LAX

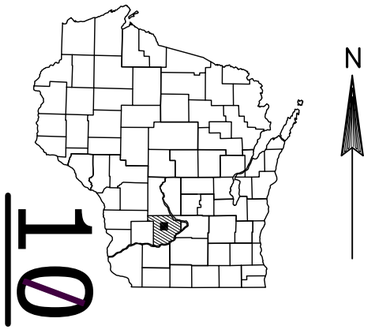
APRIL 2019

PROJECT ID: 5752-00-81

COUNTY: SAUK

ORDER OF SHEETS

TOTAL SHEETS = 62



N

10

DESIGN DESIGNATION 5752-00-01

A.A.D.T. (2017)	=	1600 VPD
A.A.D.T. (2037)	=	1870 VPD
D.H.V.	=	215 VPH
D.D.	=	56/44
T.	=	11.8%
DESIGN SPEED	=	60 MPH
ESALS	=	60,000

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
- 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

USH 14 - LA VALLE

LITTLE BARABOO RIVER STRUCTURE B-56-67

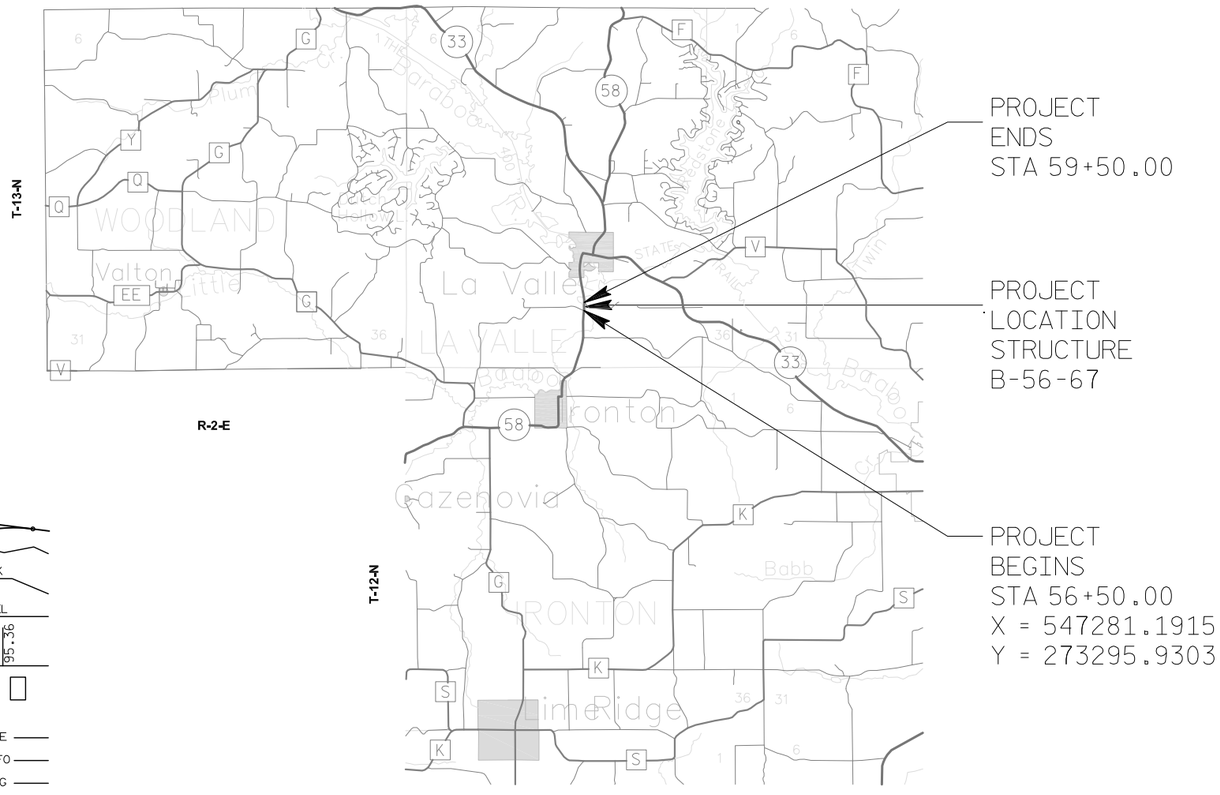
STH 58

SAUK COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
5752-00-81	WISC 2019218	1

STATE PROJECT NUMBER

5752-00-81



LAYOUT SCALE 0 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.057 MI.

HORIZONTAL POSITIONS SHOWN ARE WISCONSIN COUNTY COORDINATES, SAUK COUNTY, NAD83 2011, IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (12) (NAVD 88 (12)).

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	JSD
Designer	PAUL M. VALENTI
Project Manager	ANTHONY M. VANDER WIELEN
Regional Examiner	SW REGION
Regional Supervisor	JOSEPH A. GREGAS III
C.O. Examiner	

APPROVED FOR THE DEPARTMENT

DATE: 1/30/2019 Anthony M. Vander Wielen (Signature)

E

GENERAL NOTES

- THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
- D.O.T. BRIDGE BENCHMARK MONUMENT TO BE FURNISHED BY THE STATE AND PLACED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER.
- RIGHT OF WAY LINES SHOWN ON THE CROSS SECTIONS ARE APPROXIMATE.
- PRIOR TO THE PLACEMENT OF MGS GUARDRAIL, THE SHOULDERS SHALL BE IN PLACE, SHAPED AND COMPACTED UNLESS SHOWN OTHERWISE.
- THE CONTRACTOR'S PAVING OPERATIONS SHALL BE CONSISTENT WITH THE PLAN TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, BIKE OR PARKING LANE.
- CONTRACTOR WILL BE RESPONSIBLE FOR RESHAPING AND SEEDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY HIS OPERATION OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS.

DNR LIAISON

ANDY BARTA
ENVIRONMENTAL ANALYSIS & REVIEW SPECIALIST
WISCONSIN DEPT. OF NATURAL RESOURCES
SOUTH CENTRAL REGION
3911 FISH HATCHERY ROAD
FITCHBURG, WI 53711
608-275-3308

TOWN OF LA VALLE

RAMON DEMASKIE
TOWN BOARD CHAIRMAN
TOWN HALL (608) 985-7695
EMAIL: RDEMASKIE@ALLIED.COOP

SAUK COUNTY

PATRICK GAVINSKI
SAUK COUNTY HIGHWAY COMMISSIONER
620 STH 136
PO BOX 26
WEST BARABOO, WI 53913
OFFICE (608) 355-4855
FAX (608) 355-4398

DESIGN CONTACTS

Anthony M Vander Wielen, P.E.
PROJECT MANAGER
WISDOT SW REGION
3550 Mormon Coulee Road
La Crosse, WI 54601
608-789-7878

Paul M. Valenti, P.E.
PROJECT DESIGNER
WISDOT SW REGION
3550 Mormon Coulee Road
La Crosse, WI 54601
608-785-9053

ORDER OF SECTION 2 SHEETS

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

UTILITY CONTACTS

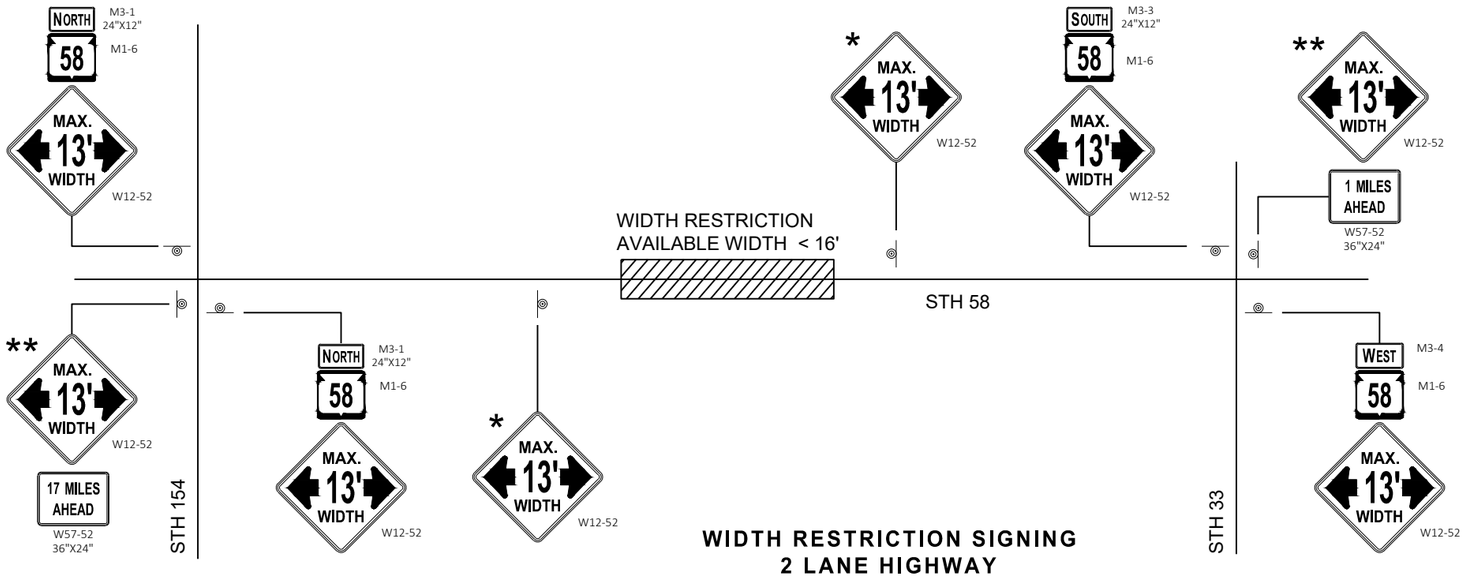
LA VALLE TELEPHONE COOPERATIVE
COMMUNICATIONS LINE
ATTN: JOHN BARTZ
108 W MAIN ST
PO BOX 28
LA VALLE , WI 53941
OFFICE (608) 985-7201
MOBILE (608) 393-3234
FAX (608) 985-8080
EMAIL: JBARTZ@MWT.NET

ALLIANT ENERGY
ELECTRICITY
ATTN: MICHAEL LONG
520 COMMERCE AVE
BARABOO, WI 53913
OFFICE (608) 356-0608
MOBILE (608) 778-0038
EMAIL: MICHAELLONG@ALLIANTENERGY.COM

STANDARD ABBREVIATIONS

AC	ACRE
AGG	AGGREGATE
<	ANGLE
AE, AEW	APRON ENDWALL
ASPH.	ASPHALTIC
A.D.T.	AVERAGE DAILY TRAFFIC
A.A.D.T.	ANNUAL AVERAGE DAILY TRAFFIC
B.F.	BACK FACE
BM	BENCHMARK
BTWN	BETWEEN
CTR.	CENTER
C/L	CENTER LINE
Δ	CENTRAL ANGLE OR DELTA
C.E.	COMMERCIAL ENTRANCE
CONST.	CONSTRUCTION
CMCP	CORRUGATED METAL CULVERT PIPE
CMP	CORRUGATED METAL PIPE
CO.	COUNTY
CTH	COUNTY TRUNK HIGHWAY
CR.	CREEK
CABC	CRUSHED AGGREGATE BASE COURSE
CY	CUBIC YARD
CP	CONTROL POINT OR CULVERT PIPE
C&G	CURB AND GUTTER
D	DEGREE OF CURVE
D.H.V.	DESIGN HOURLY VOLUME
DIA.	DIAMETER
D.D.	DIRECTIONAL DISTRIBUTION
DISCH.	DISCHARGE
DMS	DYNAMIC MESSAGE SIGN
EA	EACH
E	EAST
EB	EASTBOUND
ELEC.	ELECTRIC(AL), ELEC. CABLE
EL., ELEV.	ELEVATION
ESALS	EQUIVALENT SINGLE AXLE LOADS
EXC.	EXCAVATION
EXIST	EXISTING
F.F.	FACE TO FACE
FERT.	FERTILIZER
F.E.	FIELD ENTRANCE
F/L, F.L.	FLOW LINE
GALV.	GALVANIZE
H.S.	HIGH STRENGTH
CWT	HUNDRED WEIGHT
INL	INLET
INTER.	INTERSECTION
IH	INTERSTATE HIGHWAY
JT.	JOINT
LT	LEFT
L.H.F.	LEFT HAND FORWARD
L.	LENGTH OF CURVE
L.F.	LINEAR FOOT(FEET)
LC.	LONG CHORD
LS	LUMP SUM
M.P.	MARKER POST
MGAL	1000 GALLONS
N.C.	NORMAL CROWN
N	NORTH
NB	NORTHBOUND
NOR	NORMAL
NO.	NUMBER
PAV'T	PAVEMENT
P.L.E.	PERMANENT LIMITED EASEMENT
P.C.	POINT OF CURVATURE
P.I.	POINT OF INTERSECTION
P.T.	POINT OF TANGENCY
PCC	PORTLAND CEMENT CONCRETE
P.E.	PRIVATE ENTRANCE
PGL	PROFILE GRADE LINE
P.L.	PROPERTY LINE
R	RADIUS OR RANGE
R/L	REFERENCE LINE
R.C.C.P.	REINFORCED CONCRETE CULVERT PIPE
REQ'D	REQUIRED
RT	RIGHT
R.H.F.	RIGHT HAND FORWARD
R/W	RIGHT OF WAY
RD.	ROAD
SHLD.	SHOULDER(S)
SHR.	SHRINKAGE
S	SOUTH
SB	SOUTHBOUND
S.F.	SQUARE FOOT (FEET)
SDD	STANDARD DETAIL DRAWING(S)
STH	STATE TRUNK HIGHWAY
STA.	STATION
S.E.	SUPERELEVATION
S/L	SURVEY LINE
SYM	SYMMETRICAL
T.	PERCENT TRUCKS
TEL.	TELEPHONE
TEMP.	TEMPORARY
T.L.E.	TEMPORARY LIMITED EASEMENT
T.O.C.	TOP OF CURB
TYP	TYPICAL
UNCL.	UNCLASSIFIED
U.G.	UNDERGROUND (CABLE)
VAR	VARIABLE
V.C.	VERTICAL CURVE
V.P.C.	VERTICAL POINT OF CURVATURE
V.P.I.	VERTICAL POINT OF INTERSECTION
V.P.T.	VERTICAL POINT OF TANGENCY
Wt.	WEIGHT
W	WEST
WB	WESTBOUND

2



WIDTH RESTRICTION SIGNING
2 LANE HIGHWAY

ADVANCED WIDTH RESTRICTION SIGNING DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

GENERAL NOTES

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

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

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

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

WIDTH ON SIGN TO BE APPROXIMATELY ONE FOOT LESS THAN AVAILABLE WIDTH.

* PLACE 500 FEET BEFORE THE W20 - 1A AND 500 FEET BEFORE ADDITIONAL SIGNS FOR ROADWAYS WITH A PRE - CONSTRUCTION SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350 FOOT TYPICAL SPACING. FOR 25-30 MPH, USE 200 FOOT TYPICAL SPACING.

** SIGN SHALL BE VISIBLE FROM ROADWAY.

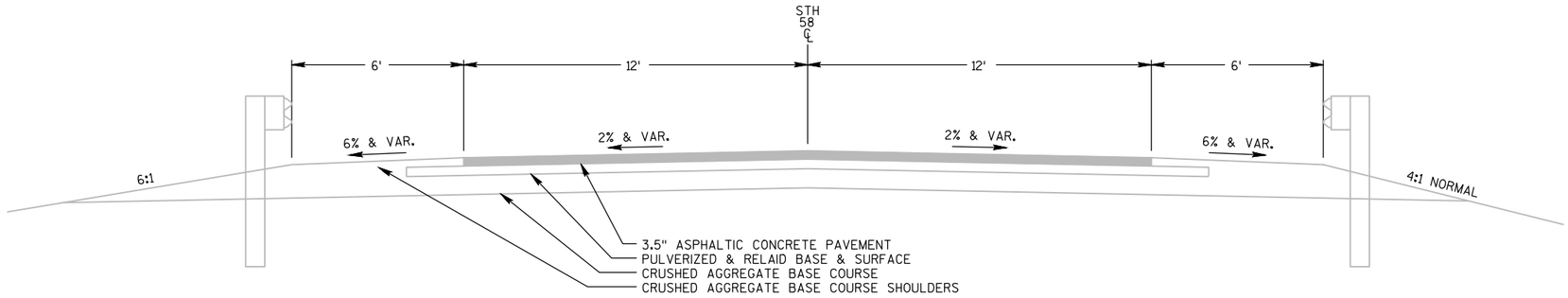
*** ADDITIONAL SIGNS NEEDED IF THERE IS AN ON RAMP BETWEEN SIGNS.

WIDTH ON SIGN TO BE APPROX. 1 - FOOT LESS THAN AVAILABLE WIDTH

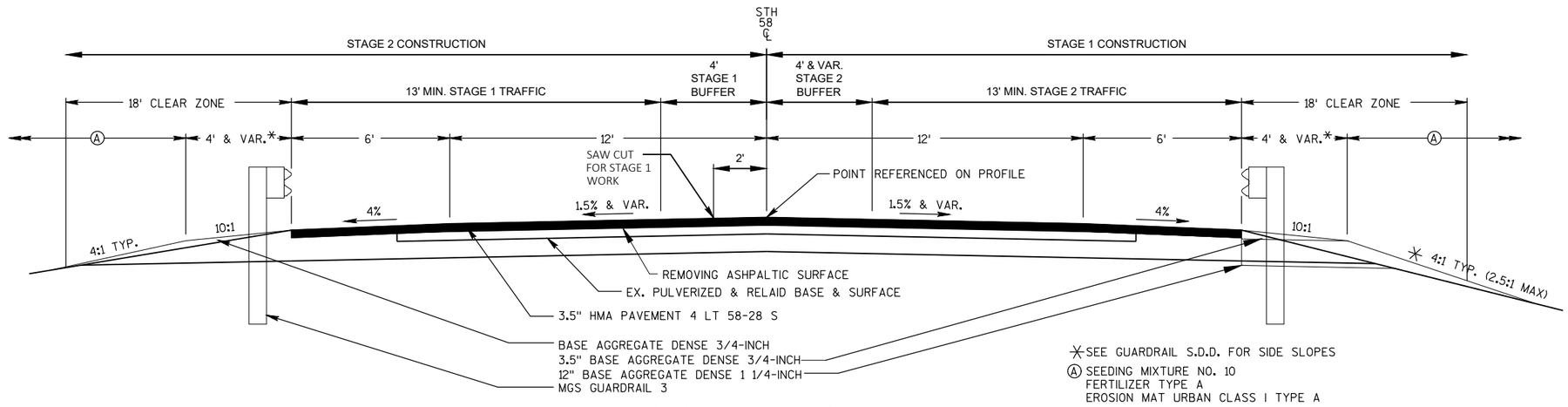
PROJECT NO: 5752-00-81	HWY: STH 58	COUNTY: SAUK	CONSTRUCTION DETAILS	SHEET 3	E

FILE NAME : N:\PDS\C3D\57520001\SHEETSPLAN\021001-CD.DWG
LAYOUT NAME - 021002-CD
PLOT DATE : 1/30/2019 7:32 AM
PLOT BY : VALENTI, PAUL M
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2



EXISTING TYPICAL SECTION



PROPOSED TYPICAL SECTION

STA. 56+50.00 TO STA. 57+76.27
STA. 58+47.89 TO STA 59+50.00

* SEE GUARDRAIL S.D.D. FOR SIDE SLOPES

Ⓐ SEEDING MIXTURE NO. 10
FERTILIZER TYPE A
EROSION MAT URBAN CLASS I TYPE A

NOTES:
3.5" HMA PAVEMENT TO BE PAVED IN 2 LIFTS
1" BASE AGGREGATE DENSE 1 1/4-INCH ASSUMED
UNDERNEATH HMA PAVEMENT FOR GRADING

PROJECT NO: 5752-00-81	HWY: STH 58	COUNTY: SAUK	PLAN: TYPICAL SECTIONS	SHEET 4	E

2

2

N

JESSOP ROAD

LITTLE BARABOO RIVER

Existing Right of Way

SLOPE INTERCEPTS

EROSION MAT CLASS I TYPE A URBAN

PT: 56+12.08

PC: 58+85.67

12+00'n

13+00'n

STH 58

55+00 56+00 57+00 58+00 59+00 60+00 61+00

GUY

TEMP

POST

SLOPE INTERCEPTS

EROSION MAT URBAN CLASS I TYPE A

Existing Right of Way

EROSION MAT URBAN CLASS I TYPE A

LEGEND

- EROSION MAT URBAN CLASS I TYPE A
- SILT FENCE
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW

PROJECT NO: 5752-00-81	HWY: STH 58	COUNTY: SAUK	EROSION CONTROL PLAN	SHEET 5	E

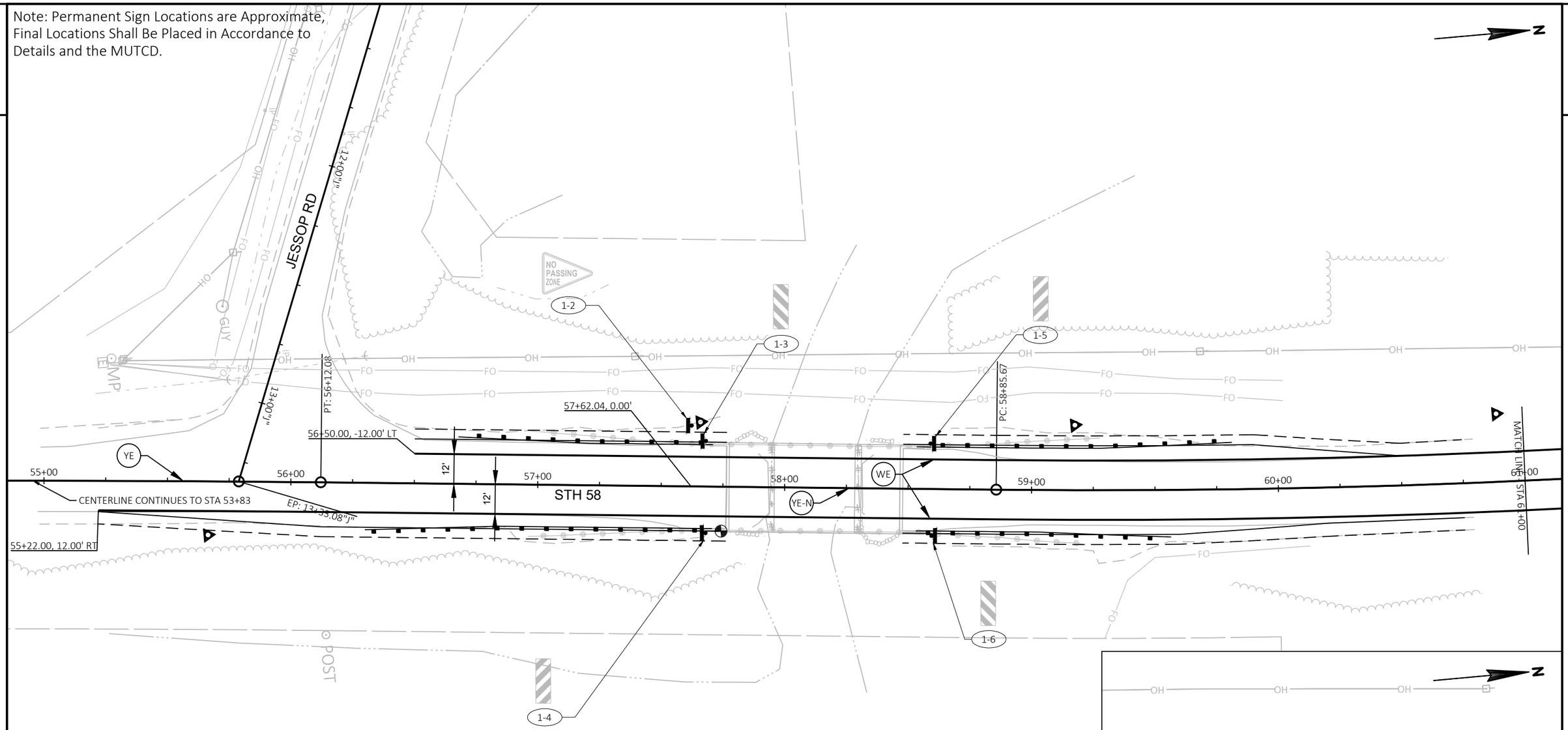
FILE NAME : N:\PDS\C3D\57520001\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022001-ec

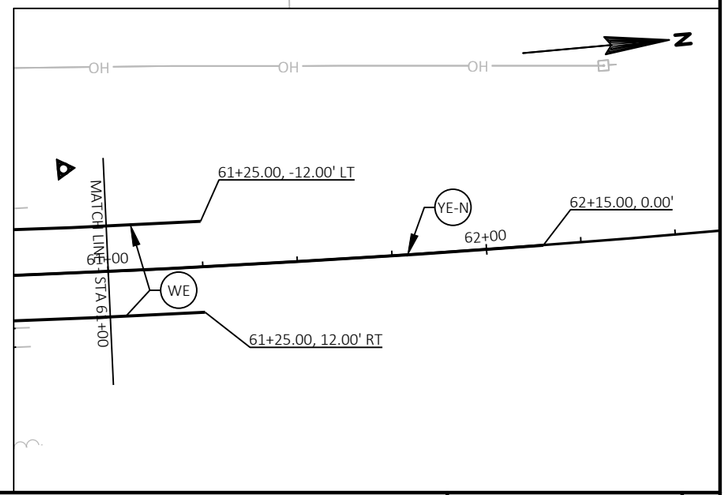
PLOT DATE : 10/22/2018 8:24 AM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

Note: Permanent Sign Locations are Approximate, Final Locations Shall Be Placed in Accordance to Details and the MUTCD.





PERMANENT SIGNING LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON NEW POST(S)
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

PAVEMENT MARKING LEGEND

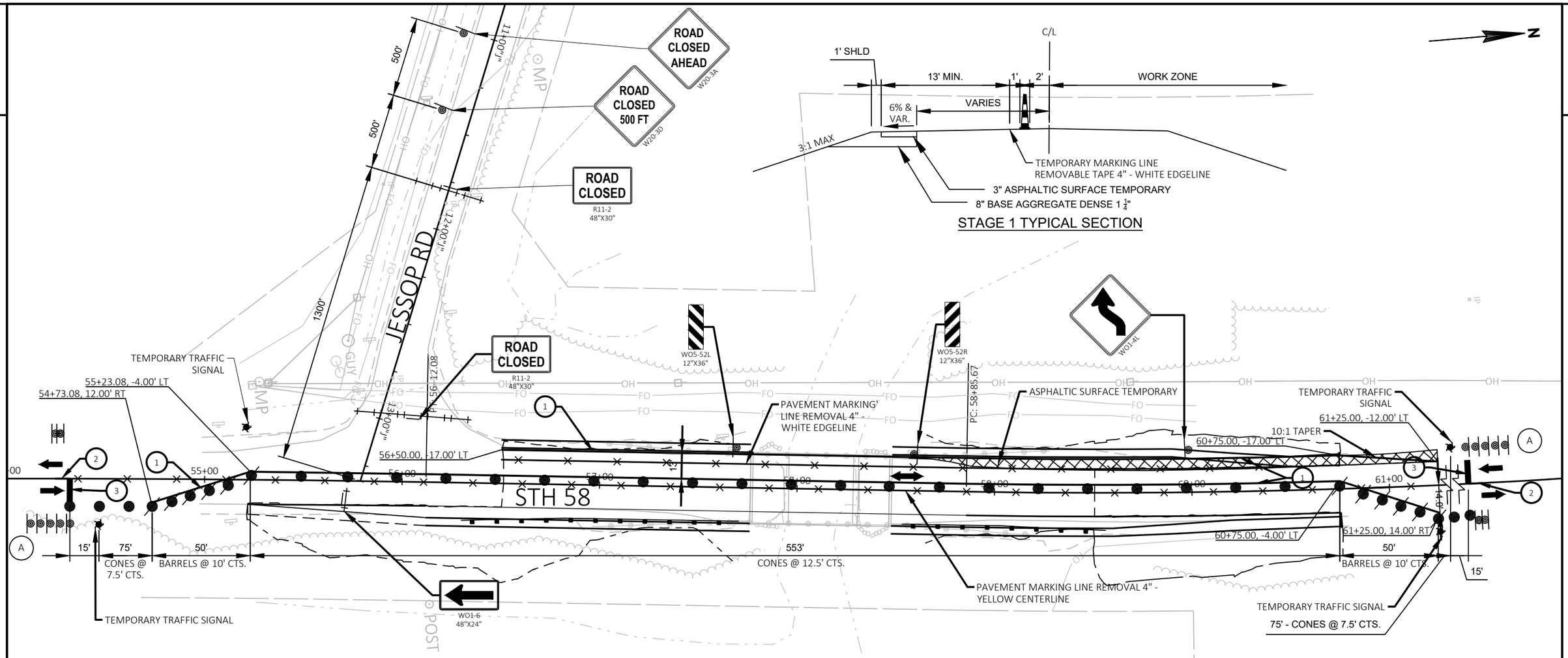
- (YE) MARKING LINE EPOXY 4-INCH (YELLOW CENTERLINE)
- (YE-N) MARKING LINE EPOXY 4-INCH (YELLOW CENTERLINE NB NO PASSING)
- (WE) MARKING LINE EPOXY 4-INCH (WHITE EDGELINE)

PROJECT NO: 5752-00-81	HWY: STH 58	COUNTY: SAUK	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET 6	E

FILE NAME : N:\PDS\C3D\57520001\SHEETSPLAN\023201-PS.DWG
LAYOUT NAME - 023201-ps

PLOT DATE : 10/22/2018 8:27 AM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:40 FT

2



STAGE 1 TYPICAL SECTION

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL CONE 42-INCH
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- ASPHALTIC SURFACE TEMPORARY
- DIRECTION OF TRAFFIC
- (1) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH - WHITE EDGE LINE
- (2) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH - YELLOW CENTERLINE
- (3) TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH - WHITE
- (A) SEE SDD 15d-33 "TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS" FOR ADVANCE WARNING SIGNS AND SIGNAL PLACEMENT

PROJECT NO: 5752-00-81	HWY: STH 58	COUNTY: SAUK	TRAFFIC STAGING PLAN - STAGE 1	SHEET 7	E

FILE NAME : N:\PDS\C3D\57520001\SHEETSPLAN\026001-S1.DWG
LAYOUT NAME - 026001-s1
PLOT DATE : 10/22/2018 8:33 AM
PLOT BY : VALENTI, PAUL M
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

N

ROAD CLOSED AHEAD
W20-3A

ROAD CLOSED 500 FT
W20-3D

ROAD CLOSED
R11-2
48"X30"

500'

500'

1300'

11+00"n

12+00"n

13+00"n

JESSOP RD

WO1-6
48"X24"

55+23.32, -11.62' LT

TEMPORARY TRAFFIC SIGNAL

55+03.34, -11.62' LT

PT: 56+12.08

55+95.50, 4.02' RT

55+72.01, 2.61' RT

55+71.22, 15.59' RT

STH 58

55+00

56+00

57+00

58+00

59+00

60+00

61+00

PC: 58+85.67

59+74.91, 4.00' RT

60+19.57, 1.44' RT

60+74.99, 1.00' RT

TEMPORARY TRAFFIC SIGNAL

61+40.00, -12.00' LT

61+24.95, -12.00' LT

60+75.00, 14.00' RT

11.6'

13'

13'

A

2

3

1

15'

125'

CONES @ 7.5' CTS.

50'

BARRELS @ 10' CTS.

503'

CONES @ 12.5' CTS.

50'

BARRELS @ 10' CTS.

15'

TEMPORARY TRAFFIC SIGNAL

75' - CONES AT 7.5' CTS.

TEMPORARY TRAFFIC SIGNAL

POST

WO1-4R

WO5-52R
12"X36"

WO5-52L
12"X36"

OH

FO

MP

C/L

2' & VAR.

WORK ZONE

1'

13' MIN.

