EAU

PROJECT ID: 8640-00-71

WITH: 8640-00-73

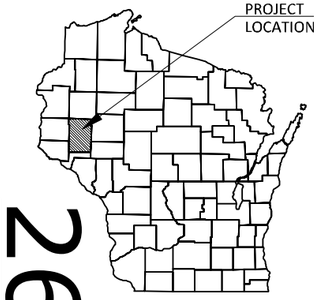
COUNTY: DUNN

SEPTEMBER 2022

ORDER OF SHEETS

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

TOTAL SHEETS = 112



26

DESIGN DESIGNATION 8640-00-71/73

A.A.D.T.	2023	=	2,500
A.A.D.T.	2043	=	3,000
D.H.V.		=	4.3
D.D.		=	60/40
T.		=	5.1%
DESIGN SPEED		=	60 MPH
ESALS		=	210,000

CONVENTIONAL SYMBOLS

PLAN

- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE (300'FR)
- 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

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
8640-00-71	WISC 2022525	1
8640-00-73	WISC 2022526	1

MENOMONIE-BOYCEVILLE

COON CREEK BRIDGE B-17-0368

STH 79

DUNN

STATE PROJECT NUMBER
8640-00-71

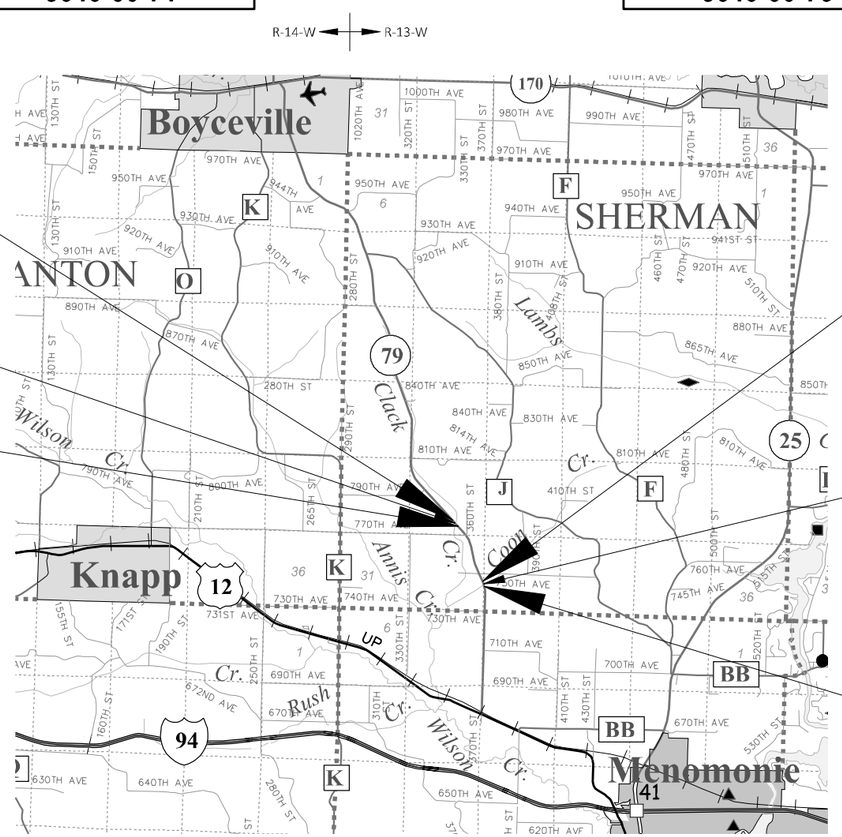
MENOMONIE-CONNORSVILLE

CLACK CREEK BRIDGE B-17-0369

STH 79

DUNN

STATE PROJECT NUMBER
8640-00-73



LAYOUT

SCALE 0 2.0 MI

TOTAL NET LENGTH OF CENTERLINE = 0.358 MI

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

ORIGINAL PLANS PREPARED BY

MSA

ENGINEERING | ARCHITECTURE | SURVEYING
FUNDING | PLANNING | ENVIRONMENTAL
11 E MARSHALL ST
RICE LAKE, WI 54868
(715) 234-1000 www.msa-ps.com

WISCONSIN
JAMES A. WATTERS
47495-6
OAKDALE, MN
PROFESSIONAL ENGINEER

DATE: 04/21/2022 (Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	CORRE, INC.
Designer	MSA PROFESSIONAL SERVICES, INC.
Project Manager	CAMERON SHIFFER
Regional Examiner	TOU YANG
Regional Supervisor	TYLER RONGSTAD

APPROVED FOR THE DEPARTMENT

Tyler Rongstad

DATE: (Signature)

E

STANDARD ABBREVIATIONS

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

RUNOFF COEFFICIENT TABLE

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER		2-6	6 & OVER	0-2	2-6	6 & OVER
MEDIAN STRIP TURF	0.19	0.20	0.24	0.19	0.22	0.26	0.20	0.23	0.30	0.20	0.25 0.32	0.30 0.40
SIDE SLOPE TURF			0.25			0.27			0.28			0.30 0.38
PAVEMENT:	0.40 - 0.60											
ASPHALT:	0.70 - 0.95											
CONCRETE:	0.80 - 0.95											
BRICK:	0.70 - 0.80											
DRIVES, WALKS:	0.75 - 0.85											
ROOFS:	0.75 - 0.95											
GRAVEL ROADS, SHOULDERS	0.40 - 0.60											

EROSION CONTROL NOTES

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

TOTAL PROJECT AREA = 5.45 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 3.50 ACRES

COMMUNICATIONS

AT&T WISCONSIN
RICK PODOLAK
304 S. DEWEY ST.
EAU CLAIRE, WI 54701
PHONE: (715) 410-0656
EMAIL: RP4514@ATT.COM

ELECTRIC

DUNN ENERGY COOPERATIVE
MIKE ANDRASCHKO
N5725 600TH ST, P.O. BOX 220
MENOMONIE, WI 54751
PHONE: (715) 232-6240
EMAIL: MANDRA@DUNNENERGY.COM

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

GENERAL NOTES

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

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

PLAN DETAIL ORDER

GENERAL NOTES
TYPICAL SECTIONS
CONSTRUCTION DETAILS
EROSION CONTROL
PAVEMENT MARKING & SIGNING
DETOUR PLAN

AS-BUILTS

PROJECT: 0017-74-00 (1987)
PROJECT: 8640-04-71 (1991)
PROJECT: 864-00-70 (2010)

DNR LIASON

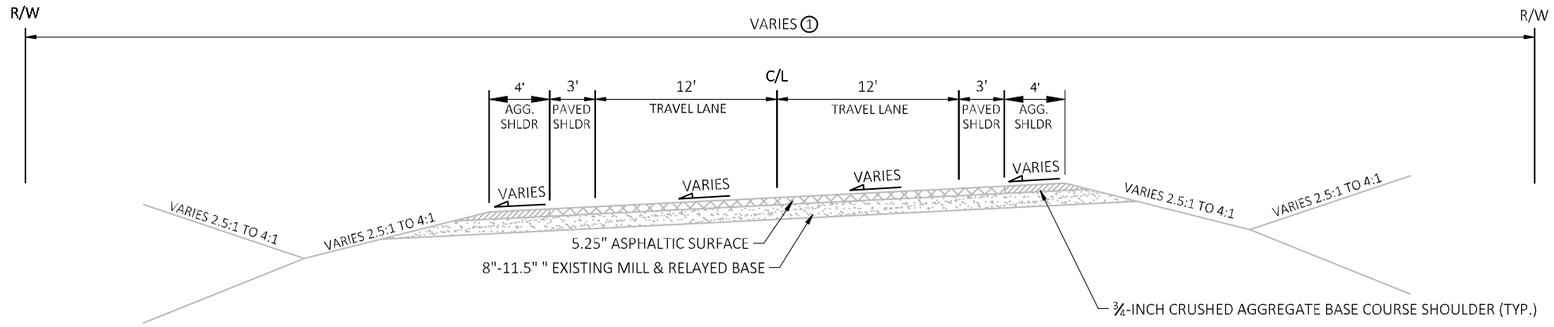
DEPARTMENT OF NATURAL RESOURCES
LEAH NICOL
1300 WEST CLAIREMONT AVENUE
EAU CLAIRE, WI 54701
PHONE: (715) 934-9014
EMAIL: LEAH.NICOL@WISCONSIN.GOV

DESIGN CONTACT

MSA PROFESSIONAL SERVICES, INC.
60 PLATO BLVD EAST SUITE 140
ST. PAUL, MN 55107-1835
ATTN: JAMES WATTERS, PE
PHONE: (612) 720-7896
EMAIL: JWATTERS@MSA-PS.COM

WISDOT CONTACT

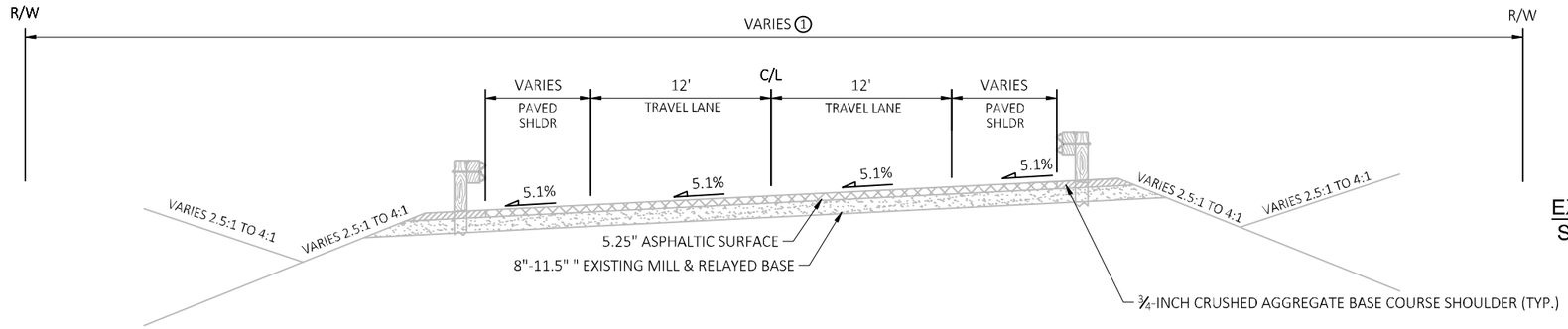
CORRE, INC.
CAMERON SHIFFER
1802 WARDEN ST
EAU CLAIR, WI 54703
ATTN: JAMES WATTERS, PE
PHONE: (608) 828-1011
EMAIL: CSHIFFER@CORREINC.COM



EXISTING TYPICAL SECTION - STH 79
SUPERELEVATED

COON CREEK CROSSING
STA 285+00 - STA 288+95
STA 292+50 - STA 295+50

CLACK CREEK CROSSING
STA 332+50 - STA 333+50

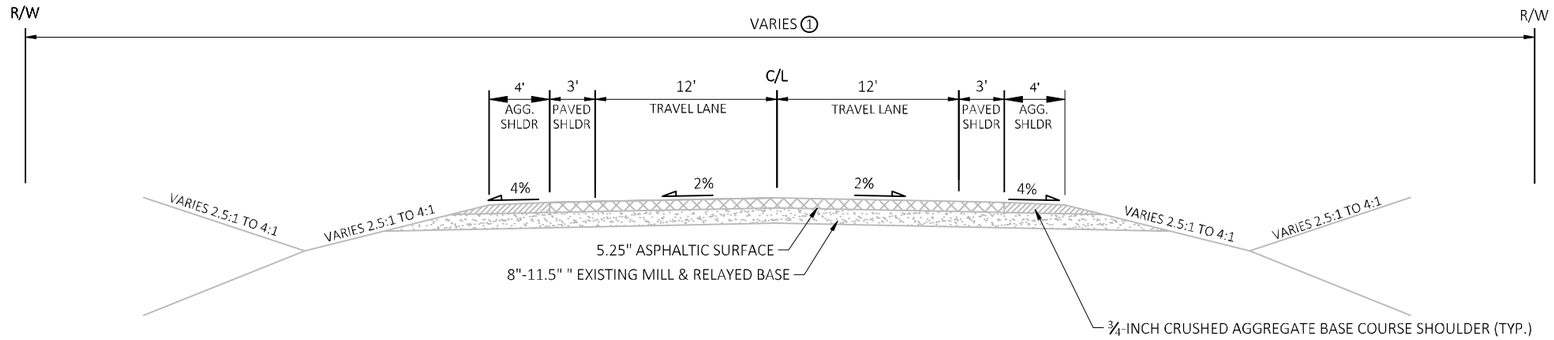


NOTES

① 100' AT COON CREEK CROSSING
120' AT CLACK CREEK CROSSING

EXISTING TYPICAL SECTION - STH 79
SUPERELEVATED WITH GUARDRAIL

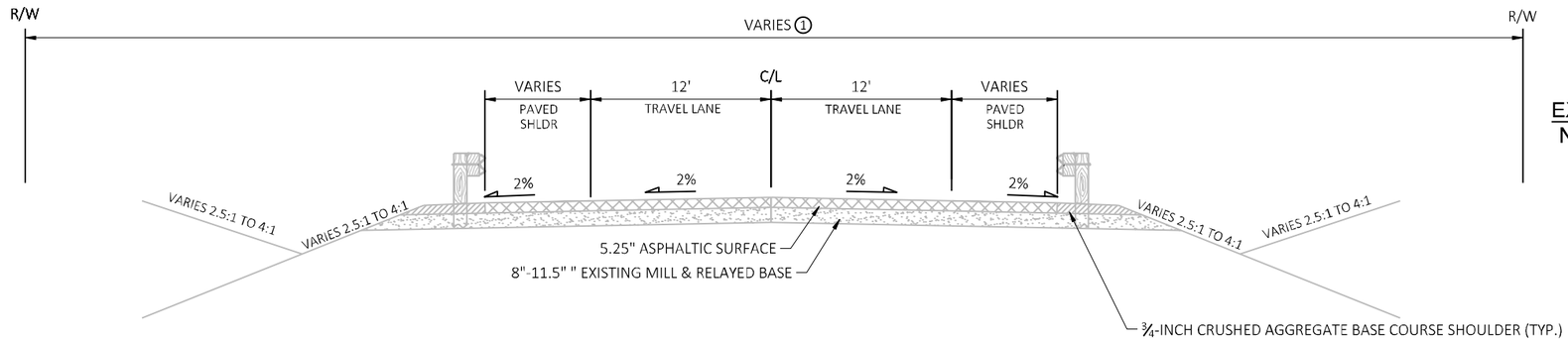
COON CREEK CROSSING
STA 288+95 - STA 290+49
STA 291+09 - STA 292+50



EXISTING TYPICAL SECTION - STH 79
NORMAL CROWN

COON CREEK CROSSING
STA 295+50 - STA 297+50

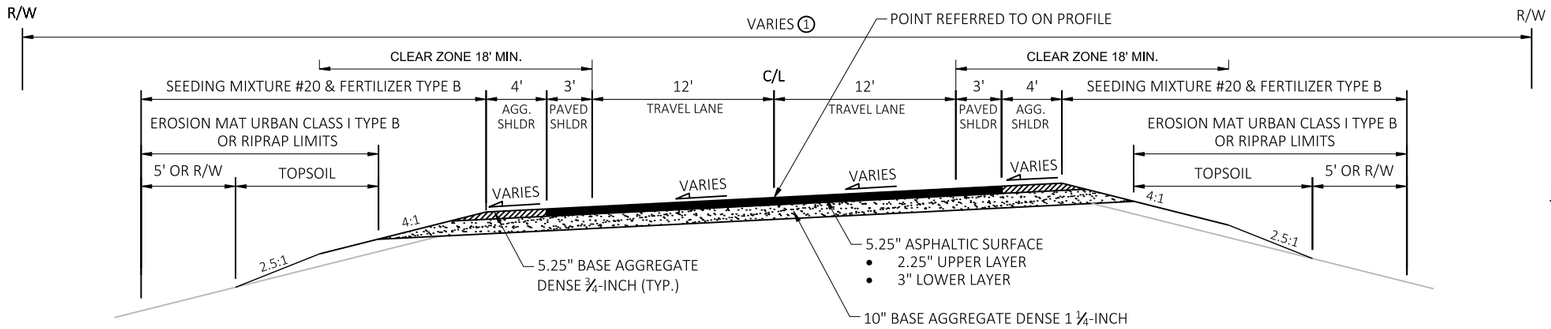
CLACK CREEK CROSSING
STA 333+50 - STA 335+25
STA 340+80 - STA 341+67



EXISTING TYPICAL SECTION - STH 79
NORMAL CROWN WITH GUARDRAIL

CLACK CREEK CROSSING
STA 335+25 - STA 338+00
STA 338+90 - STA 340+80

PROJECT NO: 8640-00-71, 8640-00-73	HWY: STH 79	COUNTY: DUNN	EXISTING TYPICAL SECTIONS	SHEET 3	E



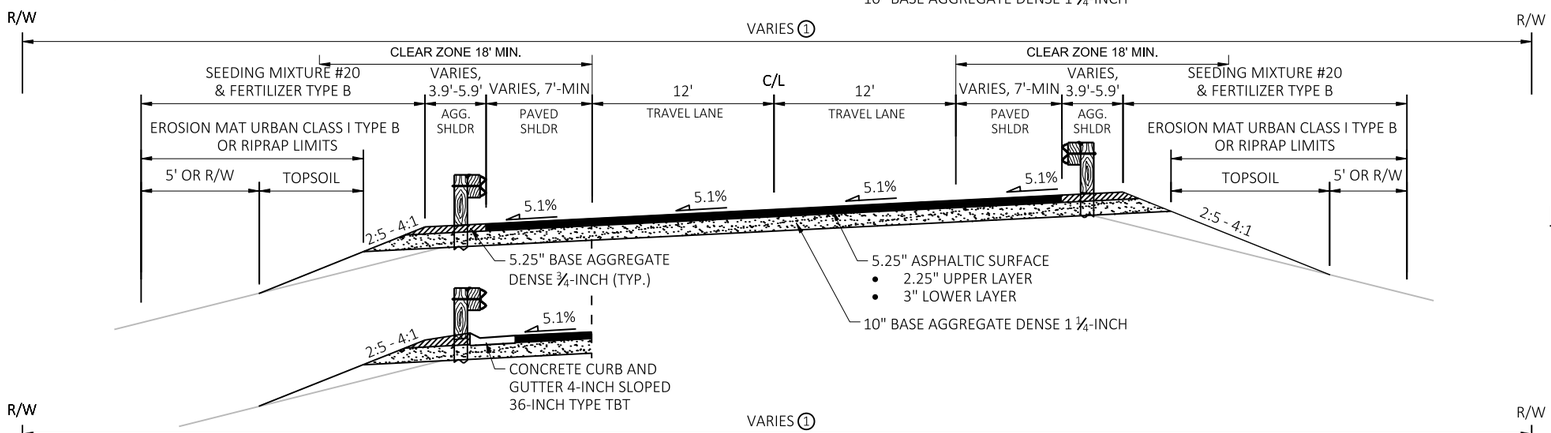
PROPOSED TYPICAL SECTION - STH 79
SUPERELEVATED

COON CREEK CROSSING
STA 285+00 - STA 288+40
STA 293+45 - STA 295+50

CLACK CREEK CROSSING
STA 332+50 - STA 333+50

NOTES

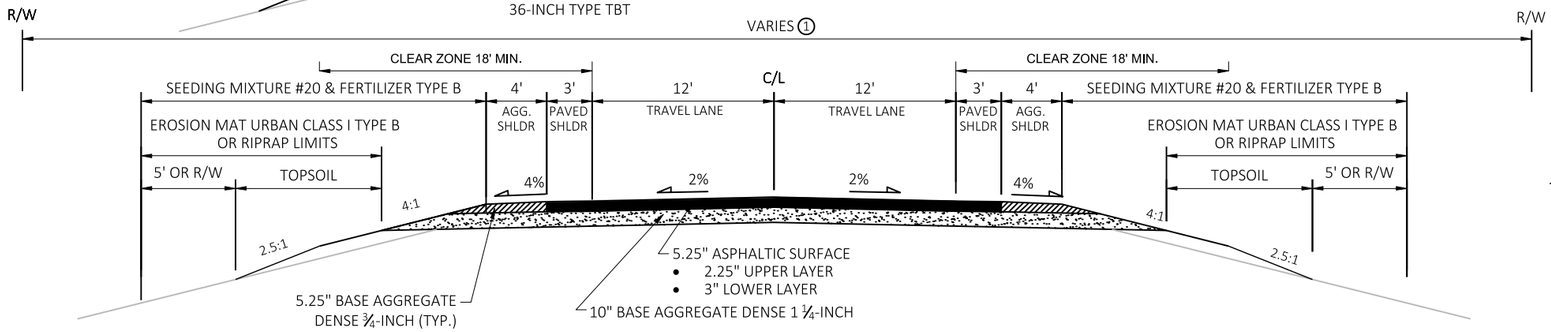
(1) 100' AT COON CREEK CROSSING
120' AT CLACK CREEK CROSSING



PROPOSED TYPICAL SECTION - STH 79
SUPERELEVATED WITH GUARDRAIL

COON CREEK CROSSING
STA 288+40 - STA 290+41
STA 291+13 - STA 293+45

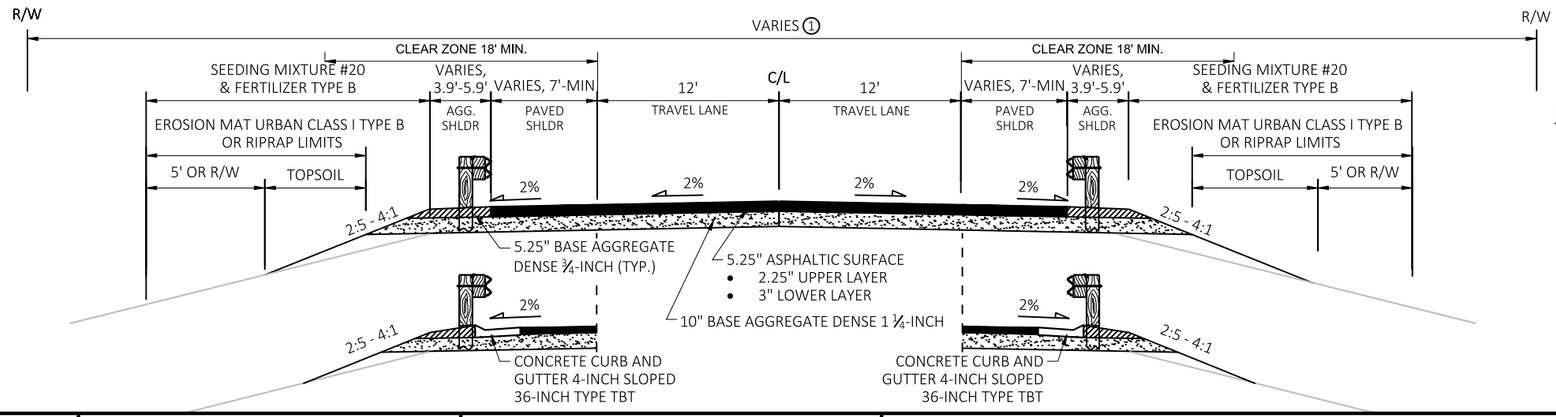
CONCRETE CURB AND GUTTER
STA 291+13 LT - STA 291+80 LT



PROPOSED TYPICAL SECTION - STH 79
NORMAL CROWN

COON CREEK CROSSING
STA 295+50 - STA 297+50

CLACK CREEK CROSSING
STA 333+50 - STA 335+25

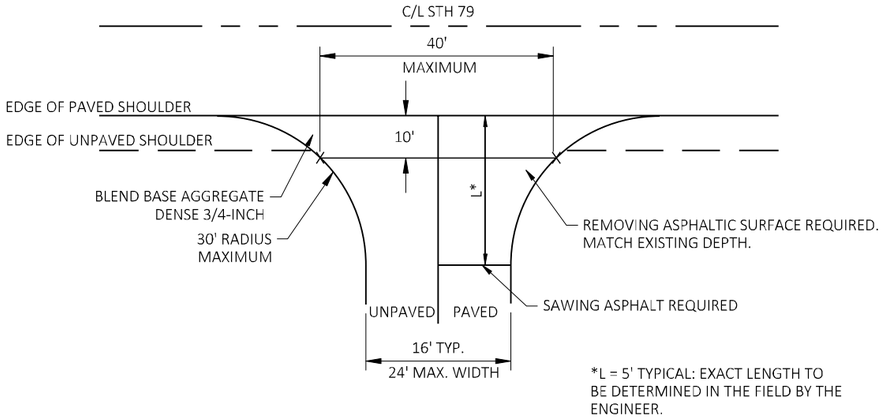


PROPOSED TYPICAL SECTION - STH 79
NORMAL CROWN WITH GUARDRAIL

CLACK CREEK CROSSING
STA 334+85 - STA 337+94
STA 338+96 - STA 341+10

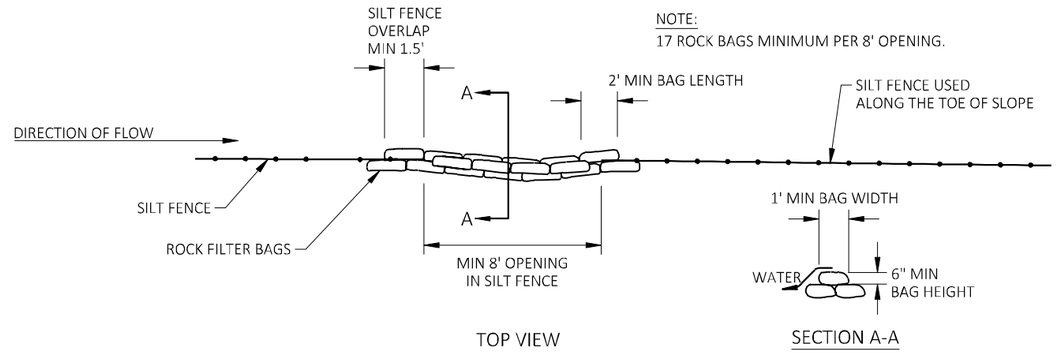
CONCRETE CURB AND GUTTER
STA 337+19 LT - STA 337+88 LT
STA 337+33 RT - STA 338+00 RT

PROJECT NO: 8640-00-71, 8640-00-73	HWY: STH 79	COUNTY: DUNN	FINISHED TYPICAL SECTIONS	SHEET 4	E



DRIVEWAY DETAIL

CE, PE, AND FE

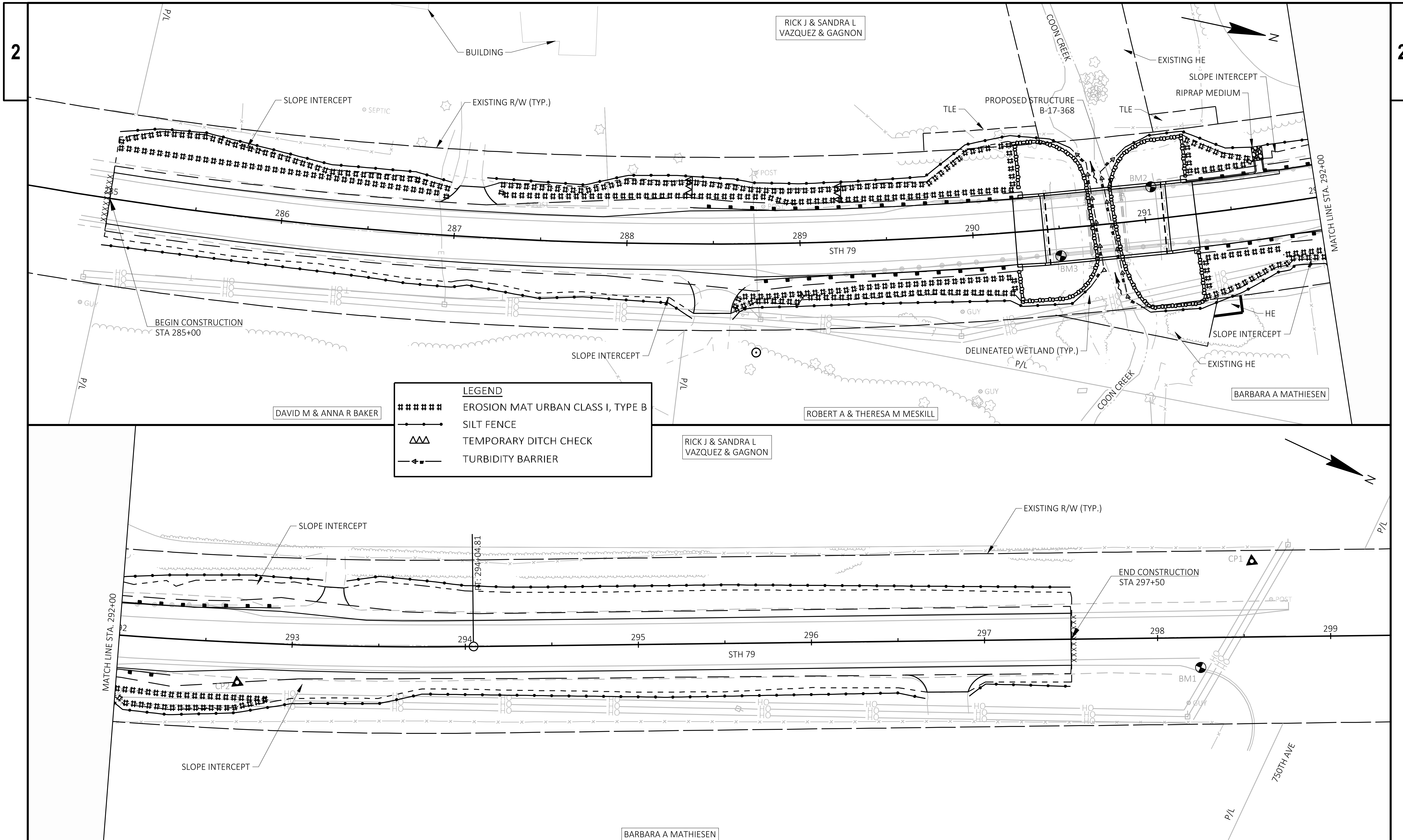


ROCK BAGS USED FOR SILT FENCE RELIEF

2

PROJECT NO: 8640-00-71, 8640-00-73	HWY: STH 79	COUNTY: DUNN	CONSTRUCTION DETAILS	SHEET 5	E

FILE NAME : P:\90S\93\00093461\CADD\C3D\SHEETSPLAN\021001-CD.DWG
LAYOUT NAME - 021001-cd
PLOT DATE : 1/26/2022 1:04 PM
PLOT BY : COURTNEY ROOYAKKERS
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



PROJECT NO: 8640-00-71, 8640-00-73	HWY: STH 79	COUNTY: DUNN	EROSION CONTROL	SHEET 6	E

FILE NAME : P:\90S\93\00093461\CADD\C3D\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022001-ec
PLOT DATE : 5/11/2022 12:02 PM PLOT BY : COURTNEY ROOYAKKERS PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44

2

CHARLES GRUNDEMAN

EXISTING R/W (TYP.)

SLOPE INTERCEPT

N

BP: 332+00.00

PI: 333+56.22

333 334 335

STH 79

CP25

HO

BEGIN CONSTRUCTION
STA 332+50

SLOPE INTERCEPT

MATCH LINE STA. 335+50

2

LEGEND

- EROSION MAT URBAN CLASS I, TYPE B
- SILT FENCE
- TURBIDITY BARRIER
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK

ROBERT A & LYNDA BIRD

ROBERT A & LYNDA BIRD

CHARLES GRUNDEMAN

P/L

HE

EXISTING R/W (TYP.)

SLOPE INTERCEPT

RIPRAP MEDIUM

CLACK CREEK

PI: 340+00.35

EXISTING HE

PROPOSED STRUCTURE
B-17-369

HE

SLOPE INTERCEPT

N

EP: 342+25.00

CP26

BM126

336 337 338 339 340 341 342

STH 79

BM125

CP34

END CONSTRUCTION
STA 341+67
MATCH EXISTING

MATCH LINE STA. 335+50

SLOPE INTERCEPT

RIPRAP MEDIUM

HO

BM127

SLOPE INTERCEPT

HE

DELINEATED WETLAND (TYP.)

HE

EXISTING HE

CLACK CREEK

ROBERT A & LYNDA BIRD

PROJECT NO: 8640-00-71, 8640-00-73	HWY: STH 79	COUNTY: DUNN	EROSION CONTROL	SHEET 7	E

FILE NAME : P:\90S\93\00093485\CADD\C3D\SHEETSPLAN\022002-EC.DWG
LAYOUT NAME - 022002-ec

PLOT DATE : 5/12/2022 9:49 AM PLOT BY : COURTNEY ROOYAKKERS PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

2

RICK J & SANDRA L VAZQUEZ & GAGNON

BUILDING

P/L

COON CREEK

N

PROPOSED STRUCTURE B-17-368

REMOVING SIGNS TYPE II (TYP.)
REMOVING SMALL SIGN SUPPORTS

EXISTING R/W (TYP.)

SEPTIC

POST

MWE4

MDYE4

285

286

287

288

289

290

291

BM2

BM3

STH 79

MATCH LINE STA. 292+00

MWE4

BEGIN CONSTRUCTION
STA 285+00

GUY

P/L

COON CREEK

BARBARA A MATHIESEN

DAVID M & ANNA R BAKER

ROBERT A & THERESA M MESKILL

MARKING LEGEND

MWE4	MARKING LINE EPOXY 4-INCH (WHITE SOLID LINE)
MDYE4	MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)

RICK J & SANDRA L VAZQUEZ & GAGNON

N

EXISTING R/W (TYP.)

END CONSTRUCTION
STA 297+50

P/L

CP1

POST

MATCH LINE STA. 292+00

PT: 294+04.81

MWE4

MDYE4

293

294

295

296

297

298

299

WIS 79

BM1

CP2

MWE4

GUY

750TH AVE

P/L

BARBARA A MATHIESEN

PROJECT NO: 8640-00-71, 8640-00-73	HWY: STH 79	COUNTY: DUNN	PAVEMENT MARKING AND SIGNING	SHEET 8	E

FILE NAME : P:\90S\93\00093461\CADD\C3D\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 024501-pm

PLOT DATE : 4/26/2022 8:16 AM PLOT BY : COURTNEY ROOYAKKERS PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

CHARLES GRUNDEMAN

EXISTING R/W (TYP.)

N

MYE4

MWE4

STH 79

CP25

MWE4

MYS4

HO

BEGIN CONSTRUCTION
STA 332+50

MARKING LEGEND	
MWE4	MARKING LINE EPOXY 4-INCH (WHITE SOLID LINE)
MYE4	MARKING LINE EPOXY 4-INCH (YELLOW SOLID LINE)
MYS4	MARKING LINE EPOXY 4-INCH SKIPS (YELLOW 12.5' DASH 37.5' GAP)

ROBERT A & LYNDA BIRD

ROBERT A & LYNDA BIRD

CHARLES GRUNDEMAN

P/L

EXISTING R/W (TYP.)

PROPOSED STRUCTURE
B-17-369

CLACK CREEK

REMOVING SIGNS TYPE II (TYP.)
REMOVING SMALL SIGN SUPPORTS

N

MYE4

MWE4

CP26

BM126

STH 79

BM125

CP34

MYS4

MWE4

MYS4

END CONSTRUCTION
STA 341+67

HO

FO

BM127

MOVING SMALL SIGN SUPPORTS
MOVING SIGNS TYPE II

NO PASSING ZONE

CLACK CREEK

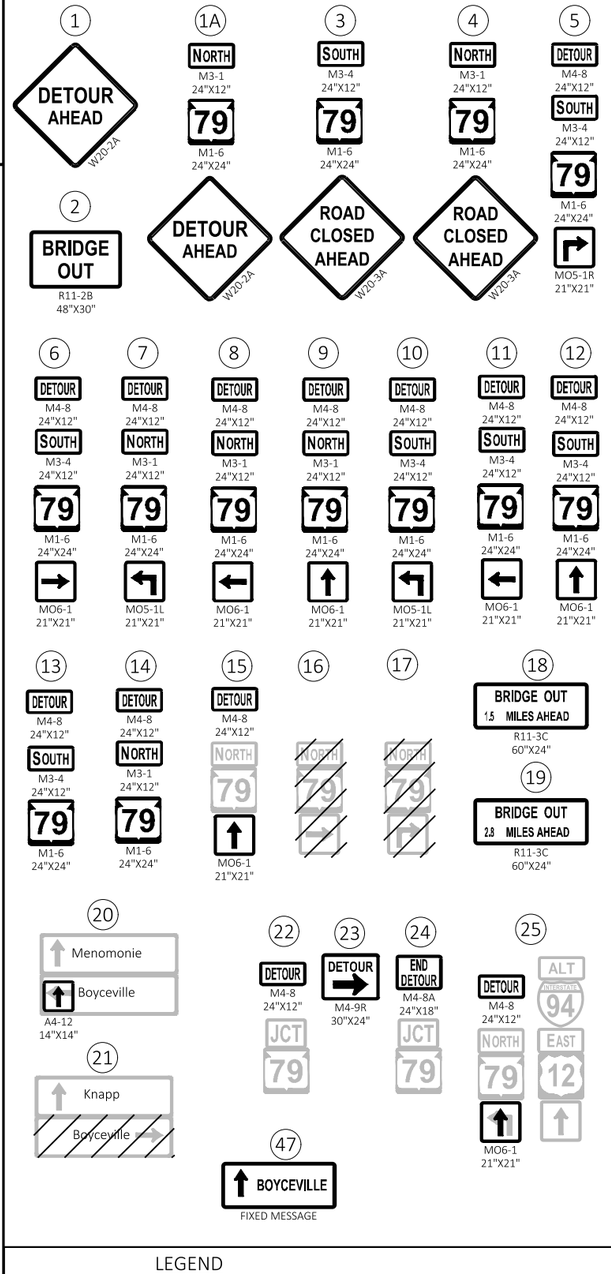
ROBERT A & LYNDA BIRD

PROJECT NO: 8640-00-71, 8640-00-73	HWY: STH 79	COUNTY: DUNN	PAVEMENT MARKING AND SIGNING	SHEET 9	E

FILE NAME : P:\90S\93\00093485\CADD\C3D\SHEETSPLAN\024502-PM.DWG
LAYOUT NAME - 024502-pm

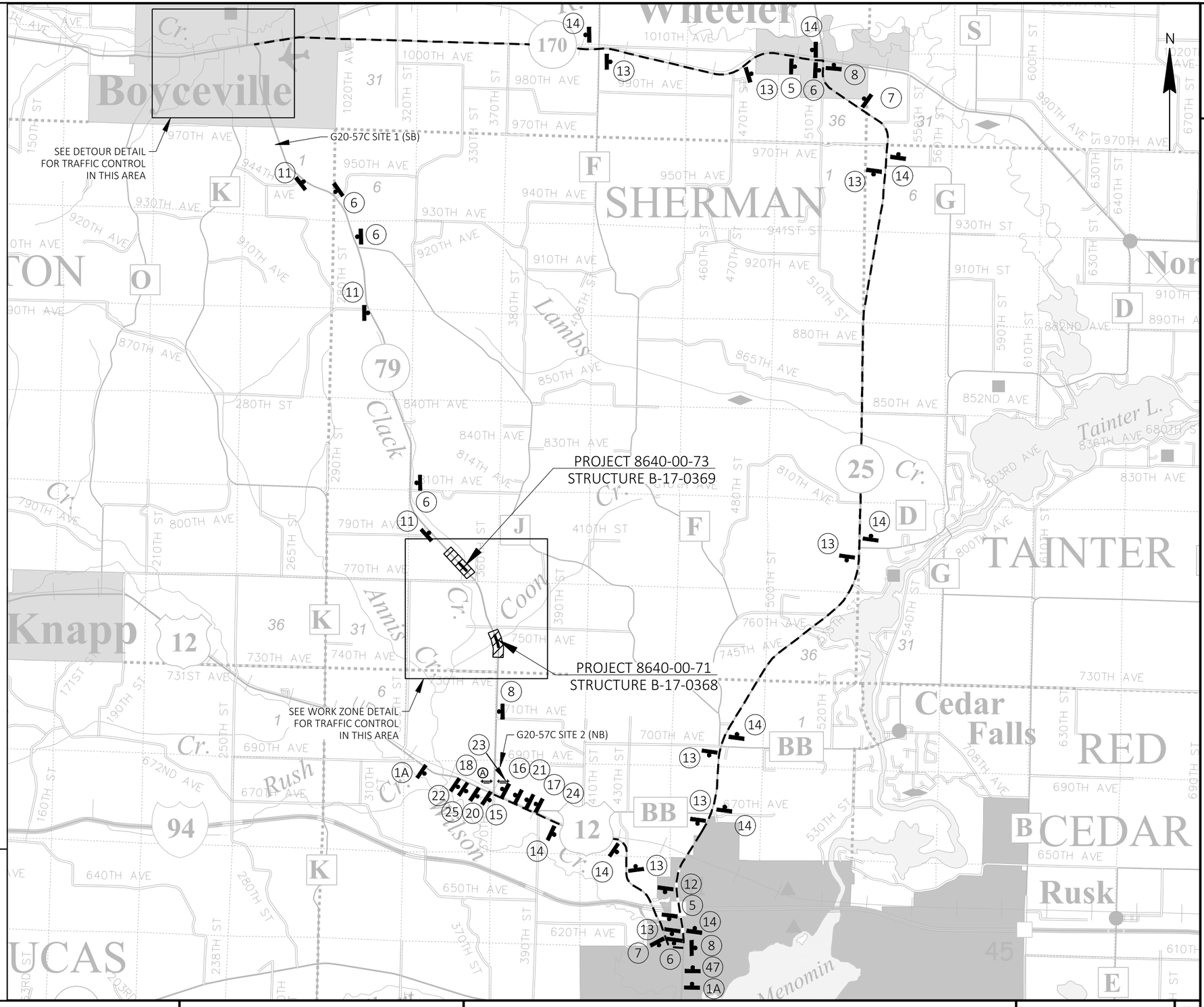
PLOT DATE : 4/26/2022 8:17 AM PLOT BY : COURTNEY ROOYAKKERS PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44



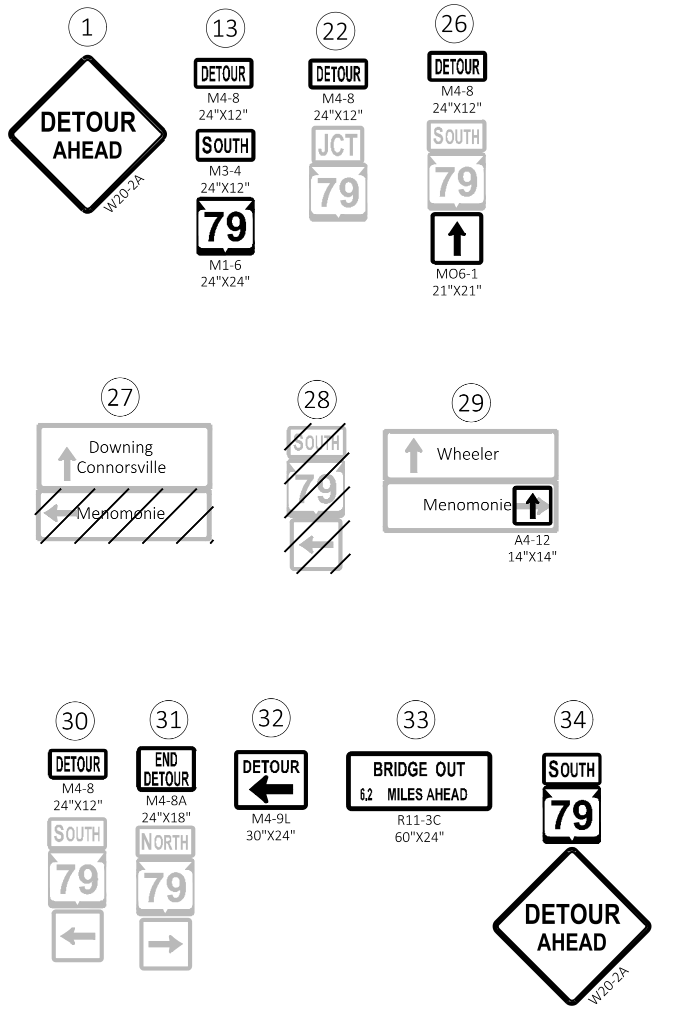
LEGEND

- WORK ZONE
- DETOUR ROUTE
- SIGN MOUNTED ON POST(S)
- BARRICADE TYPE III WITH/WITHOUT SIGN
- Ⓐ TYPE A WARNING LIGHT (FLASHING)
- 79 EXISTING SIGN
- 79 EXISTING SIGN TO BE COVERED



PROJECT NO: 8640-00-71, 8640-00-73	HWY: STH 79	COUNTY: DUNN	DETOUR PLAN	SHEET 10	E

2



DETOUR DETAIL

2

LEGEND

WORK ZONE	EXISTING SIGN
DETOUR ROUTE	EXISTING SIGN TO BE COVERED
SIGN MOUNTED ON POST(S)	
BARRICADE TYPE III WITH/WITHOUT SIGN	
Ⓐ TYPE A WARNING LIGHT (FLASHING)	

PROJECT NO: 8640-00-71, 8640-00-73	HWY: STH 79	COUNTY: DUNN	DETOUR PLAN	SHEET 11	E

(40)
R11-3C
60"X24"

(41)
R11-3C
60"X24"

(42)
R11-2B
48"X30"

(43)
R11-2
48"X30"

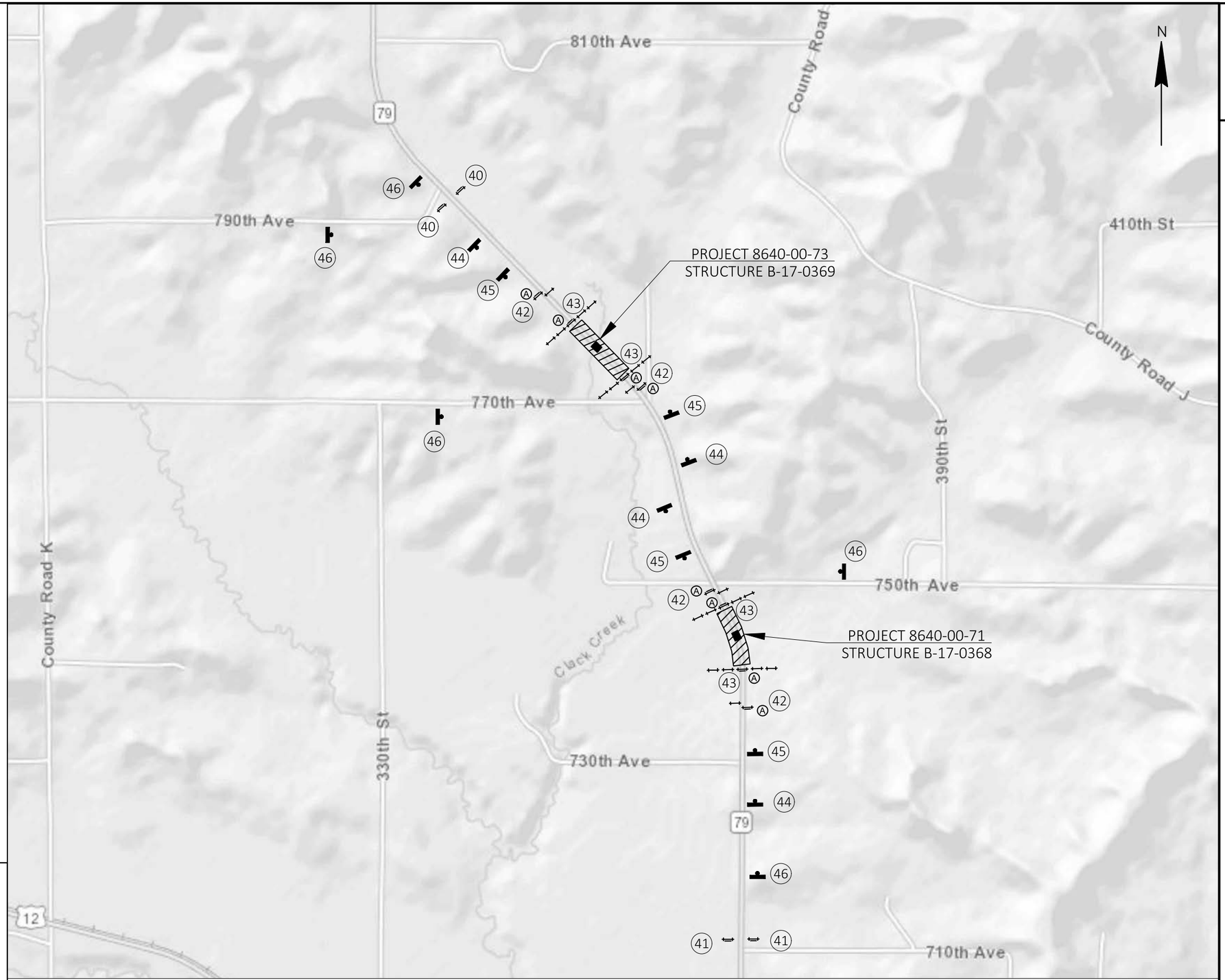
(44)

(45)

(46)

LEGEND

- WORK ZONE
- SIGN MOUNTED ON POST(S)
- BARRICADE TYPE III WITH/WITHOUT SIGN
- (A) TYPE A WARNING LIGHT (FLASHING)



WORK ZONE DETAIL

PROJECT NO: 8640-00-71, 8640-00-73	HWY: STH 79	COUNTY: DUNN	DETOUR PLAN	SHEET 12	E

Estimate Of Quantities

Line	Item	Item Description	Unit	Total	8640-00-71 Qty	8640-00-73 Qty
0002	202.0105	Roadside Clearing	STA	6.000	2.000	4.000
0004	203.0211.S	Abatement of Asbestos Containing Material (structure) 02. B-17-0143	EACH	1.000		1.000
0006	203.0260	Removing Structure Over Waterway Minimal Debris (structure) 01. B-17-0142	EACH	1.000	1.000	
0008	203.0260	Removing Structure Over Waterway Minimal Debris (structure) 02. B-17-0143	EACH	1.000		1.000
0010	204.0110	Removing Asphaltic Surface	SY	1,070.000	1,070.000	
0012	204.0165	Removing Guardrail	LF	1,330.000	468.000	862.000
0014	204.0170	Removing Fence	LF	420.000		420.000
0016	205.0100	Excavation Common	CY	3,930.000	2,191.000	1,739.000
0018	206.1000	Excavation for Structures Bridges (structure) 01. B-17-0368	LS	1.000	1.000	
0020	206.1000	Excavation for Structures Bridges (structure) 02. B-17-0369	LS	1.000		1.000
0022	210.1500	Backfill Structure Type A	TON	1,086.000	522.000	564.000
0024	213.0100	Finishing Roadway (project) 01. 8640-00-71	EACH	1.000	1.000	
0026	213.0100	Finishing Roadway (project) 02. 8640-00-73	EACH	1.000		1.000
0028	305.0110	Base Aggregate Dense 3/4-Inch	TON	880.000	480.000	400.000
0030	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	6,100.000	3,550.000	2,550.000
0032	415.0410	Concrete Pavement Approach Slab	SY	341.000	140.000	201.000
0034	416.1010	Concrete Surface Drains	CY	10.000	2.000	8.000
0036	455.0605	Tack Coat	GAL	515.000	295.000	220.000
0038	465.0105	Asphaltic Surface	TON	2,115.000	1,235.000	880.000
0040	502.0100	Concrete Masonry Bridges	CY	532.000	240.000	292.000
0042	502.3200	Protective Surface Treatment	SY	772.000	323.000	449.000
0044	502.3210	Pigmented Surface Sealer	SY	235.000	100.000	135.000
0046	503.0137	Prestressed Girder Type I 36W-Inch	LF	426.000	426.000	
0048	503.0146	Prestressed Girder Type I 45W-Inch	LF	505.000		505.000
0050	505.0400	Bar Steel Reinforcement HS Structures	LB	10,360.000	5,320.000	5,040.000
0052	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	64,160.000	27,150.000	37,010.000
0054	506.2605	Bearing Pads Elastomeric Non-Laminated	EACH	22.000	12.000	10.000
0056	506.4000	Steel Diaphragms (structure) 01. B-17-0368	EACH	5.000	5.000	
0058	506.4000	Steel Diaphragms (structure) 02. B-17-0369	EACH	8.000		8.000
0060	516.0500	Rubberized Membrane Waterproofing	SY	48.000	24.000	24.000
0062	550.1100	Piling Steel HP 10-Inch X 42 Lb	LF	3,730.000	1,750.000	1,980.000
0064	601.0588	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type TBT	LF	146.000	51.000	95.000
0066	601.0590	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type TBTT	LF	17.000	3.000	14.000
0068	606.0200	Riprap Medium	CY	9.000	3.000	6.000
0070	606.0300	Riprap Heavy	CY	775.000	485.000	290.000
0072	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	400.000	200.000	200.000
0074	614.0150	Anchor Assemblies for Steel Plate Beam Guard	EACH	8.000	4.000	4.000
0076	614.2300	MGS Guardrail 3	LF	750.000	250.000	500.000
0078	614.2500	MGS Thrie Beam Transition	LF	315.200	157.600	157.600
0080	614.2610	MGS Guardrail Terminal EAT	EACH	8.000	4.000	4.000
0082	618.0100	Maintenance And Repair of Haul Roads (project) 01. 8640-00-71	EACH	1.000	1.000	
0084	618.0100	Maintenance And Repair of Haul Roads (project) 02. 8640-00-73	EACH	1.000		1.000
0086	619.1000	Mobilization	EACH	1.000	0.500	0.500
0088	624.0100	Water	MGAL	107.000	62.000	45.000
0090	625.0100	Topsoil	SY	7,380.000	3,860.000	3,520.000
0092	628.1504	Silt Fence	LF	4,390.000	2,540.000	1,850.000
0094	628.1520	Silt Fence Maintenance	LF	4,390.000	2,540.000	1,850.000
0096	628.1905	Mobilizations Erosion Control	EACH	8.000	4.000	4.000
0098	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	2.000	2.000

					8640-00-71	8640-00-73
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0100	628.2008	Erosion Mat Urban Class I Type B	SY	7,380.000	3,860.000	3,520.000
0102	628.6005	Turbidity Barriers	SY	474.000	173.000	301.000
0104	628.7504	Temporary Ditch Checks	LF	72.000	36.000	36.000
0106	628.7555	Culvert Pipe Checks	EACH	25.000	17.000	8.000
0108	628.7570	Rock Bags	EACH	180.000	90.000	90.000
0110	629.0210	Fertilizer Type B	CWT	4.650	2.430	2.220
0112	630.0120	Seeding Mixture No. 20	LB	200.000	105.000	95.000
0114	630.0200	Seeding Temporary	LB	50.000	25.000	25.000
0116	630.0500	Seed Water	MGAL	175.000	93.000	82.000
0118	638.2102	Moving Signs Type II	EACH	1.000		1.000
0120	638.2602	Removing Signs Type II	EACH	8.000	4.000	4.000
0122	638.3000	Removing Small Sign Supports	EACH	8.000	4.000	4.000
0124	638.4000	Moving Small Sign Supports	EACH	1.000		1.000
0126	642.5201	Field Office Type C	EACH	1.000	0.500	0.500
0128	643.0300	Traffic Control Drums	DAY	40.000	20.000	20.000
0130	643.0420	Traffic Control Barricades Type III	DAY	3,880.000	1,940.000	1,940.000
0132	643.0705	Traffic Control Warning Lights Type A	DAY	5,460.000	2,730.000	2,730.000
0134	643.0900	Traffic Control Signs	DAY	20,150.000	10,075.000	10,075.000
0136	643.0920	Traffic Control Covering Signs Type II	EACH	12.000	6.000	6.000
0138	643.1000	Traffic Control Signs Fixed Message	SF	44.200	18.000	26.200
0140	643.5000	Traffic Control	EACH	1.000	0.500	0.500
0142	645.0111	Geotextile Type DF Schedule A	SY	134.000	66.000	68.000
0144	645.0120	Geotextile Type HR	SY	1,228.000	752.000	476.000
0146	646.1020	Marking Line Epoxy 4-Inch	LF	7,860.000	5,000.000	2,860.000
0148	648.0100	Locating No-Passing Zones	MI	0.410	0.240	0.170
0150	650.4500	Construction Staking Subgrade	LF	2,007.000	1,179.000	828.000
0152	650.5000	Construction Staking Base	LF	2,007.000	1,179.000	828.000
0154	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	209.000	67.000	142.000
0156	650.6500	Construction Staking Structure Layout (structure) 01. B-17-0368	LS	1.000	1.000	
0158	650.6500	Construction Staking Structure Layout (structure) 02. B-17-0369	LS	1.000		1.000
0160	650.9910	Construction Staking Supplemental Control (project) 01. 8640-00-71	LS	1.000	1.000	
0162	650.9910	Construction Staking Supplemental Control (project) 02. 8640-00-73	LS	1.000		1.000
0164	650.9920	Construction Staking Slope Stakes	LF	2,007.000	1,179.000	828.000
0166	690.0150	Sawing Asphalt	LF	120.000	60.000	60.000
0168	715.0502	Incentive Strength Concrete Structures	DOL	3,200.000	1,500.000	1,700.000
0170	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	1,000.000	500.000	500.000
0172	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 01. 290+77	EACH	1.000	1.000	
0174	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 02. 338+45	EACH	1.000		1.000
0176	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	300.000	300.000	
0178	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	300.000	300.000	

3

CATEGORY	STATION	TO	STATION	LOCATION	202.0105 ROADSIDE CLEARING STA	204.0110 REMOVING ASPHALTIC SURFACE SY	204.0170 REMOVING FENCE LF	690.0150 SAWING ASPHALT LF
0010	285+00	-	290+42	MAINLINE	--	--	--	30
0010	287+50	-	290+40	MAINLINE	--	970	--	--
0010	289+00	-	291+00	MAINLINE	2	--	--	--
0010	291+12	-	291+42	MAINLINE	--	100	--	--
0010	291+12	-	297+50	MAINLINE	--	--	--	30
				PROJECT 8640-00-71 TOTAL 0010	2	1,070	0	60
0010	332+25	-	337+83	MAINLINE	2	--	--	30
0010	338+96	-	341+67	MAINLINE	2	--	--	30
0010	335+90	-	338+48	LT	--	--	260	--
0010	339+36	-	340+90	RT	--	--	160	--
				PROJECT 8640-00-73 TOTAL 0010	4	0	420	60
				TOTAL	6	1,070	420	120

CATEGORY	STATION	TO	STATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	624.0100 WATER MGAL
0010	285+00	-	290+42	210	1,630	28
0010	291+13	-	294+50	220	1,870	32
0010	DRIVEWAYS			50	50	2
	PROJECT 8640-00-71 TOTAL 0010			480	3,550	62
0010	332+25	-	338+01	210	1,650	28
0010	338+91	-	342+25	170	880	16
0010	DRIVEWAYS			20	20	1
	PROJECT 8640-00-73 TOTAL 0010			400	2,550	45
	TOTAL			880	6,100	107

3

CATEGORY	STATION	TO	STATION	205.0100 EXCAVATION COMMON CY	(1)UNUSABLE MATERIAL CY	UNEXPANDED FILL CY	(2) EXPANDED FILL CY	(3) MASS ORDINATE (+/-) CY	208.0100 BORROW CY
0010	285+00	-	290+32	383	160	454	567	-345	--
0010	291+22	-	297+50	1,808	305	128	160	1,343	--
	PROJECT 8640-00-71 TOTAL 0010			2,191					0
0010	332+50		337+75	1,344	255	231	288	801	--
0010	339+14		341+67	395	123	300	375	-104	--
	PROJECT 8640-00-73 TOTAL 0010			1,739					0
			TOTAL	3,930					0

(1) EXISTING ASPHALT IS ASSUMED TO BE UNUSABLE MATERIAL
(2) EXPANDEDN FILL FACTOR = 1.25
(3) THE MASS ORDINATE + OR - QUANTITY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION.
MINUS QUANTITY INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

CATEGORY	STATION	TO	STATION	455.0605 TACK COAT GAL	465.0105 ASPHALTIC SURFACE TON
0010	285+00	-	290+24	140	575
0010	291+29	-	297+50	155	660
0010					
	PROJECT 8640-00-71 TOTAL 0010			295	1,235
0010	332+50	-	337+71	140	580
0010	339+20	-	341+67	80	300
	PROJECT 8640-00-73 TOTAL 0010			220	880
	TOTALS			515	2,115

3

CATEGORY	STATION	TO	STATION	LOCATION	416.1010 CONCRETE SURFACE DRAINS CY	601.0588 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBT LF	601.0590 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBTT LF	REMARKS
0010	291+26	-	291+80	LT	--	51	3	
0010	-	-	291+70	LT	2	--	--	CONCRETE SURFACE DRAIN
			PROJECT 8640-00-71 TOTAL 0010		2	51	3	
0010	337+16	-	337+71	LT	--	55	--	
0010	-	-	337+27	LT	5	--	--	CONCRETE SURFACE DRAIN
0010	337+29	-	337+83	RT	--	40	14	
0010	-	-	337+40	RT	3	--	--	CONCRETE SURFACE DRAIN
			PROJECT 8640-00-73 TOTAL 0010		8	95	14	
				TOTALS	10	146	17	

CATEGORY	STATION	TO	STATION	LOCATION	204.0165 REMOVING GUARDRAIL LF	614.2300 MGS GUARDRAIL 3 LF	614.2500 MGS THRIE BEAM TRANSITION LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH
0010	288+38	-	290+32	LT	75	100	39.4	1
0010	288+73	-	290+32	RT	156	62.5	39.4	1
0010	291+23	-	292+93	LT	162	75	39.4	1
0010	291+23	-	292+30	RT	75	12.5	39.4	1
0010		-						
			PROJECT 8640-00-71 TOTAL 0010		468	250	157.6	4
0010	334+80	-	337+72	LT	272	200	39.4	1
0010	335+69	-	337+83	RT	234	125	39.4	1
0010	339+02	-	341+21	LT	172	125	39.4	1
0010	339+02	-	340+60	RT	184	50	39.4	1
			PROJECT 8640-00-73 TOTAL 0010		862	500	157.6	4
				TOTALS	1,330	750	315.2	8

CATEGORY	STATION	TO	STATION	LOCATION	415.0410 CONCRETE PAVEMENT APPROACH SLAB SY
0010	290+24	-	290+41	MAINLINE	70
0010	291+13	-	291+29	MAINLINE	70
			PROJECT 8640-00-71 TOTAL 0010		140
0010	337+71	-	338+01	MAINLINE	100
0010	338+89	-	339+20	MAINLINE	101
			PROJECT 8640-00-73 TOTAL 0010		201
				TOTAL	341

CATEGORY	STATION	LOCATION	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECKS EACH	628.7570 ROCK BAGS EACH	REMARKS
0010	287+09	LT	--	3	--	DRIVEWAY
0010	288+25	LT	12	--	--	
0010	288+50	RT	--	3	--	DRIVEWAY
0010	289+25	LT	12	--	--	
0010	290+23	LT	--	--	20	SILT FENCE RELIEF
0010	290+23	RT	--	--	20	SILT FENCE RELIEF
0010	291+30	LT	--	--	20	SILT FENCE RELIEF
0010	291+29	RT	--	--	20	SILT FENCE RELIEF
0010	293+25	LT	--	3	--	DRIVEWAY
0010	296+80	RT	--	3	--	DRIVEWAY
0010		UNDISTRIBUTED	12	5	10	
		PROJECT 8640-00-71 TOTAL 0010	36	17	90	
0010	334+06	LT	--	3	--	DRIVEWAY
0010	337+55	LT	12	--	--	
0010	337+60	LT	--	--	20	SILT FENCE RELIEF
0010	337+83	RT	--	--	20	SILT FENCE RELIEF
0010	339+13	LT	--	--	20	SILT FENCE RELIEF
0010	339+25	RT	--	--	20	SILT FENCE RELIEF
0010	339+35	LT	12	--	--	
0010		UNDISTRIBUTED	12	5	10	
		PROJECT 8640-00-73 TOTAL 0010	36	8	90	
		TOTALS	72	25	180	

CATEGORY	STATION	TO	STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	628.6005 TURBIDITY BARRIERS SY
0010	285+00	-	290+60	LT	580	580	--	--	--
0010	285+00	-	290+55	RT	600	600	--	--	--
0010			230+91		--	--	--	--	83
0010			290+84		--	--	--	--	90
0010	290+90	-	297+50	RT	680	680	--	--	--
0010	290+95	-	297+50	LT	680	680	--	--	--
0010				PROJECT 8640-00-71	--	--	4	2	--
				PROJECT 8640-00-71 TOTAL 0010	2,540	2,540	4	2	173
0010	332+50	-	337+75	RT	610	610	--	--	--
0010	332+50	-	337+75	LT	600	600	--	--	--
0010			338+30		--	--	--	--	149
0010			338+58		--	--	--	--	152
0010	339+05	-	341+67	LT	330	330	--	--	--
0010	339+05	-	341+67	RT	310	310	--	--	--
0010				PROJECT 8640-00-73	--	--	4	2	--
				PROJECT 8640-00-73 TOTAL 0010	1,850	1,850	4	2	301
				TOTALS	4,390	4,390	8	4	303

CATEGORY	STATION	TO	STATION	LOCATION	625.0100 TOPSOIL SY	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0200 SEEDING TEMPORARY LB	630.0500 SEED WATER MGAL
0010	285+00	-	288+39	RT	410	410	0.26	11	--	10
0010	288+60	-	290+31	RT	280	280	0.18	8	--	7
0010	285+00	-	287+03	LT	490	490	0.31	13	--	12
0010	287+15	-	290+30	LT	580	580	0.37	16	--	14
0010	291+24	-	296+66	RT	900	900	0.57	24	--	21
0010	296+90	-	297+50	RT	60	60	0.04	2	--	2
0010	291+25	-	293+18	LT	300	300	0.19	8	--	7
0010	293+30	-	297+50	LT	740	740	0.47	20	--	17
0010				UNDISTRIBUTED	100	100	0.06	4	25	3
				PROJECT 8640-00-71 TOTAL 0010	3,860	3,860	2.43	105	25	93
0010	332+50	-	333+99	LT	300	300	0.19	8	--	7
0010	334+12	-	337+77	LT	1,010	1,010	0.64	27	--	23
0010	332+50	-	337+90	RT	820	820	0.52	22	--	19
0010	339+00	-	341+70	LT	610	610	0.38	16	--	14
0010	339+14	-	341+70	RT	680	680	0.43	18	--	16
0010				UNDISTRIBUTED	100	100	0.06	3	25	3
				PROJECT 8640-00-73 TOTAL 0010	3,520	3,520	2.22	95	25	82
				TOTALS	7,380	7,380	4.65	200	50	175

CATEGORY	STATION	LOCATION	638.2102 MOVING SIGNS TYPE II EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	638.4000 MOVING SMALL SIGN SUPPORTS EACH
0010	290+20	LT	--	1	1	--
0010	290+20	RT	--	1	1	--
0010	291+20	LT	--	1	1	--
0010	291+20	RT	--	1	1	--
		PROJECT 8640-00-71 TOTAL 0010	0	4	4	0
0010	337+70	LT	--	1	1	--
0010	337+80	RT	--	1	1	--
0010	339+00	LT	--	1	1	--
0010	339+10	RT	--	1	1	--
0010	340+20	RT	1	--	--	1
		PROJECT 8640-00-73 TOTAL 0010	1	4	4	1
		TOTALS	1	8	8	1

CATEGORY	LOCATION	DURATION DAYS	643.0300 TRAFFIC CONTROL DRUMS DAY	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	643.0900 TRAFFIC CONTROL SIGNS DAY	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II NO. CYCLES	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH	643.1000 TRAFFIC CONTROL SIGNS FIXED MESSAGE SF	REMARKS
0010	ADVANCE WARNING	7	--	--	--	--	--	--	18	PLACE G20-57 SIGNS 7 DAYS PRIOR TO CONSTRUCTION, REMOVE WHEN CONSTRUCTION BEGINS
0010	PROJECT	115	--	1,840	2,530	9,775	1	6	--	DETOUR
0010	UNDISTRIBUTED		20	100	200	300	--	--	--	
	PROJECT 8640-00-71 TOTAL 0010		20	1,940	2,730	10,075		6	18	
0010	ADVANCE WARNING	7	--	--	--	--	--	--	18	PLACE G20-57 SIGNS 7 DAYS PRIOR TO CONSTRUCTION, REMOVE WHEN CONSTRUCTION BEGINS
0010	PROJECT	115	--	1,840	2,530	9,775	1	6	8.2	DETOUR
0010	UNDISTRIBUTED		20	100	200	300	--	--	--	
	PROJECT 8640-00-73 TOTAL 0010		20	1,940	2,730	10,075		6	26.2	
		TOTALS	40	3,880	5,460	20,150		12	44.2	

CATEGORY	STATION	LOCATION	606.0200 RIPRAP MEDIUM CY	645.0120 GEOTEXTILE TYPE HR SY	REMARKS
0010	291+70	LT	3	9	CONCRETE SURFACE DRAIN
	PROJECT 8460-00-71 TOTAL 0010		3	9	
0010	337+27	LT	3	9	CONCRETE SURFACE DRAIN
0010	337+40	RT	3	9	CONCRETE SURFACE DRAIN
	PROJECT 8460-00-73 TOTAL 0010		6	18	
		TOTALS	9	27	

CATEGORY	STATION	TO	STATION	LOCATION	646.1020 MARKING LINE EPOXY 4-INCH LF	REMARKS
0010	285+00	-	297+50	MAINLINE	2,500	WHITE EDGELINE
0010	285+00	-	297+50	MAINLINE	2,500	YELLOW CENTERLINE
				PROJECT 8640-00-71 TOTAL 0010	5,000	
0010	332+50	-	341+67	MAINLINE	1,840	WHITE EDGELINE
0010	332+50	-	342+25	MAINLINE	1,020	YELLOW CENTERLINE
				PROJECT 8640-00-73 TOTAL 0010	2,860	
				TOTAL	7,860	

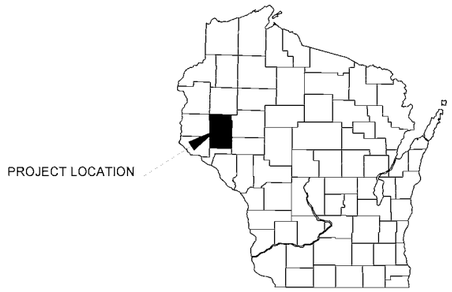
CATEGORY	STATION	TO	STATION	LOCATION	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF	650.6500.01 CONSTRUCTION STAKING STRUCTURE LAYOUT (B-17-0368) LS	650.6500.01 CONSTRUCTION STAKING STRUCTURE LAYOUT (B-17-0369) LS	650.9910.01 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (8640-00-71) LS	650.9910.01 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (8640-00-73) LS	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF
0010	285+00	-	290+42		542	542	--	--	--	--	--	542
0010	291+13	-	297+50		637	637	67	--	--	--	--	637
0010				PROJECT 8640-00-71	--	--	--	1	--	1	--	--
				PROJECT 8640-00-71 TOTAL 0010	1,179	1,179	67	1	0	1	0	1,179
0010	332+50	-	338+00		550	550	142	--	--	--	--	550
0010	338+89	-	341+67		278	278	--	--	--	--	--	278
0010				PROJECT 8640-00-71	--	--	--	--	1	--	1	--
				PROJECT 8640-00-73 TOTAL 0010	828	828	142	0	1	0	1	828
				TOTALS	2,007	2,007	209	1	1	1	2	2,007

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PROJECT PLAT TITLE SHEET
8640-00-21
MENOMONIE-BOYCEVILLE

COON CREEK BRIDGE B-17-0368

STH 79

DUNN COUNTY



CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W OR HE LINE
PROPERTY LINE
LOT, TIE & OTHER MINOR LINES
SLOPE INTERCEPT
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING — TO BE REMOVED
BRIDGE

SECTION CORNER SYMBOL
SECTION CORNER MONUMENT
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN
OFF-PREMISE SIGN

R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND IRON PIN (1-INCH UNLESS NOTED) IP

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE		
TELEPHONE POLE		
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)		

ACCESS RESTRICTED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)

PARCEL NUMBER (25) UTILITY NUMBER (40)
PARALLEL OFFSETS

CONVENTIONAL ABBREVIATIONS

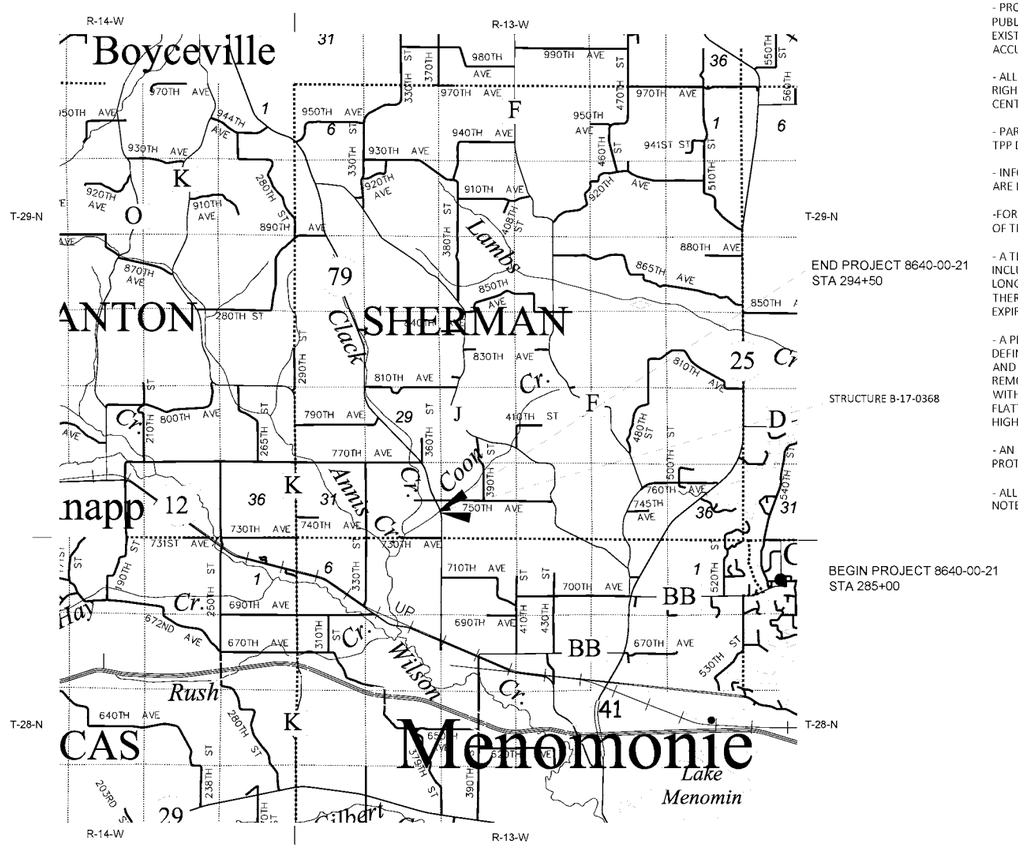
ACCESS RIGHTS	AR	POINT OF INTERSECTION	PI
ACRES	AC	PROPERTY LINE	PL
AHEAD	AH	RECORDED AS	(100')
ALUMINUM	ALUM	REEL / IMAGE	R/I
AND OTHERS	ET AL	REFERENCE LINE	R/L
BACK	BK	REMAINING	REM
BLOCK	BLK	RESTRICTIVE DEVELOPMENT EASEMENT	RDE
CENTERLINE	C/L	RIGHT	RT
CERTIFIED SURVEY MAP	CSM	RIGHT OF WAY	R/W
CONCRETE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

CURVE DATA

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

CONVENTIONAL UTILITY SYMBOLS

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



LAYOUT
SCALE 0 1 MI

THE NOTES,CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 8640-00-21.

