EAU

PROJECT ID: 7590-00-73

WITH: N/A

COUNTY: EAU CLAIRE

NOVEMBER 2024

ORDER OF SHEETS

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

TOTAL SHEETS = 288

49

N

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

ELEVA - EAU CLAIRE

SOUTH COUNTY LINE TO CEDAR ROAD

STH 93

EAU CLAIRE COUNTY

STATE PROJECT NUMBER
7590-00-73

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
7590-00-73	WISC 2025045	1

DESIGN DESIGNATION

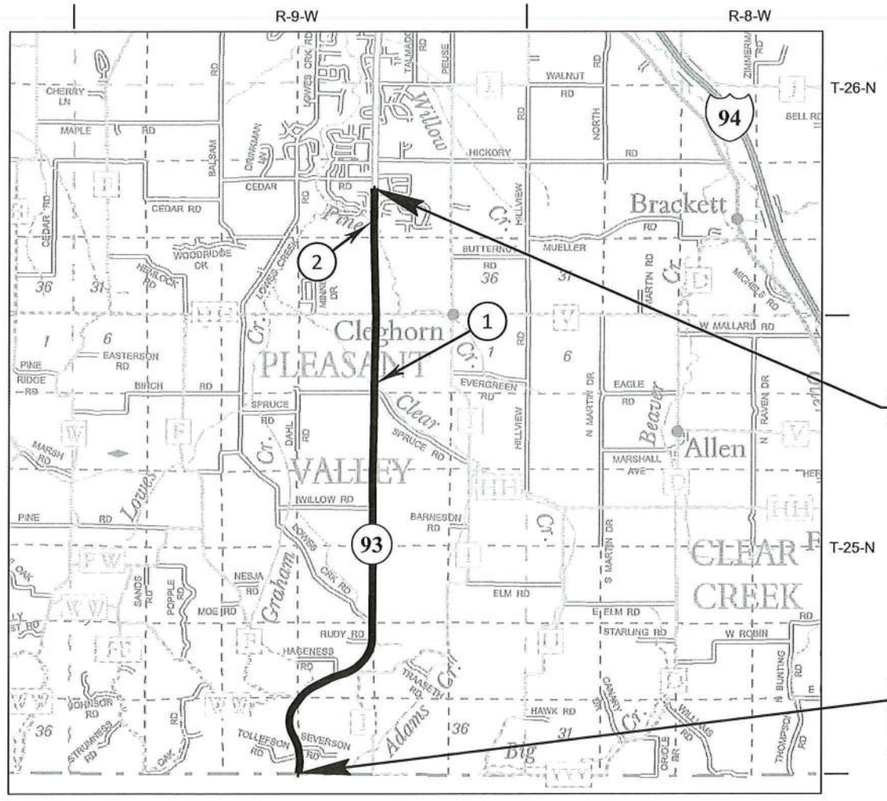
A.A.D.T.	2026	=	5,080
A.A.D.T.	2046	=	5,440
D.H.V.		=	275
D.D.		=	50/50
T.		=	19.9%
DESIGN SPEED		=	55 MPH
ESALS		=	1,450,000

CONVENTIONAL SYMBOLS

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

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

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



END PROJECT
STA 452+98

1 STRUCTURE B-18-241
STA 316+02
(CLEAR CREEK)

2 STRUCTURE B-18-251
STA 426+17
(PINE CREEK)

BEGIN PROJECT
STA 15+25
Y=200,089.2453
X=347,369.6071

LAYOUT

SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 8.290 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), EAU CLAIRE 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

SEH
Building a Better World for All of Us™

Short Elliott Hendrickson Inc.
10 North Bridge Street
Chippewa Falls, WI 54729-2550
715.720.6200 main | 888.908.8166 fax
800.472.5881 toll free | www.sehinc.com

WISCONSIN
BRETT L. HOLLISTER
40868
EAU CLAIRE
WI
PROFESSIONAL ENGINEER

7/25/2024 (Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	WISDOT/SEH
Designer	SEH
Project Manager	DAN RAMBO, PE
Regional Examiner	WISDOT NW REGION
Regional Supervisor	NICOLE PASSUELLO, PE

APPROVED FOR THE DEPARTMENT

DATE: 7/25/2024 (Signature)

E

STANDARD ABBREVIATIONS

ABUT	ABUTMENT
AC	ACRE
AGG	AGGREGATE
AECPRC	APRON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE
AECPCS	APRON ENDWALL FOR CULVERT PIPE CORRUGATED STEEL
ASPH	ASPHALTIC
AVG	AVERAGE
ADT	AVERAGE DAILY TRAFFIC
BF	BACK FACE
BM	BENCH MARK
BR	BRIDGE
CE	COMMERCIAL ENTRANCE
C/L	CENTER LINE
Δ	CENTRAL ANGLE OR DELTA
COB	CENTER OF BARRIER
CONC	CONCRETE
CPRC	CULVERT PIPE REINFORCED CONCRETE
CPRCHE	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL
CR	CREEK
CY	CUBIC YARD
C&G	CURB AND GUTTER
D	DEGREE OF CURVE
DHV	DESIGN HOUR VOLUME
DISCH	DISCHARGE
DG	DITCH GRADE
DWY	DRIVEWAY
X	EAST GRID COORDINATE
EAT	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
EOR	END POINT OF RADIUS
EL	ELEVATION
ENT	ENTRANCE
ESALS	EQUIVALENT SINGLE AXLE LOADS
EXC	EXCAVATION
EBS	EXCAVATION BELOW SUBGRADE
EXIST	EXISTING
FC	FACE OF CURB
FF	FACE TO FACE
FERT	FERTILIZE
FE	FIELD ENTRANCE
FL	FLOW LINE
FO	FIBER OPTIC
CWT	HUNDREDWEIGHT
HYD	HYDRANT
ID	INSIDE DIAMETER
INV	INVERT
IP	IRON PIPE ON PIN
LHF	LEFT-HAND FORWARD
L	LENGTH OF CURVE
LF	LINEAR FOOT
LC	LONG CHORD OF CURVE
LS	LUMP SUM
MH	MANHOLE
MOR	MID POINT OF RADIUS
NC	NORMAL CROWN
NO	NUMBER
OBLIT	OBLITERATE
PAVT	PAVEMENT
PE	PRIVATE ENTRANCE
PVRC	POINT OF VERTICAL REVERSE CURVE
QOR	QUARTER POINT OF RADIUS
R	RADIUS
REQ'D	REQUIRED
RES	RESIDENCE OR RESIDENTIAL
RHF	RIGHT-HAND FORWARD
R/W	RIGHT-OF-WAY
R	RIVER
RDWY	ROADWAY
R/L	REFERENCE LINE
SALV	SALVAGED
SAN	SANITARY SEWER
SF	SQUARE FEET
SY	SQUARE YARD
SDD	STANDARD DETAIL DRAWINGS
STA	STATION
SS	STORM SEWER
SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
SE	SUPERELEVATION RATE
TC	TOP OF CURB
T OR TN	TOWN
T	TRUCKS (PERCENT OF)
TYP	TYPICAL
VAR	VARIABLE
VC	VERTICAL CURVE
Y	NORTH GRID COORDINATE
YD	YARD

RUNOFF COEFFICIENT TABLE

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

TOTAL PROJECT AREA = 163 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 4.5 ACRES

DNR AREA LIAISON:

DNR WEST CENTRAL REGION HEADQUARTERS
1300 WEST CLAIREMONT AVENUE
EAU CLAIRE, WI 54701
TELEPHONE: 715.934.9014
ATTENTION: LEAH NICOL
EMAIL: LEAH.NICOL@WISCONSIN.GOV

WISDOT CONTACT:

WISCONSIN DEPT OF TRANSPORTATION
NORTHWEST REGION
718 W. CLAIREMONT AVE.
EAU CLAIRE, WI 54701
TELEPHONE: 715.836.5181
ATTENTION: DANIEL RAMBO
EMAIL: DANIEL.RAMBO@DOT.WI.GOV

DESIGN CONTACT:

SEH INC.
10 NORTH BRIDGE STREET
CHIPPEWA FALLS, WI 54729-2550
TELEPHONE: 715.720.6253
ATTENTION: BRETT HOLLISTER
EMAIL: BHOLLISTER@SEHINC.COM

UTILITY CONTACT LIST:

BRIGHTSPEED - COMMUNICATIONS
BRIAN HUHN
425 ELLINGSON AVENUE
HAWKINS, WI 54530
(980) 376-15759 (OFFICE)
(715) 563-8294 (MOBILE)
BRIAN.HUHN@BRIGHTSPEED.COM

SPECTRUM - COMMUNICATIONS
RYAN LUCKEN
12401 MCCCANN DR
ALTOONA, WI 54720
(715) 833-7390
RYAN.LUCKEN@CHARTER.COM

EAU CLAIRE ENERGY COOPERATIVE - ELECTRIC
JOSH VANINGAN
8214 US HIGHWAY 12
P.O. BOX 368
FALL CREEK, WI 54742-0368
(715) 832-6473
JVANINGAN@ECEC.COM

FLINT HILLS RESOURCE GROUP - GAS
SHELDON RAU
13775 CLARK ROAD
ROSEMOUNT, MN 55068
SHELDON.RAU@FHR.COM

RIVERLAND ENERGY COOPERATIVE - ELECTRIC
JOSH ABRAMCZAK
N28988 STATE ROAD 93
P.O. BOX 277
ARCADIA, WI 54612-0277
(608) 323-3381
JABRAMCZAK@RIVERLANDENERGY.COM

TRI-COUNTY COMMUNICATIONS COOPERATIVE - COMMUNICATIONS
JAY KONSELA
417 5TH AVE N
P.O. BOX 578
STRUM, WI 54770
(715) 530-4245
JKONSELA@TCCPRO.NET

XCEL ENERGY - GAS
BECKY MARQUARDT
1400 WESTERN AVE
EAU CLAIRE, WI 54701
(715) 737-1590
REBECCA.K.MARQUARDT@XCELENERGY.COM

ORDER OF SECTION 2 DETAIL SHEETS:

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
EROSION CONTROL
TRAFFIC CONTROL
DETOUR

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

GENERAL NOTES:

1. NO TREES OR SHRUBS SHALL BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.
2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
3. THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK. ANY LOCAL MUNICIPAL UTILITY WHICH IS NOT A MEMBER OF THE DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.
4. PRIOR TO ORDERING DRAINAGE PIPES AND STRUCTURES, THE CONTRACTOR SHALL VERIFY RELATED DRAINAGE INFORMATION IN THE PLANS WITH THE ENGINEER.
5. INLET AND DISCHARGE ELEVATIONS FOR DRAINAGE STRUCTURES SHOWN ON THE PLAN MAY BE ADJUSTED BY THE ENGINEER TO FIT FIELD CONDITIONS.
6. WETLANDS, WATERWAYS, AND OTHER ENVIRONMENTALLY SENSITIVE AREAS SHALL BE PROTECTED AT ALL TIMES. DO NOT STORE EQUIPMENT OR MATERIALS NEAR THESE SITES UNLESS APPROVED BY THE ENGINEER.
7. BROKEN CONCRETE CONTAINING RE-BAR SHALL NOT BE USED AS RIPRAP.
8. TRAFFIC CONTROL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
9. REMOVAL OF EROSION CONTROL DEVICES IS INCLUDED IN THE COST OF THEIR RESPECTIVE BID ITEMS.
10. THE EROSION CONTROL FEATURES AS SHOWN IN THE PLANS ARE AT SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.
11. ASPHALTIC SURFACES SHALL BE SAWCUT AT THE MATCH LINE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
12. DISTURBED AREAS WITHIN THE RIGHT OF WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE SALVAGE TOPSOILED, FERTILIZED AND SEEDED.
13. FERTILIZER SHALL NOT BE USED WITHIN 20 FEET OF WETLANDS.
14. A CONVERSION FACTOR OF 2.0 TONS/CY IS USED TO ESTIMATE QUANTITIES FOR BASE AGGREGATE DENSE.
15. APPLY TACK COAT AT A RATE OF 0.07 GAL/SY TO MILLED SURFACE AND 0.05 GA/SY BETWEEN LAYERS OF HMA PAVEMENT.
16. HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LB/SY/IN.
17. THE CONTRACTOR'S PAVING OPERATIONS SHALL BE CONSISTENT WITH THE PLAN AND TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING OR TURNING LANE.

2

2

N

TREMPEALEAU COUNTY
EAU CLAIRE COUNTY

TOWN OF PLEASANT VALLEY

CTH F

CTH WW

CTH F

TOLLEFSON RD

SEVERSON RD

GRAHAM CREEK

HAGENESS RD

STH 93

15

50

100

BEGIN PROJECT 7590-00-73
STA 15+25.00

CTH I

CTH I

RUDY RD

LOWES CREEK RD

KELLEY CREEK

KELLEY CREEK

CTH I

STH 93

150

200

250

300

WILLOW RD

SPRUCE RD

CLEAR CREEK

STA 138+54 & 138+64
2-43"x68" CULVERT PIPE REINFORCED
CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III
CULVERT #18093018974, #18093083486

STA 355+32
CULVERT PIPE REINFORCED
CONCRETE 48-INCH
CULVERT #18093022322

CTH HH

EXISTING STRUCTURE
C-18-600

EXISTING STRUCTURE
B-18-942

STH 93

350

400

450

ASPEN RD

CEDAR RD

STH 93

PINE CREEK

PROPOSED STRUCTURE
B-18-251

NICOLE CT

CEDAR RD

SPRUCE RD

PROPOSED STRUCTURE
B-18-241

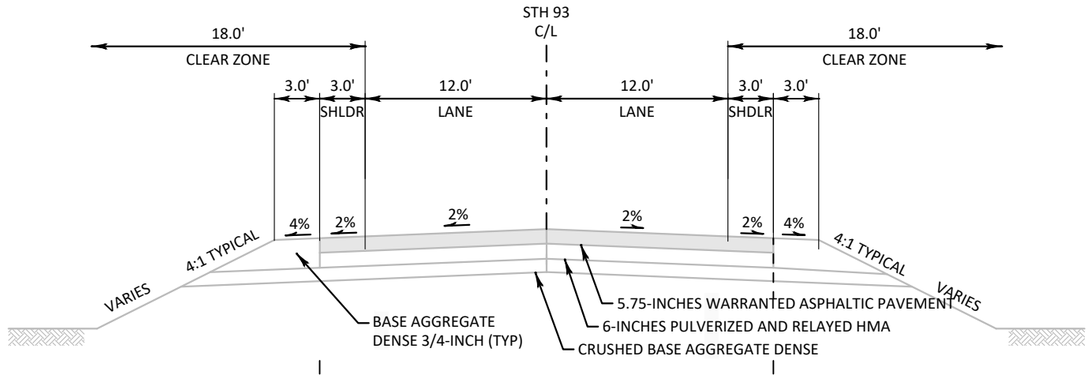
STA 336+44
CULVERT PIPE
REINFORCED CONCRETE
36-INCH
CULVERT #18093018990

CTH HH

STA 348+41
CULVERT PIPE REINFORCED
CONCRETE 48-INCH
CULVERT #18093022321

END PROJECT 7550-00-73

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	PROJECT OVERVIEW	SHEET 3 E



TYPICAL EXISTING SECTION

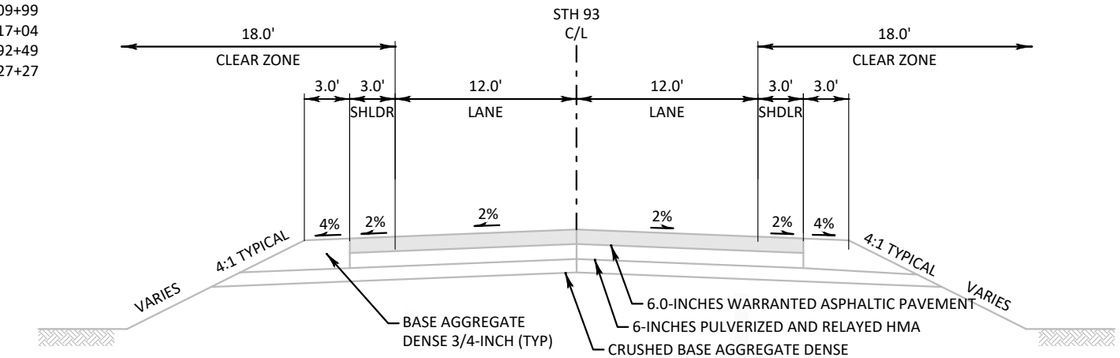
STH 93

STA 15+25 - STA 310+00

TYPICAL EXISTING GUARDRAIL HALF SECTION

STH 93

LEFT	RIGHT
STA 17+42 - STA 26+36	STA 20+14 - STA 25+76
STA 31+73 - STA 39+70	STA 34+13 - STA 37+26
STA 56+55 - STA 67+91	STA 41+40 - STA 57+05
STA 84+74 - STA 90+78	STA 62+61 - STA 68+05
STA 117+25 - STA 126+60	STA 72+94 - STA 80+53
STA 195+91 - STA 201+34	STA 84+76 - STA 90+43
STA 228+02 - STA 234+90	STA 99+94 - STA 106+24
STA 272+68 - STA 279+10	STA 116+45 - STA 119+72
STA 306+15 - STA 309+95	STA 122+28 - STA 124+70
STA 314+93 - STA 317+64	STA 195+82 - STA 201+87
STA 388+04 - STA 392+02	STA 228+37 - STA 234+53
STA 424+98 - STA 427+65	STA 272+32 - STA 279+12
	STA 283+62 - STA 289+04
	STA 306+06 - STA 309+99
	STA 314+43 - STA 317+04
	STA 386+94 - STA 392+49
	STA 424+47 - STA 427+27



TYPICAL EXISTING SECTION

STH 93

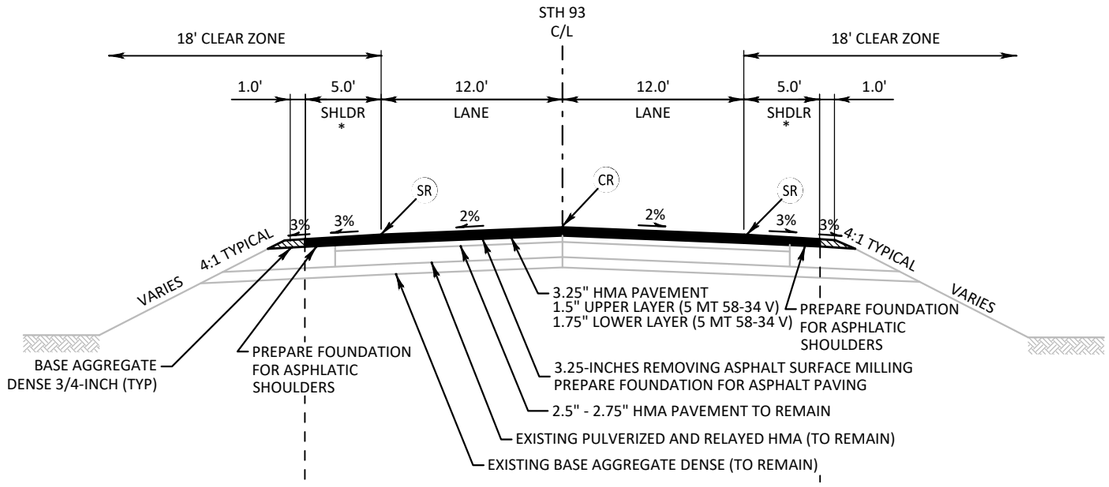
STA 310+00 - STA 452+98

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	TYPICAL SECTIONS	SHEET 4	E

TYPICAL PROPOSED GUARDRAIL HALF SECTION

STH 93

LEFT			RIGHT		
STA 17+07	-	STA 26+30	STA 20+15	-	STA 25+68
STA 31+70	-	STA 39+70	STA 33+98	-	STA 37+30
STA 56+46	-	STA 61+84	STA 41+39	-	STA 57+06
STA 61+98	-	STA 68+01	STA 62+59	-	STA 68+05
STA 84+73	-	STA 90+79	STA 72+57	-	STA 80+64
STA 117+25	-	STA 126+61	STA 84+72	-	STA 90+91
STA 195+90	-	STA 201+34	STA 99+93	-	STA 106+76
STA 227+96	-	STA 230+62	STA 116+35	-	STA 119+72
STA 230+90	-	STA 234+90	STA 122+01	-	STA 125+21
STA 272+67	-	STA 279+86	STA 195+19	-	STA 202+00
STA 306+19	-	STA 310+00	STA 228+36	-	STA 234+55
STA 314+92	-	STA 317+66	STA 272+31	-	STA 279+12
STA 388+02	-	STA 389+96	STA 283+61	-	STA 289+67
STA 390+14	-	STA 393+21	STA 306+06	-	STA 310+00
STA 424+97	-	STA 427+65	STA 314+41	-	STA 317+03
			STA 386+93	-	STA 393+12
			STA 424+47	-	STA 427+28

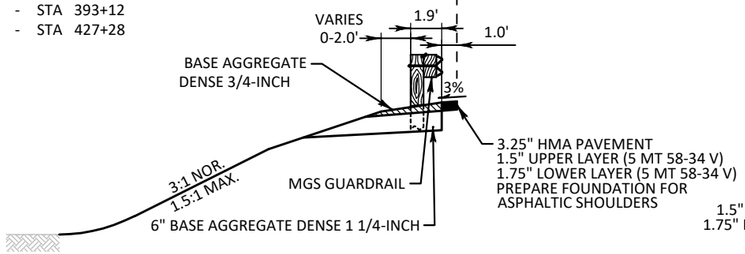


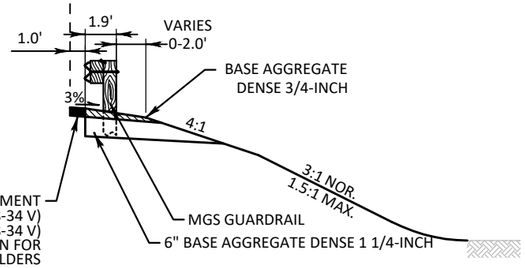
* 2' OF PAVED SHOULDER WIDENING, ASPHALTIC SHOULDER RUMBLE STRIPS 2-LANE RURAL AND PREPARING FOUNDATION FOR ASPHALTIC SHOULDERS TO BE PAID UNDER CATEGORY 0040

TYPICAL FINISHED SECTION

STH 93

STA 15+25 - STA 452+98



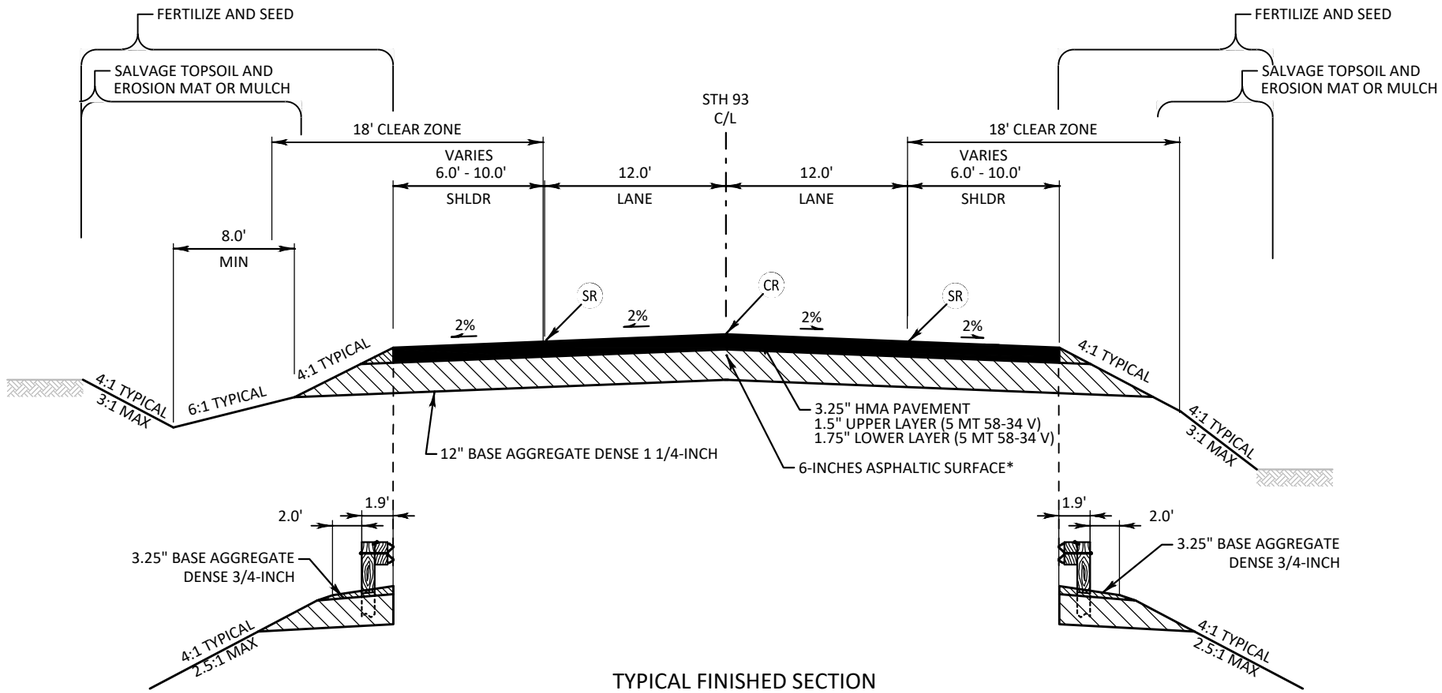


KEYNOTE LEGEND

(CR) ASPHALTIC RUMBLE STRIPS, CENTERLINE

(SR) ASPHALTIC RUMBLE STRIPS, SHOULDER

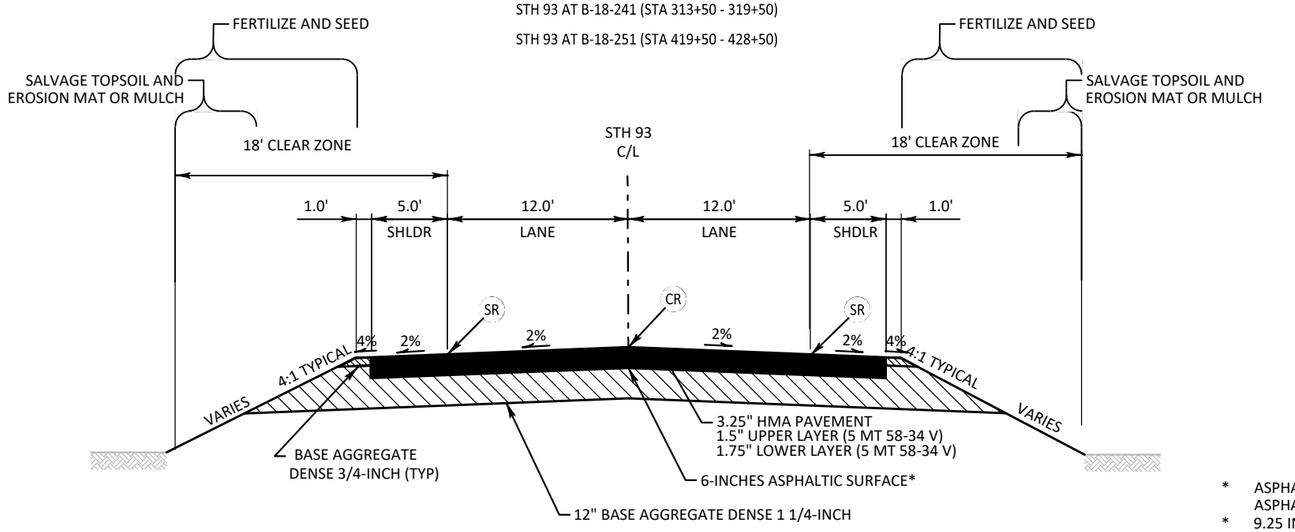
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	TYPICAL SECTIONS	SHEET 5 E



TYPICAL FINISHED SECTION
BRIDGE APPROACHES

STH 93 AT B-18-241 (STA 313+50 - 319+50)

STH 93 AT B-18-251 (STA 419+50 - 428+50)



TYPICAL FINISHED SECTION
CULVERT REPLACEMENT

STH 93

STA	138+12	- STA	139+03
STA	335+81	- STA	337+07
STA	348+10	- STA	349+18
STA	354+78	- STA	355+86

* ASPHALTIC SURFACE SHALL MEET A MINIMUM GRADE OF 3 MT 58-34V. ASPHALTIC SURFACE PLACED IN TWO 3-INCH LIFTS

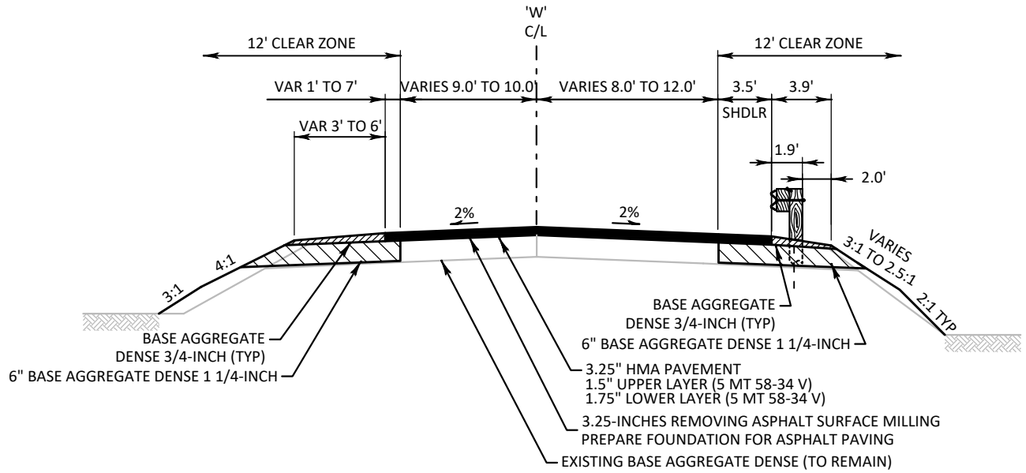
* 9.25 INCH ASPHALTIC SURFACE TO BE PLACED PRIOR TO MAINLINE MILLING AND PAVING OPERATIONS WITH 6.0" REMAINING AFTER MAINLINE MILLING

KEYNOTE LEGEND

(CR) ASPHALTIC RUMBLE STRIPS, CENTERLINE

(SR) ASPHALTIC RUMBLE STRIPS, SHOULDER

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	TYPICAL SECTIONS	SHEET 6 E



TYPICAL FINISHED SECTION

WILLOW ROAD

STA 10+37'W' - STA 12+23'W'

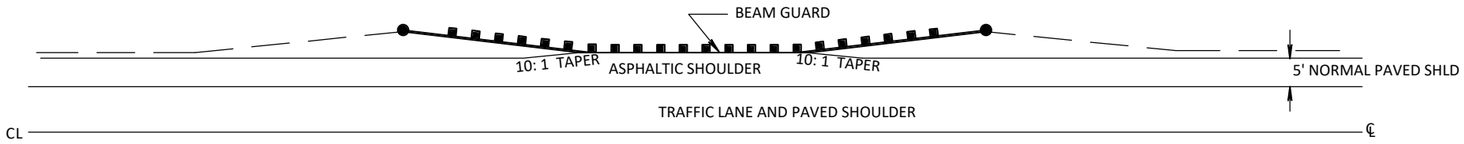
KEYNOTE LEGEND

(CR) ASPHALTIC RUMBLE STRIPS, CENTERLINE

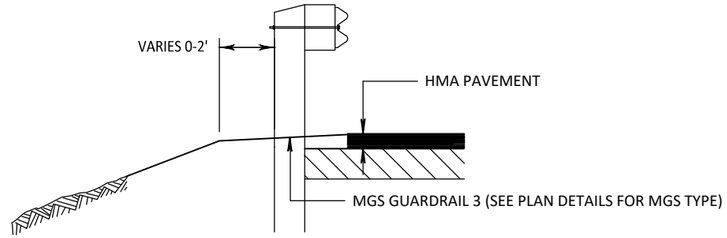
(SR) ASPHALTIC RUMBLE STRIPS, SHOULDER

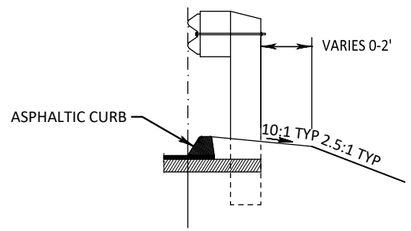
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	TYPICAL SECTIONS	SHEET 7	E

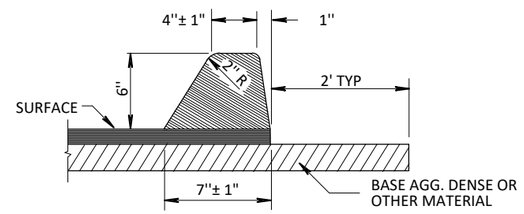
2



DETAIL FOR ASPHALTIC SHOULDER AT BEAM GUARD

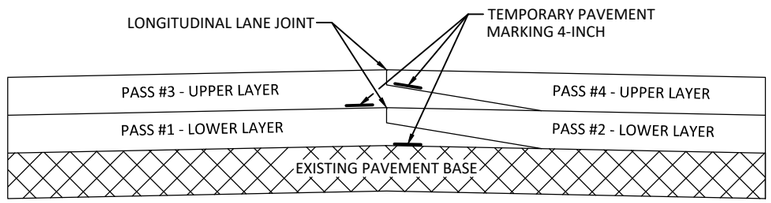




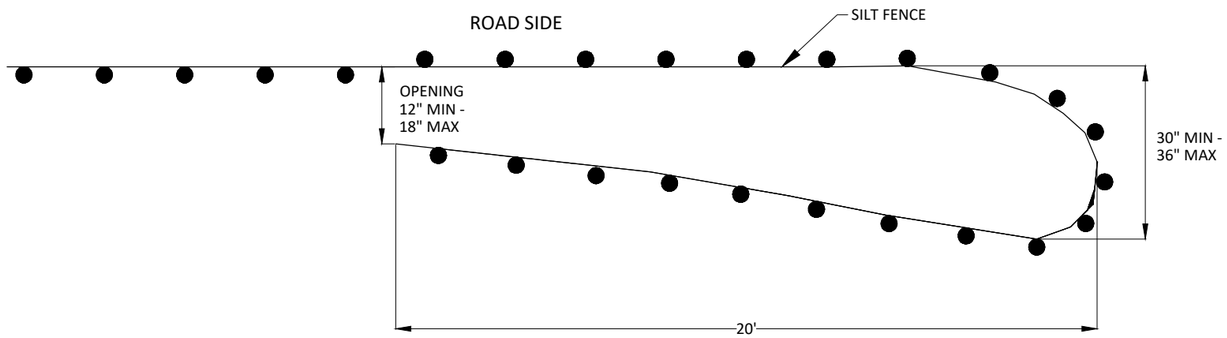


ASPHALTIC CURB DETAIL

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CONSTRUCTION DETAILS	SHEET 8	E



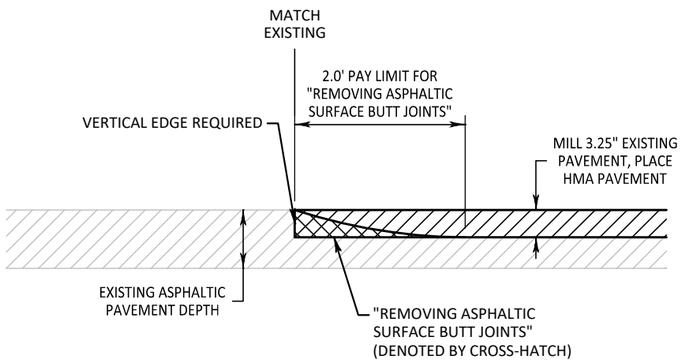
PAVEMENT MARKING DETAIL FOR TAPERED OVERLAPPING JOINTS IN HMA PAVEMENTS



PLAN VIEW

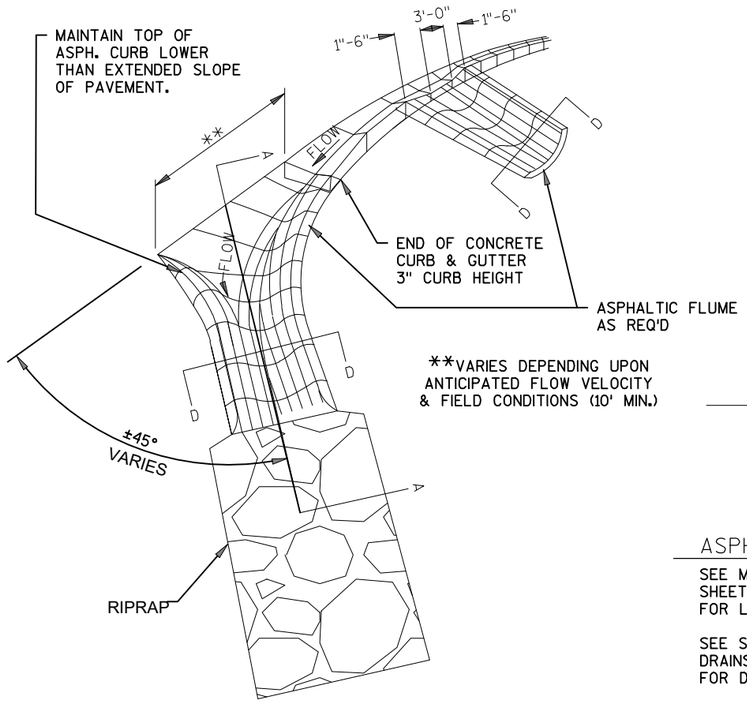
TEMPORARY SMALL ANIMAL TURN-AROUND

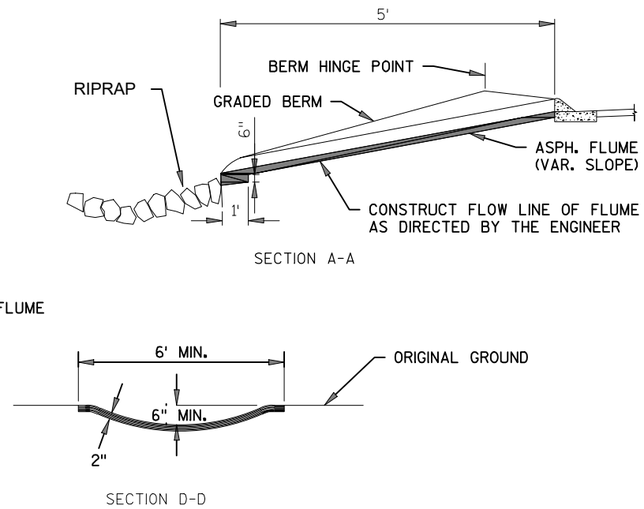
GENERAL NOTES:
SILT FENCE POSTS FOR THE TURN-AROUND SHOULD BE ON THE OUTSIDE OF THE TURN-AROUND AND TRENCHED IN ACCORDING TO SILT FENCE REQUIREMENTS. THE PURPOSE OF THE TURN-AROUNDS ARE TO REDIRECT SMALL REPTILES AWAY FROM THE CONSTRUCTION ZONE.



BUTT JOINT TO MATCH EXISTING

STA 15+25 (BEGIN PROJECT)
STA 452+98 (END PROJECT)
STA 10+37'W' (WILLOW ROAD)

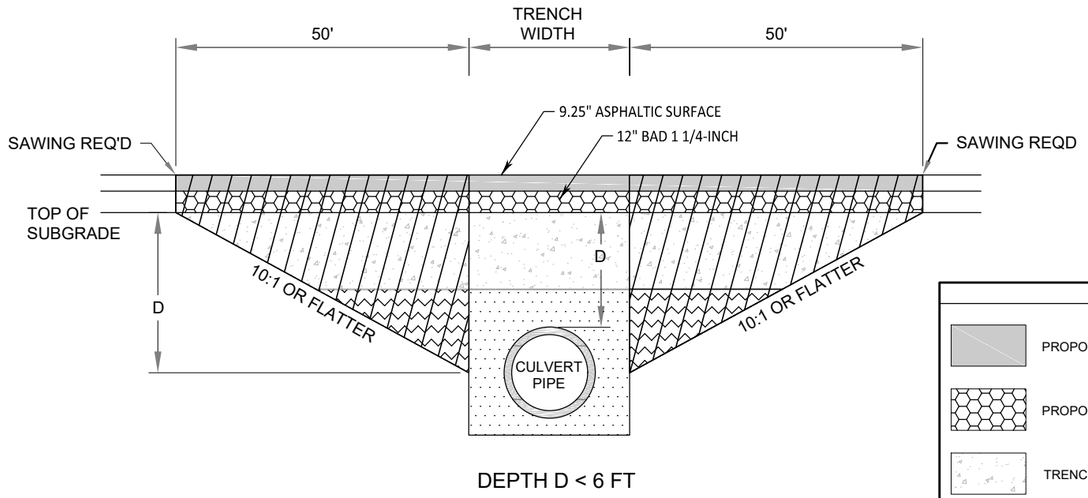




ASPHALTIC FLUME DETAIL

SEE MISCELLANEOUS QUANTITY SHEETS AND PLAN SHEETS FOR LOCATIONS.

SEE SDD "CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES" FOR DETAILS NOT SHOWN.



DEPTH D < 6 FT

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

KEY

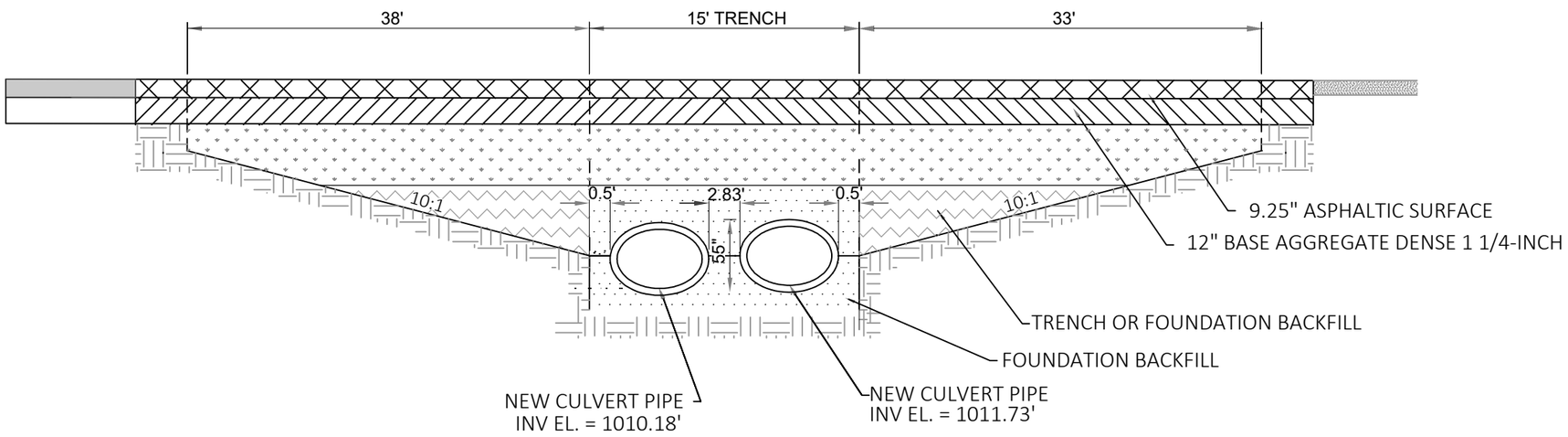
- PROPOSED ASPHALTIC SURFACE
- PROPOSED BASE
- TRENCH BACKFILL
- TRENCH OR FOUNDATION BACKFILL
- FOUNDATION BACKFILL
- TRANSITION CUT

NOTES

TRANSITION CUT IS PAID AS EXCAVATION COMMON.
TRANSITION CUT WIDTH IS FROM SUBGRADE SHOULDER POINT TO SUBGRADE SHOULDER POINT.
BACKFILL THE TRANSITION CUT AREAS WITH FOUNDATION AND TRENCH BACKFILL AS SPECIFIED IN STANDARD SEC 520.
PERFORM CULVERT PIPE INSTALLATION BEFORE MILLING AND PAVING OPERATIONS.
PLACE ASPHALTIC SURFACE AFTER CULVERT PIPE INSTALLATION AND BEFORE MILLING AND PAVING OPERATION.

CULVERT PIPES WITH TRANSITION

ROUTE	STATION (CL)	DEPTH D (FT)	PIPE DIA (IN)
STH 93	138+54	1.5	68x34
STH 93	138+64	0.5	68x34
STH 93	336+34	2.0	36
STH 93	348+41	3.6	48
STH 93	355+09	3.8	48



CULVERT REPLACEMENT NORTH FACING
STA 138+60

2

2

N

SLOPE INTERCEPT (TYP)

FE

BEGIN PROJECT 7590-00-73
STA 15+25.00

STH 93

PC: 20+50.61

PE

SLOPE INTERCEPT (TYP)

PE

SLOPE INTERCEPT (TYP)

FE

MATCH LINE 27+00

TREMPEALEAU COUNTY
EAU CLAIRE COUNTY

APPROXIMATE EXISTING R/W (TYP)

EROSION CONTROL LEGEND

- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- SILT FENCE
- SLOPE INTERCEPT
- TURBIDITY BARRIER
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

N

APPROXIMATE EXISTING R/W (TYP)

SLOPE INTERCEPT (TYP)

TOLLEFSON RD

PT: 28+79.10

SLOPE INTERCEPT (TYP)

PC: 32+83.83

PT: 38+61.50

SLOPE INTERCEPT (TYP)

MATCH LINE 27+00

STH 93

SEVERSON RD

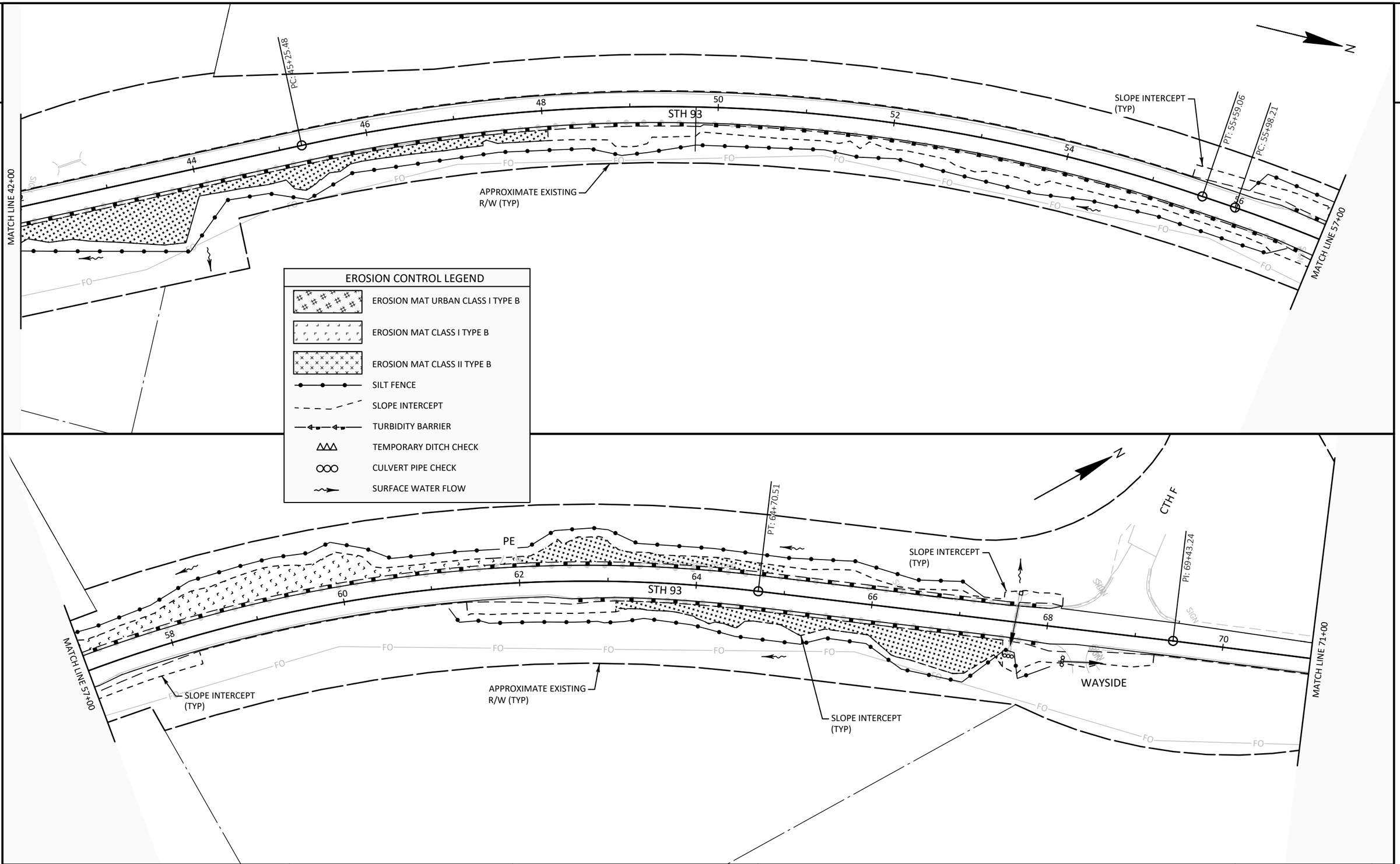
MATCH LINE 42+00

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	EROSION CONTROL	SHEET 11 E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 02 TYP SEC & DETAILS\022000_EC (EROSION CONTROL).DWG PLOT DATE : 5/29/2024 2:33 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1.0 IN = 100.0 FT

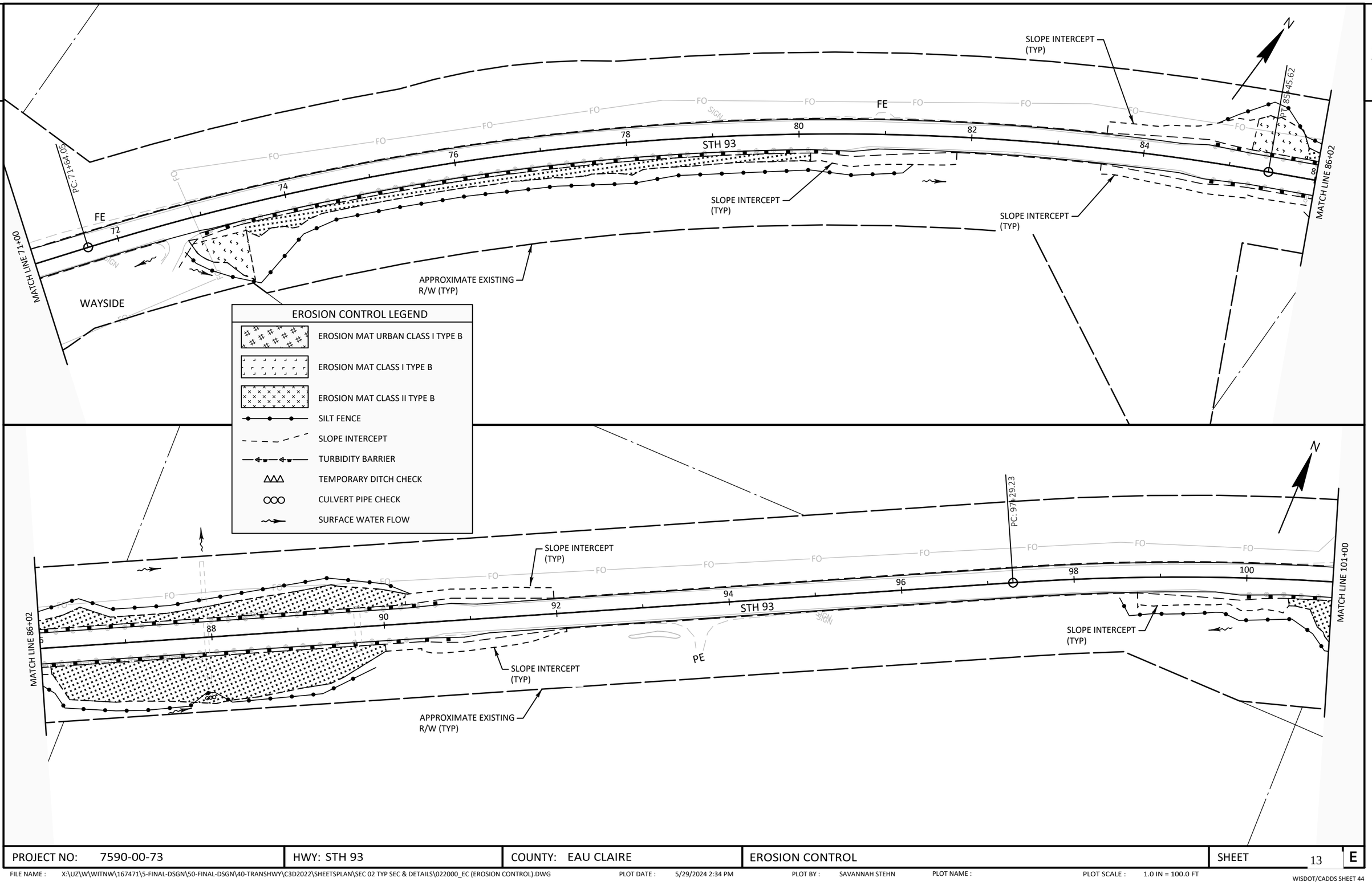
WISDOT/CADDS SHEET 44

2



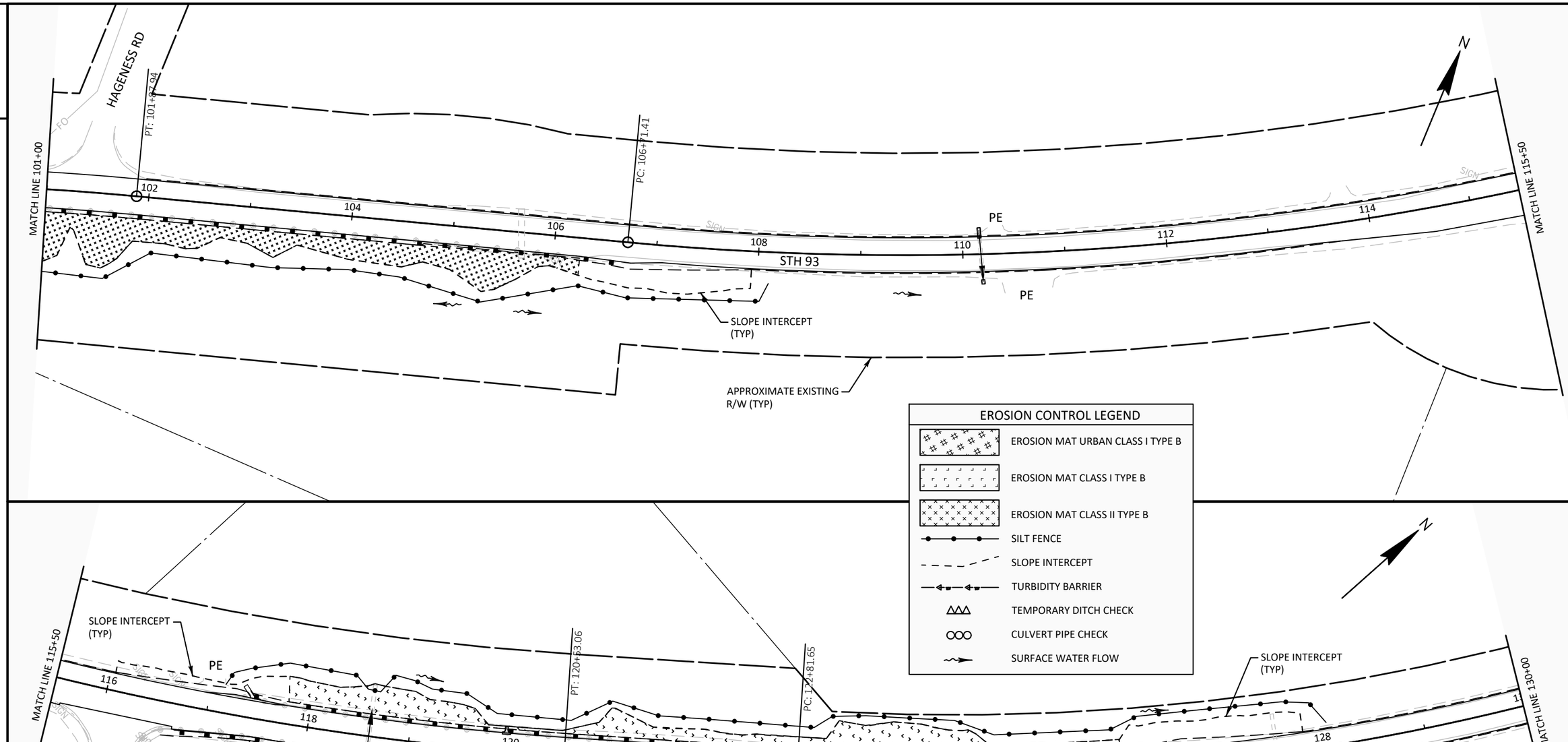
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	EROSION CONTROL	SHEET 12 E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 02 TYP SEC & DETAILS\022000_EC (EROSION CONTROL).DWG PLOT DATE : 5/29/2024 2:34 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1.0 IN = 100.0 FT
WISDOT/CADDS SHEET 44



PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	EROSION CONTROL	SHEET 13 E

2



PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	EROSION CONTROL	SHEET 14	E

2

N

MATCH LINE 130+00

132

134

136

138

140

142

144

MATCH LINE 145+00

FE

PE

TRAASETH RD

STH 93

RUDY RD

KELLY CREEK

PT: 140+94.77

DELINEATED WETLANDS (TYP)

APPROXIMATE EXISTING R/W (TYP)

EROSION CONTROL LEGEND

- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- SILT FENCE
- SLOPE INTERCEPT
- TURBIDITY BARRIER
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

N

MATCH LINE 145+00

146

148

150

152

154

156

158

MATCH LINE 160+00

FE

STH 93

LOWES CREEK RD

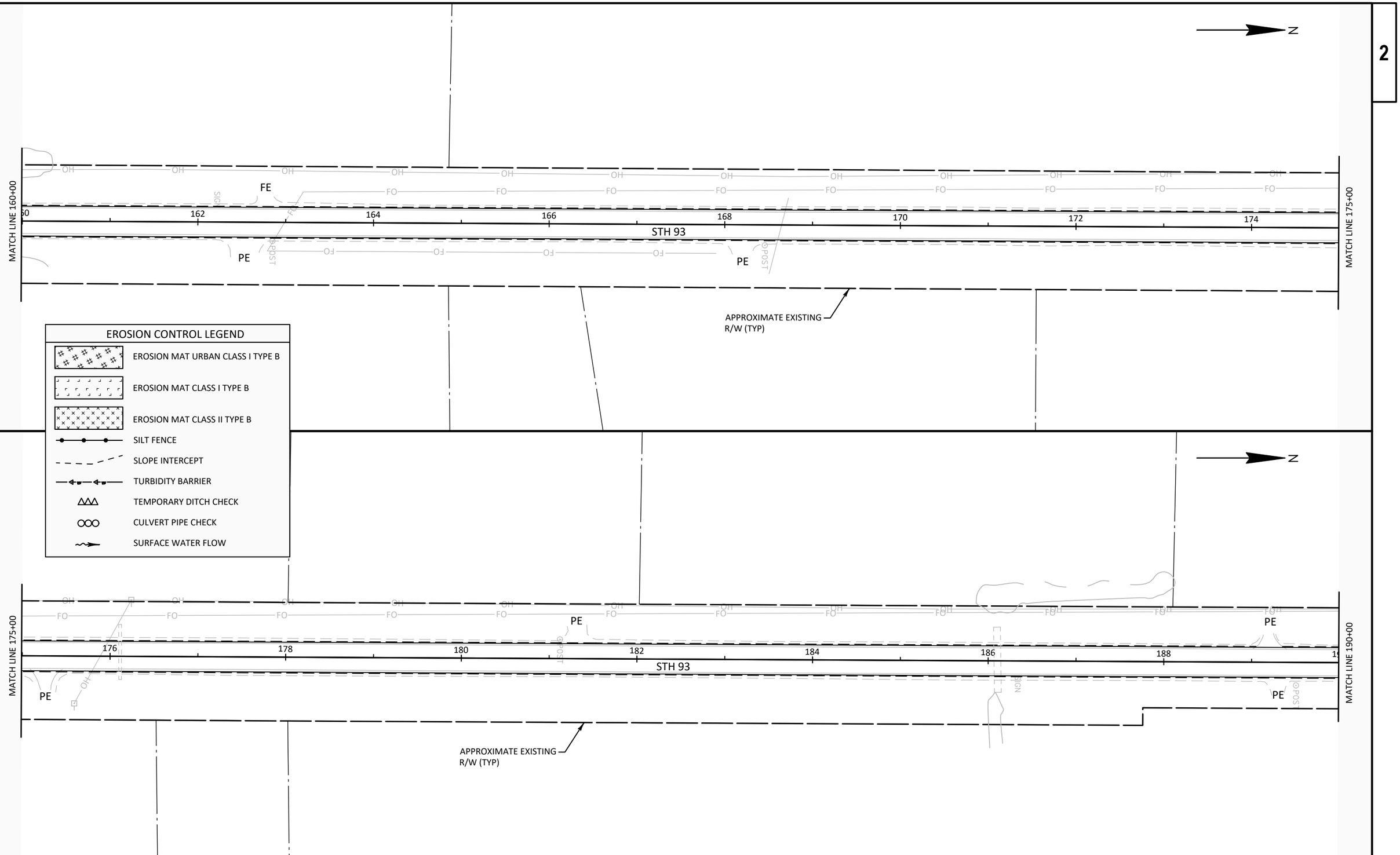
APPROXIMATE EXISTING R/W (TYP)

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	EROSION CONTROL	SHEET 15 E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 02 TYP SEC & DETAILS\022000_EC (EROSION CONTROL).DWG PLOT DATE : 5/29/2024 2:34 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1.0 IN = 100.0 FT

WISDOT/CADDS SHEET 44

2



EROSION CONTROL LEGEND

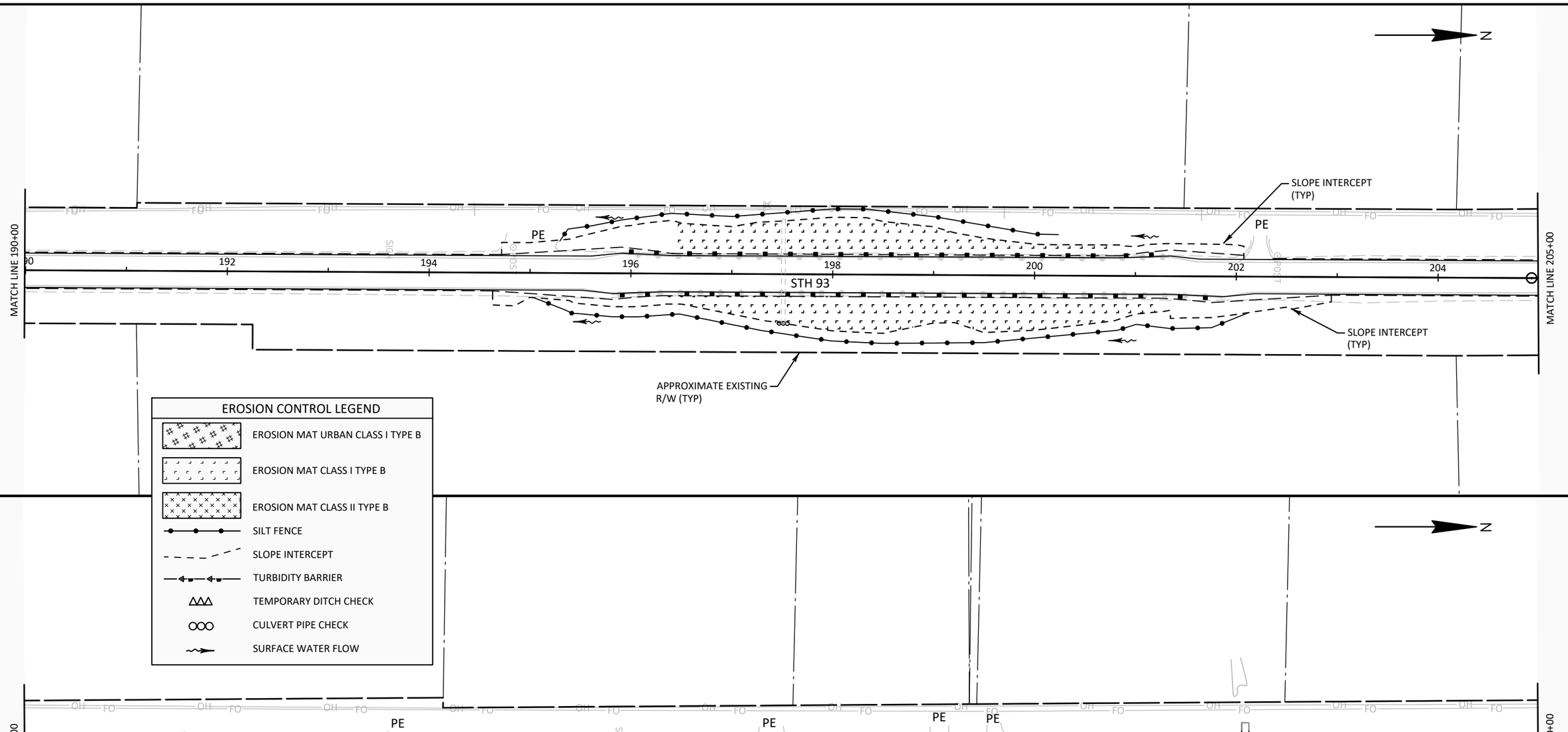
- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- SILT FENCE
- SLOPE INTERCEPT
- TURBIDITY BARRIER
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

2

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	EROSION CONTROL	SHEET 16	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 02 TYP SEC & DETAILS\022000_EC (EROSION CONTROL).DWG PLOT DATE : 5/29/2024 2:35 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1.0 IN = 100.0 FT

2



PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	EROSION CONTROL	SHEET 17	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 02 TYP SEC & DETAILS\022000_EC (EROSION CONTROL).DWG PLOT DATE : 5/29/2024 2:35 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1.0 IN = 100.0 FT

WISDOT/CADDS SHEET 44

2

N

WILLOW RD

SLOPE INTERCEPT (TYP)

MATCH LINE 220+00

MATCH LINE 235+00

PE

FE

PE

PE

STH 93

220

222

224

226

228

230

232

234

SLOPE INTERCEPT (TYP)

APPROXIMATE EXISTING R/W (TYP)

EROSION CONTROL LEGEND

- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- SILT FENCE
- SLOPE INTERCEPT
- TURBIDITY BARRIER
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

N

PI: 234+99.15

MATCH LINE 235+00

MATCH LINE 250+00

FE

FE

PE

STH 93

236

238

240

242

244

246

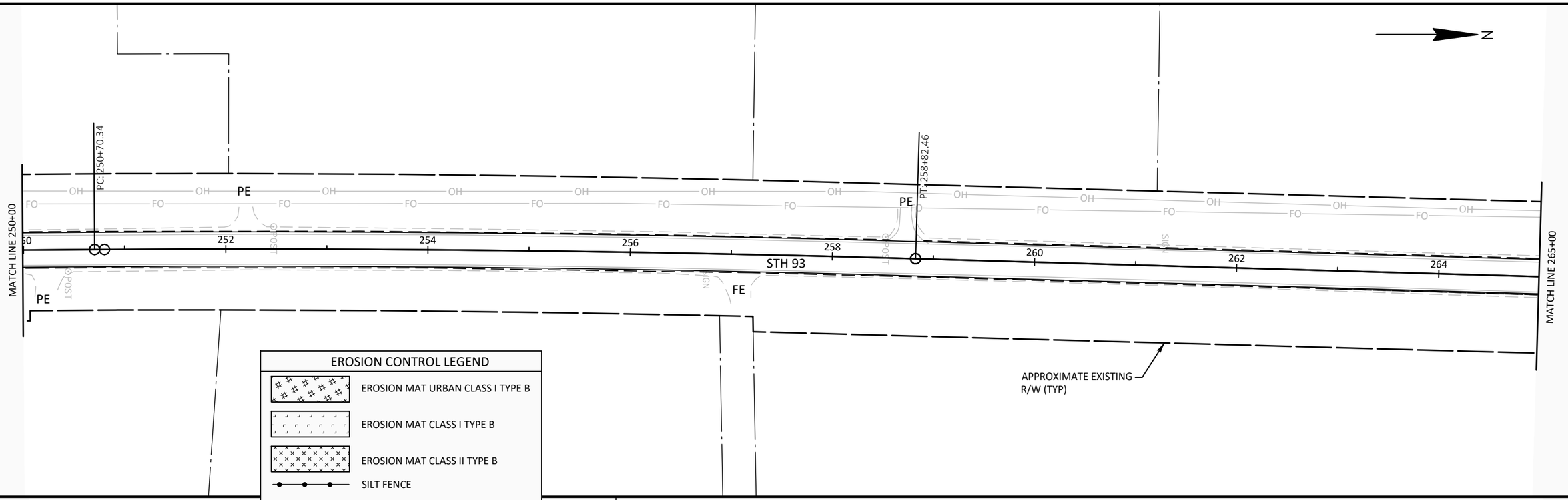
248

SLOPE INTERCEPT (TYP)

APPROXIMATE EXISTING R/W (TYP)

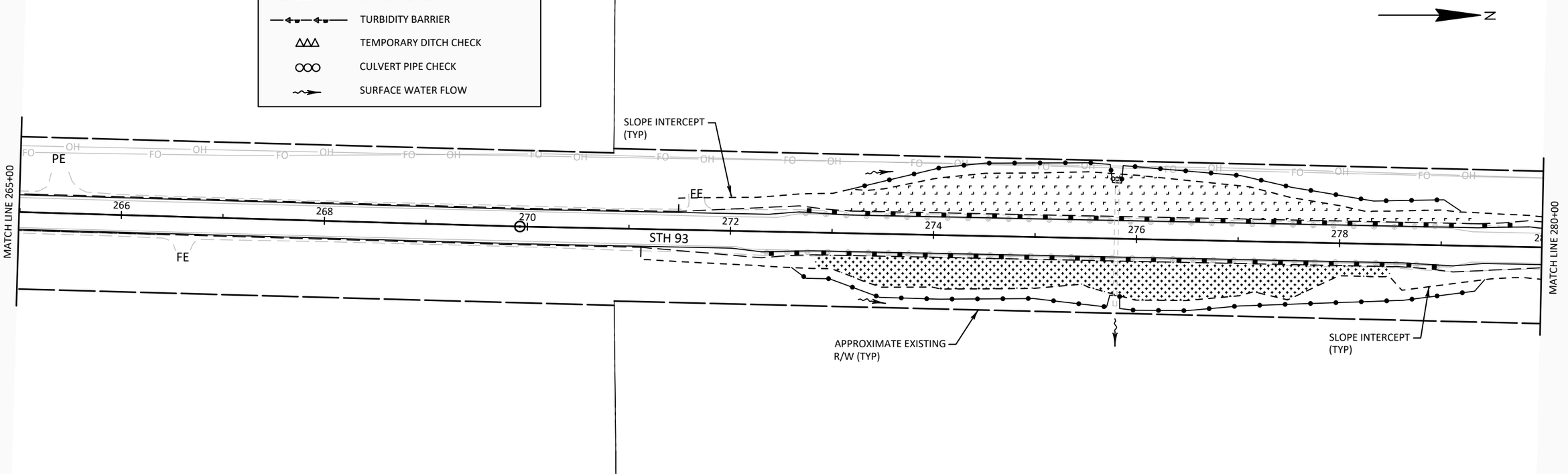
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	EROSION CONTROL	SHEET 18 E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 02 TYP SEC & DETAILS\022000_EC (EROSION CONTROL).DWG PLOT DATE : 5/29/2024 2:35 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1.0 IN = 100.0 FT



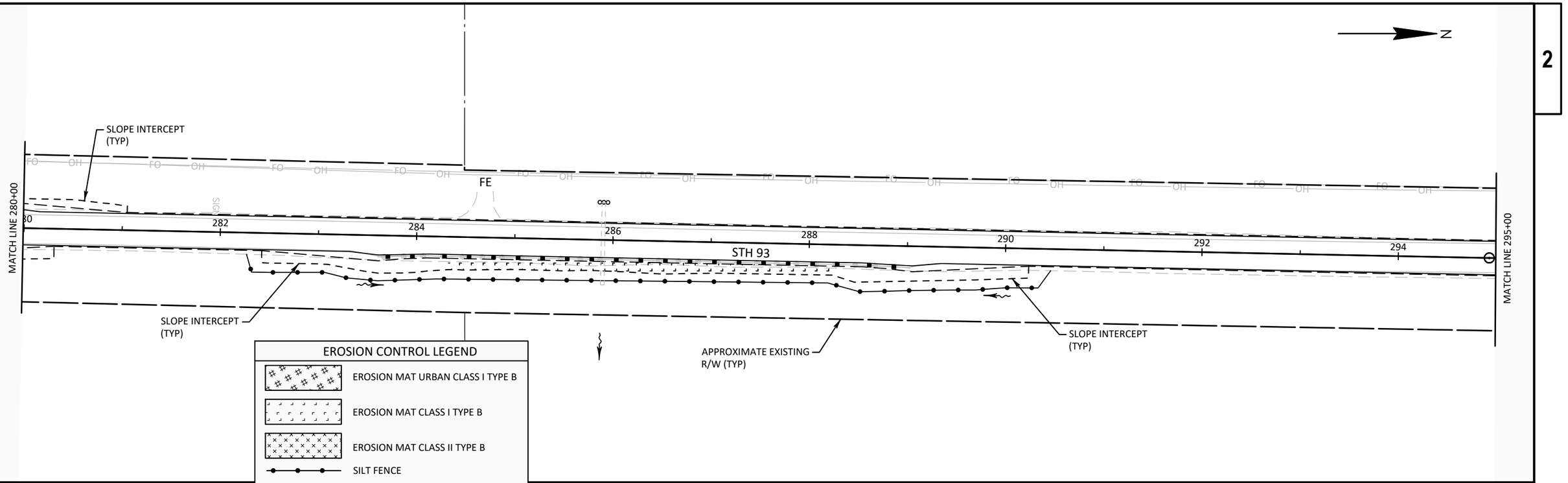
EROSION CONTROL LEGEND

- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- SILT FENCE
- SLOPE INTERCEPT
- TURBIDITY BARRIER
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW



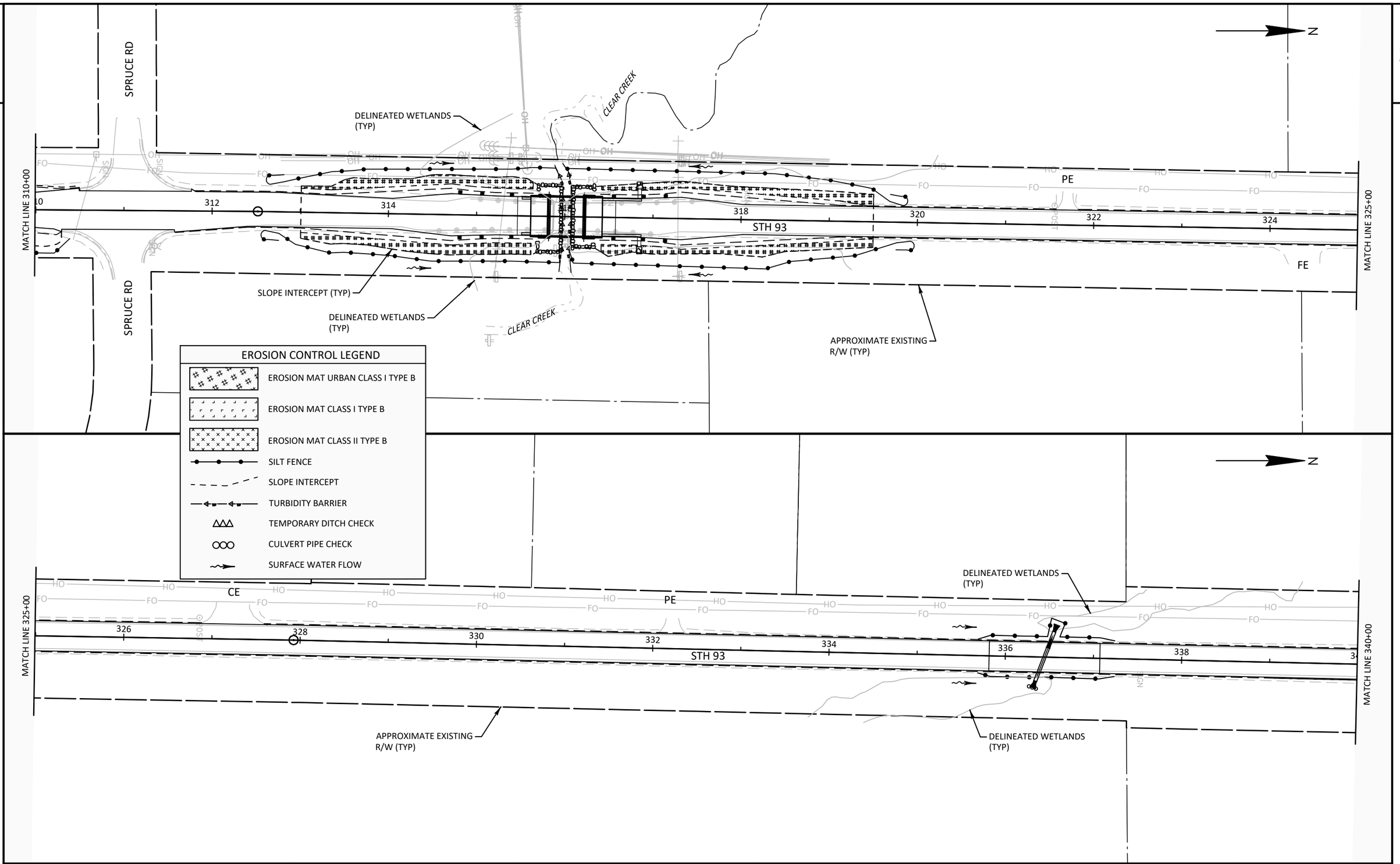
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	EROSION CONTROL	SHEET 19 E

2

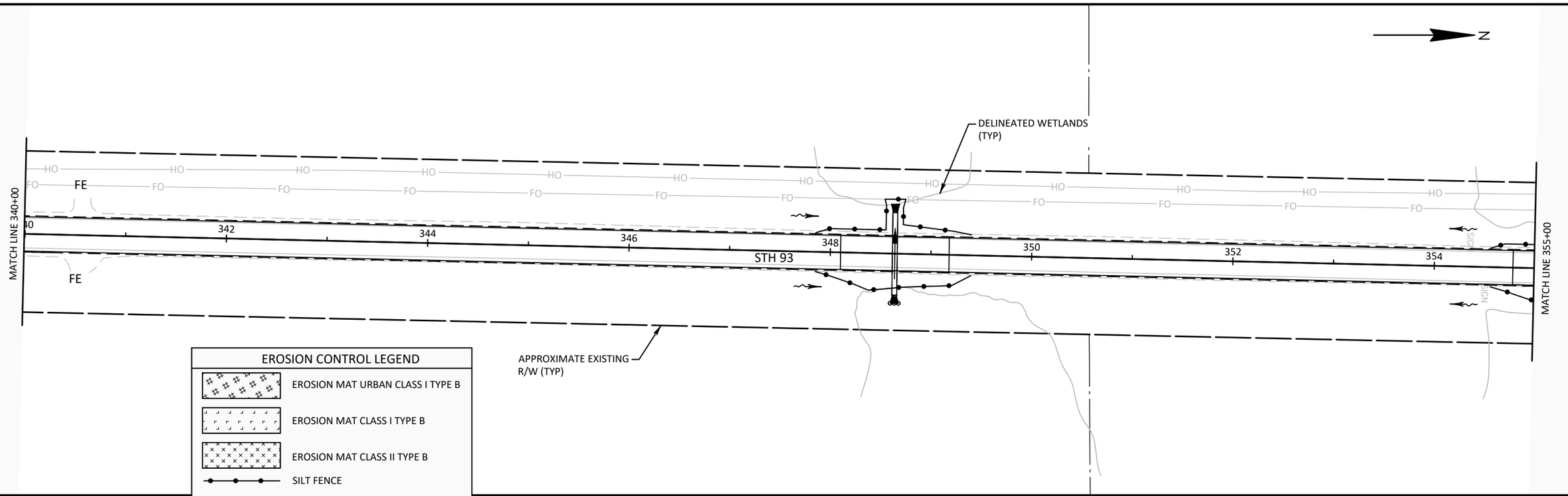


PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	EROSION CONTROL	SHEET 20	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 02 TYP SEC & DETAILS\022000_EC (EROSION CONTROL).DWG PLOT DATE : 5/29/2024 2:36 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1.0 IN = 100.0 FT
WISDOT/CADDS SHEET 44

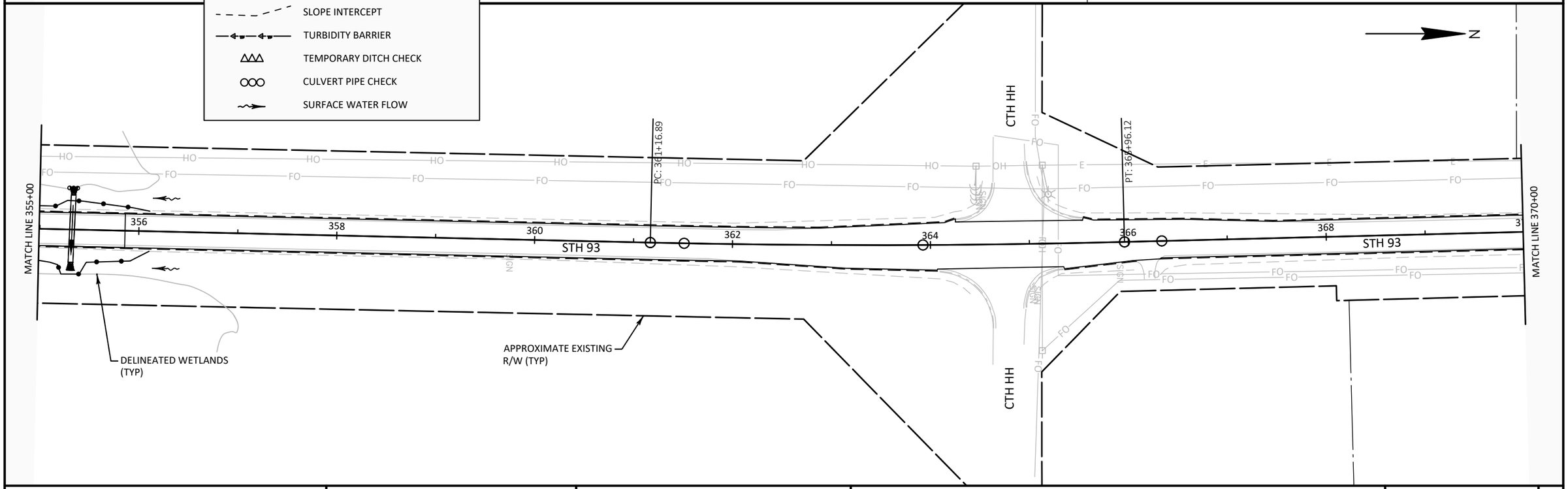

SPRUCE RD
SPRUCE RD
CLEAR CREEK
CLEAR CREEK
DELINEATED WETLANDS (TYP)
DELINEATED WETLANDS (TYP)
SLOPE INTERCEPT (TYP)
APPROXIMATE EXISTING R/W (TYP)
MATCH LINE 310+00
MATCH LINE 325+00
MATCH LINE 325+00
MATCH LINE 340+00
STH 93
STH 93
PE
FE
CE
PE
DELINEATED WETLANDS (TYP)
APPROXIMATE EXISTING R/W (TYP)
DELINEATED WETLANDS (TYP)
310
312
314
318
320
322
324
326
328
330
332
334
336
338
EROSION CONTROL LEGEND
EROSION MAT URBAN CLASS I TYPE B
EROSION MAT CLASS I TYPE B
EROSION MAT CLASS II TYPE B
SILT FENCE
SLOPE INTERCEPT
TURBIDITY BARRIER
TEMPORARY DITCH CHECK
CULVERT PIPE CHECK
SURFACE WATER FLOW
N
N

2



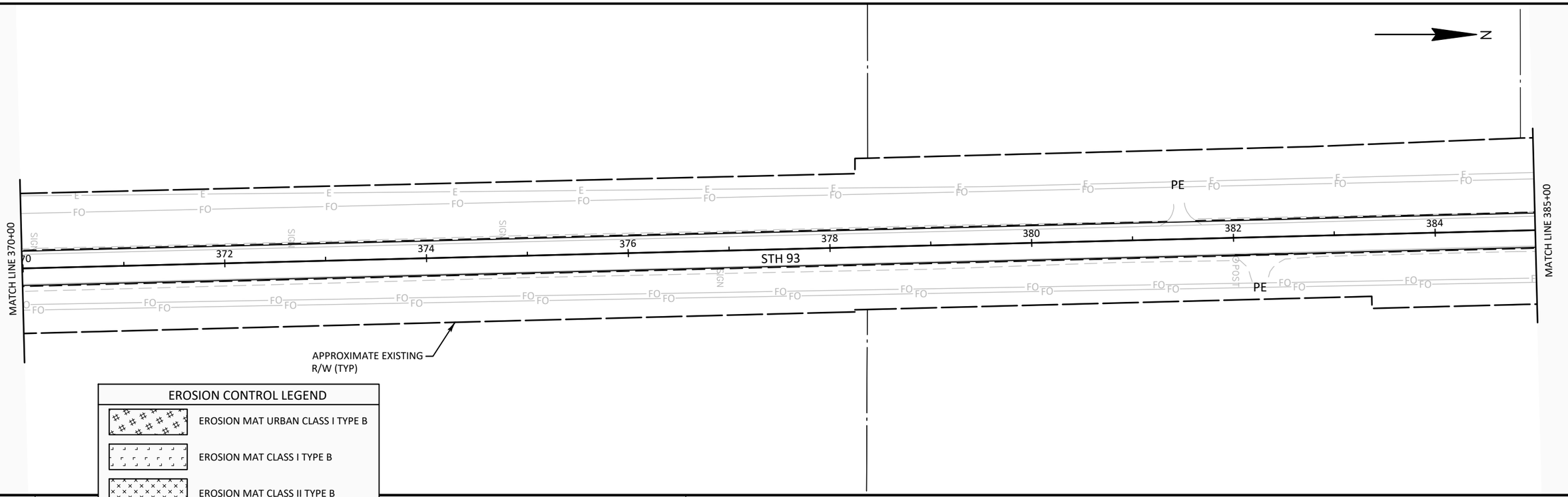
EROSION CONTROL LEGEND

- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- SILT FENCE
- SLOPE INTERCEPT
- TURBIDITY BARRIER
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW



PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	EROSION CONTROL	SHEET 22 E

2



PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	EROSION CONTROL	SHEET 23	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 02 TYP SEC & DETAILS\022000_EC (EROSION CONTROL).DWG PLOT DATE : 5/29/2024 2:36 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1.0 IN = 100.0 FT
WISDOT/CADDS SHEET 44

2

N

DELINEATED WETLANDS (TYP)

MATCH LINE 399+98

400 402 404 406 408 410 412 414

STH 93

PE

FE

PE

PE

MATCH LINE 415+00

APPROXIMATE EXISTING R/W (TYP)

EROSION CONTROL LEGEND

- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- SILT FENCE
- SLOPE INTERCEPT
- TURBIDITY BARRIER
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

N

PC: 420+79.58

SLOPE INTERCEPT (TYP)

PT: 425+25.17

PINE CREEK

DELINEATED WETLANDS (TYP)

MATCH LINE 415+00

416 418 420 422 424 426 428

STH 93

FE

PE

MATCH LINE 430+00

APPROXIMATE EXISTING R/W (TYP)

DELINEATED WETLANDS (TYP)

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	EROSION CONTROL	SHEET 24	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 02 TYP SEC & DETAILS\022000_EC (EROSION CONTROL).DWG PLOT DATE : 5/29/2024 2:37 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1.0 IN = 100.0 FT

2

N

ASPEN RD

MATCH LINE 430+00

PE

STH 93

430 432 434 436 438 440 442 444

MATCH LINE 445+00

APPROXIMATE EXISTING R/W (TYP)

NICOLE CT

EROSION CONTROL LEGEND

- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- SILT FENCE
- SLOPE INTERCEPT
- TURBIDITY BARRIER
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

N

CEDAR RD

MATCH LINE 445+00

CE

CE

PE

446 448 450 452 454

STH 93

APPROXIMATE EXISTING R/W (TYP)

END PROJECT 7590-00-73
STA 452+98.14

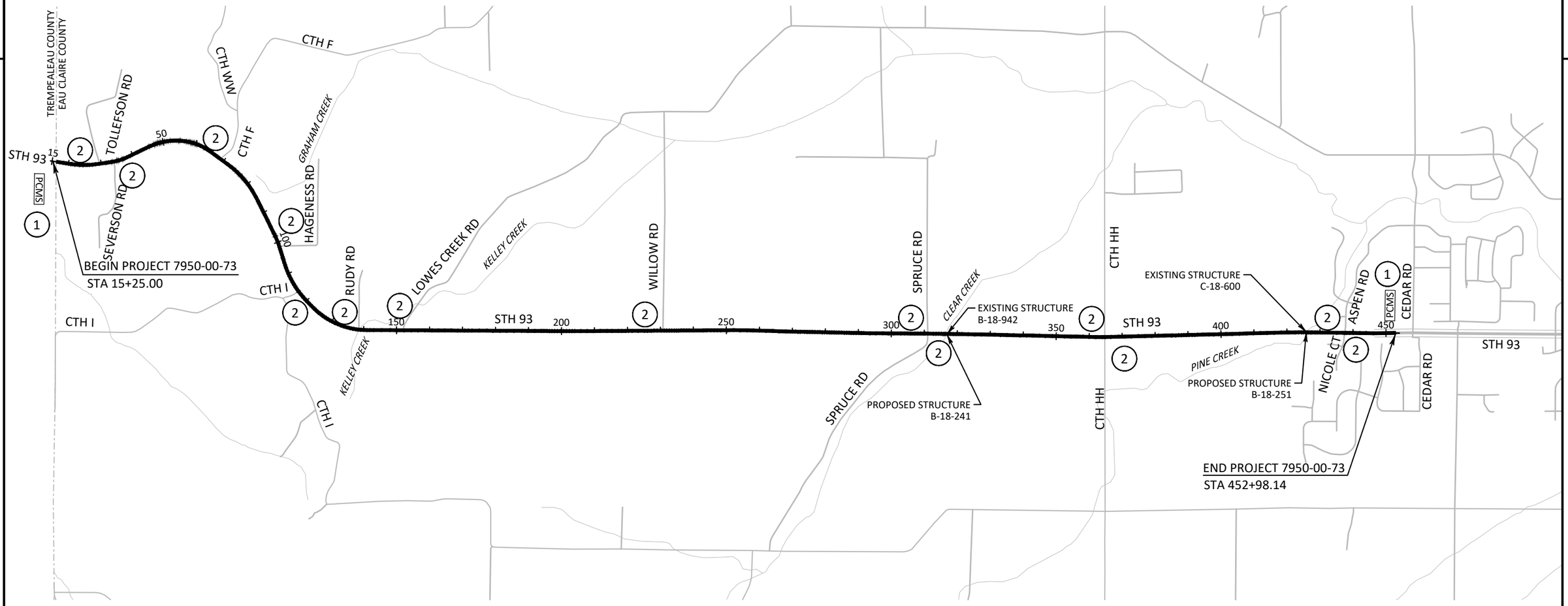
CEDAR RD

CEDAR RD

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	EROSION CONTROL	SHEET 25 E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 02 TYP SEC & DETAILS\022000_EC (EROSION CONTROL).DWG PLOT DATE : 5/29/2024 2:37 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1.0 IN = 100.0 FT

WISDOT/CADDS SHEET 44



TRAFFIC CONTROL GENERAL NOTES

1. ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.
2. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
3. ALL TYPE III BARRICADES SHALL BE EQUIPPED WITH TYPE "A" (LOW INTENSITY FLASHING) LIGHTS PER SDDS.
4. PLACE GROOVED PAVEMENT AND BUMP SIGNS DURING THE MILLING AND PAVING OPERATIONS. SEE SDD "TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES" FOR ADDITIONAL INFORMATION.
5. PLACE PCMS BOARDS 7 DAYS PRIOR TO CONSTRUCTION AND REMOVE THEM WHEN CONSTRUCTION BEGINS.

LEGEND

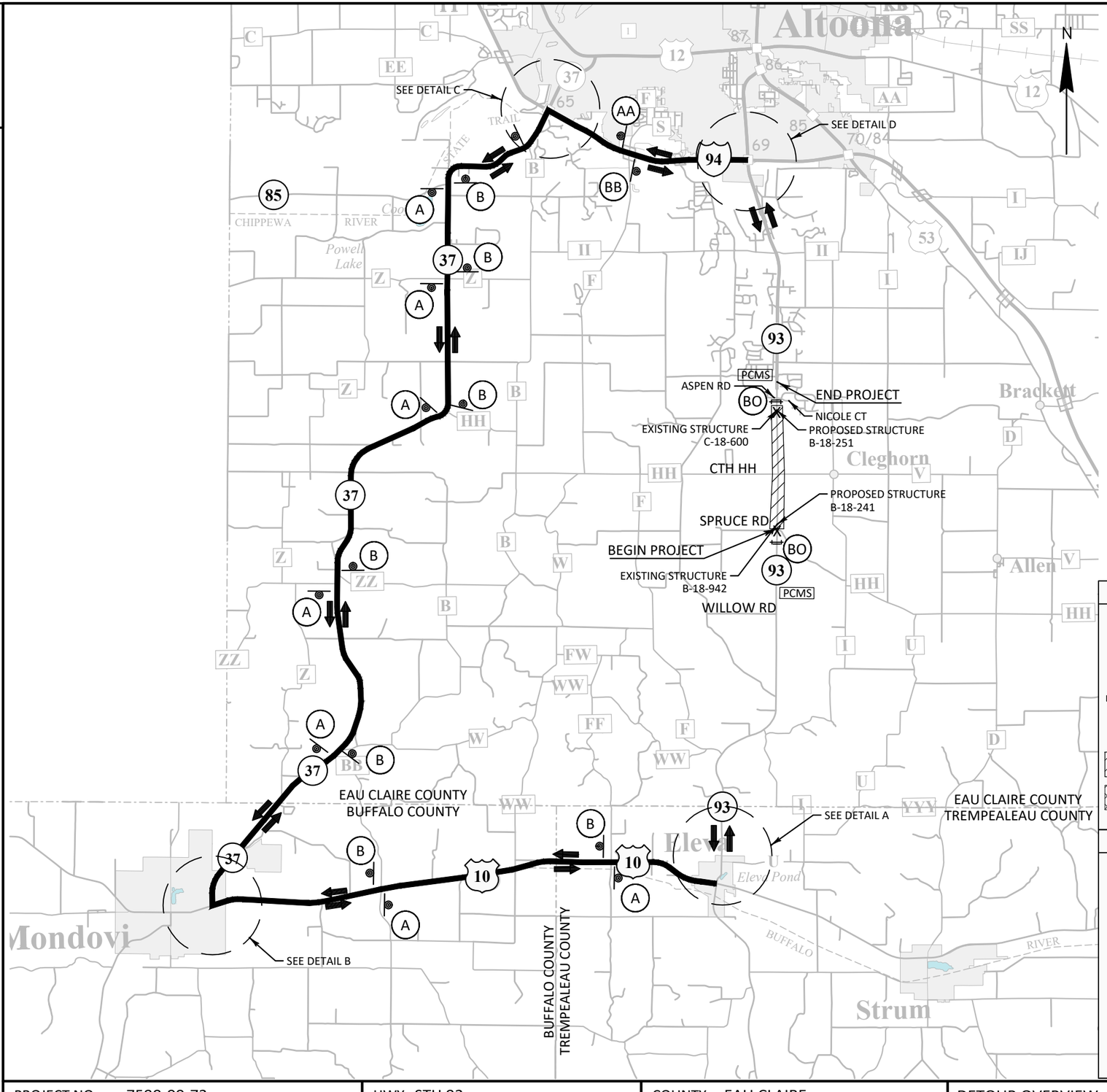
(1) PLACE TRAFFIC CONTROL SIGNS PER SDD "TRAFFIC CONTROL, ADVANCED WARNING SIGNS 45 M.P.H. OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC'.

(2) PLACE TRAFFIC CONTROL SIGNS PER SDD "TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL" IN SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC".

PCMS PORTABLE CHANGEABLE MESSAGE SIGN

FRAME 1	FRAME 2
HWY 93 TO CLOSE	XXXXDAY XX/XX

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	ADVANCED WARNING SIGNING	SHEET 26	E



GENERAL NOTES: DETOURS

SEE STANDARD DETAIL DRAWINGS FOR "BARRICADES AND SIGNS FOR MAINLINE CLOSURES," "DETAIL F, DETOUR SIGNING."

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

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE TRAFFIC CONTROL PLAN, INCLUDING PRE-EXISTING SIGNING IN THE VICINITY, SHALL BE COVERED OR REMOVED AS SPECIFIED IN THE PLANS OR AS DIRECTED BY THE ENGINEER IN THE FIELD.

ALL "W" AND "WO" SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

ALL M3 SERIES SIGNS (NORTH, EAST, SOUTH, WEST) WHICH ARE PART OF ANY DETOUR ROUTE MARKER SIGNING ASSEMBLY OR ATTACHED TO ANY WARNING SIGN SHALL BE BLACK MESSAGE ON WHITE BACKGROUND.

ALL M05 AND M06 ARROW SIGNS SHALL BE THE SAME AS "M" SIGNS EXCEPT THAT THE BACKGROUND IS ORANGE.

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

PCMS SHALL BE IN PLACE A MINIMUM OF 7 DAYS PRIOR TO CONSTRUCTION.

DETOUR PLAN LEGEND

- SIGN ON PERMANENT SUPPORT (EXISTING/PROPOSED)
- TYPE III BARRICADE (WITH/WITHOUT SIGN)
- TRAFFIC FLOW/DETOUR ROUTE
- X — FULL CLOSURE LOCATION
- WORK SPACE
- TRAFFIC CONTROL COVERING SIGNS TYPE I, OR TYPE II (BLANK ORANGE PANEL TYPICAL FOR ALL COVERING)

REASSURANCE SIGNAGE

A	B	AA	BB
DETOUR M4-8 24"X12"	DETOUR M4-8 24"X12"	DETOUR M4-8 36"X18"	DETOUR M4-8 36"X18"
SOUTH M3-3 24"X12"	NORTH M3-1 24"X12"	SOUTH M3-3 36"X18"	NORTH M3-1 36"X18"
93 M1-4 24"X24"	93 M1-4 24"X24"	93 M1-4 36"X36"	93 M1-4 36"X36"

BO — SEE "DETAIL D: ROAD CLOSURE BARRICADE DETAIL" ON SDD "BARRICADES AND SIGN FOR VARIOUS CLOSURES". USE R11-2B "BRIDGE OUT" SIGN.

R11-2B 48" X 30"

TYPE III BARRICADE

SEE SDD "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" FOR GUIDANCES WHERE STH 93 INTERSECTS WITH:

- TOLLEFSON RD
- SEVERSON RD
- CTH F
- HAGENESS RD
- CTH I
- RUDY RD
- LOWES CREEK RD
- WILLOW RD
- SPRUCE RD
- CTH HH
- NICOLE CT
- ASPEN RD

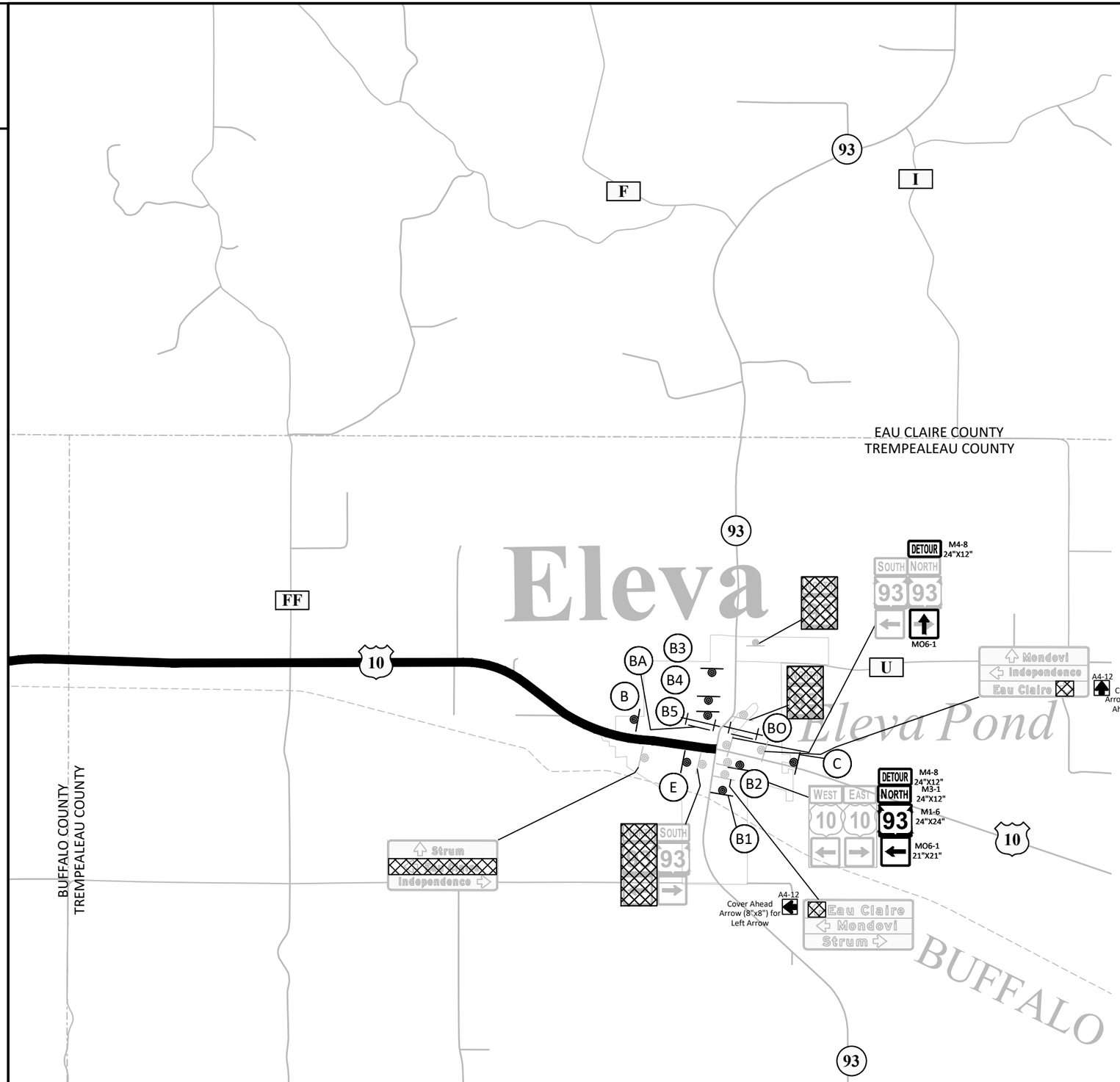
STH 93 PCMS MESSAGE:

FRAME A	FRAME B
HWY 93 TO CLOSE	XXXX/DAY XX/XX

(IN PLACE A MINIMUM OF 7 CALENDAR DAYS PRIOR TO EXTENDED ROAD CLOSURE)

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	DETOUR OVERVIEW	SHEET 27 E

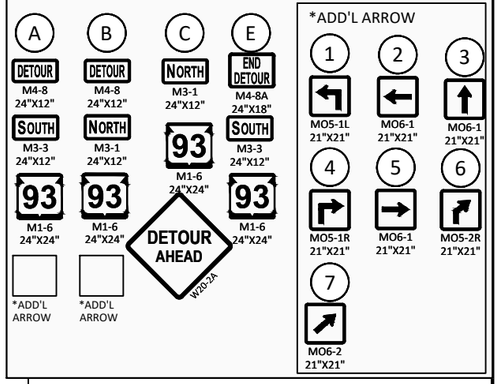
2



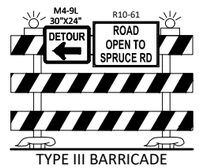
DETOUR PLAN LEGEND

- SIGN ON PERMANENT SUPPORT (EXISTING/PROPOSED)
- TYPE III BARRICADE (WITH/WITHOUT SIGN)
- TRAFFIC FLOW/DETOUR ROUTE
- X — FULL CLOSURE LOCATION
- WORK SPACE
- TRAFFIC CONTROL COVERING SIGNS TYPE I, OR TYPE II (BLANK ORANGE PANEL TYPICAL FOR ALL COVERING)

REASSURANCE SIGNAGE



BO



TYPE III BARRICADE

SEE "DETAIL D: ROAD CLOSURE BARRICADE DETAIL" ON SDD "BARRICADES AND SIGN FOR VARIOUS CLOSURES". USE R11-2B "BRIDGE OUT" SIGN.

BA

TYPE III BARRICADE

SEE "DETAIL D: ROAD CLOSURE BARRICADE DETAIL" ON SDD "BARRICADES AND SIGN FOR VARIOUS CLOSURES". USE R11-2B "BRIDGE OUT XX MILES AHEAD" SIGN.

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	DETOUR ROUTE - DETAIL A	SHEET 28 E

2

W

BB

Z

37

10

EAST 10 WEST 10 SOUTH 37

B

A1

B5

B4

A2

10

A

C

B1

B2

Eleva
Eau Claire

NORTH 37

vi

DETOUR PLAN LEGEND

- SIGN ON PERMANENT SUPPORT (EXISTING/PROPOSED)
- TYPE III BARRICADE (WITH/WITHOUT SIGN)
- TRAFFIC FLOW/DETOUR ROUTE
- X — FULL CLOSURE LOCATION
- WORK SPACE
- TRAFFIC CONTROL COVERING SIGNS TYPE I, OR TYPE II (BLANK ORANGE PANEL TYPICAL FOR ALL COVERING)

REASSURANCE SIGNAGE

A
DETOUR M4-8 24"X12"
SOUTH M3-3 24"X12"
93 M1-6 24"X24"
*ADD'L ARROW

B
DETOUR M4-8 24"X12"
NORTH M3-1 24"X12"
93 M1-6 24"X24"
*ADD'L ARROW

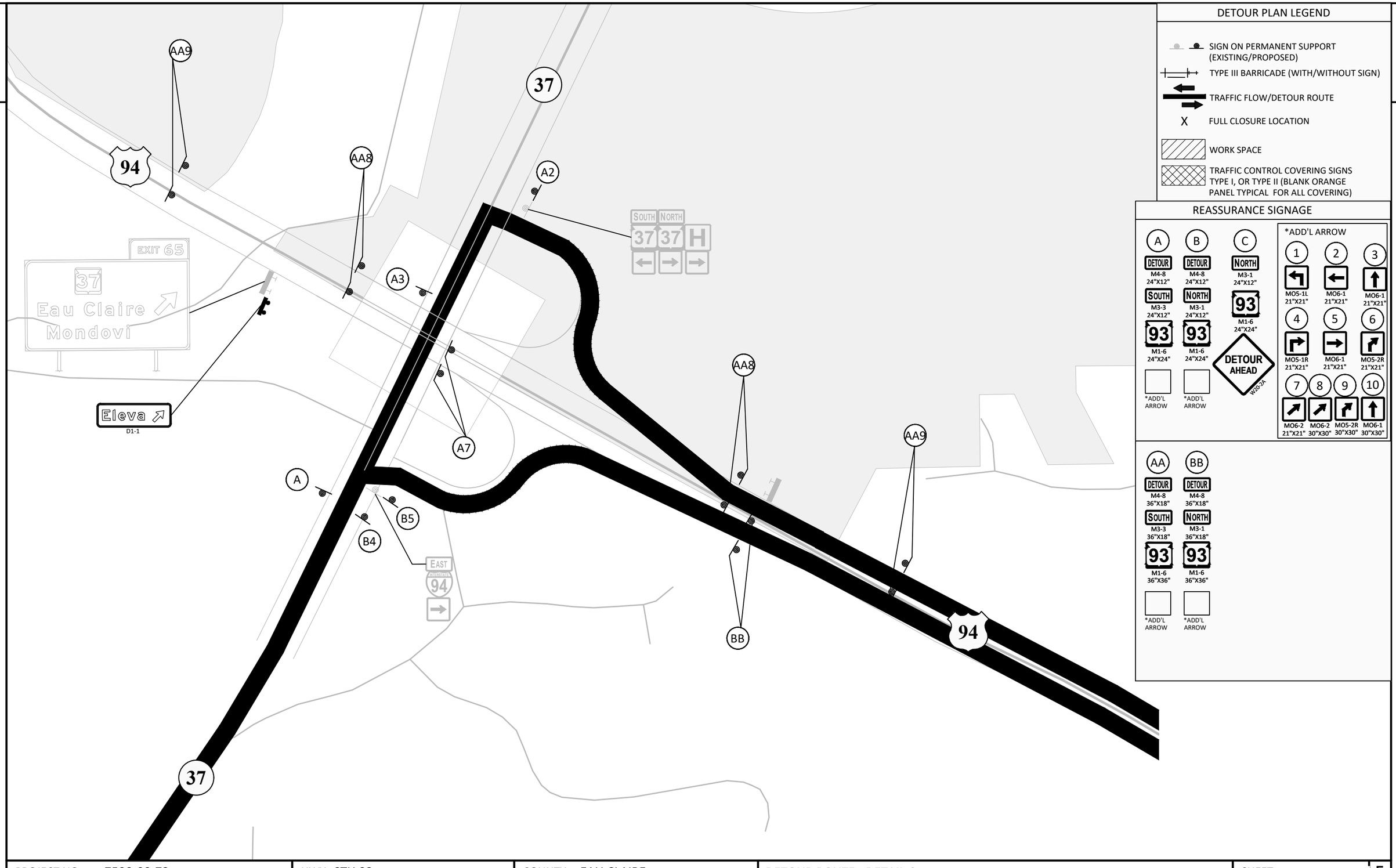
C
NORTH M3-1 24"X12"
93 M1-6 24"X24"
DETOUR AHEAD W20-2A

*ADD'L ARROW

1 MO5-1L 21"X21"
2 MO6-1 21"X21"
3 MO6-1 21"X21"
4 MO5-1R 21"X21"
5 MO6-1 21"X21"
6 MO5-2R 21"X21"

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	DETOUR ROUTE - DETAIL B	SHEET 29 E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 02 TYP SEC & DETAILS\027000_DT (DETOUR DETAILS).DWG PLOT DATE : 7/29/2024 3:55 PM PLOT BY : SEH LAYOUT NAME : 03 PLOT SCALE : 1.0 IN = 2640.0 FT
WISDOT/CADDS SHEET 42



PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	DETOUR ROUTE - DETAIL C	SHEET 30 E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 02 TYP SEC & DETAILS\027000_DT (DETOUR DETAILS).DWG PLOT DATE : 7/31/2024 3:23 PM PLOT BY : SEH LAYOUT NAME : 04 PLOT SCALE : 1.0 IN = 500.0 FT
WISDOT/CADDS SHEET 42

2

2

DETOUR PLAN LEGEND

- SIGN ON PERMANENT SUPPORT (EXISTING/PROPOSED)
- TYPE III BARRICADE (WITH/WITHOUT SIGN)
- TRAFFIC FLOW/DETOUR ROUTE
- X — FULL CLOSURE LOCATION
- WORK SPACE
- TRAFFIC CONTROL COVERING SIGNS TYPE I, OR TYPE II (BLANK ORANGE PANEL TYPICAL FOR ALL COVERING)

SOUTH ALT 93 53

93

M4-8 24"X12" DETOUR
SOUTH NORTH ALTERNATE 93 93 53
M06-1 21"X21"
A4-12 8"x8"
COVER Eleva Eau Claire

EXIT 68 93 Eleva Eau Claire
COVER
A4-12 9.5"x9.5"

E

93 SOUTH Eleva
A4-12 9.5"x9.5"

A6

A7

AA

94

DD

A1

A2

Eleva
D1-1

AA10

E

94

EXIT 68 93 Eau Claire

Eau Claire Eleva
A4-12 8"x8"
COVER

BO

R10-61
ROAD OPEN TO ASPEN RD

NORTH SOUTH 93 93

93 NORTH Eau Claire AHEAD

93

REASSURANCE SIGNAGE

A	B	C	D	AA	BB	CC	DD
DETOUR M4-8 24"X12"	DETOUR M4-8 24"X12"	NORTH M3-1 24"X12"	END DETOUR M4-8A 24"X18"	DETOUR M4-8 36"X18"	DETOUR M4-8 36"X18"	NORTH M3-1 36"X18"	END DETOUR M4-8A 36"X18"
SOUTH M3-3 24"X12"	NORTH M3-1 24"X12"	93 M1-6 24"X24"	NORTH M3-1 24"X12"	SOUTH M3-3 36"X18"	NORTH M3-1 36"X18"	93 M1-6 36"X36"	NORTH M3-1 36"X18"
93 M1-6 24"X24"	93 M1-6 24"X24"	DETOUR AHEAD W20-2A	93 M1-6 24"X24"	93 M1-6 36"X36"	93 M1-6 36"X36"	DETOUR AHEAD W20-2A	93 M1-6 36"X36"
*ADD'L ARROW	*ADD'L ARROW			*ADD'L ARROW	*ADD'L ARROW		

*ADD'L ARROW

1	2	3
MO5-1L 21"X21"	MO6-1 21"X21"	MO6-1 21"X21"
4	5	6
MO5-1R 21"X21"	MO6-1 21"X21"	MO5-2R 21"X21"
7	8	9	10
MO6-2 21"X21"	MO6-2 30"X30"	MO5-2R 30"X30"	MO6-1 30"X30"

E
SOUTH M3-3 24"X12"
93 M1-6 24"X24"
DETOUR AHEAD W20-2A

BO
R11-3B
R11-3B-SIZE
BRIDGE OUT 5 MILES AHEAD
TYPE III BARRICADE

SEE "DETAIL D: ROAD CLOSURE BARRICADE DETAIL" ON SDD "BARRICADES AND SIGN FOR VARIOUS CLOSURES". USE R11-2B "BRIDGE OUT" SIGN.

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	DETOUR ROUTE - DETAIL D	SHEET 31 E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 02 TYP SEC & DETAILS\027000_DT (DETOUR DETAILS).DWG PLOT DATE : 7/31/2024 3:22 PM PLOT BY : SEH LAYOUT NAME : 05 PLOT SCALE : 1.0 IN = 1000.0 FT
WISDOT/CADDS SHEET 42

Estimate Of Quantities

7590-00-73

Line	Item	Item Description	Unit	Total	Qty
0002	201.0205	Grubbing	STA	235.000	235.000
0004	203.0100	Removing Small Pipe Culverts	EACH	5.000	5.000
0006	203.0250	Removing Structure Over Waterway Remove Debris (structure) 01. B-18-942	EACH	1.000	1.000
0008	203.0250	Removing Structure Over Waterway Remove Debris (structure) 02. C-18-600	EACH	1.000	1.000
0010	204.0110	Removing Asphaltic Surface	SY	68.000	68.000
0012	204.0115	Removing Asphaltic Surface Butt Joints	SY	16.000	16.000
0014	204.0120	Removing Asphaltic Surface Milling	SY	152,240.000	152,240.000
0016	204.0165	Removing Guardrail	LF	16,735.000	16,735.000
0018	204.0220	Removing Inlets	EACH	3.000	3.000
0020	204.0245	Removing Storm Sewer (size) 01. 12-Inch	LF	138.000	138.000
0022	204.9060.S	Removing (item description) 01. Cattle Pass	EACH	1.000	1.000
0024	205.0100	Excavation Common	CY	10,519.000	10,519.000
0026	206.1001	Excavation for Structures Bridges (structure) 01. B-18-241	EACH	1.000	1.000
0028	206.1001	Excavation for Structures Bridges (structure) 02. B-18-251	EACH	1.000	1.000
0030	208.0100	Borrow	CY	14,302.000	14,302.000
0032	210.1500	Backfill Structure Type A	TON	350.000	350.000
0034	211.0101	Prepare Foundation for Asphaltic Paving (project) 01. 7590-00-73	EACH	1.000	1.000
0036	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	876.000	876.000
0038	213.0100	Finishing Roadway (project) 01. 7590-00-73	EACH	1.000	1.000
0040	305.0110	Base Aggregate Dense 3/4-Inch	TON	3,730.000	3,730.000
0042	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	10,060.000	10,060.000
0044	305.0500	Shaping Shoulders	STA	876.000	876.000
0046	415.0080	Concrete Pavement 8-Inch	SY	102.000	102.000
0048	415.0410	Concrete Pavement Approach Slab	SY	160.000	160.000
0050	455.0605	Tack Coat	GAL	14,390.000	14,390.000
0052	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	2.000	2.000
0054	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	2.000	2.000
0056	460.2000	Incentive Density HMA Pavement	DOL	6,570.000	6,570.000
0058	460.2005	Incentive Density PWL HMA Pavement	DOL	21,080.000	21,080.000
0060	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	17,350.000	17,350.000
0062	460.2010	Incentive Air Voids HMA Pavement	DOL	31,340.000	31,340.000
0064	460.6645	HMA Pavement 5 MT 58-34 V	TON	31,335.000	31,335.000
0066	460.9000.S	Material Transfer Vehicle	EACH	1.000	1.000
0068	465.0105	Asphaltic Surface	TON	1,561.000	1,561.000
0070	465.0110	Asphaltic Surface Patching	TON	300.000	300.000
0072	465.0115	Asphaltic Surface Detours	TON	50.000	50.000
0074	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	15.000	15.000
0076	465.0310	Asphaltic Curb	LF	2,692.000	2,692.000
0078	465.0315	Asphaltic Flumes	SY	140.000	140.000
0080	465.0520	Asphaltic Rumble Strips, Shoulder	LF	85,701.000	85,701.000
0082	465.0560	Asphaltic Rumble Strips, Centerline	LF	40,895.000	40,895.000
0084	502.0100	Concrete Masonry Bridges	CY	726.000	726.000
0086	502.3200	Protective Surface Treatment	SY	842.000	842.000
0088	502.3210	Pigmented Surface Sealer	SY	162.000	162.000
0090	504.0900	Concrete Masonry Endwalls	CY	19.000	19.000
0092	505.0400	Bar Steel Reinforcement HS Structures	LB	11,120.000	11,120.000
0094	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	113,880.000	113,880.000
0096	505.0800.S	Bar Steel Reinforcement HS Stainless Structures	LB	860.000	860.000
0098	516.0500	Rubberized Membrane Waterproofing	SY	48.000	48.000

7590-00-73

Line	Item	Item Description	Unit	Total	Qty
0100	520.8700	Cleaning Culvert Pipes	EACH	5.000	5.000
0102	522.0124	Culvert Pipe Reinforced Concrete Class III 24-Inch	LF	12.000	12.000
0104	522.0136	Culvert Pipe Reinforced Concrete Class III 36-Inch	LF	64.000	64.000
0106	522.0148	Culvert Pipe Reinforced Concrete Class III 48-Inch	LF	150.000	150.000
0108	522.1036	Apron Endwalls for Culvert Pipe Reinforced Concrete 36-Inch	EACH	2.000	2.000
0110	522.1048	Apron Endwalls for Culvert Pipe Reinforced Concrete 48-Inch	EACH	4.000	4.000
0112	522.2343	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 43x68-Inch	LF	182.000	182.000
0114	524.0118	Culvert Pipe Salvaged 18-Inch	LF	50.000	50.000
0116	524.0130	Culvert Pipe Salvaged 30-Inch	LF	14.000	14.000
0118	524.0136	Culvert Pipe Salvaged 36-Inch	LF	8.000	8.000
0120	524.0148	Culvert Pipe Salvaged 48-Inch	LF	14.000	14.000
0122	524.0172	Culvert Pipe Salvaged 72-Inch	LF	24.000	24.000
0124	550.1100	Piling Steel HP 10-Inch X 42 Lb	LF	2,590.000	2,590.000
0126	601.0588	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type TBT	LF	116.000	116.000
0128	601.0590	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type TBTT	LF	100.000	100.000
0130	602.3010	Concrete Surface Drains	CY	4.000	4.000
0132	606.0200	Riprap Medium	CY	43.000	43.000
0134	606.0300	Riprap Heavy	CY	528.600	528.600
0136	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	360.000	360.000
0138	614.0150	Anchor Assemblies for Steel Plate Beam Guard	EACH	8.000	8.000
0140	614.0396	Guardrail Mow Strip Asphalt	SY	650.000	650.000
0142	614.2300	MGS Guardrail 3	LF	7,934.250	7,934.250
0144	614.2330	MGS Guardrail 3 K	LF	5,263.000	5,263.000
0146	614.2350	MGS Guardrail Short Radius	LF	112.400	112.400
0148	614.2500	MGS Thrie Beam Transition	LF	315.200	315.200
0150	614.2610	MGS Guardrail Terminal EAT	EACH	58.000	58.000
0152	614.2630	MGS Guardrail Short Radius Terminal	EACH	2.000	2.000
0154	618.0100	Maintenance and Repair of Haul Roads (project) 01. 7590-00-73	EACH	1.000	1.000
0156	619.1000	Mobilization	EACH	1.000	1.000
0158	624.0100	Water	MGAL	13.200	13.200
0160	625.0500	Salvaged Topsoil	SY	73,190.000	73,190.000
0162	627.0200	Mulching	SY	32,140.000	32,140.000
0164	628.1504	Silt Fence	LF	23,290.000	23,290.000
0166	628.1520	Silt Fence Maintenance	LF	23,290.000	23,290.000
0168	628.1905	Mobilizations Erosion Control	EACH	18.000	18.000
0170	628.1910	Mobilizations Emergency Erosion Control	EACH	6.000	6.000
0172	628.2004	Erosion Mat Class I Type B	SY	18,690.000	18,690.000
0174	628.2008	Erosion Mat Urban Class I Type B	SY	5,200.000	5,200.000
0176	628.2023	Erosion Mat Class II Type B	SY	17,160.000	17,160.000
0178	628.6005	Turbidity Barriers	SY	464.000	464.000
0180	628.7555	Culvert Pipe Checks	EACH	142.000	142.000
0182	629.0210	Fertilizer Type B	CWT	35.000	35.000
0184	630.0120	Seeding Mixture No. 20	LB	2,305.000	2,305.000
0186	630.0200	Seeding Temporary	LB	1,385.000	1,385.000
0188	630.0500	Seed Water	MGAL	1,645.000	1,645.000
0190	633.5200	Markers Culvert End	EACH	8.000	8.000
0192	642.5001	Field Office Type B	EACH	1.000	1.000
0194	643.0300	Traffic Control Drums	DAY	9,240.000	9,240.000
0196	643.0420	Traffic Control Barricades Type III	DAY	3,150.000	3,150.000

7590-00-73

Line	Item	Item Description	Unit	Total	Qty
0198	643.0705	Traffic Control Warning Lights Type A	DAY	4,150.000	4,150.000
0200	643.0900	Traffic Control Signs	DAY	25,230.000	25,230.000
0202	643.0910	Traffic Control Covering Signs Type I	EACH	2.000	2.000
0204	643.0920	Traffic Control Covering Signs Type II	EACH	9.000	9.000
0206	643.1000	Traffic Control Signs Fixed Message	SF	26.250	26.250
0208	643.1050	Traffic Control Signs PCMS	DAY	28.000	28.000
0210	643.3165	Temporary Marking Line Paint 6-Inch	LF	233,568.000	233,568.000
0212	643.5000	Traffic Control	EACH	1.000	1.000
0214	645.0111	Geotextile Type DF Schedule A	SY	176.000	176.000
0216	645.0120	Geotextile Type HR	SY	1,121.000	1,121.000
0218	646.2020	Marking Line Epoxy 6-Inch	LF	374.000	374.000
0220	646.2040	Marking Line Grooved Wet Ref Epoxy 6-Inch	LF	144,034.000	144,034.000
0222	646.4040	Marking Line Grooved Wet Ref Epoxy 10-Inch	LF	734.000	734.000
0224	646.5020	Marking Arrow Epoxy	EACH	10.000	10.000
0226	646.7120	Marking Diagonal Epoxy 12-Inch	LF	510.000	510.000
0228	650.4500	Construction Staking Subgrade	LF	14,796.000	14,796.000
0230	650.5000	Construction Staking Base	LF	14,796.000	14,796.000
0232	650.6000	Construction Staking Pipe Culverts	EACH	15.000	15.000
0234	650.6501	Construction Staking Structure Layout (structure) 01. B-18-241	EACH	1.000	1.000
0236	650.6501	Construction Staking Structure Layout (structure) 02. B-18-251	EACH	1.000	1.000
0238	650.8000	Construction Staking Resurfacing Reference	LF	43,773.000	43,773.000
0240	650.9911	Construction Staking Supplemental Control (project) 01. 7590-00-73	EACH	1.000	1.000
0242	650.9920	Construction Staking Slope Stakes	LF	14,796.000	14,796.000
0244	690.0150	Sawing Asphalt	LF	527.000	527.000
0246	715.0502	Incentive Strength Concrete Structures	DOL	4,464.000	4,464.000
0248	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	500.000	500.000
0250	740.0440	Incentive IRI Ride	DOL	16,580.000	16,580.000
0252	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 01. 316+00	EACH	1.000	1.000
0254	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 02. 426+18	EACH	1.000	1.000
0256	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,000.000	2,000.000
0258	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	2,400.000	2,400.000
0260	SPV.0180	Special 01. Ditch Cleaning	SY	216.000	216.000

3

GRUBBING

STATION	LOCATION	201.0205 STA	REMARKS
18+50 - 21+50	LT	3	
21+00 - 25+00	RT	4	
26+00 - 27+00	LT	1	
32+00 - 33+00	LT	1	
34+00 - 37+00	RT	3	
42+50 - 44+00	RT	2	
58+00 - 61+00	LT	3	
66+00 - 68+00	RT	2	
72+50 - 73+50	RT	1	
85+00 - 89+00	LT & RT	5	
100+00 - 102+00	RT	2	
105+00 - 106+00	RT	1	
116+50 - 117+50	RT	1	
119+00 - 123+00	RT	4	
126+00 - 134+00	RT	8	
142+00 - 150+00	RT	8	
158+00 - 167+00	RT	9	
167+00 - 174+00	LT & RT	7	
174+00 - 181+00	RT	7	
185+00 - 189+00	RT	4	
197+00 - 202+00	RT	5	
202+00 - 211+00	RT	10	
217+00 - 226+00	RT	9	
229+00 - 231+00	LT & RT	2	
236+00 - 240+00	LT & RT	4	
243+00 - 247+00	RT	4	
251+00 - 258+00	LT & RT	7	
258+00 - 266+00	RT	8	
266+00 - 272+00	LT & RT	6	
272+00 - 284+00	RT	12	
293+00 - 299+00	LT & RT	6	
299+00 - 306+50	RT	8	
306+50 - 315+00	RT	8	
318+00 - 320+00	LT	2	
328+00 - 330+00	RT	2	
330+00 - 332+00	LT & RT	2	
332+00 - 333+50	RT	2	
359+00 - 364+00	RT	5	
366+00 - 368+50	RT	3	
379+50 - 382+00	RT	3	
382+00 - 410+00	LT & RT	28	
411+00 - 413+00	LT	2	
416+00 - 421+00	RT	5	
421+00 - 428+00	LT & RT	7	
428+00 - 432+00	LT	4	
432+00 - 437+00	RT	5	
		235	

ASPHALT REMOVALS

STATION	LOCATION	204.0110 REMOVING ASPHALTIC SURFACE SY	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	REMARKS
15+25 - 125+00	LT & RT	-	40870	7	
125+00 - 235+00	LT & RT	0	38030	3	
235+00 - 313+50	LT & RT	-	27400	-	
319+50 - 419+50	LT & RT	-	34070	-	
419+50 - 452+98	LT & RT	68	11870	7	
PROJECT TOTAL		68	152240	16	

REMOVING STORM SEWER ITEMS

STATION	LOCATION	204.0220 REMOVING INLETS EACH	204.0245.01 REMOVING STORM SEWER (12-INCH) LF	REMARKS
21+22	LT	1	13	12-INCH CPCS
23+85	LT	1	85	12-INCH CPCS
32+43	LT	1	40	12-INCH CPCS
PROJECT TOTAL		3	138	

REMOVING CATTLE PASS

STATION	LOCATION	204.9060.S.01 EACH	REMARKS
89+70	LT & RT	1	52 LF, PACS 72"x42"
PROJECT TOTAL		1	

REMOVING GUARDRAIL

STATION	LOCATION	204.0165 REMOVING GUARDRAIL LF
15+10 - 125+00	LT & RT	9715
125+00 - 235+00	LT & RT	2612
235+00 - 313+00	LT & RT	2637
319+00 - 419+00	LT & RT	1224
419+00 - 452+98	LT & RT	547
PROJECT TOTAL		16735

NOTE: BID ITEMS ARE UNDER CATEGORY 0010, UNLESS OTHERWISE NOTED

EARTHWORK SUMMARY

CATEGORY 0010

DIVISION	FROM/TO STATION	LOCATION	* 205.0100 COMMON EXCAVATION (1) CUT	SALVAGED / UNUSABLE PAVEMENT MATERIAL	AVAILABLE MATERIAL (2)	UNEXPANDED FILL	EXPANDED FILL (3) FACTOR 1.25	MASS ORDINATE +/- (4)	WASTE	208.0100 BORROW	COMMENT:
DIVISION 1											
	16+30 - 27+50	BEAMGUARD LT & RT	223	0	223	1,441	1,801	-1,578	0	-1,578	
	30+52 - 69+24	BEAMGUARD LT & RT	722	0	722	2,449	3,061	-2,339	0	-2,339	
	72+78 - 81+84	BEAMGUARD RT	83	0	83	300	375	-292	0	-292	
	83+52 - 92+10	BEAMGUARD LT & RT	84	0	84	2,020	2,525	-2,441	0	-2,441	
	89+70	CATTLE PASS REMOVAL	34	0	34	110	137	-103	0	-103	
	98+73 - 107+94	BEAMGUARD RT	101	0	101	477	596	-495	0	-495	
	138+14 - 139+00	PIPE REPLACEMENT	379	0	379	47	59	320	320	0	
	194+63 - 202+94	BEAMGUARD LT & RT	162	0	162	1,047	1,309	-1,147	0	-1,147	
	226+88 - 235+75	BEAMGUARD LT & RT	119	0	119	1,757	2,196	-2,077	0	-2,077	
	271+12 - 290+24	BEAMGUARD LT & RT	369	0	369	1,573	1,966	-1,597	0	-1,597	
	304+87 - 310+00	BEAMGUARD LT & RT	96	0	96	380	475	-379	0	-379	
	313+00 - 319+50	CLEAR CREEK BRIDGE	1,495	348	1,147	595	744	403	403	0	
	336+34	MAINLINE	289	69	219	200	250	-31	0	-31	
	348+41	MAINLINE	547	56	491	400	500	-9	0	-9	
	355+09	MAINLINE	479	56	423	380	475	-52	0	-52	
	385+75 - 393+67	BEAMGUARD LT & RT	142	0	0	1,146	1,433	-1,433	0	-1,433	
	419+60 - 429+61	PINE CREEK BRIDGE	5,157	554	4,603	225	281	4,322	4,322	0	
	10+37 - 11+50	WILLOW RD	39	0	39	295	369	-330	0	-330	
DIVISION 1 SUBTOTALS			10,519	1,083	9,295	14,842	18,552	-9,257	5,045	-14,302	
TOTAL			10,519	1,083	9,295	14,842	18,552	-9,257	5,045	-14,302	

NOTES:

(1) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
(2) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL
(3) EXPANDED FILL FACTOR = 1.25 (EXPANDED FILL = UNEXPANDED FILL * FILL FACTOR)
(4) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.
(5) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFMORATION ONLY.

NOTE: BID ITEMS ARE UNDER CATEGORY 0010, UNLESS OTHERWISE NOTED

PREPARE FOUNDATION FOR
ASPHALTIC PAVING

PROJECT	211.0101 EACH
01. 7590-00-73	1
PROJECT TOTAL	1

PREPARE FOUNDATION FOR
ASPHALTIC SHOULDERS

CATEGORY	STATION TO STATION	LOCATION	211.0400 STA
0040	15+25 - 452+98	LT	438
	15+25 - 452+98	RT	438
	PROJECT TOTAL		876

FINISHING ROADWAY

PROJECT	213.0100 EACH
01. 7590-00-73	1
PROJECT TOTAL	1

BASE AGGREGATE DENSE

STATION - STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	*305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	624.0100 WATER MGAL	REMARKS
15+10 - 452+98	LT/RT	3,699	3,558	7.3	SHOULDERS
138+54	LT/RT	-	378	0.4	PIPE REPLACEMENT
336+34	LT/RT	-	372	0.4	PIPE REPLACEMENT
348+41	LT/RT	-	319	0.3	PIPE REPLACEMENT
355+09	LT/RT	-	319	0.3	PIPE REPLACEMENT
313+50 - 319+50	LT/RT	-	1,766	1.8	BRIDGE APPROACH
419+50 - 428+50	LT/RT	-	2,698	2.7	BRIDGE APPROACH
WILLOW RD	LT/RT	31	54	0.1	
PROJECT TOTAL		3,730	9,464	13.2	

*ADDITIONAL ITEMS LISTED ELSEWHERE IN PLANS

SHAPING SHOULDERS

CATEGORY	STATION TO STATION	LOCATION	211.0400 STA
0040	15+25 - 452+98	LT	438
	15+25 - 452+98	RT	438
	PROJECT TOTAL		876

NOTE: BID ITEMS ARE UNDER CATEGORY 0010, UNLESS OTHERWISE NOTED

3

CONCRETE PAVEMENT

STATION - STATION	LOCATION	415.0080 CONCRETE PAVEMENT 8-INCH	415.0410 CONCRETE PAVEMENT APPROACH SLAB	REMARKS
			SY	
315+46 - 315+61	LT/RT	27	40	B-18-241
316+43 - 316+58	LT/RT	24	40	B-18-241
425+61 - 425+76	LT/RT	24	40	B-18-251
426+58 - 426+73	LT/RT	27	40	B-18-251
PROJECT TOTAL		102	160	

HMA PAVEMENT ITEMS

CATEGORY	STATION	LOCATION	455.0605 TACK COAT	460.6645 HMA PAVEMENT 5 MT 58-34 V	460.9000.S MATERIAL TRANSFER VEHICLE	465.0105 ASPHALTIC SURFACE	465.0110 ASPHALTIC SURFACE PATCHING	465.0110 ASPHALTIC SURFACE DETOURS	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	*465.0130 ASPHALTIC CURB	465.0560 ASPHALTIC RUMBLE STRIPS, CENTERLINE	465.0520 ASPHALTIC RUMBLE STRIPS, SHOULDER	REMARKS
			GAL	TON	EACH	TON	TON	TON	TON	LF	LF	LF	
	PROJECT	LT & RT	-	-	1	930	300	50	-	-	-	-	
0010	15+25 - 125+00	LT & RT	3512	7835	-	-	-	-	-	2362	8775	-	
	125+00 - 235+00	LT & RT	3520	7249	-	28	-	-	-	110	9400	-	
	235+00 - 313+50	LT & RT	2512	5317	-	-	-	-	-	-	7450	-	
	313+50 - 319+50	LT & RT	157	392	-	-	-	-	-	-	438	876	
	319+50 - 419+50	LT & RT	3159	6561	-	-	-	-	-	-	9400	-	
	419+50 - 428+50	LT & RT	253	607	-	-	-	-	15	-	738	1396	
	428+50 - 452+98	LT & RT	783	2175	-	-	-	-	-	-	4694	-	
	138+60	LT & RT	36	-	-	170	-	-	-	-	-	-	
	336+34	LT & RT	33	-	-	159	-	-	-	-	-	-	
	348+41	LT & RT	28	-	-	137	-	-	-	-	-	-	
	355+09	LT & RT	28	-	-	137	-	-	-	-	-	-	
	WILLOW RD	LT	68	104	-	-	-	-	-	-	-	-	
	SUBTOTAL CATEGORY 0010		14089	30240	1	1561	300	50	15	2472	40895	2272	
0040	15+25 - 125+00	LT & RT	22	79	-	-	-	-	-	-	-	19720	SHOULDER WIDENING
	125+00 - 235+00	LT & RT	99	361	-	-	-	-	-	-	-	19370	SHOULDER WIDENING
	235+00 - 313+50	LT & RT	57	209	-	-	-	-	-	-	-	14010	SHOULDER WIDENING
	319+50 - 419+50	LT & RT	101	366	-	-	-	-	-	-	-	17610	SHOULDER WIDENING
	428+50 - 452+98	LT & RT	22	81	-	-	-	-	-	-	-	12719	SHOULDER WIDENING
	SUBTOTAL CATEGORY 0040		301	1095	0	0	0	0	0	0	0	83429	
	PROJECT TOTAL		14390	31335	1	1561	300	50	15	2472	40895	85701	

*ADDITIONAL ITEMS SHOWN ELSEWHERE IN PLANS

NOTE: TACK COAT REQUIRED PRIOR TO PAVING OVER MILLED SURFACE. CALCULATIONS BASED ON APPLICATION RATE OF 0.07 GAL/SY. TACK COAT BETWEEN HMA LAYERS 0.05 GAL/SY.

NOTE: BID ITEMS ARE UNDER CATEGORY 0010, UNLESS OTHERWISE NOTED

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PWL ITEMS

STATION - STATION	LOCATION	460.0105.S HMA PERCENT WITHIN LIMITS {PWL} TEST STRIP VOLUMETRICS EACH	460.0110.S HMA PERCENT WITHIN LIMITS {PWL} TEST STRIP DENSITY EACH	REMARKS
15+25 - 452+98	LT & RT	2	2	
PROJECT TOTAL		2	2	

PWL MIXTURE USE TABLE

LOCATION	STATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEM	TONS	THICKNESS	QUALITY MANAGEMENT PROGRAM TO BE USED FOR: MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
12 FOOT DRIVING LANE	15+10 TO 452+98	LOWER LAYER	MILLED EXISTING HMA SURFACE	5 MT 58-34 V	11348	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVING LANE	15+10 TO 452+98	UPPER LAYER	5 MT 58-34 V	5 MT 58-34 V	9727	1.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
PAVED SHOULDER (WIDTH VARIES)	15+10 TO 452+98	LOWER LAYER	MILLED EXISTING HMA SURFACE	5 MT 58-34 V	5469	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	DEPARTMENT ACCEPTANCE (SS 460.3.3.2); NOT ELIGIBLE FOR INCENTIVE
PAVED SHOULDER (WIDTH VARIES)	15+10 TO 452+98	UPPER LAYER	5 MT 58-34 V	5 MT 58-34 V	4688	1.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	DEPARTMENT ACCEPTANCE (SS 460.3.3.2); NOT ELIGIBLE FOR INCENTIVE
SIDE ROADS	PROJECT	LOWER LAYER	MILLED EXISTING HMA SURFACE	5 MT 58-34 V	56	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	DEPARTMENT ACCEPTANCE (SS 460.3.3.2); NOT ELIGIBLE FOR INCENTIVE
SIDE ROADS	PROJECT	UPPER LAYER	5 MT 58-34 V	5 MT 58-34 V	48	1.5	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	DEPARTMENT ACCEPTANCE (SS 460.3.3.2); NOT ELIGIBLE FOR INCENTIVE
VARIOUS	15+10 TO 452+98	CULVERT PATCHES	BASE AGGREGATE	ASPHALTIC SURFACE	930	9.25" TOTAL	(SS 465)	ORDINARY COMPACTION (SS 450.3.2.6.2)

ASPHALTIC FLUMES

STATION	LOCATION	*465.0310 ASPHALTIC CURB LF	465.0315 ASPHALTIC FLUMES SY	*606.0200 RIPRAP MEDIUM CY	*645.0120 GEOTEXTILE TYPE HR SY	REMARKS
17+36	LT	20	7	3	10	RIPRAP AT ASPHALTIC FLUME; W=6', L=8'
19+43	LT	20	20	3	10	RIPRAP AT ASPHALTIC FLUME; W=6', L=8'
21+22	LT	20	20	3	10	RIPRAP AT ASPHALTIC FLUME; W=6', L=8'
23+85	LT	20	9	3	10	RIPRAP AT ASPHALTIC FLUME; W=6', L=8'
31+88	LT	20	7	3	10	RIPRAP AT ASPHALTIC FLUME; W=6', L=8'
34+60	LT	20	9	3	10	RIPRAP AT ASPHALTIC FLUME; W=6', L=8'
36+82	LT	20	24	3	10	RIPRAP AT ASPHALTIC FLUME; W=6', L=8'
117+37	LT	20	8	3	10	RIPRAP AT ASPHALTIC FLUME; W=6', L=8'
120+00	LT	20	12	3	10	RIPRAP AT ASPHALTIC FLUME; W=6', L=8'
122+50	LT	20	12	3	10	RIPRAP AT ASPHALTIC FLUME; W=6', L=8'
124+30	LT	20	12	3	10	RIPRAP AT ASPHALTIC FLUME; W=6', L=8'
PROJECT TOTAL		220	140	33	110	

*ADDITIONAL ITEMS SHOWN ELSEWHERE IN PLANS

NOTE: BID ITEMS ARE UNDER CATEGORY 0010, UNLESS OTHERWISE NOTED

CULVERT ITEMS

*** INLET STATION	OFFSET	ELEV. (FT)	*** OUTLET STATION	OFFSET	ELEV. (FT)	SLOPE (%)	LOCATION	*203.0100 REMOVING SMALL PIPE CULVERTS EACH	520.8700 CLEANING CULVERT PIPES EACH	522.0124 CULVERT PIPE REINFORCED CLASS III CONCRETE 24-INCH LF	522.0136 CULVERT PIPE REINFORCED CLASS III CONCRETE 36-INCH LF	522.0148 CULVERT PIPE REINFORCED CLASS III CONCRETE 48-INCH LF	522.1036 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH EACH	522.1048 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 48-INCH EACH	524.0118 CULVERT PIPE SALVAGED 18-INCH LF	524.0130 CULVERT PIPE SALVAGED 30-INCH LF	524.0136 CULVERT PIPE SALVAGED 36-INCH LF	524.0148 CULVERT PIPE SALVAGED 48-INCH LF	524.0172 CULVERT PIPE SALVAGED 72-INCH LF	*633.5200 MARKERS CULVERT END EACH	REMARKS
26+08	31.7' LT	1000.25	26+08	39.6' LT	999.60	8.32	STH 93	-	1	8	-	-	-	-	-	-	-	-	-	-	JOINT TIES REQUIRED AT ALL JOINTS
26+13	28.8' RT	1005.30	26+13	24.8' RT	1004.97	8.32	STH 93	-	-	4	-	-	-	-	-	-	-	-	-	-	JOINT TIES REQUIRED AT ALL JOINTS
26+60	36.0' LT	1005.68	26+36	38.1' LT	1004.48	2.42	PE	-	-	-	-	-	-	-	50	-	-	-	-	-	
67+66	35.2' LT	1115.30	67+66	31.2' LT	1115.23	1.70	STH 93	-	-	-	4	-	-	-	-	-	-	-	-	-	JOINT TIES REQUIRED AT ALL JOINTS
110+16	25.8' LT	1105.50	110+17	15.8' LT	1105.40	1.00	STH 93	-	-	-	-	-	-	-	-	10	-	-	-	-	JOINT TIES REQUIRED AT ALL JOINTS
110+19	25.2' RT	1104.99	110+20	29.2' RT	1104.95	1.00	STH 93	-	-	-	-	-	-	-	-	4	-	-	-	-	JOINT TIES REQUIRED AT ALL JOINTS
118++60	46.9' RT	1066.76	118+60	40.9' RT	1066.23	8.86	STH 93	-	-	-	-	-	-	-	-	-	8	-	-	-	JOINT TIES REQUIRED AT ALL JOINTS
158+90	26.4' LT	996.52	158+90	40.4' LT	996.27	1.75	STH 93	-	-	-	-	-	-	-	-	-	-	14	-	-	
197+51							STH 93	-	1	-	-	-	-	-	-	-	-	-	-	-	
217+08	30.5' RT	995.64	217+09	22.7' RT	995.35	3.92	STH 93	-	1	-	-	-	-	-	-	-	-	-	8	-	JOINT TIES REQUIRED AT ALL JOINTS
217+09	23.2' LT	993.52	217+09	39.2' LT	992.90	3.92	STH 93	-	-	-	-	-	-	-	-	-	-	-	16	-	JOINT TIES REQUIRED AT ALL JOINTS
275+80							STH 93	-	1	-	-	-	-	-	-	-	-	-	-	-	
390+06	46.2' LT						PE	-	1	-	-	-	-	-	-	-	-	-	-	-	
336+35	27.4' RT	946.04	336+55	29.1' LT	945.91	0.22	STH 93	1	-	-	60	-	2	-	-	-	-	-	-	2	36" CPRC; JOINT TIES REQUIRED AT ALL JOINTS
348+64	40.9' LT	940.48	348+64	41.1' RT	940.16	0.39	STH 93	1	-	-	-	82	-	2	-	-	-	-	-	2	48" 'CPRC; JOINT TIES REQUIRED AT ALL JOINTS
355+33	34.9' LT	941.75	355+32	33.1' RT	941.61	0.21	STH 93	1	-	-	-	68	-	2	-	-	-	-	-	2	48" CPRC; JOINT TIES REQUIRED AT ALL JOINTS
							PROJECT TOTAL	3	5	12	64	150	2	4	50	14	8	14	24	6	

*ADDITIONAL ITEMS SHOWN ELSEWHERE IN PLANS

CULVERT ITEMS

*** INLET STATION	OFFSET	ELEV. (FT)	*** OUTLET STATION	OFFSET	ELEV. (FT)	SLOPE (%)	LOCATION	*203.0100 REMOVING SMALL PIPE CULVERTS EACH	522.2343 CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 43x68-INCH LF	504.0900 CONCRETE MASONRY ENDWALLS CY	* 633.5200 MARKERS CULVERT END EACH	REMARKS
138+31	32.9' RT	1010.18	138+85	43.0' LT	1009.60	0.06	LT/RT	1	94	10	1	30"x66" HORIZ ELLIPTICAL-STEEL; JOINT TIES REQUIRED AT ALL JOINTS
138+42	32.8' RT	1011.73	138+93	37.6' LT	1009.60	2.42	LT/RT	1	88	9	1	38"x66" HORIZ ELLIPTICAL-STEEL; JOINT TIES REQUIRED AT ALL JOINTS
							PROJECT TOTAL	2	182	19	2	

*ADDITIONAL ITEMS LISTED ELSEWHERE IN PLANS
*** PIPE INVERT AND STATION/OFFSET AT END OF PIPE

SURFACE DRAIN ITEMS

STATION	LOCATION	601.0588 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBT LF	601.0588 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBTT LF	602.3010 CONCRETE SURFACE DRAINS CY	*606.0200 RIPRAP MEDIUM CY	*645.0120 GEOTEXTILE TYPE HR SY	REMARKS
315+51 - 315+61	LT & RT	-	20	-	-	-	B-18-241
316+43 - 316+87	LT & RT	58	30	2	5	11	B-18-241
425+32 - 425+76	LT & RT	58	30	2	5	11	B-18-251
426+58 - 426+68	LT & RT	-	20	-	-	-	B-18-251
ITEM TOTALS		116	100	4	10	22	

*ADDITIONAL ITEMS SHOWN ELSEWHERE IN PLANS
NOTE: BID ITEMS ARE UNDER CATEGORY 0010, UNLESS OTHERWISE NOTED

3

MAINTENANCE AND REPAIR OF HAUL ROADS (7590-00-73)

PROJECT	618.0100 EACH
7590-00-73	1
PROJECT TOTAL	1

MOBILIZATION

PROJECT	619.1000 EACH
01. 7590-00-73	1
PROJECT TOTAL	1

GUARDRAIL ITEMS

STATION	LOCATION	614.0396 GUARDRAIL MOW STRIP ASPHALT SY	614.2300 MGS GUARDRAIL 3 LF	614.2330 MGS GUARDRAIL 3K LF	614.2350 MGS GUARDRAIL SHORT RADIUS LF	CONTROLLED RELEASE TERMINAL POSTS EACH	614.2500 MGS THRIE BEAM TRANSITION LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH	614.2630 MGS GUARDRAIL SHORT RADIUS TERMINAL EACH	REMARKS
17+20 - 26+30	LT	-	-	800	-	-	-	2	-	
20+15 - 25+68	RT	-	450	-	-	-	-	2	-	
31+70 - 39+70	LT	-	565	122.5	-	-	-	2	-	
34+30 - 37+30	RT	-	-	200	-	-	-	2	-	
41+39 - 57+06	RT	-	785	665	-	-	-	2	-	
56+46 - 68+01	LT	-	1058	-	-	-	-	2	-	
62+59 - 68+05	RT	-	437.5	-	-	-	-	2	-	
72+93 - 80+64	RT	-	662.5	-	-	-	-	2	-	
84+72 - 90+92	RT	-	512.5	-	-	-	-	2	-	
84+73 - 90+79	LT	-	500	-	-	-	-	2	-	
99+93 - 106+76	RT	-	425	150	-	-	-	2	-	
116+72 - 119+72	RT	-	200	-	-	-	-	2	-	
117+25 - 126+61	LT	-	825	-	-	-	-	2	-	
122+28 - 124+77	RT	-	145	-	-	-	-	2	-	
195+82 - 201+88	RT	-	500	-	-	-	-	2	-	
195+91 - 201+34	LT	-	-	437.5	-	-	-	2	-	
227+96 - 10+37'W'	LT	270	-	225	62.4	10	-	2	-	
228+36 - 234+02	RT	-	-	512.5	-	-	-	2	-	
272+31 - 278+12	RT	-	-	575	-	-	-	2	-	
272+67 - 279+86	LT	-	-	612.5	-	-	-	2	-	
283+61 - 289+05	RT	-	437.5	-	-	-	-	2	-	
306+06 - 310+00	RT	-	-	288	-	-	-	2	-	
306+19 - 310+00	LT	380	275	-	-	-	-	2	-	
343+71 - 317+33	LT & RT	-	-	-	-	-	157.6	4	-	CLEAR CREEK BRIDGE
386+93 - 392+50	RT	-	-	450	-	-	-	2	-	
388+33 - 392+08	LT	-	56.25	225	50	8	-	2	2	CUT GUARDRAIL REQUIRED
424+27 - 427+82	LT & RT	-	100	-	-	-	157.6	4	-	PINE CREEK BRIDGE
ITEM TOTALS		650	7934.25	5263.0	112.4	18	315.2	58	2	

RESTORATION

STATION	LOCATION	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0200 SEEDING TEMPORARY LB	630.0500 SEED WATER MGAL
15+25 - 452+98	STH 93	60987	26778	27	1920	1152	1370
UNDISTRIBUTED		12203	5362	8	385	233	275
ITEM TOTALS		73190	32140	35	2305	1385	1645

MOBILIZATIONS EROSION CONTROL

STATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
PROJECT LENGTH	18	6
PROJECT TOTAL	18	6

NOTE: BID ITEMS ARE UNDER CATEGORY 0010, UNLESS OTHERWISE NOTED

EROSION CONTROL ITEMS

STATION	LOCATION	*606.0300 RIPRAP HEAVY CY	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	628.2004 EROSION MAT CLASS I TYPE B SY	628.2023 EROSION MAT CLASS II TYPE B SY	628.6005 TURBIDITY BARRIERS SY	628.7555 CULVERT PIPE CHECKS EACH	*645.0120 GEOTEXTILE TYPE HR SY	REMARKS
PROJECT	LT & RT	-	19408	19408	4335	15574	14300	387	118	-	
138+37	RT	8.7								17	
138+89	LT	6.8								10	
UNDISTRIBUTED		3.1	3882	3882	865	3116	2860	77	24	6	
PROJECT TOTAL		18.6	23290	23290	5200	18690	17160	464	142	33	

*ADDITIONAL ITEMS LISTED ELSEWHERE IN PLANS

TRAFFIC CONTROL

STAGE	PROJECT LOCATION	APPROX. SERVICE PERIOD DAYS	643.5000 TRAFFIC CONTROL	643.0300 TRAFFIC CONTROL DRUMS QTY.	643.0300 DAY	643.0420 TRAFFIC CONTROL BARRICADES TYPE III QTY.	643.0420 DAY	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A QTY.	643.0705 DAY	643.0900 TRAFFIC CONTROL SIGNS QTY.	643.0900 DAY	643.1000 TRAFFIC CONTROL FIXED MESSAGE SF	643.1050 TRAFFIC CONTROL SIGNS PCMS QTY.	643.1050 DAY	*643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I EACH	*643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH	REMARKS
	PROJECT	-	1														
-	STH 93 NB	7	-		-	-	-	-	-	-	-	-	1	7	-	-	PROJECT START
-	STH 93 SB	7	-		-	-	-	-	-	-	-	-	1	7	-	-	PROJECT END
-	STH 93 NB	7	-		-	-	-	-	-	-	-	-	1	7	-	-	PRIOR TO STH 93 DETOUR
-	STH 93 SB	7	-		-	-	-	-	-	-	-	-	1	7	-	-	PRIOR TO STH 93 DETOUR
	15+25 - 452+98	154	-		-	-	-	-	-	35	5,390	-	-	-	-	-	ADVANCED WARNING
	STH 93 DETOUR	64	-		-	41	2,624	54	3,456	201	12,864	26.25	0	0	2	9	SEE DETOUR SHEETS
	15+25 - 452+98	154	-	50	7,700	-	-	-	-	18	2,772	-	-	-	-	-	SEE SDD 15C12-09A, 15D44-02
	UNDISTRIBUTED				1,540		526		694		4,204	-		-	-	-	
	PROJECT TOTAL		1		9,240		3,150		4,150		25,230	26.25		28	2	9	

*NUMBER OF CYCLES = 1

PAVEMENT MARKING

STATION	LOCATION	643.3165 ** TEMPORARY MARKING LINE PAINT 6-INCH LF	646.2020 MARKING LINE EPOXY 6-INCH YELLOW LF	646.2020 WHITE LF	646.2040 MARKING LINE GROOVED WET REF EPOXY 6-INCH YELLOW LF	646.2040 WHITE LF	646.4040 MARKING LINE GROOVED WET REF EPOXY 10-INCH LF	646.5020 MARKING ARROW EPOXY EACH	646.7120 MARKING DIAGONAL EPOXY 12-INCH LF	REMARKS
15+25 - 125+00	CENTERLINE	87800	-	-	-	-	-	-	-	HMA LAYERS & PRIOR TO RUMBLESTRIPS
125+00 - 235+00	CENTERLINE	48450	-	-	-	-	-	-	-	HMA LAYERS & PRIOR TO RUMBLESTRIPS
235+00 - 313+50	CENTERLINE	30450	-	-	-	-	-	-	-	HMA LAYERS & PRIOR TO RUMBLESTRIPS
313+50 - 319+50	CENTERLINE	1700	-	-	-	-	-	-	-	HMA LAYERS & PRIOR TO RUMBLESTRIPS
319+50 - 419+50	CENTERLINE	48450	-	-	-	-	-	-	-	HMA LAYERS & PRIOR TO RUMBLESTRIPS
419+50 - 428+50	CENTERLINE	800	-	-	-	-	-	-	-	HMA LAYERS & PRIOR TO RUMBLESTRIPS
428+50 - 452+98	CENTERLINE	15918	-	-	-	-	-	-	-	HMA LAYERS & PRIOR TO RUMBLESTRIPS
15+25 - 125+00	RT	-	-	-	21950	21420	187	3	-	UPPER HMA LAYER
125+00 - 235+00	RT	-	-	-	12113	21735	-	-	-	UPPER HMA LAYER
235+00 - 313+50	LT & RT	-	-	-	7613	15445	100	2	-	UPPER HMA LAYER
313+50 - 319+50	LT	-	25	162	425	1038	-	-	-	UPPER HMA LAYER
319+50 - 419+50	RT	-	-	-	12113	19740	227	4	-	UPPER HMA LAYER
419+50 - 428+50	RT	-	25	162	200	1638	-	-	-	UPPER HMA LAYER
428+50 - 452+98	RT	-	-	-	3980	4626	220	4	510	UPPER HMA LAYER
PROJECT TOTAL		233568	374		144034		734	10	510	

**SEE CONSTRUCTION DETAIL FOR TEMPORARY MARKINGS ON HMA PAVEMENTS

NOTE: BID ITEMS ARE UNDER CATEGORY 0010, UNLESS OTHERWISE NOTED

FIELD OFFICE TYPE B

PROJECT	642.5001 EACH
01. 7590-00-73	1
PROJECT TOTAL	1

3

CONSTRUCTION STAKING

STATION	LOCATION	650.4500 SUBGRADE LF	650.5000 BASE LF	650.6000 CULVERT PIPE EACH	650.8000 RESURFACING REFERENCE LF	650.9911 SUPPLEMENTAL CONTROL (7590-00-73) EACH	650.9920 SLOPE STAKES LF
16+30 - 27+50	BEAMGUARD LT & RT	1120	1120	-	-	-	1120
30+52 - 69+24	BEAMGUARD LT & RT	3872	3872	-	-	-	3872
72+78 - 81+84	BEAMGUARD RT	906	906	-	-	-	906
83+52 - 92+10	BEAMGUARD LT & RT	858	858	-	-	-	858
98+73 - 107+94	BEAMGUARD RT	921	921	-	-	-	921
138+14 - 139+00	PIPE REPLACEMENT	86	86	-	-	-	86
194+63 - 202+94	BEAMGUARD LT & RT	831	831	-	-	-	831
226+88 - 235+75	BEAMGUARD LT & RT	887	887	-	-	-	887
271+12 - 290+24	BEAMGUARD LT & RT	1912	1912	-	-	-	1912
304+87 - 310+00	BEAMGUARD LT & RT	513	513	-	-	-	513
313+00 - 319+50	CLEAR CREEK BRIDGE	650	650	-	-	-	650
335+91 - 337+07	MAINLINE	116	116	-	-	-	116
348+10 - 349+18	MAINLINE	108	108	-	-	-	108
354+78 - 355+78	MAINLINE	100	100	-	-	-	100
385+75 - 393+67	BEAMGUARD LT & RT	792	792	-	-	-	792
419+50 - 429+61	PINE CREEK BRIDGE	1011	1011	-	-	-	1011
10+37 - 11+50	WILLOW RD	113	113	-	-	-	113
PROJECT LENGTH	LT & RT	-	-	15	43773	1	-
PROJECT TOTAL		14796	14796	15	43773	1	14796

CONSTRUCTION STAKING STRUCTURE LAYOUT

STRUCTURE	650.6501
01. B-18-241	1
02. B-18-251	1

SAWING

STATION	LOCATION	690.0150 SAWING ASPHALT LF	REMARKS
89+18	LT & RT	36	CATTLE PASS REMOVAL
90+22	LT & RT	36	CATTLE PASS REMOVAL
138+12	LT & RT	30	CULVERT PIPE
138+51	LT	25	RUDY RD
139+03	LT & RT	30	CULVERT PIPE
230+75	LT	17	WILLOW RD
313+50	LT & RT	30	RECONSTRUCT AREA
319+50	LT & RT	30	RECONSTRUCT AREA
335+81	LT & RT	30	CULVERT PIPE
337+07	LT & RT	30	CULVERT PIPE
348+10	LT & RT	30	CULVERT PIPE
349+18	LT & RT	30	CULVERT PIPE
354+78	LT & RT	30	CULVERT PIPE
355+86	LT & RT	30	CULVERT PIPE
366+20	RT	36	REMOVE FE
419+50	LT & RT	30	RECONSTRUCT AREA
427+65	RT	17	DRIVEWAY
428+50	LT & RT	30	RECONSTRUCT AREA
PROJECT TOTAL		527	

INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM (STATION)

STATION	999.2000.S	REMARKS
01. 316+00	1	B-18-942
02. 426+18	1	C-18-600

SPECIAL ITEMS

STATION	LOCATION	SPV.0180 SPECIAL (01. DITCH CLEANING) SY
26+00 - 26+20	LT	27
26+00 - 26+20	RT	27
158+80 - 159+00	LT	27
186+00 - 186+20	LT	27
186+00 - 186+20	RT	27
197+40 - 197+60	LT	27
275+70 - 275+90	RT	27
285+55 - 285+75	LT	27
PROJECT TOTAL		216

NOTE: BID ITEMS ARE UNDER CATEGORY 0010, UNLESS OTHERWISE NOTED

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PROJECT PLAT TITLE SHEET
7590-00-23
ELEVA - EAU CLAIRE
SOUTH COUNTY LINE TO CEDAR ROAD
STH 93
EAU CLAIRE 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 CULVERT

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 XXXXX

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

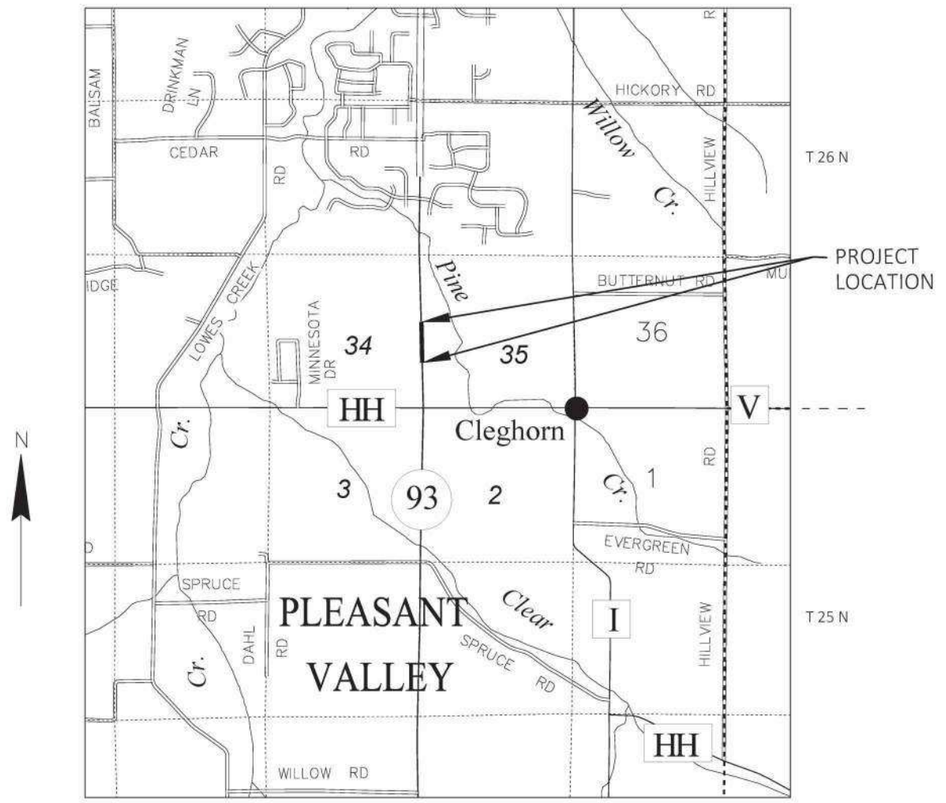
ACCESS RESTRICTED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)
PARCEL NUMBER 25 UTILITY NUMBER 40
PARALLEL OFFSETS

CONVENTIONAL ABBREVIATIONS

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

CURVE DATA ABBREVIATIONS

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



CONVENTIONAL UTILITY SYMBOLS

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

LAYOUT SCALE 0 0.5 MI.