10:1

4:1 TYP (2.5:1 MAX)

BUILT IN STAGE 1

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH - WHITE EDGELINE

STAGE 2 TYPICAL SECTION

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL CONE 42-INCH
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- (1) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH - WHITE EDGE LINE
- (2) TEMPORARY MARKING LINE PAINT 4-INCH - YELLOW CENTERLINE
- (3) TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH - WHITE
- (A) SEE SDD 15d-33 "TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS" FOR ADVANCE WARNING SIGNS AND SIGNAL PLACEMENT

PROJECT NO: 5752-00-81	HWY: STH 58	COUNTY: SAUK	TRAFFIC STAGING PLAN - STAGE 2	SHEET 8	E

FILE NAME : N:\PDS\C3D\57520001\SHEETSPLAN\026101-S2.DWG
LAYOUT NAME - 026101-s2
PLOT DATE : 10/22/2018 8:34 AM
PLOT BY : VALENTI, PAUL M
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

N

END ALIGNMENT
STA 10+00.00
Y=273,347.953
X=546,964.486

BP: 10+00.00

JESSOP ROAD

333.08'
S68° 22' 14"E

12

73°57'16"

EP: 13+33.08

44 46 48 50 52 54 56 58

CURVE NO. 1

STH 58

N5° 45' 00"E
273.59'

STATION
EQUATION
STA 55+78.89 =
STA 13+33.08 "J"

PT: 56+12.08

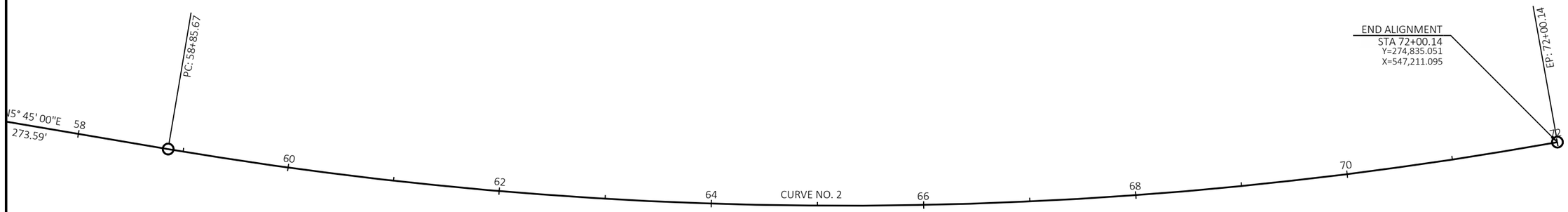
BEGIN ALIGNMENT
STA 42+72.00
Y=271,920.059
X=547,221.307

CURVE NO. 1
PI STA = 49+42.81
Y = 272590.774
X = 547210.186
DELTA = 6°42'00"
D = 0°30'00"
T = 670.81'
L = 1340.08'
R = 11460.00'
PC STA = 42+72.00
PT STA = 56+12.08

PROJECT NO: 5752-00-81	HWY: STH 58	COUNTY: SAUK	ALIGNMENT DETAILS	SHEET 9	E

2

N



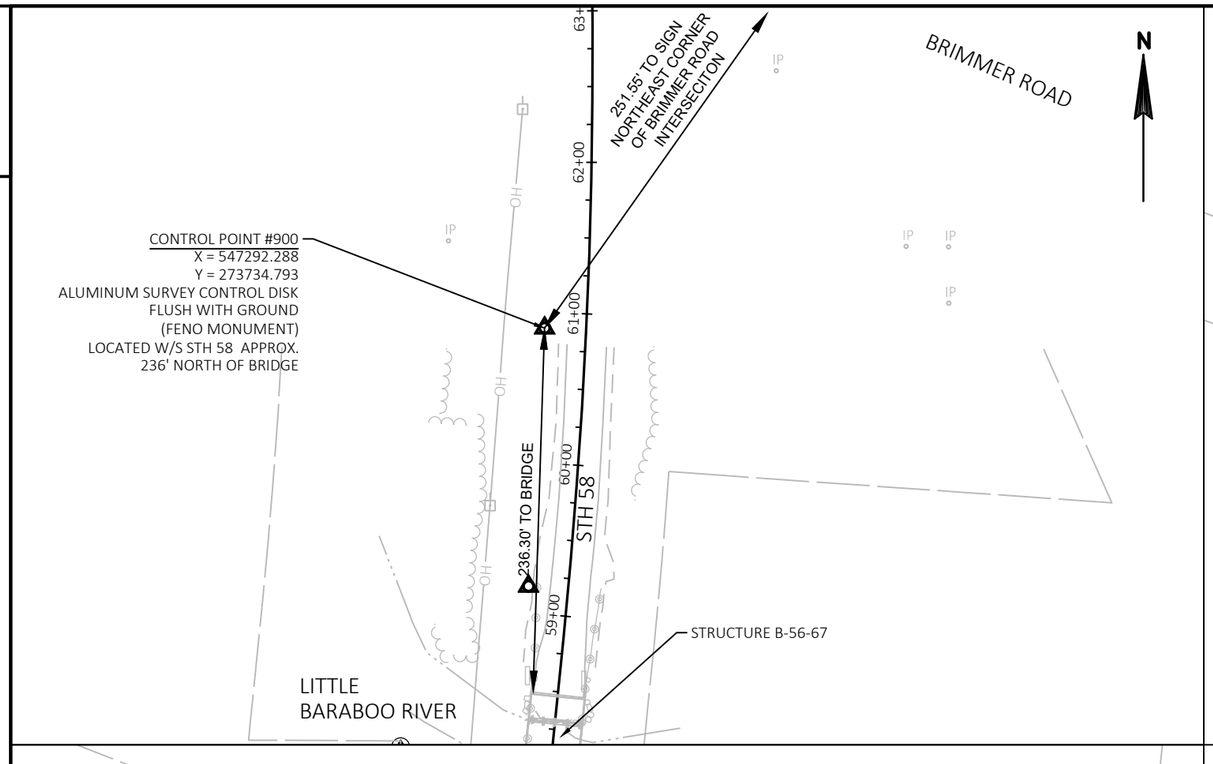
STH 58

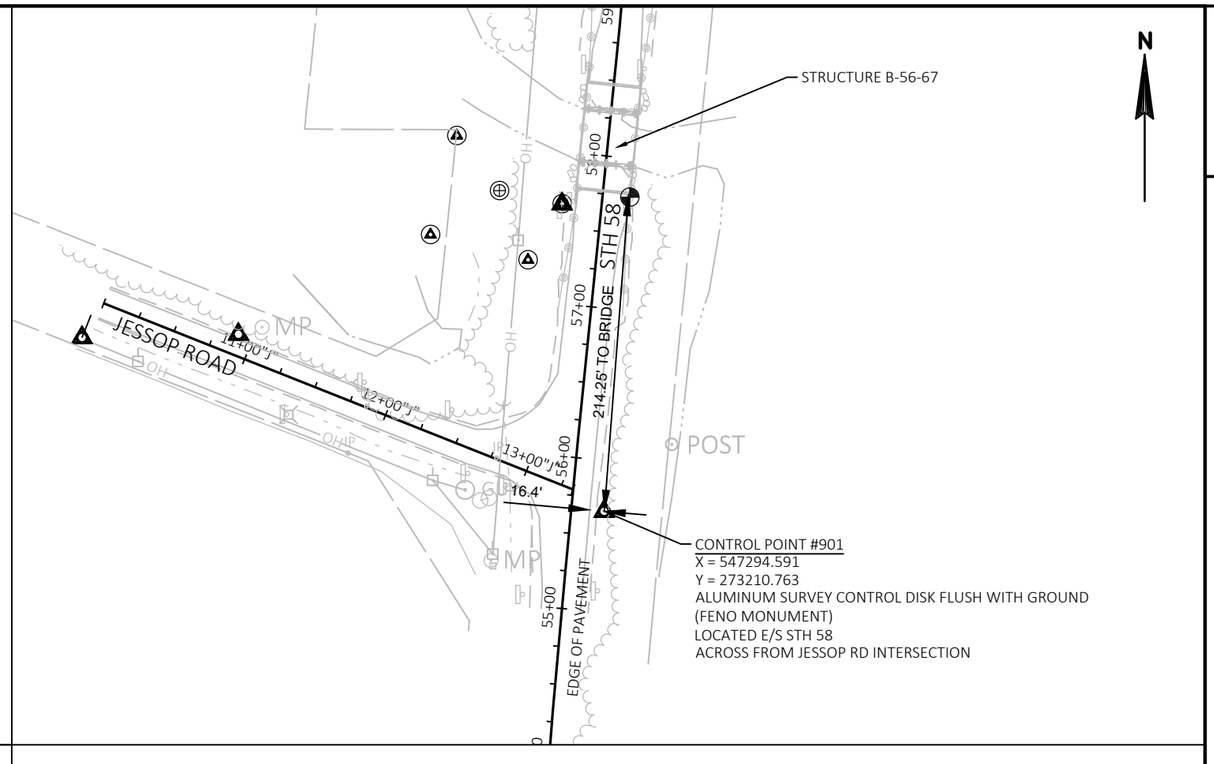
CURVE NO. 2
PI STA = 65+49.47
Y = 274190.875
X = 547371.308
DELTA = 19°43'00"
D = 1°30'00"
T = 663.80'
L = 1314.47'
R = 3819.80'
PC STA = 58+85.67
PT STA = 72+00.14

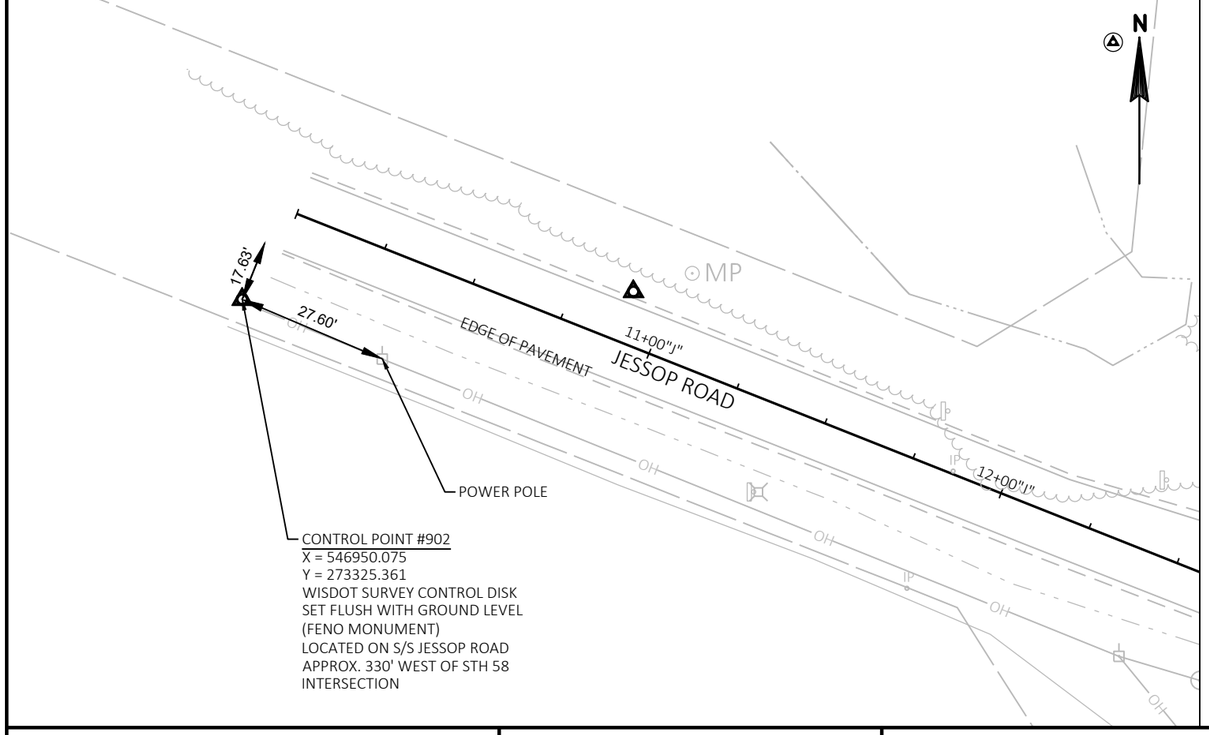
PROJECT NO: 5752-00-81	HWY: STH 58	COUNTY: SAUK	ALIGNMENT DETAILS	SHEET 10	E

FILE NAME : N:\PDS\C3D\57520001\SHEETSPLAN\027201-AD.DWG
LAYOUT NAME - 027202-ad

PLOT DATE : 10/22/2018 8:35 AM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:100 FT







PROJECT NO: 5752-00-81	HWY: STH 58	COUNTY: SAUK	ALIGNMENT DETAILS - CONTROL POINTS	SHEET 11	E

5752-00-81

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	5.000	5.000
0004	201.0205	Grubbing	STA	5.000	5.000
0006	203.0210.S	Abatement of Asbestos Containing Material (structure) 01. B-56-067	LS	1.000	1.000
0008	204.0110	Removing Asphaltic Surface	SY	810.000	810.000
0010	204.0165	Removing Guardrail	LF	272.000	272.000
0012	205.0100	Excavation Common	CY	128.000	128.000
0014	213.0100	Finishing Roadway (project) 01. 5752-00-81	EACH	1.000	1.000
0016	305.0110	Base Aggregate Dense 3/4-Inch	TON	98.000	98.000
0018	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	613.000	613.000
0020	312.0110	Select Crushed Material	TON	8.000	8.000
0022	455.0605	Tack Coat	GAL	78.000	78.000
0024	460.2000	Incentive Density HMA Pavement	DOL	112.000	112.000
0026	460.4110.S	Reheating HMA Pavement Longitudinal Joints	LF	228.000	228.000
0028	460.5224	HMA Pavement 4 LT 58-28 S	TON	112.000	112.000
0030	465.0125	Asphaltic Surface Temporary	TON	16.000	16.000
0032	502.3200	Protective Surface Treatment	SY	271.000	271.000
0034	509.0301	Preparation Decks Type 1	SY	1.000	1.000
0036	509.0302	Preparation Decks Type 2	SY	1.000	1.000
0038	509.0500	Cleaning Decks	SY	271.000	271.000
0040	509.1500	Concrete Surface Repair	SF	437.000	437.000
0042	509.2000	Full-Depth Deck Repair	SY	1.000	1.000
0044	509.2500	Concrete Masonry Overlay Decks	CY	16.000	16.000
0046	614.2300	MGS Guardrail 3	LF	325.000	325.000
0048	614.2500	MGS Thrie Beam Transition	LF	150.000	150.000
0050	614.2610	MGS Guardrail Terminal EAT	EACH	4.000	4.000
0052	618.0100	Maintenance And Repair of Haul Roads (project) 01. 5752-00-81	EACH	1.000	1.000
0054	619.1000	Mobilization	EACH	1.000	1.000
0056	624.0100	Water	MGAL	7.000	7.000
0058	625.0105	Topsoil	CY	142.000	142.000
0060	628.1504	Silt Fence	LF	1,566.000	1,566.000
0062	628.1520	Silt Fence Maintenance	LF	1,566.000	1,566.000
0064	628.1905	Mobilizations Erosion Control	EACH	2.000	2.000
0066	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	4.000
0068	628.2006	Erosion Mat Urban Class I Type A	SY	1,275.000	1,275.000
0070	628.7504	Temporary Ditch Checks	LF	10.000	10.000
0072	628.7560	Tracking Pads	EACH	2.000	2.000
0074	629.0205	Fertilizer Type A	CWT	1.000	1.000
0076	630.0110	Seeding Mixture No. 10	LB	20.000	20.000

5752-00-81

Line	Item	Item Description	Unit	Total	Qty
0078	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	5.000	5.000
0080	638.2102	Moving Signs Type II	EACH	5.000	5.000
0082	638.3000	Removing Small Sign Supports	EACH	5.000	5.000
0084	642.5001	Field Office Type B	EACH	1.000	1.000
0086	643.0300	Traffic Control Drums	DAY	672.000	672.000
0088	643.0420	Traffic Control Barricades Type III	DAY	504.000	504.000
0090	643.0705	Traffic Control Warning Lights Type A	DAY	560.000	560.000
0092	643.0715	Traffic Control Warning Lights Type C	DAY	672.000	672.000
0094	643.0900	Traffic Control Signs	DAY	2,632.000	2,632.000
0096	643.1070	Traffic Control Cones 42-Inch	DAY	3,920.000	3,920.000
0098	643.5000	Traffic Control	EACH	1.000	1.000
0100	646.1020	Marking Line Epoxy 4-Inch	LF	1,751.000	1,751.000
0102	646.9000	Marking Removal Line 4-Inch	LF	1,148.000	1,148.000
0104	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	2,779.000	2,779.000
0106	649.0850	Temporary Marking Stop Line Removable Tape 18-Inch	LF	64.000	64.000
0108	650.5000	Construction Staking Base	LF	553.000	553.000
0110	650.9910	Construction Staking Supplemental Control (project) 01. 5752-00-81	LS	1.000	1.000
0112	650.9920	Construction Staking Slope Stakes	LF	553.000	553.000
0114	661.0100	Temporary Traffic Signals for Bridges (structure) 01. B-56-067	LS	1.000	1.000
0116	690.0150	Sawing Asphalt	LF	666.000	666.000

3

CLEARING & GRUBBING SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	CLEARING 201.0105 STA	GRUBBING 201.0205 STA	REMARKS
0010	55+00	-	58+00	RT	3	3	
0010	59+00	-	61+00	RT	2	2	
				TOTAL 0010	5	5	

REMOVING ASPHALTIC SURFACE

CATEGORY	STATION	TO	STATION	LOCATION	204.0110 SY	REMARKS
	STAGE 1					
0010	56+50	-	57+76	LT & RT	196	
0010	57+00	-	57+76	RT	21	PAVED SHLD RT
0010	58+48	-	59+50	LT	198	
0010	59+50		60+75	RT	35	PAVED SHLD RT
	STAGE 2					
0010	56+50	-	57+76	LT & RT	224	
0010	58+48	-	59+50	LT	113	
0010	58+48	-	59+00	LT	23	PAVED SHLD LT
				TOTAL 0010	810	

REMOVING GUARDRAIL

CATEGORY	STATION	TO	STATION	LOCATION	204.0165 LF	REMARKS
	STAGE 1					
0010	56+96	-	57+66	RT	70	
0010	58+58	-	59+20	RT	62	
	STAGE 2					
0010	56+96	-	57+66	LT	70	
0010	58+58	-	59+28	LT	70	
				TOTAL 0010	272	

MOBILIZATIONS EROSION CONTROL

CATEGORY	STATION	LOCATION	628.1905 EACH	REMARKS
0010	STAGE 1		1	
0010	STAGE 2		1	
		TOTAL 0010	2	

MOBILIZATIONS EMERGENCY EROSION CONTROL

CATEGORY	STATION	LOCATION	628.1910 EACH	REMARKS
0010	STAGE 1		2	
0010	STAGE 2		2	
		TOTAL 0010	4	

SELECT CRUSHED MATERIAL

CATEGORY	STATION	TO	STATION	LOCATION	312.0110 TON	REMARKS
0010	56+50	-	57+76		4	CONTINGENCY FOR EBS
0010	58+48	-	59+50		4	CONTINGENCY FOR EBS
				TOTAL 0010	8	

SAWING ASPHALT

CATEGORY	STATION	TO	STATION	LOCATION	690.0150 LF	REMARKS
	STAGE 1					
0010	55+20	-	56+50	RT	130	PAVED SHLD RT
0010	56+50			LT & RT	14	
0010	56+50	-	57+76	LT	126	
0010	58+48	-	59+50	LT	102	
0010	59+50			LT & RT	16	
0010	59+50	-	60+75	RT	125	
0010	60+75			RT	2	PAVED SHLD RT
	STAGE 2					
0010	56+50			LT	16	
0010	59+50			LT	10	
0010	59+50	-	60+75	LT	125	PAVED SHLD LT
				TOTAL 0010	666	

TEMPORARY DITCH CHECKS

CATEGORY	STATION	LOCATION	628.7504 LF	REMARKS
0010	57+25	LT	10	
		TOTAL 0010	10	

TRACKING PADS

CATEGORY	STATION	LOCATION	628.7560 EACH	REMARKS
0010	STAGE 1		1	
0010	STAGE 2		1	
		TOTAL 0010	2	

SILT FENCE SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	FENCE 628.1504 LF	MAINTENANCE 628.1520 LF	REMARKS
0010	55+22	-	57+95	RT	357	357	
0010	56+50	-	57+95	LT	275	275	
0010	58+35	-	60+75	LT	311	311	
0010	58+35	-	60+75	RT	310	310	
0010	UNDISTRIBUTED				313	313	
				TOTAL 0010	1566	1566	

PAVEMENT SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	BASE AGGREGATE DENSE 3/4-INCH 305.0110 TON	BASE AGGREGATE DENSE 1 1/4-INCH 305.0120 TON	REHEATING HMA PAV'T LONG JOINT 460.4110.S LF	TACK COAT 455.0605 GAL	HMA PAVEMENT 4 LT 58-28 S 460.5224 TON	ASPHALTIC SURFACE TEMPORARY 465.0125 TON	REMARKS
	TEMPORARY PAVING										
0010	58+72	-	61+25	LT		97				16	
	STAGE 1										
	DRIVING LANES										
0010	56+50	-	57+76	LT & RT		9		12	32.9		
0010	58+48	-	59+50	LT & RT		7		10	26.7		
	PAVED SHOULDERS										
0010	55+22	-	56+12	RT		2		2	5.9		
0010	56+12	-	57+76	RT		6		8	21.4		
0010	58+48	-	60+20	RT		6		8	22.5		
0010	60+20		60+75	RT		1		1	3.0		
	AGGREGATE SHOULDERS										
0010	55+22	-	56+12	RT	11	56					
0010	56+12	-	57+76	RT	19	38					
0010	58+48	-	60+20	RT	20	108					
0010	60+20		60+75	RT	6	35					
	STAGE 2										
	DRIVING LANES										
0010	56+50	-	57+76	LT & RT		9	126	12	32.9		
0010	58+48	-	59+50	LT & RT		7	102	10	26.7		
	PAVED SHOULDERS										
0010	56+50	-	57+76	LT		4		6	16.5		
0010	58+48	-	60+50	LT		7		9	26.4		
	AGGREGATE SHOULDERS										
0010	56+50	-	57+76	LT	15	79					
0010	58+48	-	60+75	LT	27	142					
				TOTAL 0010	98	613	228	78	112	16	

PERMANENT SIGNING SUMMARY

CATEGORY	SIGN NO	APPROX STATION	LOC.	SIGN CODE	SIGN MESSAGE	SIGN SIZE (W X H) INCHES	POSTS WOOD 4X6-INCH 14-FT 634.0614 EACH	MOVING SIGNS TYPE II 638.2102 EACH	REMOVING SMALL SIGN SUPPORTS 638.3000 EACH	REMARKS
0010	1-2	57+60	LT	W14-3	NO PASSING ZONE	48 X 36	1	1	1	
0010	1-3	57+67	LT	W5-52L	BRIDGE HASH MARKS	12 X 36	1	1	1	
0010	1-4	57+67	RT	W5-52R	BRIDGE HASH MARKS	12 X 36	1	1	1	
0010	1-5	58+60	LT	W5-52R	BRIDGE HASH MARKS	12 X 36	1	1	1	
0010	1-6	58+60	RT	W5-52L	BRIDGE HASH MARKS	12 X 36	1	1	1	
						TOTAL 0010	5	5	5	

MIDWEST GUARDRAIL SYSTEM (MGS) SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	3 614.2300 LF	THRIE BEAM TRANSITION 614.2500 LF	EAT 614.2610 EACH	REMARKS
	STAGE 1							
0010	56+30	-	57+71	RT	103.5	37.5	1	Post 1 at STA 56+30.16, 19' RT
0010	58+53	-	59+56	RT	65.5	37.5	1	Post 1 at STA 59+56.39, 19' RT
	STAGE 2							
0010	56+68	-	57+71	LT	65.5	37.5	1	Post 1 at STA 56+67.66, 19' LT
0010	58+53	-	59+81	LT	90.5	37.5	1	Post 1 at STA 59+81.39, 19' LT
				TOTAL 0010	325	150	4	

WATER

CATEGORY	STATION	TO	STATION	LOCATION	624.0100 MGAL	REMARKS
	AGGREGATE BASE					
0010	55+22	-	57+76	RT	2.5	
0010	56+50	-	57+76	LT	0.6	
0010	58+48	-	60+75	LT	1.1	
0010	58+48	-	60+75	RT	3.0	
				TOTAL 0010	7	

RESTORATION SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	TOPSOIL 625.0105 CY	EROSION MAT URBAN CLASS I TYPE A 628.2006 SY	FERTILZER TYPE A 629.0205 CWT	SEEDING MIXTURE NO. 10 630.0110 LB	REMARKS
	STAGE 1								
0010	55+20	-	57+95	RT	50	451	0.28	7	
0010	58+35	-	60+75	RT	38	340	0.21	5	
	UNDISTRIBUTED			RT	22	198	0.12	3	
	STAGE 2								
0010	56+50	-	57+95	LT	11	97	0.06	2	
0010	58+35	-	60+75	LT	15	132	0.08	2	
	UNDISTRIBUTED			LT	6	57	0.04	1	
				TOTAL 0010	142	1275	1	20	

TRAFFIC CONTROL SUMMARY

CATEGORY	STATION	DAYS	DRUMS AMOUNT	DRUMS 643.0300 DAY	BARRICADES TYPE III AMOUNT	BARRICADES TYPE III 643.0420 DAY	WARNING LIGHTS TYPE A AMOUNT	WARNING LIGHTS TYPE A 643.0705 DAY	WARNING LIGHTS TYPE C AMOUNT	WARNING LIGHTS TYPE C 643.0715 DAY	SIGNS AMOUNT	SIGNS 643.0900 DAY	CONES 42-INCH AMOUNT	CONES 42-INCH 643.1070 DAY	REMARKS
	STAGE 1														
0010	JESSOP RD CLOSURE	28	0	0	8	224	10	280	0	0	4	112	0	0	
0010	ONE LANE WITH SIGNALS	28	12	336	1	28	0	0	12	336	25	700	69	1932	
0010	LANE WIDTH ADVANCE WARN	28	0	0	0	0	0	0	0	0	18	504	0	0	
	STAGE 2														
0010	JESSOP RD CLOSURE	28	0	0	8	224	10	280	0	0	4	112	0	0	
0010	ONE LANE WITH SIGNALS	28	12	336	1	28	0	0	12	336	25	700	71	1988	
0010	LANE WIDTH ADVANCE WARN	28	0	0	0	0	0	0	0	0	18	504	0	0	
		TOTAL 0010		672		504		560		672		2632		3920	

MARKING LINE EPOXY 4-INCH

CATEGORY	STATION	TO	STATION	LOCATION	646.1020 LF	REMARKS
0010	56+50	-	61+25	LT	475	WHITE EDGELINE
0010	53+75	-	57+62	ON CL	97	YELLOW CENTERLINE
0010	57+62	-	62+23	ON CL	576	YELLOW CENTERLINE NB NO PASS
0010	55+22	-	61+25	RT	603	WHITE EDGELINE
				TOTAL 0010	1751	

MARKING REMOVAL LINE 4-INCH

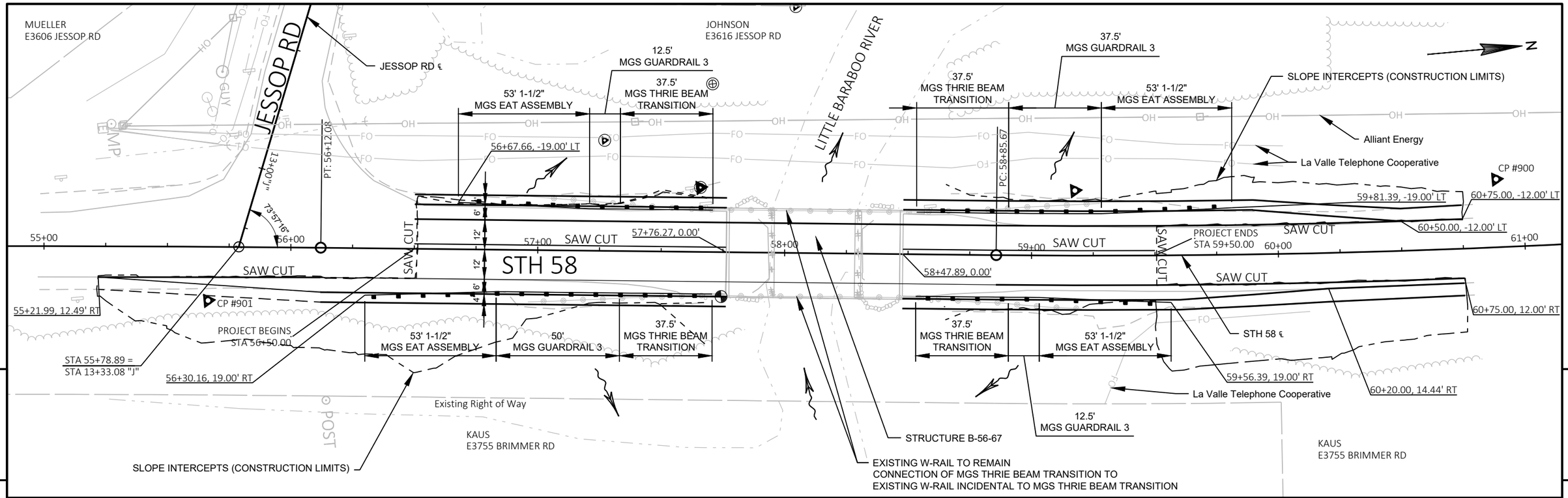
CATEGORY	STATION	TO	STATION	LOCATION	646.9000 LF	REMARKS
0010	56+50	-	61+25	LT	475	LEFT EDGELINE
0010	53+75	-	57+62	ON CL	97	CENTERLINE
0010	57+62	-	62+23	ON CL	576	CENTERLINE NB NO PASS
				TOTAL 0010	1148	

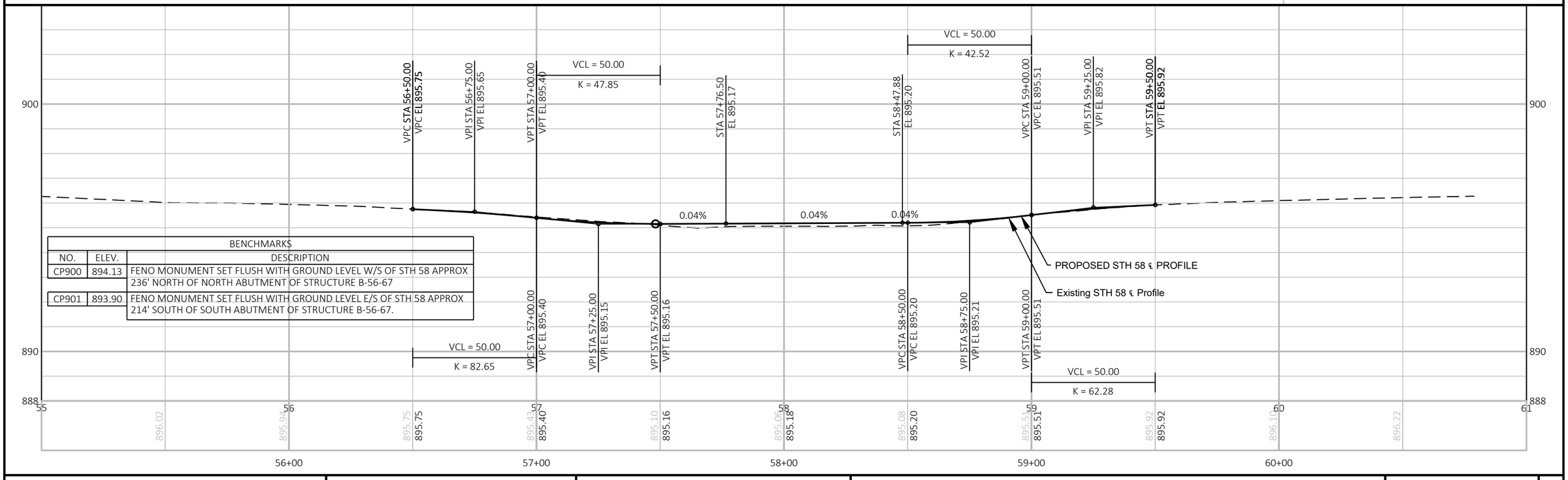
TEMPORARY MARKING REMOVABLE TAPE

CATEGORY	STATION	TO	STATION	LOCATION	LINE 4-INCH 649.0150 LF	STOP LINE 18-INCH 649.0850 LF	REMARKS
	STAGE 1						
0010	54+24	-	53+83	ON C/L	16		YELLOW DOUBLE CENTERLINE
0010	54+73	-	61+25	RT	652		WHITE EDGELINE
0010	53+83			RT		16	WHITE STOP LINE
0010	56+50	-	61+25	LT	475		WHITE EDGELINE
0010	62+15			LT		16	WHITE STOP LINE
0010	62+15	-	62+23	ON C/L	15		YELLOW DOUBLE CENTERLINE
	UNDISTRIBUTED				240	16	
	STAGE 2						
0010	55+71	-	60+75	RT	504		WHITE EDGELINE - NORTHBOUND SIDE
0010	55+03	-	61+40	LT	637		WHITE EDGELINE- SOUTHBOUND SIDE
	UNDISTRIBUTED				240	16	
				TOTAL 0010	2779	64	

CONSTRUCTION STAKING SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	BASE 650.5000 LF	SUPP CONTROL 650.9910 LS	SLOPE STAKES 650.9920 LF	REMARKS
0010	ENTIRE PROJECT					1		
0010	55+22	-	60+75	LT & RT	553		553	
				TOTAL 0010	553	1	553	



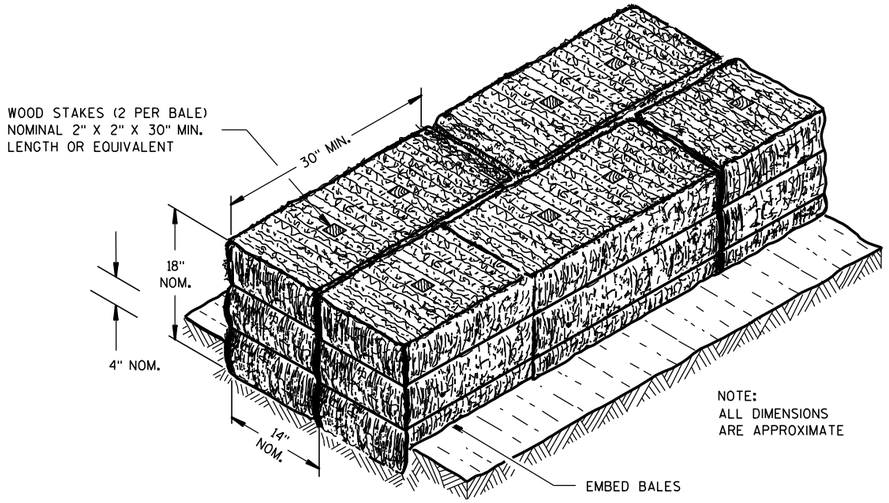


BENCHMARK$		
NO.	ELEV.	DESCRIPTION
CP900	894.13	FENO MONUMENT SET FLUSH WITH GROUND LEVEL W/S OF STH 58 APPROX 236' NORTH OF NORTH ABUTMENT OF STRUCTURE B-56-67
CP901	893.90	FENO MONUMENT SET FLUSH WITH GROUND LEVEL E/S OF STH 58 APPROX 214' SOUTH OF SOUTH ABUTMENT OF STRUCTURE B-56-67.

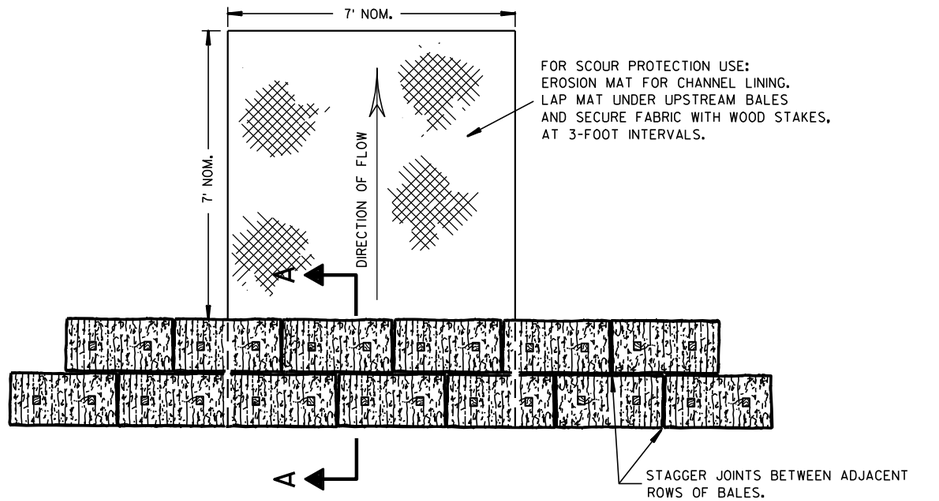
PROJECT NO: 5752-00-81	HWY: STH 58	COUNTY: SAUK	PLAN AND PROFILE: STH 58	SHEET 18	E

Standard Detail Drawing List

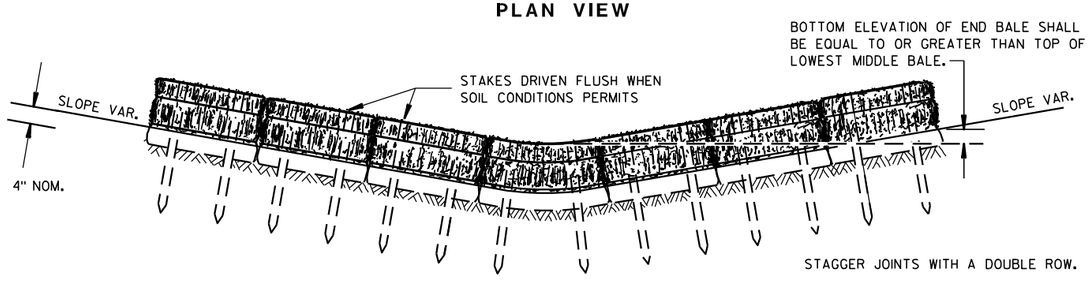
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E14-01	TRACKING PAD
09G02-05A	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
09G02-05B	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
09G02-05C	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
14B42-06A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-06B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-06C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-06D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
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)
14B45-05E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05K	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05L	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
15C08-19A	LONGITUDINAL MARKING (MAINLINE)
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D33-04	TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS



SECTION A-A



PLAN VIEW



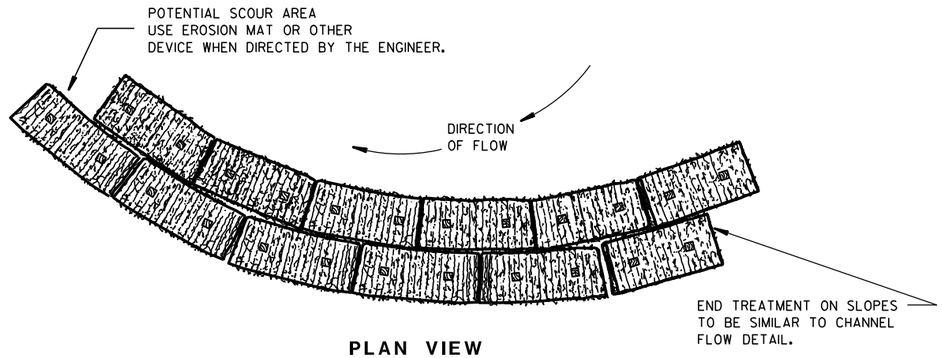
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

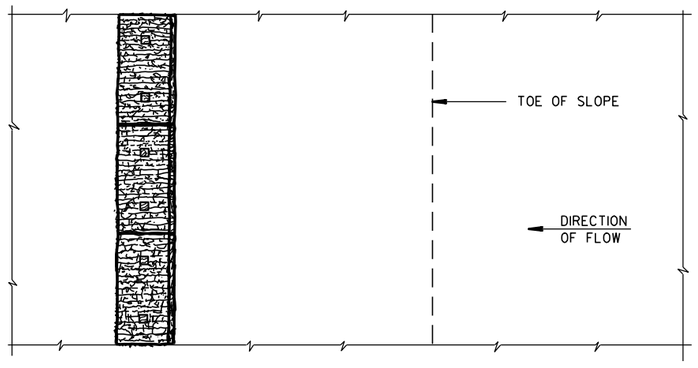
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(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.

