EAU

March 09, 2021

PROJECT ID: 8949-02-61

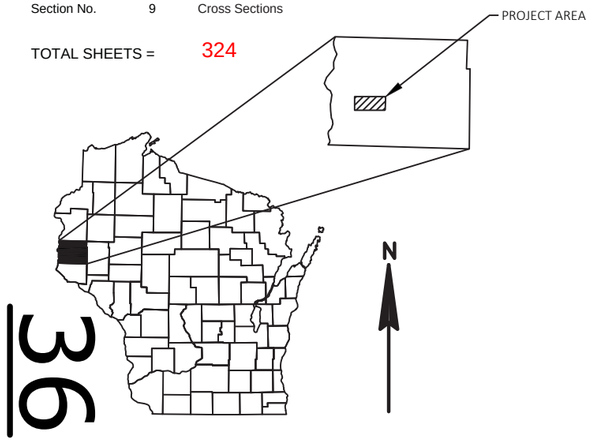
WITH: 8949-02-62

COUNTY: ST. CROIX

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 = 324



36

DESIGN DESIGNATION

A.A.D.T.	2021	=	4600
A.A.D.T.	2041	=	6000
D.H.V.		=	420
D.D.		=	60/40
T.		=	8.5 %
DESIGN SPEED		=	55 MPH
ESALS		=	1,100,000

CONVENTIONAL SYMBOLS

PLAN

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

PROFILE

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

UTILITIES

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

HUDSON-BALDWIN

CTH U TO WEST JCT STH 65

USH 12

ST. CROIX COUNTY

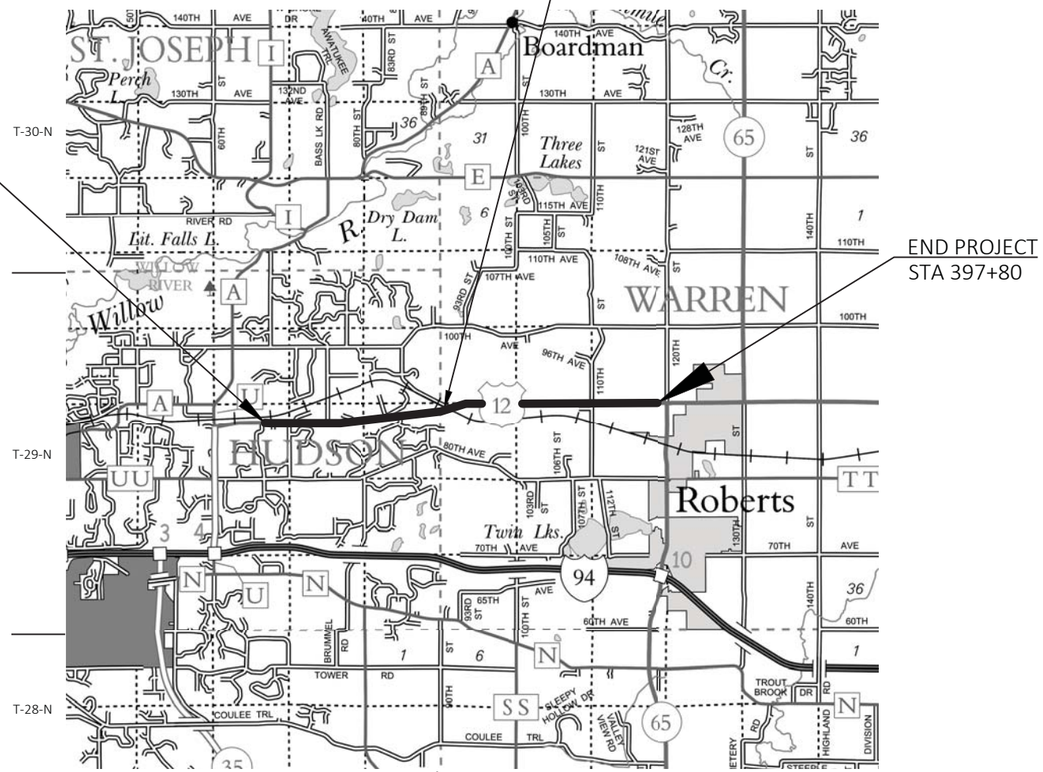
STATE PROJECT NUMBER	STATE PROJECT NUMBER
8949-02-61	8949-02-62

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
8949-02-61	WISC 2021249	1
8949-02-62	WISC 2021250	1

BEGIN PROJECT
STA 120+50
Y = 347346.521
X = 534252.463

STRUCTURE B-55-0076
EXCEPTION TO NET CENTERLINE
STA. 250+03.5 - STA. 251+87.7

END PROJECT
STA 397+80



TOTAL NET LENGTH OF CENTERLINE = 5.217 MI.

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

ORIGINAL PLANS PREPARED BY

KNIGHT Engineers & Architects
831 Critter Court
Suite 400
Onalaska, WI 54560
Phone: (608) 519-1455

WISCONSIN
RYAN B. McKANE
E-37669
HOLMEN WI.
PROFESSIONAL ENGINEER

Ryan B McKane

DATE: 1/07/2021 (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	CBS SQUARED, INC.
Designer	KNIGHT E/A INC.
Project Manager	BRETT HOLLISTER
Regional Examiner	TOU YANG
Regional Supervisor	JIM KOENIG

APPROVED FOR THE DEPARTMENT

DATE: 1/7/2021 Brett Hollister (Signature)

E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\010101_TI.DWG PLOT DATE : 1/7/2021 10:40 AM PLOT BY : KAKACEK, JOHN PLOT NAME :

STANDARD ABBREVIATIONS

AC	ACRE
AGG	AGGREGATE
AH	AHEAD
AADT	ANNUAL AVERAGE DAILY TRAFFIC
ASPH	ASPHALTIC
AVG	AVERAGE
BK	BACK
BAD	BASE AGGREGATE DENSE
BM	BENCH MARK
BR	BRIDGE
CL or C/L	CENTER LINE
CE	COMMERCIAL ENTRANCE
CONC	CONCRETE
CO	COUNTY
CTH	COUNTY TRUNK HIGHWAY
CR	CREEK
CABC	CRUSHED AGGREGATE BASE COURSE
CSD	COMMUNITY SENSITIVE DESIGN
CY or CUYD	CUBIC YARD
CULV	CULVERT
CP	CULVERT PIPE
C & G	CURB AND GUTTER
D	DEGREE OF CURVE
DIA	DIAMETER
DISCH	DISCHARGE
E	EAST
EB	EASTBOUND
EL or ELEV	ELEVATION
EW	ENDWALL
ENT	ENTRANCE
EXC	EXCAVATION
EX	EXISTING
FERT	FERTILIZER
FE	FIELD ENTRANCE
FL or F/L	FLOW LINE
FT	FOOT
HE	HIGHWAY EASEMENT
HMA	HOT MIX ASPHALT
CWT	HUNDREDWEIGHT
INL	INLET
INV	INVERT
JCT	JUNCTION
LT	LEFT
L	LENGTH OF CURVE
LIN FT or LF	LINEAR FOOT
LS	LUMP SUM
NC	NORMAL CROWN
N	NORTH
NB	NORTHBOUND
NO	NUMBER
PT	POINT
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PT	POINT OF TANGENCY
PCC	PORTLAND CEMENT CONCRETE
LB	POUND
PE	PRIVATE ENTRANCE
R	RADIUS
RL or R/L	REFERENCE LINE
RT	RIGHT
R/W	RIGHT-OF-WAY
RD	ROAD
SHLDR	SHOULDER
SB	SOUTHBOUND
SF or SQ FT	SQUARE FEET
SY or SQ YD	SQUARE YARD
SDD	STANDARD DETAIL DRAWINGS
STH	STATE TRUNK HIGHWAYS
SE	SUPERELEVATION
T	TANGENT
TEMP	TEMPORARY
TWLTL	TWO-WAY LEFT-TURN LANE
UG	UNDERGROUND
USH	UNITED STATES HIGHWAY
V	VELOCITY OR DESIGN SPEED
VC	VERTICAL CURVE
WB	WESTBOUND
YD	YARD

GENERAL NOTES

- NO TREES OR SHRUBS SHALL BE REMOVED UNLESS SUCH TREES OR SHRUBS HAVE BEEN DESGINATED FOR REMOVAL BY THE ENGINEER.
- DISTURBED AREAS WITHIN THE RIGHT OF WAY ARE TO BE SALVAGED TOPSOILED, FERTILIZED, SEEDED, AND MULCHED OR SODDED AS DIRECTED BY THE ENGINEER.
- MATCH EXISTING DRIVEWAYS WITH IN-KIND MATERIALS.
- PAVING LIMITS ARE TO BE DETERMINED BY THE ENGINEER.
- TACK COAT SHALL BE REQUIRED BETWEEN THE MILLED PAVEMENT AND ASPHALTIC SURFACE.
- THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLAN ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
- HMA PAVEMENT OVER MILLED SURFACE TO BE PLACED IN TWO LIFTS: LOWER 1 3/4", UPPER 1 1/2".
- AT CULVERT REPLACEMENT LOCATIONS ASPHALTIC SURFACE OVER BASE AGGREGATE TO BE PLACED IN TWO LIFTS: LOWER 3", UPPER 2 1/2". FINAL GRADE TO MATCH PROPOSED MILLED PAVEMENT ELEVATION.
- SURFACE WEIGHT CALCULATIONS ARE BASED ON 115 LB/SY/IN.
- TACK COAT APPLICATION RATE IS BASED ON 0.06 GAL/SY
- WHEN THE QUANTITIY OF BASE AGGREGATE IS MEASURED FOR PAVEMENT BY THE TON OR CUBIC YARD, THE DEPTH OR THICKNESS OF THE LAYER SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.
- ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988.
- PAVEMENT MARKING PLANS ARE NOT PROVIDED. FOR C/L AND LANE LINE MARKINGS REFER TO SDD LONGITUDINAL MARKING (MAINLINE), SDD PAVEMENT MARKING (TURN LANES), AND MISCELLANEOUS QUANTITIES FOR DETAILS
- PAVE CONCRETE PAVEMENT 10-INCH A FULL 15 FEET WIDE WITH NO LONGITUDINAL JOINT AT EDGELINE.

PAVEMENT STRUCTURE BORING LOG

- BORING #1, STA. 122+10±, 5' RT OF ℄, 6.5" OF ASPHALT OVER 3.5" OF SILTY SAND OVER 4" OF CONCRETE
- BORING #2, STA. 135+10±, 5' LT OF ℄, 6.5" OF ASPHALT OVER 5" OF SILTY SAND OVER UNDETERMINED DEPTH OF CONCRETE
- BORING #3, STA. 149+00±, 5' RT OF ℄, 8.5" OF ASPHALT OVER 3.5" OF SILTY SAND OVER 5" OF CONCRETE
- BORING #4, STA. 160+30±, 5' LT OF ℄, 6" OF ASPHALT OVER 5" OF SILTY SAND OVER UNDETERMINED DEPTH OF CONCRETE
- BORING #5, STA. 175+10±, 5' RT OF ℄, 8" OF ASPHALT OVER 7" OF SILTY SAND OVER 6" OF CONCRETE
- BORING #6, STA. 186+70±, 5' LT OF ℄, 4.5" OF ASPHALT OVER 2.5" OF SILTY SAND OVER 13.5" OF CONCRETE
- BORING #7, STA. 200+00±, 5' RT OF ℄, 6" OF ASPHALT OVER 2.5" OF SILTY SAND OVER 2" OF CONCRETE
- BORING #8, STA. 214+70±, 5' LT OF ℄, 4" OF ASPHALT OVER 3.5" SILTY SAND OVER UNDETERMINED DEPTH OF CONCRETE
- BORING #9, STA. 227+30±, 5' RT OF ℄, 8" OF ASPHALT OVER 3" OF AGGREGATE BASE OVER 5" OF CONCRETE
- BORING #10, STA. 240+00±, 5' LT OF ℄, 3" OF ASPHALT OVER 3.5" OF SILTY SAND OVER UNDETERMINED DEPTH OF CONCRETE
- BORING #11, STA. 255+10±, 5' RT OF ℄, 7" OF ASPHALT OVER 2.5" OF SILTY SAND OVER 4" OF CONCRETE
- BORING #12, STA. 265+90±, 5' LT OF ℄, 9.5" OF ASPHALT OVER 7" OF SILTY SAND OVER UNDETERMINED DEPTH OF CONCRETE
- BORING #13, STA. 279+80±, 5' RT OF ℄, 3" OF ASPHALT OVER 3" OF AGGREGATE BASE OVER 7" OF CONCRETE
- BORING #14, STA. 290+70±, 5' LT OF ℄, 5.5" OF ASPHALT OVER 2" OF SILTY SAND OVER UNDETERMINED DEPTH OF CONCRETE
- BORING #15, STA. 304+10±, 5' RT OF ℄, 5" OF ASPHALT OVER 2.5" OF SILTY SAND OVER 9" OF CONCRETE
- BORING #16, STA. 317+20±, 5' LT OF ℄, 4" OF ASPHALT OVER 6" OF SILTY SAND OVER UNDETERMINED DEPTH OF CONCRETE
- BORING #17, STA. 329+00±, 5' RT OF ℄, 6" OF ASPHALT OVER 3.5" OF SILTY SAND OVER 7" OF CONCRETE
- BORING #18, STA. 342+70±, 5' LT OF ℄, 4" OF ASPHALT OVER 5" OF SILTY SAND OVER UNDETERMINED DEPTH OF CONCRETE
- BORING #19, STA. 356+40±, 5' RT OF ℄, 5" OF ASPHALT OVER 3.5" OF SILTY SAND OVER UNDETERMINED DEPTH OF CONCRETE
- BORING #20, STA. 369+00±, 5' LT OF ℄, 4.5" OF ASPHALT OVER 3.5" SILTY SAND OVER UNDETERMINED DEPTH OF CONCRETE
- BORING #21, STA. 380+50±, 5' RT OF ℄, 5" OF ASPHALT OVER 2.5" OF SILTY SAND OVER UNDETERMINED DEPTH OF CONCRETE
- BORING #22, STA. 393+90±, 5' LT OF ℄, 8" OF ASPHALT OVER 2.5" OF SILTY SAND OVER 5.5" OF CONCRETE

** FOR ADDITIONAL INFORMATION FROM THE GEOTECHNICAL REPORT, CONTACT JOHN KAKACEK AT KNIGHT E/A, INC.

2

AREA CONTACTS

WISDOT PROJECT MANAGER
BRETT HOLLISTER, PE
(715) 834-3161
HOLLISTERB@AYRESASSOCIATES.COM

DESIGN CONTACT
KNIGHT E/A, INC.
JOHN KAKACEK
831 CRITTER COURT, SUITE 400
ONALASKA, WI 54650
(608) 519-1455
JKAKACEK@KNIGHTEA.COM

WISDNR: ST. CROIX COUNTY
AMY LESIK
1300 WEST CLAIREMONT AVENUE
EAU CLAIRE, WI 54701
(715) 836-6571
AMYL.LESIK@WISCONSIN.GOV

ST. CROIX COUNTY HIGHWAY DEPARTMENT
ROBBIE KREJCI
920 THIRD STREET, P.O. BOX 108
HAMMOND, WI 54015
(715) 245-4201
ROBBIE.KREJCI@SCCWI.GOV

TOWN OF HUDSON
TOWN BOARD CHAIRMAN
JEFF JOHNSON
1016 TROUT BROOK ROAD
HUDSON, WI, 54016
(715) 386-8086
TOWNOFHUDSON@BALDWIN-TELECOM.COM

TOWN OF WARREN
TOWN SUPERVISOR
GERALD MUELLER
(715) 220-6683
TOWNWARREN2@ATT.NET

ORDER OF TYPICAL SECTION & DETAIL SHEETS

1. GENERAL NOTES
2. PROJECT OVERVIEW
3. TYPICAL SECTIONS
4. CONSTRUCTION DETAILS
5. EROSION CONTROL
6. DETOUR PLAN
7. ALIGNMENT DETAIL

2

UTILITY CONTACTS

AT&T WISCONSIN
RICK PODOLAK
304 SOUTH DEWEY STREET
EAU CLAIRE, WI 54701
RICK.T.PODOLAK@ATT.COM
(715) 839-5565

MIDWEST NATURAL GAS INC.
RICK SCHERMERHORN
3600 STATE HIGHWAY 157, P.O. BOX 429
LA CROSSE, WI 54602
RICKS@MIDWESTNATURALGAS.COM
(608) 781-1011

XCEL ENERGY - ELECTRICITY
DARREN NORDSKOG
2001 OLD HIGHWAY 35 S.
HUDSON, WI 54016
DARREN.M.NORDSKOG@XCELENERGY.COM
715-410-3755

BALDWIN TELECOM, INC.
MATT KNEGENDORF
930 MAPLE STREET
BALDWIN, WI 54002
MKNEGENDORF@LSWI.NET
(715) 688-1034

SPRINT COMMUNICATIONS CO LP
DAN HILLIARD
849 EARL STREET
SAINT PAUL, MN 55106
DAN.J.HILLIARD@SPRINT.COM
(612) 217-3526

XCEL ENERGY - GAS
DARREN NORDSKOG
2001 OLD HIGHWAY 35 S.
HUDSON, WI 54016
DARREN.M.NORDSKOG@XCELENERGY.COM
715-410-3755

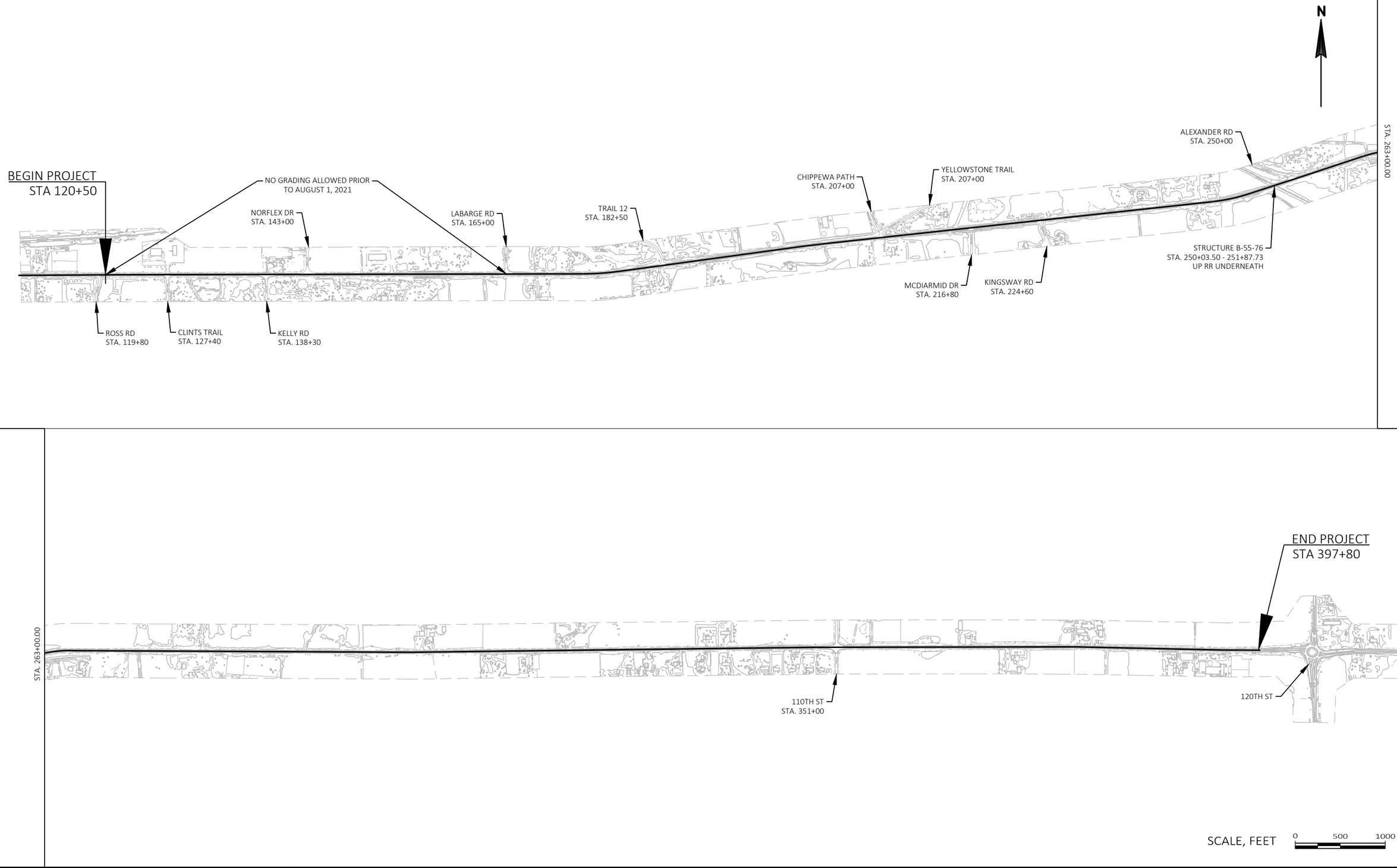
CENTURYLINK COMMUNICATIONS, LLC
BOB STRONG
5480 FELTL ROAD
MINNETONKA, MN 55343
BOB.STRONG@CENTURYLINK.COM
(952) 351-2353

LEVEL 3 COMMUNICATIONS LLC

1025 ELDORADO BLVD
BROOMFIELD, CO 80021 -8869
NATIONALRELO@CENTURYLINK.COM

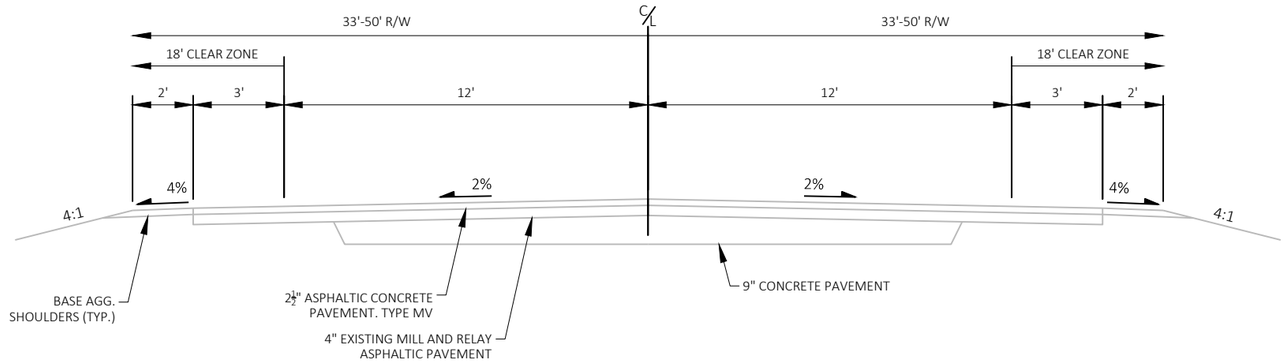
VERIZON BUSINESS COMMUNICATIONS
RJ CICATELLO
15725 RYERSON RD
NEW BERLIN, WI 53151
RANDY.CICATELLO@VERIZON.COM
262-232-1323

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



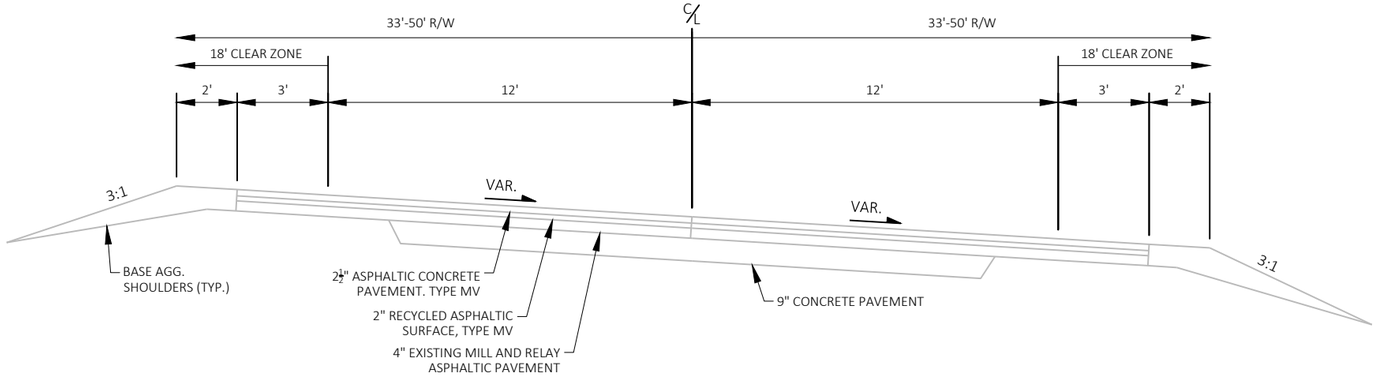
PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	PROJECT OVERVIEW	SHEET 4	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\020201_PO.DWG
LAYOUT NAME - Plan 1 IN 2000 FT
PLOT DATE : 1/7/2021 2:26 PM
PLOT BY : KAKACEK, JOHN
PLOT NAME :
PLOT SCALE : 1 IN:1000 FT
WISDOT/CADDS SHEET 42



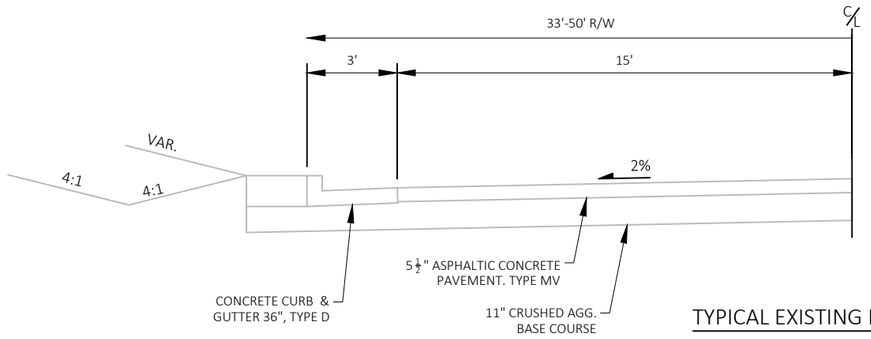
TYPICAL EXISTING SECTION*

STA. 120+50 TO STA. 173+52
STA. 177+34 TO STA. 243+92
STA. 247+89 TO STA. 261+34
STA. 265+97 TO STA. 397+80



TYPICAL EXISTING SUPERELEVATED SECTION*

STA. 173+52 TO STA. 177+34
STA. 243+92 TO STA. 247+89
STA. 261+34 TO STA. 265+97



TYPICAL EXISTING HALF SECTION*

STA. 304+75 TO 306+50 LT

* SEE PAVEMENT STRUCTURE BORING LOG FOR ADDITIONAL INFORMATION ON PAVEMENT STRUCTURE

PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	PLAN: TYPICAL SECTIONS	SHEET 5	E

① RESTORATION ITEMS TO EXTEND 5-FT BEYOND DAYLIGHT SLOPE

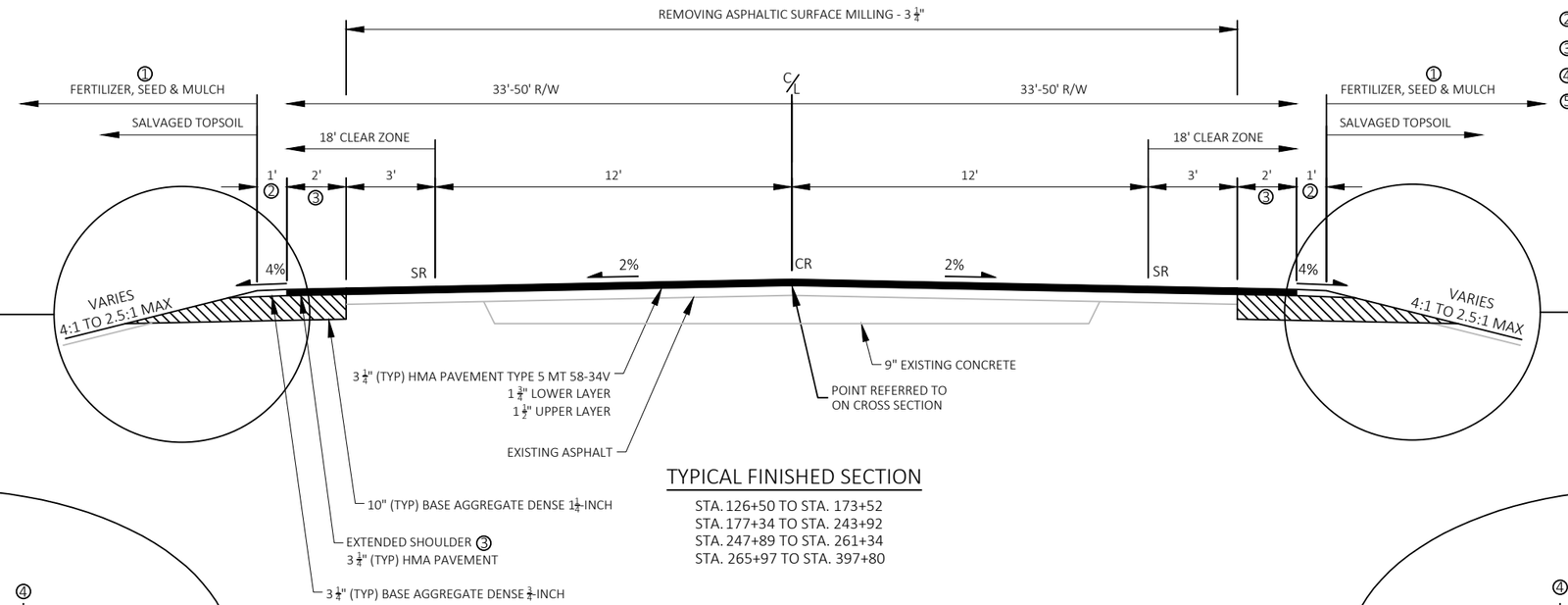
② ROUND SHOULDER TO MATCH EXISTING SLOPE

③ EXTENDED SHOULDER PAID FOR UNDER ID 8949-02-62

④ EDGE OF PAVED SHOULDER

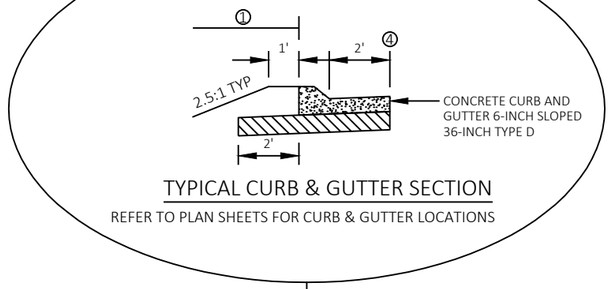
⑤ WEDGING QUANTITY ADDED FOR S.E. CORRECTION AREAS

CR = CENTERLINE RUMBLE STRIPS
SR = SHOULDER RUMBLE STRIPS



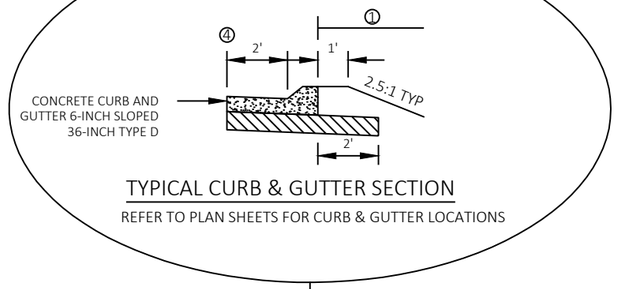
TYPICAL FINISHED SECTION

STA. 126+50 TO STA. 173+52
STA. 177+34 TO STA. 243+92
STA. 247+89 TO STA. 261+34
STA. 265+97 TO STA. 397+80



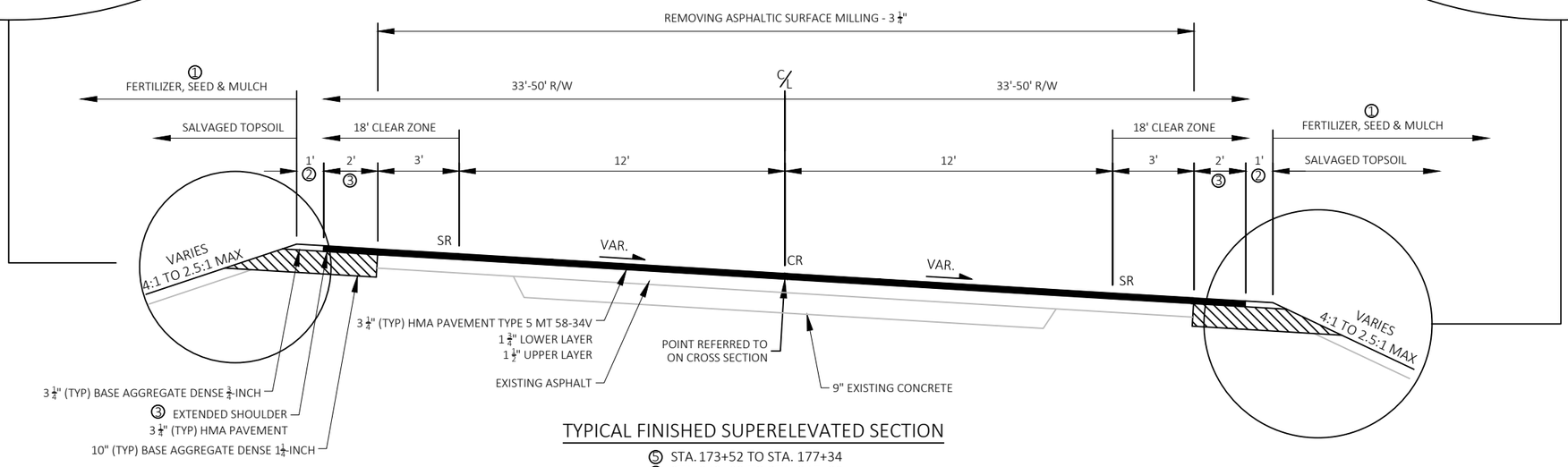
TYPICAL CURB & GUTTER SECTION

REFER TO PLAN SHEETS FOR CURB & GUTTER LOCATIONS



TYPICAL CURB & GUTTER SECTION

REFER TO PLAN SHEETS FOR CURB & GUTTER LOCATIONS



TYPICAL FINISHED SUPERELEVATED SECTION

⑤ STA. 173+52 TO STA. 177+34
⑤ STA. 243+92 TO STA. 247+89
STA. 261+34 TO STA. 265+97

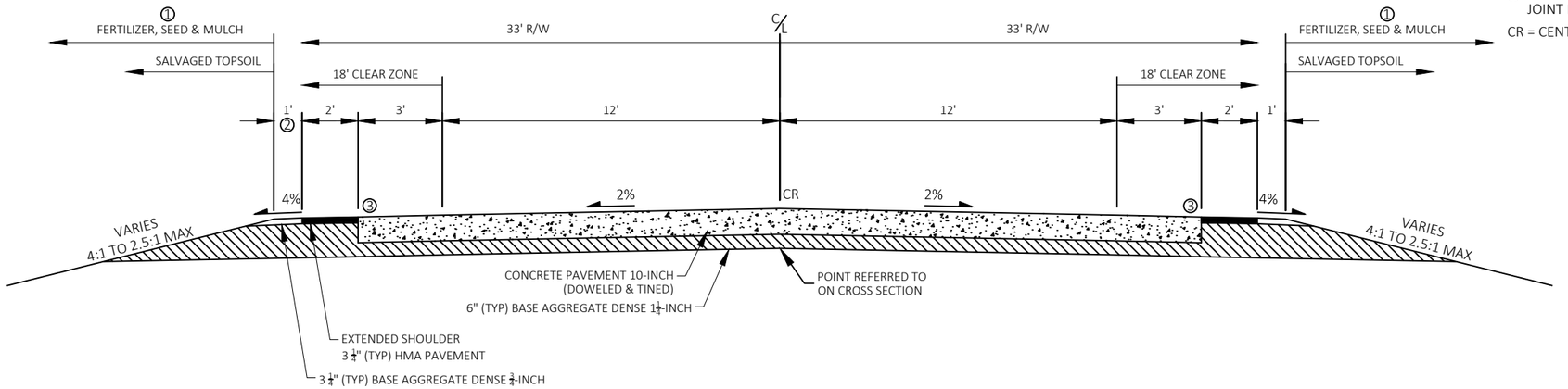
PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	PLAN: TYPICAL SECTIONS	SHEET 6	E

① RESTORATION ITEMS TO EXTEND 5-FT BEYOND DAYLIGHT SLOPE

② ROUND SHOULDER TO MATCH EXISTING SLOPE

③ PAVE CONCRETE LANE 15-FT. NO LONGITUDINAL JOINT REQ'D

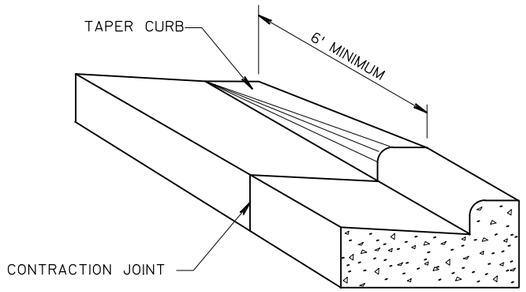
CR = CENTERLINE RUMBLE STRIPS



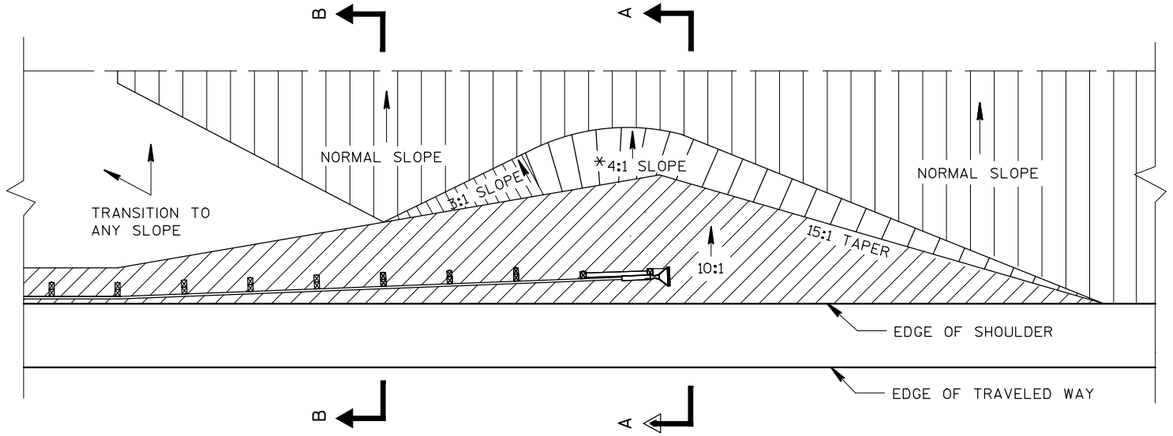
TYPICAL FINISHED SECTION - CONCRETE PAVEMENT

STA. 120+50 TO STA. 126+50

PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	PLAN: TYPICAL SECTIONS	SHEET 7	E

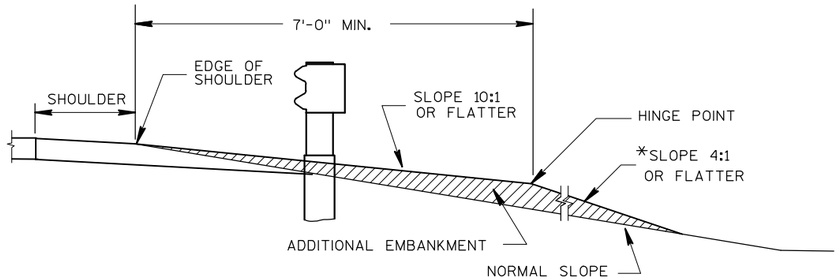


DETAIL OF CURB & GUTTER TERMINI

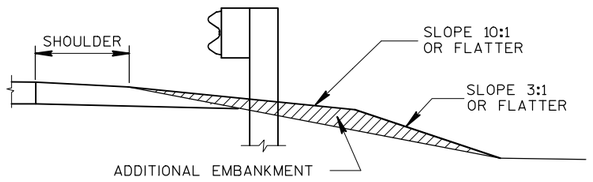


PLAN VIEW

*A 3:1 MAXIMUM SLOPE MAY BE USED FOR INSTALLATIONS ON EXISTING HIGHWAYS.