THE NOTES, CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 7590-00-23.

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

ALL NEW RIGHT-OF-WAY AND PERMANENT EASEMENT 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.

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

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 THE NEW REFERENCE LINES.

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.

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

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

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.

PROJECT NUMBER 7590-00-23-4.01
SHEET 2 OF 2

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\RW\DWG\040101-RP.DWG
LAYOUT NAME: Title
PLOT DATE : 3/12/2024 1:14 PM PLOT BY : SEH
7590-00-23-4.01

TRANSPORTATION PROJECT PLAT NO: 7590-00-23-4.01

THAT PART OF THE NE 1/4 OF THE SE1/4, SECTION 34, TOWNSHIP 26 NORTH, RANGE 9 WEST,
TOWN OF PLEASANT VALLEY, EAU CLAIRE COUNTY, WISCONSIN.

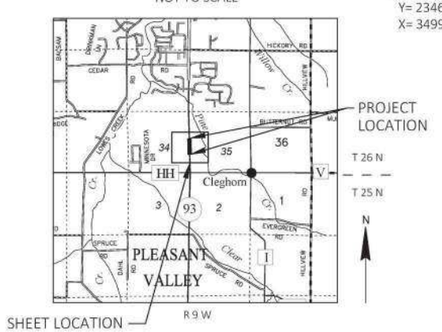
RELOCATION ORDER STH 93 ELEVA - EAU CLAIRE, SOUTH COUNTY LINE TO CEDAR ROAD, EAU CLAIRE COUNTY.

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 NAMED 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.

LOCATION SKETCH
NOT TO SCALE



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

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

ALL NEW RIGHT-OF-WAY AND PERMANENT EASEMENT 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.

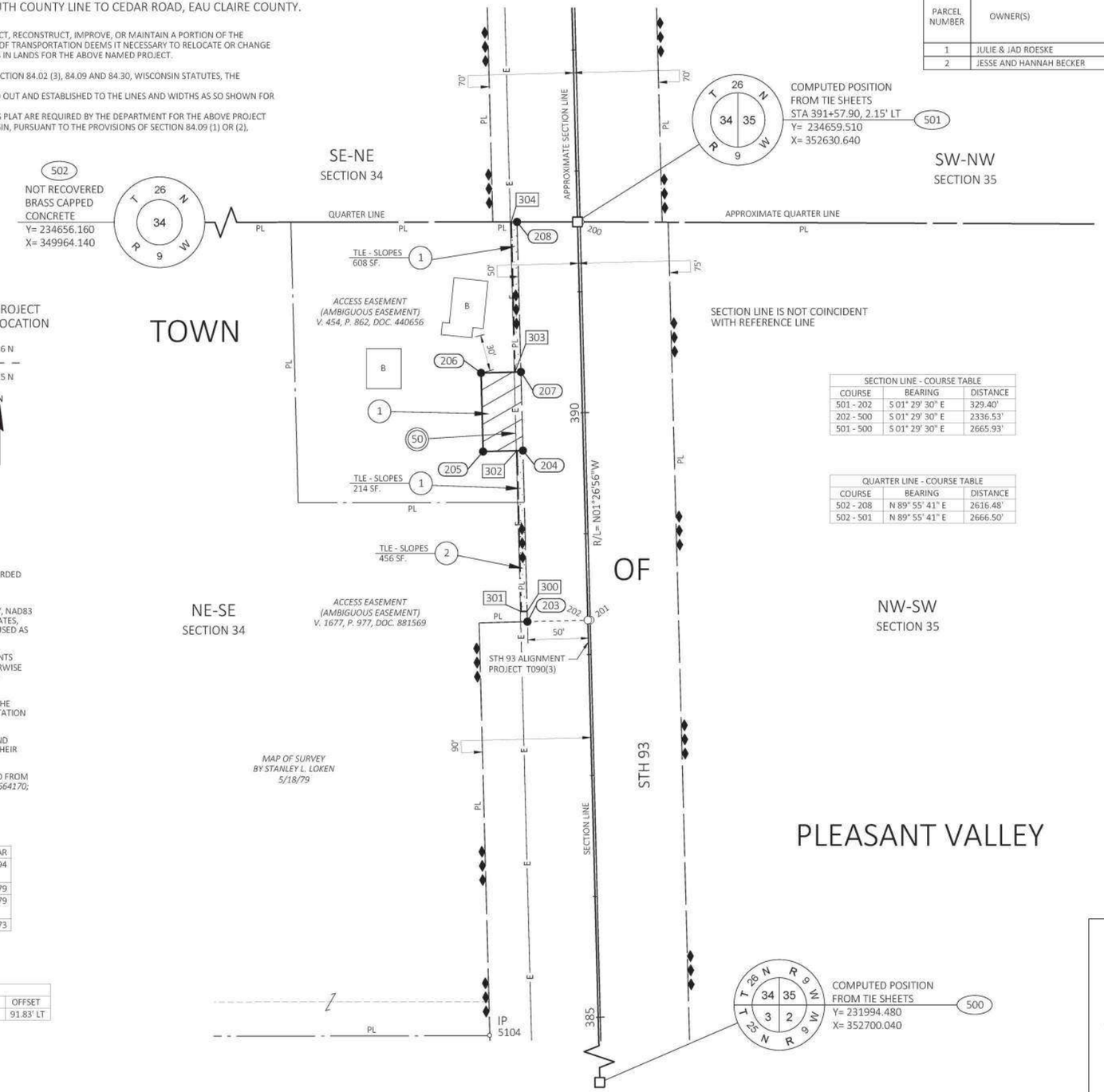
FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN THE NW REGION - EAU CLAIRE.

FOUND MONUMENT INFORMATION SHOWN REPRESENTS TYPE AND LOCATION OF EXISTING MONUMENTS WITHOUT OPINION AS TO THEIR VALIDITY AND USE AS A PROPERTY CORNER.

EXISTING ACCESS CONTROL ALONG STH 93 HAS BEEN ESTABLISHED FROM PREVIOUS PROJECT 7590-07-29 (7590-08-29); *V. 898, P. 36, DOC. 664170; V. 898, P. 34, DOC. 664168 AND V. 898, P. 35, DOC. 664169.*

ROAD NAME	BASIS OF EXISTING R/W	YEAR
STH 93	CONTROLLED ACCESS PLAN 7590-07-29 (7590-08-29)	1994
STH 93	PROJECT T-318	1979
STH 93	MAP OF SURVEY BY STANLEY L. LOKEN	1979
STH 93	PROJECT T090(3)	1973

RECOVERED MONUMENTS					
POINT	Y	X	DESCRIPTION	STATION	OFFSET
5104	233986.877	352557.943	5/8" IRON PIPE	384+87.32	91.83' LT



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

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTERESTS REQUIRED	R/W SQUARE FEET REQUIRED			TLE SQUARE FEET
			NEW	EXISTING	TOTAL	
1	JULIE & JAD ROESKE	FEE / TLE	2143	-	2143	822
2	JESSE AND HANNAH BECKER	TLE	-	-	-	456

1252957
TINA K. POMMIER
EAU CLAIRE COUNTY WI
REGISTER OF DEEDS
RECORDED ON
03/15/2024 11:23 AM
REC FEE:
TRANS FEE:
EXEMPT #:
PAGES: 2
This document was electronically recorded and returned to submitter

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 7590-00-23-4.01
SHEET 1 OF 2

FEE - COURSE TABLE		
COURSE	BEARING	DISTANCE
200 - 201	S 01° 26' 56" E	329.34'
201 - 202	S 88° 30' 30" W	1.91'
202 - 203	S 88° 30' 30" W	50.00'
203 - 204	N 01° 29' 30" W	141.54'
204 - 205	S 88° 33' 04" W	32.99'
205 - 206	N 01° 26' 56" W	65.00'
206 - 207	N 88° 33' 04" E	32.94'
207 - 208	N 01° 29' 30" W	124.10'
208 - 501	N 89° 55' 41" E	50.02'
501 - 200	S 89° 45' 53" E	2.15'

SECTION LINE - COURSE TABLE		
COURSE	BEARING	DISTANCE
501 - 202	S 01° 29' 30" E	329.40'
202 - 500	S 01° 29' 30" E	2336.53'
501 - 500	S 01° 29' 30" E	2665.93'

QUARTER LINE - COURSE TABLE		
COURSE	BEARING	DISTANCE
502 - 208	N 89° 55' 41" E	2616.48'
502 - 501	N 89° 55' 41" E	2666.50'

FEE STATION & OFFSET TABLE		
POINT	STATION	OFFSET
200	391+57.83	0.00'
201	388+28.50	0.00'
202	388+28.50	1.91' LT
203	388+28.46	51.91' LT
204	389+70.00	52.01' LT
205	389+70.00	85.00' LT
206	390+35.00	85.00' LT
207	390+35.00	52.06' LT
208	391+59.10	52.15' LT

TLE STATION & OFFSET TABLE		
POINT	STATION	OFFSET
300	388+37.00	51.91' LT
301	388+37.00	57.00' LT
302	389+70.00	57.00' LT
303	390+35.00	57.00' LT
304	391+59.22	57.00' LT

UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	OWNER (S)	INTEREST REQUIRED
50	EAU CLAIRE ELECTRIC COOPERATIVE	RELEASE OF RIGHTS

UTILITY EASEMENT TABLE			
UTILITY NUMBER	PARCEL	RECORDING INFORMATION	NAME
50	1	V. 513, P. 278, DOC. 478136	EAU CLAIRE ELECTRIC COOPERATIVE
	1	V. 597, P. 628, DOC. 524025	
	1	V. 1705, P. 404-405, DOC. 888312	
	2	V. 513, P. 136, DOC. 478036	

SEH
10 N BRIDGE ST
CHIPPEWA FALLS WI 54729

I, JASON L. CANCE 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 WISCONSIN DEPARTMENT OF TRANSPORTATION NORTHWEST REGION I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN JASON L. CANCE S-2688 CHIPPEWA FALLS WI LAND SURVEYOR

SIGNATURE: _____ DATE: 3-12-24
PRINT NAME: JASON L. CANCE
REGISTRATION NUMBER: S-2688

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION NORTHWEST REGION
SIGNATURE: _____ DATE: 3-12-24
PRINT NAME: AARON GUSTAFSON

GRUBBING REQ'D
STA 18+50 TO STA 21+50 LT
STA 21+00 TO STA 25+00 RT

APPROXIMATE PROPERTY LINE (TYP)

C1
PI STA = 24+67.91
Y = 201,020.9907
X = 347,514.2535
Δ = 16°57'12"
D = 2°02'47"
T = 417.29'
L = 828.49'
R = 2,800.00'
PC STA = 20+50.61
PT STA = 28+79.10
SE = MATCH EXISTING

STA 26+60 LT
SALVAGE AND REINSTALL EXISTING
18-INCH CPRC

SLOPE INTERCEPT (TYP)

STA 15+00.00 POT:
Y=200,064.541
X=347,365.772

MGS GUARDRAIL TERMINAL EAT

DRIVEWAY CURB HEAD IN FRONT OF GUARDRAIL POST #3

ASPHALTIC FLUME REQ'D

STA 19+43, LT
ASPHALTIC FLUME REQ'D

STA 17+43 TO 25+80, LT
ASPHALTIC CURB REQ'D

REMOVING GUARDRAIL

PC: 20+50.61

CULV #: 18093073413
STA 21+22, LT
REMOVE EXISTING INLET
REMOVE CPCS 36-INCH
ASPHALTIC FLUME REQ'D

CULV #: N/A
STA 23+85, LT
REMOVE EXISTING INLET
REMOVE CPCS 12-INCH
ASPHALTIC FLUME REQ'D

DRIVEWAY CURB HEAD IN FRONT OF GUARDRAIL POST #3

MGS GUARDRAIL 3 K

CP 18

FE AGG

N8° 49' 27"E

STH 93

PE AGG

MATCH LINE 27+00

BEGIN PROJECT 7590-00-73
STA 15+25.00
Y=200,089.245
X=347,369.607
MATCH EXISTING PAVEMENT
SAWCUT REQUIRED

MGS GUARDRAIL TERMINAL EAT

SLOPE INTERCEPT (TYP)

REMOVING GUARDRAIL

MGS GUARDRAIL 3

RIVERLAND ENERGY COOPERATIVE - ELEC

TREMPEALEAU COUNTY
EAU CLAIRE COUNTY

APPROXIMATE EXISTING R/W (TYP)

NOTE: FINAL PLACEMENT OF FLUMES MUST MAINTAIN THE MINIMUM POST SEPARATION DISTANCES IN THE STANDARD DETAIL.

PI: 24+67.91

CULV #: 18093018969
STA 26+10
EXTEND EXISTING 30-INCH CPRC LT/RT
1 CLEANING CULVERT PIPE
2 MARKERS CULVERT END
DITCH CLEANING STA 26+00 TO 26+20 LT&RT

BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
CP 18		945.68	3/4" REBAR
CP 17	39+81.6, 45.6' RT	1067.28	3/4" REBAR

GRUBBING REQ'D
STA 26+00 TO STA 27+00 LT
STA 32+00 TO STA 33+00 LT
STA 34+00 TO STA 37+00 RT

APPROXIMATE PROPERTY LINE (TYP)

C2
PI STA = 35+75.03
Y = 202,123.0294
X = 347,356.8425
Δ = 17°53'27"
D = 3°05'49"
T = 291.21'
L = 577.67'
R = 1,850.00'
PC STA = 32+83.83
PT STA = 38+61.50
SE = MATCH EXISTING

CULV #: 18093022300
STA 32+43, LT
REMOVE EXISTING INLET
REMOVE CPCS 12-INCH

APPROXIMATE EXISTING R/W (TYP)

DRIVEWAY CURB HEAD IN FRONT OF GUARDRAIL POST #3

MGS GUARDRAIL TERMINAL EAT

STA 31+88, LT
ASPHALTIC FLUME REQ'D

DRIVEWAY CURB HEAD IN FRONT OF GUARDRAIL POST #3

MGS GUARDRAIL TERMINAL EAT

SLOPE INTERCEPT (TYP)

PT: 28+79.10

TOLLEFSON RD

MATCH LINE 27+00

N8° 07' 44"W

STH 93

PC: 32+83.83

MGS GUARDRAIL 3 K

MGS GUARDRAIL 3

REMOVING GUARDRAIL

STA 34+60, LT
ASPHALTIC FLUME REQ'D

STA 31+95 TO 39+70, LT
ASPHALTIC CURB REQ'D

STA 36+82, LT
ASPHALTIC FLUME REQ'D

PT: 38+61.50

DRIVEWAY CURB HEAD IN FRONT OF GUARDRAIL POST #3

MGS GUARDRAIL TERMINAL EAT

N26° 01' 11"W

MATCH LINE 42+00

CP 17

MGS GUARDRAIL TERMINAL EAT

SLOPE INTERCEPT (TYP)

MGS GUARDRAIL TERMINAL EAT

MGS GUARDRAIL 3 K

REMOVING GUARDRAIL

PI: 35+75.03

SEVERSON RD

TRI-COUNTY COMMUNICATIONS - COMM

NOTE: FINAL PLACEMENT OF FLUMES MUST MAINTAIN THE MINIMUM POST SEPARATION DISTANCES IN THE STANDARD DETAIL.

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	PLAN: STH 93	SHEET 46 E

GRUBBING REQ'D
STA 42+50 TO STA 44+00 RT

PI: 50+55.41

PC: 45+25.48

N

SLOPE INTERCEPT (TYP)

MGS GUARDRAIL TERMINAL EAT

PT: 55+59.06

PC: 55+98.21

MATCH LINE 42+00

N26° 01' 11"W

44 46 48 50 52 54

STH 93

C3

+84

+46

+98

+56

+52

N5° 08' 55"E

MATCH LINE 57+00

APPROXIMATE EXISTING R/W (TYP)

MGS GUARDRAIL 3

REMOVING GUARDRAIL

MGS GUARDRAIL 3 K

TRI-COUNTY COMMUNICATIONS - COMM

APPROXIMATE PROPERTY LINE (TYP)

C3

PI STA = 50+55.41
Y = 203,457.6168
X = 346,705.3507
Δ = 31°10'06"
D = 3°00'56"
T = 529.92'
L = 1,033.58'
R = 1,900.00'
PC STA = 45+25.48
PT STA = 55+59.06
SE = MATCH EXISTING

5

5

BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
CP 16	70+18.6, 68.4' RT	1130.48	3/4" REBAR

GRUBBING REQ'D
STA 58+00 TO STA 61+00 LT
STA 66+00 TO STA 68+00 RT

N

CTH F

PI: 60+45.14

MGS GUARDRAIL 3

PT: 64+70.51

REMOVING GUARDRAIL

REMOVING GUARDRAIL

MGS GUARDRAIL TERMINAL EAT

PI: 69+43.24

58 60 62 64 66 68 70

C4

STH 93

+59

+13

+48

+01

+52

+05

MGS GUARDRAIL TERMINAL EAT

SLOPE INTERCEPT (TYP)

REMOVING GUARDRAIL

MGS GUARDRAIL 3

MGS GUARDRAIL TERMINAL EAT

WAYSIDE

ASPHALT ENTRANCE
STA 68+42 RT

CP 16

MATCH LINE 57+00

+06

SLOPE INTERCEPT (TYP)

APPROXIMATE EXISTING R/W (TYP)

TRI-COUNTY COMMUNICATIONS - COMM

SLOPE INTERCEPT (TYP)

MGS GUARDRAIL TERMINAL EAT

APPROXIMATE PROPERTY LINE (TYP)

MATCH LINE 71+00

CULV #: N/A
STA 67+63
EXTEND EXISTING CPRC 30-INCH

C4

PI STA = 60+45.14
Y = 204,469.5175
X = 346,796.5247
Δ = 30°45'23"
D = 3°31'33"
T = 446.93'
L = 872.30'
R = 1,625.00'
PC STA = 55+98.21
PT STA = 64+70.51
SE = MATCH EXISTING

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	PLAN: STH 93	SHEET 47 E

GRUBBING REQ'D
STA 72+50 TO STA 73+50 RT
STA 85+00 TO STA 89+00 LT & RT

PI: 78+68.20

SLOPE INTERCEPT (TYP)

TRI-COUNTY COMMUNICATIONS - COMM

MGS GUARDRAIL TERMINAL EAT

PT: 85+45.62

FE

AGG

STH 93

C5

PC: 71+64.05

MATCH LINE 71+00

MGS GUARDRAIL 3

SLOPE INTERCEPT (TYP)

MGS GUARDRAIL TERMINAL EAT

SLOPE INTERCEPT (TYP)

MGS GUARDRAIL TERMINAL EAT

MATCH LINE 86+02

REMOVING GUARDRAIL

MGS GUARDRAIL TERMINAL EAT

WAYSIDE
ASPHALT ENTRANCE
STA 72+67 RT

STA 72+93.13, 20.00'RT

APPROXIMATE EXISTING R/W (TYP)

APPROXIMATE PROPERTY LINE (TYP)

C5

PI STA = 78+68.20
Y = 205,959.5296
X = 347,883.9456
Δ = 27°17'45"
D = 1°58'33"
T = 704.15'
L = 1,381.57'
R = 2,900.00'
PC STA = 71+64.05
PT STA = 85+45.62
SE = MATCH EXISTING

BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
CP 15	93+82.2, 35.8' LT	1103.05	3/4" REBAR

GRUBBING REQ'D
STA 85+00 TO STA 89+00 LT & RT

APPROXIMATE PROPERTY LINE (TYP)

TRI-COUNTY COMMUNICATIONS - COMM

PC: 97+29.23

PI: 99+59.08

MGS GUARDRAIL TERMINAL EAT

MGS GUARDRAIL 3

REMOVING GUARDRAIL

SLOPE INTERCEPT (TYP)

CP 15

N63° 38' 03"E

STH 93

PE

AGG

MATCH LINE 86+02

MATCH LINE 101+00

SLOPE INTERCEPT (TYP)

MGS GUARDRAIL TERMINAL EAT

MGS GUARDRAIL TERMINAL EAT

SLOPE INTERCEPT (TYP)

REMOVING GUARDRAIL

MGS GUARDRAIL 3

APPROXIMATE EXISTING R/W (TYP)

CULV #: 18093022302
STA 87+94
EXISTING 48-INCH CPRC TO REMAIN
2 MARKERS CULVERT END

CULV #: 18093088587
STA 89+70
REMOVE EXISTING PACS 72"X42"

C6

PI STA = 99+59.08
Y = 206,899.9623
X = 349,781.2762
Δ = 9°13'18"
D = 2°00'37"
T = 229.85'
L = 458.71'
R = 2,850.00'
PC STA = 97+29.23
PT STA = 101+87.94
SE = MATCH EXISTING

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	PLAN: STH 93	SHEET 48 E

FILE NAME : X:\UZ\W\WITNW\167471\5-final-dsgn\50-final-dsgn\40-TransHwy\C3D2022\SheetsPlan\SEC 05 Plan & Profile\050200_pn (OvrUndr Plan STH 93).dwg PLOT DATE : 9/18/2024 10:36 PM PLOT BY : SEH LAYOUT NAME : 03 PLOT SCALE : 1.0 IN = 100.0 FT

WISDOT/CADDS SHEET 44

GRUBBING REQ'D
STA 100+00 TO STA 102+00 RT
STA 105+00 TO STA 106+00 RT

HAGENESS RD

PT: 101+87.94

MATCH LINE 101+00

102

104

N72° 51' 21"E

106

PC: 106+71.41

CULV #: 18093018972
STA 110+42
EXTEND EXISTING 30-INCH CPRC LT & RT

108

110

PE

112

FE
AGG

114

C7

MATCH LINE 115+50

STH 93

REMOVING GUARDRAIL

+73

MGS GUARDRAIL 3

+23

+76

MGS GUARDRAIL TERMINAL EAT

MGS GUARDRAIL 3 K

SLOPE INTERCEPT (TYP)

PE

C7

PI STA = 113+75.70
Y = 207,317.8408
X = 351,135.9037
Δ = 27°23'31"
D = 1°58'57"
T = 704.29
L = 1,381.65'
R = 2,890.00'
PC STA = 106+71.41
PT STA = 120+53.06
SE = MATCH EXISTING

PI: 113+75.70

APPROXIMATE PROPERTY LINE (TYP)

CULV #: 18093018971
STA 105+67
EXISTING PACS 72"X42" TO REMAIN
2 MARKERS CULVERT END

APPROXIMATE EXISTING R/W (TYP)

5

5

BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
CP 14	115+75.3, 44.9' RT	1088.69	3/4" REBAR

NOTE: FINAL PLACEMENT OF FLUMES MUST MAINTAIN THE MINIMUM POST SEPARATION DISTANCES IN THE STANDARD DETAIL.

GRUBBING REQ'D
STA 116+50 TO STA 117+50 RT
STA 119+00 TO STA 123+00 RT
STA 126+00 TO STA 134+00 RT

MGS GUARDRAIL TERMINAL EAT

SLOPE INTERCEPT (TYP)

DRIVEWAY CURB HEAD IN FRONT OF GUARDRAIL POST #3

ASPHALTIC FLUME REQ'D

+25

+78

MATCH LINE 115+50

116

CP 14

118

+72

+49

CTH I

120

PT: 120+53.06

N45° 27' 50"E

122

REMOVING GUARDRAIL

PC: 122+81.65

STA 117+50 TO 126+10, LT
ASPHALTIC CURB REQ'D

124

STH 93

126

+07

+61

MGS GUARDRAIL TERMINAL EAT

SLOPE INTERCEPT (TYP)

FE
AGG

128

MATCH LINE 130+00

+19

+72

+28

+82

+25

+77

MGS GUARDRAIL TERMINAL EAT

REMOVING GUARDRAIL

MGS GUARDRAIL TERMINAL EAT

SLOPE INTERCEPT (TYP)

MGS GUARDRAIL TERMINAL EAT

REMOVING GUARDRAIL

MGS GUARDRAIL TERMINAL EAT

SLOPE INTERCEPT (TYP)

FE
AGG

CULV #: 18093022304
STA 127+53
EXISTING 36-INCH CPRC TO REMAIN

CULV #: 18093022303
EXISTING 36-INCH CPRC TO REMAIN
STA 118+60 LT & RT
SALVAGE AND REINSTALL LAST SECTION OF PIPE (8 LF)

APPROXIMATE EXISTING R/W (TYP)

APPROXIMATE PROPERTY LINE (TYP)

CLEARING REQ'D
STA 126+00 TO STA 134+00 RT

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	PLAN: STH 93	SHEET 49 E

MATCH LINE 130+00

C8

PI STA = 132+38.27
Y = 208,643.0545
X = 352,482.7559
Δ = 45°10'02"
D = 2°29'28"
T = 956.62'
L = 1,813.13'
R = 2,300.00'
PC STA = 122+81.65
PT STA = 140+94.77
SE = MATCH EXISTING

PI: 132+38.27

GRUBBING REQ'D
STA 126+00 TO STA 134+00 RT
STA 142+00 TO STA 150+00 RT

FE

132 C8 134 136 138 140 142 144

STH 93

N0° 17' 49"E

TRAASETH RD

RUDY RD

TRI-COUNTY COMMUNICATIONS - COMM

KELLEY CREEK

PE ASPH

CULV #: 18093018974 & 18093083486
STA 138+54 & 138+64
REMOVE EXISTING CULVERT PIPE STEEL HORIZONTAL ELLIPTICAL 60"X38"
2-68"X43" CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS III REQ'D
CONCRETE MASONRY ENDWALLS REQ'D
2 MARKERS CULVERT END

APPROXIMATE PROPERTY LINE (TYP)

DELINEATED WETLAND

EAU CLAIRE ENERGY - ELEC

PT: 140+94.77

CP 13

APPROXIMATE EXISTING R/W (TYP)

MATCH LINE 145+00

BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
CP 13	144+61.2, 50.6' LT	1009.89	3/4" REBAR

CULV #: 18093018976
STA 146+57
EXIST 30-INCH CPRC TO REMAIN
2 MARKERS CULVERT END

DELINEATED WETLAND

EAU CLAIRE ENERGY - ELEC

FE
AGG

LOWES CREEK RD

146 148 150 152 154 156 158

STH 93

N0° 17' 49"E

DELINEATED WETLAND

APPROXIMATE EXISTING R/W (TYP)

APPROXIMATE PROPERTY LINE (TYP)

GRUBBING REQ'D
STA 142+00 TO STA 150+00 RT

CULV #: 18093018977
STA 158+90
48-INCH CPRC TO REMAIN
SALVAGE AND REINSTALL 14' LT

DITCH CLEANING STA 158+80 TO 159+00 LT

DELINEATED WETLAND

DELINEATED WETLAND

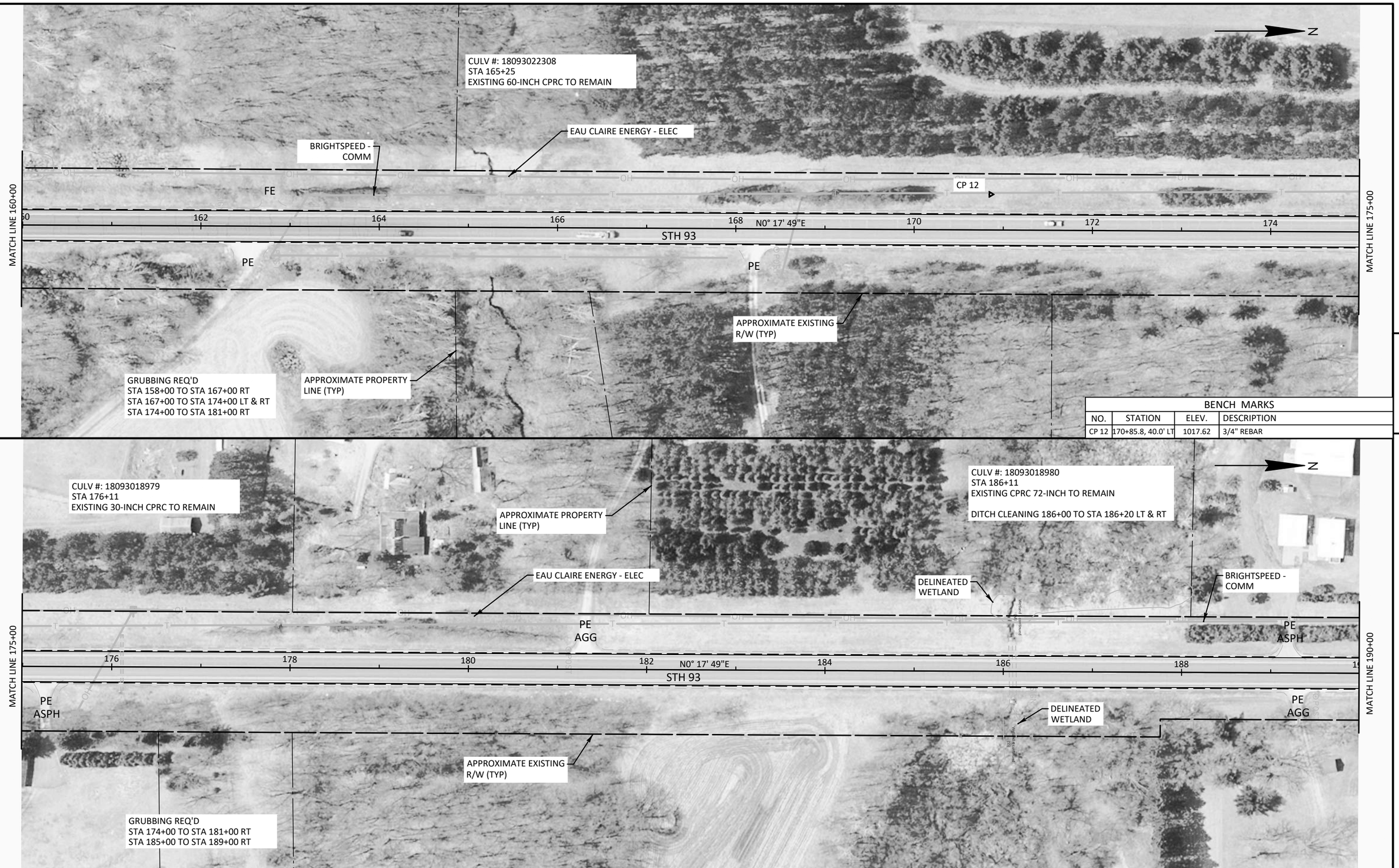
GRUBBING REQ'D
STA 158+00 TO STA 167+00 RT

MATCH LINE 160+00

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	PLAN: STH 93	SHEET 50 E

FILE NAME : X:\UZ\W\WITNW\167471\5-final-dsgn\50-final-dsgn\40-TransHwy\C3D2022\SheetsPlan\SEC 05 Plan & Profile\050200_pn (OvrUndr Plan STH 93).dwg PLOT DATE : 9/18/2024 10:37 PM PLOT BY : SEH LAYOUT NAME : 05 PLOT SCALE : 1.0 IN = 100.0 FT

WISDOT/CADDS SHEET 44



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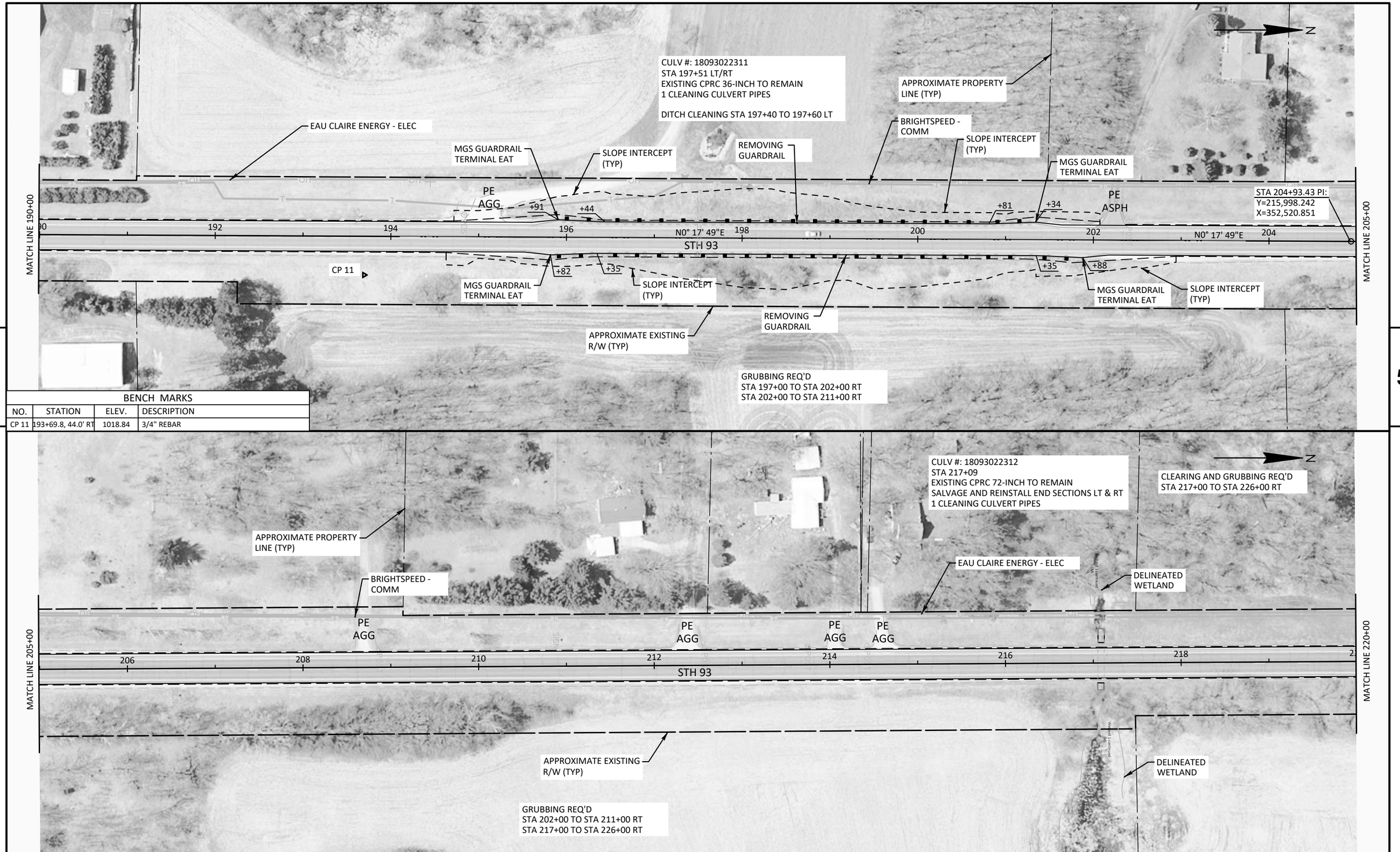
BENCH MARKS

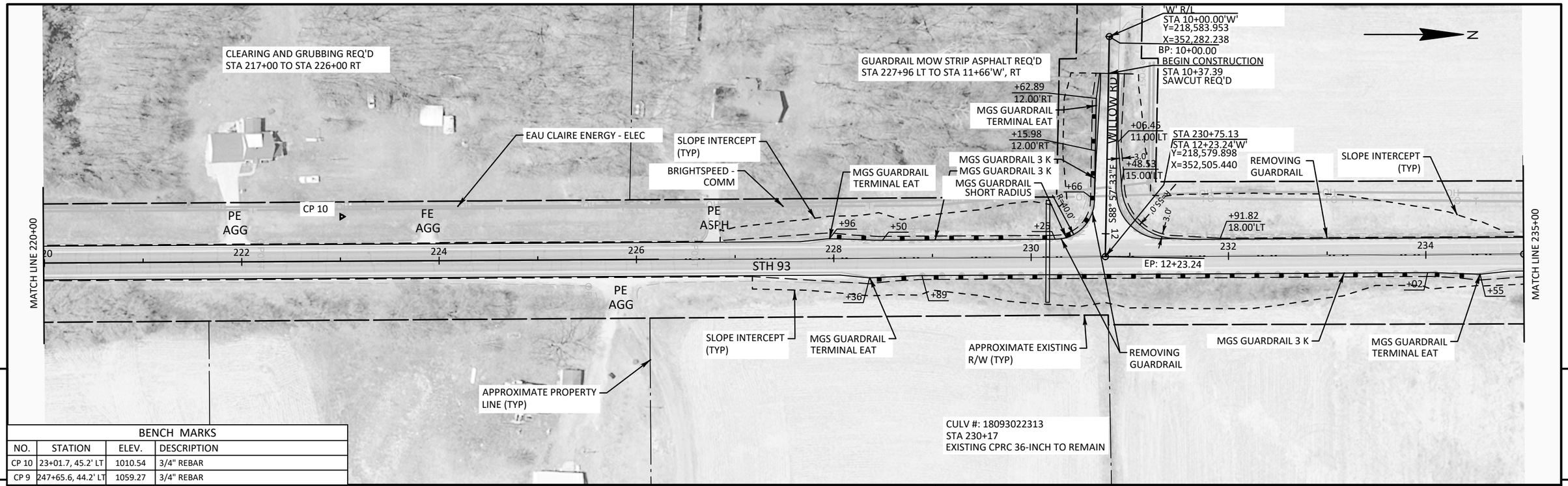
NO.	STATION	ELEV.	DESCRIPTION
CP 12	170+85.8, 40.0' LT	1017.62	3/4" REBAR

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	PLAN: STH 93	SHEET 51 E

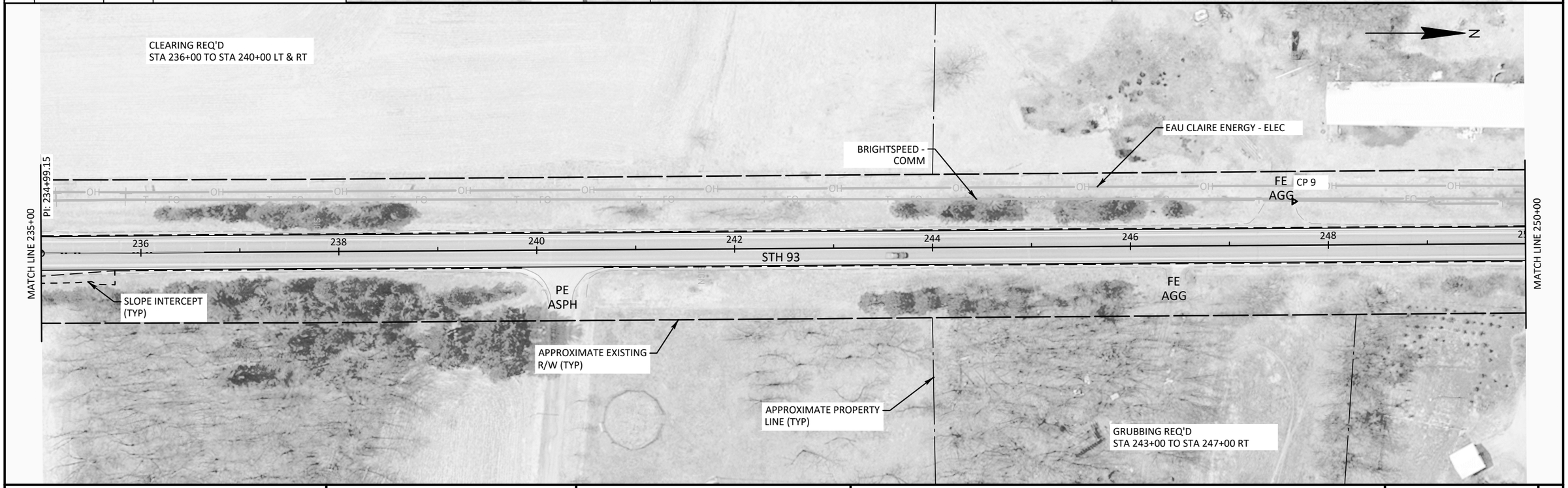


BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
CP 11	193+69.8, 44.0' RT	1018.84	3/4" REBAR

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	PLAN: STH 93	SHEET 52	E



BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
CP 10	23+01.7, 45.2' LT	1010.54	3/4" REBAR
CP 9	247+65.6, 44.2' LT	1059.27	3/4" REBAR



PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	PLAN: STH 93	SHEET 53 E

FILE NAME : X:\UZ\W\WITNW\167471\5-final-dsgn\50-final-dsgn\40-TransHwy\C3D2022\SheetsPlan\SEC 05 Plan & Profile\050200_pn (OvrUndr Plan STH 93).dwg
PLOT DATE : 9/19/2024 9:56 AM
PLOT BY : SEH
LAYOUT NAME : 08
PLOT SCALE : 1.0 IN = 100.0 FT
WISDOT/CADDS SHEET 44

GRUBBING REQ'D
STA 251+00 TO STA 258+00 LT & RT
STA 258+00 TO STA 266+00 RT

APPROXIMATE PROPERTY LINE (TYP)

BRIGHTSPEED - COMM

EAU CLAIRE ENERGY - ELEC

PC: 250+70.34

PI: 254+76.44

PT: 258+82.46

PE AGG

PE ASPH

MATCH LINE 250+00

MATCH LINE 265+00

STH 93

N1° 39' 09"E

FE AGG

PE

C9

PI STA = 254+76.44
Y = 220,981.1562
X = 352,489.8184
Δ = 2°01'55"
D = 0°15'01"
T = 406.10'
L = 812.12'
R = 22,900.00'
PC STA = 250+70.34
PT STA = 258+82.46
SE = MATCH EXISTING

APPROXIMATE EXISTING R/W (TYP)

BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
CP 8	272+00.6, 48.3' LT	1023.61	3/4" REBAR

EAU CLAIRE ENERGY - ELEC

SLOPE INTERCEPT (TYP)

MGS GUARDRAIL 3 K

BRIGHTSPEED - COMM

REMOVING GUARDRAIL

MGS GUARDRAIL TERMINAL EAT

STA 269+93.36 PI:
Y=222,497.531
X=352,533.561

CP 8

MGS GUARDRAIL TERMINAL EAT

+67

+20

+33

+86

PE AGG

FE AGG

MATCH LINE 265+00

MATCH LINE 280+00

N1° 39' 09"E

N1° 10' 08"E

STH 93

+31

+84

+59

+12

SLOPE INTERCEPT (TYP)

MGS GUARDRAIL 3 K

MGS GUARDRAIL TERMINAL EAT

APPROXIMATE EXISTING R/W (TYP)

REMOVING GUARDRAIL

MGS GUARDRAIL TERMINAL EAT

APPROXIMATE PROPERTY LINE (TYP)

GRUBBING REQ'D
STA 258+00 TO STA 266+00 RT
STA 266+00 TO STA 272+00 LT & RT
STA 272+00 TO STA 284+00 RT

CULV #: 18093022317
STA 275+80
EXISTING CPRC 36-INCH TO REMAIN
1 CLEANING CULVERT PIPES
2 MARKERS CULVERT END
DITCH CLEANING STA 275+70 TO 275+90 RT

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	PLAN: STH 93	SHEET 54 E

CULV #: 18093022318
STA 285+64
EXISTING CPRC 36-INCH TO REMAIN

DITCH CLEANING STA 285+55 TO 285+75 LT

N

SLOPE INTERCEPT (TYP)

EAU CLAIRE ENERGY - ELEC

BRIGHTSPEED - COMM

FE AGG

STA 294+93.36 PI:
Y=224,997.010
X=352,584.553

MATCH LINE 280+00

MATCH LINE 295+00

280 282 284 286 288 290 292 294

N1° 10' 08"E

STH 93

+61 +14 +52 +05

MGS GUARDRAIL TERMINAL EAT

SLOPE INTERCEPT (TYP)

MGS GUARDRAIL 3

REMOVING GUARDRAIL

APPROXIMATE EXISTING R/W (TYP)

MGS GUARDRAIL TERMINAL EAT

SLOPE INTERCEPT (TYP)

APPROXIMATE PROPERTY LINE (TYP)

GRUBBING REQ'D
STA 272+00 TO STA 284+00 RT
STA 293+00 TO STA 299+00 LT & RT

BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
CP 7	301+00.2, 46.2' LT	1081.99	3/4" REBAR

5

5

N

GUARDRAIL MOW STRIP ASPHALT REQ'D
STA 306+19 LT TO STA 310+00 LT

APPROXIMATE PROPERTY LINE (TYP)

DELINEATED WETLAND

EAU CLAIRE ENERGY - ELEC

BRIGHTSPEED - COMM

MGS GUARDRAIL TERMINAL EAT

MGS GUARDRAIL 3

REMOVING GUARDRAIL

CP 7

SLOPE INTERCEPT (TYP)

PE AGG

+19 +72 +47

MATCH LINE 295+00

MATCH LINE 310+00

296 298 300 302 304 306 308

N0° 24' 18"E

STH 93

+06 +59 +47

APPROXIMATE EXISTING R/W (TYP)

SLOPE INTERCEPT (TYP)

MGS GUARDRAIL TERMINAL EAT

MGS GUARDRAIL 3 K

REMOVING GUARDRAIL

DELINEATED WETLAND

GRUBBING REQ'D
STA 293+00 TO STA 299+00 LT & RT
STA 299+00 TO STA 306+50 RT
STA 306+50 TO STA 315+00 RT

CULV #: 18093022319
STA 308+62
EXISTING CPRC 48-INCH TO REMAIN

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	PLAN: STH 93	SHEET 55 E

CONCRETE PAVEMENT APPROACH SLAB &
CONCRETE PAVEMENT 8-INCH (SHOULDERS)
STA 315+46 TO STA 315+61
STA 316+43 TO STA 316+58

FLINT HILLS RESOURCE PINE BEND - GAS

DELINEATED WETLAND

GRUBBING REQ'D
STA 306+50 TO STA 315+00 RT
STA 318+00 TO STA 320+00 LT

SPRUCE RD

CLEAR CREEK

MGS GUARDRAIL TERMINAL EAT

STA 310+97.38 PI:
Y=226,600.983
X=352,595.893

MGS THRIE BEAM TRANSITION

MGS GUARDRAIL TERMINAL EAT

EXISTING STRUCTURE B-18-942

MGS GUARDRAIL TERMINAL EAT

BRIGHTSPEED - COMM

EAU CLAIRE ENERGY - ELEC

BM 53

MGS THRIE BEAM TRANSITION

DELINEATED WETLAND

CP 67

PE ASPH

MATCH LINE 310+00

+00

+71

+24

+64

+40

+80

+33

N0° 24' 18"E

N0° 57' 56"E

310

312

314

316

318

320

322

324

STH 93

MATCH LINE 325+00

MGS GUARDRAIL TERMINAL EAT

SLOPE INTERCEPT (TYP)

REMOVING GUARDRAIL

MGS GUARDRAIL TERMINAL EAT

MGS THRIE BEAM TRANSITION

BM 52

MGS THRIE BEAM TRANSITION

MGS GUARDRAIL TERMINAL EAT

DELINEATED WETLAND

FE AGG

PROPOSED STRUCTURE B-18-241 REQ'D
SEE STRUCTURE PLAN

FLINT HILLS RESOURCE PINE BEND - GAS

BRIGHTSPEED - COMM

APPROXIMATE PROPERTY LINE (TYP)

APPROXIMATE EXISTING R/W (TYP)

NOTE: FINAL PLACEMENT OF FLUMES MUST MAINTAIN THE MINIMUM POST SEPARATION DISTANCES IN THE STANDARD DETAIL.

BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
CP 67	312+81.5, 28.8' LT	950.09	3/4" REBAR
BM 53	315+50.6, 64.5' LT	943.16	SPK IN POWER POLE
BM 52	316+08.6, 16.3' RT	947.56	HT MOD MON.
CP 6	325+80.5, 47.4' LT	956.40	3/4" REBAR

GRUBBING REQ'D
STA 328+00 TO STA 330+00 RT
STA 330+00 TO STA 332+00 LT & RT
STA 332+00 TO STA 333+50 RT

CULV #: 18093018990
STA 336+34
REMOVE EXISTING 36-INCH CPRC
1-36" CPRC CLASS III REQ'D
2-36" AEW CPRC REQ'D

APPROXIMATE PROPERTY LINE (TYP)

BRIGHTSPEED - COMM

CP 6

CE ASPH

EAU CLAIRE ENERGY - ELEC

PE ASPH

DELINEATED WETLAND

MATCH LINE 325+00

326

328

330

332

334

336

338

340

N0° 57' 56"E

N1° 17' 49"E

STH 93

STA 327+93.39 PI:
Y=228,296.769
X=352,622.970

MATCH LINE 340+00

APPROXIMATE EXISTING R/W (TYP)

BRIGHTSPEED - COMM

DELINEATED WETLAND

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	PLAN: STH 93	SHEET 56	E

FILE NAME : X:\UZ\W\WITNW\167471\5-final-dsgn\50-final-dsgn\40-TransHwy\C3D2022\SheetsPlan\SEC 05 Plan & Profile\050200_pn (OvrUndr Plan STH 93).dwg PLOT DATE : 9/18/2024 10:39 PM PLOT BY : SEH LAYOUT NAME : 11 PLOT SCALE : 1.0 IN = 100.0 FT

WISDOT/CADDS SHEET 44

CULV #: 18093022321
STA 348+41
REMOVE EXISTING 48-INCH CPRC
1-48" CPRC CLASS III REQ'D
2-48" AEW CPRC REQ'D

EAU CLAIRE ENERGY - ELEC

DELINEATED WETLAND

BRIGHTSPEED - COMM

FE AGG

MATCH LINE 340+00

340 342 344 346 348 350 352 354

N1° 17' 49"E

STH 93

CP 5

FE AGG

MATCH LINE 355+00

BRIGHTSPEED - COMM

APPROXIMATE EXISTING R/W (TYP)

DELINEATED WETLAND

APPROXIMATE PROPERTY LINE (TYP)

N

BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
CP 5	352+19.3, 30.5' LT	945.11	3/4" REBAR

CULV #: 18093022322
STA 355+09
REMOVE EXISTING 48-INCH CPRC
1-48" CPRC CLASS III REQ'D
2-48" AEW CPRC REQ'D

C10

PI STA = 363+56.55
Y = 231,859.0228
X = 352,703.6220
Δ = 2°44'45"
D = 0°34'23"
T = 239.66'
L = 479.23'
R = 10,000.00'
PC STA = 361+16.89
PT STA = 365+96.12
SE = MATCH EXISTING

BRIGHTSPEED - COMM

EAU CLAIRE ENERGY - ELEC

DELINEATED WETLAND

MATCH LINE 355+00

PC: 361+16.89

356 358 360 362 364 366 368 370

N1° 17' 49"E

STH 93

C10

PI: 363+56.55

N1° 26' 56"W

STH 93

PT: 365+96.12

CTH HH

CTH HH

BRIGHTSPEED - COMM

MATCH LINE 370+00

SAWCUT REQ'D

SPECTRUM - COMM

DELINEATED WETLAND

BRIGHTSPEED - COMM

APPROXIMATE EXISTING R/W (TYP)

BRIGHTSPEED - COMM

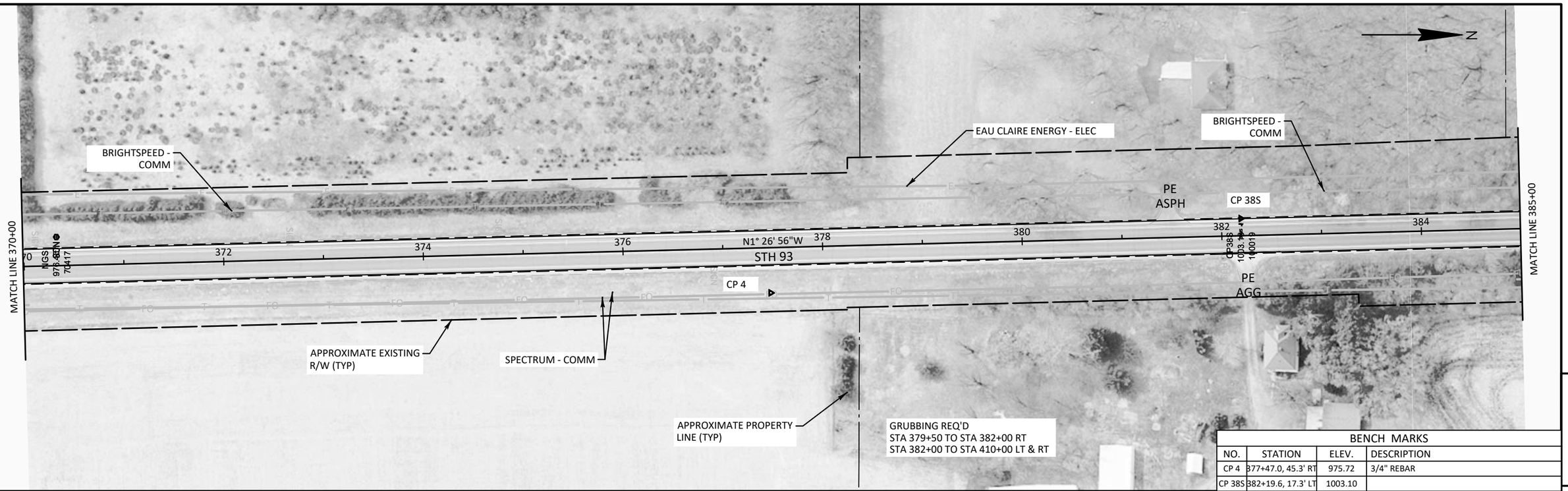
APPROXIMATE PROPERTY LINE (TYP)

GRUBBING REQ'D
STA 359+00 TO STA 364+00 RT
STA 366+00 TO STA 368+50 RT

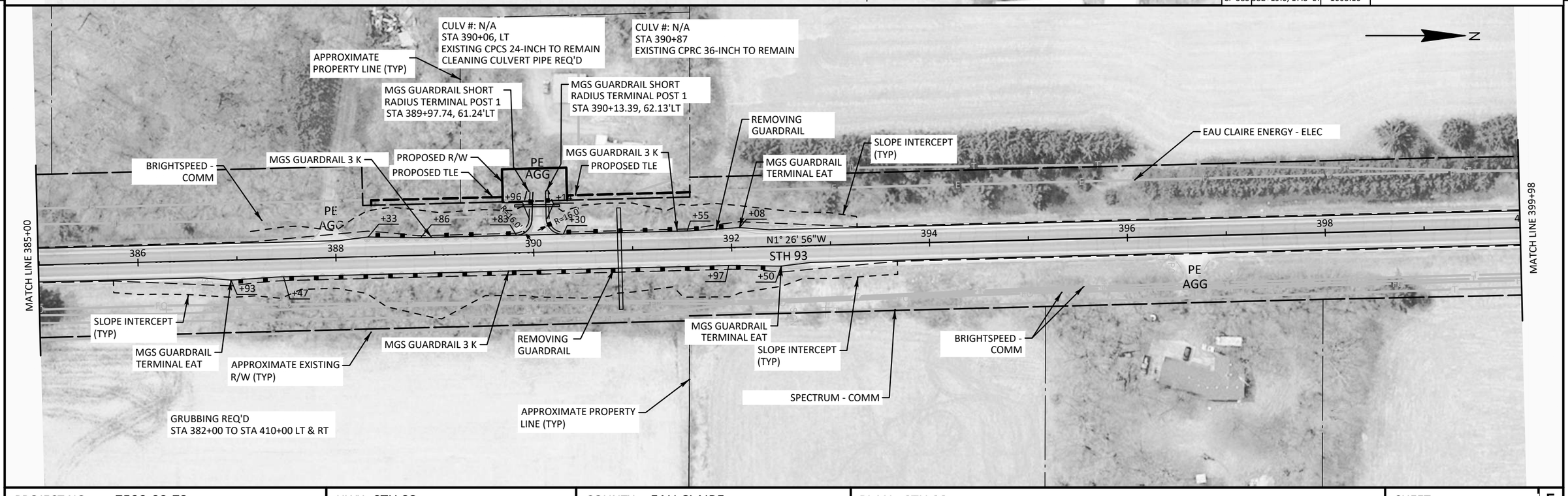
STA 366+20 RT
SAWCUT REQ'D
GRADE DITCHLINE

N

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	PLAN: STH 93	SHEET 57 E



BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
CP 4	377+47.0, 45.3' RT	975.72	3/4" REBAR
CP 38S	382+19.6, 17.3' LT	1003.10	



PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	PLAN: STH 93	SHEET 58 E

CULV #: 18093018994
STA 400+07
EXISTING CPRC 30-INCH TO REMAIN
2-AEW CPRC 30-INCH REQ'D
2 MARKERS CULVERT END

CULV #: 18093018995
STA 408+33
EXISTING CPRC 48-INCH TO REMAIN

N

DELINEATED WETLAND

BRIGHTSPEED - COMM

EAU CLAIRE ENERGY - ELEC

PE AGG

CP 3

MATCH LINE 399+98

400 402 404 406 408 410 412 414

N1° 26' 56"W

STH 93

MATCH LINE 415+00

PE AGG

FE AGG

BRIGHTSPEED - COMM

SPECTRUM - COMM

APPROXIMATE EXISTING R/W (TYP)

APPROXIMATE PROPERTY LINE (TYP)

CLEARING REQ'D
STA 382+00 TO STA 410+00 LT & RT

GRUBBING REQ'D
STA 382+00 TO STA 410+00 LT & RT
STA411+00 TO STA 413+00 LT

5

5

BENCH MARKS

NO.	STATION	ELEV.	DESCRIPTION
CP 3	403+50.0, 30.6' LT	954.29	3/4" REBAR
CP 62	423+80.7, 22.4' LT	917.36	3/4" REBAR
BM 51	425+17.4, 41.6' RT	914.00	RR SPK IN TREE
BM 50	426+30.6, 17.8' LT	915.29	CHIS SQUARE

CONCRETE PAVEMENT APPROACH SLAB &
CONCRETE PAVEMENT 8-INCH (SHOULDERS)
STA 425+61 TO STA 425+76
STA 426+58 TO STA 426+73

N

DELINEATED WETLAND

EXISTING STRUCTURE C-18-600

MGS THRIE BEAM TRANSITION

MGS GUARDRAIL TERMINAL EAT

MGS GUARDRAIL 3

MGS GUARDRAIL TERMINAL EAT

EAU CLAIRE ENERGY - ELEC

BRIGHTSPEED - COMM

SLOPE INTERCEPT (TYP)

PC: 420+79.58

PI: 423+02.40

PT: 425+25.17

PINE CREEK

CP 62

BM 50

BM 51

MATCH LINE 415+00

416 418 420 422 424 426 428

N1° 26' 56"W

STH 93

N0° 46' 51"E

MATCH LINE 430+00

FE AGG

PE ASPH

MGS THRIE BEAM TRANSITION

MGS GUARDRAIL TERMINAL EAT

MGS GUARDRAIL 3

PROPOSED STRUCTURE B-18-251 REQUIRED SEE STRUCTURE PLAN

MGS GUARDRAIL TERMINAL EAT

BRIGHTSPEED - COMM

SPECTRUM - COMM

APPROXIMATE EXISTING R/W (TYP)

DELINEATED WETLAND

APPROXIMATE PROPERTY LINE (TYP)

NOTE: FINAL PLACEMENT OF FLUMES MUST MAINTAIN THE MINIMUM POST SEPARATION DISTANCES IN THE STANDARD DETAIL.

GRUBBING REQ'D
STA 416+00 TO STA 421+00 RT
STA 421+00 TO STA 428+00 LT & RT
STA 428+00 TO STA 432+00 LT

C11

PI STA =	423+02.40
Y =	237,803.0663
X =	352,553.2857
Δ =	2°13'47"
D =	0°30'01"
T =	222.82'
L =	445.59'
R =	11,450.00'
PC STA =	420+79.58
PT STA =	425+25.17
SE =	MATCH EXISTING

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	PLAN: STH 93	SHEET 59 E

GRUBBING REQ'D
STA 428+00 TO STA 432+00 LT
STA 432+00 TO STA 437+00 RT

EAU CLAIRE ENERGY - ELEC

BRIGHTSPEED - COMM

ASPEN RD

CULV #: 18093018996
STA 441+42
EXISTING CPRC 48-INCH TO REMAIN

XCEL ENERGY - GAS

N

MATCH LINE 430+00

430 432 434 436 438 440 442 444

N0° 46' 51"E

N0° 46' 51"E

N0° 00' 52"E

STH 93

CP 2

PE
ASPH

STA 443+93.14 PI:
Y=239,893.663
X=352,581.771

MATCH LINE 445+00

BRIGHTSPEED - COMM

SPECTRUM - COMM

APPROXIMATE EXISTING R/W (TYP)

NICOLE CT

DELINEATED WETLAND

APPROXIMATE PROPERTY LINE (TYP)

BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
CP 2	431+15.7, 30.0' RT	919.62	3/4" REBAR
CP 1		927.30	3/4" REBAR

N

CEDAR RD

XCEL ENERGY - GAS

END PROJECT 7590-00-73
STA 452+98.14
MATCH EXISTING PAVEMENT
SAWCUT REQUIRED

EAU CLAIRE ENERGY - ELEC

CE
ASPH

BRIGHTSPEED - COMM

PE

CE
AGG

MATCH LINE 445+00

446 448 450 452 454

N0° 00' 52"E

N0° 09' 28"W

STH 93

STA 454+00.00 POT:
Y=240,900.523
X=352,581.716

STA 452+98.14 PI:
Y=240,798.666
X=352,581.997

CP 1

CEDAR RD

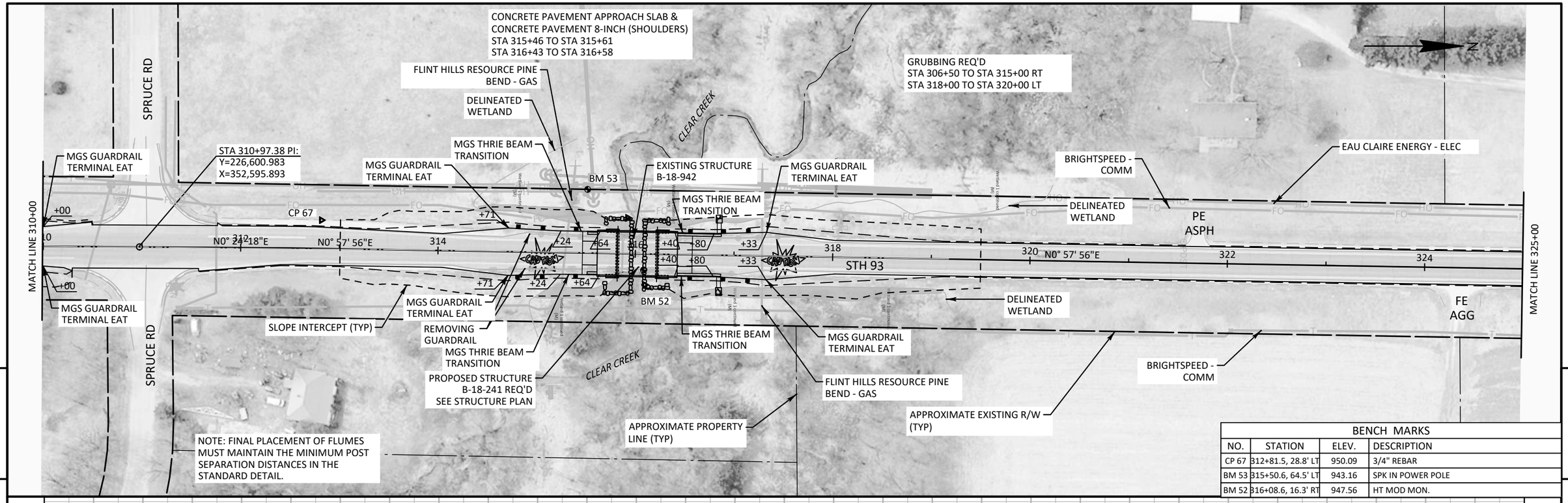
CEDAR RD

BRIGHTSPEED - COMM

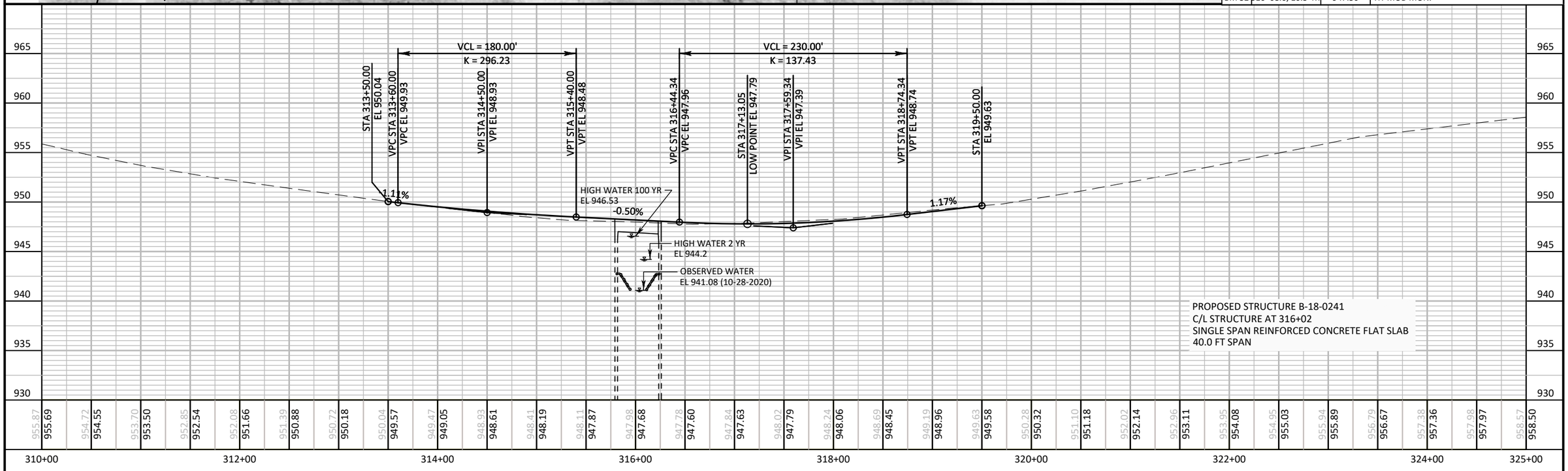
APPROXIMATE EXISTING R/W (TYP)

APPROXIMATE PROPERTY LINE (TYP)

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	PLAN: STH 93	SHEET 60 E



BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
CP 67	312+81.5, 28.8' LT	950.09	3/4" REBAR
BM 53	315+50.6, 64.5' LT	943.16	SPK IN POWER POLE
BM 52	316+08.6, 16.3' RT	947.56	HT MOD MON.

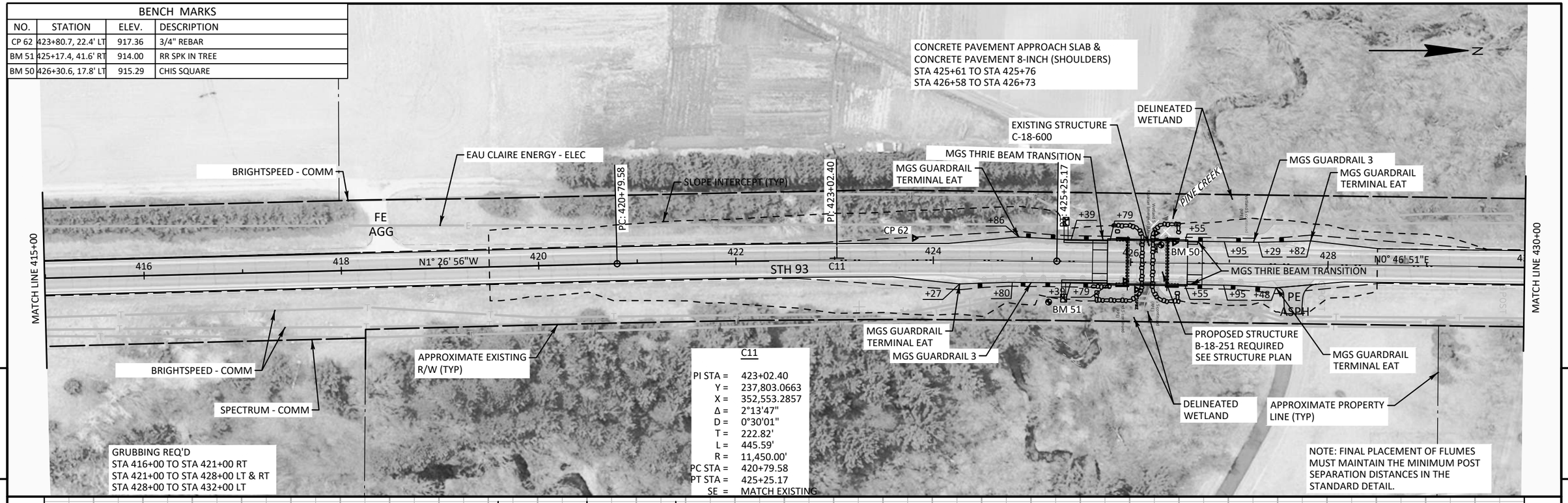


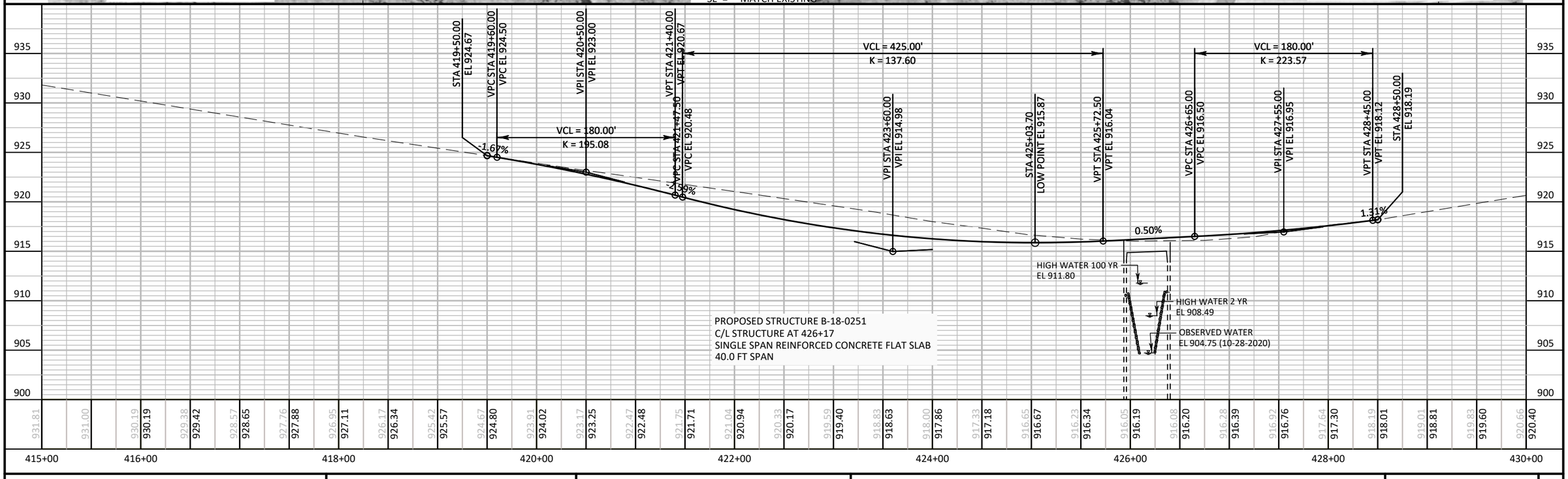
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	PLAN AND PROFILE: STH 93 AT CLEAR CREEK	SHEET 61 E

FILE NAME : X:\UZ\W\WITNW\167471\5-final-dsgn\50-final-dsgn\40-TransHwy\C3D2022\SheetsPlan\SEC 05 Plan & Profile\050200_pn (OvrUndr Plan STH 93).dwg PLOT DATE : 9/18/2024 10:40 PM PLOT BY : SEH LAYOUT NAME : CLEAR CR PNP PLOT SCALE : 1.0 IN = 100.0 FT

WISDOT/CADDS SHEET 44

BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
CP 62	423+80.7, 22.4' LT	917.36	3/4" REBAR
BM 51	425+17.4, 41.6' RT	914.00	RR SPK IN TREE
BM 50	426+30.6, 17.8' LT	915.29	CHIS SQUARE





PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	PLAN AND PROFILE: STH 93 AT PINE CREEK	SHEET 62 E

Standard Detail Drawing List

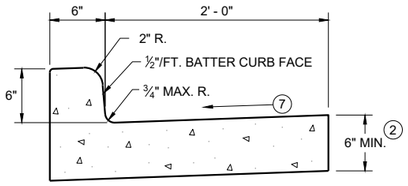
08D01-23A	CONCRETE CURB & GUTTER
08D02-08A	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D02-08B	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D02-08C	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D04-07	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D22-01	DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL
08E09-06	SILT FENCE
08E11-02	TURBIDITY BARRIER
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
08F10-02	CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH
12A03-10	NAME PLATE (STRUCTURES)
13A10-03A	SHOULDER RUMBLE STRIPS - ASPHALT
13A10-03G	SHOULDER AND EDGE LINE RUMBLE STRIPS - CROSSINGS, INTERSECTIONS, BRIDGES, DRIVEWAYS
13A11-04A	CENTERLINE RUMBLE STRIPS - ASPHALT
13A11-04D	CENTERLINE RUMBLE STRIPS - INTERSECTIONS, DRIVEWAYS, BRIDGES, RAILROADS
13B02-09A	CONCRETE PAVEMENT APPROACH SLAB
13B02-09B	STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB
13C19-03	HMA LONGITUDINAL JOINTS
14B28-04A	GUARDRAIL MOW STRIP
14B28-04B	GUARDRAIL MOW STRIP
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)
14B45-05F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05K	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05L	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B53-02A	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02B	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02C	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02D	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02E	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02F	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02G	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02H	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02I	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-09C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C06-12	SIGNING & MARKING FOR TWO LANE BRIDGES
15C07-15C	PAVEMENT MARKING ARROWS
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-23B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C08-23C	PAVEMENT MARKING (TURN LANES)
15C08-23D	PAVEMENT MARKING (TURN LANES)
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C12-09B	TRAFFIC CONTROL, LANE CLOSURE WITH AUTOMATED FLAGGER ASSISTANCE DEVICE

6

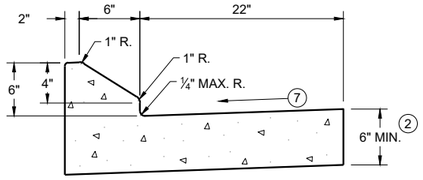
Standard Detail Drawing List

15C18-08A	MEDIAN ISLAND MARKING PAVEMENT MARKINGS
15C19-09A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C35-06A	PAVEMENT MARKING (INTERSECTIONS)
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES
15D51-01	TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY

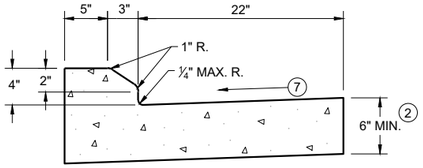
6



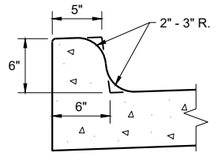
TYPES A (1) & D



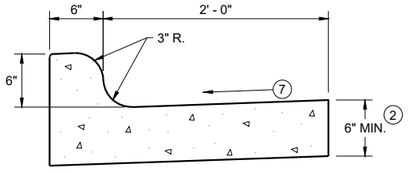
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

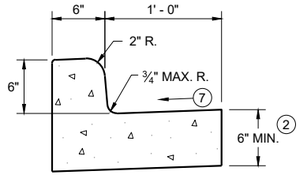


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



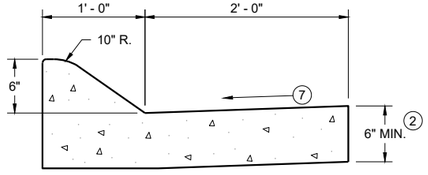
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

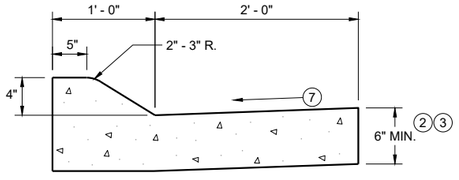


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

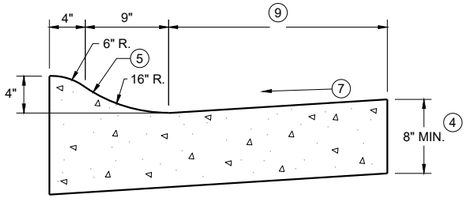


6" SLOPED CURB TYPES A (1) & D



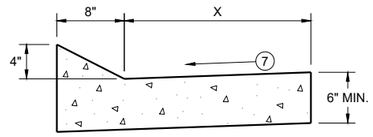
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

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

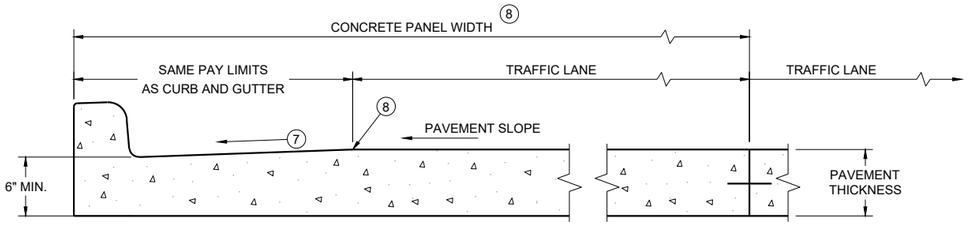


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

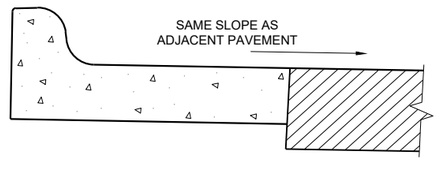
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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)

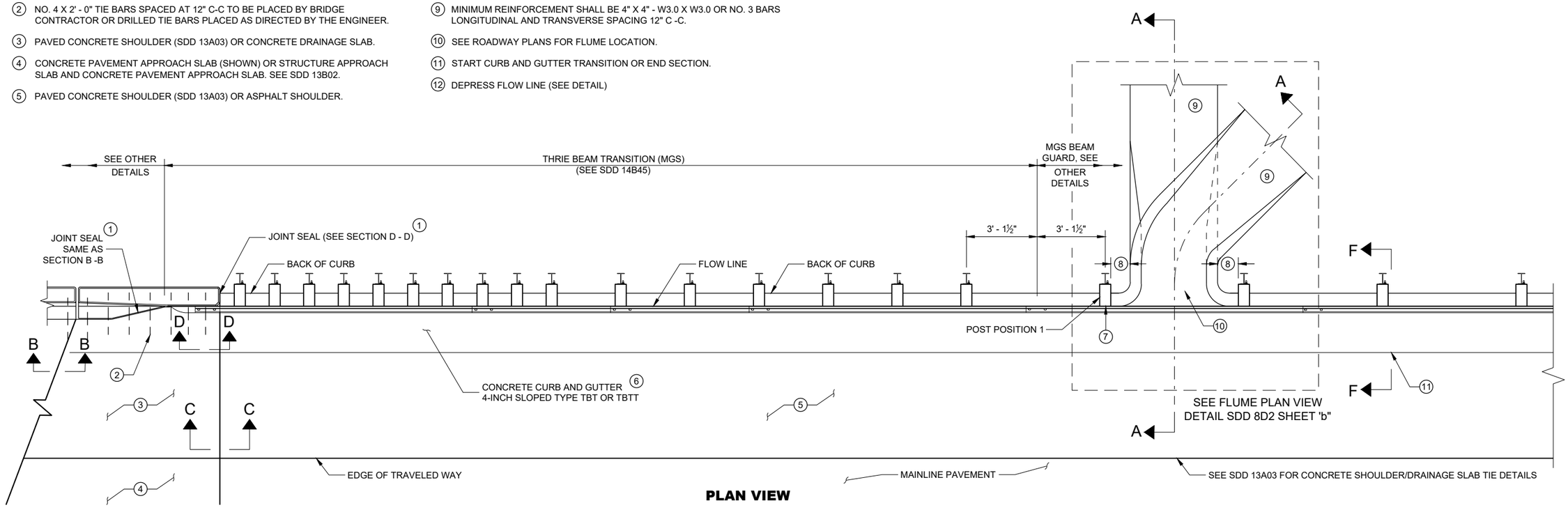
(8) CENTER FLUME BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE EDGE OF FLUME TO POSTS.

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

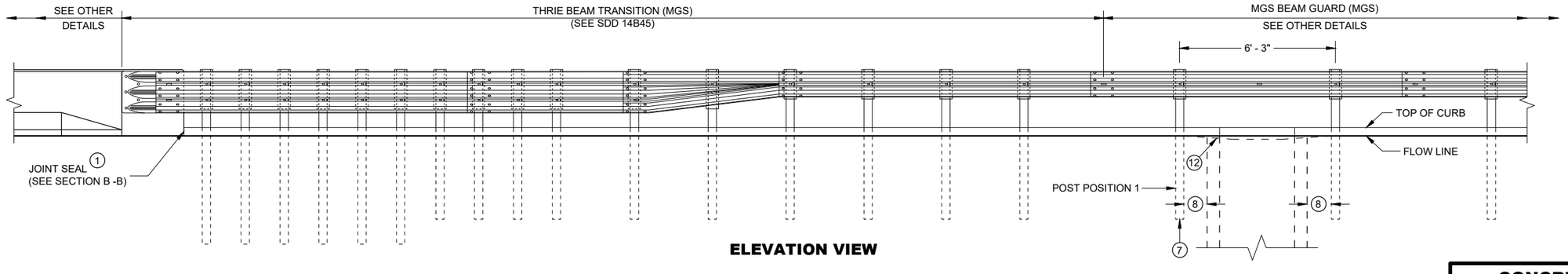
(10) SEE ROADWAY PLANS FOR FLUME LOCATION.

(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

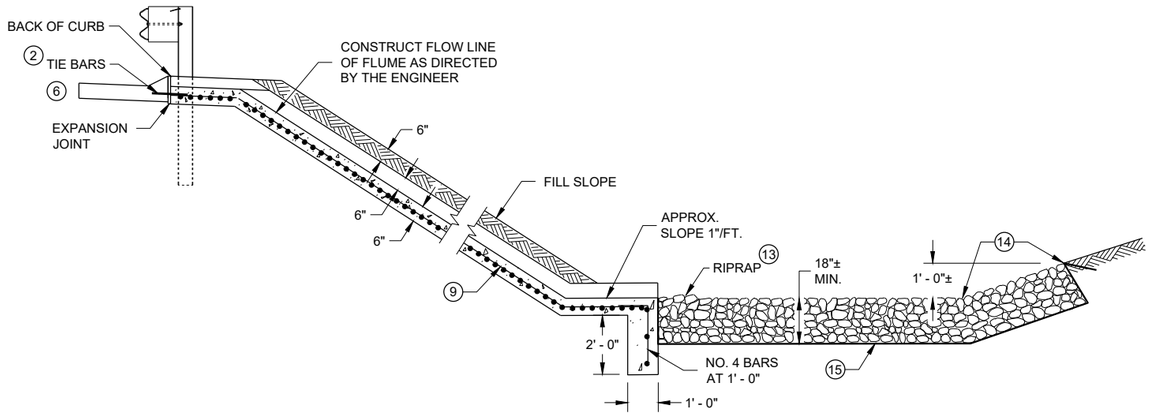
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

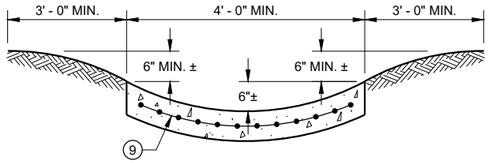
SDD 08D02 - 08a

6

SDD 08D02 - 08a



SECTION A - A



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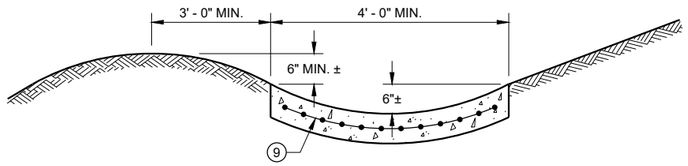

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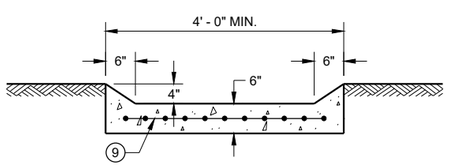
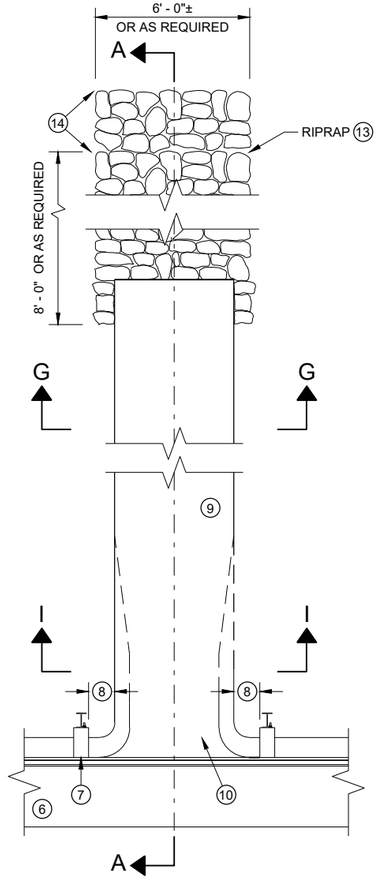
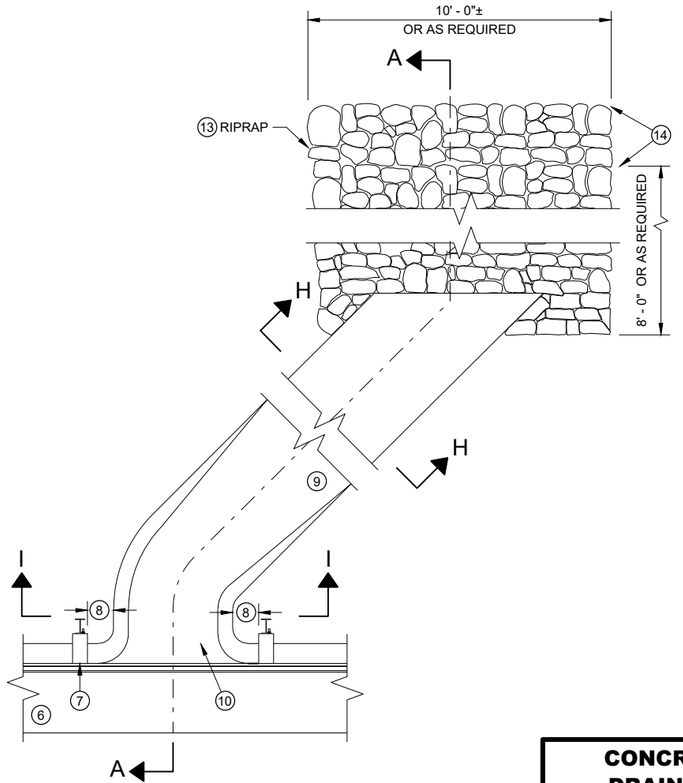


SECTION I - I



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 TYPE HR.

CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

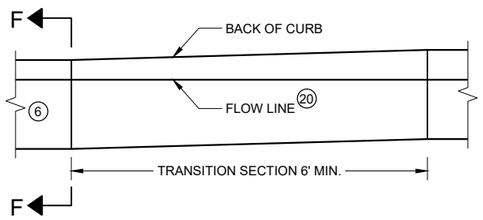
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

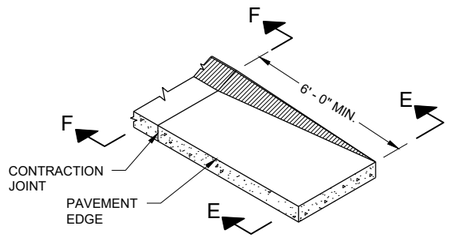
SDD 08D02 - 08b

6

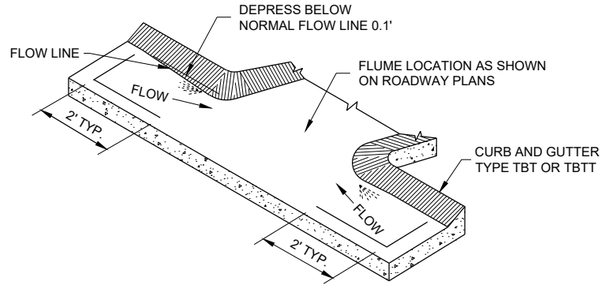
SDD 08D02 - 08b



**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 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.

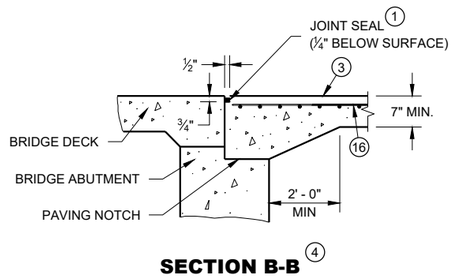
(17) MSG THRIE BEAM TRANSITION POST 1. SEE SDD 14B45 FOR ADDITIONAL CONSTRUCTION DETAILS AND ACCEPTABLE MATERIALS.

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

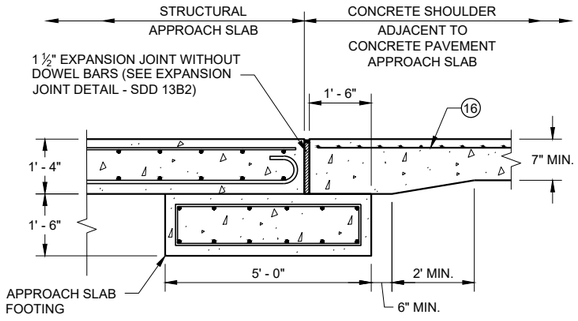
(19) ALIGN FACE OF POST BLOCK WITH FLOW LINE.

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

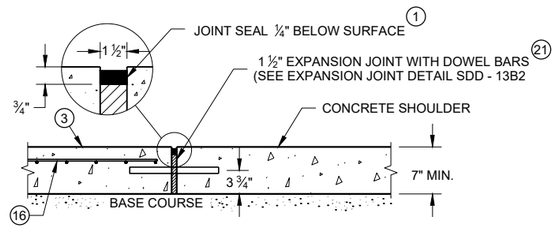
(21) DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING HMA PAVEMENTS.



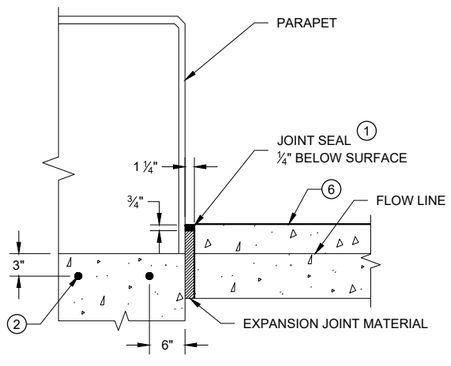
SECTION B-B (4)



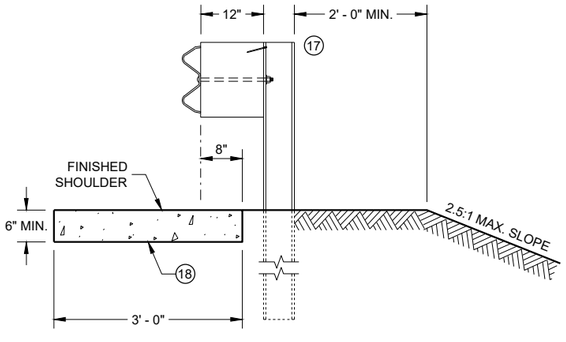
SECTION C - C
JOINT DETAIL FOR BRIDGE WITH STRUCTURAL APPROACH SLAB AND CONCRETE APPROACH SLAB



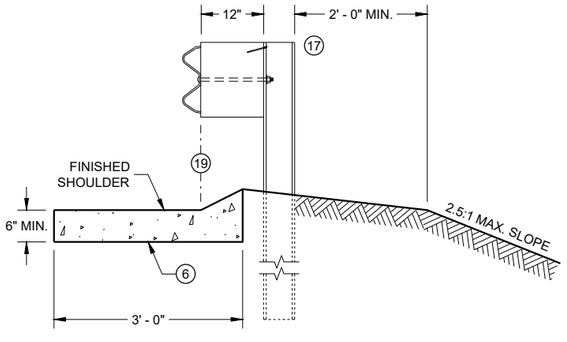
SECTION C - C
JOINT DETAIL FOR BRIDGE APPROACH WITH CONCRETE SHOULDERS



SECTION D - D



SECTION E - E



SECTION F - F

CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

6

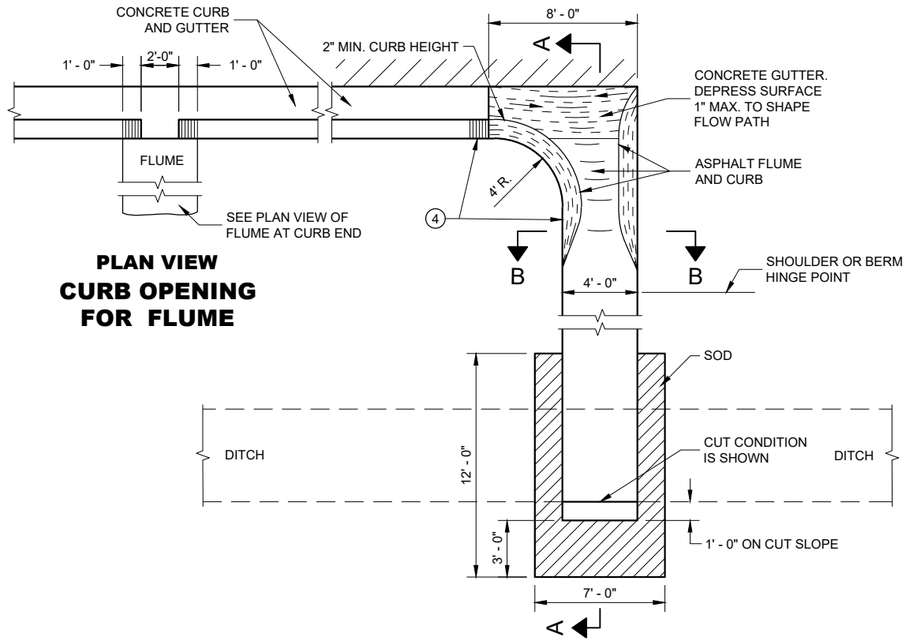
SDD 08D02 - 08c

6

SDD 08D02 - 08c

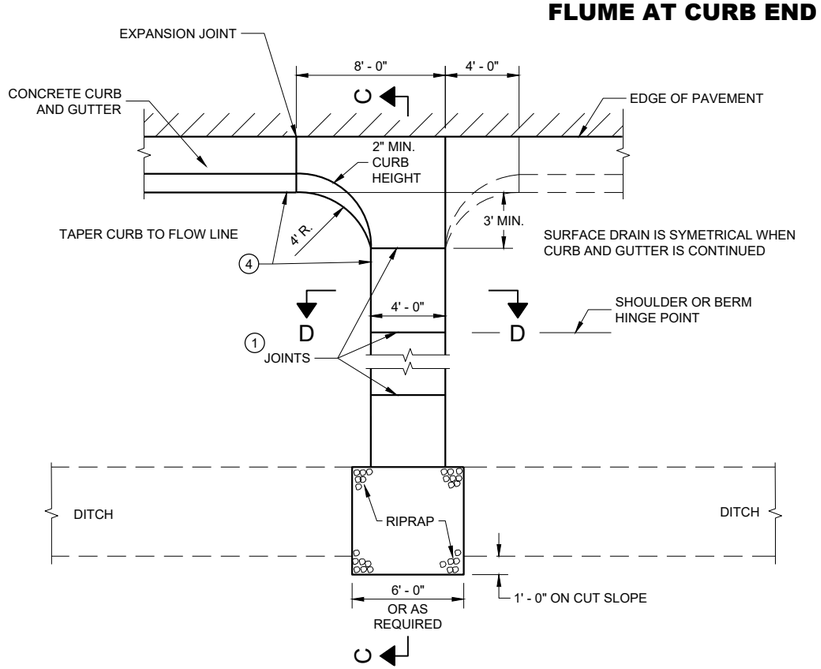
NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

ASPHALTIC FLUME



PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



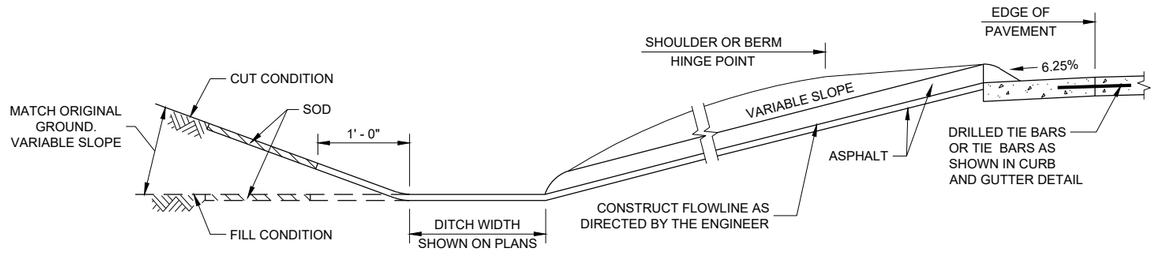
PLAN VIEW
CONCRETE SURFACE DRAIN

GENERAL NOTES

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

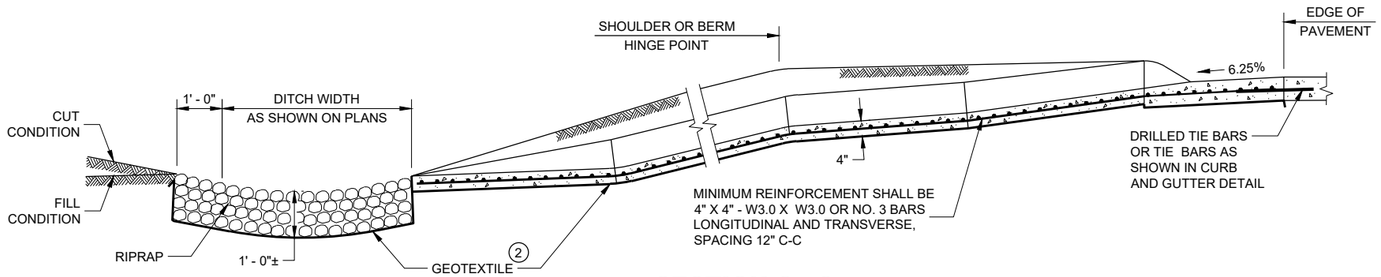
4" X 4" - W3.0 X W3.0 CONCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

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

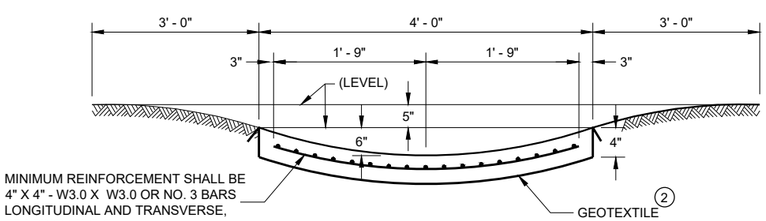


SECTION A - A

SECTION B - B



SECTION C - C



SECTION D - D

CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

6

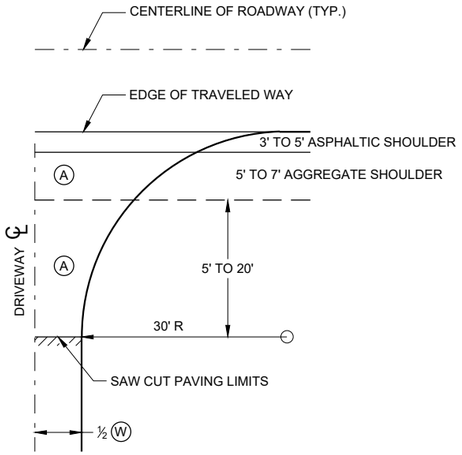
SDD 08D04 - 07

6

SDD 08D04 - 07

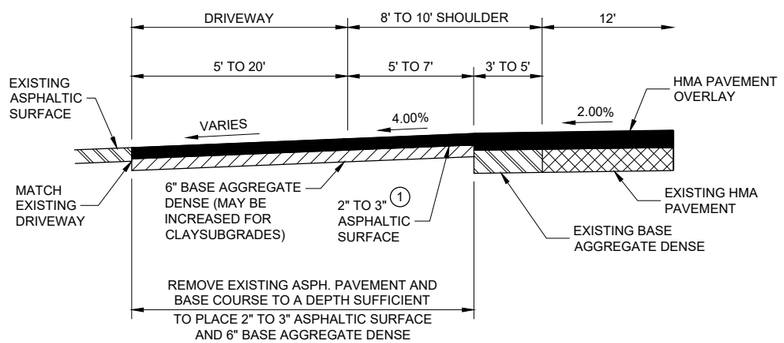
GENERAL NOTES

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



PLAN VIEW

HALF SECTION



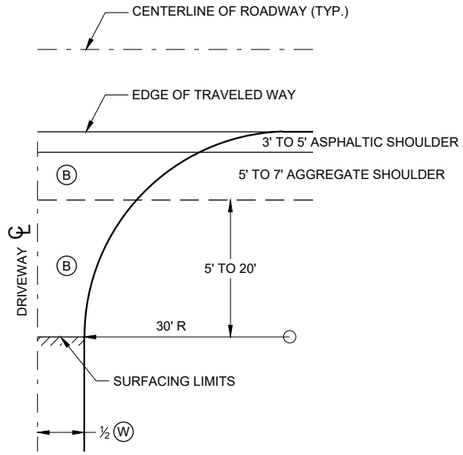
PROFILE VIEW

RURAL ENTRANCE
WITH ASPHALTIC SURFACE
RESURFACING PROJECTS

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

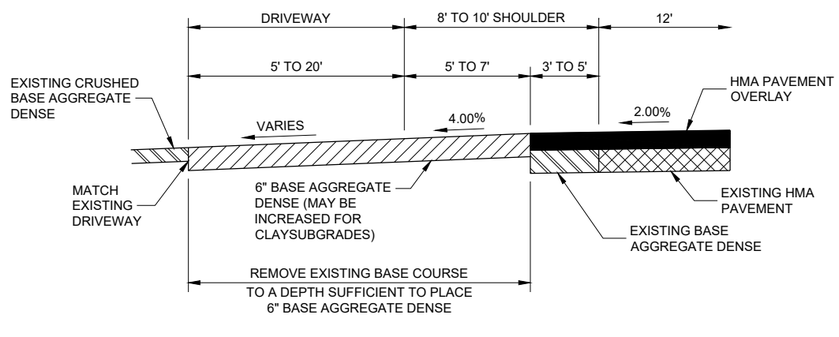
(B) : PAID FOR AS BASE AGGREGATE DENSE 1 ¼" (TON)

(W) : DRIVEWAY WIDTH 16' MIN. - 24' MAX.



PLAN VIEW

HALF SECTION



PROFILE VIEW

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

DRIVEWAYS WITHOUT CURB AND GUTTER RESURFACING PROJECTS RURAL

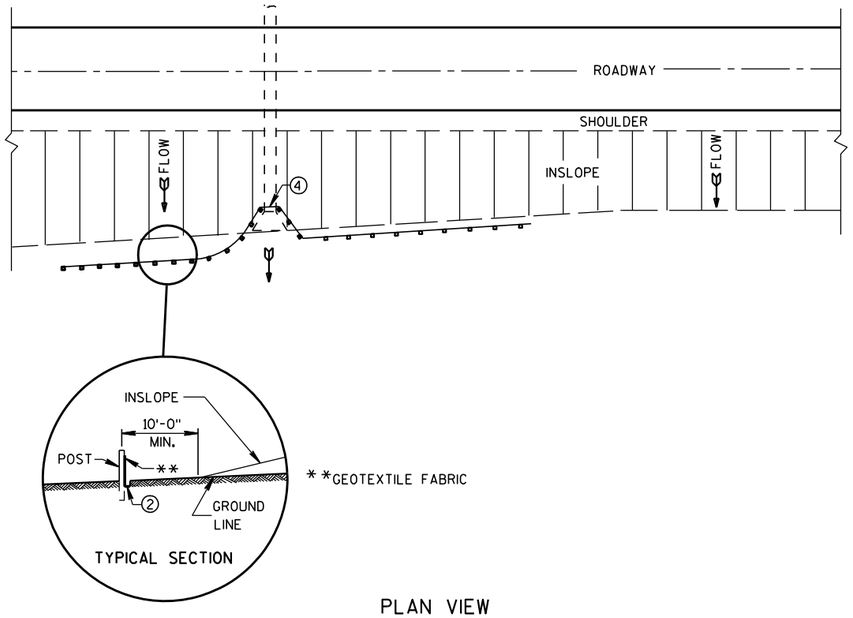
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2016
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT ENGINEER

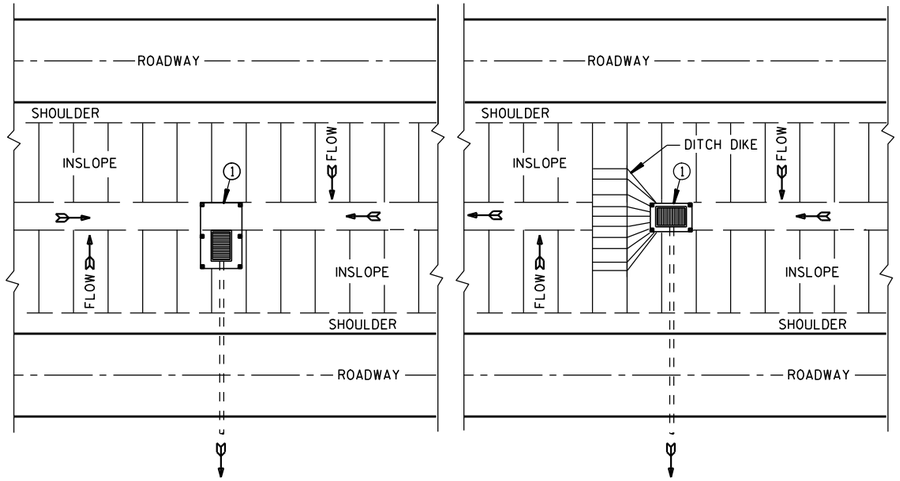
FHWA

6
SDD 08D22 - 01



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



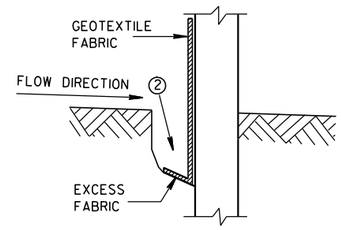
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

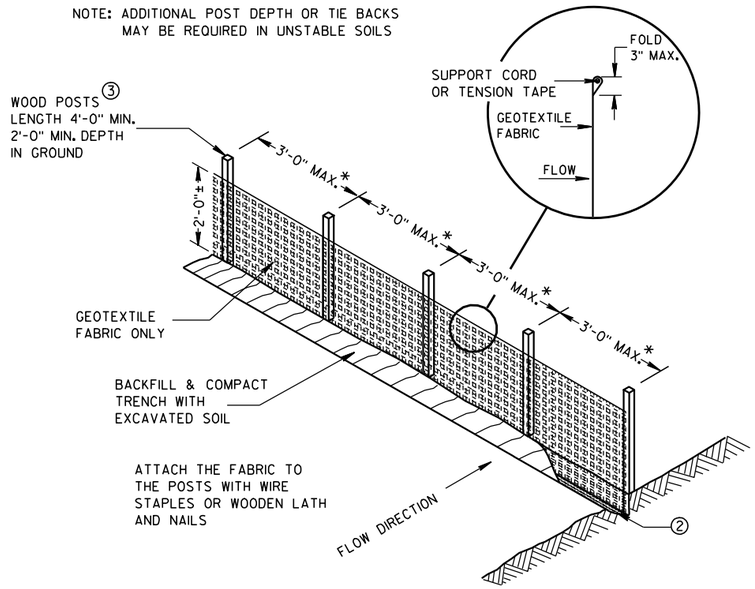
GENERAL NOTES

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

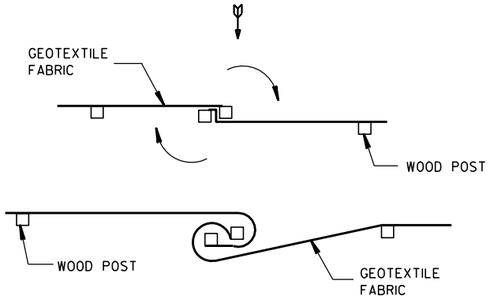
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL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



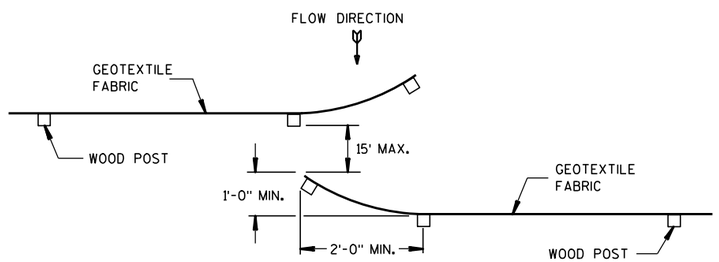
TRENCH DETAIL



SILT FENCE

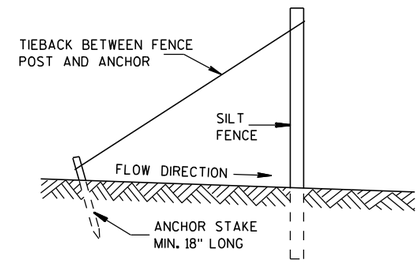


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

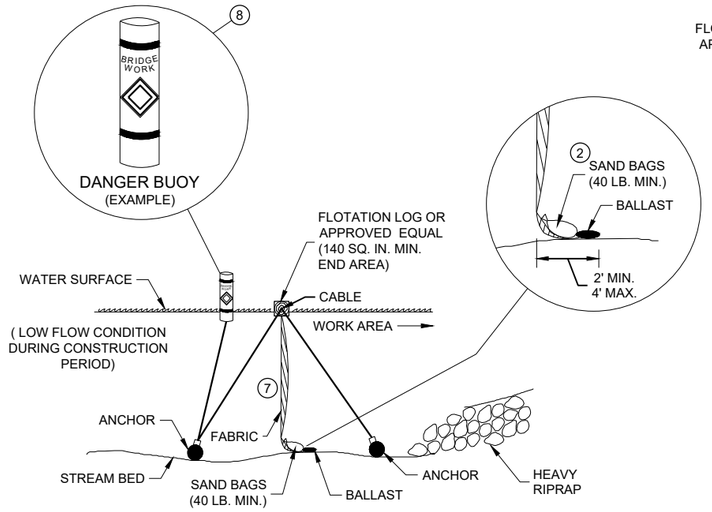
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

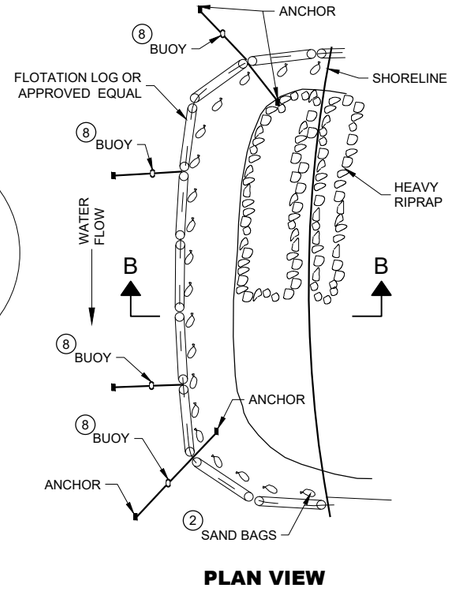
S.D.D. 8 E 9-6

6

S.D.D. 8 E 9-6

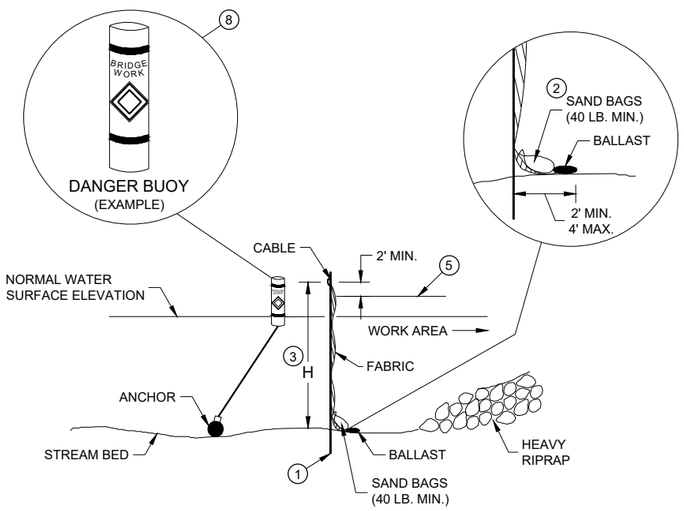


SECTION B - B

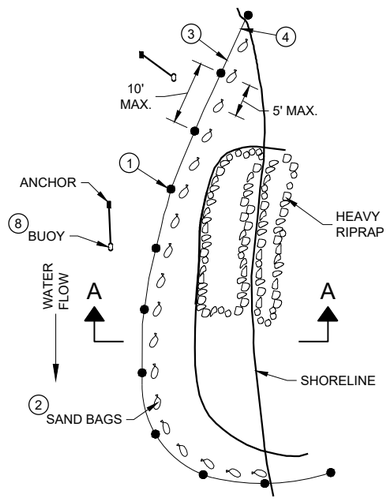


PLAN VIEW

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.

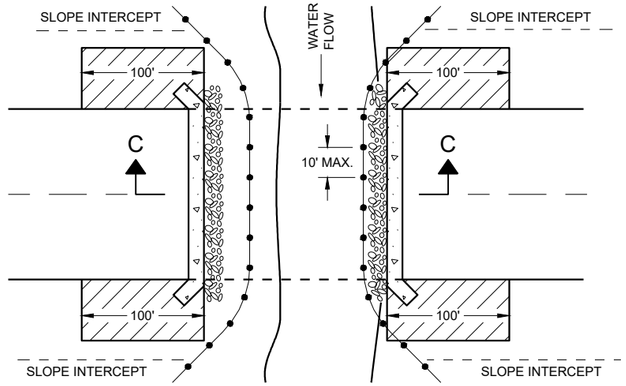
(4) IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

(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.

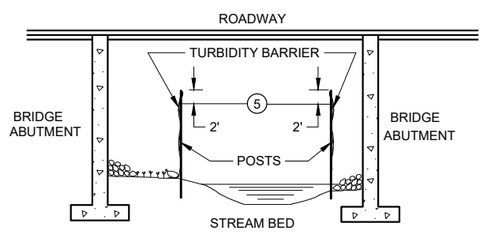
(6) FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BEDROCK PREVENTS THE INSTALLATION OF POSTS.

(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

6

SDD 08E11 - 02

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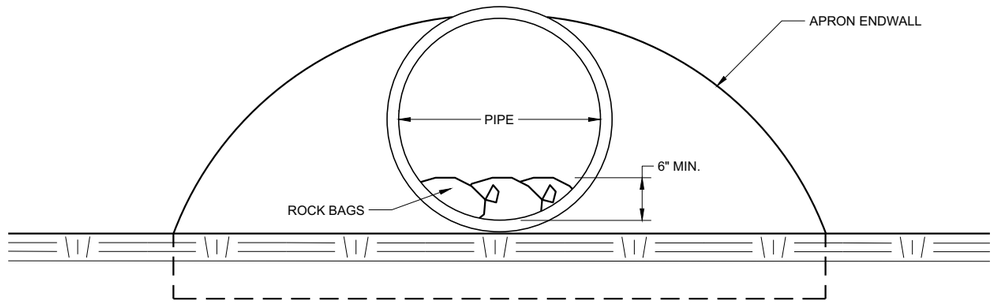
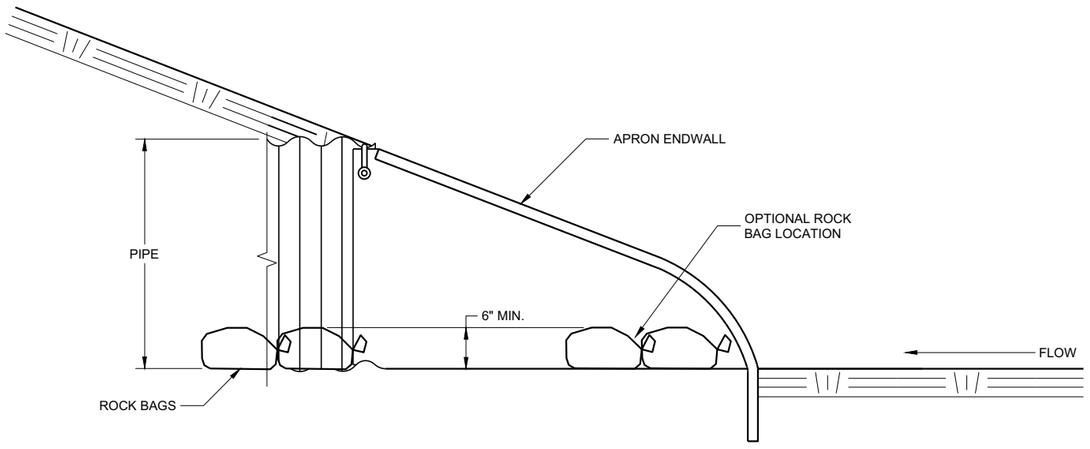
SDD 08E11 - 02



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 ENGINEER

FHWA

6

SDD 08E15 - 01

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SDD 08E15 - 01

METAL APRON ENDWALLS

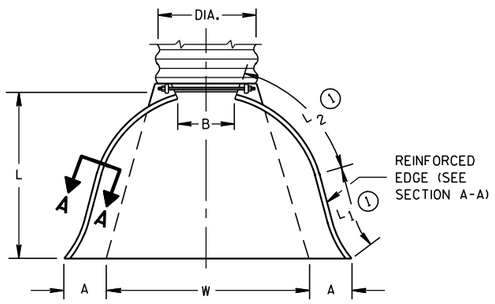
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4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

× EXCEPT CENTER PANEL SEE GENERAL NOTES

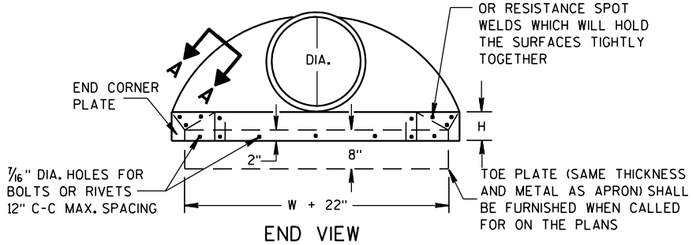
REINFORCED CONCRETE APRON ENDWALLS

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

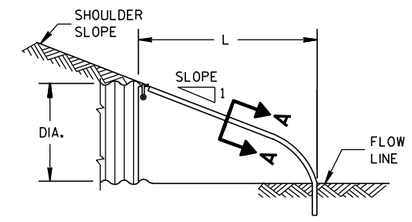
*MINIMUM
**MAXIMUM



PLAN VIEW

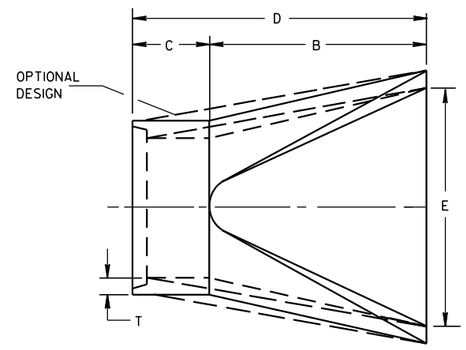


END VIEW

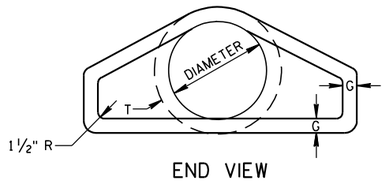


SIDE ELEVATION

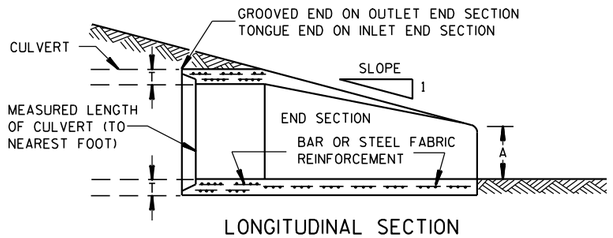
METAL ENDWALLS



PLAN

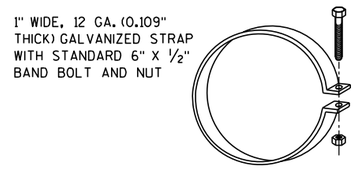


END VIEW



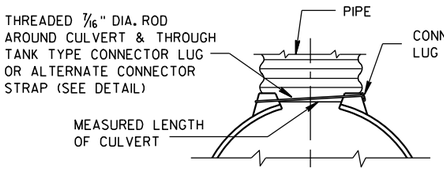
LONGITUDINAL SECTION

CONCRETE ENDWALLS

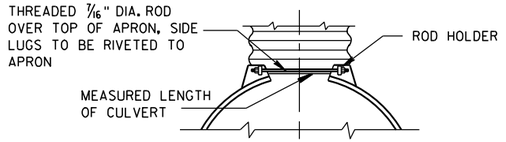


ALTERNATE FOR TYPE 1 CONNECTION

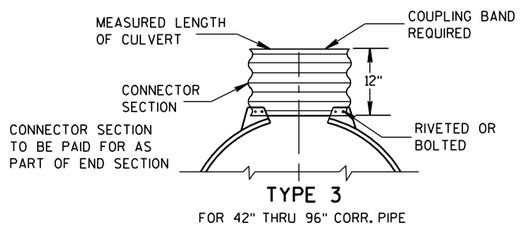
END SECTION CONNECTOR STRAP



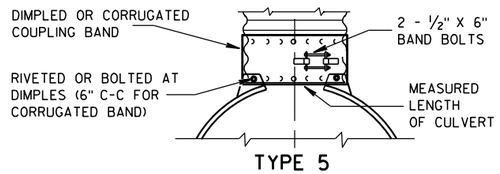
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

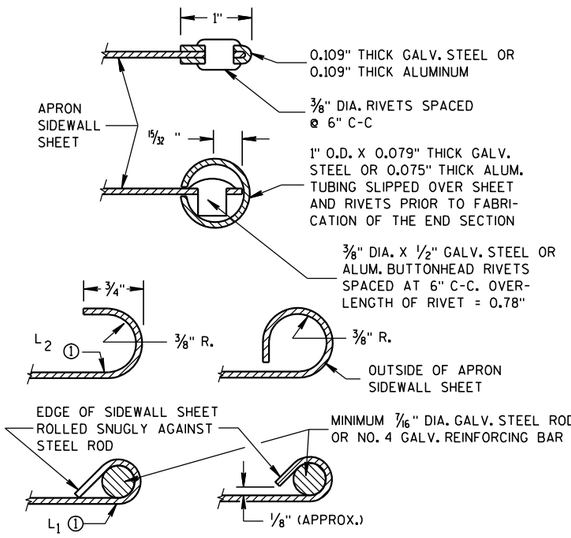
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

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

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

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

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

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

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

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

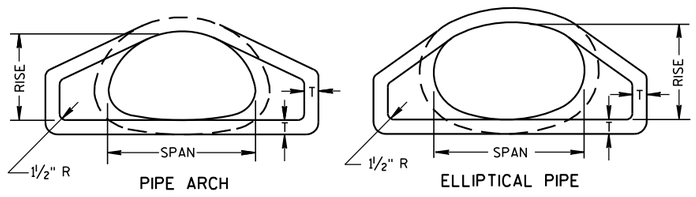
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

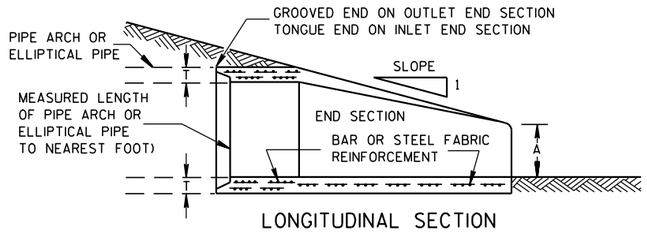
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

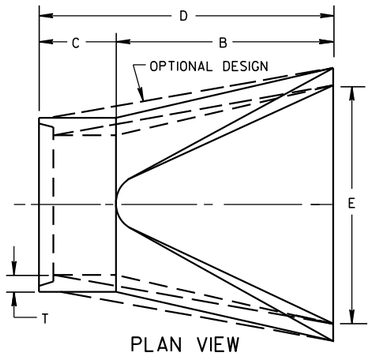
6
S.D.D. 8 F 1-11



END VIEW

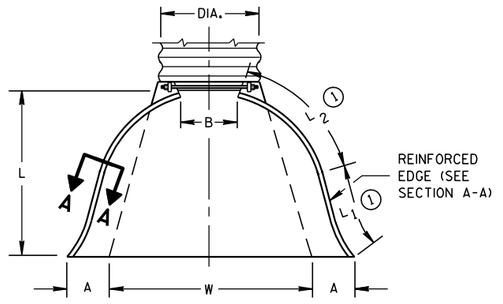


LONGITUDINAL SECTION

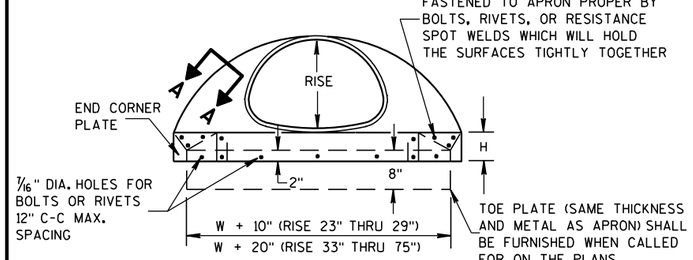


PLAN VIEW

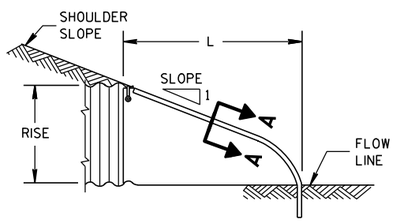
CONCRETE ENDWALLS



PLAN VIEW

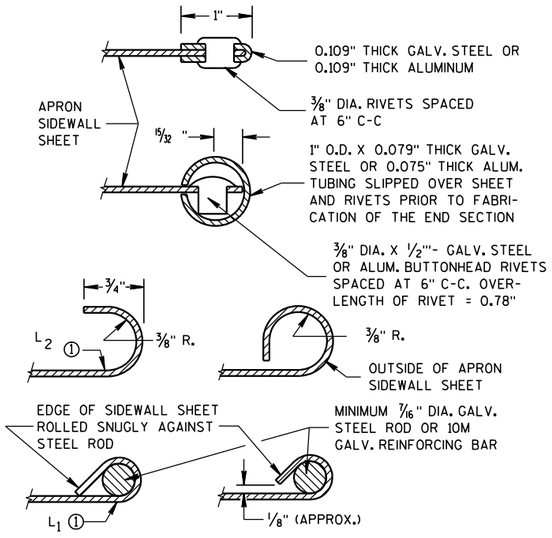


END VIEW



SIDE ELEVATION

METAL ENDWALLS



SECTION A-A

2- 2/3" X 1/2" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
15	17	13	.064	.060	7	9	6	19	14	16	30	2½ to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19⅜	36	2½ to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21¾	42	2½ to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27½	48	2½ to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37⅝	60	2½ to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45⅜	75	2½ to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54¾	85	2½ to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	2½ to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	72¾	102	2¼ to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82¼	114	2¼ to 1	3 Pc.
66	77	52	.109*	.105*	18	36	12	77	—	—	126	2 to 1	3 Pc.
72	83	57	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.

3" X 1" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
48	53	41	.109	.105	18	26	12	63	24	72¾	90	2½ to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82¼	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	1½ to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1½ to 1	3 Pc.
72	81	59	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.
78	87	63	.109*	.105*	22	38	12	77	—	—	148	1½ to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1½ to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1½ to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1½ to 1	3 Pc.

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL SEE GENERAL NOTES

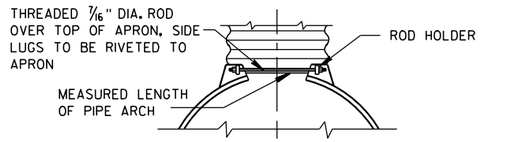
REINFORCED CONCRETE PIPE ARCH

EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	29	18	3	8½	39	33	72	48	3 to 1
30	36	22	3½	9½	50	46	96	60	3 to 1
36	44	27	4	11⅛	60	36	96	72	3 to 1
42	51	31	4½	15 13/16	60	36	96	78	3 to 1
48	58	36	5	21	60	36	96	84	3 to 1
54	65	40	5½	25½	60	36	96	90	3 to 1
60	73	45	6	31	60	36	96	96	3 to 1
72	88	54	7	31	60	39	99	120	2 to 1
84	102	62	8	28½	83	19	102	144	2 to 1

REINFORCED CONCRETE ELLIPTICAL PIPE

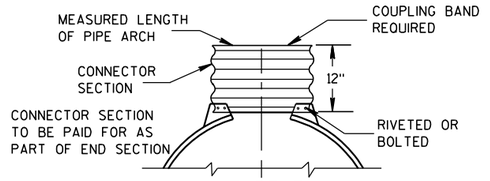
EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48	6½	30	60	36	96	96	2½ to 1

**NOMINAL SIZE



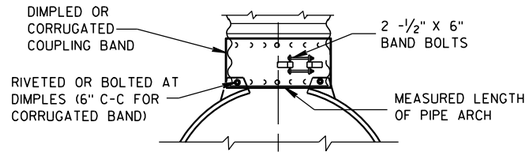
TYPE 2

FOR 17" X 13" THRU 112" X 75" PIPE ARCH



TYPE 3

FOR 64" X 43" THRU 112" X 75" PIPE ARCH



TYPE 5

ALTERNATE FOR:

ALL SIZES CORRUGATED PIPE ARCHES

NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL.

CONNECTION 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.

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

ALL THREE PIECE STEEL APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE ARCH PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 77" X 52" THROUGH 112" X 75" APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

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

① FOR PIPE ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/94 — DATE

/S/ Rory L. Rhinesmith — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

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S.D.D. 8 F 2-1

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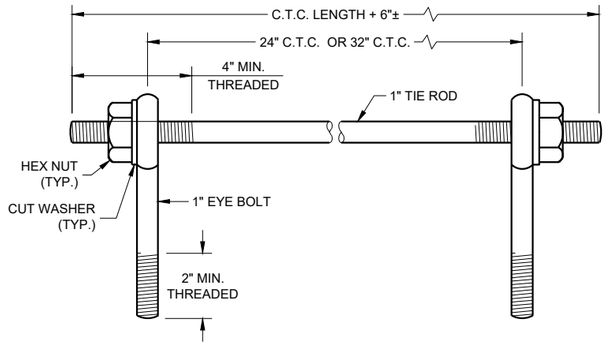
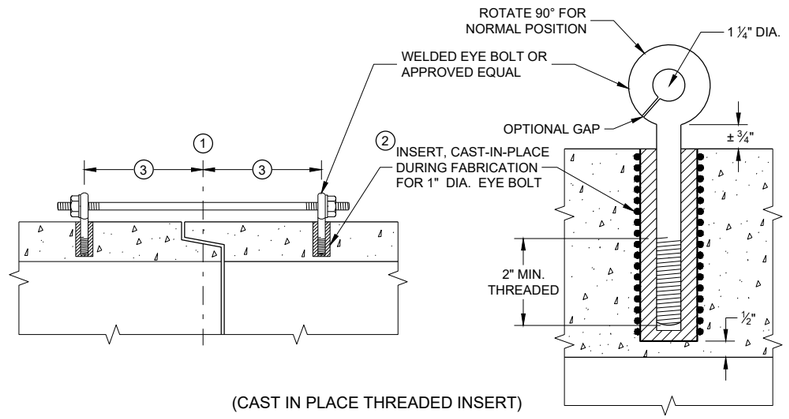
S.D.D. 8 F 2-1



EYE BOLTS AND TIE ROD



(CAST IN PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

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

GENERAL NOTES

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

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

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

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

(1) CENTER LINE OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

(2) THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

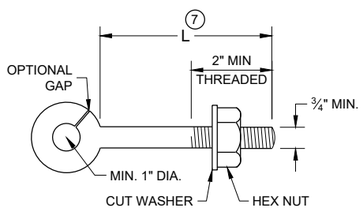
(3) HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.

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

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

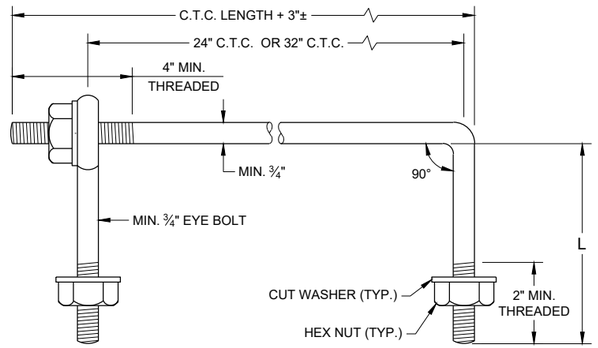
(6) LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.

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

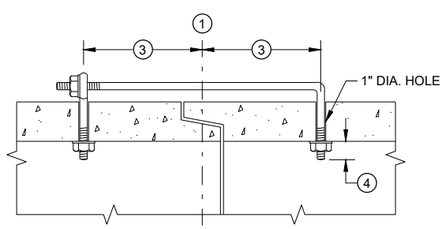


EYE BOLT (7)

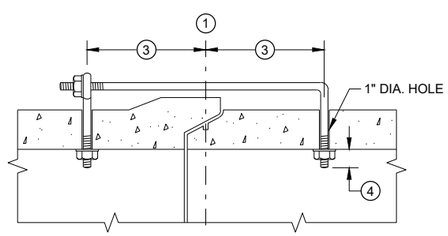
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD



(TONGUE AND GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

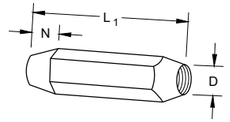
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

ADJUSTABLE TIE ROD TABLE

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

DIMENSIONS SHOWN ARE IN INCHES



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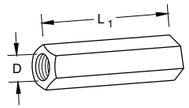
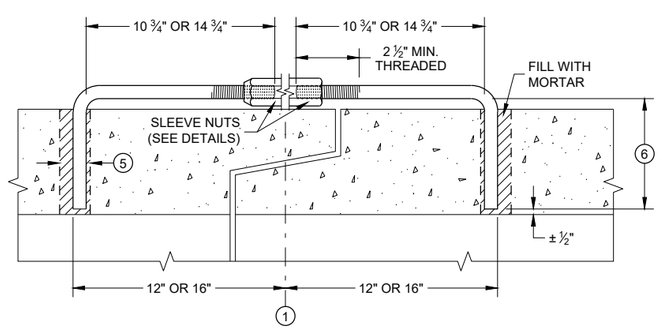


PLAIN

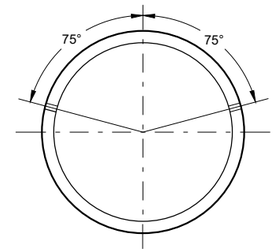
RIGHT AND LEFT THREADS

SLEEVE NUTS



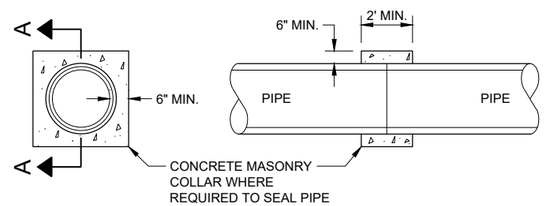
LONGITUDINAL SECTION

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



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

TRANSVERSE SECTION



SECTION A - A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

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SDD 08F04 - 08

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SDD 08F04 - 08

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.

FILL SLOPES FLATTER THAN 2 ½:1 SHALL BE WARPED TO MEET THE TOP OF THE WINGWALLS.

ALL STEEL REINFORCEMENT AND WELDED STEEL WIRE FABRIC SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE NOTED.

(1) MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS SPACED 12" C-C IN BOTH DIRECTIONS.

(2) THE SPACE BETWEEN PIPES SHALL BE AS FOLLOWS:

DIAMETER OR SPAN	SPACE
UP TO AND INCLUDING 48"	2' - 0"
OVER 48" TO 72"	½ DIA. OR SPAN
OVER 72"	3' - 0"

(3) LIMITS OF TRENCH BACKFILL

(4) LIMITS OF FOUNDATION BACKFILL

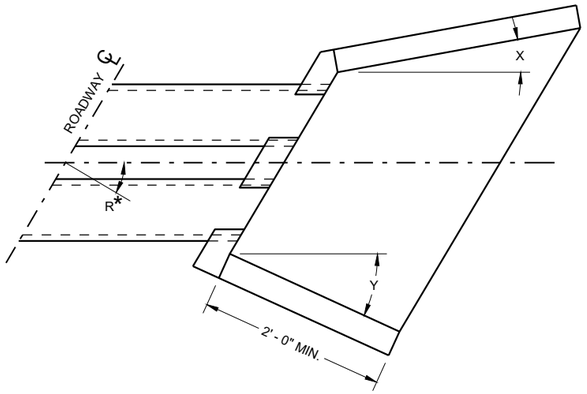
(5) FOUNDATION AND TRENCH BACKFILL ARE MATERIALS INCLUDED IN PAYMENT FOR CULVERT PIPE, PIPE ARCH, CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPSE OR CONCRETE MASONRY ENDWALLS.

(6) DO NOT PLACE FOUNDATION BACK FILL OR ANY OTHER GRANULAR BACKFILL AROUND OR BELOW CUT OFF WALL. POUR CUT OFF WALL AGAINST NATIVE SOIL

(7) MINIMUM HEIGHT SHALL BE THE GREATER OF 1'- 0" OR ¼ HEIGHT OF CULVERT PIPE.

TRENCH BACKFILL

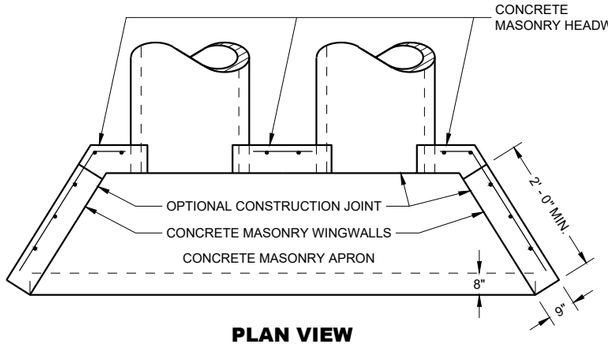
FOUNDATION BACKFILL



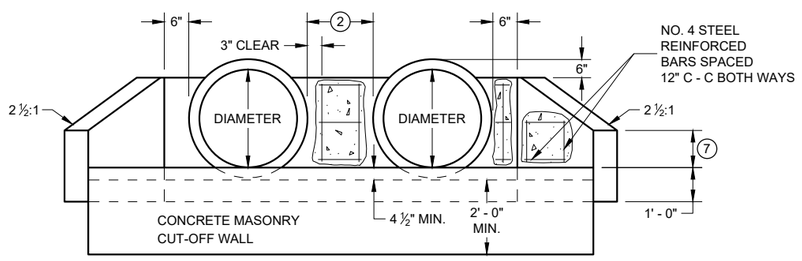
WINGWALL ANGLE DETAILS

INLET			OUTLET		
R*	X	Y	R*	X	Y
0 - 7°	30°	30°	0 - 15°	15°	15°
8 - 22°	25°	30°	16 - 45°	10°	15°
23 - 37°	20°	30°	46 - 75°	5°	15°
38 - 52°	15°	30°	OVER 75°	0°	15°
53 - 67°	10°	30°			
68 - 82°	5°	30°			
OVER 82°	0°	30°			

R* = NUMBER OF DEGREES RIGHT OR LEFT HAND FORWARD

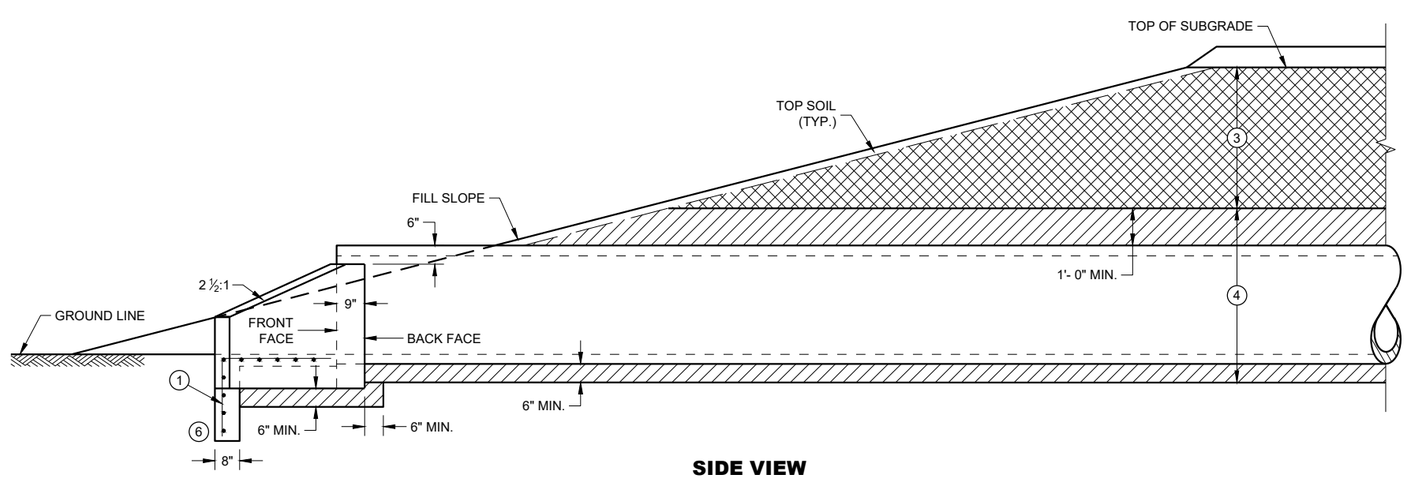


PLAN VIEW



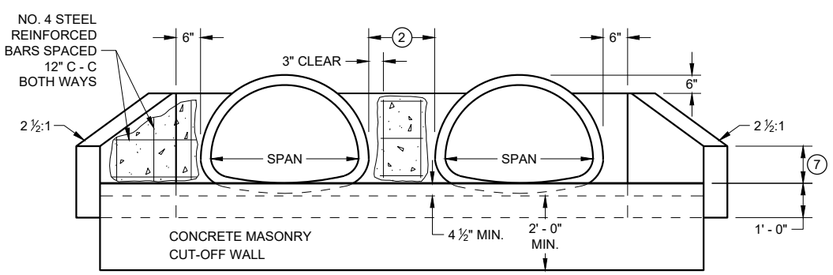
END VIEW

CIRCULAR PIPE



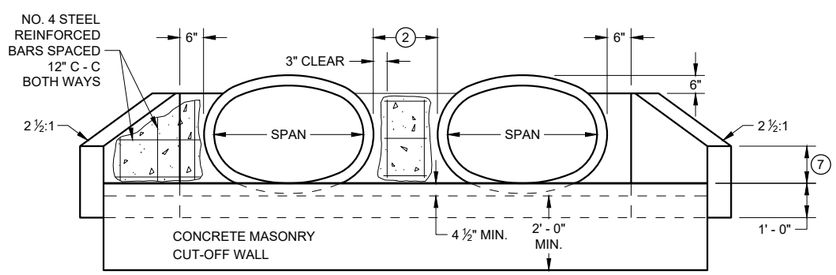
SIDE VIEW

CIRCULAR PIPE, PIPE ARCH OR HORIZONTAL ELLIPSE



END VIEW

PIPE ARCH



END VIEW

HORIZONTAL ELLIPSE

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2022 — DATE

/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

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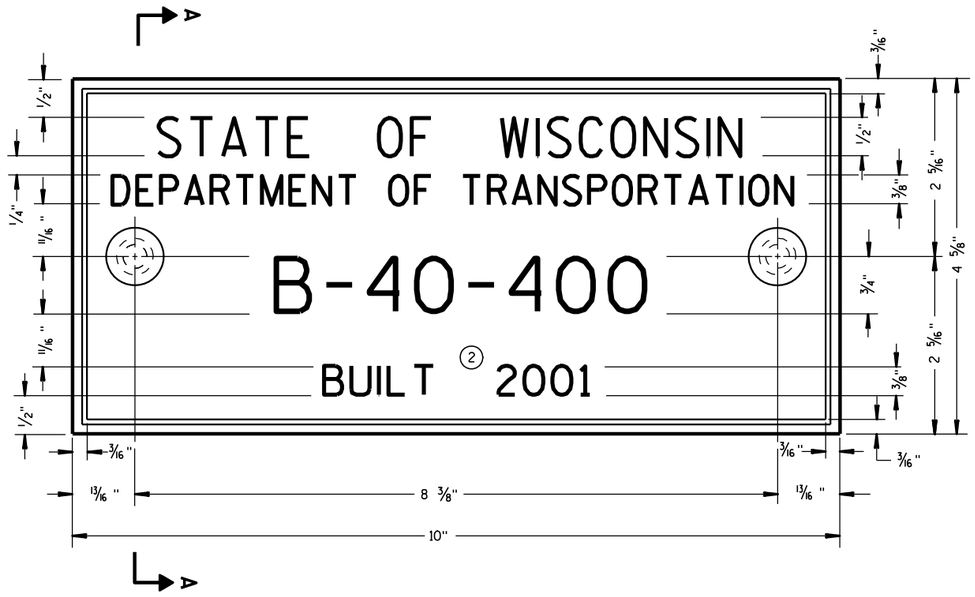
SDD 08F10 - 02



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

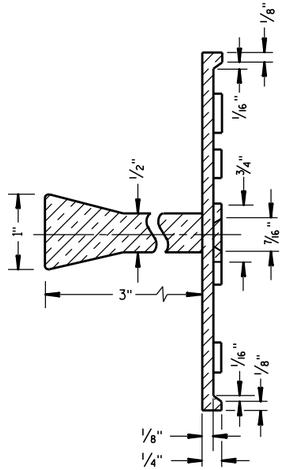
GENERAL NOTES

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.