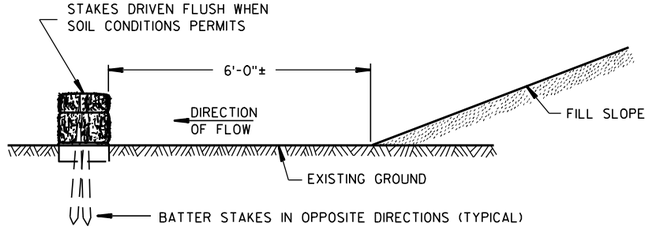


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

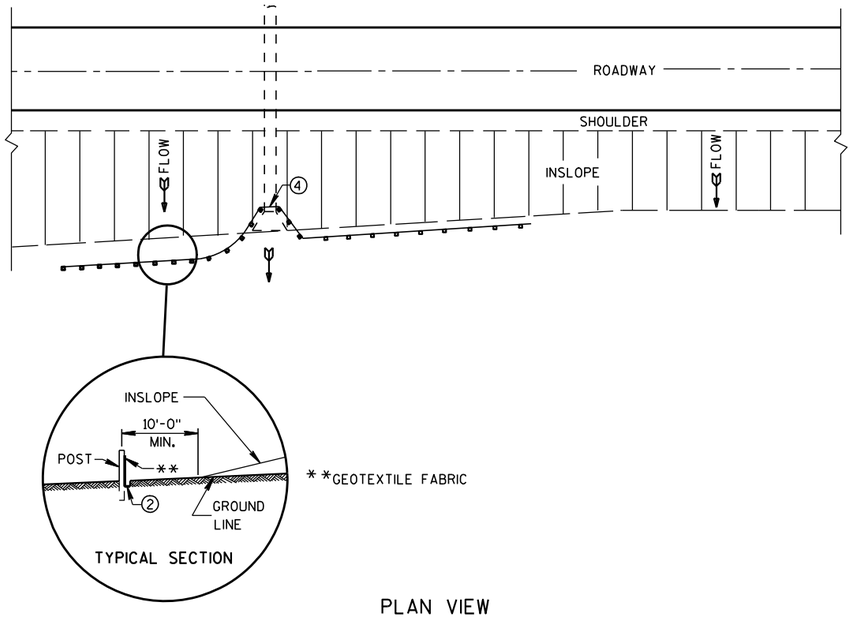
WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

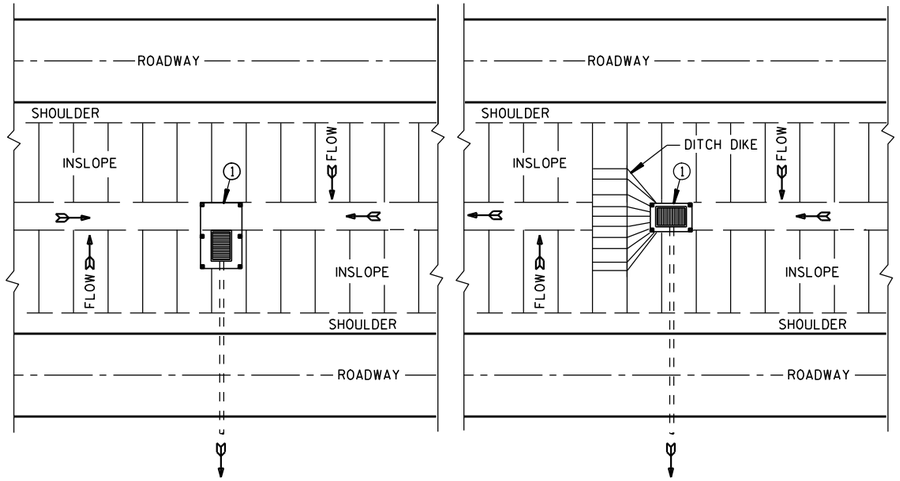
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



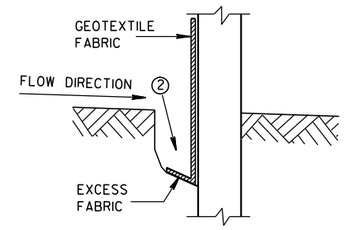
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

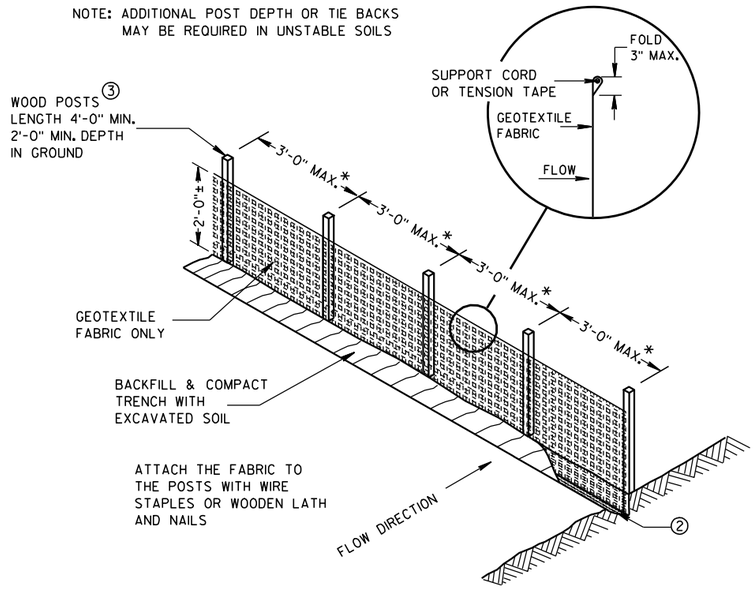
GENERAL NOTES

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

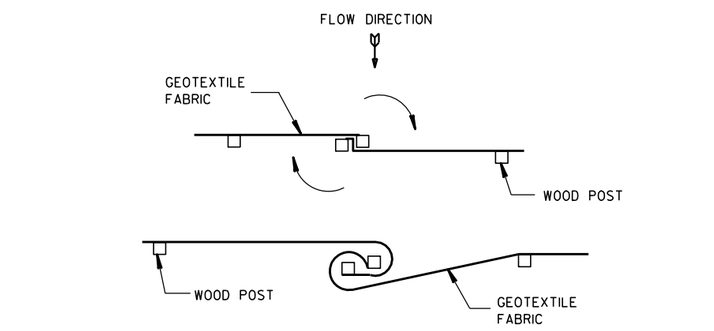
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL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



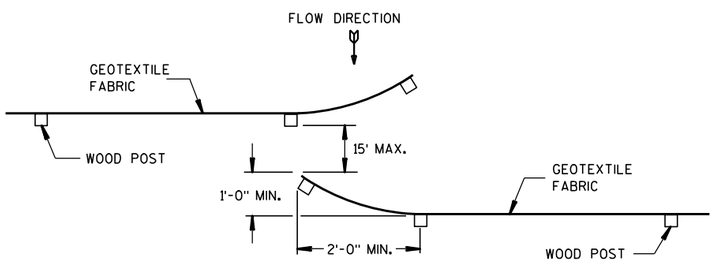
TRENCH DETAIL



SILT FENCE

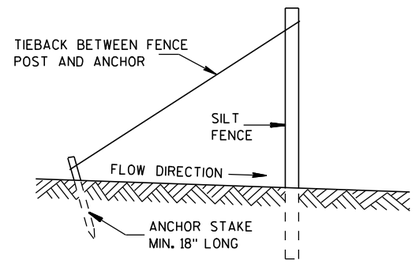


TWIST METHOD



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

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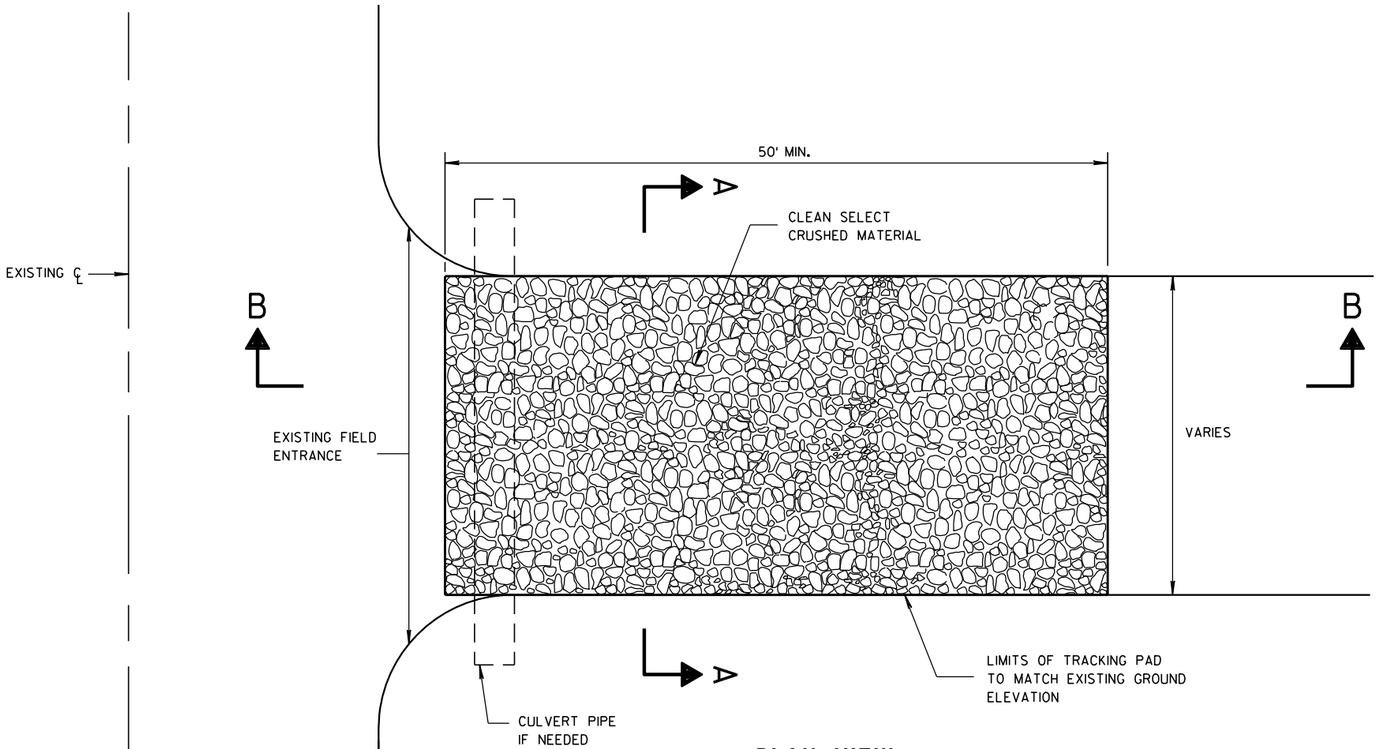
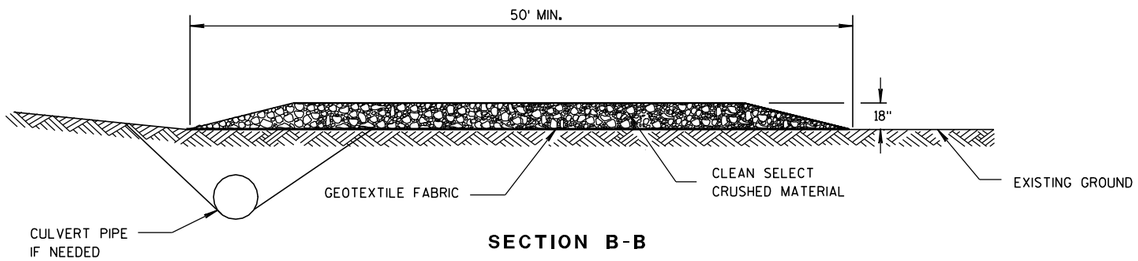


PLAN VIEW



SECTION B-B

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.

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

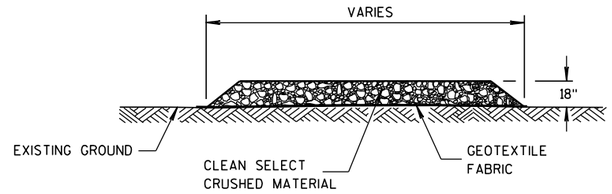
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.



SECTION A-A

TRACKING PAD

TRACKING PAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/24/2011	/S/ Jerry H. Zoda	
DATE	ROADWAY STANDARDS ENGINEER	ENT

FHWA

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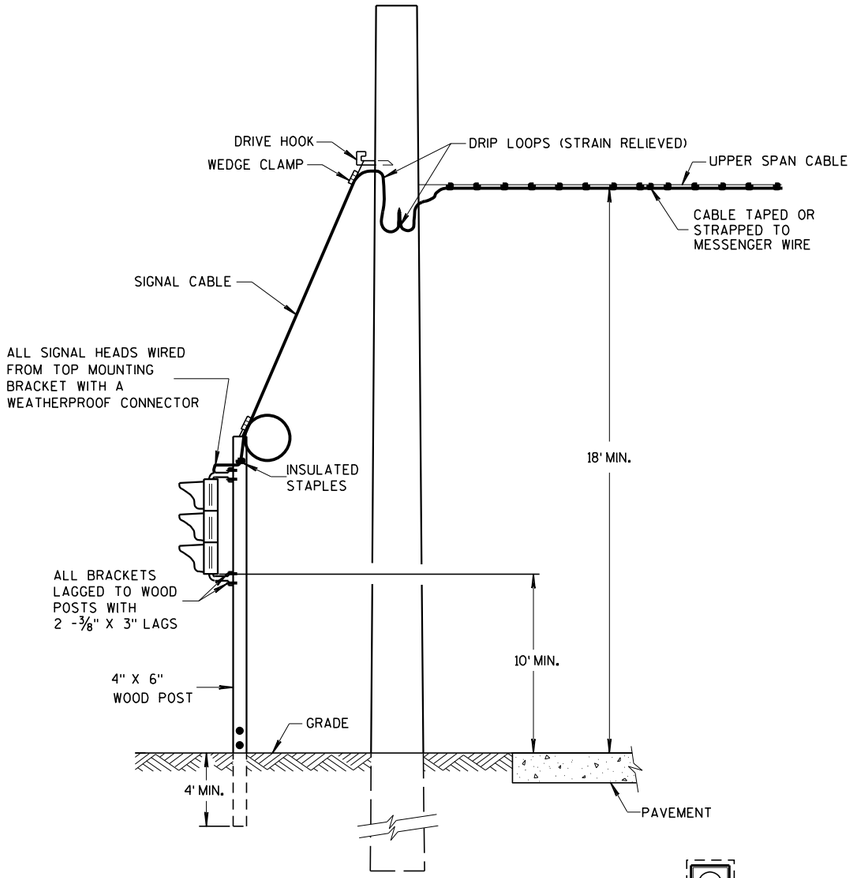
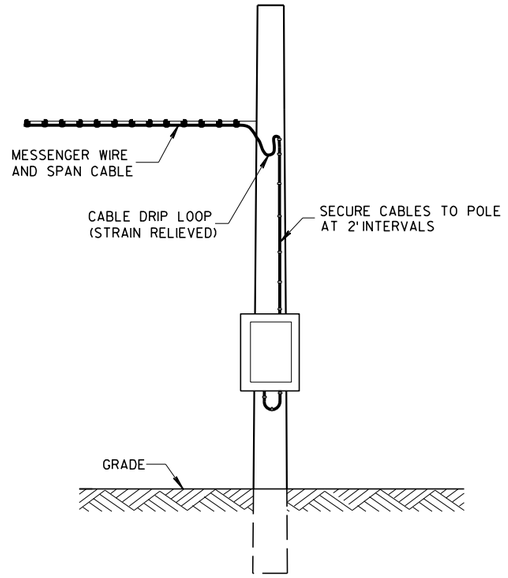
S.D.D. 8 E 14-1



TYPICAL DROP TO TRAFFIC SIGNAL FACE



POLE MOUNT CABINET INSTALLATION

GENERAL NOTES

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

POLE MOUNTED TRAFFIC SIGNAL CONTROL CABINET MAYBE MOUNTED ON THE SERVICE POLE IF THE ELECTRICAL UTILITY ALLOWS THE INSTALLATION.

WHEN UTILITY POLES ARE USED TO SPAN THE TEMPORARY OVERHEAD CABLE, WRITTEN PERMISSION MUST BE OBTAINED FROM THE OWNER OF THE POLES AND GIVEN TO THE PROJECT MANAGER. ALL PERTINENT UTILITY AND CODE CLEARANCES SHALL BE MAINTAINED.

WOOD POLES (NONBREAKAWAY) SHALL BE NO CLOSER TO EDGE OF PAVEMENT THAN OFFSET DISTANCE CHART ALLOWS OR 4 FEET BEHIND PROTECTIVE BARRIER (BEAM GUARD, ETC.).

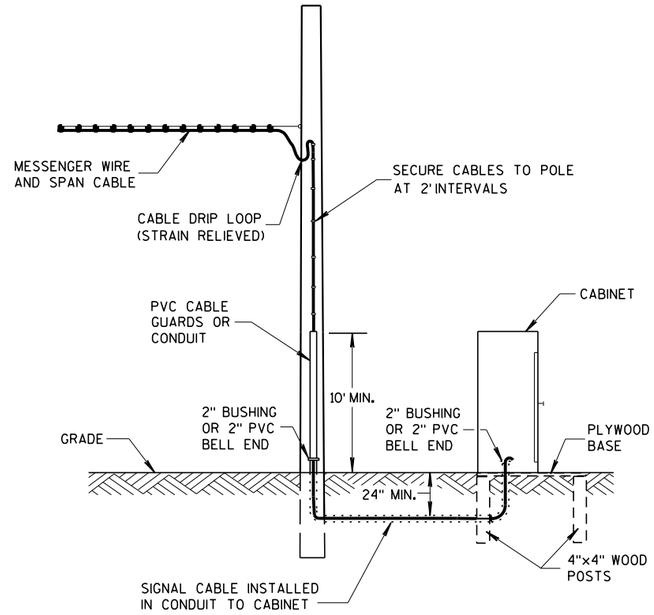
WOOD POSTS (BREAKAWAY) SHALL BE NO CLOSER THAN 2 FEET OUTSIDE OF SHOULDER.

VERTICAL CLEARANCE ETC. PER NEC.

TRAFFIC SIGNAL FACES SHALL BE TYPICALLY PLACED 12 FEET FROM EDGE OF PAVEMENT.

EACH TRAFFIC SIGNAL FACE SHALL HAVE A BACKPLATE.

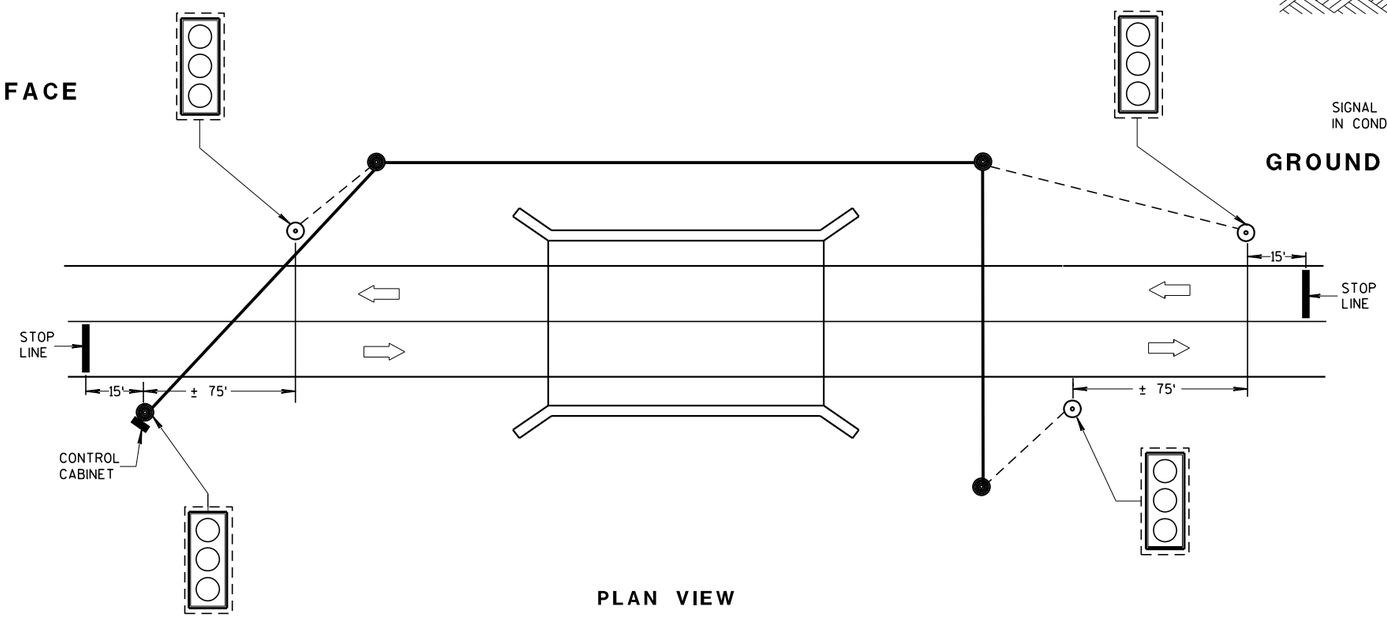
SIGNING, PAVEMENT MARKING AND LANE CONTROL REQUIREMENTS SHALL CONFORM TO STANDARD DETAIL DRAWING 15 D 33.



GROUND MOUNT CABINET INSTALLATION

OFFSET DISTANCES FOR TEMPORARY NON-BREAKAWAY POLES	
SPEED LIMIT	OFFSET DISTANCE**
GREATER THAN 45 MPH	18 FT
45 MPH OR LESS	12 FT
45 MPH OR LESS W/ CURBS	2 FT

**NOTE: OFFSET MEASURED FROM OUTER EDGE OF OUTSIDE THRU LANE.



PLAN VIEW

TYPICAL BRIDGE TEMPORARY TRAFFIC SIGNAL LOCATION

LEGEND

- WOOD POLE (NON-BREAKAWAY)
- WOOD POST (BREAKAWAY)
- SIGNAL CABLE
- SIGNAL CABLE W/MESSENGER
- LED TRAFFIC SIGNAL FACE WITH BACKPLATE (3-12")
- DIRECTION OF TRAFFIC

MINIMUM POLE LENGTHS	CLASS	MINIMUM BURIAL DEPTHS
25 FEET	V	5 FEET
30 FEET	V	6 FEET
35 FEET	IV	7 FEET
40 FEET	IV	8 FEET
45 FEET	IV	9 FEET

BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICA
FHWA

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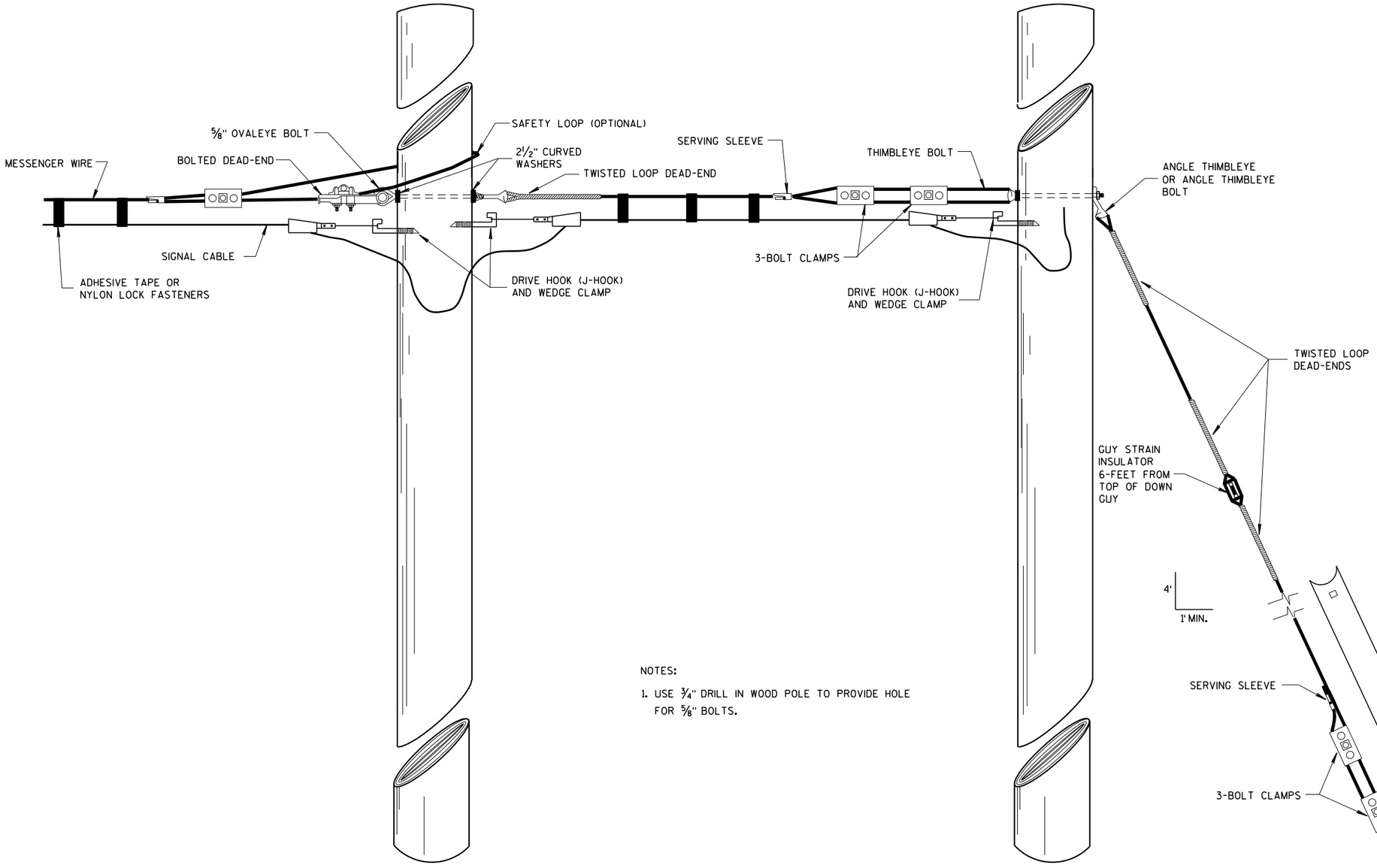
S.D.D. 9 G 2-5a



SPAN WIRE POLE

GUY POLE

NOTES:

1. USE 3/4" DRILL IN WOOD POLE TO PROVIDE HOLE FOR 5/8" BOLTS.

TYPICAL DEAD-ENDINGS OR GUYING

BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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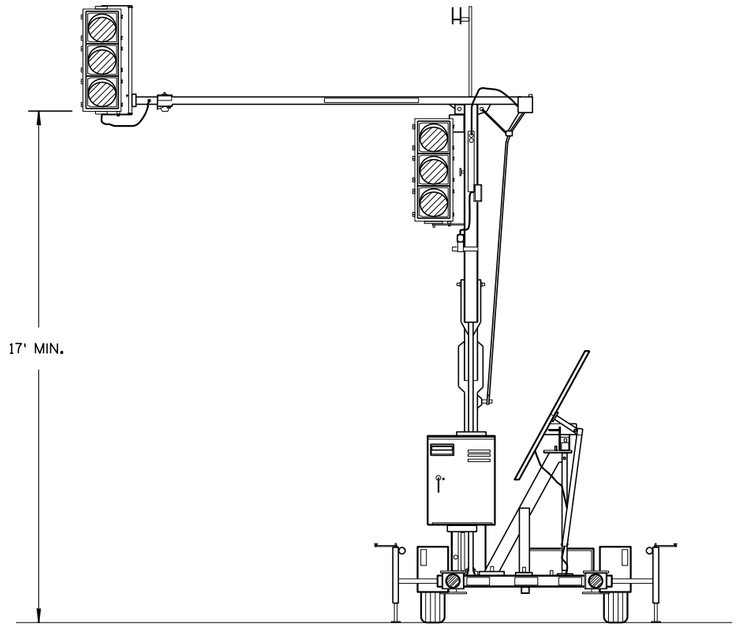
S.D.D. 9 G 2-5b

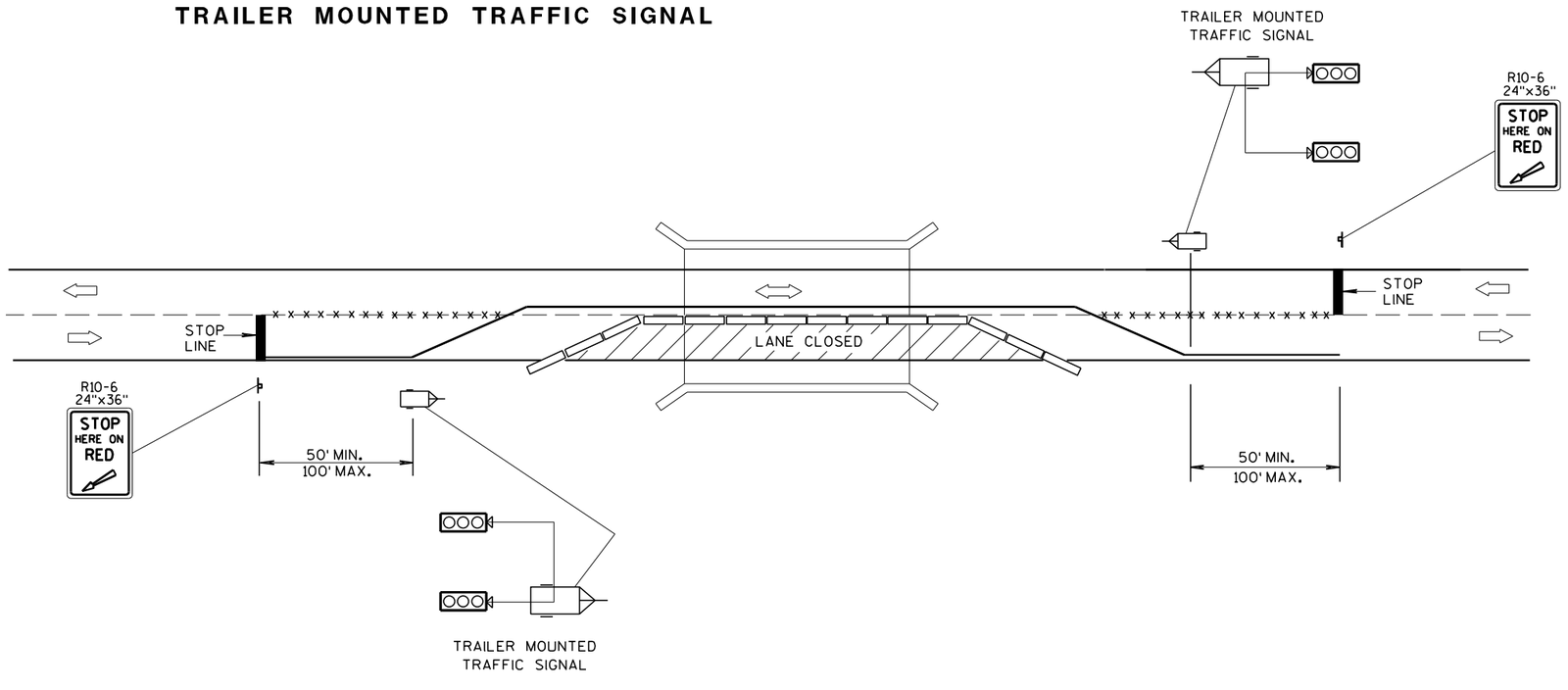


TRAILER MOUNTED TRAFFIC SIGNAL

GENERAL NOTES

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

SIGNING, PAVEMENT MARKING AND LANE CONTROL REQUIREMENTS SHALL CONFORM TO STANDARD DETAIL DRAWING 15 D 33.



TYPICAL TRAILER MOUNTED TRAFFIC SIGNAL LOCATION

LEGEND

- POST MOUNTED SIGN
- REMOVING PAVEMENT MARKING
- TEMPORARY PRECAST CONCRETE BARRIER
- TRAILER MOUNTED TRAFFIC SIGNAL
- DIRECTION OF TRAFFIC FLOW

BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL 25
FHWA

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S.D.D. 9 G 2-5c

6

S.D.D. 9 G 2-5c

(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.

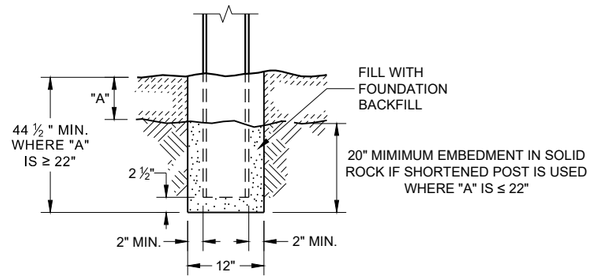
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL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

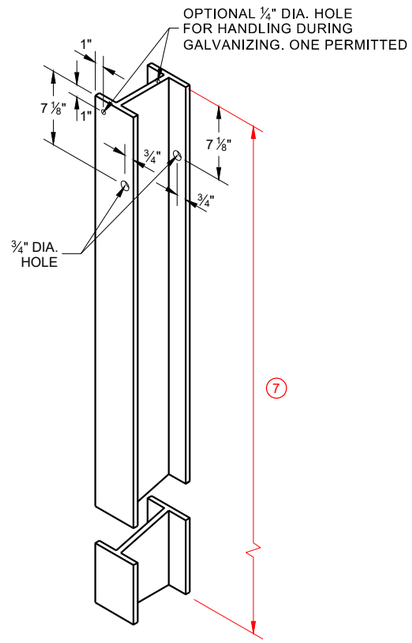
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(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.