NOTES:

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

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

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

- INFORMATION FOR THE BASIS OF EXISTING HIGHWAY RIGHT-OF-WAY POINTS OF REFERENCE AND ACCESS CONTROL ARE LISTED ON THE TPP DETAIL PAGES.

-FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN EAU CLAIRE, WISCONSIN

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

- A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHT TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

- AN EASEMENT FOR HIGHWAY PURPOSES (HE), AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE.

- ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY ¾" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

PROJECT NUMBER: 8840-00-21 - 4.01
SHEET: 2 OF 2
AMENDMENT NO: 20

FILE NAME : P:\90S\93\00093461\CADD\C3D\RIGHTOFWAY\DWG\RW 8640-00-01_03.DWG
LAYOUT NAME: 8640-00-01 COON TPP Title 34x22
PLOT DATE : 9/16/2015 3:04 PM PLOT BY : CHAD BESAW PLOT NAME : _____
APPRAISAL PLAT DATE : 2/1/2021

8840-00-21-4.01

4

TRANSPORTATION PROJECT PLAT NO: 8640-00-21-4.01

THAT PART OF THE NE 1/4 - SE 1/4, OF SECTION 32, TOWNSHIP 29 NORTH, RANGE 13 WEST, TOWN OF SHERMAN, DUNN COUNTY, WISCONSIN

RELOCATION ORDER - STH 79, MENOMONIE - BOYCEVILLE, COON CREEK BRIDGE B-17-0368, DUNN COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT. TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

FOR ADDITIONAL INFORMATION REFER TO TITLE SHEET RECORDED AS SHEET 2 OF 2.

NOTES:

-POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DUNN 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.

-FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN EAU CLAIRE, WISCONSIN

- ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY ¾" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

-EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
- PLAT OF RIGHT OF WAY REQUIRED - STATE PROJECT NO. 6239
- CSM NO. 2972, CSM NO. 2971, CSM NO. 465
- EXISTING CENTERLINE OF STH 79

SCHEDULE OF LANDS & INTERESTS REQUIRED		OWNER'S NAMES ARE FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT						
PARCEL NUMBER	OWNERS	INTEREST REQUIRED	R/W SQ FT REQUIRED SQ FT				PLE SQ FT	TLE SQ FT
			NEW	EXISTING	TOTAL	HE		
1	Rick J. Vazquez and Sandra L. Gagnon, husband and wife, as survivorship marital property	TLE	—	—	—	—	—	1,046
2	Barbara A. Mathiesen	HE	—	—	—	149	—	—

650816
DUNN COUNTY, WI
REGISTER OF DEEDS
HEATHER M. KUHN
RECORDED ON
04/13/2021 12:22 PM
REC FEE: 25.00
PAGES: 2
The above recording information verifies that this document has been electronically recorded and returned to the submitter.

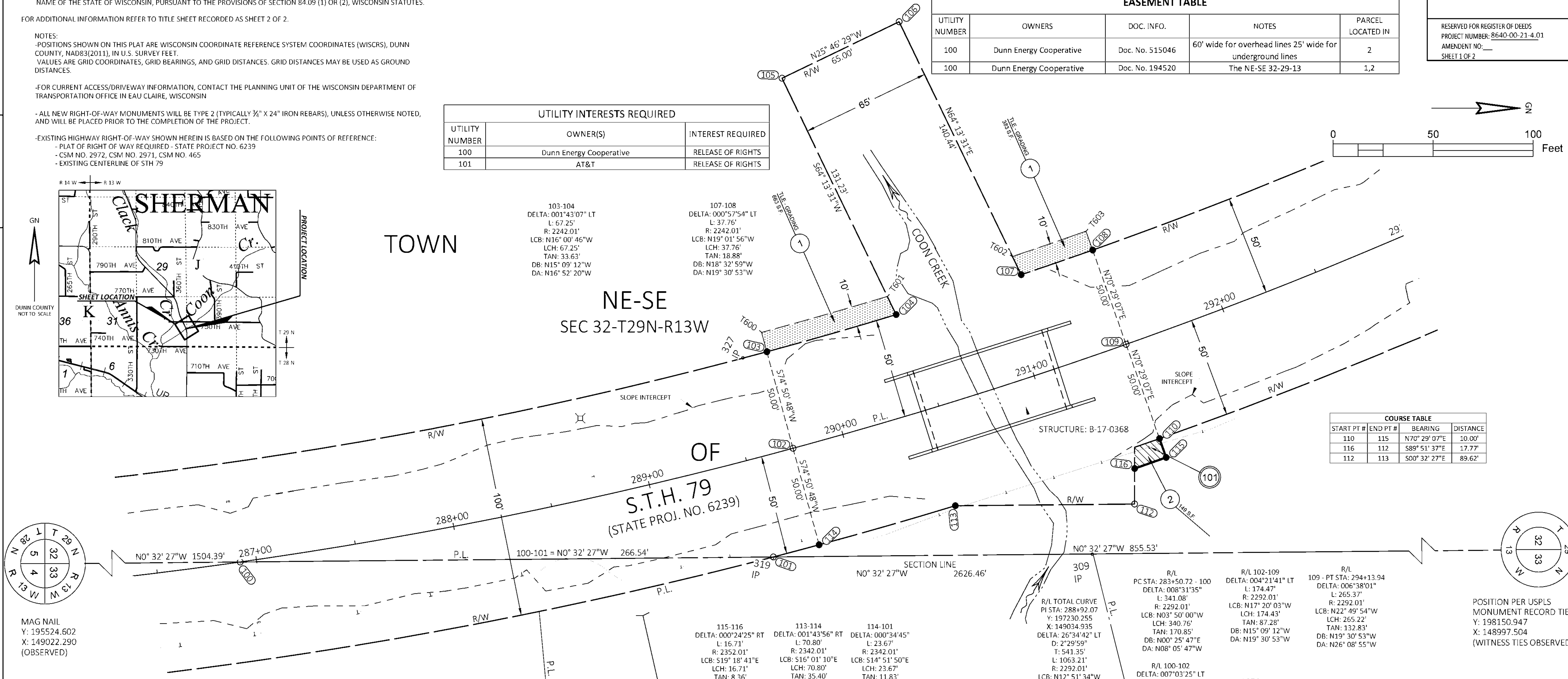
RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER: 8640-00-21-4.01
AMENDENT NO:___
SHEET 1 OF 2

EASEMENT TABLE

UTILITY NUMBER	OWNERS	DOC. INFO.	NOTES	PARCEL LOCATED IN
100	Dunn Energy Cooperative	Doc. No. 515046	60' wide for overhead lines 25' wide for underground lines	2
100	Dunn Energy Cooperative	Doc. No. 194520	The NE-SE 32-29-13	1,2

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
100	Dunn Energy Cooperative	RELEASE OF RIGHTS
101	AT&T	RELEASE OF RIGHTS



COURSE TABLE

START PT #	END PT #	BEARING	DISTANCE
110	115	N70° 29' 07"E	10.00'
116	112	S89° 51' 37"E	17.77'
112	113	S00° 32' 27"E	89.62'

R/W POINTS

Point	Station	Offset	Y	X
100	286+91.80	0.00'	197028.921	149008.093
101	289+50.94	RT 50.00'	197295.447	149005.578
102	289+74.10	0.00'	197305.254	148951.245
103	289+74.10	LT 50.00'	197292.183	148902.983
104	290+42.85	LT 50.00'	197356.825	148884.432
105	290+20.82	LT 179.55'	197299.762	148766.260
106	290+90.72	LT 189.25'	197358.295	148737.996
107	291+09.97	LT 50.00'	197419.362	148864.461
108	291+48.57	LT 50.00'	197455.058	148852.147
109	291+48.57	0.00'	197471.760	148899.275
110	291+48.57	RT 50.00'	197488.463	148946.403
112	291+26.62	RT 76.78'	197475.990	148979.123
113	290+43.39	RT 50.00'	197386.373	148979.969
114	289+74.10	RT 50.00'	197318.324	148999.506
115	291+48.57	RT 60.00'	197491.803	148955.828
116	291+32.29	RT 60.00'	197476.033	148961.354

TLE POINTS

Point	Station	Offset	Y	X
T600	289+74.10	LT 60.00'	197289.569	148893.331
T601	290+41.24	LT 60.00'	197352.423	148875.317
T602	291+08.67	LT 60.00'	197414.979	148855.383
T603	291+48.57	LT 60.00'	197451.717	148842.722

EXISITNG MONUMENTS

Point	Station	Offset	Description	Y	X
309	290+99.62	RT 93.81'	0.75" IRON ROD	197454.890	149004.204
319	289+50.30	RT 50.48'	0.75" IRON ROD	197294.939	149006.207
327	289+61.44	LT 50.16'	0.75" IRON ROD	197280.185	148906.036

MSA
ENGINEERING | ARCHITECTURE | SURVEYING
FUNDING | PLANNING | ENVIRONMENTAL
1835 North Stevens Street, Rhinelander WI 54501
(715) 362-3244 www.msa-ps.com

I, CHAD A. BESAW PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN CHAD A. BESAW S-3029 MERRILL WI LAND SURVEYOR 4/12/2021

SIGNATURE: [signature] DATE: 4/12/2021
PRINT NAME: CHAD A. BESAW
REGISTRATION NUMBER: S3029

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION NORTHWEST REGION - EAU CLAIRE

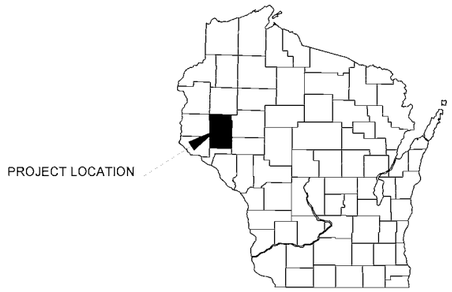
SIGNATURE: Heather L Dresel DATE: 4/12/2021
PRINT NAME: HEATHER L. DRESEL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PROJECT PLAT TITLE SHEET
8640-00-23
MENOMONIE-CONNORSVILLE

CLACK CREEK BRIDGE B-17-0369

STH 79

DUNN COUNTY



CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
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NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W OR HE LINE
PROPERTY LINE
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TRANSMISSION STRUCTURES
BUILDING — TO BE REMOVED
BRIDGE

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R/W MONUMENT (TO BE SET)
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FOUND IRON PIN (1-INCH UNLESS NOTED) IP

	COMPENSABLE	NON-COMPENSABLE
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PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)		

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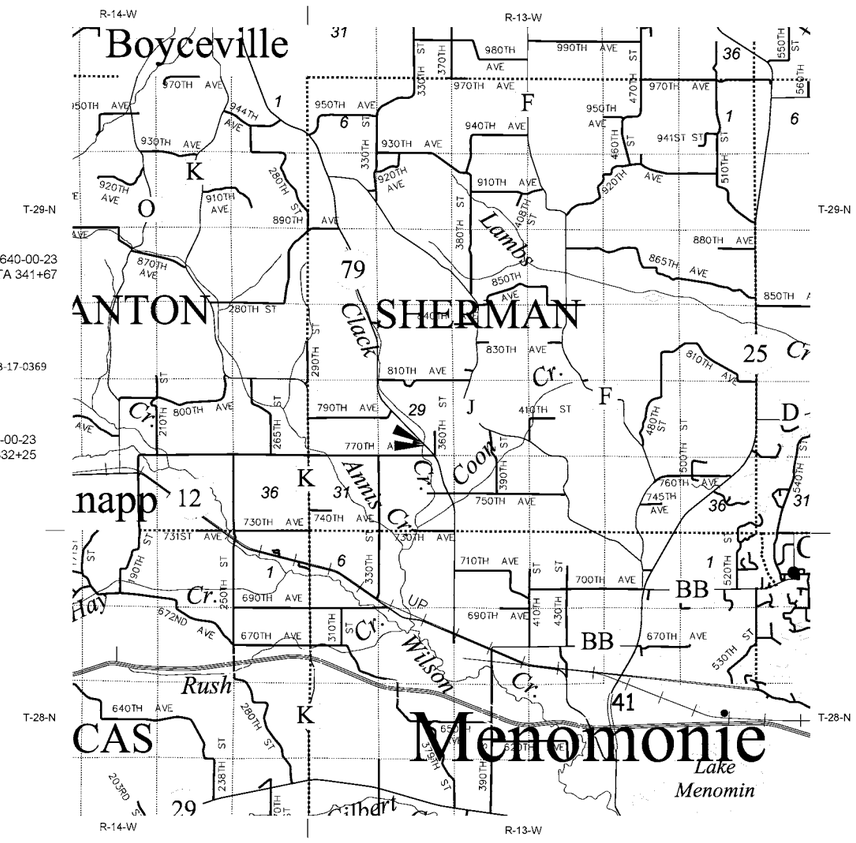
NO ACCESS (NEW HIGHWAY)

PARCEL NUMBER (25) UTILITY NUMBER (40)
PARALLEL OFFSETS

END PROJECT 8640-00-23 STA 341+67

STRUCTURE B-17-0369

BEGIN PROJECT 8640-00-23 STA 332+25



LAYOUT
SCALE 0 1 MI

CONVENTIONAL ABBREVIATIONS

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AHEAD	AH	RECORDED AS	(100')
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AND OTHERS	ET AL	REFERENCE LINE	R/L
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DOCUMENT NUMBER	DOC	TELEPHONE PEDESTAL	TP
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LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
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NOTES:

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- AN EASEMENT FOR HIGHWAY PURPOSES (HE), AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE.

- ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY ¾" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

PROJECT NUMBER: 8640-00-23 - 4.01
SHEET: 2 OF 2
AMENDMENT NO: 22

FILE NAME : P:\90S\93\00093461\CADD\C3D\RIGHTOFWAY\DWG\RW 8640-00-01_03.DWG
LAYOUT NAME: 8640-00-03 CLACK TPP Title 34x22 (2)
PLOT DATE : 9/16/2015 3:04 PM PLOT BY : CHAD BESAW PLOT NAME : _____
APPRAISAL PLAT DATE : 2/1/2021

TRANSPORTATION PROJECT PLAT NO: 8640-00-23-4.01

THAT PART OF THE SW1/4 - SE 1/4, OF SECTION 29, TOWNSHIP 29 NORTH, RANGE 13 WEST,
TOWN OF SHERMAN, DUNN COUNTY, WISCONSIN

RELOCATION ORDER - STH 79, MENOMONIE - CONNORSVILLE, CLACK CREEK BRIDGE B-17-0369, DUNN COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT. TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

FOR ADDITIONAL INFORMATION REFER TO TITLE SHEET RECORDED AS SHEET 2 OF 2.

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

PARCEL NUMBER	OWNERS	INTEREST REQUIRED	R/W SQ FT REQUIRED SQ FT				PLE SQ FT	TLE SQ FT
			NEW	EXISTING	TOTAL	HE		
1	Robert A. Bird and Lynda Bird, husband and wife as survivorship marital property	HE	__	__	__	5,558	__	__

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
100	Dunn Energy Cooperative	RELEASE OF RIGHTS
101	AT&T	RELEASE OF RIGHTS

EASEMENT TABLE

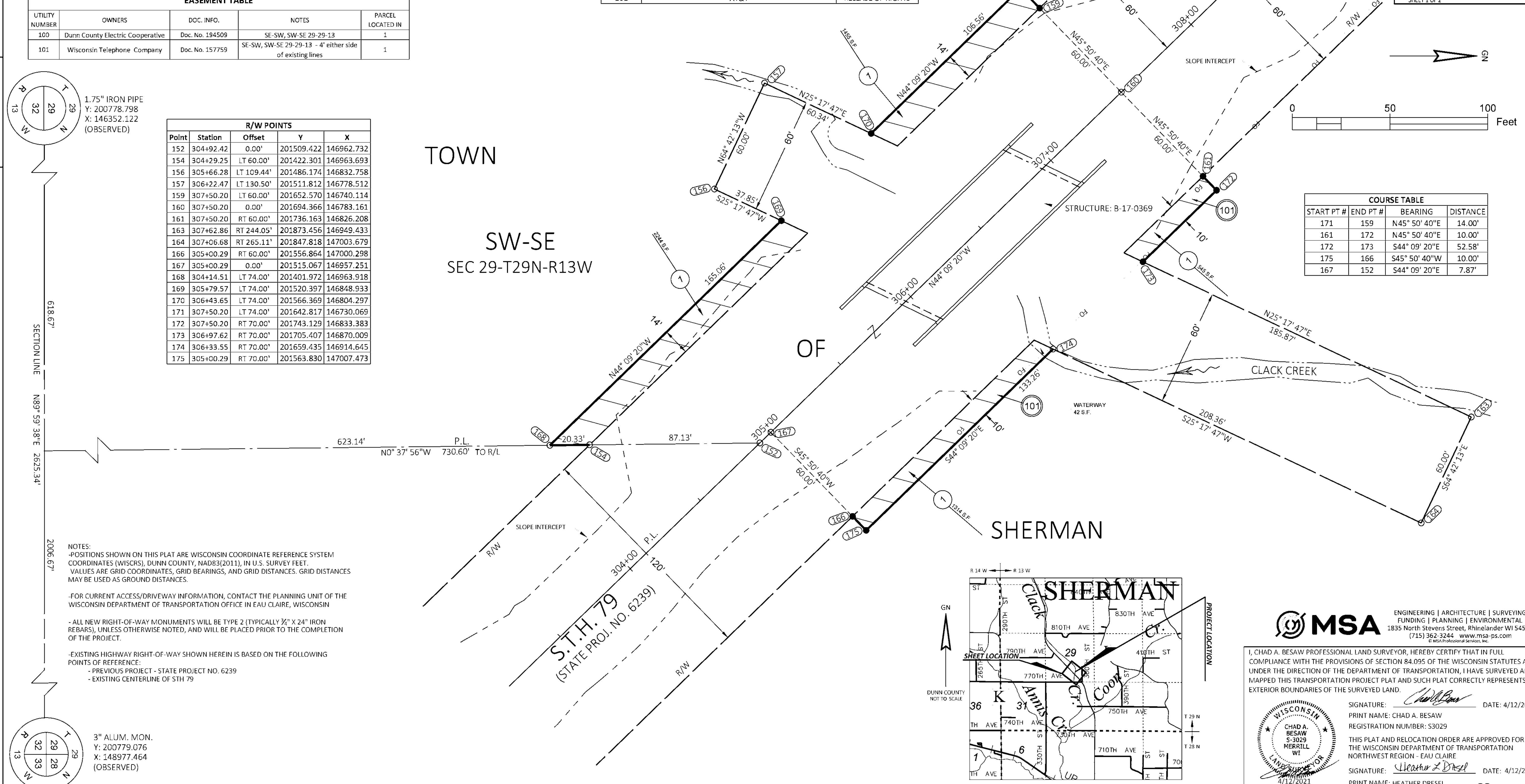
UTILITY NUMBER	OWNERS	DOC. INFO.	NOTES	PARCEL LOCATED IN
100	Dunn County Electric Cooperative	Doc. No. 194509	SE-SW, SW-SE 29-29-13	1
101	Wisconsin Telephone Company	Doc. No. 157759	SE-SW, SW-SE 29-29-13 - 4' either side of existing lines	1

R/W POINTS

Point	Station	Offset	Y	X
152	304+92.42	0.00'	201509.422	146962.732
154	304+29.25	LT 60.00'	201422.301	146963.693
156	305+66.28	LT 109.44'	201486.174	146832.758
157	306+22.47	LT 130.50'	201511.812	146778.512
159	307+50.20	LT 60.00'	201652.570	146740.114
160	307+50.20	0.00'	201694.366	146783.161
161	307+50.20	RT 60.00'	201736.163	146826.208
163	307+62.86	RT 244.05'	201873.456	146949.433
164	307+06.68	RT 265.11'	201847.818	147003.679
166	305+00.29	RT 60.00'	201556.864	147000.298
167	305+00.29	0.00'	201515.067	146957.251
168	304+14.51	LT 74.00'	201401.972	146963.918
169	305+79.57	LT 74.00'	201520.397	146848.933
170	306+43.65	LT 74.00'	201566.369	146804.297
171	307+50.20	LT 74.00'	201642.817	146730.069
172	307+50.20	RT 70.00'	201743.129	146833.383
173	306+97.62	RT 70.00'	201705.407	146870.009
174	306+33.55	RT 70.00'	201659.435	146914.645
175	305+00.29	RT 70.00'	201563.830	147007.473

COURSE TABLE

START PT #	END PT #	BEARING	DISTANCE
171	159	N45° 50' 40"E	14.00'
161	172	N45° 50' 40"E	10.00'
172	173	S44° 09' 20"E	52.58'
175	166	S45° 50' 40"W	10.00'
167	152	S44° 09' 20"E	7.87'



NOTES:

-POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DUNN 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.

-FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN EAU CLAIRE, WISCONSIN

- ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY ¾" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

-EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
  - PREVIOUS PROJECT - STATE PROJECT NO. 6239
  - EXISTING CENTERLINE OF STH 79

650817

DUNN COUNTY, WI
REGISTER OF DEEDS
HEATHER M. KUHN

RECORDED ON
04/13/2021 12:28 PM

REC FEE: 25.00
PAGES: 2
The above recording information verifies that this document has been electronically recorded and returned to the submitter.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER: 8640-00-23-4.01
AMENDENT NO:___
SHEET 1 OF 2

MSA
ENGINEERING | ARCHITECTURE | SURVEYING
FUNDING | PLANNING | ENVIRONMENTAL
1835 North Stevens Street, Rhinelander WI 54501
(715) 362-3244 www.msa-ps.com

I, CHAD A. BESAW PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN
CHAD A. BESAW
S-3029
MERRILL
WI
LAND SURVEYOR
4/12/2021

SIGNATURE: [signature] DATE: 4/12/2021
PRINT NAME: CHAD A. BESAW
REGISTRATION NUMBER: S3029

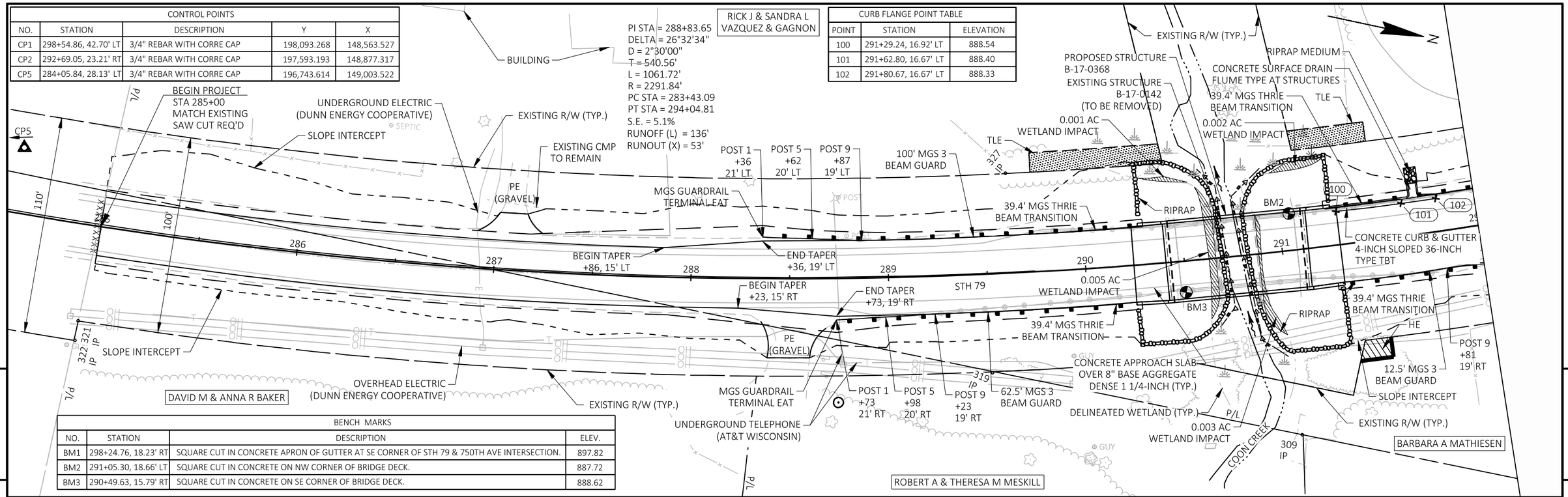
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION NORTHWEST REGION - EAU CLAIRE

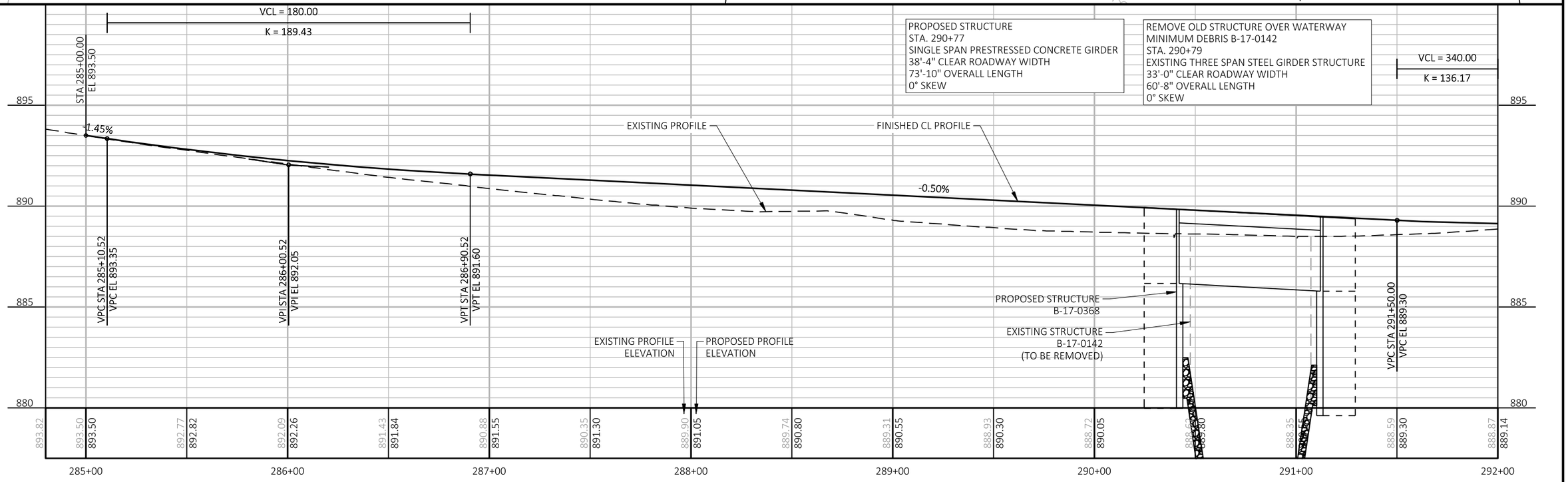
SIGNATURE: [signature] DATE: 4/12/2021
PRINT NAME: HEATHER DRESEL

CONTROL POINTS				
NO.	STATION	DESCRIPTION	Y	X
CP1	298+54.86, 42.70' LT	3/4" REBAR WITH CORRE CAP	198,093.268	148,563.527
CP2	292+69.05, 23.21' RT	3/4" REBAR WITH CORRE CAP	197,593.193	148,877.317
CP5	284+05.84, 28.13' LT	3/4" REBAR WITH CORRE CAP	196,743.614	149,003.522

CURB FLANGE POINT TABLE		
POINT	STATION	ELEVATION
100	291+29.24, 16.92' LT	888.54
101	291+62.80, 16.67' LT	888.40
102	291+80.67, 16.67' LT	888.33

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
BM1	298+24.76, 18.23' RT	SQUARE CUT IN CONCRETE APRON OF GUTTER AT SE CORNER OF STH 79 & 750TH AVE INTERSECTION.	897.82
BM2	291+05.30, 18.66' LT	SQUARE CUT IN CONCRETE ON NW CORNER OF BRIDGE DECK.	887.72
BM3	290+49.63, 15.79' RT	SQUARE CUT IN CONCRETE ON SE CORNER OF BRIDGE DECK.	888.62





PROJECT NO: 8640-00-71	HWY: STH 79	COUNTY: DUNN	PLAN AND PROFILE: COON CREEK CROSSING	SHEET 24	E

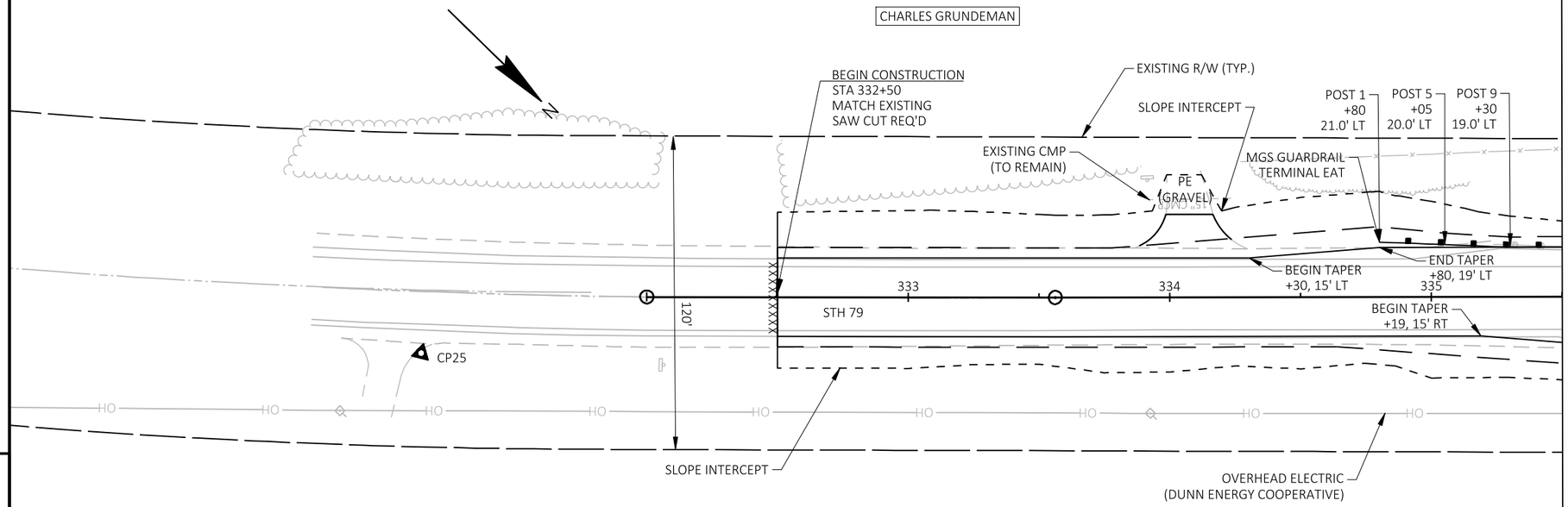
PROJECT NO: 8640-00-71	HWY: STH 79	COUNTY: DUNN	PLAN AND PROFILE: COON CREEK CROSSING	SHEET 25	E

FILE NAME : P:\90S\93\00934611\CADD\C3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050102

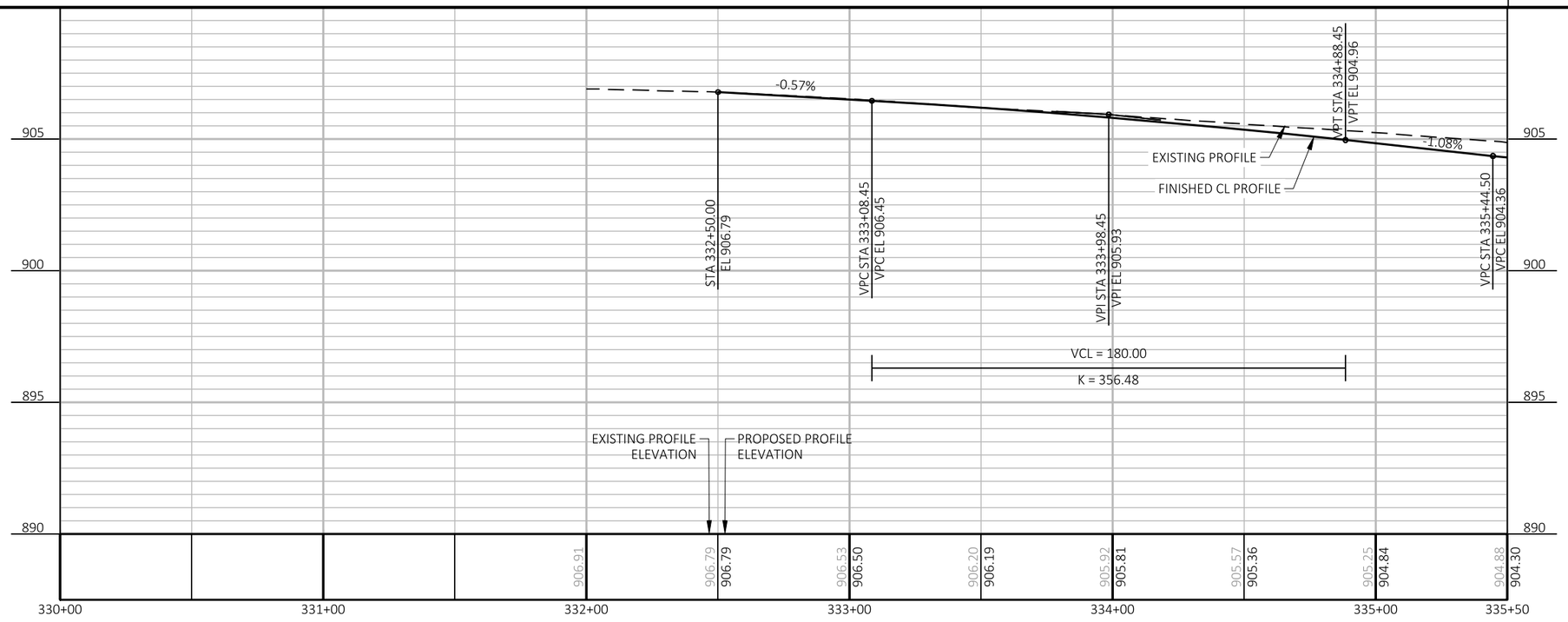
PLOT DATE : 5/11/2022 11:58 AM PLOT BY : COURTNEY ROOYAKKERS PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

CHARLES GRUNDEMAN



ROBERT A & LYNDA BIRD



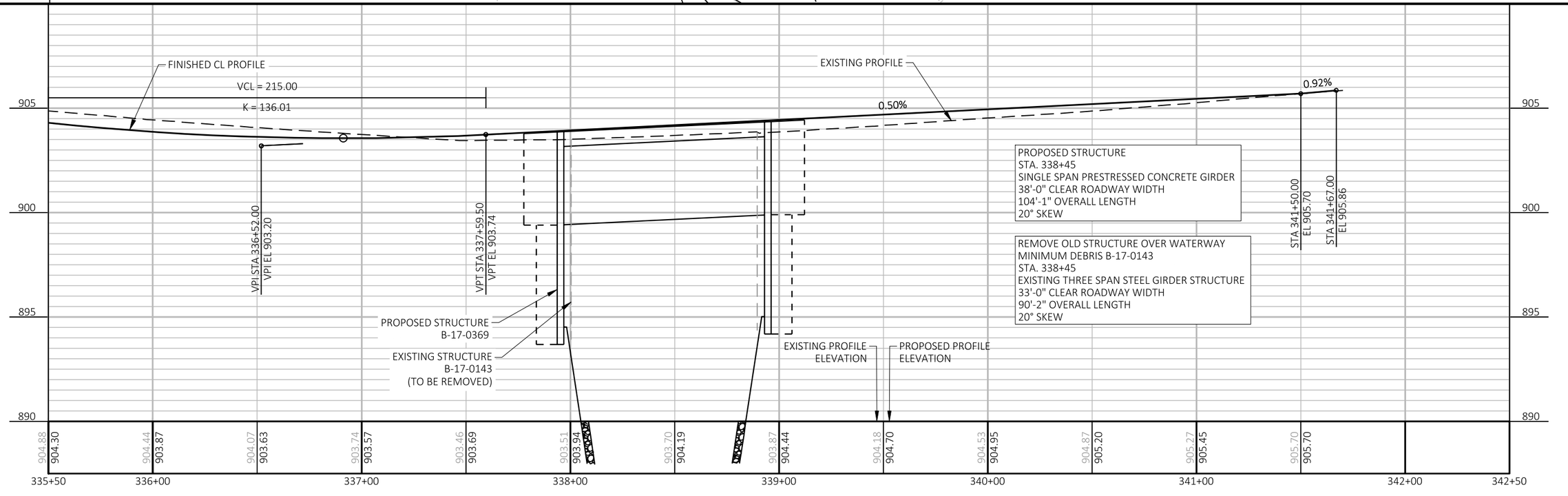
PROJECT NO: 8640-00-73	HWY: STH 79	COUNTY: DUNN	PLAN AND PROFILE: CLACK CREEK CROSSING	SHEET 26	E

CURB FLANGE POINT TABLE		
POINT	STATION	ELEVATION
300	337+15.99, 16.67' LT	903.26
301	337+33.29, 16.67' LT	903.30
302	337+71.02, 16.87' LT	903.46

CONTROL POINTS				
NO.	STATION	DESCRIPTION	Y	X
CP25	331+16.00, 23.64' RT	3/4" REBAR WITH CORRE CAP	201,110.701	147,382.397
CP34	339+34.65, 15.19' RT	3/4" REBAR WITH CORRE CAP	201,693.581	146,804.461
CP26	341+66.55, 21.01' LT	3/4" REBAR WITH CORRE CAP	201,835.265	146,617.346

CURB FLANGE POINT TABLE		
POINT	STATION	ELEVATION
200	337+29.45, 16.67' RT	903.29
201	337+46.86, 16.67' RT	903.35
202	337+82.93, 16.74' RT	903.52

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
125	338+06.43	SE CORNER OF BRIDGE. METAL WISDOT CAP SET IN BRIDGE DECK.	903.31
126	338+80.98	NW CORNER OF BRIDGE. CUT SQUARE IN BRIDGE DECK.	903.71
127	342+60.69	10" SPIKE SET IN WEST SIDE OF POWER POLE DUNNCO#22022. POWER POLE TO NE OF BRIDGE	902.22



PROJECT NO: 8640-00-73	HWY: STH 79	COUNTY: DUNN	PLAN AND PROFILE: CLACK CREEK CROSSING	SHEET 27	E

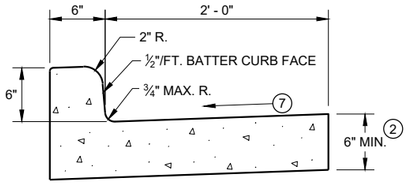
FILE NAME : P:\905\93\00093485\CADD\C3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050104-pp
PLOT DATE : 5/12/2022 9:53 AM
PLOT BY : COURTNEY ROOYAKKERS
PLOT NAME :
PLOT SCALE : 1 IN:50 FT

Standard Detail Drawing List

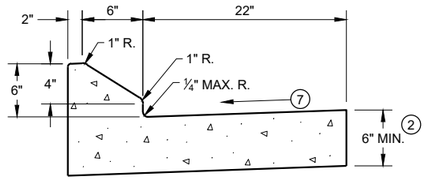
08D01-22A	CONCRETE CURB & GUTTER
08D01-22B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D02-07A	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D02-07B	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D02-07C	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D04-06	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E11-02	TURBIDITY BARRIER
08E15-01	CULVERT PIPE CHECK
12A03-10	NAME PLATE (STRUCTURES)
13B02-09A	CONCRETE PAVEMENT APPROACH SLAB
13C19-03	HMA LONGITUDINAL JOINTS
14B29-01	SAFETY EDGE
14B42-07A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
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)
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-08C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C06-09	SIGNING & MARKING FOR TWO LANE BRIDGES
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS

6

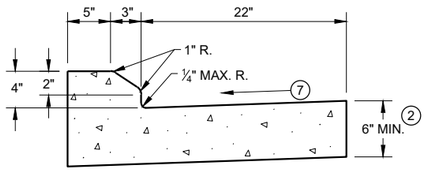
6



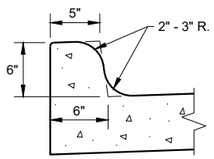
TYPES A[1] & D



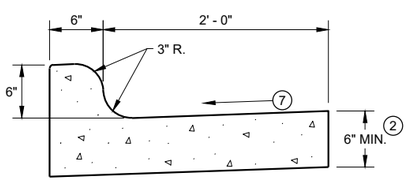
6" SLOPED CURB TYPES G[1] & J



4" SLOPED CURB TYPES G[1] & J

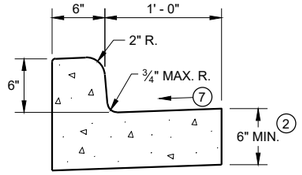


TYPES K[1] & L
(OPTIONAL CURB SHAPE)



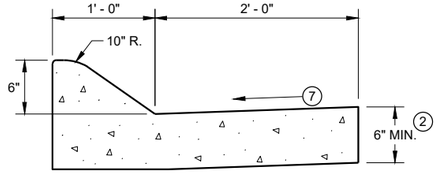
TYPES K[1] & L

CONCRETE CURB AND GUTTER 30"



TYPES A[1] & D

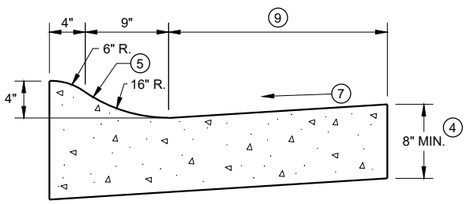
CONCRETE CURB AND GUTTER 18"



6" SLOPED CURB TYPES A[1] & D

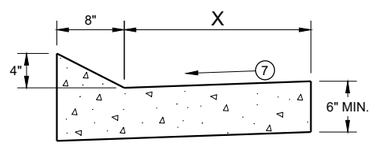
4" SLOPED CURB TYPES A[1] & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R[1] & T

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

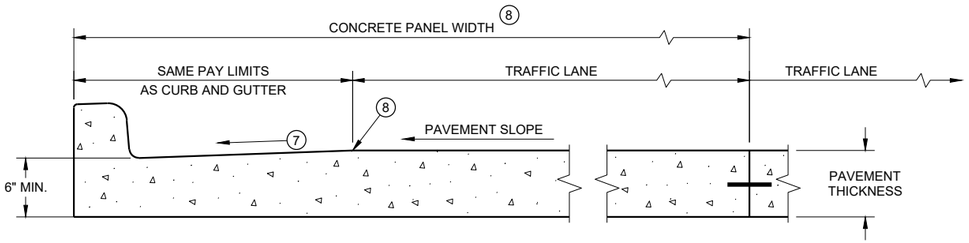


TYPES TBT & TBTT[1]

CONCRETE CURB AND GUTTER

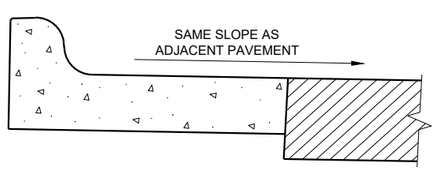
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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



PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



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

GENERAL NOTES

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

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

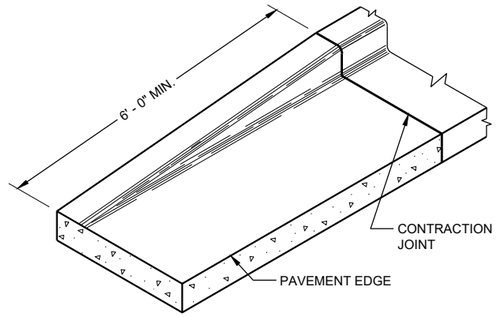
INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

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

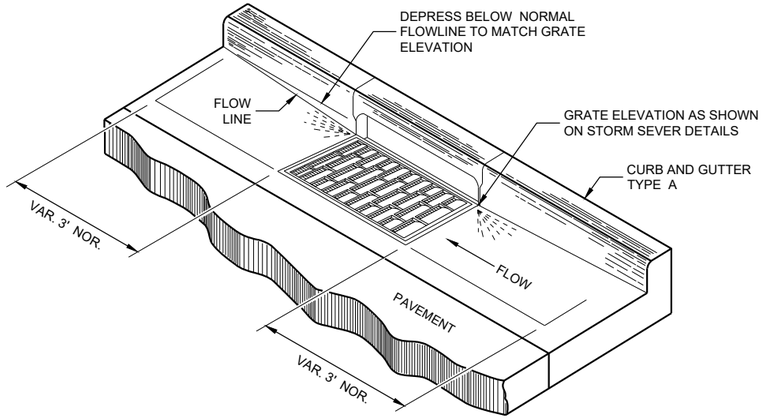
1. TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.
2. THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
3. USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH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

CONCRETE CURB AND GUTTER

SDD 08D01 - 22a
6



END SECTIONCURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS

(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

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

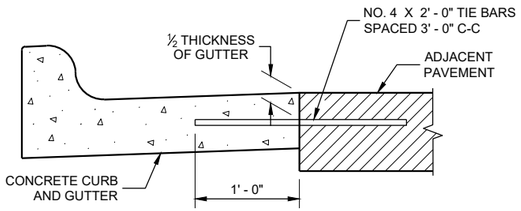
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

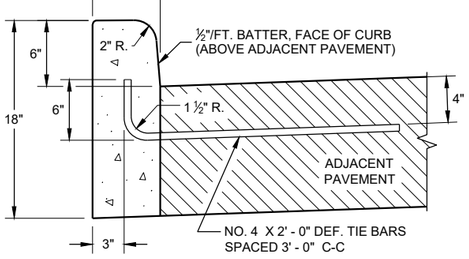
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

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

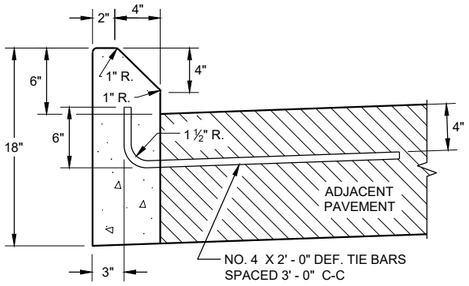
(9) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.



TYPICAL TIE BAR LOCATION (1)

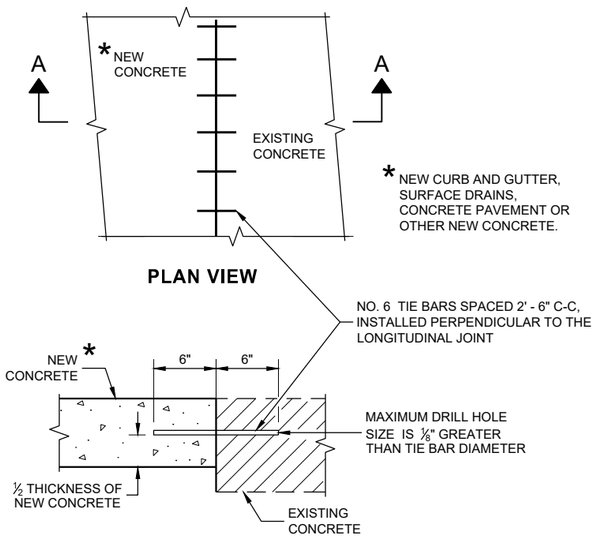


TYPES A (1) & D



TYPES G (1) & J

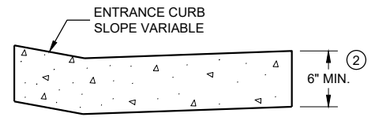
CONCRETE CURB



PLAN VIEW

SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



DRIVEWAY ENTRANCE CURB (9)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

SDD08D01 - 22b
SDD08D01 - 22b

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.

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

(1) USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.

(2) NO. 4 X 2' - 0" TIE BARS SPACED AT 12" C-C TO BE PLACED BY BRIDGE CONTRACTOR OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.

(3) PAVED CONCRETE SHOULDER (SDD 13A03) OR CONCRETE DRAINAGE SLAB.

(4) CONCRETE PAVEMENT APPROACH SLAB (SHOWN) OR STRUCTURE APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB. SEE SDD 13B02.

(5) PAVED CONCRETE SHOULDER (SDD 13A03) OR ASPHALT SHOULDER.

(6) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE TBT OR TBTT. USE TYPE TBTT CURB WITH NO. 4 X 2' -0" TIE BARS SPACED AT 3' - 0" C-C ONLY WHEN ADJACENT TO CONCRETE PAVEMENTS.

(7) PLACE FLUME BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)

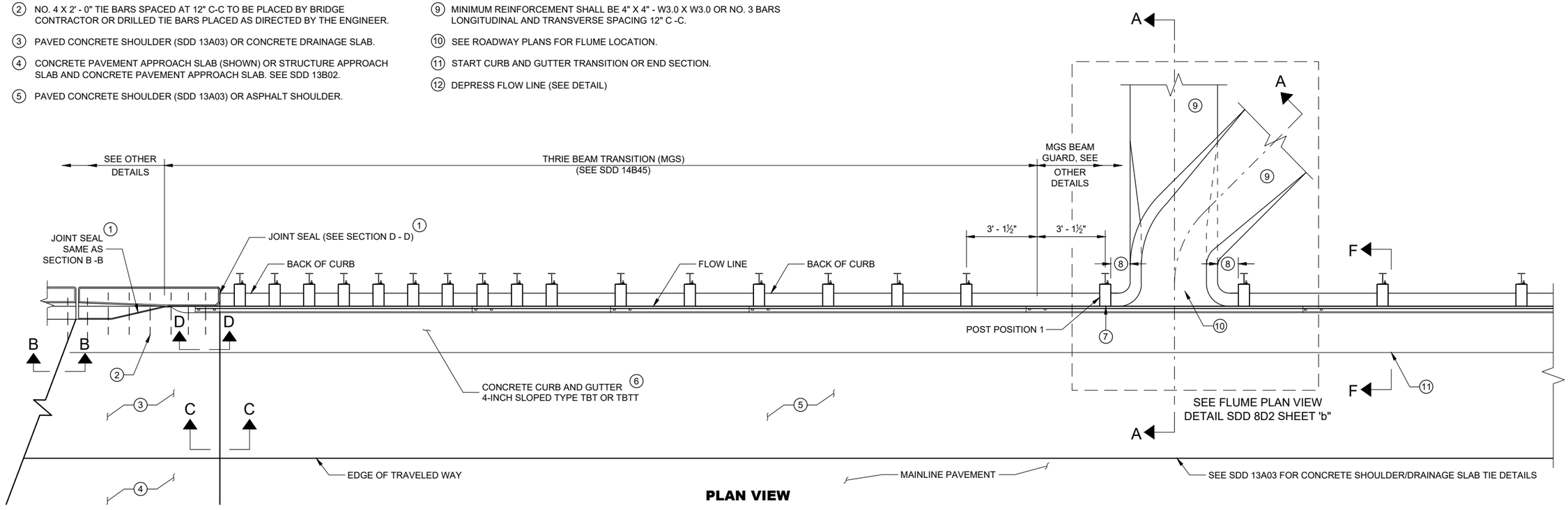
(8) CENTER FLUME BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE EDGE OF FLUME TO POSTS.

(9) MINIMUM REINFORCEMENT SHALL BE 4" X 4" - W3.0 X W3.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C -C.

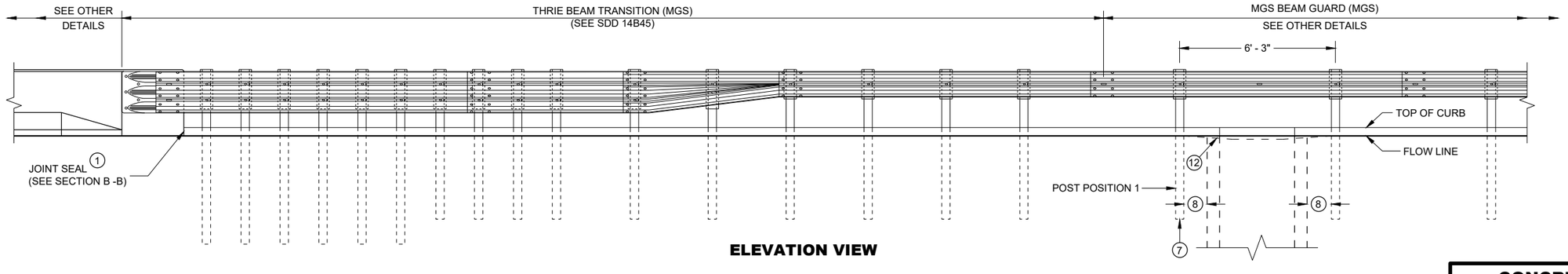
(10) SEE ROADWAY PLANS FOR FLUME LOCATION.

(11) START CURB AND GUTTER TRANSITION OR END SECTION.

(12) DEPRESS FLOW LINE (SEE DETAIL)



PLAN VIEW



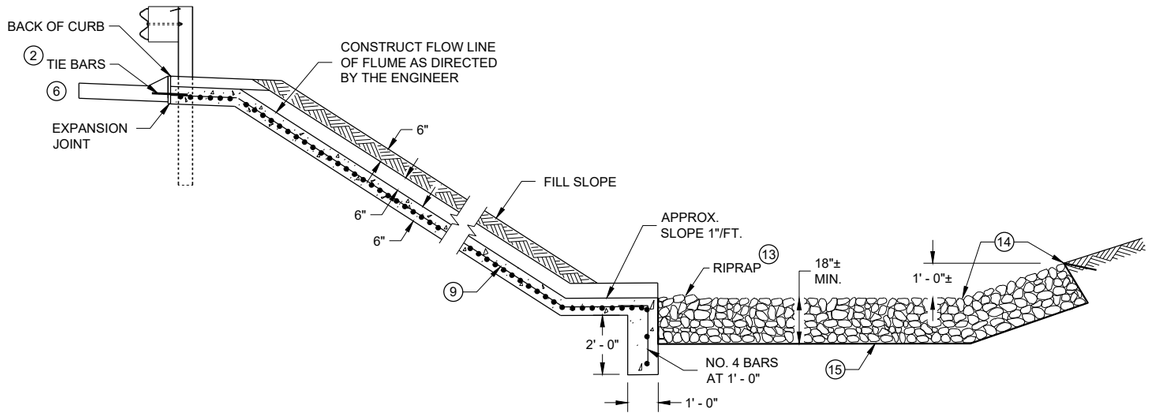
ELEVATION VIEW

CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

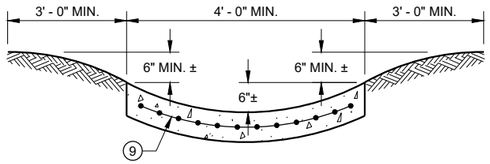
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D02 - 07a

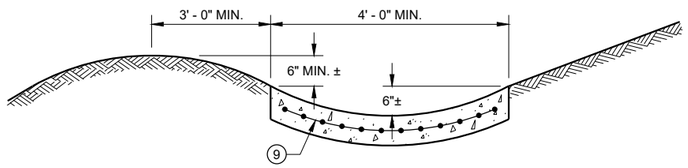
SDD 08D02 - 07a



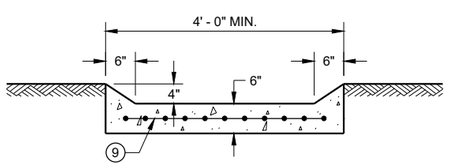
SECTION A - A



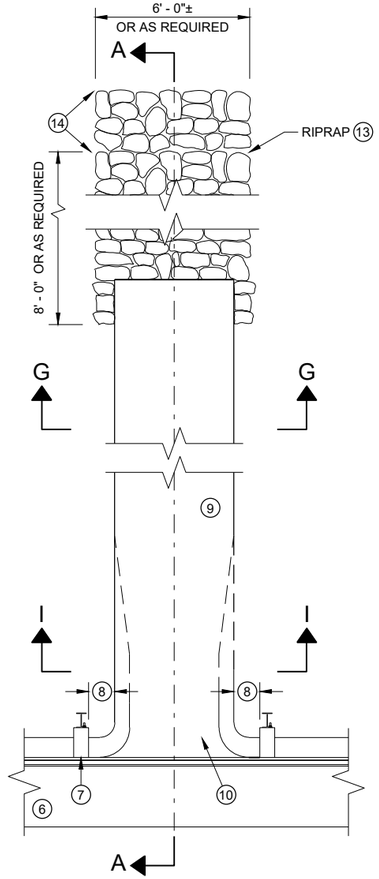
SECTION G - G



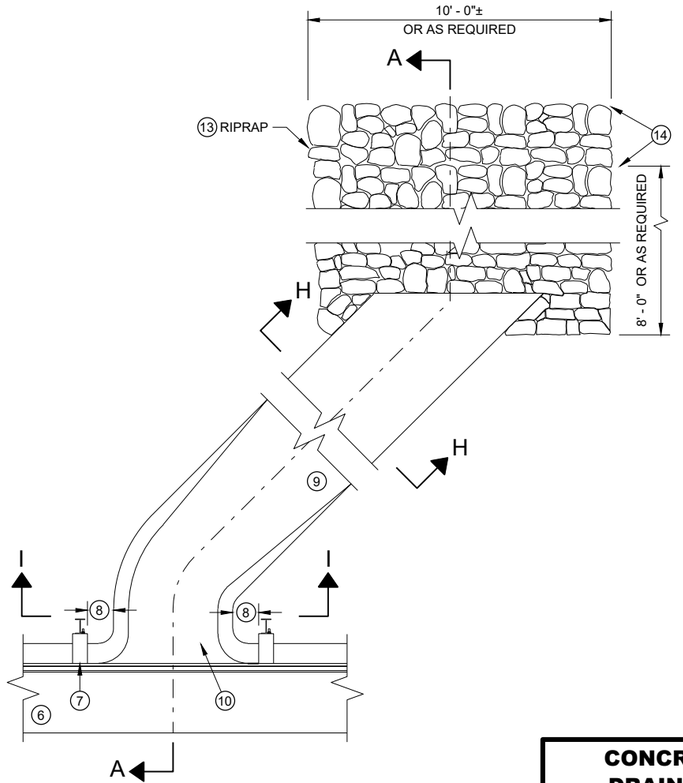
SECTION H - H



SECTION I - I



PLAN VIEW PERPENDICULAR FLUME



PLAN VIEW SKEWED FLUME

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.

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

1. USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.
2. NO. 4 X 2' - 0" TIE BARS SPACED AT 12" C-C TO BE PLACED BY BRIDGE CONTRACTOR OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.
3. PAVED CONCRETE SHOULDER (SDD 13A03) OR CONCRETE DRAINAGE SLAB.
4. CONCRETE PAVEMENT APPROACH SLAB (SHOWN) OR STRUCTURE APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB. SEE SDD 13B02 AND STRUCTURE PLANS.
5. PAVED CONCRETE SHOULDER (SDD 13A03) OR ASPHALT SHOULDER.
6. CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE TBT OR TBTT. USE TYPE TBTT CURB WITH NO. 4 X 2' -0" TIE BARS SPACED AT 3' - 0" C-C ONLY WHEN ADJACENT TO CONCRETE PAVEMENTS.
7. PLACE FLUME BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)
8. CENTER FLUME BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE EDGE OF FLUME TO POSTS.
9. MINIMUM REINFORCEMENT SHALL BE 4" X 4" - W3.0 X W3.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C -C.
10. SEE ROADWAY PLANS FOR FLUME LOCATION.
11. START CURB AND GUTTER TRANSITION OR END SECTION.
12. DEPRESS FLOW LINE (SEE DETAIL)
13. MEDIUM RIPRAP UNLESS OTHERWISE SPECIFIED.
14. LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH AS REQUIRED.
15. GEOTEXTILE FABRIC TYPE HR.

CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

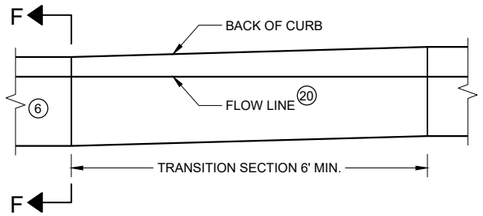
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

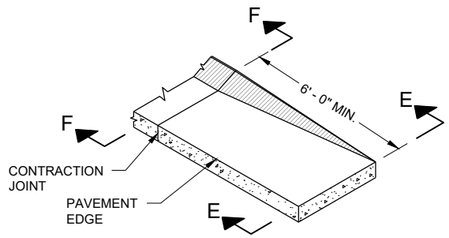
SDD 08D02 - 07b

6

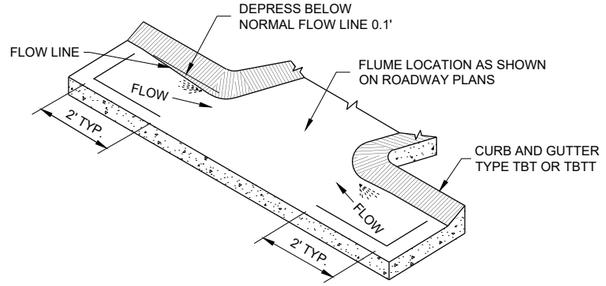
SDD 08D02 - 07b



CURB AND GUTTER TRANSITION SECTION
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36 INCH TYPE TBT OR TBTT



CURB AND GUTTER END SECTION
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36 INCH TYPE TBT OR TBTT



CURB AND GUTTER FLOW LINE DEPRESSION AT FLUMES CONCRETE CURB AND GUTTER 4-INCH SLOPED 36 INCH TYPE TBT OR TBTT

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.

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

(1) USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.

(2) NO. 4 X 2' - 0" TIE BARS SPACED AT 12" C-C TO BE PLACED BY BRIDGE CONTRACTOR OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.

(3) PAVED CONCRETE SHOULDER (SDD 13A03) OR CONCRETE DRAINAGE SLAB.

(4) CONCRETE PAVEMENT APPROACH SLAB (SHOWN) OR STRUCTURE APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB. SEE SDD 13B02 AND STRUCTURE PLANS.

(5) PAVED CONCRETE SHOULDER (SDD 13A03) OR ASPHALT SHOULDER.

(6) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE TBT OR TBTT. USE TYPE TBTT CURB WITH NO. 4 X 2' -0" TIE BARS SPACED AT 3' - 0" C-C ONLY WHEN ADJACENT TO CONCRETE PAVEMENTS.

(7) PLACE FLUME BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)

(8) CENTER FLUME BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE EDGE OF FLUME TO POSTS.

(9) MINIMUM REINFORCEMENT SHALL BE 4" X 4" - W3.0 X W3.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C -C.

(10) SEE ROADWAY PLANS FOR FLUME LOCATION.

(11) START CURB AND GUTTER TRANSITION OR END SECTION.

(12) DEPRESS FLOW LINE (SEE DETAIL)

(13) MEDIUM RIPRAP UNLESS OTHERWISE SPECIFIED.

(14) LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH IS REQUIRED.

(15) GEOTEXTILE FABRIC TYPE HR.

(16) MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C - C.

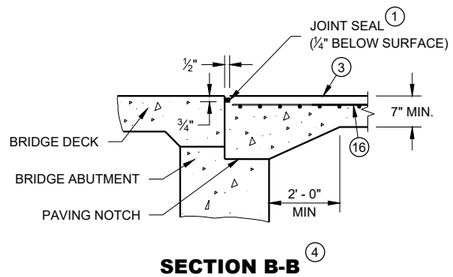
(17) MSG THRIE BEAM TRANSITION POST 1. SEE SDD 14B45 FOR ADDITIONAL CONSTRUCTION DETAILS AND ACCEPTABLE MATERIALS.

(18) MAINTAIN WIDTH, THICKNESS AND CROSS SLOPE OF ADJACENT TYPE TBT OR TBTT CURB. SEE NOTE 6 FOR TIE BAR SPACING.

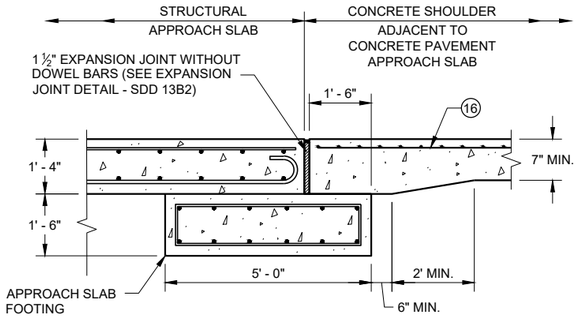
(19) ALIGN FACE OF POST BLOCK WITH FLOW LINE.

(20) MAINTAIN FLOW LINE AT EDGE OF PAVEMENT/FACE OF BEAM GUARD AS APPLICABLE.

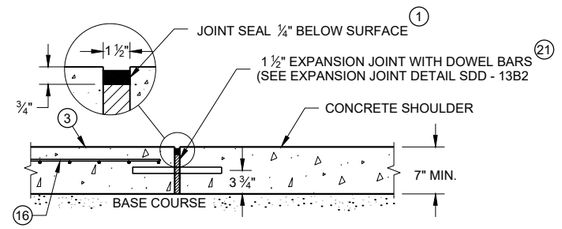
(21) DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING HMA PAVEMENTS.