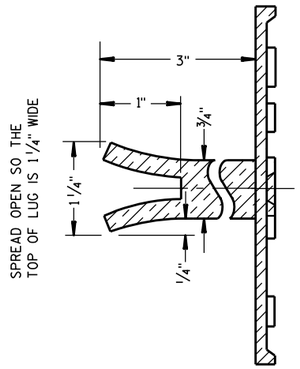
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

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

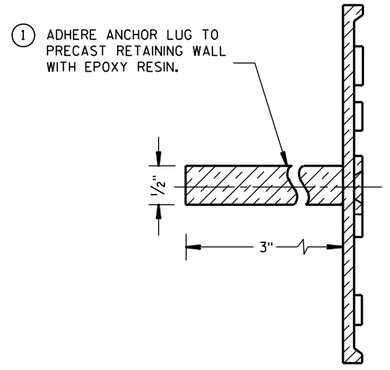
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



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 Becker
CHIEF STRUCTURAL DEVELOPMENT ENGINEER

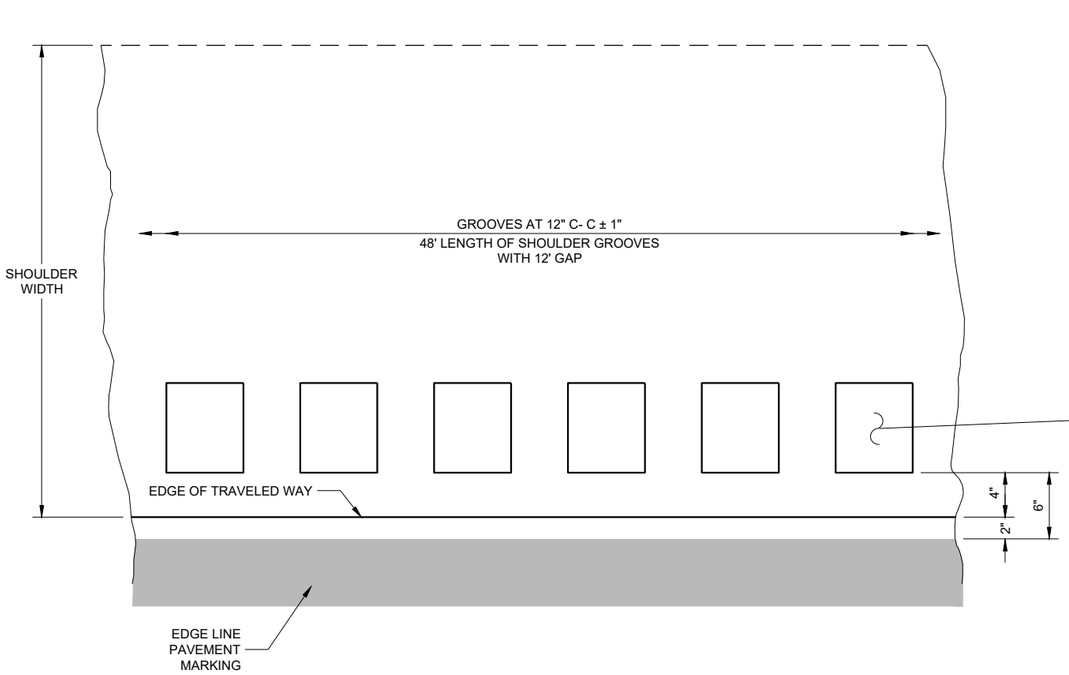
FHWA

6

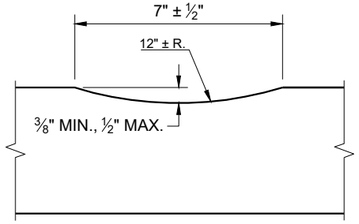
S.D.D. 12 A 3-10

6

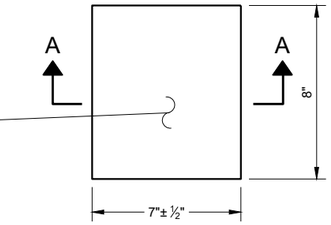
S.D.D. 12 A 3-10



PLAN DETAIL VIEW
SHOULDER WITH GROOVES



SECTION A - A

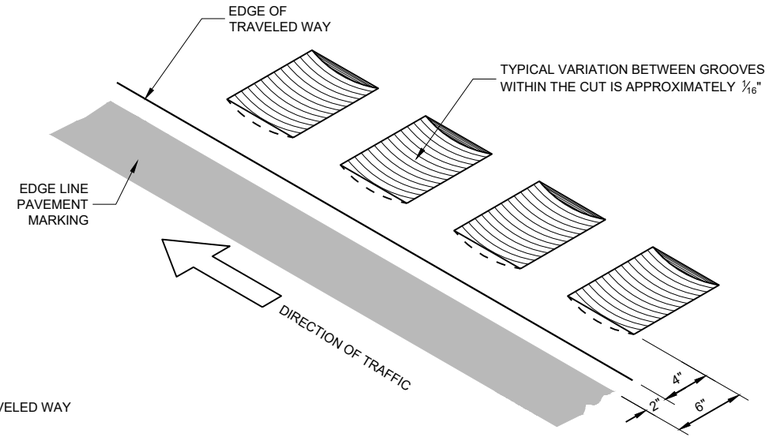


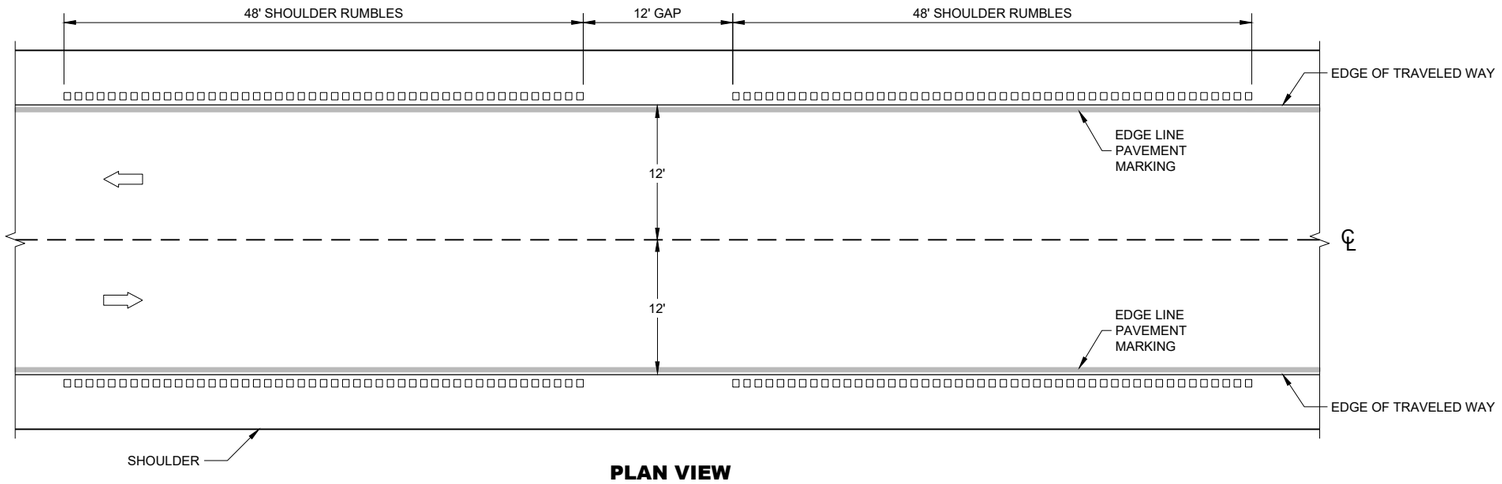
PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

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

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





PLAN VIEW

SHOULDER RUMBLE STRIPS - ASPHALT

SHOULDER RUMBLE STRIPS ASPHALT

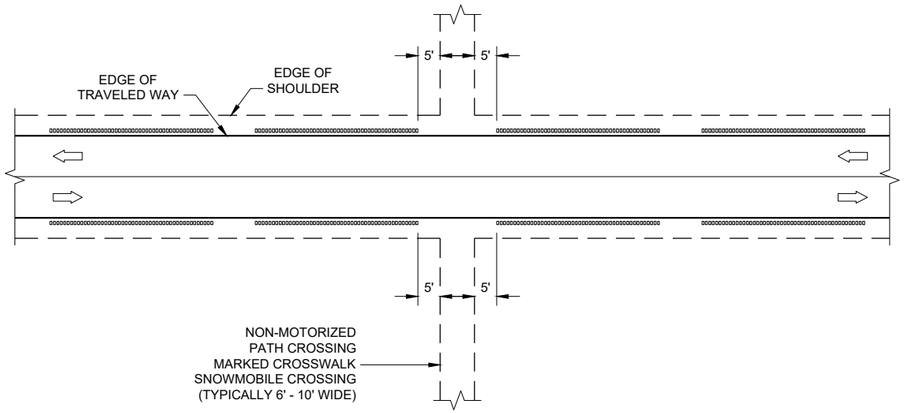
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

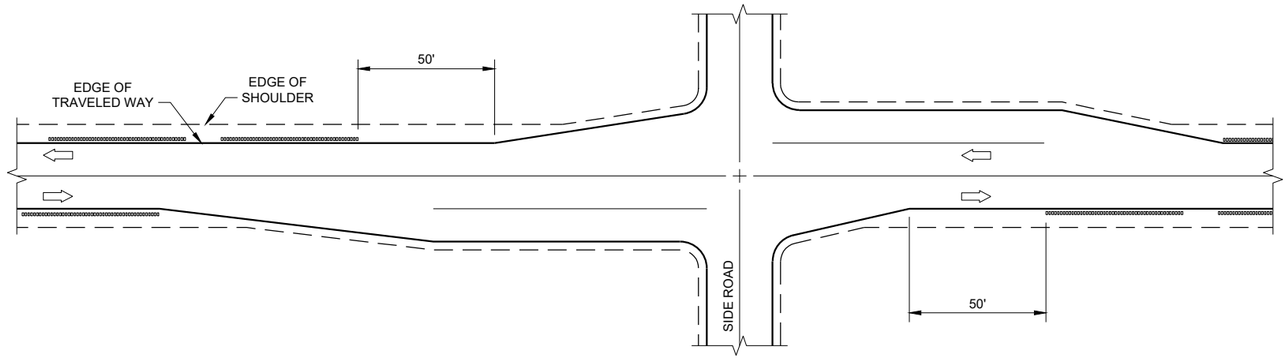
SDD 13A10 - 03a

6

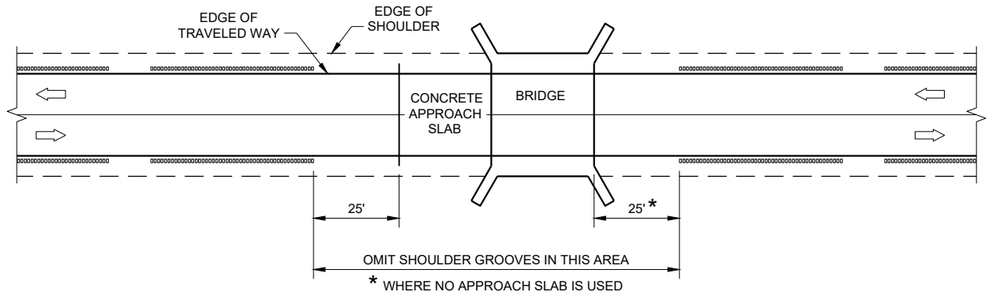
SDD 13A10 - 03a



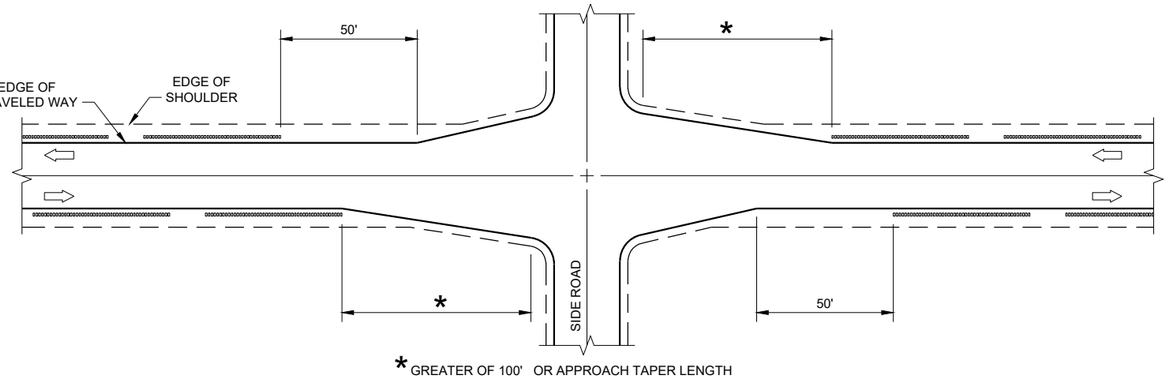
GROOVES AT MISCELLANEOUS CROSSINGS



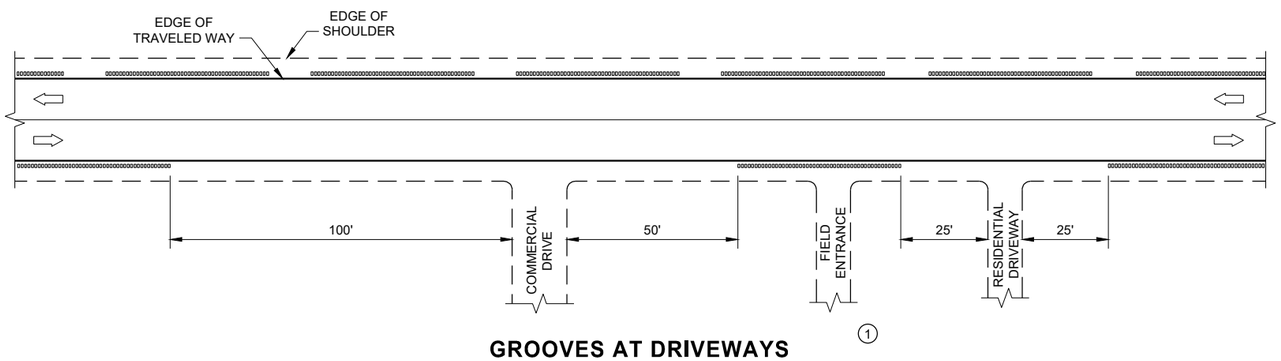
GROOVES AT RIGHT TURN LANE



GROOVES AT BRIDGES



GROOVES AT INTERSECTIONS WITH APPROACH TAPER



GROOVES AT DRIVEWAYS ①

GENERAL NOTES

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13A10 - 03g

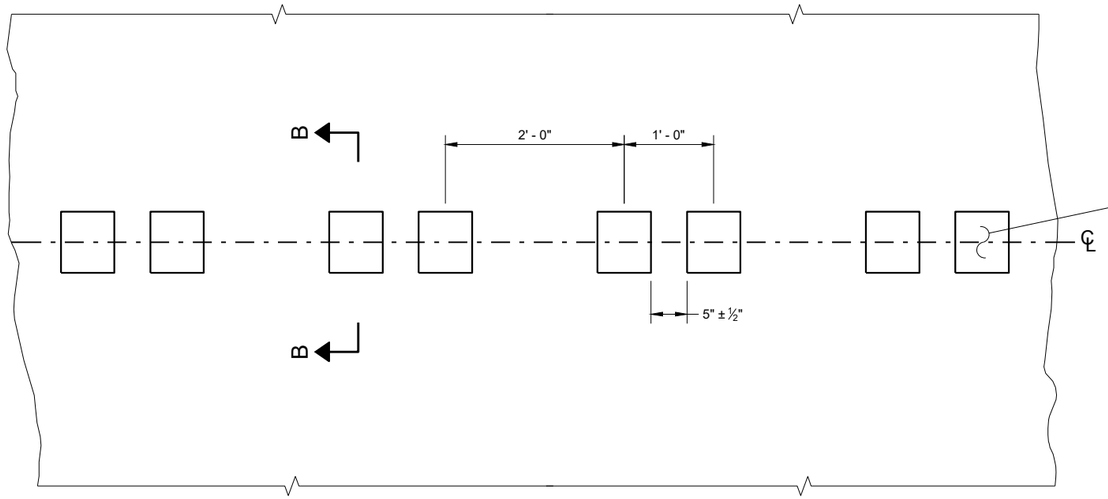
6

SDD 13A10 - 03g

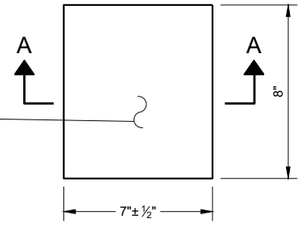
GENERAL NOTES

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

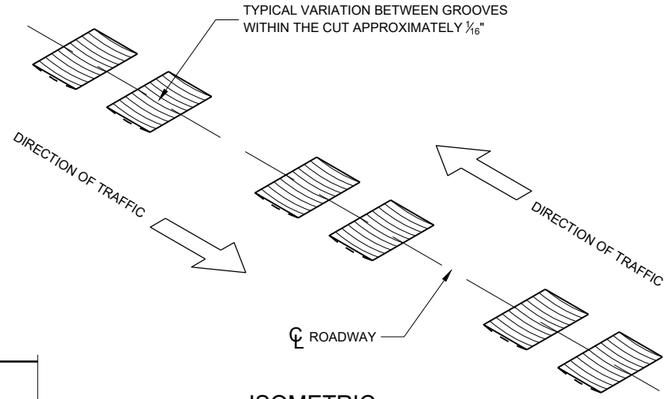
CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS WHEN DIRECTED BY THE ENGINEER.



PLAN DETAIL VIEW



PLAN VIEW
(SINGLE GROOVE)



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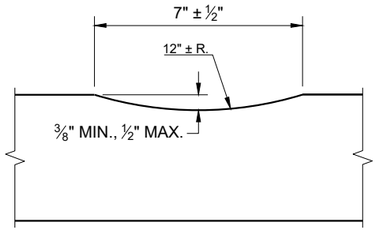
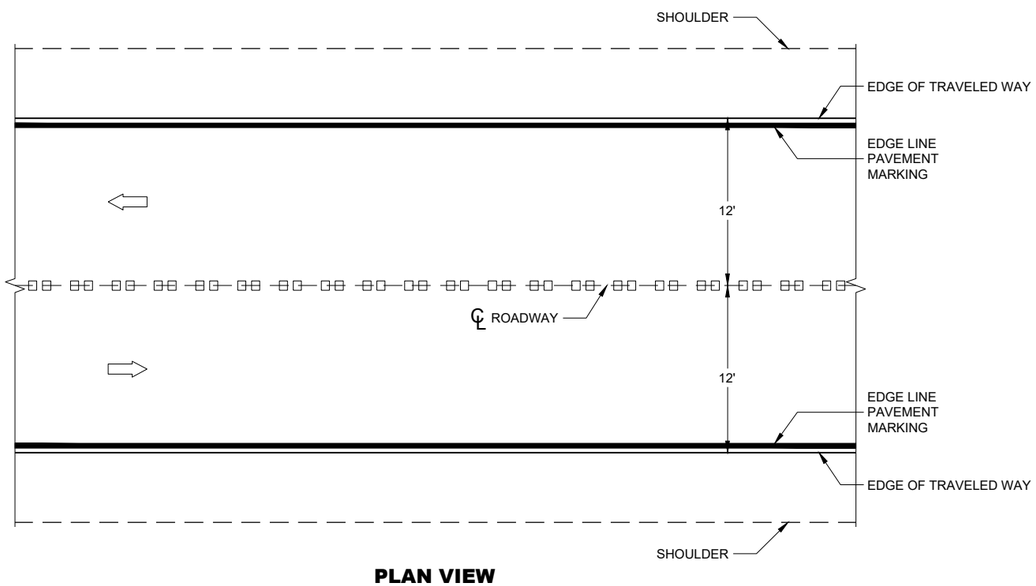
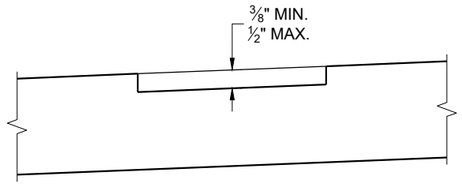


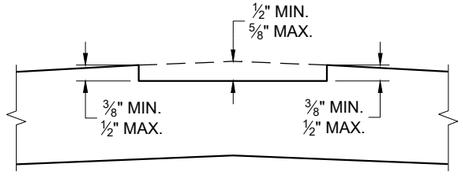
SECTION A - A



PLAN VIEW



SECTION B - B
SUPERELEVATED ROADWAY



SECTION B - B
CROWNED ROADWAY

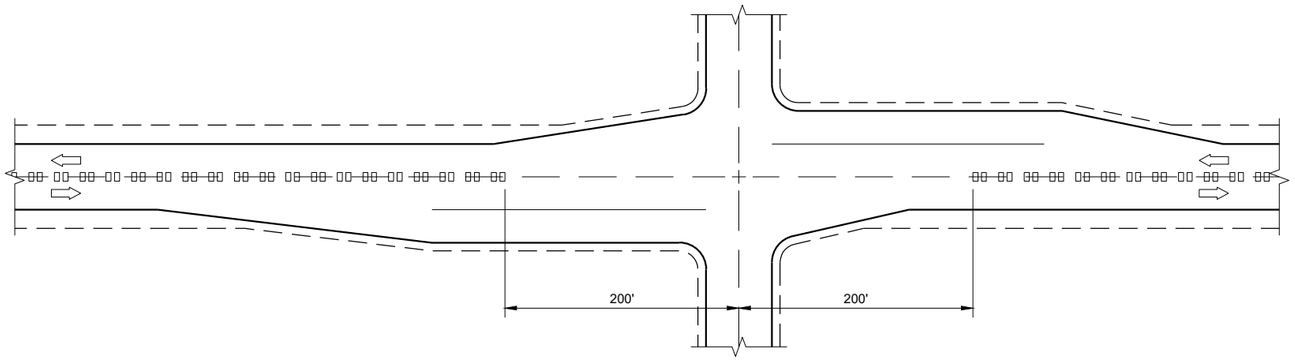
CENTERLINE RUMBLE STRIPS - ASPHALT

CENTERLINE RUMBLE STRIPS - ASPHALT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

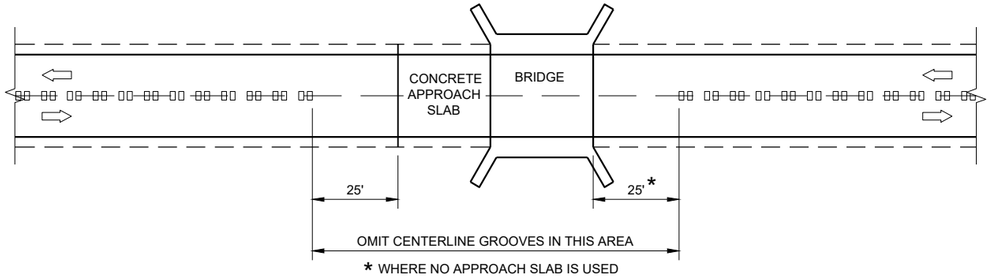
SDD 13A11 - 04a



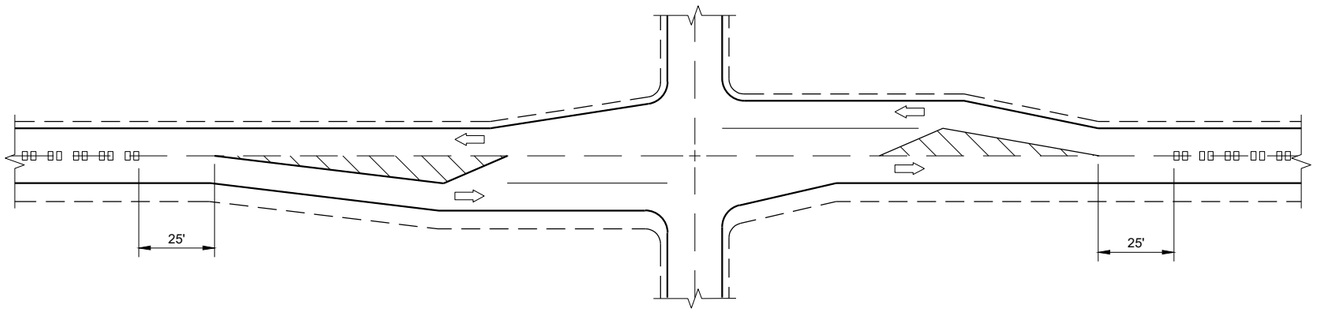
CENTERLINE GROOVES AT INTERSECTIONS

GENERAL NOTES

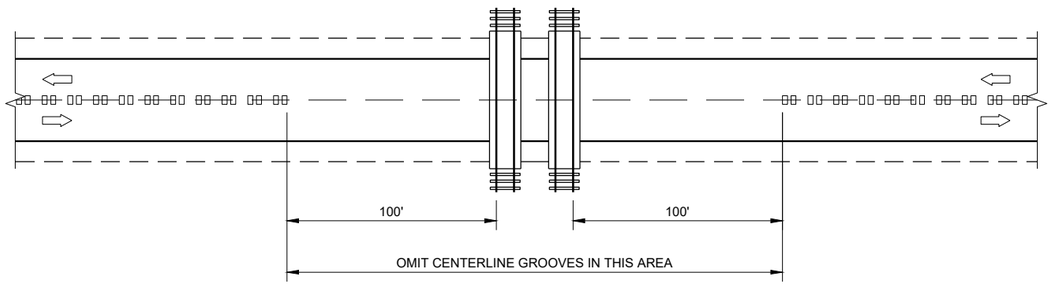
1. CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS WHEN DIRECTED BY THE ENGINEER.



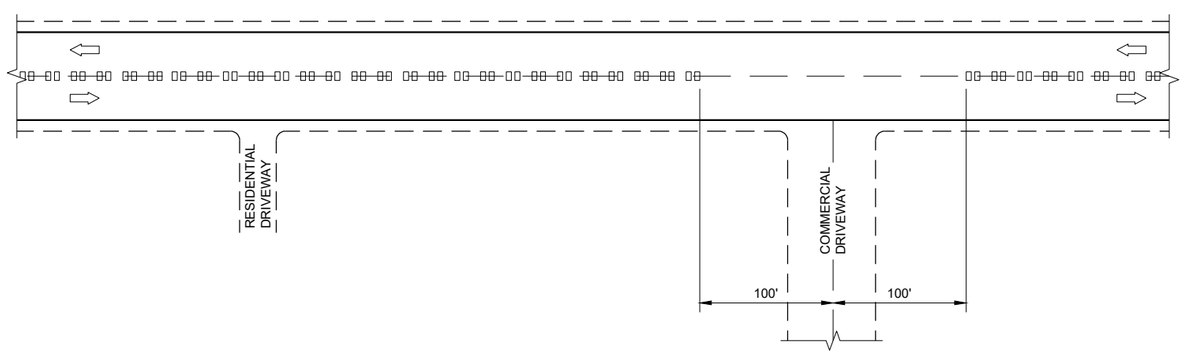
CENTERLINE GROOVES AT BRIDGES



CENTERLINE GROOVES AT INTERSECTIONS (WITH LEFT TURN LANES)



CENTERLINE GROOVES AT RAILROADS



CENTERLINE GROOVES AT DRIVEWAYS (1)

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

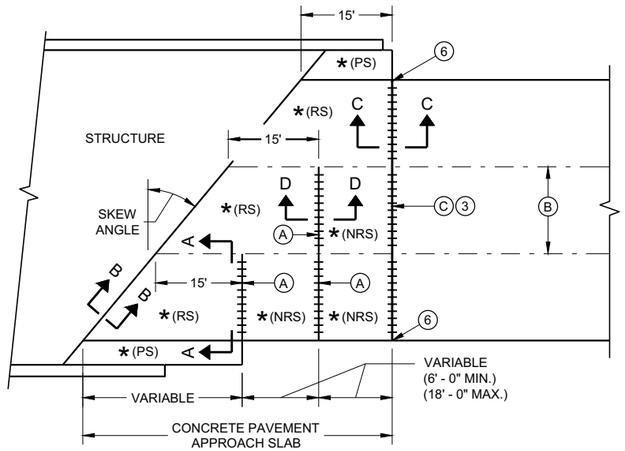
May 2023
DATE

/S/ John Jenkins
ROADWAY STANDARDS DEVELOPMENT ENGINEER

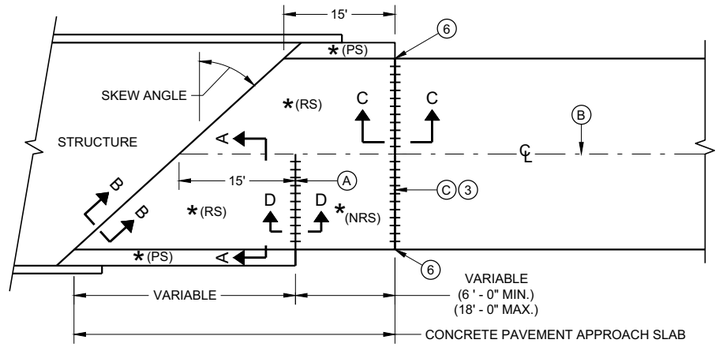
FHWA

6

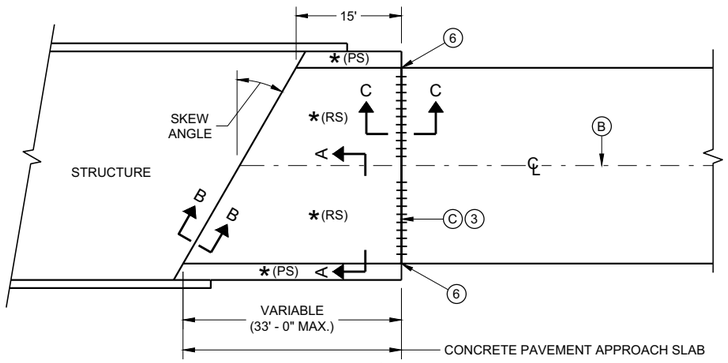
SDD 13A11 - 04d



SKEWED APPROACH
(PAVEMENT MORE THAN TWO LANES)



SKEWS > 20°
(PAVEMENT WIDTH ≤ 30')



SKEWS ≤ 20°
(PAVEMENT WIDTH ≤ 30')

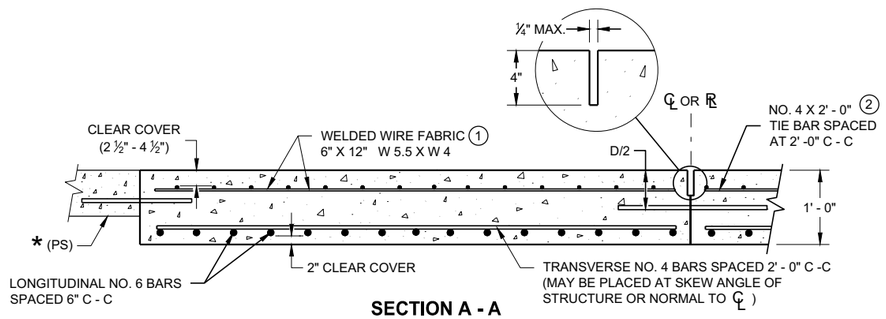
APPROACH SLAB AND ADJACENT PAVEMENT

* (RS) = REINFORCED CONCRETE SLAB

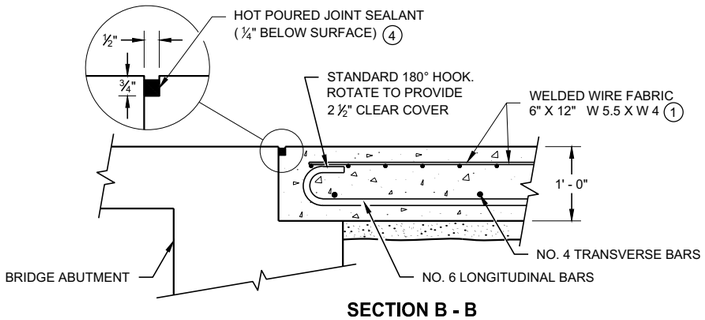
* (PS) = PAVED CONCRETE SHOULDER OR CONCRETE DRAINAGE SLAB

* (NRS) - NON - REINFORCED CONCRETE SLAB

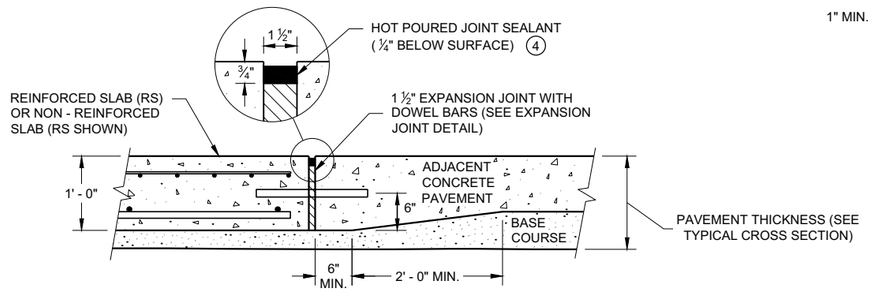
*** STANDARD DOWEL BAR DIAMETER (SEE SDD 13C11 AND SDD 13C13)



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.

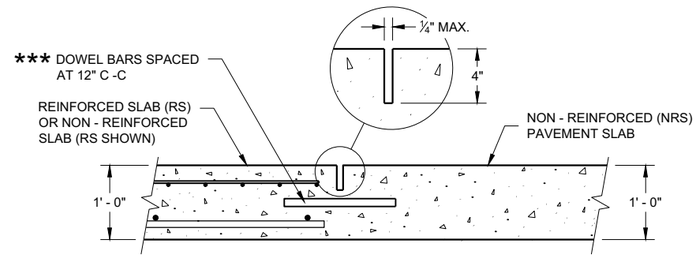
(5) PLACE EXPANSION CAP ON THE END OF THE DOWEL THAT IS NOT TACK WELDED TO THE BASKET. DO NOT FORCE DOWEL BAR PAST THE DOWEL STOP.

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

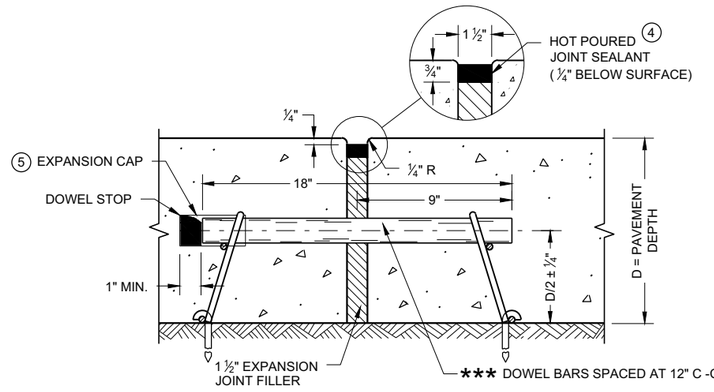
(A) STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℞.

(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

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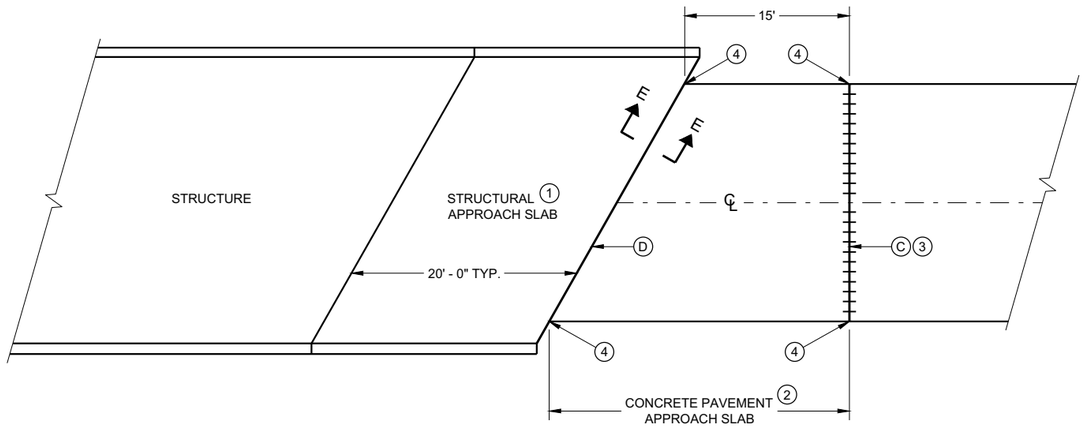
SDD 13B02 - 09a



BRIDGE APPROACHES

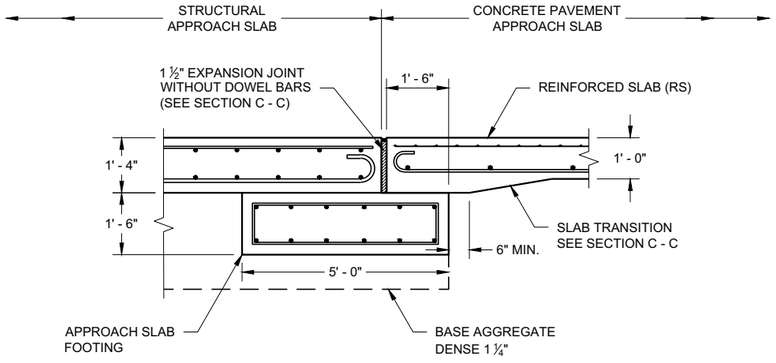
GENERAL NOTES

ALL PROJECTS THAT INVOLVE A STRUCTURAL APPROACH SLAB WILL ALSO HAVE A CONCRETE PAVEMENT APPROACH SLAB.

1. SEE BRIDGE PLAN.
2. CONFORM TO SDD 13B02 SHEET A FOR CONCRETE PAVEMENT APPROACH SLAB DETAILS
3. DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.
4. EXTEND EXPANSION JOINT THROUGH ANY ADJACENT TIED CONCRETE.

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

D. 1 ½" EXPANSION JOINT (NO DOWELS)



SECTION E - E
FOOTING DETAIL
STRUCTURAL APPROACH SLAB TO CONCRETE BRIDGE APPROACH

STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB

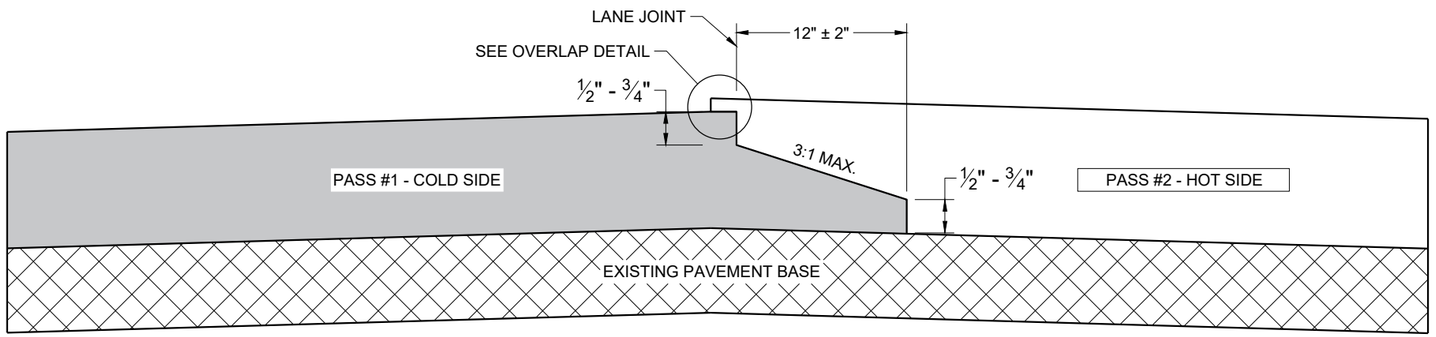
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

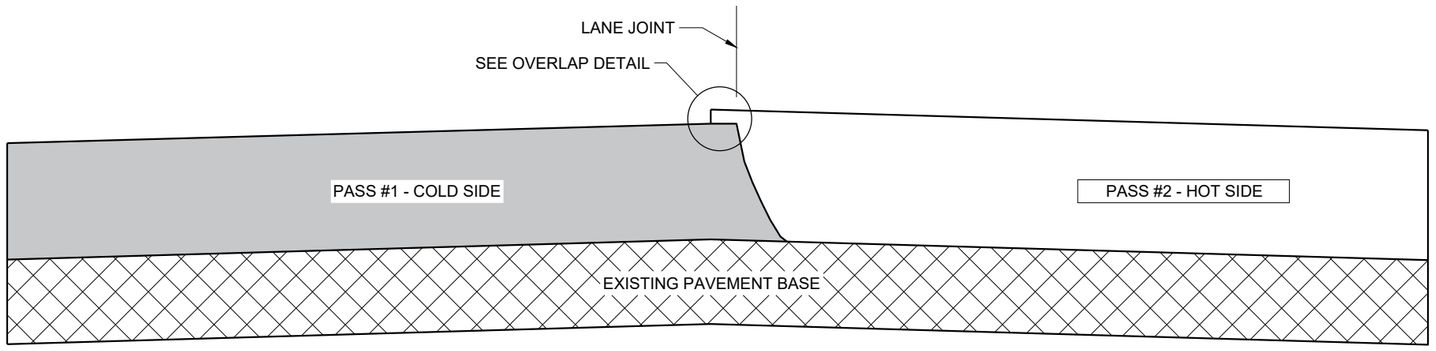
/S/ Peter Kemp P.E.
PAVEMENT SUPERVISOR

FHWA

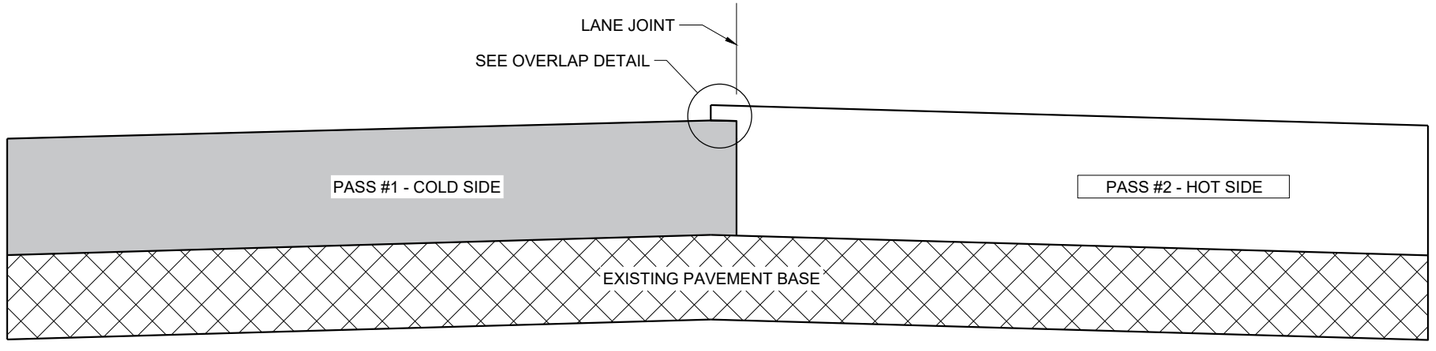
6
SDD 13B02 - 09b



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

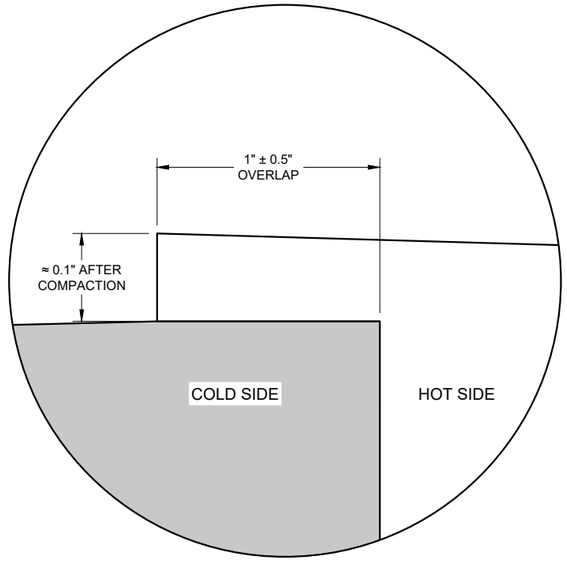
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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

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

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

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



OVERLAP DETAIL (TYPICAL)

6

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SDD 13C19 - 03

SDD 13C19 - 03

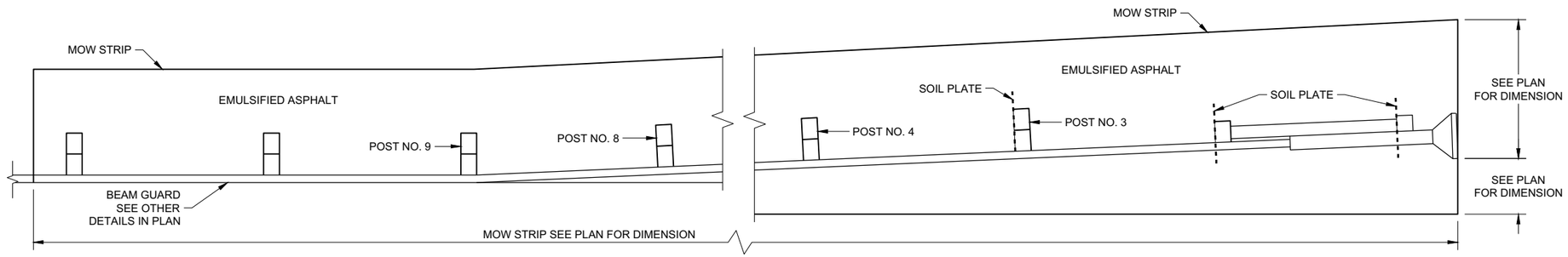
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

/S/ Steven Hefel
HMA PAVEMENT ENGINEER

FHWA



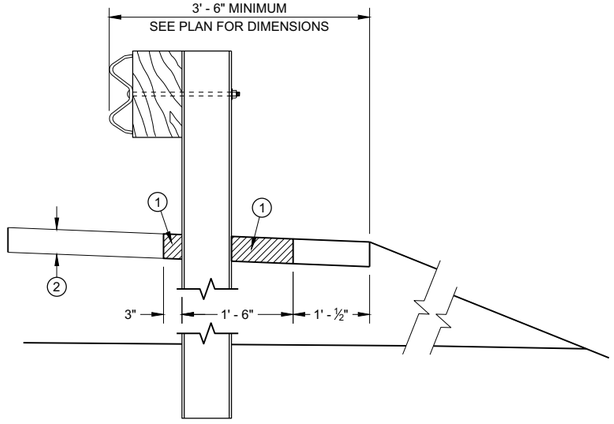
PLAN VIEW

MOW STRIP LAYOUT FOR ENERGY ABSORBING TERMINAL

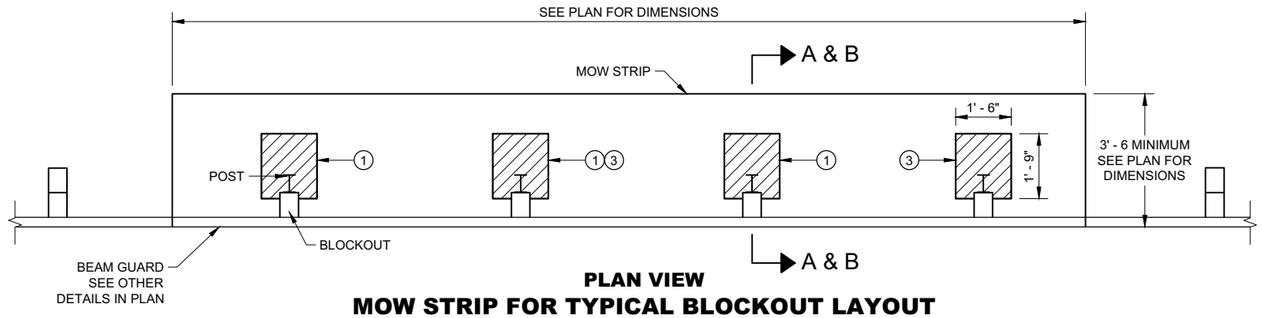
GENERAL NOTES

ONLY USE STEEL POSTS IN CONCRETE AND ASPHALT MOW STRIPS.

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

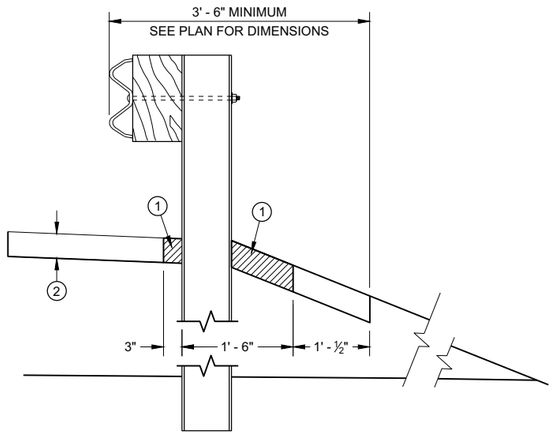


SECTION A - A

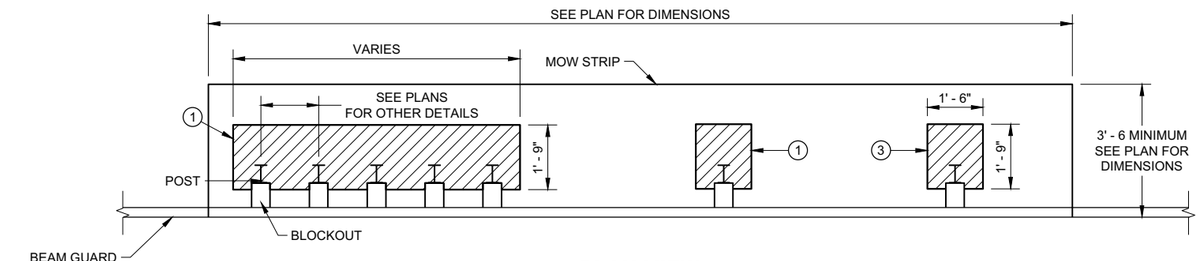


PLAN VIEW

MOW STRIP FOR TYPICAL BLOCKOUT LAYOUT

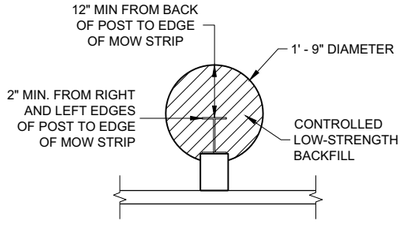


SECTION B - B

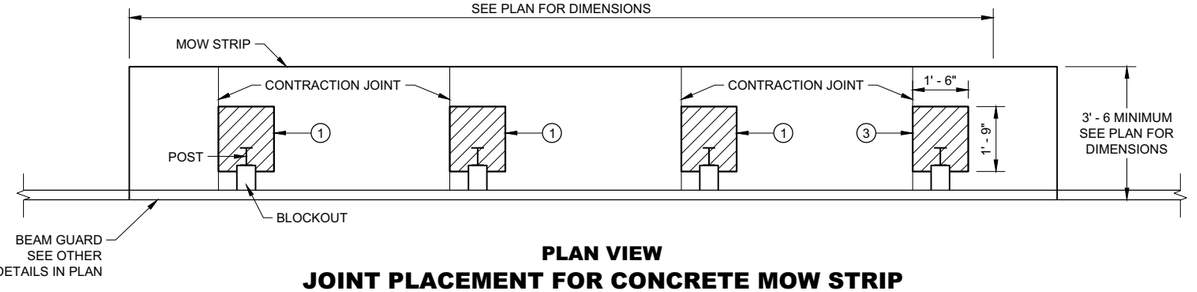


PLAN VIEW

MOW STRIP FOR TIGHT SPACING LAYOUT



ALTERNATIVE HMA MOW STRIP DESIGN



PLAN VIEW

JOINT PLACEMENT FOR CONCRETE MOW STRIP

GUARDRAIL MOW STRIP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B28 - 04a

6

SDD 14B28 - 04a

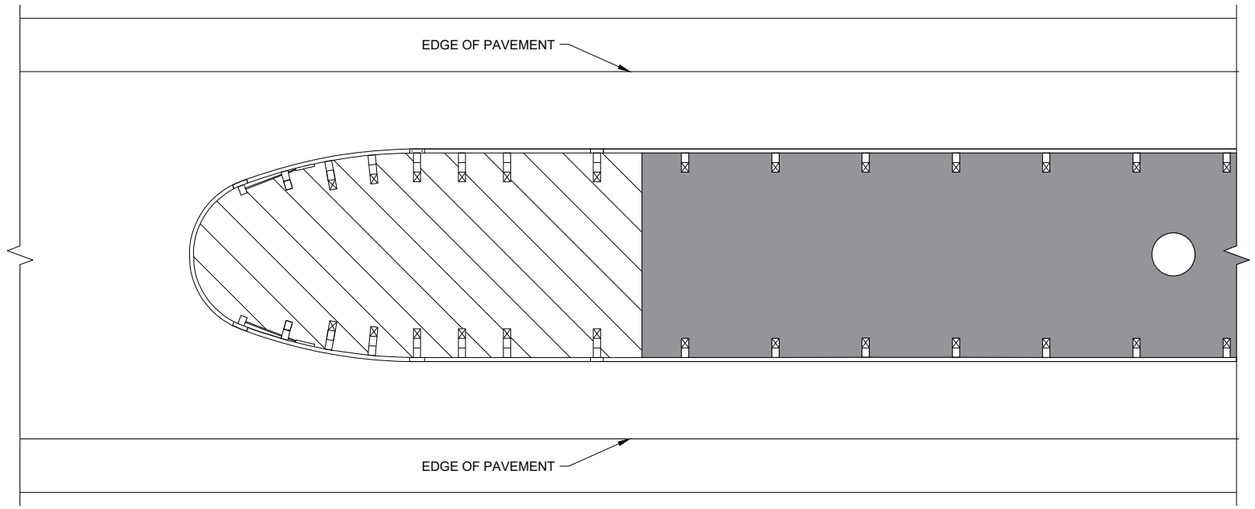
LEGEND

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

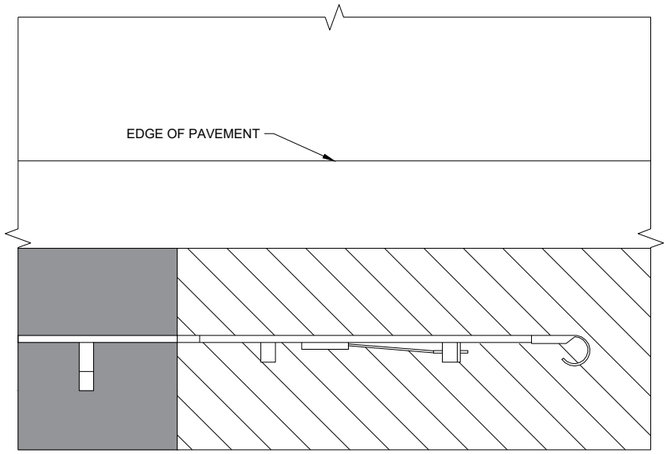
EMULSIFIED ASPHALT MOW STRIP (SEE OTHER DETAILS)

GENERAL NOTES

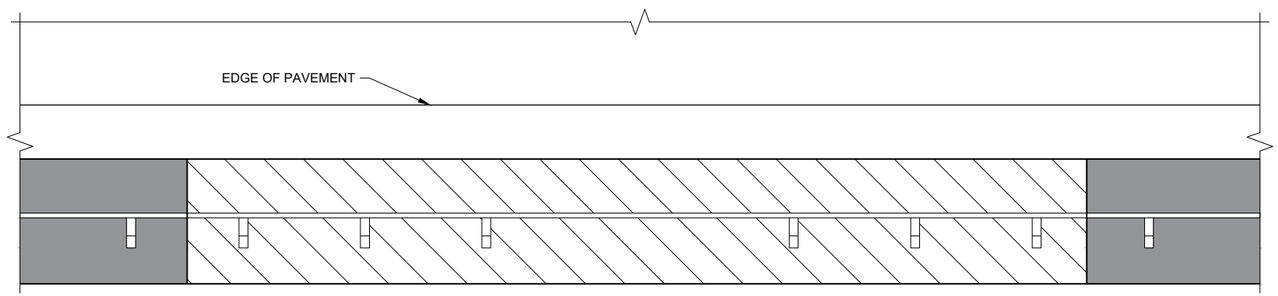
EXISTING THRIE BEAM BULLNOSES MAY HAVE WOOD POSTS. NEW THRIE BEAM BULLNOSE WILL HAVE STEEL POSTS.



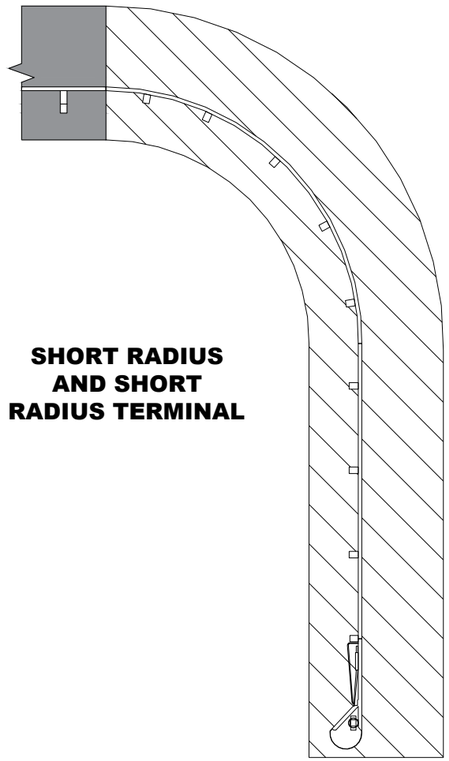
THRIE BEAM BULLNOSE



TYPE 2 TERMINAL



LONG - SPAN



SHORT RADIUS AND SHORT RADIUS TERMINAL

GUARDRAIL MOW STRIP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

6

SDD 14B28 - 04b

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SDD 14B28 - 04b

(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.

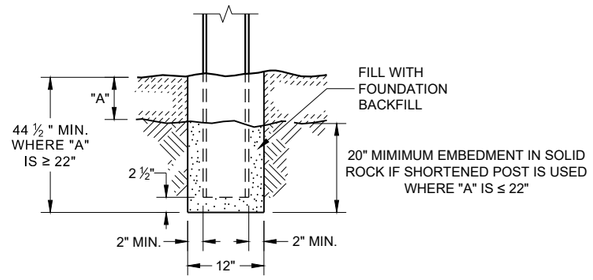
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL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

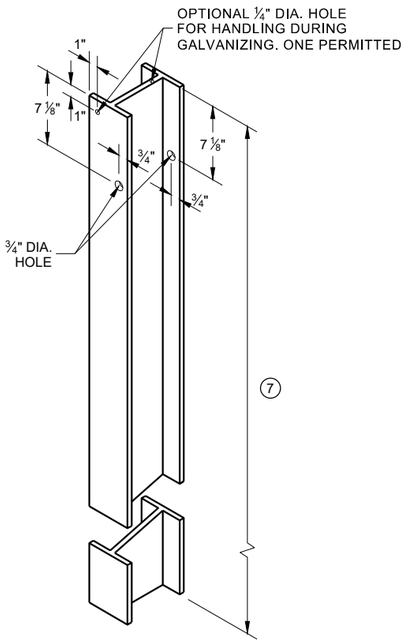
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(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.

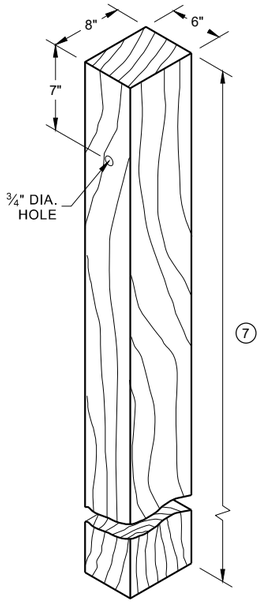
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



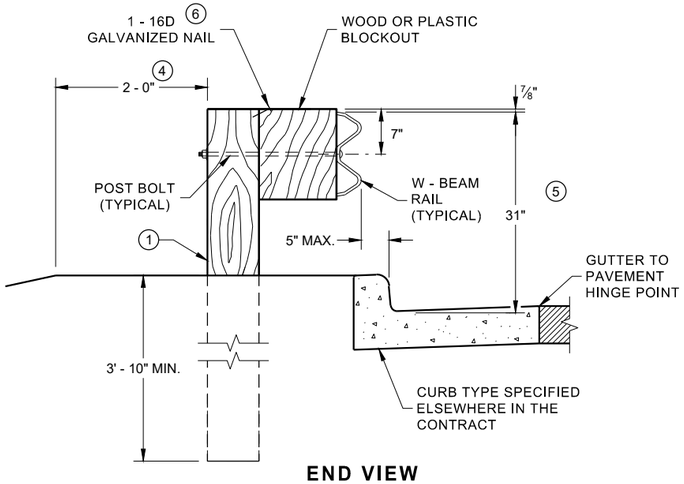
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



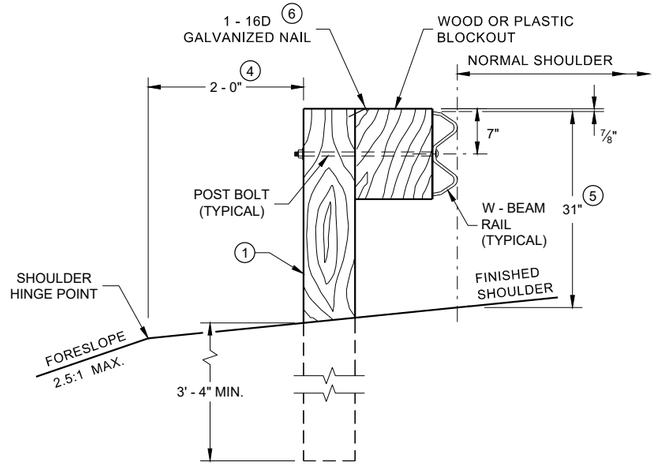
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



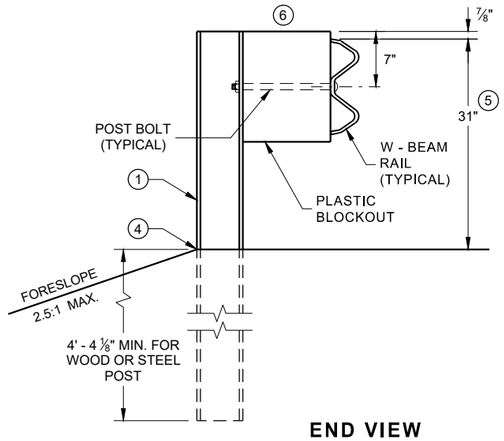
WOOD POST (6" X 8") NOMINAL (1)



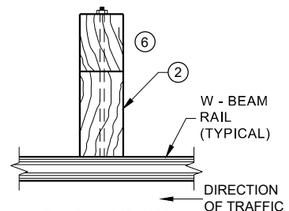
END VIEW
LOCATED ALONG A CURBED ROADWAY



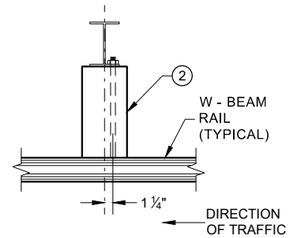
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



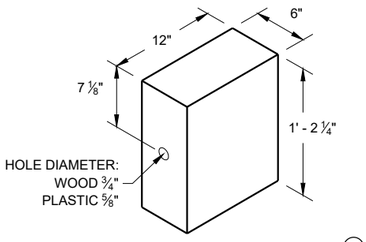
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



WOOD OR PLASTIC BLOCKOUT (2)

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

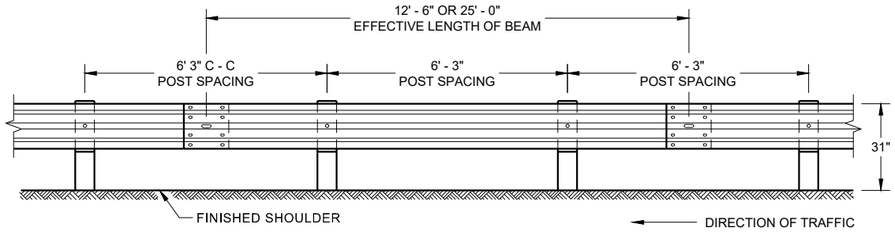
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

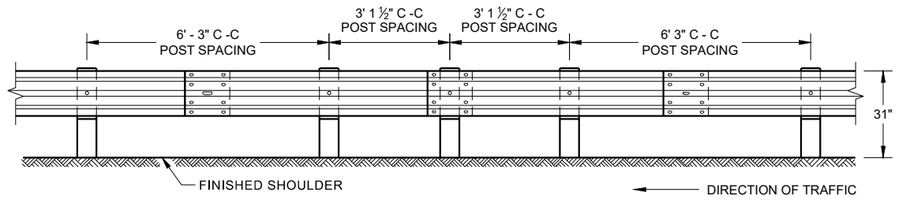
SDD 14B42 - 07a

6

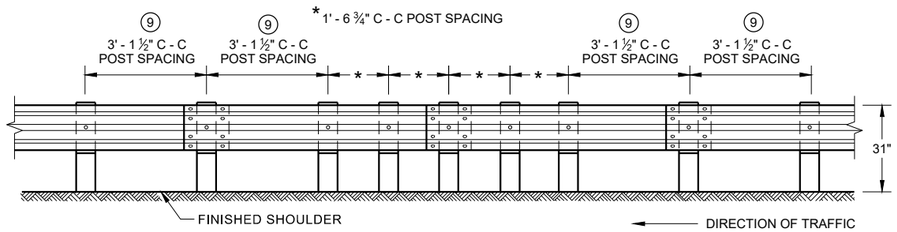
SDD 14B42 - 07a



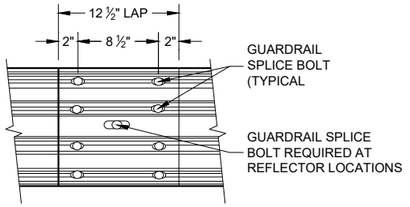
FRONT VIEW
POST SPACING STANDARD INSTALLATION



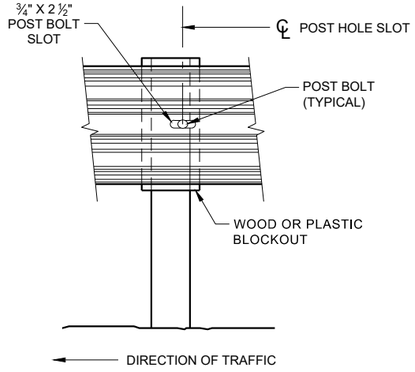
FRONT VIEW
HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)



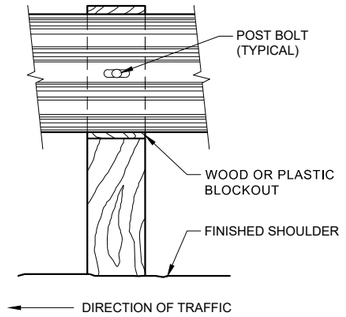
FRONT VIEW
QUARTER POST SPACING (QS)



FRONT VIEW
MID-SPAN BEAM SPLICE



FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST

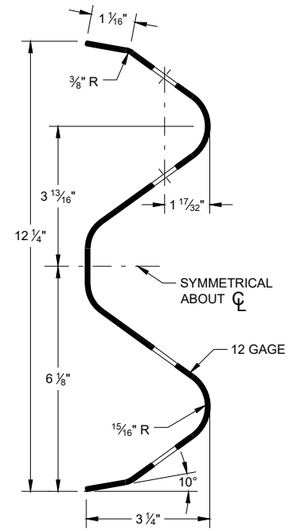
GENERAL NOTES

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

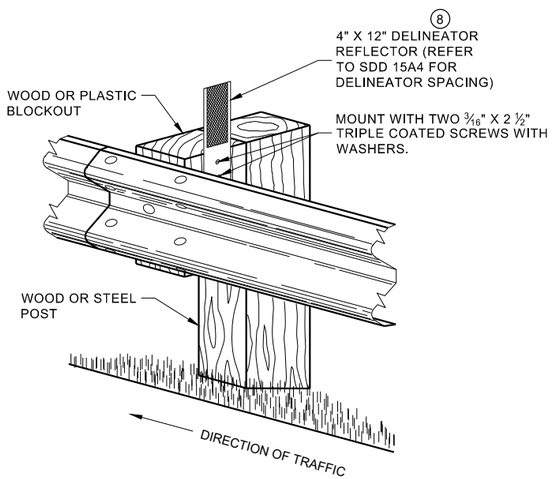
⑨ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

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.



SECTION THRU W-BEAM RAIL



ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

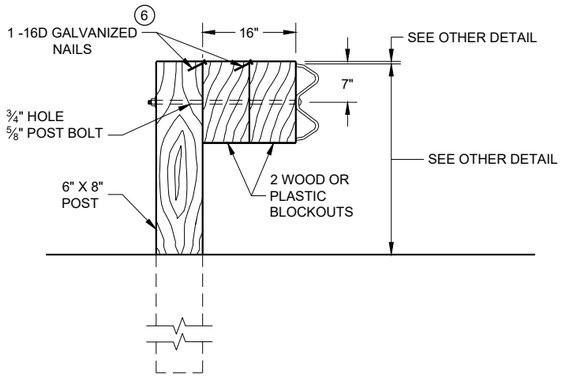
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B42 - 07b

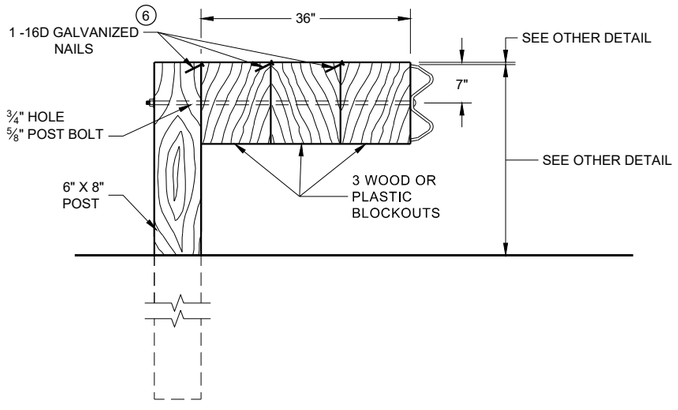
6

SDD 14B42 - 07b



DETAIL FOR 16" BLOCKOUT DEPTH

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



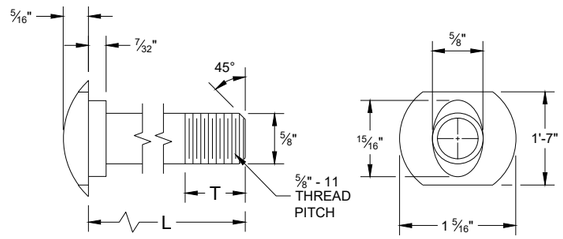
DETAIL FOR 36" BLOCKOUT DEPTH

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.

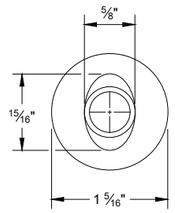
NOTE:

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.

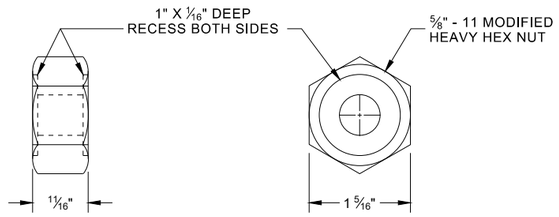


POST BOLT TABLE

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

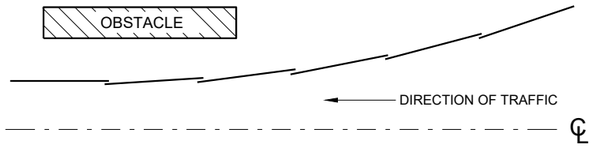


ALTERNATE BOLT HEAD

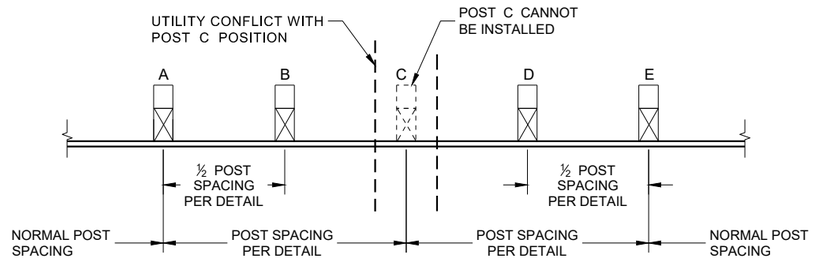


POST BOLT, SPLICE BOLT AND RECESS NUT

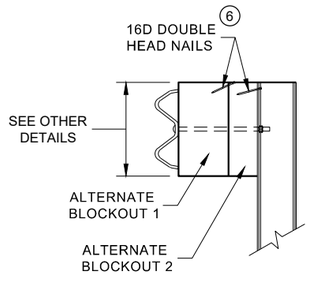
6 WHEN USING STEEL POST AD WOOD BLOCKOUTS, INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.



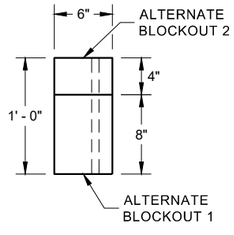
PLAN VIEW
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



SIDE VIEW



PLAN VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

6

SDD 14B42 - 07c

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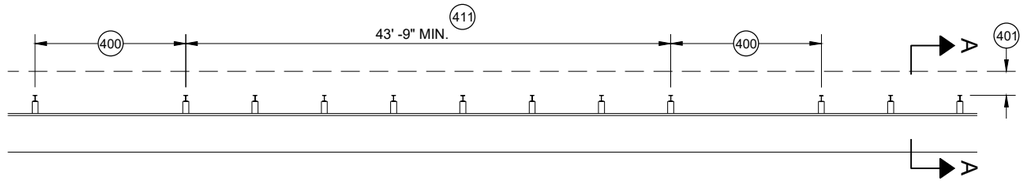
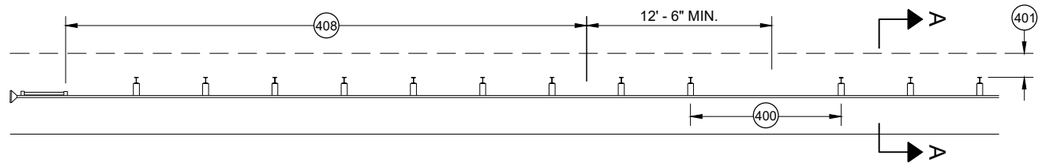
SDD 14B42 - 07c

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

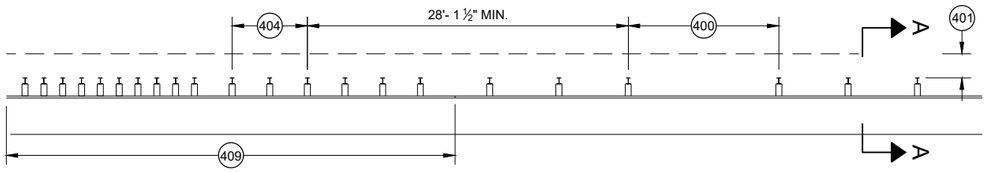
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



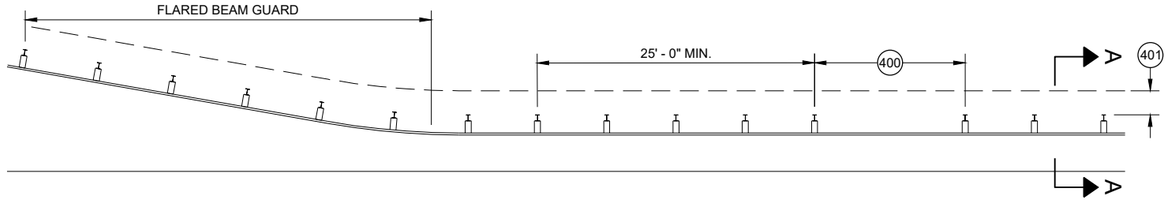
MISSING POST IN MGS GUARDRAIL



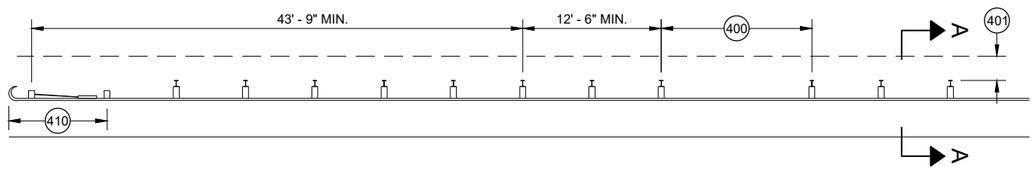
MISSING POST IN MGS GUARDRAIL NEAR EAT



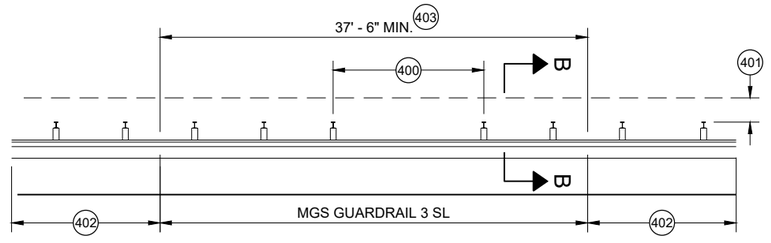
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

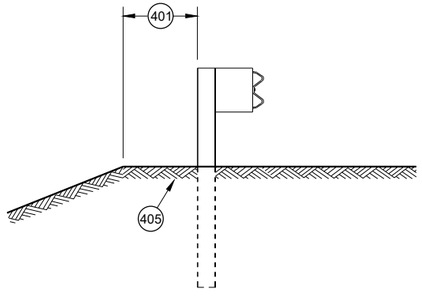


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

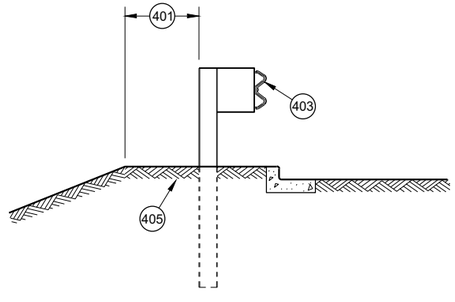


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

(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 DEVELOPMENT UNIT SUPERVISOR

FHWA

6
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.

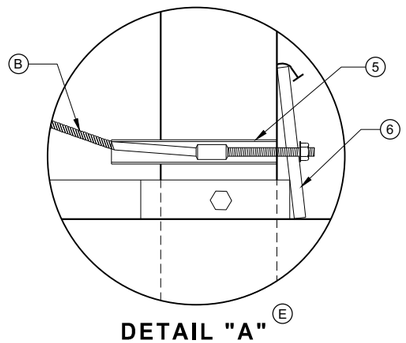
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

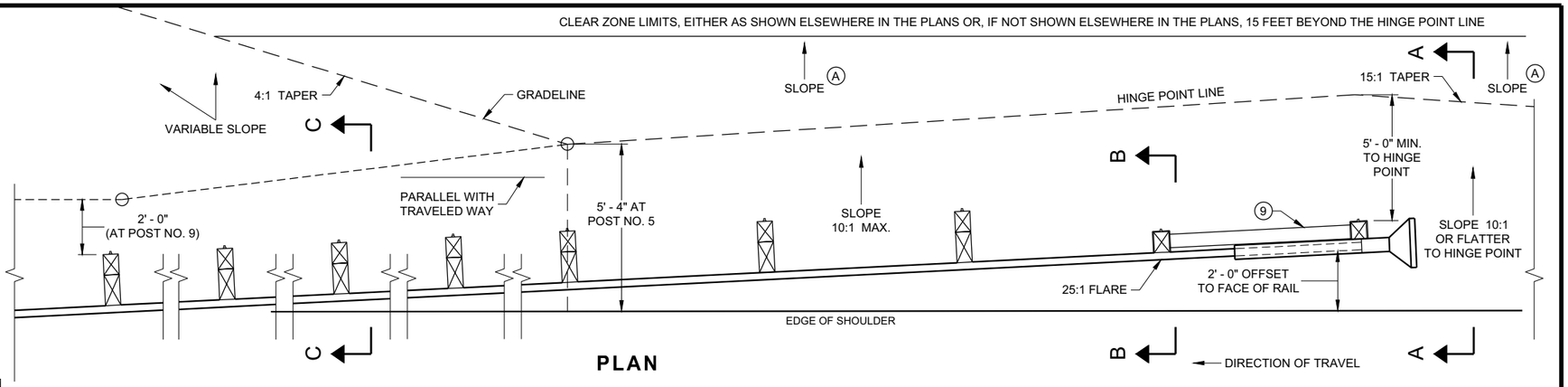
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

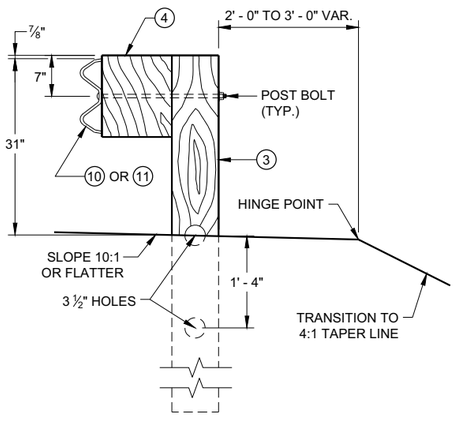
SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

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.

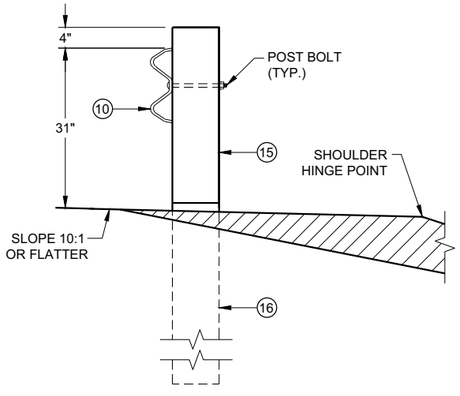


DETAIL "A" (E)

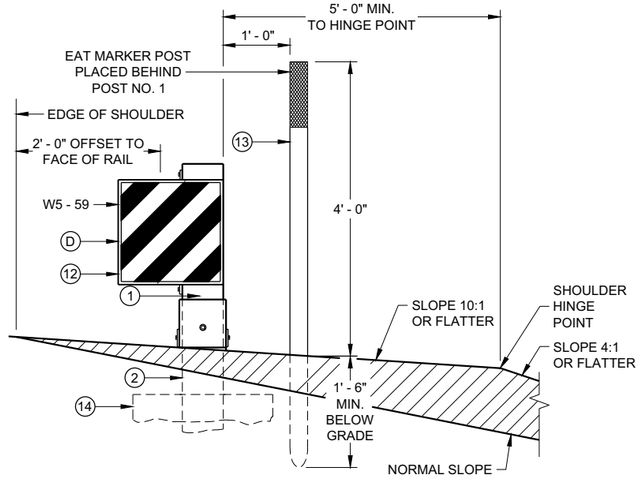




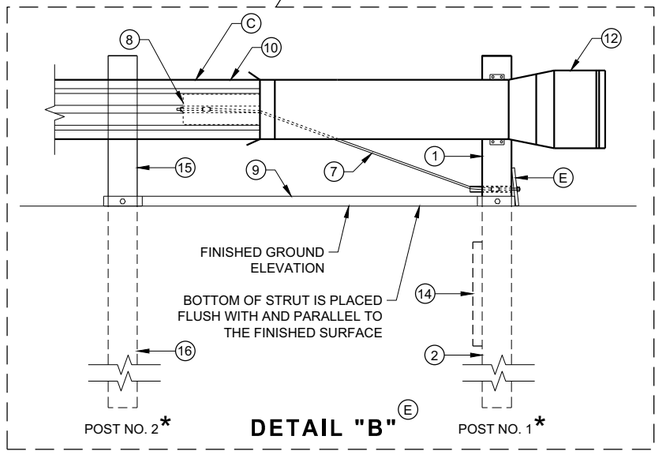
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

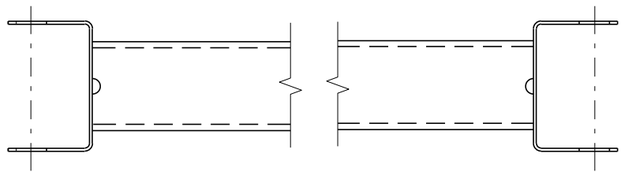
SDD 14B44 - 04a

SDD 14B44 - 04a

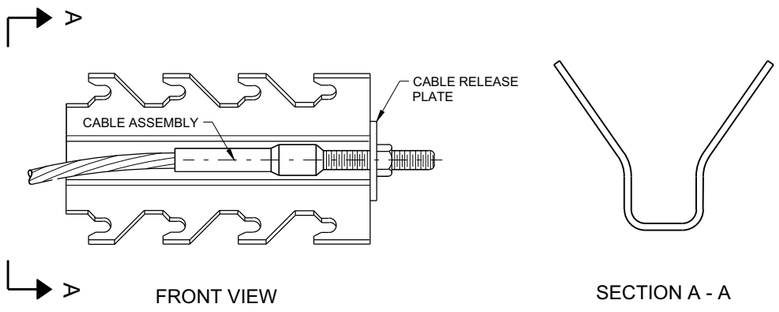
6

BILL OF MATERIALS

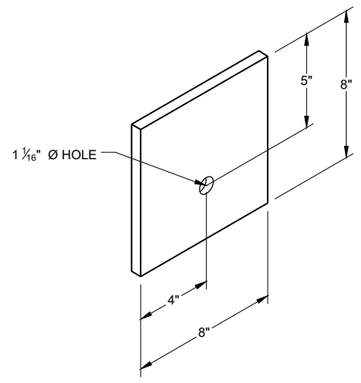
PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUGACTURER'S DETAILS FOR MORE INFORMATION.
1	UPPER POST NO. 1 6" X 6" TUBE
2	LOWER POST NO. 1
3	WOOD CRT
4	WOOD BLOCKOUT
5	PIPE SLEEVE
6	BEARING PLATE
7	BCT CABLE ASSEMBLY
8	ANCHOR CABLE BOX
9	GROUND STRUT
10	PERFORATED W-BEAM RAIL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



GENERIC GROUND STRUT (9) (E)



GENERIC ANCHOR CABLE BOX (9) (E)



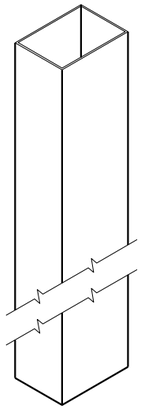
BEARING PLATE (6) (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

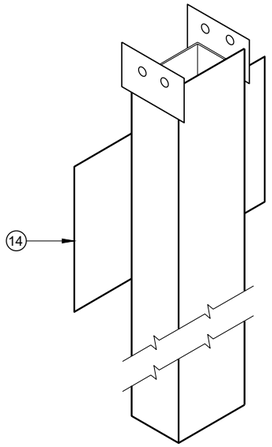
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

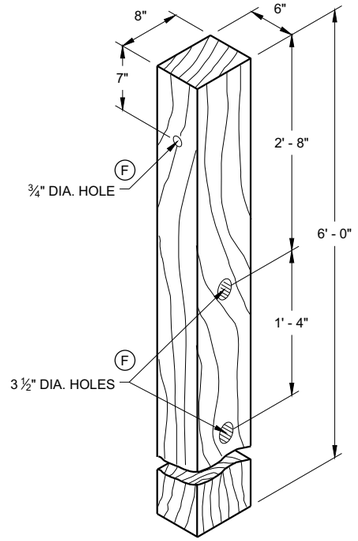
SDD 14B44 - 04b



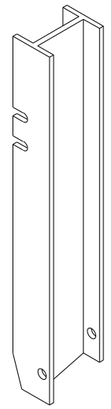
UPPER POST NO. 1 (1) (E)



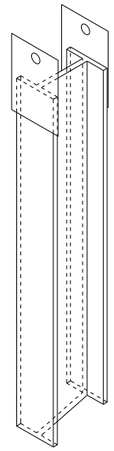
LOWER POST NO. 1 (2) (E)



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



UPPER POST NO. 2 (15) (E)



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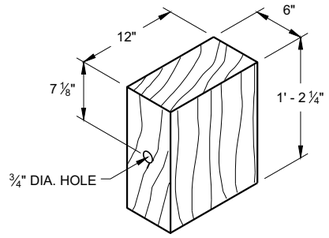
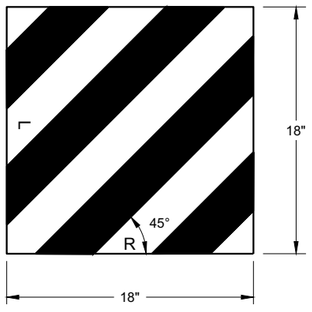
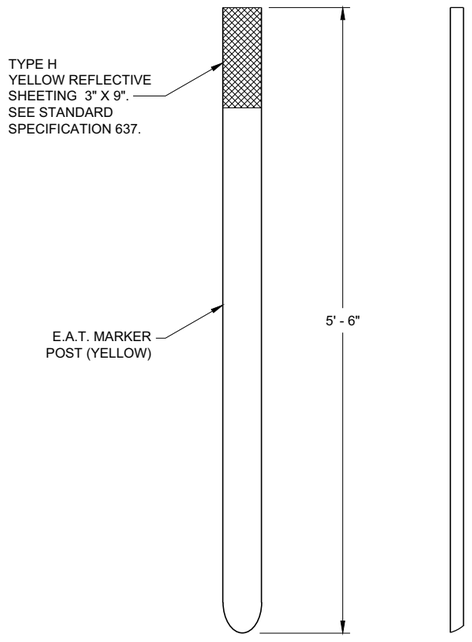


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



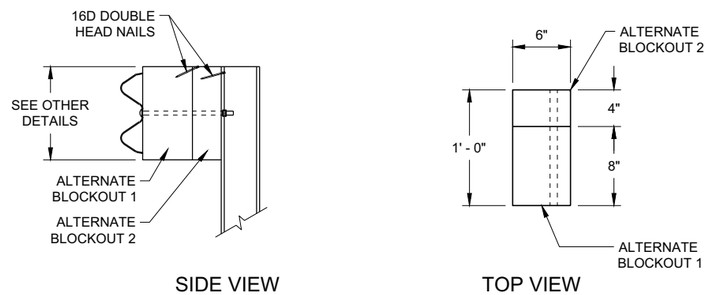
W5 - 59

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

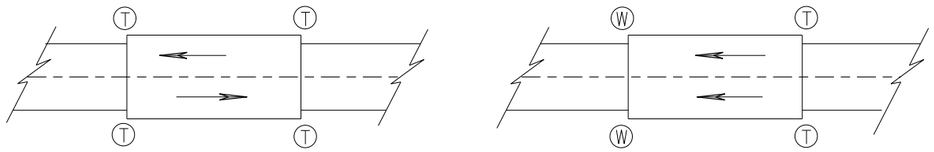
APPROVED
7/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA

6

SDD 14B44 - 04c

6

SDD 14B44 - 04c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

(T) THRIE BEAM CONNECTION

(W) W-BEAM CONNECTION WHEN REQUIRED

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

GENERAL NOTES

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

TRANSITION USES STEEL POSTS ONLY.

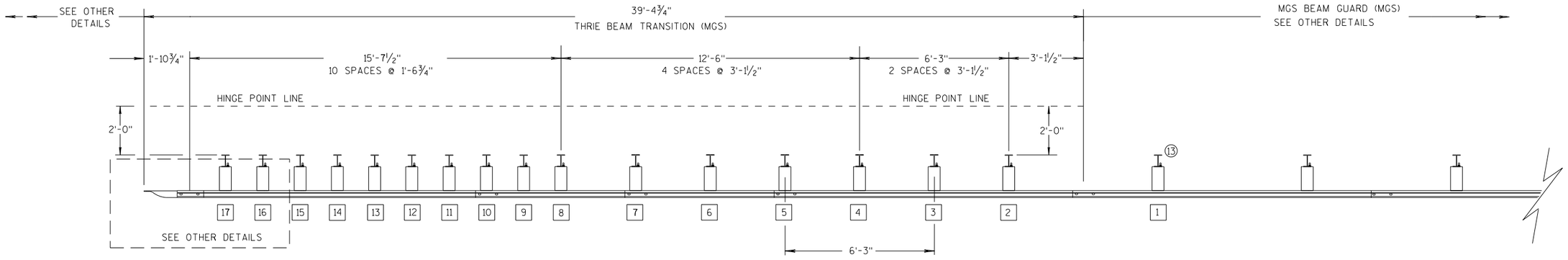
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

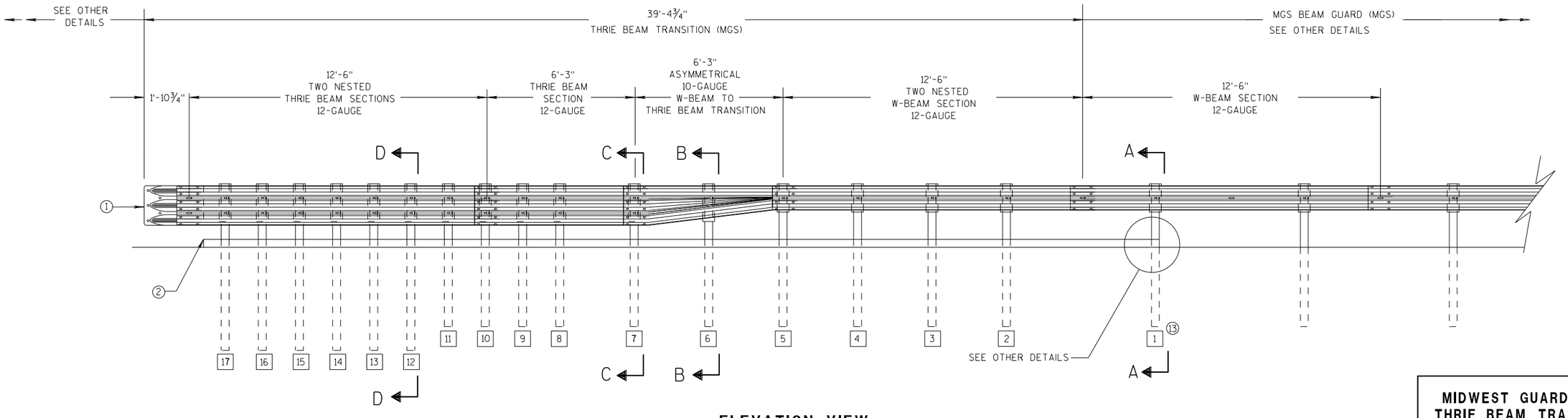
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

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

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



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

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

6

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

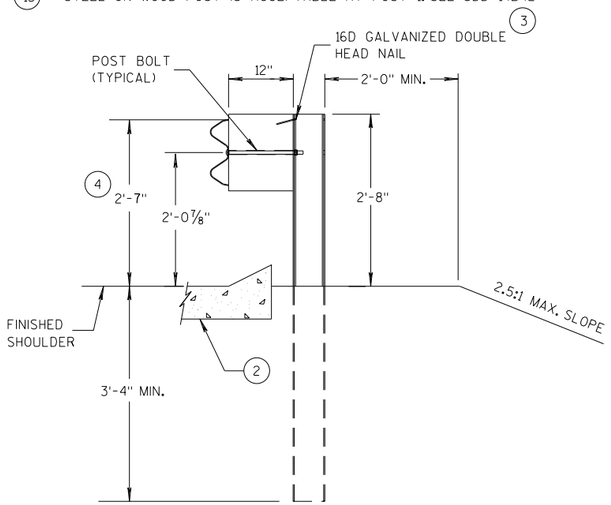
GENERAL NOTES

(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.

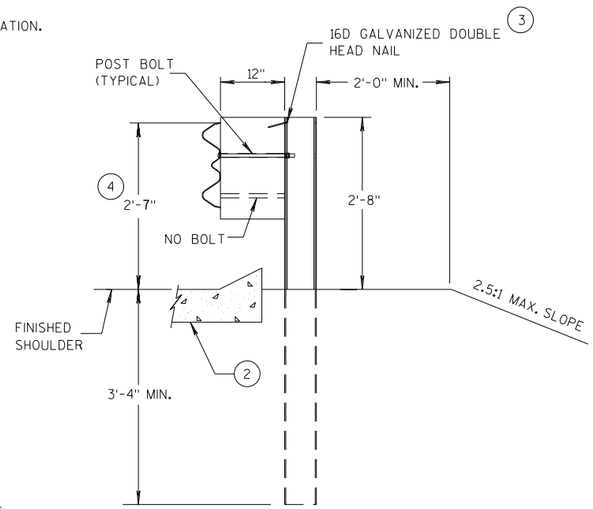
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

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



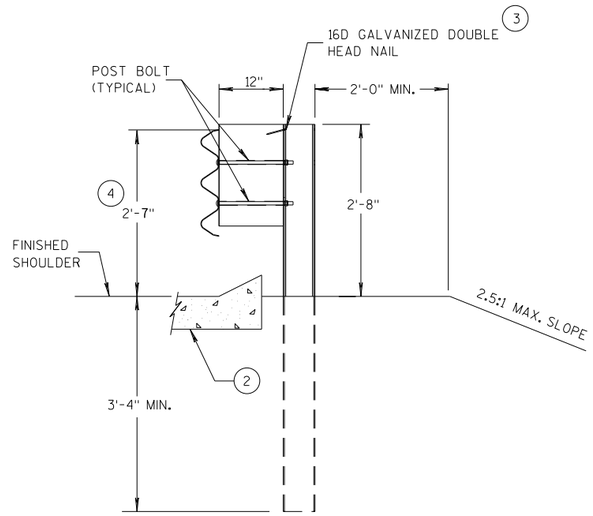
SECTION A-A (13)

POSTS 1-5



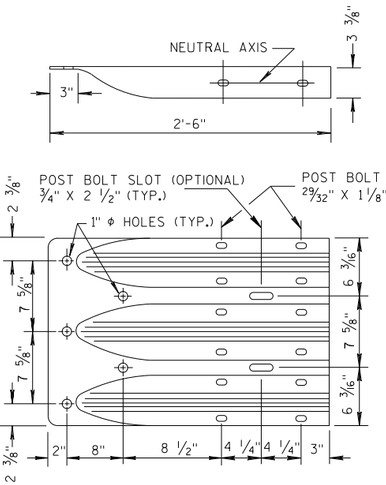
SECTION B-B

POST 6

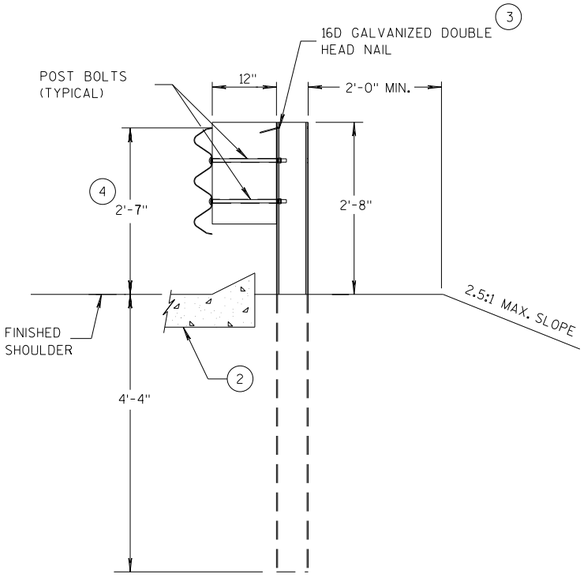


SECTION C-C

POSTS 7-11

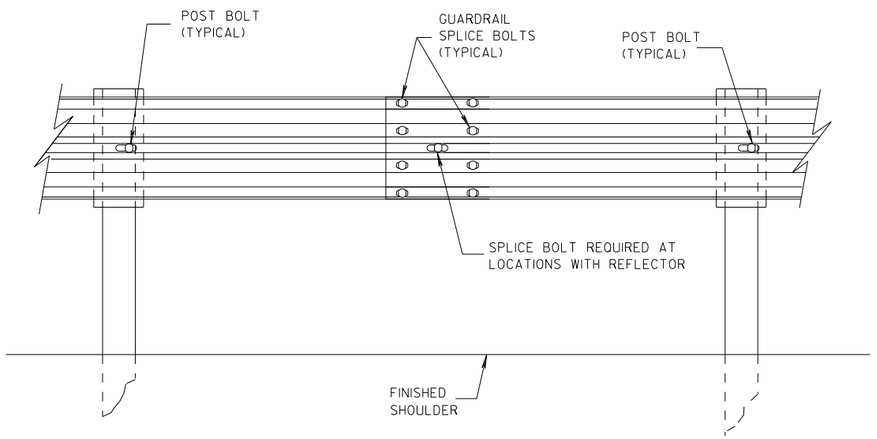


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-17



SPLICE DETAIL

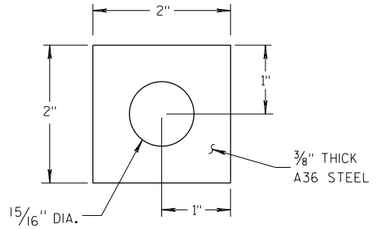
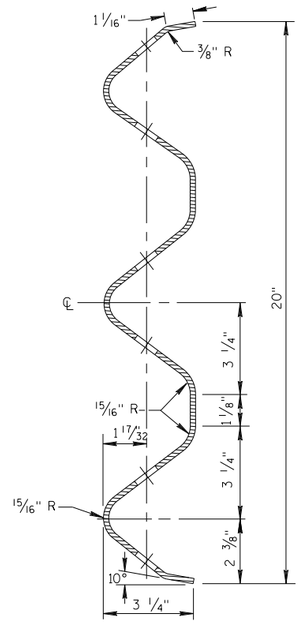


PLATE WASHER DETAIL



SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

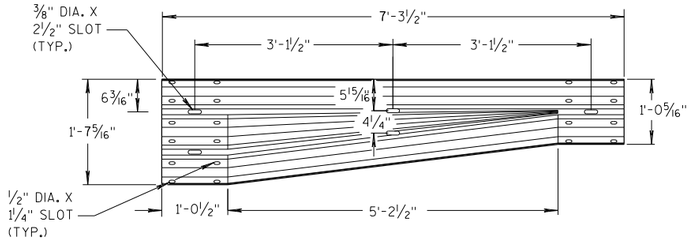
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

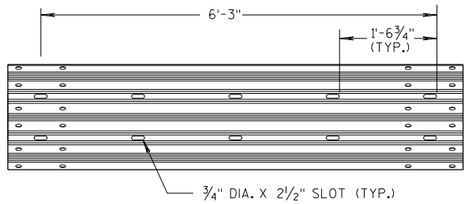
S.D.D. 14 B 45-5b

6

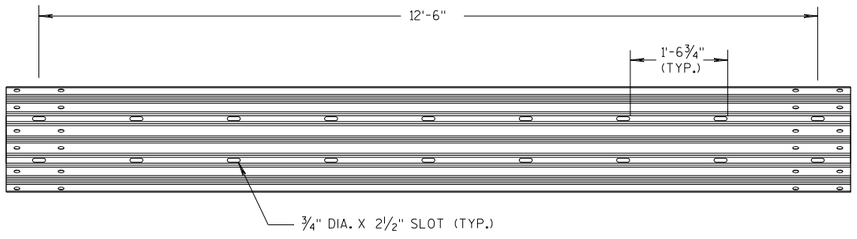
S.D.D. 14 B 45-5b



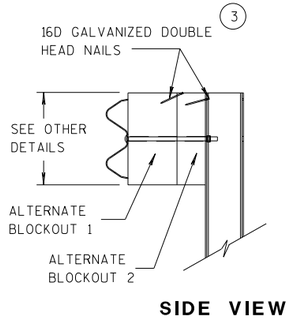
W-BEAM TO THRIE BEAM TRANSITION SECTION



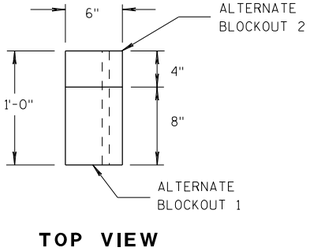
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

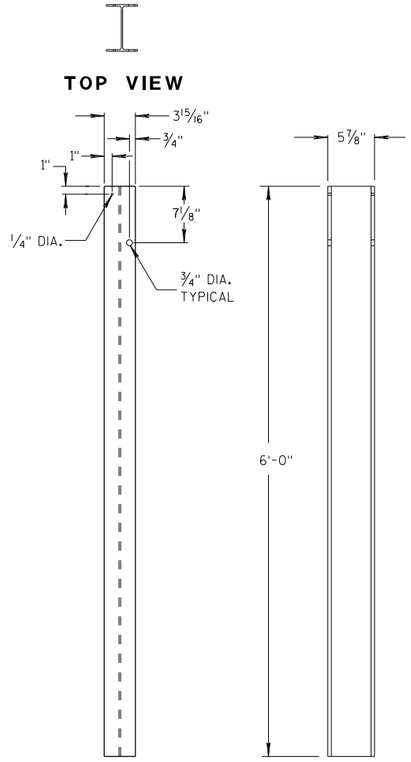


SIDE VIEW



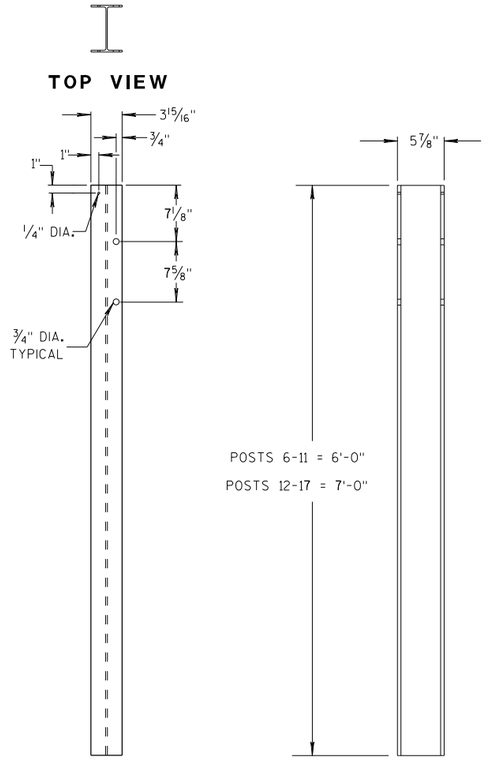
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



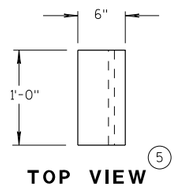
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

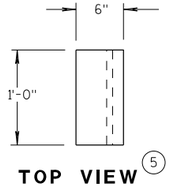


FRONT VIEW SIDE VIEW

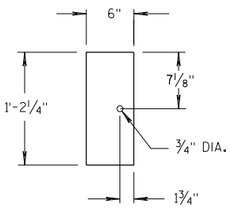
STEEL POSTS 6-17



TOP VIEW (5)

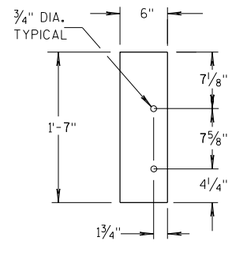


TOP VIEW (5)



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)

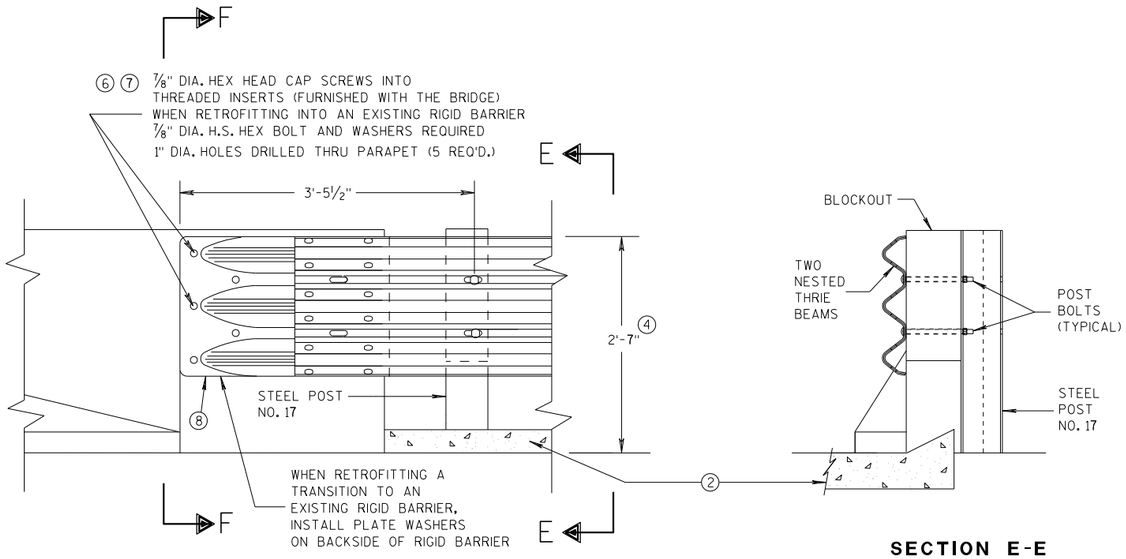
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

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

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.

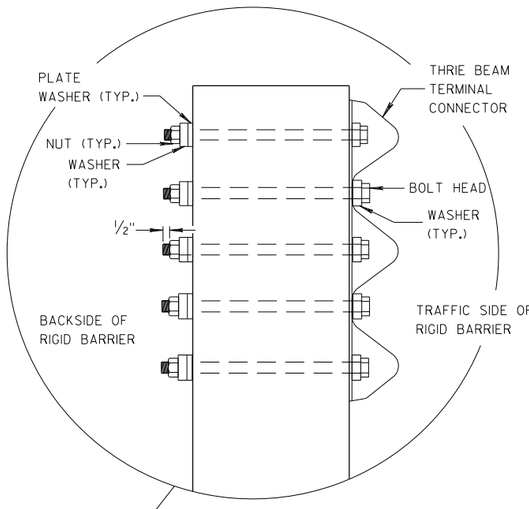
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

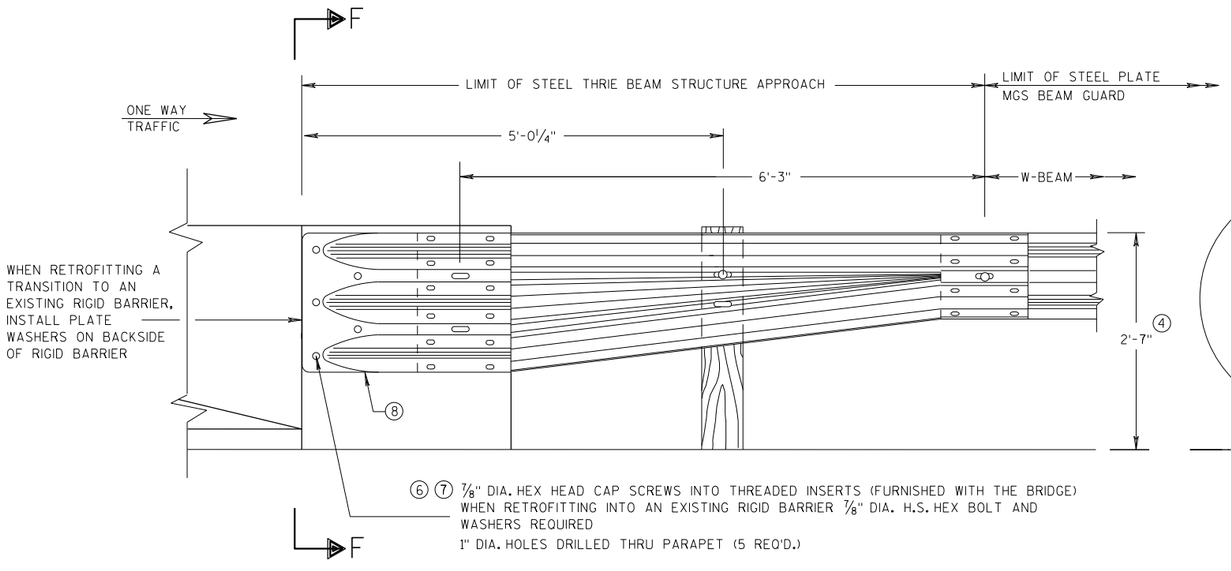
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

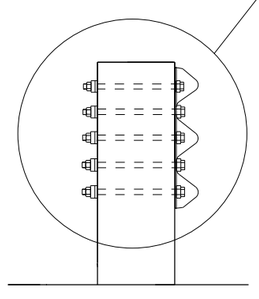
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. 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".

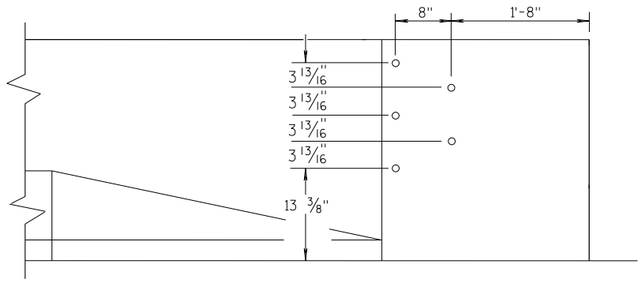




FRONT VIEW



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 DEVELOPMENT UNIT SUPERVISOR
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.

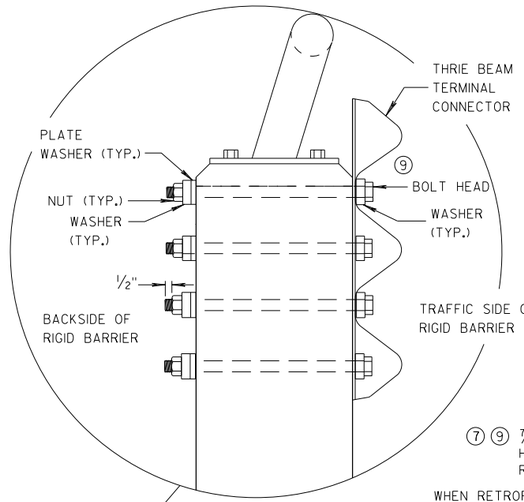
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

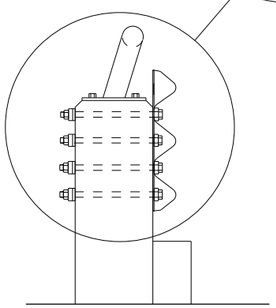
(6) DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(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.

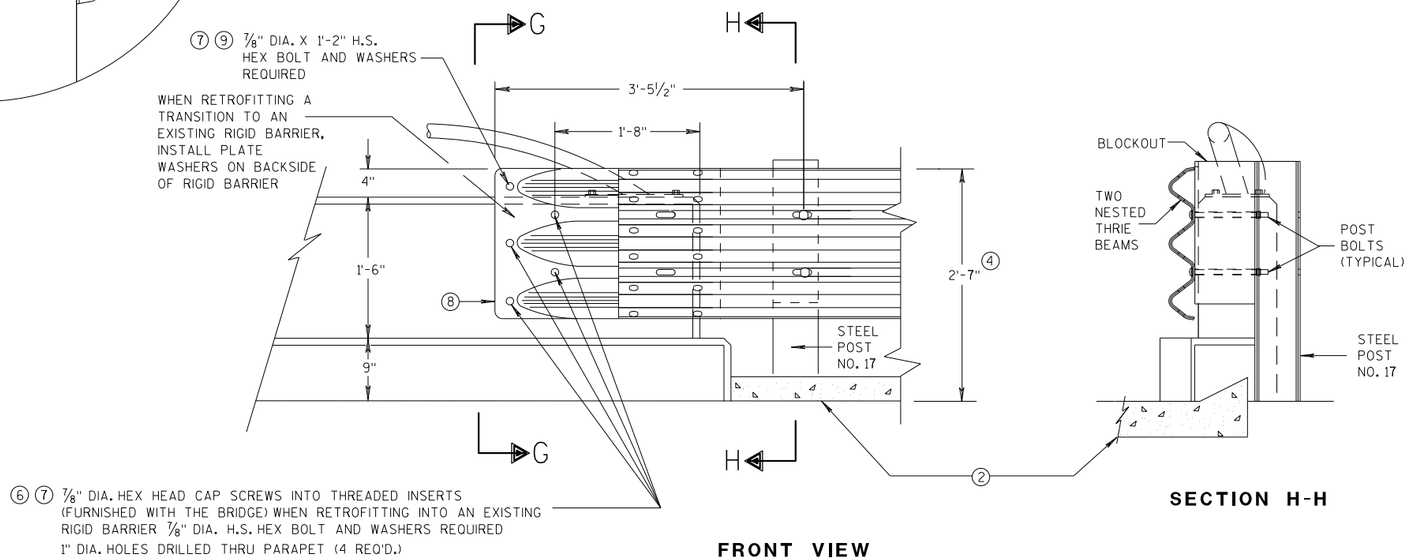
(8) THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 ½".

(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.





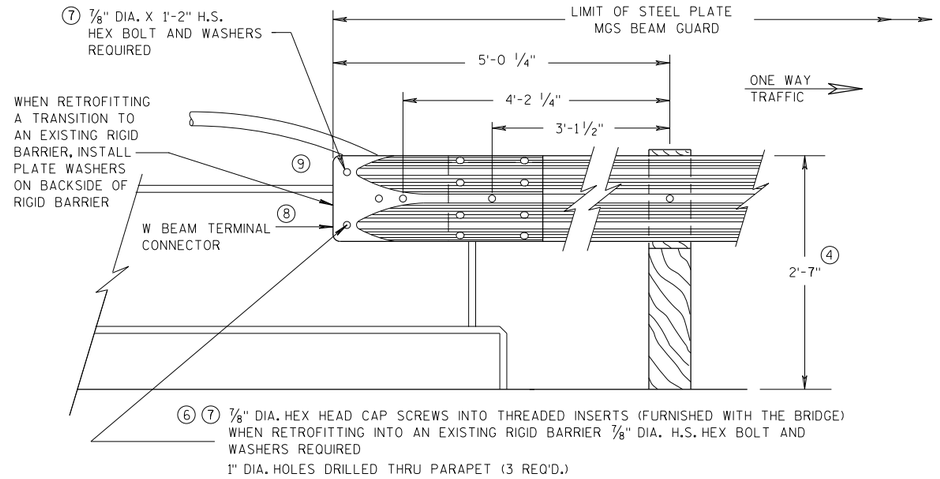
SECTION G-G



FRONT VIEW

SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

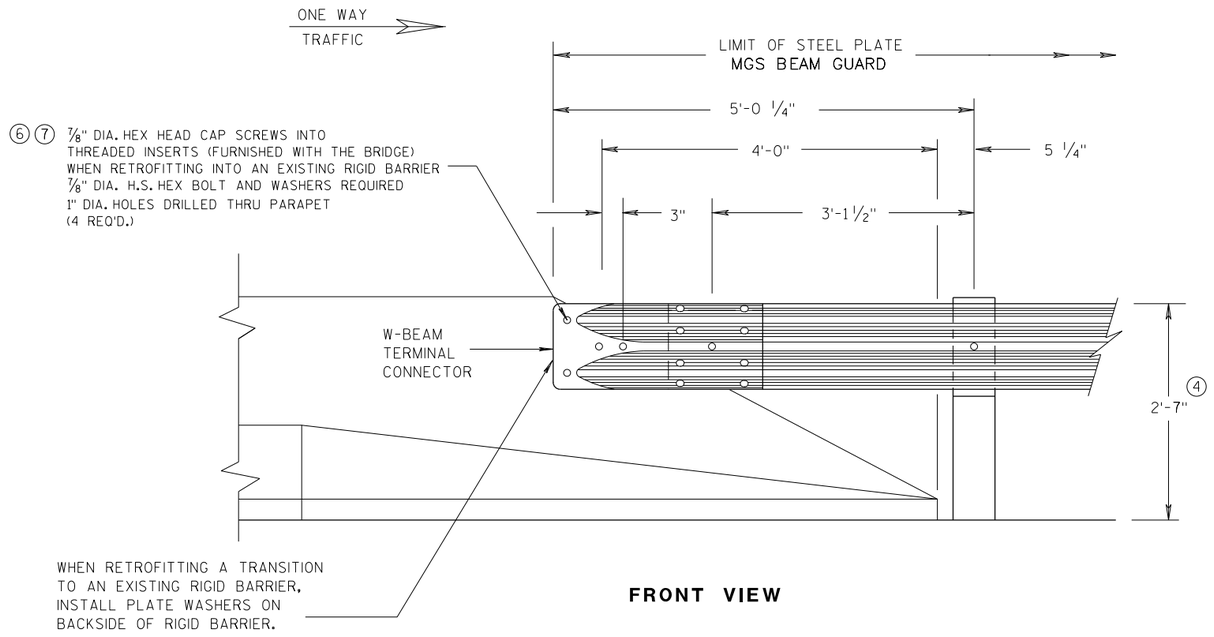
(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018 — DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR



FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

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

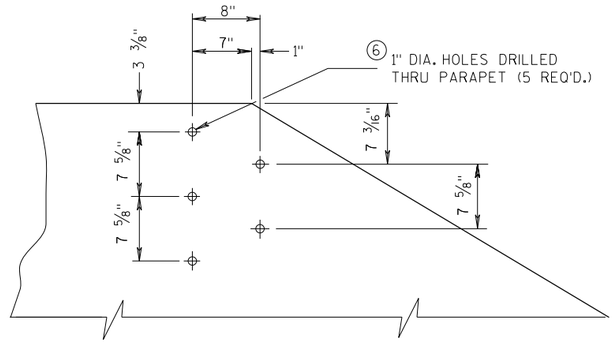
GENERAL NOTES

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

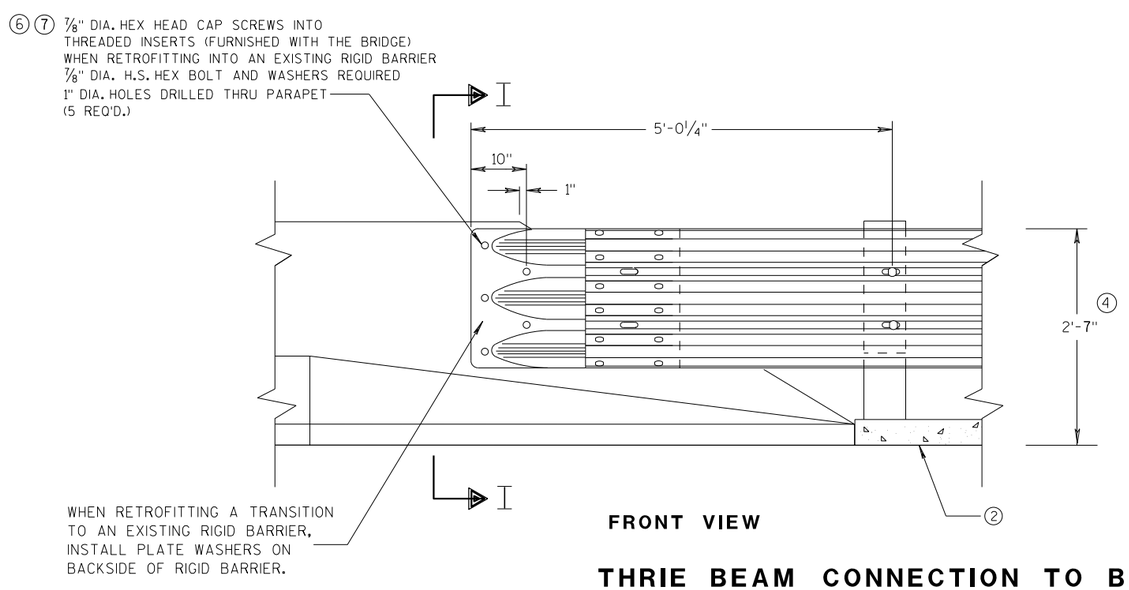
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

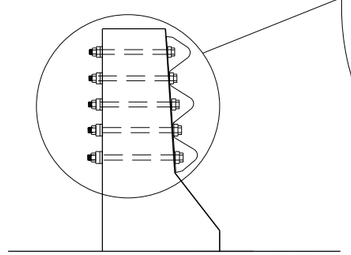
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE.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



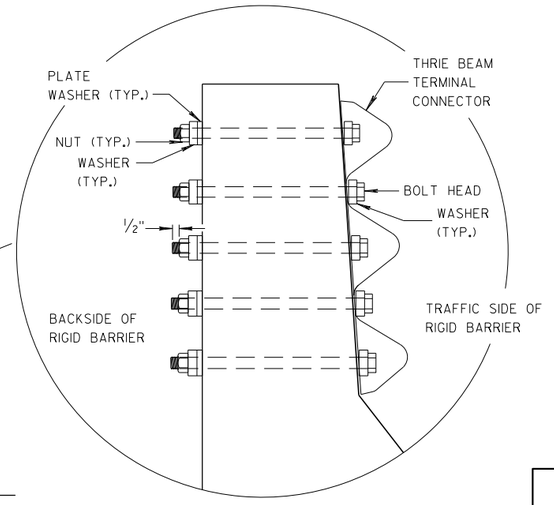
DRILL HOLE LOCATION AND PATTERN FOR THRIE BEAM CONNECTION



FRONT VIEW



SECTION I-I



THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

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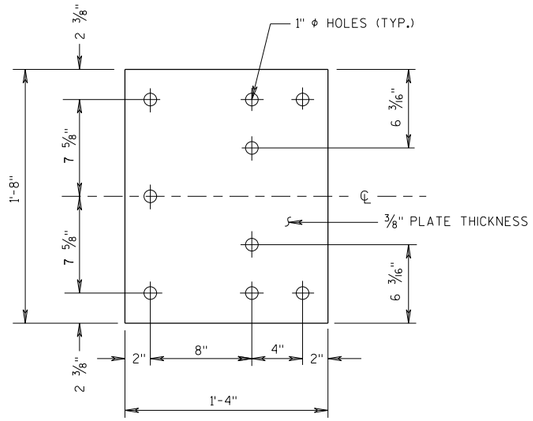
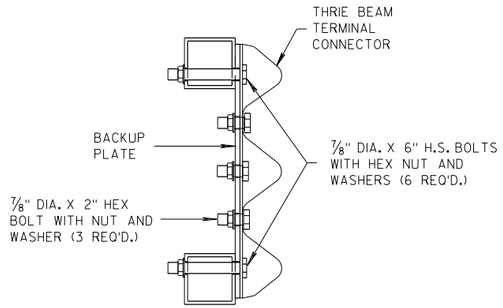
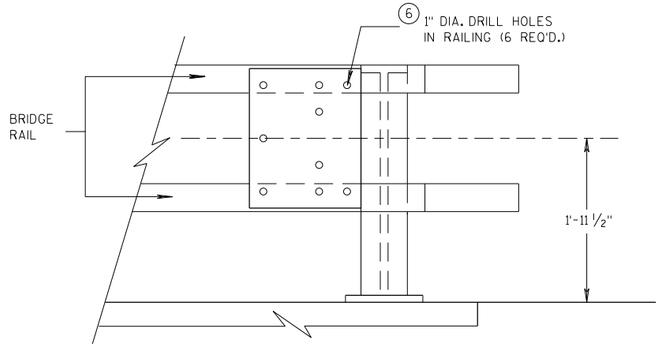


BACK-UP PLATE DETAIL



SECTION J-J

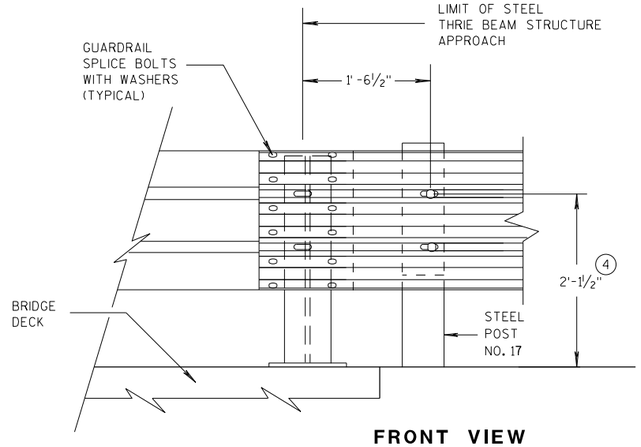


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

GENERAL NOTES

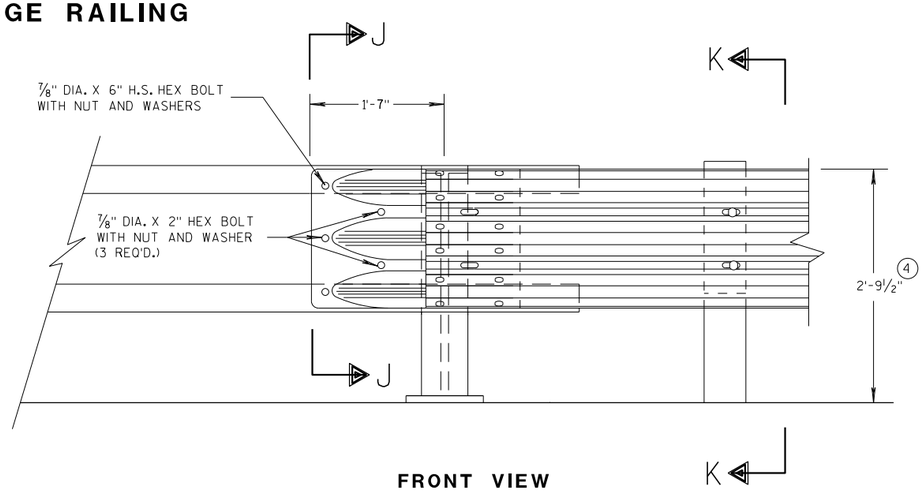
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

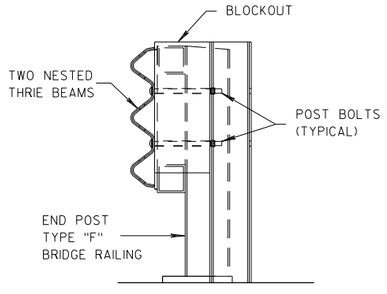


FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



FRONT VIEW



SECTION K-K

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 07/2018 — DATE
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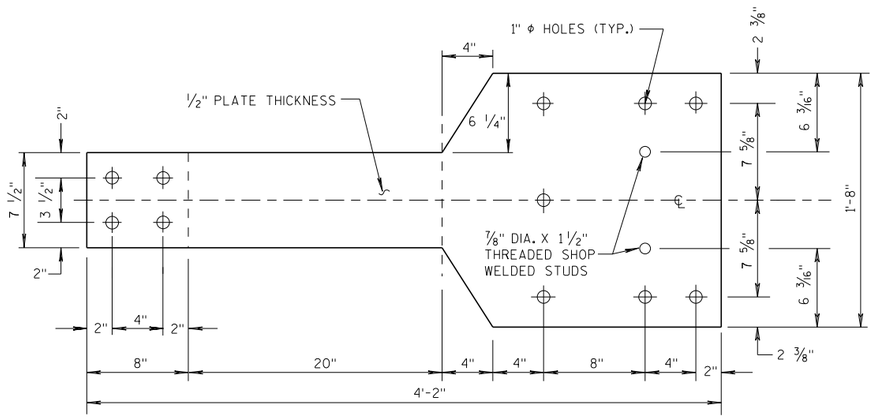
S.D.D. 14 B 45-5g

6

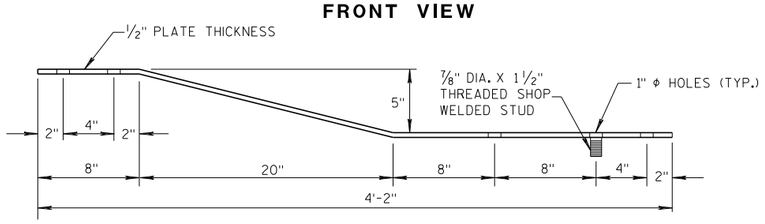
S.D.D. 14 B 45-5g

GENERAL NOTES

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

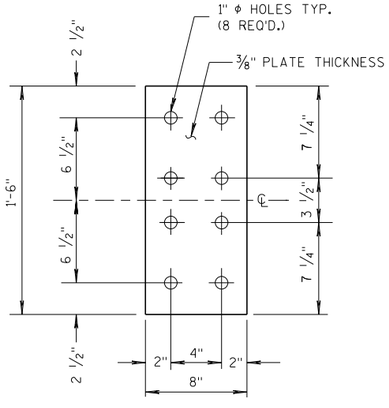


FRONT VIEW



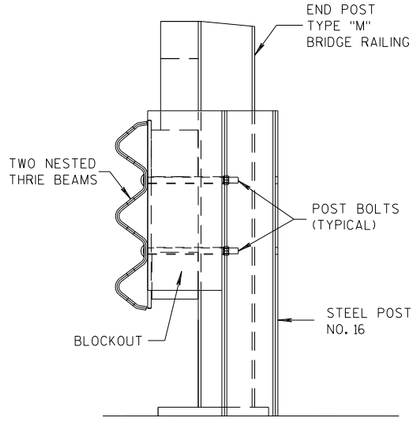
PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

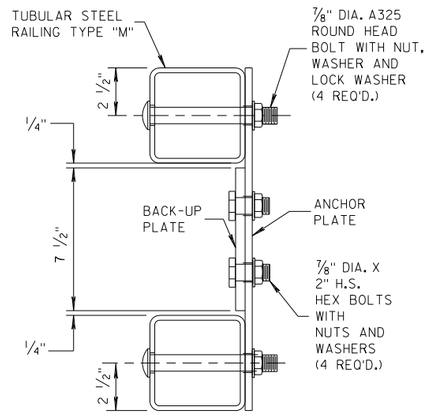


FRONT VIEW

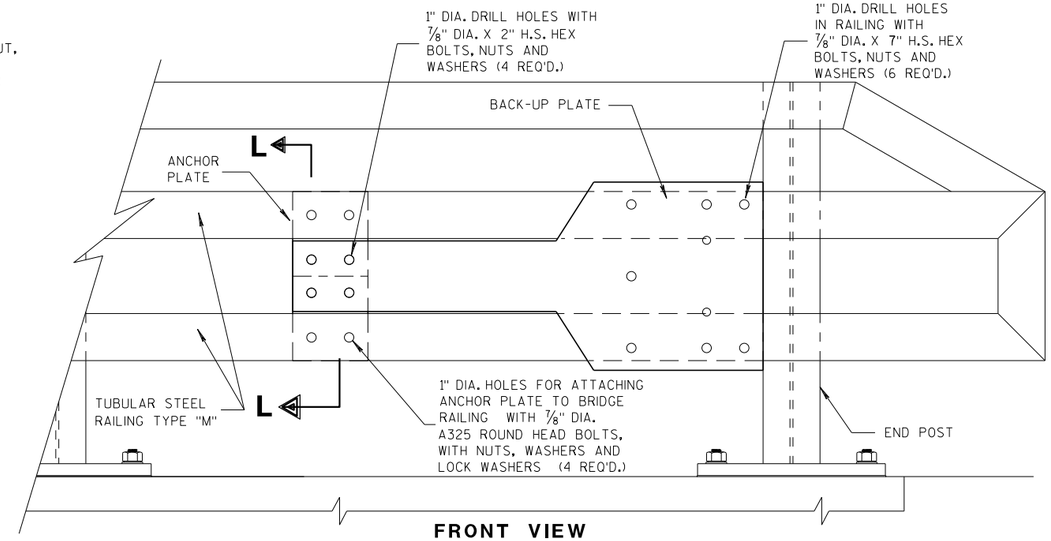
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M

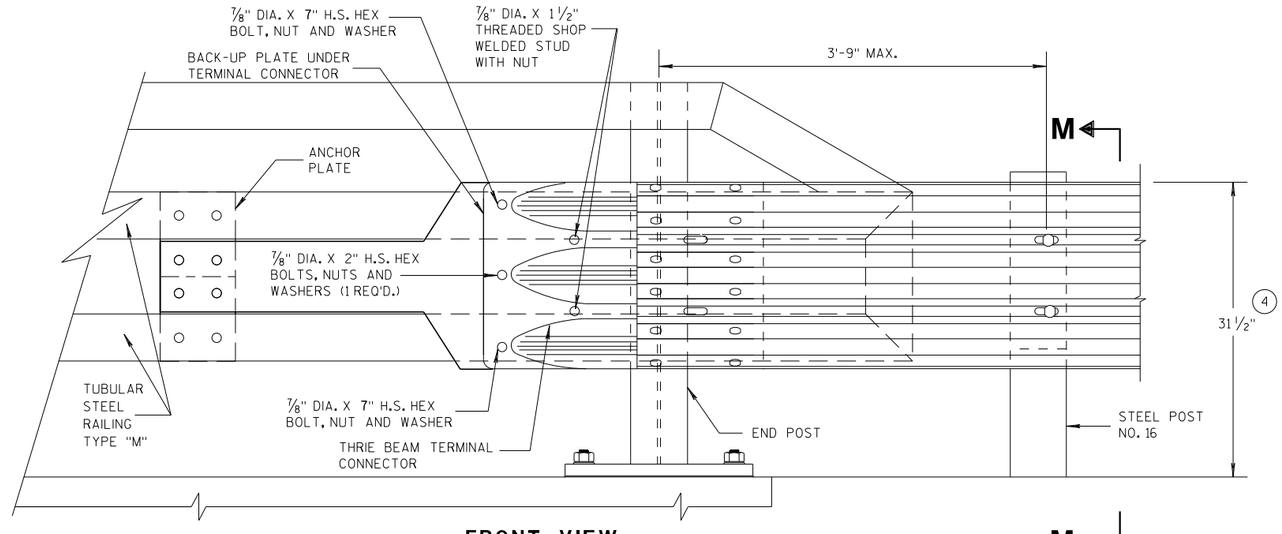


SECTION L-L

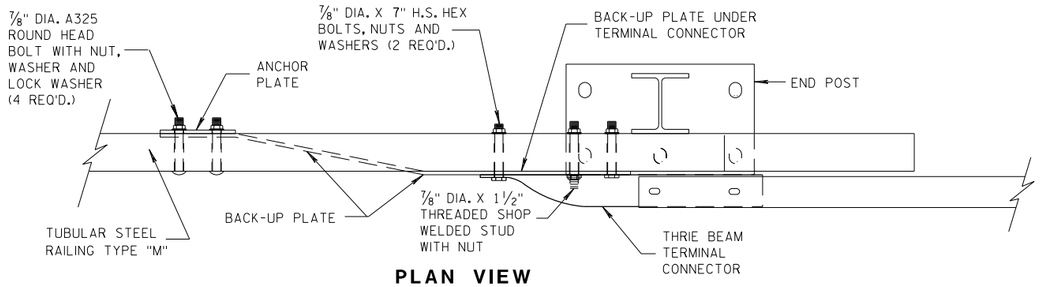


FRONT VIEW

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



FRONT VIEW



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA

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

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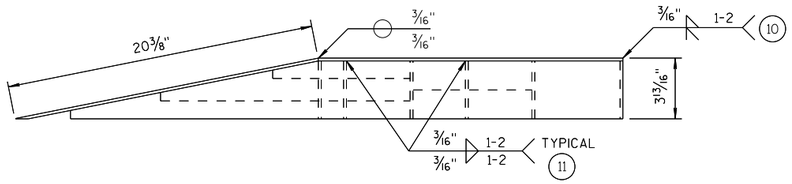
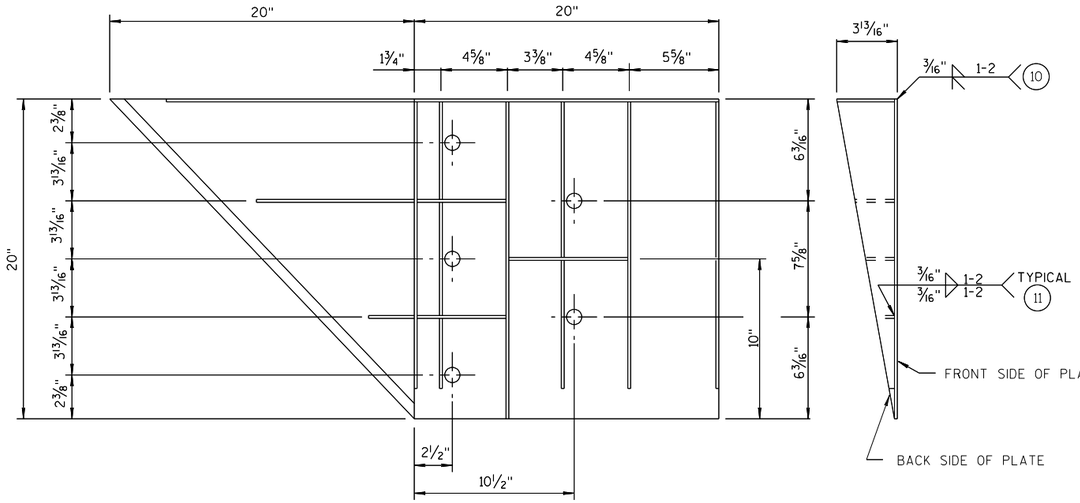
S.D.D. 14 B 45-5h





WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

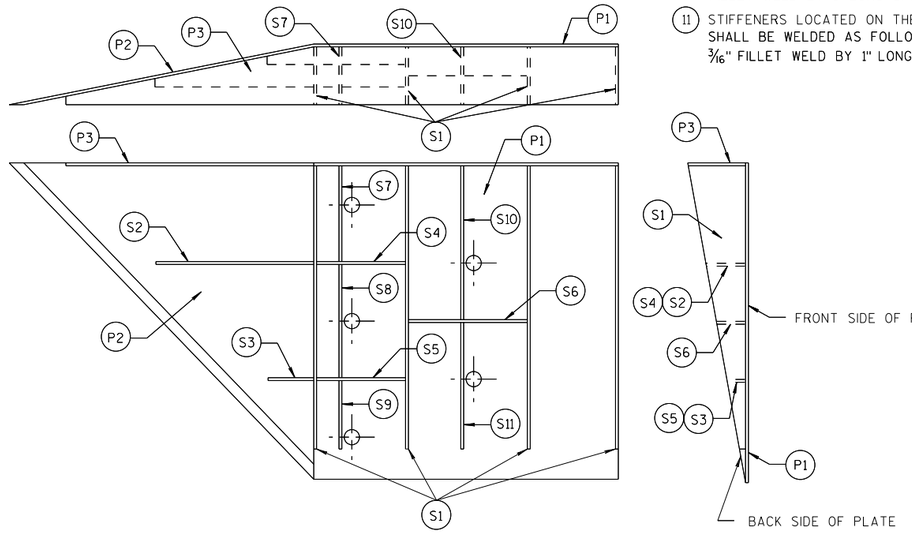


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK.

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

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

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

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

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

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

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

SINGLE SLOPE CONNECTION PLATE

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

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

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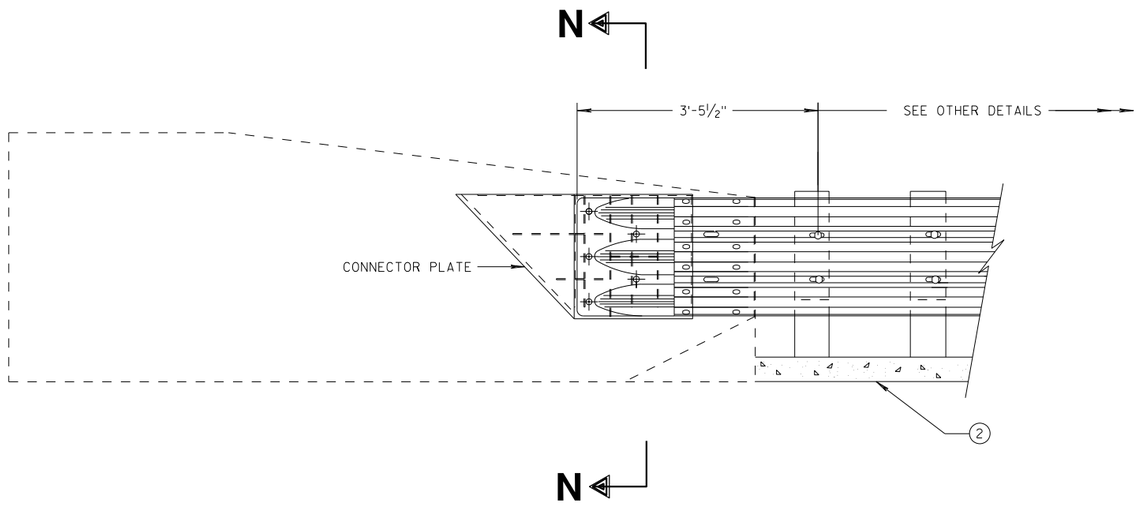
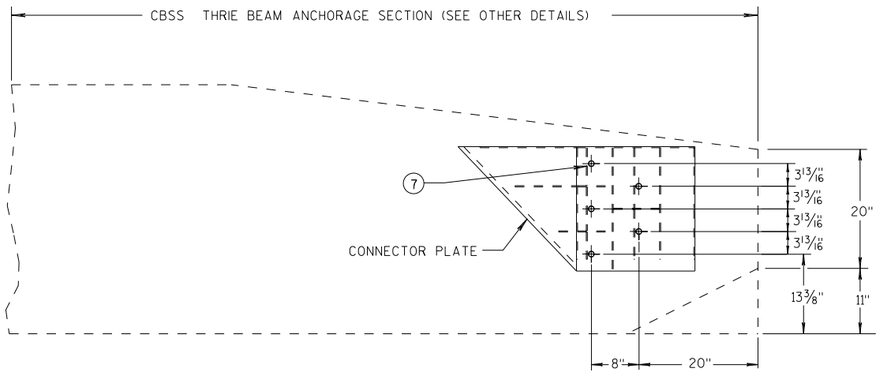
S.D.D. 14 B 45-5i



THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



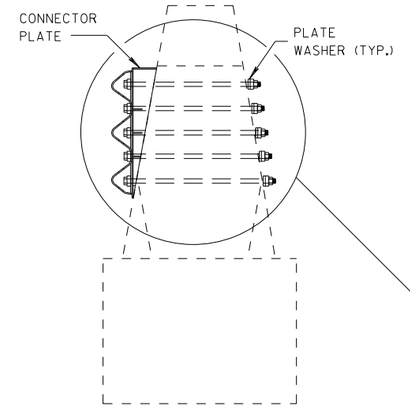
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

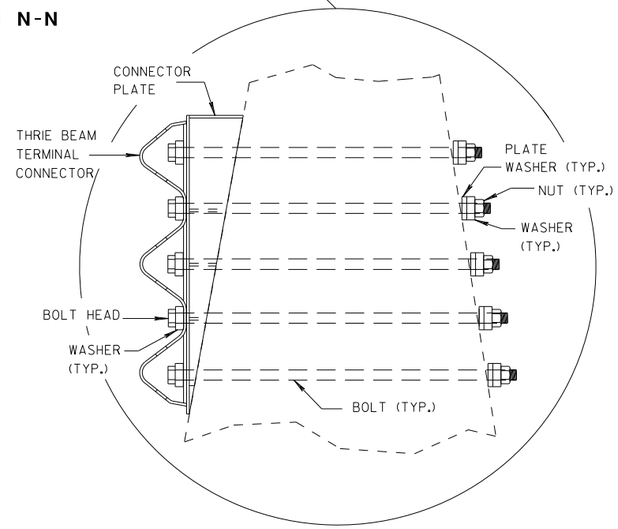
CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

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

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



SECTION N-N



MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
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ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

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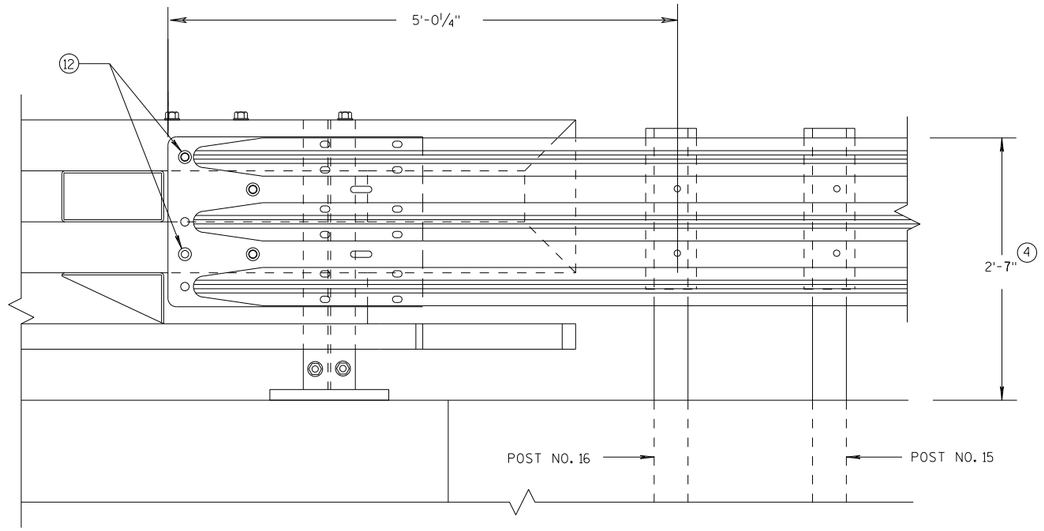
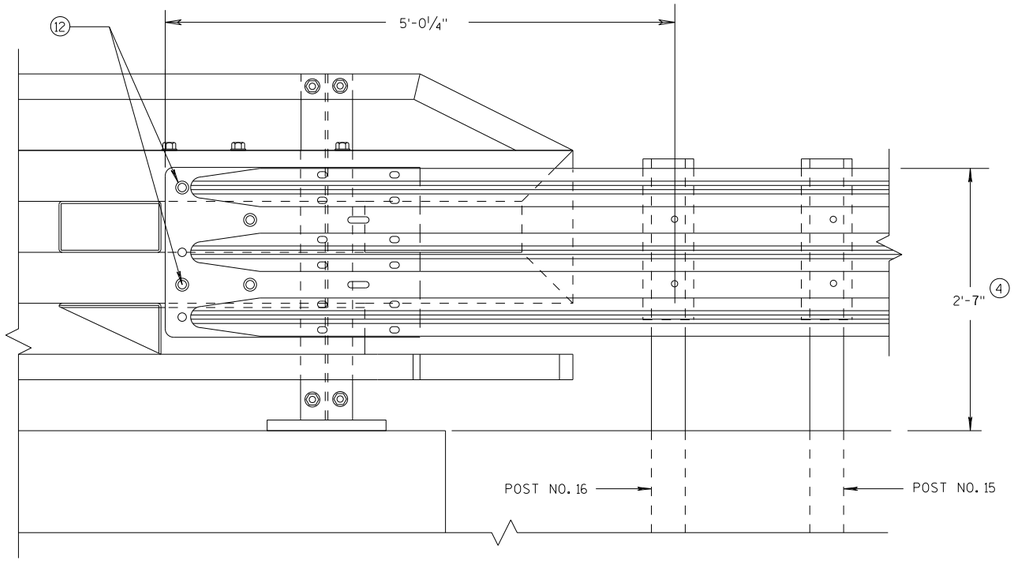
S.D.D. 14 B 45-5j



ELEVATION OF DETAIL AT NY3 END POST

THRIE BEAM RAIL ATTACHMENT



ELEVATION OF DETAIL AT NY4 END POST

THRIE BEAM RAIL ATTACHMENT

GENERAL NOTES

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

(12) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND 1/2-INCH BEYOND NUT.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
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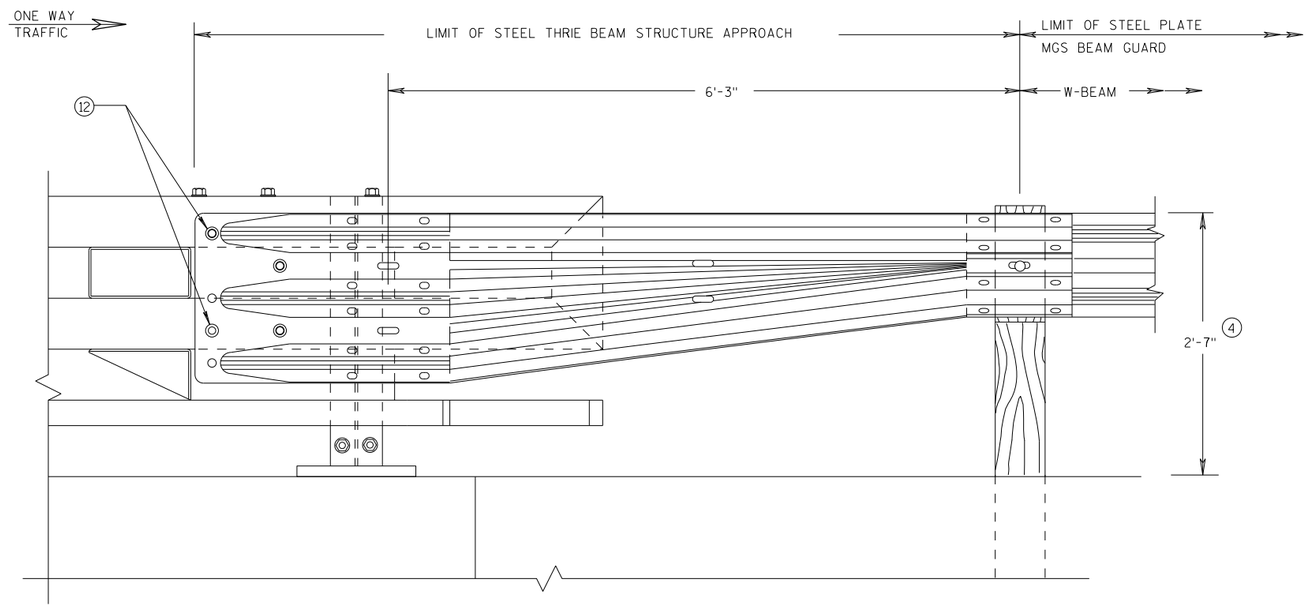


FRONT VIEW

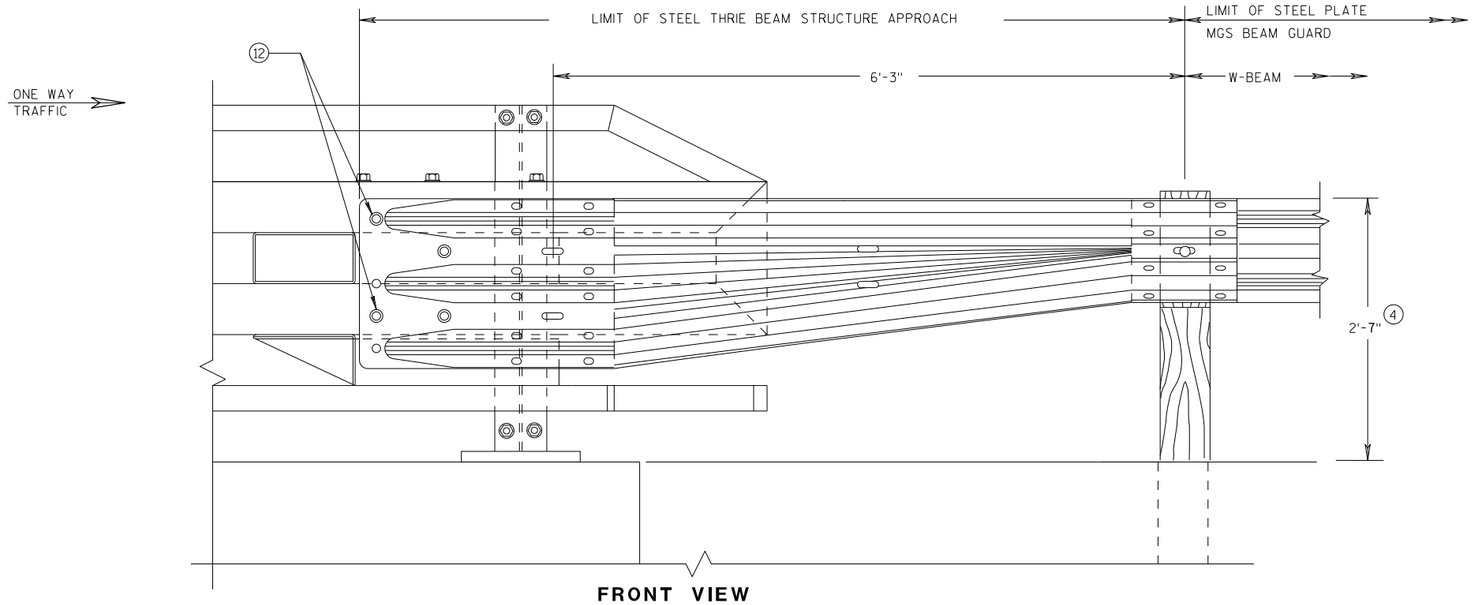
W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY3"

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

GENERAL NOTES

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

(12) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND ½-INCH BEYOND NUT.



FRONT VIEW

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

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

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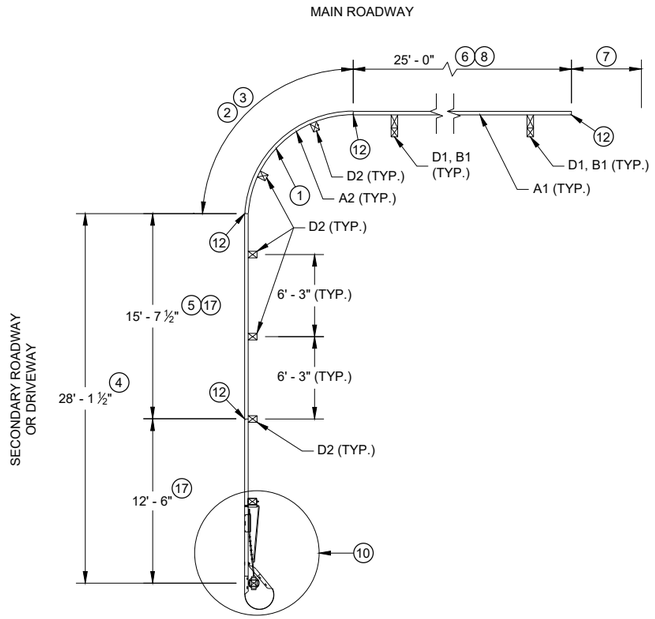
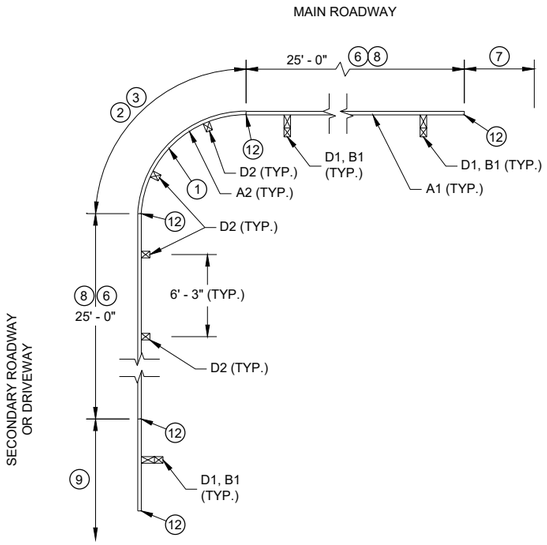


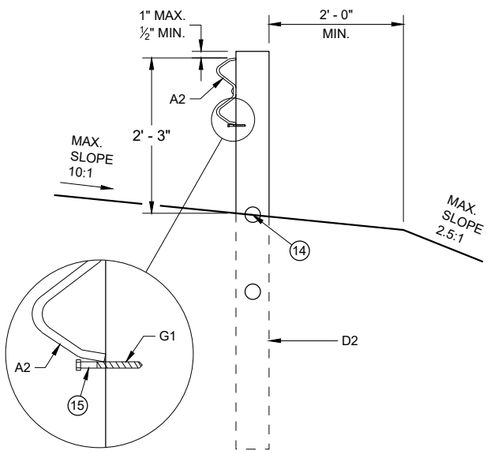
PLAN VIEW

SHORT RADIUS BEAM GUARD WITH SHORT RADIUS TERMINAL ON SECONDARY ROAD OR DRIVEWAY

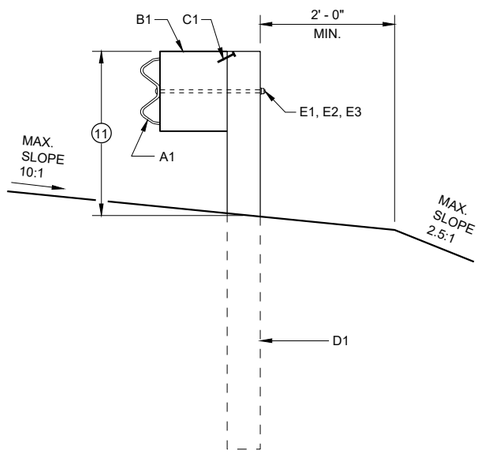


PLAN VIEW

SHORT RADIUS BEAM GUARD WITH EAT, ADDITIONAL BEAM GUARD OR TRANSITION TO RIGID BARRIER ON SECONDARY ROAD OR DRIVEWAY



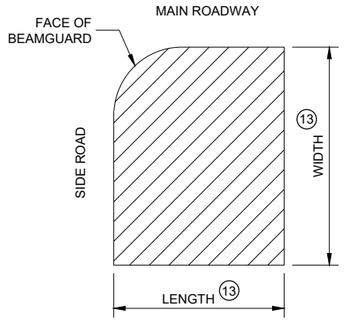
CONTROLLED RELEASE TERMINAL POST (CRT) IN RADIUS



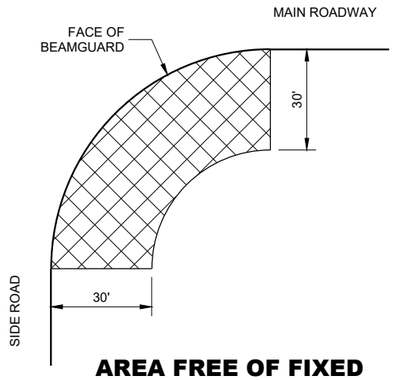
BEAM GUARD POSTS IN HEIGHT TRANSITION

TABLE FOR RADIUS OF 32' AND LESS

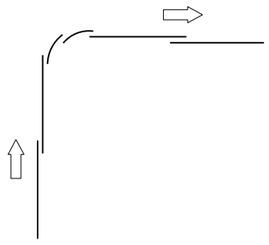
RADIUS (FT)	LENGTH (FT)	WIDTH (FT)
8	25	15
16	30	15
24	40	20
32	50	30



AREA FREE OF FIXED OBJECTS FOR RADIUS 32' AND LESS (16)



AREA FREE OF FIXED OBJECTS FOR RADIUS GREATER THAN 32'



LAP SPLICE DETAIL

GENERAL NOTES

SEE PLANS FOR OTHER BARRIER SYSTEM AND LOCATION SPECIFICS.