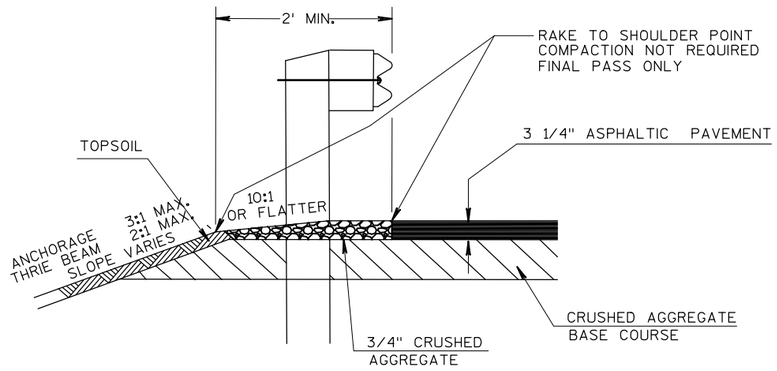


SECTION A-A

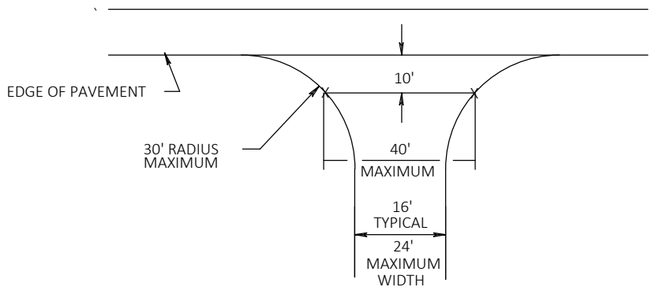


SECTION B-B

FILL AREA AT BEAM GUARD

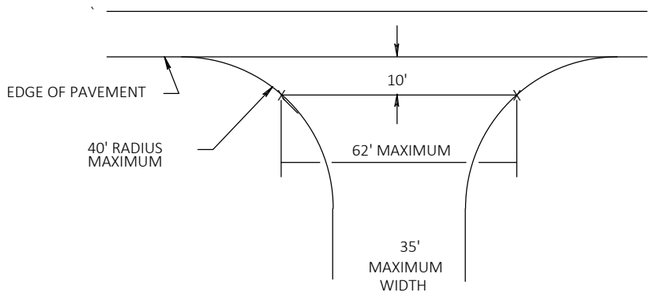


ASPHALTIC SHOULDER AT GUARD RAIL



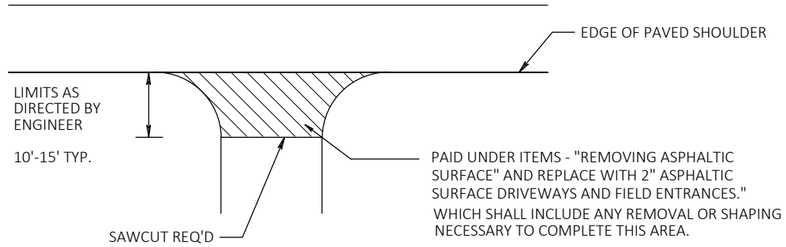
TYPICAL FIELD ENTRANCE DETAIL

(NON-COMMERCIAL RURAL)



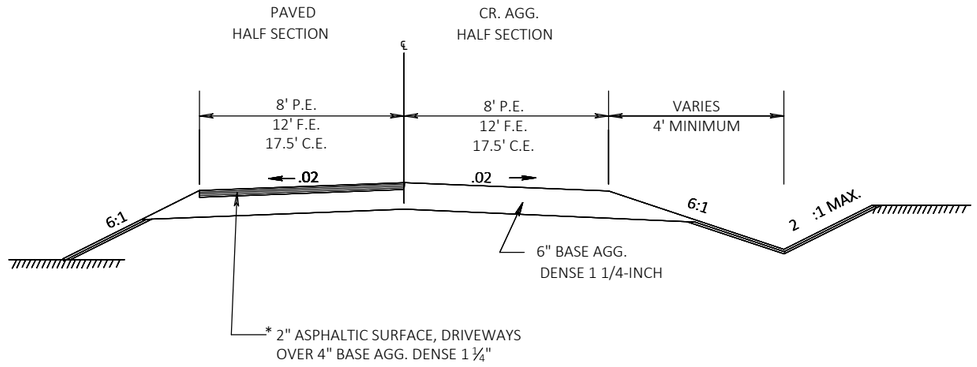
TYPICAL COMMERCIAL ENTRANCE DETAIL

(COMMERCIAL RURAL)



ANY ADDITIONAL BASE AGG. DENSE REQ'D. SHALL BE PAID
UNDER ITEM - "BASE AGGREGATE DENSE 1 14/-INCH"

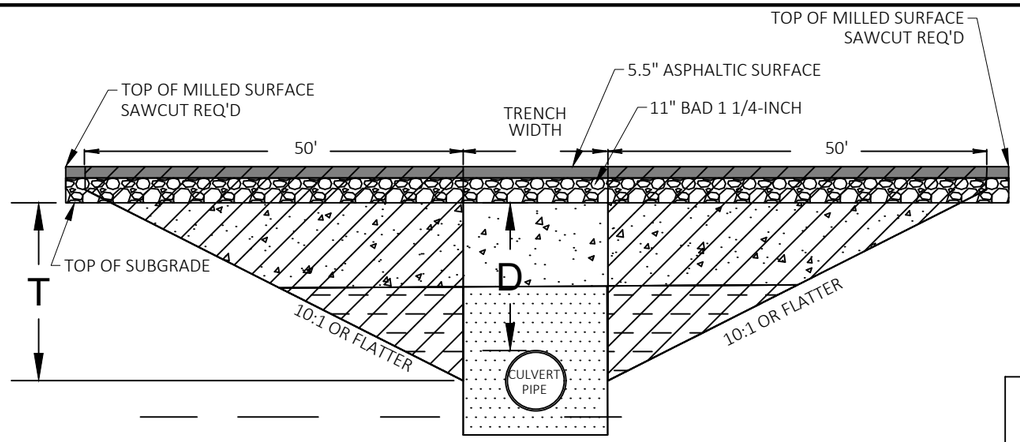
RURAL PRIVATE ENTRANCE DETAIL - ASPHALT



* OR MATCH EXIST.
ASPH. DEPTH

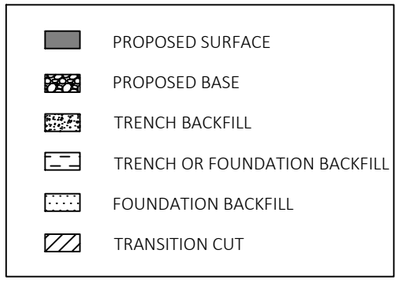
TYPICAL SECTION FOR
DRIVEWAY ENTRANCES

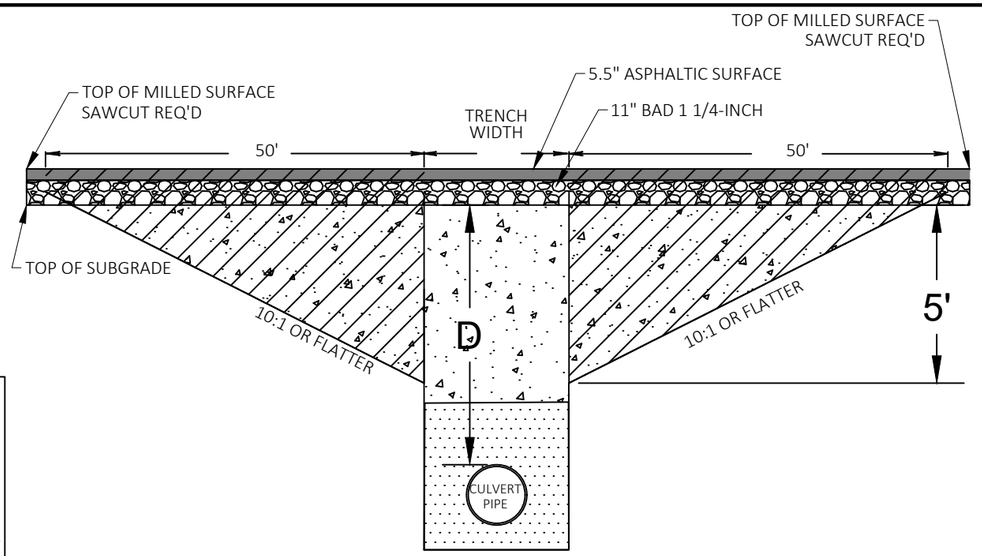
NOTE:
DRIVEWAY PROFILES NOT EXPECTED TO EXCEED
10%. PLACE LOW POINT OF DRIVEWAY PROFILE
OVER DITCH FLOW LINE.



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.

CULVERT INSTALLATION DETAIL
DEPTH D < 6 FT





CULVERT INSTALLATION DETAIL
DEPTH D ≥ 6 FT

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 SPEC 520.
PERFORM CULVERT PIPE INSTALLATION BEFORE MILLING AND PAVING.
PLACE 5.5"ASPHALT PAVEMENT AFTER CULVERT PIPE INSTALLATION AND BEFORE PAVING OPERATION.

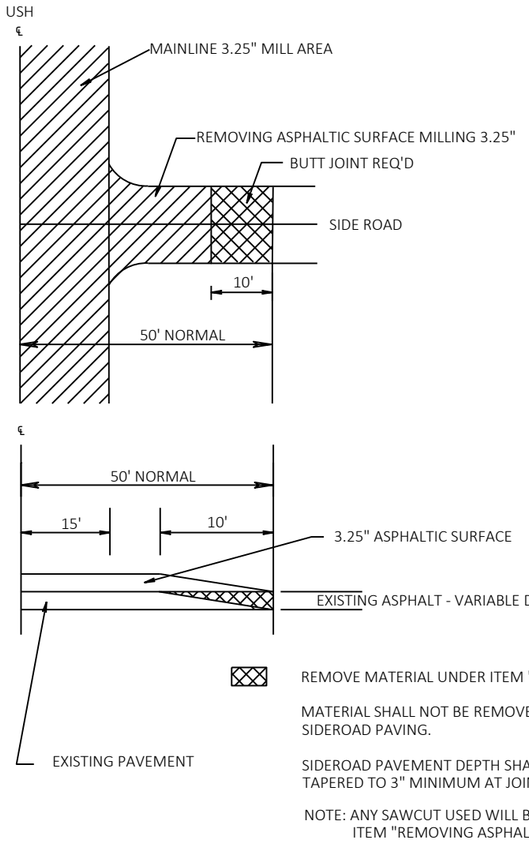
CULVERT PIPE TRANSITION

ROUTE	STA.	DEPTH	PIPE DIA. (IN)	REMARKS
USH 12	139+50	0.8 FT	19 X 30	
USH 12	155+61	0.3 FT	38 X 60	
USH 12	159+00	0.4 FT	29 X 45	
USH 12	228+12	3.1 FT	24	
USH 12	230+17	4.6 FT	24	
USH 12	236+02	1.6 FT	24	
USH 12	240+98	9.6 FT	24	
USH 12	285+55	2.4 FT	24	
USH 12	289+38	6.6 FT	24	
USH 12	301+44	4.2 FT	24	
USH 12	304+36	2.3 FT	24	
USH 12	307+88	2.4 FT	24	
USH 12	318+92	0.5 FT	18	
USH 12	330+38	1.1 FT	24	
USH 12	343+65	3.9 FT	30	
USH 12	361+40	4.3 FT	30	
USH 12	396+35	0.7 FT	19 X 30	

RUNOFF COEFFICIENT TABLE

A	HYDROLOGIC SOIL GROUP											
	B		C							D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIP-TURF	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
SIDE SLOPE: TURF			.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 = 54.0 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 39.6 ACRES



NOTE: IF THE EXISTING SIDEROAD CONSISTS OF A BASE COURSE SURFACE, THE NEW ASPHALT SHALL BE PLACED TO THE ENDS OF THE EXISTING SIDEROAD RADIUS'.

NOT TO SCALE

REMOVE MATERIAL UNDER ITEM 'REMOVING ASPHALT SURFACE, BUTT JOINTS'

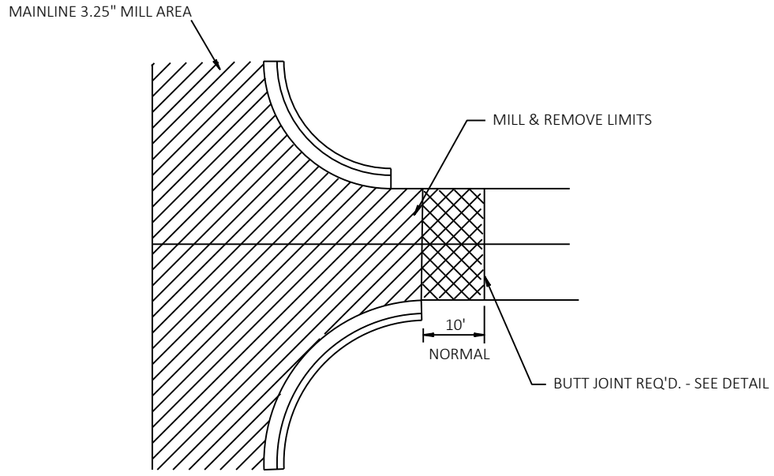
MATERIAL SHALL NOT BE REMOVED UNDER THIS ITEM UNTIL 24 HOURS BEFORE SIDEROAD PAVING.

SIDEROAD PAVEMENT DEPTH SHALL MATCH AT MAINLINE PAVEMENT EDGE AND BE TAPERED TO 3" MINIMUM AT JOINT

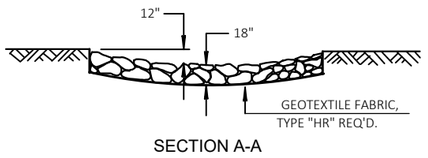
NOTE: ANY SAWCUT USED WILL BE CONSIDERED INCIDENTAL TO THE ITEM "REMOVING ASPHALTIC SURFACE, BUTT JOINTS."

SIDE ROAD DETAIL - NO CURB & GUTTER

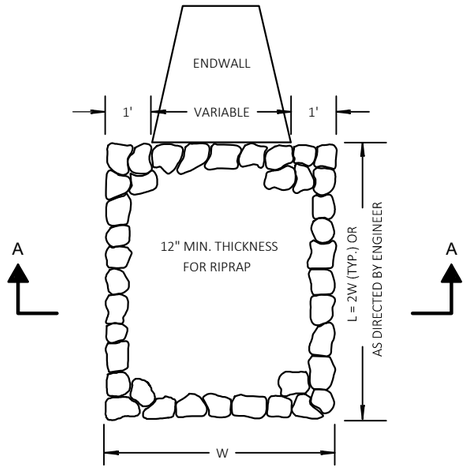
NOT TO SCALE



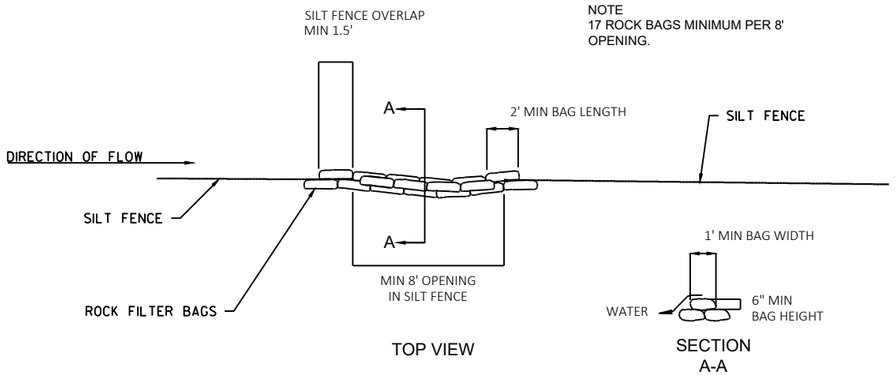
SIDEROAD DETAIL - CURB & GUTTER TO REMAIN



SECTION A-A



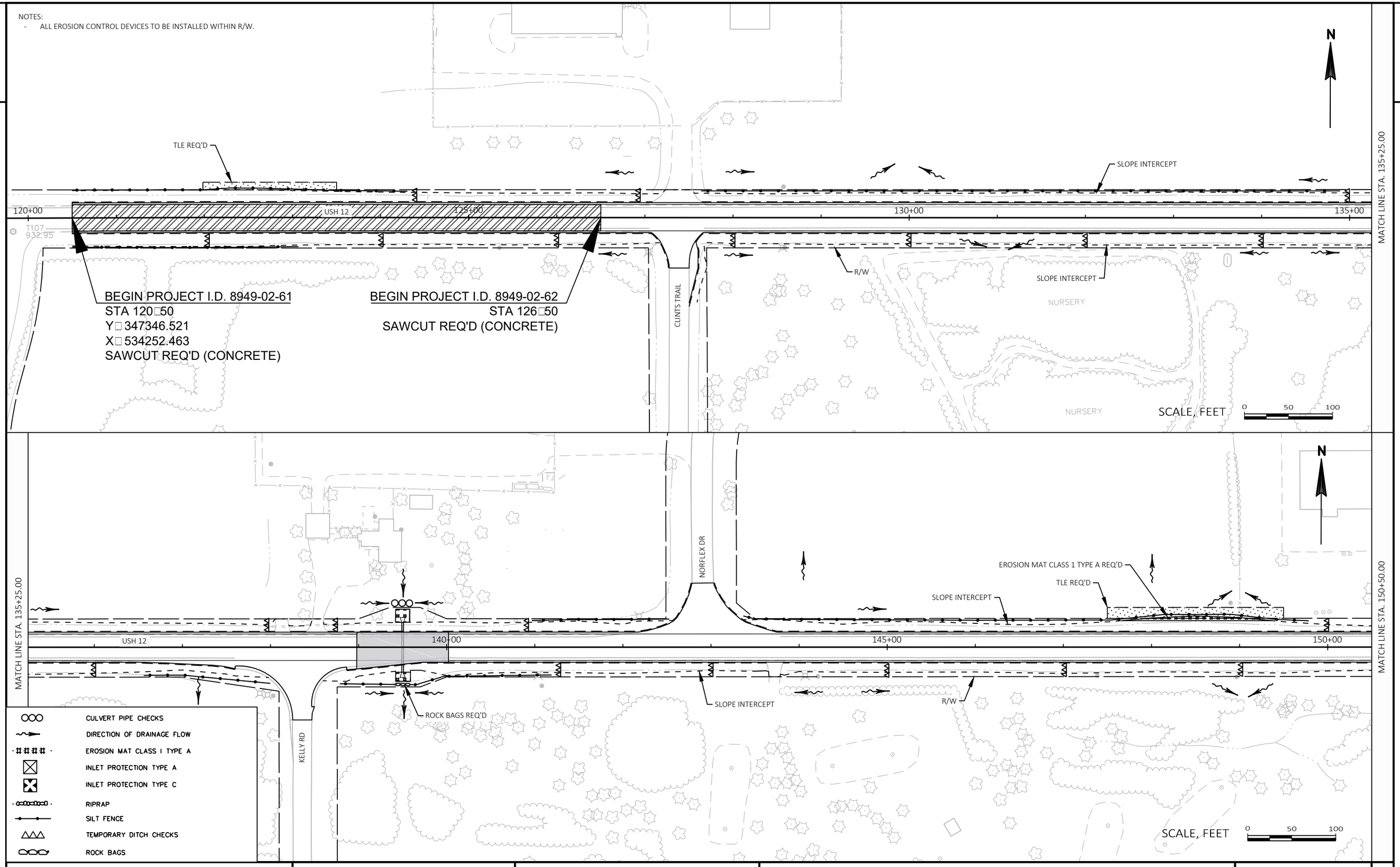
RIPRAP MEDIUM TREATMENT AT CULVERTS



ROCK BAGS USED FOR SILT FENCE RELIEF

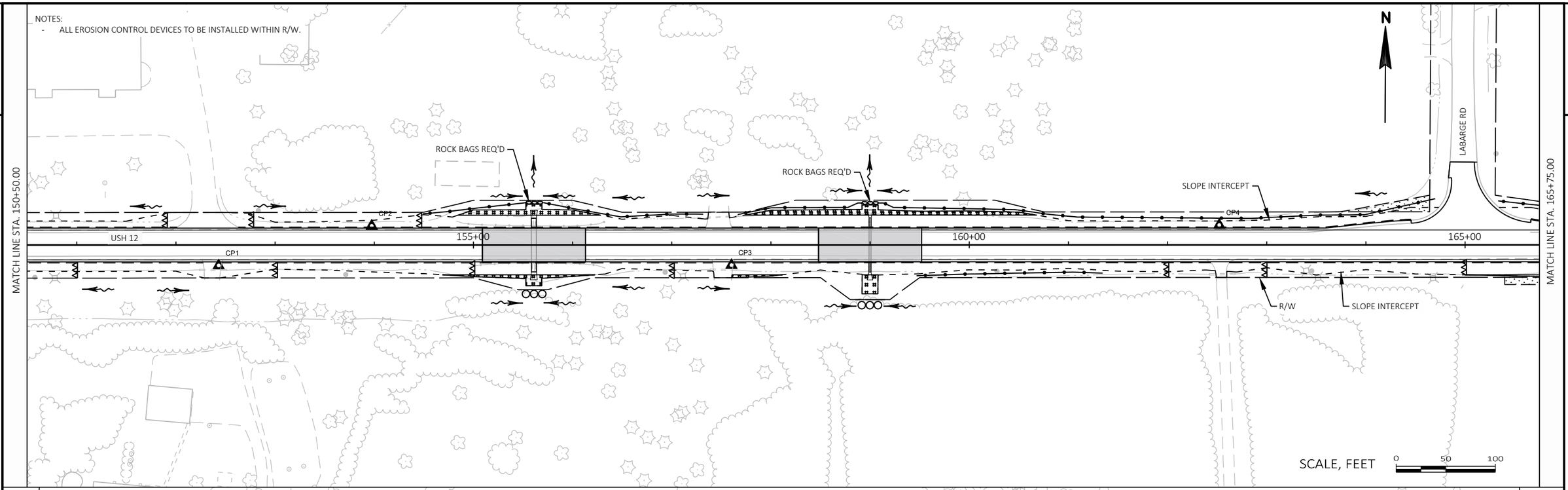
PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CONSTRUCTION DETAILS	SHEET 12	E

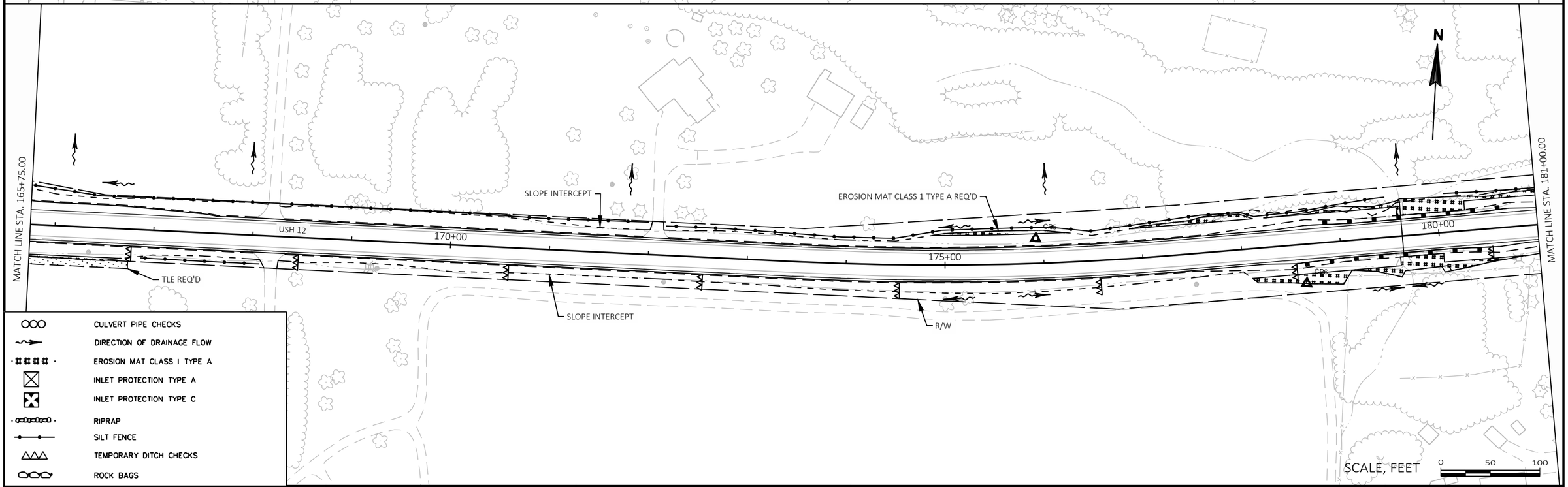
NOTES:
- ALL EROSION CONTROL DEVICES TO BE INSTALLED WITHIN R/W.



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	EROSION CONTROL PLAN	SHEET 13 E

NOTES:
- ALL EROSION CONTROL DEVICES TO BE INSTALLED WITHIN R/W.





- CULVERT PIPE CHECKS
- DIRECTION OF DRAINAGE FLOW
- EROSION MAT CLASS I TYPE A
- INLET PROTECTION TYPE A
- INLET PROTECTION TYPE C
- RIPRAP
- SILT FENCE
- TEMPORARY DITCH CHECKS
- ROCK BAGS

PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	EROSION CONTROL PLAN	SHEET 14	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 2
PLOT DATE : 1/8/2021 2:35 PM
PLOT BY : KAKACEK, JOHN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

NOTES:
- ALL EROSION CONTROL DEVICES TO BE INSTALLED WITHIN R/W.

MATCH LINE STA. 181+00.00

MATCH LINE STA. 196+25.00

GAVIN PASS

USH 12

185+00

190+00

195+00

CP7

CP8

CP9

SLOPE INTERCEPT

SLOPE INTERCEPT

R/W

N

SCALE, FEET 0 50 100

MATCH LINE STA. 196+25.00

MATCH LINE STA. 211+50.00

CHIPPEWA PATH

YELLOWSTONE TRL

USH 12

200+00

205+00

210+00

CP10

CP11

SLOPE INTERCEPT

EROSION MAT CLASS 1 TYPE A REQ'D

R/W

SLOPE INTERCEPT

N

SCALE, FEET 0 50 100

CULVERT PIPE CHECKS

DIRECTION OF DRAINAGE FLOW

EROSION MAT CLASS I TYPE A

INLET PROTECTION TYPE A

INLET PROTECTION TYPE C

RIPRAP

SILT FENCE

TEMPORARY DITCH CHECKS

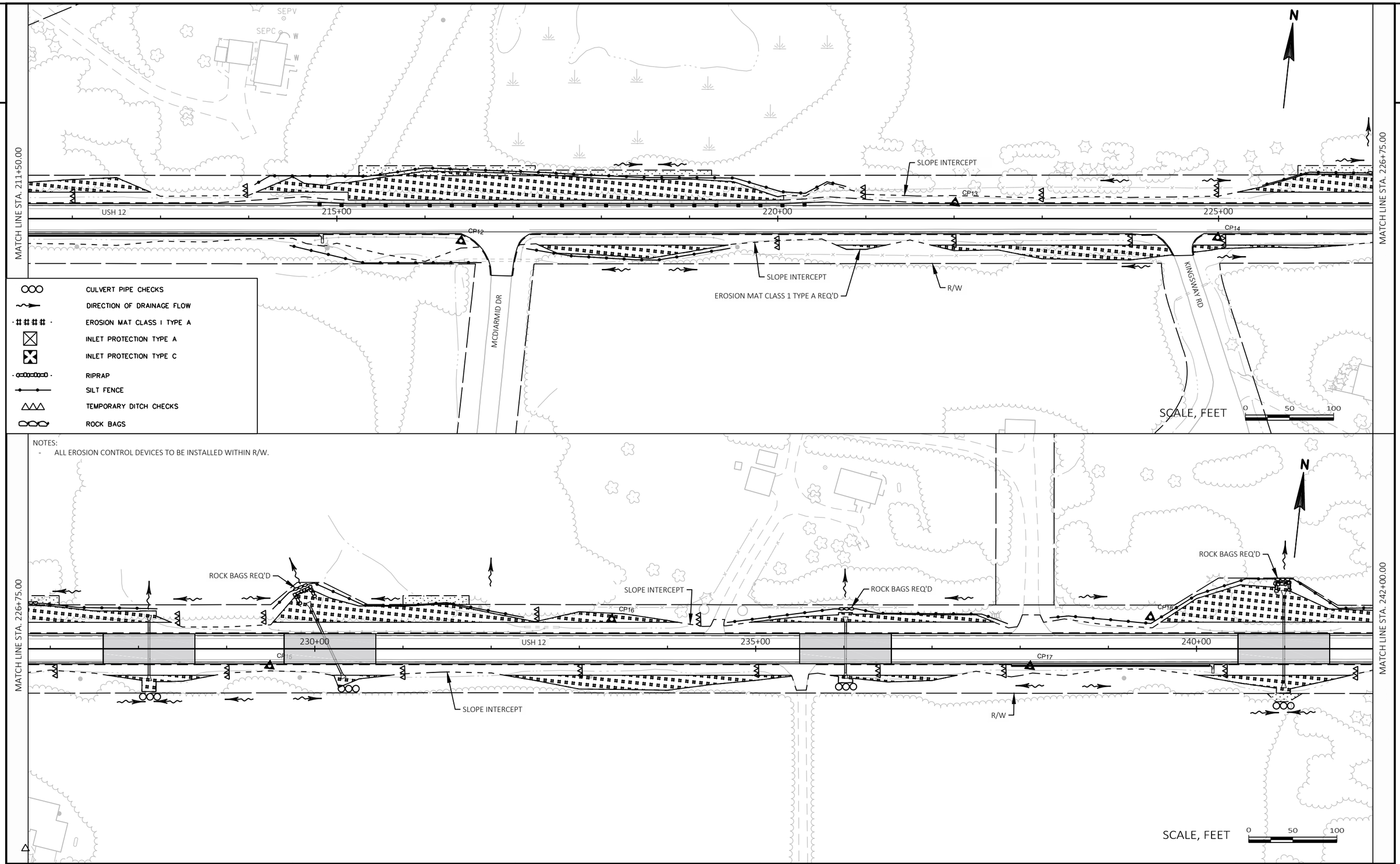
ROCK BAGS

PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	EROSION CONTROL PLAN	SHEET 15	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 3

PLOT DATE : 1/8/2021 2:35 PM PLOT BY : KAKACEK, JOHN PLOT NAME : PLOT SCALE : 1 IN:100 FT

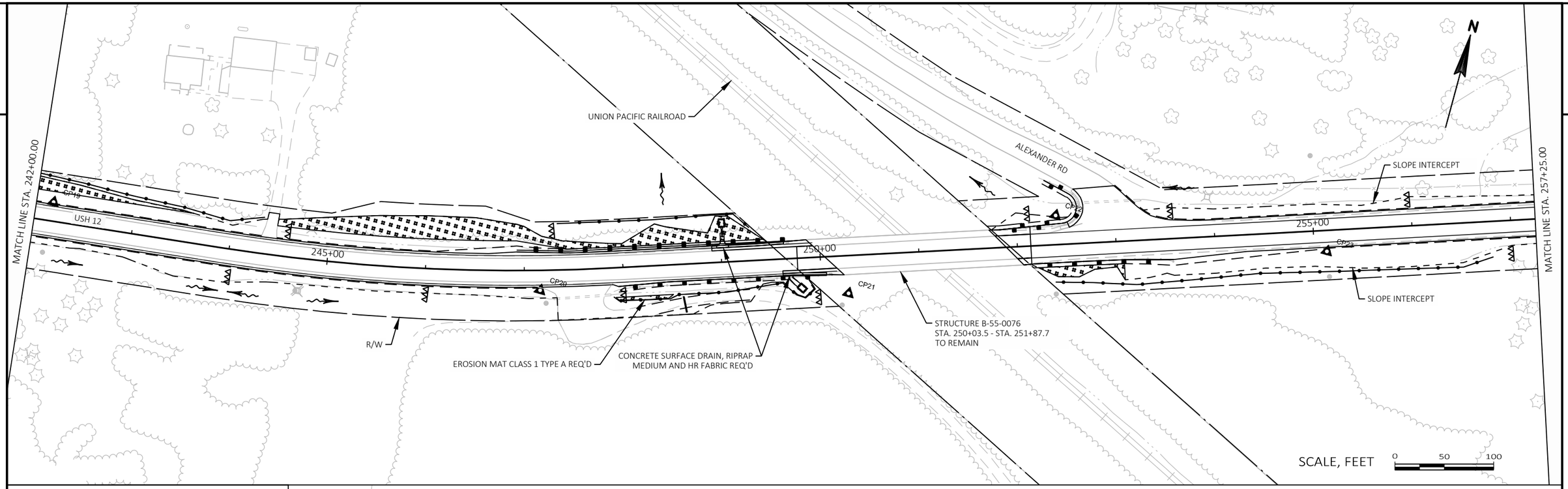
WISDOT/CADDS SHEET 42



NOTES:
- ALL EROSION CONTROL DEVICES TO BE INSTALLED WITHIN R/W.

PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	EROSION CONTROL PLAN	SHEET 16	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 4
PLOT DATE : 1/8/2021 2:35 PM
PLOT BY : KAKACEK, JOHN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42



CULVERT PIPE CHECKS

DIRECTION OF DRAINAGE FLOW

EROSION MAT CLASS I TYPE A

INLET PROTECTION TYPE A

INLET PROTECTION TYPE C

RIPRAP

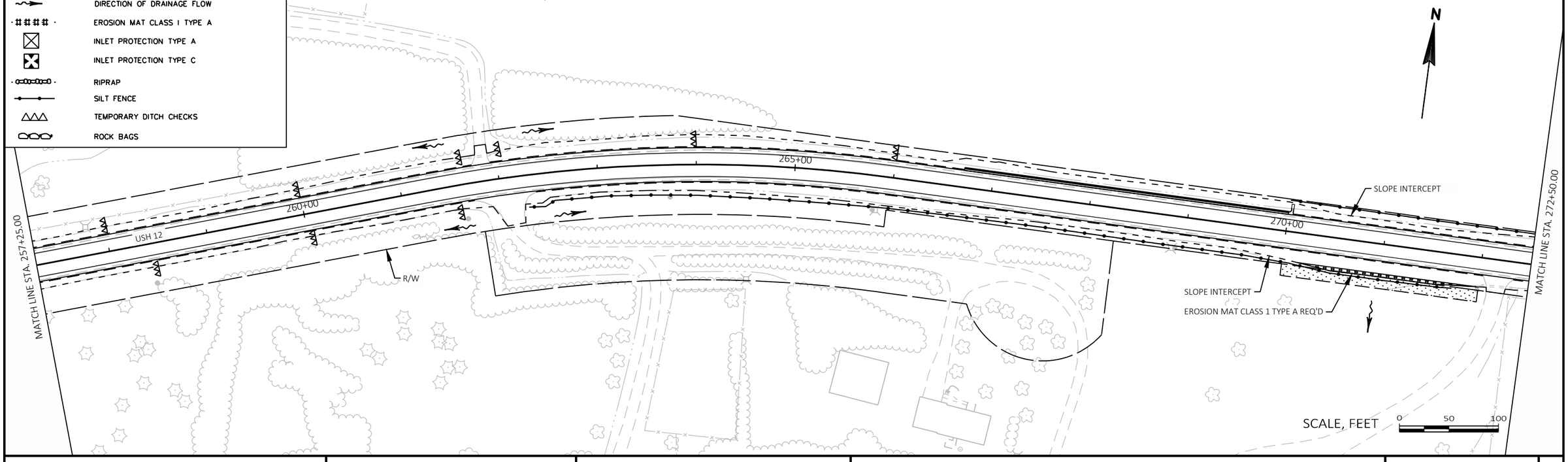
SILT FENCE

TEMPORARY DITCH CHECKS

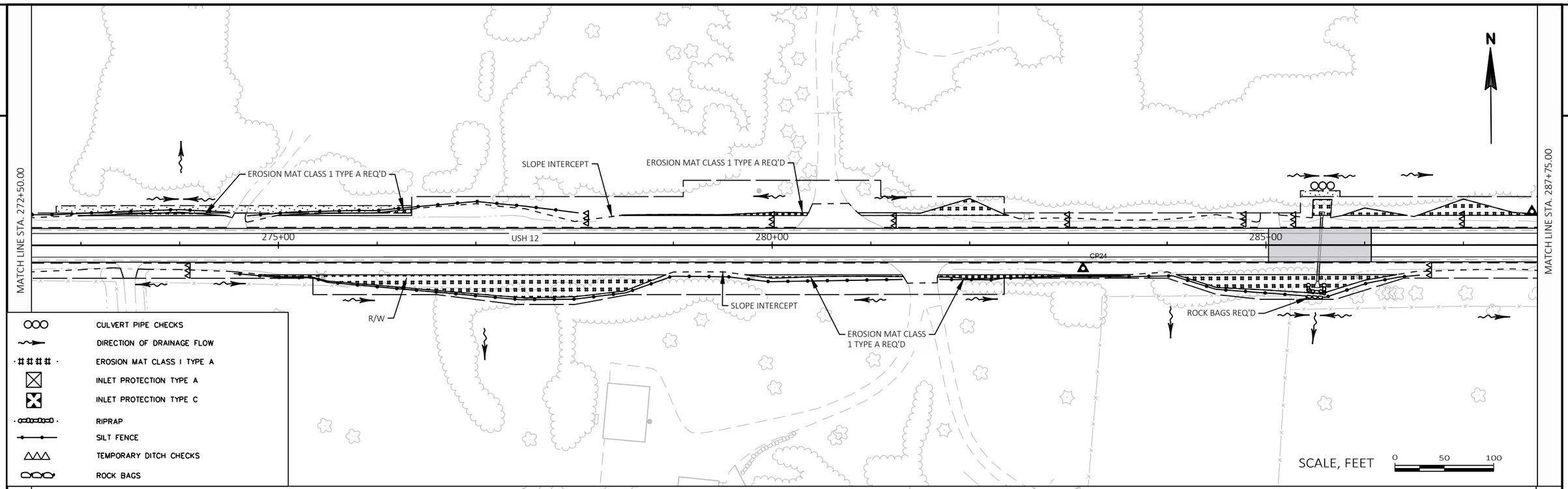
ROCK BAGS

NOTES:

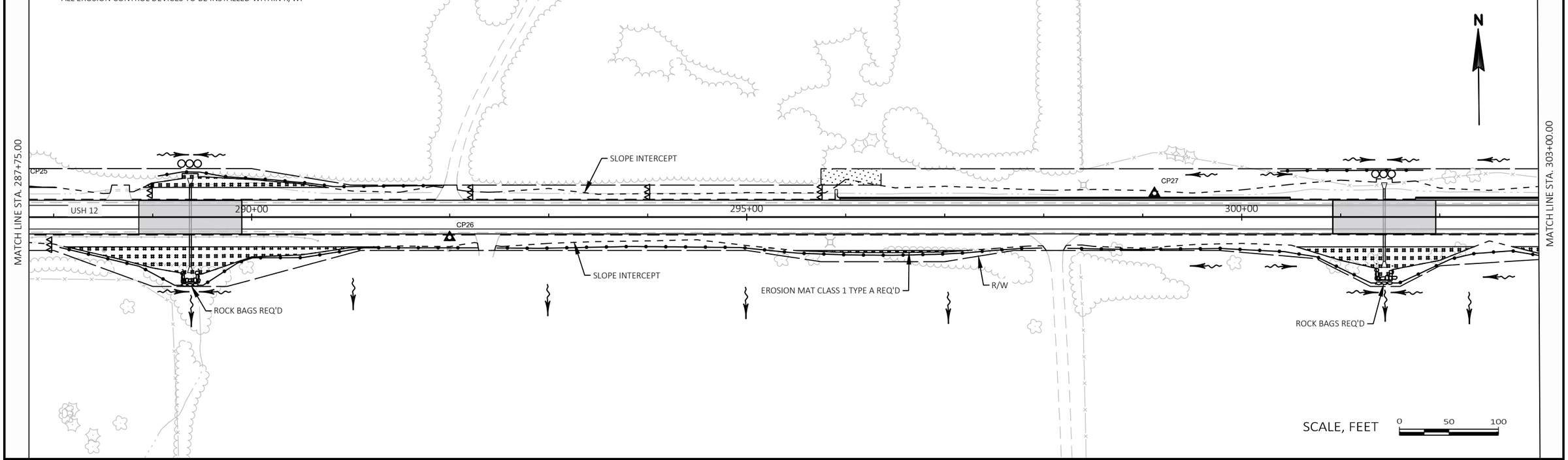
- ALL EROSION CONTROL DEVICES TO BE INSTALLED WITHIN R/W.



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	EROSION CONTROL PLAN	SHEET 17	E



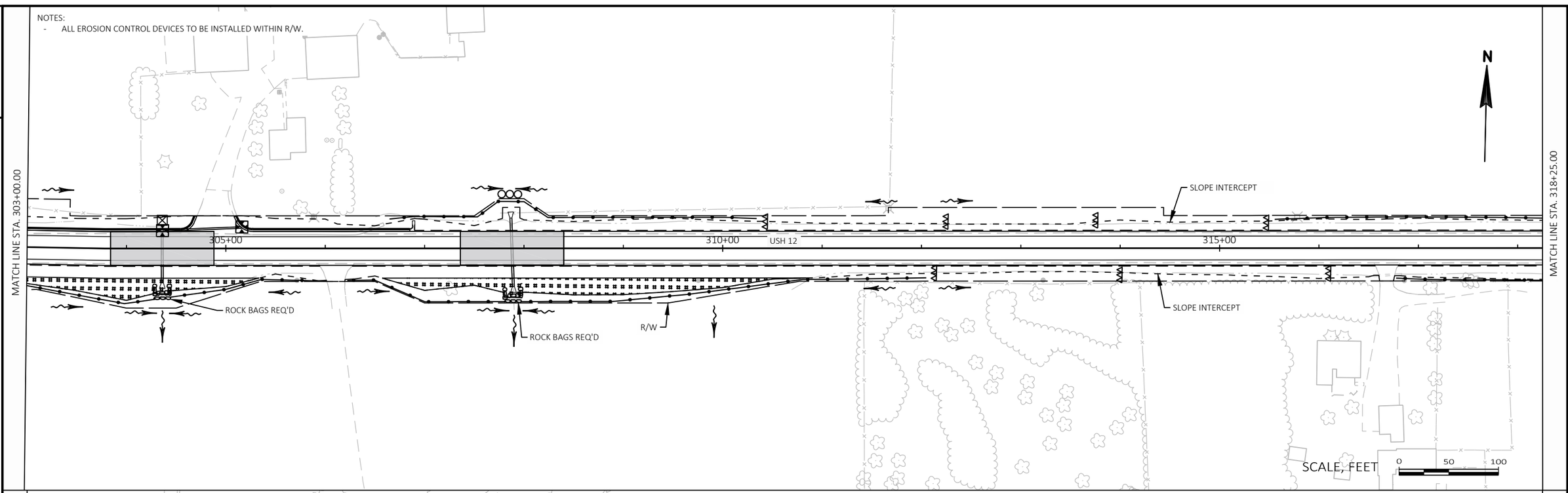
NOTES:
- ALL EROSION CONTROL DEVICES TO BE INSTALLED WITHIN R/W.