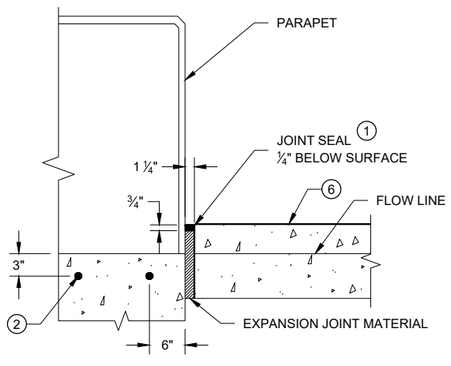
SECTION B-B (4)



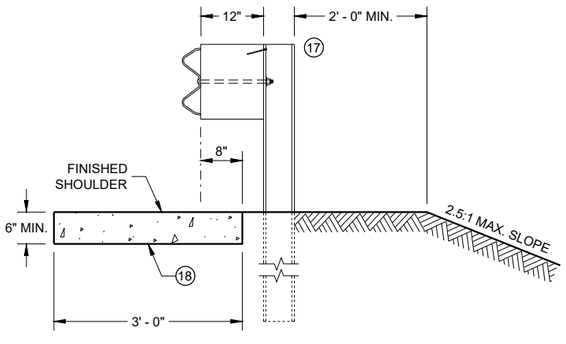
SECTION C - C
JOINT DETAIL FOR BRIDGE WITH STRUCTURAL APPROACH SLAB AND CONCRETE APPROACH SLAB



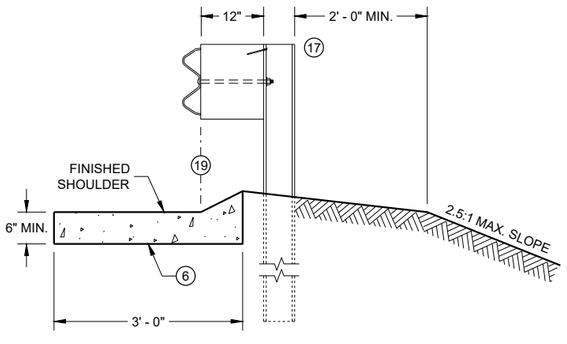
SECTION C - C
JOINT DETAIL FOR BRIDGE APPROACH WITH CONCRETE SHOULDERS



SECTION D - D



SECTION E - E



SECTION F - F

CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

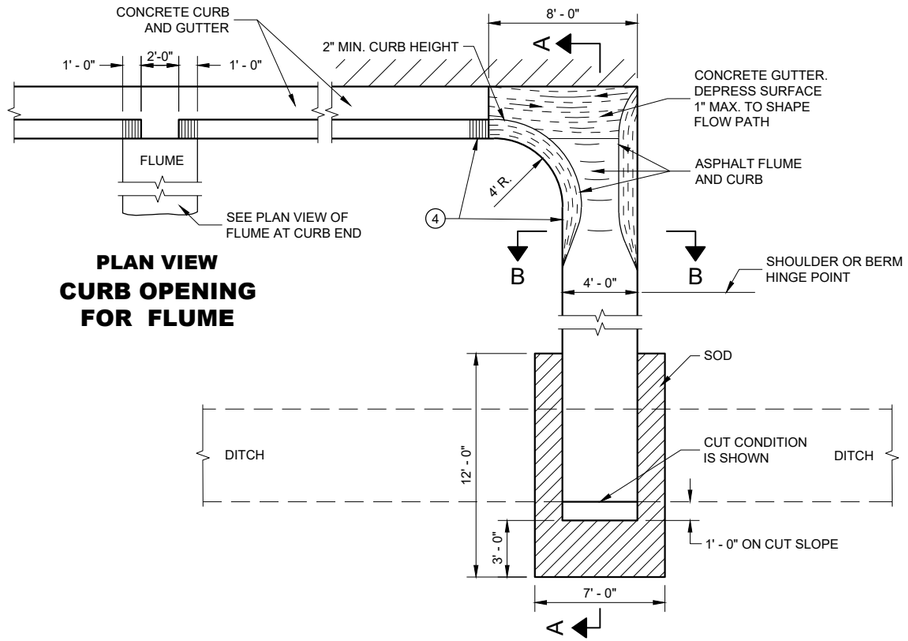
FHWA

SDD 08D02 - 07c

SDD 08D02 - 07c

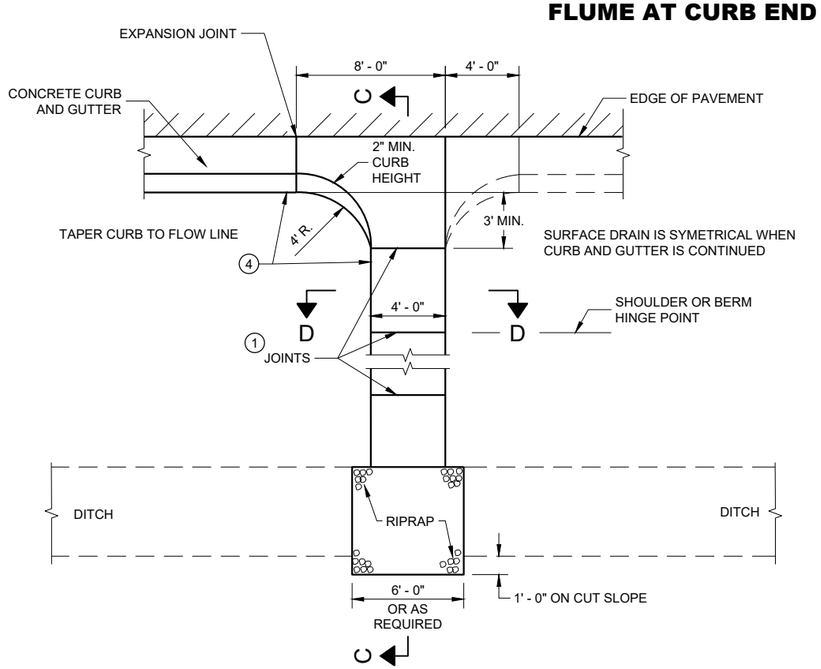
NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

ASPHALTIC FLUME



PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



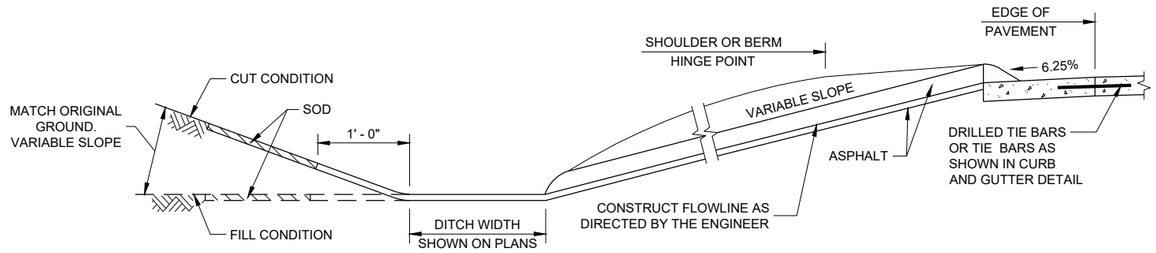
PLAN VIEW
CONCRETE SURFACE DRAIN

GENERAL NOTES

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

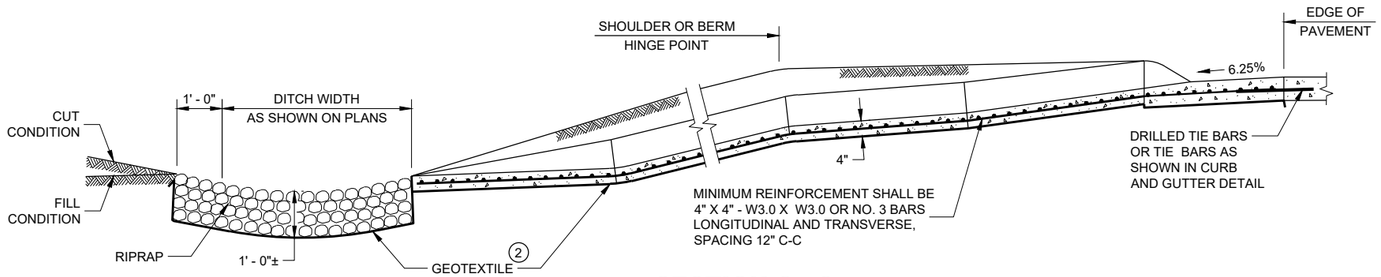
4" X 4" - W3.0 X W3.0 CONCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

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

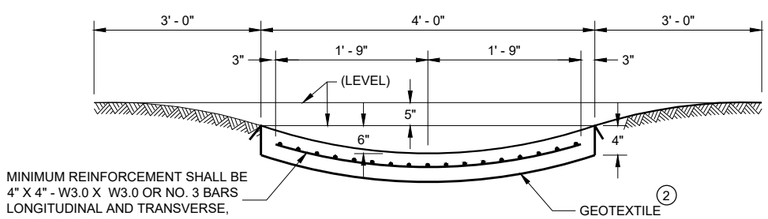


SECTION A - A

SECTION B - B



SECTION C - C



SECTION D - D

CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

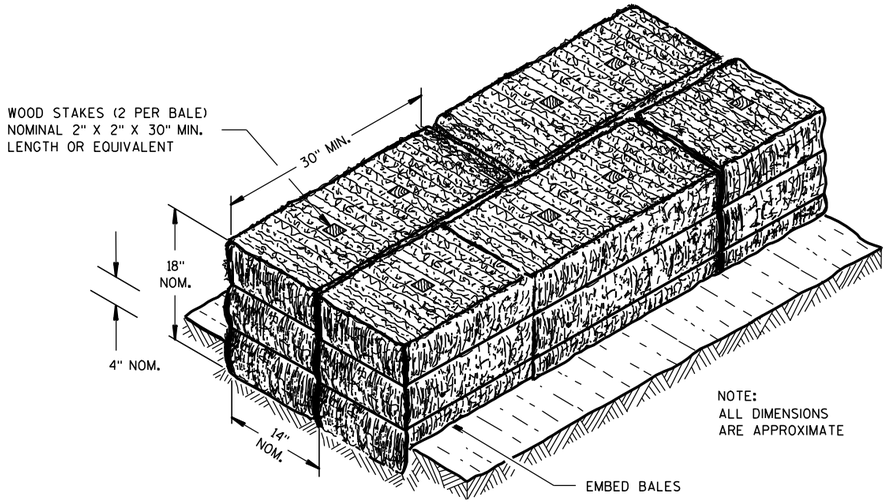
APPROVED
November 2021
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

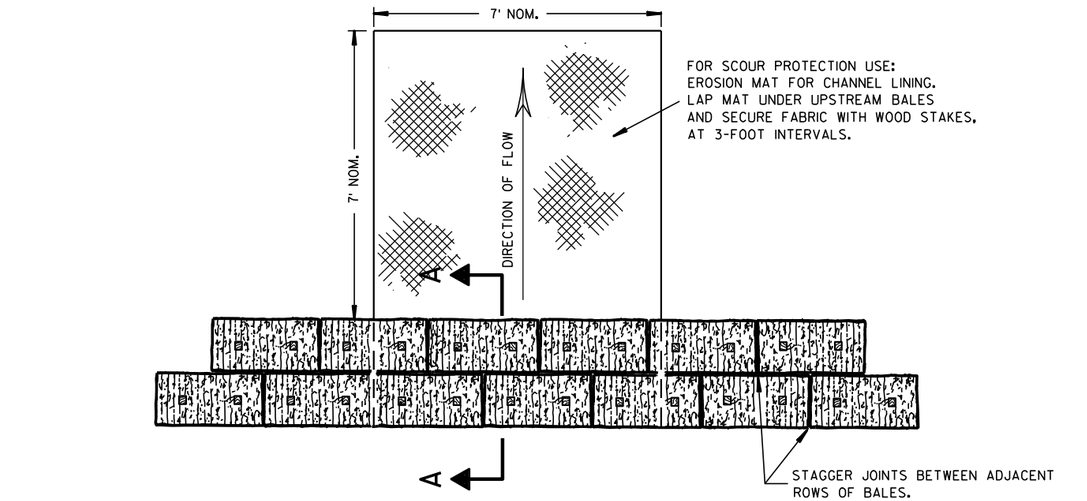
FHWA

6

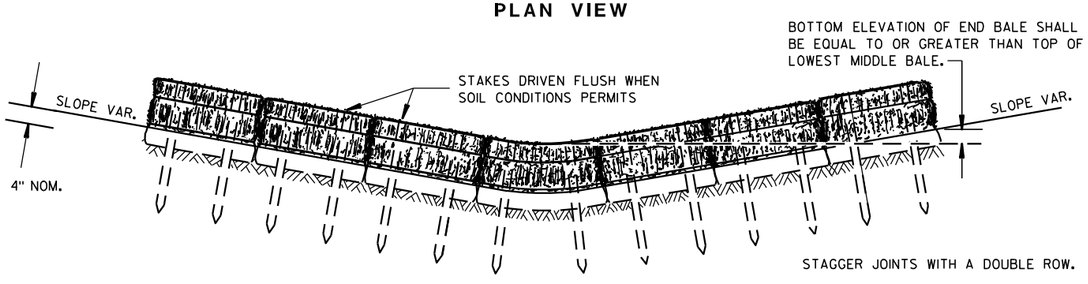
SDD 08D04 - 06



SECTION A-A



PLAN VIEW



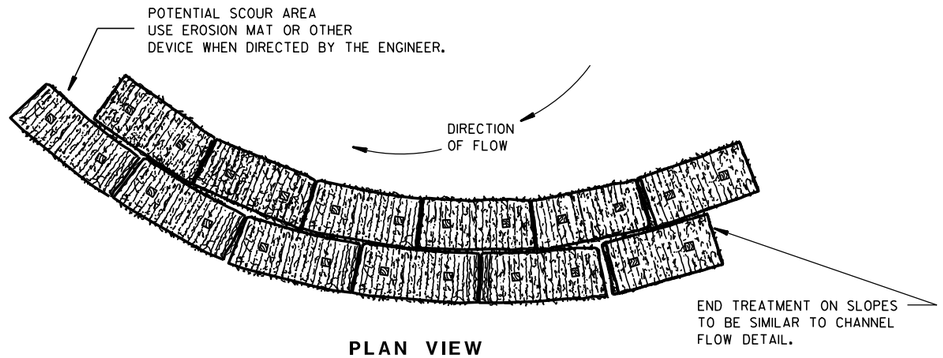
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

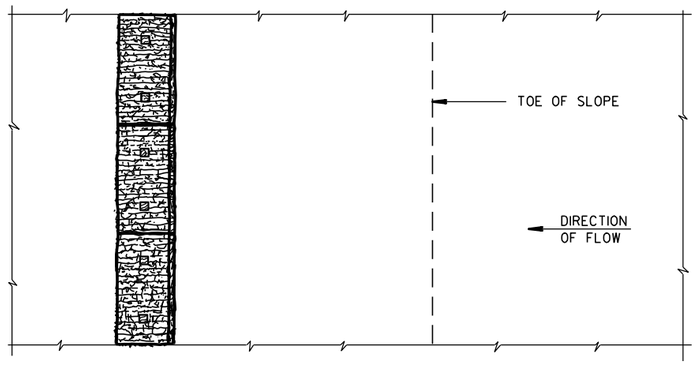
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

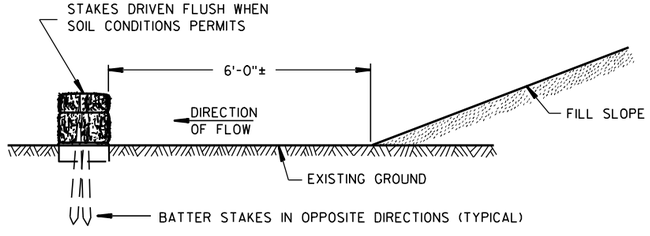


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

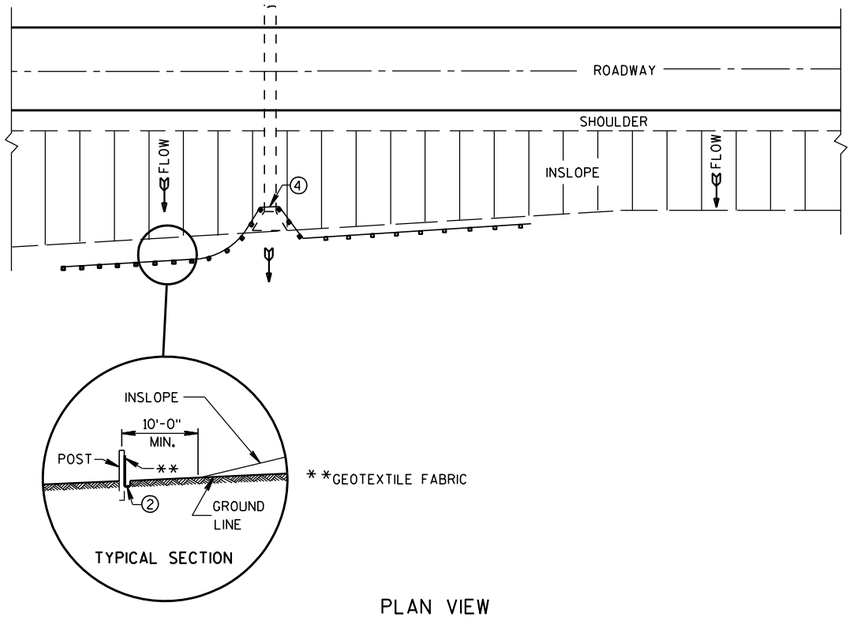
APPROVED

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

FHWA

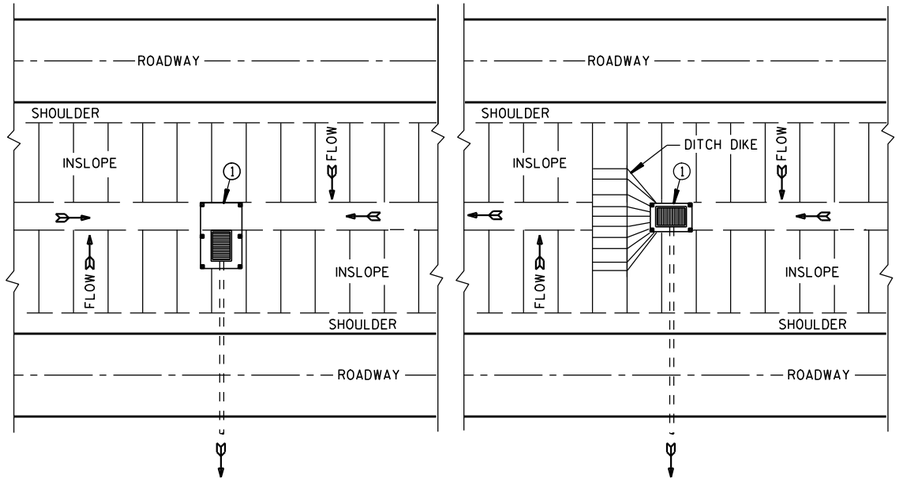
6

S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



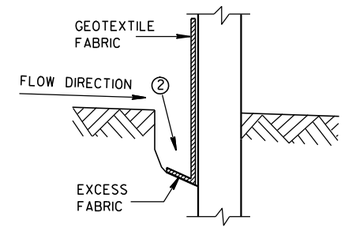
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

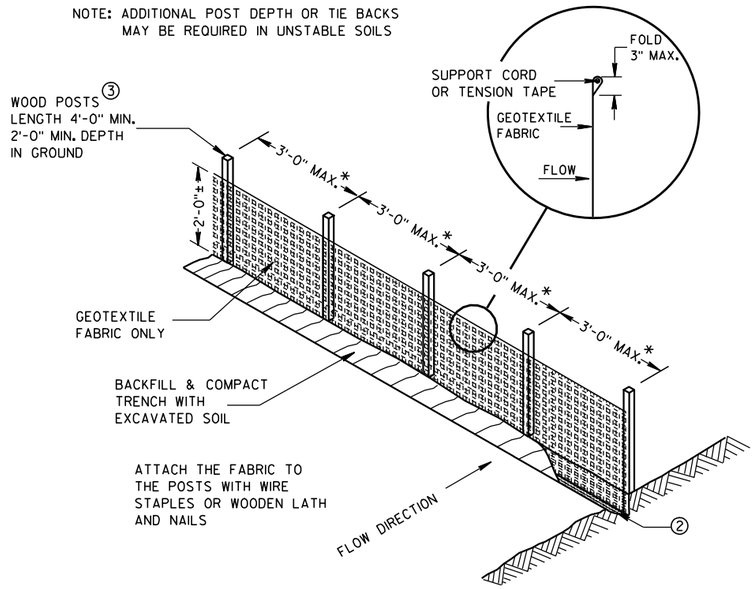
GENERAL NOTES

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

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

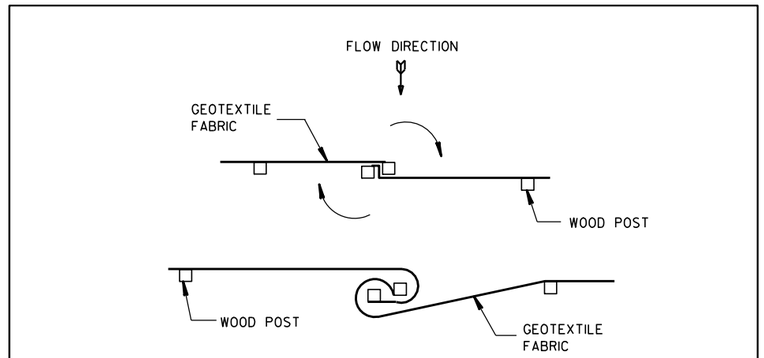


TRENCH DETAIL

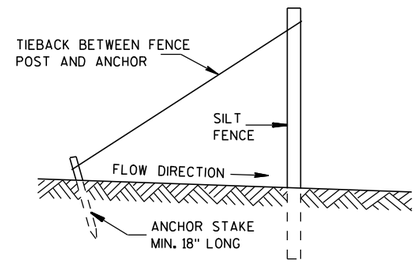


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE



JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

S.D.D. 8 E 9-6

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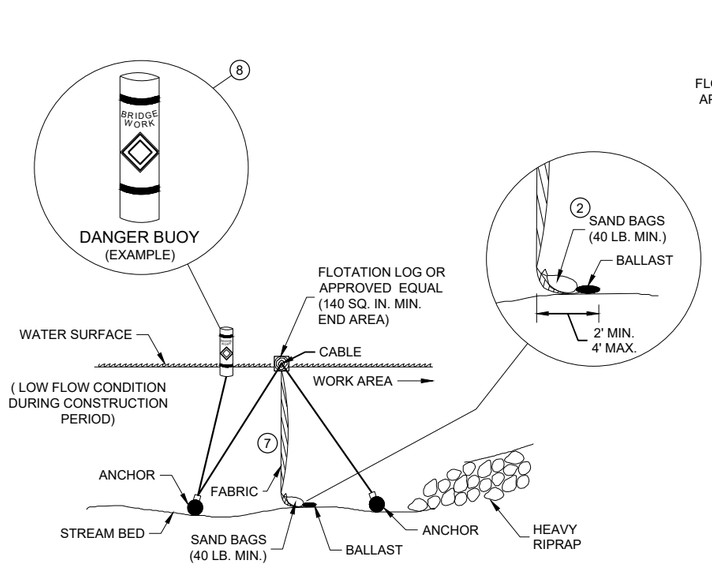
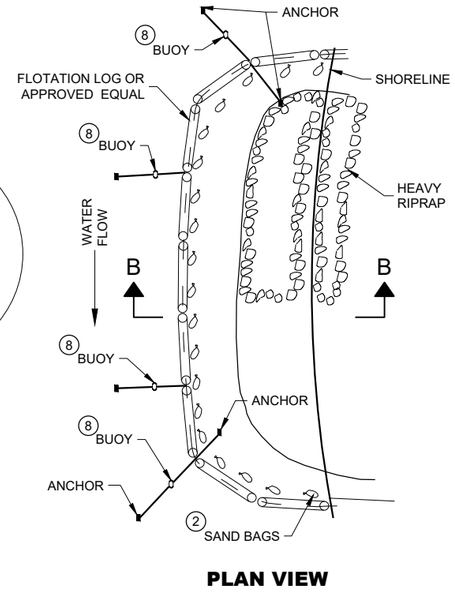
S.D.D. 8 E 9-6

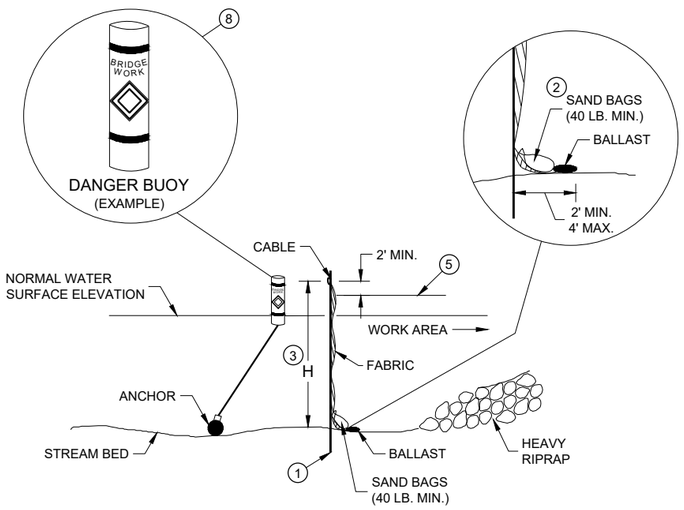


SECTION B - B

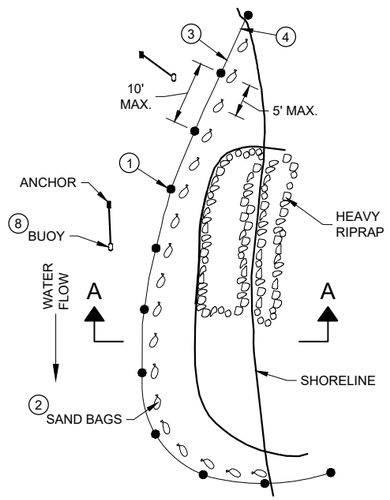


PLAN VIEW

TURBIDITY BARRIER - FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



SECTION A - A



PLAN VIEW

TURBIDITY BARRIER - STANDARD POST INSTALLATION

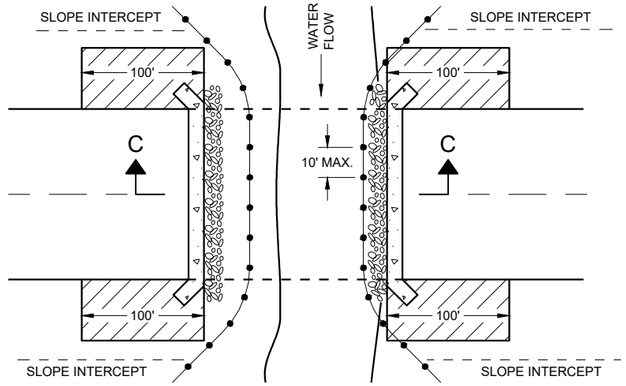
TURBIDITY BARRIER PLACEMENT DETAILS

GENERAL NOTES

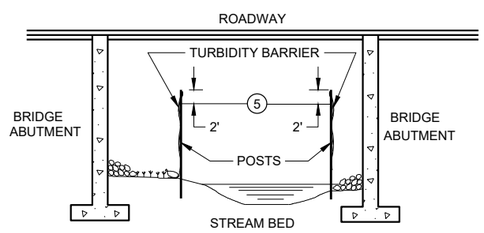
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

TURBIDITY BARRIER MAY BE REMOVED AT THE ENGINEERS DISCRETION, WHEN PERMANENT EROSION CONTROL MEASURES HAVE BEEN ESTABLISHED.

1. DRIVEN STEEL POSTS, PIPES, OR CHANNELS. LENGTH SHALL BE SUFFICIENT TO SECURELY SUPPORT BARRIER AT HIGH WATER ELEVATIONS.
2. SAND BAGS TO BE USED AS ADDITIONAL BALLAST WHEN ORDERED BY THE ENGINEER TO MEET ADVERSE FIELD CONDITIONS. SPACE AS APPROPRIATE FOR SITE CONDITIONS.
3. WHEN BARRIER HEIGHT "H" EXCEEDS 8 FEET, POST SPACING MAY NEED TO BE DECREASED.
4. IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.
5. ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MINIMUM BARRIER HEIGHT SHALL BE 2' GREATER THAN EITHER THE Q2 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WHICHEVER IS GREATER.
6. FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BEDROCK PREVENTS THE INSTALLATION OF POSTS.
7. ALLOW SUFFICIENT SLACK VERTICALLY AND HORIZONTALLY SO THAT SEDIMENT BUILD UP WILL NOT SEPARATE OR LOWER THE TURBIDITY BARRIER.
8. USE AS DIRECTED BY COAST GUARD OR DNR PERMIT WHEN WORKING IN NAVIGABLE WATERWAYS.



PLAN VIEW



SECTION C - C

TURBIDITY BARRIER DETAIL SHOWING TYPICAL PLACEMENT AT STRUCTURES

TURBIDITY BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/4/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

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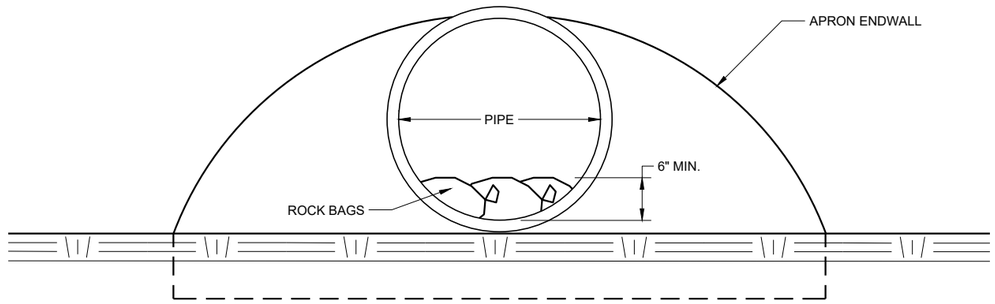
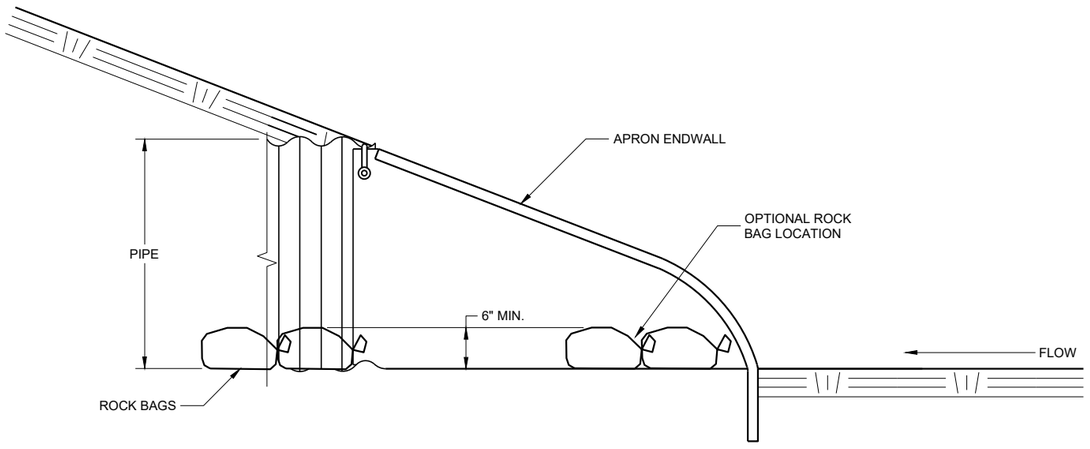
SDD 08E11 - 02



END VIEW



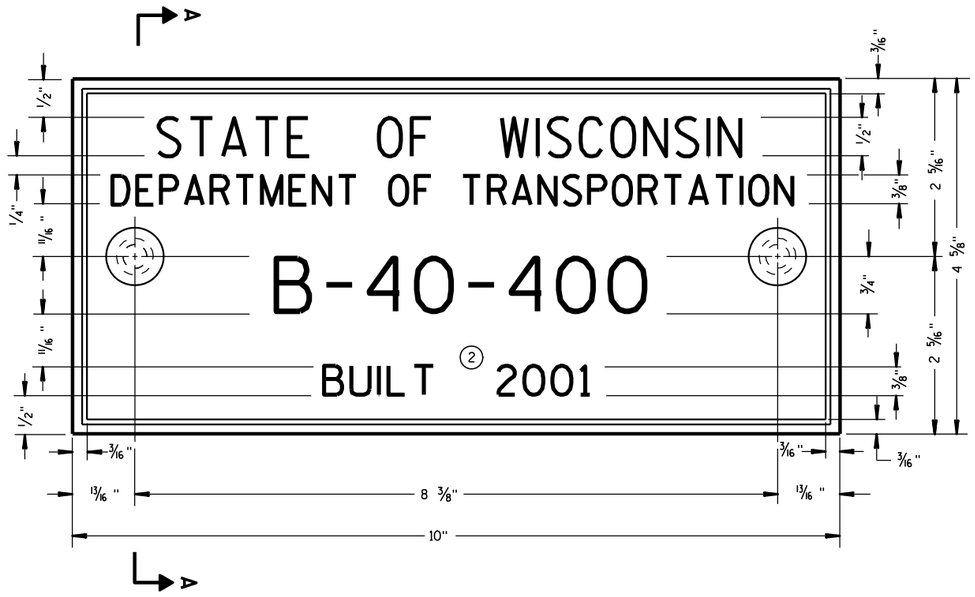
SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

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

6
SDD 08E15 - 01



TYPICAL NAME PLATE

(BRIDGES, CULVERTS, AND RETAINING WALLS)

FOR MULTI-UNIT STRUCTURES
LINE 3 ABOVE SHALL READ

B = BRIDGE
C = CULVERT
R = RETAINING WALL

COUNTY NO.

BRIDGE NO.

UNIT NO. FOR MULTIPLE UNIT BRIDGE

B-40-400-1A

NUMBERING DESIGNATION MULTI-UNIT STRUCTURES

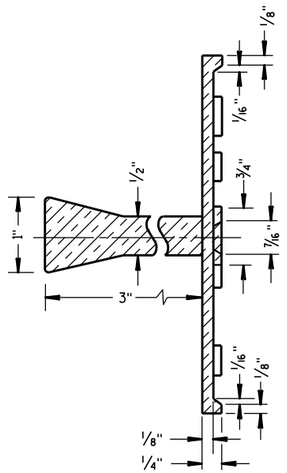
GENERAL NOTES

NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

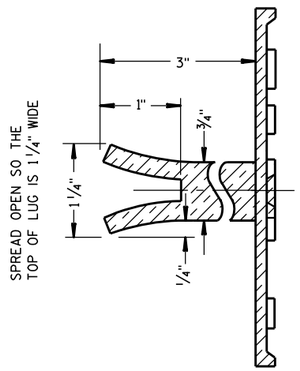
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

(1) EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

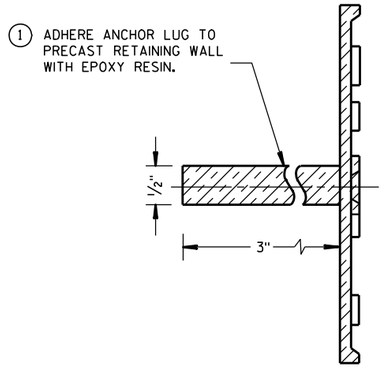
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG



ALTERNATE LUG

(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

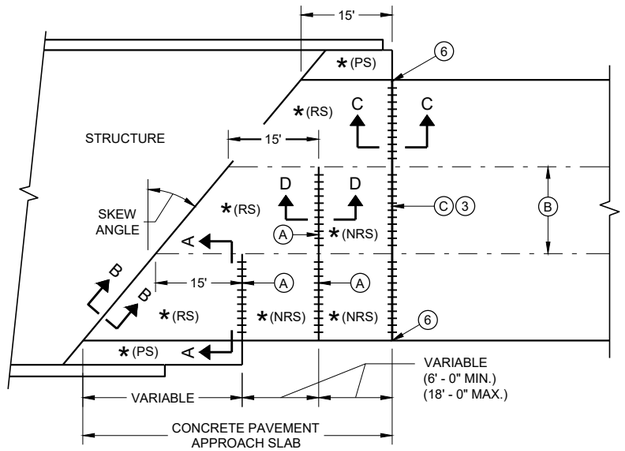
3/26/10 DATE

/S/ Scot Beck CHIEF STRUCTURAL DEVELOPMENT ENGINEER

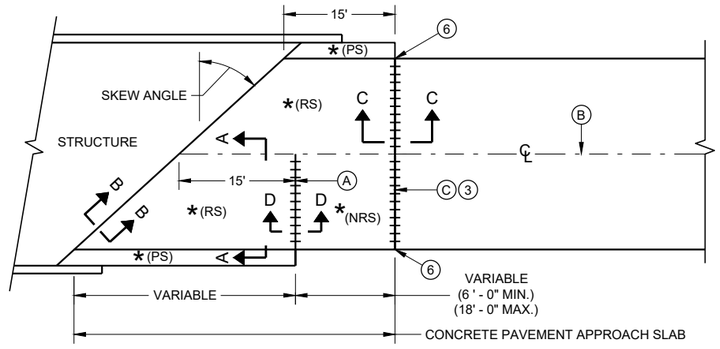
FHWA

6

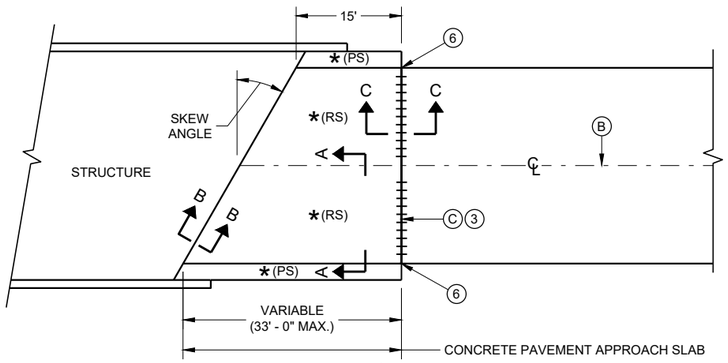
S.D.D. 12 A 3-10



SKEWED APPROACH
(PAVEMENT MORE THAN TWO LANES)



SKEWS > 20°
(PAVEMENT WIDTH ≤ 30')



SKEWS ≤ 20°
(PAVEMENT WIDTH ≤ 30')

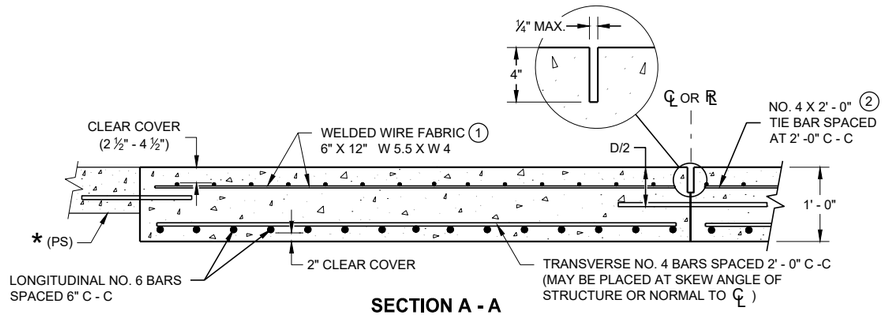
APPROACH SLAB AND ADJACENT PAVEMENT

* (RS) = REINFORCED CONCRETE SLAB

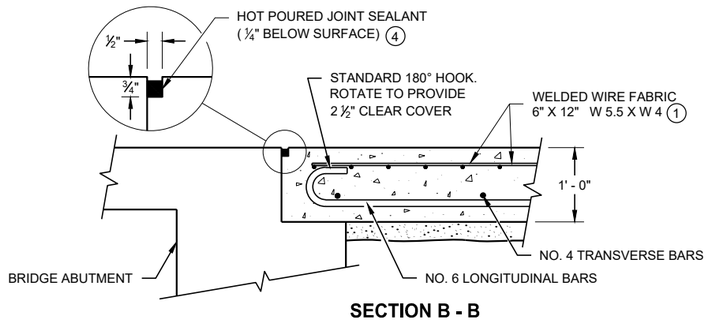
* (PS) = PAVED CONCRETE SHOULDER OR CONCRETE DRAINAGE SLAB

* (NRS) - NON - REINFORCED CONCRETE SLAB

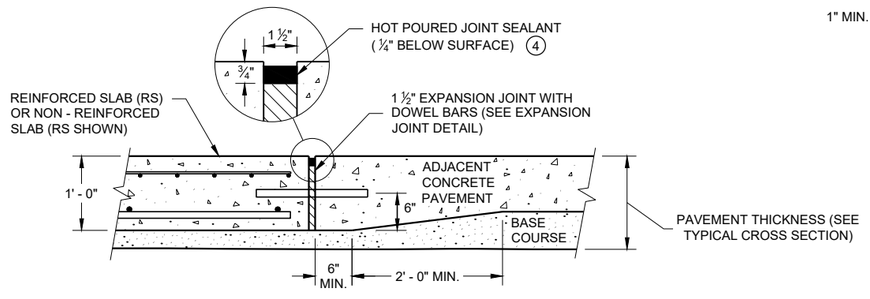
*** STANDARD DOWEL BAR DIAMETER (SEE SDD 13C11 AND SDD 13C13)



SECTION A - A
REINFORCEMENT POSITIONING DETAIL



SECTION B - B
BEND DETAIL
BOTTOM REINFORCEMENT



SECTION C - C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT

GENERAL NOTES

THE CONTRACTOR MAY SPLICE NO. 6 BARS IN THE APPROACH SLAB FOR SKEWED STRUCTURES ONLY. STAGGER SPLICES WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP IS 20 INCHES.

TACK WELD DOWEL BARS TO THE BASKETS ON ALTERNATE ENDS.

(1) THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2' - 0 " C - C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.

(2) THE CONTRACTOR MAY OMIT THE BARS BETWEEN REINFORCED SLABS WHERE SLAB REINFORCEMENT BARS EXTEND ACROSS THE CENTERLINE OR REFERENCE LINE.

(3) DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.

(4) USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.

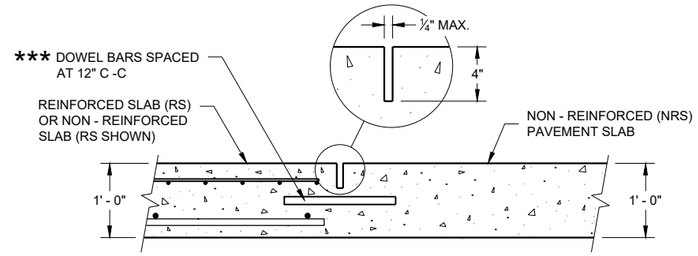
(5) PLACE EXPANSION CAP ON THE END OF THE DOWEL THAT IS NOT TACK WELDED TO THE BASKET. DO NOT FORCE DOWEL BAR PAST THE DOWEL STOP.

(6) EXTEND EXPANSION JOINT THROUGH ANY ADJACENT TIED CONCRETE.

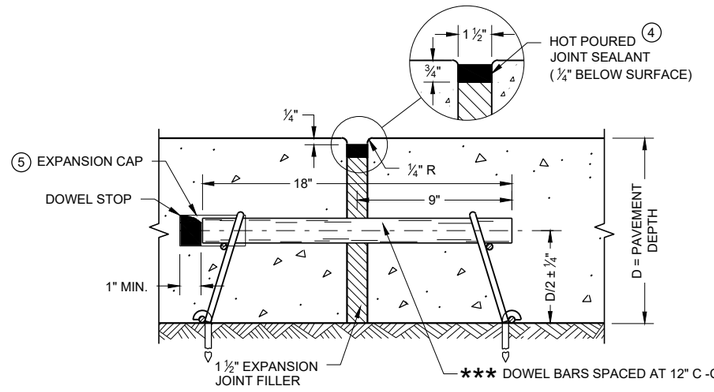
(A) STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℞.

(B) STANDARD LONGITUDINAL JOINT WITH TIE BARS.

(C) 1 ½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℞ .



SECTION D - D
CONTRACTION JOINT



EXPANSION JOINT DETAIL

CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Peter Kemp, P.E.
PAVEMENT SUPERVISOR

FHWA

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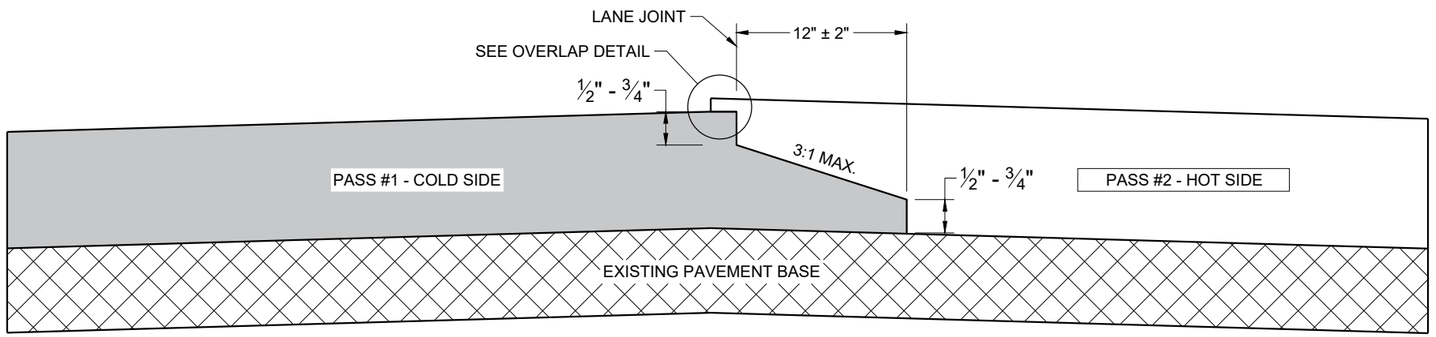
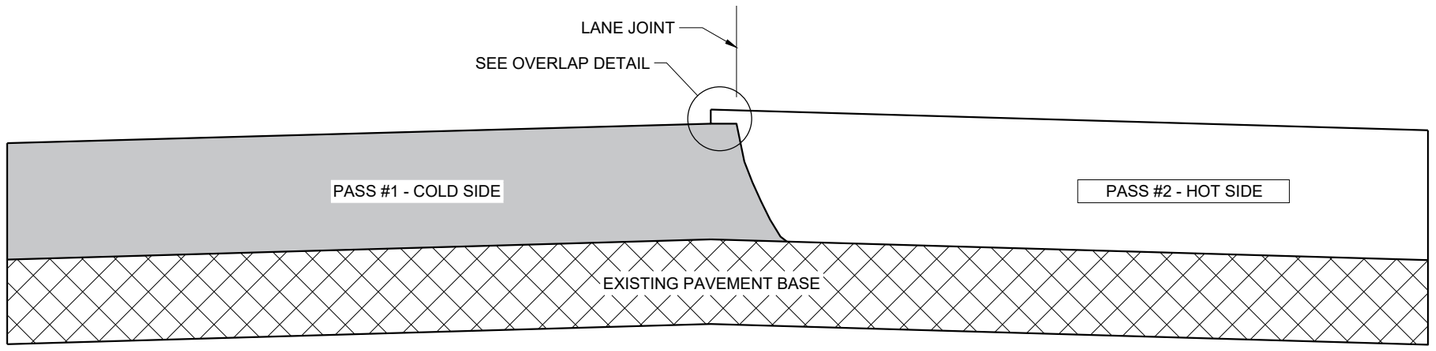
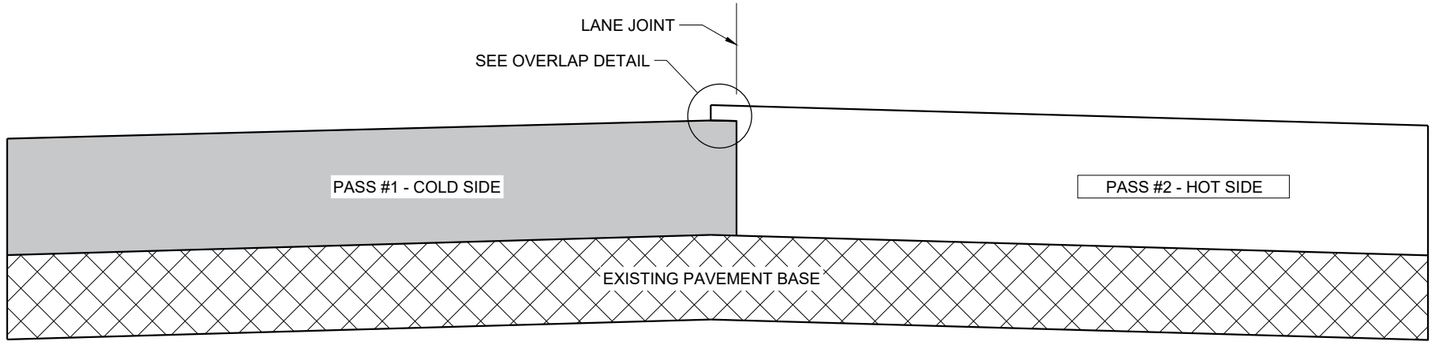
SDD 13B02 - 09a



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

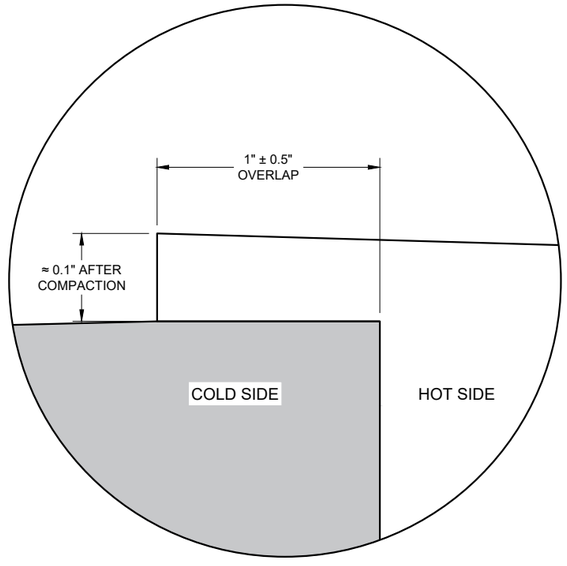
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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

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

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

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



OVERLAP DETAIL (TYPICAL)

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SDD 13C19 - 03

SDD 13C19 - 03

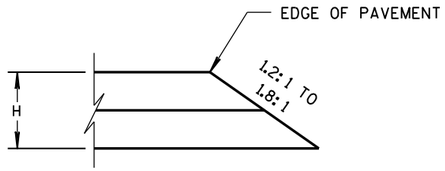
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

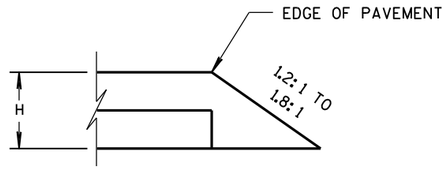
/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA



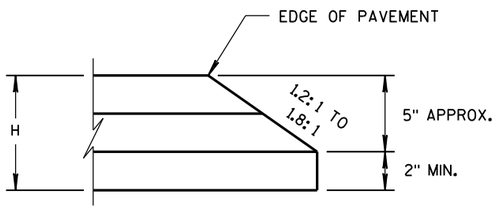
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



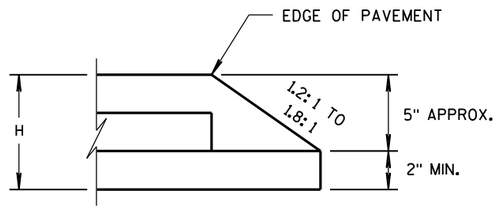
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

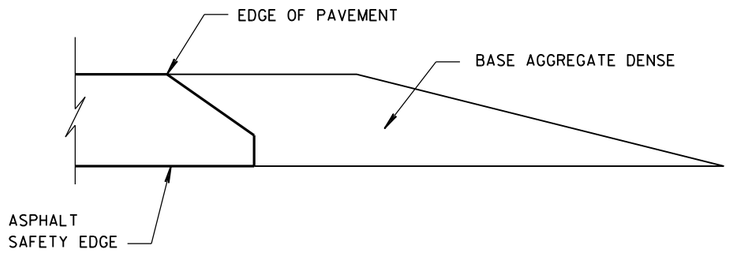
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

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S.D.D. 14 B 29-1

SAFETY EDGE SM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/2012
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

(1) WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

(2) USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

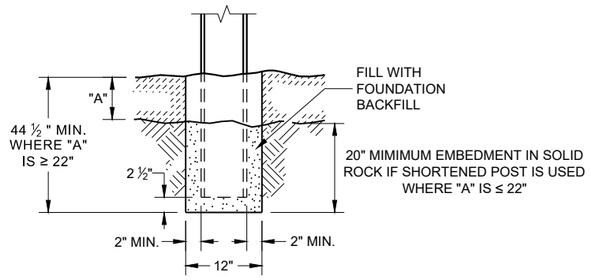
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL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

(4) WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

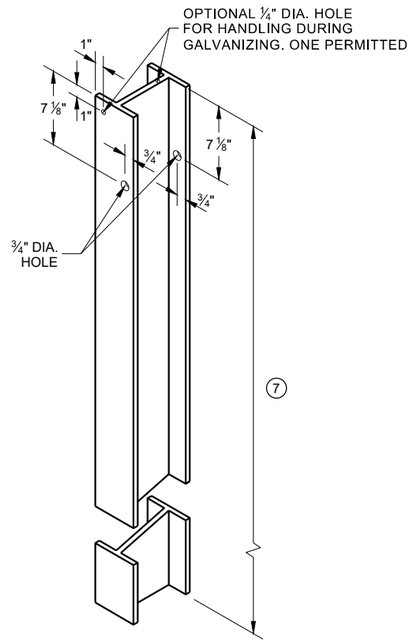
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(6) WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

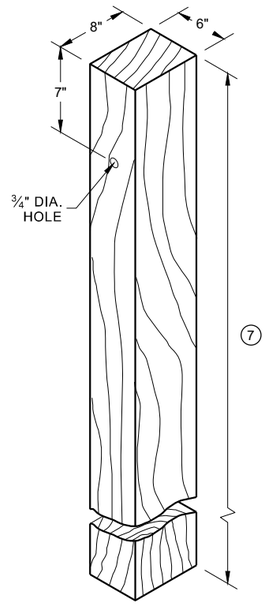
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



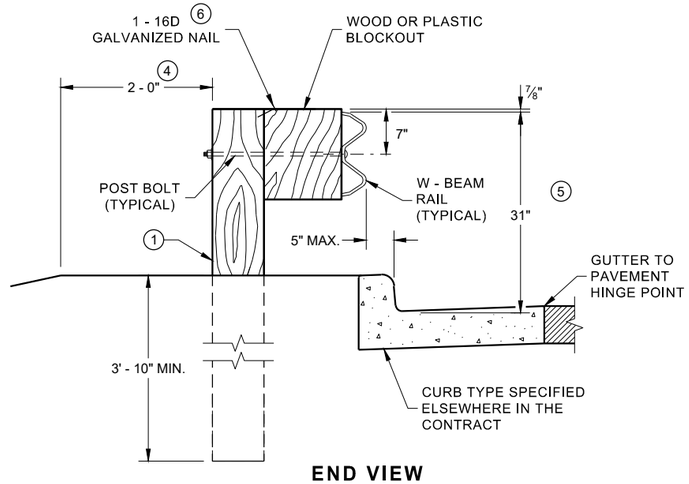
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



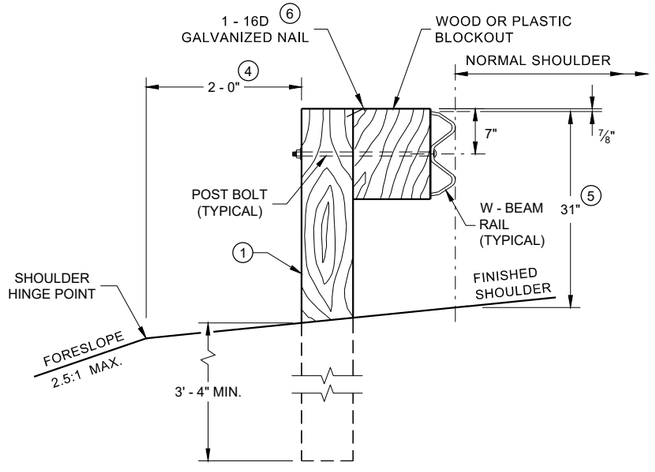
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



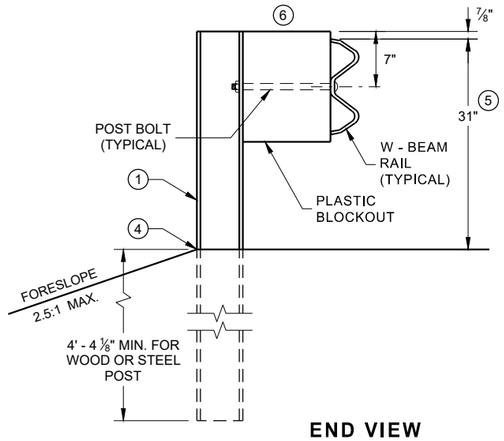
WOOD POST (6" X 8") NOMINAL (1)



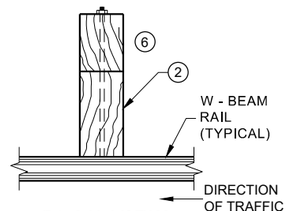
END VIEW
LOCATED ALONG A CURBED ROADWAY



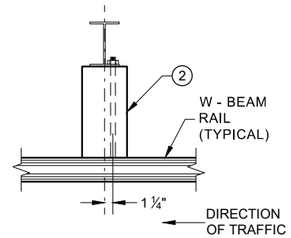
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



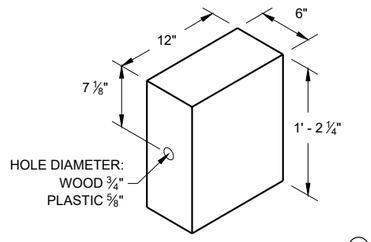
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



WOOD OR PLASTIC BLOCKOUT (2)

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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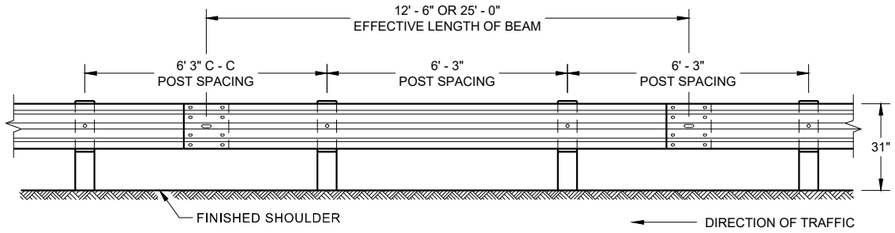
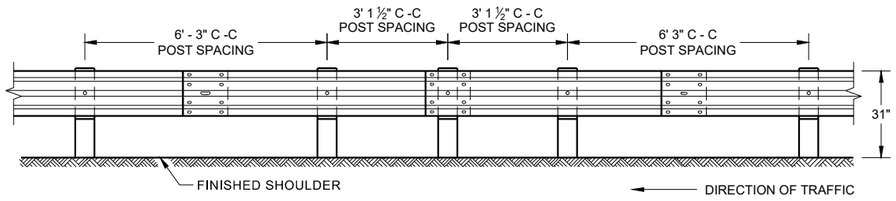
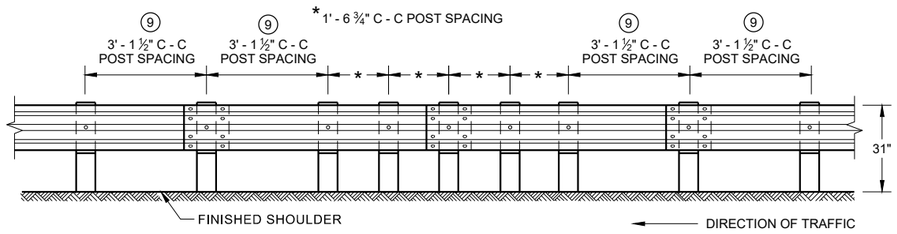


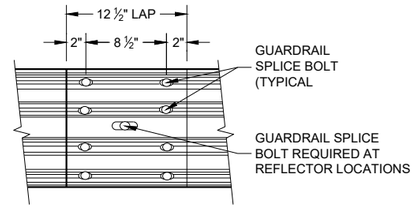
FRONT VIEW
POST SPACING STANDARD INSTALLATION



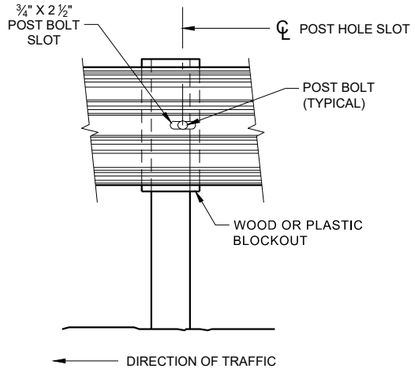
FRONT VIEW
HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)



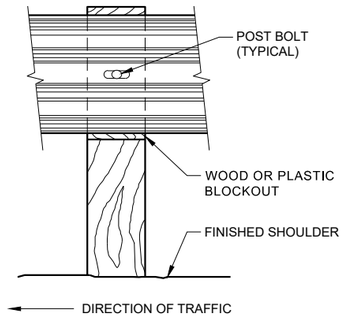
FRONT VIEW
QUARTER POST SPACING (QS)



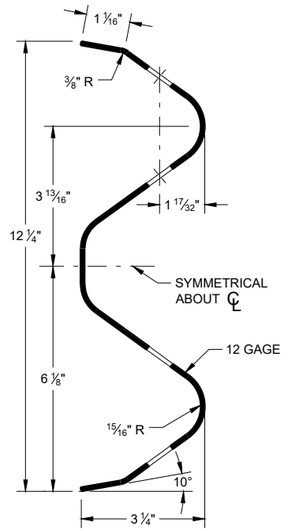
FRONT VIEW
MID-SPAN BEAM SPLICE



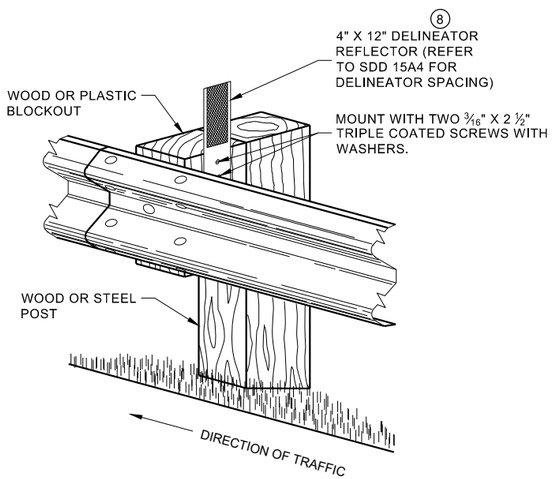
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION

GENERAL NOTES

⑧ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

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

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

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

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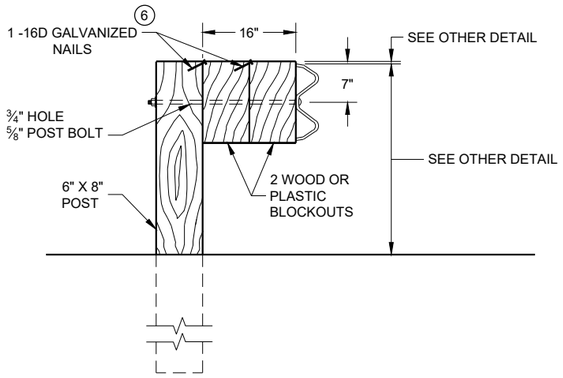
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

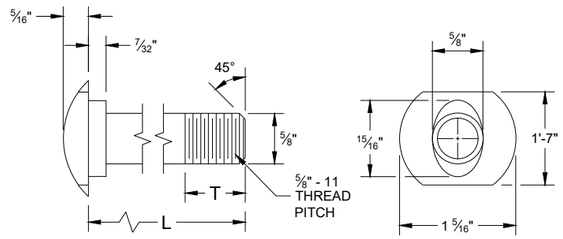


DETAIL FOR 16" BLOCKOUT DEPTH

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.

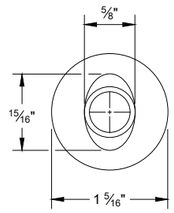
NOTE:

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.

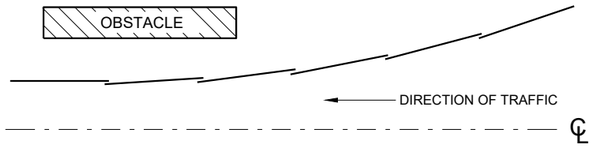


POST BOLT TABLE

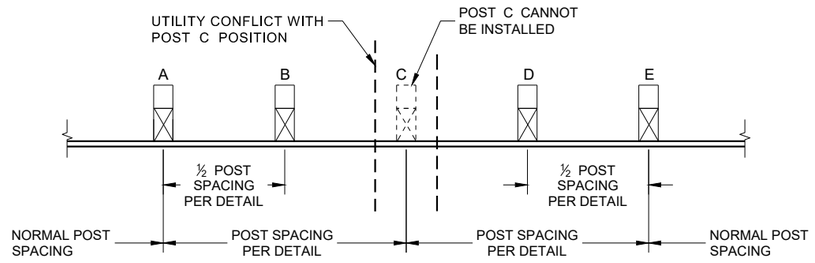
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



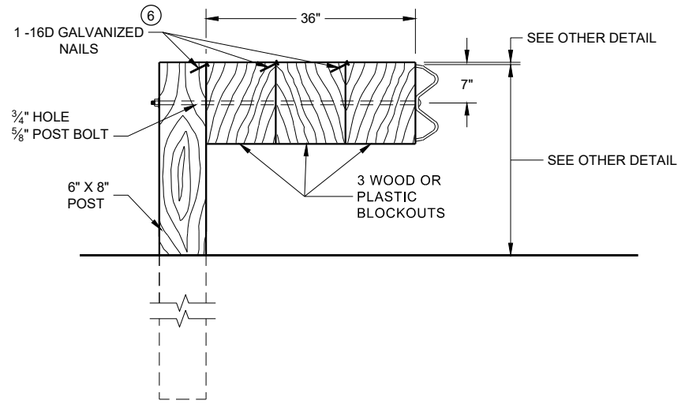
ALTERNATE BOLT HEAD



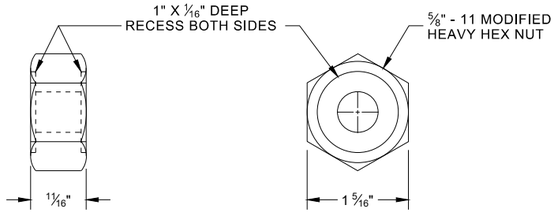
PLAN VIEW
BEAM LAPPING DETAIL



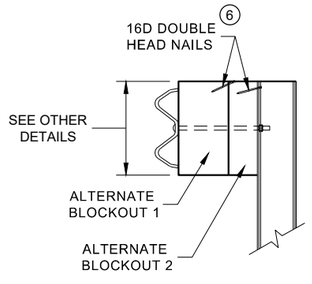
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



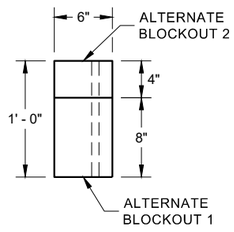
DETAIL FOR 36" BLOCKOUT DEPTH



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.

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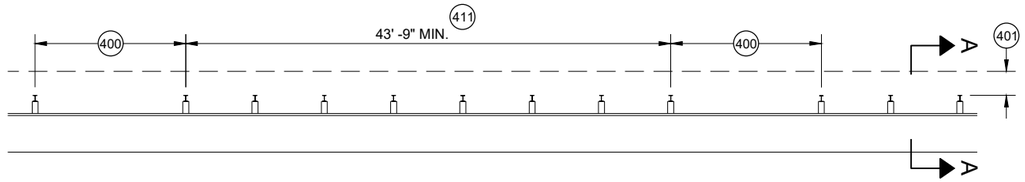
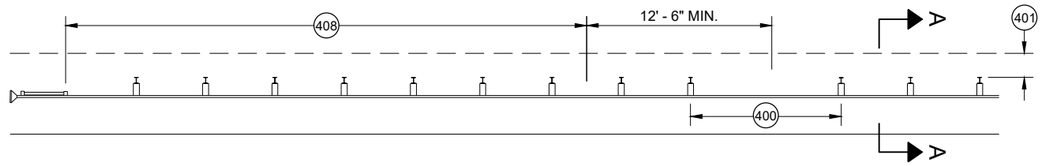
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

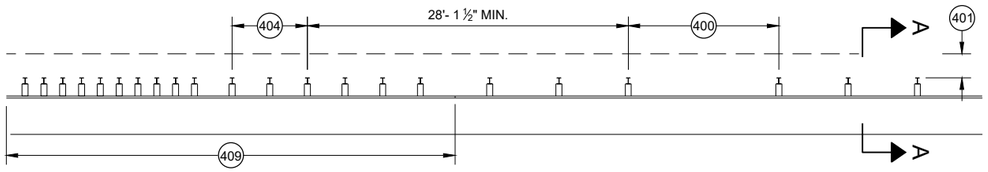
SDD 14B42 - 07c



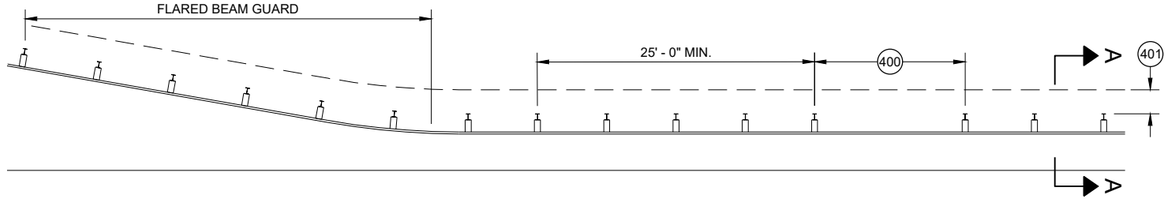
MISSING POST IN MGS GUARDRAIL



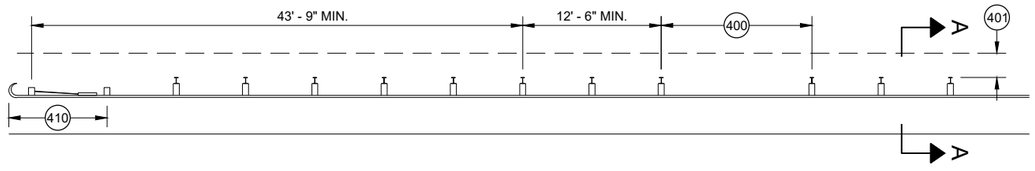
MISSING POST IN MGS GUARDRAIL NEAR EAT



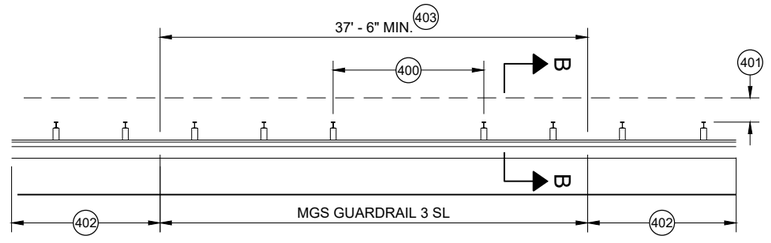
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

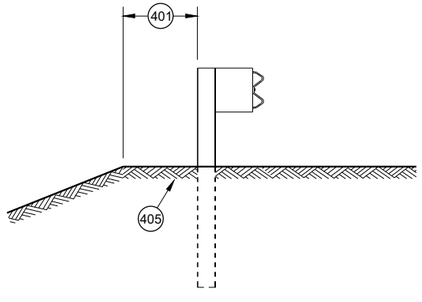


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

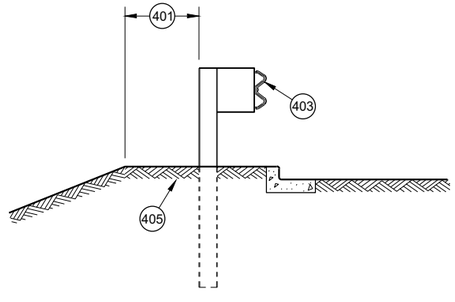


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

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



SECTION A - A 406



SECTION B - B 406

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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SDD 14B42 - 07d

SDD 14B42 - 07d

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.