SEE SDD 14B42 FOR MORE INFORMATION ON BEAM GUARD INSTALLATION, PARTS, MATERIALS, AND INSTALLATION INFORMATION.

GALVANIZE PARTS AFTER FABRICATION.

WELDING TO FOLLOW CURRENT REQUIREMENTS OF THE AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE ANSI / AWS D1.1.

UNLESS NOTED OTHERWISE, ALL PLATES ARE FLAT AND FREE OF WARP.

UNLESS NOTED OTHERWISE, ALL EDGES ARE SMOOTH, STRAIGHT AND VERTICAL.

ALL CUTS AND HOLES, EXCEPT IN BEAM GUARD RAIL ARE TO BE MACHINED OR MACHINE FLAME CUT.

UNLESS NOTED OTHERWISE, CUT OR PROVIDE BOLTS THAT ARE ¼" TO ½" BEYOND THE NUT.

DRAWINGS ARE NOT TO SCALE.

(1) RADIUS MEASURE FROM INSIDE OF RAIL. LENGTH OF BEAM GUARD SHORT RADIUS GUARD MEASURED ALONG TRAFFIC SIDE OF RAIL. RADIUS BETWEEN 8 FEET TO 150 FEET. SEE PLAN FOR REQUIRED RADIUS. BEAM GUARD RAIL IN RADIUS IS SHOP BENT. ODD RAIL LENGTH OR FIELD CUTS MAY BE REQUIRED.

(2) CONTROLLED RELEASE TERMINAL (CRT) POSTS ARE USED IN THE RADIUS. CONTROLLED RELEASE TERMINAL (CRT) POSTS ARE SPACED 6' - 3". SEE PLAN FOR NUMBER OF CONTROLLED RELEASE (CRT) POSTS.

(3) WITHIN RADIUS BEAM GUARD RAILS ARE NOT BOLTED TO POSTS. BEAM GUARD RAIL IS RESTED ON TOP OF LAG SCREW.

(4) MINIMUM LENGTH OF BEAM GUARD ALONG SIDE ROAD OR DRIVEWAY TO INSTALL SHORT RADIUS TERMINAL. BEAM GUARD IS PAID WITH BEAM GUARD ITEM.

(5) ODD LENGTH OF BEAM GUARD REQUIRED TO INSTALL SHORT RADIUS TERMINAL.

(6) MINIMUM AMOUNT OF BEAM GUARD TO BE INSTALLED PRIOR TO TRANSITION TO RIGID BARRIER. ADDITIONAL BEAM GUARD, OR EAT. BEAM GUARD PAID FOR WITH BEAM GUARD ITEM. SEE PLANS FOR MORE DETAIL.

(7) BEAM GUARD, EAT, OR TRANSITION TO RIGID BARRIER. SEE PLAN.

(8) TOP OF BEAM GUARD BY THE RADIUS IS 27". HEIGHT OF BEAM GUARD IS 31" BY TRANSITION TO RIGID BARRIER, ADDITIONAL BEAM GUARD OR EAT.

(9) ADDITIONAL BEAM GUARD, EAT OR TRANSITION TO RIGID BARRIER. BEAM GUARD SHOWN. SEE PLAN FOR DETAILS.

(10) SHORT RADIUS TERMINAL (SEE OTHER DETAILS).

(11) HEIGHT VARIES. SEE NOTE (8) AND (8).

(12) BEAM GUARD RAIL SPLICE LOCATION. SPLICE LOCATION REQUIRES PART F1 AND F2. SEE SDD 14B42 FOR DETAILS.

(13) SEE TABLE FOR VALUES.

(14) MAXIMUM HEIGHT FOR CENTER OF HOLE IS ¾" ABOVE FINISHED GROUND ±1".

(15) DRILL POST $^{15}/_{64}$" DIA. PILOT HOLE. DO NOT HAMMER LAG SCREW INTO POST.

(16) SMALL SIGNS ON BREAKAWAY HARDWARE ARE ACCEPTABLE.

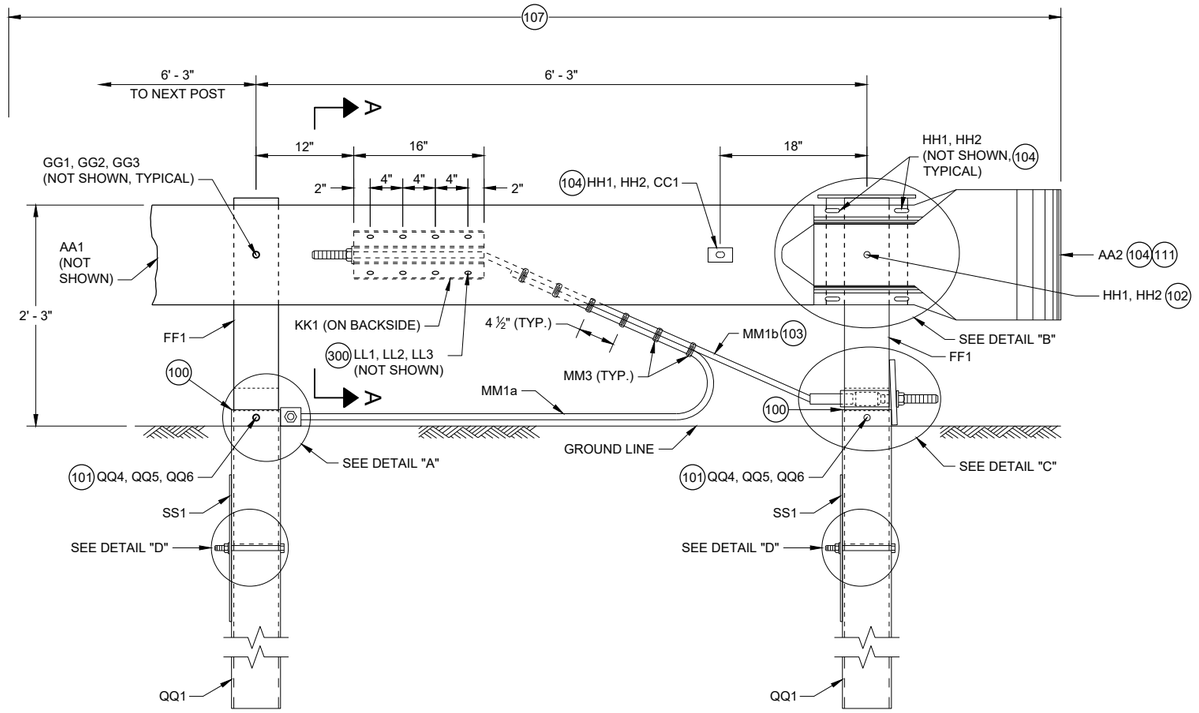
(17) TOP OF RAIL HEIGHT IS 27" WHEN USING A SHORT RADIUS TERMINAL (CRT).

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

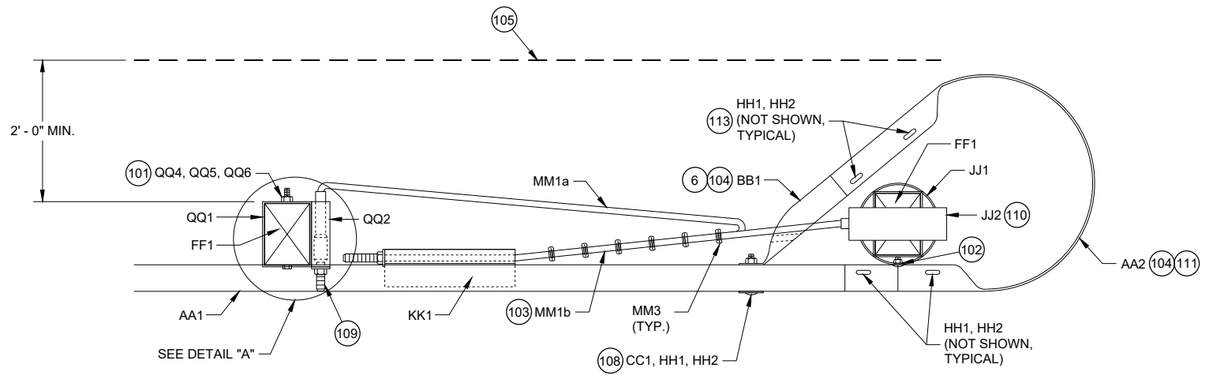
6

SDD 14B53 - 02a



PROFILE VIEW

SHORT RADIUS TERMINAL



TOP VIEW

SHORT RADIUS TERMINAL

GENERAL NOTES

100 TOP OF FOUNDATION TUBE 2 INCHES MAXIMUM ABOVE FINISHED GROUND.

101 WASHERS REQUIRED BETWEEN BOLT HEAD AND FOUNDATION TUBE AND BETWEEN NUT AND FOUNDATION TUBE.

102 SPLICE BOLT AND NUT CONNECTS BEAM GUARD RAIL, W-BEAM SECTION BUFFER, AND STEEL PIPE ASSEMBLY. NO WASHER REQUIRED. SEE DETAIL "B".

103 CABLE IS TAUT.

104 ADJUST AA2 AND BB1 TO FIT.

105 BREAK POINT OF SHOULDER.

106 TACK WELD CABLE CONNECTOR TUBE PLATE TO CABLE CONNECTION TUBE. SEE DETAIL "A" PROFILE VIEW.

107 PAY LIMIT FOR BEAM GUARD.

108 SQUARE WASHER BETWEEN HEAD OF BOLT AND TRAFFIC FACE OF BEAM GUARD. ROUND WASHER REQUIRED BETWEEN NUT AND BB1.

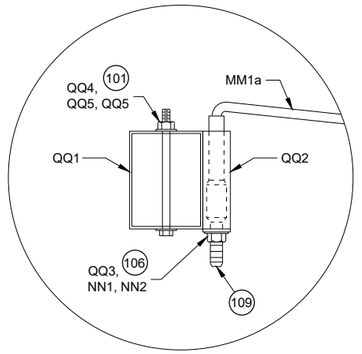
109 CUT OR PROVIDE THREADED STUD THAT IS FLUSH WITH FACE OF BEAM GUARD RAIL KK1 (PLUS OR MINUS ½" TOLERANCE). DEBURR AFTER CUTTING.

110 SEE STEEL PIPE ASSEMBLY DETAILS.

111 ATTACH UU2 WITH UU3. SHOP APPLY UU1 TO UU2.

112 FOUR (4) HH1 AND HH2 REQUIRED TO ATTACH AA1 TO AA2.

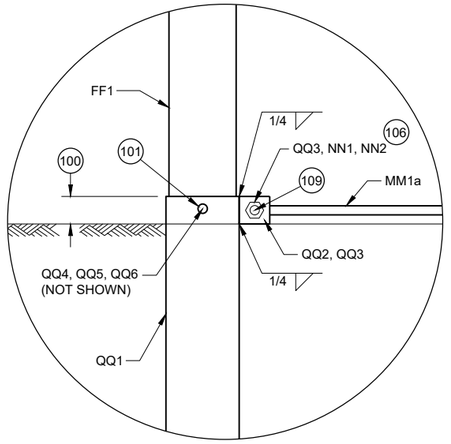
113 FOUR (4) HH1 AND HH2 REQUIRED TO ATTACH AA2 TO BB1.



TOP VIEW

DETAIL "A"

(WOOD BREAKAWAY AND BEAM GUARD RAIL POSTS NOT SHOWN)



PROFILE VIEW

DETAIL "A"

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B53 - 02b

SDD 14B53 - 02b

6

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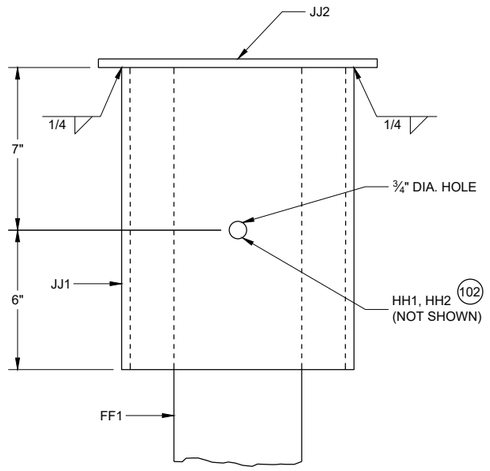
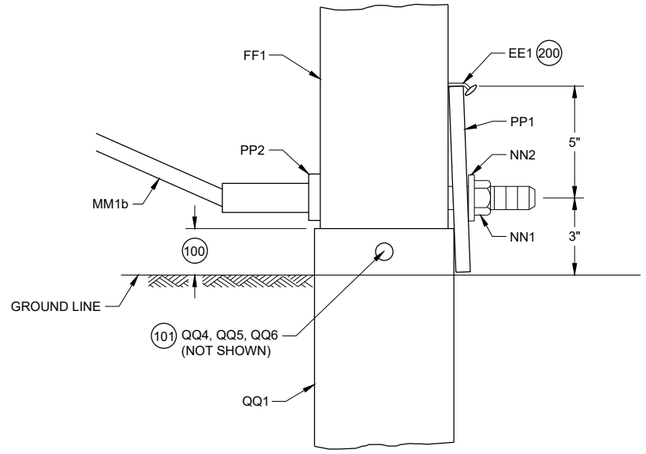
GENERAL NOTES

(200) TWO (2) NAILS SPACED 4 INCHES CENTER TO CENTER.



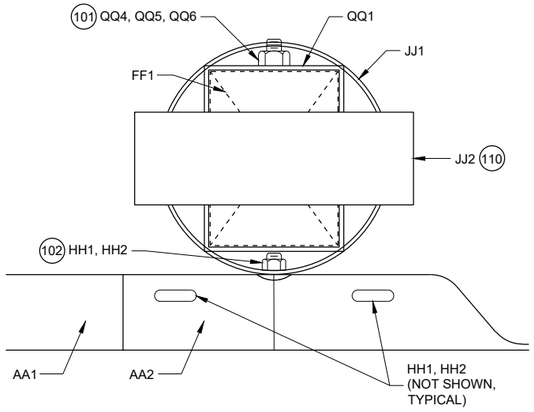
PROFILE VIEW

DETAIL "B"
STEEL PIPE ASSEMBLY
(BEAM GUARD AND W BEAM END SECTION NOT SHOWN)



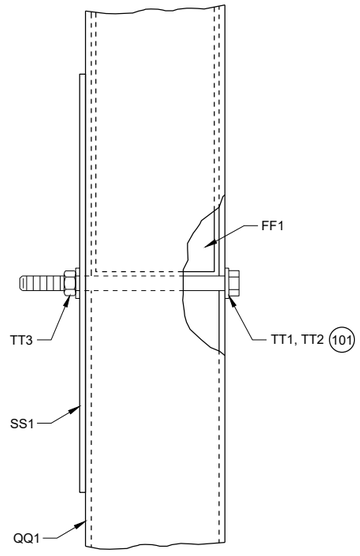
PROFILE VIEW

DETAIL "C"



PLAN VIEW

DETAIL "B"
STEEL PIPE ASSEMBLY



PROFILE VIEW

DETAIL "D"

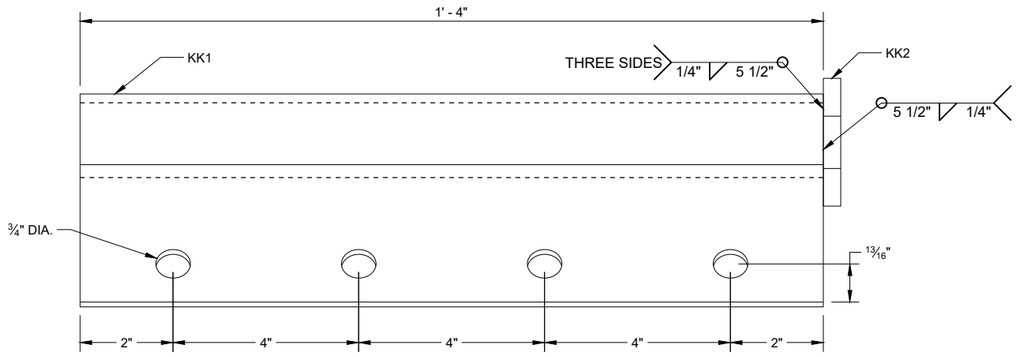
SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

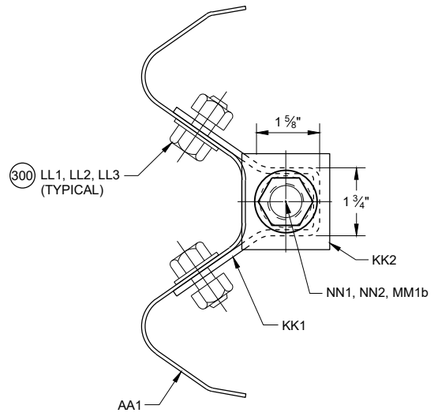
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

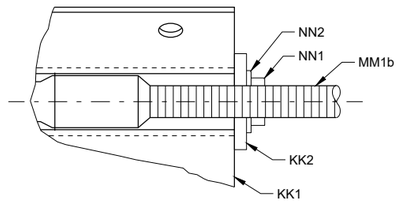
6
SDD 14B53 - 02c

GENERAL NOTES

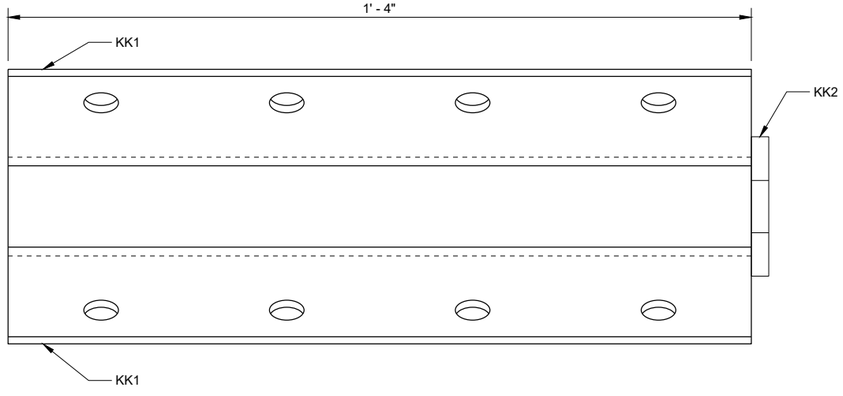
(300) WASHERS REQUIRED BETWEEN BOLT HEAD AND BEAM GUARD RAIL AND BETWEEN NUT AND ANCHOR BRACKET. EIGHT (8) LL1 AND LL3 REQUIRED. SIXTEEN (16) LL2 REQUIRED.

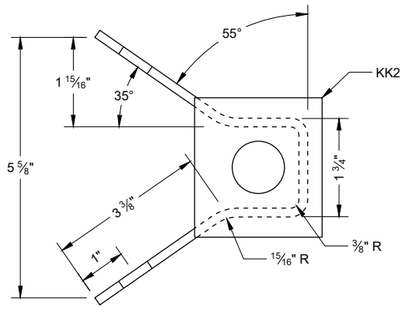




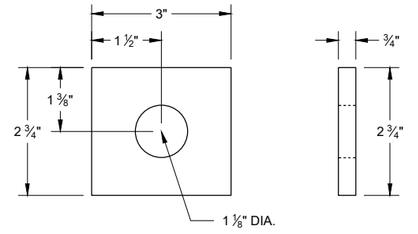


SECTION A - A





ANCHOR BRACKET (KK1, KK2)



ANCHOR BRACKET BEARING PLATE (KK2)

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

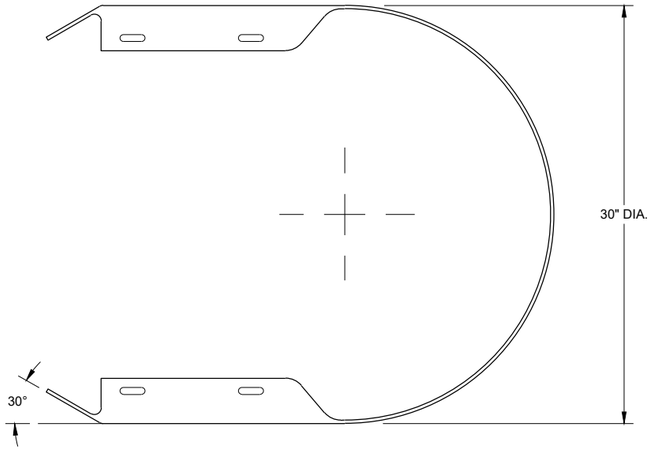
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 14B53 - 02d

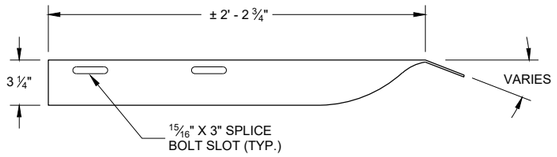
GENERAL NOTES

(400) CROSS SECTION OF PART IS TO FIT OVER AA1 .

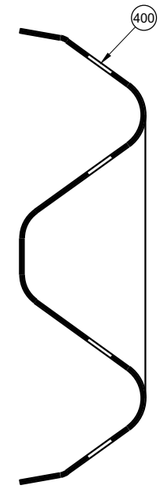
(401) CROSS SECTION OF PART IS TO FIT OVER OR UNDER AA1 .



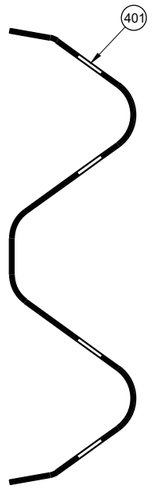
TOP VIEW



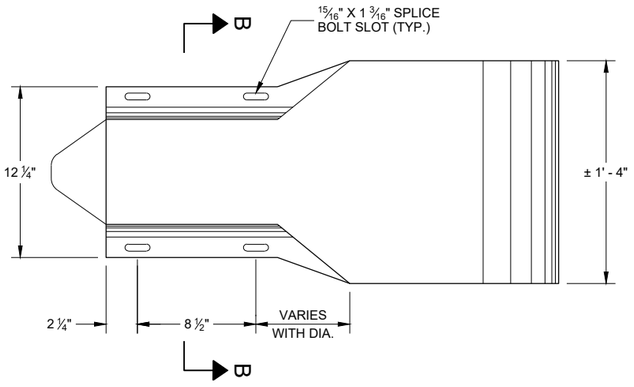
TOP VIEW



SECTION B -B

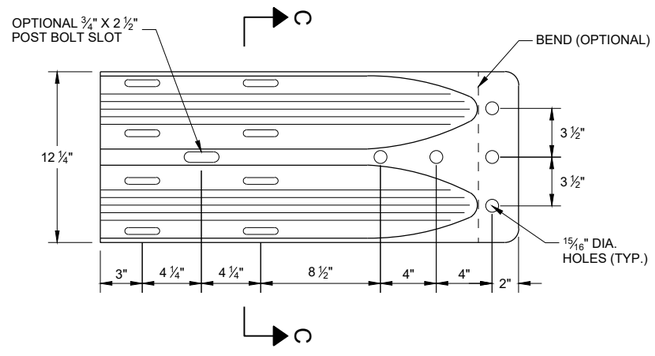


SECTION C -C



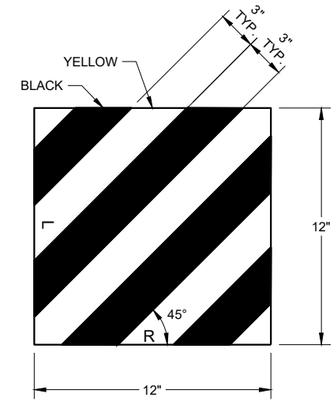
PROFILE VIEW

W BEAM
END SECTION BUFFER (AA2)



PROFILE VIEW

W BEAM
TERMINAL CONNECTOR (BB1)



REFLECTIVE SHEETING (UU1, UU2)

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

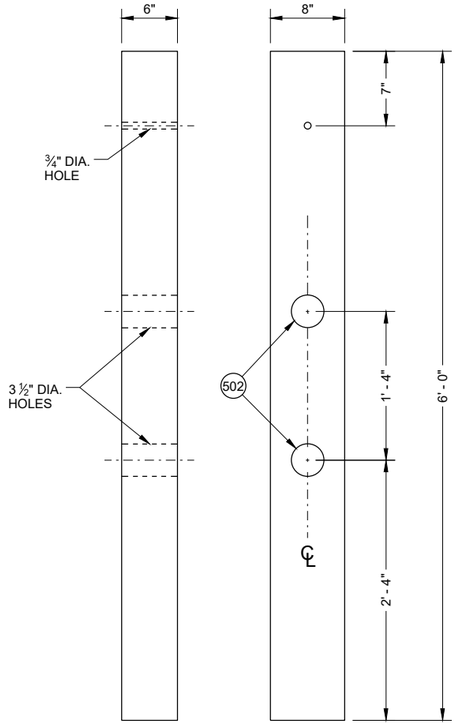
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B53 - 02e

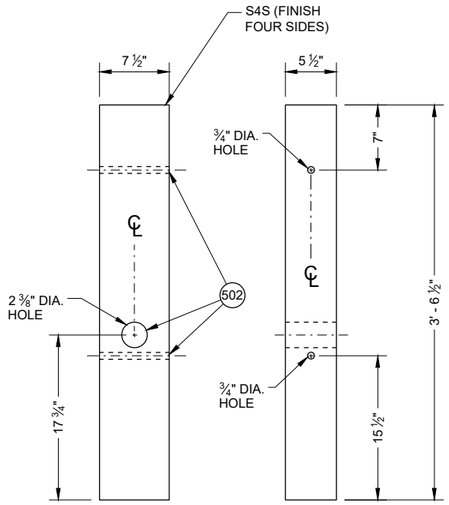
6

SDD 14B53 - 02e



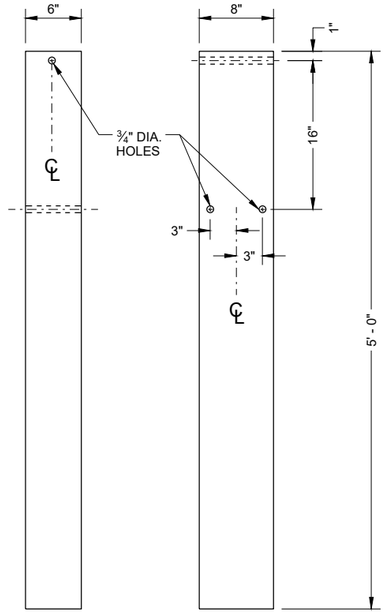
FRONT VIEW SIDE VIEW

CONTROLLED RELEASE POST (CRT) (DD2)



FRONT VIEW SIDE VIEW

WOOD BREAKAWAY POST (FF1)



FRONT VIEW SIDE VIEW

FOUNDATION TUBE (QQ1) (500)

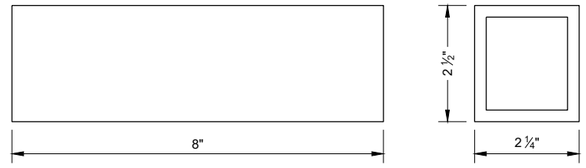
GENERAL NOTES

(500) SEE DETAIL "D" FOR LOCATION AND ATTACHMENT OF SS1.

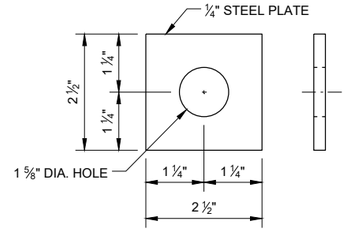
(501) FOR MM1a THREADED STUD ONLY REQUIRED ON ONE END. SWAGED FITTING REQUIRED.

(502) LOCATE HOLES ON THE CENTERLINE OF THE SIDE OF THE POST.

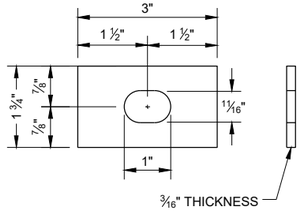
(503) MM1a MAY HAVE ONE THREADED STUD 4 INCHES LONG. SEE NOTE (109).



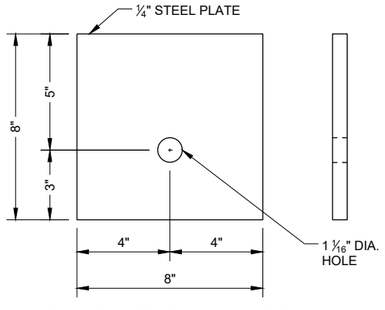
FOUNDATION TUBE - ANCHOR CABLE TUBE (QQ2)



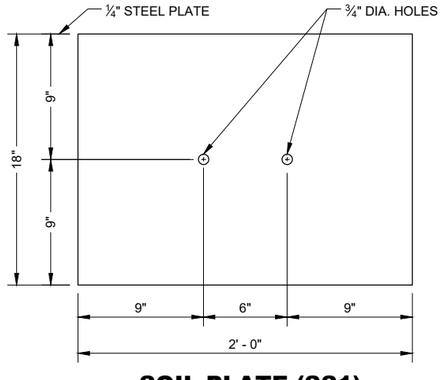
ANCHOR CABLE TUBE END PLATE (QQ3)



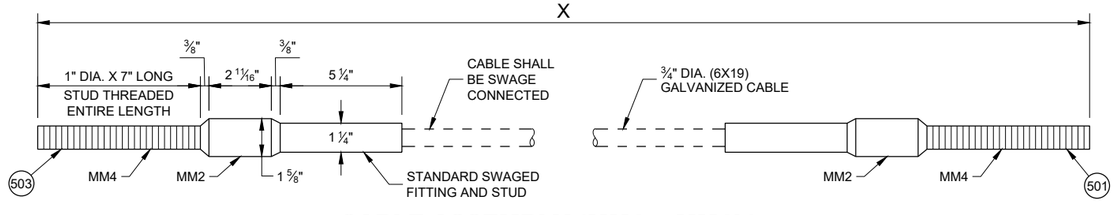
RECTANGULAR PLATE WASHER (CC1)



BEARING PLATE (PP1)



SOIL PLATE (SS1)



CABLE ASSEMBLY (MM1a, MM1b)

"X" LENGTH

MM1b	9' - 0"
MM1b	6' - 8"

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B53 - 02f

6

SDD 14B53 - 02f

6

BILL OF MATERIALS - SHORT RADIUS BEAM GUARD (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
A1	BEAM GUARD RAIL	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
A2	BEAM GUARD RAIL - SHOP BENT	INDICATE ON BACK OF RAIL THE RADIUS THAT RAIL WAS BENT TO. SHOP BEND RADIUS IS TO THE NEAREST FOOT. FOLLOW AASHTO M180 ON HOW TO MARK RADIUS INFORMATION.	
		AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
B1	BLOCK - WOOD	WISDOT SPEC. 614	SEE SDD 14B42
C1	NAIL	ASTM A153 HOT DIP CLASS D	
		ASTM F1667 TYPE 1 STYLE 12 (16 DOUBLE HEAD)	
D1	POST-STRONG POST-WOOD	WISDOT SPEC. 614	SEE SDD 14B42
D2	POST-CRT-WOOD	WISDOT SPEC. 614	
E1	POST BOLT	ASTM A307 GRADE A OR SAE J429 GRADE 2	5/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		AASHTO M180	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
E2	POST BOLT - WASHER	ASTM F436 TYPE 1 (HARDEN TYPICALLY USED WITH STEEL) OR ASTM F844 (UNHARDENED TYPICALLY WITH WOOD)	5/8" DIA.
		GALV. AASHTO M111 / ASTM A 123 OR GALV. HOT DIP. TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
E3	POST BOLT - NUT	AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	5/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		ASTM A563 GRADE A HEAVY HEX HEAD	
F1	SPLICE BOLT	GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	5/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		ASTM A307 GRADE A OR SAE J429 GRADE 2	
		UNC	
		AASHTO M180	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
F2	SPLICE BOLT - NUT	ASTM A563 GRADE A	5/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C/ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
G1	LAG SCREW	ASTM A308 GRADE A ASTM A153 CLASS D	1/2" DIA. 6" LONG
H1	DELINEATOR - BEAM GUARD		SEE SDD 14B42 FOR MORE INFORMATION
H2	DELINEATION - SHEETING	YELLOW OR WHITE	
		WISDOT SPEC 637 TYPE SH	
		APPROVED PRODUCT LIST	
J1	FOUNDATION BACKFILL	STANDARD SPEC. 614	
AA1	BEAM GUARD RAIL - PUNCHED	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
AA2	BEAM GUARD RAIL - END SECTION BUFFER	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
BB1	BEAM GUARD RAIL - TERMINAL CONNECTOR MODIFIED	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
CC1	SHORT RADIUS - SQUARE WASHER	AASHTO M180	
		GALV. AASHTO M111 / ASTM A123	
EE1	NAIL	ASTM A153 HOT DIP CLASS D	
		ASTM F1667 TYPE 1 STYLE 12 (16 DOUBLE HEADED)	
FF1	POST - BCT - WOOD	S4S FINISH ON 4 SIDES	
		WISDOT SPEC. 614	
GG1	POST BOLT	ASTM A307 GRADE A OR SAE J429 GRADE 2	3/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		AASHTO M180	
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C/ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		UNC	
GG2	POST BOLT - WASHER	ASTM F436 TYPE 1 (HARDEN TYPICALLY USED WITH STEEL) OR ASTM F844 (UNHARDENED TYPICALLY WITH WOOD)	3/8" DIA.
		GALV. AASHTO M111 / ASTM A 123 OR GALV. HOT DIP. TO AASHTO M232 CLASS C/ASTM A153 CLASS C / ASTM F2329	

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B53 - 02g

BILL OF MATERIALS - SHORT RADIUS BEAM GUARD (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
GG3	POST BOLT - NUT	ASTM A563 GRADE A	⅜" DIA. SEE 14B42 FOR GEOMETRY
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		ASTM A563 GRADE A HEAVY HEX HEAD	
HH1	SPLICE BOLT	GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	⅜" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		ASTM A307 GRADE A OR SAE J429 GRADE 2	
		UNC	
		AASHTO M180 HEAD GEOMETRY	
HH2	SPLICE BOLT - NUT	ASTM A563 GRADE A	⅜" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
JJ1	PIPE - STEEL	ASTM A53 GALVANIZED GRADE B SCHEDULE 40	10" O.D.
JJ2	TOP PLATE	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	DIMENSIONS ⅜" X 4" X 1' - 0"
		GALV. AASHTO M111 / ASTM A123	
KK1	ANCHOR BRACKET	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / ASTM A123	
KK2	ANCHOR BRACKET - BEARING PLATE	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / ASTM A123	
LL1	ANCHOR BRACKET - BOLT	ASTM A307 GRADE B HEAVY HEX HEAD OR SAE J429 GRADE 2 HEAVY HEX HEAD	⅝" DIA.
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
LL2	ANCHOR BRACKET - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	⅝" DIA.
		GALV. AASHTO M111 / ASTM A123 OR GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
LL3	ANCHOR BRACKET - NUT	ASTM A563 GRADE A	⅝" DIA.
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
MM1a	ANCHOR CABLE	AASHTO M30 / ASTM A741 INDEPENDENT WIRE CORE (IWRC) OR WIRE STRAND CORE (WCS), IMPROVED PLOW STEEL (IPS), 6X19, TYPE II OR IIc CLASS C ZINC COATED	
MM1b	ANCHOR CABLE	AASHTO M30 / ASTM A741 INDEPENDENT WIRE CORE (IWRC) OR WIRE STRAND CORE (WCS), IMPROVED PLOW STEEL (IPS), 6X19, TYPE II OR IIc CLASS C ZINC COATED	
MM2	ANCHOR CABLE - SWAGE FITTING	ASTM A576 GRADE 1035	
		SWAGE FITTINGS ARE TO BE FACTORY SWEDGED. WITH A BREAKING STRENGTH 40,000 LBS.	
		GALV. AASHTO M111 / ASTM A123	
		ASME B30.26 FORGED, CAST, OR DIE STAMPED WITH THE FOLLOWING INTO CONNECTION: NAME OF MANUFACTURER OR TRADEMARK OF CONNECTION'S MANUFACTURER, SIZE OR RATED LOAD, GRADE.	
MM3	WIRE ROPE CABLE CLAMPS	FF-C-450D TYPE 1 CLASS 1	¾"
		ASTM A153 HOT DIP CLASS D	
MM4	ANCHOR CABLE - SWAGE FITTING - STUD	ASTM F3125 GRADE A325 TYPE 1 OR SAE GRADE 5 OR ASTM A449 TYPE 1 HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
NN1	ANCHOR CABLE - NUT	ASTM A563 GRADE A	1" DIA.
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
NN2	ANCHOR CABLE - NUT - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	1" DIA.
		GALV. AASHTO M111 / ASTM A123 OR GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	

6

SDD 14B53 - 02h

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

BILL OF MATERIALS - SHORT RADIUS BEAM GUARD (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
PP1	BEARING PLATE AT POST	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / ASTM A123	
PP2	PIPE - STEEL	ASTM A53 GALVANIZED GRADE B SCHEDULE 40	2" DIA. x 6" LONG
QQ1	FOUNDATION TUBE	ASTM A500 GRADE B	8" X 6" X 3/16"
		GALV. AASHTO M111 / ASTM A123	
QQ2	SHORT RADIUS - FOUNDATION TUBE - ANCHOR CABLE - TUBE	ASTM A500 GRADE B	DIMENSIONS 2 1/2" X 2 1/4" X 1/4" X 8"
		GALV. AASHTO M111 / ASTM A123	
QQ3	SHORT RADIUS - SOIL TUBE - ANCHOR CABLE - TUBE - END PLATE	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	DIMENSIONS 2 1/2" X 2 1/2" X 1/4"
		GALV. AASHTO M111 / ASTM A123	
QQ4	GROUND STRUT AND YOKE - BOLT	GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	5/8 DIA.
		ASTM A307 GRADE B HEAVY HEX HEAD OR SAE J429 GRADE 2 HEAVY HEX HEAD	
		UNC	
QQ5	GROUND PLATE AND YOKE - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	5/8 DIA.
		GALV. AASHTO M111 / ASTM A123 OR GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
QQ6	GROUND STRUT AND YOKE - NUT	HEAVY HEX	5/8 DIA.
		UNC	
		ASTM A563 GRADE A	
		OVER TAPPED NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
SS1	SOIL PLATE	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / A123	
TT1	SOIL PLATE - BOLT	ASTM A307 GRADE B HEAVY HEX HEAD OR SAE J429 GRADE 2 HEAVY HEX HEAD	5/8 DIA.
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
TT2	SOIL PLATE - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	5/8 DIA.
		GALV. AASHTO M111 / ASTM A123 OR GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
TT3	SOIL PLATE - NUT	GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	5/8 DIA.
UU1	OBJECT MARKER - SHEETING	MUTCD / WISDOT OBJECT MARKER TYPE 3	PATTERN AND COLOR FOR SHEETING. SHEETING TYPE FOR MARKER.
		WISDOT SPEC 637 TYPE F	
		APPROVED PRODUCT LIST	
UU2	OBJECT MARKER - ALUMINUM PLATE	WISDOT SPEC 637 ALUMINUM PLATE	MATERIAL AND THICKNESS OF MATERIALS
UU3	OBJECT MARKER - SCREWS	STAINLESS SELF-TAPPING SCREWS	
VV1	FOUNDATION BACKFILL	WISDOT SPEC 614	

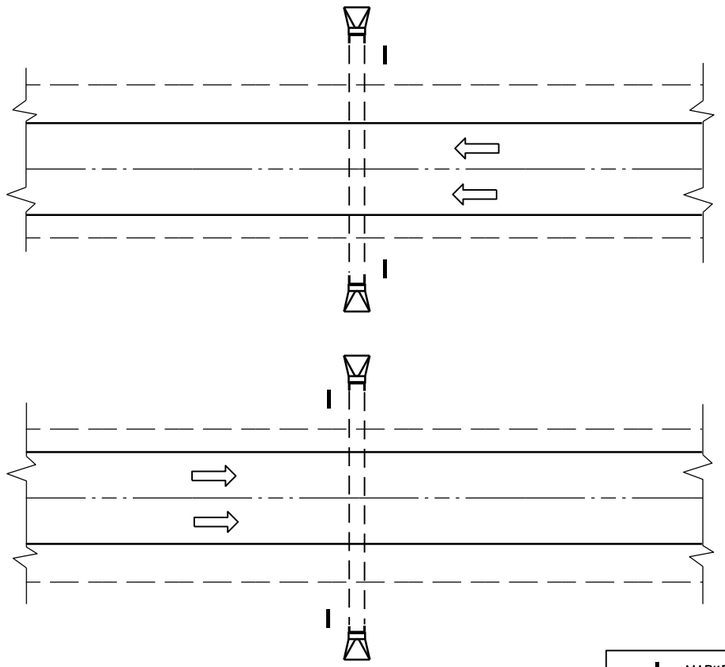
SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT ENGINEER

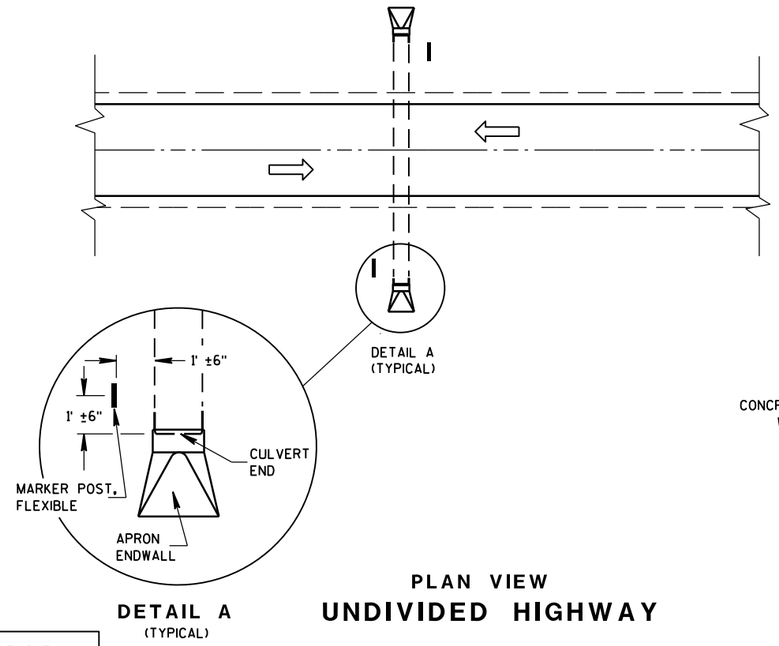
FHWA

6
SDD 14B53 - 02i



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

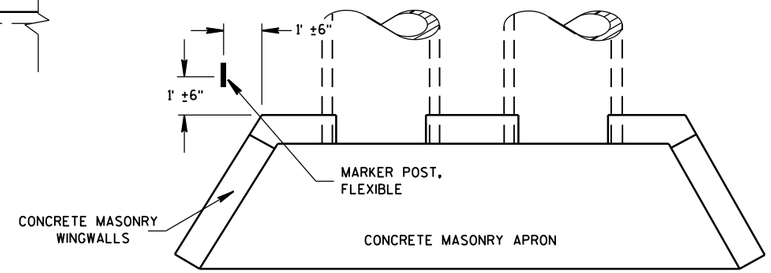
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

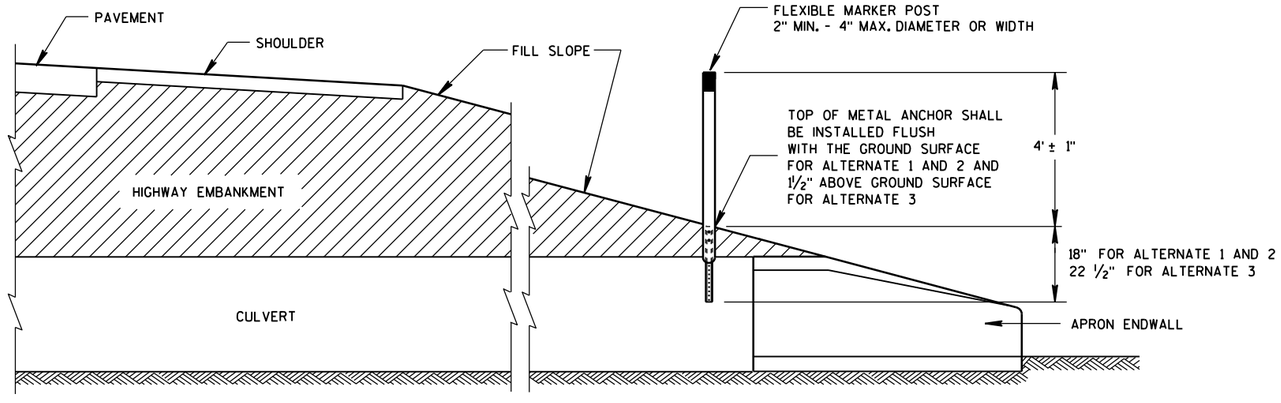
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

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

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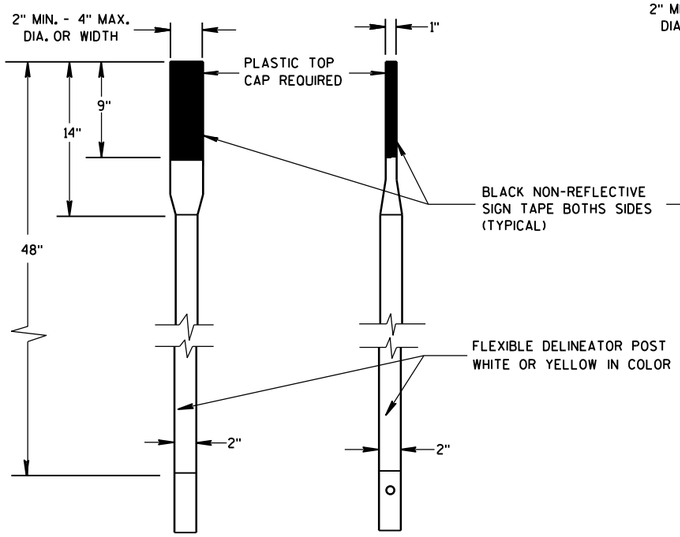
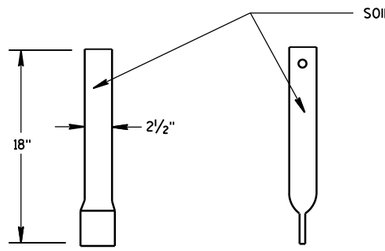
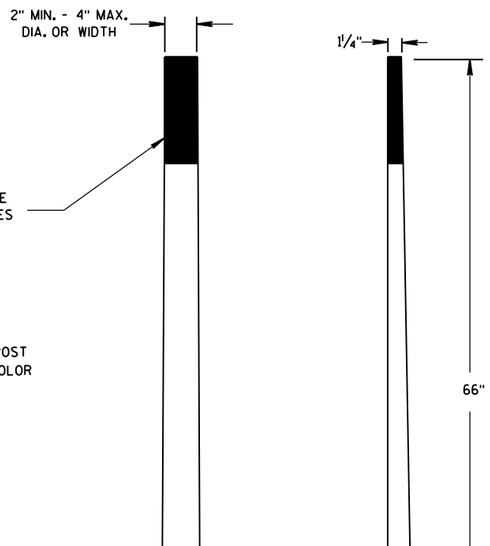
S.D.D. 15 A 3-2a





FRONT VIEW SIDE VIEW

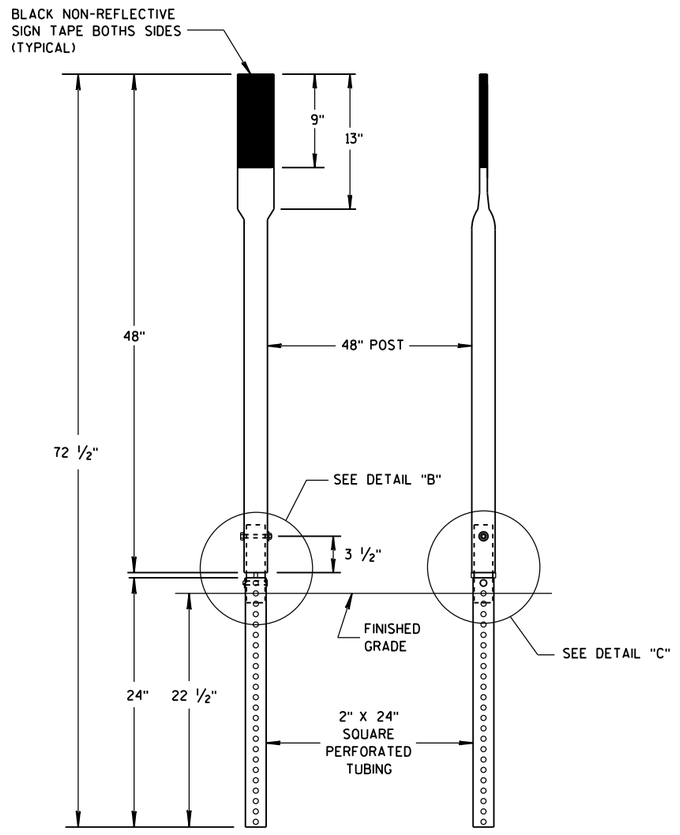
ALTERNATE 1



FRONT VIEW SIDE VIEW

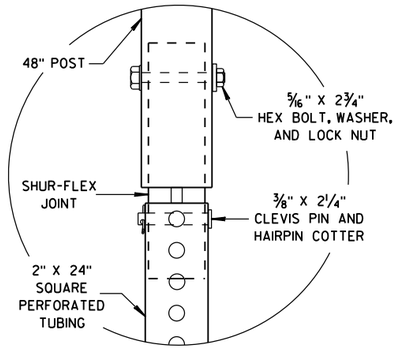
ALTERNATE 2

FLEXIBLE MARKER POSTS

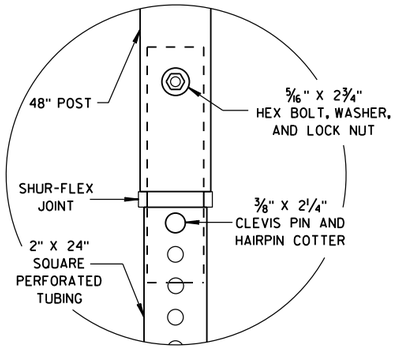


FRONT VIEW SIDE VIEW

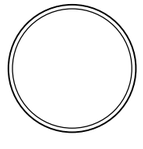
ALTERNATE 3



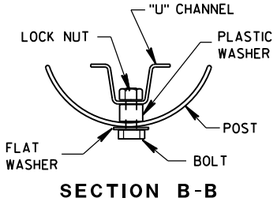
DETAIL B



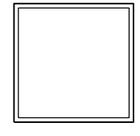
DETAIL C



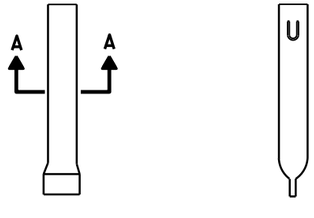
SECTION A-A



SECTION B-B

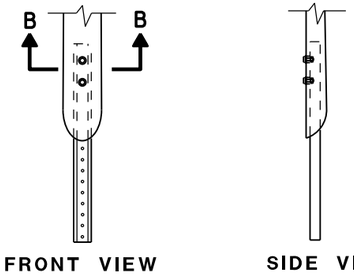


SECTION C-C



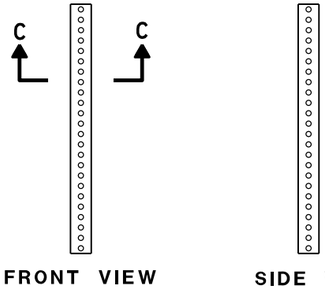
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

ALTERNATE 2



FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/1/2012
DATE

/S/ Travis Feltes
STATE TRAFFIC ENGINEER OF DESIGN

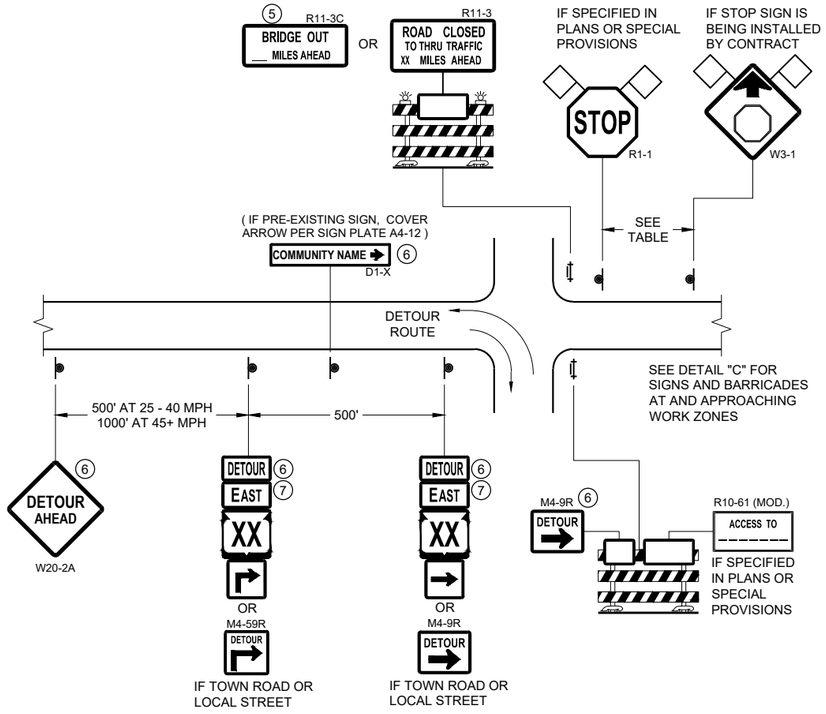
FHWA

6

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

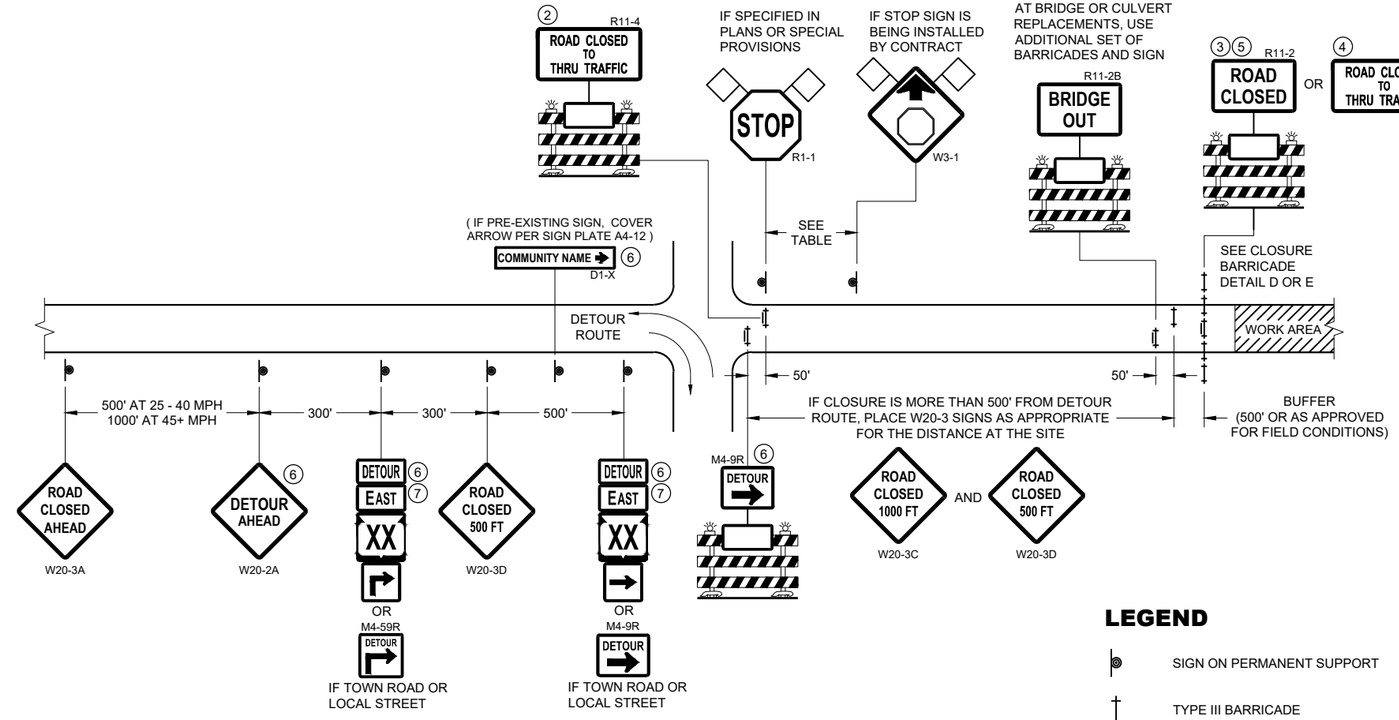
6

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



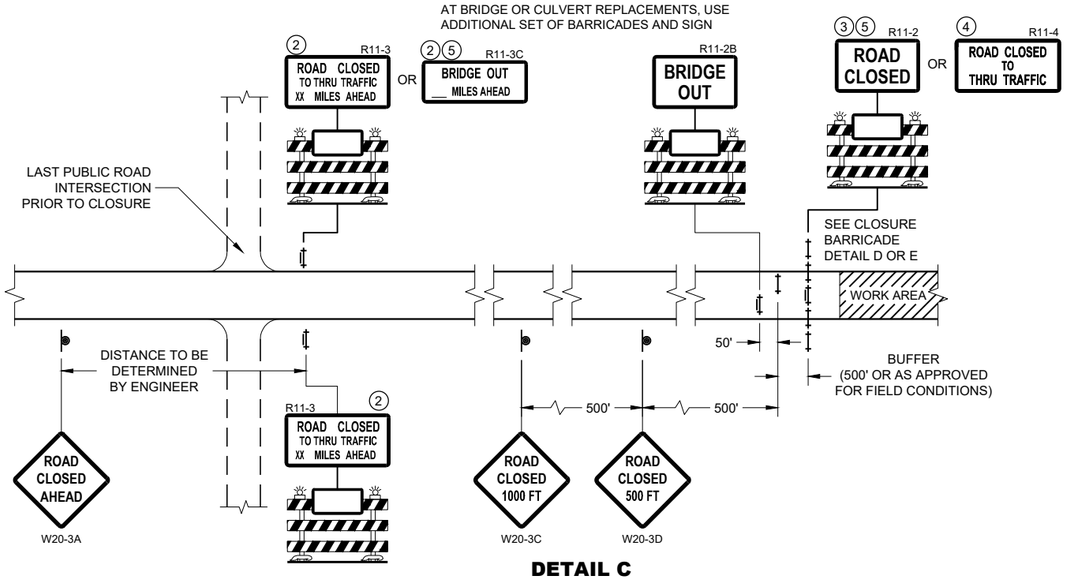
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

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



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

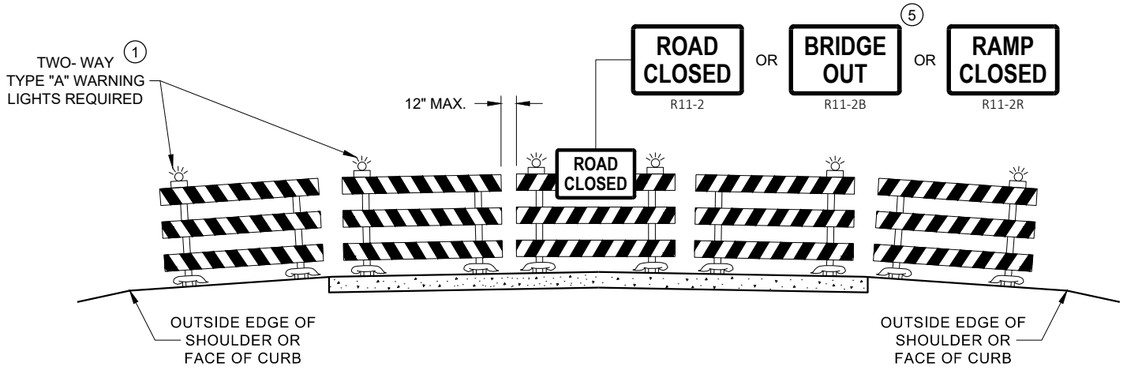
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

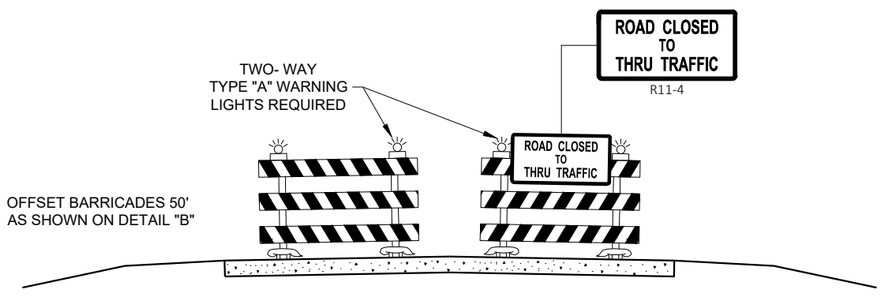
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6
SDD 15C02 - 09a



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6
SDD 15C02 - 09b

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 / EAST — M4 - 8, 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.

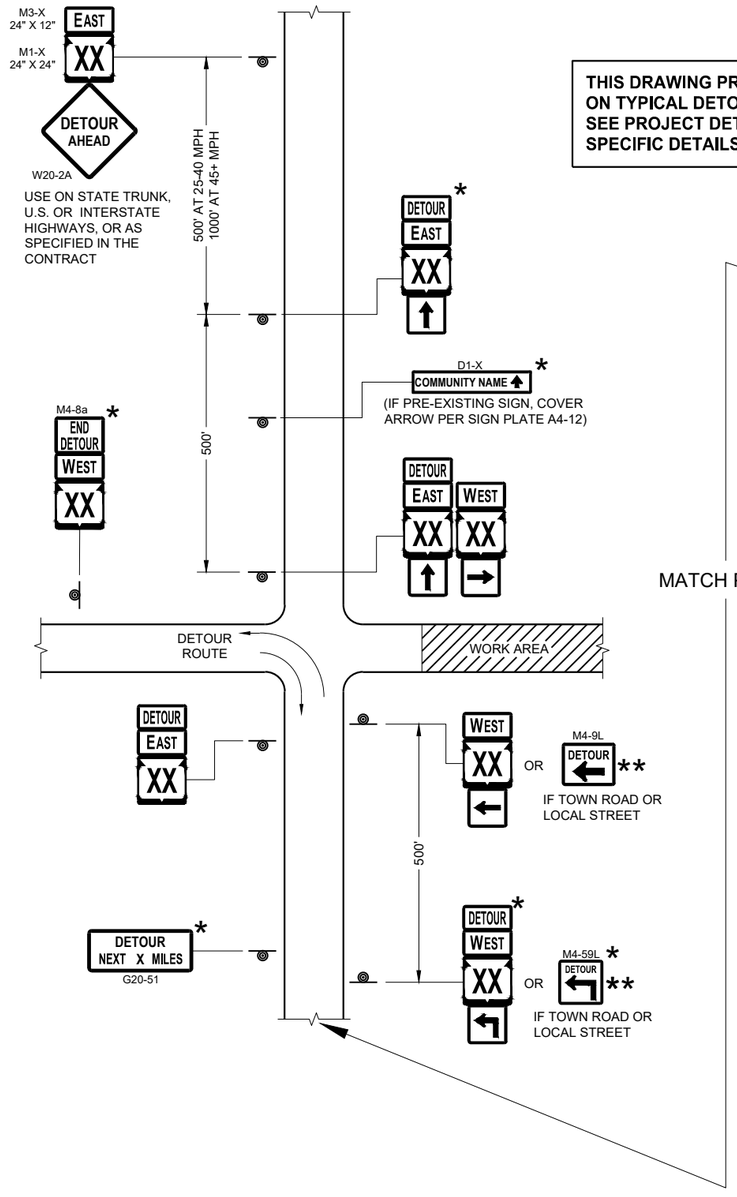
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

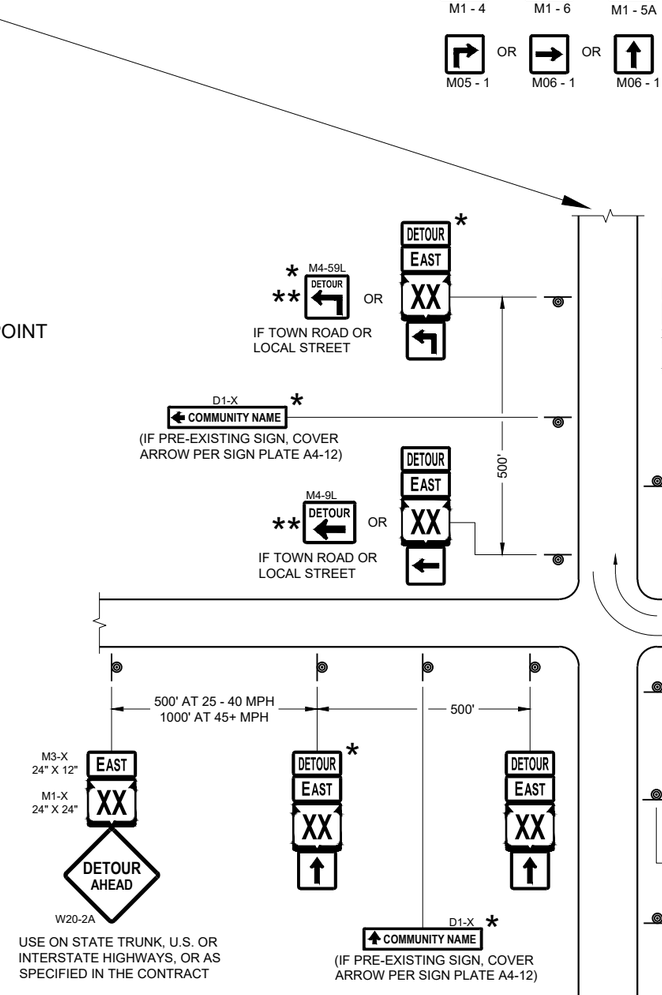
SIGN SIZES SHALL BE AS FOLLOWS:

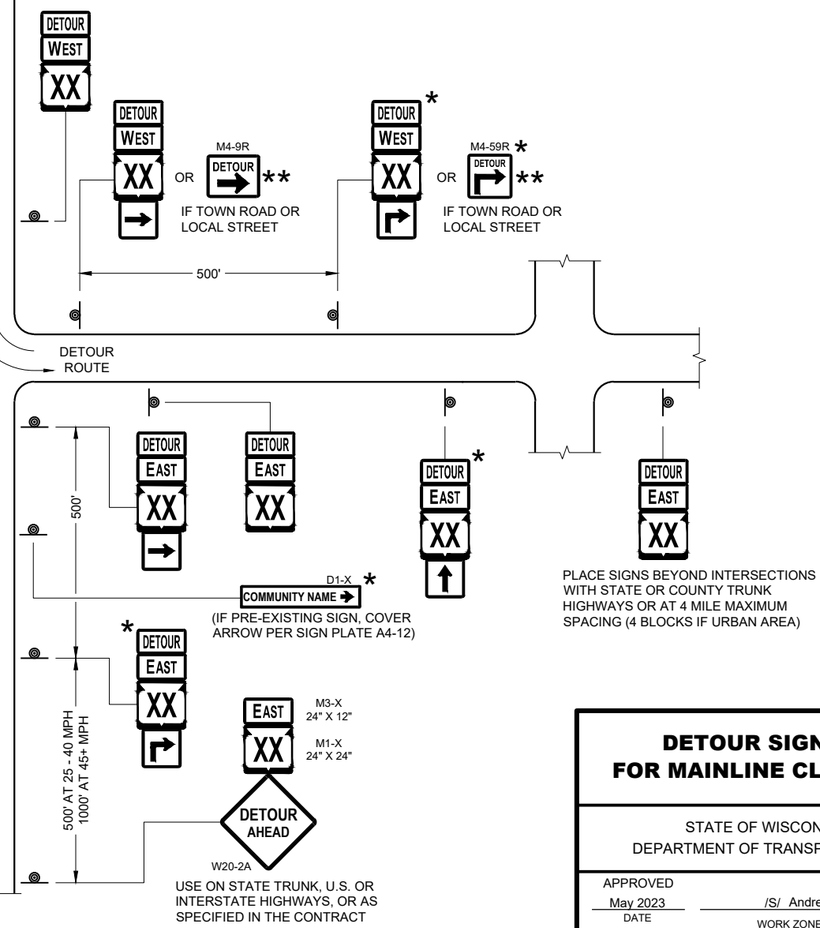
- M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING 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

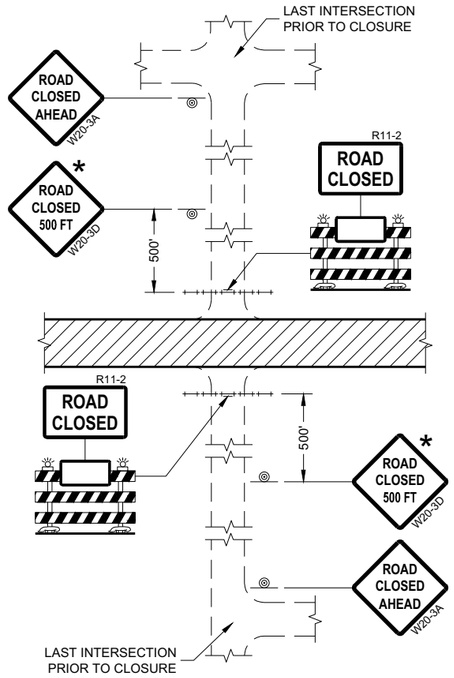
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

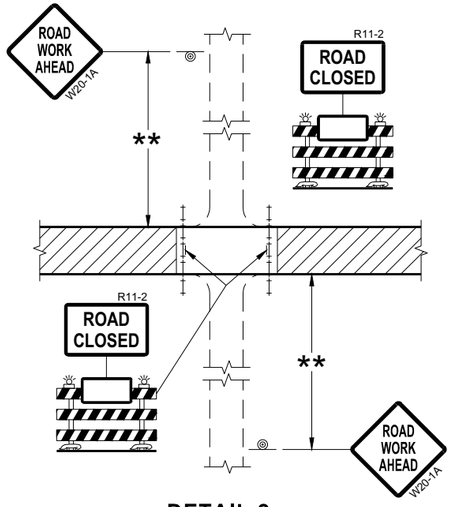
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

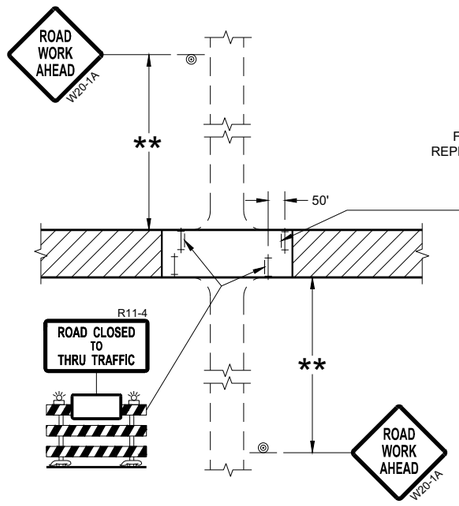
6
SDD 15C02 - 09c



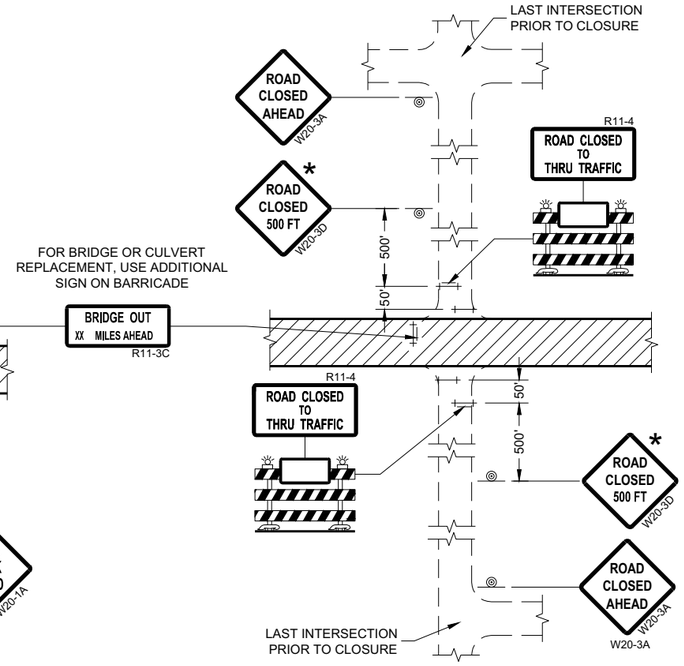
DETAIL 1
(NO ACCESS TO PROJECT)



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



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



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

GENERAL NOTES

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

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

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

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

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

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

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

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

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

* OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.

** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6
SDD 15C03 - 05

GENERAL NOTES

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

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

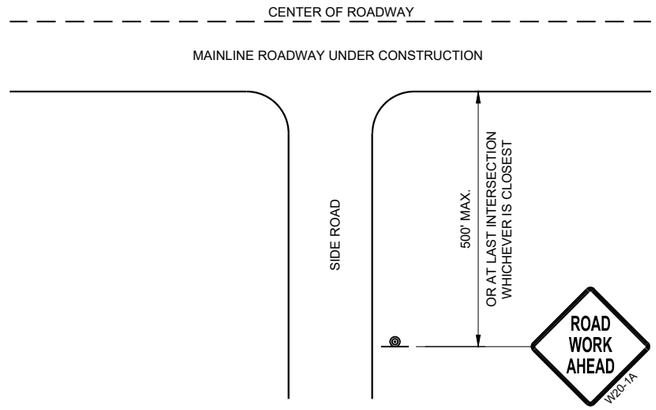
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

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

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

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



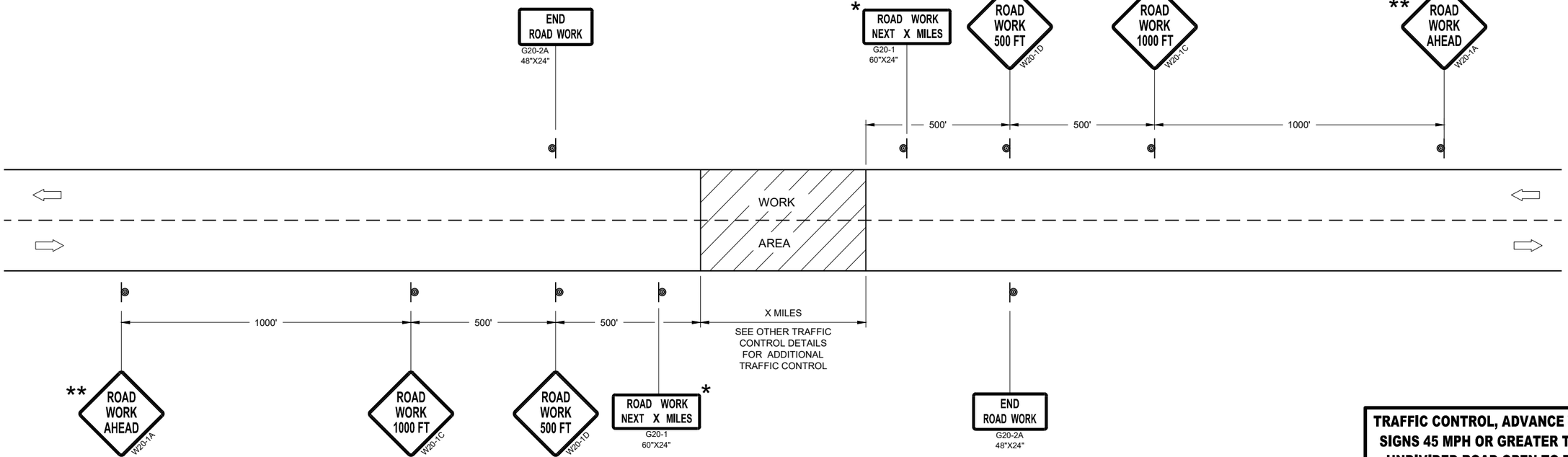
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

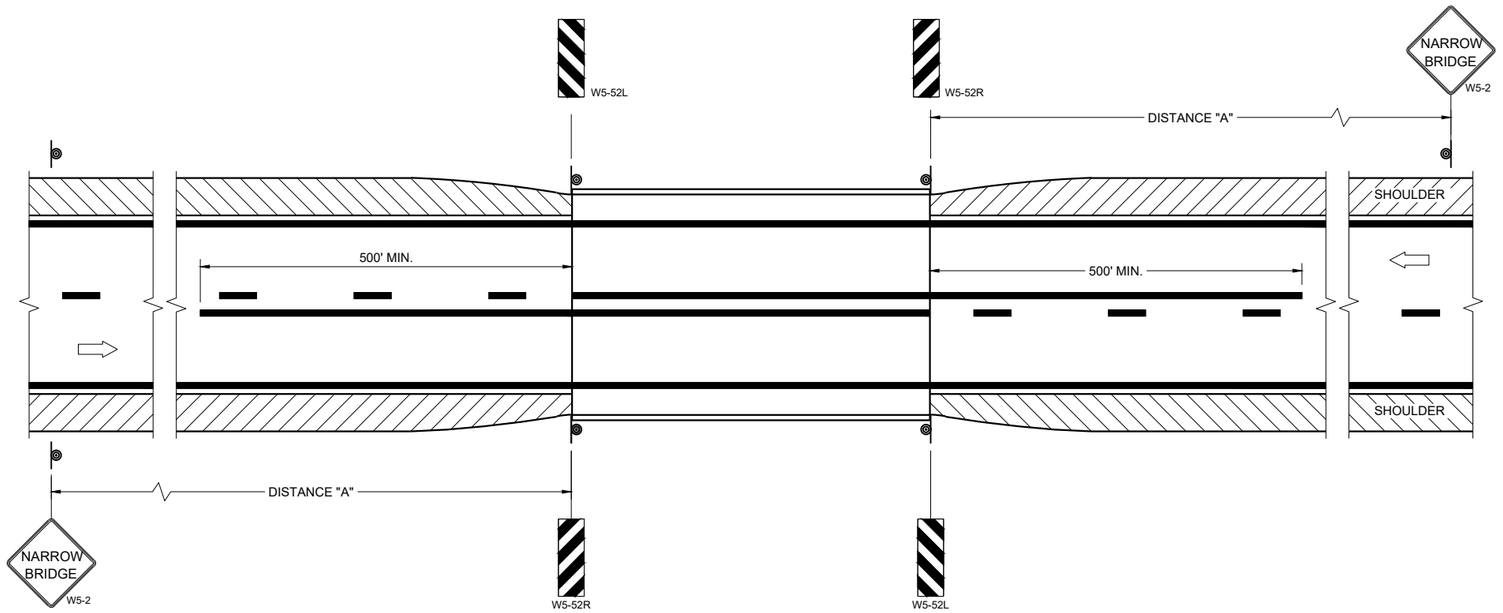
APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

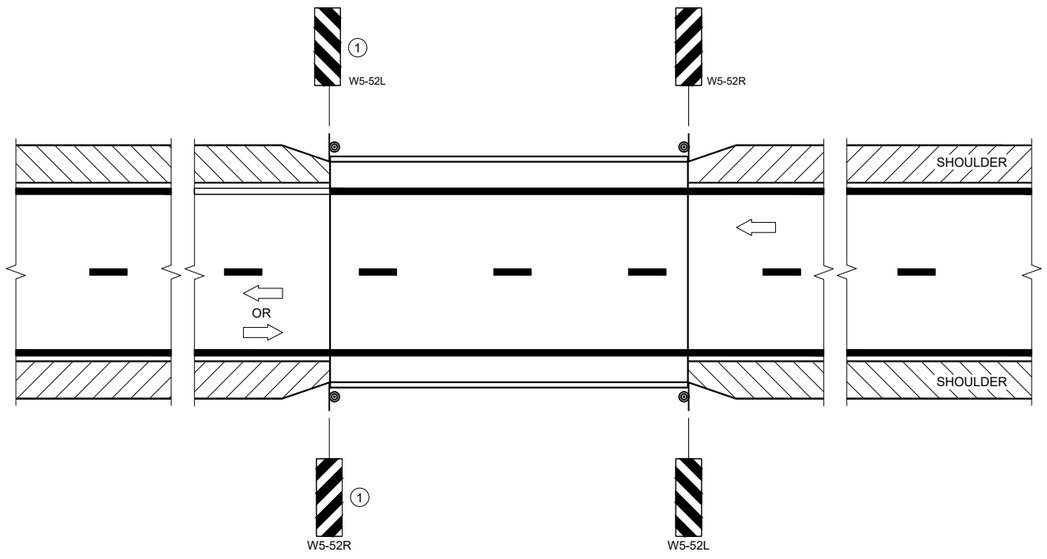
6

SDD 15C04 - 05



SITUATION 1

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



SITUATION 2

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

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THE 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.

ON BRIDGE ONLY PROJECTS, PLACE 300 FEET OF EDGELINE.

OMIT EDGELINES ON ROADWAYS WITHOUT EXISTING EDGELINES.

(1) OMIT ON ONE-WAY TRAVELED WAYS.

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

DISTANCE TABLE

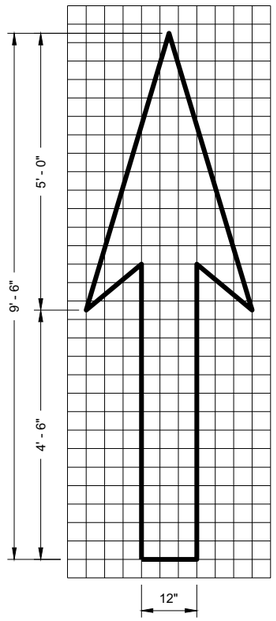
POSTED OR 85TH PERCENTILE SPEED	DISTANCE "A"
25	150'
30	200'
35	250'
40	300'
45	400'
50	550'
55	700'

SIGNING AND MARKING FOR TWO LANE BRIDGES

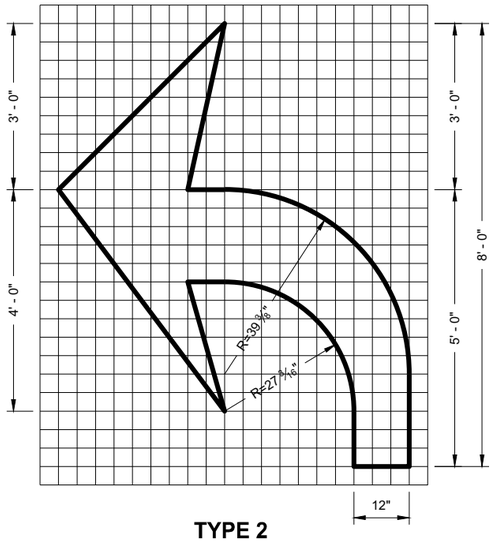
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

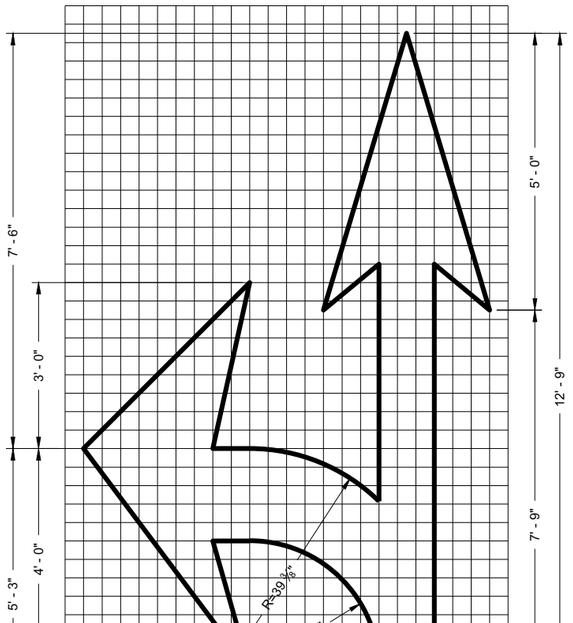
6
SDD 15C06-12



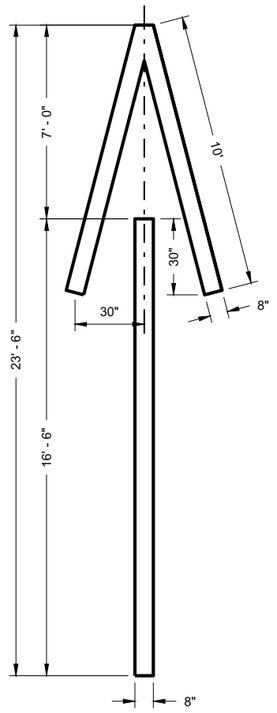
TYPE 1



TYPE 2



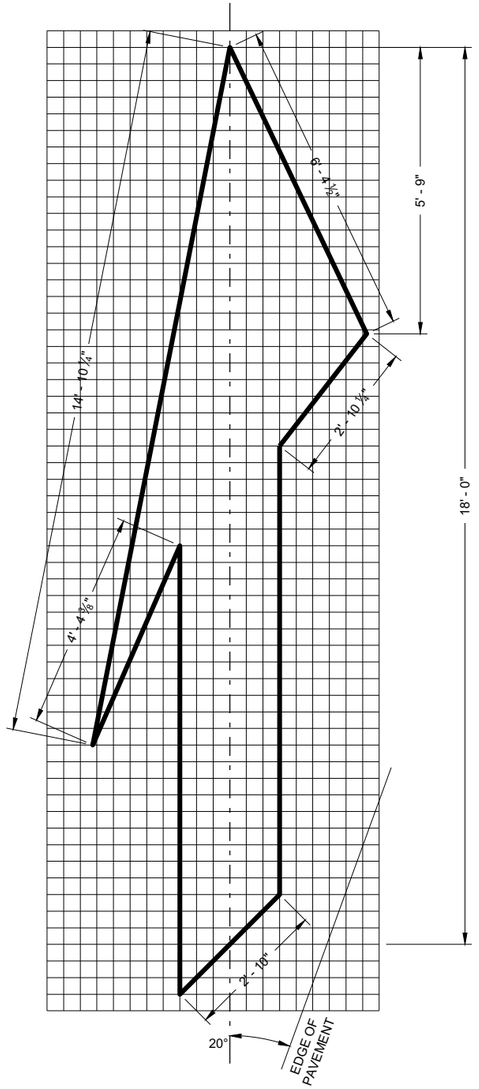
TYPE 3



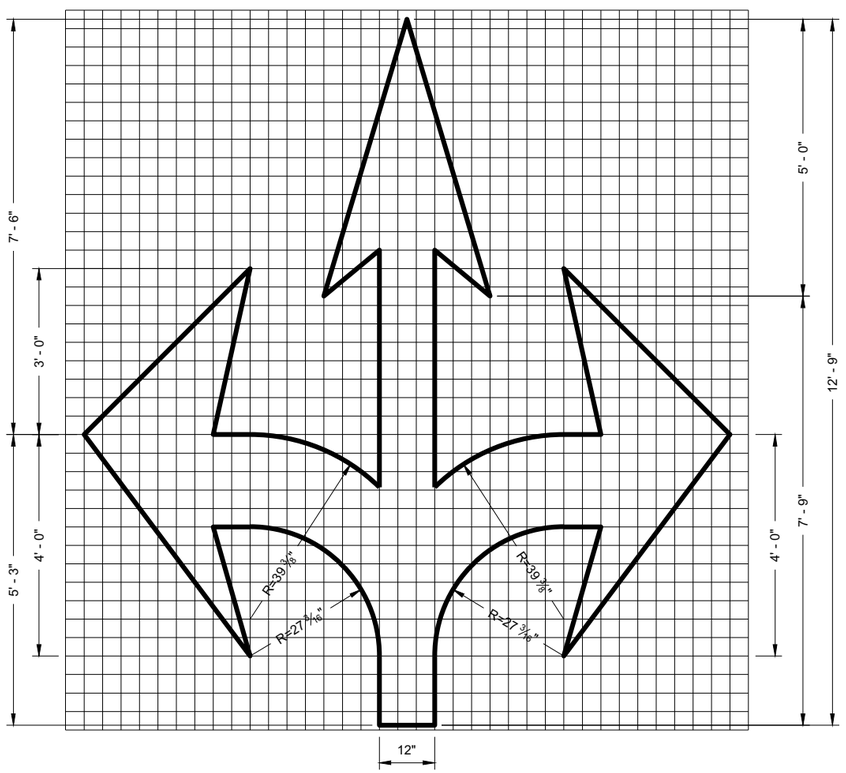
TYPE 4

GENERAL NOTES

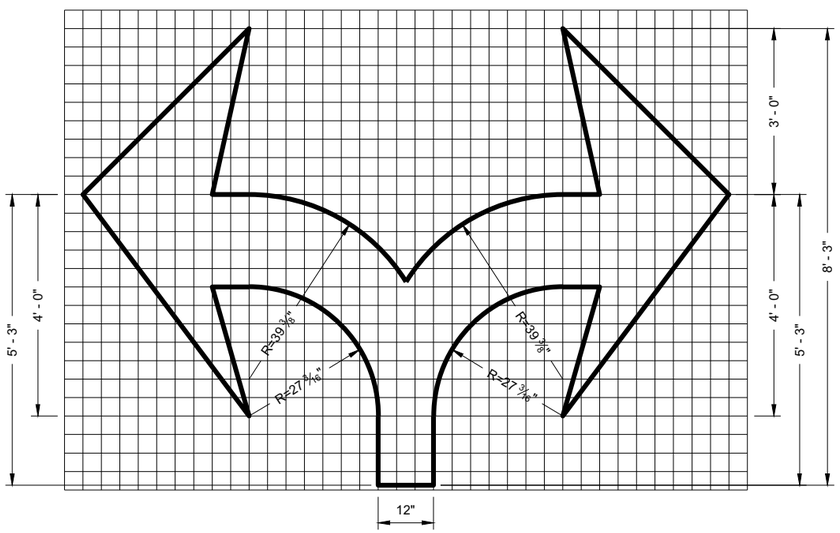
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MARKING ENGINEER

FHWA

6

SDD 15C07 - 15c

6

SDD15C07 - 15c

GENERAL NOTES

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

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

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

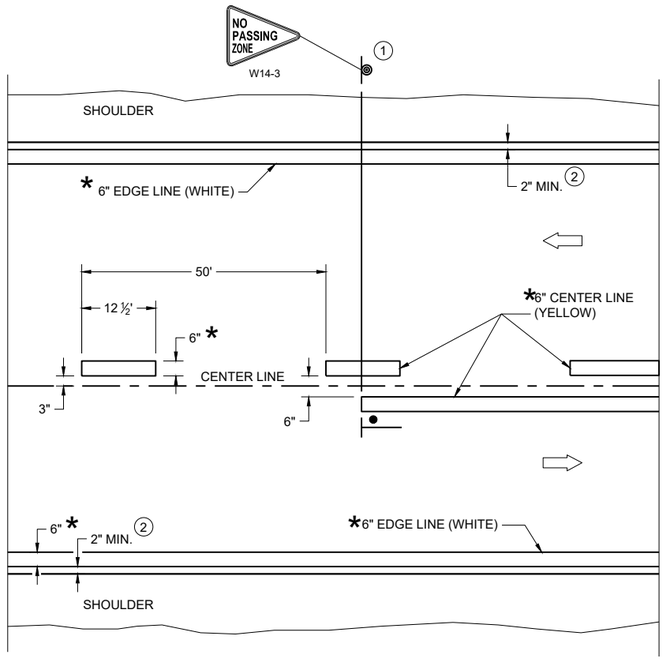
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

LEGEND

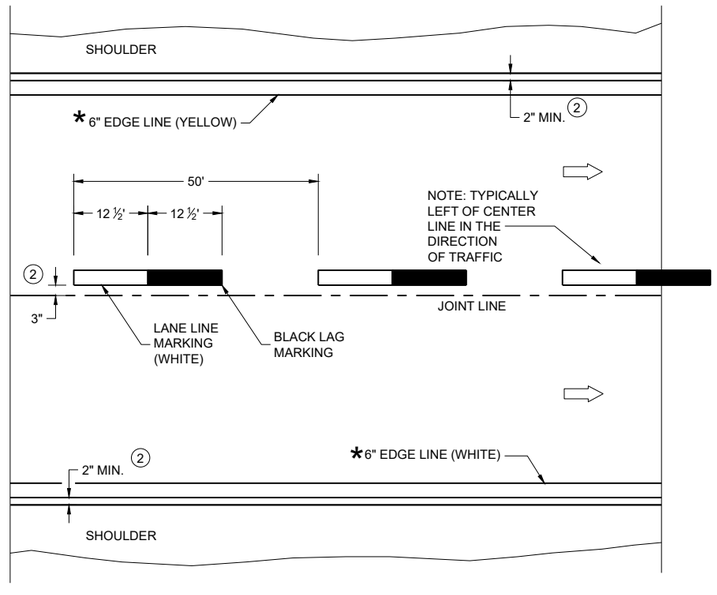
"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

6

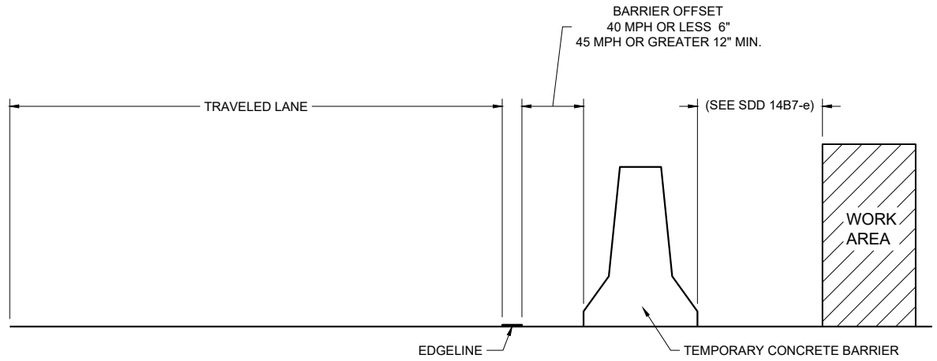
PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

SDD 15C08-23a



TEMPORARY BARRIER OFFSET FROM EDGELINE

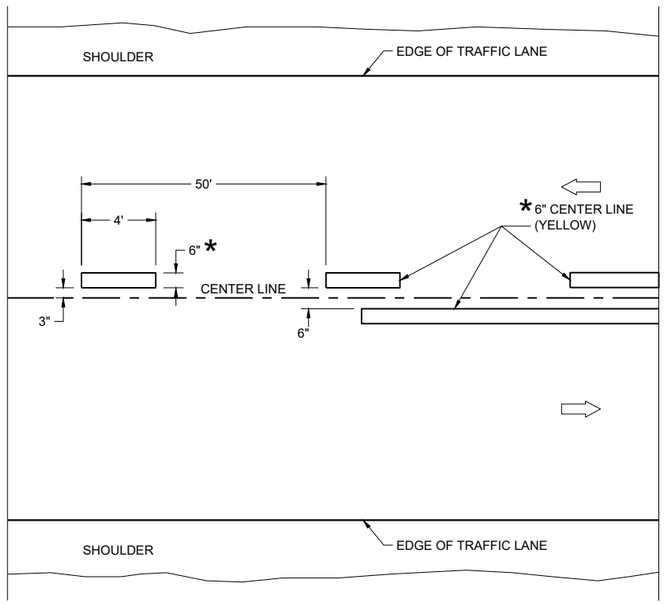
GENERAL NOTES

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

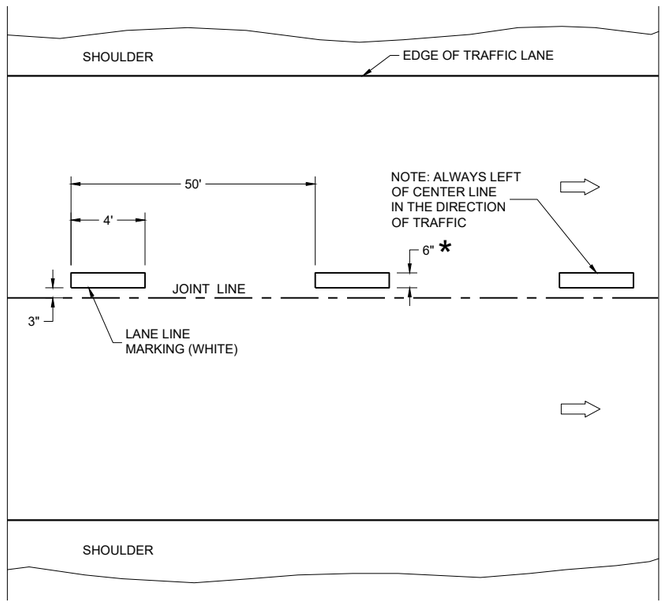
LEGEND

⇨ DIRECTION OF TRAFFIC

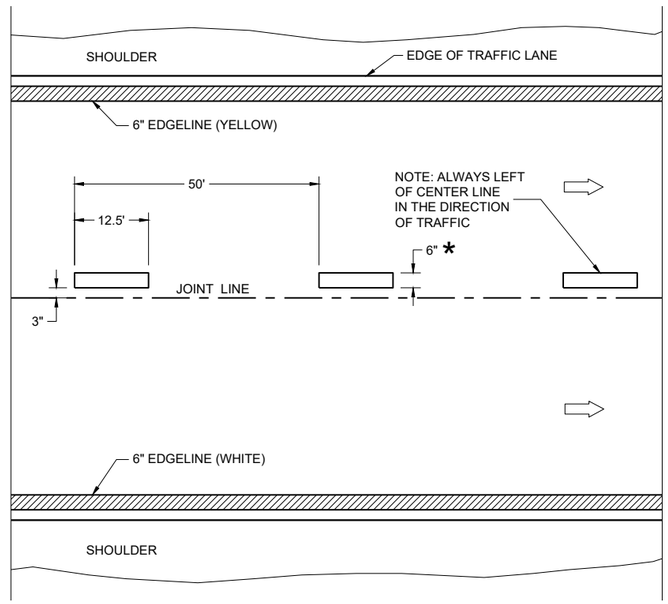
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

TEMPORARY PAVEMENT MARKING

TEMPORARY LONGITUDINAL PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

SDD 15C08-23b

6

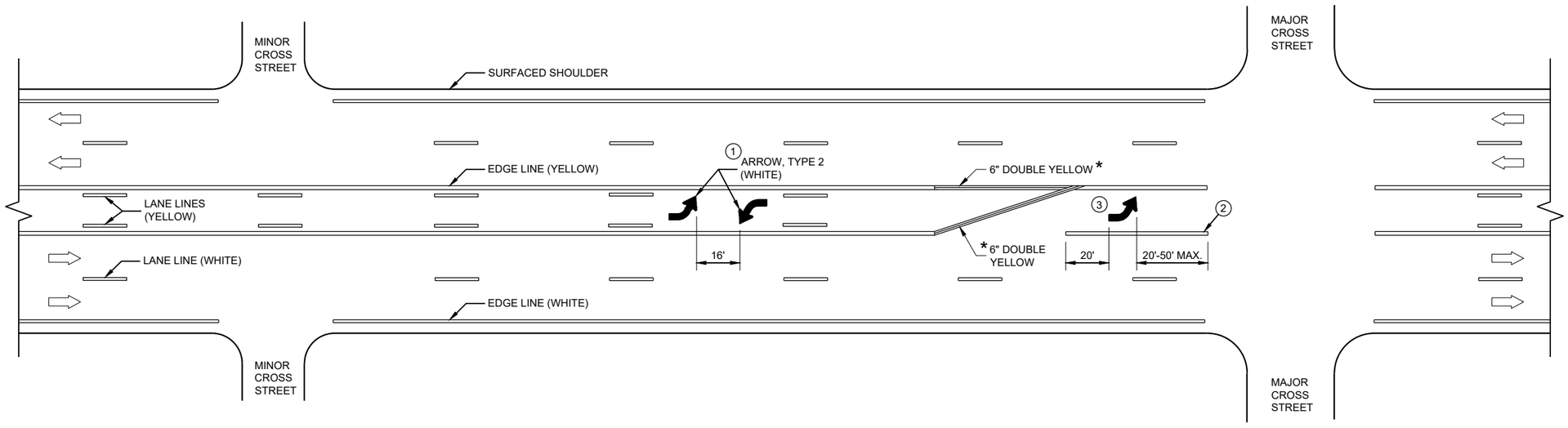
SDD 15C08-23b

GENERAL NOTES

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

⇨ DIRECTION OF TRAFFIC

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY LEFT TURN LANE

6

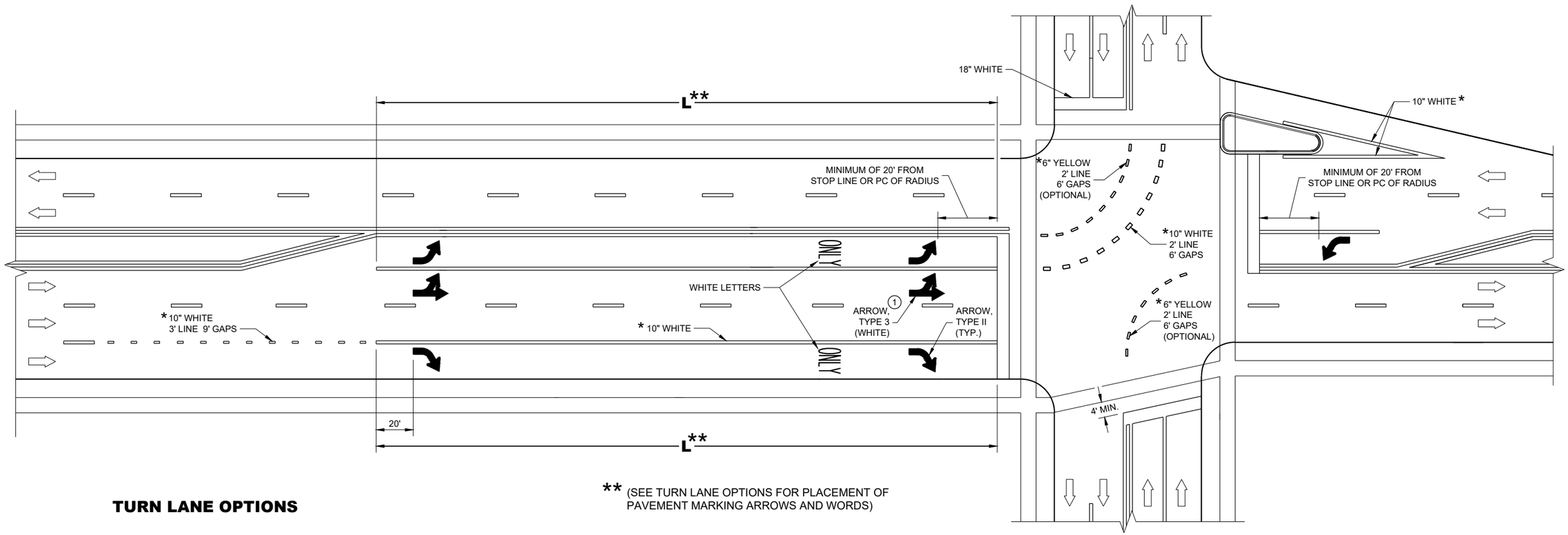
SDD 15C08-23c

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

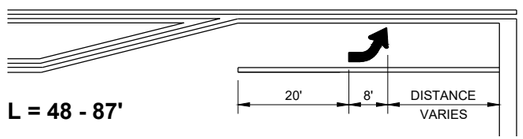
SDD 15C08-23c



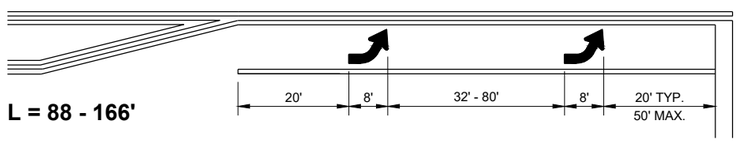
** (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

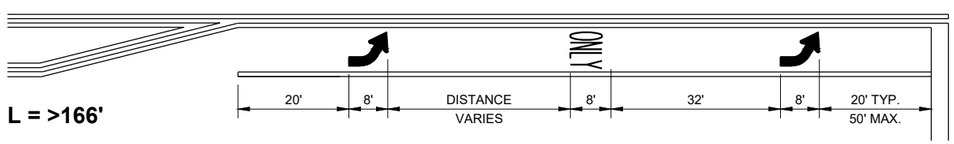
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

GENERAL NOTES

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

⇨ DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

PAVEMENT MARKING (TURN LANES)

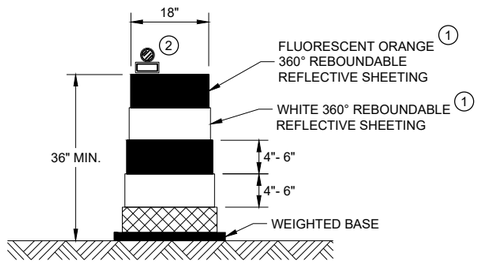
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C08-23d

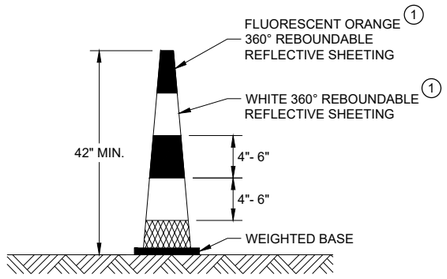
GENERAL NOTES

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



DRUM

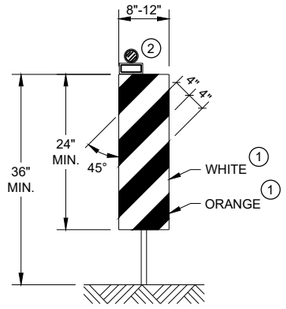
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

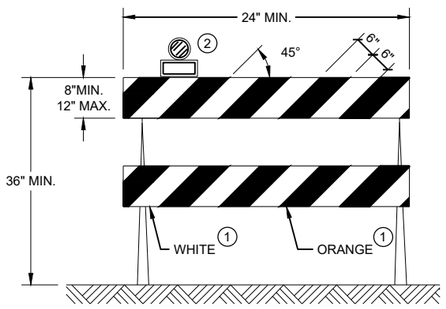
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



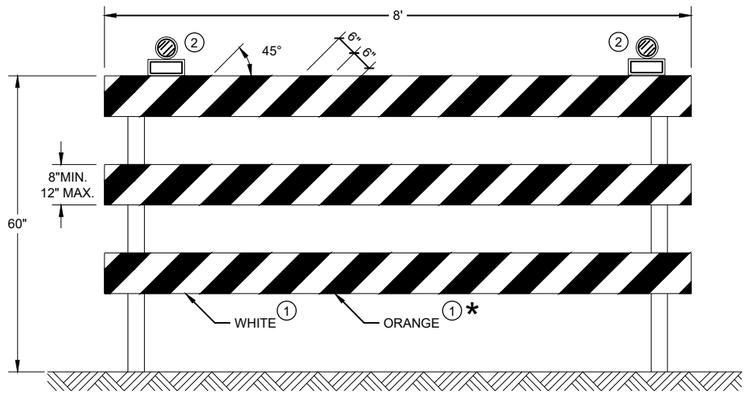
VERTICAL PANEL

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



TYPE 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
November 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6
SDD 15C11 - 10b

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

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

GENERAL NOTES

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

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

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

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

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

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

FLAGGING

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

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

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

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

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

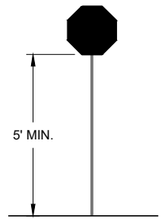
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

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

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

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



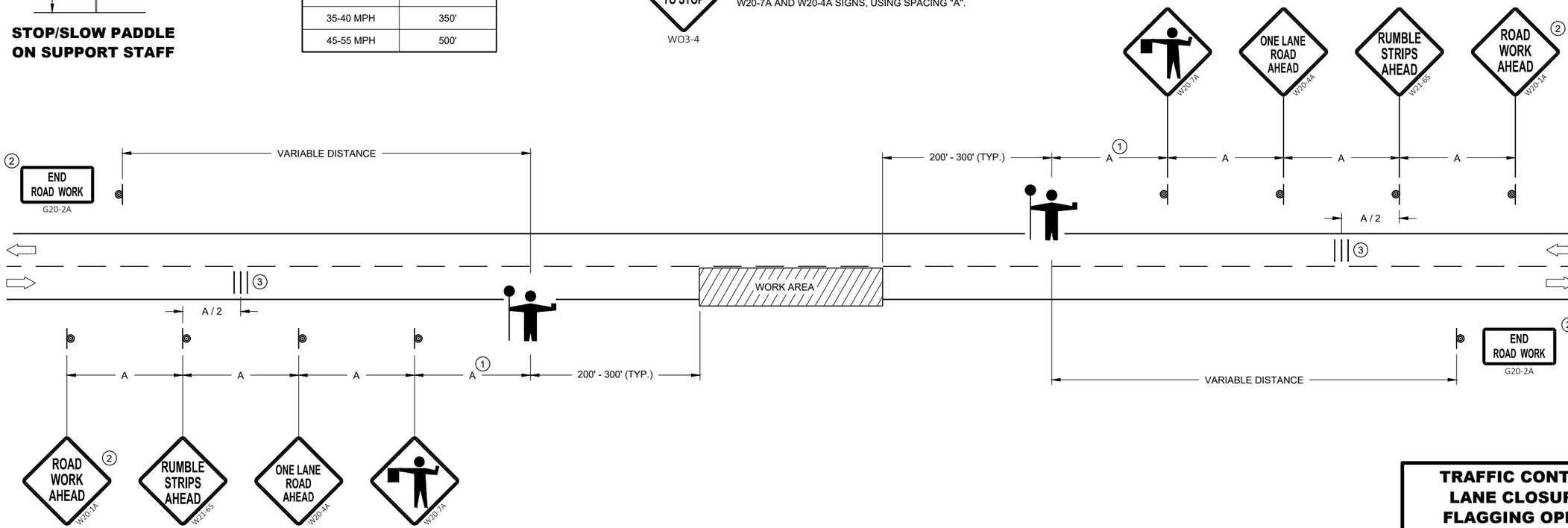
STOP/SLOW PADDLE ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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

WO3-4

USE OF WO3-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6
SDD 15C12 - 09a

GENERAL NOTES

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL CONE 42-INCH
- TRAFFIC CONTROL DRUM
- TEMPORARY PORTABLE RUMBLE STRIP ARRAY
- DIRECTION OF TRAFFIC
- WORK AREA
- AFAD — AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD)

GENERAL NOTES

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

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

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

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

FLAGGING

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

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

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

(2) IF FLAGGERS ARE PHYSICALLY NEEDED TO FLAG, REPLACE WO3-4 SIGNS WITH W20-7A SIGNS.

TEMPORARY PORTABLE RUMBLE STRIPS

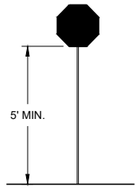
UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

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

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

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

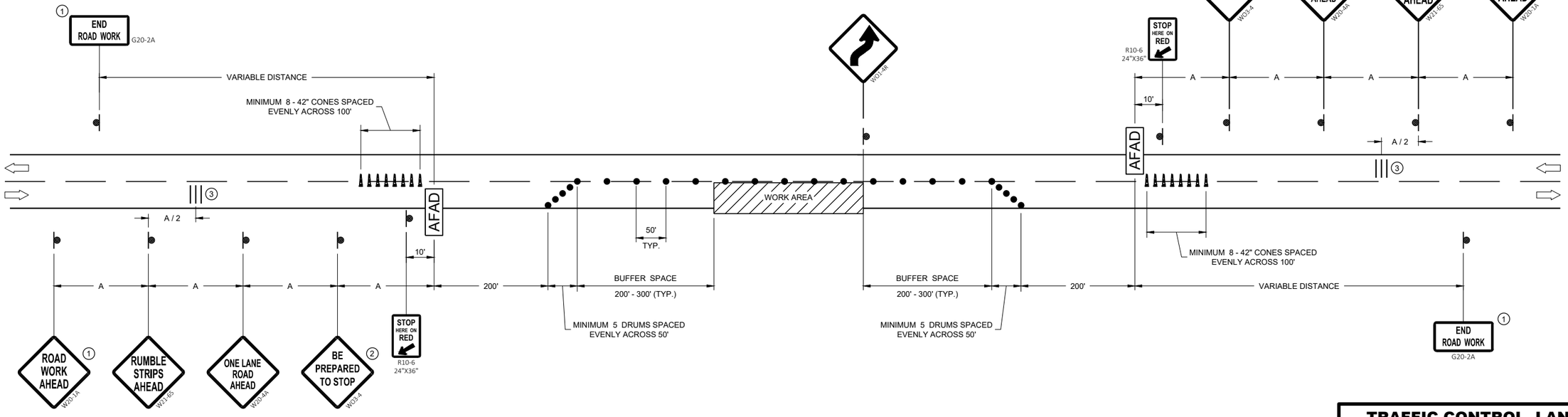
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSELY AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER.



STOP/SLOW PADDLE ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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



TRAFFIC CONTROL, LANE CLOSURE WITH AUTOMATED FLAGGER ASSISTANCE DEVICE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

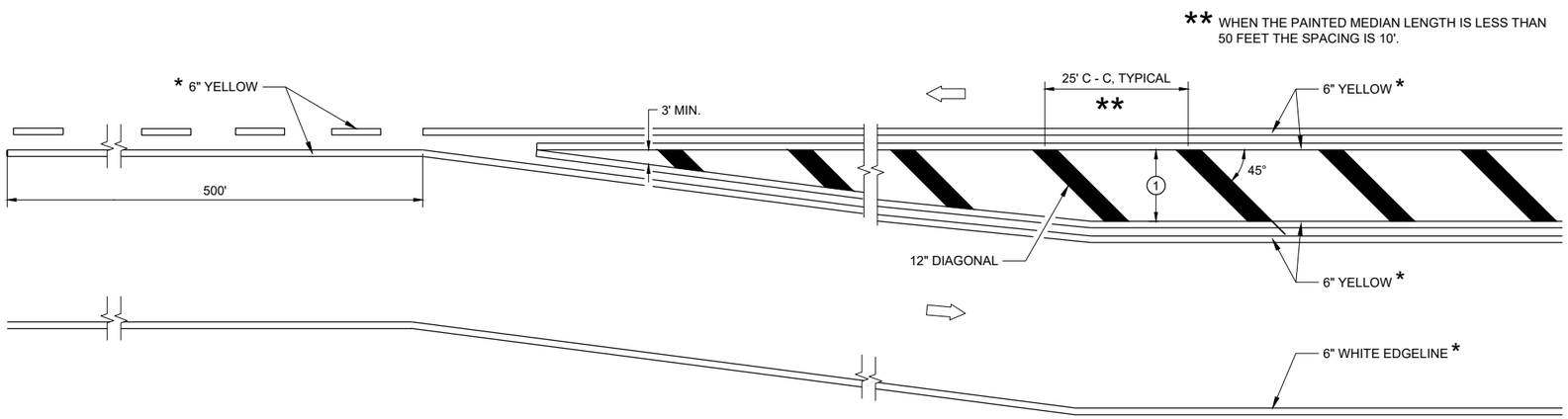
APPROVED
May 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15C12 - 09b



MEDIAN ISLAND DETAIL

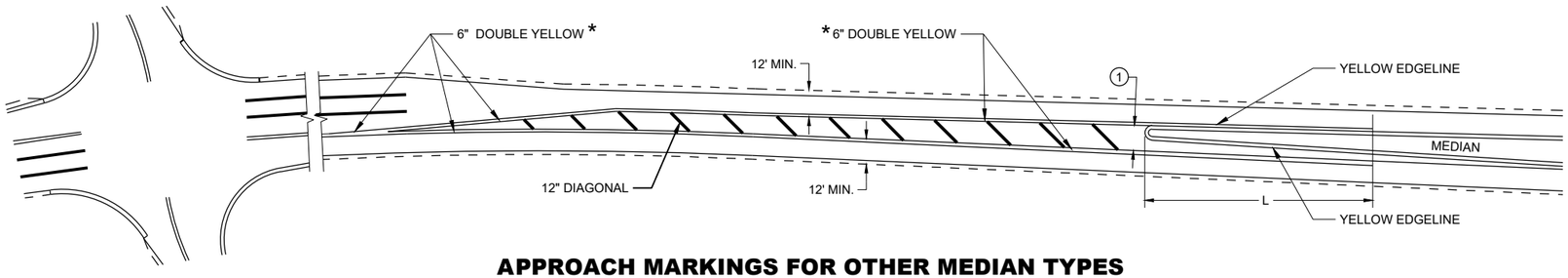
GENERAL NOTES

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

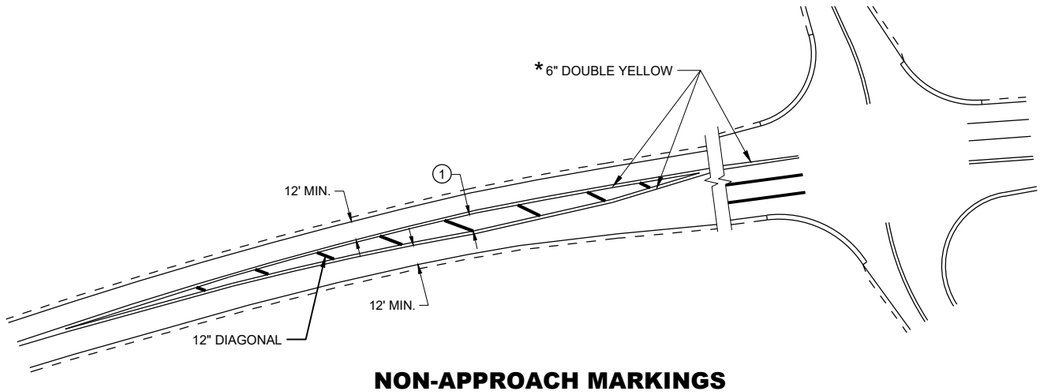
⇨ DIRECTION OF TRAVEL

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

SPEED LIMIT	L
<35 MPH	5'
35> MPH	50'



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON-APPROACH MARKINGS

MEDIAN ISLAND PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Jeannie Silver — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

6

SDD 15C18-08a

LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

GENERAL NOTES

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

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

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

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

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

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

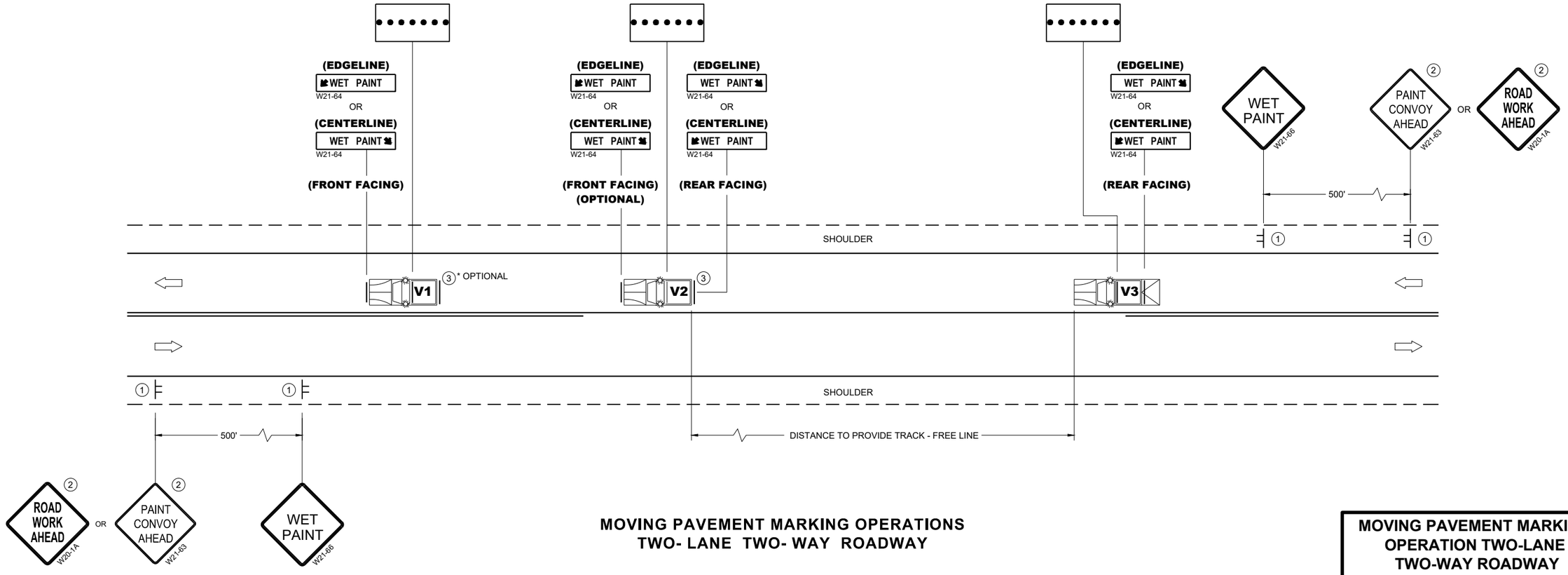
CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

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

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

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

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



MOVING PAVEMENT MARKING OPERATIONS
TWO- LANE TWO- WAY ROADWAY

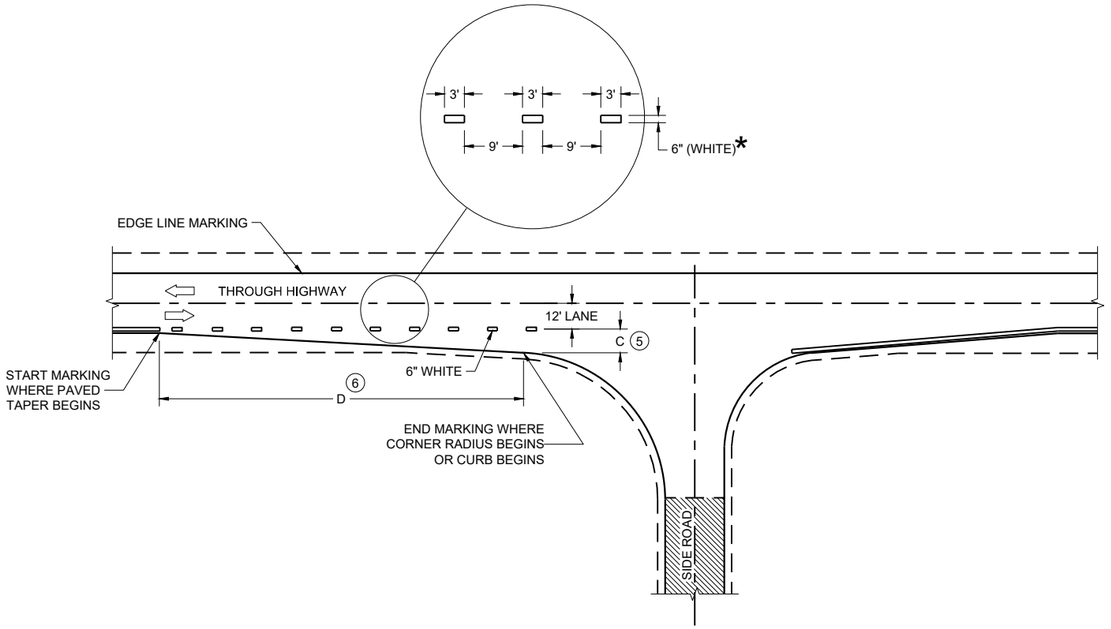
MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2024
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER
FHWA

6

SDD 15C19-9a



MINOR INTERSECTION

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

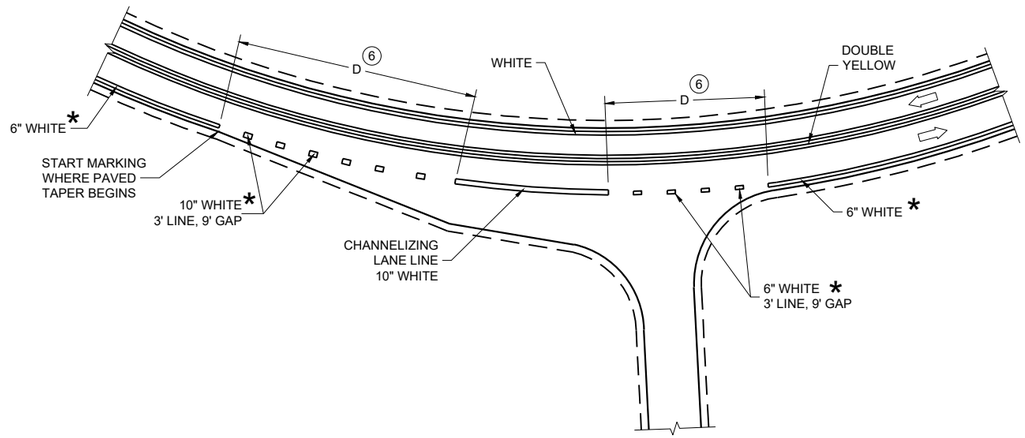
GENERAL NOTES

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

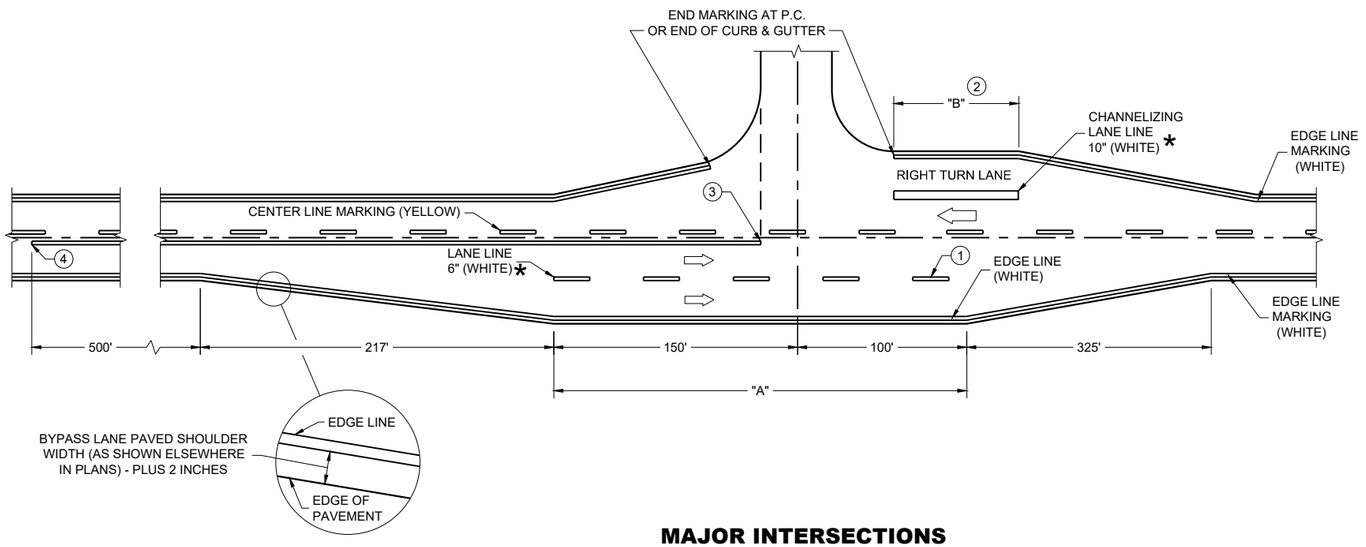
1. WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
2. WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
3. BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
4. BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
5. WHEN DISTANCE "C" IS LESS THAN 4 FEET, OMIT DOTTED EXTENSION.
6. WHEN DISTANCE "D" IS LESS THAN 50 FEET, OMIT DOTTED EXTENSION.

LEGEND

DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

PAVEMENT MARKING (INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C35-06a

LEGEND

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL DRUM

DIRECTION OF TRAFFIC

WORK ZONE

GENERAL NOTES

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

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

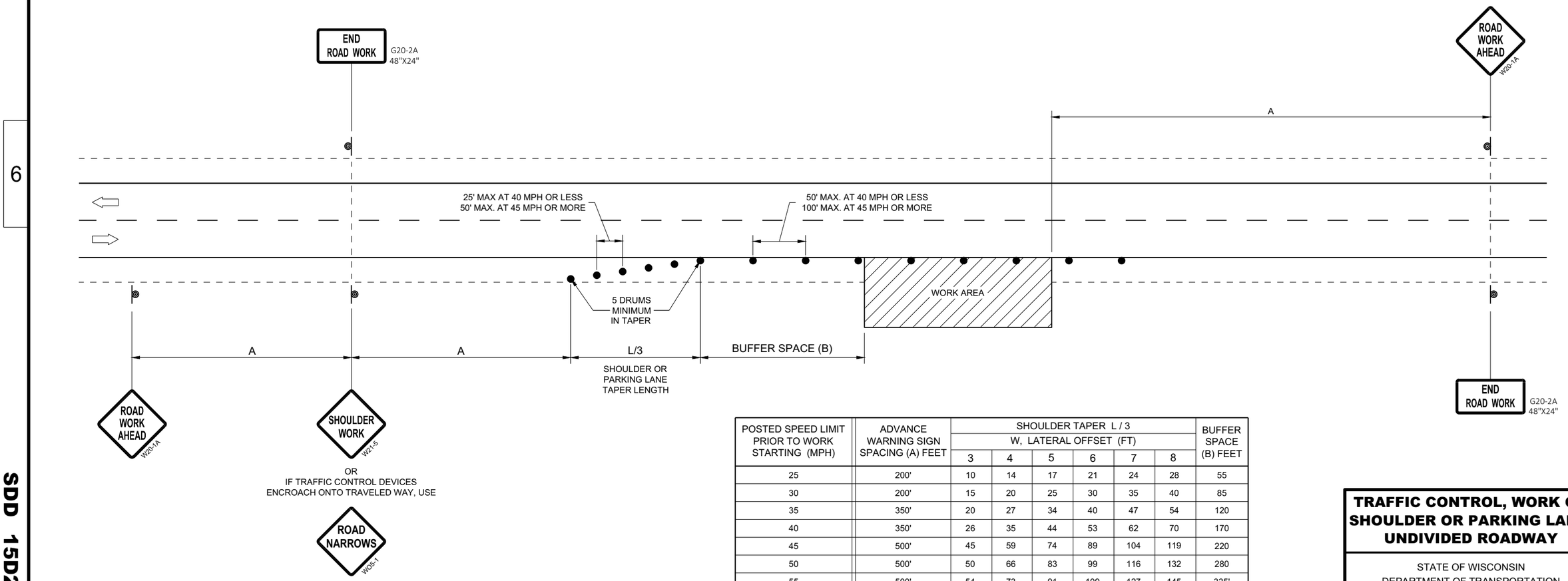
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

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

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

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



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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

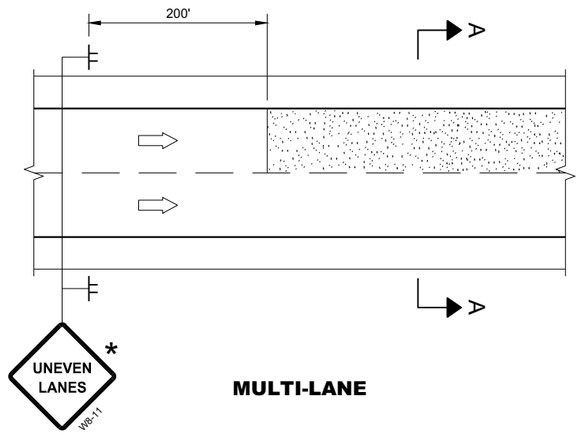
APPROVED
May 2020
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER

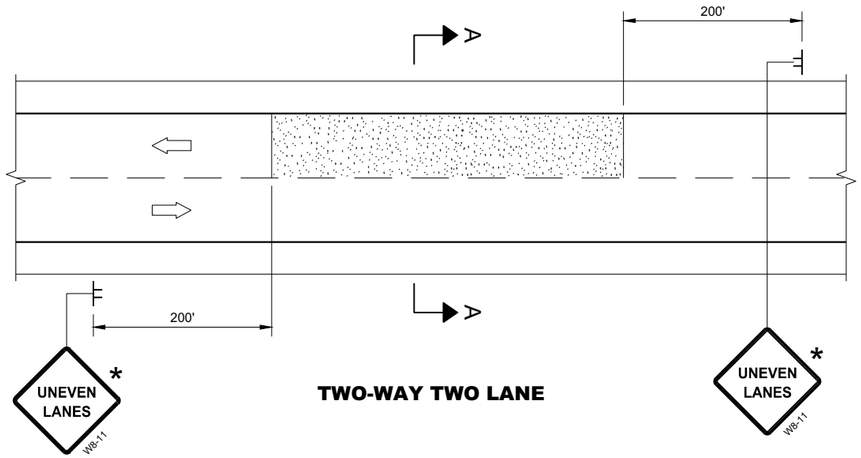
FHWA

6

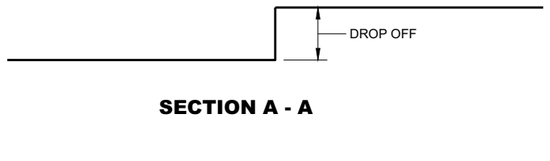
SDD 15D28 - 04



MULTI-LANE

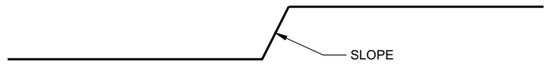


TWO-WAY TWO LANE

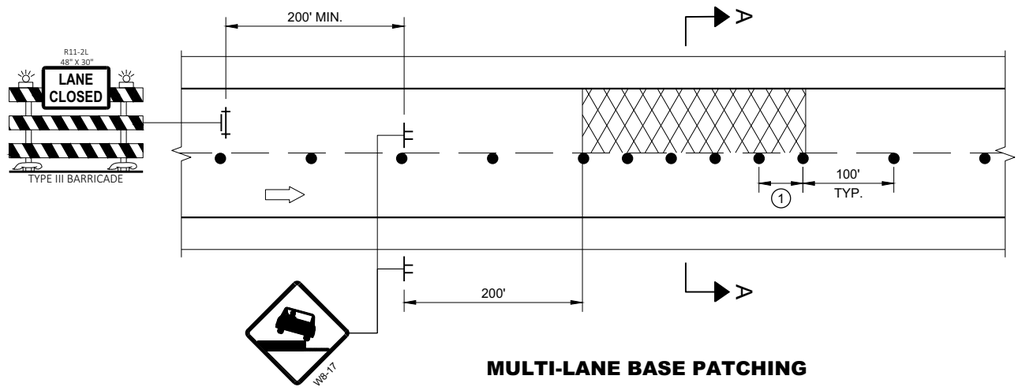


SECTION A - A

OR

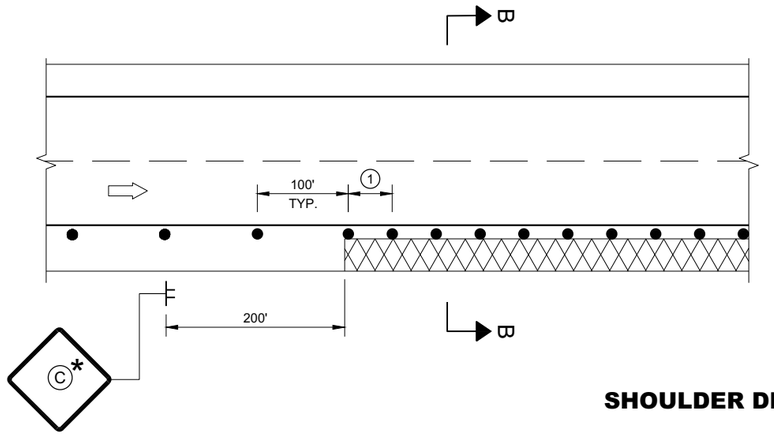


SECTION A - A

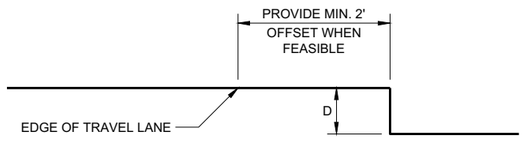


MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS



SHOULDER DROP-OFFS



SECTION B - B

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

GENERAL NOTES

FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.

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

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

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

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

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

LEGEND

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

TRAFFIC CONTROL, DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

6

SDD 15D39 - 02

6

SDD 15D39 - 02

GENERAL NOTES

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

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

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

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

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

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

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

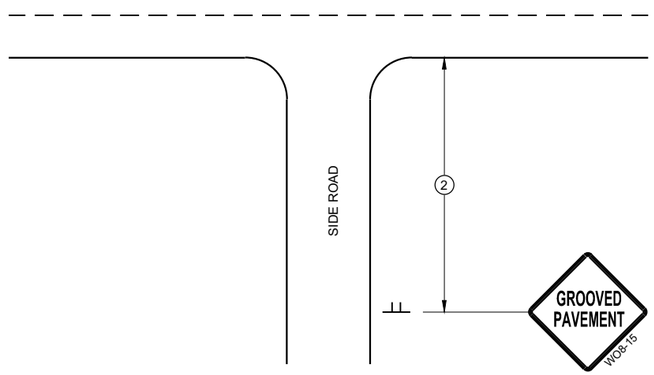
(1) PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

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

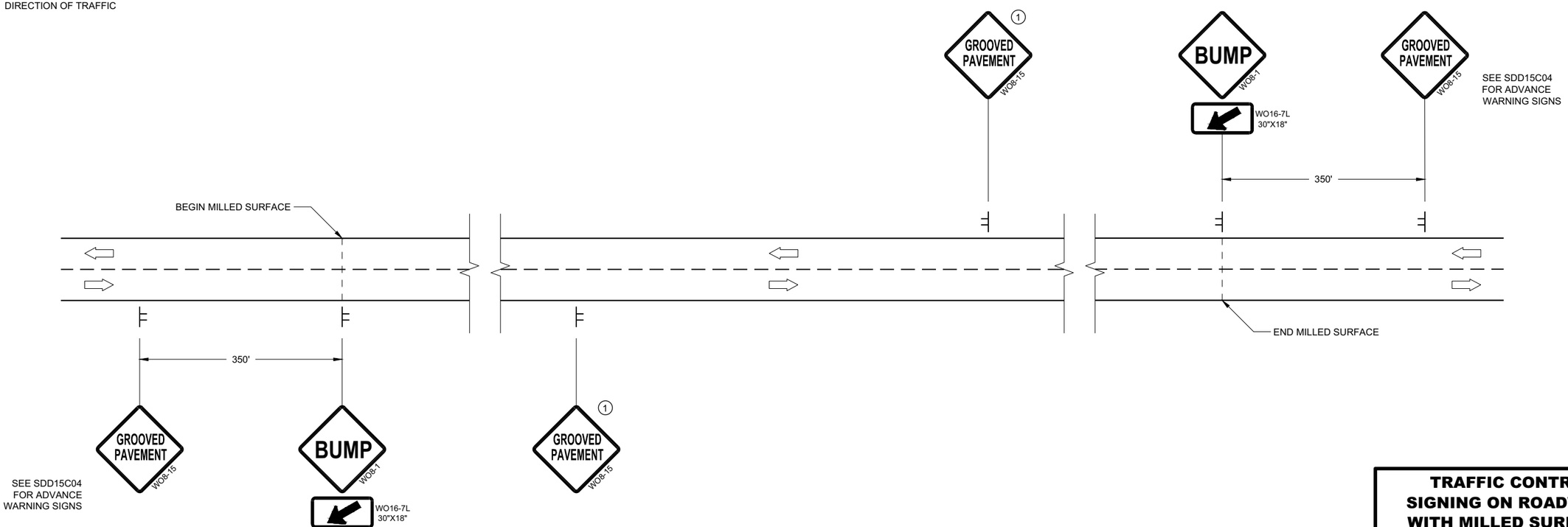
LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON MILLED SURFACES

TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D44 - 02

LEGEND

V1 WORK VEHICLE

V2 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

FLASHING ARROW PANEL (CAUTION)

WORK AREA

DIRECTION OF TRAFFIC

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

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

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

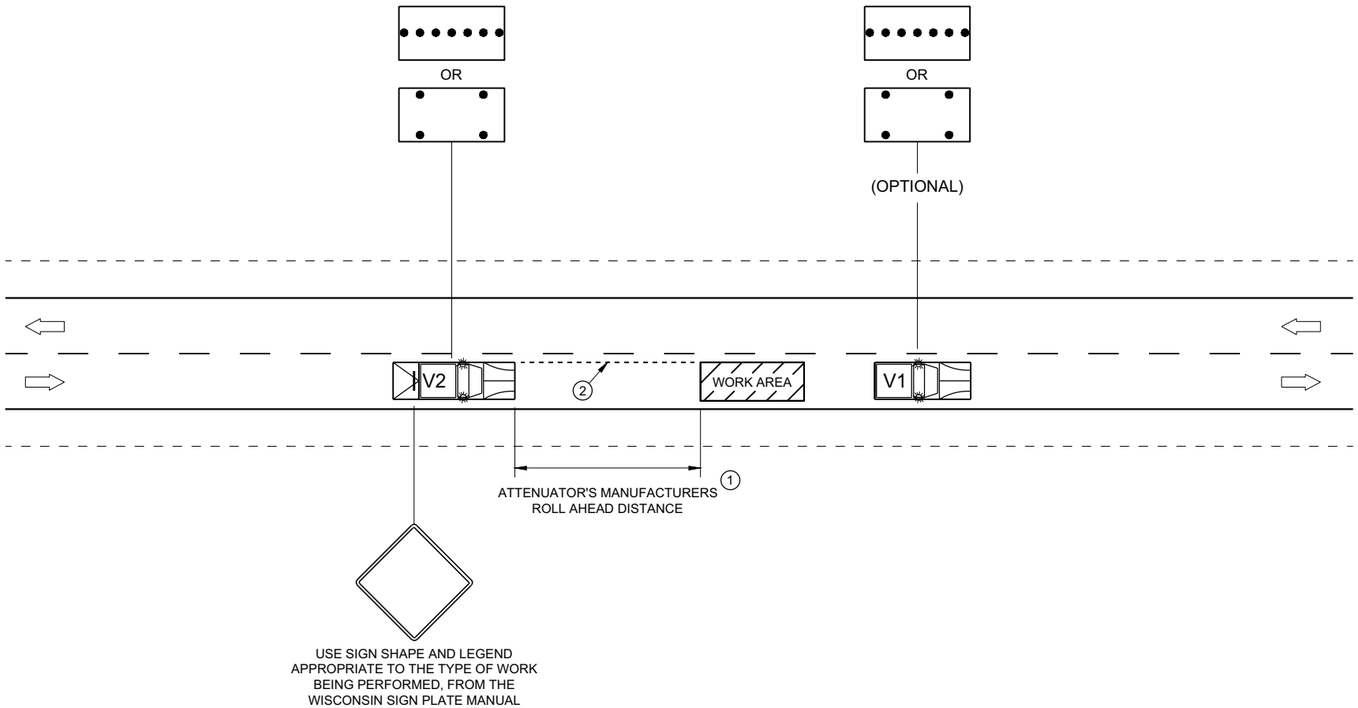
ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

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

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

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

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



TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

February 2021
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER

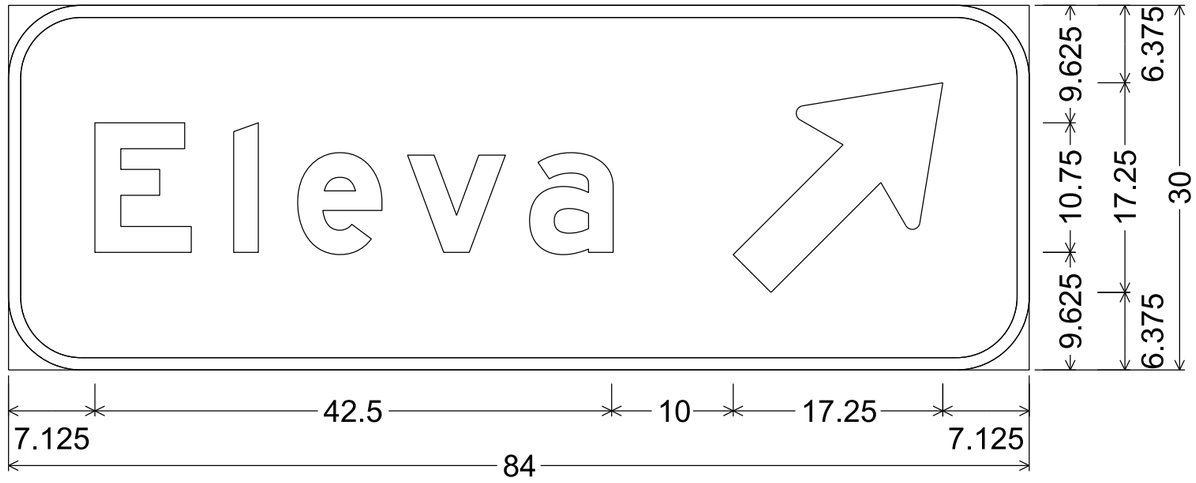
FHWA

6

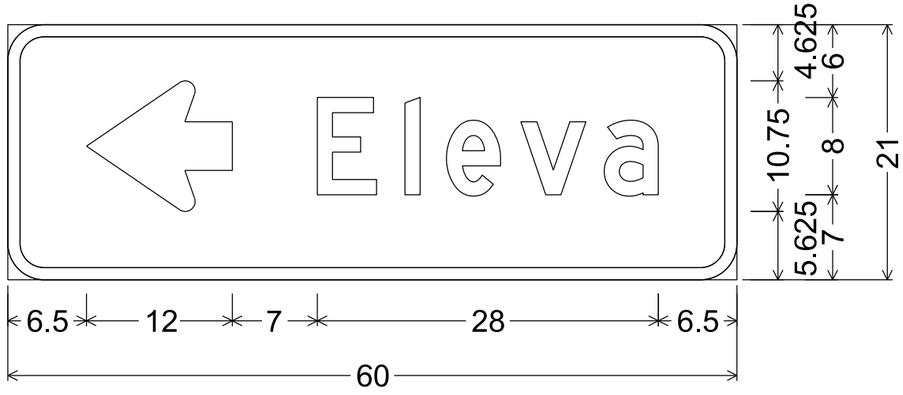
SDD 15D51 - 01

NOTES

1. Fixed Message Signs Type II- Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - E Mod or as noted

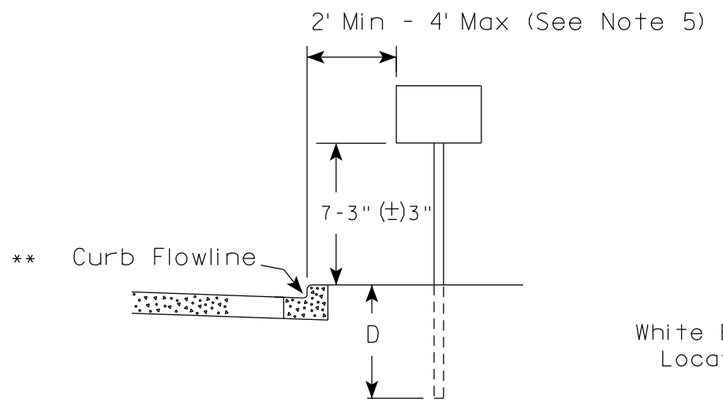


6.000" Radius, 1.000" Border

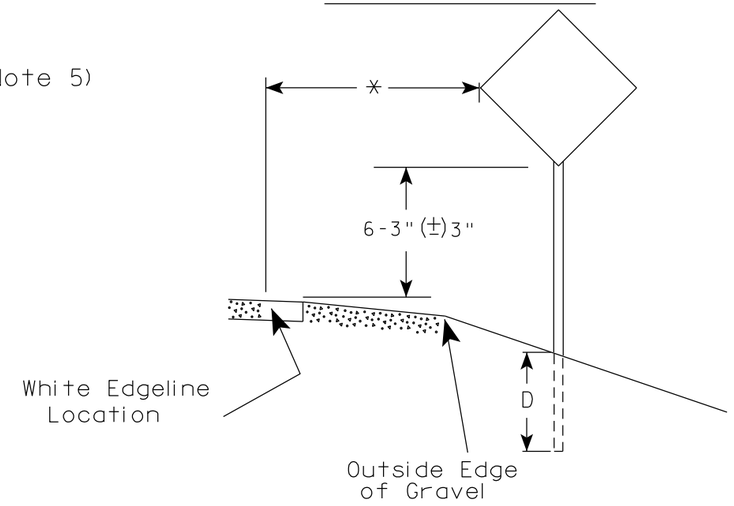


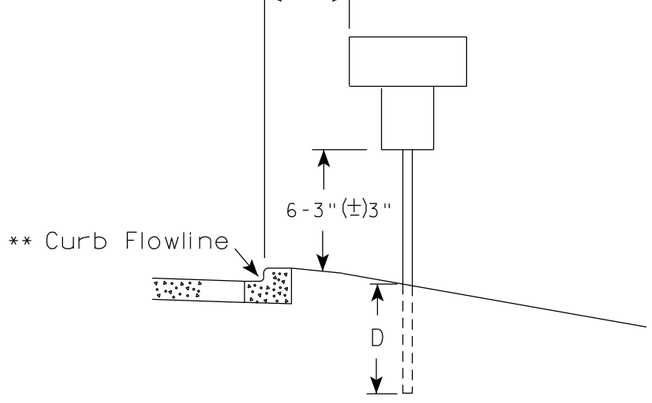
D1-1; 3.000" Radius, 1.000" Border
"Eleva", D

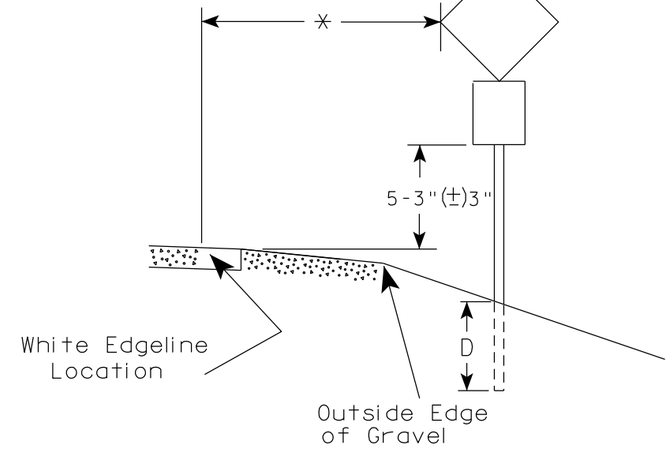
URBAN AREA



RURAL AREA (See Note 2)







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

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

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±) 3".
3. For expressways and freeways, mounting height is 7'- 3" (±) 3" or 6'-3" (±) 3" depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±) 3".
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directd by the Engineer.

POST EMBEDMENT DEPTH

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

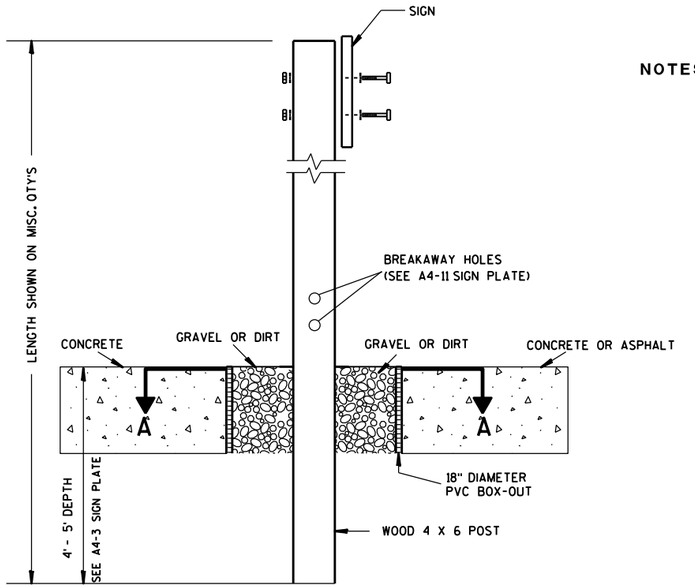
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

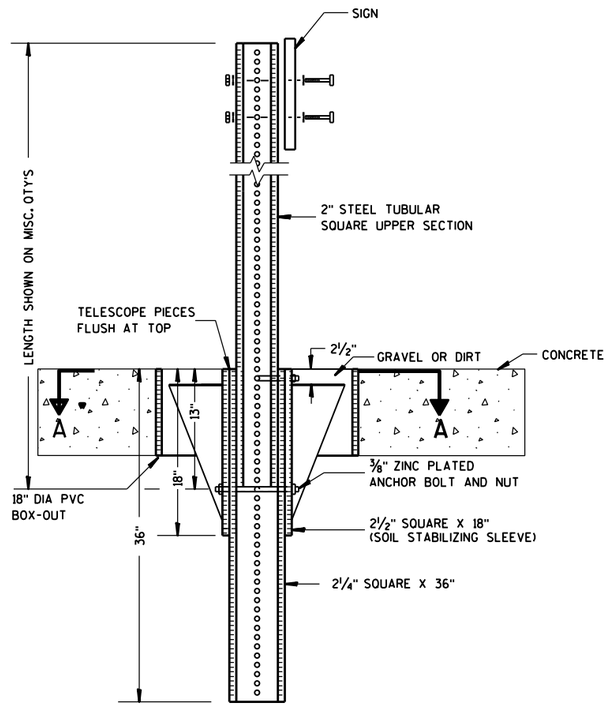
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



ELEVATION VIEW

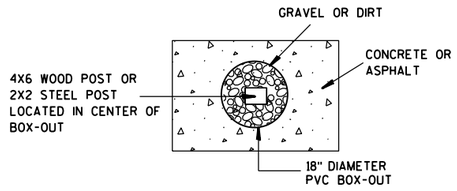
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

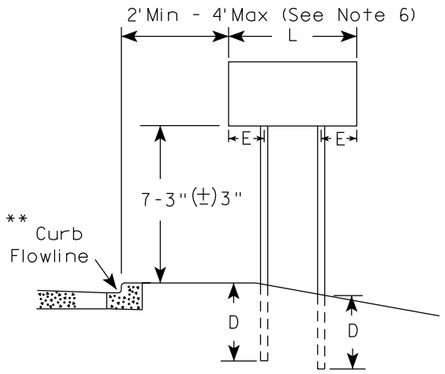
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

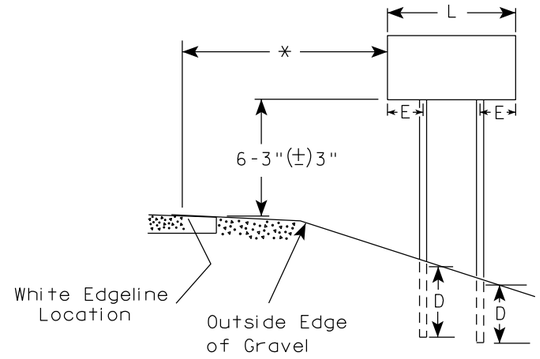
DATE 1/27/14 PLATE NO. A4-3B.1

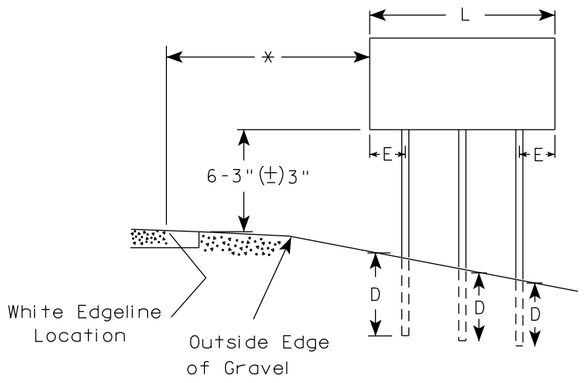
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

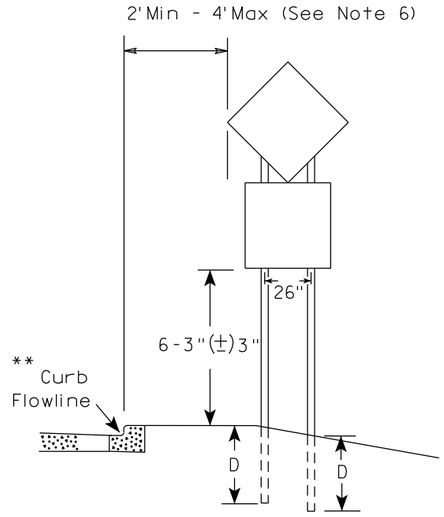
URBAN AREA



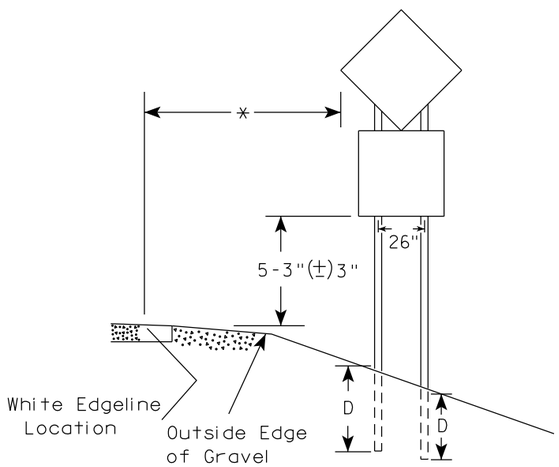
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)		
	L	E
***	Greater than 48" Less than 60"	12"
	60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) 3" or 6'-3" (±) 3" depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±) 3".