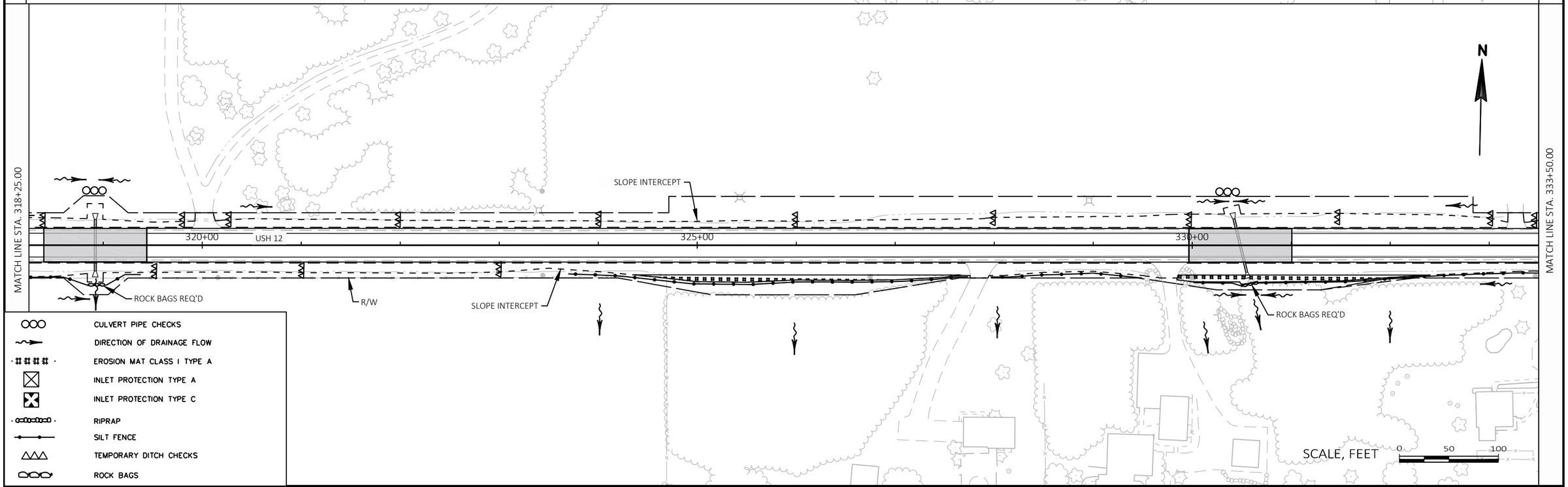


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	EROSION CONTROL PLAN	SHEET 18	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 6
PLOT DATE : 1/8/2021 2:35 PM
PLOT BY : KAKACEK, JOHN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

NOTES:
- ALL EROSION CONTROL DEVICES TO BE INSTALLED WITHIN R/W.





CULVERT PIPE CHECKS
DIRECTION OF DRAINAGE FLOW
EROSION MAT CLASS I TYPE A
INLET PROTECTION TYPE A
INLET PROTECTION TYPE C
RIPRAP
SILT FENCE
TEMPORARY DITCH CHECKS
ROCK BAGS

PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	EROSION CONTROL PLAN	SHEET 19	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 7
PLOT DATE : 1/8/2021 2:35 PM
PLOT BY : KAKACEK, JOHN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

NOTES:
- ALL EROSION CONTROL DEVICES TO BE INSTALLED WITHIN R/W.

MATCH LINE STA. 333+50.00

MATCH LINE STA. 348+75.00

ROCK BAGS REQ'D

EROSION MAT CLASS 1 TYPE A REQ'D

SLOPE INTERCEPT

CP29

CP28

CP30

USH 12

335+00

340+00

345+00

SLOPE INTERCEPT

R/W

N

SCALE, FEET 0 50 100

	CULVERT PIPE CHECKS
	DIRECTION OF DRAINAGE FLOW
	EROSION MAT CLASS I TYPE A
	INLET PROTECTION TYPE A
	INLET PROTECTION TYPE C
	RIPRAP
	SILT FENCE
	TEMPORARY DITCH CHECKS
	ROCK BAGS

MATCH LINE STA. 348+75.00

MATCH LINE STA. 364+00.00

WETLAND IMPACT AREA

SLOPE INTERCEPT

CP31

350+00

USH 12

355+00

360+00

SLOPE INTERCEPT

R/W

110TH ST

WETLAND IMPACT AREA

ROCK BAGS REQ'D

N

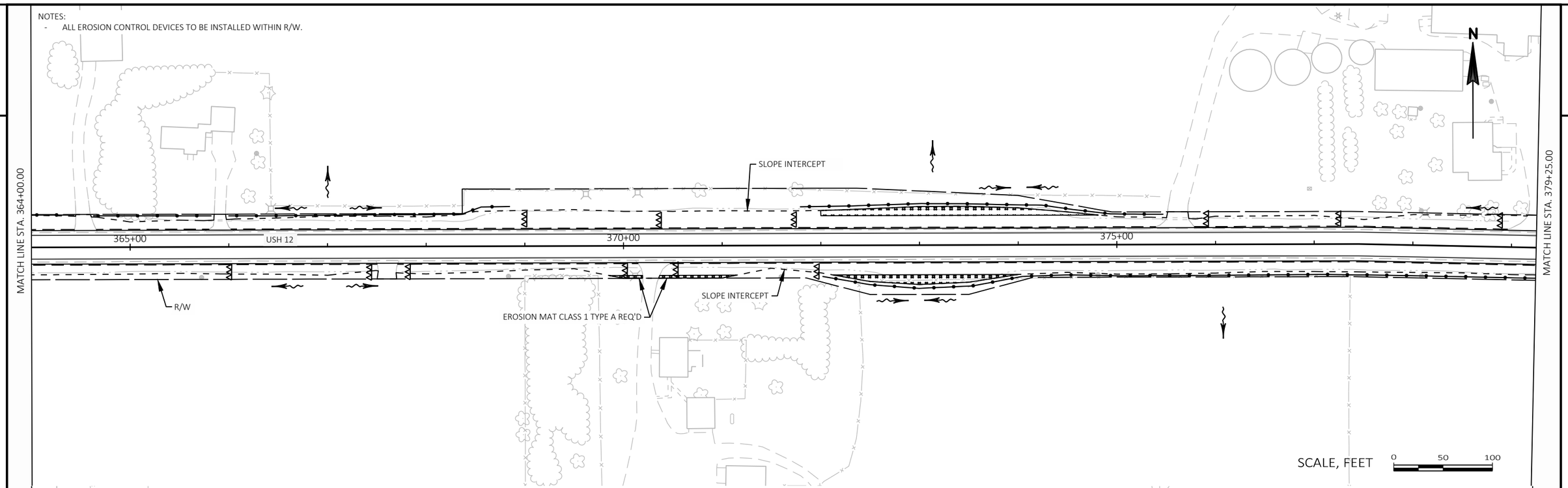
SCALE, FEET 0 50 100

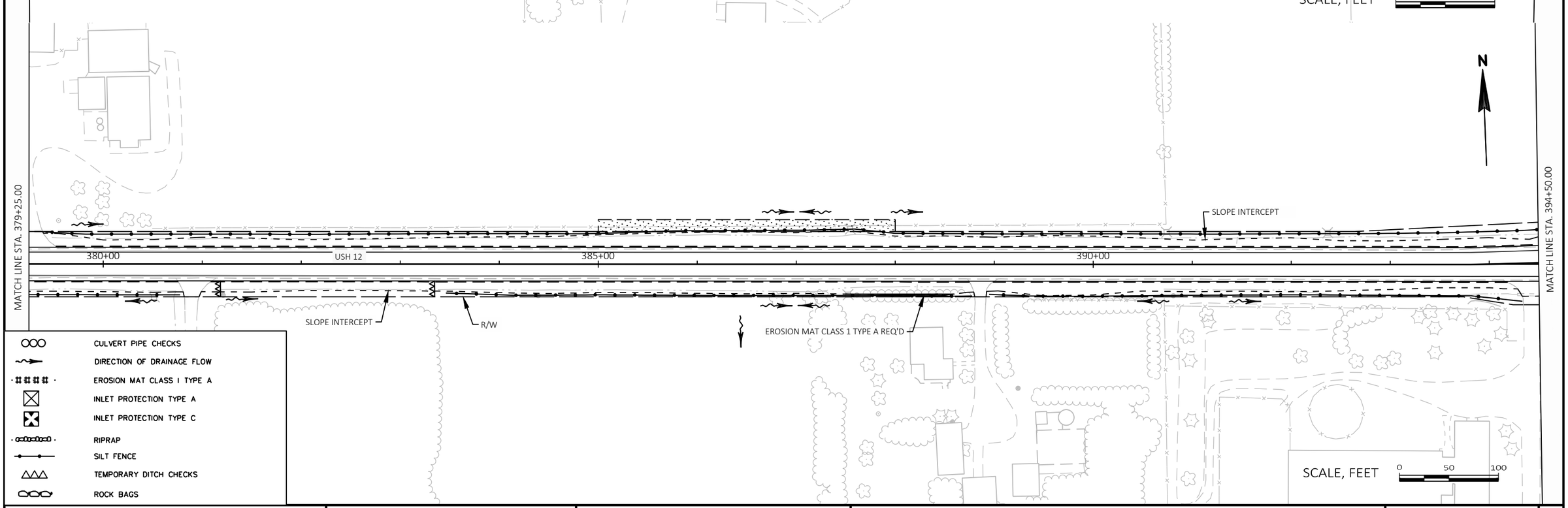
PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	EROSION CONTROL PLAN	SHEET 20 E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 8

PLOT DATE : 1/8/2021 2:36 PM PLOT BY : KAKACEK, JOHN PLOT NAME : PLOT SCALE : 1 IN:100 FT

NOTES:
- ALL EROSION CONTROL DEVICES TO BE INSTALLED WITHIN R/W.

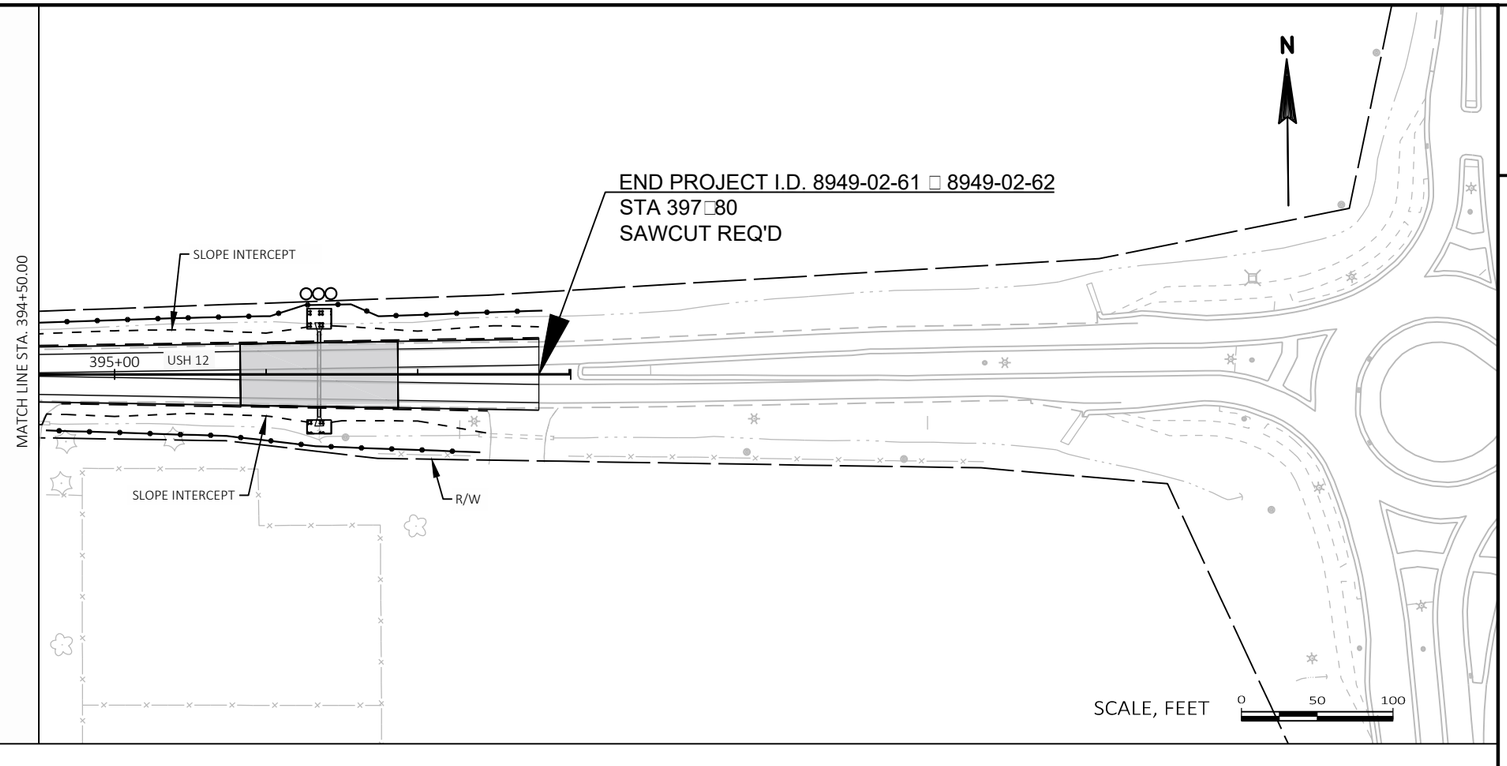




CULVERT PIPE CHECKS
DIRECTION OF DRAINAGE FLOW
EROSION MAT CLASS I TYPE A
INLET PROTECTION TYPE A
INLET PROTECTION TYPE C
RIPRAP
SILT FENCE
TEMPORARY DITCH CHECKS
ROCK BAGS

PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	EROSION CONTROL PLAN	SHEET 21	E

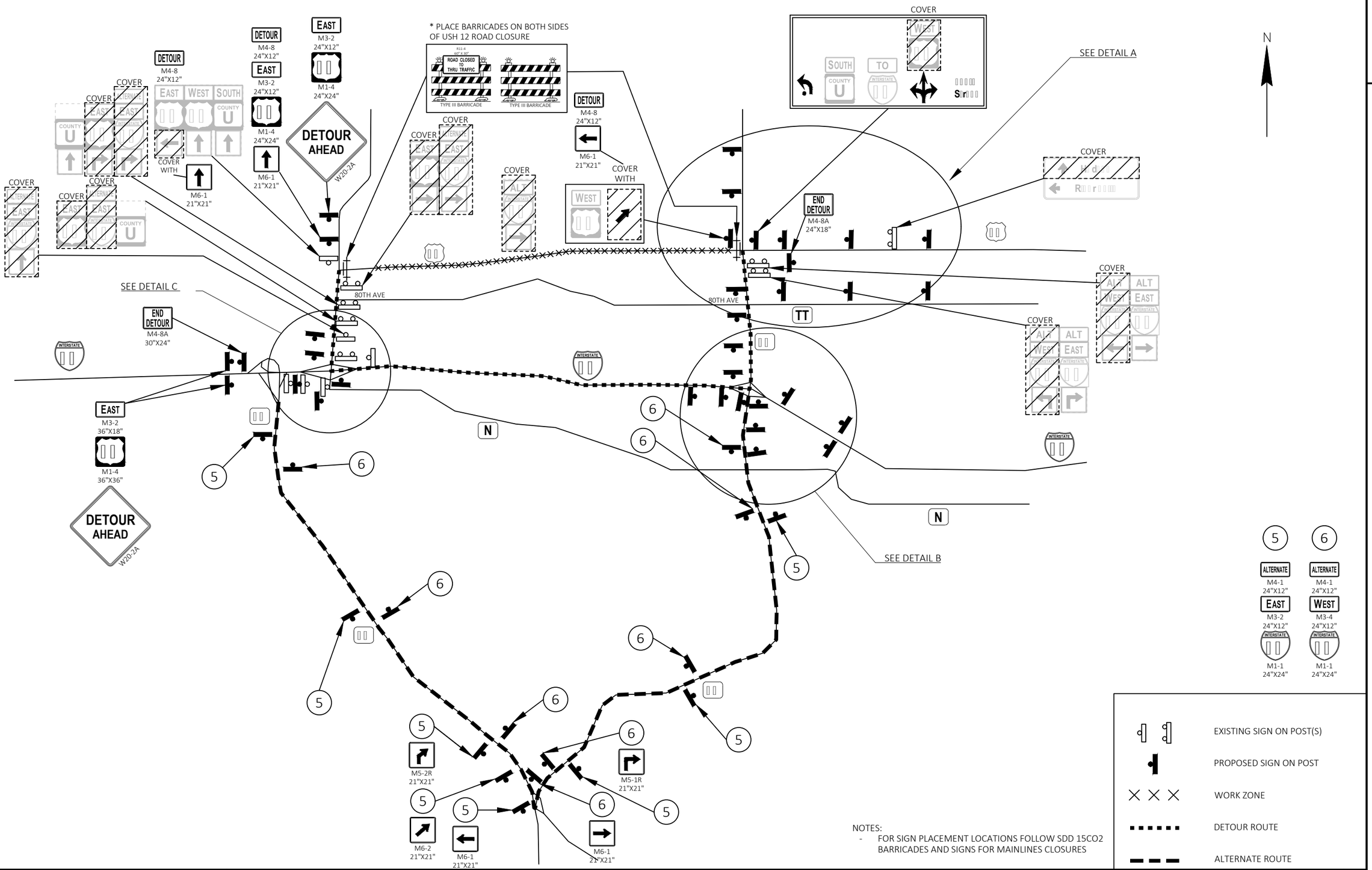
FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 9
PLOT DATE : 1/8/2021 2:36 PM
PLOT BY : KAKACEK, JOHN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT



NOTES:
- ALL EROSION CONTROL DEVICES TO BE INSTALLED WITHIN R/W.

	CULVERT PIPE CHECKS
	DIRECTION OF DRAINAGE FLOW
	EROSION MAT CLASS I TYPE A
	INLET PROTECTION TYPE A
	INLET PROTECTION TYPE C
	RIPRAP
	SILT FENCE
	TEMPORARY DITCH CHECKS
	ROCK BAGS

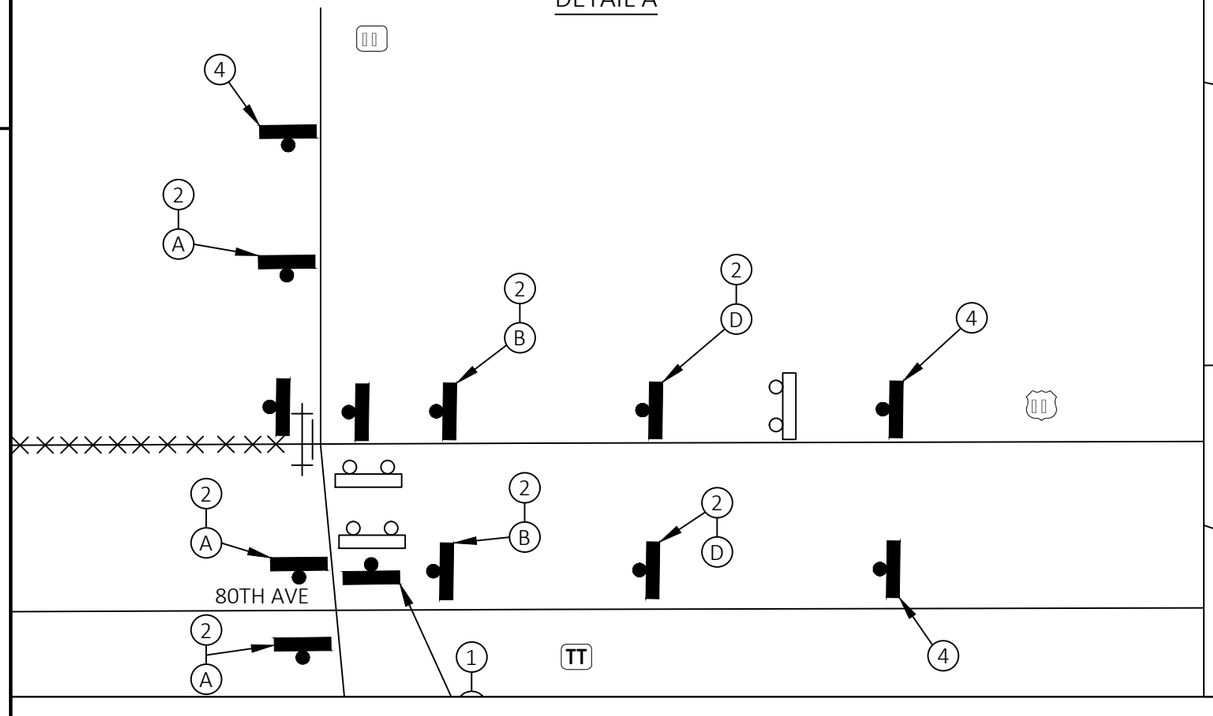
PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	EROSION CONTROL PLAN	SHEET 22 E



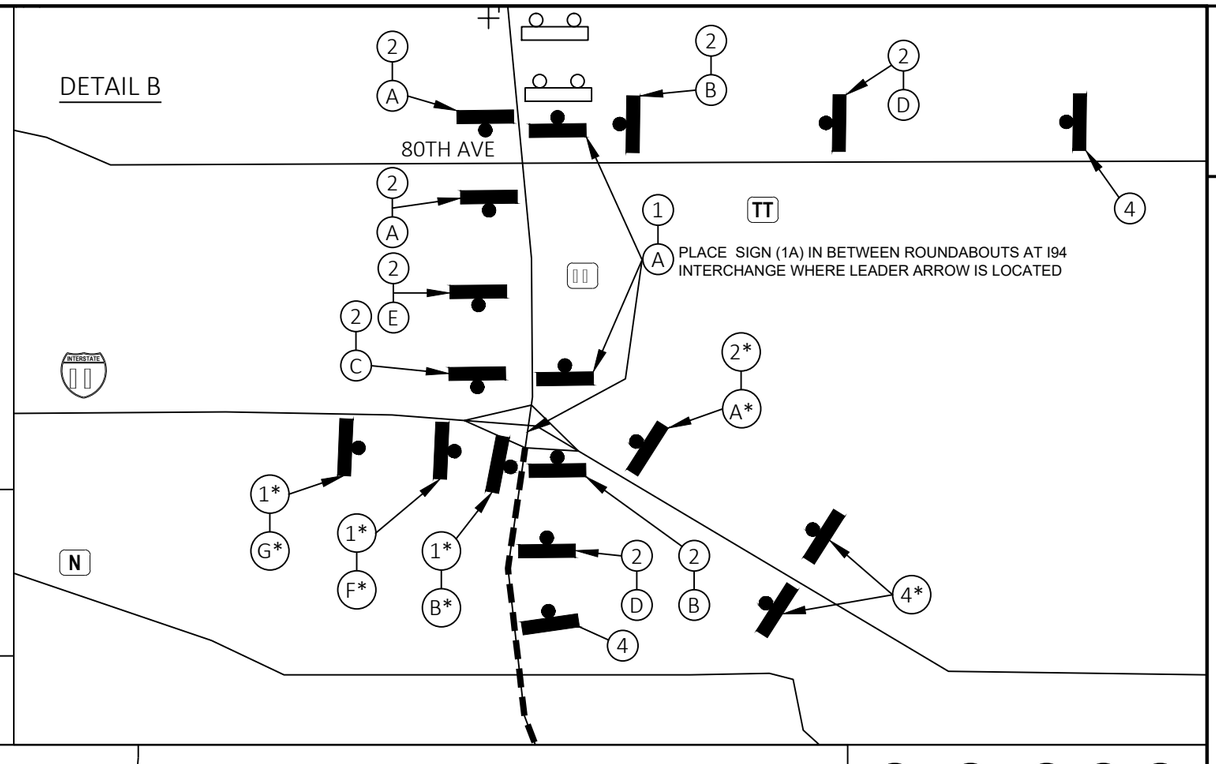
NOTES:
- FOR SIGN PLACEMENT LOCATIONS FOLLOW SDD 15CO2 BARRICADES AND SIGNS FOR MAINLINES CLOSURES

PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	TRAFFIC CONTROL- DETOUR ROUTE	SHEET 23	E

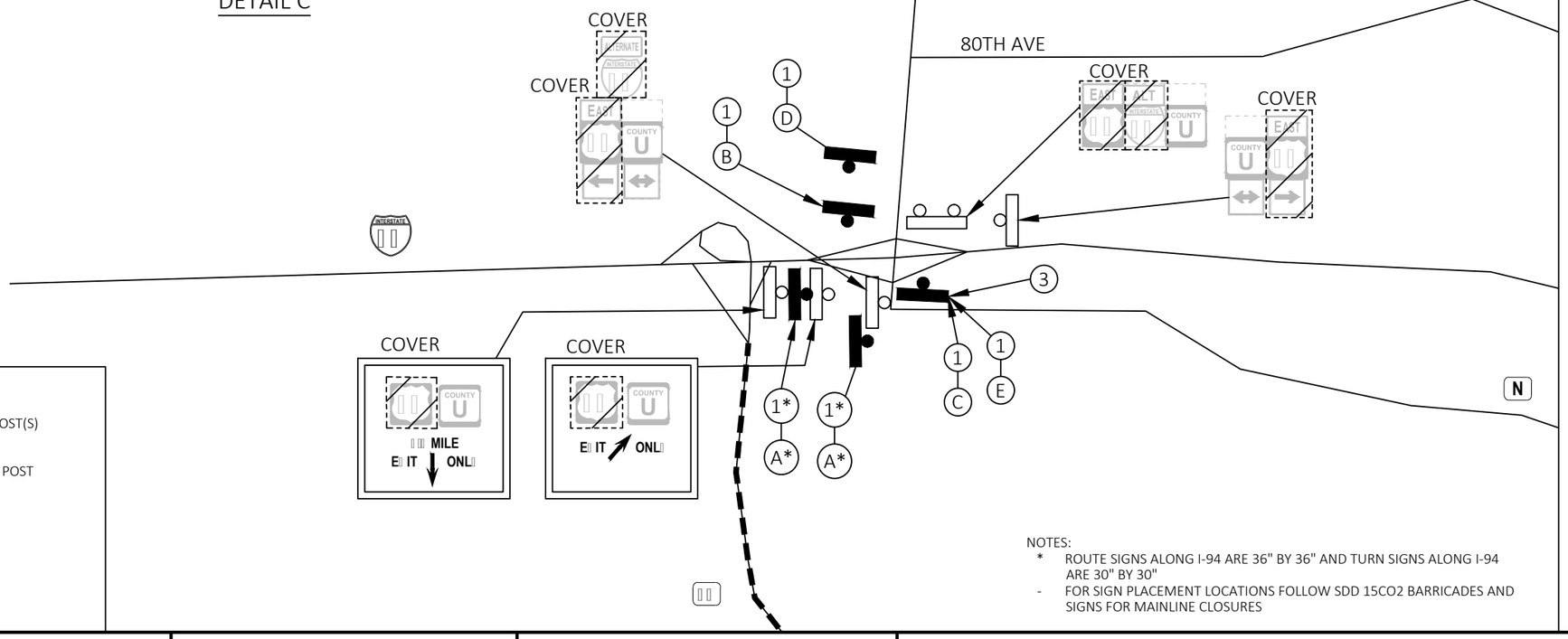
DETAIL A



DETAIL B



DETAIL C



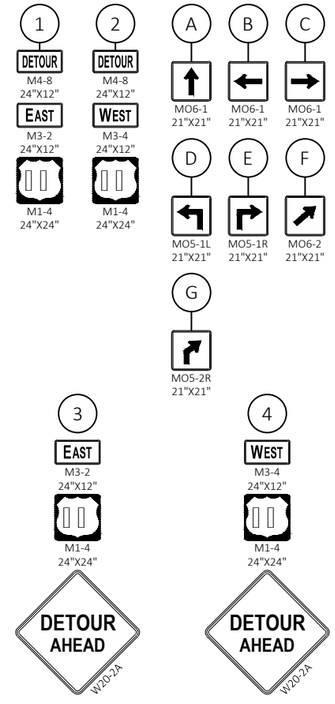
EXISTING SIGN ON POST(S)

PROPOSED SIGN ON POST

WORK ZONE

DETOUR ROUTE

ALTERNATE ROUTE



NOTES:

* ROUTE SIGNS ALONG I-94 ARE 36" BY 36" AND TURN SIGNS ALONG I-94 ARE 30" BY 30"

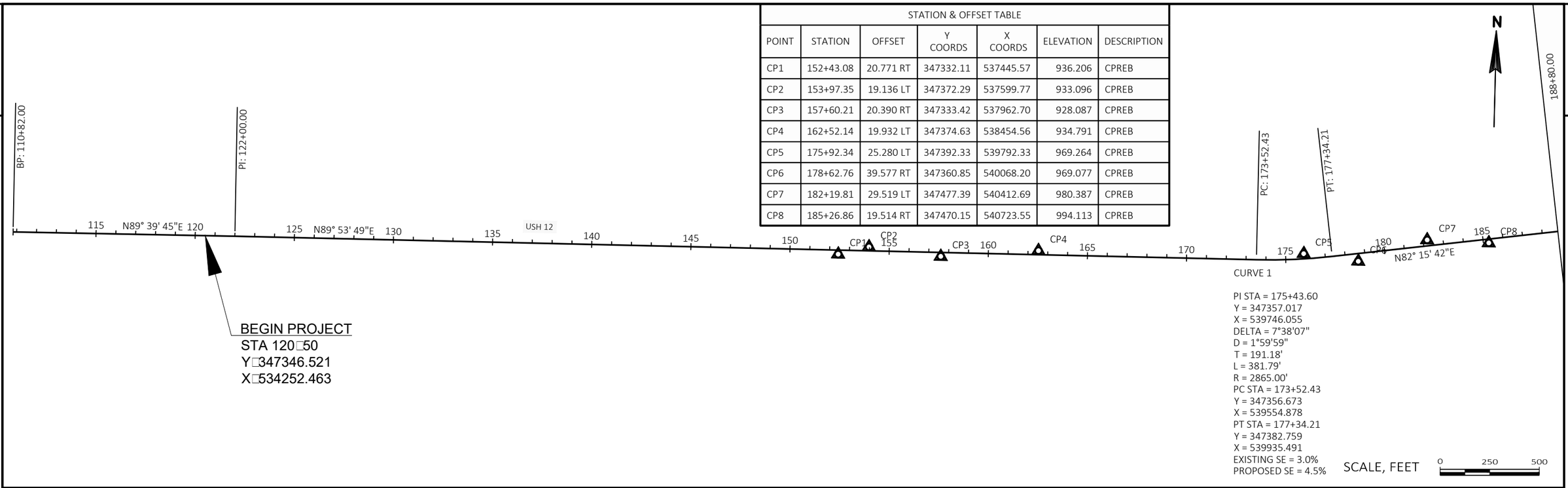
\- FOR SIGN PLACEMENT LOCATIONS FOLLOW SDD 15CO2 BARRICADES AND SIGNS FOR MAINLINE CLOSURES

PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	TRAFFIC CONTROL- DETOUR ROUTE	SHEET 24	E

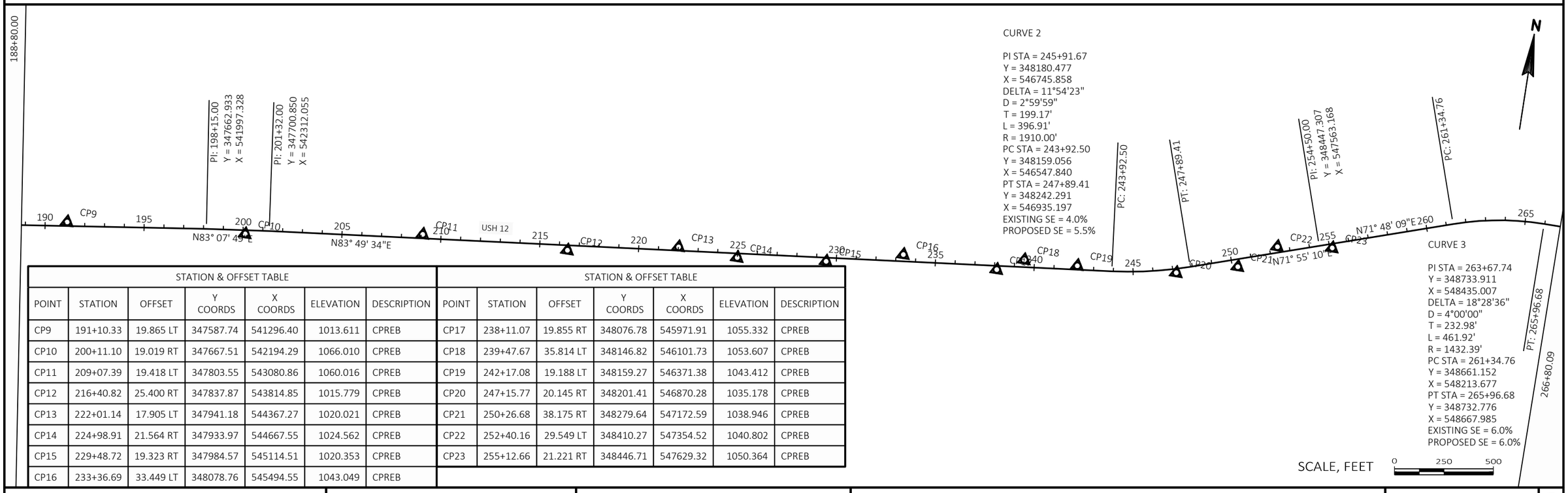
FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\027001_DT.DWG
LAYOUT NAME - 2

PLOT DATE : 10/28/2020 3:11 PM PLOT BY : KAKACEK, JOHN PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42



STATION & OFFSET TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	DESCRIPTION
CP1	152+43.08	20.771 RT	347332.11	537445.57	936.206	CPREB
CP2	153+97.35	19.136 LT	347372.29	537599.77	933.096	CPREB
CP3	157+60.21	20.390 RT	347333.42	537962.70	928.087	CPREB
CP4	162+52.14	19.932 LT	347374.63	538454.56	934.791	CPREB
CP5	175+92.34	25.280 LT	347392.33	539792.33	969.264	CPREB
CP6	178+62.76	39.577 RT	347360.85	540068.20	969.077	CPREB
CP7	182+19.81	29.519 LT	347477.39	540412.69	980.387	CPREB
CP8	185+26.86	19.514 RT	347470.15	540723.55	994.113	CPREB

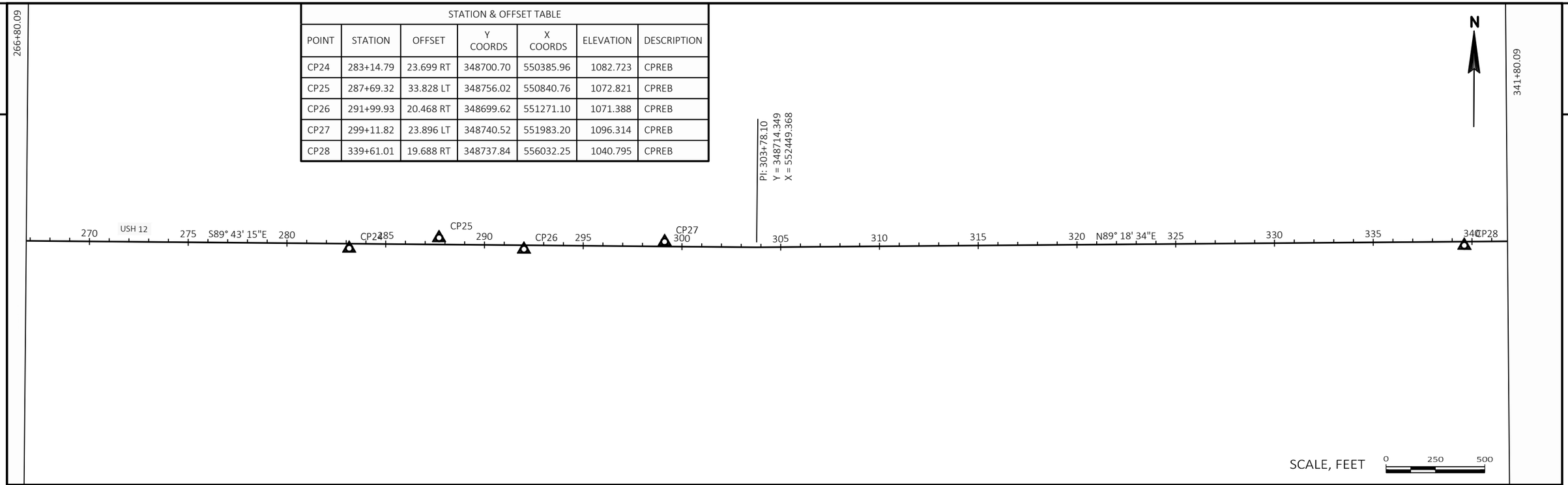


STATION & OFFSET TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	DESCRIPTION
CP9	191+10.33	19.865 LT	347587.74	541296.40	1013.611	CPREB
CP10	200+11.10	19.019 RT	347667.51	542194.29	1066.010	CPREB
CP11	209+07.39	19.418 LT	347803.55	543080.86	1060.016	CPREB
CP12	216+40.82	25.400 RT	347837.87	543814.85	1015.779	CPREB
CP13	222+01.14	17.905 LT	347941.18	544367.27	1020.021	CPREB
CP14	224+98.91	21.564 RT	347933.97	544667.55	1024.562	CPREB
CP15	229+48.72	19.323 RT	347984.57	545114.51	1020.353	CPREB
CP16	233+36.69	33.449 LT	348078.76	545494.55	1043.049	CPREB

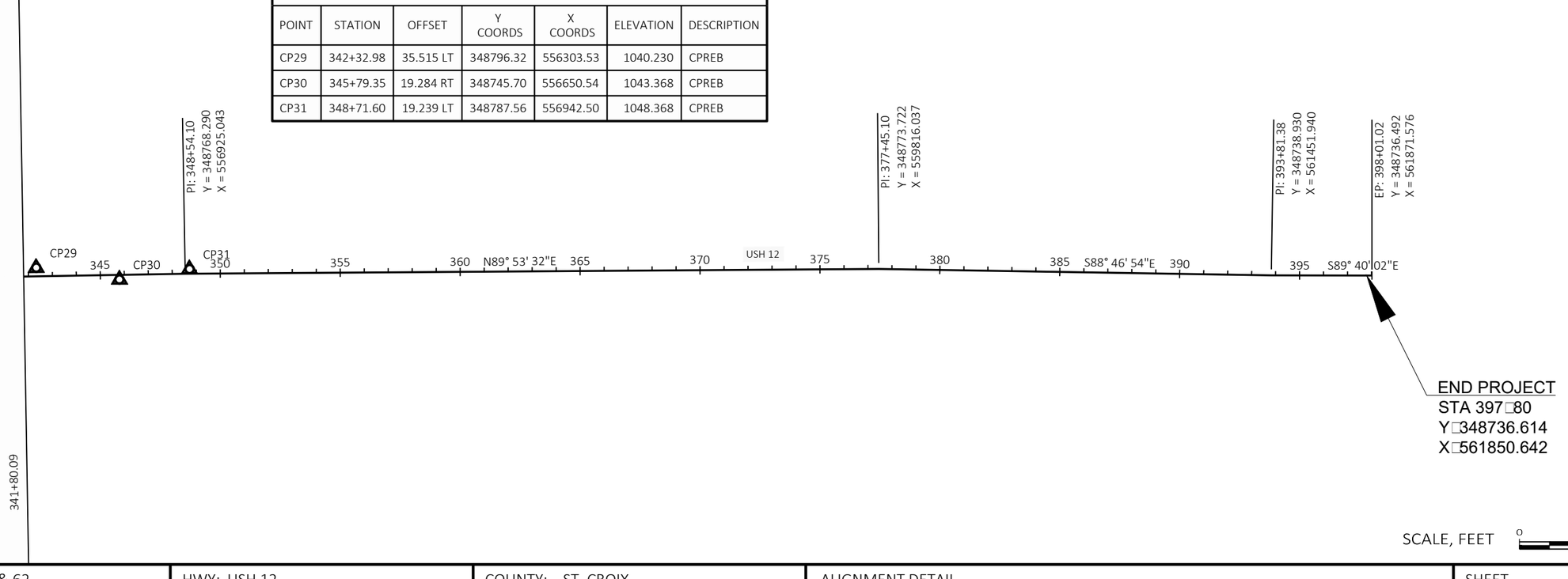
STATION & OFFSET TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	DESCRIPTION
CP17	238+11.07	19.855 RT	348076.78	545971.91	1055.332	CPREB
CP18	239+47.67	35.814 LT	348146.82	546101.73	1053.607	CPREB
CP19	242+17.08	19.188 LT	348159.27	546371.38	1043.412	CPREB
CP20	247+15.77	20.145 RT	348201.41	546870.28	1035.178	CPREB
CP21	250+26.68	38.175 RT	348279.64	547172.59	1038.946	CPREB
CP22	252+40.16	29.549 LT	348410.27	547354.52	1040.802	CPREB
CP23	255+12.66	21.221 RT	348446.71	547629.32	1050.364	CPREB

PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	ALIGNMENT DETAIL	SHEET 25	E

STATION & OFFSET TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	DESCRIPTION
CP24	283+14.79	23.699 RT	348700.70	550385.96	1082.723	CPREB
CP25	287+69.32	33.828 LT	348756.02	550840.76	1072.821	CPREB
CP26	291+99.93	20.468 RT	348699.62	551271.10	1071.388	CPREB
CP27	299+11.82	23.896 LT	348740.52	551983.20	1096.314	CPREB
CP28	339+61.01	19.688 RT	348737.84	556032.25	1040.795	CPREB



STATION & OFFSET TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	DESCRIPTION
CP29	342+32.98	35.515 LT	348796.32	556303.53	1040.230	CPREB
CP30	345+79.35	19.284 RT	348745.70	556650.54	1043.368	CPREB
CP31	348+71.60	19.239 LT	348787.56	556942.50	1048.368	CPREB



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	ALIGNMENT DETAIL	SHEET 26	E

					8949-02-61	8949-02-62
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0002	201.0105	Clearing	STA	97.000	97.000	
0004	201.0205	Grubbing	STA	97.000	97.000	
0006	203.0100	Removing Small Pipe Culverts	EACH	16.000	16.000	
0008	203.0200	Removing Old Structure (station) 01. 155+61	LS	1.000	1.000	
0010	204.0100	Removing Concrete Pavement	SY	1,350.000	1,350.000	
0012	204.0115	Removing Asphaltic Surface Butt Joints	SY	3,595.000	3,595.000	
0014	204.0120	Removing Asphaltic Surface Milling	SY	91,233.000	91,233.000	
0016	204.0150	Removing Curb & Gutter	LF	465.000	465.000	
0018	204.0165	Removing Guardrail	LF	4,953.000	4,953.000	
0020	204.0220	Removing Inlets	EACH	1.000	1.000	
0022	205.0100	Excavation Common	CY	23,069.000	23,069.000	
0024	208.0100	Borrow	CY	2,738.000	2,738.000	
0026	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	544.000		544.000
0028	213.0100	Finishing Roadway (project) 01. 8949-02-61	EACH	1.000	1.000	
0030	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,670.000	1,670.000	
0032	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	24,465.000	24,465.000	
0034	415.0085	Concrete Pavement 8 1/2-Inch	SY	103.000	103.000	
0036	415.0100	Concrete Pavement 10-Inch	SY	2,000.000	2,000.000	
0038	415.0410	Concrete Pavement Approach Slab	SY	140.000	140.000	
0040	416.0610	Drilled Tie Bars	EACH	6.000	6.000	
0042	416.1010	Concrete Surface Drains	CY	6.000	6.000	
0044	455.0605	Tack Coat	GAL	6,914.000	6,196.000	718.000
0046	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	2.000	2.000	
0048	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	2.000	2.000	
0050	460.2000	Incentive Density HMA Pavement	DOL	5,890.000	5,890.000	
0052	460.2005	Incentive Density PWL HMA Pavement	DOL	7,890.000	7,890.000	
0054	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	10,852.000	10,852.000	
0056	460.2010	Incentive Air Voids HMA Pavement	DOL	19,360.000	19,360.000	
0058	460.6645	HMA Pavement 5 MT 58-34 V	TON	19,681.000	17,449.000	2,232.000
0060	465.0105	Asphaltic Surface	TON	2,608.000	2,608.000	
0062	465.0110	Asphaltic Surface Patching	TON	50.000	50.000	
0064	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	27.000	27.000	
0066	465.0315	Asphaltic Flumes	SY	48.000	48.000	
0068	465.0425	Asphaltic Shoulder Rumble Strips 2-Lane Rural	LF	47,444.000		47,444.000
0070	465.0475	Asphalt Centerline Rumble Strips 2-Lane Rural	LF	23,202.000	23,202.000	
0072	520.3312	Culvert Pipe Class III-A 12-Inch	LF	16.000	16.000	
0074	520.8700	Cleaning Culvert Pipes	EACH	1.000	1.000	
0076	521.1012	Apron Endwalls for Culvert Pipe Steel 12-Inch	EACH	2.000	2.000	
0078	522.0418	Culvert Pipe Reinforced Concrete Class IV 18-Inch	LF	47.000	47.000	
0080	522.0424	Culvert Pipe Reinforced Concrete Class IV 24-Inch	LF	668.000	668.000	

				8949-02-61	8949-02-62	
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0082	522.0430	Culvert Pipe Reinforced Concrete Class IV 30-Inch	LF	147.000	147.000	
0084	522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	EACH	2.000	2.000	
0086	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	23.000	23.000	
0088	522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	EACH	4.000	4.000	
0090	522.2319	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 19x30-Inch	LF	105.000	105.000	
0092	522.2329	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 29x45-Inch	LF	44.000	44.000	
0094	522.2338	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 38x60-Inch	LF	44.000	44.000	
0096	522.2619	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 19x30-Inch	EACH	4.000	4.000	
0098	522.2629	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 29x45-Inch	EACH	2.000	2.000	
0100	522.2638	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 38x60-Inch	EACH	2.000	2.000	
0102	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	3,614.000	3,614.000	
0104	601.0590	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type TBTT	LF	117.000	117.000	
0106	606.0200	Riprap Medium	CY	45.000	45.000	
0108	611.0615	Inlet Covers Type F	EACH	1.000	1.000	
0110	611.3230	Inlets 2x3-FT	EACH	1.000	1.000	
0112	611.8115	Adjusting Inlet Covers	EACH	1.000	1.000	
0114	612.0212	Pipe Underdrain Unperforated 12-Inch	LF	20.000	20.000	
0116	614.2300	MGS Guardrail 3	LF	1,150.000	1,150.000	
0118	614.2330	MGS Guardrail 3 K	LF	200.000	200.000	
0120	614.2340	MGS Guardrail 3 L	LF	200.000	200.000	
0122	614.2350	MGS Guardrail Short Radius	LF	79.000	79.000	
0124	614.2500	MGS Thrie Beam Transition	LF	157.500	157.500	
0126	614.2610	MGS Guardrail Terminal EAT	EACH	12.000	12.000	
0128	614.2630	MGS Guardrail Short Radius Terminal	EACH	2.000	2.000	
0130	618.0100	Maintenance And Repair of Haul Roads (project) 01. 8949-02-61	EACH	1.000	1.000	
0132	619.1000	Mobilization	EACH	1.000	0.950	0.050
0134	624.0100	Water	MGAL	370.000	370.000	
0136	625.0500	Salvaged Topsoil	SY	66,500.000	66,500.000	
0138	627.0200	Mulching	SY	66,500.000	66,500.000	
0140	628.1504	Silt Fence	LF	26,421.000	26,421.000	
0142	628.1520	Silt Fence Maintenance	LF	26,421.000	26,421.000	

					8949-02-61	8949-02-62
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0144	628.1905	Mobilizations Erosion Control	EACH	11.000	11.000	
0146	628.1910	Mobilizations Emergency Erosion Control	EACH	6.000	6.000	
0148	628.2002	Erosion Mat Class I Type A	SY	20,355.000	20,355.000	
0150	628.7005	Inlet Protection Type A	EACH	1.000	1.000	
0152	628.7015	Inlet Protection Type C	EACH	2.000	2.000	
0154	628.7504	Temporary Ditch Checks	LF	1,720.000	1,720.000	
0156	628.7555	Culvert Pipe Checks	EACH	17.000	17.000	
0158	628.7570	Rock Bags	EACH	272.000	272.000	
0160	629.0210	Fertilizer Type B	CWT	5.200	5.200	
0162	630.0140	Seeding Mixture No. 40	LB	142.000	142.000	
0164	630.0200	Seeding Temporary	LB	142.000	142.000	
0166	630.0500	Seed Water	MGAL	1,500.000	1,500.000	
0168	633.5200	Markers Culvert End	EACH	38.000	38.000	
0170	638.2102	Moving Signs Type II	EACH	8.000	8.000	
0172	638.4000	Moving Small Sign Supports	EACH	8.000	8.000	
0174	642.5001	Field Office Type B	EACH	1.000	1.000	
0176	643.0300	Traffic Control Drums	DAY	3,050.000	3,050.000	
0178	643.0420	Traffic Control Barricades Type III	DAY	2,196.000	2,196.000	
0180	643.0705	Traffic Control Warning Lights Type A	DAY	4,392.000	4,392.000	
0182	643.0900	Traffic Control Signs	DAY	24,156.000	24,156.000	
0184	643.0920	Traffic Control Covering Signs Type II	EACH	52.000	52.000	
0186	643.1050	Traffic Control Signs PCMS	DAY	28.000	28.000	
0188	643.5000	Traffic Control	EACH	1.000	1.000	
0190	645.0120	Geotextile Type HR	SY	89.000	89.000	
0192	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	54,290.000	54,290.000	
0194	646.4520	Marking Line Same Day Epoxy 4-Inch	LF	44,822.000	44,822.000	
0196	646.7120	Marking Diagonal Epoxy 12-Inch	LF	133.000	133.000	
0198	648.0100	Locating No-Passing Zones	MI	5.250	5.250	
0200	649.0105	Temporary Marking Line Paint 4-Inch	LF	85,528.000	85,528.000	
0202	650.4000	Construction Staking Storm Sewer	EACH	1.000	1.000	
0204	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	3,731.000	3,731.000	
0206	650.6000	Construction Staking Pipe Culverts	EACH	17.000	17.000	
0208	650.8000	Construction Staking Resurfacing Reference	LF	27,730.000	27,730.000	
0210	650.9910	Construction Staking Supplemental Control (project) 01. 8949-02-61	LS	1.000	1.000	
0212	650.9920	Construction Staking Slope Stakes	LF	27,730.000	27,730.000	
0214	690.0150	Sawing Asphalt	LF	957.000	957.000	
0216	690.0250	Sawing Concrete	LF	40.000	40.000	
0218	740.0440	Incentive IRI Ride	DOL	20,880.000	20,880.000	
0220	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	1,000.000	1,000.000	

					8949-02-61	8949-02-62
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0222	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	630.000	630.000	
0224	SPV.0090	Special 01. CONCRETE CURB AND GUTTER CURE AND SEAL TREATMENT	LF	3,731.000	3,731.000	
0226	SPV.0105	Special 01. PREPARE FOUNDATION FOR ASPHALTIC PAVING SPECIAL (PROJECT) 01. 8949-02-61	LS	1.000	1.000	
0228	SPV.0105	Special 02. MATERIAL TRANSFER VEHICLE	LS	1.000	1.000	
0230	SPV.0105	Special 03. MILLING AND REMOVING TEMPORARY JOINT	LS	1.000	1.000	

CLEARING AND GRUBBING SUMMARY

ID	STATION	TO	STATION	LOCATION	CLEARING 201.0105 STA	GRUBBING 201.0205 STA	REMARKS
61	168+50	-	170+50	USH 12 LT	2	2	
61	176+00	-	178+00	USH 12 LT	2	2	
61	179+00	-	181+00	USH 12 LT	2	2	
61	186+50	-	191+50	USH 12 LT	5	5	
61	190+00	-	194+00	USH 12 RT	4	4	
61	191+00	-	195+00	USH 12 LT	4	4	
61	196+00	-	197+00	USH 12 RT	1	1	
61	198+00	-	199+00	USH 12 RT	1	1	
61	200+00	-	202+00	USH 12 LT	2	2	
61	209+00	-	212+00	USH 12 RT	3	3	
61	211+00	-	213+00	USH 12 LT	2	2	
61	214+00	-	215+00	USH 12 LT	1	1	
61	215+00	-	221+00	USH 12 LT	6	6	
61	222+00	-	225+00	USH 12 RT	3	3	
61	225+00	-	229+00	USH 12 LT	4	4	
61	229+00	-	232+00	USH 12 LT	3	3	
61	232+00	-	234+00	USH 12 LT	2	2	
61	239+00	-	242+00	USH 12 LT	3	3	
61	244+00	-	250+00	USH 12 LT	6	6	
61	276+00	-	277+00	USH 12 RT	1	1	
61	276+00	-	279+00	USH 12 RT	3	3	
61	277+00	-	278+00	USH 12 LT	1	1	
61	281+00	-	283+00	USH 12 LT	2	2	
61	283+00	-	286+00	USH 12 RT	3	3	
61	285+00	-	286+00	USH 12 LT	1	1	
61	288+00	-	290+00	USH 12 RT	2	2	
61	289+00	-	290+00	USH 12 LT	1	1	
61	296+00	-	298+00	USH 12 RT	2	2	
61	298+00	-	299+00	USH 12 RT	1	1	
61	301+00	-	303+00	USH 12 RT	2	2	
61	307+00	-	308+00	USH 12 RT	1	1	
61	317+00	-	318+00	USH 12 RT	1	1	
61	330+00	-	331+00	USH 12 RT	1	1	
61	341+00	-	344+00	USH 12 RT	3	3	
61	344+00	-	345+00	USH 12 LT	1	1	
61	344+00	-	347+50	USH 12 RT	4	4	
61	352+00	-	355+00	USH 12 LT	3	3	
61	353+50	-	355+50	USH 12 RT	2	2	
61	358+00	-	360+00	USH 12 LT	2	2	
61	378+00	-	379+00	USH 12 LT	1	1	
61	386+00	-	389+00	USH 12 RT	3	3	
				PROJECT TOTALS =	97	97	

BASE AGGREGATE SUMMARY

ID	STATION	TO	STATION	LOCATION	BASE DENSE AGGREGATE 3/4-INCH 305.0110 TON	BASE DENSE AGGREGATE 1 1/4-INCH 305.0120 TON	REMARKS
61	120+50	-	126+50	USH 12 LT/RT	36	969	CONCRETE SECTION
61	126+50	-	137+60	USH 12 RT	33	405	
61	126+50	-	164+50	USH 12 LT	113	1,385	
61	127+50	-	127+60	CLINT'S TRAIL	5	60	TROOPER OBSERVATION PAD
61	138+90	-	182+23	USH 12 RT	129	1,580	
61	165+60	-	194+60	USH 12 LT	86	1,057	
61	182+23	-	186+81	USH 12 RT C&G	14	167	
61	186+81	-	207+34	USH 12 RT	61	749	
61	194+60	-	201+00	USH 12 LT C&G	19	234	
61	201+00	-	249+77	USH 12 LT	145	1,778	
61	207+34	-	214+80	USH 12 RT C&G	23	272	
61	214+80	-	237+90	USH 12 RT	69	842	
61	237+90	-	240+15	USH 12 RT C&G	7	82	
61	240+15	-	249+77	USH 12 RT	29	351	
61	247+80	-	249+30	DWY RT	37	-	
61	252+14	-	266+70	USH 12 LT	44	531	
61	252+14	-	345+70	USH 12 RT	278	3,410	
61	266+70	-	270+00	USH 12 LT C&G	10	121	
61	270+00	-	295+94	USH 12 LT	77	946	
61	295+94	-	300+49	USH 12 LT C&G	14	166	
61	300+49	-	301+76	USH 12 LT	4	47	
61	301+76	-	304+57	USH 12 LT C&G	9	103	
61	304+57	-	305+25	USH 12 LT	3	25	
61	305+25	-	306+85	USH 12 LT C&G	5	59	
61	306+85	-	350+50	USH 12 LT	130	1,591	
61	345+70	-	348+55	USH 12 RT C&G	9	104	
61	348+55	-	350+25	USH 12 RT	6	62	
61	351+40	-	397+80	USH 12 RT	138	1,692	
61	351+65	-	397+80	USH 12 LT	137	1,682	
	PROJECT LIMITS			CULVERT REPLACEMENTS	-	3,995	17 LOCATIONS
				PROJECT ID 8949-02-61 TOTALS	1,670	24,465	

PAVEMENT REMOVAL

ID	STATION	TO	STATION	LOCATION	REMOVING CONCRETE PAVEMENT 204.0100 SY	REMOVING ASPHALTIC SURFACE BUTT JOINTS 204.0115 SY	REMOVING ASPHALTIC SURFACE MILLING 204.0120 SY	REMARKS
61	120+50	-	126+50	CONCRETE SECTION	1350	-	-	
61	126+50	-	250+23	MAINLINE	-	250	41609	
61	251+72	-	397+80	MAINLINE	-	250	49480	
61	126+50	-	397+80	DRIVEWAYS	-	-	144	
61	126+50	-	397+80	INTERSECTIONS	-	3,095	-	
				PROJECT TOTALS =	1,350	3,595	91,233	

ALL ITEMS ARE ID 8949-02-61 UNLESS NOTED OTHERWISE

DIVISION	FROM/TO STATION	LOCATION	205.0100 COMMON EXCAVATION (1) CUT (2)	205.0100 COMMON EXCAVATION (1) EBS EXCAVATION (3)	SALVAGED /UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	REDUCED EBS IN FILL (6) FACTOR 0.80	EXPANDED EBS BACKFILL (7) FACTOR 1.30	UNEXPANDED FILL	EXPANDED FILL (8) FACTOR 1.30	MASS ORDINATE +/- (9)	WASTE	208.0100 BORROW	COMMENT
DIVISION 1 - USH 12	120+50/397+80		22,569	500	0	22,569	400	650	19,867	25,307	-2,738	0	2,738	
GRAND TOTAL			22,569	500	0	22,569	400	650	19,867	25,307	-2,738	0	2,738	
UNDISTRIBUTED														
TOTAL COMMON EXC			23,069											

NOTES:
(1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100
(2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
(3) EBS EXCAVATION TO BE BACKFILLED WITH SUITABLE CUT MATERIAL.
(4) SALVAGED/UNUSABLE PAVEMENT MATERIAL
(5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL
(6) REDUCED EBS IN FILL - EXCAVATED EBS MATERIAL IS USABLE IN FILLS OUTSIDE THE 1:1 SLOPE. EBS IN FILL REDUCTION FACTOR = 0.80
(7) EXPANDED EBS BACKFILL - THIS IS TO BE FILLED WITH SUITABLE CUT MATERIAL. EBS BACKFILL FACTOR = 1.3.
(8) EXPANDED FILL FACTOR = 1.3
DEPENDING ON SELEC **EXPANDED FILL = (UNEXPANDED FILL - REDUCED EBS) * FILL FACTOR**
(9) 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 DIVIS
(10) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFORMATION ONLY.

ALL ITEMS ARE ID 8949-02-61 UNLESS NOTED OTHERWISE

3

ASPHALTIC FLUMES

ID	STATION	LOCATION	465.0315 SY	REMARKS
61	182+26	USH 12 RT	6	
61	194+63	USH 12 LT	6	
61	214+82	USH 12 RT	6	
61	240+17	USH 12 RT	6	
61	270+03	USH 12 LT	6	
61	295+92	USH 12 LT	6	
61	306+88	USH 12 LT	6	
61	345+67	USH 12 RT	6	
		PROJECT TOTAL =	48	

CONCRETE PAVEMENT SUMMARY

ID	STATION TO	STATION	LOCATION	CONCRETE PAVEMENT 8 1/2-INCH 415.0085 SY	CONCRETE PAVEMENT 10-INCH 415.0110 SY	CONCRETE PAVEMENT APPROACH SLAB 415.0410 SY	REMARKS
61	120+50 -	126+50	USH 12	-	2,000	-	
61	248+91 -	249+92	USH 12 WB	40	-	-	
61	249+77 -	250+04	USH 12 WB	-	-	29	
61	249+77 -	250+16	USH 12 EB	-	-	45	
61	249+61 -	250+23	USH 12 EB	26	-	-	
61	251+72 -	252+14	USH 12 WB	29	-	-	
61	251+78 -	252+14	USH 12 WB	-	-	40	
61	251+88 -	252+14	USH 12 EB	-	-	26	
61	251+99 -	252+14	USH 12 EB	8	-	-	
			PROJECT ID 8949-02-61 TOTALS	103	2,000	140	

REMOVING CULVERT SUMMARY

STATION	LOCATION	REMOVING SMALL PIPE CULVERTS 203.0100 EACH	REMOVE OLD STRUCTURE (STA. 155+61) 203.0200 EACH	REMARKS
139+50	USH 12	1	-	
155+61	USH 12	-	1	
159+00	USH 12	1	-	
188+61	USH 12	-	-	
228+12	USH 12	1	-	
230+17	USH 12	1	-	
236+02	USH 12	1	-	
240+98	USH 12	1	-	
248+60	USH 12	-	-	
285+55	USH 12	1	-	
289+38	USH 12	1	-	
301+44	USH 12	1	-	
304+36	USH 12	1	-	
307+88	USH 12	1	-	
318+92	USH 12	1	-	
330+48	USH 12	1	-	
343+65	USH 12	1	-	
361+40	USH 12	1	-	
396+35	USH 12	1	-	
	PROJECT TOTALS =	16	1	

CURB & GUTTER SUMMARY

ID	STATION TO	STATION	LOCATION	REMOVING CURB & GUTTER 204.0150 LF	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D 601.0557 LF	CONCRETE CURB & GUTTER4-INCH SLOPED 36-INCH TYPE TBTT 601.0590 LF	CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER 650.5500 LF	CONCRETE CURB AND GUTTER CURE AND SEAL TREATMENT SPV.0090.01 LF
61	182+23 -	186+81	USH 12 RT	-	453	-	453	453
61	194+60 -	201+00	USH 12 LT	303	640	-	640	640
61	207+34 -	214+80	USH 12 RT	-	746	-	746	746
61	237+90 -	240+15	USH 12 RT	-	225	-	225	225
61	266+70 -	270+00	USH 12 LT	-	330	-	330	330
61	295+94 -	300+49	USH 12 LT	-	455	-	455	455
61	301+76 -	304+71	USH 12 LT	-	300	-	300	300
61	305+08 -	306+85	USH 12 LT	162	180	-	180	180
61	345+70 -	348+55	USH 12 RT	-	285	-	285	285
61	248+91 -	249+64	USH 12 LT	-	-	73	73	73
61	249+62 -	250+06	USH 12 RT	-	-	44	44	44
			PROJECT TOTALS =	465	3614	117	3731	3731

PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS

ID	STATION TO	STATION	LOCATION	211.0400 STA
62	126+50 -	397+80	LT	272
62	126+50 -	397+80	RT	272
			PROJECT TOTALS =	544

ALL ITEMS ARE ID 8949-02-61 UNLESS NOTED OTHERWISE

HMA PAVEMENT ITEMS

ARE ID 8949-02-61 UNLESS NOTED OTHERWISE

ID	STATION TO STATION	LOCATION	TACK COAT 455.0605 GAL	HMA PAVEMENT 5 MT 58-34 V 460.6645 TON	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES 465.0120 TON	ASPHALTIC SURFACE 465.0105 TON	ASPHALTIC SURFACE PATCHING 465.0110 TON	REMARKS
61	120+50 - 126+50	MAINLINE	16	50	-	-	-	CONCRETE SECTION SHOULDER
61	126+50 - 250+18	MAINLINE	2,466	7,679	-	-	-	
61	251+74 - 397+80	MAINLINE	2,931	9,127	-	-	-	
61	126+50 - 397+80	DRIVEWAYS	9	-	27	-	-	
61	126+50 - 397+80	INTERSECTIONS	186	579	-	-	-	
61	127+50 - 127+60	CLINT'S TRAIL	3	14	-	-	-	TROOPER OBSERVATION PAD
61	126+50 - 397+80	S.E. CORRECTION	180	-	-	466	-	
61	PROJECT LIMITS	CULVERT REPLACEMENT	405	-	-	2,142		17 LOCATIONS
61	PROJECT LIMITS	UNDSTRIBUTED	-	-	-	-	50	
		PROJECT ID 8949-02-61 TOTALS	6,196	17,449	27	2,608	50	
62	126+50 - 250+23	EXTENDED SHLD RT	165	512	-	-	-	
62	126+50 - 249+89	EXTENDED SHLD LT	163	507	-	-	-	
62	252+01 - 397+80	EXTENDED SHLD RT	195	607	-	-	-	
62	251+72 - 397+80	EXTENDED SHLD LT	195	606	-	-	-	
		PROJECT ID 8949-02-62 TOTALS	718	2,232	0	0	0	
		PROJECT TOTALS	**6,914**	**19,681**	**27**	**2,608**	**50**	

HMA PAVEMENT SUMMARY

ID	STATION TO STATION	LOCATION	HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP VOLUMETRICS 460.0105.S EACH	HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP DENSITY 460.0110.S EACH
61	126+50 - 397+80	MAINLINE	2	2
		PROJECT ID 8949-02-61 TOTALS	2	2

FOR INFORMATIONAL PURPOSES ONLY

STATION		LOCATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEM	TONS	THICKNESS	QUALITY MANAGEMENT PROGRAM TO BE USED FOR MIXTURE ACCEPTANCE	QUALITY MANAGEMENT PROGRAM TO BE USED FOR DENSITY ACCEPTANCE
126+50	250+18	2-12FT DRIVING LANES	UPPER LAYER	HMA PAVEMENT 5 MT 58-34 V	5 MT 58-34 V	3673.29	1.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
251+74	397+80	2-12FT DRIVING LANES	UPPER LAYER	HMA PAVEMENT 5 MT 58-34 V	5 MT 58-34 V	4212.31	1.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
126+50	250+18	2-12FT DRIVING LANES	LOWER LAYER	EXISTING ASPHALT MILL & RELAY	5 MT 58-34 V	4285.51	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY HMA PAVEMENT 460.2000
251+74	397+80	2-12FT DRIVING LANES	LOWER LAYER	EXISTING ASPHALT MILL & RELAY	5 MT 58-34 V	4914.36	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY HMA PAVEMENT 460.2000
126+50	250+18	2-5FT PAVED SHOULDERS	UPPER LAYER	HMA PAVEMENT 5 MT 58-34 V	5 MT 58-34 V	489.73	1.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
251+74	397+80	2-5FT PAVED SHOULDERS	UPPER LAYER	HMA PAVEMENT 5 MT 58-34 V	5 MT 58-34 V	559.04	1.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
126+50	250+18	2-5FT PAVED SHOULDERS	LOWER LAYER	EXISTING ASPHALT MILL & RELAY & 1-1/4" BASE AGG	5 MT 58-34 V	571.35	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
251+74	397+80	2-5FT PAVED SHOULDERS	LOWER LAYER	EXISTING ASPHALT MILL & RELAY & 1-1/4" BASE AGG	5 MT 58-34 V	652.21	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE

3

RUMBLE STRIP SUMMARY

ID	STATION	TO	STATION	LOCATION	ASPHALTIC SHOULDER RUMBLE STRIPS 2-LANE RURAL 465.0425 LF	ASPHALTIC CENTER LINE RUMBLE STRIP 2-LANE RURAL 465.0475 LF	REMARKS
61	120+50	-	397+80	CL	-	23,202	
62	126+50	-	397+80	LT	23,782	-	TYPE 1
62	126+50	-	397+80	RT	23,662	-	TYPE 1
	PROJECT ID 8949-02-61 TOTALS =				-	23,202	
	PROJECT ID 8949-02-62 TOTALS =				47,444	-	
	PROJECT TOTALS =				**47,444**	**23,202**	

ADDITIONAL HMA PAVEMENT ITEMS

ID	STATION	TO	STATION	LOCATION	PREPARE FOUNDATION FOR ASPHALTIC PAVING SPECIAL (PROJECT) 01. 8949-02-61 SPV.0105.01 LS	MATERIAL TRANSFER VEHICLE SPV.0105.02 LS	MILLING AND REMOVING TEMPORARY JOINT SPV.0105.03 LS	REMARKS
61	120+50	-	397+80	MAINLINE	1	1	1	
	PROJECT TOTALS =				1	1	1	

3

CONCRETE SURFACE DRAIN SUMMARY

ID	STATION	TO	STATION	LOCATION	DRILLED TIE BARS 416.0610 EACH	CONCRETE SURFACE DRAINS 416.1010 CY	APRON ENDWALLS FOR CULVERT PIPE STEEL 12-INCH 521.1012 EACH	* RIPRAP MEDIUM 606.0200 CY	PIPE UNDERDRAIN UNPERFORATED 12-INCH 612.0212 LF	* GEOTEXTILE TYPE HR 645.0120 SY
61	248+91	-	250+23	WEST APPROACH, LT	3	3	1	8	10	5.5
61	251+72	-	252+14	WEST APPROACH, RT	3	3	1	8	10	5.5
					6	6	2	16	20	11.0

STORM SEWER SUMMARY

STATION	LOCATION	REMOVING INLETS 204.0220 EACH	INLET COVERS TYPE F 611.0615 EACH	INLETS 2x3-FT 611.3230 EACH	ADJUSTING INLET COVERS 611.8115 EACH	CONSTRUCTION STAKING STORM SEWER SYSTEM 650.4000 EACH	RIM	INVERT	REMARKS
304+36	18' LT	1	1	1	-	1	1092.60	1087.60	
305+20	21' LT	-	-	-	1	-	-	-	
PROJECT TOTALS =		**1**	**1**	**1**	**1**	**1**			

ALL ITEMS ARE ID 8949-02-61 UNLESS NOTED OTHERWISE

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CULVERT SUMMARY

STATION	LOCATION	CULVERT PIPE CLASS III-A 12-INCH 520.3312 LF	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH 522.1018 EACH	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH 522.1024 EACH	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH 522.1030 EACH	CLEANING CULVERT PIPES 520.8700 EACH	CULVERT PIPE REINFORCED CONCRETE CLASS IV 18-INCH 522.0418 LF	CULVERT PIPE REINFORCED CONCRETE CLASS IV 24-INCH 522.0424 LF	CULVERT PIPE REINFORCED CONCRETE CLASS IV 30-INCH 522.0430 LF	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 19X30-INCH 522.2319 LF	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 29X45-INCH 522.2329 LF	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 38X60-INCH 522.2338 LF	APRON ENDWALLS FOR CULVERT PIPE REINCORCED CONCRETE HORIZONTAL ELLIPTICAL 19X30-INCH 522.2619 LF	APRON ENDWALLS FOR CULVERT PIPE REINCORCED CONCRETE HORIZONTAL ELLIPTICAL 29X45-INCH 522.2629 LF	APRON ENDWALLS FOR CULVERT PIPE REINCORCED CONCRETE HORIZONTAL ELLIPTICAL 38X60-INCH 522.2638 LF	CONSTRUCTION STAKING PIPE CULVERTS 650.6000 EACH	REMARKS
139+50	USH 12	-	-	2	-	-	-	-	-	50	-	-	2	-	-	1	
155+61	USH 12	-	-	-	-	-	-	-	-	-	-	44	-	-	2	1	
159+00	USH 12	-	-	-	-	-	-	-	-	-	44	-	-	2	-	1	
188+61	USH 12	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	
228+12	USH 12	-	-	2	-	-	-	62	-	-	-	-	-	-	-	1	
230+17	USH 12	-	-	2	-	-	-	75	-	-	-	-	-	-	-	1	
236+02	USH 12	-	-	2	-	-	-	54	-	-	-	-	-	-	-	1	
240+98	USH 12	-	-	2	-	-	-	99	-	-	-	-	-	-	-	1	
248+60	USH 12	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
285+55	USH 12	-	-	2	-	-	-	60	-	-	-	-	-	-	-	1	
289+38	USH 12	-	-	2	-	-	-	83	-	-	-	-	-	-	-	1	
301+44	USH 12	-	-	2	-	-	-	72	-	-	-	-	-	-	-	1	
304+36	USH 12	-	-	1	-	-	-	51	-	-	-	-	-	-	-	1	
307+88	USH 12	-	-	2	-	-	-	60	-	-	-	-	-	-	-	1	
318+92	USH 12	-	2	-	-	-	47	-	-	-	-	-	-	-	-	1	
330+48	USH 12	-	-	2	-	-	-	52	-	-	-	-	-	-	-	1	
343+65	USH 12	-	-	-	2	-	-	-	77	-	-	-	-	-	-	1	
361+40	USH 12	-	-	-	2	-	-	-	70	-	-	-	-	-	-	1	
396+35	USH 12	-	-	2	-	-	-	-	-	55	-	-	2	-	-	1	
PROJECT TOTALS =		16	2	23	4	1	47	668	147	105	44	44	4	2	2	17	

BEAM GUARD SUMMARY

ID	STATION TO	STATION	LOCATION	REMOVING GUARDRAIL 204.0165 LF	MGS GUARDRAIL 3 614.2300 LF	MGS GUARDRAIL 3 K 614.2330 LF	MGS GUARDRAIL 3 L 614.2340 LF	MGS GUARDRAIL SHORT RADIUS 614.2350 LF	MGS THRIE BEAM TRANSITION 614.2500 LF	MGS GUARDRAIL TERMINAL EAT 614.2610 EACH	MGS GUARDRAIL SHORT RADIUS TERMINAL 614.2630 EACH	RADIUS	REMARKS
61	154+83 -	156+33	LT	152	-	-	-	-	-	-	-	-	REMOVE
61	154+95 -	156+33	RT	140	-	-	-	-	-	-	-	-	REMOVE
61	179+09 -	180+78	LT	165	-	-	100	-	-	2	-	-	REPLACE
61	179+09 -	180+53	RT	137	-	-	100	-	-	2	-	-	REPLACE
61	186+60 -	187+35	RT	77	-	-	-	-	-	-	-	-	REMOVE
61	186+63 -	191+12	LT	452	275	100.0	-	38.29	-	1	1	24	REPLACE
61	187+69 -	189+75	RT	700	-	100.0	-	-	-	2	-	-	REPLACE/SHORTEN
61	191+34 -	194+28	LT	301	-	-	-	-	-	-	-	-	REMOVE
61	214+63 -	220+57	LT	589	487.5	-	-	-	-	2	-	-	REPLACE
61	214+74 -	216+50	RT	177	-	-	-	-	-	-	-	-	REMOVE
61	217+09 -	219+40	RT	250	-	-	-	-	-	-	-	-	REMOVE
61	229+48 -	232+61	LT	315	-	-	-	-	-	-	-	-	REMOVE
61	240+01 -	241+64	LT	165	-	-	-	-	-	-	-	-	REMOVE
61	246+92 -	249+73	LT	276	187.5	-	-	-	39.38	1	-	-	BRIDGE NW - REPLACE
61	247+95 -	250+12	RT	223	125	-	-	-	39.38	1	-	-	BRIDGE SW - REPLACE
61	251+82 -	252+62	LT	145	25	-	-	40.66	39.38	-	1	16	BRIDGE NE - REPLACE
61	252+15 -	253+57	RT	144	50	-	-	-	39.38	1	-	-	BRIDGE SE - REPLACE
61	287+66 -	290+68	RT	304	-	-	-	-	-	-	-	-	REMOVE
61	342+69 -	345+08	LT	241	-	-	-	-	-	-	-	-	REMOVE
		PROJECT TOTAL		4,953	1,150.0	200	200	79	157.50	12	2		

SILT FENCE SUMMARY

STATION	TO	STATION	LOCATION	SILT FENCE 628.1504 LF	SILT FENCE MAINTENANCE 628.1520 LF	REMARKS
120+50	-	124+30	LT	381	381	
120+50	-	123+07	RT	257	257	
127+64	-	134+89	LT	725	725	
136+56	-	137+99	RT	144	144	
138+79	-	141+19	RT	242	242	
140+97	-	142+53	LT	156	156	
143+37	-	149+79	LT	643	643	
154+49	-	157+32	LT	284	284	
157+66	-	164+70	LT	708	708	
159+47	-	161+35	RT	188	188	
165+34	-	168+13	LT	281	281	
166+87	-	168+08	RT	121	121	
168+26	-	171+99	LT	373	373	
172+17	-	179+48	LT	730	730	
180+08	-	182+24	LT	217	217	
186+08	-	191+07	LT	505	505	
187+63	-	196+04	RT	848	848	
191+38	-	194+35	LT	301	301	
203+60	-	206+48	LT	297	297	
214+07	-	220+78	LT	681	681	
214+46	-	216+64	RT	220	220	
217+15	-	219+47	RT	234	234	
225+50	-	228+22	LT	274	274	
229+52	-	232+37	LT	302	302	
234+67	-	237+86	LT	322	322	
238+33	-	244+32	LT	622	622	
247+34	-	249+30	LT	200	200	
247+89	-	249+94	RT	230	230	
252+37	-	256+81	RT	446	446	
262+27	-	271+73	RT	940	940	
270+00	-	274+51	LT	450	450	
274+68	-	278+04	LT	337	337	
274+55	-	281+32	RT	682	682	
PROJECT SUBTOTAL 1				13,341	13,341	

SILT FENCE SUMMARY (CONTINUED)

STATION	TO	STATION	LOCATION	SILT FENCE 628.1504 LF	SILT FENCE MAINTENANCE 628.1520 LF	REMARKS
281+69	-	286+56	RT	492	492	
288+06	-	292+29	RT	439	439	
289+05	-	291+92	LT	289	289	
292+47	-	297+99	RT	552	552	
298+24	-	306+01	RT	795	795	
300+39	-	301+84	LT	145	145	
306+22	-	312+05	RT	589	589	
306+65	-	310+34	LT	379	379	
315+55	-	318+31	LT	275	275	
316+78	-	319+38	RT	264	264	
323+70	-	327+74	RT	405	405	
327+96	-	329+49	RT	153	153	
330+01	-	333+52	RT	352	352	
333+76	-	336+32	RT	257	257	
336+62	-	338+83	RT	223	223	
336+63	-	338+43	LT	180	180	
338+77	-	340+48	LT	171	171	
339+00	-	340+65	RT	165	165	
342+72	-	345+49	LT	293	293	
351+34	-	354+65	LT	332	332	
354+50	-	363+61	RT	914	914	
355+01	-	355+51	LT	56	56	
359+39	-	364+44	LT	507	507	
364+63	-	365+83	LT	120	120	
366+00	-	368+85	LT	287	287	
371+79	-	375+47	LT	369	369	
372+02	-	380+78	RT	877	877	
379+42	-	397+82	LT	1,843	1,843	
383+46	-	388+78	RT	531	531	
388+95	-	394+33	RT	539	539	
394+55	-	397+41	RT	287	287	
PROJECT SUBTOTAL 2 =				13,080	13,080	
PROJECT SUBTOTAL 1 =				13,341	13,341	
PROJECT TOTAL =				**26,421**	**26,421**	

MOBILIZATION

ID	LOCATION	619.1000 EACH	REMARKS
61	PROJECT	0.95	
62	PROJECT	0.05	
PROJECT TOTALS =		1.0	

WATER

STATION	TO	STATION	LOCATION	624.0100 MGAL	REMARKS
120+50	-	397+80	USH12	370	
PROJECT TOTALS =				370	

MOBILIZATION EROSION CONTROL

LOCATION	MOBILIZATIONS EROSION CONTROL 628.1905 EACH	MOBILIZATIONS EMERGENCY EROSION CONTROL 628.1910 EACH
	11	6
PROJECT TOTAL =	11	6

ALL ITEMS ARE ID 8949-02-61 UNLESS NOTED OTHERWISE

EROSION CONTROL LANDSCAPING ITEMS

STATION	TO	STATION	LOCATION	SALVAGED TOPSOIL 625.0500 SY	MULCHING 627.0200 SY	EROSION MAT CLASS 1 TYPE A 628.2002 SY	FERTILIZER TYPE B 629.0210 CWT	SEEDING MIXTURE NO.20 630.0120 LB	SEEDING TEMPORARY 630.0200 LB	SEED WATER 630.0500 MGAL	REMARKS
120+50	-	126+50	MAINLINE	1885	1885	0	0.2	3.8	3.8	43	CONCRETE SECTION
126+50	-	397+80	MAINLINE LT	28736	28736	9985	2.1	59.0	59.0	645	
126+50	-	397+80	MAINLINE RT	29937	29937	8520	2.2	60.0	60.0	672	
			UNDISTRIBUTED	5942	5942	1850	0.7	19.2	19.2	140	
			TOTAL =	66,500	66,500	20,355	5.2	142.0	142.0	1500	

EROSION CONTROL SUMMARY

STATION	TO	STATION	LOCATION	INLET PROTECTION TYPE A 628.7005 EACH	INLET PROTECTION TYPE C 628.7015 EACH	TEMPORARY DITCH CHECKS 628.7504 LF	CULVERT PIPE CHECKS 628.7555 EACH	ROCK BAGS 628.7570 EACH	* RIPRAP MEDIUM 606.0200 CY	* GEOTEXTILE TYPE HR 645.0120 SY	REMARKS
120+50	-	397+80	MAINLINE LT	-	-	800	-	-	-	-	
120+50	-	397+80	MAINLINE RT	-	-	820	-	-	-	-	
139+37	-	139+61	59' LT	-	-	-	1	17	-	-	
155+49	-	155+73	49' RT	-	-	-	1	17	-	-	
158+88	-	159+12	60' RT	-	-	-	1	17	-	-	
228+01	-	228+25	55' RT	-	-	-	1	-	-	-	
230+26	-	230+50	45' RT	-	-	-	1	17	3	8	CULVERT END
235+91	-	236+14	43' RT	-	-	-	1	17	-	-	
240+87	-	241+11	65' RT	-	-	-	1	17	3	8	CULVERT END
285+45	-	285+69	60' LT	-	-	-	1	17	3	8	CULVERT END
289+25	-	289+49	54' LT	-	-	-	1	17	3	8	CULVERT END
301+31	-	301+55	43' LT	-	-	-	1	17	3	8	CULVERT END
304+24	-	304+48	38' LT	-	-	-	1	17	3	8	CULVERT END
304+36	-	304+36	18' LT	1	1	-	-	-	-	-	
305+20	-	305+20	21' LT	-	1	-	-	-	-	-	
307+74	-	307+98	54' LT	-	-	-	1	17	3	8	CULVERT END
318+79	-	319+03	55' LT	-	-	-	1	17	-	-	
330+24	-	330+48	54' LT	-	-	-	1	17	-	-	
343+53	-	343+77	60' RT	-	-	-	1	17	4	11	CULVERT END
361+27	-	361+51	61' LT	-	-	-	1	17	4	11	CULVERT END
396+23	-	396+46	53' LT	-	-	-	1	17	-	-	
			UNDISTRIBUTED	-	-	100	-	-	-	-	
			TOTAL =	1	2	1,720	17	272	29	78	