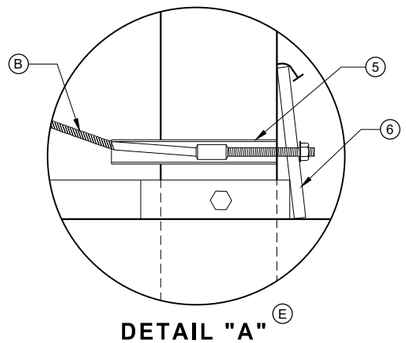
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

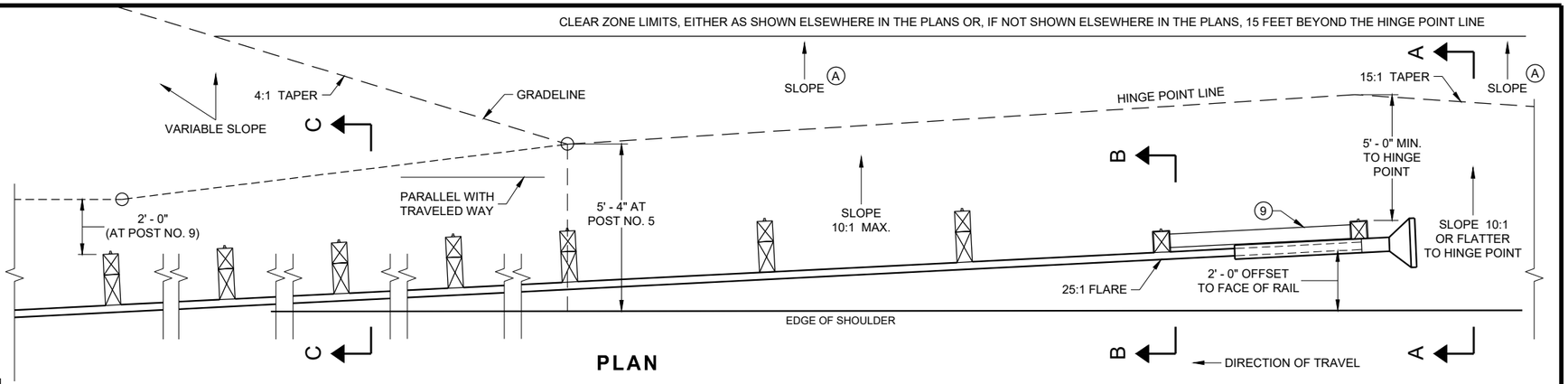
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

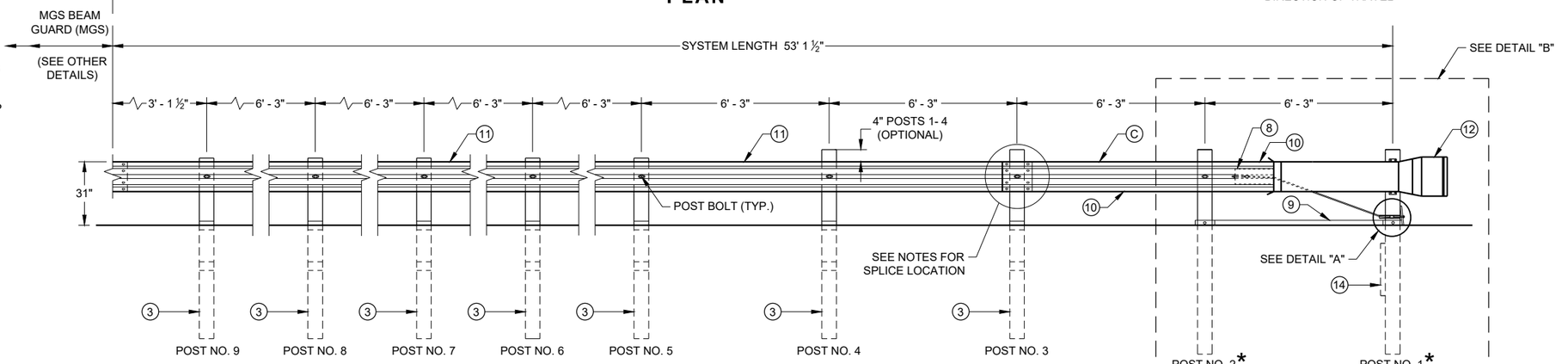
SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

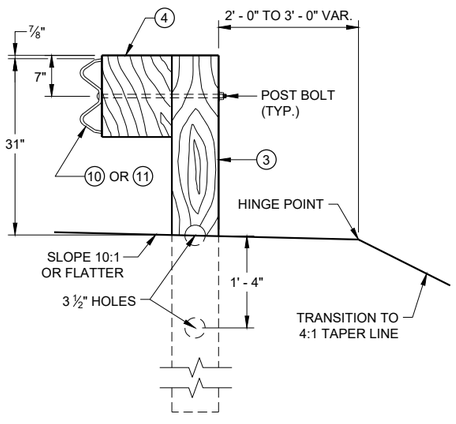
THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



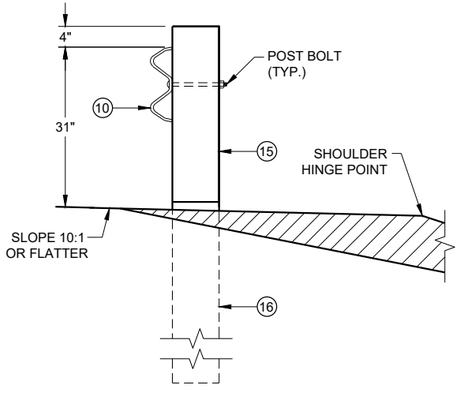
DETAIL "A" (E)



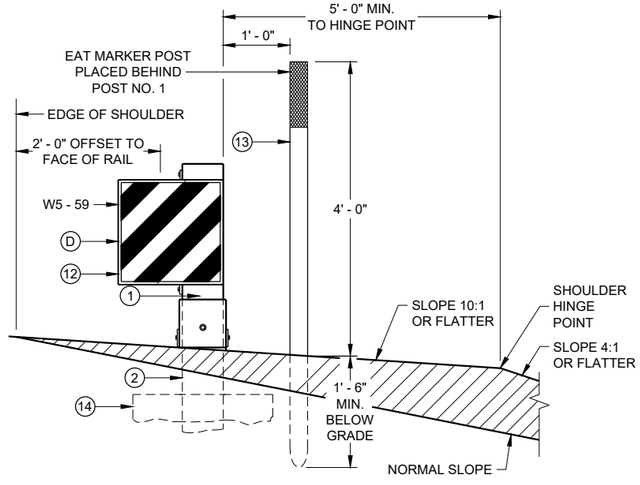




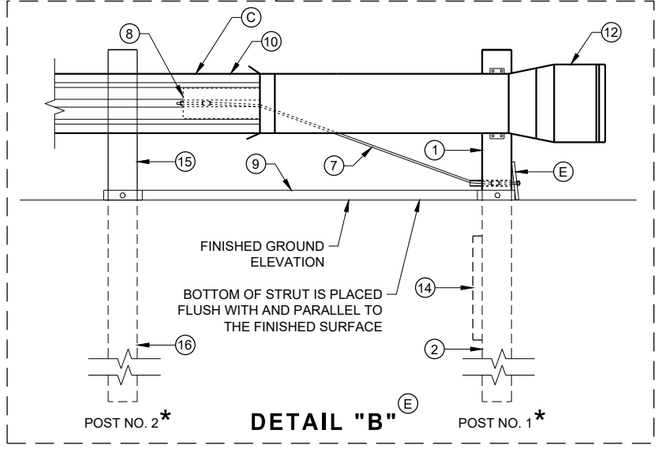
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*

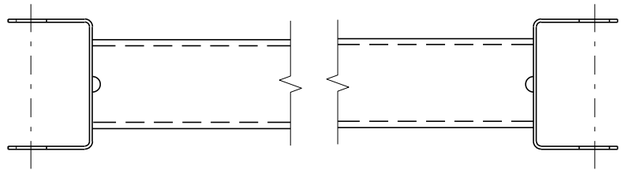


MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

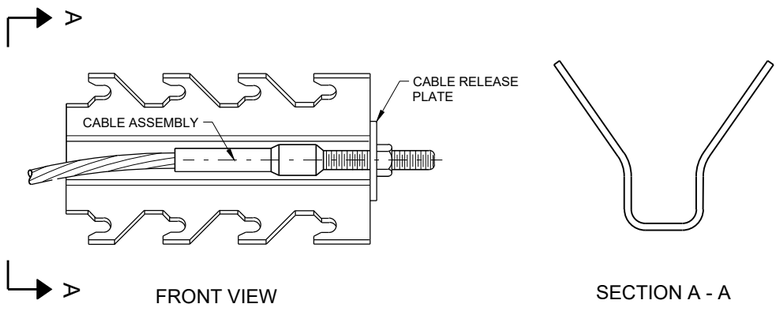
SDD 14B44 - 04a



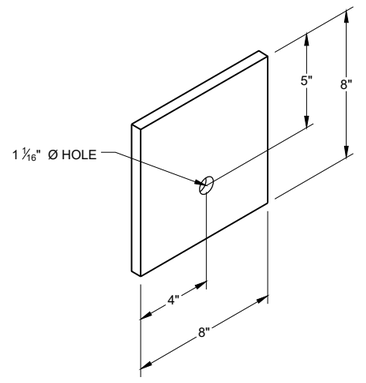
GENERIC GROUND STRUT ⑨ Ⓔ

BILL OF MATERIALS

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



GENERIC ANCHOR CABLE BOX ⑨ Ⓔ



BEARING PLATE ⑥ Ⓔ

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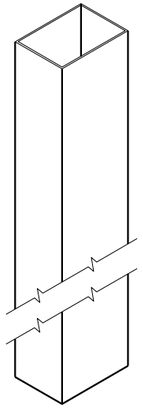
SDD 14B44 - 04b

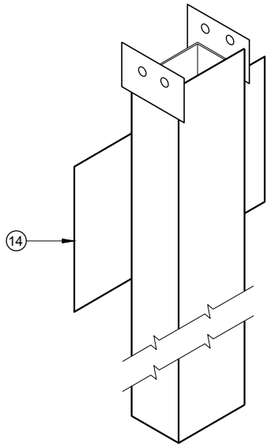
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



UPPER POST NO. 1 (1) (E)



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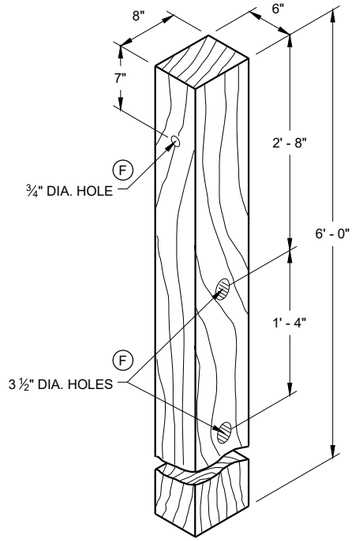
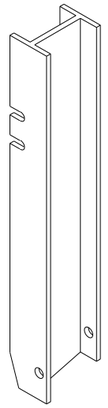


WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



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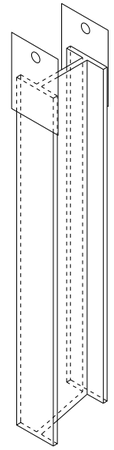

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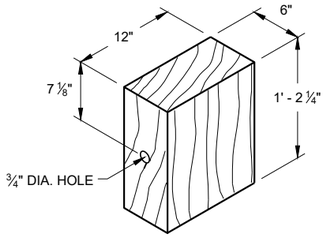
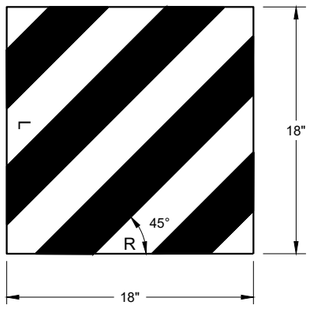
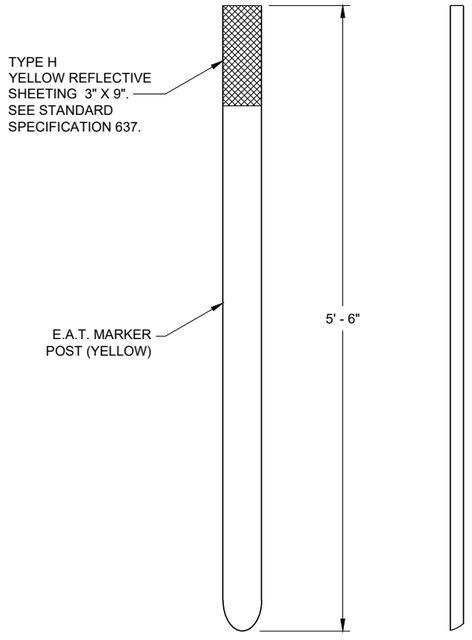


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



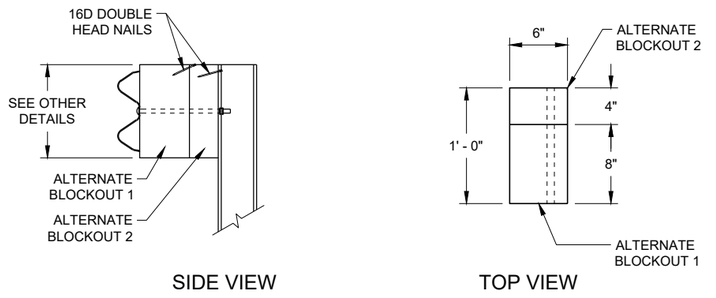
W5 - 59

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

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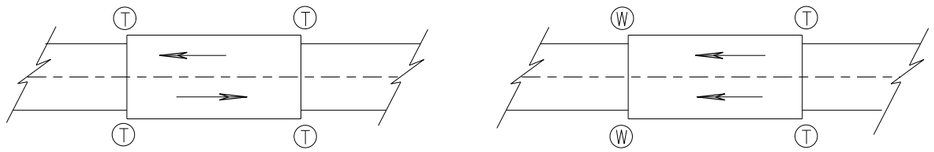
SDD 14B44 - 04c



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.

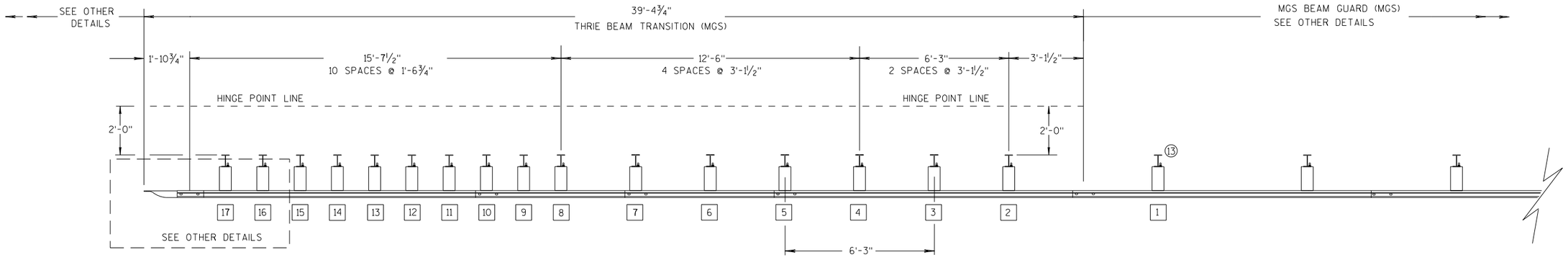
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

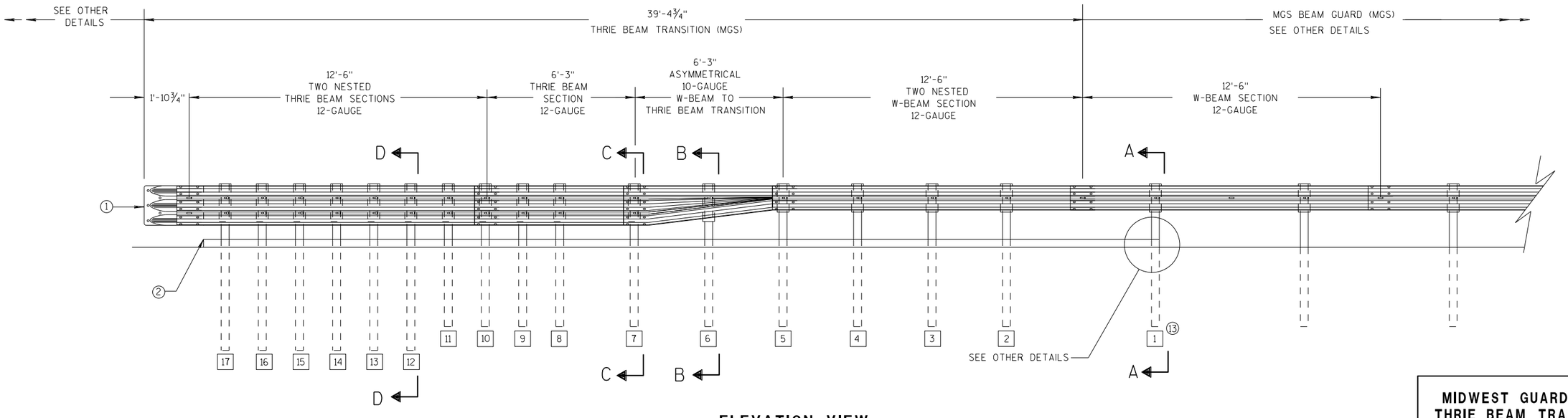
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

(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

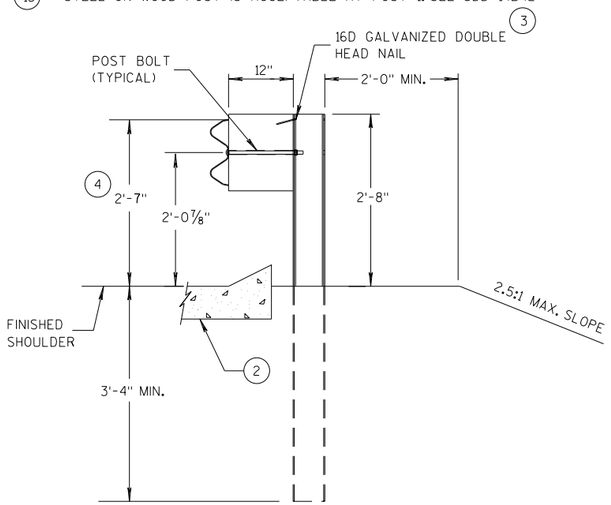
GENERAL NOTES

(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.

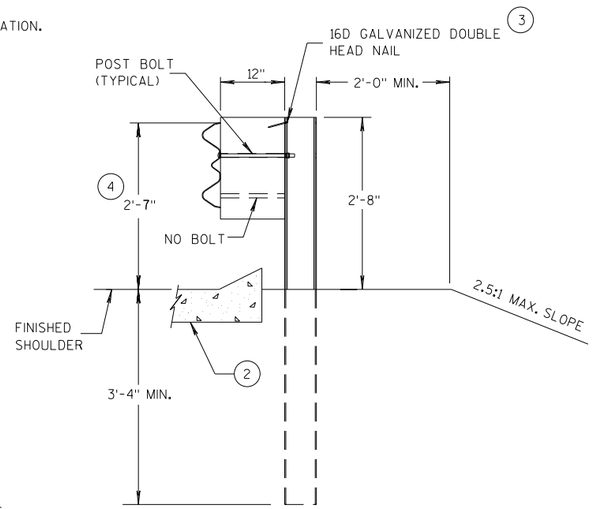
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

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



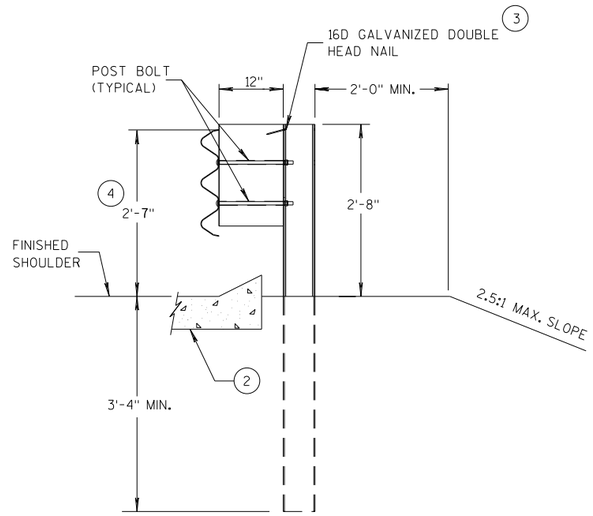
SECTION A-A (13)

POSTS 1-5



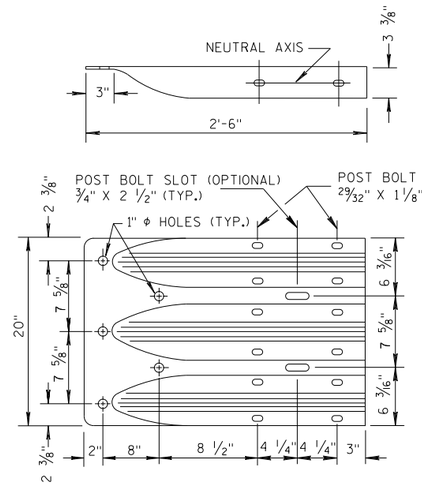
SECTION B-B

POST 6

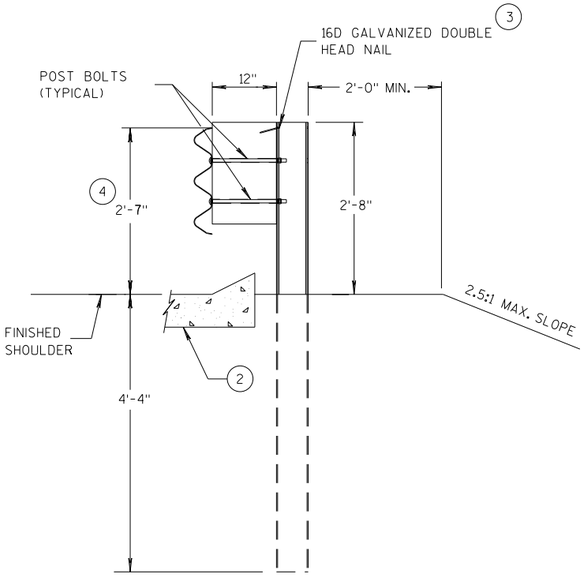


SECTION C-C

POSTS 7-11

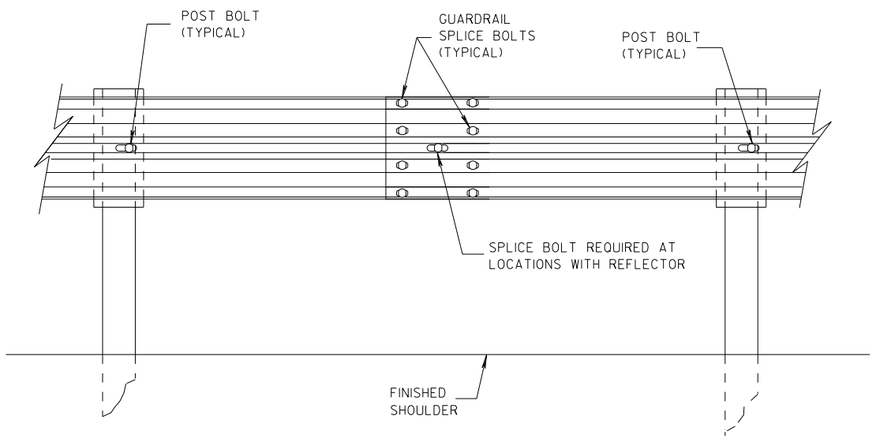


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-17



SPLICE DETAIL

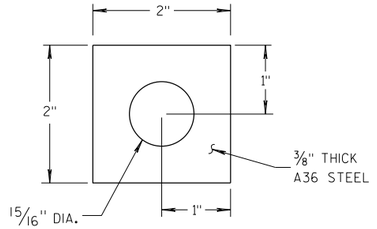
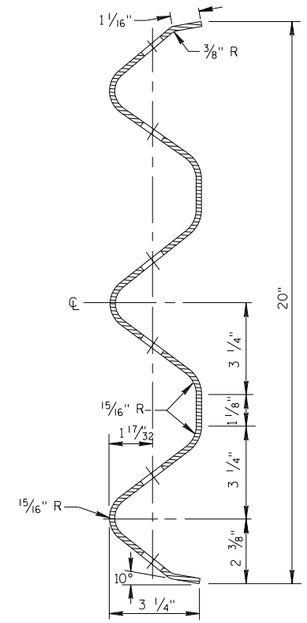


PLATE WASHER DETAIL



SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

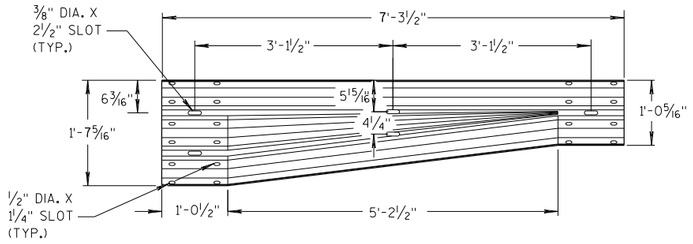
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOF

6

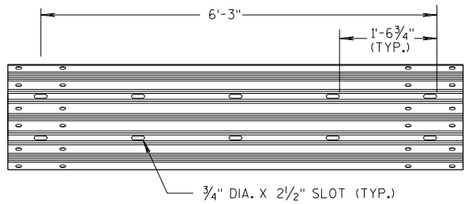
S.D.D. 14 B 45-5b

6

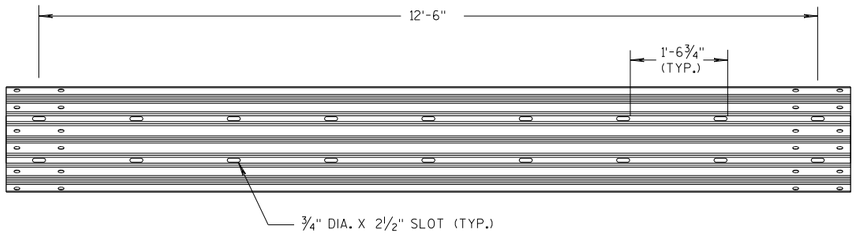
S.D.D. 14 B 45-5b



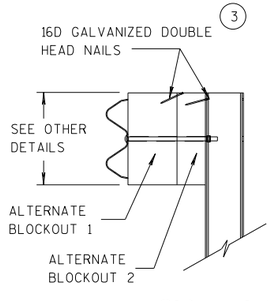
W-BEAM TO THRIE BEAM TRANSITION SECTION



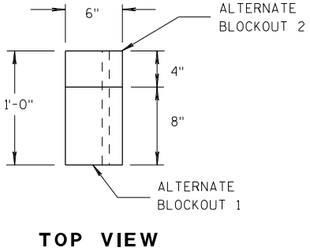
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

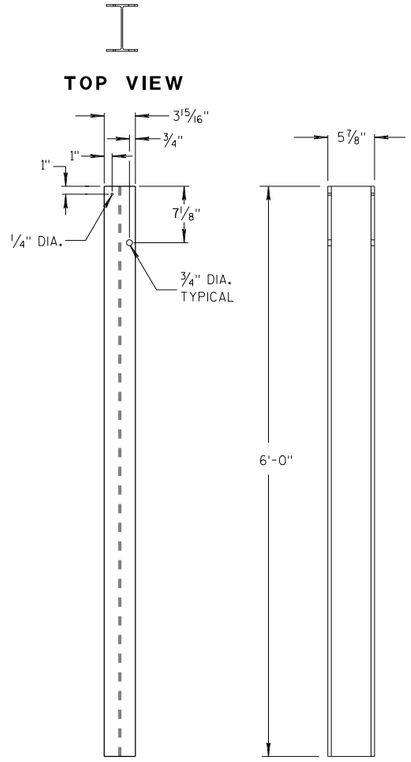


SIDE VIEW



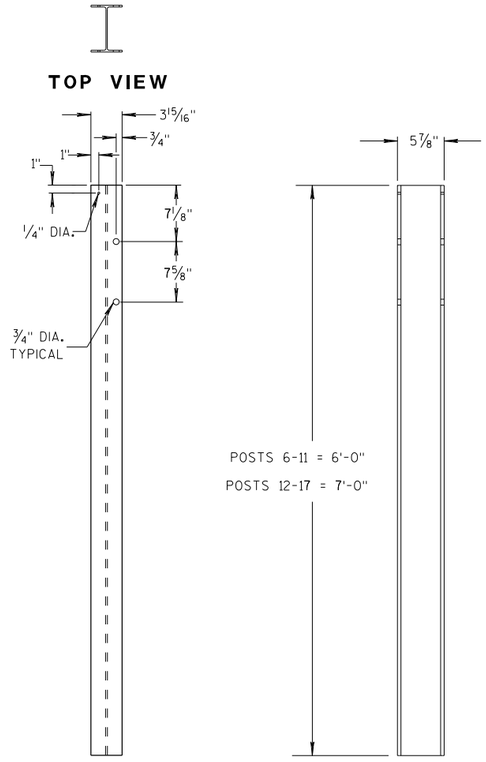
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



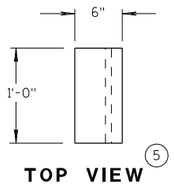
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

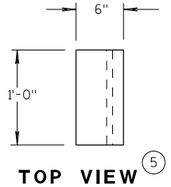


FRONT VIEW SIDE VIEW

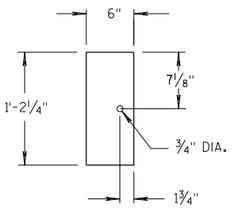
STEEL POSTS 6-17



TOP VIEW (5)

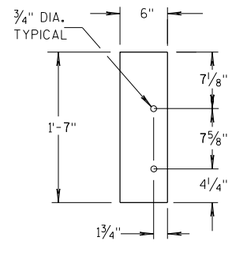


TOP VIEW (5)



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.

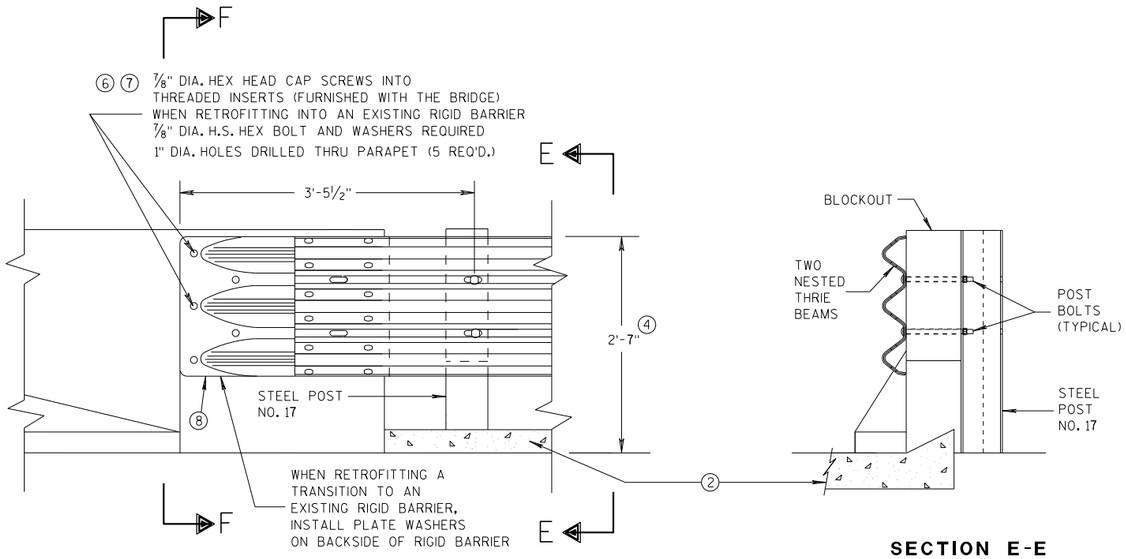
(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

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



FRONT VIEW

SECTION E-E

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

GENERAL NOTES

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

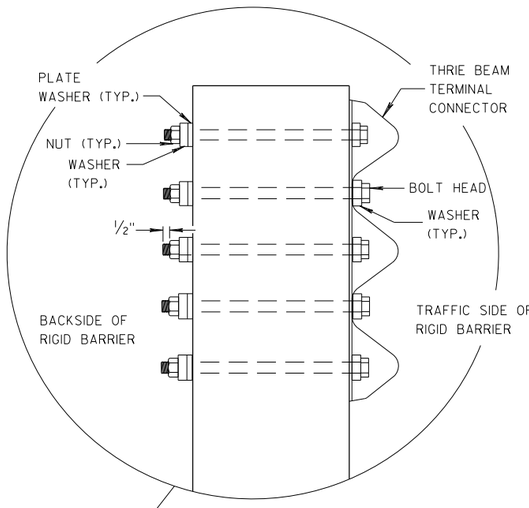
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

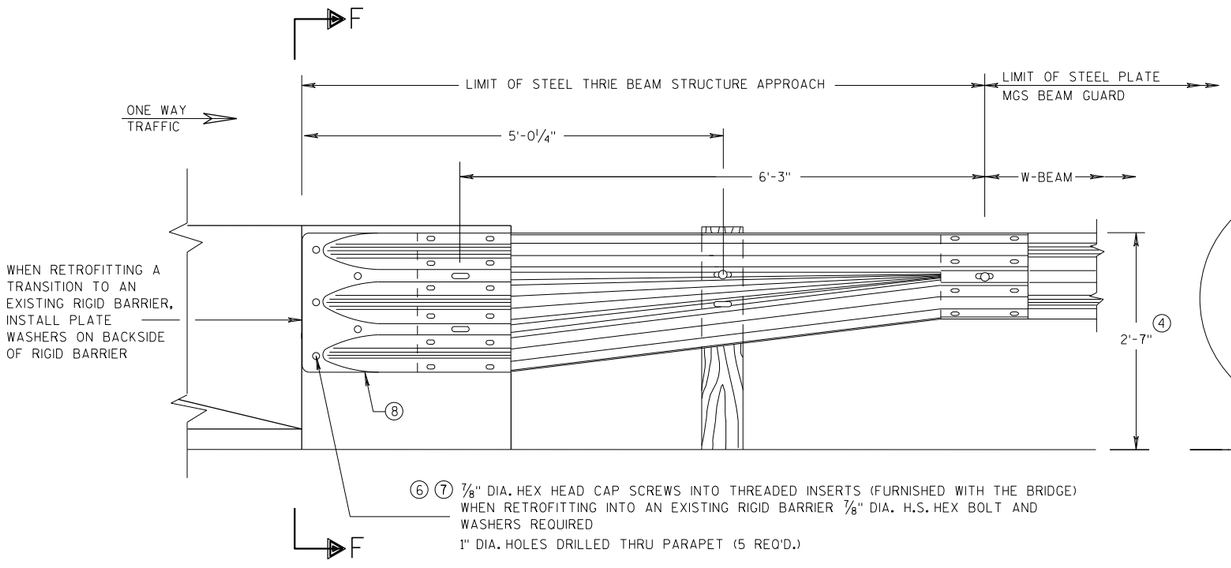
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

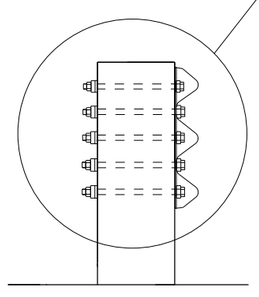
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE.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

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

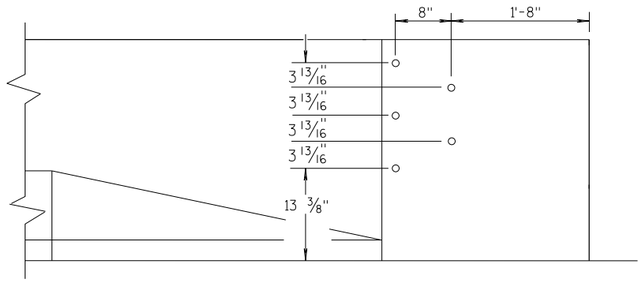




FRONT VIEW



SECTION F-F



DRILL HOLE LOCATION

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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

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

GENERAL NOTES

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

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

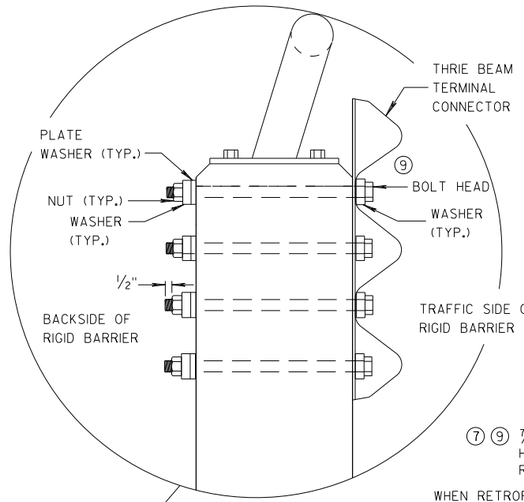
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

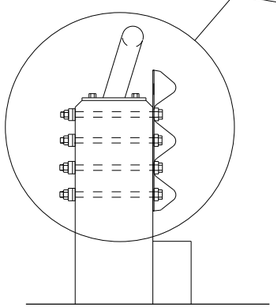
(6) DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

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

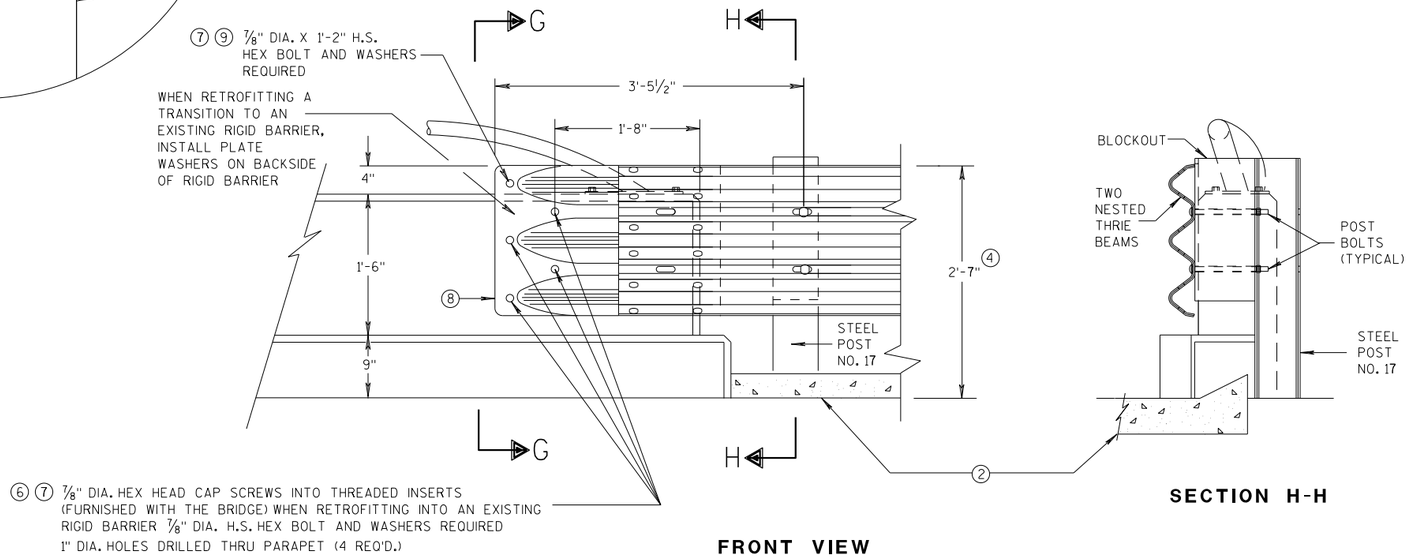
(8) THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 ½".

(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.





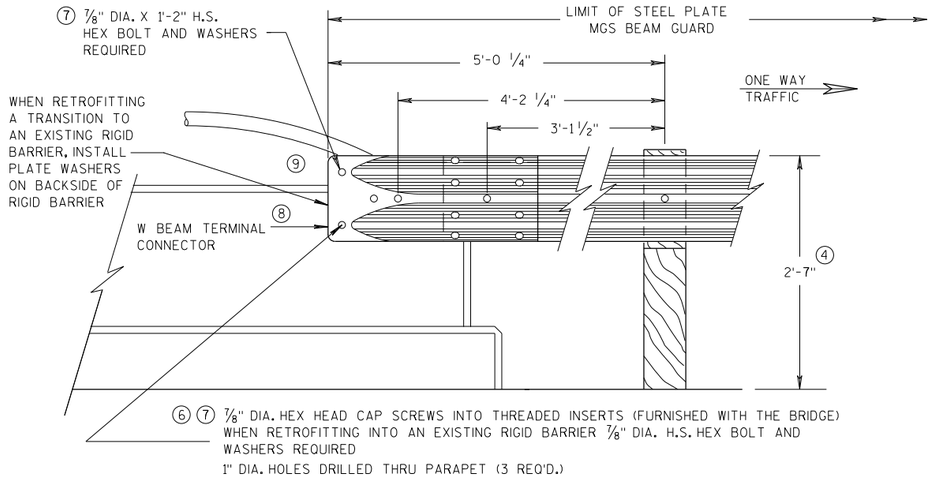
SECTION G-G



FRONT VIEW

SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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

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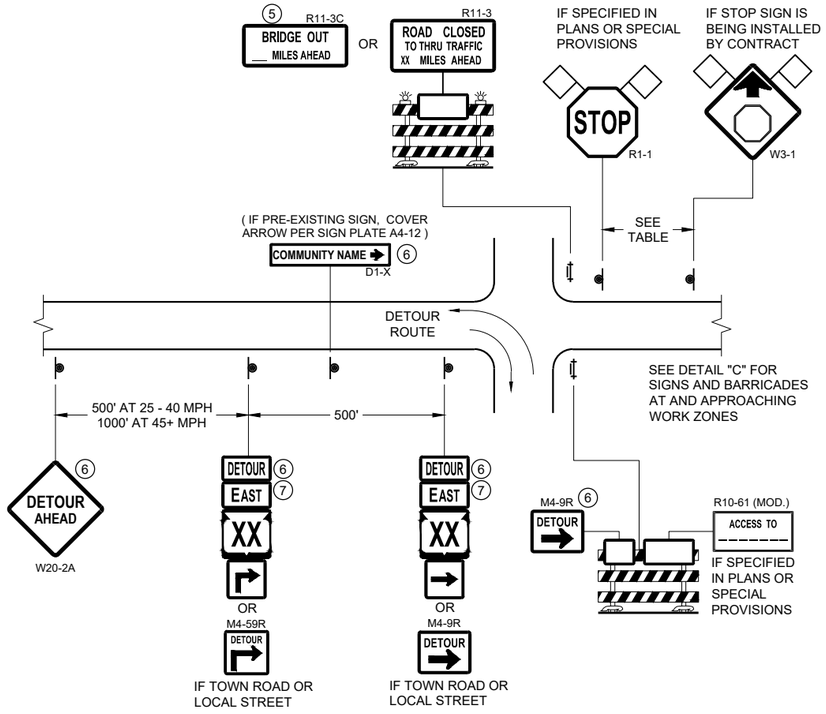
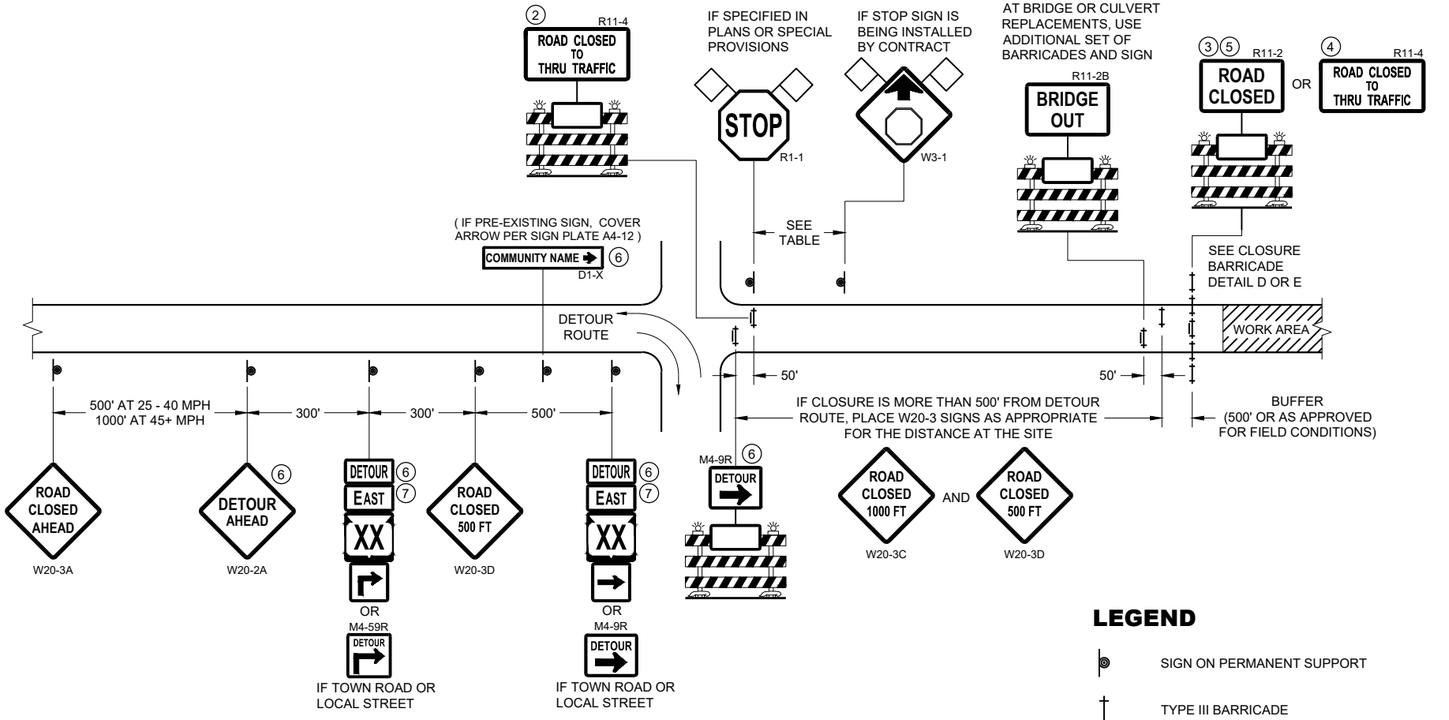
S.D.D. 14 B 45-5e



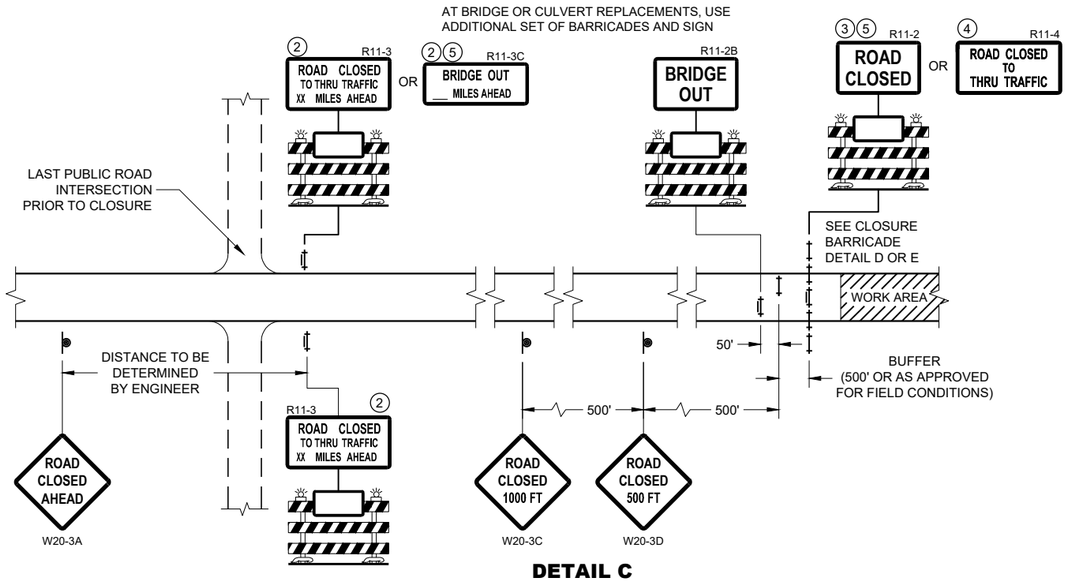
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

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

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

LEGEND

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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

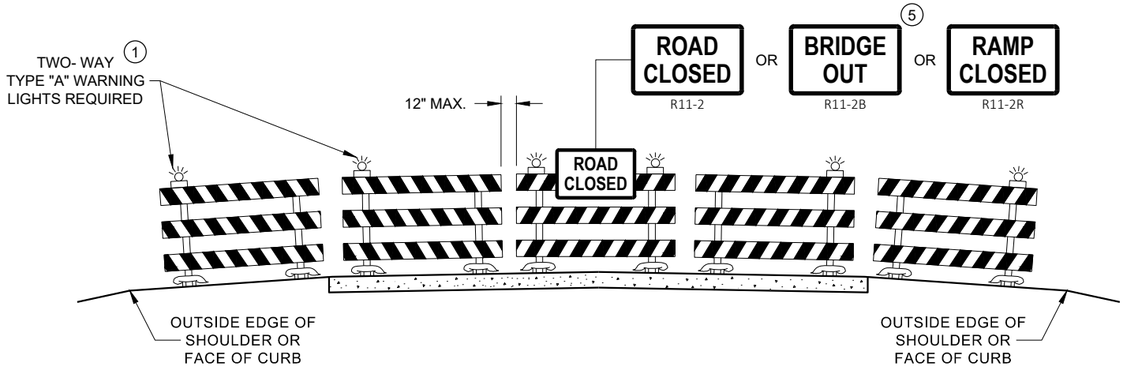
APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

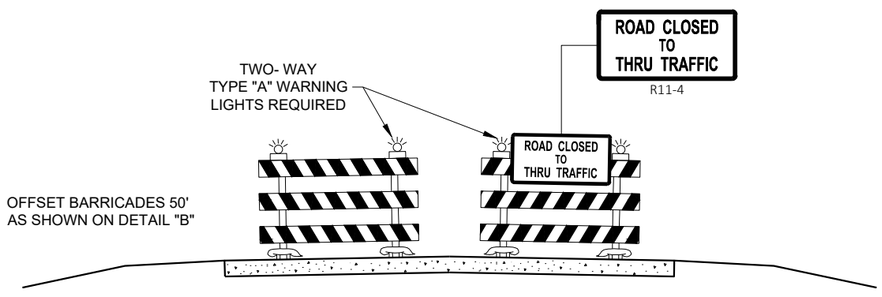
6

SDD 15C02 - 08a

SDD 15C02 - 08a



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

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

THE R11 - 2, R11 - 3, M4 - 9, R11 - 4, AND R10 - 61 SIGNS PLACED ON THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL OR BOTTOM RAILS.

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING.

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

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SDD 15C02 - 08b

6

SDD 15C02 - 08b

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

LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR — M4 - 8
- EAST — M3 - X
- XX — M1 - 4 OR XX — M1 - 6 OR COUNTY X — M1 - 5A
- M05 - 1 OR M06 - 1 OR M06 - 1

GENERAL NOTES

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

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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

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

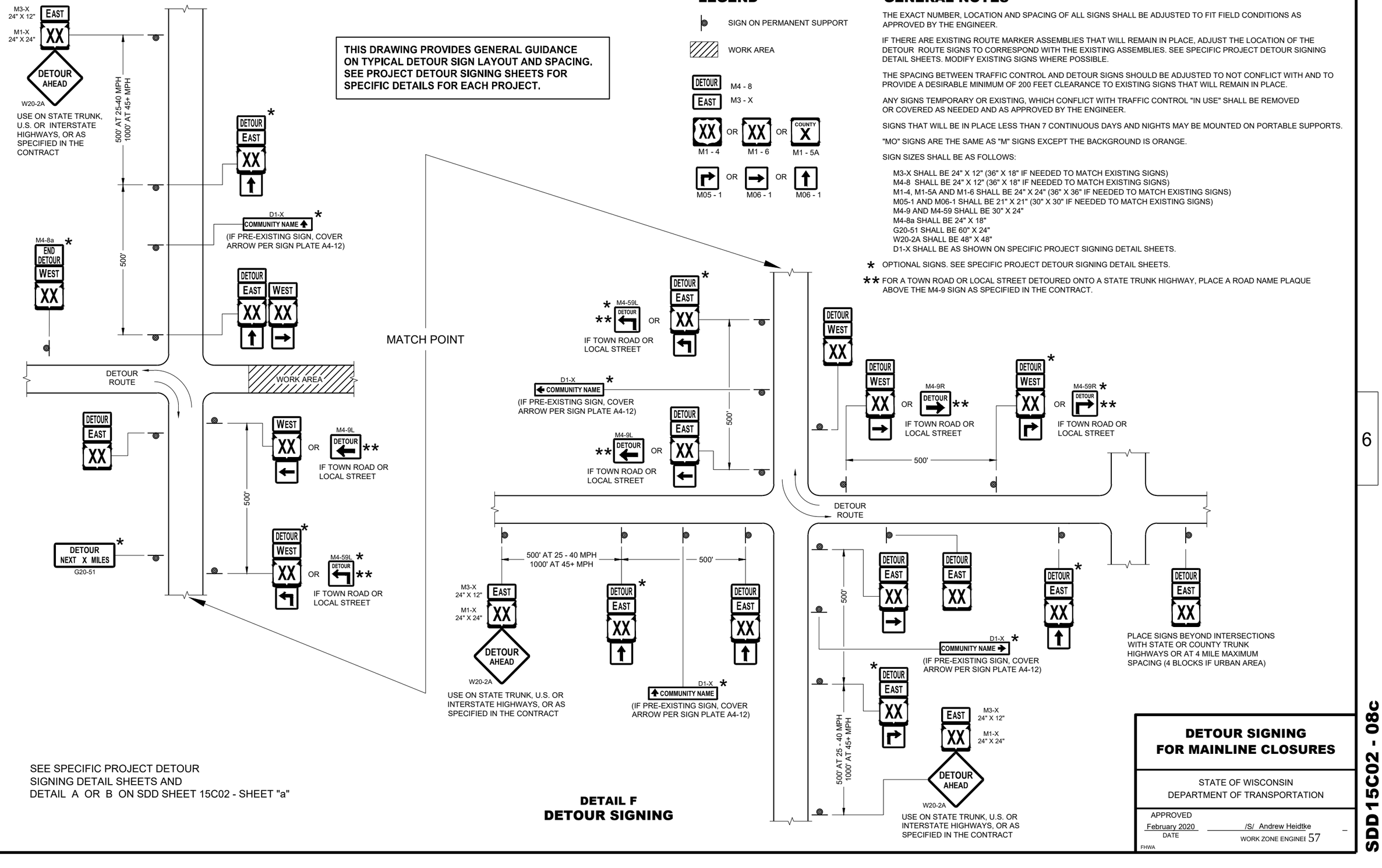
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-9 AND M4-59 SHALL BE 30" X 24"
- M4-8a SHALL BE 24" X 18"
- G20-51 SHALL BE 60" X 24"
- W20-2A SHALL BE 48" X 48"
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



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

DETAIL F
DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

SDD 15C02 - 08c

SDD 15C02 - 08c

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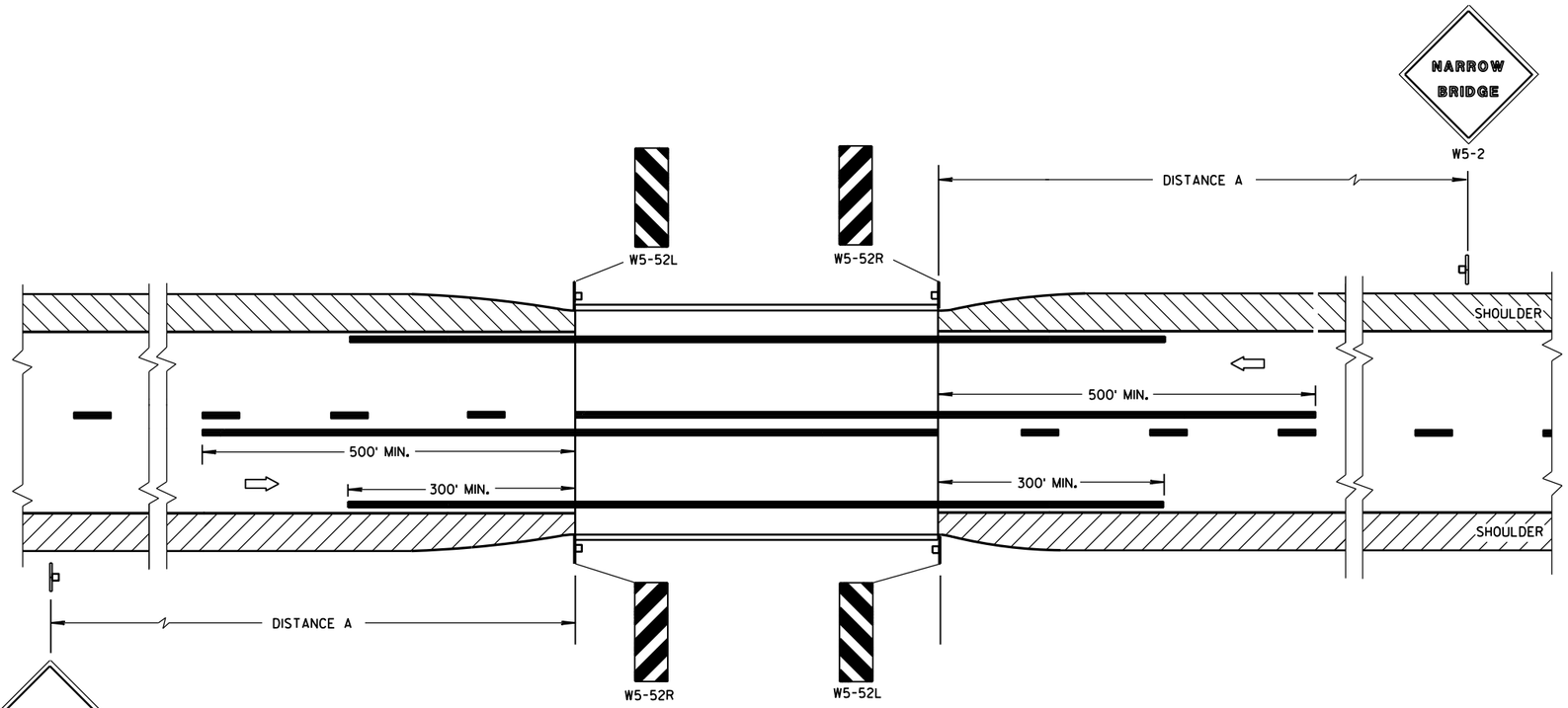


SITUATION 1

WARRANTING CRITERIA:

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

DISTANCE TABLE

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

GENERAL NOTES

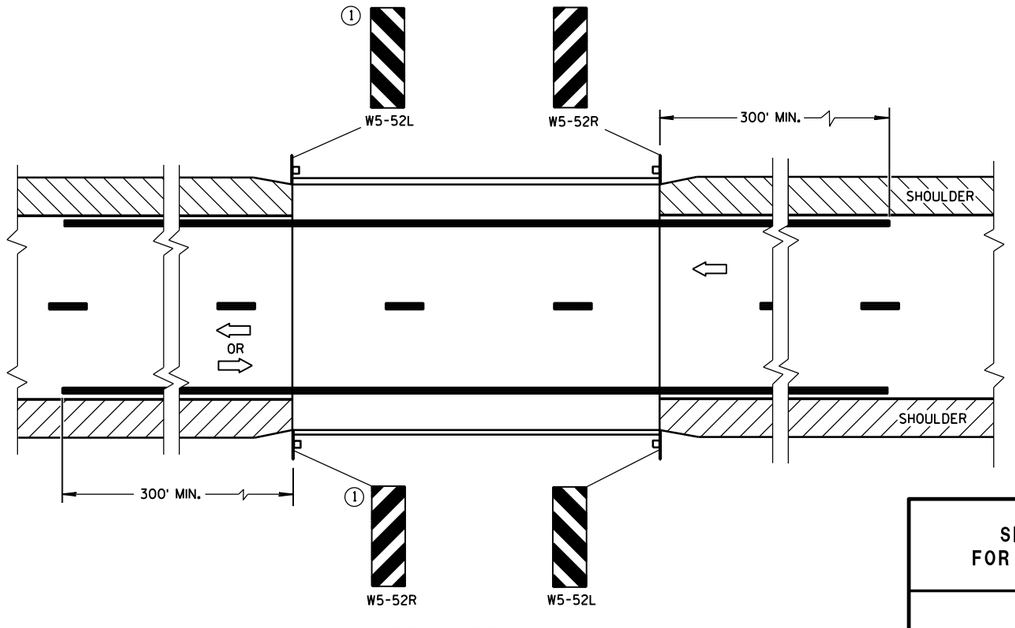
DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

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

(1) OMIT ON ONE-WAY TRAVELLED WAYS.

⇨ DIRECTION OF TRAFFIC



SITUATION 2

WARRANTING CRITERIA:

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

SIGNING & MARKING FOR TWO LANE BRIDGES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

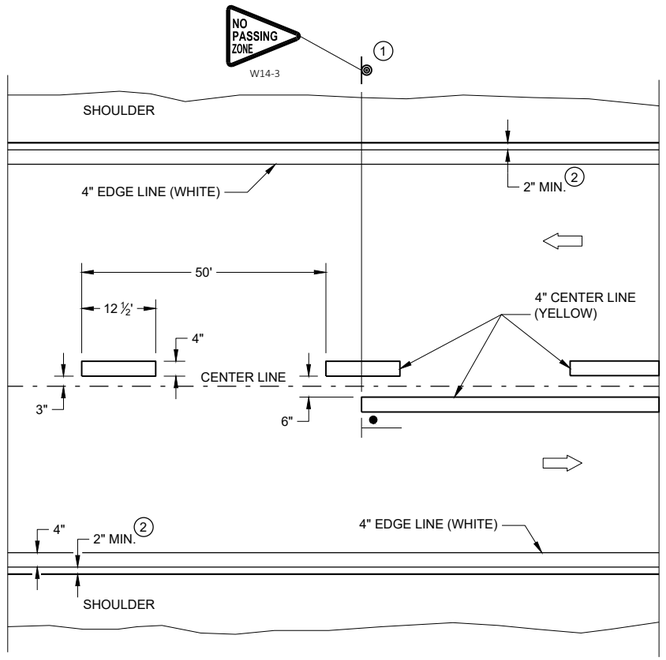
APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MARKING ENGINEER
FHWA

6

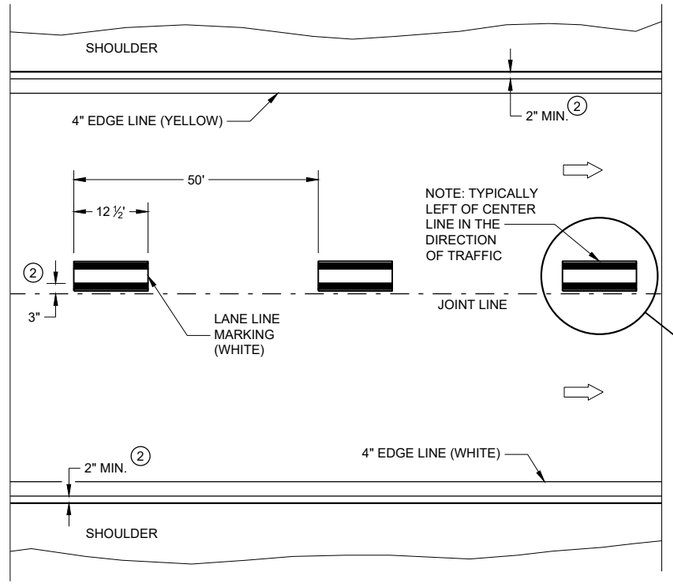
S.D.D. 15 C 6-9

6

S.D.D. 15 C 6-9

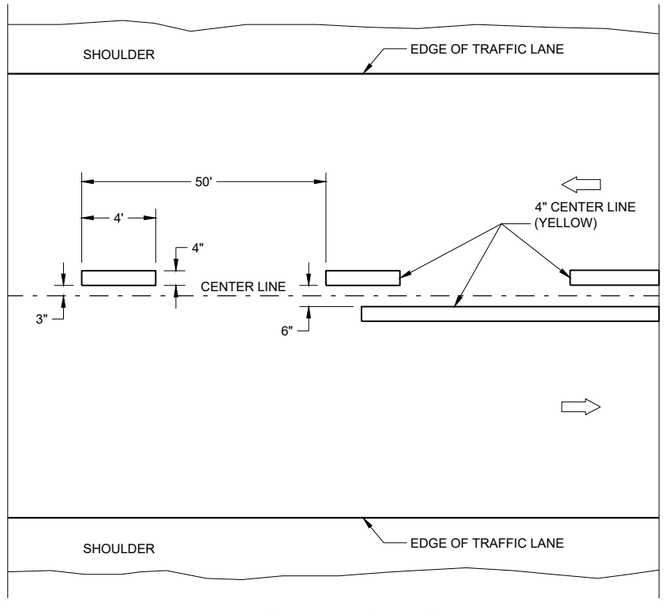


TWO WAY TRAFFIC

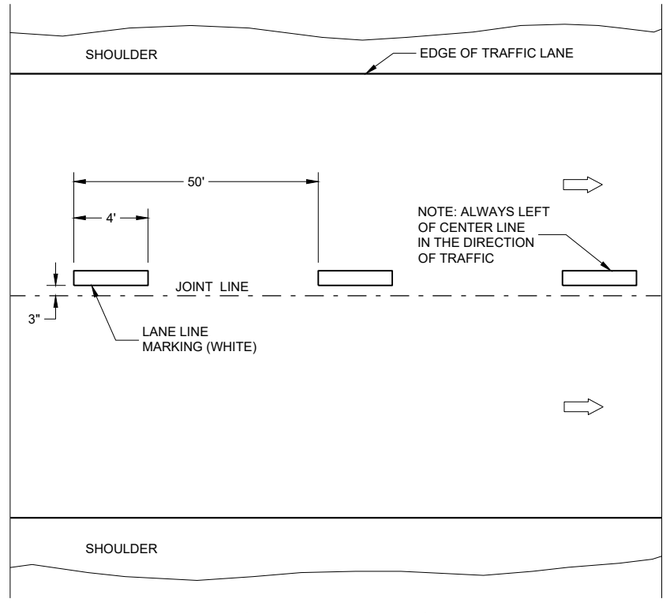


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

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

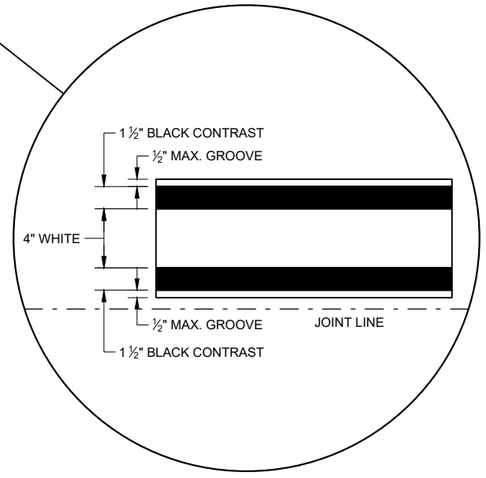
1. LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
2. MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

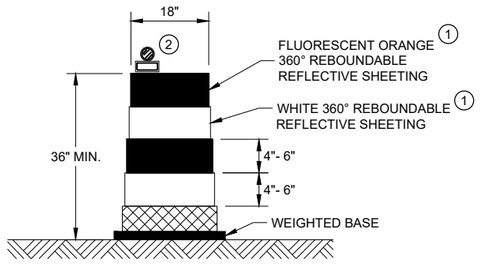
FHWA

SDD 15C08 - 20a

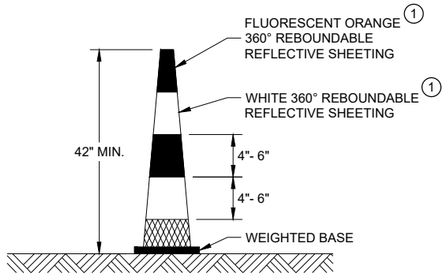
SDD 15C08 - 20a

GENERAL NOTES

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

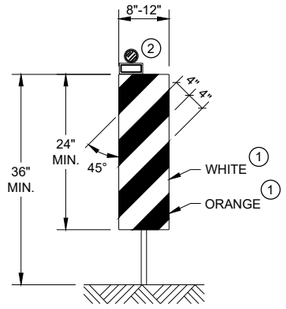


DRUM



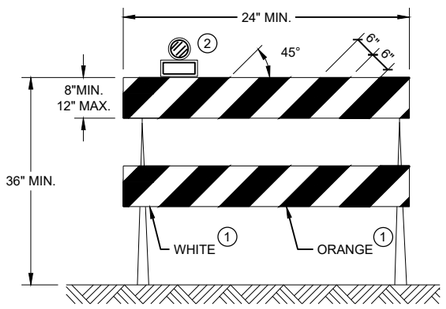
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



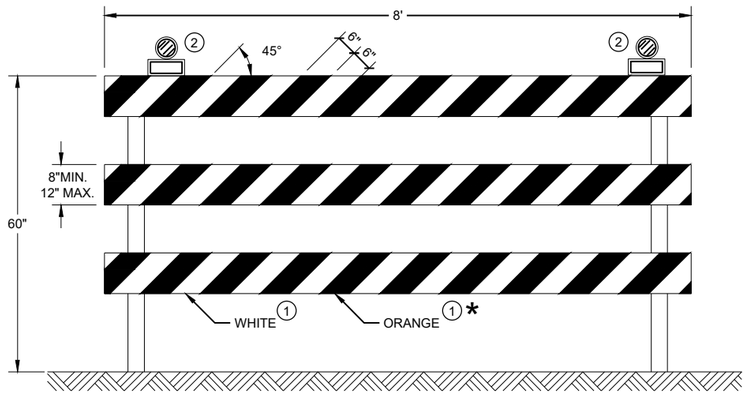
VERTICAL PANEL

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



TYPE II BARRICADE

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



TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

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SDD 15C11 - 09b

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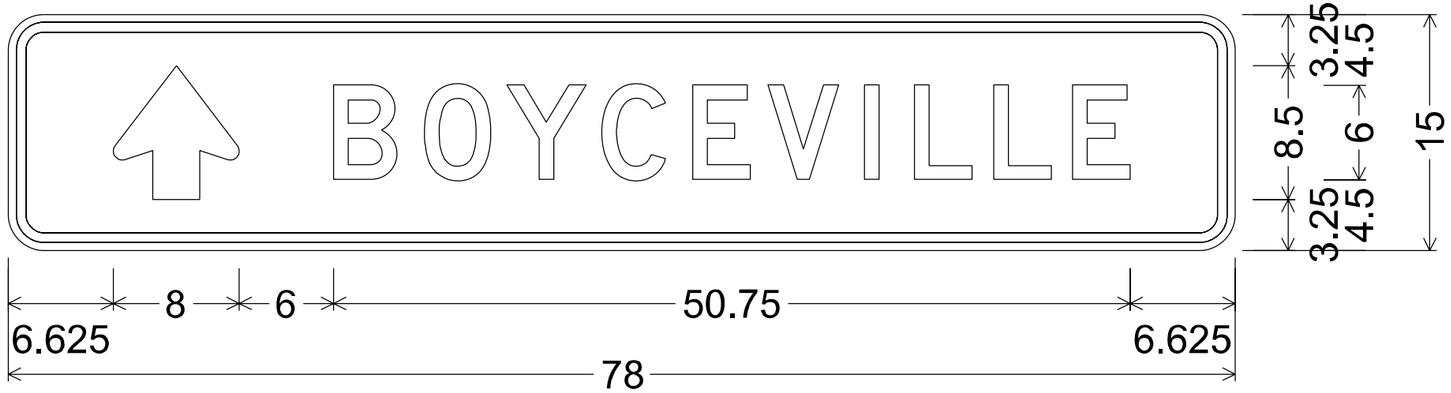
SDD 15C11 - 09b

NOTES

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



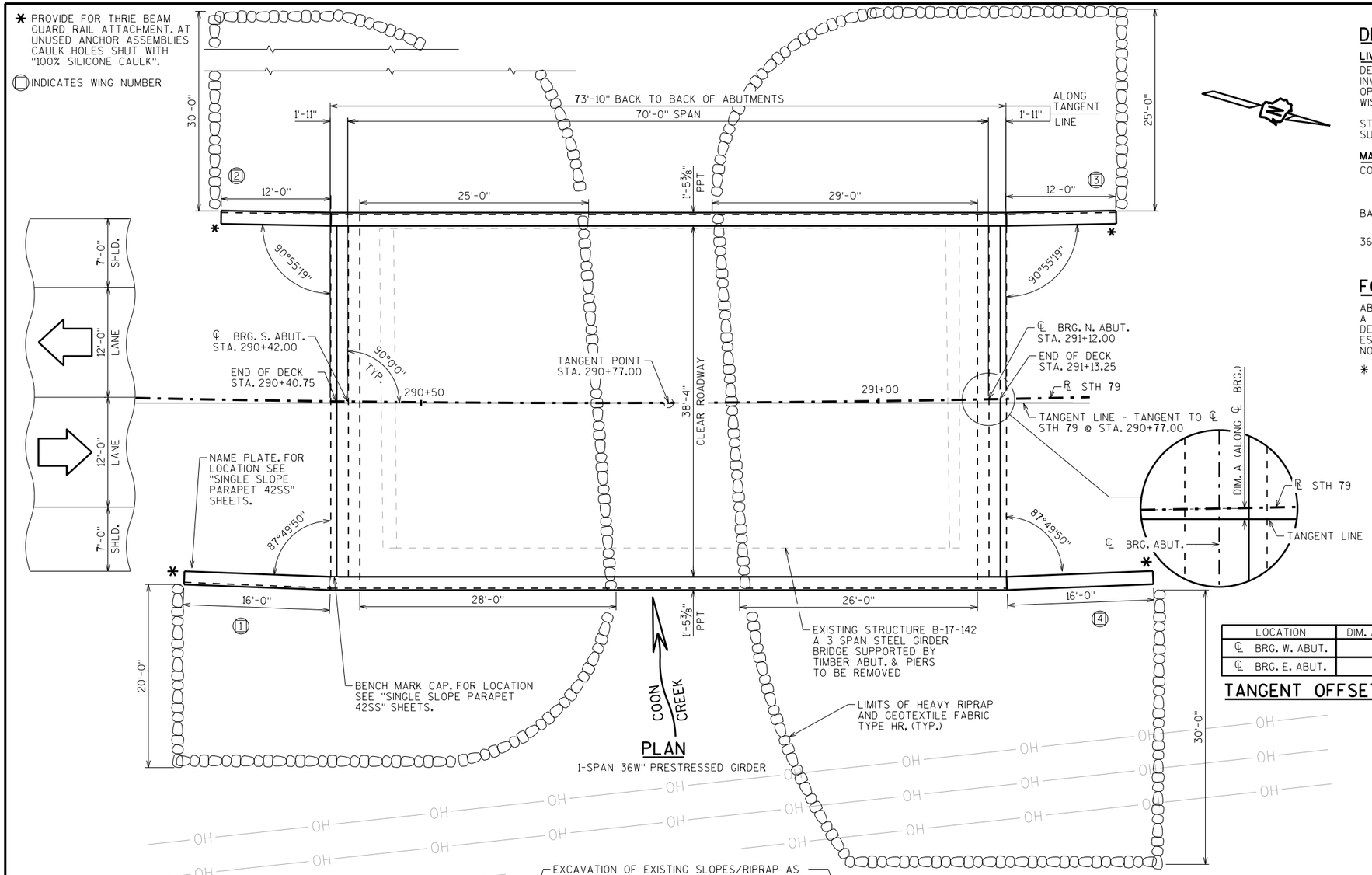
2.250" Radius, 0.625" Border, 0.500" Indent

STATE PROJECT NUMBER

8640-00-71

* PROVIDE FOR THRIE BEAM GUARD RAIL ATTACHMENT. AT UNUSED ANCHOR ASSEMBLIES CAULK HOLES SHUT WITH "100% SILICONE CAULK".

