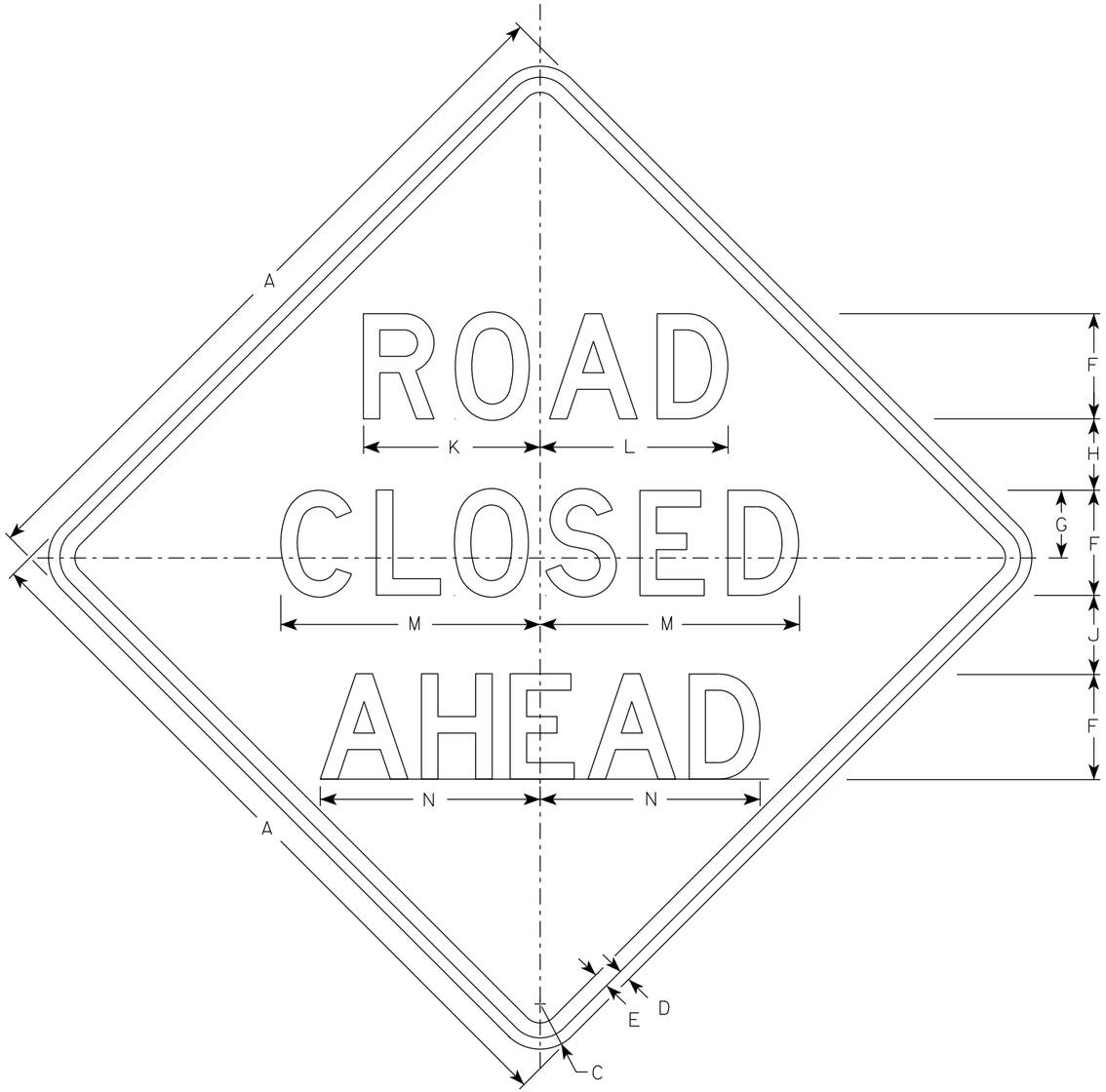
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

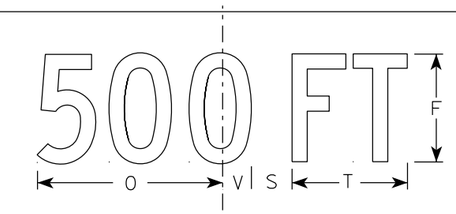
DATE 1/10/2024 PLATE NO. W20-1.12

PROJECT NO:

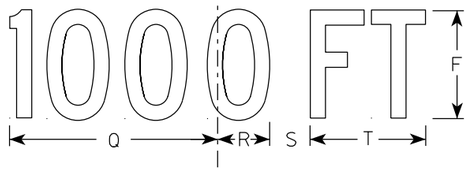
SHEET NO: 104 E



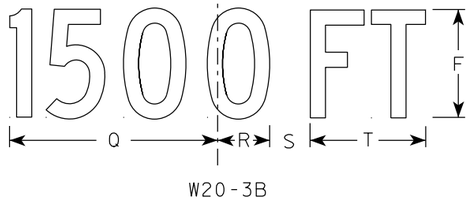
W20-3A



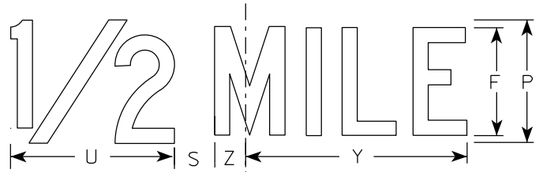
W20-3D



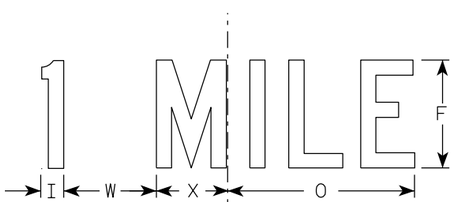
W20-3C



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

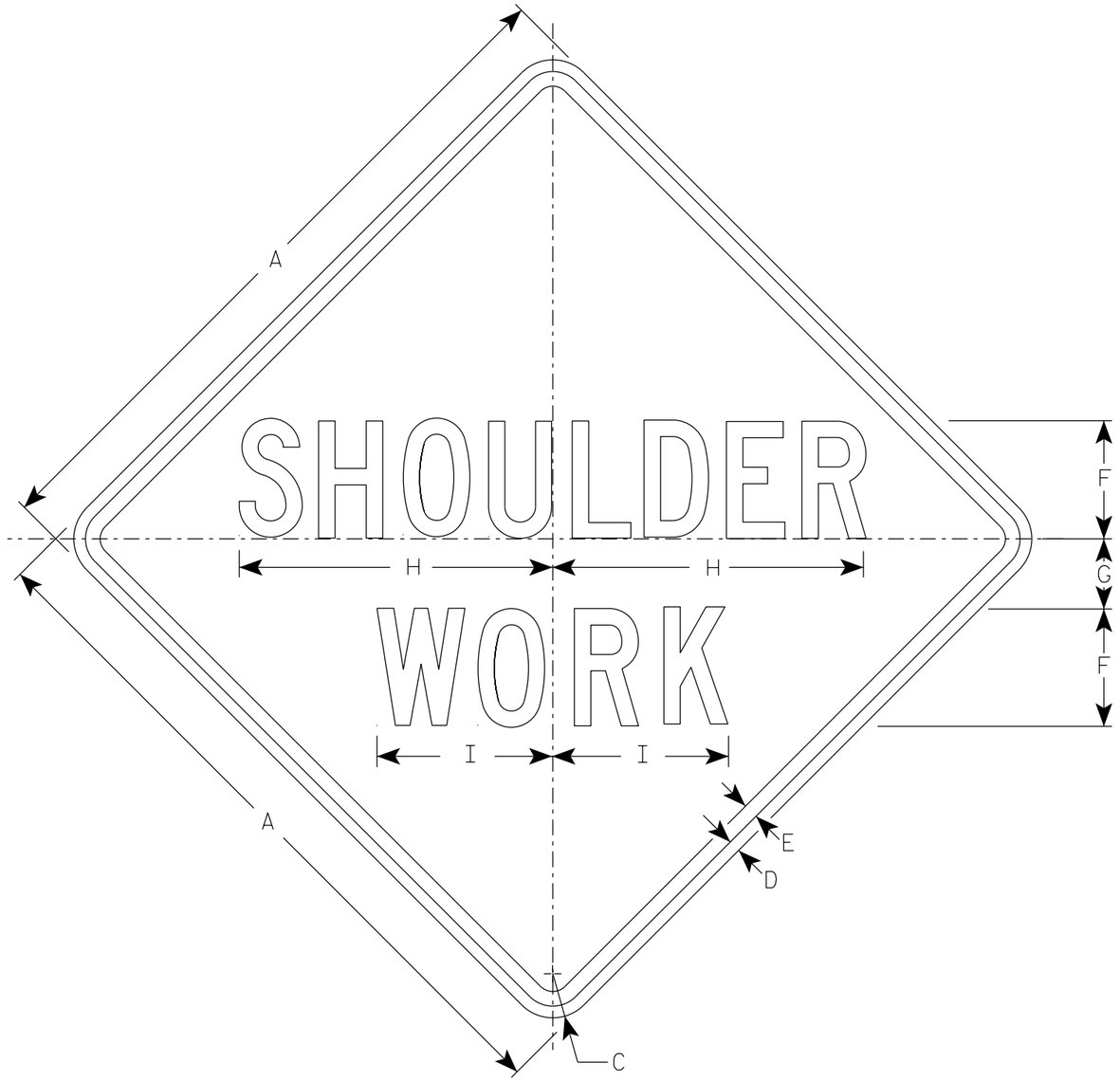
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W203.DGN PLOT DATE : 10-JAN 2024 12:02 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



W21-5

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	6	3 1/2	16	9																		9.0
2S	48		3	3/4	1	8	5	21 3/8	11 1/4																		16.0
2M	48		3	3/4	1	8	5	21 3/8	11 1/4																		16.0
3	48		3	3/4	1	8	5	21 3/8	11 1/4																		16.0
4	48		3	3/4	1	8	5	21 3/8	11 1/4																		16.0
5	48		3	3/4	1	8	5	21 3/8	11 1/4																		16.0

STANDARD SIGN
W21-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 1/11/2024 PLATE NO. W21-5.7

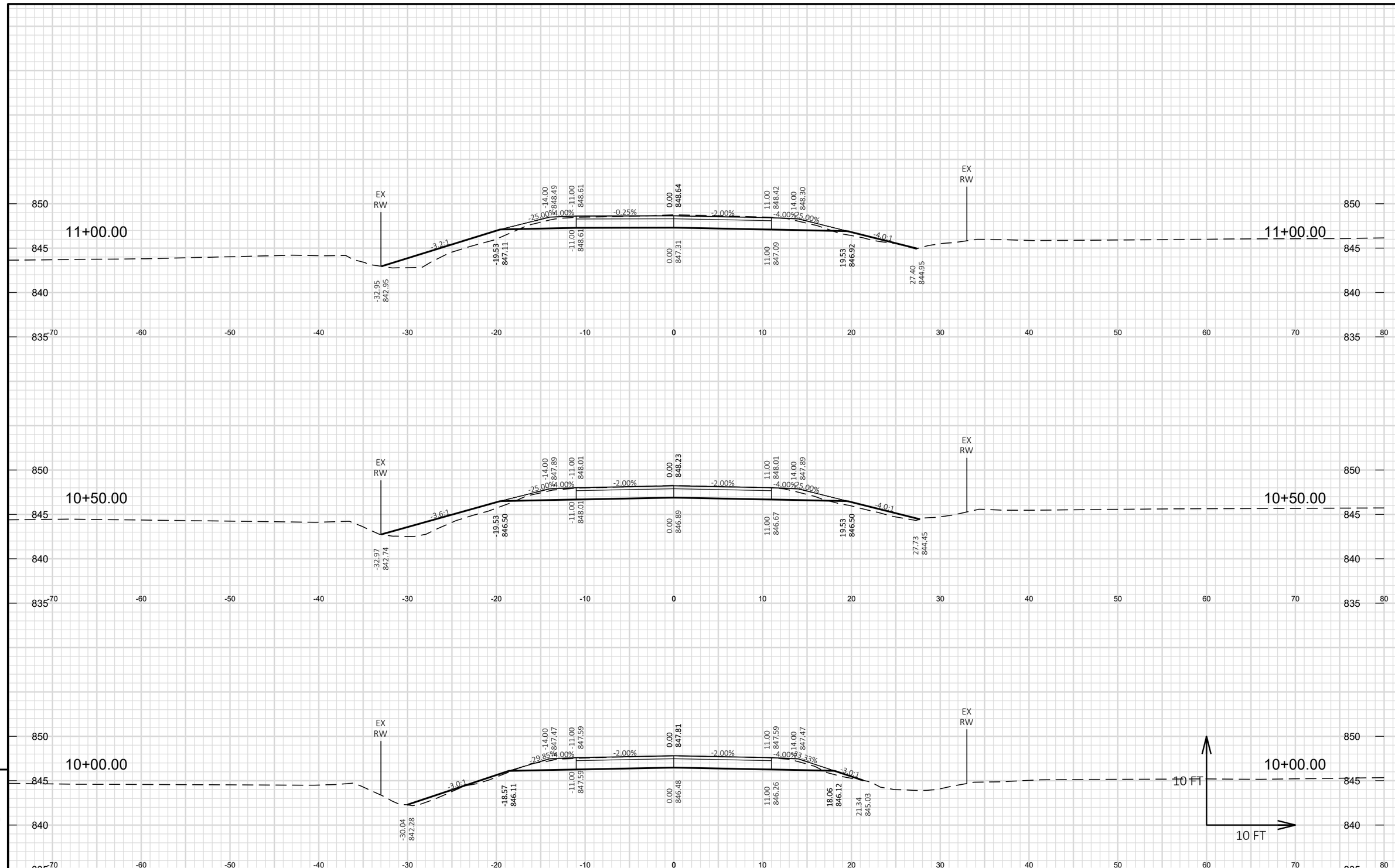
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 106 | E

LONG LAKE ROAD EARTHWORK

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.00	MASS ORDINATE
10+00.00	1000.00	0.00	40.51	0.00	3.90	0	0	0	0	0	0
10+50.00	1050.00	50.00	40.35	0.00	15.96	75	0	18	75	18	57
11+00.00	1100.00	50.00	40.97	0.00	15.58	75	0	29	150	47	103
11+50.00	1150.00	50.00	49.51	0.00	22.50	84	0	35	234	82	152
12+00.00	1200.00	50.00	70.00	0.00	22.04	111	0	41	345	123	222
12+50.00	1250.00	50.00	99.44	0.00	4.63	157	0	25	502	148	354
13+00.00	1300.00	50.00	164.91	0.00	9.32	245	0	13	747	161	586
13+50.00	1350.00	50.00	179.35	0.00	23.51	319	0	30	1066	191	875
14+00.00	1400.00	50.00	147.50	0.00	65.95	303	0	83	1369	274	1095
14+50.00	1450.00	50.00	70.00	0.00	118.98	201	0	171	1570	445	1125
15+00.00	1500.00	50.00	60.00	0.00	191.27	120	0	287	1690	732	958
15+50.00	1550.00	50.00	63.00	0.00	175.85	114	0	340	1804	1072	732
16+00.00	1600.00	50.00	25.00	0.00	80.75	81	0	238	1885	1310	575
16+50.00	1650.00	50.00	36.52	0.00	9.33	57	0	83	1942	1393	549
16+78.47	1678.47	28.47	17.06	0.00	0.96	28	0	5	1970	1398	572

USH 10 TURN LANES EARTHWORK

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.00	MASS ORDINATE
817+45.98	81745.98	0.00	29.41	0.00	0.00	0	0	0	0	0	0
817+50.00	81750.00	4.02	48.35	0.00	0.00	6	0	0	6	0	6
818+00.00	81800.00	50.00	28.16	0.00	0.00	71	0	0	77	0	77
818+50.00	81850.00	50.00	60.51	0.00	0.00	82	0	0	159	0	159
819+00.00	81900.00	50.00	35.38	0.00	0.85	89	0	1	248	1	247
819+46.00	81946.00	46.00	53.95	0.00	0.86	76	0	1	324	2	322
819+50.00	81950.00	4.00	50.08	0.00	0.68	8	0	0	332	2	330
820+00.00	82000.00	50.00	39.75	0.00	0.00	83	0	1	415	3	412
820+50.00	82050.00	50.00	49.43	0.00	0.00	83	0	0	498	3	495
821+00.00	82100.00	50.00	88.31	0.00	0.00	128	0	0	626	3	623
821+50.00	82150.00	50.00	79.82	0.00	0.00	156	0	0	782	3	779
822+00.00	82200.00	50.00	58.56	0.00	19.25	128	0	18	910	21	889
822+50.00	82250.00	50.00	28.80	0.00	27.34	81	0	43	991	64	927
823+00.00	82300.00	50.00	27.20	0.00	40.22	52	0	63	1043	127	916
823+50.00	82350.00	50.00	26.81	0.00	50.43	50	0	84	1093	211	882
824+00.00	82400.00	50.00	25.45	0.00	58.55	48	0	101	1141	312	829
824+50.00	82450.00	50.00	12.30	0.00	90.76	35	0	138	1176	450	726
824+57.91	82457.91	7.91	25.49	0.00	114.19	6	0	30	1182	480	702
825+00.00	82500.00	42.09	26.91	0.00	37.65	41	0	118	1223	598	625
825+50.00	82550.00	50.00	31.72	0.00	0.00	54	0	35	1277	633	644
826+00.00	82600.00	50.00	34.79	0.00	0.00	62	0	0	1339	633	706
826+50.00	82650.00	50.00	35.68	0.00	0.00	65	0	0	1404	633	771
826+57.91	82657.91	7.91	35.52	0.00	0.00	10	0	0	1414	633	781



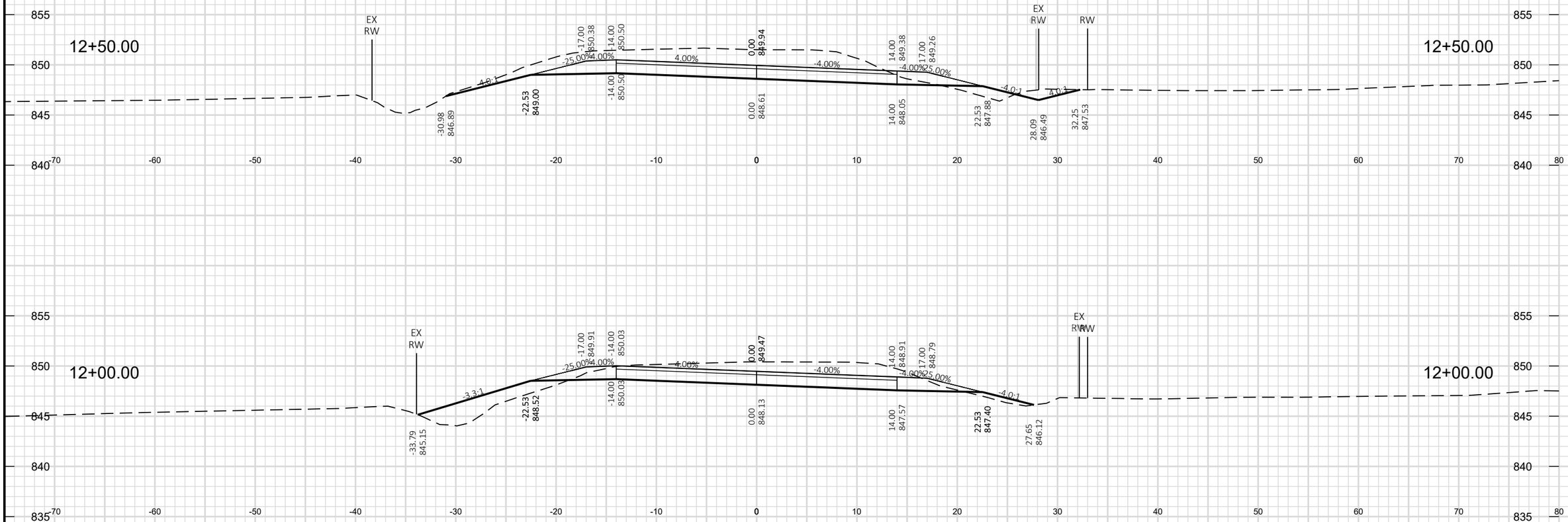
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PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	CROSS SECTIONS: LONG LAKE ROAD	SHEET 108 E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-68-00_BRILLION-REEDSVILLE MILL-FILL\DESIGN\C3D FILES\DESIGN\CORRIDORS\CORR-LONGLAKERD.DWG
LAYOUT NAME - 09

PLOT DATE : 5/29/2026 8:26 AM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49





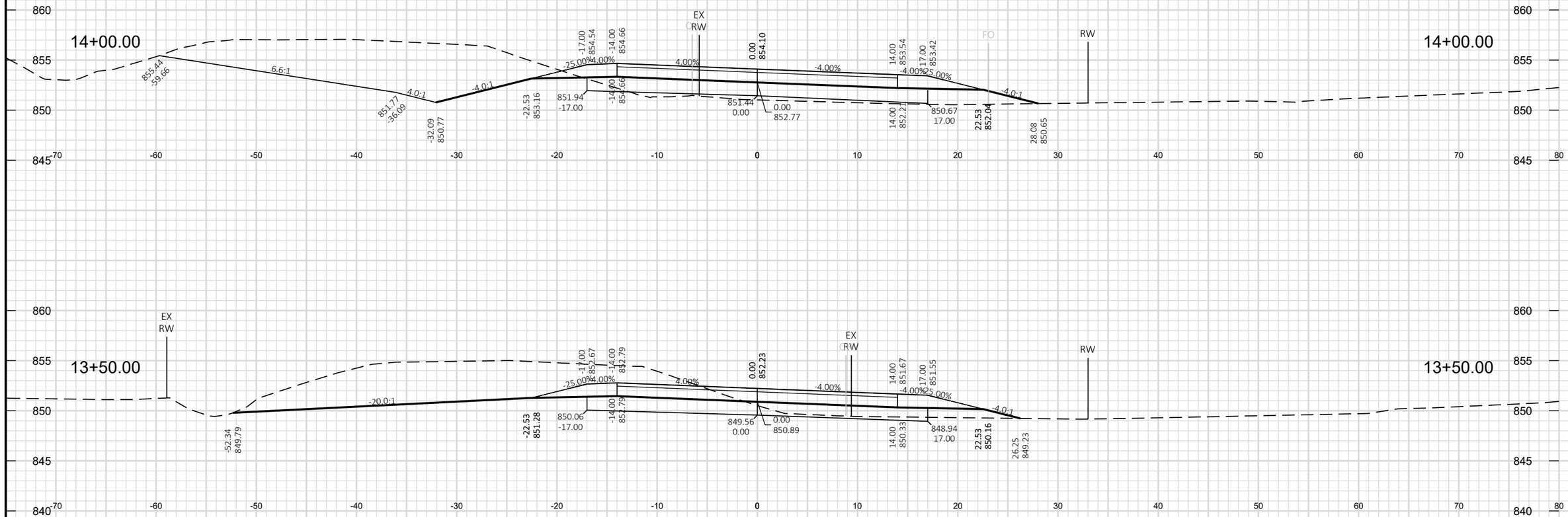
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PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	CROSS SECTIONS: LONG LAKE ROAD	SHEET 109	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-68-00_BRILLION-REEDSVILLE MILL-FILL\DESIGN\C3D FILES\DESIGN\CORRIDORS\CORR-LONGLAKERD.DWG
LAYOUT NAME - 10

PLOT DATE : 5/29/2026 8:26 AM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

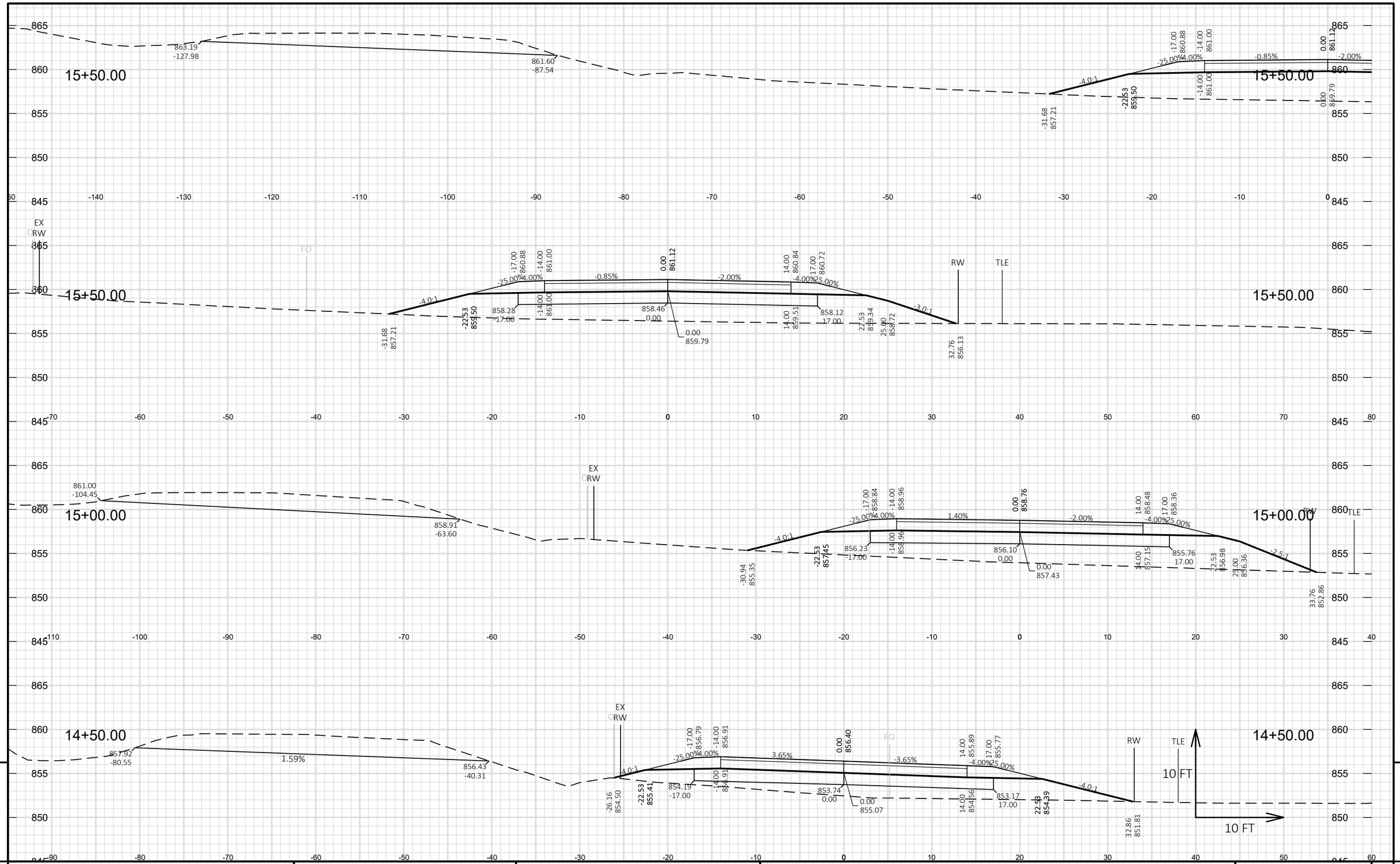


PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	CROSS SECTIONS: LONG LAKE ROAD	SHEET 110 E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-68-00_BRILLION-REEDSVILLE MILL-FILL\DESIGN\C3D FILES\DESIGN\CORRIDORS\CORR-LONGLAKERD.DWG
LAYOUT NAME - 11

PLOT DATE : 5/29/2026 8:26 AM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	CROSS SECTIONS: LONG LAKE ROAD	SHEET 111	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-68-00_BRILLION-REEDSVILLE MILL-FILL\DESIGN\C3D FILES\DESIGN\CORRIDORS\CORR-LONGLAKERD.DWG
LAYOUT NAME - 12

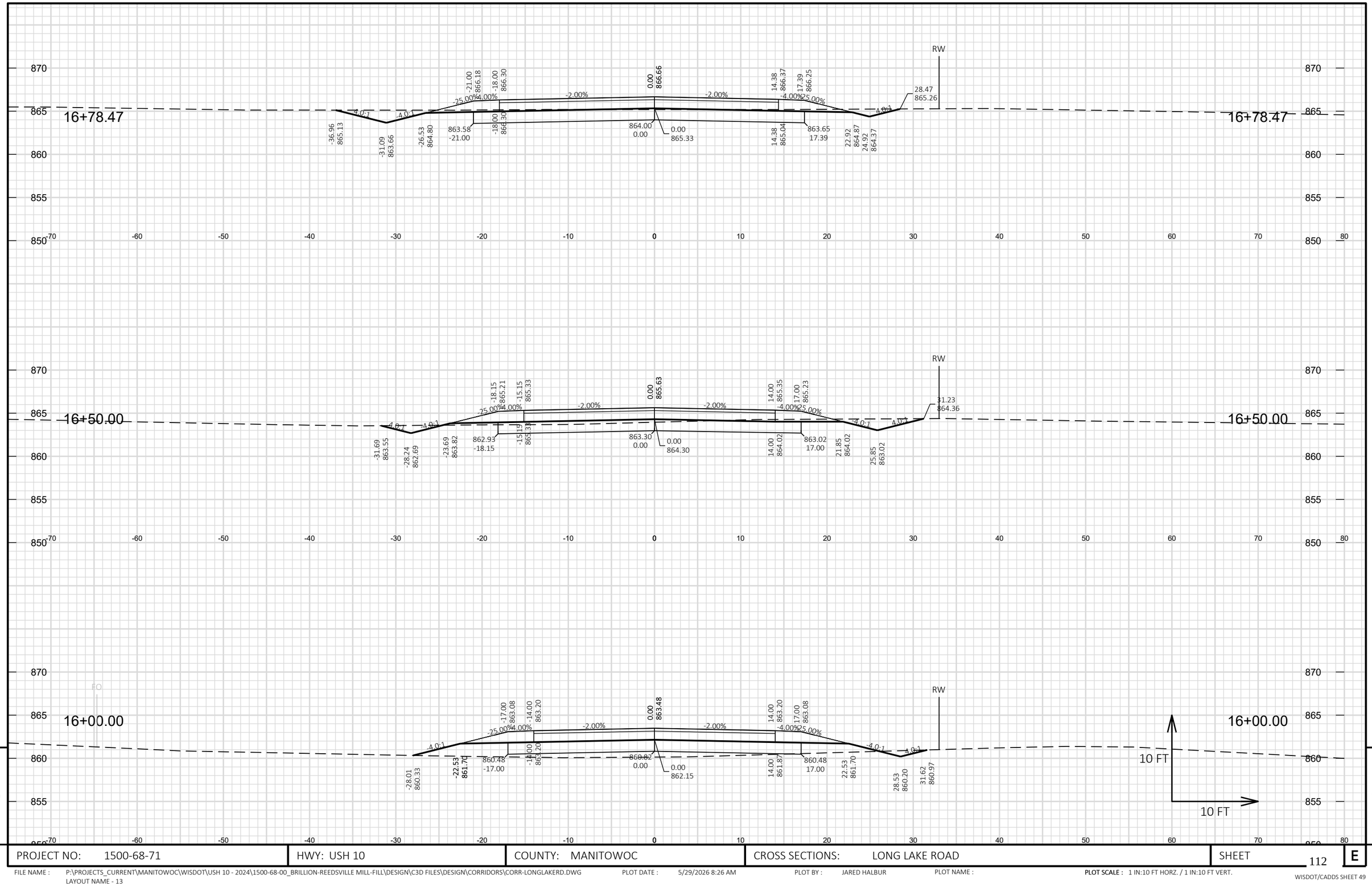
PLOT DATE : 7/22/2026 9:40 AM

PLOT BY : DEXTER KAETTERHENRY

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	CROSS SECTIONS: LONG LAKE ROAD	SHEET 112	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-68-00_BRILLION-REEDSVILLE MILL-FILL\DESIGN\C3D FILES\DESIGN\CORRIDORS\CORR-LONGLAKERD.DWG
LAYOUT NAME - 13

PLOT DATE : 5/29/2026 8:26 AM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

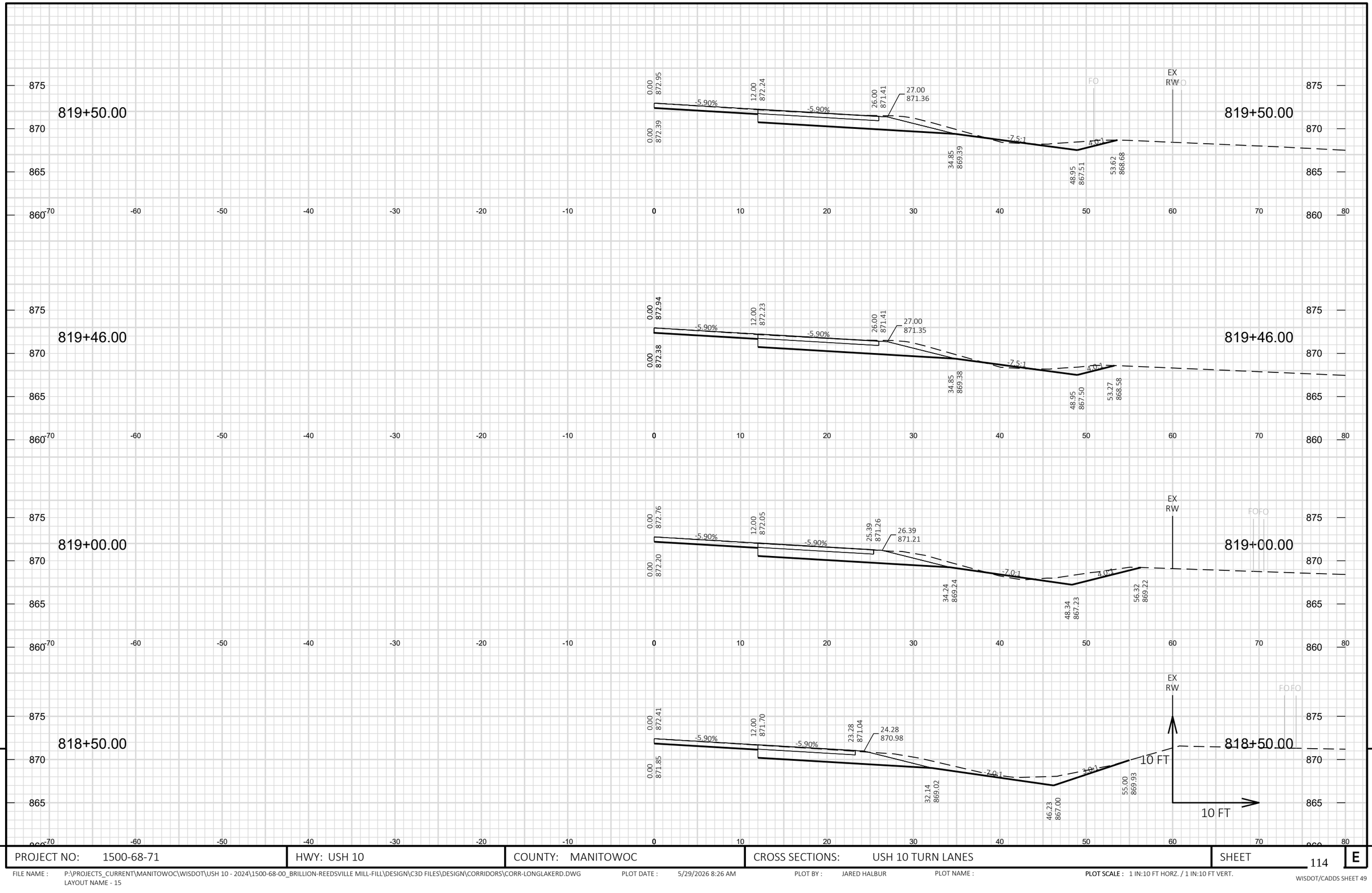


9

9

PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	CROSS SECTIONS: USH 10 TURN LANES	SHEET 113	E

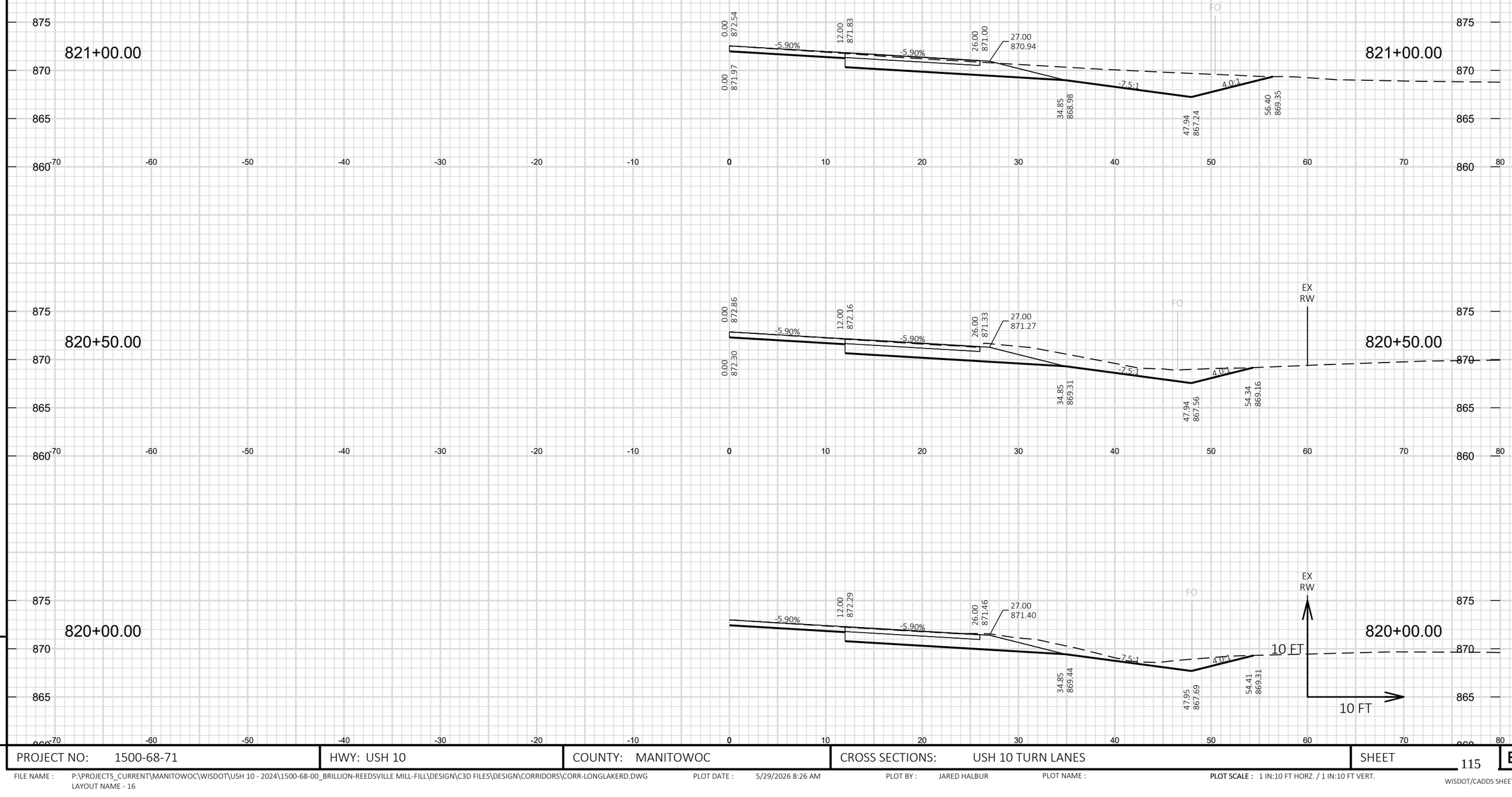
FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-68-00_BRILLION-REEDSVILLE MILL-FILL\DESIGN\C3D FILES\DESIGN\CORRIDORS\CORR-LONGLAKERD.DWG
LAYOUT NAME - 14
PLOT DATE : 5/29/2026 8:26 AM
PLOT BY : JARED HALBUR
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



9

PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	CROSS SECTIONS: USH 10 TURN LANES	SHEET 114 E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-68-00_BRILLION-REEDSVILLE MILL-FILL\DESIGN\C3D FILES\DESIGN\CORRIDORS\CORR-LONGLAKERD.DWG
LAYOUT NAME - 15
PLOT DATE : 5/29/2026 8:26 AM
PLOT BY : JARED HALBUR
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

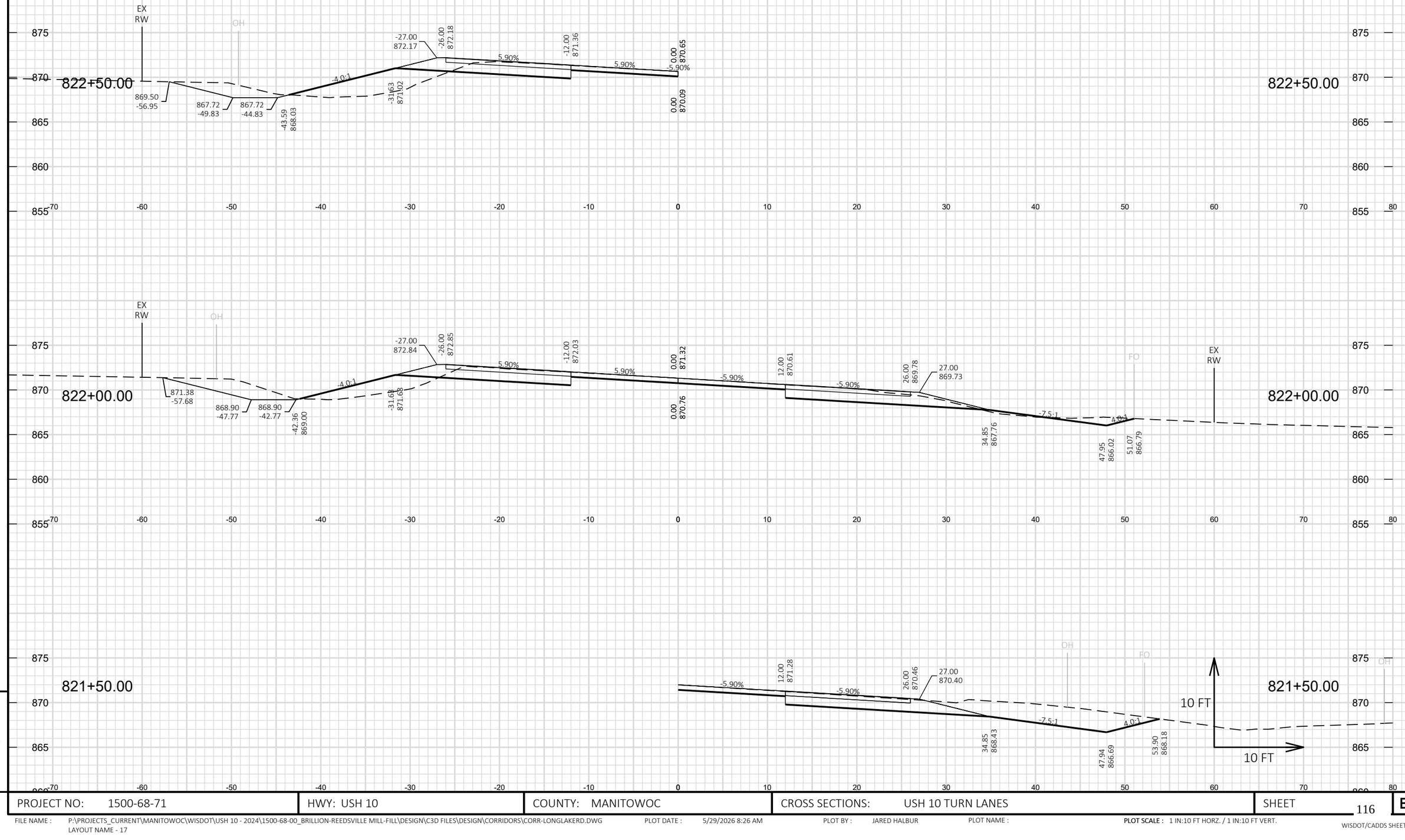


9

9

PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	CROSS SECTIONS: USH 10 TURN LANES	SHEET 115	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-68-00_BRILLION-REEDSVILLE MILL-FILL\DESIGN\C3D FILES\DESIGN\CORRIDORS\CORR-LONGLAKERD.DWG
LAYOUT NAME - 16
PLOT DATE : 5/29/2026 8:26 AM
PLOT BY : JARED HALBUR
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



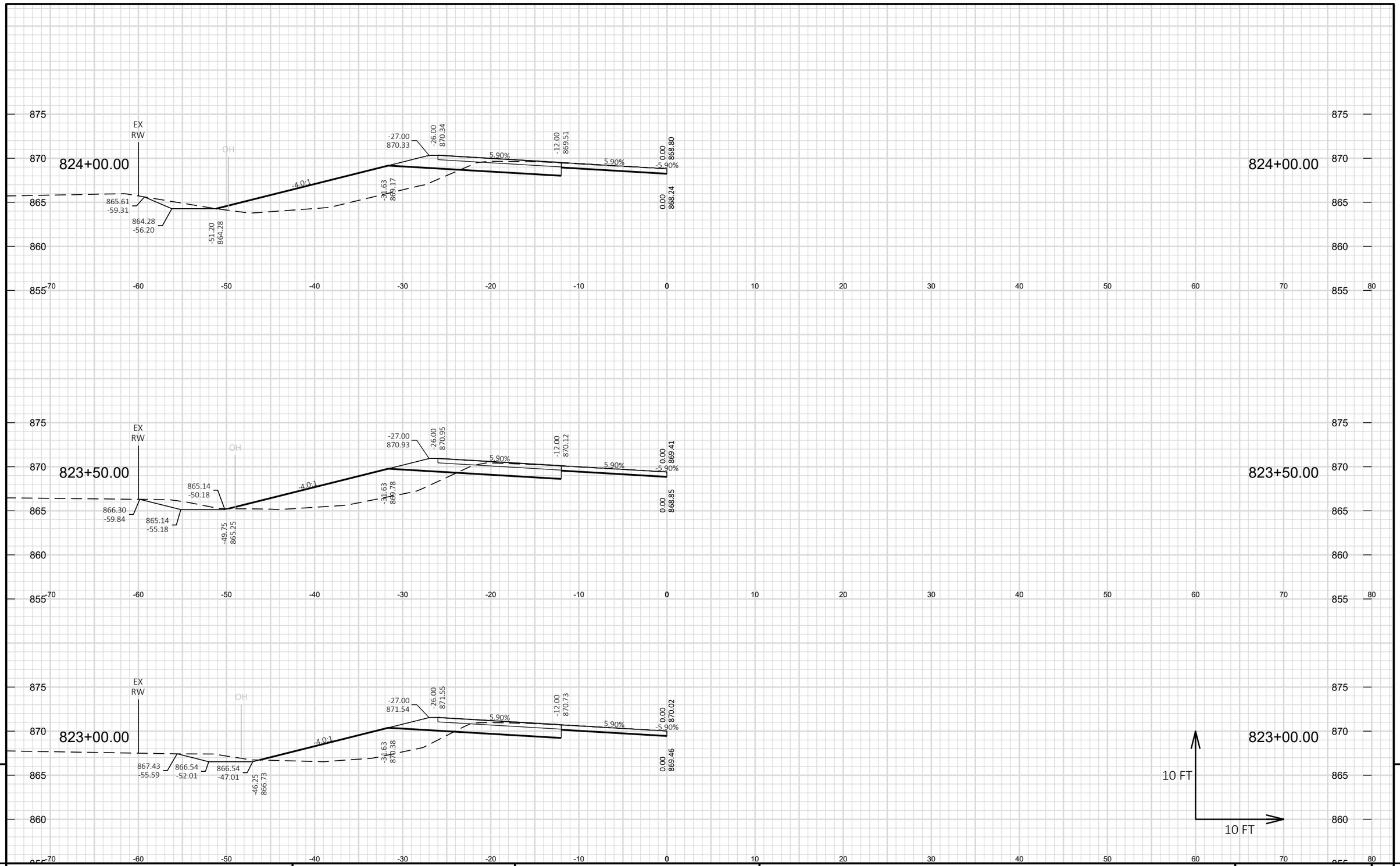
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PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	CROSS SECTIONS: USH 10 TURN LANES	SHEET 116	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-68-00_BRILLION-REEDSVILLE MILL-FILL\DESIGN\C3D FILES\DESIGN\CORRIDORS\CORR-LONGLAKERD.DWG
LAYOUT NAME - 17

PLOT DATE : 5/29/2026 8:26 AM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

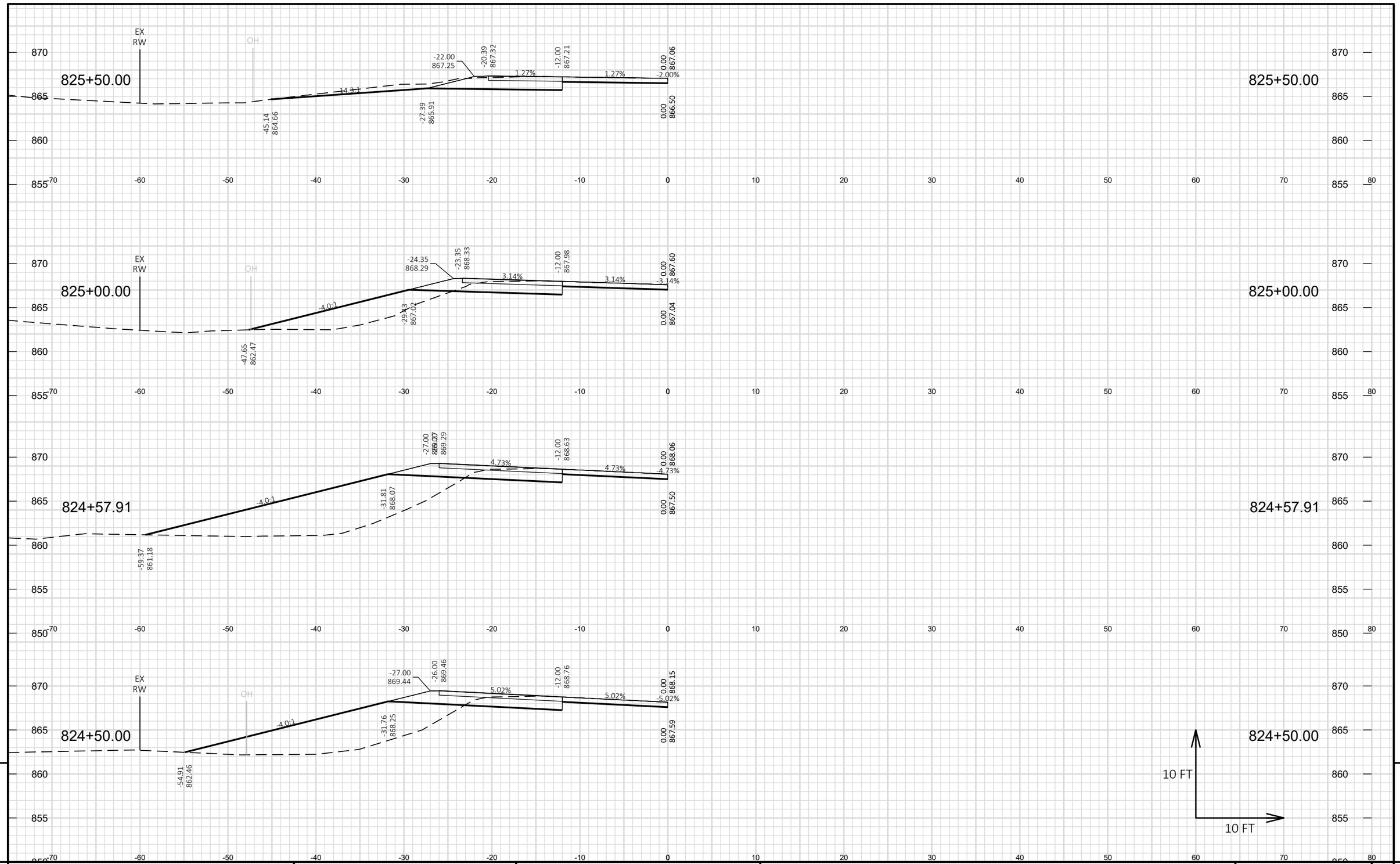


PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	CROSS SECTIONS: USH 10 TURN LANES	SHEET 117 E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-68-00_BRILLION-REEDSVILLE MILL-FILL\DESIGN\C3D FILES\DESIGN\CORRIDORS\CORR-LONGLAKERD.DWG
LAYOUT NAME - 18

PLOT DATE : 5/29/2026 8:26 AM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



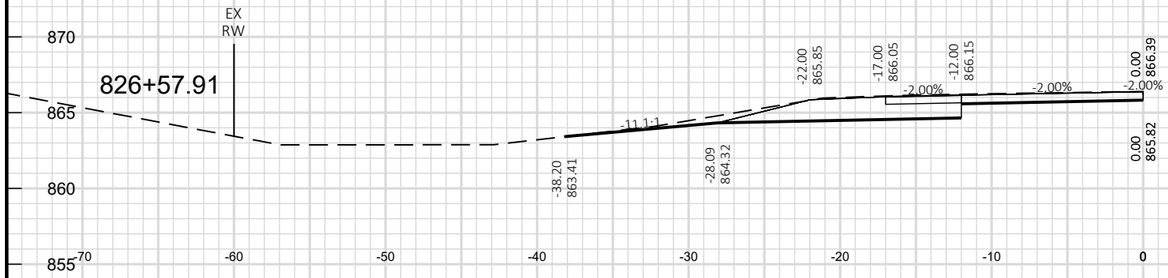
9

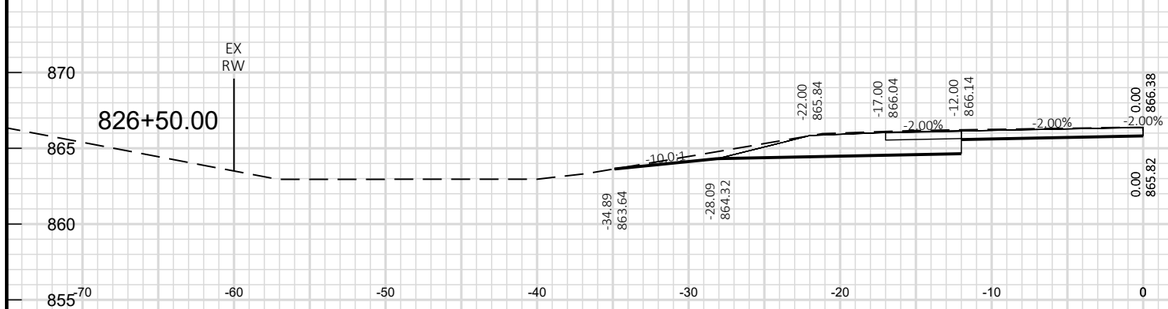
PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	CROSS SECTIONS: USH 10 TURN LANES	SHEET 118	E

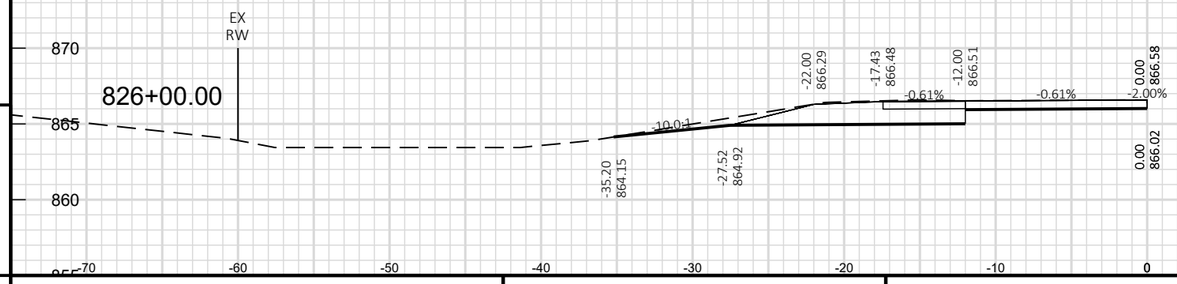
FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-68-00_BRILLION-REEDSVILLE MILL-FILL\DESIGN\C3D FILES\DESIGN\CORRIDORS\CORR-LONGLAKERD.DWG
LAYOUT NAME - 19

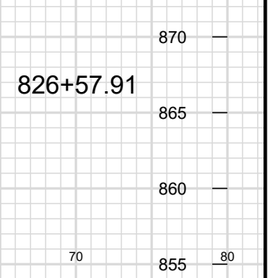
PLOT DATE : 5/29/2026 8:26 AM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

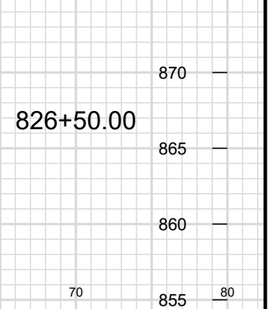
WISDOT/CADDS SHEET 49

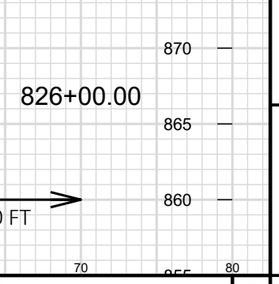












9

9

PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	CROSS SECTIONS: USH 10 TURN LANES	SHEET 119	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-68-00_BRILLION-REEDSVILLE MILL-FILL\DESIGN\C3D FILES\DESIGN\CORRIDORS\CORR-LONGLAKERD.DWG
LAYOUT NAME - 20

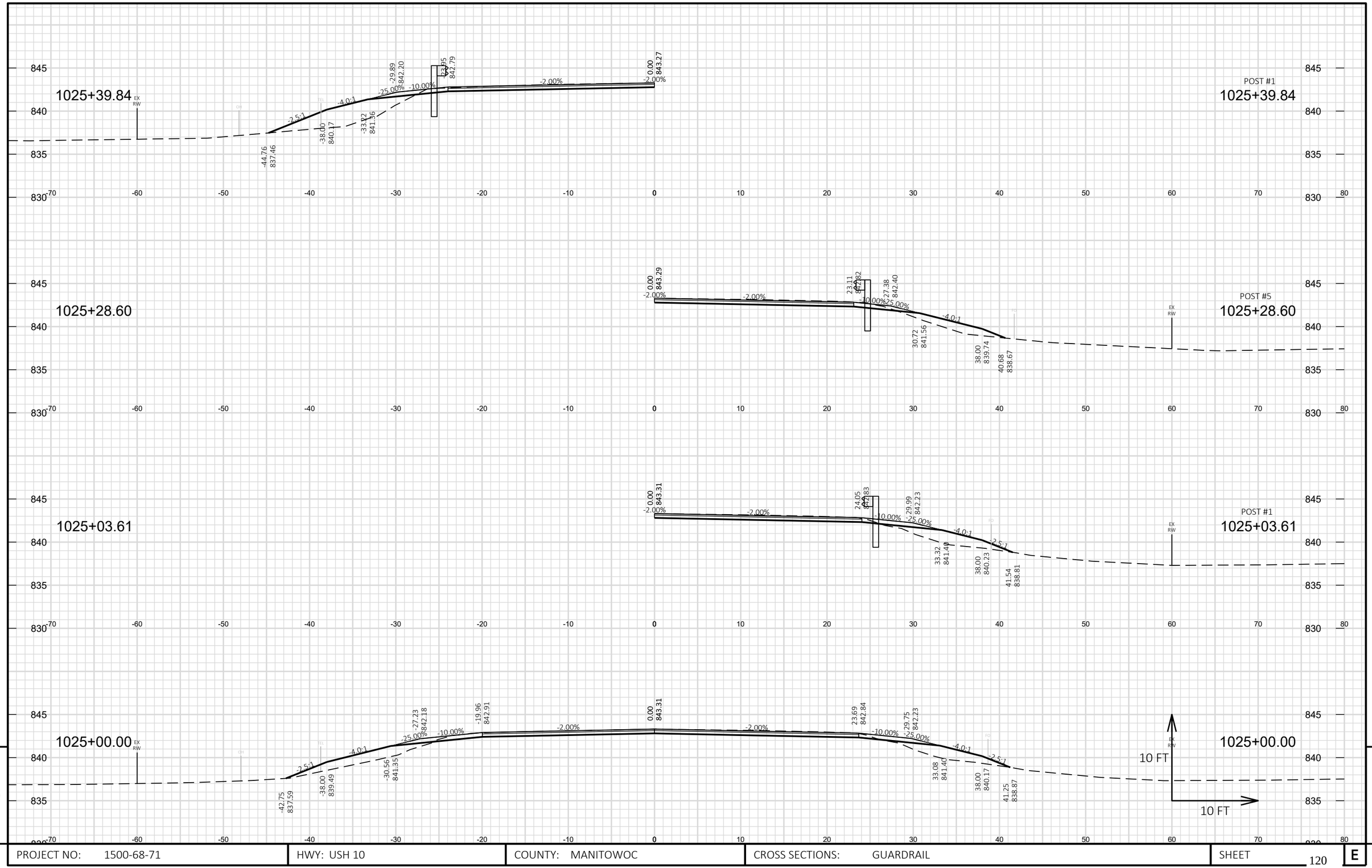
PLOT DATE : 5/29/2026 8:26 AM

PLOT BY : JARED HALBUR

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	CROSS SECTIONS: GUARDRAIL	SHEET 120	E

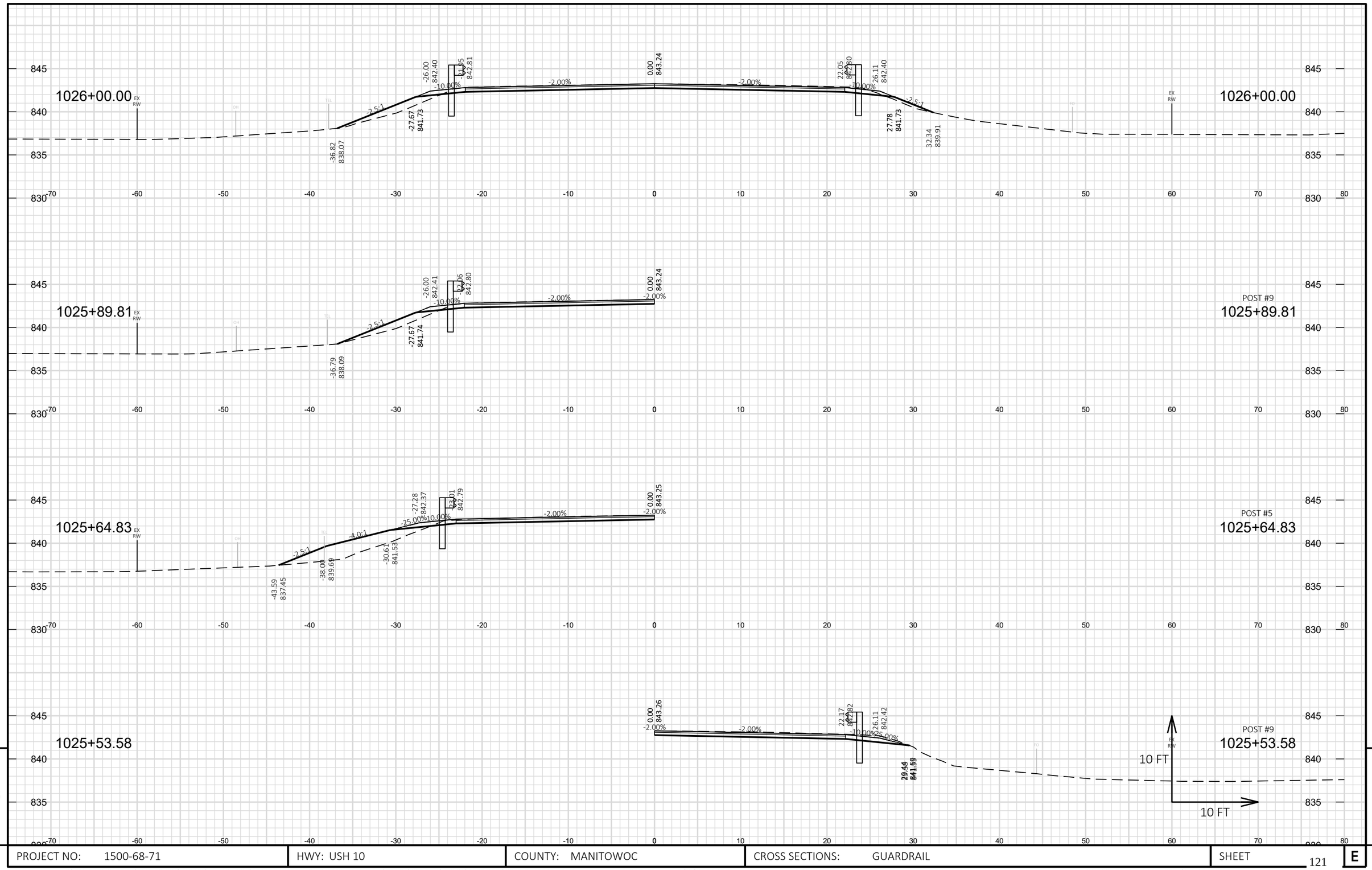
FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-68-00_BRILLION-REEDSVILLE MILL-FILL\DESIGN\C3D FILES\DESIGN\CORRIDORS\CORR-GUARDRAIL.DWG
LAYOUT NAME - 05

PLOT DATE : 5/28/2026 4:16 PM

PLOT BY : JARED HALBUR

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



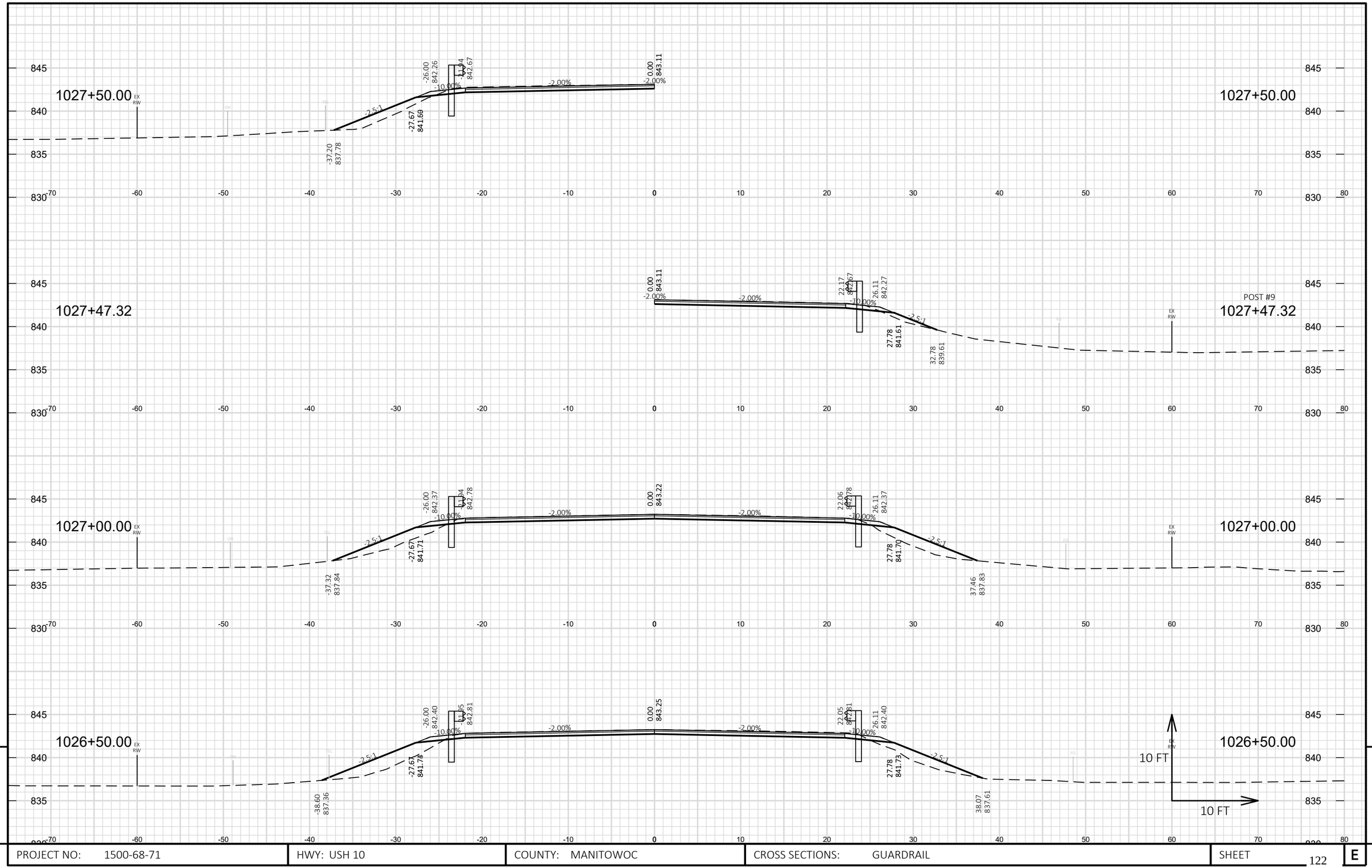
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9

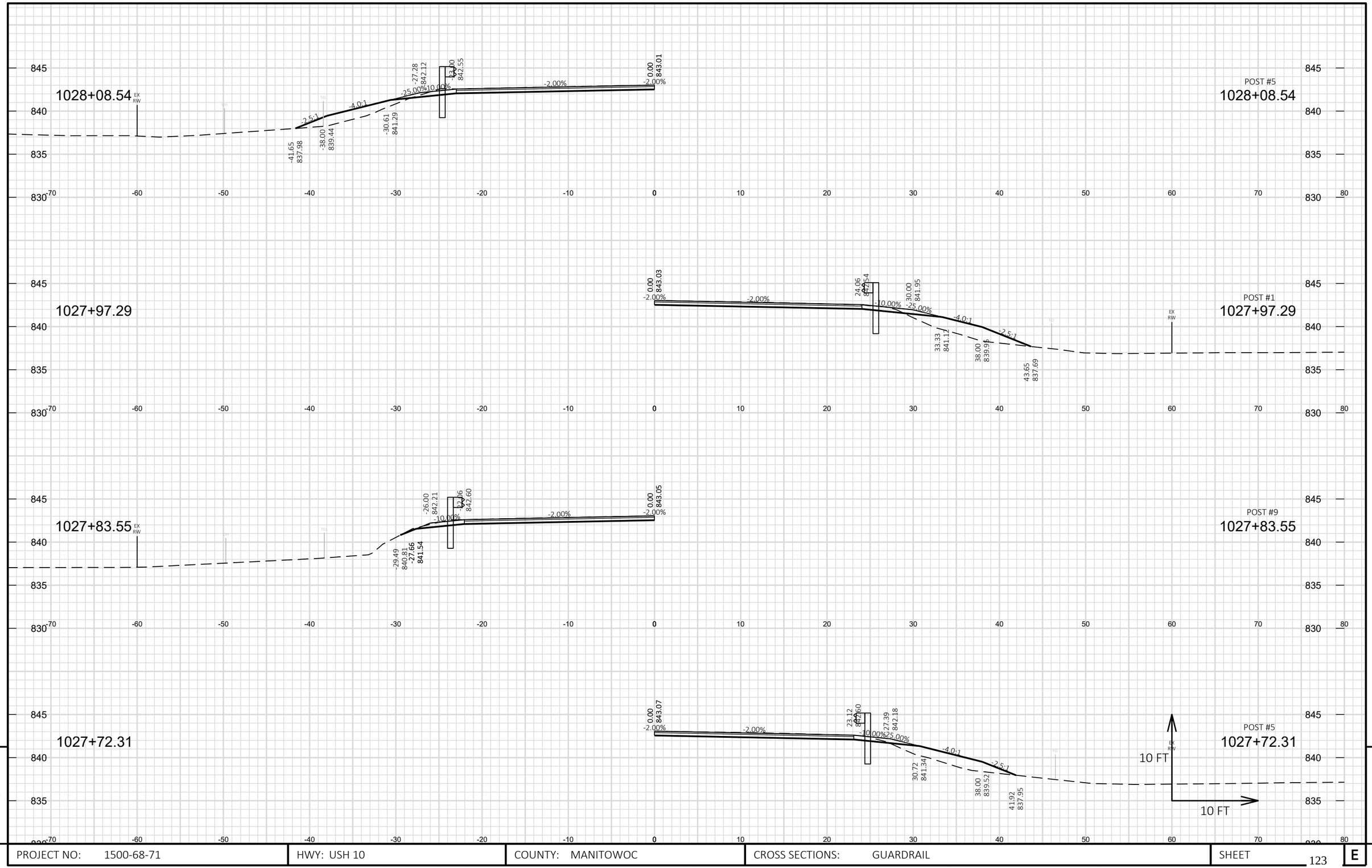
PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	CROSS SECTIONS: GUARDRAIL	SHEET 121 E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-68-00_BRILLION-REEDSVILLE MILL-FILL\DESIGN\C3D FILES\DESIGN\CORRIDORS\CORR-GUARDRAIL.DWG
LAYOUT NAME - 06

PLOT DATE : 5/28/2026 4:16 PM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



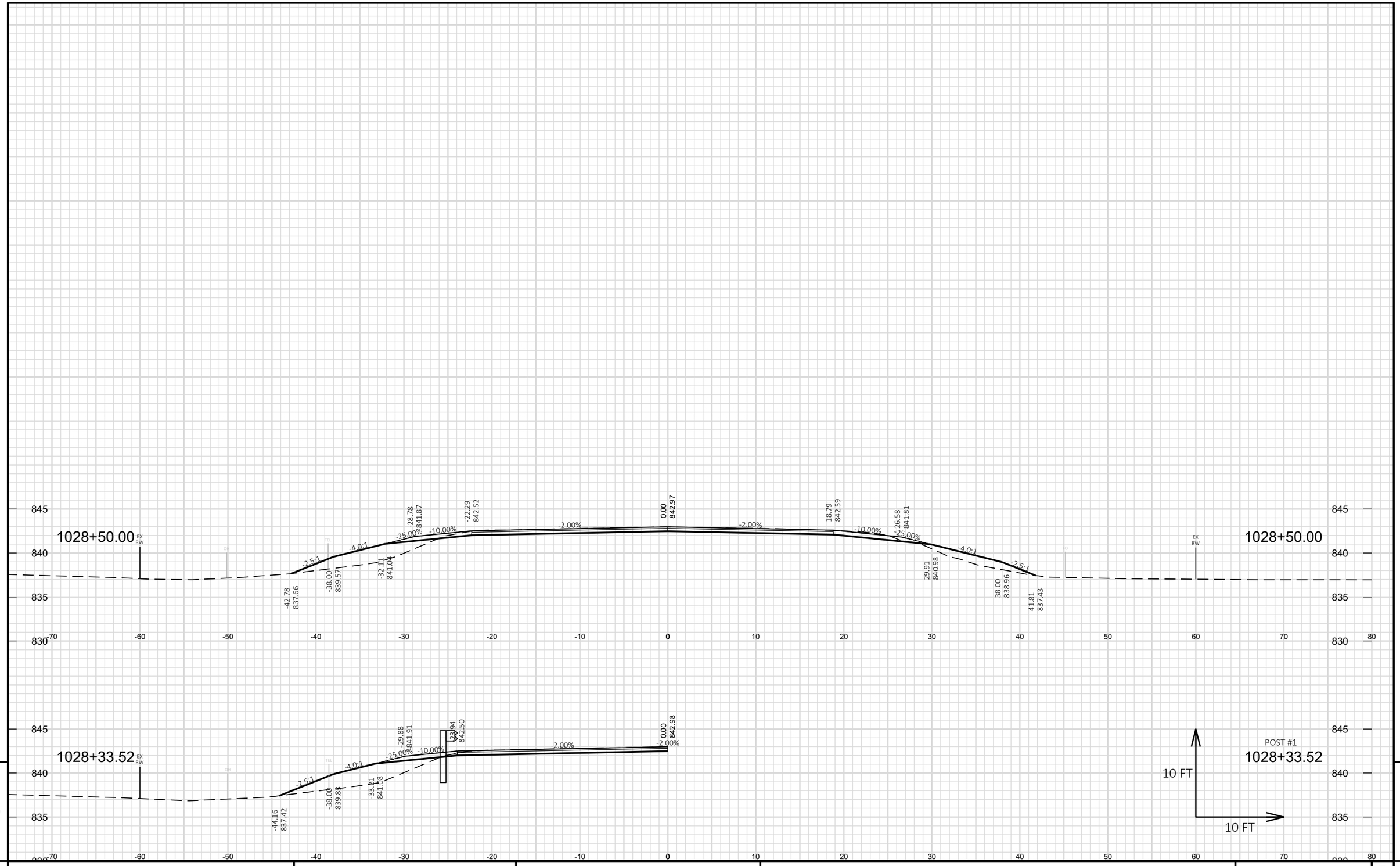
PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	CROSS SECTIONS: GUARDRAIL	SHEET 122 E



9

PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	CROSS SECTIONS: GUARDRAIL	SHEET 123	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-68-00_BRILLION-REEDSVILLE MILL-FILL\DESIGN\C3D FILES\DESIGN\CORRIDORS\CORR-GUARDRAIL.DWG
LAYOUT NAME - 08
PLOT DATE : 5/28/2026 4:16 PM
PLOT BY : JARED HALBUR
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

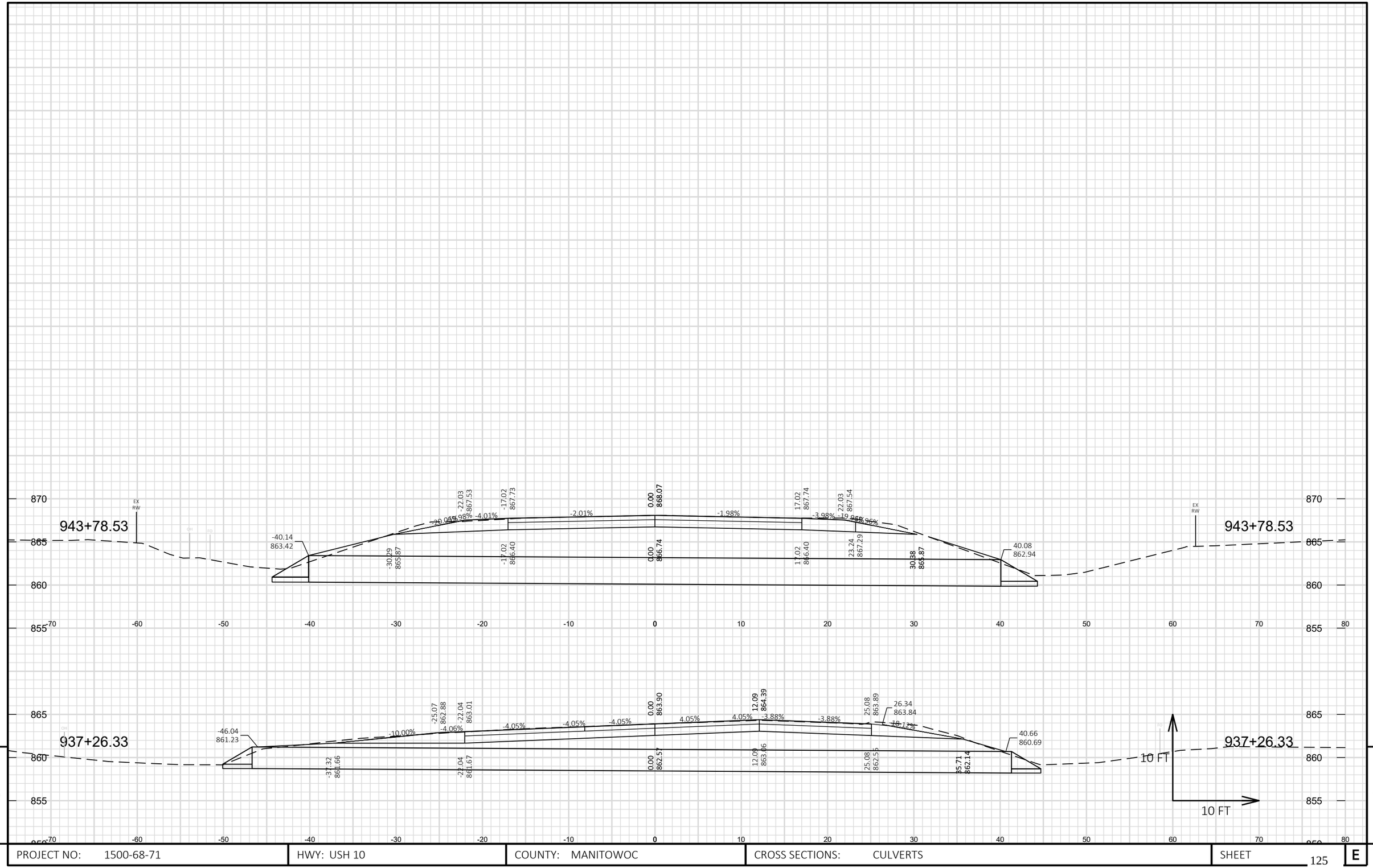


PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	CROSS SECTIONS: GUARDRAIL	SHEET 124 E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-68-00_BRILLION-REEDSVILLE MILL-FILL\DESIGN\C3D FILES\DESIGN\CORRIDORS\CORR-GUARDRAIL.DWG
LAYOUT NAME - 09

PLOT DATE : 5/28/2026 4:17 PM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1500-68-71	HWY: USH 10	COUNTY: MANITOWOC	CROSS SECTIONS: CULVERTS	SHEET 125 E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-68-00_BRILLION-REEDSVILLE MILL-FILL\DESIGN\C3D FILES\DESIGN\CORRIDORS\CORR-GUARDRAIL.DWG
LAYOUT NAME - 10

PLOT DATE : 5/28/2026 4:17 PM PLOT BY : JARED HALBUR PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov

GRE

DECEMBER 2026

PROJECT ID: 1500-75-71

WITH: 1500-68-71

COUNTY: MANITOWOC

ORDER OF SHEETS

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

TOTAL SHEETS = 140



29

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

MAIN STREET, V. OF REEDSVILLE

CTH W - PLEASANT VIEW RD

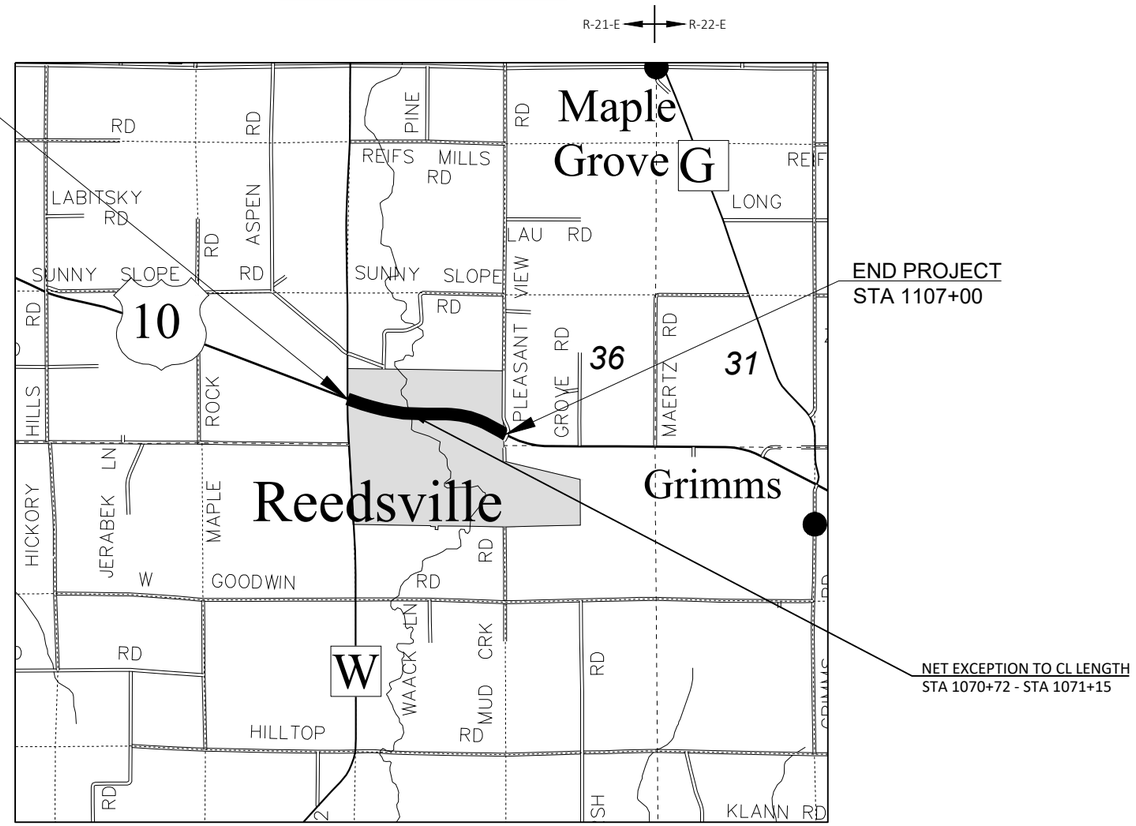
USH 10

MANITOWOC COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1500-75-71		

STATE PROJECT NUMBER

1500-75-71



LAYOUT

SCALE 0 1 MI

TOTAL NET LENGTH OF CENTERLINE = 1.222 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), MANITOWOC 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.

DESIGN DESIGNATION			1500-75-71	CTH W SOUTH OF USH 10	CTH W NORTH OF USH 10
A.A.D.T.	2027	=	6580	2800	1400
A.A.D.T.	2047	=	7500	3420	1710
D.H.V.		=	803		
D.D.		=	60/40		
T.		=	17.8%		
DESIGN SPEED		=	45 MPH		
ESALS		=	2,570,000		

CONVENTIONAL SYMBOLS

PLAN

- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE (300'EB')
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES

- ELECTRIC (E)
- FIBER OPTIC (FO)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

ORIGINAL PLANS PREPARED BY

GREMMER & ASSOCIATES, INC.
CONSULTING ENGINEERS
Stevens Point • Fond du Lac
120 Wilshire Boulevard North • Stevens Point, WI 54481
(715) 341-4363 • fax (715) 341-1256

WISCONSIN PROFESSIONAL ENGINEER
JARED T. HALBUR
E-100484
WISCONSIN RAPIDS, WI

7/21/2026 — DATE

JARED T. HALBUR, PE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	NE REGION
Designer	GREMMER & ASSOCIATES, INC.
Project Manager	B. HAEN
Regional Examiner	REGIONAL EXAMINER
Regional Supervisor	K.BERG

APPROVED FOR THE DEPARTMENT

DATE: 7/22/26 (Signature)

E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\SHEETSPLAN\010101-TI.DWG PLOT DATE : 7/22/2026 9:16 AM PLOT BY : DEXTER KAETTERHENRY PLOT NAME :

GENERAL NOTES

THE LOCATIONS OF EISTING UTILITY FACILITIES AS SHOWN ON THE PLANS ARE APPROIMATE THERE MAY BE OTHER UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN

ORDER OF SECTION 2 DETAIL SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
INTERSECTION DETAILS
CURB RAMP DETAILS
EROSION CONTROL
STORM SEWER
PERMANENT SIGNING
TRAFFIC CONTROL
ALIGNMENT PLAN

DNR LIASION

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
MATT SCHAEVE
2984 SHAWANO AVENUE
GREEN BAY, WI 54313
920-366-1544
.....