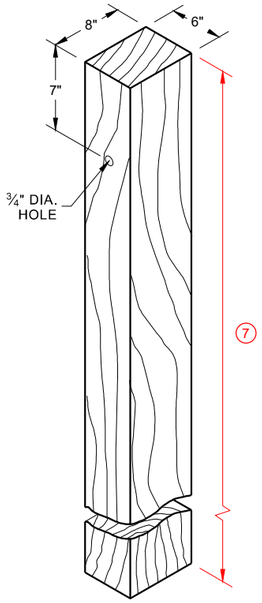
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



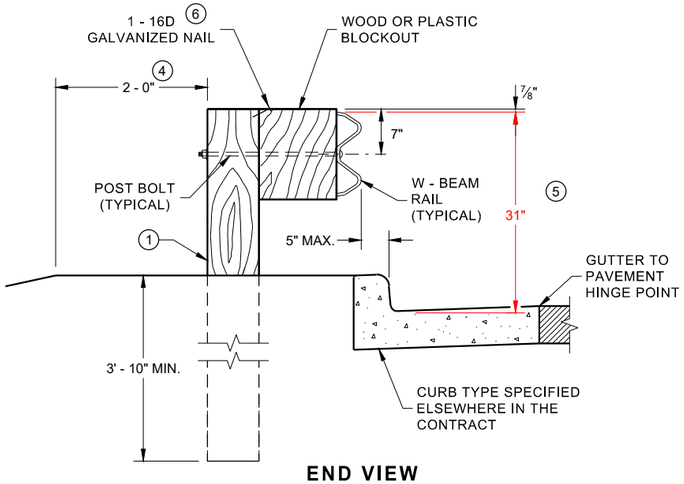
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



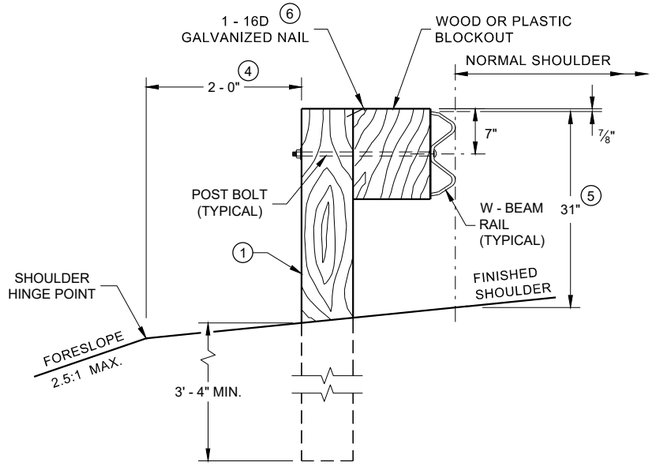
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



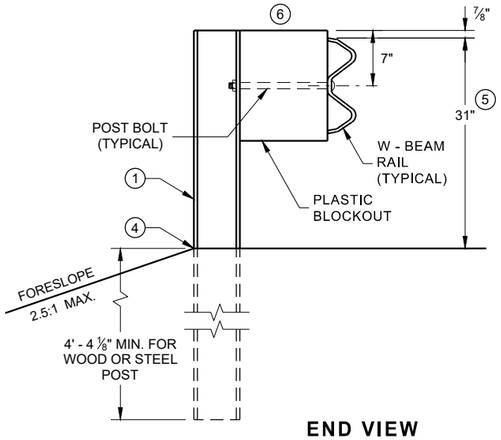
WOOD POST (6" X 8") NOMINAL (1)



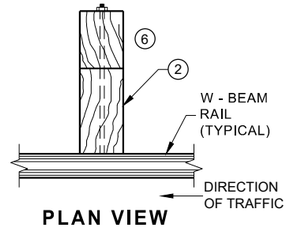
END VIEW
LOCATED ALONG A CURBED ROADWAY



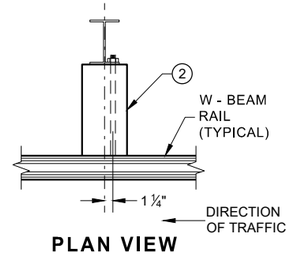
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



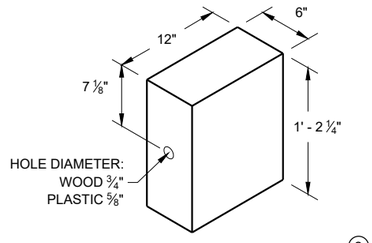
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



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 - 06a

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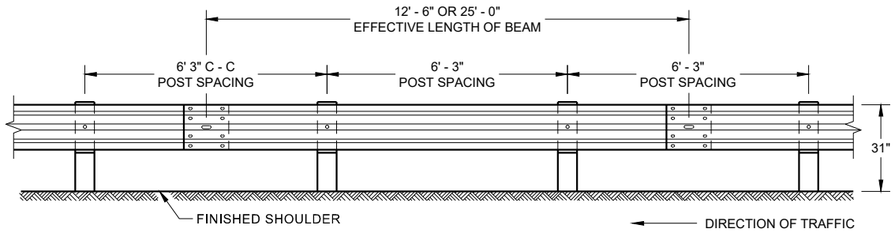
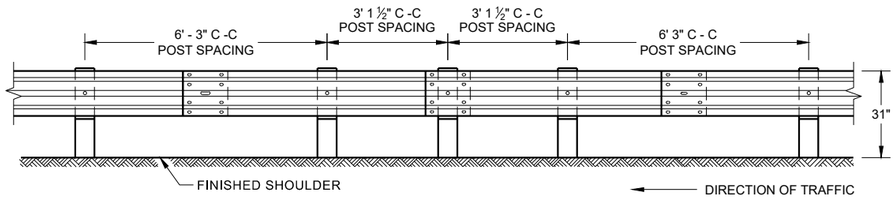
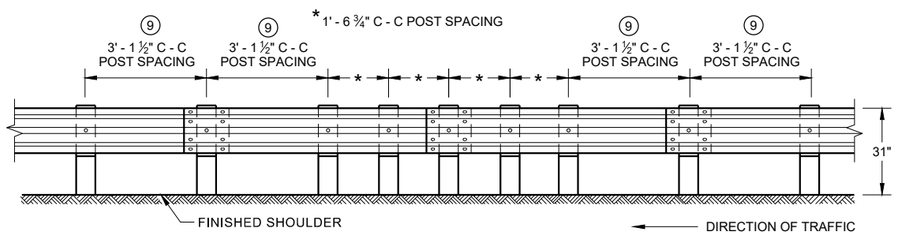
SDD 14B42 - 06a



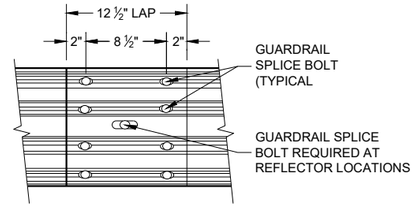
FRONT VIEW
POST SPACING STANDARD INSTALLATION



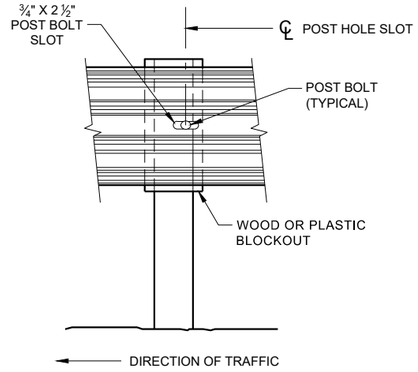
FRONT VIEW
HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)



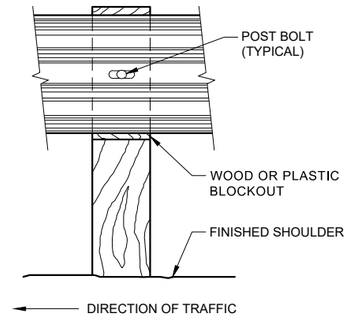
FRONT VIEW
QUARTER POST SPACING (QS)



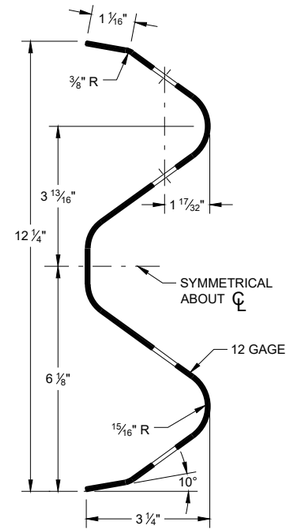
FRONT VIEW
MID-SPAN BEAM SPLICE



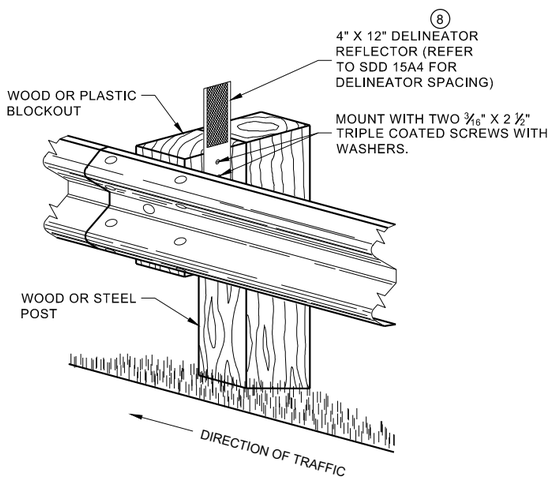
FRONT VIEW AT STEEL POST



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. RAIL SPLICE LOCATIONS ARE THE ONLY ACCEPTABLE LOCATIONS FOR REFLECTORS.

⑨ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

POST BOLTS ARE A ¾" 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

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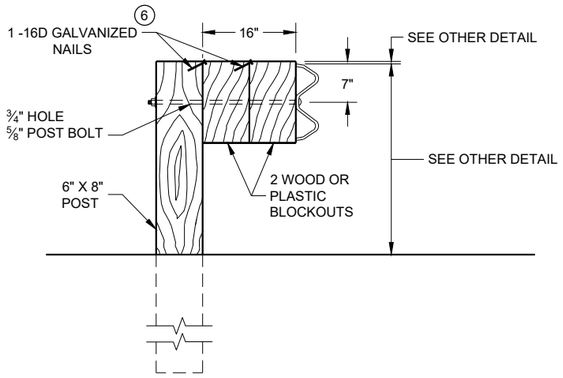
SDD 14B42 - 06b
SDD 14B42 - 06b

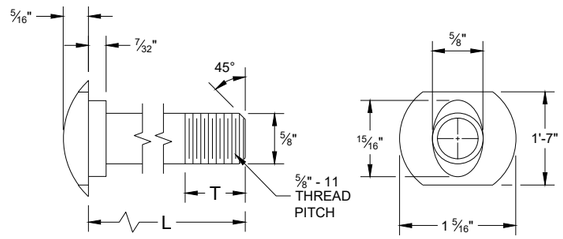


DETAIL FOR 16" BLOCKOUT DEPTH

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.

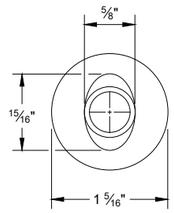
NOTE:

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.

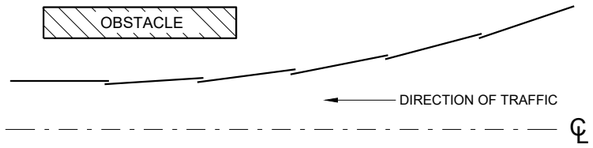


POST BOLT TABLE

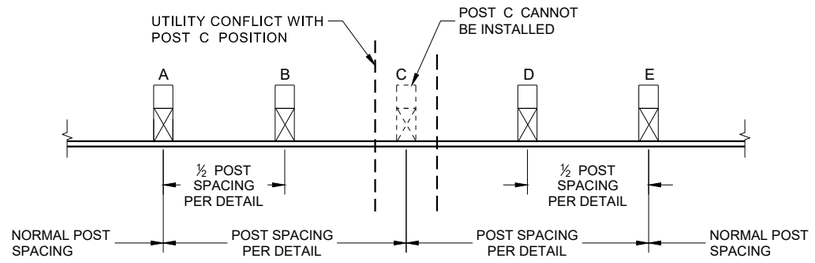
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



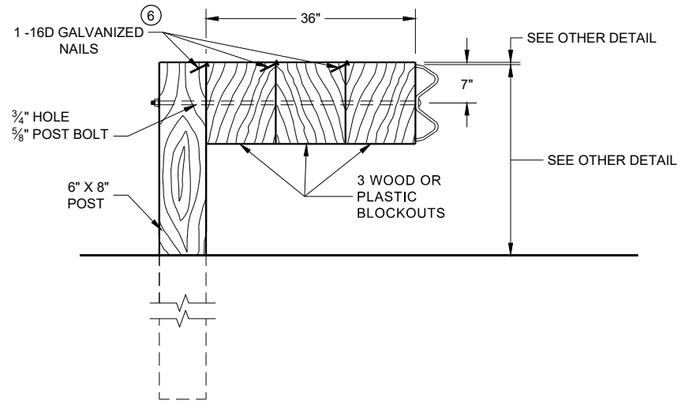
ALTERNATE BOLT HEAD



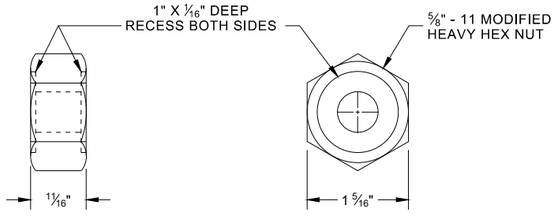
PLAN VIEW
BEAM LAPPING DETAIL



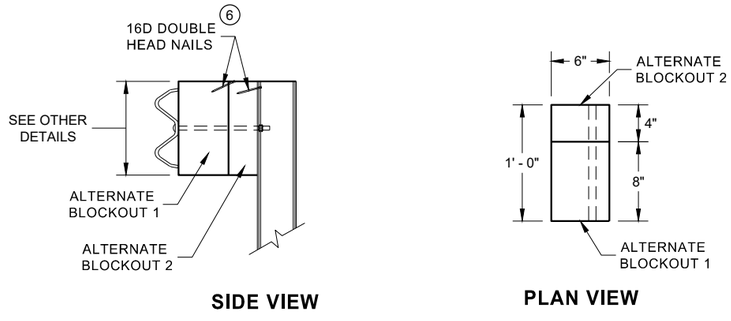
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



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.

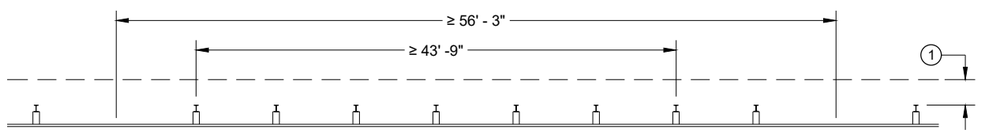
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

(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.

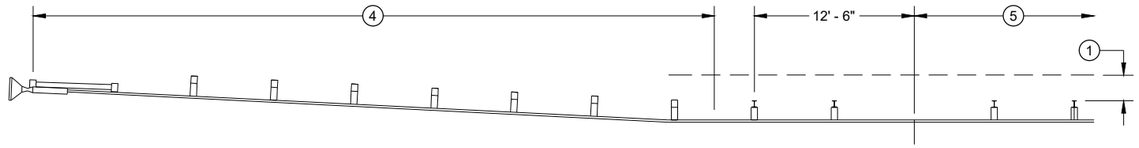
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

6

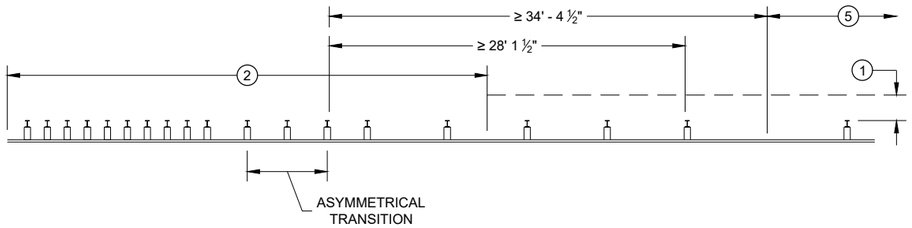
SDD 14B42 - 06c



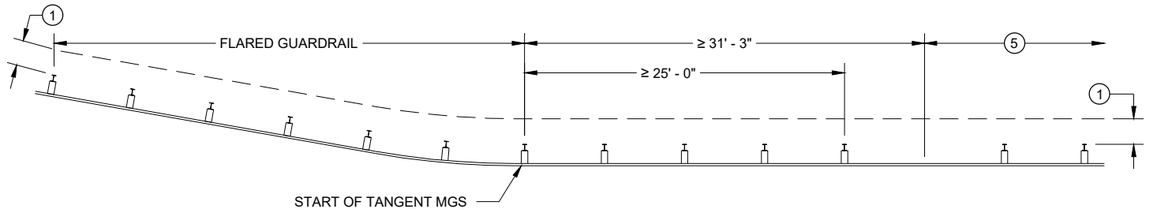
MISSING POST IN NORMAL BEAM GUARD RUN



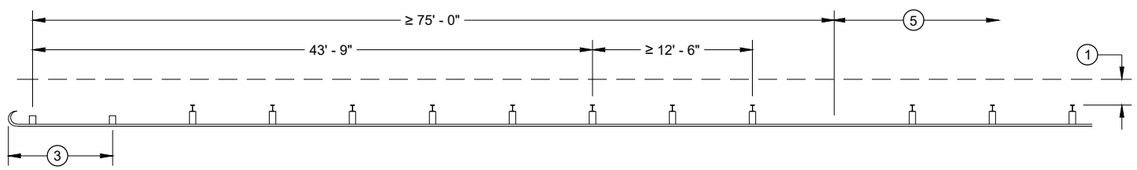
MISSING POST IN NORMAL BEAM GUARD RUN NEAR EAT



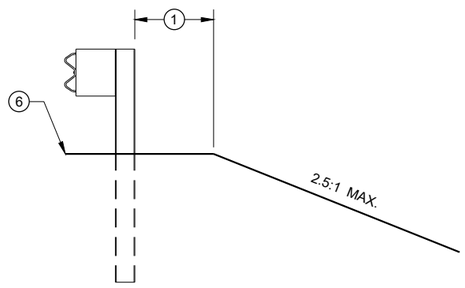
MISSING POST NEAR APPROACH THRIE BEAM TRANSITION



MISSING POST IN NORMAL BEAM GUARD RUN NEAR FLARED BEAM GUARD



MISSING POST IN NORMAL BEAM GUARD RUN NEAR TYPE 2 TERMINAL



CROSS SECTION VIEW

1. MINIMUM OF 2 FEET OF GRADING BEHIND POST.
2. SEE SDD 14B45 FOR MORE DETAILS.
3. SEE SDD 14B47 FOR MORE DETAILS.
4. SEE SDD 14B44 FOR MORE DETAILS.
5. SEE MISSING POST IN NORMAL BEAM GUARD RUN FOR DISTANCE TO NEXT MISSING POST AND AREA FOR WELL DRAINED, COMPACTED SOILS.
6. SEE PLAN FOR SHOULDER DESIGN.

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

SDD 14B42 - 06d

SDD 14B42 - 06d

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.

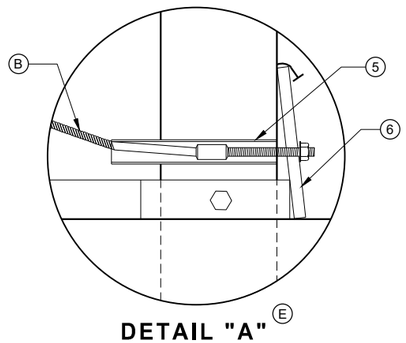
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

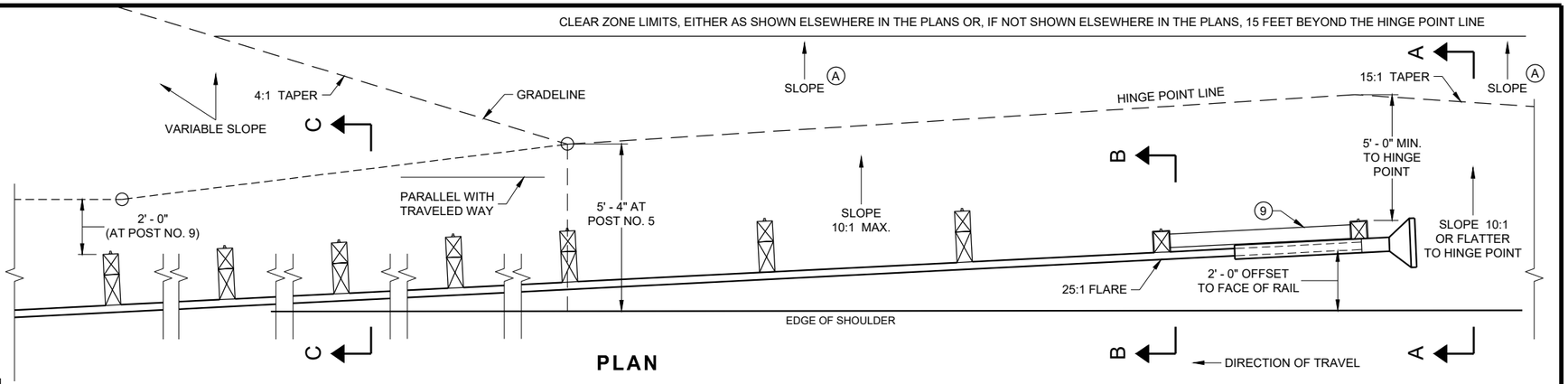
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

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

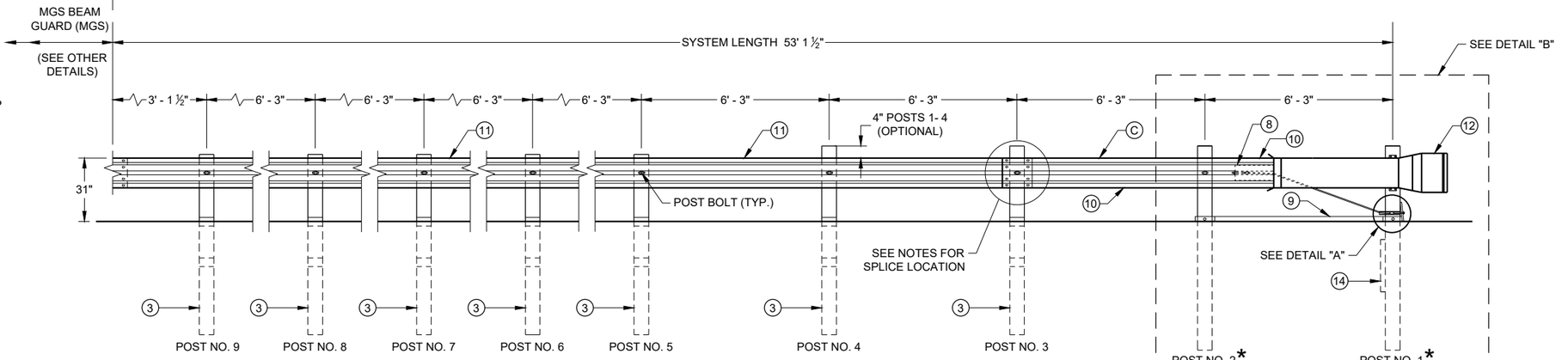
THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



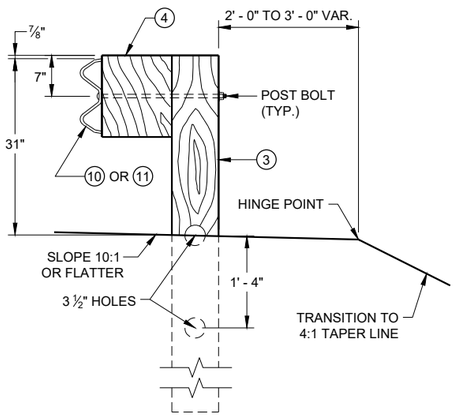
DETAIL "A" (E)



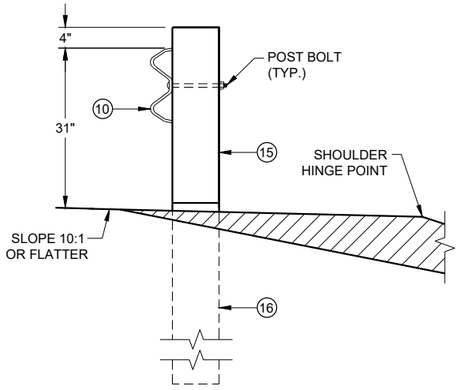
PLAN



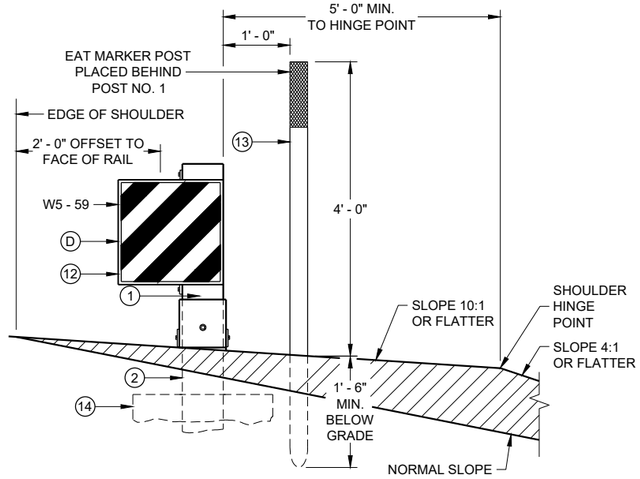
ELEVATION



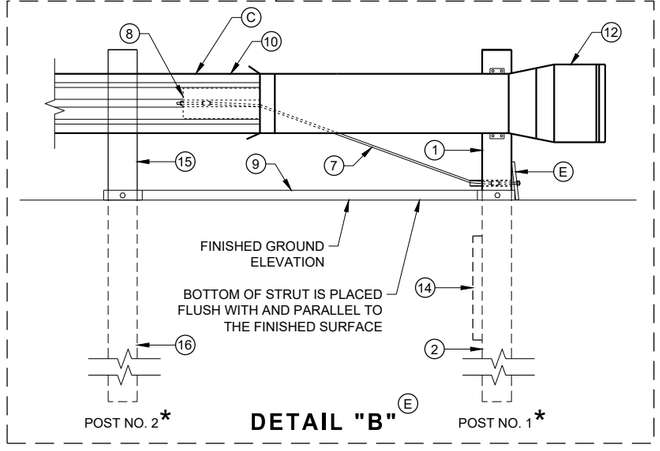
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



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)

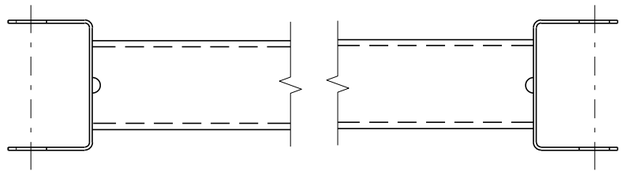
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

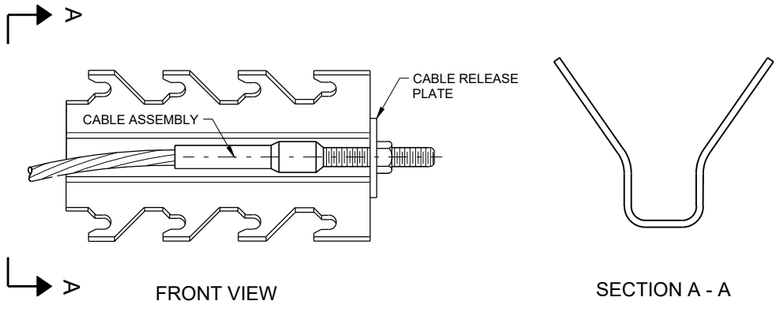
SDD 14B44 - 04a

BILL OF MATERIALS

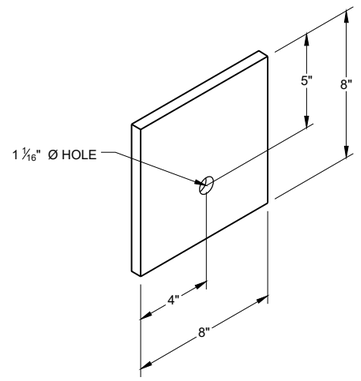
PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUGACTURER'S DETAILS FOR MORE INFORMATION.
①	UPPER POST NO. 1 6" X 6" TUBE
②	LOWER POST NO. 1
③	WOOD CRT
④	WOOD BLOCKOUT
⑤	PIPE SLEEVE
⑥	BEARING PLATE
⑦	BCT CABLE ASSEMBLY
⑧	ANCHOR CABLE BOX
⑨	GROUND STRUT
⑩	PERFORATED W-BEAM RAIL 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 GROUND STRUT ⑨ Ⓔ



GENERIC ANCHOR CABLE BOX ⑨ Ⓔ



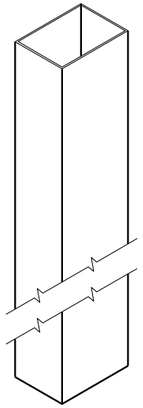
BEARING PLATE ⑥ Ⓔ

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

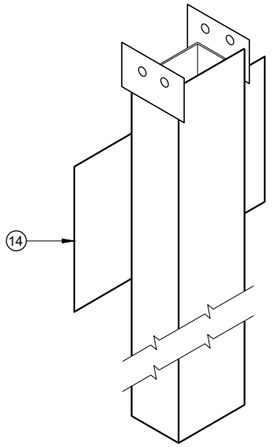
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

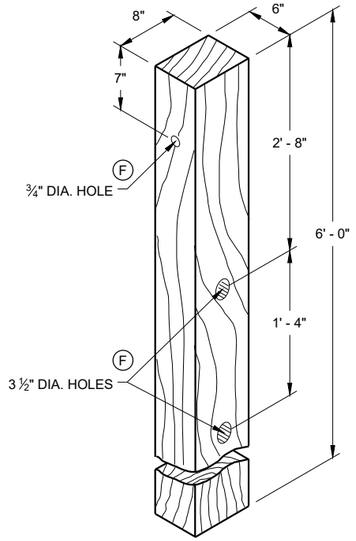
SDD 14B45 - 04b



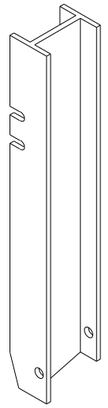
UPPER POST NO. 1 (1) (E)



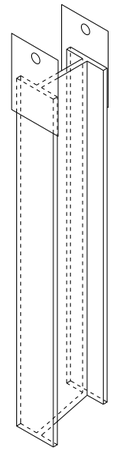
LOWER POST NO. 1 (2) (E)



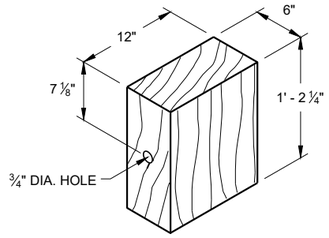
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



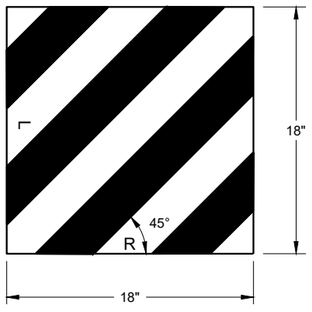
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

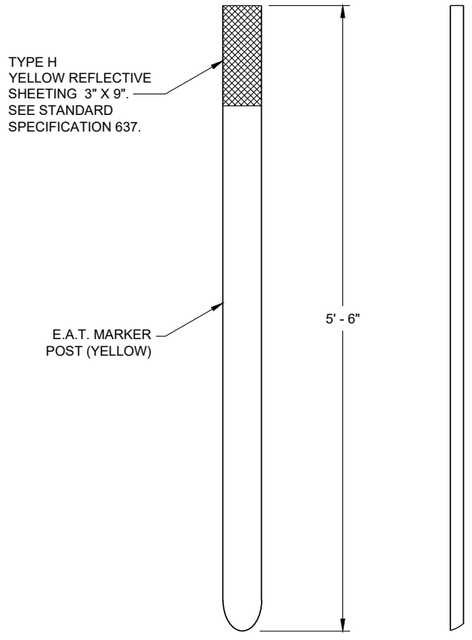


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



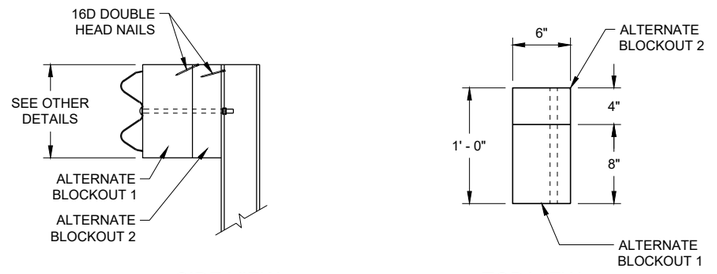
W5 - 59

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)

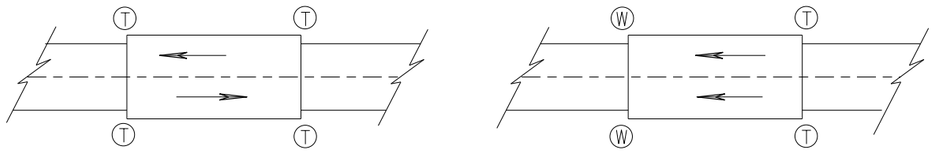
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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.

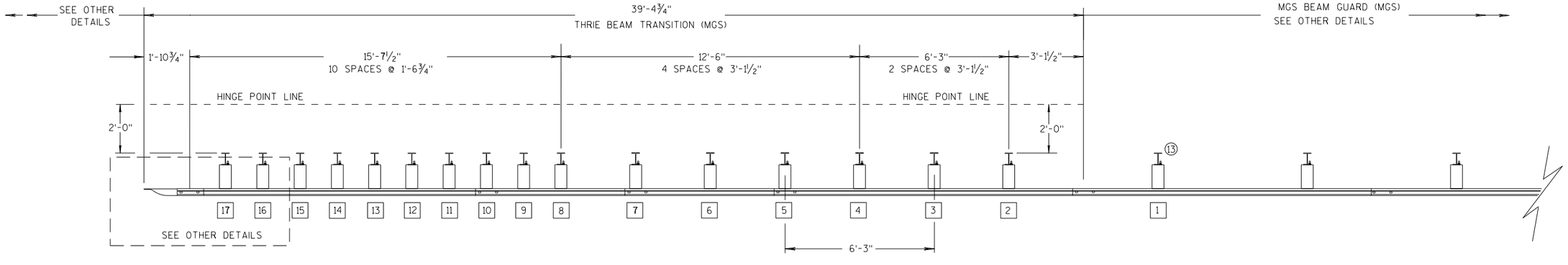
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

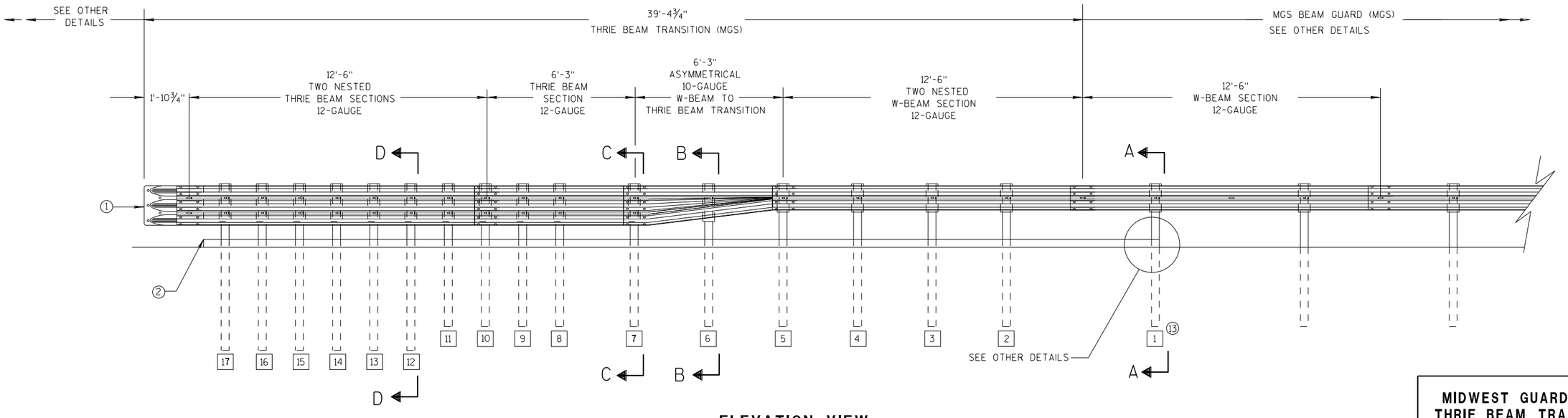
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

(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

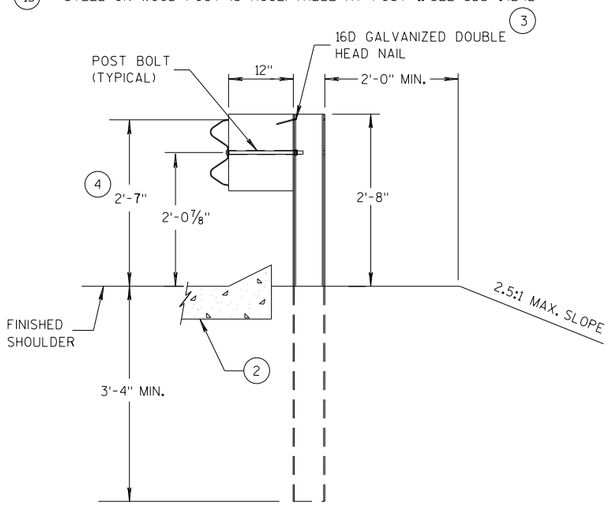
GENERAL NOTES

(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.