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

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

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

POST EMBEDMENT DEPTH

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

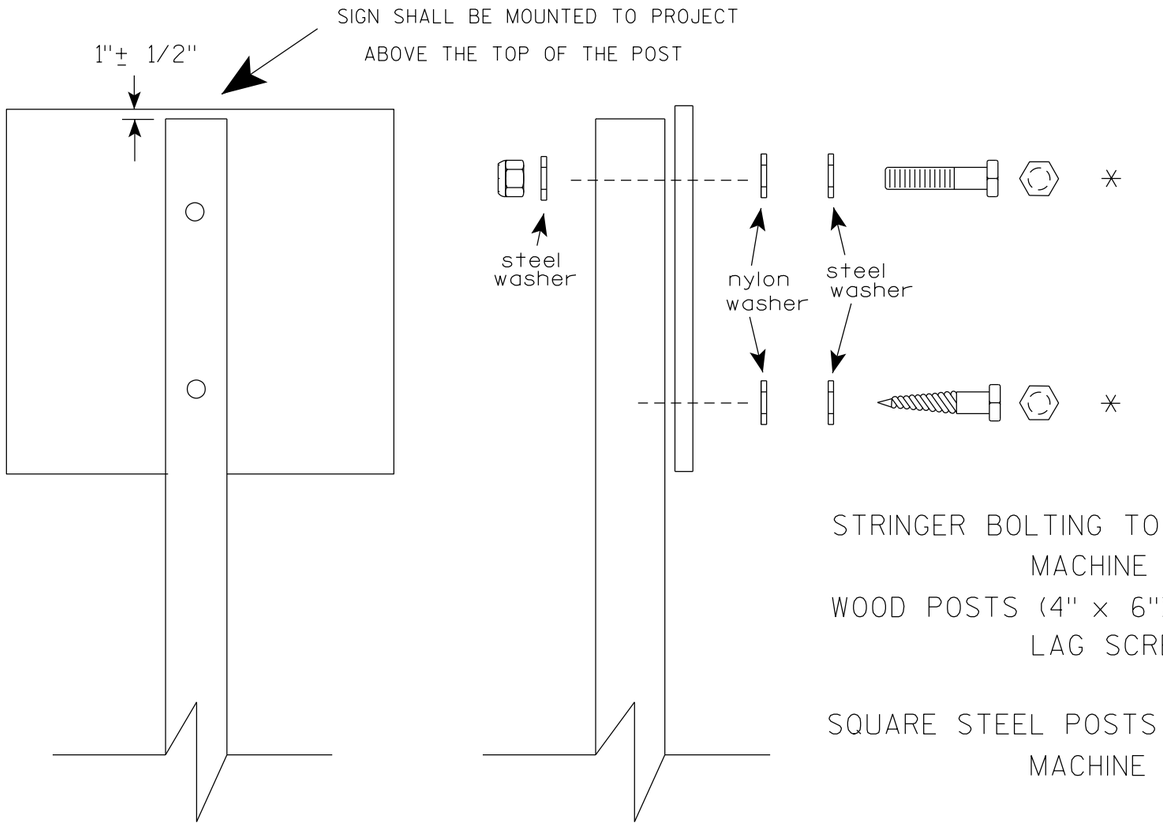
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



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

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

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

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

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

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

WOOD POSTS (4" x 6")

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

SQUARE STEEL POSTS (2" x 2")

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

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

WASHERS (ALL POSTS) -

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

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

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

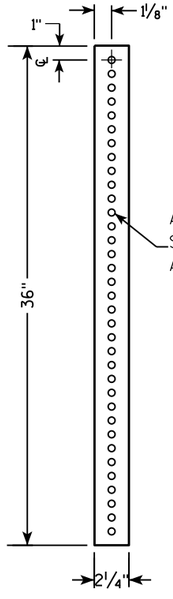
APPROVED Matthew R Rauch
for State Traffic Engineer

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

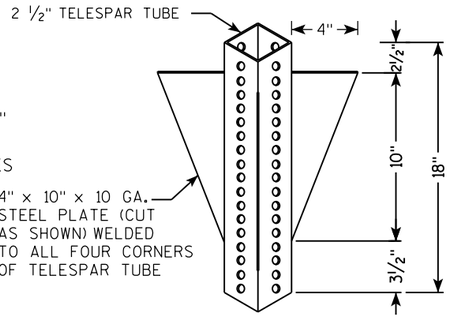
PROJECT NO:				SHEET NO:	E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

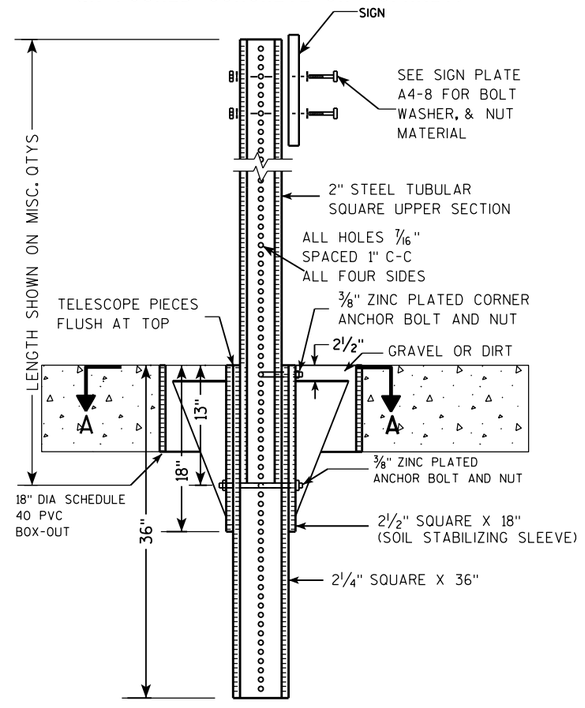
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



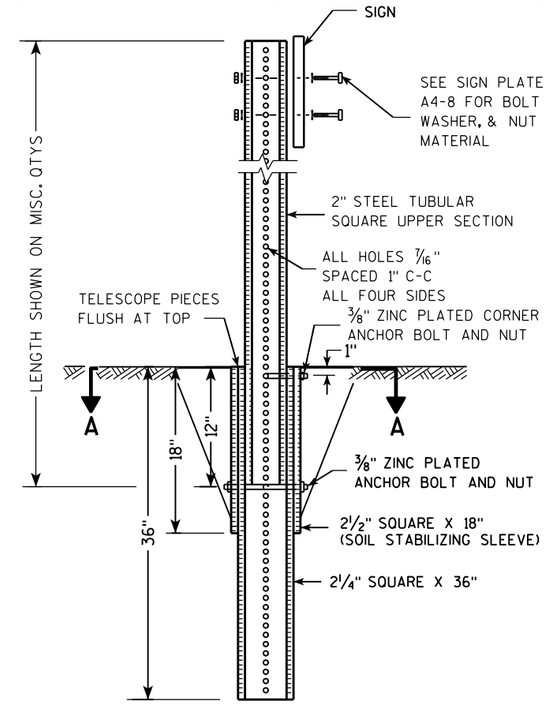
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

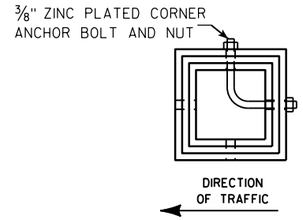


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

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

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

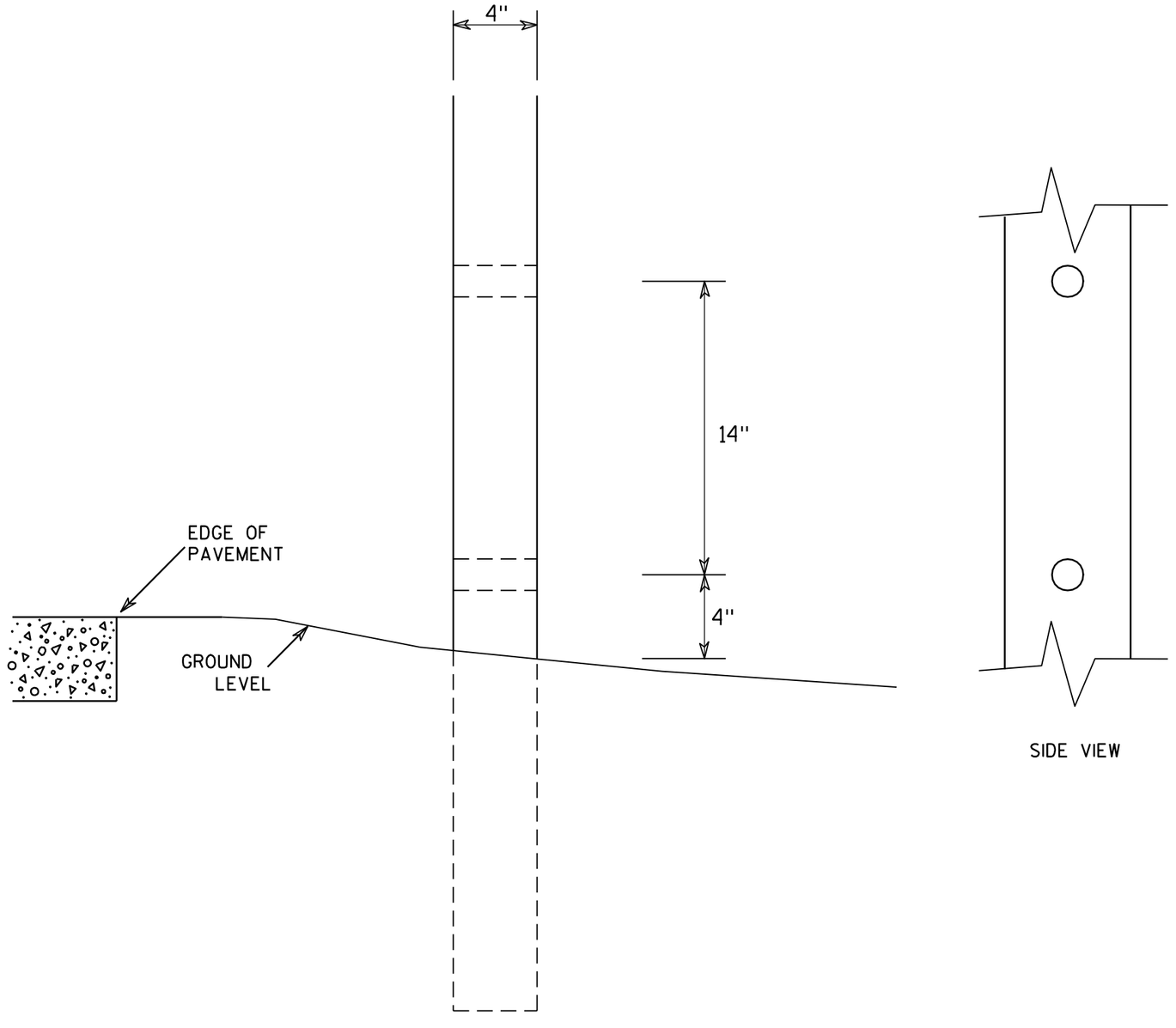
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE NO. A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

4 X 6 WOOD POST MODIFICATIONS

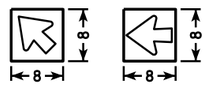
WISCONSIN DEPT OF TRANSPORTATION

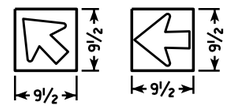
APPROVED Chester J Spang for State Traffic Engineer

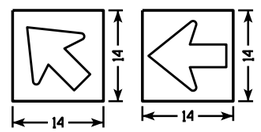
DATE 3/27/97 PLATE NO. A4-11.2

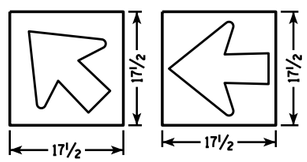
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

SIGN LAYOUT WITH VARIOUS SIZED MESSAGES







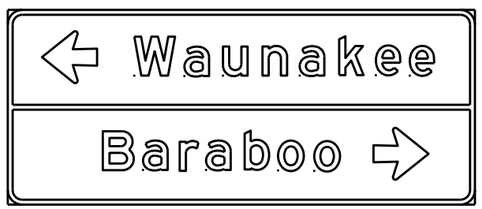


GENERAL NOTES

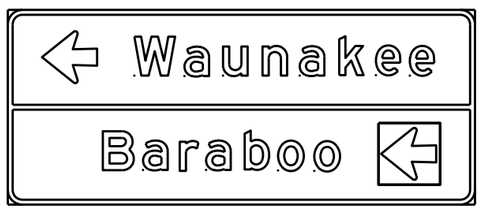
1. Materials shall conform to Standard Specification Section 637.
   Base - Sheet Aluminum 0.040" Thickness
   Sheeting - Orange Type F Reflective
   Arrow - Black Non-Reflective
2. Arrow signs shall be fastened to permanent sign by either aluminum rivets or aluminum self-tapping sheet metal screws. There shall be a minmum of 2 fasteners used per arrow sign.
3. There shall be a spacer consisting of a 0.08" nylon washer between the back of the arrow sign and the face of the permanent sign.
4. Arrows are per standard plate A1-2
5. Use separate arrow sign for each destination
6. Tilt arrow is always at 45 degrees
7. Arrow is centered on arrow sign

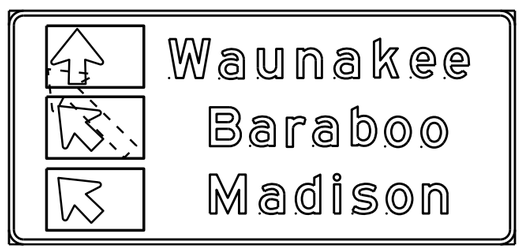
Lower Case Copy Size	Standard Width (Single Arrow)	2 Line Tilt Arrow Cover Width	3 Line Tilt Arrow Cover Width	Height
3¾" Series C	8	9 ½	14 ½	8
4½" Series D & E	9 ½	10	15	9 ½
6" Series D & E	14	16	20 ½	14
8" Series E	17 ½	20 ½	25	17 ½

BEFORE



AFTER





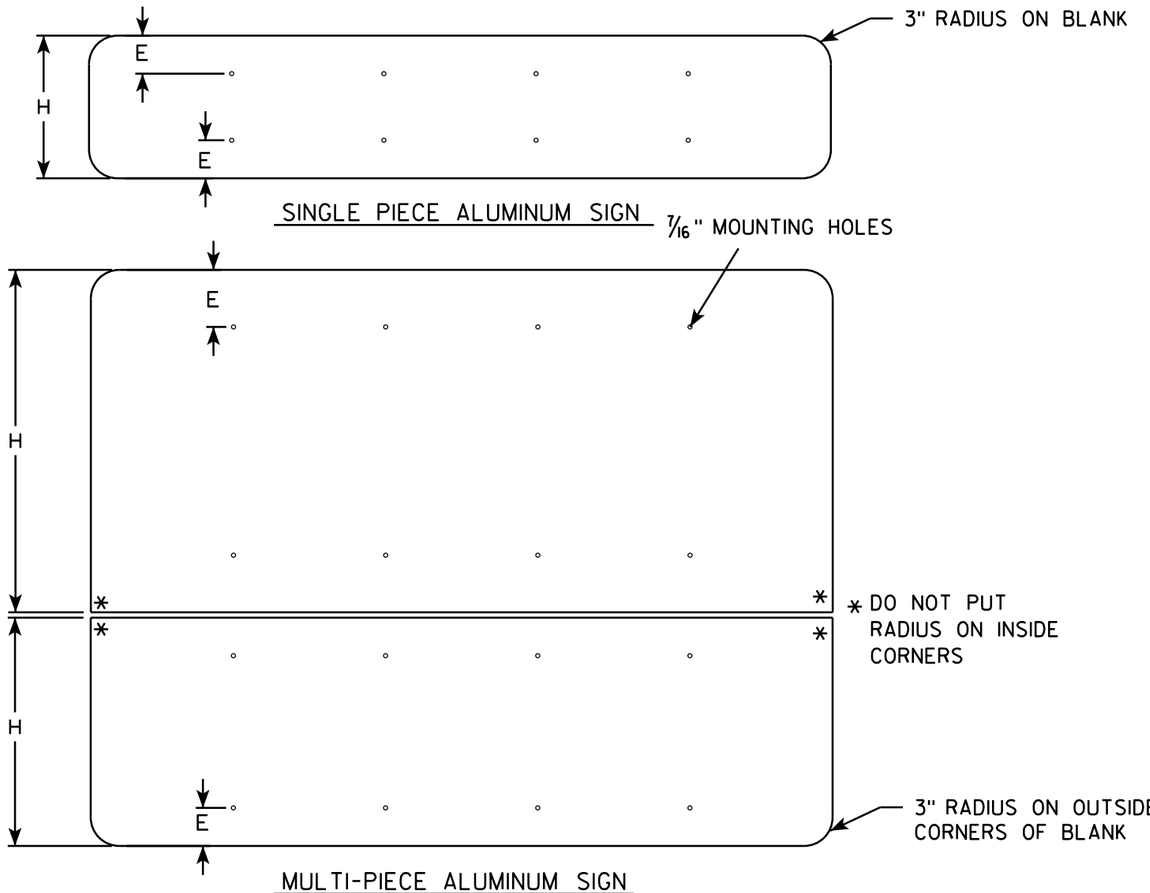
DESTINATION DIRECTIONAL ARROW FOR DETOUR SIGNS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/08/14 PLATE NO. A4-12.2

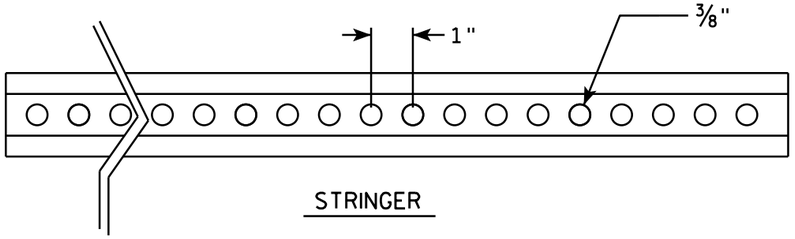
PROJECT NO: | SHEET NO: E



GENERAL NOTES

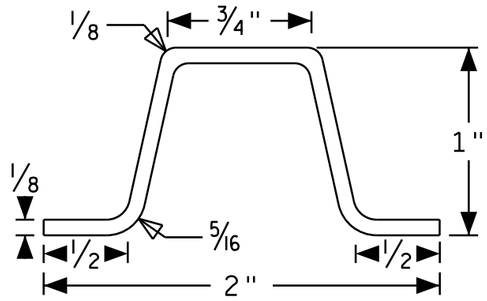
- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 36", DIMENSION E SHALL BE 4"
- SIGN STRINGER MATERIAL SHALL CONSIST OF STEEL CHANNEL POST SECTIONS, WEIGHING 1.12 LBS/FT IN ACCORDANCE WITH SECTION 633.2.1 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
- SEE SIGN PLATE A4-8 FOR SIGN STRINGER BOLTING REQUIREMENTS.

SIGN WIDTH	STRINGER WIDTH	POSTS	HOLE SPACING	MOUNTING HOLES
78"	72"	2	16"	15" 31" 47" 63"
84"	72"	2	17"	16½" 33½" 50½" 67½"
90"	72"	2	18"	18" 36" 54" 72"
96"	90"	2	19"	19½" 38½" 57½" 76½"
102"	90"	2	20"	21" 41" 61" 81"
108"	90"	2	21"	22½" 43½" 64½" 85½"
114"	108"	3	15"	12" 27" 42" 57" 72" 87" 102"
120"	108"	3	16"	12" 28" 44" 60" 76" 92" 108"
126"	108"	3	17"	12" 29" 46" 63" 80" 97" 114"
132"	126"	3	18"	12" 30" 48" 66" 84" 102" 120"
138"	126"	3	19"	12" 31" 50" 69" 88" 107" 126"
144"	126"	3	20"	12" 32" 52" 72" 92" 112" 132"

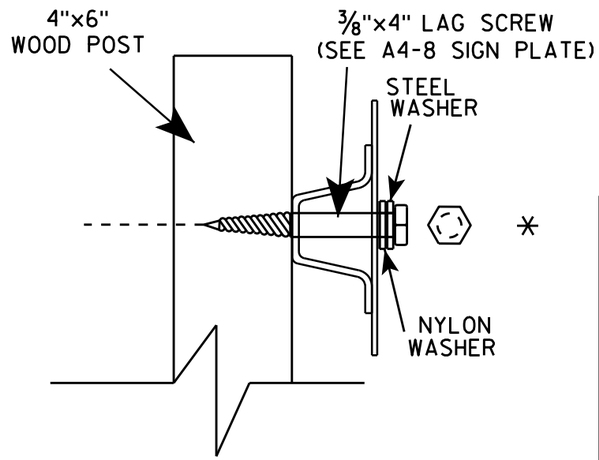


STRINGER

CROSS SECTION VIEW OF CHANNEL



POST MOUNTING



SIGN STRINGER MOUNTING REQUIREMENTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

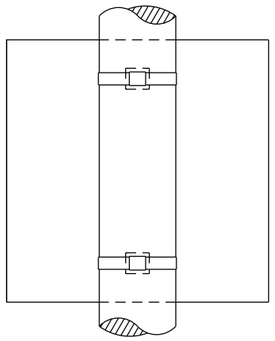
for State Traffic Engineer

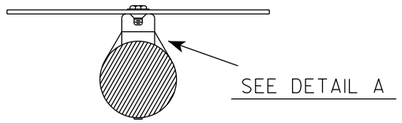
DATE 4/26/16 PLATE NO. A4-18.1

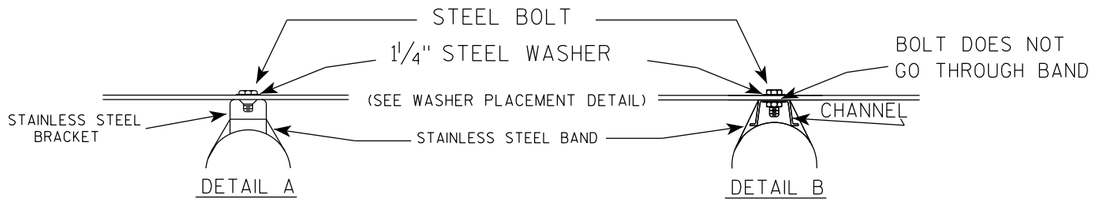
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

BANDING

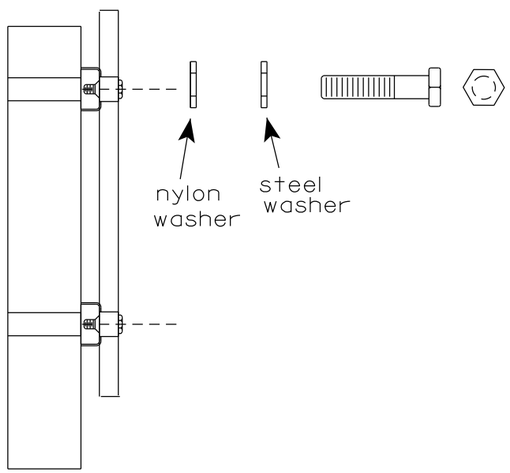
SINGLE SIGN







WASHER PLACEMENT

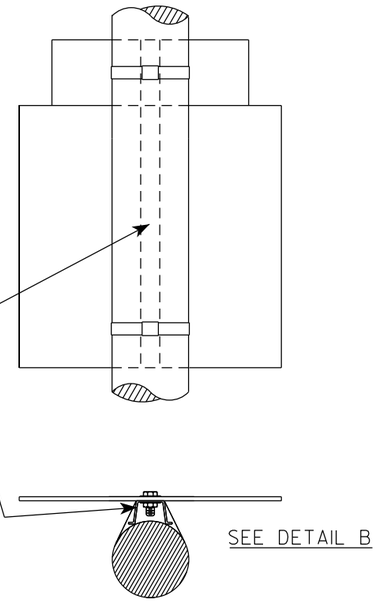


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



STANDARD SIGN
SIGN BANDING DETAILS

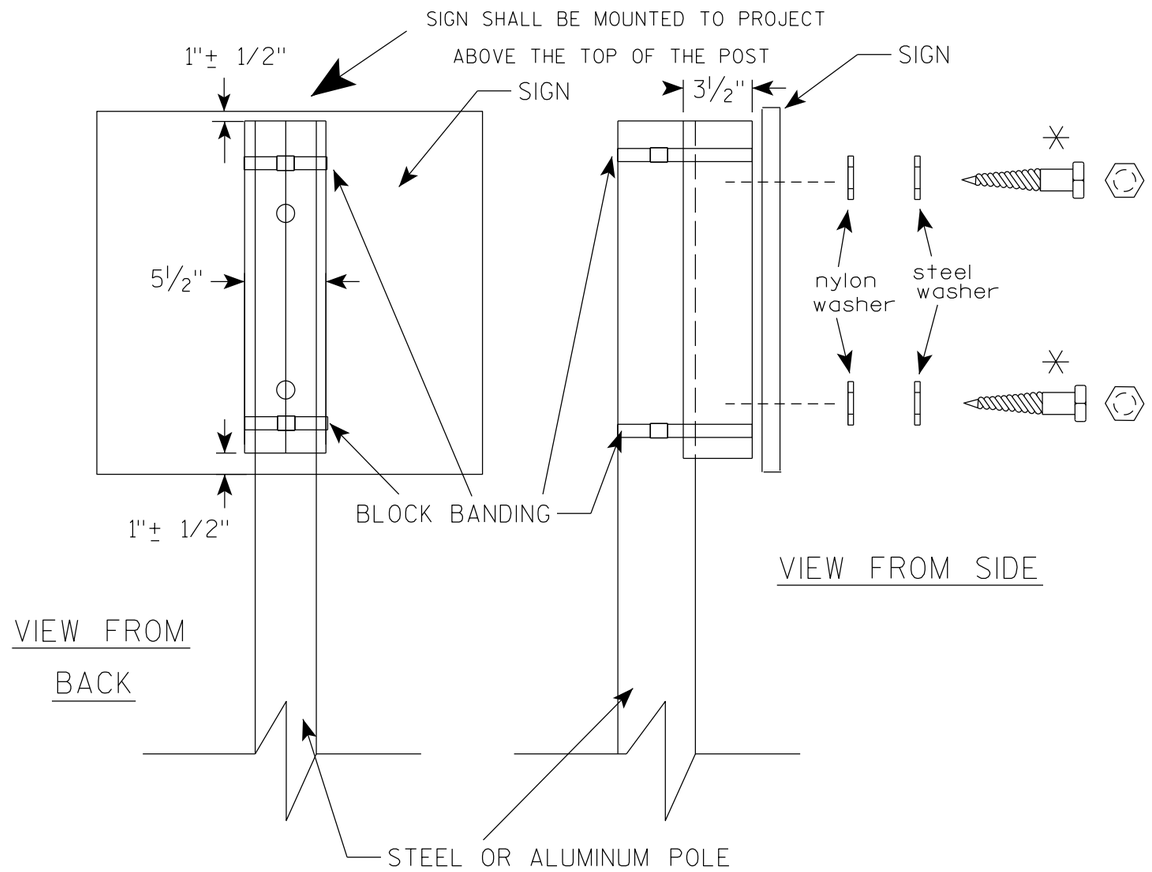
WISCONSIN DEPT OF TRANSPORTATION

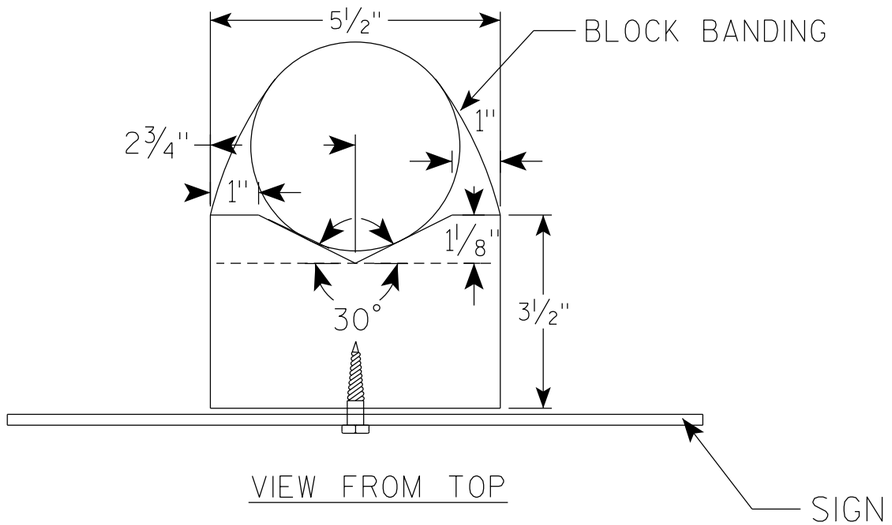
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

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





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

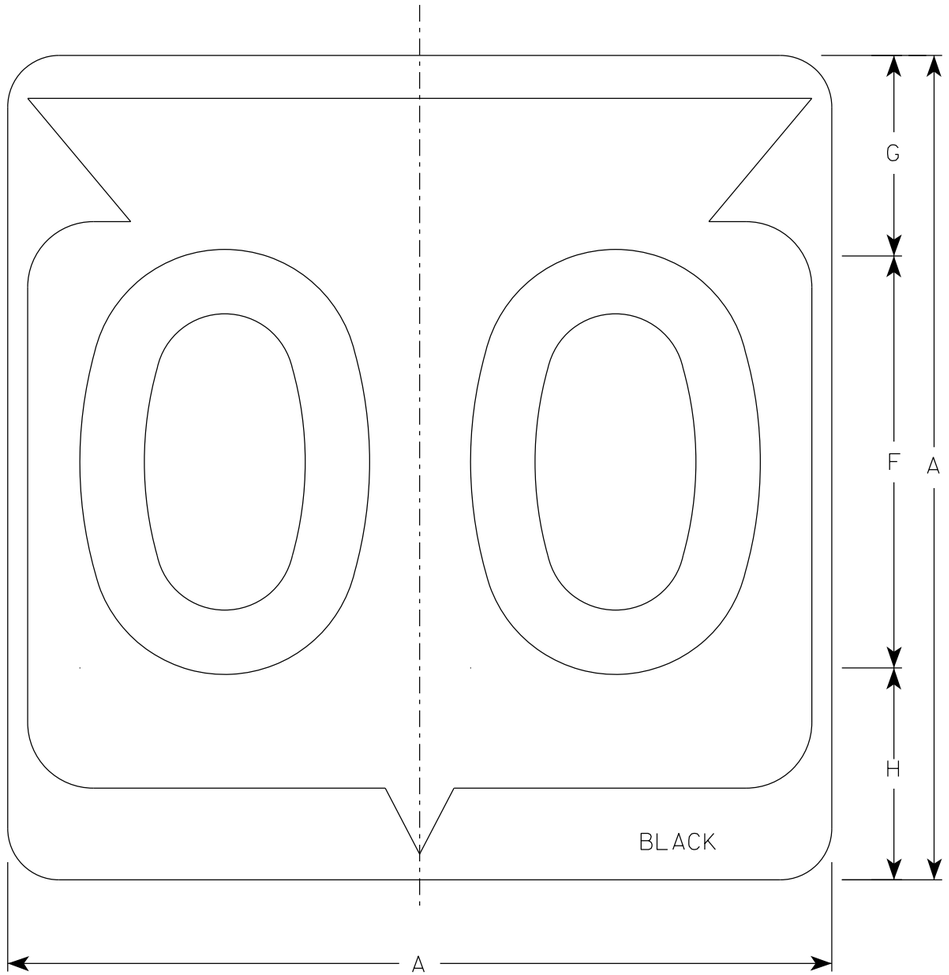
BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

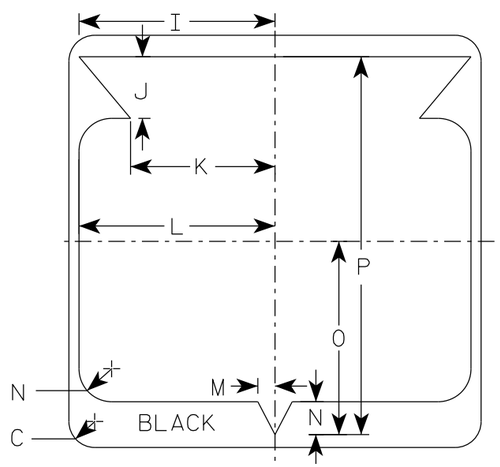
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO: | SHEET NO: E



M1-6



NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
2M	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0

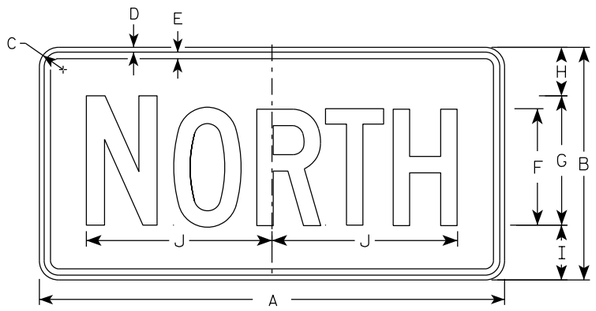
STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

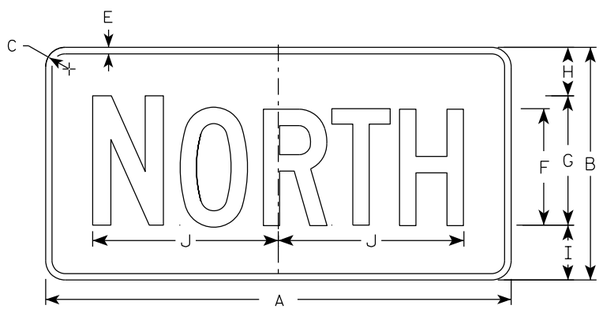
APPROVED Matthew R Rauch
for State Traffic Engineer

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

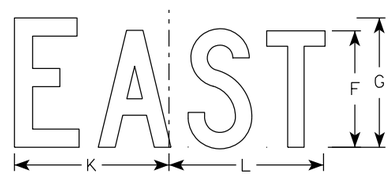
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



M3-1
MM3-1
MP3-1

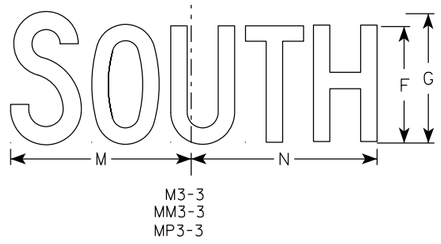


MB3-1
MK3-1
MN3-1

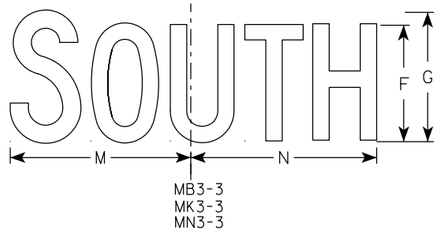


M3-2
MM3-2
MP3-2

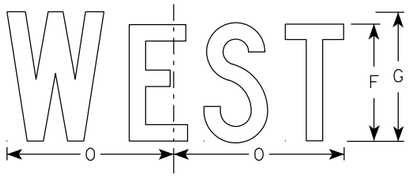
MB3-2
MK3-2
MN3-2



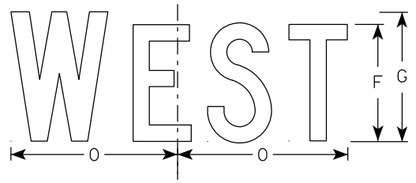
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H Reflective
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/2	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4												2.00
2M	24	12	1 1/2	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4												2.00
3	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5
4	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5
5	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5

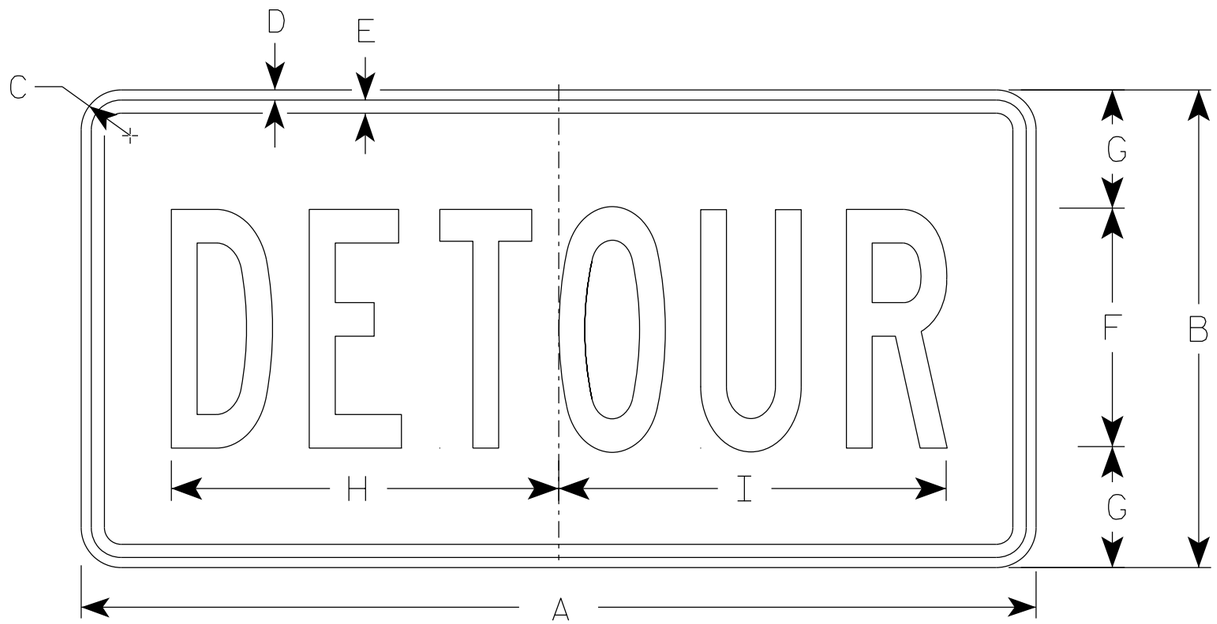
STANDARD SIGNS
M3-1 THRU M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

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

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



M4-8

NOTES

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

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

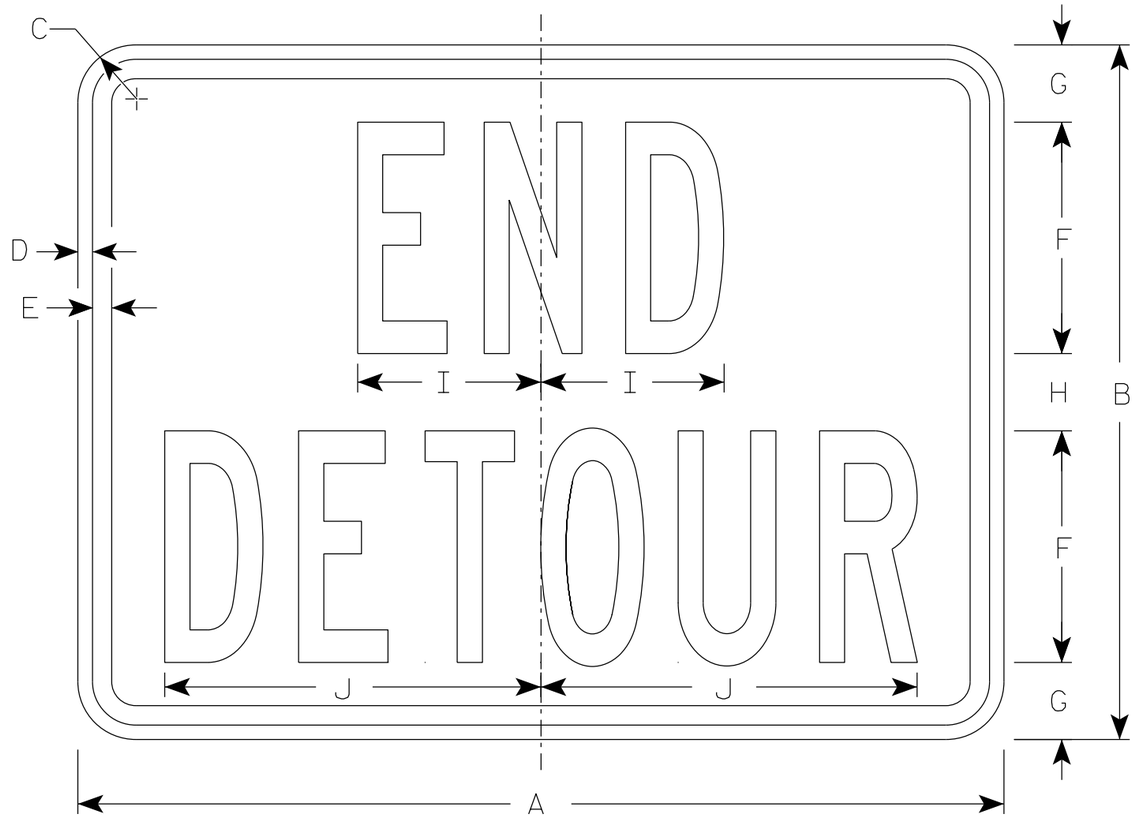
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



M4-8A

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	18	1 ½	⅜	½	6	2	2	4 ¾	9 ¾																	3.0
2M	24	18	1 ½	⅜	½	6	2	2	4 ¾	9 ¾																	3.0
3	30	24	1 ½	⅜	½	8	2 ½	3	6 ¾	13																	5.0
4	30	24	1 ½	⅜	½	8	2 ½	3	6 ¾	13																	5.0
5	30	24	1 ½	⅜	½	8	2 ½	3	6 ¾	13																	5.0

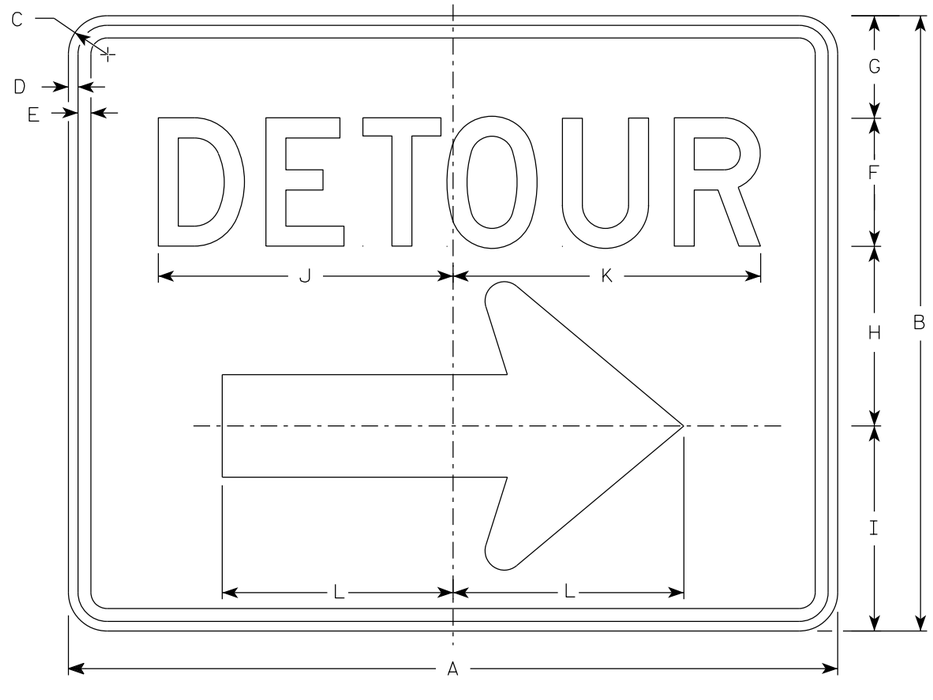
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

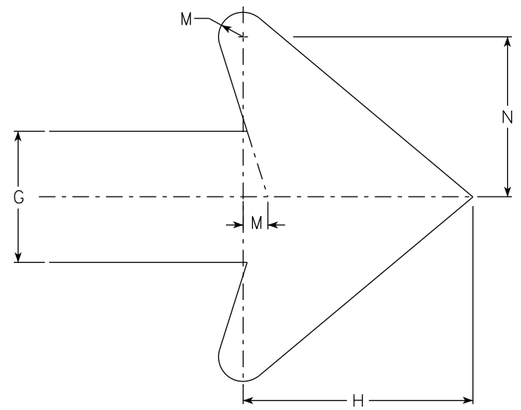
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



M4-9R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M4-9L is the same as M4-9R except the arrow is reversed.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	30	24	1 1/2	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
2M	30	24	1 1/2	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
3	30	24	1 1/2	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
4	48	36	1 7/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0
5	48	36	1 7/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0

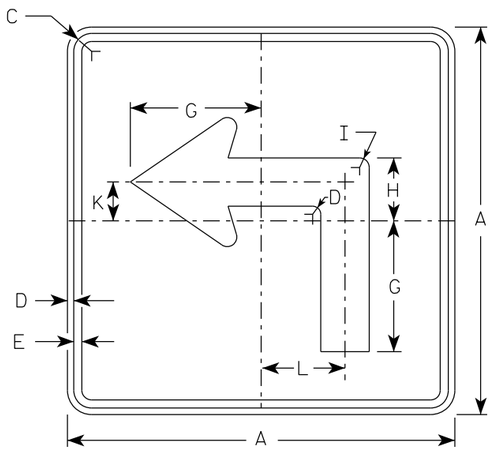
STANDARD SIGN
M4-9 R & L

WISCONSIN DEPT OF TRANSPORTATION

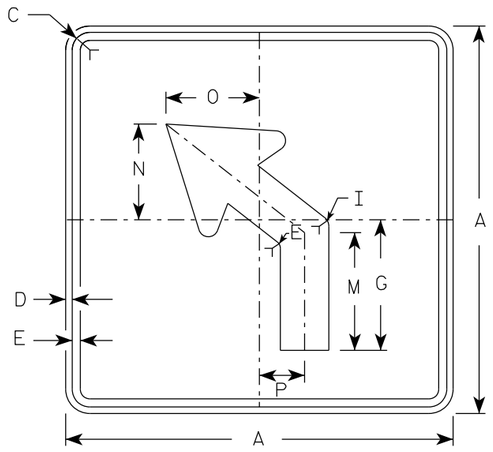
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-9R.6

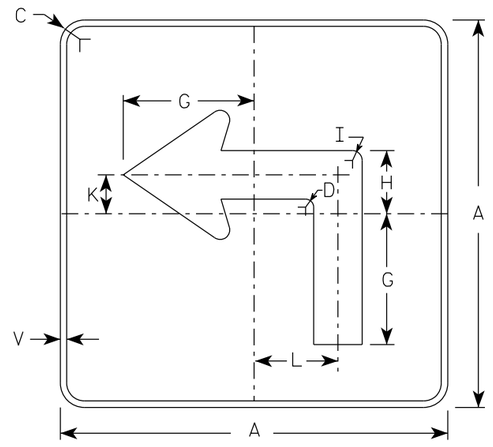
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



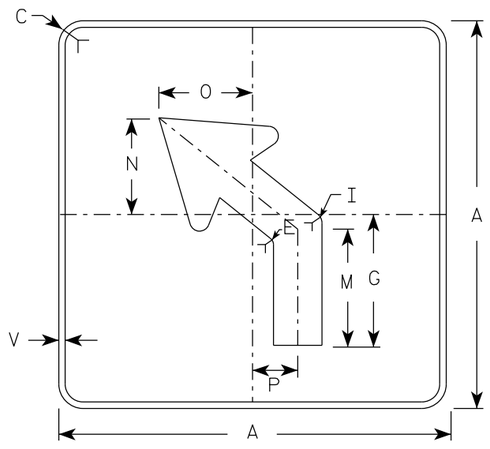
M5-1L
MM5-1L
MO5-1L
MP5-1L



M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L

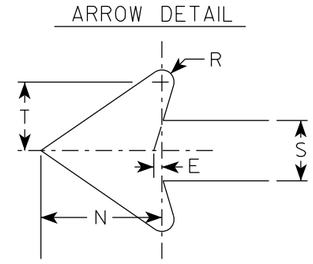


MB5-2L
MK5-2L
MN5-2L
MR5-2L

NOTES

1. Signs are Type II - Type H reflective except as shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

ARROW DETAIL



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	21		1 1/2	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3		1/2					3.06
2M	21		1 1/2	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3		1/2					3.06
3	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25
4	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25
5	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25

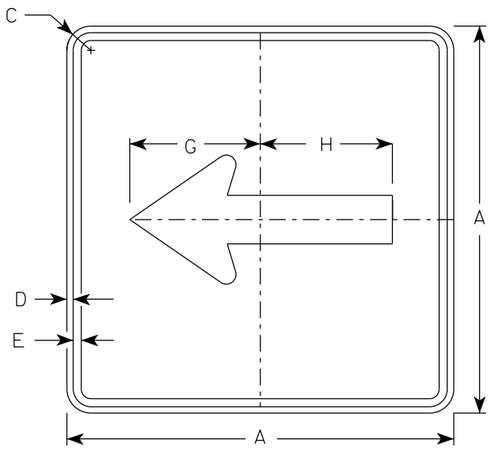
STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

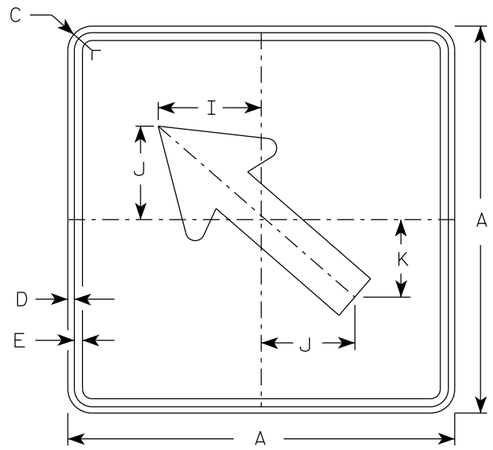
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/13/2023 PLATE NO. M5-1.15

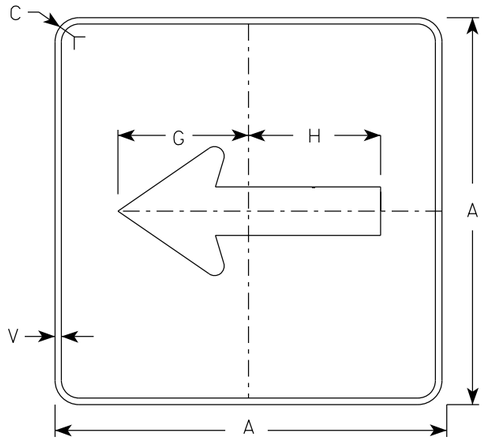
PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



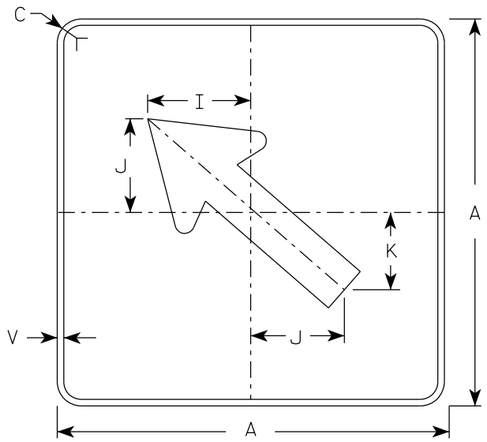
M6-1
MM6-1
MO6-1
MP6-1



M6-2
MM6-2
MO6-2
MP6-2



MB6-1
MK6-1
MN6-1
MR6-1

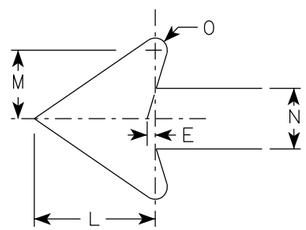


MB6-2
MK6-2
MN6-2
MR6-2

NOTES

1. Signs are Type II - Type H Reflective except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow

ARROW DETAIL



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	21		1 1/2	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2							1/2					3.06
2M	21		1 1/2	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2							1/2					3.06
3	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25
4	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25
5	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25

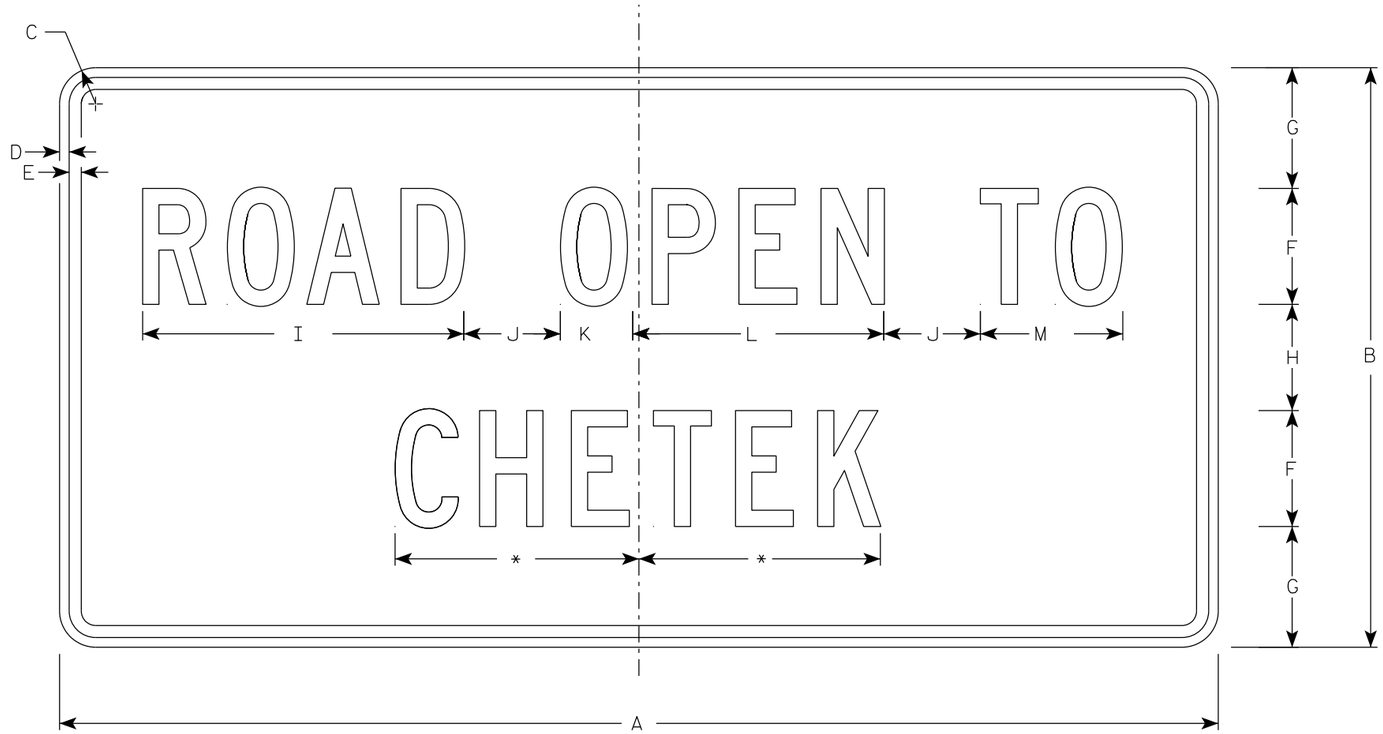
STANDARD SIGN M6-1 & M6-2 SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/13/2023 PLATE NO. M6-1.16

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



R10-61

*See note 5

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	24	1 1/2	1/2	5/8	4	5 1/2	5	10 3/4	2	2 1/8	8 3/8	4 5/8														6.0
2S	60	30	1 7/8	1/2	5/8	6	6 1/4	5 1/2	16 5/8	5	3 3/4	13	7 3/8														12.5
2M	60	30	1 7/8	1/2	5/8	6	6 1/4	5 1/2	16 5/8	5	3 3/4	13	7 3/8														12.5
3																											
4																											
5																											

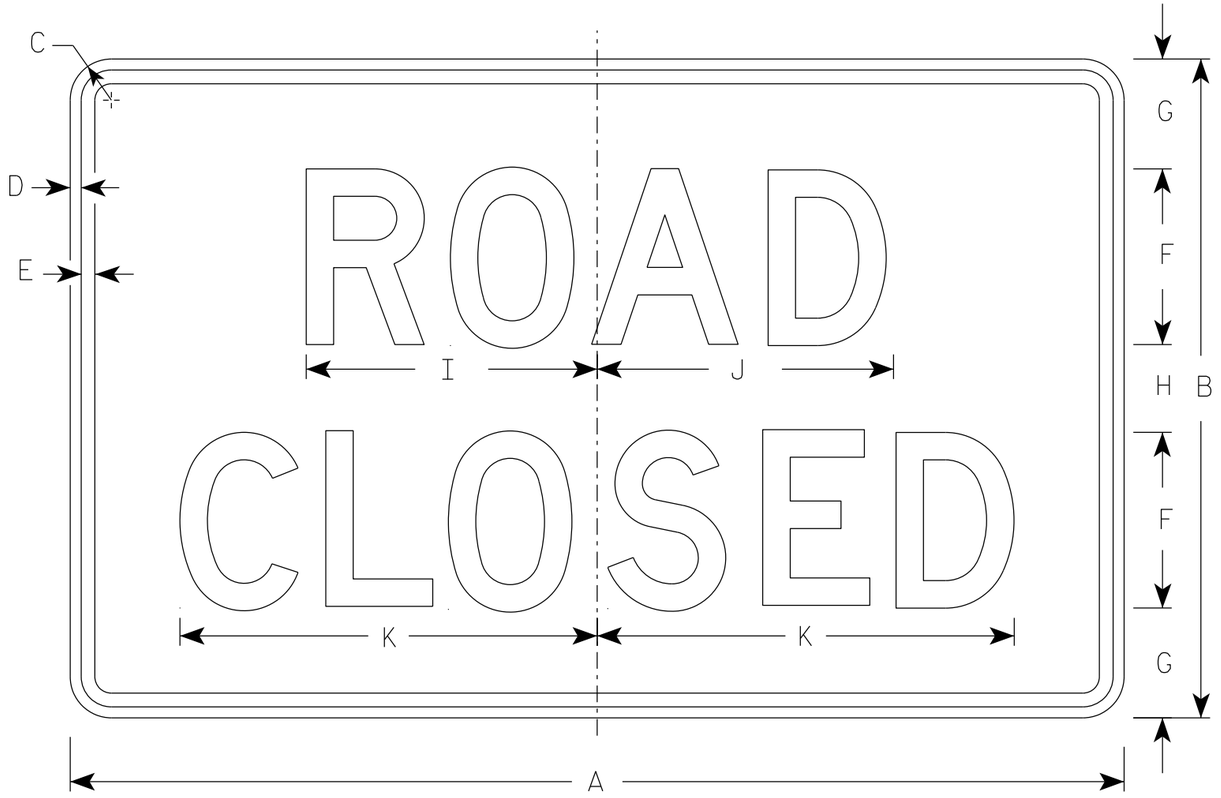
STANDARD SIGN
R10-61

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

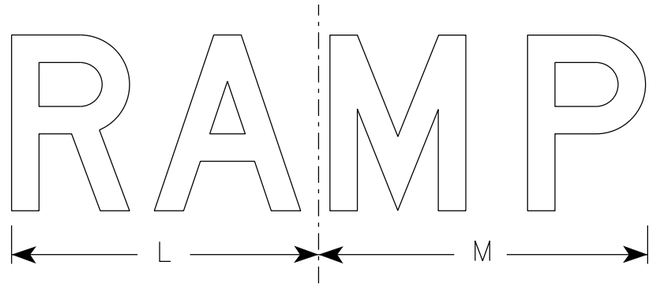
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



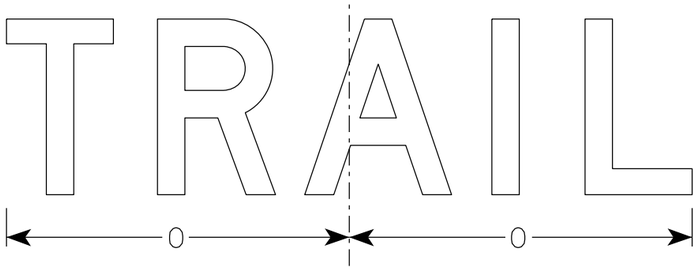
R11-2

NOTES

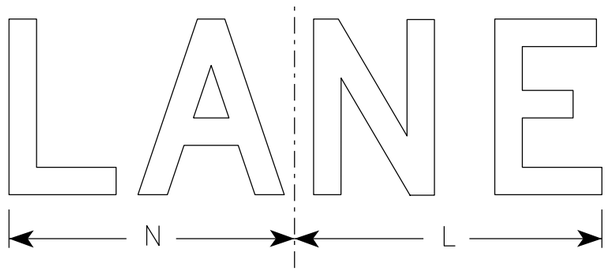
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the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



R11-2R



R11-2T



R11-2L

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

STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

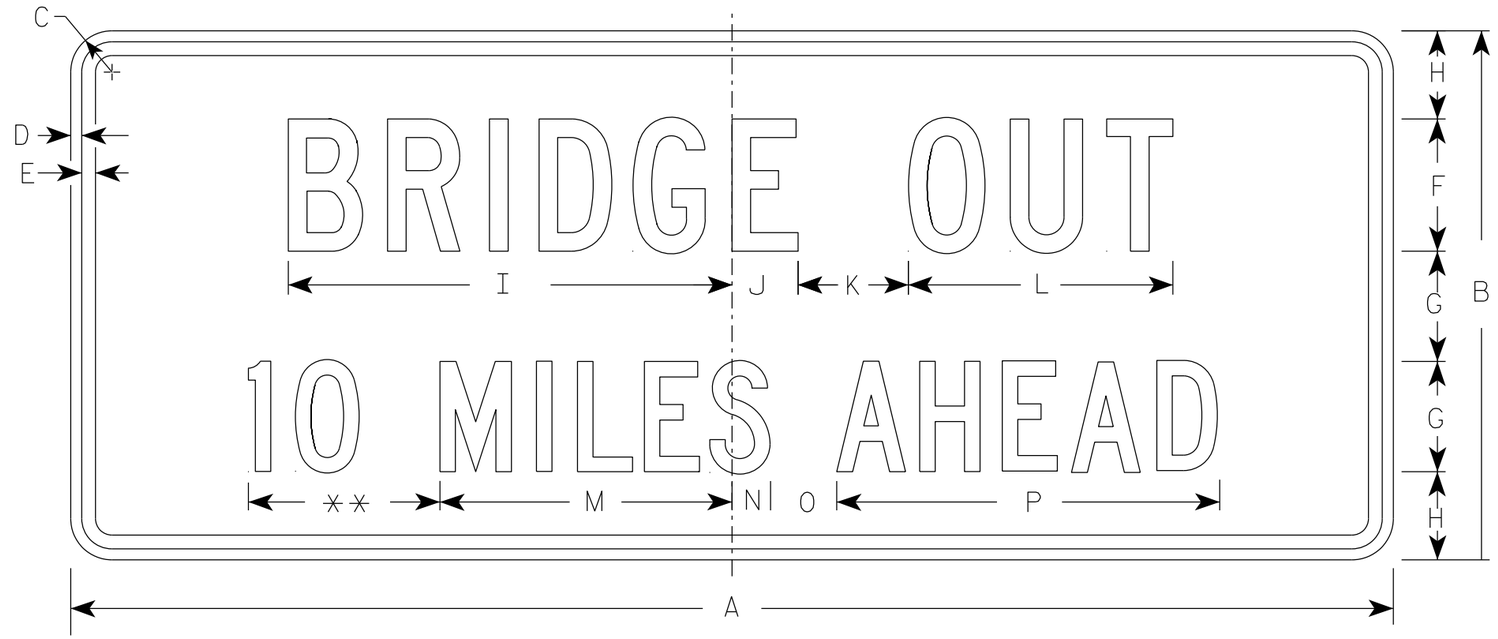
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/5/24 PLATE NO. R11-2.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

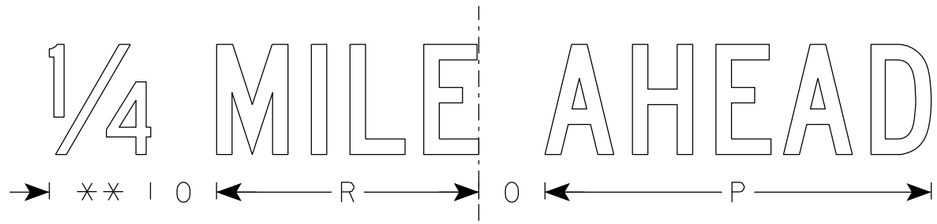
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.



R11-3C

** See Note 5



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	15	1 1/2	1/2	5/8	4	3	2 1/2	13 1/4	2 1/4	3	8	8	1 1/2	2	10 3/4		7 1/8									3.75
2S	60	24	1 7/8	1/2	5/8	6	5	4	20 1/8	3	5	12	13 1/4	1 3/4	3	17 3/8		11 7/8									10.0
2M	60	24	1 7/8	1/2	5/8	6	5	4	20 1/8	3	5	12	13 1/4	1 3/4	3	17 3/8		11 7/8									10.0
3																											
4																											
5																											

STANDARD SIGN
R11-3C

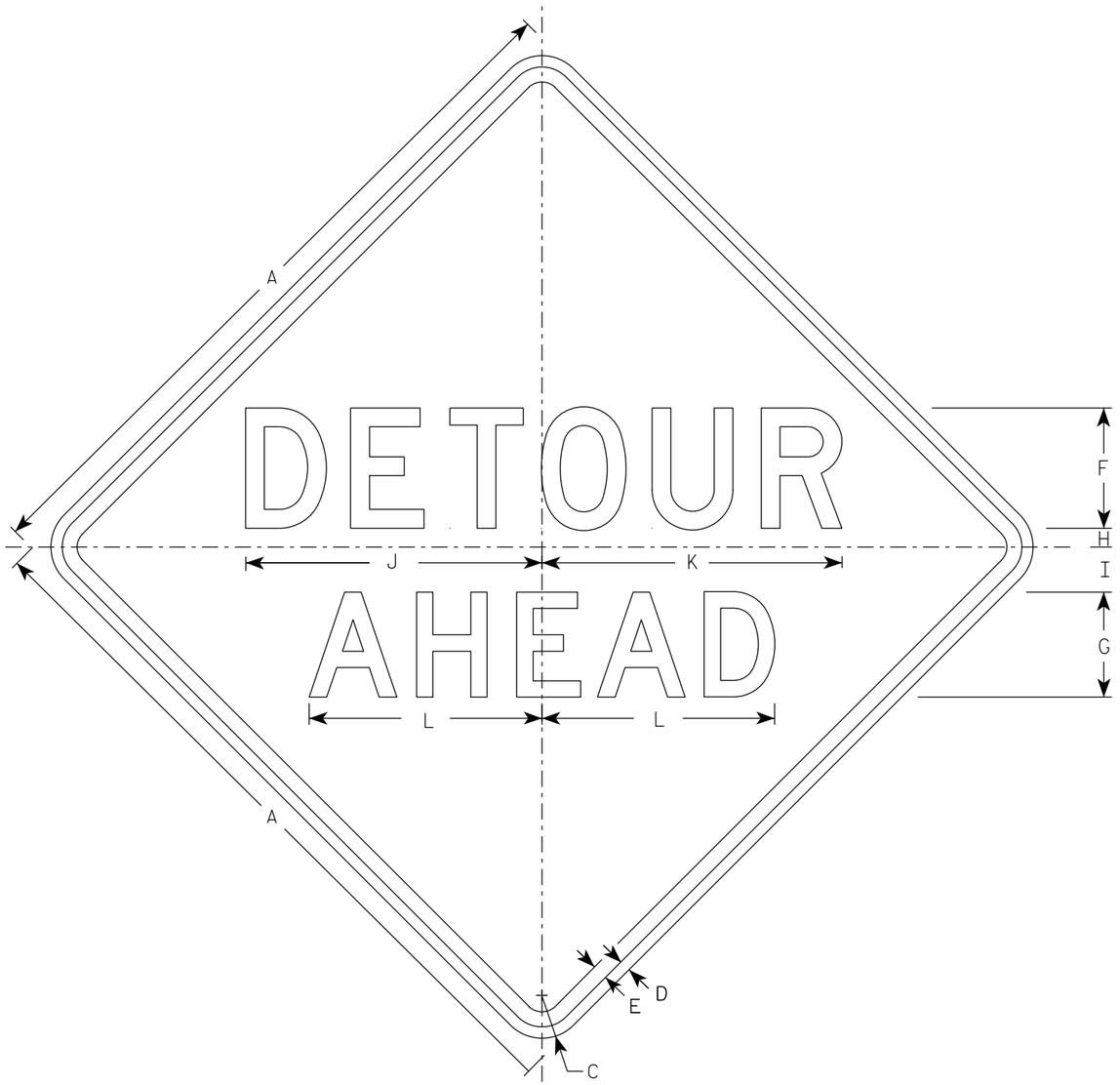
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

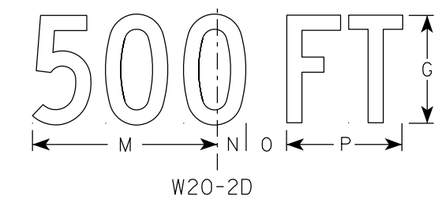
DATE 2/5/24 PLATE NO. R11-3C.4

PROJECT NO: | SHEET NO: E

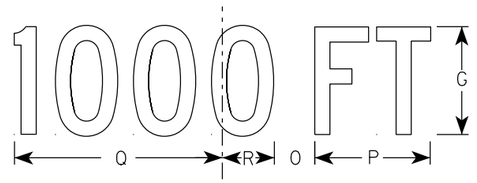
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R113C.dgn PLOT DATE : 5-FEB 2024 2:52 PLOT BY : mscj9h



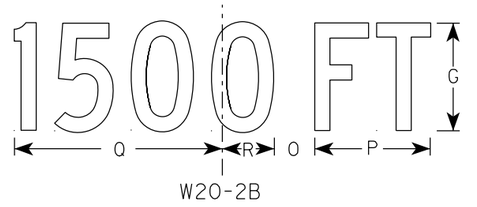
W20-2A



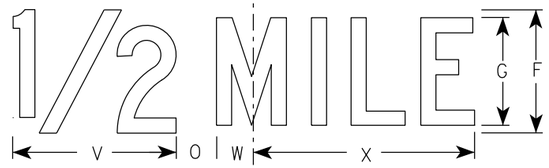
W20-2D



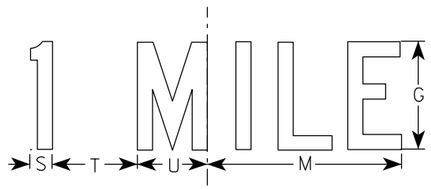
W20-2C



W20-2B



W20-2G



W20-2F

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

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

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

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

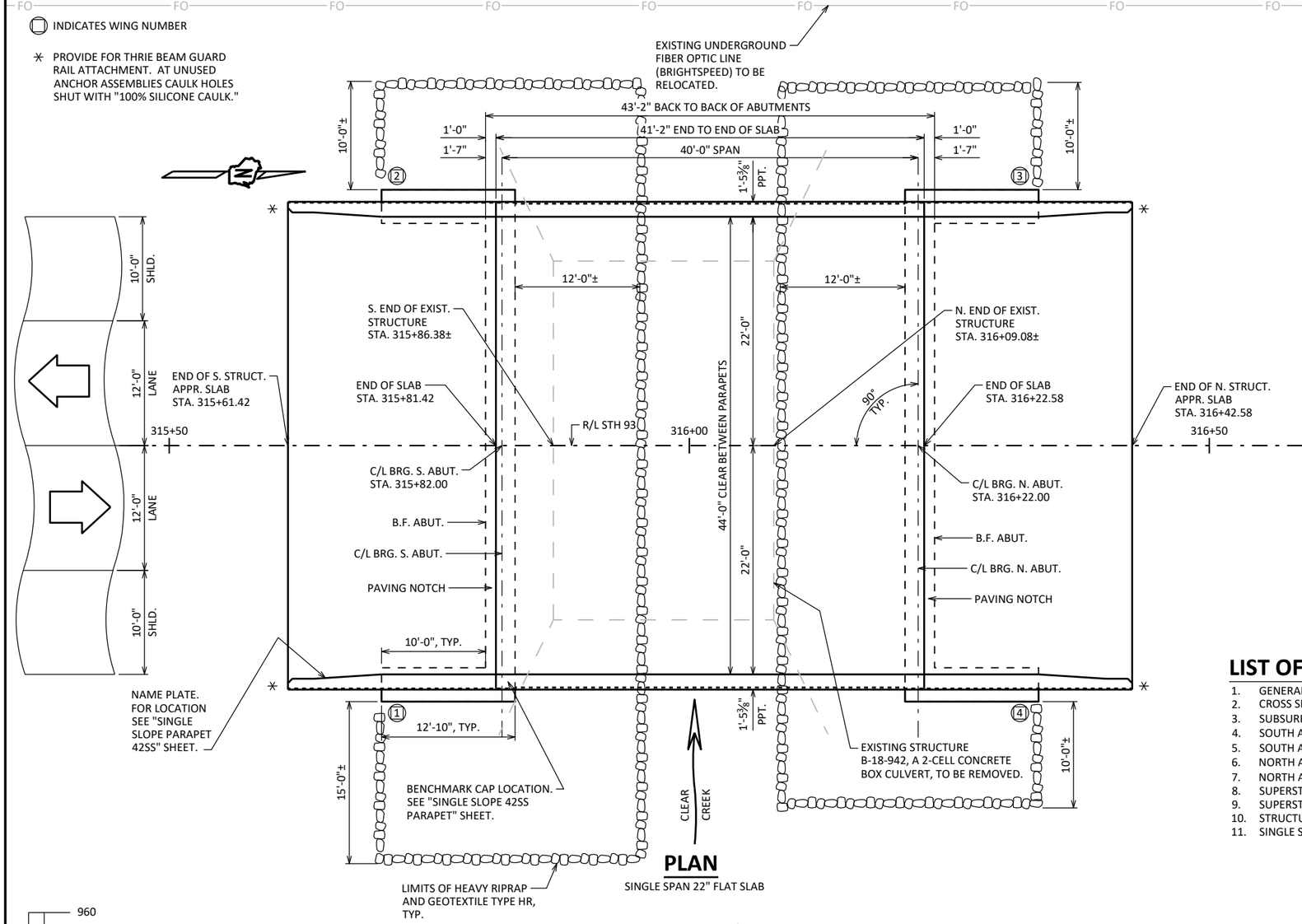
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

STATE PROJECT NUMBER

7590-00-73

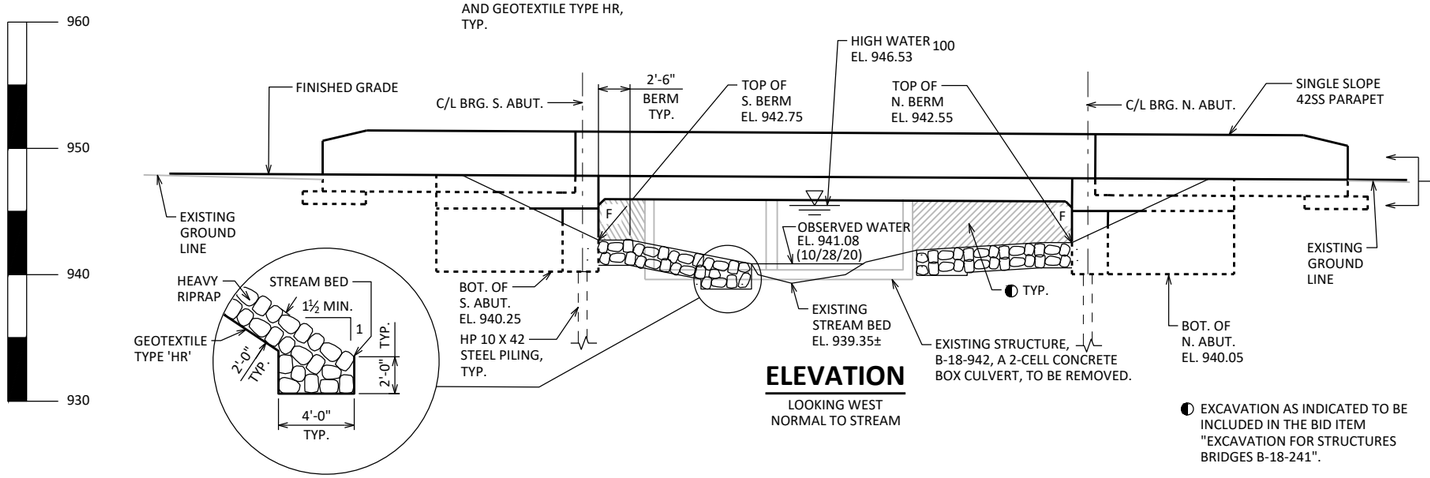
INDICATES WING NUMBER

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



PLAN

SINGLE SPAN 22" FLAT SLAB

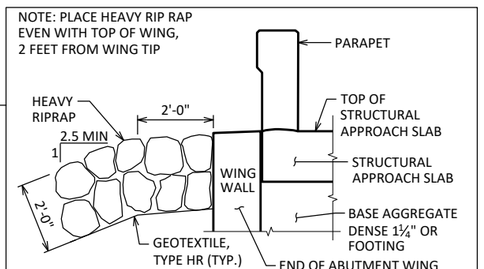


ELEVATION

LOOKING WEST
NORMAL TO STREAM

◐ EXCAVATION AS INDICATED TO BE INCLUDED IN THE BID ITEM "EXCAVATION FOR STRUCTURES BRIDGES B-18-241".

NOTE: PLACE HEAVY RIP RAP EVEN WITH TOP OF WING, 2 FEET FROM WING TIP



TYPICAL FILL SECTION AT WING TIPS

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING: RF = 1.20
OPERATING RATING: RF = 1.55
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 & STRUCTURAL APPROACH SLAB & FTG. — f'_c = 4,000 PSI
- ALL OTHER — f'_c = 3,500 PSI

BAR STEEL REINFORCEMENT
- GRADE 60 — f_y = 60,000 PSI
- STAINLESS, GRADE 60 — f_y = 60,000 PSI

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 10 X 42 PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
- ESTIMATED 95'-0" LONG AT THE SOUTH ABUTMENT.
- ESTIMATED 75'-0" LONG AT THE 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 PILE CAPACITY.

HYDRAULIC DATA

100-YEAR FREQUENCY:

Q_{100}= 830 C.F.S.
V_{100}= 4.65 F.P.S.
HW_{100}= EL. 946.53
WATERWAY AREA = 178.5 SQ. FT.
DRAINAGE AREA = 9.7 SQ. MI.
ROADWAY OVERTOPPING = N/A
SCOUR CRITICAL CODE = 5

2-YEAR FREQUENCY:

Q_2= 215 C.F.S.
V_2= 3.9 F.P.S.
HW_2= EL. 944.2

TRAFFIC DATA

STH 93:

ADT = 7,000 (2044)
R.D.S. = 60 MPH

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. SUPERSTRUCTURE PLAN
9. SUPERSTRUCTURE DETAILS
10. STRUCTURAL APPROACH SLABS
11. SINGLE SLOPE PARAPET 42SS

STRUCTURE DESIGN CONTACTS:

VISTA SHAHRIARI 608-266-7086
KYLE BUSCH 608-267-0465

NO.	DATE	REVISION	BY

WISCONSIN DEPARTMENT OF TRANSPORTATION
BUREAU OF STRUCTURES

ACCEPTED KHB 7/30/24
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-18-241

STH 93 OVER CLEAR CREEK

COUNTY	TOWN
EAU CLAIRE	PLEASANT VALLEY

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATION

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
VS	SEH	VS	SEH

GENERAL PLAN

SHEET 1 OF 11

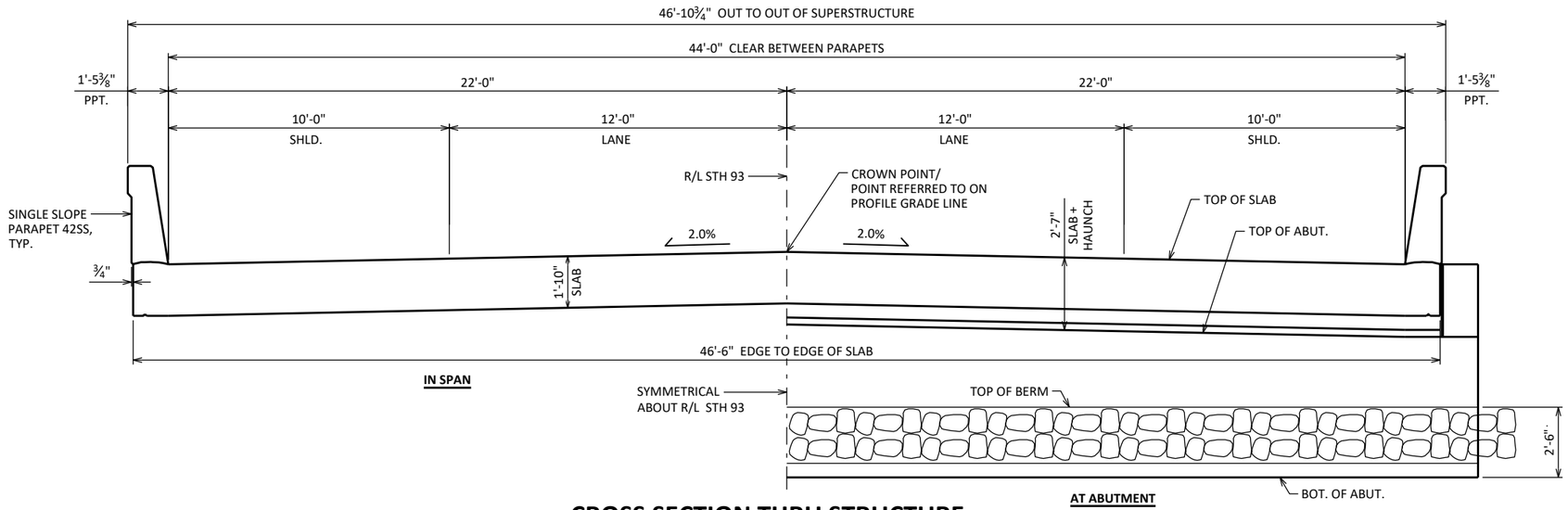
SCALE =

I.D. 7590-00-03A

DATE: JULY 2024

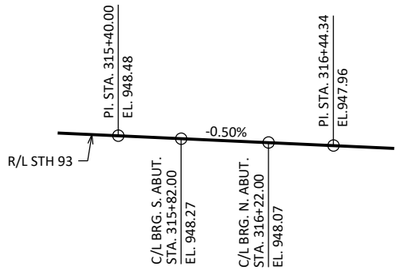
8

8



CROSS SECTION THRU STRUCTURE

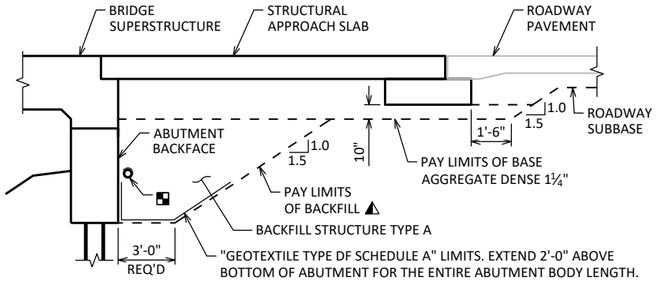
LOOKING NORTH



PROFILE GRADE LINE - R/L STH 93

TOTAL ESTIMATED QUANTITIES

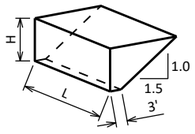
BID ITEM NUMBER	BID ITEMS	UNIT	SUPER.	S. STRUCT. APP. SLAB	S. ABUT.	N. ABUT.	N. STRUCT. APP. SLAB	TOTALS
203.0250	REMOVING STRUCTURE OVER WATERWAY REMOVE DEBRIS (B-18-942)	EACH	---	---	---	---	---	1
206.1001	EXCAVATION FOR STRUCTURES BRIDGES B-18-241	EACH	---	---	---	---	---	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	---	---	90	90	---	180
305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	---	149	---	---	149	298
502.0100	CONCRETE MASONRY BRIDGES	CY	151.4	64.3	41.6	41.6	64.3	363
502.3200	PROTECTIVE SURFACE TREATMENT	SY	225	98	---	---	98	421
502.3210	PIGMENTED SURFACE SEALER	SY	41	20	---	---	20	81
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	---	---	2,780	2,780	---	5,560
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	32,280	10,860	1,470	1,470	10,860	56,940
505.0800.S	BAR STEEL REINFORCEMENT HS STAINLESS STRUCTURES	LB	430	---	---	---	---	430
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	---	---	12	12	---	24
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	---	---	665	525	---	1,190
606.0300	RIPRAP HEAVY	CY	---	---	130	117	---	247
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	---	---	90	90	---	180
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	4	---	---	---	---	4
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	---	---	44	44	---	88
645.0120	GEOTEXTILE TYPE HR	SY	---	---	221	200	---	421
	NON-BID ITEMS							
	FILLER	Size	---	---	---	---	---	½", ¾", 1½"



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.



ABUTMENT BACKFILL DIAGRAM

L = OUT TO OUT OF ABUTMENT BODY 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)

STATE PROJECT NUMBER

7590-00-73

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-18-241" SHALL BE THE EXISTING GROUNDLINE, AND STREAM BED ELEVATION.

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. ALSO EXCLUDED IS THE "BASE AGGREGATE DENSE 1 1/4-INCH" AS DETAILED ON THE STRUCTURAL APPROACH SLAB SHEETS.

THE BACKFILL QUANTITIES ARE BASED ON THE PAY LIMITS SHOWN ON THE PLANS AND MAY NOT REFLECT ACTUAL PLACED QUANTITIES. "BACKFILL STRUCTURE TYPE A" REQUIRED DIRECTLY BEHIND ABUTMENTS AND ABUTMENT WINGS FOR 3 FEET. BACKFILL PLACED BEYOND PAY LIMITS OR EXCEEDING PLAN QUANTITIES SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES.

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.

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

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

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.

AT ABUTMENTS, HP 12X53 STEEL PILING MAY BE USED IN LIEU OF HP 10X42 STEEL PILING. PAYMENT SHALL BE BASED ON BID PRICE FOR HP 10X42 STEEL PILING.

SLAB FALSEWORK SHALL BE SUPPORTED ON PILES OR THE SUBSTRUCTURE, UNLESS AN ALTERNATE METHOD IS APPROVED BY THE ENGINEER.

AT ABUTMENTS, CONCRETE POURED UNDER WATER WILL BE ALLOWED AND SHALL BE DONE IN ACCORDANCE WITH SECTION 502.3.5.3 OF THE STANDARD SPECIFICATIONS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-18-241

DRAWN BY VS | PLANS CK'D SEH

CROSS SECTION & QUANTITIES

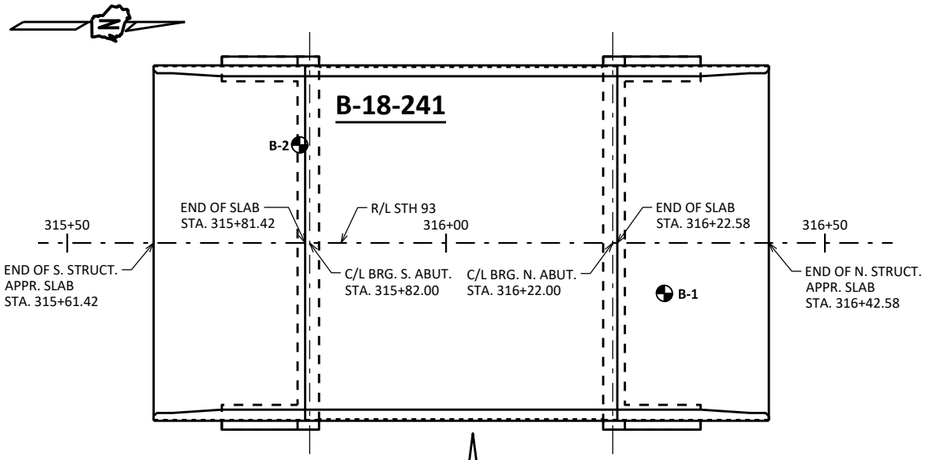
SHEET 2

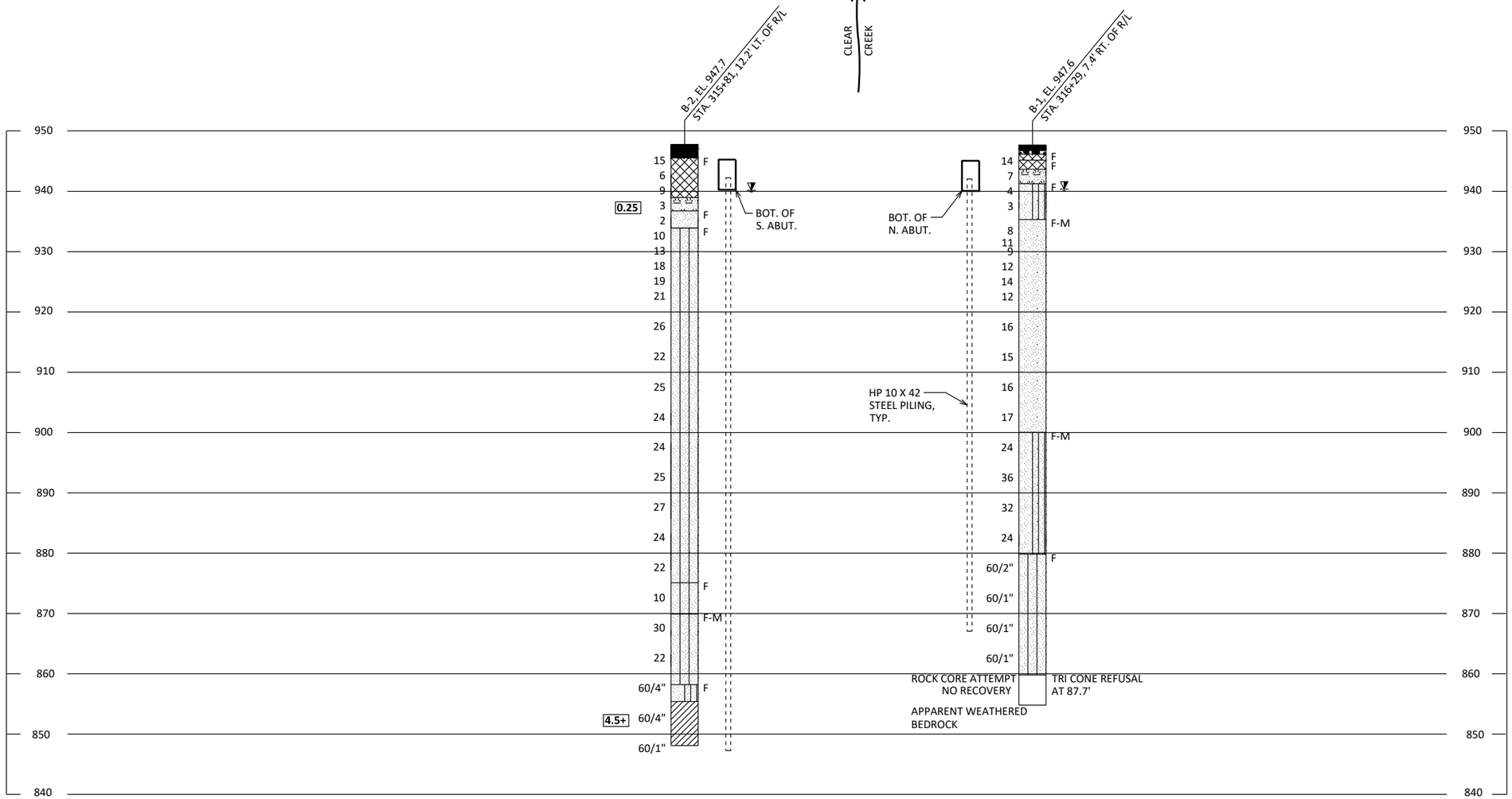
SCALE =

8

8

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
B-1	12/08/2023	227132.7	352610.7
B-2	12/06/2023	227084.9	352590.3
BORINGS COMPLETED BY: AET			
REPORT COMPLETED BY: WISDOT			
ALL COORDINATES REFERENCED TO WCCS NAD 83 (91) EAU CLAIRE COUNTY			
COORDINATES COLLECTED USING NON-SURVEY GRADE EQUIPMENT			





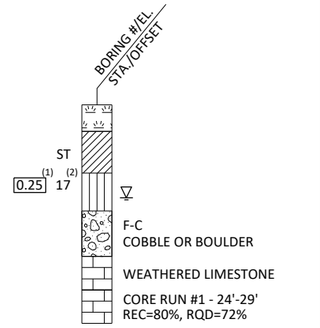
STATE PROJECT NUMBER

7590-00-73

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-18-241

DRAWN BY TLP/VS | PLANS CK'D SEH

SUBSURFACE EXPLORATION

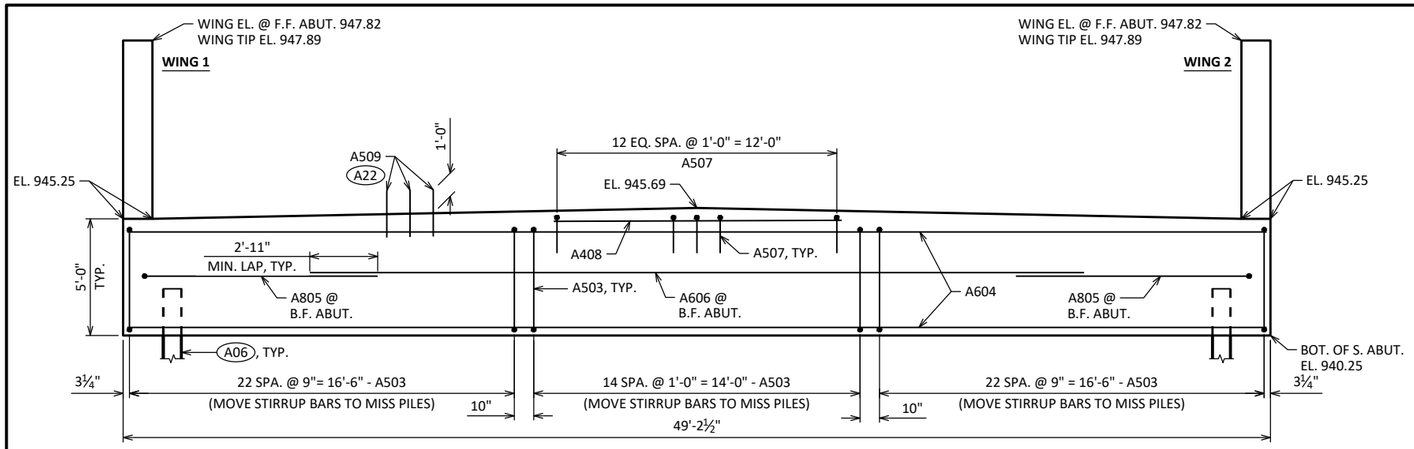
SHEET 3

8

8

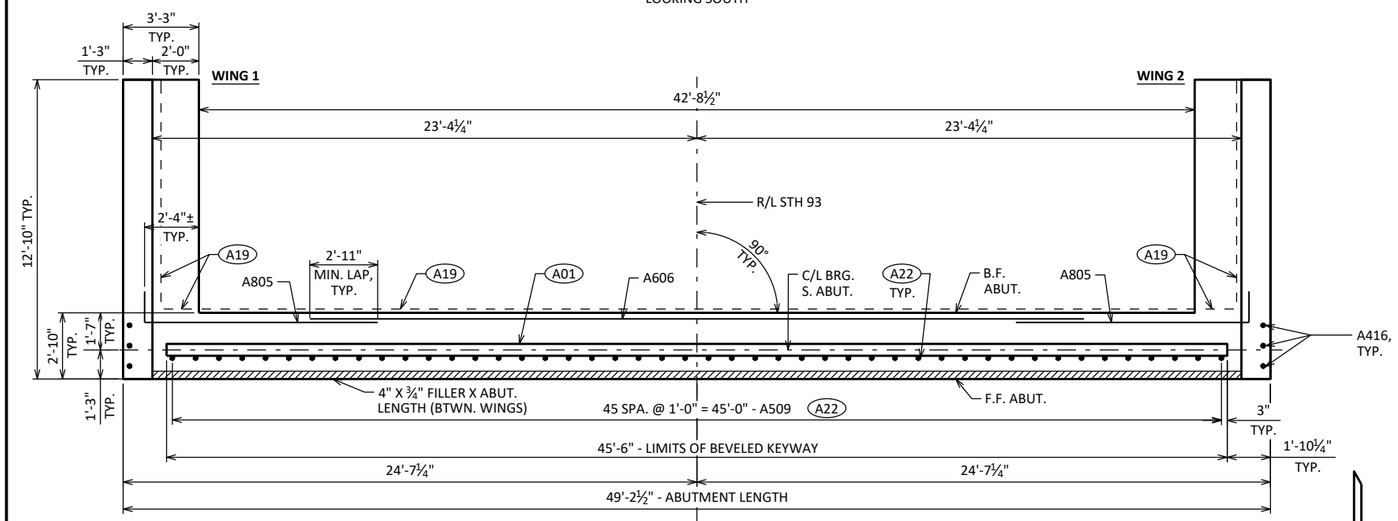
STATE PROJECT NUMBER

7590-00-73

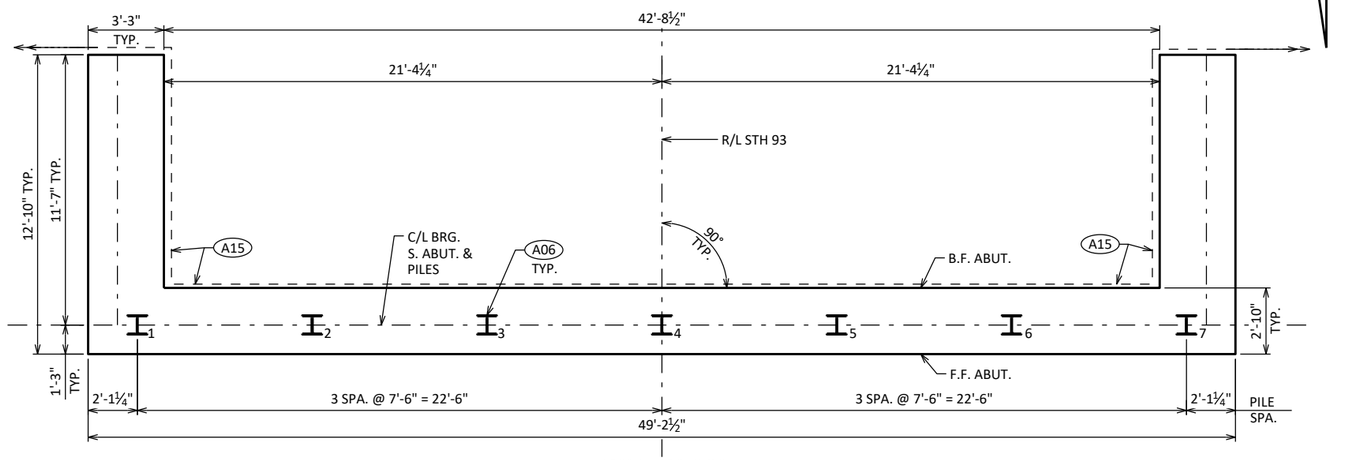


ELEVATION

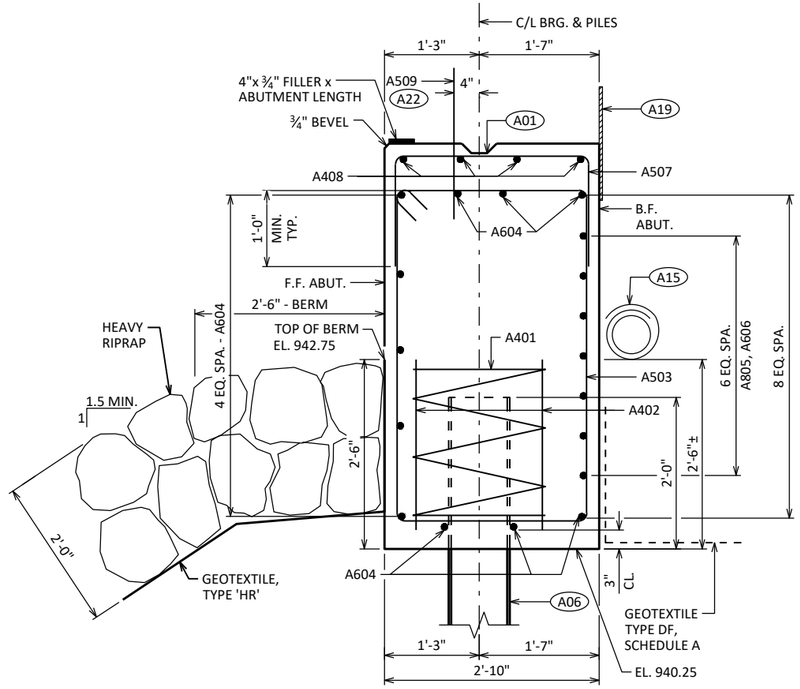
LOOKING SOUTH



PLAN



PILE PLAN



SECTION THRU BODY

A01 CONST. JOINT: KEYWAY FORMED BY A BEVELED 2" x 6".

A06 SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING, ESTIMATED 95'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.

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

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

A22 A509 BARS @ 1'-0" SPA. AT TOP OF ABUT. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-18-241

DRAWN BY VS | PLANS CK'D SEH

SOUTH ABUTMENT

SHEET 4

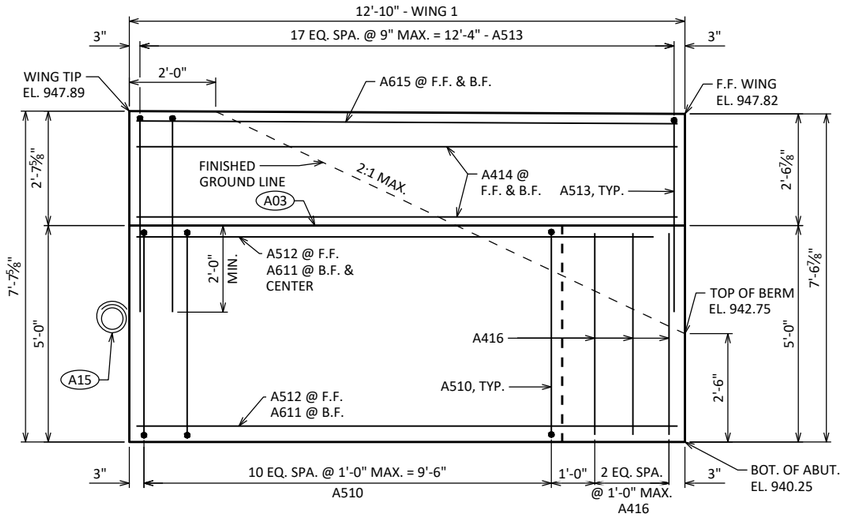
SCALE =

8

8

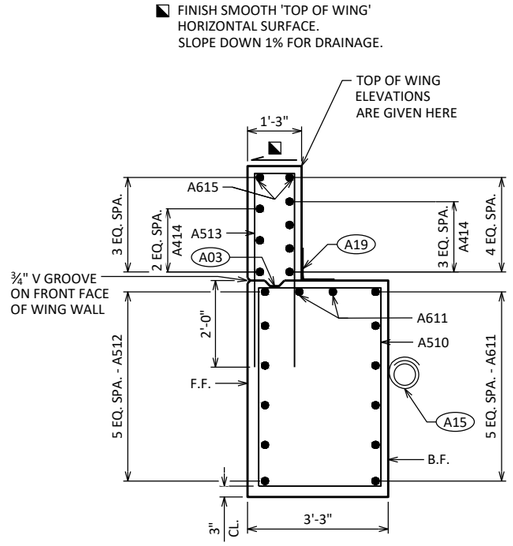
STATE PROJECT NUMBER

7590-00-73



WING 1 ELEVATION

WING 2 SIMILAR



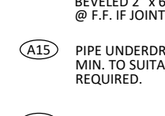
SECTION THRU WING 1

WING 2 SIMILAR

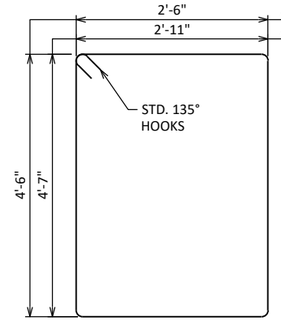
BILL OF BARS

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

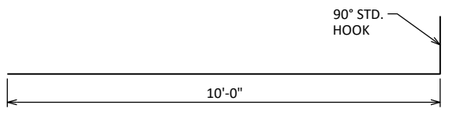
BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
A401		7	28'-0"	X		PILES - 1 PER BODY PILE
A402		14	2'-3"			PILES - 2 PER BODY PILE
A503		61	14'-8"	X		ABUT. BODY - STIRRUP - VERT.
A604		11	48'-10"			ABUT. BODY - HORIZ.
A805		14	11'-2"	X		ABUT. BODY - HORIZ. - B.F.
A606		7	33'-3"			ABUT. BODY - HORIZ. - B.F.
A507		13	5'-3"	X		ABUT. BODY - VERT. - TOP
A408		4	12'-4"			ABUT. BODY - HORIZ. -TOP
A509	X	46	2'-0"			ABUT. BODY - VERT. - TOP - DOWEL BAR
A510	X	22	15'-8"	X		WINGS 1 & 2 - BOT. - STIRRUP - VERT.
A611	X	16	12'-6"			WINGS 1 & 2 - BOT. - HORIZ - B.F. & CENTER
A512	X	12	12'-6"			WINGS 1 & 2 - BOT. - HORIZ - F.F.
A513	X	36	9'-8"	X		WINGS 1 & 2 - TOP - VERT.
A414	X	14	12'-6"			WINGS 1 & 2 - TOP - HORIZ. - B.F. & F.F.
A615	X	4	12'-6"			WINGS 1 & 2 - TOP - HORIZ. - B.F. & F.F.
A416		6	4'-7"			ABUT. BODY - END FACES - VERT.



A401



A503, A510



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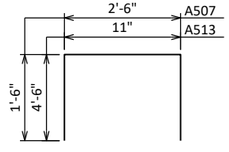
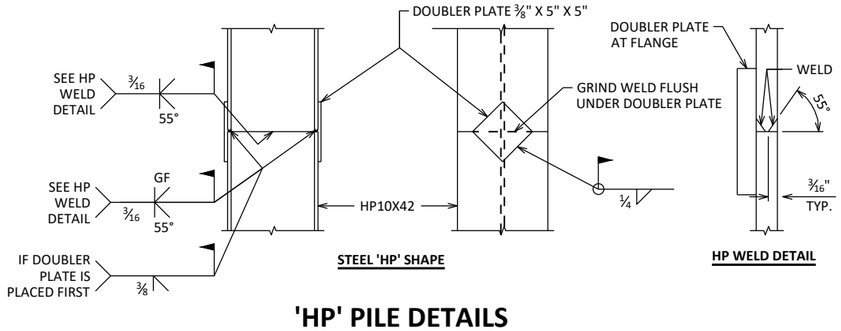


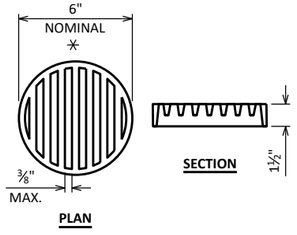
A507, A513



STEEL 'HP' SHAPE

HP WELD DETAIL

'HP' PILE DETAILS



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.

A03 OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2" x 6". (18" RMW @ B.F. & ¾" "V" GROOVE @ F.F. IF JOINT IS USED).

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

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-18-241

DRAWN BY VS | PLANS CK'D SEH

SOUTH ABUTMENT DETAILS

SHEET 5

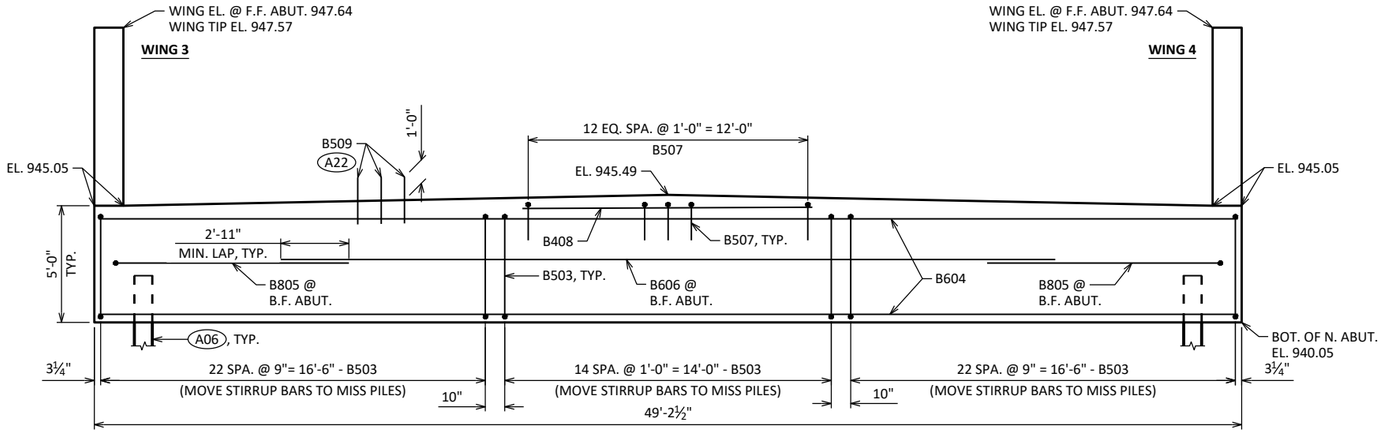
SCALE =

8

8

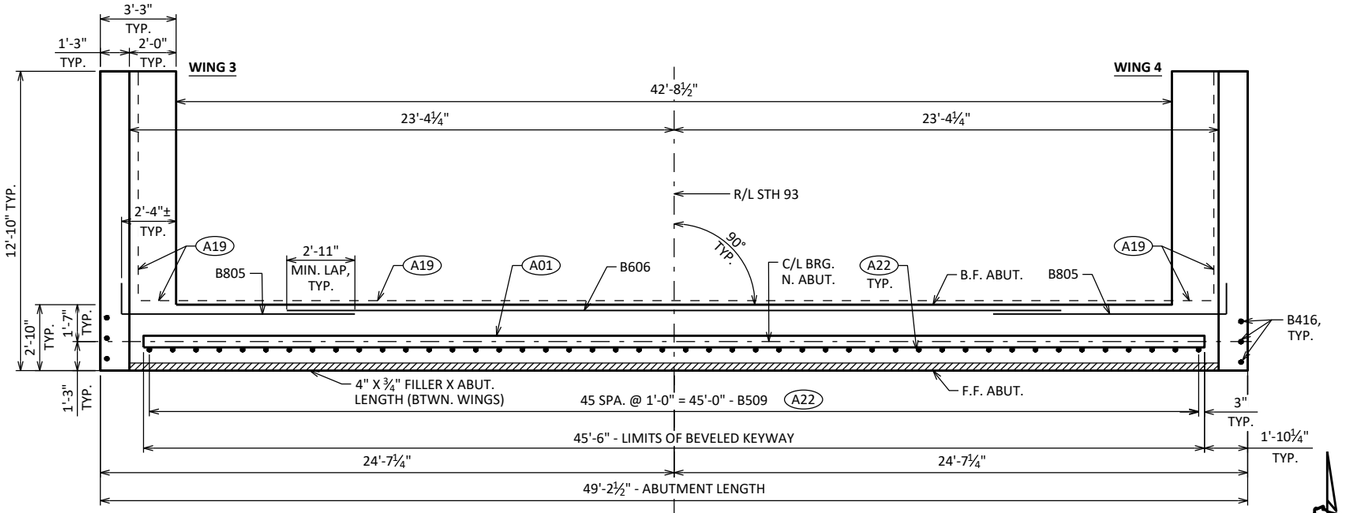
STATE PROJECT NUMBER

7590-00-73

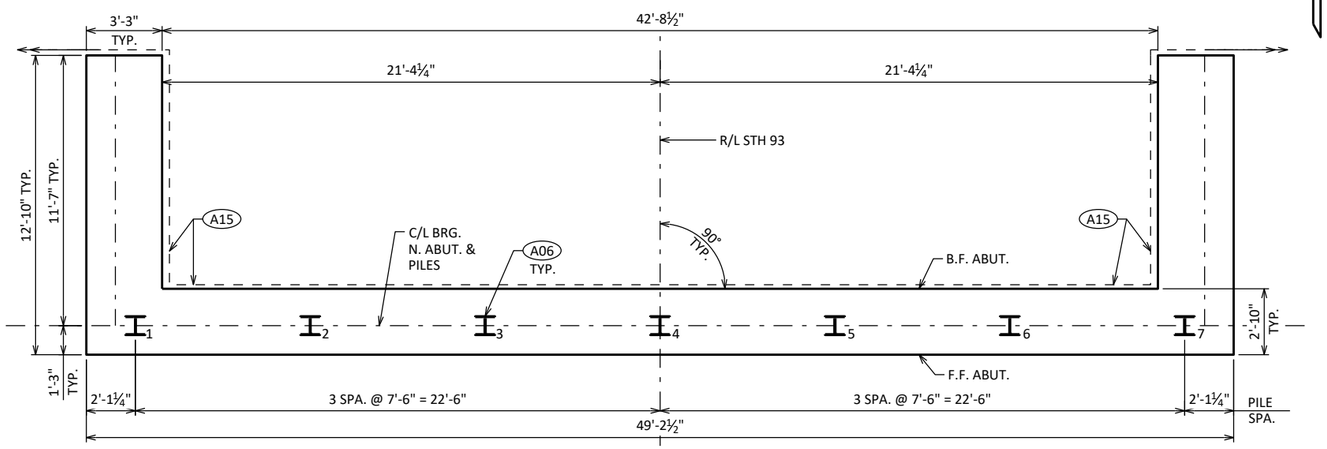


ELEVATION

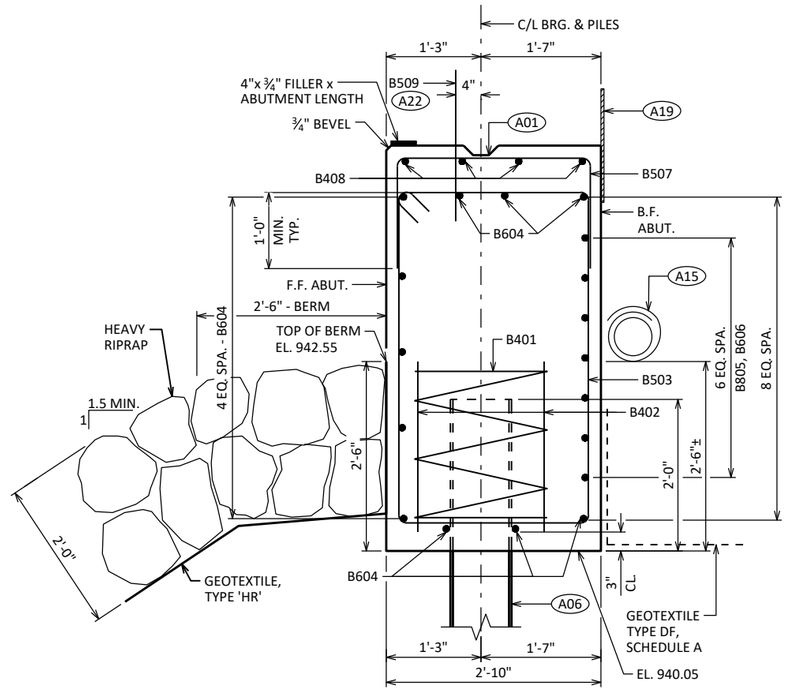
LOOKING NORTH



PLAN



PILE PLAN



SECTION THRU BODY

A01 CONST. JOINT: KEYWAY FORMED BY A BEVELED 2" x 6".

A06 SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING, ESTIMATED 75'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.

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

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

A22 B509 BARS @ 1'-0" SPA. AT TOP OF ABUT. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-18-241

DRAWN BY VS | PLANS CK'D SEH

NORTH ABUTMENT

SHEET 6

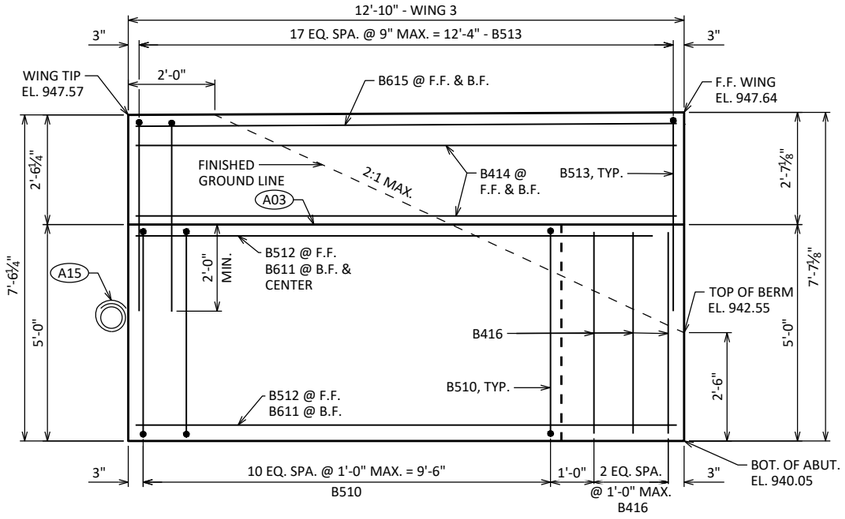
SCALE =

8

8

STATE PROJECT NUMBER

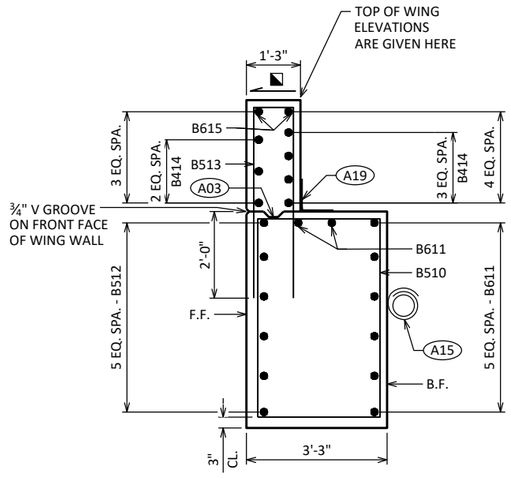
7590-00-73



WING 3 ELEVATION

WING 4 SIMILAR

FINISH SMOOTH 'TOP OF WING'
HORIZONTAL SURFACE.
SLOPE DOWN 1% FOR DRAINAGE.



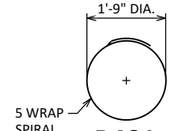
SECTION THRU WING 3

WING 4 SIMILAR

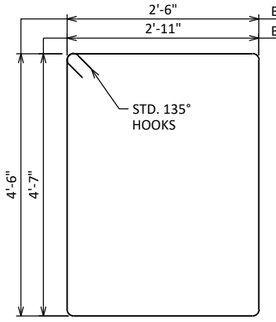
BILL OF BARS

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

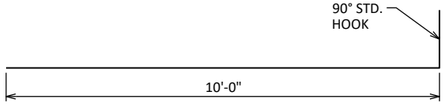
BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
B401		7	28'-0"	X		PILES - 1 PER BODY PILE
B402		14	2'-3"			PILES - 2 PER BODY PILE
B503		61	14'-8"	X		ABUT. BODY - STIRRUP - VERT.
B604		11	48'-10"			ABUT. BODY - HORIZ.
B805		14	11'-2"	X		ABUT. BODY - HORIZ. - B.F.
B606		7	33'-3"			ABUT. BODY - HORIZ. - B.F.
B507		13	5'-3"	X		ABUT. BODY - VERT. - TOP
B408		4	12'-4"			ABUT. BODY - HORIZ. -TOP
B509	X	46	2'-0"			ABUT. BODY - VERT. - TOP - DOWEL BAR
B510	X	22	15'-8"	X		WINGS 3 & 4 - BOT. - STIRRUP - VERT.
B611	X	16	12'-6"			WINGS 3 & 4 - BOT. - HORIZ - B.F. & CENTER
B512	X	12	12'-6"			WINGS 3 & 4 - BOT. - HORIZ - F.F.
B513	X	36	9'-8"	X		WINGS 3 & 4 - TOP - VERT.
B414	X	14	12'-6"			WINGS 3 & 4 - TOP - HORIZ. - B.F. & F.F.
B615	X	4	12'-6"			WINGS 3 & 4 - TOP - HORIZ. - B.F. & F.F.
B416		6	4'-7"			ABUT. BODY - END FACES - VERT.



B401



B503, B510



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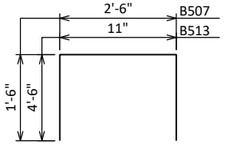
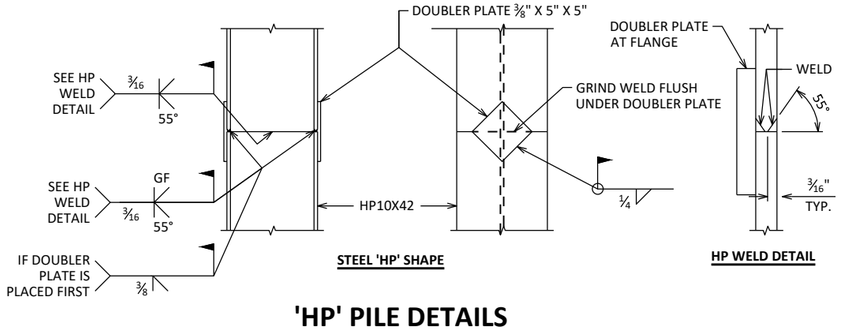


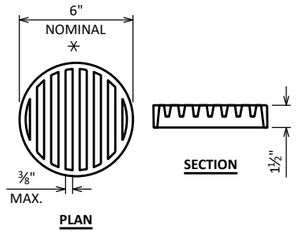
B507, B513



STEEL 'HP' SHAPE

HP WELD DETAIL

'HP' PILE DETAILS



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.

(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2" x 6". (18" RMW @ B.F. & ¾" "V" GROOVE @ F.F. IF JOINT IS USED).

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

(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-18-241

DRAWN BY VS | PLANS CK'D SEH

NORTH ABUTMENT DETAILS

SHEET 7

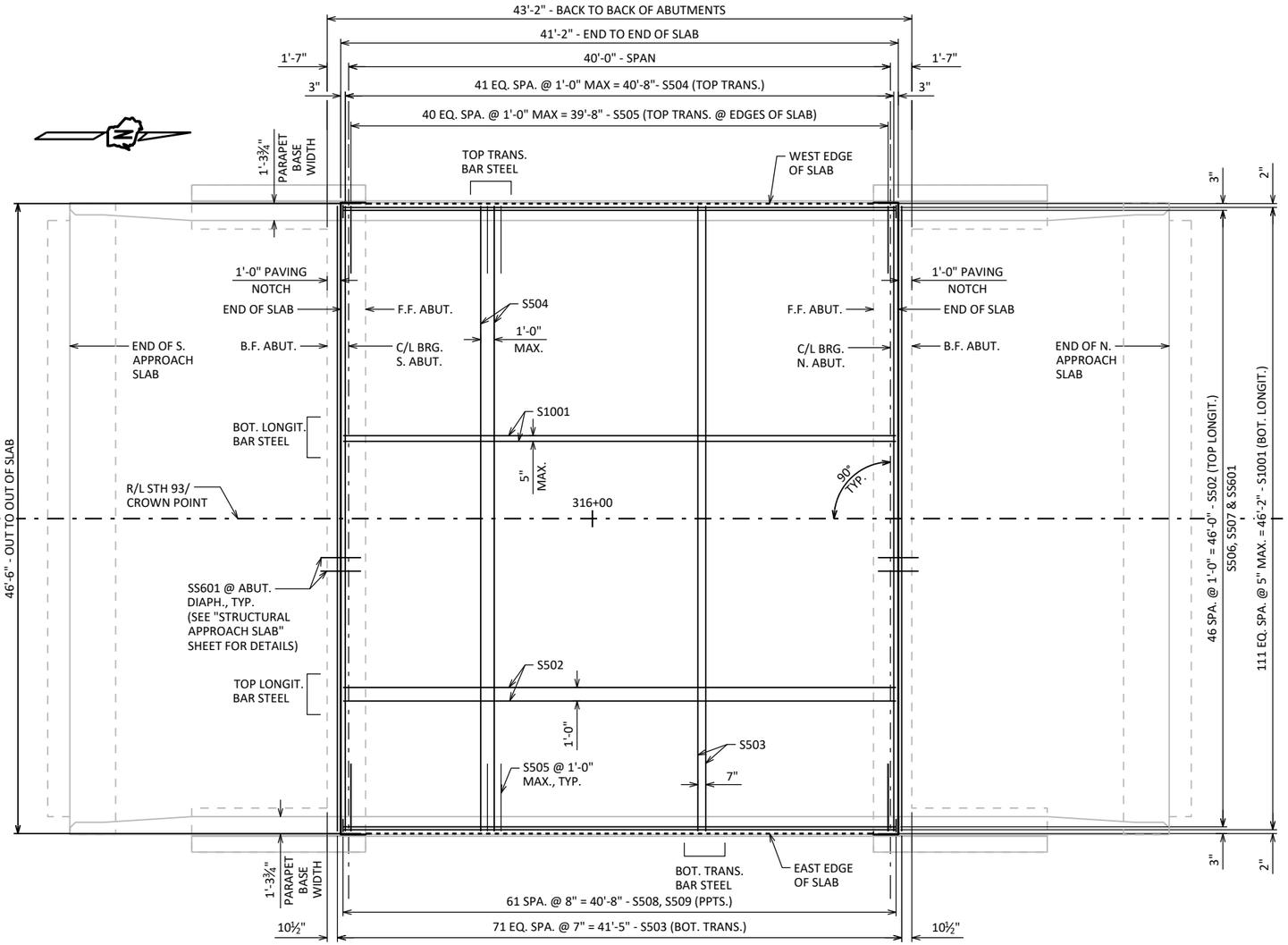
SCALE =

8

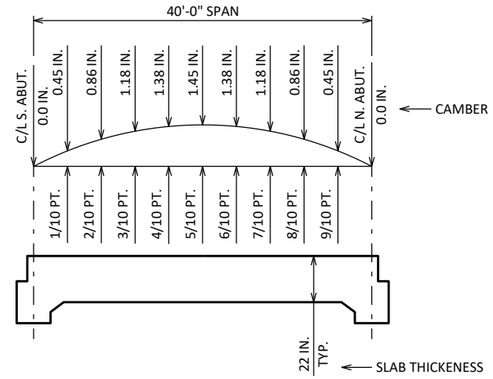
8

STATE PROJECT NUMBER

7590-00-73



PLAN

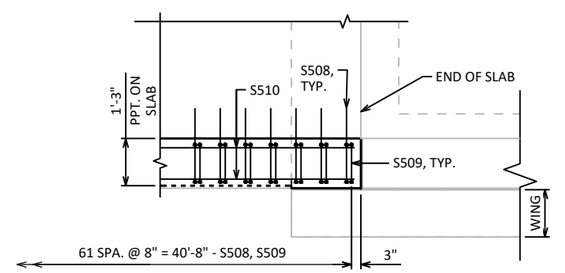


CAMBER AND SLAB THICKNESS DIAGRAM

CAMBER SHOWN IS BASED ON 3 TIMES DEAD LOAD DEFLECTIONS. CAMBER SPANS AS SHOWN TO PROVIDE FOR DEAD LOAD DEFLECTION AND FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT.
PARAPETS PLACED ON TOP OF THE SLAB SHALL BE POURED AFTER FALSEWORK HAS BEEN RELEASED.

TO DETERMINE FALSEWORK ELEVATION AT EDGE OF SLAB, CROWN OR REFERENCE LINE FOLLOW THIS PROCEDURE:

	TOP OF SLAB ELEVATION AT FINAL GRADE
LESS	SLAB THICKNESS
PLUS	CAMBER
PLUS	FORM SETTLEMENT/DEFLECTION DUE TO PLACEMENT OF SLAB CONCRETE (TO BE COMPUTED BY THE CONTRACTOR)
EQUALS	TOP OF SLAB FALSEWORK ELEVATION



PPT. REINFORCEMENT

TYP. ALL CORNERS

TOP OF SLAB ELEVATIONS

LOCATION	C/L 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.	C/L BRG. N. ABUT.
W. GUTTER	947.83	947.81	947.79	947.77	947.75	947.73	947.71	947.69	947.67	947.65	947.63
R/L & CROWN	948.27	948.25	948.23	948.21	948.19	948.17	948.15	948.13	948.11	948.09	948.07
E. GUTTER	947.83	947.81	947.79	947.77	947.75	947.73	947.71	947.69	947.67	947.65	947.63

SURVEY TOP OF SLAB ELEVATIONS

LOCATION	C/L BRG. S. ABUT.	5/10 PT.	C/L BRG. N. ABUT.
W. GUTTER			
R/L & CROWN			
E. GUTTER			

PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF SLAB ELEVATIONS AT THE C/L OF ABUTMENTS AND AT 5/10 PTS. TO VERIFY CAMBER. TAKE ELEVATIONS ALONG GUTTER LINES AND CROWN OR R/L. RECORD THE ELEVATIONS IN THE ABOVE TABLE FOR THE "AS BUILT" PLANS.

NOTES

FILL IN THE TABLE OF "SURVEY TOP OF SLAB ELEVATIONS" FOR EACH SPAN ON AS BUILT PLANS.

TOP TRANSVERSE BARS IN SLAB SHALL BE SUPPORTED BY INDIVIDUAL BAR CHAIRS AT APPROXIMATELY 3'-0" CENTERS EACH WAY. BOTTOM LONGITUDINAL BARS SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS AT APPROXIMATELY 4'-0" CENTERS.

ALL SLAB THICKNESS DIMENSIONS ARE MINIMUM. ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-18-241

DRAWN BY VS | PLANS CK'D SEH

SUPERSTRUCTURE PLAN

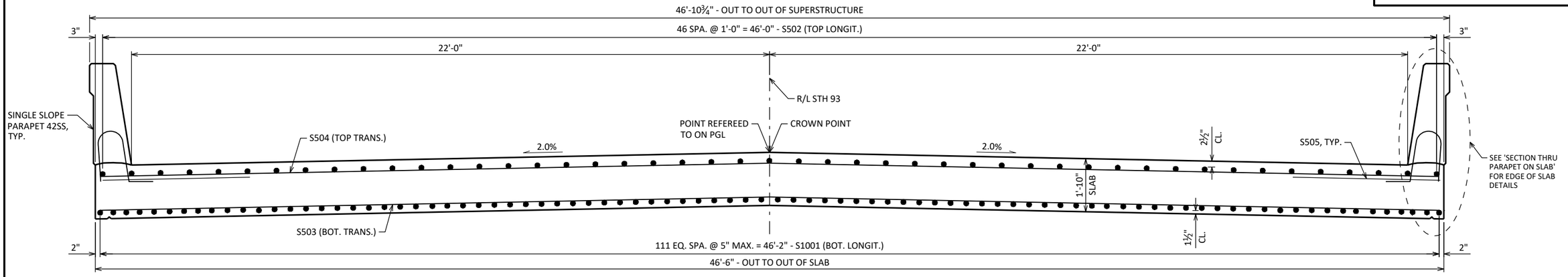
SHEET 8

SCALE =

8

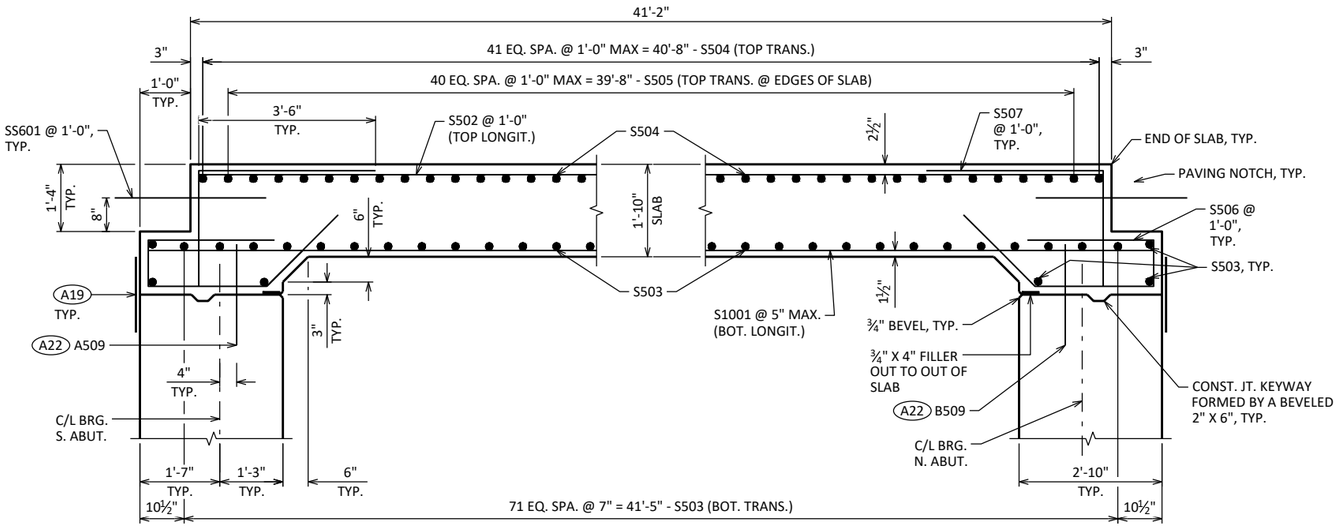
8

STATE PROJECT NUMBER
7590-00-73



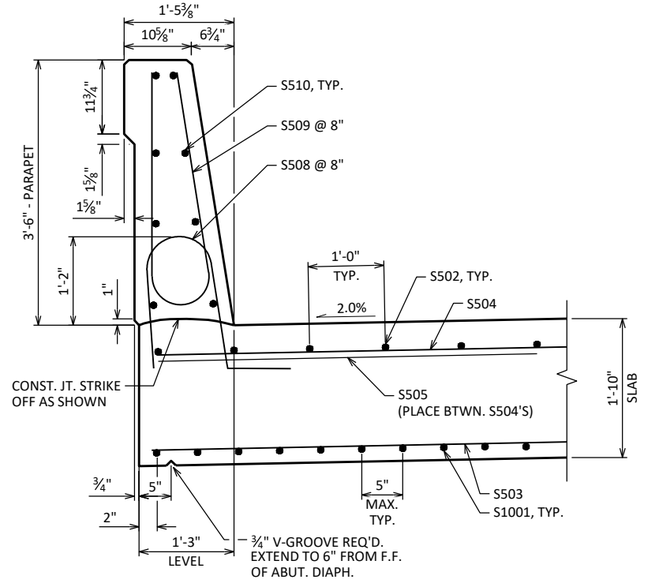
CROSS SECTION THRU ROADWAY

LOOKING NORTH



LONGITUDINAL SECTION THRU SLAB

LOOKING WEST



SECTION THRU PARAPET ON SLAB

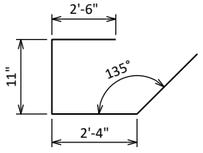
(SEE PARAPET SHEET FOR ADDITIONAL DETAILS)

BILL OF BARS

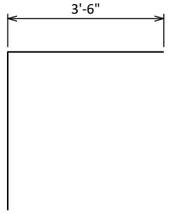
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
S1001	X	112	42'-10"			SLAB - BOT. - LONGIT.
S502	X	47	40'-10"			SLAB TOP - LONGIT.
S503	X	78	46'-2"			SLAB - BOT. - TRANS.
S504	X	42	46'-2"			SLAB - TOP - TRANS.
S505	X	82	5'-0"			SLAB - TOP - TRANS. - EDGES OF SLAB
S506	X	94	7'-9"	X		SLAB/DIA. - VERT.
S507	X	94	5'-8"	X		SLAB/DIA. - VERT.
S508	X	124	4'-5"	X		SLAB/PPT. - VERT.
S509	X	124	6'-8"	X		PPT. - VERT.
S510	X	16	40'-10"			PPT. - LONGIT.
SS601		94	3'-0"			SLAB/STRUCTURAL APPROACH SLAB - DOWEL

SS601 — STAINLESS STEEL



S506



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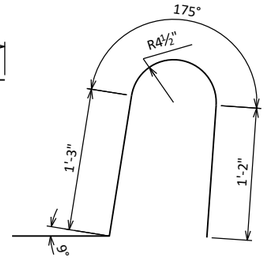

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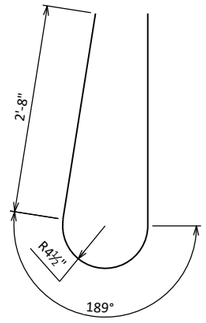

S509

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

(A22) A509 AND B509 BARS @ 1'-0" SPA. AT TOP OF ABUT. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE B-18-241

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SUPERSTRUCTURE DETAILS

SHEET 9

SCALE =

8

8

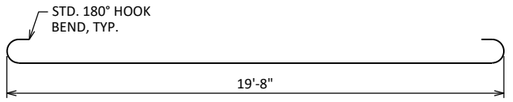
STATE PROJECT NUMBER

7590-00-73

BILL OF BARS

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

BAR MARK	COAT	S. STR. APPR. SLAB	N. STR. APPR. SLAB	LENGTH	BENT	BAR SERIES	LOCATION
T501	X	45	45	12'-2"	X		APPROACH SLAB FTG. - STIRRUP
T502	X	4	4	8'-11"	X		APPROACH SLAB FTG. - STIRRUP
T803	X	4	4	43'-8"			APPROACH SLAB FTG. - TRANS. - HORIZ.
T804	X	8	8	46'-3"			APPROACH SLAB FTG. - TRANS. - HORIZ.
T805	X	78	78	21'-6"	X		APPROACH SLAB - LONGIT. - BOT.
T506	X	42	42	46'-3"			APPROACH SLAB - TRANS. - TOP & BOT.
T507	X	40	40	4'-1"	X		APPROACH SLAB - TRANS. - TOP - BOTH EDGES
T508	X	47	47	19'-8"			APPROACH SLAB - LONGIT. - TOP



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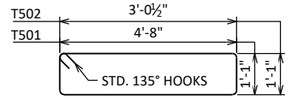
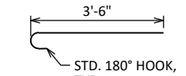


T501, T502



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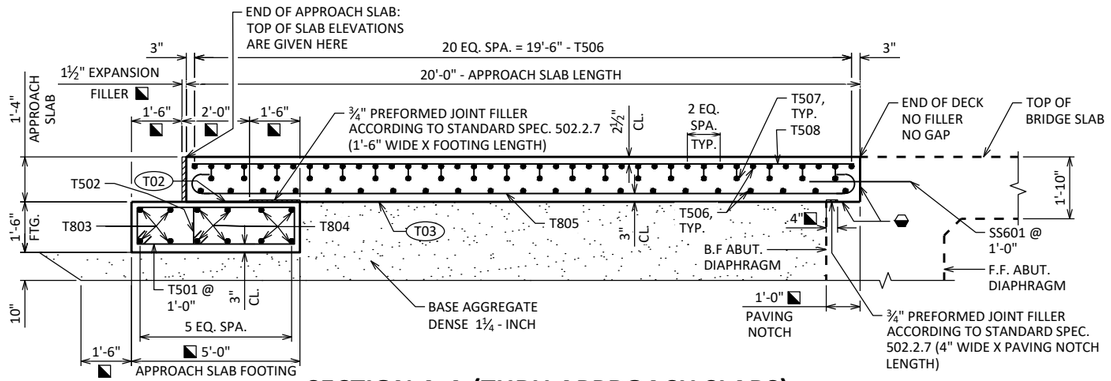
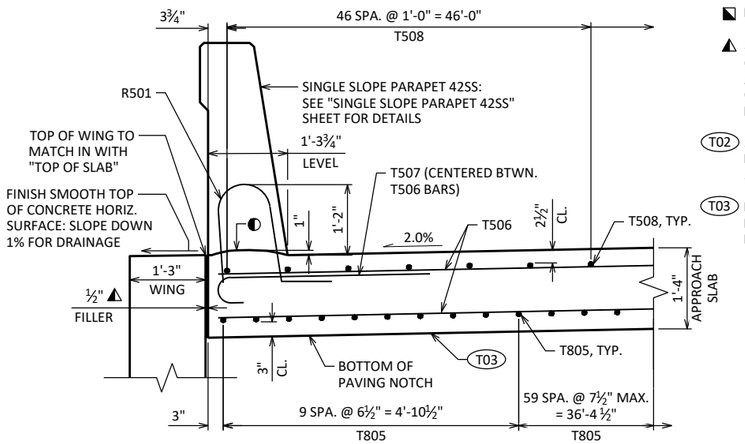
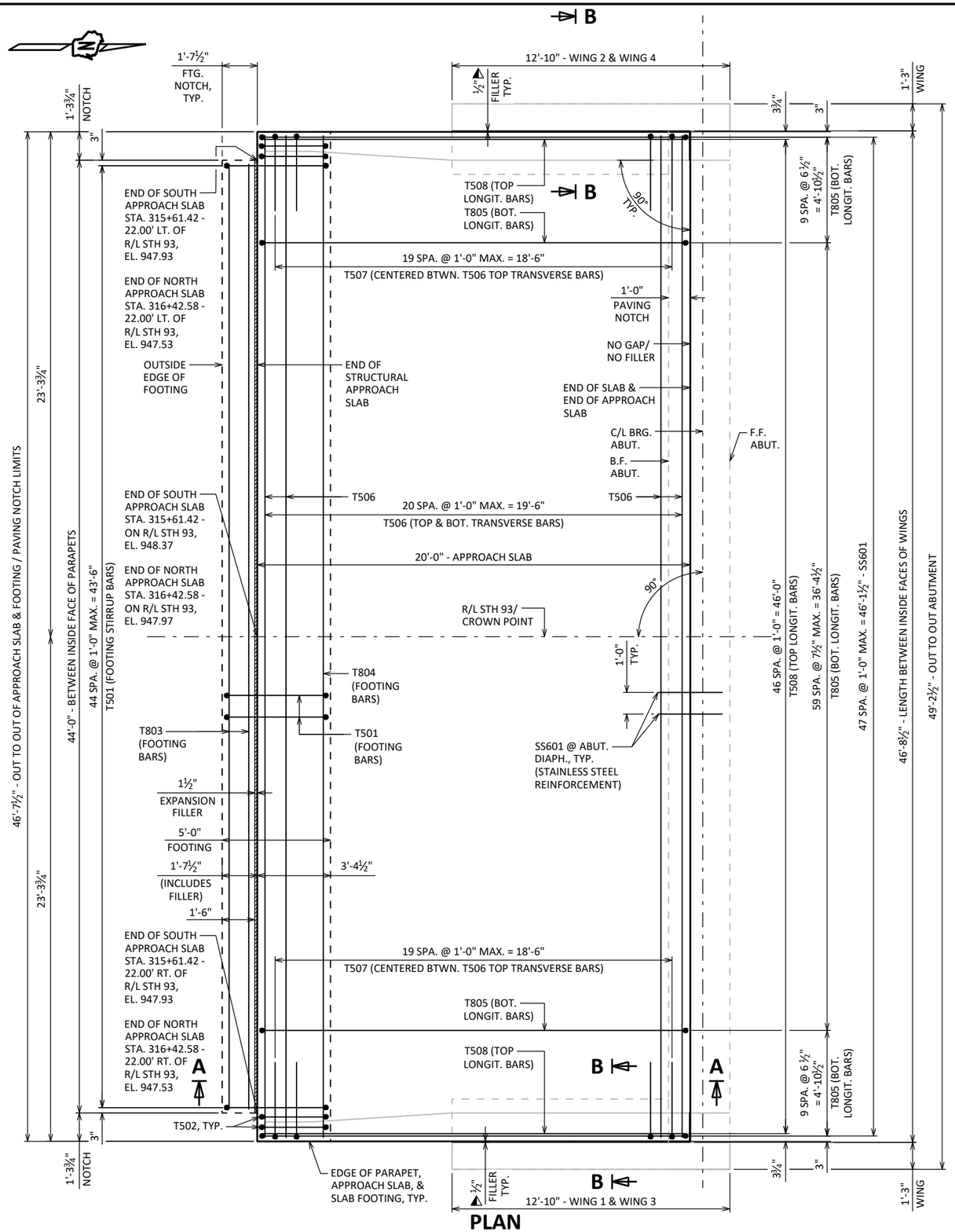


SECTION A-A (THRU APPROACH SLABS)

- APPLY PROTECTIVE SURFACE TREATMENT TO HORIZONTAL AND VERTICAL PAVING NOTCH SURFACES PRIOR TO POURING STRUCTURAL APPROACH SLAB.
- CONST. JOINT: STRIKE OFF AND LEAVE ROUGH AS SHOWN.
- DIMENSION IS TAKEN NORMAL TO C/L BRG. ABUTMENTS.
- SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING, GRAY, NON-BITUMINOUS JOINT SEALER (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.
- (T02) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE LENGTH OF THE FOOTING.
- (T03) PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF SUBGRADE BENEATH SLAB.



SECTION B-B (EDGE OF SLAB DETAIL)



PLAN

SOUTH APPROACH SLAB SHOWN - NORTH APPROACH SLAB SIMILAR

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-18-241

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STRUCTURAL APPROACH SLABS

SHEET 10

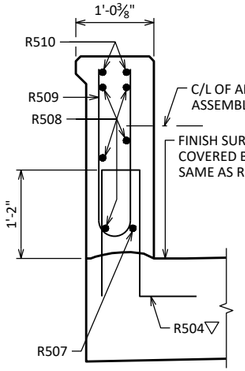
SCALE =

8

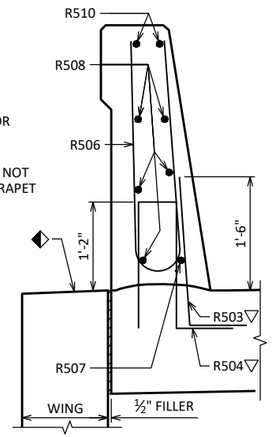
8

STATE PROJECT NUMBER

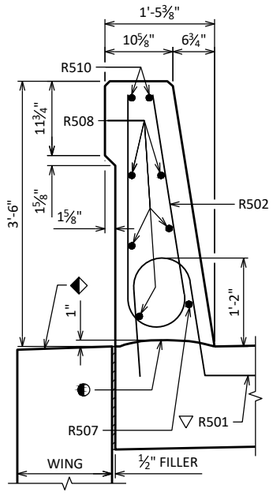
7590-00-73



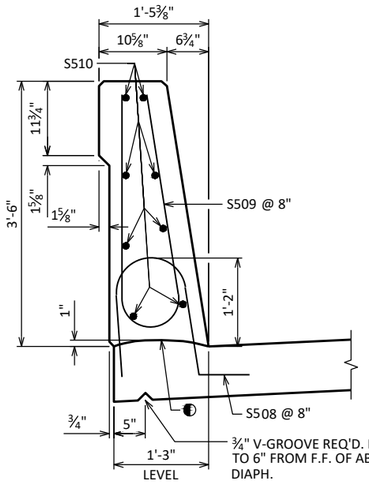
SECTION A-A



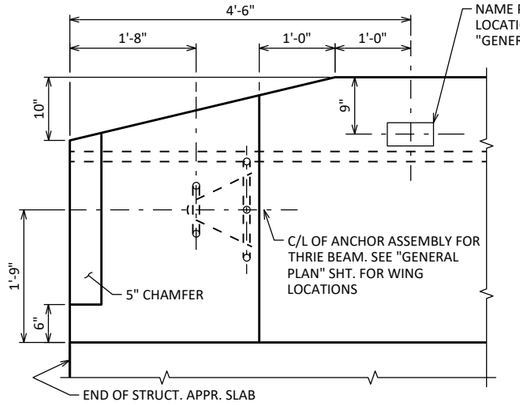
SECTION B-B



SECTION C-C



SECTION THRU PARAPET ON DECK



PARAPET END TREATMENT DETAIL

LOOKING AT INSIDE FACE OF PARAPET

BILL OF BARS

FOR STRUCTURAL APPOACH SLAB PARAPETS

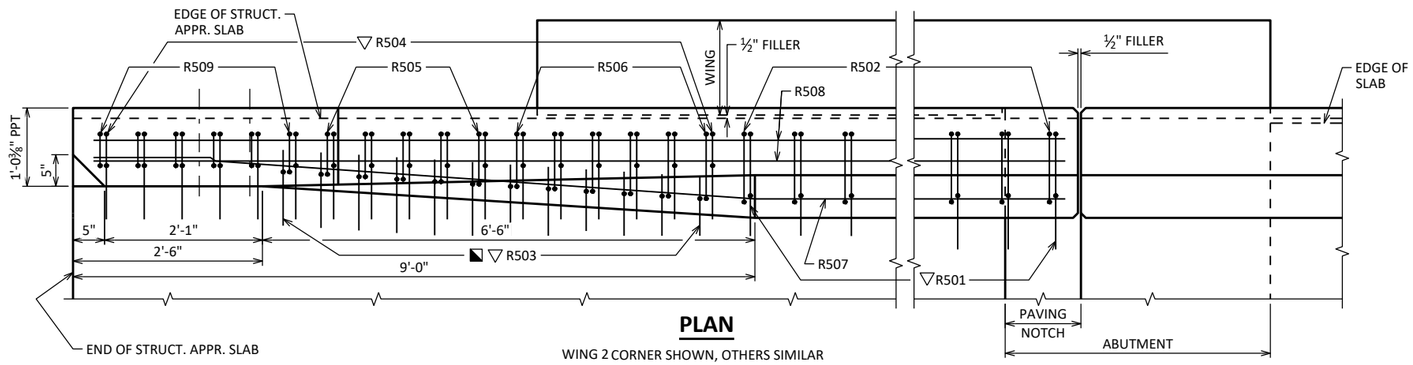
BAR MARK	COAT	S. STR. APPR. SLAB	N. STR. APPR. SLAB	LENGTH	BENT	BAR SERIES	LOCATION
R501	X	34	34	4'-5"	X		PARAPET VERT.
R502	X	34	34	6'-8"	X		PARAPET VERT.
R503	X	24	24	2'-9"	X		PARAPET VERT.
R504	X	34	34	4'-4"	X		PARAPET VERT.
R505	X	10	10	6'-5"	X		PARAPET VERT.
R506	X	12	12	6'-6"	X		PARAPET VERT.
R507	X	2	2	19'-8"	X		PARAPET HORIZ.
R508	X	10	10	19'-8"			PARAPET HORIZ.
R509	X	12	12	5'-5"	X	⚠	PARAPET VERT.
R510	X	4	4	19'-8"	X		PARAPET HORIZ.

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

BAR SERIES TABLE

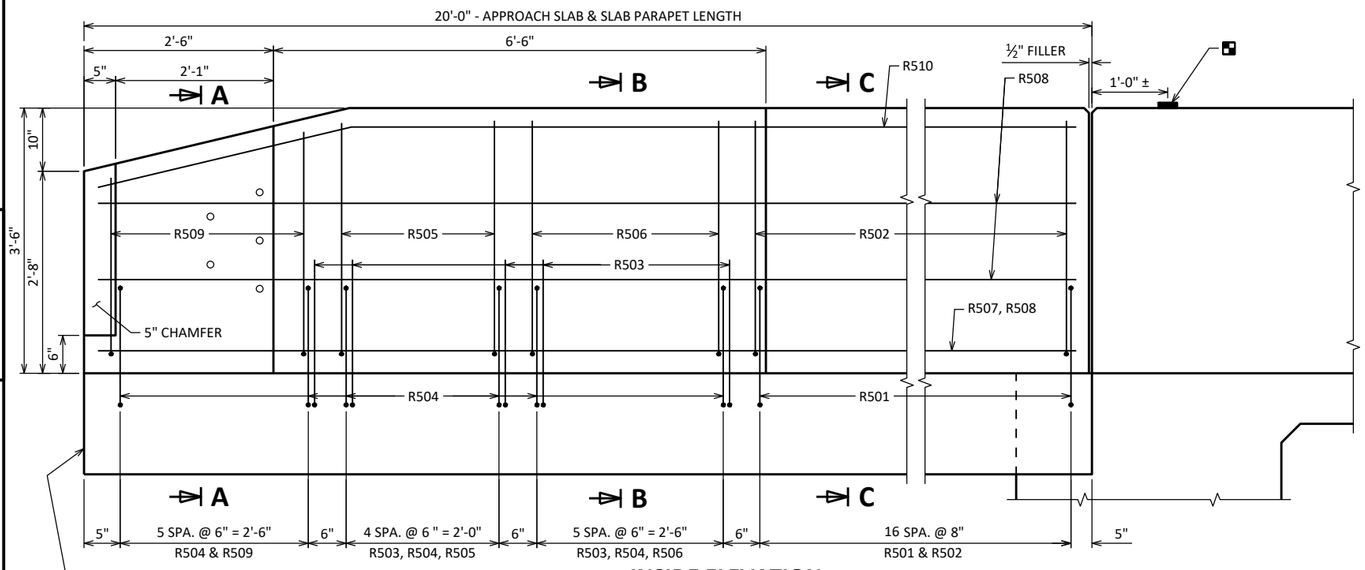
BUNDLE AND TAG EACH SERIES SEPARATELY.

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



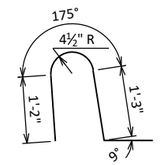
PLAN

WING 2 CORNER SHOWN, OTHERS SIMILAR

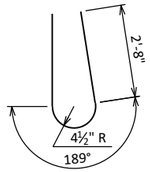


INSIDE ELEVATION

WING 2 CORNER SHOWN, OTHERS SIMILAR
WING & STRUCTURAL APPROACH SLAB FOOTING NOT SHOWN FOR CLARITY



R501



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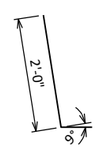

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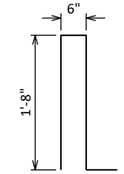

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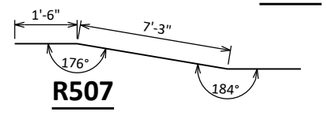

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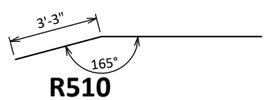

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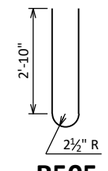

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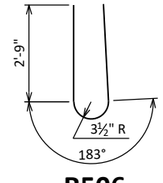

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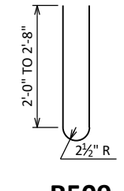
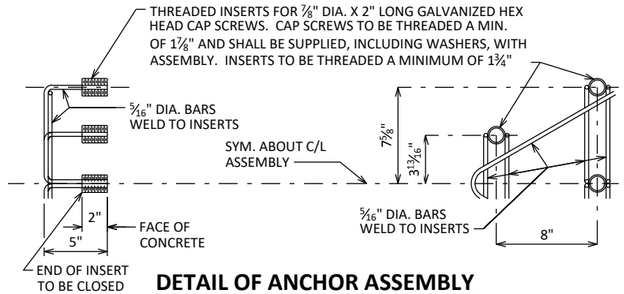


R509

BENCH MARK CAP.



DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH ASTM F2329.

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

◐ CONST. JOINT - STRIKE OFF AS SHOWN

◆ SLOPE FOR DRAINAGE

◣ USE CARE TO PLACE R503 BARS CORRECTLY ALONG TRANSITION OF PARAPET.