(1) INDICATES WING NUMBER

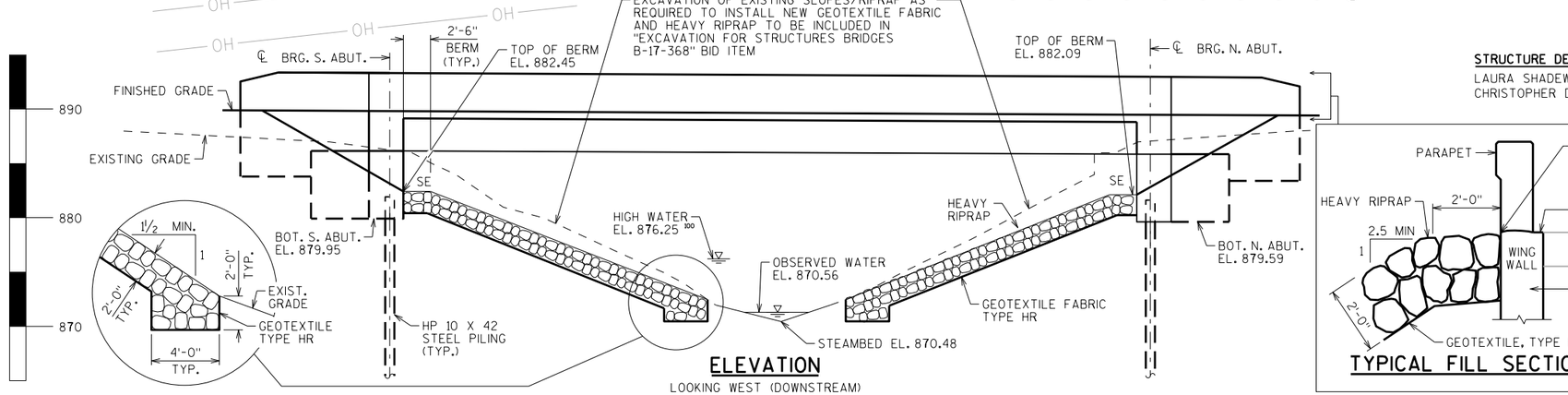


PLAN

1-SPAN 36W" PRESTRESSED GIRDER

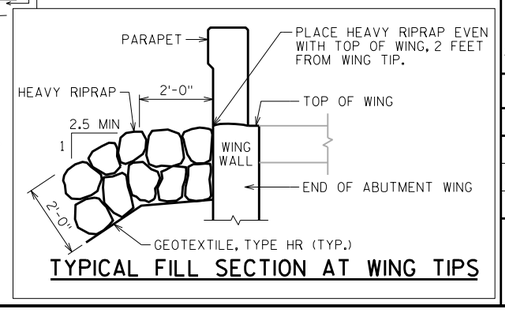
LOCATION	DIM. A (ALONG ℄)
℄ BRG. W. ABUT.	3¼"
℄ BRG. E. ABUT.	3¼"

TANGENT OFFSET TABLE



ELEVATION

LOOKING WEST (DOWNSTREAM)



TYPICAL FILL SECTION AT WING TIPS

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF = 1.11
OPERATING RATING FACTOR: RF = 1.47
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 250 (KIPS)

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

MATERIAL PROPERTIES:

CONCRETE MASONRY:
SUPERSTRUCTURE — f'c = 4,000 P.S.I.
ALL OTHER — f'c = 3,500 P.S.I.

BAR STEEL REINFORCEMENT:
GRADE 60 — fy = 60,000 P.S.I.

36W" PRESTRESSED GIRDERS:
CONCRETE MASONRY — f'c = 8,000 P.S.I.
STRANDS: 0.6" DIA. WITH ULTIMATE TENSILE STRENGTH OF 270,000 P.S.I.

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 10 X 42 PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 160 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 90'-0" LONG AT SOUTH ABUTMENT AND 85'-0" LONG AT NORTH ABUTMENT

** THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

HYDRAULIC DATA

100 YEAR FREQUENCY

Q_{100} = 550 C.F.S.
VEL.$_{100}$ = 3.01 F.P.S.
HW.$_{100}$ = EL. 876.25
WATERWAY AREA = 182.72 SQ. FT.
DRAINAGE AREA = 3.2 SQ. MI.
ROADWAY OVERTOPPING = N/A
SCOUR CRITICAL CODE = 8

2 YEAR FREQUENCY

Q_2 = 125 C.F.S.
VEL.$_2$ = 2.82 F.P.S.
HW.$_2$ = EL. 873.52

TRAFFIC VOLUME

STH 79

ADT = 2,300.0 (2043)
R.D.S. = 60 M.P.H.

CURVE DATA

STH 79

P.I. = 288+83.65
Δ = 26°32'34"
D = 2°30'00"
T = 540.56'
L = 1,061.72'
R = 2,291.84'
S.E. = 0.051 %
P.C. = 283+43.09
P.T. = 294+04.81

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION & QUANTITIES
3. SUBSURFACE EXPLORATION
4. SOUTH ABUTMENT
5. SOUTH ABUTMENT DETAILS
6. NORTH ABUTMENT
7. NORTH ABUTMENT DETAILS
8. 36W" PRESTRESSED GIRDER DETAILS 1
9. 36W" PRESTRESSED GIRDER DETAILS 2
10. STEEL DIAPHRAGM
11. SUPERSTRUCTURE PLAN
12. SUPERSTRUCTURE CROSS SECTION
13. SUPERSTRUCTURE DETAILS
14. SINGLE SLOPE PARAPET 42SS

STRUCTURE DESIGN CONTACTS:

LAURA SHADEWALD (608) 267-9592
CHRISTOPHER DOLL (608) 266-3229

NO.	DATE	REVISION	BY

WISCONSIN DEPARTMENT OF TRANSPORTATION
BUREAU OF STRUCTURES

ACCEPTED LLS 6/2/22
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-17-368

STH 79 OVER COON CREEK

COUNTY: DUNN — TOWN: SHERMAN

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGNED CK'D.	DRAWN BY	PLANS CK'D.
JDM	CAD	MJH	CAD

GENERAL PLAN

SHEET 1 OF 14

62

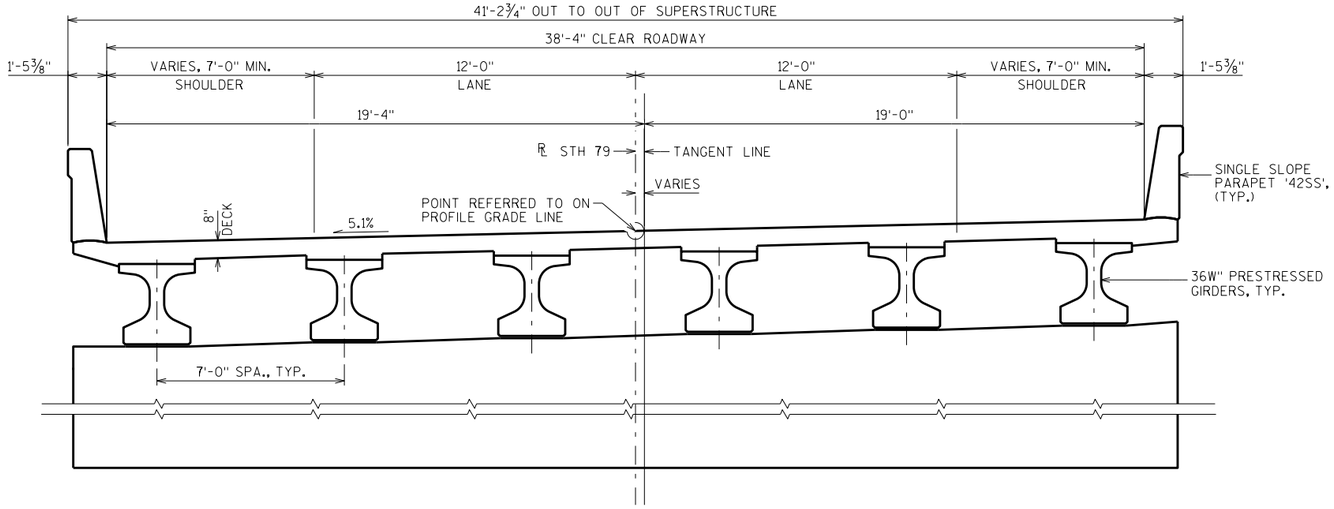
I.D. 8640-00-01A

DATE: MAY 2022

SCALE = 6.25

8

8



CROSS SECTION THRU ROADWAY

LOOKING NORTH

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER.	SOUTH ABUT.	NORTH ABUT.	TOTALS
203.0260	REMOVING STRUCTURE OVER WATERWAY MINIMAL DEBRIS B-17-142	EACH	——	——	——	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-17-368	LS	——	——	——	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	——	261	261	522
502.0100	CONCRETE MASONRY BRIDGES	CY	135.4	52.3	52.3	240
502.3200	PROTECTIVE SURFACE TREATMENT	SY	323	——	——	323
502.3210	PIGMENTED SURFACE SEALER	SY	72	14	14	100
503.0137	PRESTRESSED GIRDER TYPE I 36W-INCH	LF	426	——	——	426
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	——	2,660	2,660	5,320
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	21,370	2,890	2,890	27,150
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	——	6	6	12
506.4000	STEEL DIAPHRAGMS B-17-368	EACH	5	——	——	5
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	——	12	12	24
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	——	900	850	1,750
606.0300	RIPRAP HEAVY	CY	——	230	255	485
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	——	100	100	200
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	——	2	2	4
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	——	33	33	66
645.0120	GEOTEXTILE TYPE HR	SY	——	353	390	743
	NON-BID ITEMS					
	FILLER	SIZE	——	——	——	½", ¾", 1½"
				——	——	——

GENERAL NOTES

STATE PROJECT NUMBER

8640-00-71

DRAWINGS SHALL NOT BE SCALED.

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

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.

THE UPPER LIMIT OF "EXCAVATION FOR STRUCTURES BRIDGES B-17-368" SHALL BE THE EXISTING GROUNDLINE.

AT THE BACK FACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL TYPE A.

EXCAVATION BELOW THE ABUTMENT AND ABUTMENT BEDDING MATERIALS REQUIRES ENGINEER APPROVAL. GEOTEXTILE SHALL BE SET AT THE BOTTOM OF EXCAVATION AND EXTEND 2'-0" ABOVE BOTTOM OF ABUTMENT.

THE QUANTITY FOR BACKFILL STRUCTURE IS CALCULATED BASED ON THE DETAIL SHOWN IN THE PLANS.

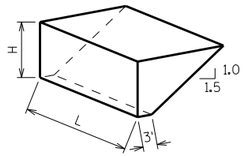
ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE EXPOSED TOP OF DECK SURFACE AND THE VERTICAL AND HORIZONTAL SURFACES OF THE PAVING NOTCHES AT ABUTMENT DIAPHRAGMS.

PIGMENTED PROTECTIVE SURFACE SEALER TO BE APPLIED TO THE FRONT FACE AND THE TOP OF THE PARAPETS, INCLUDING PARAPETS ON WINGS.

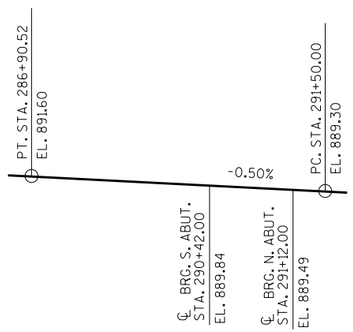
THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP AND GEOTEXTILE TYPE "HR" TO THE EXTENT SHOWN ON SHEET 1 AND THE ABUTMENT DETAILS.

THE HAUNCH CONCRETE QUANTITY IS BASED ON THE AVERAGE HAUNCH SHOWN ON THE "36W" PRESTRESSED GIRDER DETAILS 2" SHEET.

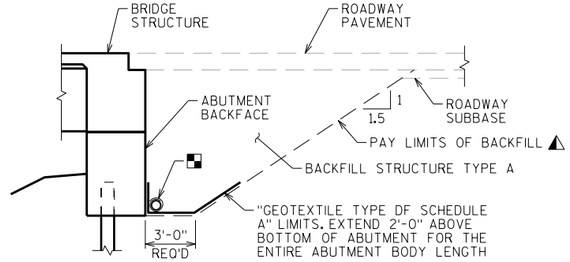


ABUTMENT BACKFILL DIAGRAM FOR WINGS PARALLEL TO ROADWAY

L = OUT TO OUT OF ABUTMENT, INCLUDING WINGS (FT)
H = AVERAGE ABUTMENT FILL HEIGHT (FT)
EF = EXPANSION FACTOR (1.20 FOR CY BID ITEMS AND 1.00 FOR TON BID ITEMS)
V_{CF} = (L)(3.0')(H) + (L)(0.5)(1.5H)(H)
V_{CY} = V_{CF} (EF)/27
V_{TON} = V_{CY} (2.0)



PROFILE GRADE LINE - STH 79



TYPICAL SECTION THRU ABUTMENT

⚠ BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

▪ PIPE UNDERDRAIN WRAPPED (6 INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN. SEE RODENT SHIELD DETAIL ON ABUT. DETAIL SHTS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-17-368

DRAWN BY MJH | PLANS CK'D. CAD

CROSS SECTION & QUANTITIES

SHEET 2

63

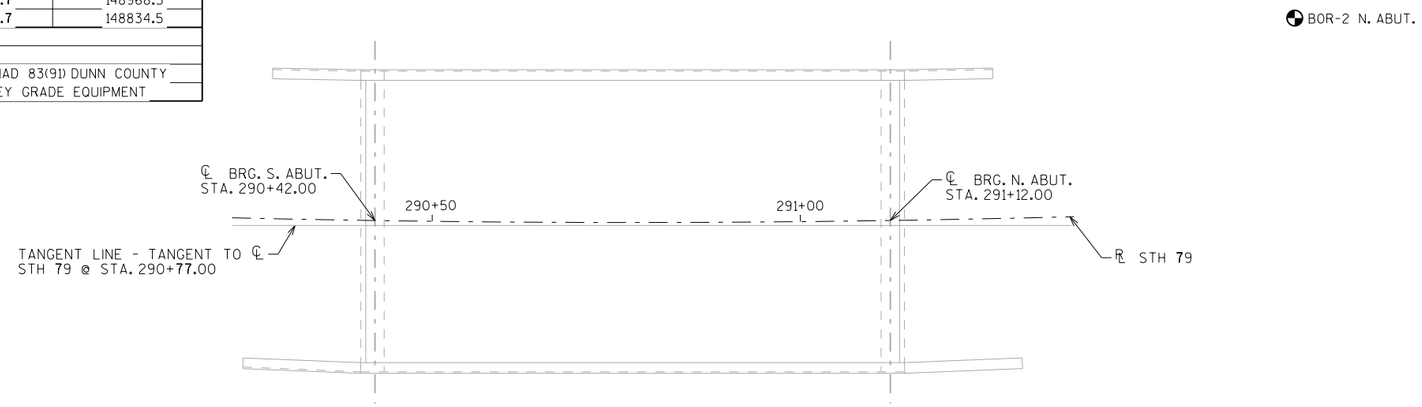
SCALE = 2.75

8

8

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	6/08/2021	197374.7	148968.5
2	6/09/2021	197468.7	148834.5

BORINGS COMPLETED BY: WISDOT
REPORT COMPLETED BY: WISDOT
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) DUNN COUNTY
COORDINATES COLLECTED USING NON-SURVEY GRADE EQUIPMENT



* THE GROUND WATER ELEVATION WAS DETERMINED FROM WHERE THE SOIL SAMPLE WAS DESCRIBED AS WET.

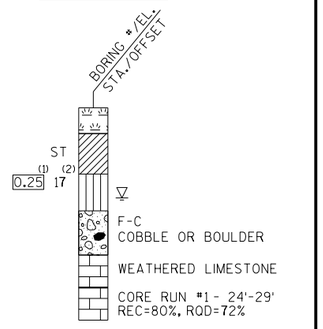
STATE PROJECT NUMBER

8640-00-71

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/ META

LEGEND OF BORING



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

- AT TIME OF DRILLING
- END OF DRILLING
- AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-17-368

DRAWN BY TLP/MJH | PLANS CK'D. CAD

SUBSURFACE EXPLORATION

SHEET 3

64

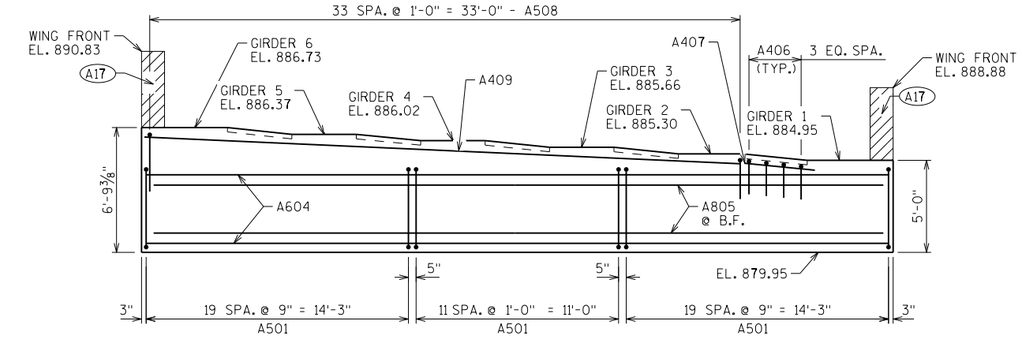
8

8

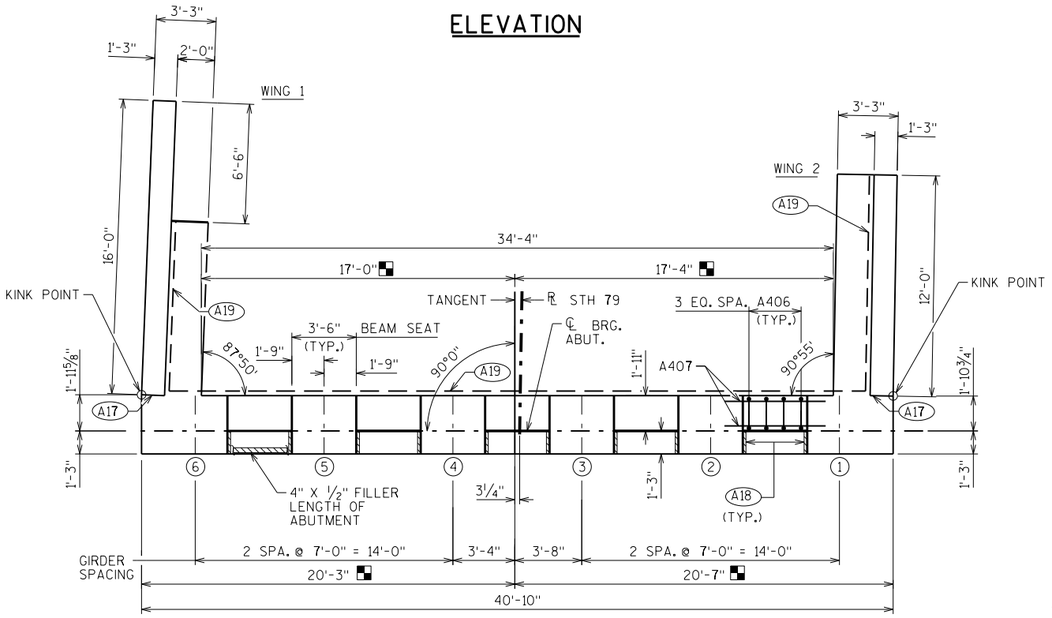
SCALE =

STATE PROJECT NUMBER

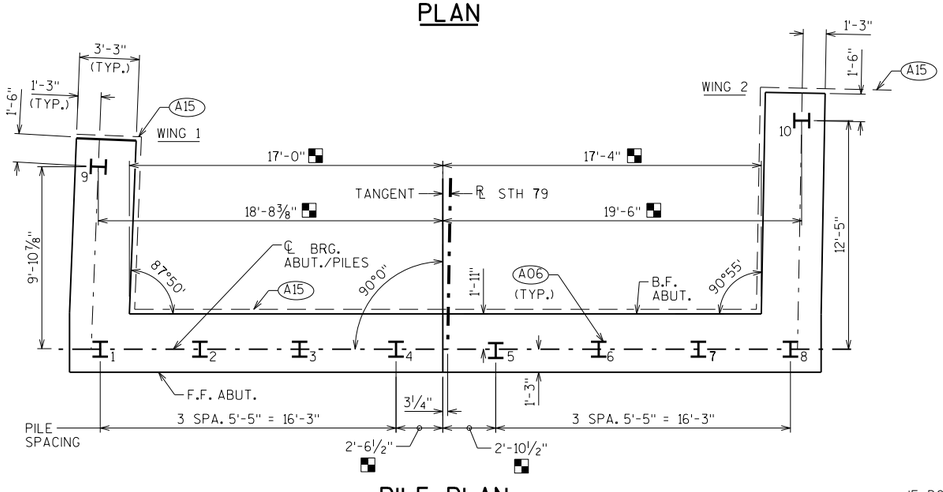
8640-00-71



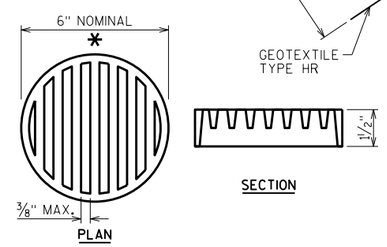
ELEVATION



PLAN



PILE PLAN

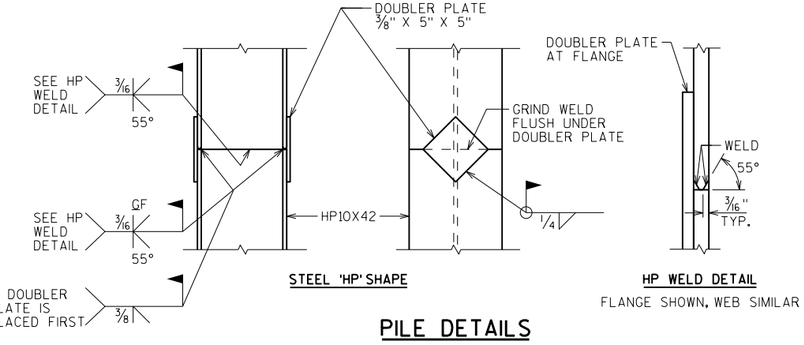


RODENT SHIELD DETAIL

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

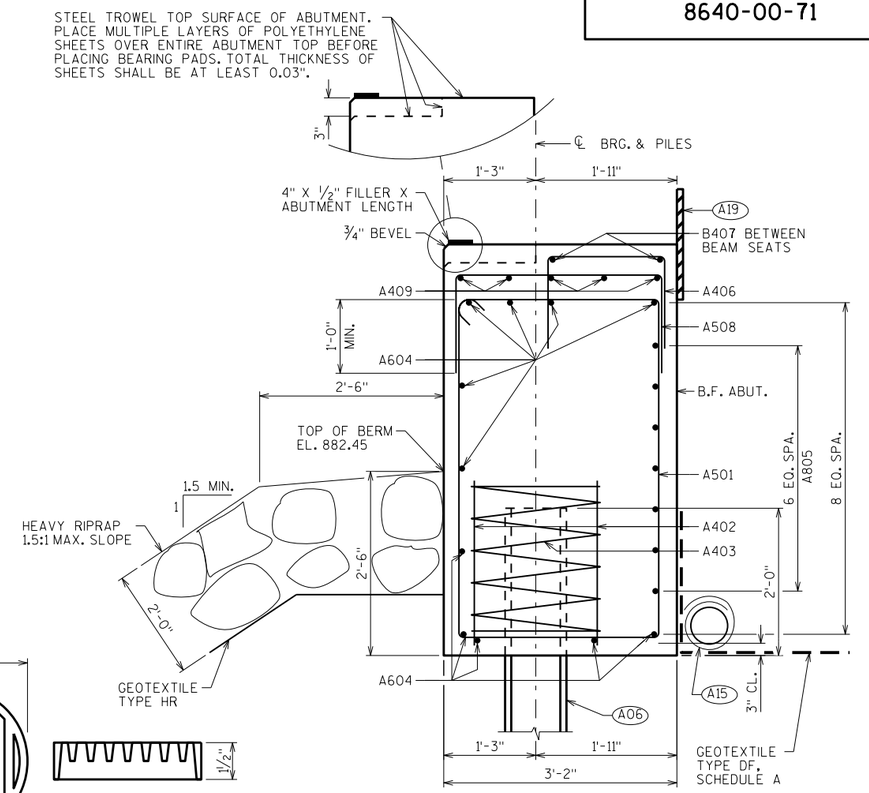


STEEL 'HP' SHAPE

HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

PILE DETAILS



SECTION THRU BODY

- ◯ INDICATES GIRDER NUMBER
- ▪ MEASURED TO TANGENT LINE
- (A06) SUPPORT ABUTMENT ON HP 10 X 42 STEEL PILING, ESTIMATED 90'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 160 TONS PER PILE.
- (A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.
- (A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.
- (A18) 3/4" CORK FILLER UP VERT. BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER.
- (A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-17-368

DRAWN BY	MJH	PLANS CK'D.	CAD

SOUTH ABUTMENT

SHEET 4

65

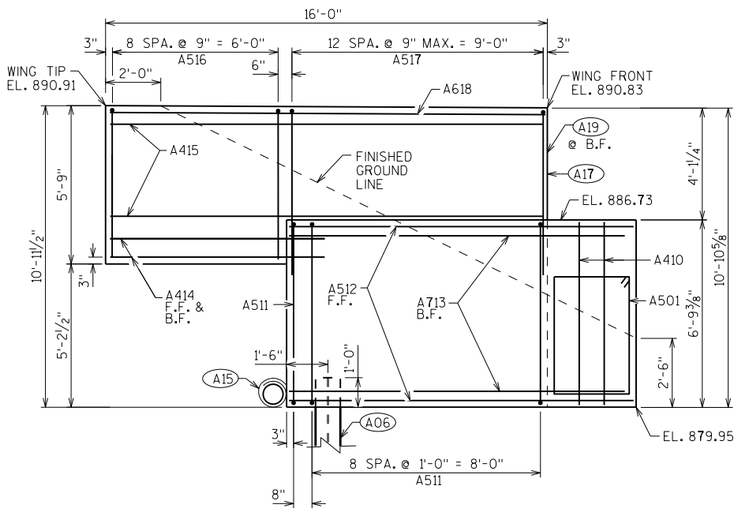
SCALE = 4.00

8

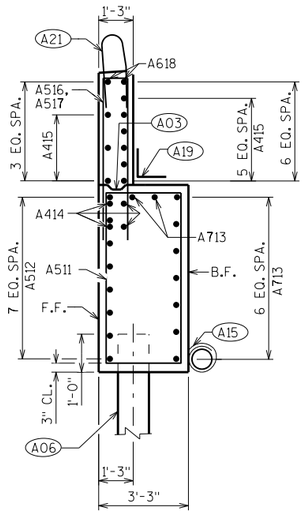
8

STATE PROJECT NUMBER

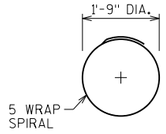
8640-00-71



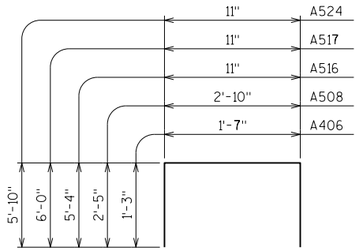
WING 1



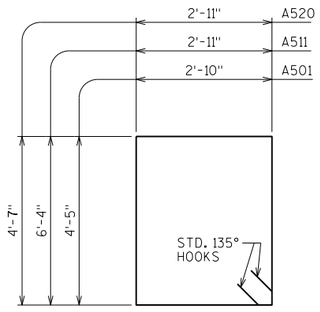
WING 1 SECTION



A403



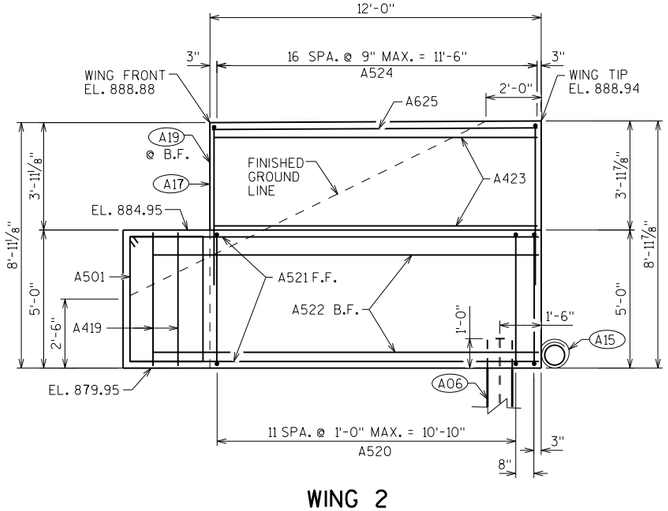
A406, A508, A516, A517, A524



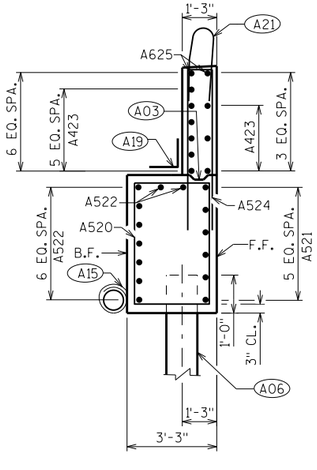
A501. A511, A520

BILL OF BARS

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A501		52	15'-2"	X		BODY-STIRRUPS
A402		16	2'-3"			BODY PILES - 2 PER BODY PILE
A403		8	28'-0"	X		BODY PILES - 1 PER BODY PILE
A604		11	40'-6"			BODY - HORIZ.
A805		7	40'-6"			BODY - HORIZ. - B.F.
A406		20	3'-11"	X		BODY - VERT. - TOP - BTWN. BEAM SEATS
A407		10	5'-6"			BODY - HORIZ. - TOP - BTWN. BEAM SEATS
A508		34	7'-5"	X		BODY - TOP - VERT.
A409		5	33'-6"			BODY - TOP - HORIZ.
A410	X	2	6'-4"			WING 1 - VERT. - END OF ABUTMENTS - F.F.
A511	X	10	19'-2"	X		WING 1 - STIRRUP - LOWER WING
A512	X	8	12'-4"			WING 1 - HORIZ. - F.F. - LOWER WING
A713	X	9	12'-2"			WING 1 - HORIZ. - B.F. - LOWER WING
A414	X	4	7'-9"			WING 1 - HORIZ. - BOT - UPPER WING
A415	X	9	15'-8"			WING 1 - HORIZ. - UPPER WING
A516	X	9	11'-4"	X		WING 1 - VERT. - UPPER WING
A517	X	13	12'-8"	X		WING 1 - VERT. - UPPER WING
A618	X	2	15'-8"			WING 1 - HORIZ. - UPPER WING - TOP
A419	X	2	4'-7"			WING 2 - VERT. - END OF ABUTMENTS - F.F.
A520	X	13	15'-8"	X		WING 2 - STIRRUP - LOWER WING
A521	X	6	14'-10"			WING 2 - HORIZ. - F.F. - LOWER WING
A522	X	9	13'-7"			WING 2 - HORIZ. - B.F. - LOWER WING
A423	X	9	11'-8"			WING 2 - HORIZONTAL - UPPER WING
A524	X	17	12'-4"	X		WING 2 - VERTICAL - UPPER WING
A625	X	2	11'-8"			WING 2 - HORIZONTAL - UPPER WING - TOP



WING 2



WING 2 SECTION

(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 x 6. (18" RMW @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).

(A06) SUPPORT ABUTMENT ON HP 10 X 42 STEEL PILING, ESTIMATED 90'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 160 TONS PER PILE.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

(A21) FOR PPT. BARS & DIMENSIONS, SEE "SINGLE SLOPE PARAPET 42SS" SHEET.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-17-368

DRAWN BY MJH | PLANS CK'D. CAD

SOUTH ABUTMENT DETAILS

SHEET 5

66

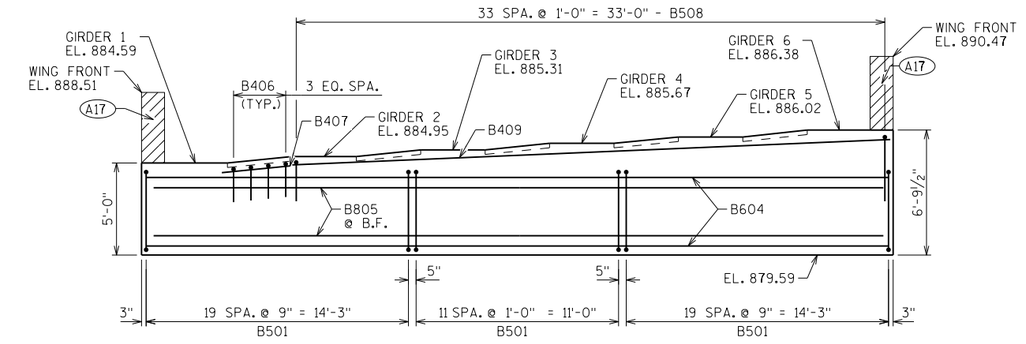
SCALE = 2.67

8

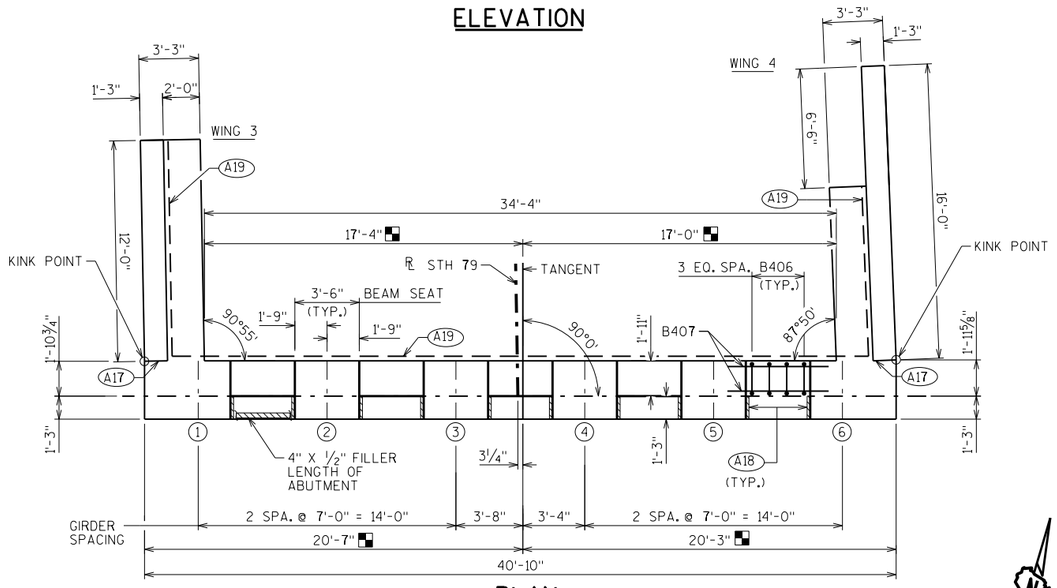
8

STATE PROJECT NUMBER

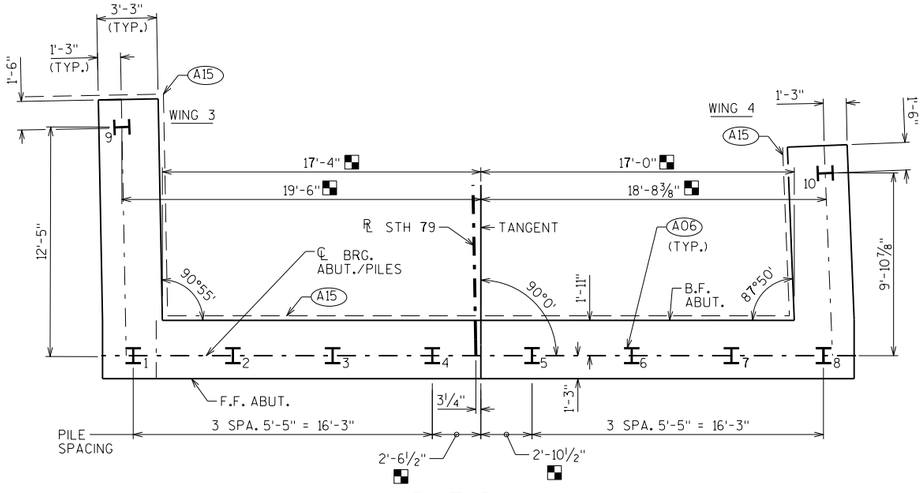
8640-00-71



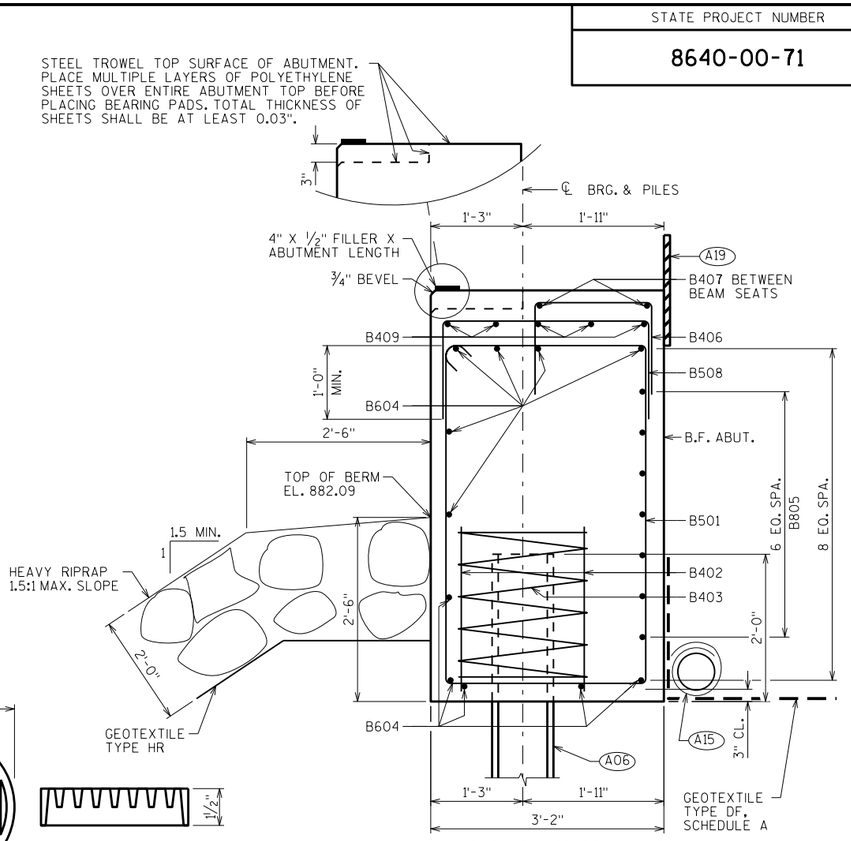
ELEVATION



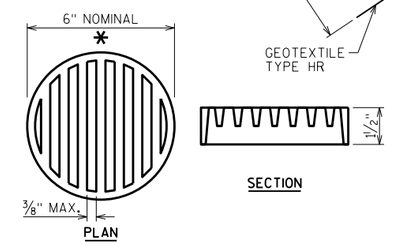
PLAN



PILE PLAN



SECTION THRU BODY



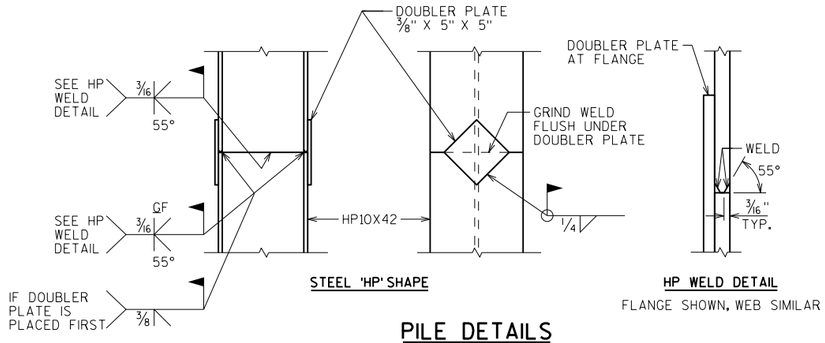
PLAN — SECTION

RODENT SHIELD DETAIL

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.



STEEL 'HP' SHAPE — HP WELD DETAIL (FLANGE SHOWN, WEB SIMILAR)

PILE DETAILS

- ◯ INDICATES GIRDER NUMBER
- ■ MEASURED TO TANGENT LINE
- (A06) SUPPORT ABUTMENT ON HP 10 X 42 STEEL PILING, ESTIMATED 85'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 160 TONS PER PILE.
- (A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.
- (A17) 1/2" FILLER (INCLUDED IN WING LENGTH); SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.
- (A18) ¾" CORK FILLER UP VERT. BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER.
- (A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-17-368

DRAWN BY	MJH	PLANS CK'D.	CAD

NORTH ABUTMENT

SHEET 6

67

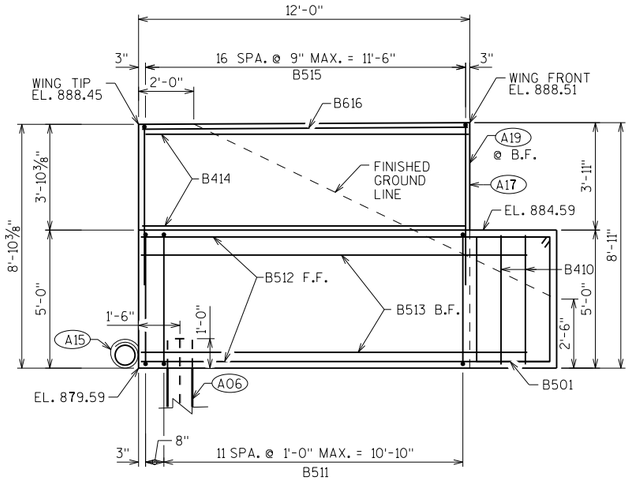
SCALE = 4.00

8

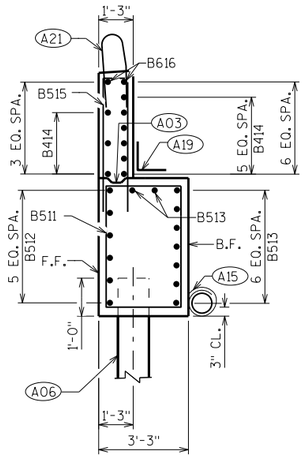
8

STATE PROJECT NUMBER

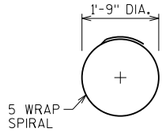
8640-00-71



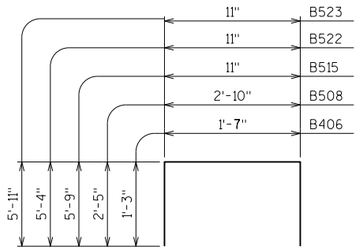
WING 3



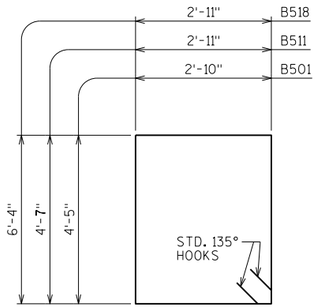
WING 3 SECTION



B403



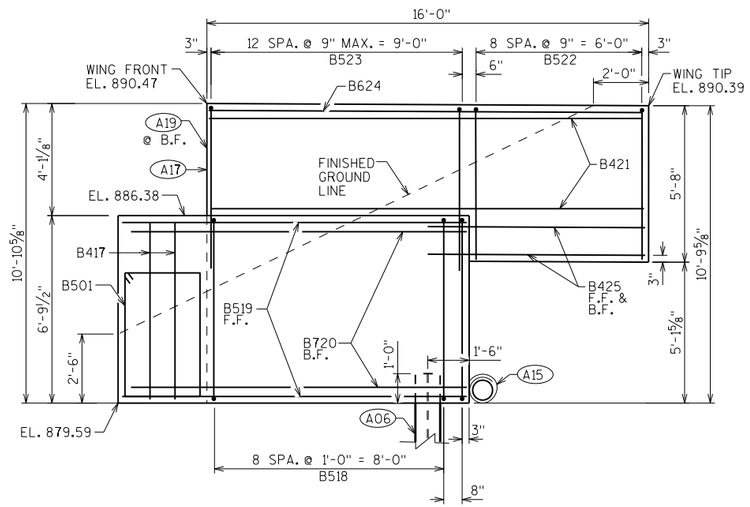
B406, B508, B515, B522, B523



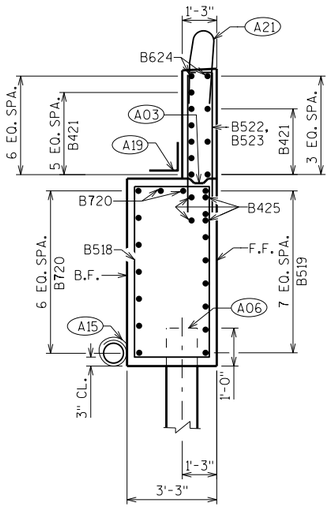
B501. B511, B518

BILL OF BARS

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
B501		52	15'-2"	X		BODY-STIRRUPS
B402		16	2'-3"			BODY PILES - 2 PER BODY PILE
B403		8	28'-0"	X		BODY PILES - 1 PER BODY PILE
B604		11	40'-6"			BODY - HORIZ.
B805		7	40'-6"			BODY - HORIZ. - B.F.
B406		20	3'-11"	X		BODY - VERT. - TOP - BTWN. BEAM SEATS
B407		10	5'-6"			BODY - HORIZ. - TOP - BTWN. BEAM SEATS
B508		34	7'-5"	X		BODY - TOP - VERT.
B409		5	33'-6"			BODY - TOP - HORIZ.
B410	X	2	4'-7"			WING 1 - VERT. - END OF ABUTMENTS - F.F.
B511	X	13	15'-8"	X		WING 3 - STIRRUP - LOWER WING
B512	X	6	14'-10"			WING 3 - HORIZ. - F.F. - LOWER WING
B513	X	9	13'-7"			WING 3 - HORIZ. - B.F. - LOWER WING
B414	X	9	11'-8"			WING 3 - HORIZ. - UPPER WING
B515	X	17	5'-8"	X		WING 3 - VERT. - UPPER WING
B616	X	9	11'-8"			WING 3 - HORIZ. - TOP - UPPER WING
B417	X	2	6'-4"			WING 4 - VERT. - END OF ABUTMENTS - F.F.
B518	X	10	19'-2"	X		WING 4 - STIRRUP - LOWER WING
B519	X	8	12'-4"			WING 4 - HORIZ. - F.F. - LOWER WING
B720	X	9	12'-2"			WING 4 - HORIZ. - B.F. - LOWER WING
B421	X	9	15'-8"			WING 4 - HORIZ. - UPPER WING
B522	X	9	11'-4"	X		WING 4 - VERT. - UPPER WING
B523	X	13	12'-6"	X		WING 4 - VERT. - UPPER WING
B624	X	2	15'-8"			WING 4 - HORIZ. - UPPER WING - TOP
B425	X	4	7'-9"			WING 4 - HORIZ. - BOT. - UPPER WING



WING 4



WING 4 SECTION

A03 OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 x 6. (18" RMW @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).

A06 SUPPORT ABUTMENT ON HP 10 X 42 STEEL PILING, ESTIMATED 85'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 160 TONS PER PILE.

A15 PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

A17 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

A19 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

A21 FOR PPT. BARS & DIMENSIONS, SEE "SINGLE SLOPE PARAPET 42SS" SHEET.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE B-17-368

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NORTH ABUTMENT DETAILS

SHEET 7

68

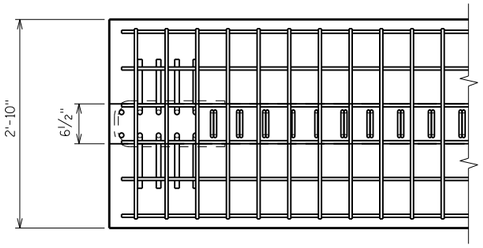
SCALE = 2.67

8

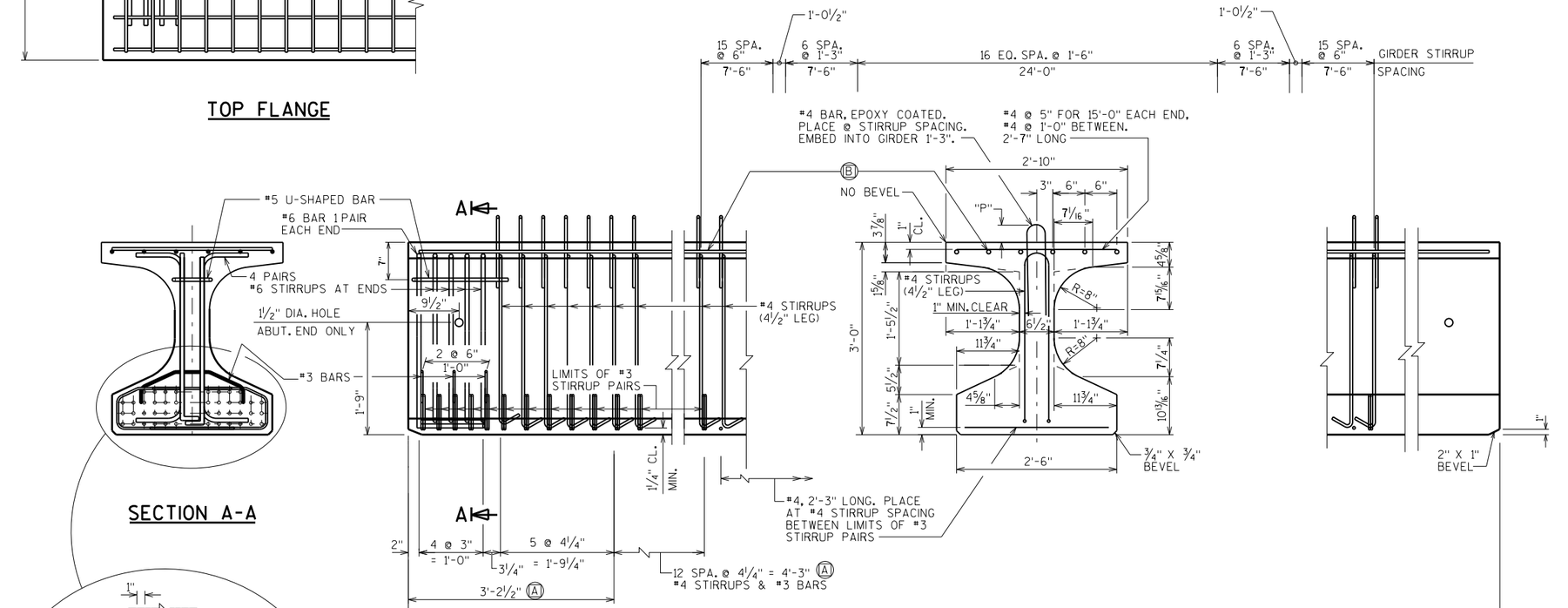
8

STATE PROJECT NUMBER

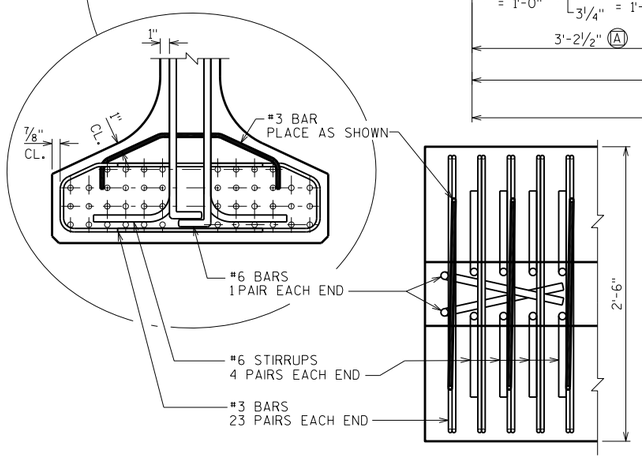
8640-00-71



TOP FLANGE



SECTION A-A



BOTTOM FLANGE

SIDE VIEW & TYPICAL SECTION IN SPAN

Ⓐ DETAIL TYP. AT EACH END

Ⓑ 6 #4 BARS, FULL LENGTH, MIN. LAP = 1'-11"

NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY, EXCEPT THE OUTSIDE 8" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED CONCRETE SEALER SHALL BE APPLIED TO ALL SMOOTH SURFACES INCLUDING THE OUTSIDE 8" OF THE TOP FLANGE.

DO NOT APPLY CONCRETE SEALER OR EPOXY TO SURFACES RECEIVING APPLICATION OF CONCRETE STAINING.

THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS. SEE SECT. 503.3.4 OF STANDARD SPECIFICATIONS FOR GUIDANCE.

STRANDS SHALL BE FLUSH WITH END OF GIRDER. FOR GIRDER ENDS EMBEDDED COMPLETELY IN CONCRETE, END OF STRANDS SHALL BE COATED WITH NON-BITUMINOUS JOINT SEALER. FOR GIRDER ENDS THAT ARE FINALLY EXPOSED, COAT THE GIRDER ENDS, EXPOSED STRAND ENDS AND ALL NON-BONDING SURFACES WITHIN 2 FEET OF THE GIRDER ENDS WITH A NON-PIGMENTED EPOXY CONFORMING TO AASHTO M-235 TYPE III, GRADE 2, CLASS B OR C. THE EPOXY SHALL BE APPLIED AT LEAST 3 DAYS AFTER MOIST CURING HAS CEASED AND PRIOR TO THE APPLICATION OF THE SEALER.

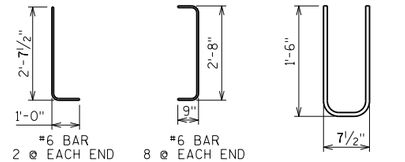
ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

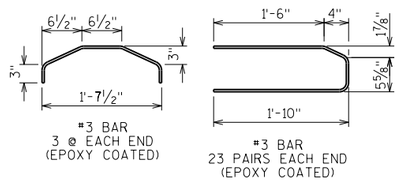
SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT.

AN EQUIVALENT OF WELDED WIRE FABRIC (WWF) ASTM A1064 MAY BE SUBSTITUTED FOR THE STIRRUP REINFORCEMENT SHOWN, UPON APPROVAL OF THE STRUCTURES MAINTENANCE SECTION. IF USED, WWF SUBSTITUTION DETAILS SHALL BE SUBMITTED ELECTRONICALLY TO THE WISDOT FABRICATION LIBRARY AND ACCEPTED PRIOR TO SHOP DRAWING SUBMITTAL.

PRESTRESSING STRANDS SHALL BE (0.6" DIA.)-7 WIRE LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 270,000 PSI.

FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "STEEL DIAPHRAGM" SHEET.





✳ MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

GIRDER DATA

SPAN	GIRDER	GIRDER LENGTH "L" (FEET)	DEAD LOAD DEFL. (IN.) 1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	CONC. STRGTH. f'c (P.S.I.)	"P" (IN.) 1ST 1/3 OF GIRDER	MID 1/3 OF GIRDER	END 1/3 OF GIRDER	DIA. OF STRAND (IN.)	DRAPED PATTERN TOTAL NO. OF STRANDS	f'ci (P.S.I.) ✳	(IN.) "A"	"B" MIN.	"B" MAX.	"C"
1	1-6	71	0.2	0.4	0.6	0.7	0.8	0.7	0.6	0.4	0.2	8,000	8.0	7.0	8.0	0.6	18	6,400	32	11	14	4

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-17-368

DRAWN BY MJH | PLANS CK'D. CAD

36W" PRESTRESSED GIRDER DETAILS 1

SHEET 8

69

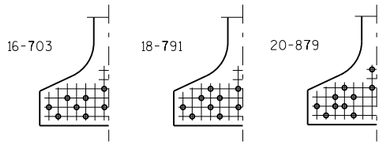
SCALE = 1.00

8

8

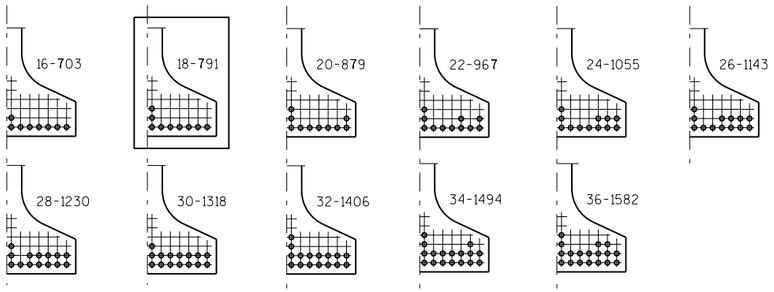
STATE PROJECT NUMBER

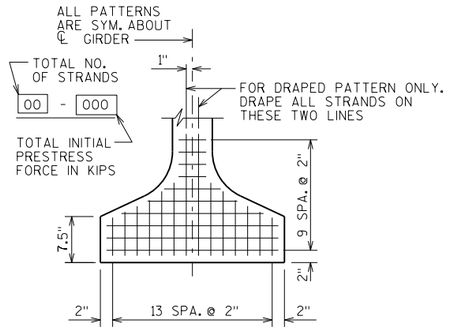
8640-00-71



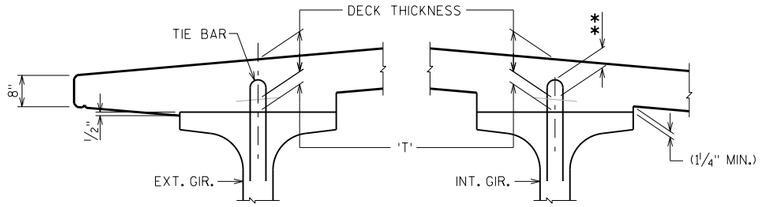
STANDARD ARRANGEMENTS TO RAISE CENTER OF GRAVITY TO AVOID DRAPING OF STRANDS

0.6" DIA. STRANDS





TYP. STRAND PATTERN



DECK HAUNCH DETAIL

IF 1¼" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR, THE PLAN DECK THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN ½" OR,

** IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED.

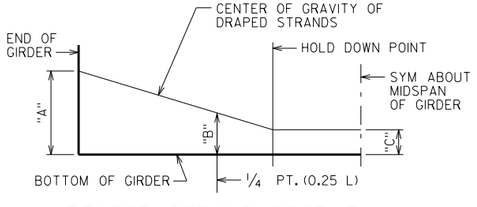
TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT ℄ OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEV. AT FINAL GRADE
- TOP OF GIRDER ELEVATION
+ DEAD LOAD DEFLECTION
- DECK THICKNESS
= HAUNCH HEIGHT 'T'

NOTE: AN AVERAGE HAUNCH ('T') OF 3.3" WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES".

ARRANGEMENT AT ℄ SPAN - FOR GIRDERS WITH DRAPED STRANDS

0.6" DIA. STRANDS



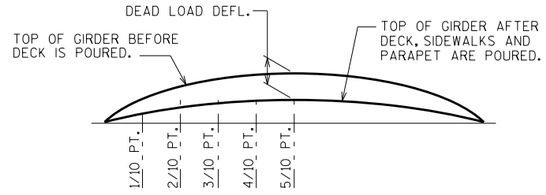
DRAPED STRAND PROFILE

*THE THEORETICAL INITIAL CAMBER VALUE AT THE TIME OF STRAND RELEASE AT MIDSPAN MULTIPLIED BY A FACTOR OF 1.4 TO ACCOUNT FOR CAMBER GROWTH FROM THE TIME OF STRAND RELEASE TO JOBSITE PLACEMENT.

SPAN	CAMBER (IN.) *
1	1.4"

THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T', USE ACTUAL GIRDER SHOTS.

THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.



DEAD LOAD DEFLECTION DIAGRAM

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-17-368

DRAWN BY MJH | PLANS CK'D. CAD

36W" PRESTRESSED GIRDER DETAILS 2

SHEET 9

70

SCALE = 1.00

8

8

STATE PROJECT NUMBER

8640-00-71

NOTES

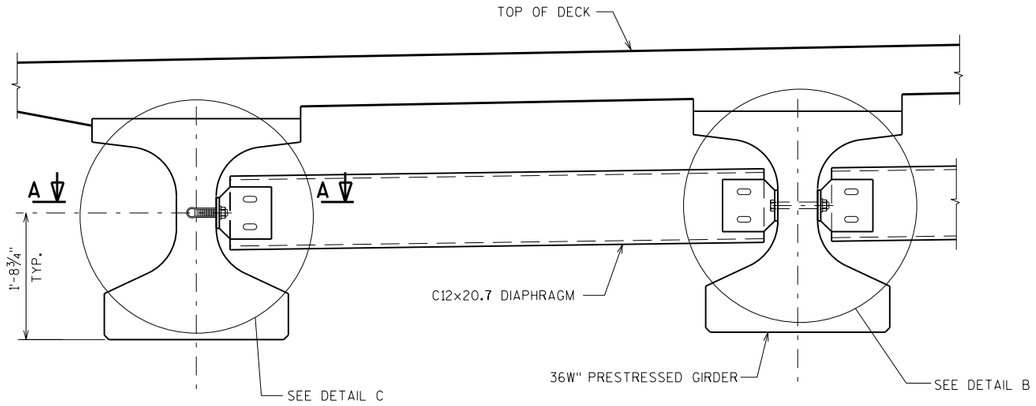
ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-17-368", EACH.

EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

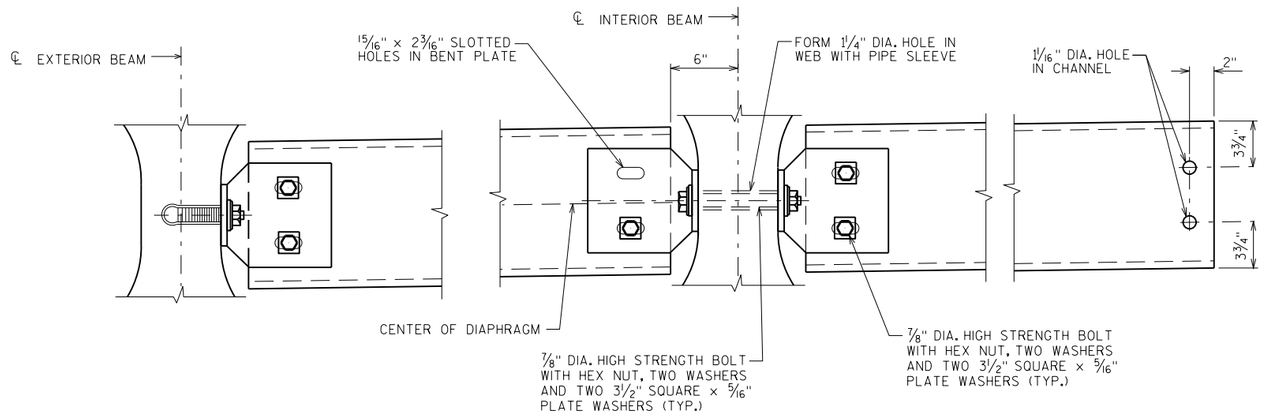
ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36.

ALL DIAPHRAGM MATERIAL INCLUDING BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED AFTER FABRICATION.

STEEL DIAPHRAGM TO CONCRETE WEB CONNECTION SHALL BE SNUG-TIGHT PLUS 1/4 TURN, UNLESS NOTED OTHERWISE. HIGH STRENGTH BOLTS FOR WEB CONNECTION SHALL MEET THE REQUIREMENTS FOR ASTM A325 OR ASTM A449.