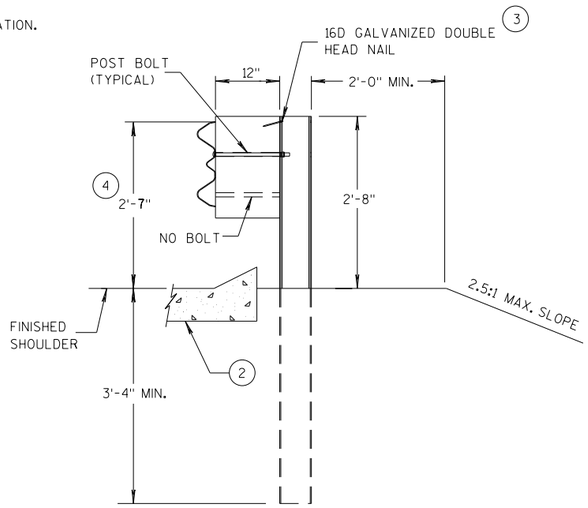
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

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



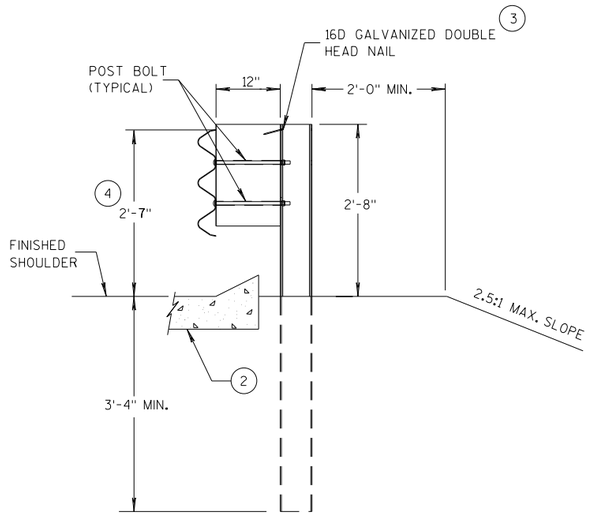
SECTION A-A (13)

POSTS 1-5



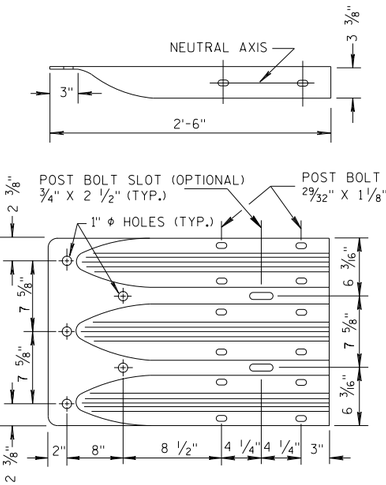
SECTION B-B

POST 6

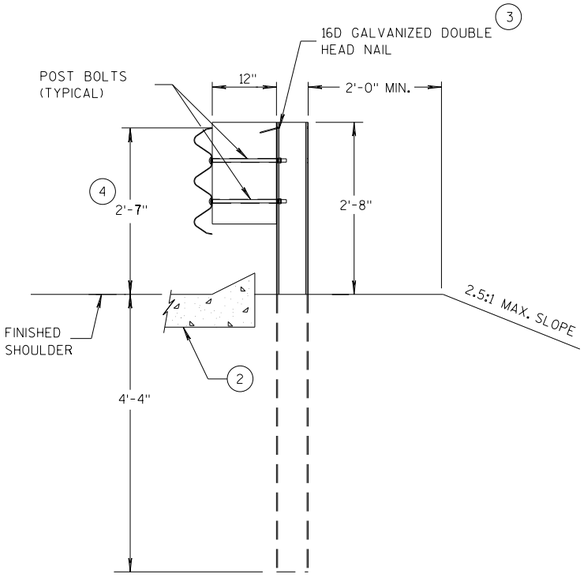


SECTION C-C

POSTS 7-11

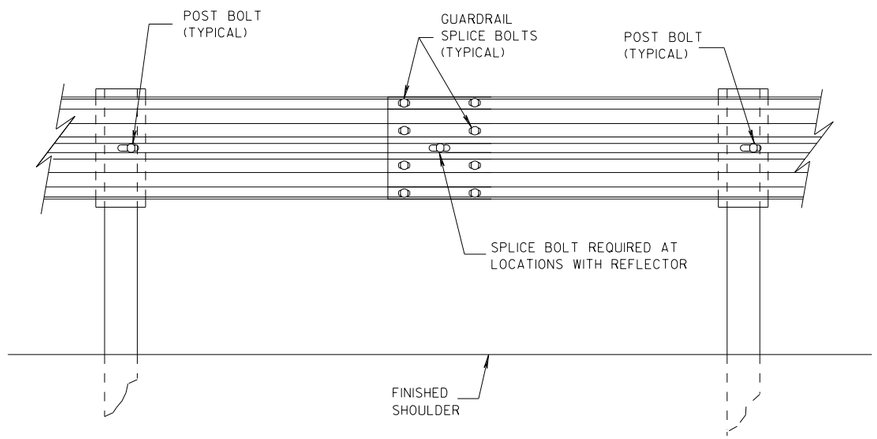


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-17



SPLICE DETAIL

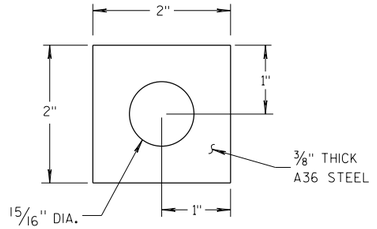
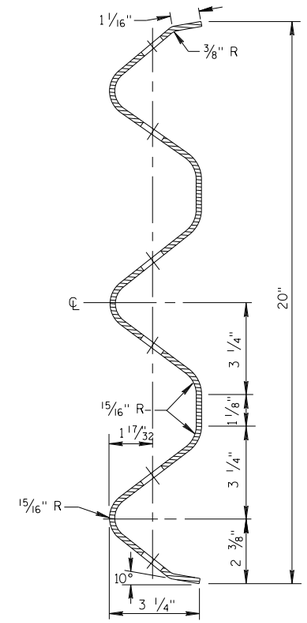


PLATE WASHER DETAIL



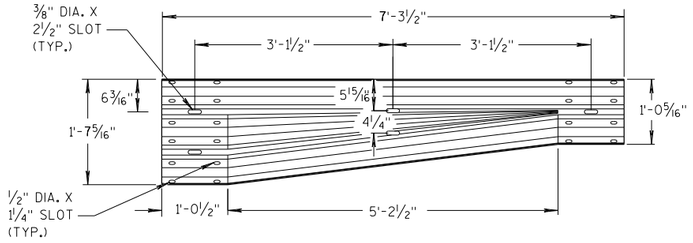
SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

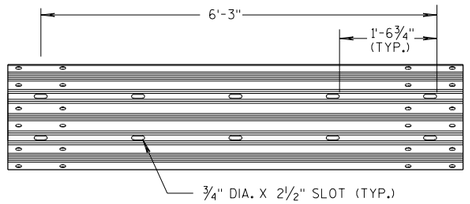
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOF

6

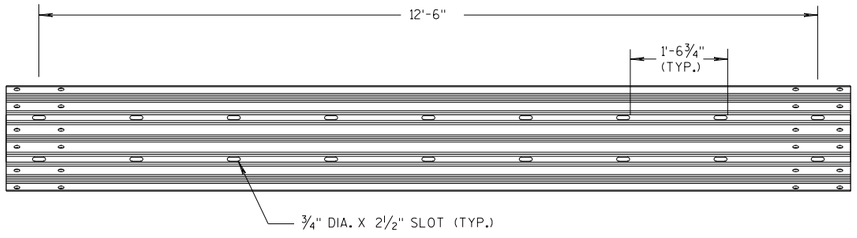
S.D.D. 14 B 45-5b



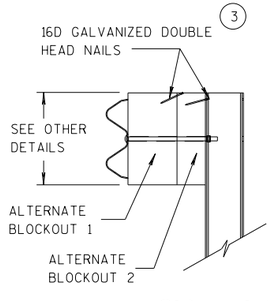
W-BEAM TO THRIE BEAM TRANSITION SECTION



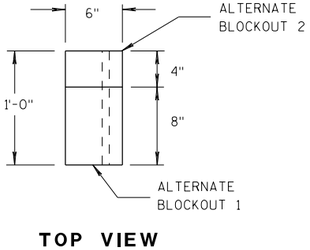
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

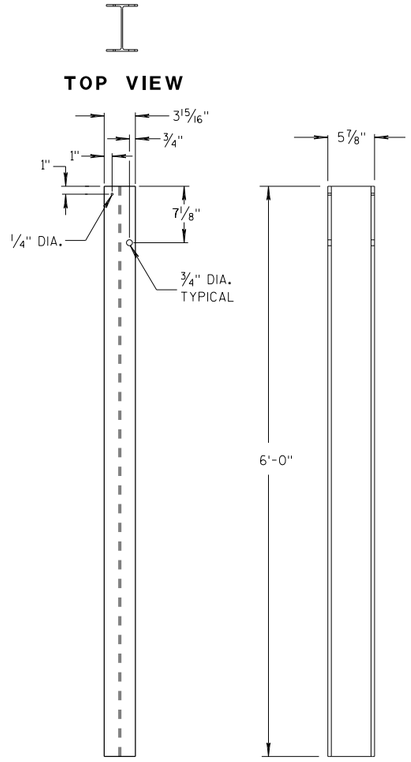


SIDE VIEW



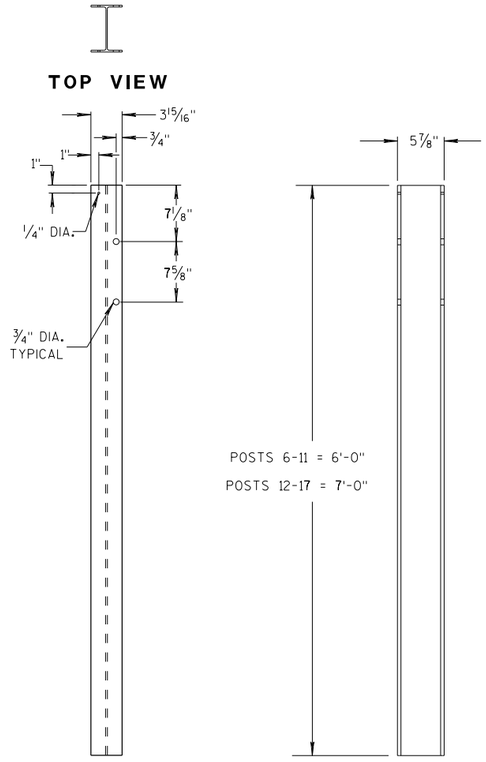
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



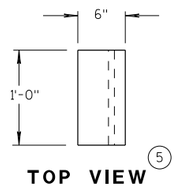
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

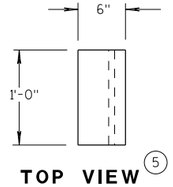


FRONT VIEW SIDE VIEW

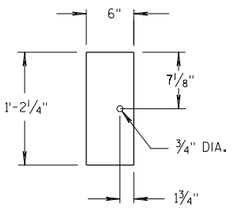
STEEL POSTS 6-17



TOP VIEW (5)

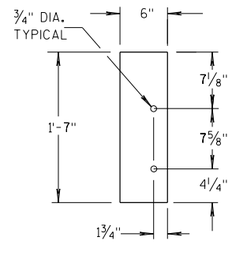


TOP VIEW (5)



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 TRANSPOR

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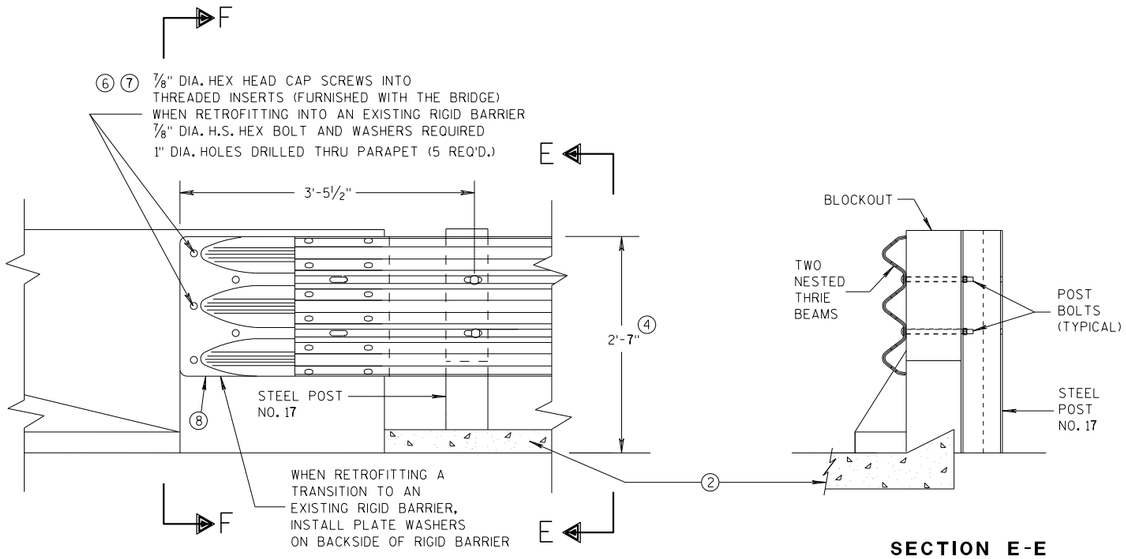


FRONT VIEW

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.

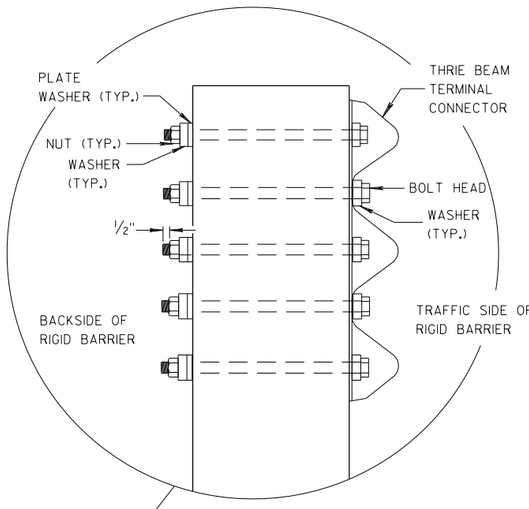
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

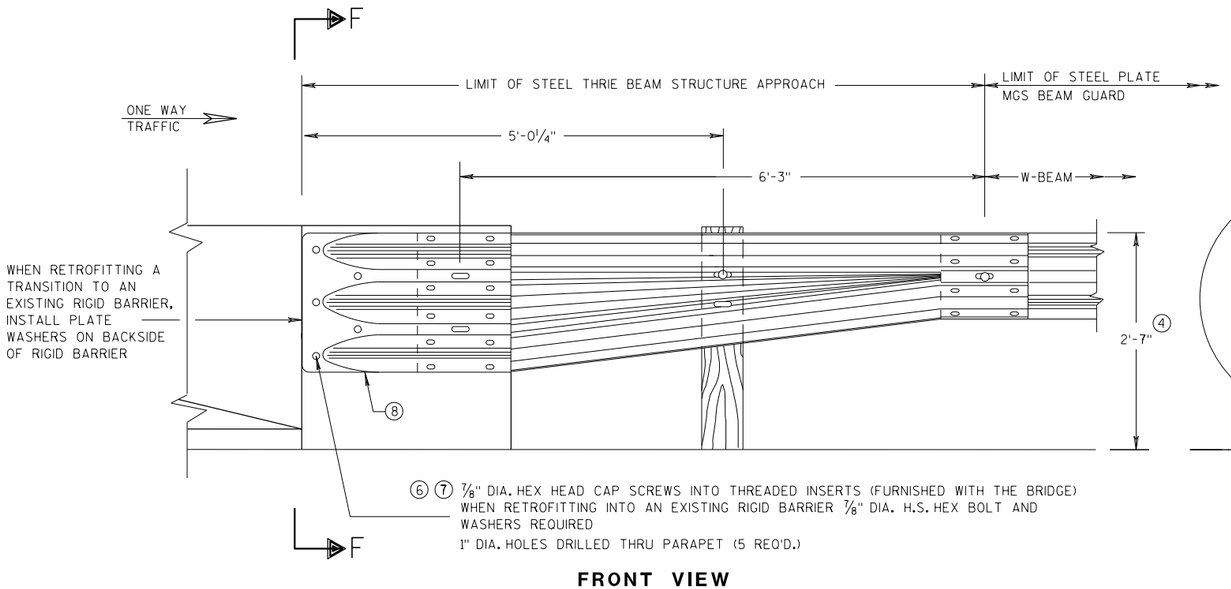
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

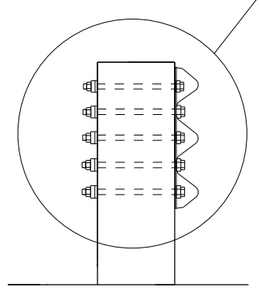
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" 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".

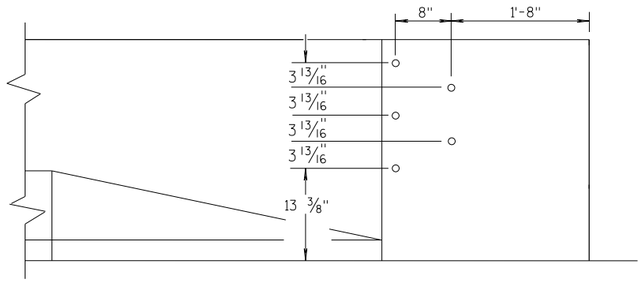




FRONT VIEW



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
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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.

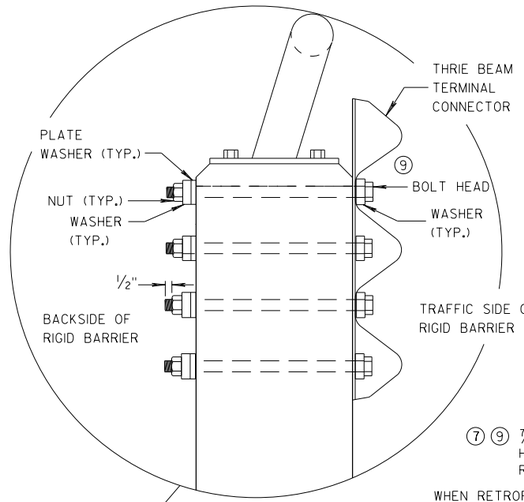
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

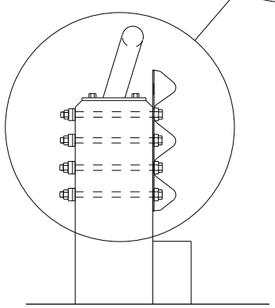
(6) DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(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 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

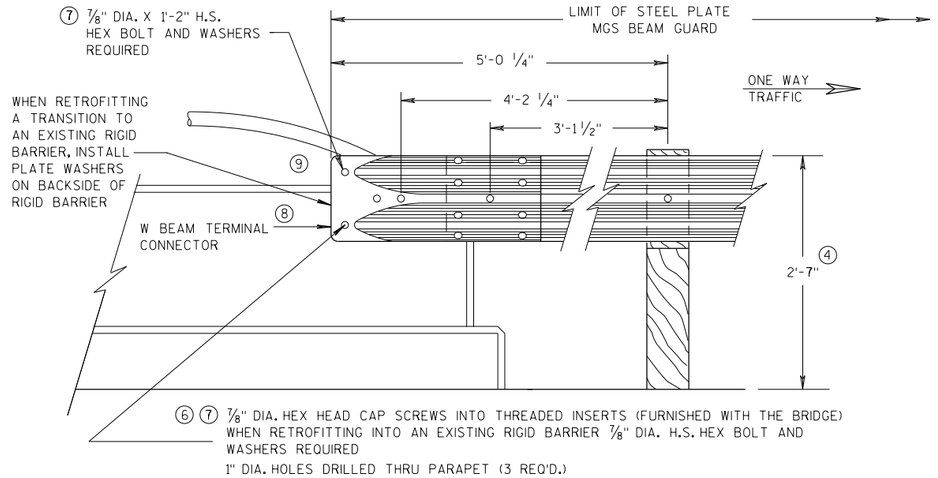
(8) THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".

(9) BOLT, NUT AND WASHERS NOT REQUIRED FOR THIS LOCATION WHEN RETROFITTING AN EXISTING PAPAPET AND THE HOLE IS EITHER ABOVE PARAPET OR WITHIN 4 INCHES OF THE EDGE OF PARAPET.





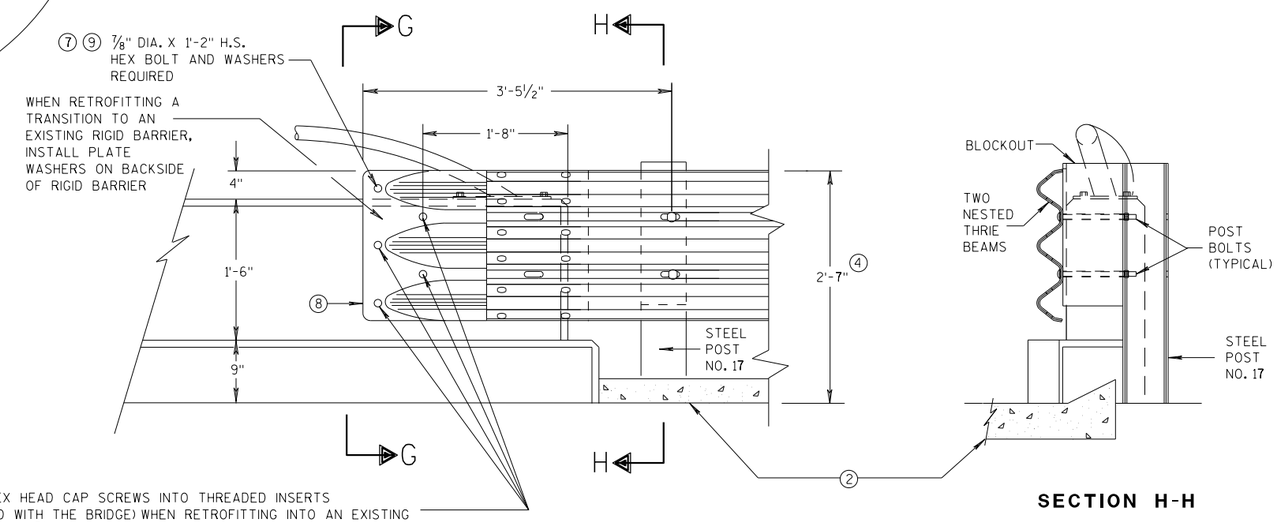
SECTION G-G



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

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



FRONT VIEW

SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

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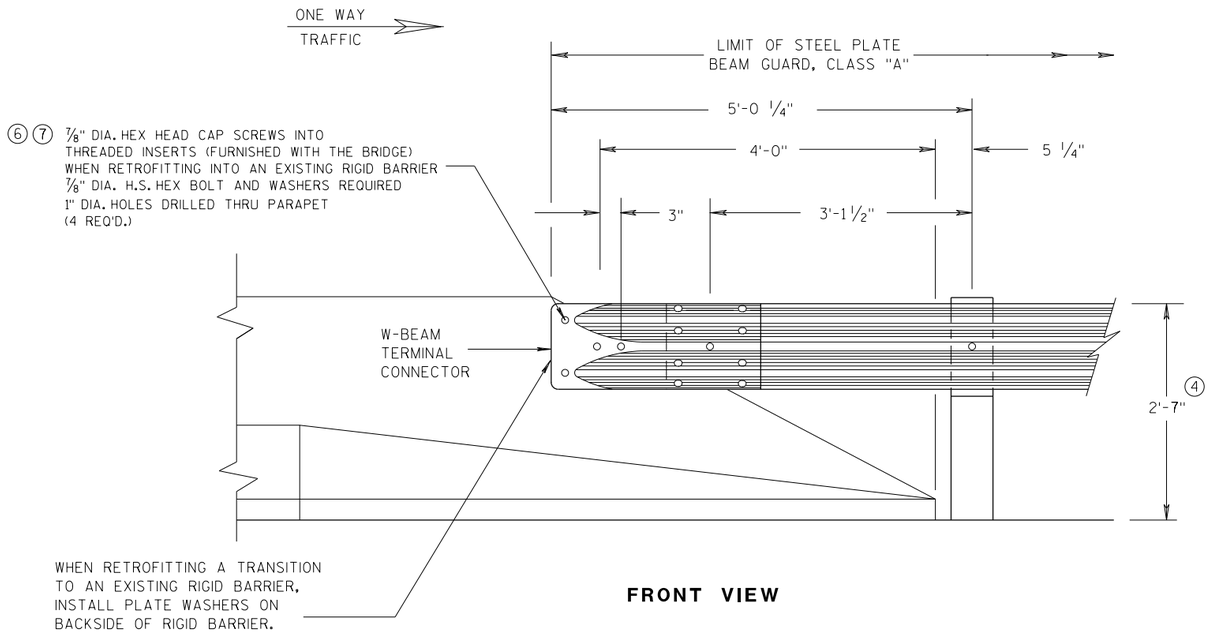


FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

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

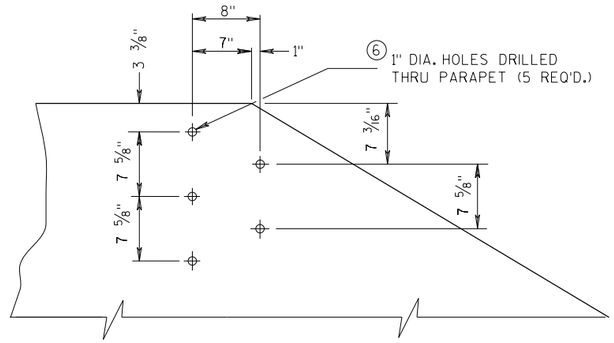
GENERAL NOTES

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

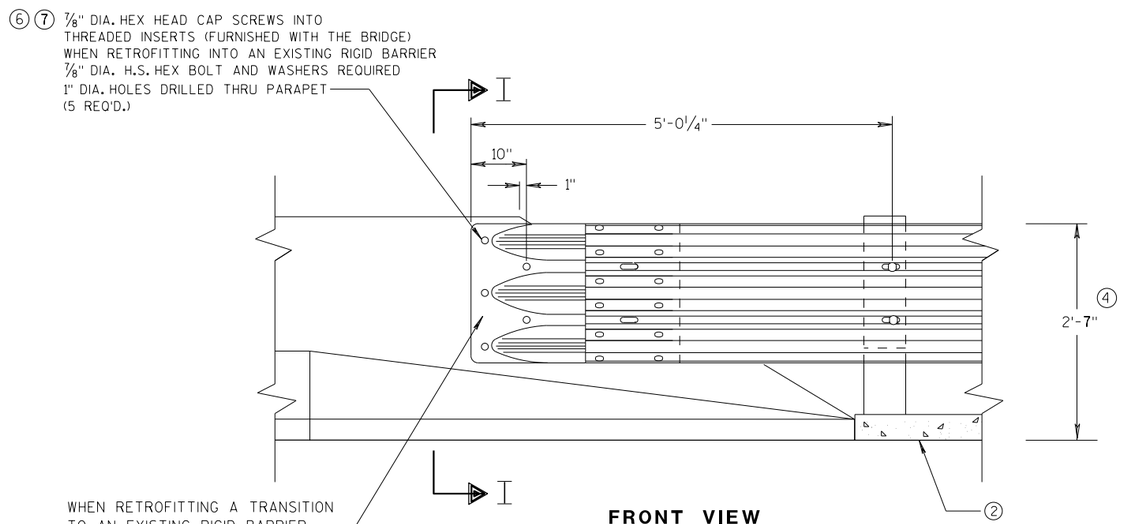
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

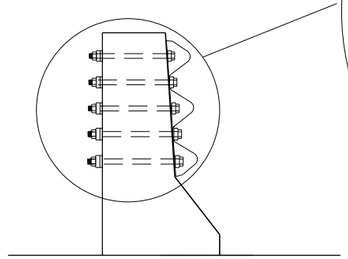
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.



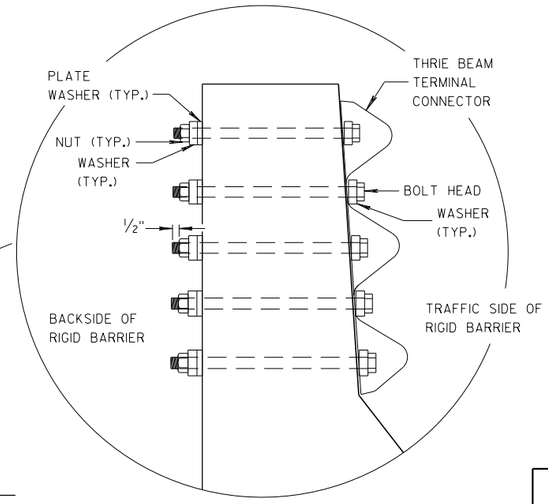
DRILL HOLE LOCATION AND PATTERN
FOR THRIE BEAM CONNECTION



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

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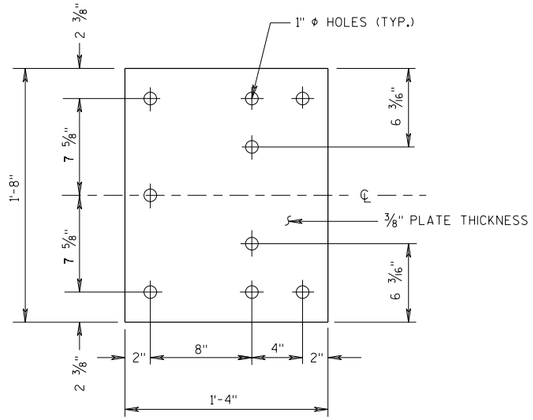
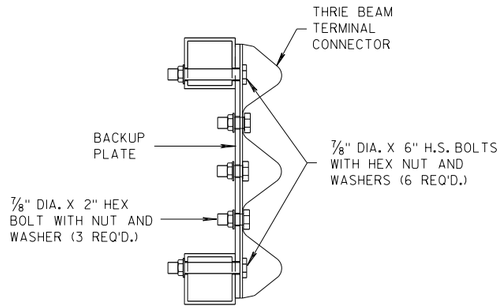
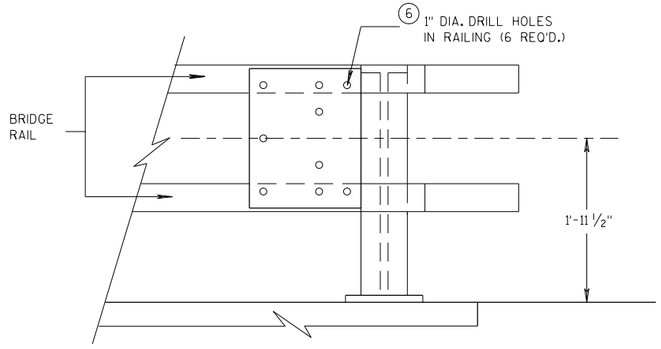


BACK-UP PLATE DETAIL



SECTION J-J

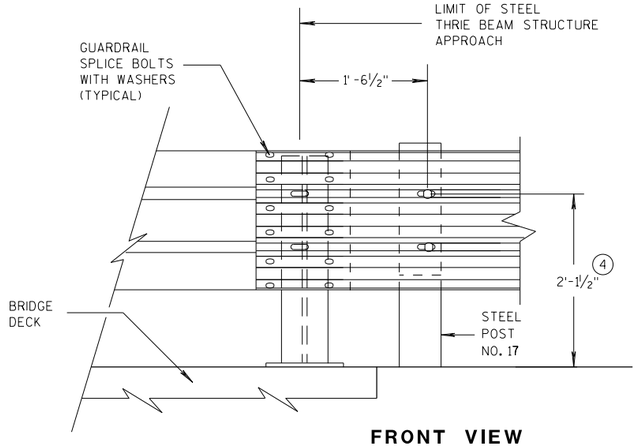


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

GENERAL NOTES

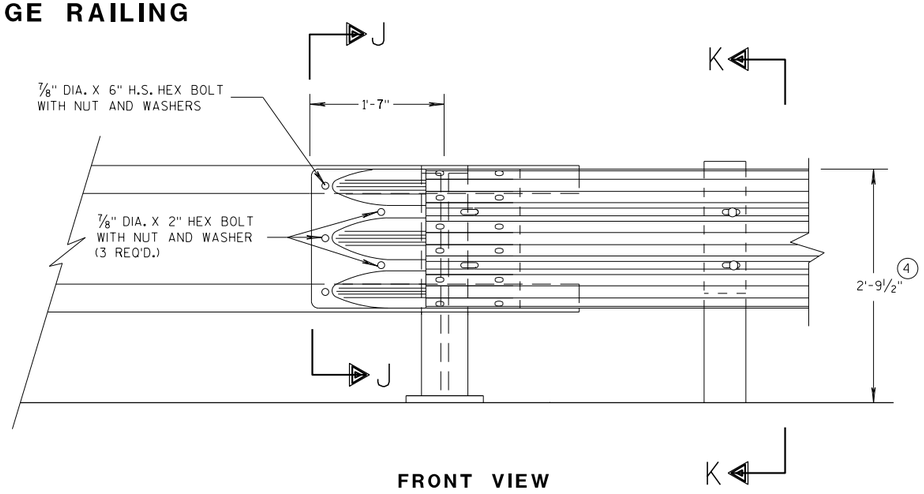
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