MANITOWOC COUNTY HIGHWAY COMMISSIONER

GREG GROTEGUT
STATE ROAD
MANITOWOC WI 222
2
greggrotegut@co.manitowoc.wi.us

NE REGION SURVEY COORDINATOR

CORMAC MCINNIS RLS
VANDERPERREN WAY
GREEN BAY WI
22
cormac.mcinnis@dot.wi.gov

CONSULTANT PROJECT MANAGER

BRIAN HAEN PE
VANDERPERREN WAY
GREEN BAY WI
2
brian.haen@dot.wi.gov

UTILITIES CONTACTS

COMMUNICATIONS

FRONTIER COMMUNICATIONS
ATTN CHRISTOPHER BLUMER
BROADWAY
SUN PRAIRIE WI
PHONE 22
EMAIL

SPECTRUM
ATTN SCOTT DECLARK
E PLANK ROAD
APPLETON WI
PHONE 2
EMAIL

GAS/PETROLEUM

WISCONSIN PUBLIC SERVICE
ATTN MATT GABODA
S WILDWOOD AVENUE
SHEBOYGAN WI
PHONE 2
EMAIL

ELECTRICITY

WISCONSIN PUBLC SERVICE
ATTN CHUCK WINDUS
22 W CALUMET STREET
CHILTON WI
PHONE 22
CELL 2
EMAIL

SEWER

REEDSVILLE MUNICIPAL SEWER UTILITY
ATTN JASON MAERT
2 MENASH STREET
REEDSVILLE WI 2
PHONE 2
EMAIL

WATER

REEDSVILLE MUNICIPAL WATER UTILITY
ATTN JASON MAERT
2 MENASH STREET
REEDSVILLE WI 2
PHONE 2
EMAIL

DIGGERS HOTLINE
Dial 811 or (800)242-8511
www.DiggersHotline.com

EMERGENCY CONTACT NUMBERS FOR WISCONSIN POWER AND LIGHT COMPANY

ELECTRIC 2 HOUR EMERGENCY SERVICE 22
GAS 2 HOUR EMERGENCY SERVICE 22

EMERGENCY CONTACT NUMBERS FOR WISCONSIN PUBLIC SERVICE

ELECTRIC 2 HOUR EMERGENCY SERVICE 2
GAS 2 HOUR EMERGENCY SERVICE 2

EMERGENCY CONTACT NUMBERS FOR WE ENERGIES

ELECTRIC 2 HOUR EMERGENCY SERVICE 2
GAS 2 HOUR EMERGENCY SERVICE 22

RUNOFF COEFFICIENT TABLE

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE PERCENT			SLOPE RANGE PERCENT			SLOPE RANGE PERCENT			SLOPE RANGE PERCENT		
LAND USE	2	2 OVER	2	2	OVER	2	2	OVER	2		2	OVER
ROW CROPS	22	22	2 2	2	2		2				2	
MEDIAN STRIP TURF	2 2	2 2	2	22 2	2	2 2	2		2 2		2 2	
SIDE SLOPE TURF			2 2			2			2			
PAVEMENT												
ASPHALT												
CONCRETE												
BRICK												
DRIVES WALKS												
ROOFS												
GRAVEL ROADS SHOULDERS												

TOTAL PROJECT AREA ACRES
TOTAL AREA EPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES ACRES

CONTROL POINTS / BENCHMARKS TABLE

POINT NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
1015	324328.653	153135.152	840.47	BM RR SPIKE
1016	325327.278	152732.121	841.35	BM RR SPIKE
1017	325119.004	153249.647	840.62	BM RR SPIKE
1018	325677.607	153302.652	839.34	BM RR SPIKE

TOWN OF MAPLE GROVE



N

BEGIN PROJECT 1500-75-71
STA 1042+00

1040 1045 1050 1055 1060 1065 1070 1075 1080 1085 1090 1095 1100 1105 1110 1115 1120

CTH W

15

10

INTERSECTION REALIGNMENT

CULVERT REPLACEMENT
STA 1056+55

N 6TH ST

CURB RAMP ADDITION

MUD CREEK

N 5TH ST

NET EXCEPTION TO CL LENGTH
STA 1070+72 - STA 1071+15

VILLAGE OF REEDSVILLE

4TH ST

CURB RAMP ADDITION

HAZMAT SITE
345 MAIN ST

3RD ST

CURB RAMP ADDITION

N 2ND ST

PLEASANT VIEW RD

USH 10/MAIN ST

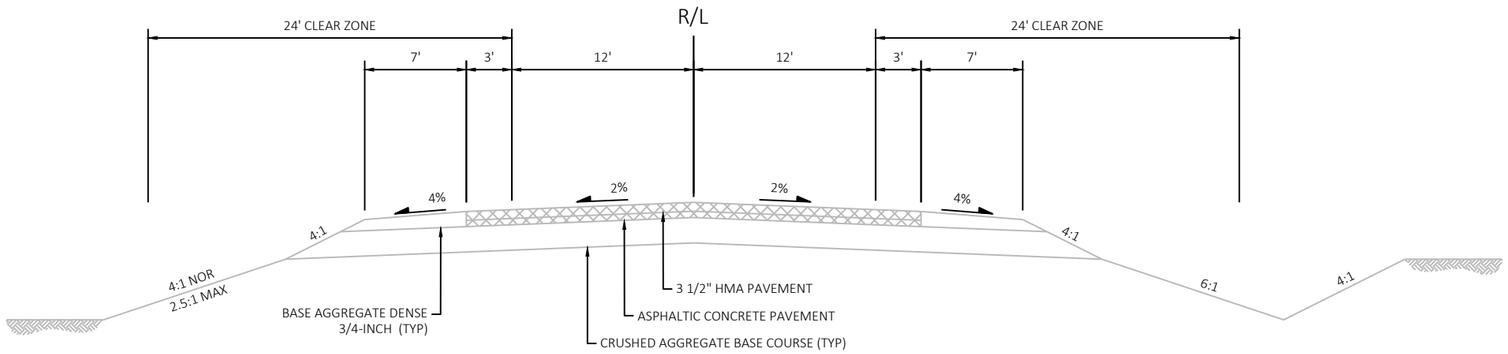
END PROJECT 1500-75-71
STA 1107+00

TOWN OF ROCKLAND

2

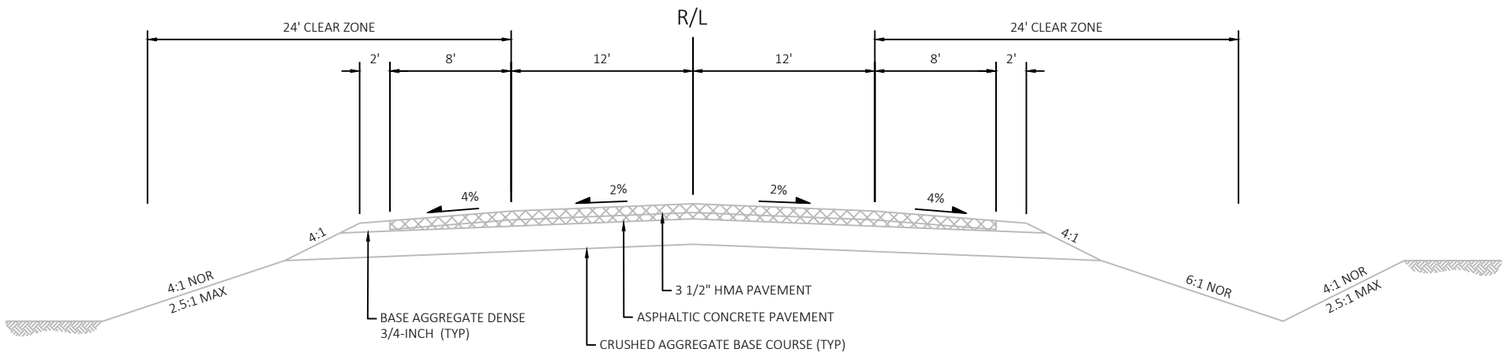
PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\SHEETSPLAN\020201-PO.DWG
LAYOUT NAME - 020201-po
PLOT DATE : 5/29/2026 8:06 AM
PLOT BY : JARED HALBUR
PLOT NAME :
PLOT SCALE : 1 IN:500 FT
WISDOT/CADDS SHEET 42



EXISTING TYPICAL SECTION USH 10

STA 1042+00 TO STA 1055+00

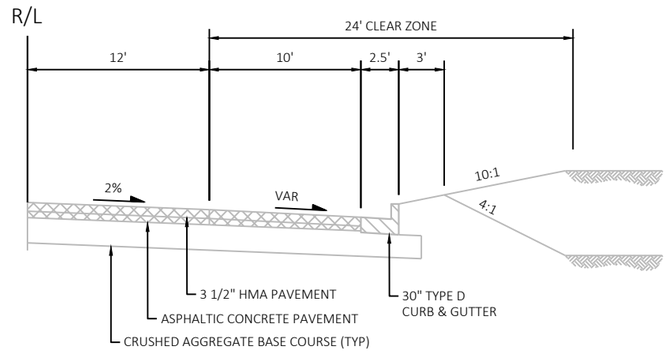


EXISTING TYPICAL SECTION USH 10

STA 1055+00 TO STA 1070+72
STA 1081+00 TO STA 1107+00

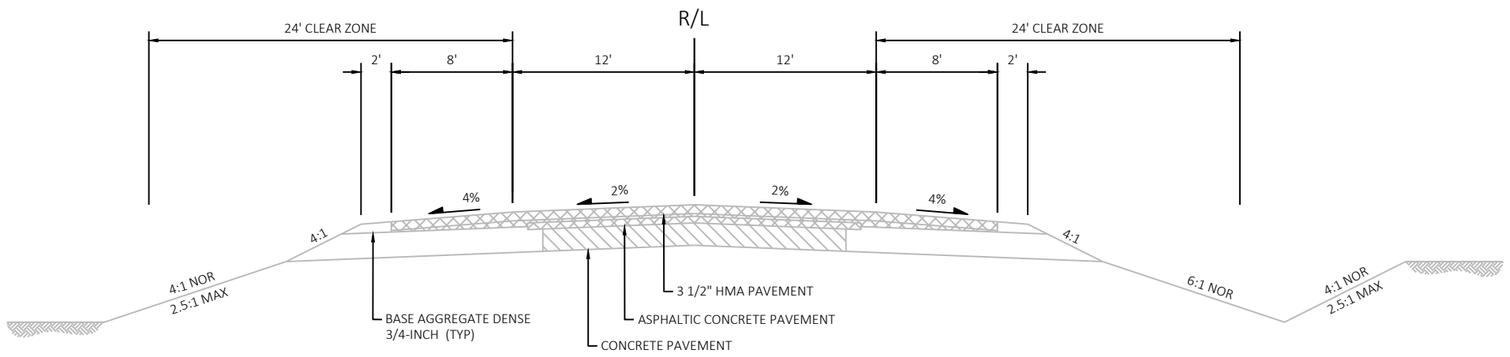
PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	TYPICAL SECTIONS	SHEET 4	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 020301-ts
PLOT DATE : 5/28/2026 9:09 PM
PLOT BY : JARED HALBUR
PLOT NAME :
PLOT SCALE : 1IN:10 FT
WISDOT/CADDS SHEET 42



EXISTING TYPICAL SECTION USH 10

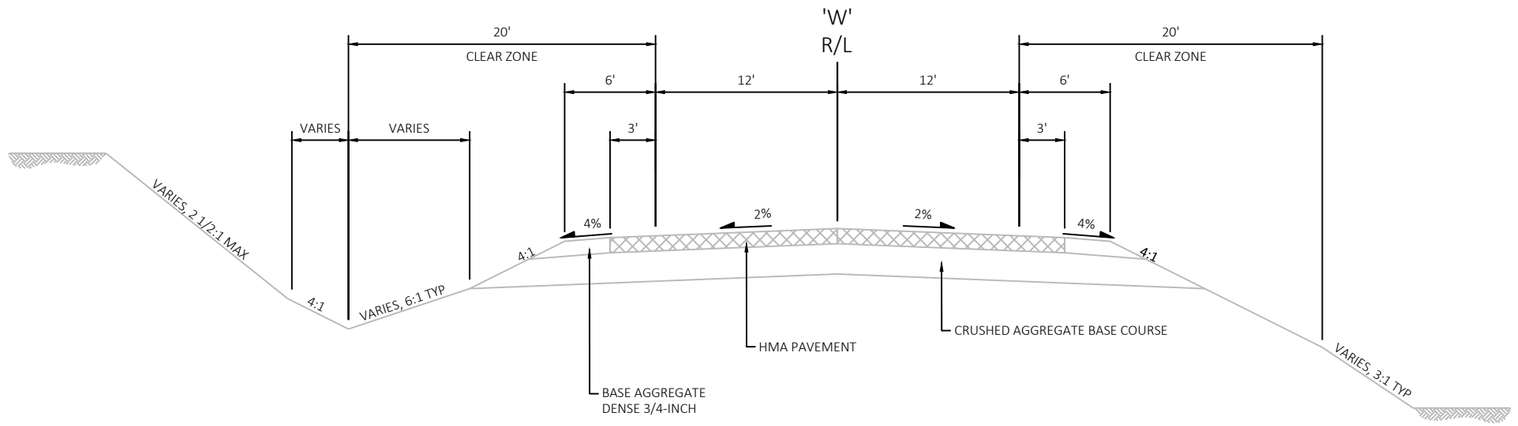
STA 1057+00 TO STA 1061+00 RT
STA 1061+00 TO STA 1063+50 LT
STA 1077+27 TO STA 1078+25 RT
STA 1085+13 TO STA 1088+20 RT



EXISTING TYPICAL SECTION USH 10

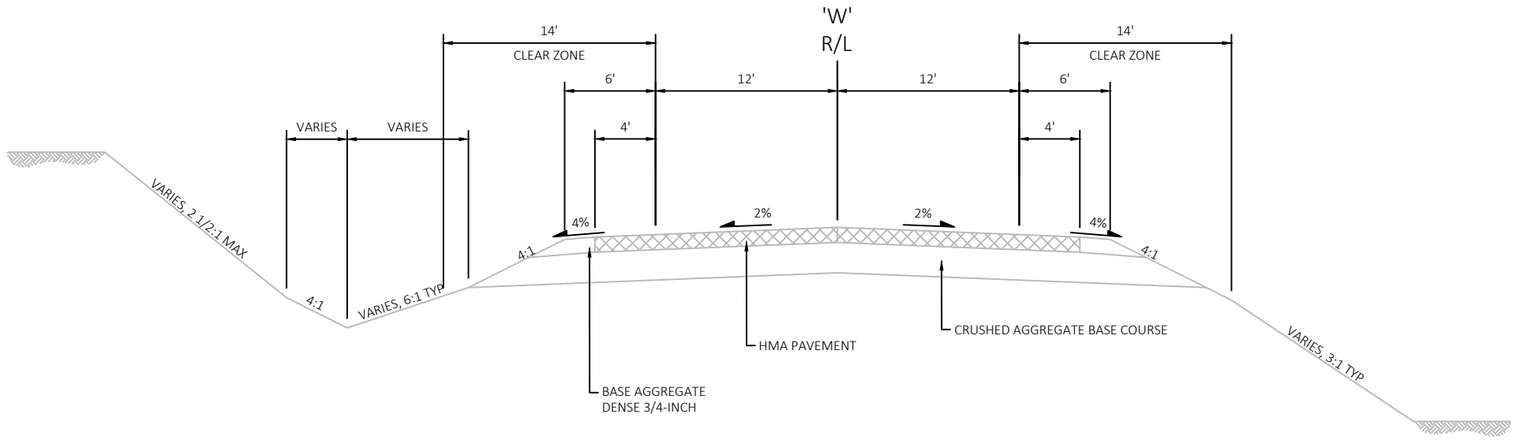
STA 1071+15 TO STA 1081+00

PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	TYPICAL SECTIONS	SHEET 5	E



EXISTING TYPICAL SECTION CTH W

STA 18+84 'W' TO STA 26+07 'W'



EXISTING TYPICAL SECTION CTH W

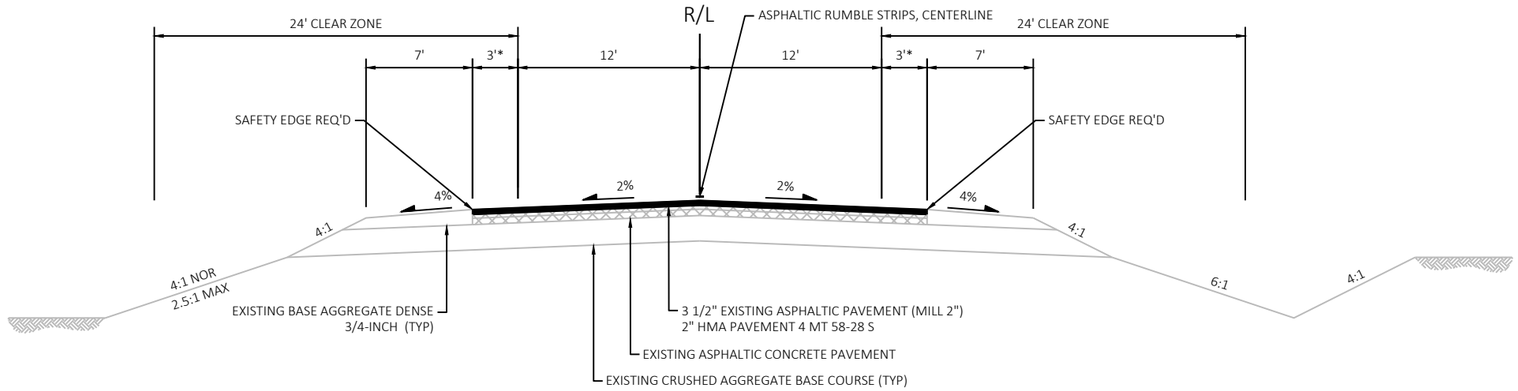
STA 26+07 'W' TO STA 30+26 'W'

PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	TYPICAL SECTIONS	SHEET 6	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 020303-ts

PLOT DATE : 5/28/2026 9:09 PM PLOT BY : JARED HALBUR PLOT NAME : PLOT SCALE : 1IN:10 FT

WISDOT/CADDS SHEET 42

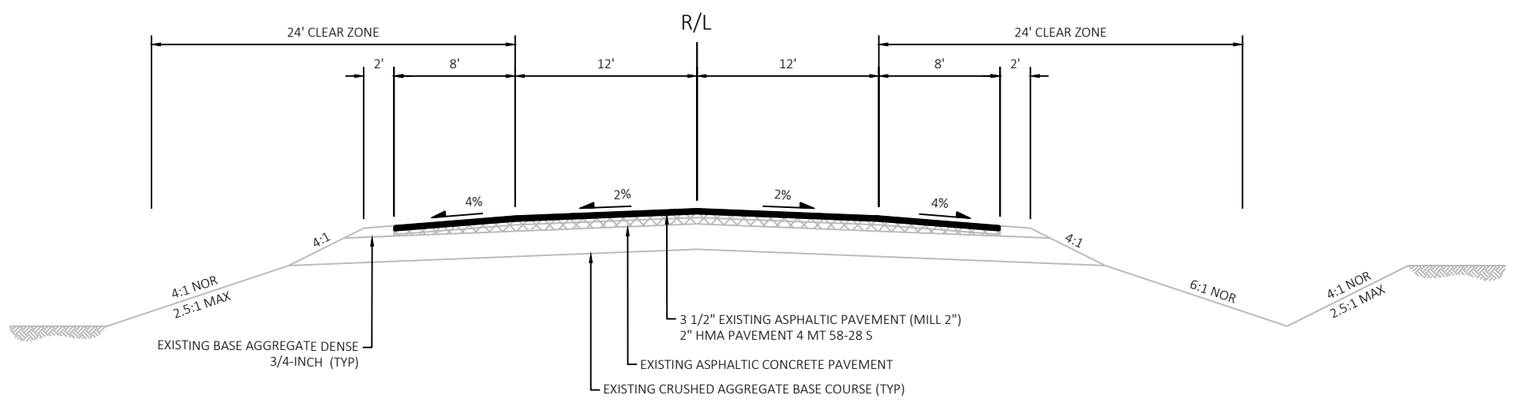


FINISHED TYPICAL SECTION USH 10

STA 1042+00 TO STA 1055+00

NOTES:

* PAVED SHOULDER WIDTH VARIES DUE TO INCLUSION OF AUXILLARY TURN LANES FOR CTH W/USH 10 INTERSECTION.

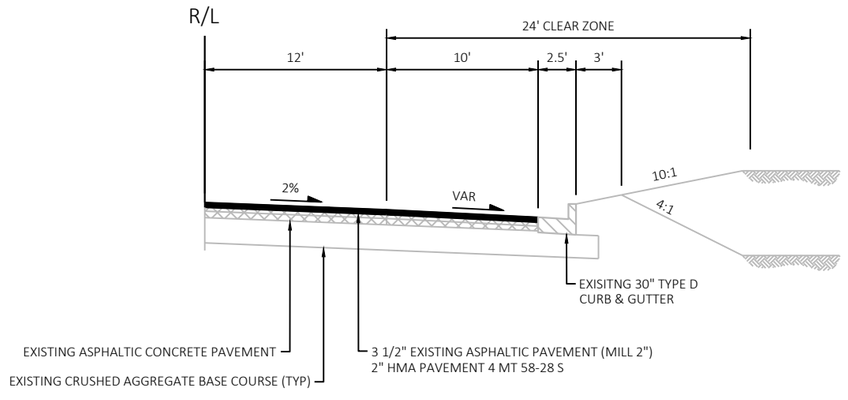


FINISHED TYPICAL SECTION USH 10

STA 1055+00 TO STA 1070+72
STA 1081+00 TO STA 1107+00

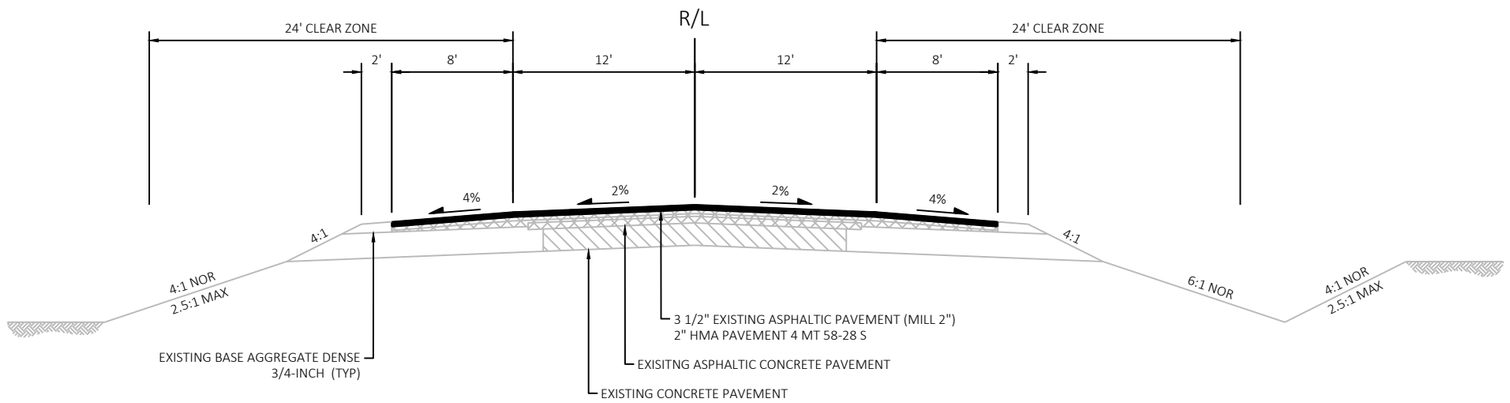
PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	TYPICAL SECTIONS	SHEET 7	E

2



FINISHED TYPICAL SECTION USH 10

STA 1057+00 TO STA 1061+00 RT
STA 1061+00 TO STA 1063+50 LT
STA 1077+27 TO STA 1078+25 RT
STA 1085+13 TO STA 1088+20 RT

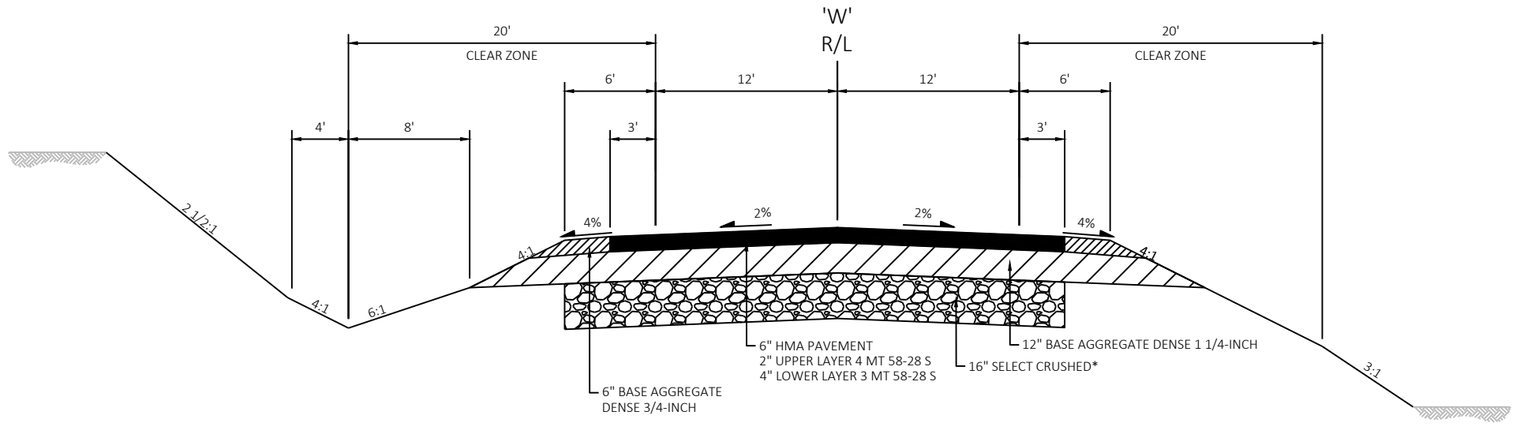


FINISHED TYPICAL SECTION USH 10

STA 1071+15 TO STA 1081+00

PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	TYPICAL SECTIONS	SHEET 8	E

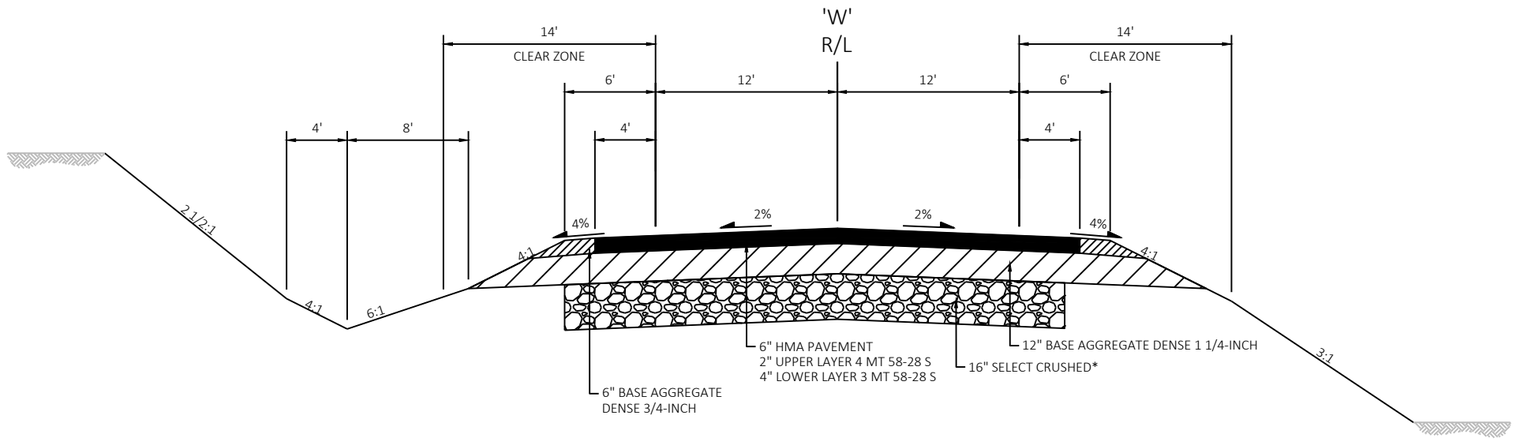
FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 020305-ts
PLOT DATE : 5/28/2026 9:09 PM PLOT BY : JARED HALBUR PLOT NAME : PLOT SCALE : 1IN:10 FT



FINISHED TYPICAL SECTION CTH W

STA 23+82.29 'W' TO STA 30+40 'W'

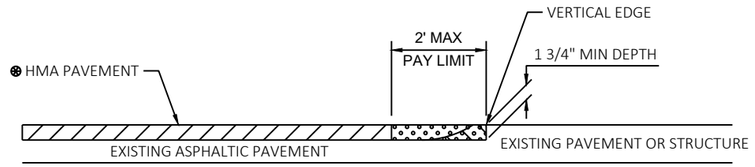
NOTES:
* SELECT CRUSHED TO BE PLACED WHERE PROPOSED ALIGNMENT DEVIATES FROM EXISTING ROAD BED. APPROXIMATELY STA 27+50 - STA 29+75 AND STA 31+40 - STA 33+00. ENGINEER IN FIELD MAY ALTER BREAKER RUN LOCATIONS AS NEEDED.



FINISHED TYPICAL SECTION CTH W

STA 30+40 'W' TO STA 36+75 'W'

2



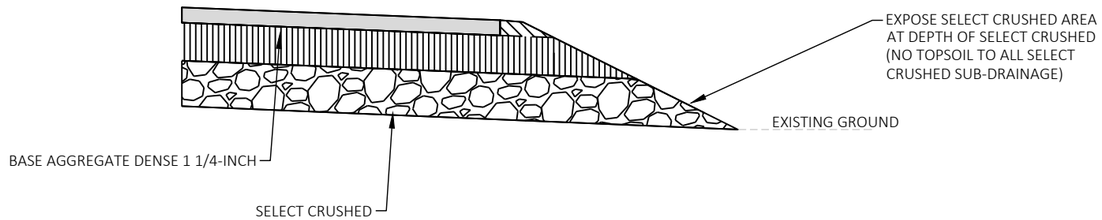
HMA SEE TYPICAL CROSS SECTION FOR PAVEMENT TYPE AND THICKNESS OF INDIVIDUAL LAYERS

REMOVING ASPHALTIC SURFACE, MILLING

REMOVING ASPHALTIC SURFACE, BUTT JOINTS

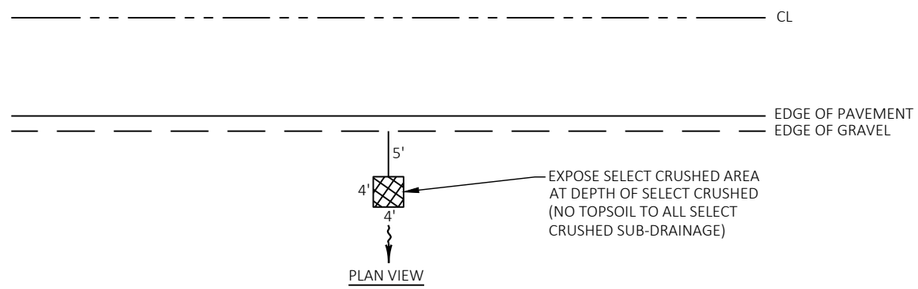
REMOVE ASPHALTIC SURFACE WEDGE AT BUTT JOINT TO CREATE VERTICAL EDGE

BUTT JOINT DETAIL FOR ASPHALTIC PAVEMENTS (NO PROFILE CHANGE)



CROSS SECTION VIEW

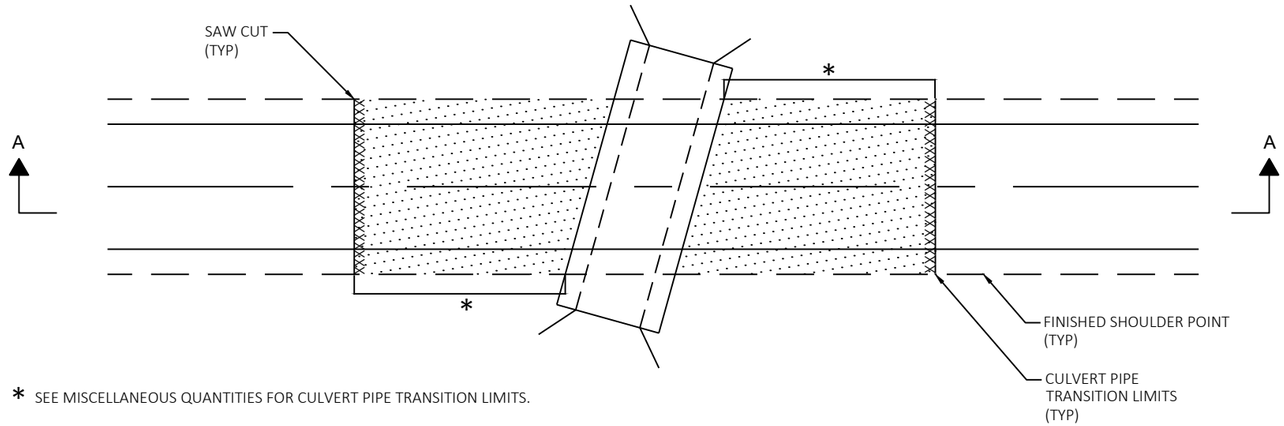
NOTES:
SELECT CRUSHED WEEP TO BE AT LOW POINT OF SELECT CRUSHED LAYER APPROXIMATELY STA 29+55 AND STA 32+29.



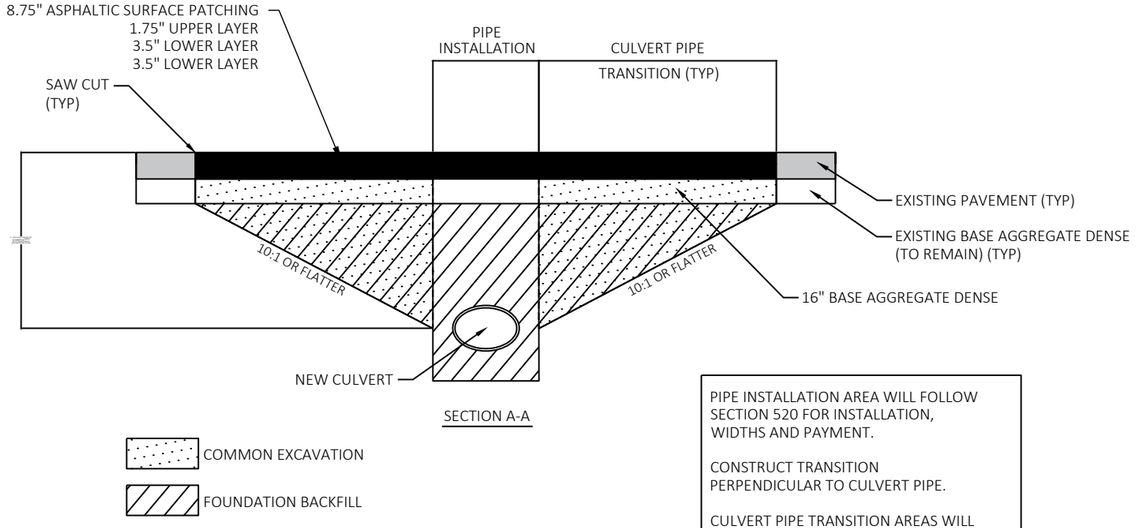
PLAN VIEW

SELECT CRUSHED WEAPS

2



* SEE MISCELLANEOUS QUANTITIES FOR CULVERT PIPE TRANSITION LIMITS.



PIPE INSTALLATION AREA WILL FOLLOW SECTION 520 FOR INSTALLATION, WIDTHS AND PAYMENT.

CONSTRUCT TRANSITION PERPENDICULAR TO CULVERT PIPE.

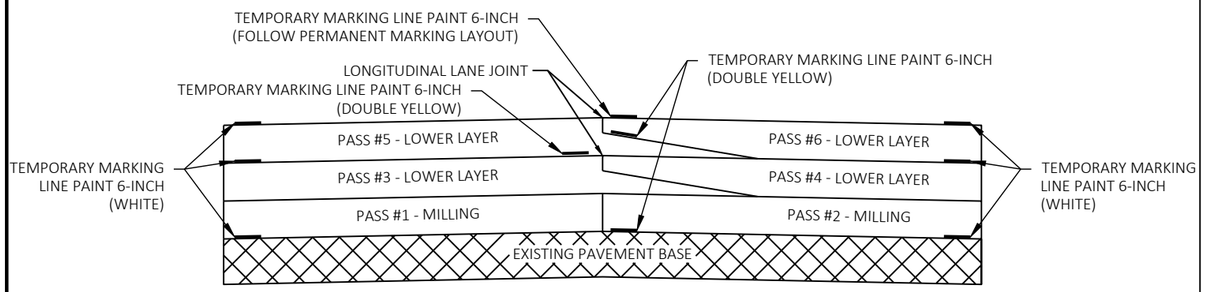
CULVERT PIPE TRANSITION AREAS WILL BE PAID BY COMMON EXCAVATION & SPV FOUNDATION BACKFILL.

PAVEMENT SAW CUT TO BE PERPENDICULAR TO ROADWAY ALIGNMENT.

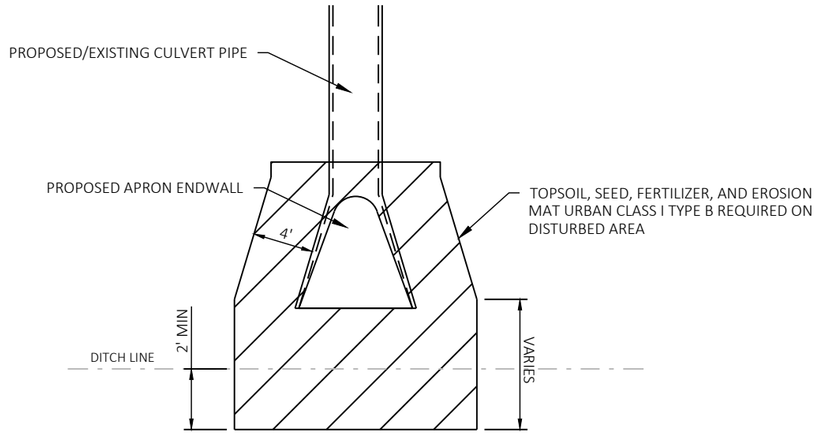
NEW CULVERT PIPES WITH TRANSITION

NOTES

ROADWAY SHALL HAVE TEMPORARY OR PERMANENT CENTERLINE MARKINGS AT ALL TIMES.



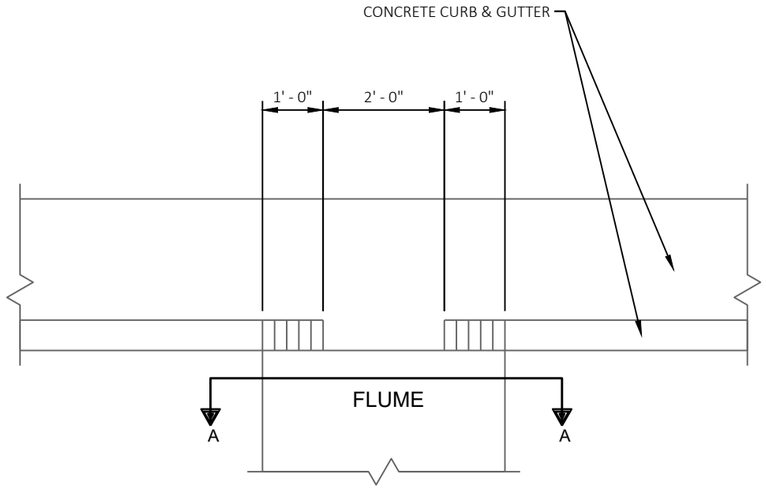
PAVEMENT MARKING DETAIL FOR TAPERED OVERLAPPING JOINTS IN HMA PAVEMENTS



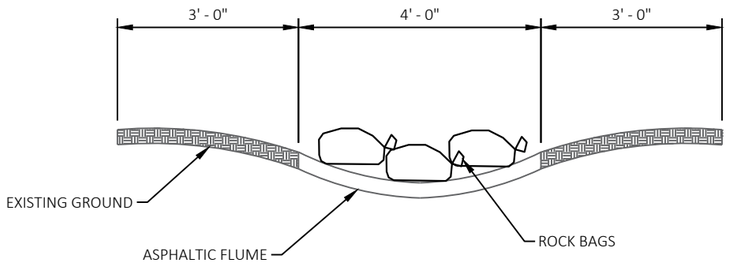
GRADING, SHAPING AND FINISHING CULVERT PIPES AND APRON ENDWALLS DETAIL

2

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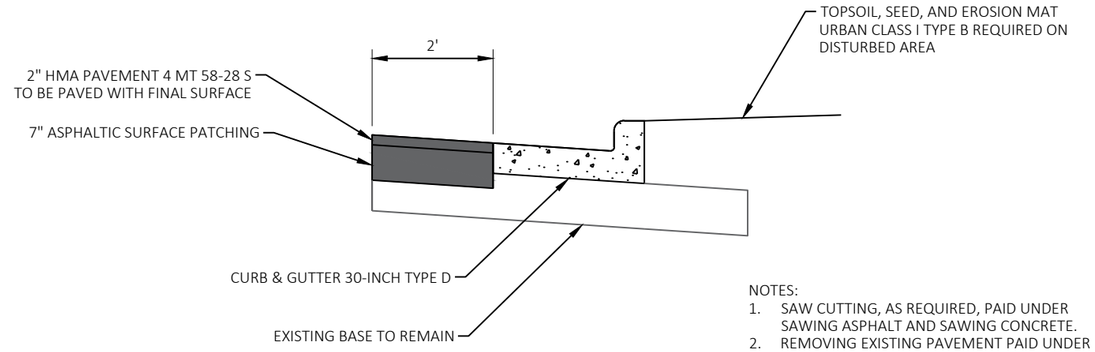


PLAN VIEW



SECTION A-A

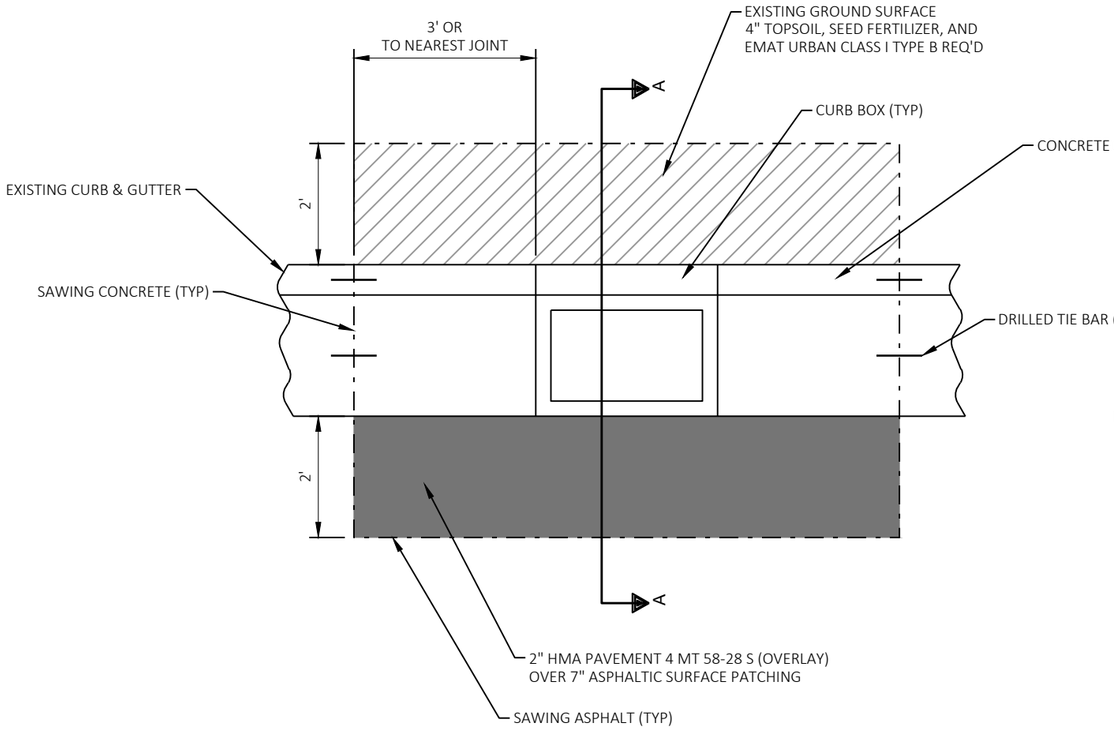
ASPHALTIC FLUME ROCK BAG REPLACEMENT DETAIL

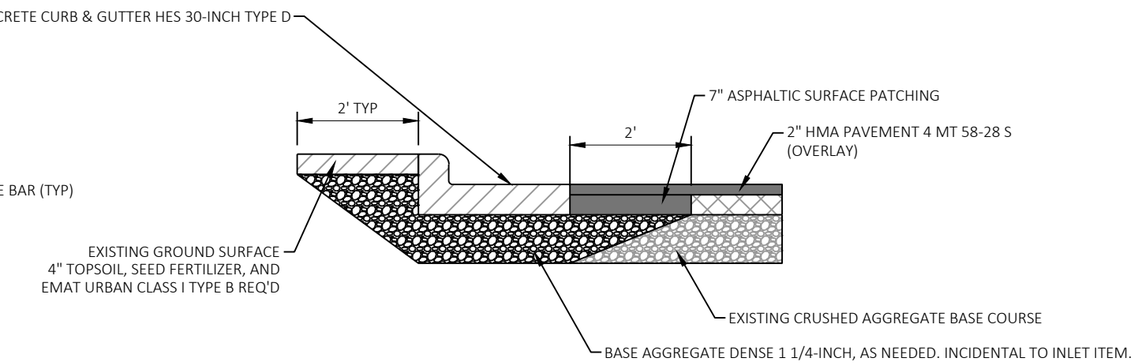


NOTES:
1. SAW CUTTING, AS REQUIRED, PAID UNDER SAWING ASPHALT AND SAWING CONCRETE.
2. REMOVING EXISTING PAVEMENT PAID UNDER REMOVE ASPHALTIC SURFACE

CURB & GUTTER REPLACEMENT DETAIL

2

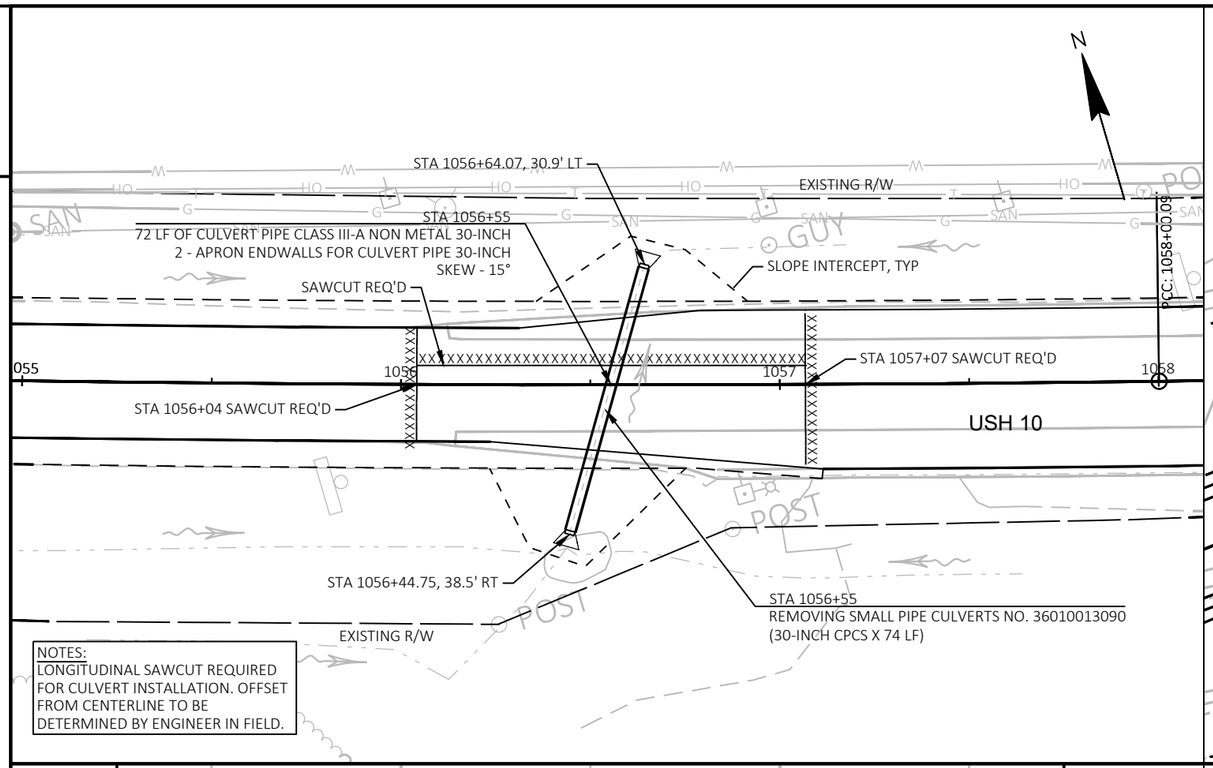


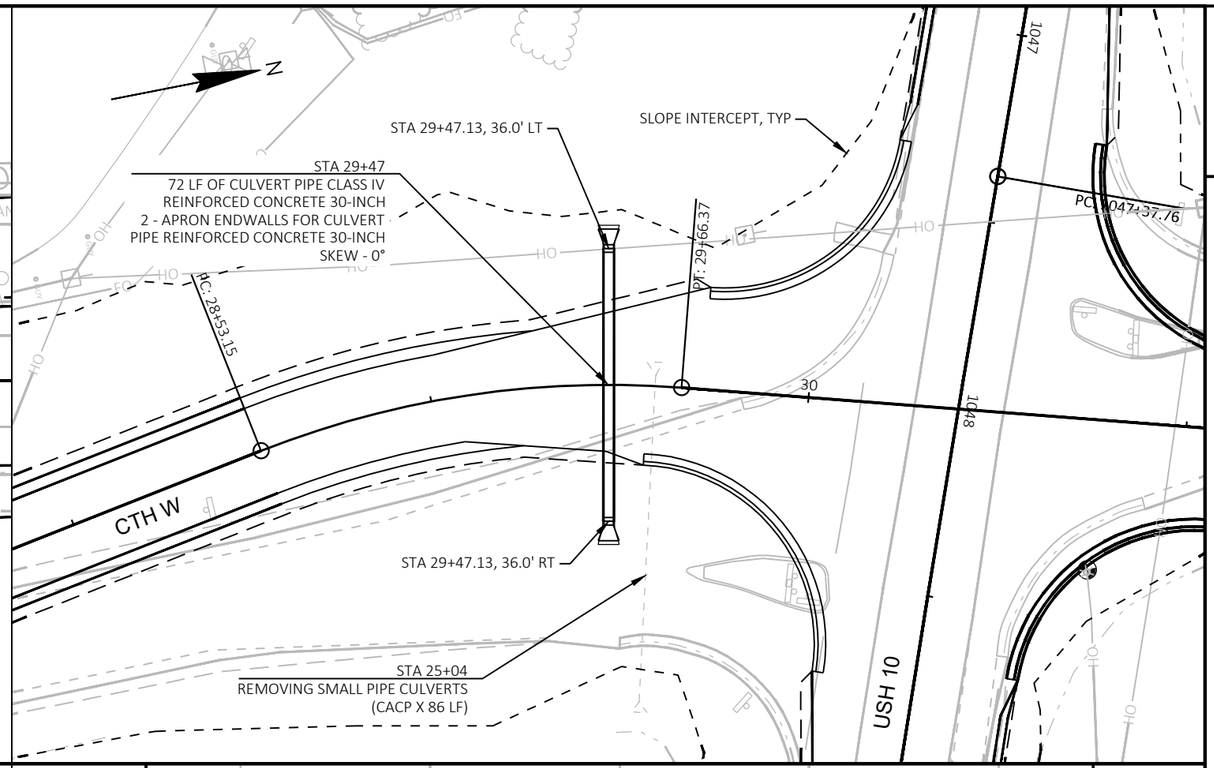


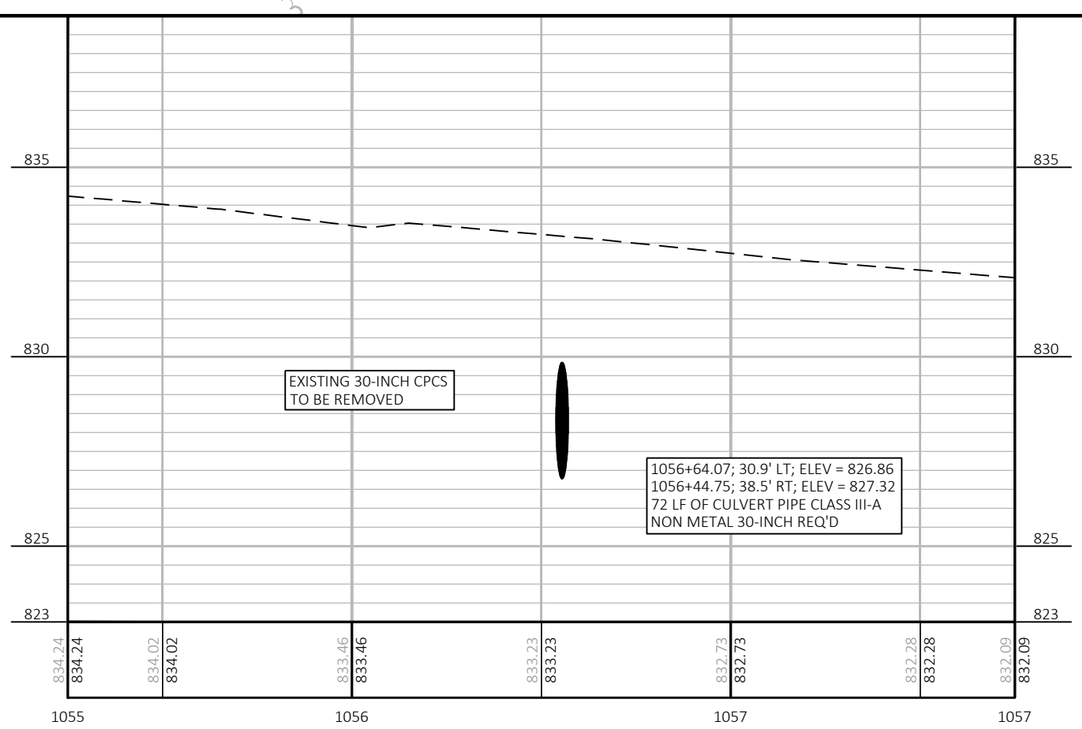
SECTION A-A

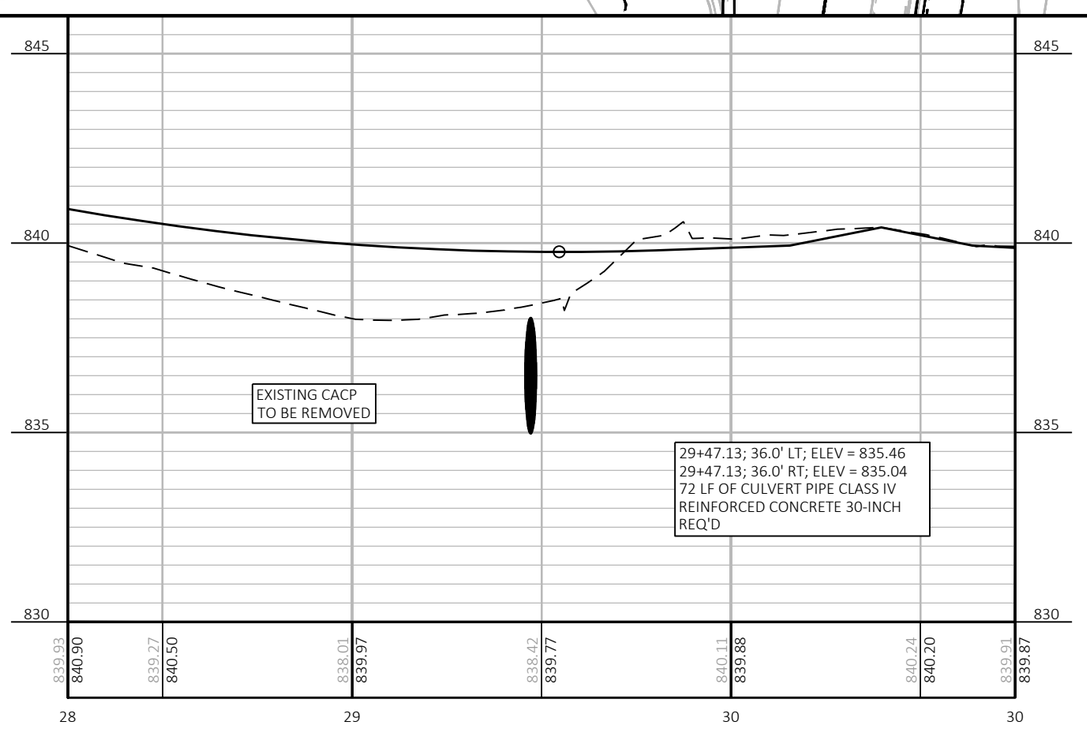
NOTES:
1. THE CURB BOX OPENING SHALL BE SEALED PRIOR TO POURING THE CONCRETE CURB TO PREVENT CONCRETE FROM ENTERING THE STRUCTURE.
2. REUSE EXISTING GRATE AND CASTING UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
3. SAW CUTTING, AS REQUIRED, PAID FOR UNDER SAWING ASPHALT AND SAWING CONCRETE.
4. REMOVALS SHALL BE PAID FOR UNDER REMOVING ASPHALTIC SURFACE AND REMOVING CURB & GUTTER.

INLET INSTALLATION DETAIL









PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	CONSTRUCTION DETAILS - CULVERTS	SHEET 15	E

2

NOTES:
UTILIZE SDD AT GRADE SIDE ROAD INTERSECTION TYPE A2 FOR MORE INFORMATION.
RADIUS MEASURED TO EDGE OF PAVEMENT OR FLAG LINE OF CURB & GUTTER.

CTH W SOUTH POSTED SPEED = 45 MPH
CTH W NORTH POSTED SPEED = 55 MPH

END CONSTRUCTION
STA 36+75 'W'
MATCH EXISTING
SAW CUT REQ'D

STA 1053+07.00
14.7' RT

STA 1051+68.35
27.0' LT

EXISTING R/W

R = 50'

VETERINARY ASSOCIATES, LLC

INTERSECTION TYPE A2
85° INTERSECTION ANGLE
STA 1048+00
STA 30+40

CONCRETE CURB AND GUTTER
6-INCH SLOPED 36-INCH TYPE D, TYP

72 LF OF CULVERT PIPE
CLASS IV 30-INCH

GRADING, SHAPING DITCH

USH 10

ASPHALTIC FLUMES, TYP

SLOPE INTERCEPT, TYP

CTH W

STA 1043+82.46
27.0' RT

STA 1042+45.09
15.1' RT

BEGIN CONSTRUCTION
STA 23+82 'W'
MATCH EXISTING
SAW CUT REQ'D

PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	INTERSECTION DETAIL	SHEET 16	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\SHEETSPLAN\021001-ID.DWG
LAYOUT NAME - 021001-id
PLOT DATE : 7/29/2026 9:31 AM PLOT BY : DEXTER KAETTERHENRY PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

2

836.20
SWALE

SLOPE INTERCEPT, TYP

836.44
SWALE

840.19
STA 31+56.25
16.0' RT

838.86
STA 31+70.83
16.0' LT

840.44
STA 31+07.65
24.0' RT

R = 50'
+68.2, 74.0' LT

839.04
STA 31+20.83
18.0' LT

836.71
SWALE

NOTES:
RADII ARE MEASURED TO EDGE OF PAVEMENT OR FLAG LINE OF CURB & GUTTER.

REMOVAL OF EXISTING PAVEMENT IS PAID FOR AS COMMON EXCAVATION.

R = 50'
+24.8, 74.0' LT

837.25
SWALE

839.98
STA 1048+34.23
37.2' LT

839.54
STA 1048+68.23
24.0' LT

839.66
STA 1047+62.04
40.5' LT

840.27
STA 1047+24.83
24.0' LT

837.75
EX SWALE

839.11
STA 1049+48.46
15.15' RT

834.26
SWALE

833.76
SWALE

839.46
STA 1048+74.36
24.0' RT

834.51
SWALE

839.35
STA 1048+37.12
40.85' RT

840.35
STA 1047+66.16
37.1' RT

834.90
SWALE

839.11
STA 1046+44.68
15.0' LT

838.25
EX SWALE

R = 50'
+74.4, 74.0' RT

840.24
STA 1047+32.58
24' RT

839.23
STA 29+57.13
18.0' RT

840.45
STA 29+72.03
24.0' LT

838.35
SWALE

INV = 835.04
STA 29+47.13
35.0' RT

839.24
STA 29+23.24
15.0' RT

836.64
SWALE

837.75
SWALE

R = 50'
+32.6, 74.0' RT

836.13
SWALE

INV = 835.46
STA 29+47.13
35.0' LT

840.50
STA 29+27.95
15.0' LT

838.25
SWALE

838.03
SWALE

838.30
SWALE

838.49
EX SWALE

1051
1050
1049
1048
1047
1046
1045
32
31
30
29
28
USH 10
CTH W
N

PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	INTERSECTION DETAIL	SHEET 17	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\SHEETSPLAN\021001-ID.DWG
LAYOUT NAME - 021001-id (2)
PLOT DATE : 7/29/2026 9:31 AM
PLOT BY : DEXTER KAETTERHENRY
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42



LEGEND:

- 2 — CONCRETE CURB RAMP TYPE 2
- 4B1 — CONCRETE CURB RAMP TYPE 4B1
- X — CURB RAMP NUMBER
- TOP — TOPSOIL
- SW6 — CONCRETE SIDEWALK 6-INCH
- * — LANDING

NOTES:

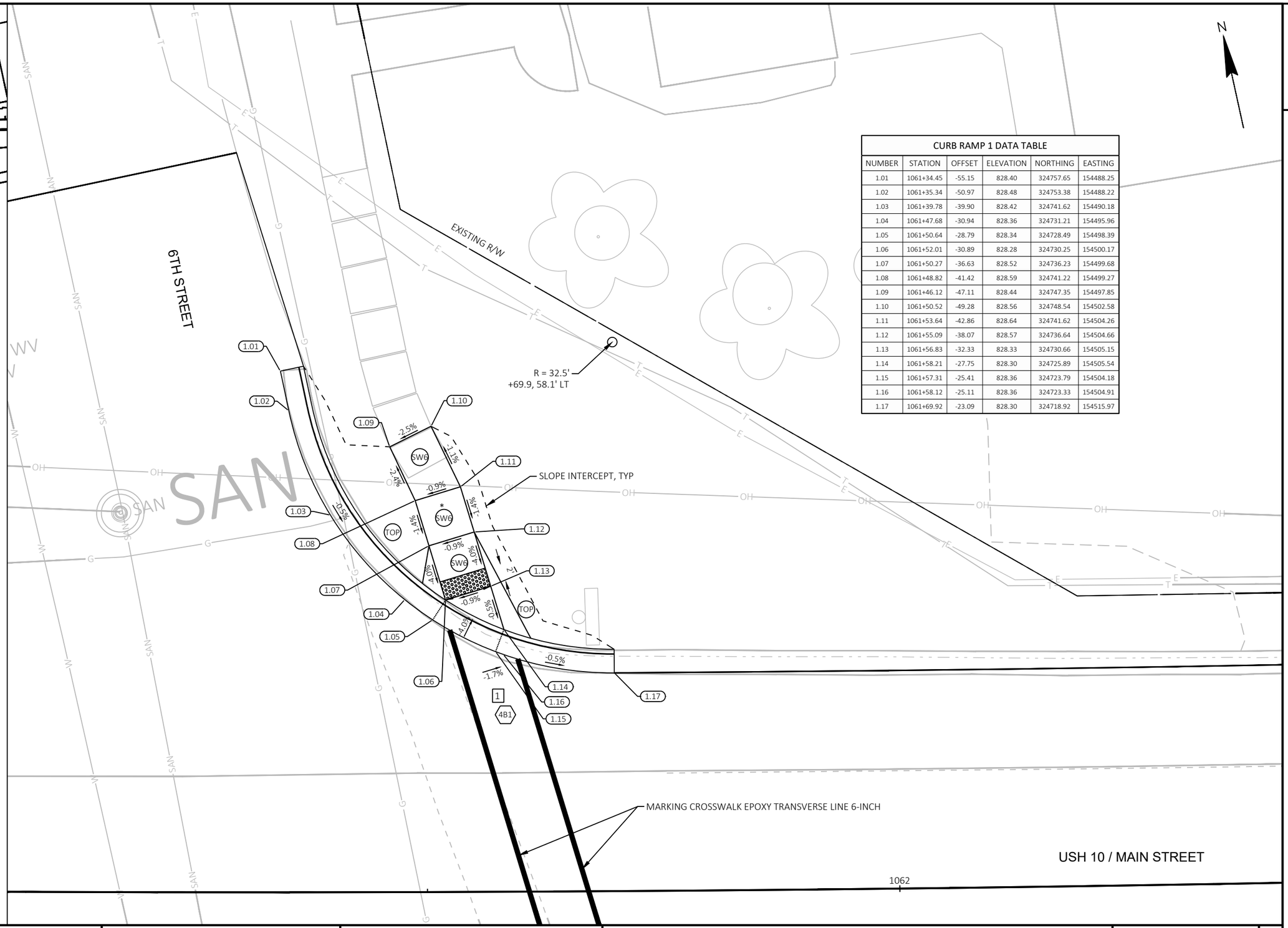
CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.

THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION.

REFER TO STANDARD DETAIL DRAWINGS "CURB RAMPS" FOR JOINT LOCATIONS AND COMPLETE CURB RAMP REQUIREMENTS.

CURB RAMP FLARES TO BE GRASS (UNPAVED NON-TRAVERSABLE).

ALL STATION AND OFFSET INFORMATION REFERENCE USH 10 R/L.



CURB RAMP 1 DATA TABLE					
NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1.01	1061+34.45	-55.15	828.40	324757.65	154488.25
1.02	1061+35.34	-50.97	828.48	324753.38	154488.22
1.03	1061+39.78	-39.90	828.42	324741.62	154490.18
1.04	1061+47.68	-30.94	828.36	324731.21	154495.96
1.05	1061+50.64	-28.79	828.34	324728.49	154498.39
1.06	1061+52.01	-30.89	828.28	324730.25	154500.17
1.07	1061+50.27	-36.63	828.52	324736.23	154499.68
1.08	1061+48.82	-41.42	828.59	324741.22	154499.27
1.09	1061+46.12	-47.11	828.44	324747.35	154497.85
1.10	1061+50.52	-49.28	828.56	324748.54	154502.58
1.11	1061+53.64	-42.86	828.64	324741.62	154504.26
1.12	1061+55.09	-38.07	828.57	324736.64	154504.66
1.13	1061+56.83	-32.33	828.33	324730.66	154505.15
1.14	1061+58.21	-27.75	828.30	324725.89	154505.54
1.15	1061+57.31	-25.41	828.36	324723.79	154504.18
1.16	1061+58.12	-25.11	828.36	324723.33	154504.91
1.17	1061+69.92	-23.09	828.30	324718.92	154515.97

PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	CURB RAMP DETAILS	SHEET 18	E



LEGEND:

- (2) CONCRETE CURB RAMP TYPE 2
- (4B1) CONCRETE CURB RAMP TYPE 4B1
- [X] CURB RAMP NUMBER
- (TOP) TOPSOIL
- (SWG) CONCRETE SIDEWALK 6-INCH
- * LANDING

NOTES:

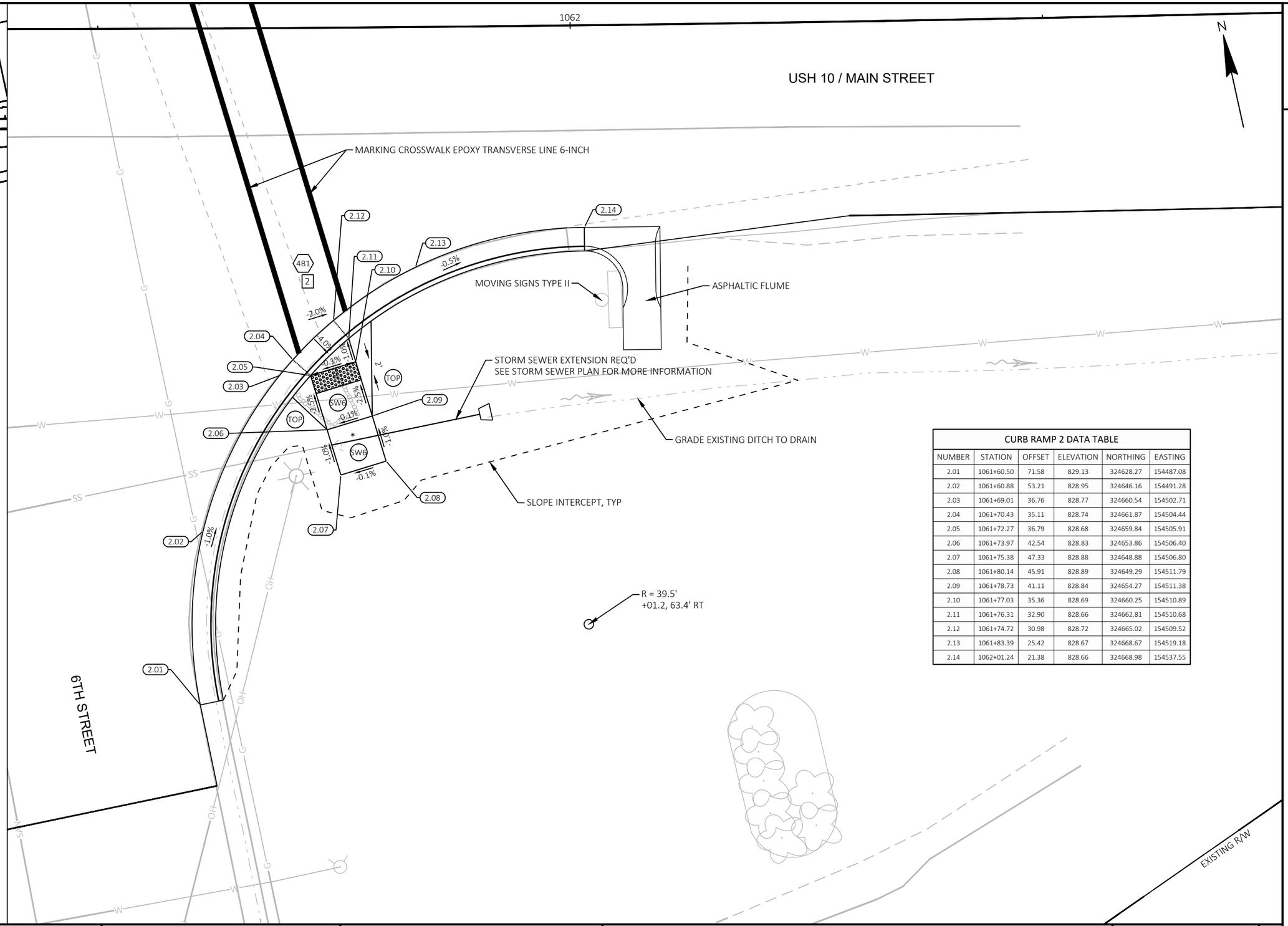
CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.

THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION.

REFER TO STANDARD DETAIL DRAWINGS "CURB RAMPS" FOR JOINT LOCATIONS AND COMPLETE CURB RAMP REQUIREMENTS.

CURB RAMP FLARES TO BE GRASS (UNPAVED NON-TRAVERSABLE).

ALL STATION AND OFFSET INFORMATION REFERENCE USH 10 R/L.

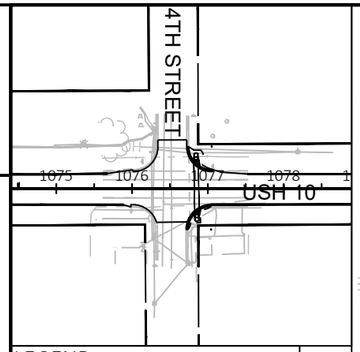


CURB RAMP 2 DATA TABLE

NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
2.01	1061+60.50	71.58	829.13	324628.27	154487.08
2.02	1061+60.88	53.21	828.95	324646.16	154491.28
2.03	1061+69.01	36.76	828.77	324660.54	154502.71
2.04	1061+70.43	35.11	828.74	324661.87	154504.44
2.05	1061+72.27	36.79	828.68	324659.84	154505.91
2.06	1061+73.97	42.54	828.83	324653.86	154506.40
2.07	1061+75.38	47.33	828.88	324648.88	154506.80
2.08	1061+80.14	45.91	828.89	324649.29	154511.79
2.09	1061+78.73	41.11	828.84	324654.27	154511.38
2.10	1061+77.03	35.36	828.69	324660.25	154510.89
2.11	1061+76.31	32.90	828.66	324662.81	154510.68
2.12	1061+74.72	30.98	828.72	324665.02	154509.52
2.13	1061+83.39	25.42	828.67	324668.67	154519.18
2.14	1062+01.24	21.38	828.66	324668.98	154537.55

PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	CURB RAMP DETAILS	SHEET 19	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\SHEETSPLAN\021151_CR.DWG
LAYOUT NAME - 01 (2)
PLOT DATE : 10/26/2026 9:56 AM
PLOT BY : JARED HALBUR
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 44



LEGEND:

- 2 — CONCRETE CURB RAMP TYPE 2
- 4B1 — CONCRETE CURB RAMP TYPE 4B1
- X — CURB RAMP NUMBER
- TOP — TOPSOIL
- SW6 — CONCRETE SIDEWALK 6-INCH
- * — LANDING

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.

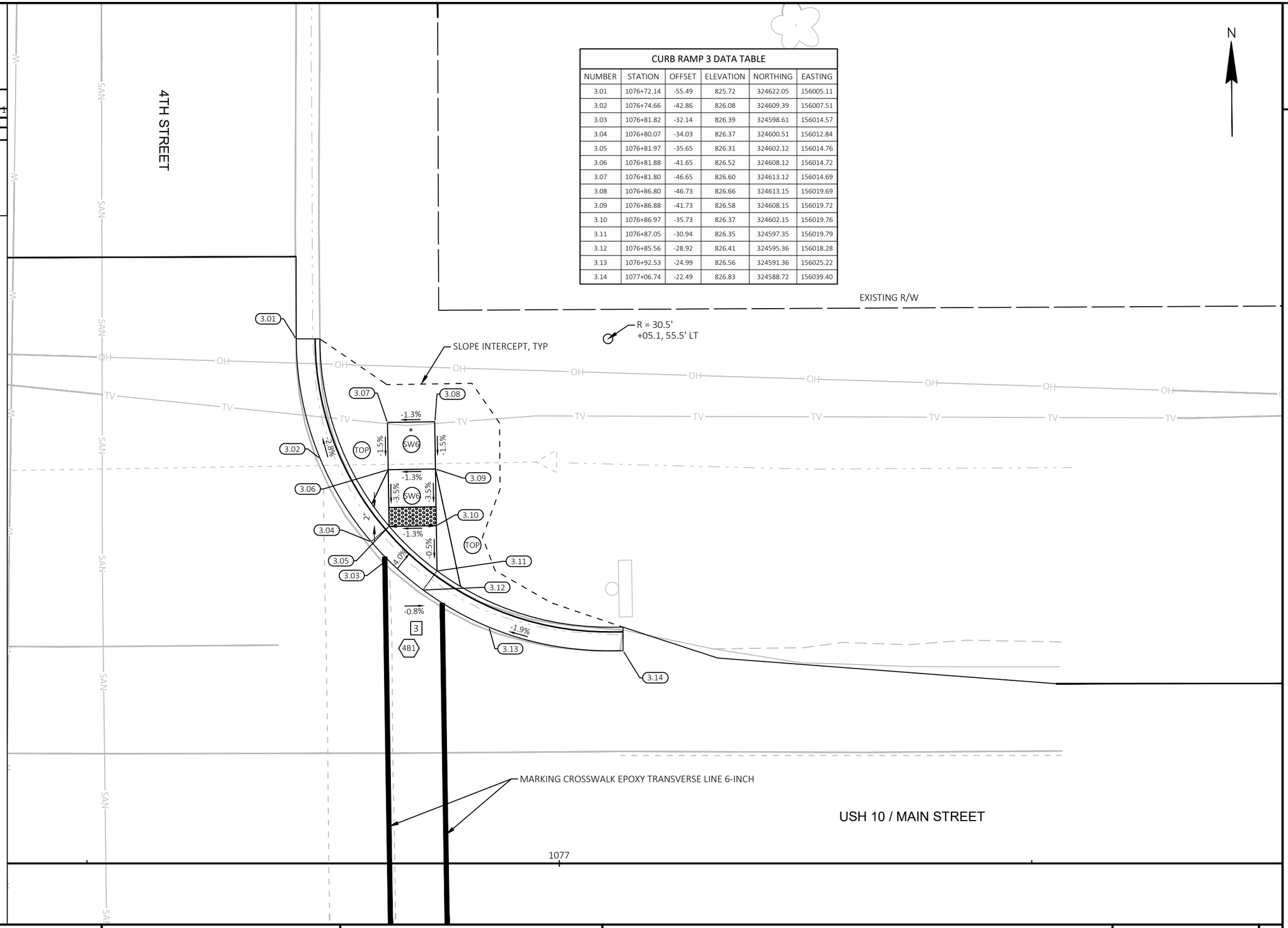
REFER TO STANDARD DETAIL DRAWINGS "CURB RAMPS" FOR JOINT LOCATIONS AND COMPLETE CURB RAMP REQUIREMENTS.

CURB RAMP FLARES TO BE GRASS (UNPAVED NON-TRAVERSABLE).

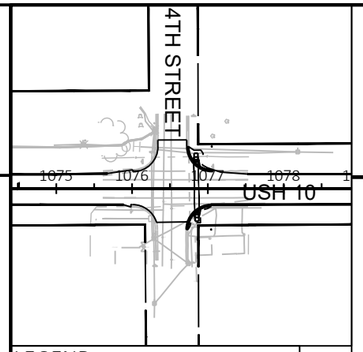
ALL STATION AND OFFSET INFORMATION REFERENCE USH 10 R/L.

CURB RAMP 3 DATA TABLE

NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
3.01	1076+72.14	-55.49	825.72	324622.05	156005.11
3.02	1076+74.66	-42.86	826.08	324609.39	156007.51
3.03	1076+81.82	-32.14	826.39	324598.61	156014.57
3.04	1076+80.07	-34.03	826.37	324600.51	156012.84
3.05	1076+81.97	-35.65	826.31	324602.12	156014.76
3.06	1076+81.88	-41.65	826.52	324608.12	156014.72
3.07	1076+81.80	-46.65	826.60	324613.12	156014.69
3.08	1076+86.80	-46.73	826.66	324613.15	156019.69
3.09	1076+86.88	-41.73	826.58	324608.15	156019.72
3.10	1076+86.97	-35.73	826.37	324602.15	156019.76
3.11	1076+87.05	-30.94	826.35	324597.35	156019.79
3.12	1076+85.56	-28.92	826.41	324595.36	156018.28
3.13	1076+92.53	-24.99	826.56	324591.36	156025.22
3.14	1077+06.74	-22.49	826.83	324588.72	156039.40



PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	CURB RAMP DETAILS	SHEET 20	E



LEGEND:

- 2 — CONCRETE CURB RAMP TYPE 2
- 4B1 — CONCRETE CURB RAMP TYPE 4B1
- X — CURB RAMP NUMBER
- TOP — TOPSOIL
- SWG — CONCRETE SIDEWALK 6-INCH
- * — LANDING

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.

REFER TO STANDARD DETAIL DRAWINGS "CURB RAMPS" FOR JOINT LOCATIONS AND COMPLETE CURB RAMP REQUIREMENTS.

CURB RAMP FLARES TO BE GRASS (UNPAVED NON-TRAVERSABLE).

ALL STATION AND OFFSET INFORMATION REFERENCE USH 10 R/L.

2

1077

N

2

USH 10 / MAIN STREET

MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH

4.12 4.14 4.11 4.13 4B1 4 -1.0% -1.1% 4.0% 4.04 4.03 4.05 -1.4% -0.5% TOP 4.10 SLOPE INTERCEPT, TYP -3.5% SWG -3.5% 4.06 4.09 -1.4% 4.02 -1.8% -1.5% TOP SWG -1.5% * -1.4% 4.07 4.08 4.01

R = 30.5'
+04.2, 51.0' RT

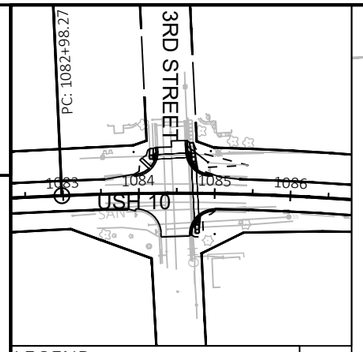
EXISTING R/W

4TH STREET

CURB RAMP 4 DATA TABLE					
NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
4.01	1076+71.21	54.10	826.01	324512.47	156003.15
4.02	1076+73.70	41.46	826.24	324525.09	156005.76
4.03	1076+80.85	30.73	826.48	324535.75	156013.00
4.04	1076+81.28	30.31	826.49	324536.16	156013.44
4.05	1076+83.01	32.11	826.43	324534.35	156015.16
4.06	1076+83.11	38.11	826.64	324528.35	156015.19
4.07	1076+83.18	43.11	826.71	324523.35	156015.22
4.08	1076+88.18	43.03	826.78	324523.38	156020.22
4.09	1076+88.11	38.03	826.71	324528.38	156020.19
4.10	1076+88.01	32.03	826.50	324534.38	156020.16
4.11	1076+87.95	28.23	826.48	324538.18	156020.13
4.12	1076+86.62	26.11	826.54	324540.31	156018.82
4.13	1076+91.55	23.56	826.60	324542.82	156023.77
4.14	1077+04.18	21.03	826.74	324545.22	156036.43

PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	CURB RAMP DETAILS	SHEET 21	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\SHEETSPLAN\021151_CR.DWG
LAYOUT NAME - 02 (2)
PLOT DATE : 10/26/2026 9:57 AM
PLOT BY : JARED HALBUR
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 44



LEGEND:

- 2 — CONCRETE CURB RAMP TYPE 2
- 4B1 — CONCRETE CURB RAMP TYPE 4B1
- X — CURB RAMP NUMBER
- TOP — TOPSOIL
- SW6 — CONCRETE SIDEWALK 6-INCH
- * — LANDING

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.

REFER TO STANDARD DETAIL DRAWINGS "CURB RAMPS" FOR JOINT LOCATIONS AND COMPLETE CURB RAMP REQUIREMENTS.

CURB RAMP FLARES TO BE GRASS (UNPAVED NON-TRAVERSABLE).

ALL STATION AND OFFSET INFORMATION REFERENCE USH 10 R/L.

CURB RAMP 5 DATA TABLE

NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
5.01	1084+71.70	-31.81	826.80	324586.15	156805.98
5.02	1084+64.59	-41.85	826.49	324596.61	156799.42
5.03	1084+67.80	-36.31	826.73	324590.88	156802.32
5.04	1084+69.80	-37.78	826.67	324592.22	156804.43
5.05	1084+69.57	-41.86	826.61	324596.31	156804.45
5.06	1084+69.22	-47.85	826.52	324602.31	156804.47
5.07	1084+65.13	-47.61	826.23	324602.33	156800.31
5.08	1084+62.76	-46.95	826.29	324601.81	156797.87
5.09	1084+60.81	-69.56	826.23	324624.51	156797.23
5.10	1084+61.66	-53.84	826.26	324608.76	156797.16
5.11	1084+61.77	-52.31	826.27	324607.23	156797.19

CURB RAMP 5 DATA TABLE

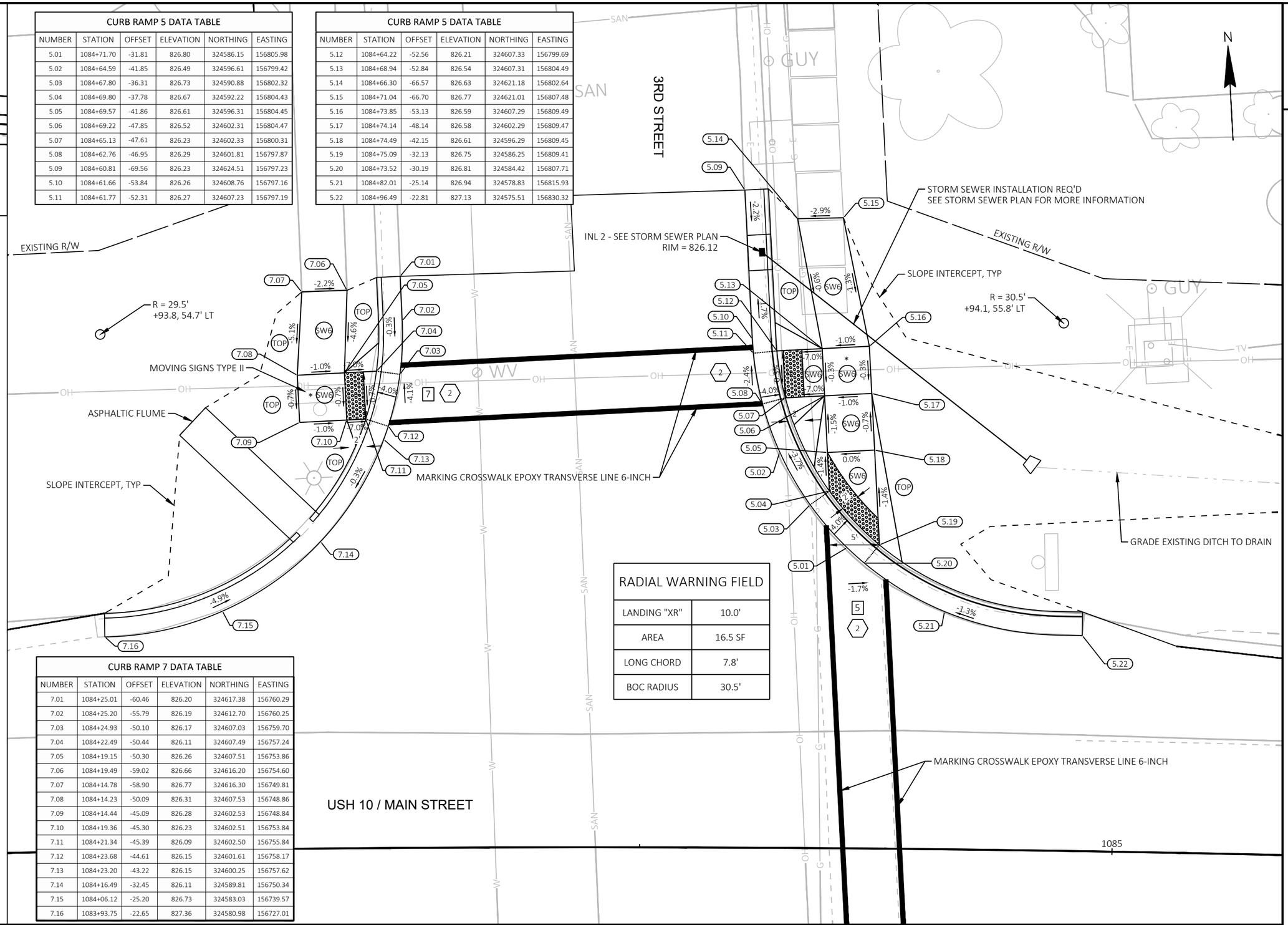
NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
5.12	1084+64.22	-52.56	826.21	324607.33	156799.69
5.13	1084+68.94	-52.84	826.54	324607.31	156804.49
5.14	1084+66.30	-66.57	826.63	324621.18	156802.64
5.15	1084+71.04	-66.70	826.77	324621.01	156807.48
5.16	1084+73.85	-53.13	826.59	324607.29	156809.49
5.17	1084+74.14	-48.14	826.58	324602.29	156809.47
5.18	1084+74.49	-42.15	826.61	324596.29	156809.45
5.19	1084+75.09	-32.13	826.75	324586.25	156809.41
5.20	1084+73.52	-30.19	826.81	324584.42	156807.71
5.21	1084+82.01	-25.14	826.94	324578.83	156815.93
5.22	1084+96.49	-22.81	827.13	324575.51	156830.32

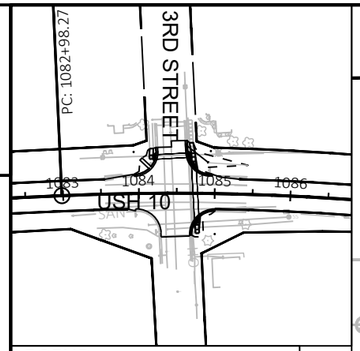
CURB RAMP 7 DATA TABLE

NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
7.01	1084+25.01	-60.46	826.20	324617.38	156760.29
7.02	1084+25.20	-55.79	826.19	324612.70	156760.25
7.03	1084+24.93	-50.10	826.17	324607.03	156759.70
7.04	1084+22.49	-50.44	826.11	324607.49	156757.24
7.05	1084+19.15	-50.30	826.26	324607.51	156753.86
7.06	1084+19.49	-59.02	826.66	324616.20	156754.60
7.07	1084+14.78	-58.90	826.77	324616.30	156749.81
7.08	1084+14.23	-50.09	826.31	324607.53	156748.86
7.09	1084+14.44	-45.09	826.28	324602.53	156748.84
7.10	1084+19.36	-45.30	826.23	324602.51	156753.84
7.11	1084+21.34	-45.39	826.09	324602.50	156755.84
7.12	1084+23.68	-44.61	826.15	324601.61	156758.17
7.13	1084+23.20	-43.22	826.15	324600.25	156757.62
7.14	1084+16.49	-32.45	826.11	324589.81	156750.34
7.15	1084+06.12	-25.20	826.73	324583.03	156739.57
7.16	1083+93.75	-22.65	827.36	324580.98	156727.01

RADIAL WARNING FIELD

LANDING "XR"	10.0'
AREA	16.5 SF
LONG CHORD	7.8'
BOC RADIUS	30.5'





LEGEND:

- 2 — CONCRETE CURB RAMP TYPE 2
- 4B1 — CONCRETE CURB RAMP TYPE 4B1
- X — CURB RAMP NUMBER
- TOP — TOPSOIL
- SW6 — CONCRETE SIDEWALK 6-INCH
- * — LANDING

NOTES:

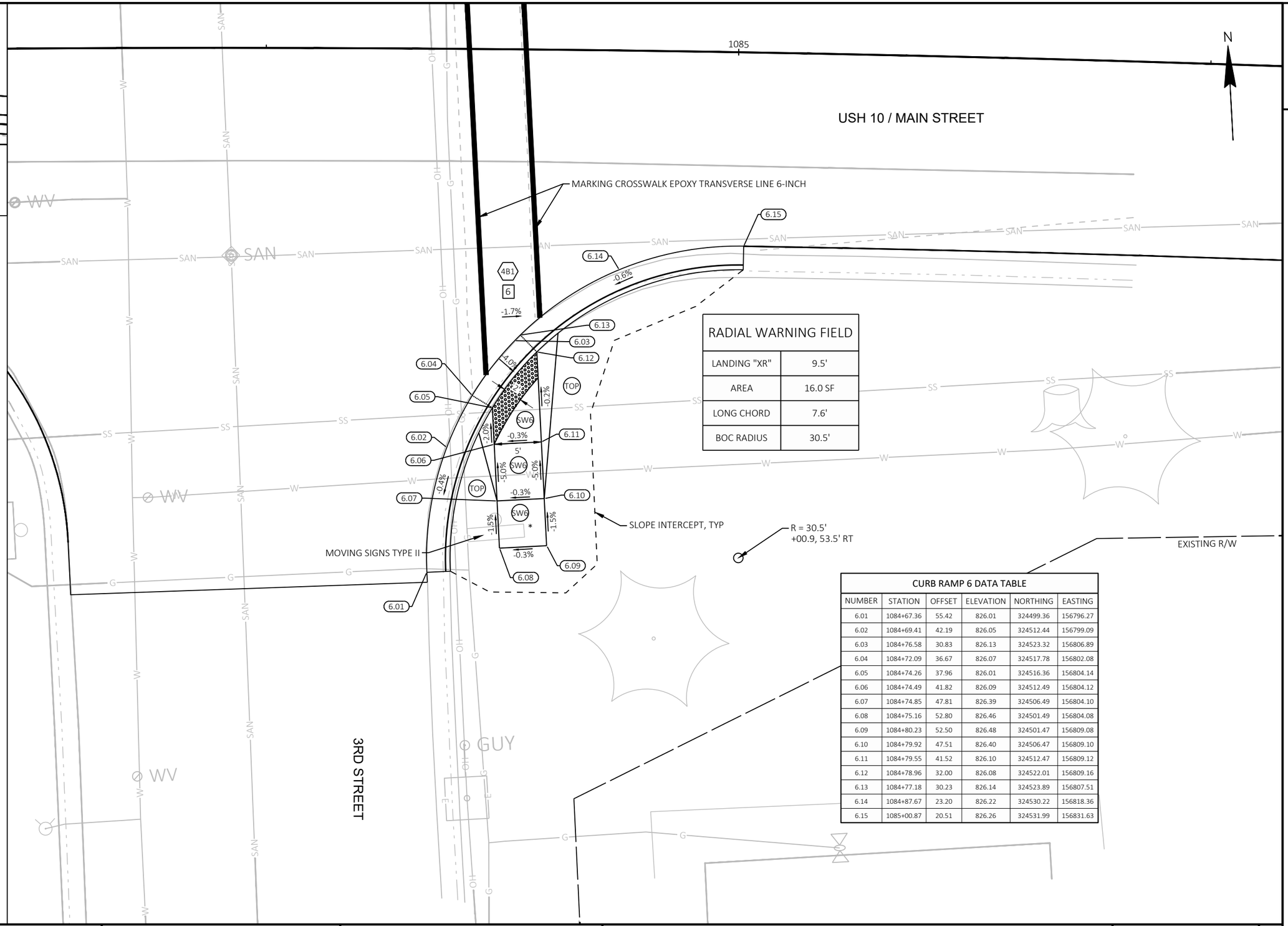
CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.

THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION.

REFER TO STANDARD DETAIL DRAWINGS "CURB RAMPS" FOR JOINT LOCATIONS AND COMPLETE CURB RAMP REQUIREMENTS.

CURB RAMP FLARES TO BE GRASS (UNPAVED NON-TRAVERSABLE).

ALL STATION AND OFFSET INFORMATION REFERENCE USH 10 R/L.



RADIAL WARNING FIELD

LANDING "XR"	9.5'
AREA	16.0 SF
LONG CHORD	7.6'
BOC RADIUS	30.5'

CURB RAMP 6 DATA TABLE

NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
6.01	1084+67.36	55.42	826.01	324499.36	156796.27
6.02	1084+69.41	42.19	826.05	324512.44	156799.09
6.03	1084+76.58	30.83	826.13	324523.32	156806.89
6.04	1084+72.09	36.67	826.07	324517.78	156802.08
6.05	1084+74.26	37.96	826.01	324516.36	156804.14
6.06	1084+74.49	41.82	826.09	324512.49	156804.12
6.07	1084+74.85	47.81	826.39	324506.49	156804.10
6.08	1084+75.16	52.80	826.46	324501.49	156804.08
6.09	1084+80.23	52.50	826.48	324501.47	156809.08
6.10	1084+79.92	47.51	826.40	324506.47	156809.10
6.11	1084+79.55	41.52	826.10	324512.47	156809.12
6.12	1084+78.96	32.00	826.08	324522.01	156809.16
6.13	1084+77.18	30.23	826.14	324523.89	156807.51
6.14	1084+87.67	23.20	826.22	324530.22	156818.36
6.15	1085+00.87	20.51	826.26	324531.99	156831.63

PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	CURB RAMP DETAILS	SHEET 23	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\SHEETSPLAN\021151_CR.DWG
LAYOUT NAME - 03 (2)
PLOT DATE : 10/26/2026 9:57 AM
PLOT BY : JARED HALBUR
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 44

2

2

N

EP: 38+28.51

PT: 35+53.72

PC: 34+49.87

PT: 32+47.95

PC: 31+16.94

PT: 29+66.37

PC: 28+53.15

PT: 27+41.22

PRC: 25+51.13

PC: 1047+37.76

EXISTING R/W

USH 10

1055

1050

1045

1040

WETLAND BOUNDARY, TYP

LEGEND:

- EROSION MAT CLASS I URBAN TYPE B
- CULVERT PIPE CHECK
- SILT FENCE
- TEMPORARY DITCH CHECK
- INLET PROTECTION TYPE A

PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	EROSION CONTROL	SHEET 24	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 01

PLOT DATE : 5/28/2026 9:27 PM PLOT BY : JARED HALBUR PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

WETLAND BOUNDARY, TYP

EXISTING R/W

PCC: 1058+00.09

1060

USH 10

EXISTING R/W

EXISTING R/W

6TH STREET

N

LEGEND:

EROSION MAT CLASS I URBAN TYPE B

CULVERT PIPE CHECK

SILT FENCE

TEMPORARY DITCH CHECK

INLET PROTECTION TYPE A

N

EXISTING R/W

1075

USH 10

EXISTING R/W

4TH STREET

EXISTING R/W

EXISTING R/W

PC: 1082+98.27

1085

USH 10

N

EXISTING R/W

EXISTING R/W

EXISTING R/W

3RD STREET

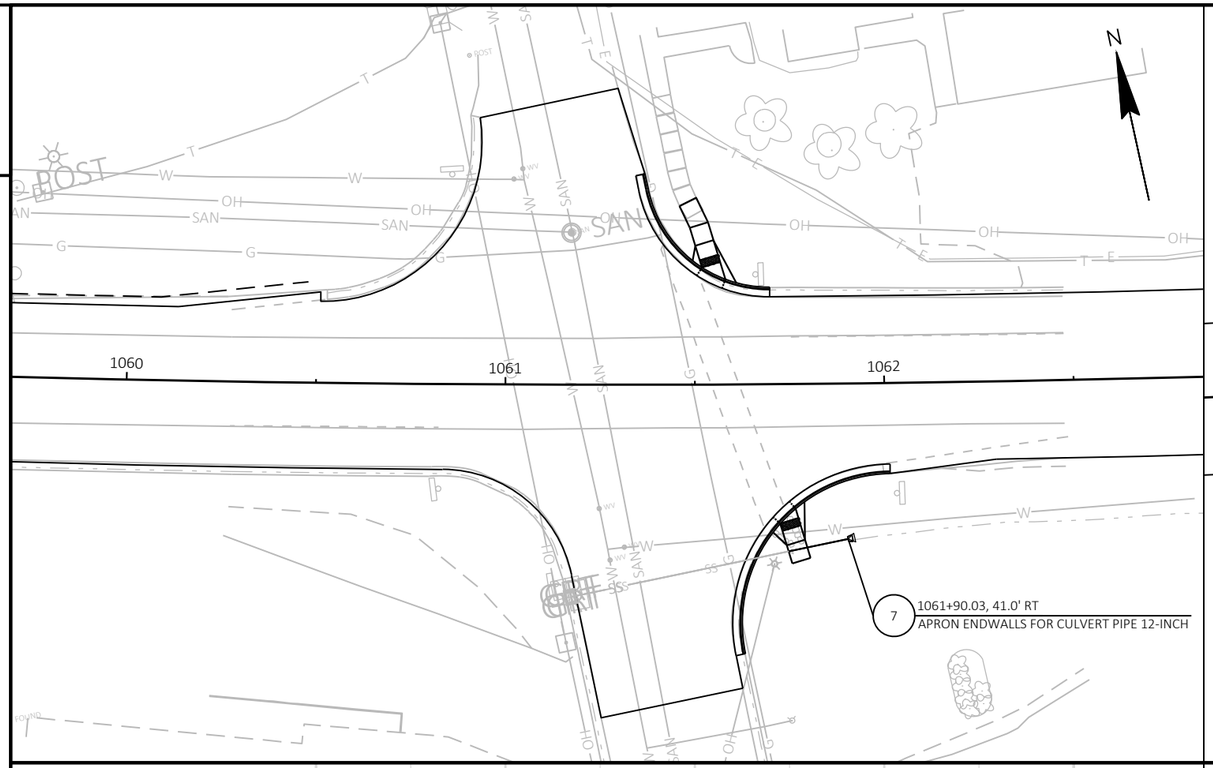
PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	EROSION CONTROL	SHEET 25	E

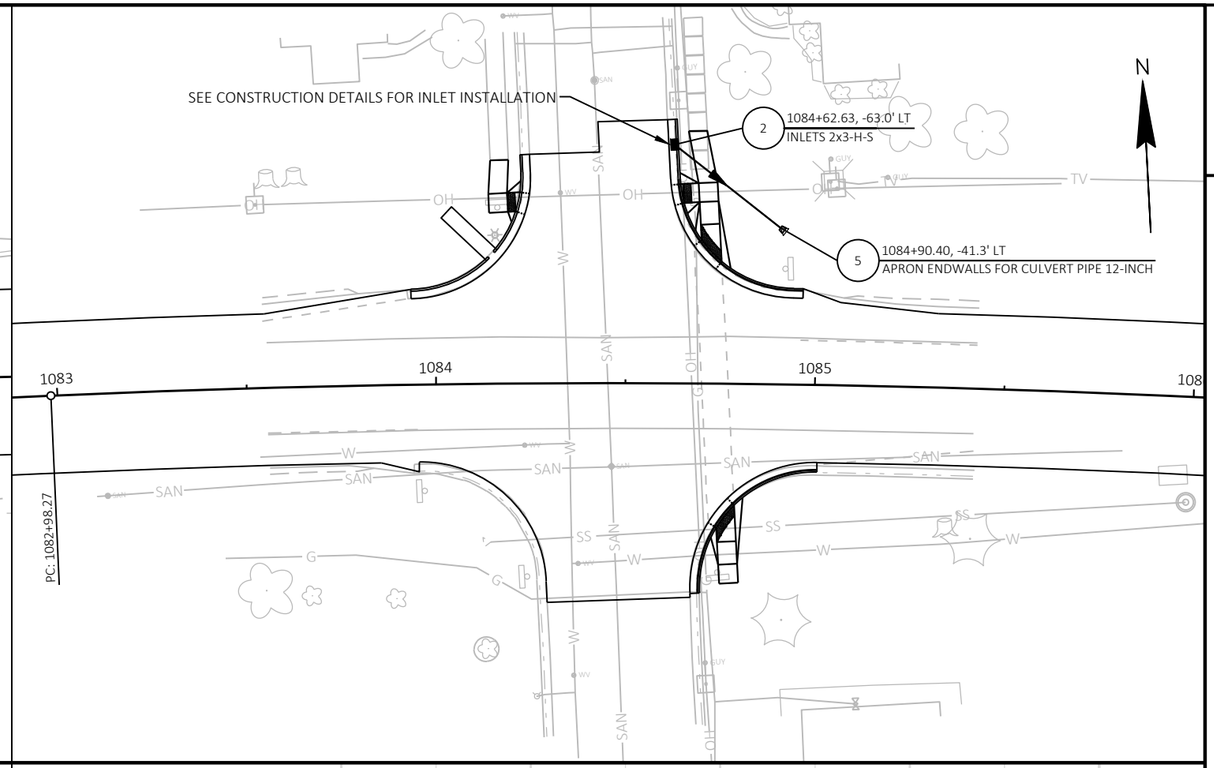
FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 02

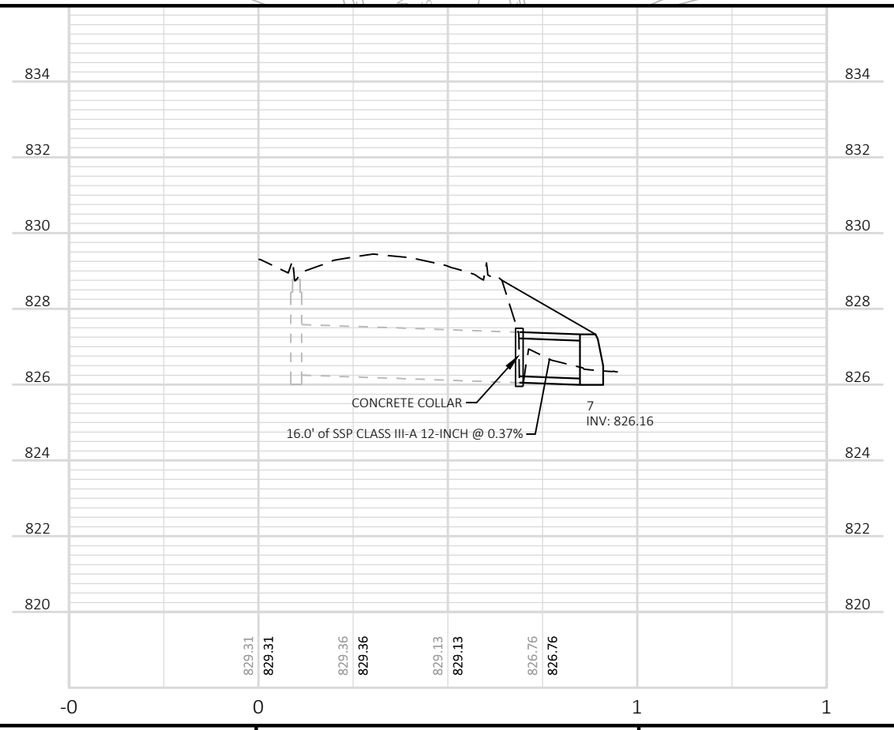
PLOT DATE : 5/28/2026 9:27 PM PLOT BY : JARED HALBUR PLOT NAME : PLOT SCALE : 1 IN:40 FT

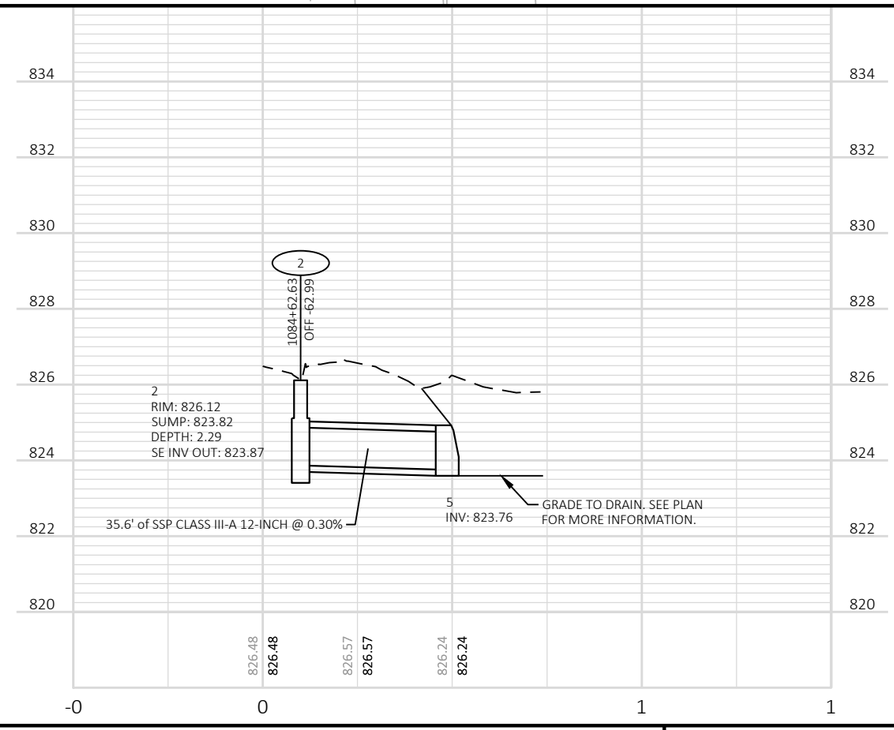
WISDOT/CADDS SHEET 42

2









PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	STORM SEWER	SHEET 26	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\SHEETSPLAN\022501_SS.DWG
LAYOUT NAME - Sheet-01
PLOT DATE : 5/28/2026 9:29 PM PLOT BY : JARED HALBUR PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

END CONSTRUCTION
STA 36+75 'W'

W1-4R
36"X36"

W3-1
36"X36"

PLACE W3-1 SIGN
APPROXIMATELY 750
FEET FROM STOP SIGN

PLACE W1-4R SIGN
APPROXIMATELY 250
FEET UPSTREAM
FROM W3-1 SIGN

PT: 35+53.72

PC: 34+49.81

EXISTING R/W

MOVING SIGNS TYPE II

STOP
R1-1
30"X30"

PT: 32+47.95

MOVING SIGNS TYPE II

10
J13-1
24"X45"

STOP
R1-1
30"X30"

PC: 31+16.94

EXISTING R/W

1050

EXISTING R/W

REMOVING SIGNS TYPE II

REMOVING SIGNS TYPE II

10
J13-1
24"X45"

STOP
R1-1
36"X36"

PT: 29+66.37

STOP
R1-1
30"X30"

1045

USH 10

MOVING SIGNS TYPE II

EXISTING R/W

PC: 28+53.15

CTH W

MOVING SIGNS TYPE II

PT: 27+21.22

PLACE W3-1 SIGN APPROXIMATELY
750 FEET FROM STOP SIGN

W3-1
36"X36"

PLACE W1-4R SIGN APPROXIMATELY 250
FEET UPSTREAM FROM W3-1 SIGN

W1-4R
36"X36"

PRC: 25+51.13

BEGIN CONSTRUCTION
STA 23+82.29 'W'

N

PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	PERMANENT SIGNING	SHEET 27	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 021001-id
PLOT DATE : 5/28/2026 9:31 PM
PLOT BY : JARED HALBUR
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

END CONSTRUCTION
STA 36+75 'W'

MDY6
EPOXY

PT: 35+53.72

MW6
EPOXY

PC: 34+49.87

MW6
EPOXY

PT: 32+47.95

STOP
EPOXY

PC: 31+16.94

EXISTING R/W

MW10
EPOXY

ARROW
EPOXY

WORD
EPOXY

ARROW
EPOXY

1050

EXISTING R/W

MW6
GWRE

MY6
GWRE

1055

YS6-12.5
GWRE

MW6
GWRE

MDY6
GWRE

N

STOP
EPOXY

CTH W

MW6
EPOXY

PT: 29+66.37

MW6
GWRE

YS6-12.5
GWRE

1045

USH 10

WORD
EPOXY

ARROW
EPOXY

EXISTING R/W

ARROW
EPOXY

MW10
EPOXY

MW6
GWRE

MY6
GWRE

PC: 28+53.15

MW6
EPOXY

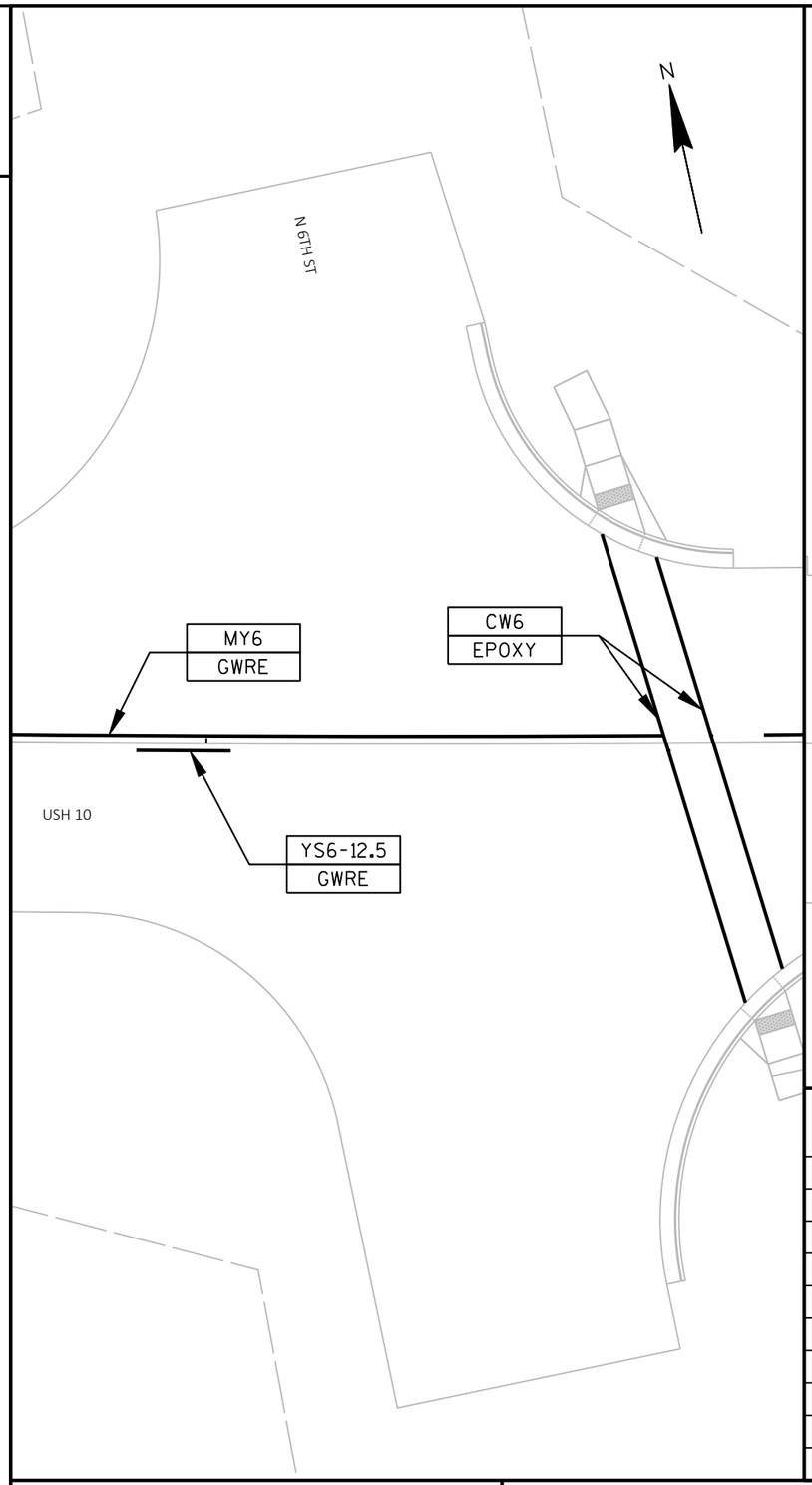
PT: 27+21.22

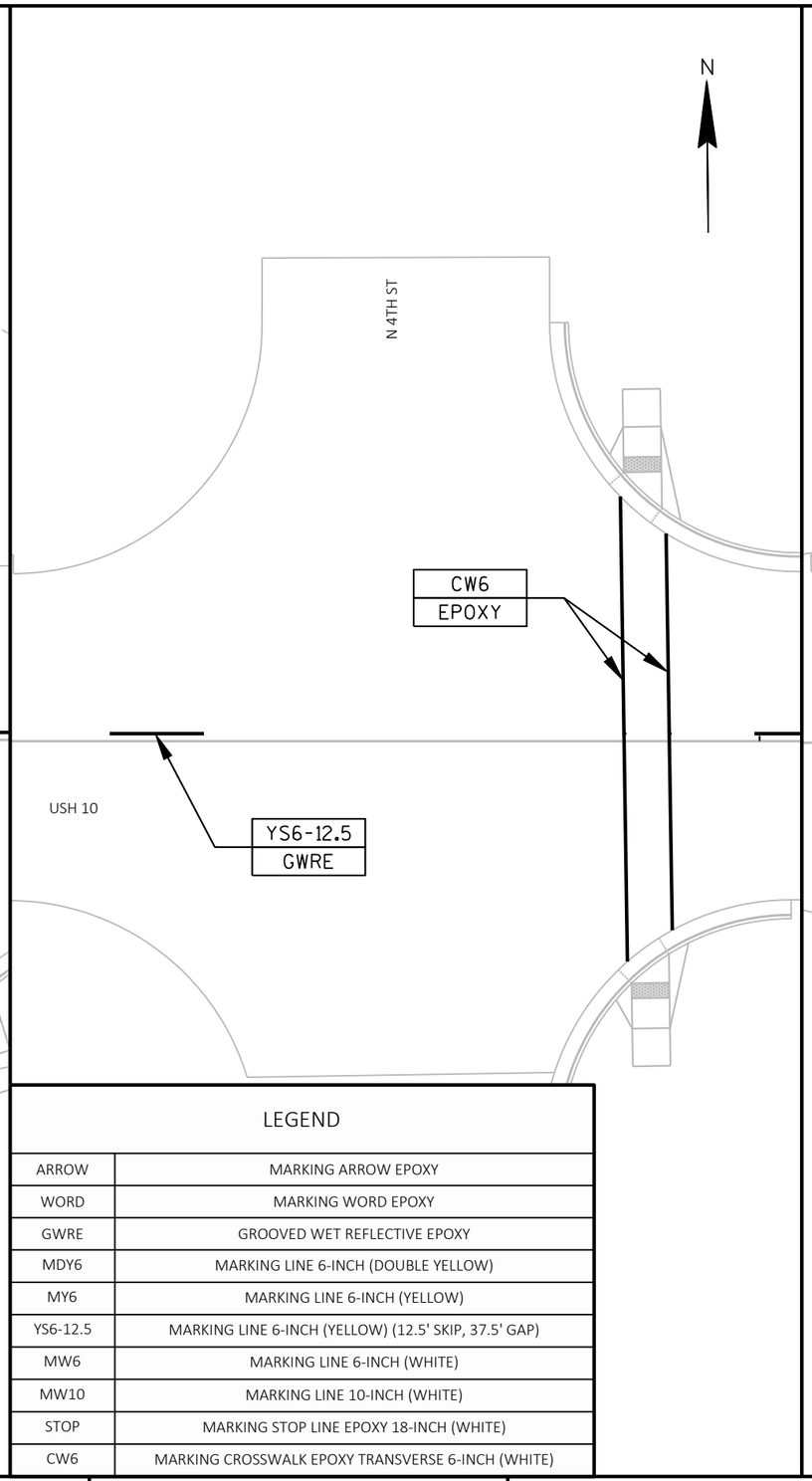
MDY6
EPOXY

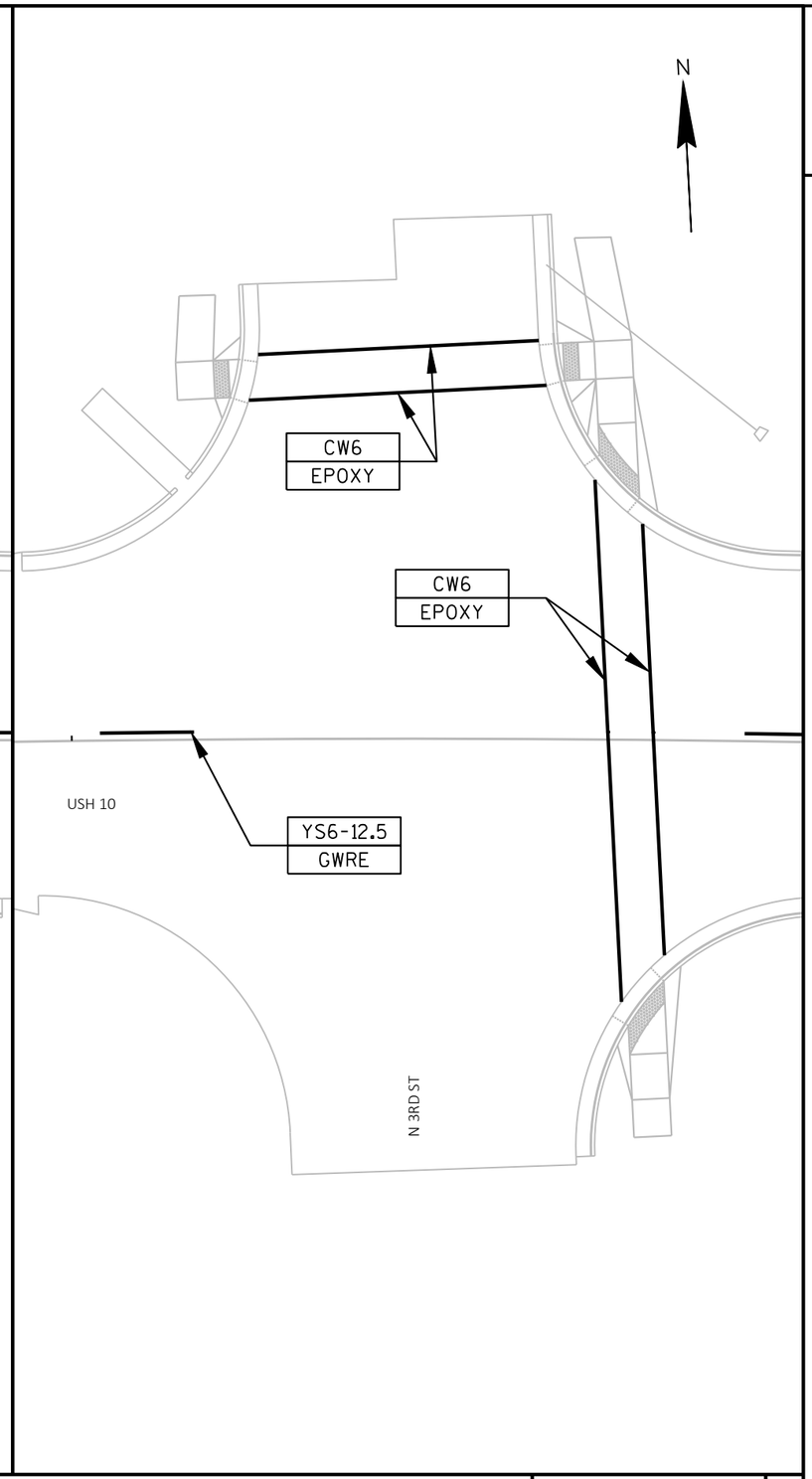
PRC: 25+51.13

BEGIN CONSTRUCTION
STA 23+82.29 'W'

LEGEND	
ARROW	MARKING ARROW EPOXY
WORD	MARKING WORD EPOXY
GWRE	GROOVED WET REFLECTIVE EPOXY
MDY6	MARKING LINE 6-INCH (DOUBLE YELLOW)
MY6	MARKING LINE 6-INCH (YELLOW)
YS6-12.5	MARKING LINE 6-INCH (YELLOW) (12.5' SKIP, 37.5' GAP)
MW6	MARKING LINE 6-INCH (WHITE)
MW10	MARKING LINE 10-INCH (WHITE)
STOP	MARKING STOP LINE EPOXY 18-INCH (WHITE)
CW6	MARKING CROSSWALK EPOXY TRANSVERSE 6-INCH (WHITE)



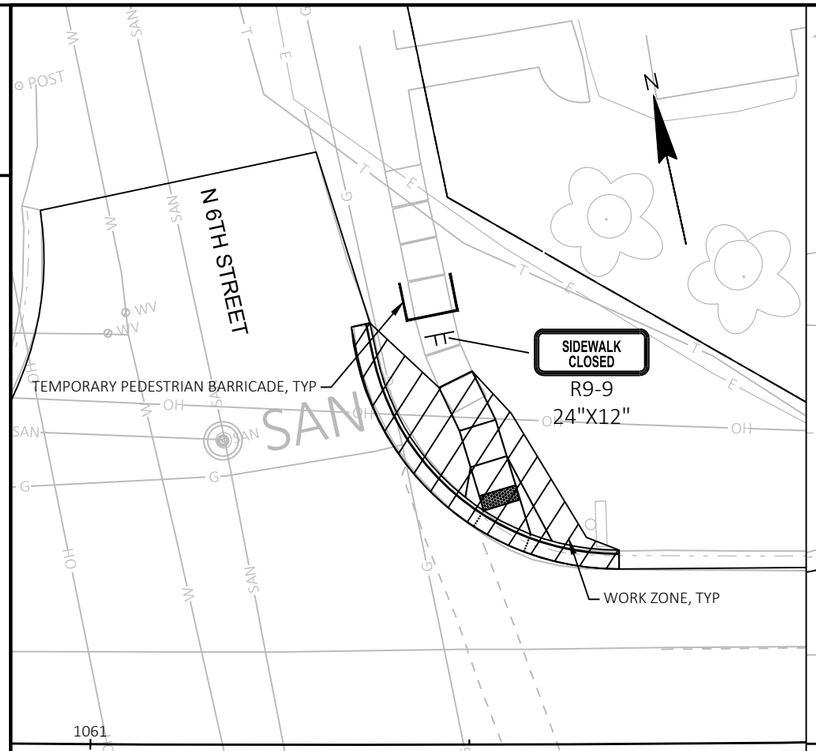


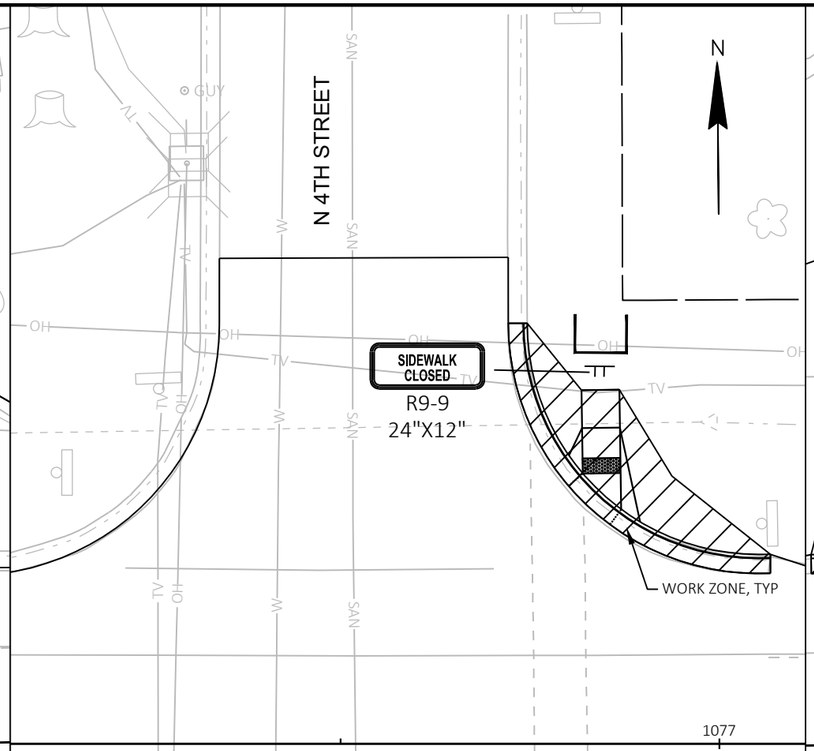


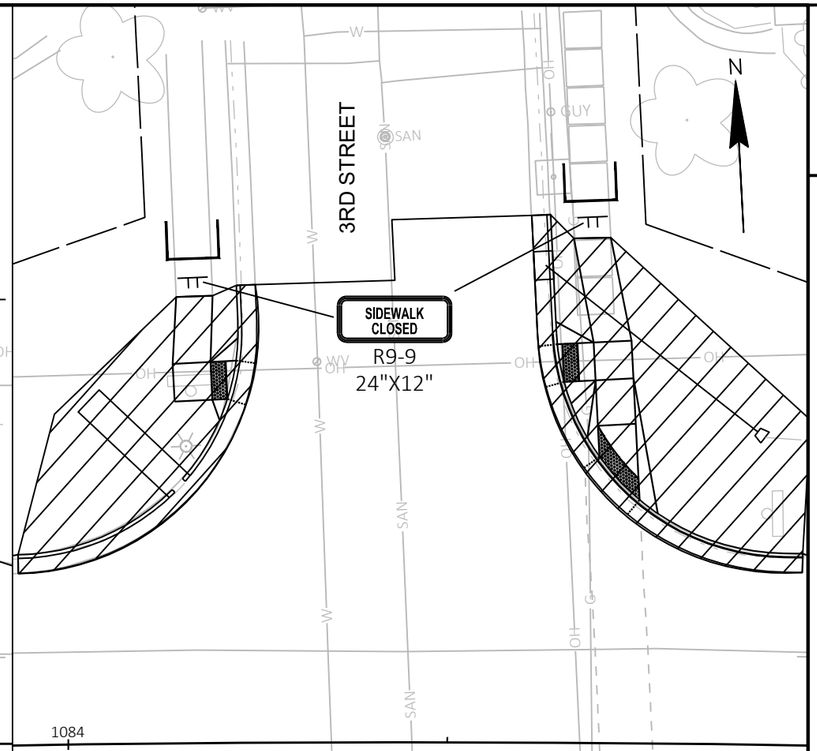
LEGEND

ARROW	MARKING ARROW EPOXY
WORD	MARKING WORD EPOXY
GWRE	GROOVED WET REFLECTIVE EPOXY
MDY6	MARKING LINE 6-INCH (DOUBLE YELLOW)
MY6	MARKING LINE 6-INCH (YELLOW)
YS6-12.5	MARKING LINE 6-INCH (YELLOW) (12.5' SKIP, 37.5' GAP)
MW6	MARKING LINE 6-INCH (WHITE)
MW10	MARKING LINE 10-INCH (WHITE)
STOP	MARKING STOP LINE EPOXY 18-INCH (WHITE)
CW6	MARKING CROSSWALK EPOXY TRANSVERSE 6-INCH (WHITE)

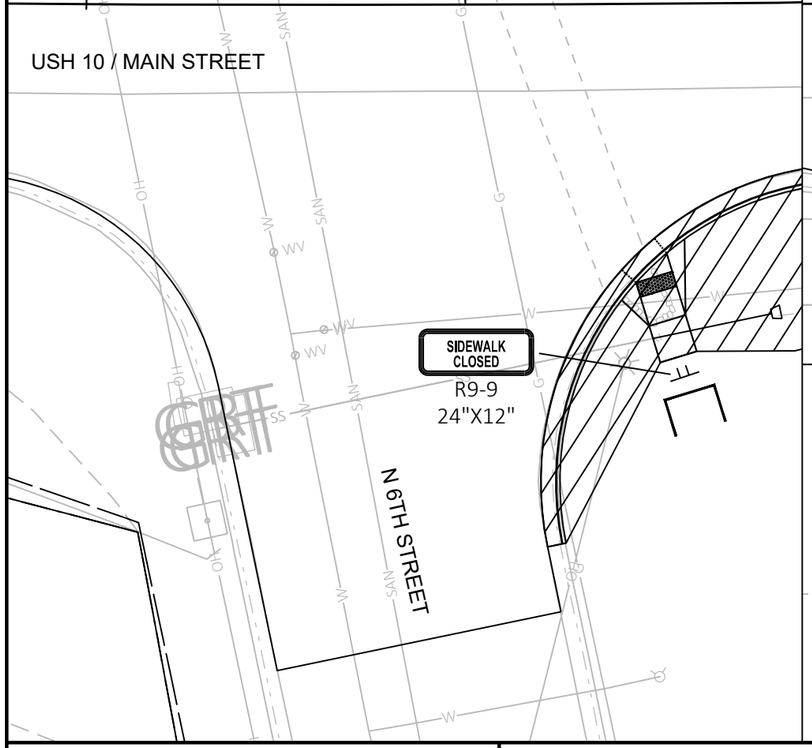
PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	PAVEMENT MARKING	SHEET 29	E

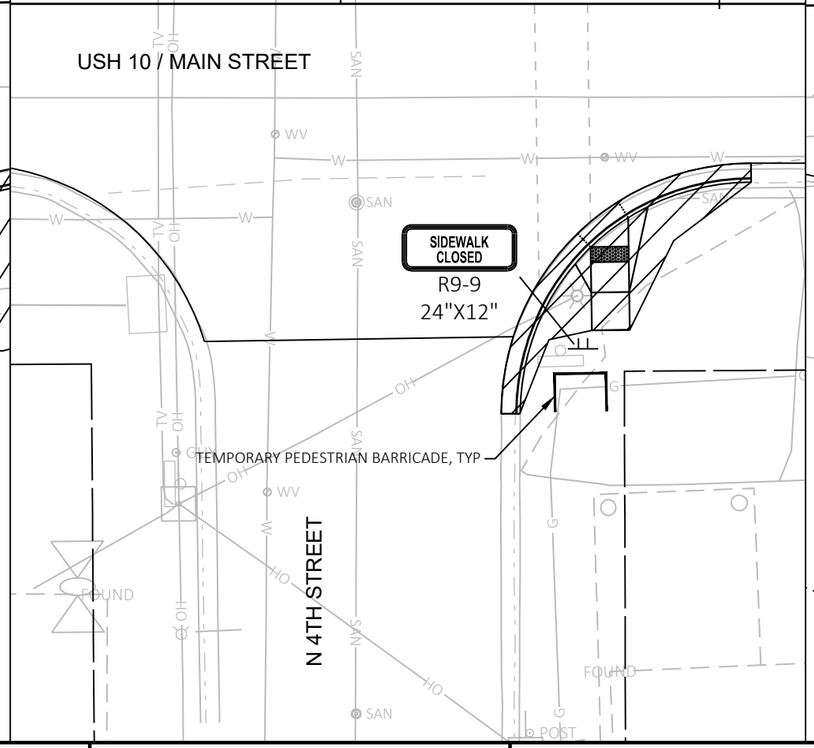


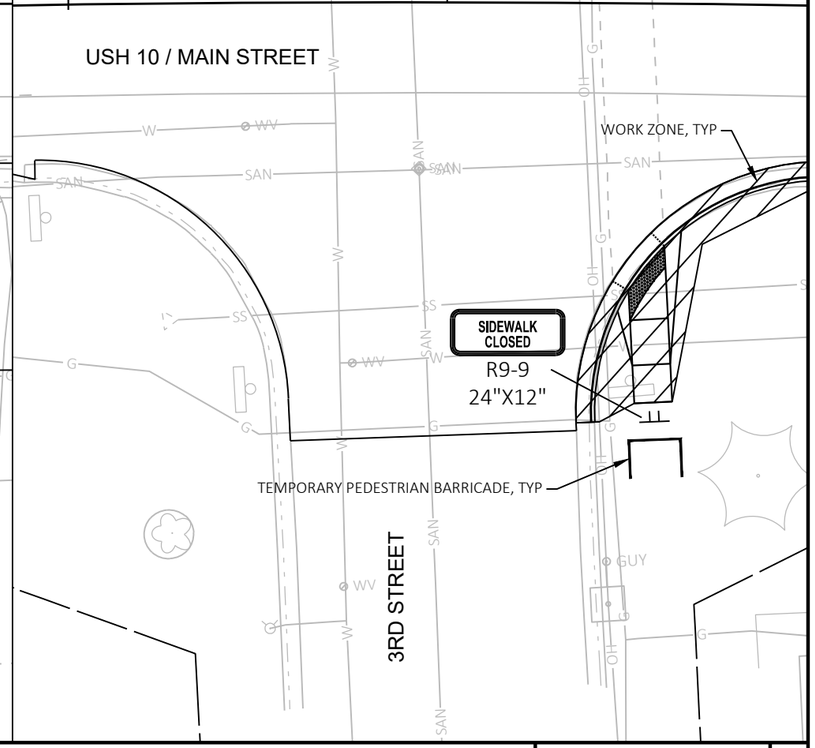




2







PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	TRAFFIC CONTROL - PEDESTRIANS	SHEET 30	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\SHEETSPLAN\025001_TC.DWG
LAYOUT NAME - 04
PLOT DATE : 3/18/2026 3:59 PM
PLOT BY : JARED HALBUR
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 44

2

2

TRAFFIC CONTROL NOTES:

PROVIDE A TEMPORARY DROP-OFF SLOPE AT TRANSITION BETWEEN CONSTRUCTION STAGES. AT THE END OF EACH WORKDAY, CONSTRUCT A 3:1 BASE AGGREGATE SLOPE TAPERING FROM THE EDGE OF THE EXISTING PAVEMENT.

TRAFFIC CONTROL MAY BE ADJUSTED BY ENGINEER IN FIELD IF NECESSARY

N

STAGE 1 - NORTH

SEE SDD: TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY (USH 10 POSTED SPEED LIMIT = 55 MPH)

SEE SDD: TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY (USH 10 POSTED SPEED LIMIT = 55 MPH)

INSTALL CURB AND GUTTER PRIOR TO MOVING TO STAGE 2

RADIUS = 60'

INSTALL CULVERT PIPE TO EXISTING PAVEMENT LIMITS TEMPORARILY CAP UNTIL CONNECTION CAN BE MADE IN STAGE 2

GRADE TO GRAVEL SURFACE MINIMUM

DRIVEWAY ACCESS TO BE MAINTAINED AT ALL TIMES

GRADE TO GRAVEL SURFACE MINIMUM

RADIUS = 60'

INSTALL CURB AND GUTTER PRIOR TO MOVING TO STAGE 2

SEE SDD: TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY (USH 10 POSTED SPEED LIMIT = 55 MPH)

SEE SDD: TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY (USH 10 POSTED SPEED LIMIT = 55 MPH)

1045

1050

11'

LEGEND

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

N

STAGE 1 - SOUTH

PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	TRAFFIC CONTROL: CTH W - STAGE 1	SHEET 31	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\SHEETSPLAN\025002_TC.DWG
LAYOUT NAME - Plan 1 IN 40 FT
PLOT DATE : 10/28/2026 8:45 AM
PLOT BY : JARED HALBUR
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

TRAFFIC CONTROL NOTES:

PROVIDE A TEMPORARY DROP-OFF SLOPE AT TRANSITION BETWEEN CONSTRUCTION STAGES. AT THE END OF EACH WORKDAY, CONSTRUCT A 3:1 BASE AGGREGATE SLOPE TAPERING FROM THE EDGE OF THE EXISTING PAVEMENT.

TRAFFIC CONTROL MAY BE ADJUSTED BY ENGINEER IN FIELD IF NECESSARY

SEE SDD: TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY (USH 10 POSTED SPEED LIMIT = 55 MPH)

RADIUS = 60'

M1-4 24"X24"

M6-4 21"X21"

ORANGE FLAGS REQ'D

R1-1 30"X30"

FINISH CULVERT PIPE INSTALLATION

GRADE TO GRAVEL SURFACE MINIMUM FOR PROPOSED ROADWAY REALIGNMENT

DRIVEWAY ACCESS MAY BE RESTRICTED

24' MIN

STAGE 2 - SOUTH

DRIVEWAY ACCESS TO BE MAINTAINED AT ALL TIMES

W01-4L

SEE SDD: TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY (USH 10 POSTED SPEED LIMIT = 55 MPH)

LEGEND

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

N

W01-4L

STAGE 2 - NORTH

SEE SDD: TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY (USH 10 POSTED SPEED LIMIT = 55 MPH)

24' MIN

DRIVEWAY ACCESS TO BE MAINTAINED AT ALL TIMES

GRADE TO GRAVEL SURFACE MINIMUM FOR PROPOSED ALIGNMENT

RADIUS = 60'

M1-4 24"X24"

M6-4 21"X21"

ORANGE FLAGS REQ'D

R1-1 30"X30"

RADIUS = 60'

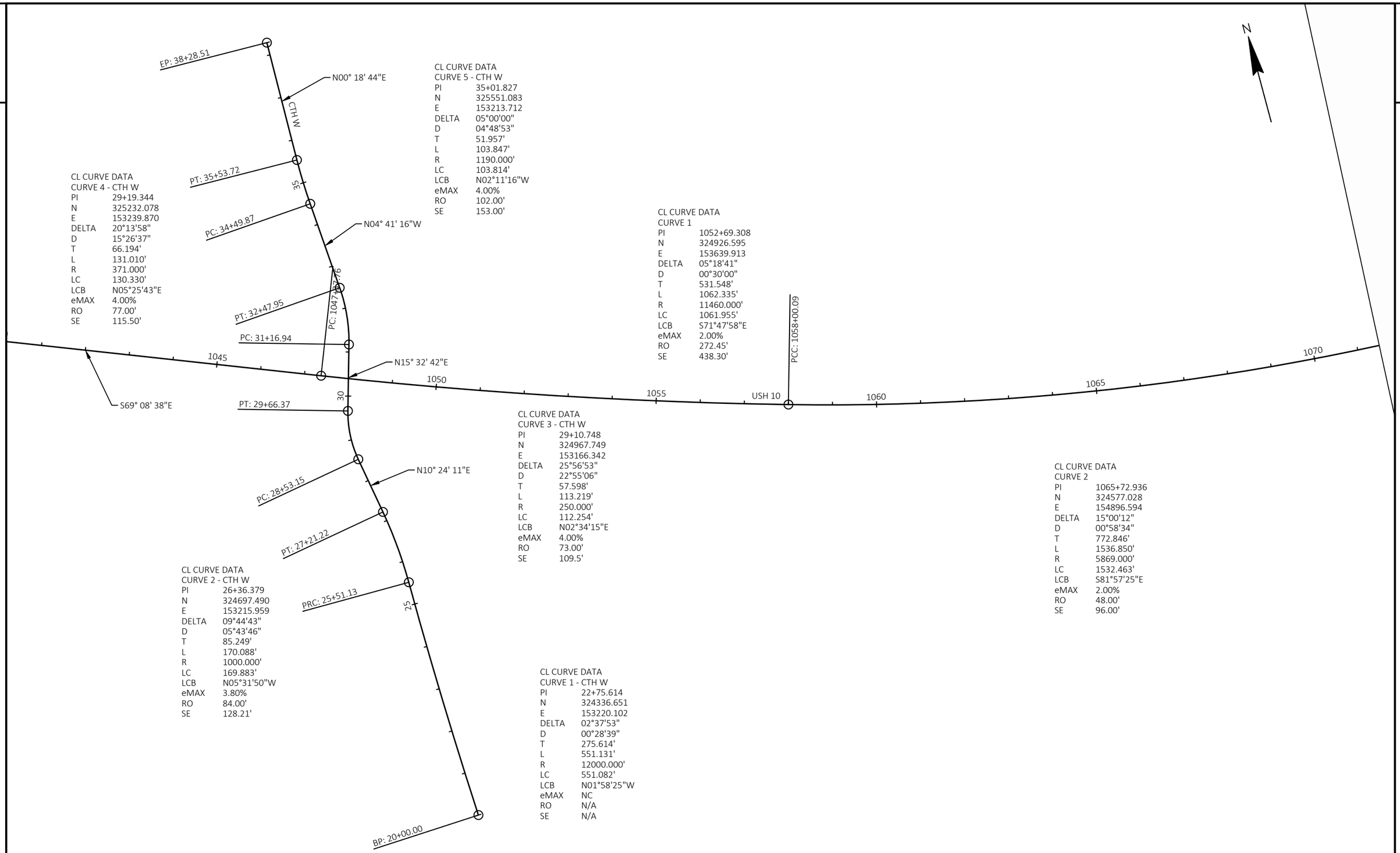
SEE SDD: TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY (USH 10 POSTED SPEED LIMIT = 55 MPH)

N

2

PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	TRAFFIC CONTROL: CTH W - STAGE 2	SHEET 32	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\SHEETSPLAN\025003_TC.DWG
LAYOUT NAME - Plan 1 IN 40 FT
PLOT DATE : 10/28/2026 8:45 AM PLOT BY : JARED HALBUR PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42



CL CURVE DATA
CURVE 4 - CTH W

PI	29+19.344
N	325232.078
E	153239.870
DELTA	20°13'58"
D	15°26'37"
T	66.194'
L	131.010'
R	371.000'
LC	130.330'
LCB	N05°25'43"E
eMAX	4.00%
RO	77.00'
SE	115.50'

CL CURVE DATA
CURVE 5 - CTH W

PI	35+01.827
N	325551.083
E	153213.712
DELTA	05°00'00"
D	04°48'53"
T	51.957'
L	103.847'
R	1190.000'
LC	103.814'
LCB	N02°11'16"W
eMAX	4.00%
RO	102.00'
SE	153.00'

CL CURVE DATA
CURVE 1

PI	1052+69.308
N	324926.595
E	153639.913
DELTA	05°18'41"
D	00°30'00"
T	531.548'
L	1062.335'
R	11460.000'
LC	1061.955'
LCB	S71°47'58"E
eMAX	2.00%
RO	272.45'
SE	438.30'

CL CURVE DATA
CURVE 3 - CTH W

PI	29+10.748
N	324967.749
E	153166.342
DELTA	25°56'53"
D	22°55'06"
T	57.598'
L	113.219'
R	250.000'
LC	112.254'
LCB	N02°34'15"E
eMAX	4.00%
RO	73.00'
SE	109.5'

CL CURVE DATA
CURVE 2

PI	1065+72.936
N	324577.028
E	154896.594
DELTA	15°00'12"
D	00°58'34"
T	772.846'
L	1536.850'
R	5869.000'
LC	1532.463'
LCB	S81°57'25"E
eMAX	2.00%
RO	48.00'
SE	96.00'

CL CURVE DATA
CURVE 2 - CTH W

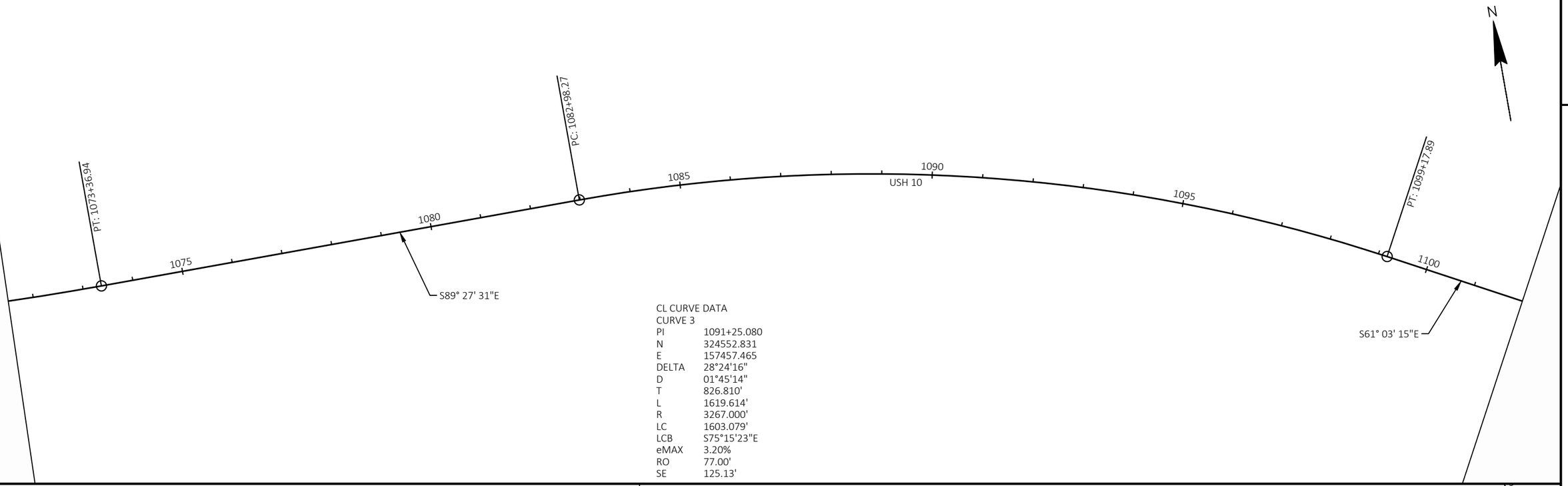
PI	26+36.379
N	324697.490
E	153215.959
DELTA	09°44'43"
D	05°43'46"
T	85.249'
L	170.088'
R	1000.000'
LC	169.883'
LCB	N05°31'50"W
eMAX	3.80%
RO	84.00'
SE	128.21'

CL CURVE DATA
CURVE 1 - CTH W

PI	22+75.614
N	324336.651
E	153220.102
DELTA	02°37'53"
D	00°28'39"
T	275.614'
L	551.131'
R	12000.000'
LC	551.082'
LCB	N01°58'25"W
eMAX	NC
RO	N/A
SE	N/A

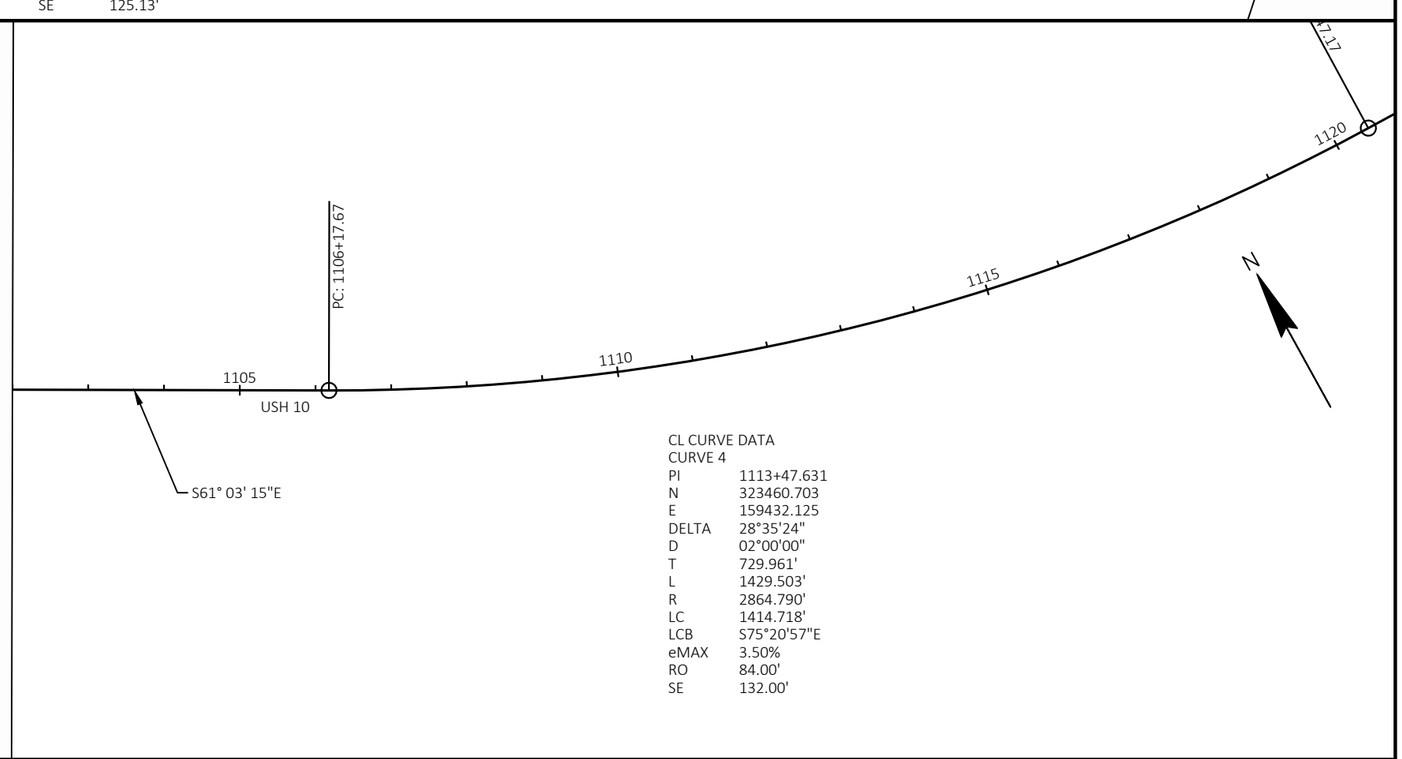
PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	ALIGNMENT DIAGRAM	SHEET 33 E

2



CL CURVE DATA
CURVE 3

PI	1091+25.080
N	324552.831
E	157457.465
DELTA	28°24'16"
D	01°45'14"
T	826.810'
L	1619.614'
R	3267.000'
LC	1603.079'
LCB	S75°15'23"E
eMAX	3.20%
RO	77.00'
SE	125.13'



CL CURVE DATA
CURVE 4

PI	1113+47.631
N	323460.703
E	159432.125
DELTA	28°35'24"
D	02°00'00"
T	729.961'
L	1429.503'
R	2864.790'
LC	1414.718'
LCB	S75°20'57"E
eMAX	3.50%
RO	84.00'
SE	132.00'

PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	ALIGNMENT DIAGRAM	SHEET 34	E

1500-75-71

Line	Item	Item Description	Unit	Total	Qty
0002	203.0100	Removing Small Pipe Culverts	EACH	2.000	2.000
0004	204.0115	Removing Asphaltic Surface Butt Joints	SY	870.000	870.000
0006	204.0120	Removing Asphaltic Surface Milling	SY	31,000.000	31,000.000
0008	204.0150	Removing Curb & Gutter	LF	825.000	825.000
0010	204.0155	Removing Concrete Sidewalk	SY	6.000	6.000
0014	204.9060.S	Removing (item description) 01. Removing Apron Endwalls	EACH	1.000	1.000
0016	205.0100	Excavation Common	CY	7,500.000	7,500.000
0018	205.0501.S	Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	TON	1.000	1.000
0020	208.1500.S	Temporary Lane Shift During Culvert Work	EACH	1.000	1.000
0028	213.0100	Finishing Roadway (project) 01. 1500-75-71	EACH	1.000	1.000
0030	305.0110	Base Aggregate Dense 3/4-Inch	TON	800.000	800.000
0032	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	4,400.000	4,400.000
0034	305.0500	Shaping Shoulders	STA	130.000	130.000
0036	312.0110	Select Crushed Material	TON	1,080.000	1,080.000
0040	455.0605	Tack Coat	GAL	2,370.000	2,370.000
0046	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	1.000	1.000
0048	460.2000	Incentive Density HMA Pavement	DOL	705.000	705.000
0050	460.2005	Incentive Density PWL HMA Pavement	DOL	2,000.000	2,000.000
0052	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	1,300.000	1,300.000
0054	460.2010	Incentive Air Voids HMA Pavement	DOL	3,980.000	3,980.000
0056	460.6223	HMA Pavement 3 MT 58-28 S	TON	1,100.000	1,100.000
0058	460.6224	HMA Pavement 4 MT 58-28 S	TON	3,980.000	3,980.000
0060	465.0110	Asphaltic Surface Patching	TON	200.000	200.000
0062	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	20.000	20.000
0064	465.0315	Asphaltic Flumes	SY	40.000	40.000
0066	465.0520	Asphaltic Rumble Strips, Shoulder	LF	800.000	800.000
0068	465.0560	Asphaltic Rumble Strips, Centerline	LF	400.000	400.000
0070	520.1012	Apron Endwalls for Culvert Pipe 12-Inch	EACH	2.000	2.000
0074	520.1030	Apron Endwalls for Culvert Pipe 30-Inch	EACH	2.000	2.000
0078	520.3430	Culvert Pipe Class III-A Non-metal 30-Inch	LF	72.000	72.000
0080	520.8000	Concrete Collars for Pipe	EACH	1.000	1.000
0084	522.0430	Culvert Pipe Reinforced Concrete Class IV 30-Inch	LF	72.000	72.000
0088	522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	EACH	2.000	2.000
0090	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	390.000	390.000
0092	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	305.000	305.000
0094	602.0415	Concrete Sidewalk 6-Inch	SF	665.000	665.000
0096	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	60.000	60.000
0098	602.0615	Curb Ramp Detectable Warning Field Radial Natural Patina	SF	40.000	40.000
0100	608.3012	Storm Sewer Pipe Class III-A 12-Inch	LF	52.000	52.000
0102	611.0639	Inlet Covers Type H-S	EACH	1.000	1.000
0104	611.1230	Catch Basins 2x3-FT	EACH	1.000	1.000
0116	618.0100	Maintenance and Repair of Haul Roads (project) 01. 1500-75-71	EACH	1.000	1.000
0118	619.1000	Mobilization	EACH	0.250	0.250
0120	624.0100	Water	MGAL	75.000	75.000
0122	625.0100	Topsoil	SY	10,175.000	10,175.000
0124	627.0200	Mulching	SY	2,820.000	2,820.000
0126	628.1504	Silt Fence	LF	1,620.000	1,620.000
0128	628.1520	Silt Fence Maintenance	LF	810.000	810.000
0130	628.1905	Mobilizations Erosion Control	EACH	3.000	3.000

1500-75-71

Line	Item	Item Description	Unit	Total	Qty
0132	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0134	628.2008	Erosion Mat Urban Class I Type B	SY	7,350.000	7,350.000
0136	628.7005	Inlet Protection Type A	EACH	2.000	2.000
0138	628.7504	Temporary Ditch Checks	LF	125.000	125.000
0140	628.7555	Culvert Pipe Checks	EACH	30.000	30.000
0142	628.7570	Rock Bags	EACH	18.000	18.000
0144	629.0210	Fertilizer Type B	CWT	7.100	7.100
0146	630.0130	Seeding Mixture No. 30	LB	460.000	460.000
0148	630.0160	Seeding Mixture No. 60	LB	30.000	30.000
0150	630.0500	Seed Water	MGAL	260.000	260.000
0152	633.5200	Markers Culvert End	EACH	4.000	4.000
0154	634.0616	Posts Wood 4x6-Inch x 16-FT	EACH	8.000	8.000
0156	637.2210	Signs Type II Reflective H	SF	62.620	62.620
0158	638.2102	Moving Signs Type II	EACH	4.000	4.000
0160	638.2602	Removing Signs Type II	EACH	9.000	9.000
0162	638.3000	Removing Small Sign Supports	EACH	9.000	9.000
0164	643.0300	Traffic Control Drums	DAY	1,000.000	1,000.000
0166	643.0420	Traffic Control Barricades Type III	DAY	300.000	300.000
0168	643.0705	Traffic Control Warning Lights Type A	DAY	350.000	350.000
0170	643.0900	Traffic Control Signs	DAY	1,500.000	1,500.000
0172	643.1050	Traffic Control Signs PCMS	DAY	7.000	7.000
0174	643.3105	Temporary Marking Line Paint 4-Inch	LF	52,000.000	52,000.000
0178	643.5000	Traffic Control	EACH	0.250	0.250
0180	644.1810	Temporary Pedestrian Barricade	LF	120.000	120.000
0182	646.2020	Marking Line Epoxy 6-Inch	LF	5,000.000	5,000.000
0184	646.2040	Marking Line Grooved Wet Ref Epoxy 6-Inch	LF	24,280.000	24,280.000
0186	646.4020	Marking Line Epoxy 10-Inch	LF	600.000	600.000
0188	646.5020	Marking Arrow Epoxy	EACH	4.000	4.000
0190	646.5120	Marking Word Epoxy	EACH	2.000	2.000
0192	646.6120	Marking Stop Line Epoxy 18-Inch	LF	40.000	40.000
0196	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	450.000	450.000
0200	650.4000	Construction Staking Storm Sewer	EACH	3.000	3.000
0202	650.4500	Construction Staking Subgrade	LF	1,250.000	1,250.000
0204	650.5000	Construction Staking Base	LF	1,250.000	1,250.000
0206	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	695.000	695.000
0208	650.6000	Construction Staking Pipe Culverts	EACH	2.000	2.000
0210	650.8000	Construction Staking Resurfacing Reference	LF	6,500.000	6,500.000
0212	650.9000	Construction Staking Curb Ramps	EACH	8.000	8.000
0214	650.9500	Construction Staking Sidewalk (project) 01. 1500-75-71	EACH	1.000	1.000
0218	650.9911	Construction Staking Supplemental Control (project) 01. 1500-75-71	EACH	1.000	1.000
0220	650.9920	Construction Staking Slope Stakes	LF	1,250.000	1,250.000
0222	690.0150	Sawing Asphalt	LF	2,040.000	2,040.000
0224	690.0250	Sawing Concrete	LF	155.000	155.000
0226	740.0440	Incentive IRI Ride	DOL	4,888.000	4,888.000
0232	SPV.0035	Special 01. Foundation Backfill	CY	460.000	460.000
0234	SPV.0060	Special 01. Grading, Shaping and Finishing Culvert Pipes and Apron Endwalls	EACH	2.000	2.000
0236	SPV.0090	Special 01. Grading and Shaping Ditch	LF	985.000	985.000

3

REMOVING ASPHALTIC SURFACE BUTT JOINTS

STATION - STATION	LOCATION	204.0115 SY	COMMENTS
CATEGORY CODE 0010			
1042+00	USH 10 CL	36	BEGIN PROJECT
1043+22	USH 10 LT	4	DRIVEWAY
19+32	CTH W CL	36	CTH W BEGIN
30+25	CTH W CL	40	CTH W END
1052+37	USH 10 LT	7	DRIVEWAY
1057+29	USH 10 RT	7	DRIVEWAY
1059+29	USH 10 RT	7	DRIVEWAY
1061+11	USH 10 LT	46	NORTH 6TH STREET
1061+44	USH 10 RT	46	NORTH 6TH STREET
1063+32	USH 10 RT	7	DRIVEWAY
1064+75	USH 10 RT	7	DRIVEWAY
1068+56	USH 10 LT	48	NORTH 5TH STREET
1068+66	USH 10 RT	46	NORTH 5TH STREET
1070+72	USH 10 CL	45	B-36-0892
1071+15	USH 10 CL	45	B-36-0892
1076+52	USH 10 RT	51	NORTH 4TH STREET
1076+53	USH 10 LT	46	NORTH 4TH STREET
1077+28	USH 10 RT	4	DRIVEWAY
1077+86	USH 10 RT	4	DRIVEWAY
1081+74	USH 10 RT	4	DRIVEWAY
1084+43	USH 10 LT	54	NORTH 3RD STREET
1084+48	USH 10 RT	46	NORTH 3RD STREET
1086+48	USH 10 RT	4	DRIVEWAY
1087+26	USH 10 RT	4	DRIVEWAY
1091+64	USH 10 LT	46	NORTH 2ND STREET
1092+00	USH 10 RT	46	NORTH 2ND STREET
1105+78	USH 10 LT	37	PLEASANT VIEW ROAD
1105+88	USH 10 RT	41	MANITOWOC STREET
1107+00	USH 10 CL	56	END PROJECT
TOTALS		**870**	

REMOVING CONCRETE SIDEWALK

STATION - STATION	LOCATION	204.0155 SY	COMMENTS
CATEGORY CODE 0010			
1084+71	USH 10 LT	6	CURB RAMP CONNECTION
TOTAL		**6**	

REMOVING ASPHALTIC SURFACE MILLING

STATION - STATION	LOCATION	204.0120 SY	COMMENTS
CATEGORY CODE 0010			
1042+00 - 1107+00	USH 10 LT & RT	31,000	2.0" MILL
TOTALS		**31,000**	

REMOVING CURB AND GUTTER

STATION - STATION	LOCATION	204.0150 LF	COMMENTS
CATEGORY CODE 0010			
1047+16 - 1048+99	USH 10 LT & RT	415	CTH W INTERSECTION
1061+34 - 1062+01	USH 10 LT & RT	126	NORTH 6TH STREET
1076+71 - 1077+07	USH 10 LT & RT	105	NORTH 4TH STREET
1083+94 - 1085+01	USH 10 LT & RT	179	NORTH 3RD STREET
TOTAL		**825**	

REMOVING CULVERT ITEMS

STATION	LOCATION	203.0100 REMOVING SMALL PIPE CULVERTS EACH	204.9060.S REMOVING APRON ENDWALLS EACH	COMMENTS
CATEGORY CODE 0010				
25+04	CTH W RT	1	--	CACP 86 LF
1056+55	USH 10 CL	1	--	30-INCH CPCS X 74 LF
1061+76	USH 10 RT	--	1	STORM SEWER EXTENSION
TOTALS		**2**	**1**	

DIVISION	FROM/TO STATION	LOCATION	205.0100 COMMON EXCAVATION (1) CUT (2)	205.0100 COMMON EXCAVATION (1) EBS EXCAVATION (3)	SALVAGED/UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	UNEXPANDED FILL	EXPANDED FILL (13) FACTOR 1.00	MASS ORDINATE +/- (14)	WASTE	COMMENT
CTH W	23+82.29 - 36+75	CL	5,427	0	0	5,427	868	868	4,559	4,559	
USH 10 TURN LANES	1042+32.58 - 1053+18.22	LT/RT	1,700	0	0	1,700	57	57	1,643	1,643	
CULVERT REPLACEMENT	1056+55	CL	223	0	0	223	0	0	223	223	
CURB RAMPS	PROJECT	LT/RT	150	0	0	150	0	0	150	150	
PROJECT TOTAL			7,500	0	0	7,500	925	925	6,575	6,575	
TOTAL COMMON EXC (CY)			7,500								

NOTES:
(1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100
(2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
(4) SALVAGED/UNUSABLE PAVEMENT MATERIAL
5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL
(13) EXPANDED FILL FACTOR = 1.25. EXPANDED FILL = UNEXPANDED FILL * FILL FACTOR
(14) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.
(15) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFORMATION ONLY.

MISC. SHEET 1 OF

BASE AGGREGATE DENSE AND BREAKER RUN ITEMS

STATION - STATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	305.0500 SHAPING SHOULDERS STA	312.0110 SELECT CRUSHED MATERIAL TON	COMMENTS
CATEGORY CODE 0010					
1042+00 - 1107+00	460	--	130	--	USH 10 SHOULDERS
23+82 - 36+75	420	--	--	--	CTH W SHOULDERS
23+82 - 36+75	--	4,100	--	1,080	CTH W ROADWAY
1056+25	--	275	--	--	CULVERT REPLACEMENT
PROJECT	--	25	--	--	CURB RAMPS
	880	**4,400**	**130**	**1,080**	

ASPHALTIC ITEMS

STATION - STATION	LOCATION	455.0605 TACK COAT GAL	460.6223 HMA PAVEMENT 3 MT 58-28 S TON	460.6224 HMA PAVEMENT 4 MT 58-28 S TON	465.0110 ASPHALTIC SURFACE PATCHING TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	465.0520 ASPHALTIC RUMBLE STRIPS SHOULDER LF	465.0560 ASPHALTIC RUMBLE STRIPS CENTERLINE LF	460.0110.S HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP DENSITY EACH	COMMENTS
CATEGORY CODE 0010										
1042+00 - 1107+00	USH 10 CL	1,800	--	3,450	200	15	800	400	1	USH 10
23+82 - 36+75	CTH W CL	570	1,100	530	--	5	--	--	--	CTH W
	TOTALS	**2,370**	**1,100**	**3,980**	**200**	**20**	**800**	**400**	**1**	

1500-75-71

PWL Mixture Use Table

LOCATION	STATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEM	TONS	THICKNESS	MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
12' Driving Lane	1042+00 - 1107+00	Upper Layer	Milled Existing HMA Surface	4 MT 58-28 S	2,000	2.00	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
12' Driving Lane	23+82 - 36+75	Upper Layer	3 MT 58-28 S	4 MT 58-28 S	400	2.00	PWL Incentive Air Voids HMA Pavement 460.2010	Department Acceptance (SS 460.3.3.2) *Not Eligible for Incentive
4' Shoulder	23+82 - 36+75	Upper Layer	3 MT 58-28 S	4 MT 58-28 S	130	2.00	PWL Incentive Air Voids HMA Pavement 460.2010	Department Acceptance (SS 460.3.3.2) *Not Eligible for Incentive
Shoulder / Intersections	1042+00 - 1107+00	Upper Layer	Milled Existing HMA Surface	4 MT 58-28 S	1,450	2.00	PWL Incentive Air Voids HMA Pavement 460.2010	Acceptance per SS 460.3.3.2 *Not Eligible for Incentive
12' Driving Lane	23+82 - 36+75	Lower Layer	Base Aggregate	3 MT 58-28 S	825	4.00	QMP per SS 460.2.8	Incentive Density HMA Pavement 460.2000
4' Shoulder	23+82 - 36+75	Lower Layer	Base Aggregate	3 MT 58-28 S	275	4.00	QMP per SS 460.2.8	Incentive Density HMA Pavement 460.2000
Various	781+60 - 1042+00	Culvert Replacements	Base Aggregate	Asphaltic Surface Patching	200	6.00	Per SS 465	Acceptance By Ordinary Compaction (SS 450.3.2.6.2)

ASPHALTIC FLUME ITEMS

STATION	LOCATION	465.0315 ASPHALTIC FLUMES SY	COMMENTS
CATEGORY CODE 0010			
1047+27 - 1048+74	USH 10 LT/RT	32	CTH W
1084+09	USH 10 LT	8	N 3RD STREET
TOTALS		**40**	

CONCRETE CURB AND GUTTER ITEMS

STATION - STATION	LOCATION	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF	601.0557 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D LF	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF
CATEGORY CODE 0010				
1047+25 - 1048+74	USH 10 LT&RT	--	305	305
1061+34 - 1062+01	USH 10 LT&RT	120	--	120
1076+71 - 1077+07	USH 10 LT&RT	100	--	100
1083+94 - 1085+01	USH 10 LT&RT	170	--	170
	TOTALS	**390**	**305**	**695**

CULVERT PIPE ITEMS

STATION	LOCATION	208.1500.S TEMPORARY LANE SHIFT DURING CULVERT WORK EACH	520.1030 APRON ENDWALLS FOR CULVERT PIPE 30-INCH EACH	520.3430 CULVERT PIPE CLASS III-A NON-METAL 30-INCH LF	522.0430 CULVERT PIPE REINFORCED CONCRETE CLASS IV 30-INCH LF	522.1030 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONRETE 30-INCH EACH	633.5200 MARKERS CULVERT END EACH	650.6000 CONSTRUCTION STAKING PIPE CULVERTS EACH
CATEGORY CODE 0010								
29+47	CTH W LT/RT	--	--	--	72	2	2	1
1056+55	USH 10 LT/RT	1	2	72	--	--	2	1
	TOTALS	1	2	72	72	2	4	2

CONCRETE SIDEWALK ITEMS

STATION - STATION	LOCATION	602.0415 CONCRETE SIDEWALK 6-INCH SF	602.0515 CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA SF	602.0615 CURB RAMP DETECTABLE WARNING FIELD RADIAL NATURAL PATINA SF
CATEGORY CODE 0030				
1061+34 - 1062+01	USH 10 LT&RT	160	20	--
1076+71 - 1077+07	USH 10 LT&RT	135	20	--
1083+94 - 1085+01	USH 10 LT&RT	370	20	40
	TOTALS	**665**	**60**	**40**

STORM SEWER ITEMS

STATION	LOCATION	520.8000 CONCRETE COLLAR FOR PIPE EACH	520.1012 APRON ENDWALLS FOR CULVERT PIPE 12-INCH EACH	608.3012 STORM SEWER PIPE CLASS III-A 12-INCH LF	611.0639 INLET COVERS TYPE H-S EACH	611.1230 CATCH BASINS 2X3-FT EACH	650.4000 CONSTRUCTION STAKING STORM SEWER EACH
CATEGORY CODE 0010							
1061+90	USH 10 RT	1	1	16	--	--	1
1084+62	USH 10 LT	--	--	36	1	1	1
1084+90	USH 10 LT	--	1	--	--	--	1
		1	**2**	**52**	**1**	**1**	**3**

MISC. SHEET 3

WATER

LOCATION	624.0100 WATER MGAL	COMMENTS
CATEGORY CODE 0010		
PROJECT	75	
TOTALS	**75**	

LANDSCAPING ITEMS

STATION - STATION	LOCATION	625.0100 TOPSOIL SY	627.0200 MULCHING SY	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	629.0210 FERTILIZER TYPE B CWT	630.0130 SEED MIX NO. 30 LBS	630.0160 SEED MIX NO. 60 LBS	630.0500 SEED WATER MGAL
CATEGORY CODE 0010										
23+82 - 36+75	CTH W LT&RT	8,200	2,350	1,050	525	5,850	5.6	370	20	207
1061+34 - 1062+01	USH 10 LT&RT	75	--	100	50	75	0.1	3	--	2
1076+71 - 1077+07	USH 10 LT&RT	45	--	100	50	45	0.1	2	--	1
1083+94 - 1085+01	USH 10 LT&RT	155	--	100	50	155	0.1	8	--	4
UNDISTRIBUTED	PROJECT	1,700	470	270	135	1,225	1.2	77	10	46
TOTALS		**10,175**	**2,820**	**1,620**	**810**	**7,350**	**7.1**	**460**	**30**	**260**

DITCH CHECK ITEMS

STATION	LOCATION	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECKS EACH	628.7570 ROCK BAGS EACH
CATEGORY CODE 0010				
1047+27 - 1047+74	USH 10 LT & RT	--	--	12
1048+49	USH 10 RT	--	15	--
1056+44	USH 10 RT	--	15	--
23+82 - 36+75	CTH W LT & RT	80	--	--
1062+21	USH 10 RT	15	--	--
1084+02	USH 10 LT	15	--	--
1084+09	USH 10 LT	--	--	6
1085+43	USH 10 LT	15	--	--
TOTAL		**125**	**30**	**18**

MOBILIZATIONS EROSON CONTROL

STATION - STATION	LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	COMMENTS
23+82 - 36+75	CTH W LT & RT	1	1	CTH W
1056+55	USH 10 LT & RT	1	1	CULVERT
1061+34 - 1085+01	USH 10 LT & RT	1	1	CURB RAMPS
TOTALS		**3**	**3**	

INLET PROTECTION ITEMS

STATION	LOCATION	628.7005 TYPE A EACH
CATEGORY CODE 0010		
1061+15	USH 10 RT	1
1084+75	USH 10 LT	1
TOTAL		**2**

TRAFFIC CONTROL ITEMS

LOCATION	643.0300 DRUMS DAYS	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A DAYS	643.0900 SIGNS DAYS	643.1050 SIGNS PCMS DAYS	643.3105 TEMPORARY MARKING LINE PAINT 4-INCH WHITE LF	643.3105 TEMPORARY MARKING LINE PAINT 4-INCH YELLOW LF	644.1810 TEMPORARY PEDESTRIAN BARRICADE LF
CATEGORY CODE 0010								
PROJECT	1,000	300	350	1,500	7	39,000	13,000	120
TOTALS	**1,000**	**300**	**350**	**1,500**	**7**	**52,000**		**120**

MISC. SHEET 4

SIGNING ITEMS

STATION	LOCATION	SIGN CODE	SIZE	638.2102 MOVING SIGNS TYPE II EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	634.0616 POSTS WOOD 4x6-INCH X 16-FT EACH	637.2210 SIGNS TYPE II RELFECTIVE H SF
CATEGORY CODE 0010								
1044+32	RT	--	--	1	--	--	--	--
1047+39	LT	--	--	--	1	1	--	--
1047+70	LT	--	--	--	1	1	--	--
1047+72	LT	--	--	--	1	1	--	--
1047+76	LT	--	--	--	1	1	--	--
1048+50	RT	--	--	--	1	1	--	--
1048+54	RT	--	--	--	1	1	--	--
1048+55	RT	--	--	--	1	1	--	--
1048+86	RT	--	--	--	1	1	--	--
1048+96	LT	--	--	--	1	1	--	--
24+60	RT	W1-4R	36"X36	--	--	--	1	9.00
27+47	LT	--	--	1	--	--	--	--
28+25	RT	W3-1	36"X36	--	--	--	1	9.00
28+34	RT	--	--	1	--	--	--	--
29+75	RT	R1-1	30"X30"	--	--	--	1	6.25
29+75	RT	M1-4	24"X24"	--	--	--	1	4.00
29+75	RT	M6-4	21"X21"	--	--	--	--	3.06
31+50	LT	R1-1	30"X30"	--	--	--	1	6.25
31+50	LT	M1-4	24"X24"	--	--	--	1	4.00
31+50	LT	M6-1	21"X21"	--	--	--	--	3.06
32+39	RT	--	--	1	--	--	--	--
33+00	LT	W3-1	36"X36	--	--	--	1	9.00
36+25	LT	W1-4R	36"X36	--	--	--	1	9.00
			TOTALS	**4**	**9**	**9**	**8**	**62.62**

PAVEMENT MARKING ITEMS

LOCATION	OFFSET	646.2020 MARKING LINE EPOXY 6-INCH WHITE LF	646.2020 MARKING LINE EPOXY 6-INCH YELLOW LF	646.2040 MARKING LINE GROOVED WET REF EPOXY 6-INCH WHITE LF	646.2040 MARKING LINE GROOVED WET REF EPOXY 6-INCH YELLOW LF	646.4020 MARKING LINE EPOXY 10-INCH LF	646.5020 MARKING ARROW EPOXY EACH	646.5120 MARKING WORD EPOXY EACH	646.6120 MARKING STOP LINE EPOXY 18-INCH LF	646.7420 MARKING CROSSWALK EPOXY TRANSVERSE 6-INCH EACH
CATEGORY CODE 0010										
PROJECT	USH 10 LT/RT/CL	--	--	20,000	4,280	600	4	2	--	450
PROJECT	CTH W LT/RT/CL	2,500	2,500	--	--	--	--	--	40	--
	TOTALS	**5,000**		**24,280**		**600**	**4**	**2**	**40**	**450**

MISC. SHEET 5

CONSTRUCTION STAKING ITEMS

STATION - STATION	LOCATION	650.4500 SUBGRADE LF	650.5000 BASE LF	650.8000 RESURFACING REFERENCE LF	650.9000 CURB RAMPS EACH	650.9911 SUPPLEMENTAL CONTROL EACH	650.9920 SLOPE STAKES LF
CATEGORY CODE 0010							
PROJECT	LT/RT/CL	1,250	1,250	6,500	8	1	1,250
TOTALS		**1,250**	**1,250**	**6,500**	**8**	**1**	**1,250**

STAKING ITEMS FOR STORM SEWER, CURB AND GUTTER AND PIPE CULVERTS SHOWN ELSEWHERE

SAWING ITEMS

LOCATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF	COMMENTS
CATEGORY CODE 0010			
23+82	30	--	CTH W SOUTH LIMITS
1042+45 - 1049+48	703	--	CTH W AT USH 10
1046+45 - 1053+07	662	--	CTH W AT USH 10
36+75	25	--	CTH W NORTH LMIMTS
1056+55	175	125	CULVERT REMOVAL
1061+59	135	10	6TH STREET
1076+85	115	10	4TH STREET
1084+50	195	10	3RD STREET
TOTALS	**2,040**	**155**	

GRADING SHAPING AND FINISHING DITCH

LOCATION	SPV.0090.01 GRADING SHAPING AND FINISHING DITCH LF	COMMENTS
CATEGORY CODE 0010		
1049+00 - 1052+00	300	USH 10 DITCH
1061+75 - 1062+25	50	STORM SEWER EXTENSION
1084+90 - 1091+25	635	USH 10 DITCH
TOTALS	**985**	

GRADING SHAPING AND FINISHING CULVERT PIPES AND APRON ENDWALLS

LOCATION	SPV.0060.01 GRADING SHAPING AND FINISHING CULVERT PIPES AND APRON ENDWALLS EACH	COMMENTS
CATEGORY CODE 0010		
1056+55	1	USH 10 CULVERT
29+47	1	CTH W CULVERT
TOTALS	**2**	

FOUNDATION BACKFILL

LOCATION	SPV.0035.01 FOUNDATION BACKFILL CY	COMMENTS
CATEGORY CODE 0010		
1056+55	265	USH 10 CULVERT
29+47	195	USH 10 CULVERT
TOTALS	**460**	

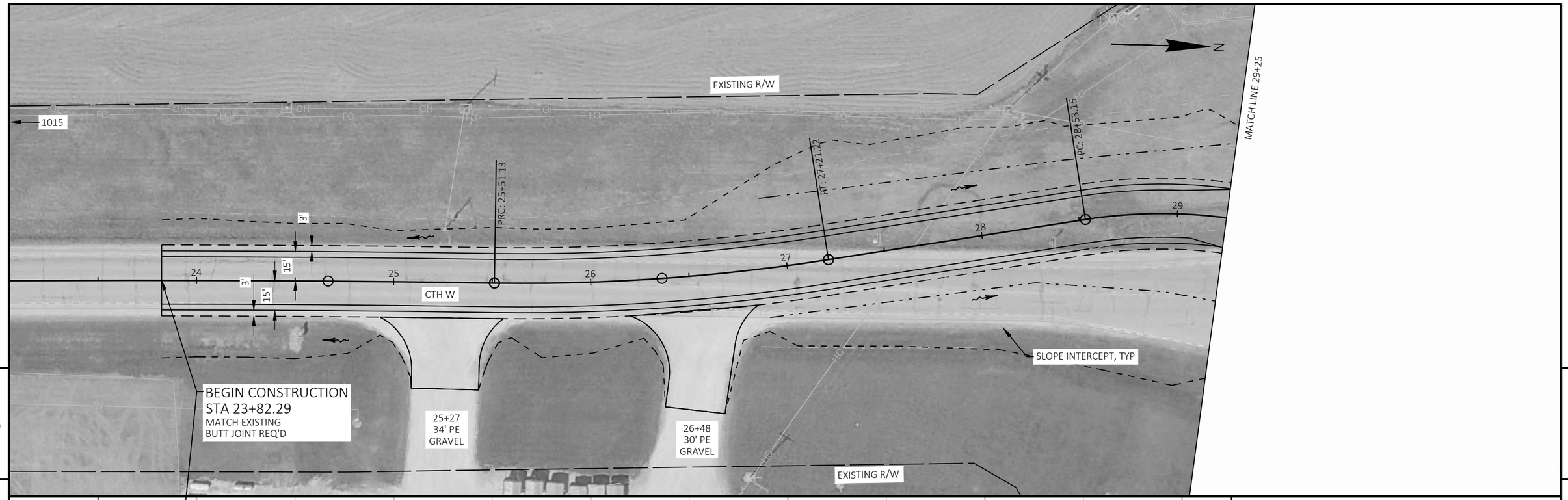
STATION - STATION	* COMMON EXCAVATION CY	* TOPSOIL SY	* EROSION MAT URBAN CLASS I TYPE B SY	* FERTILIZER TYPE B CWT	* SEED MIX NO. 30 LBS	* SEED WATER MGAL
CATEGORY CODE 0010						
1049+00 - 1052+00	60	340	340	0.2	15	8
1061+75 - 1062+25	10	55	55	0.1	3	2
1084+90 - 1091+25	120	705	705	0.5	33	18
1056+55	5	25	25	0.1	2	1
29+47	5	25	25	0.1	2	1
TOTALS	**200**	**1,150**	**1,150**	**1.0**	**55**	**30**

* QUANTITIES ARE GIVEN FOR INFORMATIONAL PURPOSES ONLY AND ARE INCIDENTAL TO THE GRADING SPV

EXCAVATION, HAULING, AND DISPOSAL OF PETROLEUM CONTAMINATED SOIL

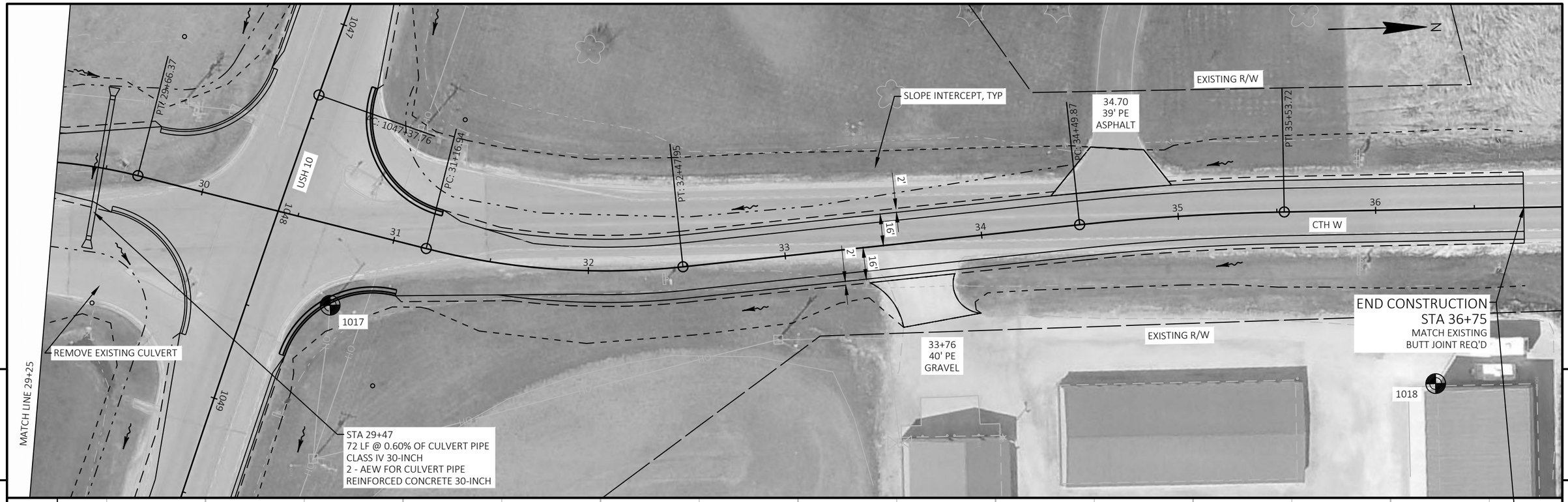
STATION	LOCATION	205.0501.S TON	COMMENTS
CATEGORY CODE 0010			
1077+00	USH 10 RT	1	USH 10 CURB RAMP
TOTALS		**1**	

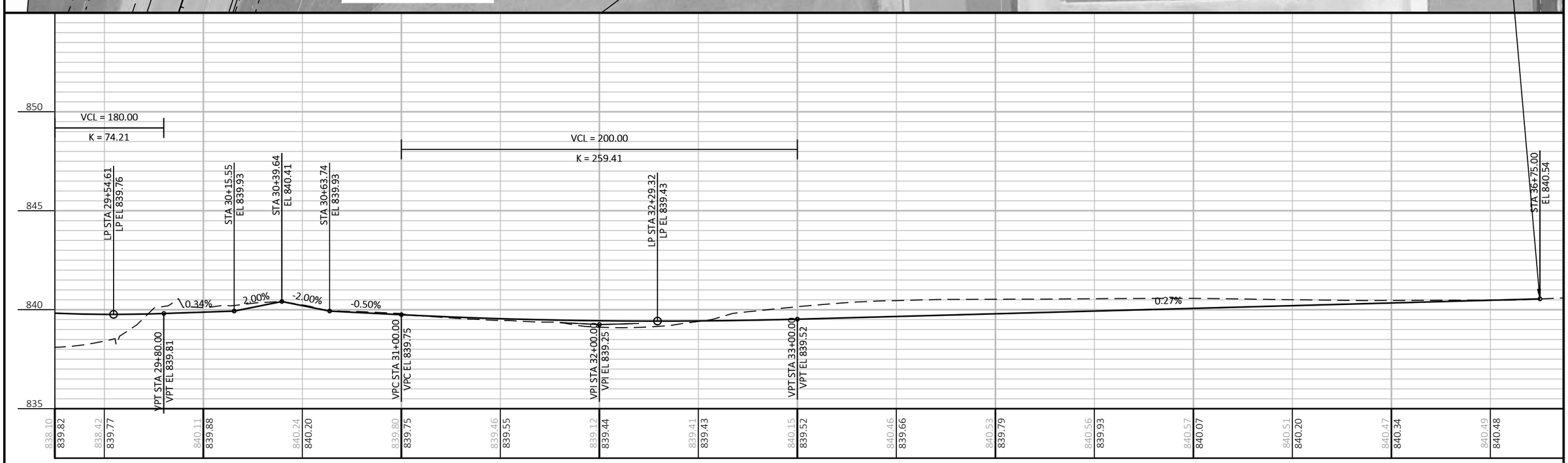
MISC. SHEET 6



PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	PLAN AND PROFILE: CTH W	SHEET 43	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 03
PLOT DATE : 5/28/2026 9:41 PM
PLOT BY : JARED HALBUR
PLOT NAME :
PLOT SCALE : 1 IN:50 FT





PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	PLAN AND PROFILE: CTH W	SHEET 44	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 04
PLOT DATE : 5/28/2026 9:41 PM
PLOT BY : JARED HALBUR
PLOT NAME :
PLOT SCALE : 1 IN:50 FT

5

5

N

STA 1043+22
ASPHALT PE
MATCH EXISTING

1016

1042

1044

1046

1048

1050

1052

1054

1056

1017

CONCRETE CURB AND GUTTER
6-INCH SLOPED 36-INCH TYPE D, TYP

DEDICATED RIGHT TURN LANE

BEGIN TAPER
+68, 26' LT

STA 1052+37
ASPHALT PE
MATCH EXISTING

END TAPER
+07, 15' LT

BEGIN TAPER
+31, 15' LT

EXISTING R/W

INV = 826.86

END TAPER
+11, 22' RT

END TAPER
+79, 20' LT

BEGIN TAPER
+45, 15' RT

BEGIN PROJECT 1500-75-71
STA 1042+00

EXISTING R/W

END TAPER
+83, 26' RT

DEDICATED RIGHT TURN LANE

PT: 32+47.95

PC: 34+49.87

PC: 31+16.94

PT: 29+66.37

72 LF OF CULVERT PIPE
CLASS IV 30-INCH

PC: 28+43.15

PT: 27+41.12

PRC: 25+51.13

CTH W RELOCATION
(SEE INTERSECTION DETAILS
AND PLAN AND PLAN AND PROFILE)

PI: 115+79.27

PT: 110+94.79

EXISTING WETLAND BOUNDARY, TYP

EXISTING R/W

CURVE 1

BEGIN TAPER
+24, 15' RT

INV = 827.32

STA 1057+29
ASPHALT PE

REPLACE EXISTING 30-INCH CPCS
CULVERT PIPE CLASS III-A NON-METAL 30-INCH REQUIRED

MATCH LINE 1057+24.98

PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	PLAN SHEETS	SHEET 45	E



5

5

PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	PLAN SHEETS	SHEET 46	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050202-pn
PLOT DATE : 5/28/2026 9:47 PM
PLOT BY : JARED HALBUR
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	PLAN SHEETS	SHEET 47	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050203-pn
PLOT DATE : 5/28/2026 9:47 PM PLOT BY : JARED HALBUR PLOT NAME : PLOT SCALE : 1 IN:100 FT

NOTES:
EXISTING UTILITY FACILITIES MAY BE PRESENT BUT ARE NOT SHOWN.

