WKE

JANUARY 2022

PROJECT ID: 1560-00-76

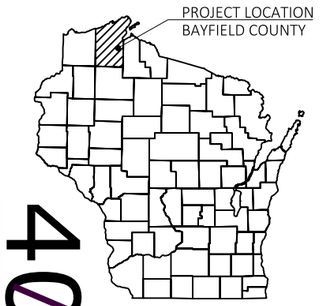
WITH: N/A

COUNTY: BAYFIELD

40

ORDER OF SHEETS

TOTAL SHEETS = 90



N

DESIGN DESIGNATION

A.A.D.T.	2022	=	2,190
A.A.D.T.	2042	=	2,520
D.H.V.		=	308
D.D.		=	60/40
T.		=	23.6
DESIGN SPEED		=	55 MPH
ESALS		=	960,000

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

DRUMMOND - USH 2

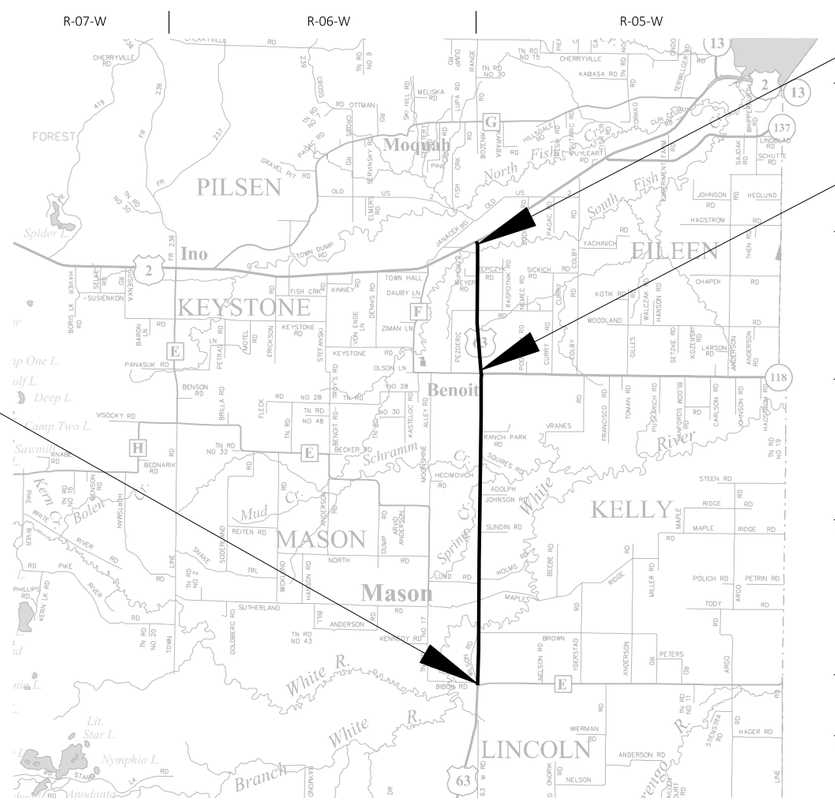
CTH E EAST TO USH 2

USH 63

BAYFIELD COUNTY

STATE PROJECT NUMBER
1560-00-76

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1560-00-76	WISC 2022136	1



END PROJECT
STA 142+50
Y = 439,987.879
X = 775,013.836

STA AHEAD = 7+18
STA BACK = 1498+95.83
Y = 426,487.917
X = 775,625.855

BEGIN PROJECT
STA 1172+40
Y = 393,834.425
X = 775,727.801

LAYOUT

SCALE 0 3 MI

TOTAL NET LENGTH OF CENTERLINE = 8.747 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), BAYFIELD 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 12.

ORIGINAL PLANS PREPARED BY

MSA

332 W. SUPERIOR STREET, #600, DULUTH, MN 55802
(218) 722-3915 (1-800) 777-7380 FAX: (218) 722-4548

WISCONSIN PROFESSIONAL ENGINEER
ALEX PASSOW
E-464886
MINOCQUA
WI

DATE: 7/15/2021 Alex Passow (PROFESSIONAL ENGINEER)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	COLEMAN ENGINEERING COMPANY
Designer	MSA PROFESSIONAL SERVICES, INC.
Project Manager	GARY METZER
Regional Examiner	TOU YANG
Regional Supervisor	NICOLE PASSUELLO

APPROVED FOR THE DEPARTMENT

DATE: 7/15/2021 Gary Metzer (Signature)

E

FILE NAME : G:\00\00093\00093599\CADD\SHEETSPLAN\010101-TI.DWG PLOT DATE : 7/6/2021 2:30 PM PLOT BY : COURTNEY ROOYAKKERS PLOT NAME :

STANDARD ABBREVIATIONS

AC	ACRE
AGG	AGGREGATE
<	ANGLE
ASPH	ASPHALTIC
AC	ASPHALT CEMENT
ADT	AVERAGE DAILY TRAFFIC
B & B	BALLED AND BURLAPPED
BM	BENCH MARK
CB	CATCH BASIN
` OR C/L	CENTER LINE
C-C	CENTER TO CENTER
CONC	CONCRETE
CO	COUNTY
CTH	COUNTY TRUNK HIGHWAY
CY	CUBIC YARD
CULV	CULVERT
CP	CULVERT PIPE
CPRC	CULVERT PIPE REINFORCED CONCRETE
C & G	CURB AND GUTTER
D	DEGREE OF CURVE
DHV	DESIGN HOUR VOLUME
DIA OR |	DIAMETER
DIST	DISTRICT
DWY	DRIVEWAY
E	EAST
X	EAST GRID COORDINATE
EB	EASTBOUND
ELEC	ELECTRIC
EL OR ELEV	ELEVATION
EMB	EMBANKMENT
EW	ENDWALL
ESALS	EQUIVALENT SINGLE AXLE LOADS
EXC	EXCAVATION
EBS	EXCAVATION BELOW SUBGRADE
EXIST	EXISTING
EXP	EXPANSION
F-F	FACE TO FACE
FERT	FERTILIZER
FE	FIELD ENTRANCE
F/L	FLOW LINE
FT	FOOT
GN	GRID NORTH
HR	HANDICAP RAMP
HT	HEIGHT
CWT	HUNDREDWEIGHT
HYD	HYDRANT
IN DIA	INCH DIAMETER
INL	INLET
ID	INSIDE DIAMETER
I	INTERSECTION ANGLE
IE	INVERT ELEVATION
IP	IRON PIPE OR PIN
JCT	JUNCTION
L	LENGTH OF CURVE
LF	LINEAR FOOT
LC	LONG CHORD OF CURVE
LCB	LONG CHORD BEARING
LS	LUMP SUM
MH	MANHOLE
N	NORTH
Y	NORTH GRID COORDINATE
OE	OUTLET ELEVATION
OL	OUT LOT
OD	OUTSIDE DIAMETER
OH	OVERHEAD LINES
PAVT	PAVEMENT
PLE	PERMANENT LIMITED EASEMENT
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PT	POINT OF TANGENCY
PCC	PORTLAND CEMENT CONCRETE
LB	POUND
PE	PRIVATE ENTRANCE
R OR RAD	RADIUS
RR	RAILROAD
R	RANGE
~ OR R/L	REFERENCE LINE
REQD	REQUIRED
RT	RIGHT
R / W	RIGHT-OF-WAY
RD	ROAD
SALV	SALVAGED
SAN	SANITARY SEWER
SECT	SECTION
SHLDR	SHOULDER
SW	SIDEWALK
S	SOUTH
SB	SOUTHBOUND
SPECS	SPECIFICATIONS
SQ	SQUARE
SF OR SQ FT	SQUARE FEET
SY	SQUARE YARD
SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
STD	STANDARD
SDD	STANDARD DETAIL DRAWINGS
STH	STATE TRUNK HIGHWAYS
STA	STATION
SS	STORM SEWER
T	TANGENT
TEL	TELEPHONE
TEMP	TEMPORARY
TLE	TEMPORARY LIMITED EASEMENT
T	TON
TC	TOP OF CURB
TN	TOWN
TRANS	TRANSITION
T	TRUCKS (percent of)
TYP	TYPICAL
UNCL	UNCLASSIFIED
USH	UNITED STATES HIGHWAY
VAR	VARIABLE
VERT	VERTICAL
VC	VERTICAL CURVE
VOL	VOLUME
WM	WATER MAIN
WV	WATER VALVE
W	WEST
WB	WESTBOUND
YD	YARD

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		2-6	6 & OVER	0-2	2-6	6 & OVER
MEDIAN STRIP TURF	0.19	0.20	0.24	0.19	0.22	0.26	0.20	0.23	0.30	0.20	0.25 0.32	0.30 0.40
SIDE SLOPE TURF			0.25			0.27			0.28			0.30 0.38
PAVEMENT:	0.40 - 0.60											
ASPHALT:	0.70 - 0.95											
CONCRETE:	0.80 - 0.95											
BRICK:	0.70 - 0.80											
DRIVES, WALKS:	0.75 - 0.85											
ROOFS:	0.75 - 0.95											
GRAVEL ROADS, SHOULDERS	0.40 - 0.60											

TOTAL PROJECT AREA = 161.9 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.3 ACRES

EROSION CONTROL NOTES

RUNOFF COEFFICIENTS FOR THIS PROJECT: EXISTING SIDE SLOPES 0.30, PROPOSED SIDE SLOPES 0.30, EXISTING PAVEMENT 0.95, PROPOSED PAVEMENT 0.95.

SECTION 2 ORDER

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
BEAMGUARD DETAILS
PAVEMENT MARKING

DNR LIAISON

DEPARTMENT OF NATURAL RESOURCES
SHAWN HASELEU
810 W. MAPLE STREET
SPOONER, WI 54801
PHONE: (715) 635-4228
EMAIL: SHAWN.HASELEU@WISCONSIN.GOV

DESIGN CONTACT

MSA PROFESSIONAL SERVICES, INC.
SEAN SPROMBERG, PE
332 W SUPERIOR STREET
DULUTH, MN 55802
PHONE: (715) 304-0451
EMAIL: SSPROMBERG@MSA-PS.COM

BAYFIELD COUNTY SURVEYOR

DEPARTMENT OF LAND RECORDS
PAT MCKUEN
117 E. FIFTH STREET
P.O. BOX 878
WASHBURN, WI 54891
PHONE: (715) 373-6156
EMAIL: COUNTYSURVEYOR@BAYFIELDCOUNTY.ORG

GENERAL NOTES

NO TREES OR SHRUBS ARE TO BE REMOVED UNLESS SUCH TREES OR SHRUBS HAVE BEEN DESIGNATED FOR REMOVAL BY THE ENGINEER.

HMA PAVEMENT THICKNESSES SHALL CONSIST OF A 1.75-INCH 5 MT 58-34 V LOWER LAYER AND A 1.5-INCH 5 MT 58-34 V UPPER LAYER.

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

THE ROADWAY CENTERLINE SHOWN ON THESE PLANS IS FOR STATIONING REFERENCE ONLY. THE PROPOSED ROADWAY TO FOLLOW THE EXISTING CENTERLINE.

R/W APPROXIMATED ON PLAN SHEETS BASED ON AS-BUILTS AND PARCEL MAPPING.

AS-BUILTS

PROJECT: 1564-07-71 (1980)
PROJECT: 1560-03-72 (1988)
PROJECT: 1560-13-71 (1998)
PROJECT: 1560-20-71 (2006)
PROJECT: 1180-04-60 (2012)

UTILITY CONTACTS

ELECTRIC

BAYFIELD ELECTRIC COOPERATIVE INC.
ROBERT LAHTI
68460 DISTRICT STREET
P.O. BOX 68
IRON RIVER, WI 54847
PHONE: (715) 372-4287
EMAIL: BOB.LAHTI@BAYFIELDELECTRIC.COM

ELECTRIC

XCEL ENERGY
MURRAY SMERER
2400 FARM ROAD
ASHLAND, WI 54806
PHONE: (715) 682-6928
EMAIL: MURRAY.J.SMERER@EXCELENERGY.COM

COMMUNICATIONS

NORVADO
GUY FOLSOM
43705 USH 63
P.O. BOX 67
CABLE, WI 54821-0067
PHONE: (715) 798-7123
EMAIL: GFOLSOM@NORVADO.COM

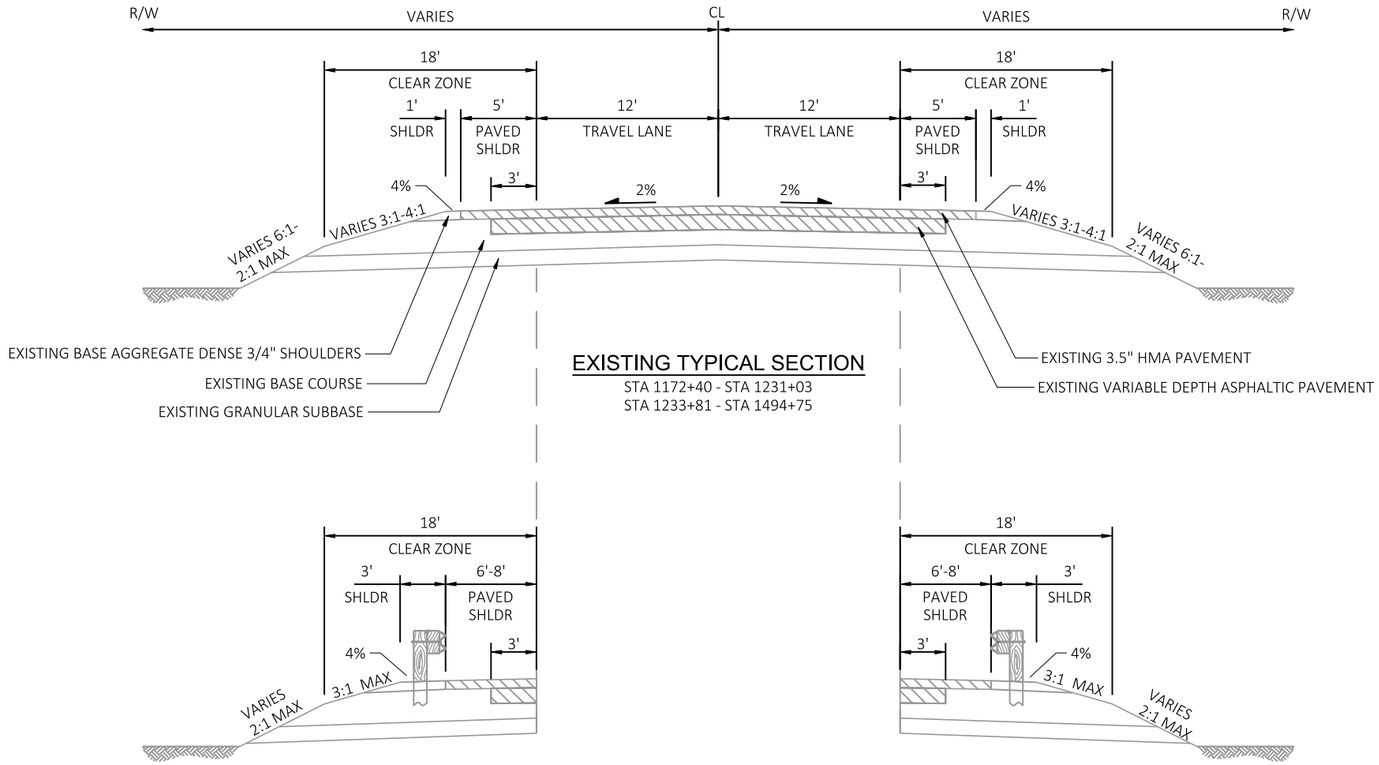
MERIT NETWORK, INC.
NICK ANDRUS
880 TECHNOLOGY DRIVE
ANN ARBOR, MI 48104
PHONE: (734) 277-7502
EMAIL: OSP@MERIT.EDU

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

2

PROJECT NO: 1560-00-76	HWY: USH 63	COUNTY: BAYFIELD	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : G:\00\00093\00093599\CADD\SHEETSPLAN\020201-PO.DWG
LAYOUT NAME - 020201-po
PLOT DATE : 7/6/2021 3:13 PM
PLOT BY : COURTNEY ROOYAKKERS
PLOT NAME :
PLOT SCALE : 1 IN:1500 FT
WISDOT/CADDS SHEET 44



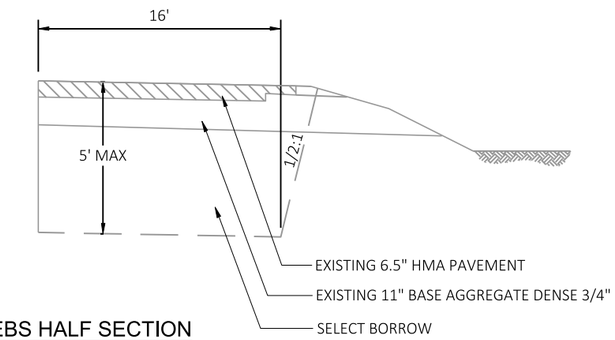
EXISTING TYPICAL SECTION

STA 1172+40 - STA 1231+03
STA 1233+81 - STA 1494+75

EXISTING TYPICAL SECTION BEAM GUARD

STA 1231+03 - STA 1231+88 LT
STA 1232+95 - STA 1234+18 LT
STA 1413+10 - STA 1414+88 LT

STA 1230+67 - STA 1231+88 RT
STA 1232+95 - STA 1233+81 RT
STA 1412+47 - STA 1414+02 RT



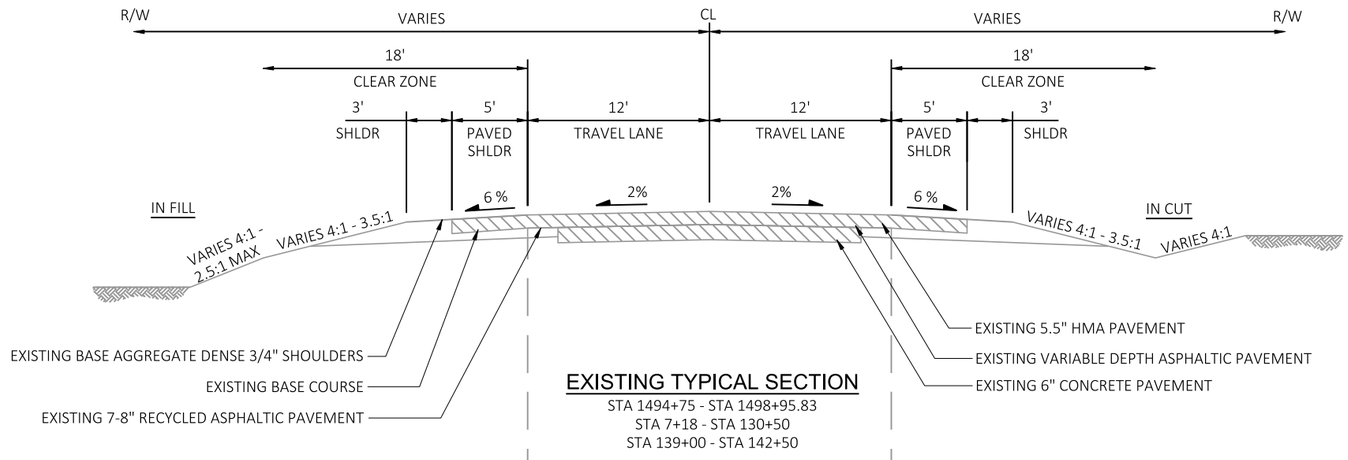
EXISTING EBS HALF SECTION

STA 1216+60 - STA 1219+55
STA 1235+50 - STA 1239+00
STA 1225+23 - STA 1226+73

NOTE
EXISTING TYPICALS BASED ON AS-BUILT PLANS

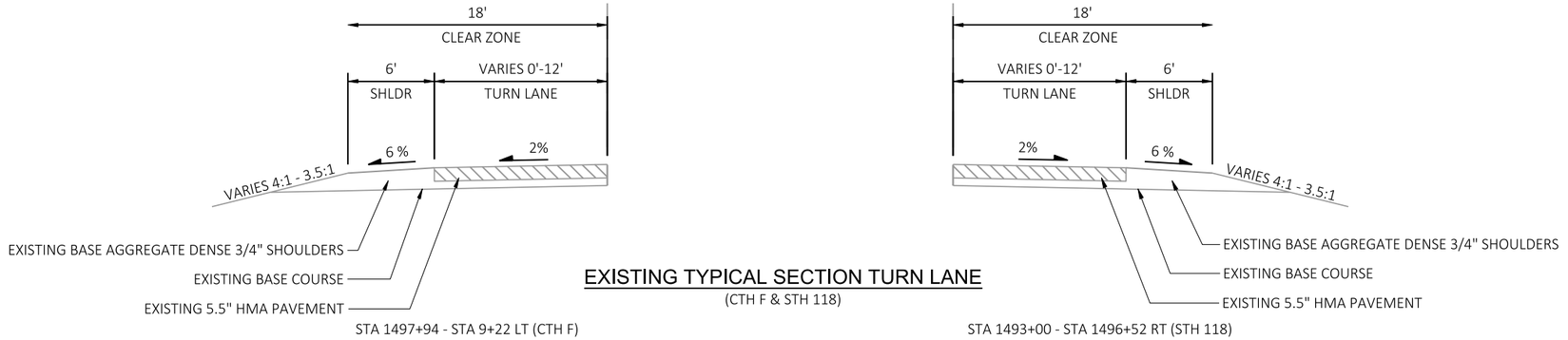
PROJECT NO: 1560-00-76	HWY: USH 63	COUNTY: BAYFIELD	TYPICAL SECTIONS	SHEET 4	E

2



EXISTING TYPICAL SECTION

STA 1494+75 - STA 1498+95.83
STA 7+18 - STA 130+50
STA 139+00 - STA 142+50

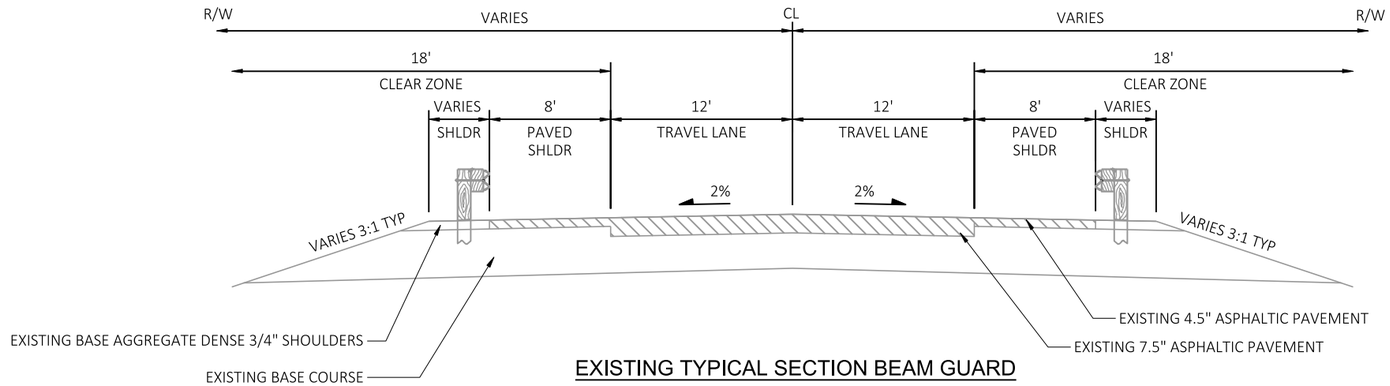


EXISTING TYPICAL SECTION TURN LANE

(CTH F & STH 118)

STA 1497+94 - STA 9+22 LT (CTH F)

STA 1493+00 - STA 1496+52 RT (STH 118)



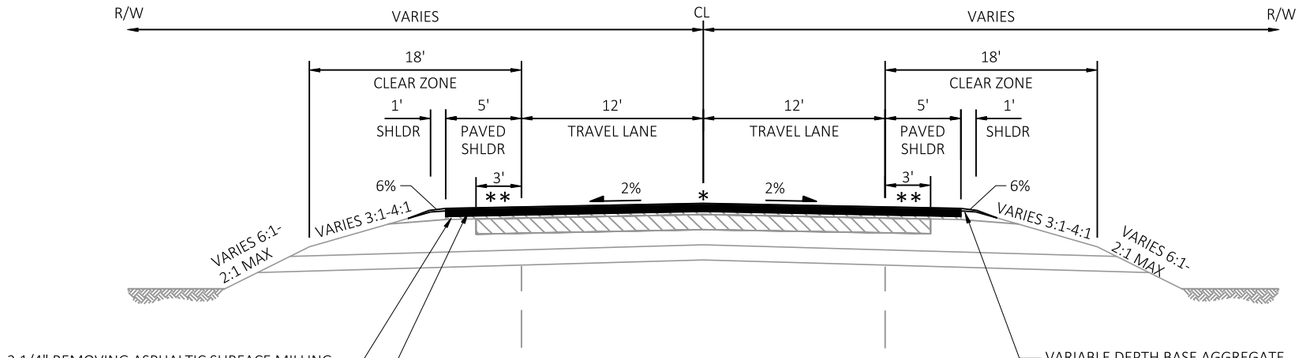
EXISTING TYPICAL SECTION BEAM GUARD

STA 132+00 - STA 133+65 LT
STA 134+54 - STA 136+19 LT

STA 132+00 - STA 133+65 RT
STA 134+54 - STA 136+19 RT

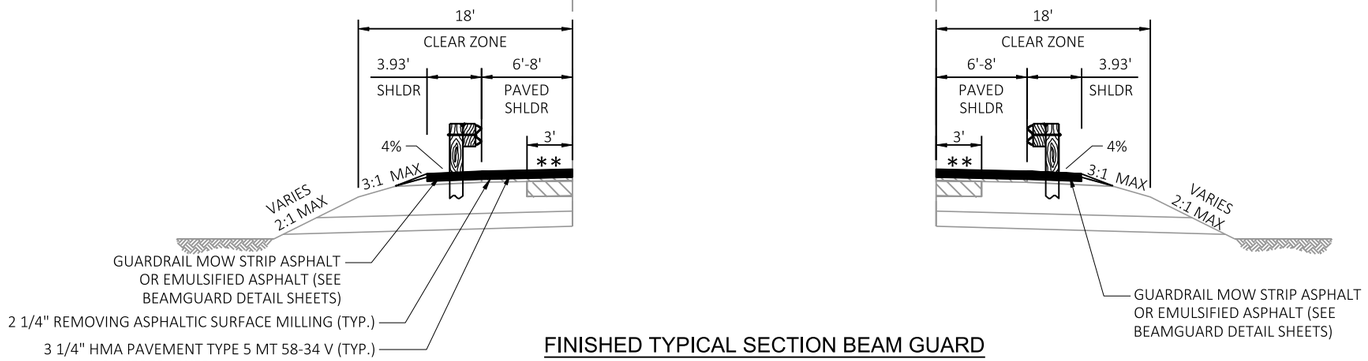
NOTE
EXISTING TYPICALS BASED ON AS-BUILT PLANS

PROJECT NO: 1560-00-76	HWY: USH 63	COUNTY: BAYFIELD	TYPICAL SECTIONS	SHEET 5	E



FINISHED TYPICAL SECTION

STA 1172+40 - STA 1232+01
STA 1232+90 - STA 1494+75



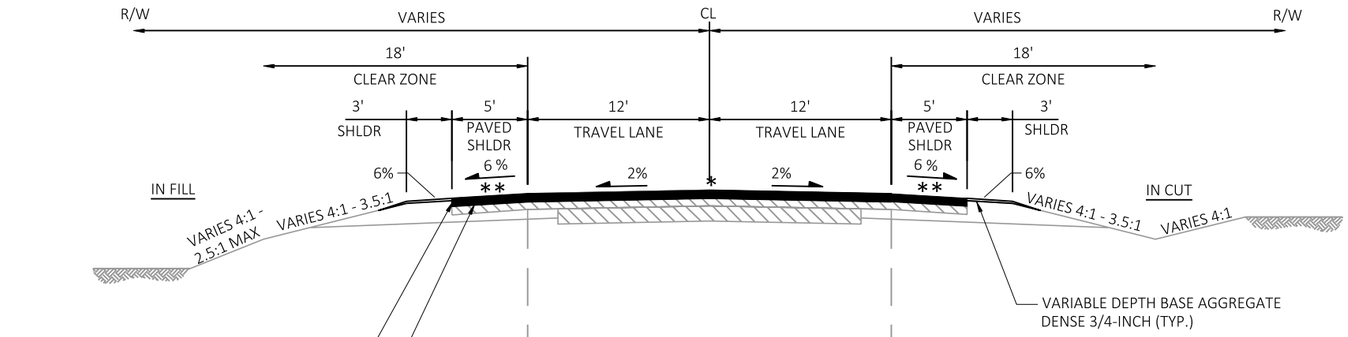
FINISHED TYPICAL SECTION BEAM GUARD

STA 1231+01 - STA 1231+93 LT
STA 1232+97 - STA 1233+90 LT
STA 1412+72 - STA 1415+53 LT

STA 1231+01 - STA 1231+93 RT
STA 1232+97 - STA 1233+90 RT
STA 1411+70 - STA 1414+39 RT

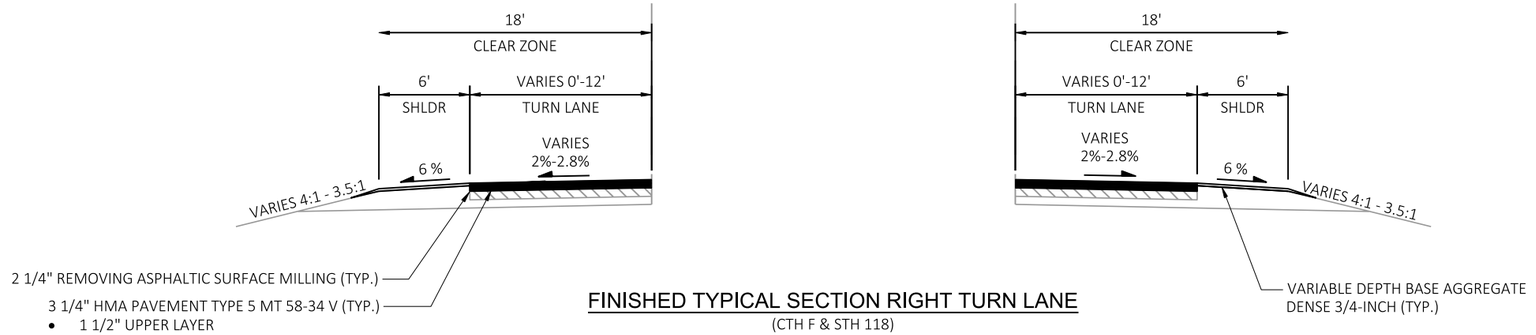
* ASPHALTIC CENTERLINE RUMBLE STRIP 2-LANE RURAL

** ASPHALTIC SHOULDER RUMBLE STRIP 2-LANE RURAL



FINISHED TYPICAL SECTION

STA 1494+75 - STA 1498+95.83
STA 7+18 - STA 130+50



FINISHED TYPICAL SECTION RIGHT TURN LANE

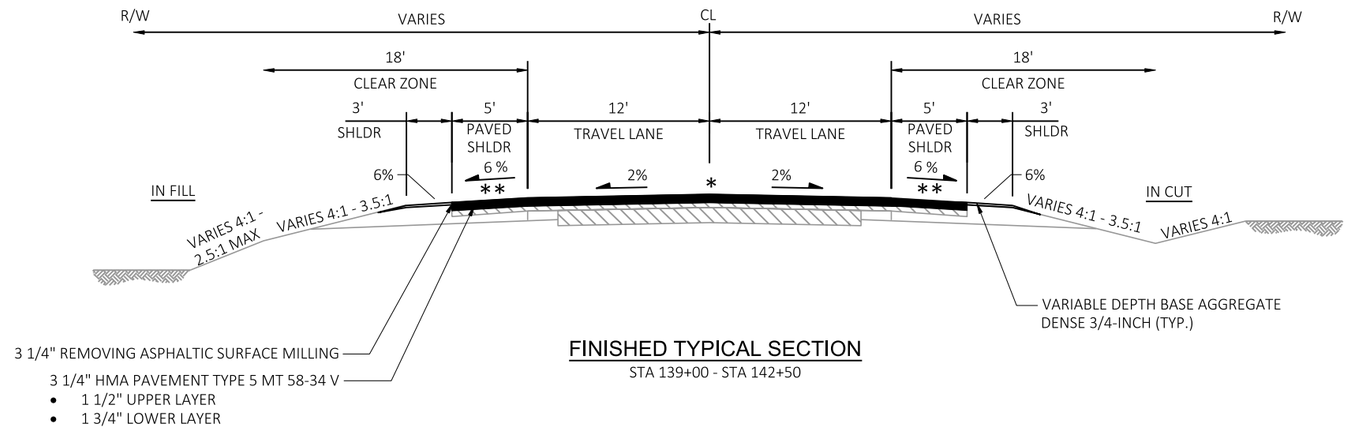
(CTH F & STH 118)

STA 1497+94 - STA 9+22 LT (CTH F)

STA 1493+00 - STA 1496+52 RT (STH 118)

* ASPHALTIC CENTERLINE RUMBLE STRIP 2-LANE RURAL

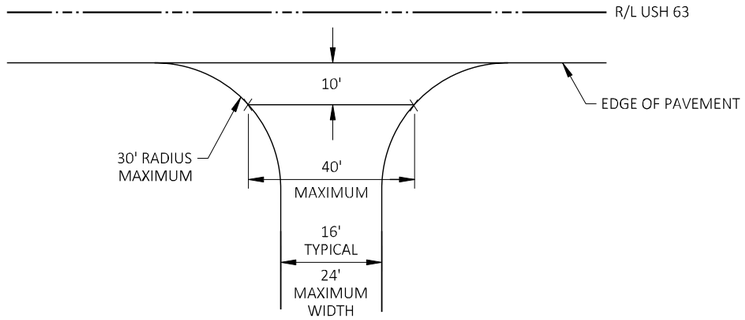
** ASPHALTIC SHOULDER RUMBLE STRIP 2-LANE RURAL



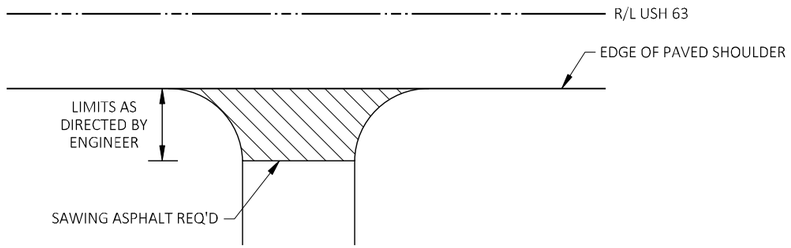
FINISHED TYPICAL SECTION

STA 139+00 - STA 142+50

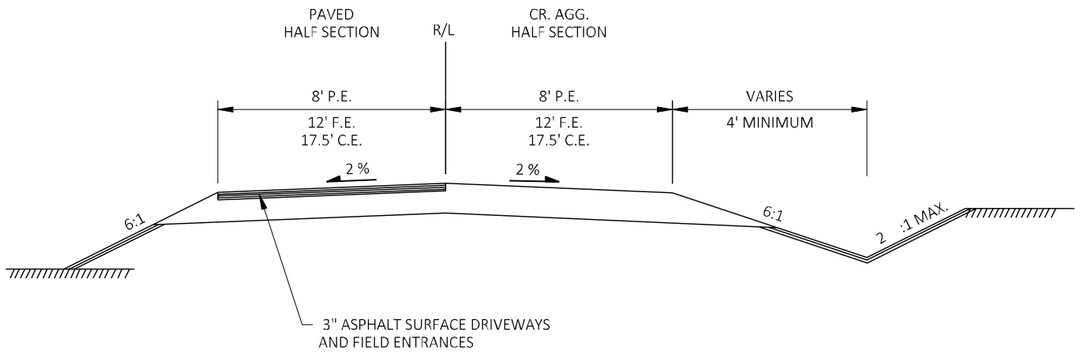
PROJECT NO: 1560-00-76	HWY: USH 63	COUNTY: BAYFIELD	TYPICAL SECTIONS	SHEET 7	E



TYPICAL DRIVEWAY DETAIL
(NON-COMMERCIAL RURAL)

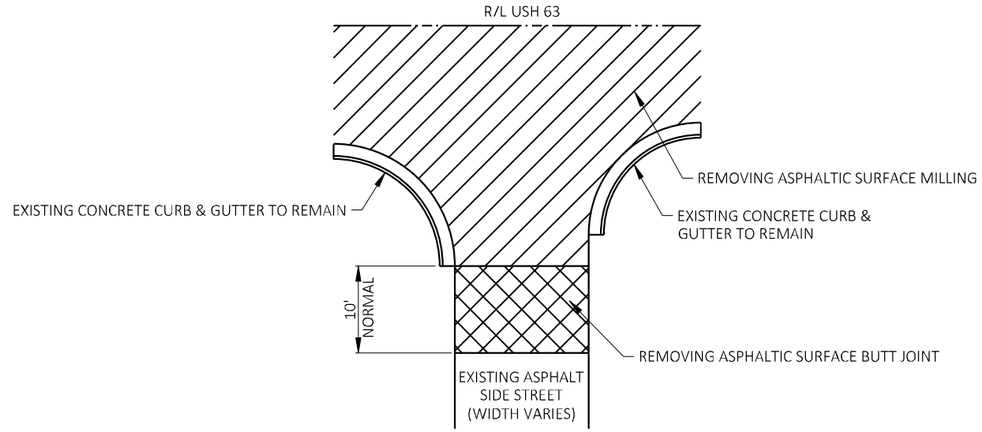


RURAL DRIVEWAY DETAIL - ASPHALT



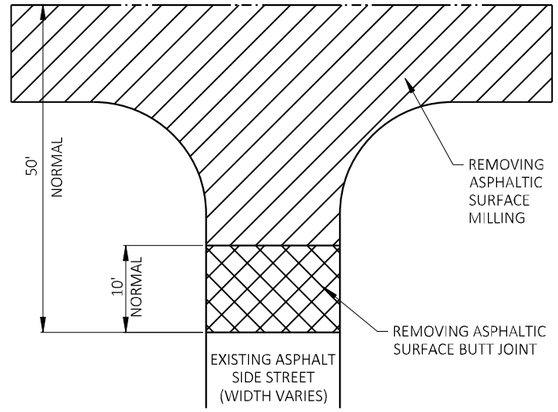
TYPICAL SECTION
FOR PRIVATE ENTRANCES

NOTE:
DRIVEWAY PROFILES NOT EXPECTED TO EXCEED 10%, PLACE LOW POINT OF DRIVEWAY PROFILE OVER DITCH FLOW LINE.



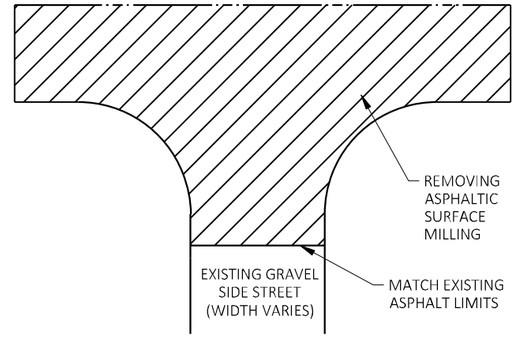
RURAL ASPHALTIC SURFACE SIDE ROAD DETAIL

SIDE ROAD WITH CURB AND GUTTER TO REMAIN
CTH E
CTH F
STH 118



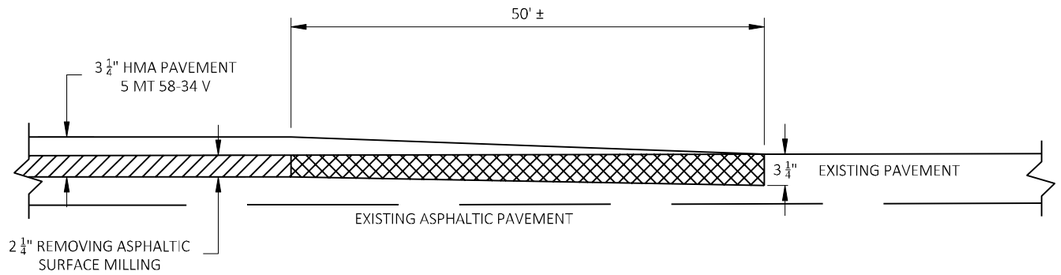
RURAL ASPHALTIC SURFACE SIDE ROAD DETAIL

SIDE ROAD WITH NO CURB AND GUTTER
PEZDERIC RD



RURAL GRAVEL SURFACE SIDE ROAD DETAIL

BIBON RD
WILSON RD
WILSON RD N
BROWN RD
MAPLE RIDGE RD
LUND RD
HOLMES RD
SUNDEEN RD
ADOLPH JOHNSON RD
SQUIRES RD
RANCH PARK RD
FRANZEL RD
SROMEYER LN
ZEPCZYK RD



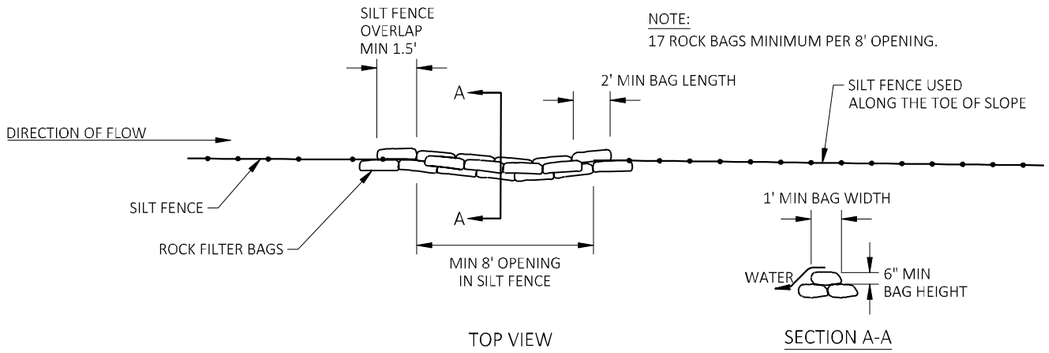
REMOVING ASPHALTIC SURFACE MILLING

REMOVING ASPHALTIC SURFACE BUTT JOINT

BUTT JOINT DETAIL

STA 1172+40 - STA 1172+90
STA 1231+51 - STA 1232+01
STA 1232+90 - STA 1233+40
STA 130+00 - STA 130+50
STA 139+00 - STA 139+50
STA 142+00 - STA 142+50

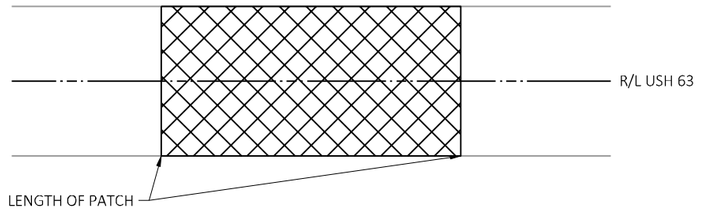
∗EXACT DIMENSIONS TO BE DETERMINED
BY ENGINEER IN THE FIELD



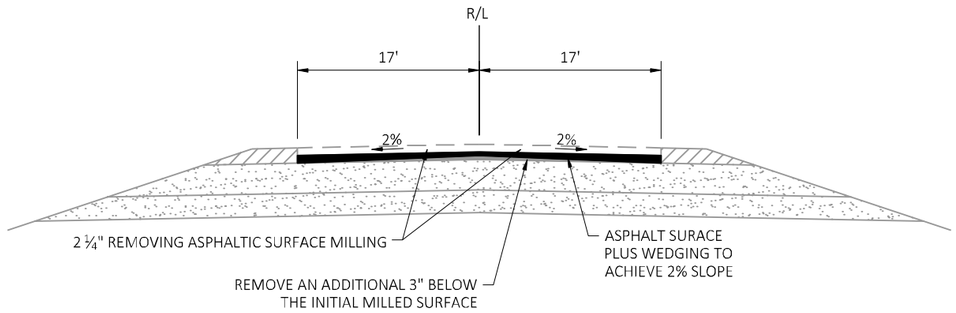
TOP VIEW

SECTION A-A

ROCK BAGS USED FOR SILT FENCE RELIEF



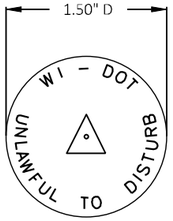
PLAN



SECTION

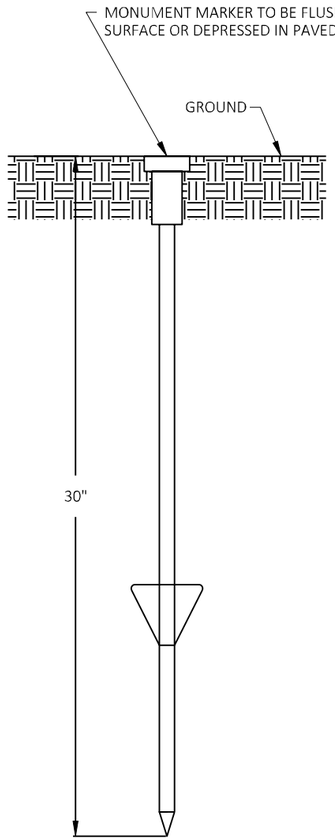
ASPHALTIC BASE PATCH PARTIAL DEPTH

STA 45+25 - STA 45+75



WIS DOT MONUMENT CAP MARKER LOGO (SSDR130)

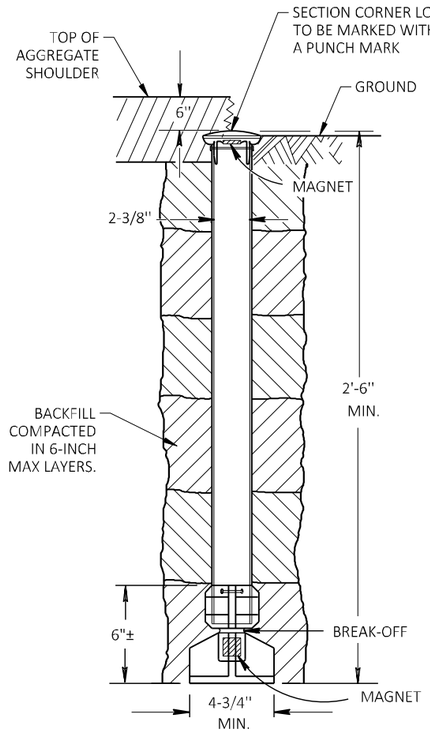
CONTRACTOR TO ORDER LANDMARK REFERENCE MONUMENTS WITH THE ABOVE STAMPING



(FRONT VIEW)

BERNSTEN DRIVABLE MONUMENT SSDR130

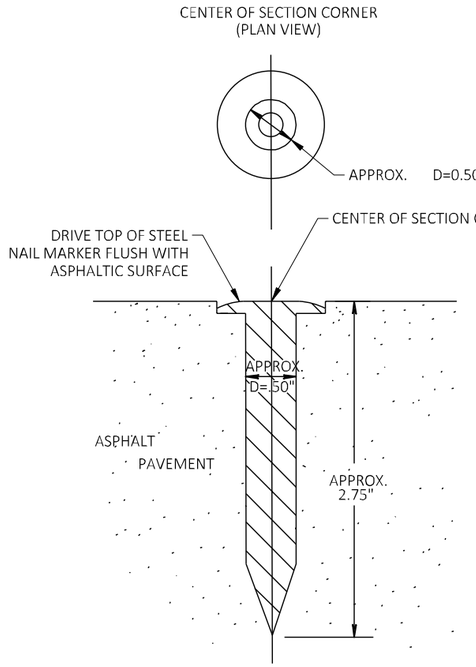
LANDMARK REFERENCE MONUMENT (TIES ONLY)



(SIDE VIEW)

OUTSIDE OF PAVEMENT

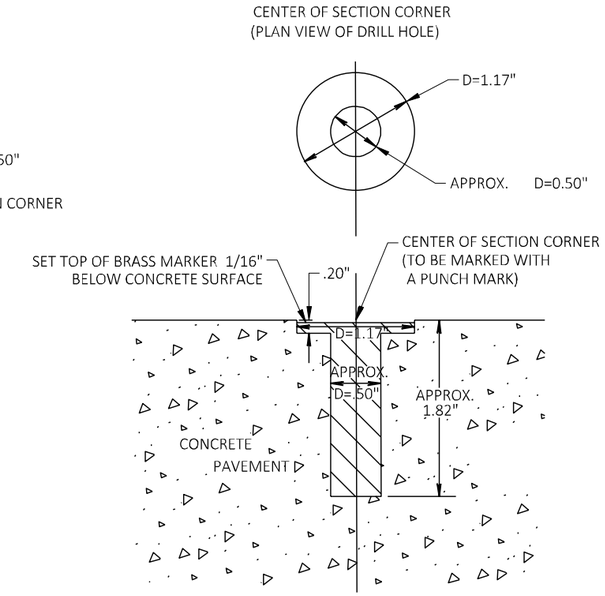
BERNTSEN A1BR30 ALUMINUM BREAK-OFF MONUMENT



(SIDE VIEW)

IN ASPHALTIC PAVEMENT

BERNTSEN SNM1 STEEL NAIL MARKER



NOTE: TO DRILL HOLE, USE A "SURVEY MARKER COUNTERSINK DRILL BIT" ITEM #BPMDRL, AVAILABLE FROM BERNTSEN INTERNATIONAL INC.