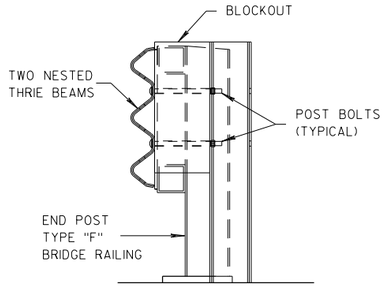


FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



FRONT VIEW



SECTION K-K

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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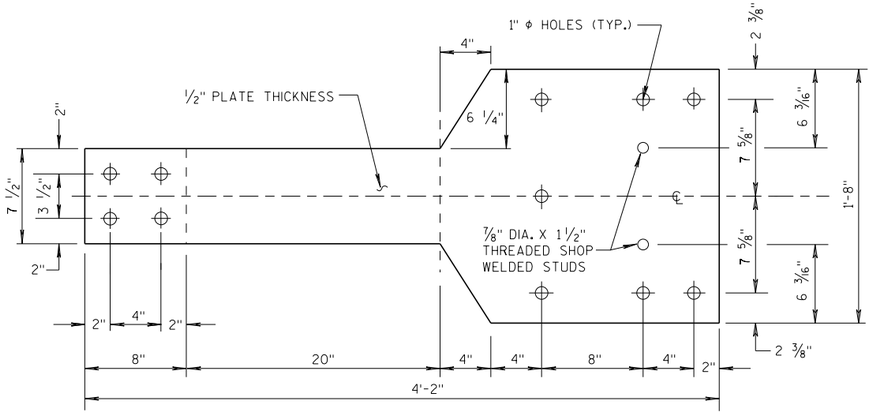
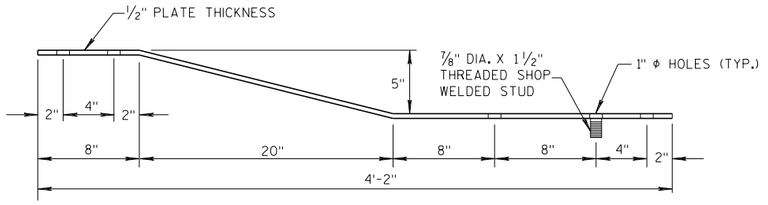
GENERAL NOTES

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

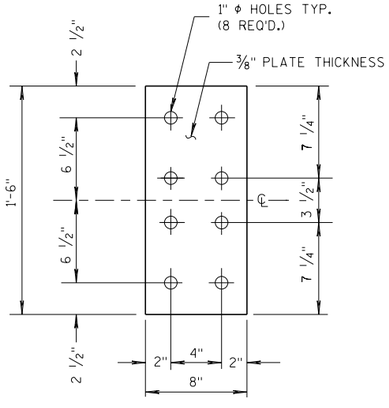


FRONT VIEW

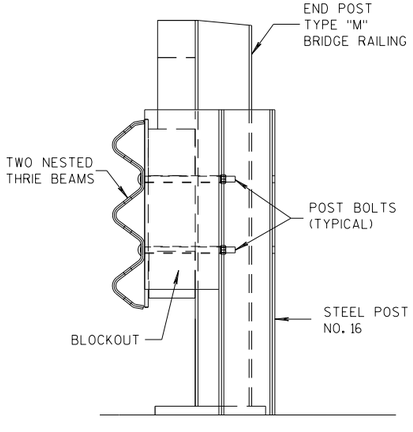


PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

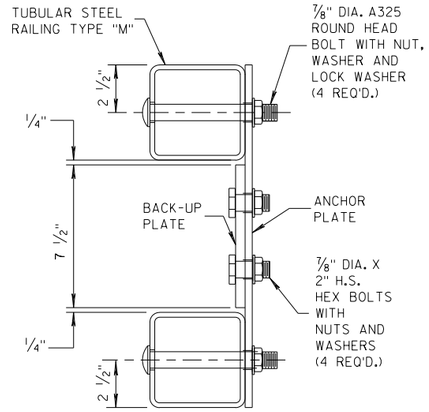


FRONT VIEW

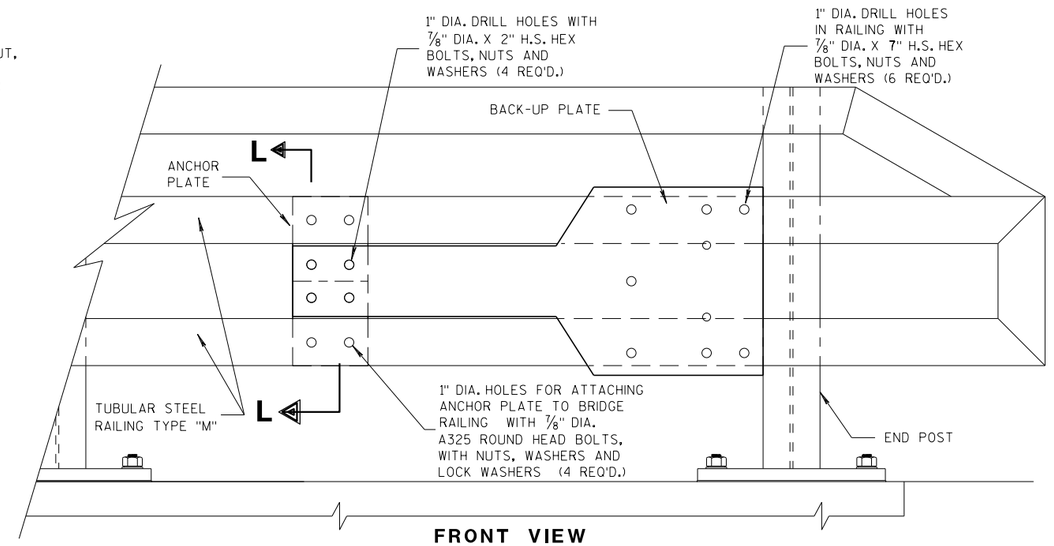


SECTION M-M

ANCHOR PLATE DETAIL, TYPE "M"

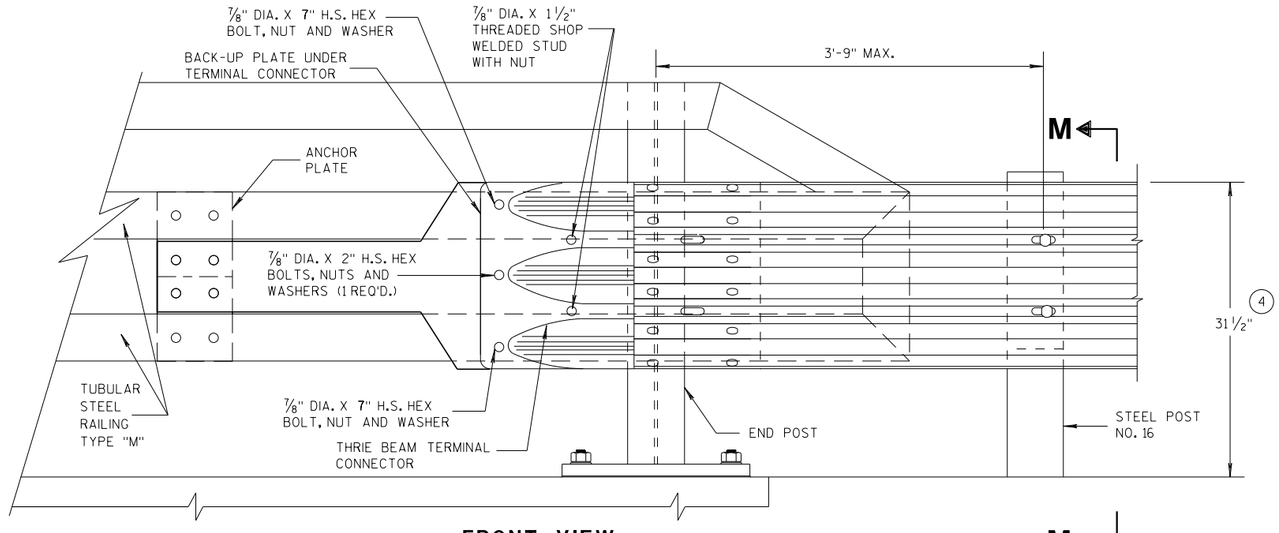


SECTION L-L

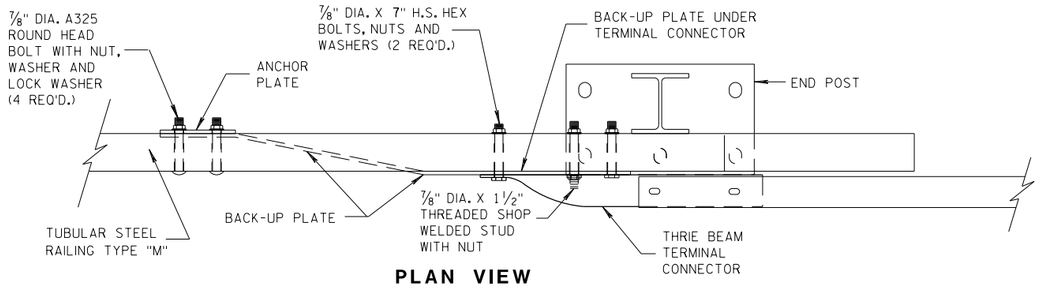


FRONT VIEW

ANCHOR AND BACK-UP PLATE MOUNTING TO BRIDGE RAILING, TYPE "M"



FRONT VIEW



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

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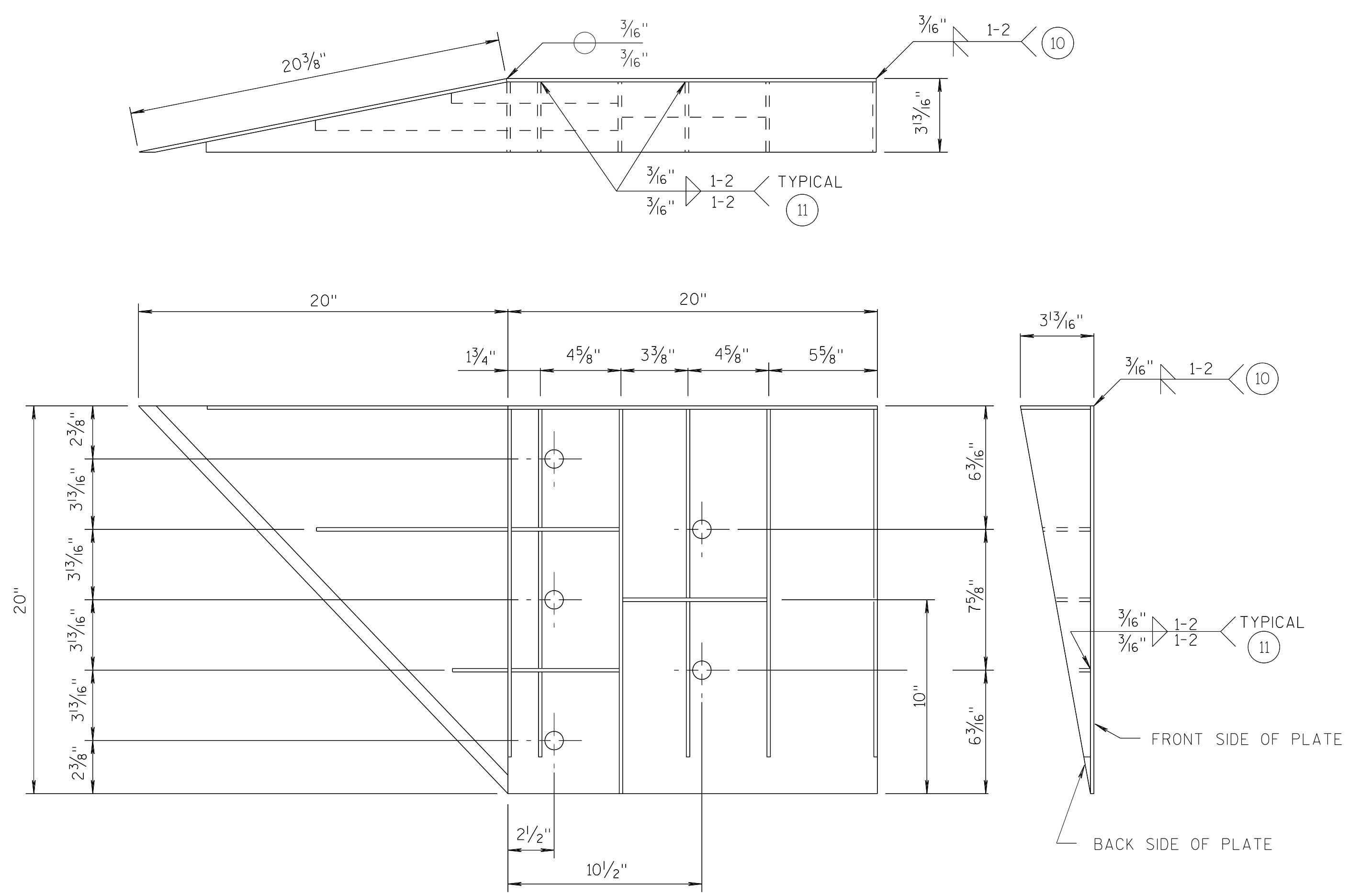

WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

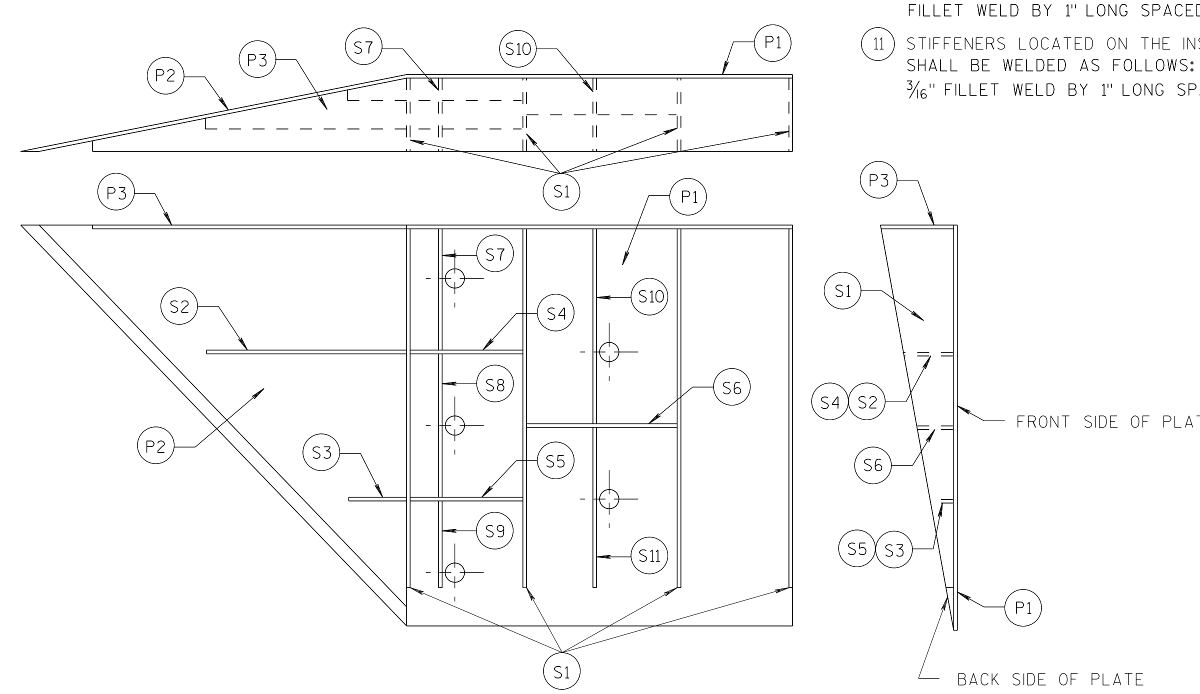

PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK.

CONNECTOR PLATE SHALL BE FABRICATED FROM ASTM GRADE A36 STEEL AND GALVANIZED.

FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

(10) STIFFENERS LOCATED AT THE OUTSIDE EDGES OF THE COVER PLATES SHALL BE WELDED AS FOLLOWS: SINGLE BEVEL GROOVE WELD ON EXTERNAL SIDES AND 3/16" FILLET WELD BY 1" LONG SPACED AT 2" ON INTERNAL SIDES.

(11) STIFFENERS LOCATED ON THE INSIDE OF THE COVER PLATE SHALL BE WELDED AS FOLLOWS: 3/16" FILLET WELD BY 1" LONG SPACED AT 2".

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

PLATE	QUANTITY	SHAPE	SIZE (A x B x C x D)	THICKNESS
P1	1	B A	20" x 20"	3/16"
P2	1	B A C	20" x 20" x 28 9/16"	3/16"
P3	1	B A C D	39" x 3 5/8" x 20" x 19 5/16"	3/16"
S1	4	B A C	18 7/16" x 3 5/8" x 18 3/4"	1/4"
S2	1	B A C D	10 1/4" x 2 7/16" x 10 3/8" x 1/2"	1/4"
S3	1	B A C D	3" x 1 1/16" x 3 1/8" x 1/2"	1/4"
S4	1	B A	6 1/8" x 2 7/16"	1/4"
S5	1	B A	6 1/8" x 1 1/16"	1/4"
S6	1	B A	7 3/4" x 1 3/4"	1/4"
S7	1	A D B C	2 9/16" x 6" x 3 5/8" x 5 7/8"	1/4"
S8	1	A D B C	1 5/32" x 7 1/2" x 2 1/2" x 7 3/8"	1/4"
S9	1	C A B	6 1/16" x 6 3/16" x 1 3/32"	1/4"
S10	1	A D B C	1 7/8" x 9 7/8" x 3 5/8" x 9 11/16"	1/4"
S11	1	C A B	8 1/2" x 8 3/4" x 1 13/16"	1/4"

SINGLE SLOPE CONNECTION PLATE

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
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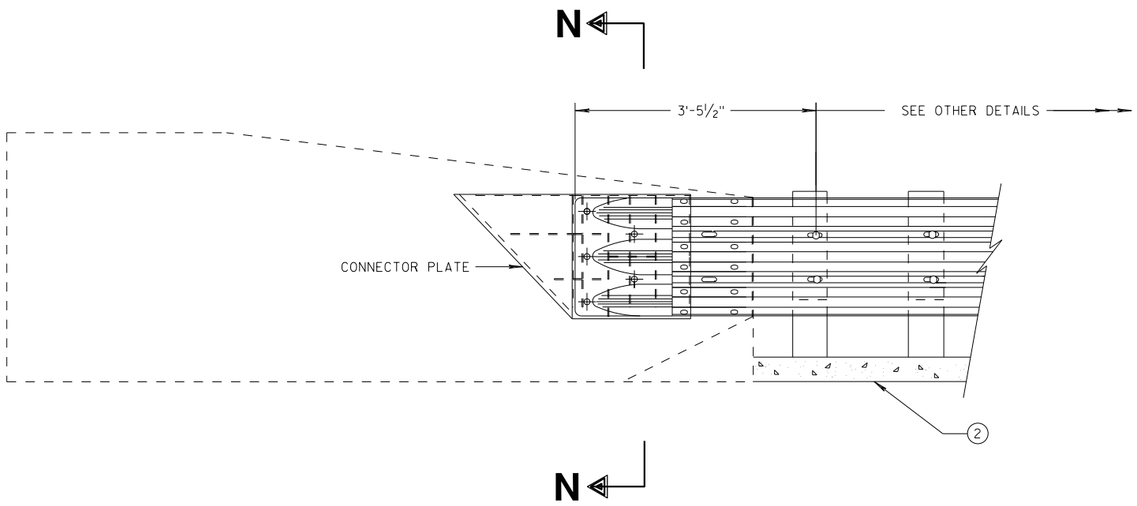
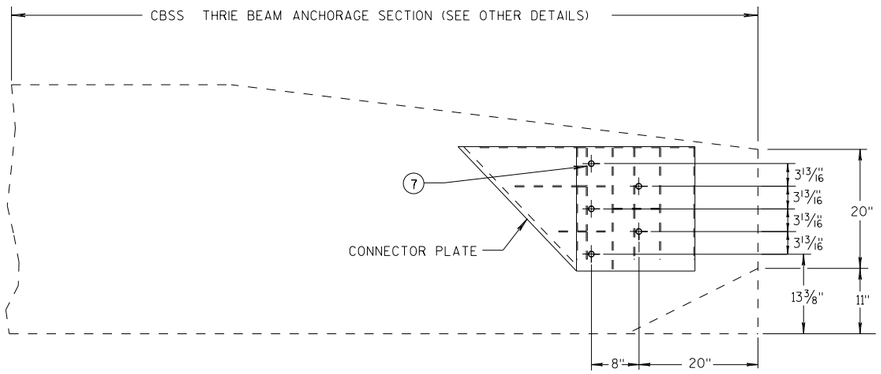
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA



THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



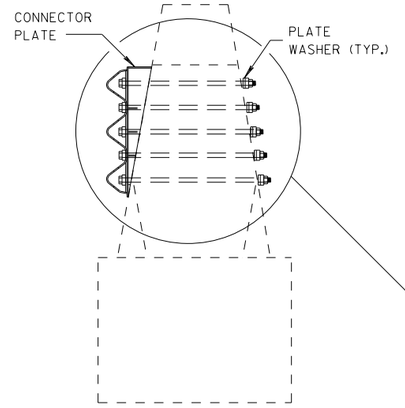
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

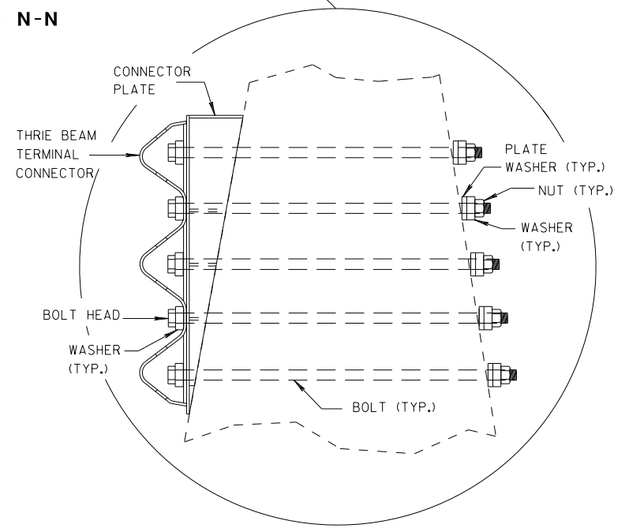
CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

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

(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 ⅝" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.



SECTION N-N



MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS DI
UNIT SUPERVIS

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

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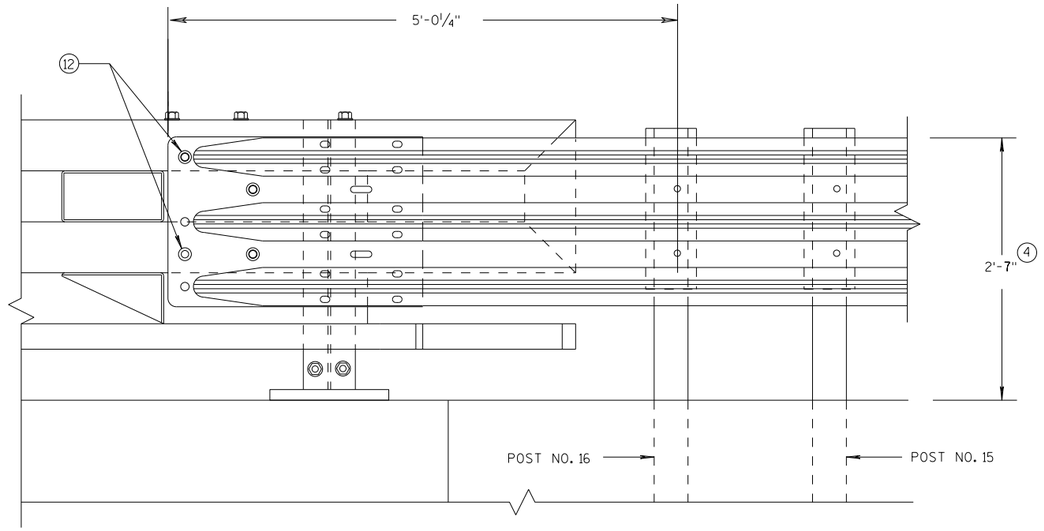
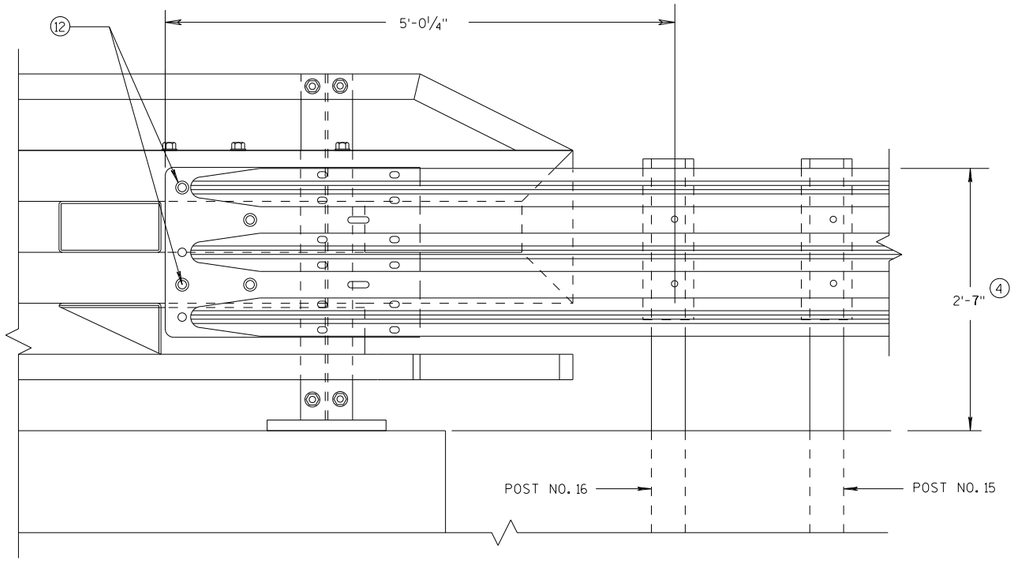
S.D.D. 14 B 45-5j



ELEVATION OF DETAIL AT NY3 END POST

THRIE BEAM RAIL ATTACHMENT



ELEVATION OF DETAIL AT NY4 END POST

THRIE BEAM RAIL ATTACHMENT

GENERAL NOTES

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

(12) 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. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND 1/2-INCH BEYOND NUT.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS D
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FHWA

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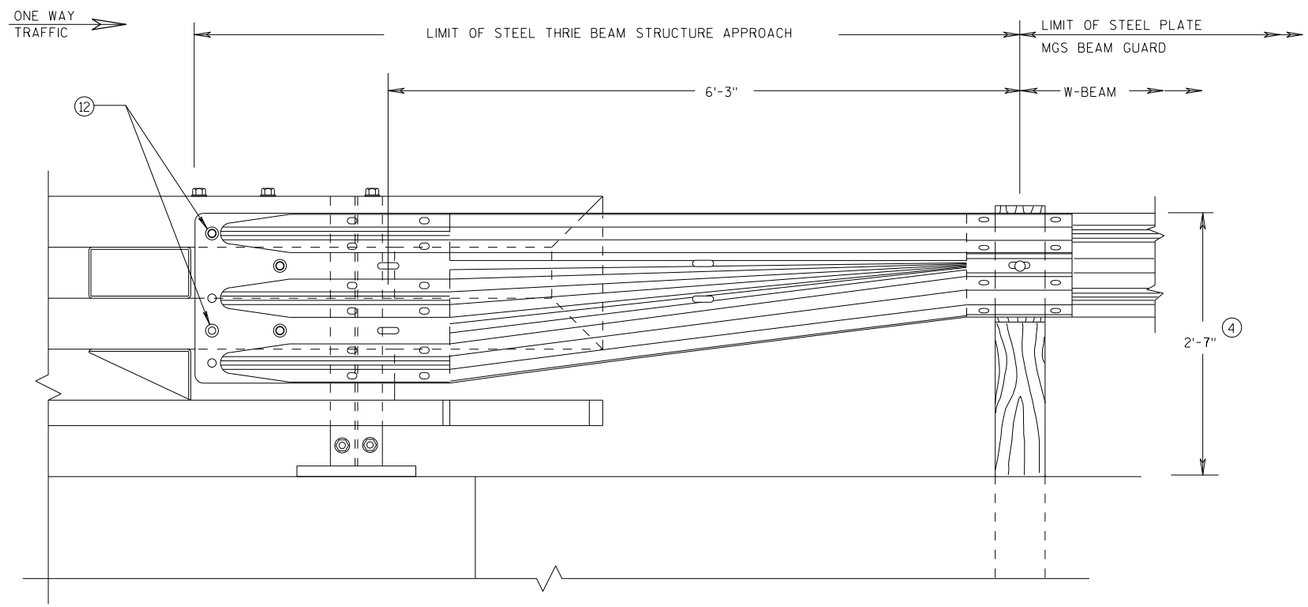
S.D.D. 14 B 45-5k



FRONT VIEW

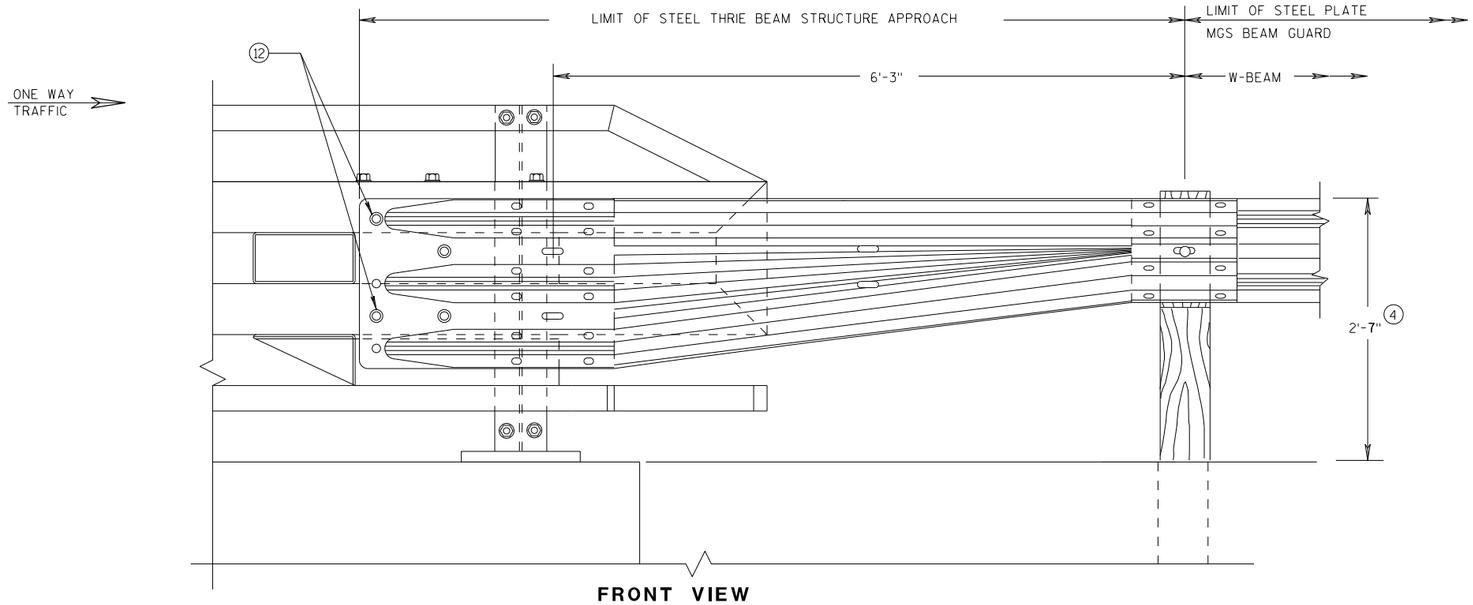
W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY3"

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

GENERAL NOTES

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

(12) 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. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND 1/2-INCH BEYOND NUT.



FRONT VIEW

W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY4"

(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
7/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS D UNIT SUPERVIS
FHWA

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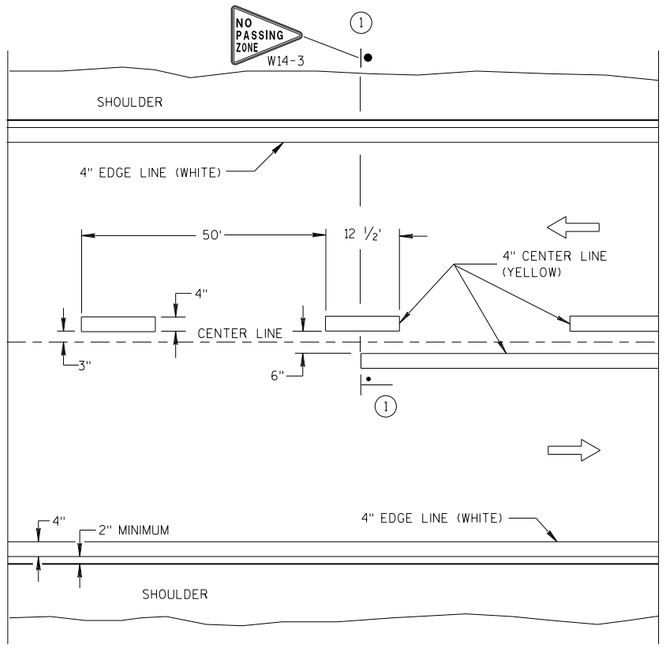
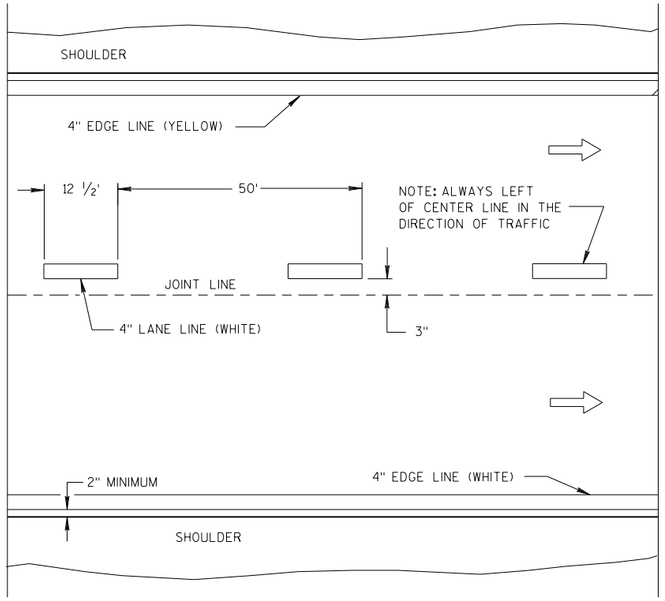
S.D.D. 14 B 45-5L

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



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT 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.