N

EXISTING 48-INCH CPRC (TO REMAIN)

EXISTING R/W

BUTT JOINT REQ'D

N. 2ND ST

EX INV = 821.86

GRADE TO DRAIN
635 LF @ 0.30%

EXISTING R/W

1088 1090 1092 1094 1096 1098 1100 1102

MATCH LINE 1087+74.87

CURVE 3

EXISTING R/W

PT: 1099+17.89

MATCH LINE 1102+99.97

STA 1089+76
GRAVEL PE

STA 1090+74
GRAVEL PE

EXISTING R/W

BUTT JOINT REQ'D

N. 2ND ST

MILL ST

PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	PLAN SHEETS	SHEET 48	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050204-pn

PLOT DATE : 5/28/2026 9:47 PM PLOT BY : JARED HALBUR PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

NOTES:
EXISTING UTILITY FACILITIES MAY BE PRESENT BUT ARE NOT SHOWN.

N

5

5

MATCH LINE 1102+99.97

PLEASANT VIEW RD

BUTT JOINT REQ'D

END PROJECT 1500-75-71
STA 1107+00
MATCH EXISTING
BUTT JOINT REQ'D

EXISTING R/W

1104

1106

1108

1110

1112

1114

1116

1118

PC: 1106+17.67

CURVE 4

BUTT JOINT REQ'D

MANITOWOC ST

EXISTING R/W

MILL ST

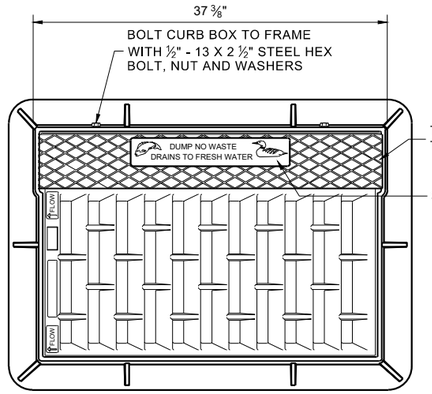
MUD CREEK RD

PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	PLAN SHEETS	SHEET 49	E

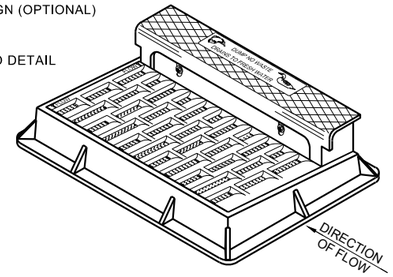
Standard Detail Drawing ListStandard Detail Drawing List

08A05-22A	INLET COVERS TYPE A, H, A-S, H-S AND Z
08A09-03	CATCH BASINS 2X3-FT AND 2.5X3-FT
08D01-24A	CONCRETE CURB AND GUTTER
08D01-24B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-07	CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES
08D05-23A	CURB RAMPS TYPES 1 AND 1-A
08D05-23B	CURB RAMPS TYPES 2 AND 3
08D05-23C	CURB RAMPS TYPES 4A AND 4A1
08D05-23D	CURB RAMPS TYPES 4B AND 4B1
08D05-23E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-23F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD
08D05-23G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPES 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
09A01-14A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C", "D" AND TEE INTERSECTION BYPASS LANE
09A01-14B	AT-GRADE SIDE ROAD INTERSECTION, TYPES "A1" & "A2"
09A15-01	DRIVEWAYS WITHOUT CURB AND GUTTER RESURFACING PROJECTS RURAL
13A10-03G	SHOULDER AND EDGE LINE RUMBLE STRIPS - CROSSINGS, INTERSECTIONS, BRIDGES, DRIVEWAYS
13A10-03H	SHOULDER AND EDGE LINE RUMBLE STRIPS - RAILROAD, PASSING, CLIMBING AND BYPASS LANES
13A11-04A	CENTERLINE RUMBLE STRIPS - ASPHALT
13A11-04D	CENTERLINE RUMBLE STRIPS - INTERSECTIONS, DRIVEWAYS, BRIDGES, RAILROADS
13C19-03	HMA LONGITUDINAL JOINTS
14B29-01	SAFETY EDGE
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-10A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-10B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C07-16B	PAVEMENT MARKING WORDS
15C07-16C	PAVEMENT MARKING ARROWS
15C08-24A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-24B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C08-24C	PAVEMENT MARKING (TURN LANES)
15C08-24D	PAVEMENT MARKING (TURN LANES)
15C11-11B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C19-11A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C33-05	STOP LINE AND CROSSWALK PAVEMENT MARKING
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)
15D28-06	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D30-12A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-12B	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-12C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-12F	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D48-01	TRAFFIC CONTROL, LANE SHIFT IN FLAGGING OPERATION
16A02-01	GEODETIC SURVEY MONUMENT

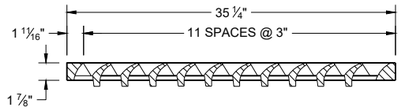
6

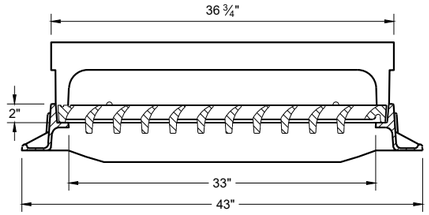


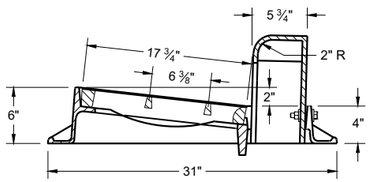
NOTE: EITHER CASTING IS ACCEPTABLE

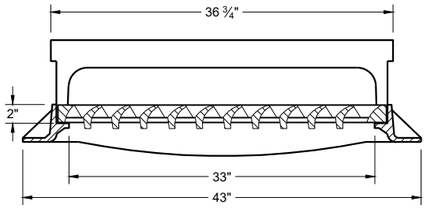


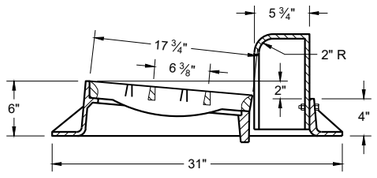
NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"







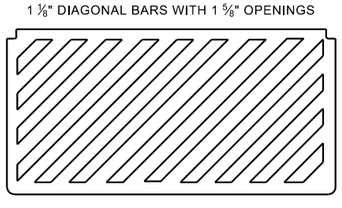




TYPE "H"

NOTE: EITHER CASTING IS ACCEPTABLE

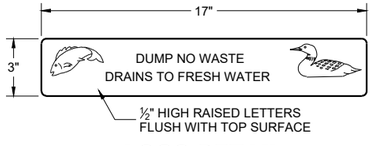
1 ⅛" DIAGONAL BARS WITH 1 ⅝" OPENINGS



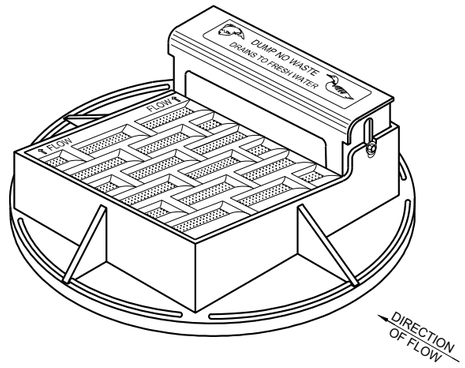
SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35" X 17 ¾" X 2")

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

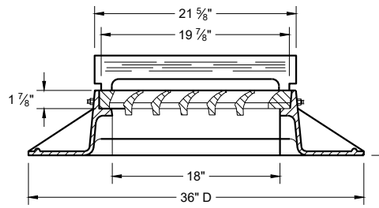


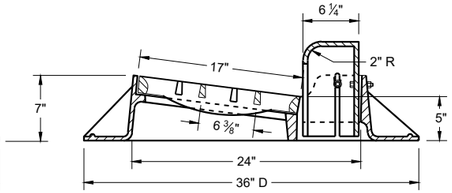
LOGO DETAIL



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"

NOTE: EITHER CASTING IS ACCEPTABLE





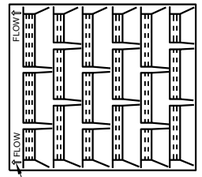
TYPE "A"

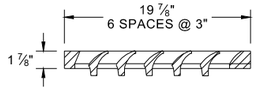
GENERAL NOTES

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.

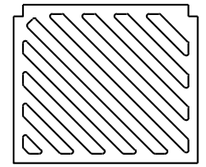
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.





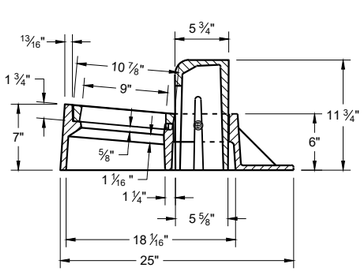
1" DIAGONAL BARS
WITH 1 ½" OPENINGS



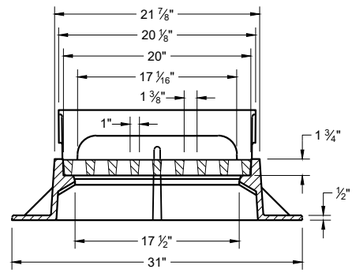
SPECIAL GRATE FOR TYPE "A" COVER

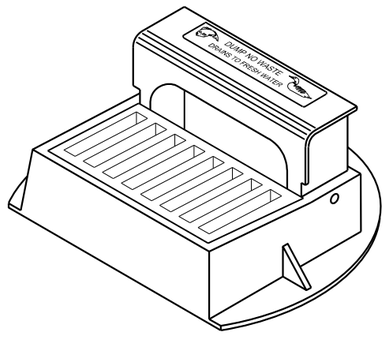
(MEASURES 19 ¾" X 17" X 1 ⅞")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)



TYPE "Z"





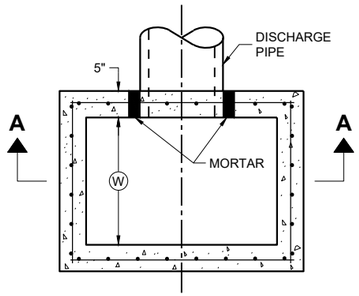
INLET COVERS
TYPES A, H, A-S, H-S AND Z

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

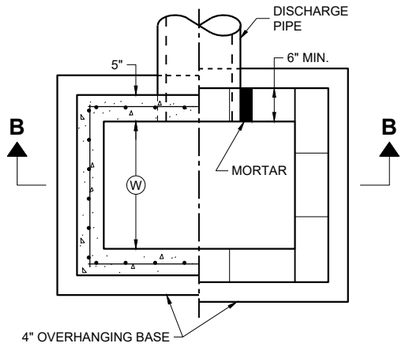
APPROVED
February 2025
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR

FHWA



PLAN VIEW



PLAN VIEW

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP N0T SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST CATCH BASIN UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL PRECAST CATCH BASIN UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

(1) FOR PRECAST CATCH BASINS AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

(2) CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

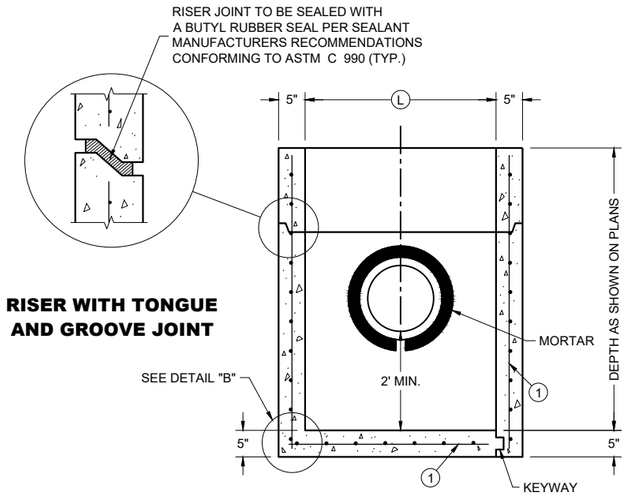
(3) 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER MATRIX

CATCH BASIN SIZE	WIDTH (W) (FT.)	LENGTH (L) (FT.)	INLET COVER TYPE	
			F	ALL H'S
2 X 3-FT	2	3		X
2.5 X 3-FT	2.5	3	X	

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER (IN)	
	WIDTH (W)(IN)	LENGTH (L)(IN)
2 X 3-FT	12	24
2.5 X 3-FT	18	24

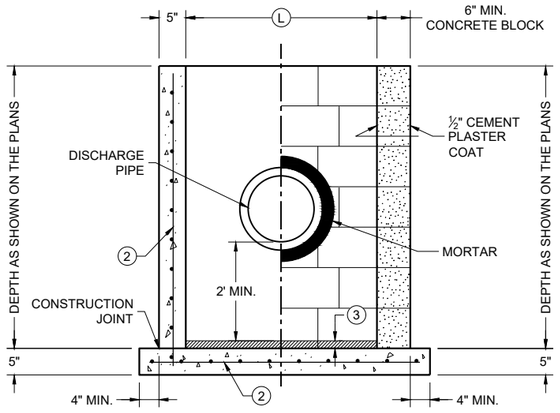


RISER WITH TONGUE AND GROOVE JOINT

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE

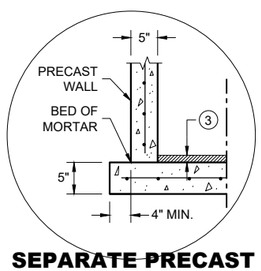
SECTION A - A



CAST IN PLACE REINFORCED CONCRETE

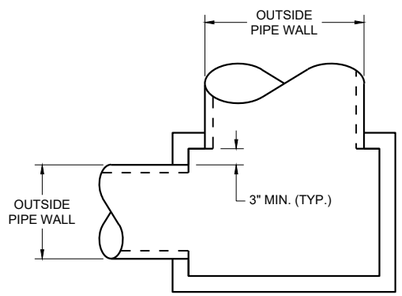
CONCRETE BLOCK ON CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (1)

SECTION B - B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "B"



DETAIL "A"

CATCH BASINS 2X3-FT AND 2.5X3-FT

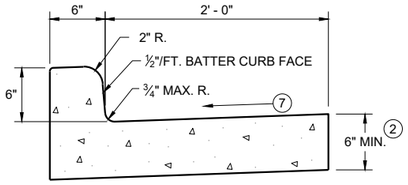
CATCH BASINS
2 X 3-FT AND 2.5 X 3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

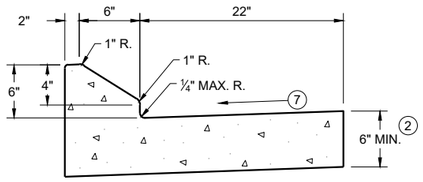
APPROVED
December 2023 /S/ RODNEY TAYLOR
DATE ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVIS

FHWA

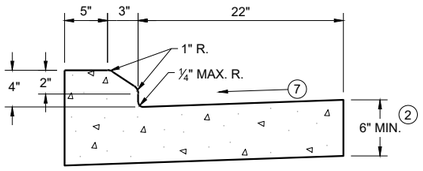
6
SDD 08A09-03



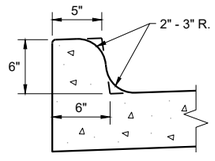
TYPES A (1) & D



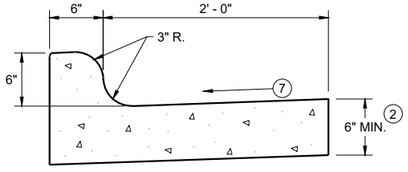
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

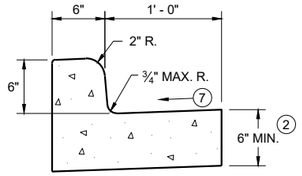


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



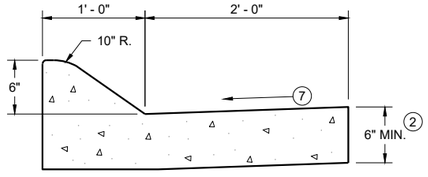
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

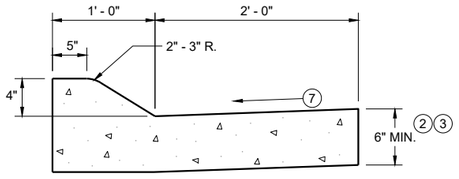


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

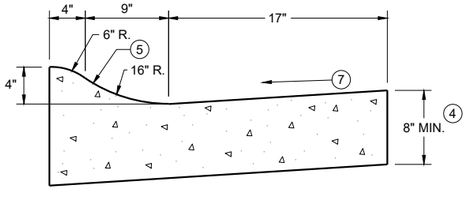


6" SLOPED CURB TYPES A (1) & D



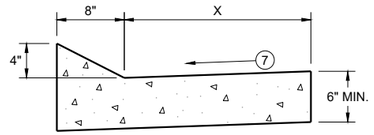
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T
CONCRETE CURB AND GUTTER 30"

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

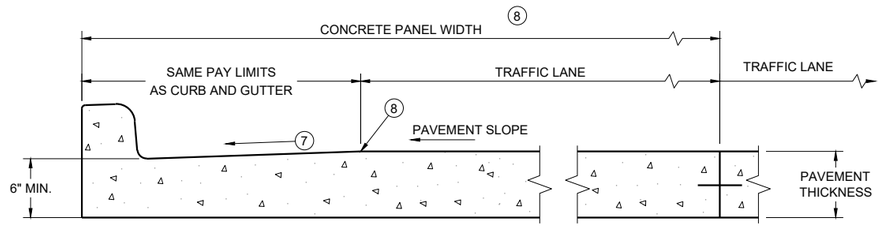


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

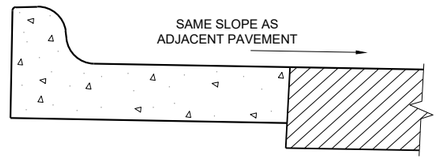
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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)

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.

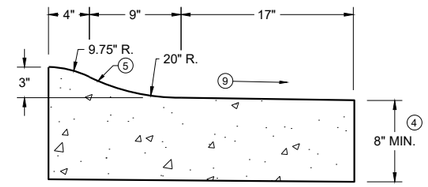
(5) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(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.

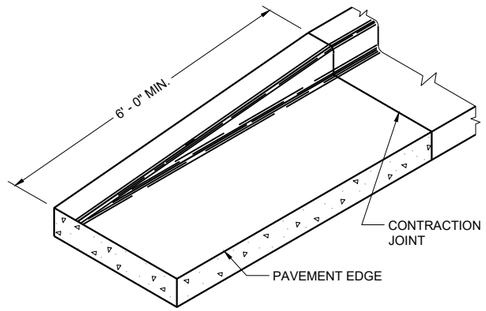
(9) SLOPE TO BE REVERSE SLOPE MATCHING THE SLOPE OF THE PAVEMENT AND THE CIRCULATORY ROADWAY



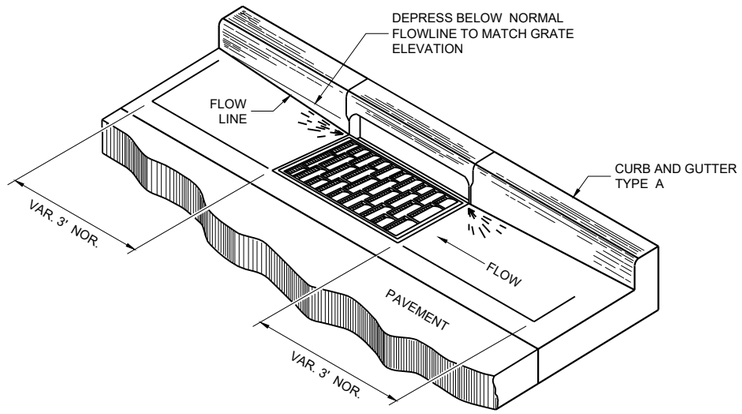
3" SLOPED CURB TYPES R (1) & T

CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



END SECTION CURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS

(TYPICAL H INLET COVER SHOWN)

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.

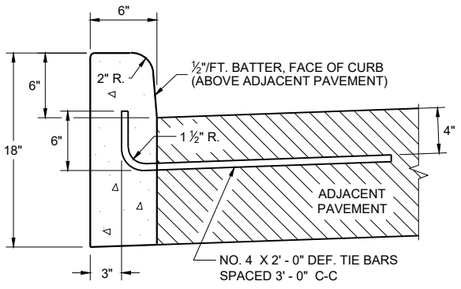
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

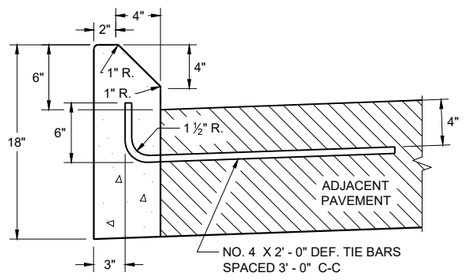
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(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.

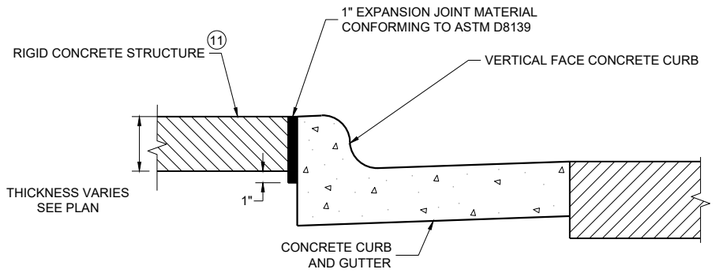


TYPES A (1) & D

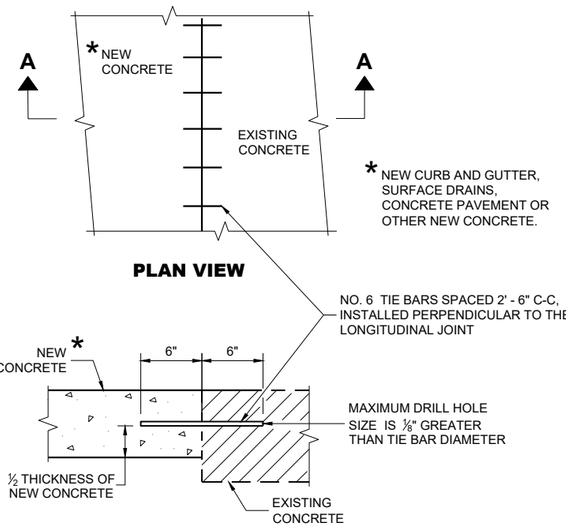


TYPES G (1) & J

CONCRETE CURB



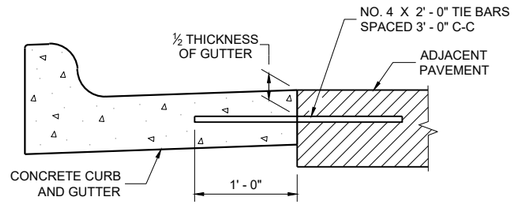
EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE (11)



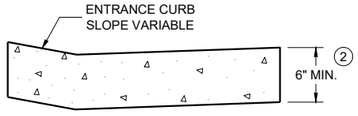
PLAN VIEW

SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (10)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2025 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

6

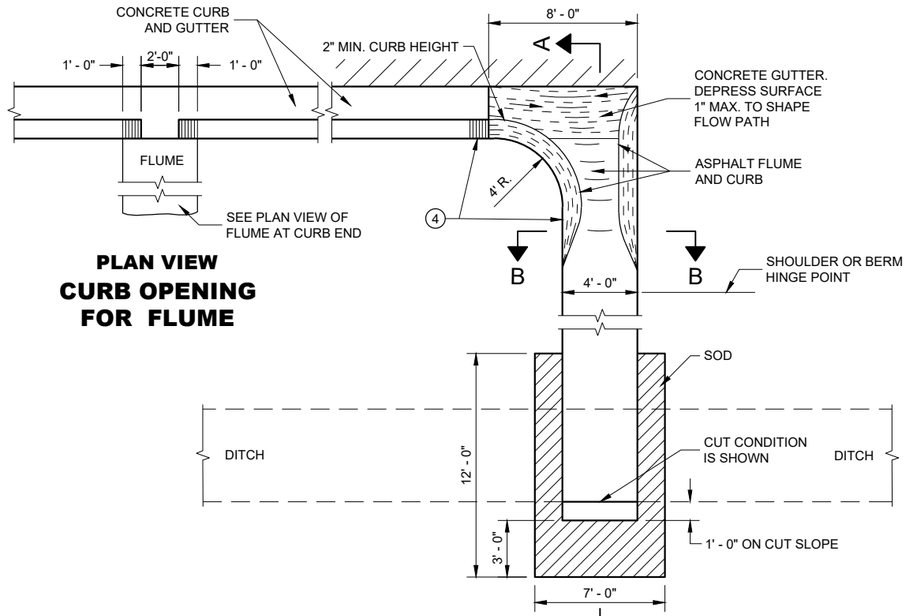
SDD 08D01-24b

6

SDD 08D01-24b

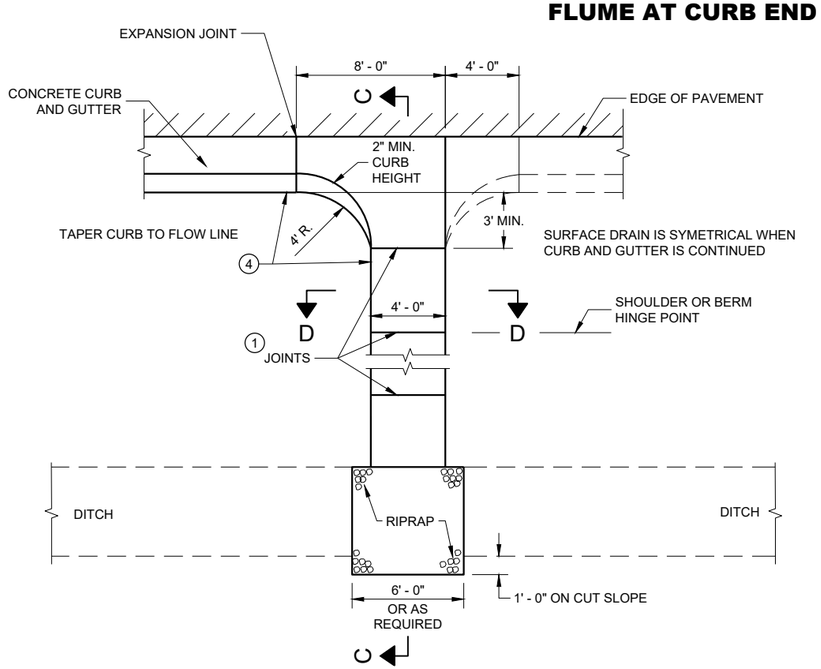
NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

ASPHALTIC FLUME



PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



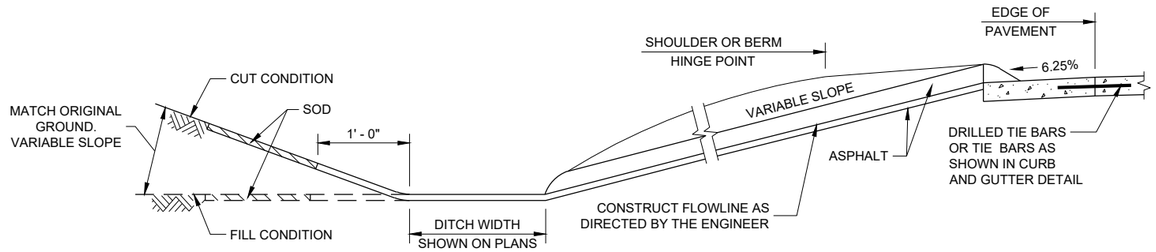
PLAN VIEW
CONCRETE SURFACE DRAIN

GENERAL NOTES

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

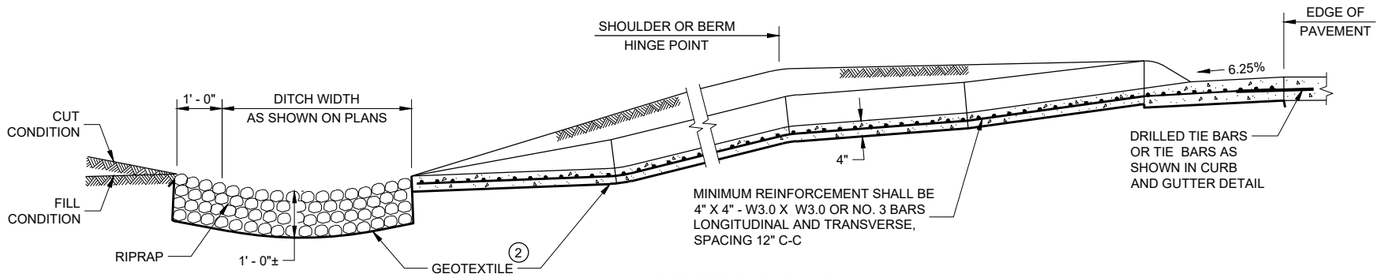
4" X 4" - W3.0 X W3.0 CONCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

1. JOINTS SHALL BE ⅛" TO ¼" WIDE BY 1½" DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
2. GEOTEXTILE TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
3. CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED.
4. ANGLE OF FLUME IN RELATION TO BACK OF CURB TO BE CONSTRUCTED PER THE PLAN DETAILS OR AS DIRECTED BY THE ENGINEER. ANGLE OF FLUME MAY BE OTHER THAN 90 DEGREES AS SHOWN.

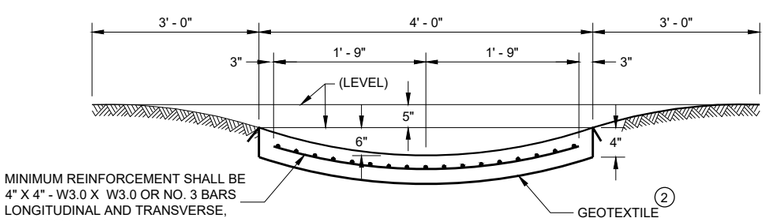


SECTION A - A

SECTION B - B



SECTION C - C



SECTION D - D

CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

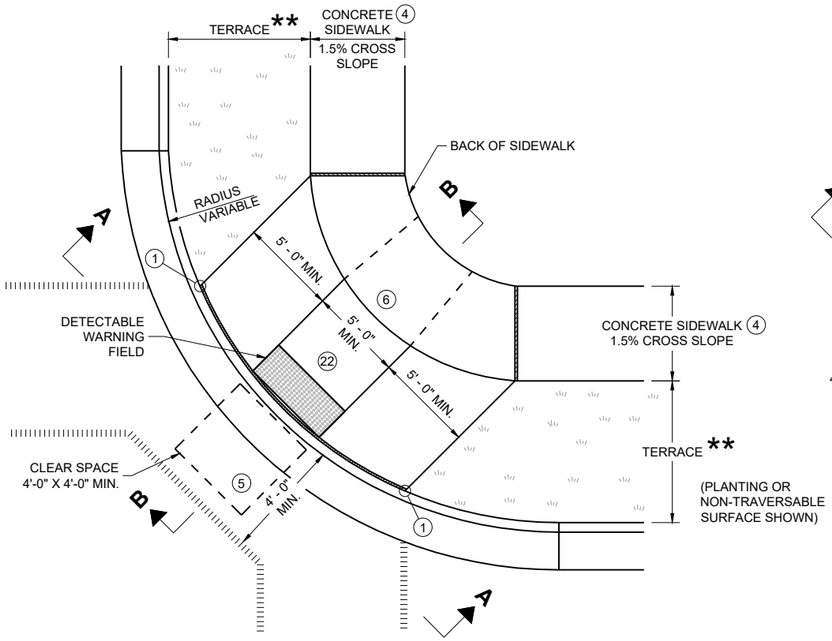
FHWA

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SDD 08D04 - 07

6

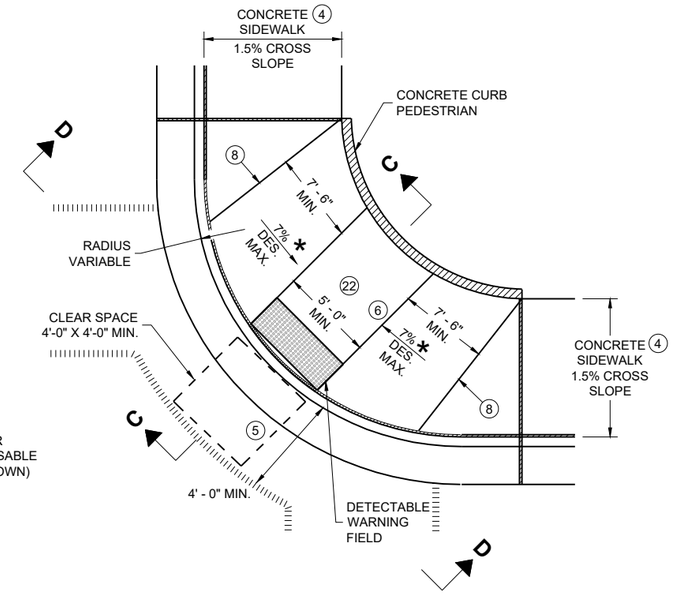
SDD 08D04 - 07



PLAN VIEW

CURB RAMP TYPE 1

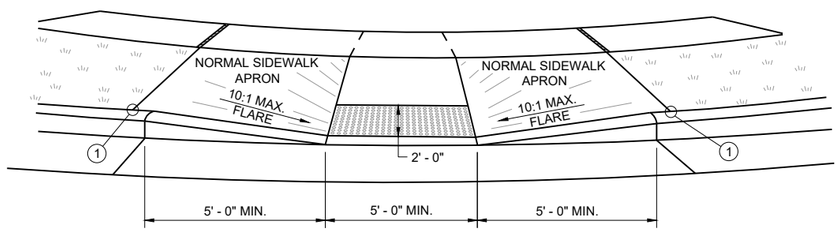
(CENTER OF CORNER RADIUS)



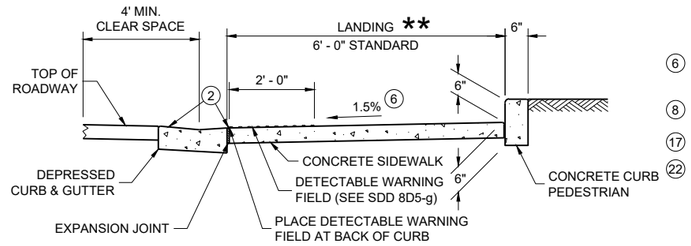
PLAN VIEW

CURB RAMP TYPE 1 - A

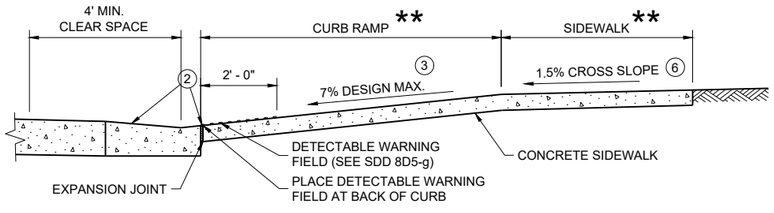
(NO TERRACE)



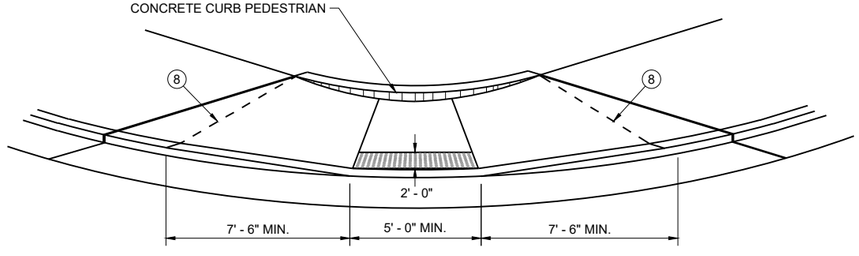
VIEW A - A FOR TYPE 1



SECTION C - C FOR TYPE 1 - A



SECTION B - B FOR TYPE 1



VIEW D - D FOR TYPE 1 - A

GENERAL NOTES

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

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

DETECTABLE WARNING FILED 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 CURB RAMP.

(1) 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.

(2) GRADE CHANGE BETWEEN GUTTER COUNTER SLOPE AND THE CURB RAMP SLOPE IS DESIRABLY 11% OR LESS AND SHALL NOT EXCEED 13.3%. TYPICAL GUTTER COUNTER SLOPE IS 4% BUT MAY BE MODIFIED TO FIT FIELD CONDITIONS. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5%, DESIRABLY 7% OR LESS, AND SHALL NOT EXCEED A MAXIMUM OF 8.3%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.3% CURB RAMP SLOPE IS ALLOWABLE WITH GUTTER COUNTER SLOPE OF 5% MAXIMUM AND A 13.3% MAXIMUM GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.1% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(5) PROVIDE A CLEAR SPACE IN THE STREET AND GUTTER AREA. WHEN THE GUTTER CROSS SLOPE EXCEEDS 2.1%, CONSTRUCT THE CLEAR SPACE IN THE STREET AREA AND THE 4 FOOT WIDTH IS MEASURED FROM THE FLANGE LINE. FOR RECONSTRUCTION AND MODERNIZATION PROJECTS THE CLEAR SPACE SLOPE PARALLEL TO THE CURBLINE SHOULD BE 2.1% MAX FOR CROSSINGS THAT ARE STOP AND YIELD CONTROLLED, AND 5% MAX FOR THOSE THAT ARE SIGNAL CONTROLLED. FOR PERPETUATION AND REHABILITATION PROJECTS THE SLOPE OF THE CLEAR SPACE PARALLEL TO THE CURBLINE WILL MATCH THE ROADWAY LONGITUDINAL SLOPE. THE SLOPE OF THE CLEAR SPACE PERPENDICULAR TO THE CURBLINE WILL MATCH THE ROADWAY CROSS SLOPE BUT SHOULD NOT EXCEED 5% UNLESS THE ROADWAY IS SUPERELEVATED (WHEN SUPERELEVATED THE ROADWAY CROSS SLOPE SHOULD MATCH THE SUPERELEVATION).

(6) PROVIDE A 5 FOOT BY 5 FOOT LANDING. SLOPE PERPENDICULAR TO CURB SHALL BE 2.1% MAXIMUM. SLOPE PARALLEL TO CURB SHALL MATCH THE CURB AND GUTTER LONGITUDINAL SLOPE.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(17) A MAXIMUM 2-INCH CONCRETE BORDER IS PERMITTED ALONG ALL SIDES OF THE DETECTABLE WARNING FIELD SURFACE.

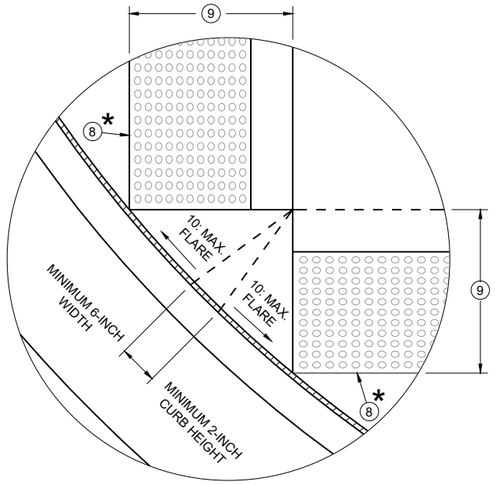
(22) THE ENTIRE RAMP SHALL BE A PLANAR SURFACE. DO NOT WARP THE RUNNING SLOPE OR CROSS SLOPE OF THE RAMP. WARPING OF THE SIDEWALK CROSS SLOPE SHALL TAKE PLACE BETWEEN THE LANDING AND MATCH POINT.

LEGEND

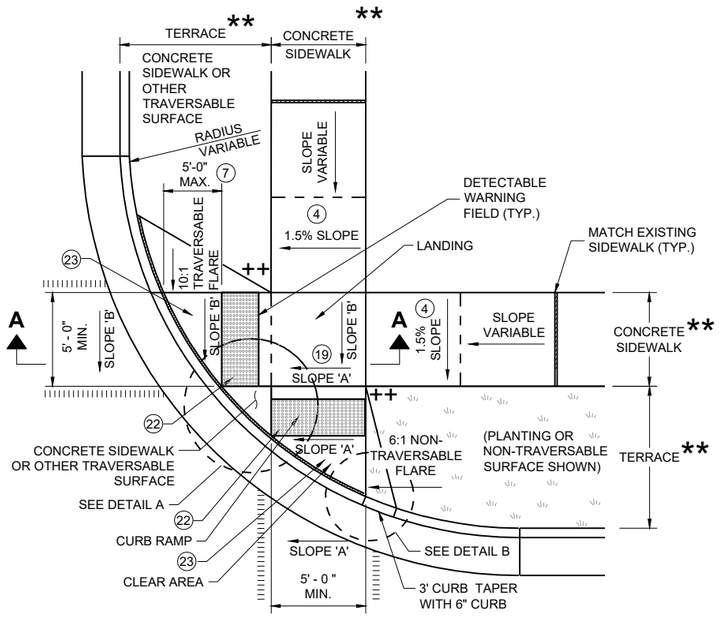
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- * MAXIMUM 8.3%
- ** WIDTH SHOWN ELSEWHERE IN THE PLANS

CURB RAMPS TYPE 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



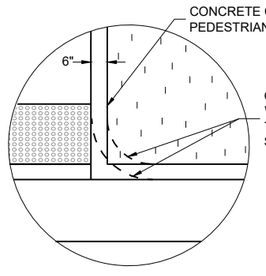
DETAIL A



PLAN VIEW

CURB RAMP TYPE 2

(CENTER OF CORNER RADIUS)



DETAIL B

PLAN VIEW

CURB RAMP TYPE 3

(OUTSIDE OF CROSSWALK AREA)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF CURB 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.

(2) GRADE CHANGE BETWEEN GUTTER COUNTER SLOPE AND THE CURB RAMP SLOPE IS DESIRABLY 11% OR LESS AND SHALL NOT EXCEED 13.3%. TYPICAL GUTTER COUNTER SLOPE IS 4% BUT MAY BE MODIFIED TO FIT FIELD CONDITIONS. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5%, DESIRABLY 7% OR LESS, AND SHALL NOT EXCEED A MAXIMUM OF 8.3%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.3% CURB RAMP SLOPE IS ALLOWABLE WITH GUTTER COUNTER SLOPE OF 5% MAXIMUM AND A 13.3% MAXIMUM GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.1% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(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% DESIGN MAXIMUM SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% DESIGN MAXIMUM SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.

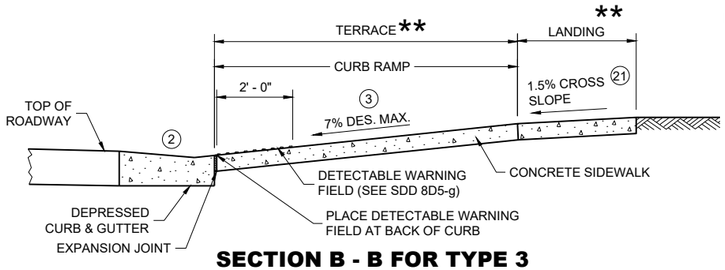
(17) A MAXIMUM 2-INCH CONCRETE BORDER IS PERMITTED ALONG ALL SIDES OF THE DETECTABLE WARNING FIELD SURFACE.

(19) WHERE A LANDING SERVES TWO CURB RAMPS, THE LANDING SLOPE SHALL NOT EXCEED THE CROSS SLOPE AT THE BOTTOM OF THE RAMP OR WITHIN THE CROSSWALK PARALLEL TO THE DIRECTION OF TRAVEL.

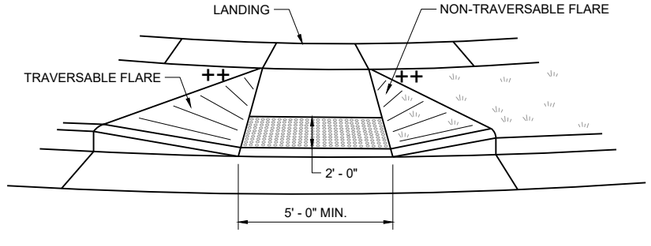
(21) PROVIDE A LANDING WITH A SLOPE PARALLEL TO ROADWAY THAT MATCHES SLOPE AT THE BOTTOM OF THE ADJACENT RAMP. SLOPE PERPENDICULAR TO ROADWAY SHALL BE 2.1% MAXIMUM. STANDARD LANDING SIZE IS 5 FEET BY 5 FEET.

(22) THE ENTIRE RAMP SHALL BE A PLANAR SURFACE. DO NOT WARP THE RUNNING SLOPE OR CROSS SLOPE OF THE RAMP. WARPING OF THE SIDEWALK CROSS SLOPE SHALL TAKE PLACE BETWEEN THE LANDING AND MATCH POINT.

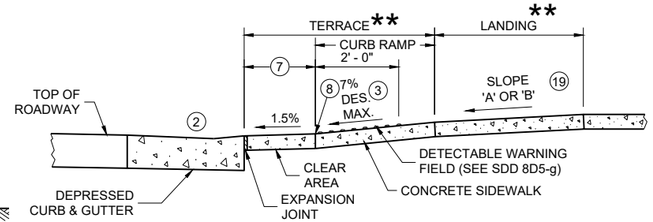
(23) THE CLEAR AREA BETWEEN THE BOTTOM OF RAMP AND BACK OF CURB SHALL BE SLOPED SO THAT WATER DRAINS OUT OF ONE SIDE OR BOTH SIDES OF THE CURB OPENING.



SECTION B - B FOR TYPE 3



VIEW C - C FOR TYPE 3



SECTION A - A FOR TYPE 2

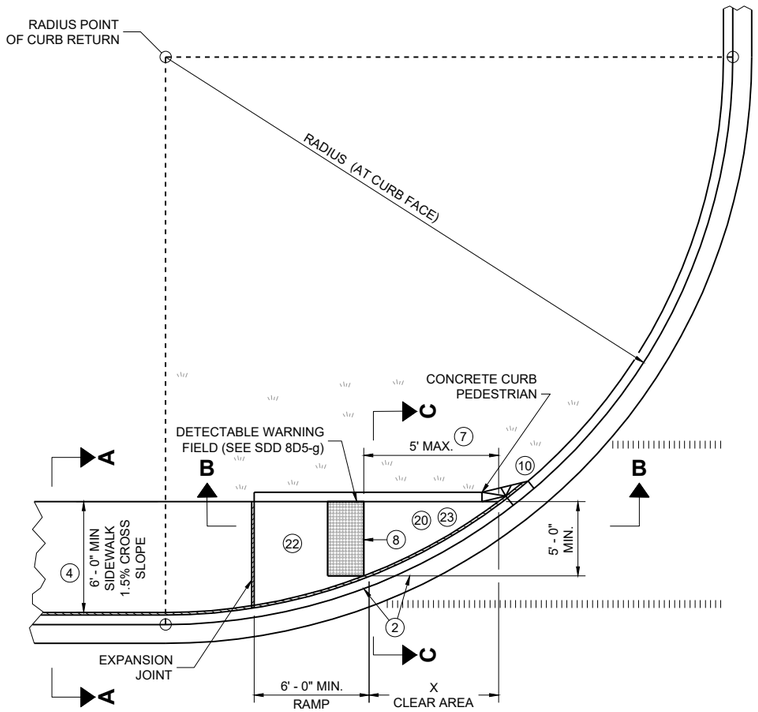
LEGEND

▨	½" EXPANSION JOINT SIDEWALK
- - - -	CONTRACTION JOINT SIDEWALK
ıllıllıllıllıl	PAVEMENT MARKING CROSSWALK (WHITE)
*	MAXIMUM 2.1% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK
**	WIDTH SHOWN ELSEWHERE IN THE PLANS
++	CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

CURB RAMPS TYPE 2 AND 3

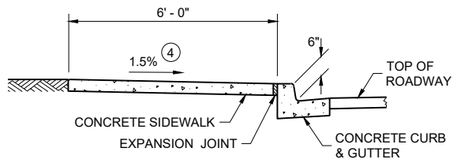
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 08D05-23b

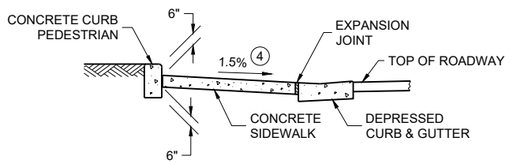


PLAN VIEW

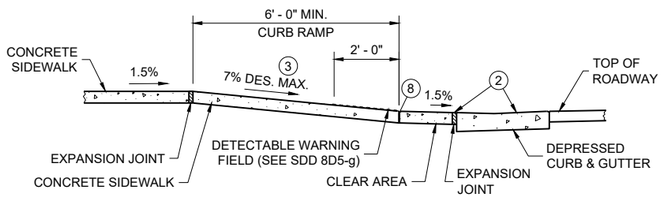
CURB RAMP TYPE 4A



SECTION A - A FOR TYPE 4A



SECTION C - C FOR TYPE 4A



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

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)
- ++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

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

INTERMEDIATE RADII CAN BE INTERPOLATED

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF CURB 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.

(2) GRADE CHANGE BETWEEN GUTTER COUNTER SLOPE AND THE CURB RAMP SLOPE IS DESIRABLY 11% OR LESS AND SHALL NOT EXCEED 13.3%. TYPICAL GUTTER COUNTER SLOPE IS 4% BUT MAY BE MODIFIED TO FIT FIELD CONDITIONS. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5%, DESIRABLY 7% OR LESS, AND SHALL NOT EXCEED A MAXIMUM OF 8.3%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.3% CURB RAMP SLOPE IS ALLOWABLE WITH GUTTER COUNTER SLOPE OF 5% MAXIMUM AND A 13.3% MAXIMUM GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.1% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(7) WHEN THIS 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.

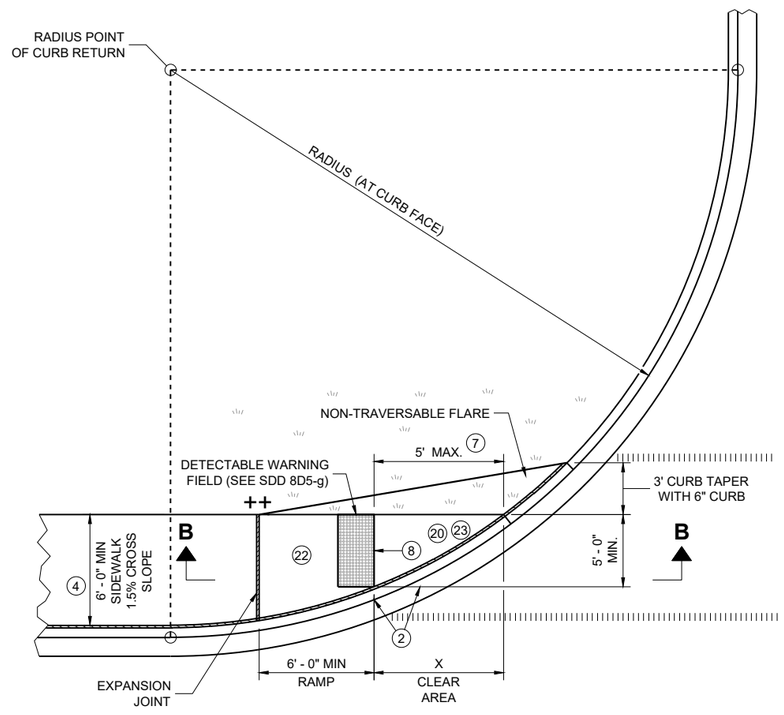
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

(17) A MAXIMUM 2-INCH CONCRETE BORDER IS PERMITTED ALONG ALL SIDES OF THE DETECTABLE WARNING FIELD SURFACE.

(20) MAXIMUM 1.5% DESIGN MAXIMUM AND 2.1% PROWAG MAXIMUM RUNNING SLOPE ON CLEAR AREA. CROSS SLOPE OF CLEAR AREA SHALL MATCH THE CROSS SLOPE OF THE ADJACENT CROSSWALK.

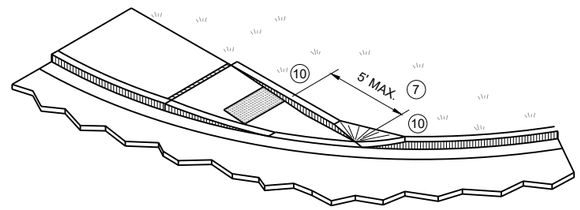
(22) THE ENTIRE RAMP SHALL BE A PLANAR SURFACE. DO NOT WARP THE RUNNING SLOPE OR CROSS SLOPE OF THE RAMP. WARPING OF THE SIDEWALK CROSS SLOPE SHALL TAKE PLACE BETWEEN THE LANDING AND MATCH POINT.

(23) THE CLEAR AREA BETWEEN THE BOTTOM OF RAMP AND BACK OF CURB SHALL BE SLOPED SO THAT WATER DRAINS OUT OF ONE SIDE OR BOTH SIDES OF THE CURB OPENING.

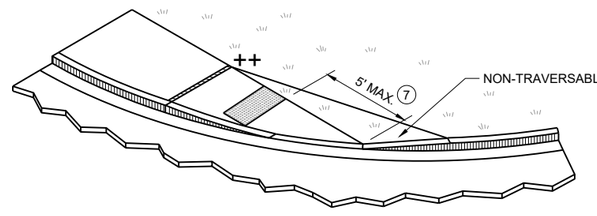


PLAN VIEW

CURB RAMP TYPE 4A1



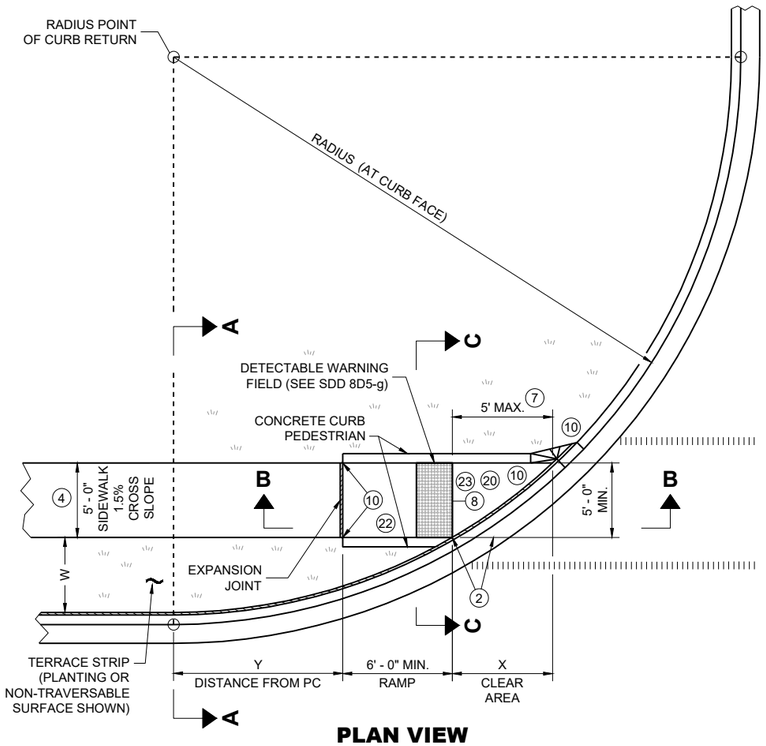
ISOMETRIC VIEW FOR TYPE 4A



ISOMETRIC VIEW FOR TYPE 4A1

CURB RAMPS
TYPE 4A AND 4A1

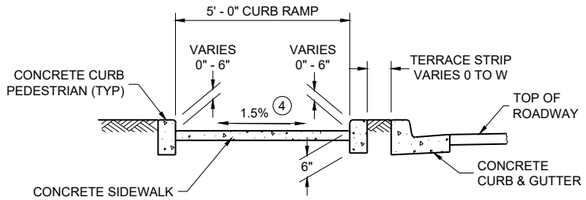
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



PLAN VIEW
CURB RAMP TYPE 4B

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 ¼"	0' - 5"	2' - 1"	1' - 4 ½"	1' - 5"	2' - 1"	0' - 10"	2' - 7 ½"	0' - 3 ¼"	3' - 0 ¼"						
15 FEET	4' - 6 ¾"	2' - 1 ¾"	3' - 9"	3' - 5 ¾"	3' - 1 ¼"	4' - 6"	2' - 6 ¾"	5' - 4 ½"	2' - 1"	6' - 1"	1' - 8"	6' - 8 ½"	1' - 3 ¼"	7' - 2 ½"	0' - 10 ¾"	7' - 7 ¼"
20 FEET			4' - 11 ½"	5' - 1 ¾"	4' - 3 ¼"	6' - 5 ½"	3' - 8 ¾"	7' - 7"	3' - 3"	8' - 6 ½"	2' - 10"	9' - 4 ½"	2' - 5 ½"	10' - 1 ¼"	2' - 1 ¼"	10' - 9"
30 FEET									4' - 10 ¾"	12' - 5 ¾"	4' - 5 ½"	13' - 7 ¾"	4' - 0 ¾"	14' - 8 ½"	3' - 8 ½"	15' - 8 ¼"
40 FEET															4' - 10 ¾"	19' - 8 ¼"

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



SECTION C - C FOR TYPE 4B

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)
- * MAXIMUM 2.1% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK
- ++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF CURB 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.

(2) GRADE CHANGE BETWEEN GUTTER COUNTER SLOPE AND THE CURB RAMP SLOPE IS DESIRABLY 11% OR LESS AND SHALL NOT EXCEED 13.3%. TYPICAL GUTTER COUNTER SLOPE IS 4% BUT MAY BE MODIFIED TO FIT FIELD CONDITIONS. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5%, DESIRABLY 7% OR LESS, AND SHALL NOT EXCEED A MAXIMUM OF 8.3%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.3% CURB RAMP SLOPE IS ALLOWABLE WITH GUTTER COUNTER SLOPE OF 5% MAXIMUM AND A 13.3% MAXIMUM GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.1% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(7) WHEN THIS 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.

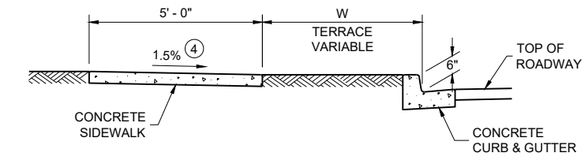
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

(17) A MAXIMUM 2-INCH CONCRETE BORDER IS PERMITTED ALONG ALL SIDES OF THE DETECTABLE WARNING FIELD SURFACE.

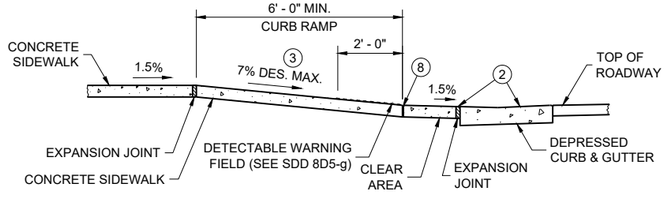
(20) MAXIMUM 1.5% DESIGN MAXIMUM AND 2.1% PROWAG MAXIMUM RUNNING SLOPE ON CLEAR AREA. CROSS SLOPE OF CLEAR AREA SHALL MATCH THE CROSS SLOPE OF THE ADJACENT CROSSWALK.

(22) THE ENTIRE RAMP SHALL BE A PLANAR SURFACE. DO NOT WARP THE RUNNING SLOPE OR CROSS SLOPE OF THE RAMP. WARPING OF THE SIDEWALK CROSS SLOPE SHALL TAKE PLACE BETWEEN THE LANDING AND MATCH POINT.

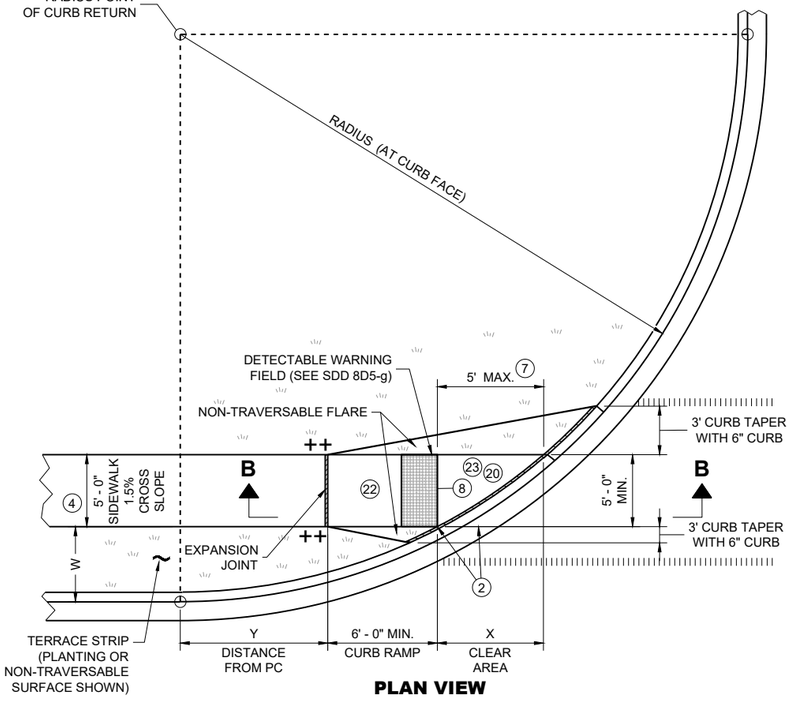
(23) THE CLEAR AREA BETWEEN THE BOTTOM OF RAMP AND BACK OF CURB SHALL BE SLOPED SO THAT WATER DRAINS OUT OF ONE SIDE OR BOTH SIDES OF THE CURB OPENING.



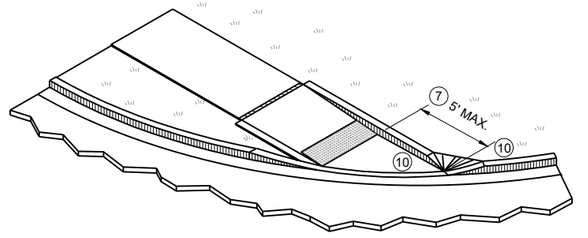
SECTION A - A FOR TYPE 4B



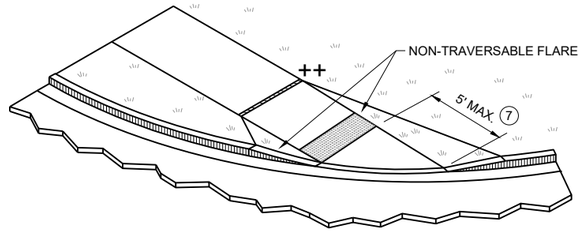
SECTION B - B FOR TYPE 4B AND TYPE 4B1



PLAN VIEW
CURB RAMP TYPE 4B1



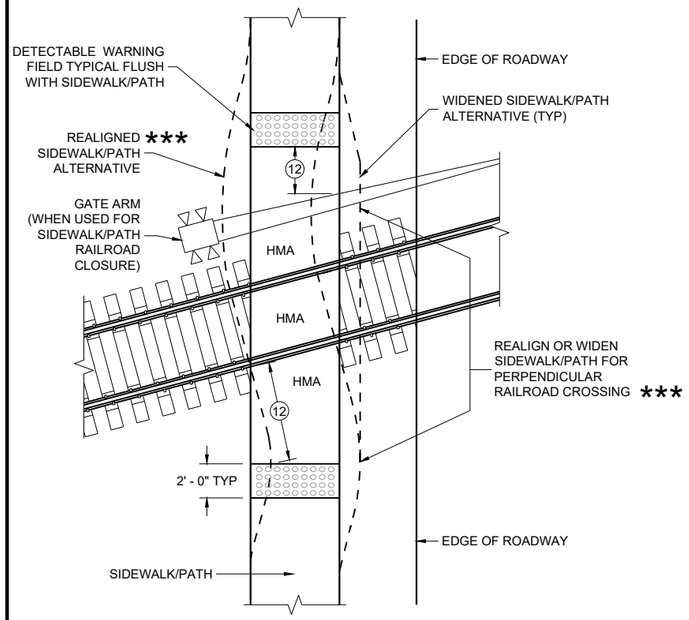
ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1

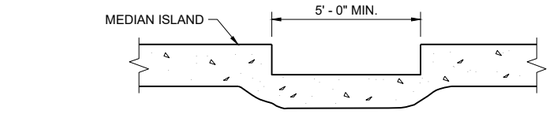
CURB RAMPS
TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

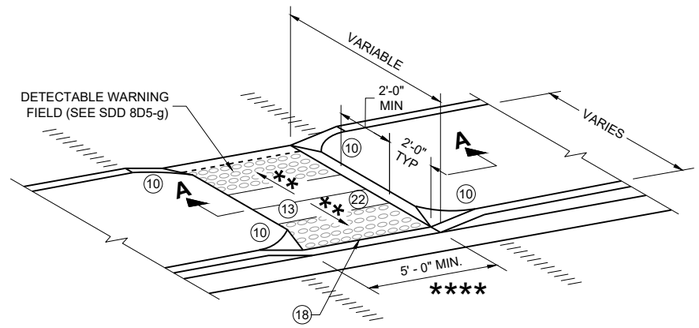


CURB RAMP TYPE 8

DETECTABLE WARNINGS FOR SIDEWALKS OR SHARED USE PATHS AT RAILROAD CROSSINGS



SECTION A - A FOR TYPE 5



CURB RAMP TYPE 5

MEDIAN ISLAND NON-ELEVATED PEDESTRIAN CROSSING

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF CURB 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 2.1%.

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

(2) GRADE CHANGE BETWEEN GUTTER COUNTER SLOPE AND THE CURB RAMP SLOPE IS DESIRABLY 11% OR LESS AND SHALL NOT EXCEED 13.3%. TYPICAL GUTTER COUNTER SLOPE IS 4% BUT MAY BE MODIFIED TO FIT FIELD CONDITIONS. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5%, DESIRABLY 7% OR LESS, AND SHALL NOT EXCEED A MAXIMUM OF 8.3%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.3% CURB RAMP SLOPE IS ALLOWABLE WITH GUTTER COUNTER SLOPE OF 5% MAXIMUM AND A 13.3% MAXIMUM GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.1% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A 5 FOOT BY 5 FOOT LANDING. SLOPE PERPENDICULAR TO CURB SHALL BE 2.1% MAXIMUM. SLOPE PARALLEL TO CURB SHALL MATCH THE CURB AND GUTTER LONGITUDINAL SLOPE.

(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.

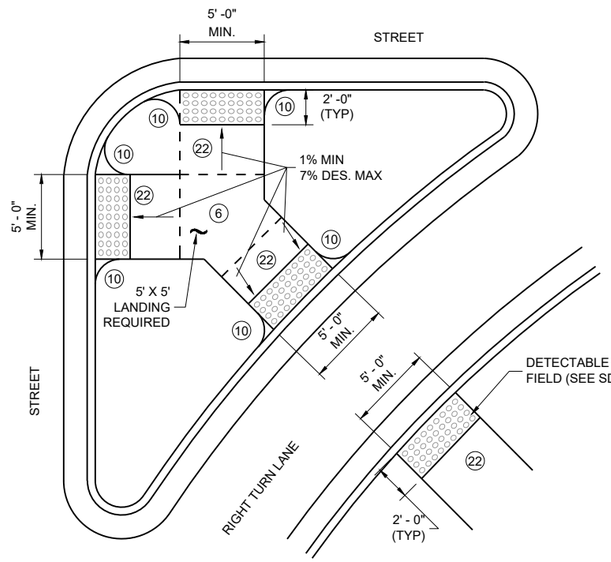
(12) THE DOWNSTREAM EDGE OF THE DETECTABLE WARNING SHOULD BE LOCATED AT LEAST 2 FEET UPSTREAM FROM THE AUTOMATIC GATE, COUNTERWEIGHT, FLASHING-LIGHT SIGNALS, OR CROSSBUCK ASSEMBLY SPECIFIC TO THE PATHWAY OR SIDEWALK (IF ANY ARE PRESENT) AND AT LEAST 12 FEET FROM THE NEAREST RAIL.

(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.

(17) A MAXIMUM 2-INCH CONCRETE BORDER IS PERMITTED ALONG ALL SIDES OF THE DETECTABLE WARNING FIELD SURFACE.

(18) WHEN THE DISTANCE BETWEEN THE BACK OF CURBS IS LESS THAN 6 FEET BUT THE FACE OF CURB TO FACE OF CURB DISTANCE IS 6 FEET OR GREATER THEN THE DETECTABLE WARNING FIELDS MAY BE MOVED SO THAT THE EDGE OF THE WARNING FIELD IS PLACED AT THE GUTTER FLOWLINE. MAINTAIN A MINIMUM OF TWO FEET BETWEEN DETECTABLE WARNING FIELD PANELS.

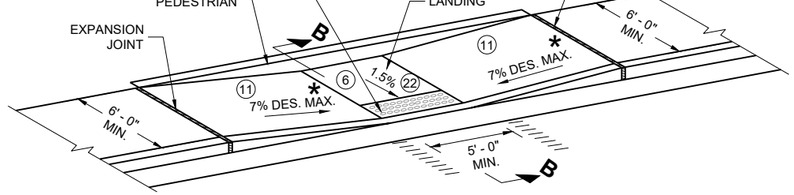
(22) THE ENTIRE RAMP SHALL BE A PLANAR SURFACE. DO NOT WARP THE RUNNING SLOPE OR CROSS SLOPE OF THE RAMP. WARPING OF THE SIDEWALK CROSS SLOPE SHALL TAKE PLACE BETWEEN THE LANDING AND MATCH POINT.



CURB RAMP TYPE 6

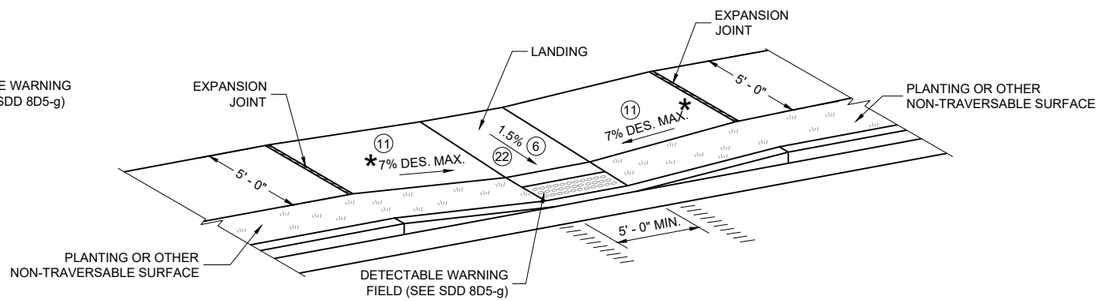
DETECTABLE WARNING AT ISLANDS

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



CURB RAMP TYPE 7A

FOR INTERSECTIONS AND MID BLOCK CROSSINGS

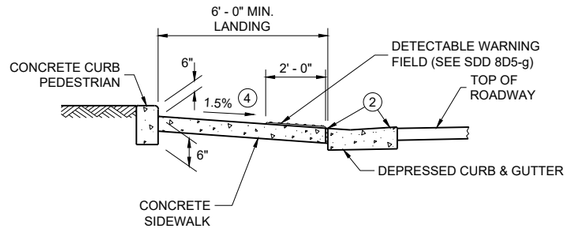


CURB RAMP TYPE 7B

FOR INTERSECTIONS AND MID BLOCK CROSSINGS

LEGEND

═══	½" EXPANSION JOINT SIDEWALK
– – – –	CONTRACTION JOINT FIELD LOCATED
ıı ıı ıı ıı	PAVEMENT MARKING CROSSWALK (WHITE)
*	MAXIMUM 8.3%
**	1% MINIMUM (PROVIDE DRAINAGE)
***	DETAILS TO BE DETERMINED BY ENGINEER
****	FOR SHARED USE PATHS, WIDTH MUST BE AS WIDE AS THE CROSSWALK

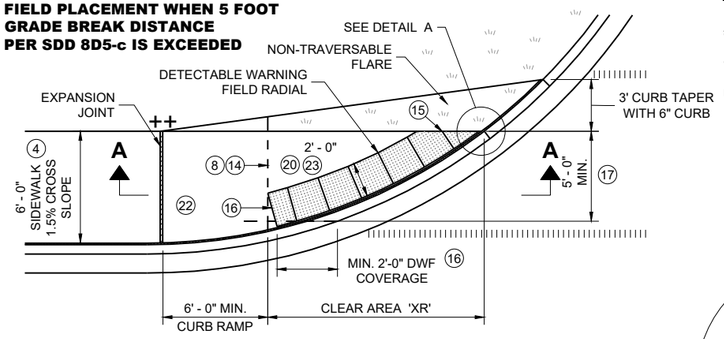


SECTION B - B FOR TYPE 7A

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

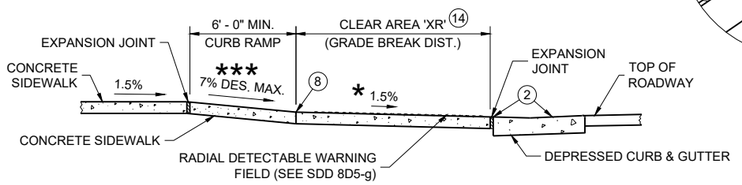
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



PLAN VIEW

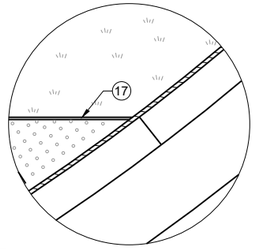
CURB RAMP TYPE 4A1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



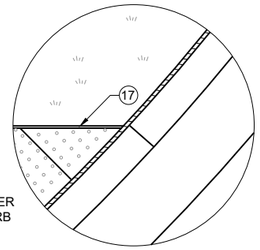
SECTION A - A FOR TYPE 4A1

LEGEND

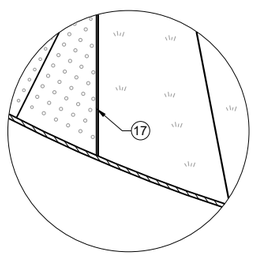
═══	½" EXPANSION JOINT SIDEWALK
– – – –	CONTRACTION JOINT SIDEWALK
ıı ıı ıı ıı	PAVEMENT MARKING CROSSWALK (WHITE)
**	WIDTH SHOWN ELSEWHERE IN THE PLANS
***	MAXIMUM 8.3%
++	CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE



DETAIL A



DETAIL B



DETAIL C

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF CURB 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 FILED ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AD 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 COUNTER SLOPE AND THE CURB RAMP SLOPE IS DESIRABLY 11% OR LESS AND SHALL NOT EXCEED 13.3%. TYPICAL GUTTER COUNTER SLOPE IS 4% BUT MAY BE MODIFIED TO FIT FIELD CONDITIONS. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5%, DESIRABLY 7% OR LESS, AND SHALL NOT EXCEED A MAXIMUM OF 8.3%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.3% CURB RAMP SLOPE IS ALLOWABLE WITH GUTTER COUNTER SLOPE OF 5% MAXIMUM AND A 13.3% MAXIMUM GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.1% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A 5 FOOT BY 5 FOOT LANDING. SLOPE PERPENDICULAR TO CURB SHALL BE 2.1% MAXIMUM. SLOPE PARALLEL TO CURB SHALL MATCH THE CURB AND GUTTER LONGITUDINAL SLOPE.

(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 ⅛" 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 2-INCH CONCRETE BORDER IS PERMITTED ALONG ALL SIDES OF THE DETECTABLE WARNING FIELD SURFACE.

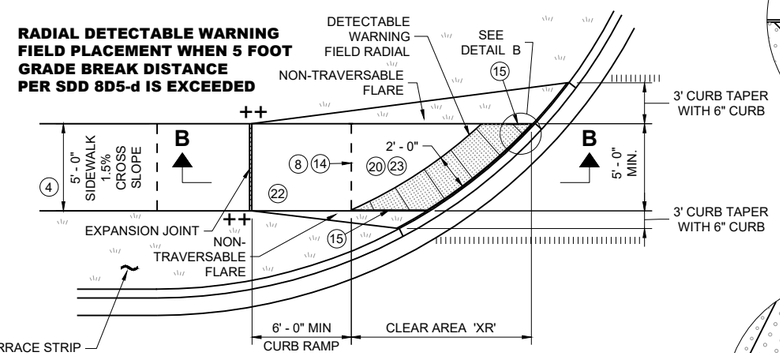
(19) WHERE A LANDING SERVES TWO CURB RAMPS, THE LANDING SLOPE SHALL NOT EXCEED THE CROSS SLOPE AT THE BOTTOM OF THE RAMP OR WITHIN THE CROSSWALK PARALLEL TO THE DIRECTION OF TRAVEL.

(20) MAXIMUM 1.5% DESIGN MAXIMUM AND 2.1% PROWAG MAXIMUM RUNNING SLOPE ON CLEAR AREA. CROSS SLOPE OF CLEAR AREA SHALL MATCH THE CROSS SLOPE OF THE ADJACENT CROSSWALK.

(22) THE ENTIRE RAMP SHALL BE A PLANAR SURFACE. DO NOT WARP THE RUNNING SLOPE OR CROSS SLOPE OF THE RAMP. WARPING OF THE SIDEWALK CROSS SLOPE SHALL TAKE PLACE BETWEEN THE LANDING AND MATCH POINT.

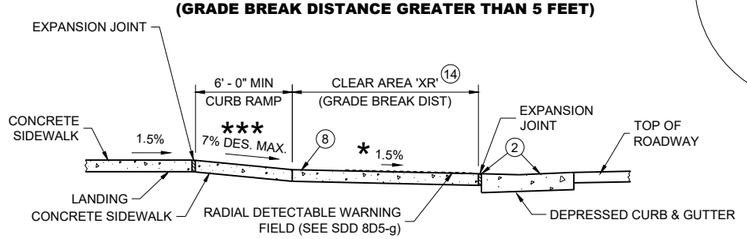
(23) THE CLEAR AREA BETWEEN THE BOTTOM OF RAMP AND BACK OF CURB SHALL BE SLOPED SO THAT WATER DRAINS OUT OF ONE SIDE OR BOTH SIDES OF THE CURB OPENING.