* ITEM SHOWN ELSEWHERE IN PLANS

ALL ITEMS ARE ID 8949-02-61 UNLESS NOTED OTHERWISE

MARKERS CULVERT END

ID	STATION	LOCATION	633.5200 EACH
61	139+50	USH 12	2
61	155+61	USH 12	2
61	159+00	USH 12	2
61	179+63	USH 12	2
61	188+61	USH 12	2
61	228+12	USH 12	2
61	230+17	USH 12	2
61	236+02	USH 12	2
61	240+98	USH 12	2
61	285+55	USH 12	2
61	289+38	USH 12	2
61	301+44	USH 12	2
61	304+36	USH 12	2
61	307+88	USH 12	2
61	318+92	USH 12	2
61	330+48	USH 12	2
61	343+65	USH 12	2
61	361+40	USH 12	2
61	396+35	USH 12	2
	PROJECT TOTALS =		38

MOVING SIGN SUMMARY

ID		MOVING SIGNS TYPE II 638.2102 EACH	MOVING SMALL SIGN SUPPORTS 638.4000 EACH	REMARKS
61	UNDISTRIBUTED	8	8	NO PASSING ZONE
	PROJECT TOTALS =	8	8	

FIELD OFFICE TYPE B (PROJECT) 01. 8949-02-61

STATION	TO	STATION	LOCATION	642.5001 EACH
120+50	-	397+80	PROJECT	1
			PROJECT TOTALS =	1

LOCATING NO-PASSING ZONES

STATION	TO	STATION	LOCATION	648.0100 MI
120+50	-	397+80	CENTERLINE	5.25
			PROJECT TOTAL =	5.25

PAVEMENT MARKING SUMMARY

STATION	TO	STATION	LOCATION	MARKING LINE SAME DAY EPOXY 4-INCH 646.4520 LF	MARKING LINE GROOVED WET REF EPOXY 4-INCH 646.1040 LF	MARKING DIAGONAL EPOXY 12-INCH 646.7120 LF	TEMPORARY MARKING LINE PAINT 4-INCH 649.1050 LF	REMARKS
120+50	-	142+16	LT	-	2,166	-	-	W.B. LANE EDGE - WHITE
120+50	-	127+08	RT	-	658	-	-	E.B. LANE EDGE - WHITE
120+50	-	133+50	CL	325	-	-	217	CENTERLINE DASHED - YELLOW
127+66	-	137+60	RT	-	994	-	-	E.B. LANE EDGE - WHITE
133+50	-	145+35	CL	296	-	-	197	W.B. CENTERLINE DASHED - YELLOW
133+50	-	150+10	CL	1,660	-	-	3,320	E.B. CENTERLINE SOLID - YELLOW
138+86	-	216+41	RT	-	7,757	-	-	E.B. LANE EDGE - WHITE
143+75	-	164+46	LT	-	2,071	-	-	W.B. LANE EDGE - WHITE
145+35	-	161+50	CL	1,615	-	-	3,230	W.B. CENTERLINE SOLID - YELLOW
150+10	-	161+50	CL	285	-	-	190	E.B. CENTERLINE DASHED - YELLOW
161+50	-	163+45	CL	195	-	-	130	CENTERLINE DASHED - YELLOW
163+45	-	174+40	CL	274	-	-	183	W.B. CENTERLINE DASHED - YELLOW
163+45	-	263+75	CL	10,030	-	-	20,060	E.B. CENTERLINE SOLID - YELLOW
165+66	-	182+02	LT	-	1,634	-	-	W.B. LANE EDGE - WHITE
174+40	-	272+85	CL	9,845	-	-	19,690	W.B. CENTERLINE SOLID - YELLOW
183+20	-	206+40	LT	-	2,320	-	-	W.B. LANE EDGE - WHITE
207+33	-	252+56	LT	-	4,520	-	-	W.B. LANE EDGE - WHITE
217+22	-	224+27	RT	-	705	-	-	E.B. LANE EDGE - WHITE
224+84	-	350+24	RT	-	12,539	-	-	E.B. LANE EDGE - WHITE
253+70	-	350+45	LT	-	9,679	-	-	W.B. LANE EDGE - WHITE
263+75	-	271+70	CL	199	-	-	133	E.B. CENTERLINE DASHED - YELLOW
271+70	-	281+20	CL	950	-	-	1,900	E.B. CENTERLINE SOLID - YELLOW
272+85	-	280+50	CL	191	-	-	127	W.B. CENTERLINE DASHED - YELLOW
280+50	-	290+20	CL	970	-	-	1,940	W.B. CENTERLINE SOLID - YELLOW
281+20	-	290+20	CL	225	-	-	150	E.B. CENTERLINE DASHED - YELLOW
290+20	-	299+10	CL	223	-	-	149	W.B. CENTERLINE DASHED - YELLOW
290+20	-	319+70	CL	2,950	-	-	5,900	E.B. CENTERLINE SOLID - YELLOW
299+10	-	332+00	CL	3,290	-	-	6,580	W.B. CENTERLINE SOLID - YELLOW
319+70	-	332+00	CL	308	-	-	205	E.B. CENTERLINE DASHED - YELLOW
332+00	-	336+75	CL	475	-	-	950	CENTERLINE DASHED - YELLOW
336+75	-	350+25	CL	338	-	-	225	W.B. CENTERLINE DASHED - YELLOW
336+75	-	379+10	CL	4,235	-	-	8,470	E.B. CENTERLINE SOLID - YELLOW
350+25	-	393+81	CL	4,356	-	-	8,712	W.B. CENTERLINE SOLID - YELLOW
351+46	-	397+80	RT	-	4,634	-	-	E.B. LANE EDGE - WHITE
351+67	-	397+80	LT	-	4,613	-	-	W.B. LANE EDGE - WHITE
379+10	-	388+20	CL	228	-	-	152	E.B. CENTERLINE DASHED - YELLOW
388+20	-	393+81	CL	561	-	-	1,122	E.B. CENTERLINE SOLID - YELLOW
393+81	-	397+80	CL	399	-	-	798	W.B. CENTERLINE SOLID - YELLOW
393+81	-	397+80	CL	399	-	-	798	E.B. CENTERLINE SOLID - YELLOW
394+06	-	397+67	CL	-	-	133	-	CENTERLINE DIAGONAL LANE SEPARATION - YELLOW
			PROJECT TOTALS =	44,822	54,290	133	85,528	

NOTES:
TEMPORARY MARKING LINE APPLIED FOLLOWING MILLING AND LOWER LAYER HMA LAYER

ALL ITEMS ARE ID 8949-02-61 UNLESS NOTED OTHERWISE

TRAFFIC CONTROL SUMMARY

ID		DURATION CALENDAR DAYS	TRAFFIC CONTROL DRUMS 643.0300 DAY	TRAFFIC CONTROL BARRICADES TYPE III 643.0420 DAY	TRAFFIC CONTROL WARNING LIGHTS TYPE A 643.0705 DAY	TRAFFIC CONTROL SIGNS 643.0900 DAY	TRAFFIC CONTROL COVERING SIGNS TYPE II 643.0920 DAY	TRAFFIC CONTROL PCMS 643.1050 DAY	COVER/UNCOVER CYCLES	REMARKS
61	PROJECT	122	-	488	976	22448	52	28	1	DETOUR
61	ROSS RD RT	122	-	244	488	244	-	-		
61	KELLY RD RT	122	-	244	488	244	-	-		
61	LABARGE RD LT	122	-	244	488	244	-	-		
61	MCDIARMID DR RT	122	-	244	488	244	-	-		
61	ALEXANDER RD LT	122	-	244	488	244	-	-		
61	110TH ST LT	122	-	244	488	244	-	-		
61	110TH ST RT	122	-	244	488	244	-	-		
61	UNDISTRIBUTED	-	3050	-	-	-	-	-		
	PROJECT TOTALS =	976	3050	2196	4392	24156	52	28		

*PCMS SIGNS TO BE PLACED ON EACH END FOR TWO WEEKS PRIOR TO CONSTRUCTION
*ONE BARRICADE TYPE III AND BARRICADE TYPE II TO BE PLACED AT EACH END OF ROAD CLOSURE
*COVERING SIGNS WERE QUANTIFIED AS EACH INDIVIDUAL SIGN COVERED AND COUNTED ON DETOUR PLAN SHEET

SAWING PAVEMENT

ID	STATION	TO	STATION	LOCATION	SAWING ASPHALT 690.0150 LF	SAWING CONCRETE 690.0250 LF	REMARKS
61	120+50	-	120+50	USH 12	10	20	BEGIN CONCRETE PAVEMENT
61	126+50	-	126+50	USH 12	10	20	END CONCRETE PAVEMENT
61	397+80	-	397+80	USH 12	44	-	END PROJECT
61	127+28	-	127+50	CLINTS TRAIL	23	-	
61	138+35	-	138+47	KELLY RD	22	-	
61	142+78	-	143+03	NORFLEX DR	25	-	
61	164+85	-	165+09	LABARGE RD	25	-	
61	182+34	-	182+57	TRAIL 12	23	-	
61	206+76	-	207+05	CHIPPEWA PATH	30	-	
61	216+75	-	216+98	MCDIARMID DR	24	-	
61	224+49	-	224+71	KINGSWAY RD	22	-	
61	252+59	-	253+01	ALEXANDER RD	42	-	
61	350+83	-	351+08	110TH ST	26	-	
61	350+83	-	351+08	110TH ST	24	-	
61	125+00	-	397+80	DRIVEWAYS	607	-	
				PROJECT TOTALS =	957	40	

TRAFFIC CONTROL

STATION	TO	STATION	LOCATION	643.5000 EACH
120+50	-	397+80	PROJECT	1
			PROJECT TOTALS =	1

CONSTRUCTION STAKING SUMMMARY

ID	STATION	TO	STATION	LOCATION	CONSTRUCTION STAKING CONCRETE PAVEMENT 650.7000 LF	CONSTRUCTION STAKING RESURFACING REFERENCE 650.8000 LF	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 8949-02-61 650.9910 LS	CONSTRUCTION STAKING SLOPE STAKES 650.9920 LF
61	120+50	-	397+80	USH 12	767	27,730	1	27,730
				PROJECT ID 8949-02-61 TOTALS =	767	27,730	1	27,730

ALL ITEMS ARE ID 8949-02-61 UNLESS NOTED OTHERWISE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PROJECT PLAT TITLE SHEET
8949-02-21
HUDSON - BALDWIN
CTH U TO WEST JUNCTION STH 65
USH 12
ST CROIX COUNTY

4

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) — W — (TYPE)
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING — TO BE REMOVED
BRIDGE

SECTION CORNER SYMBOL
SECTION CORNER MONUMENT
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN — OFF-PREMISE SIGN (#1-25)
R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND IRON PIN (1-INCH UNLESS NOTED) IP

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

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

CONVENTIONAL ABBREVIATIONS

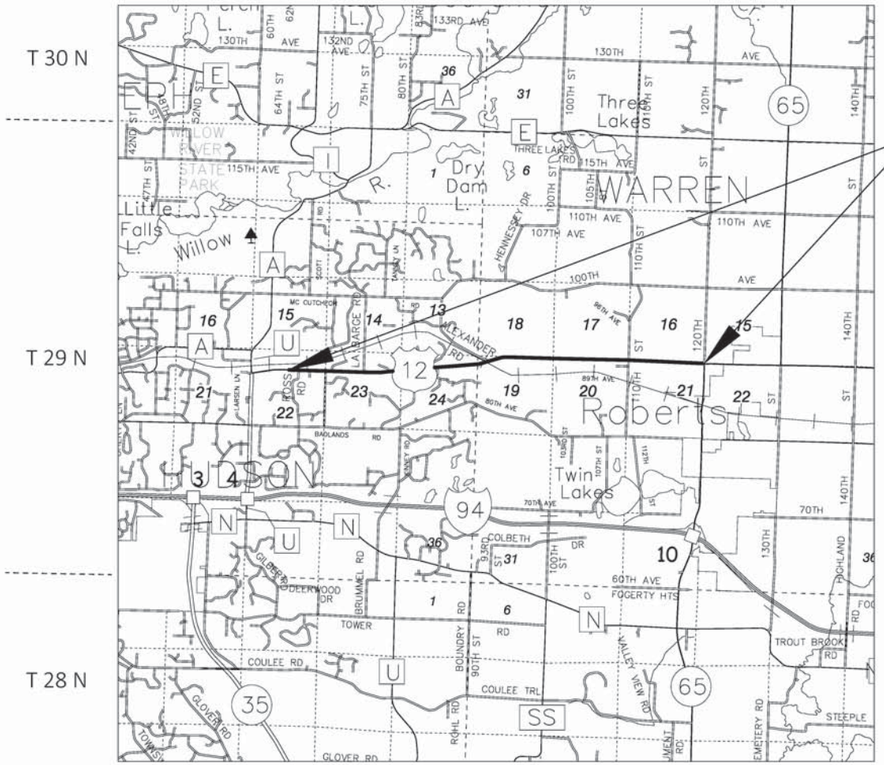
ACCESS RIGHTS	AR	POINT OF CURVATURE	PC
ACRES	AC	POINT OF COMPOUND CURVE	PCC
AHEAD	AH	POINT OF INTERSECTION	PI
ALUMINUM	ALUM	PROPERTY LINE	PL
AND OTHERS	ET AL	RECORDED AS	(100')
BACK	BK	REEL / IMAGE	R/I
BLOCK	BLK	REFERENCE LINE	R/L
BUILDING	B	REMAINING	REM
CENTERLINE	C/L	RESTICTIVE DEVELOPMENT EASEMENT	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
FRACTIONAL	FRAC	TRANSPORTATION PROJECT PLAT	TPP
GAS VALVE	GV	UNITED STATES HIGHWAY	USH
GRID NORTH	GN	VOLUME	V
HIGHWAY EASEMENT	HE		
IDENTIFICATION	ID		
LAND CONTRACT	LC		
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETIC SURVEY	NGS		
NUMBER	NO		
OUTLOT	OL		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	POB		

CURVE DATA

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

CONVENTIONAL UTILITY SYMBOLS

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



THE NOTES, CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 8949-02-21.

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), ST. CROIX 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. NGS POINT UTILIZED WAS DN7050.

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

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, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

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 ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. 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 CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN THE NW REGION.

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.

cbs²
770 TECHNOLOGY WAY
CHIPPEWA FALLS, WI 54729

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8949-02-21-4.01
SHEET 2 OF 2

APPRAISAL PLAT DATE: 4/22/20
8949-02-21-4.01

TRANSPORTATION PROJECT PLAT NO: 8949-02-21-4.01

THAT PART OF LOT 1 OF CSM 9-2490, V 9, P 2490, DOC 484314, LOCATED IN PART OF THE NW 1/4 OF THE NE 1/4, AND PART OF THE LIMITED COMMON AREA FOR UNIT 1 OF KELLY ROAD CONDOMINIUM, V 2, P 16, DOC 821056, LOCATED IN PART OF THE SE 1/4 OF THE NE 1/4, ALL IN SECTION 22, TOWNSHIP 29 NORTH, RANGE 19 WEST, TOWN OF HUDSON, ST CROIX COUNTY, WISCONSIN.

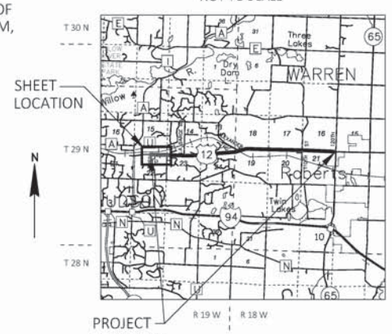
RELOCATION ORDER OF USH 12 HUDSON - BALDWIN, CTH U TO WEST JUNCTION STH 65, ST CROIX COUNTY

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), ST CROIX 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. NGS POINT UTILIZED WAS DN7050.

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

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

ROAD NAME	BASIS OF EXISTING R/W	YEAR
USH 12 KELLY RD	KELLY ROAD CONDOMINIUM V 2, P 16, DOC 821056	2006
USH 12	CSM 15-4164, V 15, P 4164, DOC 655354	2001
USH 12	CSM 12-3462, V 12, P 3462, DOC 580314	1998
USH 12	R/W PLAT 8949-03-22	1996
USH 12	PHEASANT RUN V 6, P 40, DOC 536242	1995
USH 12	CSM 9-2490, V 9, P 2490, DOC 484314	1992
USH 12	CSM 3-621, V 3, P 621, DOC 349632	1978
USH 12	FED AID PROJECT NO 370-H	1929

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)	INTEREST REQUIRED	R/W SQUARE FEET REQUIRED			TLE SQUARE FEET
			NEW	EXISTING	TOTAL	
1	HIGHWAY DEPT ST CROIX COUNTY	TLE	-	-	-	1302
2	WILLOW RIVER COMPANY LLC	FEE	884	-	884	-

UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	OWNER (S)	INTEREST REQUIRED
80	AT&T WISCONSIN	RELEASE OF RIGHTS
81	BALDWIN LIGHTSTREAM	RELEASE OF RIGHTS
82	XCEL ENERGY (GAS)	RELEASE OF RIGHTS

UTILITY EASEMENT TABLE			
UTILITY NUMBER	PARCEL	RECORDING INFORMATION	NAME
80	1	DOC 226068, V 295, P 349	AT&T WISCONSIN
80	2	NO EASEMENT OF RECORD	
81	2	NO EASEMENT OF RECORD	
82	2	NO EASEMENT OF RECORD	

1101288
BETH PABST
REGISTER OF DEEDS
ST. CROIX CO., WI
RECEIVED FOR RECORD
04/28/2020 12:57 PM
EXEMPT #
PLAT FEE 25.00
VOLUME: TPP1
PAGES: 180
PAGES: 2
****The above recording information verifies that this document has been electronically recorded & returned to the submitter**

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8949-02-21-4.01
SHEET 1 OF 2

NORTH 1/4 CORNER 2919157
** Y= 348,675.213
X= 533,422.326

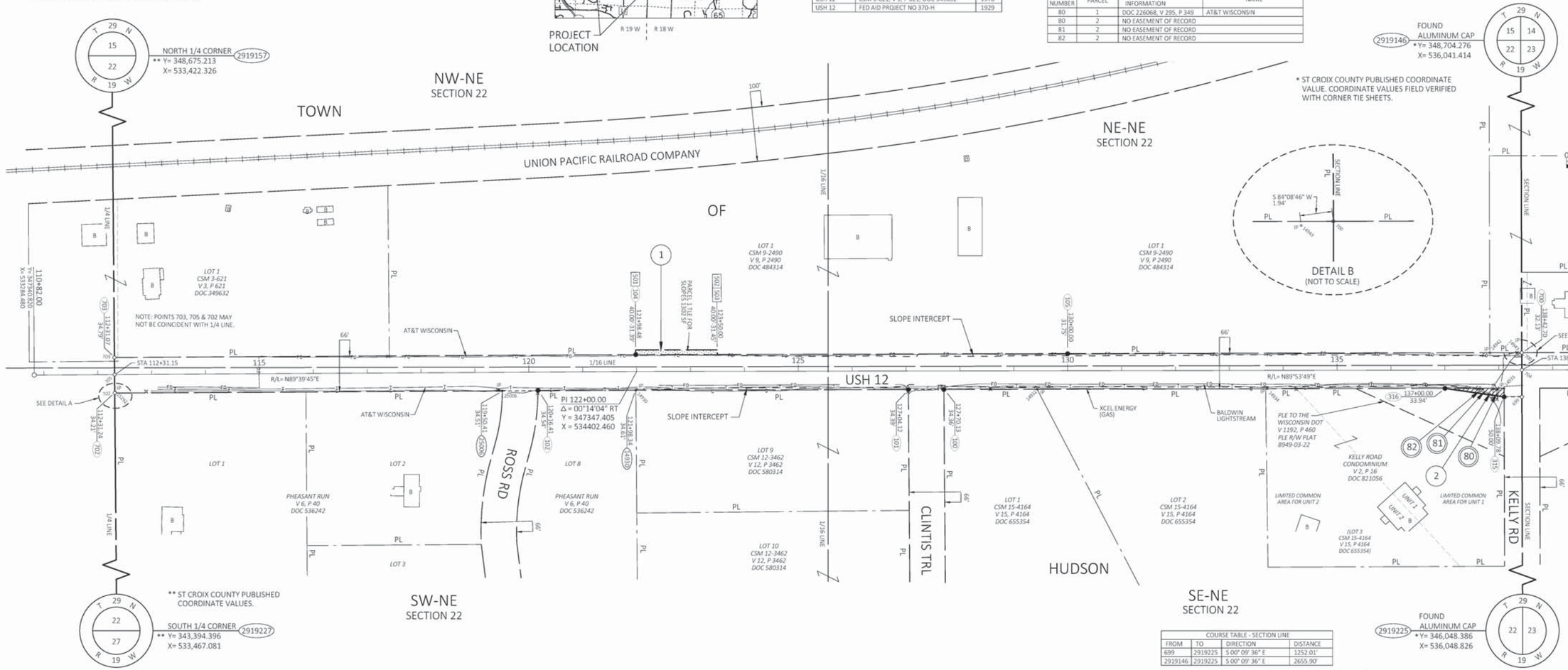
2919146 FOUND ALUMINUM CAP
* Y= 348,704.276
X= 536,041.414

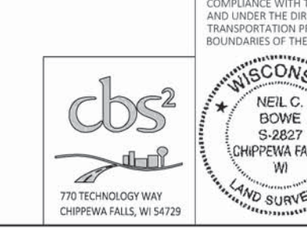
* ST CROIX COUNTY PUBLISHED COORDINATE VALUE. COORDINATE VALUES FIELD VERIFIED WITH CORNER TIE SHEETS.

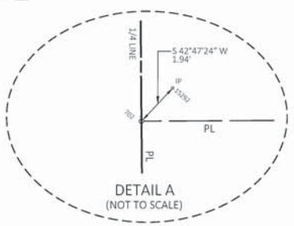
** ST CROIX COUNTY PUBLISHED COORDINATE VALUES.

SOUTH 1/4 CORNER 2919227
** Y= 343,394.396
X= 533,467.081

2919225 FOUND ALUMINUM CAP
* Y= 346,048.386
X= 536,048.826







COURSE TABLE - 1/4 LINE			
FROM	TO	DIRECTION	DISTANCE
2919227	702	N 00° 29' 08" W	3913.23'
703	2919157	N 00° 29' 08" W	1301.78'
2919227	2919157	N 00° 29' 08" W	5281.01'

RECOVERED MONUMENTS			
POINT	Y	X	DESCRIPTION
14930	347312.784	534401.008	1 1/4" IRON PIPE
14932	347314.440	535145.733	3/4" REBAR
14933	347316.414	536012.218	3/4" REBAR
14934	347315.348	535572.734	3/4" REBAR
14942	347381.829	535985.777	1 1/4" IRON PIPE
14943	347382.290	536043.170	3/4"REBAR W/RCAP 2287
15292	347308.911	533435.236	1" IRON PIPE
25006	347311.426	534153.082	1" IRON PIPE

COURSE TABLE			
FROM	TO	DIRECTION	DISTANCE
2919146	700	S 00° 09' 36" E	1321.79'
700	699	S 00° 09' 36" E	82.10'
699	315	S 89° 50' 24" W	33.00'
315	316	N 81° 46' 43" W	110.95'
316	14930	S 89° 52' 15" W	1501.52'
14930	702	S 89° 41' 10" W	967.10'
702	703	N 00° 29' 08" W	66.00'
703	104	N 89° 41' 10" E	967.41'
104	700	N 89° 52' 15" E	1644.35'

COURSE TABLE - SEGMENTS			
FROM	TO	DIRECTION	DISTANCE
700	704	S 00° 09' 36" E	32.13'
704	699	S 00° 09' 36" E	49.97'
316	100	S 89° 52' 15" W	929.88'
100	101	S 89° 52' 15" W	66.00'
101	14930	S 89° 52' 15" W	505.64'
14930	102	S 89° 41' 10" W	181.93'
102	25006	S 89° 41' 10" W	66.00'
25006	702	S 89° 41' 10" W	719.17'
702	705	N 00° 29' 08" W	34.21'
705	703	N 00° 29' 08" W	31.79'
104	105	N 89° 52' 15" E	801.65'
105	700	N 89° 52' 15" E	842.70'

COURSE TABLE - SECTION LINE			
FROM	TO	DIRECTION	DISTANCE
699	2919225	S 00° 09' 36" E	1252.01'
2919146	2919225	S 00° 09' 36" E	2655.90'

cbs²
770 TECHNOLOGY WAY
CHIPPEWA FALLS, WI 54729

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

WISCONSIN
NEIL C. BOWE
S-2827
CHIPPEWA FALLS WI
LAND SURVEYOR

SIGNATURE: Neil C. Bowe DATE: 4/22/20
PRINT NAME: NEIL C. BOWE
REGISTRATION NUMBER: S-2827

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

SIGNATURE: Debra B. Stensland DATE: 4/22/20
PRINT NAME: DEBRA B. STENSLAND

FILE NAME : P:\KNGHT\17001 - USH 12\RIGHT OF WAY\CAD\040101-RP_RD.DWG PLOT DATE : 4/28/2020 10:47 AM
APPRAISAL PLAT DATE : 4/22/20

TRANSPORTATION PROJECT PLAT NO: 8949-02-21-4.02

THAT PART OF LOT 10 OF CSM 25-5832, V 25, P 5832, DOC 950646, AND PART OF HIGHWAY 12 BUSINESS CONDOMINIUM FIRST ADDENDUM, V 2, P 68, DOC 1050590, LOCATED IN AND INCLUDING PART OF THE NW 1/4 OF THE NW 1/4, AND PART OF UNIT 108 OF HIGHWAY 12 BUSINESS CONDOMINIUM FIRST ADDENDUM, V 2, P 68, DOC 1050590, AND PART OF LOT 1 OF CSM 6043, V 26, P 6043, DOC 1002087, LOCATED IN PART OF THE NE 1/4 OF THE NW 1/4, AND PART OF LOT 1 OF CSM 11-3234, V 11, P 3234, DOC 558109, LOCATED IN PART OF THE SW 1/4 OF THE NW 1/4, AND PART OF LOT 5 OF EVERGREEN ESTATES, V 6, P 92, DOC 561438, AND PART OF LOT 1 OF CSM 7-1878, V 7, P 1878, DOC 429911, LOCATED IN PART OF THE SE 1/4 OF THE NW 1/4, SECTION 23, TOWNSHIP 29 NORTH, RANGE 19 WEST, TOWN OF HUDSON, ST CROIX COUNTY, WISCONSIN.

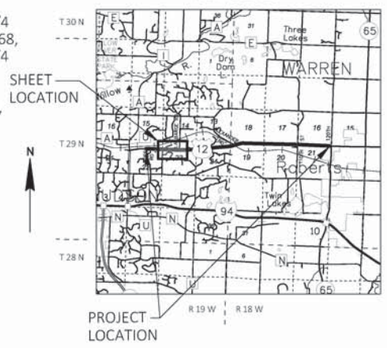
RELOCATION ORDER OF USH 12 HUDSON - BALDWIN, CTH U TO WEST JUNCTION STH 65, ST CROIX COUNTY

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 IN THE OFFICE OF THE REGISTER OF DEEDS IN ST CROIX COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 1101288.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), ST CROIX 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. NGS POINT UTILIZED WAS DN7050.

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

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

ROAD NAME	BASIS OF EXISTING R/W	YEAR
USH 12	HIGHWAY 12 BUSINESS CONDOMINIUM FIRST ADDENDUM V 2, P 68, DOC 1050590	2017
USH 12 LABARGE RD	CSM 6043, V 26, P 6043, DOC 1002087	2014 2012
USH 12 NORFLEX DR	CSM 25-5832, V 25, P 5832, DOC 950646	
USH 12 LABARGE RD	CSM 18-4728, V 18, P 4728, DOC 759109	2012
USH 12	SKYLER ESTATES CONDOMINIUM V 1, P 75, DOC 672286	2002
USH 12	WALDROFF FARM ROAD CONDOMINIUM V 1, P 62, DOC 638301	2001
USH 12	EVERGREEN ESTATES V 6, P 92, DOC 561438	1997
USH 12 KELLY RD	CSM 11-3234, V 11, P 3234, DOC 558109	1997
USH 12 KELLY RD LABARGE RD	R/W PLAT 8949-03-22	1996
USH 12	CSM 520618, V 10, P 2807, DOC 520618	1994
USH 12	CSM 2778, V 10, P 2778, DOC 518326	1993
USH 12	CSM 7-1878, V 7, P 1878, DOC 429911	1987
USH 12	CSM 3-622, V 3, P 622, DOC 349633	1978
USH 12	FED AID PROJECT NO 370-H	1929
USH 12	STATE AID PROJECT NO 6993	1928

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

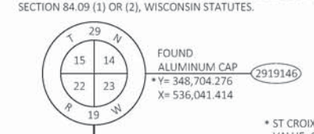
PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W SQUARE FEET REQUIRED			TLE SQUARE FEET
			NEW	EXISTING	TOTAL	
3	MCPHILLIPS HOLDINGS LLC	FEE	1598	-	1598	-
4	ANDERSON HOLDINGS INC	FEE, TLE	4028	-	4028	2542
5	COMMON ELEMENT FOR DENNIS L KRUEGER AND BONNIE C KRUEGER TRUST DATED JULY 27, 2000 (UNIT 101), MARSHALL DILLON, LLC (UNIT 102), CARLSON'S FLOOR COVERING, LLC (UNIT 103), ST CROIX VALLEY DISTRIBUTING, LLC (UNIT 104), BRIAN E WERT (UNIT 105), JOAN LLC (UNIT 106), BBCJ LLC (UNIT'S 107 & 108).	TLE	-	-	-	686
6	BBCJ LLC	FEE	963	-	963	-
7	GERALD P & DEBORAH A SCHOUTEN	FEE	1221	-	1221	-
8	DEAN A & DAWN M SAGSTETTER	FEE	892	-	892	-
9	PAUL J & TOUNKEO IBINGER	FEE	1544	-	1544	-

UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	OWNER (S)	INTEREST REQUIRED
80	AT&T WISCONSIN	RELEASE OF RIGHTS
82	XCEL ENERGY (GAS)	RELEASE OF RIGHTS
83	MIDWEST NATURAL GAS, INC	RELEASE OF RIGHTS

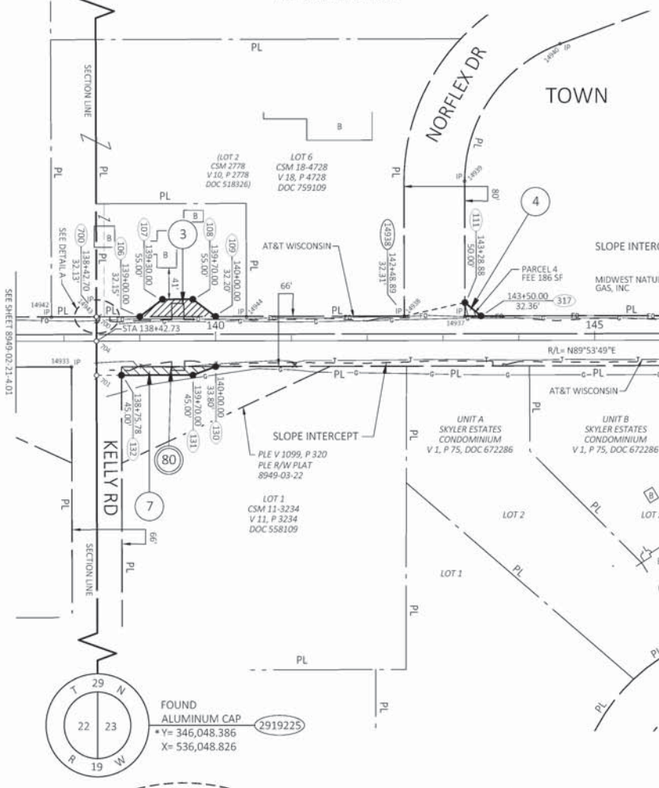
UTILITY EASEMENT TABLE			
UTILITY NUMBER	PARCEL	RECORDING INFORMATION	NAME
80	4,5,7	NO EASEMENT OF RECORD	
82	7	DOC 807034, V 2893, P 059	XCEL ENERGY (GAS)
	8	DOC 807039, V 2893, P 069	
	9	DOC 807040, V 2893, P 071	
83	4,6	NO EASEMENT OF RECORD	

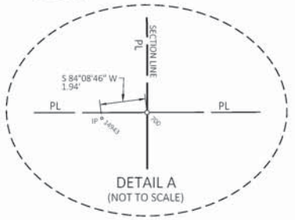
1102612
BETH PABST
REGISTER OF DEEDS
ST. CROIX CO., WI
RECEIVED FOR RECORD
05/18/2020 11:42 AM
EXEMPT #
PLAT FEE 25.00
VOLUME: TPP1
PAGES: 181
PAGES: 1
****The above recording information verifies that this document has been electronically recorded & returned to the submitter**

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8949-02-21-4.02



* ST CROIX COUNTY PUBLISHED COORDINATE VALUE. COORDINATE VALUES FIELD VERIFIED WITH CORNER TIE SHEETS.





COURSE TABLE - SECTION LINE			
FROM	TO	DIRECTION	DISTANCE
2919225	701	N 00° 09' 36" W	1256.98'
700	2919146	N 00° 09' 36" W	1321.79'
2919146	2919225	S 00° 09' 36" E	2655.90'

COURSE TABLE - SEGMENTS			
FROM	TO	DIRECTION	DISTANCE
706	707	S 00° 06' 14" E	33.32'
707	708	S 00° 06' 14" E	32.66'
701	704	N 00° 09' 36" W	45.00'
704	700	N 00° 09' 36" W	32.13'

COURSE TABLE							
FROM	TO	DIRECTION	DISTANCE	FROM	TO	DIRECTION	DISTANCE
2919146	700	S 00° 09' 36" E	1321.79'	119	120	N 89° 52' 15" E	388.58'
700	106	N 89° 52' 15" E	57.30'	120	706	N 89° 53' 51" E	38.95'
106	107	N 52° 36' 24" E	37.71'	706	708	S 00° 06' 14" E	65.98'
107	108	N 89° 53' 49" E	40.00'	708	122	S 89° 52' 15" W	553.25'
108	109	S 52° 52' 04" E	37.68'	122	123	S 53° 32' 09" W	37.25'
109	14938	N 89° 52' 15" E	248.89'	123	124	S 89° 53' 49" W	40.00'
14938	111	N 77° 25' 44" E	81.93'	124	125	N 53° 48' 03" W	37.23'
111	317	S 50° 13' 58" E	27.52'	125	126	S 89° 52' 15" W	230.00'
317	112	N 89° 52' 15" E	1100.00'	126	127	S 75° 02' 36" W	46.56'
112	113	N 76° 14' 49" E	51.45'	127	128	S 89° 53' 49" W	30.00'
113	114	N 89° 53' 49" E	100.00'	128	129	N 75° 18' 51" W	46.54'
114	115	S 76° 33' 05" E	51.43'	129	130	S 89° 52' 15" W	1500.00'
115	116	N 89° 52' 15" E	125.00'	130	131	S 69° 25' 31" W	32.02'
116	117	N 76° 24' 24" E	51.42'	131	132	S 89° 53' 49" W	94.22'
117	118	N 89° 53' 49" E	200.72'	132	701	S 89° 53' 49" W	33.00'
118	119	S 76° 45' 39" E	51.39'	701	700	N 00° 09' 36" W	77.13'

RECOVERED MONUMENTS			
POINT	Y	X	DESCRIPTION
14933	347316.414	536012.218	3/4" REBAR
14942	347381.829	535985.777	1 1/4" IRON PIPE
14943	347382.290	536043.170	3/4"REBAR W/RCAP 2287
14937	347383.179	536531.285	3/4" REBAR
14938	347383.568	536451.266	3/4" REBAR
14944	347382.501	536243.173	1 1/4" IRON PIPE
15068	347385.894	537757.347	1 1/4" IRON PIPE
14939	347561.056	536530.897	3/4" REBAR
14940	347742.379	536656.604	3/4" REBAR LEANING E

COURSE TABLE - 1/4 LINE			
FROM	TO	DIRECTION	DISTANCE
2919147	706	S 00° 06' 14" E	1286.41'
708	2919237	S 00° 06' 14" E	3906.03'
2919237	2919147	N 00° 06' 14" W	5258.42'

770 TECHNOLOGY WAY
CHIPPEWA FALLS, WI 54729

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

SIGNATURE: _____ DATE: 5/1/20
PRINT NAME: NEIL C. BOWE
REGISTRATION NUMBER: S-2827

WISCONSIN NEIL C. BOWE S-2827 CHIPPEWA FALLS WI LAND SURVEYOR

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

SIGNATURE: _____ DATE: 5/1/20
PRINT NAME: DEBRA B. STENSLAND

FILE NAME : P:\KNGHT\17001 - USH 12\RIGHT OF WAY\CAD\040101-RP_RD.DWG PLOT DATE : 5/14/2020 12:25 PM
APPRAISAL PLAT DATE : 5/1/20

WISDOT 8949-02-21-4.02

TRANSPORTATION PROJECT PLAT NO: 8949-02-21-4.02 AMENDMENT NO: 1 AMENDS PARCEL 3 OF TRANSPORTATION PROJECT PLAT 8949-02-21-4.02 RECORDED AS DOCUMENT NO: 1102612, VOLUME TPP1, PAGES 181.

THAT PART OF LOT 10 OF CSM 25-5832, V 25, P 5832, DOC 950646, AND PART OF HIGHWAY 12 BUSINESS CONDOMINIUM FIRST ADDENDUM, V 2, P 68, DOC 1050590, LOCATED IN AND INCLUDING PART OF THE NW 1/4 OF THE NW 1/4, AND PART OF UNIT 108 OF HIGHWAY 12 BUSINESS CONDOMINIUM FIRST ADDENDUM, V 2, P 68, DOC 1050590, AND PART OF LOT 1 OF CSM 6043, V 26, P 6043, DOC 1002087, LOCATED IN PART OF THE NE 1/4 OF THE NW 1/4, AND PART OF LOT 1 OF CSM 1-3234, V 11, P 3234, DOC 558109, LOCATED IN PART OF THE SW 1/4 OF THE NW 1/4, AND PART OF LOT 5 OF EVERGREEN ESTATES, V 6, P 92, DOC 561438, AND PART OF LOT 1 OF CSM 7-1878, V 7, P 1878, DOC 429911, LOCATED IN PART OF THE SE 1/4 OF THE NW 1/4, SECTION 23, TOWNSHIP 29 NORTH, RANGE 19 WEST, TOWN OF HUDSON, ST CROIX COUNTY, WISCONSIN.

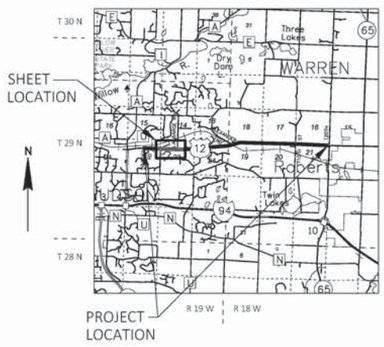
RELOCATION ORDER OF USH 12 HUDSON - BALDWIN, CTH U TO WEST JUNCTION STH 65, ST CROIX COUNTY

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 IN THE OFFICE OF THE REGISTER OF DEEDS IN ST CROIX COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 1101288.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), ST CROIX 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. NGS POINT UTILIZED WAS DN7050.