(SIDE VIEW OF DRILL HOLE)

IN CONCRETE PAVEMENT

BERNTSEN BP - 1 BRASS MARKER WITH ANCHOR PLUG

SECTION CORNER MONUMENTS

GENERAL NOTES

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

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

CONTRACTOR WILL SUPPLY ALL REQUIRED SURVEY MONUMENTS.

SECTION CORNER MONUMENT AND LANDMARK REFERENCE MONUMENT DETAIL

2

DNR STATE OF WISCONSIN

APPROX. R/W

N

LEGEND

EROSION MAT URBAN CLASS I, TYPE B

SILT FENCE

OVERHEAD ELECTRIC (XCEL ENERGY)

GUARDRAIL MOW STRIP ASPHALT, 4' WIDE (TYP.)

CLEANING STORM SEWER (18" CPRC)

1 - MGS EAT
39.4 LF - MGS THRIE BEAM TRANSITION

POST 1
1231+00.9
22.0' LT

POST 5
1231+25.9
21.0' LT

POST 9
1231+50.9
20.0' LT

1230+50.9
17.0' LT

PI: 1229+68.85

B-04-0035 (TO REMAIN)

1 - MGS EAT
39.4 LF - MGS THRIE BEAM TRANSITION

POST 9
1233+39.9
20.0' LT

POST 5
1233+64.9
21.0' LT

POST 1
1233+89.9
22.0' LT

1234+39.9
17.0' LT

1230+00 1231+00 1232+00 1233+00 USH 63 1234+00 1235+00

1230+50.9
17.0' RT

POST 1
1231+00.9
22.0' RT

POST 5
1231+25.9
21.0' RT

POST 9
1231+50.9
20.0' RT

FIBER OPTIC (NORVADO)

1 - MGS EAT
39.4 LF - MGS THRIE BEAM TRANSITION

CLEANING STORM SEWER (18" CPRC)

POST 9
1233+39.9
20.0' RT

1 - MGS EAT
39.4 LF - MGS THRIE BEAM TRANSITION

POST 5
1233+64.9
21.0' RT

POST 1
1233+89.9
22.0' RT

1234+39.9
17.0' RT

APPROX. R/W

WHITE RIVER

MICHAEL W & PHYLLIS A CEGLER

MICHAEL J PLISS JR

CONTROL POINTS					
NO.	STATION	DESCRIPTION	Y	X	ELEV.
12	1219+41.70, 26.47' RT	5/8" C.E.C. CAPPED REBAR	398,535.57	775,785.51	917.71
13	1253+33.43, 25.67' RT	5/8" C.E.C. CAPPED REBAR	401,927.20	775,761.71	931.64

PROJECT NO: 1560-00-76	HWY: USH 63	COUNTY: BAYFIELD	BEAMGUARD DETAILS	SHEET 11	E

FILE NAME : G:\00\00093\00093599\CADD\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 021201-pd
PLOT DATE : 5/28/2021 9:36 AM
PLOT BY : COURTNEY ROOYAKKERS
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

TIMOTHY S &
MELISSA I NETZ

N

LEGEND

EROSION MAT URBAN CLASS I, TYPE B

SILT FENCE

APPROX. R/W

GUARDRAIL MOW STRIP EMULSIFIED, 4' WIDE (TYP.) SEE STANDARD DETAIL DRAWING "GUARDRAIL MOW STRIP"

FIBER OPTIC (NORVADO)

1412+41.8
17.0' LT

POST 1
1412+71.8
20.0' LT

1 - MGS EAT

POST 5
1412+96.8
19.0' LT

POST 9
1413+21.8
18.0' LT

112.5 LF - MGS 3 L BEAM GUARD

MEDIUM RIPRAP
STA 1413+65 - 1414+10 LT

DRAINAGE WAY

1 - MGS EAT
62.5 LF - MGS 3 BEAM GUARD

POST 9
1415+03.0
18.0' LT

POST 5
1415+28.0
19.0' LT

POST 1
1415+53.0
20.0' LT

APPROX. R/W
1415+83.0
17.0' LT

18'

10'

8'

25'

1411+00 1412+00 1413+00 1414+00 USH 63 1415+00 1416+00

50'

8'

CP-19

30'

POST 1
1411+70.3
20.0' RT

POST 5
1411+95.3
19.0' RT

POST 9
1412+20.3
18.0' RT

1 - MGS EAT
50 LF - MGS 3 BEAM GUARD

112.5 LF - MGS 3 L BEAM GUARD

C-04-2381
(TO REMAIN)

MEDIUM RIPRAP
STA 1412+75 - 1413+45 RT

POST 9
1413+89.0
18.0' RT

1 - MGS EAT

POST 5
1414+14.0
19.0' RT

POST 1
1414+39.0
20.0' RT

1414+69.0
17.0' RT

APPROX. R/W

SQUIRES RD

OVERHEAD ELECTRIC
(XCEL ENERGY)

CONTROL POINTS					
NO.	STATION	DESCRIPTION	Y	X	ELEV.
19	1411+78.70, 29.31' RT	5/8" C.E.C. CAPPED REBAR	417,772.52	775,783.32	875.97

TERRY L HOGAN

PROJECT NO: 1560-00-76	HWY: USH 63	COUNTY: BAYFIELD	BEAMGUARD DETAILS	SHEET 12	E

FILE NAME : G:\00\00093\00093599\CADD\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 021202-pd

PLOT DATE : 7/7/2021 12:40 PM PLOT BY : COURTNEY ROOYAKKERS PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

BEGIN PROJECT
STA 1172+40

BIBON RD

WILSON RD

APPROX. R/W

MWGWR4

1175

MYS4

1180

MYS4

MYE4

USH 63

MWGWR4

1185

MWGWR4

MDY4

1190

1195

MYE4

MYS4

12

MATCH LINE STA 1200+00

APPROX. R/W

CTH E

N

2

MARKING LEGEND

MWGWR4	MARKING LINE GROOVED WET REFLECTIVE 4-INCH (WHITE SOLID LINE)
MWGWRS4	MARKING LINE GROOVED WET REFLECTIVE 4-INCH SKIPS (3' DASH 9' GAP)
MWS4	MARKING LINE EPOXY 4-INCH SKIPS (12.5' DASH 37.5' GAP)
MYE4	MARKING LINE EPOXY 4-INCH (YELLOW)
MDY4	MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
MYS4	MARKING LINE EPOXY 4-INCH SKIPS (12.5' DASH 37.5' GAP)
MWGWR8	MARKING LINE GROOVED WET REFLECTIVE 8-INCH (WHITE)

MATCH LINE STA 1200+00

APPROX. R/W

MYE4

00

1205

MYS4

1210

MWGWR4

USH 63

MWGWR4

1215

MYS4

1220

WILSON RD

1225

MWGWR4

MWGWR4

12

APPROX. R/W

APPROX R/W

BROWN RD

MATCH LINE STA 1230+00

N

PROJECT NO: 1560-00-76	HWY: USH 63	COUNTY: BAYFIELD	PAVEMENT MARKING	SHEET 13 E

2

MARKING LEGEND

MWGWR4	MARKING LINE GROOVED WET REFLECTIVE 4-INCH (WHITE SOLID LINE)
MWGWRS4	MARKING LINE GROOVED WET REFLECTIVE 4-INCH SKIPS (3' DASH 9' GAP)
MWS4	MARKING LINE EPOXY 4-INCH SKIPS (12.5' DASH 37.5' GAP)
MYE4	MARKING LINE EPOXY 4-INCH (YELLOW)
MDY4	MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
MYS4	MARKING LINE EPOXY 4-INCH SKIPS (12.5' DASH 37.5' GAP)
MWGWR8	MARKING LINE GROOVED WET REFLECTIVE 8-INCH (WHITE)

PROJECT NO: 1560-00-76	HWY: USH 63	COUNTY: BAYFIELD	PAVEMENT MARKING	SHEET 14 E

2

2

MATCH LINE STA 1290+00

MATCH LINE STA 1320+00

APPROX. R/W

APPROX. R/W

90 1295 1300 1305 1310 1315 13

USH 63

MWGWR4

MYS4

MWGWR4

N

MARKING LEGEND

MWGWR4	MARKING LINE GROOVED WET REFLECTIVE 4-INCH (WHITE SOLID LINE)
MWGWRS4	MARKING LINE GROOVED WET REFLECTIVE 4-INCH SKIPS (3' DASH 9' GAP)
MWS4	MARKING LINE EPOXY 4-INCH SKIPS (12.5' DASH 37.5' GAP)
MYE4	MARKING LINE EPOXY 4-INCH (YELLOW)
MDY4	MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
MYS4	MARKING LINE EPOXY 4-INCH SKIPS (12.5' DASH 37.5' GAP)
MWGWR8	MARKING LINE GROOVED WET REFLECTIVE 8-INCH (WHITE)

N

MATCH LINE STA 1320+00

MATCH LINE STA 1350+00

SPRING CREEK

APPROX. R/W

APPROX. R/W

20 1325 1330 1335 1340 1345 13

USH 63

MYS4

MWGWR4

MYE4

MYS4

MWGWR4

MYS4

MWGWR4

MYE4

MYS4

SUNDEEN RD

PROJECT NO: 1560-00-76	HWY: USH 63	COUNTY: BAYFIELD	PAVEMENT MARKING	SHEET 15	E

FILE NAME : G:\00\00093\00093599\CADD\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 024503

PLOT DATE : 10/28/2021 11:01 AM PLOT BY : SHAWN DOLENS PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 44

2

2

MATCH LINE STA 1350+00

MATCH LINE STA 1380+00

APPROX. R/W

APPROX. R/W

1350

1355

1360

1365

1370

1375

1380

USH 63

MWGWR4

MYS4

MWGWR4

MWGWR4

ADOLPH JOHNSON RD

N

MARKING LEGEND

MWGWR4	MARKING LINE GROOVED WET REFLECTIVE 4-INCH (WHITE SOLID LINE)
MWGWRS4	MARKING LINE GROOVED WET REFLECTIVE 4-INCH SKIPS (3' DASH 9' GAP)
MWS4	MARKING LINE EPOXY 4-INCH SKIPS (12.5' DASH 37.5' GAP)
MYE4	MARKING LINE EPOXY 4-INCH (YELLOW)
MDY4	MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
MYS4	MARKING LINE EPOXY 4-INCH SKIPS (12.5' DASH 37.5' GAP)
MWGWR8	MARKING LINE GROOVED WET REFLECTIVE 8-INCH (WHITE)

SPRING CREEK

SCHRAMM CREEK

MATCH LINE STA 1380+00

MATCH LINE STA 1410+00

APPROX. R/W

APPROX. R/W

1380

1385

1390

1395

1400

1405

1410

USH 63

MYE4

MDY4

MWGWR4

MYE4

MYS4

MWGWR4

APPROX R/W

MYS4

OH

SQUIRES RD

N

PROJECT NO: 1560-00-76	HWY: USH 63	COUNTY: BAYFIELD	PAVEMENT MARKING	SHEET 16	E

FILE NAME : G:\00\00093\00093599\CADD\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 024504

PLOT DATE : 10/28/2021 11:02 AM PLOT BY : SHAWN DOLENS PLOT NAME : PLOT SCALE : 1 IN:200 FT

2

MARKING LEGEND

MWGWR4	MARKING LINE GROOVED WET REFLECTIVE 4-INCH (WHITE SOLID LINE)
MWGWRS4	MARKING LINE GROOVED WET REFLECTIVE 4-INCH SKIPS (3' DASH 9' GAP)
MWS4	MARKING LINE EPOXY 4-INCH SKIPS (12.5' DASH 37.5' GAP)
MYE4	MARKING LINE EPOXY 4-INCH (YELLOW)
MDY4	MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
MYS4	MARKING LINE EPOXY 4-INCH SKIPS (12.5' DASH 37.5' GAP)
MWGWR8	MARKING LINE GROOVED WET REFLECTIVE 8-INCH (WHITE)

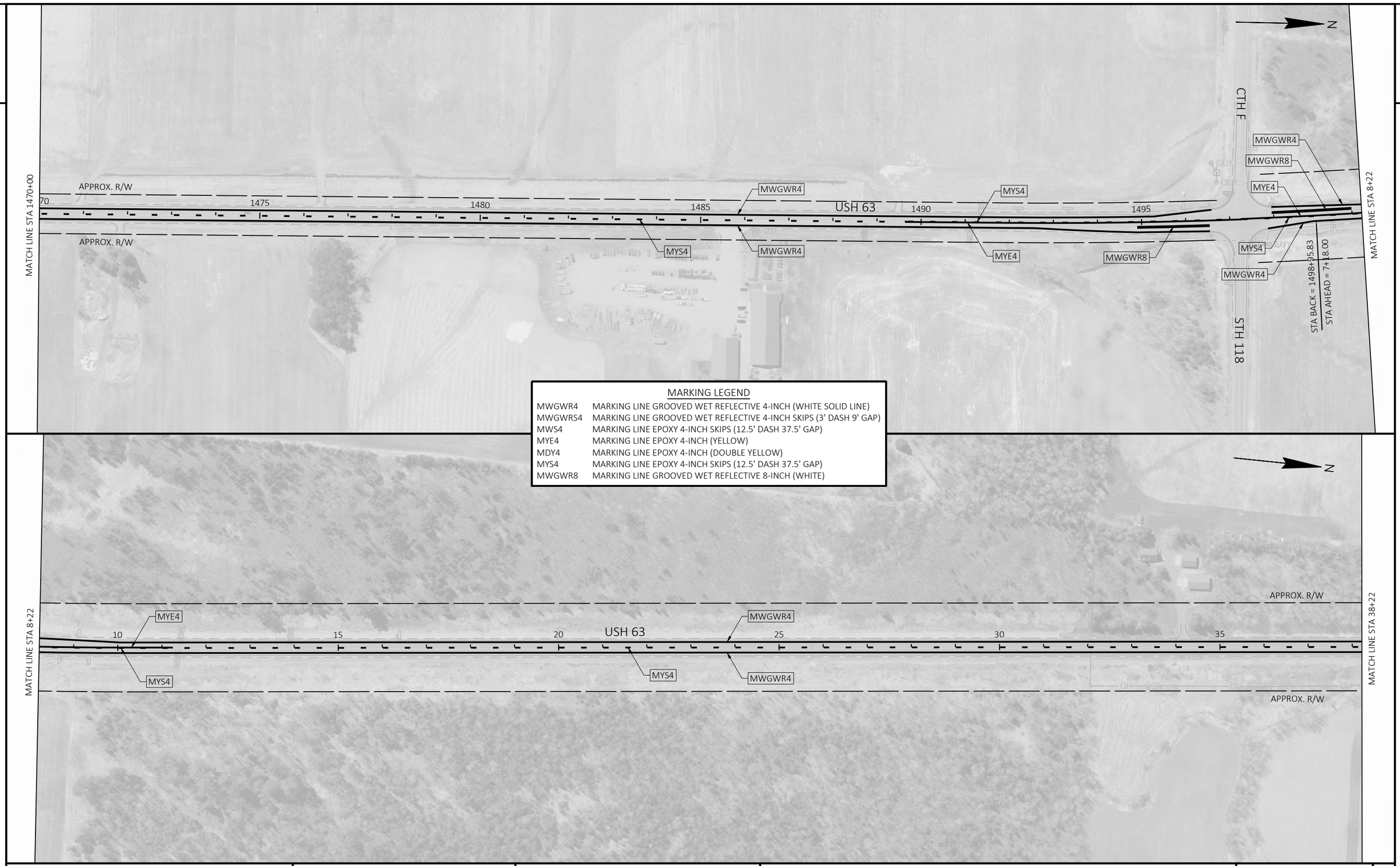
2

PROJECT NO: 1560-00-76	HWY: USH 63	COUNTY: BAYFIELD	PAVEMENT MARKING	SHEET 17	E

FILE NAME : G:\00\00093\00093599\CADD\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 024505

PLOT DATE : 10/28/2021 11:02 AM PLOT BY : SHAWN DOLENS PLOT NAME : PLOT SCALE : 1 IN:200 FT

2



MARKING LEGEND

MWGWR4	MARKING LINE GROOVED WET REFLECTIVE 4-INCH (WHITE SOLID LINE)
MWGWRS4	MARKING LINE GROOVED WET REFLECTIVE 4-INCH SKIPS (3' DASH 9' GAP)
MWS4	MARKING LINE EPOXY 4-INCH SKIPS (12.5' DASH 37.5' GAP)
MYE4	MARKING LINE EPOXY 4-INCH (YELLOW)
MDY4	MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
MYS4	MARKING LINE EPOXY 4-INCH SKIPS (12.5' DASH 37.5' GAP)
MWGWR8	MARKING LINE GROOVED WET REFLECTIVE 8-INCH (WHITE)

PROJECT NO: 1560-00-76	HWY: USH 63	COUNTY: BAYFIELD	PAVEMENT MARKING	SHEET 18 E

FILE NAME : G:\00\00093\00093599\CADD\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 024506

PLOT DATE : 10/28/2021 11:02 AM PLOT BY : SHAWN DOLENS PLOT NAME : PLOT SCALE : 1 IN:200 FT

2

MARKING LEGEND

MWGWR4	MARKING LINE GROOVED WET REFLECTIVE 4-INCH (WHITE SOLID LINE)
MWGWRS4	MARKING LINE GROOVED WET REFLECTIVE 4-INCH SKIPS (3' DASH 9' GAP)
MWS4	MARKING LINE EPOXY 4-INCH SKIPS (12.5' DASH 37.5' GAP)
MYE4	MARKING LINE EPOXY 4-INCH (YELLOW)
MDY4	MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
MYS4	MARKING LINE EPOXY 4-INCH SKIPS (12.5' DASH 37.5' GAP)
MWGWR8	MARKING LINE GROOVED WET REFLECTIVE 8-INCH (WHITE)

PROJECT NO: 1560-00-76	HWY: USH 63	COUNTY: BAYFIELD	PAVEMENT MARKING	SHEET 19	E

2

2

N

MATCH LINE STA 98+22

MATCH LINE STA 128+22

STROMEYER LN

APPROX. R/W

MWGWR4

MWGWRS4

USH 63

100

105

110

115

120

125

MWGWR4

MYS4

MWGWR4

APPROX. R/W

ZEPCZYK RD

MARKING LEGEND

MWGWR4	MARKING LINE GROOVED WET REFLECTIVE 4-INCH (WHITE SOLID LINE)
MWGWRS4	MARKING LINE GROOVED WET REFLECTIVE 4-INCH SKIPS (3' DASH 9' GAP)
MWS4	MARKING LINE EPOXY 4-INCH SKIPS (12.5' DASH 37.5' GAP)
MYE4	MARKING LINE EPOXY 4-INCH (YELLOW)
MDY4	MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
MYS4	MARKING LINE EPOXY 4-INCH SKIPS (12.5' DASH 37.5' GAP)
MWGWR8	MARKING LINE GROOVED WET REFLECTIVE 8-INCH (WHITE)

N

USH 2

MATCH LINE STA 128+22

APPROX. R/W

MYS4

MWGWR4

USH 63

130

135

140

144

MDY4

MYS4

MYE4

MWGWR4

APPROX R/W

APPROX. R/W

SOUTH FISH CREEK

END PROJECT
STA 142+50

PROJECT NO: 1560-00-76	HWY: USH 63	COUNTY: BAYFIELD	PAVEMENT MARKING	SHEET 20	E

FILE NAME : G:\00\00093\00093599\CADD\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 024508

PLOT DATE : 10/28/2021 11:02 AM PLOT BY : SHAWN DOLENS PLOT NAME : PLOT SCALE : 1 IN:200 FT

1560-00-76

Line	Item	Item Description	Unit	Total	Qty
0002	204.0110	Removing Asphaltic Surface	SY	36.000	36.000
0004	204.0115	Removing Asphaltic Surface Butt Joints	SY	1,328.000	1,328.000
0006	204.0120	Removing Asphaltic Surface Milling	SY	174,238.000	174,238.000
0008	204.0165	Removing Guardrail	LF	755.000	755.000
0010	205.0100	Excavation Common	CY	73.000	73.000
0012	208.0100	Borrow	CY	512.000	512.000
0014	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 1560-00-76	LS	1.000	1.000
0016	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	9.000	9.000
0018	213.0100	Finishing Roadway (project) 01. 1560-00-76	EACH	1.000	1.000
0020	305.0110	Base Aggregate Dense 3/4-Inch	TON	3,089.000	3,089.000
0022	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	320.000	320.000
0024	455.0605	Tack Coat	GAL	22,939.000	22,939.000
0026	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	1.000	1.000
0028	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	2.000	2.000
0030	460.2005	Incentive Density PWL HMA Pavement	DOL	22,157.000	22,157.000
0032	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	18,140.000	18,140.000
0034	460.2010	Incentive Air Voids HMA Pavement	DOL	32,233.000	32,233.000
0036	460.6645	HMA Pavement 5 MT 58-34 V	TON	32,312.000	32,312.000
0038	460.9000.S	Material Transfer Vehicle 01. 1560-00-76	EACH	1.000	1.000
0040	465.0105	Asphaltic Surface	TON	500.000	500.000
0042	465.0110	Asphaltic Surface Patching	TON	300.000	300.000
0044	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	45.000	45.000
0046	465.0425	Asphaltic Shoulder Rumble Strips 2-Lane Rural	LF	83,769.000	83,769.000
0048	465.0450	Asphaltic Intersection Rumble Strips	SY	27.000	27.000
0050	465.0475	Asphalt Centerline Rumble Strips 2-Lane Rural	LF	38,249.000	38,249.000
0052	606.0200	Riprap Medium	CY	63.000	63.000
0054	614.0396	Guardrail Mow Strip Asphalt	SY	178.000	178.000
0056	614.0397	Guardrail Mow Strip Emulsified Asphalt	SY	245.000	245.000
0058	614.2300	MGS Guardrail 3	LF	112.500	112.500
0060	614.2340	MGS Guardrail 3 L	LF	225.000	225.000
0062	614.2500	MGS Thrie Beam Transition	LF	157.600	157.600
0064	614.2610	MGS Guardrail Terminal EAT	EACH	8.000	8.000
0066	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1560-00-76	EACH	1.000	1.000
0068	619.1000	Mobilization	EACH	1.000	1.000
0070	621.0100	Landmark Reference Monuments	EACH	28.000	28.000
0072	624.0100	Water	MGAL	34.000	34.000
0074	625.0100	Topsoil	SY	1,648.000	1,648.000
0076	628.1504	Silt Fence	LF	1,400.000	1,400.000
0078	628.1520	Silt Fence Maintenance	LF	1,400.000	1,400.000
0080	628.1905	Mobilizations Erosion Control	EACH	3.000	3.000
0082	628.1910	Mobilizations Emergency Erosion Control	EACH	1.000	1.000
0084	628.2008	Erosion Mat Urban Class I Type B	SY	1,648.000	1,648.000
0086	629.0210	Fertilizer Type B	CWT	92.700	92.700
0088	630.0130	Seeding Mixture No. 30	LB	34.000	34.000
0090	630.0200	Seeding Temporary	LB	23.000	23.000
0092	630.0500	Seed Water	MGAL	23.000	23.000
0094	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	7.000	7.000
0096	638.2102	Moving Signs Type II	EACH	7.000	7.000
0098	638.3000	Removing Small Sign Supports	EACH	7.000	7.000

1560-00-76

Line	Item	Item Description	Unit	Total	Qty
0100	638.4000	Moving Small Sign Supports	EACH	3.000	3.000
0102	642.5001	Field Office Type B	EACH	1.000	1.000
0104	643.0300	Traffic Control Drums	DAY	300.000	300.000
0106	643.0900	Traffic Control Signs	DAY	2,475.000	2,475.000
0108	643.1000	Traffic Control Signs Fixed Message	SF	36.000	36.000
0110	643.5000	Traffic Control	EACH	1.000	1.000
0112	645.0120	Geotextile Type HR	SY	155.000	155.000
0114	646.1020	Marking Line Epoxy 4-Inch	LF	27,962.000	27,962.000
0116	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	89,155.000	89,155.000
0118	646.3040	Marking Line Grooved Wet Ref Epoxy 8-Inch	LF	363.000	363.000
0120	648.0100	Locating No-Passing Zones	MI	8.750	8.750
0122	649.0105	Temporary Marking Line Paint 4-Inch	LF	20,545.000	20,545.000
0124	649.0120	Temporary Marking Line Epoxy 4-Inch	LF	27,962.000	27,962.000
0126	650.8000	Construction Staking Resurfacing Reference	LF	45,338.000	45,338.000
0128	650.9910	Construction Staking Supplemental Control (project) 01. 1560-00-76	LS	1.000	1.000
0130	650.9920	Construction Staking Slope Stakes	LF	807.000	807.000
0132	690.0150	Sawing Asphalt	LF	411.000	411.000
0134	740.0440	Incentive IRI Ride	DOL	35,000.000	35,000.000
0136	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	1,000.000	1,000.000
0138	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	630.000	630.000
0140	SPV.0060	Special 01. Reestablish Section Corner Monuments	EACH	14.000	14.000
0142	SPV.0060	Special 02. Cleaning Storm Sewer	EACH	2.000	2.000
0144	SPV.0180	Special 01. Asphaltic Base Patch Partial Depth	SY	189.000	189.000

STATION	TO	STATION	LOCATION	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY
1172+40	-	1172+90	MAINLINE	189	--
1172+90	-	1231+51	MAINLINE	--	22,142
1231+51	-	1232+01	MAINLINE	217	--
1232+90	-	1233+40	MAINLINE	226	--
1233+40	-	1498+96	MAINLINE	--	100,323
7+18	-	130+50	MAINLINE	--	46,399
130+50	-	131+00	MAINLINE	189	--
139+00	-	139+50	MAINLINE	189	--
139+50	-	142+00	MAINLINE	--	945
142+00	-	142+50	MAINLINE	189	--
			BEAMGUARD	--	166
			SIDEROADS	129	3,865
			DRIVEWAYS	--	218
			UNDISTRIBUTED	--	270
			TOTAL 0010	1,328	174,328

STATION	TO	STATION	LOCATION	205.0100 EXCAVATION COMMON CY	UNEXPANDED FILL CY	(1) EXPANDED FILL	(2) MASS ORDINATE	208.0100 BORROW CY	REMARKS
1230+25	-	1231+93	MAINLINE	17	57	71	-54	54	BEAMGUARD
1233+00	-	1234+75	MAINLINE	13	95	119	-106	106	BEAMGUARD
1411+61	-	1416+25	MAINLINE	43	316	395	-352	352	BEAMGUARD
			TOTAL 0010	73				512	

(1)- EXPANDED FILL FACTOR = 1.25
(2) THE MASS ORDINATE + OR - QUANTITY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS QUANTITY INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

3

STATION	TO	STATION	LOCATION	204.0110 REMOVING ASPHALTIC SURFACE SY	211.0400 PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS STA	REMARKS
1172+40	-	142+50	MAINLINE	--	--	BEAMGUARD AREA
1230+05	-	1230+92	RT	17	--	BEAMGUARD AREA
1230+50	-	1231+50	LT	--	1	BEAMGUARD AREA
1233+66	-	1234+40	RT	--	1	BEAMGUARD AREA
1233+90	-	1234+88	LT	19	--	BEAMGUARD AREA
1411+69	-	1414+69	RT	--	3	BEAMGUARD AREA
1412+42	-	1415+83	LT	--	4	BEAMGUARD AREA
			TOTAL 0010	36	9	

STATION	TO	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	624.0100 WATER MGAL
1172+40	-	130+50	SHOULDERS	2,704	--	28
139+00	-	142+50	SHOULDERS	35	--	1
1230+25	-	1234+50	BEAMGUARD AREAS	--	130	--
			BEAMGUARD AREAS	--	190	--
			SIDEROADS	120	--	2
			DRIVEWAYS	230	--	3
			TOTAL 0010	3,089	320	34

STATION	TO	STATION	LOCATION	455.0605 TACK COAT GAL	460.6645 HMA PAVEMENT 5 MT 58-34 V TON	465.0105 ASPHALTIC SURFACE TON	465.0110 ASPHALTIC SURFACE PATCHING TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON
1172+40	-	1232+01	MAINLINE - LOWER LIFT	1,580	2,230	--	--	--
1232+90	-	1498+96	MAINLINE - LOWER LIFT	7,040	9,950	--	--	--
7+18	-	130+50	MAINLINE - LOWER LIFT	3,270	4,620	--	--	--
139+00	-	142+50	MAINLINE - LOWER LIFT	100	140	--	--	--
1172+40	-	1232+01	MAINLINE - UPPER LIFT	1,360	1,920	--	--	--
1232+90	-	1498+96	MAINLINE - UPPER LIFT	6,040	8,530	--	--	--
7+18	-	130+50	MAINLINE - UPPER LIFT	2,800	3,960	--	--	--
139+00	-	142+50	MAINLINE - UPPER LIFT	90	120	--	--	--
			SIDEROADS	565	740	--	--	--
			BEAMGUARD	78	102	--	--	--
			DRIVEWAYS	16	--	--	--	45
			UNDISTRIBUTED	--	--	500	300	--
			TOTAL 0010	22,939	32,312	500	300	45

STATION	TO	STATION	LOCATION	465.0425 ASPHALTIC SHOULDER RUMBLE STRIPS 2-LANE RURAL LF	465.0450 ASPHALTIC INTERSECTION RUMBLE STRIPS SY	465.0475 ASPHALT CENTERLINE RUMBLE STRIPS 2-LANE RURAL LF
1172+40	-	1232+01	MAINLINE	10,957	--	4,361
1232+90	-	1498+96	MAINLINE	49,655	--	23,006
7+18	-	130+50	MAINLINE	22,519	--	10,532
139+00	-	142+50	MAINLINE	638	--	350
139+25	-	139+50	USH 2 INTERSECTION	--	27	--
			TOTAL 0010	83,769	27	38,249

HMA MIXTURE ACCEPTANCE

1560-00-76								
							QUALITY MANAGEMENT PROGRAM TO BE USED	
LOCATION	STA - STA	MIXTURE USE	UNDERLYING SURFACE	BID ITEM	TONS	THICKNESS	MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
12 FOOT DRIVING LANE	1172+40 - 130+50, 139+00 - 142+50	UPPER LAYER	HMA 5MT 58-34V	5MT 58-34V	10,226	1.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	PWL INCENTIVE DENSITY HMA PAVEMENT 460.2005
SHOULDERS, SIDEROADS, BEAMGUARD WIDENINGS	VARIOUS	UPPER LAYER	HMA 5MT 58-34V	5MT 58-34V	5,424	1.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTED BY DEPARTMENT TESTING, NOT ELIGBLE FOR INCENTIVE
12 FOOT DRIVING LANE	1172+40 - 130+50, 139+00 - 142+50	LOWER LAYER	MILLED SURFACE	5MT 58-34V	11,931	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	PWL INCENTIVE DENSITY HMA PAVEMENT 460.2005
SHOULDERS, SIDEROADS, BEAMGUARD WIDENINGS	VARIOUS	LOWER LAYER	MILLED SURFACE	5MT 58-34V	4,652	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTED BY DEPARTMENT TESTING, NOT ELIGBLE FOR INCENTIVE
DRIVEWAYS	VARIOUS	LOWER AND UPPER LAYER	MILLED EXISTING HMA SURFACE OR BASE AGGREGATE	ASPHALTIC SURFACE	500	3	QMP AS PER SS 465	ACCEPTED BY ORDINARY COMPACTION
PATCHING	VARIOUS	LOWER LAYER	MILLED SURFACE	ASPHALTIC SURFACE PATCHING	300	VARIES	QMP AS PER SS 465	ACCEPTED BY ORDINARY COMPACTION
DRIVEWAYS	VARIOUS	UPPER LAYER	MILLED EXISTING HMA SURFACE OR BASE AGGREGATE	ASPHALTIC SURFACE DRIVEWAYS	45	3	QMP AS PER SS 465	ACCEPTED BY ORDINARY COMPACTION

STATION	TO	STATION	LOCATION	204.0165 REMOVING GUARDRAIL LF	614.0396 GUARDRAIL MOW STRIP ASPHALT SY	614.0397 GUARDRAIL MOW STRIP EMULSIFIED ASPHALT SY	614.2300 MGS GUARDRAIL 3 LF	614.2340 MGS GUARDRAIL 3 L LF	614.2500 MGS THRIE BEAM TRANSITION LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH	REMARKS
1231+07	-	1231+92	LT	85	45	--	--	--	39.4	1	
1230+69	-	1231+92	RT	125	45	--	--	--	39.4	1	
1232+99	-	1234+21	LT	125	45	--	--	--	39.4	1	
1232+99	-	1233+84	RT	85	45	--	--	--	39.4	1	
1413+13	-	1414+92	LT	180	--	125	62.5	112.5	--	2	
1412+50	-	1414+05	RT	155	--	120	50	112.5	--	2	CENTER MGS L GUARDRAIL ON C-04-2381
			TOTAL 0010	755	178	245	112.5	225	157.6	8	

STATION	TO	STATION	LOCATION	625.0100 TOPSOIL SY	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIXTURE NO. 30 LB	630.0200 SEEDING TEMPORARY LB	630.0500 SEED WATER MGAL
1231+07	-	1231+92	LT	180	180	0.1	4	3	3
1230+69	-	1231+92	RT	180	180	11.3	4	3	3
1232+99	-	1234+21	LT	180	180	11.3	4	3	3
1232+99	-	1233+84	RT	180	180	11.3	4	3	3
1413+13	-	1414+92	LT	527	527	33.2	10	6	6
1412+50	-	1414+05	RT	404	404	25.4	8	5	5
			TOTAL 0010	1,648	1,648	92.7	34	23	23

STATION	TO	STATION	LOCATION	606.0200 RIPRAP MEDIUM CY	645.0120 GEOTEXTILE TYPE HR SY
1412+75	-	1413+45	RT	39	97
1413+65	-	1414+10	LT	24	58
			TOTAL 0010	63	155

STATION	TO	STATION	LOCATION	628.1504 SILT FENCE LF	628.152 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
1230+15	-	1235+00	LT	440	440	--	--
1230+15	-	1235+00	RT	440	440	--	--
1411+60	-	1411+60	LT	480	480	--	--
1411+60	-	1411+60	RT	480	480	--	--
			PROJECT	--	--	3	1
			TOTAL 0010	1,400	1,400	3	1

LOCATION	621.0100 LANDMARK REFERENCE MONUMENTS EACH	SPV.0060.01 SPECIAL (01. REESTABLISH SECTION CORNER MONUMENTS) EACH
E 1/4 OF SEC 36 T46N-R6W	2	1
E 1/4 OF SEC 25 T46N-R6W	2	1
SE OF SEC 24 T46N-R6W	2	1
E 1/4 OF SEC 24 T46N-R6W	2	1
NW OF SEC 19 T46N-R5W	2	1
E 1/4 OF SEC 13 T46N-R6W	2	1
SE OF SEC 12 T46N-R6W	2	1
E 1/4 OF SEC 12 T46N-R6W	2	1
SE OF SEC 1 T46N-R6W	2	1
E 1/4 OF SEC 1 T46N-R6W	2	1
NE OF SEC 36 T47N-R6W	2	1
NW OF SEC 31 T47N-R5W	2	1
SW OF SEC 19 T47N-R5W	2	1
W 1/4 OF SEC 19 T47N-R5W	2	1
TOTAL 0010	28	14

LOCATION	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	638.2102 MOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	638.4000 MOVING SMALL SIGN SUPPORTS EACH	REMARKS
WHITE RIVER BRIDGE	4	4	4	--	EXISTING OBJECT MARKER SIGNS
PROJECT 1560-00-76	--	3	--	3	NO PASSING SIGNS
UNDISTRIBUTED	3	--	3	--	
TOTAL 0010	7	7	7	3	

LOCATION	643.0300 TRAFFIC CONTROL DRUMS DAY	643.0900 TRAFFIC CONTROL SIGNS DAY	643.1000 TRAFFIC CONTROL SIGNS FIXED MESSAGE SF	643.5000 TRAFFIC CONTROL EACH	REMARKS
PROJECT 1560-00-76	--	--	--	1	
ADVANCED WARNING	--	2,175	--	--	
BEAM GUARD REPLACEMENT	200	--	--	--	
PRIOR TO CONSTRUCTION	--	--	36	--	G20-57 SIGNS TO BE PLACED AT PROJECT TERMINI 7 DAYS PRIOR TO CONSTRUCTION AND REMOVED WHEN CONSTRUCTION BEGINS.
UNDISTRIBUTED	100	300	--	--	
TOTAL 0010	300	2,475	36	1	

STATION	TO	STATION	LOCATION	646.1020 MARKING LINE EPOXY 4-INCH LF	646.1040 MARKING LINE GROOVED WET REF EPOXY 4-INCH LF	646.3040 MARKING LINE GROOVED WET REF EPOXY 8-INCH LF	649.0105 TEMPORARY MARKING LINE PAINT 4-INCH LF	649.0120 TEMPORARY MARKING LINE EPOXY 4-INCH LF	REMARKS
1172+40	-	1498+96	EDGELINES	--	64157	--	--	--	
1172+40	-	1498+96	CENTERLINE	21,770	--	--	--	--	FOR PLACEMENT AFTER MILLING RUMBLE STRIPS
1172+40	-	1498+96	CENTERLINE	--	--	--	16,449	--	FOR PLACEMENT PRIOR TO MILLING RUMBLE STRIPS
1172+40	-	1498+96	CENTERLINE	--	--	--	--	21,770	FOR PLACEMENT ON MILLED SURFACE
1494+74	-	1496+53	TURN LANE	--	--	180		--	
1497+94	-	8+00	TURN LANE	--	--	183	--	--	
7+18	-	130+50	EDGELINES	--	24,298	--	--	--	
7+18	-	130+50	CENTERLINE	5,492	--	--	--	--	FOR PLACEMENT AFTER MILLING RUMBLE STRIPS
7+18	-	130+50	CENTERLINE	--	--	--	3,396	--	FOR PLACEMENT PRIOR TO MILLING RUMBLE STRIPS
7+18	-	130+50	CENTERLINE	--	--	--	--	5,492	FOR PLACEMENT ON MILLED SURFACE
139+00	-	142+50	EDGELINES	--	700	--	--	--	
139+00	-	142+50	CENTERLINE	700	--	--	--	--	FOR PLACEMENT AFTER MILLING RUMBLE STRIPS
139+00	-	142+50	CENTERLINE	--	--	--	700	--	FOR PLACEMENT PRIOR TO MILLING RUMBLE STRIPS
139+00	-	142+50	CENTERLINE	--	--	--	--	700	FOR PLACEMENT ON MILLED SURFACE
			TOTAL 0010	27,962	89,155	363	20,545	27,962	

LOCATION	648.0100 LOCATING NO-PASSING ZONES MI
PROJECT 1560-00-76	8.75
TOTAL 0010	8.75

STATION	TO	STATION	LOCATION	690.0150 SAWING ASPHALT LF
1230+05	-	1230+92	RT	95
1233+90	-	1234+88	LT	91
42+75	-	43+25	MAINLINE	68
			DRIVEWAYS	157
			TOTAL 0010	411

STATION	LOCATION	SPV.0060.02 CLEANING STORM SEWER EACH	REMARKS
1231+88	LT	1	INLET AND 50-FEET OF 18-INCH CPRC
1231+88	RT	1	INLET AND 50-FEET OF 18-INCH CPRC
	TOTAL 0010	2	

STATION	TO	STATION	LOCATION	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF	650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) (1560-00-76) LS	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF
			PROJECT	45,338	1	--
1230+25		1231+88		--	--	163
1232+95		1234+75		--	--	180
1411+61		1416+25		--	--	464
			TOTAL 0010	45,338	1	807

STATION	TO	STATION	LOCATION	SPV.0180.01 ASPHALTIC BASE PATCH PARTIAL DEPTH SY	REMARKS
45+25	-	45+75	PROJECT	189	TRAVEL LANES AND PAVED SHOULDERS
			TOTAL 0010	189	

RICHARD G BONNEVILLE

DONALD R NELSON

PETER B SACKMAN

BEGIN PROJECT
STA 1172+40
BEGIN MILL AND OVERLAY
SEE BUTT JOINT DETAIL

BP: 1170+00.00

BIBON RD

OVERHEAD ELECTRIC
(BAYFIELD ELECTRIC)

EXISTING GEODETIC
SURVEY CONTROL
STATION - DO NOT
DISTURB

NGS

WILSON RD

APPROX. R/W

EXISTING GEODETIC SURVEY
CONTROL STATION

USGS

1175

1180

EXISTING 60" CPRC
(TO REMAIN)

N1°33'09"E

USH 63

1185

1190

PC: 1190+26.14

PT: 1192+28.06

1195

APPROX. R/W

MATCH LINE STA 1200+00

PLSS

APPROX. R/W

EXISTING SECTION
CORNER MONUMENTS -
DO NOT DISTURB

BURIED ELECTRIC
(BAYFIELD ELECTRIC)

CTH E

EXISTING 24" CPRC
(TO REMAIN)