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



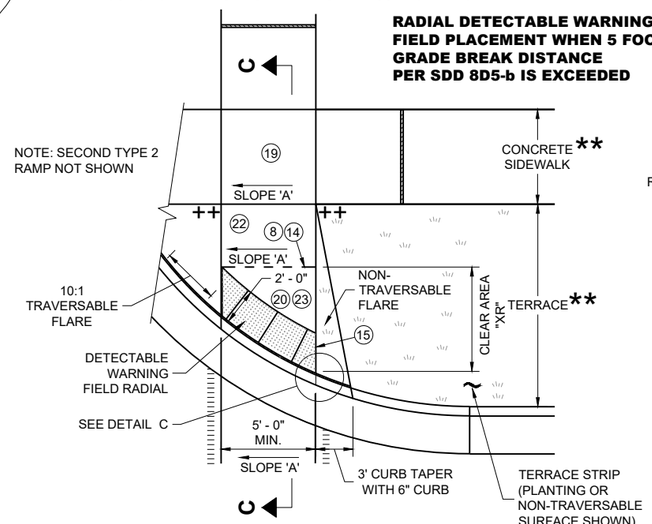
PLAN VIEW

CURB RAMP TYPE 4B1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



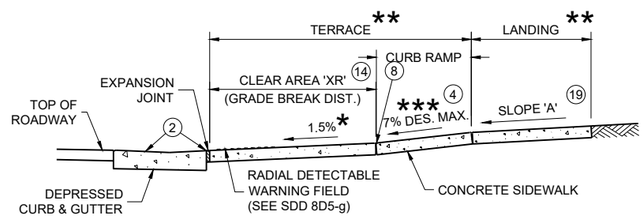
SECTION B - B FOR TYPE 4B1

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



PLAN VIEW

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



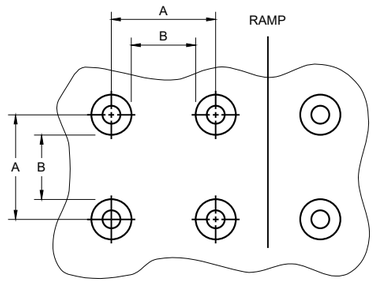
SECTION C - C FOR TYPE 2

CURB RAMPS
RADIAL DETECTABLE WARNING

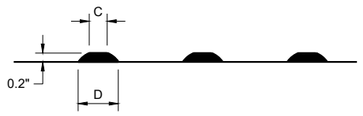
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

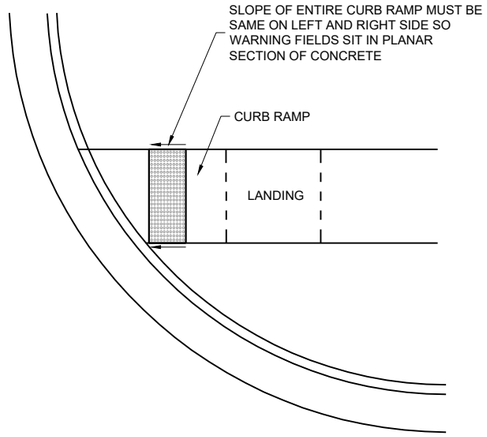
* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



PLAN VIEW



ELEVATION VIEW



DETECTABLE WARNING FIELD
PLANAR INSTALLATION

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 FILED 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.

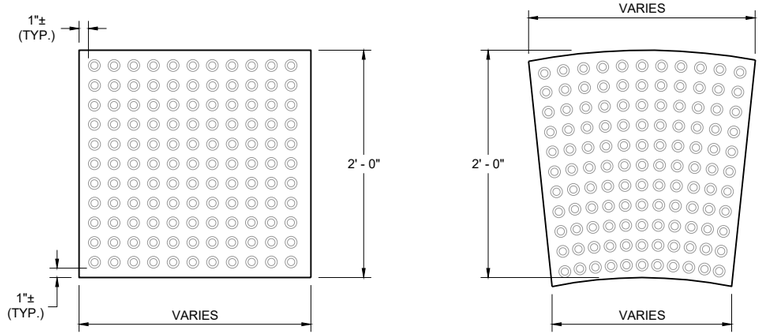
FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE. 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 ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

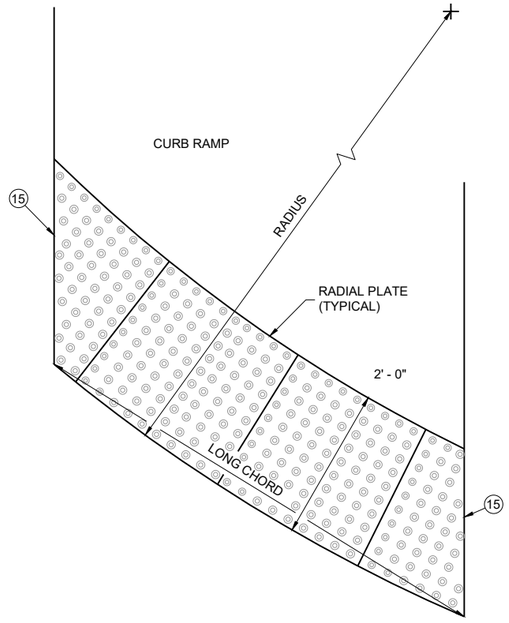
TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



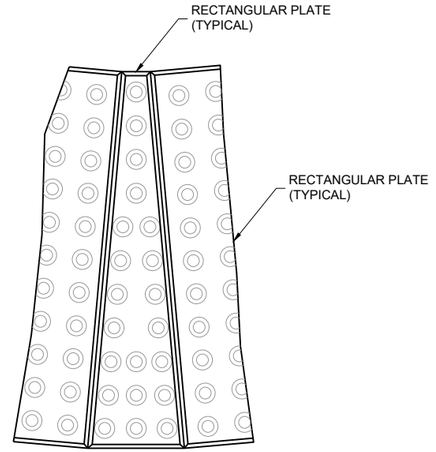
RECTANGULAR PLATES

RADIAL PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)



PLAN VIEW
RADIAL DETECTABLE WARNING FIELD ATTRIBUTES



PLAN VIEW
RADIAL WEDGE PLATE CONNECTION DETAIL

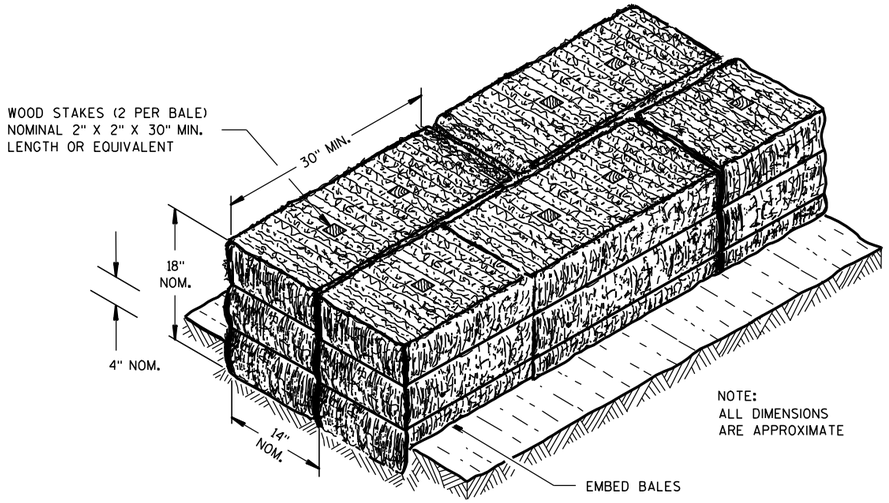
CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

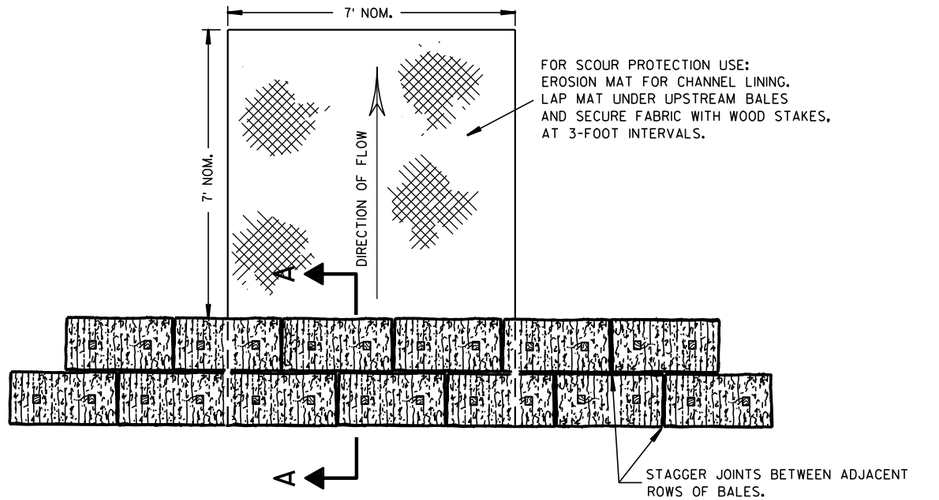
APPROVED
May 2026 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

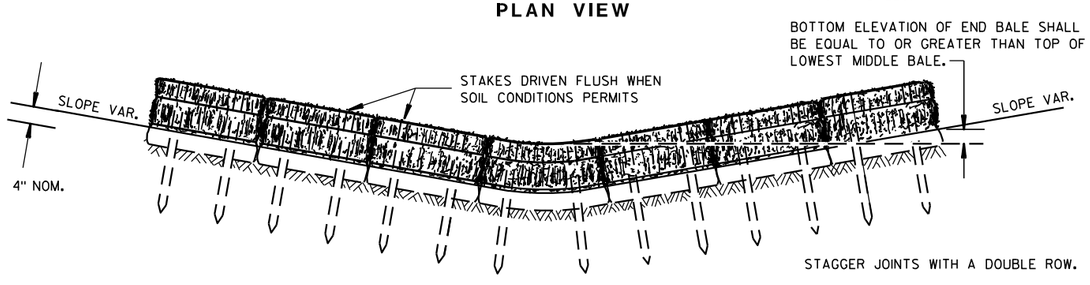
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SECTION A-A



PLAN VIEW



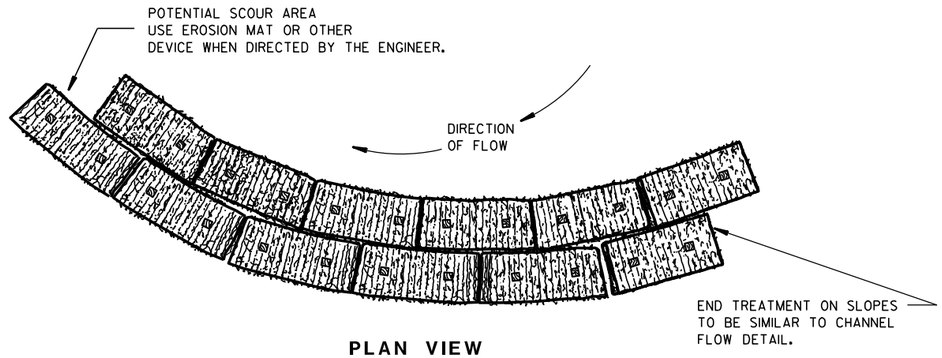
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

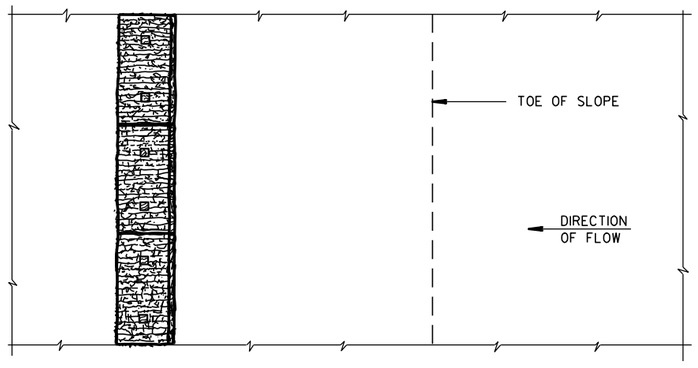
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

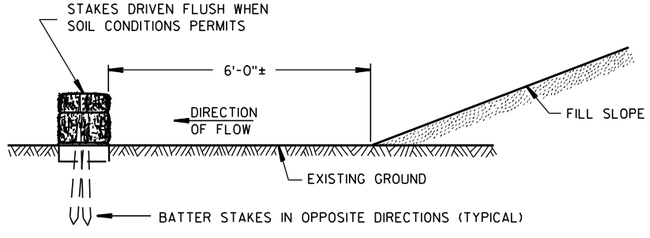


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

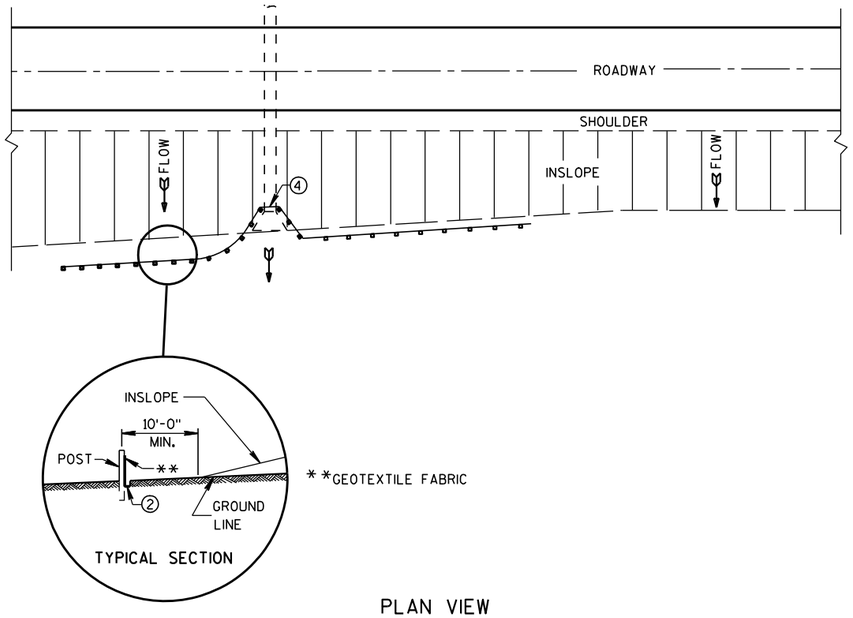
6/04/02 — DATE

/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

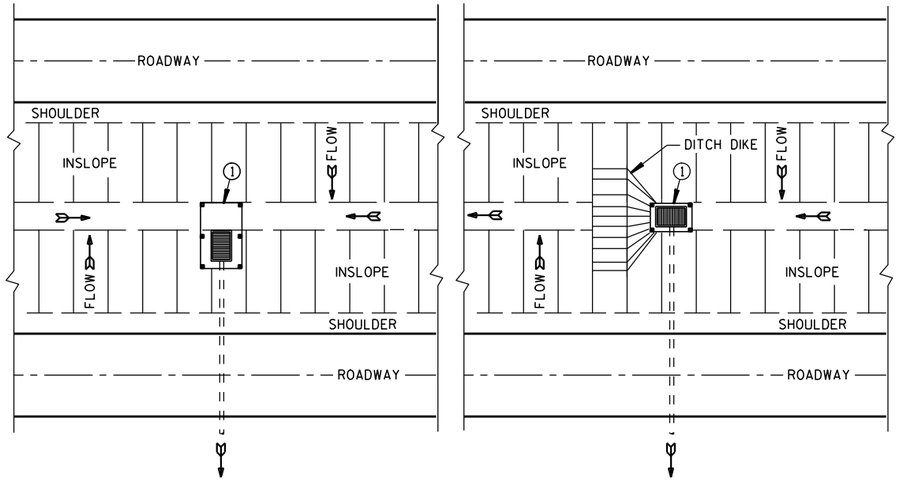
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S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



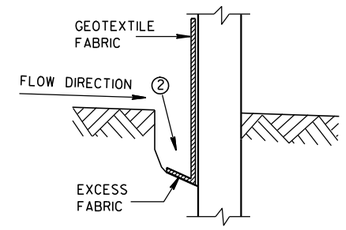
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

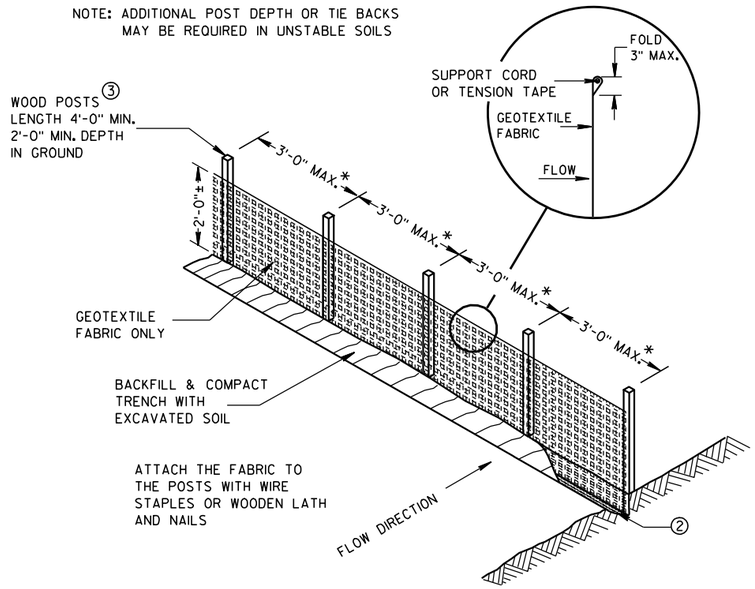
GENERAL NOTES

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

1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.

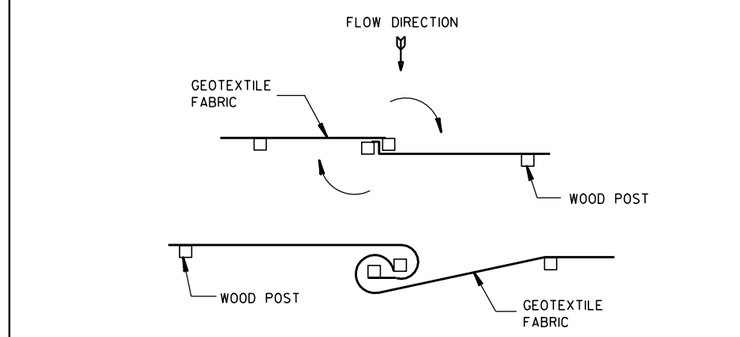


TRENCH DETAIL

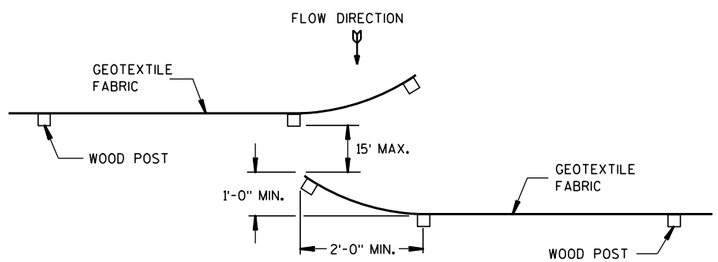


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

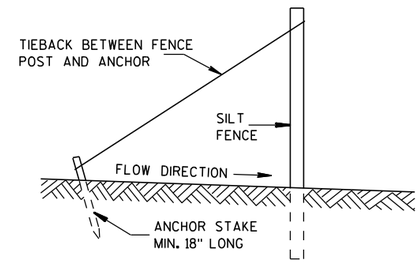


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

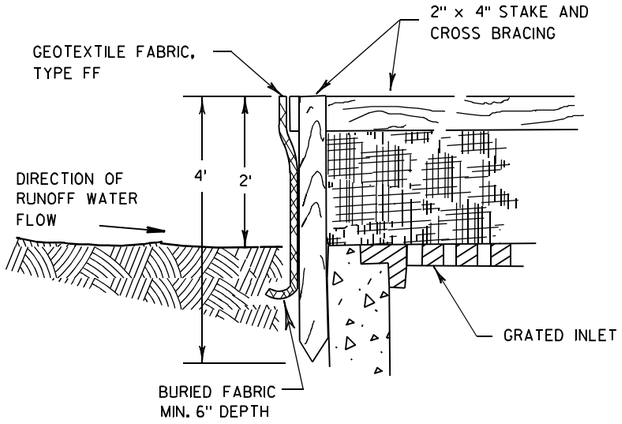
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

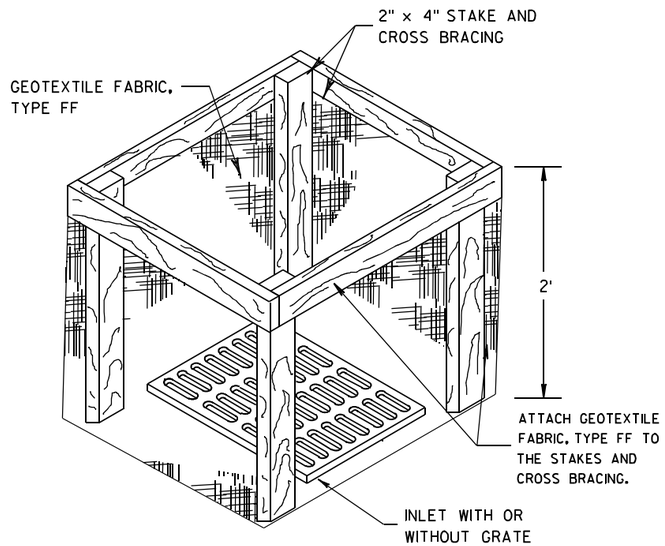
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S.D.D. 8 E 9-6

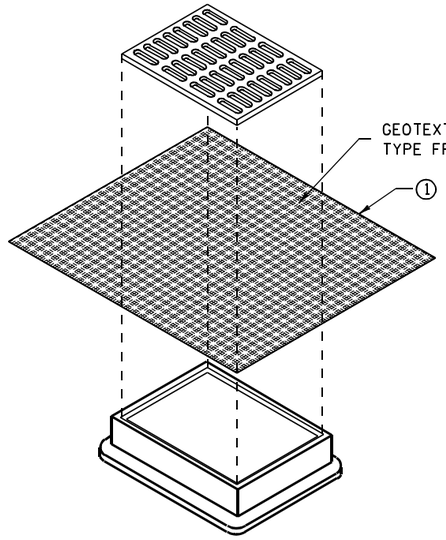
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S.D.D. 8 E 9-6



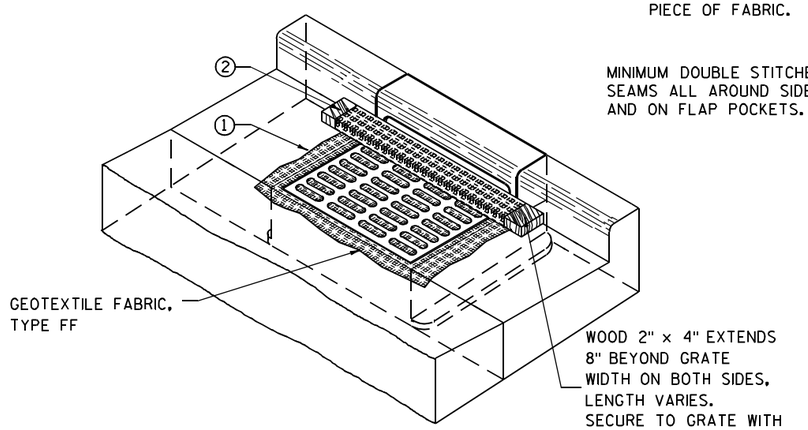


INLET PROTECTION, TYPE A

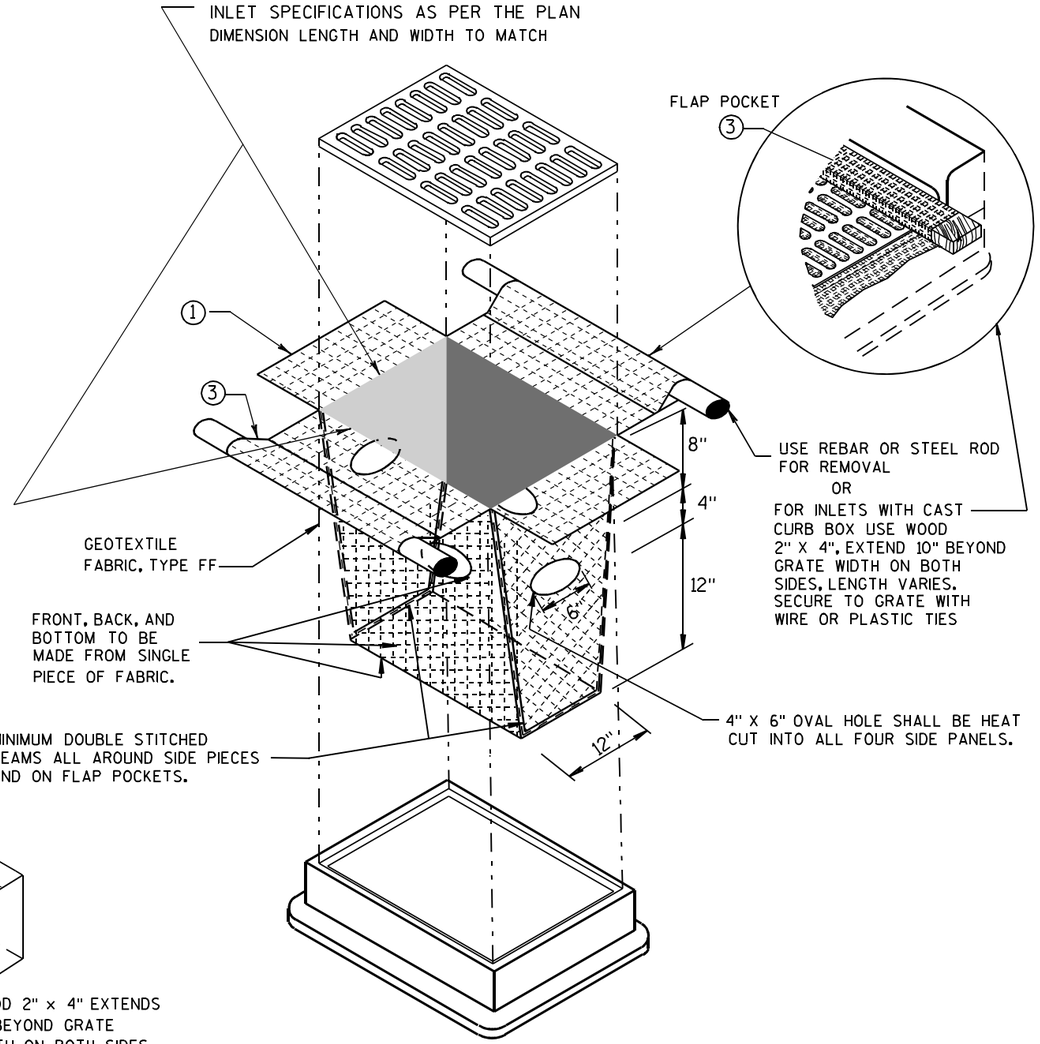


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

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

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.

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 A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

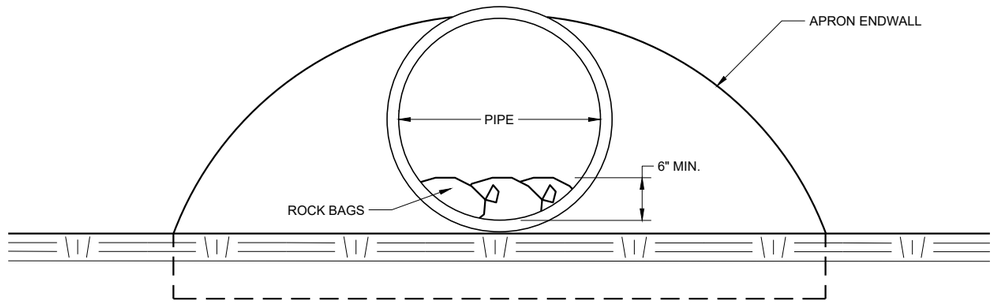
APPROVED

10/16/02
DATE

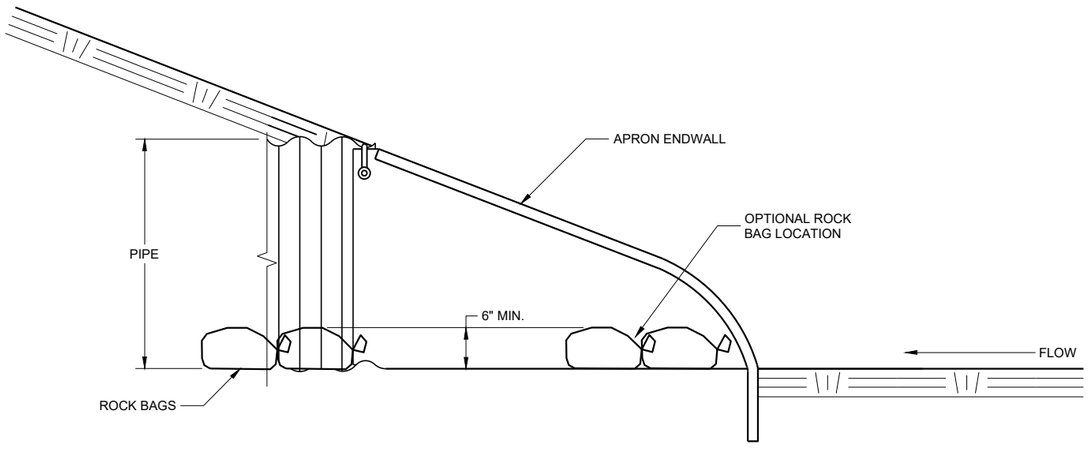
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

6
S.D.D. 8 E 10-2



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 — EROSION CONTROL ENGI
FHWA

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SDD 08E15 - 01

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SDD 08E15 - 01

METAL APRON ENDWALLS

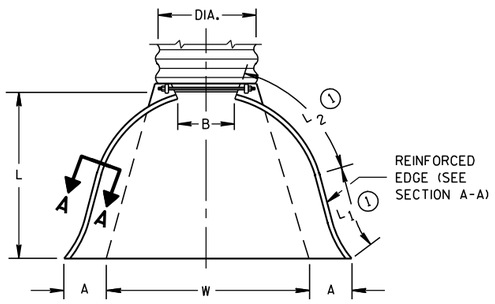
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4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

× EXCEPT CENTER PANEL SEE GENERAL NOTES

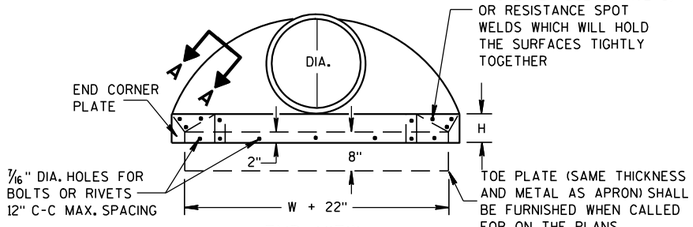
REINFORCED CONCRETE APRON ENDWALLS

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

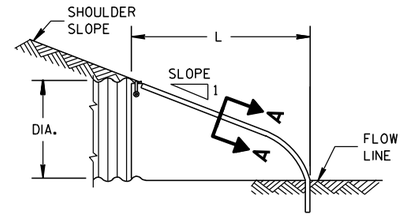
*MINIMUM
**MAXIMUM



PLAN VIEW

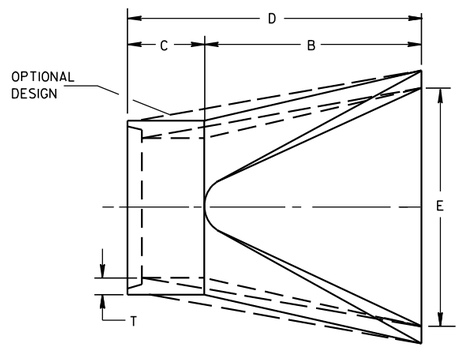


END VIEW

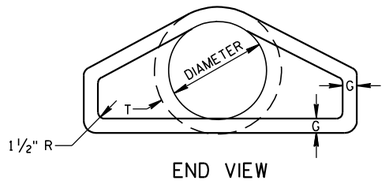


SIDE ELEVATION

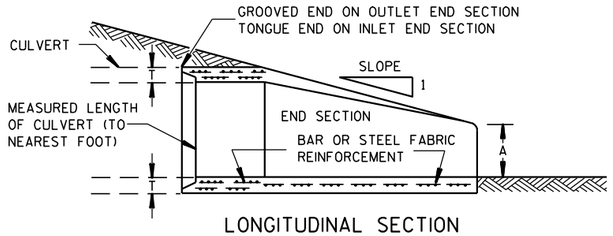
METAL ENDWALLS



PLAN

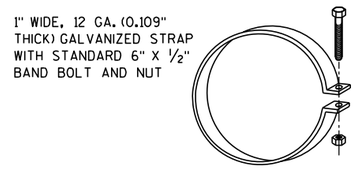


END VIEW



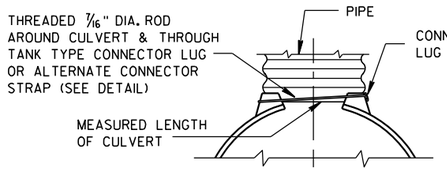
LONGITUDINAL SECTION

CONCRETE ENDWALLS

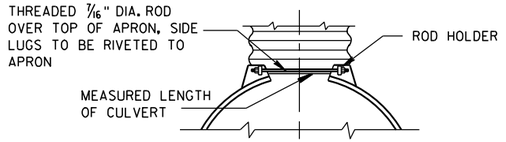


ALTERNATE FOR TYPE 1 CONNECTION

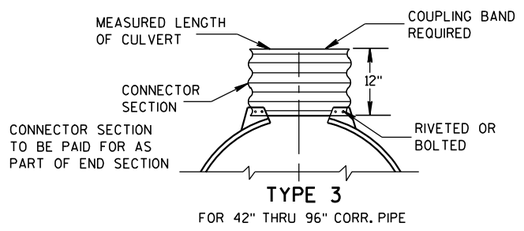
END SECTION CONNECTOR STRAP



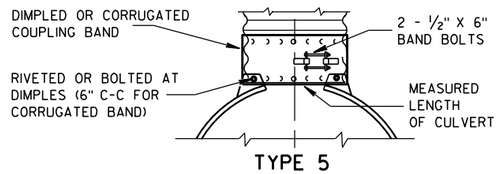
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

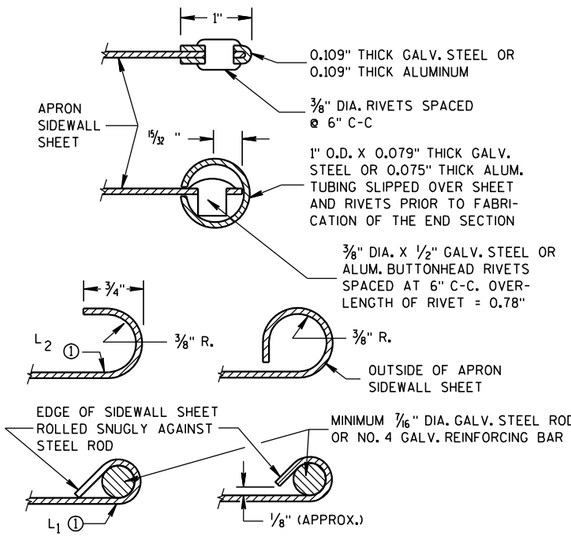
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

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

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

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

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

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

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

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

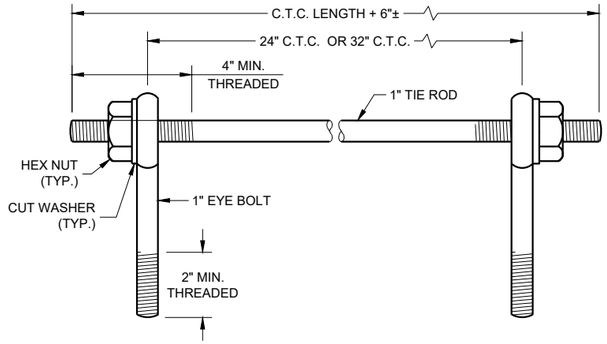
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

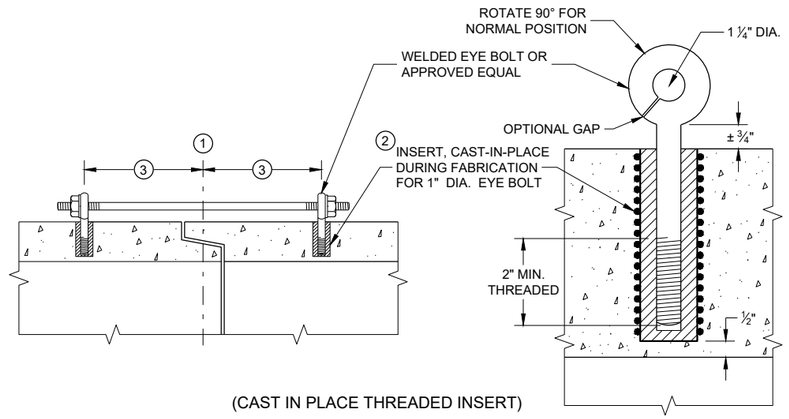
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOP 67 NEER
FHWA

6
S.D.D. 8 F 1-11



EYE BOLTS AND TIE ROD



(CAST IN PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

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

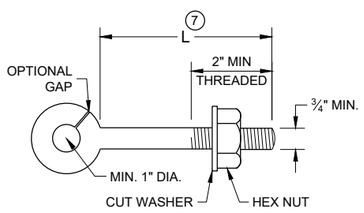
(3) HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.

(4) BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

(5) OPENING TO BE ROD DIAMETER PLUS 1 INCH.

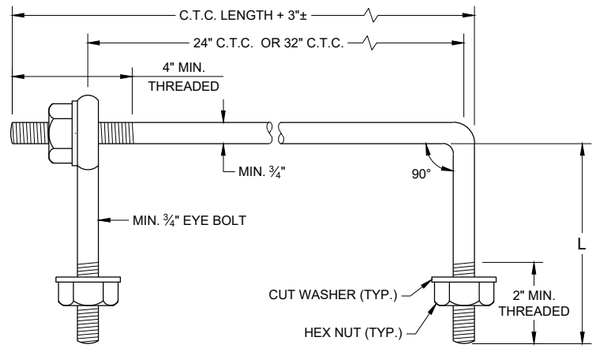
(6) LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.

(7) EYE BOLT LENGTH DETERMINED BY WALL THICKNESS, BELL THICKNESS AND BOLT PROJECTION INSIDE PIPE.

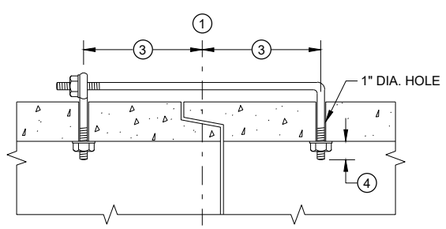


EYE BOLT (7)

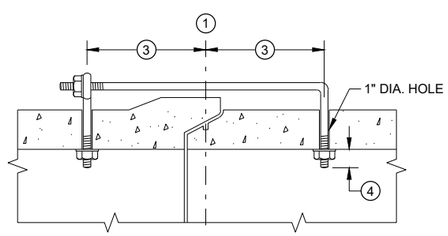
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD



(TONGUE AND GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

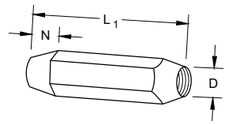
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

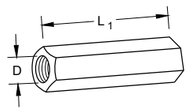
ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12 - 60	⅝	⅝	5	½
66 - 84	¾	¾	5	½
90 - 144	1	1	7	1 7/16

DIMENSIONS SHOWN ARE IN INCHES



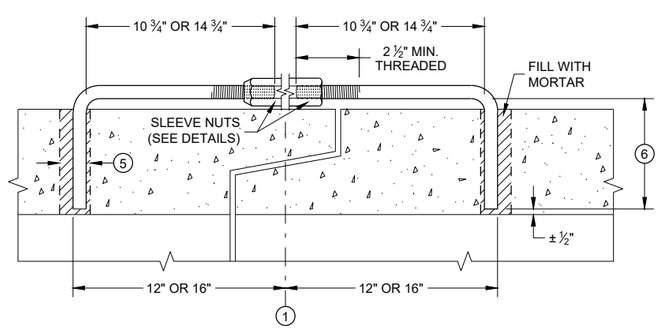
TAPERED



PLAIN

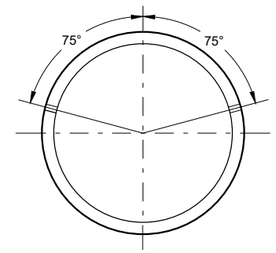
RIGHT AND LEFT THREADS

SLEEVE NUTS



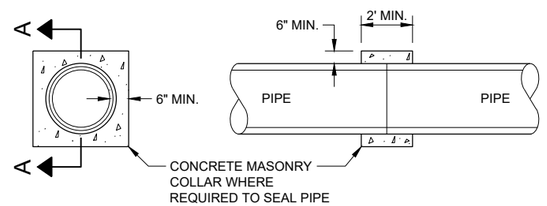
LONGITUDINAL SECTION

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

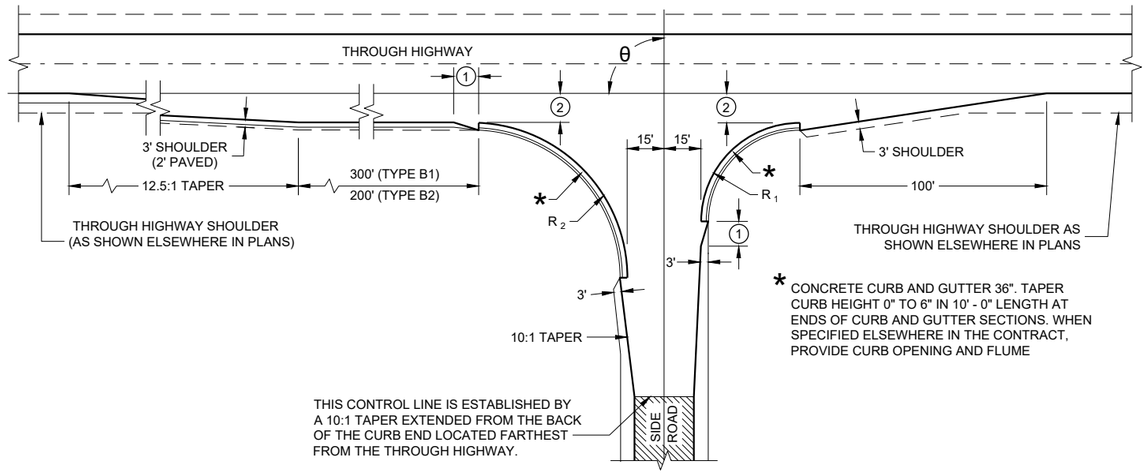
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

SDD 08F04 - 08

SDD 08F04 - 08



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

TYPE "B1" AND "B2"

RADII DIMENSIONS FOR TYPES "B1", "B2", "C" AND "D" INTERSECTIONS

θ	R_1	R_2
65 - 70	35	70
71 - 80	40	70
81 - 90	40	60
91 - 100	50	55
101 - 110	60	45

GENERAL NOTES

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

SIDE ROAD SURFACING NOTE

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

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

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

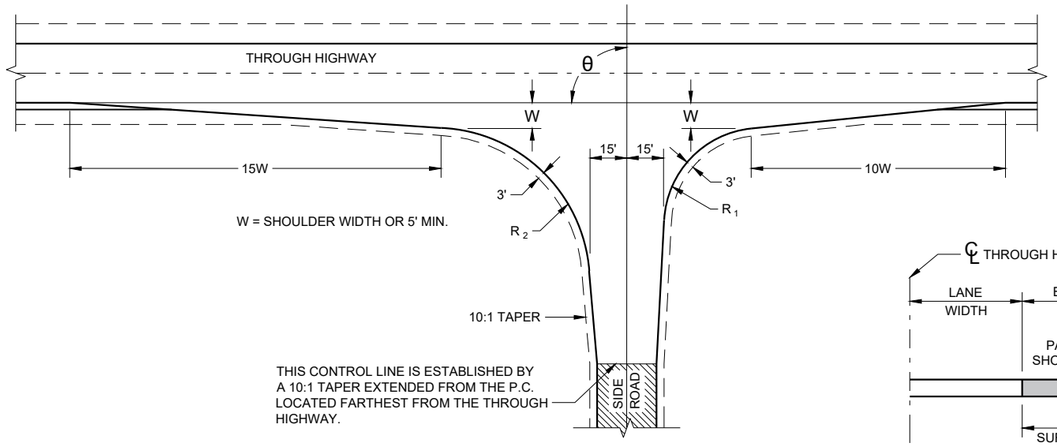
(1) 10-FT TYPICAL.

(2) 12-FT** PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLAN.

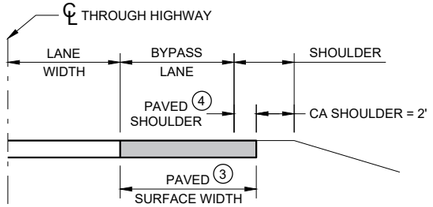
**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

(3) BYPASS LANE PAVED SURFACE WIDTH OUTSIDE OF TRAVEL LANE
- ASPHALT = 12-FT PLUS PAVED SHOULDER WIDTH
- PC CONCRETE = 13-FT PLUS PAVED SHOULDER WIDTH

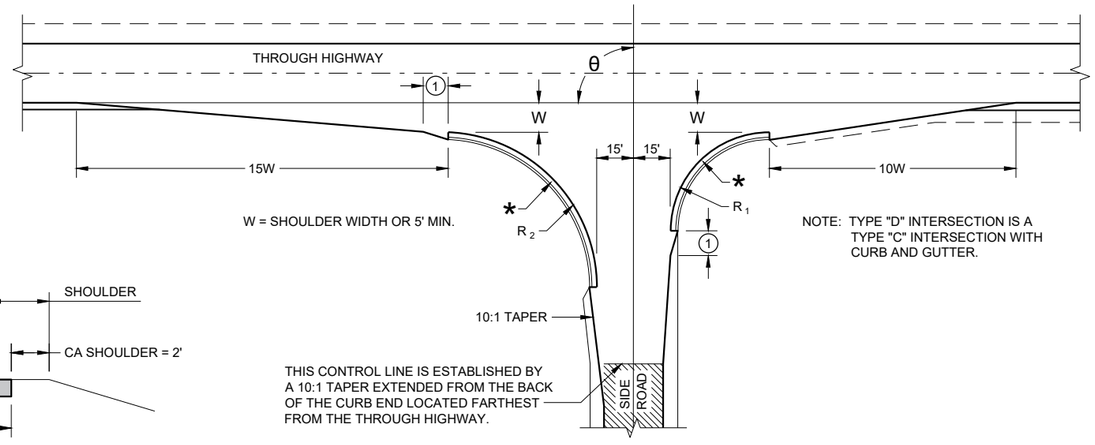
(4) BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.



TYPE "C"

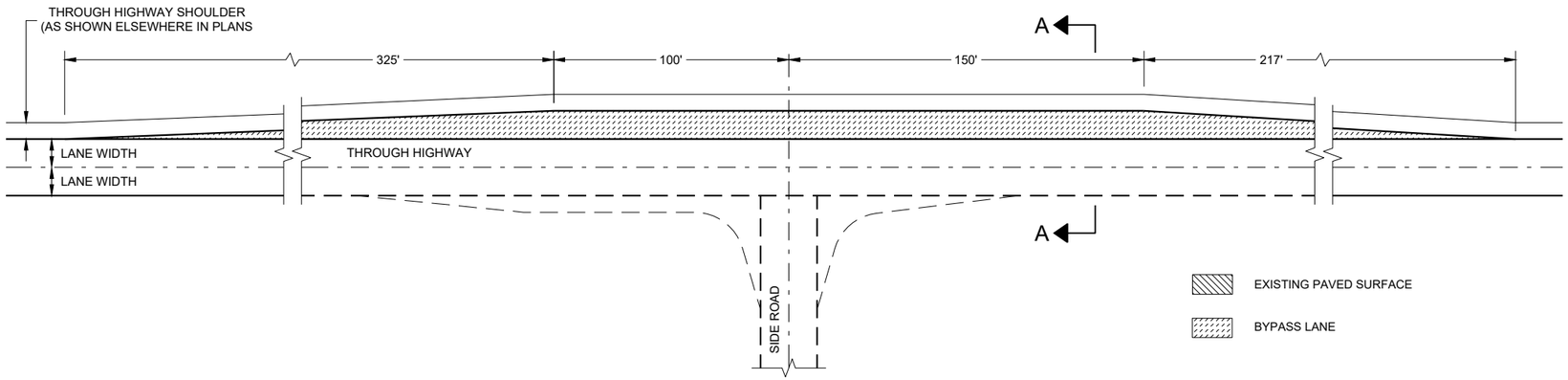


SECTION A - A
(SHOWING BYPASS LANE AND SHOULDER)



NOTE: TYPE "D" INTERSECTION IS A TYPE "C" INTERSECTION WITH CURB AND GUTTER.

TYPE "D"



TEE INTERSECTION BYPASS LANE DETAIL

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

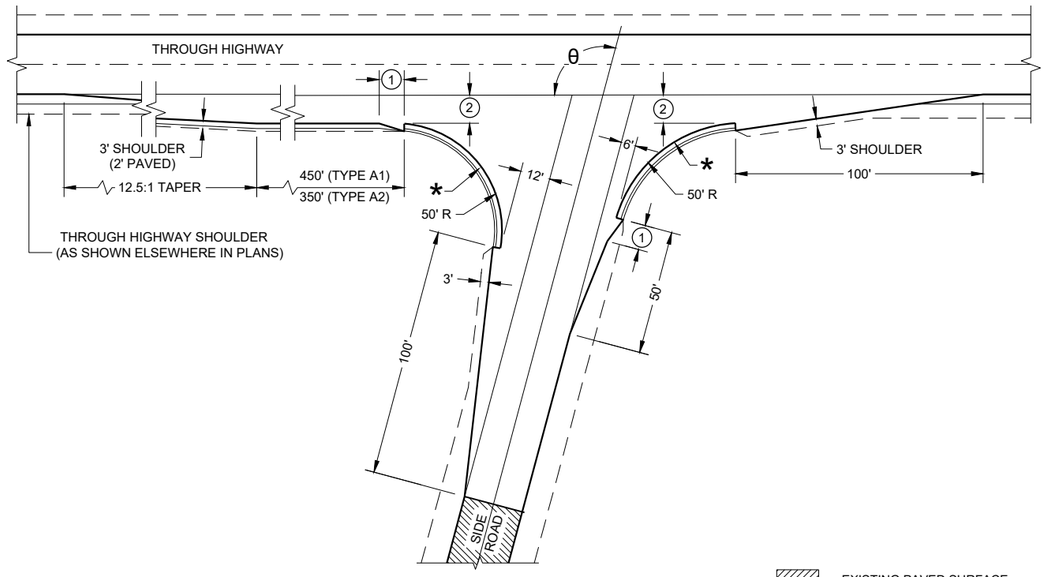
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

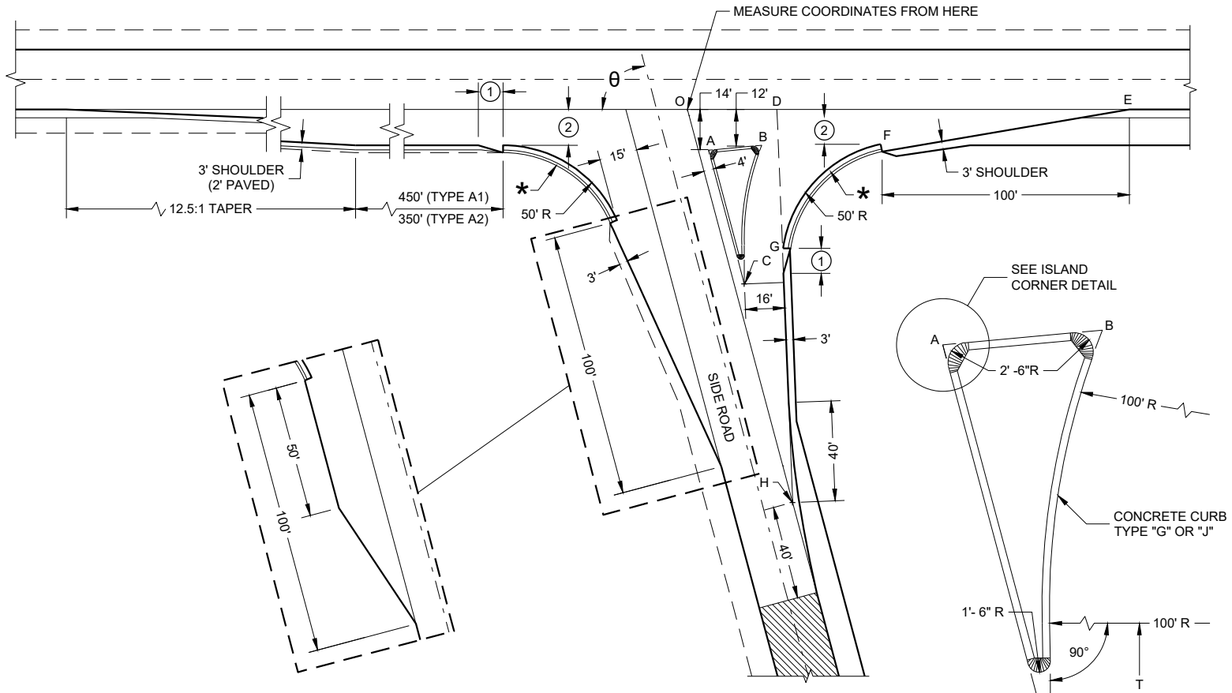
SDD 09A01 - 14a

6

SDD 09A01 - 14a

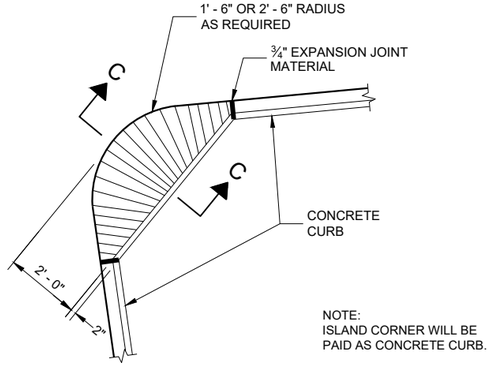


θ = MORE THAN 80°

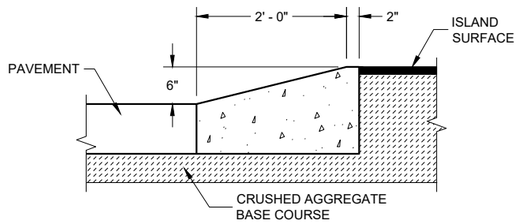


SIDE ROAD WIDENING AND TAPER REQUIRED WHERE THE THROUGH HIGHWAY CARRIES TWO-WAY TRAFFIC
θ = ACUTE ANGLES 70° OR LESS

θ = ACUTE ANGLES 80° OR LESS



PLAN VIEW



SECTION C - C

ISLAND CORNER DETAIL

(TO BE CONSTUCTED AT ALL ISLAND CORNERS)

TABLE OF DIMENSIONS FOR VARIABLE SIDE ROAD INTERSECTION ANGLES

(INTERPOLATE VALUES FOR ANGLES NOT SHOWN)

ANGLE θ DEGREES	COORDINATES IN FEET (MEASURED FROM POINT 'O') X / Y								LENGTH IN FEET				
	A	B	C	D	E	F	G	H	AB	AC	T	OJ	OH
60	12.7 / -14.0	44.9 / -12.0	46.4 / -72.4	41.9 / 0.0	205.0 / 0.0	104.6 / -12.0	64.0 / -75.5	85.0 / -147.1	32.3	67.4	4.9	85.9	169.9
65	10.9 / -14.0	39.0 / -12.0	37.8 / -71.6	39.4 / 0.0	196.1 / 0.0	95.7 / -12.0	54.1 / -71.5	70.5 / -151.3	28.2	63.6	8.5	80.9	166.9
70	9.4 / -14.0	33.9 / -12.0	29.8 / -70.1	37.4 / 0.0	188.3 / 0.0	87.8 / -12.0	45.6 / -67.5	56.1 / -154.2	24.6	59.7	11.5	76.1	164.1
75	7.9 / -14.0	29.3 / -12.0	22.3 / -67.9	35.7 / 0.0	181.2 / 0.0	80.7 / -12.0	38.2 / -63.4	41.8 / -155.9	21.5	55.8	13.8	71.4	161.4
80	6.5 / -14.0	25.4 / -12.0	15.6 / -65.2	34.4 / 0.0	174.8 / 0.0	74.4 / -12.0	31.8 / -59.3	27.6 / -156.5	18.9	52.0	15.6	66.9	158.9

TYPE 'A1" AND "A2" SIDE ROAD INTERSECTION DETAILS

AT GRADE SIDE ROAD INTERSECTIONS
TYPES "A1" AND "A2"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022 — DATE
/S/ John Jenkins — ROADWAY STANDARDS DEVE ENGINEER
FHWA

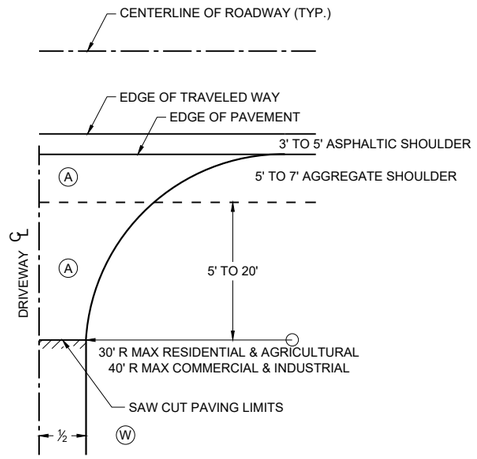
SDD 09A01 - 14b

6

SDD 09A01 - 14b

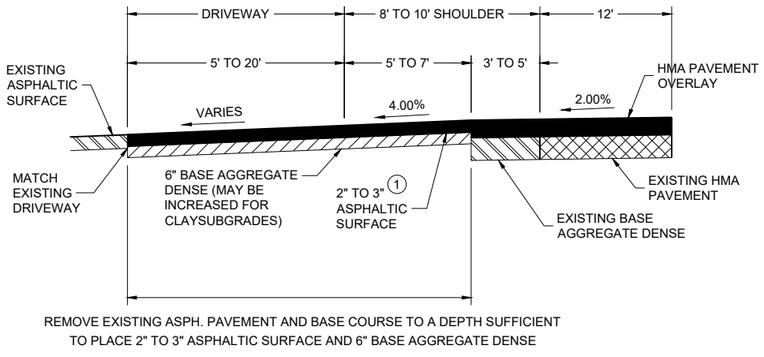
GENERAL NOTES

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



PLAN VIEW

HALF SECTION



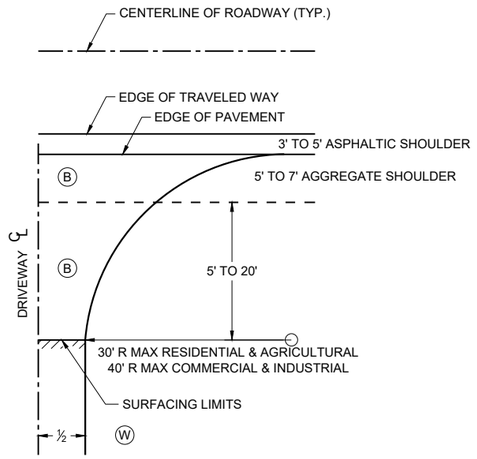
PROFILE VIEW

RURAL ENTRANCE WITH ASPHALTIC SURFACE RESURFACING PROJECTS

Ⓐ : PAID FOR AS ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES. (TON)

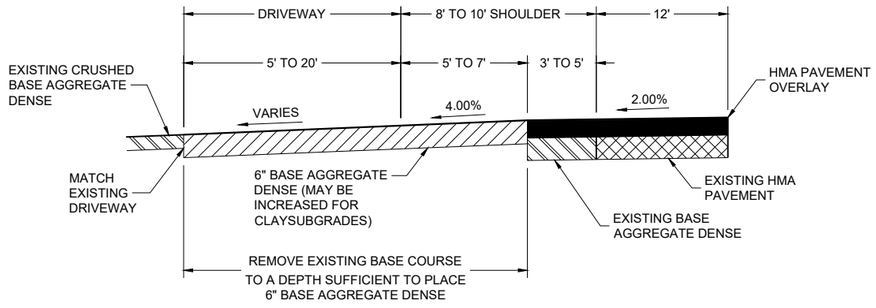
Ⓑ : PAID FOR AS BASE AGGREGATE DENSE 1 1/4" (TON)

Ⓦ : DRIVEWAY WIDTHS (MEASURED AT ROW LINE)
- ~ COMMERCIAL & INDUSTRIAL 16' MIN. - 35' MAX.
- ~ RESIDENTIAL & AGRICULTURAL (NONCOMMERCIAL) 16' MIN. - 24' MAX.



PLAN VIEW

HALF SECTION



PROFILE VIEW

RURAL ENTRANCE WITH AGGREGATE SURFACE 6" BASE AGGREGATE DENSE RESURFACING PROJECTS

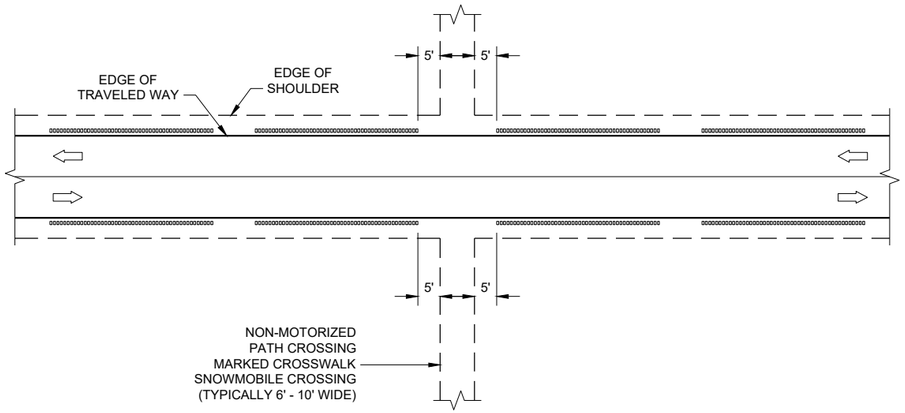
DRIVEWAYS WITHOUT CURB AND GUTTER RESURFACING PROJECTS RURAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

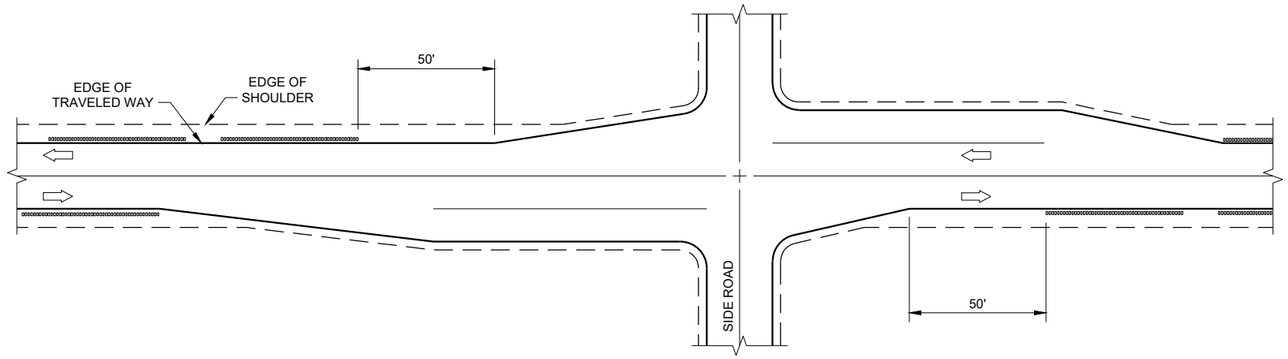
APPROVED
November 2025 (DATE)
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

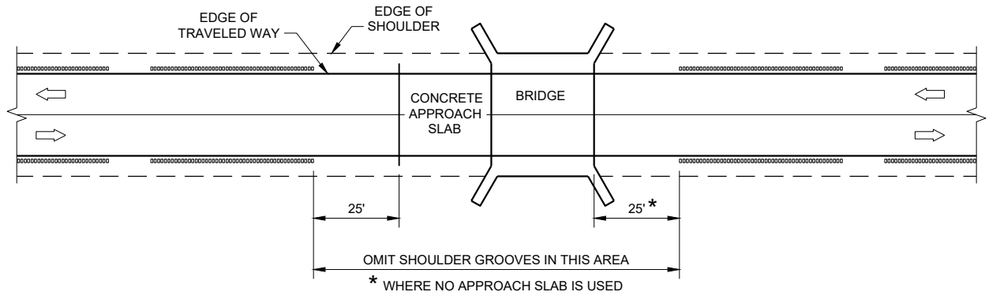
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SDD 09A15-01



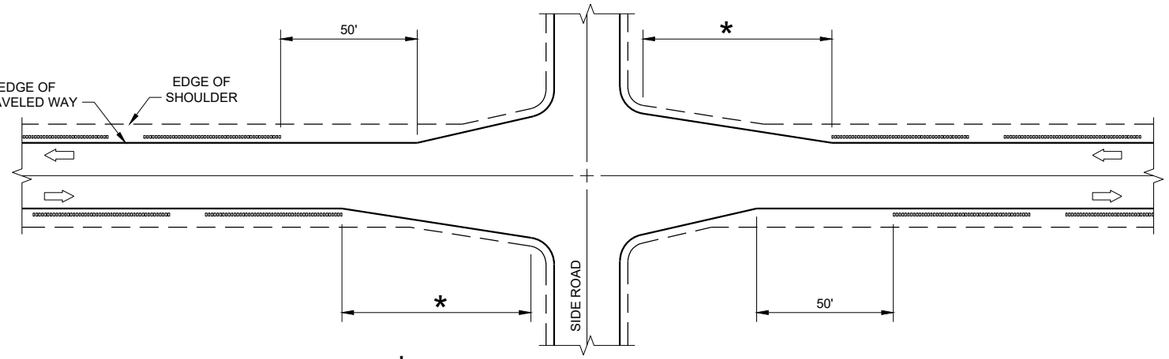
GROOVES AT MISCELLANEOUS CROSSINGS



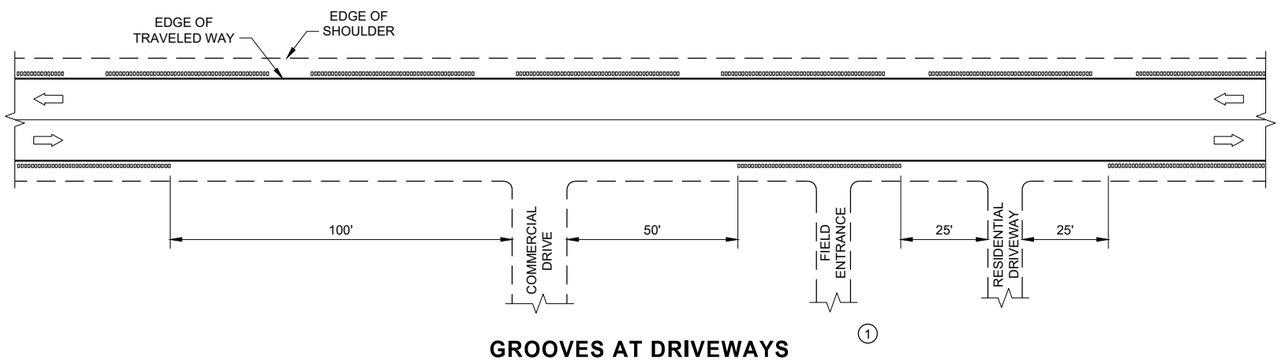
GROOVES AT RIGHT TURN LANE



GROOVES AT BRIDGES



GROOVES AT INTERSECTIONS WITH APPROACH TAPER



GROOVES AT DRIVEWAYS ①

GENERAL NOTES

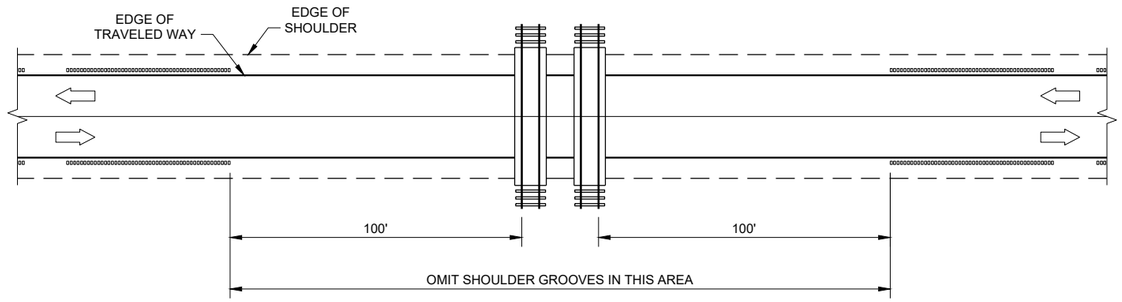
① SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.

SHOULDER AND EDGE LINE RUMBLE STRIPS CROSSINGS, INTERSECTIONS, BRIDGES, DRIVEWAYS

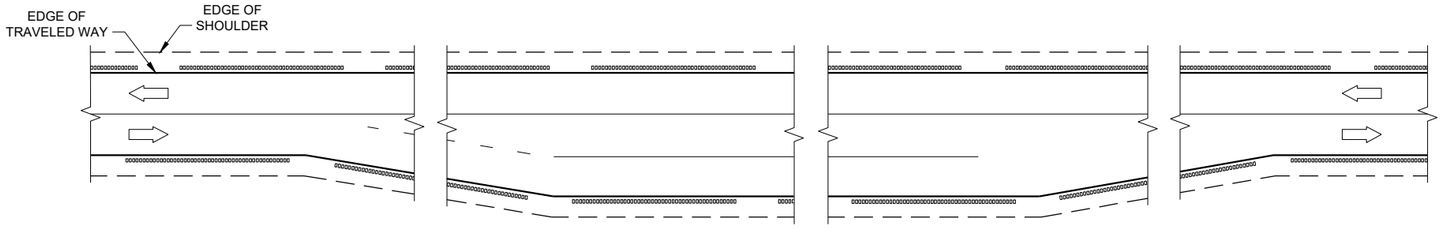
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

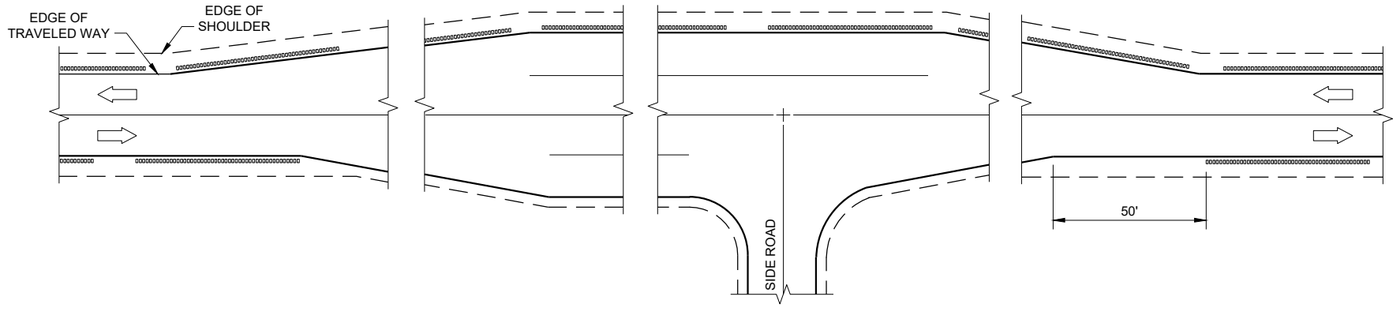
SDD 13A10 - 03g



GROOVES AT RAILROADS



GROOVES AT PASSING AND CLIMBING LANES



GROOVES AT BYPASS LANES

6

SDD 13A10 - 03h

SHOULDER AND EDGE LINE RUMBLE STRIPS - RAILROAD, PASSING, CLIMBING AND BYPASS LANES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2023
DATE

/S/ John Jenkins
ROADWAY STANDARDS DEVE ENGINEER

FHWA

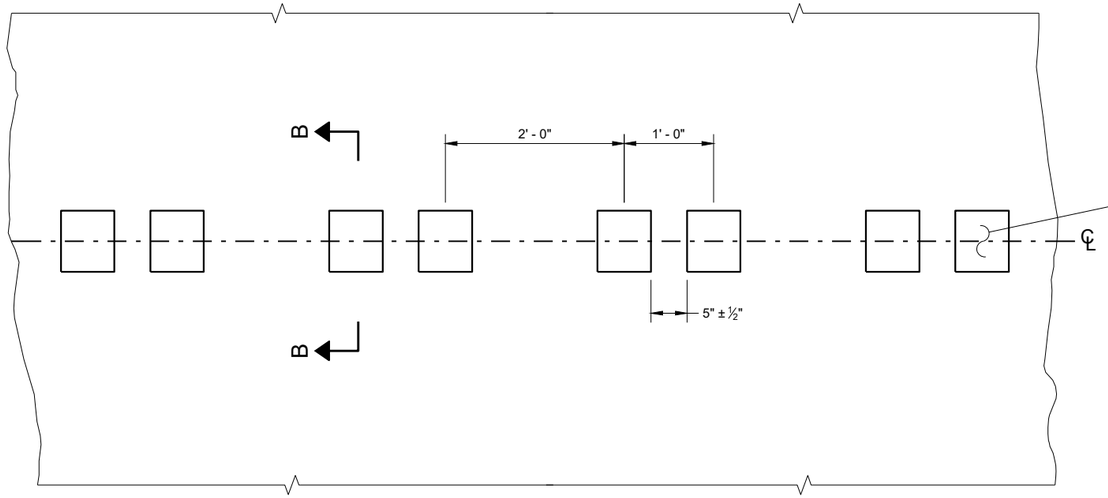
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SDD 13A10 - 03h

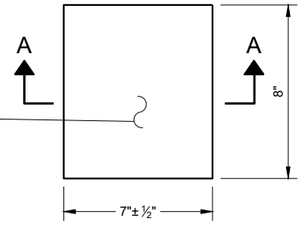
GENERAL NOTES

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

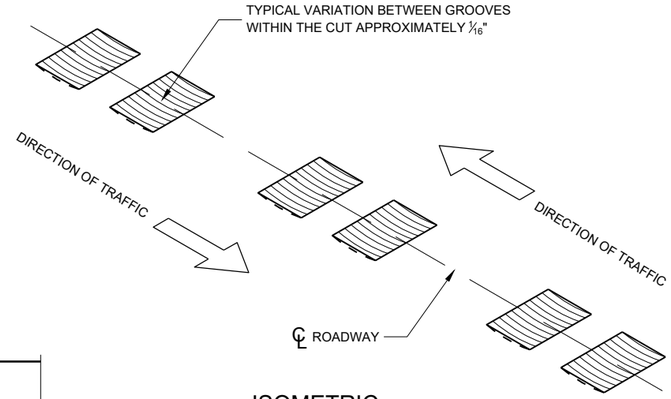
CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS WHEN DIRECTED BY THE ENGINEER.



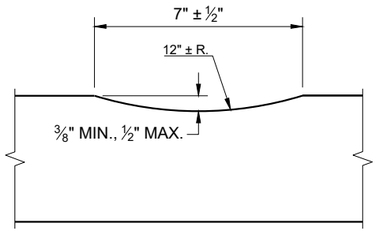
PLAN DETAIL VIEW



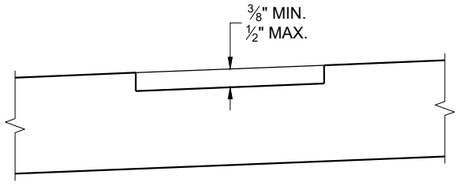
PLAN VIEW
(SINGLE GROOVE)



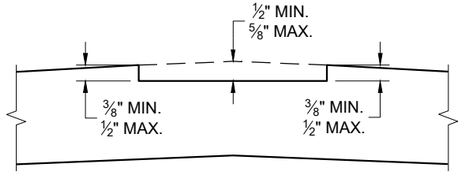
ISOMETRIC



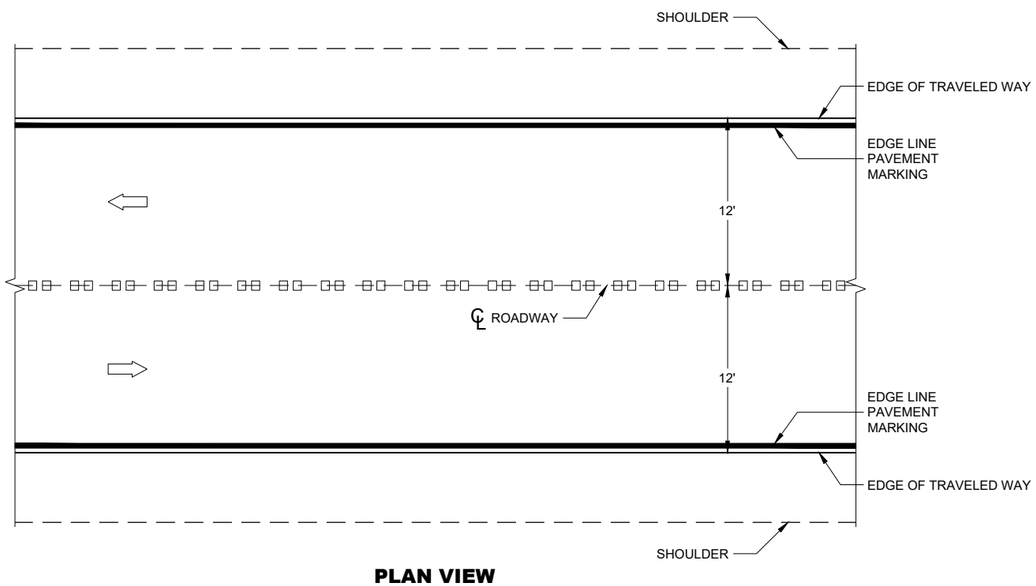
SECTION A - A



SECTION B - B
SUPERELEVATED ROADWAY



SECTION B - B
CROWNED ROADWAY



PLAN VIEW

CENTERLINE RUMBLE STRIPS - ASPHALT

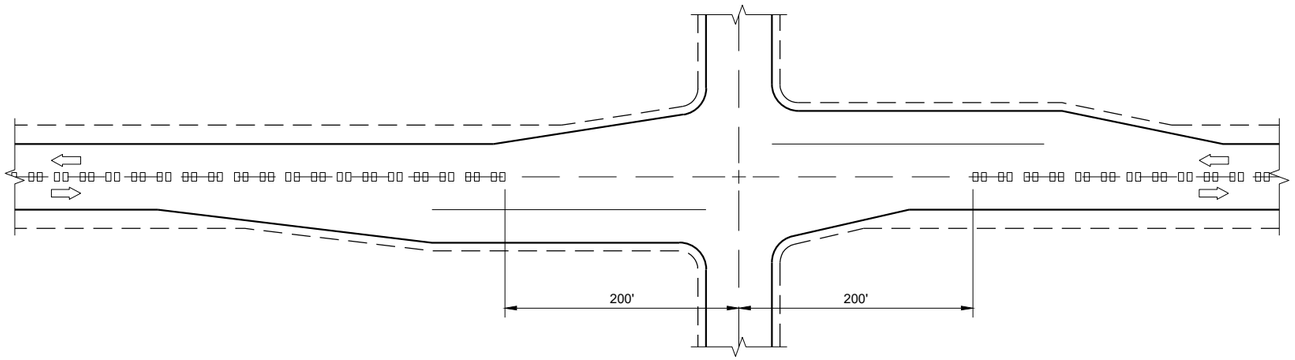
CENTERLINE RUMBLE STRIPS - ASPHALT	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTA	74

6

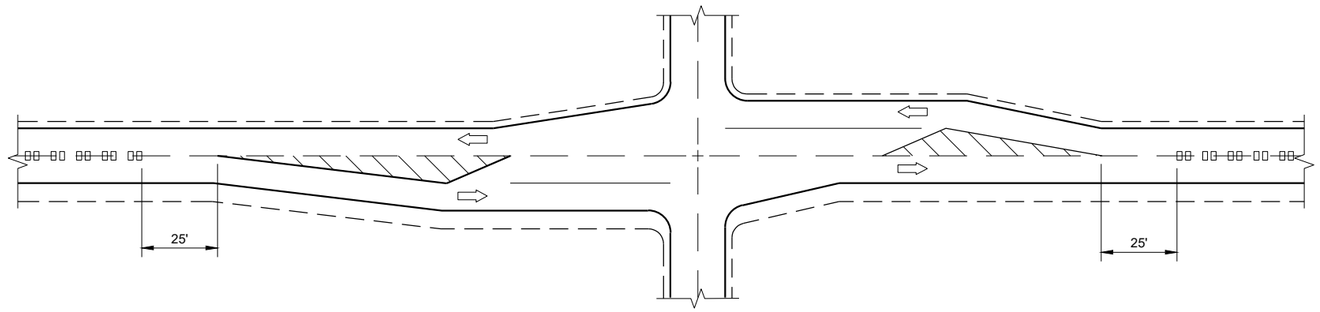
SDD 13A11 - 04a

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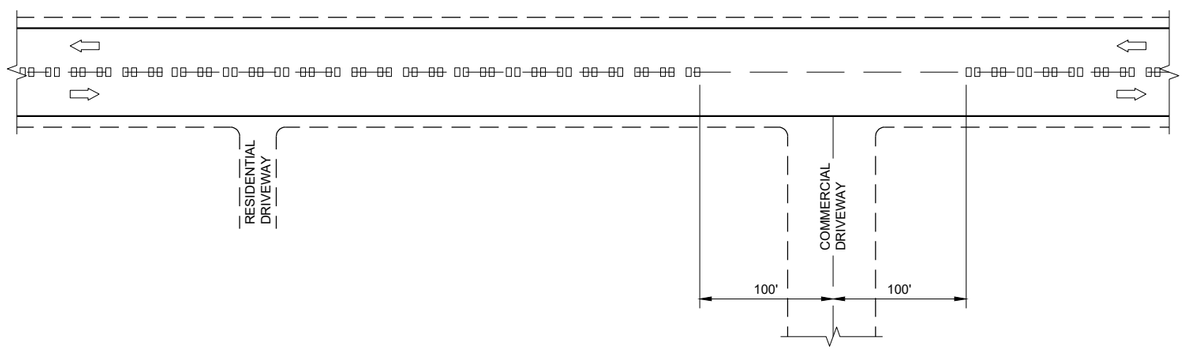
SDD 13A11 - 04a



CENTERLINE GROOVES AT INTERSECTIONS



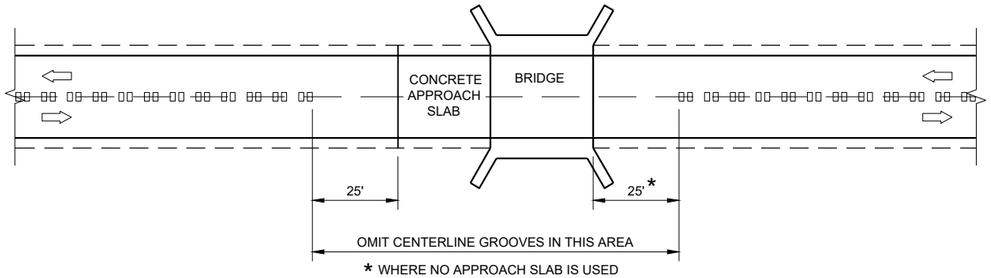
CENTERLINE GROOVES AT INTERSECTIONS (WITH LEFT TURN LANES)



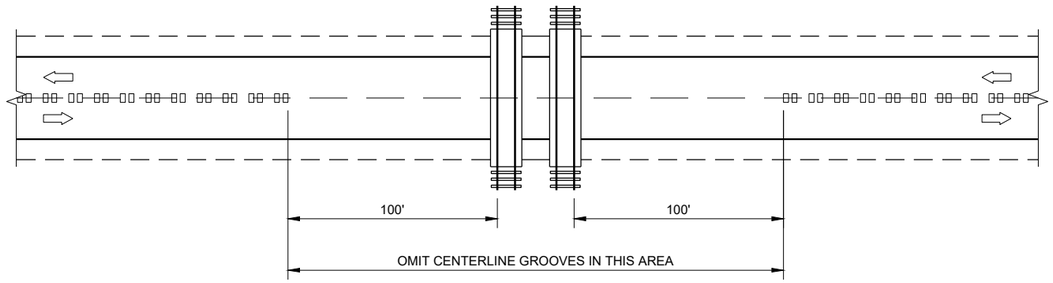
CENTERLINE GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

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



CENTERLINE GROOVES AT BRIDGES



CENTERLINE GROOVES AT RAILROADS

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

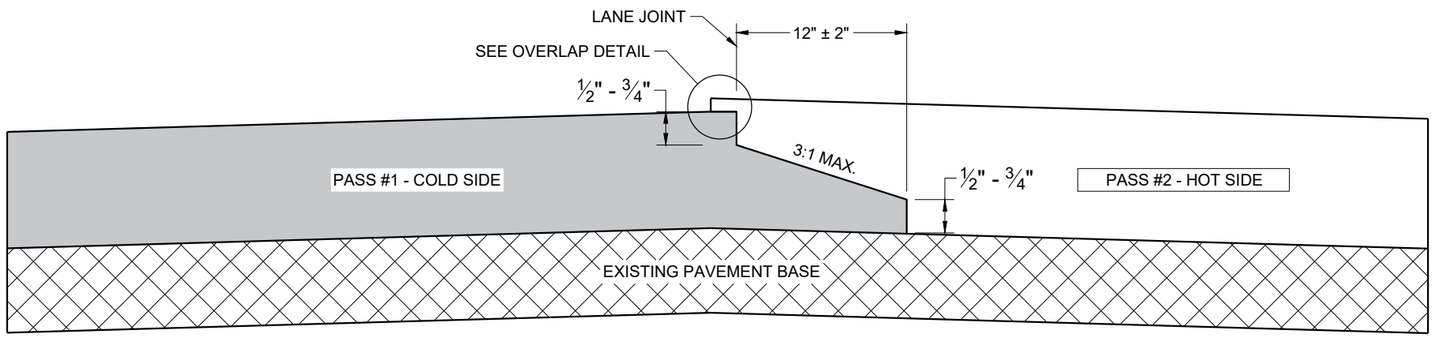
APPROVED
May 2023 — DATE
/S/ John Jenkins — ROADWAY STANDARDS DEVE ENGINEER

FHWA

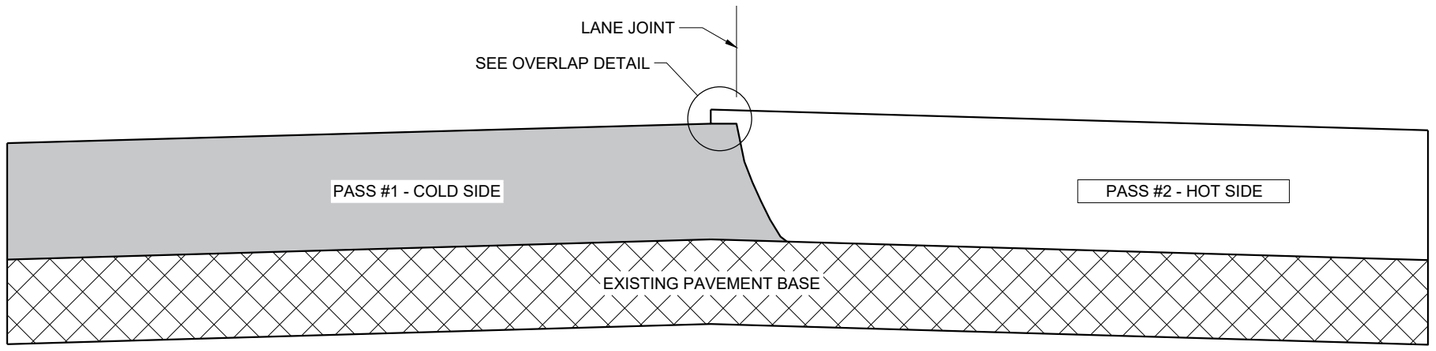
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SDD 13A11 - 04d