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

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

ROAD NAME	BASIS OF EXISTING R/W	YEAR
USH 12	HIGHWAY 12 BUSINESS CONDOMINIUM FIRST ADDENDUM V 2, P 68, DOC 1050590	2017
USH 12	CSM 6043, V 26, P 6043, DOC 1002087	2014
LABARGE RD		2012
USH 12 NORFLEX DR	CSM 25-5832, V 25, P 5832, DOC 950646	
USH 12 LABARGE RD	CSM 18-4728, V 18, P 4728, DOC 759109	2012
USH 12	SKYLER ESTATES CONDOMINIUM V 1, P 75, DOC 672286	2002
USH 12	WALDROFF FARM ROAD CONDOMINIUM V 1, P 62, DOC 638301	2001
USH 12	EVERGREEN ESTATES V 6, P 92, DOC 561438	1997
USH 12 KELLY RD	CSM 11-3234, V 11, P 3234, DOC 558109	1997
USH 12 KELLY RD LABARGE RD	R/W PLAT 8949-03-22	1996
USH 12	CSM 520618, V 10, P 2807, DOC 520618	1994
USH 12	CSM 2778, V 10, P 2778, DOC 518326	1993
USH 12	CSM 7-1878, V 7, P 1878, DOC 429911	1987
USH 12	CSM 3-622, V 3, P 622, DOC 349633	1978
USH 12	FED AID PROJECT NO 370-H	1929
USH 12	STATE AID PROJECT NO 6993	1928

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)	INTEREST REQUIRED	R/W SQUARE FEET REQUIRED			TLE SQUARE FEET
			NEW	EXISTING	TOTAL	
3	MCPHILLIPS HOLDINGS LLC	FEE	865	-	865	-
4	ANDERSON HOLDINGS INC	FEE, TLE	4028	-	4028	2542
5	COMMON ELEMENT FOR DENNIS L KRUEGER AND BONNIE C KRUEGER TRUST DATED JULY 27, 2000 (UNIT 101), MARSHALL DILLON, LLC (UNIT 102), CARLSON'S FLOOR COVERING, LLC (UNIT 103), ST CROIX VALLEY DISTRIBUTING, LLC (UNIT 104), BRIAN E WERT (UNIT 105), JOAN LLC (UNIT 106), BBCJ LLC (UNIT'S 107 & 108).	TLE	-	-	-	686
6	BBCJ LLC	FEE	963	-	963	-
7	GERALD P & DEBORAH A SCHOUTEN	FEE	1221	-	1221	-
8	DEAN A & DAWN M SAGSTETTER	FEE	892	-	892	-
9	PAUL J & TOUNKEO IBINGER	FEE	1544	-	1544	-

UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	OWNER (S)	INTEREST REQUIRED
80	AT&T WISCONSIN	RELEASE OF RIGHTS
82	XCEL ENERGY (GAS)	RELEASE OF RIGHTS
83	MIDWEST NATURAL GAS, INC	RELEASE OF RIGHTS

UTILITY EASEMENT TABLE			
UTILITY NUMBER	PARCEL	RECORDING INFORMATION	NAME
80	4,5,7	NO EASEMENT OF RECORD	
82	7	DOC 807034, V 2893, P 059	XCEL ENERGY (GAS)
	8	DOC 807039, V 2893, P 069	
	9	DOC 807040, V 2893, P 071	
83	4,6	NO EASEMENT OF RECORD	

1114025
BETH PABST
REGISTER OF DEEDS
ST. CROIX CO., WI
RECEIVED FOR RECORD
10/14/2020 11:03 AM
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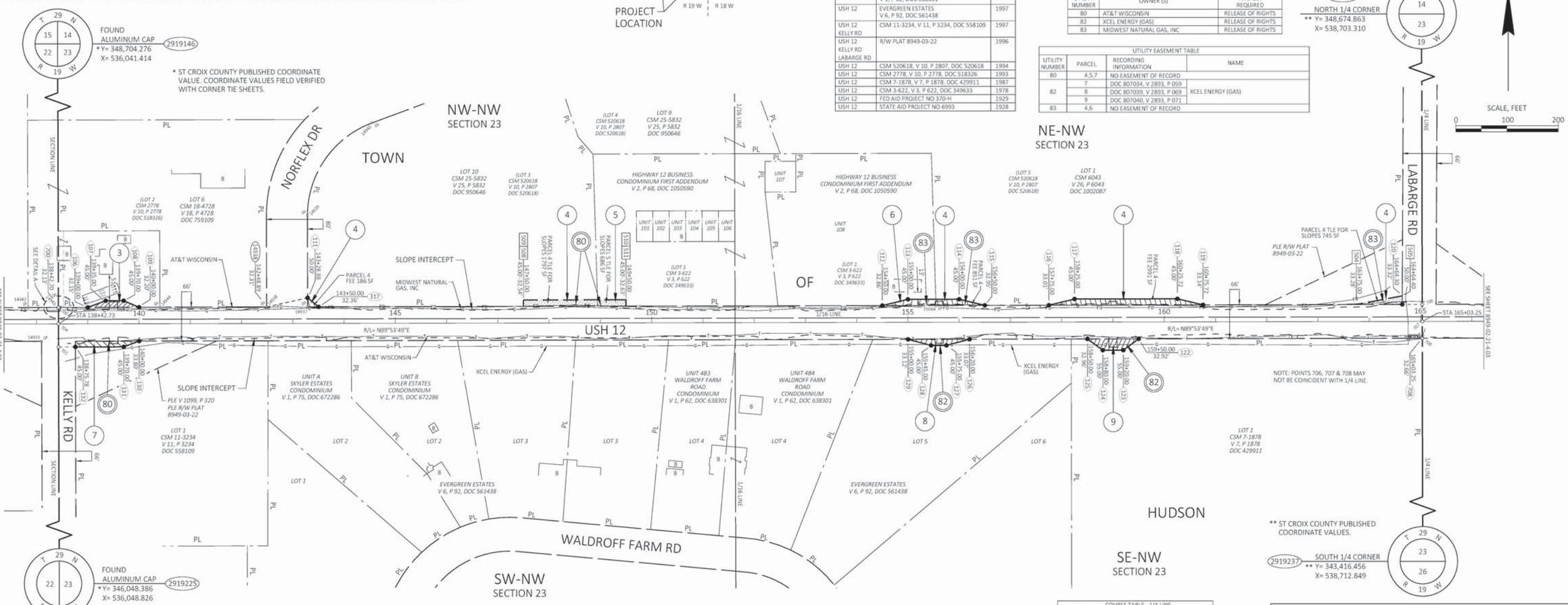
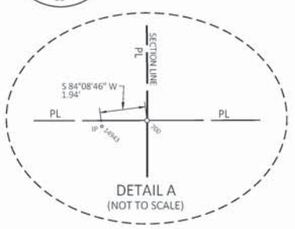
RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8949-02-21-4.02
AMENDMENT NO: 1



COURSE TABLE - SECTION LINE			
FROM	TO	DIRECTION	DISTANCE
2919225	701	N 00° 09' 36" W	1256.98'
700	2919146	N 00° 09' 36" W	1321.79'
2919146	2919225	S 00° 09' 36" E	2655.90'

COURSE TABLE - SEGMENTS			
FROM	TO	DIRECTION	DISTANCE
706	707	S 00° 06' 14" E	33.32'
707	708	S 00° 06' 14" E	32.66'
701	704	N 00° 09' 36" W	45.00'
704	700	N 00° 09' 36" W	32.13'



COURSE TABLE							
FROM	TO	DIRECTION	DISTANCE	FROM	TO	DIRECTION	DISTANCE
2919146	700	S 00° 09' 36" E	1321.79'	119	120	N 89° 52' 15" E	388.58'
700	106	N 89° 52' 15" E	57.30'	120	706	N 89° 53' 51" E	38.95'
106	107	N 69° 44' 34" E	37.28'	706	708	S 00° 06' 14" E	65.98'
107	108	N 89° 53' 49" E	35.00'	708	122	S 89° 52' 15" W	553.25'
108	109	S 66° 59' 46" E	32.62'	122	123	S 53° 52' 09" W	37.25'
109	14938	N 89° 52' 15" E	248.89'	123	124	S 89° 53' 49" W	40.00'
14938	111	N 77° 25' 44" E	81.93'	124	125	N 53° 48' 03" W	37.23'
111	317	S 50° 13' 58" E	27.52'	125	126	S 89° 52' 15" W	230.00'
317	112	N 89° 52' 15" E	1100.00'	126	127	S 75° 02' 36" W	46.56'
112	113	N 76° 14' 49" E	51.45'	127	128	S 89° 53' 49" W	30.00'
113	114	N 89° 53' 49" E	100.00'	128	129	N 75° 18' 51" W	46.54'
114	115	S 76° 33' 05" E	51.43'	129	130	S 89° 52' 15" W	1500.00'
115	116	N 89° 52' 15" E	125.00'	130	131	S 69° 25' 31" W	32.02'
116	117	N 76° 24' 24" E	51.42'	131	132	S 89° 53' 49" W	94.22'
117	118	N 89° 53' 49" E	200.72'	132	701	S 89° 53' 49" W	33.00'
118	119	S 76° 45' 39" E	51.39'	701	700	N 00° 09' 36" W	77.13'

RECOVERED MONUMENTS			
POINT	Y	X	DESCRIPTION
14933	347316.414	536012.218	3/4" REBAR
14942	347381.829	535985.777	1 1/4" IRON PIPE
14943	347382.290	536043.170	3/4"REBAR W/RCAP 2287
14937	347383.179	536531.285	3/4" REBAR
14938	347383.568	536451.266	3/4" REBAR
14944	347382.501	536243.173	1 1/4" IRON PIPE
15068	347385.894	537757.347	1 1/4" IRON PIPE
14939	347561.056	536530.897	3/4" REBAR
14940	347742.379	536656.604	3/4" REBAR LEANING E

COURSE TABLE - 1/4 LINE			
FROM	TO	DIRECTION	DISTANCE
2919147	706	S 00° 06' 14" E	1286.41'
708	2919237	S 00° 06' 14" E	3906.03'
2919237	2919147	N 00° 06' 14" W	5258.42'

770 TECHNOLOGY WAY
CHIPPEWA FALLS, WI 54729

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

SIGNATURE: _____ DATE: 10/9/20
PRINT NAME: NEIL C. BOWE
REGISTRATION NUMBER: S-2827

WISCONSIN NEIL C. BOWE S-2827 CHIPPEWA FALLS WI LAND SURVEYOR

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

SIGNATURE: _____ DATE: 10/9/20
PRINT NAME: DEBRA B. STENSLAND

FILE NAME : P:\KNGHT\17001 - USH 12\RIGHT OF WAY\CAD\040101-RP_RD.DWG PLOT DATE : 10/13/2020 1:03 PM
APPRAISAL PLAT DATE : 10/9/20

WISDOT 8949-02-21-4.02

TRANSPORTATION PROJECT PLAT NO: 8949-02-21-4.03

THAT PART OF THE NW 1/4 OF THE NE 1/4, AND PART OF LOT 1 OF CSM 28-6440, V 28, P 6440, DOC 1059714, LOCATED IN AND INCLUDING PART OF THE NE 1/4 OF THE NE 1/4, AND PART OF THE SW 1/4 OF THE NE 1/4, SECTION 23, TOWNSHIP 29 NORTH, RANGE 19 WEST, TOWN OF HUDSON, ST CROIX COUNTY, WISCONSIN.

RELOCATION ORDER OF USH 12 HUDSON - BALDWIN, CTH U TO WEST JUNCTION STH 65, ST CROIX COUNTY

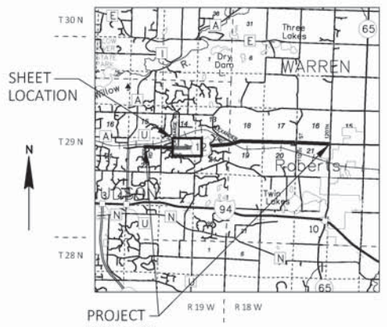
TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN 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 IN THE OFFICE OF THE REGISTER OF DEEDS IN ST CROIX COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 1101288.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), ST CROIX 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. NGS POINT UTILIZED WAS DN7050.

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

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

ROAD NAME	BASIS OF EXISTING R/W	YEAR
USH 12 GAVIN PASS	HUNTER HILLS ESTATES V 11, P 70, DOC 1071273	2018
USH 12	CSM 28-6440, V 28, P 6440, DOC 1059714	2017
USH 12 LABARGE RD	R/W PLAT 8949-03-22	1996
USH 12	CSM 9-2535, V 9, P 2535, DOC 487909	1992
USH 12	CSM 8-2298, V 8, P 2298, DOC 464630	1990
USH 12	CSM 2-342, V 2, P 342, DOC 337704	1977
USH 12	FED AID PROJECT NO 370-H	1929
USH 12	STATE AID PROJECT NO 6993	1928

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)	INTEREST REQUIRED	R/W SQUARE FEET REQUIRED			TLE SQUARE FEET
			NEW	EXISTING	TOTAL	
11	ALFRED L & ANN SCHROEDER	FEE	997	-	997	-
12	ANDREW L & ANNE K HEISER	FEE	1447	-	1447	-
13	GALE H & ISABEL N QUALLS	TLE	-	-	-	996
14	PEGGY M MOELTER	FEE	3981	-	3981	-

UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	OWNER (S)	INTEREST REQUIRED
80	AT&T WISCONSIN	RELEASE OF RIGHTS
81	BALDWIN LIGHTSTREAM	RELEASE OF RIGHTS
83	MIDWEST NATURAL GAS, INC	RELEASE OF RIGHTS

UTILITY EASEMENT TABLE			
UTILITY NUMBER	PARCEL	RECORDING INFORMATION	NAME
80	11	DOC 439137, V 815, P 617	WISCONSIN BELL, INC
81	11	NO EASEMENT OF RECORD	
83	11	NO EASEMENT OF RECORD	
80	14	NO EASEMENT OF RECORD	

1102614
BETH PABST
REGISTER OF DEEDS
ST. CROIX CO., WI
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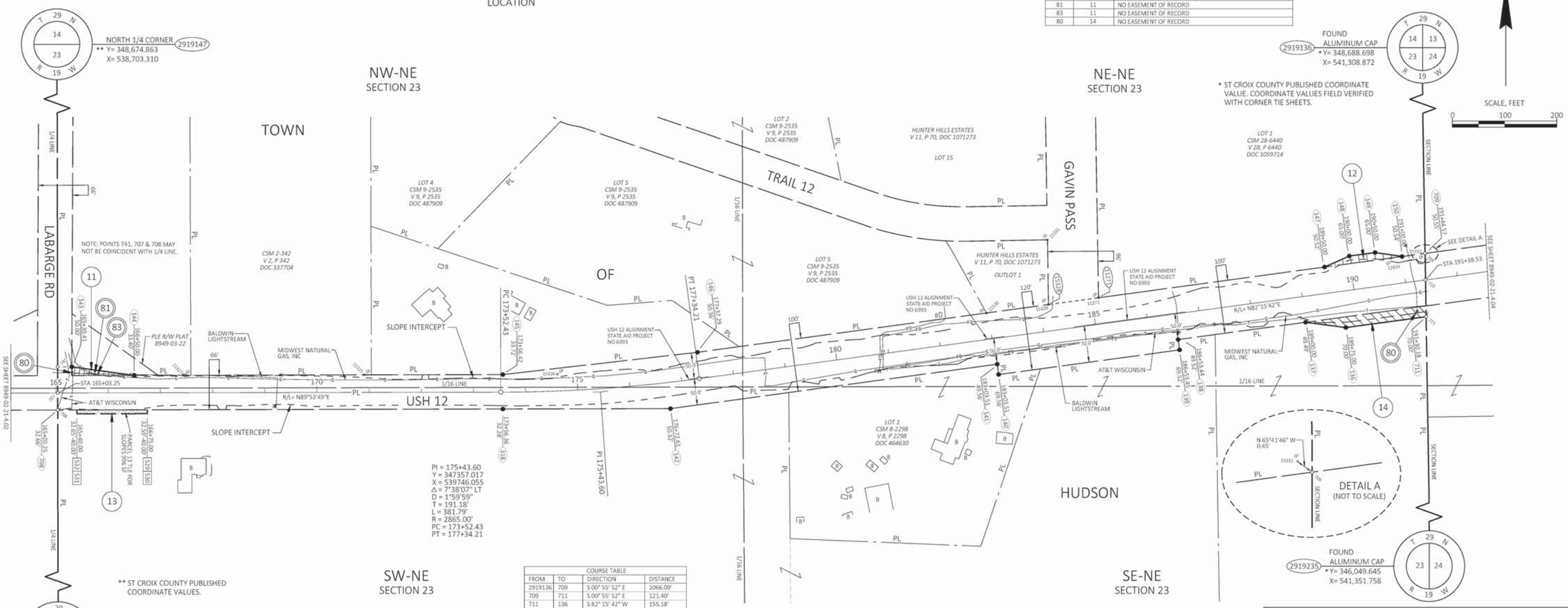
PROJECT NUMBER 8949-02-21-4.03



COURSE TABLE			
FROM	TO	DIRECTION	DISTANCE
2919136	709	S 00° 55' 52" E	1066.09'
709	711	S 00° 55' 52" E	121.40'
711	136	S 82° 15' 42" W	155.18'
136	137	N 82° 26' 25" W	77.76'
137	138	S 82° 15' 15" W	246.56'
138	139	S 07° 44' 45" E	20.00'
139	140	S 82° 15' 15" W	349.94'
140	141	N 07° 44' 45" W	20.00'
141	142	S 82° 15' 15" W	631.97'
142	708	S 89° 52' 15" W	1174.31'
708	741	N 00° 06' 14" W	82.66'
741	143	N 89° 53' 46" E	27.16'
143	144	S 82° 12' 06" E	120.74'
144	145	N 89° 52' 15" E	706.37'
145	146	N 83° 28' 23" E	375.42'
146	147	N 82° 15' 15" E	1212.71'
147	148	N 66° 06' 44" E	52.05'
148	149	N 82° 15' 42" E	50.00'
149	150	S 81° 36' 34" E	52.05'
150	709	N 82° 15' 15" E	44.57'

COURSE TABLE - 1/4 LINE			
FROM	TO	DIRECTION	DISTANCE
2919237	708	N 00° 06' 14" W	3906.03'
741	2919147	N 00° 06' 14" W	1269.73'
2919237	2919147	N 00° 06' 14" W	5258.42'

RECOVERED MONUMENTS			
POINT	Y	X	DESCRIPTION
11271	347537.613	540700.294	1" IRON PIPE
12824	347612.963	541260.409	3/4" REBAR
15325	347390.068	539293.291	1" IRON PIPE
15326	347391.171	539663.281	3/4" REBAR
15327	347389.209	538947.580	1" IRON PIPE
15328	347524.582	540604.491	1-1/4" REBAR
15330	347508.123	540485.657	1-1/4" IRON PIPE
15332	347622.932	541325.783	1-1/4" IRON PIPE
15331	347648.582	540602.447	1-1/4" REBAR

COURSE TABLE - SEGMENTS			
FROM	TO	DIRECTION	DISTANCE
708	707	N 00° 06' 14" W	32.66'
707	741	N 00° 06' 14" W	50.00'
709	710	S 00° 55' 52" E	50.90'
710	711	S 00° 55' 52" E	70.50'
142	318	S 89° 52' 15" W	321.15'
318	708	S 89° 52' 15" W	853.16'
146	15328	N 82° 15' 15" E	678.92'
15328	11271	N 82° 15' 15" E	96.69'
11271	147	N 82° 15' 15" E	437.10'

STATION & OFFSET TABLE		
POINT	STATION	OFFSET
15328	184+16.22	50.45' LT
11271	185+12.90	50.46' LT

COURSE TABLE - SECTION LINE			
FROM	TO	DIRECTION	DISTANCE
2919136	709	S 00° 55' 52" E	1066.09'
711	2919235	S 00° 55' 52" E	1451.90'
2919136	2919235	S 00° 55' 52" E	2639.40'

cbs²
770 TECHNOLOGY WAY
CHIPPEWA FALLS, WI 54729

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

WISCONSIN NEIL C. BOWE S-2827 CHIPPEWA FALLS WI LAND SURVEYOR

SIGNATURE: Neil C. Bowe DATE: 5/1/20
PRINT NAME: NEIL C. BOWE
REGISTRATION NUMBER: S-2827

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

SIGNATURE: Debra B. Stensland DATE: 5/1/20
PRINT NAME: DEBRA B. STENSLAND

TRANSPORTATION PROJECT PLAT NO: 8949-02-21-4.04

THAT PART OF LOT 1 OF CSM 9-2421, V 9, P 2421, DOC 475441, AND PART OF LOT 1 OF CSM 9-2470, V 9, P 2470, DOC 481840, AND PART OF LOT 26 OF SUNRIDGE, V 5, P 71, DOC 451750, LOCATED IN PART OF THE NW 1/4 OF THE NW 1/4, AND PART LOT 1 OF CSM 1-229, V 1, P 229, DOC 332749, LOCATED IN PART OF THE NE 1/4 OF THE NW 1/4, SECTION 24, TOWNSHIP 29 NORTH, RANGE 19 WEST, TOWN OF HUDSON, ST CROIX COUNTY, WISCONSIN.

RELOCATION ORDER OF USH 12 HUDSON - BALDWIN, CTH U TO WEST JUNCTION STH 65, ST CROIX COUNTY

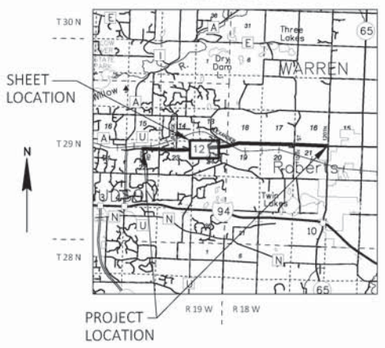
TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN 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 IN THE OFFICE OF THE REGISTER OF DEEDS IN ST CROIX COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 1101288.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), ST CROIX 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. NGS POINT UTILIZED WAS DN7050.

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

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

ROAD NAME	BASIS OF EXISTING R/W	YEAR
USH 12 MCDIARMID DR	SUNRIDGE II V 6, P 17, DOC 519728	1994
USH 12	CSM 9-2470, V 9, P 2470, DOC 481840	1992
USH 12	CSM 9-2421, V 9, P 2421, DOC 475441	1991
USH 12	SUNRIDGE V 5, P 71, DOC 451750	1989
USH 12 YELLOWSTONE TRAIL	CSM 1-229, V 1, P 229, DOC 332749	1976
USH 12	FED AID PROJECT NO 370-H	1929
USH 12	STATE AID PROJECT NO 6993	1928

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)	INTEREST REQUIRED	R/W SQUARE FEET REQUIRED			TLE SQUARE FEET
			NEW	EXISTING	TOTAL	
16	SCOTT H & SUSAN A BLANK	FEE	2491	-	2491	-
17	LORNE E JOHNSON	TLE	-	-	-	2848
18	PAUL M & ANITA L MARTIN TRUST	FEE	5266	-	5266	-

1102672
BETH PABST
REGISTER OF DEEDS
ST. CROIX CO., WI
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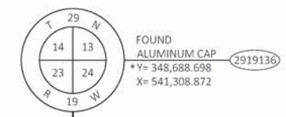
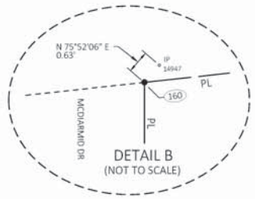


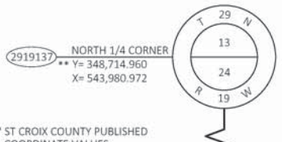
TOWN

NW-NW
SECTION 24

* ST CROIX COUNTY PUBLISHED COORDINATE VALUE. COORDINATE VALUES FIELD VERIFIED WITH CORNER TIE SHEETS.

LOT 1
CSM 9-2421
V 9, P 2421
DOC 475441

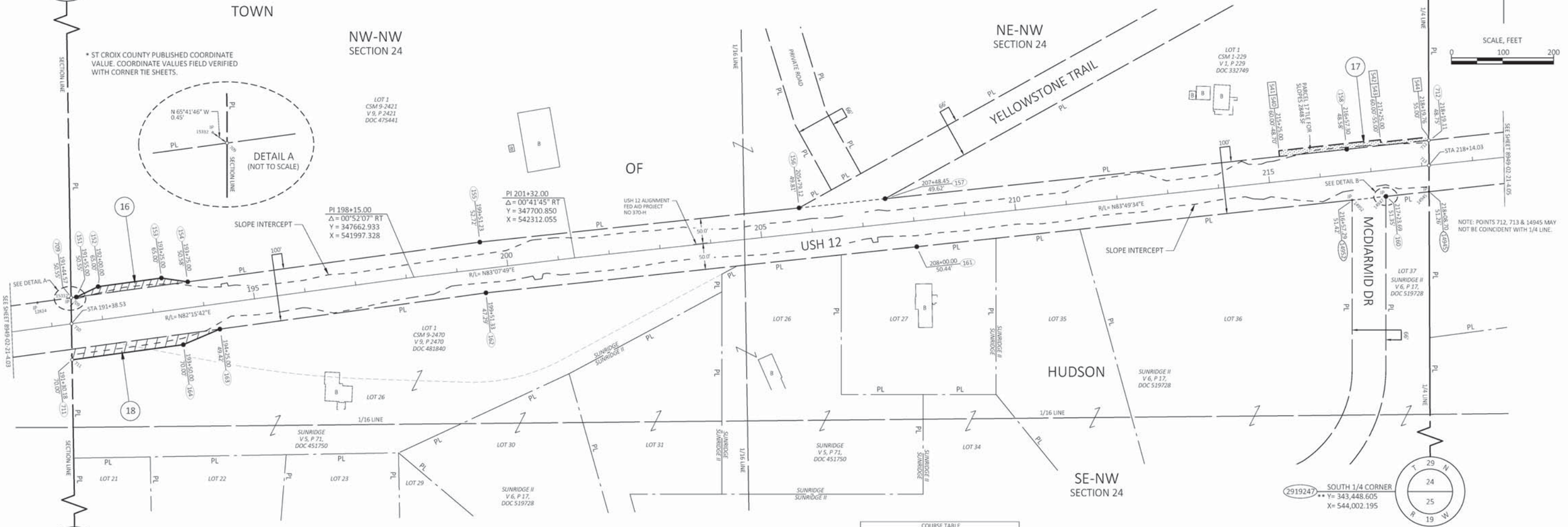




2919137 NORTH 1/4 CORNER
** Y= 348,714.960
X= 543,980.972

** ST CROIX COUNTY PUBLISHED COORDINATE VALUES.

NE-NW
SECTION 24



2919235 FOUND ALUMINUM CAP
* Y= 346,049.645
X= 541,351.758

2919247 SOUTH 1/4 CORNER
** Y= 343,448.605
X= 544,002.195

COURSE TABLE - SECTION LINE			
FROM	TO	DIRECTION	DISTANCE
711	2919235	S 00° 55' 52" E	1451.91'
2919136	2919235	S 00° 55' 52" E	2639.40'

RECOVERED MONUMENTS			
POINT	Y	X	DESCRIPTION
12824	347612.963	541260.409	3/4" REBAR
14947	347821.133	543900.640	2" IRON PIPE
14952	347813.771	543834.028	2" IRON PIPE
14945	347830.095	543984.720	1-1/4" IRON PIPE
15332	347622.932	541325.783	1-1/4" IRON PIPE

COURSE TABLE - SEGMENTS			
FROM	TO	DIRECTION	DISTANCE
711	710	N 00° 55' 52" W	70.50'
710	709	N 00° 55' 52" W	50.91'
712	713	S 00° 13' 51" E	49.01'
713	14945	S 00° 13' 51" E	51.54'

COURSE TABLE			
FROM	TO	DIRECTION	DISTANCE
2919136	709	S 00° 55' 52" E	1066.09'
709	151	N 82° 15' 15" E	10.43'
151	152	N 64° 27' 26" E	47.26'
152	153	N 82° 15' 42" E	125.00'
153	154	S 81° 38' 50" E	52.04'
154	155	N 82° 15' 15" E	577.02'
155	156	N 83° 53' 28" E	628.52'
156	157	N 83° 53' 28" E	169.33'
157	158	N 83° 53' 28" E	908.85'
158	712	N 83° 46' 04" E	161.81'
712	14945	S 00° 13' 51" E	100.55'
14945	160	S 83° 46' 04" W	85.01'
160	14952	S 83° 46' 04" W	66.39'
14952	161	S 83° 53' 28" W	857.29'
161	162	S 83° 53' 28" W	848.08'
162	163	S 82° 15' 15" W	525.60'
163	164	S 66° 54' 55" W	77.77'
164	711	S 82° 15' 42" W	219.82'
711	709	N 00° 55' 52" W	121.40'

COURSE TABLE - 1/4 LINE			
FROM	TO	DIRECTION	DISTANCE
2919137	712	S 00° 13' 51" E	784.21'
14945	2919247	S 00° 13' 51" E	4381.64'
2919137	2919247	S 00° 13' 51" E	5266.40'

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

SIGNATURE: Neil C. Bowe DATE: 5/1/20
PRINT NAME: NEIL C. BOWE
REGISTRATION NUMBER: S-2827

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

SIGNATURE: Debra B. Stensland DATE: 5/1/20
PRINT NAME: DEBRA B. STENSLAND

WISCONSIN NEIL C. BOWE S-2827 CHIPPEWA FALLS WI LAND SURVEYOR

cbs2
770 TECHNOLOGY WAY
CHIPPEWA FALLS, WI 54729

TRANSPORTATION PROJECT PLAT NO: 8949-02-21-4.05

THAT PART OF LOT 8 OF CSM 14-3955, V 14, P 3955, DOC 630577, LOCATED IN PART OF THE NW 1/4 OF THE NE 1/4, AND PART OF PARCEL 5 OF CSM 1-193, V 1, P 193, DOC 330205, LOCATED IN AND INCLUDING PART OF THE NE 1/4 OF THE NE 1/4, SECTION 24, TOWNSHIP 29 NORTH, RANGE 19 WEST, TOWN OF HUDSON, ST CROIX COUNTY, WISCONSIN.

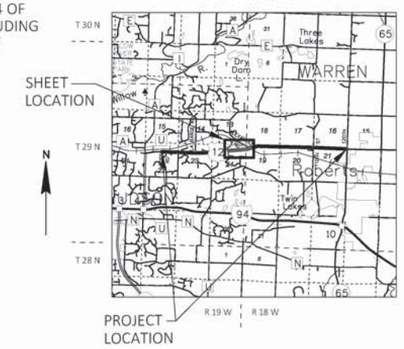
RELOCATION ORDER OF USH 12 HUDSON - BALDWIN, CTH U TO WEST JUNCTION STH 65, ST CROIX COUNTY

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 IN THE OFFICE OF THE REGISTER OF DEEDS IN ST CROIX COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 1101288.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), ST CROIX 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. NGS POINT UTILIZED WAS DN7050.

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

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

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)	INTEREST REQUIRED	R/W SQUARE FEET REQUIRED			TLE SQUARE FEET
			NEW	EXISTING	TOTAL	
19	BRADLEY C & LISA J LARSON	FEE, TLE	1754	-	1754	2450
-	-	-	-	-	-	-
21	LYLE ELENKIWICH	TLE	-	-	-	198
22	PHILIP J FOLTZ	FEE	4146	-	4146	-
-	-	-	-	-	-	-
24	DANIEL & LISA MARTINEAU	FEE	255	-	255	-

1102673
BETH PABST
REGISTER OF DEEDS
ST. CROIX CO., WI
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05/18/2020 11:46 AM
EXEMPT #
PLAT FEE 25.00
VOLUME: TPP1
PAGES: 184
PAGES: 1
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RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8949-02-21-4.05

ROAD NAME	BASIS OF EXISTING R/W	YEAR
USH 12 YELLOWSTONE TRAIL	CSM 14-3955, V 14, P 3955, DOC 630577	2000
USH 12 KINGSWAY RD	CSM 9-2629, V 9, P 2629, DOC 501128	1993
USH 12	CSM 1-193, V 1, P 193, DOC 330205	1975
USH 12	FED AID PROJECT NO 370-H	1929
USH 12	STATE AID PROJECT NO 6993	1928

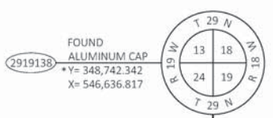
UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	OWNER (S)	INTEREST REQUIRED
80	AT&T WISCONSIN	RELEASE OF RIGHTS
84	XCEL ENERGY (ELECTRIC)	RELEASE OF RIGHTS

UTILITY EASEMENT TABLE			
UTILITY NUMBER	PARCEL	RECORDING INFORMATION	NAME
80	22	NO EASEMENT OF RECORD	
84	21,22	DOC 308675, V 480, P 422	XCEL ENERGY
	22	DOC 342173, V 558, P 566	

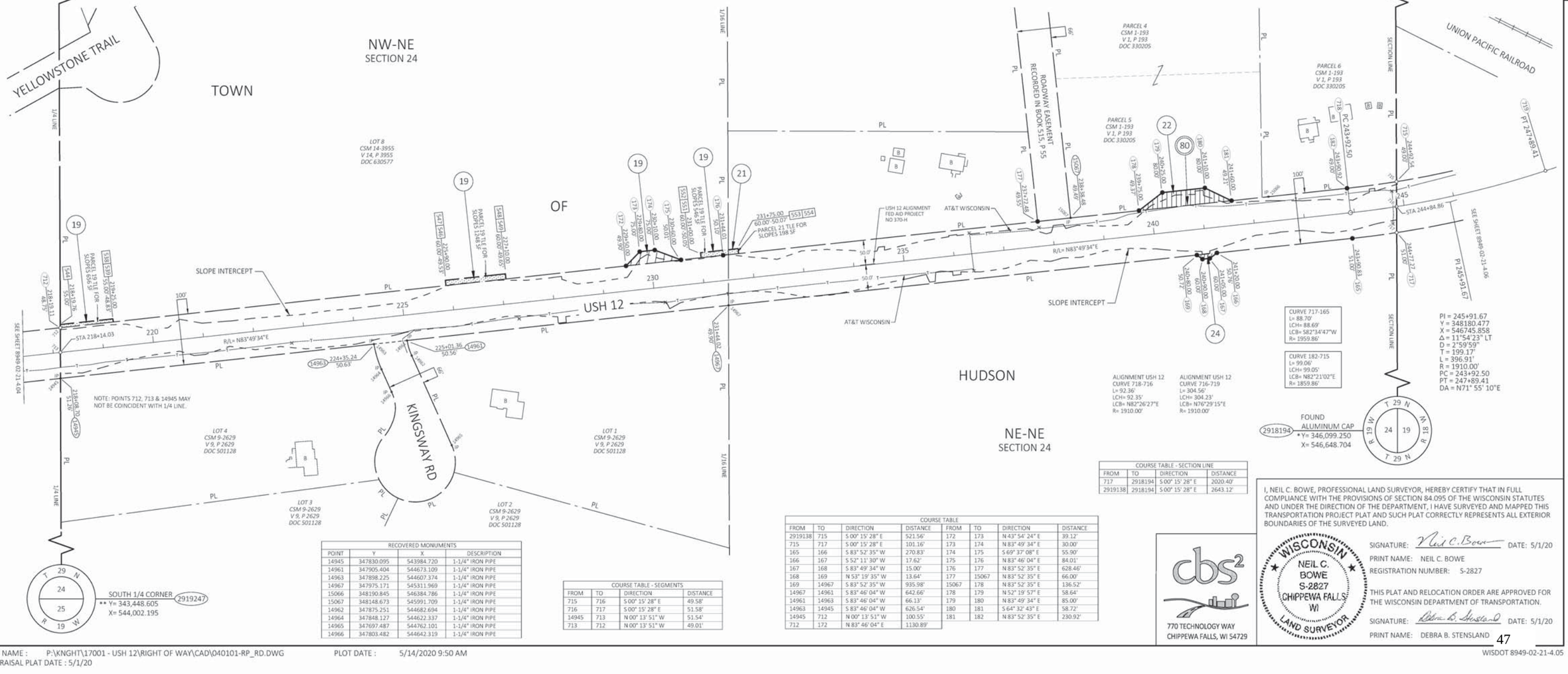
COURSE TABLE - 1/4 LINE			
FROM	TO	DIRECTION	DISTANCE
2919247	14945	N 00° 13' 51" W	4381.64'
712	2919137	N 00° 13' 51" W	784.21'
2919247	2919137	N 00° 13' 51" W	5266.40'

** ST CROIX COUNTY PUBLISHED COORDINATE VALUES.

* ST CROIX COUNTY PUBLISHED COORDINATE VALUE. COORDINATE VALUES FIELD VERIFIED WITH CORNER TIE SHEETS.



N
SCALE, FEET
0 100 200



RECOVERED MONUMENTS			
POINT	Y	X	DESCRIPTION
14945	347830.095	543984.720	1-1/4" IRON PIPE
14961	347905.404	544673.109	1-1/4" IRON PIPE
14963	347898.225	544607.374	1-1/4" IRON PIPE
14967	347975.171	545311.969	1-1/4" IRON PIPE
15066	348190.845	546384.786	1-1/4" IRON PIPE
15067	348148.673	545991.709	1-1/4" IRON PIPE
14962	347875.251	544682.694	1-1/4" IRON PIPE
14964	347848.127	544622.337	1-1/4" IRON PIPE
14965	347697.487	544762.101	1-1/4" IRON PIPE
14966	347803.482	544642.319	1-1/4" IRON PIPE

COURSE TABLE - SEGMENTS			
FROM	TO	DIRECTION	DISTANCE
715	716	S 00° 15' 28" E	49.58'
716	717	S 00° 15' 28" E	51.58'
14945	713	N 00° 13' 51" W	51.54'
713	712	N 00° 13' 51" W	49.01'

COURSE TABLE							
FROM	TO	DIRECTION	DISTANCE	FROM	TO	DIRECTION	DISTANCE
2919138	715	S 00° 15' 28" E	521.56'	172	173	N 43° 54' 24" E	39.12'
715	717	S 00° 15' 28" E	101.16'	173	174	N 83° 49' 34" E	30.00'
165	166	S 83° 52' 35" W	270.83'	174	175	S 69° 37' 08" E	55.90'
166	167	S 52° 11' 30" W	17.62'	175	176	N 83° 46' 04" E	84.01'
167	168	S 83° 49' 34" W	15.00'	176	177	N 83° 52' 35" E	628.46'
168	169	N 53° 19' 35" W	13.64'	177	15067	N 83° 52' 35" E	66.00'
169	14967	S 83° 52' 35" W	935.98'	15067	178	N 83° 52' 35" E	136.52'
14967	14961	S 83° 46' 04" W	642.66'	178	179	N 52° 19' 57" E	58.64'
14961	14963	S 83° 46' 04" W	66.13'	179	180	N 83° 49' 34" E	85.00'
14963	14945	S 83° 46' 04" W	626.54'	180	181	S 64° 32' 43" E	58.72'
14945	712	N 00° 13' 51" W	100.55'	181	182	N 83° 52' 35" E	230.92'
712	172	N 83° 46' 04" E	1130.89'				

COURSE TABLE - SECTION LINE			
FROM	TO	DIRECTION	DISTANCE
717	2918194	S 00° 15' 28" E	2020.40'
2919138	2918194	S 00° 15' 28" E	2643.12'

cbs2
770 TECHNOLOGY WAY
CHIPPEWA FALLS, WI 54729

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

WISCONSIN NEIL C. BOWE S-2827 CHIPPEWA FALLS WI LAND SURVEYOR

SIGNATURE: Neil C. Bowe DATE: 5/1/20
PRINT NAME: NEIL C. BOWE
REGISTRATION NUMBER: S-2827

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

SIGNATURE: Debra B. Stensland DATE: 5/1/20
PRINT NAME: DEBRA B. STENSLAND

FILE NAME : P:\KNGHT\17001 - USH 12\RIGHT OF WAY\CAD\040101-RP_RD.DWG
PLOT DATE : 5/14/2020 9:50 AM
APPRAISAL PLAT DATE : 5/1/20

TRANSPORTATION PROJECT PLAT NO: 8949-02-21-4.06

THAT PART OF THE NW 1/4 OF THE NW 1/4, AND PART OF THE NE 1/4 OF THE NW 1/4, SECTION 19, TOWNSHIP 29 NORTH, RANGE 18 WEST, TOWN OF WARREN, ST CROIX COUNTY, WISCONSIN.

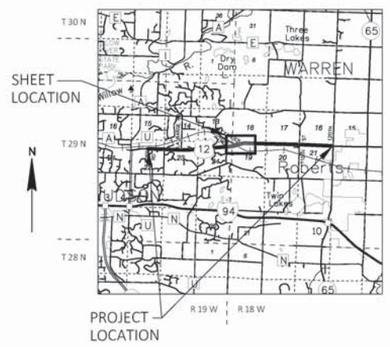
RELOCATION ORDER OF USH 12 HUDSON - BALDWIN, CTH U TO WEST JUNCTION STH 65, ST CROIX COUNTY

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


T 30 N
T 29 N
T 28 N
R 19 W
R 18 W
SHEET LOCATION
PROJECT LOCATION
N
WARREN
Three Lakes
Dry Dam
Tiger Cheek
Tiger Cheek
Tiger Cheek

TRANSPORTATION PROJECT PLAT NO: 8949-02-21-4.07

THAT PART OF LOT 1 OF CSM 7-1848, V 7, P 1848, DOC 427651, LOCATED IN AND INCLUDING PART OF THE SW 1/4 OF THE SE 1/4, AND PART OF LOT 1 OF CSM 7-1848, V 7, P 1848, DOC 427651, LOCATED IN AND INCLUDING THE SE 1/4 OF THE SE 1/4, SECTION 18, AND PART OF OF LOT 2 OF CSM 24-5616, V 24, P 5616, DOC 892781, LOCATED IN AND INCLUDING PART OF THE NW 1/4 OF THE NE 1/4, AND PART OF OUTLOT 1 OF CSM 24-5616, V 24, P 5616, DOC 892781, AND PART OF LOT 1 OF CSM 15-4162, V 15, P 4162, DOC 655120, LOCATED IN PART OF THE NE 1/4 OF THE NE 1/4, SECTION 19, TOWNSHIP 29 NORTH, RANGE 18 WEST, TOWN OF WARREN, ST CROIX COUNTY, WISCONSIN.

RELOCATION ORDER OF USH 12 HUDSON - BALDWIN, CTH U TO WEST JUNCTION STH 65, ST CROIX 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.