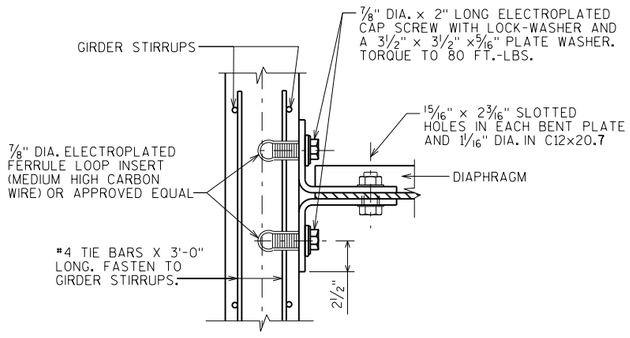


PART TRANSVERSE SECTION AT DIAPHRAGM



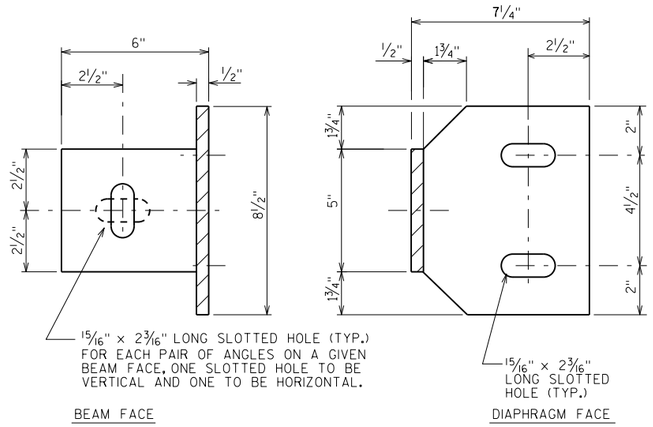
DETAIL C

DETAIL B



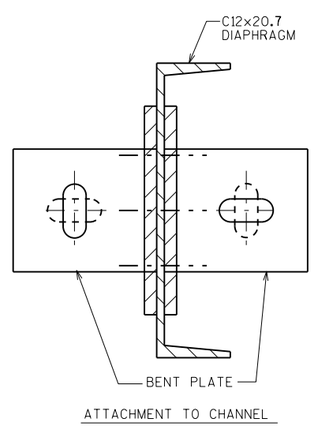
SECTION A-A

(FOR EXTERIOR ATTACHMENT)



BEAM FACE

DIAPHRAGM FACE



ATTACHMENT TO CHANNEL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-17-368

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STEEL DIAPHRAGM

SHEET 10

71

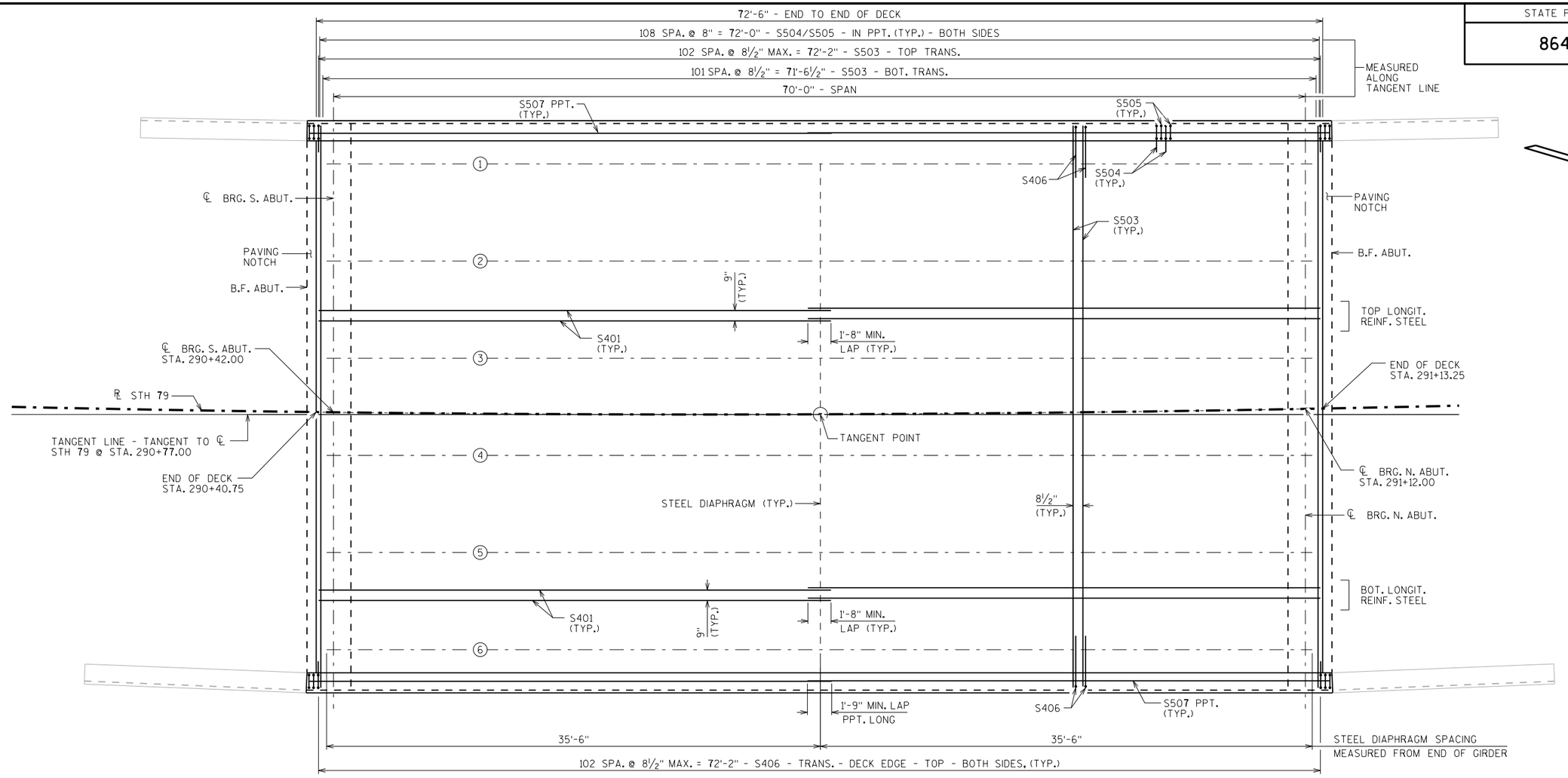
8

8

SCALE = 1.00

STATE PROJECT NUMBER

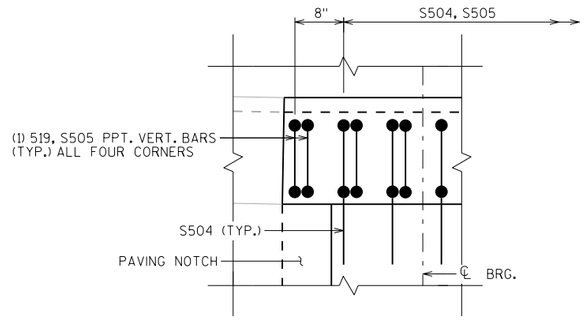
8640-00-71



PLAN

TOP OF DECK ELEVATIONS

	℄ BRG. S. ABUT.	1/10 PT.	2/10 PT.	3/10 PT.	4/10 PT.	5/10 PT.	6/10 PT.	7/10 PT.	8/10 PT.	9/10 PT.	℄ BRG. N. ABUT.
LEFT GL	888.87	888.83	888.79	888.75	888.72	888.68	888.65	888.61	888.58	888.55	888.52
GIRDER 1	888.96	888.92	888.88	888.84	888.80	888.77	888.73	888.70	888.67	888.63	888.60
GIRDER 2	889.31	889.27	889.23	889.20	889.16	889.12	889.09	889.06	889.02	888.99	888.96
GIRDER 3	889.67	889.63	889.59	889.55	889.52	889.48	889.45	889.41	889.38	889.35	889.32
PGL	889.84	889.81	889.77	889.74	889.70	889.67	889.63	889.60	889.56	889.53	889.49
GIRDER 4	890.03	889.99	889.95	889.91	889.87	889.84	889.80	889.77	889.74	889.71	889.68
GIRDER 5	890.38	890.34	890.30	890.27	890.23	890.20	890.16	890.13	890.10	890.06	890.03
GIRDER 6	890.74	890.70	890.66	890.62	890.59	890.55	890.52	890.48	890.45	890.42	890.39
RIGHT GL	890.82	890.78	890.75	890.71	890.67	890.64	890.60	890.57	890.54	890.51	890.48



PARAPET CORNER REINFORCEMENT

○ INDICATED GIRDER NUMBER

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-17-368

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SUPERSTRUCTURE PLAN

SHEET 11

72

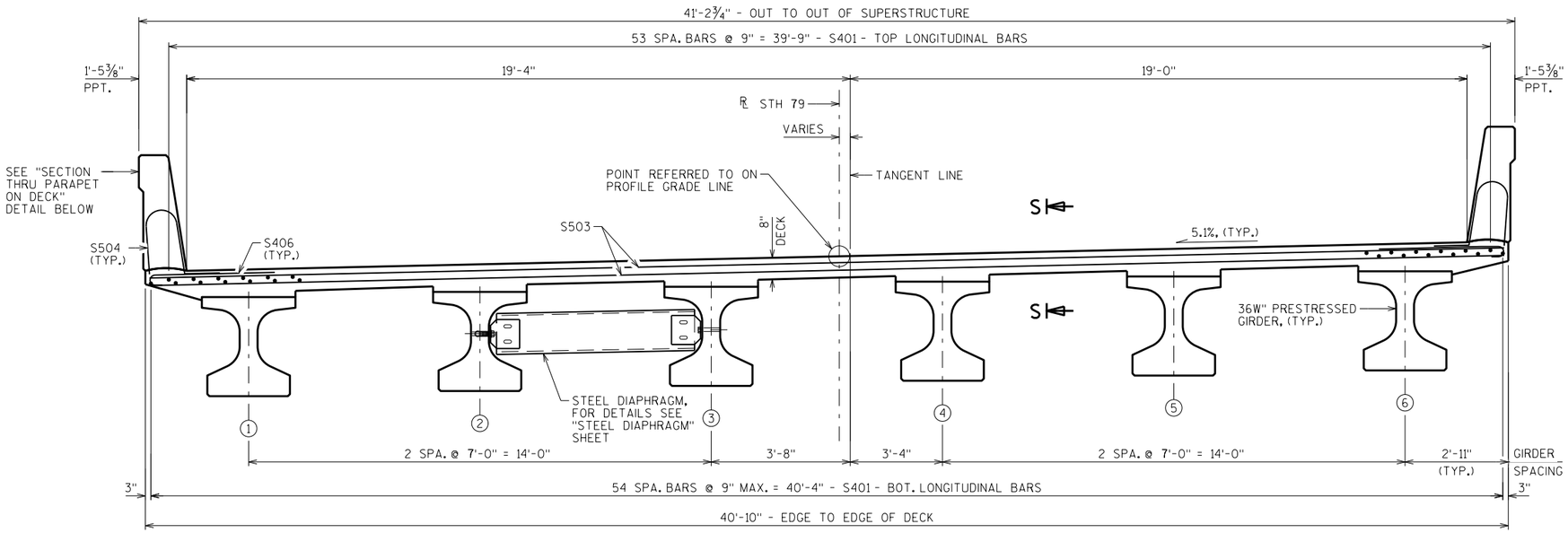
SCALE = 4.00

8

8

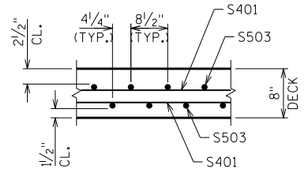
STATE PROJECT NUMBER

8640-00-71

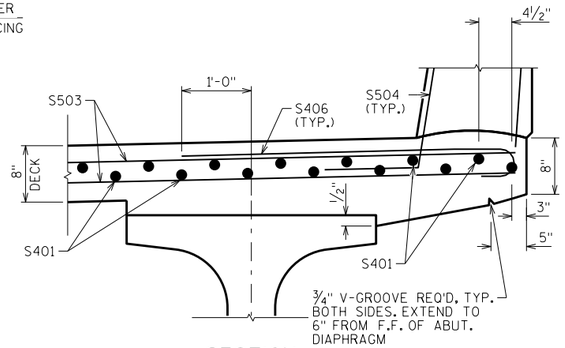


CROSS SECTION THRU BRIDGE

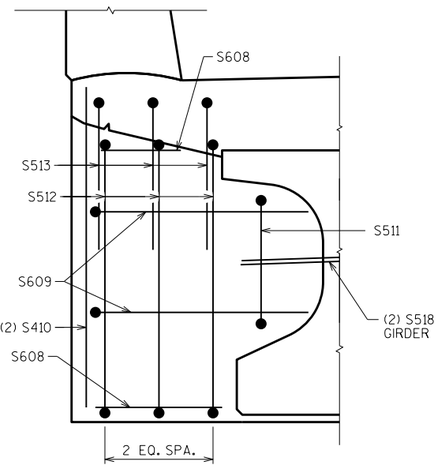
(LOOKING NORTH)



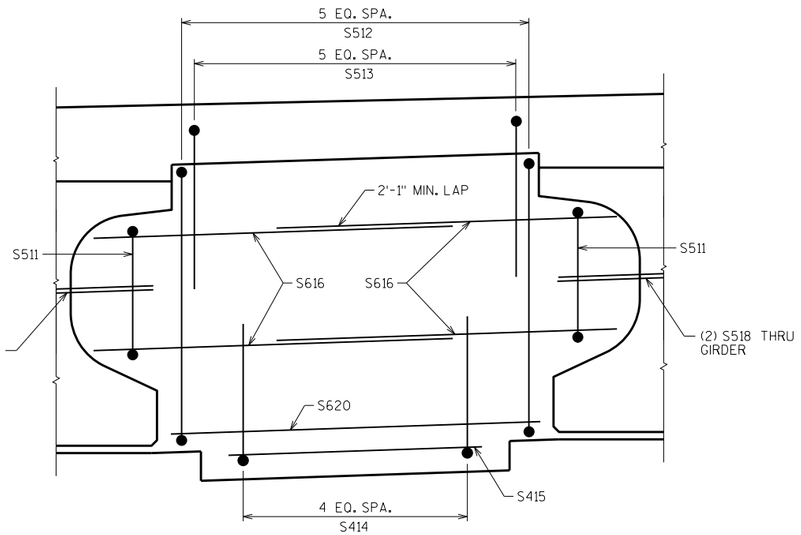
SECTION S-S



SECTION

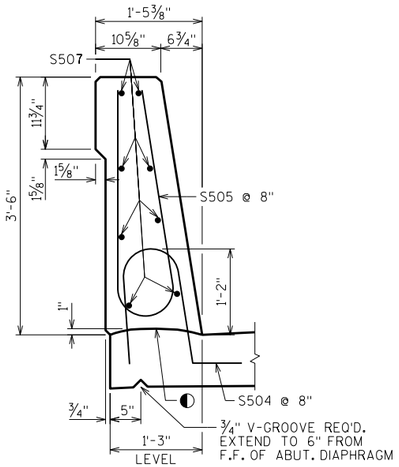


ABUTMENT END DIAPHRAGM DETAIL



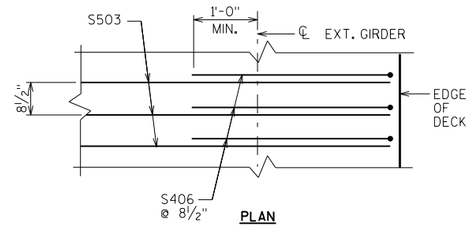
ABUTMENT DIAPHRAGM DETAIL

TYP. BETWN. GIRDERS



SECTION THRU PARAPET ON DECK

◐ CONST. JOINT - STRIKE OFF AS SHOWN



PLAN

ADDITIONAL REINFORCEMENT DETAILS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-17-368

DRAWN BY MJH | PLANS CK'D. CAD

SUPERSTRUCTURE CROSS SECTION

SHEET 12

73

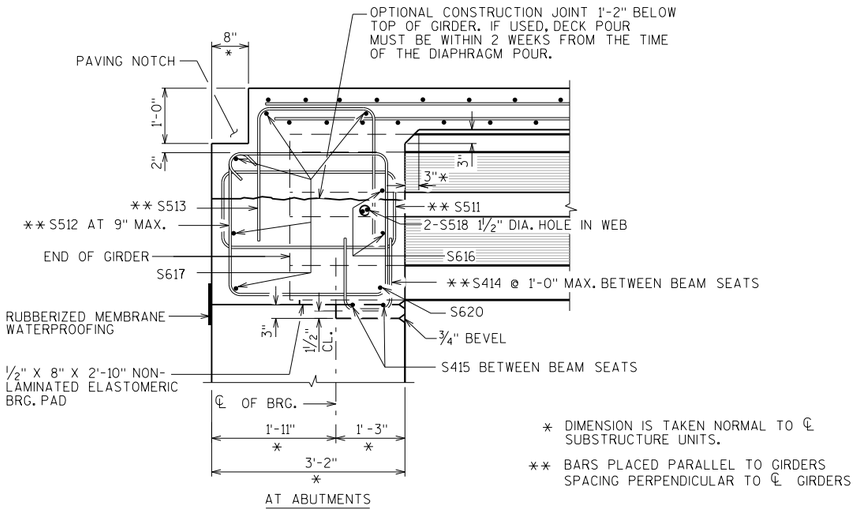
8

8

SCALE = 2.00

STATE PROJECT NUMBER

8640-00-71



* DIMENSION IS TAKEN NORMAL TO ℄ SUBSTRUCTURE UNITS.

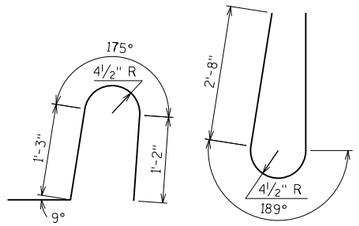
** BARS PLACED PARALLEL TO GIRDERS SPACING PERPENDICULAR TO ℄ GIRDERS

PART LONGIT. SECTION

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

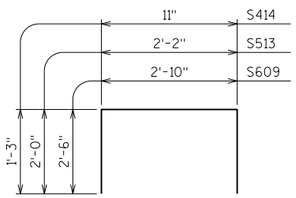
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
S401	X	218	36'-11"			DECK - LONG. - TOP & BOT.
NOT		USED				
S503	X	205	40'-6"			DECK - TRANS. - TOP & BOT.
S504	X	218	4'-5"	X		DECK/PARAPET - VERT.
S505	X	222	6'-8"	X		PPT. - VERT.
S406	X	206	4'-3"	X		DECK - TRANS. - DECK EDGE
S507	X	32	37'-8"			PPT. - HORIZ.
S608	X	4	1'-4"			ABUT. DIAPH. - ENDS - HORIZ. - F.F.
S609	X	8	7'-6"	X		ABUT. DIAPH. - ENDS - HORIZ.
S410	X	8	3'-6"			ABUT. DIAPH. - ENDS - VERT.
S511	X	24	9'-3"	X		ABUT. DIAPH. - VERT.
S512	X	72	12'-2"	X		ABUT. DIAPH. - VERT.
S513	X	72	5'-11"	X		ABUT. DIAPH. - VERT.
S414	X	50	3'-3"	X		ABUT. DIAPH. - VERT. - BTWN. BEAM SEATS
S415	X	20	3'-1"			ABUT. DIAPH. - HORIZ. - BTWN. BEAM SEATS
S616	X	40	4'-2"			ABUT. DIAPH. - HORIZ. - F.F.
S617	X	10	40'-4"			ABUT. DIAPH. - HORIZ. - B.F. & TOP
S518	X	24	6'-0"			ABUT. DIAPH. - HORIZ. - THRU GIR.
S519	X	4	5'-10"	X		PPT. - VERT. - 1 EACH CORNER AT END OF DECK
S620	X	10	4'-2"			ABUT. DIAPH. - BOT. - F.F.



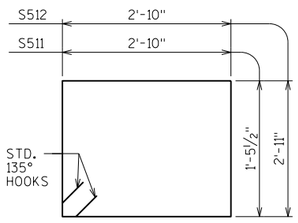
S504

S505

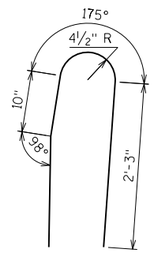
S406



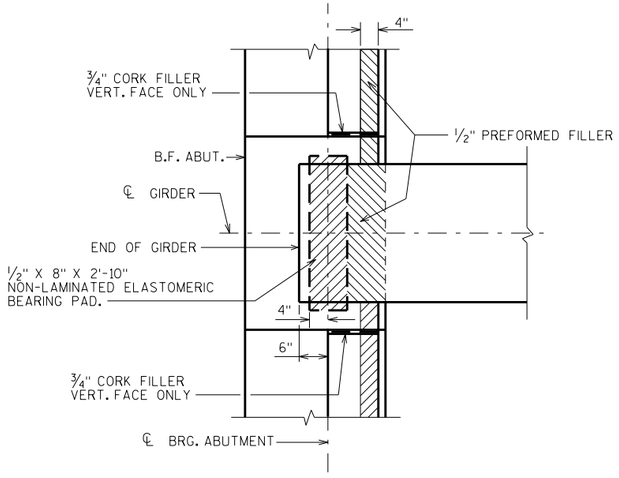
S609, S513, S414



S511, S512



S519



BEARING PAD DETAIL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-17-368

DRAWN BY MJH | PLANS CK'D. CAD

SUPERSTRUCTURE DETAILS

SHEET 13

74

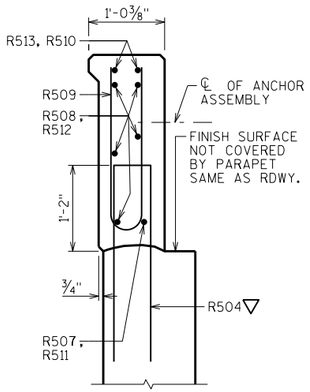
SCALE = 1.33

8

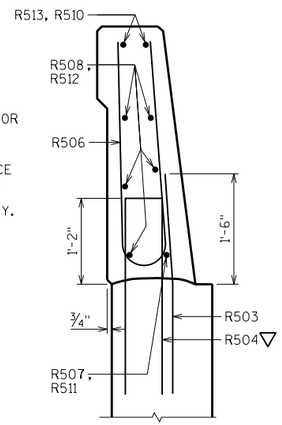
8

STATE PROJECT NUMBER

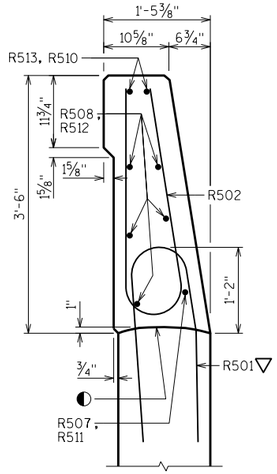
8640-00-71



SECTION A-A



SECTION B-B



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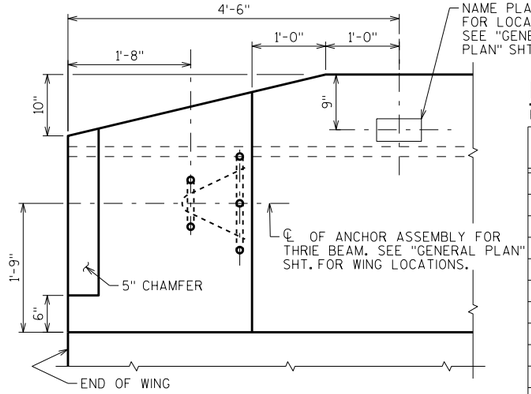


PARAPET END TREATMENT DETAIL

LOOKING AT INSIDE FACE OF PARAPET

BILL OF BARS

FOR ABUTMENT PARAPETS

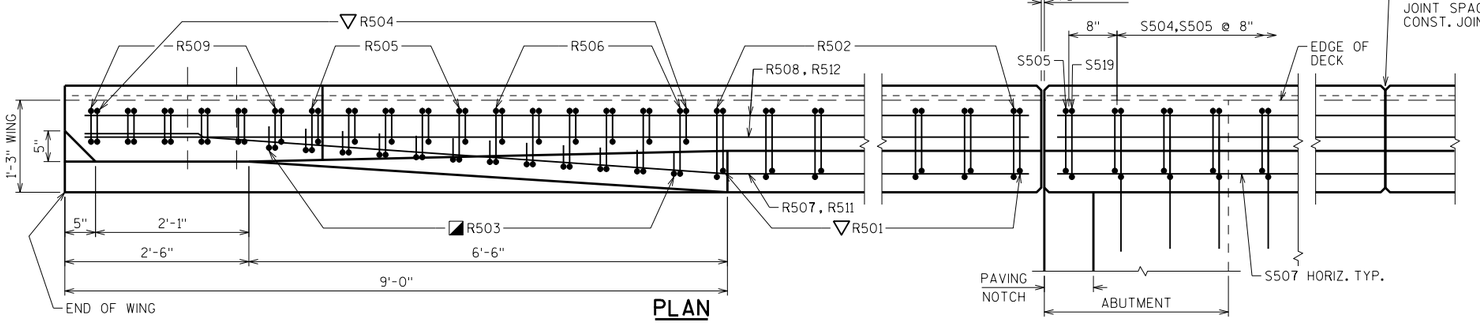
BAR MARK	COAT	S. ABUT.	N. ABUT.	LENGTH	BENT	BAR SERIES	LOCATION
R501	X	16	16	5'-10"	X		PARAPET VERT.
R502	X	16	16	6'-8"	X		PARAPET VERT.
R503	X	24	24	3'-0"	X		PARAPET VERT.
R504	X	34	34	5'-7"	X		PARAPET VERT.
R505	X	10	10	6'-5"	X		PARAPET VERT.
R506	X	12	12	6'-6"	X		PARAPET VERT.
R507	X	1	1	15'-7"	X		PARAPET HORIZ.-WING 1&4
R508	X	5	5	15'-7"			PARAPET HORIZ.-WING 1&4
R509	X	12	12	5'-5"	X	◭	PARAPET VERT.
R510	X	2	2	15'-7"	X		PARAPET HORIZ.-WING 1&4
R511	X	1	1	11'-7"	X		PARAPET HORIZ.-WING 2&3
R512	X	5	5	11'-7"			PARAPET HORIZ.-WING 2&3
R513	X	2	2	11'-7"	X		PARAPET HORIZ.-WING 2&3

◭ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

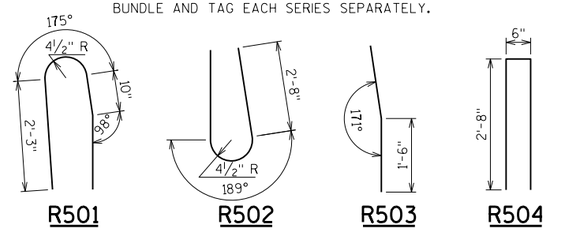
BAR MARK	NO. REQ'D	LENGTH
R509	4 SERIES OF 6	4'-9" TO 6'-1"

BUNDLE AND TAG EACH SERIES SEPARATELY.

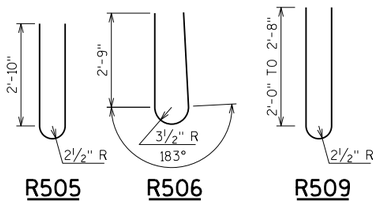


PLAN

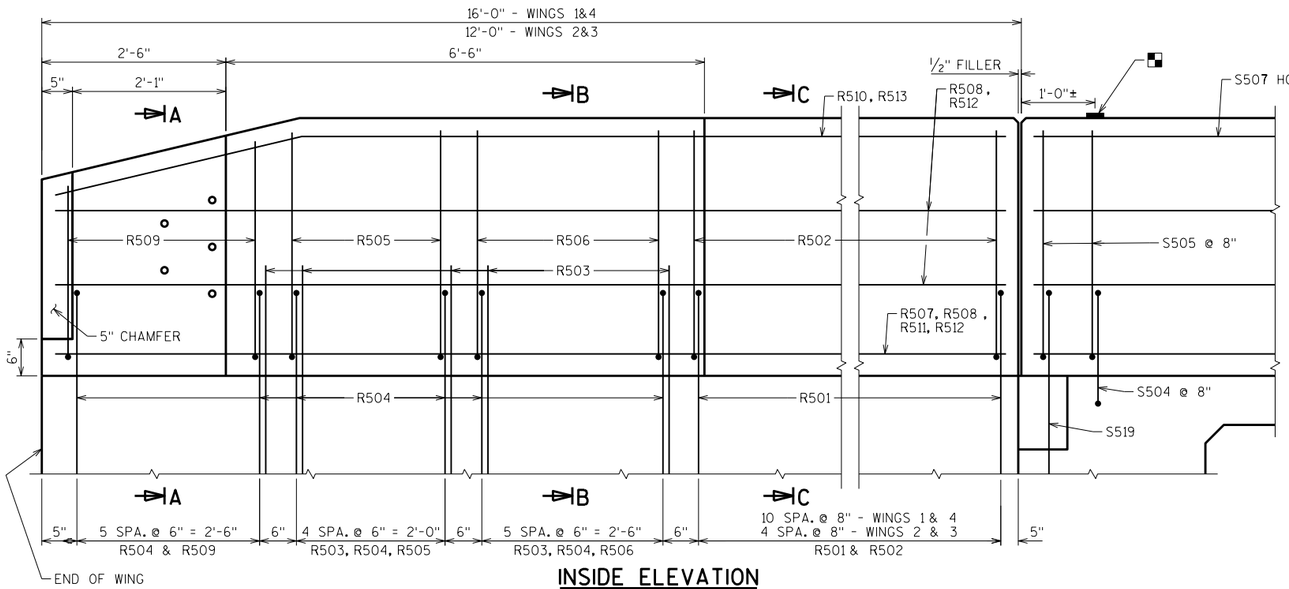
SW CORNER SHOWN, OTHERS SIMILAR



R501 R502 R503 R504

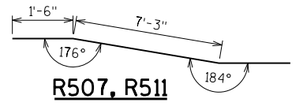


R505 R506 R509

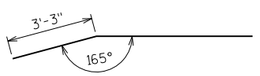


INSIDE ELEVATION

SW CORNER SHOWN, OTHERS SIMILAR



R507, R511



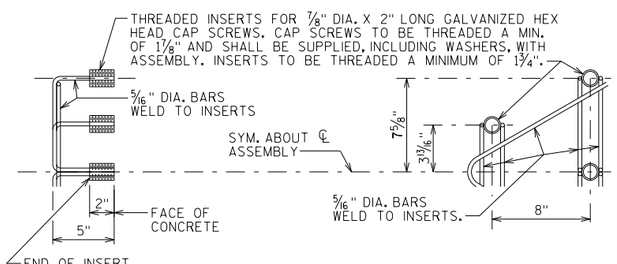
R510, R513

■ BENCH MARK CAP (WHEN SUPPLIED). AVOID PLACING A BENCH MARK CAP BELOW A RAIL OR FENCE SYSTEM THAT IS ATTACHED TO THE TOP OF THE PARAPET.

◐ CONST. JOINT - STRIKE OFF AS SHOWN

◪ R503 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. USE CARE TO PLACE R503 BARS CORRECTLY ALONG TRANSITION OF PARAPET.

▽ R501 AND R504 BARS TO BE TIED TO WING STEEL BEFORE WING IS POURED.



DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 CLASS C.

ASSEMBLY SHALL BE BID ITEM "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD", EACH.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-17-368

DRAWN BY CAD/MJH | PLANS CK'D. CAD

SINGLE SLOPE PARAPET 42SS

SHEET 14

75

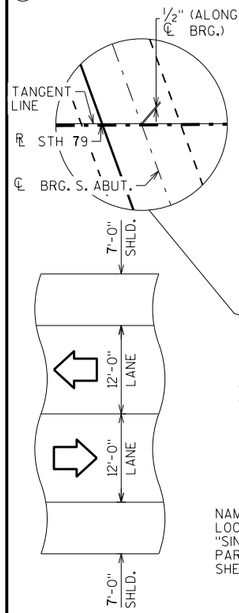
SCALE = 1.00

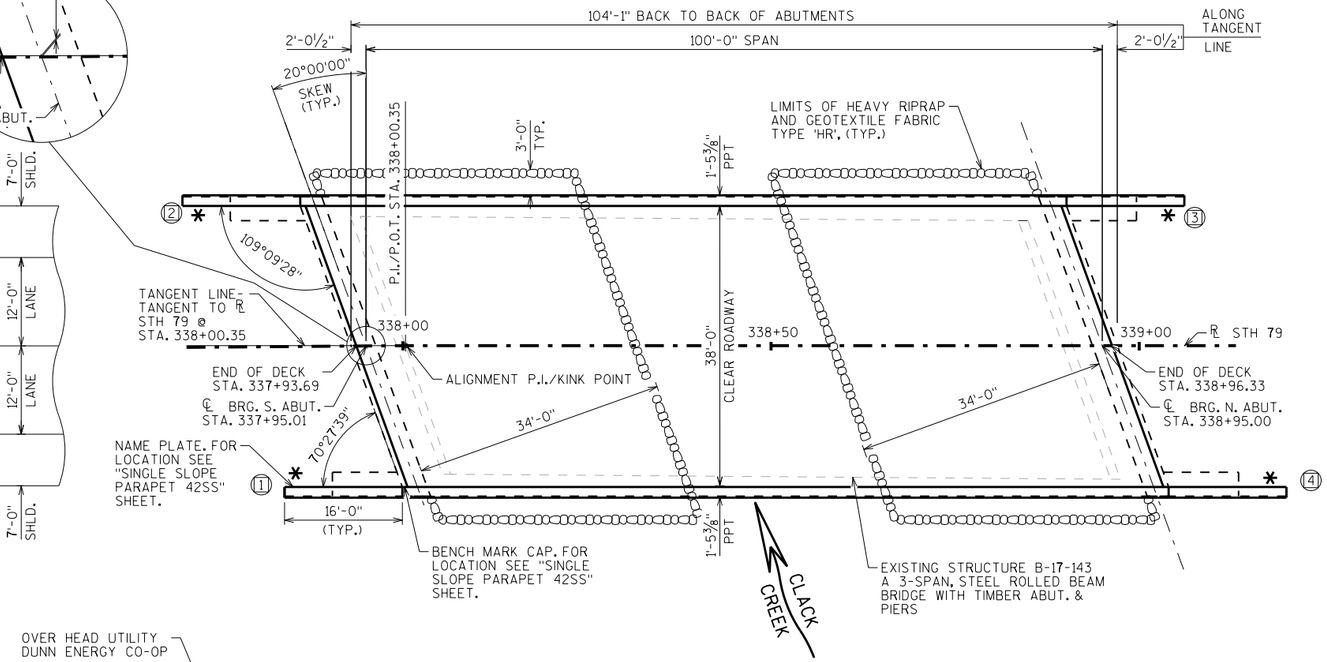
8

8

* PROVIDE FOR THRIE BEAM GUARD RAIL ATTACHMENT. AT UNUSED ANCHOR ASSEMBLIES CAULK HOLES SHUT WITH "100% SILICONE CAULK".

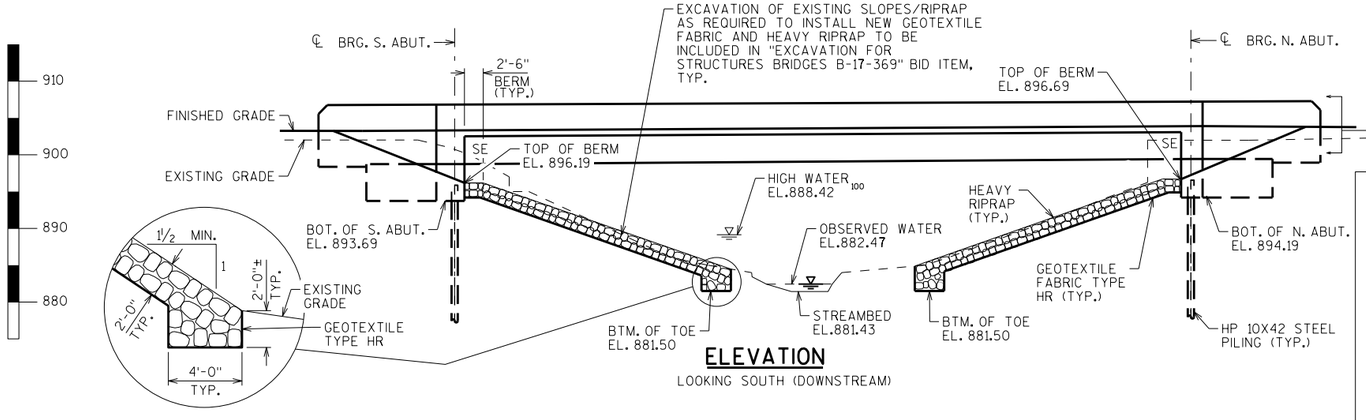
(1) INDICATES WING NUMBER





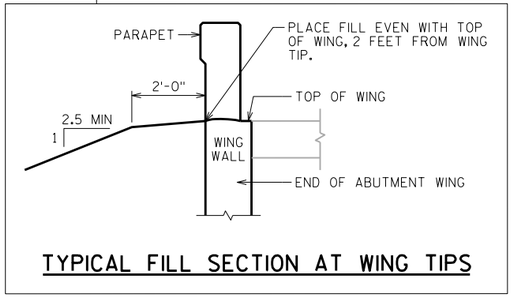
PLAN

1-SPAN 45W" PRESTRESSED GIRDER



ELEVATION

LOOKING SOUTH (DOWNSTREAM)



TYPICAL FILL SECTION AT WING TIPS

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF = 1.12
OPERATING RATING FACTOR: RF = 1.46
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 250(KIPS)

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

MATERIAL PROPERTIES:

CONCRETE MASONRY:
SUPERSTRUCTURE — f'c = 4,000 P.S.I.
ALL OTHER — f'c = 3,500 P.S.I.

BAR STEEL REINFORCEMENT:
GRADE 60 — fy = 60,000 P.S.I.

45W" PRESTRESSED GIRDERS:
CONCRETE MASONRY — f'c = 8,000 P.S.I.
STRANDS: 0.6" DIA. WITH ULTIMATE TENSILE STRENGTH OF 270,000 P.S.I.

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 10X42 PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 170 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 90'-0" LONG.

** THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

HYDRAULIC DATA

100 YEAR FREQUENCY

Q_{100} = 900 C.F.S.
$VEL._{100}$ = 5.05 F.P.S.
$HW._{100}$ = EL. 888.42
WATERWAY AREA = 178.22 SQ. FT.
DRAINAGE AREA = 4.5 SQ. MI.
ROADWAY OVERTOPPING = N/A
SCOUR CRITICAL CODE = 8

2 YEAR FREQUENCY

Q_2 = 200 C.F.S.
$VEL._2$ = 3.05 F.P.S.
$HW._2$ = EL. 886.14

TRAFFIC VOLUME

STH 79

ADT = 2,300 (2043)
R.D.S. = 60 M.P.H.

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION & QUANTITIES
3. SUBSURFACE EXPLORATION
4. SOUTH ABUTMENT
5. SOUTH ABUTMENT DETAILS
6. NORTH ABUTMENT
7. NORTH ABUTMENT DETAILS
8. 45W" PRESTRESSED GIRDER DETAILS 1
9. 45W" PRESTRESSED GIRDER DETAILS 2
10. STEEL DIAPHRAGM
11. SUPERSTRUCTURE PLAN
12. SUPERSTRUCTURE CROSS SECTION
13. SUPERSTRUCTURE DETAILS
14. SINGLE SLOPE PARAPET 42SS

STATE PROJECT NUMBER

8640-00-73

STRUCTURE DESIGN CONTACTS:

LAURA SHADEWALD (608) 267-9592
CHRISTOPHER DOLL (608) 266-3229

NO.	DATE	REVISION	BY

BUREAU OF STRUCTURES

ACCEPTED _____ LLS 6/2/22
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-17-369

STH 79 OVER CLACK CREEK

COUNTY	TOWN
DUNN	SHERMAN

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGNED CK'D.	DRAWN BY	PLANS CK'D.
JDM	CAD	MJH	CAD

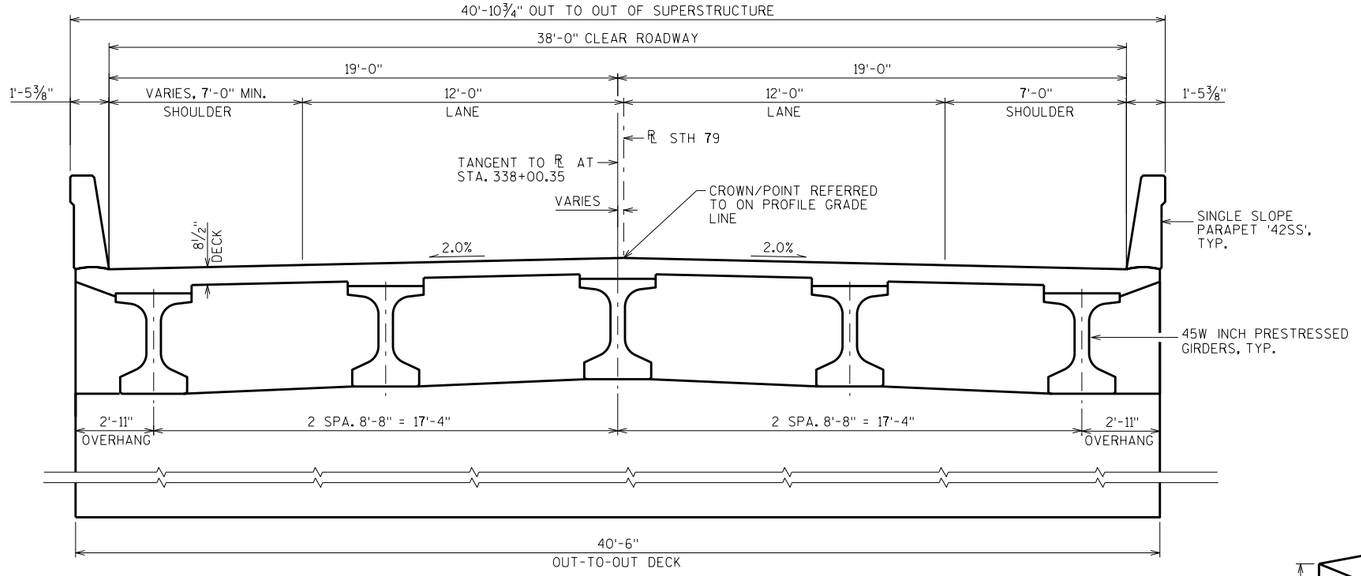
GENERAL PLAN

SHEET 1 OF 14

76

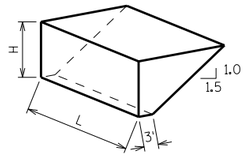
I.D. 8640-00-03A DATE: MAY 2022

SCALE = 10.00



CROSS SECTION THRU BRIDGE

LOOKING NORTH



ABUTMENT BACKFILL DIAGRAM FOR WINGS PARALLEL TO ROADWAY

L = OUT TO OUT OF ABUTMENT, INCLUDING WINGS (FT)
H = AVERAGE ABUTMENT FILL HEIGHT (FT)
EF = EXPANSION FACTOR (1.20 FOR CY BID ITEMS AND 1.00 FOR TON BID ITEMS)
V_{CF} = (L)(3.0')(H) + (L)(0.5)(1.5H)(H)
V_{CY} = V_{CF} (EF)/27
V_{TON} = V_{CY} (2.0)

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES BRIDGES B-17-369" SHALL BE THE EXISTING GROUNDLINE.

AT THE BACK FACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL TYPE A.

EXCAVATION BELOW THE ABUTMENT AND ABUTMENT BEDDING MATERIALS REQUIRES ENGINEER APPROVAL. GEOTEXTILE SHALL BE SET AT THE BOTTOM OF EXCAVATION AND EXTEND 2'-0" ABOVE BOTTOM OF ABUTMENT.

THE QUANTITY FOR BACKFILL STRUCTURE IS CALCULATED BASED ON THE DETAIL SHOWN IN THE PLANS.

ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE EXPOSED TOP OF DECK SURFACE AND THE VERTICAL AND HORIZONTAL SURFACES OF THE PAVING NOTCHES AT ABUTMENT DIAPHRAGMS.

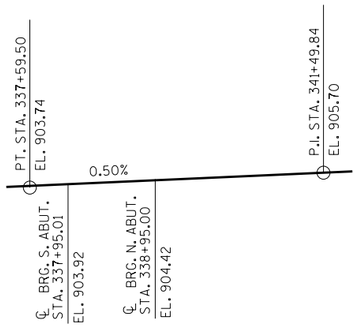
PIGMENTED PROTECTIVE SURFACE SEALER TO BE APPLIED TO THE FRONT FACE AND THE TOP OF THE PARAPETS, INCLUDING PARAPETS ON WINGS.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP AND GEOTEXTILE TYPE "HR" TO THE EXTENT SHOWN IN PLANS.

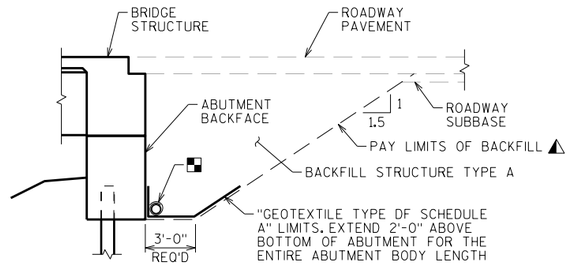
THE HAUNCH CONCRETE QUANTITY IS BASED ON THE AVERAGE HAUNCH SHOWN ON THE "45W" PRESTRESSED GIRDER DETAILS 2" SHEET.

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER.	SOUTH ABUT.	NORTH ABUT.	TOTALS
203.0260	REMOVING STRUCTURE OVER WATERWAY MINIMAL DEBRIS B-17-143	EACH	———	———	———	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-17-369	LS	———	———	———	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	———	282	282	564
502.0100	CONCRETE MASONRY BRIDGES	CY	192.7	49.5	49.5	292
502.3200	PROTECTIVE SURFACE TREATMENT	SY	449	———	———	449
502.3210	PIGMENTED SURFACE SEALER	SY	103	16	16	135
503.0146	PRESTRESSED GIRDER TYPE I 45W-INCH	LF	505	———	———	505
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	———	2,520	2,520	5,040
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	31,430	2,790	2,790	37,010
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	———	5	5	10
506.4000	STEEL DIAPHRAGMS B-17-369	EACH	8	———	———	8
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	———	12	12	24
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	———	990	990	1,980
606.0300	RIPRAP HEAVY	CY	———	145	145	290
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	———	100	100	200
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	———	2	2	4
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	———	34	34	68
645.0120	GEOTEXTILE TYPE HR	SY	———	229	229	458
	NON-BID ITEMS					
	FILLER	SIZE	———	———	———	½", ¾", 1½"



PROFILE GRADE LINE - STH 79



TYPICAL SECTION THRU ABUTMENT

⚠ BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

▪ PIPE UNDERDRAIN WRAPPED (6 INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN. SEE RODENT SHIELD DETAIL ON ABUT. DETAIL SHTS.

STATE PROJECT NUMBER
8640-00-73

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-17-369

DRAWN BY MJH | PLANS CK'D. CAD

CROSS SECTION & QUANTITIES

SHEET 2

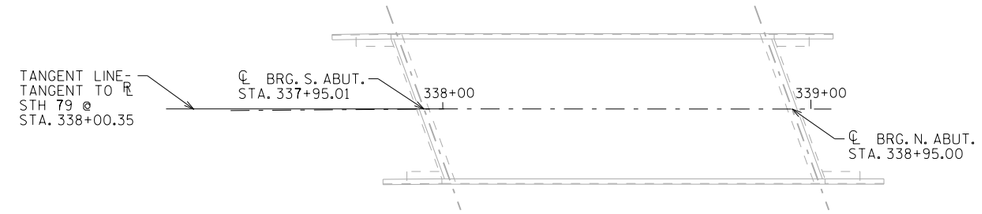
77

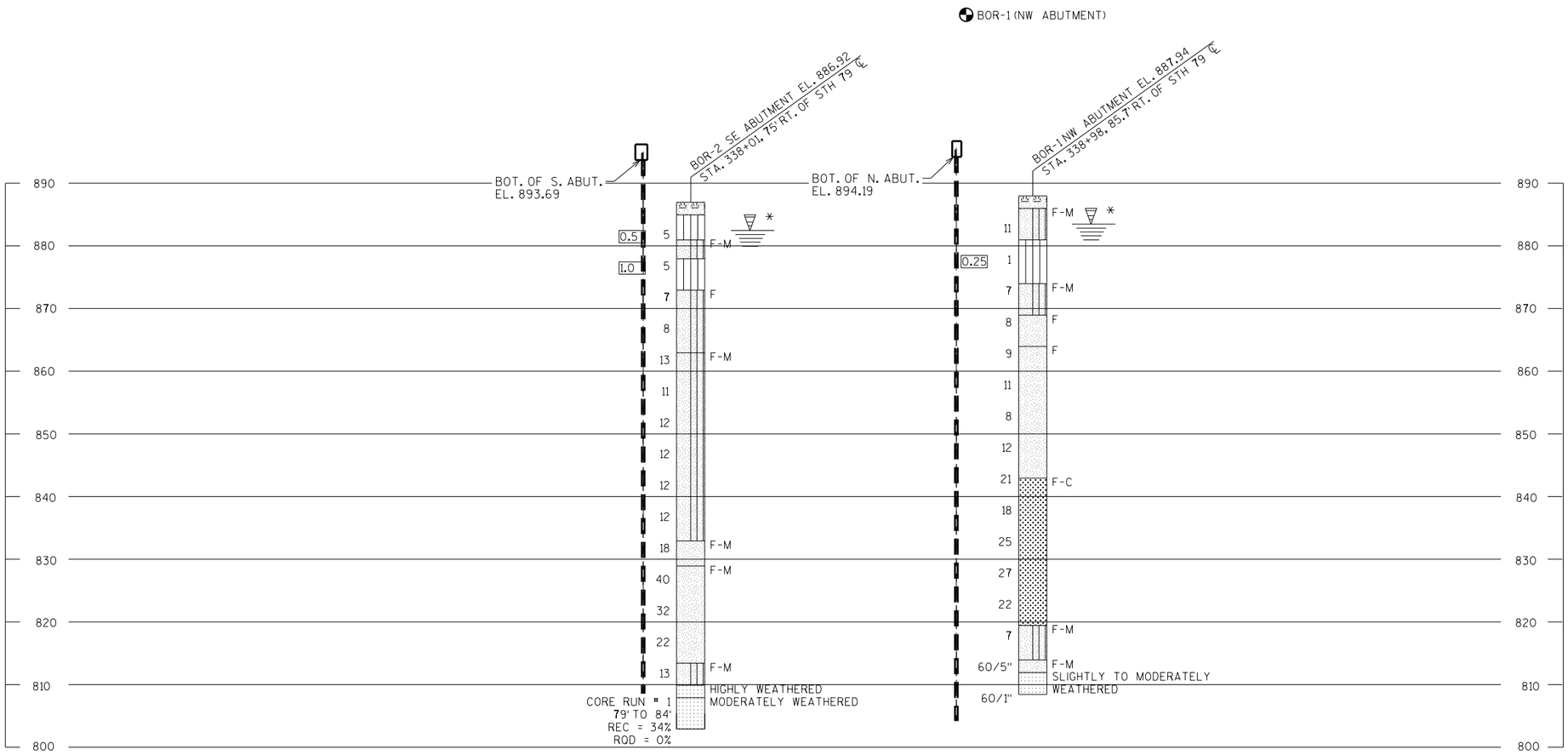
8

8

SCALE = 2.75

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	6/10/2021	201716.1	146880.8
2	6/15/2021	201639.0	146940.4
BORINGS COMPLETED BY: WISDOT			
REPORT COMPLETED BY: WISDOT			
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) DUNN COUNTY			
COORDINATES COLLECTED USING NON-SURVEY GRADE EQUIPMENT			





* THE GROUND WATER ELEVATION WAS DETERMINED FROM WHERE THE SOIL SAMPLE WAS DESCRIBED AS WET.

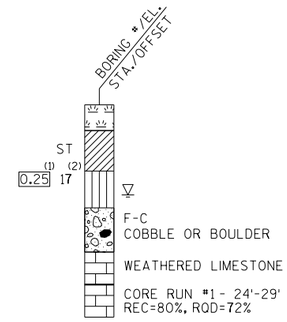
STATE PROJECT NUMBER

8640-00-73

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/ META

LEGEND OF BORING



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

- AT TIME OF DRILLING
- END OF DRILLING
- AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-17-369

DRAWN BY TLP/MJH | PLANS CK'D. CAD

SUBSURFACE EXPLORATION

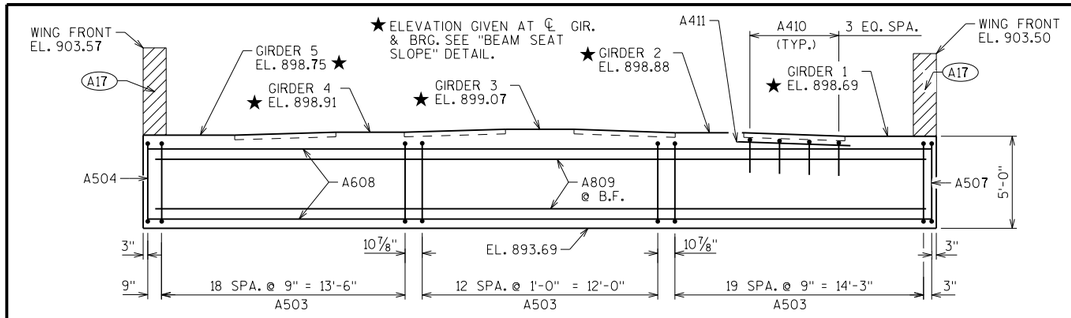
SHEET 3

78

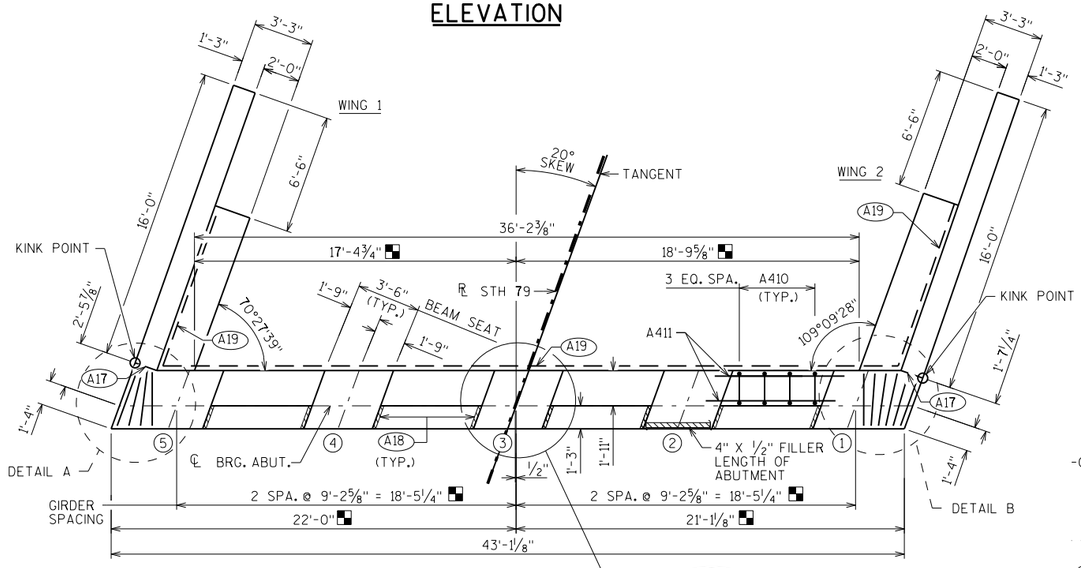
SCALE =

STATE PROJECT NUMBER

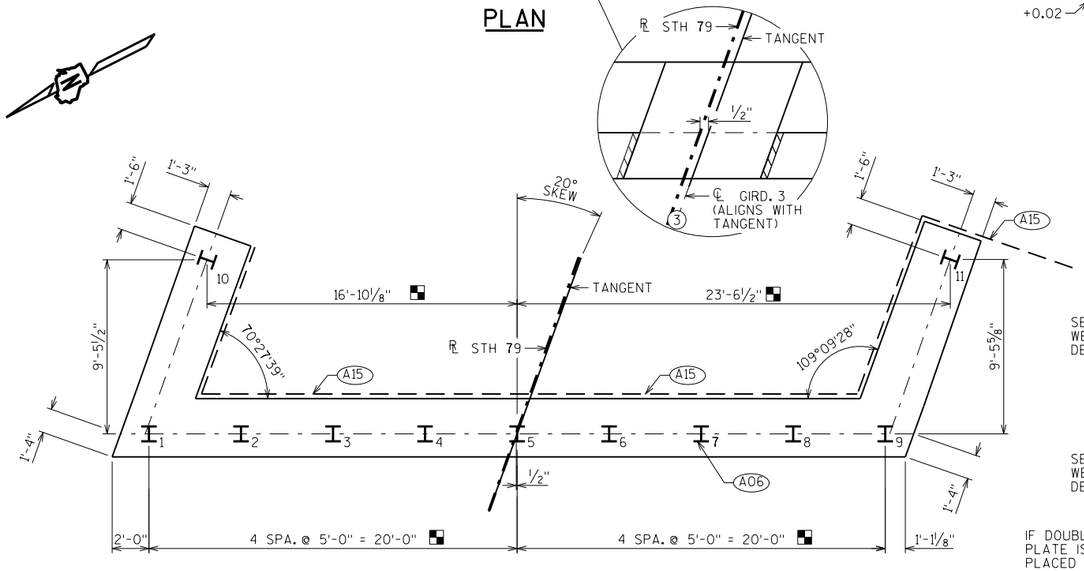
8640-00-73



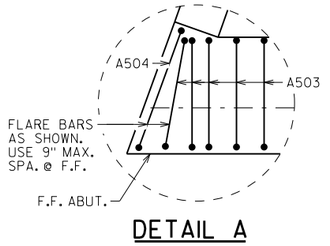
ELEVATION



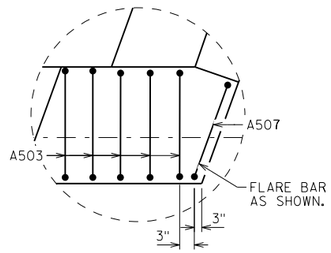
PLAN



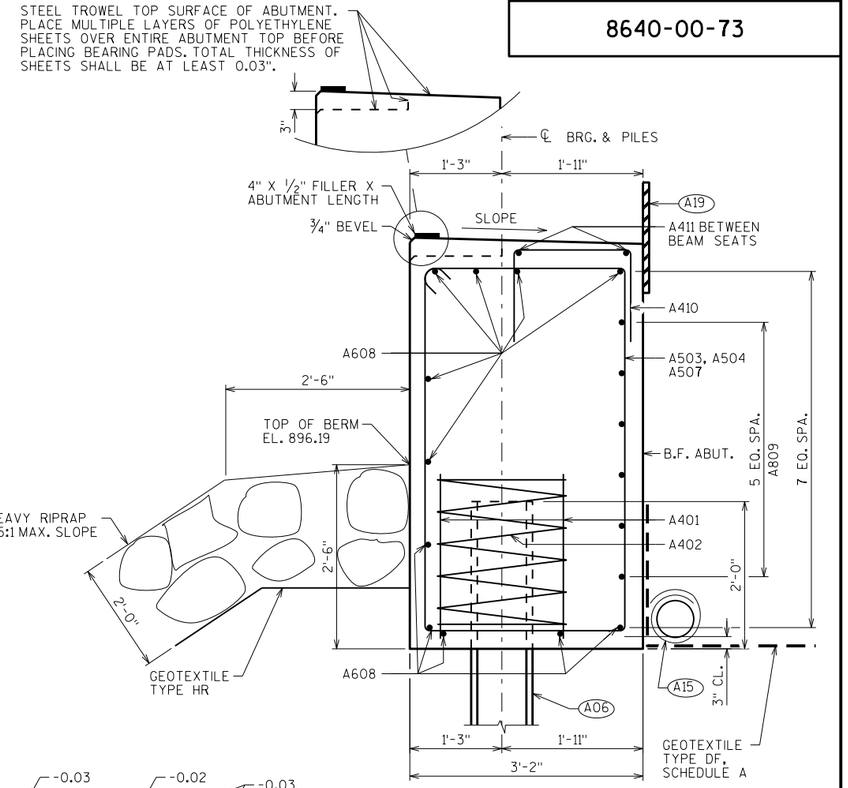
PILE PLAN



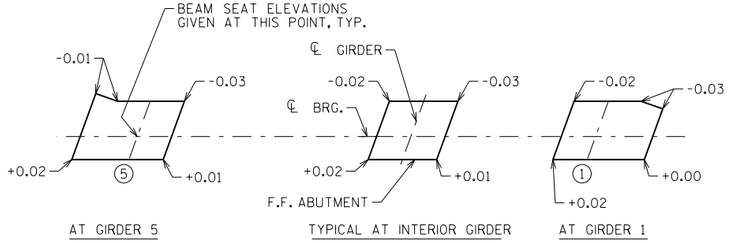
DETAIL A



DETAIL B



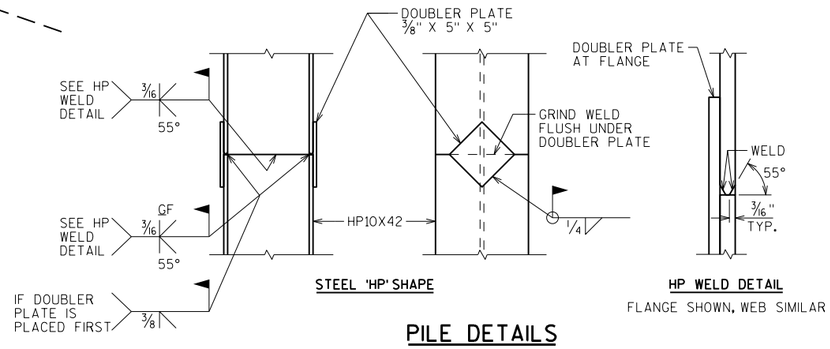
SECTION THRU BODY



AT GIRDER 5 — TYPICAL AT INTERIOR GIRDER — AT GIRDER 1

BEAM SEAT SLOPE

BEAM SEATS SHALL BE LEVEL IN THE DIRECTION PERPENDICULAR TO THE GIRDERS



STEEL 'HP' SHAPE

HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

PILE DETAILS

○ INDICATES GIRDER NUMBER

▪ MEASURED TO TANGENT LINE

(A06) SUPPORT ABUTMENT ON HP 10X42 STEEL PILING, ESTIMATED 90'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 170 TONS PER PILE.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A18) ¾" CORK FILLER UP VERT. BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-17-369

DRAWN BY MJH | PLANS CK'D. CAD

SOUTH ABUTMENT

SHEET 4

79

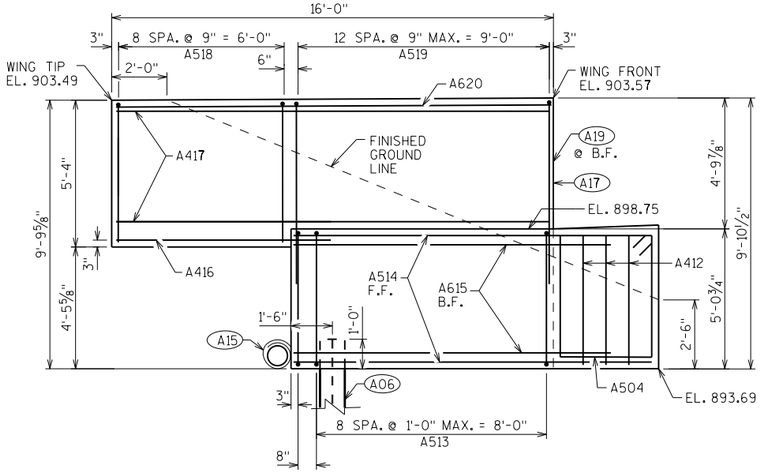
SCALE = 4.00

8

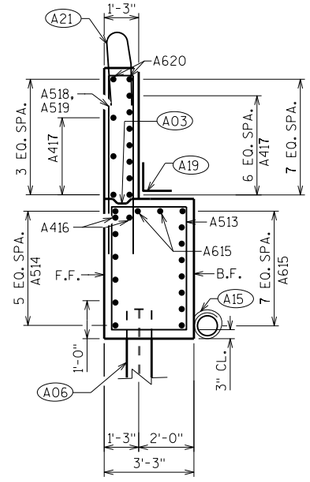
8

STATE PROJECT NUMBER

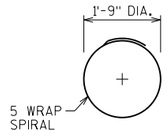
8640-00-73



WING 1



WING 1 SECTION



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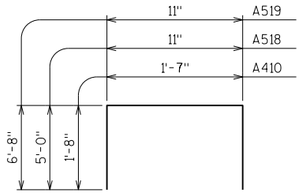
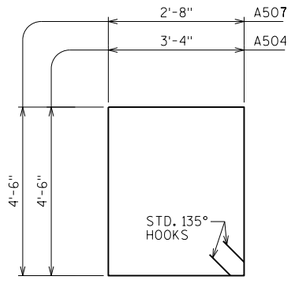
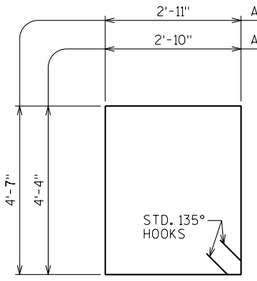


A410, A518, A519



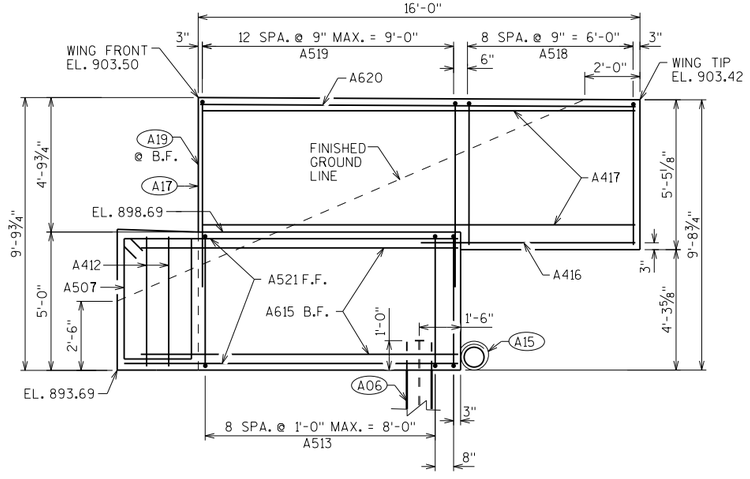
A504. A507



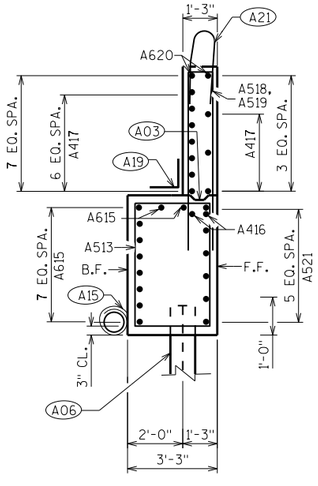
A503. A513

BILL OF BARS

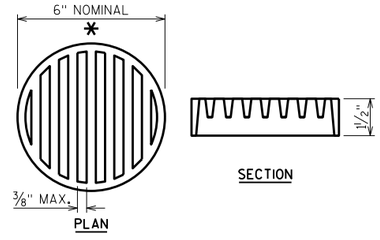
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A401		18	2'-3"			BODY PILES - 2 PER BODY PILE
A402		9	28'-0"	X		BODY PILES - 1 PER BODY PILE
A503		52	15'-0"	X		BODY-STIRRUPS
A504		1	16'-4"	X		BODY-STIRRUPS
A505		NOT	USED			
A506		NOT	USED			
A507		1	15'-0"	X		BODY-STIRRUPS
A608		11	42'-9"			BODY - HORIZ. - B.F. - MIDDLE
A809		6	42'-7"			BODY - HORIZ. - B.F.
A410		16	4'-8"	X		BODY - VERT. - TOP - BTWN. BEAM SEATS
A411		8	7'-0"			BODY - HORIZ. - TOP - BTWN. BEAM SEATS
A412	X	5	4'-7"			WINGS 1& 2 - VERT. - END OF ABUTMENTS - F.F.
A513	X	20	15'-8"	X		WINGS 1& 2 - STIRRUP - LOWER WING
A514	X	6	13'-0"			WING 1 - HORIZ. - F.F. - LOWER WING
A615	X	20	11'-7"			WINGS 1& 2 - HORIZ. - B.F. - LOWER WING
A416	X	4	7'-9"			WINGS 1& 2 - HORIZ. - BOT - UPPER WING
A417	X	20	15'-8"			WINGS 1& 2 - HORIZ. - UPPER WING
A518	X	18	10'-8"	X		WINGS 1& 2 - VERT. - UPPER WING
A519	X	26	14'-0"	X		WINGS 1& 2 - VERT. - UPPER WING
A620	X	4	15'-8"			WINGS 1& 2 - HORIZ. - UPPER WING - TOP
A521	X	6	12'-1"			WING 2 - HORIZ. - F.F. - LOWER WING



WING 2



WING 2 SECTION



RODENT SHIELD DETAIL

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 × 6. (18" RMW @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).