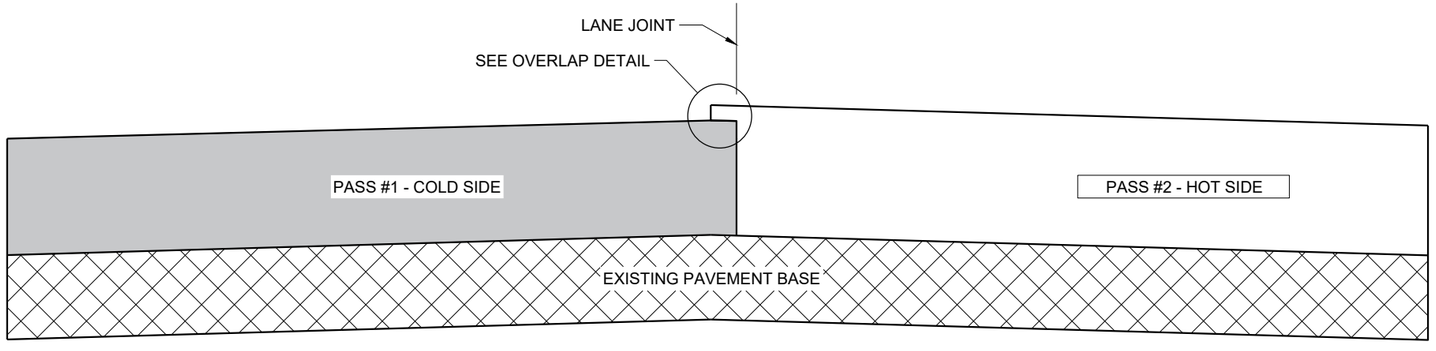
SDD 13A11 - 04d



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

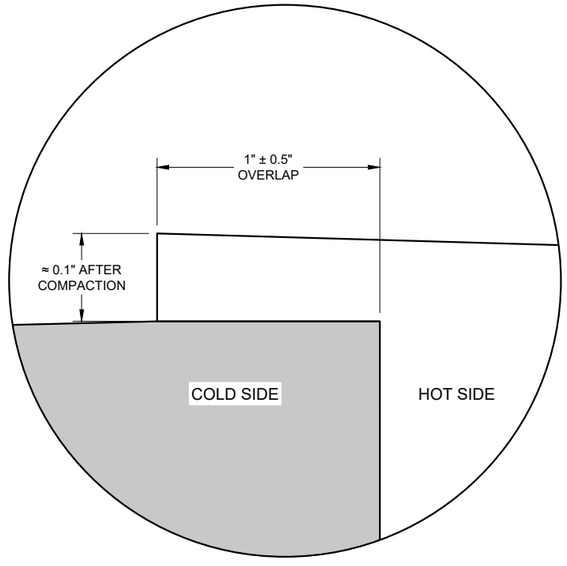
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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 DATE	/S/ Steven Hefel HMA PAVEMENT ENGIN

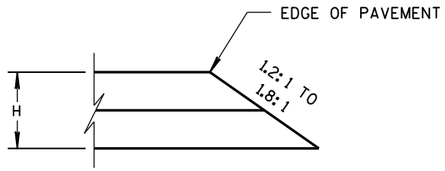
FHWA

6

SDD 13C19 - 03

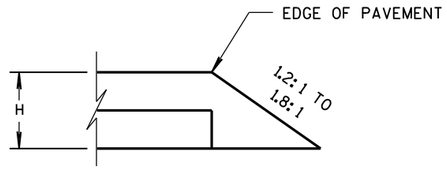
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SDD 13C19 - 03



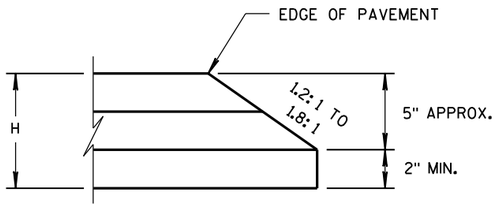
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



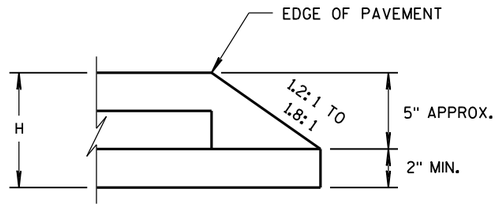
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

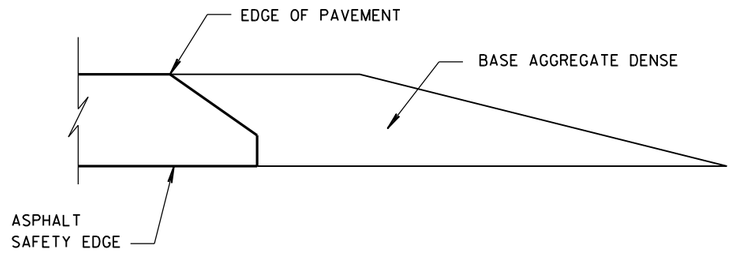
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

6

6

S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

SAFETY EDGE SM

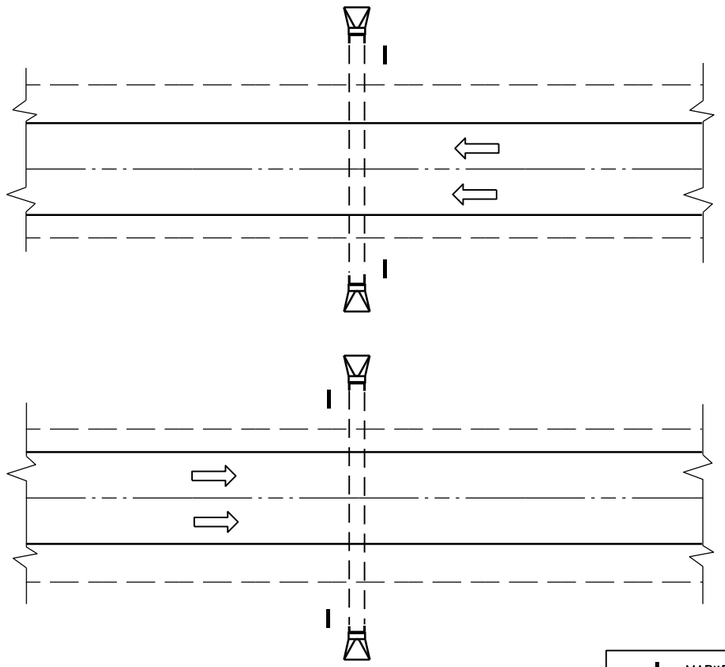
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/2012
DATE

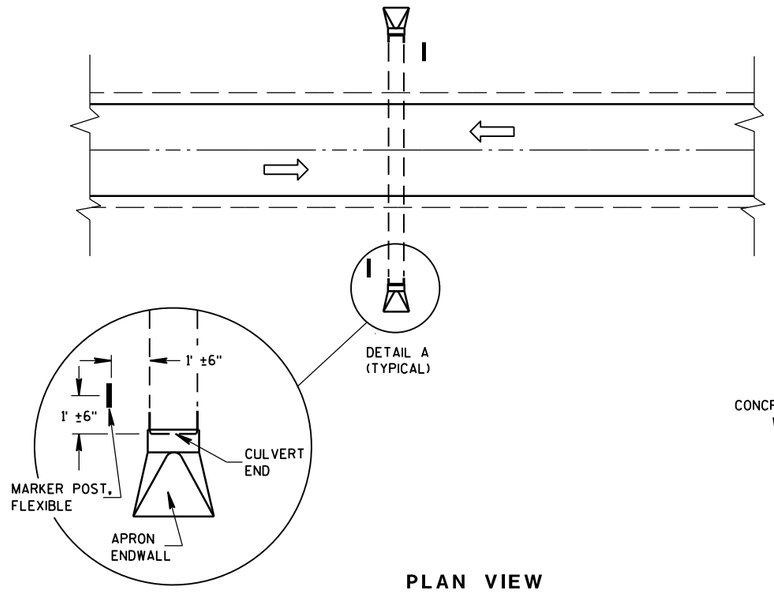
/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

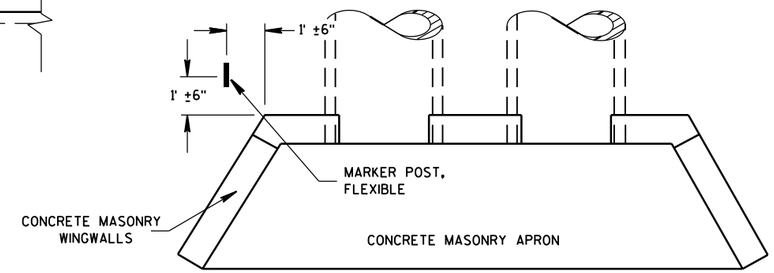
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

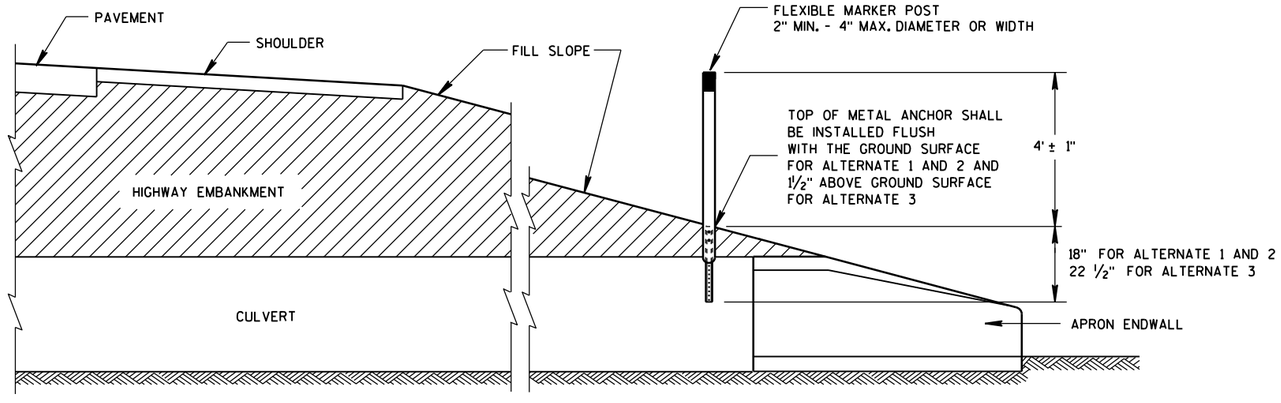
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

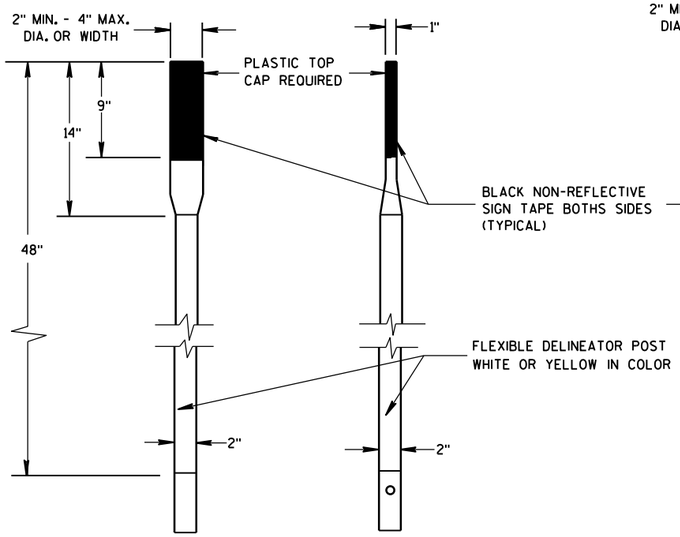
FLEXIBLE MARKER POST

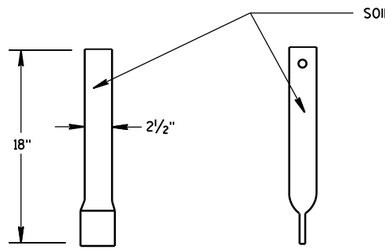
FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

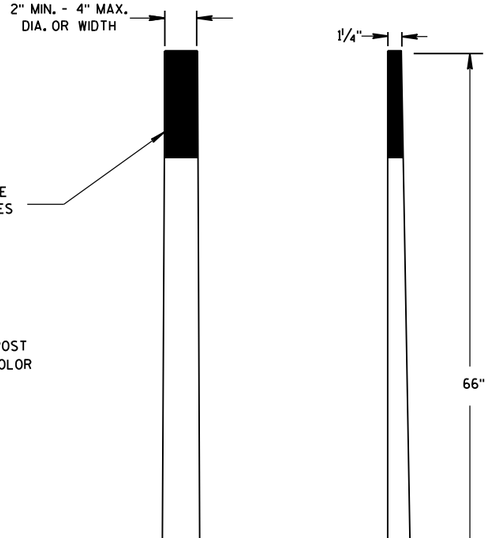
S.D.D. 15 A 3-2a





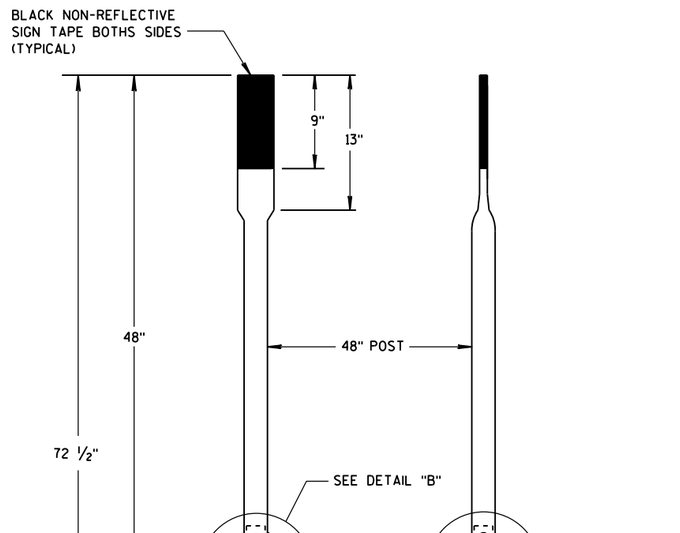
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

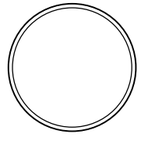
ALTERNATE 2



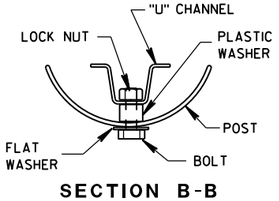
FRONT VIEW SIDE VIEW

ALTERNATE 3

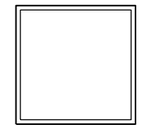
FLEXIBLE MARKER POSTS



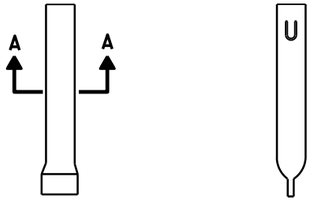
SECTION A-A



SECTION B-B

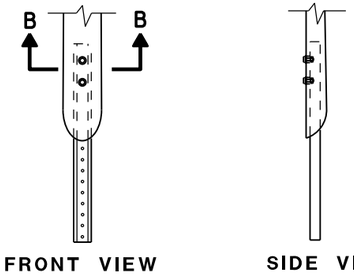


SECTION C-C



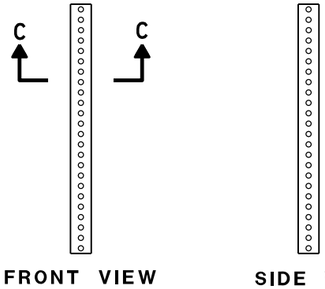
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

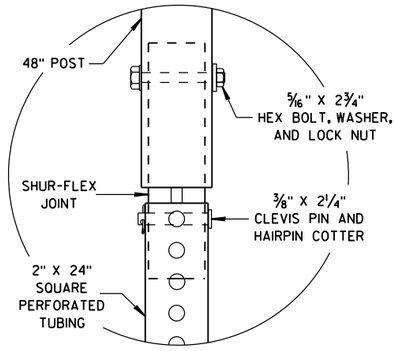
ALTERNATE 2



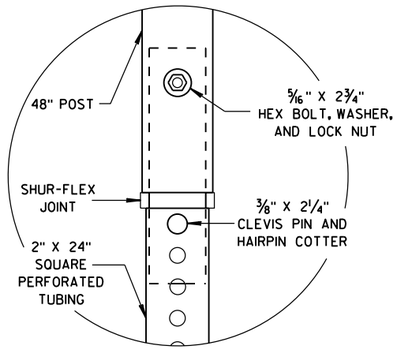
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

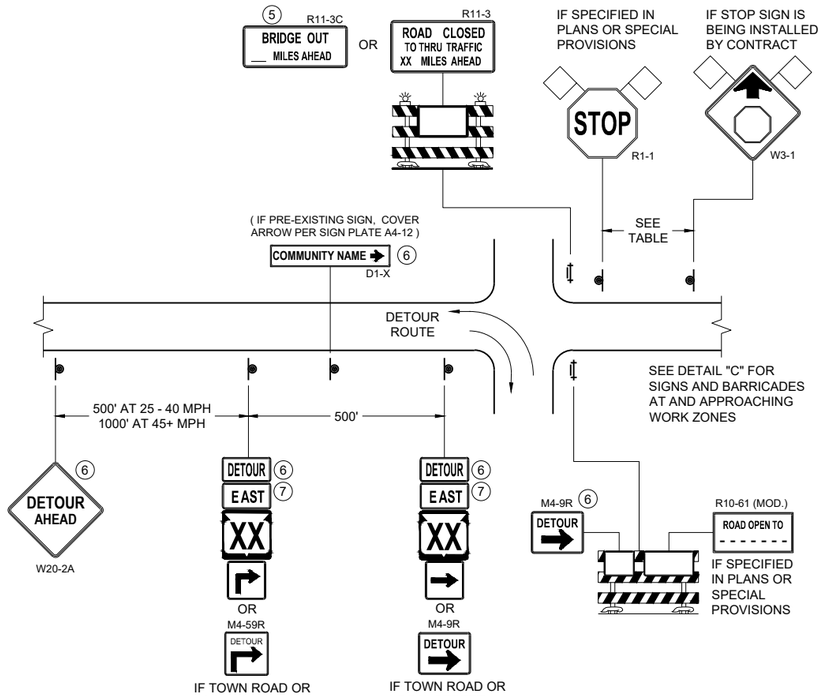
APPROVED
10/1/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

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

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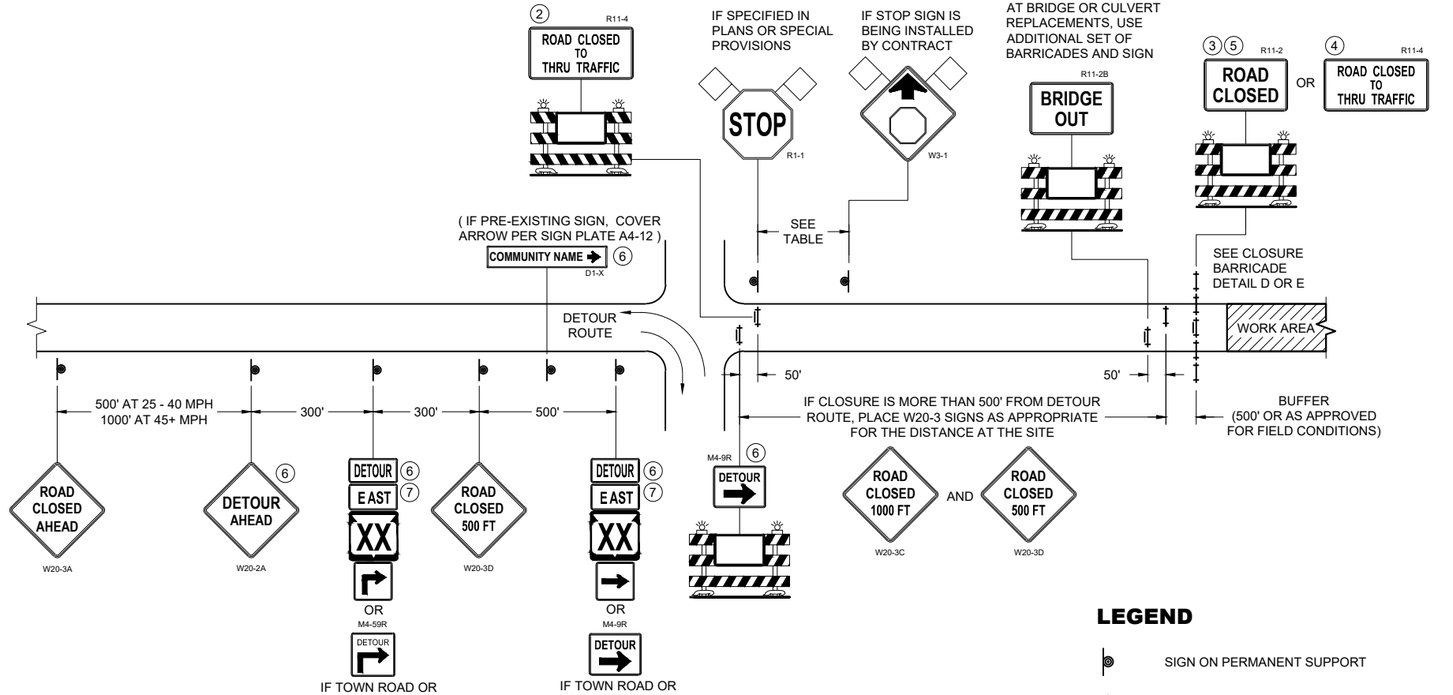
S.D.D. 15 A 3-2b



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)

LEGEND

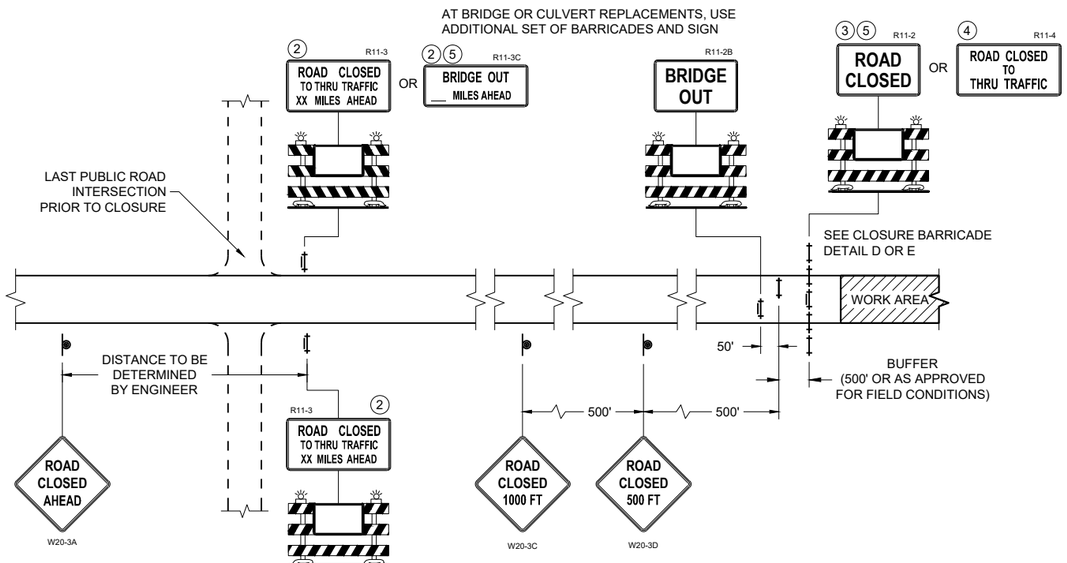
- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)

DETOUR M4 - 8

EAST M3 - X

XX M1 - 4 OR XX M1 - 6 OR COUNTY X M1 - 5A

M05 - 1 OR M06 - 1



DETAIL C

MAINLINE CLOSURE, NO POSTED DETOUR

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

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

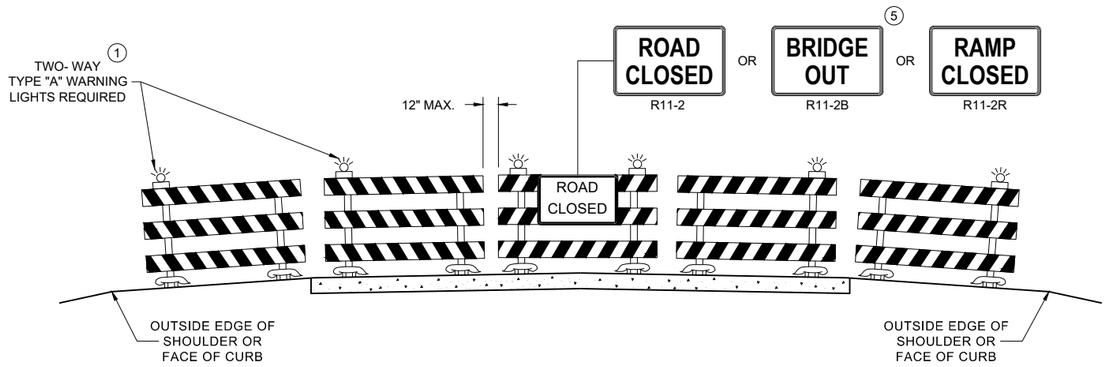
BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025 DATE
/S/ Andrew Heidtke WORK ZONE ENGINEER

FHWA

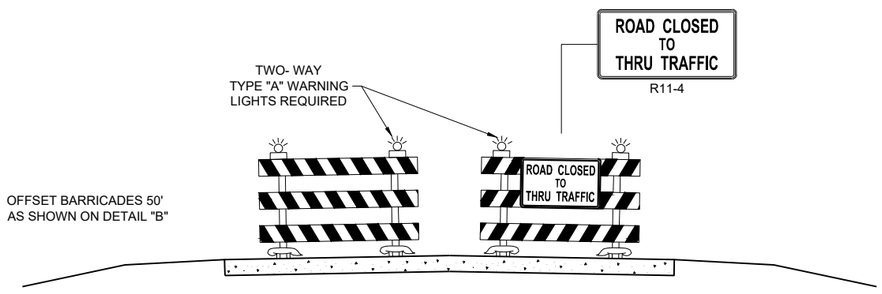
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SDD 15C02-10a



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.

PARTIAL NUMBERS ON SIGNS SHALL BE DISPLAYED AS A WHOLE NUMBER(AS NEEDED) FOLLOWED BY A FRACTION. SIGNS SHALL NOT DISPLAY NUMBERS IN DECIMAL FORM.

"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"

SIGNS PLACED ON TYPE III BARRICADES THAT ARE SIZES OTHER THAN 48"X30" SHALL HAVE A CORRUGATED POLYPROPYLENE OR POLYETHYLENE PLASTIC SIGN BASE.

(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

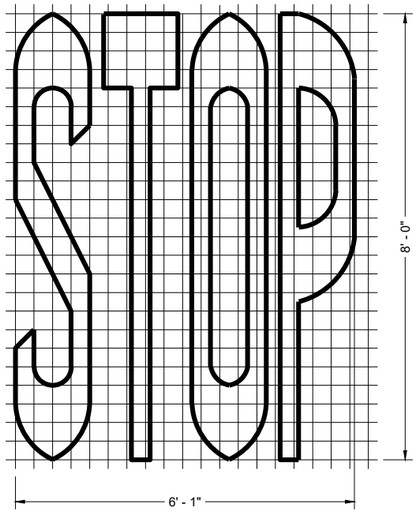
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

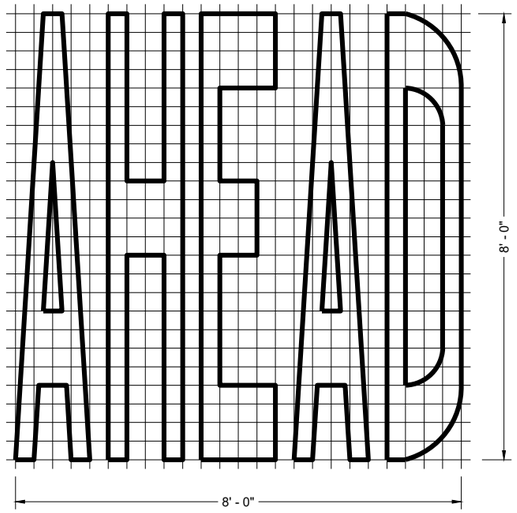
APPROVED
November 2025 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

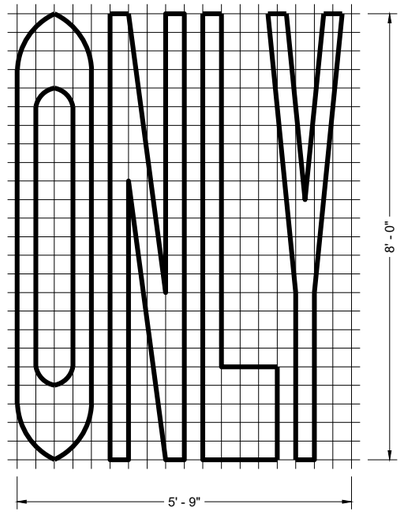
FHWA

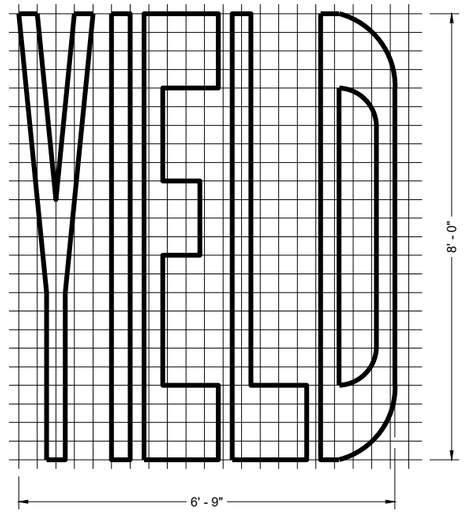
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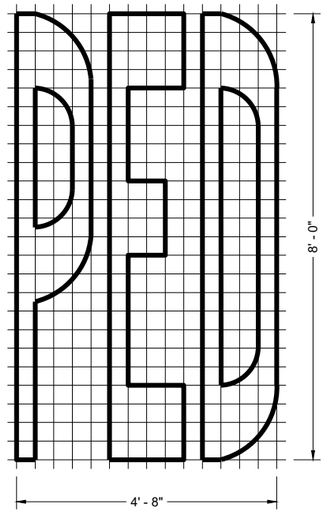
SDD 15C02-10b

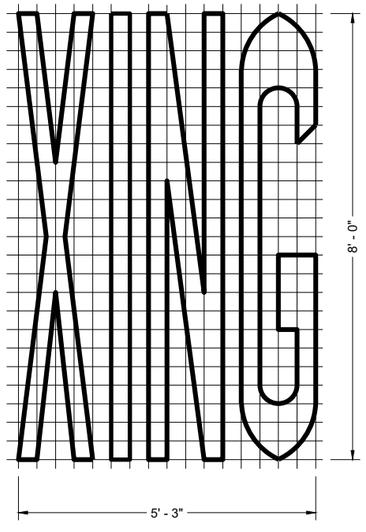


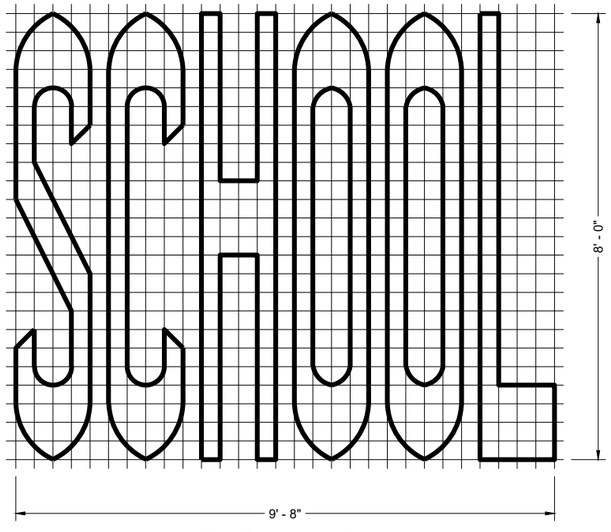




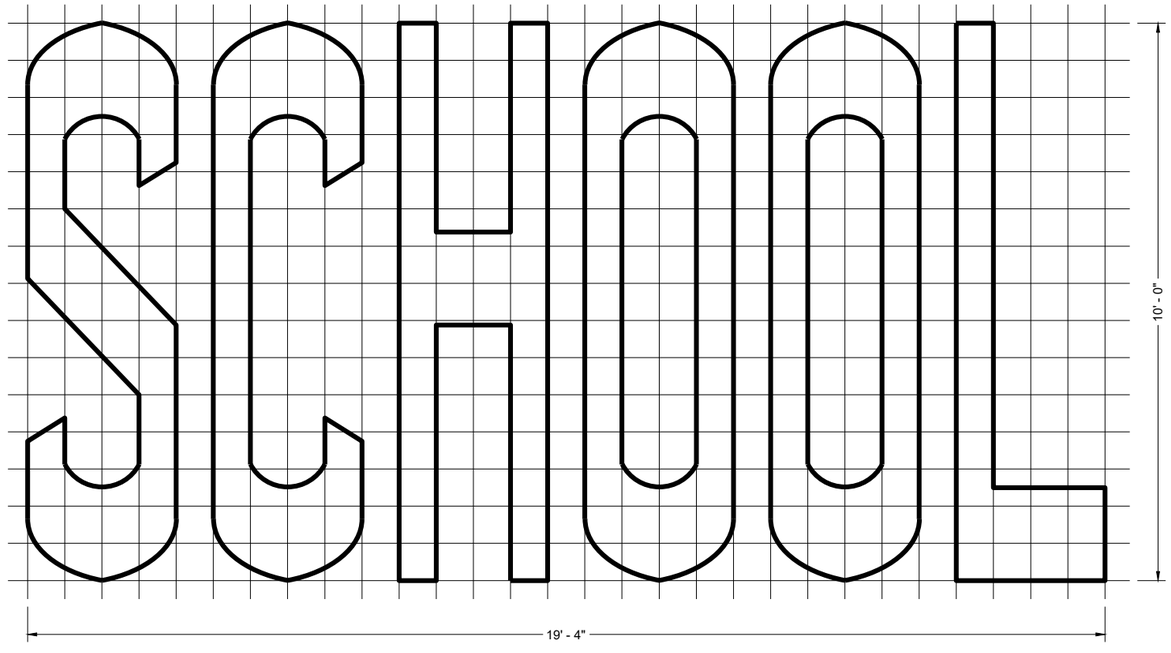








SINGLE LANE



TWO - LANE

GENERAL NOTES

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

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024 — DATE
/S/ Jeannie Silver — STATE SIGNING AND MARKING ENGINEER

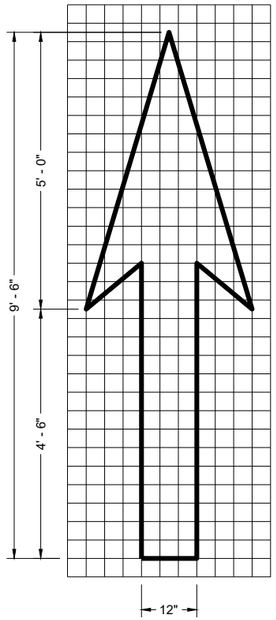
FHWA

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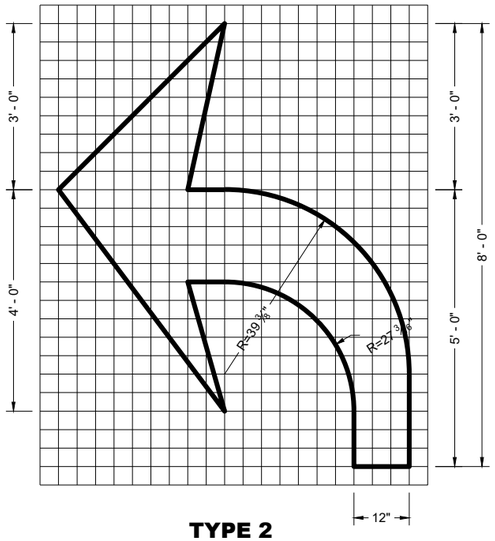
SDD 15C07-16b

GENERAL NOTES

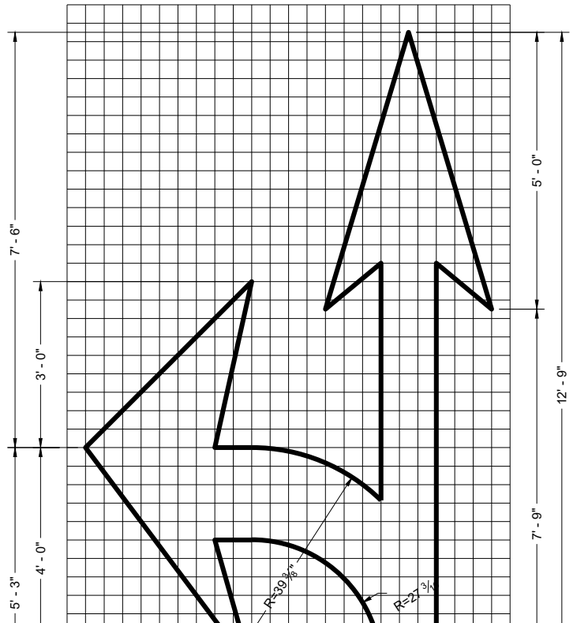
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



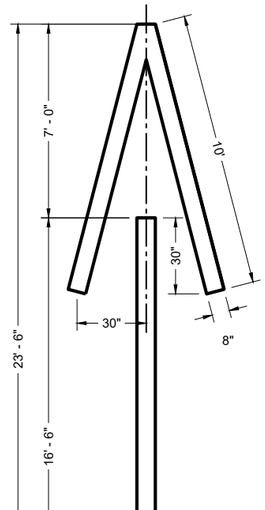
TYPE 1



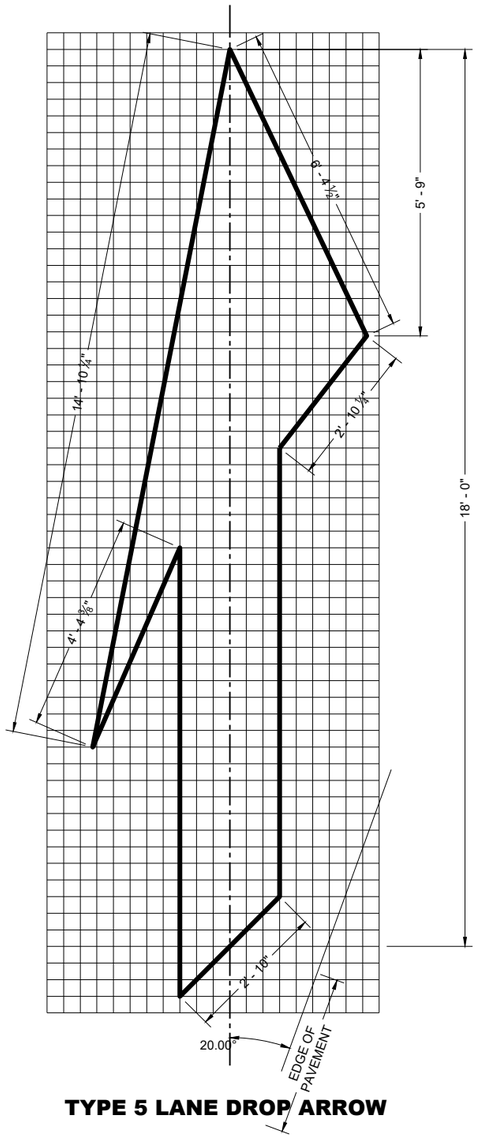
TYPE 2



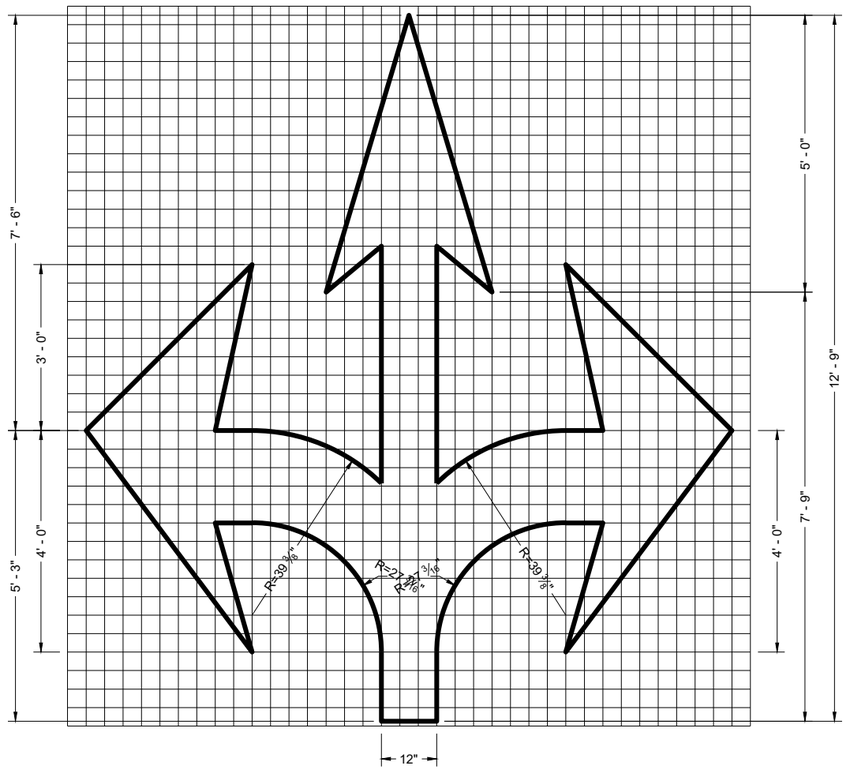
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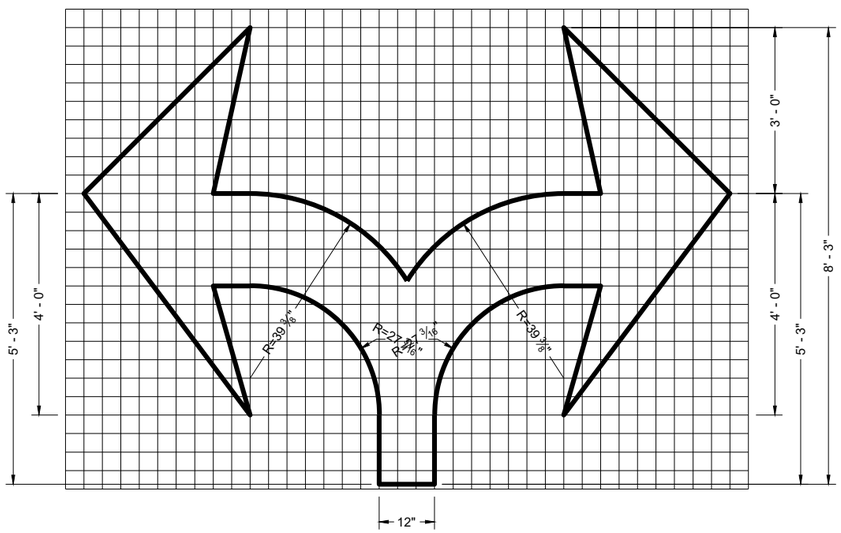
TYPE 4



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

6

SDD 15C07-16c

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024
DATE

/S/ Jeannie Silver
STATE SIGNING AND MARKING ENGINEER

FHWA

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SDD 15C07-16c

GENERAL NOTES

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

(1) LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING

(2) MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

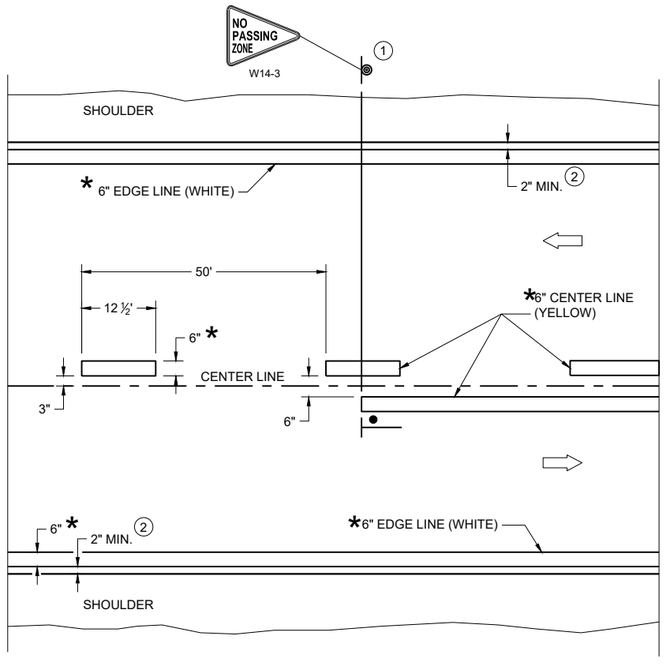
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

LEGEND

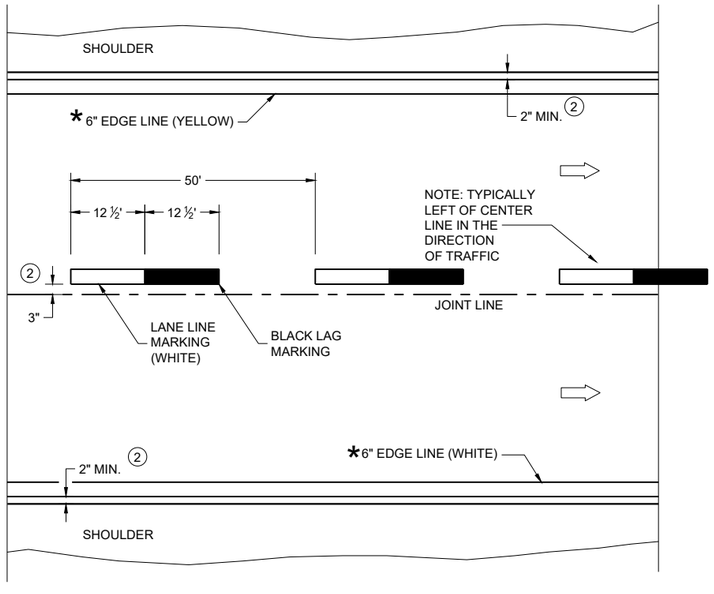
"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

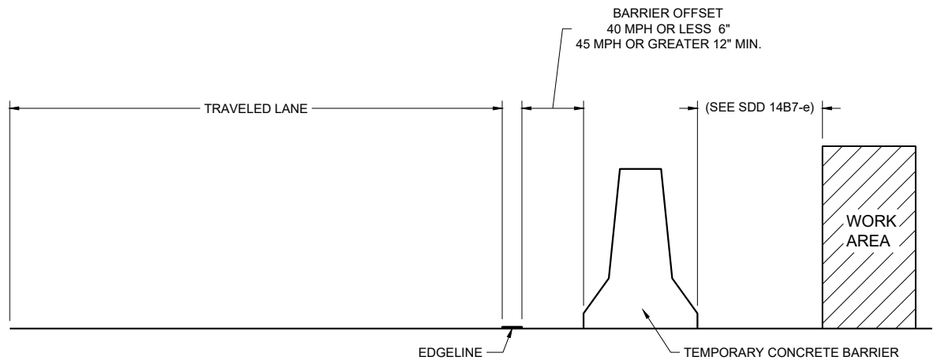
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2024
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

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SDD 15C08-24a



TEMPORARY BARRIER OFFSET FROM EDGELINE

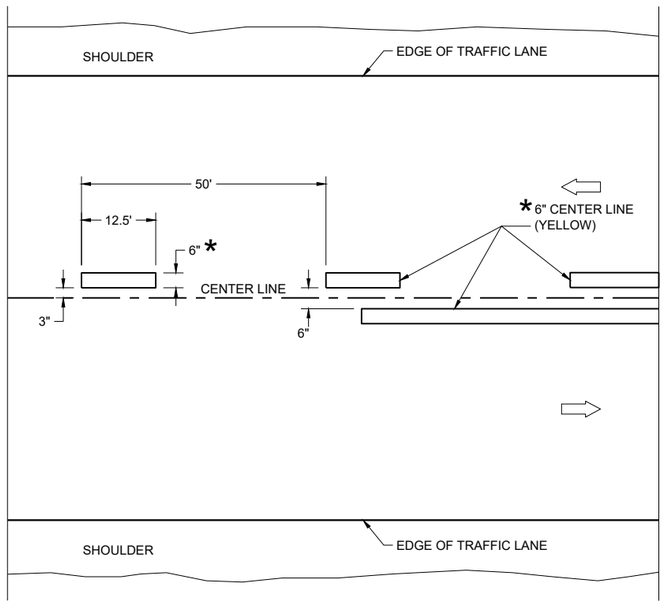
GENERAL NOTES

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

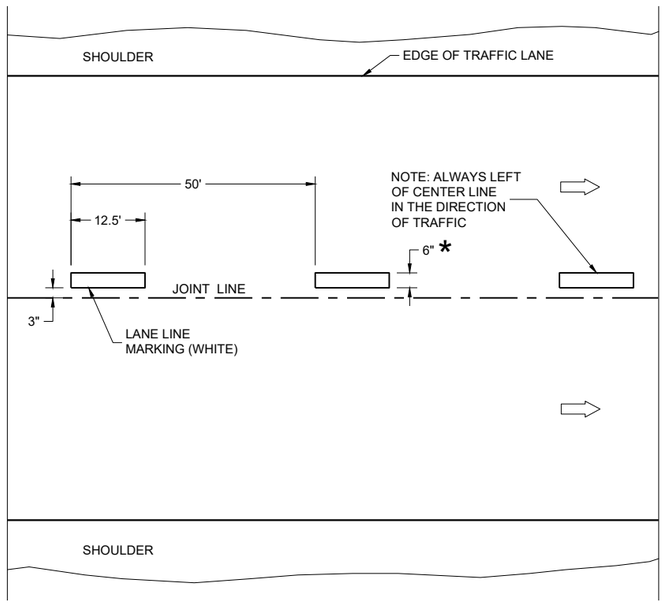
LEGEND

DIRECTION OF TRAFFIC

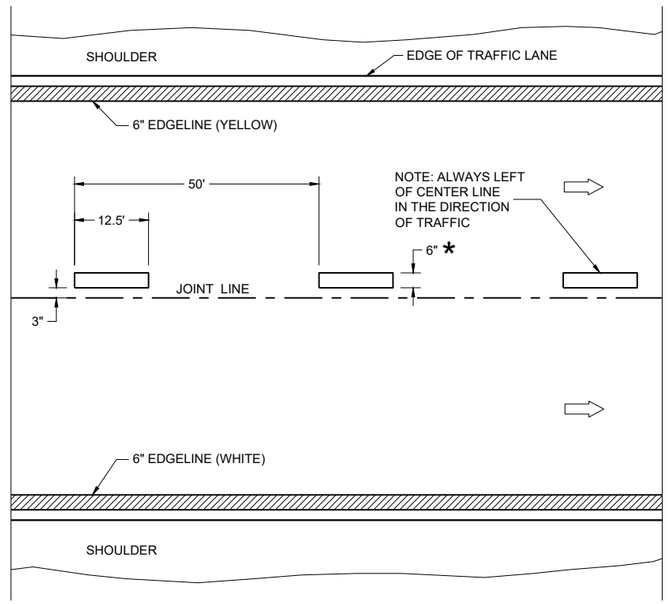
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

TEMPORARY PAVEMENT MARKING

TEMPORARY LONGITUDINAL PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2024
DATE
/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

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SDD 15C08-24b

6

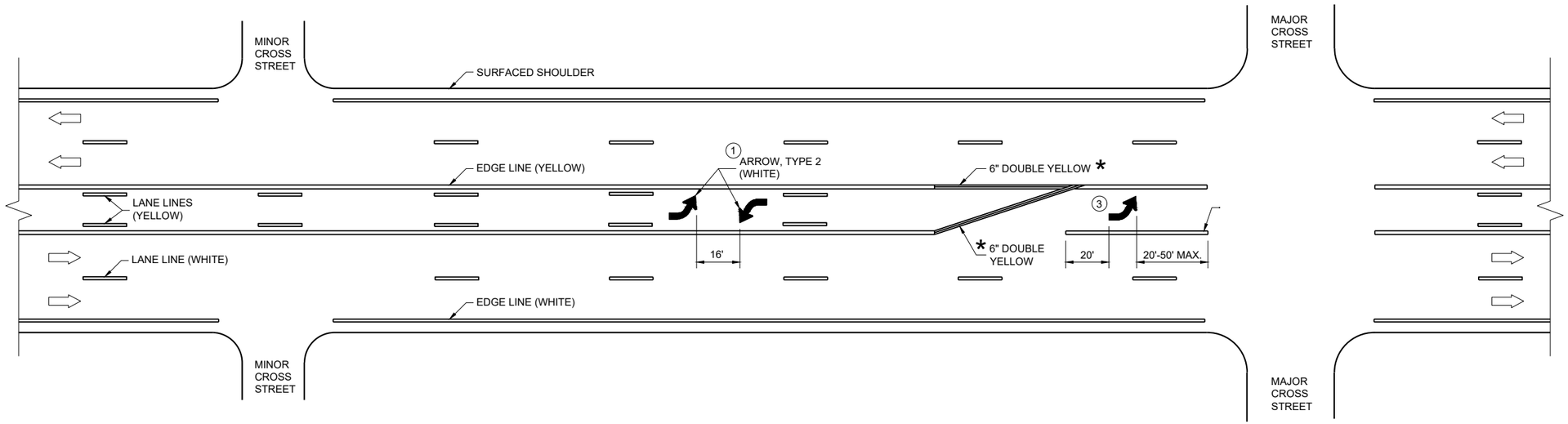
SDD 15C08-24b

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



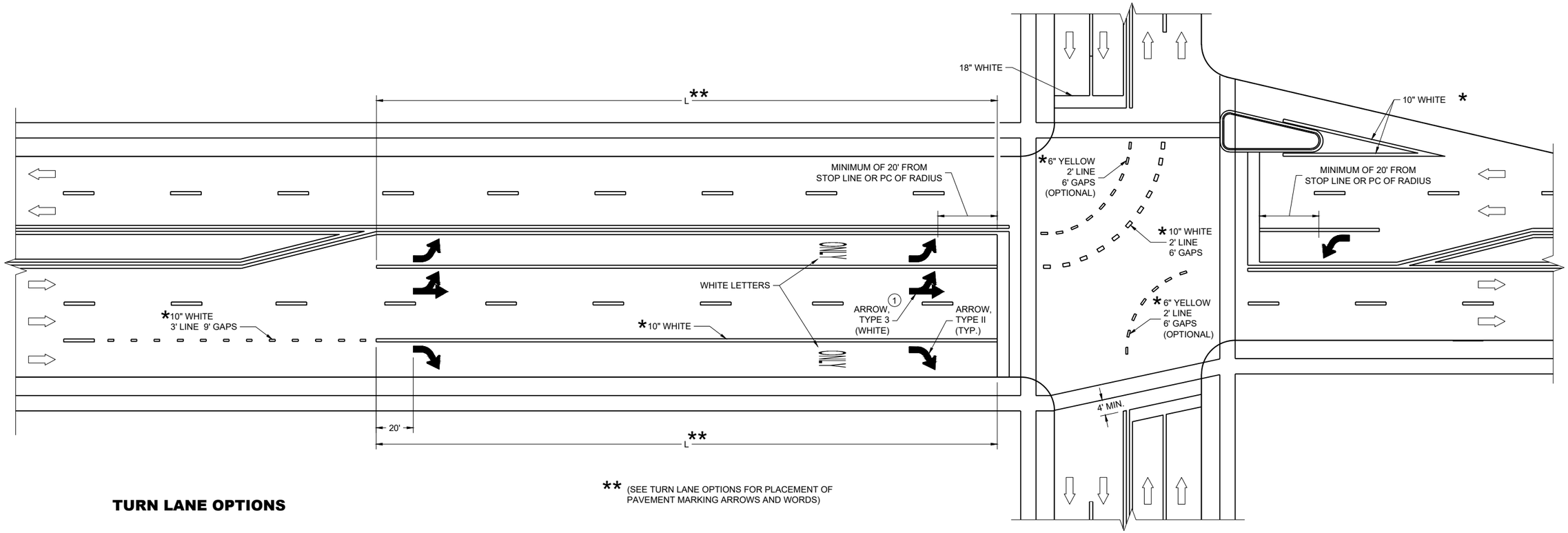
TWO WAY LEFT TURN LANE

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

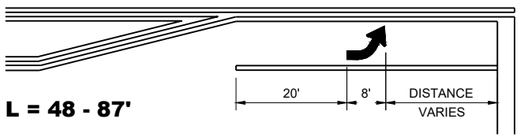
SDD 15C08-24c



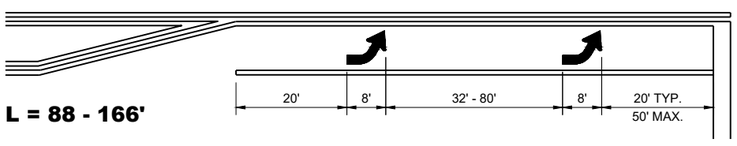
** (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

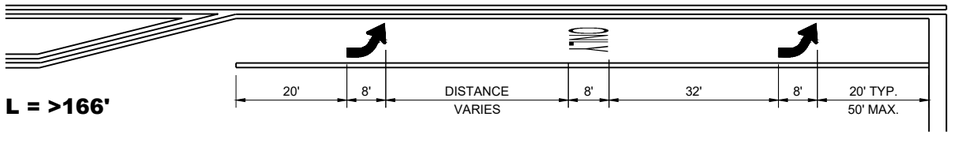
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT
REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

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)

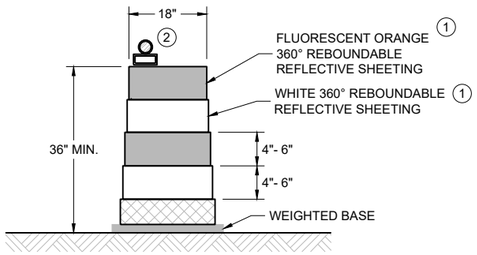
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 15C08-24d

GENERAL NOTES

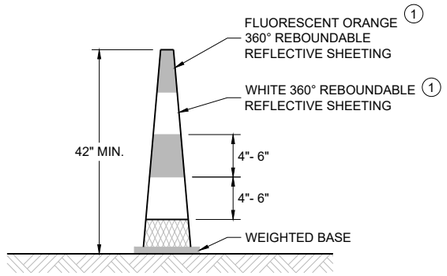
(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

(2) LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.



DRUM

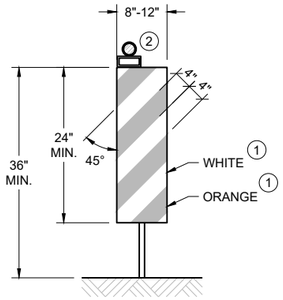
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

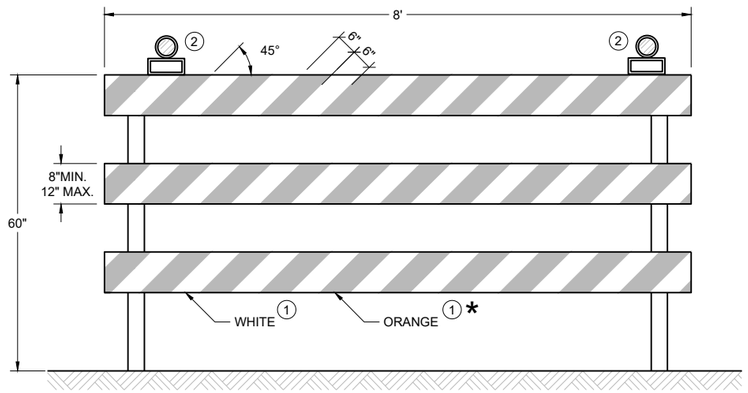
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



VERTICAL PANEL

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



TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2026 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

6
SDD 15C11-11b

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.

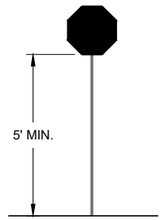
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

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.



STOP/SLOW PADDLE ON SUPPORT STAFF

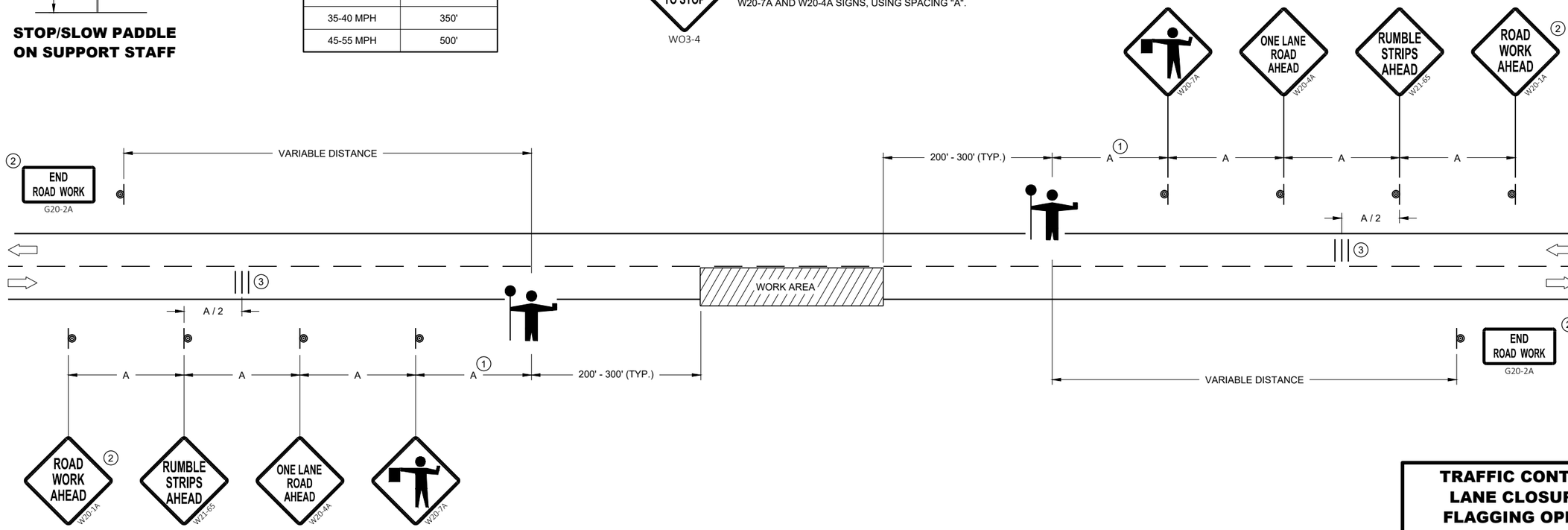
SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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



WO3-4

USE OF WO3-4 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 ENGINEE

FHWA

6

SDD 15C12 - 09a

6

SDD 15C12 - 09a

LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

GENERAL NOTES

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

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

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

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

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

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH

WORKERS SHALL NOT PERFORM WORK FROM ANY SHADOW OR PROTECTION VEHICLES.

UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

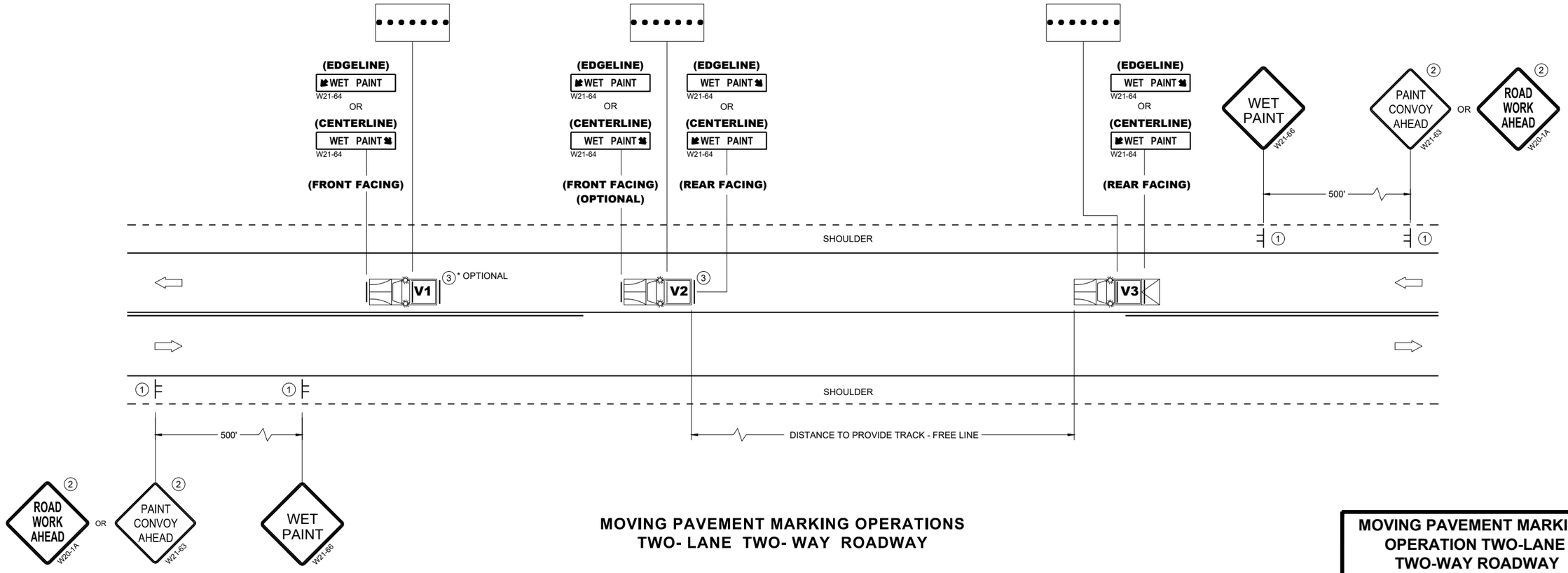
CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL BE A MINIMUM OF 28" FOR WET PAVEMENT MARKING .

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES AND AFTER EVERY MAJOR INTERSECTION.

(2) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.

(3) V1 AND V2 CAN BE SWITCHED SO THAT THE MARKER IS THE LEAD VEHICLE.



MOVING PAVEMENT MARKING OPERATIONS
TWO- LANE TWO- WAY ROADWAY

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025 — DATE
/S/ Andrew Heidtke — STATE ELECTRICAL ENGINEER

FHWA

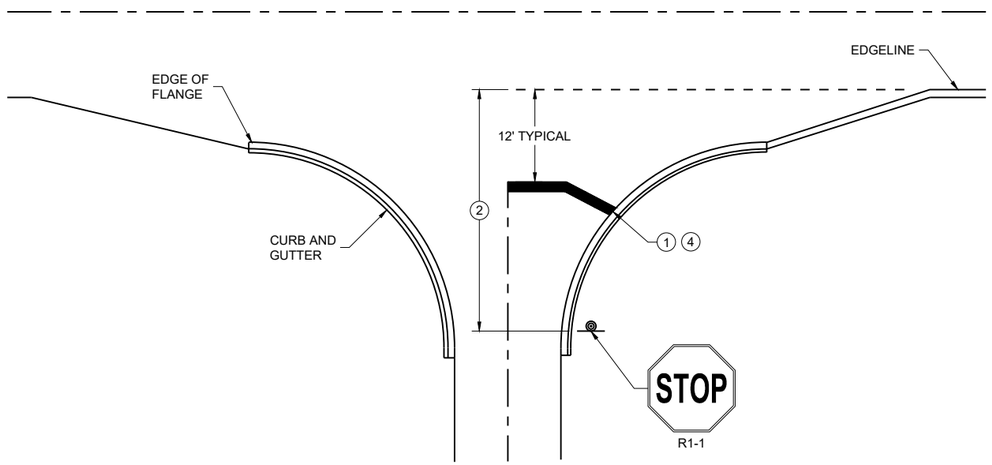
6

SDD 15C19-11a

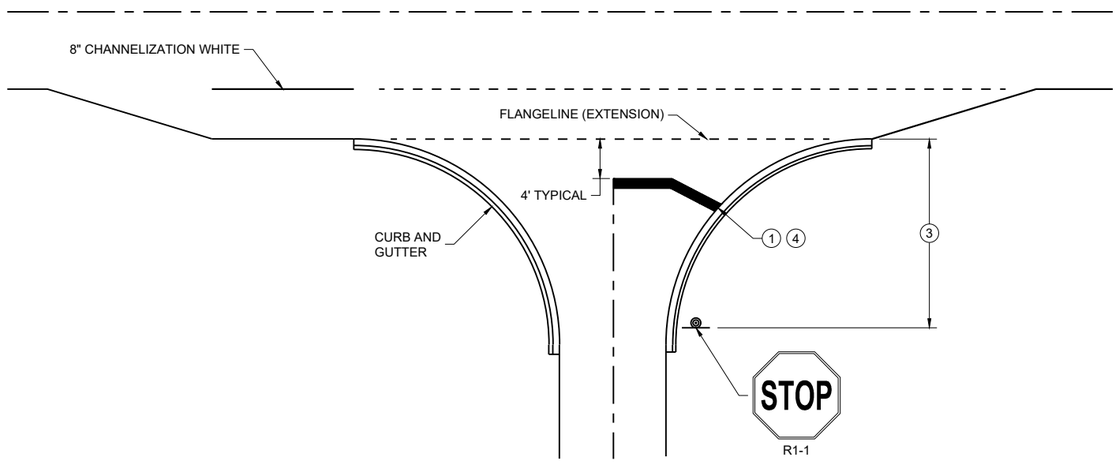
GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

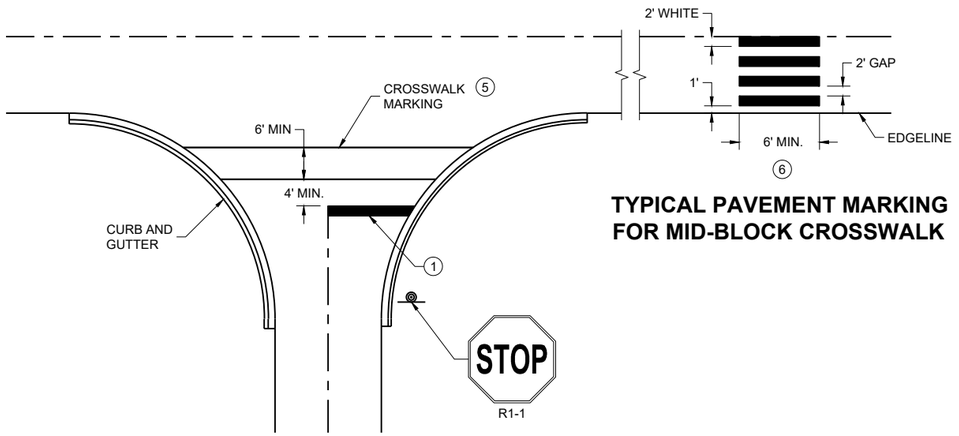
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGE LINE EXTENSION.
4. MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
5. LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES.
6. POSTED SPEED LIMITS OF 40 MPH OR GREATER USE A MINIMUM WIDTH OF 8' FOR MIDBLOCK CROSSWALKS



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

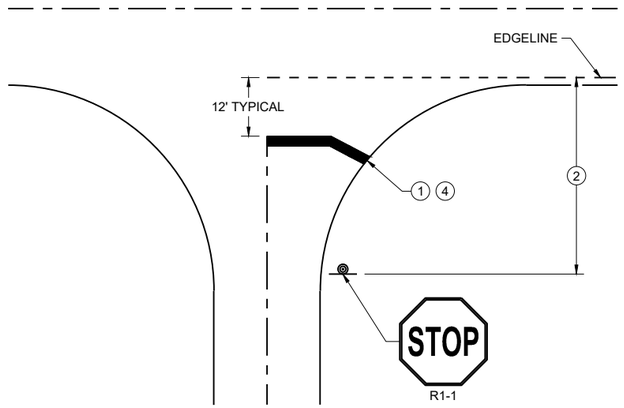


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDE ROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK 5

TYPICAL STOP LINE PAVEMENT MARKING FOR SIDE ROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

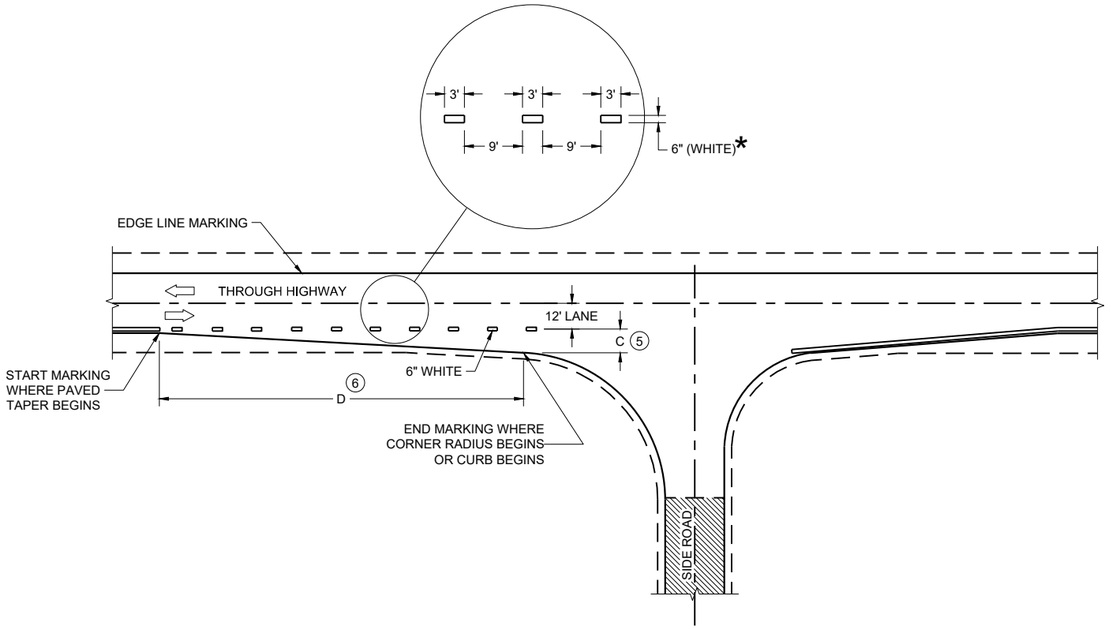
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

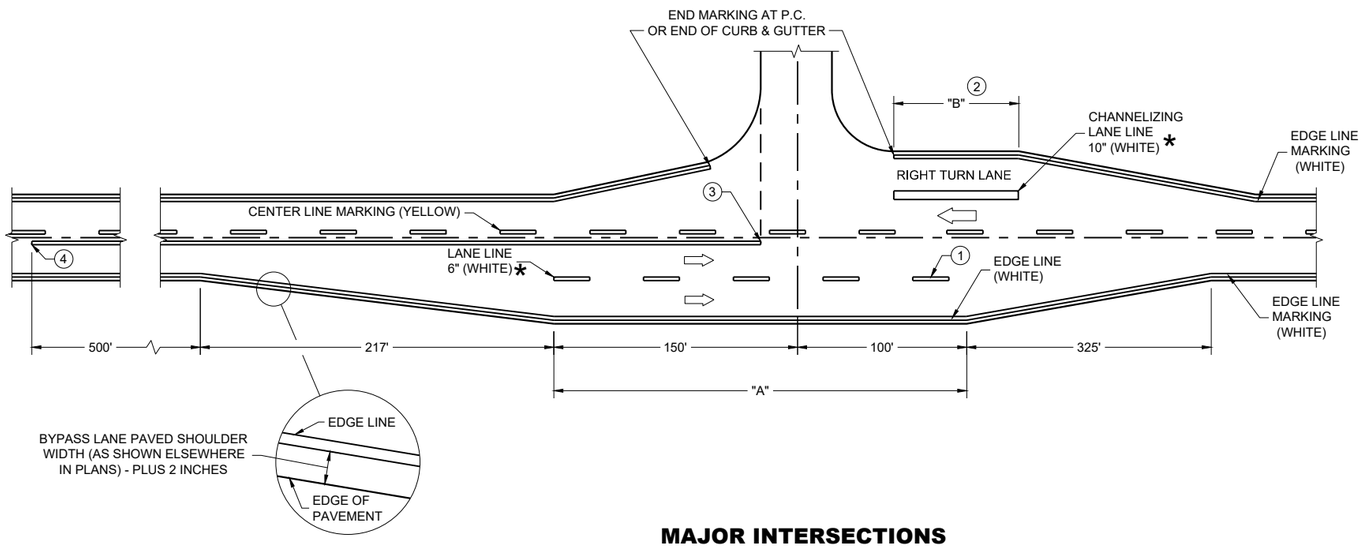
March 2024 — DATE

/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER

FHWA



MINOR INTERSECTION



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

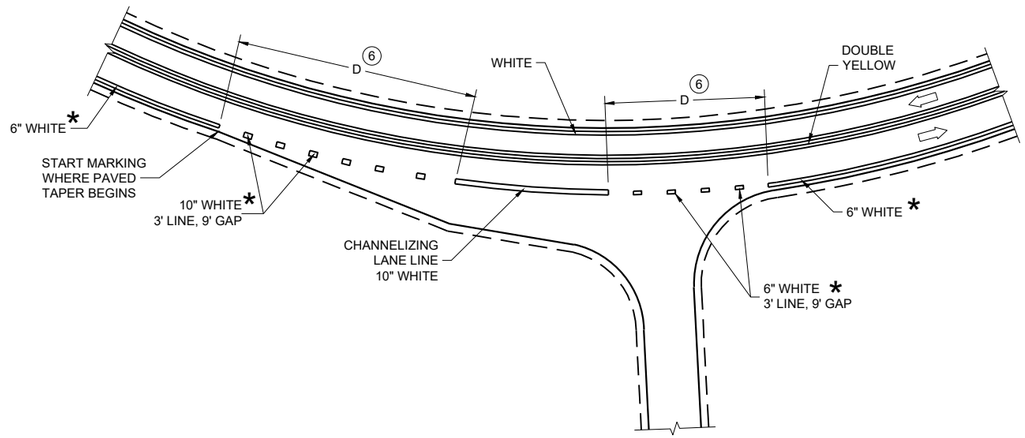
GENERAL NOTES

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

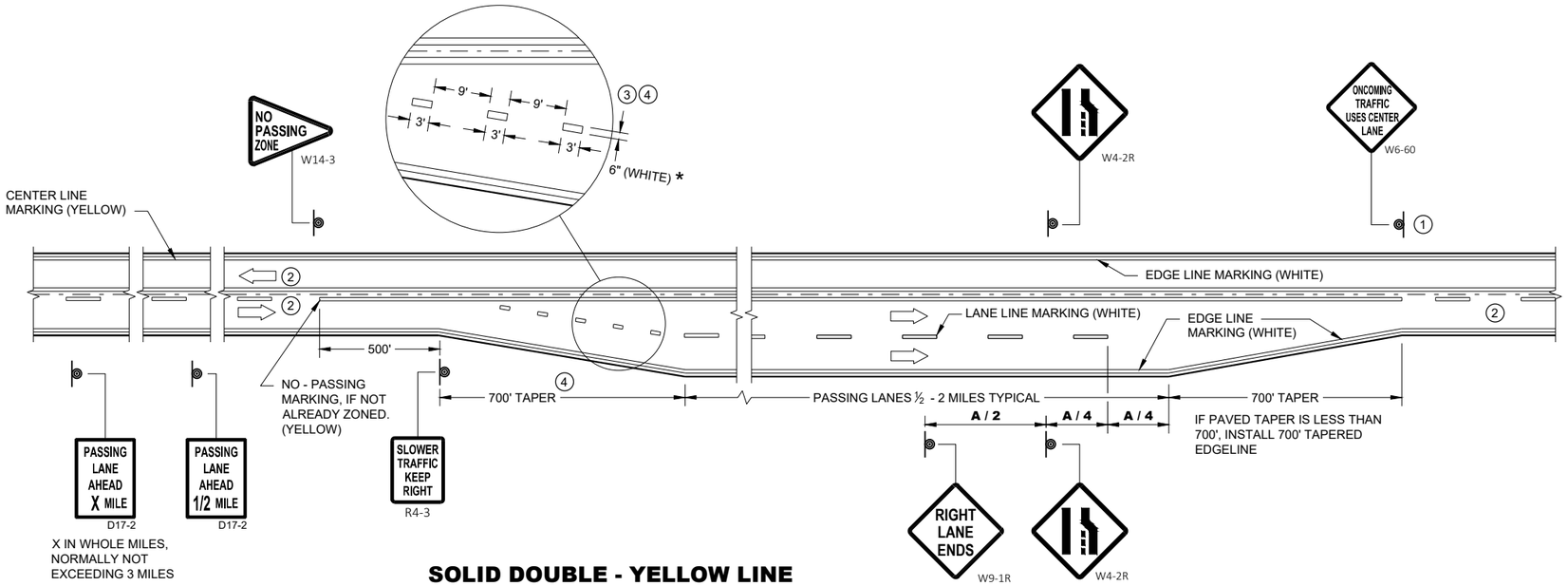
PAVEMENT MARKING (INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C35-06a

SDD 15C35-06a



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

GENERAL NOTES

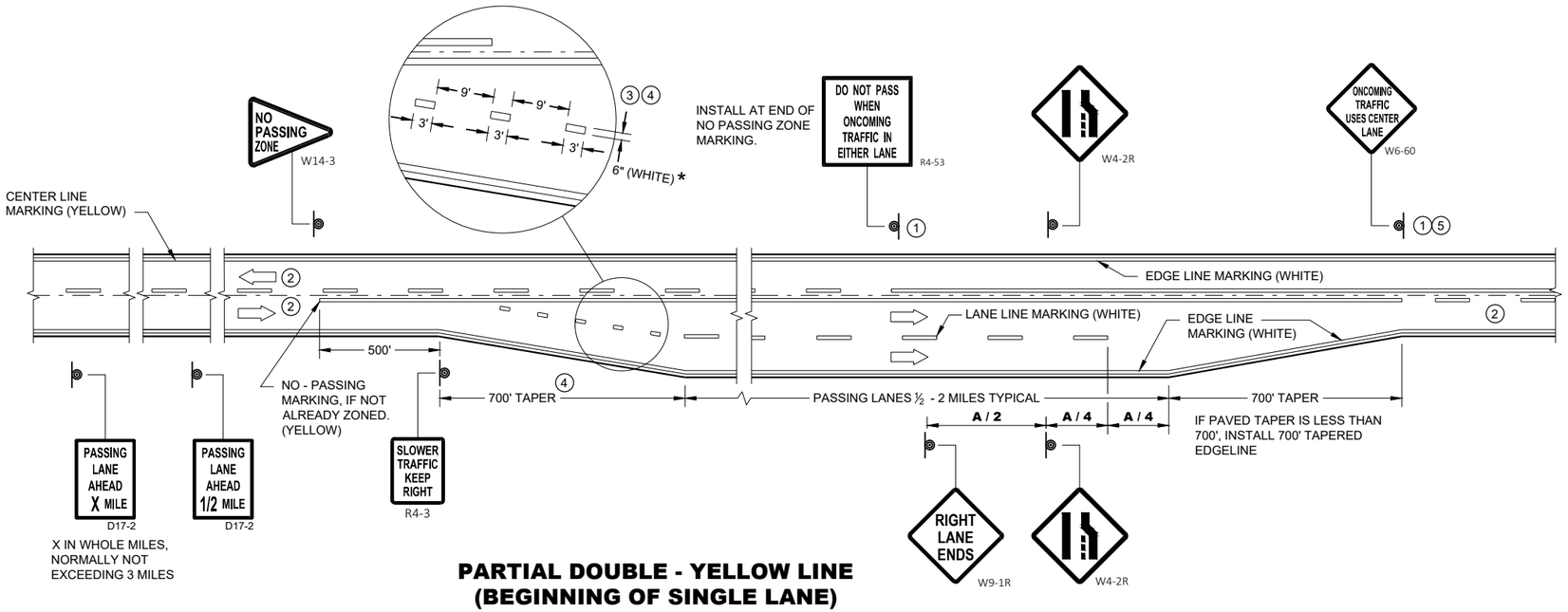
1. SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
2. THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
3. THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE, 9' GAP, EXCEPT RETRACE THE EXISTING LINE -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

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

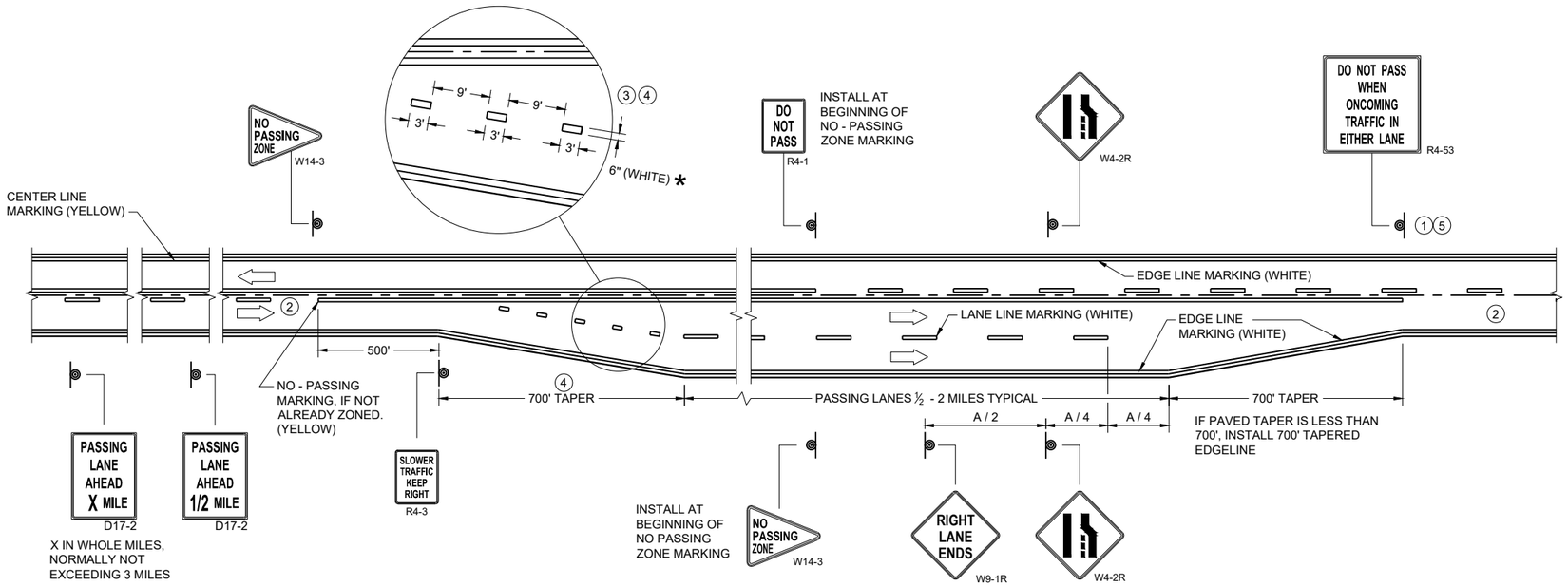
POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	775
50	885
55	990

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



PARTIAL DOUBLE - YELLOW LINE
(BEGINNING OF SINGLE LANE)

PAVEMENT MARKING & SIGNING (CLIMBING LANE & PASSING LANE)



SOLID DOUBLE - YELLOW LINE
(END OF SINGLE LANE)

GENERAL NOTES

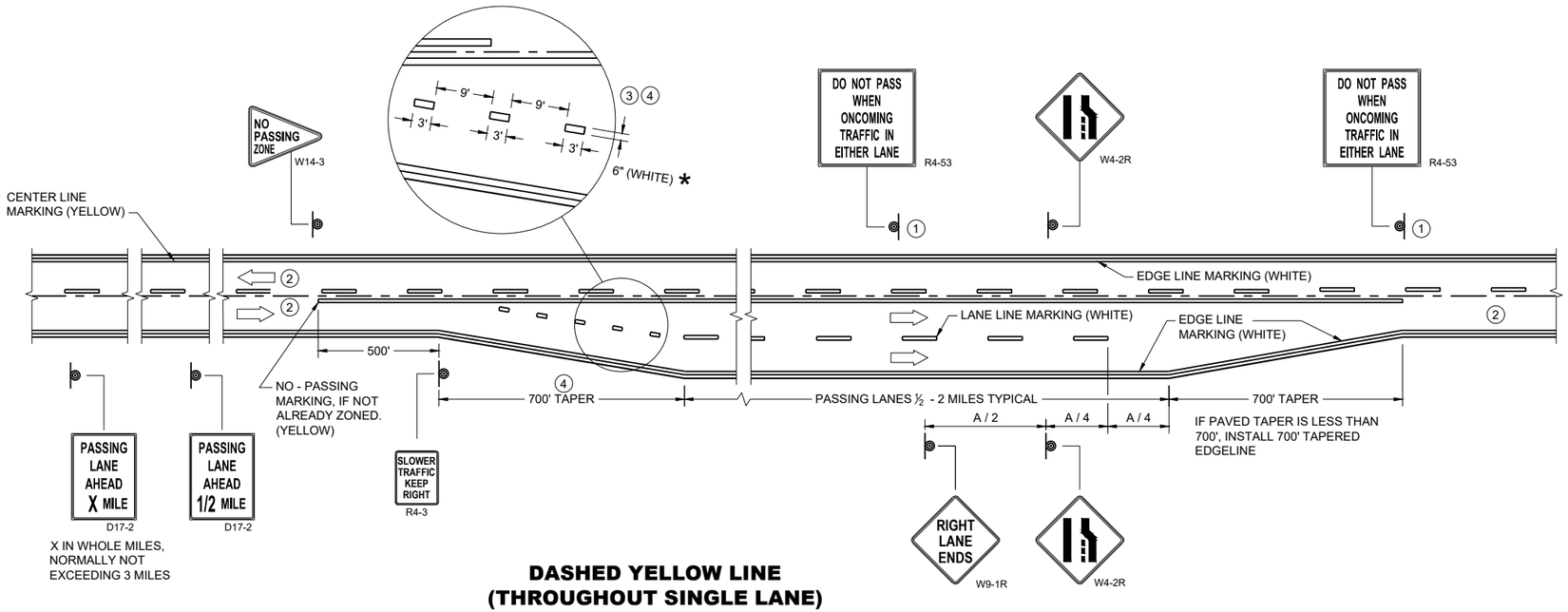
1. SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
2. THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
3. THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE, 9' GAP, EXCEPT RETRACE THE EXISTING LINE -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



DASHED YELLOW LINE
(THROUGHOUT SINGLE LANE)

PAVEMENT MARKING & SIGNING (CLIMBING LANE & PASSING LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

6

SDD 15C35-06c

SDD 15C35-06c

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.