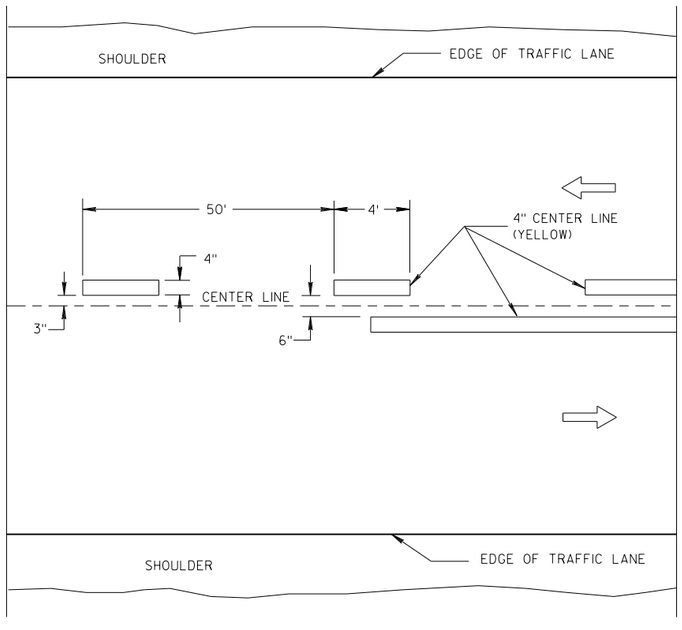
NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

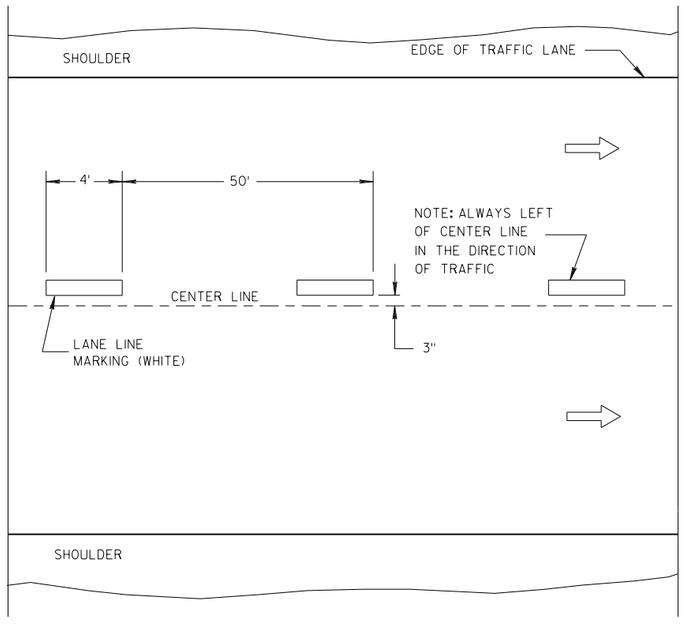
LEGEND

"T" MARKING

POST MOUNTED SIGN



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018 DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MARKING ENGINEER

FHWA

6

S.D.D. 15 C 8-19a

6

S.D.D. 15 C 8-19a

GENERAL NOTES

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

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

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

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

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

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

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

TABLE A

SHOULDER TAPER LENGTH (FEET)					BUFFER SPACE (FEET)
S \ W	4	6	8	10	
30	20	30	40	50	200
35	30	45	55	70	250
40	40	55	75	90	305
45	60	90	120	150	360
50	70	100	135	170	425
55	75	110	150	185	495

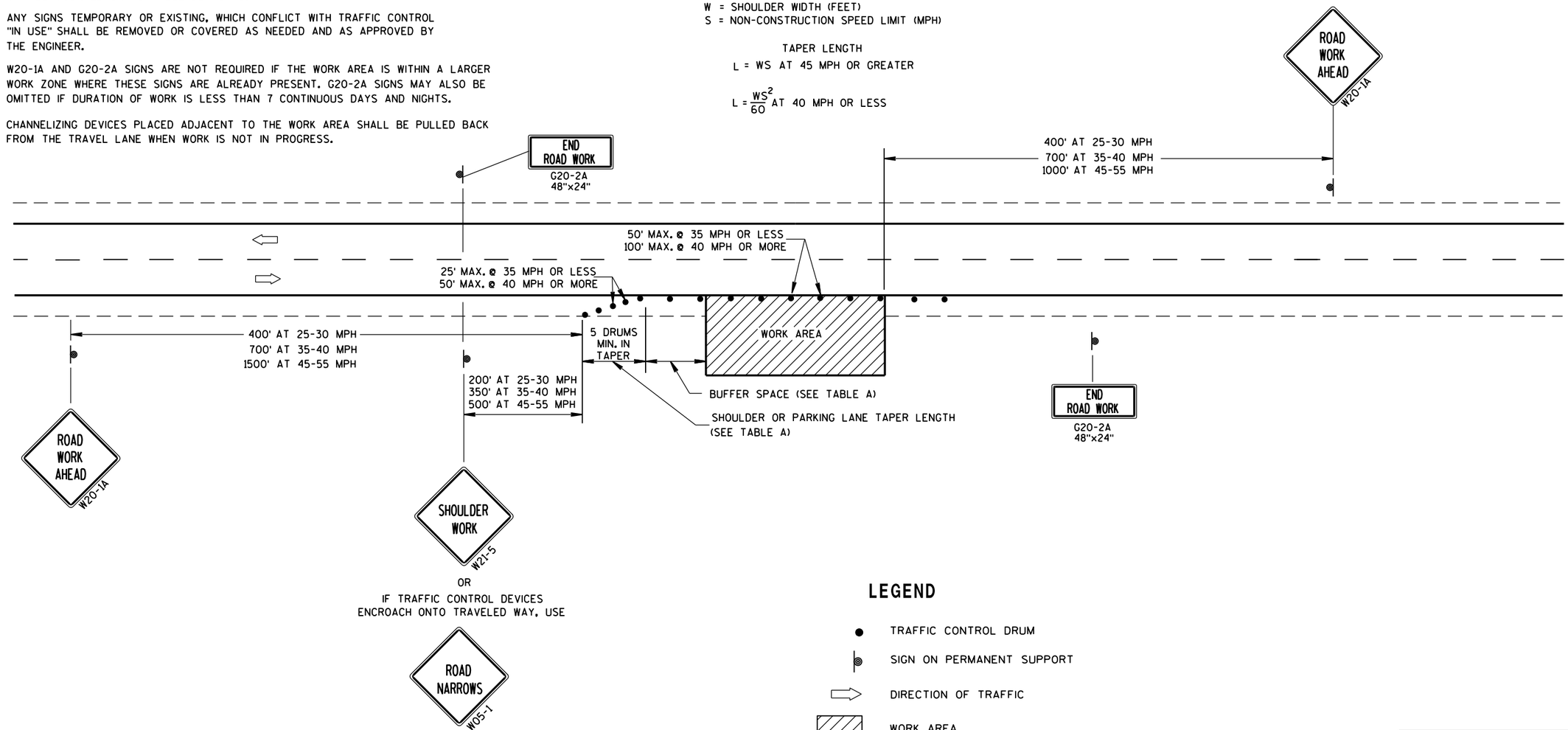
W = SHOULDER WIDTH (FEET)
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

TAPER LENGTH

L = WS AT 45 MPH OR GREATER

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

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



LEGEND

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

July 14, 2015 — DATE

/S/ Peter Amakobe Atepe — STATEWIDE WORK ZO... SAFETY ENGI... FIC

FHWA

6

S.D.D. 15 D 28-3

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S.D.D. 15 D 28-3

LEGEND

- SIGN ON PERMANENT SUPPORT
- REMOVING PAVEMENT MARKING
- TYPE III BARRICADE WITH ATTACHED SIGN
- CONCRETE BARRIER TEMPORARY PRECAST
- FLAGS, 16" x 16" MIN., (ORANGE)
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- ASPHALTIC PAVEMENT WIDENING
- DIRECTION OF TRAFFIC
- 4" X 6" WOOD POST
- TEMPORARY SIGNAL WITH BACKPLATE AND 12-INCH LENSES ON BREAKAWAY POLE

W057-52
36"x24"

INSTALL ON EACH APPROACH AT THE CLOSEST INTERSECTION WITH A STATE OR COUNTY TRUNK HIGHWAY, OR AS DIRECTED BY THE ENGINEER. WIDTH ON SIGN TO BE APPROX. 1-FOOT LESS THAN AVAILABLE WIDTH. (OMIT IF AVAILABLE WIDTH IS MORE THAN 16 FEET.)

GENERAL NOTES

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

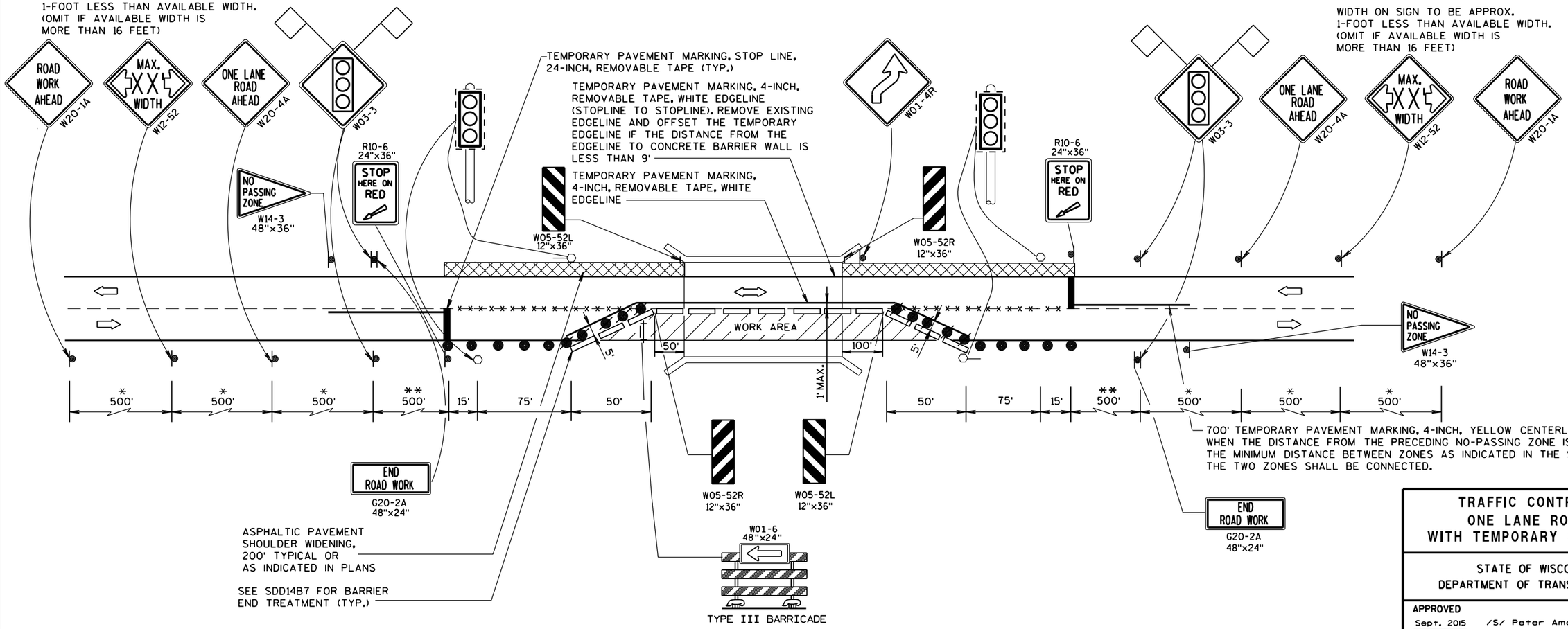
SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

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

PLACE TEMPORARY PAVEMENT MARKING EDGELINE AND CENTERLINE, AND REMOVE EXISTING PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS OR AS NOTED ON DETAIL.

* 500-FOOT SPACING SHOWN IS FOR ROADWAYS WITH A PRE-CONSTRUCTION REGULATORY SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350-FOOT TYPICAL SPACING. FOR 25-30 MPH, USE 200-FOOT TYPICAL SPACING.

** USE 300' SPACING IF PRE-CONSTRUCTION REGULATORY SPEED LIMIT IS 35 MPH OR LESS.



TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept. 2015 — DATE

/S/ Peter Amakobe Atepe — STATEWIDE WORK ZO SAFETY ENGI

FHWA

C

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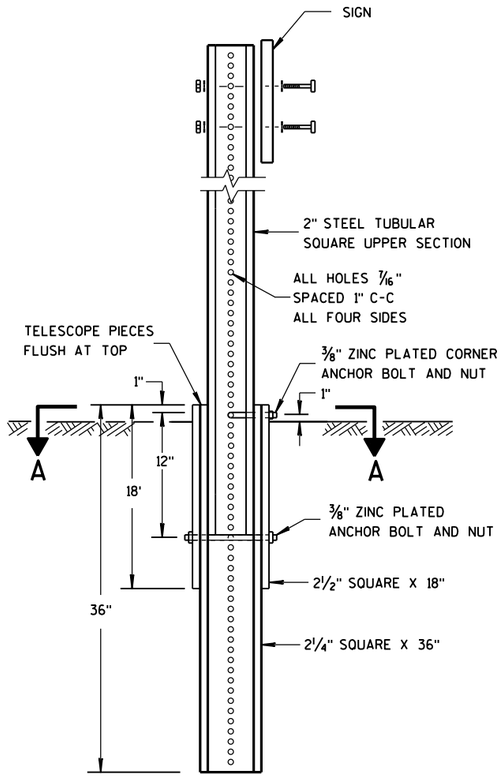
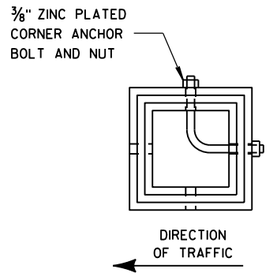
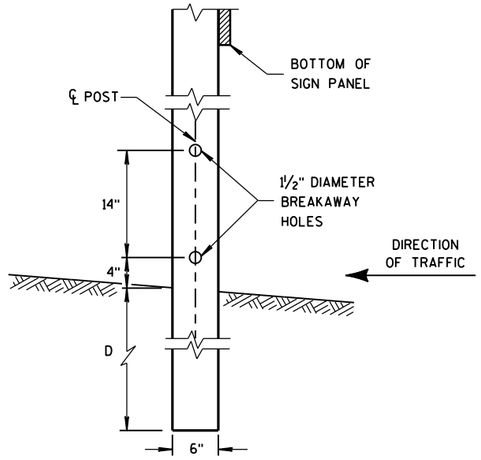
S.D.D. 15 D 33-4



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



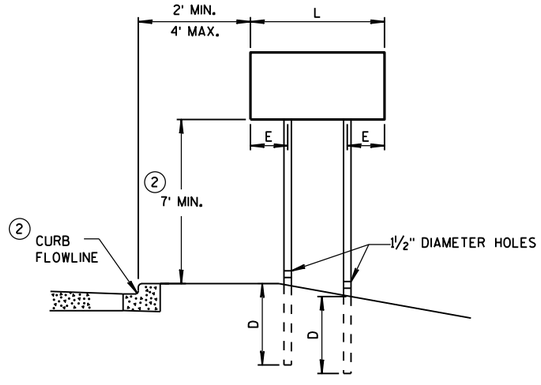
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

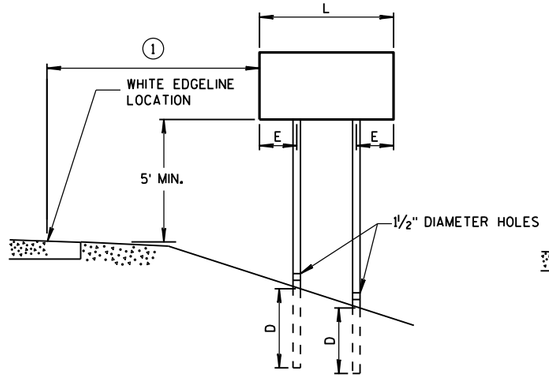
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

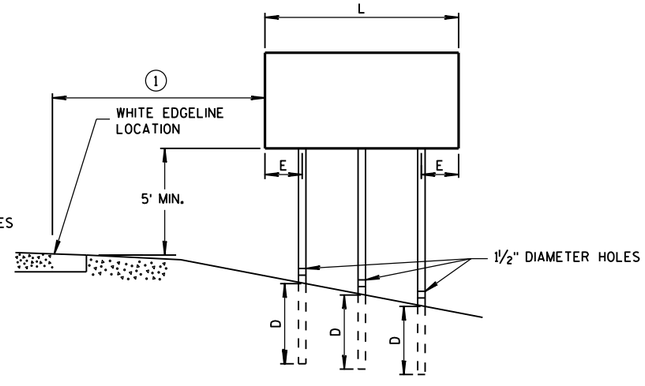
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

(3) FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

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

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

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

WOOD POST EMBEDMENT DEPTH

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

4" X 6" WOOD POST

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

SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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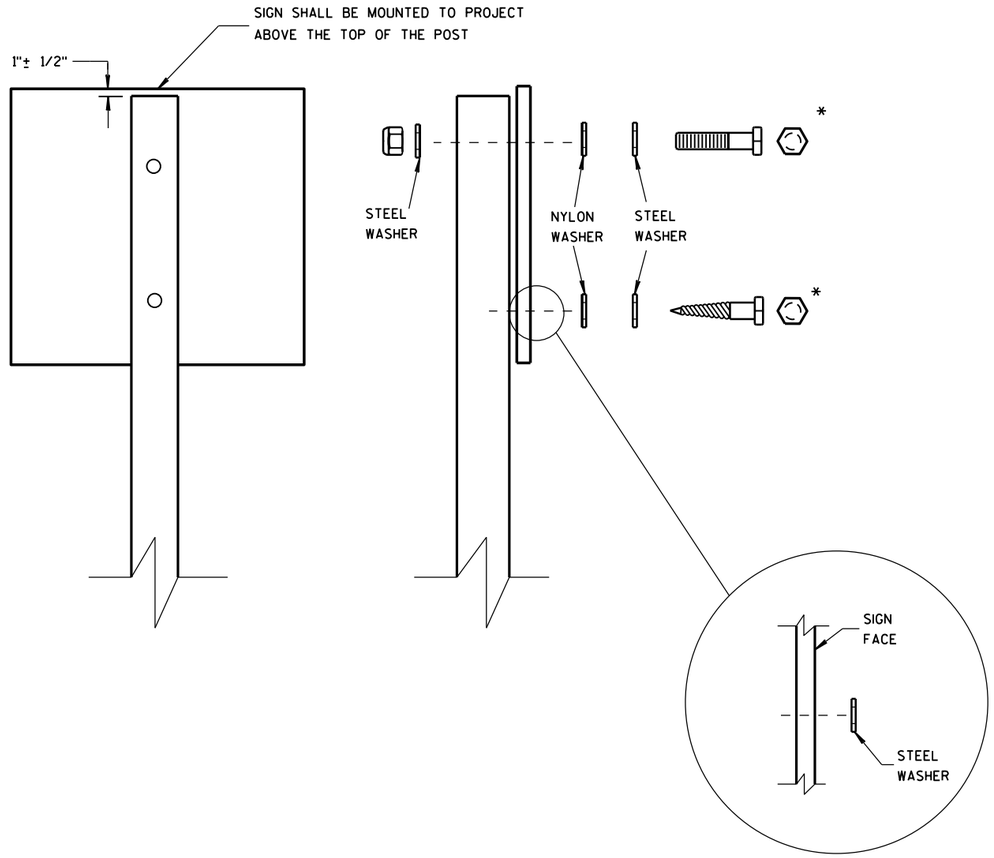
S.D.D. 15 D 38-2a
S.D.D. 15 D 38-2a



WASHER PLACEMENT WHEN SIGN HAS OTHER THAN TYPE H OR TYPE F FACE

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

A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3

B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC 3

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

WOOD POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" X 3"

MACHINE BOLTS - 5/16" X 6-1/2" OR 7" LENGTH W/ NUTS

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" LENGTH W/ NUTS

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

WASHERS (ALL POSTS) -

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

1-1/4" O.D. X 3/8" I.D. X .080 NYLON FOR ALL TYPE H SIGNS

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

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S.D.D. 15 D 38-2b

S.D.D. 15 D 38-2b

ATTACHMENT OF SIGNS TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

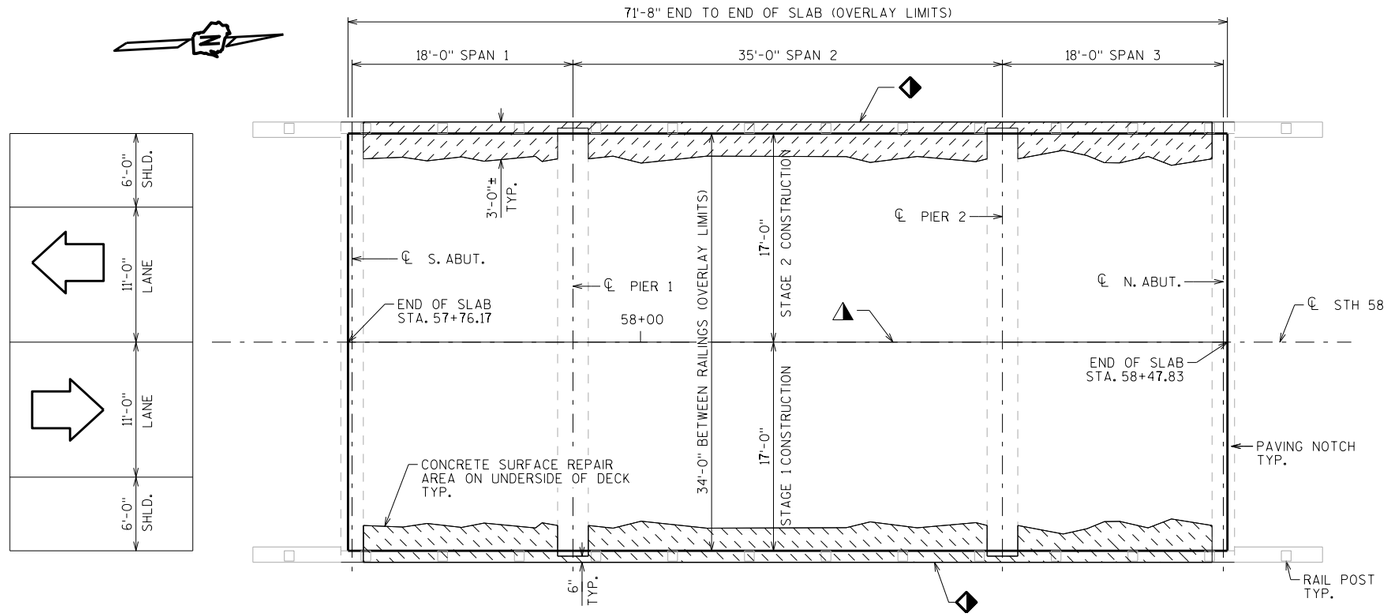
June 2017
DATE

/S/ Andrew Heldtke
WORK ZONE ENG

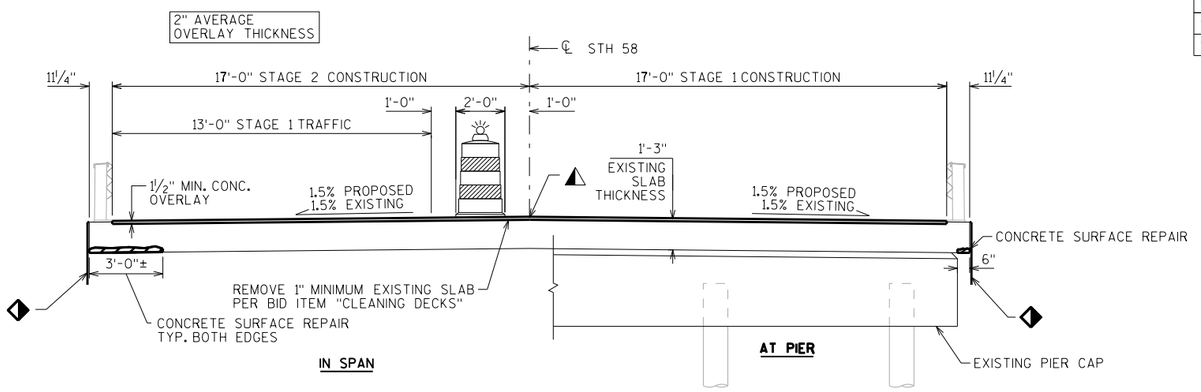
FHWA

STATE PROJECT NUMBER

5752-00-81



PLAN



CROSS SECT. THRU RDWY.

(STAGE 1 TRAFFIC SHOWN, STAGE 2 TRAFFIC IS SIMILAR)
(LOOKING NORTH)

DESIGN DATA

LIVE LOAD:

DESIGN RATING: HS-20
INVENTORY RATING: HS-22
OPERATING RATING: HS-37
MAXIMUM STANDARD PERMIT VEHICLE LOAD = 190 KIPS

MATERIAL PROPERTIES:

CONCRETE SURFACE REPAIR - f'c = 4,000 P.S.I.
CONCRETE MASONRY OVERLAY DECKS - f'c = 4,000 P.S.I.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE ENTIRE TOP SURFACE OF THE NEW CONCRETE OVERLAY.

A MINIMUM OF 1-INCH OF CONCRETE SHALL BE REMOVED FROM THE ENTIRE BRIDGE DECK UNDER THE BID ITEM "CLEANING DECKS".

ANY EXCAVATION REQUIRED TO COMPLETE THE OVERLAY AT THE ABUTMENTS TO BE CONSIDERED INCIDENTAL TO THE BID ITEM "CONCRETE MASONRY OVERLAY DECKS".

PREPARATION DECKS TYPE 1, PREPARATION DECKS TYPE 2, AND FULL-DEPTH DECK REPAIR AREAS ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION AND FULL-DEPTH DECK REPAIRS SHALL BE FILLED WITH "CONCRETE MASONRY OVERLAY DECKS".

PROFILE GRADE LINE SHALL BE DETERMINED IN THE FIELD BASED ON A MINIMUM OVERLAY THICKNESS OF 1½" PLACED ABOVE THE DECK SURFACE AFTER SURFACE PREPARATION. EXPECTED AVERAGE OVERLAY THICKNESS AT THE CROWN IS 2". IF EXPECTED AVERAGE OVERLAY THICKNESS IS EXCEEDED BY MORE THAN ½", CONTACT THE STRUCTURES DESIGN SECTION.

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
203.0210.S	ABATEMENT OF ASBESTOS CONTAINING MATERIAL B-56-67	LS	1
502.3200	PROTECTIVE SURFACE TREATMENT	SY	271
509.0301	PREPARATION DECKS TYPE 1	SY	1
509.0302	PREPARATION DECKS TYPE 2	SY	1
509.0500	CLEANING DECKS	SY	271
509.1500	CONCRETE SURFACE REPAIR	SF	437
509.2000	FULL-DEPTH DECK REPAIR	SY	1
509.2500	CONCRETE MASONRY OVERLAY DECKS	CY	16

◆ METAL DRIP EDGE TO BE REMOVED PRIOR TO CONCRETE SURFACE REPAIR AND REINSTALLED WHEN REPAIR IS COMPLETE

◭ LONGIT. CONST. JOINT

LIST OF DRAWINGS

1. CONCRETE OVERLAY

STRUCTURE DESIGN CONTACTS:

MICHAEL LARSON (608) 267-4539
LAURA SHADEWALD (608) 267-9592

NO.	DATE	REVISION	BY

BUREAU OF STRUCTURES

ACCEPTED William C. Dreher LLS 1/28/19
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-56-67

STH 58 OVER LITTLE BARABOO RIVER

COUNTY SAUK | TOWN/~~CITY/VILLAGE~~ LA VALLE

DESIGN SPEC. REHABILITATION N/A

DESIGNED BY	DESIGNED CK'D.	DRAWN BY	PLANS CK'D.
MJL	JLR	MJL	JLR

CONCRETE OVERLAY

SHEET 1 OF 1

50

I.D. 5752-00-01A DATE: JULY 2018

SCALE = 6.00

EARTHWORK SUMMARY

		205.0100									
		EXCAVATION COMMON		UNUSABLE	AVAILABLE	REDUCED EBS	REDUCED EBS	UNEXPANDED	EXPANDED	MASS ORDINATE	
		CUT	EBS EXCAVATION	MATERIAL	MATERIAL	IN FILL	BACKFILL	FILL	FILL	+/-	WASTE
						FACTOR	FACTOR		FACTOR		
			5% OF CUT			0.8	1.3		1.25		
CATEGORY	LOCATION	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD		CU YD
0010	STH 58	128	6	76	52			24	30	22	22
	CONSTRUCTION PROJECT TOTALS	128	6	76	52	0	0	24	30	22	22
	Notes:	1. Unusable material measured in cross sections consists of existing asphaltic surface to be removed under a separate pay item.									

Volume Report
Project File: N:\PDS\c3d\57520001\SheetsPlan\090100-xs.dwg
Alignment: 58-Plat
Sample Line Group: SLG-10sc
Start Sta: 55+21.990
End Sta: 60+74.837

EARTHWORK VOLUME REPORT - STH 58

	Cut			Fill		Cumulative Volume			
			Reusable				Reusable		Mass
Station	End Area	Volume	Volume	End Area	Volume	Cut	Cut	Fill	Ordinate
	Sq. Ft.	Cu. Yd.	Cu. Yd.	Sq. Ft.	Cu. Yd.	Cu. Yd.	Cu. Yd.	Cu. Yd.	Cu. Yd.
55+21.990	8.21	0	0	0	0	0	0	0	0
55+50.000	6.34	7.55	7.55	0.47	0.24	7.55	7.55	0.24	7.3
56+00.000	3.31	8.94	8.94	3.37	3.55	16.48	16.48	3.8	12.68
56+30.155	2.86	3.45	3.45	5.25	4.81	19.93	19.93	8.61	11.32
56+58.280	11.68	7.57	7.57	2.59	4.08	27.5	27.5	12.7	14.81
56+67.655	12.47	4.19	4.19	1.59	0.73	31.69	31.69	13.42	18.27
56+83.280	13.21	7.43	7.43	1.17	0.8	39.12	39.12	14.22	24.9
56+95.780	10.7	5.54	5.54	0.23	0.32	44.66	44.66	14.55	30.11
57+20.780	12.07	10.54	10.54	0	0.11	55.2	55.2	14.65	40.55
57+50.000	7.84	10.78	10.78	0	0	65.98	65.98	14.65	51.32
57+67.779	4.01	3.9	3.9	0	0	69.88	69.88	14.65	55.23
STRUCTURE B-56-067									
58+66.000	6	0	0	0.08	0	69.88	69.88	14.65	55.23
59+03.270	8.51	10.01	10.01	0.01	0.06	79.89	79.89	14.71	65.18
59+28.270	7.94	7.62	7.62	0.13	0.07	87.51	87.51	14.78	72.73
59+53.270	8.11	7.43	7.43	1.56	0.78	94.94	94.94	15.56	79.38
59+56.395	7.09	0.88	0.88	3.05	0.27	95.82	95.82	15.83	79.99
59+81.395	6.56	6.32	6.32	3.03	2.81	102.14	102.14	18.64	83.50
60+00.000	7.38	4.8	4.8	2.17	1.79	106.94	106.94	20.43	86.51
60+50.000	7.55	13.83	13.83	0.89	2.83	120.77	120.77	23.26	97.51
60+74.837	7.73	7.03	7.03	0.43	0.61	127.80	127.80	23.87	103.93

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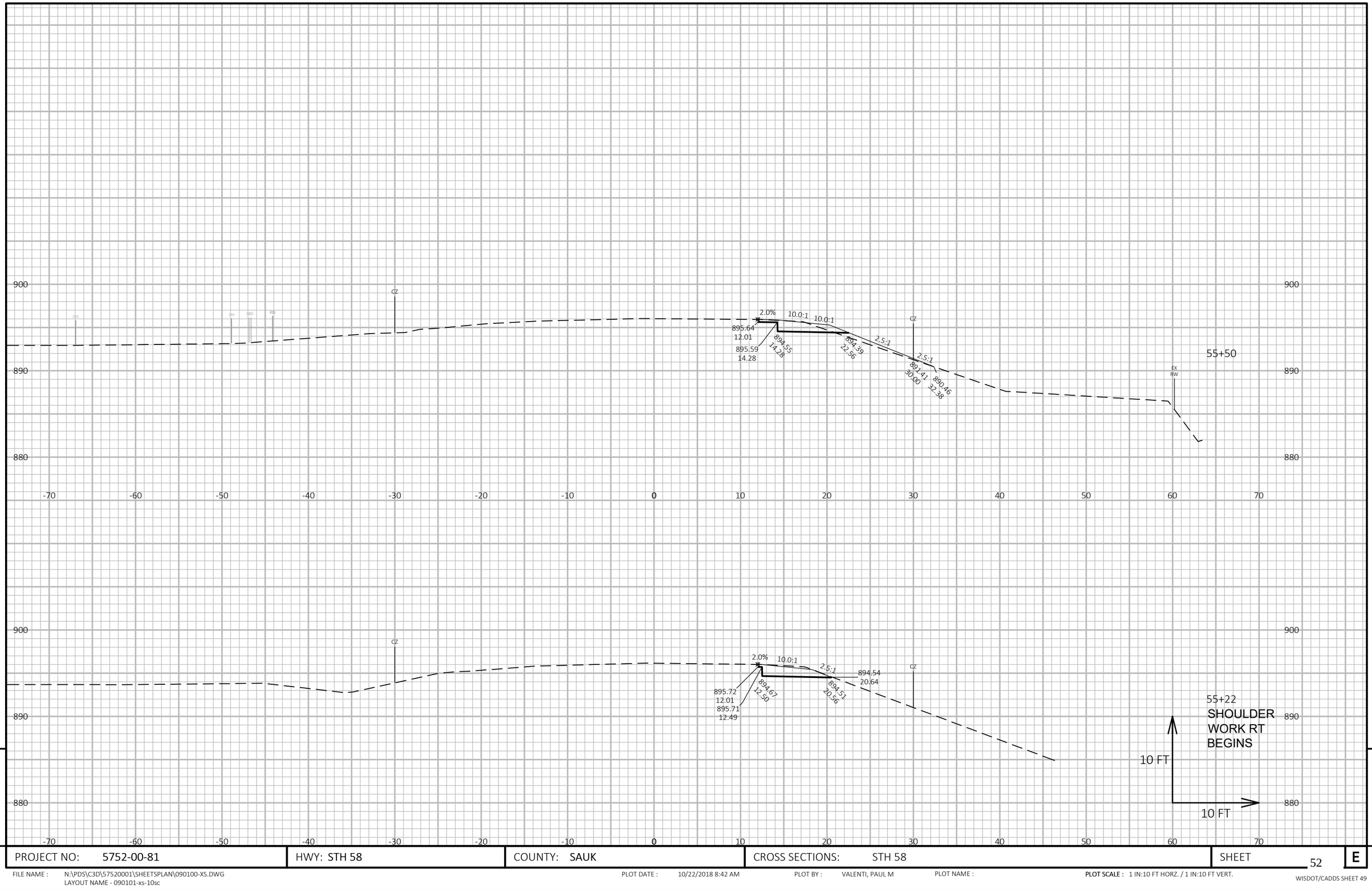
PROJECT NO: 5752-00-81 | **HWY: STH 58** | **COUNTY: SAUK** | **EARTHWORK SUMMARY** | **SHEET NO:** 51 | **E**

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ ORG DATE : _____ ORIGINATOR : DIST _ PLOT SCALE : 1:1