▽ R501, R503, AND R504 BARS TO BE TIED TO STRUCTURAL APPROACH SLAB STEEL BEFORE STRUCTURAL APPROACH SLAB IS POURED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-18-241

DRAWN BY VS | PLANS CK'D SEH

SINGLE SLOPE PARAPET 42SS

SHEET 11

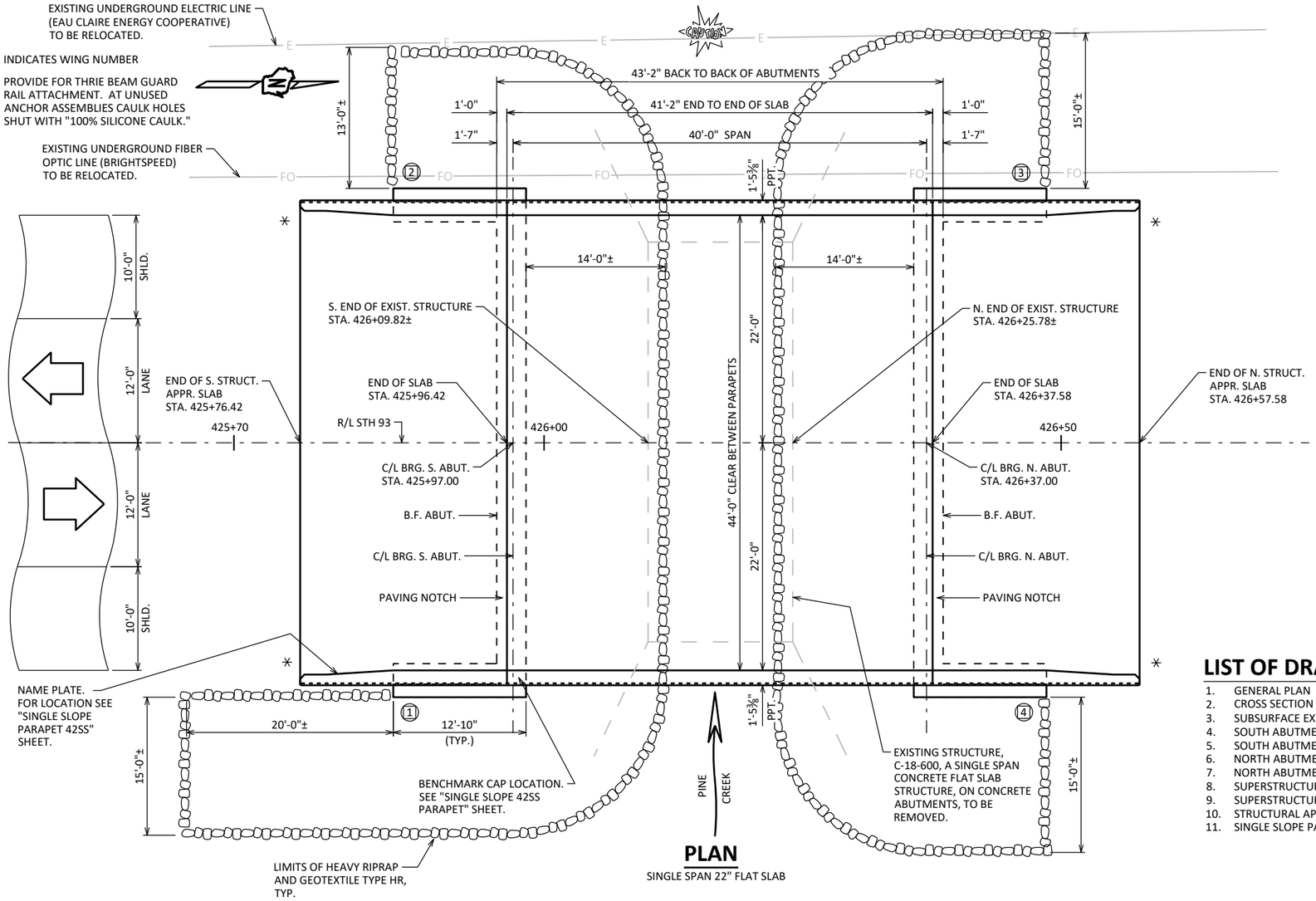
SCALE = 2.00

8

8

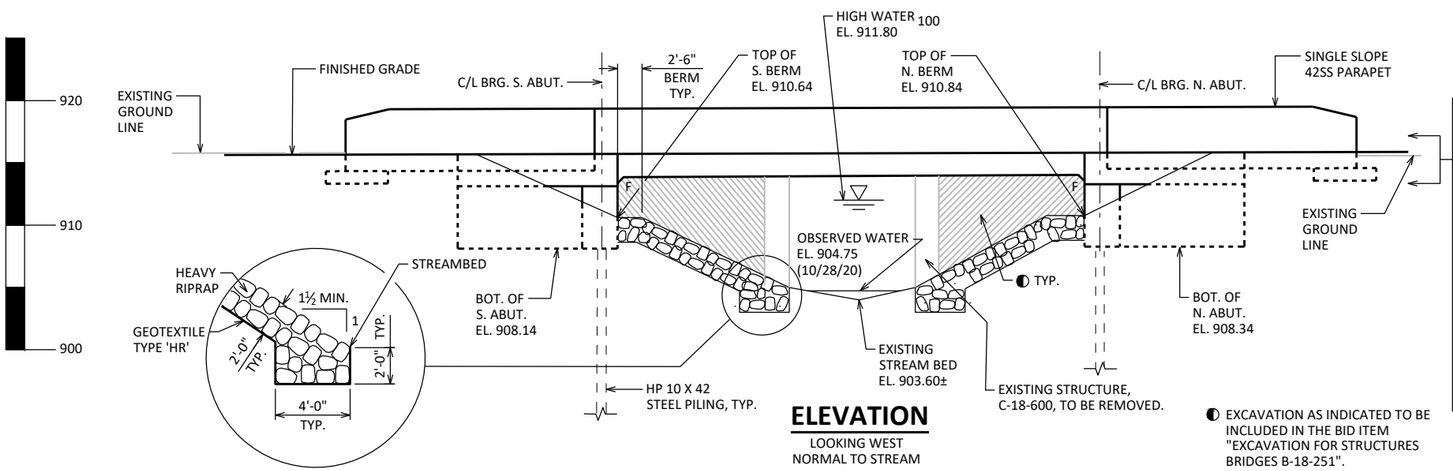
STATE PROJECT NUMBER

7590-00-73



PLAN

SINGLE SPAN 22" FLAT SLAB



ELEVATION

LOOKING WEST
NORMAL TO STREAM

◐ EXCAVATION AS INDICATED TO BE INCLUDED IN THE BID ITEM "EXCAVATION FOR STRUCTURES BRIDGES B-18-251".

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING: RF = 1.20
OPERATING RATING: RF = 1.55
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 & STRUCTURAL APPROACH SLAB & FTG. — f'_c = 4,000 PSI
- ALL OTHER — f'_c = 3,500 PSI

BAR STEEL REINFORCEMENT
- GRADE 60 — f_y = 60,000 PSI
- STAINLESS, GRADE 60 — f_y = 60,000 PSI

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 10 x 42 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
ESTIMATED 100'-0" LONG AT SOUTH ABUTMENT.
ESTIMATED 100'-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 PILE CAPACITY.

HYDRAULIC DATA

100-YEAR FREQUENCY:

Q_{100}= 550 C.F.S.
V_{100}= 5.00 F.P.S.
HW_{100}= EL. 911.80
WATERWAY AREA = 110 SQ. FT.
DRAINAGE AREA = 5.6 SQ. MI.
ROADWAY OVERTOPPING = N/A
SCOUR CRITICAL CODE = 5

2-YEAR FREQUENCY:

Q_2= 150 C.F.S.
V_2= 4.5 F.P.S.
HW_2= EL. 908.49

TRAFFIC DATA

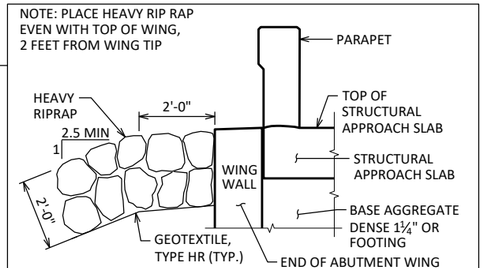
STH 93 :

ADT = 7,000 (2044)
R.D.S. = 60 MPH

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. SUPERSTRUCTURE
9. SUPERSTRUCTURE DETAILS
10. STRUCTURAL APPROACH SLAB
11. SINGLE SLOPE PARAPET 42SS

NOTE: PLACE HEAVY RIP RAP EVEN WITH TOP OF WING, 2 FEET FROM WING TIP



TYPICAL FILL SECTION AT WING TIPS

STRUCTURE DESIGN CONTACTS:

VISTA SHAHRIARI 608-266-7086
KYLE BUSCH 608-267-0465

NO.	DATE	REVISION	BY

BUREAU OF STRUCTURES

ACCEPTED KHB 7/30/24
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-18-251

STH 93 OVER PINE CREEK

COUNTY	TOWN
EAU CLAIRE	PLEASANT VALLEY

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATION

DESIGNED BY	VS	DESIGNED CK'D	SEH	DRAWN BY	WWR	PLANS CK'D	SEH

GENERAL PLAN

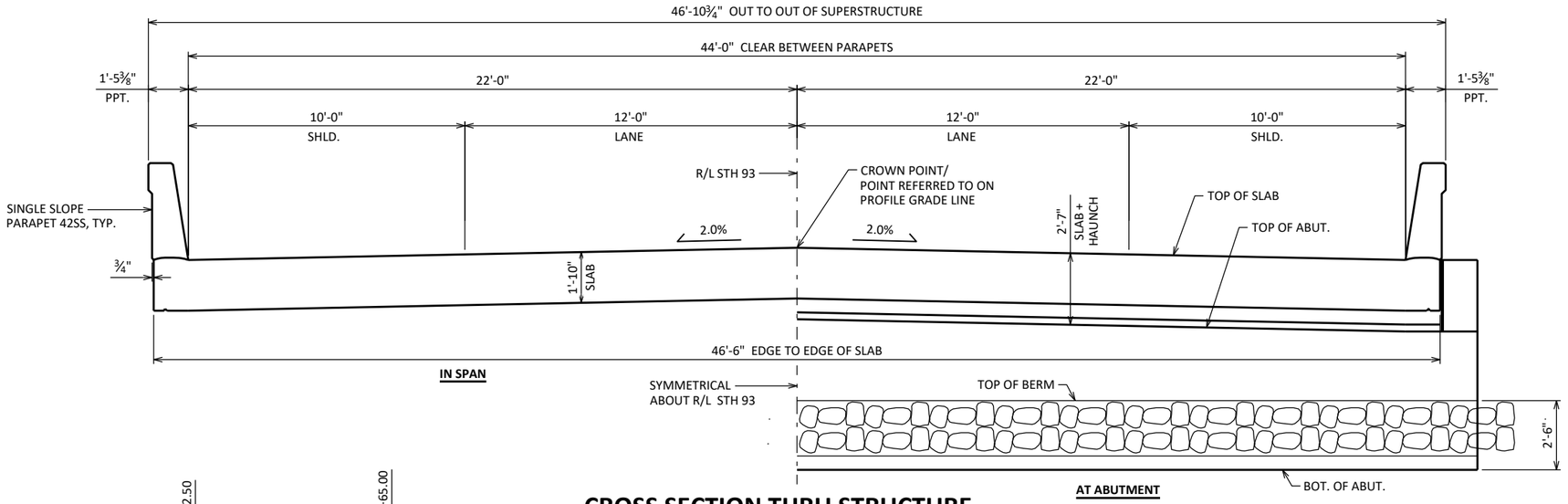
SHEET 1 OF 11

SCALE =

I.D. 7590-00-03B DATE: JUNE 2024

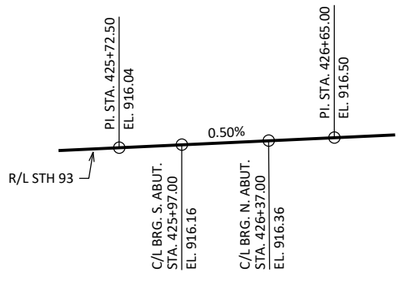
8

8



CROSS SECTION THRU STRUCTURE

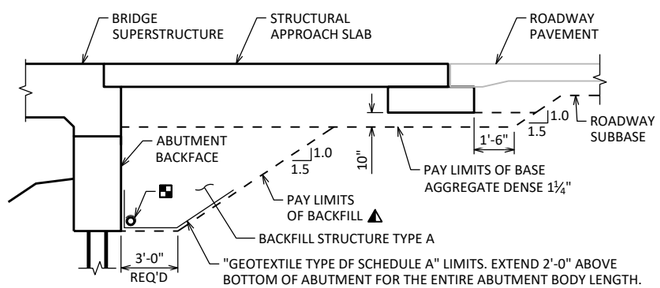
LOOKING NORTH



PROFILE GRADE LINE - R/L STH 93

TOTAL ESTIMATED QUANTITIES

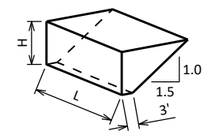
BID ITEM NUMBER	BID ITEMS	UNIT	SUPER.	S. STRUCT. APP. SLAB	S. ABUT.	N. ABUT.	N. STRUCT. APP. SLAB	TOTALS
203.0250	REMOVING STRUCTURE OVER WATERWAY REMOVE DEBRIS C-18-600	EACH	---	---	---	---	---	1
206.1001	EXCAVATION FOR STRUCTURES BRIDGES B-18-251	EACH	---	---	---	---	---	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	---	---	85	85	---	170
305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	---	149	---	---	149	298
502.0100	CONCRETE MASONRY BRIDGES	CY	151.4	64.3	41.6	41.6	64.3	363
502.3200	PROTECTIVE SURFACE TREATMENT	SY	225	98	---	---	98	421
502.3210	PIGMENTED SURFACE SEALER	SY	41	20	---	---	20	81
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	---	---	2,780	2,780	---	5,560
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	32,280	10,860	1,470	1,470	10,860	56,940
505.0800.S	BAR STEEL REINFORCEMENT HS STAINLESS STRUCTURES	LB	430	---	---	---	---	430
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	---	---	12	12	---	24
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	---	---	700	700	---	1,400
606.0300	RIPRAP HEAVY	CY	---	---	141	122	---	263
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	---	---	90	90	---	180
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	4	---	---	---	---	4
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	---	---	44	44	---	88
645.0120	GEOTEXTILE TYPE HR	SY	---	---	285	250	---	535
	NON-BID ITEMS							
	FILLER	Size	---	---	---	---	---	½", ¾", 1½"



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.



ABUTMENT BACKFILL DIAGRAM

L = OUT TO OUT OF ABUTMENT BODY 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)

STATE PROJECT NUMBER

7590-00-73

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

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES BRIDGES B-18-251" SHALL BE THE EXISTING GROUNDLINE AND STREAM BED ELEVATION.

THE BACKFILL QUANTITIES ARE BASED ON THE PAY LIMITS SHOWN ON THE PLANS AND MAY NOT REFLECT ACTUAL PLACED QUANTITIES. "BACKFILL STRUCTURE TYPE A" REQUIRED DIRECTLY BEHIND ABUTMENTS AND ABUTMENT WINGS FOR 3 FEET. BACKFILL PLACED BEYOND PAY LIMITS OR EXCEEDING PLAN QUANTITIES SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES.

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. ALSO EXCLUDED IS THE "BASE AGGREGATE DENSE 1 1/4-INCH" AS DETAILED ON THE STRUCTURAL APPROACH SLAB SHEETS.

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.

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

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

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.

SLAB FALSEWORK SHALL BE SUPPORTED ON PILES OR THE SUBSTRUCTURE, UNLESS AN ALTERNATE METHOD IS APPROVED BY THE ENGINEER.

AT ABUTMENTS, CONCRETE POURED UNDER WATER WILL BE ALLOWED AND SHALL BE DONE IN ACCORDANCE WITH SECTION 502.3.5.3 OF THE STANDARD SPECIFICATIONS.

AT ABUTMENTS, HP 12X53 STEEL PILING MAY BE USED IN LIEU OF HP 10X42 STEEL PILING. PAYMENT SHALL BE BASED ON BID PRICE FOR HP 10X42 STEEL PILING.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-18-251

DRAWN BY WWR | PLANS CK'D SEH

CROSS SECTION & QUANTITIES

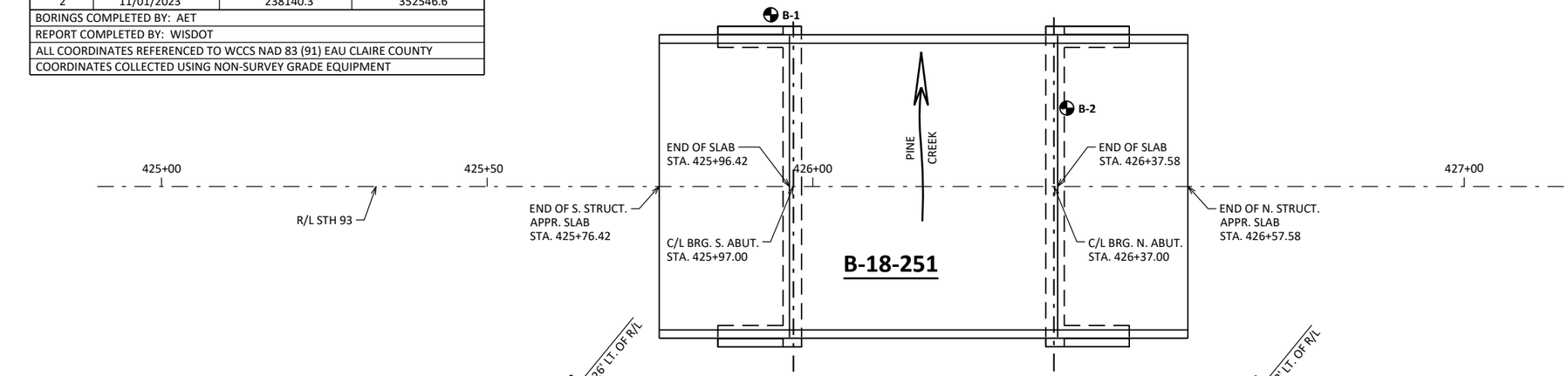
SHEET 2

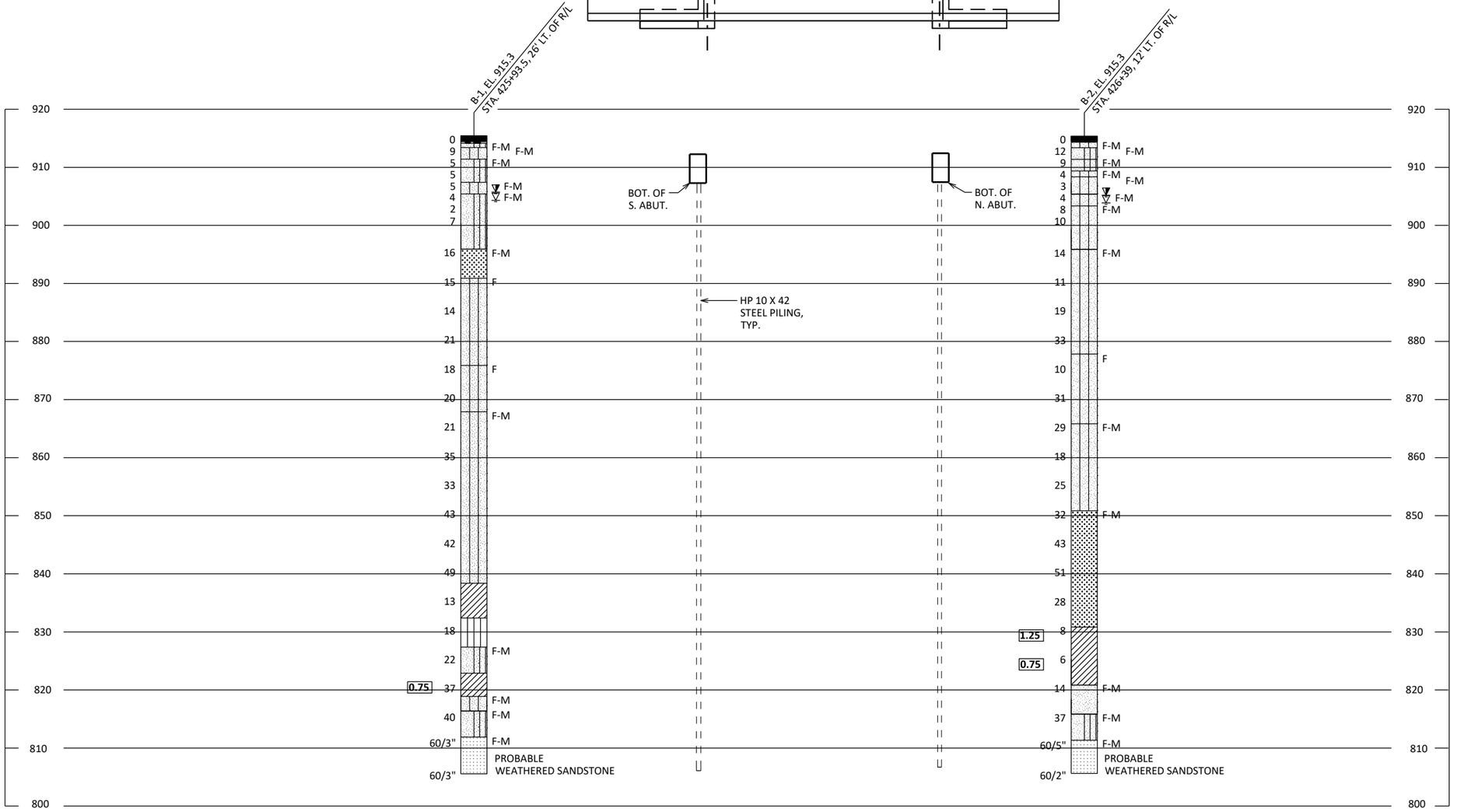
SCALE =

8

8

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	11/02/2023	238095.0	352531.6
2	11/01/2023	238140.3	352546.6
BORINGS COMPLETED BY: AET			
REPORT COMPLETED BY: WISDOT			
ALL COORDINATES REFERENCED TO WCCS NAD 83 (91) EAU CLAIRE COUNTY			
COORDINATES COLLECTED USING NON-SURVEY GRADE EQUIPMENT			





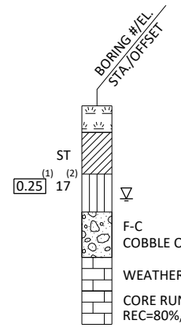
STATE PROJECT NUMBER

7590-00-73

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-18-251

DRAWN BY JJ/WWR PLANS CK'D SEH

SUBSURFACE EXPLORATION

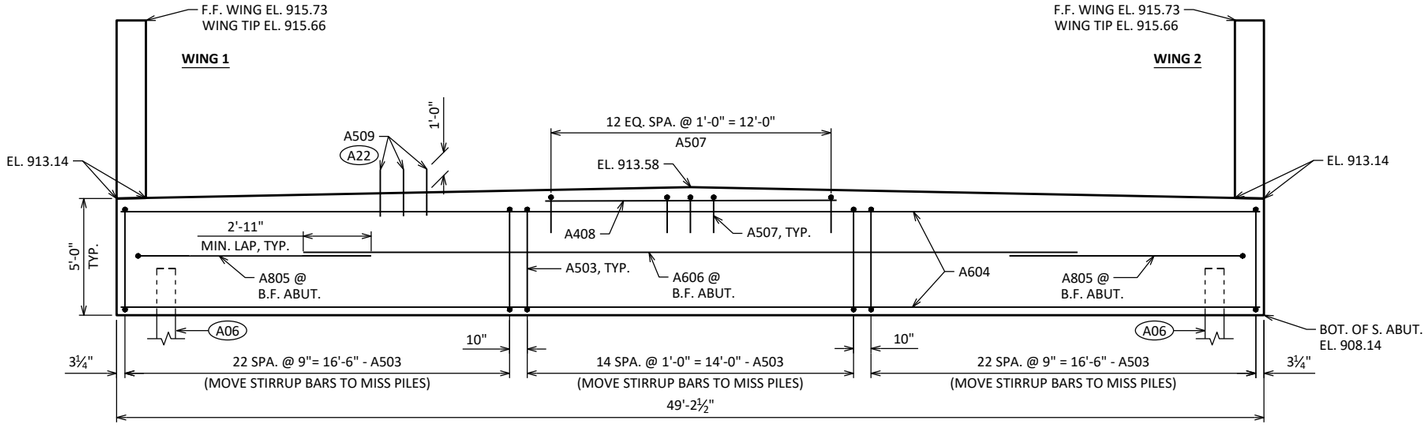
SHEET 3

8

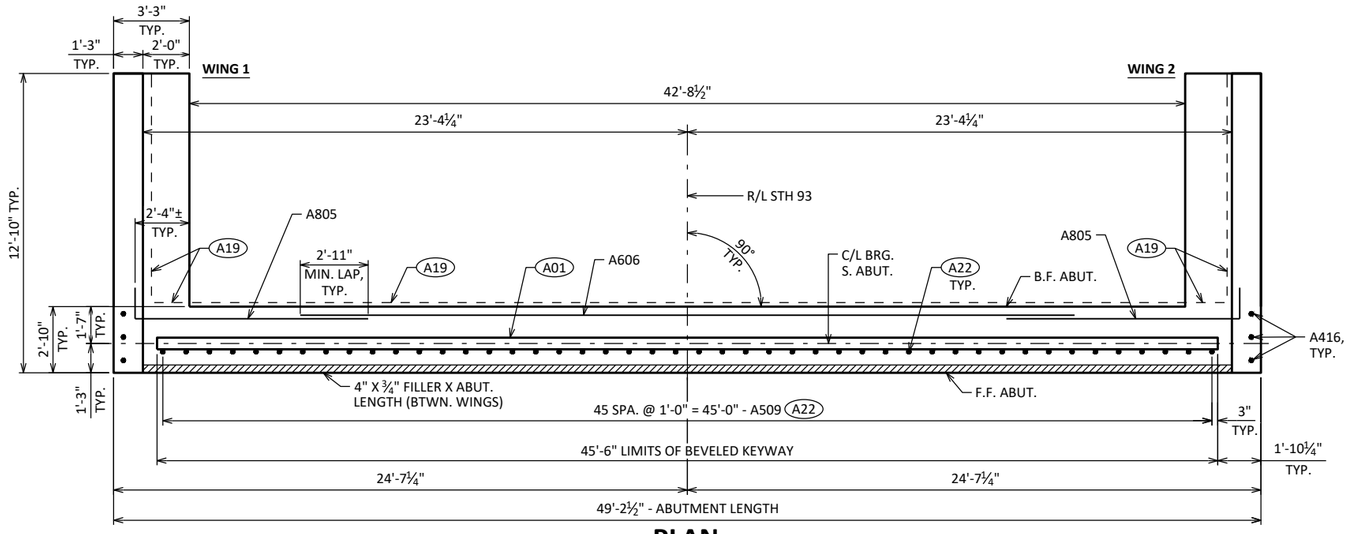
8

STATE PROJECT NUMBER

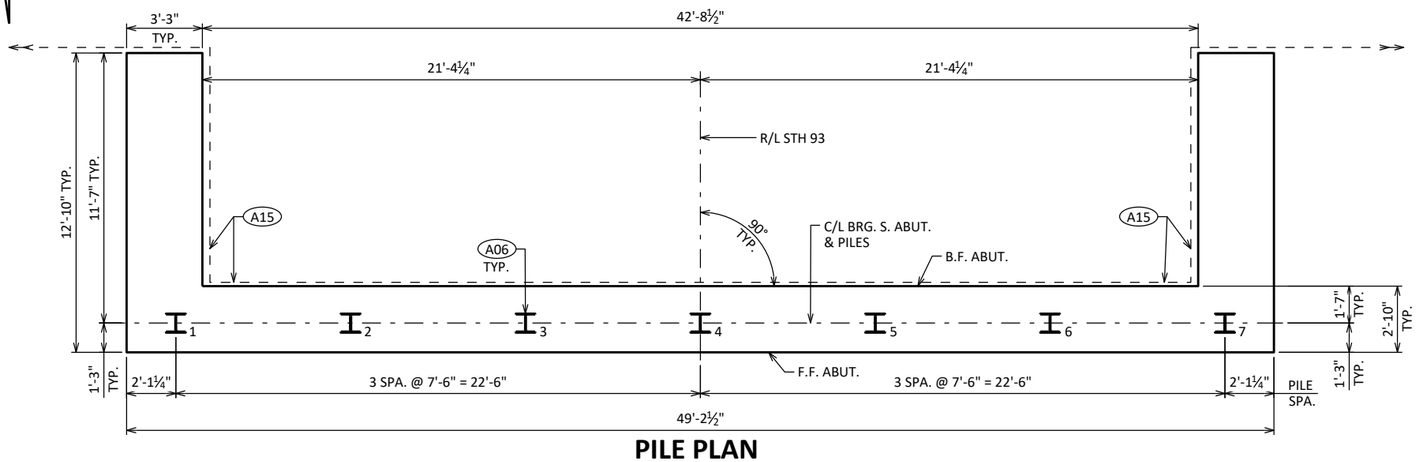
7590-00-73



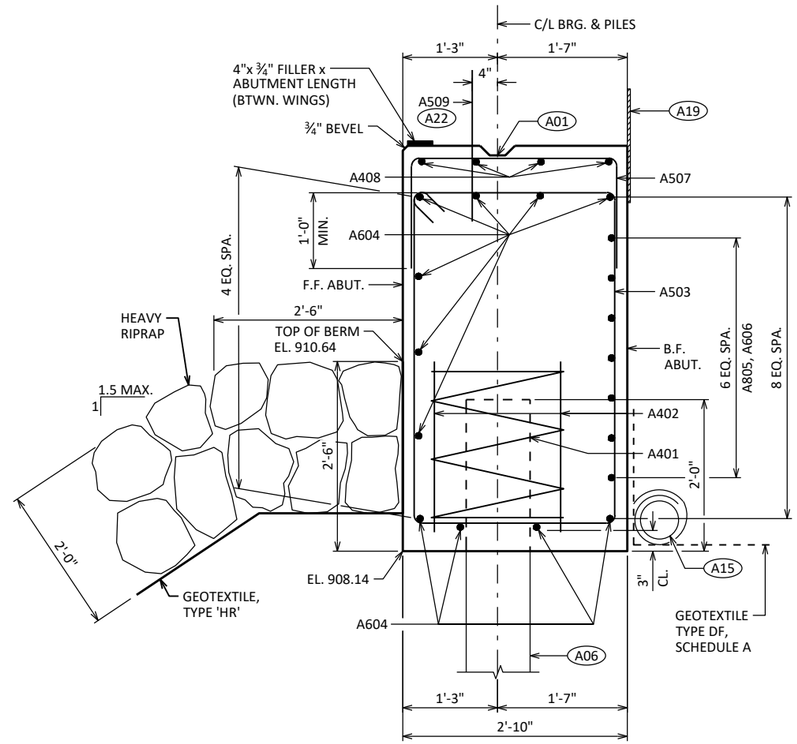
ELEVATION



PLAN



PILE PLAN



SECTION THRU BODY

A01 CONST. JOINT: KEYWAY FORMED BY A BEVELED 2 x 6.

A06 SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING, ESTIMATED 100'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.

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

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

A22 A509 BARS @ 1'-0" CTRS. AT TOP OF ABUT. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-18-251

DRAWN BY WWR | PLANS CK'D SEH

SOUTH ABUTMENT

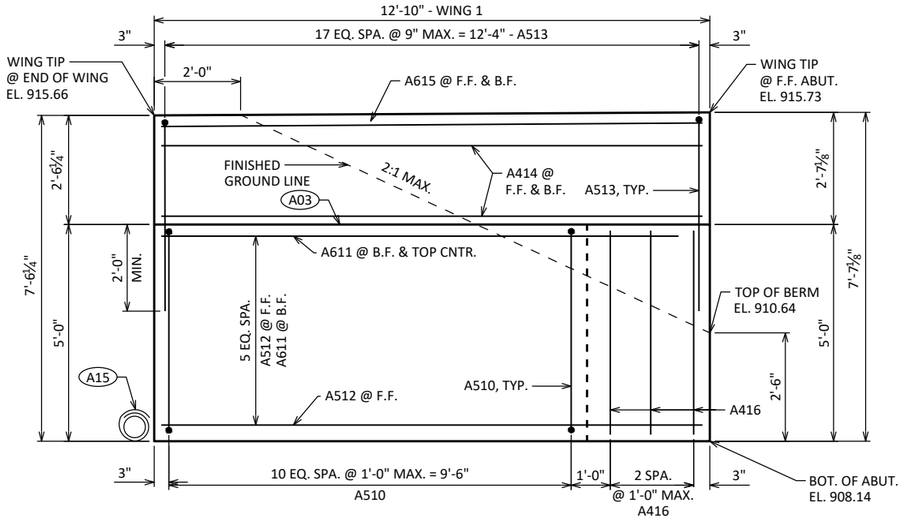
SHEET 4

8

8

STATE PROJECT NUMBER

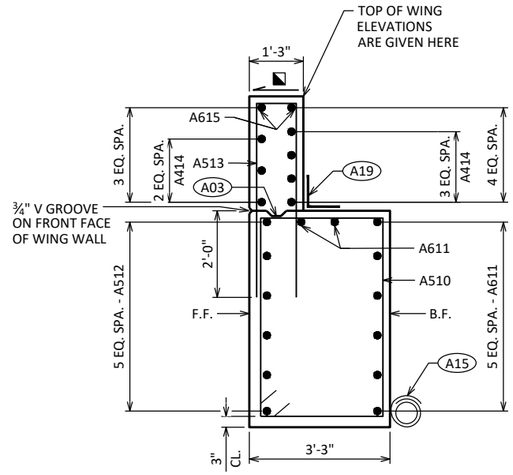
7590-00-73



WING 1 ELEVATION

WING 2 SIMILAR

FINISH SMOOTH 'TOP OF WING' HORIZONTAL SURFACE.
SLOPE DOWN 1% FOR DRAINAGE.



WING 1 SECTION

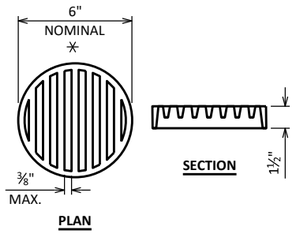
WING 2 SIMILAR

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
A401		7	28'-0"	X		ABUT. BODY-1 PER BODY PILE
A402		14	2'-3"			ABUT. BODY-2 PER BODY PILE
A503		61	14'-8"	X		ABUT. BODY-STIRRUP-VERT.
A604		11	48'-10"			ABUT. BODY-HORIZ.
A805		14	11'-2"	X		ABUT. BODY-HORIZ.-F.F.
A606		7	33'-3"			ABUT. BODY-HORIZ.-B.F.
A507		13	5'-3"	X		ABUT. BODY-VERT.-TOP U-BAR
A408		4	12'-4"			ABUT. BODY-HORIZ.-TOP
A509	X	46	2'-0"			ABUT. BODY-VERT.-TOP DOWEL BAR
A510	X	22	15'-8"	X		WINGS 1 & 2-VERT.-BODY STIRRUP
A611	X	16	12'-6"			WINGS 1 & 2-HORIZ.-BODY B.F. & TOP
A512	X	12	12'-6"			WINGS 1 & 2-HORIZ.-BODY F.F.
A513	X	36	9'-8"	X		WINGS 1 & 2-VERT.-BODY/WINGWALL U-BAR
A414	X	14	12'-6"			WINGS 1 & 2-HORIZ.-WINGWALL B.F. & F.F.
A615	X	4	12'-6"			WINGS 1 & 2-HORIZ.-WINGWALL TOP
A416		6	4'-8"			ABUT. BODY-END FACES-VERT.

'HP' PILE DETAILS

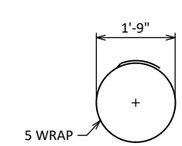


RODENT SHIELD DETAIL

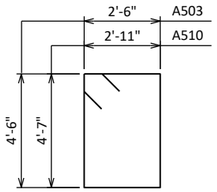
⚹ DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

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

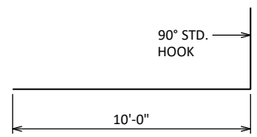
THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X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



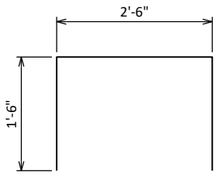
A401



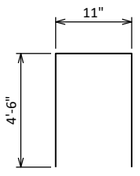
A503, A510



A805



A507



A513

(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 x 6. (18" RMW @ B.F. & ¾" "V" GROOVE @ F.F. IF JOINT IS USED).

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

(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-18-251

DRAWN BY WWR | PLANS CK'D SEH

SOUTH ABUTMENT DETAILS

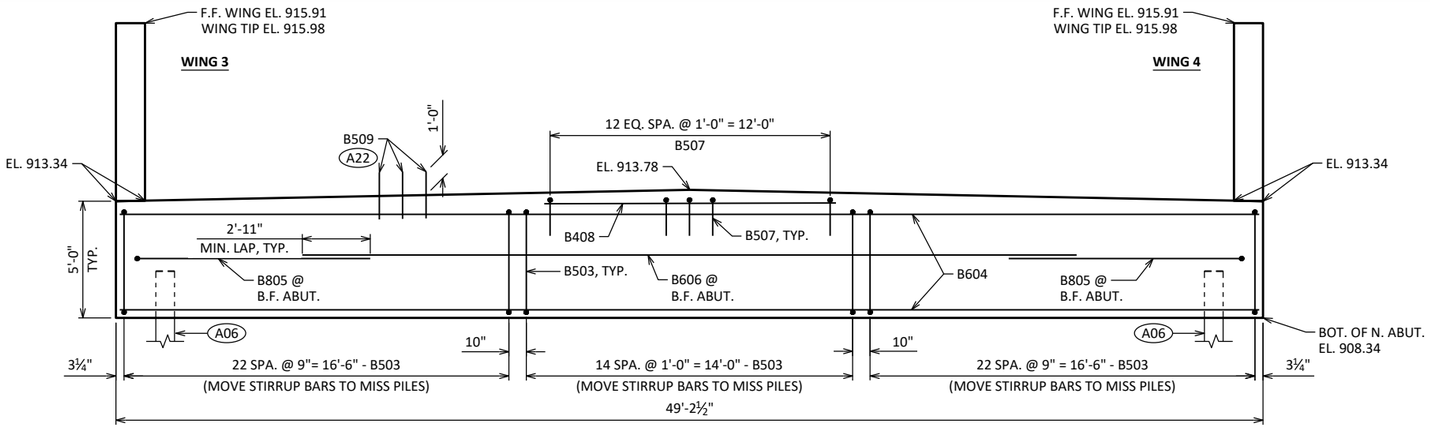
SHEET 5

8

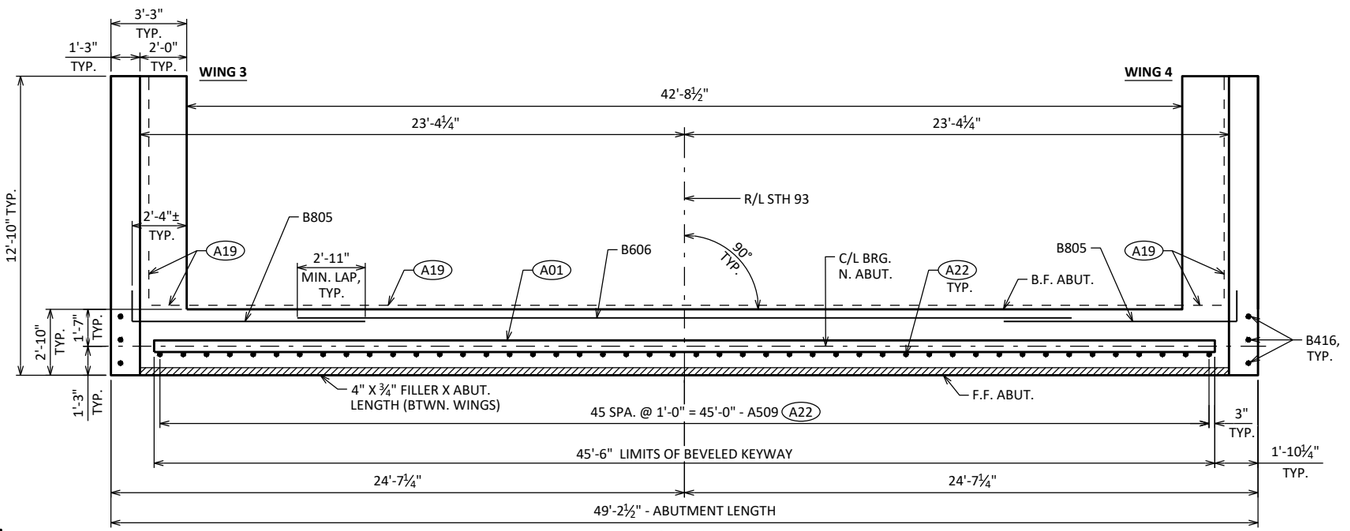
8

STATE PROJECT NUMBER

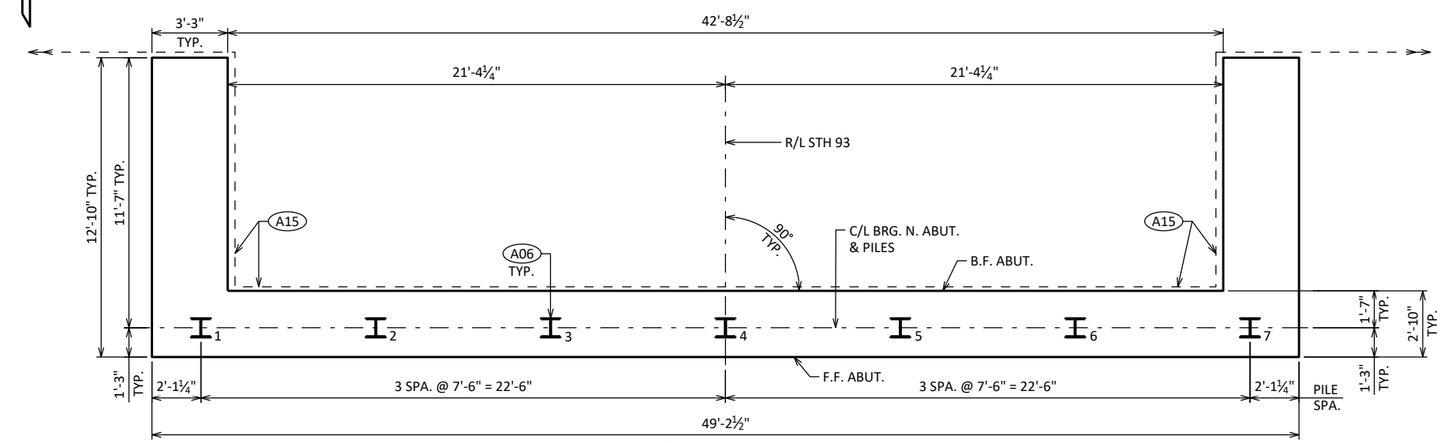
7590-00-73



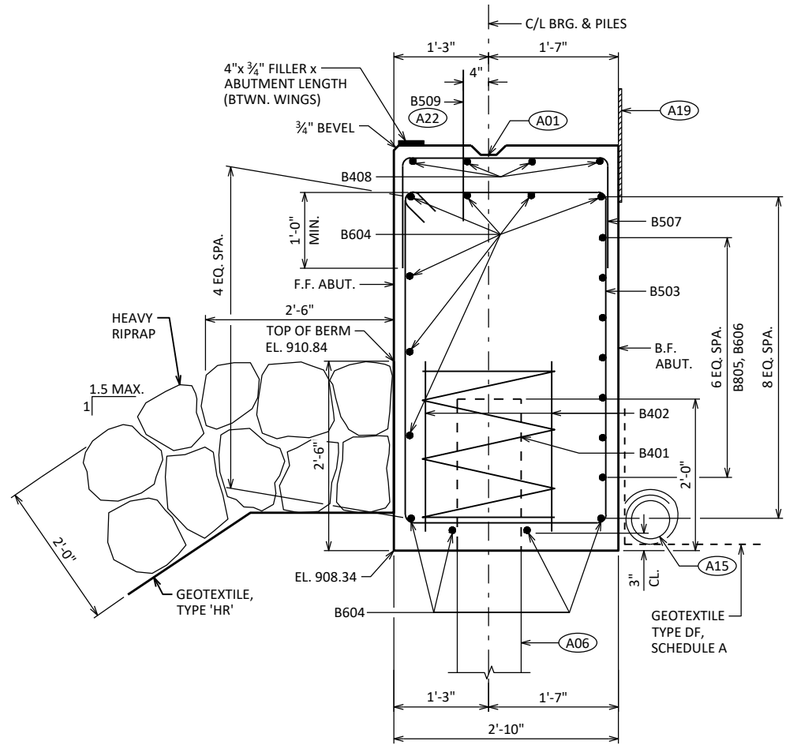
ELEVATION



PLAN



PILE PLAN



SECTION THRU BODY

A01 CONST. JOINT: KEYWAY FORMED BY A BEVELED 2 x 6.

A06 SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING, ESTIMATED 100'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.

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

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

A22 B509 BARS @ 1'-0" CTRS. AT TOP OF ABUT. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-18-251

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NORTH ABUTMENT

SHEET 6

8

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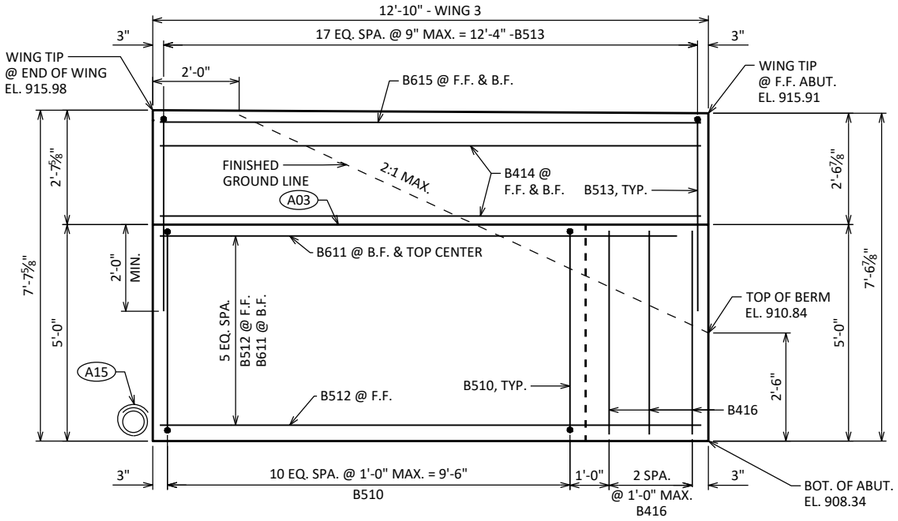
STATE PROJECT NUMBER

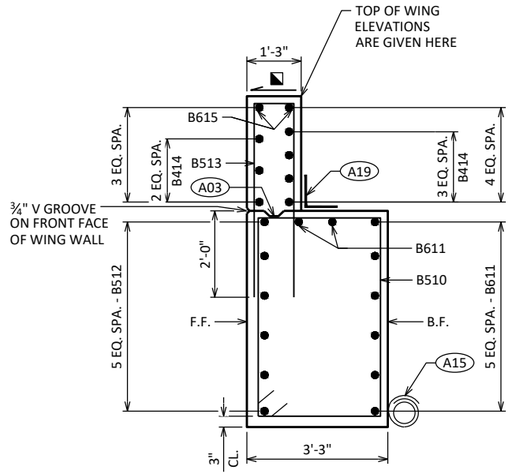
7590-00-73



WING 3 ELEVATION

WING 4 SIMILAR

FINISH SMOOTH 'TOP OF WING' HORIZONTAL SURFACE.
SLOPE DOWN 1% FOR DRAINAGE.



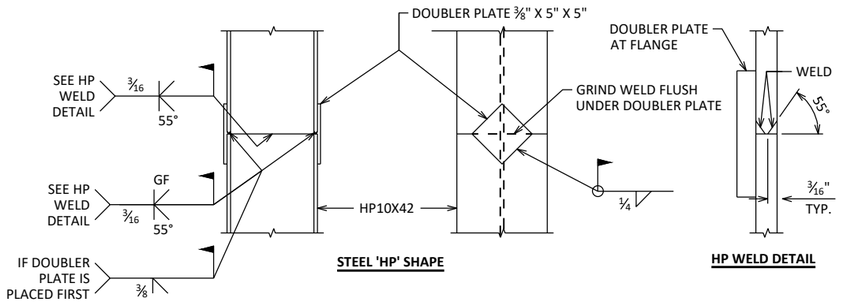
WING 3 SECTION

WING 4 SIMILAR

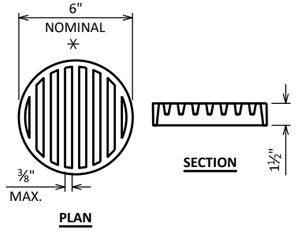
BILL OF BARS

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
B401		7	28'-0"	X		ABUT. BODY-1 PER BODY PILE
B402		14	2'-3"			ABUT. BODY-2 PER BODY PILE
B503		61	14'-8"	X		ABUT. BODY-STIRRUP-VERT.
B604		11	48'-10"			ABUT. BODY-F.F. & TOP-HORIZ.
B805		14	11'-2"	X		ABUT. BODY-HORIZ.-B.F.
B606		7	33'-3"			ABUT. BODY-HORIZ.-B.F.
B507		13	5'-3"	X		ABUT. BODY-VERT.-TOP U-BAR
B408		4	12'-4"			ABUT. BODY-HORIZ.-TOP
B509	X	46	2'-0"			ABUT. BODY-VERT.-TOP DOWEL BAR
B510	X	22	15'-8"	X		WINGS 3 & 4-VERT.-BODY STIRRUP
B611	X	16	12'-6"			WINGS 3 & 4-HORIZ.-BODY B.F. & TOP
B512	X	12	12'-6"			WINGS 3 & 4-HORIZ.-BODY F.F.
B513	X	36	9'-8"	X		WINGS 3 & 4-VERT.-BODY/WINGWALL U-BAR
B414	X	14	12'-6"			WINGS 3 & 4-HORIZ.-WINGWALL B.F. & F.F.
B615	X	4	12'-6"			WINGS 3 & 4-HORIZ.-WINGWALL TOP
B416		6	4'-8"			ABUT. BODY- END FACES-VERT.



'HP' PILE DETAILS

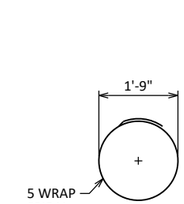


RODENT SHIELD DETAIL

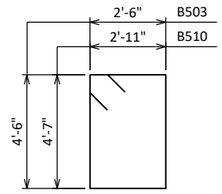
⚹ DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

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

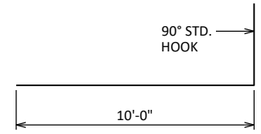
THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X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



B401



B503, B510



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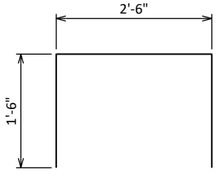

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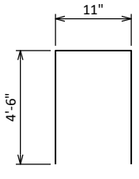

B513

(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 x 6. (18" RMW @ B.F. & ¾" "V" GROOVE @ F.F. IF JOINT IS USED).

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

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

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STRUCTURES DESIGN SECTION

STRUCTURE B-18-251

DRAWN BY WWR | PLANS CK'D SEH

NORTH ABUTMENT DETAILS

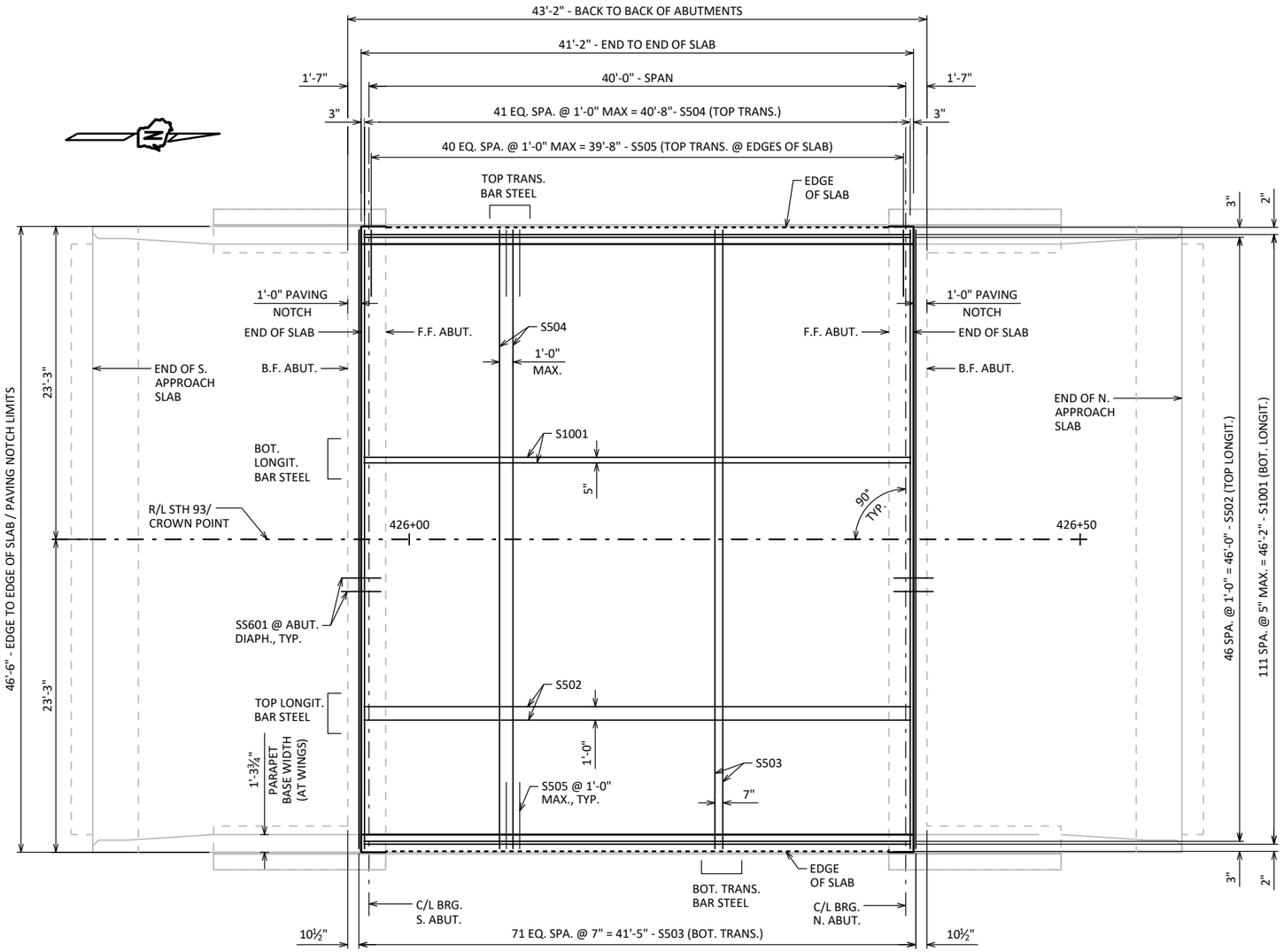
SHEET 7

8

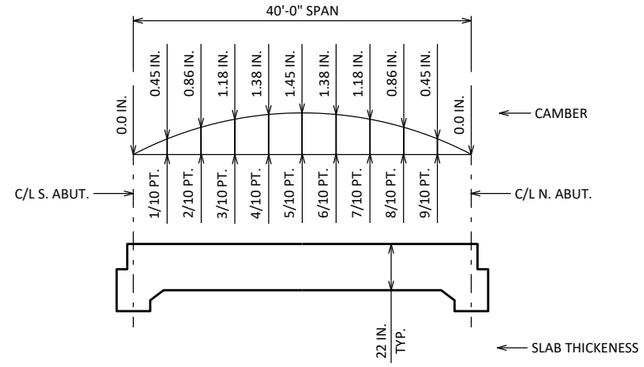
8

STATE PROJECT NUMBER

7590-00-73



PLAN

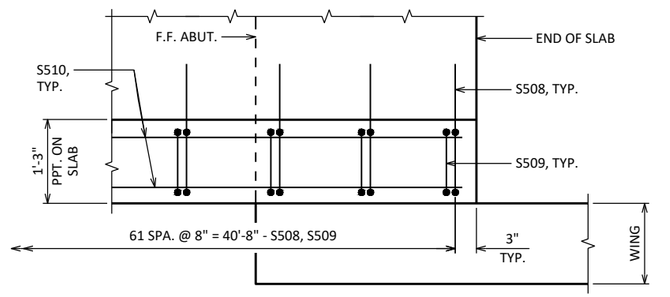


CAMBER AND SLAB THICKNESS DIAGRAM

CAMBER SHOWN IS BASED ON 3 TIMES DEAD LOAD DEFLECTIONS. CAMBER SPANS AS SHOWN TO PROVIDE FOR DEAD LOAD DEFLECTION AND FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT.
PARAPETS PLACED ON TOP OF THE SLAB SHALL BE POURED AFTER FALSEWORK HAS BEEN RELEASED.

TO DETERMINE FALSEWORK ELEVATION AT EDGE OF SLAB, CROWN OR REFERENCE LINE FOLLOW THIS PROCEDURE:

	TOP OF SLAB ELEVATION AT FINAL GRADE
LESS	SLAB THICKNESS
PLUS	CAMBER
PLUS	FORM SETTLEMENT/DEFLECTION DUE TO PLACEMENT OF SLAB CONCRETE (TO BE COMPUTED BY THE CONTRACTOR)
EQUALS	TOP OF SLAB FALSEWORK ELEVATION



PARAPET REINFORCEMENT

TYP. ALL CORNERS
(NE CORNER SHOWN)

8

TOP OF SLAB ELEVATIONS

LOCATION	C/L 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.	C/L BRG. N. ABUT.
W. GUTTER	915.72	915.74	915.76	915.78	915.80	915.82	915.84	915.86	915.88	915.90	915.92
R/L & CROWN	916.16	916.18	916.20	916.22	916.24	916.26	916.28	916.30	916.32	916.34	916.36
E. GUTTER	915.72	915.74	915.76	915.78	915.80	915.82	915.84	915.86	915.88	915.90	915.92

SURVEY TOP OF SLAB ELEVATIONS

LOCATION	C/L BRG. S. ABUT.	5/10 PT.	C/L BRG. N. ABUT.
W. GUTTER			
R/L & CROWN			
E. GUTTER			

PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF SLAB ELEVATIONS AT THE C/L OF ABUTMENTS AND AT 5/10 PTS. TO VERIFY CAMBER. TAKE ELEVATIONS ALONG GUTTER LINES AND CROWN OR R/L. RECORD THE ELEVATIONS IN THE ABOVE TABLE FOR THE "AS BUILT" PLANS.

NOTES

FILL IN THE TABLE OF "SURVEY TOP OF SLAB ELEVATIONS" FOR EACH SPAN ON AS BUILT PLANS.

TOP TRANSVERSE BARS IN SLAB SHALL BE SUPPORTED BY INDIVIDUAL BAR CHAIRS AT APPROXIMATELY 3'-0" CENTERS EACH WAY. BOTTOM LONGITUDINAL BARS SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS AT APPROXIMATELY 4'-0" CENTERS.

ALL SLAB THICKNESS DIMENSIONS ARE MINIMUM. ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-18-251

DRAWN BY WWR | PLANS CK'D SEH

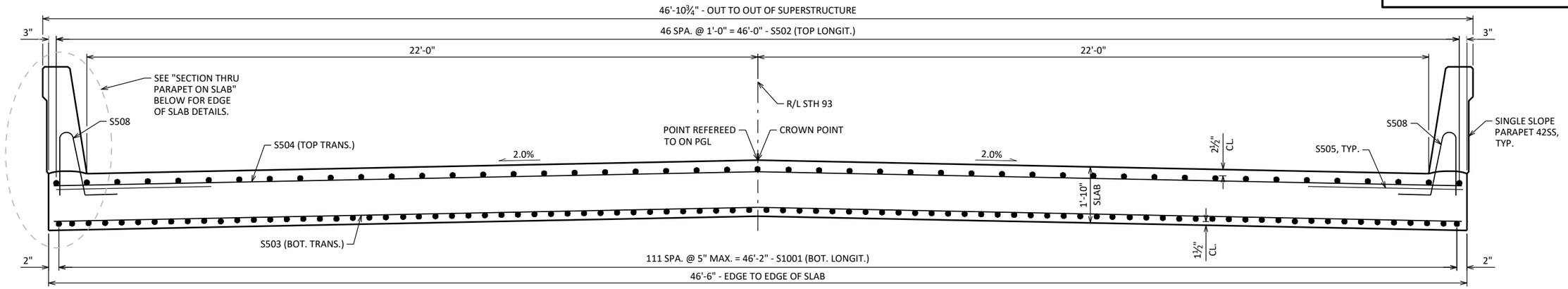
SHEET 8

SUPERSTRUCTURE

8

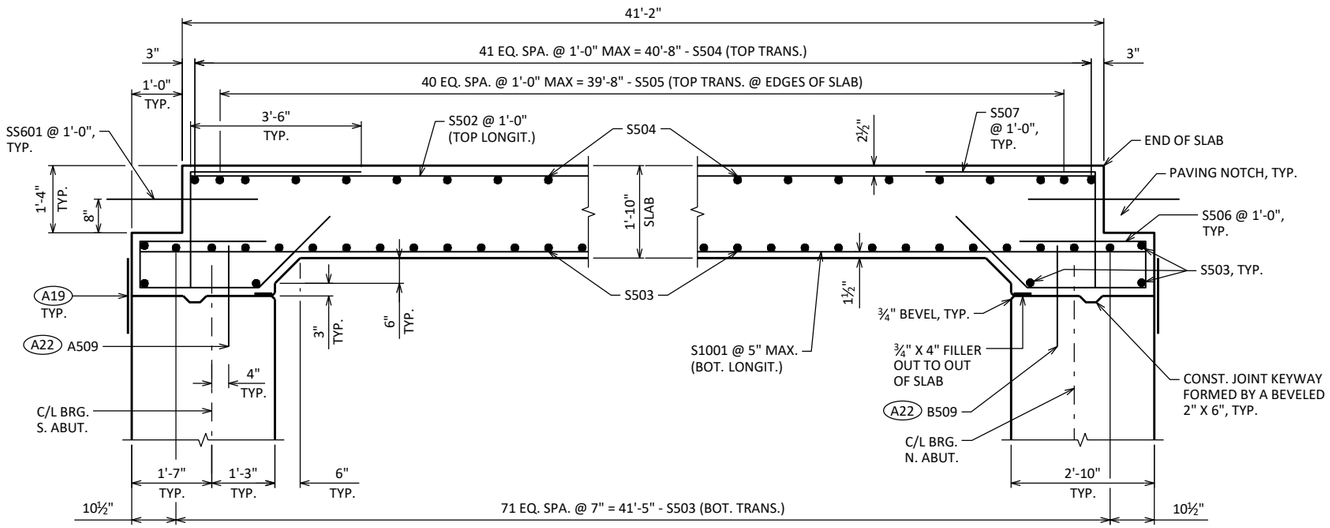
STATE PROJECT NUMBER

7590-00-73



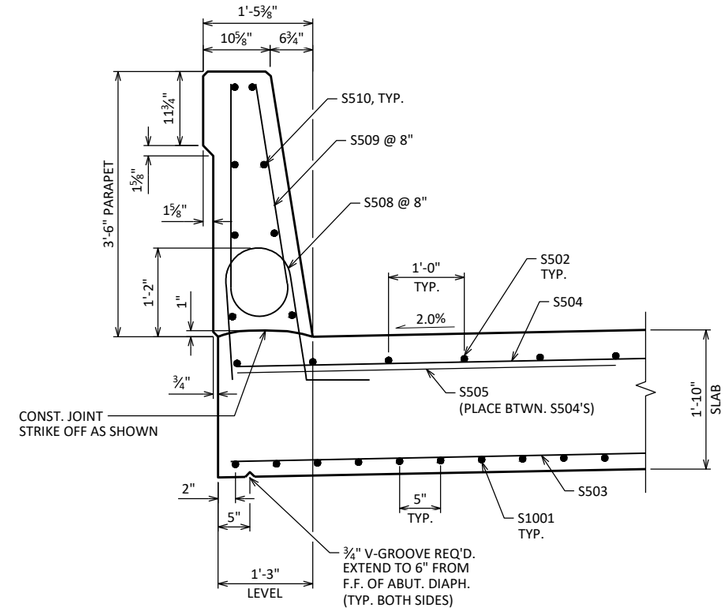
CROSS SECTION THRU ROADWAY

LOOKING NORTH



LONGITUDINAL SECTION THRU SLAB

LOOKING WEST



SECTION THRU PARAPET ON SLAB

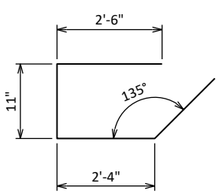
BILL OF BARS

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
S1001	X	112	42'-10"			SLAB-BOT.-LONGIT.
S502	X	47	40'-10"			SLAB-TOP-LONGIT.
S503	X	78	46'-2"			SLAB-BOT.-TRANS.
S504	X	42	46'-2"			SLAB-TOP-TRANS.
S505	X	82	5'-0"			SLAB-TOP-TRANS.-EDGES
S506	X	94	7'-9"	X		SLAB/DIAPH-VERT.
S507	X	94	5'-8"	X		SLAB-TOP L-BAR-VERT.-DIAPH.
S508	X	124	4'-5"	X		SLAB/PPT.-VERT.
S509	X	124	6'-8"	X		PPT.-HORIZ.
S510	X	16	40'-10"			PPT.-HORIZ.

SS601		94	3'-0"			SLAB/STRUCTURAL APPROACH SLAB-DOWEL

SS601 — STAINLESS STEEL



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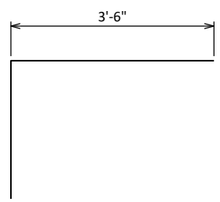

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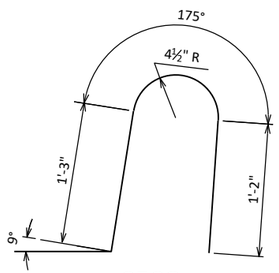

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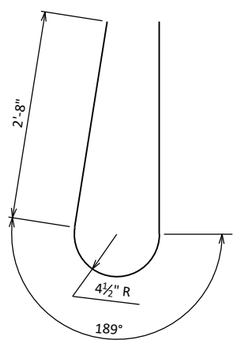

S509

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

A22 — A509 AND B509 BARS @ 1'-0" SPA. AT TOP OF ABUT. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE B-18-251

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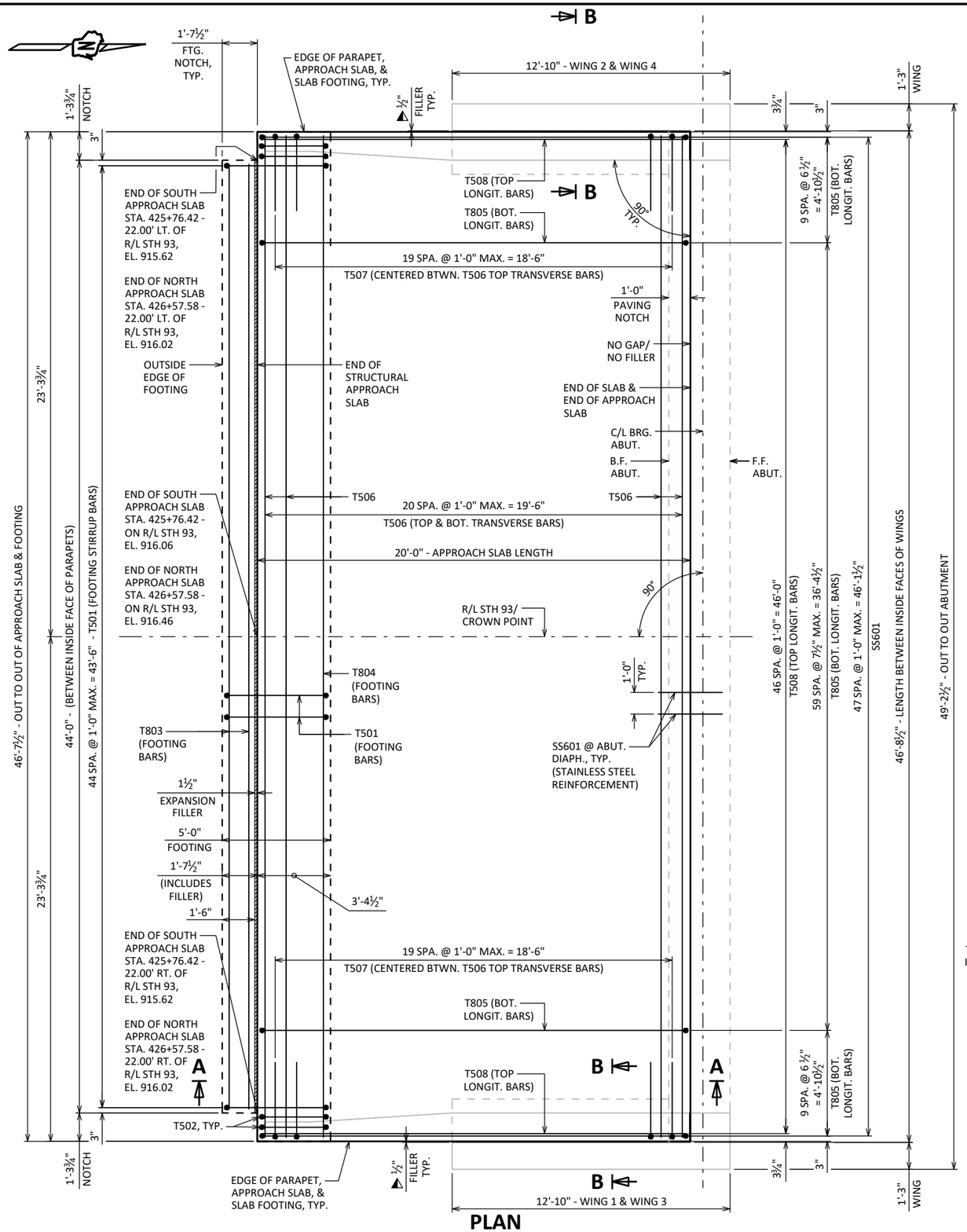
SUPERSTRUCTURE DETAILS

SHEET 9

STATE PROJECT NUMBER

7590-00-73



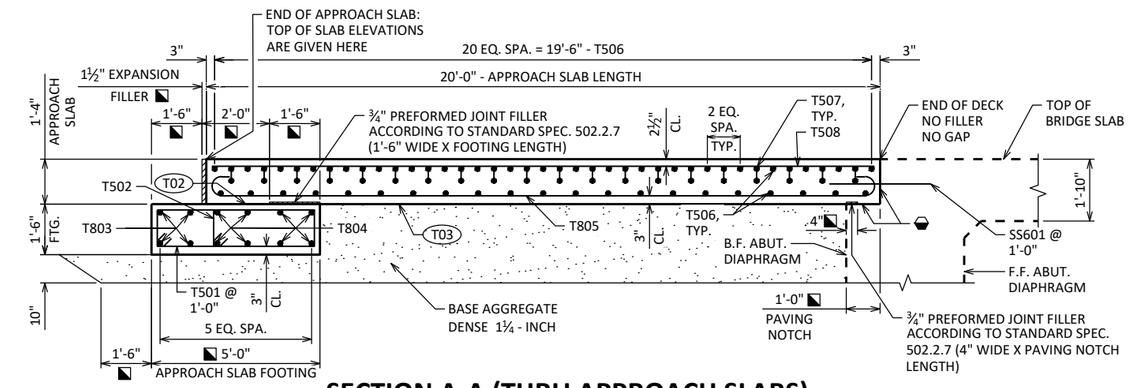
PLAN

SOUTH APPROACH SLAB SHOWN - NORTH APPROACH SLAB SIMILAR

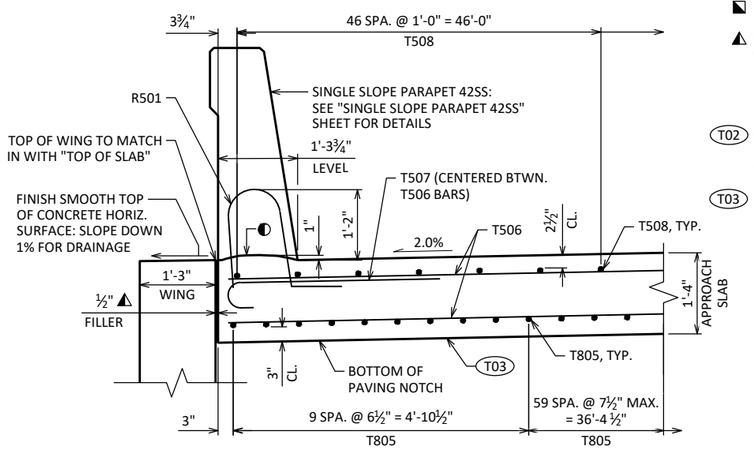
BILL OF BARS

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

BAR MARK	COAT	S. STR. APPR. SLAB	N. STR. APPR. SLAB	LENGTH	BENT	BAR SERIES	LOCATION
T501	X	45	45	12'-2"	X		APPROACH SLAB FTG.-STRIRRUP-VERT.
T502	X	4	4	8'-11"	X		APPROACH SLAB FTG.-STRIRRUP-VERT.
T803	X	4	4	43'-8"			APPROACH SLAB FTG.-TRANS.-HORIZ.
T804	X	8	8	46'-3"			APPROACH SLAB FTG.-TRANS.-HORIZ.
T805	X	78	78	21'-6"	X		APPROACH SLAB-BOT.-LONGIT.
T506	X	42	42	46'-3"			APPROACH SLAB-TRANS.-TOP & BOT.
T507	X	40	40	4'-1"	X		APPROACH SLAB-TRANS.-TOP EDGES
T508	X	47	47	19'-8"			APPROACH SLAB-LONGIT.-TOP



SECTION A-A (THRU APPROACH SLABS)



SECTION B-B (EDGE OF SLAB DETAIL)

- APPLY PROTECTIVE SURFACE TREATMENT TO HORIZONTAL AND VERTICAL PAVING NOTCH SURFACES PRIOR TO POURING STRUCTURAL APPROACH SLAB.
- CONST. JOINT: STRIKE OFF AND LEAVE ROUGH AS SHOWN.
- DIMENSION IS TAKEN NORMAL TO C/L BRG. ABUTMENTS.
- SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING, GRAY, NON-BITUMINOUS JOINT SEALER (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.
- (T02) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE LENGTH OF THE FOOTING.
- (T03) PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF SUBGRADE BENEATH SLAB.

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DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-18-251

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STRUCTURAL APPROACH SLAB

SHEET 10

SCALE =

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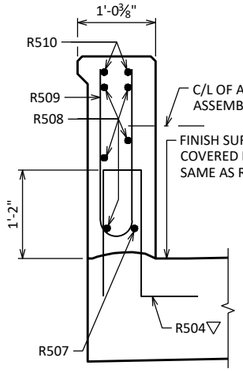
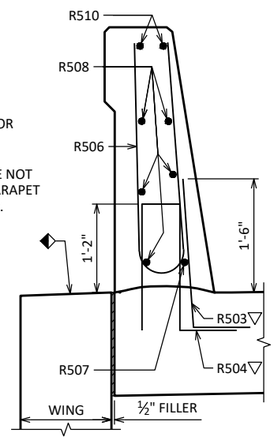
8

STATE PROJECT NUMBER

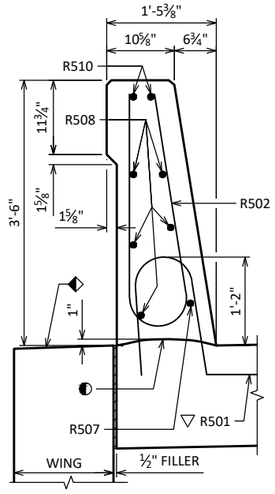
7590-00-73



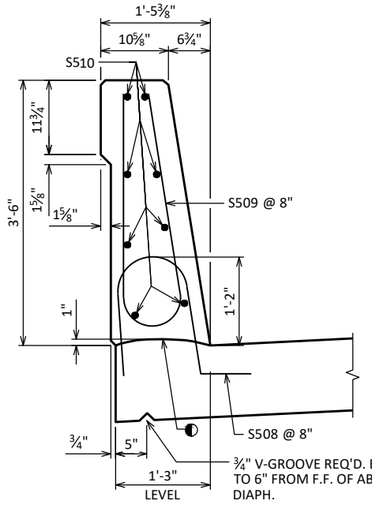
SECTION A-A



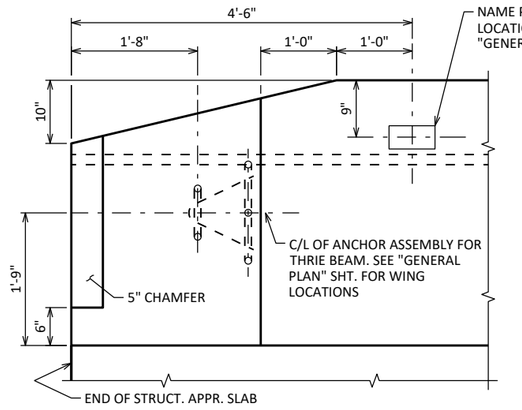
SECTION B-B



SECTION C-C



SECTION THRU PARAPET ON DECK



PARAPET END TREATMENT DETAIL

LOOKING AT INSIDE FACE OF PARAPET

BILL OF BARS

FOR STRUCTURAL APPOACH SLAB PARAPETS

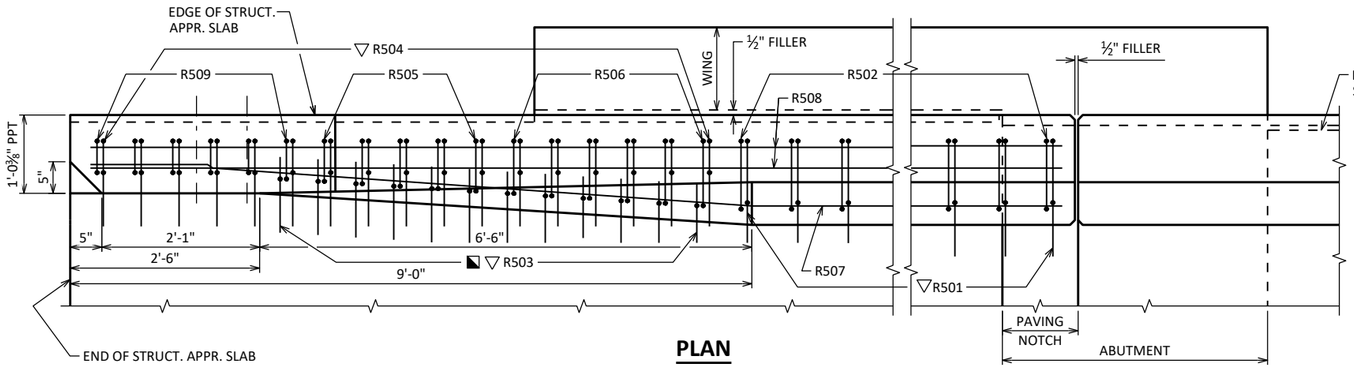
BAR MARK	COAT	SOUTH STRUCT. APPR.	NORTH STRUCT. APPR.	LENGTH	BENT	BAR SERIES	LOCATION
R501	X	34	34	4'-5"	X		PARAPET VERT.
R502	X	34	34	6'-8"	X		PARAPET VERT.
R503	X	24	24	2'-9"	X		PARAPET VERT.
R504	X	34	34	4'-4"	X		PARAPET VERT.
R505	X	10	10	6'-5"	X		PARAPET VERT.
R506	X	12	12	6'-6"	X		PARAPET VERT.
R507	X	2	2	19'-8"	X		PARAPET HORIZ.
R508	X	10	10	19'-8"			PARAPET HORIZ.
R509	X	12	12	5'-5"	X	⚠	PARAPET VERT.
R510	X	4	4	19'-8"	X		PARAPET HORIZ.

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

BAR SERIES TABLE

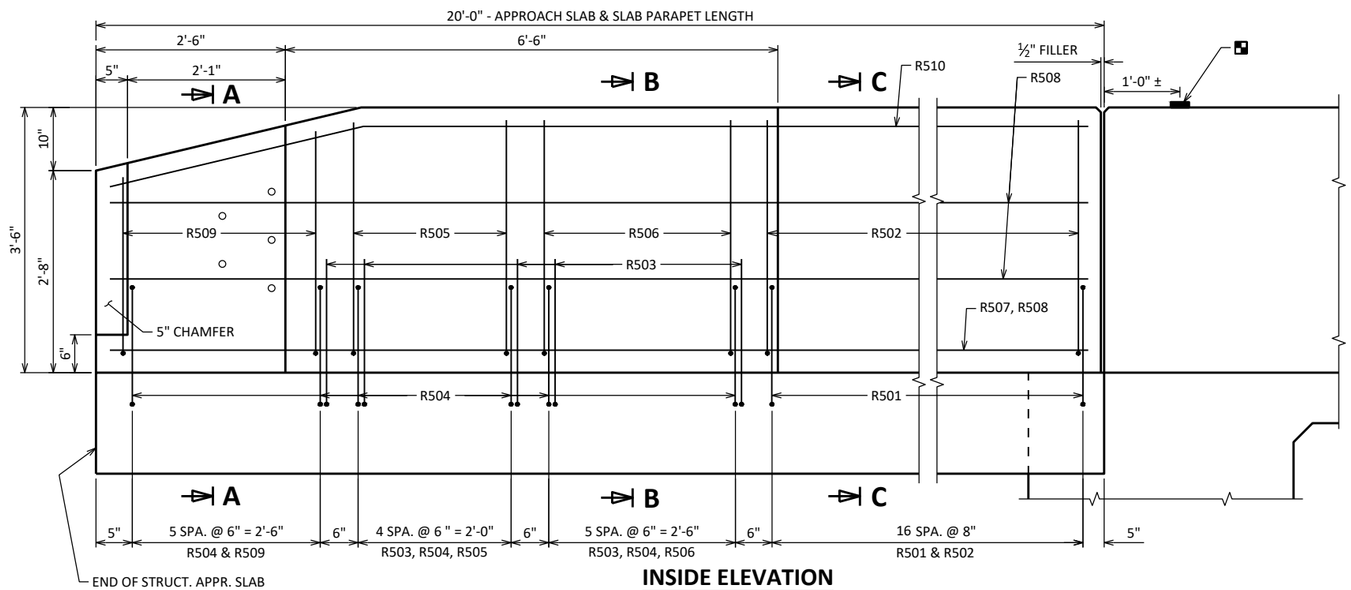
BUNDLE AND TAG EACH SERIES SEPARATELY.

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



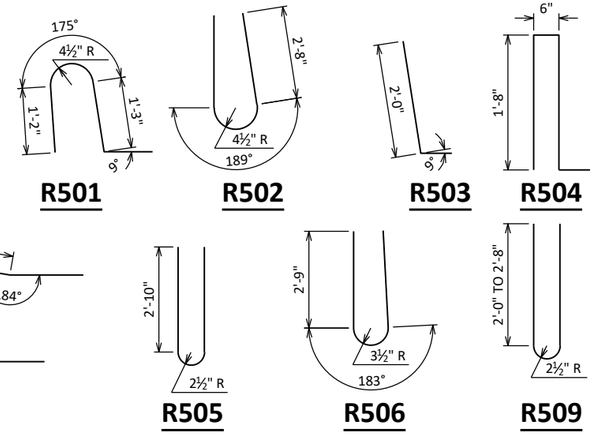
PLAN

WING 2 CORNER SHOWN, OTHERS SIMILAR



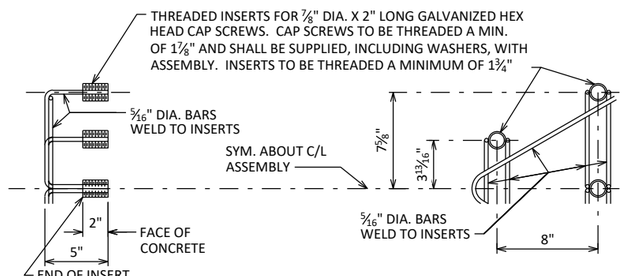
INSIDE ELEVATION

WING 2 CORNER SHOWN, OTHERS SIMILAR
WING & STRUCTURAL APPROACH SLAB FOOTING NOT SHOWN FOR CLARITY



R501 R502 R503 R504 R507 R510 R505 R506 R509

BENCH MARK CAP.



DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH ASTM F2329.

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

◐ CONST. JOINT - STRIKE OFF AS SHOWN

◆ SLOPE FOR DRAINAGE

◥ USE CARE TO PLACE R503 BARS CORRECTLY ALONG TRANSITION OF PARAPET.

▽ R501, R503, AND R504 BARS TO BE TIED TO STRUCTURAL APPROACH SLAB STEEL BEFORE STRUCTURAL APPROACH SLAB IS POURED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-18-251

DRAWN BY WWR | PLANS CK'D SEH

SINGLE SLOPE PARAPET 42SS

SHEET 11

SCALE = 2.00

8

8

DIVISION 1 - STH 93

CATEGORY	STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY)		CUMULATIVE VOL (CY)		
				CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
0010	16+30	1629.52	0.00	1.97	0.09	0	0	0	0	0
	17+00	1700.00	70.48	2.43	1.24	6	2	6	2	4
	17+20	1720.04	20.04	2.50	2.68	2	1	8	4	4
	17+45	1745.05	25.01	3.66	0.52	3	1	10	6	5
	17+70	1770.05	25.00	3.49	0.17	3	0	14	6	7
	18+00	1800.00	29.95	7.52	0.28	6	0	20	7	13
	19+00	1900.00	100.00	3.34	70.26	20	131	40	170	-130
	20+00	2000.00	100.00	6.53	27.78	18	182	58	397	-339
	20+15	2015.00	15.00	5.30	57.99	3	24	62	427	-365
	20+40	2040.00	25.00	4.62	97.11	5	72	66	516	-450
	20+65	2064.91	24.91	3.91	100.50	4	91	70	630	-560
	21+00	2100.00	35.09	3.18	37.88	5	90	75	743	-668
	22+00	2200.00	100.00	3.71	51.45	13	165	87	949	-862
	23+00	2300.00	100.00	3.72	45.95	14	180	101	1,175	-1,074
	24+00	2400.00	100.00	2.00	11.46	11	106	112	1,308	-1,196
	25+00	2500.00	100.00	2.15	48.59	8	111	119	1,447	-1,327
	25+18	2518.24	18.24	3.31	64.47	2	38	121	1,495	-1,373
	25+43	2543.06	24.82	6.91	52.22	5	54	126	1,562	-1,436
	25+68	2567.86	24.80	9.10	0.41	7	24	133	1,592	-1,458
	25+80	2579.70	11.84	19.93	50.28	6	11	140	1,606	-1,466
	26+00	2600.00	20.30	7.63	50.63	10	38	150	1,653	-1,503
	26+05	2604.84	4.84	6.30	45.88	1	9	151	1,664	-1,513
	26+08	2607.79	2.94	5.28	50.49	1	5	152	1,670	-1,519
	26+13	2612.80	5.02	4.83	58.71	1	10	153	1,683	-1,530
	26+30	2630.00	17.20	5.94	31.71	3	29	156	1,719	-1,563
	26+57	2657.19	27.18	12.97	8.78	10	20	166	1,745	-1,579
	26+86	2685.87	28.68	5.62	16.62	10	13	176	1,762	-1,586
	27+00	2700.00	14.13	37.45	18.44	11	9	187	1,773	-1,586
	27+50	2749.75	49.75	1.30	6.16	36	23	223	1,801	-1,579
						223	1441			

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PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	EARTHWORK DATA	SHEET 64	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 A EARTHWORK DATA\090101_EW.DWG
LAYOUT NAME - 01

PLOT DATE : 9/18/2024 1:29 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1" = 1'

DIVISION 1 - STH 93

CATEGORY	STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) CUT	INCREMENTAL VOL (CY) FILL	CUMULATIVE VOL (CY) CUT 1.00	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	CUMULATIVE VOL (CY) MASS ORDINATE
0010	30+52	3051.661	0	1.70	6.68	0	0	0	0	0
	31+00	3100	48	1.05	9.13	2	14	2	18	-15
	31+70	3170.458	70	4.56	2.81	7	16	10	37	-27
	31+95	3195.458	25	3.73	5.66	4	4	14	42	-28
	32+00	3200	5	4.54	0.27	1	0	14	43	-28
	32+20	3220.458	20	1.70	18.87	2	7	17	52	-35
	33+00	3300	80	2.24	0.29	6	28	22	87	-65
	34+00	3400	100	0.35	0.78	5	2	27	90	-62
	34+10	3409.59	10	7.45	0.68	1	0	29	90	-61
	34+30	3430.409	21	4.10	66.89	4	26	33	122	-89
	34+55	3454.829	24	2.19	150.75	3	98	36	245	-209
	34+80	3479.554	25	1.90	100.85	2	115	38	389	-352
	35+00	3500	20	2.72	99.85	2	76	40	484	-445
	36+00	3600	100	4.07	66.52	13	308	52	870	-817
	36+81	3680.975	81	3.04	122.10	11	283	63	1,223	-1,160
	37+00	3700	19	3.33	107.45	2	81	65	1,324	-1,259
	37+06	3705.523	6	3.39	89.52	1	20	66	1,349	-1,284
	37+30	3730.237	25	3.77	34.77	3	57	69	1,420	-1,351
	38+00	3800	70	1.07	5.00	6	51	75	1,485	-1,409
	38+50	3849.591	50	6.08	4.17	7	8	82	1,495	-1,413
	39+00	3900	50	0.24	4.23	6	8	88	1,505	-1,417
	39+20	3919.819	20	0.25	2.99	0	3	88	1,508	-1,420
	39+45	3944.809	25	0.28	1.73	0	2	88	1,511	-1,423
	39+70	3969.789	25	0.37	0.97	0	1	88	1,513	-1,424
	40+00	4000	30	1.19	6.47	1	4	89	1,518	-1,428
	40+20	4019.643	20	4.96	14.01	2	7	92	1,527	-1,436
	40+89	4088.851	69	5.10	36.97	13	65	104	1,609	-1,504
	41+39	4138.705	50	7.25	0.00	11	34	116	1,651	-1,536
	41+64	4163.685	25	5.16	3.37	6	2	122	1,653	-1,532
	41+89	4188.665	25	4.90	4.85	5	4	126	1,658	-1,532
	42+00	4200	11	5.88	0.00	2	1	129	1,659	-1,531
	43+00	4300	100	3.00	49.83	16	92	145	1,775	-1,630
	44+00	4400	100	3.50	3.31	12	98	157	1,898	-1,741
	45+00	4500	100	3.19	5.20	12	16	169	1,917	-1,748
	46+00	4600	100	5.15	1.64	15	13	185	1,933	-1,748
	47+00	4700	100	4.30	1.45	18	6	202	1,940	-1,738
	48+00	4800	100	2.58	3.19	13	9	215	1,951	-1,736
	49+00	4900	100	3.31	3.76	11	13	226	1,967	-1,741
	50+00	5000	100	7.31	0.00	20	7	246	1,976	-1,730
	51+00	5100	100	8.95	0.00	30	0	276	1,976	-1,700

DIVISION 1 - STH 93

CATEGORY	STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) CUT	INCREMENTAL VOL (CY) FILL	CUMULATIVE VOL (CY) CUT 1.00	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	CUMULATIVE VOL (CY) MASS ORDINATE
	52+00	5200	100	6.36	0.00	28	0	304	1,976	-1,672
	53+00	5300	100	13.18	0.00	36	0	340	1,976	-1,636
	54+00	5400	100	6.86	0.00	37	0	377	1,976	-1,599
	55+00	5500	100	5.94	0.00	24	0	401	1,976	-1,575
	55+42	5541.563	42	5.77	9.92	9	8	410	1,986	-1,575
	56+00	5600	58	6.16	24.81	13	38	423	2,033	-1,609
	56+46	5645.98	46	7.17	32.26	11	49	434	2,093	-1,659
	56+55	5655.34	9	7.06	31.89	2	11	437	2,107	-1,670
	56+71	5670.657	15	7.08	27.98	4	17	441	2,128	-1,688
	56+81	5680.601	10	6.64	27.44	3	10	443	2,141	-1,698
	56+95	5695.368	15	6.73	17.65	4	12	447	2,157	-1,710
	57+00	5700	5	5.79	15.03	1	3	448	2,160	-1,712
	57+06	5705.893	6	5.59	16.66	1	3	449	2,164	-1,715
	58+00	5800	94	4.20	17.98	17	60	466	2,240	-1,773
	58+27	5826.98	27	4.18	25.43	4	22	471	2,267	-1,796
	59+00	5900	73	2.25	39.35	9	88	479	2,376	-1,897
	60+00	6000	100	2.26	25.27	8	120	488	2,526	-2,038
	61+00	6100	100	2.86	0.72	9	48	497	2,586	-2,089
	61+38	6138.252	38	2.69	0.01	4	1	501	2,587	-2,086
	62+00	6200	62	5.42	11.72	9	13	510	2,604	-2,093
	62+59	6258.913	59	6.89	23.61	13	39	524	2,652	-2,128
	62+84	6284.197	25	6.41	27.84	6	24	530	2,682	-2,152
	63+00	6300	16	6.68	18.67	4	14	534	2,699	-2,165
	63+09	6309.466	9	7.27	13.52	2	6	536	2,706	-2,170
	64+00	6400	91	5.58	8.61	22	37	558	2,752	-2,195
	65+00	6500	100	5.62	10.31	21	35	579	2,796	-2,218
	66+00	6600	100	8.26	10.10	26	38	604	2,843	-2,239
	67+00	6700	100	7.93	39.65	30	92	634	2,959	-2,324
	67+51	6751.086	51	8.77	5.23	16	42	650	3,012	-2,362
	67+55	6755	4	9.09	16.49	1	2	651	3,014	-2,362
	67+66	6766.01	11	11.38	21.56	4	8	656	3,023	-2,368
	67+76	6776.066	10	12.41	18.15	4	7	660	3,033	-2,373
	67+80	6780	4	11.66	13.80	2	2	662	3,035	-2,374
	68+01	6801.046	21	15.92	11.23	11	10	672	3,048	-2,375
	68+05	6805	4	17.01	10.49	2	2	675	3,050	-2,375
	68+14	6813.847	9	20.73	0.29	6	2	681	3,052	-2,371
	69+00	6900	86	3.08	3.68	38	6	719	3,060	-2,341
	69+24	6923.8	24	3.60	0.00	3	2	722	3,062	-2,340
						722	2449			

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PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	EARTHWORK DATA	SHEET 65	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 A EARTHWORK DATA\090101_EW.DWG
LAYOUT NAME - 02

PLOT DATE : 9/18/2024 1:29 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1" = 1'

WISDOT/CADDS SHEET 49

DIVISION 1 - STH 93

CATEGORY	STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL CUT	INCREMENTAL VOL FILL	CUMULATIVE VOL (CY) CUT 1.00	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	CUMULATIVE VOL (CY) MASS ORDINATE
0010	72+78	7278.45	0.00	8.01	1.22	0	0	0	0	0
	72+93	7293.13	14.68	5.30	41.13	4	12	4	14	-11
	73+00	7300.00	6.87	4.74	48.05	1	11	5	29	-24
	73+18	7318.29	18.29	4.22	63.60	3	38	8	76	-68
	73+43	7343.44	25.15	3.40	5.70	4	32	11	116	-105
	74+00	7400.00	56.56	2.65	4.01	6	10	18	129	-111
	75+00	7500.00	100.00	2.52	0.13	10	8	27	138	-111
	76+00	7600.00	100.00	2.73	0.04	10	0	37	139	-102
	77+00	7700.00	100.00	2.47	5.56	10	10	47	152	-105
	78+00	7800.00	100.00	2.73	11.78	10	32	56	192	-136
	79+00	7900.00	100.00	1.87	6.16	9	33	65	234	-169
	80+00	8000.00	100.00	1.63	5.21	6	21	71	260	-188
	80+13	8013.22	13.22	3.02	8.32	1	3	73	264	-191
	80+38	8038.36	25.14	2.65	15.16	3	11	75	278	-202
	80+64	8063.51	25.15	2.69	18.84	2	16	78	297	-220
	81+00	8100.00	36.49	1.06	15.94	3	23	80	327	-247
	81+84	8183.67	83.67	0.82	8.85	3	38	83	375	-292
						83	300			

DIVISION 1 - STH 93

CATEGORY	STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL CUT	INCREMENTAL VOL FILL	CUMULATIVE VOL (CY) CUT 1.00	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	CUMULATIVE VOL (CY) MASS ORDINATE
0010	83+52	8352.19	0.00	1.70	6.68	0	0	0	0	0
	83+55	8355.35	3.16	1.05	9.13	0	1	0	1	-1
	84+00	8400.00	44.65	4.56	2.81	5	10	5	13	-9
	84+72	8472.34	72.34	3.73	5.66	11	11	16	28	-12
	84+73	8473.38	1.04	4.54	0.27	0	0	16	28	-12
	84+97	8497.49	24.12	1.70	18.87	3	9	19	39	-20
	84+98	8498.19	0.69	2.24	0.29	0	0	19	39	-20
	85+00	8500.00	1.81	0.35	0.78	0	0	19	39	-20
	85+23	8522.63	22.63	7.45	0.68	3	1	22	40	-17
	85+23	8523.02	0.38	4.10	66.89	0	0	22	40	-18
	86+00	8600.00	76.99	2.19	150.75	9	310	31	428	-397
	87+00	8700.00	100.00	1.90	100.85	8	466	39	1,010	-972
	88+00	8800.00	100.00	2.72	99.85	9	372	47	1,475	-1,428
	89+00	8900.00	100.00	4.07	66.52	13	308	60	1,860	-1,800
	89+70	8970.33	70.33	3.04	122.10	9	246	69	2,167	-2,098
	90+00	9000.00	29.67	3.33	107.45	3	126	73	2,325	-2,252
	90+29	9029.12	29.12	3.39	89.52	4	106	76	2,458	-2,381
	90+42	9041.53	12.40	3.77	34.77	2	29	78	2,493	-2,415
	90+54	9054.12	12.60	1.07	5.00	1	9	79	2,505	-2,426
	90+67	9066.53	12.40	6.08	4.17	2	2	81	2,508	-2,427
	90+79	9079.12	12.60	0.24	4.23	1	2	82	2,510	-2,428
	90+92	9091.53	12.40	0.25	2.99	0	2	82	2,512	-2,430
	91+98	9197.92	106.40	0.28	1.73	1	9	83	2,524	-2,440
	92+10	9210.32	12.40	0.37	0.97	0	1	84	2,525	-2,441
						84	2020			

DIVISION 1 - STH 93

CATEGORY	STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL CUT	INCREMENTAL VOL FILL	CUMULATIVE VOL (CY) CUT 1.00	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	CUMULATIVE VOL (CY) MASS ORDINATE
0010	98+73	9873.10	0.00	1.99	1.30	0	0	0	0	0
	99+00	9900.00	26.90	1.87	4.02	2	3	2	3	-1
	99+93	9993.27	93.27	7.21	0.00	16	7	18	12	6
	100+00	10000.00	6.73	7.62	0.00	2	0	19	12	7
	100+18	10018.43	18.43	7.88	0.01	5	0	25	12	13
	100+44	10043.57	25.14	4.19	4.50	6	2	30	15	16
	101+00	10100.00	56.43	3.03	60.05	8	67	38	99	-61
	102+00	10200.00	100.00	2.92	8.58	11	127	49	258	-209
	103+00	10300.00	100.00	3.31	4.28	12	24	60	288	-227
	104+00	10400.00	100.00	2.60	7.89	11	23	71	316	-244
	105+00	10500.00	100.00	1.73	8.62	8	31	79	354	-275
	106+00	10600.00	100.00	4.35	10.26	11	35	91	398	-307
	106+26	10625.73	25.73	6.92	3.25	5	6	96	406	-310
	106+51	10650.72	24.98	0.81	18.70	4	10	100	418	-319
	106+76	10675.67	24.95	0.18	36.63	0	26	100	450	-350
	107+00	10700.00	24.33	0.22	34.95	0	32	100	491	-390
	107+94	10793.68	93.68	0.27	14.01	1	85	101	597	-496
						101	477			

DIVISION 1 - STH 93

CATEGORY	STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL CUT	INCREMENTAL VOL FILL	CUMULATIVE VOL (CY) CUT 1.00	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	CUMULATIVE VOL (CY) MASS ORDINATE
0010	138+14	13814.00	0.00	68.05	25.43	0	0	0	0	0
	138+38	13837.69	23.69	146.52	22.23	94	21	94	26	68
	138+48	13848.00	10.31	179.92	4.47	62	5	156	33	124
	138+82	13881.54	33.54	90.06	8.07	168	8	324	42	282
	138+88	13888.35	6.81	83.14	28.69	22	5	346	48	298
	139+00	13900.00	11.65	69.83	9.46	33	8	379	58	321
						379	47			

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PROJECT NO: 7590-00-73 | HWY: STH 93 | COUNTY: EAU CLAIRE | EARTHWORK DATA | SHEET 66 | E

DIVISION 1 - STH 93

CATEGORY	STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL CUT	INCREMENTAL VOL FILL	CUMULATIVE VOL (CY) CUT 1.00	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	CUMULATIVE VOL (CY) MASS ORDINATE
0010	194+63	19463.03	0.00	2.46	0.36	0	0	0	0	0
	194+72	19471.75	8.72	5.86	0.33	1	0	1	0	1
	195+00	19500.00	28.25	6.01	0.00	6	0	8	0	7
	195+82	19581.83	81.83	7.46	34.41	20	52	28	66	-38
	195+91	19590.55	8.71	7.91	35.46	2	11	30	80	-49
	196+00	19600.00	9.46	7.41	35.30	3	12	33	95	-62
	196+07	19606.81	6.81	6.86	40.88	2	10	35	107	-72
	196+16	19615.53	8.72	6.19	46.08	2	14	37	125	-88
	196+32	19631.79	16.26	5.02	30.76	3	23	40	154	-113
	196+41	19640.50	8.71	4.67	20.20	2	8	42	164	-122
	197+00	19700.00	59.50	3.37	28.21	9	53	51	231	-180
	198+00	19800.00	100.00	3.11	98.29	12	234	63	523	-461
	199+00	19900.00	100.00	3.05	51.18	11	277	74	869	-795
	200+00	20000.00	100.00	3.65	45.83	12	180	87	1,094	-1,007
	200+84	20084.26	84.26	6.50	8.71	16	85	102	1,200	-1,098
	201+00	20100.00	15.74	5.21	7.26	3	5	106	1,206	-1,100
	201+09	20109.24	9.24	5.40	8.16	2	3	108	1,209	-1,102
	201+34	20134.22	24.98	5.94	8.44	5	8	113	1,219	-1,106
	201+38	20138.04	3.83	5.90	15.85	1	2	114	1,221	-1,107
	201+63	20163.02	24.98	6.45	26.92	6	20	120	1,246	-1,126
	201+88	20188.00	24.98	6.98	20.54	6	22	126	1,273	-1,148
	202+00	20200.00	12.00	5.51	17.25	3	8	128	1,284	-1,155
	202+07	20207.43	7.43	10.18	9.87	2	4	131	1,289	-1,158
	202+94	20294.30	86.87	9.38	0.00	31	16	162	1,308	-1,146
						162	1047			

DIVISION 1 - STH 93

CATEGORY	STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL CUT	INCREMENTAL VOL FILL	CUMULATIVE VOL (CY) CUT 1.00	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	CUMULATIVE VOL (CY) MASS ORDINATE
	226+88	22688.49	0.00	3.21	0.40	0	0	0	0	0
	227+00	22700.00	11.51	1.61	2.44	1	1	1	1	0
	227+17	22717.36	17.36	5.90	2.86	2	2	3	3	1
	227+96	22795.79	78.42	5.84	35.48	17	56	20	72	-52
	228+00	22800.00	4.21	6.30	36.88	1	6	21	80	-58
	228+21	22820.77	20.77	6.10	46.43	5	32	26	120	-93
	228+36	22836.16	15.39	5.50	54.43	3	29	30	156	-126
	228+46	22845.75	9.59	5.20	43.50	2	17	31	177	-146
	228+61	22861.14	15.39	4.72	29.57	3	21	34	203	-169
	228+86	22886.12	24.98	4.19	30.76	4	28	38	238	-200
	229+00	22900.00	13.88	4.82	28.25	2	15	41	257	-216
	230+00	23000.00	100.00	3.67	92.39	16	223	56	536	-480
	231+00	23100.00	100.00	1.19	50.39	9	264	65	867	-802
	232+00	23200.00	100.00	2.62	145.39	7	363	72	1,320	-1,248
	233+00	23300.00	100.00	1.88	89.83	8	436	81	1,865	-1,784
	234+00	23400.00	100.00	5.92	22.83	14	209	95	2,125	-2,030
	234+05	23404.88	4.88	5.98	22.88	1	4	96	2,131	-2,034
	234+30	23429.85	24.97	4.90	11.29	5	16	101	2,150	-2,049
	234+55	23454.84	24.98	7.22	6.54	6	8	107	2,161	-2,054
	235+00	23500.00	45.17	1.46	7.98	7	12	114	2,176	-2,062
	235+74	23573.62	73.62	2.02	4.39	5	17	119	2,197	-2,078
						119	1757			

DIVISION 1 - STH 93

CATEGORY	STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL CUT	INCREMENTAL VOL FILL	CUMULATIVE VOL (CY) CUT 1.00	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	CUMULATIVE VOL (CY) MASS ORDINATE
0010	271+12	27112.23	0.00	1.64	2.52	0	0	0	0	0
	271+49	27148.54	36.31	3.27	9.74	3	8	3	10	-7
	272+00	27200.00	51.46	3.46	20.97	6	29	10	47	-37
	272+31	27231.02	31.02	4.99	28.21	5	28	15	82	-68
	272+56	27256.00	24.98	5.23	33.55	5	29	19	118	-99
	272+67	27267.34	11.33	5.88	30.75	2	13	22	135	-113
	272+81	27280.98	13.65	6.66	29.67	3	15	25	154	-129
	272+92	27292.32	11.33	5.79	29.05	3	12	27	169	-142
	273+00	27300.00	7.68	6.09	31.17	2	9	29	180	-151
	273+17	27317.29	17.29	4.69	24.94	3	18	33	202	-170
	274+00	27400.00	82.71	3.22	85.11	12	169	45	413	-368
	275+00	27500.00	100.00	2.92	96.37	11	336	56	833	-777
	276+00	27600.00	100.00	3.03	96.67	11	357	67	1,280	-1,213
	277+00	27700.00	100.00	3.52	68.28	12	305	79	1,662	-1,583
	278+00	27800.00	100.00	6.93	8.07	19	141	99	1,839	-1,740
	278+62	27862.23	62.23	13.51	2.88	24	13	122	1,854	-1,732
	278+87	27887.21	24.98	7.93	8.27	10	5	132	1,861	-1,729
	279+00	27900.00	12.79	7.60	5.99	4	3	136	1,865	-1,729
	279+12	27912.19	12.19	7.13	4.94	3	2	139	1,868	-1,729
	279+36	27936.04	23.84	4.59	8.60	5	6	144	1,876	-1,731
	279+61	27961.01	24.97	4.24	9.96	4	9	148	1,886	-1,738
	279+86	27985.99	24.98	3.99	9.38	4	9	152	1,898	-1,745
	280+00	28000.00	14.01	4.35	6.94	2	4	154	1,903	-1,749
	280+31	28030.99	30.99	8.95	2.60	8	5	162	1,910	-1,748
	281+05	28104.80	73.80	0.30	0.73	13	5	175	1,915	-1,741
	282+43	28242.53	137.74	5.49	0.00	15	2	189	1,918	-1,728
	283+00	28300.00	57.47	2.65	0.80	9	1	198	1,919	-1,721
	283+61	28361.33	61.33	7.82	0.70	12	2	210	1,921	-1,711
	283+86	28386.31	24.98	6.65	0.88	7	1	217	1,922	-1,705
	284+00	28400.00	13.69	6.66	1.49	3	1	220	1,923	-1,703
	284+11	28411.29	11.29	7.24	0.81	3	0	223	1,923	-1,700
	285+00	28500.00	88.71	6.27	0.43	22	2	245	1,926	-1,681
	286+00	28600.00	100.00	7.95	0.16	26	1	271	1,927	-1,656
	287+00	28700.00	100.00	5.51	0.00	25	0	296	1,927	-1,631
	288+00	28800.00	100.00	3.75	0.00	17	0	313	1,927	-1,614
	288+55	28855.04	55.04	4.07	8.65	8	9	321	1,938	-1,617
	288+80	28880.02	24.98	5.37	5.87	4	7	326	1,947	-1,621
	289+00	28900.00	19.98	6.74	5.09	4	4	330	1,952	-1,622
	289+05	28905.00	5.00	6.65	5.53	1	1	331	1,953	-1,622
	290+00	29000.00	95.00	9.29	0.14	28	10	360	1,966	-1,606
	290+24	29023.80	23.80	12.36	0.00	10	0	369	1,966	-1,597
						369	1573			

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PROJECT NO: 7590-00-73 | HWY: STH 93 | COUNTY: EAU CLAIRE | EARTHWORK DATA | SHEET 67 | E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 A EARTHWORK DATA\090101_EW.DWG
LAYOUT NAME - 04

PLOT DATE : 9/18/2024 1:29 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1" = 1'

WISDOT/CADDS SHEET 49

DIVISION 1 - STH 93

CATEGORY	STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL CUT	INCREMENTAL VOL FILL	CUMULATIVE VOL (CY) CUT 1.00	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	CUMULATIVE VOL (CY) MASS ORDINATE
0010	304+87	30487.03	0.00	0.61	14.51	0	0	0	0	0
	305+00	30500.00	12.97	0.48	15.19	0	7	0	9	-9
	306+00	30600.00	100.00	12.62	21.38	24	68	25	94	-69
	306+06	30605.83	5.83	12.56	21.82	3	5	27	99	-72
	306+19	30618.83	13.00	9.30	33.13	5	13	33	116	-83
	306+31	30630.81	11.98	7.76	41.60	4	17	36	137	-100
	306+44	30643.81	13.00	6.26	49.43	3	22	40	164	-124
	306+56	30655.79	11.98	5.04	28.67	3	17	42	186	-144
	306+69	30668.79	13.00	4.20	13.90	2	10	44	199	-154
	307+00	30700.00	31.21	3.77	10.76	5	14	49	216	-167
	308+00	30800.00	100.00	2.90	28.05	12	72	61	306	-245
	309+00	30900.00	100.00	4.04	10.01	13	70	74	394	-320
	309+50	30950.04	50.04	5.30	16.33	9	24	83	425	-342
	309+75	30975.02	24.98	7.29	26.35	6	20	89	449	-361
	310+00	31000.00	24.98	9.16	16.78	8	20	96	474	-378
						96	380			

DIVISION 1 - STH 93 (CLEAR CREEK BRIDGE)

CATEGORY	STATION		REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL CUT	INCREMENTAL VOL FILL	CUMULATIVE VOL (CY) CUT 1.00	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	CUMULATIVE VOL (CY) MASS ORDINATE
0010	313+01		31300.75	0.00	47.24	0.00	0	0	0	0	0
	314+00		31400.00	99.25	78.25	19.44	231	36	231	45	186
	314+71		31471.33	71.33	67.50	63.72	193	110	423	182	241
	314+96		31495.91	24.58	61.60	63.69	59	58	482	254	227
	315+00		31500.00	4.09	61.32	62.92	9	10	491	266	225
	315+21		31521.37	21.37	59.27	61.46	48	49	539	328	211
	315+64	BK	31563.90	42.53	53.87	78.11	89	110	628	465	163
	316+40	AH	31640.07	76.17	61.43	33.73	0	0	628	465	163
	316+83		31682.73	42.66	73.13	24.62	106	46	734	523	211
	317+00		31700.00	17.27	77.28	29.68	48	17	782	545	238
	317+08		31707.69	7.69	77.79	31.05	22	9	805	556	249
	317+33		31732.69	25.00	79.42	29.56	73	28	877	591	287
	318+00		31800.00	67.31	79.88	19.39	199	61	1,076	667	409
	319+00		31900.00	100.00	75.04	7.95	287	51	1,363	730	633
	319+11		31911.36	11.35	73.19	6.08	31	3	1,394	734	660
	319+50		31950.00	38.65	68.60	4.70	101	8	1,495	743	752
							1495	595			

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PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	EARTHWORK DATA	SHEET 68	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 A EARTHWORK DATA\090101_EW.DWG
LAYOUT NAME - 05

PLOT DATE : 9/18/2024 1:29 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1" = 1'

DIVISION 1 - STH 93

CATEGORY	STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL CUT	INCREMENTAL VOL FILL	CUMULATIVE VOL (CY) CUT 1.00	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	CUMULATIVE VOL (CY) MASS ORDINATE
0010	385+75	38574.69	0.00	3.43	0.00	0	0	0	0	0
	386+93	38693.49	118.80	3.86	17.25	16	38	16	47	-31
	387+00	38700.00	6.51	3.58	16.97	1	4	17	53	-36
	387+14	38714.27	14.27	9.75	15.53	4	9	20	63	-43
	387+18	38718.47	4.20	9.28	15.02	1	2	22	66	-44
	387+43	38743.45	24.98	7.57	8.22	8	11	30	80	-50
	388+00	38800.00	56.55	7.15	1.31	15	10	45	92	-47
	388+33	38833.07	33.07	2.57	57.33	6	36	51	137	-86
	388+58	38858.05	24.98	2.25	82.65	2	65	53	218	-165
	388+83	38883.03	24.98	1.92	77.94	2	74	55	311	-256
	389+00	38900.00	16.97	1.91	93.22	1	54	56	378	-322
	390+00	39000.00	100.00	9.37	28.66	21	226	77	660	-583
	391+00	39100.00	100.00	2.24	71.19	22	185	99	891	-793
	391+59	39158.51	58.51	2.01	75.32	5	159	103	1,090	-986
	391+83	39183.49	24.98	3.01	59.27	2	62	106	1,168	-1,062
	392+00	39200.00	16.51	3.64	58.32	2	36	108	1,213	-1,105
	392+08	39208.48	8.48	3.95	76.20	1	21	109	1,239	-1,130
	392+25	39224.68	16.20	4.28	65.09	2	42	111	1,292	-1,181
	392+50	39249.67	24.99	4.52	43.07	4	50	116	1,355	-1,239
	393+27	39327.27	77.60	6.06	0.23	15	62	131	1,432	-1,302
	393+67	39367.04	39.77	8.81	0.00	11	0	142	1,433	-1,291
						142	1146			

DIVISION 1 - STH 93 (PINE CREEK BRIDGE)

CATEGORY	STATION		REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL CUT	INCREMENTAL VOL FILL	CUMULATIVE VOL (CY) CUT 1.00	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	CUMULATIVE VOL (CY) MASS ORDINATE
0010	419+60		41960.00	0.00	85.97	3.00	0	0	0	0	0
	420+00		42000.00	40.00	91.26	2.16	131	4	131	5	127
	421+00		42100.00	100.00	132.29	0.00	414	4	545	10	535
	422+00		42200.00	100.00	191.33	0.00	599	0	1,145	10	1,135
	422+62		42262.25	62.25	285.70	0.00	550	0	1,694	10	1,685
	422+86		42285.60	23.35	302.55	0.00	254	0	1,949	10	1,939
	423+00		42300.00	14.40	311.75	0.00	164	0	2,113	10	2,103
	424+00		42400.00	100.00	288.54	0.00	1112	0	3,224	10	3,215
	424+27		42426.76	26.76	269.97	0.00	277	0	3,501	10	3,491
	424+52		42451.80	25.03	248.02	0.00	240	0	3,741	10	3,731
	424+77		42476.82	25.03	207.22	1.19	211	1	3,952	10	3,942
	424+86		42486.41	9.59	205.28	0.09	73	0	4,025	11	4,015
	425+00		42500.00	13.59	190.93	0.00	100	0	4,125	11	4,114
	425+11		42511.34	11.34	165.26	0.72	75	0	4,200	11	4,189
	425+36		42536.37	25.03	123.70	10.99	134	5	4,334	18	4,316
	425+79	BK	42578.92	42.55	74.11	13.95	156	20	4,490	42	4,447
	426+55	AH	42655.08	76.17	54.82	58.04	0	0	4,490	42	4,447
	426+98		42697.71	42.63	59.83	34.19	90	73	4,580	133	4,447
	427+00		42700.00	2.29	60.05	33.78	5	3	4,585	137	4,448
	427+23		42722.69	22.69	63.46	21.49	52	23	4,637	166	4,471
	427+32		42732.08	9.39	64.93	27.00	22	8	4,660	176	4,483
	427+48		42747.67	15.58	89.87	13.39	45	12	4,704	191	4,513
	427+57		42757.06	9.40	112.78	12.27	35	4	4,740	197	4,543
	427+82		42782.04	24.98	106.26	9.99	101	10	4,841	210	4,631
	428+00		42800.00	17.96	79.68	13.21	62	8	4,903	219	4,684
	428+50		42850.00	50.00	68.82	16.30	138	27	5,040	253	4,787
	429+00		42900.00	50.00	25.74	3.54	88	18	5,128	276	4,851
	429+61		42960.71	60.71	0.00	0.00	29	4	5,157	281	4,875
							5157	225			

DIVISION 1 - WILLOW RD

CATEGORY	STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL CUT	INCREMENTAL VOL FILL	CUMULATIVE VOL (CY) CUT 1.00	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	CUMULATIVE VOL (CY) MASS ORDINATE
0010	10+37	1037.37	0.00	5.06	29.30	0	0	0	0	0
	10+63	1062.89	25.52	10.71	81.77	7	52	7	66	-58
	10+88	1087.87	24.98	9.86	70.00	10	70	17	153	-136
	11+00	1100.00	12.13	9.45	71.92	4	32	21	193	-172
	11+13	1112.85	12.85	9.11	78.37	4	36	26	238	-212
	11+50	1150.00	37.15	9.99	74.16	13	105	39	369	-330
						39	295			

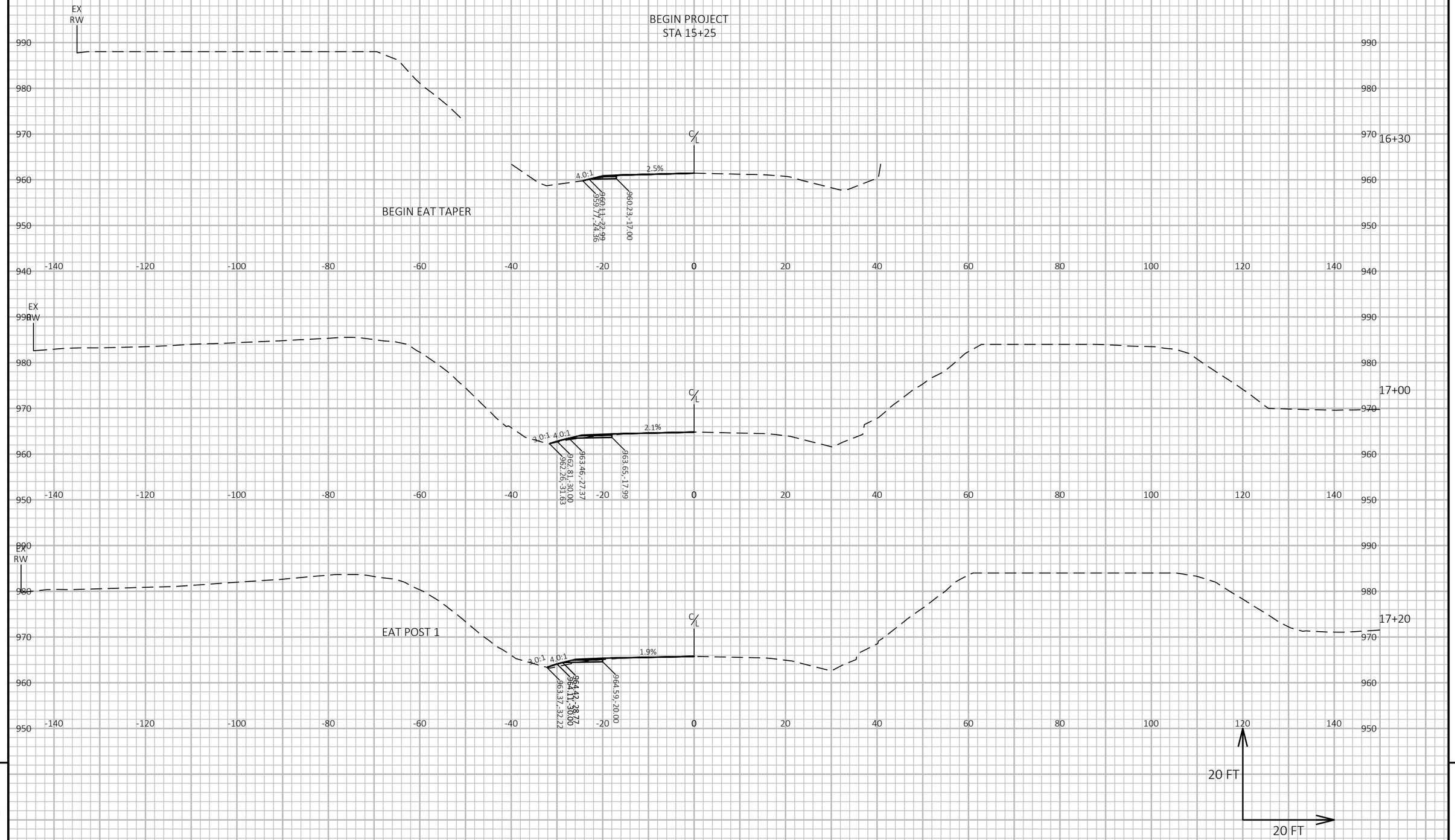
9

9

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	EARTHWORK DATA	SHEET 69	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 A EARTHWORK DATA\090101_EW.DWG
LAYOUT NAME - 06

PLOT DATE : 9/18/2024 1:29 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1" = 1'



9

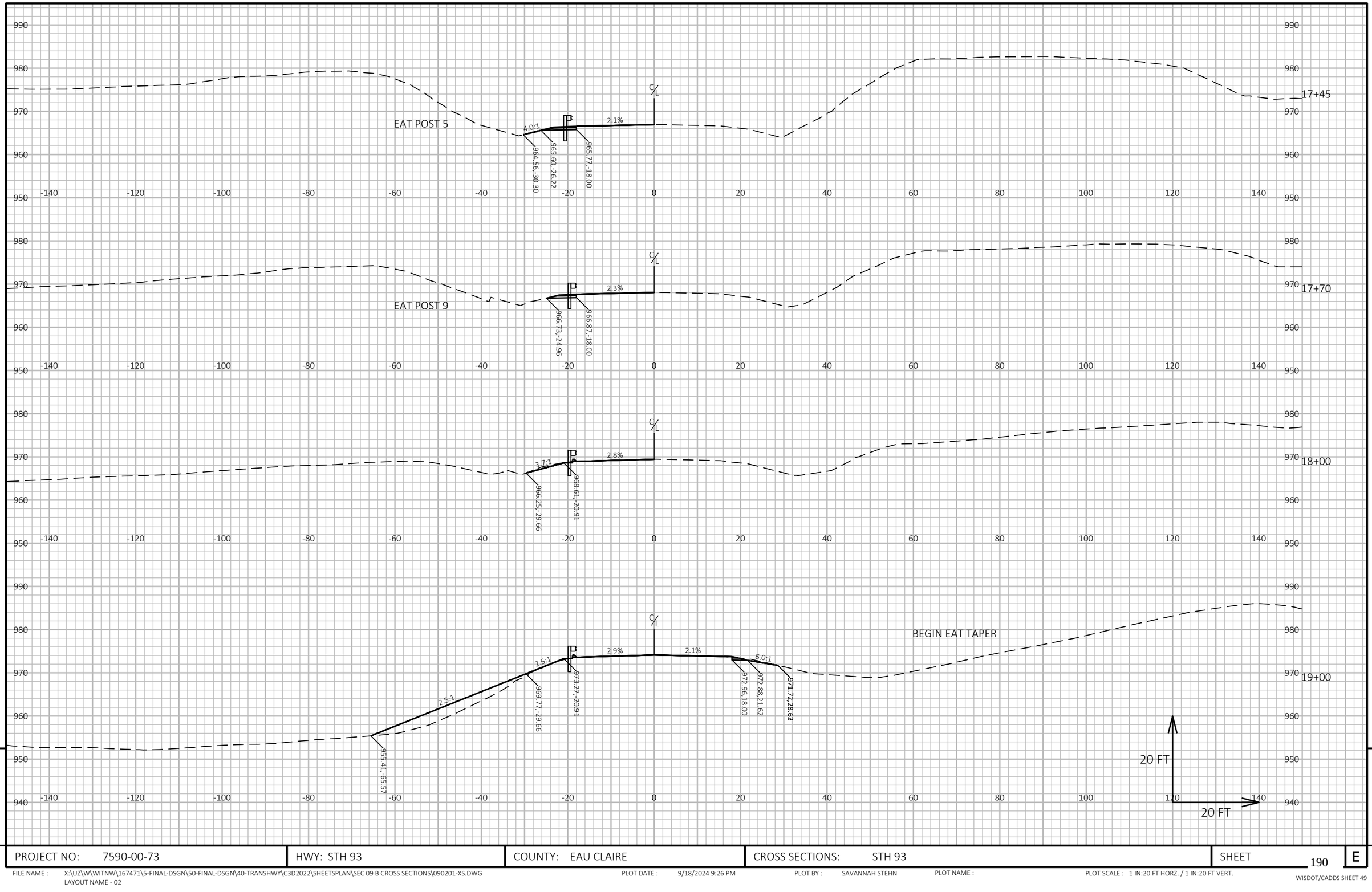
9

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 189	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 01

PLOT DATE : 9/18/2024 9:25 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

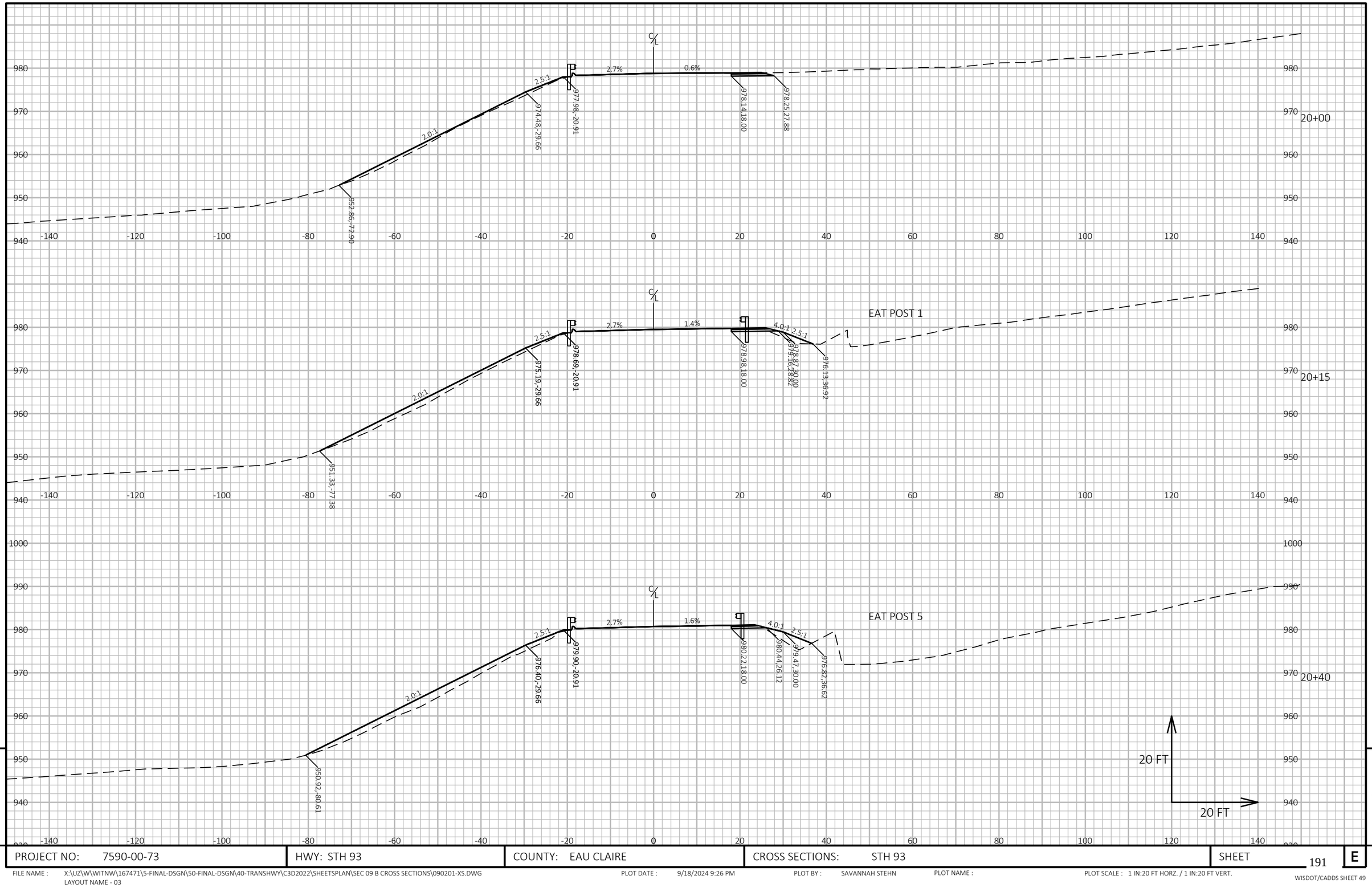


PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 190	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 02

PLOT DATE : 9/18/2024 9:26 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



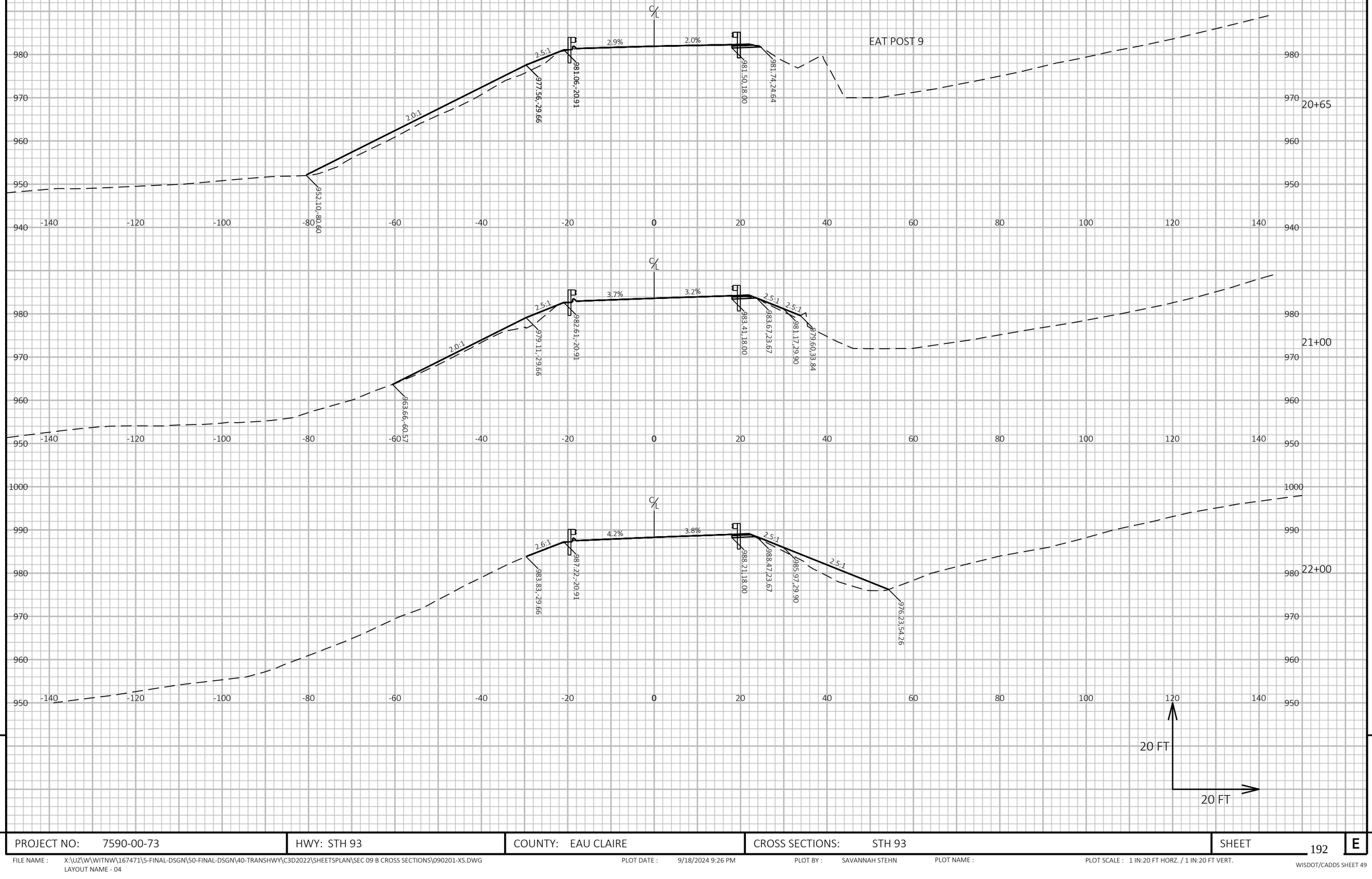
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 191	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 03

PLOT DATE : 9/18/2024 9:26 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

EAT POST 9

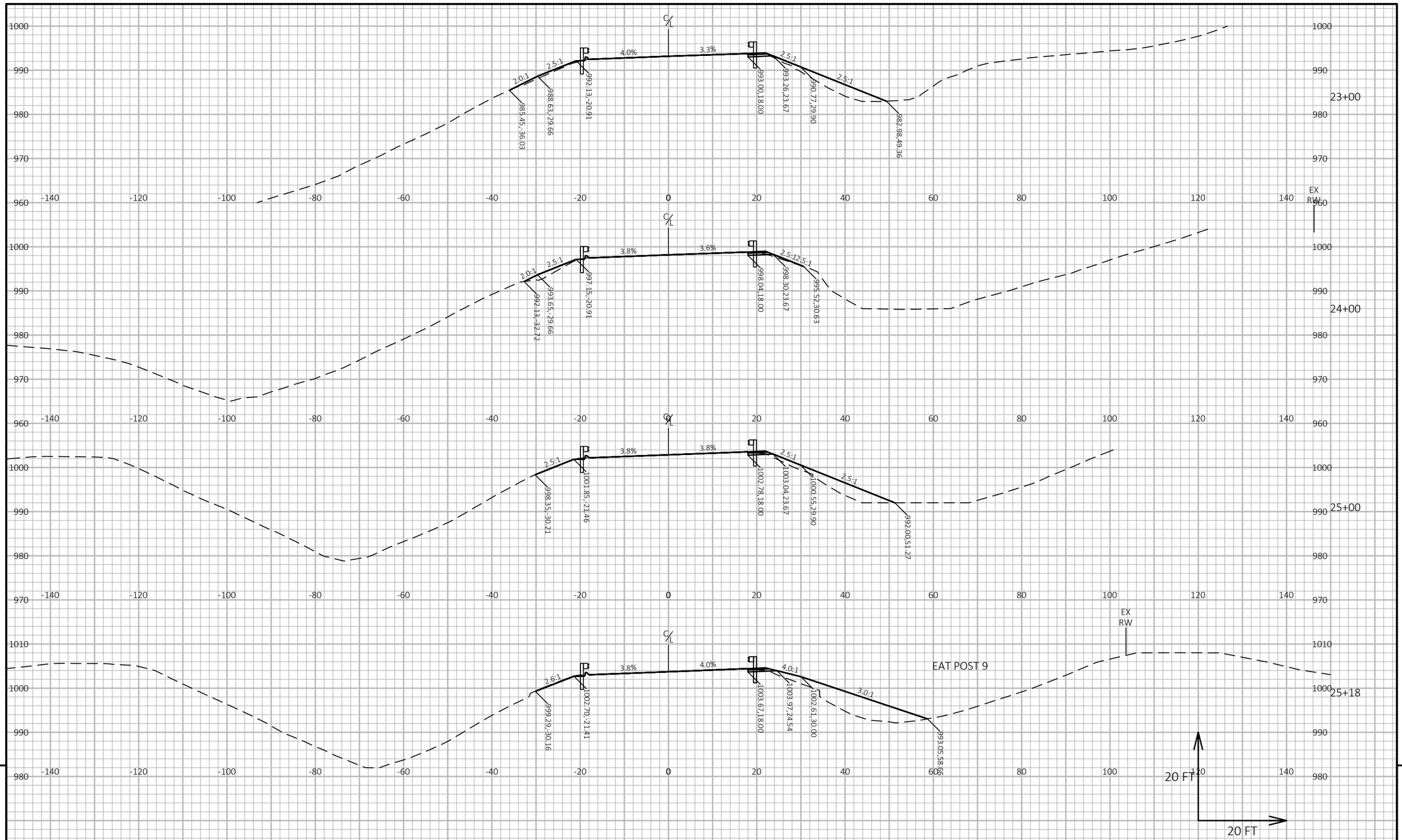


PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 192	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 04

PLOT DATE : 9/18/2024 9:26 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



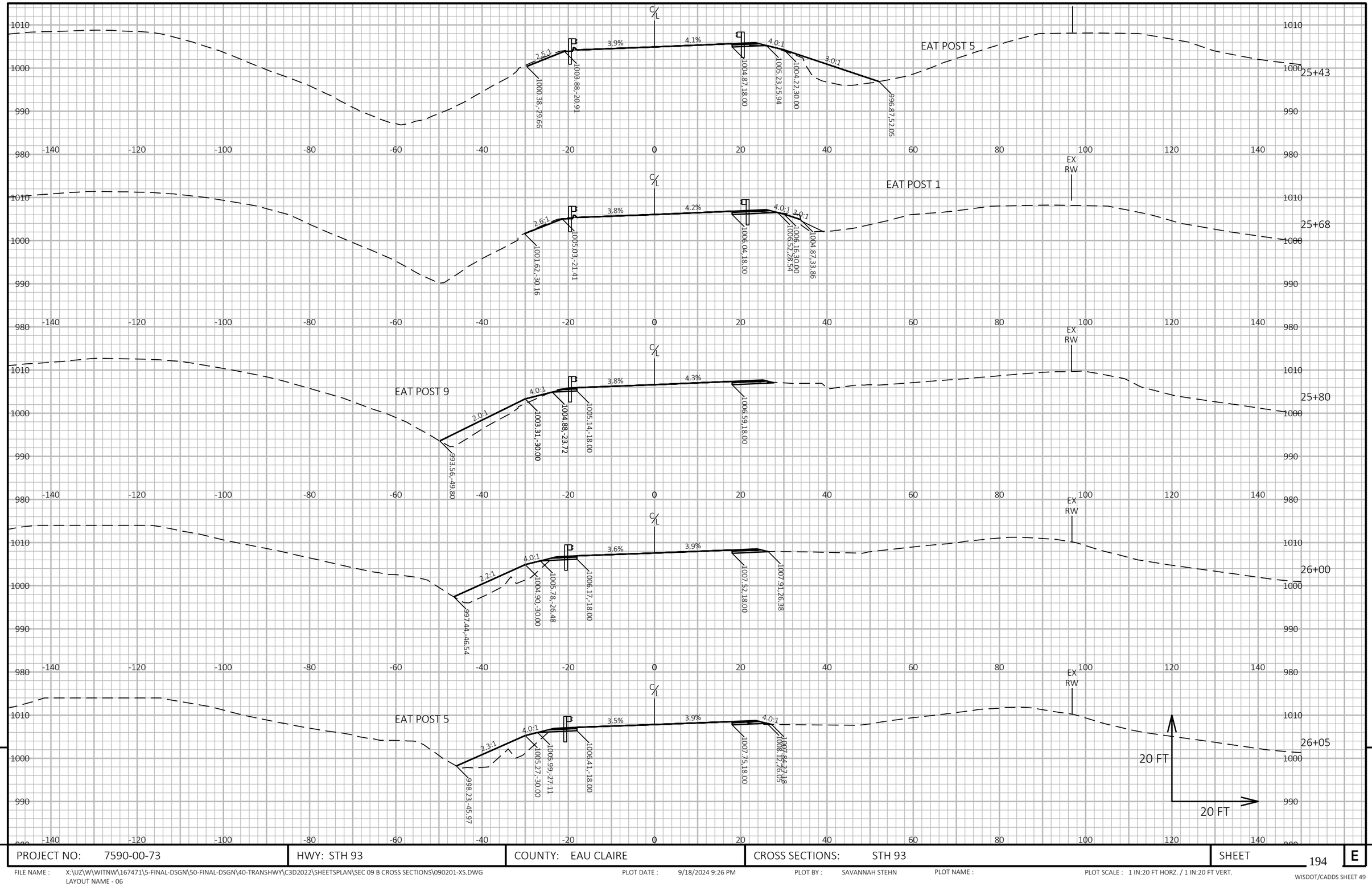
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 193	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 05

PLOT DATE : 9/18/2024 9:26 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

9 9



9

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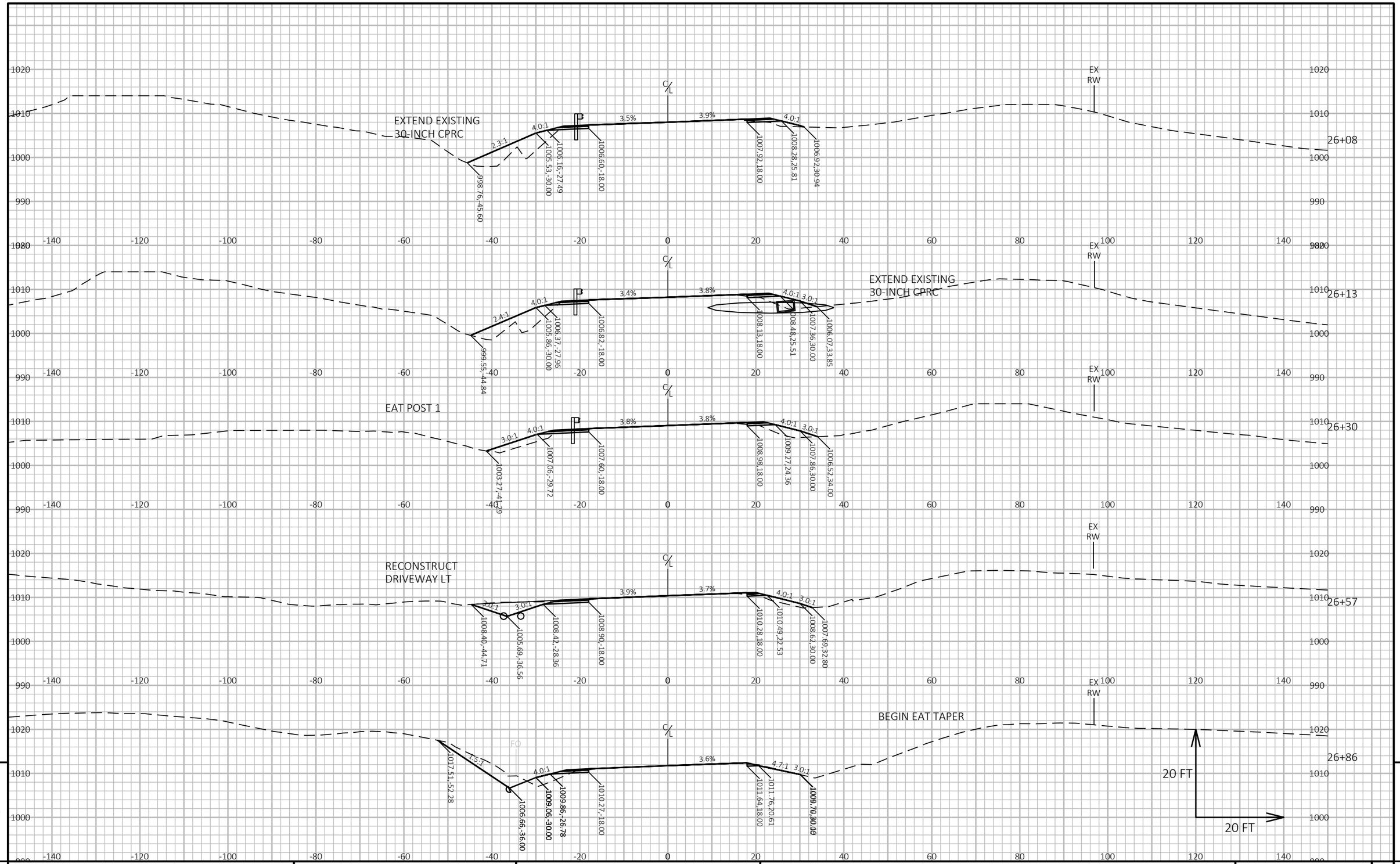
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 194	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 06

PLOT DATE : 9/18/2024 9:26 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

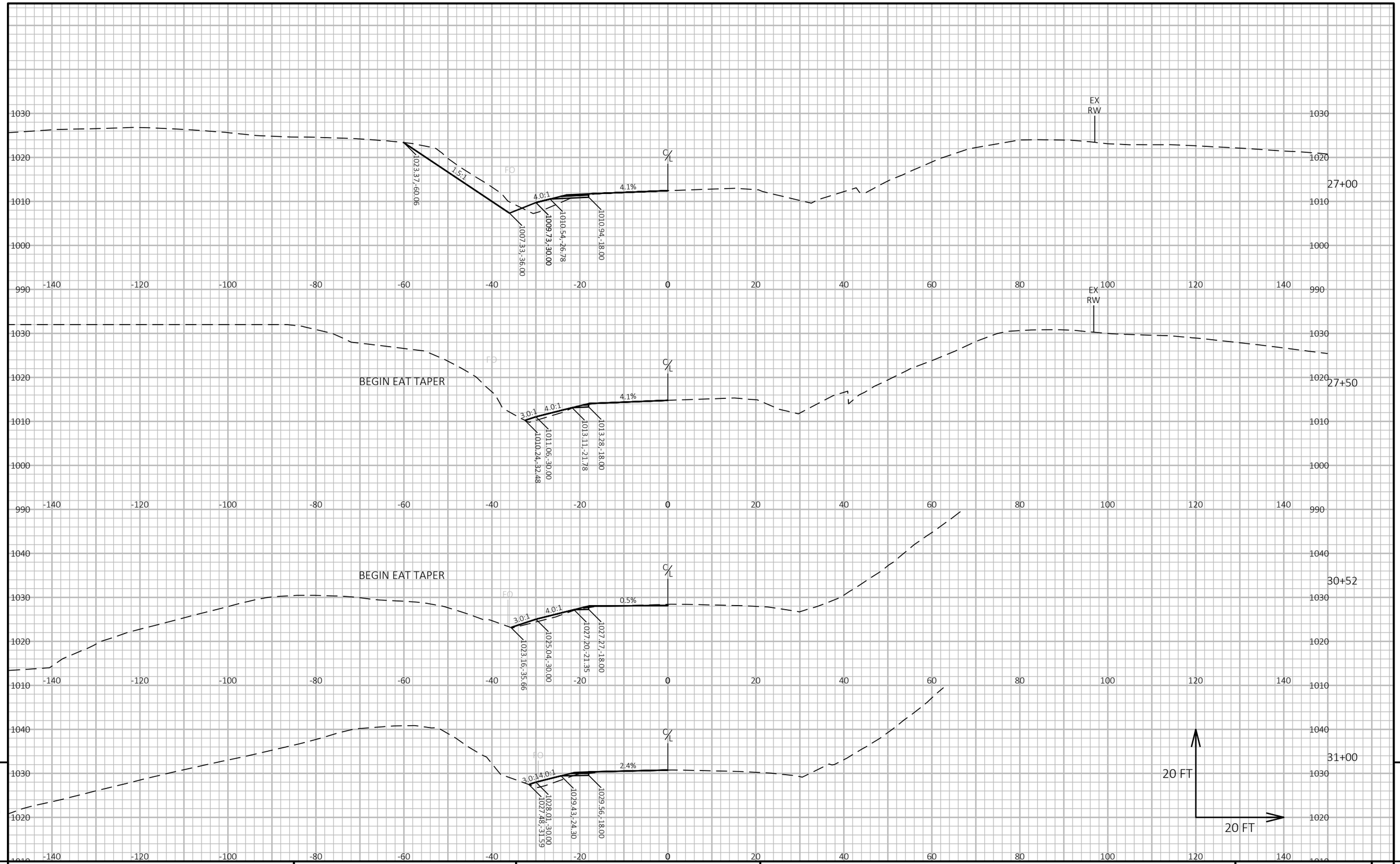


PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 195	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 07

PLOT DATE : 9/18/2024 9:26 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

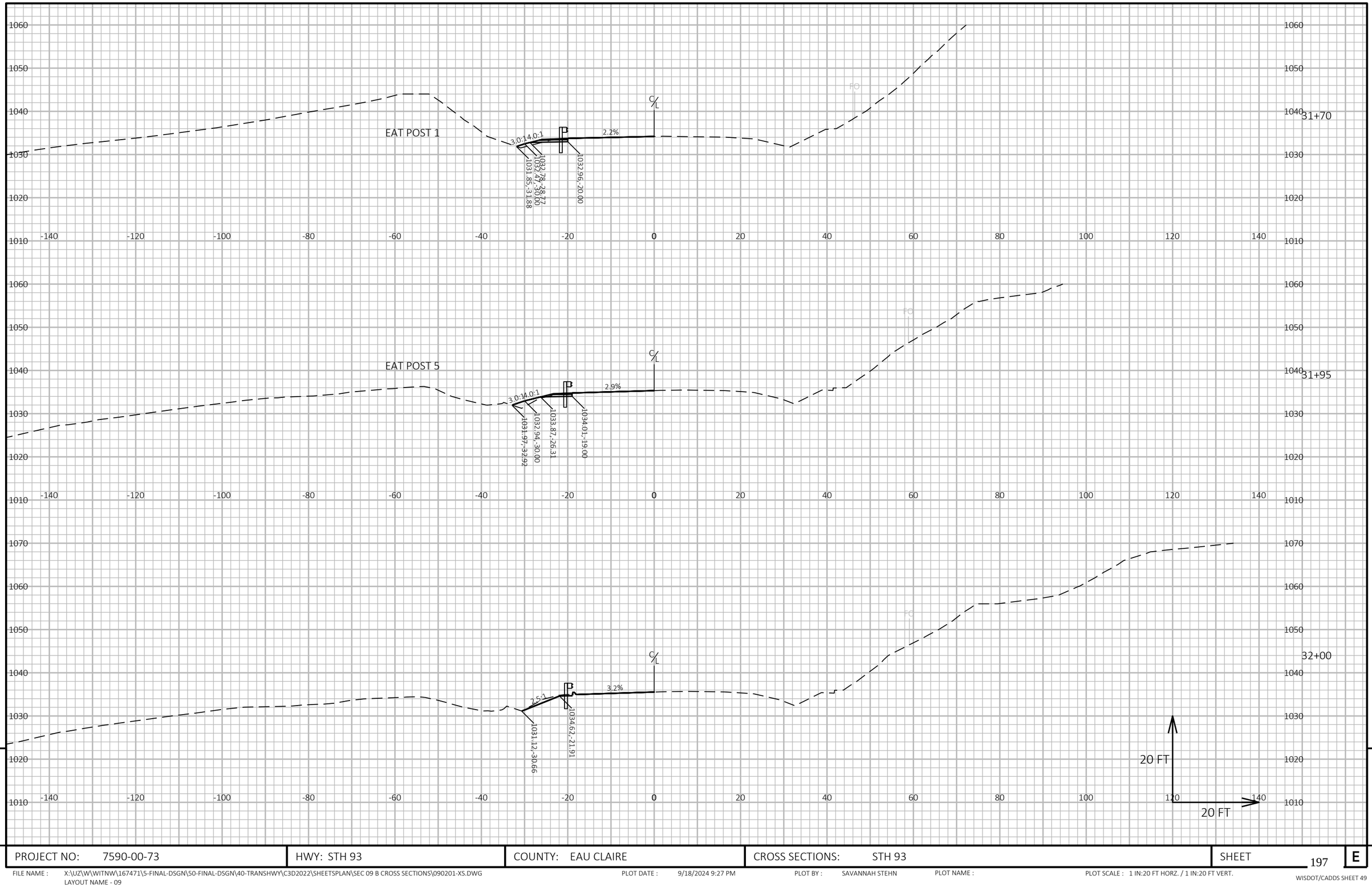


PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 196	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 08

PLOT DATE : 9/18/2024 9:27 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 197	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 09

PLOT DATE : 9/18/2024 9:27 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

EAT POST 9

32+20

33+00

34+00

9

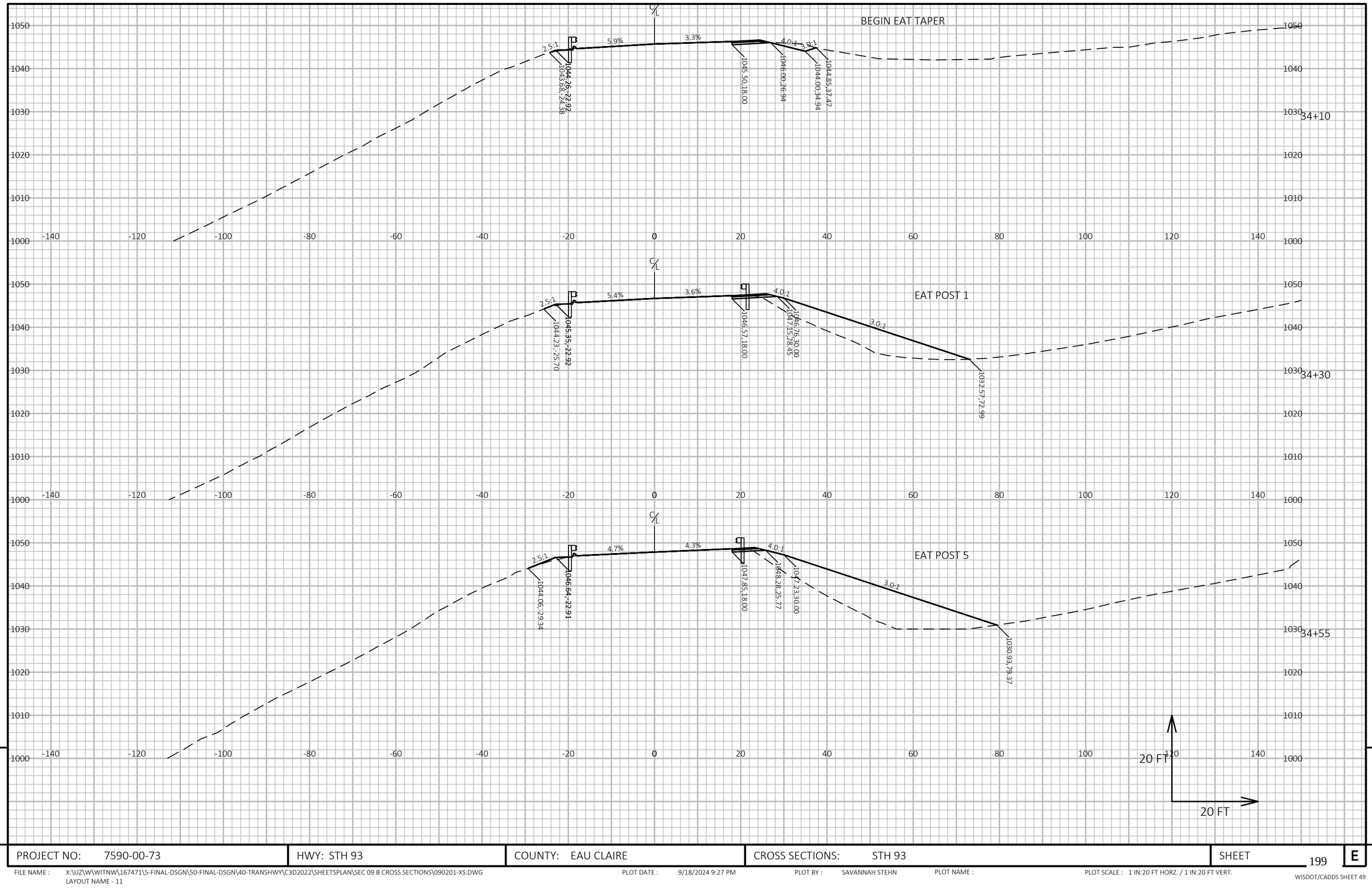
9

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 198	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 10

PLOT DATE : 9/18/2024 9:27 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 199	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 11

PLOT DATE : 9/18/2024 9:27 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

EAT POST 9

34+80

1046.03,-27.33
1047.80,-22.92
1048.97,18.00
1049.22,22.46
1047.22,30.46
1030.32,81.66

35+00

1044.27,-33.60
1045.24,-31.66
1048.74,-22.91
1049.85,18.00
1050.05,21.63
1046.55,30.38
1030.00,71.76

36+00

EX
RW

1046.64,-37.95
1050.03,-31.66
1053.53,-22.91
1054.77,18.00
1054.97,21.63
1051.47,30.38
1037.88,59.22