PI STA = 1191+27.11
Y = 395720.84
X = 775778.93
DELTA = 1°57'26"
D = 0°58'09"
T = 100.97'
L = 201.93'
R = 5911.30'
PC STA = 1190+26.14
Y = 395619.90
X = 775776.19
PT STA = 1192+28.06
Y = 395821.81
X = 775778.21

DONALD R NELSON

BRAD NELSON

MAYTOR A & SHIRLEY J
BOWERS LE

5

5

PETER B SACKMAN

DAVID J & KATHY A WILSON

DNR STATE OF
WISCONSIN

REESTABLISH SECTION
CORNER MONUMENTS

OVERHEAD ELECTRIC
(XCEL ENERGY)

WILSON RD

APPROX. R/W

PI: 1229+68.85

REESTABLISH SECTION
CORNER MONUMENTS

MATCH LINE STA 1200+00

1205

1210

USH 63

1215

1220

1225

PLSS

MATCH LINE STA 1230+00

APPROX. R/W

APPROX R/W

APPROX. R/W

EXISTING 36" CPRC
(TO REMAIN)

EXISTING 30" CPRC
(TO REMAIN)

EXISTING 48x72 CMCP
(TO REMAIN)

MICHAEL J
PLISS JR

BROWN RD

BURIED FIBER OPTIC
(NORVADO)

DONALD R NELSON

CLINT R MCDONALD

PROJECT NO: 1560-00-76	HWY: USH 63	COUNTY: BAYFIELD	PLAN	SHEET 28	E

FILE NAME : G:\00\00093\00093599\CADD\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050201-pn

PLOT DATE : 7/28/2021 8:06 AM PLOT BY : COURTNEY ROOYAKKERS PLOT NAME : PLOT SCALE : 1 IN:200 FT

JOHN & JANE E SCHRAUFNAGEL

JOHN & JANE E SCHRAUFNAGEL

DNR STATE OF WISCONSIN

SEE BUTT JOINT DETAIL

OVERHEAD ELECTRIC (XCEL ENERGY)

APPROX. R/W

M SCHRAUFNAGEL & SONS INC

REESTABLISH SECTION CORNER MONUMENTS

CTH E

APPROX. R/W

MATCH LINE STA 1230+00

1230 1235 1240 1245 USH 63 1250 PLSS 1255 12

APPROX. R/W

APPROX. R/W

B-04-0035 (TO REMAIN) BEAM GUARD IMPROVEMENTS SEE CONSTRUCTION DETAIL

BURIED FIBER OPTIC (NORVADO)

EXISTING 24" CPRC (TO REMAIN)

MATCH LINE STA 1260+00

MICHAEL J PLISS JR

WHITE RIVER

MICHAEL W & PHYLLIS A CEGLER

MARY PLISS

DONALD R NELSON

5

5

JEREMY G MAIWALD

VILLAGE OF MASON

DONALD R NELSON

BRYAN P ANDERSON

CONTAMINATION BEYOND CONSTRUCTION LIMITS

PI: 1260+28.29

PI: 1274+65.29

LUND RD

APPROX. R/W

179°54'28"

1260 1265 N0°26'18"W 1270 1275 USH 63 1280 N0°05'31"E 1285 12

PLSS

APPROX. R/W

179°25'48"

APPROX. R/W

APPROX. R/W

MATCH LINE STA 1290+00

REESTABLISH SECTION CORNER MONUMENTS

MATCH LINE STA 1260+00

HOLMS RD

MAPLE RIDGE RD

C T D LLC

DONALD R NELSON

PROJECT NO: 1560-00-76	HWY: USH 63	COUNTY: BAYFIELD	PLAN	SHEET 29	E

FILE NAME : G:\00\00093\00093599\CADD\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050202-pn

PLOT DATE : 5/27/2021 2:53 PM PLOT BY : SHAWN DOLENS PLOT NAME : PLOT SCALE : 1 IN:200 FT

DONALD R NELSON

CLAYTON L & KAY M TUTOR

N

MATCH LINE STA 1290+00

APPROX. R/W

1295 1300 N0°05'31"E 1305 PLSS USH 63 1310 1315

APPROX. R/W

APPROX. R/W

APPROX. R/W

EXISTING 24" CPRC
(TO REMAIN)

REESTABLISH SECTION
CORNER MONUMENTS

EXISTING 24" CPRC
(TO REMAIN)

MATCH LINE STA 1320+00

FERRELL GAS LP

C T D LLC

PAMELA J JACOBSON

SANDRA A BRESETTE

TIMOTHY A & MARIAN KERN

5

5

CLAYTON L & KAY M TUTOR

WISCONSIN NORTHERN
HIGHLANDS NMTC LLC

N

DAVID J & MARY S EVERARD

MATCH LINE STA 1320+00

SPRING CREEK

PI: 1331+28.29

REESTABLISH SECTION
CORNER MONUMENTS

EXISTING 24" CPRC
(TO REMAIN)

APPROX. R/W

1325 N0°05'31"E 1330 PLSS USH 63 1335 N0°12'09"E 1340 1345

APPROX. R/W

APPROX. R/W

APPROX. R/W

179°53'22"

EXISTING 30" CPRC
(TO REMAIN)

MATCH LINE STA 1350+00

Z SUNDEEN RD

CAROLE J IMRICK

WILLIAM A & BETTY M FRANZEL

PROJECT NO: 1560-00-76	HWY: USH 63	COUNTY: BAYFIELD	PLAN	SHEET 30	E

FILE NAME : G:\00\00093\00093599\CADD\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050203-pn

PLOT DATE : 5/27/2021 2:53 PM PLOT BY : SHAWN DOLENS PLOT NAME : PLOT SCALE : 1 IN:200 FT

DAVID J & MARY S EVERARD

RACHEL P COUGHTRY

JOSEPH PEZDERIC

CLAYTON A & TINA M TUTOR

CLAYTON A TUTOR

JOSEPH PEZDERIC

N

MATCH LINE STA 1350+00

APPROX. R/W

1350

1355

1360

N0°12'09"E

1365

USH 63

1370

1375

APPROX. R/W

APPROX. R/W

APPROX. R/W

EXISTING GEODETIC SURVEY CONTROL STATION - DO NOT DISTURB

COUNTY

EXISTING 24" CPRC (TO REMAIN)

PLSS

REESTABLISH SECTION CORNER MONUMENTS

EXISTING 24" CPRC (TO REMAIN)

ADOLPH JOHNSON RD

JOHN V & MARY A RYKOVICH

WILLIAM A & BETTY M FRANZEL

MATCH LINE STA 1380+00

5

5

FLORENCE M HOGLUND TRUST

JOSEPH PEZDERIC

N

SPRING CREEK

SCHRAMM CREEK

MATCH LINE STA 1380+00

APPROX. R/W

1380

1385

1390

N0°12'09"E

1395

USH 63

1400

1405

APPROX. R/W

179°6'6"

PI: 1409+28.29

MATCH LINE STA 1410+00

REESTABLISH SECTION CORNER MONUMENTS

PLSS

APPROX R/W

APPROX. R/W

EXISTING 120" CMCP (TO REMAIN)

B-04-0028 (TO REMAIN)

APPROX. R/W

OHP

SQUIRES RD

OVERHEAD ELECTRIC (XCEL ENERGY)

JOHN V & MARY A RYKOVICH

FLORENCE M HOGLUND TRUST

BRADLY S THEIS

BERNARD A BENEDICT

PROJECT NO: 1560-00-76	HWY: USH 63	COUNTY: BAYFIELD	PLAN	SHEET 31	E

FILE NAME : G:\00\00093\00093599\CADD\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050204-pn

PLOT DATE : 5/27/2021 2:53 PM PLOT BY : SHAWN DOLENS PLOT NAME : PLOT SCALE : 1 IN:200 FT

TIMOTHY S & MELISSA I NETZ

PATRICIA A JENSEN

JACK S & TRACEY A HOGLUND

MATTHEW A & BRIANNA A SECHEN

HAROLD ROBERTS

TERRY B SECHEN

TERRY L HOGAN

MATCH LINE STA 1410+00

MATCH LINE STA 1440+00

BURIED FIBER OPTIC (NORVADO)

APPROX. R/W

USH 63

N0°41'45"W

1410 1415 1420 1425 1430 1435 1440

PLSS

SQUIRES RD

C-04-2381 (TO REMAIN)
BEAM GUARD IMPROVEMENTS
SEE CONSTRUCTION DETAIL

OVERHEAD ELECTRIC
(XCEL ENERGY)

EXISTING 30" CPRC
(TO REMAIN)

REESTABLISH SECTION
CORNER MONUMENTS

RANCH PARK RD

N

5

MATTHEW A & BRIANNA A SECHEN

LULICH FARMS INC

JOAN C LULICH

LULICH FARMS INC

ROBYN LULICH

MATCH LINE STA 1440+00

MATCH LINE STA 1470+00

EXISTING 24" CPRC
(TO REMAIN)

APPROX. R/W

USH 63

N0°41'45"W

1440 1445 1450 1455 1460 1465 1470

PLSS

EXISTING 24" CPRC
(TO REMAIN)

REESTABLISH SECTION
CORNER MONUMENTS

N

5

PROJECT NO: 1560-00-76	HWY: USH 63	COUNTY: BAYFIELD	PLAN	SHEET 32	E

FILE NAME : G:\00\00093\00093599\CADD\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050205-pn

PLOT DATE : 5/27/2021 2:53 PM PLOT BY : SHAWN DOLENS PLOT NAME : PLOT SCALE : 1 IN:200 FT

LULICH FARMS INC

PI STA = 1497+04.00
Y = 426296.84
X = 775650.47
DELTA = 5°16'05"
D = 0°30'45"
T = 514.33'
L = 1027.94'
R = 11180.12'
PC STA = 1491+89.67
Y = 425782.55
X = 775656.72
PT STA = 10+39.78
Y = 426808.39
X = 775597.03

N

CTH F

PC: 1491+89.67

EXISTING 24" CPRC
(TO REMAIN)

EXISTING 24" CPRC
(TO REMAIN)

MATCH LINE STA 1470+00

APPROX. R/W

70 1475 1480 1485 N0°41'45"W USH 63 1490 1495

APPROX. R/W

APPROX. R/W

APPROX. R/W

PLSS

REESTABLISH SECTION
CORNER MONUMENTS

STA BACK = 1498+95.83
STA AHEAD = 7+18.00

MATCH LINE STA 8+22

JOHN F & DEBRA K GALLIGAN

JOHN F & DEBRA K GALLIGAN

STH 118

ROBYN LULICH

NORTHLAND HOLDINGS LLC

DANIEL B & SHERYL D METTLER

5

5

N

DAVID J GUTSCH

DONALD J JR & PATSY J KONTNY

PT: 10+39.78

MATCH LINE STA 8+22

APPROX. R/W

APPROX. R/W

10 15 20 USH 63 25 N5°57'50"W 30 35

EXISTING 24" CPRC
(TO REMAIN)

EXISTING 24" CPRC
(TO REMAIN)

APPROX. R/W

APPROX. R/W

OVERHEAD ELECTRIC
(BAYFIELD ELECTRIC)

MATCH LINE STA 38+22

DAVID J GUTSCH

REICKS VIEW FAMILY
FARMS LLC

JOHN F & DEBRA K
GALLIGAN TRUSTEES

PROJECT NO: 1560-00-76	HWY: USH 63	COUNTY: BAYFIELD	PLAN	SHEET 33	E

FILE NAME : G:\00\00093\00093599\CADD\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050206-pn

PLOT DATE : 5/27/2021 2:53 PM PLOT BY : SHAWN DOLENS PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 44

PI STA = 58+60.13
Y = 431602.66
X = 775096.19
DELTA = 5°47'45"
D = 0°30'09"
T = 577.08'
L = 1153.18'
R = 11399.95'
PC STA = 52+83.05
Y = 431028.70
X = 775156.15
PT STA = 64+36.23
Y = 432179.73
X = 775094.50

ERIC B BRYE

GEORGE A & DIANE G LULICH

DONALD J JR & PATSY J KONTNY

PC: 52+83.05

PT: 64+36.23

REESTABLISH SECTION CORNER MONUMENTS

APPROX. R/W

EXISTING 24" CPRC (TO REMAIN)

USH 63

N5°57'50"W

N0°10'05"W

MATCH LINE STA 38+22

MATCH LINE STA 68+22

BASE PATCHING REQUIRED STA 45+25 - STA 45+75 FULL WIDTH

OVERHEAD ELECTRIC (BAYFIELD ELECTRIC)

EXISTING 48" CPRC (TO REMAIN)

LULICH IMPLEMENT CO INC

CONTAMINATION BEYOND CONSTRUCTION LIMITS

BRIAN R OLBY JR

JOHN F & DEBRA K GALLIGAN TRUSTEES

REICKS VIEW FAMILY FARMS LLC

GEORGE A & DIANE G LULICH

STEVEN M & THERESA L PERRY

KENNETH & BETTY GUSS

JESUHA C DIBBERT

GEORGE T BIZUB

PEZDERIC RD

FRANZEL RD

EXISTING 24" CPRC (TO REMAIN)

OVERHEAD ELECTRIC (BAYFIELD ELECTRIC)

DANIEL H & LISA A HOVARTER

KAREN A JELINEK REV TRUST

BRADLEY J & JAN M LARSON

PROJECT NO: 1560-00-76	HWY: USH 63	COUNTY: BAYFIELD	PLAN	SHEET 34	E

FILE NAME : G:\00\00093\00093599\CADD\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050207-pn

PLOT DATE : 5/27/2021 2:53 PM PLOT BY : SHAWN DOLENS PLOT NAME : PLOT SCALE : 1 IN:200 FT

GEORGE A & DIANE G LULICH

LAWRENCE A & JOYCE L JARECKI

MILANOWSKI DAIRY INC

SUSAN A SANDOR TRUSTEE

N

STROMEYER LN

REESTABLISH SECTION CORNER MONUMENTS

APPROX. R/W

APPROX. R/W

MATCH LINE STA 98+22

100

105

USH 63

110

PLSS

N0°10'05"W

115

120

125

MATCH LINE STA 128+22

EXISTING 24" CPRC (TO REMAIN)

EXISTING 24" CPRC (TO REMAIN)

EXISTING 48" CPRC (TO REMAIN)

APPROX. R/W

APPROX. R/W

OVERHEAD ELECTRIC (BAYFIELD ELECTRIC)

BURIED ELECTRIC (BAYFIELD ELECTRIC)

ZEPCZYK RD

5

5

MILANOWSKI DAIRY INC

MILANOWSKI DAIRY INC

MICHAEL C & KRISTIE L MILANOWSKI

N

SUSAN A SANDOR TRUSTEE

PI STA = 140+54.40
Y = 439797.87
X = 775072.15
DELTA = 16°51'17"
D = 3°52'55"
T = 218.68'
L = 434.20'
R = 1476.00'
PC STA = 138+35.72
Y = 439579.19
X = 775072.79
PT STA = 142+69.92
Y = 440006.97
X = 775008.13

USH 2

PT: 142+69.92

EP: 144+42.38

SUSAN A SANDOR TRUSTEE

B-04-0119 (TO REMAIN)

REESTABLISH SECTION CORNER MONUMENTS

PC: 138+35.72

APPROX. R/W

MATCH LINE STA 128+22

130

N0°10'05"W

USH 63

135

PLSS

140

N17°01'22"W

144

NGS

APPROX R/W

STA 130+50
END MILL AND OVERLAY
SEE BUTT JOINT DETAIL

STA 139+00
BEGIN MILL AND OVERLAY
SEE BUTT JOINT DETAIL

APPROX. R/W

END PROJECT
STA 142+50
END MILL AND OVERLAY
SEE BUTT JOINT DETAIL

EXISTING GEODETIC SURVEY CONTROL STATION - DO NOT DISTURB

SOUTH FISH CREEK

MICHAEL C & KRISTIE L MILANOWSKI

MIDLAND SERVICES INC

OVERHEAD ELECTRIC (BAYFIELD ELECTRIC)

JOHN F & DEBRA K GALLIGAN TRUSTEES

PROJECT NO: 1560-00-76	HWY: USH 63	COUNTY: BAYFIELD	PLAN	SHEET 35	E

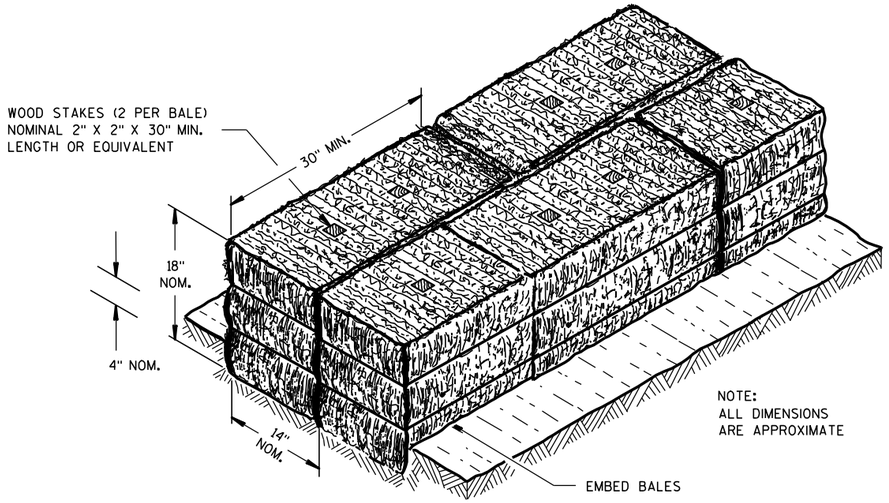
FILE NAME : G:\00\00093\00093599\CADD\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050208-pn

PLOT DATE : 5/27/2021 2:53 PM PLOT BY : SHAWN DOLENS PLOT NAME : PLOT SCALE : 1 IN:200 FT

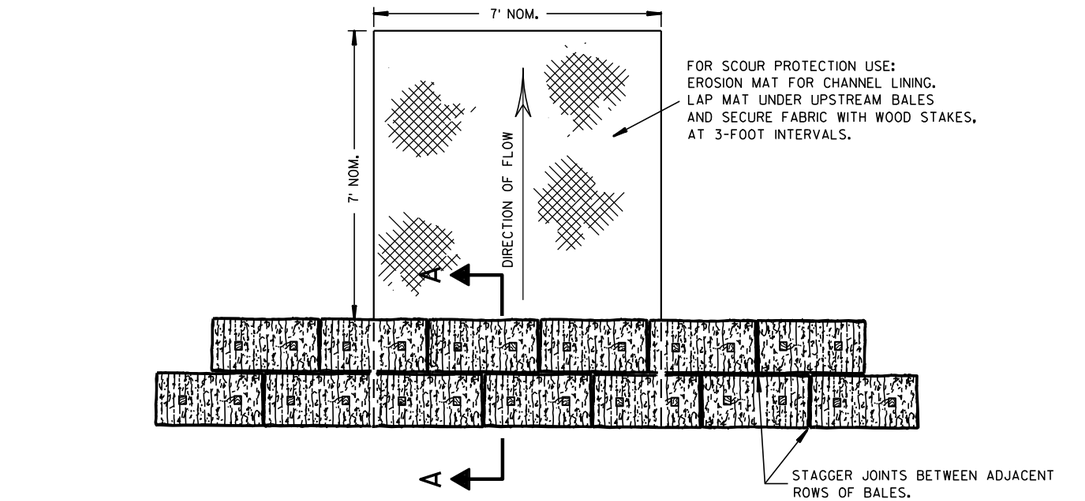
Standard Detail Drawing List

08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
13A08-01	ASPHALTIC RUMBLE STRIPS AT INTERSECTION
13A10-02A	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02C	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A11-03A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-03B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13C19-03	HMA LONGITUDINAL JOINTS
14B28-04A	GUARDRAIL MOW STRIP
14B28-04B	GUARDRAIL MOW STRIP
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)
14B45-05A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C06-09	SIGNING & MARKING FOR TWO LANE BRIDGES
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-07	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C19-06A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-04A	PAVEMENT MARKING (INTERSECTIONS)
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES
15D51-01	TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY
16A01-07	LANDMARK REFERENCE MONUMENTS AND COVERS

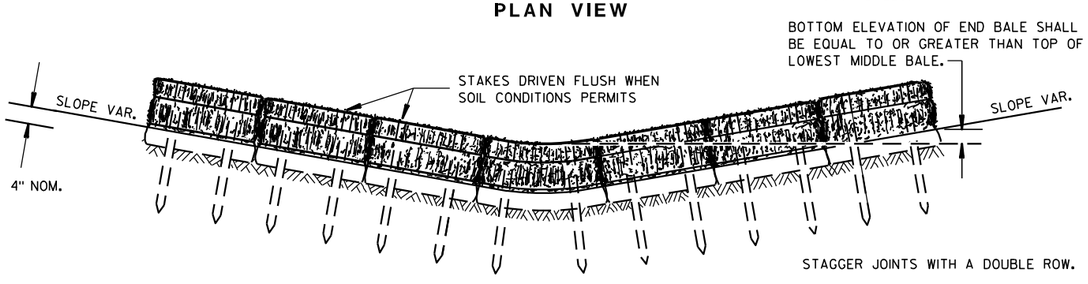
6



SECTION A-A



PLAN VIEW



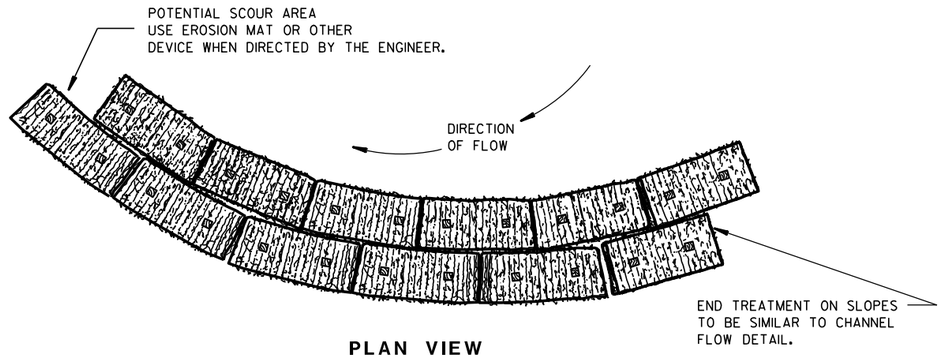
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

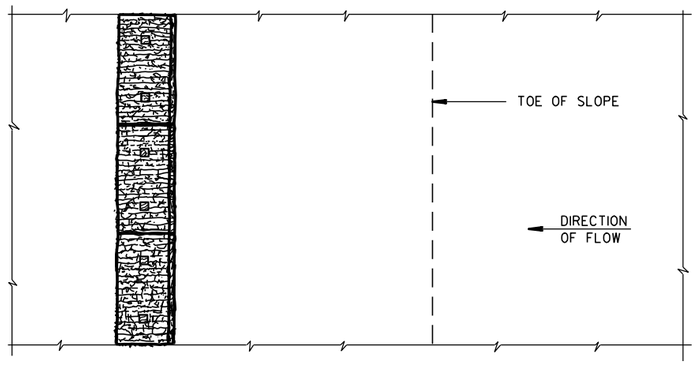
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(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.

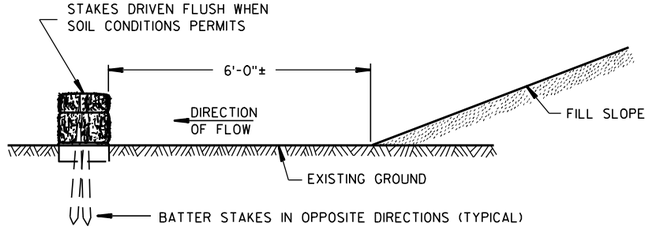


PLAN VIEW

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

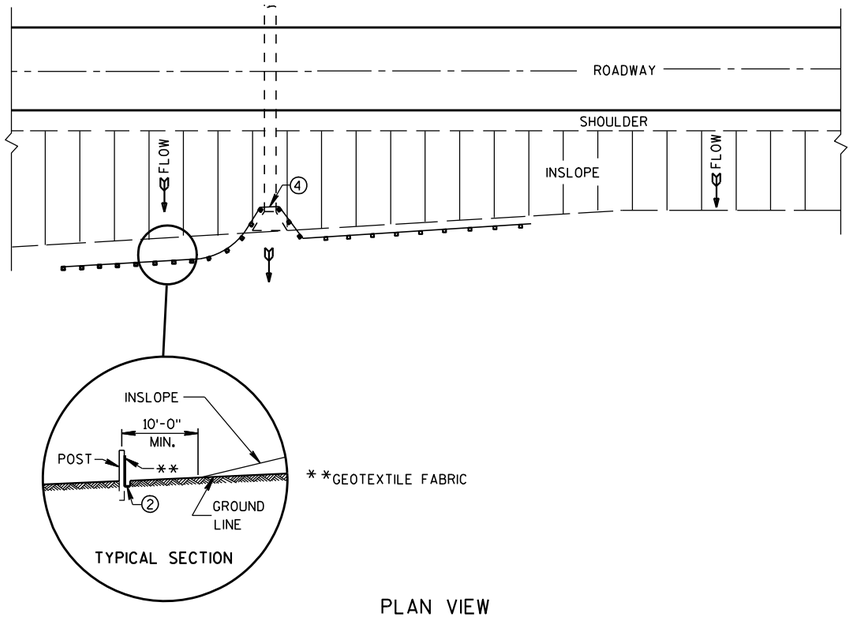
FHWA

6

S.D.D. 8 E 8-3

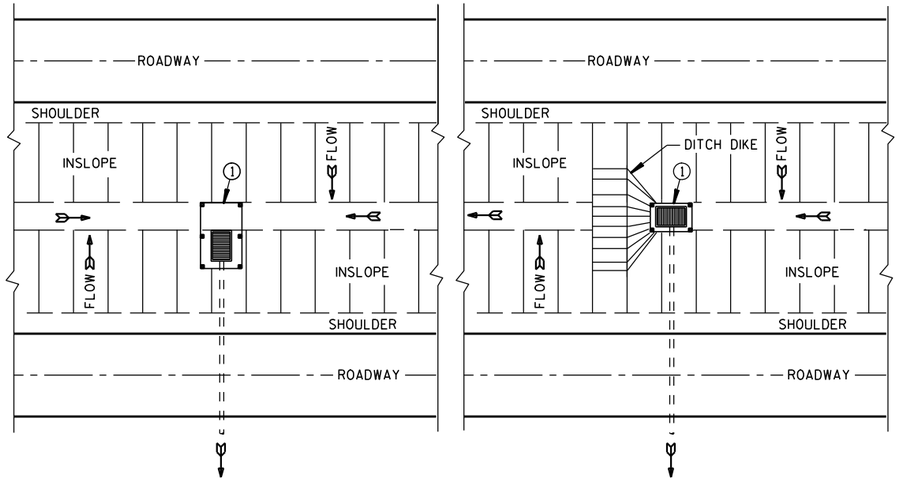
6

S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



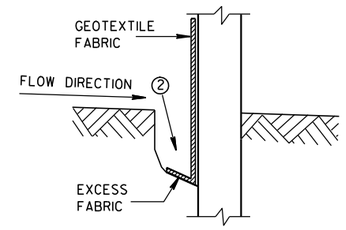
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

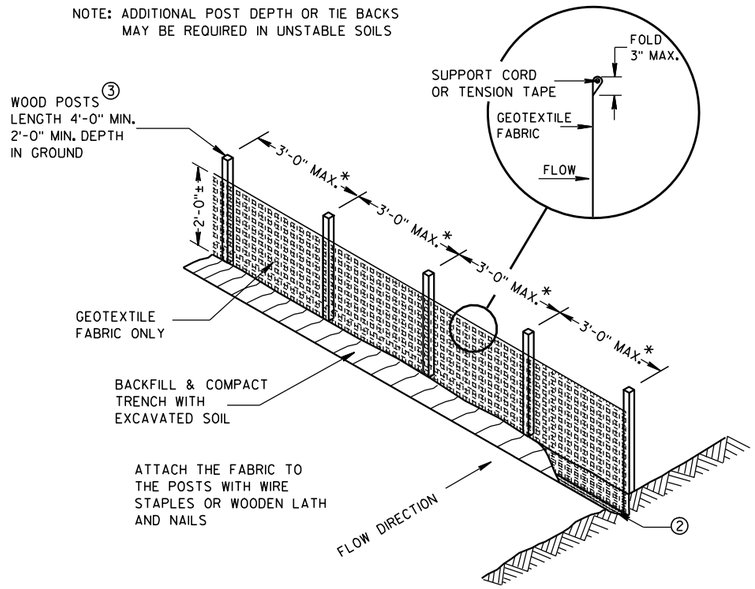
GENERAL NOTES

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

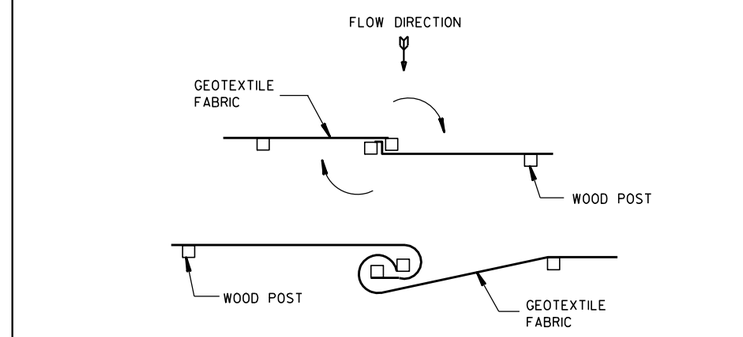
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL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



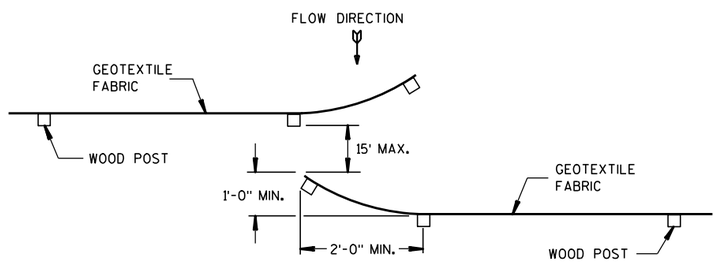
TRENCH DETAIL



SILT FENCE

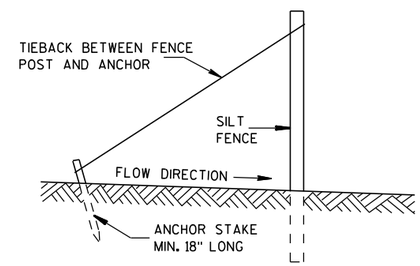


TWIST METHOD



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

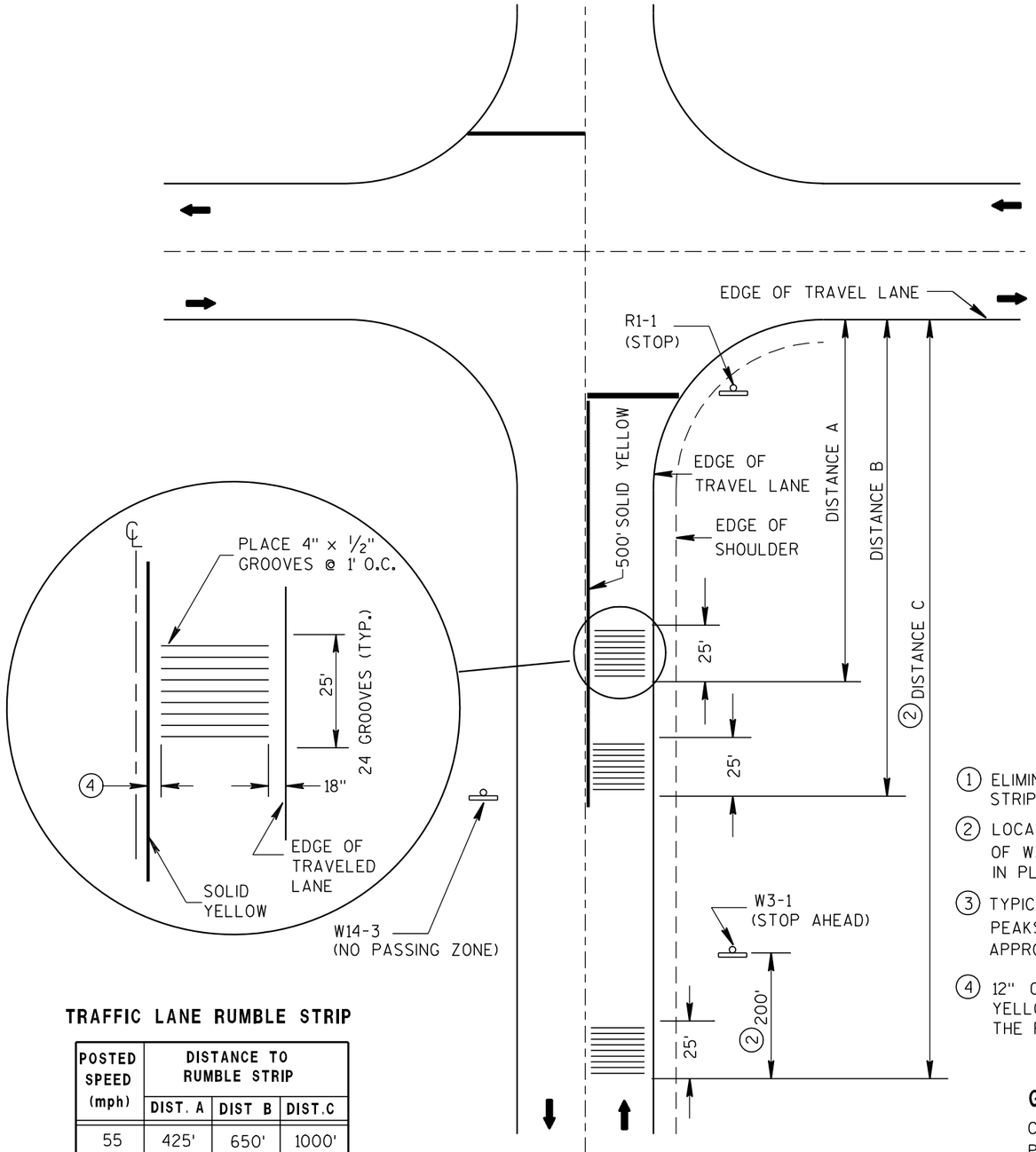
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 9-6

6

S.D.D. 8 E 9-6



ARROW SYMBOL (➡) SHOWS DIRECTION OF TRAVEL

PLAN VIEW

RUMBLE STRIP LOCATION

TRAFFIC LANE RUMBLE STRIP

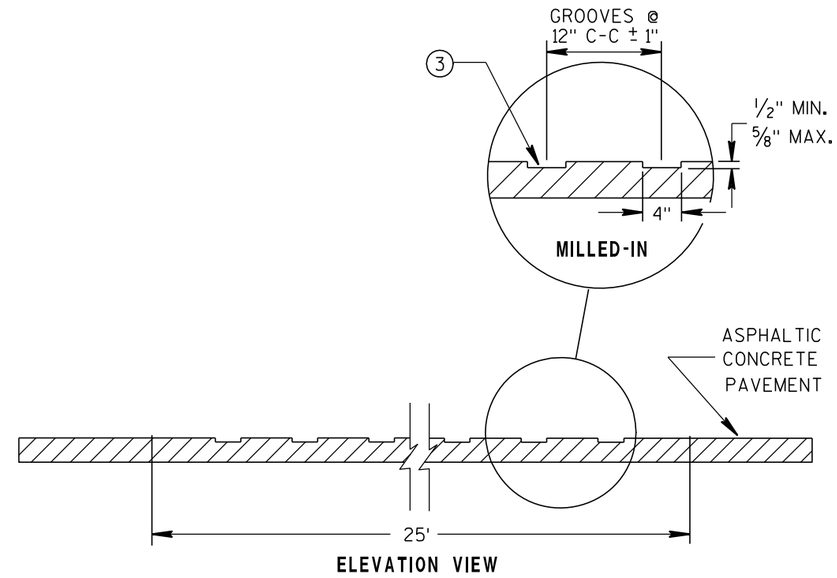
POSTED SPEED (mph)	DISTANCE TO RUMBLE STRIP		
	DIST. A	DIST B	DIST.C
55	425'	650'	1000'
50	325'	450'	800'
45	275'	400'	650'
40	225'	(1)	550'
35	175'	(1)	475'
≤ 30	125'	(1)	425'

(1) ELIMINATE THE MIDDLE SET OF RUMBLE STRIPS.

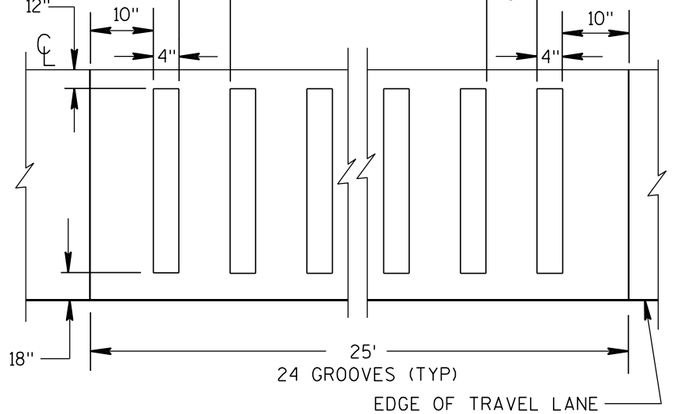
(2) LOCATE RUMBLE STRIP 200' IN ADVANCE OF W3-1 SIGN AS SHOWN. IF W3-1 IS NOT IN PLACE, USE DISTANCE C.

(3) TYPICAL VERTICAL VARIATION BETWEEN PEAKS AND VALLEYS WITHIN THE CUT APPROXIMATELY 1/16"

(4) 12" CLEAR BETWEEN THE SOLID YELLOW LINE AND THE EDGE OF THE RUMBLE.



ELEVATION VIEW



PLAN VIEW

ASPHALTIC PAVEMENT MILLED-IN

GENERAL NOTES

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

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

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

ASPHALTIC RUMBLE STRIPS AT INTERSECTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/17/2011
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS | 39
ENGINEER

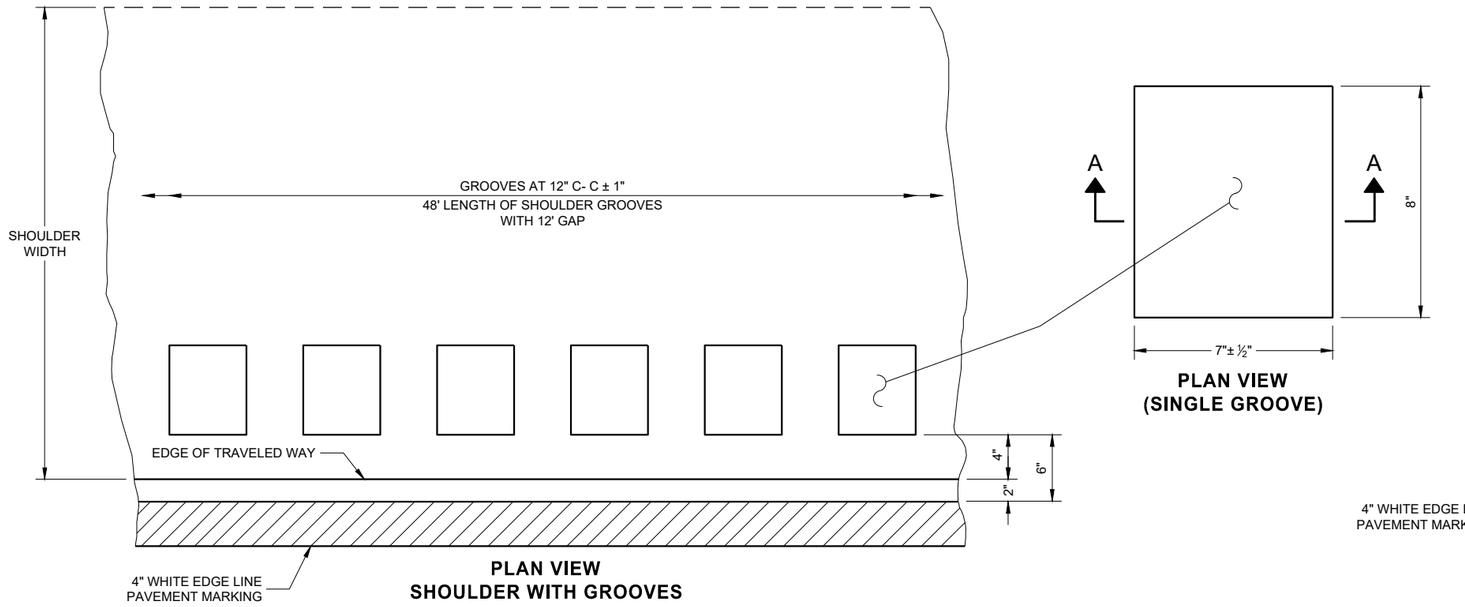
FHWA

6

S.D.D. 13 A 8-1

6

S.D.D. 13 A 8-1



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

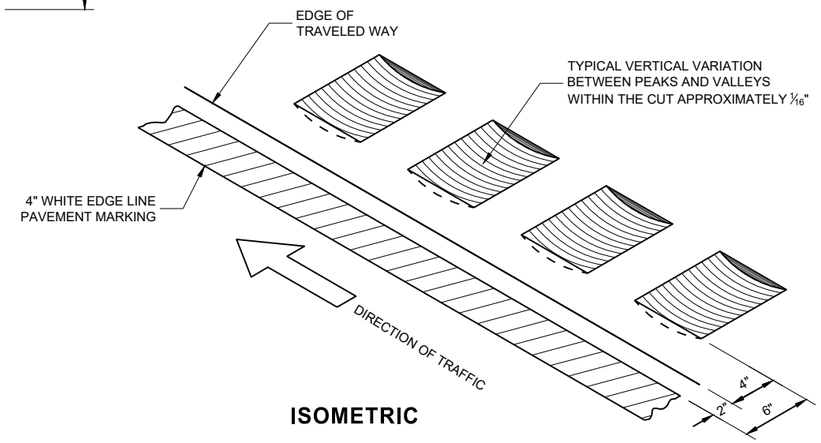
PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP

GENERAL NOTES

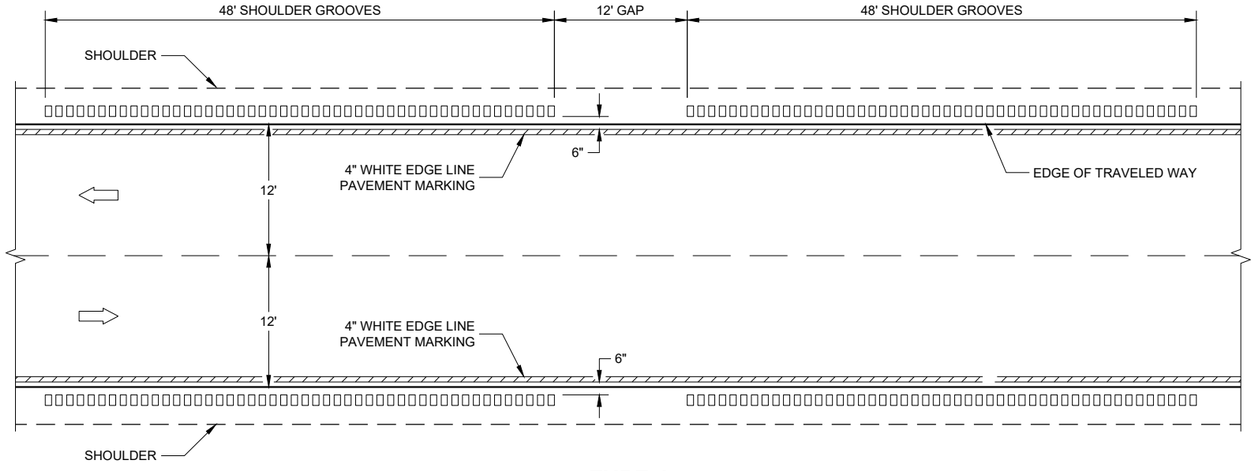
DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

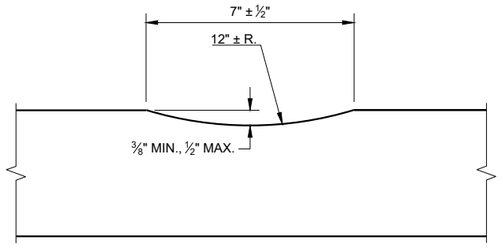
(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



ISOMETRIC



TYPE 1
2 - LANE SHOULDER RUMBLE STRIP



SECTION A - A

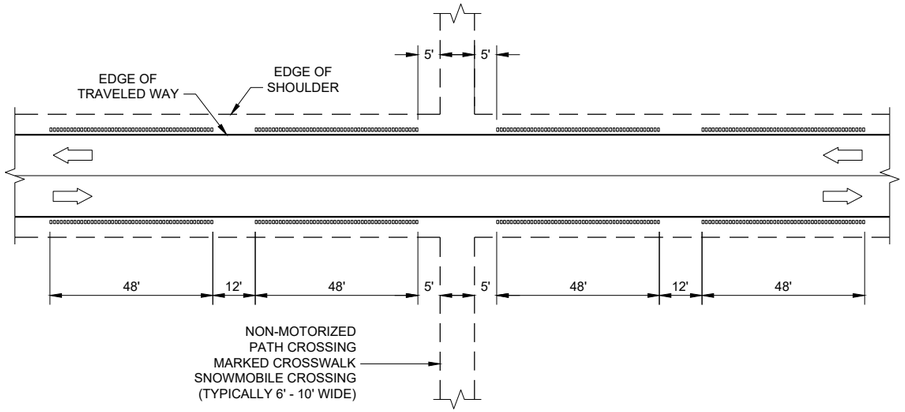
2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