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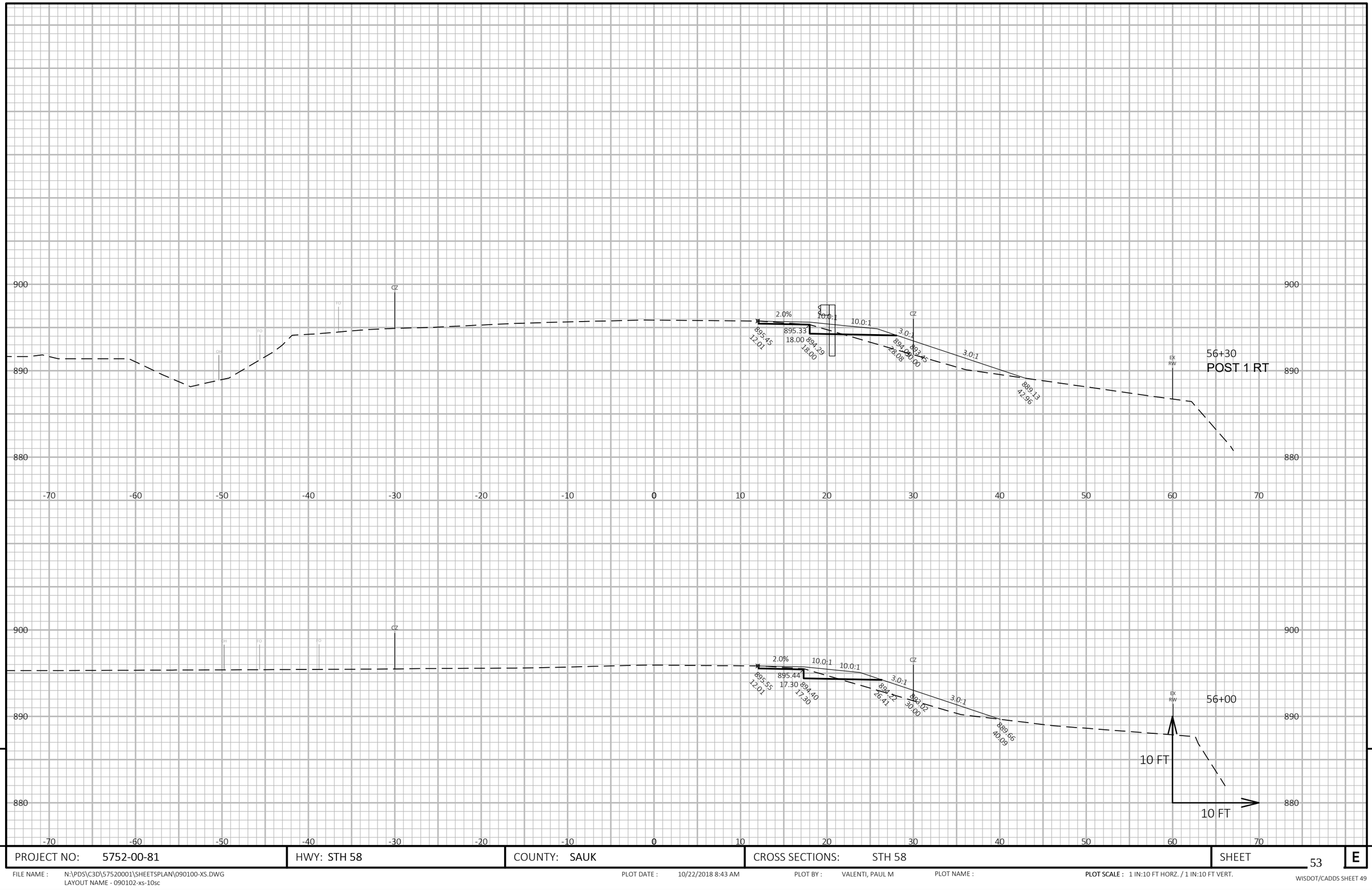
PROJECT NO: 5752-00-81	HWY: STH 58	COUNTY: SAUK	CROSS SECTIONS: STH 58	SHEET 52	E

FILE NAME : N:\PDS\C3D\57520001\SHEETSPLAN\090100-XS.DWG
LAYOUT NAME - 090101-xs-10sc

PLOT DATE : 10/22/2018 8:42 AM PLOT BY : VALENTI, PAUL M PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 5752-00-81	HWY: STH 58	COUNTY: SAUK	CROSS SECTIONS: STH 58	SHEET 53	E

FILE NAME : N:\PDS\C3D\57520001\SHEETSPLAN\090100-XS.DWG
LAYOUT NAME - 090102-xs-10sc

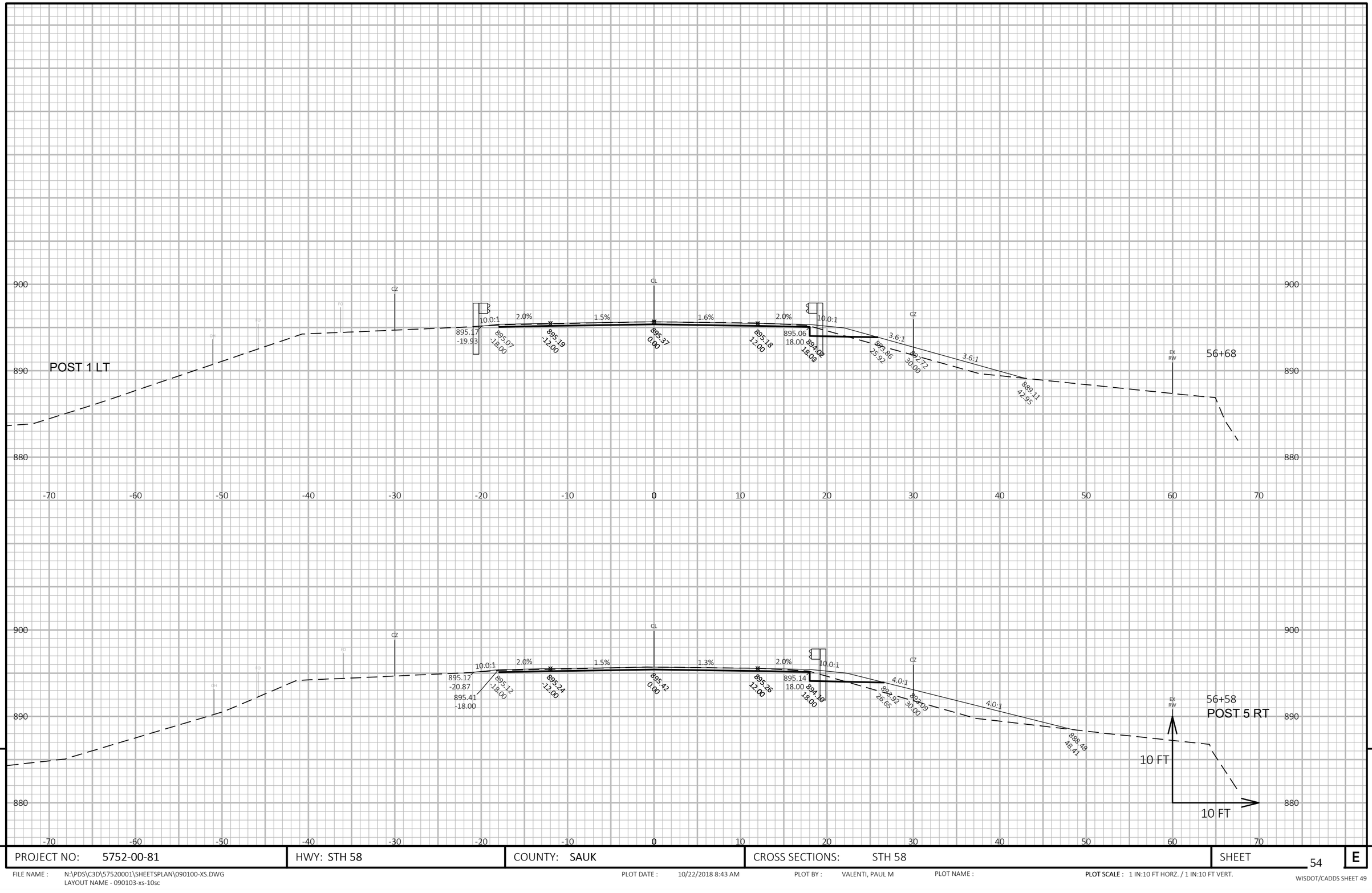
PLOT DATE : 10/22/2018 8:43 AM

PLOT BY : VALENTI, PAUL M

PLOT NAME :

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

WISDOT/CADDS SHEET 49

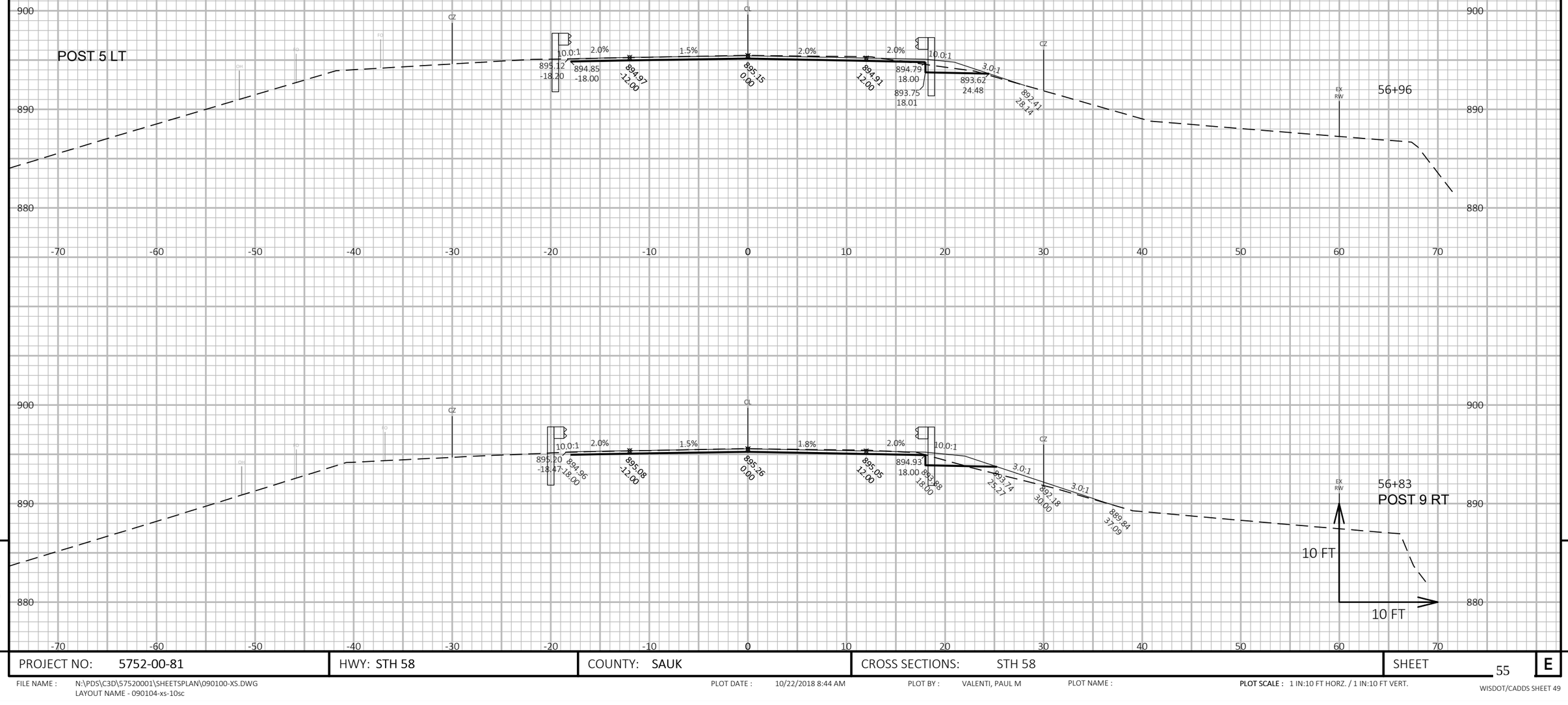


PROJECT NO: 5752-00-81	HWY: STH 58	COUNTY: SAUK	CROSS SECTIONS: STH 58	SHEET 54 E

FILE NAME : N:\PDS\C3D\57520001\SHEETSPLAN\090100-XS.DWG
LAYOUT NAME - 090103-xs-10sc

PLOT DATE : 10/22/2018 8:43 AM PLOT BY : VALENTI, PAUL M PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 5752-00-81	HWY: STH 58	COUNTY: SAUK	CROSS SECTIONS: STH 58	SHEET 55	E

FILE NAME : N:\PDS\C3D\57520001\SHEETSPLAN\090100-XS.DWG
LAYOUT NAME - 090104-xs-10sc

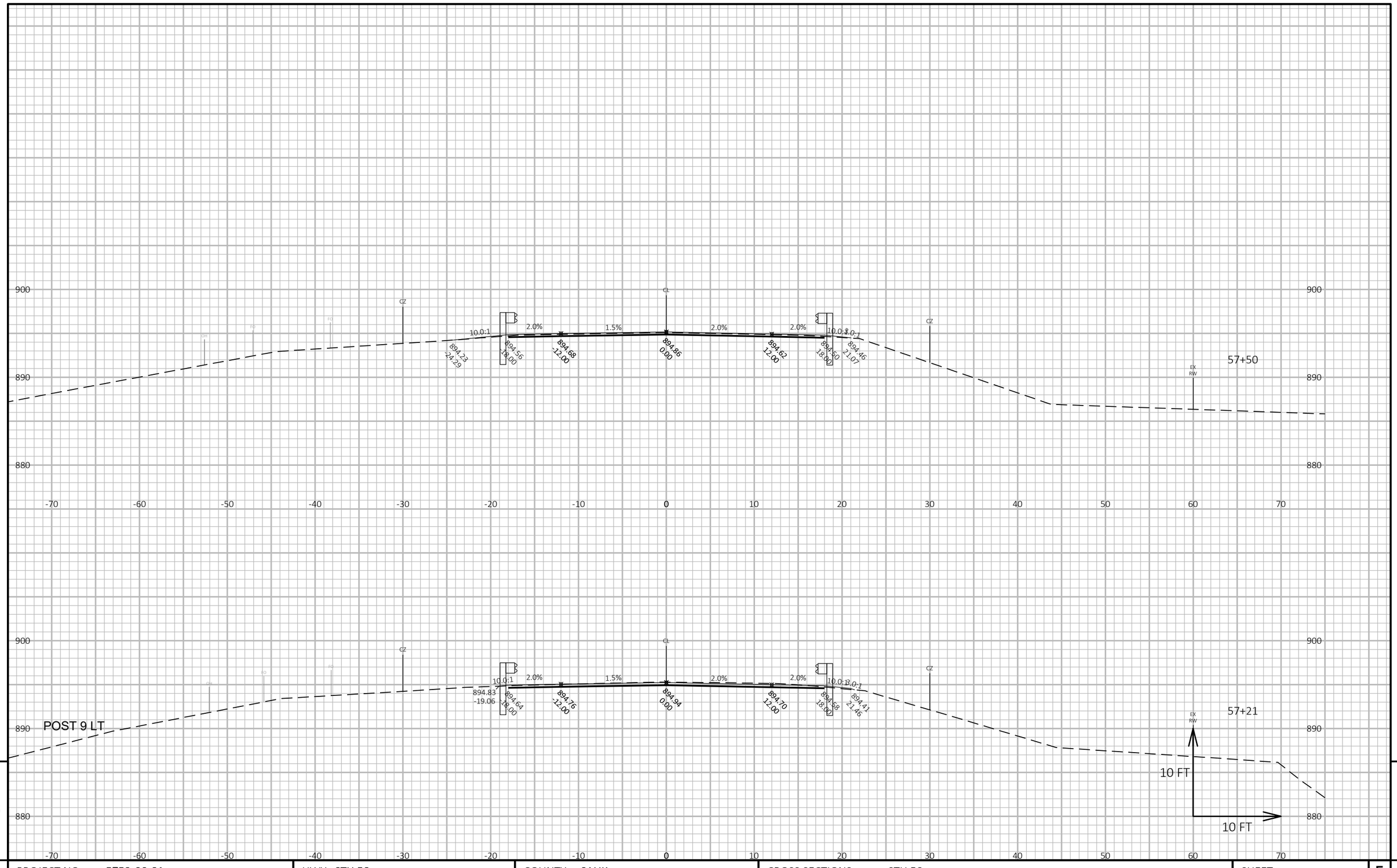
PLOT DATE : 10/22/2018 8:44 AM

PLOT BY : VALENTI, PAUL M

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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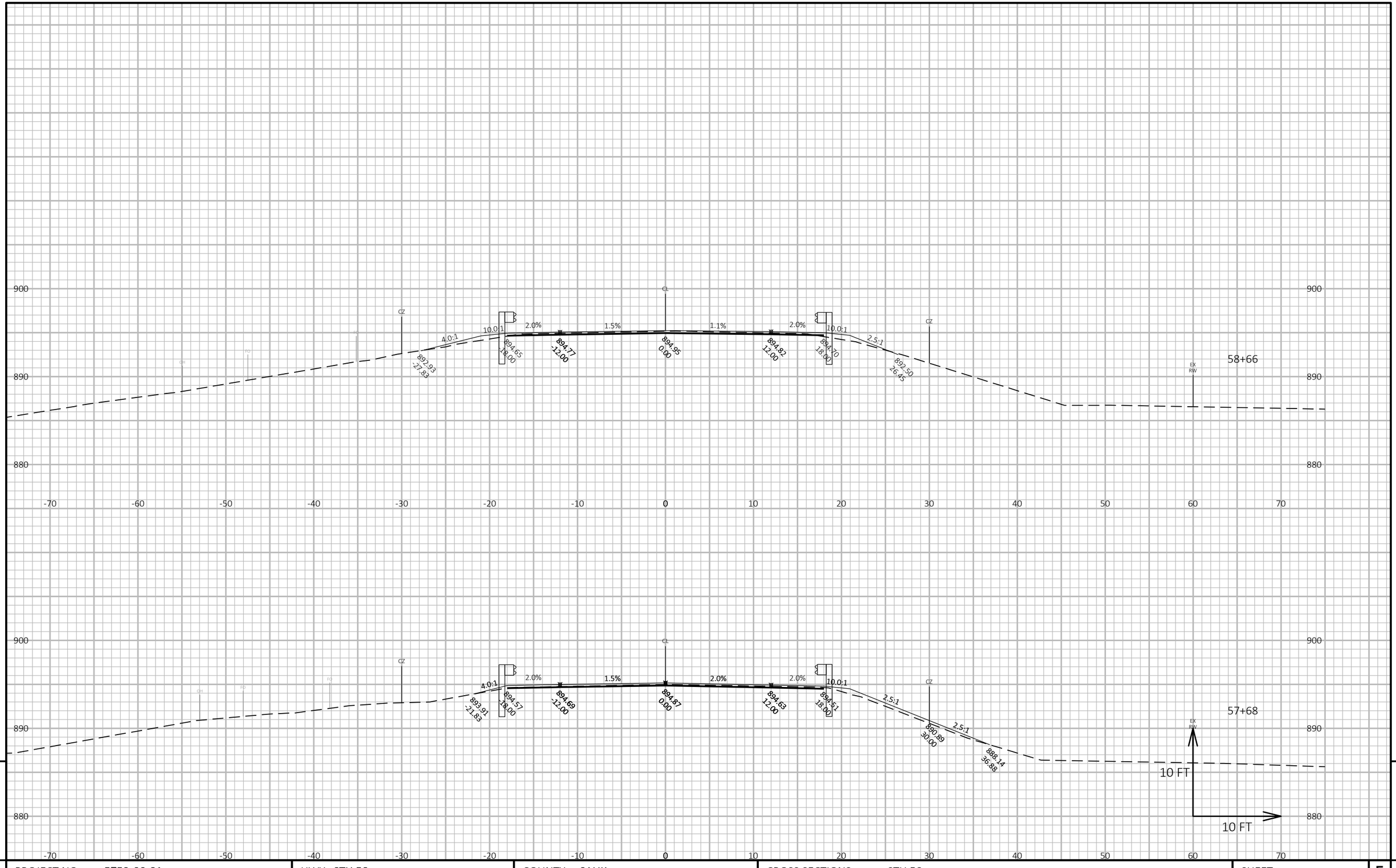
PROJECT NO: 5752-00-81	HWY: STH 58	COUNTY: SAUK	CROSS SECTIONS: STH 58	SHEET 56	E

FILE NAME : N:\PDS\C3D\57520001\SHEETSPLAN\090100-XS.DWG
LAYOUT NAME - 090105-xs-10sc

PLOT DATE : 10/22/2018 8:44 AM PLOT BY : VALENTI, PAUL M PLOT NAME :

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

WISDOT/CADDS SHEET 49



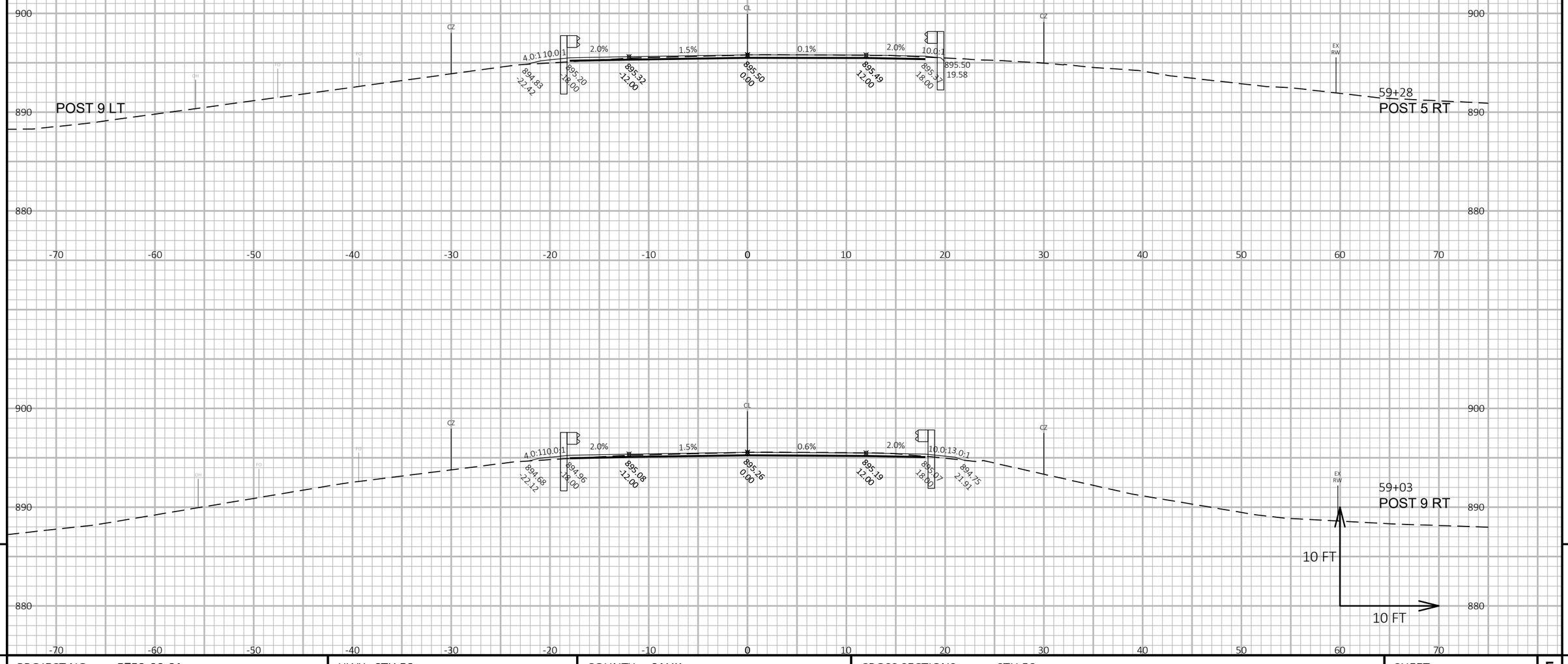
PROJECT NO: 5752-00-81	HWY: STH 58	COUNTY: SAUK	CROSS SECTIONS: STH 58	SHEET 57	E

FILE NAME : N:\PDS\C3D\57520001\SHEETSPLAN\090100-XS.DWG
LAYOUT NAME - 090106-xs-10sc

PLOT DATE : 10/22/2018 8:45 AM PLOT BY : VALENTI, PAUL M PLOT NAME :

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

WISDOT/CADDS SHEET 49



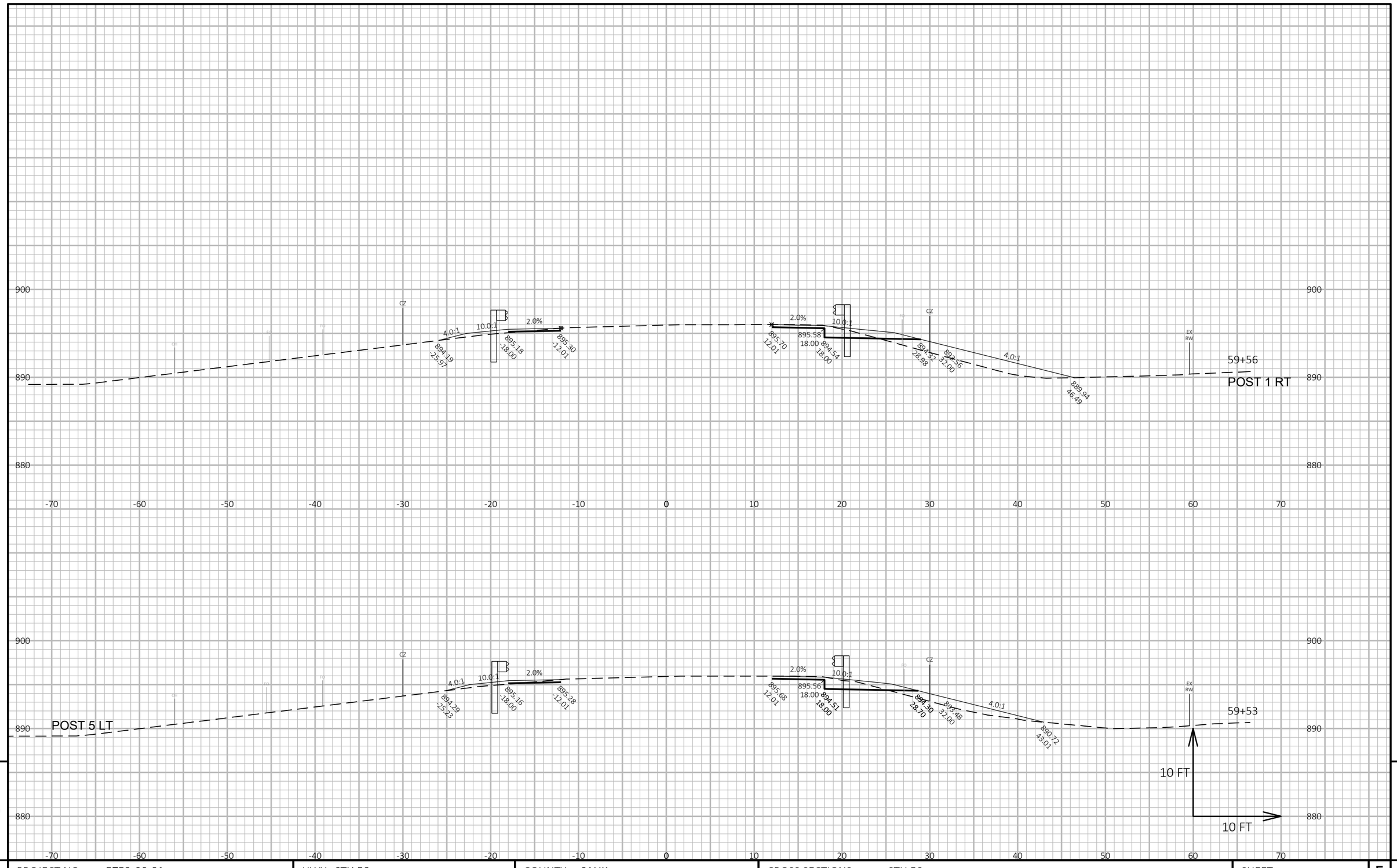
PROJECT NO: 5752-00-81	HWY: STH 58	COUNTY: SAUK	CROSS SECTIONS: STH 58	SHEET 58	E

FILE NAME : N:\PDS\C3D\57520001\SHEETSPLAN\090100-XS.DWG
LAYOUT NAME - 090107-xs-10sc

PLOT DATE : 10/22/2018 8:45 AM PLOT BY : VALENTI, PAUL M PLOT NAME :

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

WISDOT/CADDS SHEET 49

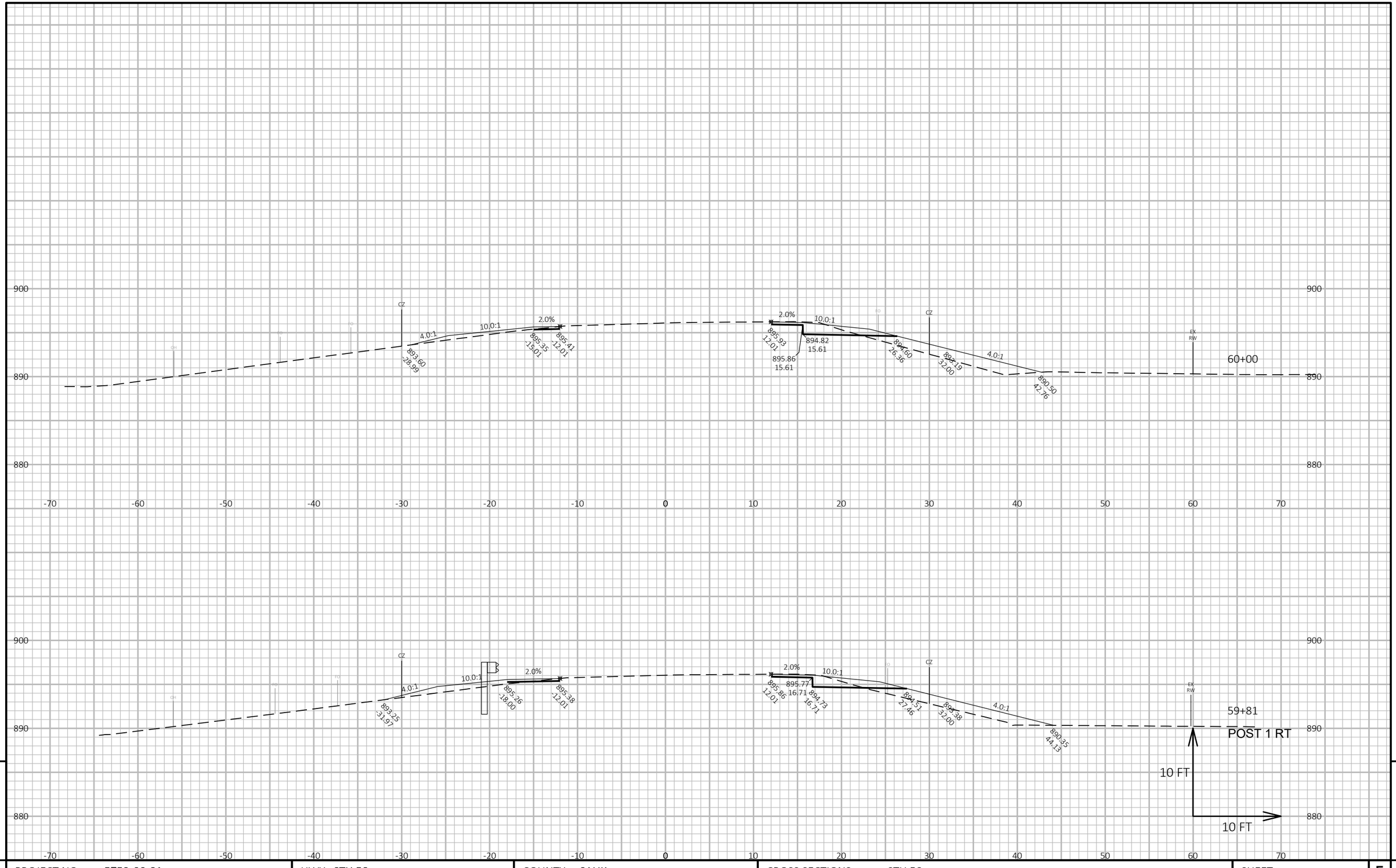


PROJECT NO: 5752-00-81	HWY: STH 58	COUNTY: SAUK	CROSS SECTIONS: STH 58	SHEET 59	E

FILE NAME : N:\PDS\C3D\57520001\SHEETSPLAN\090100-XS.DWG
LAYOUT NAME - 090108-xs-10sc

PLOT DATE : 10/22/2018 8:46 AM PLOT BY : VALENTI, PAUL M PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



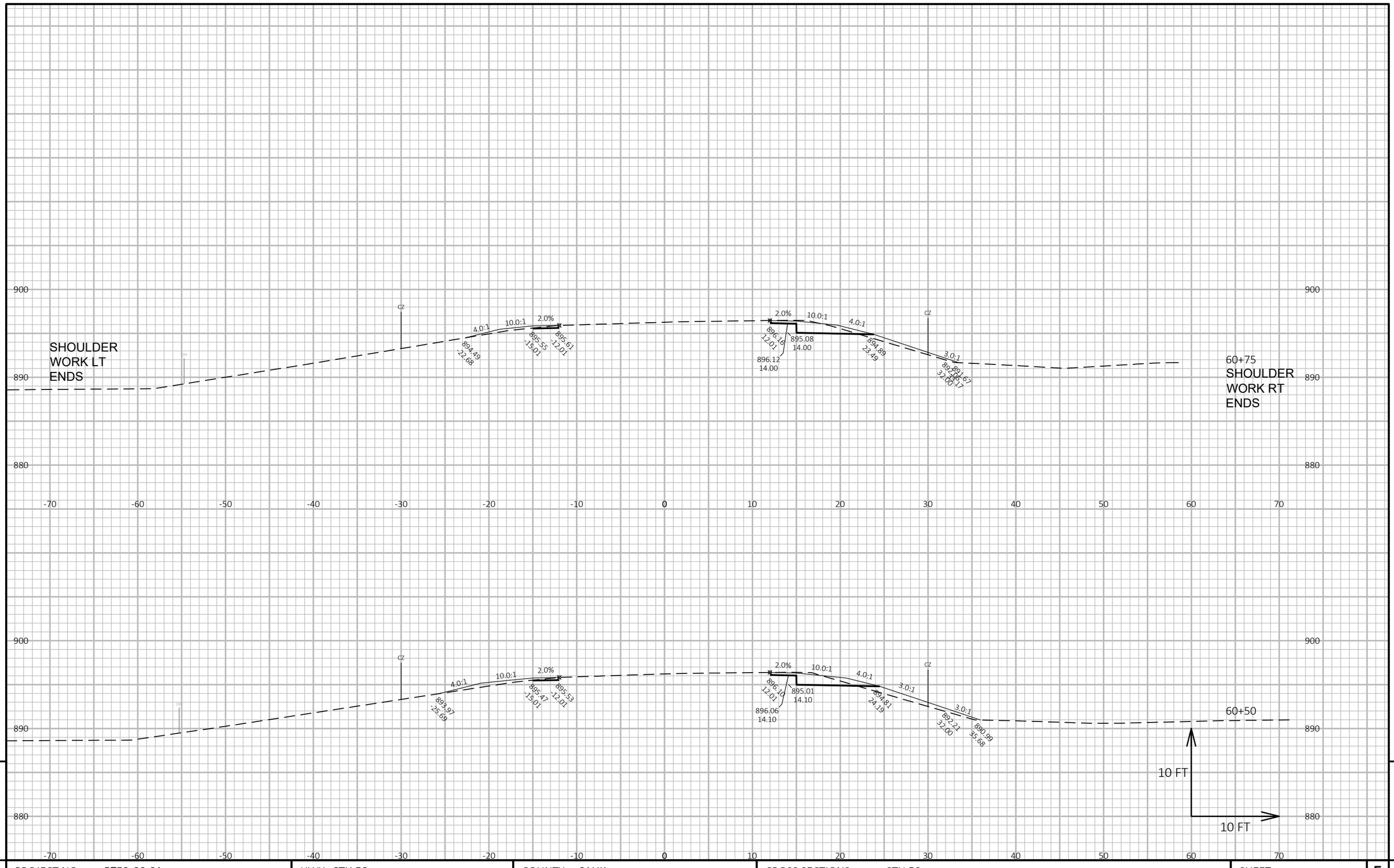
PROJECT NO: 5752-00-81	HWY: STH 58	COUNTY: SAUK	CROSS SECTIONS: STH 58	SHEET 60	E

FILE NAME : N:\PDS\C3D\57520001\SHEETSPLAN\090100-XS.DWG
LAYOUT NAME - 090109-xs-10sc

PLOT DATE : 10/22/2018 8:46 AM PLOT BY : VALENTI, PAUL M PLOT NAME :

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

WISDOT/CADDS SHEET 49



PROJECT NO: 5752-00-81	HWY: STH 58	COUNTY: SAUK	CROSS SECTIONS: STH 58	SHEET 61	E

FILE NAME : N:\PDS\C3D\57520001\SHEETSPLAN\090100-XS.DWG
LAYOUT NAME - 090110-xs-10sc

PLOT DATE : 10/22/2018 8:46 AM PLOT BY : VALENTI, PAUL M PLOT NAME :

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

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

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