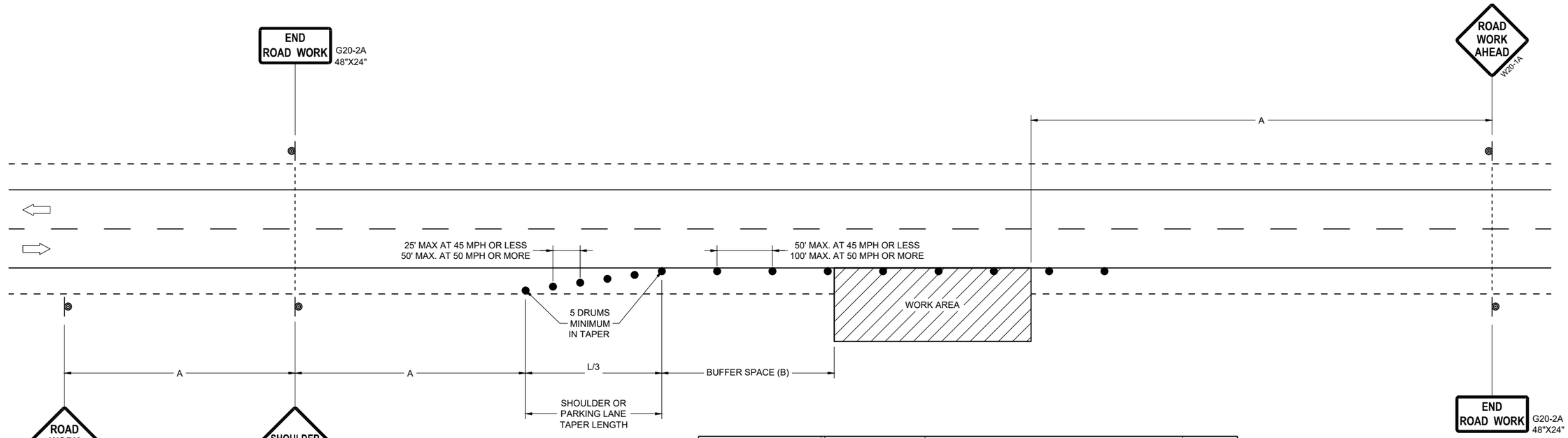
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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.



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	155
30	200'	15	20	25	30	35	40	200
35	350'	20	27	34	40	47	54	250
40	350'	26	35	44	53	62	70	305
45	500'	45	59	74	89	104	119	360
50	500'	50	66	83	99	116	132	425
55	500'	54	73	91	109	127	145	495

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

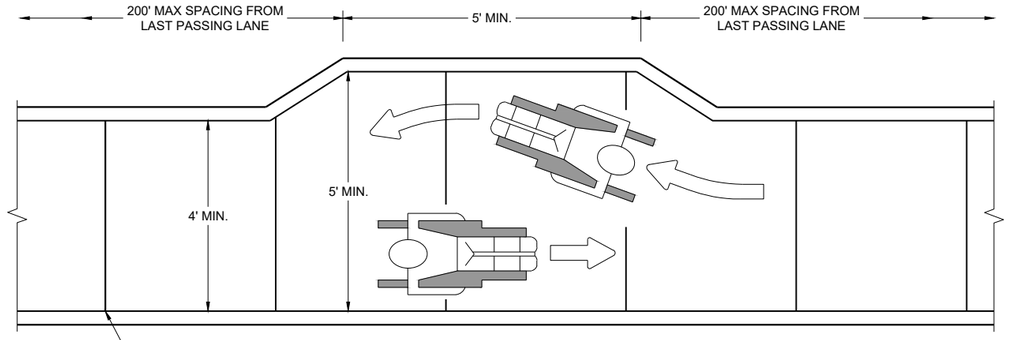
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2026
DATE

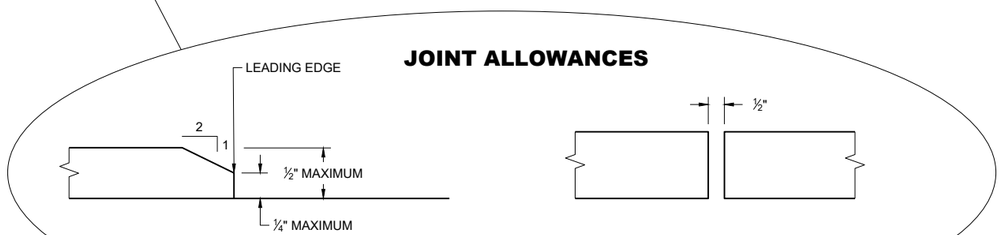
/S/ ANDREW HEIDTKE
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER

FHWA

6
SDD 15D28-06



NARROW SIDEWALK PASSING DETAIL



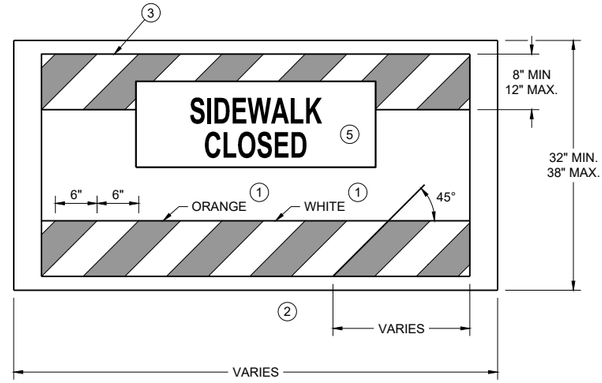
MAXIMUM VERTICAL GAP

MAXIMUM HORIZONTAL GAP

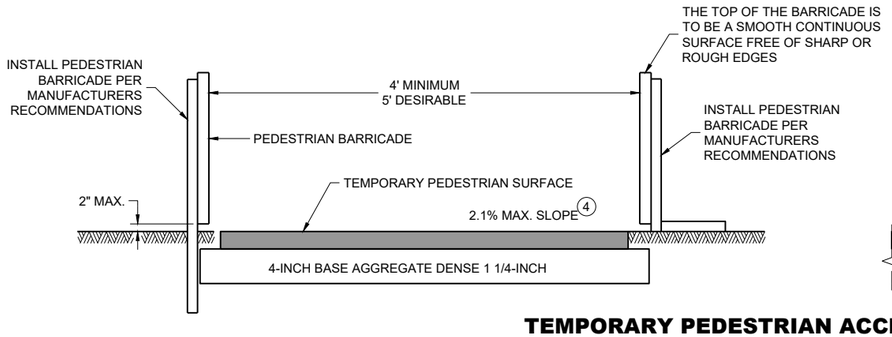
GENERAL NOTES

BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

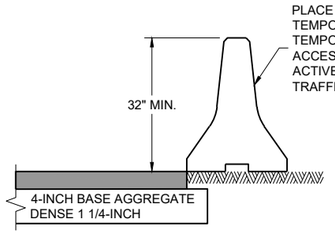
1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.
3. PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.
* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.
4. WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.
5. WHERE SIGNS FOR TEMPORARY PEDESTRIAN ACCOMMODATIONS ARE SHOWN BEING PLACED BEHIND TEMPORARY PEDESTRIAN BARRICADE, THE SIGNS MAY BE MOUNTED ON THE TEMPORARY PEDESTRIAN BARRICADE INSTEAD. A CORRUGATED POLYPROPYLENE OR POLYETHYLENE PLASTIC SIGN BASE SHALL BE USED IF MOUNTED ON THE BARRICADE. THE TOP OF THE SIGN SHALL BE MOUNTED BELOW THE TOP OF THE BARRICADE TO ALLOW A CONTINUOUS HAND-TRAILING EDGE.

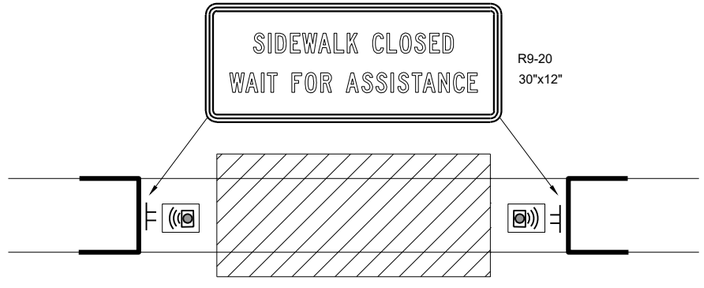


TEMPORARY PEDESTRIAN BARRICADE *



TEMPORARY PEDESTRIAN ACCESS





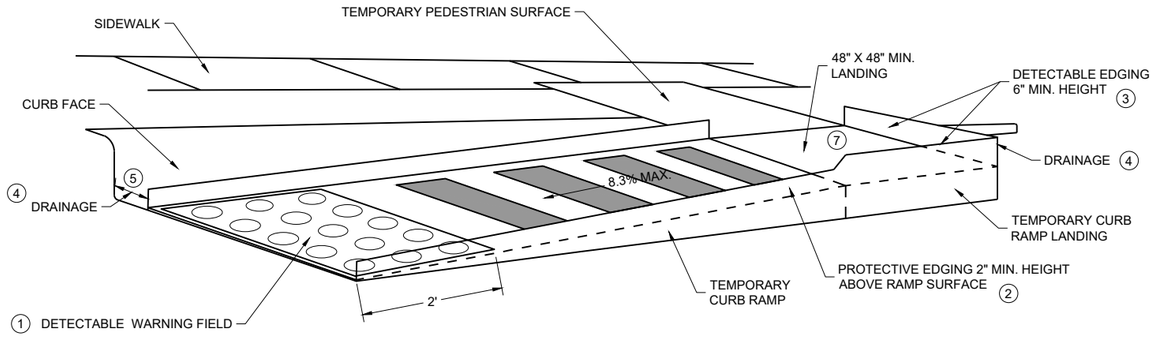
TEMPORARY PEDESTRIAN FLAGGING

LEGEND

- TEMPORARY PEDESTRIAN BARRICADE
- AUDIBLE MESSAGE DEVICE
- TEMPORARY SIGN SUPPORT
- WORK AREA

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



PERSPECTIVE VIEW

GENERAL NOTES

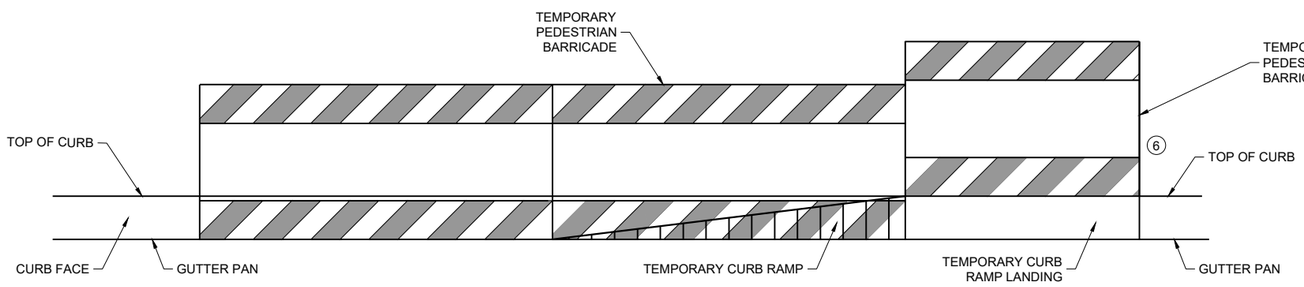
CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:48 (2.1%) MAX. CROSS-SLOPE.

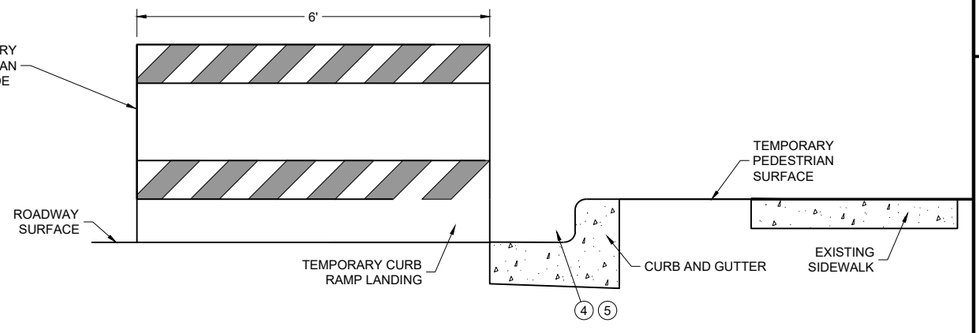
CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

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. 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.
7. LANDING TO BE SLOPED A MAXIMUM OF 2.1% IN ALL DIRECTIONS OF PEDESTRIAN TRAVEL.



FRONT VIEW



SIDE VIEW

TEMPORARY CURB RAMP PARALLEL TO CURB

6

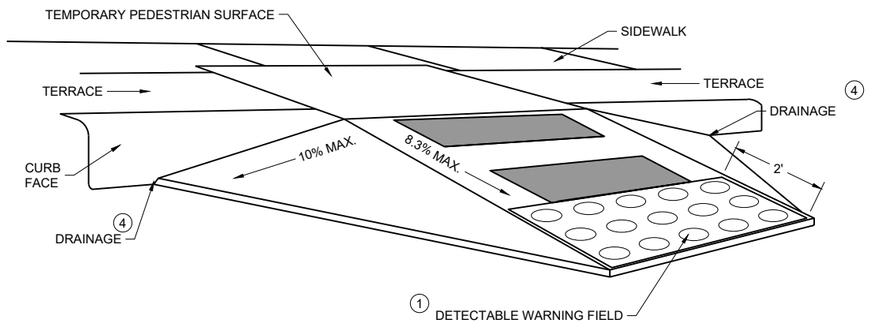
SDD 15D30-12b

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

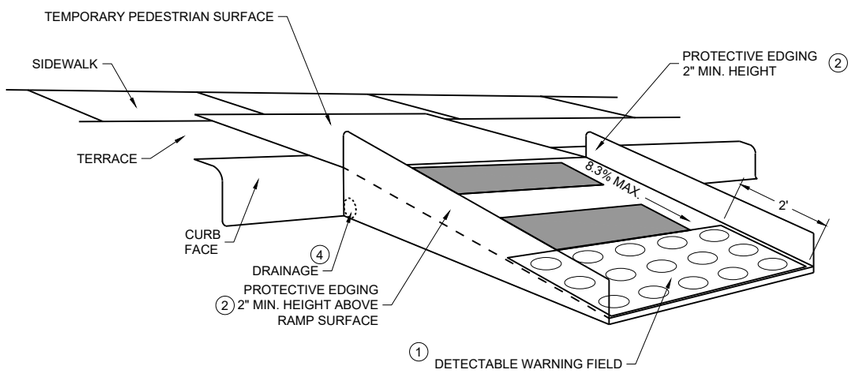
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D30-12b



WITH SIDE APRON (5)



WITH PROTECTIVE EDGE

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 1:48 (2.1%) 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.

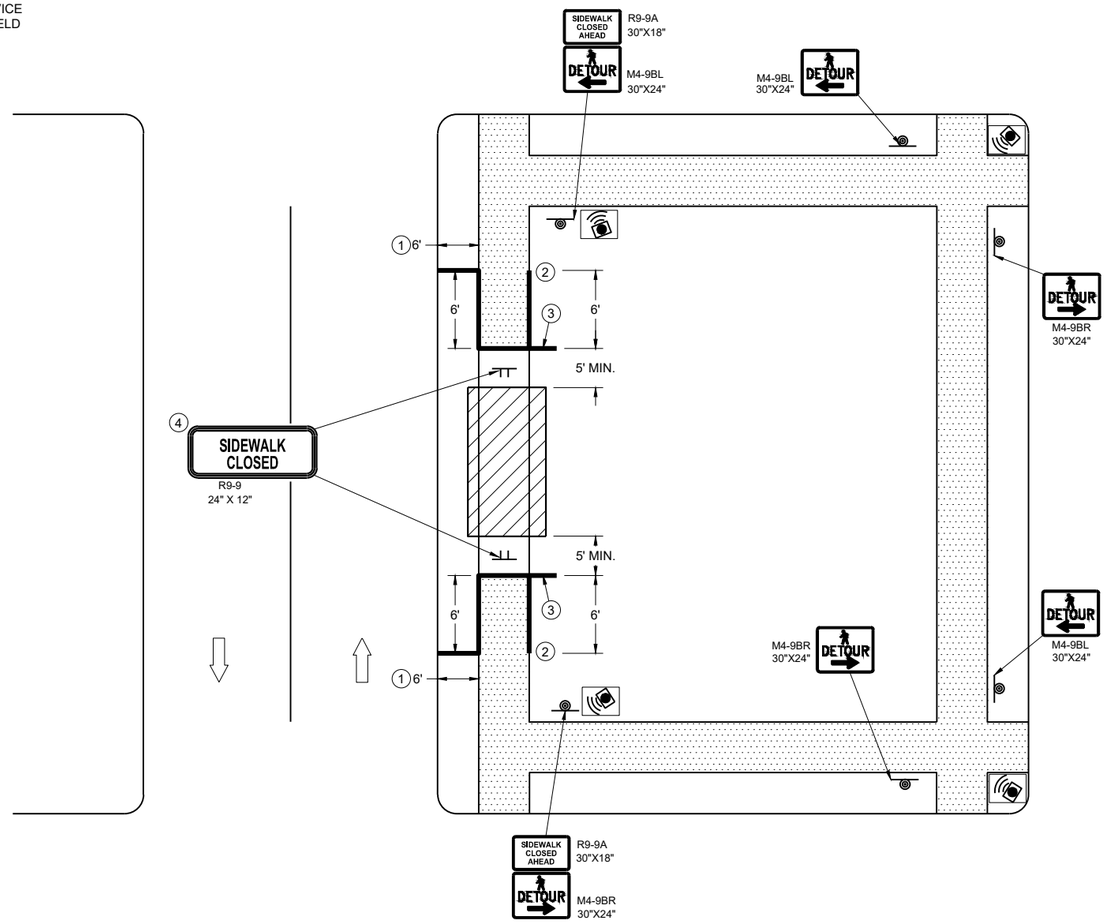
(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(5) CAN ONLY BE USED FOR RAMPS WITH 6" OR LESS OF VERTICAL CHANGE.

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)



SIDEWALK DETOUR, SIDEWALK ONLY ON ONE SIDE

GENERAL NOTES

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.

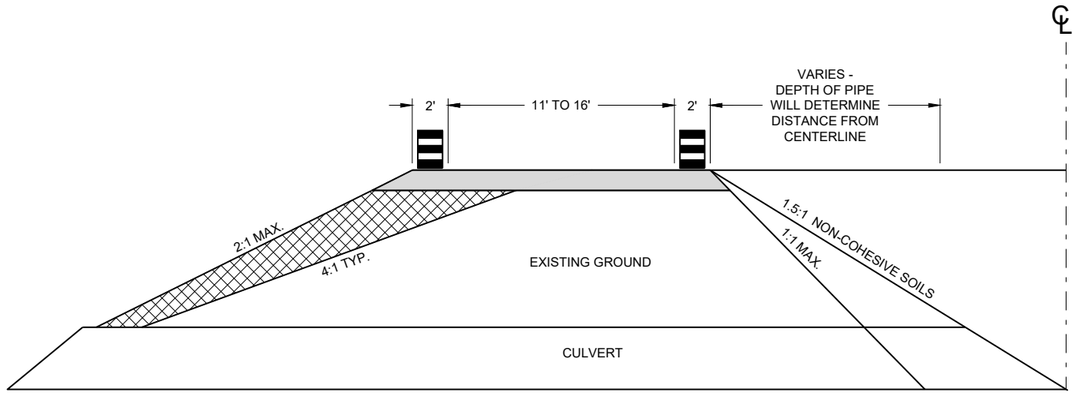
1. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
2. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
3. IF TEMPORARY PEDESTRIAN 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.

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D30-12f



CROSS SECTION

GENERAL NOTES

USE 1:1 FOR COHESIVE CLAYS AND SILTS, LOAMS, SANDY CLAYS AND ANGULAR GRAVEL SOILS.
USE 1.5:1 FOR NON-COHESIVE SOILS.

THE TAPER SHOULD EXTEND ACROSS THE SHOULDER UNLESS DOING SO WOULD GREATLY CONFLICT WITH THE WORK OPERATION.

ALL LANE CLOSURE SIGNS SHALL BE REMOVED OR COVERED AND ALL DEVICES REMOVED BEYOND THE SHOULDER WHEN WORK IS NOT IN PROGRESS AND THE LANE IS RESTORED TO A SAFE OPERATING CONDITION.

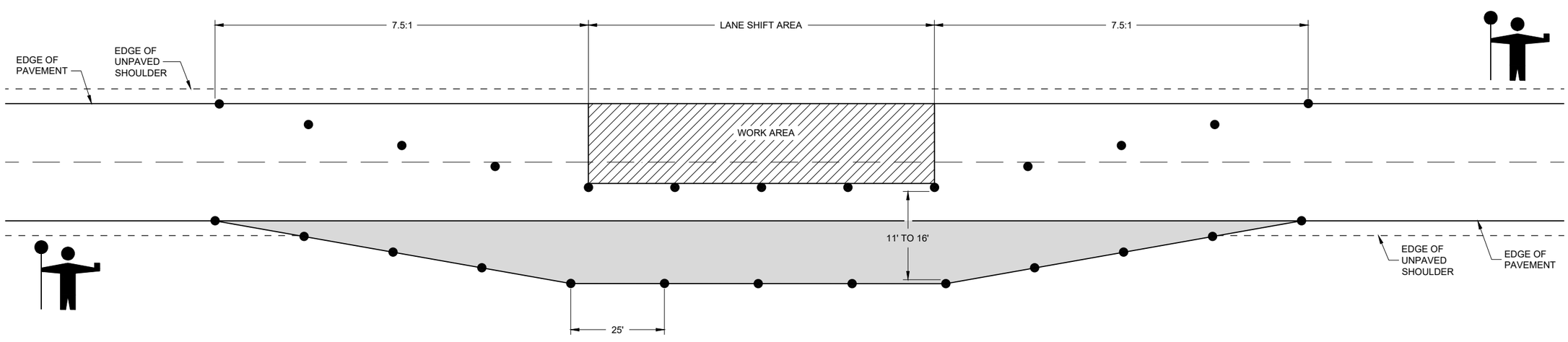
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

USE WITH SDD 15C12 "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATIONS"

USE WITH SDD 15D45 "SIGNING ON ROADWAYS WITH LOOSE GRAVEL"

LEGEND

- DRUM WITHOUT WARNING LIGHT
- 6" BASE AGGREGATE DENSE 1 ¼" -INCIDENTAL TO LANE SHIFT ITEM
- FILL - INCIDENTAL TO LANE SHIFT ITEM
- WORK AREA
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF



LANE SHIFT IN FLAGGING OPERATION

TRAFFIC CONTROL, TEMPORARY LANE SHIFT DURING CULVERT WORK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D48 - 01

6

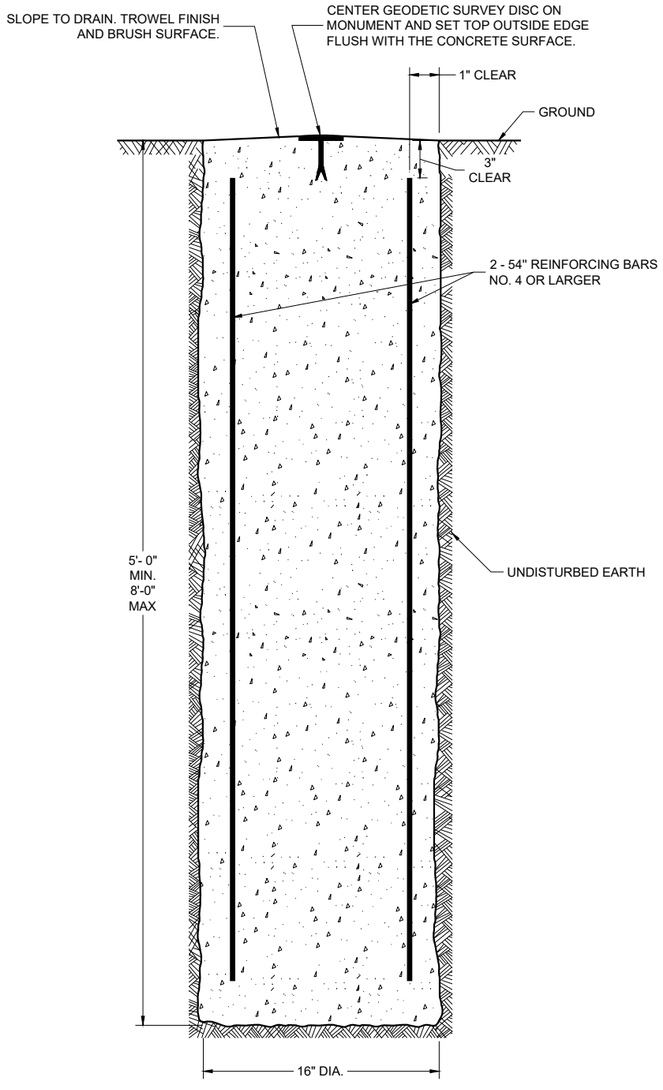
SDD 15D48 - 01

GENERAL NOTES

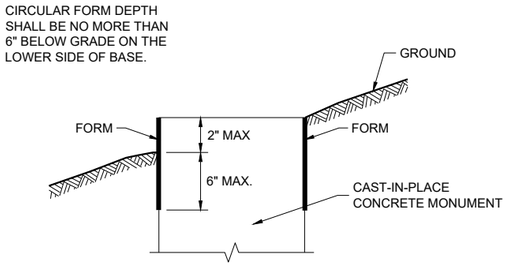
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

SURVEY MONUMENT SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

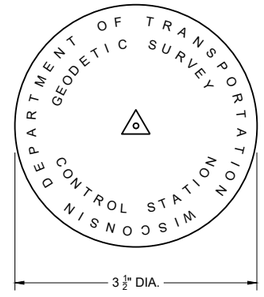
IF A SURVEY MONUMENT REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.



CAST-IN-PLACE CONCRETE MONUMENT



FORMING DETAIL



GEODETIC SURVEY DISC
FURNISHED BY WISDOT

GEODETIC SURVEY MONUMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2025 — DATE
/S/ DAVID J. LAYTON — CHIEF SURVEY AND MAPPING ENGINEER

FHWA

6

SDD 16A02-01

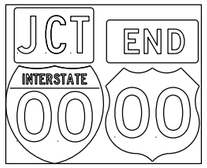
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SDD 16A02-01

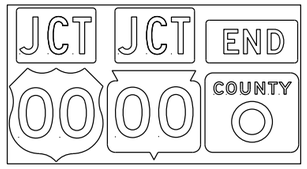
TYPICAL ASSEMBLIES



J1-1



J1-2



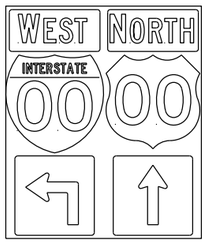
J1-3



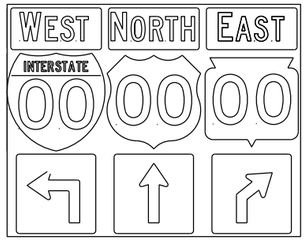
JR1-1



J2-1



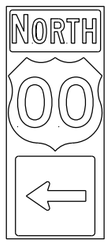
J2-2



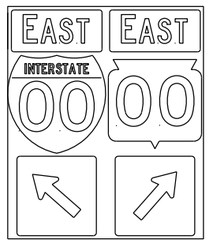
J2-3



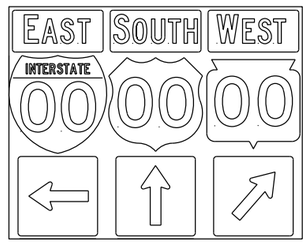
JV
(Typical Vertical J-Assembly
See Note 10 and 11)



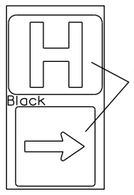
J3-1



J3-2



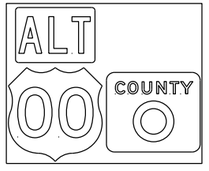
J3-3



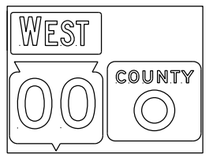
JH-1



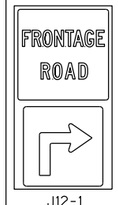
J4-1



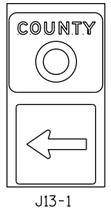
J4-2



J4-2



J12-1



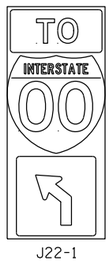
J13-1



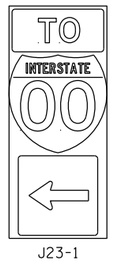
J32-1



J33-1



J22-1



J23-1



JR13-1

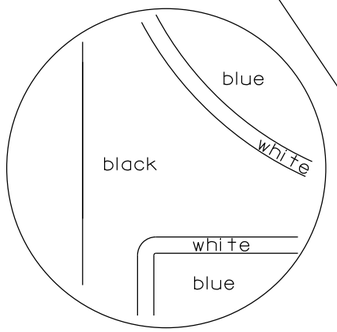


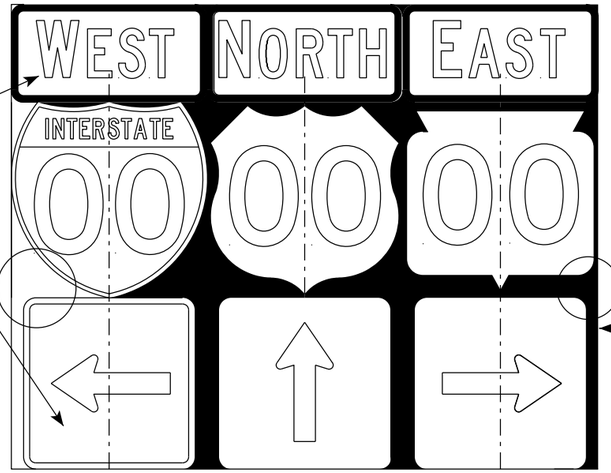
JR23-1

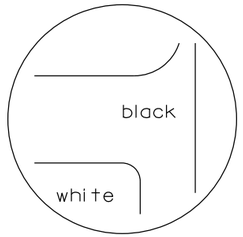


JR99-1

blue background with interstate







black background

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 inchs (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.

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

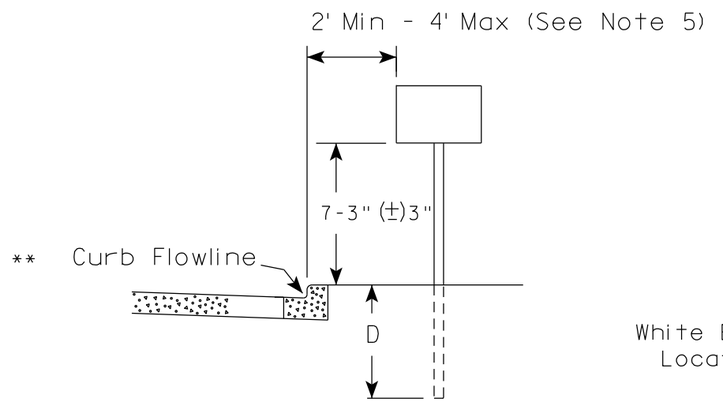
APPROVED Matthew R Rauch
for State Traffic Engineer

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

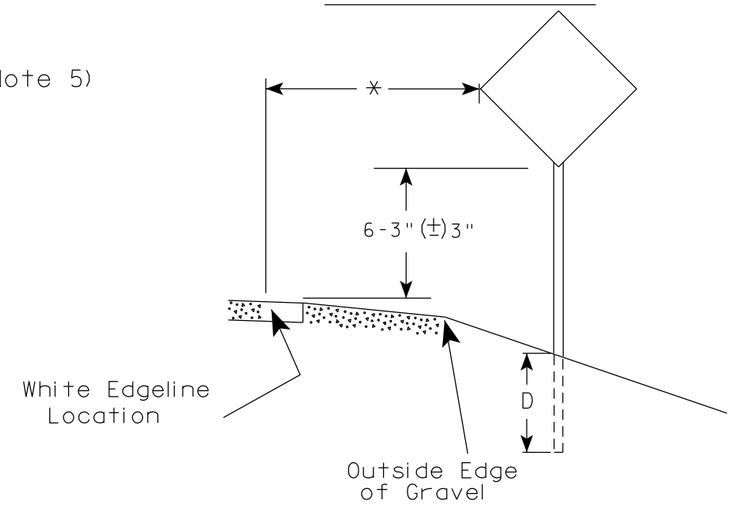
PROJECT NO:

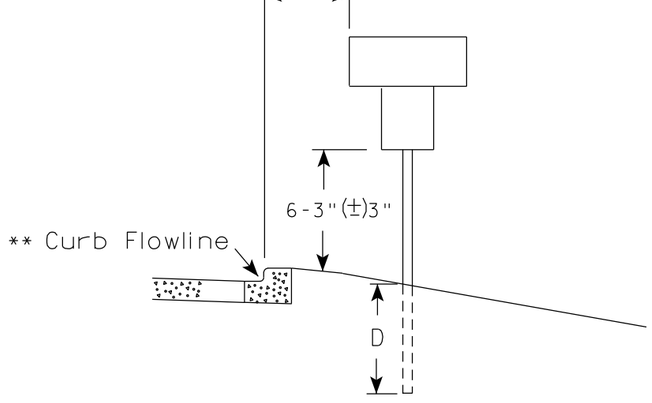
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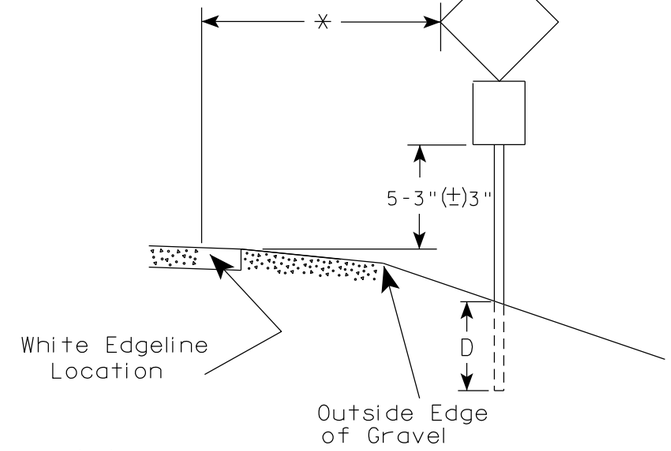
URBAN AREA



RURAL AREA (See Note 2)







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

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

POST EMBEDMENT DEPTH

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

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±) 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".
3. For expressways and freeways, mounting height is 7'- 3" (±) 3" or 6'-3" (±) 3" depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±) 3".
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directd by the Engineer.

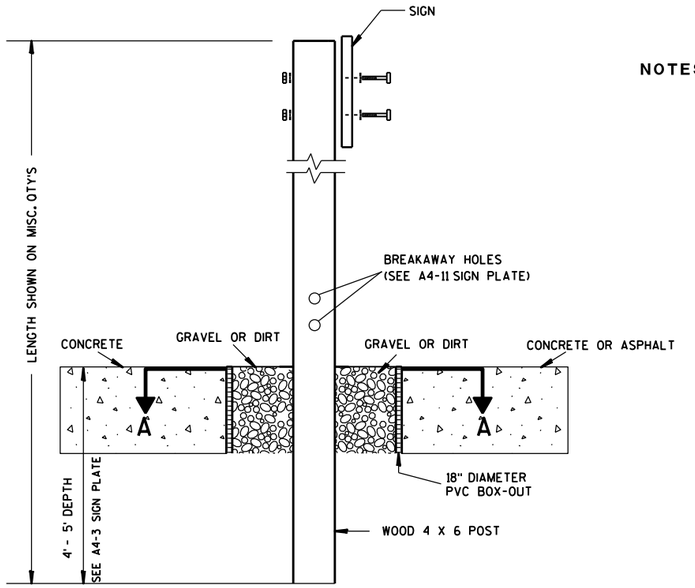
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-3.23

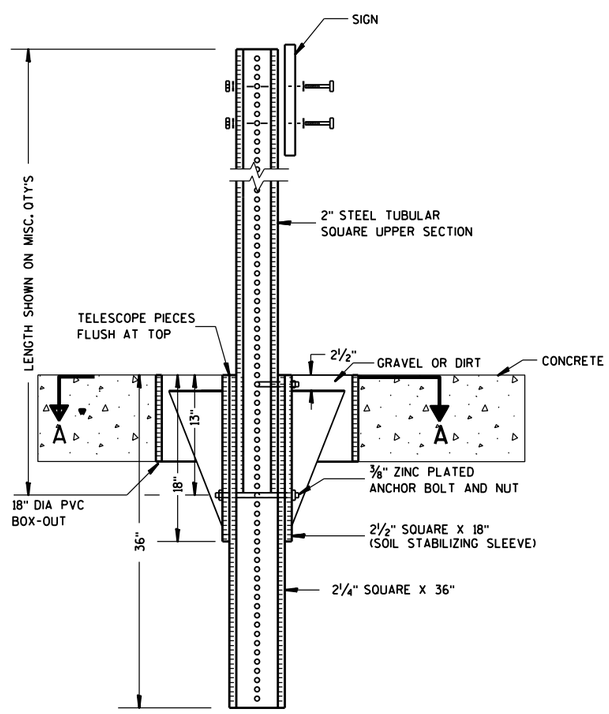
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 103	E



ELEVATION VIEW

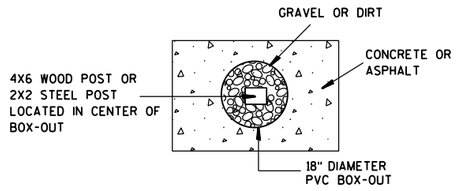
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

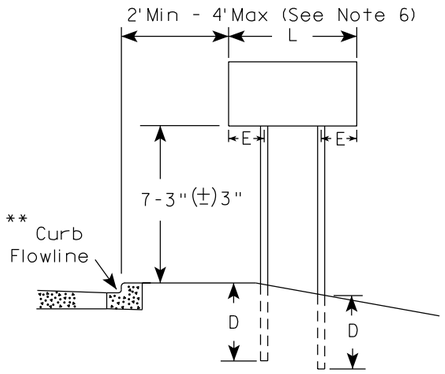
APPROVED Matthew R Rauch
for State Traffic Engineer

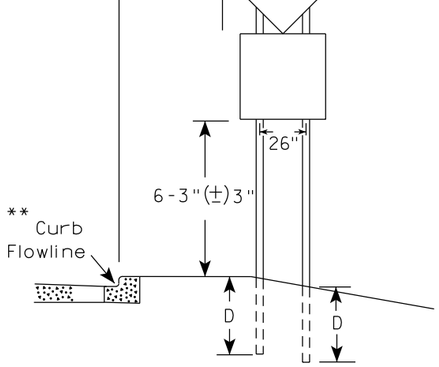
DATE 1/27/14 PLATE NO. A4-3B.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

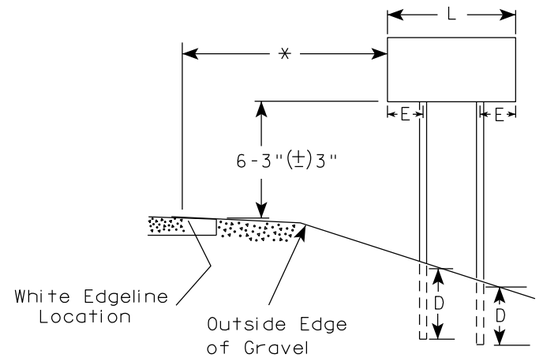
URBAN AREA

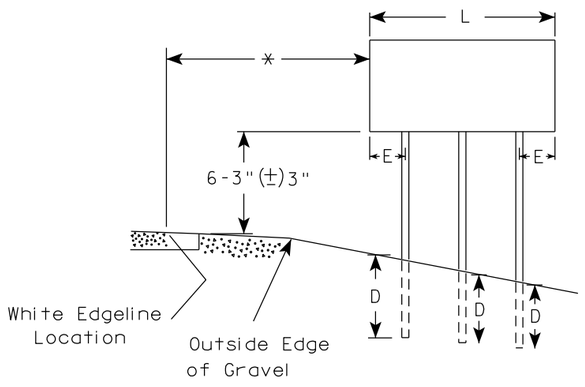


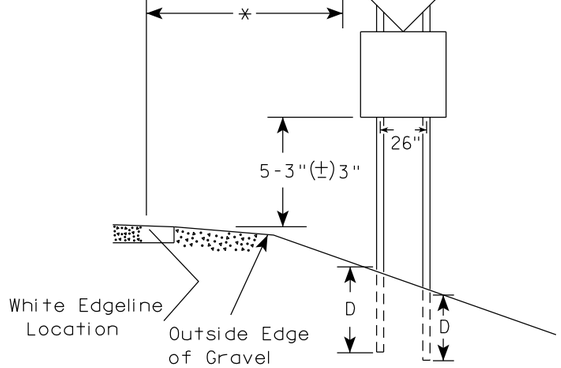


48" DIAMOND WARNING SIGN

RURAL AREA (See Note 3)







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"

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) 3" or 6'-3" (±) 3" depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directed by the engineer.
8. 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.

POST EMBEDMENT DEPTH

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

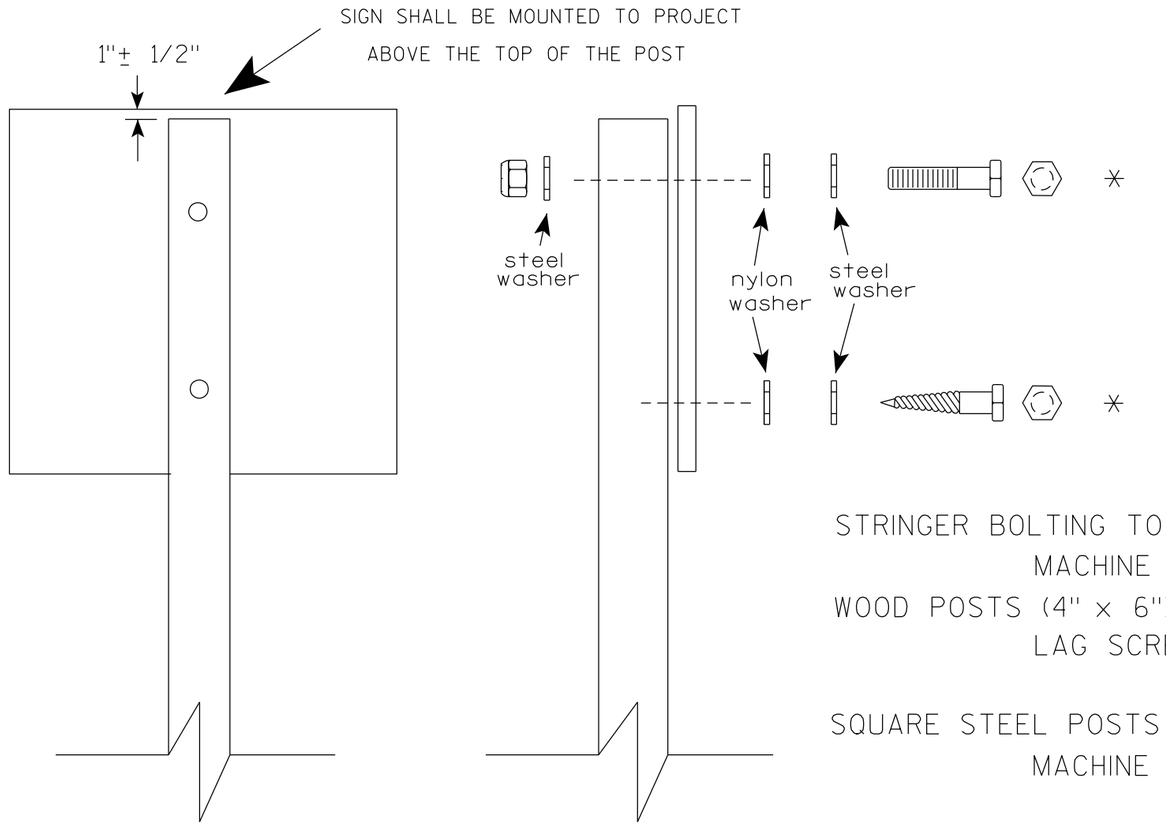
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-4.16

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 105	E



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

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

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

ATTACHMENT OF SIGNS TO POSTS

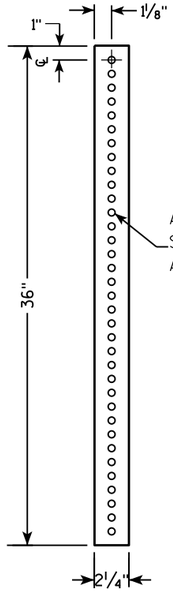
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

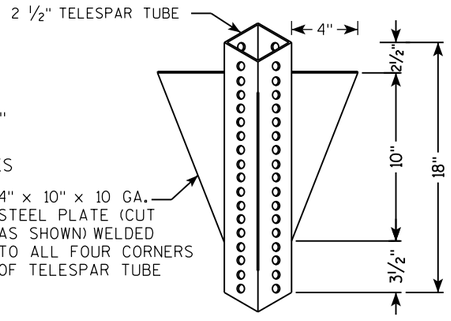
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

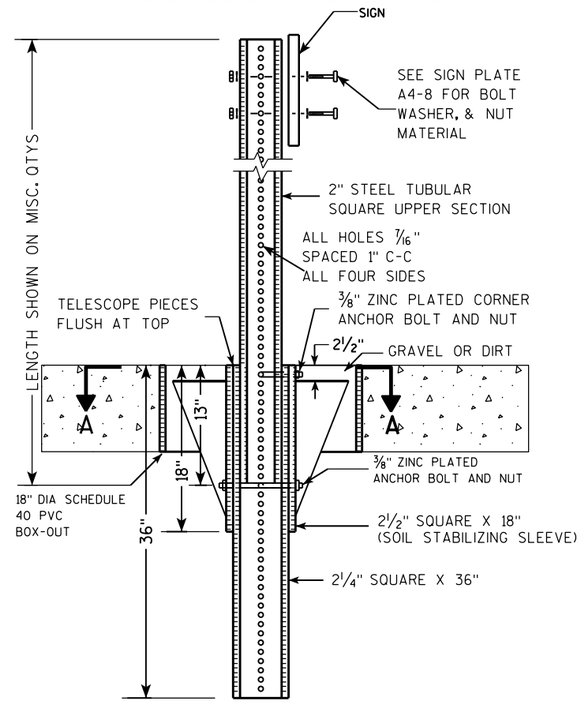
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



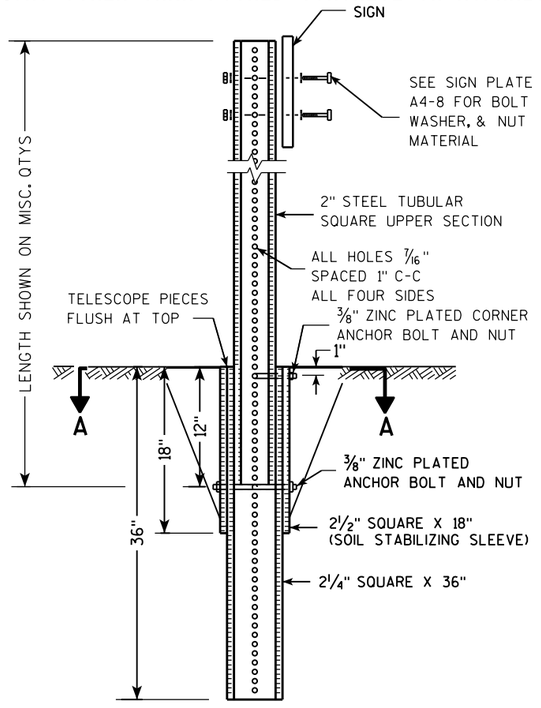
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

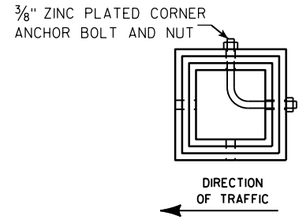


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





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

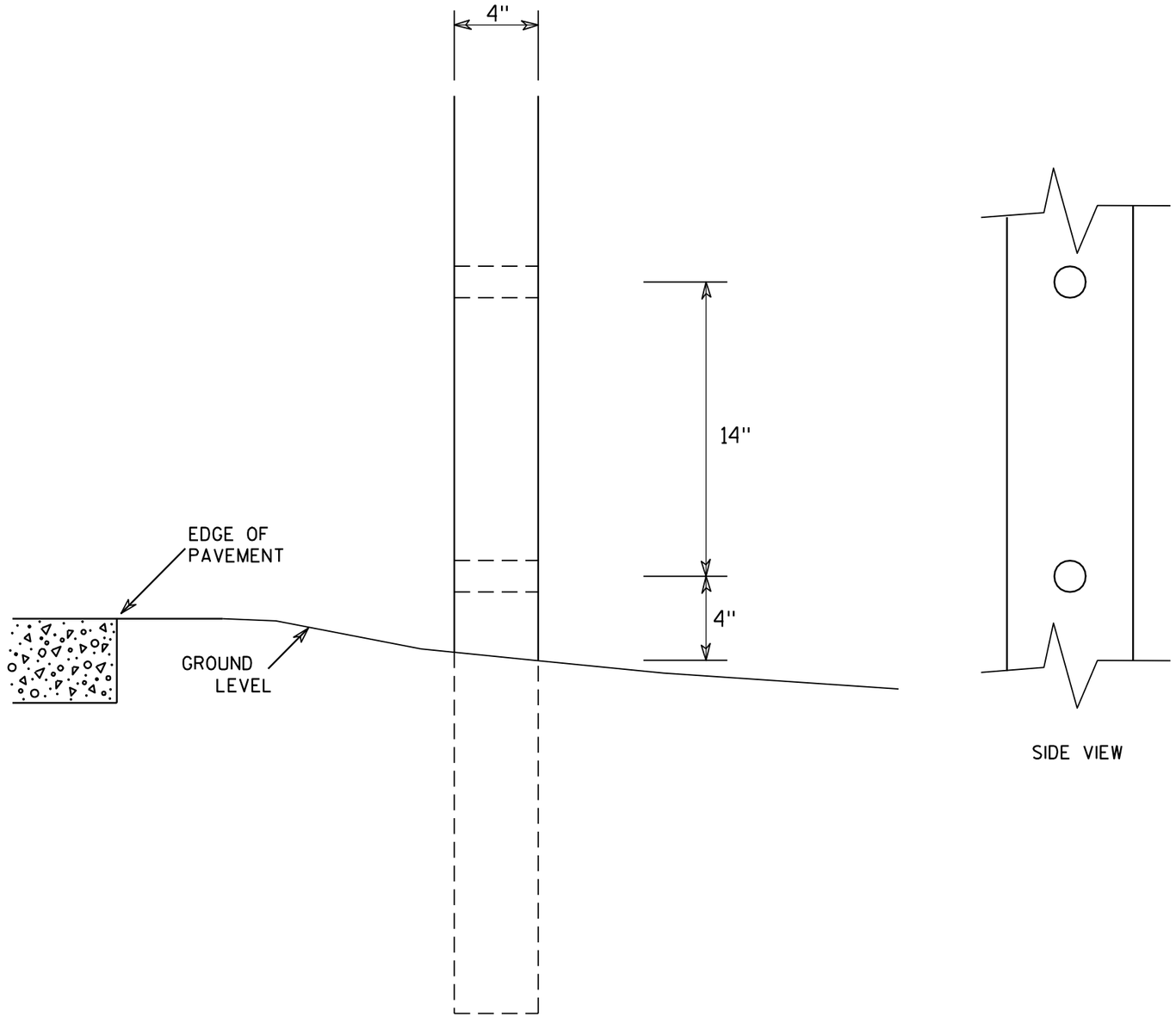
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja 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 1½" diameter holes drilled perpendicular to the roadway centerline.

7

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

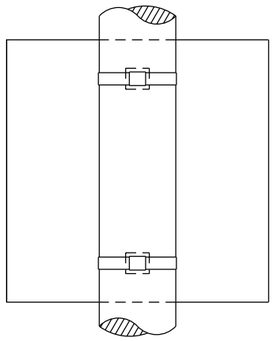
APPROVED Chester J Spang
for State Traffic Engineer

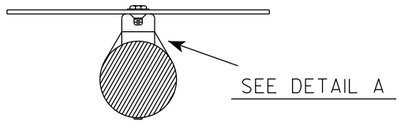
DATE 3/27/97 PLATE NO. A4-11.2

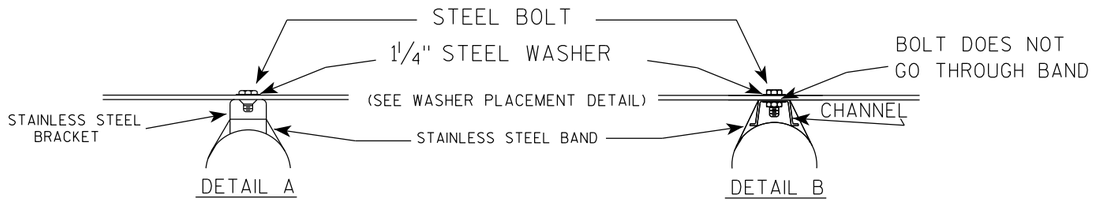
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 108	E

BANDING

SINGLE SIGN



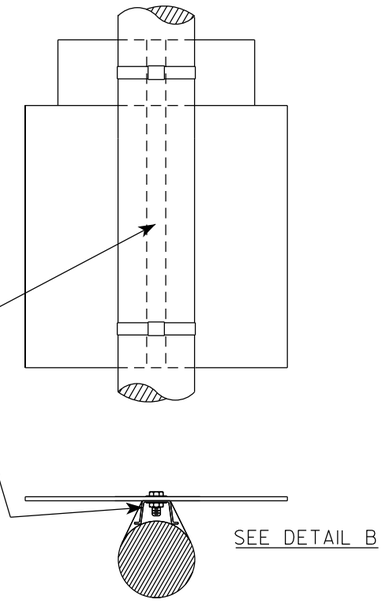




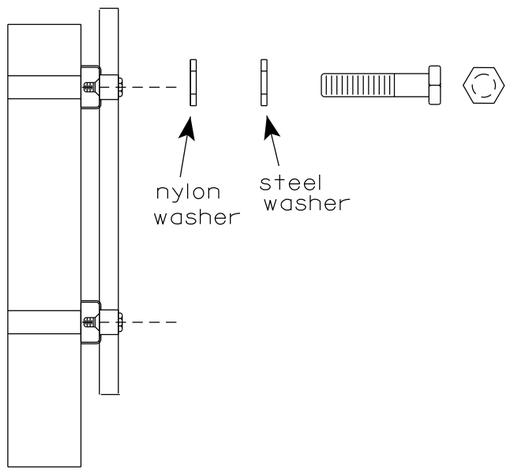
GENERAL NOTES

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 ¾" 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



WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X ⅜" I.D. X 1/16" STEEL
1-1/4" O.D. X ⅜" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

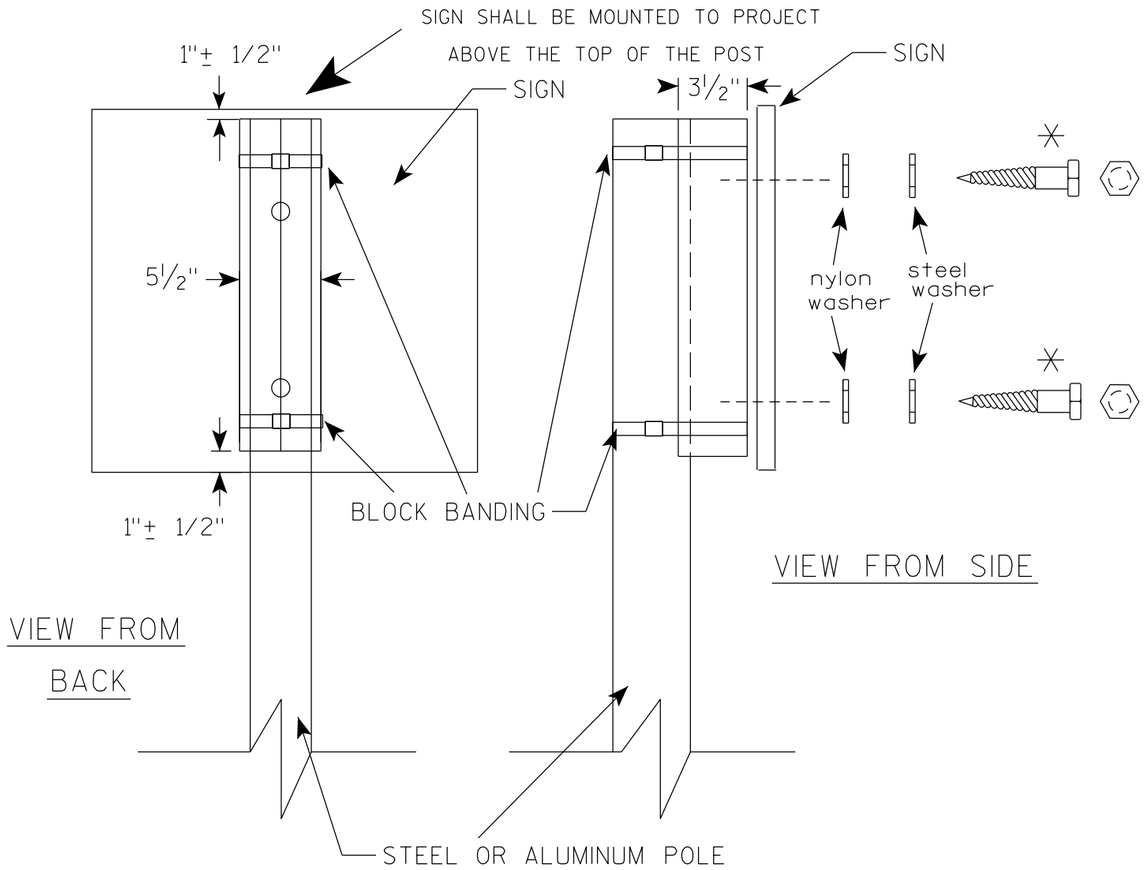
WISCONSIN DEPT OF TRANSPORTATION

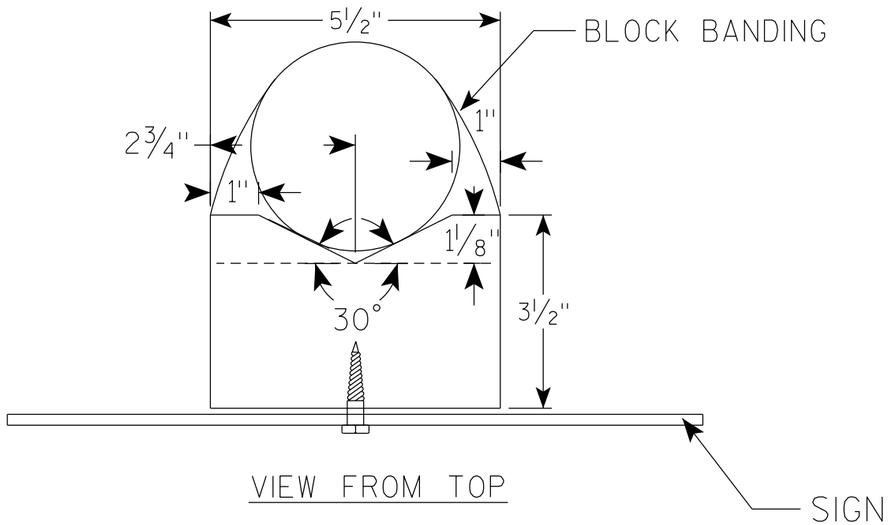
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 109	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$





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, ¾" 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 NORNALLY 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 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

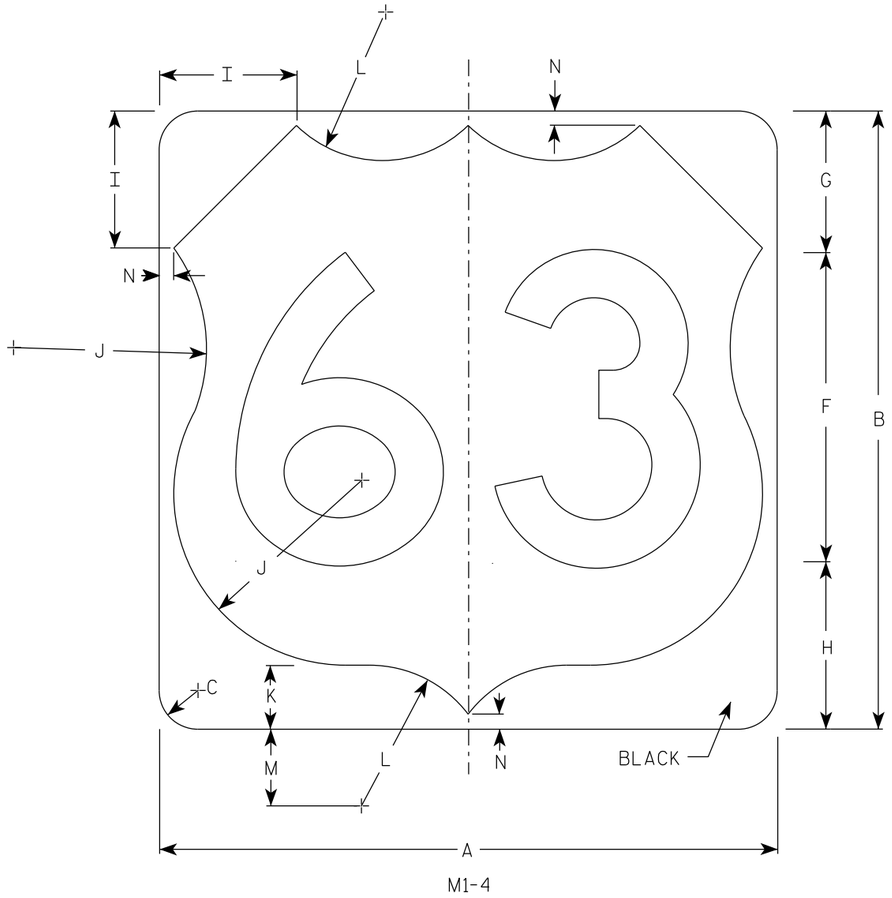
DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

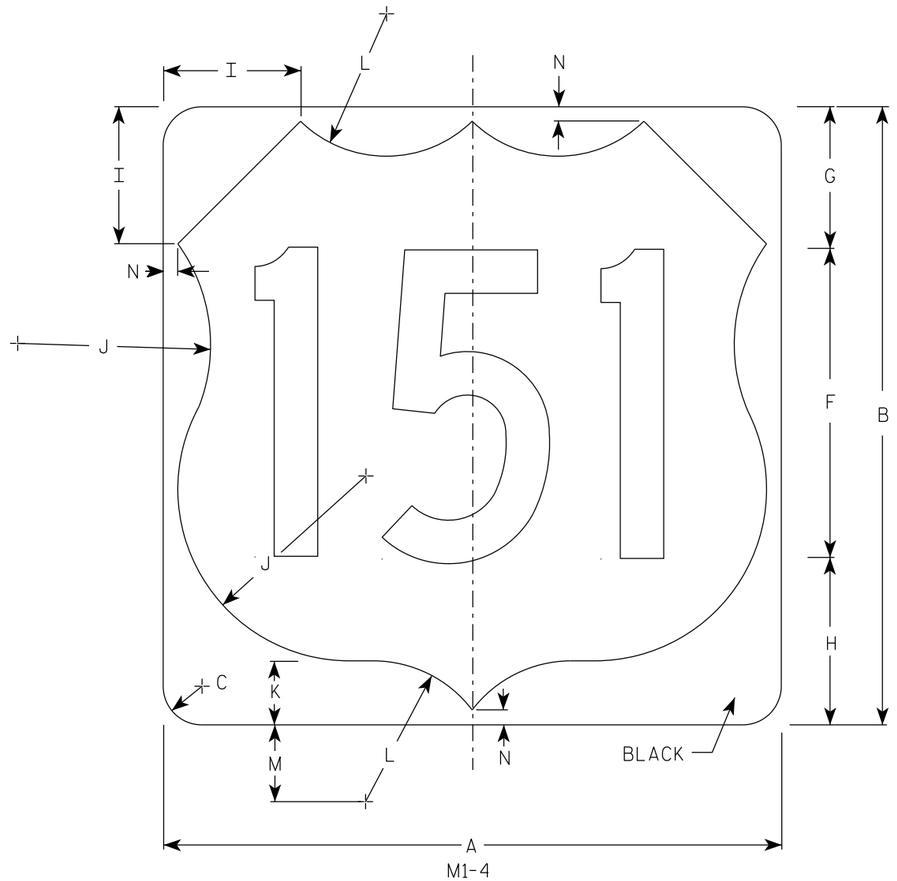
SHEET NO: 110 E

NOTES

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



M1-4



M1-4

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																											
2	24	24	1 1/2			12	5 1/2	6 1/2	5	7 1/2	2 1/2	5 1/2	3	1/2													4.0
2M	24	24	1 1/2			12	5 1/2	6 1/2	5	7 1/2	2 1/2	5 1/2	3	1/2													4.0
3	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0
4	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0
5	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0

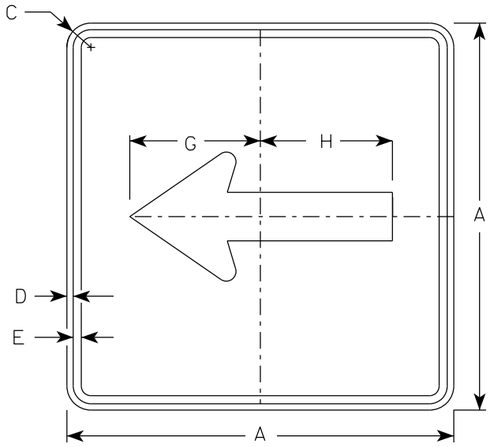
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

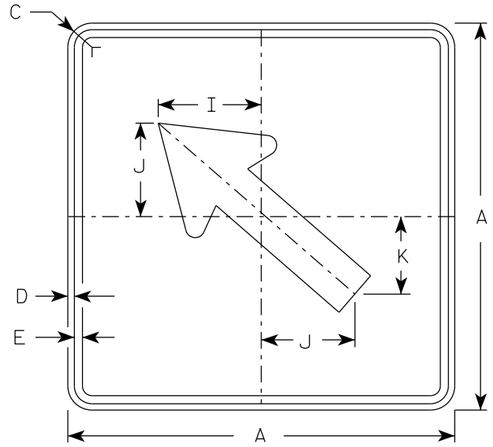
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/20/22 PLATE NO. M1-4.11

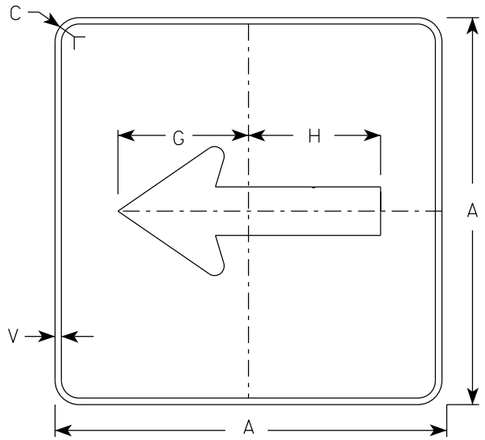
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 111 E



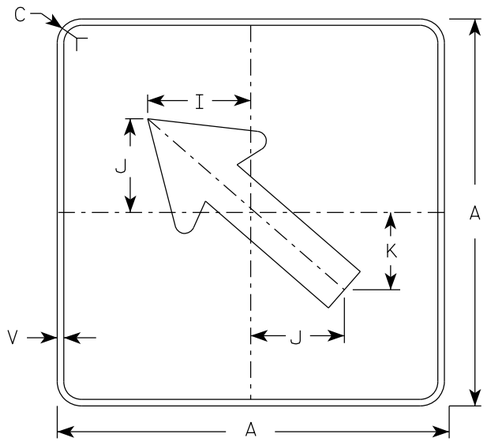
M6-1
MM6-1
MO6-1
MP6-1



M6-2
MM6-2
MO6-2
MP6-2



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

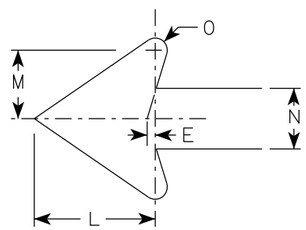


MB6-2
MK6-2
MN6-2
MR6-2

NOTES

1. Signs are Type II - Type H 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
   MO6-1 and MO6-2 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

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	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

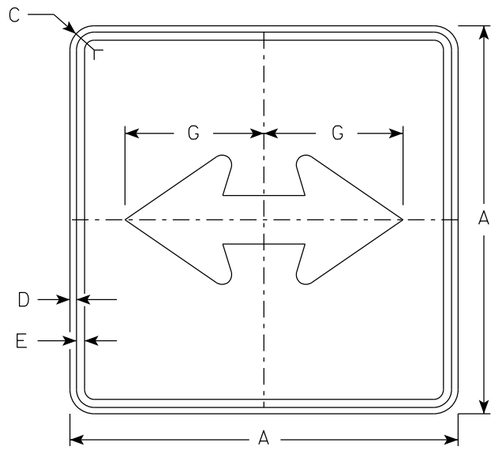
STANDARD SIGN
M6-1 & M6-2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

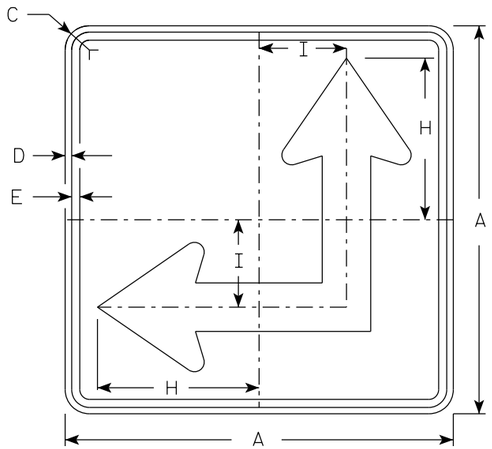
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/13/2023 PLATE NO. M6-1.16

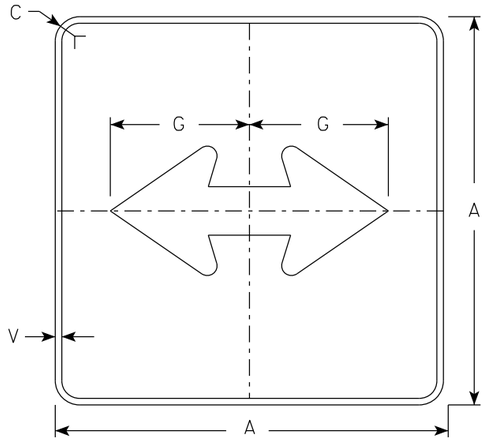
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 112 | E



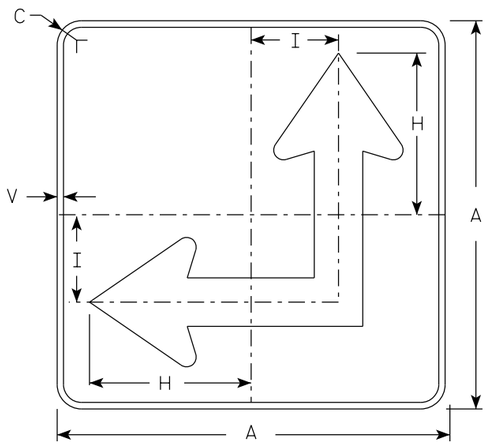
M6-4
MM6-4
MO6-4
MP6-4



M6-6
MM6-6
MO6-6
MP6-6



MB6-4
MK6-4
MN6-4
MR6-4

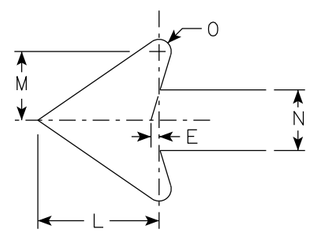


MB6-6
MK6-6
MN6-6
MR6-6

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. M6-4 and M6-6 Background - White
   Message - Black
   MB6-4 and MB6-6 Background - Blue
   Message - White
   MK6-4 and MK6-6 Background - Green
   Message - White
   MM6-4 and MM6-6 Background - White
   Message - Green
   MN6-4 and MN6-6 Background - Brown
   Message - White
   MO6-4 and MO6-6 Background - Orange - Type F Reflective
   Message - Black
   MP6-4 and MP6-6 Background - White
   Message - Blue
   MR6-4 and MR6-6 Background - Brown
   Message - Yellow
5. M6-6R same as M6-6L except arrow points ahead and right.

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	21		1 1/2	3/8	3/8		7 1/2	8 3/4	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	8 3/4	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	12 1/2	6 3/4			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	12 1/2	6 3/4			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	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4							1/2					6.25

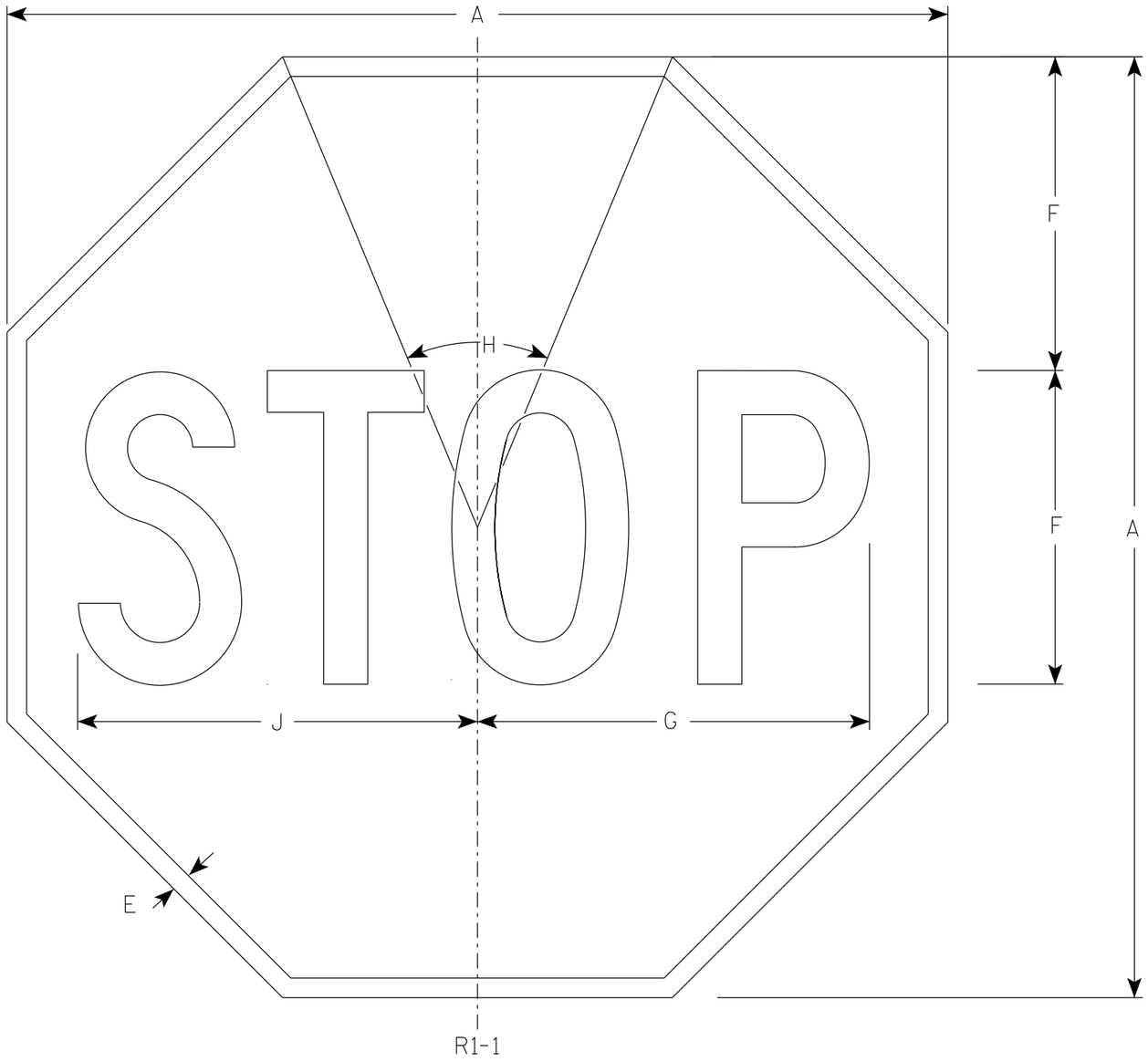
STANDARD SIGN
M6-4 & M6-6
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/13/2023 PLATE NO. M6-4.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 113 | E



NOTES

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

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

STANDARD SIGN

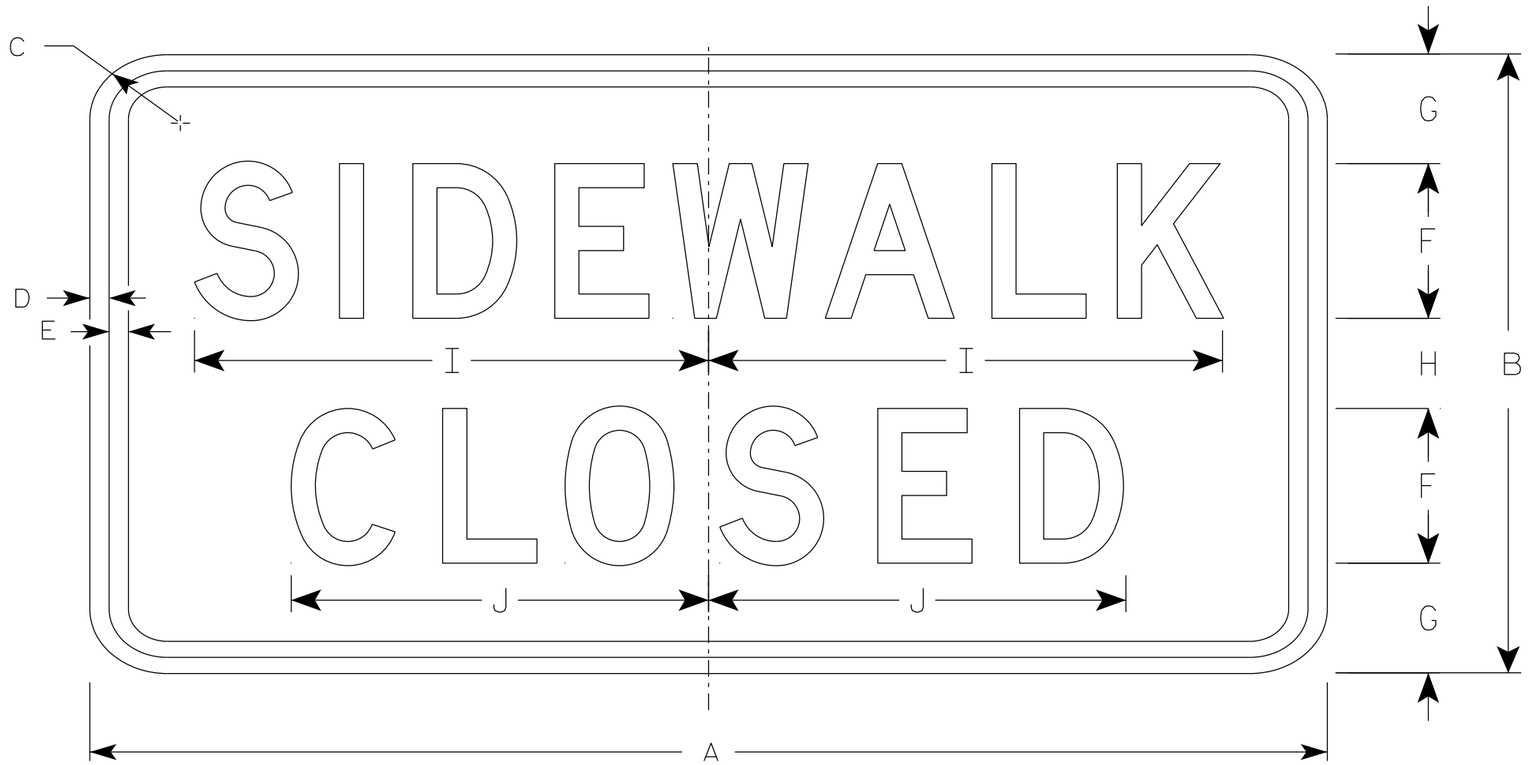
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/9/2025 PLATE NO. R1-1.14

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 114 | E



R9-9

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

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 ½	½	½	3	2 ⅛	1 ¾	10	8 ⅛																	2.0
2M	24	12	1 ½	½	½	3	2 ⅛	1 ¾	10	8 ⅛																	2.0
3	30	18	1 ½	½	½	4	3 ½	3	12 ½	10 ¼																	3.75
4																											
5																											

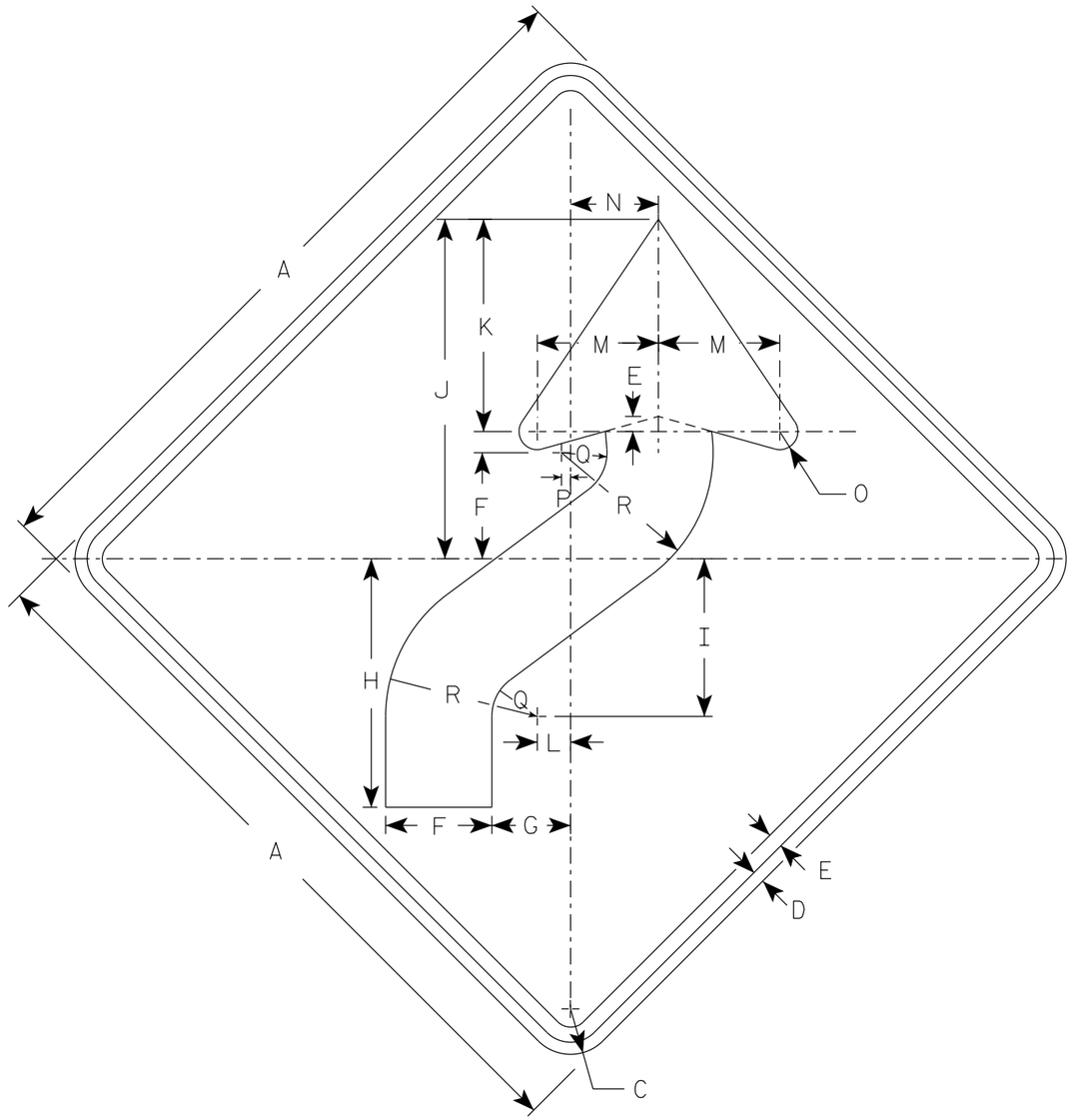
STANDARD SIGN
R9-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/24 PLATE NO. R9-9.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 115 | E



W1-4R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. W1-4L is the same as W1-4R except the arrow is reversed along the vertical centerline.