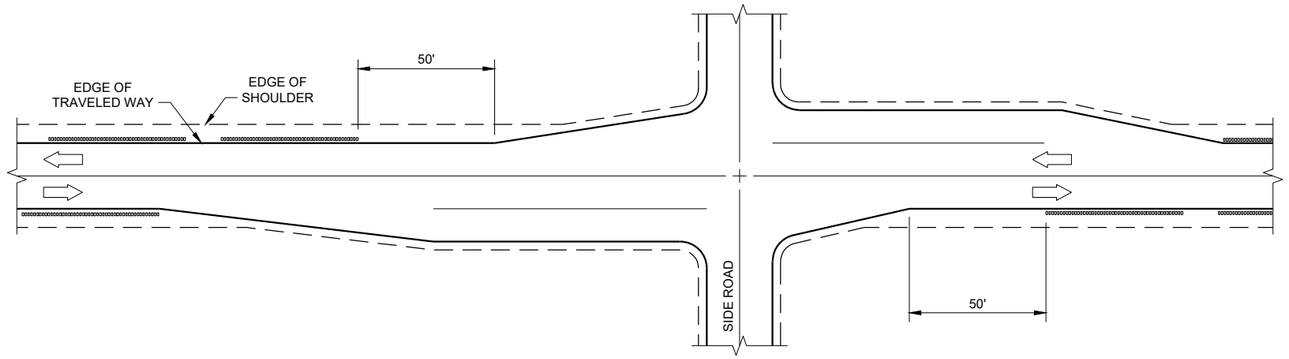
SDD 13A10 - 02a

6

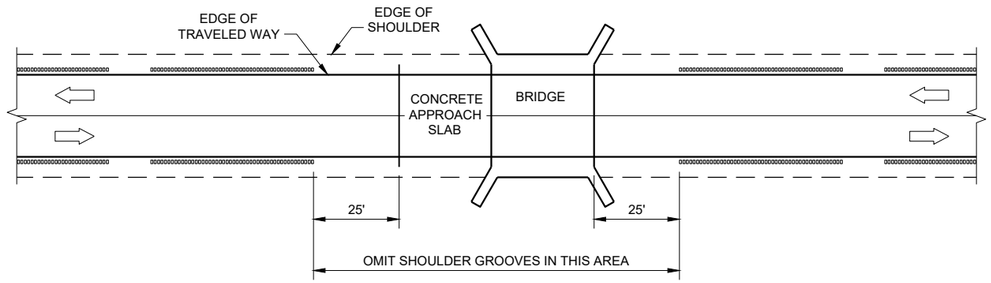
SDD 13A10 - 02a



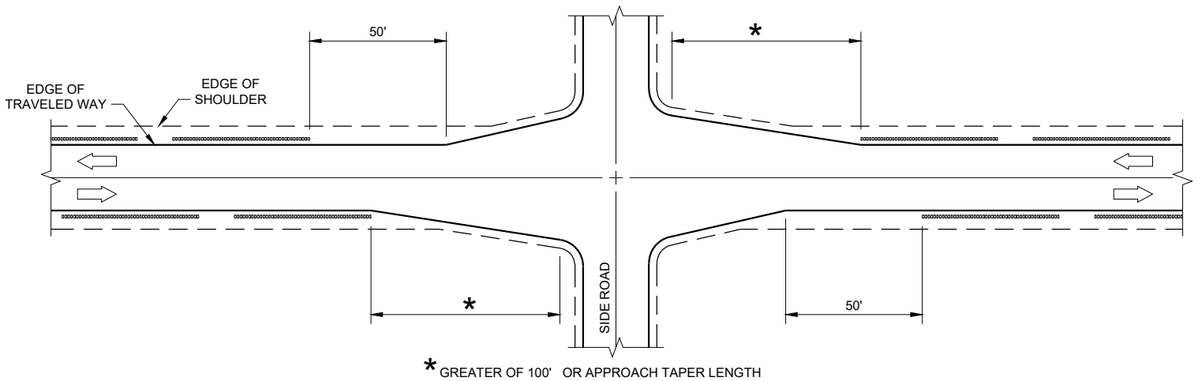
SHOULDER GROOVES AT MISCELLANEOUS CROSSINGS



SHOULDER GROOVES AT RIGHT TURN LANE

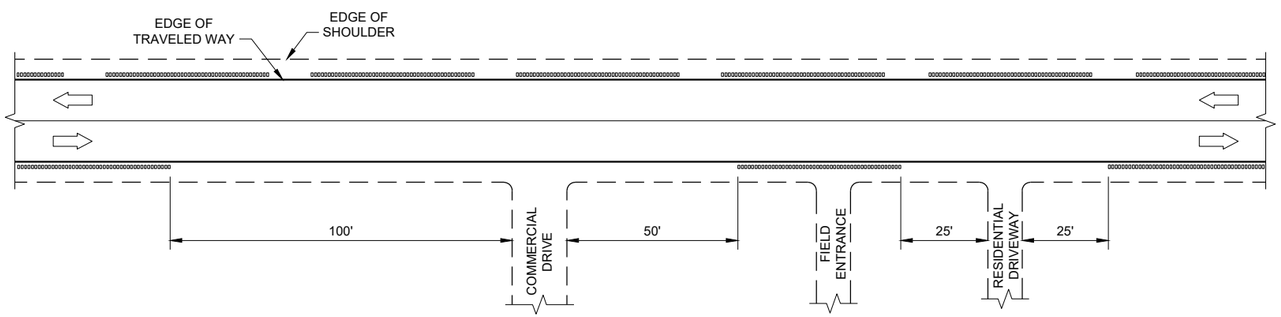


SHOULDER GROOVES AT BRIDGES



* GREATER OF 100' OR APPROACH TAPER LENGTH

SHOULDER GROOVES AT INTERSECTIONS WITH APPROACH TAPER



SHOULDER GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

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

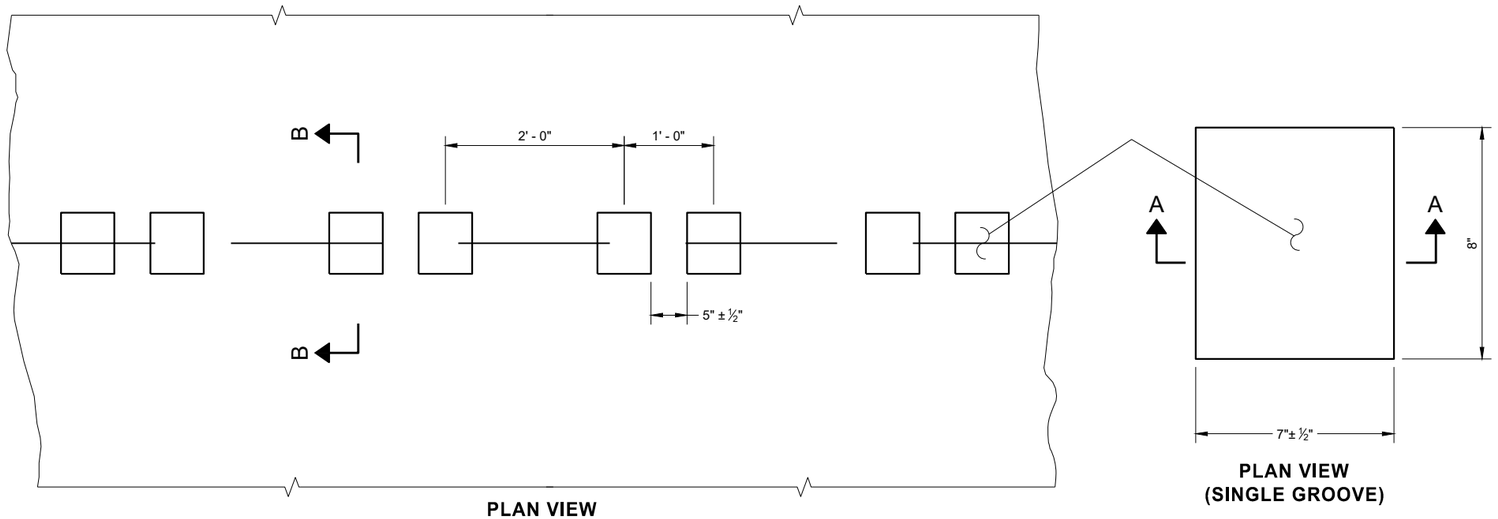
2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13A10 - 02c

SDD 13A10 - 02c



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP

GENERAL NOTES

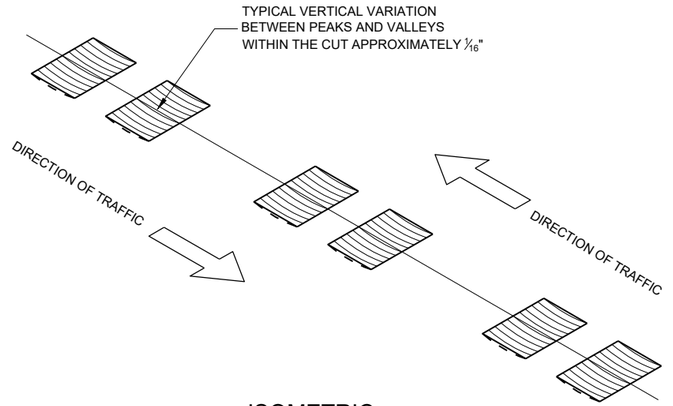
DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

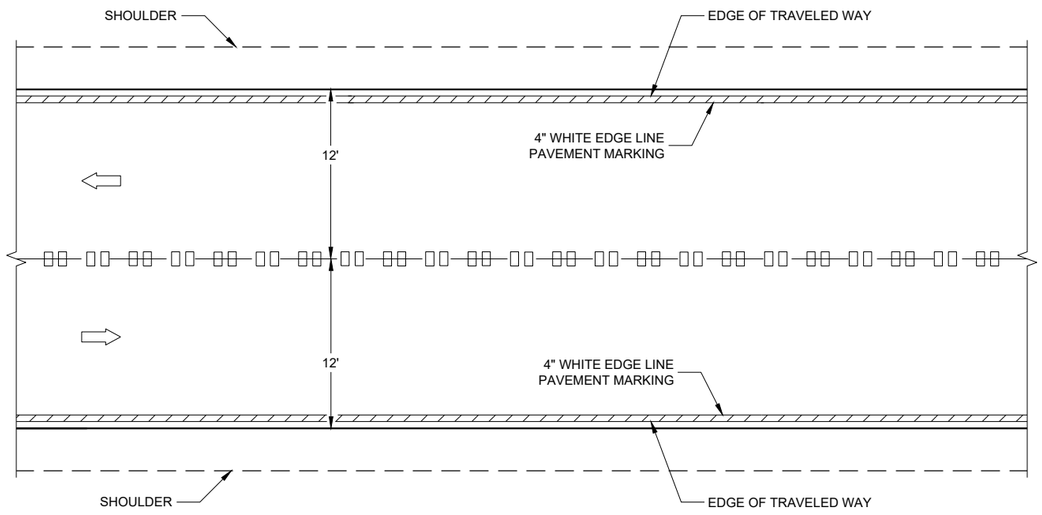
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

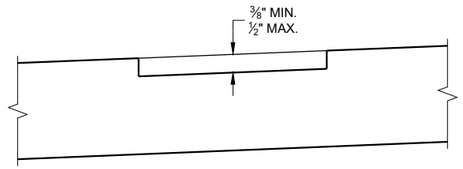
(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



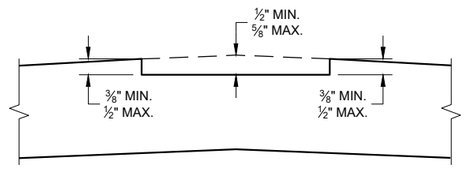
ISOMETRIC



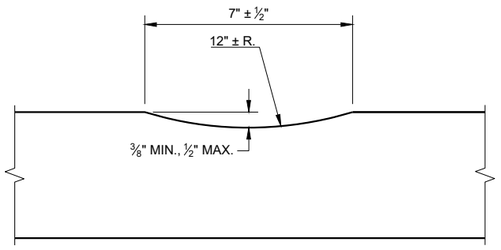
CENTERLINE GROOVES ON TWO-WAY ROADWAYS



SECTION B - B
SUPERELEVATED ROADWAY



SECTION B - B
CROWNED ROADWAY



SECTION A - A

6

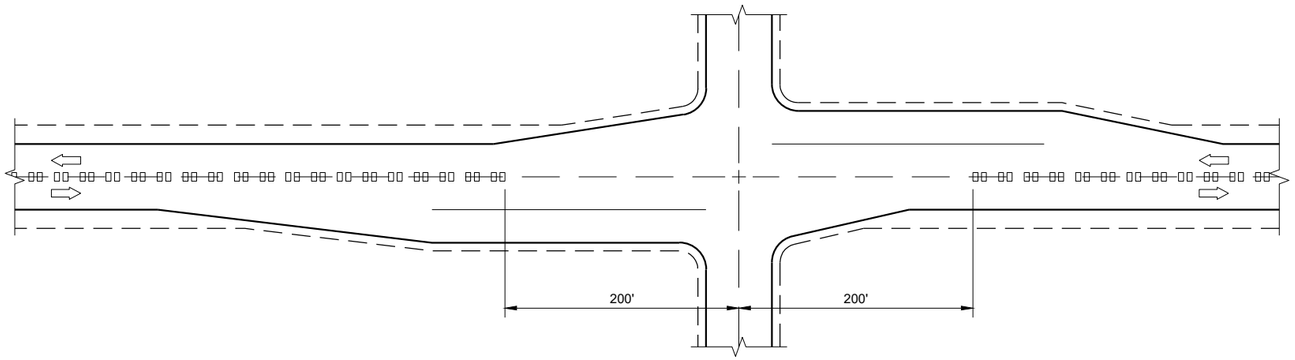
SDD 13A11 - 03a

6

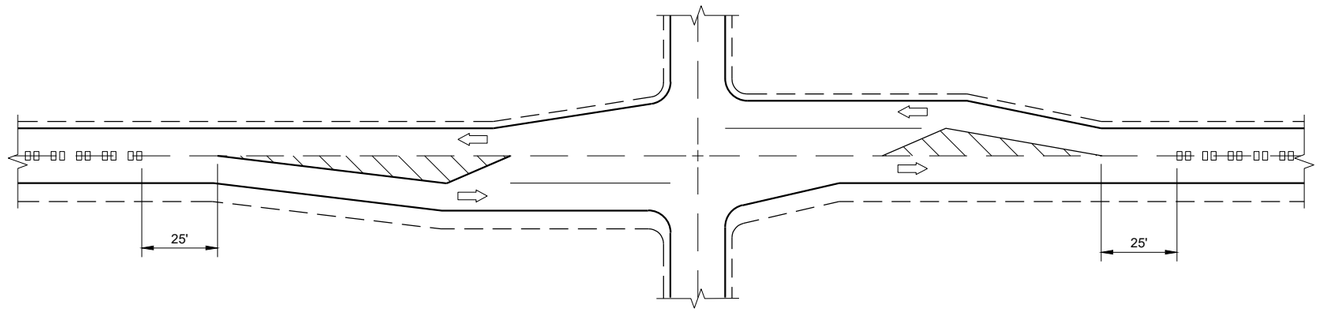
SDD 13A11 - 03a

2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

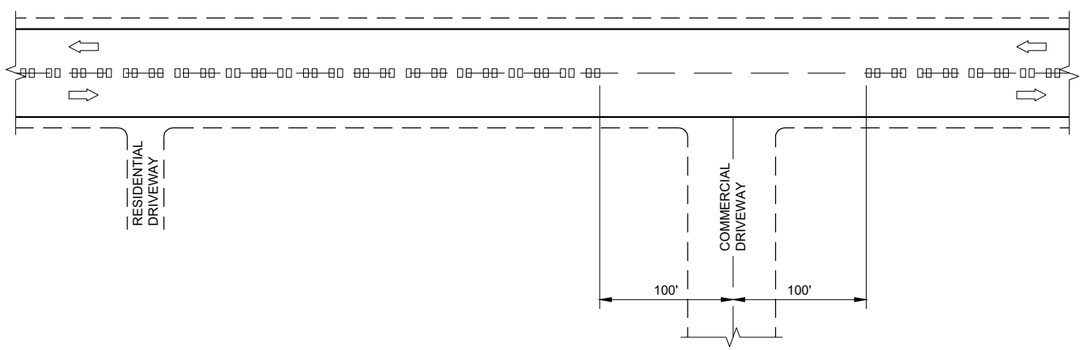
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CENTERLINE GROOVES AT INTERSECTIONS



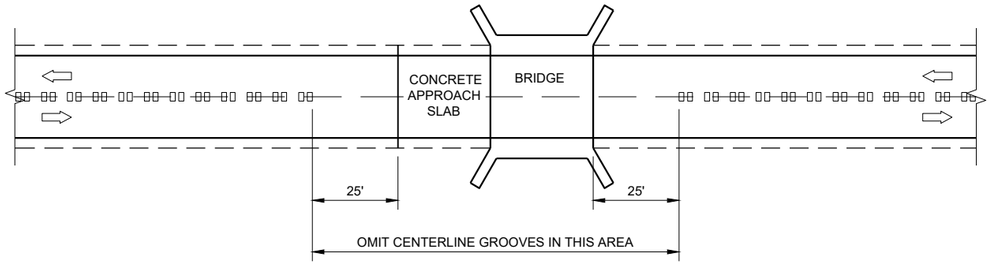
CENTERLINE GROOVES AT INTERSECTIONS (WITH LEFT TURN LANES)



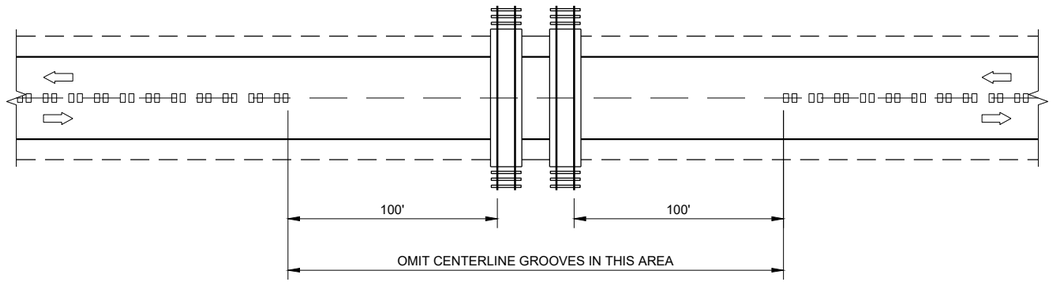
CENTERLINE GROOVES AT DRIVEWAYS (1)

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

2-LANE RURAL CENTERLINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

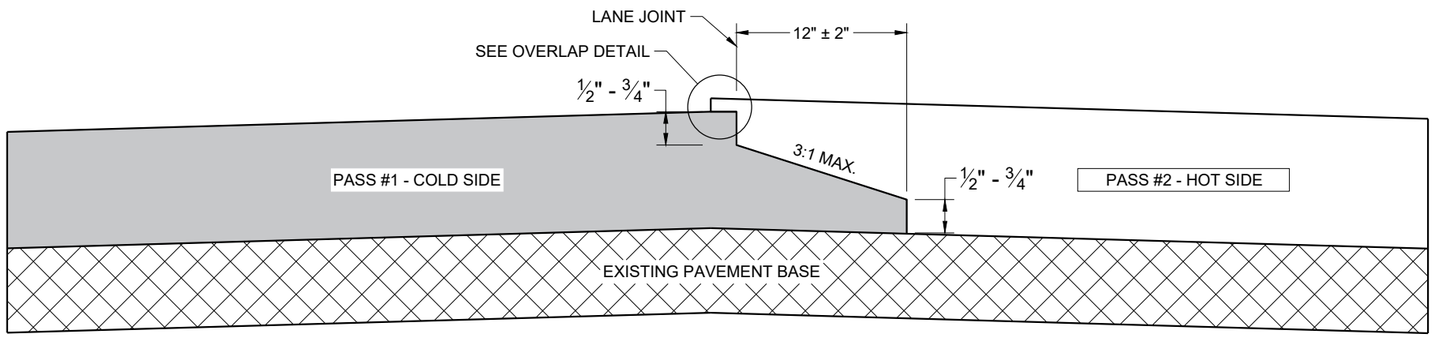
APPROVED
7/2018
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

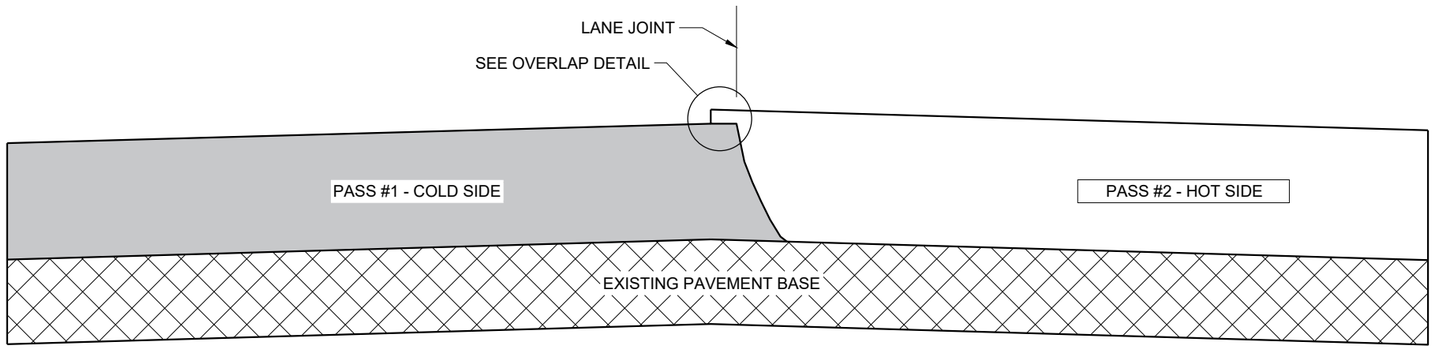
6

SDD 13A11 - 03b

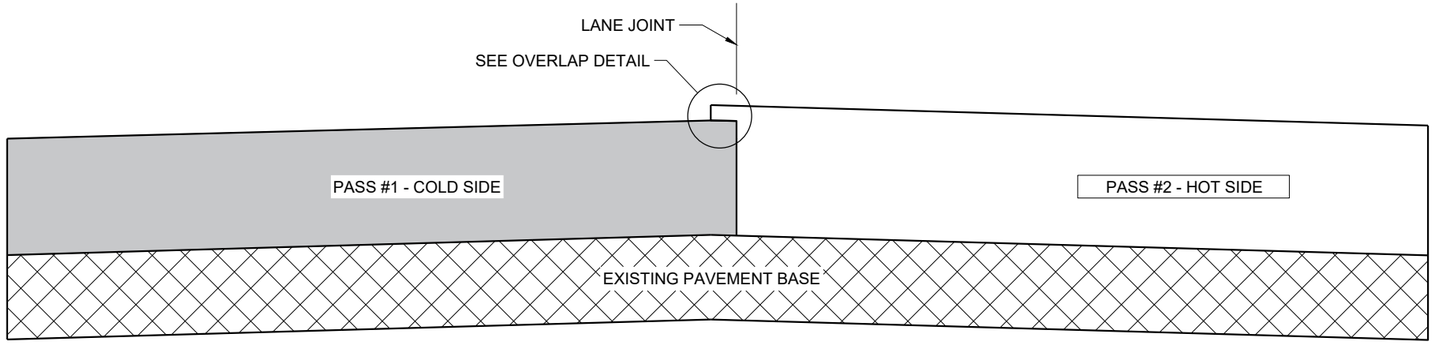
SDD 13A11 - 03b



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

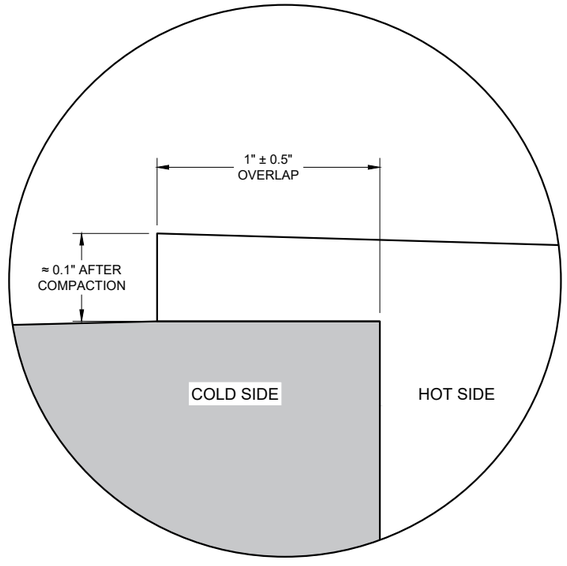
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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

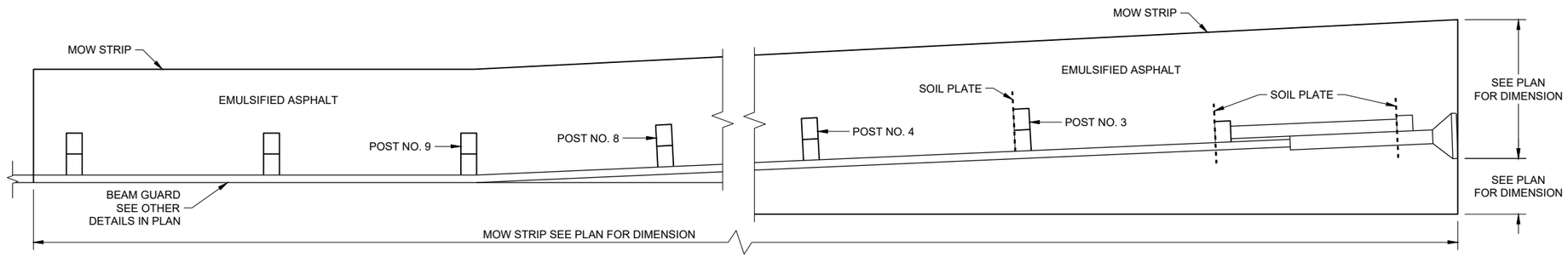
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA



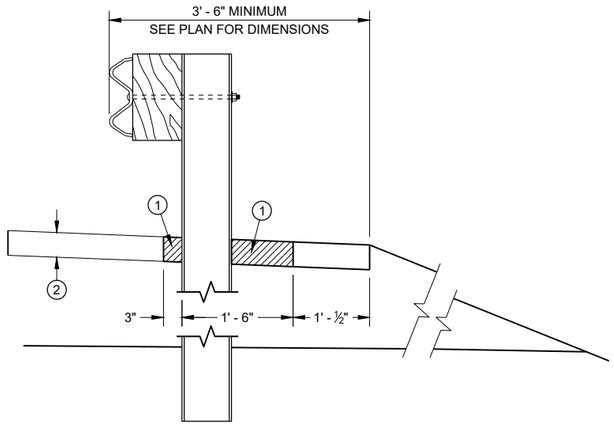
PLAN VIEW

MOW STRIP LAYOUT FOR ENERGY ABSORBING TERMINAL

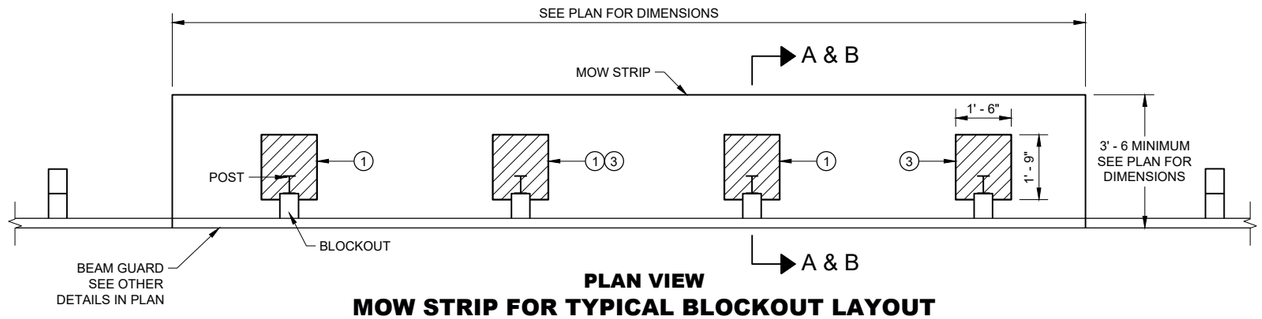
GENERAL NOTES

ONLY USE STEEL POSTS IN CONCRETE AND ASPHALT MOW STRIPS.

1. CONTROLLED LOW-STRENGTH BACKFILL OR EMULSIFIED ASPHALT.
2. DEPTH OF MOW STRIP:
   ASPHALT - 4"
   CONCRETE - 4"
   EMULSIFIED ASPHALT - 1" OR LESS
3. FOR EMULSIFIED ASPHALT, MOW STRIP STRIP LEAVE OUTS NOT REQUIRED. (TYPICAL FOR ALL POSTS)

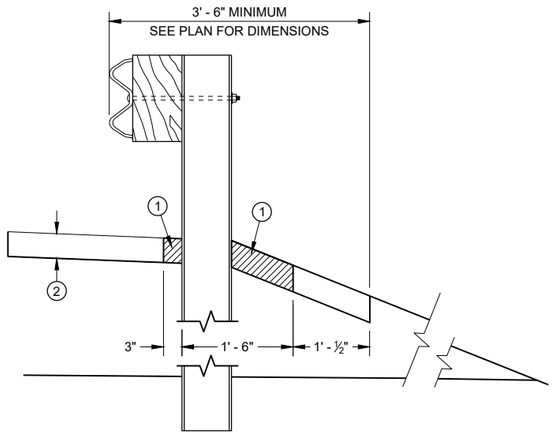


SECTION A - A

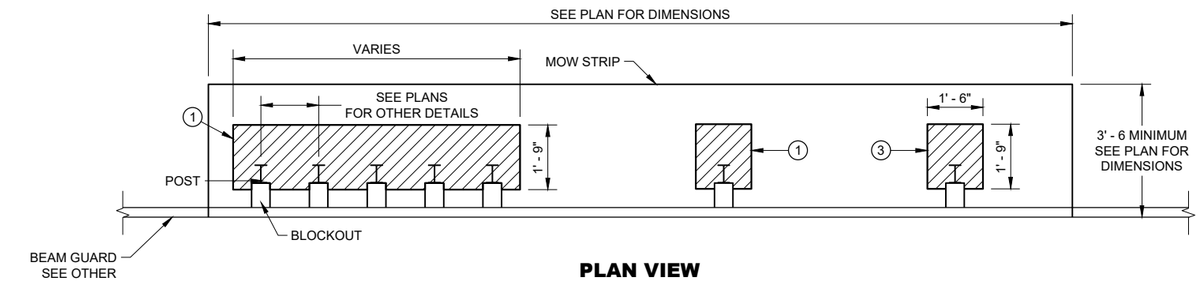


PLAN VIEW

MOW STRIP FOR TYPICAL BLOCKOUT LAYOUT

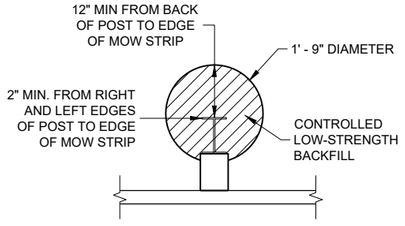


SECTION B - B

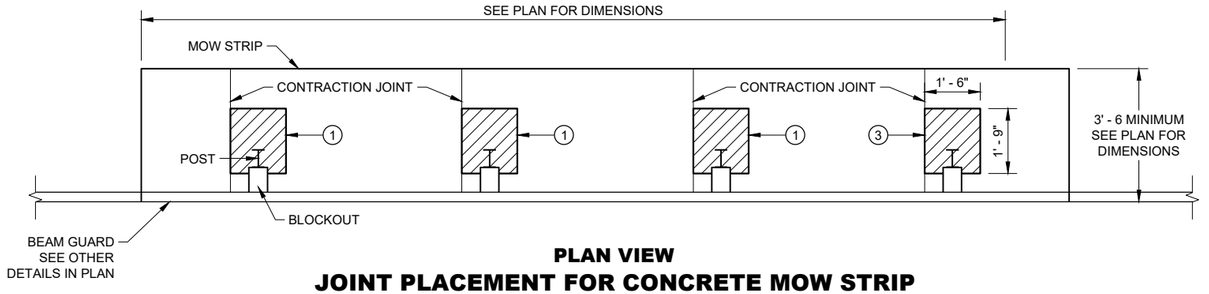


PLAN VIEW

MOW STRIP FOR TIGHT SPACING LAYOUT



ALTERNATIVE HMA MOW STRIP DESIGN



PLAN VIEW

JOINT PLACEMENT FOR CONCRETE MOW STRIP

GUARDRAIL MOW STRIP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B28 - 04a

SDD 14B28 - 04a

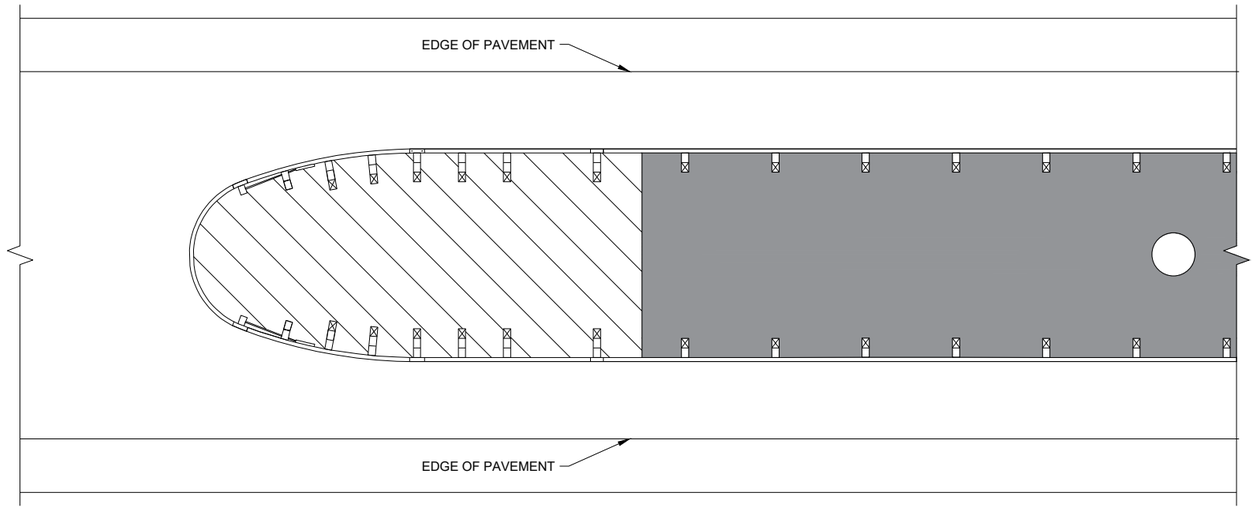
LEGEND

CONCRETE, ASPHALT, OR EMULSIFIED ASPHALT MOW STRIP (SEE OTHER DETAILS)

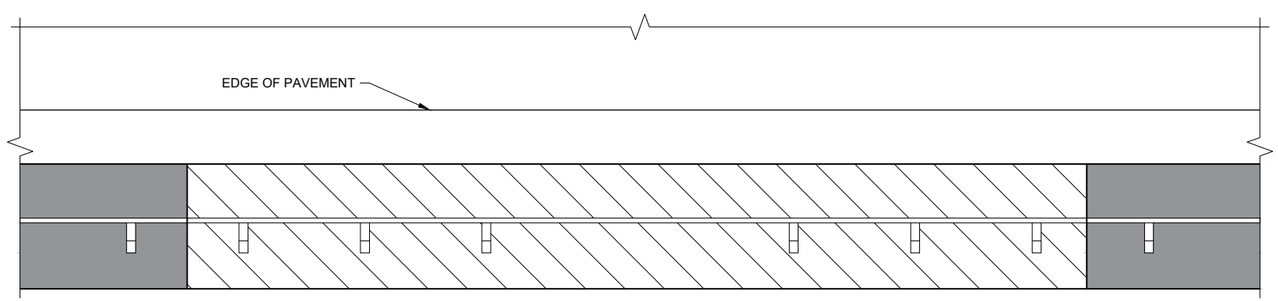
EMULSIFIED ASPHALT MOW STRIP (SEE OTHER DETAILS)

GENERAL NOTES

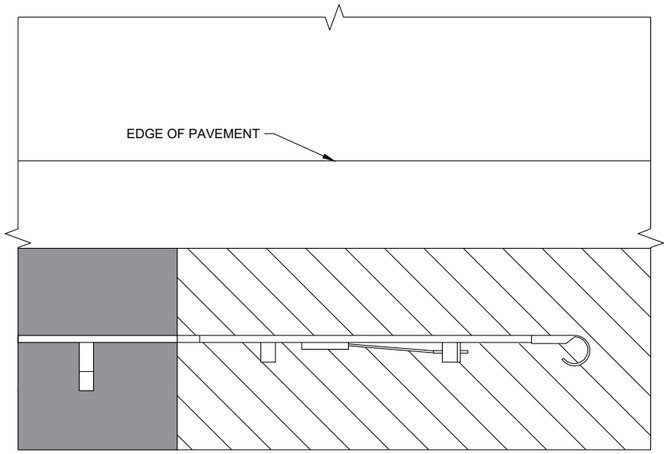
EXISTING THRIE BEAM BULLNOSES MAY HAVE WOOD POSTS. NEW THRIE BEAM BULLNOSE WILL HAVE STEEL POSTS.



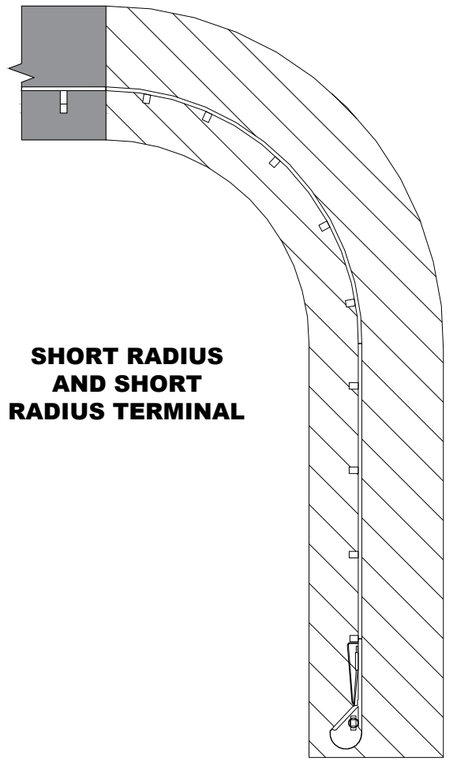
THRIE BEAM BULLNOSE



LONG - SPAN



TYPE 2 TERMINAL



SHORT RADIUS AND SHORT RADIUS TERMINAL

GUARDRAIL MOW STRIP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE
ENGINEER

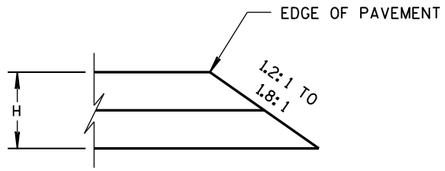
FHWA

6

SDD 14B28 - 04b

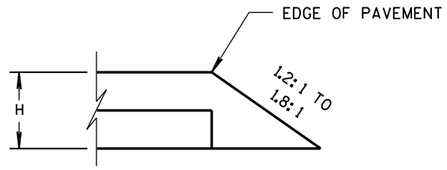
6

SDD 14B28 - 04b



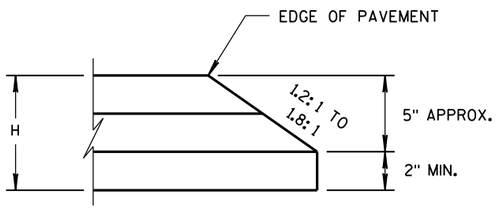
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



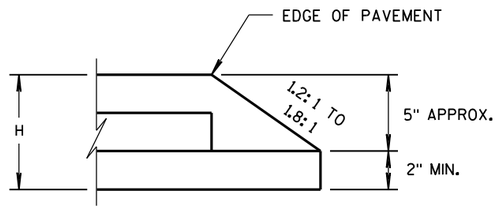
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

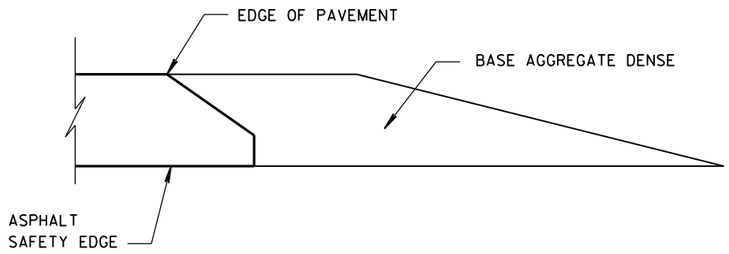
FOR H GREATER THAN 5"



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.

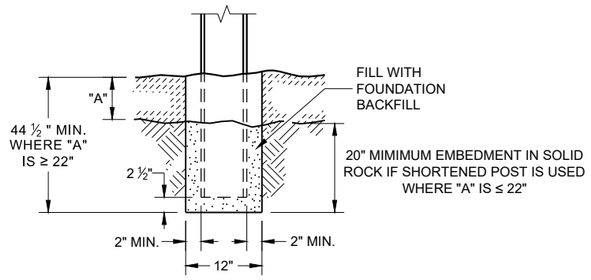
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL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

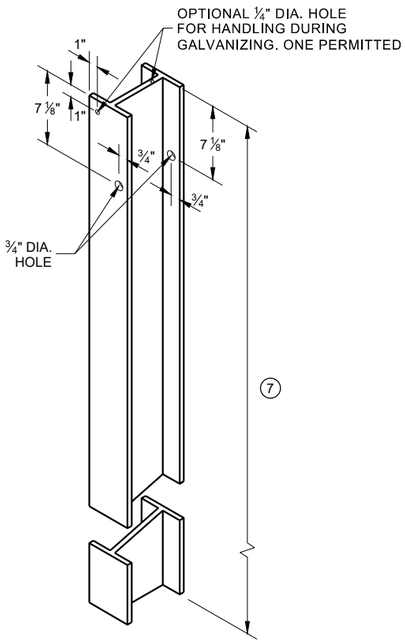
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(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.