(A06) SUPPORT ABUTMENT ON HP 10X42 STEEL PILING, ESTIMATED 90'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 170 TONS PER PILE.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

(A21) FOR PARAPET BARS AND DIMENSIONS, SEE "SINGLE SLOPE PARAPET 42SS" SHT.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-17-369

DRAWN BY MJH | PLANS CK'D. CAD

SOUTH ABUTMENT DETAILS

SHEET 5

80

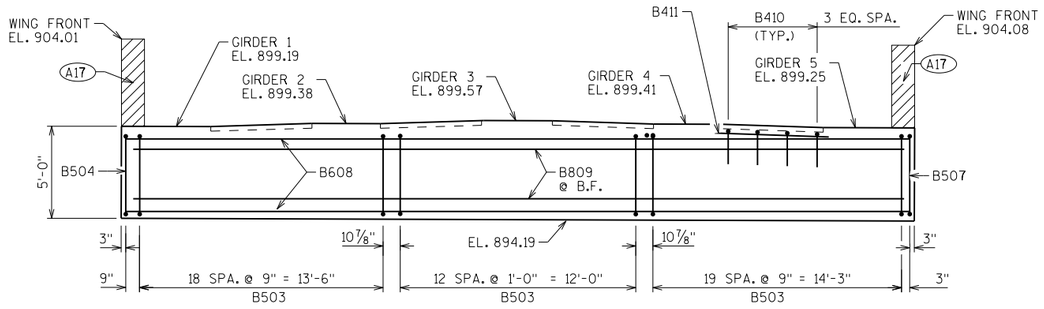
SCALE = 2.67

8

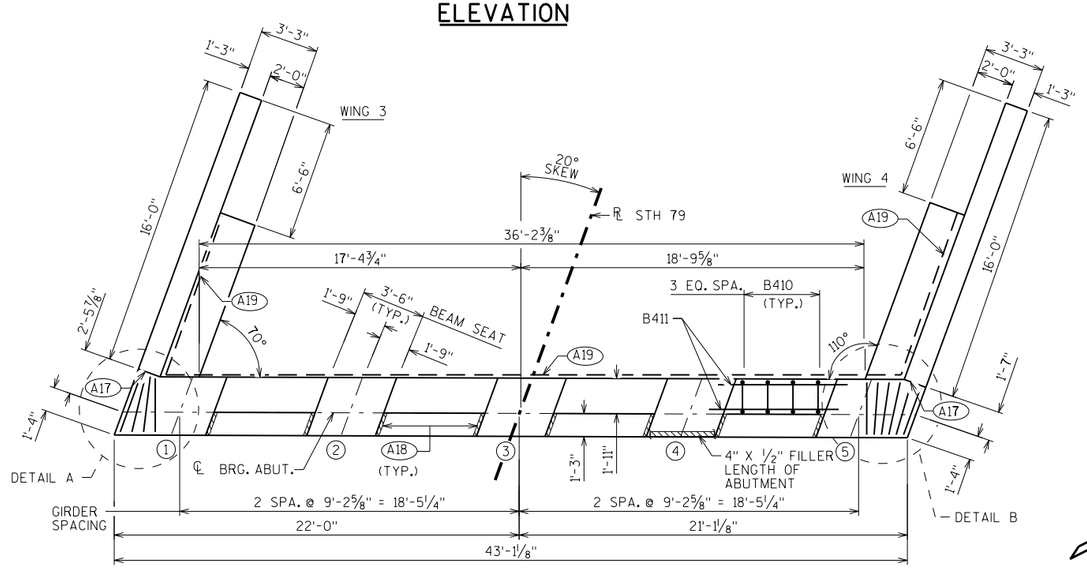
8

STATE PROJECT NUMBER

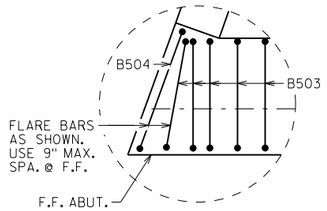
8640-00-73



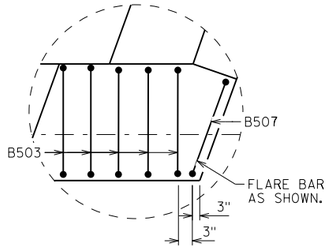
ELEVATION



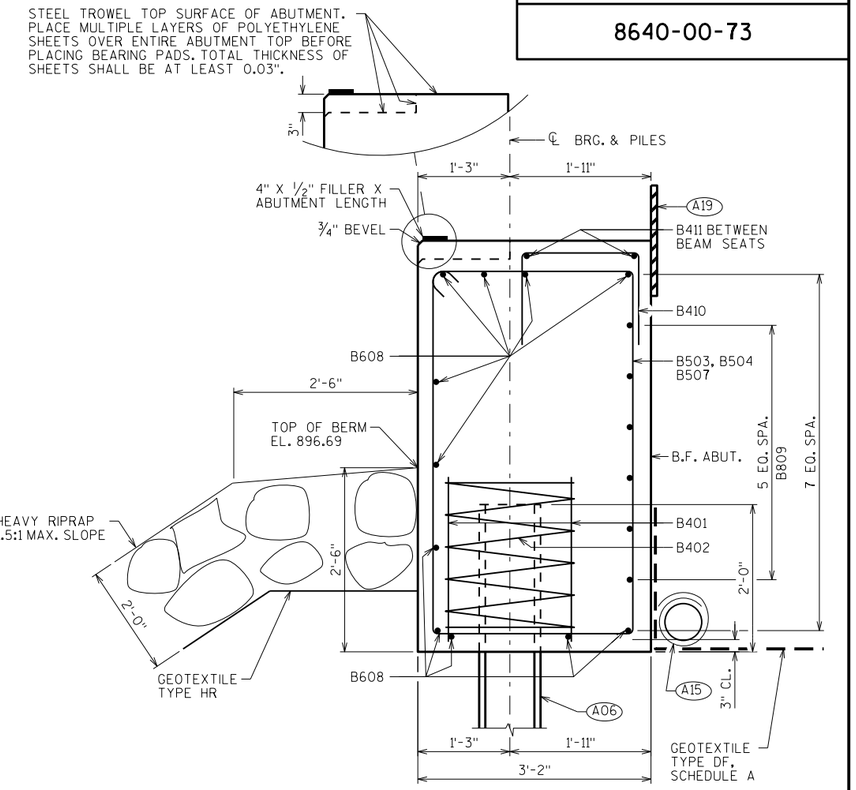
PLAN



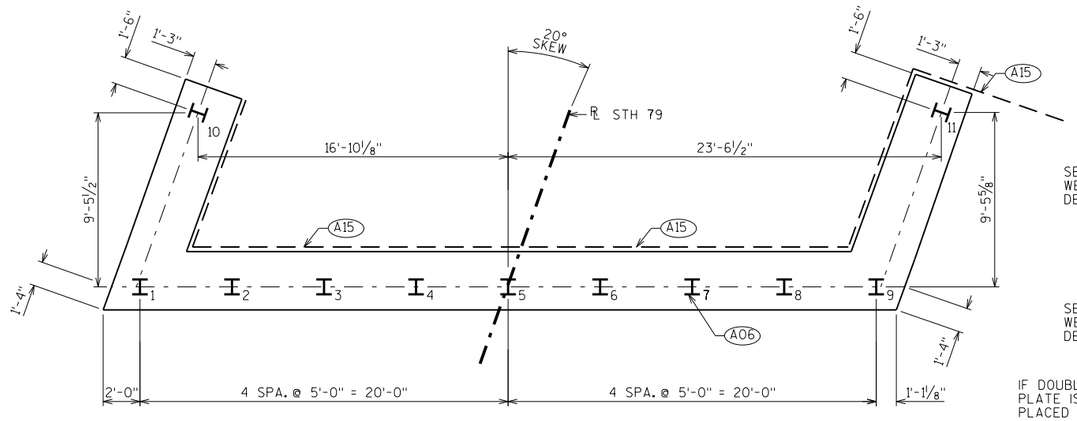
DETAIL A



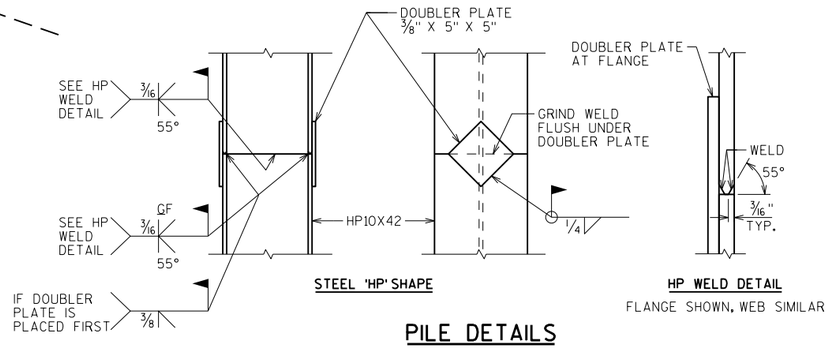
DETAIL B



SECTION THRU BODY



PILE PLAN



STEEL 'HP' SHAPE

HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

PILE DETAILS

○ INDICATES GIRDER NUMBER

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-17-369

DRAWN BY MJH | PLANS CK'D. CAD

NORTH ABUTMENT

SHEET 6

81

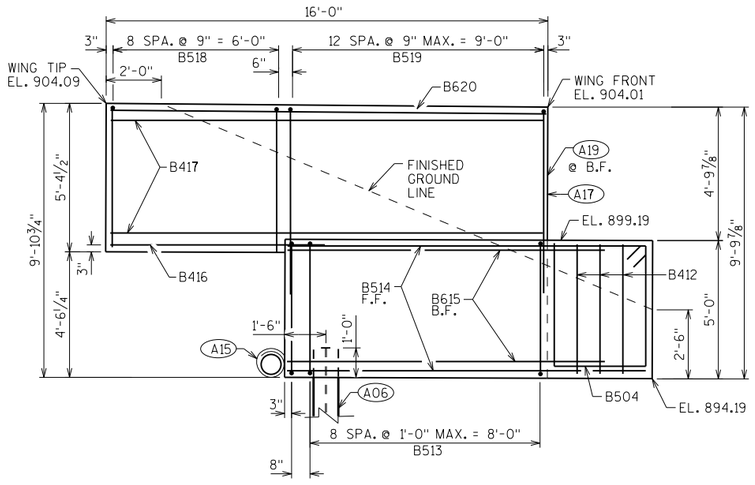
SCALE = 4.00

8

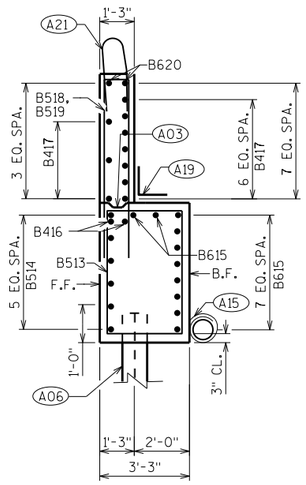
8

STATE PROJECT NUMBER

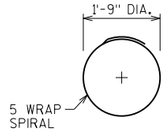
8640-00-73



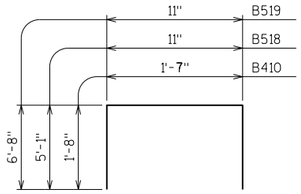
WING 3



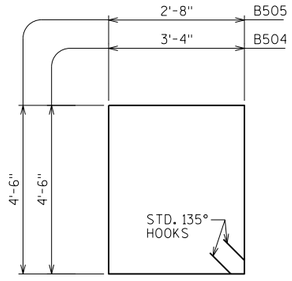
WING 3 SECTION



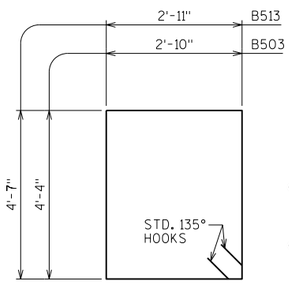
B402



B410, B518, B519



B504, B507



B503, B513

BILL OF BARS

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
B401		18	2'-3"			BODY PILES - 2 PER BODY PILE
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B504		1	16'-4"	X		BODY-STIRRUPS
B505		NOT	USED			
B506		NOT	USED			
B507		1	15'-0"	X		BODY-STIRRUPS
B608		11	42'-9"			BODY - HORIZ. - B.F. - MIDDLE
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B410		16	4'-8"	X		BODY - VERT. - TOP - BTWN. BEAM SEATS
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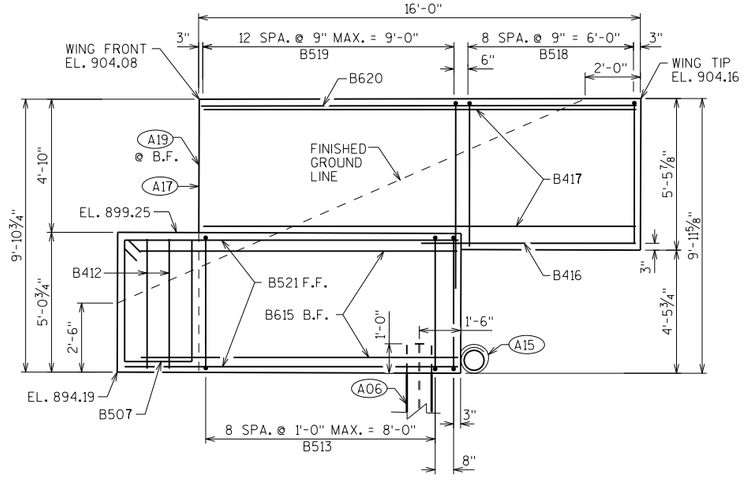
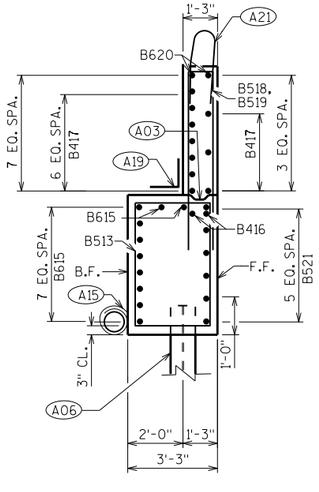
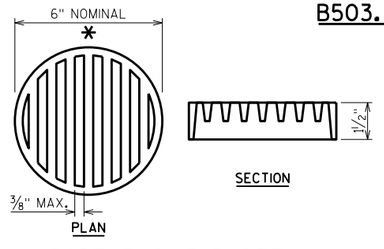
B513	X	20	15'-8"	X		WINGS 3 & 4 - STIRRUP - LOWER WING
B514	X	6	13'-0"			WING 3 - HORIZ. - F.F. - LOWER WING
B615	X	20	11'-7"			WINGS 3 & 4 - HORIZ. - B.F. - LOWER WING
B416	X	4	7'-9"			WINGS 3 & 4 - HORIZ. - BOT - UPPER WING
B417	X	20	15'-8"			WINGS 3 & 4 - HORIZ. - UPPER WING
B518	X	18	10'-10"	X		WINGS 3 & 4 - VERT. - UPPER WING
B519	X	26	14'-0"	X		WINGS 3 & 4 - VERT. - UPPER WING
B620	X	4	15'-8"			WINGS 3 & 4 - HORIZ. - UPPER WING - TOP
B521	X	6	12'-1"			WING 4 - HORIZ. - F.F. - LOWER WING



WING 4



WING 4 SECTION



RODENT SHIELD DETAIL

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 x 6. (18" RMW @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).

(A06) SUPPORT ABUTMENT ON HP 10X42 STEEL PILING, ESTIMATED 90'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 170 TONS PER PILE.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

(A21) FOR PARAPET BARS AND DIMENSIONS, SEE "SINGLE SLOPE PARAPET 42SS" SHT.

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-17-369

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NORTH ABUTMENT DETAILS

SHEET 7

82

SCALE = 2.67

8

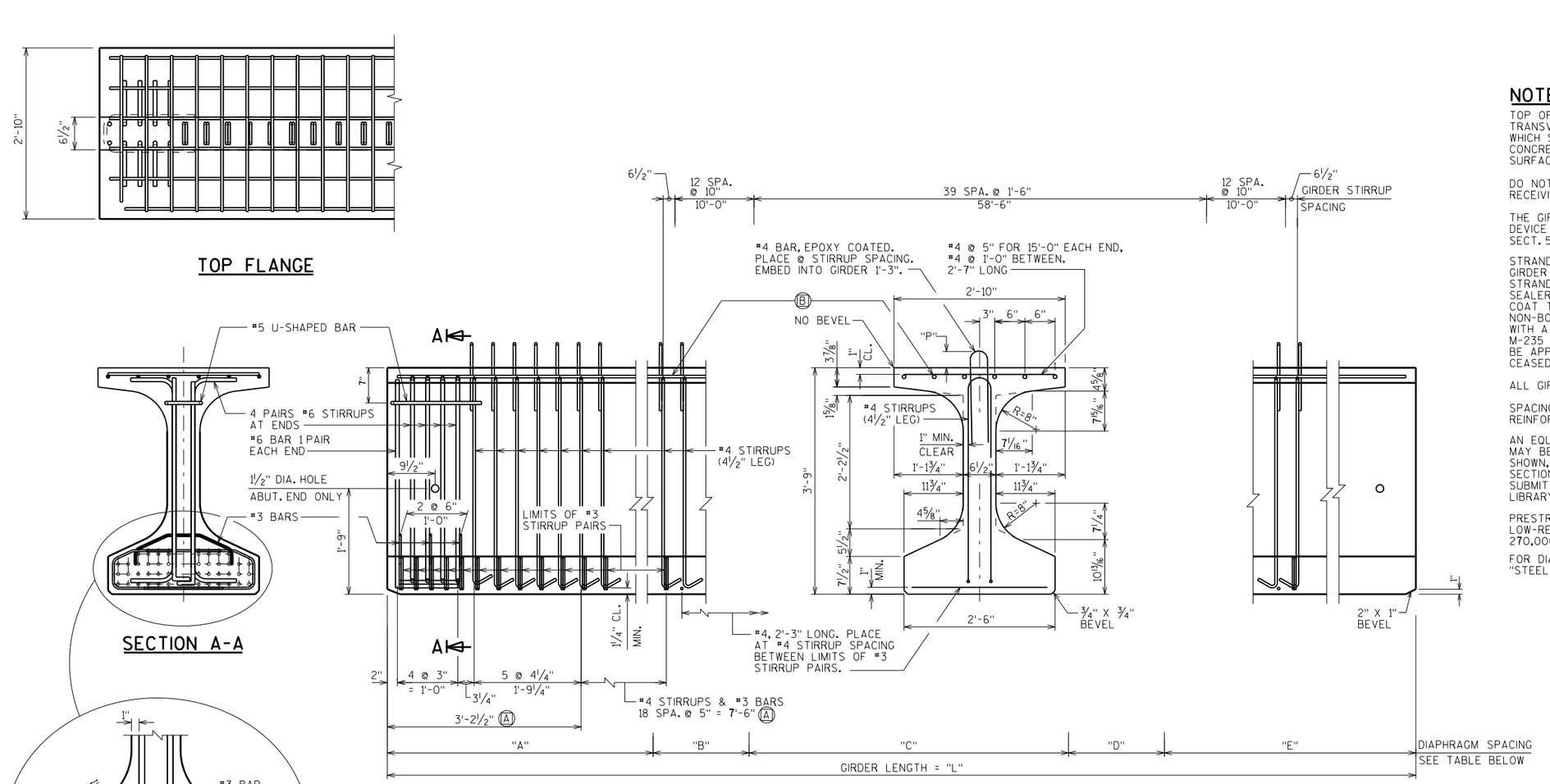
8

STATE PROJECT NUMBER

8640-00-73

TOP FLANGE

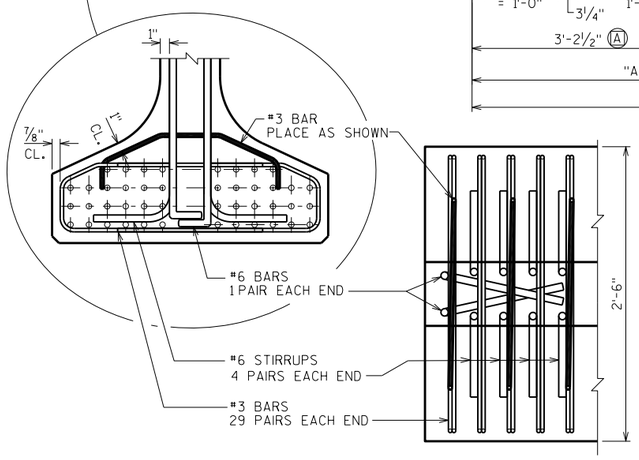
SECTION A-A



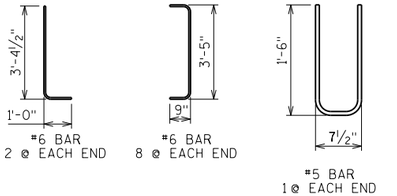
SIDE VIEW & TYPICAL SECTION IN SPAN

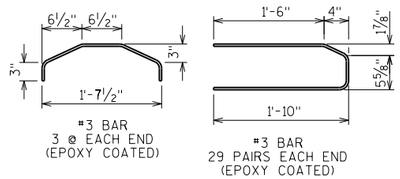
(A) DETAIL TYP. AT EACH END

(B) 6 #4 BARS, FULL LENGTH, MIN. LAP = 1'-11"



BOTTOM FLANGE





STEEL DIAPHRAGM SPACING

	"A"	"B"	"C"	"D"	"E"	
GIRDER 1 (W.)	35'-3"	0"	33'-8"	0"	32'-1"	← INSERTS IN EAST FACE
GIRDERS 2-4	32'-1"	3'-1⅞"	30'-6⅛"	3'-1⅞"	32'-1⅛"	
GIRDER 5 (E.)	32'-1"	0"	33'-8"	0"	35'-3"	← INSERTS IN WEST FACE

NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY, EXCEPT THE OUTSIDE 8" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED CONCRETE SEALER SHALL BE APPLIED TO ALL SMOOTH SURFACES INCLUDING THE OUTSIDE 8" OF THE TOP FLANGE.

DO NOT APPLY CONCRETE SEALER OR EPOXY TO SURFACES RECEIVING APPLICATION OF CONCRETE STAINING.

THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS. SEE SECT. 503.3.4 OF STANDARD SPECIFICATIONS FOR GUIDANCE.

STRANDS SHALL BE FLUSH WITH END OF GIRDER. FOR GIRDER ENDS EMBEDDED COMPLETELY IN CONCRETE, END OF STRANDS SHALL BE COATED WITH NON-BITUMINOUS JOINT SEALER. FOR GIRDER ENDS THAT ARE FINALLY EXPOSED, COAT THE GIRDER ENDS, EXPOSED STRAND ENDS AND ALL NON-BONDING SURFACES WITHIN 2 FEET OF THE GIRDER ENDS WITH A NON-PIGMENTED EPOXY CONFORMING TO AASHTO M-235 TYPE III, CLASS B OR C. THE EPOXY SHALL BE APPLIED AT LEAST 3 DAYS AFTER MOIST CURING HAS CEASED AND PRIOR TO THE APPLICATION OF THE SEALER.

ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT.

AN EQUIVALENT OF WELDED WIRE FABRIC (WWF) ASTM A1064 MAY BE SUBSTITUTED FOR THE STIRRUP REINFORCEMENT SHOWN, UPON APPROVAL OF THE STRUCTURES MAINTENANCE SECTION. IF USED, WWF SUBSTITUTION DETAILS SHALL BE SUBMITTED ELECTRONICALLY TO THE WISDOT FABRICATION LIBRARY AND ACCEPTED PRIOR TO SHOP DRAWING SUBMITTAL.

PRESTRESSING STRANDS SHALL BE (0.6" DIA.)-7 WIRE LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 270,000 PSI.

FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "STEEL DIAPHRAGM" SHEET.

✳ MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

GIRDER DATA

SPAN	GIRDER	GIRDER LENGTH "L" (FEET)	DEAD LOAD DEFL. (IN.) 1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	CONC. STRGTH. f'c (P.S.I.)	"P" (IN.) 1ST 1/3 OF GIRDER	MID 1/3 OF GIRDER	END 1/3 OF GIRDER	DIA. OF STRAND (IN.)	DRAPED PATTERN TOTAL NO. OF STRANDS	f'ci (P.S.I.) ✳	(IN.) "A"	"B" MIN.	"B" MAX.	"C"
1	1-5	101	0.7	1.3	1.8	2.1	2.3	2.1	1.8	1.3	0.7	8,000	8	7	8	0.6	38	6,800	40	13.75	16.75	5

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-17-369

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45W" PRESTRESSED GIRDER DETAILS 1

SHEET 8

83

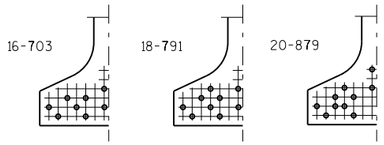
SCALE = 1.00

8

8

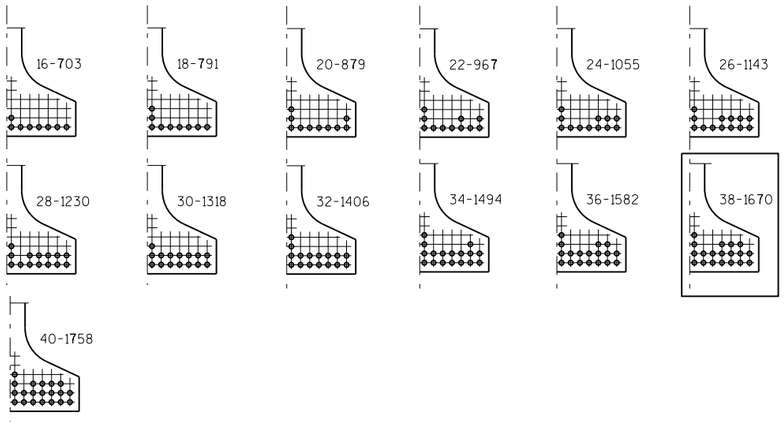
STATE PROJECT NUMBER

8640-00-73



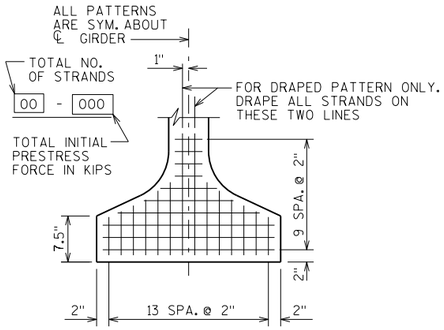
STANDARD ARRANGEMENTS TO RAISE CENTER OF GRAVITY TO AVOID DRAPING OF STRANDS

0.6" DIA. STRANDS

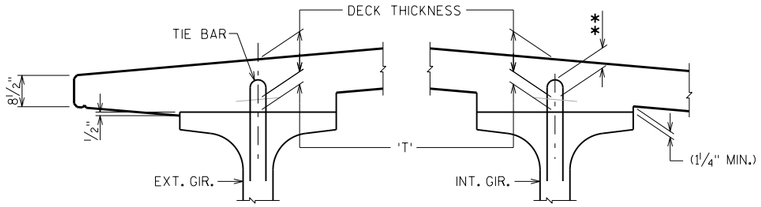


ARRANGEMENT AT ℄ SPAN - FOR GIRDERS WITH DRAPED STRANDS

0.6" DIA. STRANDS



TYP. STRAND PATTERN



DECK HAUNCH DETAIL

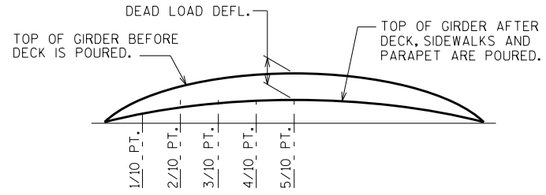
IF 1¼" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR, THE PLAN DECK THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN ½" OR,

** IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED.

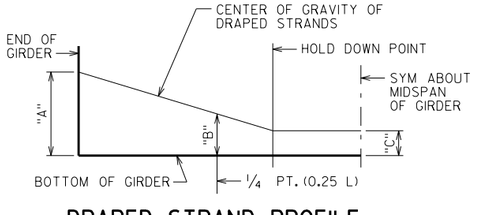
TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT ℄ OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEV. AT FINAL GRADE
- TOP OF GIRDER ELEVATION
+ DEAD LOAD DEFLECTION
- DECK THICKNESS
= HAUNCH HEIGHT 'T'

NOTE: AN AVERAGE HAUNCH ('T') OF 3.3" WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES".



DEAD LOAD DEFLECTION DIAGRAM



DRAPED STRAND PROFILE

*THE THEORETICAL INITIAL CAMBER VALUE AT THE TIME OF STRAND RELEASE AT MIDSPAN MULTIPLIED BY A FACTOR OF 1.4 TO ACCOUNT FOR CAMBER GROWTH FROM THE TIME OF STRAND RELEASE TO JOBSITE PLACEMENT.

SPAN	CAMBER (IN.) *
1	4.2

THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T', USE ACTUAL GIRDER SHOTS.

THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-17-369

DRAWN BY MJH | PLANS CK'D. CAD

45W" PRESTRESSED GIRDER DETAILS 2

SHEET 9

84

SCALE = 1.00

8

8

STATE PROJECT NUMBER

8640-00-73

NOTES

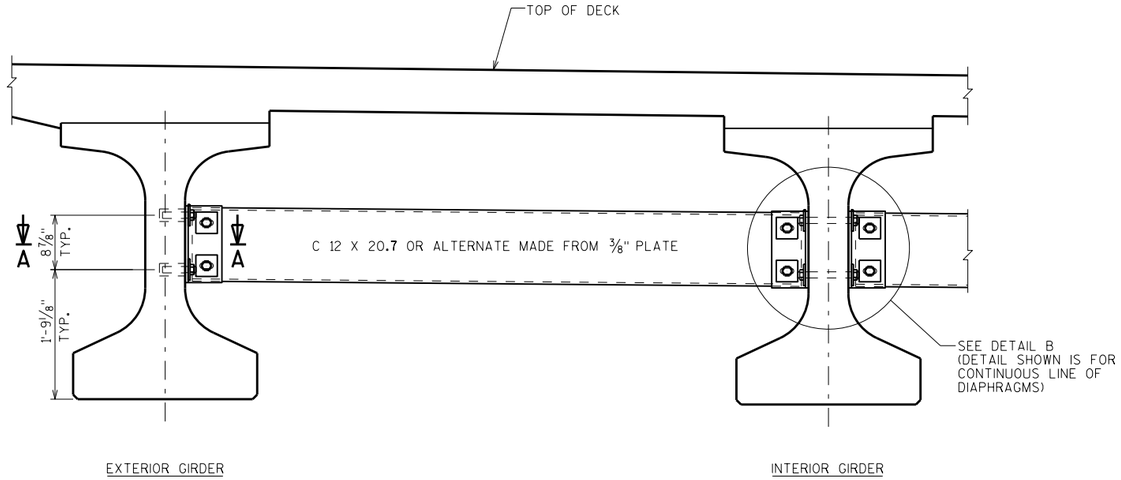
ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-17-369", EACH.

EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

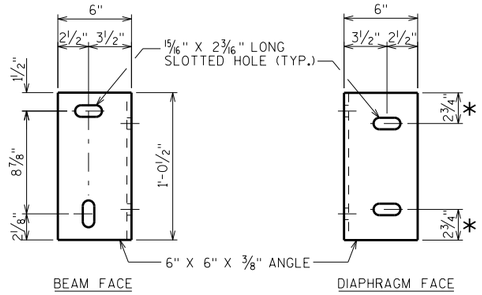
ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36.

ALL DIAPHRAGM MATERIAL INCLUDING BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED AFTER FABRICATION.

STEEL DIAPHRAGM TO CONCRETE WEB CONNECTION SHALL BE SNUG-TIGHT PLUS 1/4 TURN, UNLESS NOTED OTHERWISE. HIGH STRENGTH BOLTS FOR WEB CONNECTION SHALL MEET THE REQUIREMENTS FOR ASTM A325 OR ASTM A449.

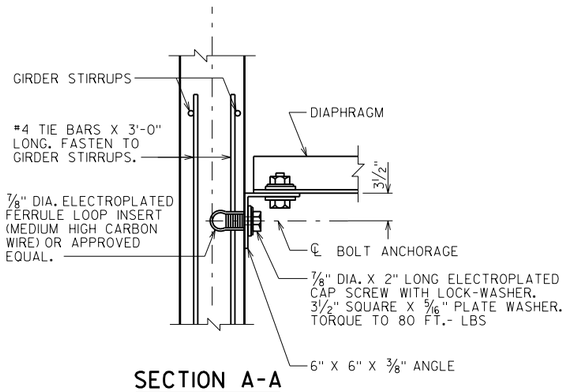


PART TRANSVERSE SECTION AT DIAPHRAGM



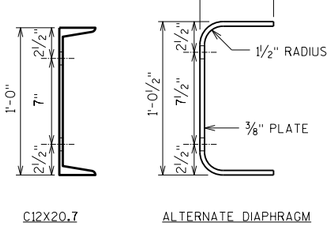
DIAPHRAGM SUPPORT

* 2 1/2" FOR ALTERNATE PLATE DIAPHRAGM

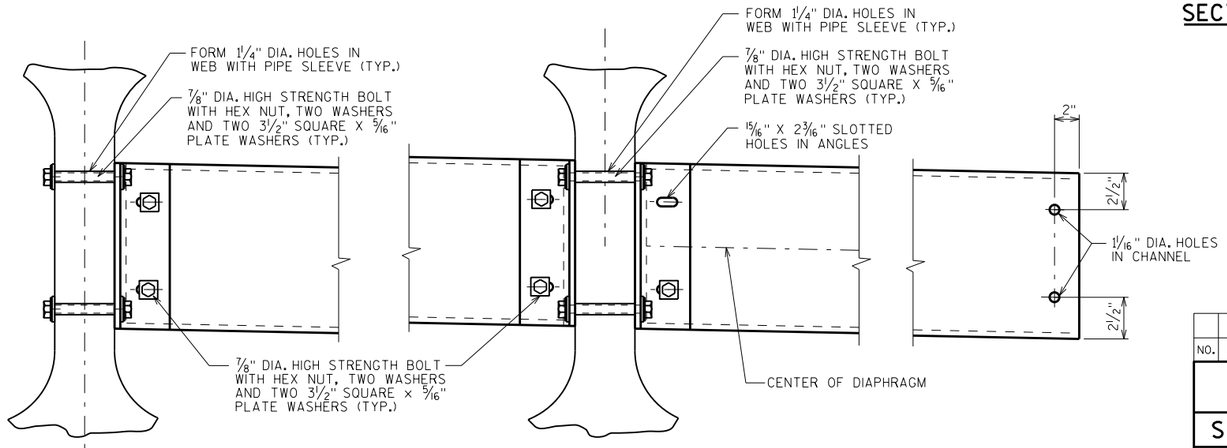


SECTION A-A

(FOR EXTERIOR ATTACHMENT)



SECTION THRU DIAPHRAGM



(FOR STAGGERED DIAPHRAGM)

DETAIL B

(FOR CONTINUOUS LINE OF DIAPHRAGMS)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-17-369

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STEEL DIAPHRAGM

SHEET 10

85

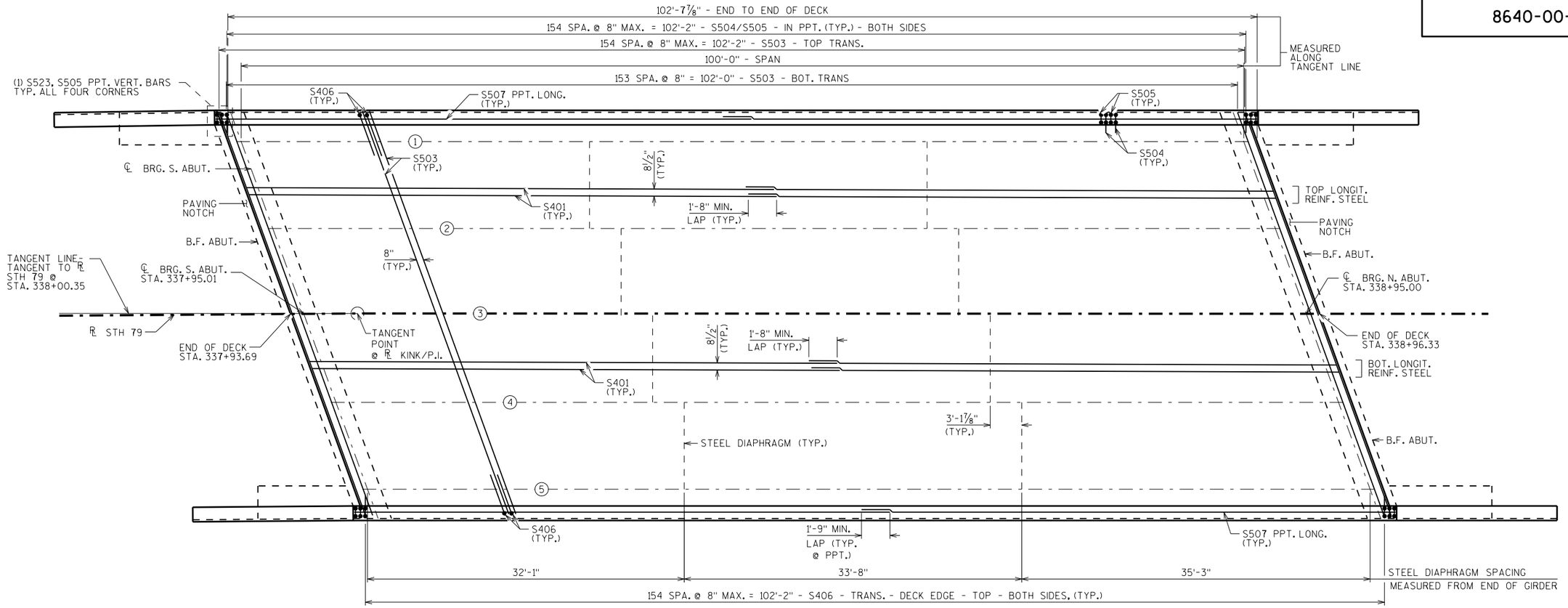
SCALE = 1.00

8

8

STATE PROJECT NUMBER

8640-00-73



PLAN

TOP OF DECK ELEVATIONS

	℄ BRG. S. ABUT.	1/10 PT.	2/10 PT.	3/10 PT.	4/10 PT.	5/10 PT.	6/10 PT.	7/10 PT.	8/10 PT.	9/10 PT.	℄ BRG. N. ABUT.
LEFT GL	903.50	903.55	903.60	903.65	903.70	903.75	903.80	903.85	903.90	903.95	904.00
GIRDER 1	903.54	903.59	903.64	903.69	903.74	903.79	903.84	903.89	903.94	903.99	904.04
GIRDER 2	903.73	903.78	903.83	903.88	903.93	903.98	904.03	904.08	904.13	904.18	904.23
GIR 3/TANGENT	903.92	903.97	904.02	904.07	904.12	904.17	904.22	904.27	904.32	904.37	904.42
GIRDER 4	903.76	903.81	903.86	903.91	903.96	904.01	904.06	904.11	904.16	904.21	904.26
GIRDER 5	903.60	903.65	903.70	903.75	903.80	903.85	903.90	903.95	904.00	904.05	904.10
RIGHT GL	903.57	903.62	903.67	903.72	903.77	903.82	903.87	903.92	903.97	904.02	904.07

◯ INDICATED GIRDER NUMBER

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-17-369

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SUPERSTRUCTURE PLAN

SHEET 11

86

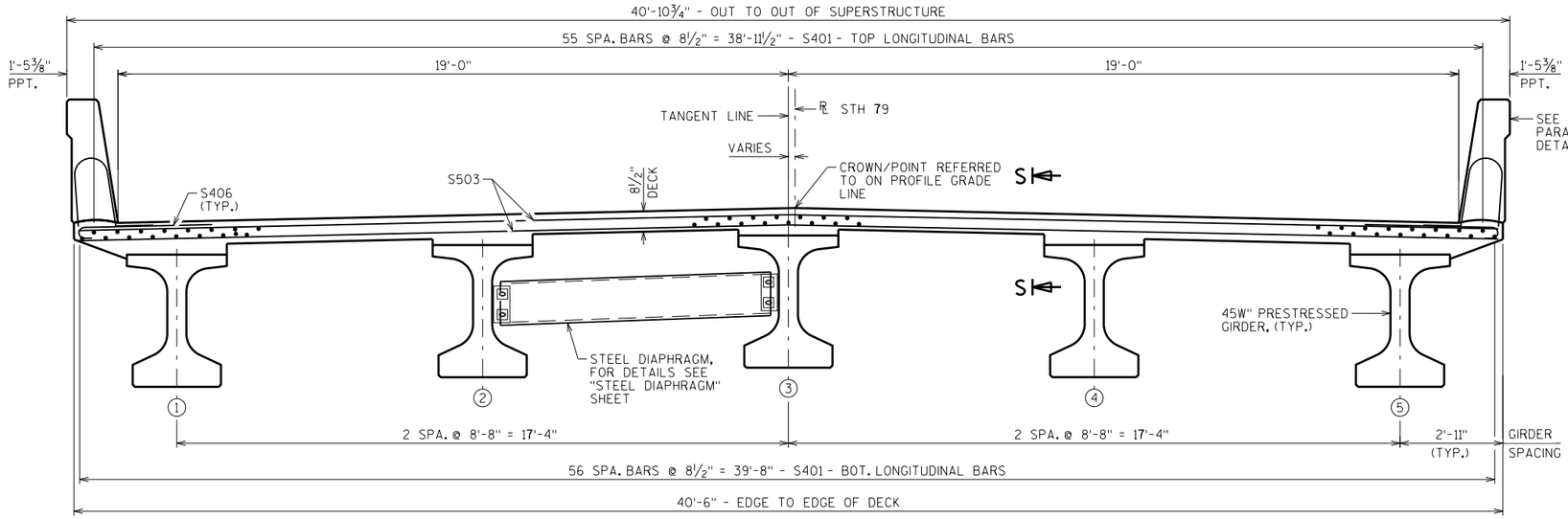
SCALE = 5.33

8

8

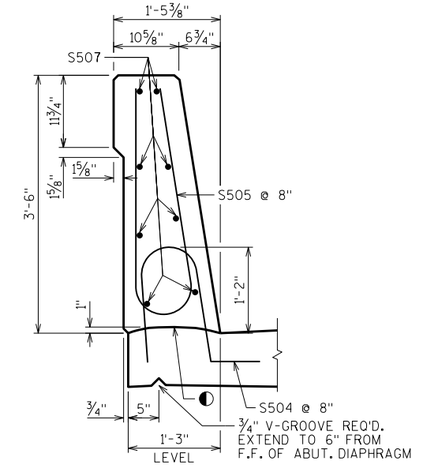
STATE PROJECT NUMBER

8640-00-73



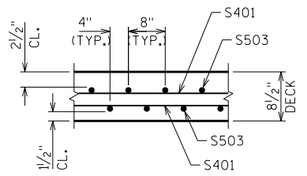
CROSS SECTION THRU BRIDGE

LOOKING NORTH

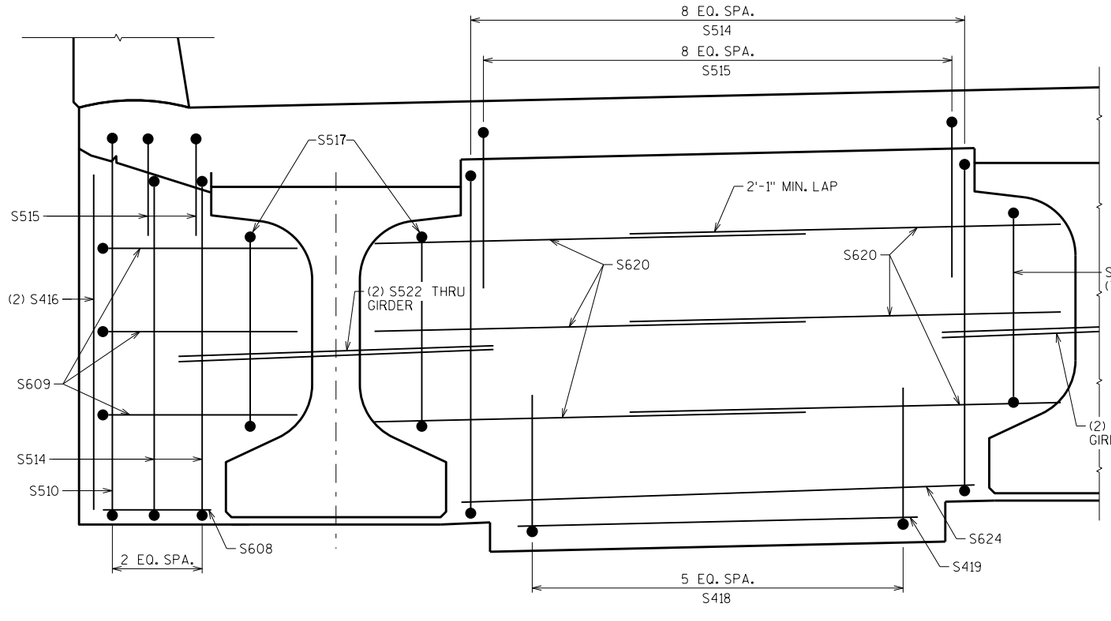


SECTION THRU PARAPET ON DECK

◐ CONST. JOINT - STRIKE OFF AS SHOWN

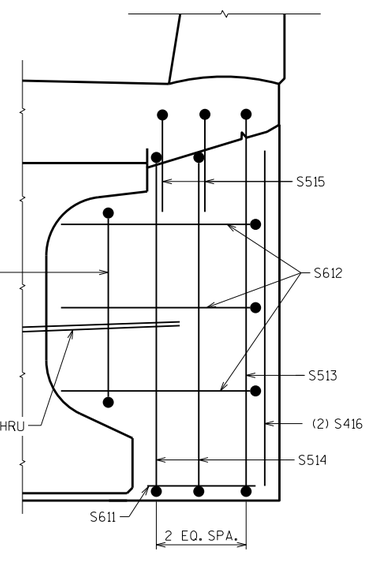


SECTION S-S



ABUTMENT END DIAPHRAGM DETAIL

WINGS 1 AND 3

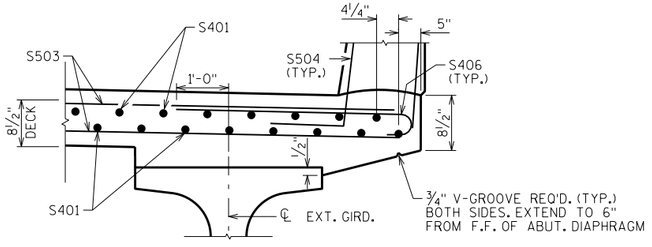


ABUTMENT DIAPHRAGM DETAIL

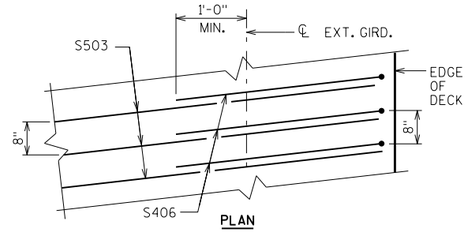
TYP. BTWN. GIRDERS

ABUTMENT END DIAPHRAGM DETAIL

WINGS 2 AND 4



SECTION



PLAN

ADDITIONAL REINFORCEMENT DETAILS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-17-369

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SUPERSTRUCTURE CROSS SECTION

SHEET 12

87

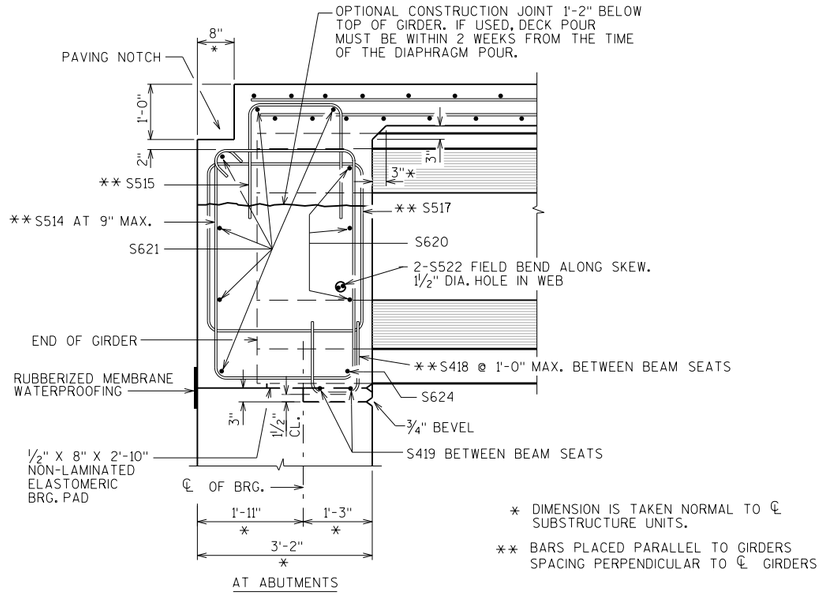
SCALE = 2.00

8

8

STATE PROJECT NUMBER

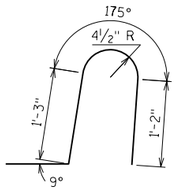
8640-00-73



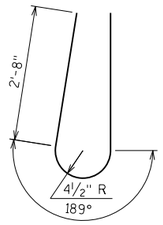
* DIMENSION IS TAKEN NORMAL TO ℄ SUBSTRUCTURE UNITS.

** BARS PLACED PARALLEL TO GIRDERS SPACING PERPENDICULAR TO ℄ GIRDERS

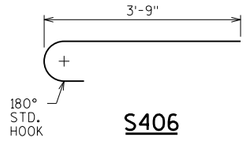
PART LONGIT. SECTION



S504



S505

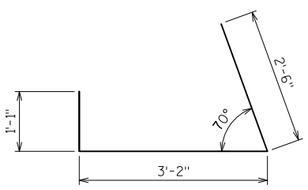


S406

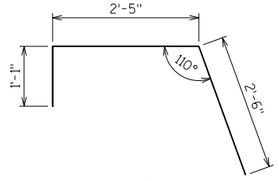
BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
S401	X	226	52'-0"			DECK - LONG. - TOP
S402		NOT	USED			
S503	X	309	42'-9"			DECK - TRANS. - TOP & BOT.
S504	X	310	4'-5"	X		DECK/PARAPET - VERT.
S505	X	314	6'-8"	X		PPT. - VERT.
S406	X	310	4'-3"	X		DECK - TRANS. - DECK EDGE
S507	X	32	52'-9"			PPT. - HORIZ.
S608	X	2	1'-5"			WINGS 1 & 3 - ABUT. DIAPH. - ENDS - HORIZ.
S609	X	6	6'-6"	X		WINGS 1 & 3 - ABUT. DIAPH. - ENDS - HORIZ.
S510	X	2	15'-8"	X		WINGS 1 & 3 - ABUT. DIAPH. - ENDS - VERT.
S611	X	2	1'-5"			WINGS 2 & 4 - ABUT. DIAPH. - ENDS - HORIZ.
S612	X	6	5'-9"	X		WINGS 2 & 4 - ABUT. DIAPH. - ENDS - HORIZ.
S513	X	2	14'-2"	X		WINGS 2 & 4 - ABUT. DIAPH. - ENDS - VERT.
S514	X	80	13'-0"	X		ABUT. DIAPH. - VERT.
S515	X	80	6'-1"	X		ABUT. DIAPH. - VERT.
S416	X	8	4'-2"			ABUT. DIAPH. - ENDS - VERT.
S517	X	20	11'-0"	X		ABUT. DIAPH. - VERT.
S418	X	48	3'-4"	X		ABUT. DIAPH. - VERT. - BTWN. BEAM SEATS
S419	X	16	5'-0"			ABUT. DIAPH. - HORIZ. - BTWN. BEAM SEATS
S620	X	48	5'-2"			ABUT. DIAPH. - HORIZ.
S621	X	12	42'-7"			ABUT. DIAPH. - HORIZ. - B.F. TOP
S522	X	20	6'-0"			ABUT. DIAPH. - HORIZ. - THRU GIR.
S523	X	4	5'-10"	X		PPT. - VERT. - 1 EACH CORNER AT END OF DECK
S624	X	8	6'-0"			ABUT. DIAPH. - BOT. - F.F.



S609



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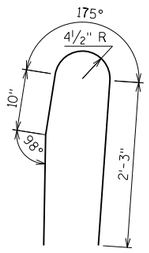

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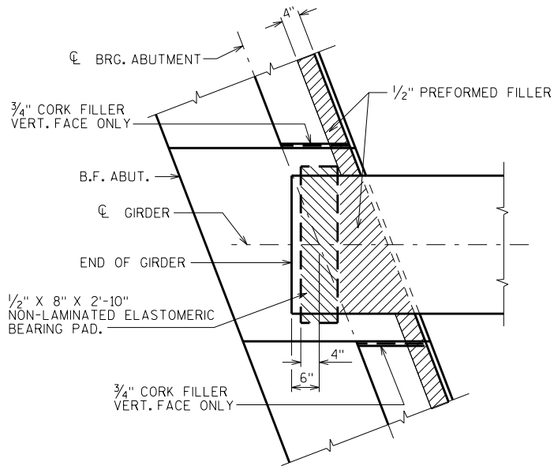
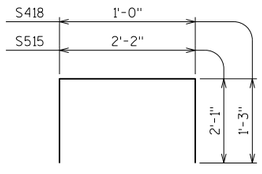
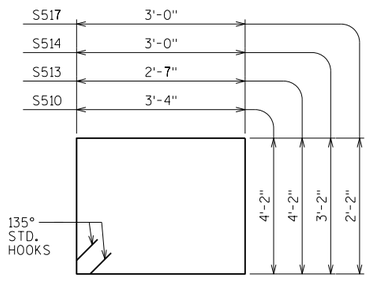


BEARING PAD DETAIL



S515, S418



S510, S513, S514, S517

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-17-369

DRAWN BY MJH | PLANS CK'D. CAD

SUPERSTRUCTURE DETAILS

SHEET 13

88

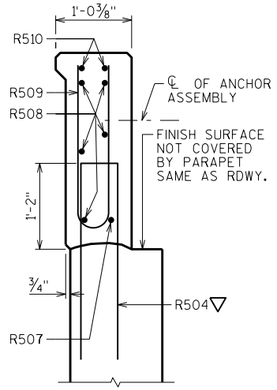
SCALE = 1.33

8

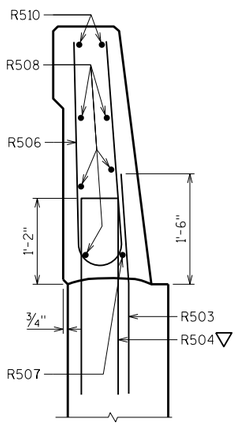
8

STATE PROJECT NUMBER

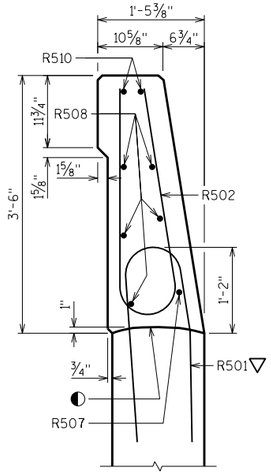
8640-00-73



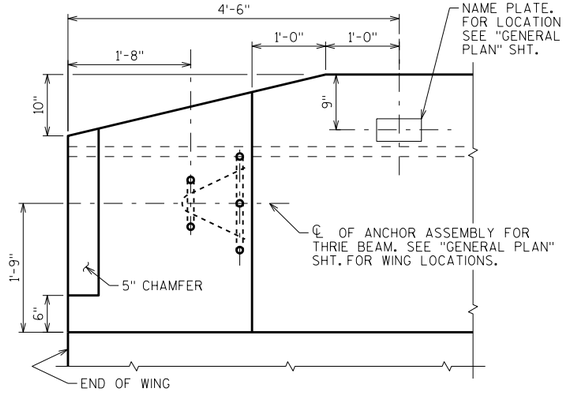
SECTION A-A



SECTION B-B



SECTION C-C



PARAPET END TREATMENT DETAIL

LOOKING AT INSIDE FACE OF PARAPET

BILL OF BARS

FOR ABUTMENT PARAPETS

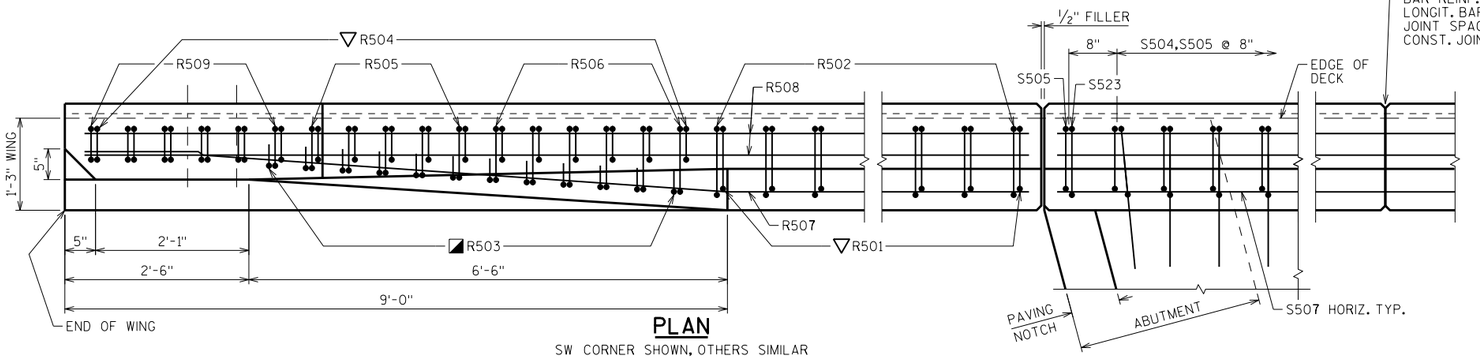
BAR MARK	COAT	S. ABUT.	N. ABUT.	LENGTH	BENT	BAR SERIES	LOCATION
R501	X	22	22	5'-10	X		PARAPET VERT.
R502	X	22	22	6'-8"	X		PARAPET VERT.
R503	X	24	24	3'-0"	X		PARAPET VERT.
R504	X	34	34	5'-7"	X		PARAPET VERT.
R505	X	10	10	6'-5"	X		PARAPET VERT.
R506	X	12	12	6'-6"	X		PARAPET VERT.
R507	X	2	2	15'-7"	X		PARAPET HORIZ.
R508	X	10	10	15'-7"			PARAPET HORIZ.
R509	X	12	12	5'-5"	X	⚠	PARAPET VERT.
R510	X	4	4	15'-7"	X		PARAPET HORIZ.

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

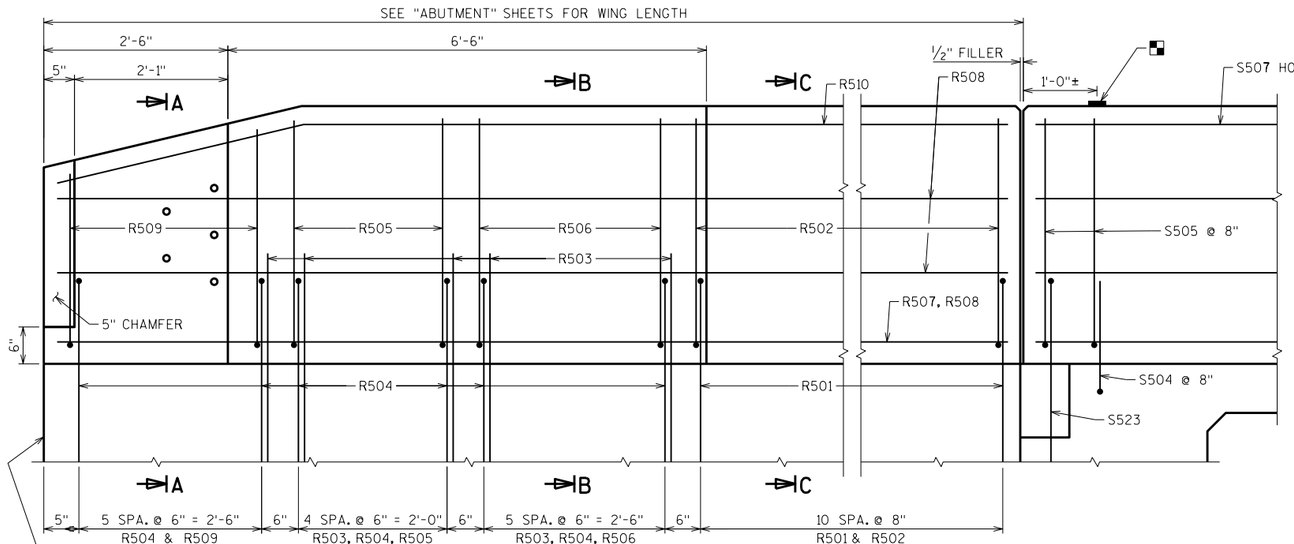
BAR MARK	NO. REQ'D	LENGTH
R509	4 SERIES OF 6	4'-9" TO 6'-1"

BUNDLE AND TAG EACH SERIES SEPARATELY.



PLAN

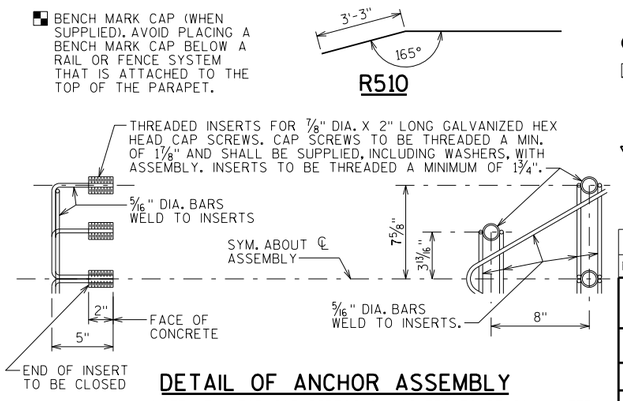
SW CORNER SHOWN, OTHERS SIMILAR



INSIDE ELEVATION

SW CORNER SHOWN, OTHERS SIMILAR

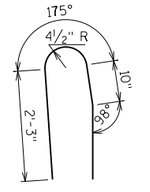
■ BENCH MARK CAP (WHEN SUPPLIED). AVOID PLACING A BENCH MARK CAP BELOW A RAIL OR FENCE SYSTEM THAT IS ATTACHED TO THE TOP OF THE PARAPET.



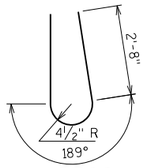
DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 CLASS C.

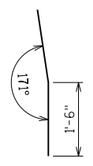
ASSEMBLY SHALL BE BID ITEM "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD", EACH.



R501

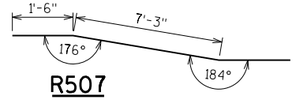


R502



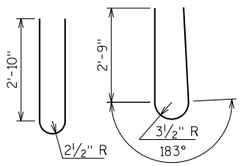
R503

R504



R507

R510



R505 R506 R509

◐ CONST. JOINT - STRIKE OFF AS SHOWN

◪ R503 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. USE CARE TO PLACE R503 BARS CORRECTLY ALONG TRANSITION OF PARAPET.

▽ R501 AND R504 BARS TO BE TIED TO WING STEEL BEFORE WING IS POURED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-17-369

DRAWN BY MJH | PLANS CK'D. CAD

SINGLE SLOPE PARAPET 42SS

SHEET 14

89

SCALE = 1.00

8

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PROJECT I.D. 8640-00-71 EARTHWORK SUMMARY

STA	EXCAVATION COMMON CY	EXCAVATION ROCK CY	FILL (1) CY	EXPANDED FILL (2) CY	UNUSABLE PAVEMENT CY	WASTE CY
285+00.00						
	90	0	26	32	24	58
285+50.00						
	83	0	28	35	24	48
286+00.00						
	68	0	15	19	24	49
286+50.00						
	59	0	7	8	24	51
287+00.00						
	10	0	0	0	4	10
287+09.00						
	33	0	11	14	20	19
287+50.00						
	17	0	29	36	17	-19
288+00.00						
	7	0	27	0	7	7
288+36.29						
	3	0	10	13	3	-10
288+50.00						
	3	0	8	10	3	-7
288+61.51						
	3	0	9	12	3	-9
288+73.42						
	3	0	12	14	3	-11
288+86.70						
	1	0	11	13	1	-12
288+98.17						
	1	0	22	28	1	-27
289+22.93						
	0	0	25	31	0	-31
289+50.00						
	0	0	90	113	0	-113
290+00.00						
	0	0	91	114	0	-114
290+25.00						
	0	0	32	40	0	-40
290+32.00						

STRUCTURE B-17-0368

STA	EXCAVATION COMMON CY	EXCAVATION ROCK CY	FILL (1) CY	EXPANDED FILL (2) CY	UNUSABLE PAVEMENT CY	WASTE CY
291+22.00						
	18	0	27	34	10	-16
291+41.65						
	8	0	9	11	4	-3
291+50.00						
	41	0	15	19	15	22
291+81.33						
	43	0	11	14	12	29
292+06.09						
	53	0	22	27	12	26
292+30.84						
	28	0	11	13	6	15
292+42.21						
	68	0	16	20	12	48
292+67.39						
	75	0	7	8	12	67
292+92.60						
	111	0	2	2	16	109
293+25.00						
	90	0	0	0	12	90
293+50.00						
	172	0	0	0	24	172
294+00.00						
	173	0	0	0	24	173
294+50.00						
	177	0	0	0	24	177
295+00.00						
	176	0	0	0	24	176
295+50.00						
	166	0	0	0	24	166
296+00.00						
	153	0	0	0	24	153
296+50.00						
	90	0	0	0	15	90
296+80.00						
	55	0	2	3	10	52
297+00.00						
	110	0	6	8	24	102
297+50.00						
TOTALS	**2191**	**0**	**582**	**691**	**465**	**1500**

(1) - NOT A BID ITEM - FOR INFORMATIONAL PURPOSES ONLY.
(2) - FILL EXPANSION 25%
(3) - EXISTING PAVEMENT BASED ON AVERAGE THICKNESS OF 5.25" OF ASPHALT PER BORING LOG.

9

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PROJECT I.D. 8640-00-73 EARTHWORK SUMMARY

STA	EXCAVATION COMMON CY	EXCAVATION ROCK CY	FILL (1) CY	EXPANDED FILL (2) CY	UNUSABLE PAVEMENT CY	WASTE CY
332+50.00	102	0	5	6	24	96
333+00.00	107	0	4	5	24	102
333+50.00	123	0	1	2	24	121
334+00.00	66	0	1	2	12	64
334+25.00	61	0	6	8	12	53
334+50.00	77	0	14	17	15	60
334+80.20	53	0	8	10	10	43
335+00.00	15	0	1	1	3	14
335+05.18	75	0	3	3	12	72
335+30.16	66	0	0	0	10	66
335+50.00	65	0	0	0	9	65
335+68.77	87	0	0	0	12	87
335+93.75	83	0	0	0	12	83
336+18.73	96	0	5	6	15	90
336+50.00	131	0	34	43	24	88
337+00.00	99	0	90	112	24	-13
337+50.00	37	0	57	72	12	-35
337+75.00	12	0	52	65	5	-53
339+14.00	28	0	87	109	12	-81
339+25.00	31	0	42	52	12	-21
339+50.00	48	0	22	27	17	21
339+75.00	38	0	11	13	12	25
340+10.01	41	0	24	30	12	11
340+34.99	19	0	12	15	5	4
340+59.97	45	0	18	22	12	23
340+71.14	46	0	16	20	12	26
340+96.12	54	0	14	18	14	36
341+21.10	32	0	3	4	8	28
341+50.00						
341+67.00						
TOTALS	1739	0	531	662	378	1077

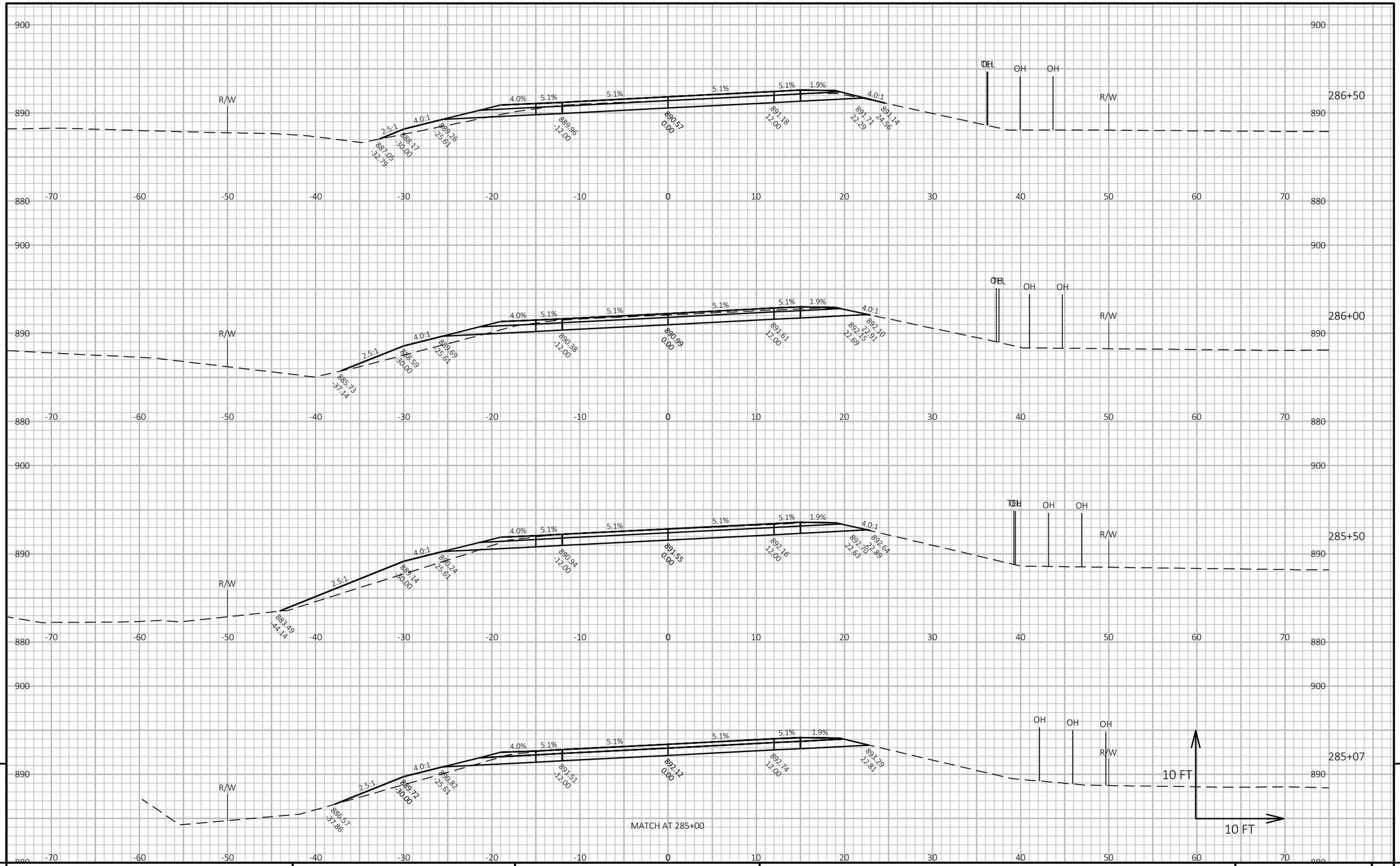
(1) - NOT A BID ITEM - FOR INFORMATIONAL PURPOSES ONLY.
(2) - FILL EXPANSION 25%
(3) - EXISTING PAVEMENT BASED ON AVERAGE THICKNESS OF 5.25" OF ASPHALT PER BORING LOG.