20 FT
20 FT

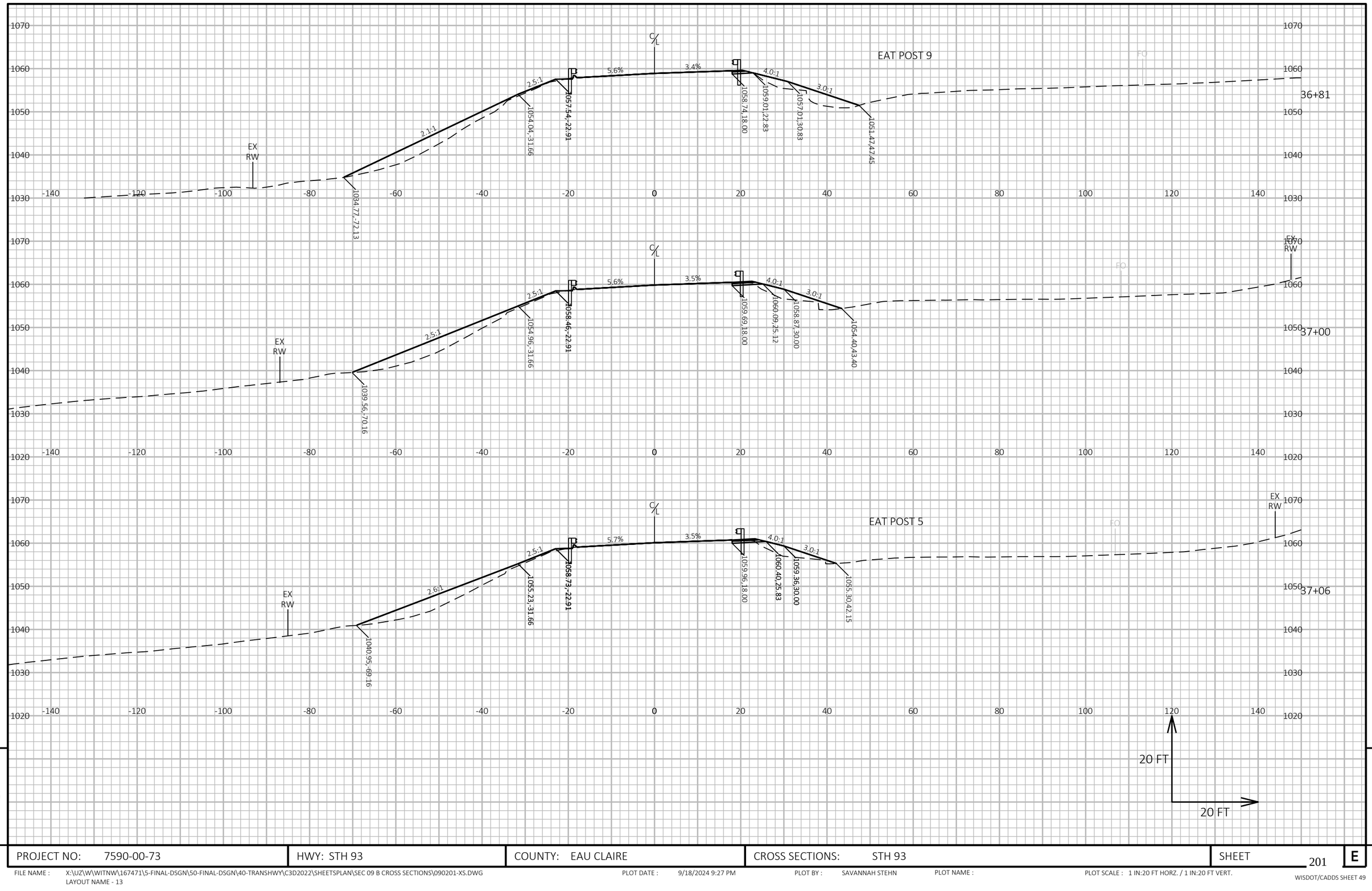
9 9

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 200	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 12

PLOT DATE : 9/18/2024 9:27 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

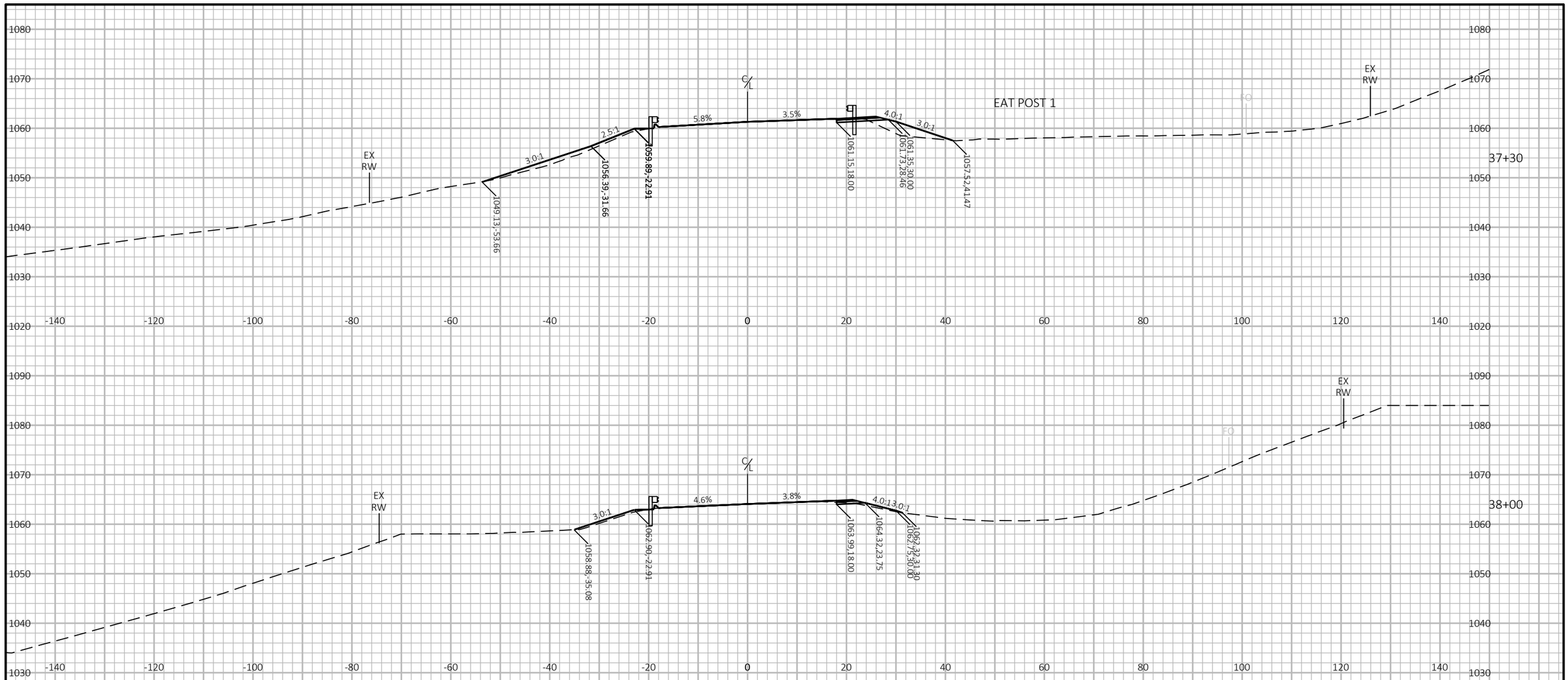
9

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 201	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 13

PLOT DATE : 9/18/2024 9:27 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

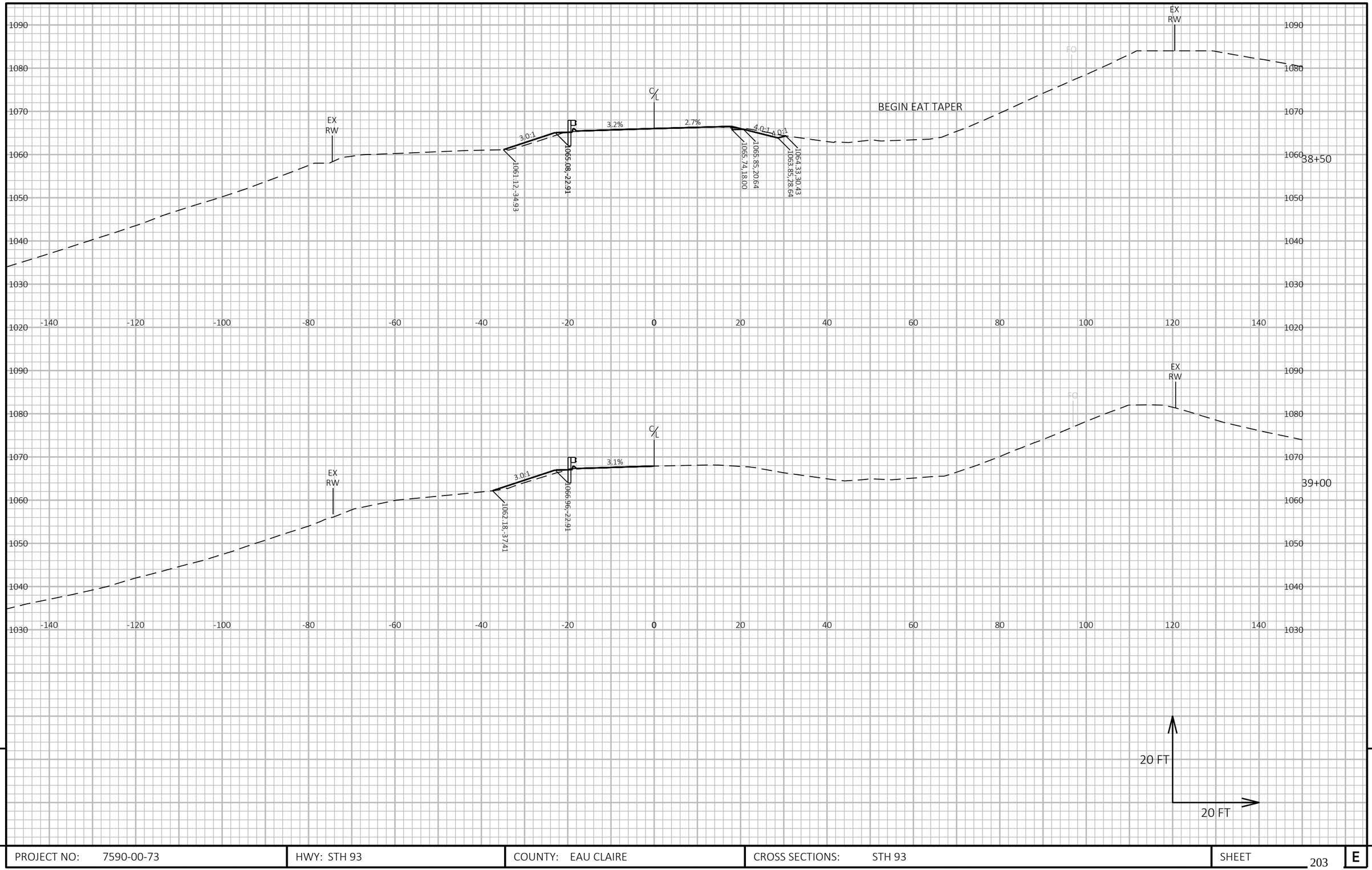


PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 202	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 14

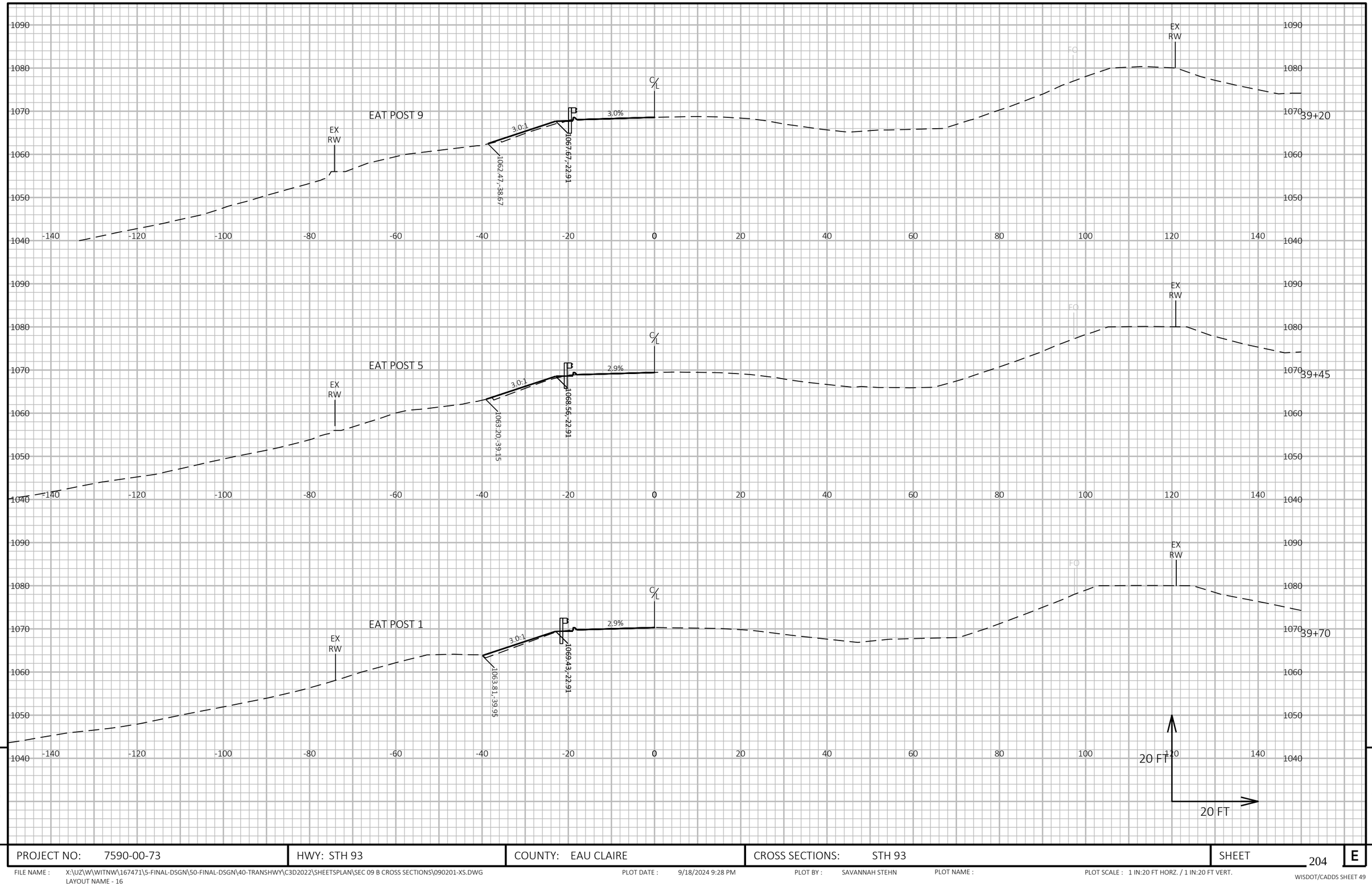
PLOT DATE : 9/18/2024 9:28 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 203	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 15
PLOT DATE : 9/18/2024 9:28 PM
PLOT BY : SAVANNAH STEHN
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49

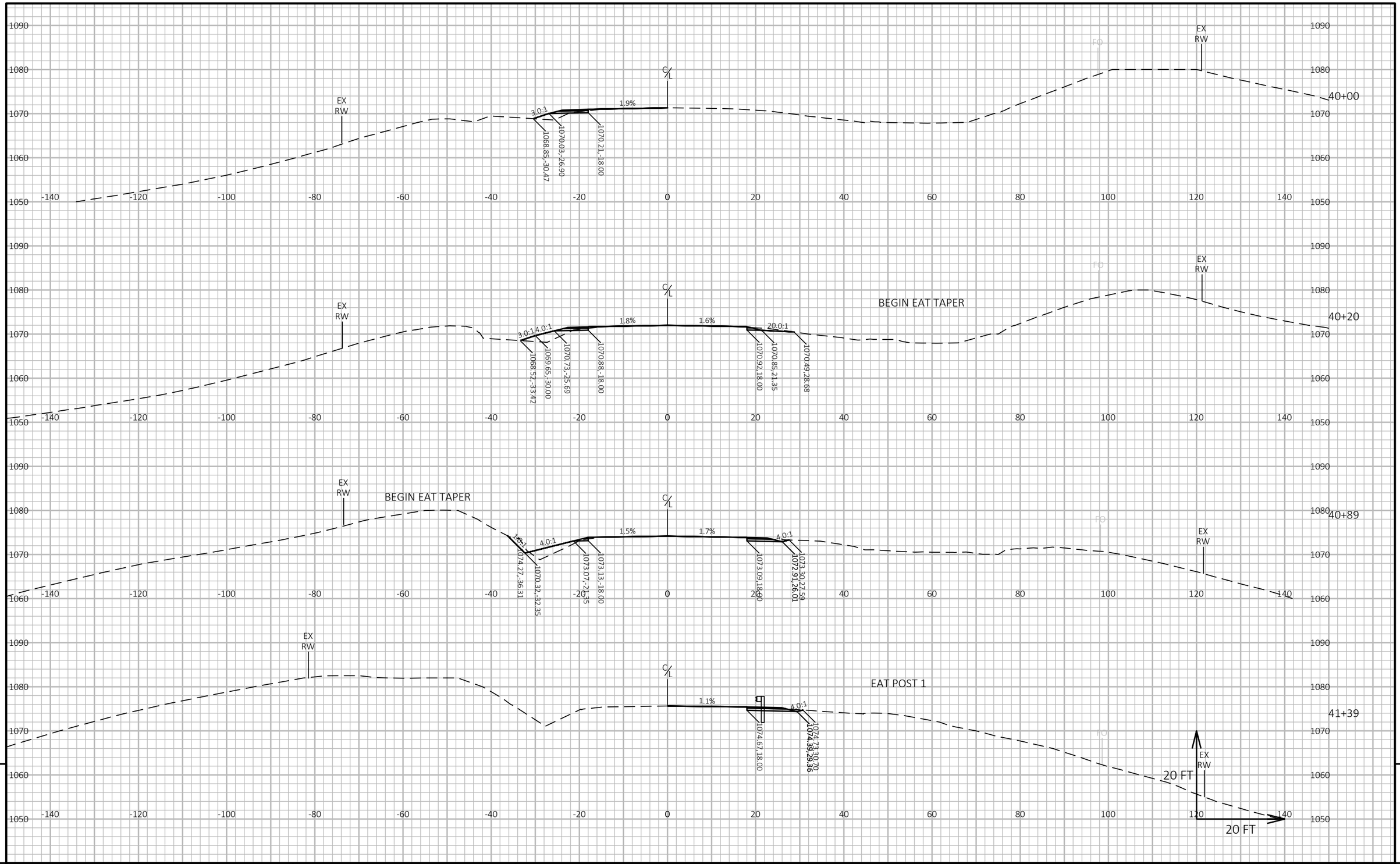


9 9

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 204	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 16

PLOT DATE : 9/18/2024 9:28 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



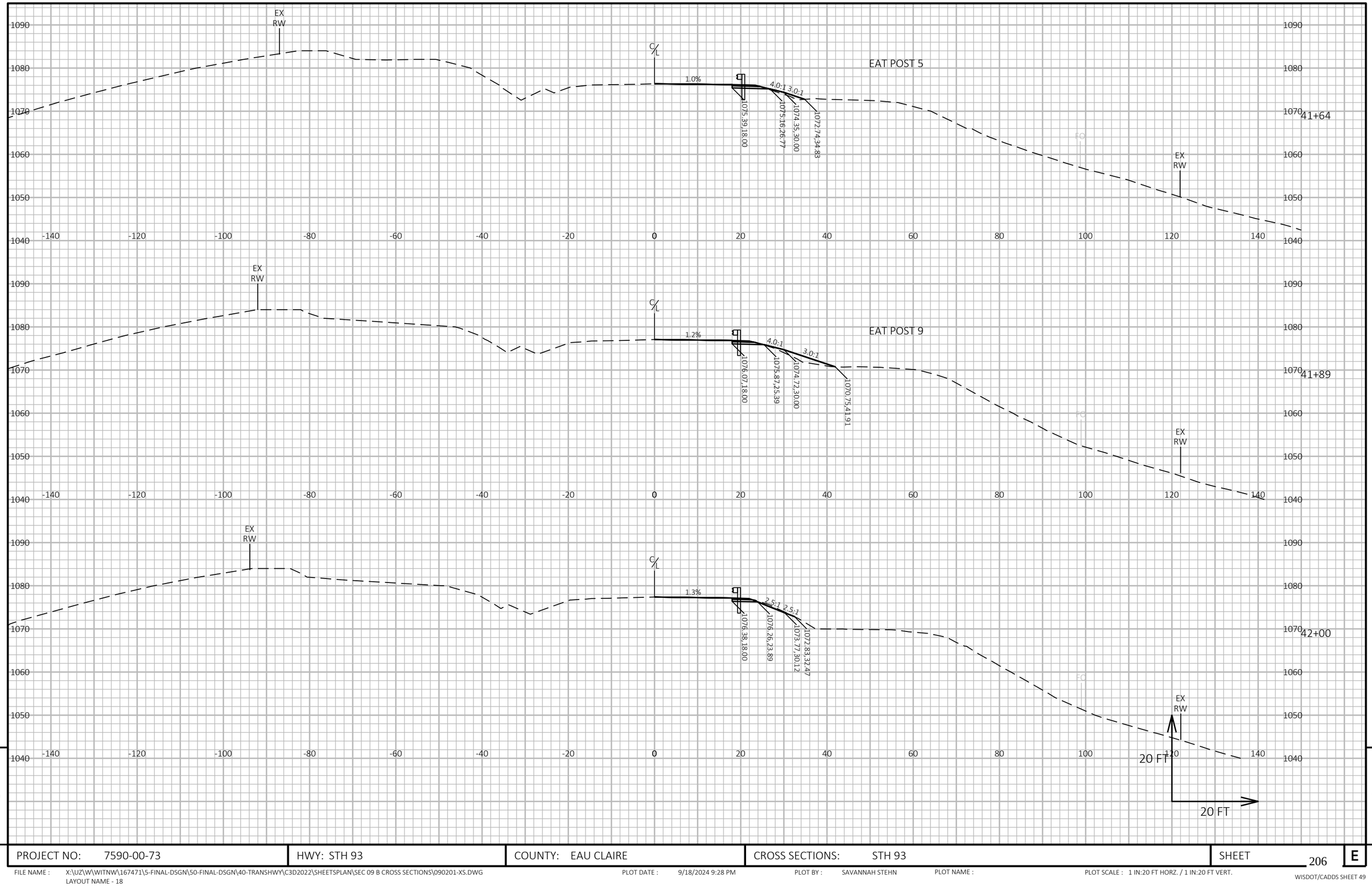
9

9

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 205	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 17

PLOT DATE : 9/18/2024 9:28 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

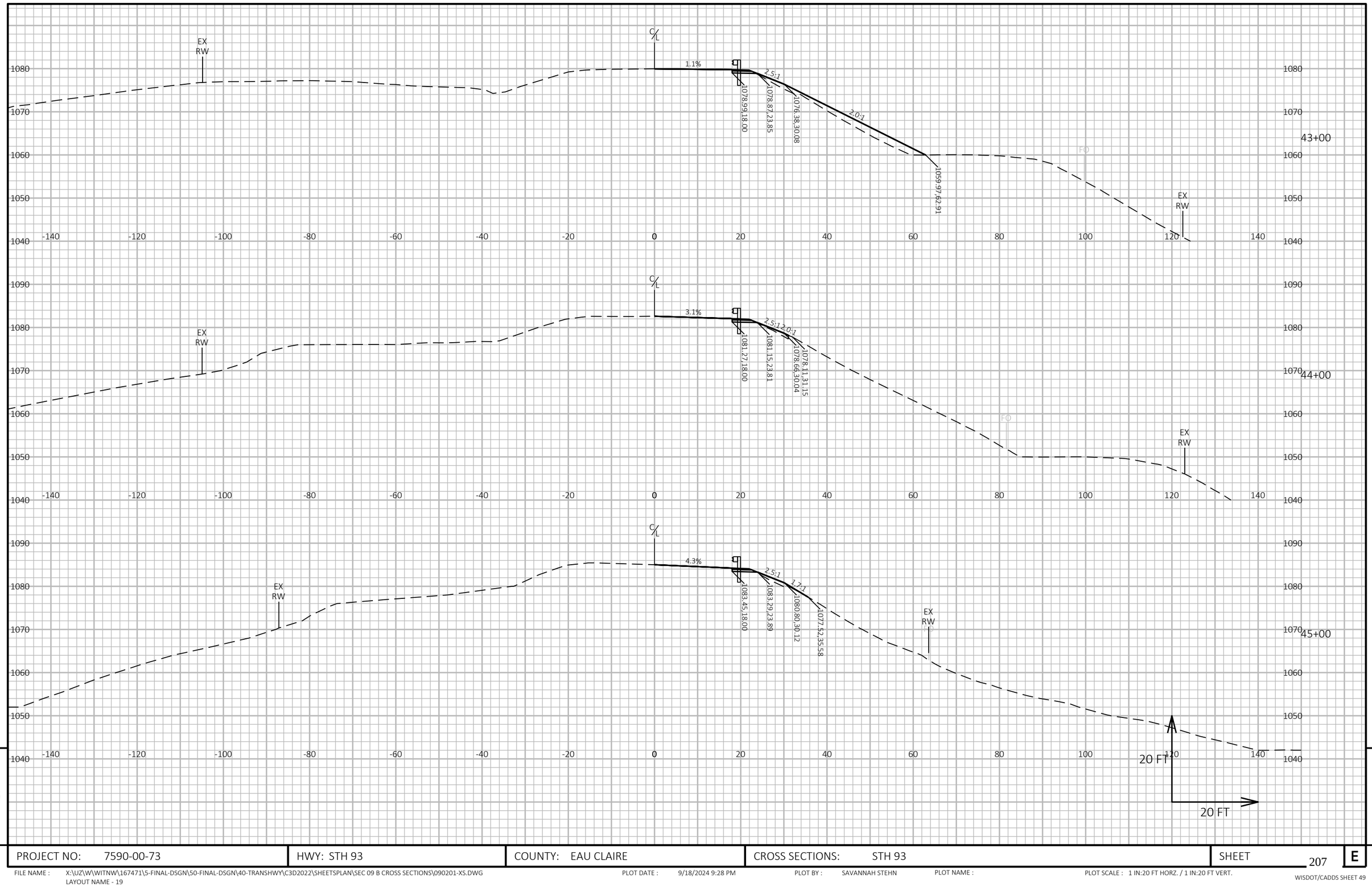


9 9

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 206	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 18

PLOT DATE : 9/18/2024 9:28 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



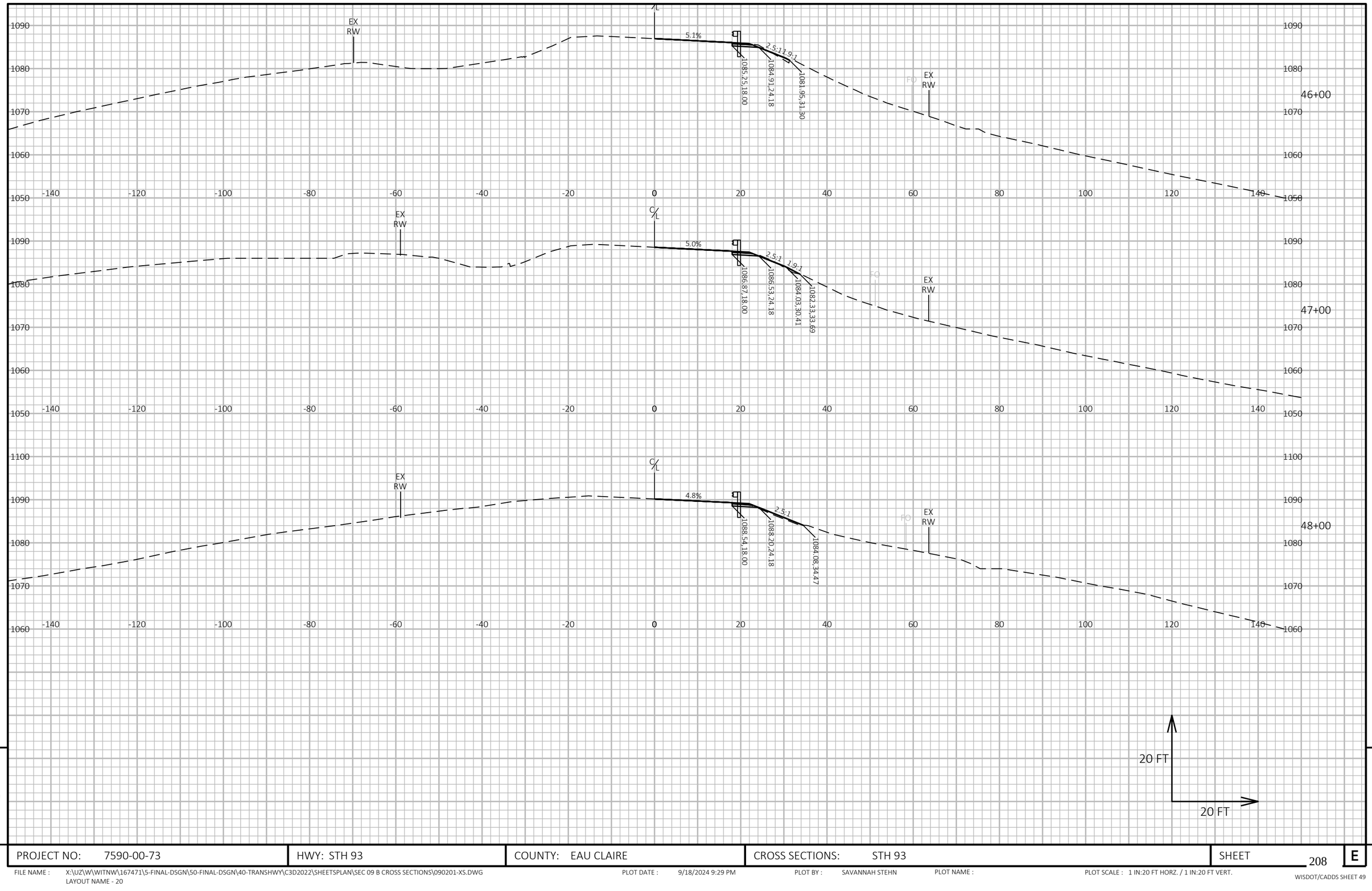
9

9

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 207	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 19

PLOT DATE : 9/18/2024 9:28 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



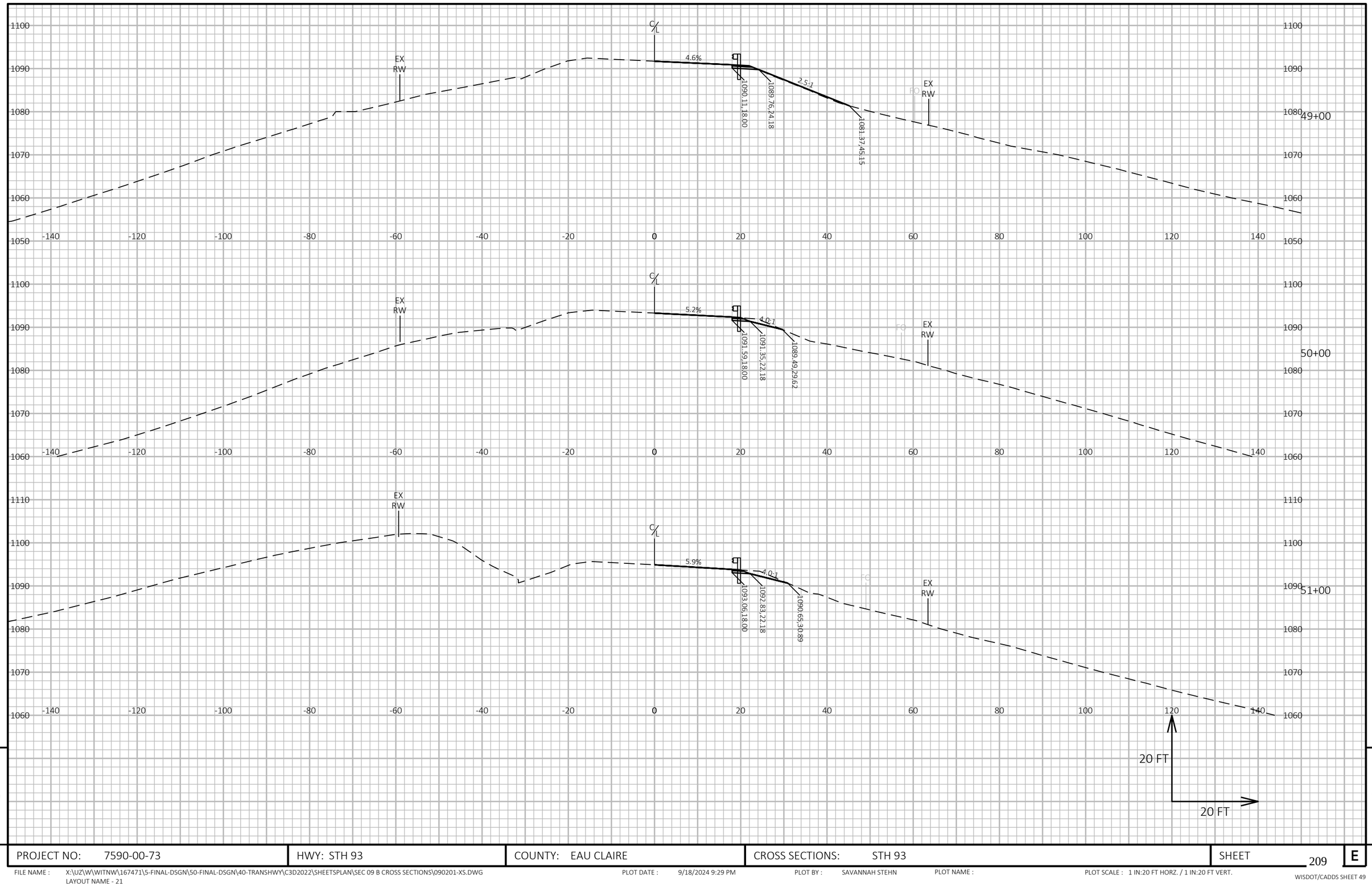
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 208	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 20

PLOT DATE : 9/18/2024 9:29 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

9 9



9

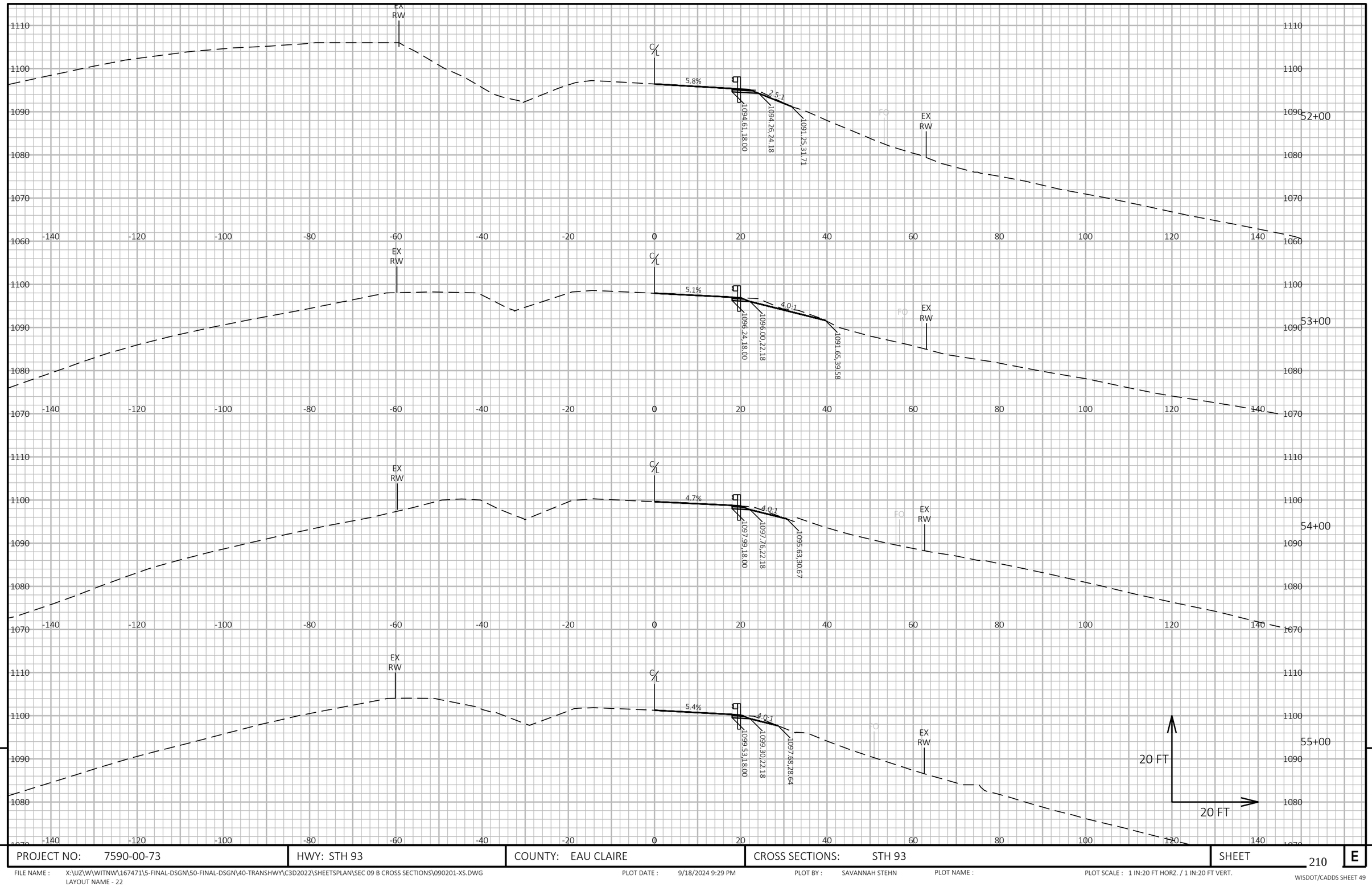
9

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 209	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 21

PLOT DATE : 9/18/2024 9:29 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

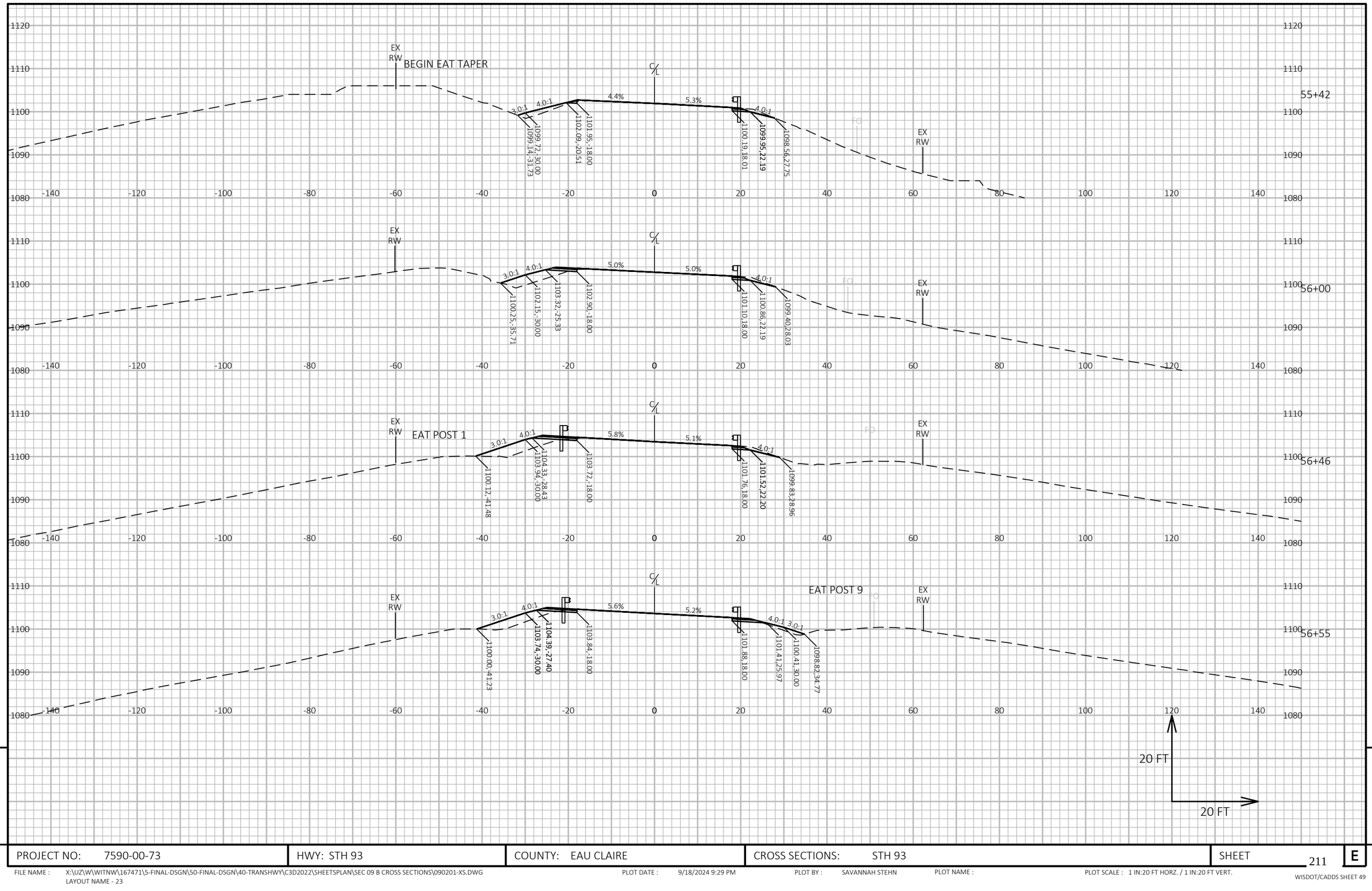
9

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 210	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 22

PLOT DATE : 9/18/2024 9:29 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

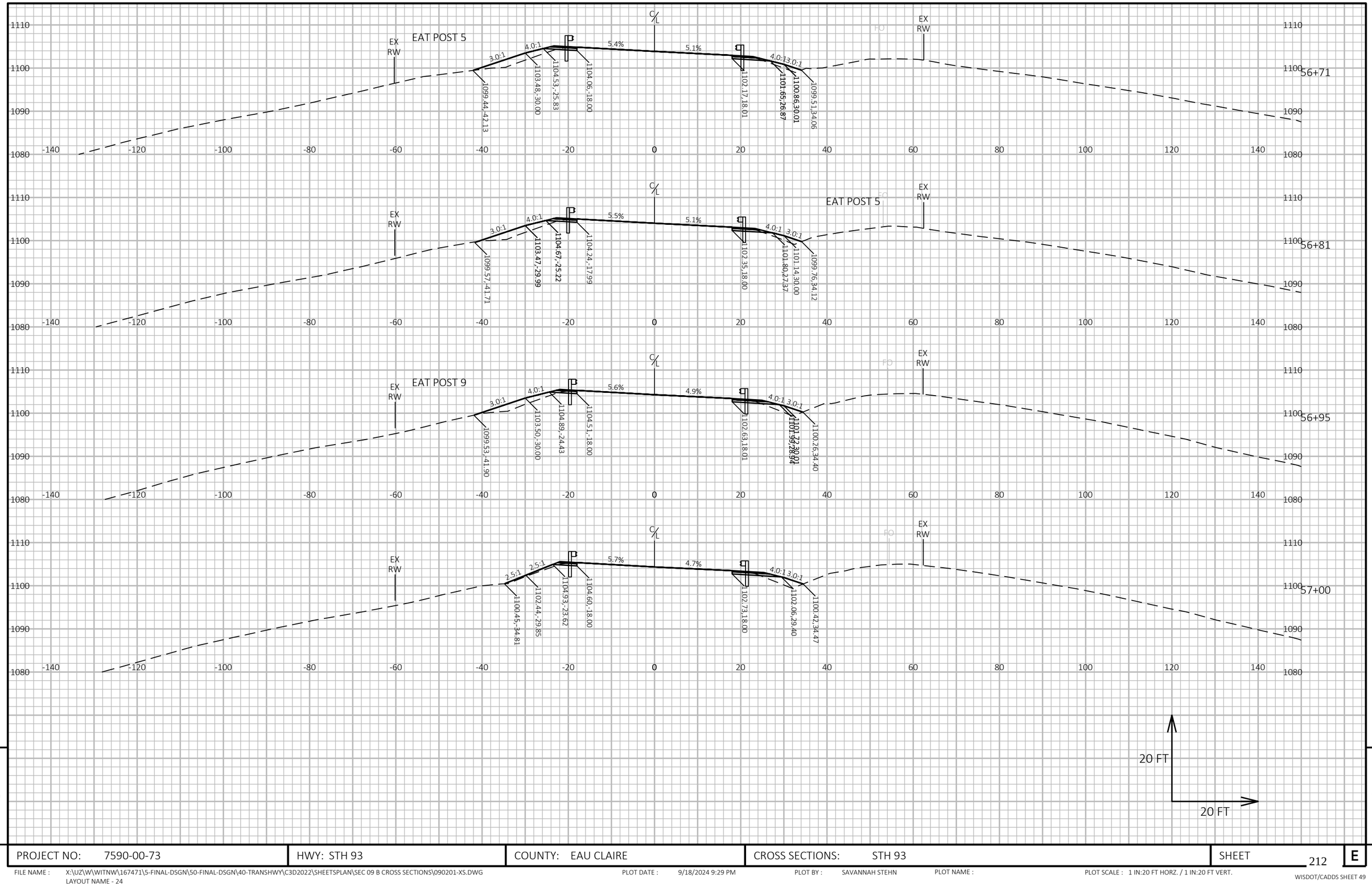
9

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 211	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 23

PLOT DATE : 9/18/2024 9:29 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

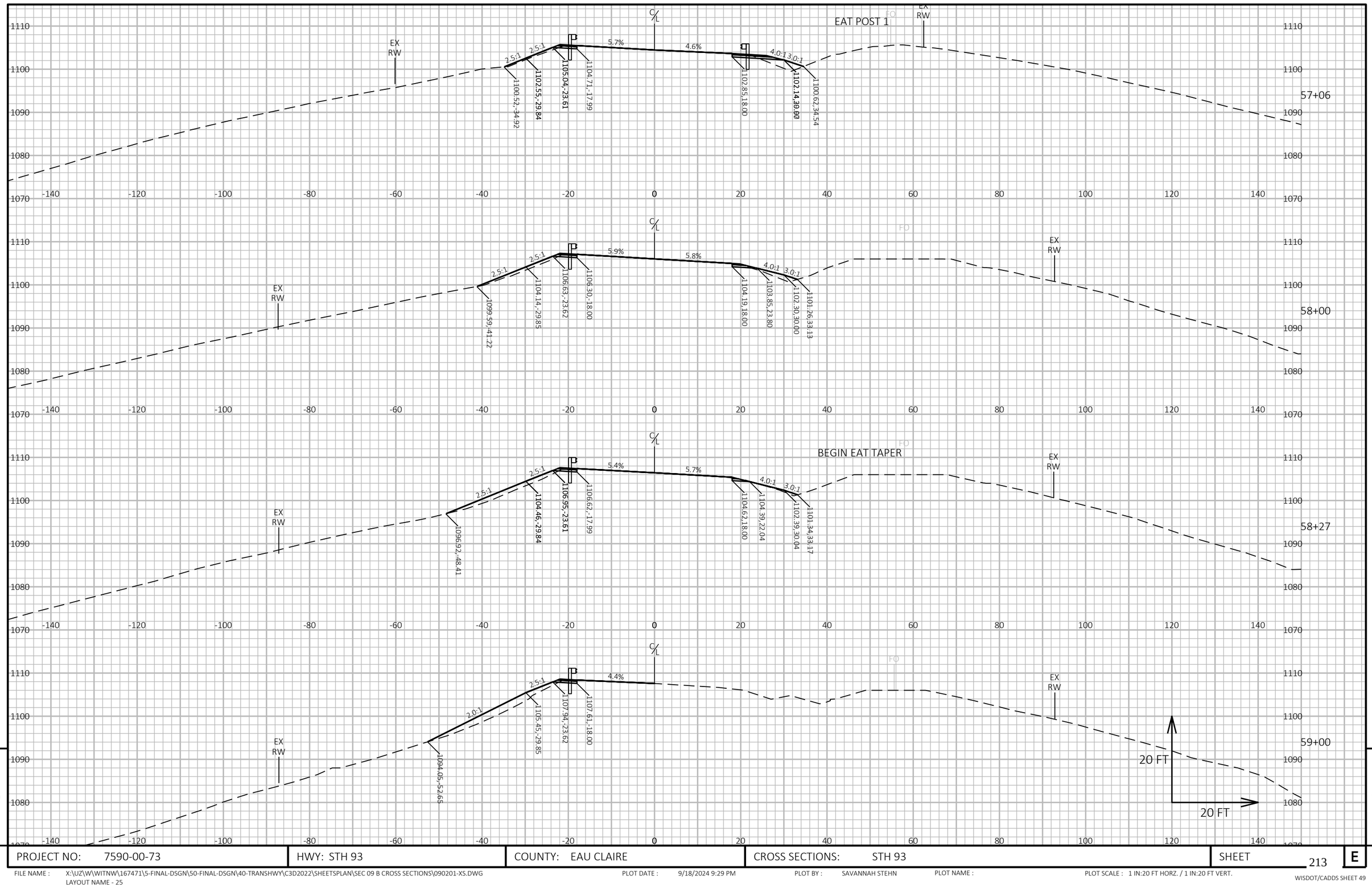


PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 212	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 24

PLOT DATE : 9/18/2024 9:29 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 213	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 25

PLOT DATE : 9/18/2024 9:29 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

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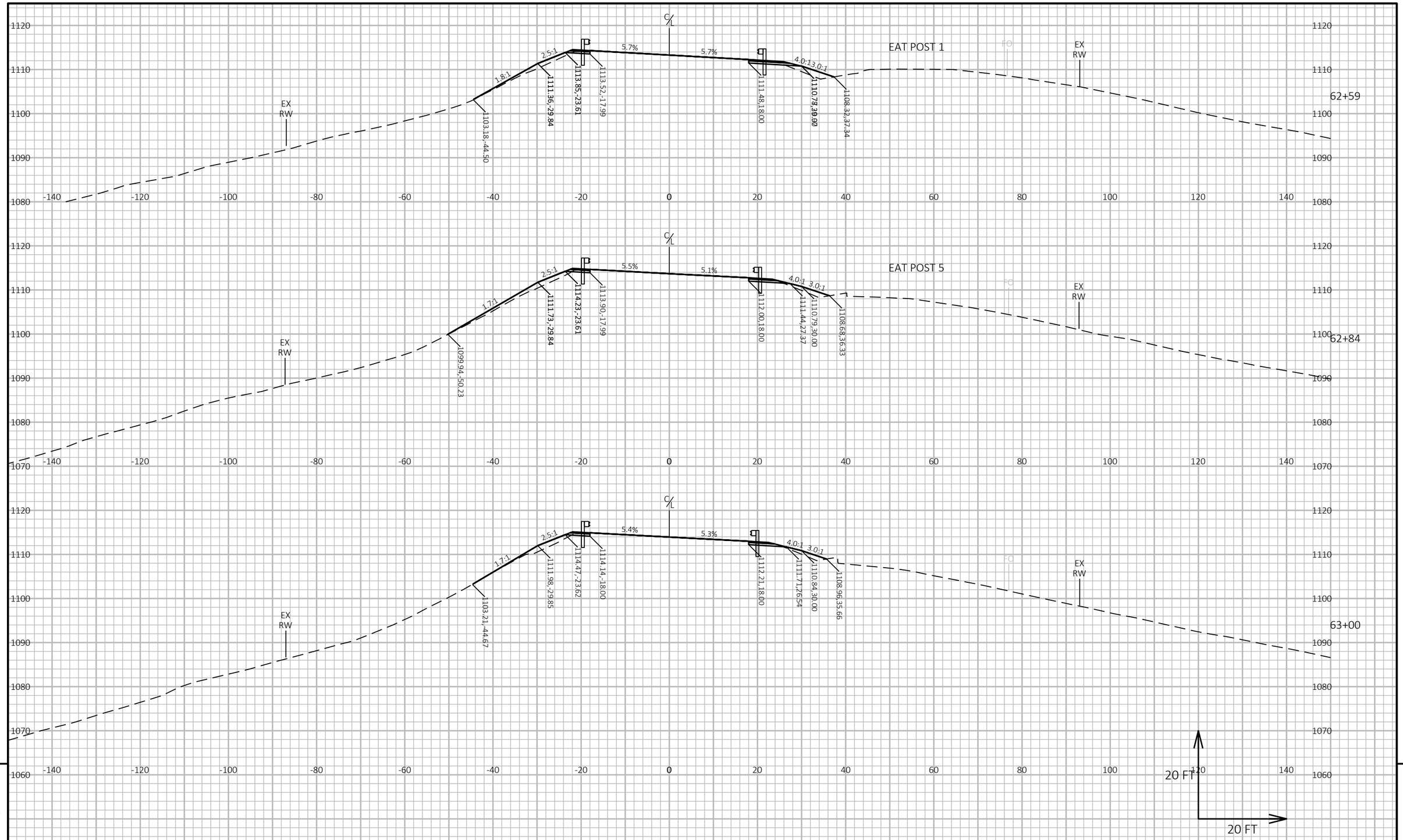
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 214	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 26

PLOT DATE : 9/18/2024 9:30 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

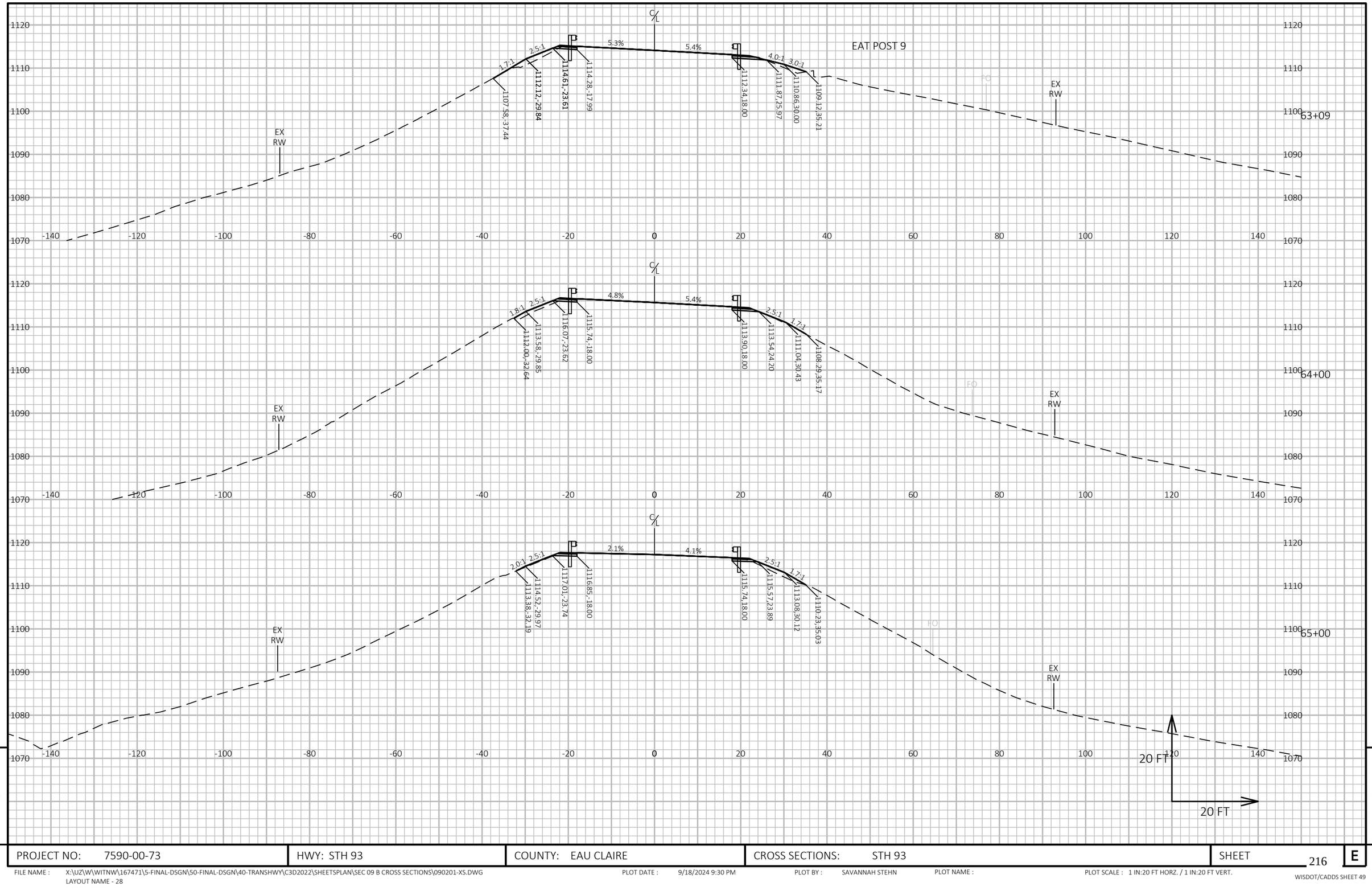


PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 215	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 27

PLOT DATE : 9/18/2024 9:30 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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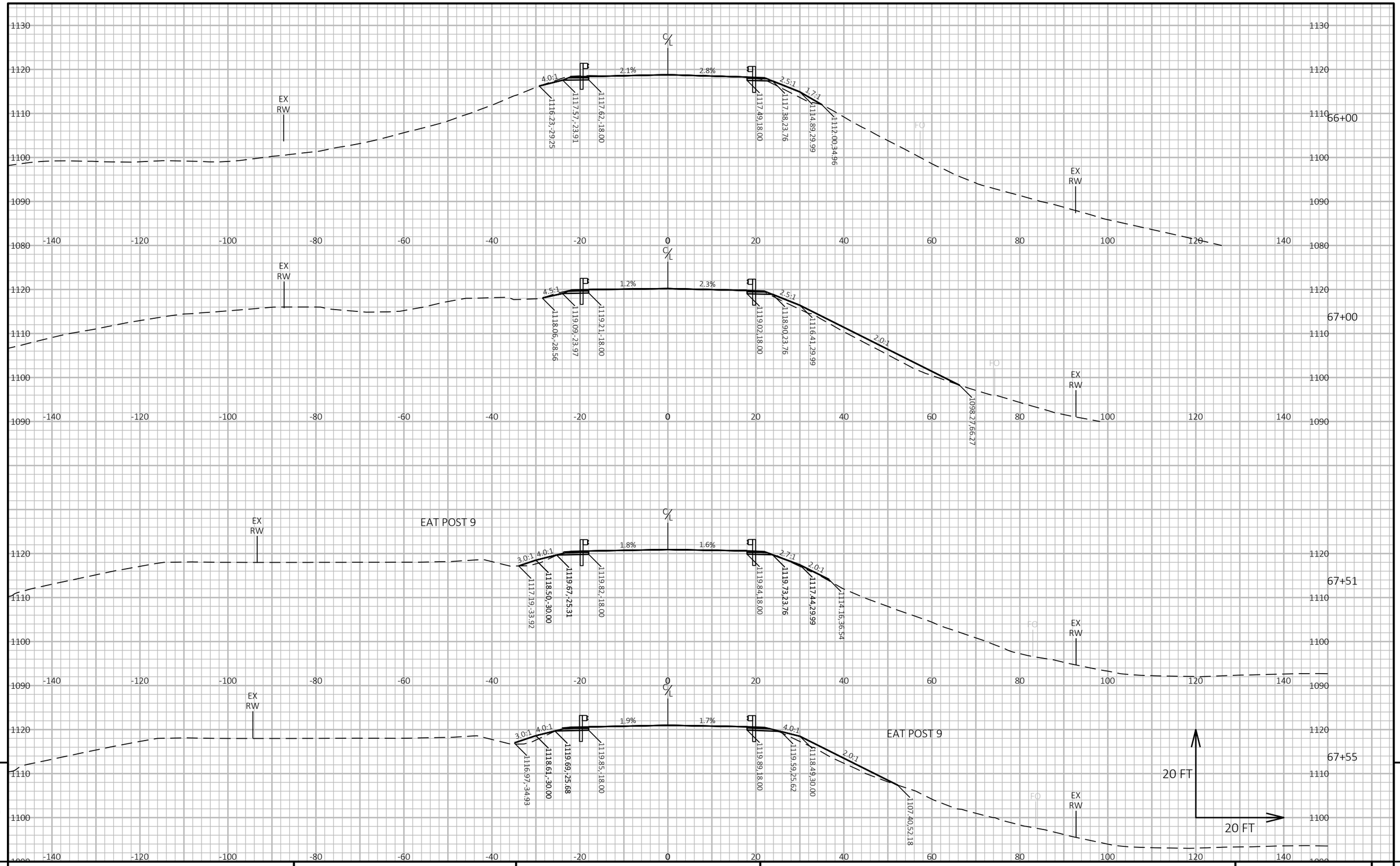
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 216	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 28

PLOT DATE : 9/18/2024 9:30 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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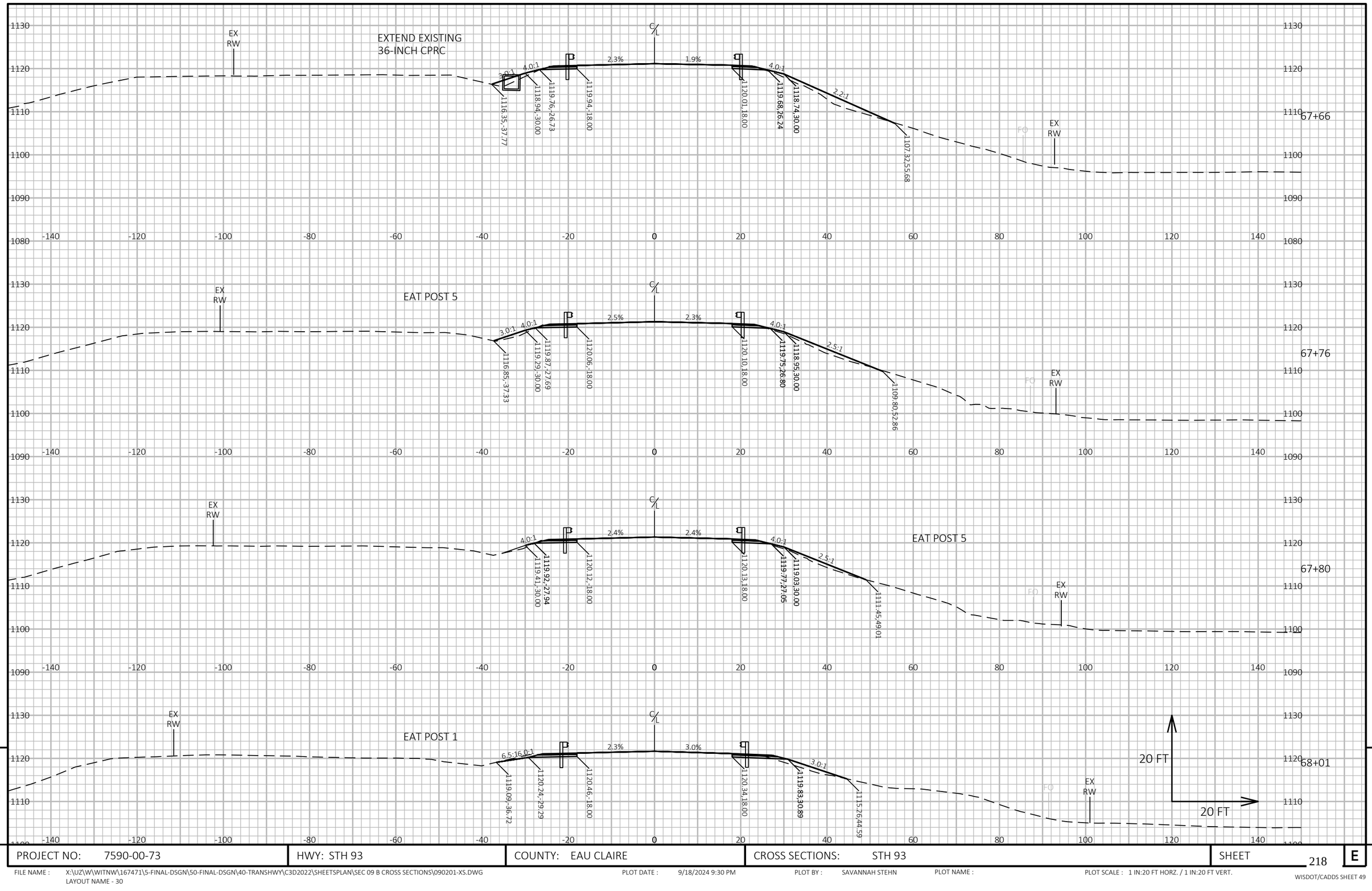
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 217	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 29

PLOT DATE : 9/18/2024 9:30 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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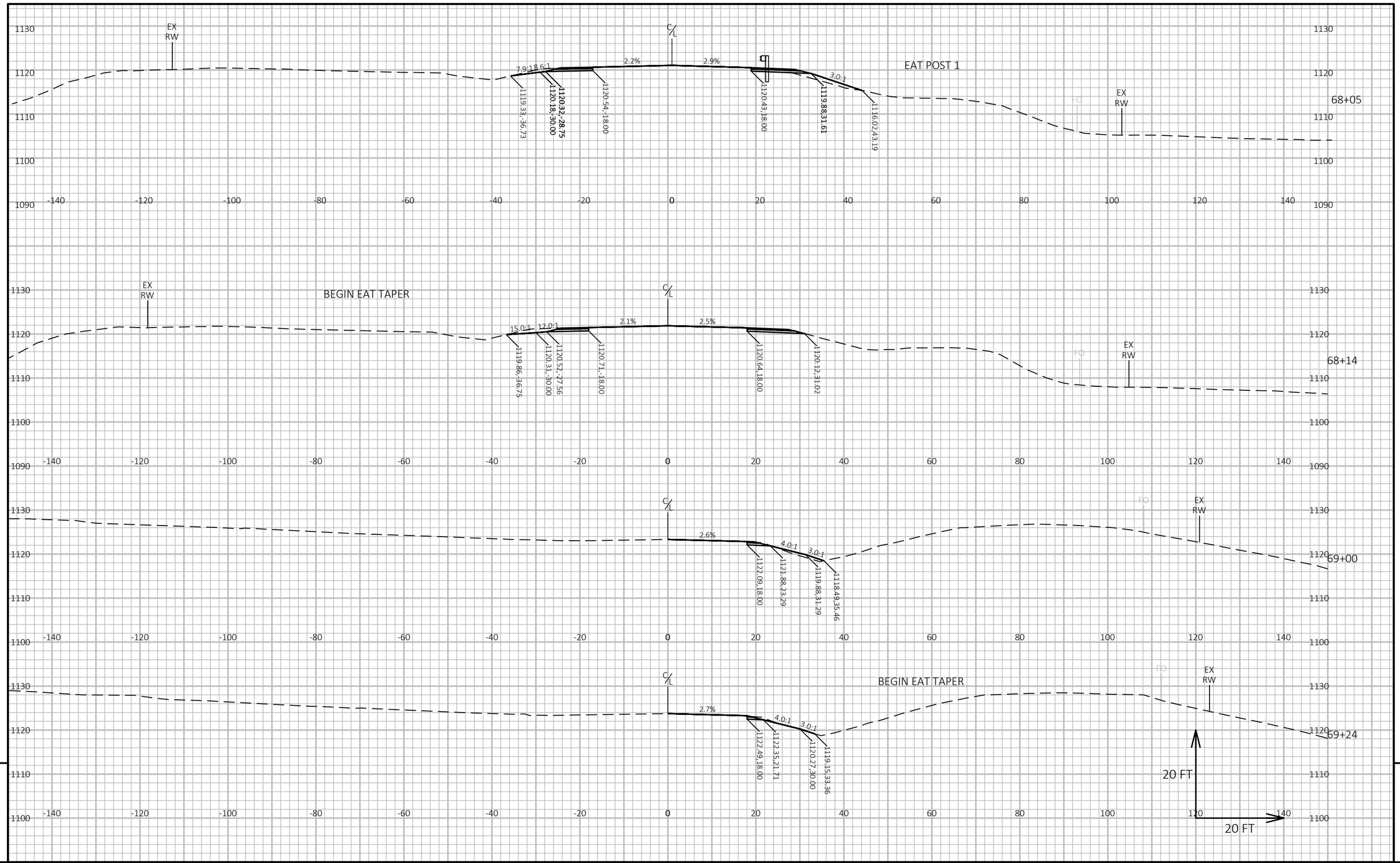
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 218	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 30

PLOT DATE : 9/18/2024 9:30 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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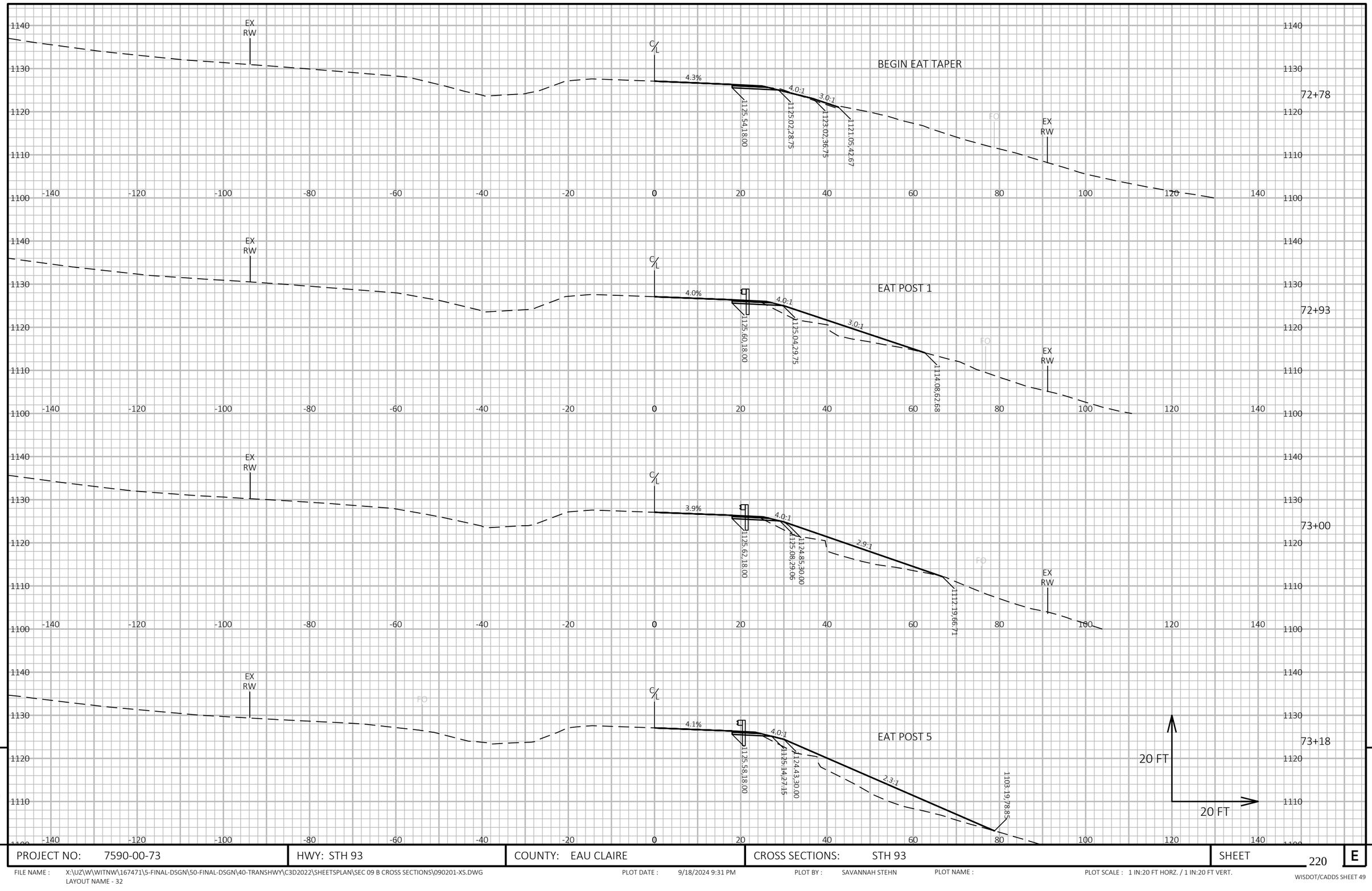
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 219	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 31

PLOT DATE : 9/18/2024 9:31 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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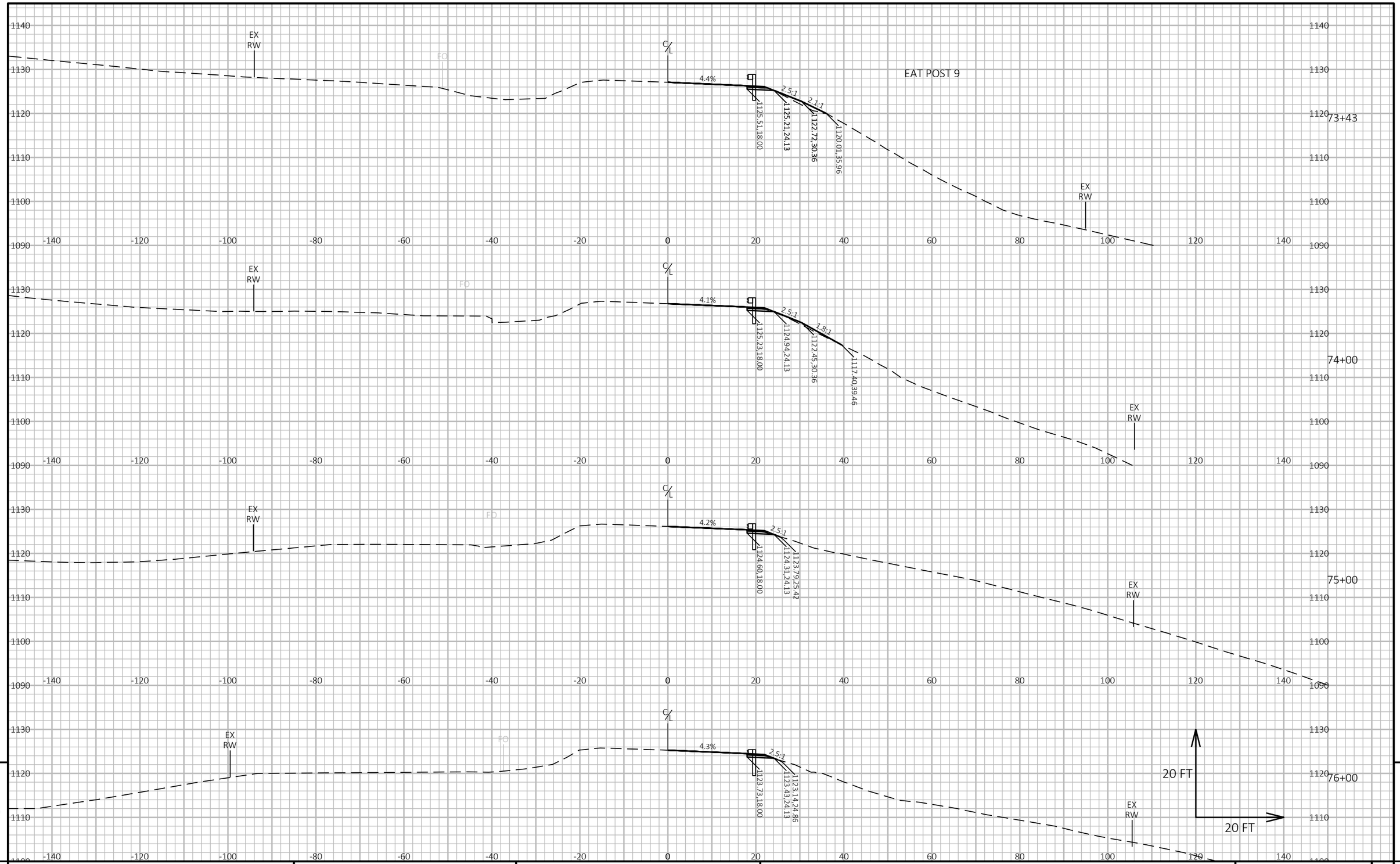
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 220	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 32

PLOT DATE : 9/18/2024 9:31 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

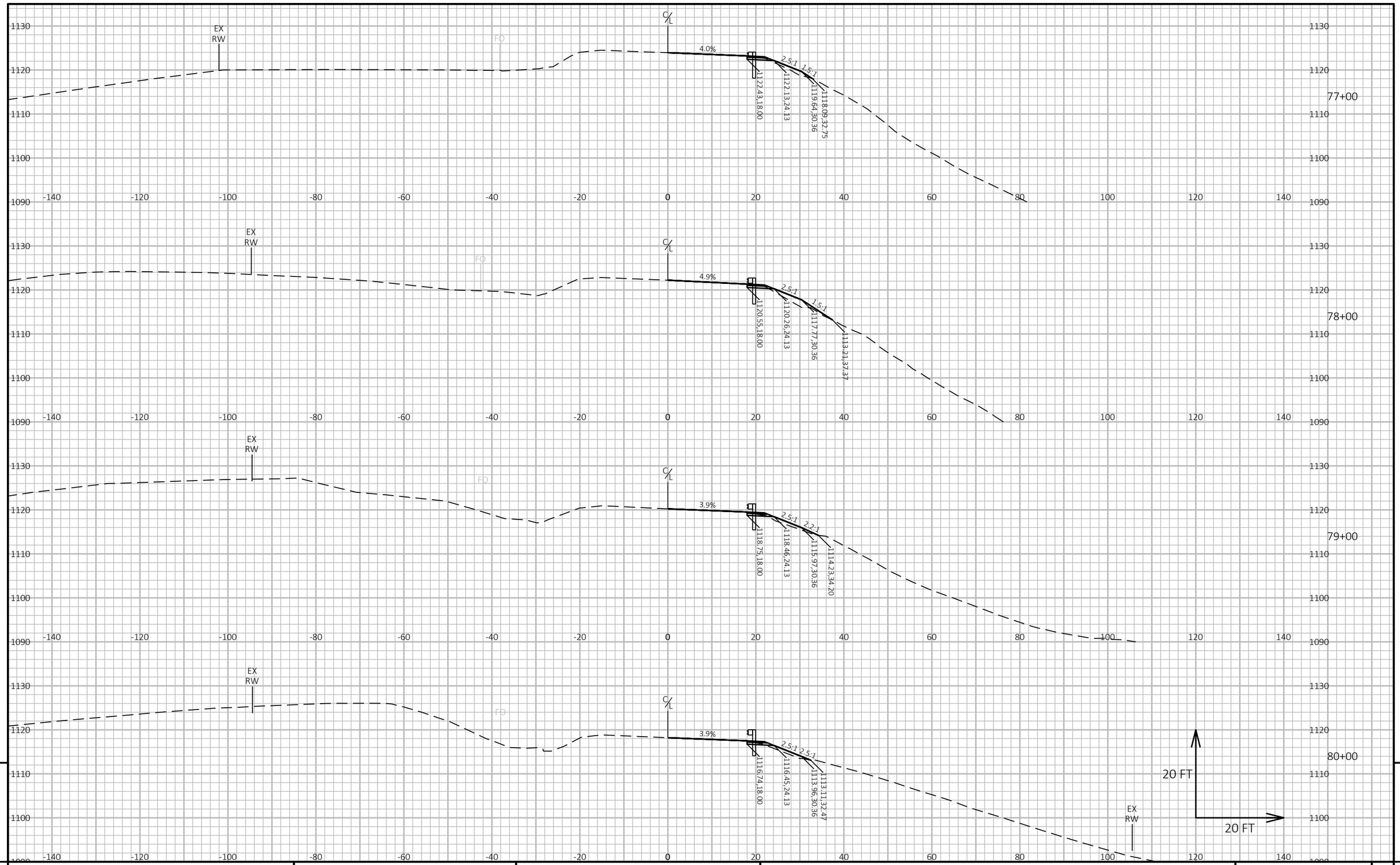
WISDOT/CADDS SHEET 49



PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 221	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 33

PLOT DATE : 9/18/2024 9:31 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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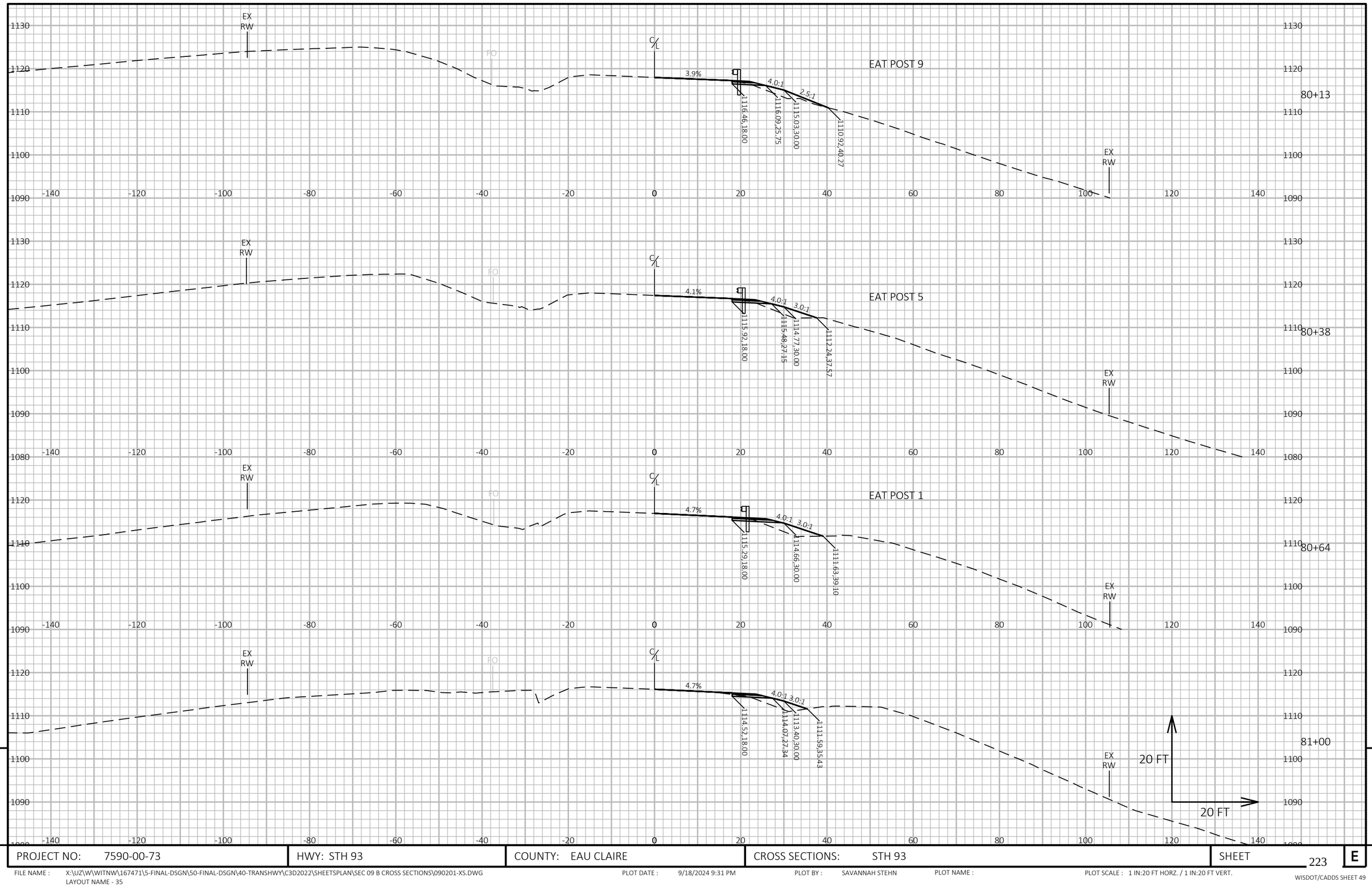
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 222	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 34

PLOT DATE : 9/18/2024 9:31 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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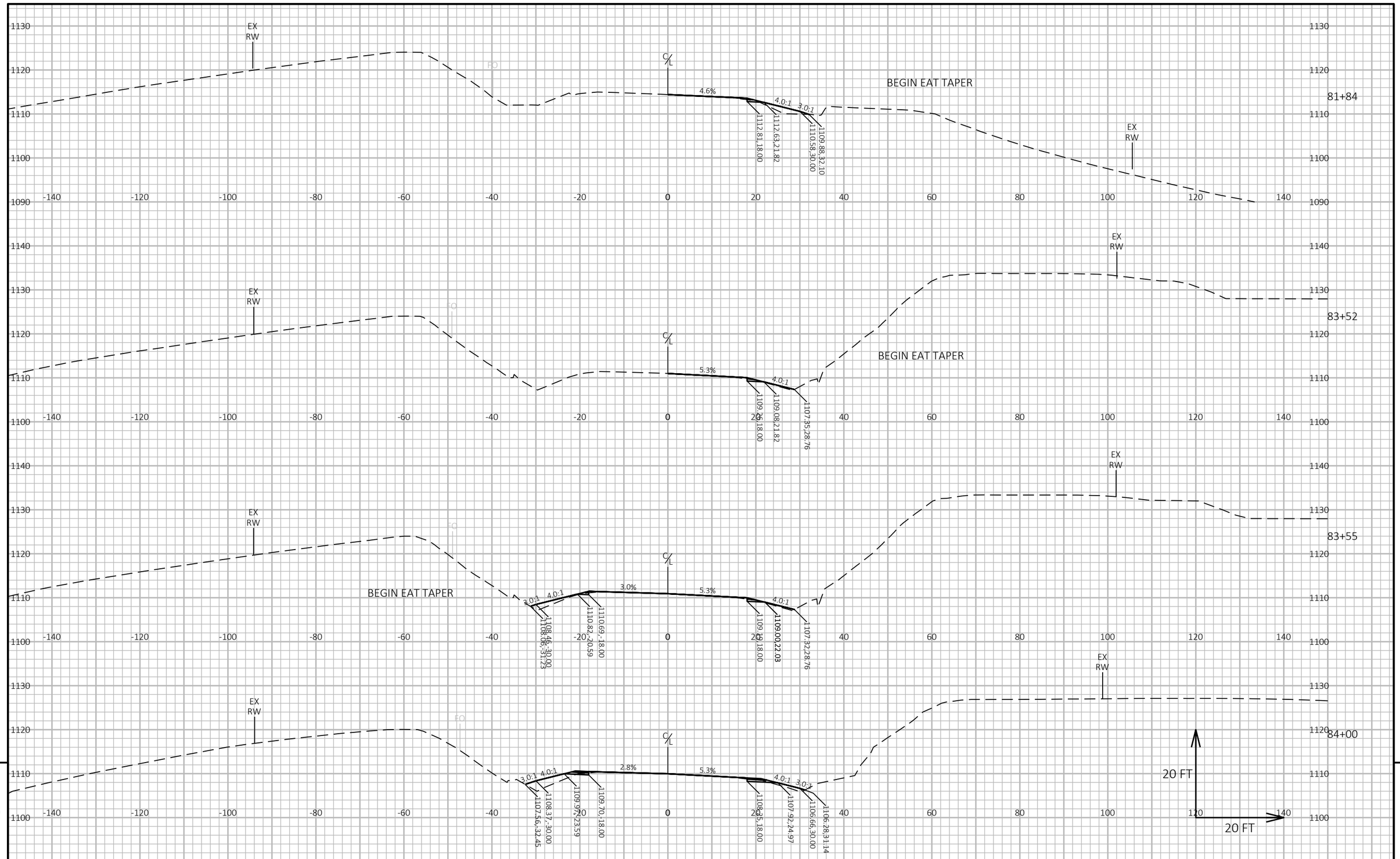
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 223	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 35

PLOT DATE : 9/18/2024 9:31 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

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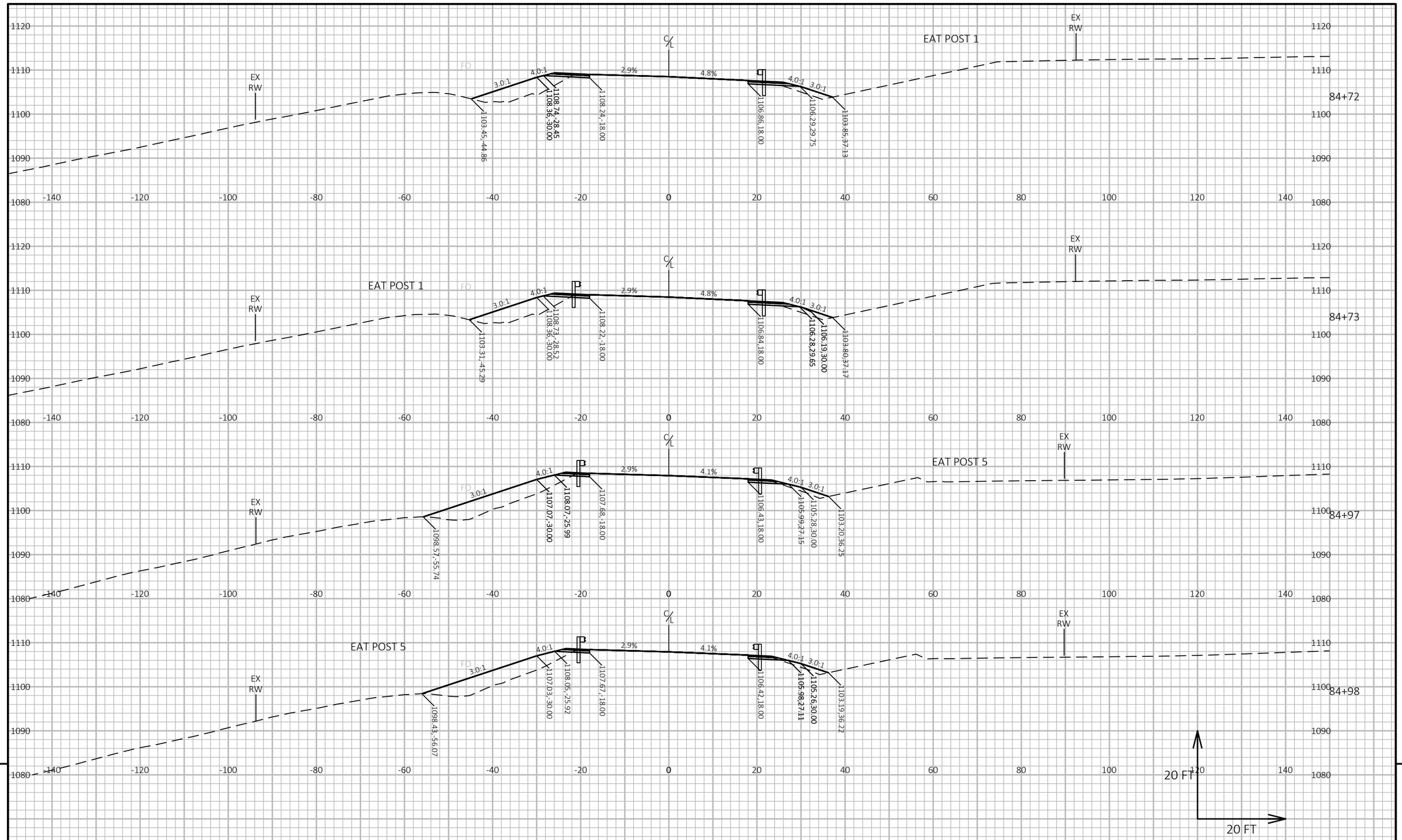
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 224	E

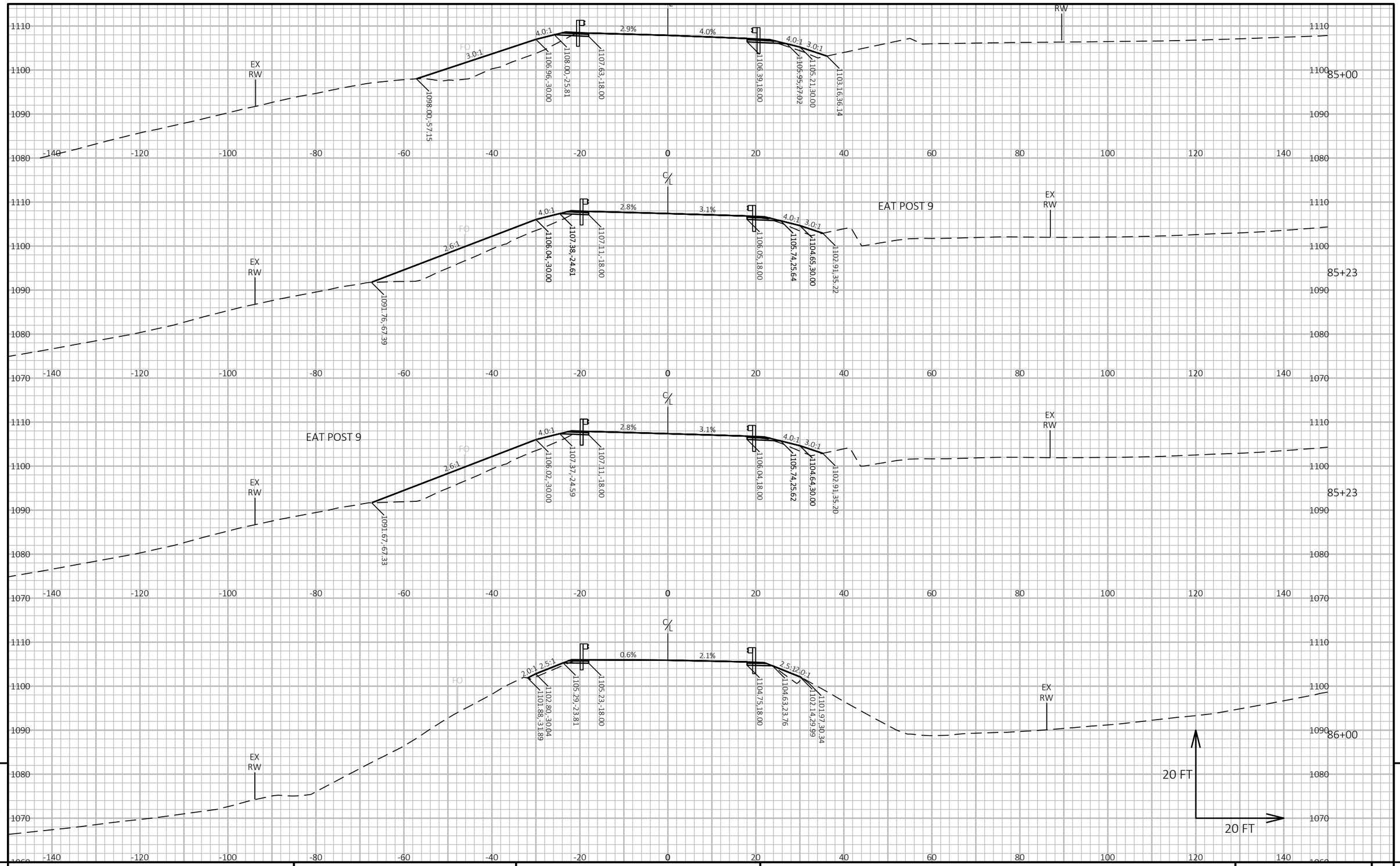
FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 36

PLOT DATE : 9/18/2024 9:32 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 225	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 37
PLOT DATE : 9/18/2024 9:32 PM
PLOT BY : SAVANNAH STEHN
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



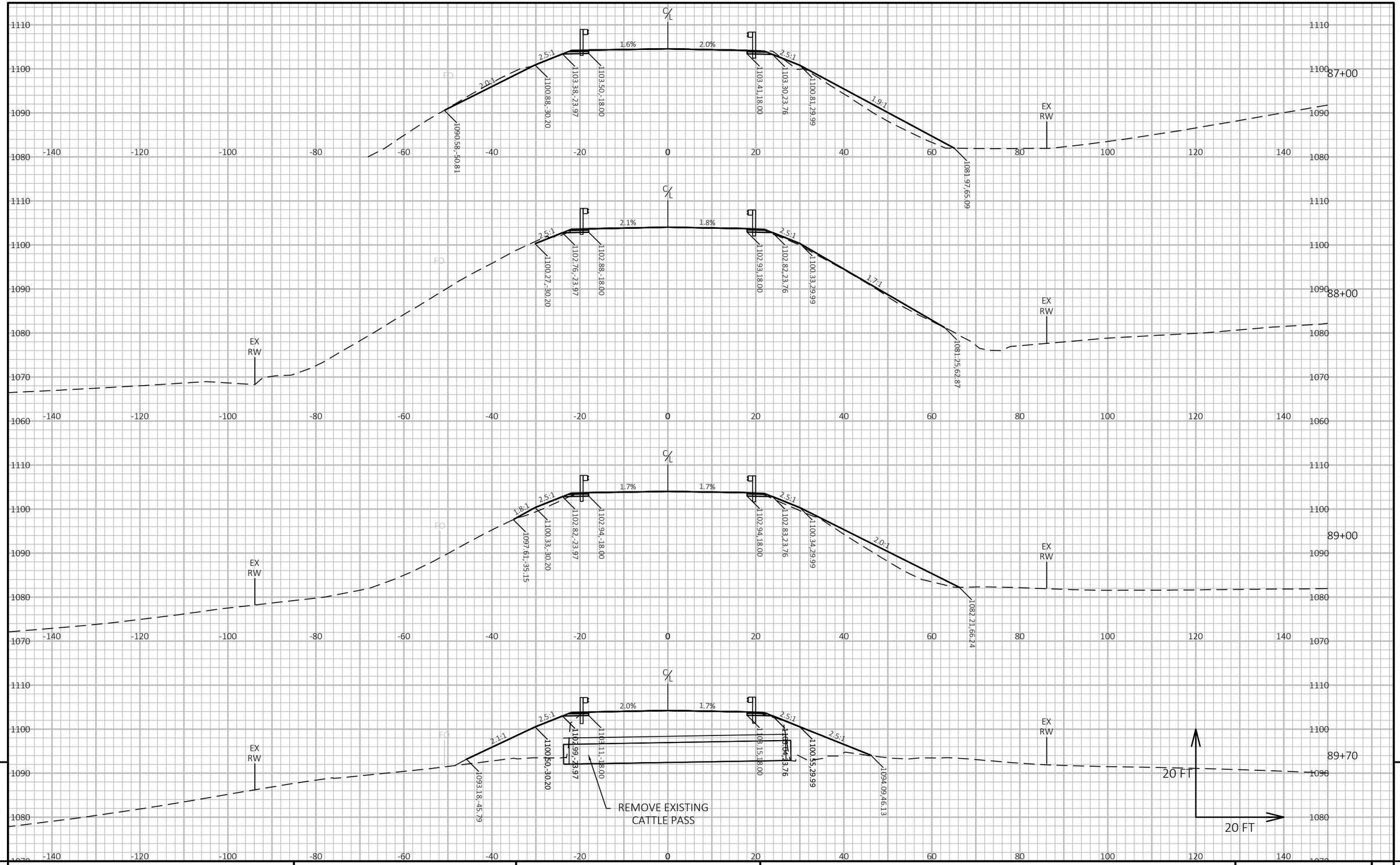
9 9

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 226	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 38

PLOT DATE : 9/18/2024 9:32 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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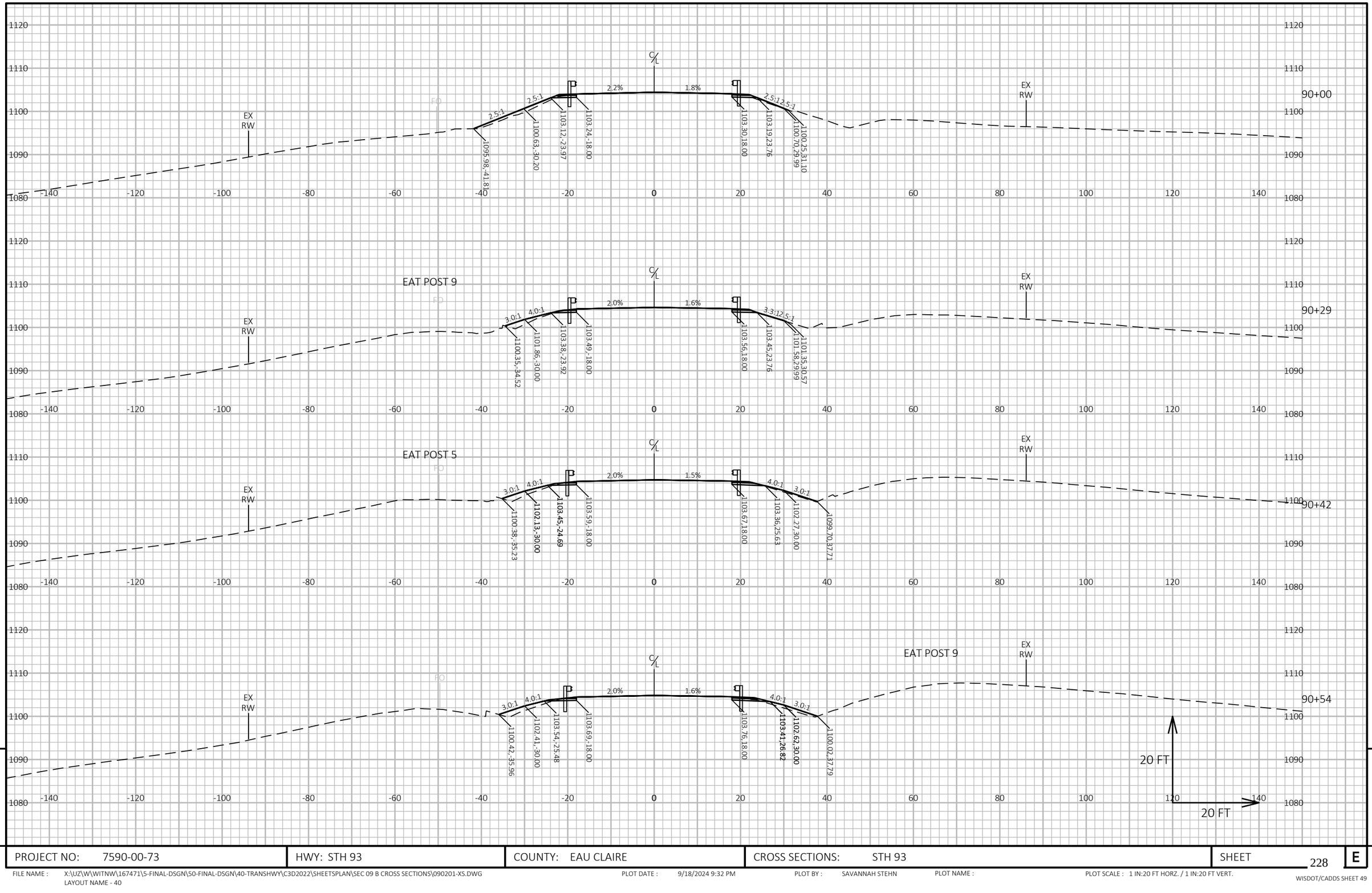
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 227	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 39

PLOT DATE : 9/18/2024 9:32 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



9

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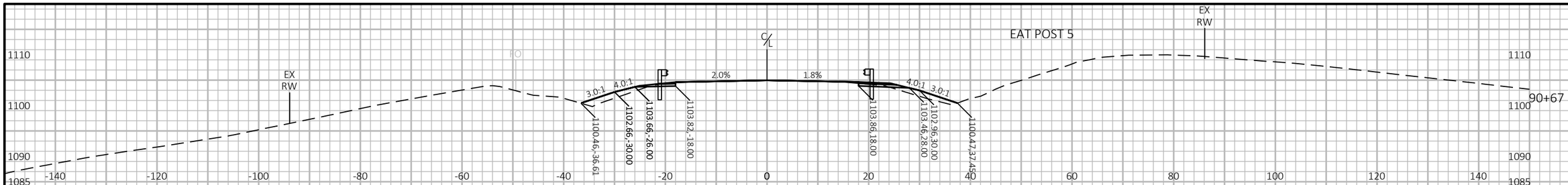
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 228	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 40

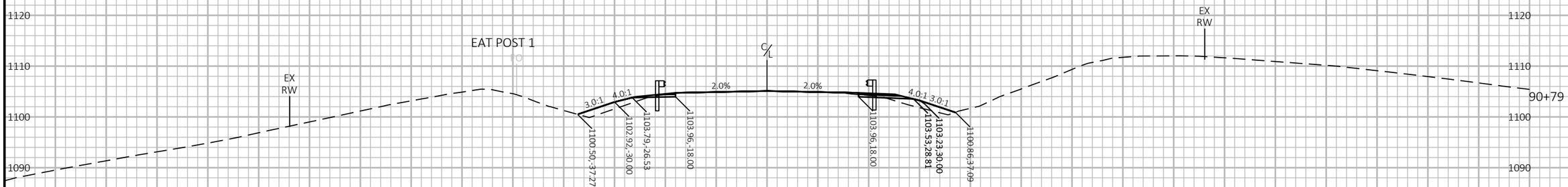
PLOT DATE : 9/18/2024 9:32 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

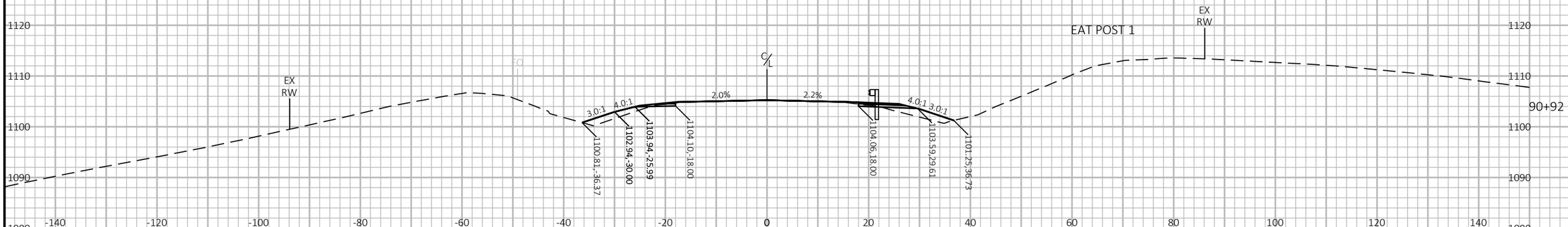
EAT POST 5



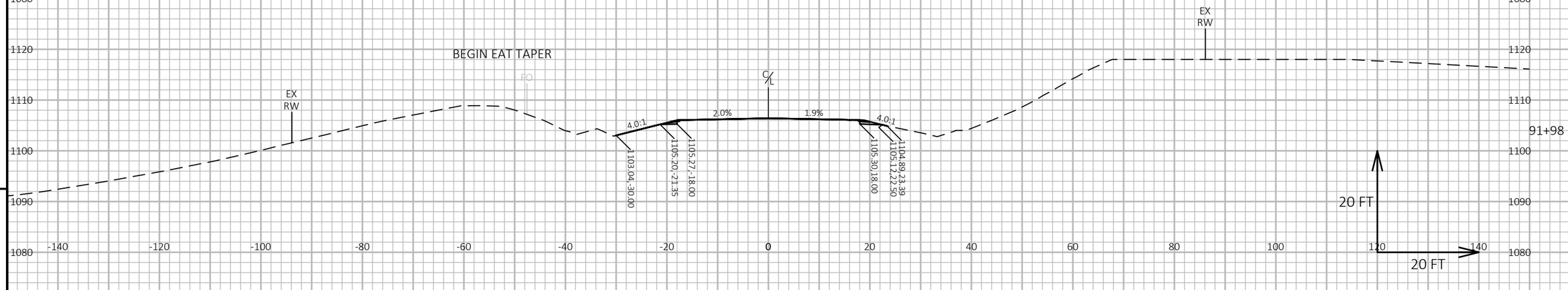
EAT POST 1



EAT POST 1



BEGIN EAT TAPER



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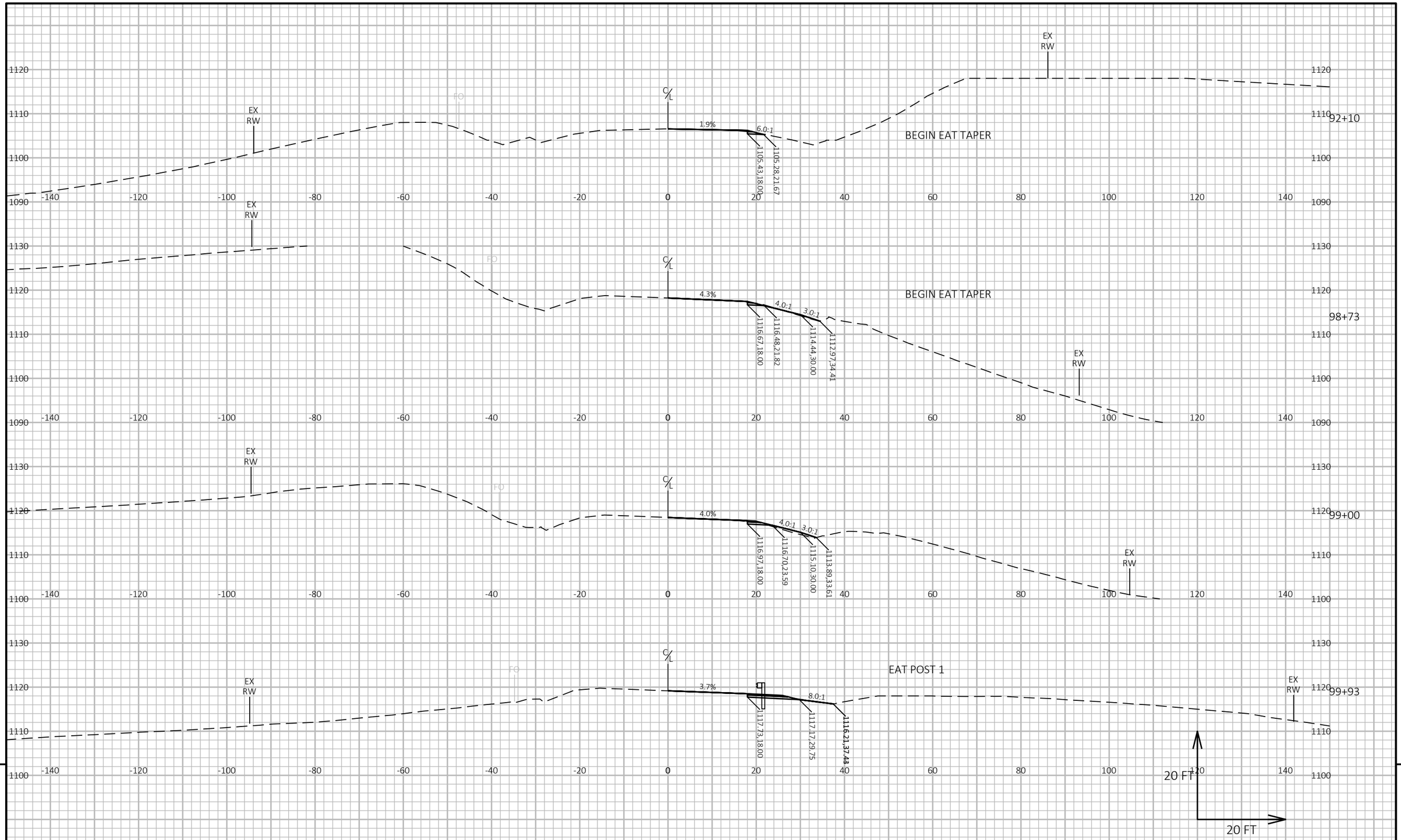
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 229	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 41

PLOT DATE : 9/18/2024 9:33 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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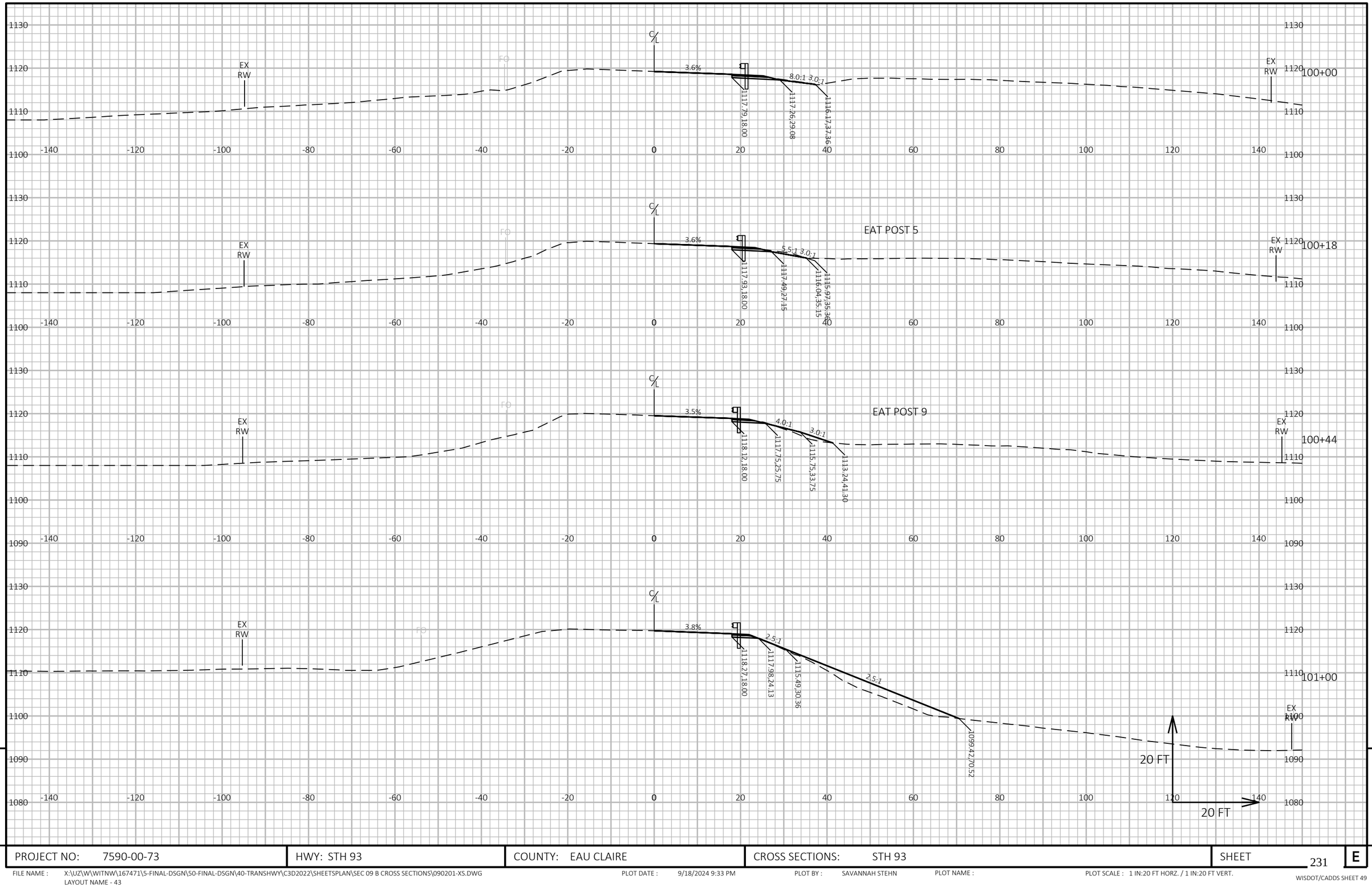
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 230	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 42

PLOT DATE : 9/18/2024 9:33 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

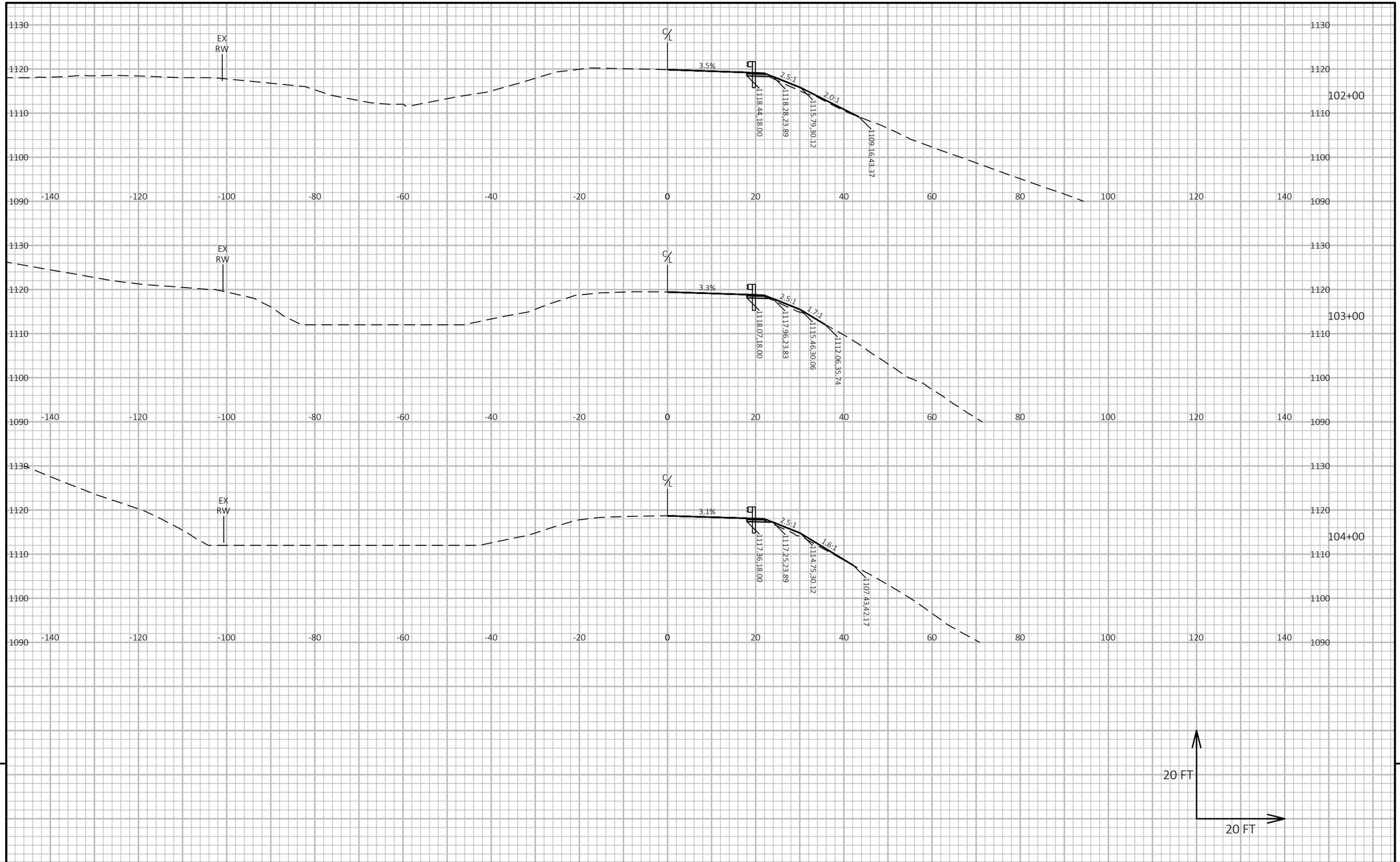


PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 231	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 43

PLOT DATE : 9/18/2024 9:33 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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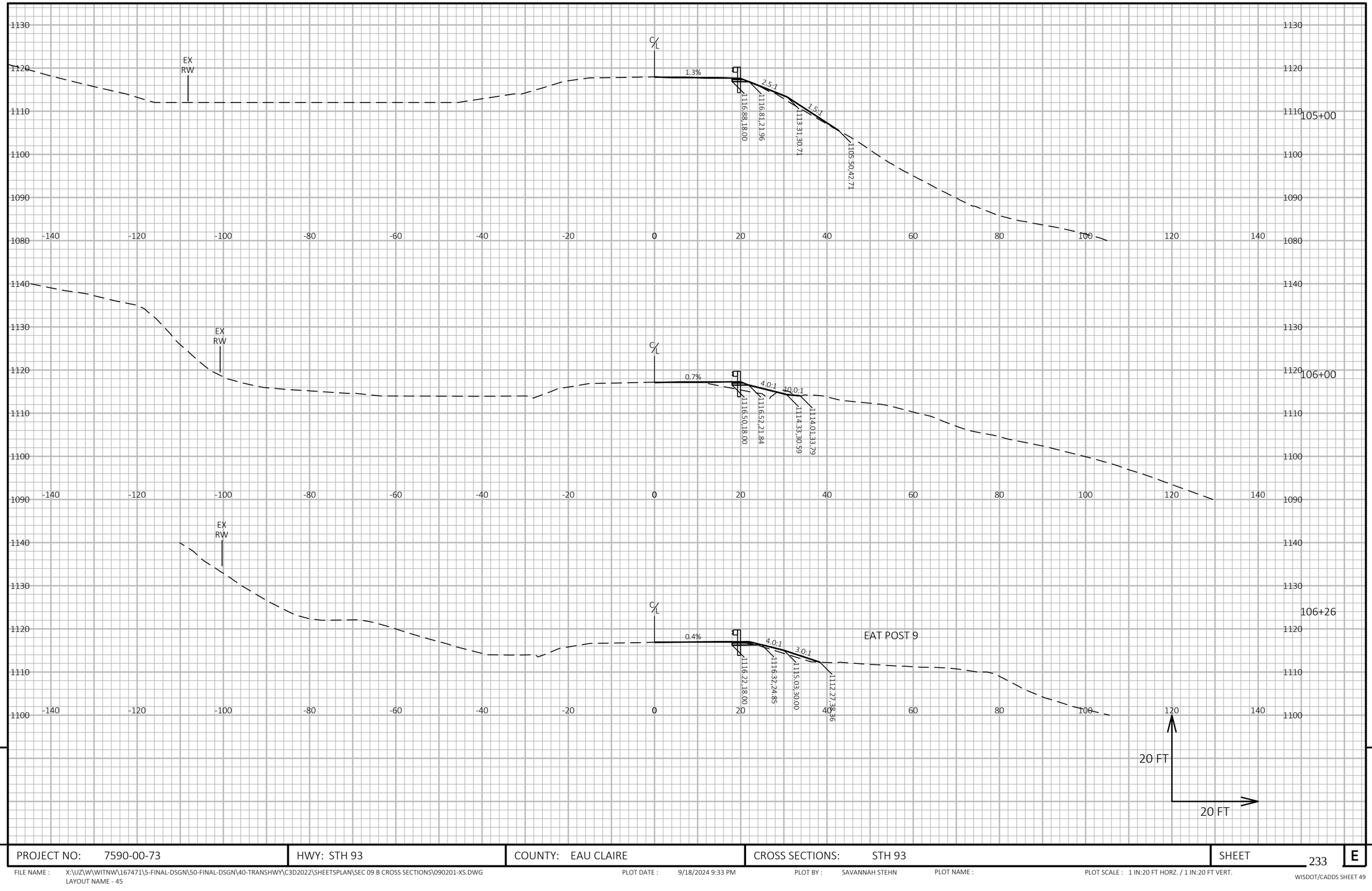
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 232	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 44

PLOT DATE : 9/18/2024 9:33 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

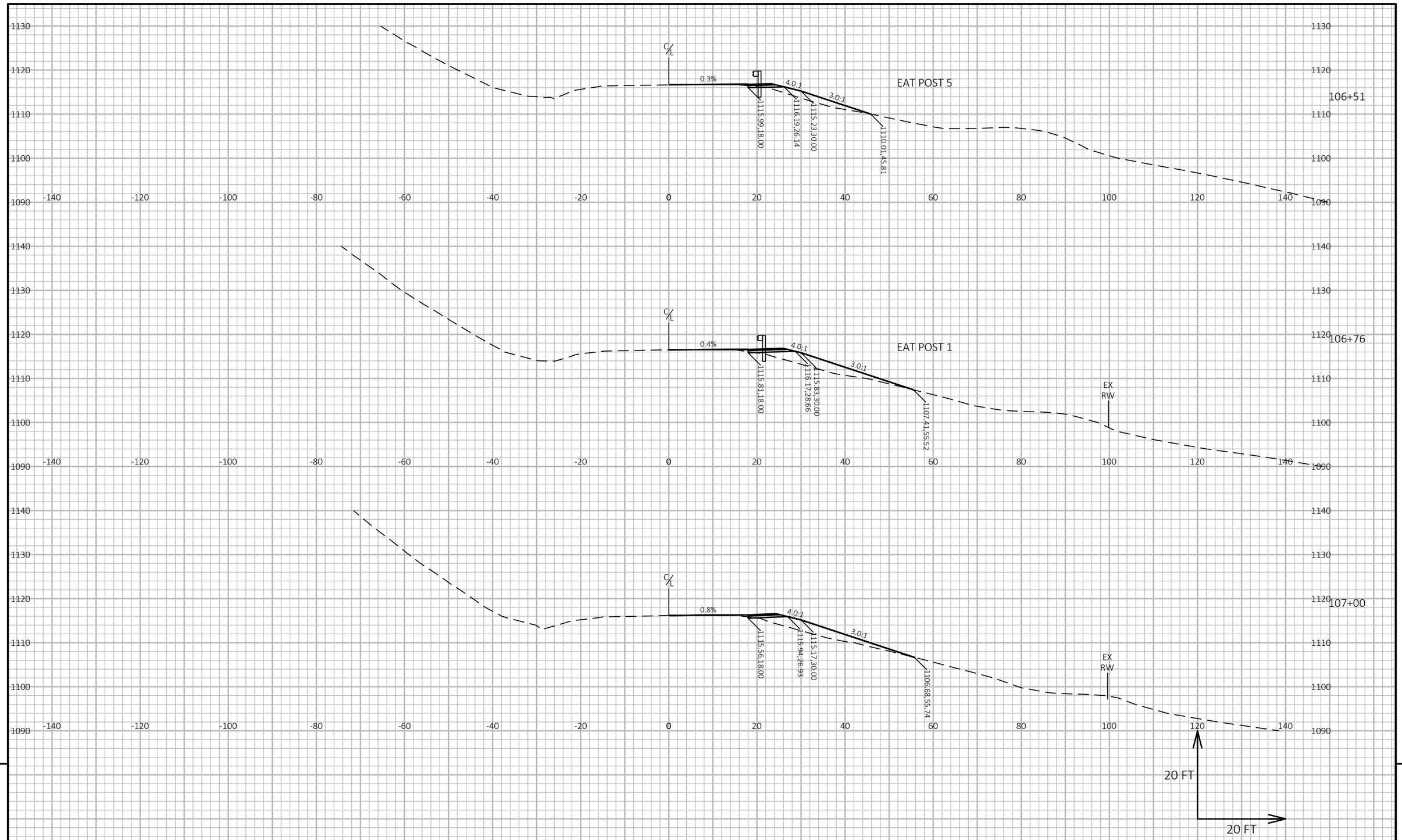


PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 233	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 45

PLOT DATE : 9/18/2024 9:33 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

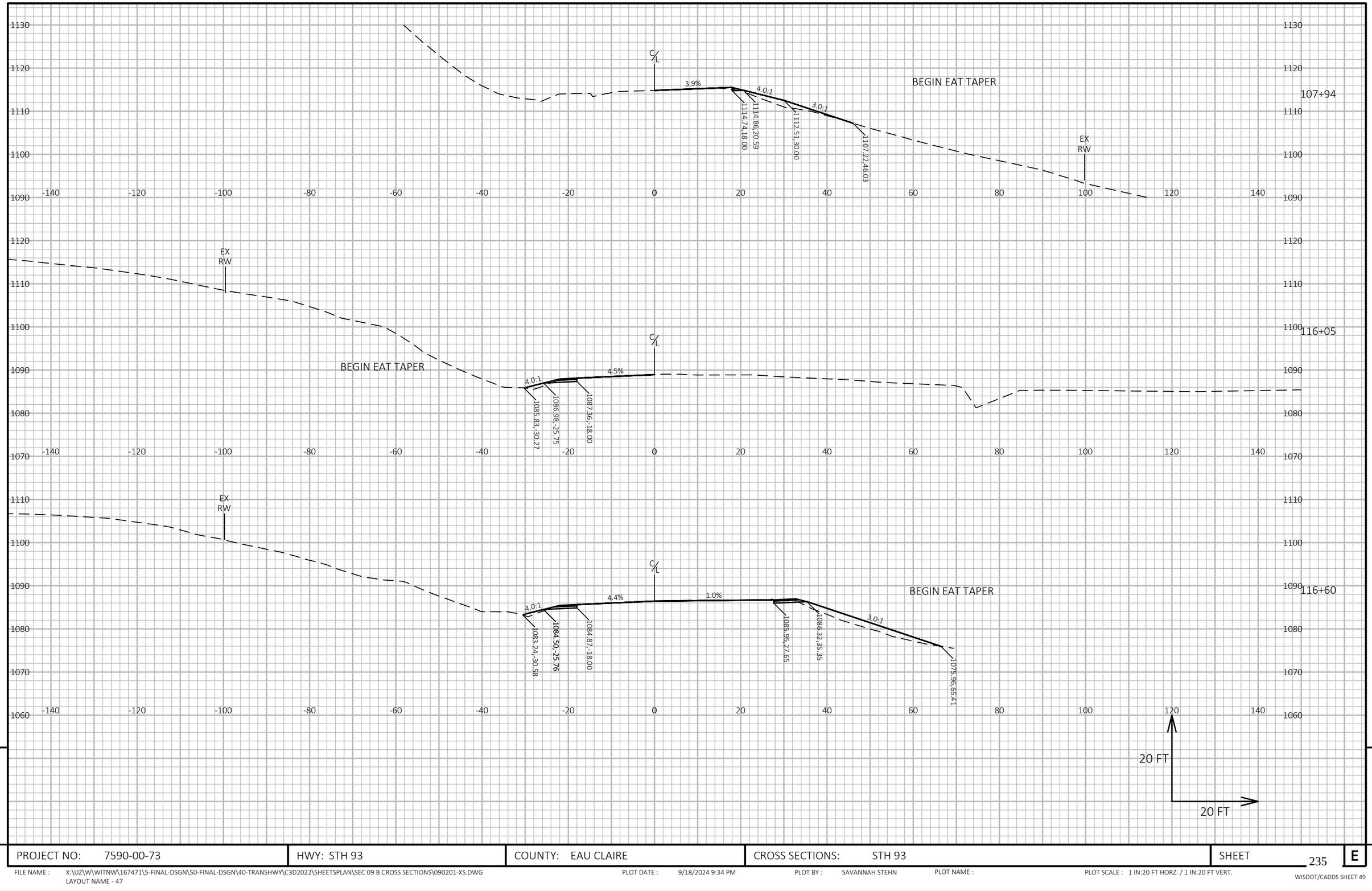


PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 234	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 46

PLOT DATE : 9/18/2024 9:34 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

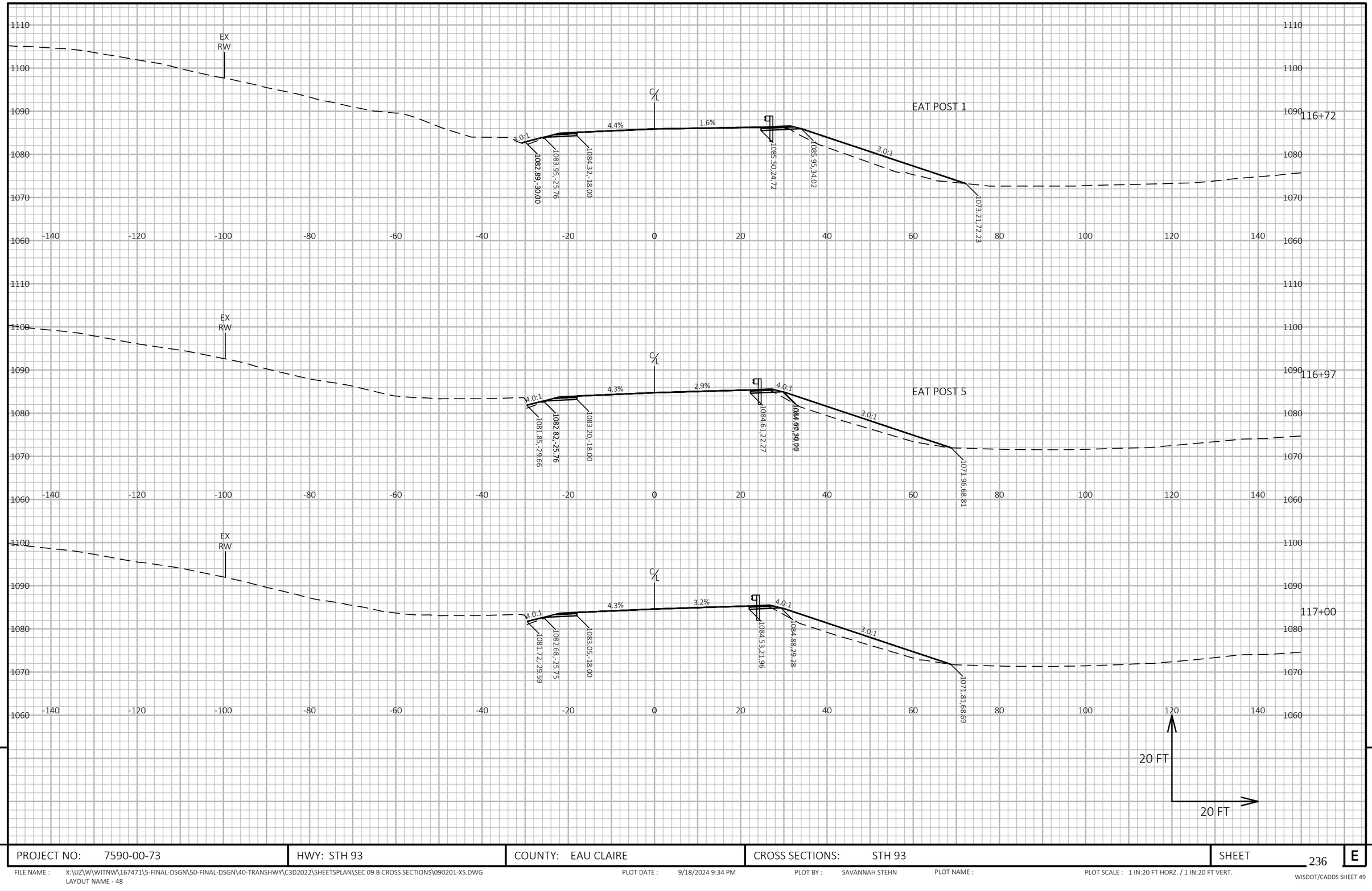


PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 235	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 47

PLOT DATE : 9/18/2024 9:34 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



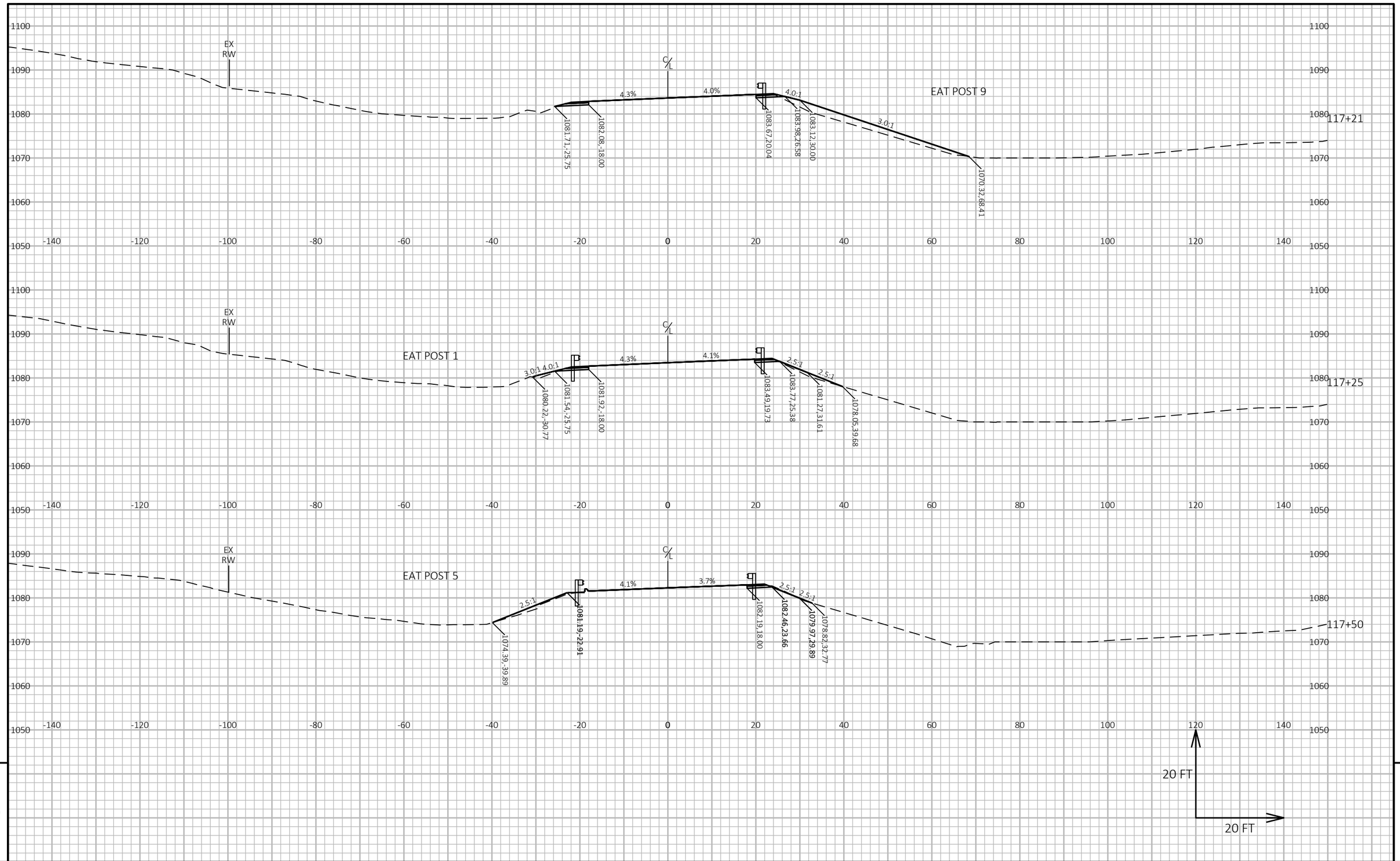
9 9

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 236	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 48

PLOT DATE : 9/18/2024 9:34 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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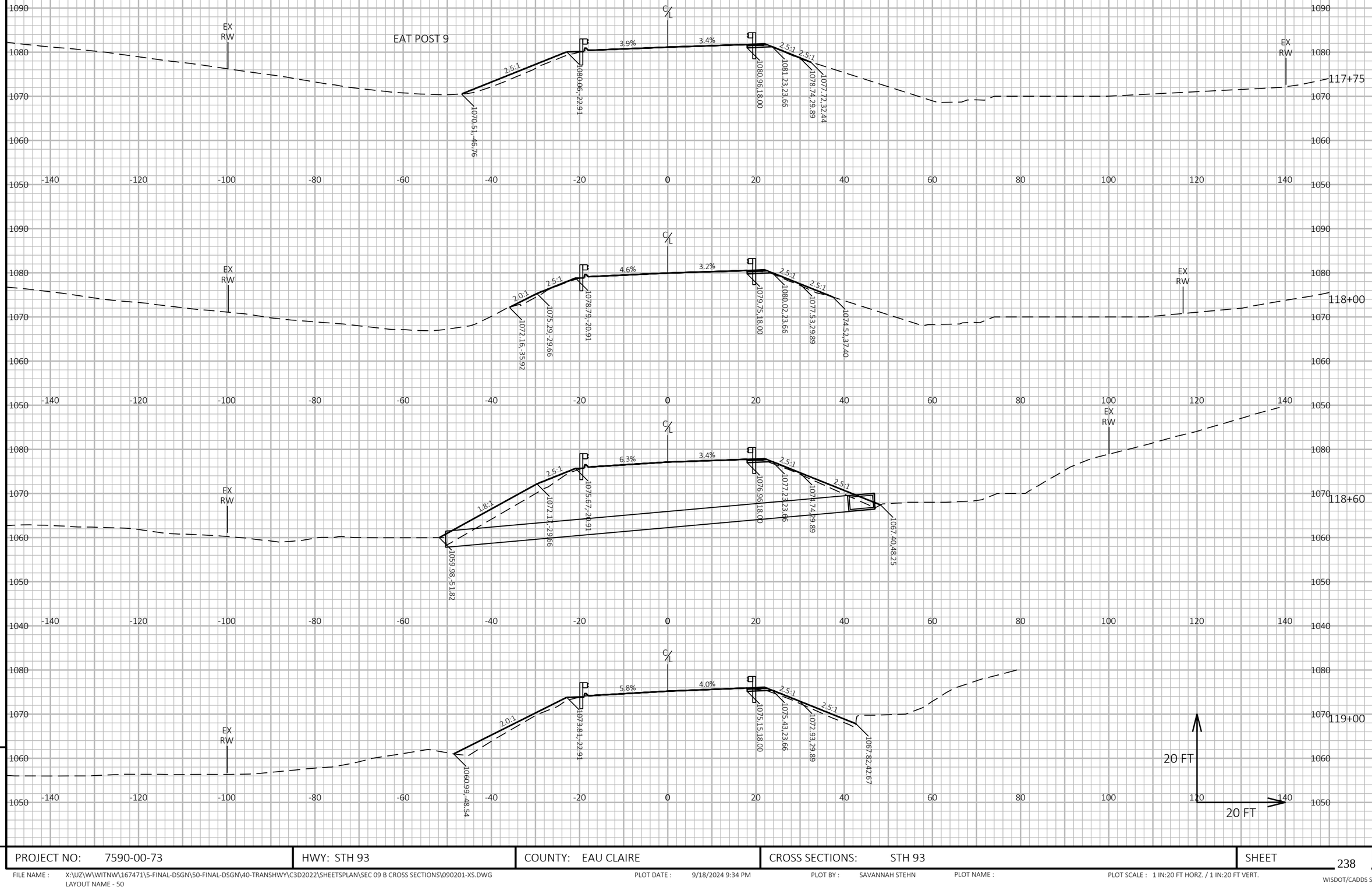
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 237	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 49

PLOT DATE : 9/18/2024 9:34 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

EAT POST 9



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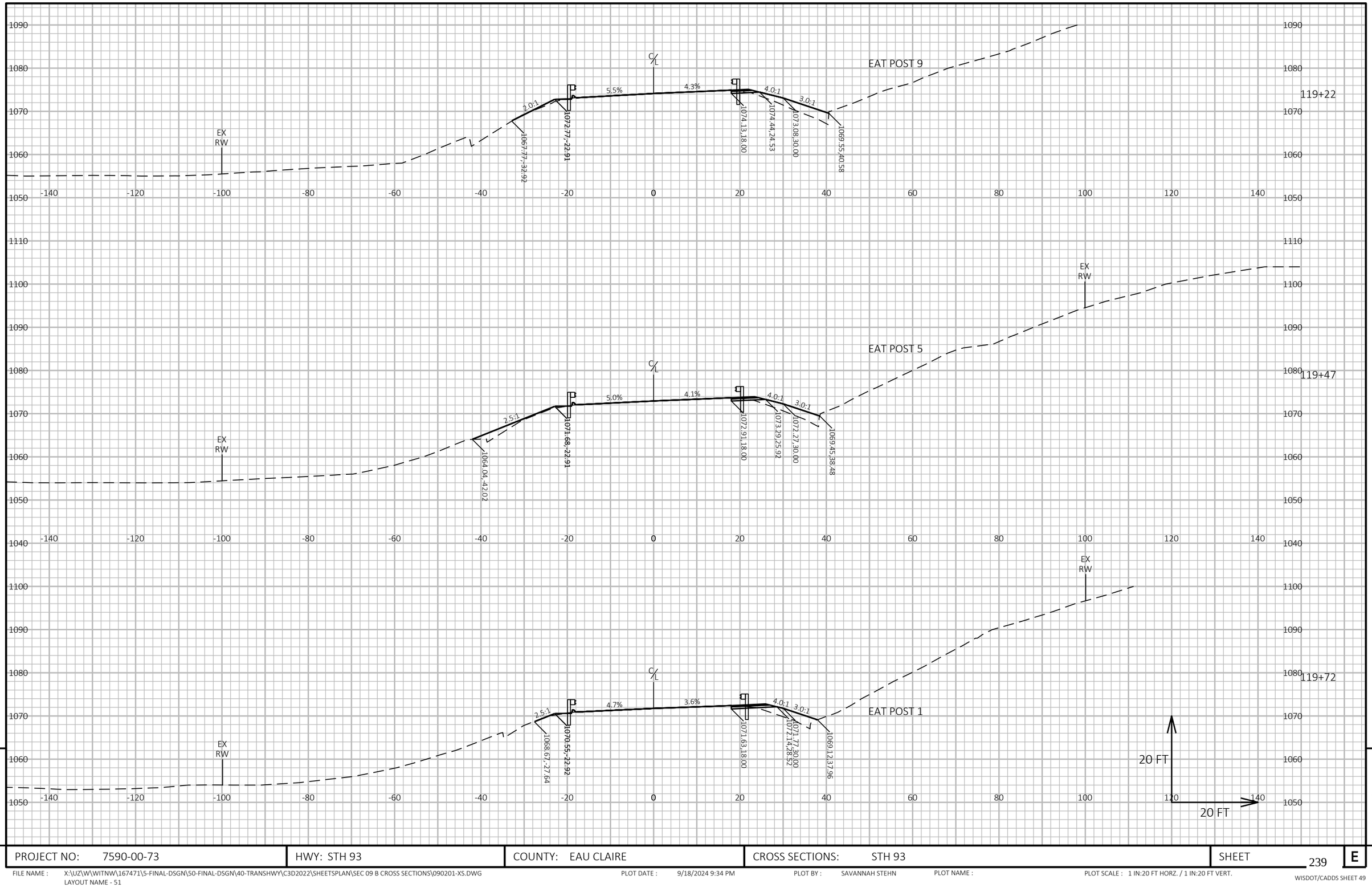
9

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 238	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 50

PLOT DATE : 9/18/2024 9:34 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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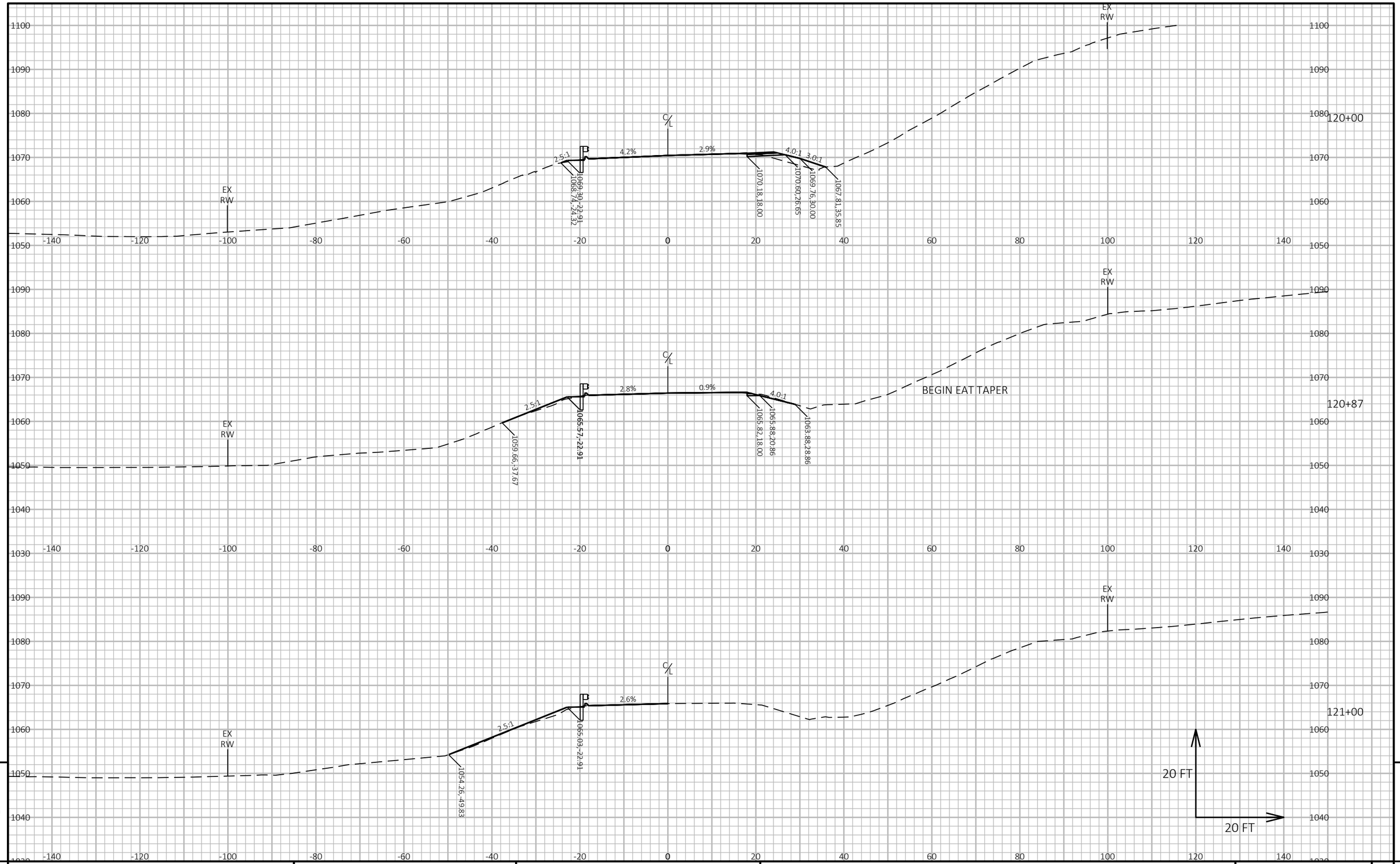
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 239	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 51

PLOT DATE : 9/18/2024 9:34 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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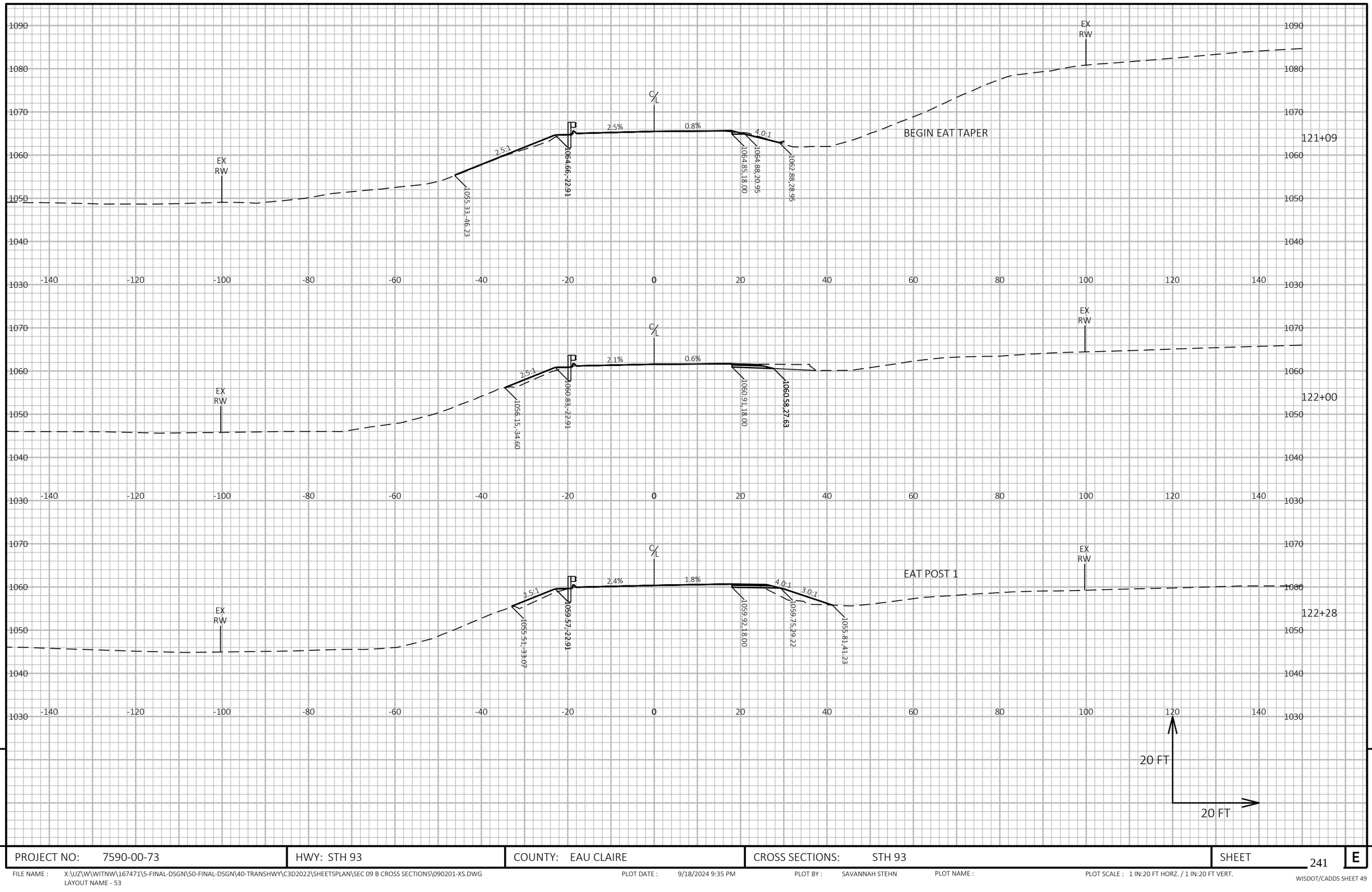
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 240	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 52

PLOT DATE : 9/18/2024 9:35 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 241	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 53

PLOT DATE : 9/18/2024 9:35 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

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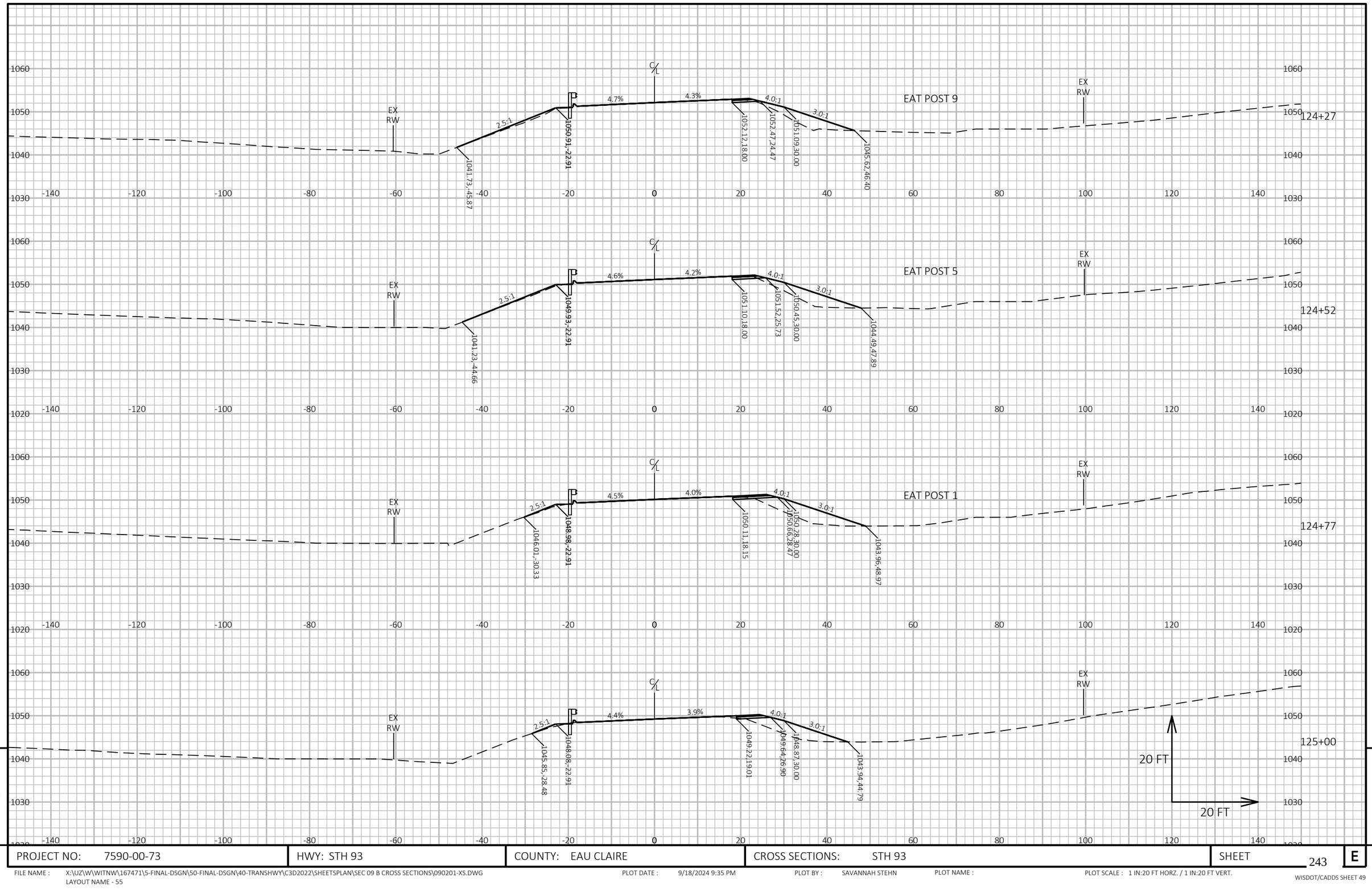
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 242	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 54