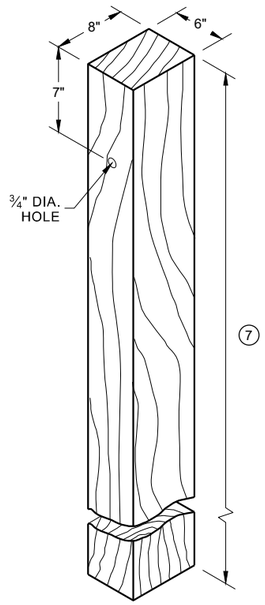
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



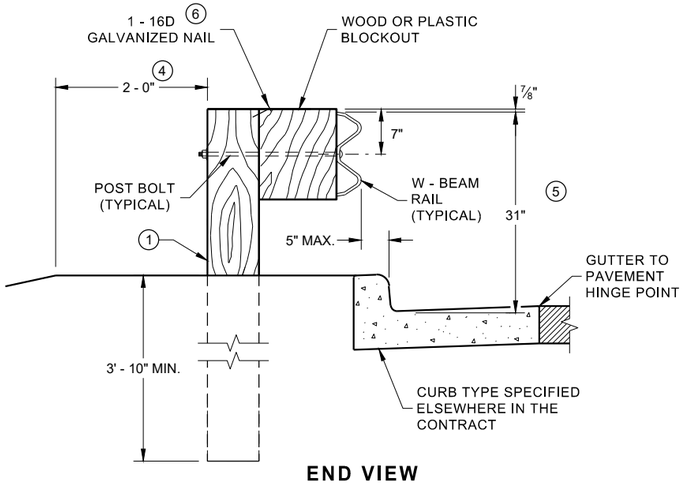
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



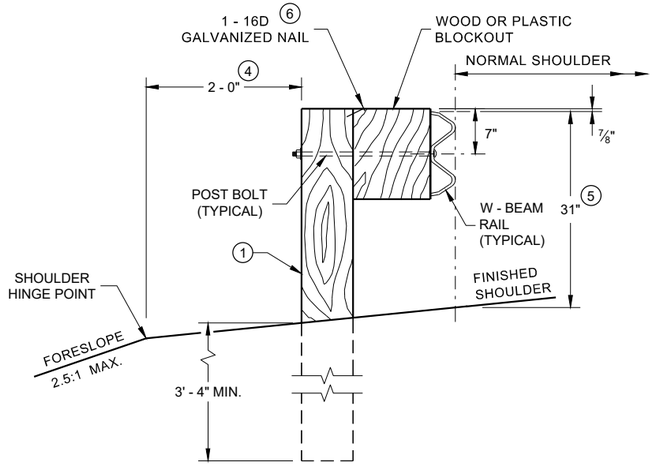
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



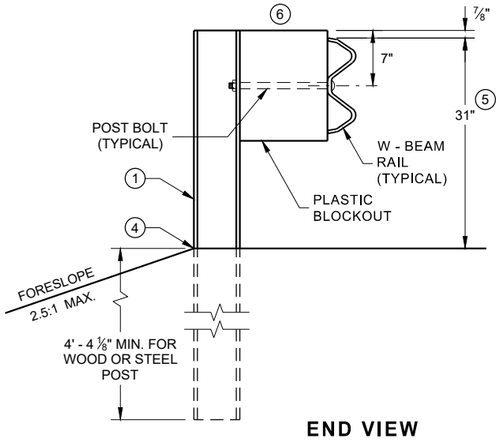
WOOD POST (6" X 8") NOMINAL (1)



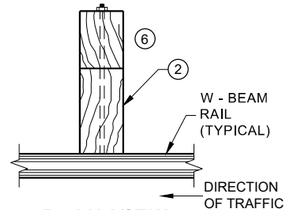
END VIEW
LOCATED ALONG A CURBED ROADWAY



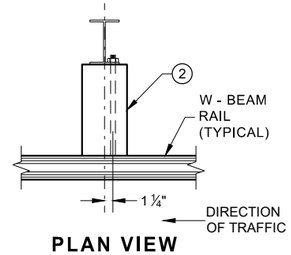
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



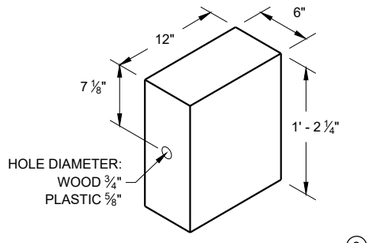
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW WOOD POST, BLOCKOUT & BEAM



PLAN VIEW STEEL POST, PLASTIC BLOCKOUT & BEAM

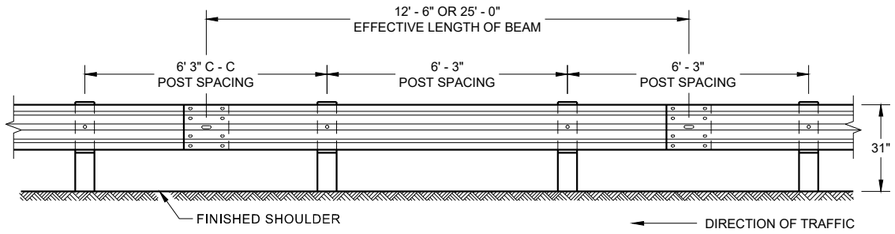


WOOD OR PLASTIC BLOCKOUT (2)

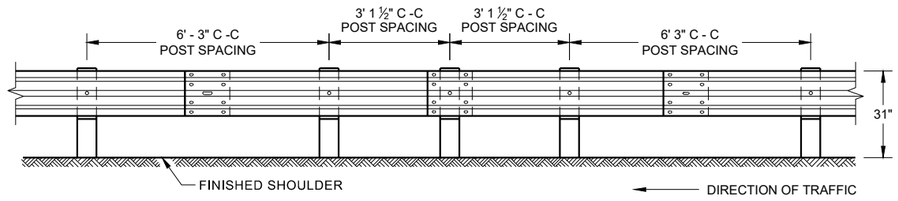
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

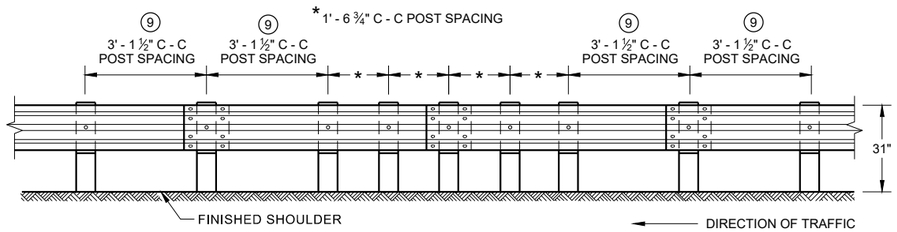
SDD 14B42 - 07a



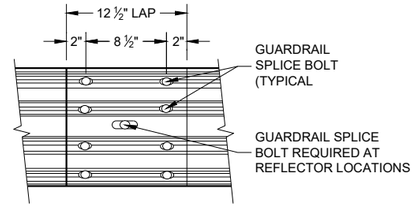
FRONT VIEW
POST SPACING STANDARD INSTALLATION



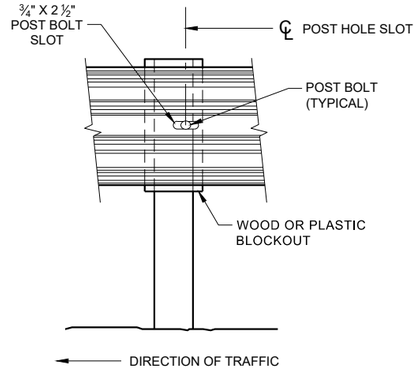
FRONT VIEW
HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)



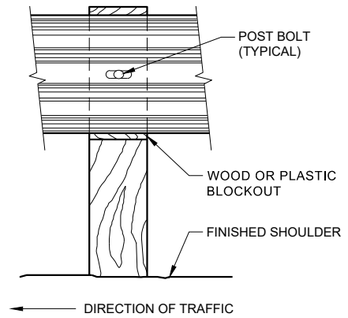
FRONT VIEW
QUARTER POST SPACING (QS)



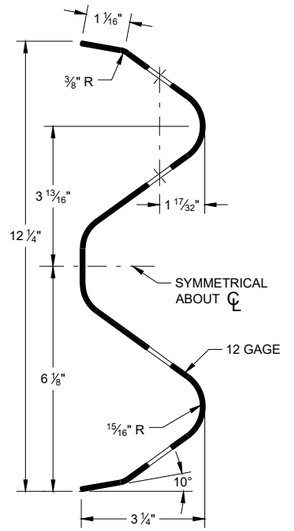
FRONT VIEW
MID-SPAN BEAM SPLICE



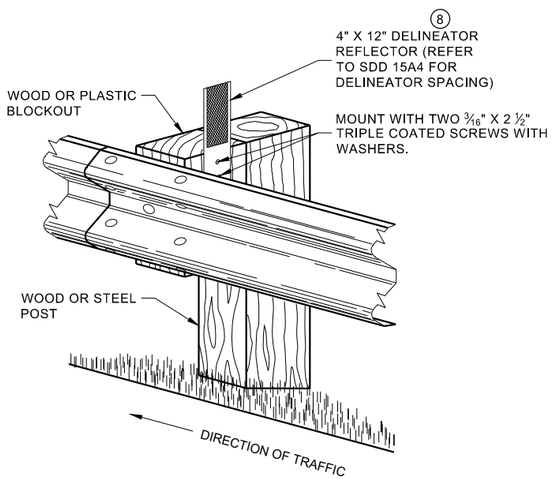
FRONT VIEW AT STEEL POST



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.

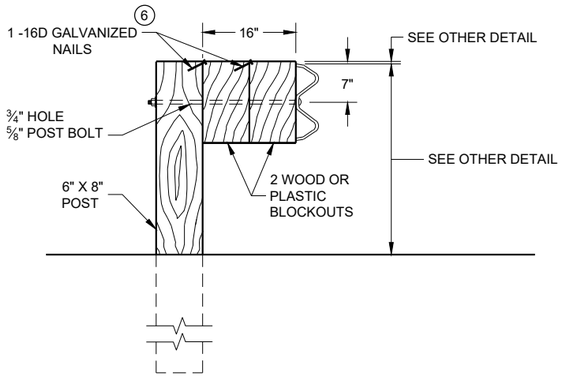
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B42 - 07b
SDD 14B42 - 07b

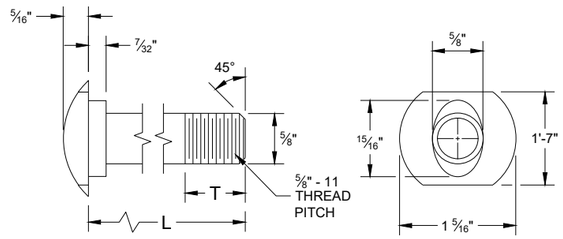


DETAIL FOR 16" BLOCKOUT DEPTH

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.

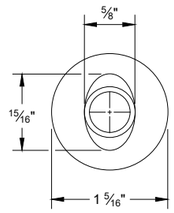
NOTE:

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.

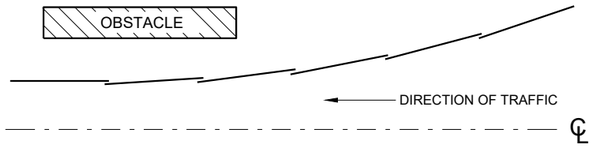


POST BOLT TABLE

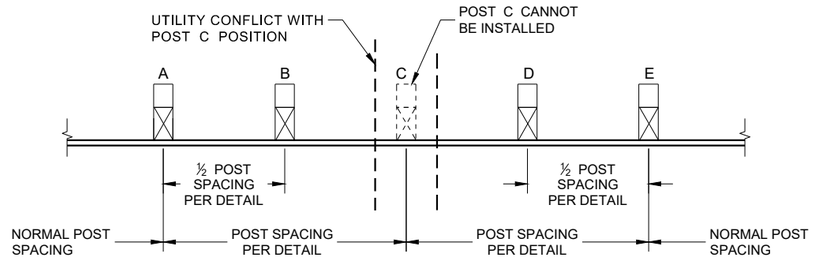
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1⁄16"
18"	4"
21"	4 1⁄16"
25"	4"



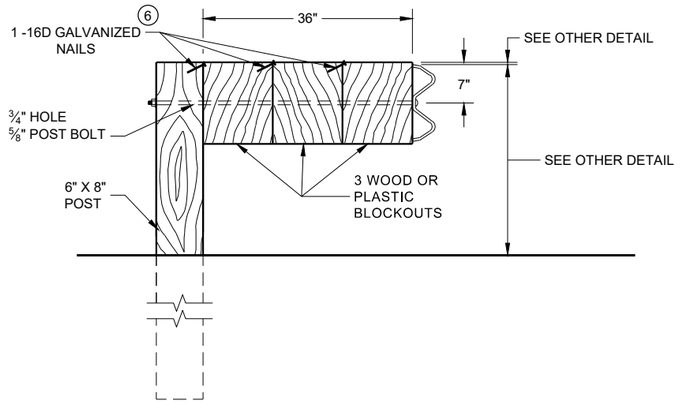
ALTERNATE BOLT HEAD



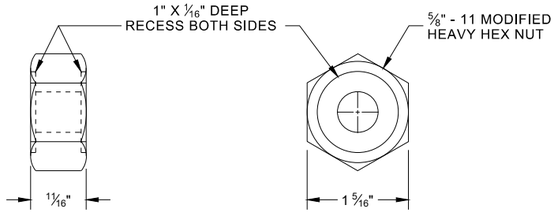
PLAN VIEW
BEAM LAPPING DETAIL



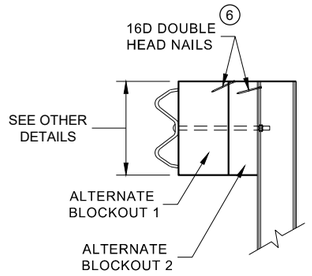
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



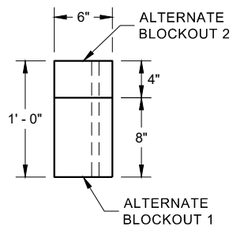
DETAIL FOR 36" BLOCKOUT DEPTH



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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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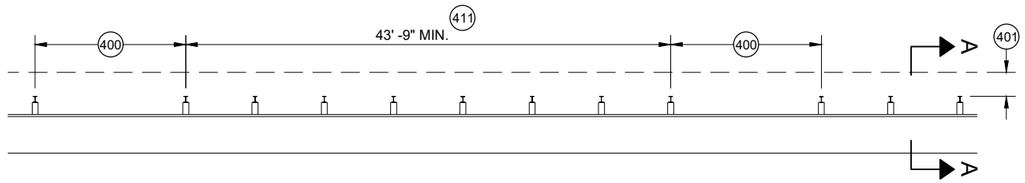
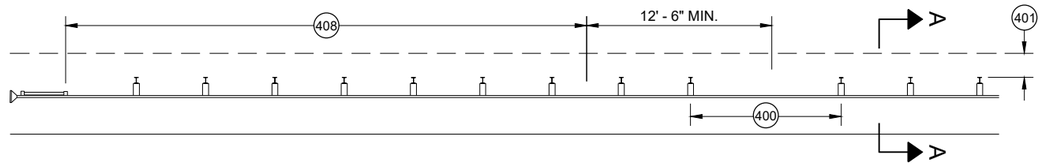
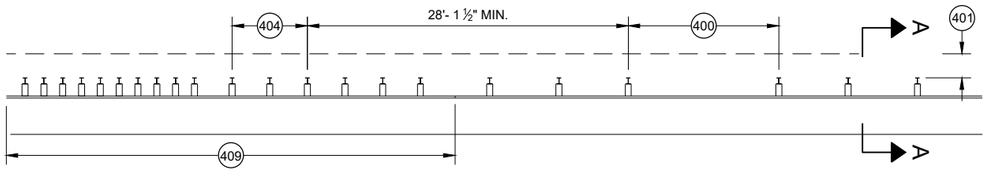
SDD 14B42 - 07c



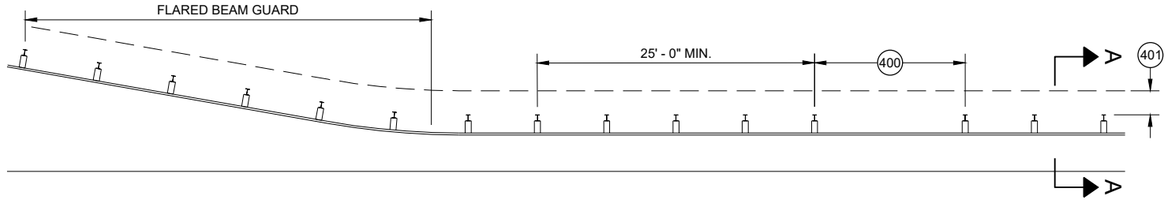
MISSING POST IN MGS GUARDRAIL



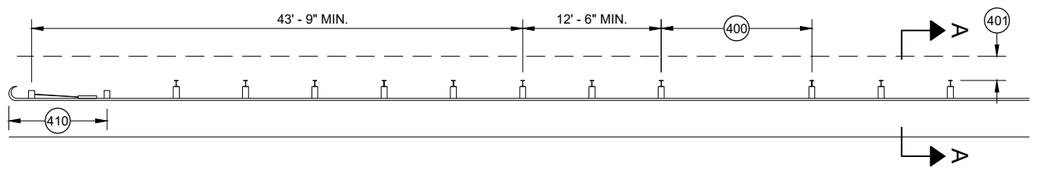
MISSING POST IN MGS GUARDRAIL NEAR EAT



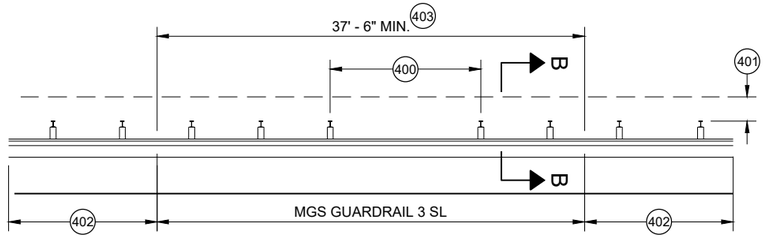
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

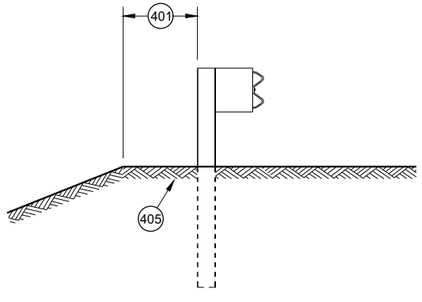


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

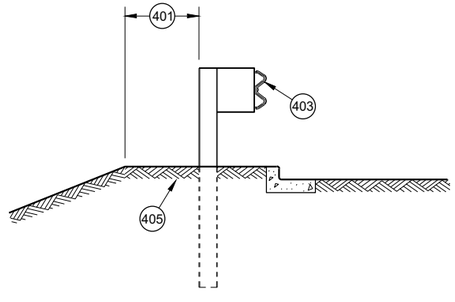


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

(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

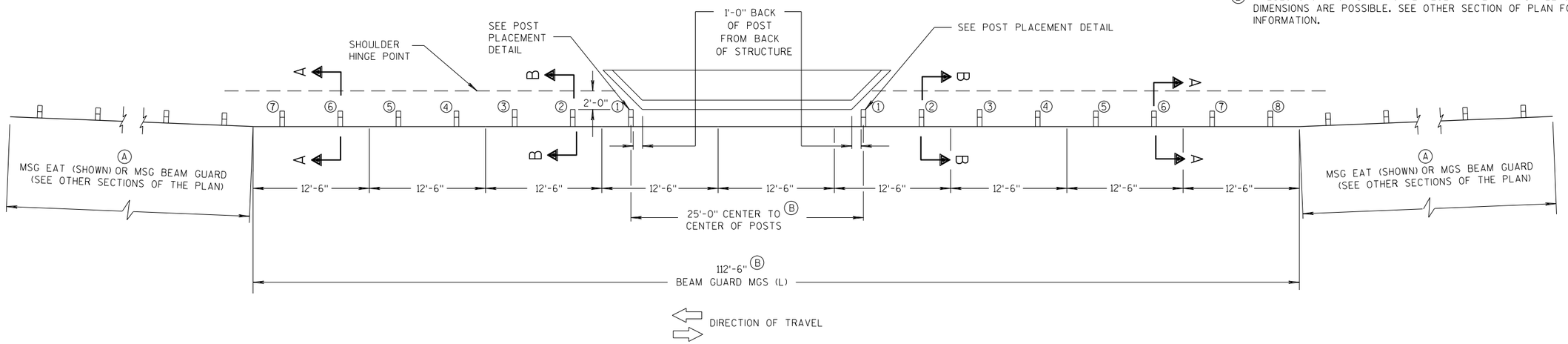
GENERAL NOTES

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

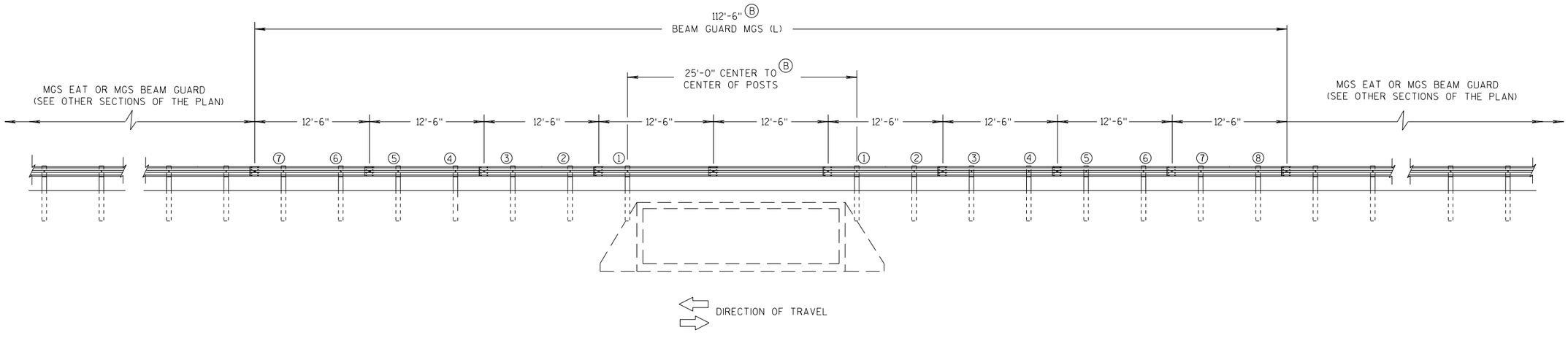
SEE SDD 14 B 42 FOR MORE DETAILS.

(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

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

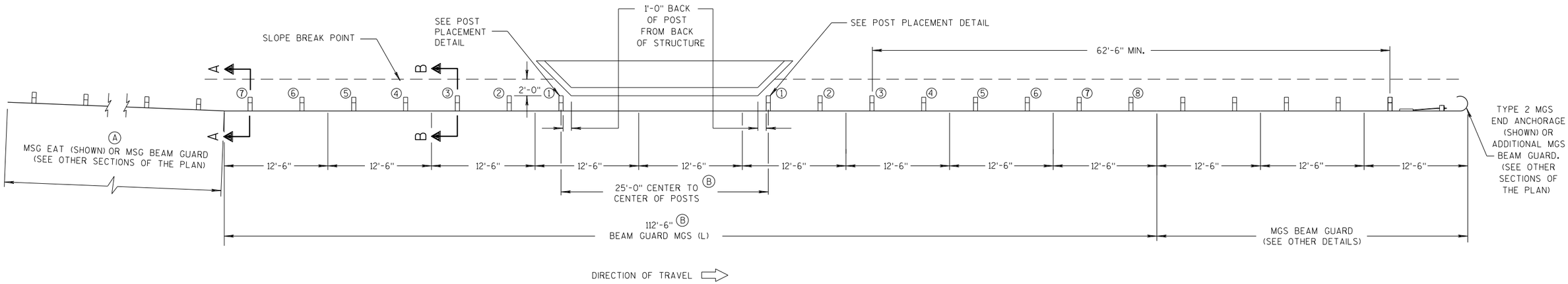
GENERAL NOTES

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

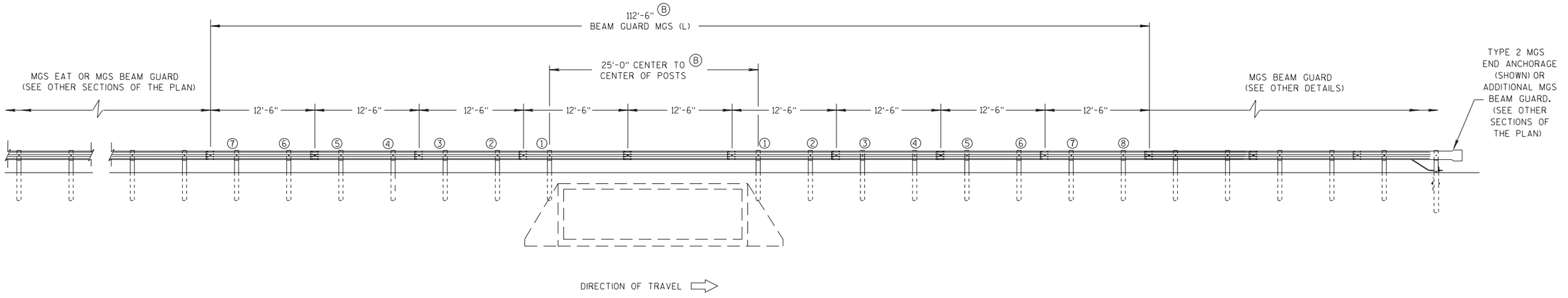
SEE SDD 14 B 42 FOR MORE DETAILS.

(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	53

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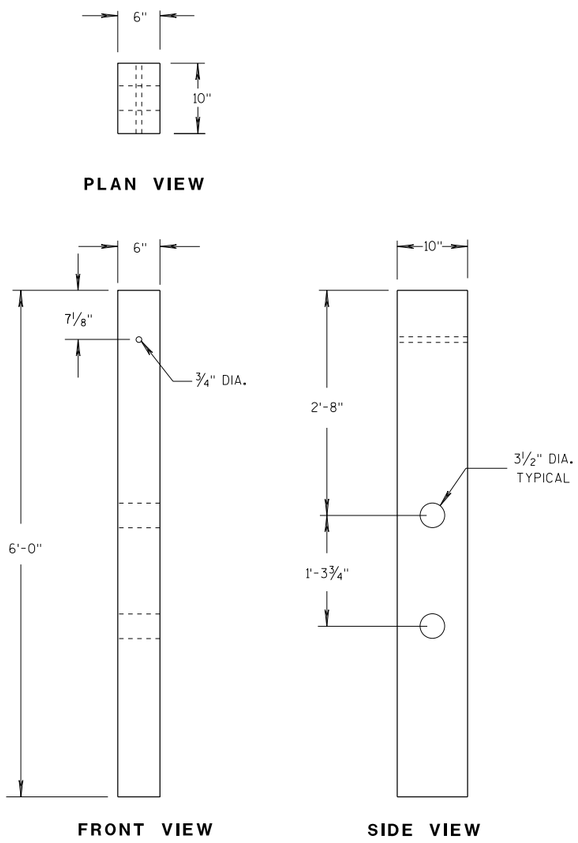
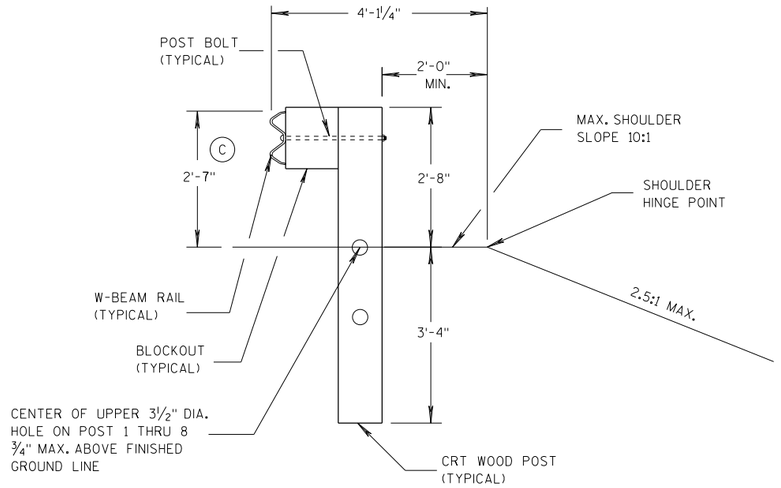
S.D.D. 14 B 43-4b



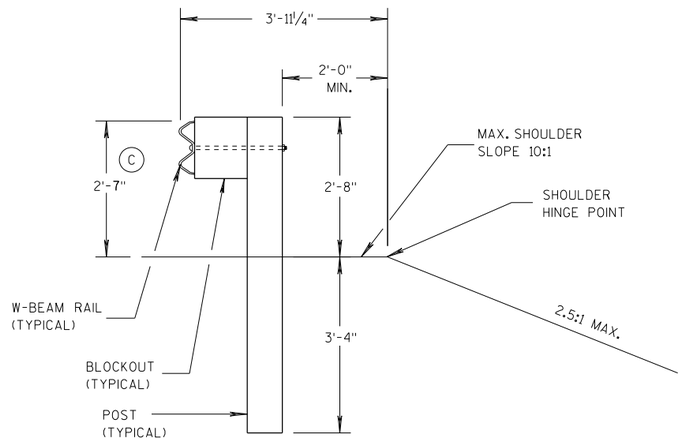
CRT WOOD POST



SECTION B-B

POSTS NO. 1-3

SEE OTHER DETAILS



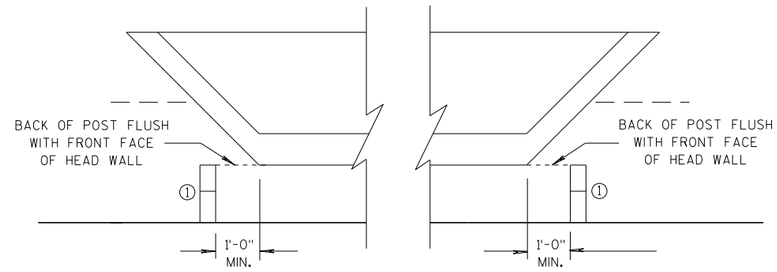
SECTION A-A

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 54 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.

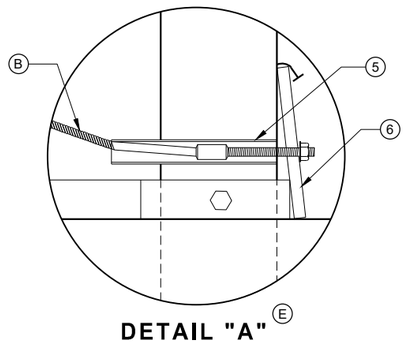
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

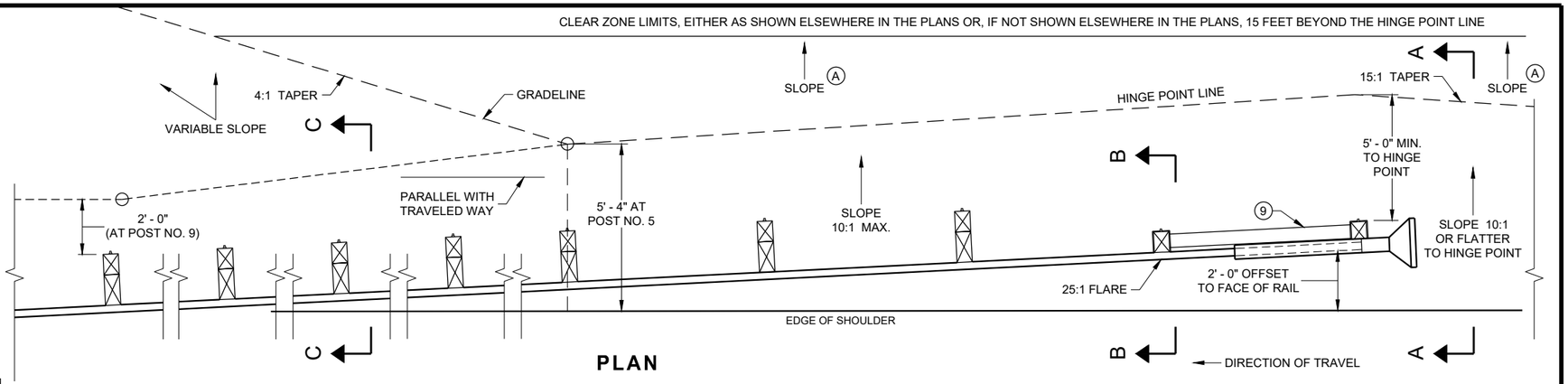
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

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

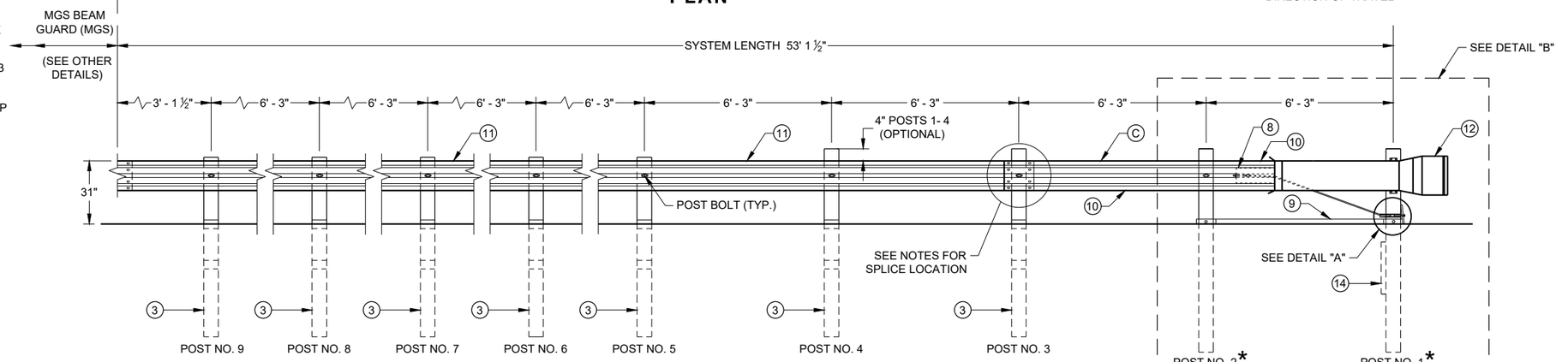
THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



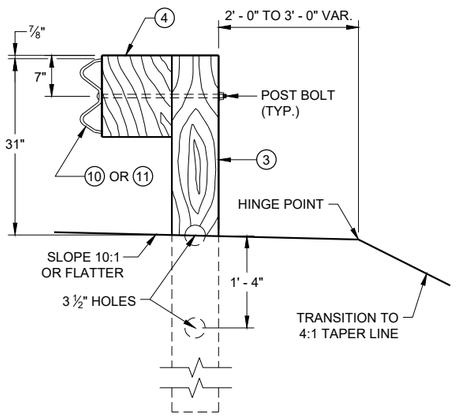
DETAIL "A" (E)



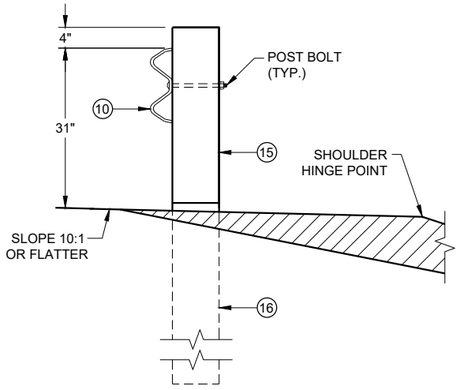
PLAN



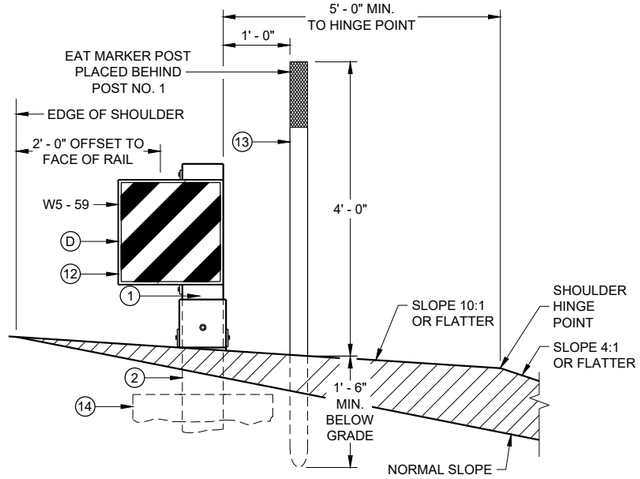
ELEVATION



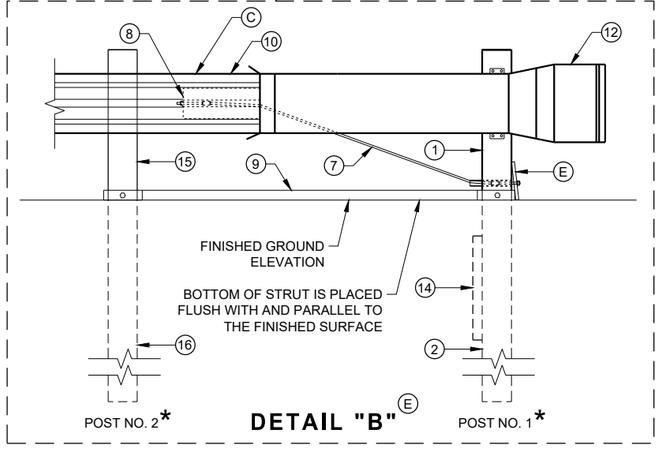
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



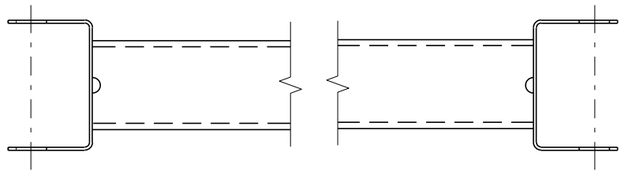
DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

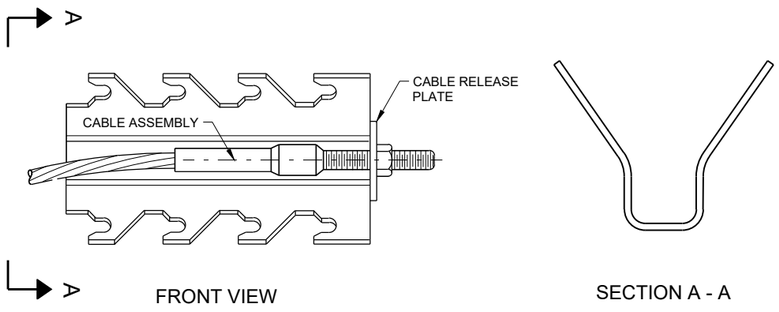
SDD 14B44 - 04a



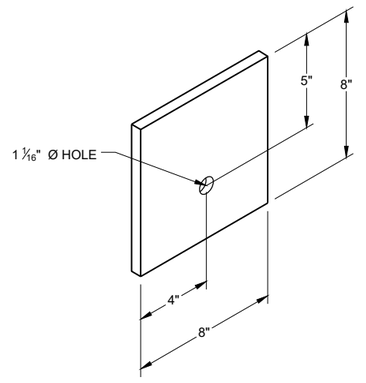
GENERIC GROUND STRUT ⑨ Ⓔ

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

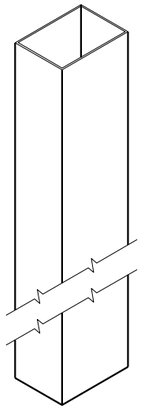
6

SDD 14B44 - 04b

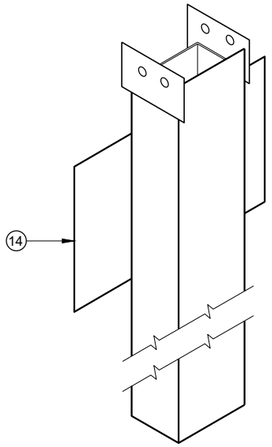
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

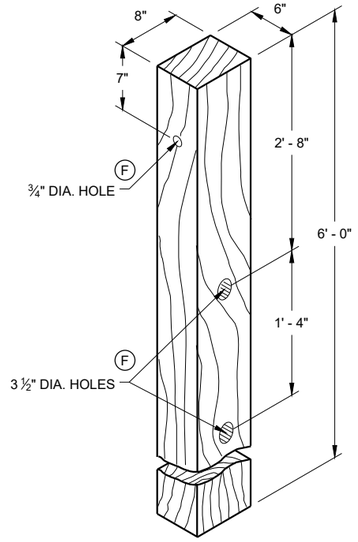
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



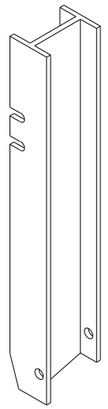
UPPER POST NO. 1 (1) (E)



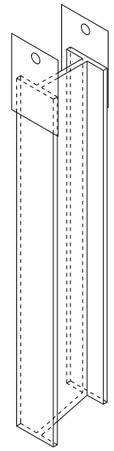
LOWER POST NO. 1 (2) (E)



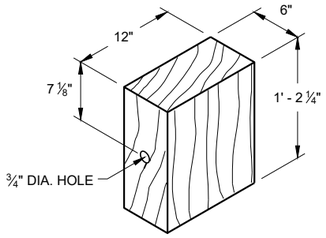
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



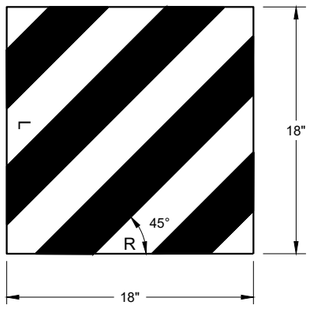
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

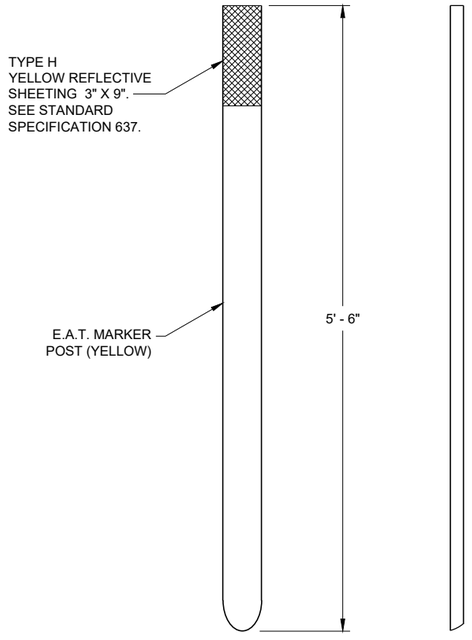


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



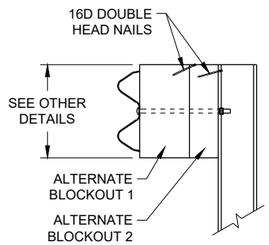
W5 - 59

REFLECTIVE SHEETING DETAIL (E)

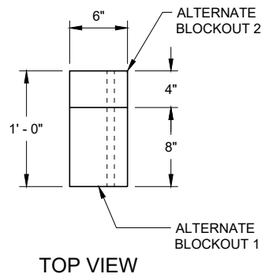


FRONT VIEW SIDE VIEW

E.A.T. MARKER POST (13)



SIDE VIEW



TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

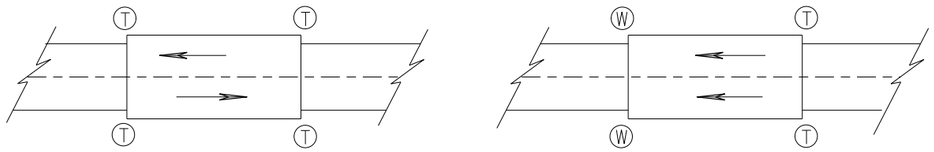
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

6

SDD 14B44 - 04c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

(T) THRIE BEAM CONNECTION

(W) W-BEAM CONNECTION WHEN REQUIRED

TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE

GENERAL NOTES

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

TRANSITION USES STEEL POSTS ONLY.