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

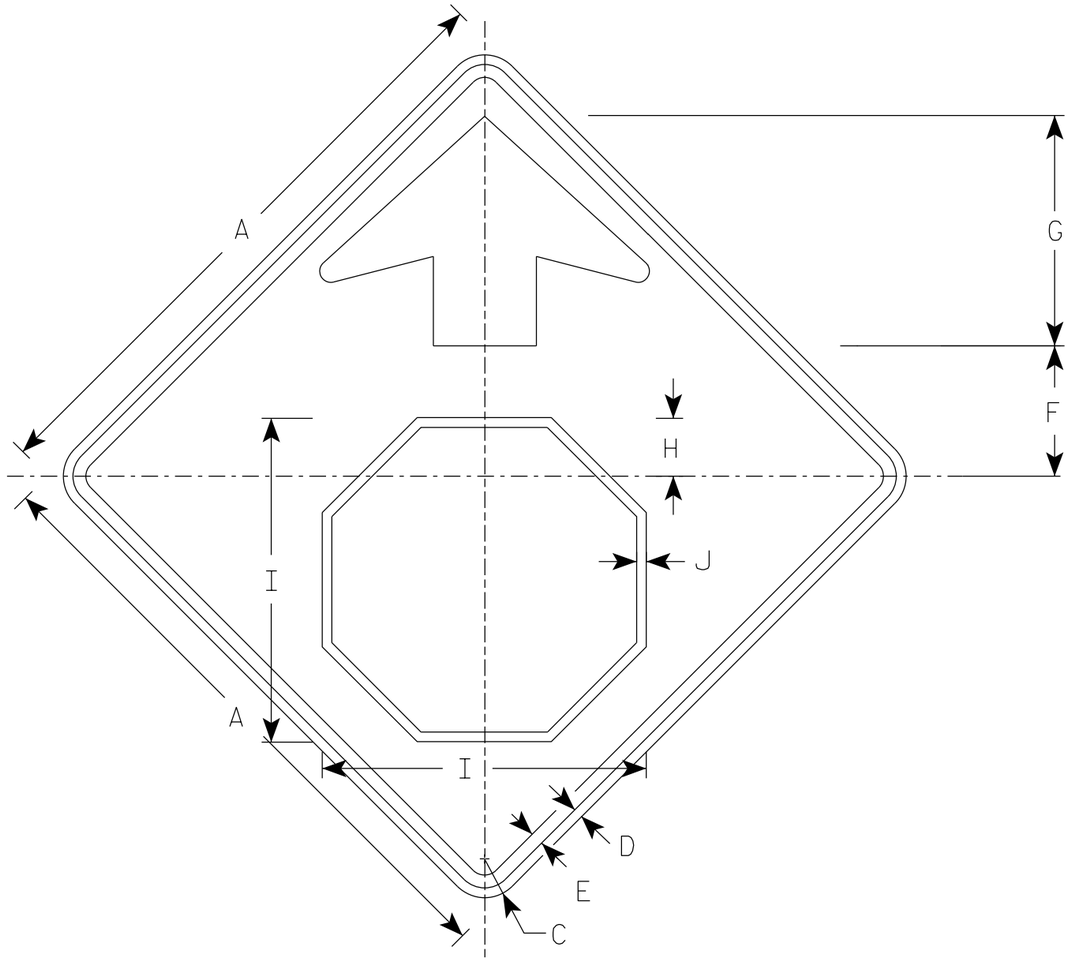
STANDARD SIGN
W1-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 3/23/2023 PLATE NO. W1-4.12

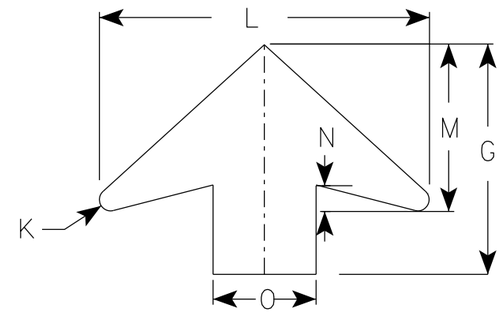
PROJECT NO:	HWY:	COUNTY:		SHEET NO: E



W3-1

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Arrow & Border - Black
   Stop Symbol - White Border on Red Background



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 7/8	1/2	5/8	6 1/4	11 1/4	2 7/8	15 3/4	1/2	1/2	16	8	1 1/4	5												6.25
2S	36		2 1/4	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
2M	36		2 1/4	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
3	36		2 1/4	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
4	48		3	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
5	48		3	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0

STANDARD SIGN
W3-1

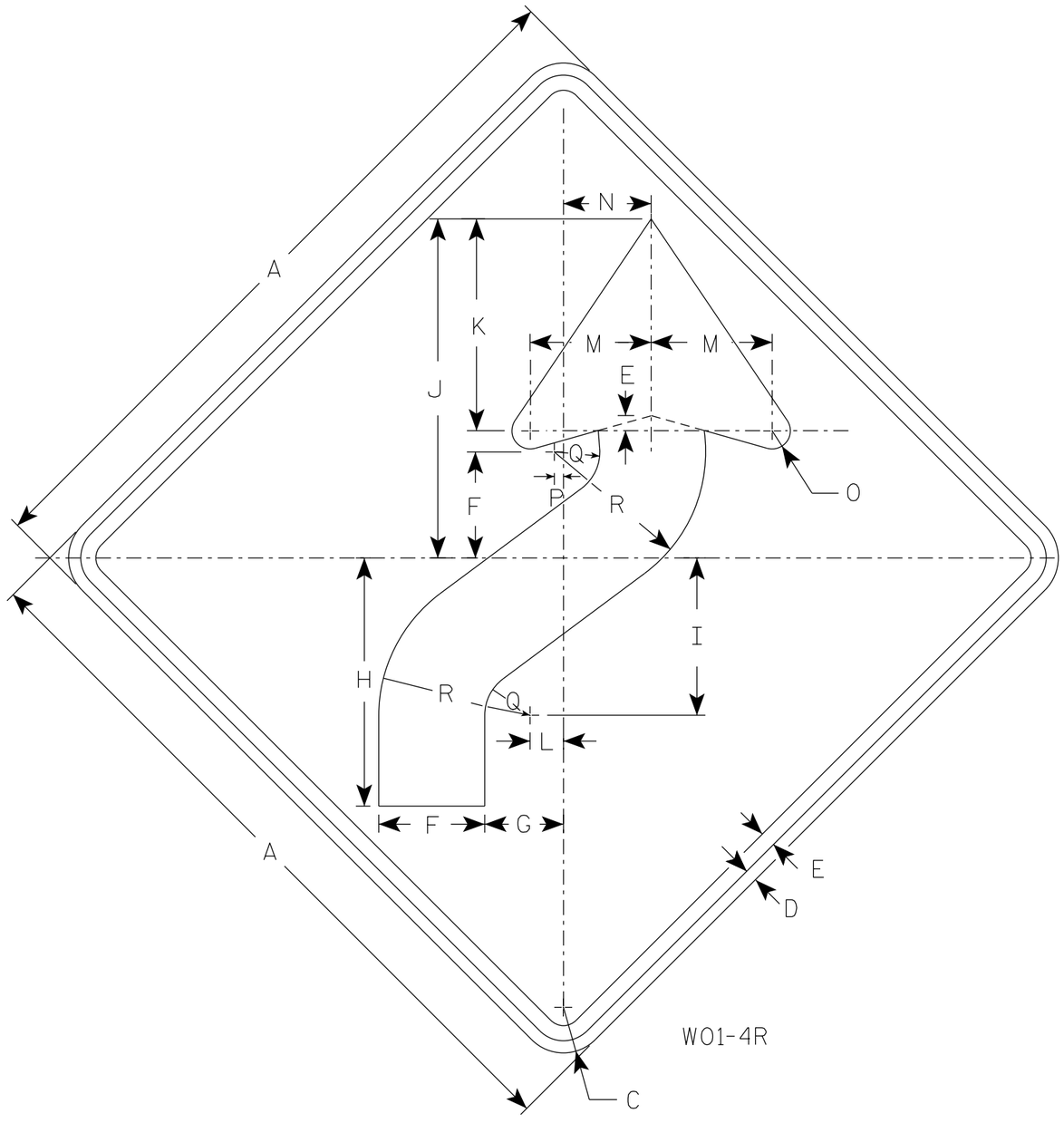
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/17/2023 PLATE NO. W3-1.13

PROJECT NO:

SHEET NO: 117 E



WO1-4R

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. WO1-4L is the same as WO1-4R except the arrow is reversed along the vertical centerline.

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

STANDARD SIGN
WO1-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 1/24/2024 PLATE NO. WO1-4.2

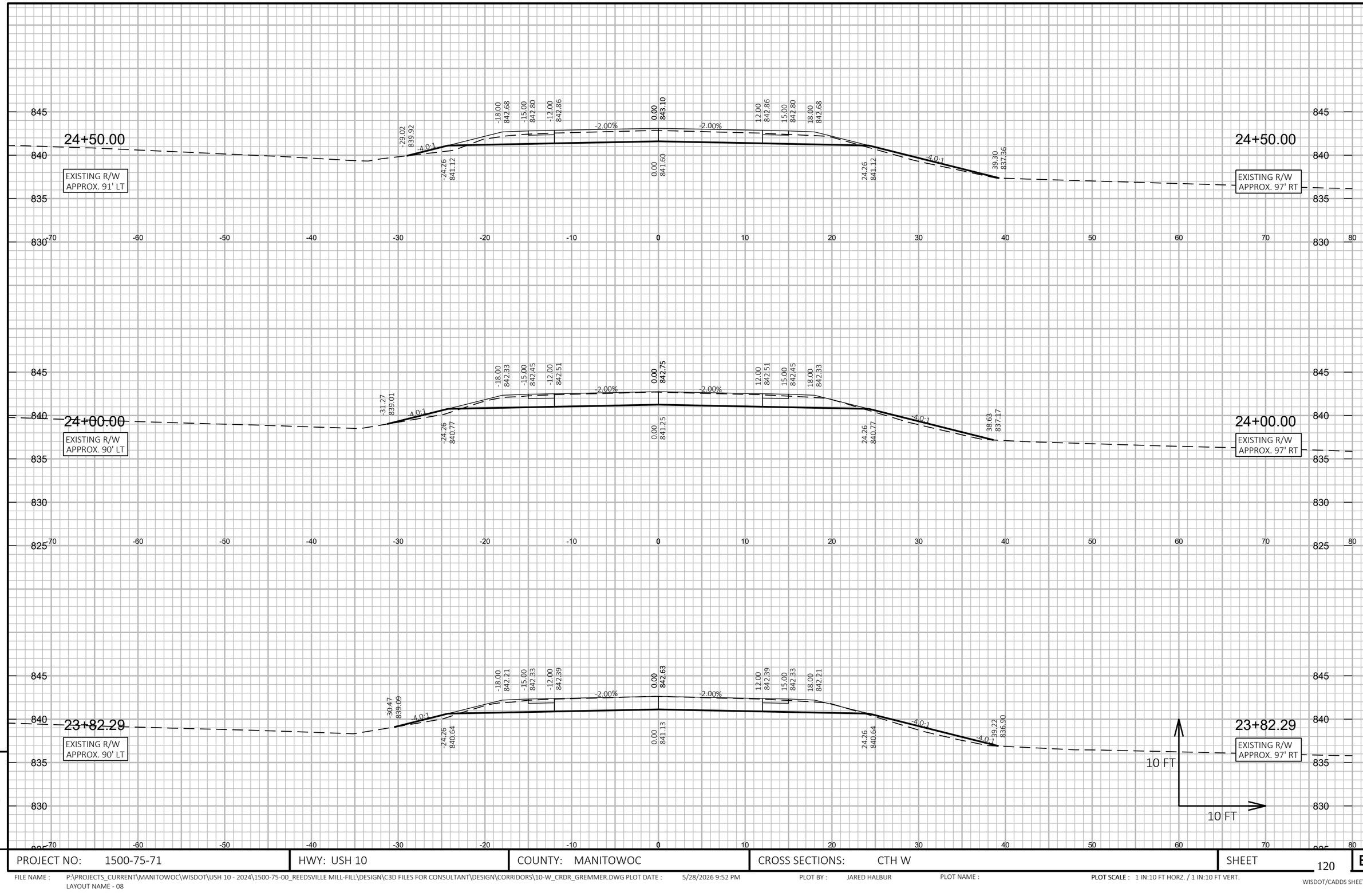
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 118 E

CTH W EARTHWORK

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
23+82.29	2382.29	0.00	58.54	0.00	6.97	0	0	0	0	0	0
24+00.00	2400.00	17.71	56.47	0.00	6.80	38	0	5	38	6	32
24+50.00	2450.00	50.00	48.04	0.00	6.53	97	0	12	135	21	114
25+00.00	2500.00	50.00	33.45	0.00	44.49	75	0	47	210	80	130
25+50.00	2550.00	50.00	21.23	0.00	55.25	51	0	92	261	195	66
26+00.00	2600.00	50.00	19.40	0.00	20.16	38	0	70	299	283	17
26+50.00	2650.00	50.00	20.61	0.00	61.94	37	0	76	336	378	42
27+00.00	2700.00	50.00	87.40	0.00	6.81	100	0	64	436	458	-22
27+50.00	2750.00	50.00	249.80	0.00	2.52	312	0	9	748	469	279
28+00.00	2800.00	50.00	276.41	0.00	3.23	487	0	5	1235	475	760
28+50.00	2850.00	50.00	339.76	0.00	0.41	571	0	3	1806	479	1327
29+00.00	2900.00	50.00	366.43	0.00	3.78	654	0	4	2460	484	1976
29+47.13	2947.13	47.13	275.52	0.00	24.35	560	0	25	3020	515	2505
29+50.00	2950.00	2.87	271.57	0.00	26.32	29	0	3	3049	519	2530
31+50.00	3150.00	0.00	169.99	0.00	19.78	0	0	0	3049	519	2530
32+00.00	3200.00	50.00	201.74	0.00	19.19	344	0	36	3393	564	2829
32+50.00	3250.00	50.00	175.08	0.00	16.15	349	0	33	3742	605	3137
33+00.00	3300.00	50.00	178.39	0.00	15.76	327	0	30	4069	643	3427
33+50.00	3350.00	50.00	158.49	0.00	4.70	312	0	19	4381	666	3715
34+00.00	3400.00	50.00	119.81	0.00	10.67	258	0	14	4639	684	3955
34+50.00	3450.00	50.00	100.11	0.00	6.82	204	0	16	4843	704	4139
35+00.00	3500.00	50.00	78.87	0.00	2.88	166	0	9	5009	715	4294
35+50.00	3550.00	50.00	65.99	0.00	15.15	134	0	17	5143	736	4407
36+00.00	3600.00	50.00	60.49	0.00	24.53	117	0	37	5260	783	4478
36+50.00	3650.00	50.00	59.92	0.00	34.87	111	0	55	5371	851	4520
36+75.00	3675.00	25.00	61.91	0.00	0.07	56	0	16	5427	871	4556

USH 10 TURN LANES EARTHWORK

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.00	MASS ORDINATE
1042+32.58	104232.58	0.00	31.30	0.00	0.00	0	0	0	0	0	0
1042+50.00	104250.00	17.42	11.35	0.00	0.00	14	0	0	14	0	14
1043+00.00	104300.00	50.00	31.51	0.00	0.00	40	0	0	54	0	54
1043+50.00	104350.00	50.00	31.99	0.00	0.21	59	0	0	113	0	113
1043+82.58	104382.58	32.58	32.55	0.00	0.31	39	0	0	152	0	152
1044+00.00	104400.00	17.42	32.63	0.00	0.26	21	0	0	173	0	173
1044+50.00	104450.00	50.00	34.36	0.00	1.56	62	0	2	235	2	233
1045+00.00	104500.00	50.00	36.42	0.00	1.20	66	0	3	301	5	296
1045+50.00	104550.00	50.00	38.43	0.00	0.33	69	0	1	370	6	364
1046+00.00	104600.00	50.00	38.46	0.00	1.30	71	0	2	441	8	433
1046+50.00	104650.00	50.00	39.62	0.00	0.52	72	0	2	513	10	503
1047+00.00	104700.00	50.00	40.54	0.00	0.14	74	0	1	587	11	576
1049+00.00	104900.00	200.00	81.55	0.00	0.82	452	0	4	1039	15	1024
1049+50.00	104950.00	50.00	33.48	0.00	3.13	107	0	4	1146	19	1127
1050+00.00	105000.00	50.00	59.85	0.00	3.38	86	0	6	1232	25	1207
1050+50.00	105050.00	50.00	57.55	0.00	3.23	109	0	6	1341	31	1310
1051+00.00	105100.00	50.00	50.11	0.00	5.33	100	0	8	1441	39	1402
1051+50.00	105150.00	50.00	20.16	0.00	4.86	65	0	9	1506	48	1458
1051+68.24	105168.24	18.24	39.69	0.00	4.18	20	0	3	1526	51	1475
1052+00.00	105200.00	31.76	39.23	0.00	1.93	46	0	4	1572	55	1517
1052+50.00	105250.00	50.00	29.92	0.00	0.00	64	0	2	1636	57	1579
1053+00.00	105300.00	50.00	25.60	0.00	0.20	51	0	0	1687	57	1630
1053+18.22	105318.22	18.22	13.83	0.00	0.02	13	0	0	1700	57	1643



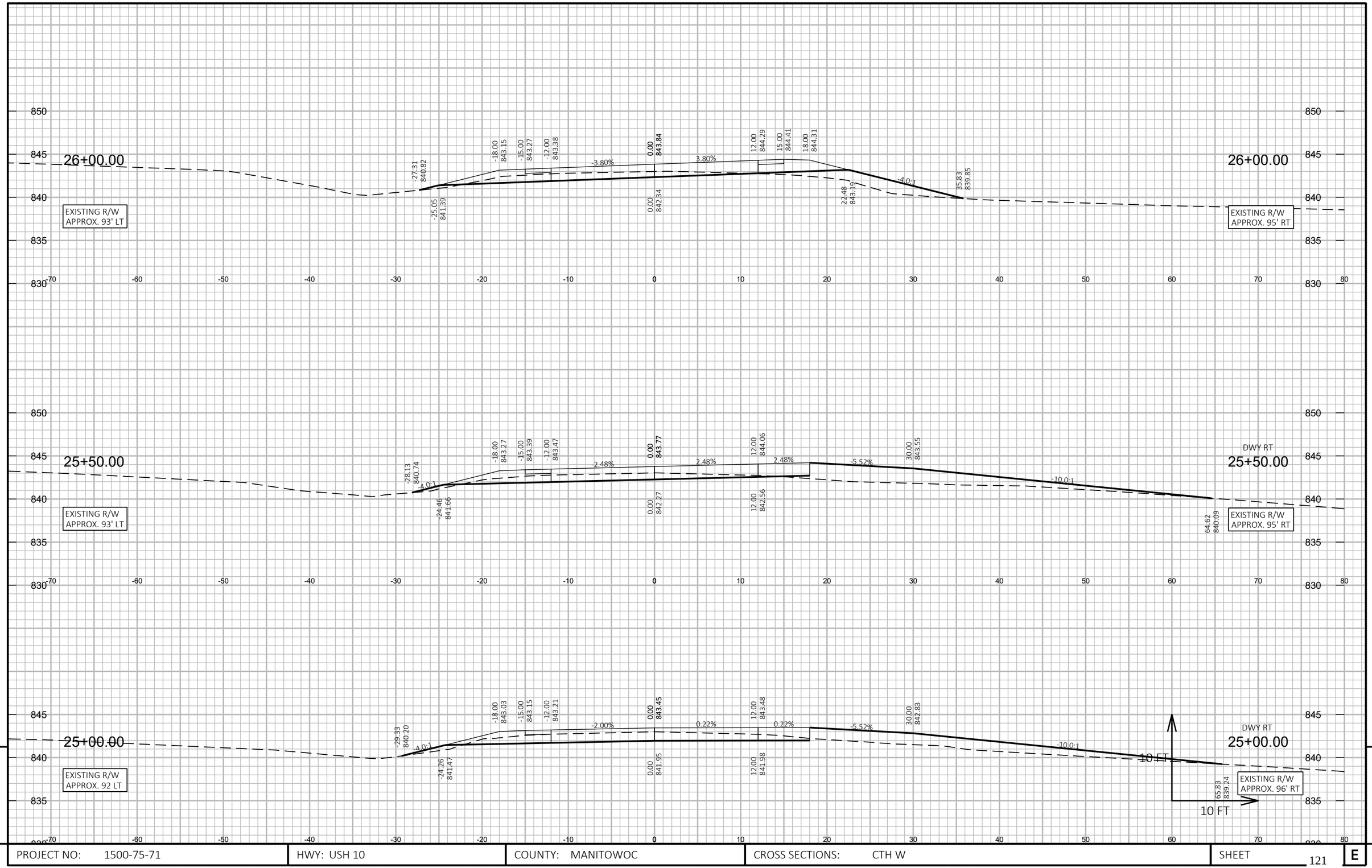
9

PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	CROSS SECTIONS: CTH W	SHEET 120	E

9

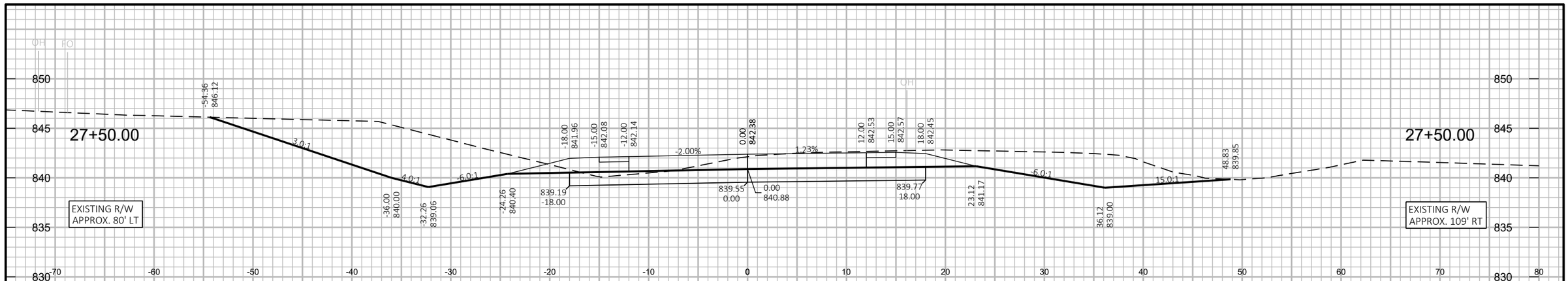
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LAYOUT NAME - 08



PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	CROSS SECTIONS: CTH W	SHEET 121 E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\DESIGN\CORRIDORS\10-W_CRDR_GREMMER.DWG PLOT DATE : 5/28/2026 9:52 PM
PLOT BY : JARED HALBUR
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
LAYOUT NAME - 09
WISDOT/CADDS SHEET 49

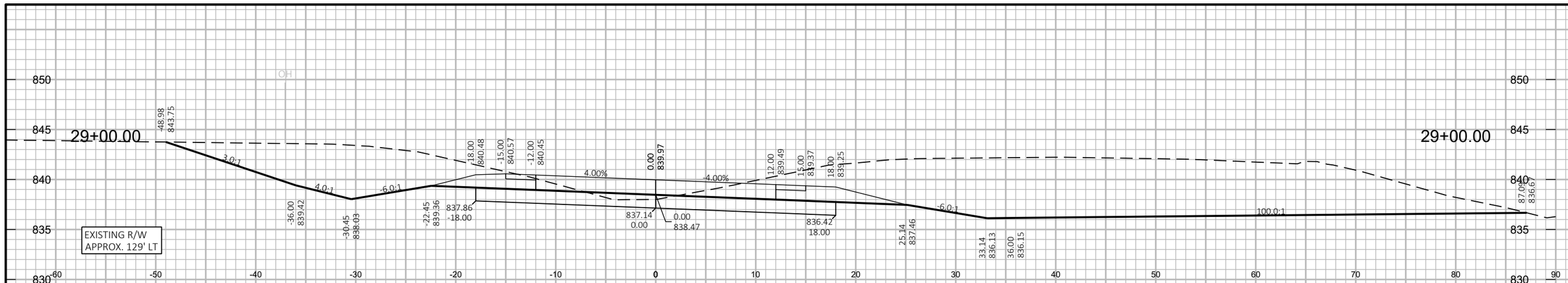


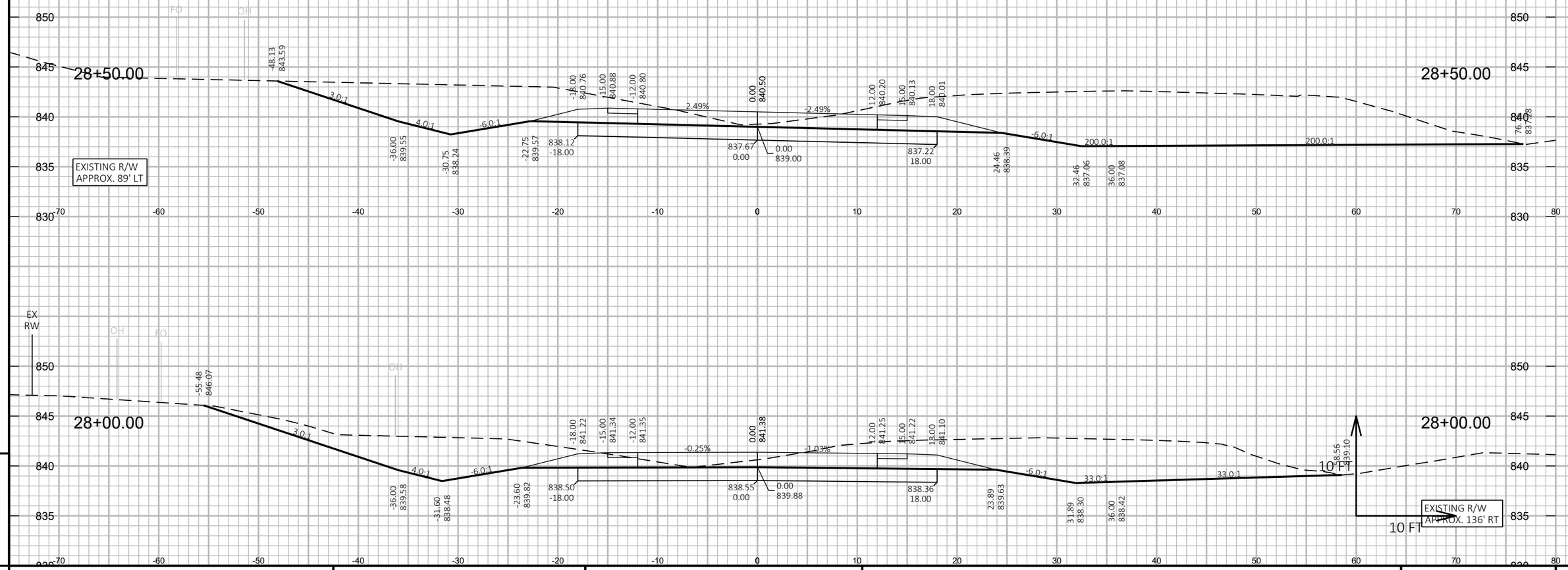
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9

PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	CROSS SECTIONS: CTH W	SHEET 122	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\DESIGN\CORRIDORS\10-W_CRDR_GREMMER.DWG PLOT DATE : 5/28/2026 9:52 PM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
LAYOUT NAME - 10



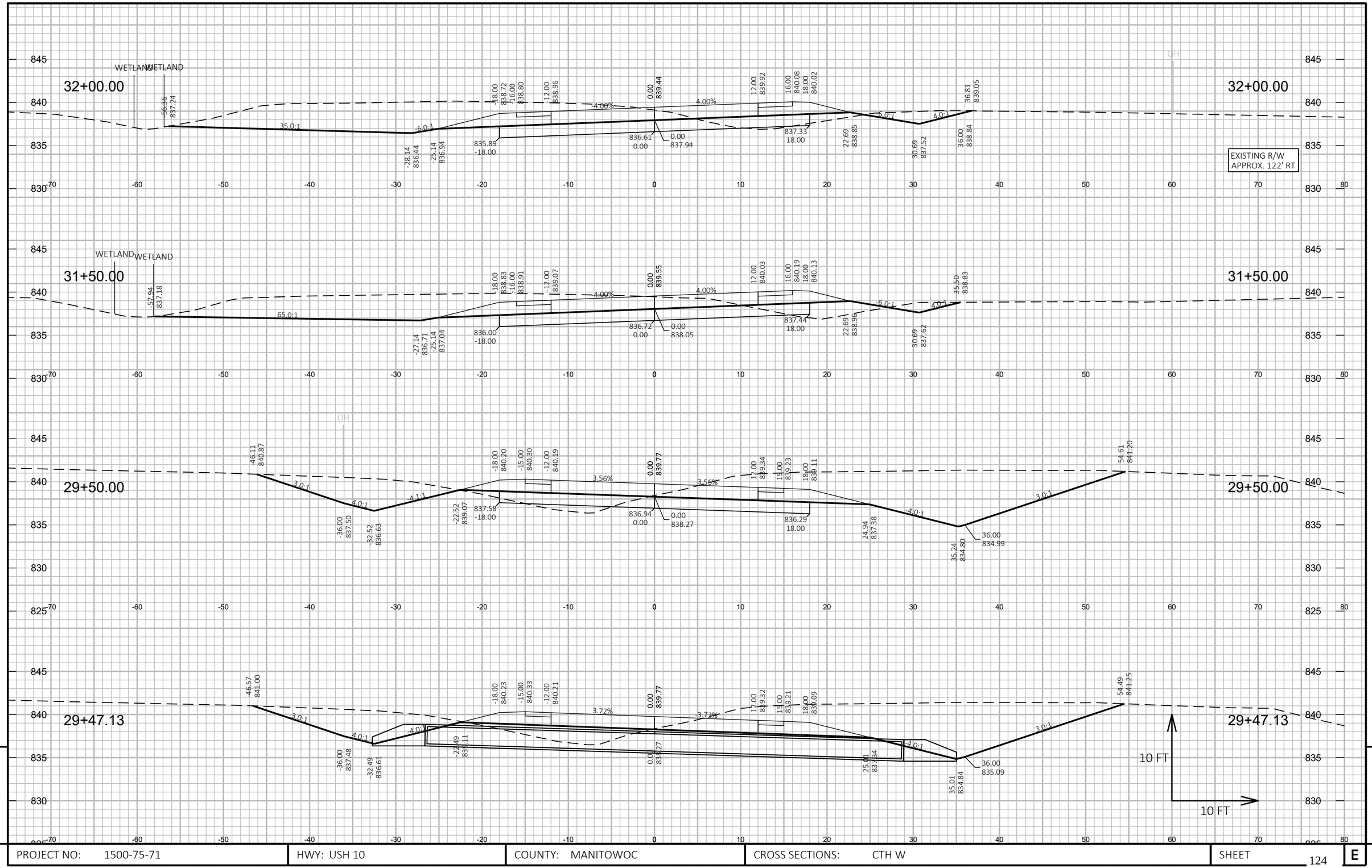


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PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	CROSS SECTIONS: CTH W	SHEET 123 E

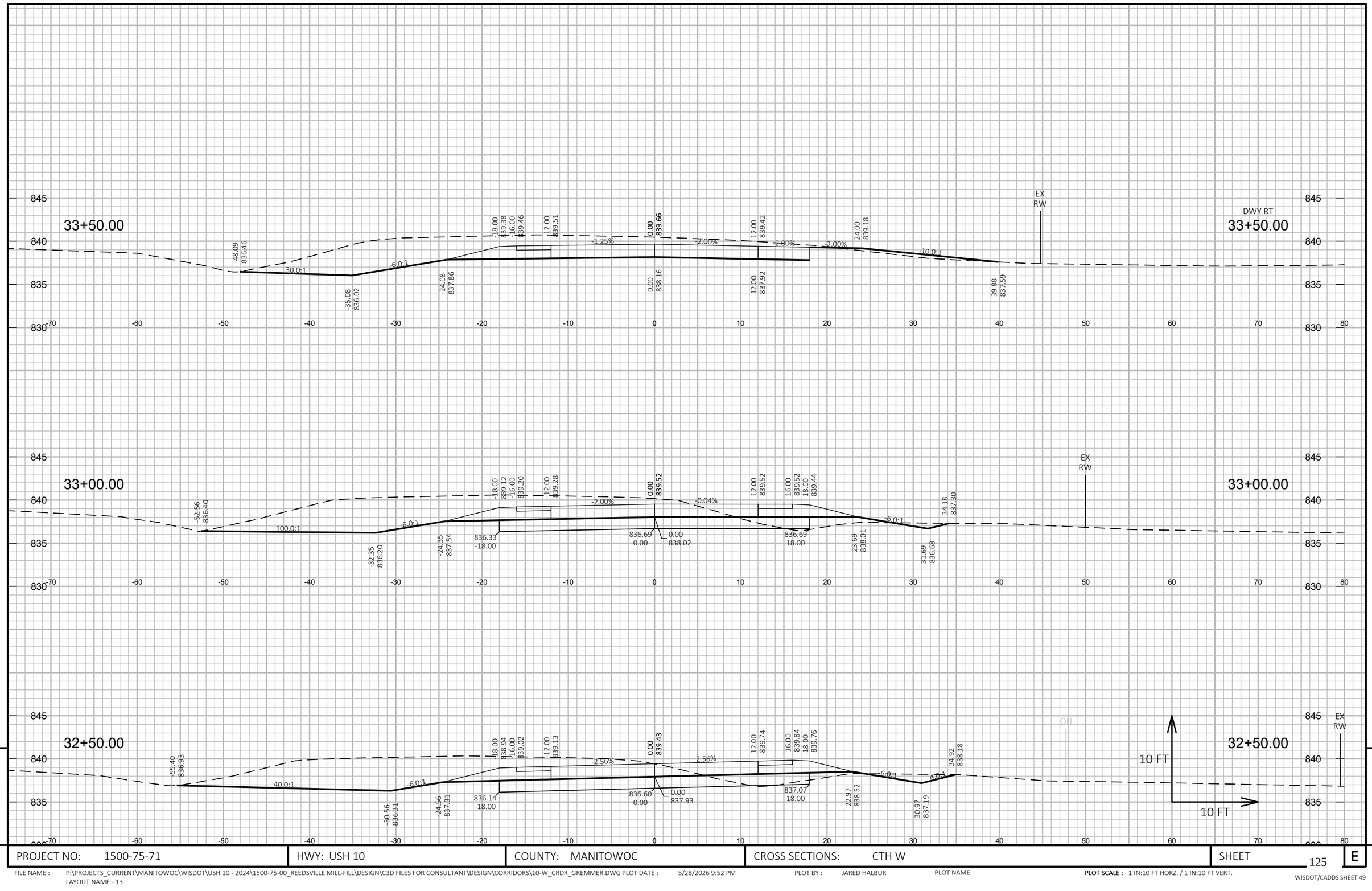
FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\DESIGN\CORRIDORS\10-W_CRDR_GREMMER.DWG PLOT DATE : 5/28/2026 9:52 PM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
LAYOUT NAME - 11



PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	CROSS SECTIONS: CTH W	SHEET 124 E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\DESIGN\CORRIDORS\10-W_CRDR_GREMMER.DWG PLOT DATE : 5/28/2026 9:52 PM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
LAYOUT NAME - 12

WISDOT/CADDS SHEET 49

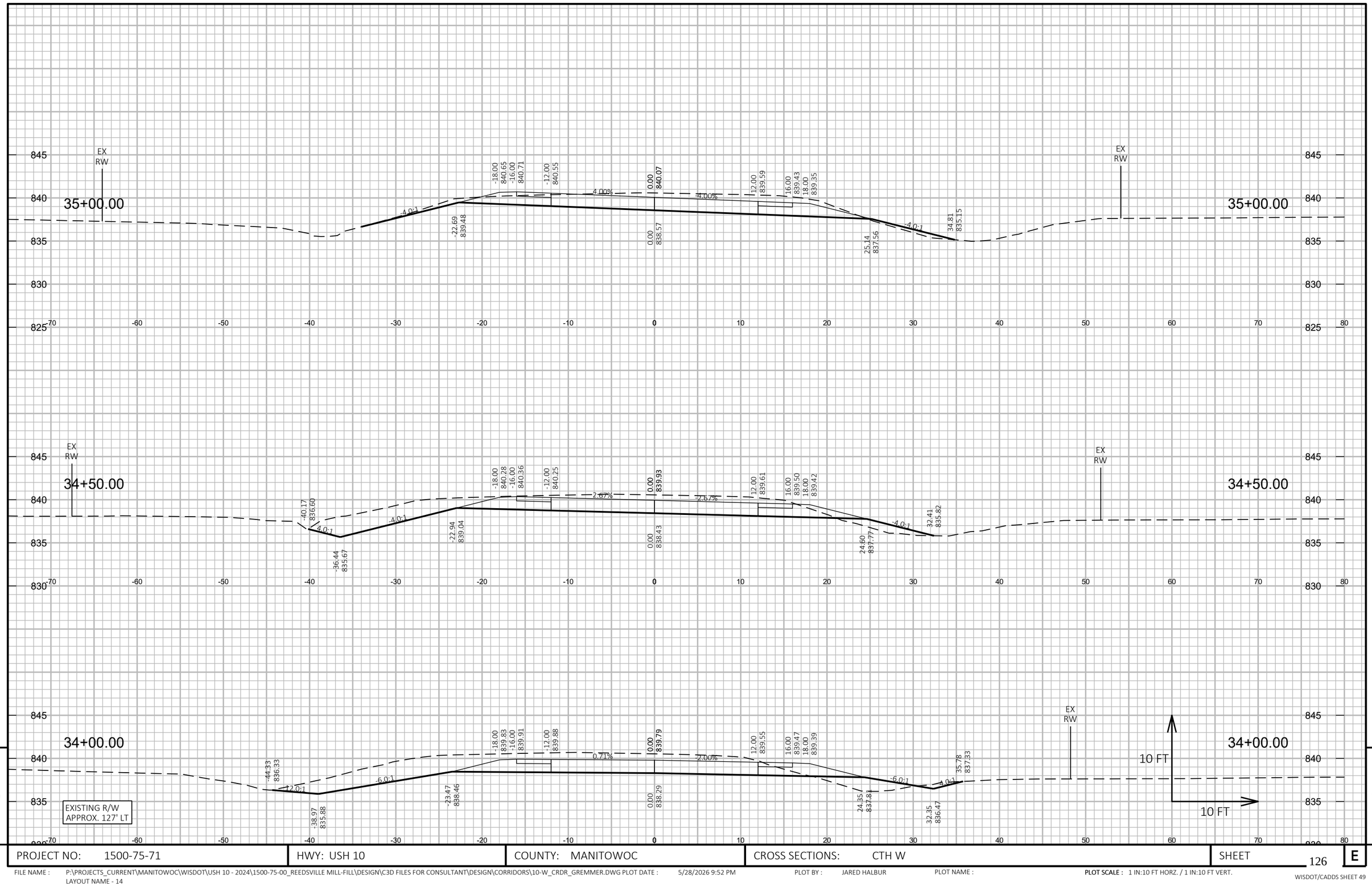


PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	CROSS SECTIONS: CTH W	SHEET 125 E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\DESIGN\CORRIDORS\10-W_CRDR_GREMMER.DWG PLOT DATE : 5/28/2026 9:52 PM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

LAYOUT NAME - 13

WISDOT/CADDS SHEET 49



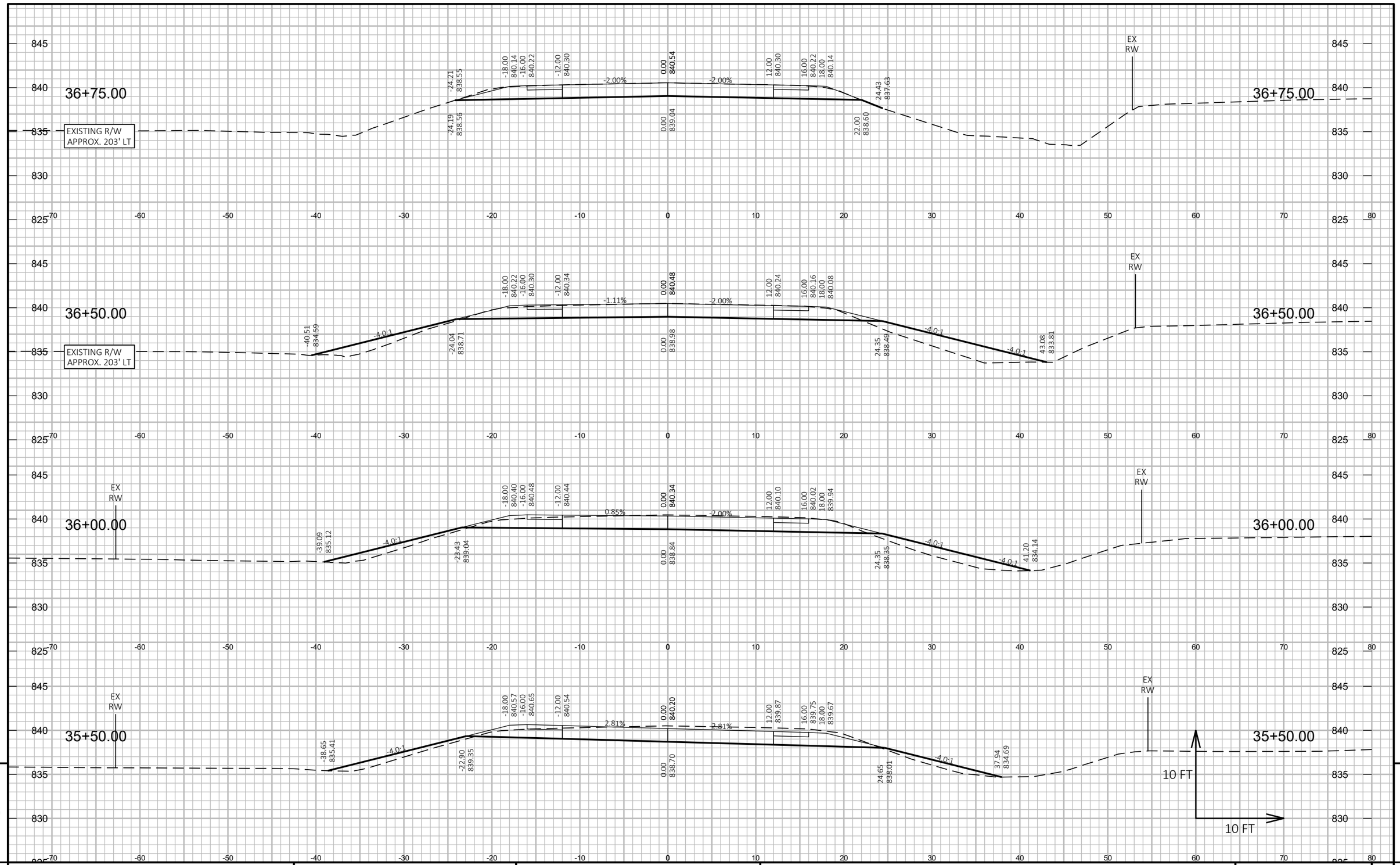
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PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	CROSS SECTIONS: CTH W	SHEET 126	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\DESIGN\CORRIDORS\10-W_CRDR_GREMMER.DWG PLOT DATE : 5/28/2026 9:52 PM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

LAYOUT NAME - 14

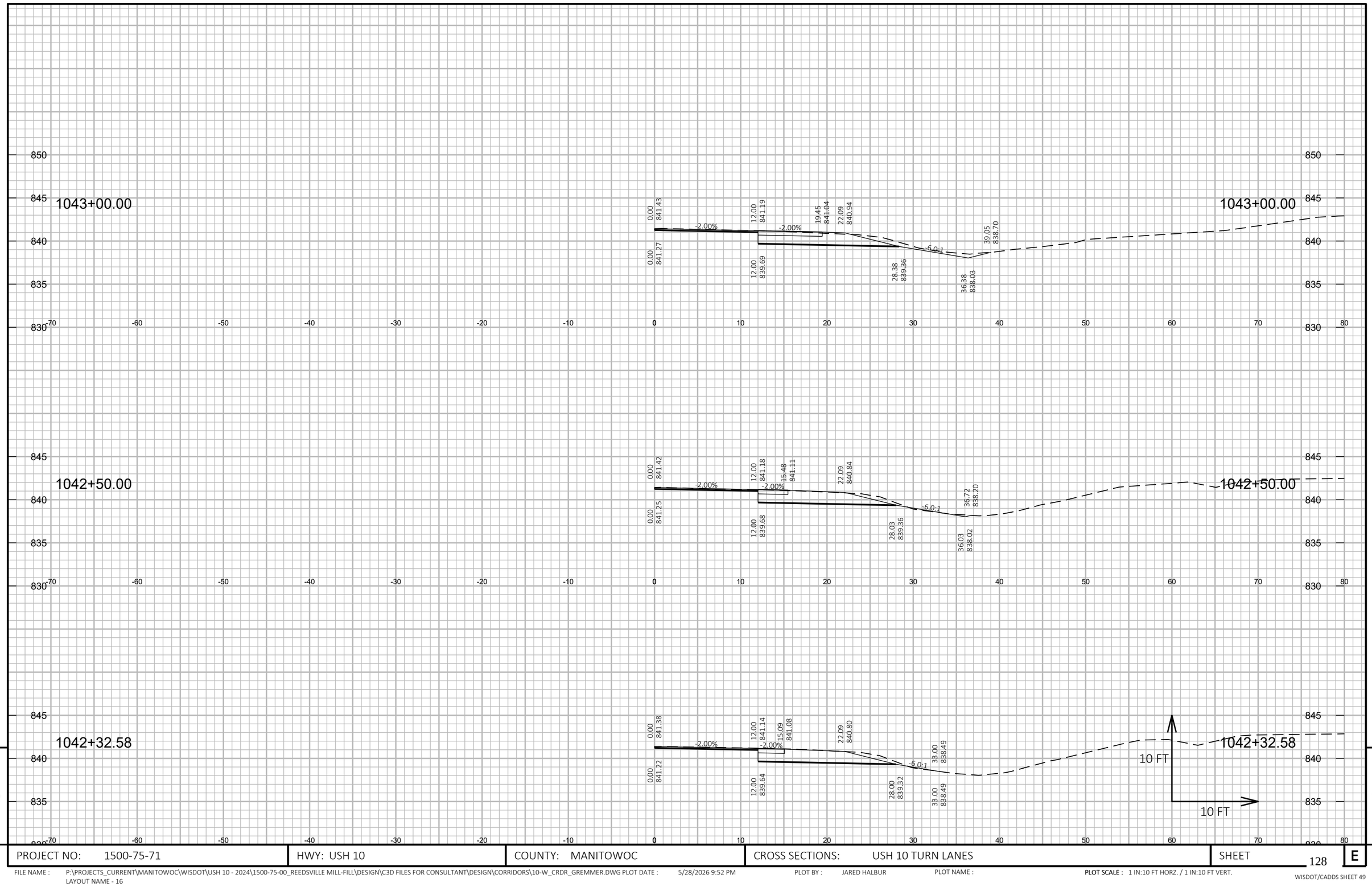


PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	CROSS SECTIONS: CTH W	SHEET 127	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\DESIGN\CORRIDORS\10-W_CRDR_GREMMER.DWG PLOT DATE : 5/28/2026 9:52 PM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

LAYOUT NAME - 15

WISDOT/CADDS SHEET 49



9

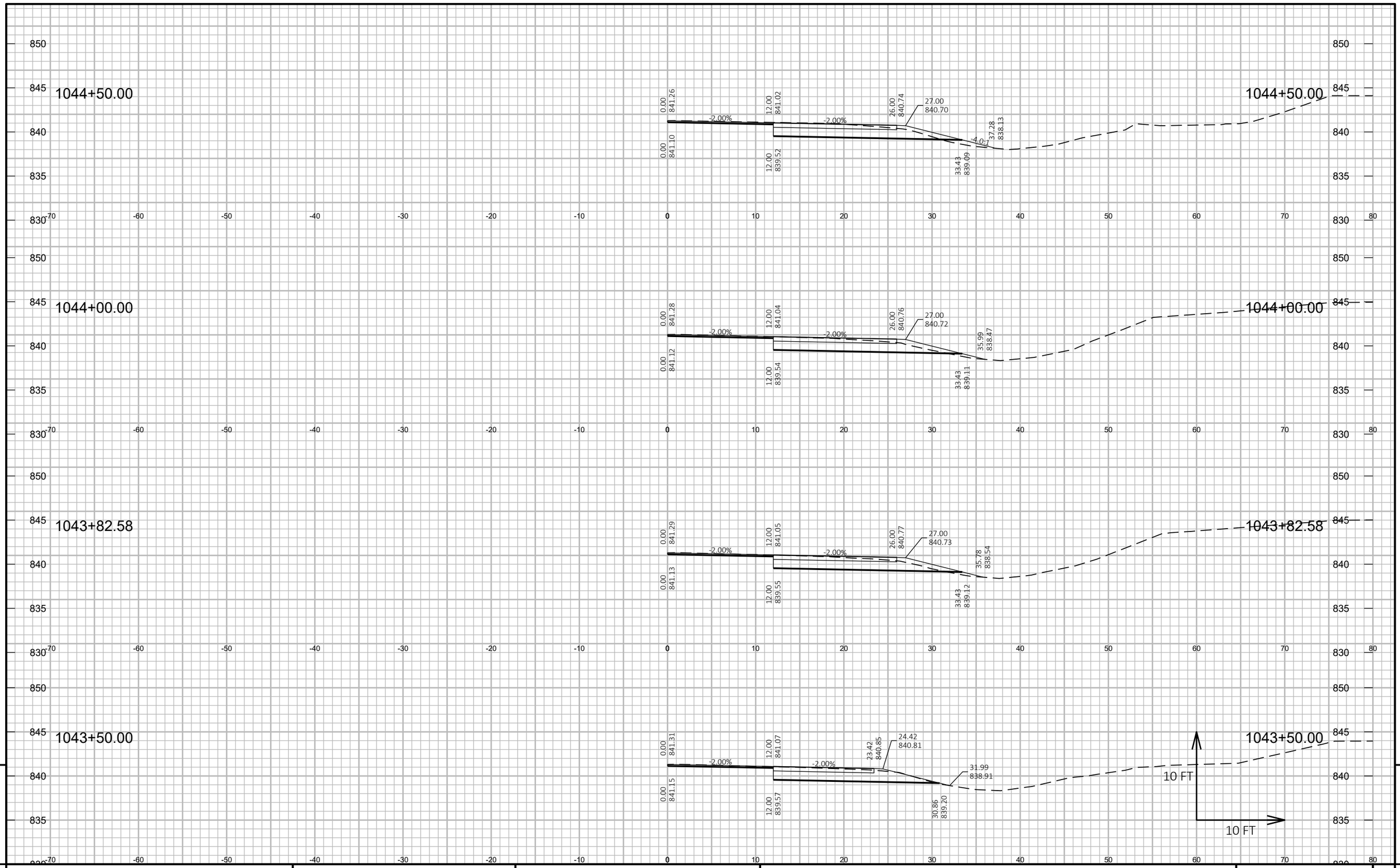
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PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	CROSS SECTIONS: USH 10 TURN LANES	SHEET 128	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\DESIGN\CORRIDORS\10-W_CRDR_GREMMER.DWG PLOT DATE : 5/28/2026 9:52 PM
LAYOUT NAME - 16

PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

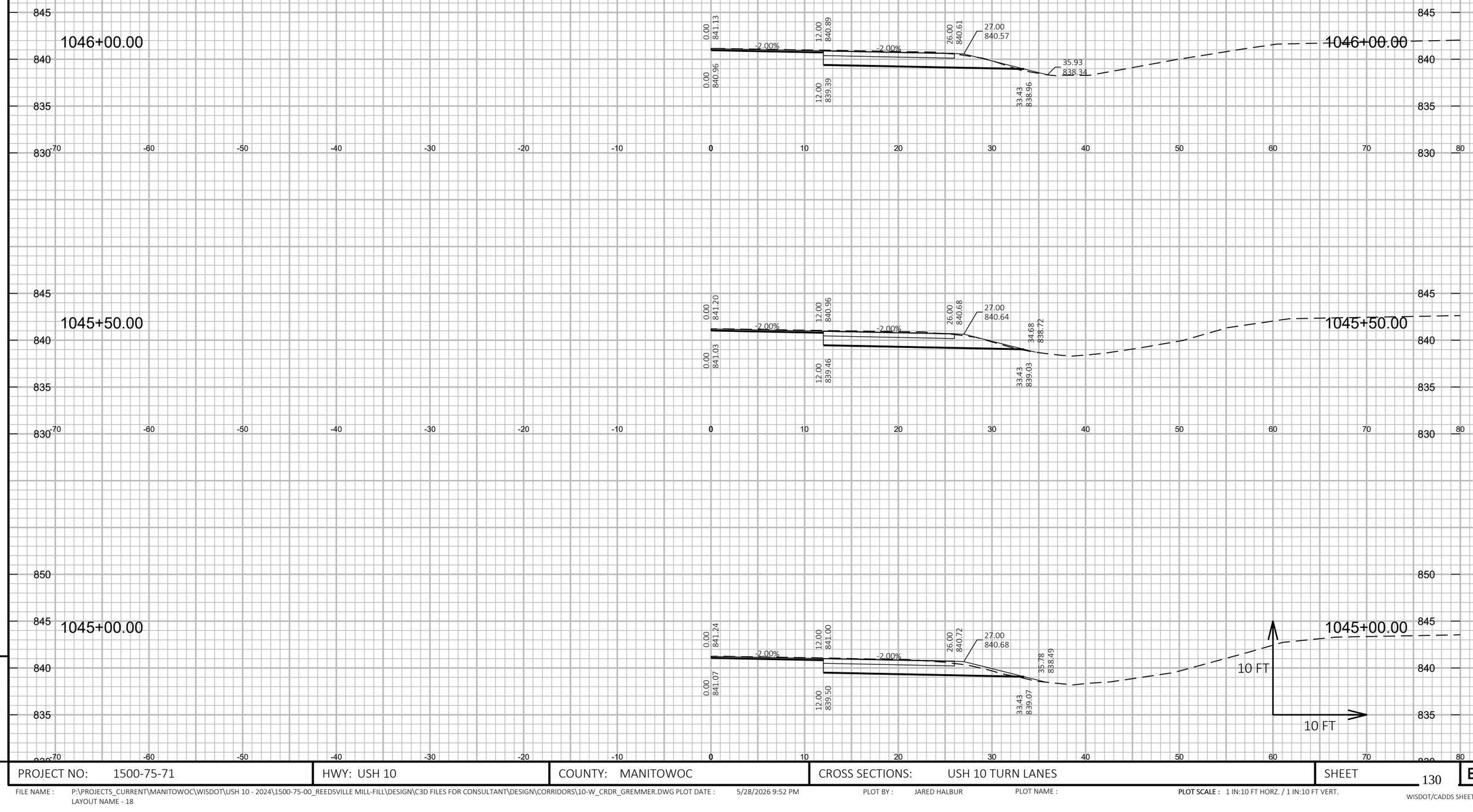
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PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	CROSS SECTIONS: USH 10 TURN LANES	SHEET 129	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\DESIGN\CORRIDORS\10-W_CRDR_GREMMER.DWG PLOT DATE : 5/28/2026 9:52 PM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

LAYOUT NAME - 17

WISDOT/CADDS SHEET 49



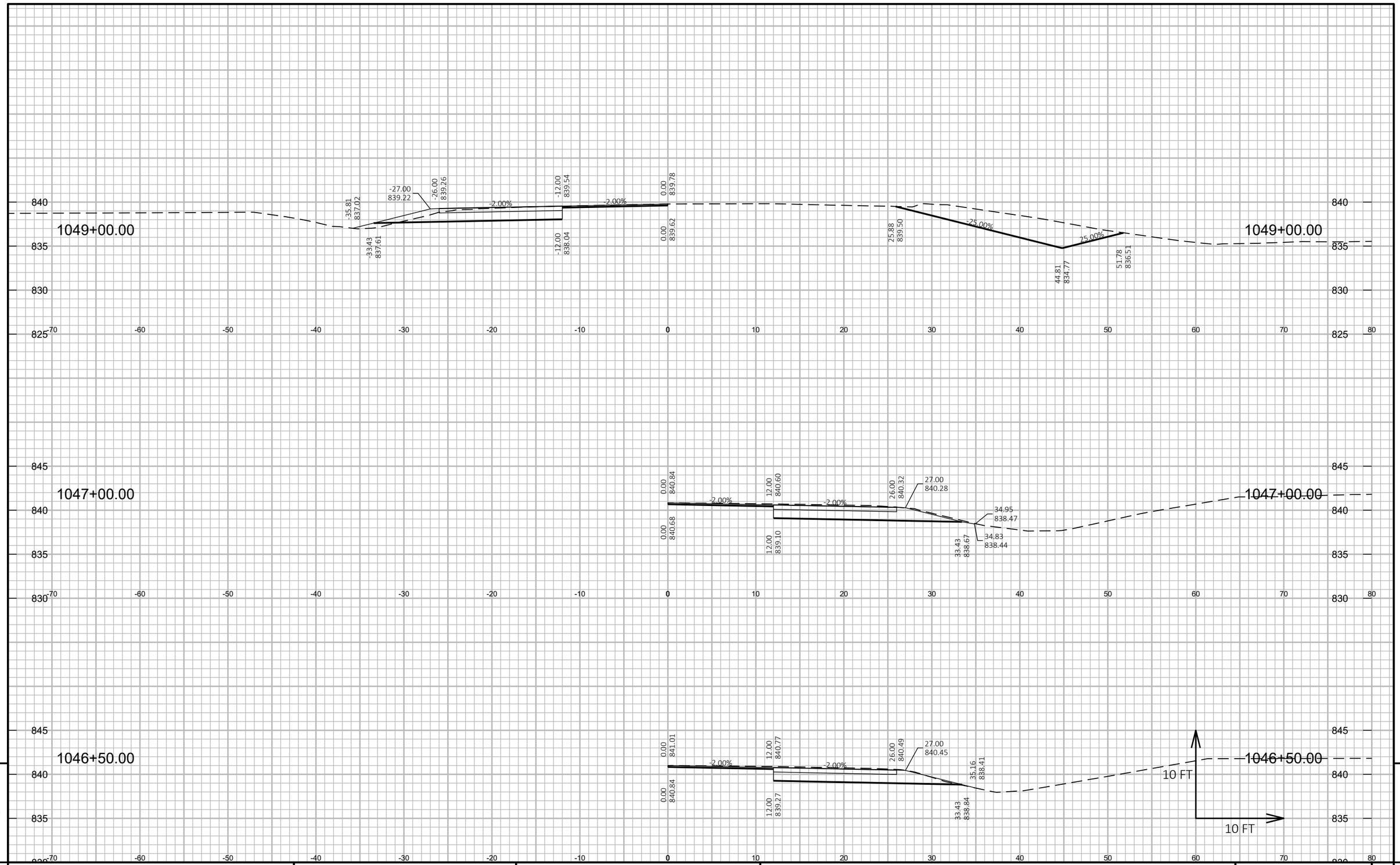
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PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	CROSS SECTIONS: USH 10 TURN LANES	SHEET 130	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\DESIGN\CORRIDORS\10-W_CRDR_GREMMER.DWG PLOT DATE : 5/28/2026 9:52 PM
LAYOUT NAME - 18

PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

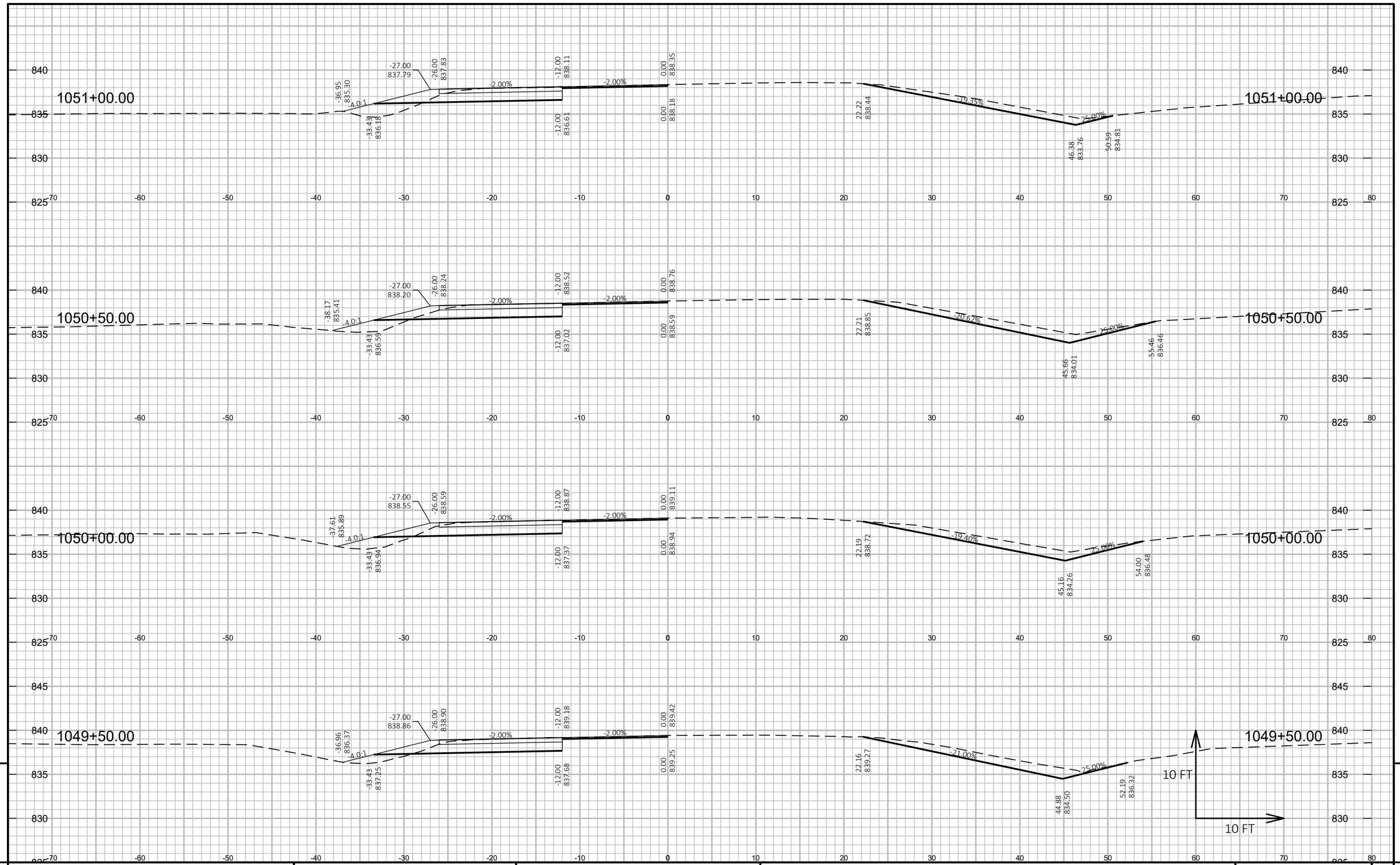


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9

PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	CROSS SECTIONS: USH 10 TURN LANES	SHEET 131	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\DESIGN\CORRIDORS\10-W_CRDR_GREMMER.DWG PLOT DATE : 5/28/2026 9:52 PM
LAYOUT NAME - 19
PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



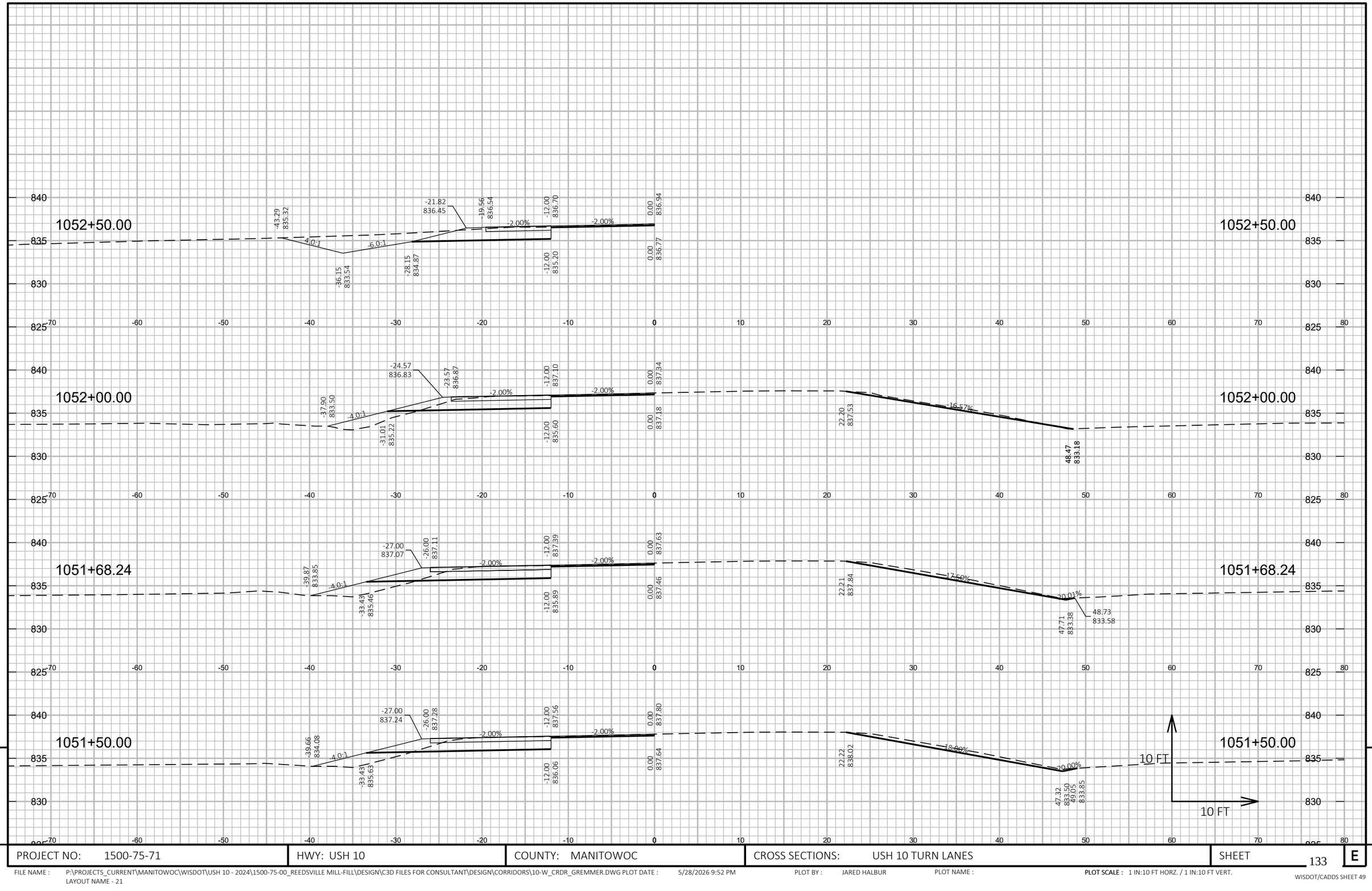
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PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	CROSS SECTIONS: USH 10 TURN LANES	SHEET 132	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\DESIGN\CORRIDORS\10-W_CRDR_GREMMER.DWG PLOT DATE : 5/28/2026 9:52 PM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

LAYOUT NAME - 20

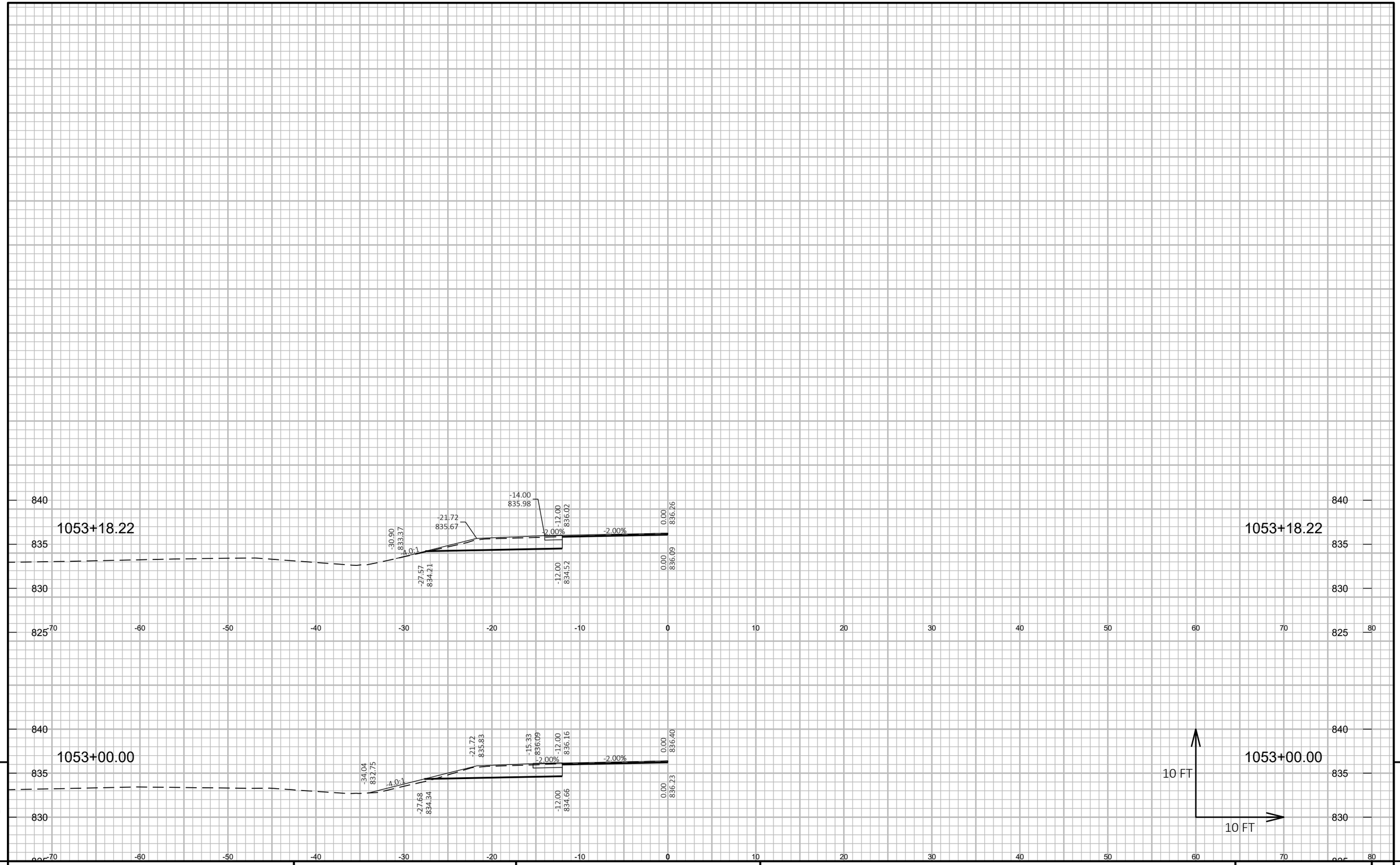


PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	CROSS SECTIONS: USH 10 TURN LANES	SHEET 133 E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\DESIGN\CORRIDORS\10-W_CRDR_GREMMER.DWG PLOT DATE : 5/28/2026 9:52 PM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

LAYOUT NAME - 21

WISDOT/CADDS SHEET 49



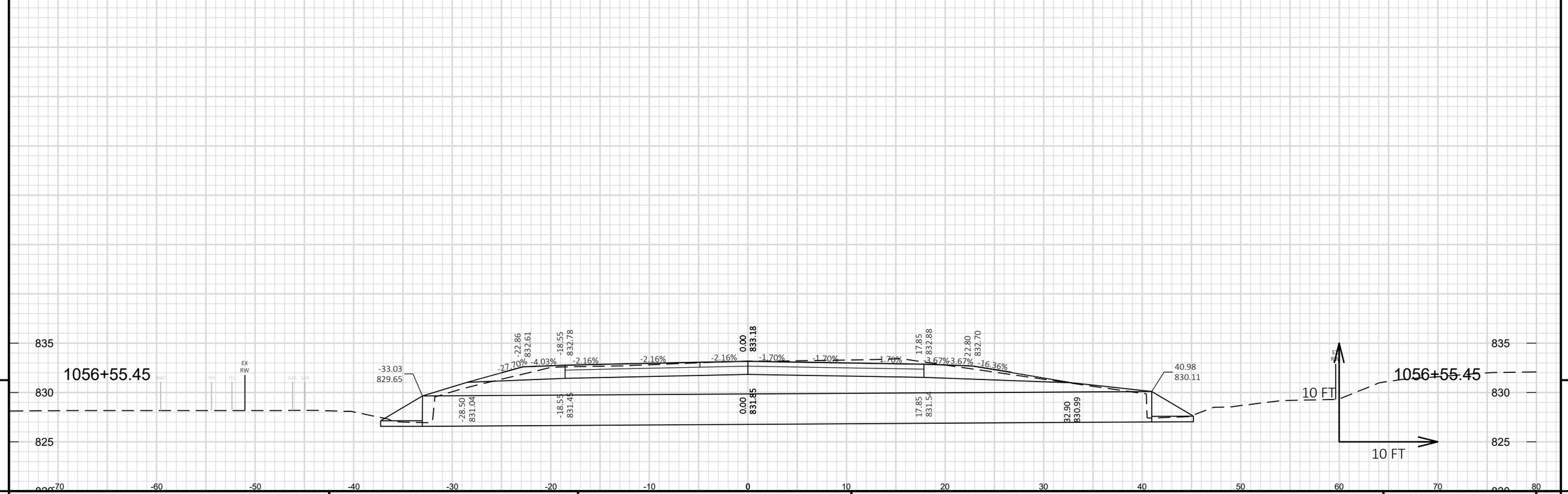
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PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	CROSS SECTIONS: USH 10 TURN LANES	SHEET 134	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\DESIGN\CORRIDORS\10-W_CRDR_GREMMER.DWG PLOT DATE : 5/28/2026 9:52 PM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

LAYOUT NAME - 22



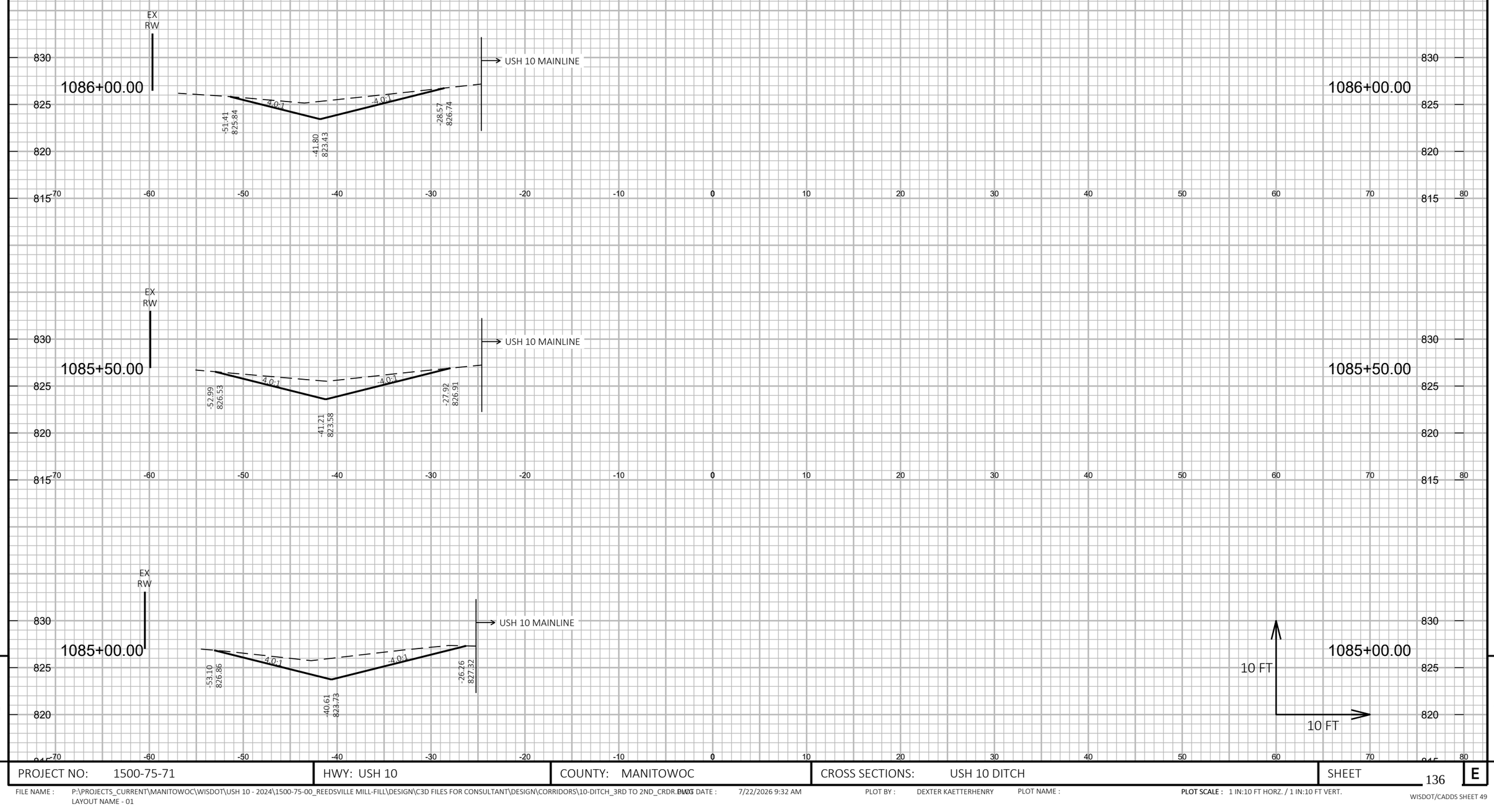
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PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	CROSS SECTIONS: CULVERT	SHEET 135	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-68-00_BRILLION-REEDSVILLE MILL-FILL\DESIGN\C3D FILES\DESIGN\CORRIDORS\CORR-GUARDRAIL.DWG
LAYOUT NAME - 11

PLOT DATE : 5/28/2026 4:18 PM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

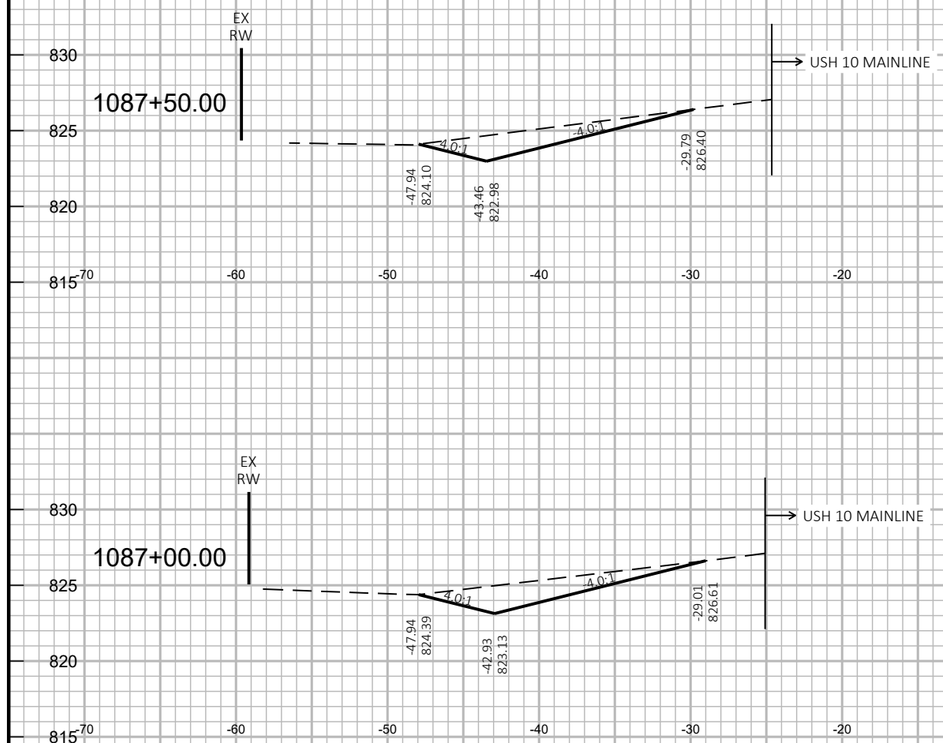


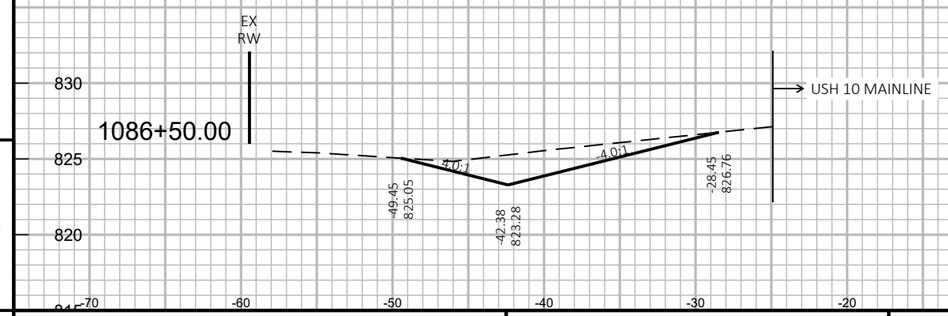
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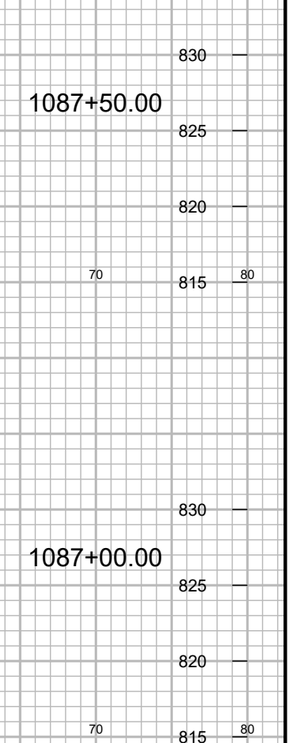
PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	CROSS SECTIONS: USH 10 DITCH	SHEET 136	E

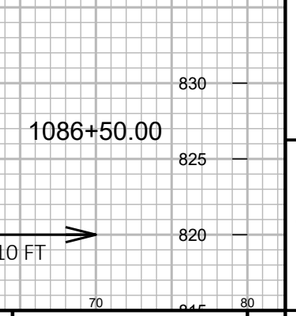
FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\DESIGN\CORRIDORS\10-DITCH_3RD TO 2ND_CRDR.DWG
LAYOUT NAME - 01
PLOT DATE : 7/22/2026 9:32 AM
PLOT BY : DEXTER KAETTERHENRY
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49









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9

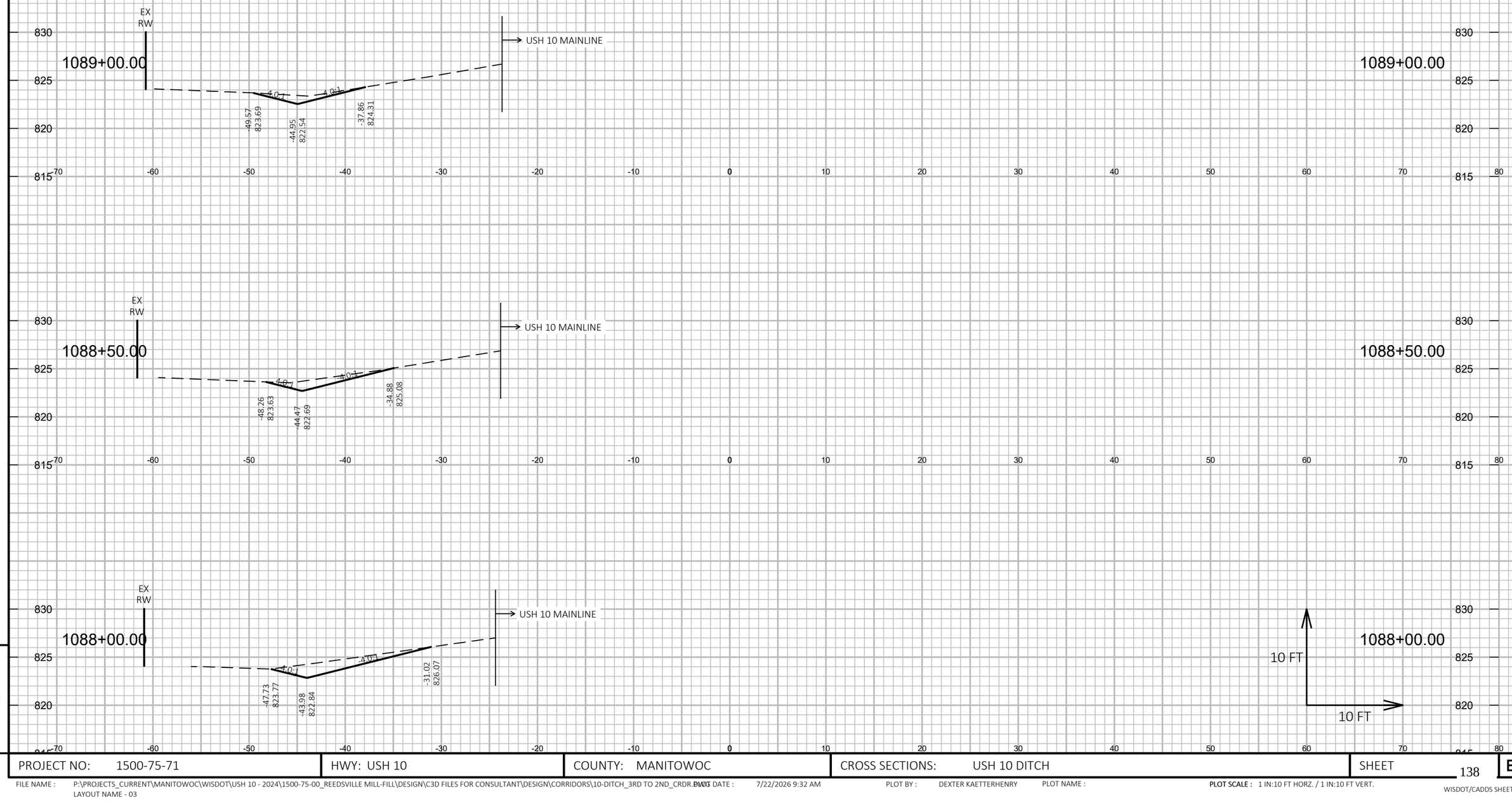
PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	CROSS SECTIONS: USH 10 DITCH	SHEET 137	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\DESIGN\CORRIDORS\10-DITCH_3RD TO 2ND_CRDR.DWG
LAYOUT NAME - 02

PLOT DATE : 7/22/2026 9:32 AM PLOT BY : DEXTER KAETTERHENRY PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

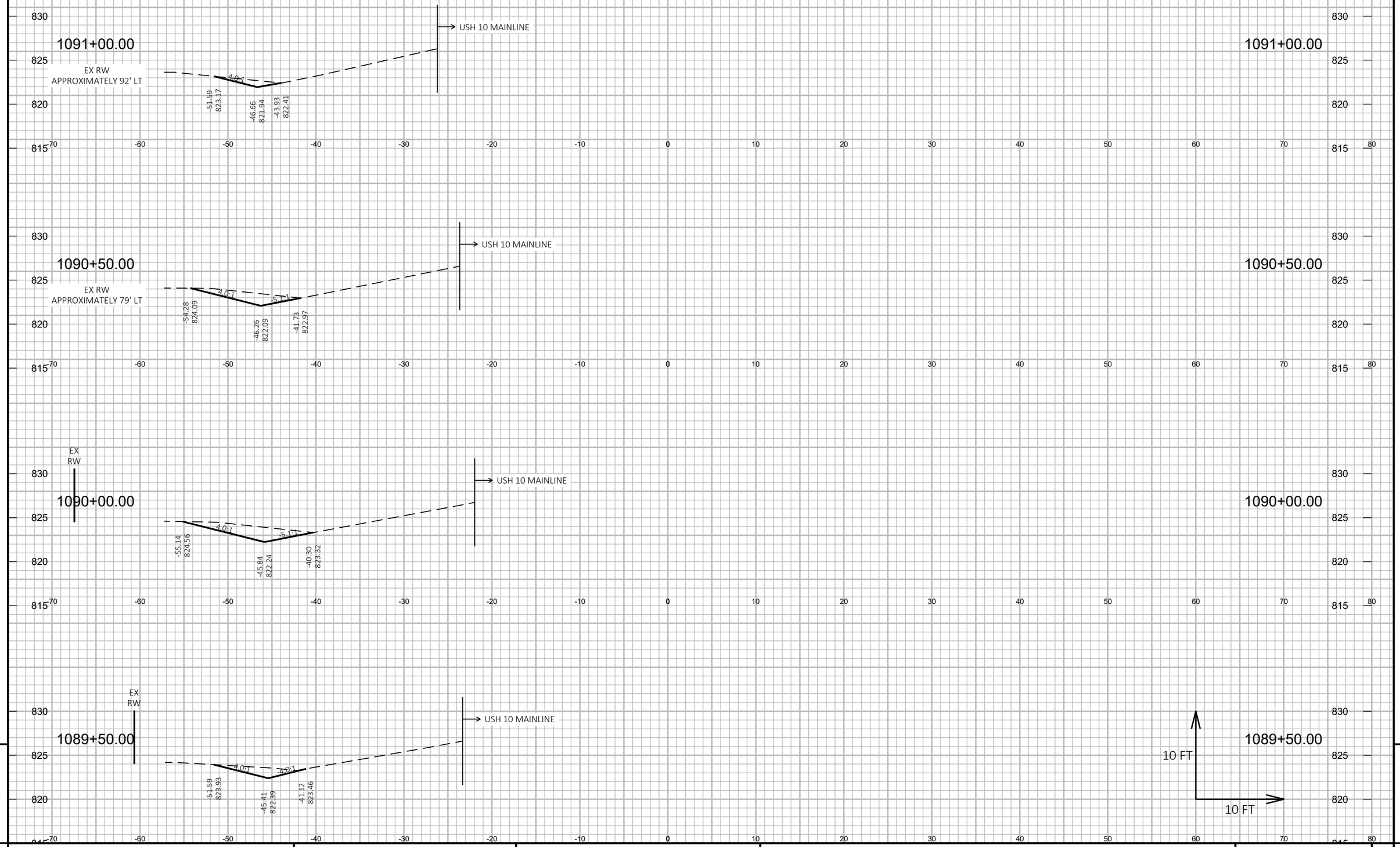


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PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	CROSS SECTIONS: USH 10 DITCH	SHEET 138	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\DESIGN\CORRIDORS\10-DITCH_3RD TO 2ND_CRDR.DWG
LAYOUT NAME - 03
PLOT DATE : 7/22/2026 9:32 AM PLOT BY : DEXTER KAETTERHENRY PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1500-75-71	HWY: USH 10	COUNTY: MANITOWOC	CROSS SECTIONS: USH 10 DITCH	SHEET 139	E

FILE NAME : P:\PROJECTS_CURRENT\MANITOWOC\WISDOT\USH 10 - 2024\1500-75-00_REEDSVILLE MILL-FILL\DESIGN\C3D FILES FOR CONSULTANT\DESIGN\CORRIDORS\10-DITCH_3RD TO 2ND_CRDR.DWG
LAYOUT NAME - 04

PLOT DATE : 7/22/2026 9:32 AM PLOT BY : DEXTER KAETTERHENRY PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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