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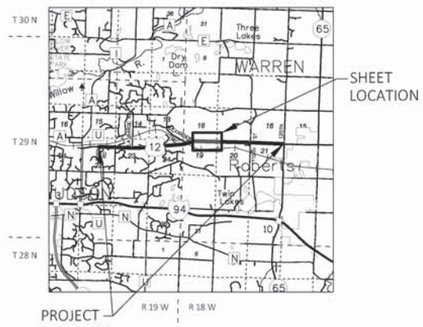
LOCATION SKETCH

NOT TO SCALE



FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS IN ST CROIX COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 1101288.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), ST CROIX 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. NGS POINT UTILIZED WAS DN7050.

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

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

EXISTING ACCESS CONTROL ALONG USH 12 HAS BEEN ESTABLISHED FROM CSM 24-5616, DOC 892781, ACCESS RESTRICTED PER COVENANT V 1708, P 536, DOC 654834.

ROAD NAME	BASIS OF EXISTING R/W	YEAR
USH 12	CSM 24-5616, V 24, P 5616, DOC 892781	2009
USH 12	CSM 15-4162, V 15, P 4162, DOC 655120	2001
USH 12	CSM 7-1848, V 7, P 1848, DOC 427651	1987
USH 12	FED AID PROJECT NO 370-H	1929

UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	OWNER (S)	INTEREST REQUIRED
84	XCEL ENERGY (ELECTRIC)	RELEASE OF RIGHTS

UTILITY EASEMENT TABLE			
UTILITY NUMBER	PARCEL	RECORDING INFORMATION	NAME
84	28,29	DOC 1031841	XCEL ENERGY

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)	INTEREST REQUIRED	R/W SQUARE FEET REQUIRED			TLE SQUARE FEET
			NEW	EXISTING	TOTAL	
28	JEFFERY D BEER	TLE	-	-	-	2656
29	DAU PROPERTIES LLC	FEE, TLE	1721	-	1721	241
-	-	-	-	-	-	-
31	DANIEL R & KIMBERLY A BEER	FEE, TLE	1700	-	1700	1001
32	MICHAEL L PETERS & SHEREE L KOEHLER	FEE	892	-	892	-
33	JEFFREY L & JOAN M DEMUTH	FEE	393	-	393	-
34	SCOTT & CHRISTINA ZWIEFEL	FEE	2545	-	2545	-
-	-	-	-	-	-	-
36	MIKE & CAROL SCHNEIDER RLT	FEE	10344	-	10344	-

1102674
BETH PABST
REGISTER OF DEEDS
ST. CROIX CO., WI
RECEIVED FOR RECORD
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EXEMPT #
PLAT FEE 25.00
VOLUME: TPP1
PAGES: 185
PAGES: 1
****The above recording information verifies that this document has been electronically recorded & returned to the submitter**

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8949-02-21-4.07

2918077
NORTH 1/4 CORNER
** Y= 354,020.038
X= 549,321.292

COURSE TABLE - 1/4 LINE			
FROM	TO	DIRECTION	DISTANCE
2918077	720	S 00° 12' 09" W	5257.74'
2918187	2918077	N 00° 12' 09" E	5290.80'

* ST CROIX COUNTY PUBLISHED COORDINATE VALUE. COORDINATE VALUES FIELD VERIFIED WITH CORNER TIE SHEETS.

2918187
FOUND SURVEY MARKER NAIL
STA 272+31.28, 0.92' RT
*Y= 348,729.268
X= 549,302.581

SW-SE
SECTION 18

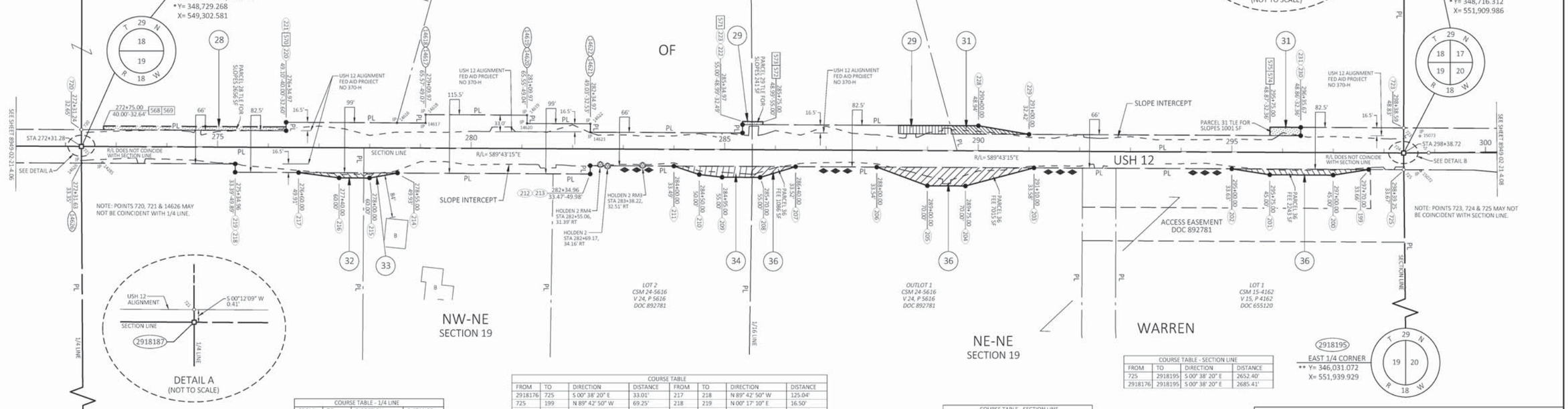
TOWN OF WARREN

NW-NE
SECTION 19

NE-NE
SECTION 19

WARREN

SE-SE
SECTION 18



DETAIL A
(NOT TO SCALE)

2918197
SOUTH 1/4 CORNER
** Y= 343,385.612
X= 549,333.790

** ST CROIX COUNTY PUBLISHED COORDINATE VALUES.

COURSE TABLE - 1/4 LINE			
FROM	TO	DIRECTION	DISTANCE
14626	2918197	S 00° 20' 05" E	5310.81'
2918197	2918187	N 00° 20' 05" W	5343.75'

RECOVERED MONUMENTS			
POINT	Y	X	DESCRIPTION
14285	348697.421	549344.428	1-1/4" IRON PIPE W/YCAP
14616	348775.726	549924.952	1-1/4" IRON PIPE
14617	348775.444	549981.500	1-1/4" IRON PIPE LEANING W
14618	348791.947	549981.582	1-1/4" IRON PIPE
14619	348790.948	550181.580	1-1/4" IRON PIPE
14620	348774.445	550181.497	1" IRON PIPE
14621	348757.318	550306.413	1" IRON PIPE
14622	348773.821	550306.496	1" IRON PIPE
14626	348696.237	549302.960	1" IRON PIPE
15072	348680.787	551943.833	1-1/4" IRON PIPE W/YCAP
15073	348749.537	551942.358	1-1/4" IRON PIPE W/YCAP

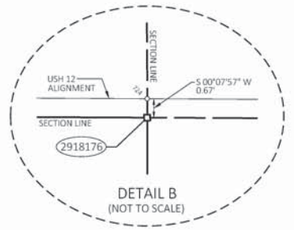
COURSE TABLE							
FROM	TO	DIRECTION	DISTANCE	FROM	TO	DIRECTION	DISTANCE
2918176	725	S 00° 38' 20" E	33.01'	217	218	N 89° 42' 50" W	125.04'
725	199	N 89° 42' 50" W	69.25'	218	219	N 00° 17' 10" E	16.50'
199	200	S 81° 04' 38" W	70.91'	219	14626	N 89° 42' 50" W	303.32'
200	201	N 89° 43' 15" W	125.00'	14626	2918187	N 00° 20' 05" W	32.94'
201	202	N 81° 05' 54" W	75.86'	2918187	720	N 00° 12' 09" E	33.06'
202	203	N 89° 42' 50" W	390.00'	720	220	S 89° 42' 50" E	403.73'
203	204	S 75° 10' 53" W	139.83'	220	221	N 00° 17' 10" E	16.50'
204	205	N 89° 43' 15" W	75.00'	221	14617	S 89° 42' 50" E	275.00'
205	206	N 69° 41' 25" W	106.44'	14617	14618	N 00° 17' 10" E	16.50'
206	207	N 89° 42' 50" W	160.00'	14618	14619	S 89° 42' 50" E	200.00'
207	208	S 73° 13' 21" W	73.22'	14619	14620	S 00° 17' 10" W	16.50'
208	209	N 89° 43' 15" W	75.00'	14620	14622	S 89° 42' 50" E	125.00'
209	210	N 83° 22' 50" W	45.28'	14622	14621	S 00° 17' 10" W	16.50'
210	211	N 71° 27' 06" W	52.65'	14621	222	S 89° 42' 50" E	300.00'
211	212	N 89° 42' 50" W	165.04'	222	223	N 00° 17' 10" E	16.50'
212	213	S 00° 17' 10" W	16.50'	223	228	S 89° 42' 50" E	465.03'
213	214	N 89° 42' 50" W	379.96'	228	229	S 80° 20' 34" E	101.35'
214	215	S 79° 54' 17" W	55.91'	229	230	S 89° 42' 50" E	535.67'
215	216	N 89° 43' 15" W	60.00'	230	231	N 00° 17' 10" E	16.50'
216	217	N 82° 31' 50" W	80.63'	231	723	S 89° 42' 50" E	202.92'
				723	2918176	S 00° 07' 57" W	49.50'

COURSE TABLE - SECTION LINE			
FROM	TO	DIRECTION	DISTANCE
2918187	2918176	S 89° 42' 55" E	2607.44'

COURSE TABLE - SEGMENTS			
FROM	TO	DIRECTION	DISTANCE
2918187	721	N 00° 12' 09" E	0.41'
721	720	N 00° 12' 09" E	32.65'
723	724	S 00° 07' 57" W	48.83'
724	2918176	S 00° 07' 57" W	0.67'

COURSE TABLE - SECTION LINE			
FROM	TO	DIRECTION	DISTANCE
2918174	723	S 00° 07' 57" W	2640.87'
2918174	2918176	S 00° 07' 57" W	2690.37'

2918174
EAST 1/4 CORNER
** Y= 351,406.673
X= 551,916.214



DETAIL B
(NOT TO SCALE)

SCALE, FEET
0 100 200

2918176
FOUND SURVEY MARKER NAIL
STA 298+38.72, 0.67' RT
*Y= 348,716.312
X= 551,909.986

COURSE TABLE - SECTION LINE			
FROM	TO	DIRECTION	DISTANCE
725	2918195	S 00° 38' 20" E	2652.40'
2918176	2918195	S 00° 38' 20" E	2685.41'

2918195
EAST 1/4 CORNER
** Y= 346,031.072
X= 551,939.929

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

SIGNATURE: Neil C. Bowe DATE: 5/15/20
PRINT NAME: NEIL C. BOWE
REGISTRATION NUMBER: S-2827

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

SIGNATURE: Debra B. Stensland DATE: 5/15/20
PRINT NAME: DEBRA B. STENSLAND

WISCONSIN NEIL C. BOWE S-2827 CHIPPEWA FALLS WI LAND SURVEYOR

cbs²
770 TECHNOLOGY WAY
CHIPPEWA FALLS, WI 54729

TRANSPORTATION PROJECT PLAT NO: 8949-02-21-4.08

THAT PART OF THE SW 1/4 OF THE SW 1/4, AND PART OF THE SE 1/4 OF THE SW 1/4, SECTION 17, AND PART THE NW 1/4 OF THE NW 1/4, AND PART OF THE NE 1/4 OF THE NW 1/4, SECTION 20, TOWNSHIP 29 NORTH, RANGE 18 WEST, TOWN OF WARREN, ST CROIX COUNTY, WISCONSIN.

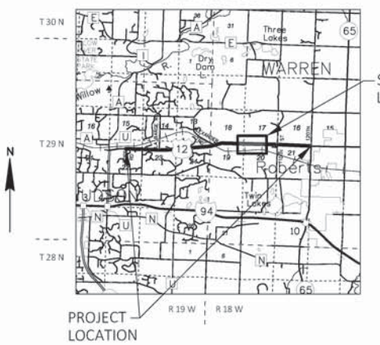
RELOCATION ORDER OF USH 12 HUDSON - BALDWIN, CTH U TO WEST JUNCTION STH 65, ST CROIX COUNTY

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 IN THE OFFICE OF THE REGISTER OF DEEDS IN ST CROIX COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 1101288.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), ST CROIX 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. NGS POINT UTILIZED WAS DN7050.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY ⅝" 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.

ROAD NAME	BASIS OF EXISTING R/W	YEAR
USH 12	CSM 15-4162, V 15, P 4162, DOC 655120	2001
USH 12	R/W PLAT 8949-6-21	1978
USH 12	FED AID PROJECT NO 370-H	1929

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)	INTEREST REQUIRED	R/W SQUARE FEET REQUIRED			TLE SQUARE FEET
			NEW	EXISTING	TOTAL	
37	JOAN E BROWN	FEE	863	-	863	-
38	DAVID M & DIANE L MCKENNA	FEE	770	-	770	-
39	KAMM BROTHERS, LLC	FEE	9975	-	9975	-
-	-	-	-	-	-	-
41	DORA MARIE ROHL	FEE	989	-	989	-

1102824
BETH PABST
REGISTER OF DEEDS
ST. CROIX CO., WI
RECEIVED FOR RECORD
05/19/2020 10:01 AM
EXEMPT #
PLAT FEE 25.00
VOLUME: TPP1
PAGES: 187
PAGES: 1
****The above recording information verifies that this document has been electronically recorded & returned to the submitter**

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8949-02-21-4.08

2918174
WEST 1/4 CORNER
** Y= 351,406.673
X= 551,916.214

** ST CROIX COUNTY PUBLISHED COORDINATE VALUES.

COURSE TABLE - SECTION LINE			
FROM	TO	DIRECTION	DISTANCE
2918174	723	S 00° 07' 57" W	2640.87'
2918174	2918176	S 00° 07' 57" W	2690.37'

* ST CROIX COUNTY PUBLISHED COORDINATE VALUE. COORDINATE VALUES FIELD VERIFIED WITH CORNER TIE SHEETS.

SW-SW
SECTION 17

2918176
FOUND SURVEY MARKER NAIL
STA 298+38.72, 0.67' RT
*Y= 348,716.312
X= 551,909.986

TOWN

PI 303+78.10
Δ = 00°58'11" LT
Y = 348714.349
X = 552449.367

USH 12 ALIGNMENT R/W PLAT 8949-6-21

SEE DETAIL A

STA 298+38.72

R/L DOES NOT COINCIDE WITH SECTION LINE

R/L= S89°43'15"E

R/L= N89°18'34"E

USH 12

SLOPE INTERCEPT

USH 12 ALIGNMENT FED AID PROJECT NO 370-H

SEE DETAIL B

STA 324+70.99

NOTE: POINTS 723, 724 & 725 MAY NOT BE COINCIDENT WITH SECTION LINE.

NOTE: POINTS 727, 728 & 729 MAY NOT BE COINCIDENT WITH 1/4 LINE.

SEE SHEET 8949-02-21-4.09

LOT 1
CSM 15-4162
V 15, P 4162
DOC 655120

2918195
WEST 1/4 CORNER
** Y= 346,031.072
X= 551,939.929

DETAIL A
(NOT TO SCALE)

COURSE TABLE - SECTION LINE			
FROM	TO	DIRECTION	DISTANCE
725	2918195	S 00° 38' 20" E	2652.40'
2918176	2918195	S 00° 38' 20" E	2685.41'

RECOVERED MONUMENTS			
POINT	Y	X	DESCRIPTION
15072	348680.787	551943.833	1-1/4" IRON PIPE W/YCAP
15073	348749.537	551942.358	1-1/4" IRON PIPE W/YCAP

NW-NW
SECTION 20

COURSE TABLE							
FROM	TO	DIRECTION	DISTANCE	FROM	TO	DIRECTION	DISTANCE
2918176	723	N 00° 07' 57" E	49.50'	246	247	S 89° 18' 06" W	495.00'
723	232	S 89° 42' 50" E	504.08'	247	248	S 49° 07' 34" W	26.18'
232	233	S 00° 17' 10" W	16.50'	248	249	S 89° 18' 34" W	25.00'
233	225	S 89° 42' 50" E	10.97'	249	250	N 50° 31' 19" W	26.17'
225	234	N 89° 18' 06" E	395.82'	250	251	S 89° 18' 06" W	782.74'
234	235	N 54° 40' 34" E	30.38'	251	252	S 79° 57' 35" W	134.04'
235	236	N 89° 18' 34" E	25.00'	252	253	S 89° 18' 34" W	245.00'
236	237	S 56° 04' 23" E	30.38'	253	254	N 67° 12' 42" W	54.51'
237	238	N 89° 18' 06" E	341.62'	254	255	S 89° 18' 06" W	115.00'
238	239	N 00° 41' 54" W	8.18'	255	256	S 71° 52' 09" W	89.10'
239	240	N 89° 18' 06" E	277.00'	256	257	S 89° 18' 34" W	50.00'
240	241	S 00° 41' 54" E	8.18'	257	258	N 78° 56' 00" W	92.65'
241	242	N 89° 18' 06" E	416.38'	258	259	S 86° 38' 42" W	110.22'
242	243	N 48° 45' 01" E	26.33'	259	260	S 62° 52' 48" W	45.05'
243	244	N 89° 18' 34" E	25.00'	260	261	N 89° 43' 15" W	30.00'
244	245	S 50° 08' 45" E	26.32'	261	262	N 62° 44' 34" W	61.72'
245	727	N 89° 18' 06" E	546.29'	262	263	N 84° 51' 19" W	98.07'
727	2918177	S 00° 10' 10" E	33.66'	263	725	N 89° 42' 50" W	138.04'
2918177	729	S 00° 11' 50" E	41.39'	725	2918176	N 00° 38' 20" W	33.01'
729	246	N 80° 34' 09" W	51.43'				

STATION & OFFSET TABLE		
POINT	STATION	OFFSET
745	298+88.20	0.00'
746	322+72.18	0.00'

COURSE TABLE - SEGMENTS			
FROM	TO	DIRECTION	DISTANCE
727	728	S 00° 10' 10" E	32.97'
728	2918177	S 00° 10' 10" E	0.69'
2918176	724	N 00° 07' 57" E	0.67'
724	723	N 00° 07' 57" E	48.83'

COURSE TABLE - SECTION LINE			
FROM	TO	DIRECTION	DISTANCE
2918176	745	N 89° 30' 32" E	49.48'
745	746	N 89° 30' 32" E	2383.93'
746	2918177	N 89° 30' 32" E	198.81'
2918176	2918177	N 89° 30' 32" E	2632.22'

COURSE TABLE - 1/4 LINE			
FROM	TO	DIRECTION	DISTANCE
729	2918207	S 00° 11' 50" E	5271.80'
2918177	2918207	S 00° 11' 50" E	5313.19'

COURSE TABLE - 1/4 LINE			
FROM	TO	DIRECTION	DISTANCE
2918087	727	S 00° 10' 10" E	5309.51'
2918087	2918177	S 00° 10' 10" E	5343.17'

2918087
NORTH 1/4 CORNER
** Y= 354,082.029
X= 554,526.296

SE-SW
SECTION 17

DETAIL B
(NOT TO SCALE)

N

SCALE, FEET
0 100 200

2918177
FOUND SURVEY MARKER NAIL
STA 324+70.99, 0.69' RT
*Y= 348,738.879
X= 554,542.109

2918207
SOUTH 1/4 CORNER
** Y= 343,425.721
X= 554,560.409

NE-NW
SECTION 20

WARREN

770 TECHNOLOGY WAY
CHIPPEWA FALLS, WI 54729

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

SIGNATURE: Neil C. Bowe DATE: 5/1/20
PRINT NAME: NEIL C. BOWE
REGISTRATION NUMBER: S-2827

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

SIGNATURE: Debra B. Stensland DATE: 5/1/20
PRINT NAME: DEBRA B. STENSLAND

WISCONSIN NEIL C. BOWE S-2827 CHIPPEWA FALLS WI LAND SURVEYOR

TRANSPORTATION PROJECT PLAT NO: 8949-02-21-4.09

THAT PART OF THE SE 1/4 OF THE SE 1/4, SECTION 17, AND PART LOTS 1 AND 2 OF CSM 6-1528, V 6, P 1528, DOC 402481, LOCATED IN AND INCLUDING PART OF THE NW 1/4 OF THE NE 1/4, AND PART OF LOTS 1 AND 3 THRU 5 OF PLEASANT ACRES, V 4, P 16, DOC 331199, LOCATED IN AND INCLUDING PART OF THE NE 1/4 OF THE NE 1/4, SECTION 20, TOWNSHIP 29 NORTH, RANGE 18 WEST, TOWN OF WARREN, ST CROIX COUNTY, WISCONSIN.

RELOCATION ORDER OF USH 12 HUDSON - BALDWIN, CTH U TO WEST JUNCTION STH 65, ST CROIX COUNTY

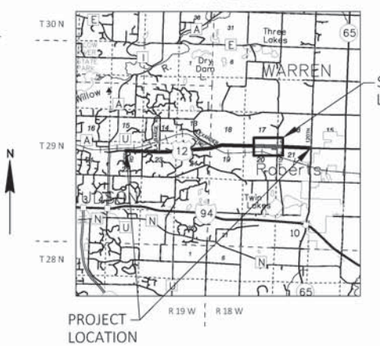
TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN 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 IN THE OFFICE OF THE REGISTER OF DEEDS IN ST CROIX COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 1101288.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), ST CROIX 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. NGS POINT UTILIZED WAS DN7050.

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

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

ROAD NAME	BASIS OF EXISTING R/W	YEAR
USH 12 110TH ST	R/W PLAT 8949-03-22	1996
USH 12	CSM 6-1528, V 6, P 1528, DOC 402481	1985
USH 12	R/W PLAT 8949-6-21	1978
USH 12	PLEASANT ACRES V 4, P 16, DOC 331199	1976
USH 12	FED AID PROJECT NO 370-H	1929

UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	OWNER (S)	INTEREST REQUIRED
80	AT&T WISCONSIN	RELEASE OF RIGHTS

UTILITY EASEMENT TABLE			
UTILITY NUMBER	PARCEL	RECORDING INFORMATION	NAME
80	38	NO EASEMENT OF RECORD	

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)	INTEREST REQUIRED	R/W SQUARE FEET REQUIRED			TLE SQUARE FEET
			NEW	EXISTING	TOTAL	
38	DAVID M & DIANE L MCKENNA	FEE, TLE	3494	-	3494	768
-	-	-	-	-	-	-
42	STEVEN & EMILY DROBINSKI	FEE	3931	-	3931	-
43	JOHN & CAROL HITT	FEE	1704	-	1704	-
44	DEBRA J FOLKS	FEE	887	-	887	-
-	-	-	-	-	-	-
46	MICHAEL J SAMUEL	FEE	1457	-	1457	-
47	MARK J & CECILIA V BLANSKI	FEE	196	-	196	-
48	STEVEN J & JACQUELINE M WEBER	FEE	804	-	804	-
49	DAVID S & AMY S THORSEN	FEE	766	-	766	-
-	-	-	-	-	-	-
51	DUSTIN R SANDERS	FEE	1990	-	1990	-

1102826
BETH PABST
REGISTER OF DEEDS
ST. CROIX CO., WI
RECEIVED FOR RECORD
05/19/2020 10:12 AM
EXEMPT #
PLAT FEE 25.00
VOLUME: TPP1
PAGES: 188
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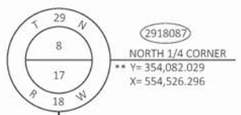
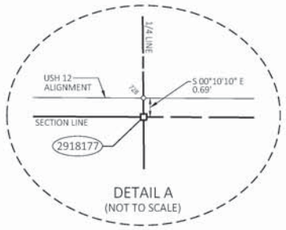
****The above recording information verifies that this document has been electronically recorded & returned to the submitter**

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8949-02-21-4.09



2918087
NORTH 1/4 CORNER
** Y= 354,082.029
X= 554,526.296

COURSE TABLE - 1/4 LINE			
FROM	TO	DIRECTION	DISTANCE
2918087	726	S 00° 10' 10" E	5293.01'
2918087	2918177	S 00° 10' 10" E	5343.17'



DETAIL A
(NOT TO SCALE)

SW-SE
SECTION 17

* ST CROIX COUNTY PUBLISHED COORDINATE VALUE. COORDINATE VALUES FIELD VERIFIED WITH CORNER TIE SHEETS.

2918177
FOUND SURVEY MARKER NAIL
STA 324+70.99, 0.69' RT
* Y= 348,738.879
X= 554,542.109

TOWN

2918207
SOUTH 1/4 CORNER
** Y= 343,425.721
X= 554,560.409

COURSE TABLE - 1/4 LINE			
FROM	TO	DIRECTION	DISTANCE
729	2918207	S 00° 11' 50" E	5271.80'
2918177	2918207	S 00° 11' 50" E	5313.19'

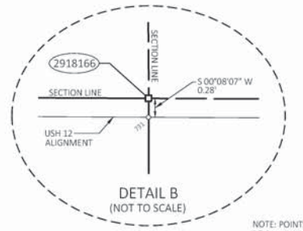
RECOVERED MONUMENTS			
POINT	Y	X	DESCRIPTION
14585	348733.641	556766.374	1" IRON PIPE
14586	348731.105	556576.409	1" IRON PIPE
14589	348724.022	556006.954	2" IRON PIPE
14591	348726.454	556193.472	1" IRON PIPE
14592	348925.473	557133.766	1-1/4" IRON PIPE LEANING E
14609	348785.190	555599.640	1" IRON PIPE
14610	348788.408	555855.667	1-1/4" IRON PIPE LEANING S
14611	348720.981	555762.976	1" IRON PIPE
14612	348714.163	555198.193	1-1/4" IRON PIPE
14613	348711.328	554922.459	1-1/4" IRON PIPE LEANING N
14587	348326.003	556481.174	2" IRON PIPE
14593	348928.684	557199.652	1-1/4" IRON PIPE
14599	348609.636	557199.536	1-1/4" IRON PIPE

NW-NE
SECTION 20

COURSE TABLE							
FROM	TO	DIRECTION	DISTANCE	FROM	TO	DIRECTION	DISTANCE
2918166	732	S 00° 08' 07" W	55.46'	280	281	S 89° 18' 06" W	180.00'
732	264	N 89° 51' 53" W	33.00'	281	282	S 80° 06' 37" W	106.37'
264	265	N 82° 07' 37" W	164.23'	282	283	S 89° 18' 34" W	145.00'
265	14585	S 89° 18' 06" W	204.64'	283	729	N 80° 34' 09" W	45.07'
14585	266	S 67° 05' 24" W	32.44'	729	2918177	N 00° 11' 50" W	41.39'
266	267	S 89° 18' 34" W	30.00'	2918177	726	N 00° 10' 10" W	50.16'
267	268	N 71° 23' 43" W	37.08'	726	284	N 89° 18' 06" E	812.18'
268	269	S 89° 18' 06" W	205.00'	284	285	S 00° 41' 54" E	16.50'
269	270	S 33° 19' 29" W	26.81'	285	286	N 89° 18' 06" E	892.11'
270	271	S 89° 18' 34" W	30.00'	286	287	N 83° 01' 28" E	119.99'
271	272	N 34° 42' 55" W	26.81'	287	288	N 65° 30' 35" E	71.04'
272	273	S 89° 18' 06" W	455.00'	288	289	N 89° 18' 34" E	90.00'
273	274	S 74° 11' 34" W	46.61'	289	290	S 56° 55' 26" E	60.15'
274	275	S 89° 18' 34" W	60.00'	290	291	S 84° 25' 15" E	76.19'
275	276	N 81° 30' 08" W	75.97'	291	292	N 89° 18' 06" E	265.33'
276	277	S 89° 18' 06" W	475.00'	292	14592	N 60° 44' 14" E	254.45'
277	278	S 75° 44' 27" W	51.44'	14592	730	N 89° 54' 40" E	33.00'
278	279	S 89° 18' 34" W	150.00'	730	2918166	S 00° 05' 20" E	156.82'
279	280	N 82° 08' 21" W	80.90'				

COURSE TABLE - SEGMENTS			
FROM	TO	DIRECTION	DISTANCE
2918166	731	S 00° 08' 07" W	0.28'
731	732	S 00° 08' 07" W	55.18'
2918177	728	N 00° 10' 10" W	0.69'
728	726	N 00° 10' 10" W	49.47'

SE-SE
SECTION 17

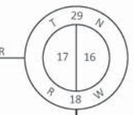


DETAIL B
(NOT TO SCALE)

** ST CROIX COUNTY PUBLISHED COORDINATE VALUES.

COURSE TABLE - SECTION LINE			
FROM	TO	DIRECTION	DISTANCE
2918164	730	S 00° 05' 20" E	2495.23'
2918166	2918164	N 00° 05' 20" W	2652.05'
732	2918205	S 00° 08' 07" W	2598.81'
2918205	2918166	N 00° 08' 07" E	2654.27'

2918164
EAST 1/4 CORNER
** Y= 351,421.067
X= 557,162.698

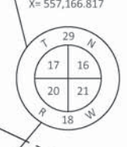


N

SCALE, FEET
0 100 200

NOTE: POINTS 730, 731 & 732 MAY NOT BE COINCIDENT WITH SECTION LINE.

2918166
FOUND SURVEY MARKER NAIL
STA 350+95.88, 0.28' LT
* Y= 348,769.023
X= 557,166.817



OF

USH 12

PLEASANT ACRES COURT

WARREN

110TH ST

SECTION LINE

1/16 LINE

1/4 LINE

PL

B

LOT 1 CSM 6-1528 V 6, P 1528 DOC 402481

LOT 2 CSM 6-1528 V 6, P 1528 DOC 402481

LOT 1 PLE R/W PLAT 8949-03-22

PLEASANT ACRES V 4, P 16 DOC 331199

LOT 2

LOT 3

LOT 4

LOT 5

LOT 6

LOT 7

LOT 8

SEE SHEET 8949-02-21-4.08

SEE SHEET 8949-02-21-4.10

SEE DETAIL A

SEE DETAIL B

R/L DOES NOT COINCIDE WITH SECTION LINE

R/L= N89°18'34"E

R/L= N89°53'32"E

STA 324+70.99

STA 350+66.83

STA 350+95.88

USH 12 ALIGNMENT FED AID PROJECT NO 370-H

USH 12 ALIGNMENT R/W PLAT 8949-6-21

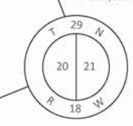
PI 348+54.10
Δ = 00°34'58" RT
Y = 348768.290
X = 556925.042

AT&T WISCONSIN

SLOPE INTERCEPT

NOTE: POINTS 726, 728 & 729 MAY NOT BE COINCIDENT WITH 1/4 LINE.

2918205
EAST 1/4 CORNER
** Y= 346,114.763
X= 557,160.548



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

SIGNATURE: _____ DATE: 5/1/20
PRINT NAME: NEIL C. BOWE
REGISTRATION NUMBER: S-2827

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

SIGNATURE: _____ DATE: 5/1/20
PRINT NAME: DEBRA B. STENSLAND

WISCONSIN
NEIL C. BOWE
S-2827
CHIPPEWA FALLS WI
LAND SURVEYOR

cbs2
770 TECHNOLOGY WAY
CHIPPEWA FALLS, WI 54729

FILE NAME : P:\KNGHT\17001 - USH 12\RIGHT OF WAY\CAD\040101-RP_RD.DWG
PLOT DATE : 5/18/2020 10:18 AM
APPRAISAL PLAT DATE : 5/1/20

TRANSPORTATION PROJECT PLAT NO: 8949-02-21-4.09 AMENDMENT NO: 1
AMENDS PARCEL 44 OF TRANSPORTATION PROJECT PLAT 8949-02-21-4.09
RECORDED AS DOCUMENT NO: 1102826, VOLUME TPP1, PAGES 188.

THAT PART OF THE SE 1/4 OF THE SE 1/4, SECTION 17, AND PART LOTS 1 AND 2 OF CSM 6-1528, V 6, P 1528, DOC 402481, LOCATED IN AND INCLUDING PART OF THE NW 1/4 OF THE NE 1/4, AND PART OF LOTS 1 AND 3 THRU 5 OF PLEASANT ACRES, V 4, P 16, DOC 331199, LOCATED IN AND INCLUDING PART OF THE NE 1/4 OF THE NE 1/4, SECTION 20, TOWNSHIP 29 NORTH, RANGE 18 WEST, TOWN OF WARREN, ST CROIX COUNTY, WISCONSIN.

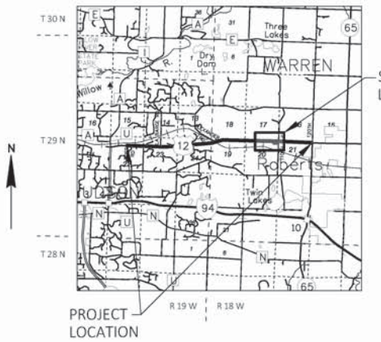
RELOCATION ORDER OF USH 12 HUDSON - BALDWIN, CTH U TO WEST JUNCTION STH 65, ST CROIX COUNTY

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 IN THE OFFICE OF THE REGISTER OF DEEDS IN ST CROIX COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 1101288.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), ST CROIX 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. NGS POINT UTILIZED WAS DN7050.

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

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

ROAD NAME	BASIS OF EXISTING R/W	YEAR
USH 12 110TH ST	R/W PLAT 8949-03-22	1996
USH 12	CSM 6-1528, V 6, P 1528, DOC 402481	1985
USH 12	R/W PLAT 8949-6-21	1978
USH 12	PLEASANT ACRES V 4, P 16, DOC 331199	1976
USH 12	FED AID PROJECT NO 370-H	1929

UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	OWNER (S)	INTEREST REQUIRED
80	AT&T WISCONSIN	RELEASE OF RIGHTS

UTILITY EASEMENT TABLE			
UTILITY NUMBER	PARCEL	RECORDING INFORMATION	NAME
80	38	NO EASEMENT OF RECORD	

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

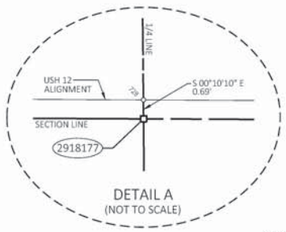
PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W SQUARE FEET REQUIRED			TLE SQUARE FEET
			NEW	EXISTING	TOTAL	
38	DAVID M & DIANE L MCKENNA	FEE, TLE	3494	-	3494	768
-	-	-	-	-	-	-
42	STEVEN & EMILY DROBINSKI	FEE	3931	-	3931	-
43	JOHN & CAROL HITT	FEE	1704	-	1704	-
44	DEBRA J FOLKS	FEE, TLE	464	-	464	151
-	-	-	-	-	-	-
46	MICHAEL J SAMUEL	FEE	1457	-	1457	-
47	MARK J & CECILIA V BLANSKI	FEE	196	-	196	-
48	STEVEN J & JACQUELINE M WEBER	FEE	804	-	804	-
49	DAVID S & AMY S THORSEN	FEE	766	-	766	-
-	-	-	-	-	-	-
51	DUSTIN R SANDERS	FEE	1990	-	1990	-

1114951
BETH PABST
REGISTER OF DEEDS
ST. CROIX CO., WI
RECEIVED FOR RECORD
10/26/2020 02:10 PM
EXEMPT #
PLAT FEE 25.00
VOLUME: TPP1
PAGES: 201
PAGES: 1
****The above recording information verifies that this document has been electronically recorded & returned to the submitter**

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8949-02-21-4.09
AMENDMENT NO: 1

2918087
NORTH 1/4 CORNER
** Y= 354,082.029
X= 554,526.296

COURSE TABLE - 1/4 LINE			
FROM	TO	DIRECTION	DISTANCE
2918087	726	S 00° 10' 10" E	5293.01'
2918087	2918177	S 00° 10' 10" E	5343.17'



DETAIL A
(NOT TO SCALE)

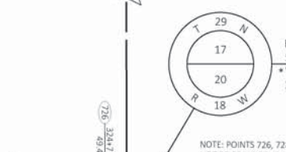
SW-SE
SECTION 17

* ST CROIX COUNTY PUBLISHED COORDINATE VALUE. COORDINATE VALUES FIELD VERIFIED WITH CORNER TIE SHEETS.

TOWN

2918177
FOUND SURVEY MARKER NAIL
STA 324+70.99, 0.69' RT
*Y= 348,738.879
X= 554,542.109

SEE SHEET 8949-02-21-4.08



COURSE TABLE - 1/4 LINE			
FROM	TO	DIRECTION	DISTANCE
729	2918207	S 00° 11' 50" E	5271.80'
2918177	2918207	S 00° 11' 50" E	5313.19'

RECOVERED MONUMENTS			
POINT	Y	X	DESCRIPTION
14585	348733.641	556766.374	1" IRON PIPE
14586	348731.105	556576.409	1" IRON PIPE
14589	348724.022	556006.954	2" IRON PIPE
14591	348726.454	556193.472	1" IRON PIPE
14592	348925.473	557133.766	1-1/4" IRON PIPE LEANING E
14609	348785.190	555599.640	1" IRON PIPE
14610	348788.408	555855.667	1-1/4" IRON PIPE LEANING S
14611	348720.981	555762.976	1" IRON PIPE
14612	348714.163	555198.193	1-1/4" IRON PIPE
14613	348711.328	554922.459	1-1/4" IRON PIPE LEANING N
14587	348326.003	556481.174	2" IRON PIPE
14593	348928.684	557199.652	1-1/4" IRON PIPE
14599	348609.636	557199.536	1-1/4" IRON PIPE

2918207
SOUTH 1/4 CORNER
** Y= 343,425.721
X= 554,560.409

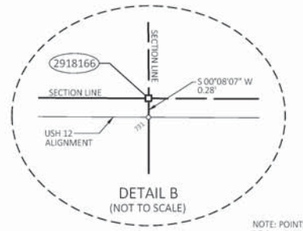
NW-NE
SECTION 20

LOT 2 CSM 6-1528 V 6, P 1528 DOC 402481

LOT 1 CSM 6-1528 V 6, P 1528 DOC 402481

COURSE TABLE							
FROM	TO	DIRECTION	DISTANCE	FROM	TO	DIRECTION	DISTANCE
2918166	732	S 00° 08' 07" W	55.46'	280	281	S 89° 18' 06" W	180.00'
732	264	N 89° 51' 53" W	33.00'	281	282	S 80° 06' 37" W	106.37'
264	265	N 82° 07' 37" W	164.23'	282	283	S 89° 18' 34" W	145.00'
265	14585	S 89° 18' 06" W	204.64'	283	729	N 80° 34' 09" W	45.07'
14585	266	S 67° 05' 24" W	32.44'	729	2918177	N 00° 11' 50" W	41.39'
266	267	S 89° 18' 34" W	30.00'	2918177	726	N 00° 10' 10" W	50.16'
267	268	N 71° 23' 43" W	37.08'	726	284	N 89° 18' 06" E	812.18'
268	269	S 89° 18' 06" W	205.00'	284	285	S 00° 41' 54" E	16.50'
269	270	S 33° 19' 29" W	26.81'	285	286	N 89° 18' 06" E	892.11'
270	271	S 89° 18' 34" W	30.00'	286	287	N 83° 01' 28" E	119.99'
271	272	N 34° 42' 55" W	26.81'	287	288	N 65° 30' 35" E	71.04'
272	273	S 89° 18' 06" W	455.00'	288	289	N 89° 18' 34" E	90.00'
273	274	S 74° 11' 34" W	46.61'	289	290	S 56° 55' 26" E	60.15'
274	275	S 89° 18' 34" W	60.00'	290	291	S 84° 25' 15" E	76.19'
275	276	N 81° 30' 08" W	75.97'	291	292	N 89° 18' 06" E	265.33'
276	277	S 89° 18' 06" W	500.00'	292	14592	N 60° 44' 14" E	254.45'
277	278	S 79° 31' 52" W	71.03'	14592	730	N 89° 54' 40" E	33.00'
278	279	S 89° 18' 34" W	105.00'	730	2918166	S 00° 05' 20" E	156.82'
279	280	N 82° 08' 21" W	80.90'				

SE-SE
SECTION 17



DETAIL B
(NOT TO SCALE)

NOTE: POINTS 730, 731 & 732 MAY NOT BE COINCIDENT WITH SECTION LINE.

COURSE TABLE - SECTION LINE			
FROM	TO	DIRECTION	DISTANCE
2918164	730	S 00° 05' 20" E	2495.23'
2918166	2918164	N 00° 05' 20" W	2652.05'
732	2918205	S 00° 08' 07" W	2598.81'
2918205	2918166	N 00° 08' 07" E	2654.27'

** ST CROIX COUNTY PUBLISHED COORDINATE VALUES.

2918164
EAST 1/4 CORNER
** Y= 351,421.067
X= 557,162.698

N

SCALE, FEET
0 100 200

2918166
FOUND SURVEY MARKER NAIL
STA 350+95.88, 0.28' LT
*Y= 348,769.023
X= 557,166.817

110TH ST

SECTION LINE

NOTE: POINTS 730, 731 & 732 MAY NOT BE COINCIDENT WITH SECTION LINE.