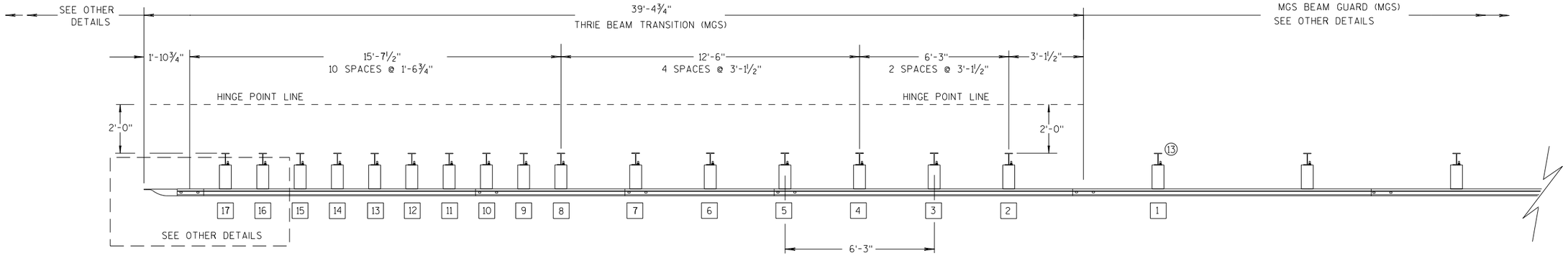
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

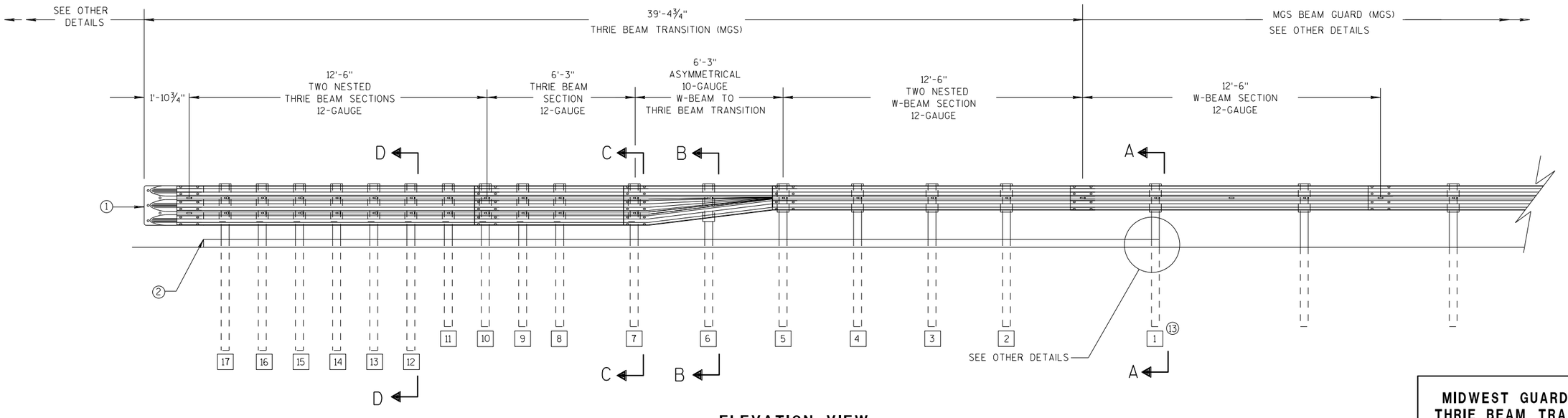
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD14B42



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 45-5a

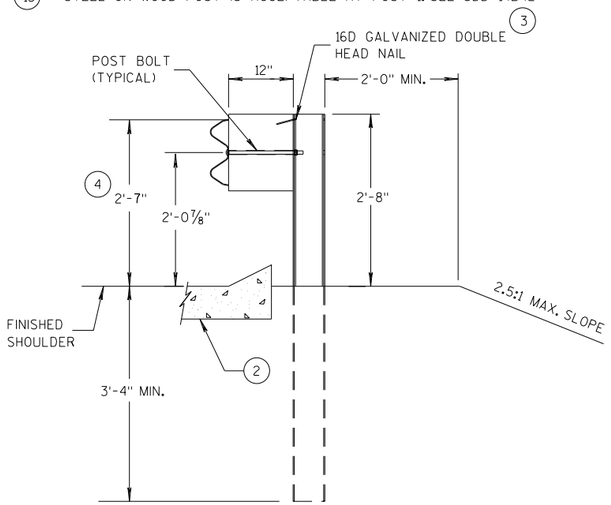
GENERAL NOTES

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 10D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

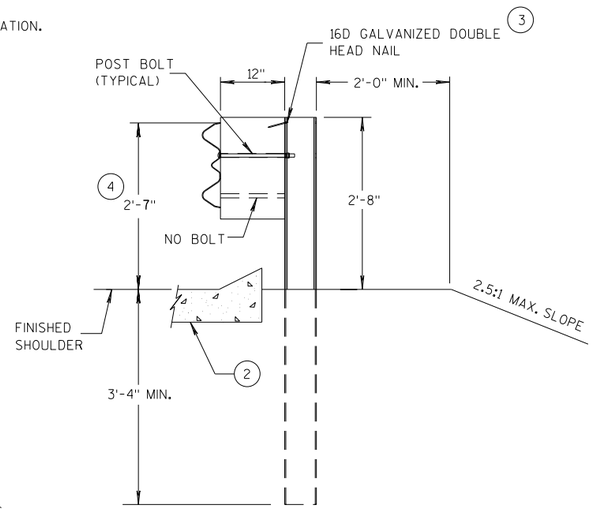
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42



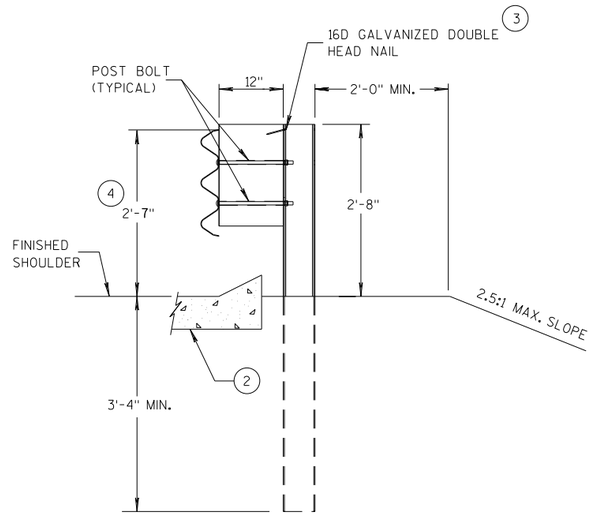
SECTION A-A (13)

POSTS 1-5



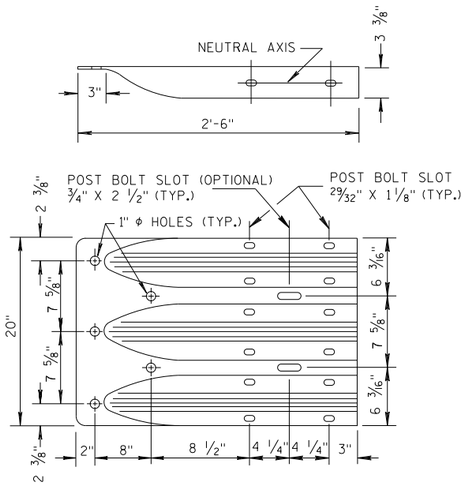
SECTION B-B

POST 6

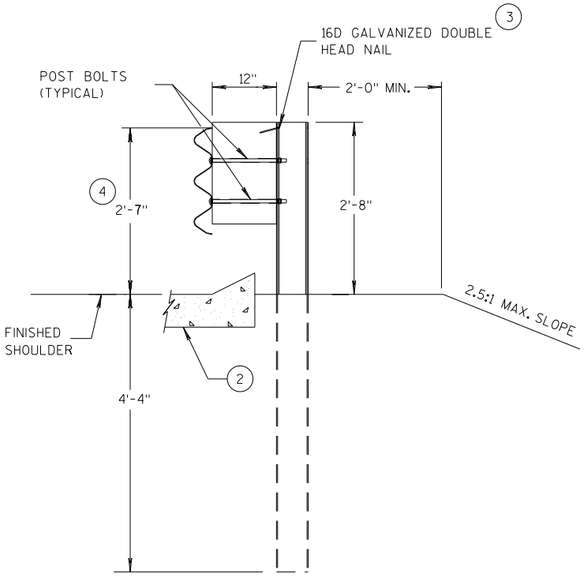


SECTION C-C

POSTS 7-11

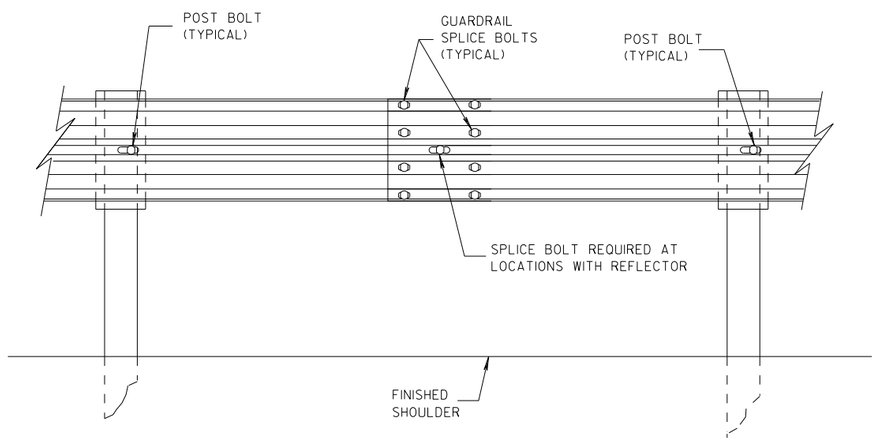


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-17



SPLICE DETAIL

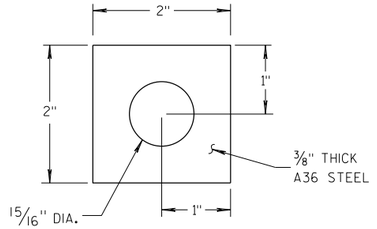
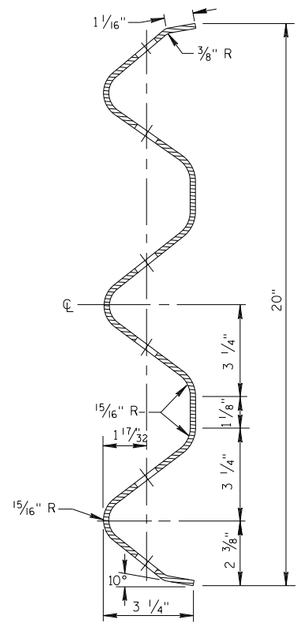


PLATE WASHER DETAIL



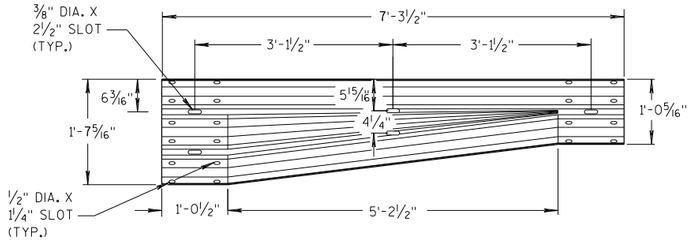
SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

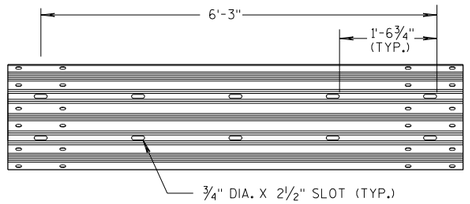
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOF

6

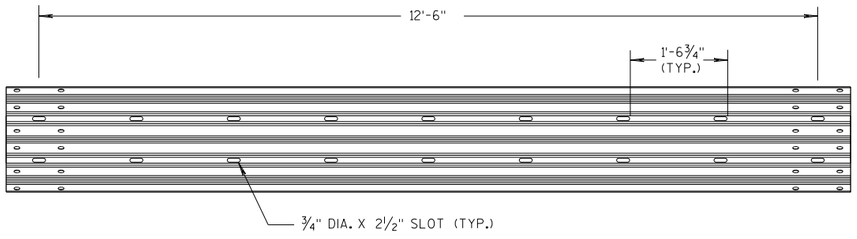
S.D.D. 14 B 45-5b



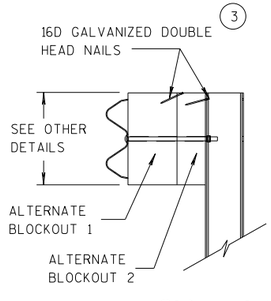
W-BEAM TO THRIE BEAM TRANSITION SECTION



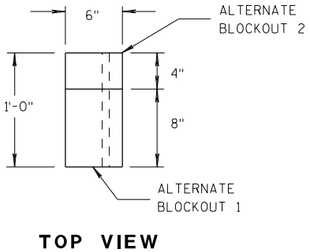
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

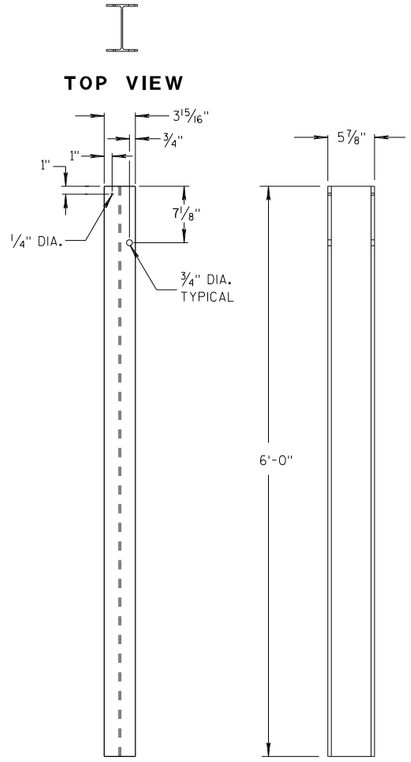


SIDE VIEW



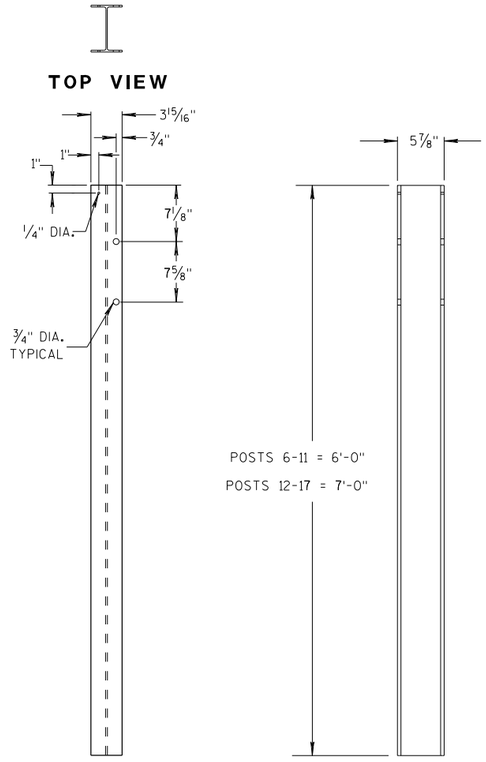
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



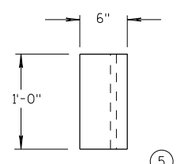
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

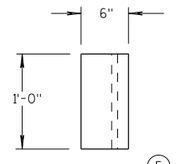


FRONT VIEW SIDE VIEW

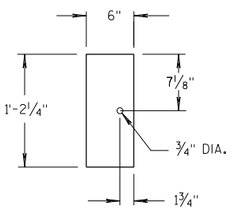
STEEL POSTS 6-17



TOP VIEW (5)

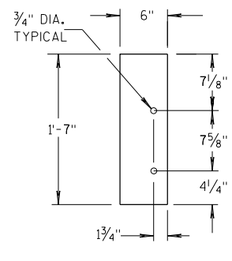


TOP VIEW (5)



FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-17

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

BOLT HOLES FOR POST ARE ON FRONT AND OF SIDE OF POST.

(3) WHEN USING STEEL POSTS 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.

(5) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.

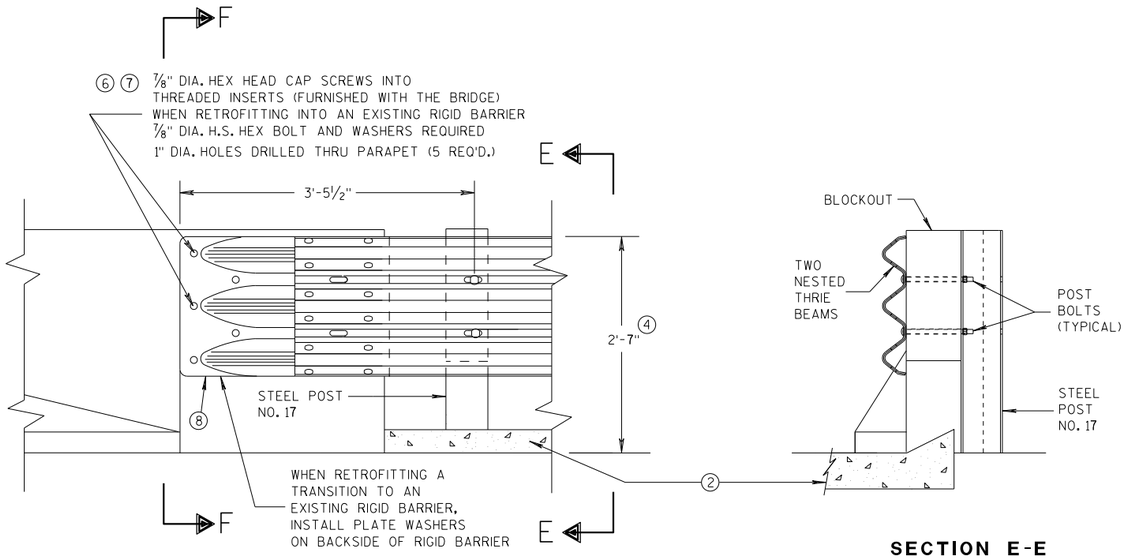
(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOF

6

S.D.D. 14 B 45-5c



FRONT VIEW

SECTION E-E

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

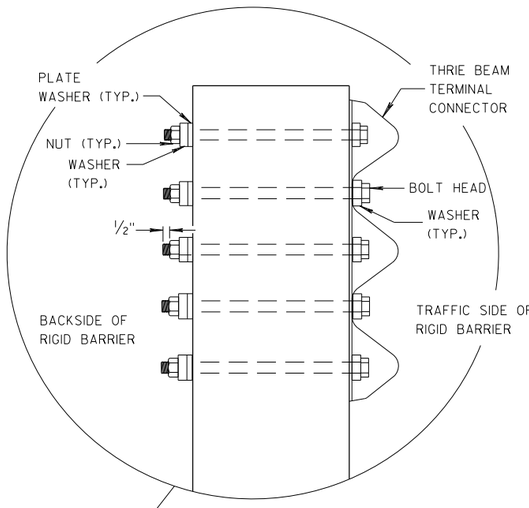
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

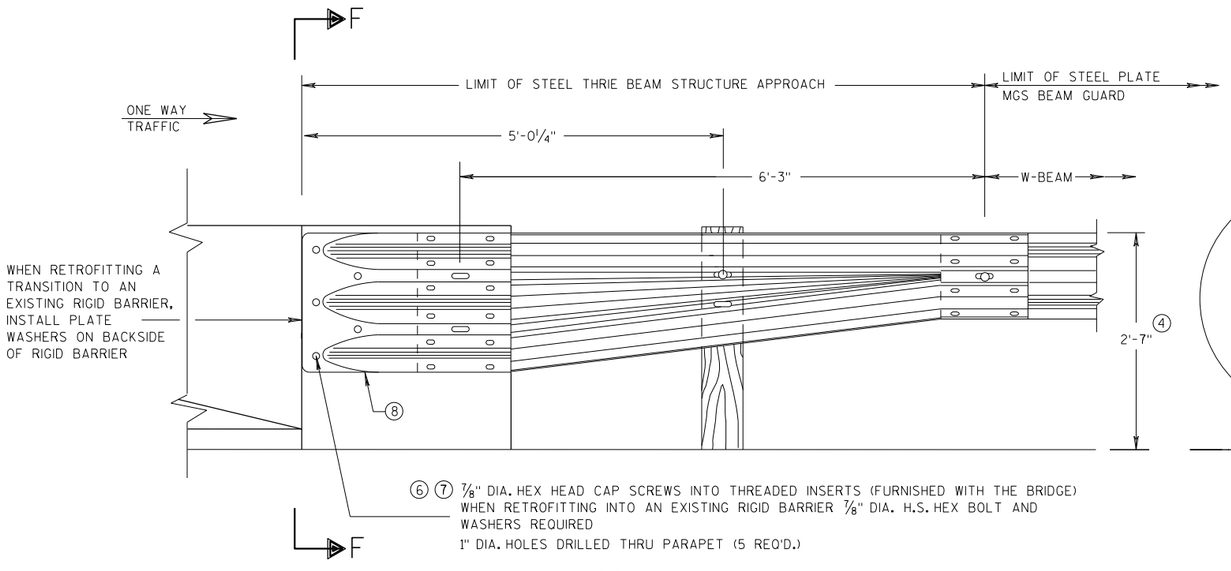
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

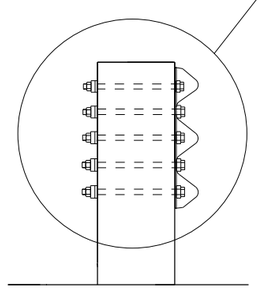
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

⑧ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".

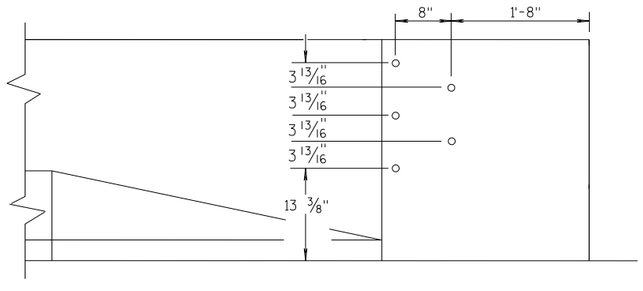




FRONT VIEW



SECTION F-F



DRILL HOLE LOCATION

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

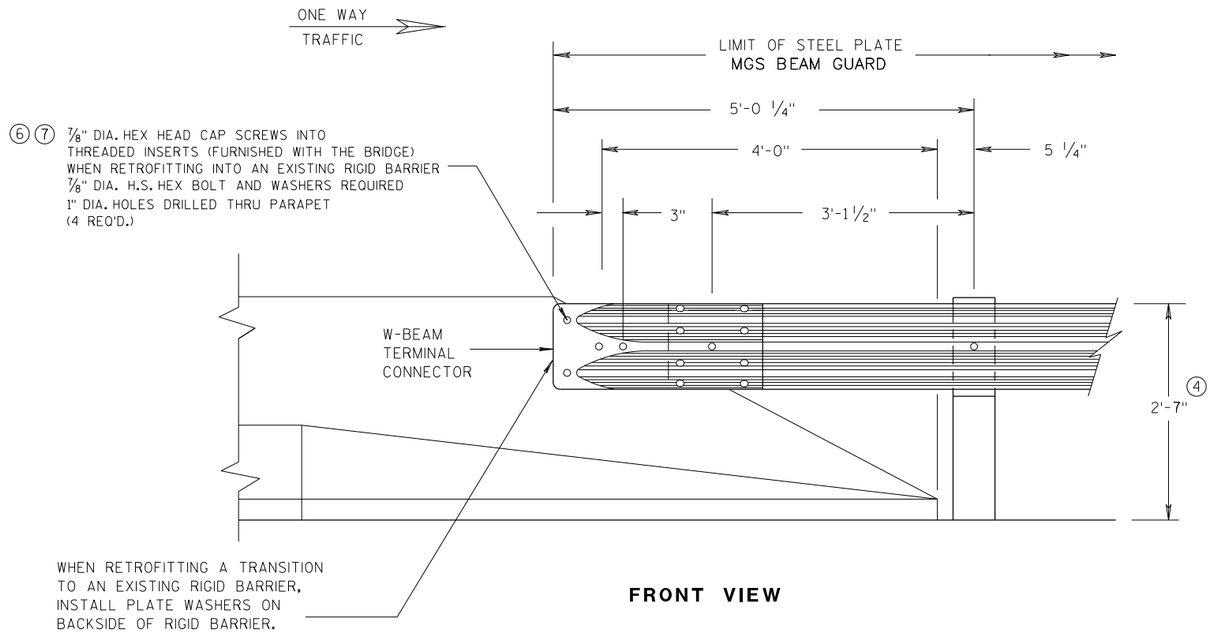
APPROVED
07/2018 DATE
/S/ Rodney Taylor
ROADWAY STANDARDS D UNIT SUPERVIS
NT
FHWA

6

S.D.D. 14 B 45-5d

6

S.D.D. 14 B 45-5d



FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

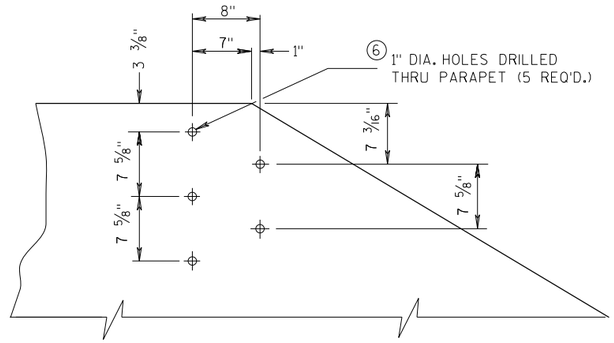
GENERAL NOTES

② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

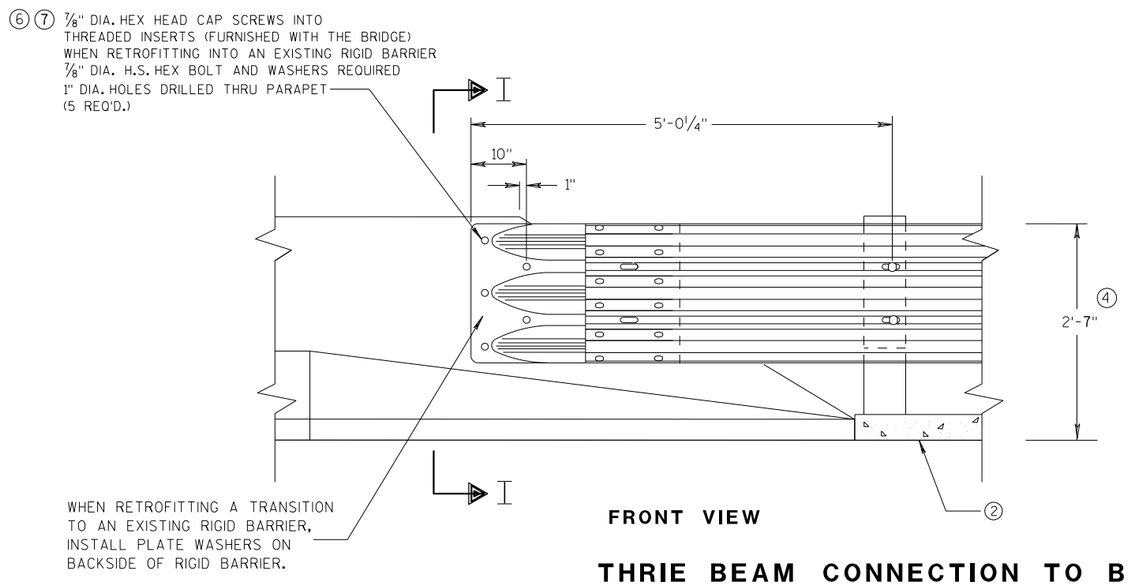
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

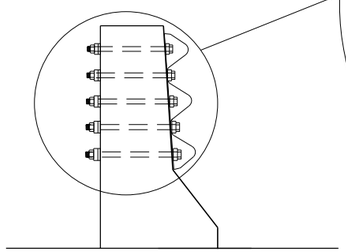
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.



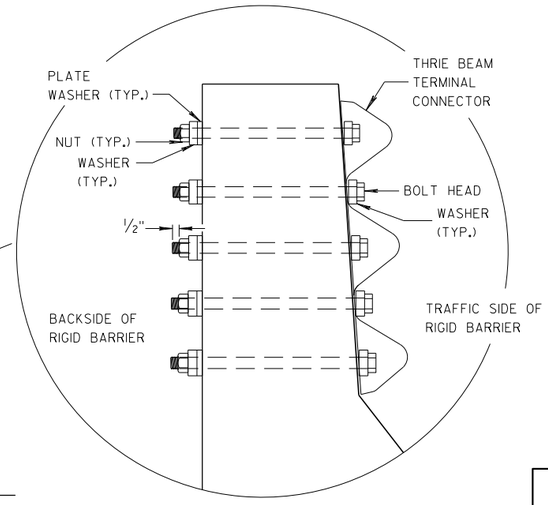
DRILL HOLE LOCATION AND PATTERN
FOR THRIE BEAM CONNECTION



FRONT VIEW



SECTION I-I



THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS [illegible] UNIT SUPERVI[illegible]ENT
FHWA

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S.D.D. 14 B 45-5f

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S.D.D. 14 B 45-5f

GENERAL NOTES

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

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

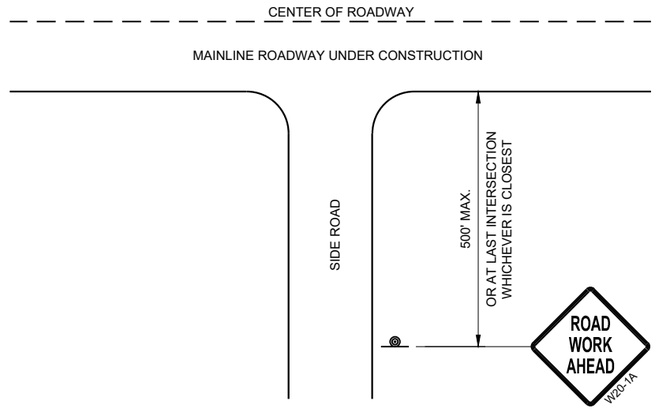
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

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

* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS

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



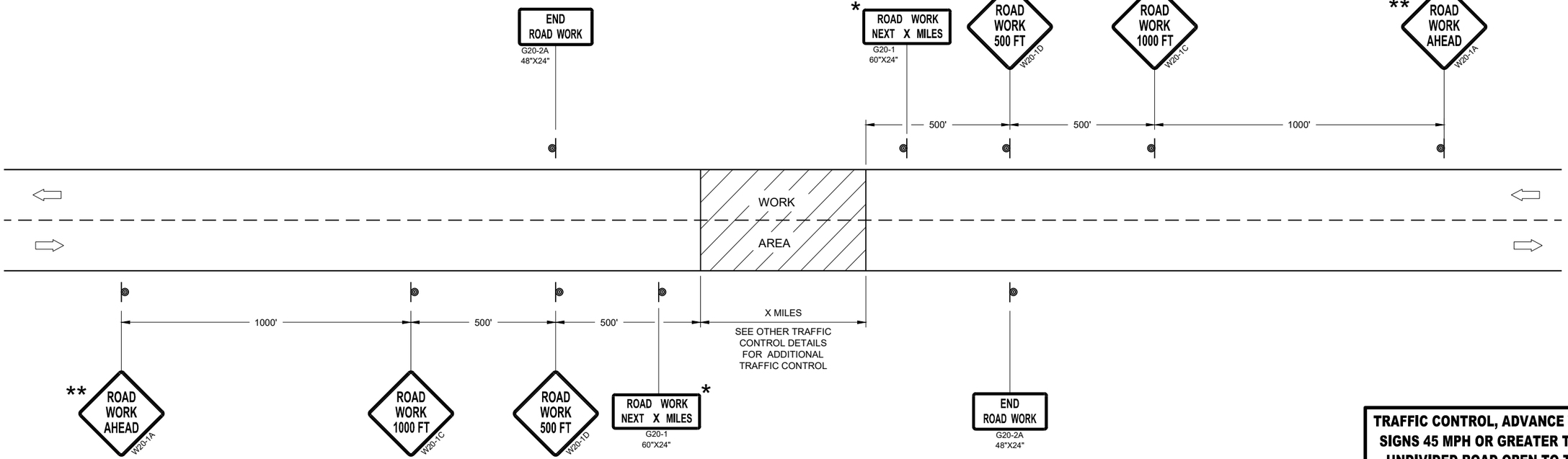
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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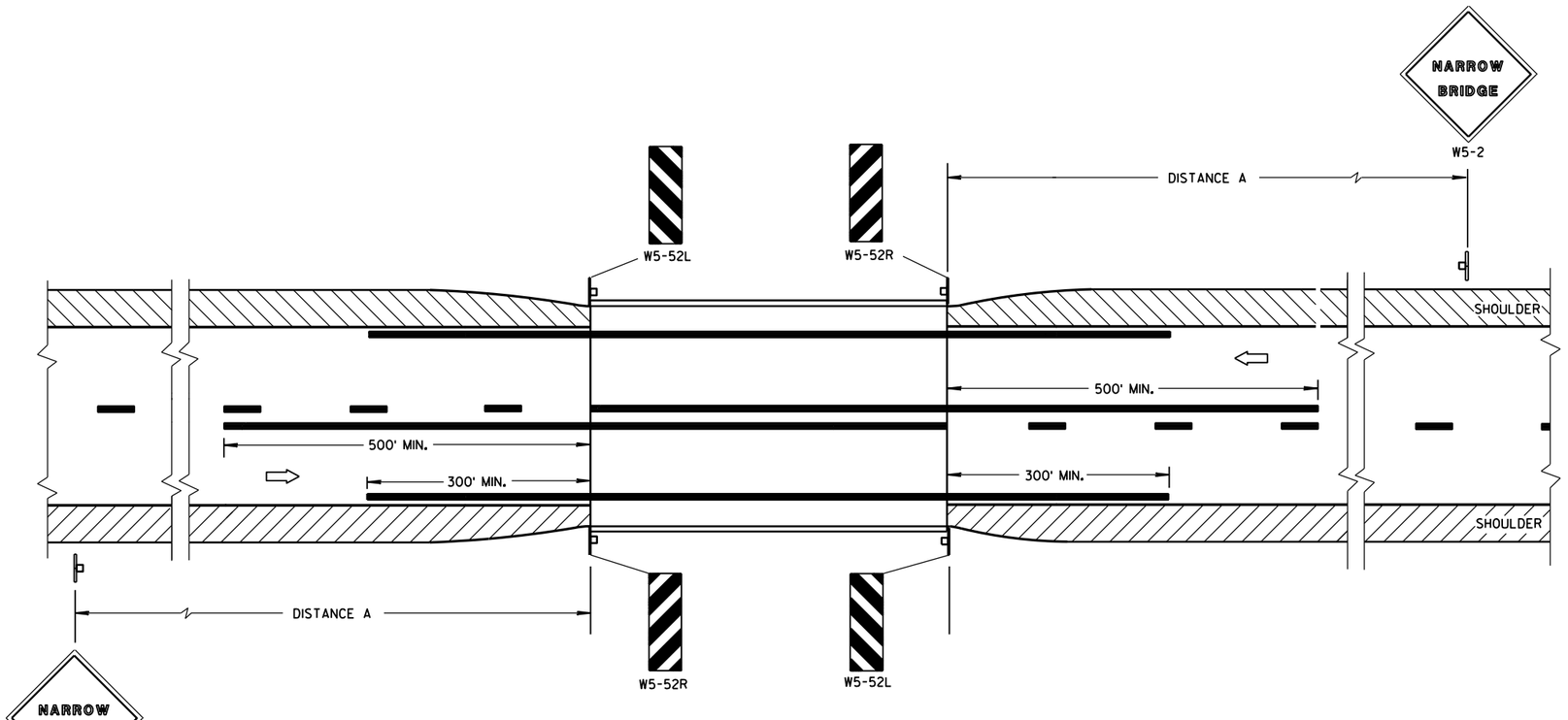
SDD 15C04 - 05



SITUATION 1

WARRANTING CRITERIA:
BRIDGE WIDTH IS AT LEAST 16 FEET BUT LESS THAN 24 FEET.

DISTANCE TABLE

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

GENERAL NOTES

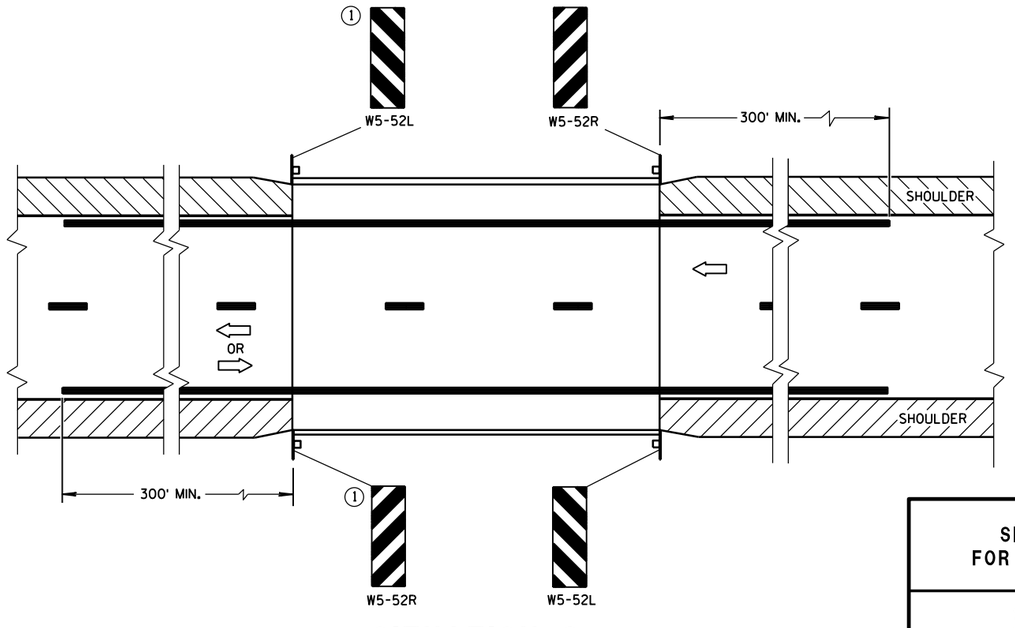
DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

LOCATE W5-52 SIGN POST(S) BEHIND GUARDRAIL WHEN PRESENT.

PLACE THE EDGE OF THE W5-52 SIGN IN LINE WITH FACE OF CURB OR PARAPET.

(1) OMIT ON ONE-WAY TRAVELLED WAYS.

⇨ DIRECTION OF TRAFFIC



SITUATION 2

WARRANTING CRITERIA:

1. BRIDGE WIDTH IS AT LEAST 24 FEET AND
2. BRIDGE SHOULDER WIDTH IS LESS THAN 6 FEET.

SIGNING & MARKING FOR TWO LANE BRIDGES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MAR[illegible]EER
FHWA

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S.D.D. 15 C 6-9

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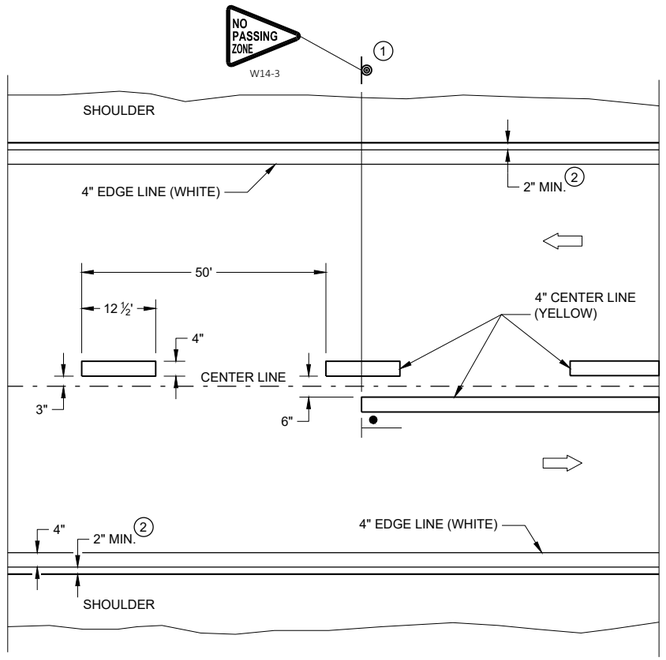
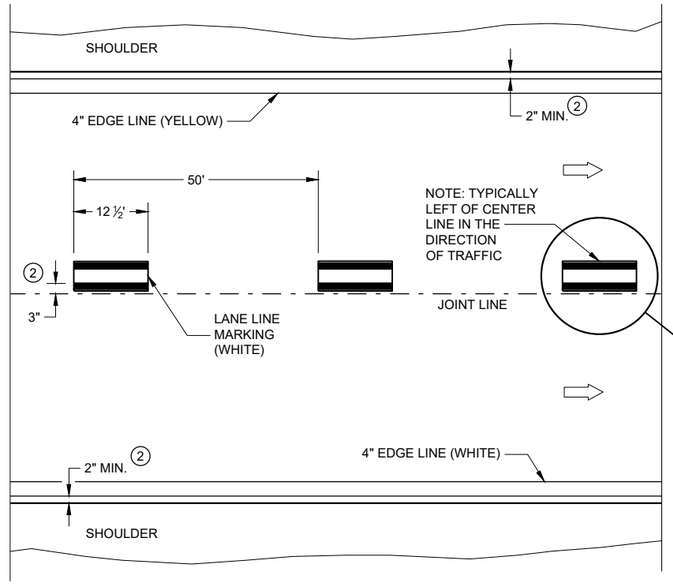
S.D.D. 15 C 6-9

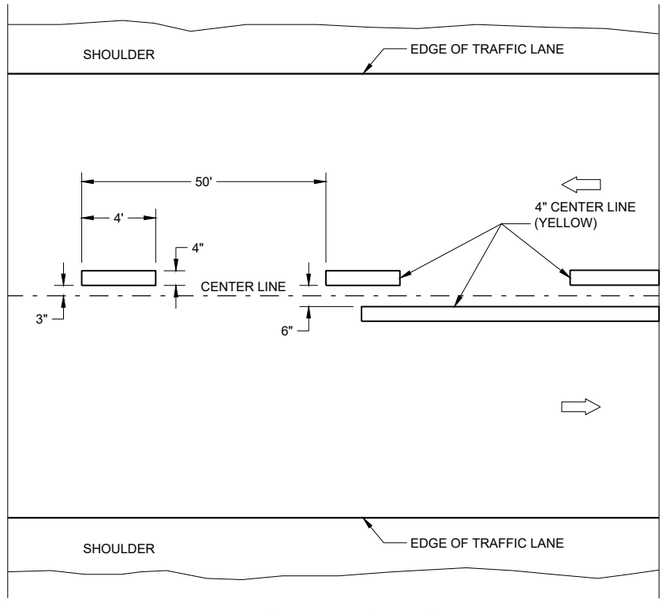


TWO WAY TRAFFIC

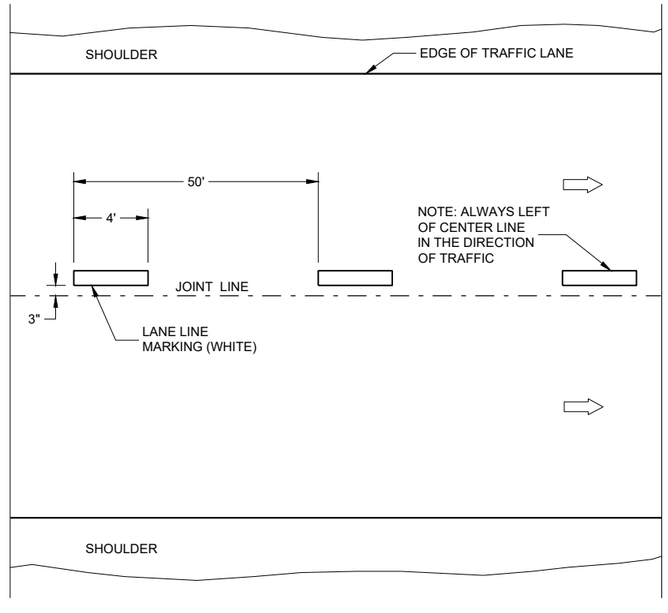


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

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

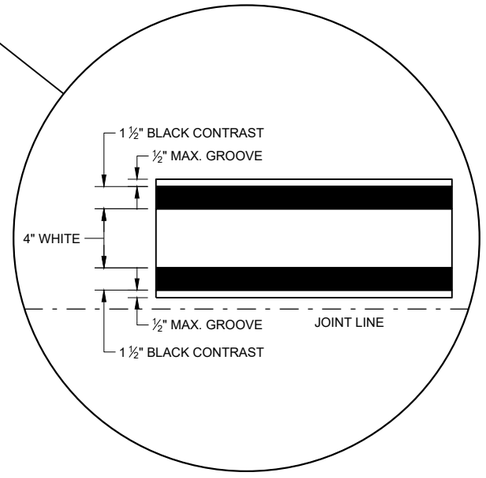
1. LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
2. MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

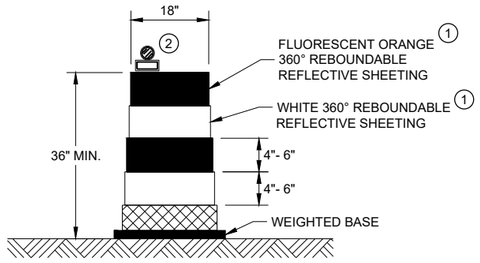
FHWA

SDD 15C08 - 20a

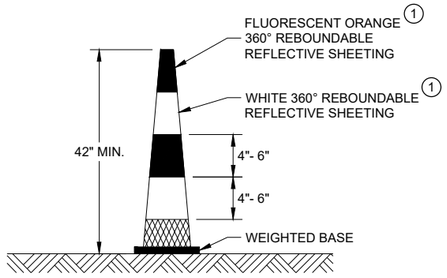
SDD 15C08 - 20a

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.

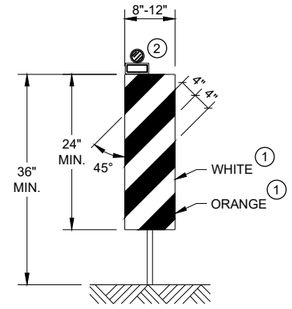


DRUM



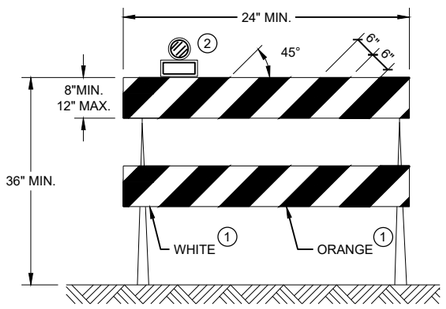
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



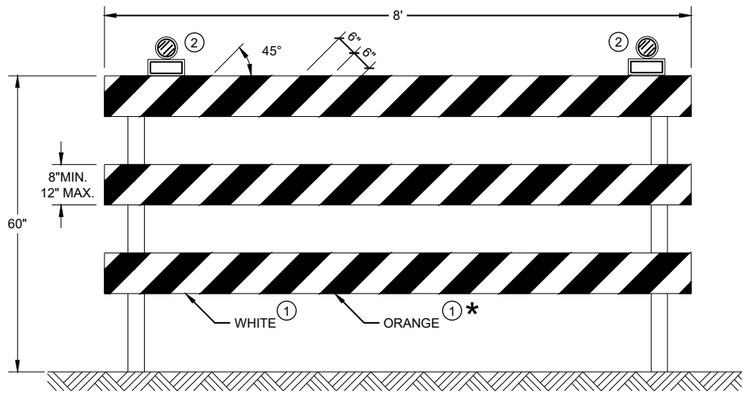
VERTICAL PANEL

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



TYPE II BARRICADE

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



TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C11 - 09b

6

SDD 15C11 - 09b

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

GENERAL NOTES

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

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

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

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

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

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

FLAGGING

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

(1) FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

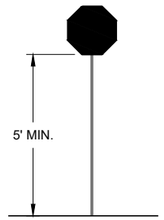
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FOR THE APPROVED PRODUCTS LIST.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.