PLOT DATE : 9/18/2024 9:35 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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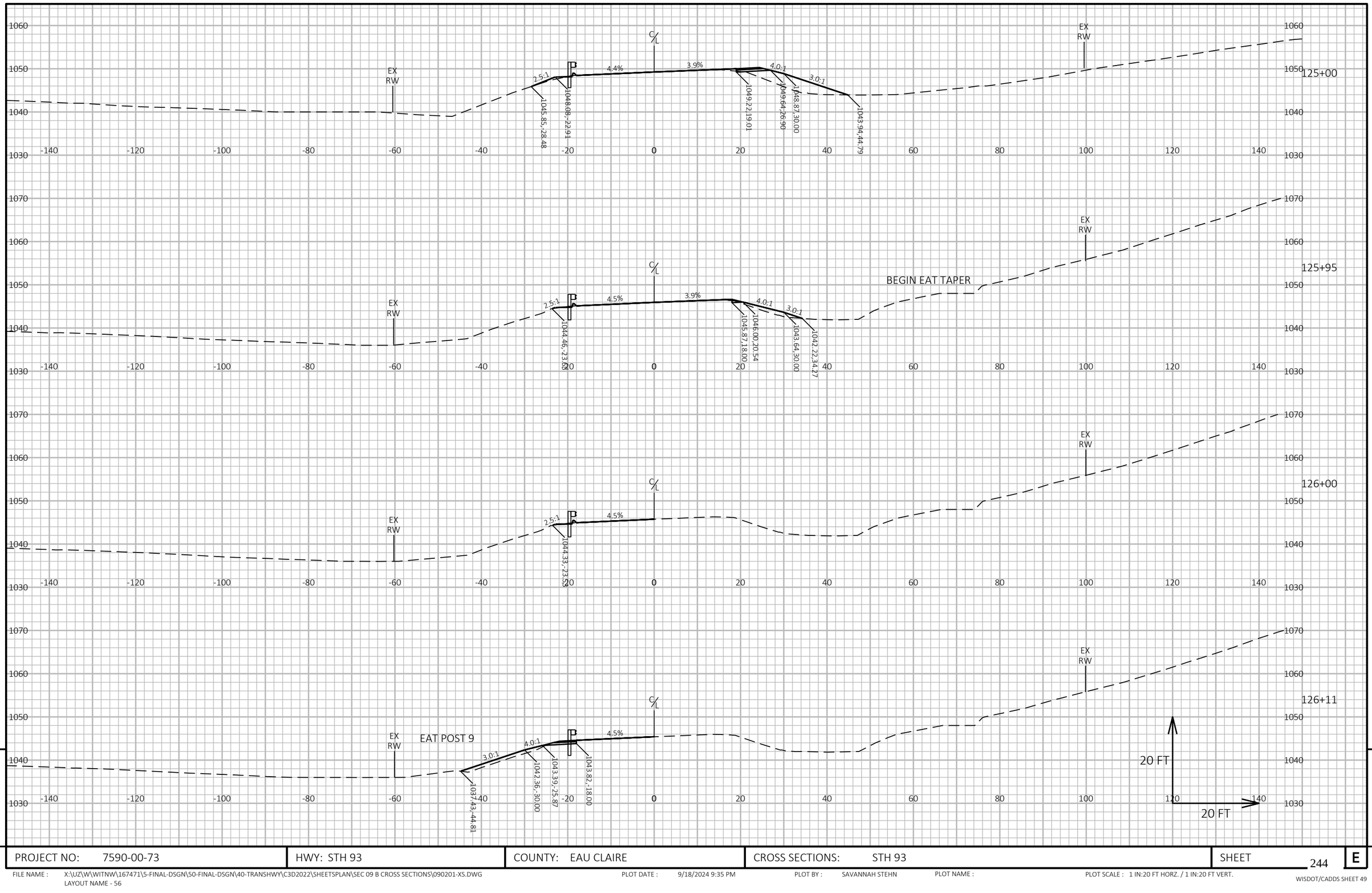
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 243	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 55

PLOT DATE : 9/18/2024 9:35 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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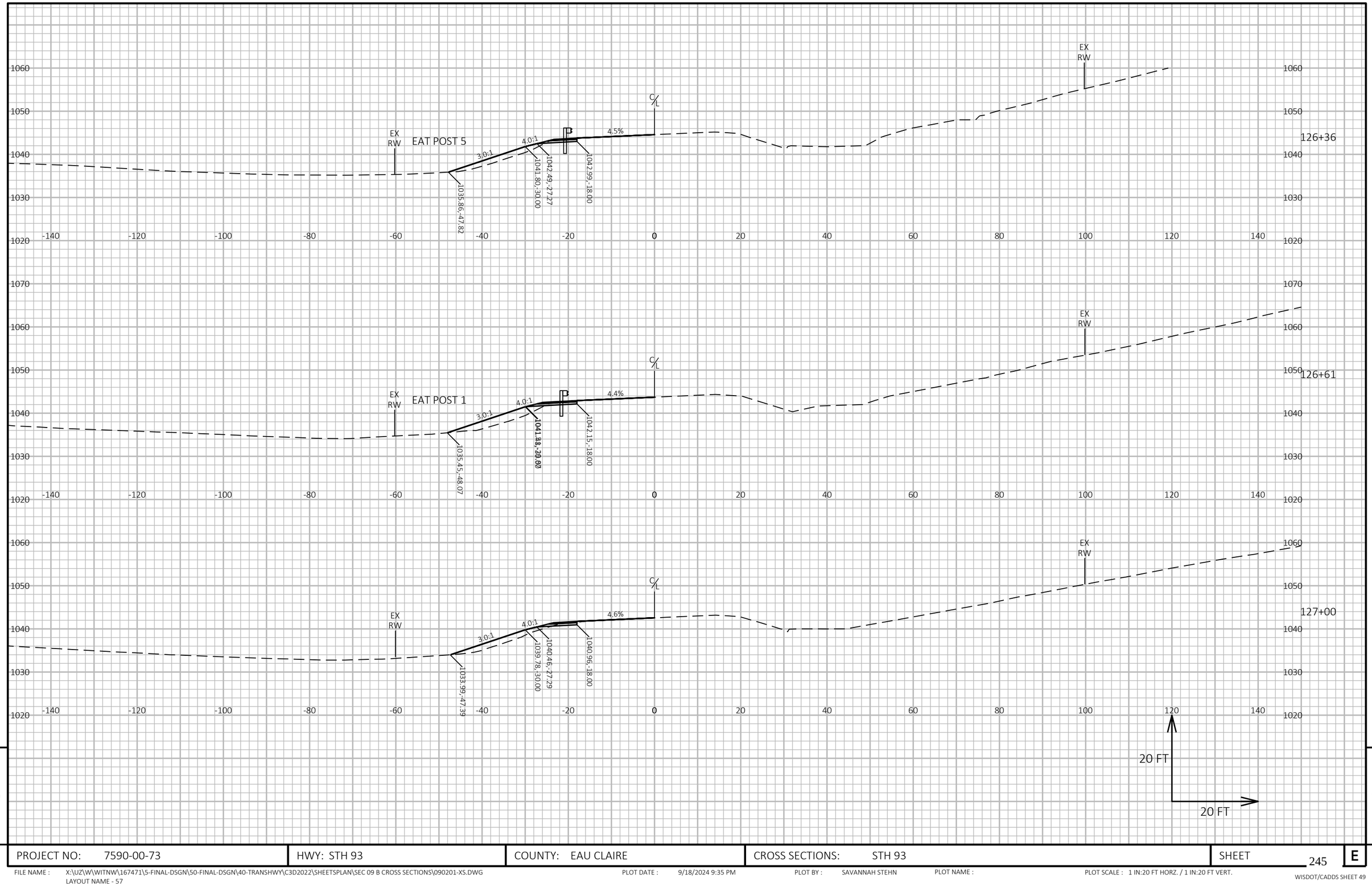
9

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 244	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 56

PLOT DATE : 9/18/2024 9:35 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



9

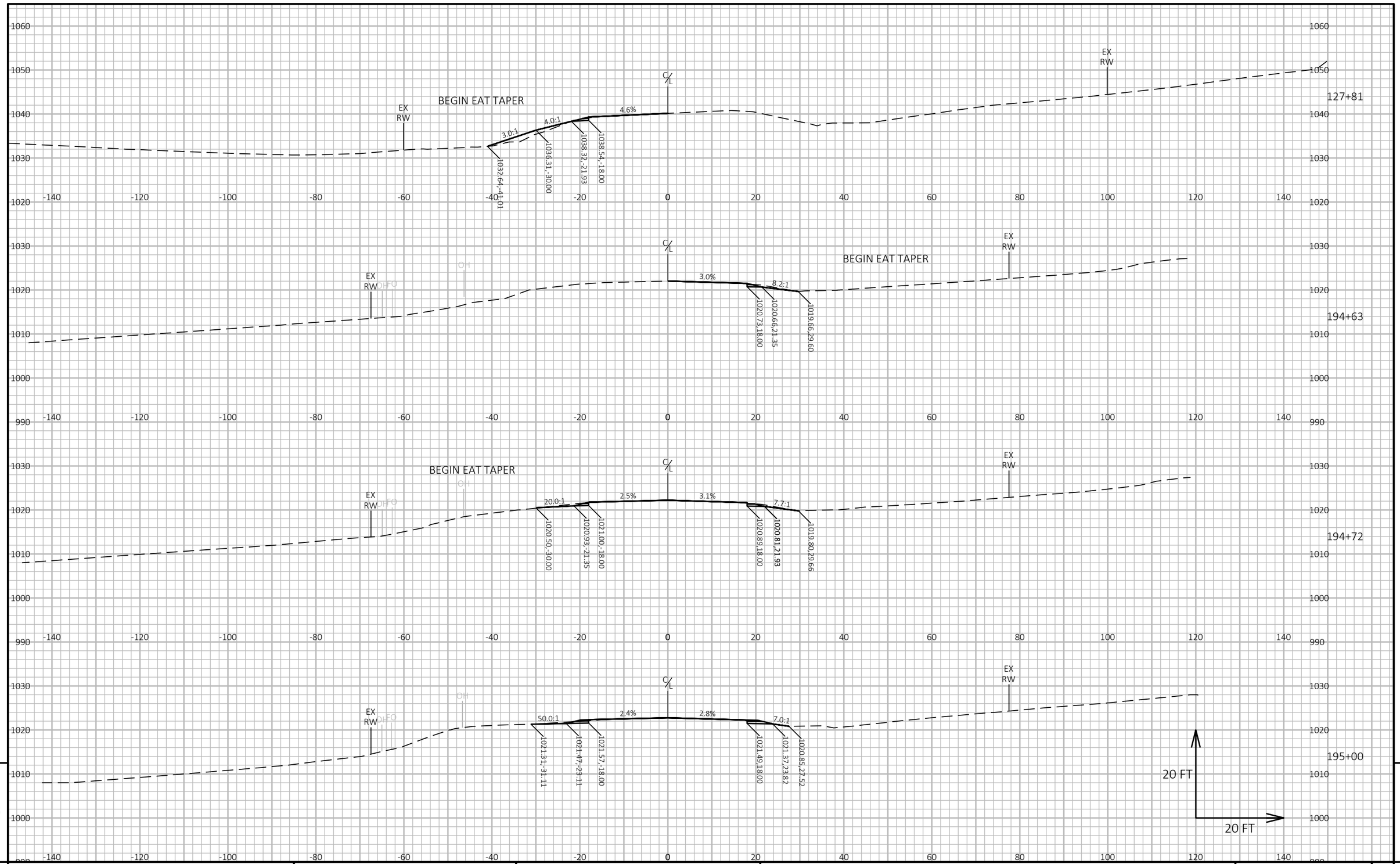
9

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 245	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 57

PLOT DATE : 9/18/2024 9:35 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

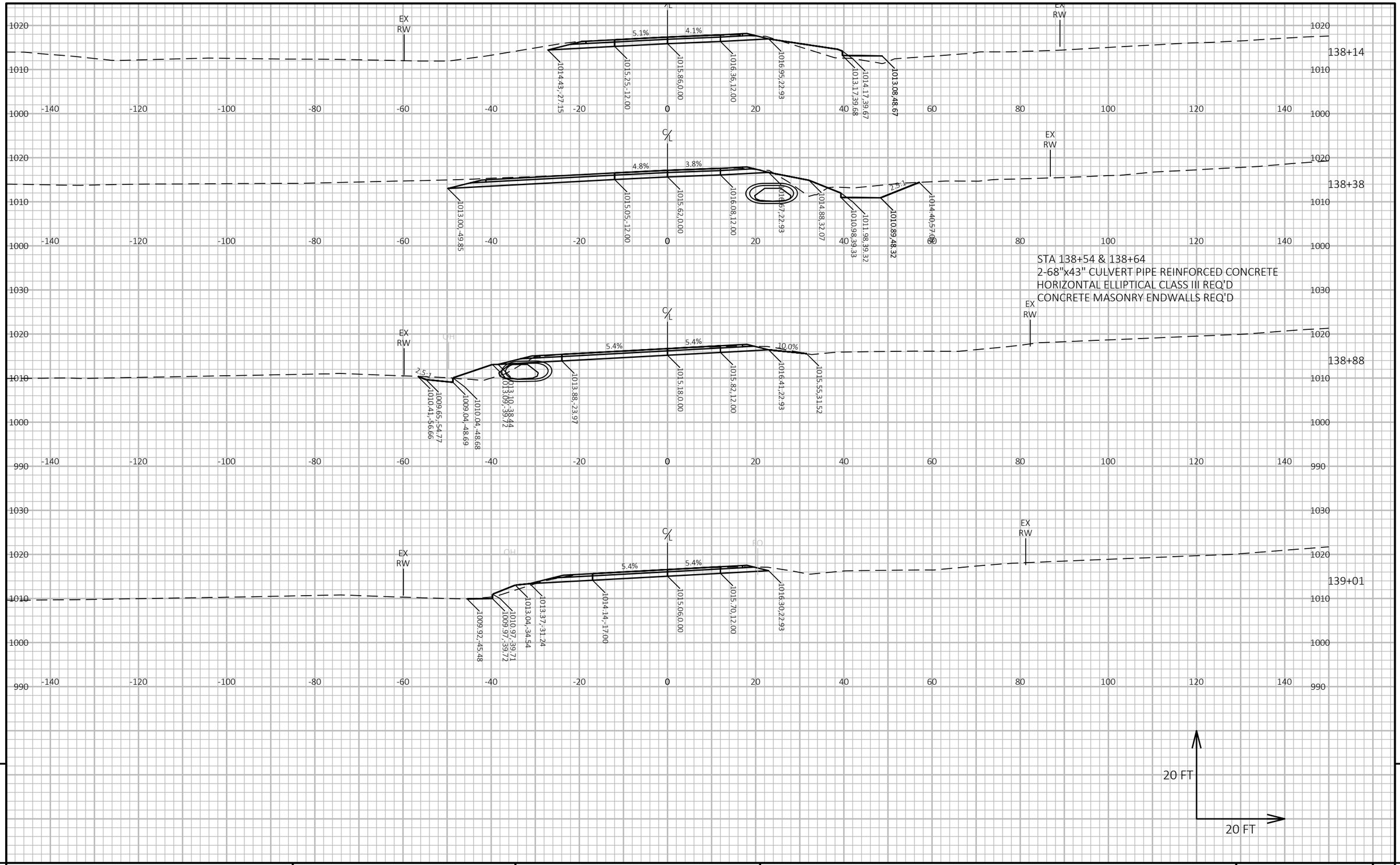


PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 246	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 58

PLOT DATE : 9/18/2024 9:36 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

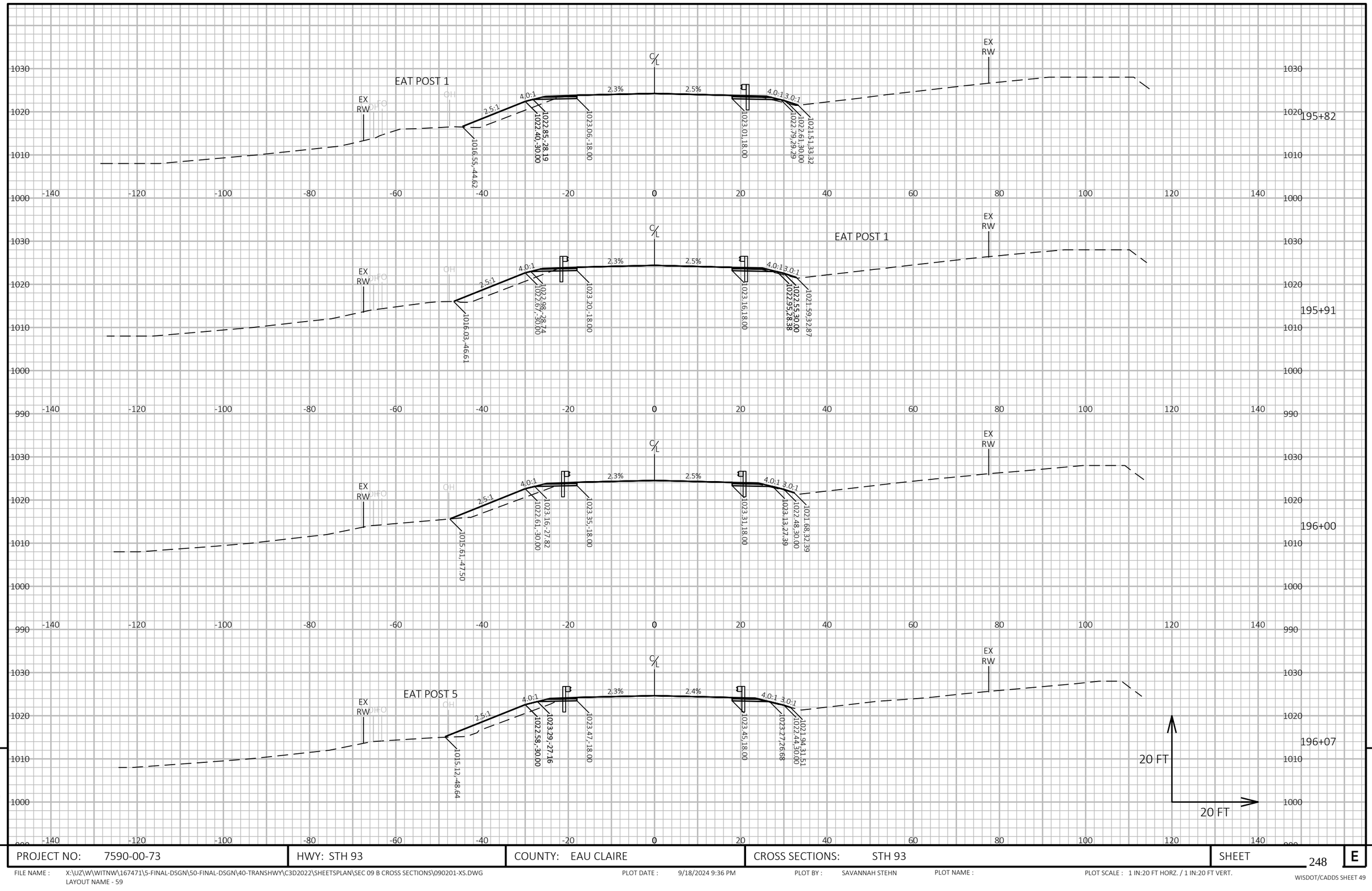


9 9

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 247	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - HE Pipes1

PLOT DATE : 9/18/2024 9:37 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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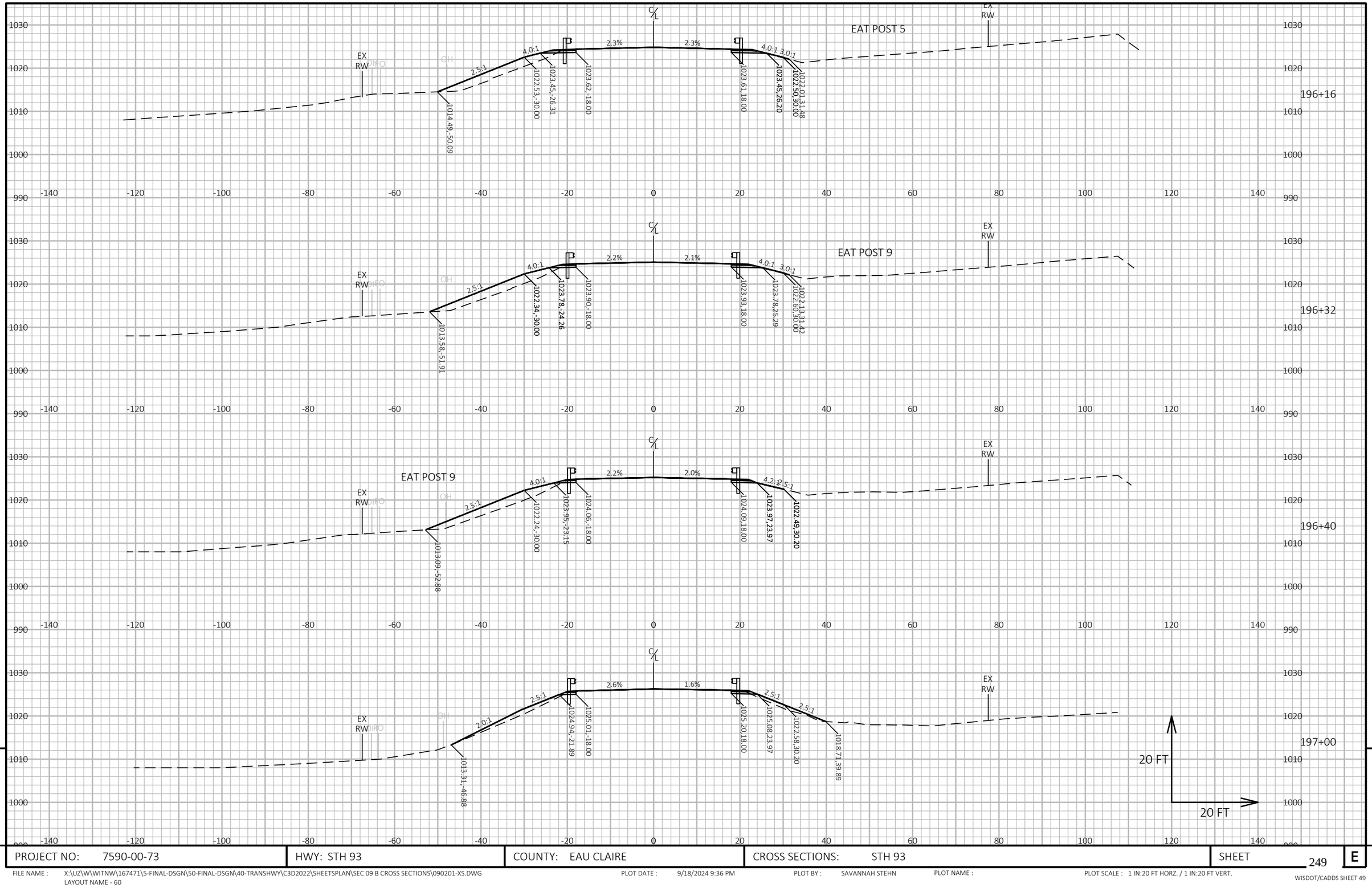
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 248	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 59

PLOT DATE : 9/18/2024 9:36 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

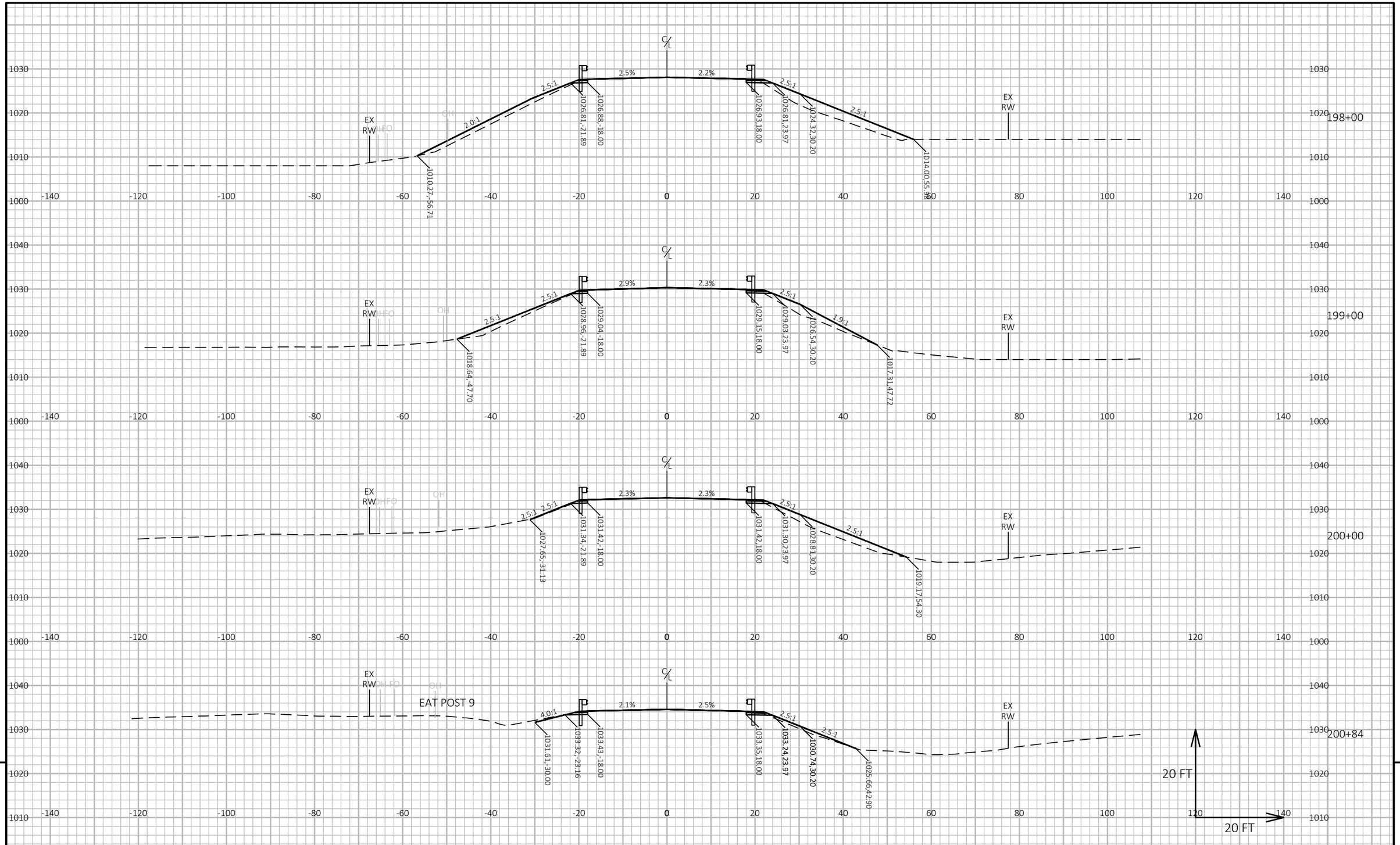
9

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 249	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 60

PLOT DATE : 9/18/2024 9:36 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



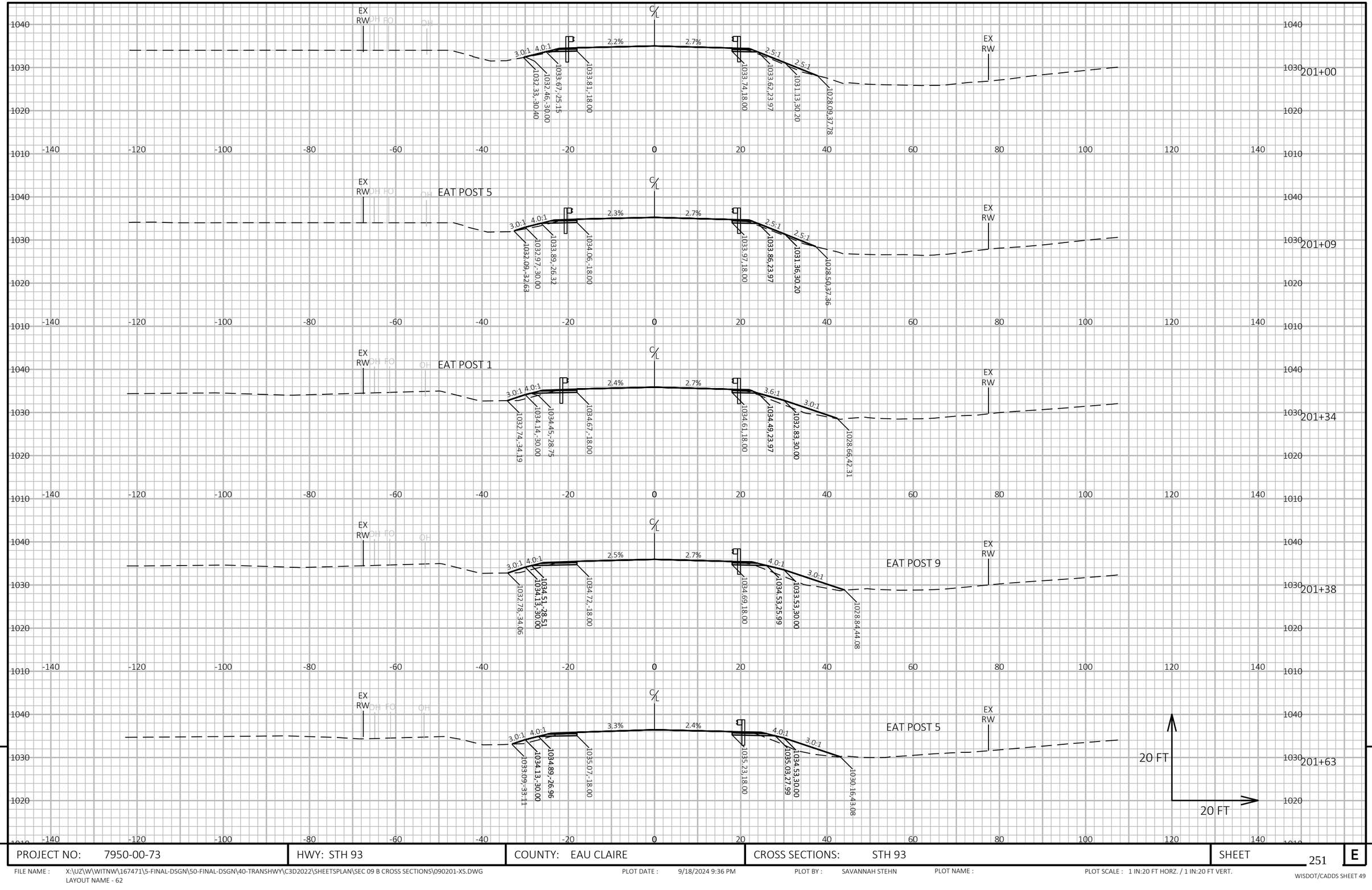
PROJECT NO: 7950-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 250	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 61

PLOT DATE : 9/18/2024 9:36 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

9 9



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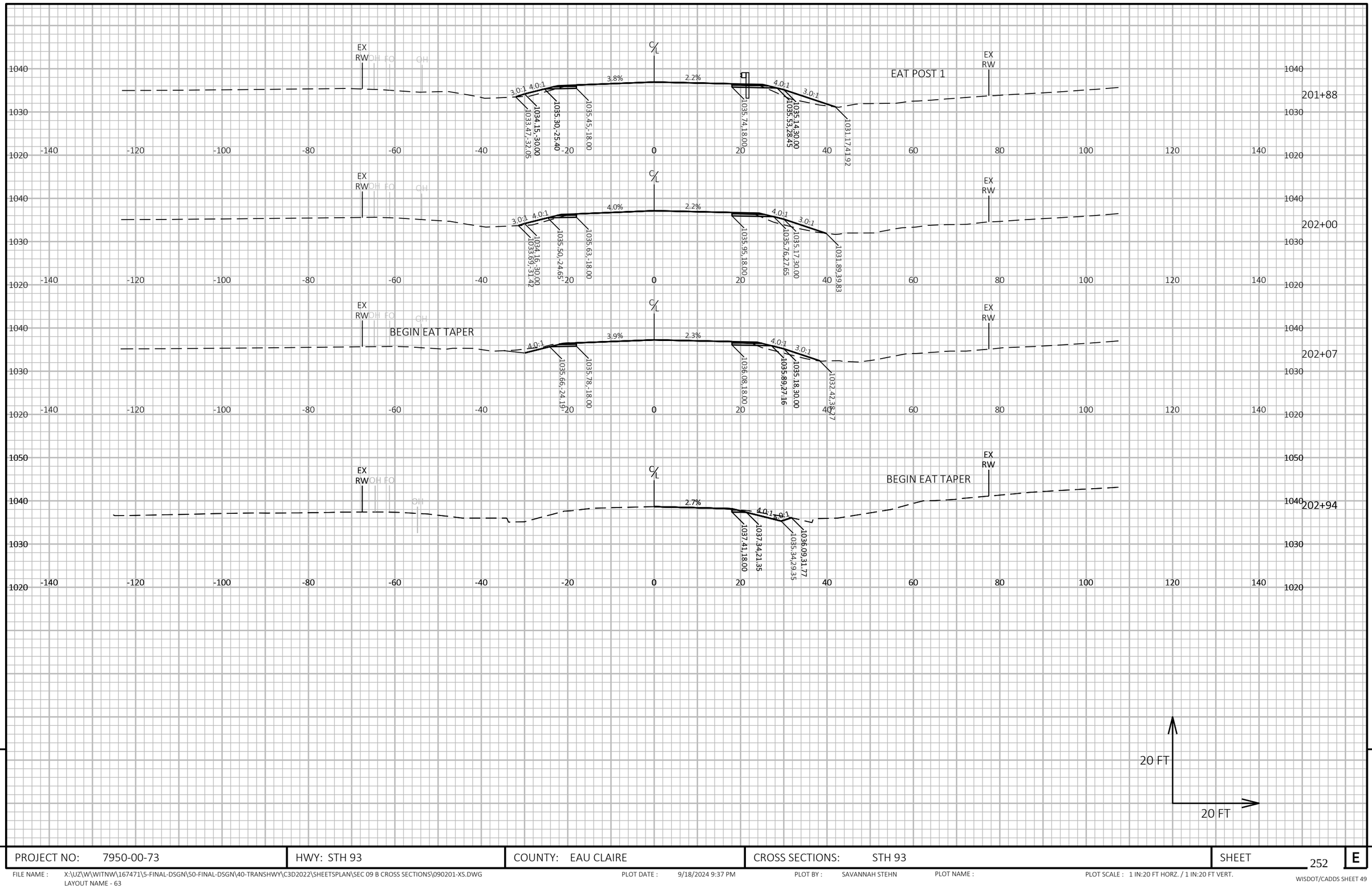
PROJECT NO: 7950-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 251	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 62

PLOT DATE : 9/18/2024 9:36 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

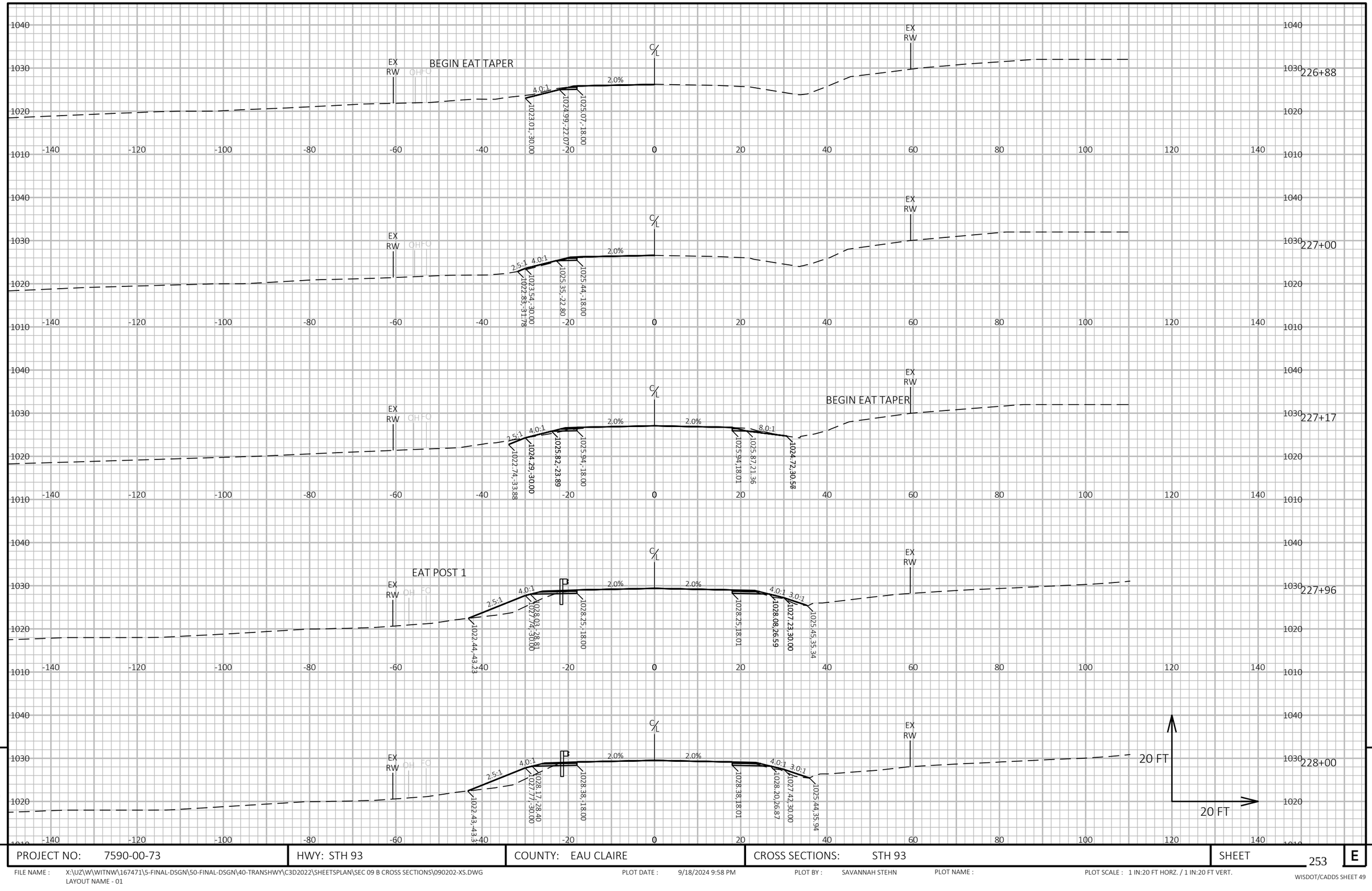
WISDOT/CADDS SHEET 49



PROJECT NO: 7950-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 252	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090201-XS.DWG
LAYOUT NAME - 63

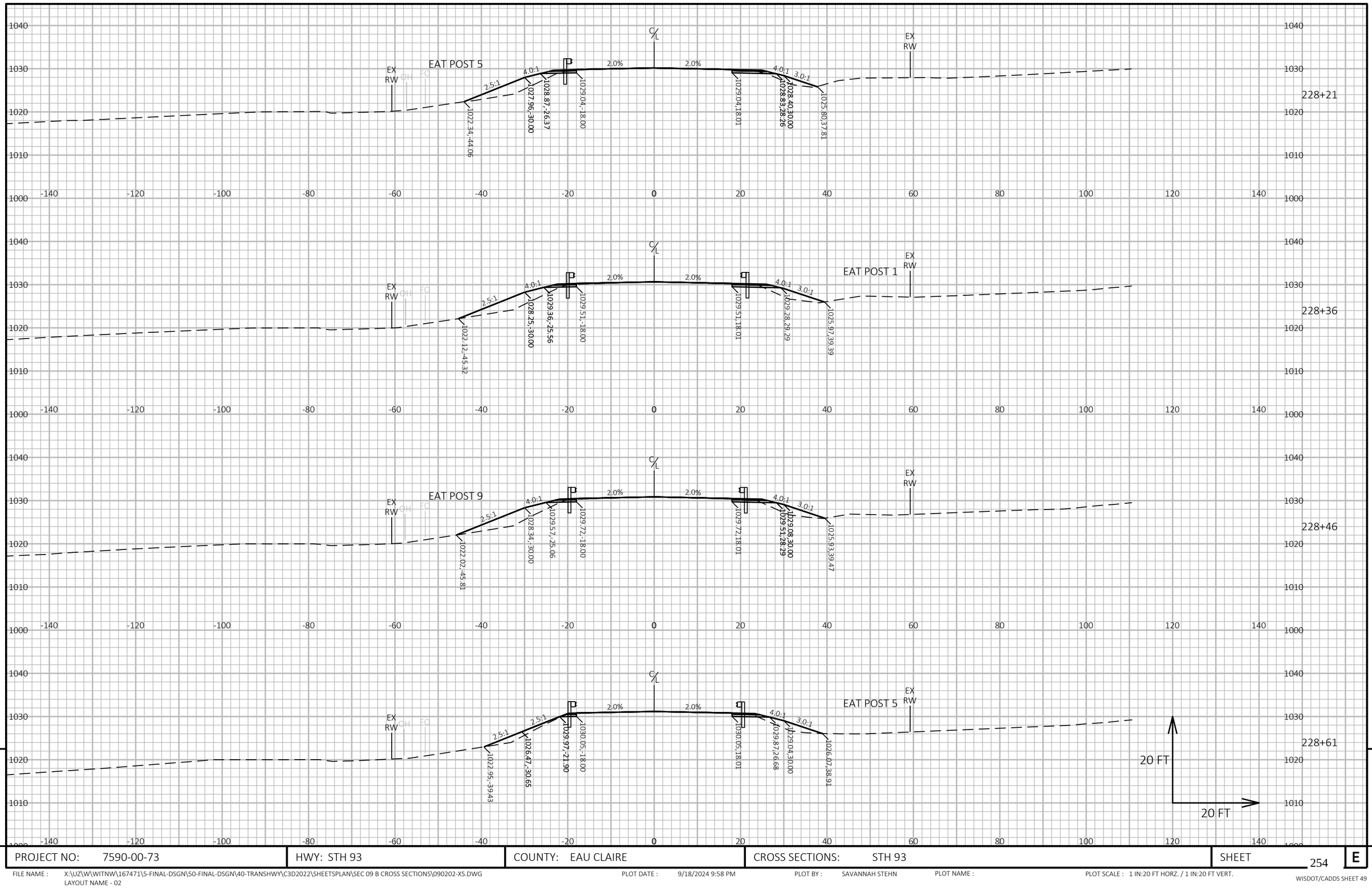
PLOT DATE : 9/18/2024 9:37 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 253	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090202-XS.DWG
LAYOUT NAME - 01

PLOT DATE : 9/18/2024 9:58 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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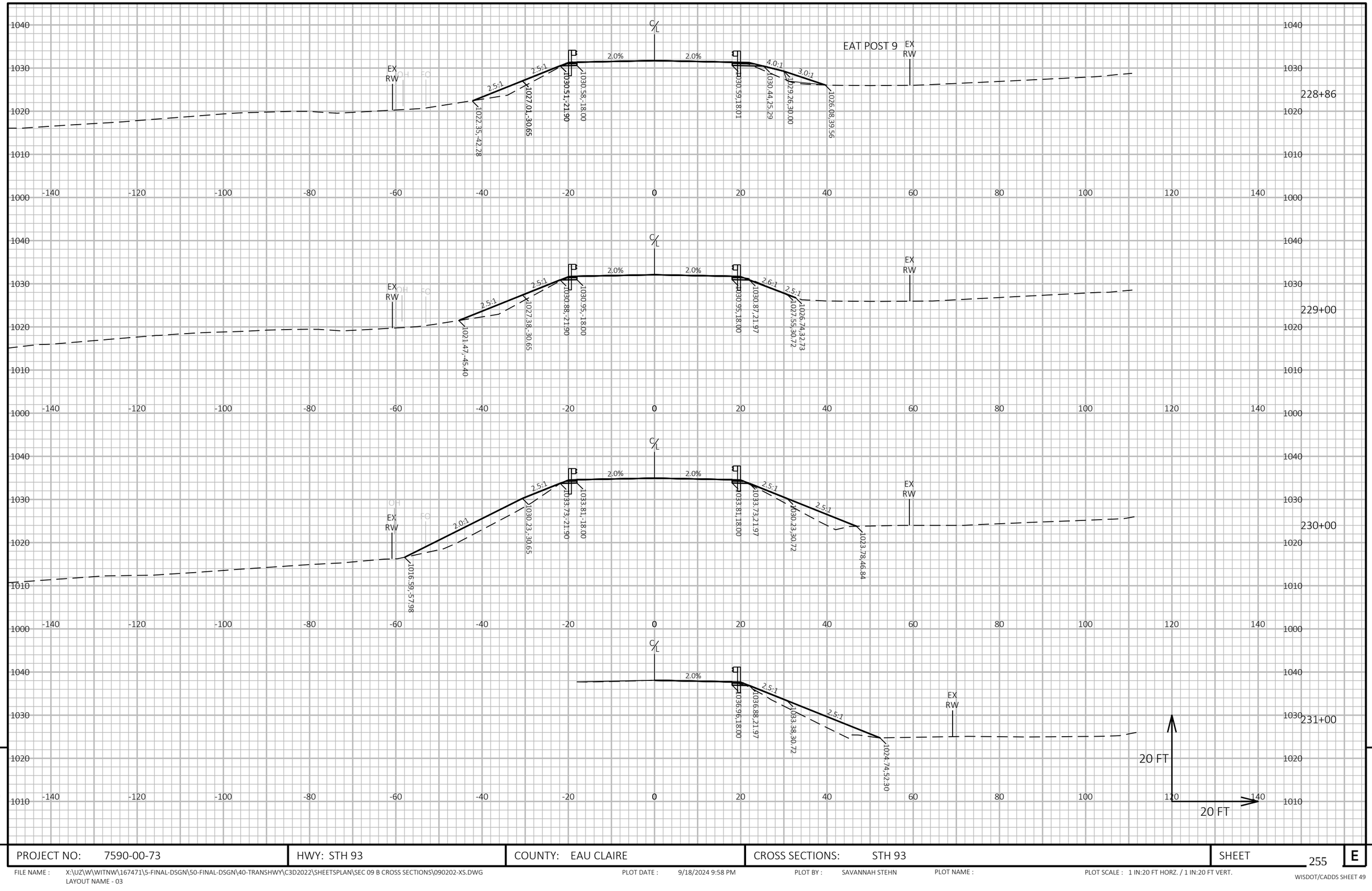
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 254	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090202-XS.DWG
LAYOUT NAME - 02

PLOT DATE : 9/18/2024 9:58 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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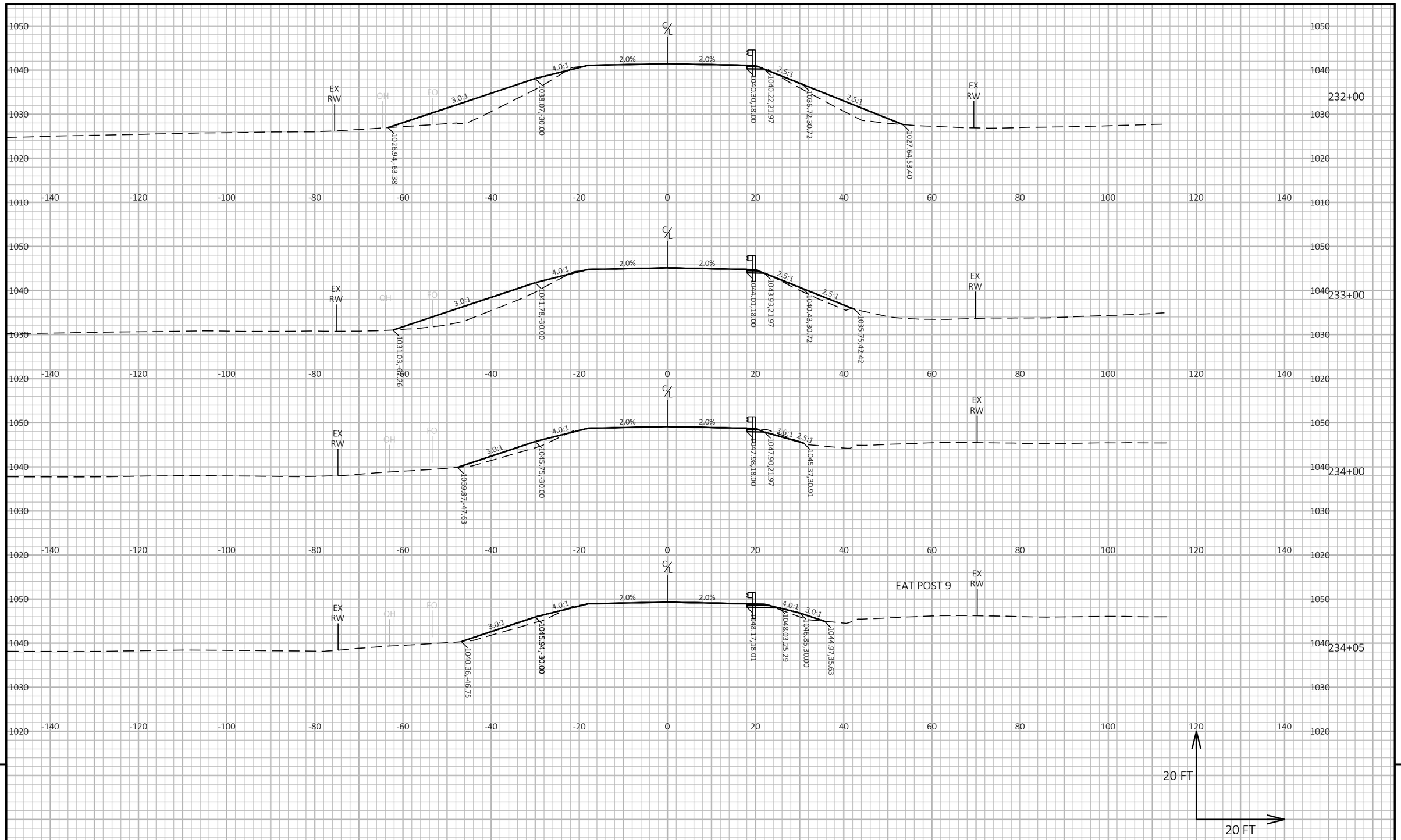
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 255	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090202-XS.DWG
LAYOUT NAME - 03

PLOT DATE : 9/18/2024 9:58 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

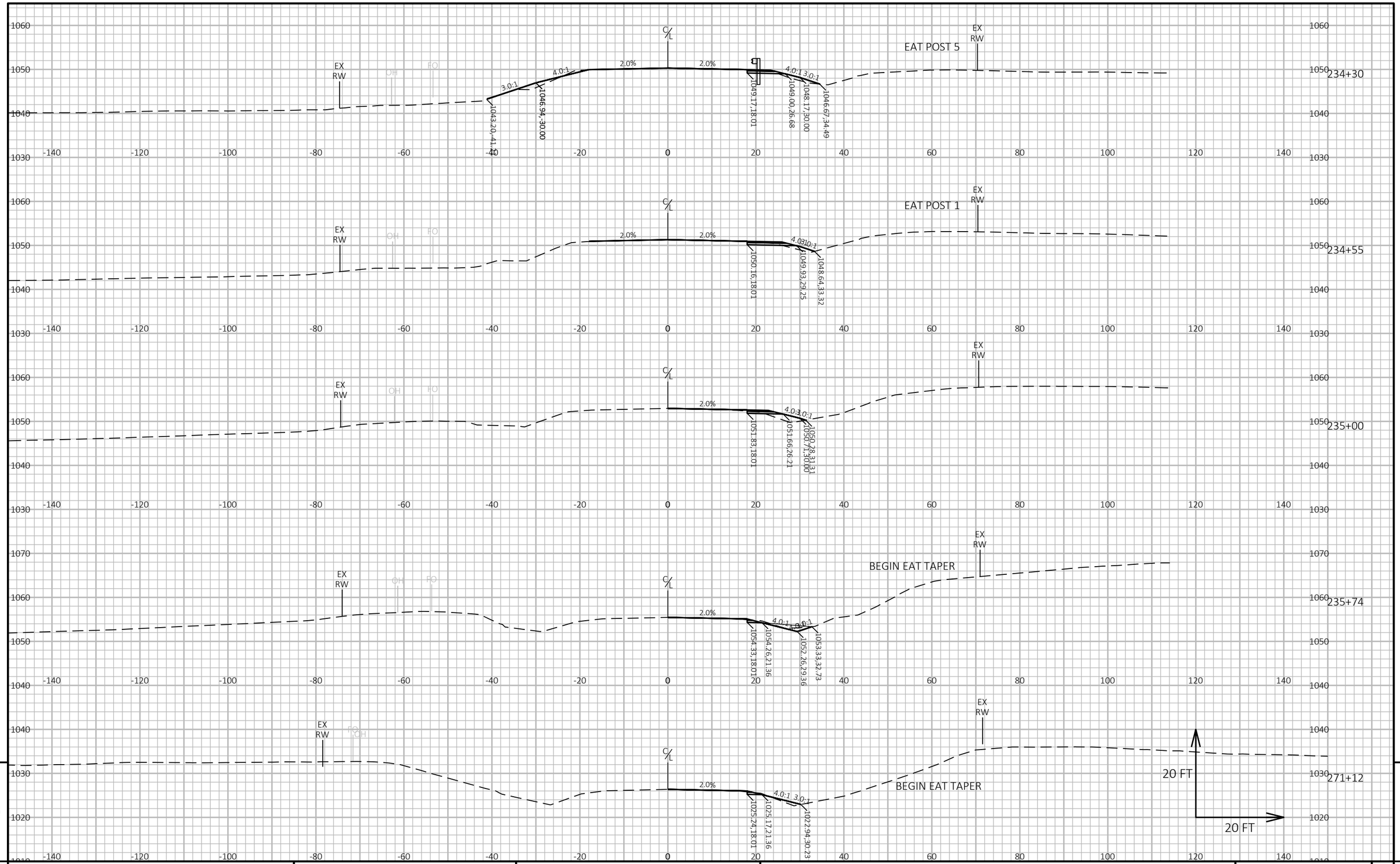


PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 256	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090202-XS.DWG
LAYOUT NAME - 04

PLOT DATE : 9/18/2024 9:58 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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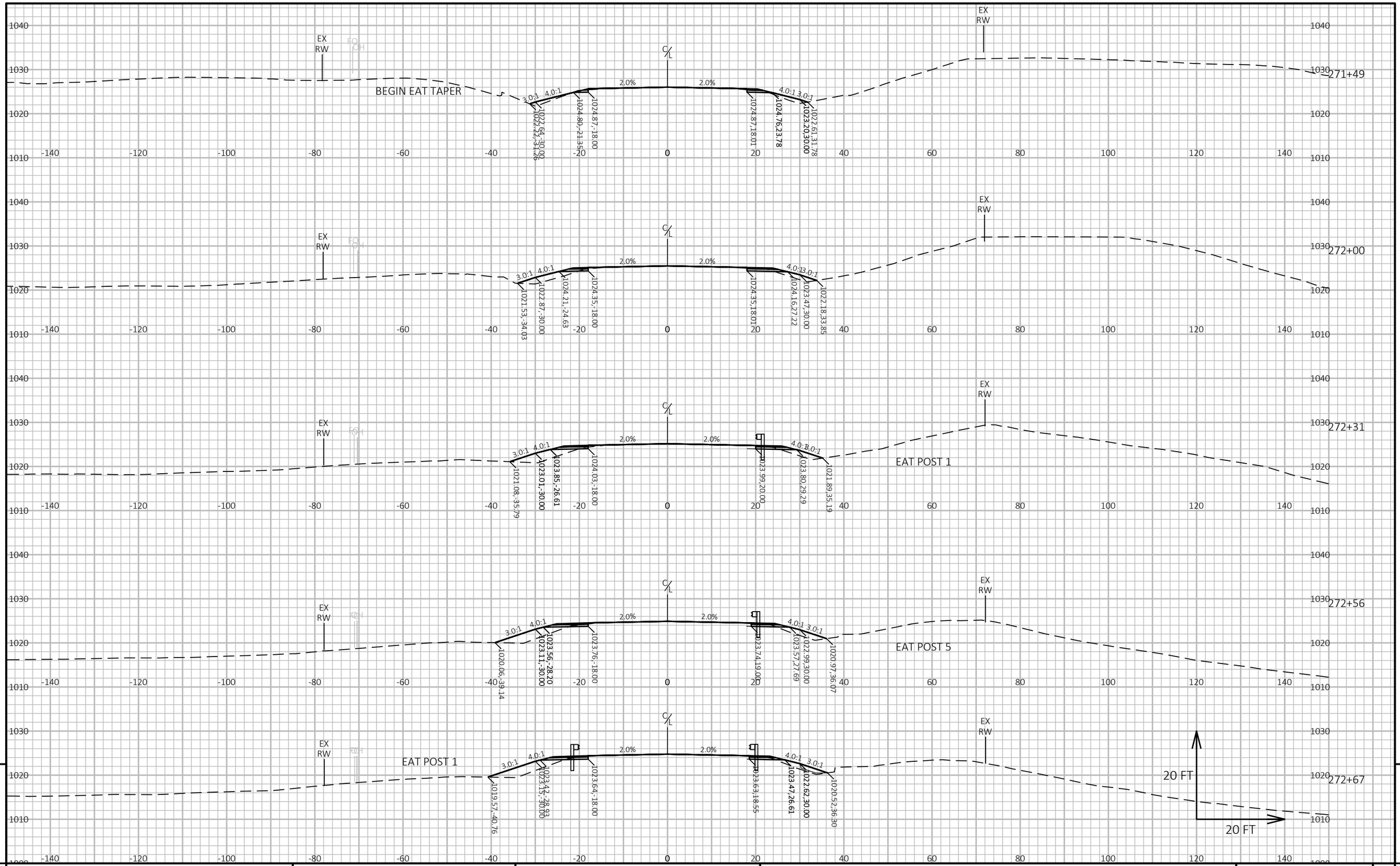
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 257	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090202-XS.DWG
LAYOUT NAME - 05

PLOT DATE : 9/18/2024 9:59 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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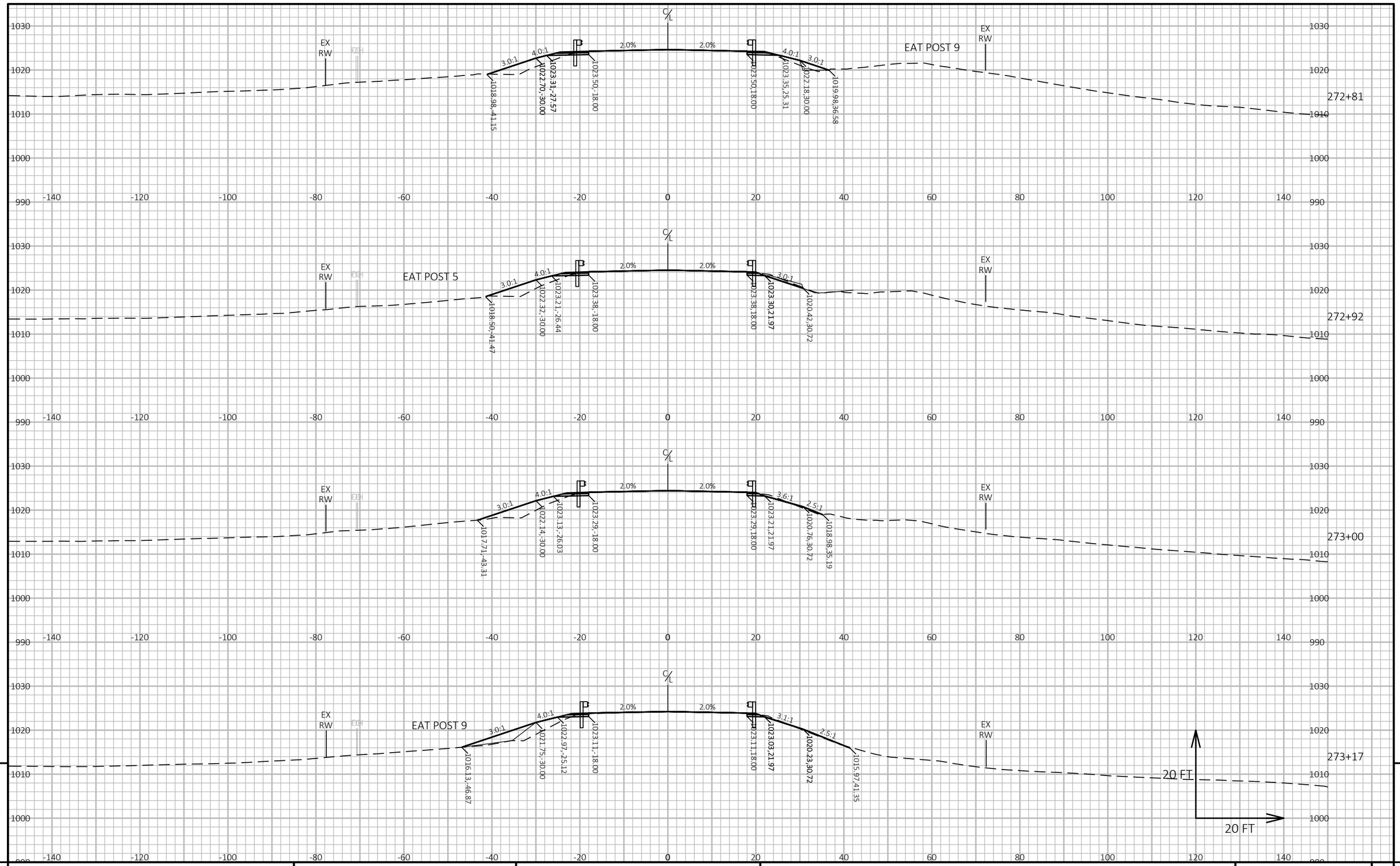
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 258	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090202-XS.DWG
LAYOUT NAME - 06

PLOT DATE : 7/29/2024 8:33 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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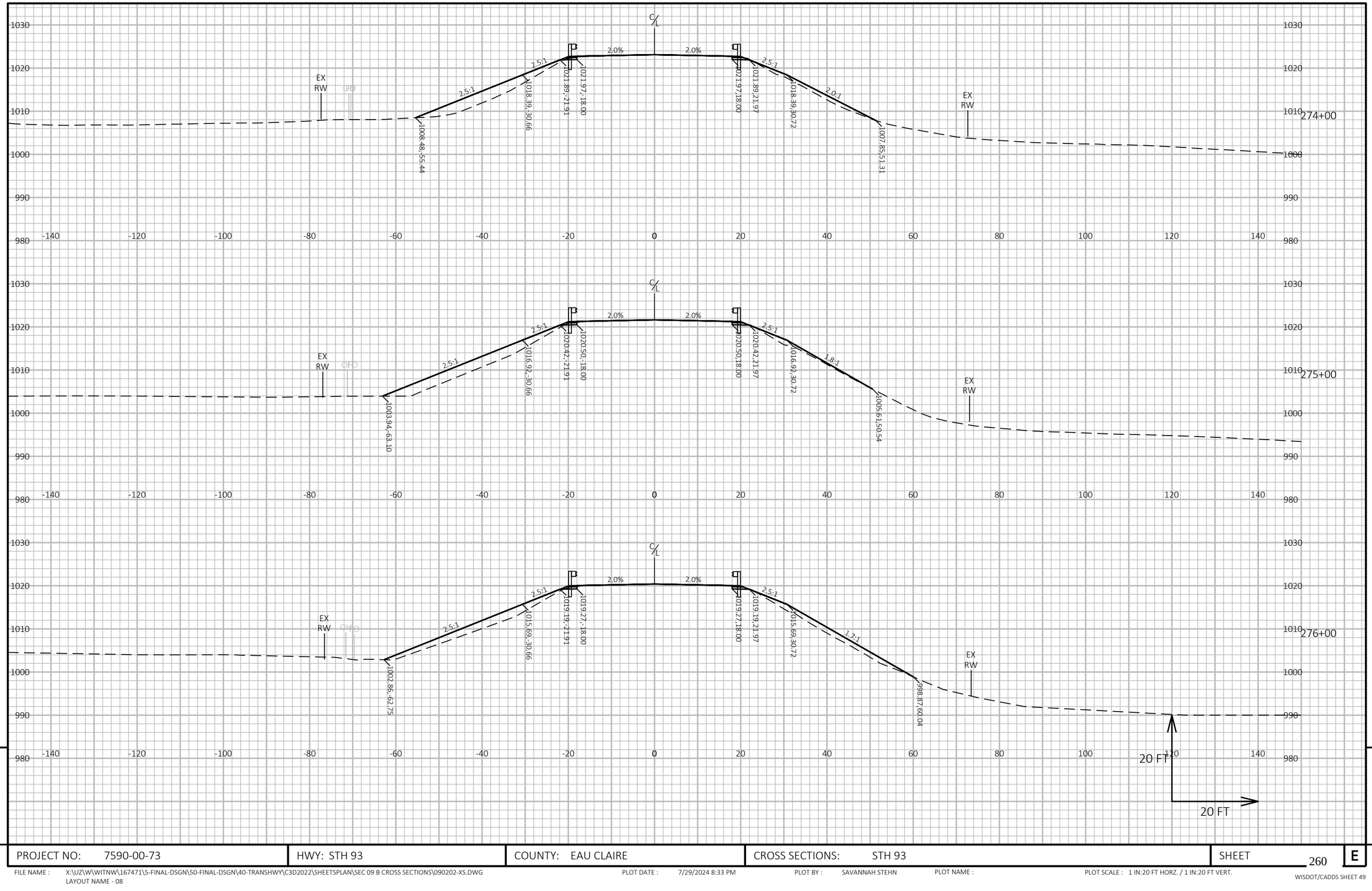
9

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 259	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090202-XS.DWG
LAYOUT NAME - 07

PLOT DATE : 7/29/2024 8:33 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 260	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090202-XS.DWG
LAYOUT NAME - 08

PLOT DATE : 7/29/2024 8:33 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

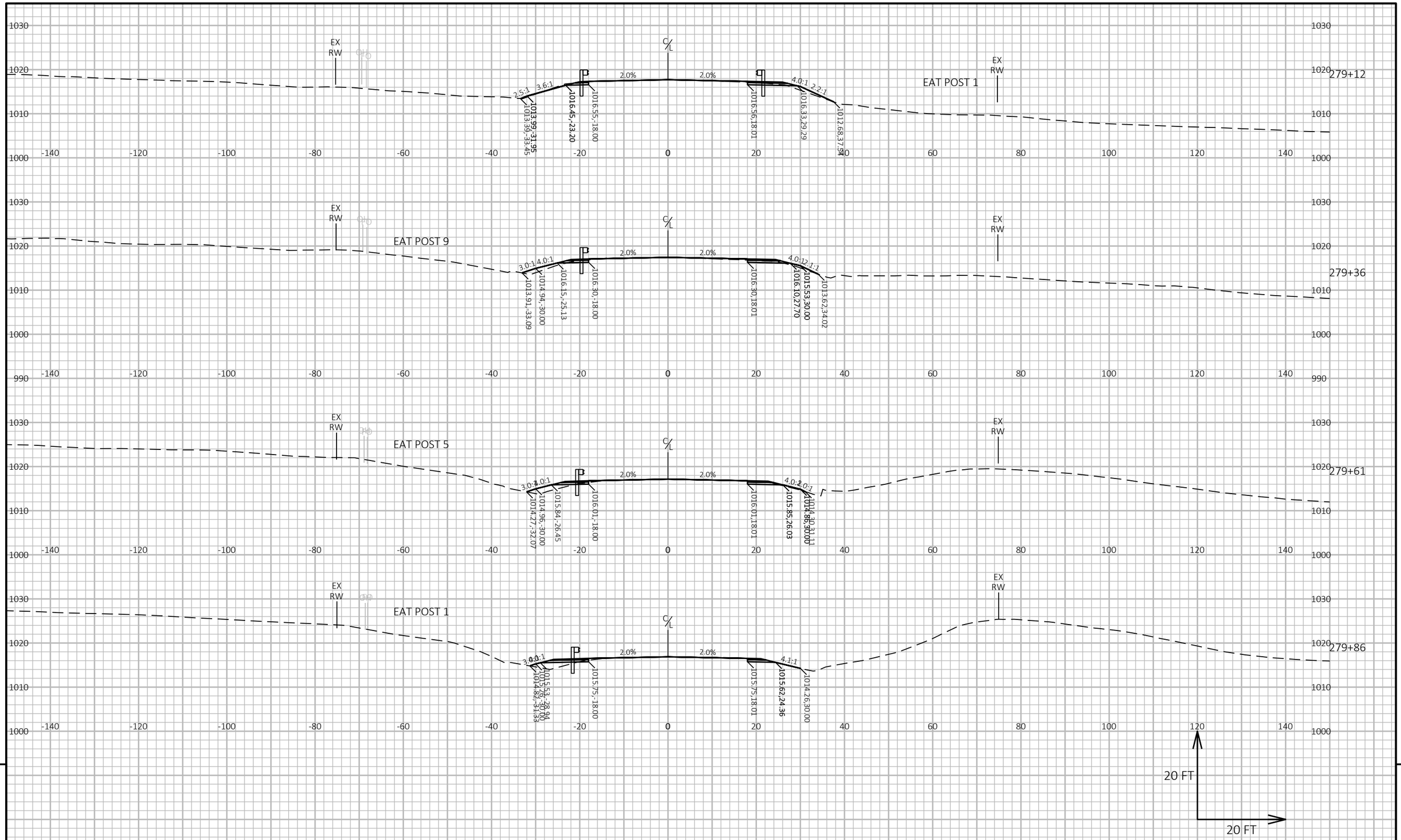
WISDOT/CADDS SHEET 49

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 261 E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090202-XS.DWG
LAYOUT NAME - 09

PLOT DATE : 7/29/2024 8:33 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

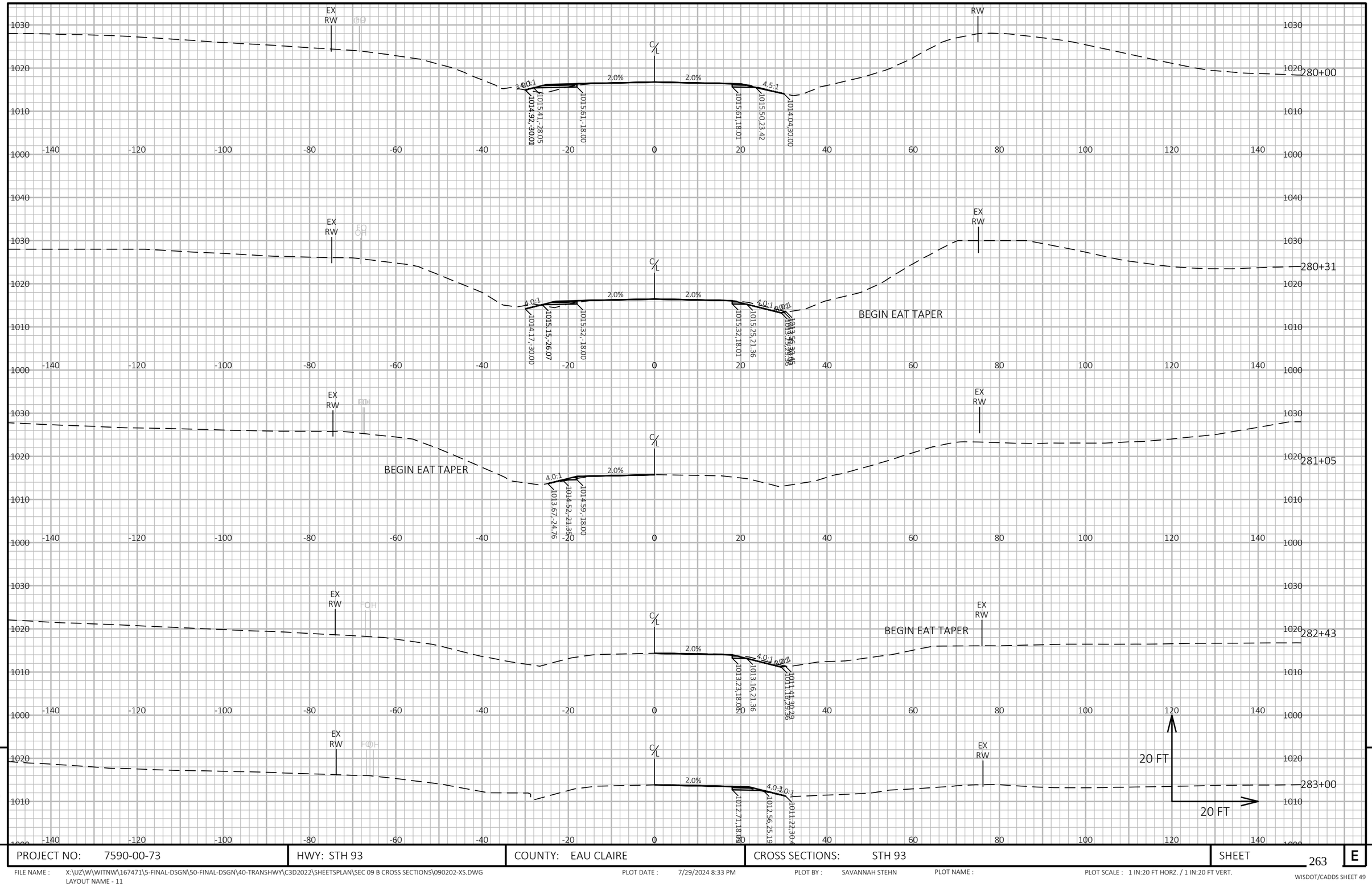


PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 262	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090202-XS.DWG
LAYOUT NAME - 10

PLOT DATE : 7/29/2024 8:33 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

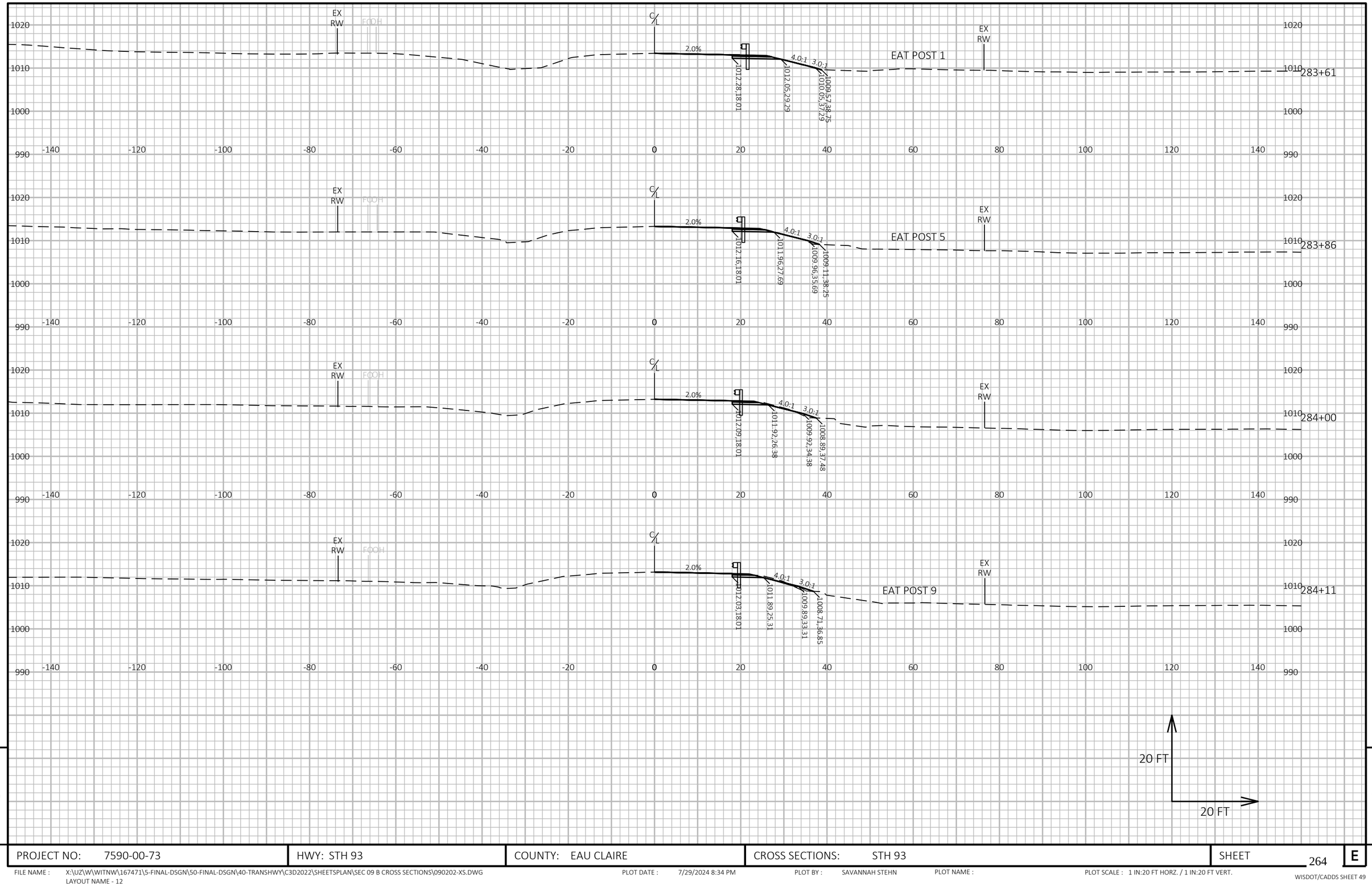
9

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 263	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090202-XS.DWG
LAYOUT NAME - 11

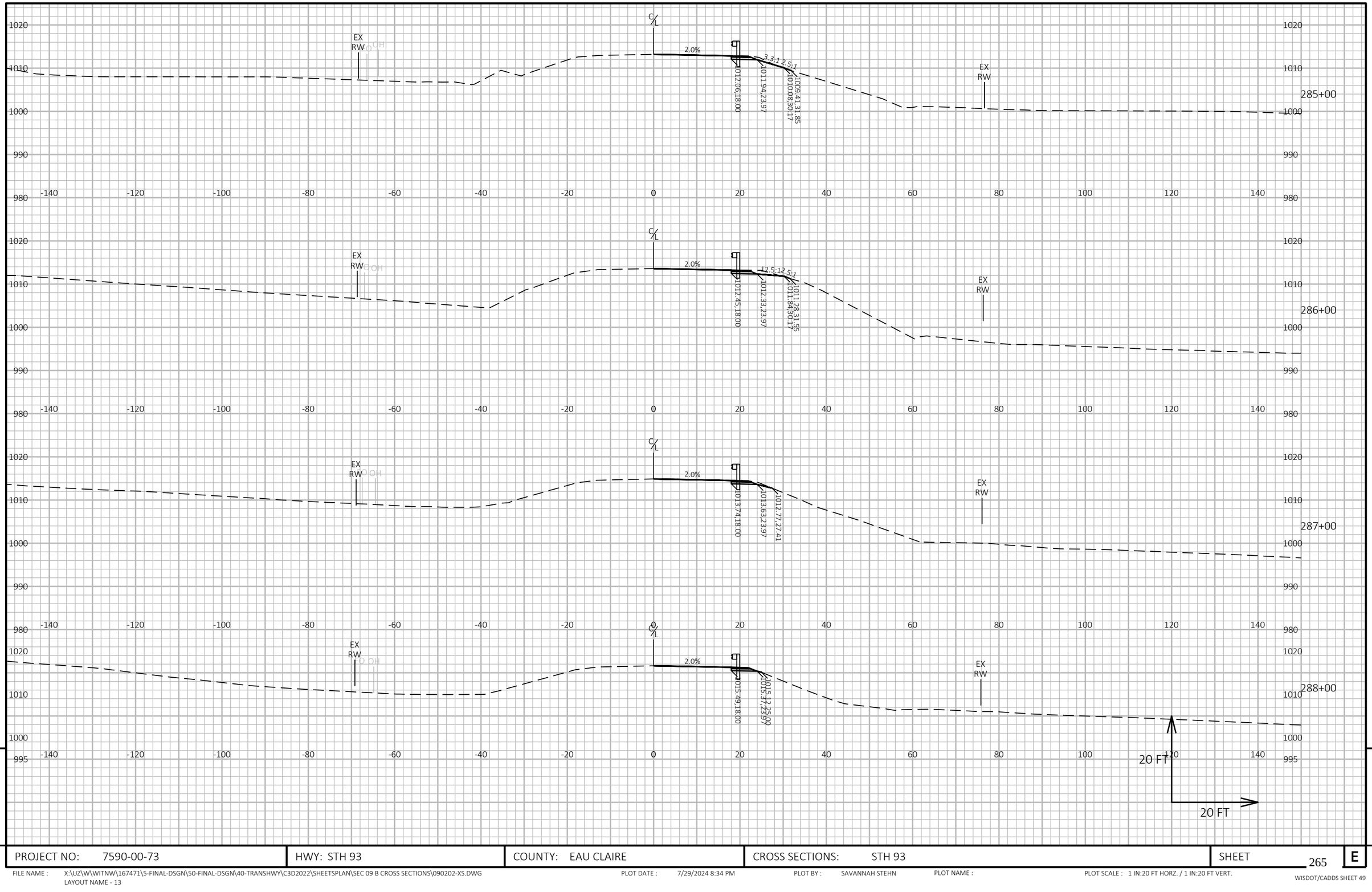
PLOT DATE : 7/29/2024 8:33 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9 9

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 264	E



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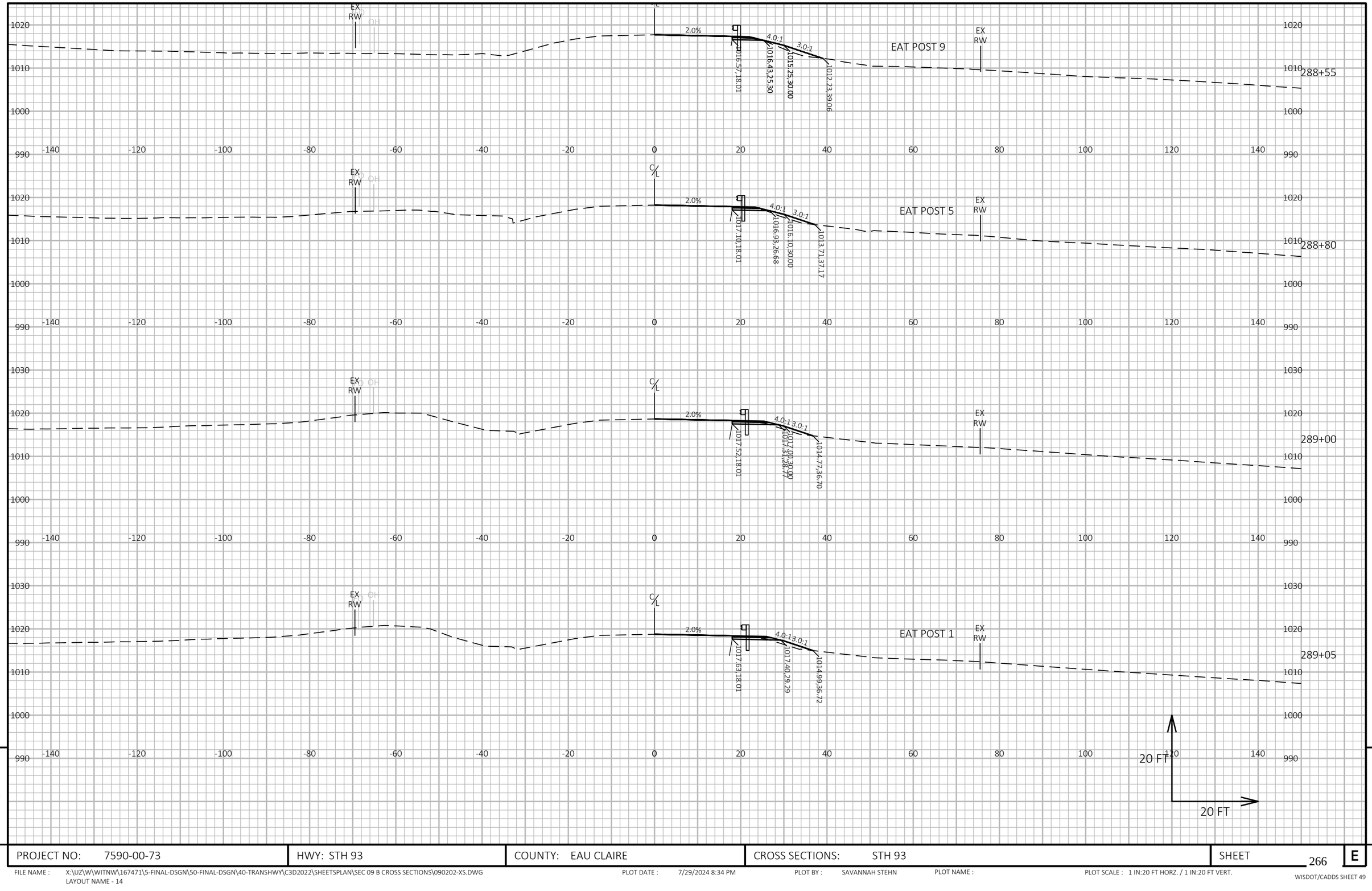
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 265	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090202-XS.DWG
LAYOUT NAME - 13

PLOT DATE : 7/29/2024 8:34 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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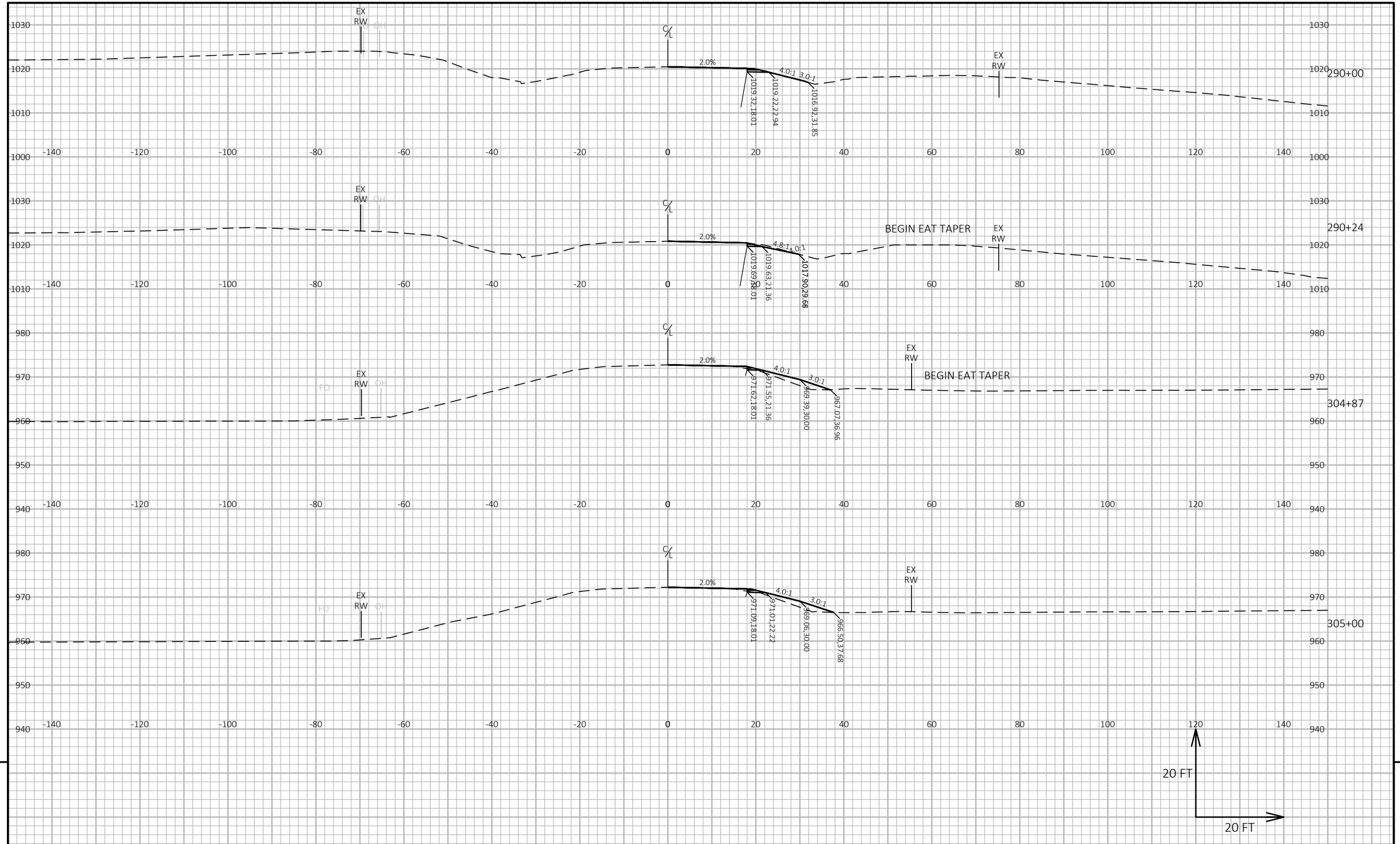
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 266	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090202-XS.DWG
LAYOUT NAME - 14

PLOT DATE : 7/29/2024 8:34 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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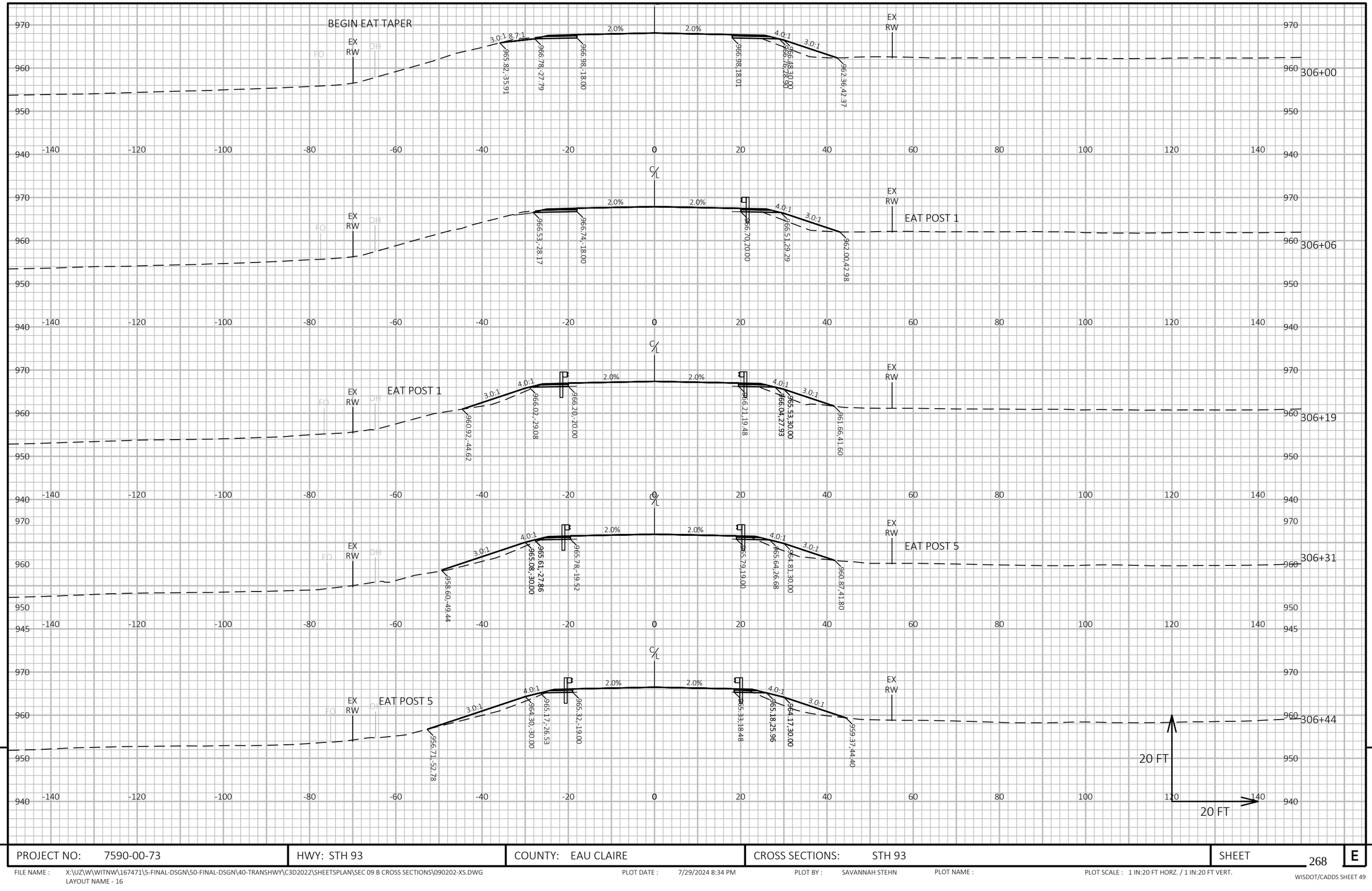
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 267	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090202-XS.DWG
LAYOUT NAME - 15

PLOT DATE : 7/29/2024 8:34 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 268	E

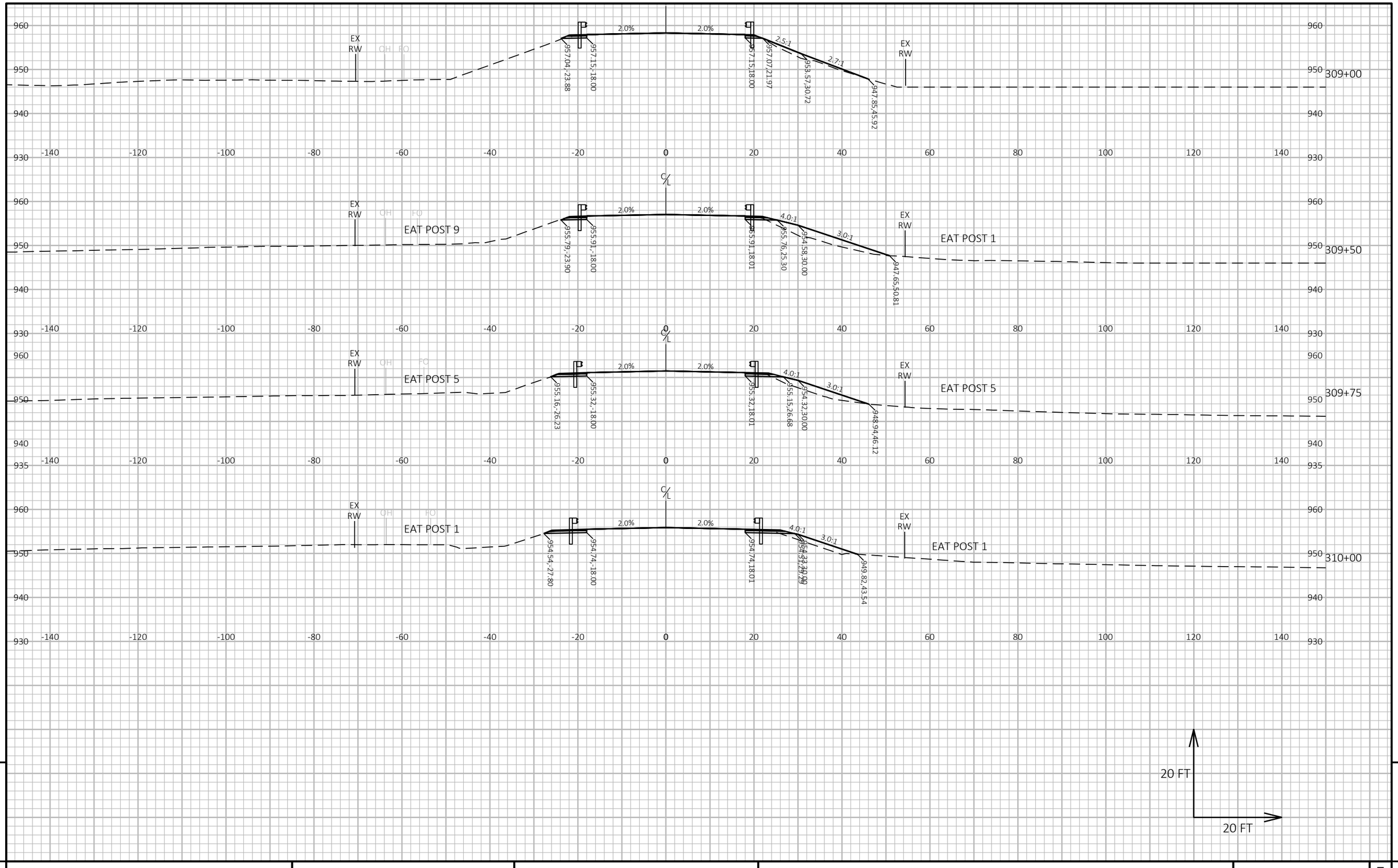
FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090202-XS.DWG
LAYOUT NAME - 16

PLOT DATE : 7/29/2024 8:34 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 269 E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090202-XS.DWG
LAYOUT NAME - 17
PLOT DATE : 7/29/2024 8:34 PM
PLOT BY : SAVANNAH STEHN
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



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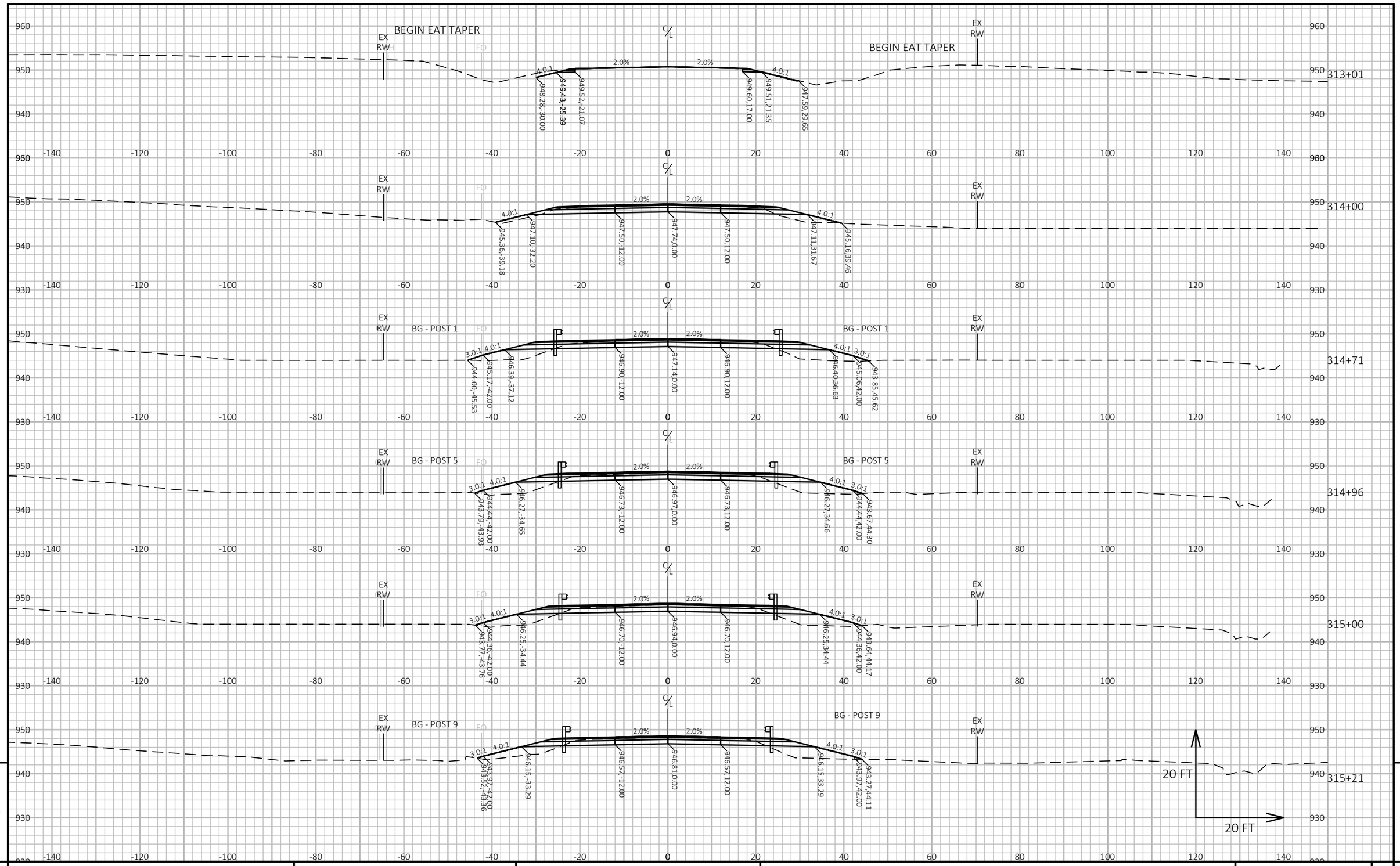
9

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 270	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090202-XS.DWG
LAYOUT NAME - 18

PLOT DATE : 7/31/2024 2:05 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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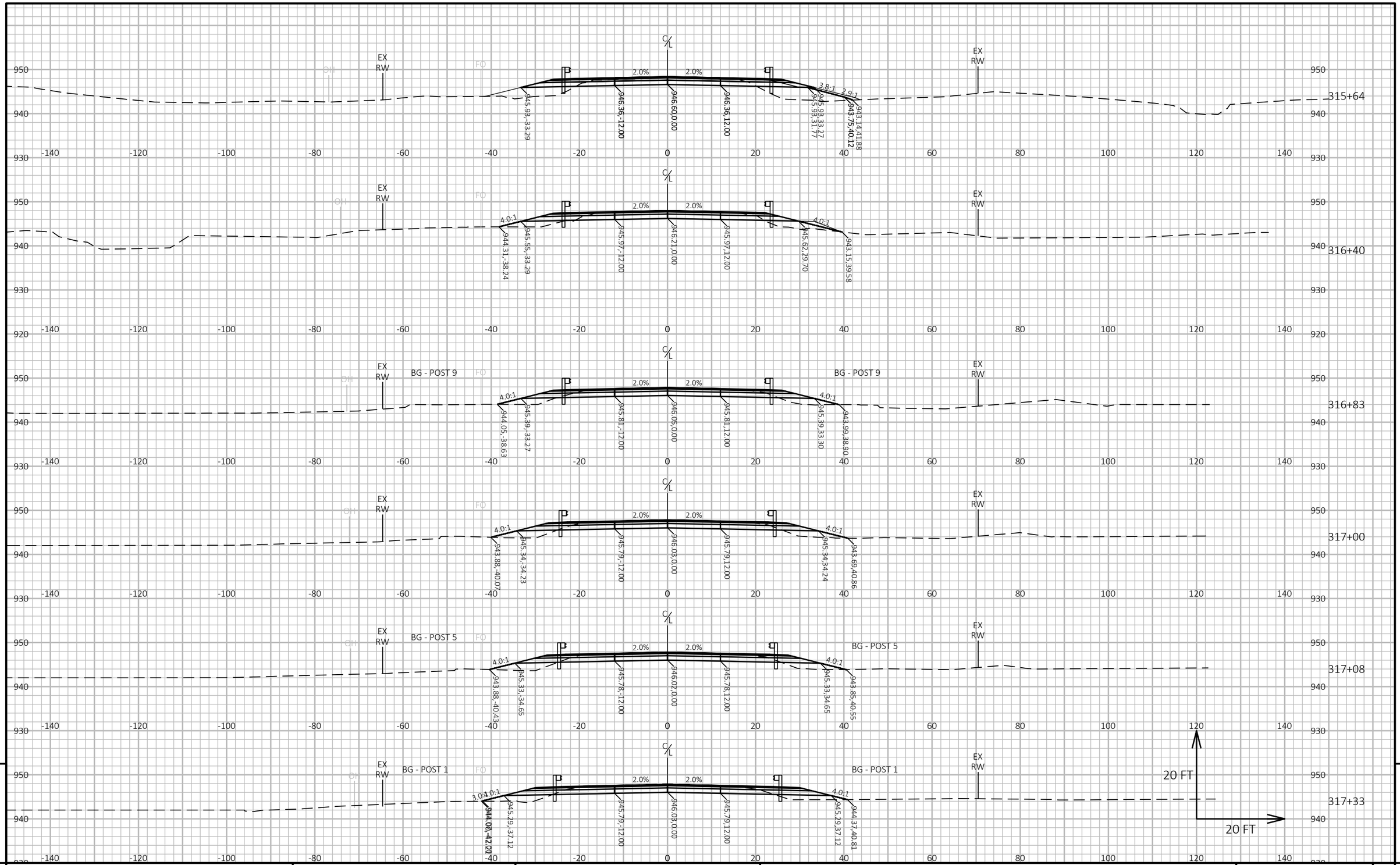
9

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: CLEAR CREEK BRIDGE B-18-241	SHEET 271	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090202-XS.DWG
LAYOUT NAME - ClearCr1

PLOT DATE : 7/29/2024 10:18 AM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



9

9

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: CLEAR CREEK BRIDGE B-18-241	SHEET 272	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090202-XS.DWG
LAYOUT NAME - ClearCr2

PLOT DATE : 7/29/2024 10:18 AM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

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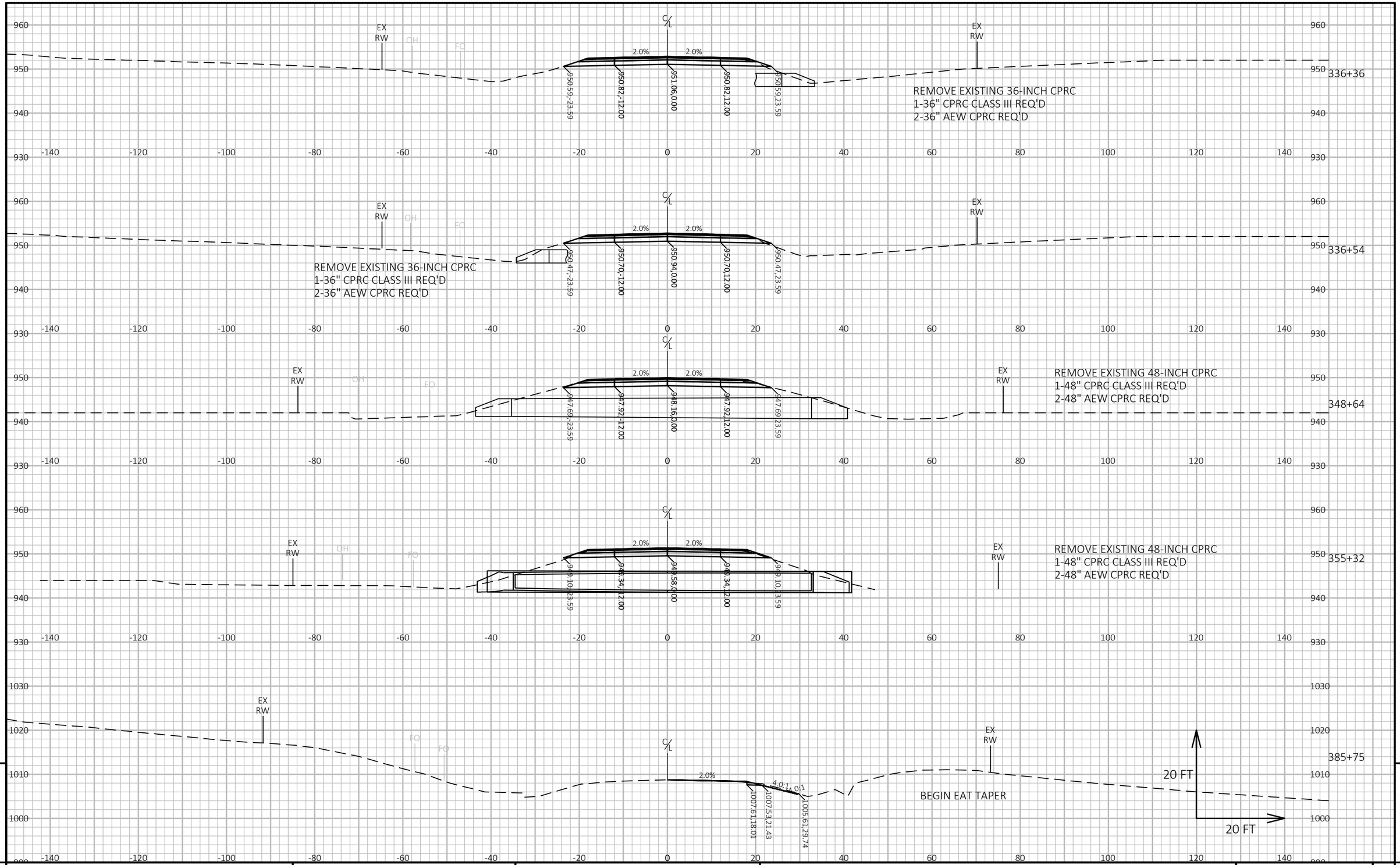
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: CLEAR CREEK BRIDGE B-18-241	SHEET 273	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090202-XS.DWG
LAYOUT NAME - ClearCr3

PLOT DATE : 7/29/2024 10:19 AM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

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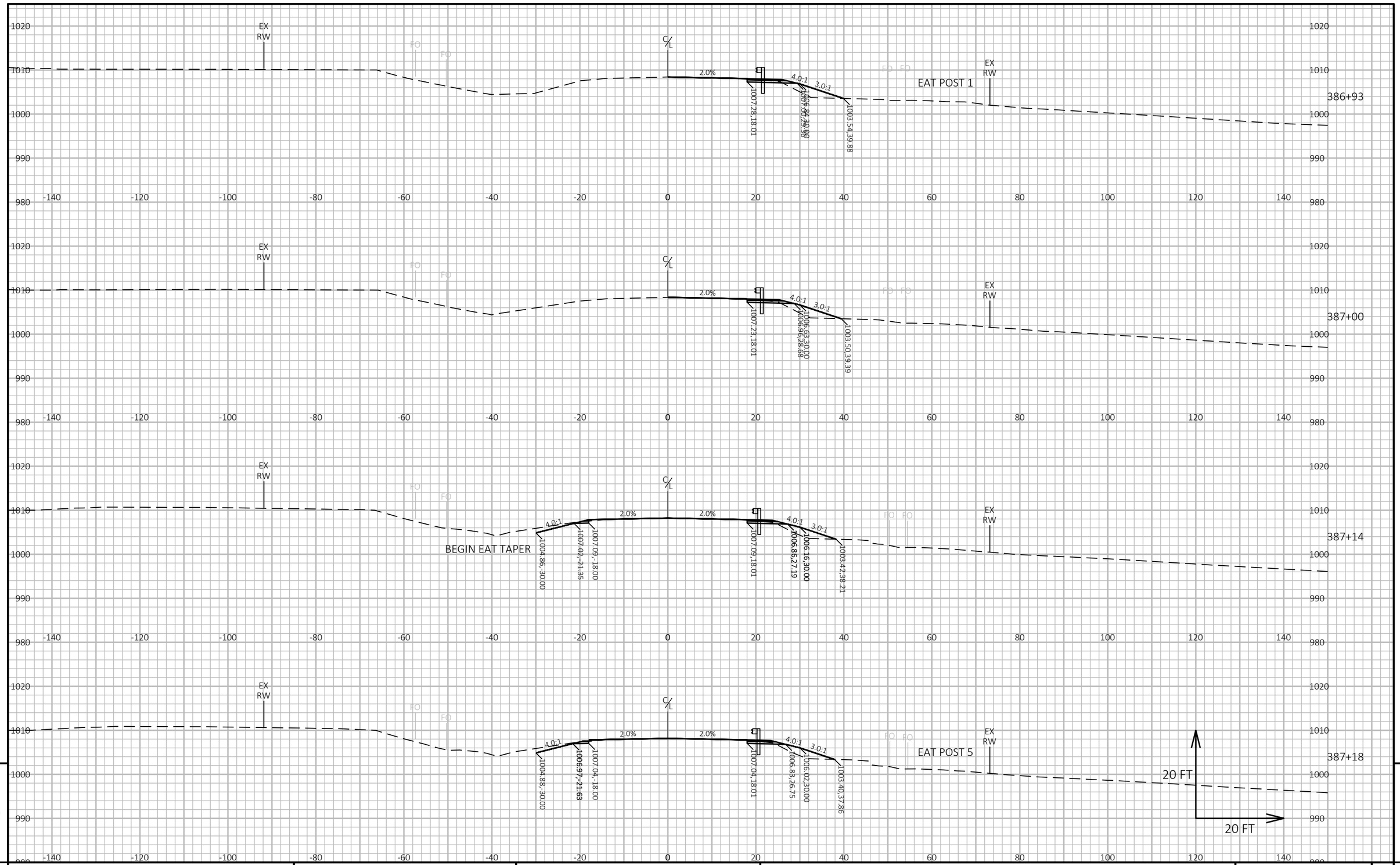
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 274	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090202-XS.DWG
LAYOUT NAME - 19

PLOT DATE : 7/31/2024 2:07 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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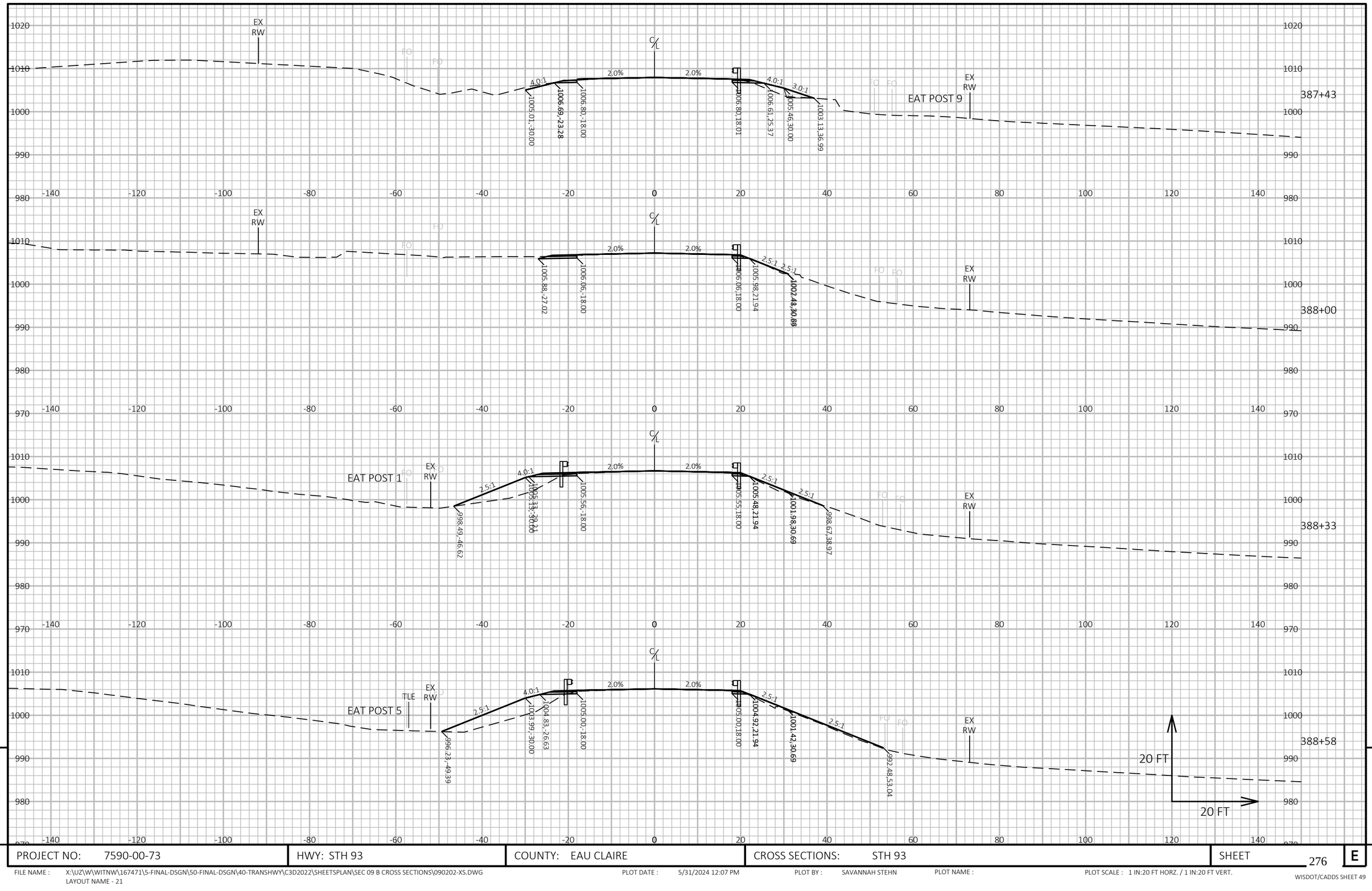
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 275	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090202-XS.DWG
LAYOUT NAME - 20
PLOT DATE : 5/31/2024 12:07 PM
PLOT BY : SAVANNAH STEHN
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



9

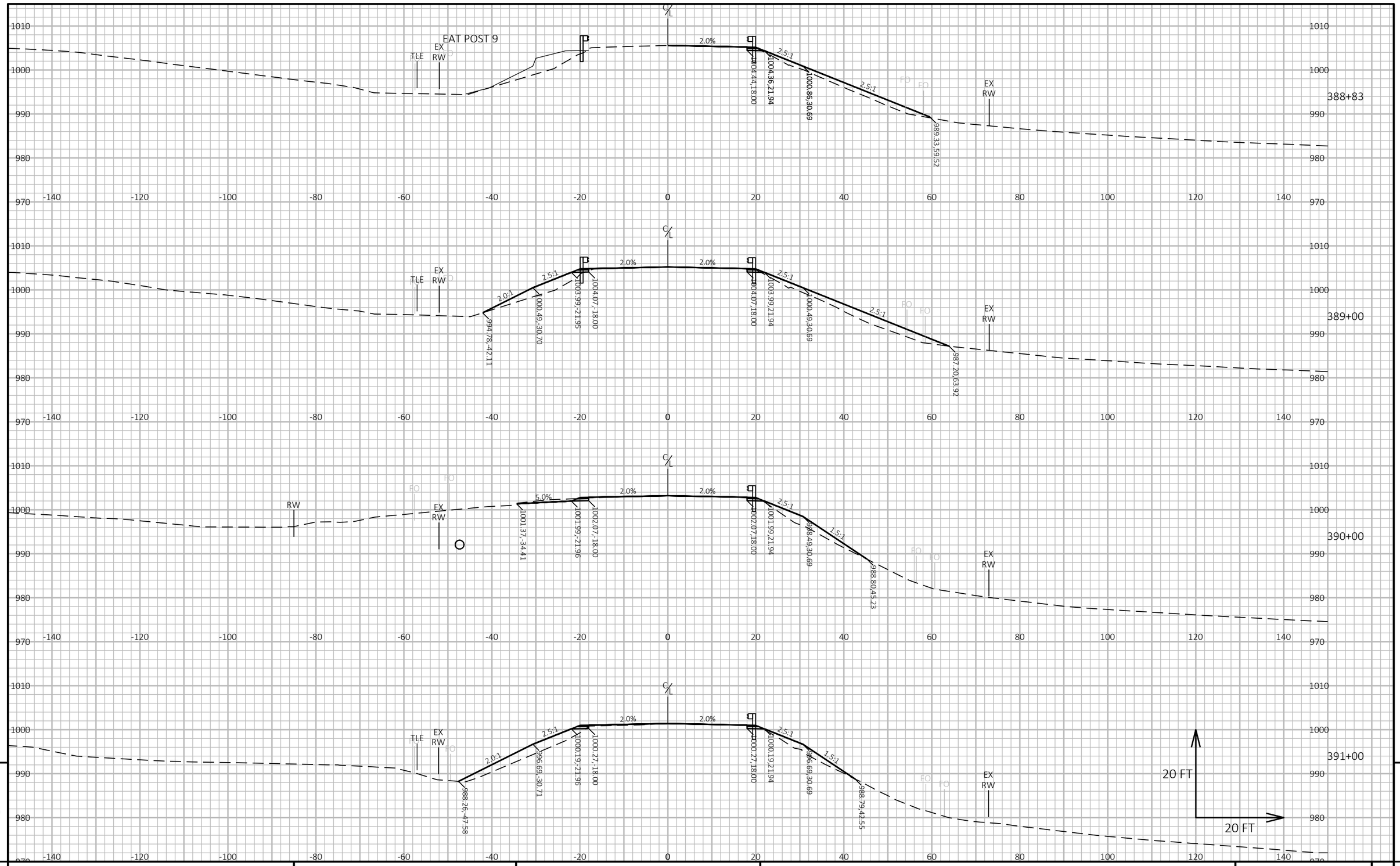
9

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 276	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090202-XS.DWG
LAYOUT NAME - 21

PLOT DATE : 5/31/2024 12:07 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

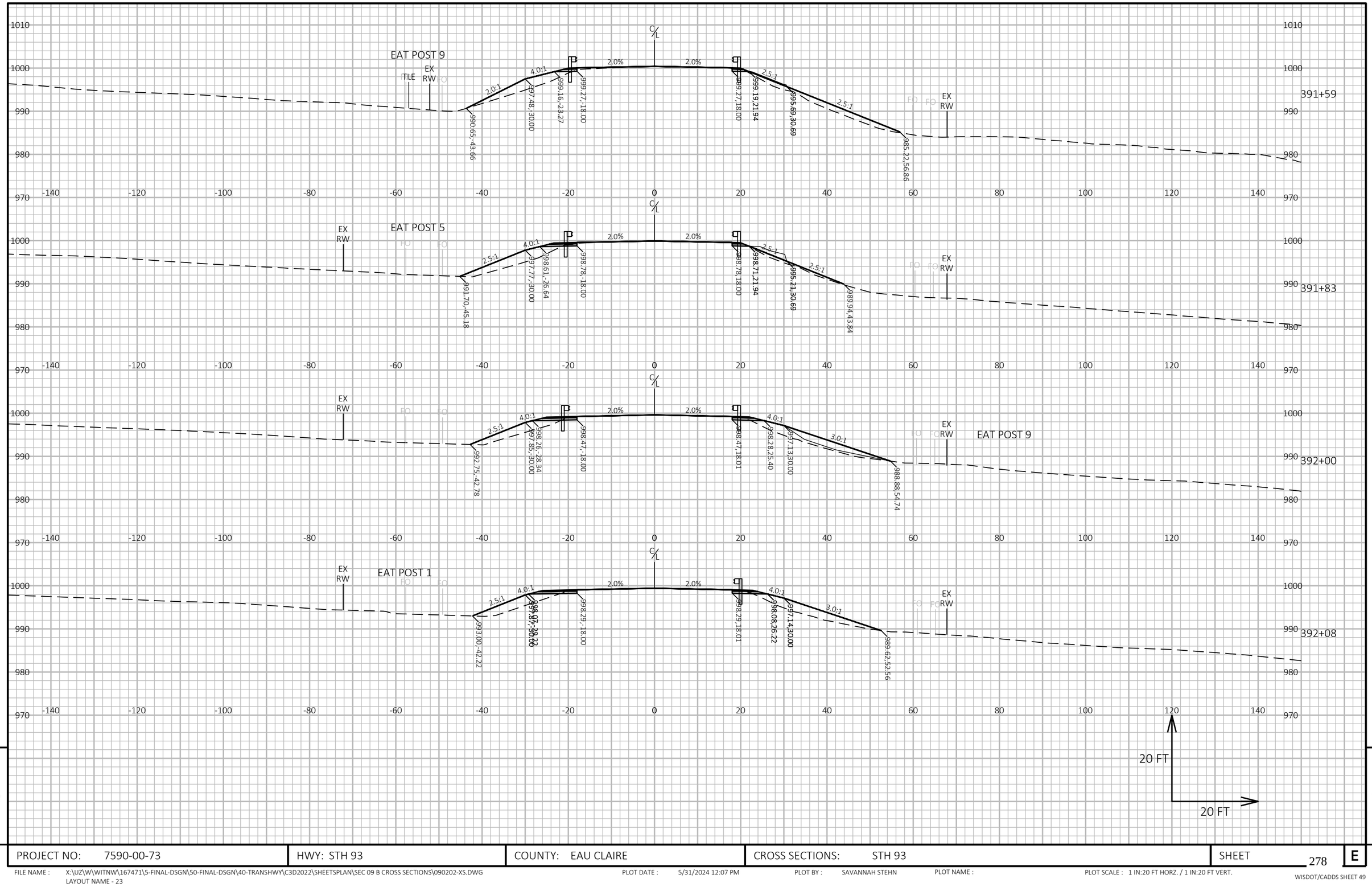


PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 277	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090202-XS.DWG
LAYOUT NAME - 22

PLOT DATE : 5/31/2024 12:07 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

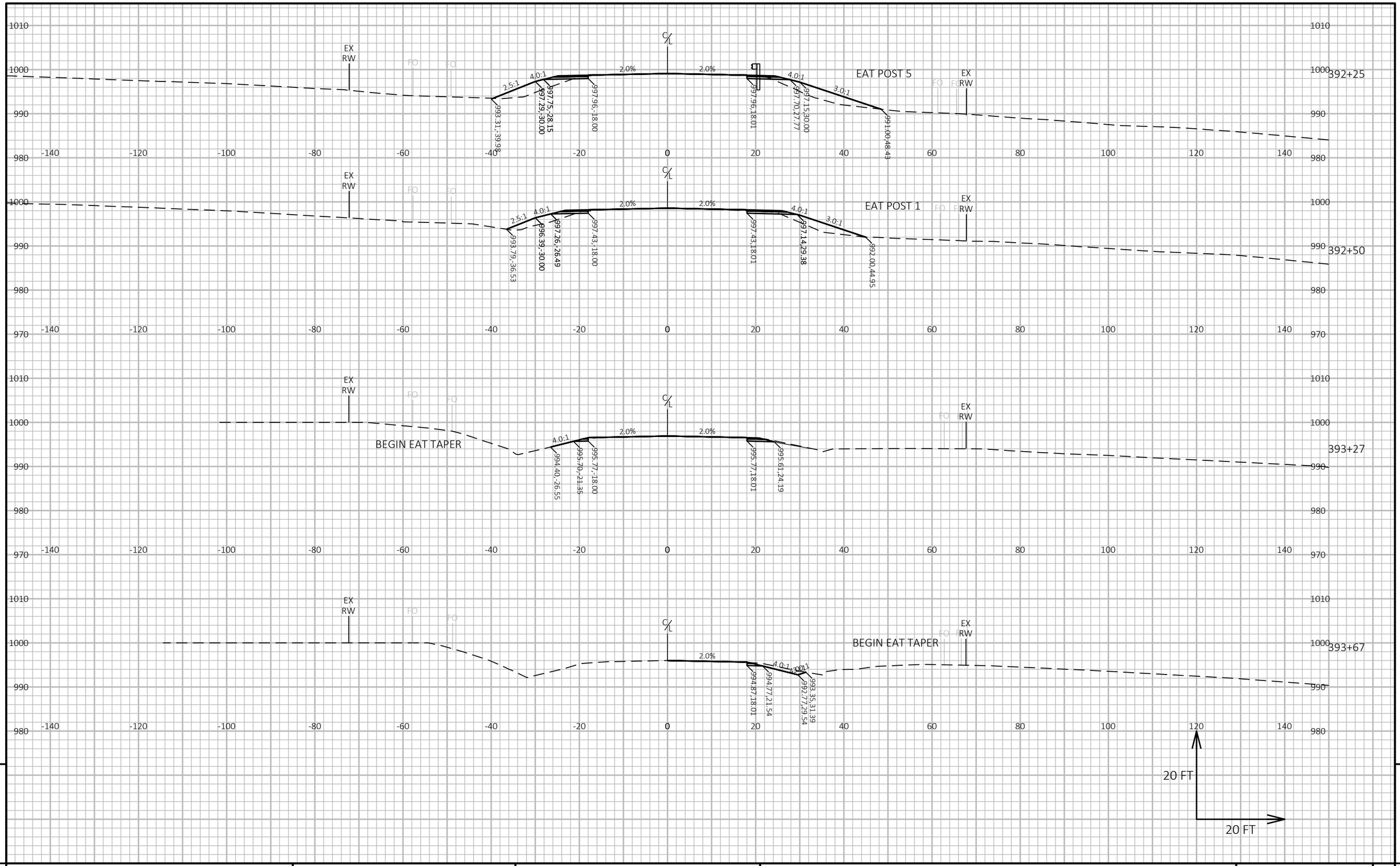


PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 278	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090202-XS.DWG
LAYOUT NAME - 23

PLOT DATE : 5/31/2024 12:07 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

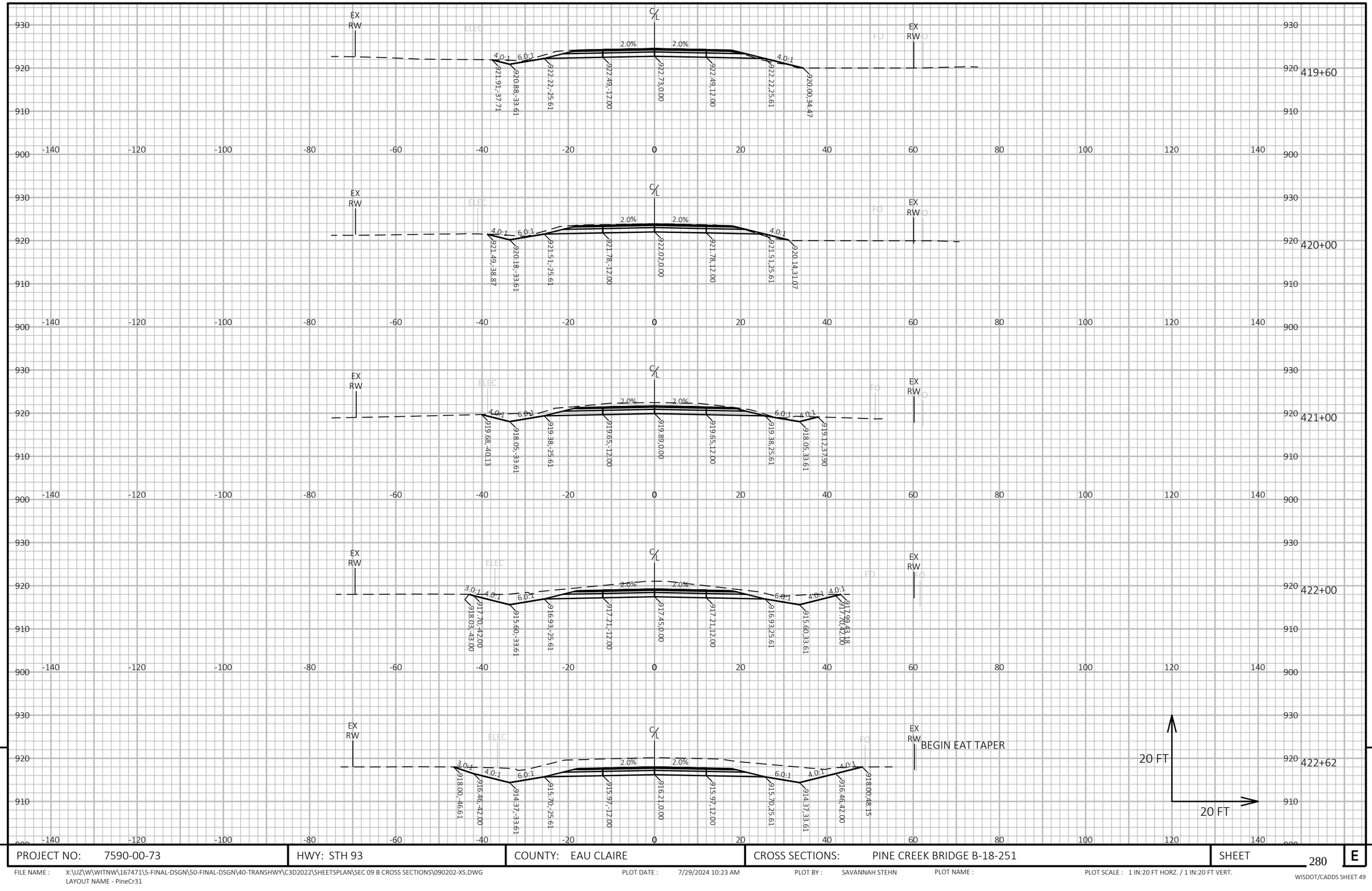


PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: STH 93	SHEET 279	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090202-XS.DWG
LAYOUT NAME - 24

PLOT DATE : 7/29/2024 8:36 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

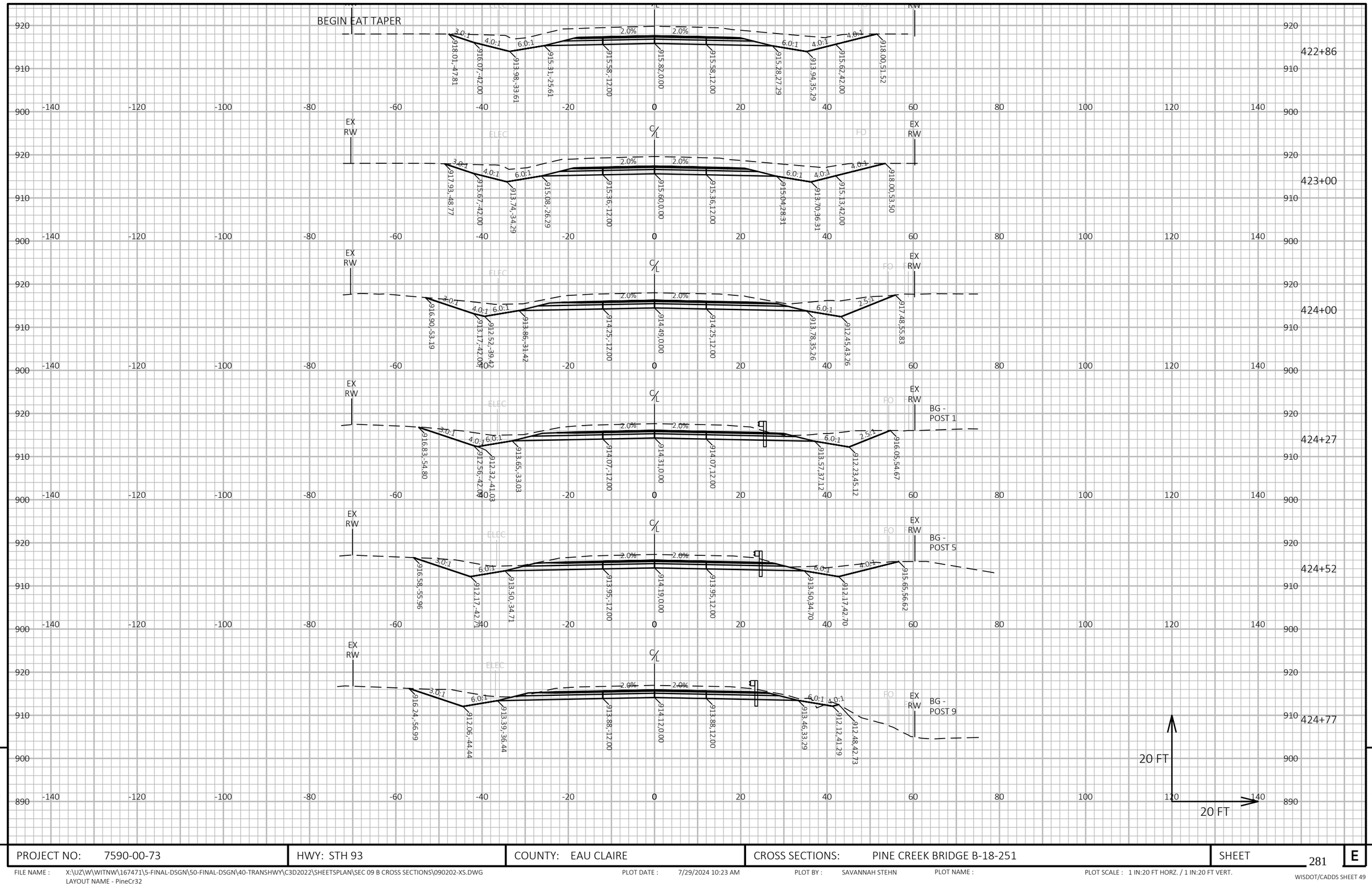


PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: PINE CREEK BRIDGE B-18-251	SHEET 280 E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090202-XS.DWG
LAYOUT NAME - PineCr31

PLOT DATE : 7/29/2024 10:23 AM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

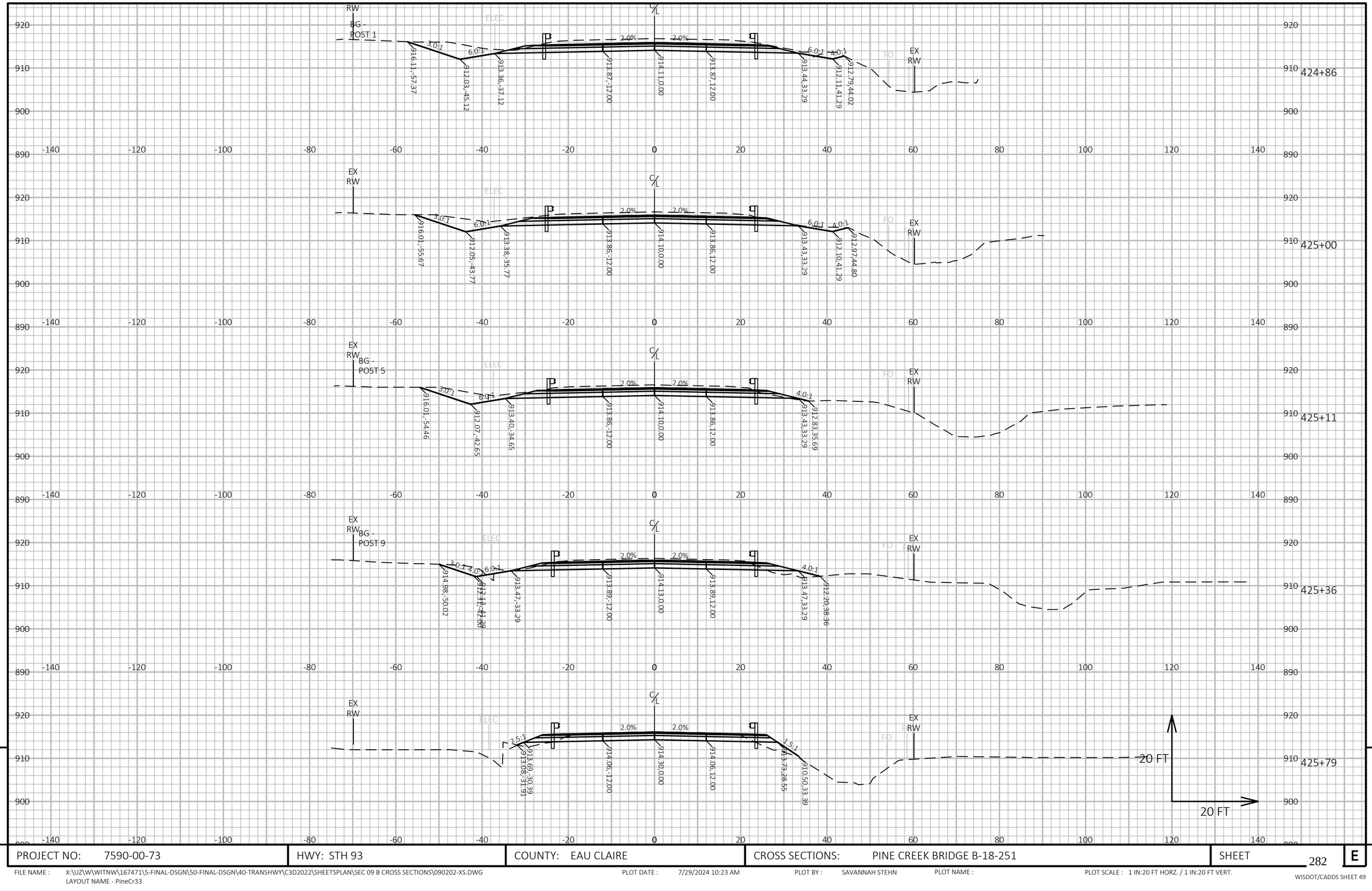


PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: PINE CREEK BRIDGE B-18-251	SHEET 281	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090202-XS.DWG
LAYOUT NAME - PineCr32

PLOT DATE : 7/29/2024 10:23 AM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: PINE CREEK BRIDGE B-18-251	SHEET 282	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090202-XS.DWG
LAYOUT NAME - PineCr33

PLOT DATE : 7/29/2024 10:23 AM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

426+55

EX RW

C/L

2.5:1 3.0:1 2.0% 2.0% 2.5:1

910.17,-44.36
911.11,-42.00
914.01,-33.29
914.44,-12.00
914.68,0.00
914.44,12.00
914.01,33.29
911.73,39.01

426+98

EX RW

BG - POST 9

C/L

3.0:1 4.0:1 2.0% 2.0% 4.0:1

911.20,-44.63
912.07,-42.00
914.25,-33.29
914.68,-12.00
914.92,0.00
914.68,12.00
914.25,33.30
911.96,42.34

427+00

EX RW

C/L

3.0:1 4.0:1 2.0% 2.0% 4.0:1

911.08,-45.02
912.09,-42.00
914.27,-33.29
914.69,-12.00
914.93,0.00
914.69,12.00
914.26,33.42
911.94,42.53

427+23

EX RW

BG - POST 5

C/L

3.0:1 4.0:1 2.0% 2.0% 4.0:1

910.85,-46.20
912.25,-42.00
914.43,-33.29
914.85,-12.00
915.09,0.00
914.85,12.00
914.40,34.66
912.62,41.77

427+32

EX RW

BG - POST 9

C/L

3.0:1 4.0:1 2.0% 2.0% 4.0:1

911.23,-45.29
912.37,-42.00
914.50,-33.29
914.93,-12.00
915.17,0.00
914.93,12.00
914.45,35.58
913.64,38.83

20 FT

20 FT

9

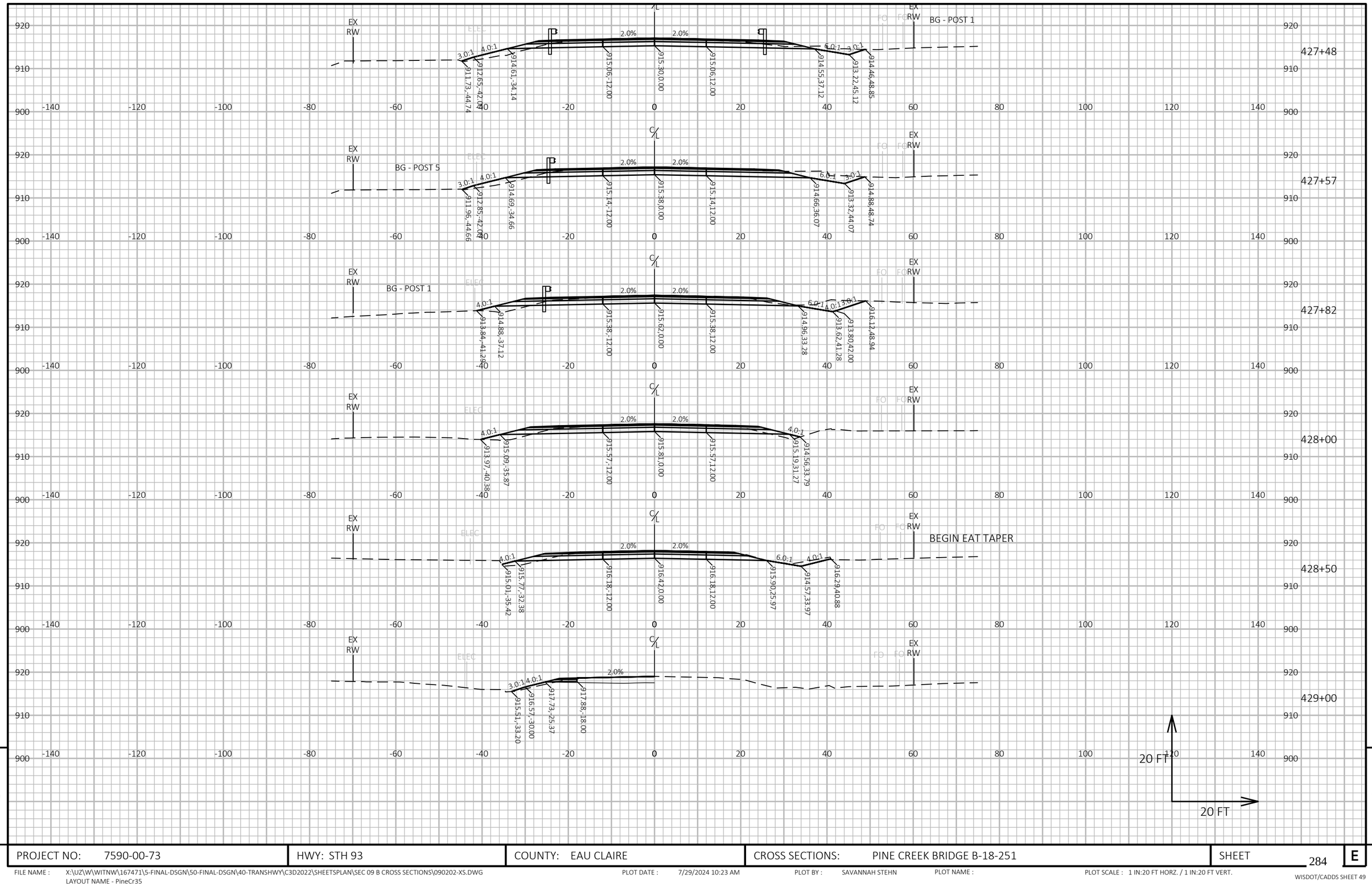
9

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: PINE CREEK BRIDGE B-18-251	SHEET 283	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090202-XS.DWG
LAYOUT NAME - PineCr34

PLOT DATE : 7/29/2024 10:23 AM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

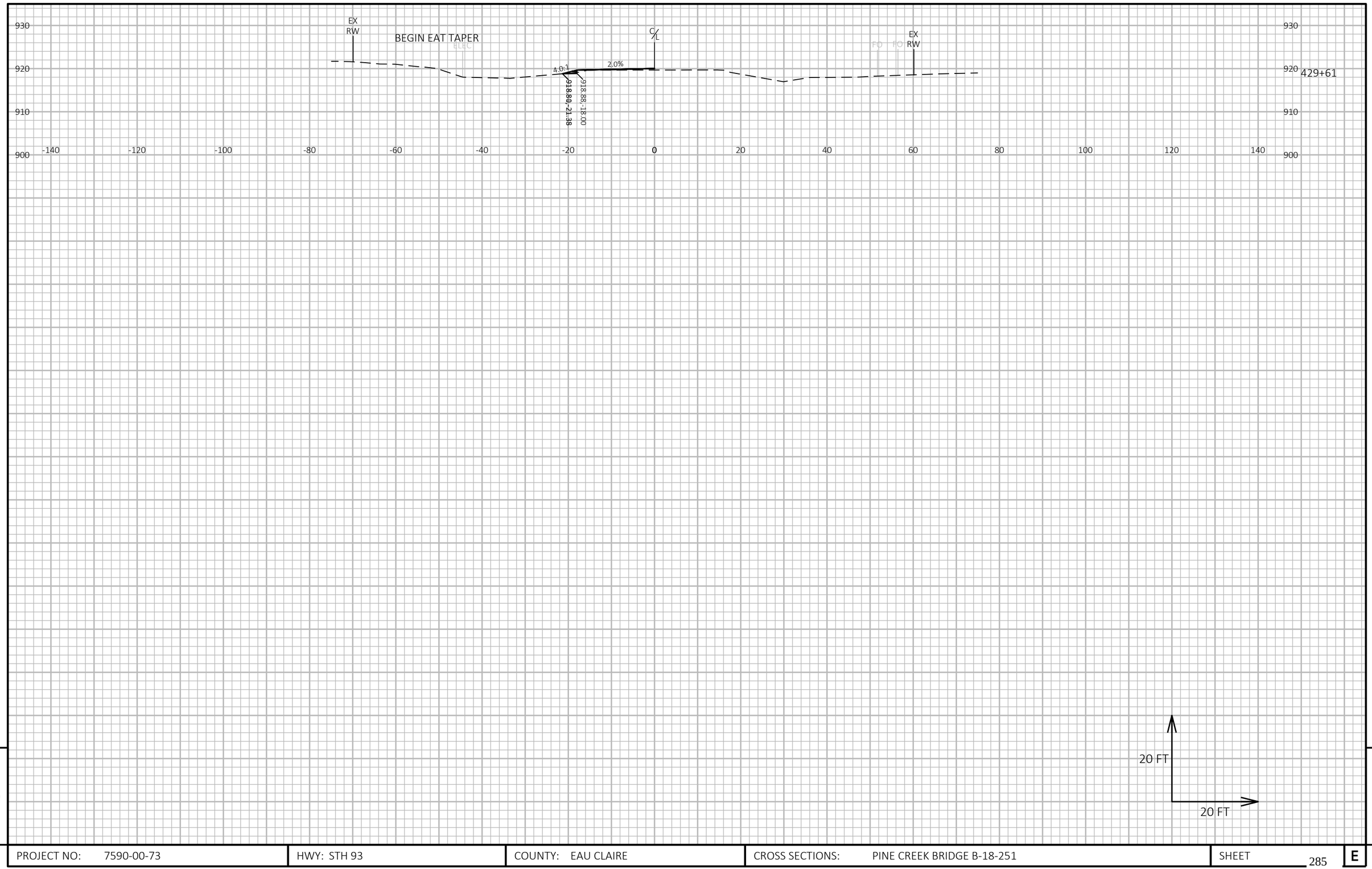


PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: PINE CREEK BRIDGE B-18-251	SHEET 284	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090202-XS.DWG
LAYOUT NAME - PineCr35

PLOT DATE : 7/29/2024 10:23 AM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



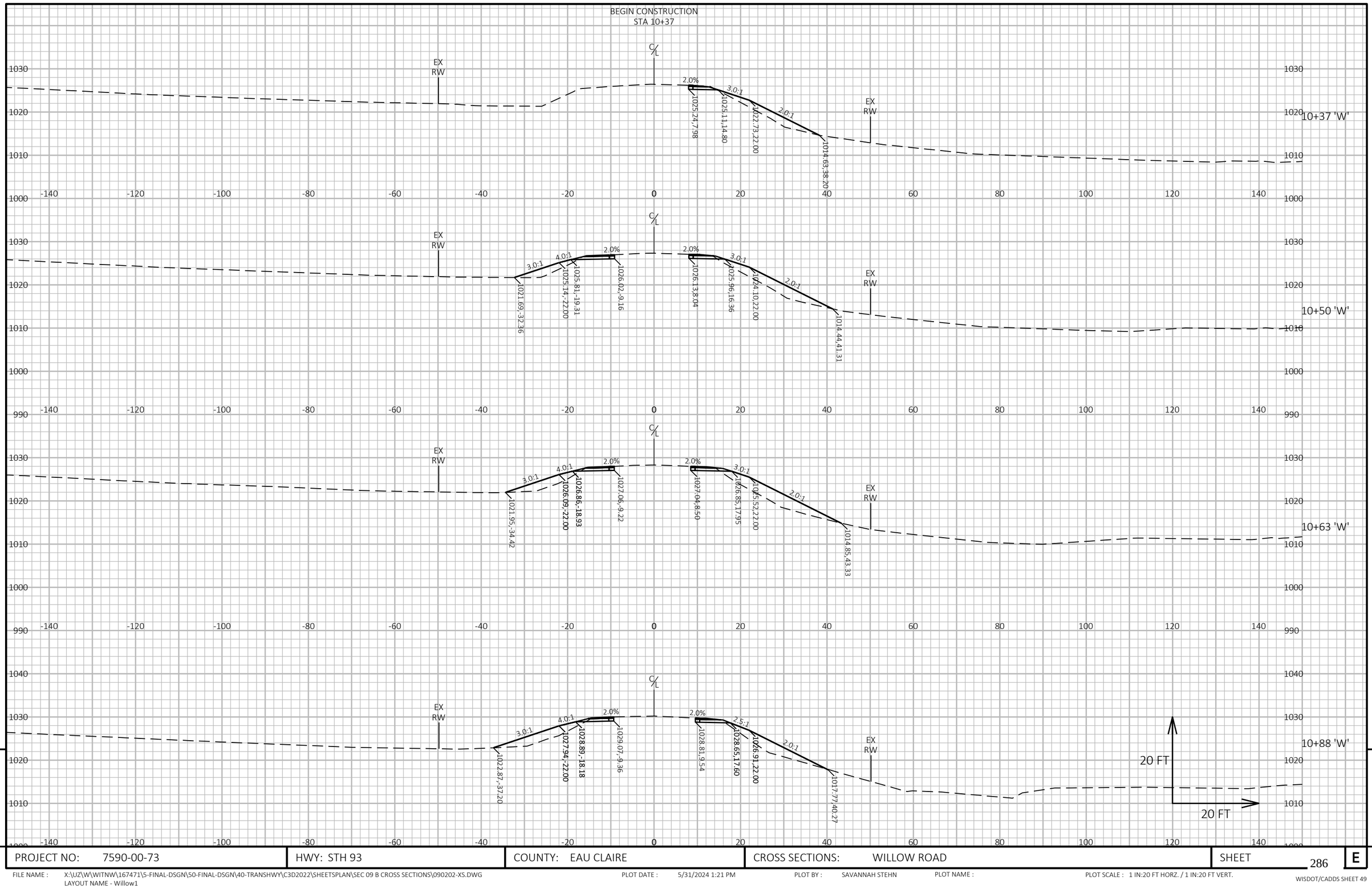
PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: PINE CREEK BRIDGE B-18-251	SHEET 285	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090202-XS.DWG
LAYOUT NAME - PineCr36

PLOT DATE : 7/29/2024 10:24 AM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

BEGIN CONSTRUCTION
STA 10+37



PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: WILLOW ROAD	SHEET 286	E

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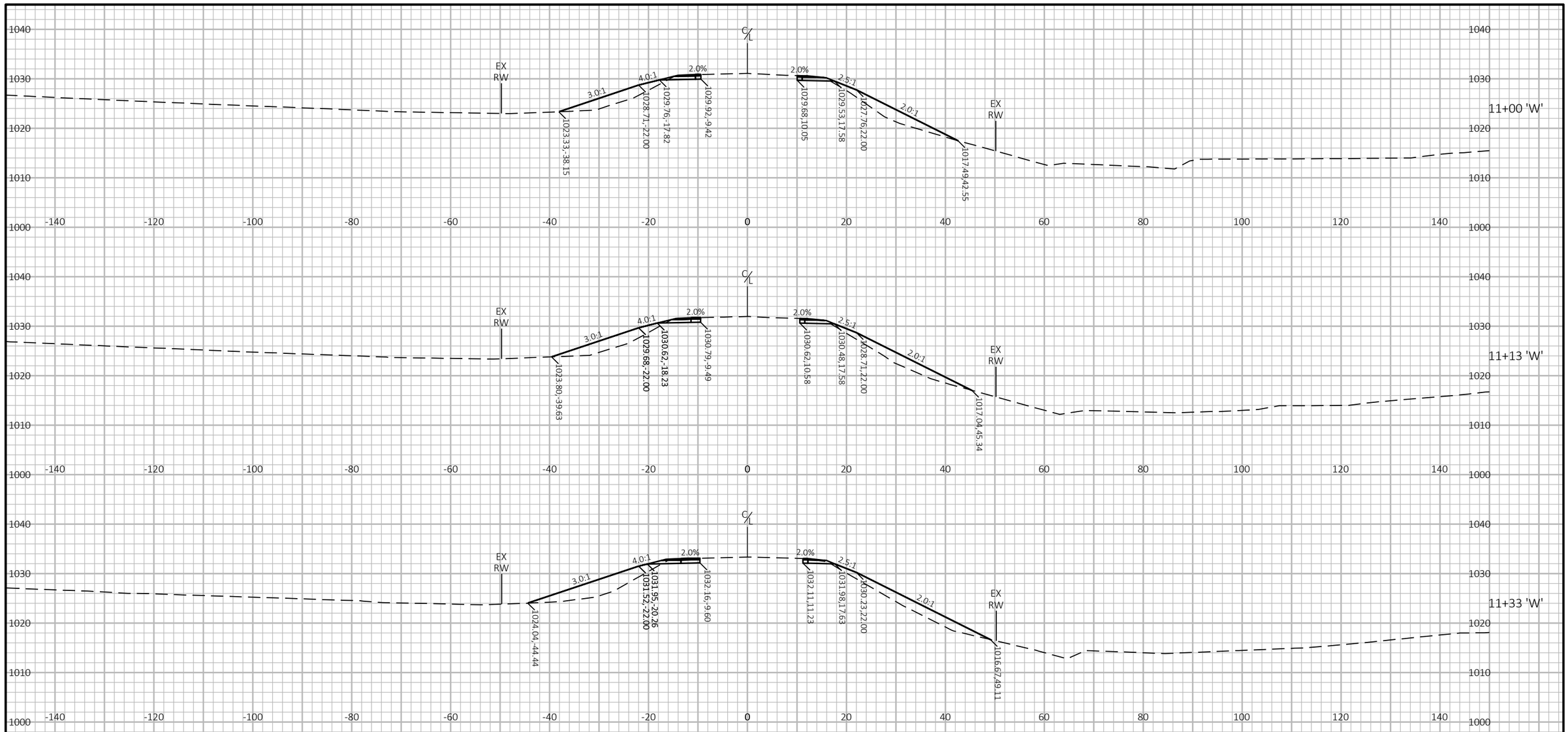
LAYOUT NAME - Willow1

PLOT DATE : 5/31/2024 1:21 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 7590-00-73	HWY: STH 93	COUNTY: EAU CLAIRE	CROSS SECTIONS: WILLOW ROAD	SHEET 287	E

FILE NAME : X:\UZ\W\WITNW\167471\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D2022\SHEETSPLAN\SEC 09 B CROSS SECTIONS\090202-XS.DWG
LAYOUT NAME - Willow2

PLOT DATE : 5/31/2024 1:22 PM PLOT BY : SAVANNAH STEHN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

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