STRUCTURE B-17-0368

9

9

PROJECT NO: 8640-00-71, 8640-00-73	HWY: STH 79	COUNTY: DUNN	CROSS SECTIONS: EARTHWORK - CLACK CREEK CROSSING	SHEET 91	E



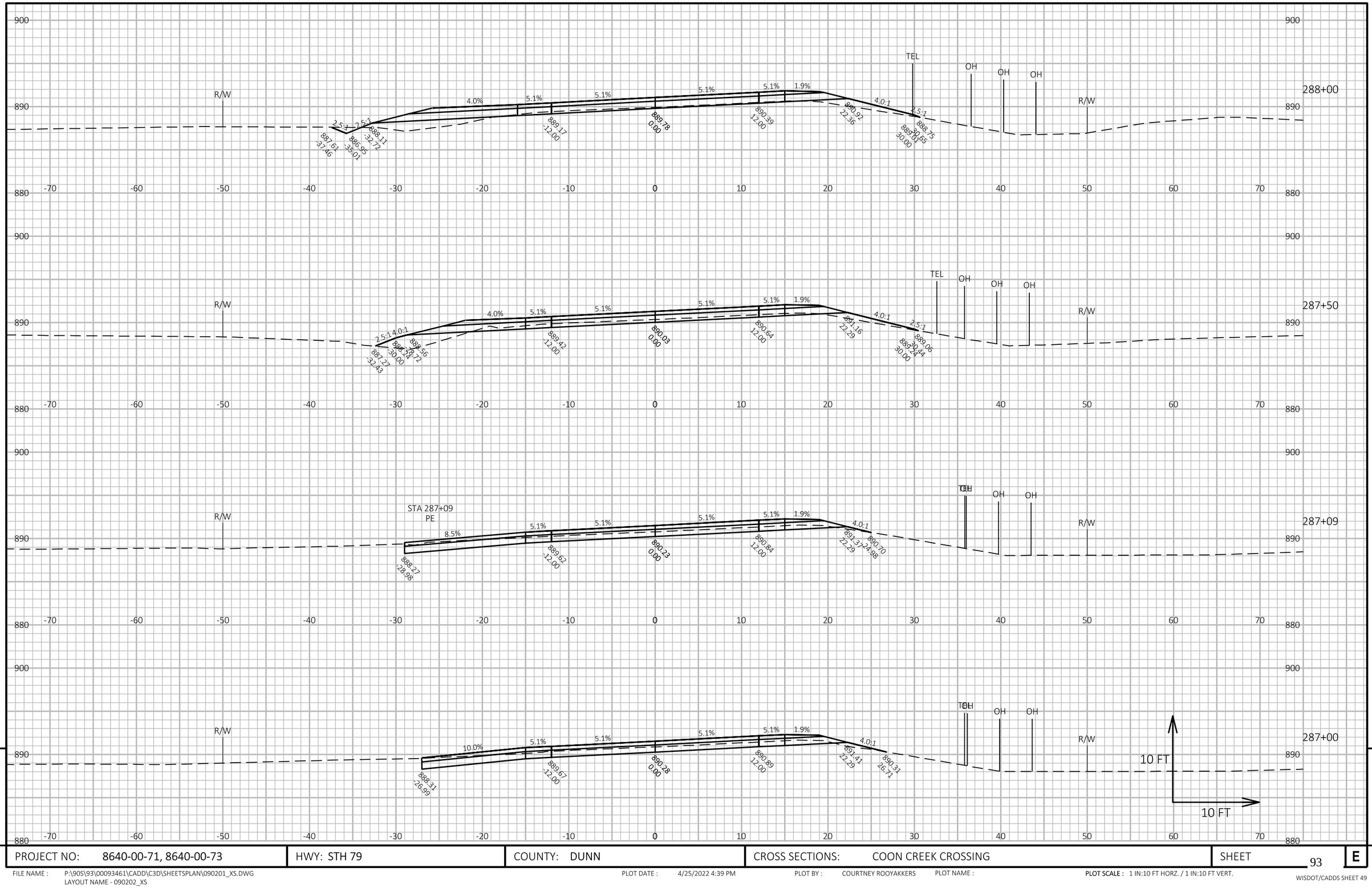
9 9

PROJECT NO: 8640-00-71, 8640-00-73	HWY: STH 79	COUNTY: DUNN	CROSS SECTIONS: COON CREEK CROSSING	SHEET 92	E

FILE NAME : P:\90S\93\00093461\CADD\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090201_XS

PLOT DATE : 4/25/2022 4:39 PM PLOT BY : COURTNEY ROOYAKKERS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 8640-00-71, 8640-00-73	HWY: STH 79	COUNTY: DUNN	CROSS SECTIONS: COON CREEK CROSSING	SHEET 93	E

FILE NAME : P:\90S\93\00093461\CADD\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090202_XS

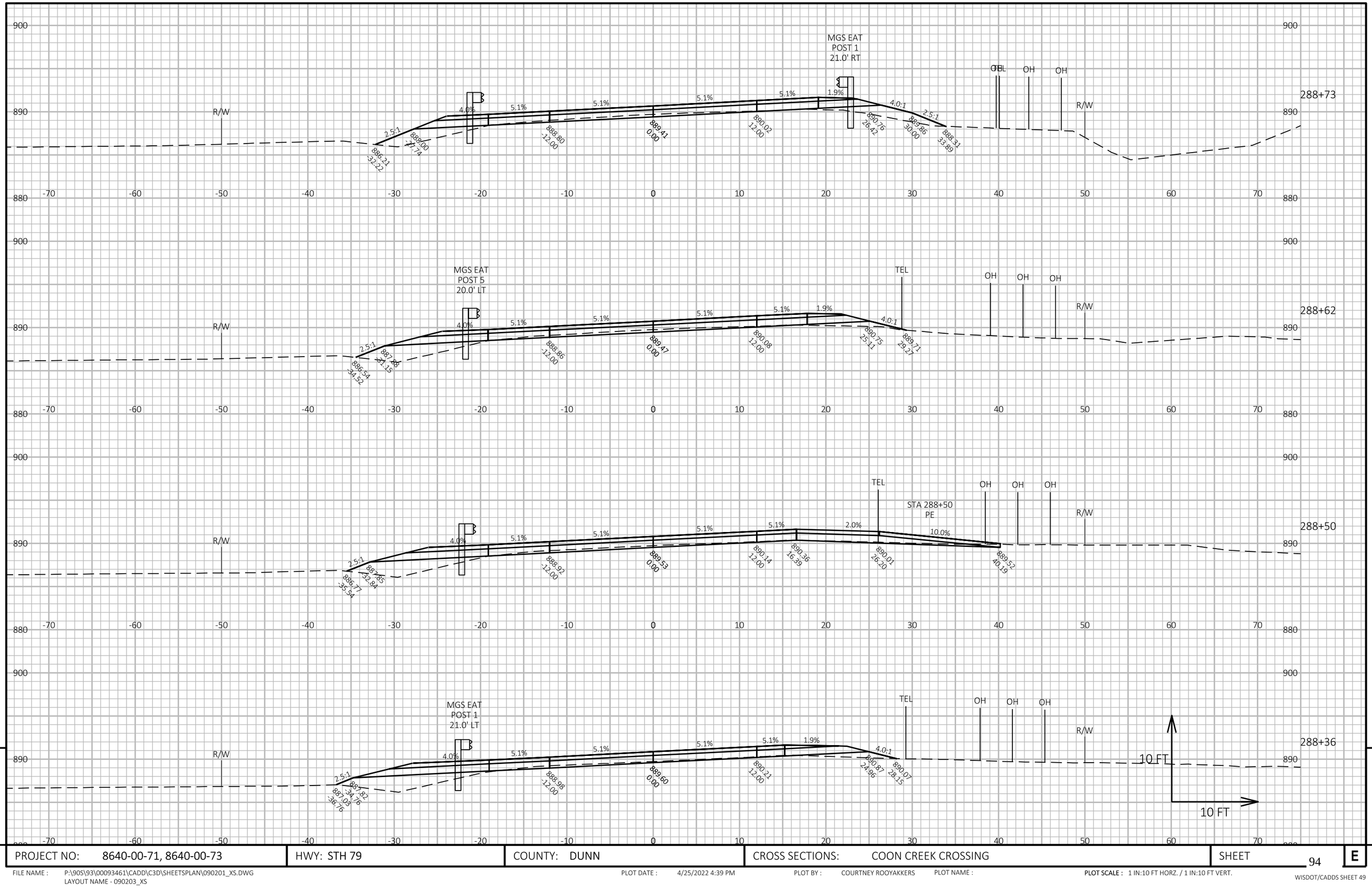
PLOT DATE : 4/25/2022 4:39 PM

PLOT BY : COURTNEY ROOYAKKERS

PLOT NAME :

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

WISDOT/CADDS SHEET 49

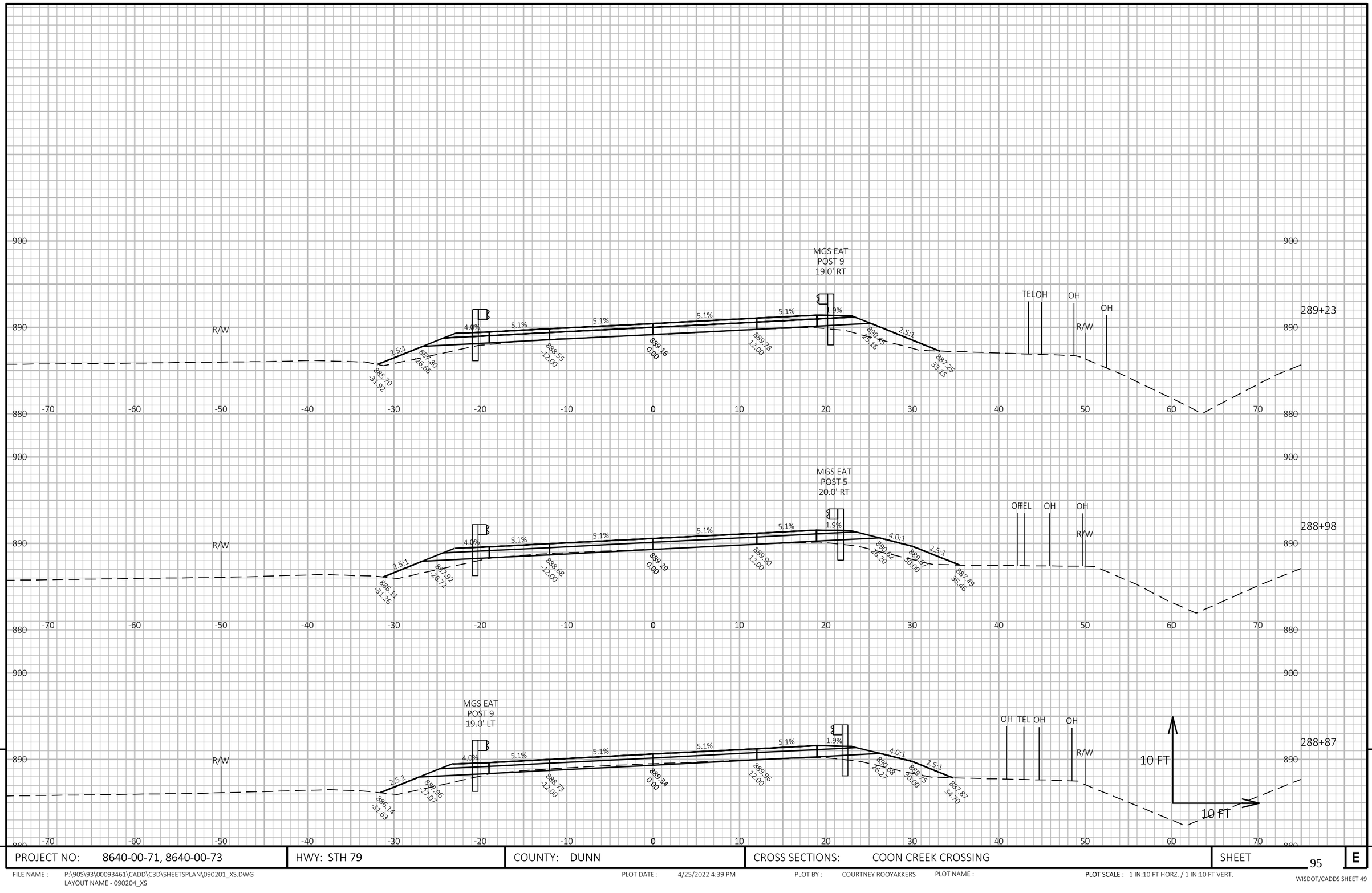


PROJECT NO: 8640-00-71, 8640-00-73	HWY: STH 79	COUNTY: DUNN	CROSS SECTIONS: COON CREEK CROSSING	SHEET 94 E

FILE NAME : P:\90S\93\00093461\CADD\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090203_XS

PLOT DATE : 4/25/2022 4:39 PM PLOT BY : COURTNEY ROOYAKKERS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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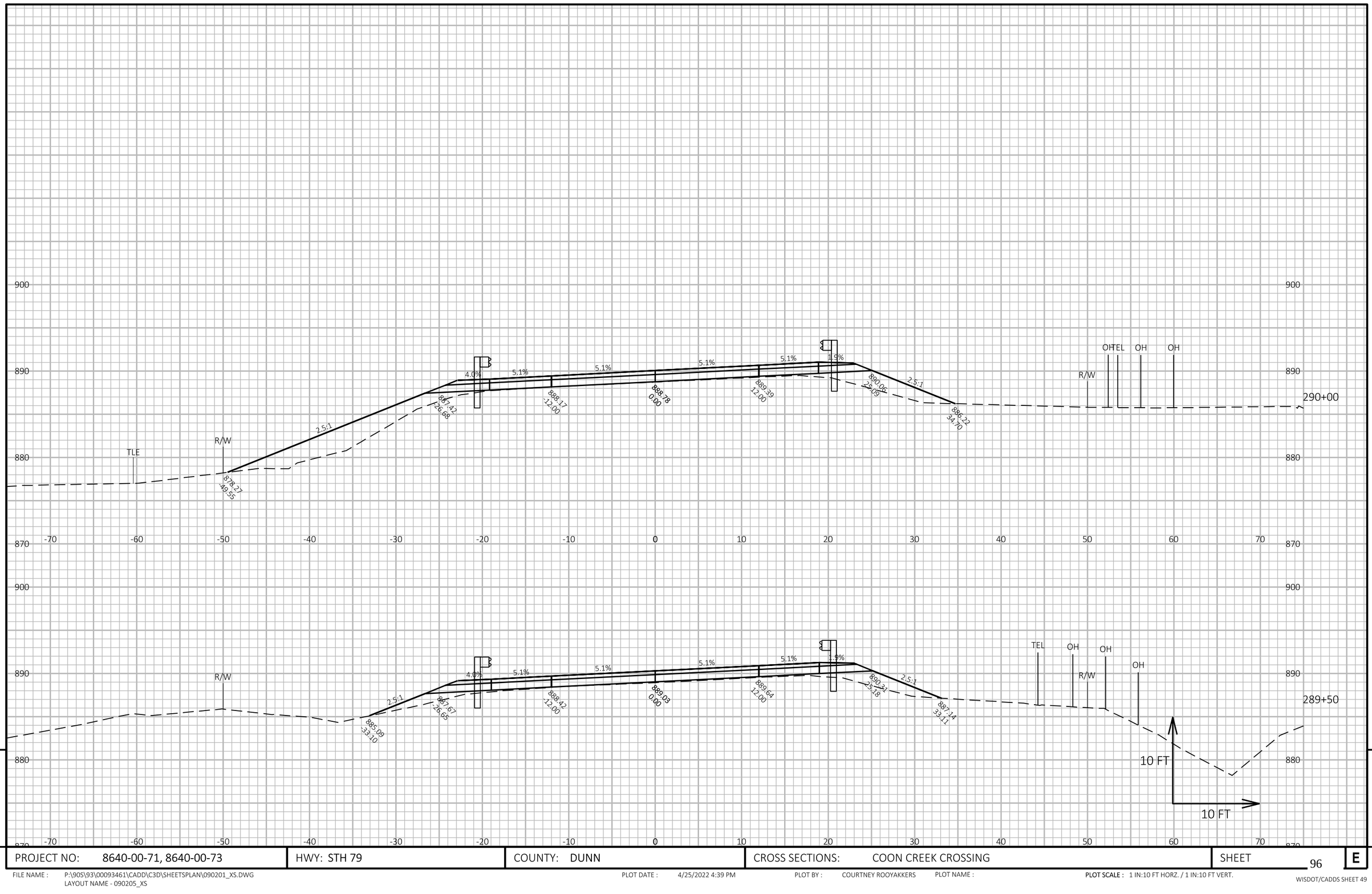
PROJECT NO: 8640-00-71, 8640-00-73	HWY: STH 79	COUNTY: DUNN	CROSS SECTIONS: COON CREEK CROSSING	SHEET 95	E

FILE NAME : P:\90S\93\00093461\CADD\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090204_XS

PLOT DATE : 4/25/2022 4:39 PM PLOT BY : COURTNEY ROOYAKKERS PLOT NAME :

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

WISDOT/CADDS SHEET 49



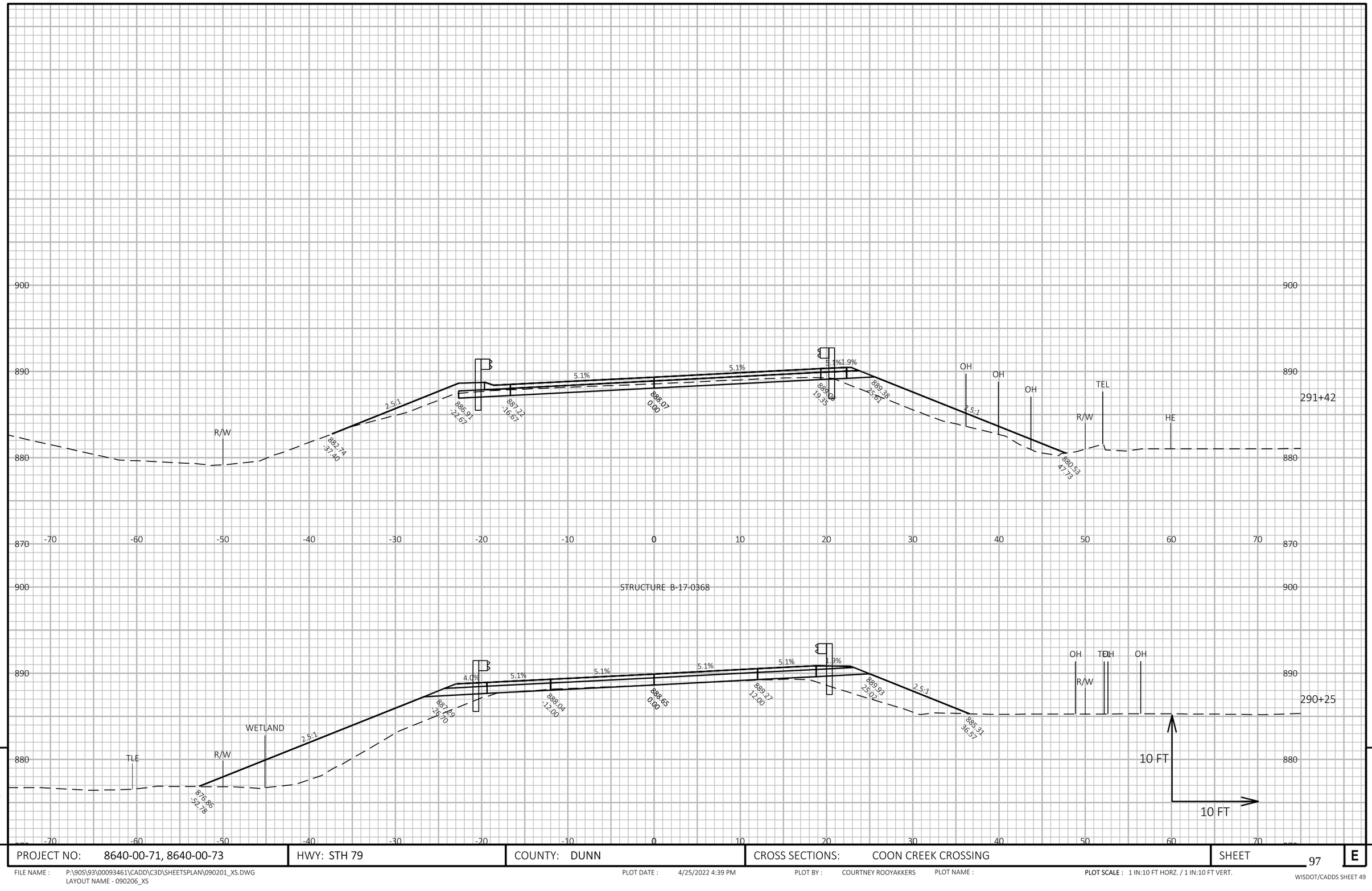
PROJECT NO: 8640-00-71, 8640-00-73	HWY: STH 79	COUNTY: DUNN	CROSS SECTIONS: COON CREEK CROSSING	SHEET 96	E

FILE NAME : P:\90S\93\00093461\CADD\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090205_XS

PLOT DATE : 4/25/2022 4:39 PM PLOT BY : COURTNEY ROOYAKKERS PLOT NAME :

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

WISDOT/CADDS SHEET 49

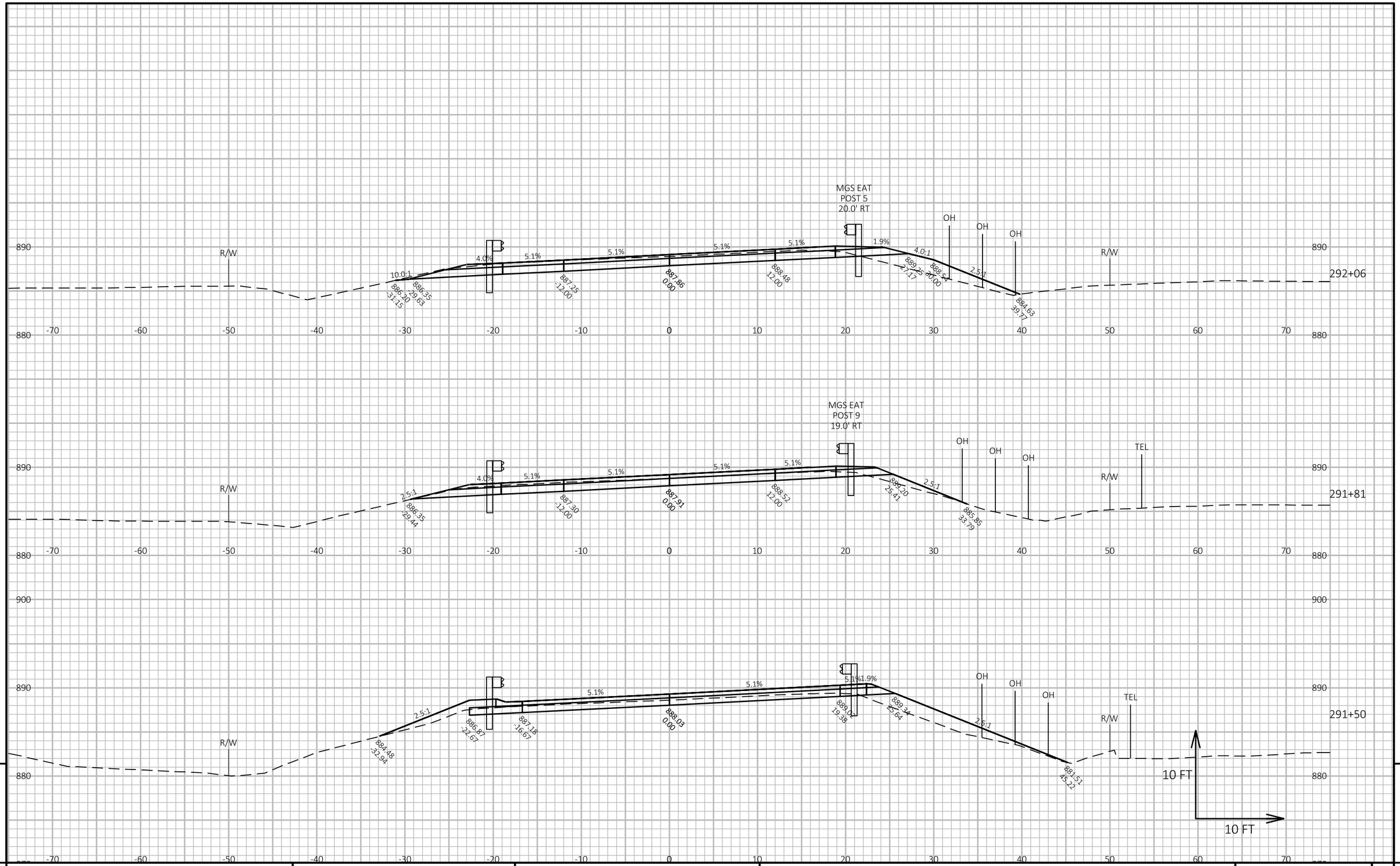


PROJECT NO: 8640-00-71, 8640-00-73	HWY: STH 79	COUNTY: DUNN	CROSS SECTIONS: COON CREEK CROSSING	SHEET 97	E

FILE NAME : P:\90S\93\00093461\CADD\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090206_XS

PLOT DATE : 4/25/2022 4:39 PM PLOT BY : COURTNEY ROOYAKKERS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 8640-00-71, 8640-00-73	HWY: STH 79	COUNTY: DUNN	CROSS SECTIONS: COON CREEK CROSSING	SHEET 98	E

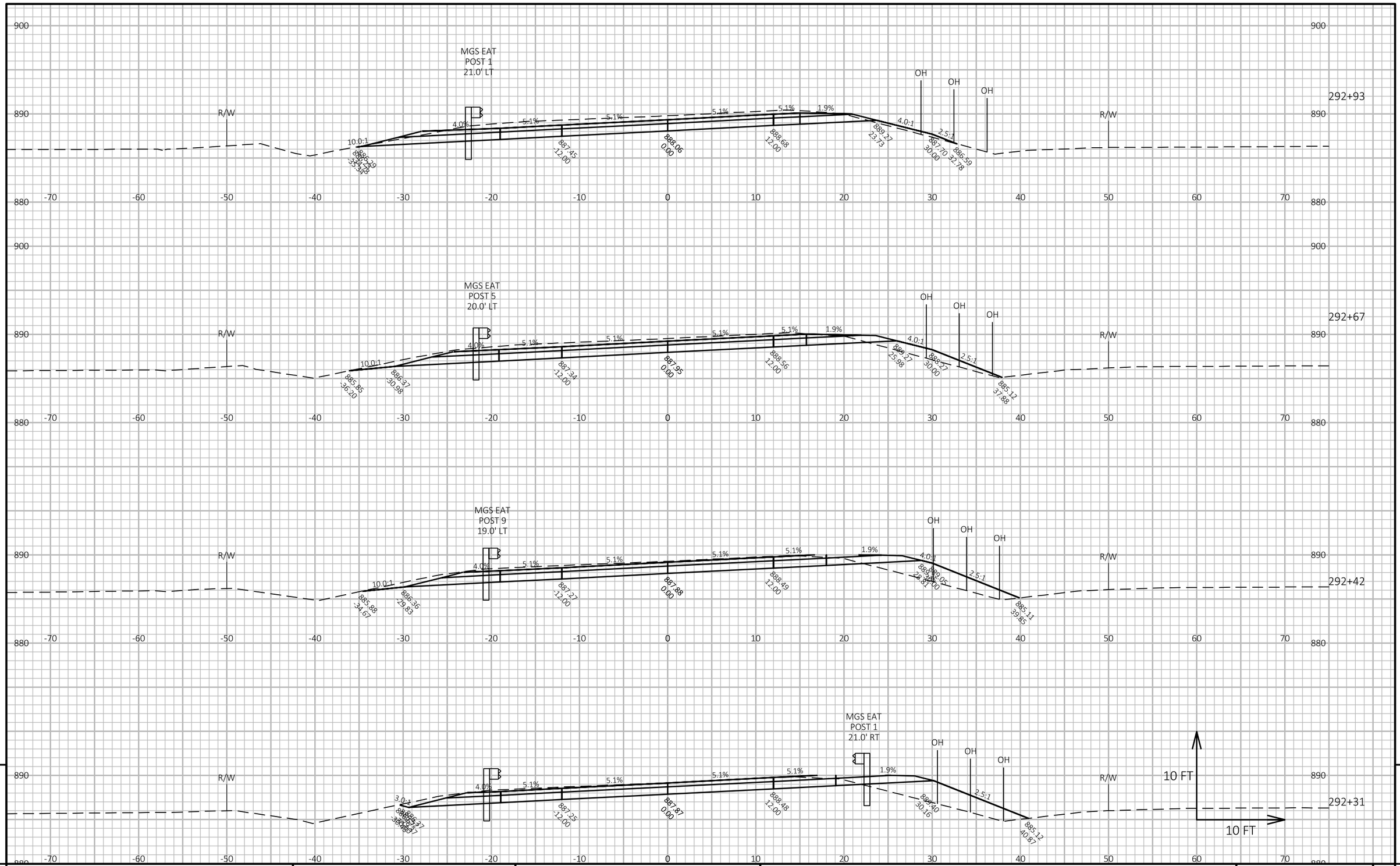
9

FILE NAME : P:\90S\93\00093461\CADD\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090207_XS

PLOT DATE : 5/12/2022 10:34 AM PLOT BY : COURTNEY ROOYAKKERS PLOT NAME :

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

WISDOT/CADDS SHEET 49



PROJECT NO: 8640-00-71, 8640-00-73	HWY: STH 79	COUNTY: DUNN	CROSS SECTIONS: COON CREEK CROSSING	SHEET 99	E

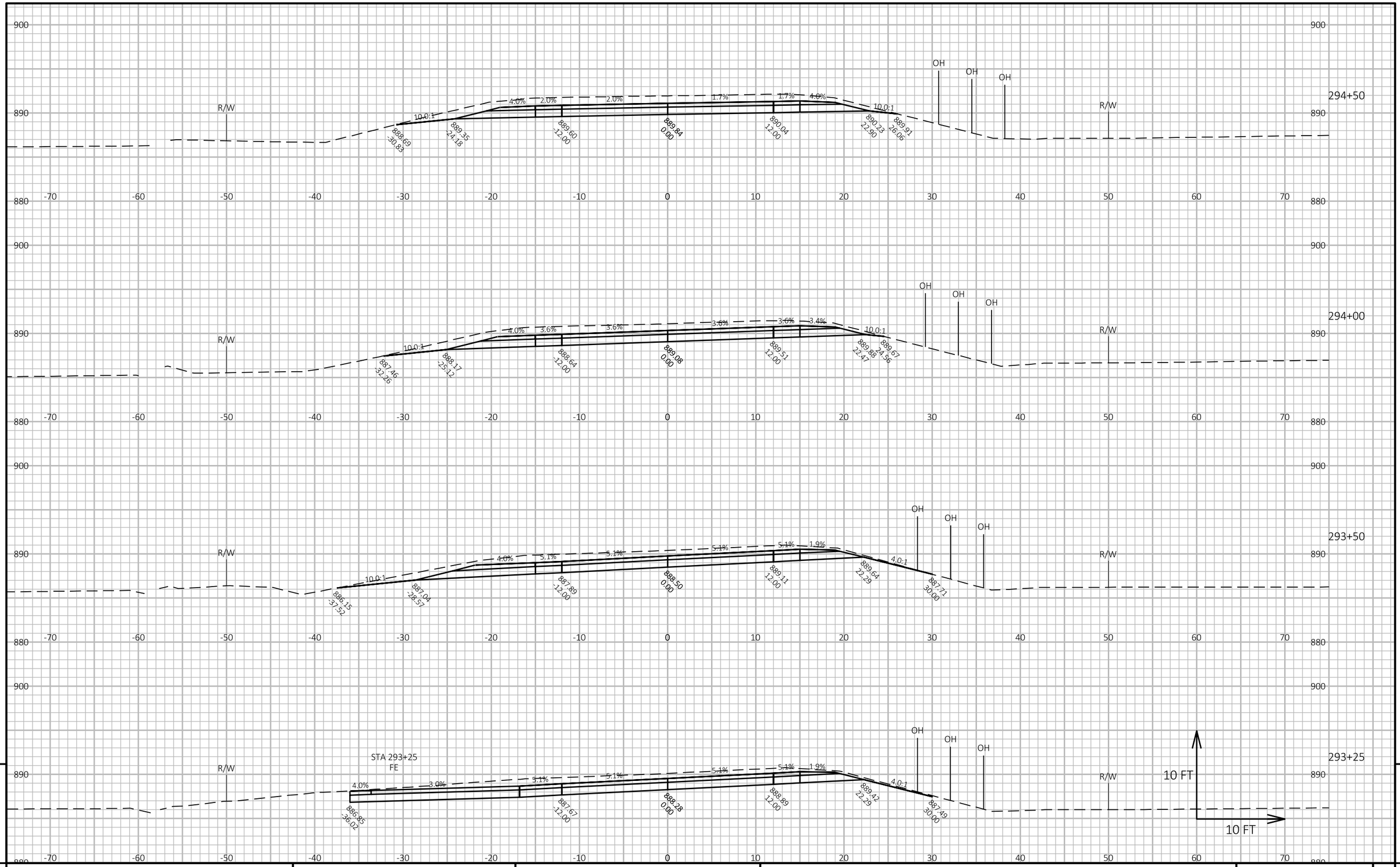
9

9

FILE NAME : P:\90S\93\00093461\CADD\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090207b_XS

PLOT DATE : 5/11/2022 11:50 AM PLOT BY : COURTNEY ROOYAKKERS PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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9

PROJECT NO: 8640-00-71, 8640-00-73	HWY: STH 79	COUNTY: DUNN	CROSS SECTIONS: COON CREEK CROSSING	SHEET 100	E

FILE NAME : P:\90S\93\00093461\CADD\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090208_xs

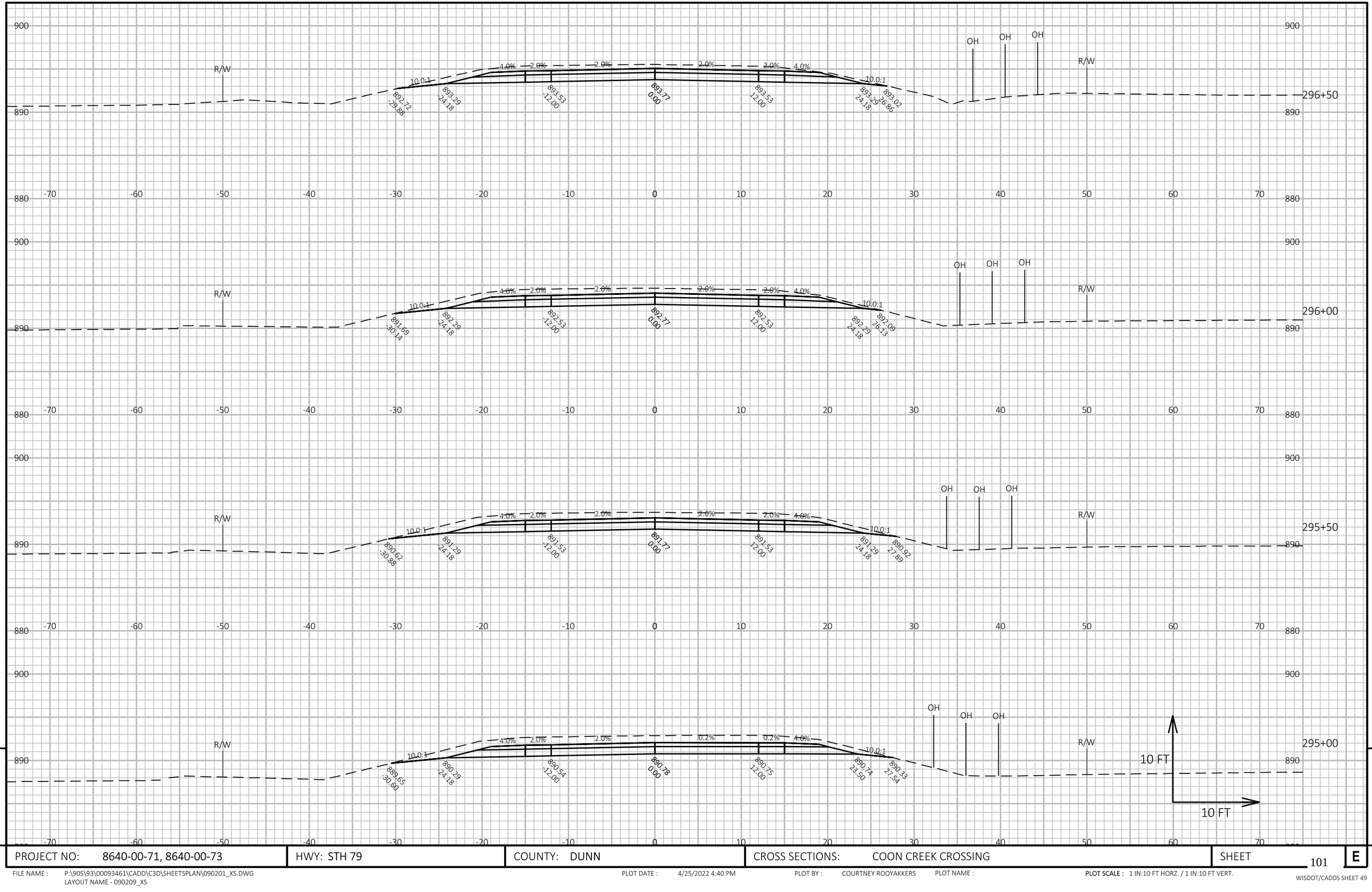
PLOT DATE : 4/25/2022 4:40 PM

PLOT BY : COURTNEY ROOYAKKERS

PLOT NAME :

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

WISDOT/CADDS SHEET 49

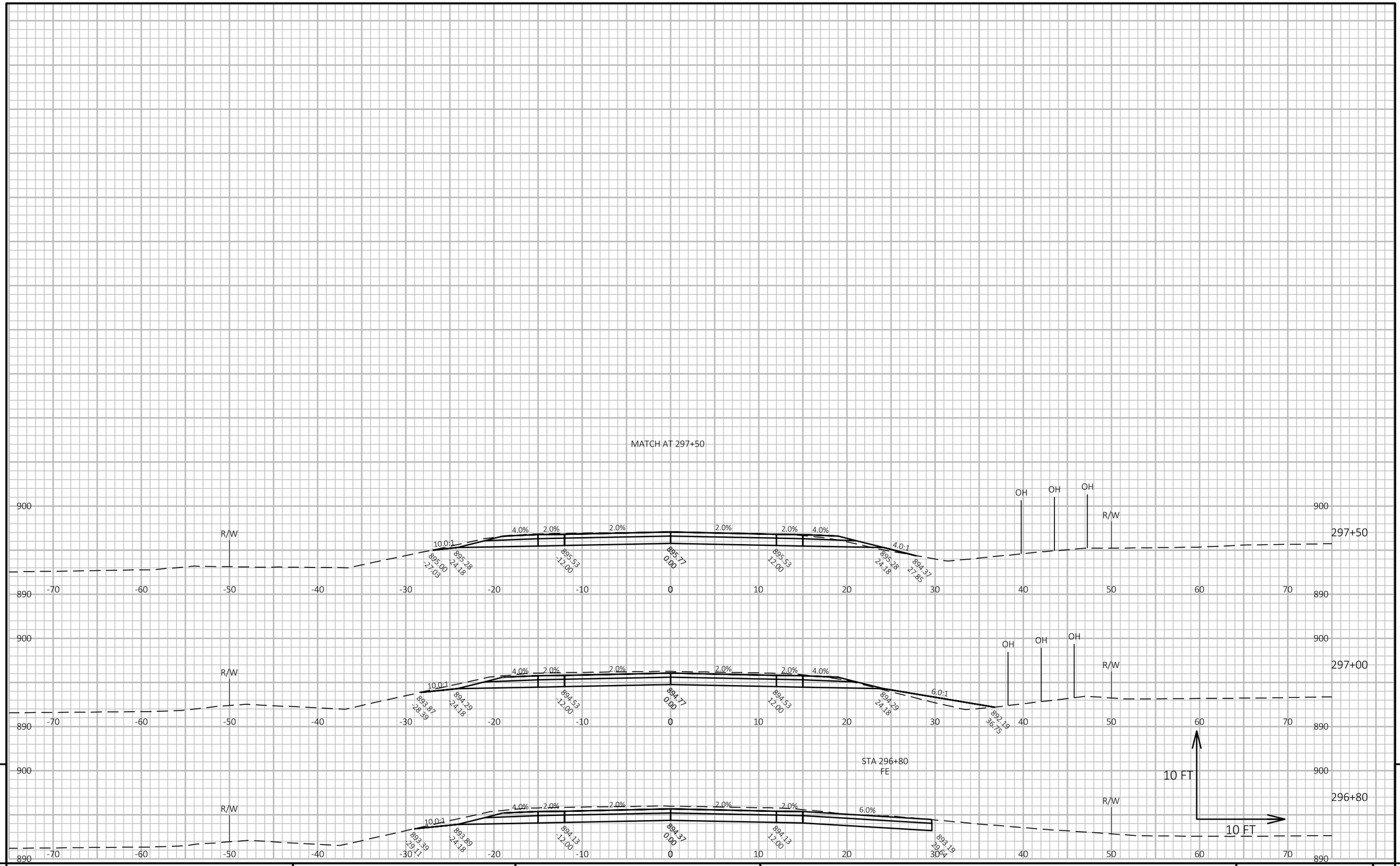


PROJECT NO: 8640-00-71, 8640-00-73	HWY: STH 79	COUNTY: DUNN	CROSS SECTIONS: COON CREEK CROSSING	SHEET 101	E

FILE NAME : P:\90S\93\00093461\CADD\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090209_XS

PLOT DATE : 4/25/2022 4:40 PM PLOT BY : COURTNEY ROOYAKKERS PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 8640-00-71, 8640-00-73	HWY: STH 79	COUNTY: DUNN	CROSS SECTIONS: COON CREEK CROSSING	SHEET 102	E

FILE NAME : P:\90S\93\00093461\CADD\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090210_XS

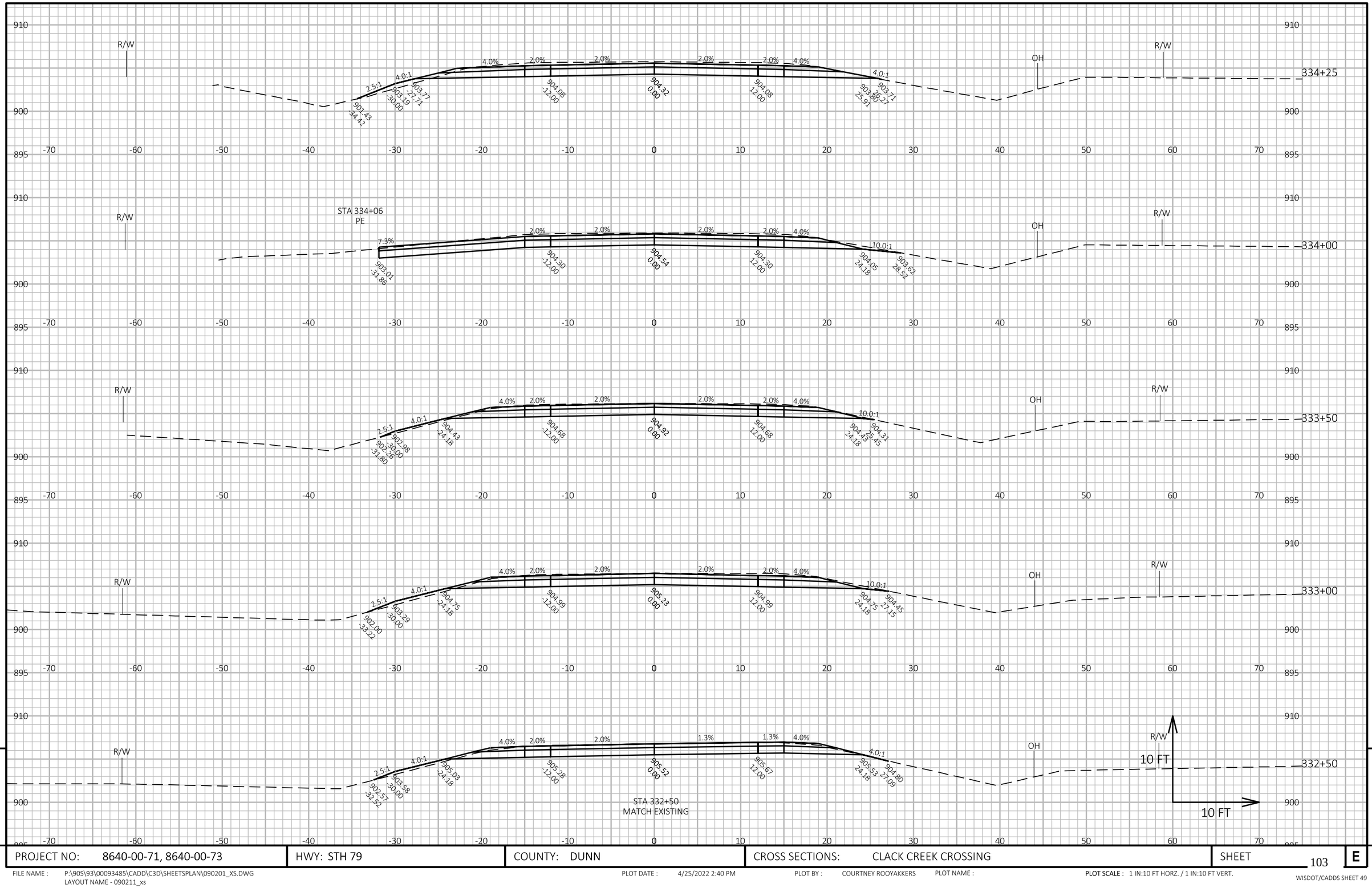
PLOT DATE : 4/25/2022 4:40 PM

PLOT BY : COURTNEY ROOYAKKERS

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 8640-00-71, 8640-00-73	HWY: STH 79	COUNTY: DUNN	CROSS SECTIONS: CLACK CREEK CROSSING	SHEET 103	E

FILE NAME : P:\90S\93\00093485\CADD\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090211_xs

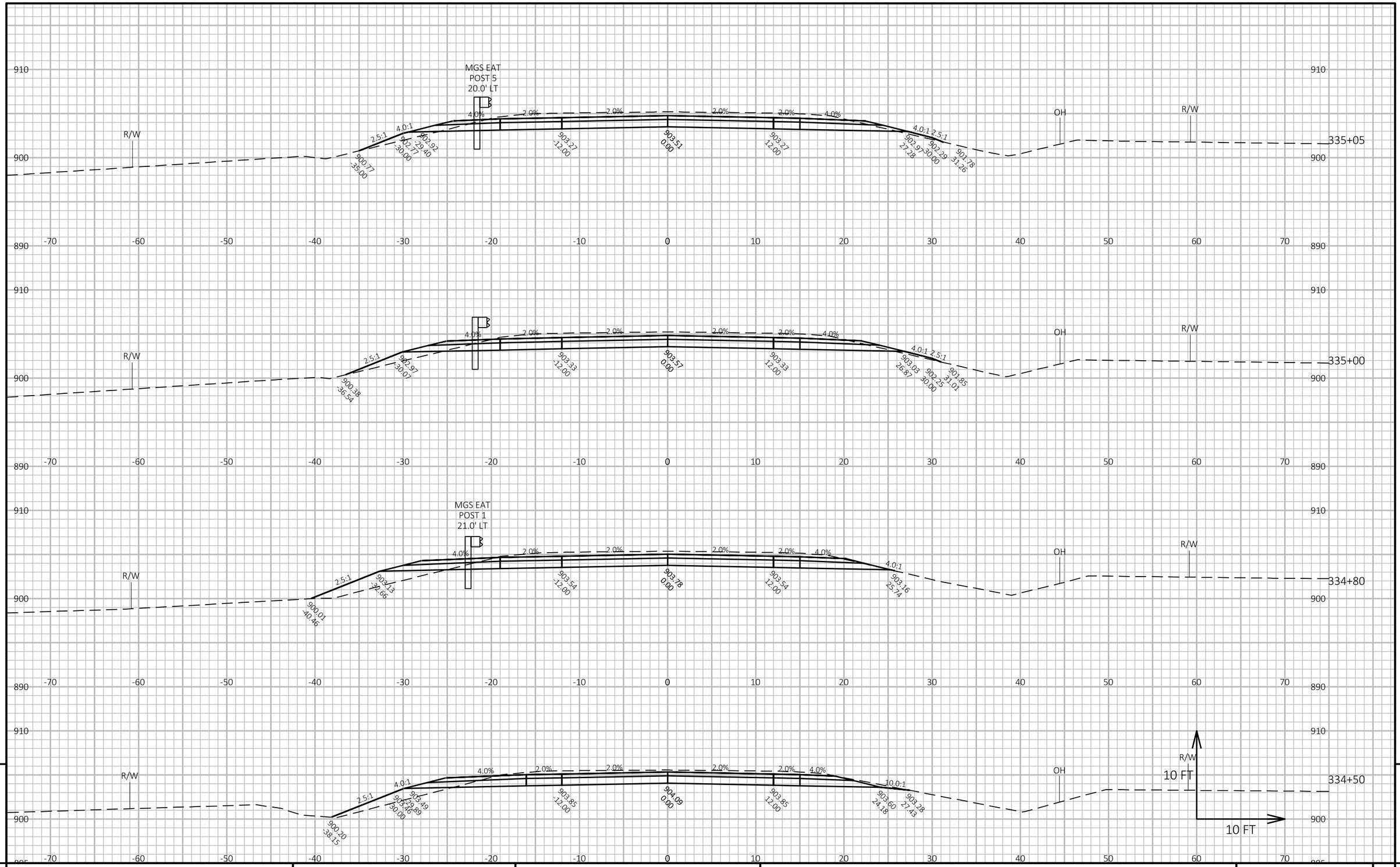
PLOT DATE : 4/25/2022 2:40 PM

PLOT BY : COURTNEY ROOYAKKERS

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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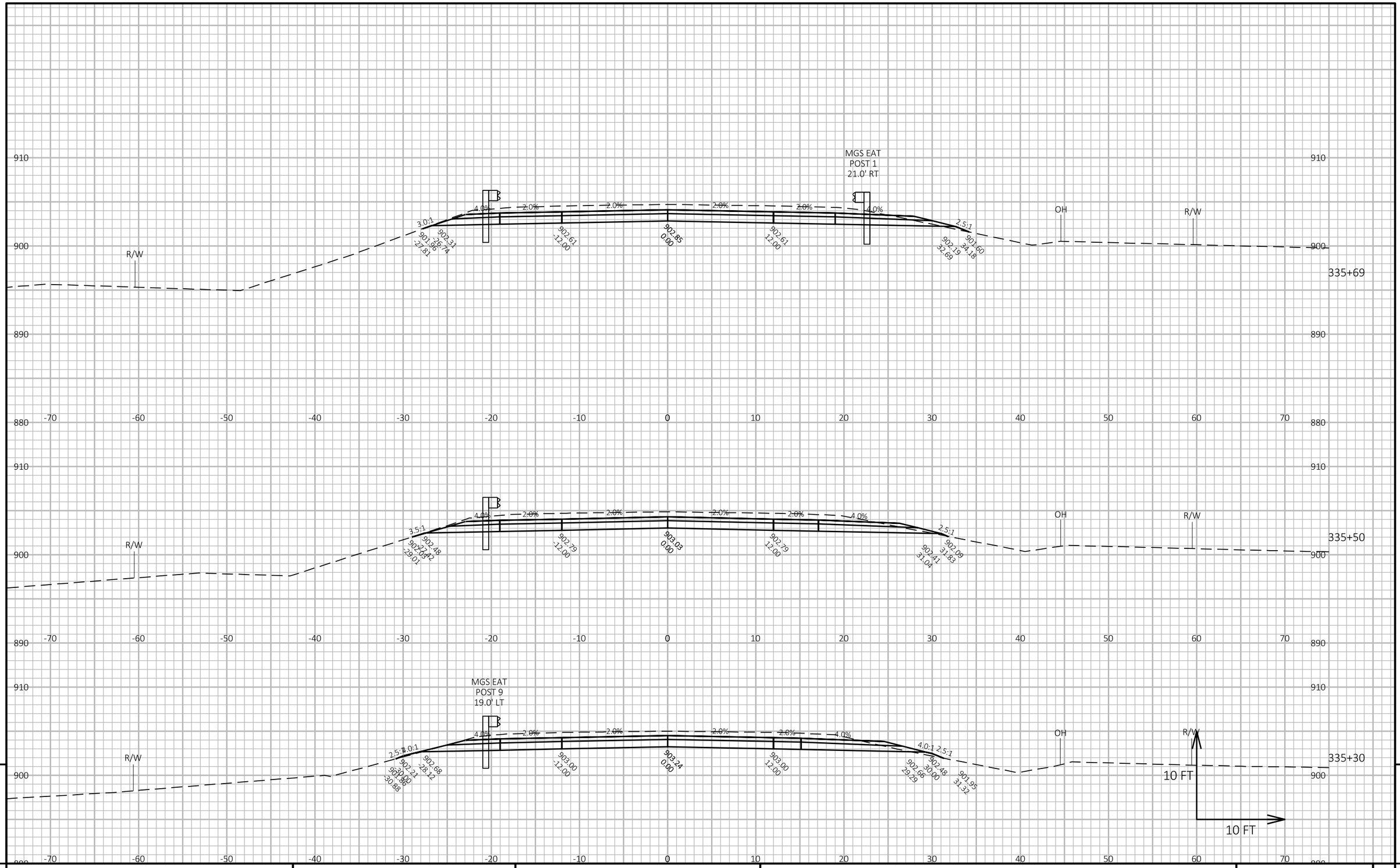
PROJECT NO: 8640-00-71, 8640-00-73	HWY: STH 79	COUNTY: DUNN	CROSS SECTIONS: CLACK CREEK CROSSING	SHEET 104	E

FILE NAME : P:\90S\93\00093485\CADD\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090212_xs

PLOT DATE : 4/25/2022 2:40 PM PLOT BY : COURTNEY ROOYAKKERS PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 8640-00-71, 8640-00-73	HWY: STH 79	COUNTY: DUNN	CROSS SECTIONS: CLACK CREEK CROSSING	SHEET 105	E

FILE NAME : P:\90S\93\00093485\CADD\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090213_xs

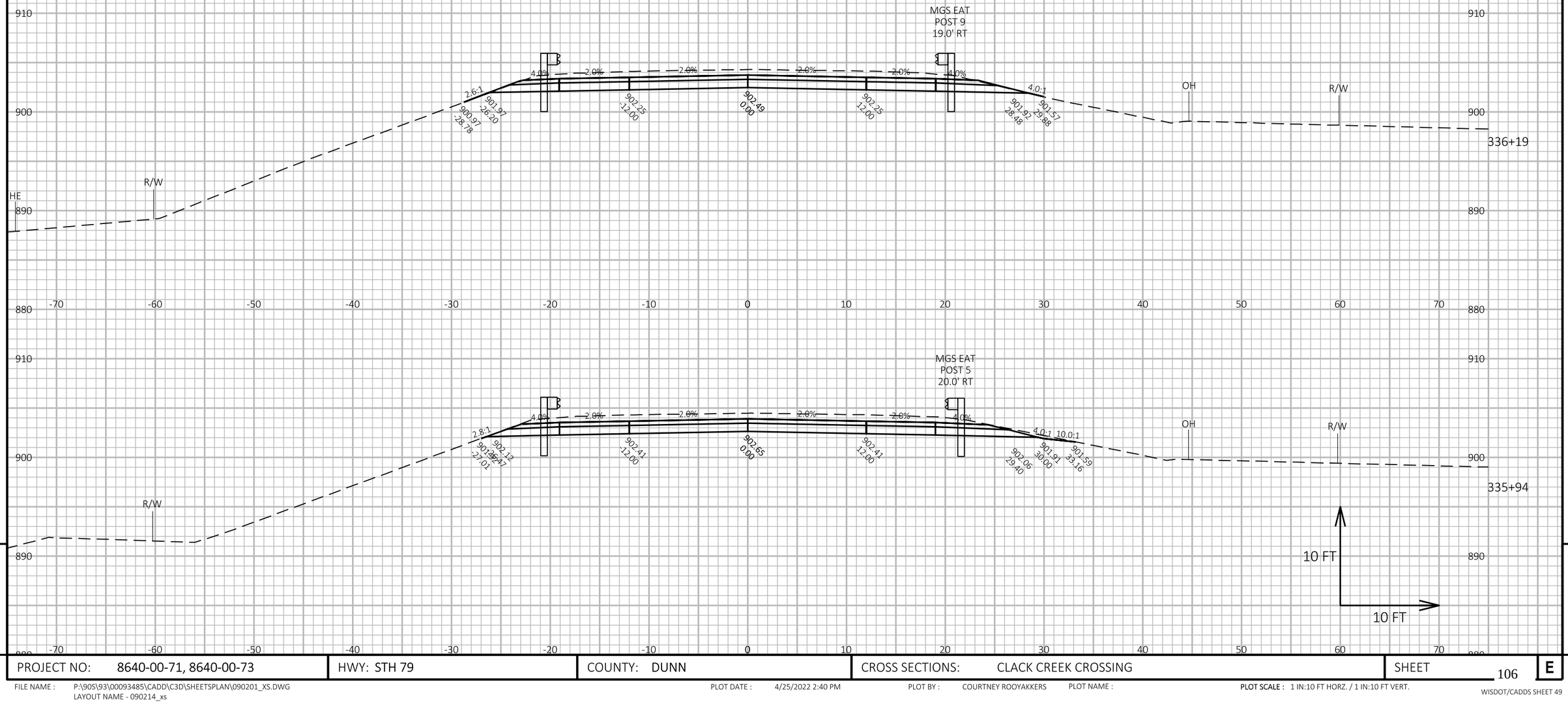
PLOT DATE : 4/25/2022 2:40 PM

PLOT BY : COURTNEY ROOYAKKERS

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 8640-00-71, 8640-00-73	HWY: STH 79	COUNTY: DUNN	CROSS SECTIONS: CLACK CREEK CROSSING	SHEET 106	E

FILE NAME : P:\90S\93\00093485\CADD\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090214_xs

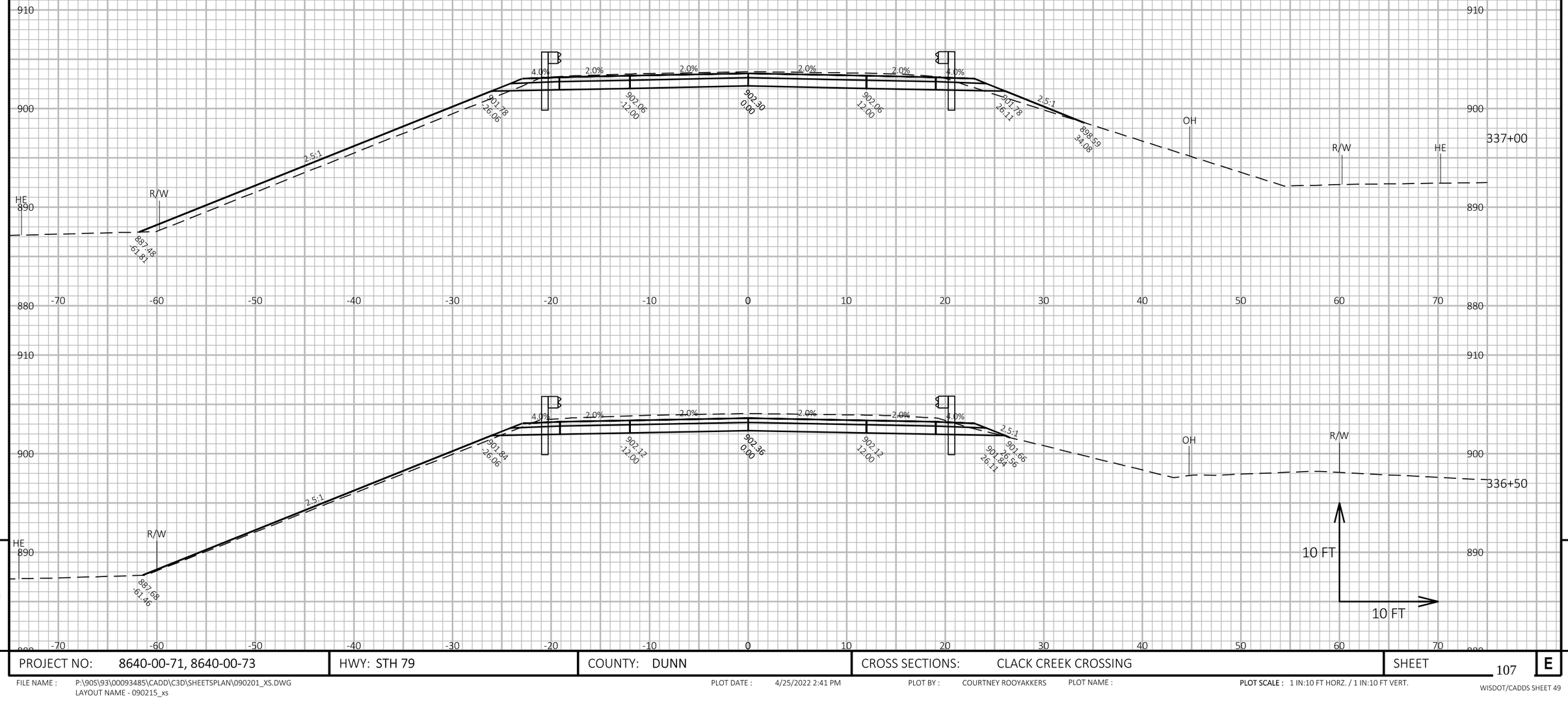
PLOT DATE : 4/25/2022 2:40 PM

PLOT BY : COURTNEY ROOYAKKERS

PLOT NAME :

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

WISDOT/CADDS SHEET 49



PROJECT NO: 8640-00-71, 8640-00-73	HWY: STH 79	COUNTY: DUNN	CROSS SECTIONS: CLACK CREEK CROSSING	SHEET 107 E

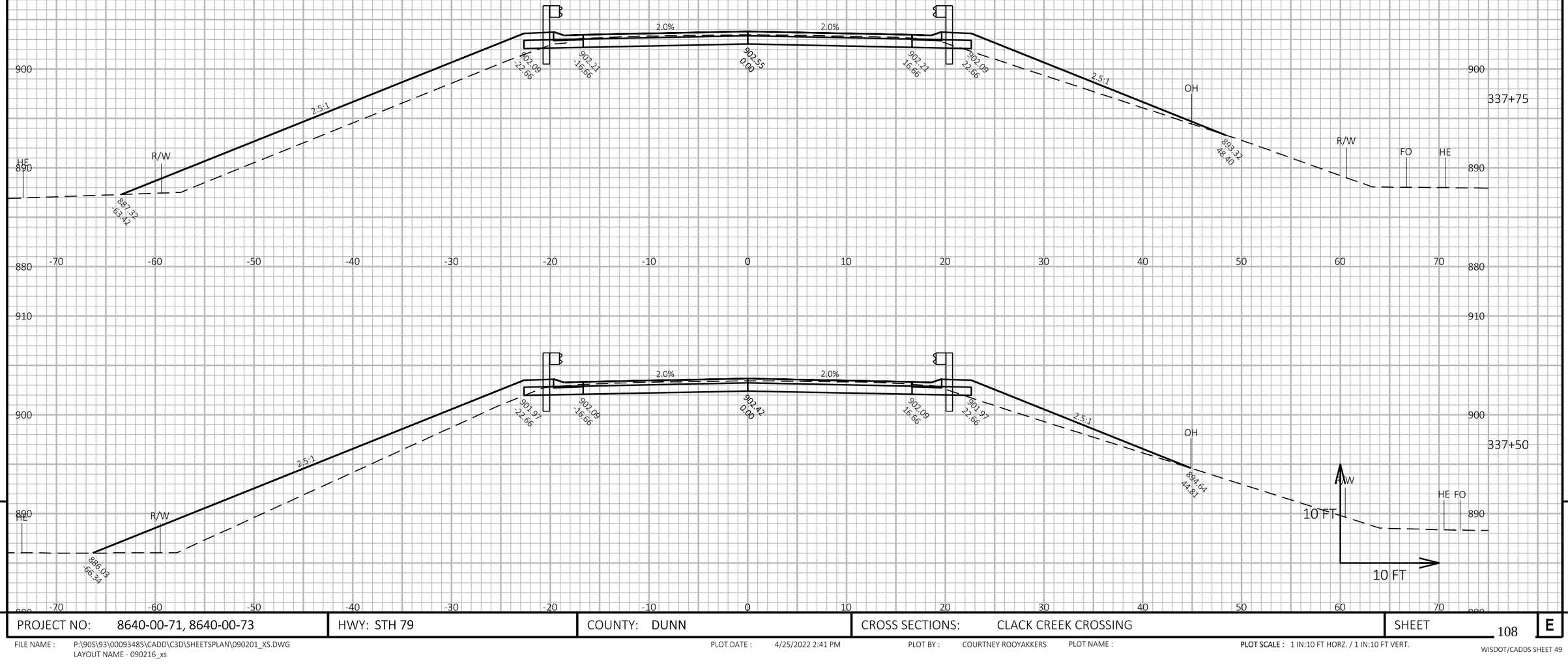
FILE NAME : P:\90S\93\00093485\CADD\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090215_xs

PLOT DATE : 4/25/2022 2:41 PM PLOT BY : COURTNEY ROOYAKKERS PLOT NAME :

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

WISDOT/CADDS SHEET 49

STRUCTURE B-17-0369



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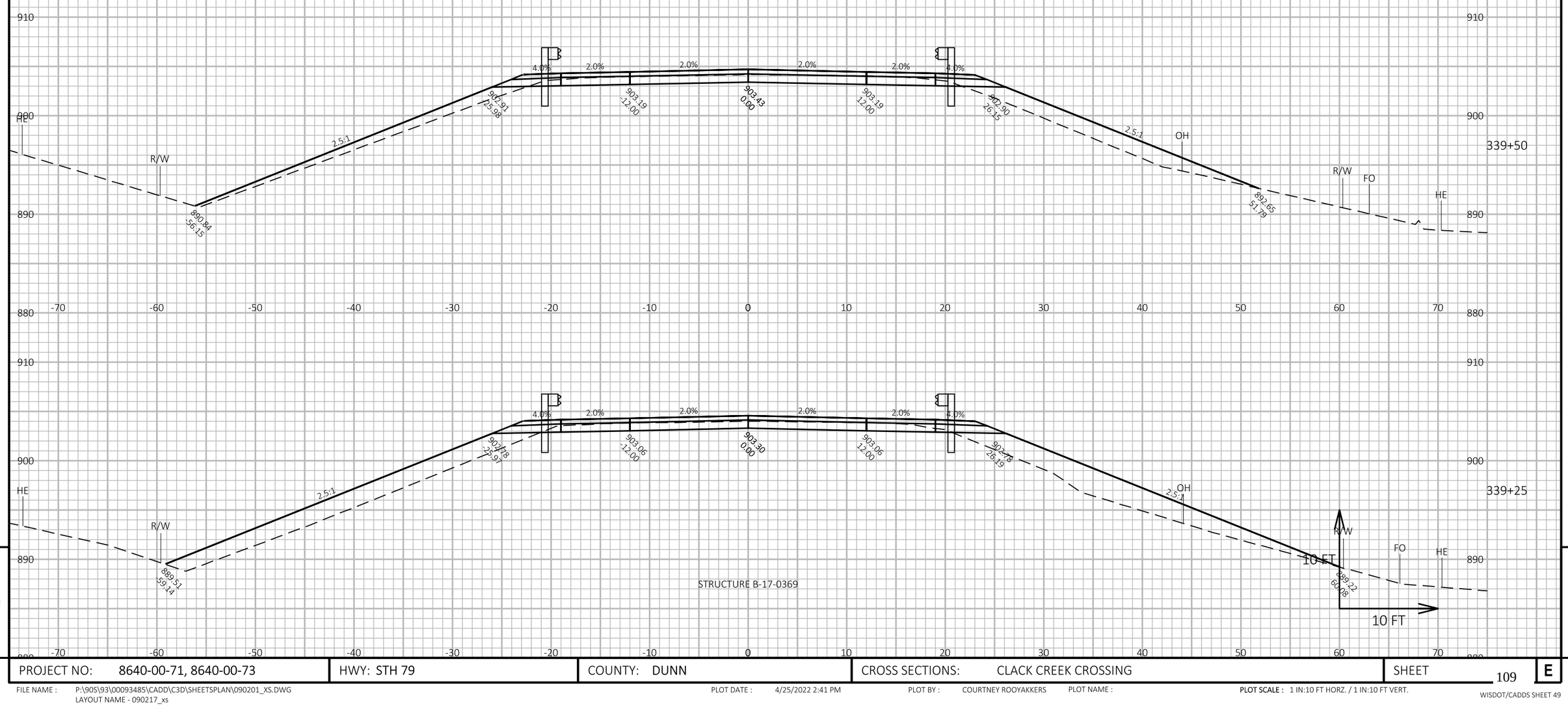
PROJECT NO: 8640-00-71, 8640-00-73	HWY: STH 79	COUNTY: DUNN	CROSS SECTIONS: CLACK CREEK CROSSING	SHEET 108	E

FILE NAME : P:\90S\93\00093485\CADD\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090216_xs

PLOT DATE : 4/25/2022 2:41 PM PLOT BY : COURTNEY ROOYAKKERS PLOT NAME :

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

WISDOT/CADDS SHEET 49



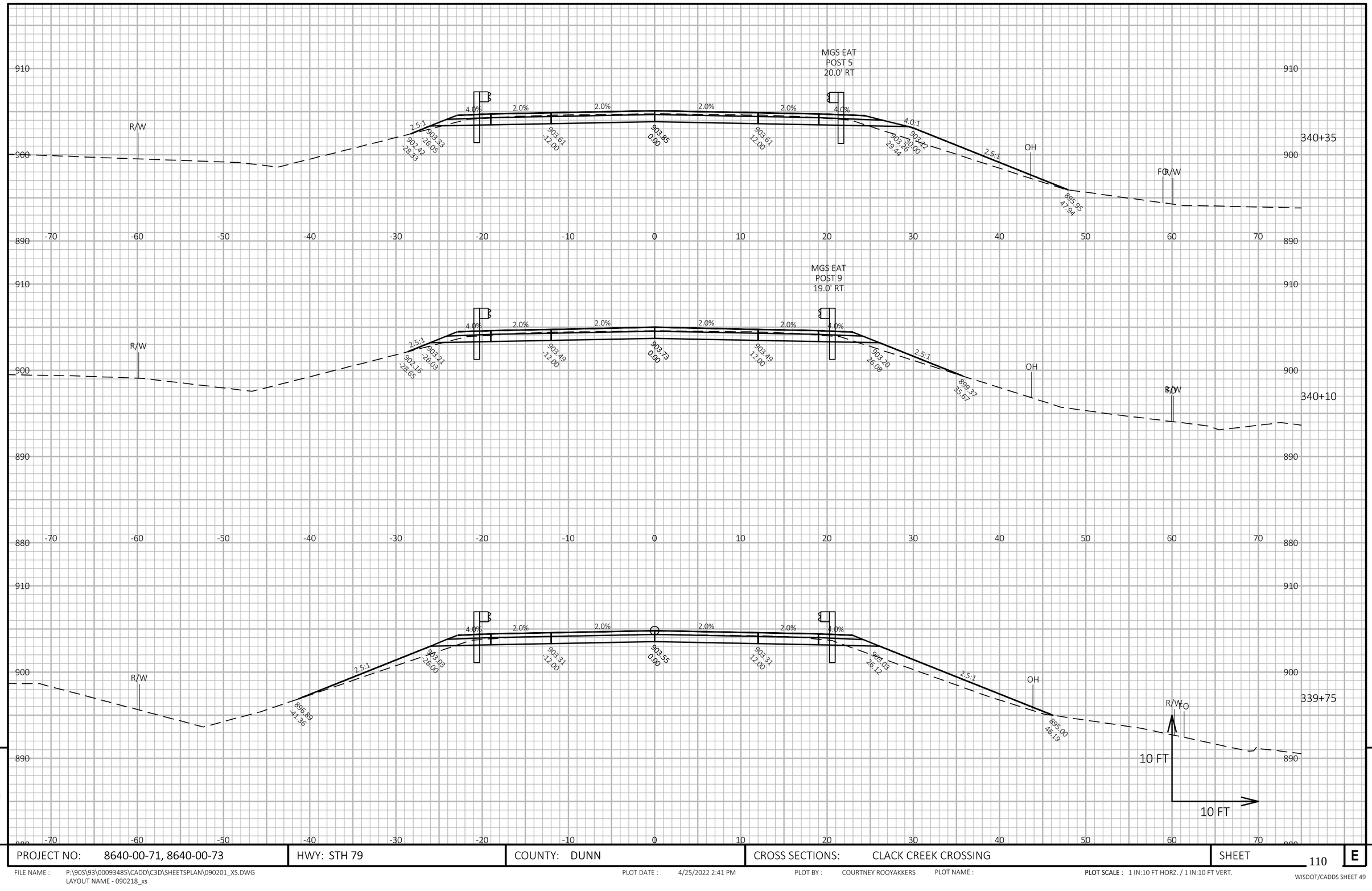
PROJECT NO: 8640-00-71, 8640-00-73	HWY: STH 79	COUNTY: DUNN	CROSS SECTIONS: CLACK CREEK CROSSING	SHEET 109	E

FILE NAME : P:\90S\93\00093485\CADD\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090217_xs

PLOT DATE : 4/25/2022 2:41 PM PLOT BY : COURTNEY ROOYAKKERS PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 8640-00-71, 8640-00-73	HWY: STH 79	COUNTY: DUNN	CROSS SECTIONS: CLACK CREEK CROSSING	SHEET 110	E

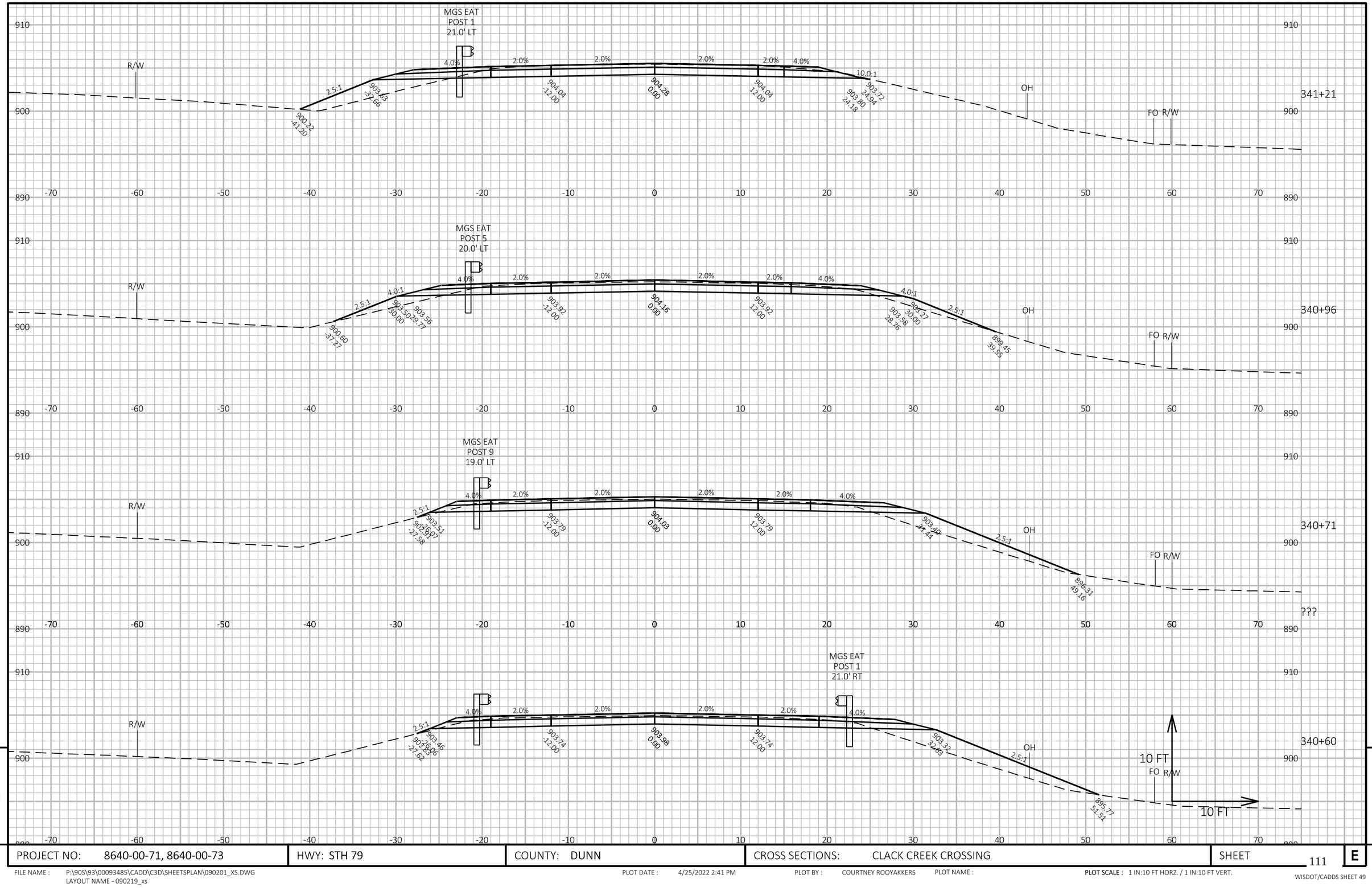
FILE NAME : P:\90S\93\00093485\CADD\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090218_xs

PLOT DATE : 4/25/2022 2:41 PM

PLOT BY : COURTNEY ROOYAKKERS PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 8640-00-71, 8640-00-73	HWY: STH 79	COUNTY: DUNN	CROSS SECTIONS: CLACK CREEK CROSSING	SHEET 111	E

FILE NAME : P:\90S\93\00093485\CADD\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 090219_xs

PLOT DATE : 4/25/2022 2:41 PM

PLOT BY : COURTNEY ROOYAKKERS

PLOT NAME :

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

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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