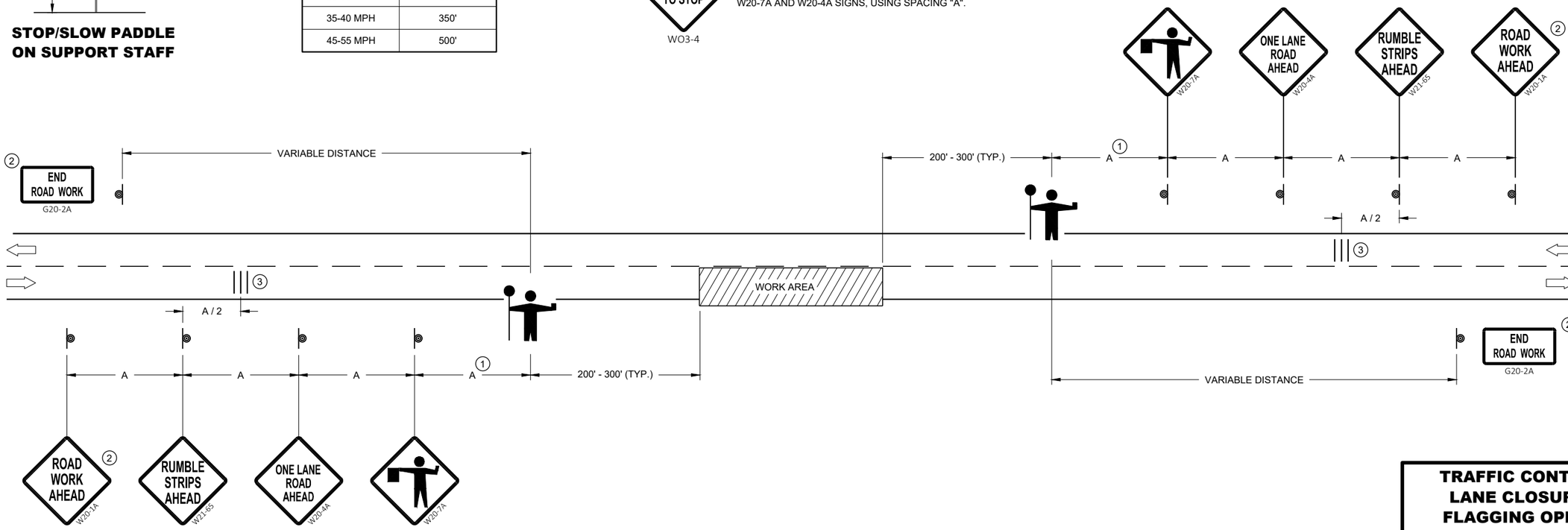
STOP/SLOW PADDLE ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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

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

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C12 - 07

SDD 15C12 - 07

LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

FLASHING ARROW PANEL (CAUTION)

GENERAL NOTES

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

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

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

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

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

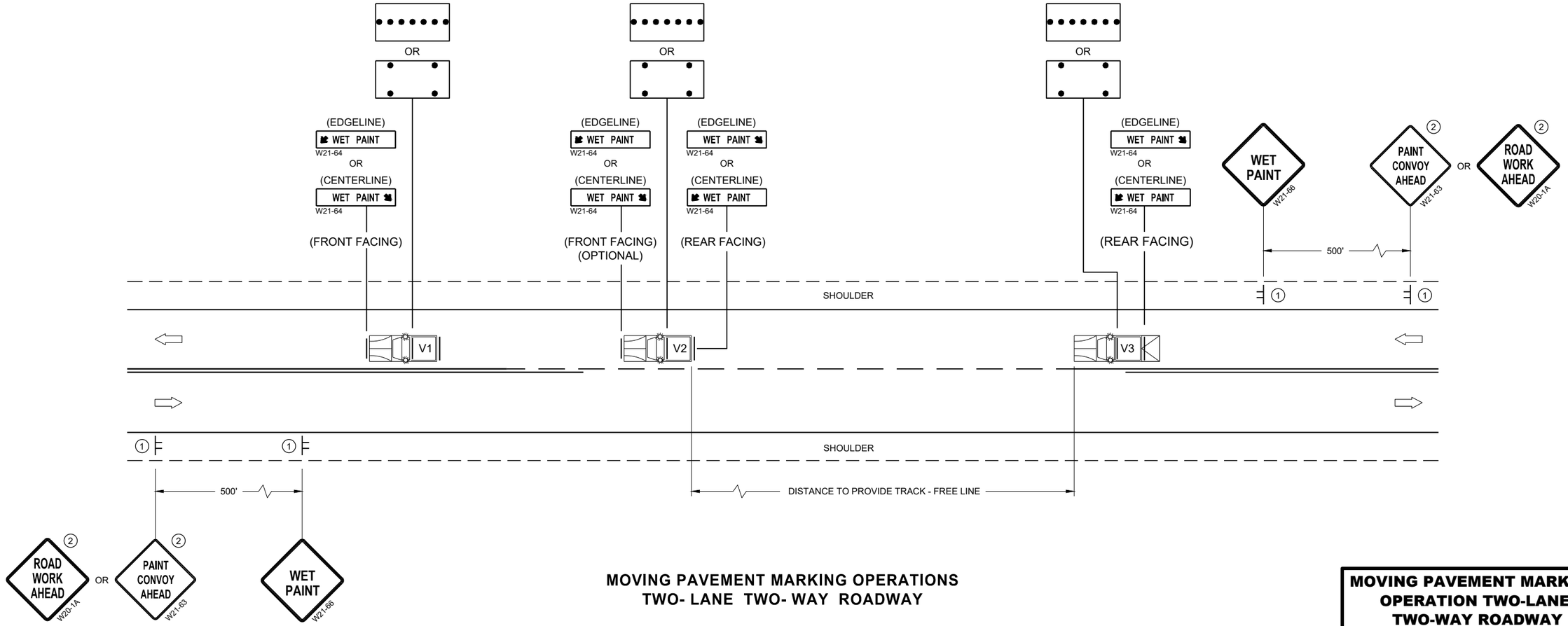
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

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

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

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

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



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 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

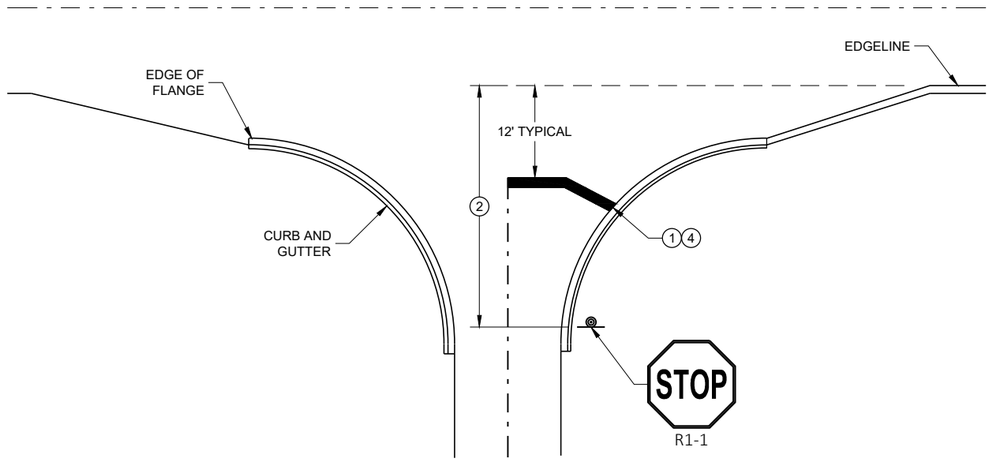
SDD 15C19 - 06a

SDD 15C19 - 06a

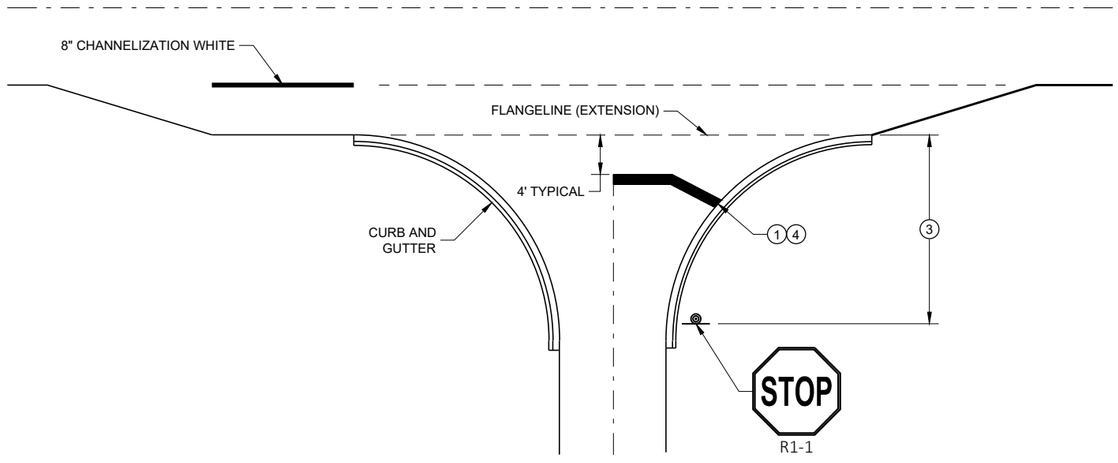
GENERAL NOTES

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

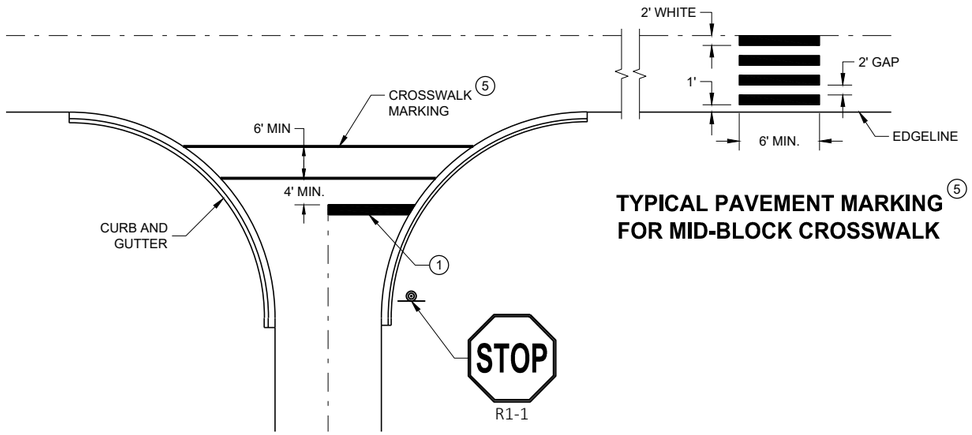
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE 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 INSTEAD.



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

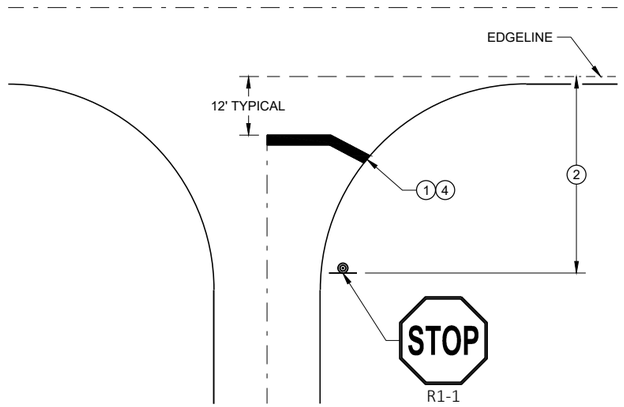


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK (5)

TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS 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
November 2019 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER
FHWA

6

SDD 15C33 - 04

6

SDD 15C33 - 04

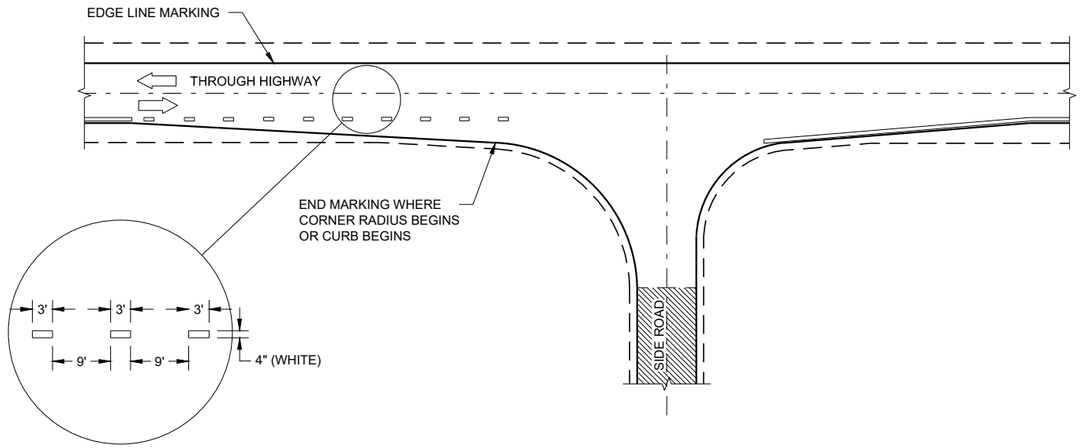
GENERAL NOTES

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

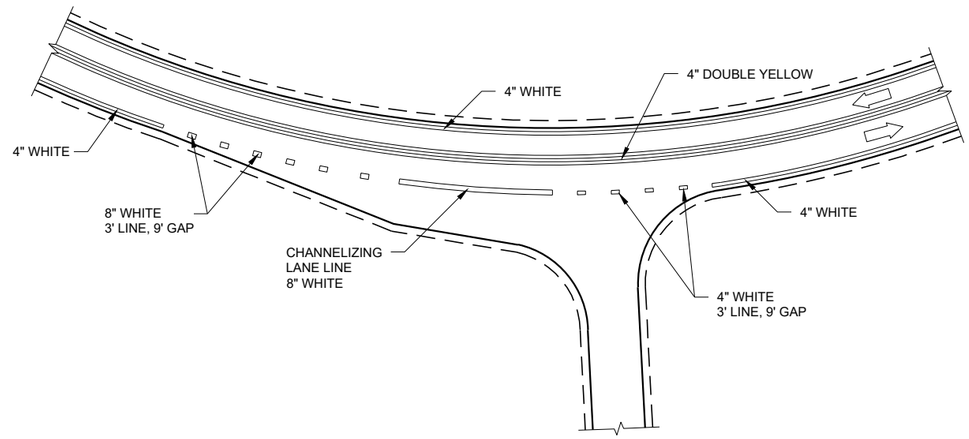
1. WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
2. WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
3. BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
4. BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.

LEGEND

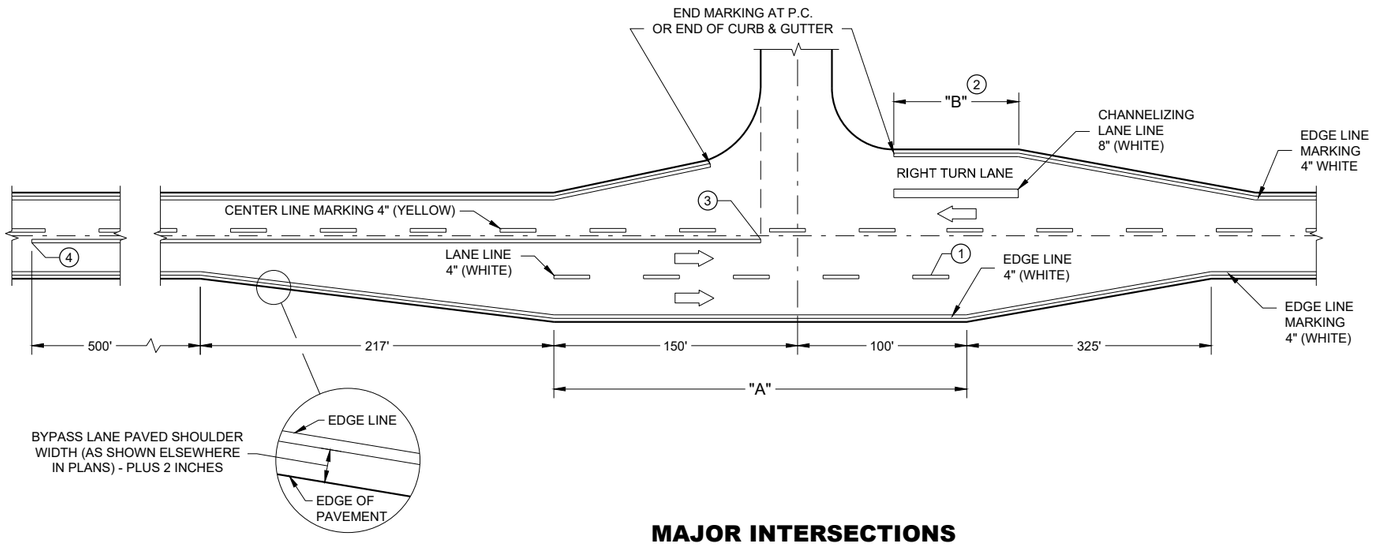
DIRECTION OF TRAVEL



MINOR INTERSECTION



INTERSECTION ON OUTSIDE OF CURVE



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

PAVEMENT MARKING (INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C35 - 04a

LEGEND

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL DRUM

DIRECTION OF TRAFFIC

WORK ZONE

GENERAL NOTES

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

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

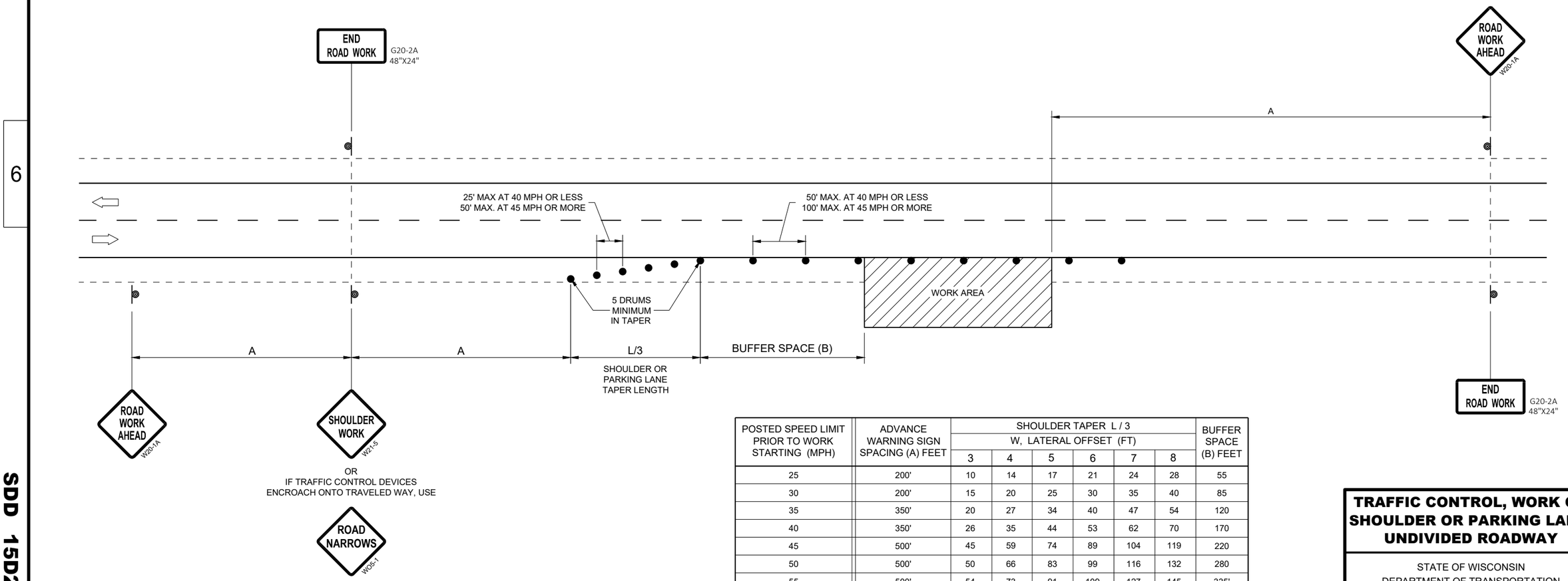
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

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

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

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



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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

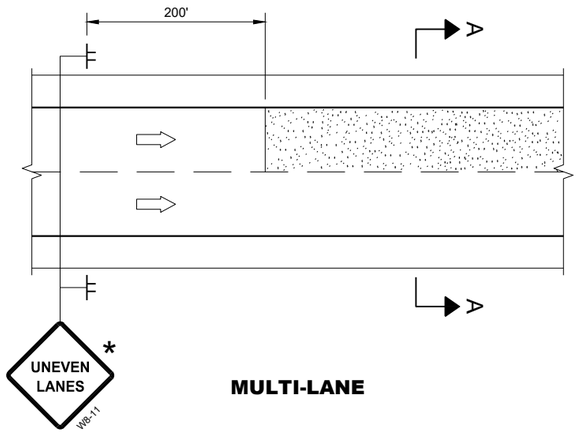
APPROVED
May 2020
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE T SAFETY ENGINEER

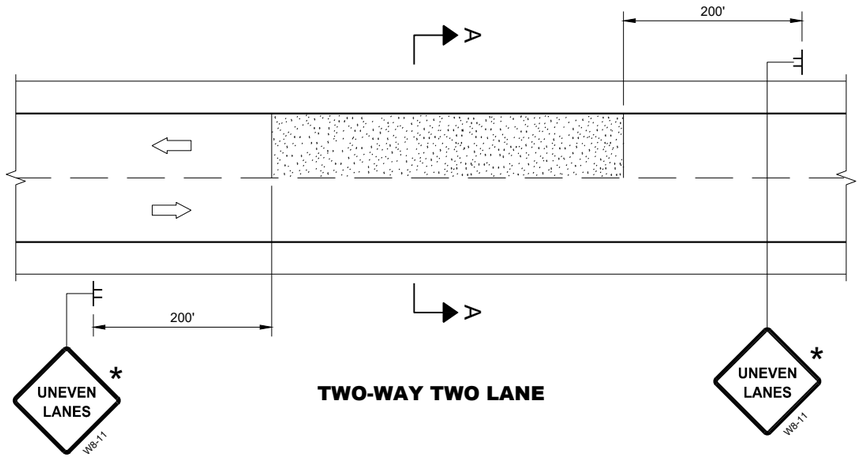
FHWA

SDD 15D28 - 04

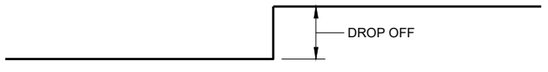
SDD 15D28 - 04



MULTI-LANE

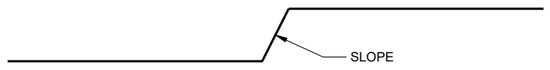


TWO-WAY TWO LANE

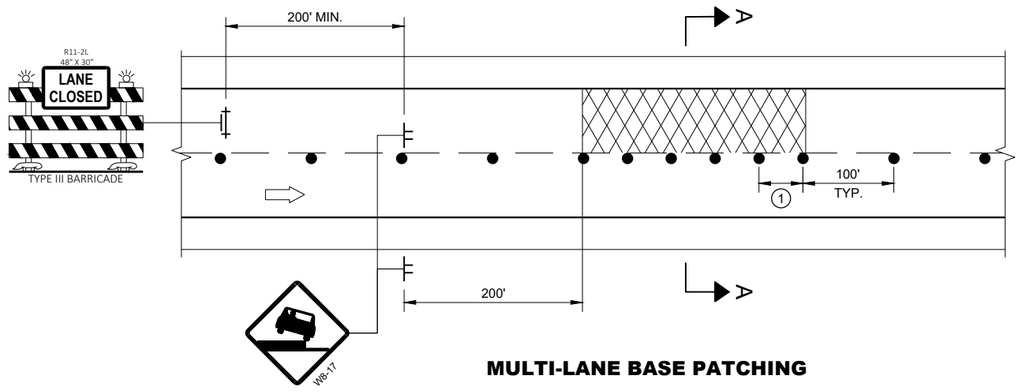


SECTION A - A

OR



SECTION A - A



MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS

GENERAL NOTES

FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.

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

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

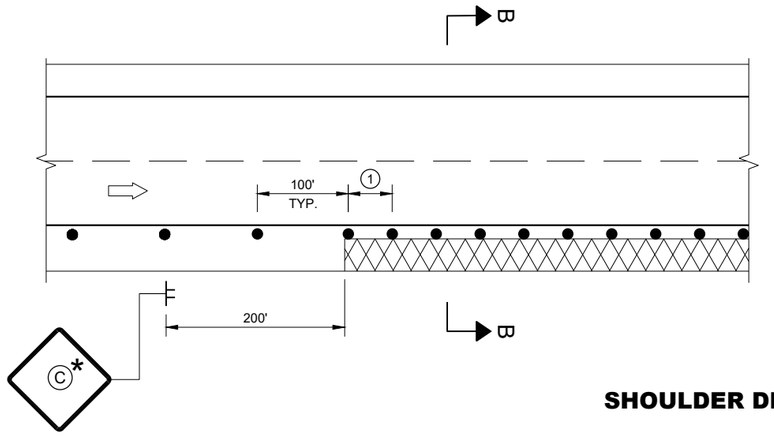
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

* IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY 1 MILE AND AFTER EVERY ENTRANCE RAMP.

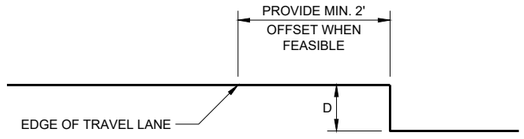
(1) USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

LEGEND

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



SHOULDER DROP-OFFS



SECTION B - B

D	SIGN (C)
< 2" WITH A SLOPE STEEPER THAN 3:1	LOW SHOULDER WO8-9
2" < 6" WITH A SLOPE STEEPER THAN 3:1	SHOULDER DROP - OFF W8-9A PROVIDE A 3:1 OR FLATTER SLOPE OF MATERIAL ADJACENT TO THE PAVEMENT

TRAFFIC CONTROL, DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D39 - 02

SDD 15D39 - 02

GENERAL NOTES

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

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

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

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

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

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

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

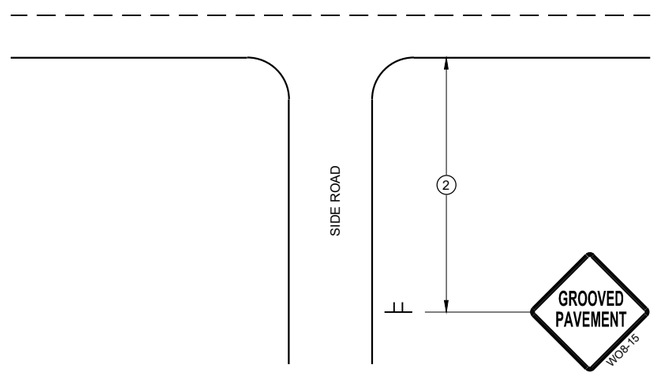
(1) PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

(2) PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

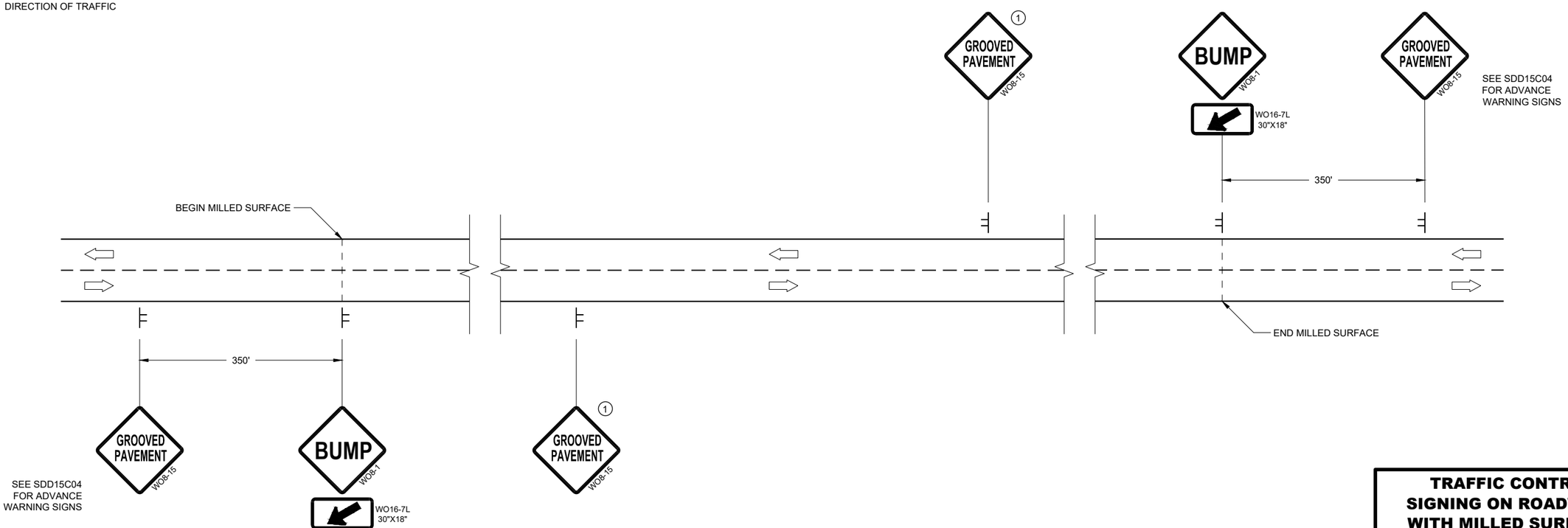
LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON MILLED SURFACES

TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

SDD 15D44 - 02

SDD 15D44 - 02

LEGEND

V1 WORK VEHICLE

V2 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

FLASHING ARROW PANEL (CAUTION)

WORK AREA

DIRECTION OF TRAFFIC

POSTED SPEED PRIOR TO WORK STARTING (MPH)	DECISION SIGHT DISTANCE (D)
0 - 25	550'
30	550'
35	700'
40	700'
45	900'
50	900'
55	1200'

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

MOBILE IS WORK THAT MOVES CONTINUOUSLY OR MOVES AT LEAST THE DECISION SIGHT DISTANCE EVERY 15 MINUTES.

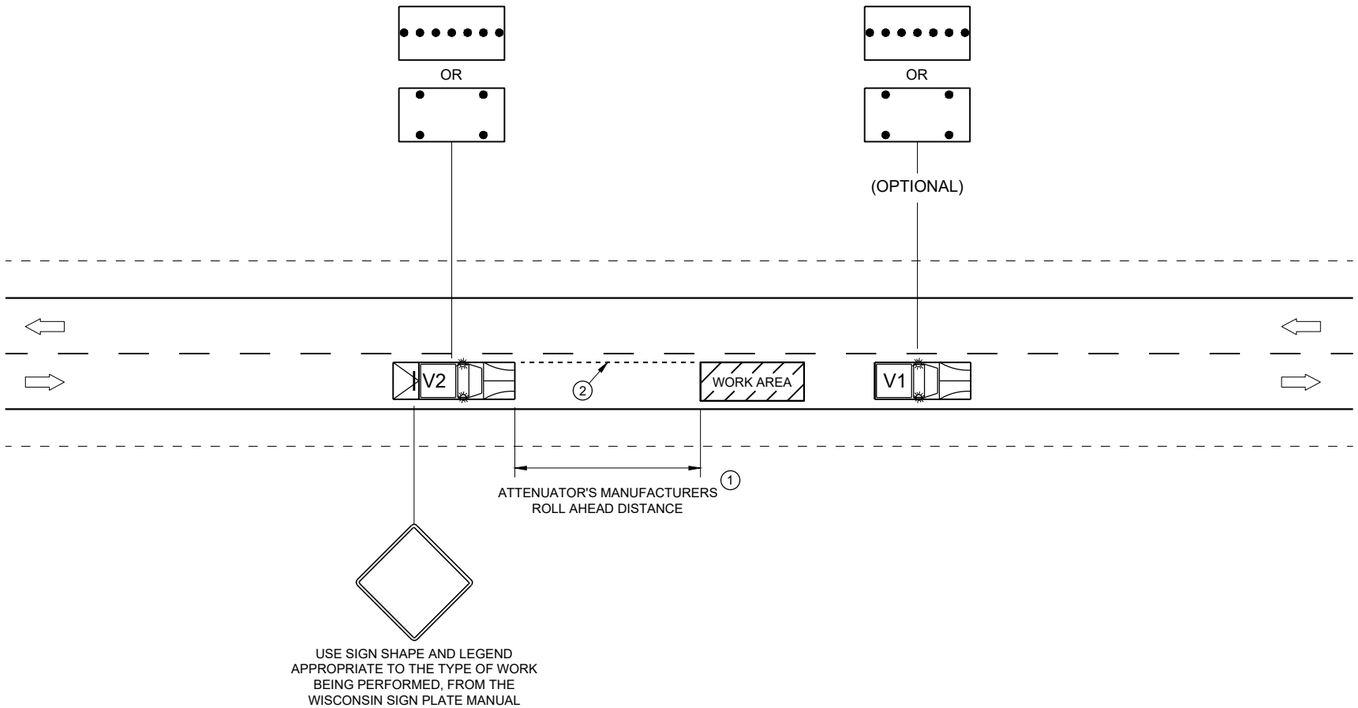
ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL ARROW PANELS SHALL BE REAR FACING, TYPE "B" OR "C", AND DISPLAYING THE FLASHING CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

(1) DISTANCE BETWEEN VEHICLES MAY INCREASE FROM THE ATTENUATOR'S ROLL AHEAD BASED ON TERRAIN, SIGHT DISTANCE, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

(2) ALIGN LEFT SIDE OF SHADOW VEHICLE WITH EDGE OF WORK AREA.



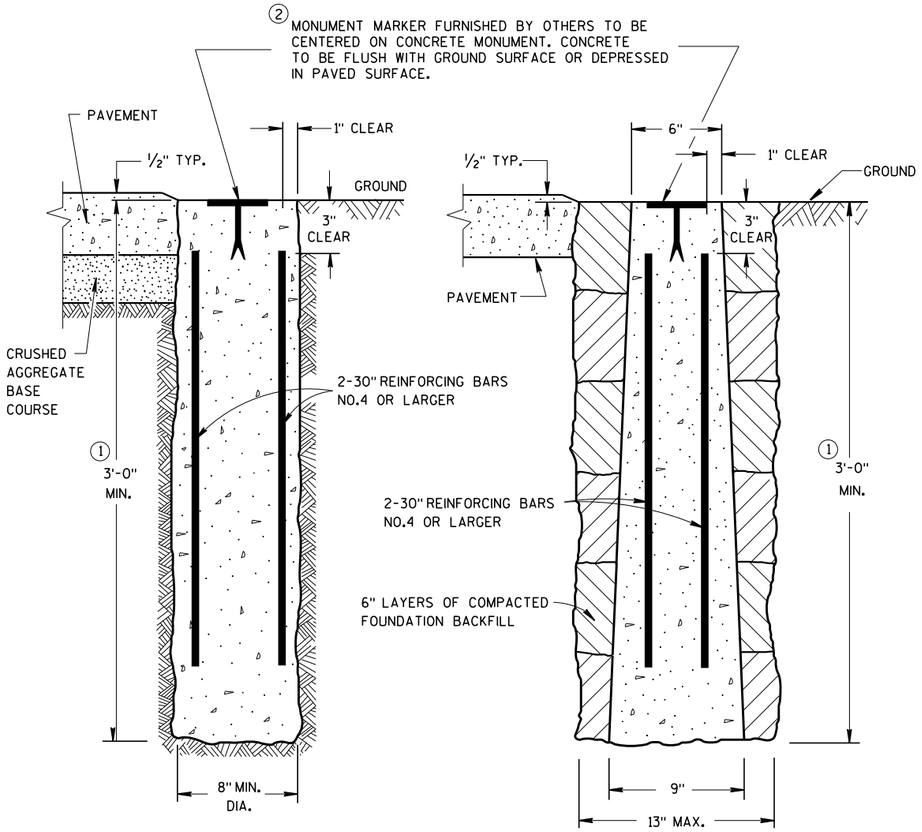
TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021 — DATE
/S/ Andrew Heidtke — STATEWIDE WORK ZONE T SAFETY ENGINEER
FHWA

6

SDD 15D51 - 01

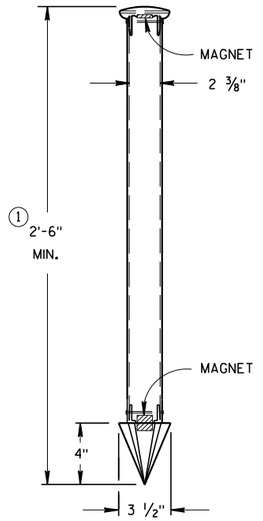


CAST-IN-PLACE

PRECAST

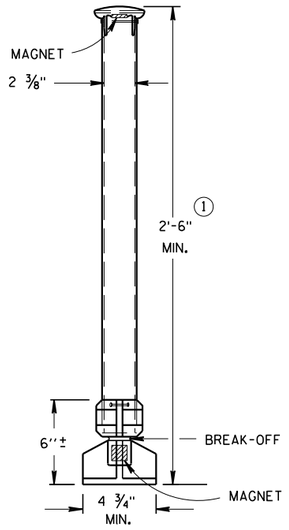
CONCRETE MONUMENTS

TYPE A



TYPE C

DRIVE-IN MONUMENT



TYPE D
NON-DRIVEN
BREAK-OFF MONUMENT

ALUMINUM MONUMENTS

(INCLUDES MARKER)

GENERAL NOTES

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

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

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

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

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

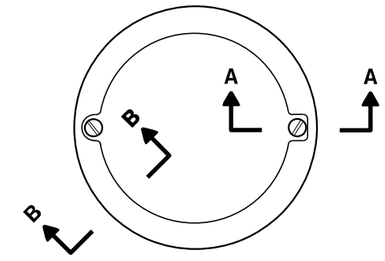
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

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

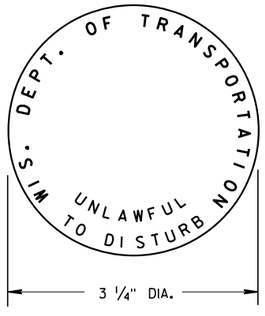
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER

① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.

② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WIS DOT MARKER.

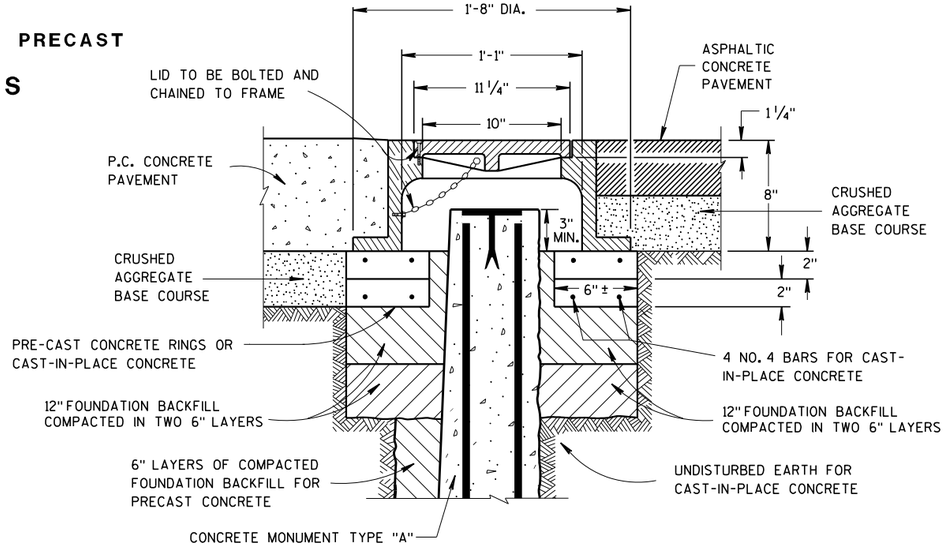


TOP VIEW



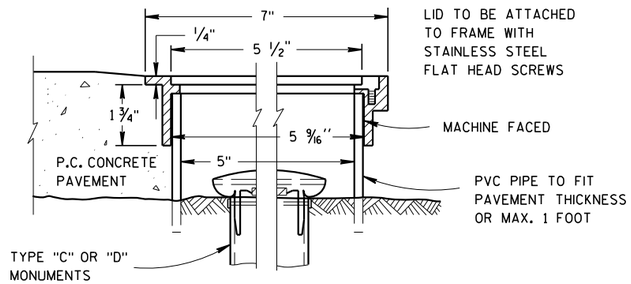
② WIS DOT MONUMENT MARKER LOGO

FOR TYPES "A", "C", & "D"



CAST IRON MONUMENT COVER

(APPROXIMATE WEIGHT 95 LBS)



SECTION B-B SECTION A-A

ALUMINUM MONUMENT COVER

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

LANDMARK REFERENCE MONUMENTS AND COVERS

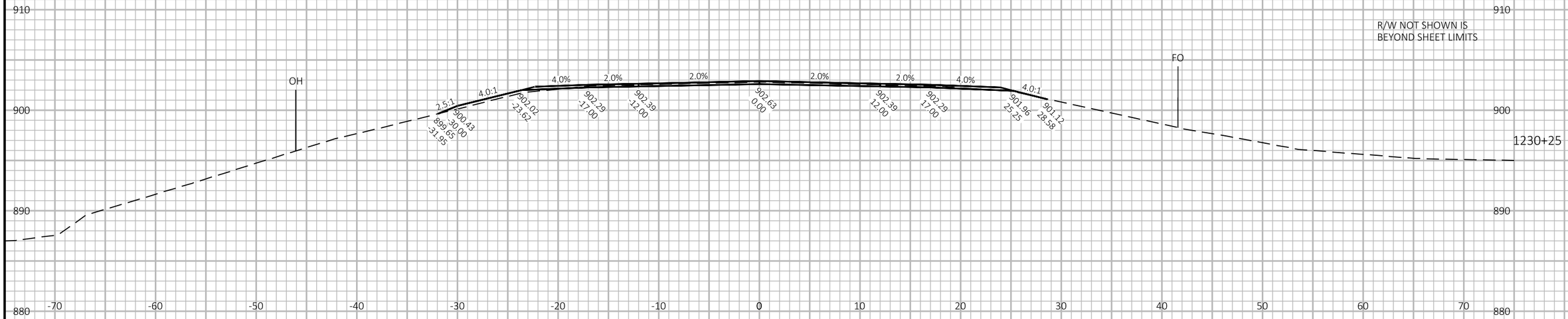
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

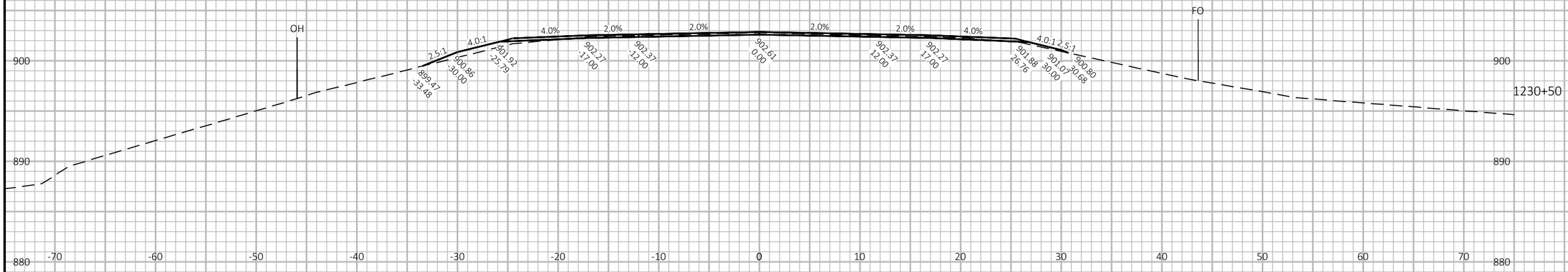
APPROVED
March 2018 — DATE
/S/ Raymond A. Kumagai — CHIEF SURVEYING AND MAPPING ENGINEER
FHWA

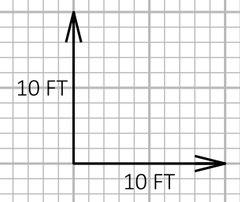
6

S.D.D. 16 A 1-7

R/W NOT SHOWN IS
BEYOND SHEET LIMITS







9

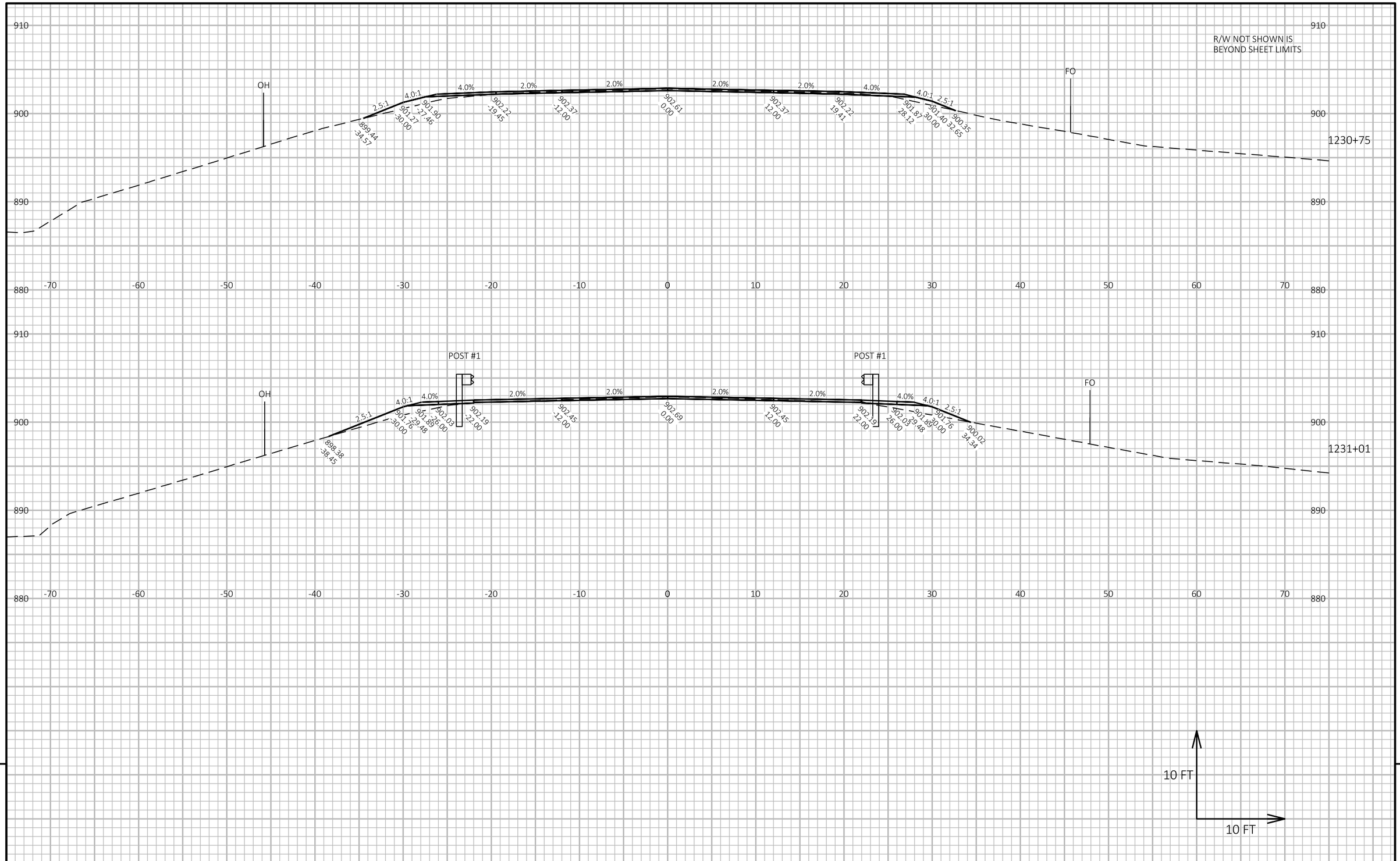
9

PROJECT NO: 1560-00-76	HWY: USH 63	COUNTY: BAYFIELD	CROSS SECTIONS: USH 63	SHEET 76	E

FILE NAME : G:\00\00093\00093599\CADD\DESIGN\CORRIDORS\CORRDOR-USH 63 NORTH SEGMENT.DWG
LAYOUT NAME - 090201-xs

PLOT DATE : 7/28/2021 8:16 AM PLOT BY : COURTNEY ROOYAKKERS PLOT NAME :

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

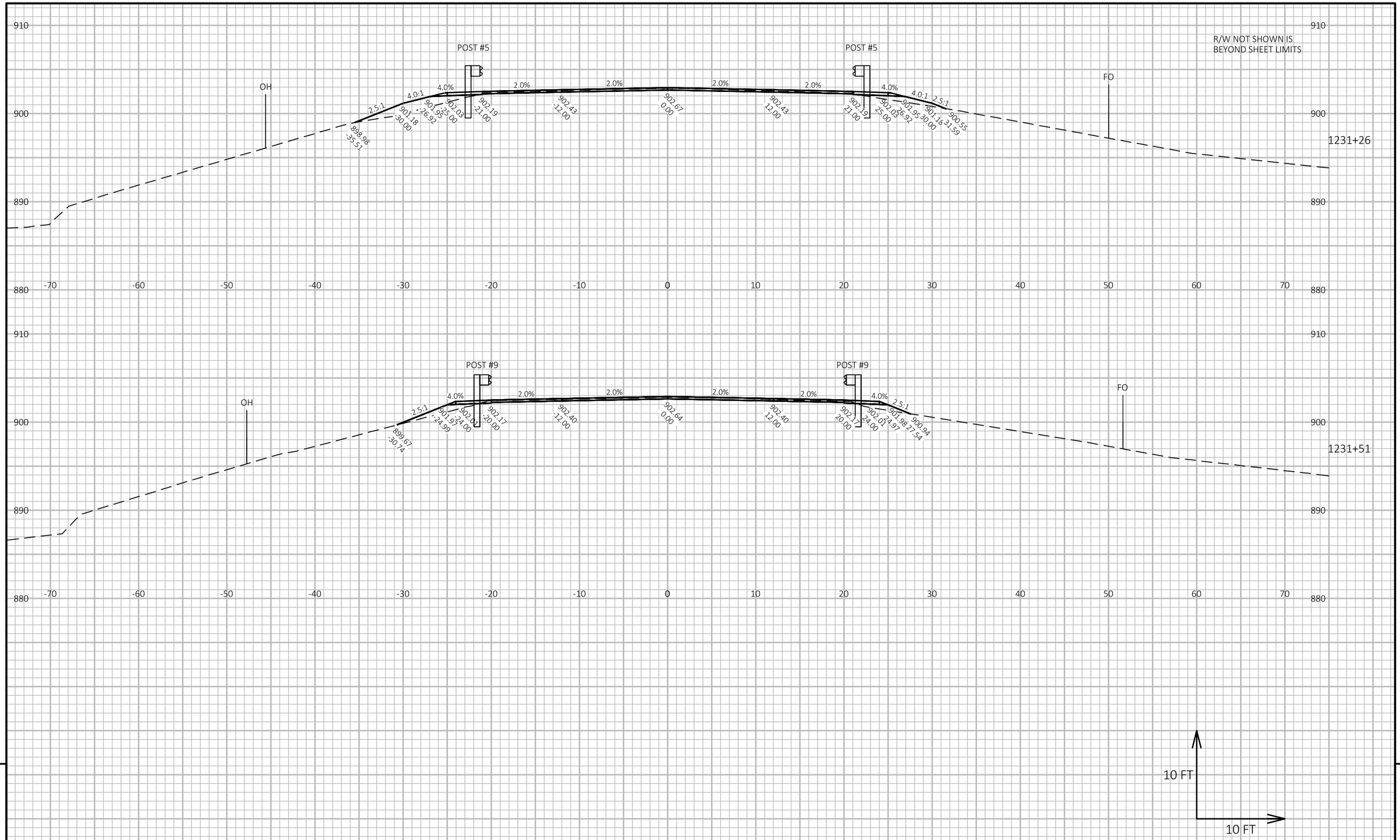


PROJECT NO: 1560-00-76	HWY: USH 63	COUNTY: BAYFIELD	CROSS SECTIONS: USH 63	SHEET 77 E

FILE NAME : G:\00\00093\00093599\CADD\DESIGN\CORRIDORS\CORRDOR-USH 63 NORTH SEGMENT.DWG
LAYOUT NAME - 090202-xs

PLOT DATE : 7/28/2021 8:16 AM PLOT BY : COURTNEY ROOYAKKERS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1560-00-76	HWY: USH 63	COUNTY: BAYFIELD	CROSS SECTIONS: USH 63	SHEET 78	E

FILE NAME : G:\00\00093\00093599\CADD\DESIGN\CORRIDORS\CORRDOR-USH 63 NORTH SEGMENT.DWG
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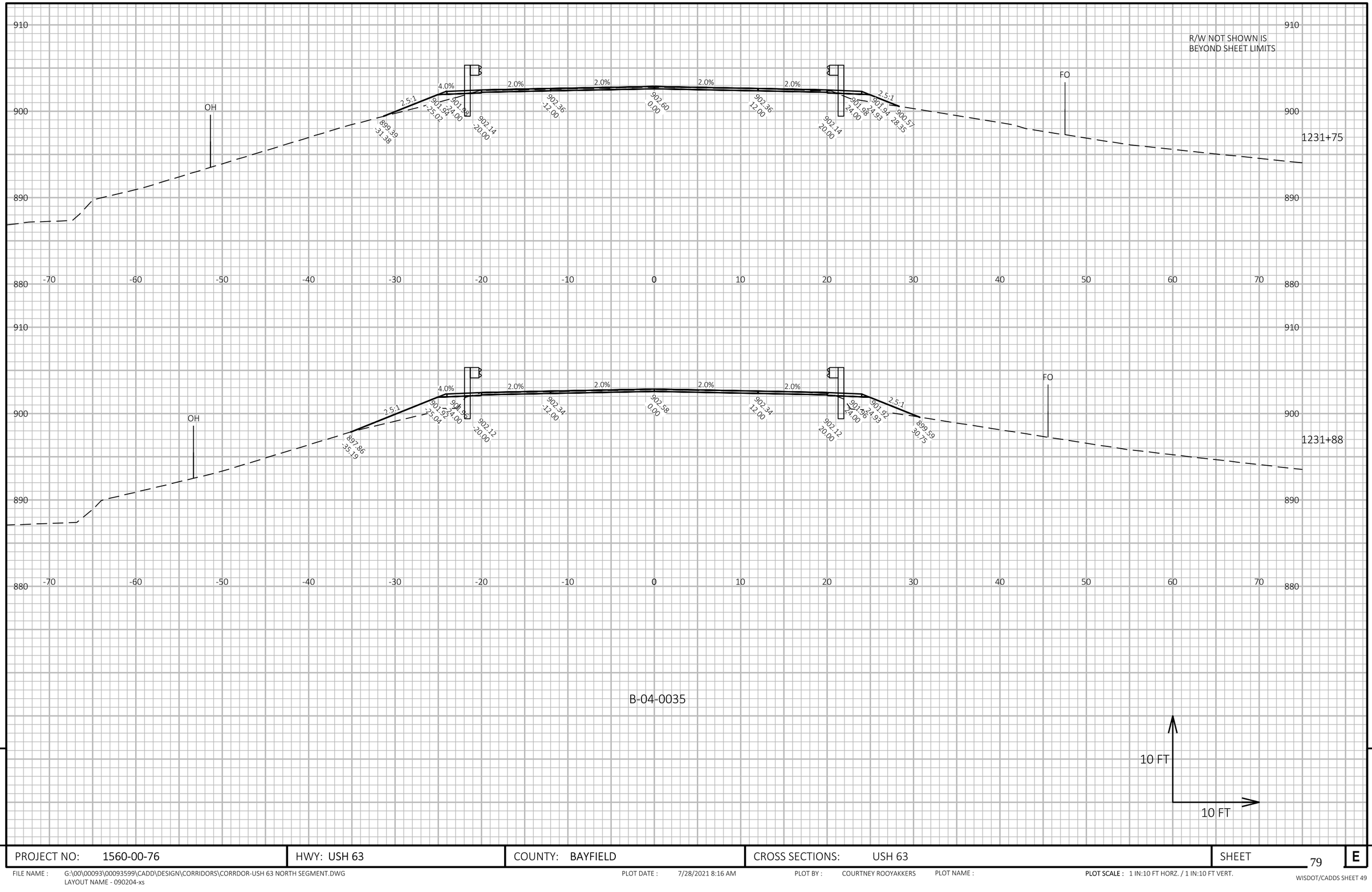
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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PROJECT NO: 1560-00-76	HWY: USH 63	COUNTY: BAYFIELD	CROSS SECTIONS: USH 63	SHEET 79	E

FILE NAME : G:\00\00093\00093599\CADD\DESIGN\CORRIDORS\CORRDOR-USH 63 NORTH SEGMENT.DWG
LAYOUT NAME - 090204-xs

PLOT DATE : 7/28/2021 8:16 AM

PLOT BY : COURTNEY ROOYAKKERS

PLOT NAME :

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

WISDOT/CADDS SHEET 49

R/W NOT SHOWN IS
BEYOND SHEET LIMITS

1233+00

OH
FO
2.5:1
4.0%
2.0%
902.47
-20.00
902.70
-12.00
902.94
0.00
902.70
12.00
902.47
20.00
902.25
24.96
899.95
30.78
902.22
-24.95
902.45
-24.00
902.31
24.00
896.66
-39.00

1233+25

OH
FO
2.5:1
4.0%
2.0%
902.60
-20.00
902.83
-12.00
903.07
0.00
902.83
12.00
902.60
20.00
902.40
24.96
901.46
27.32
902.43
-24.97
902.65
-24.00
902.44
24.00
899.93
-31.16

1233+40

POST #9
POST #9
FO
2.5:1
4.0%
2.0%
902.68
-20.00
902.90
-12.00
903.14
0.00
902.90
12.00
902.68
20.00
902.48
24.96
901.50
27.41
902.48
-24.98
902.69
-24.01
902.52
24.00
900.07
-31.00
10 FT
10 FT

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

910 900 890 880

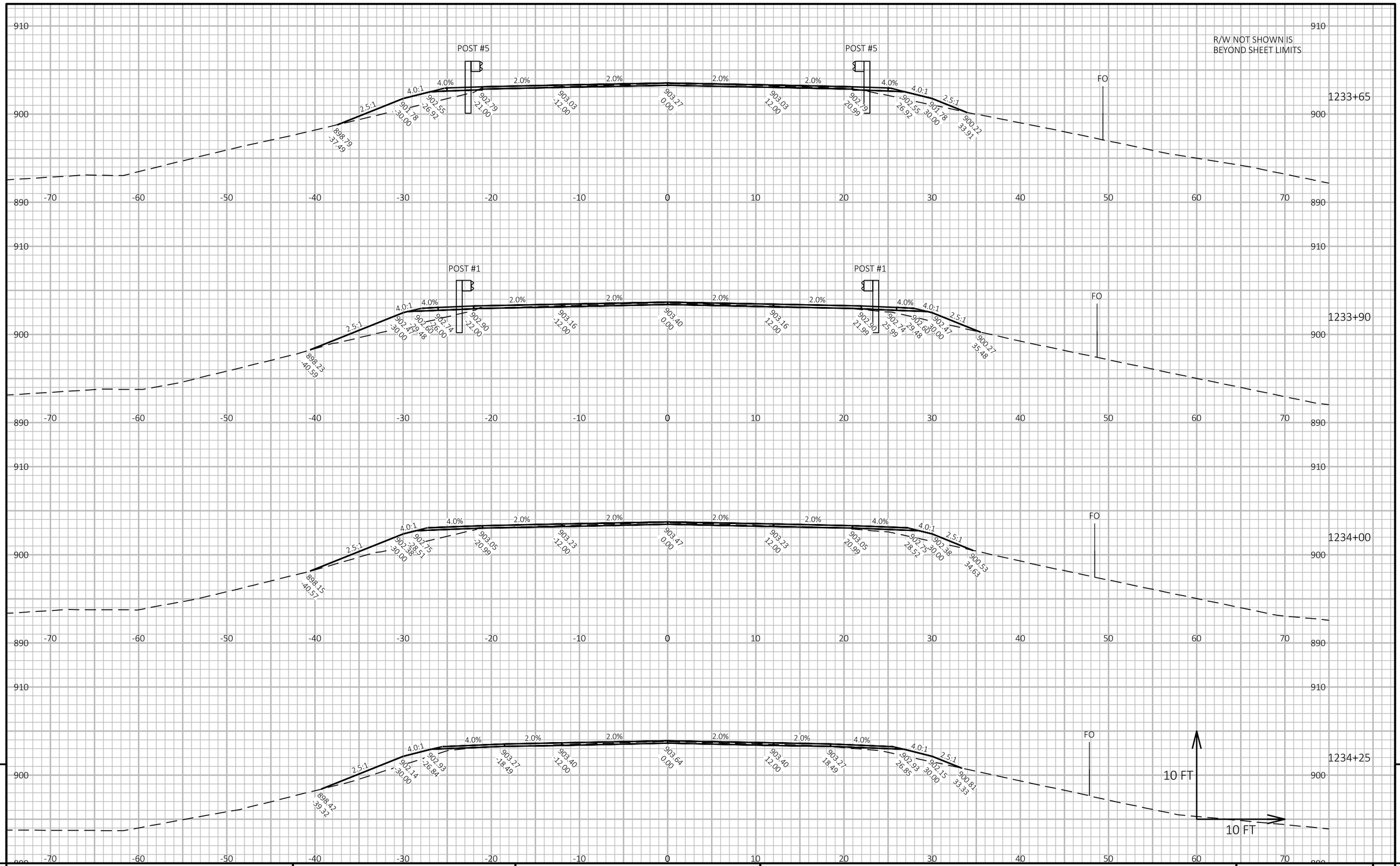
9 9

PROJECT NO: 1560-00-76	HWY: USH 63	COUNTY: BAYFIELD	CROSS SECTIONS: USH 63	SHEET 80	E

FILE NAME : G:\00\00093\00093599\CADD\DESIGN\CORRIDORS\CORRDOR-USH 63 NORTH SEGMENT.DWG
LAYOUT NAME - 090205-xs

PLOT DATE : 7/28/2021 8:16 AM PLOT BY : COURTNEY ROOYAKKERS PLOT NAME :

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



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PROJECT NO: 1560-00-76	HWY: USH 63	COUNTY: BAYFIELD	CROSS SECTIONS: USH 63	SHEET 81	E

FILE NAME : G:\00\00093\00093599\CADD\DESIGN\CORRIDORS\CORRDOR-USH 63 NORTH SEGMENT.DWG
LAYOUT NAME - 090206-xs

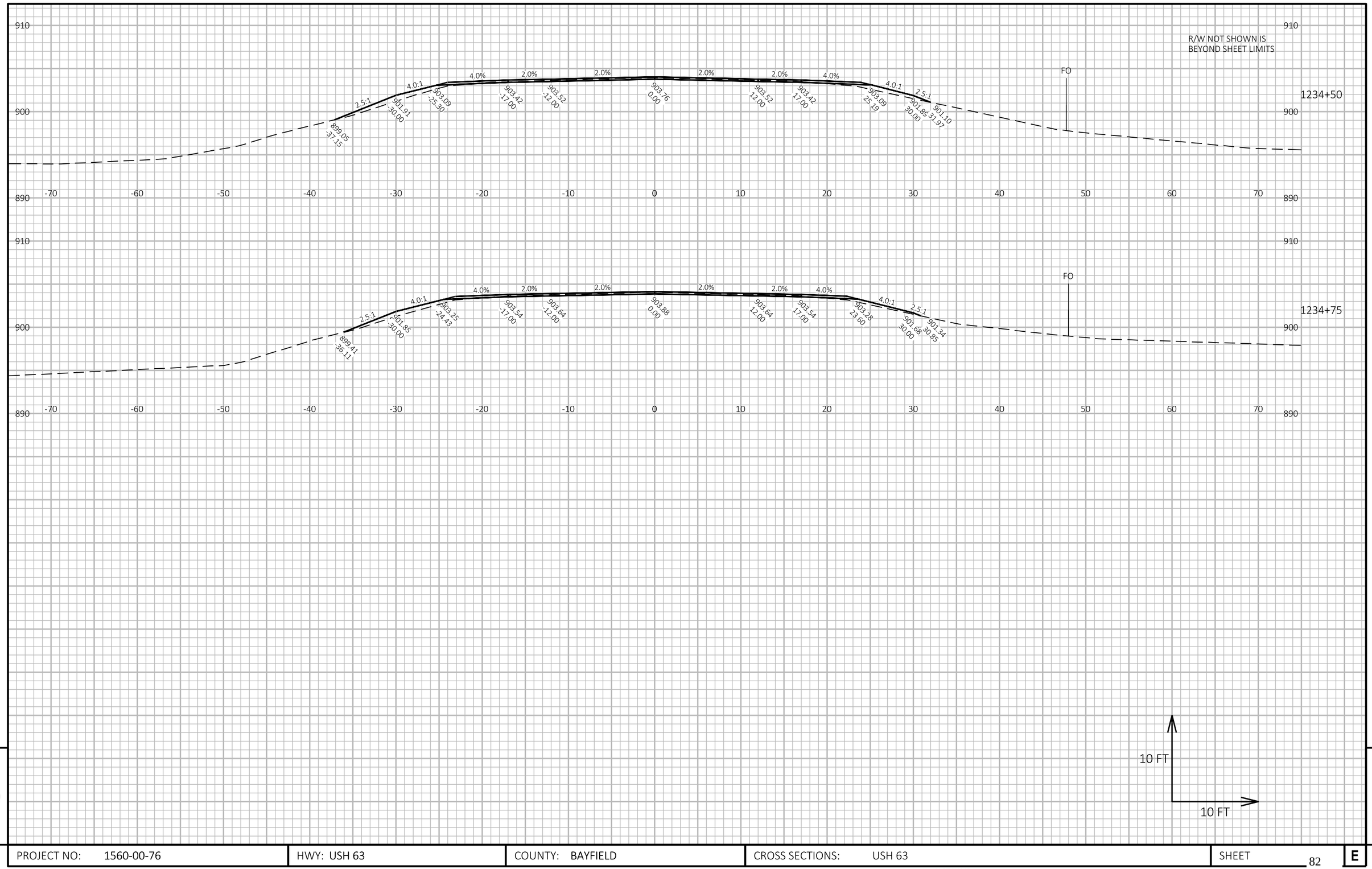
PLOT DATE : 7/28/2021 8:16 AM

PLOT BY : COURTNEY ROOYAKKERS

PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

PROJECT NO: 1560-00-76	HWY: USH 63	COUNTY: BAYFIELD	CROSS SECTIONS: USH 63	SHEET 82	E

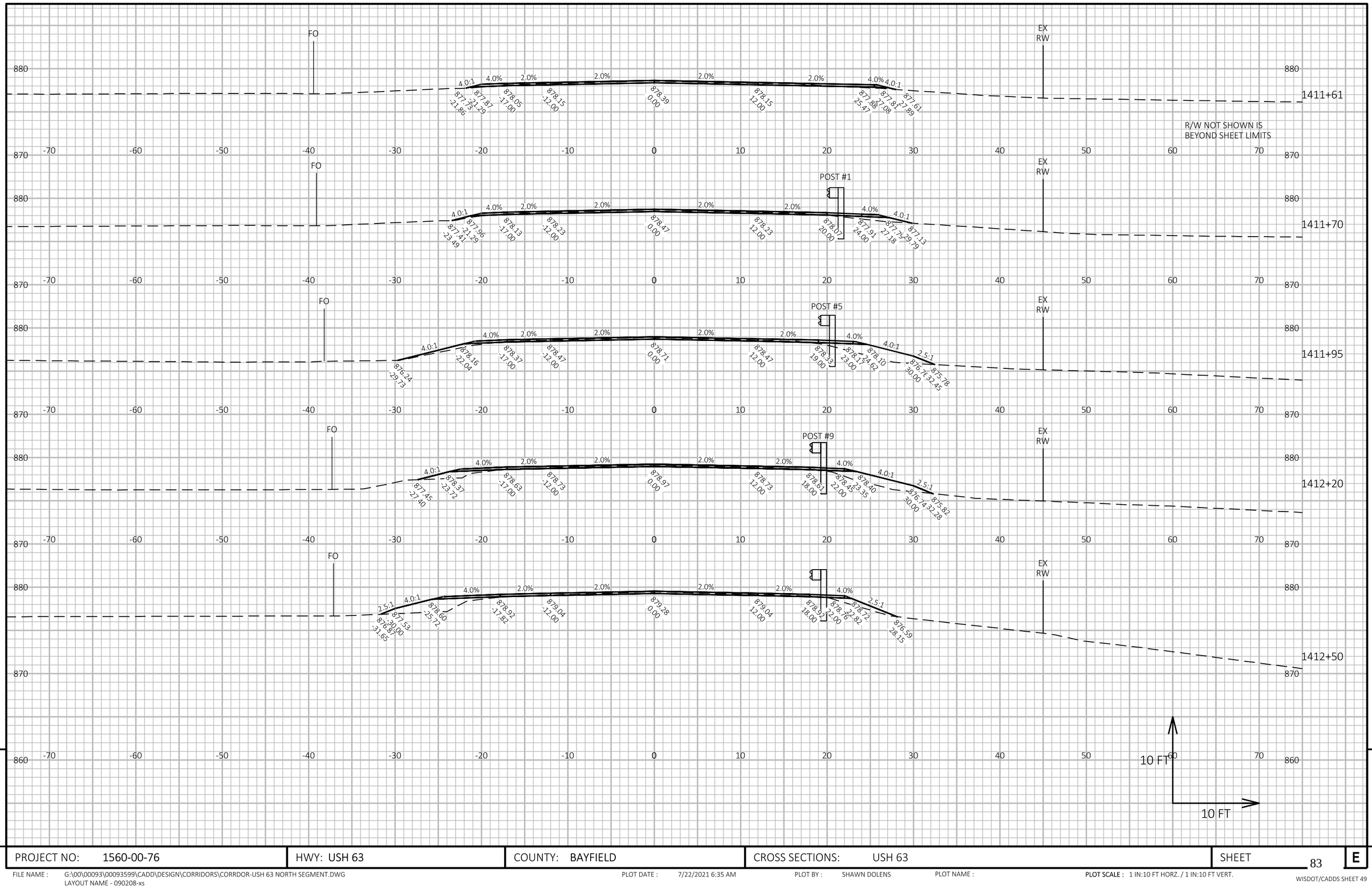
FILE NAME : G:\00\00093\00093599\CADD\DESIGN\CORRIDORS\CORRDOR-USH 63 NORTH SEGMENT.DWG
LAYOUT NAME - 090207-xs

PLOT DATE : 7/28/2021 8:16 AM PLOT BY : COURTNEY ROOYAKKERS PLOT NAME :

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

WISDOT/CADDS SHEET 49

9

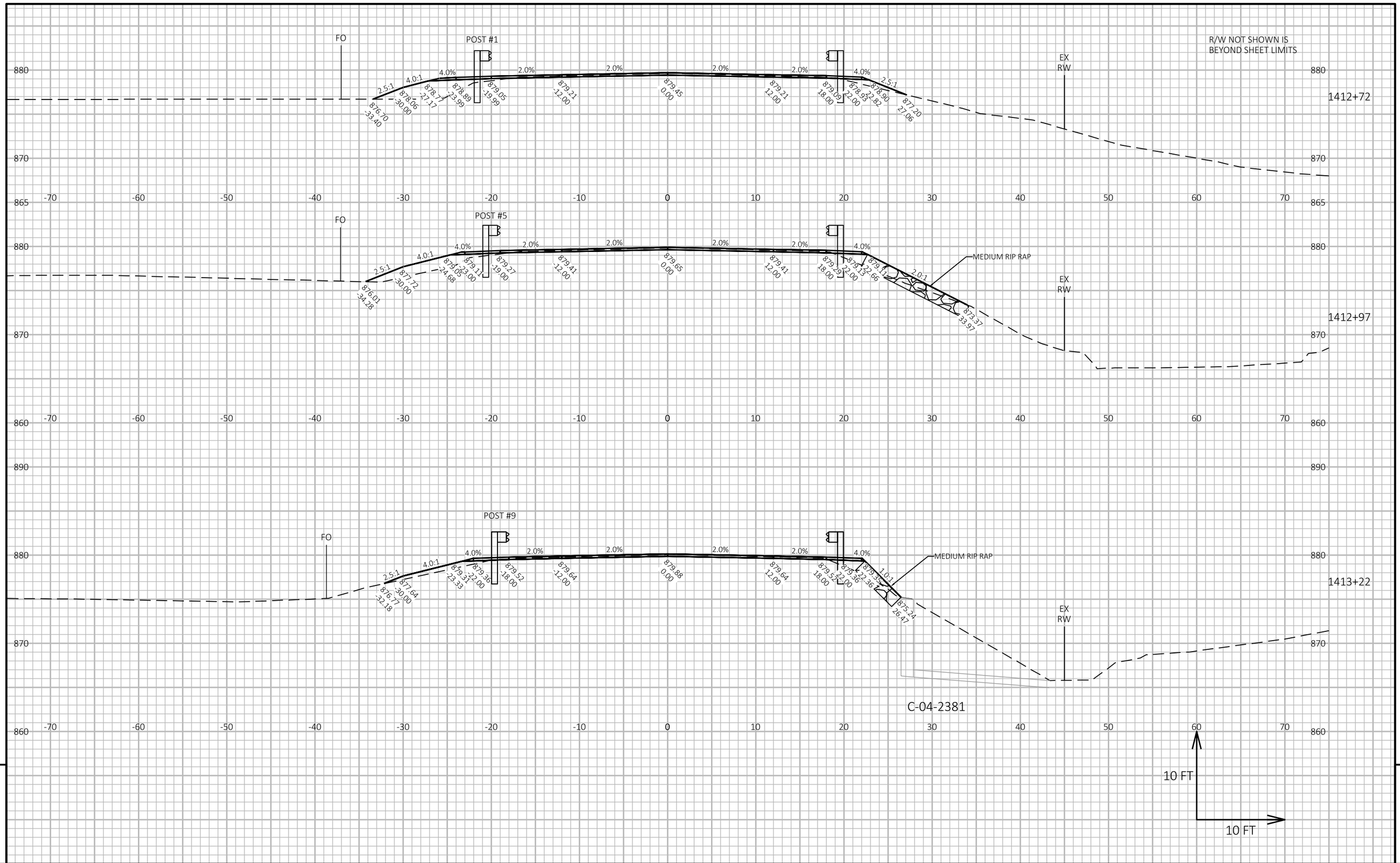


PROJECT NO: 1560-00-76	HWY: USH 63	COUNTY: BAYFIELD	CROSS SECTIONS: USH 63	SHEET 83	E

FILE NAME : G:\00\00093\00093599\CADD\DESIGN\CORRIDORS\CORRDOR-USH 63 NORTH SEGMENT.DWG
LAYOUT NAME - 090208-xs

PLOT DATE : 7/22/2021 6:35 AM PLOT BY : SHAWN DOLENS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1560-00-76	HWY: USH 63	COUNTY: BAYFIELD	CROSS SECTIONS: USH 63	SHEET 84	E

FILE NAME : G:\00\00093\00093599\CADD\DESIGN\CORRIDORS\CORRDOR-USH 63 NORTH SEGMENT.DWG
LAYOUT NAME - 090209-xs

PLOT DATE : 7/22/2021 6:35 AM PLOT BY : SHAWN DOLENS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

R/W NOT SHOWN IS
BEYOND SHEET LIMITS

1413+50

FO

EX
RW

4.0% 2.0% 2.0% 2.0% 2.0% 4.0%

2.5:1 2.5:1

876.10 -31.66 | 879.65 -22.79 | 879.68 -22.00 | 879.84 -18.00 | 879.96 -12.00 | 880.20 0.00 | 879.96 12.00 | 879.84 18.00 | 879.68 22.00 | 879.65 22.84 | 873.78 37.51

C-04-2381

1413+75

MEDIUM RIP RAP

FO

EX
RW

1.7:1

4.0% 2.0% 2.0% 2.0% 2.0% 4.0%

2.5:1

875.26 -30.57 | 879.89 -23.55 | 879.92 -22.00 | 880.08 -18.00 | 880.20 -12.00 | 880.44 0.00 | 880.20 12.00 | 880.08 18.00 | 879.92 22.00 | 879.88 23.85 | 877.72 28.24

C-04-2381

1413+89

MEDIUM RIP RAP

POST #9

FO

EX
RW

3:1

4.0% 2.0% 2.0% 2.0% 2.0% 4.0%

4.0:1 2.5:1

875.09 -27.43 | 880.03 -22.47 | 880.04 -22.00 | 880.20 -18.00 | 880.32 -12.00 | 880.56 0.00 | 880.32 12.00 | 880.20 18.00 | 880.03 22.00 | 879.99 23.39 | 878.34 30.00 | 875.74 35.48

C-04-2381

10 FT

10 FT

9

9

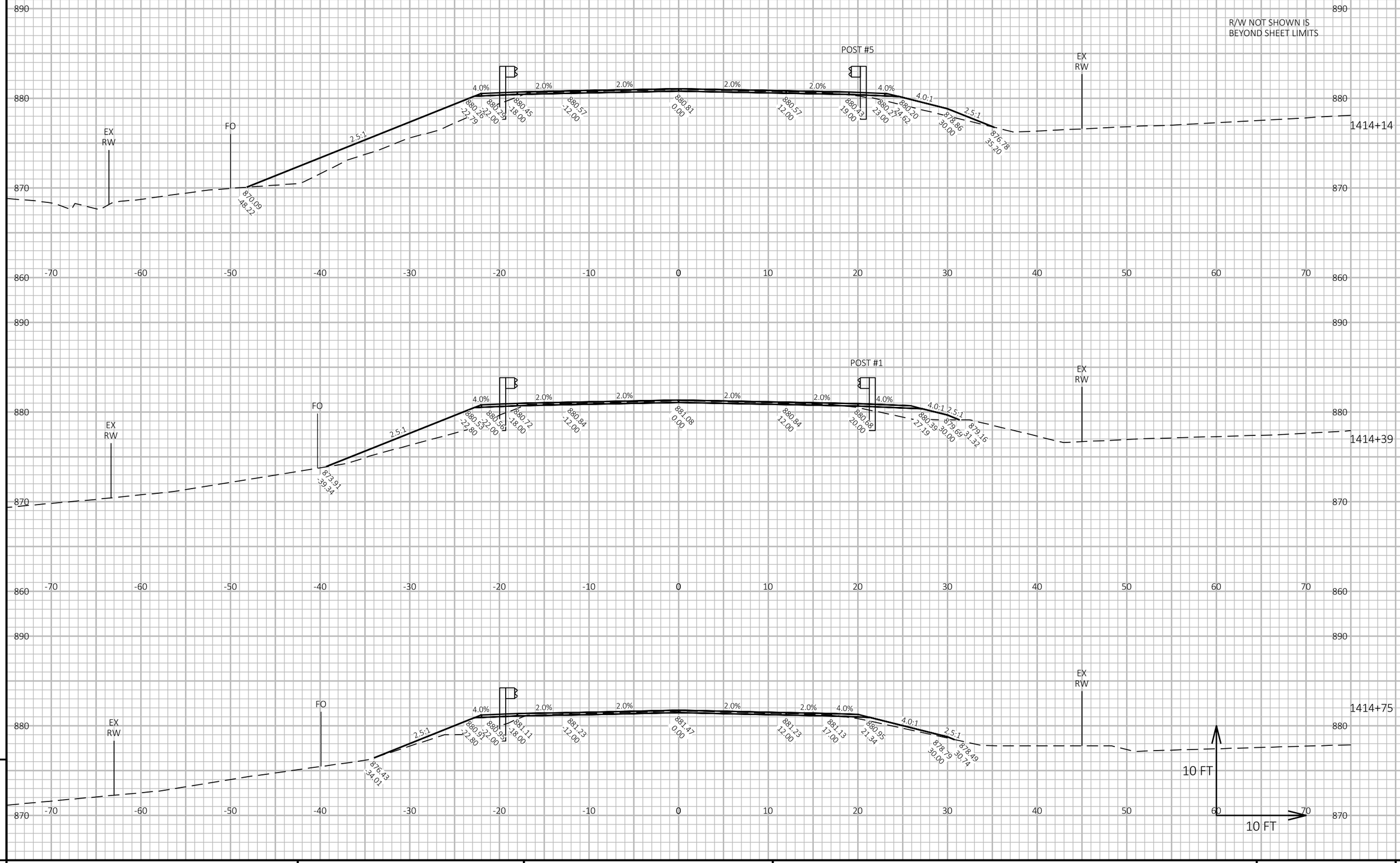
PROJECT NO: 1560-00-76	HWY: USH 63	COUNTY: BAYFIELD	CROSS SECTIONS: USH 63	SHEET 85	E

FILE NAME : G:\00\00093\00093599\CADD\DESIGN\CORRIDORS\CORRDOR-USH 63 NORTH SEGMENT.DWG
LAYOUT NAME - 090210-xs

PLOT DATE : 7/22/2021 6:35 AM PLOT BY : SHAWN DOLENS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

R/W NOT SHOWN IS
BEYOND SHEET LIMITS

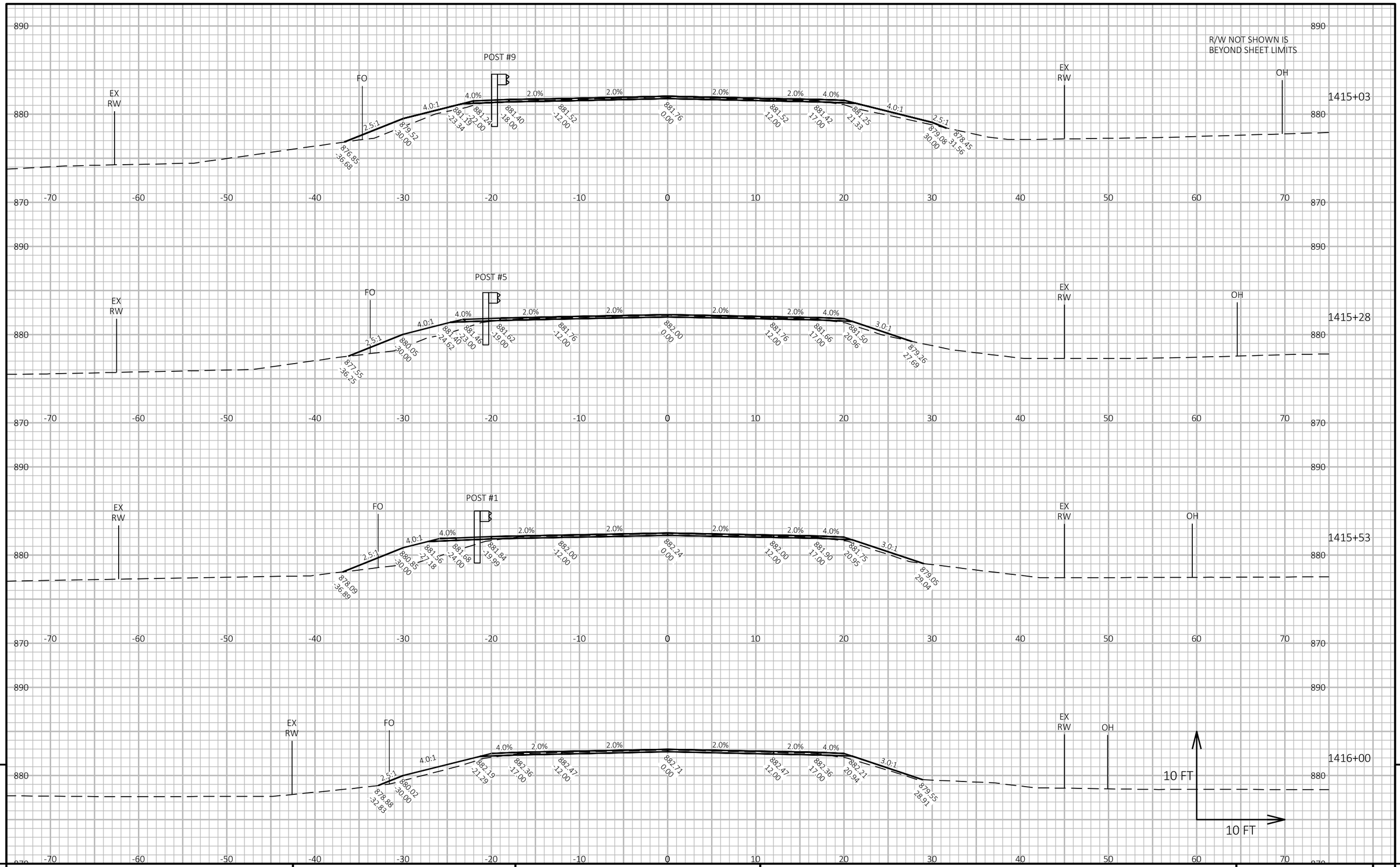


PROJECT NO: 1560-00-76	HWY: USH 63	COUNTY: BAYFIELD	CROSS SECTIONS: USH 63	SHEET 86 E

FILE NAME : G:\00\00093\00093599\CADD\DESIGN\CORRIDORS\CORRDOR-USH 63 NORTH SEGMENT.DWG
LAYOUT NAME - 090211-xs

PLOT DATE : 7/22/2021 6:35 AM PLOT BY : SHAWN DOLENS PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



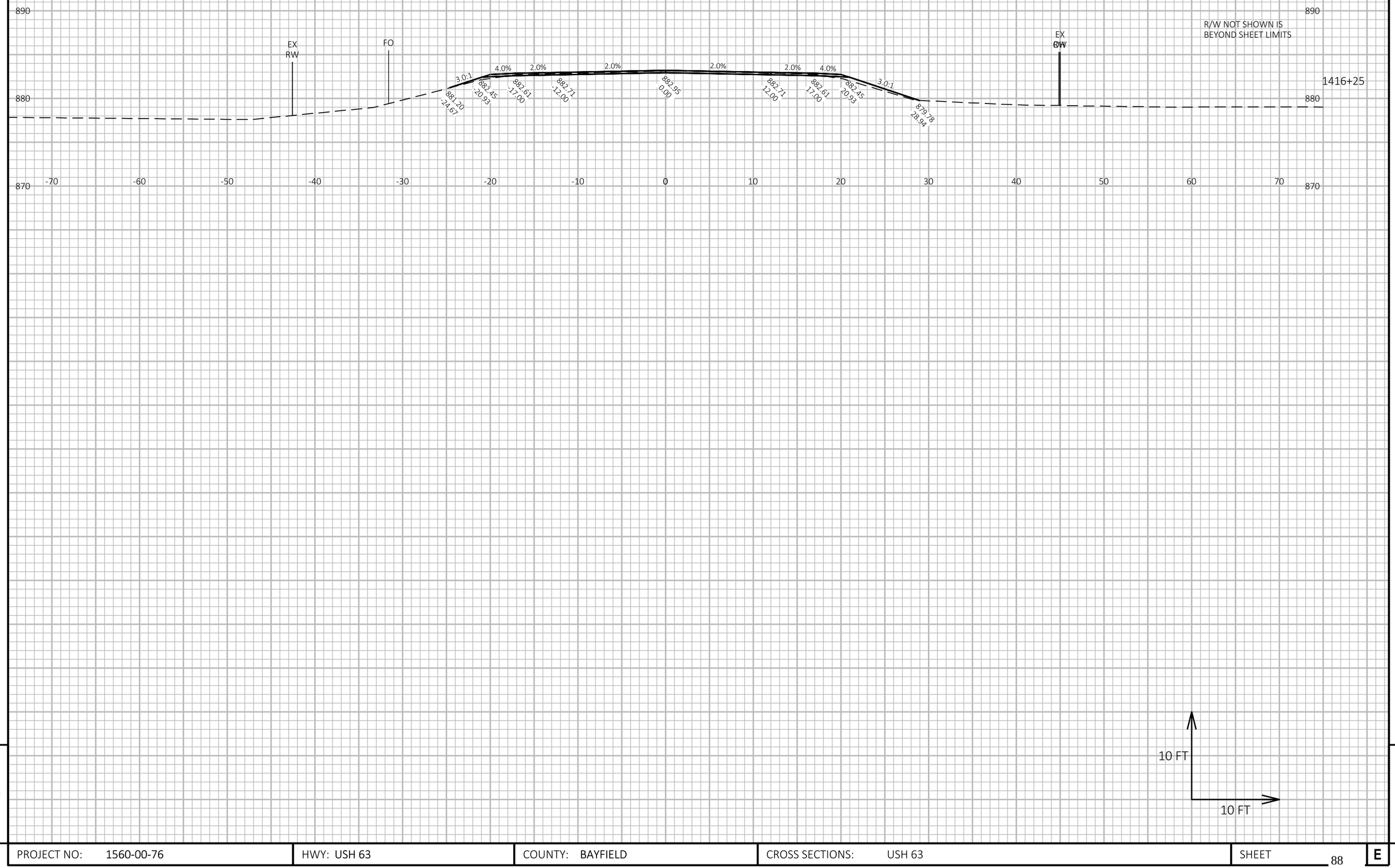
9 9

PROJECT NO: 1560-00-76	HWY: USH 63	COUNTY: BAYFIELD	CROSS SECTIONS: USH 63	SHEET 87	E

FILE NAME : G:\00\00093\00093599\CADD\DESIGN\CORRIDORS\CORRDOR-USH 63 NORTH SEGMENT.DWG
LAYOUT NAME - 090212-xs

PLOT DATE : 7/22/2021 6:35 AM PLOT BY : SHAWN DOLENS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

PROJECT NO: 1560-00-76	HWY: USH 63	COUNTY: BAYFIELD	CROSS SECTIONS: USH 63	SHEET 88	E

9

FILE NAME : G:\00\00093\00093599\CADD\DESIGN\CORRIDORS\CORRDOR-USH 63 NORTH SEGMENT.DWG
LAYOUT NAME - 090213-xs

PLOT DATE : 7/22/2021 6:35 AM PLOT BY : SHAWN DOLENS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Notes

Wisconsin Department of Transportation

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through innovation and exceptional service.

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