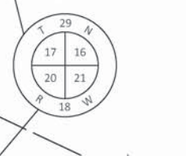
USH 12 ALIGNMENT R/W PLAT 8949-6-21
PI 348+54.10
Δ = 00°34'58" RT
Y = 348768.290
X = 556925.042

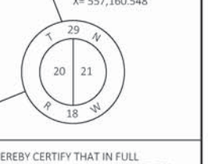
STA 350+66.83

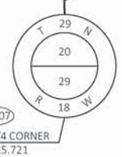
R/L DOES NOT COINCIDE WITH SECTION LINE
R/L= N89°53'32"E
STA 350+95.88
SEE DETAIL B

SEE SHEET 8949-02-21-4.10

2918205
EAST 1/4 CORNER
** Y= 346,114.763
X= 557,160.548







OF

USH 12

PLEASANT ACRES COURT

WARREN

LOT 1 PLE R/W PLAT 8949-03-22

PLEASANT ACRES V 4, P 16 DOC 331199

LOT 1 LOT 2 LOT 3 LOT 4 LOT 5 LOT 6 LOT 7 LOT 8

NE-NE
SECTION 20

COURSE TABLE - SEGMENTS			
FROM	TO	DIRECTION	DISTANCE
2918166	731	S 00° 08' 07" W	0.28'
731	732	S 00° 08' 07" W	55.18'
2918177	728	N 00° 10' 10" W	0.69'
728	726	N 00° 10' 10" W	49.47'

COURSE TABLE - SECTION LINE			
FROM	TO	DIRECTION	DISTANCE
2918177	743	N 89° 20' 31" E	2595.83'
743	2918166	N 89° 20' 31" E	29.05'
2918177	2918166	N 89° 20' 31" E	2624.88'

cbs2
770 TECHNOLOGY WAY
CHIPPEWA FALLS, WI 54729

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

WISCONSIN
NEIL C. BOWE
S-2827
CHIPPEWA FALLS WI
LAND SURVEYOR

SIGNATURE: _____ DATE: 10/19/20
PRINT NAME: NEIL C. BOWE
REGISTRATION NUMBER: S-2827

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

SIGNATURE: _____ DATE: 10/19/20
PRINT NAME: DEBRA B. STENSLAND

FILE NAME : P:\KNGHT\17001 - USH 12\RIGHT OF WAY\CAD\040101-RP_RD.DWG PLOT DATE : 10/26/2020 12:22 PM
APPRAISAL PLAT DATE : 10/19/20

WISDOT 8949-02-21-4.09

TRANSPORTATION PROJECT PLAT NO: 8949-02-21-4.10

THAT PART OF THE SW 1/4 OF THE SW 1/4, AND PART OF THE SE 1/4 OF THE SW 1/4, SECTION 16, AND PART OF THE NW 1/4 OF THE NW 1/4, AND PART OF LOT 1 OF CSM 9-2433, V 9, P 2433, DOC 477102, LOCATED IN PART OF THE NE 1/4 OF THE NW 1/4, SECTION 21, TOWNSHIP 29 NORTH, RANGE 18 WEST, TOWN OF WARREN, ST CROIX COUNTY, WISCONSIN.

RELOCATION ORDER OF USH 12 HUDSON - BALDWIN, CTH U TO WEST JUNCTION STH 65, ST CROIX COUNTY

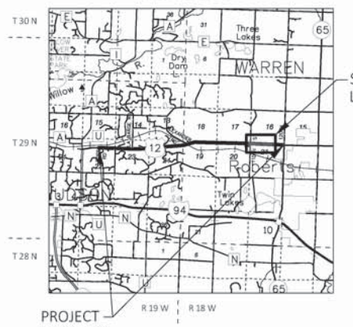
TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN 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 IN THE OFFICE OF THE REGISTER OF DEEDS IN ST CROIX COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 1101288.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), ST CROIX 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. NGS POINT UTILIZED WAS DN7050.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY ⅝" 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.

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)	INTEREST REQUIRED	R/W SQUARE FEET REQUIRED			TLE SQUARE FEET
			NEW	EXISTING	TOTAL	
38	DAVID M & DIANE L MCKENNA	FEE	17320	-	17320	-
52	KYLE J & GRETCHEN D ROZEBOOM	FEE	2813	-	2813	-

1102828
BETH PABST
REGISTER OF DEEDS
ST. CROIX CO., WI
RECEIVED FOR RECORD
05/19/2020 10:22 AM
EXEMPT #
PLAT FEE 25.00
VOLUME: TPP1
PAGES: 189
PAGES: 1
****The above recording information verifies that this document has been electronically recorded & returned to the submitter**

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8949-02-21-4.10

ROAD NAME	BASIS OF EXISTING R/W	YEAR
USH 12	R/W PLAT 8949-03-22	1996
USH 12	CSM 9-2433, V 9, P 2433, DOC 477102	1991
USH 12	CSM 1-251, V 1, P 251, DOC 333272	1976
USH 12	PLEASANT ACRES V 4, P 16, DOC 331199	1976
USH 12	FED AID PROJECT NO 370-H	1929

UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	OWNER (S)	INTEREST REQUIRED
80	AT&T WISCONSIN	RELEASE OF RIGHTS
83	MIDWEST NATURAL GAS, INC	RELEASE OF RIGHTS

UTILITY EASEMENT TABLE			
UTILITY NUMBER	PARCEL	RECORDING INFORMATION	NAME
80	38	NO EASEMENT OF RECORD	
83	38	NO EASEMENT OF RECORD	

** ST CROIX COUNTY PUBLISHED COORDINATE VALUES.

2918164
WEST 1/4 CORNER
** Y= 351,421.067
X= 557,162.698

COURSE TABLE - SECTION LINE			
FROM	TO	DIRECTION	DISTANCE
2918205	733	N 00° 08' 07" E	2494.92'
2918205	2918166	N 00° 08' 07" E	2654.27'
742	2918164	N 00° 05' 20" W	2492.40'
2918166	2918164	N 00° 05' 20" W	2652.05'

2918097
NORTH 1/4 CORNER
** Y= 354,032.572
X= 559,813.954

COURSE TABLE - 1/4 LINE			
FROM	TO	DIRECTION	DISTANCE
2918097	734	S 00° 04' 08" W	5225.89'
2918097	2918167	S 00° 04' 08" W	5259.07'
736	2918217	S 00° 04' 01" E	5291.85'
2918167	2918217	S 00° 04' 01" E	5324.67'

SCALE, FEET
0 100 200

* ST CROIX COUNTY PUBLISHED COORDINATE VALUE. COORDINATE VALUES FIELD VERIFIED WITH CORNER TIE SHEETS.

TOWN

2918166
FOUND SURVEY MARKER NAIL
STA 350+95.88, 0.28' LT
*Y= 348,769.023
X= 557,166.817

LOT 1
CSM 1-251
V 1, P 251
DOC 333272

NOTE: POINTS 742, 731 & 733 MAY NOT BE COINCIDENT WITH SECTION LINE.

110TH ST

SECTION LINE

SEE DETAIL A

MIDWEST NATURAL GAS, INC

R/L DOES NOT COINCIDE WITH SECTION LINE

R/L= N89°53'32"E

STA 350+95.88

SEE SHEET 8949-02-21-4.09

PLEASANT ACRES COURT

PLE R/W PLAT 8949-03-22

LOT 1
PLEASANT ACRES
V 4, P 16
DOC 331199

2918205
WEST 1/4 CORNER
** Y= 346,114.763
X= 557,160.548

SW-SW
SECTION 16

AT&T WISCONSIN

MIDWEST NATURAL GAS, INC

USH 12 ALIGNMENT FED AID PROJECT NO 370-H

PARCEL 38
FEE 4489 SF

PARCEL 38
FEE 86195F

SLOPE INTERCEPT

STA 366+41.07

USH 12

OF

NW-NW
SECTION 21

SE-SW
SECTION 16

USH 12 ALIGNMENT

S 00°04'08" W 0.20'

DETAIL B
(NOT TO SCALE)

NOTE: POINTS 734, 735 & 736 MAY NOT BE COINCIDENT WITH 1/4 LINE.

SLOPE INTERCEPT

USH 12 ALIGNMENT FED AID PROJECT NO 370-H

PARCEL 38
FEE 4212 SF

SEE DETAIL C

R/L= N89°53'32"E

R/L= S88°46'54"E

STA 377+36.70

SEE SHEET 8949-02-21-4.11

SEE DETAIL B

PI 377+45.10
Δ= 01°19'34" RT
Y = 348773.722
X = 559816.037

2918167
FOUND SURVEY MARKER NAIL
STA 377+36.70, 0.19' RT
*Y= 348,773.508
X= 559,807.631

2918217
SOUTH 1/4 CORNER
** Y= 343,448.841
X= 559,813.850

USH 12

N 18°04'32" W 1.21'

DETAIL C
(NOT TO SCALE)

LOT 1
CSM 9-2433
V 9, P 2433
DOC 477102

WARREN

NE-NW
SECTION 21

SECTION LINE

S 00°08'07" W 0.28'

USH 12 ALIGNMENT

DETAIL A
(NOT TO SCALE)

RECOVERED MONUMENTS			
POINT	Y	X	DESCRIPTION
14593	348928.684	557199.652	1-1/4" IRON PIPE
14596	348802.648	557467.042	1-1/4" IRON PIPE
14597	348827.649	557612.741	1-1/4" IRON PIPE
14598	348736.648	557466.946	1-1/4" IRON PIPE
14599	348609.636	557199.536	1-1/4" IRON PIPE
14605	348739.239	558968.972	1-1/4" IRON PIPE
14608	348741.835	559807.294	1-1/4" IRON PIPE
14588	348326.374	557132.807	2" IRON PIPE
14592	348925.473	557133.766	1-1/4" IRON PIPE LEANING E

COURSE TABLE							
FROM	TO	DIRECTION	DISTANCE	FROM	TO	DIRECTION	DISTANCE
2918166	742	N 00° 05' 20" W	159.65'	734	2918167	S 00° 04' 08" W	33.18'
742	14593	N 89° 54' 40" E	33.00'	2918167	736	S 00° 04' 01" E	32.82'
14593	14596	S 64° 45' 46" E	295.70'	736	303	S 89° 54' 04" W	321.67'
14596	294	N 89° 54' 04" E	145.74'	303	304	S 75° 12' 41" W	67.19'
294	14597	N 00° 05' 56" W	24.75'	304	305	S 89° 53' 32" W	100.00'
14597	295	N 89° 54' 04" E	500.00'	305	306	N 75° 23' 53" W	67.21'
295	296	S 88° 39' 25" E	118.13'	306	307	S 89° 54' 04" W	920.00'
296	297	S 82° 20' 55" E	161.48'	307	308	S 77° 57' 03" W	107.32'
297	298	N 89° 54' 04" E	516.70'	308	309	S 89° 53' 32" W	260.00'
298	299	N 00° 05' 56" W	24.75'	309	310	N 81° 39' 25" W	151.65'
299	300	N 89° 54' 04" E	400.00'	310	14598	S 89° 54' 04" W	354.05'
300	301	S 87° 22' 14" E	163.48'	14598	14599	S 64° 35' 37" W	296.15'
301	302	S 79° 58' 19" E	96.51'	14599	733	N 89° 51' 53" W	33.00'
302	734	N 89° 54' 04" E	241.80'	733	2918166	N 00° 08' 07" E	159.35'

COURSE TABLE - SECTION LINE			
FROM	TO	DIRECTION	DISTANCE
2918166	744	N 89° 54' 10" E	1545.20'
744	2918167	N 89° 54' 10" E	1095.62'
2918166	2918167	N 89° 54' 10" E	2640.82'

COURSE TABLE - SEGMENTS			
FROM	TO	DIRECTION	DISTANCE
734	735	S 00° 04' 08" W	32.98'
735	2918167	S 00° 04' 08" W	0.20'
733	731	N 00° 08' 07" E	159.07'
731	2918166	N 00° 08' 07" E	0.28'

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

SIGNATURE: Neil C. Bowe DATE: 5/12/20
PRINT NAME: NEIL C. BOWE
REGISTRATION NUMBER: S-2827

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

SIGNATURE: Debra B. Stensland DATE: 5/12/20
PRINT NAME: DEBRA B. STENSLAND

WISCONSIN NEIL C. BOWE S-2827 CHIPPEWA FALLS WI LAND SURVEYOR

cbs2
770 TECHNOLOGY WAY
CHIPPEWA FALLS, WI 54729

TRANSPORTATION PROJECT PLAT NO: 8949-02-21-4.11

THAT PART OF THE SW 1/4 OF THE SE 1/4, SECTION 16, TOWNSHIP 29 NORTH, RANGE 18 WEST, TOWN OF WARREN, ST CROIX COUNTY, WISCONSIN.

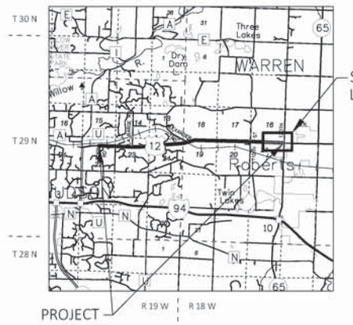
RELOCATION ORDER OF USH 12 HUDSON - BALDWIN, CTH U TO WEST JUNCTION STH 65, ST CROIX COUNTY

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 IN THE OFFICE OF THE REGISTER OF DEEDS IN ST CROIX COUNTY AS SHEET 2 OF 2 OF DOCUMENT NUMBER 1101288.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), ST CROIX 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. NGS POINT UTILIZED WAS DN7050.

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

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

EXISTING ACCESS CONTROL ALONG USH 12 HAS BEEN ESTABLISHED FROM PREVIOUS PLAT 8949-02-25-4.01 AMENDMENT NO 1, DOC 447074.

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)	INTEREST REQUIRED	R/W SQUARE FEET REQUIRED			TLE SQUARE FEET
			NEW	EXISTING	TOTAL	
38	DAVID M & DIANE L MCKENNA	TLE	-	-	-	3594

1102829
BETH PABST
REGISTER OF DEEDS
ST. CROIX CO., WI
RECEIVED FOR RECORD
05/19/2020 10:26 AM
EXEMPT #
PLAT FEE 25.00
VOLUME: TPP1
PAGES: 190
PAGES: 1
****The above recording information verifies that this document has been electronically recorded & returned to the submitter**

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8949-02-21-4.11

ROAD NAME	BASIS OF EXISTING R/W	YEAR
USH 12	R/W PLAT 8949-02-25-4.01 AMENDMENT NO 1 DOC 933881	2011
USH 12	CSM 7-2086, V 7, P 2086, DOC 447074	1989
USH 12	FED AID PROJECT NO 370-H	1929

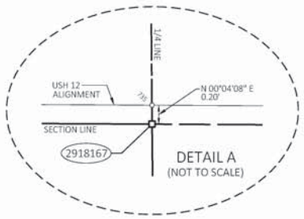
UTILITY EASEMENT TABLE			
UTILITY NUMBER	PARCEL	RECORDING INFORMATION	NAME
80	38	NO EASEMENT OF RECORD	

UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	OWNER (S)	INTEREST REQUIRED
80	AT&T WISCONSIN	RELEASE OF RIGHTS

2918097
NORTH 1/4 CORNER
** Y= 354,032.572
X= 559,813.954

COURSE TABLE - 1/4 LINE			
FROM	TO	DIRECTION	DISTANCE
2918097	734	S 00° 04' 08" W	5225.89'
2918097	2918167	S 00° 04' 08" W	5259.07'
736	2918217	S 00° 04' 01" E	5291.85'
2918167	2918217	S 00° 04' 01" E	5324.67'

* ST CROIX COUNTY PUBLISHED COORDINATE VALUE. COORDINATE VALUES FIELD VERIFIED WITH CORNER TIE SHEETS.



2918167
FOUND SURVEY MARKER NAIL
STA 377+36.70, 0.19' RT
*Y= 348,773.508
X= 559,807.631

SW-SE
SECTION 16

SE-SE
SECTION 16

2918154
EAST 1/4 CORNER
** Y= 351,363.636
X= 562,462.401

** ST CROIX COUNTY PUBLISHED COORDINATE VALUES.

COURSE TABLE - SECTION LINE			
FROM	TO	DIRECTION	DISTANCE
2918154	2918156	S 00° 13' 56" E	2646.23'
2918156	2918215	S 00° 09' 08" W	2637.01'

SCALE, FEET
0 100 200

2918156
FOUND SURVEY MARKER NAIL
*Y= 348,717.426
X= 562,473.129

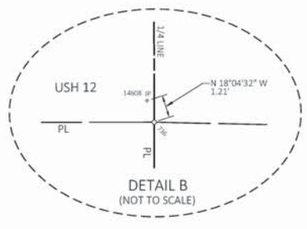
TOWN OF WARREN

NW-NE
SECTION 21

NE-NE
SECTION 21

WARREN

SLOPE INTERCEPT
AT&T WISCONSIN
SLOPE INTERCEPT
PARCEL 38 TLE FOR SLOPES 3594 SF
SECTION LINE
USH 12 ALIGNMENT R/W PLAT 8949-02-25-4.01 AMENDMENT NO 1
USH 12 ALIGNMENT R/W PLAT 8949-02-25-4.01 AMENDMENT NO 1
SEE DETAIL A
SEE DETAIL B
STA 377+36.70
R/L DOES NOT COINCIDE WITH SECTION LINE
PI 377+45.10
Δ = 01°19'34" RT
Y = 348773.722
X = 559816.037
PI 393+81.38
Δ = 00°53'08" LT
Y = 348738.930
X = 561451.940
NOTE: POINTS 734, 735 & 736 MAY NOT BE COINCIDENT WITH 1/4 LINE.
USH 12
120TH ST
STH 65
1/4 LINE
1/16 LINE
SECTION LINE
PL
66'



LOT 1
CSM 7-2086
V 7, P 2086
DOC 447074

2918215
EAST 1/4 CORNER
** Y= 346,080.425
X= 562,466.119

2918217
SOUTH 1/4 CORNER
** Y= 343,448.841
X= 559,813.850

RECOVERED MONUMENTS			
POINT	Y	X	DESCRIPTION
15137	348709.345	561298.762	5/8" REBAR
15138	348706.291	561444.039	5/8" REBAR
15141	348697.324	561493.946	5/8" REBAR
15142	348694.050	561643.780	5/8" REBAR
15145	348681.842	561743.838	3/4" REBAR W/YCAP
15148	348774.592	561335.266	5/8" REBAR
15149	348775.328	561300.274	5/8" REBAR
14608	348741.835	559807.294	1-1/4" IRON PIPE

COURSE TABLE			
FROM	TO	DIRECTION	DISTANCE
2918156	737	N 88° 47' 41" W	657.42'
737	738	N 88° 47' 41" W	70.96'
738	15145	S 01° 12' 19" W	50.92'
15145	15142	N 83° 02' 38" W	100.80'
15142	15141	N 88° 44' 53" W	149.87'
15141	15138	N 79° 48' 51" W	50.71'
15138	15137	N 88° 47' 45" W	145.31'
15137	311	N 88° 47' 45" W	828.86'
311	736	N 88° 47' 45" W	662.56'
736	2918167	N 00° 04' 01" W	32.82'
2918167	734	N 00° 04' 08" E	33.18'
734	313	S 88° 47' 45" E	663.96'
313	15149	S 88° 47' 45" E	828.97'
15149	15148	S 88° 47' 45" E	35.00'
15148	314	N 88° 16' 49" E	482.02'
314	737	S 01° 12' 19" W	57.82'

COURSE TABLE - SECTION LINE			
FROM	TO	DIRECTION	DISTANCE
738	2918167	N 88° 47' 41" W	1937.71'
2918167	2918156	S 88° 47' 41" E	2666.09'

COURSE TABLE - SEGMENTS			
FROM	TO	DIRECTION	DISTANCE
2918167	735	N 00° 04' 08" E	0.20'
735	734	N 00° 04' 08" E	32.98'
314	739	S 01° 12' 19" W	52.26'
739	737	S 01° 12' 19" W	5.56'

STATION & OFFSET TABLE		
POINT	STATION	OFFSET
739	397+45.41	0.00'
737	397+45.33	5.56' RT
738	396+74.38	4.48' RT

cbs²
770 TECHNOLOGY WAY
CHIPPEWA FALLS, WI 54729

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

WISCONSIN NEIL C. BOWE S-2827 CHIPPEWA FALLS WI LAND SURVEYOR

SIGNATURE: Neil C. Bowe DATE: 5/12/20
PRINT NAME: NEIL C. BOWE
REGISTRATION NUMBER: S-2827

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

SIGNATURE: Debra B. Stensland DATE: 5/12/20
PRINT NAME: DEBRA B. STENSLAND

FILE NAME : P:\KNGHT\17001 - USH 12\RIGHT OF WAY\CAD\040101-RP_RD.DWG PLOT DATE : 5/18/2020 1:23 PM
APPRAISAL PLAT DATE : 5/12/20

LEGEND

BUTT JOINT LIMITS

CULVERT INSTALLATION LIMITS

END CONCRETE PAVEMENT RECONSTRUCTION SECTION
BEGIN PROJECT I.D. 8949-02-62 □ HMA MILL □ OVERLAY
STA 126□50
SAWCUT REQ'D (CONCRETE)

STA. 127+36, LT
ASPHALT, PE

N

PI: 122+00.00

XCEL ENERGY - GAS

AT&T WISCONSIN

TLE REQ'D

BALDWIN TELECOM, INC.

XCEL ENERGY - ELECTRICITY

R/W

SLOPE INTERCEPT

120+00

USH 12

125+00

130+00

135+00

T107
932.95

BEGIN PROJECT I.D. 8949-02-61
BEGIN CONCRETE PAVEMENT RECONSTRUCTION
STA 120□50
Y□347346.521
X□534252.463
SAWCUT REQ'D (CONCRETE)

XCEL ENERGY - ELECTRICITY

XCEL ENERGY - GAS

AT&T WISCONSIN

BALDWIN TELECOM, INC.

CLINTS TRAIL

R/W

SLOPE INTERCEPT

PAVED PARKING AREA - 10' BY 20'
4:1 TAPERs TO EXISTING PAVEMENT

SAWCUT & BUTT
JOINT REQ'D

NURSERY

NURSERY

135+25.00

SCALE, FEET 0 50 100

STA. 138+15, LT
BASE AGG., PE

STA. 138+53, LT
BASE AGG., PE

N

135+25.00

NORFLEX DR

SAWCUT & BUTT
JOINT REQ'D

R/W

XCEL ENERGY - ELECTRICITY

TLE REQ'D

SLOPE INTERCEPT

AT&T WISCONSIN

AT&T WISCONSIN

XCEL ENERGY - ELECTRICITY

MIDWEST NATURAL GAS INC.

USH 12

140+00

145+00

150+00

AT&T WISCONSIN

R/W

SLOPE INTERCEPT

BALDWIN TELECOM, INC.

150+50.00

XCEL ENERGY - ELECTRICITY

XCEL ENERGY - GAS

SAWCUT & BUTT
JOINT REQ'D

KELLY RD

BALDWIN
TELECOM, INC.

AT&T WISCONSIN

XCEL UG ELECTRIC

REMOVE SMALL PIPE CULVERT
STA. 139+50
50' CPRC HORIZONTAL ELLIPTICAL CLASS HE-III 19X30-INCH REQ'D
2-APRON ENDWALLS FOR CPRC HORIZONTAL ELLIPTICAL 19X30-INCH REQ'D
SEE CONSTRUCTION DETAILS FOR CULVERT INSTALLATION

STA. 143+73, RT
BASE AGG., FE

SCALE, FEET 0 50 100

PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	PLAN	SHEET 55	E

LEGEND

BUTT JOINT LIMITS

CULVERT INSTALLATION LIMITS

STA. 152+33, LT
ASPHALT, PE

REMOVING GUARDRAIL - 152'
STA. 154+83 - STA. 156+33, LT

STA. 157+48, LT
BASE AGG., FE

N

150+50.00

AT&T WISCONSIN

MIDWEST
NATURAL GAS INC.

CAUTION

USH 12

CP2

CP1

155+00

REMOVE OLD STRUCTURE - EXISTING CONC. BOX CULVERT
STA. 155+61
44' CPRC HORIZONTAL ELLIPTICAL CLASS HE-III 38X60-INCH REQ'D
2-APRON ENDWALLS FOR CPRC HORIZONTAL ELLIPTICAL 38X60-INCH REQ'D
SEE CONSTRUCTION DETAILS FOR CULVERT INSTALLATION

R/W

CP3

160+00

BALDWIN TELECOM, INC.

XCEL ENERGY - ELECTRICITY

SAWCUT & BUTT
JOINT REQ'D

LAGRANGE RD

TLE REQ'D

SLOPE INTERCEPT

CP4

165+00

AT&T WISCONSIN

XCEL ENERGY - GAS

BALDWIN TELECOM, INC.

SLOPE INTERCEPT

R/W

REMOVE SMALL PIPE CULVERT
STA. 159+00
44' CPRC HORIZONTAL ELLIPTICAL CLASS HE-III 29X45-INCH REQ'D
2-APRON ENDWALLS FOR CPRC HORIZONTAL ELLIPTICAL 29X45-INCH REQ'D
SEE CONSTRUCTION DETAILS FOR CULVERT INSTALLATION

AT&T
WISCONSIN

165+75.00

STA. 152+37, RT
BASE AGG., FE

REMOVING GUARDRAIL - 140'
STA. 154+95 - STA. 156+33, RT

STA. 157+53, RT
BASE AGG., FE

STA. 162+54, RT
ASPHALT, PE

SCALE, FEET 0 50 100

STA. 168+17, LT
BASE AGG., PE

STA. 172+07, LT
ASPHALT, PE

REMOVING GUARDRAIL - 165'
STA. 179+12 - STA. 180+75, LT

GUARDRAIL REQ'D
STA. 178+66 - 180+72, LT
- 2 - MGS E.A.T.
- 100' MGS GUARDRAIL 3 L
- 12.5' LONG SPAN

N

BALDWIN TELECOM, INC.

MIDWEST NATURAL GAS INC.

R/W

SLOPE INTERCEPT

PC: 173+52.43

Mid: 175+43.32

PT: 177+34.21

CULVERT
STA. 179+63
8' BY 6' CONC. BOX TO REMAIN

BALDWIN TELECOM, INC.

AT&T WISCONSIN

USH 12

170+00

175+00

CP5

180+00

TLE REQ'D

XCEL ENERGY - GAS

XCEL ENERGY - ELECTRICITY

SLOPE INTERCEPT

R/W

CP6

XCEL ENERGY - GAS

MIDWEST NATURAL GAS INC.

AT&T WISCONSIN

BALDWIN TELECOM, INC.

181+00.00

GUARDRAIL REQ'D
STA. 178+54 - 180+60, RT
- 2 - MGS E.A.T.
- 100' MGS GUARDRAIL 3 L
- 12.5' LONG SPAN

REMOVING GUARDRAIL - 137'
STA. 179+13 - STA. 180+49, RT

STA. 168+18, RT
ASPHALT, PE

SCALE, FEET 0 50 100

SUPERELEVATION DATA USH 12 CURVE NO. 1

					IN			OUT			60 MPH
	CURVE NO.	PC	PT	D	NORMAL SECTION	2% SUPER	FULL SUPER	FULL SUPER	2% SUPER	NORMAL SECTION	SUPER RATE (%)
EXISTING	1	173+63.00	177+44.00	2°0'							3.0
FINISHED		**173+52.43**	**177+34.21**	**1°59'59"**	**172+19.09**	**173+25.76**	**173+92.42**	**176+94.22**	**177+60.88**	**178+67.55**	**4.5**

PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	PLAN	SHEET 56	E

LEGEND

BUTT JOINT LIMITS

CULVERT INSTALLATION LIMITS

181+00.00

SAWCUT & BUTT JOINT REQ'D

BALDWIN TELECOM, INC.

AT&T WISCONSIN

GAVIN PASS

MIDWEST NATURAL GAS INC.

XCEL ENERGY - ELECTRICITY

XCEL ENERGY - GAS

BALDWIN TELECOM, INC.

CULVERT
STA. 188+61
5' BY 5' CONC. BOX TO REMAIN
CLEANING CULVERT PIPES REQ'D

REMOVING GUARDRAIL - 452'
STA. 186+72 - STA. 191+13, LT

GUARDRAIL REQ'D
STA. 186+63 - 191+12, LT
- 1 - MGS E.A.T.
- 275' MGS GUARDRAIL 3
  -- STA. 187+16 - STA. 188+16
  -- STA. 189+16 - STA. 190+91
- 100' MGS GUARDRAIL 3 K
  -- STA. 188+16 - STA. 189+16
- 39' MGS GUARDRAIL SHORT RADIUS
- 1 - SHORT RADIUS TERMINAL

STA. 191+21, LT
BASE AGG., PE

REMOVING GUARDRAIL - 300'
STA. 191+34 - STA. 194+28, LT

STA. 194+49, LT
BASE AGG., FE

N

R/W

R24

SLOPE INTERCEPT

ASPHALTIC FLUME

CP7

CP8

USH 12

185+00

190+00

195+00

CAUTION

ASPHALTIC FLUME

R/W

CONCRETE CURB & GUTTER
6-INCH SLOPED 36-INCH TYPE D REQ'D
STA. 182+23 - STA. 186+81

XCEL ENERGY - ELECTRICITY

MIDWEST NATURAL GAS INC.

XCEL ENERGY - GAS

R/W

AT&T WISCONSIN

BALDWIN TELECOM, INC.

SLOPE INTERCEPT

196+25.00

STA. 182+08, RT
ASPHALT, PE

REMOVING GUARDRAIL - 77'
STA. 186+60 - STA. 187+35, RT

STA. 187+50, RT
ASPHALT, PE

GUARDRAIL REQ'D
STA. 187+69 - 189+75, RT
- 2 - MGS E.A.T.
- 100' MGS GUARDRAIL 3 K

REMOVING GUARDRAIL - 700'
STA. 187+67 - STA. 194+62, RT

SCALE, FEET 0 50 100

196+25.00

PI: 198+15.00

CONCRETE CURB & GUTTER
6-INCH SLOPED 36-INCH TYPE D REQ'D
STA. 194+60 - STA. 201+00

PI: 201+32.00

BALDWIN TELECOM, INC.

SLOPE INTERCEPT

SAWCUT & BUTT JOINT REQ'D

XCEL ENERGY - ELECTRICITY

CHIPPEWA PATH

YELLOWSTONE TRL

N

CP11

200+00

USH 12

205+00

210+00

CP10

XCEL ENERGY - ELECTRICITY

AT&T WISCONSIN

MIDWEST NATURAL GAS INC.

SLOPE INTERCEPT

R/W

MIDWEST NATURAL GAS INC.

CONCRETE CURB & GUTTER
6-INCH SLOPED 36-INCH TYPE D REQ'D
STA. 207+34 - STA. 214+80

211+50.00

STA. 200+56, RT
BASE AGG., PE

STA. 205+83, RT
BASE AGG., PE

STA. 207+21, RT
ASPHALT, PE

SCALE, FEET 0 50 100

PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	PLAN	SHEET 57	E

FILE NAME : W:\7522\CAD\I 8949-02-31\IMODELS\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - 3

PLOT DATE : 1/8/2021 9:01 AM PLOT BY : KAKACEK, JOHN PLOT NAME : PLOT SCALE : 1 IN:100 FT

LEGEND

BUTT JOINT LIMITS

CULVERT INSTALLATION LIMITS

211+50.00

REMOVING GUARDRAIL - 589'
STA. 214+66 - STA. 220+54, LT

GUARDRAIL REQ'D
STA. 214+63 - 220+57, LT
- 2 - MGS E.A.T.
- 487.5' MGS GUARDRAIL 3

SEPV

SEPC

AT&T WISCONSIN

XCEL ENERGY - ELECTRICITY

TLE REQ'D

R/W

SLOPE INTERCEPT

CP11

TLE REQ'D

USH 12

215+00

220+00

225+00

CP12

CP14

XCEL ENERGY - ELECTRICITY

ASPHALTIC FLUME

AT&T WISCONSIN

BALDWIN TELECOM, INC.

XCEL ENERGY - ELECTRICITY UG

MCDIARMID DR

SAWCUT & BUTT JOINT REQ'D

SLOPE INTERCEPT

R/W

SAWCUT & BUTT JOINT REQ'D

KINGSWAY RD

XCEL ENERGY - ELECTRICITY UG

AT&T WISCONSIN

BALDWIN TELECOM, INC.

226+75.00

REMOVING GUARDRAIL - 177'
STA. 214+74 - STA. 216+50, RT

REMOVING GUARDRAIL, 250' RT,
STA. 217+09 - STA. 219+40

SCALE, FEET 0 50 100

REMOVING GUARDRAIL - 315'
STA. 229+48 - STA. 232+61, LT

STA. 234+53, LT
ASPHALT, PE

STA. 238+14, LT
BASE AGG., PE

REMOVING GUARDRAIL, 165' LT,
STA. 240+01 - STA. 241+64

226+75.00

R/W

TLE REQ'D

TLE REQ'D

XCEL ENERGY - ELECTRICITY

SLOPE INTERCEPT

CP16

AT&T WISCONSIN

XCEL ENERGY - ELECTRICITY

CP18

230+00

USH 12

235+00

240+00

CP15

CP17

AT&T WISCONSIN

BALDWIN TELECOM, INC.

XCEL ENERGY - ELECTRICITY

REMOVE SMALL CULVERT PIPE
STA. 228+12
62' CPRC CLASS IV 24-INCH REQ'D
2-APRON ENDWALLS FOR CPRC 24-INCH REQ'D
SEE CONSTRUCTION DETAILS FOR CULVERT INSTALLATION

REMOVE SMALL CULVERT PIPE
STA. 230+17
75' CPRC CLASS IV 24-INCH REQ'D
2-APRON ENDWALLS FOR CPRC 24-INCH REQ'D
SEE CONSTRUCTION DETAILS FOR CULVERT INSTALLATION

SLOPE INTERCEPT

BALDWIN TELECOM, INC.

R/W

CONCRETE CURB & GUTTER
6-INCH SLOPED 36-INCH TYPE D REQ'D
STA. 237+90 - STA. 240+15

REMOVE SMALL CULVERT PIPE
STA. 236+02
54' CPRC CLASS IV 24-INCH REQ'D
2-APRON ENDWALLS FOR CPRC 24-INCH REQ'D
SEE CONSTRUCTION DETAILS FOR CULVERT INSTALLATION

ASPHALTIC FLUME

REMOVE SMALL CULVERT PIPE
STA. 240+98
99' CPRC CLASS IV 24-INCH REQ'D
2-APRON ENDWALLS FOR CPRC 24-INCH REQ'D
SEE CONSTRUCTION DETAILS FOR CULVERT INSTALLATION

TLE REQ'D

242+00.00

STA. 235+50, RT
BASE AGG., PE

SCALE, FEET 0 50 100

PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	PLAN	SHEET 58	E

LEGEND

BUTT JOINT LIMITS

CULVERT INSTALLATION LIMITS

STA. 244+39, LT
BASE AGG., PE

REMOVING GUARDRAIL - 276'
STA. 246+97 - STA. 249+73, LT

GUARDRAIL REQ'D
STA. 246+92 - 249+73, LT
- 1 - MGS E.A.T.
- 187.5' MGS GUARDRAIL 3
- 39.4' THRIE BEAM TRANSITION

CONCRETE SURFACE DRAIN
AND RIPRAP MEDIUM REQ'D

UNION PACIFIC RAILROAD

CONCRETE CURB & GUTTER
4-INCH SLOPED 36-INCH TYPE TBTT REQ'D
STA. 248+91 - STA. 249+64

CONCRETE APPROACH SLAB REQ'D
STA. 249+77 - STA. 250+15
STA. 251+77 - STA. 252+14

REMOVING GUARDRAIL - 145'
STA. 251+82 - STA. 252+64, LT

GUARDRAIL REQ'D
STA. 251+82 - 252+62, LT
- 39.4' THRIE BEAM TRANSITION
- 25' MGS GUARDRAIL 3
- 41' MGS GUARDRAIL SHORT RADIUS
- 1 - SHORT RADIUS TERMINAL

242+00.00

PC: 243+92.50

Mid: 245+90.96

PT: 247+89.41

PI: 254+50.00

257+25.00

AT&T WISCONSIN

R/W

USH 12

ALEXANDER RD

R16'

SAWCUT & BUTT
JOINT REQ'D

BALDWIN
TELECOM, INC.

SLOPE INTERCEPT

245+00

250+00

255+00

CP19

CP20

CP21

CP22

XCEL ENERGY -
ELECTRICITY

BALDWIN
TELECOM, INC.

AT&T WISCONSIN

R/W

16' CULVERT PIPE CLASS III-A 12-INCH
IE ELEV: 1029.627', OE ELEV: 1029.398'

CONCRETE CURB & GUTTER
4-INCH SLOPED 36-INCH TYPE TBTT REQ'D
STA. 249+62 - STA. 250+06

STRUCTURE B-55-0076
STA. 250+03.5 - STA. 251+87.7
TO REMAIN

NO WORK OR MATERIAL CAN BE
STORED WITHIN 25' OF THE
EXISTING RAILROAD TRACKS,
INCLUDING ON THE STRUCTURE

XCEL ENERGY -
ELECTRICITY

SLOPE INTERCEPT

SUPERELEVATION DATA USH 12 CURVE NO. 2

					IN			OUT			60 MPH
	CURVE NO.	PC	PT	D	NORMAL SECTION	2% SUPER	FULL SUPER	FULL SUPER	2% SUPER	NORMAL SECTION	SUPER RATE (%)
EXISTING	2	244+14.00	248+14.00	3°0'							4.0
FINISHED		**243+92.50**	**247+89.41**	**2°59'59"**	**242+41.04**	**243+47.95**	**244+41.49**	**247+40.42**	**248+33.96**	**249+40.87**	**5.5**

STA. 247+47, RT
BASE AGG., PE

GUARDRAIL REQ'D
STA. 247+95 - 250+12, RT
- 1 - MGS E.A.T.
- 125' MGS GUARDRAIL 3
- 39.4' THRIE BEAM TRANSITION

REMOVING GUARDRAIL - 223'
STA. 247+89 - 250+12, RT

BALDWIN TELECOM, INC.
CENTURYLINK COMMUNICATIONS, LLC
SPRINT COMMUNICATIONS CO LP
VERIZON BUSINESS

GUARDRAIL REQ'D
STA. 252+15 - 253+57, RT
- 39.4' THRIE BEAM TRANSITION
- 50' MGS GUARDRAIL 3
- 1 - MGS E.A.T.

REMOVING GUARDRAIL - 144'
STA. 252+15 - STA. 253+58, RT

SCALE, FEET 0 50 100

STA. 261+84, LT
BASE AGG., FE

PC: 261+34.76

Mid: 263+65.72

PT: 265+96.68

272+50.00

R/W

BALDWIN
TELECOM, INC.

260+00

265+00

270+00

USH 12

CONCRETE CURB & GUTTER
6-INCH SLOPED 36-INCH TYPE D REQ'D
STA. 266+70 - STA. 270+00

ASPHALTIC FLUME

SLOPE INTERCEPT

AT&T
WISCONSIN

XCEL ENERGY - ELECTRICITY UG

XCEL ENERGY -
ELECTRICITY

R/W

AT&T
WISCONSIN

SLOPE INTERCEPT

TLE REQ'D

SUPERELEVATION DATA USH 12 CURVE NO. 3

					IN			OUT			60 MPH
	CURVE NO.	PC	PT	D	NORMAL SECTION	2% SUPER	FULL SUPER	FULL SUPER	2% SUPER	NORMAL SECTION	SUPER RATE (%)
EXISTING	3	261+58.00	266+20.00	4°0'							6.0
FINISHED		**261+34.76**	**265+96.68**	**4°0'**	**259+74.75**	**260+81.42**	**261+88.09**	**265+43.35**	**266+50.01**	**267+56.68**	**6.0**

STA. 272+19, RT
BASE AGG., PE

STA. 262+01, RT
BASE AGG., PE

SCALE, FEET 0 50 100

PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	PLAN	SHEET 59	E

LEGEND

BUTT JOINT LIMITS

CULVERT INSTALLATION LIMITS

STA. 274+58, LT
BASE AGG., FE

STA. 280+62, LT
BASE AGG., PE

STA. 285+03, LT
BASE AGG., FE

N

272+50.00

BALDWIN
TELECOM, INC.

TLE REQ'D

SLOPE INTERCEPT

R/W

XCEL ENERGY - ELECTRICITY

BALDWIN
TELECOM, INC.

TLE REQ'D

AT&T
WISCONSIN

275+00

USH 12

280+00

285+00

CP24

SLOPE INTERCEPT

R/W

AT&T WISCONSIN

XCEL ENERGY -
ELECTRICITY

REMOVE SMALL CULVERT PIPE
STA. 285+55
60' CPRC CLASS IV 24-INCH REQ'D
2-APRON ENDWALLS FOR CPRC 24-INCH REQ'D
SEE CONSTRUCTION DETAILS FOR CULVERT INSTALLATION

287+75.00

STA. 273+50, RT
BASE AGG., PE

STA. 281+48, RT
ASPHALT, PE

SCALE, FEET 0 50 100

STA. 288+66, LT
BASE AGG., FE

STA. 292+00, LT
BASE AGG., FE

N

287+75.00

BALDWIN
TELECOM, INC.

CP25

R/W

SLOPE INTERCEPT

ASPHALTIC FLUME

TLE REQ'D

CONCRETE CURB & GUTTER
6-INCH SLOPED 36-INCH TYPE D REQ'D
STA. 295+94 - STA. 300+49

AT&T
WISCONSIN

CONCRETE CURB & GUTTER
6-INCH SLOPED 36-INCH TYPE D REQ'D
STA. 301+76 - STA. 304+57

CP27

USH 12

290+00

295+00

300+00

CP26

XCEL ENERGY -
ELECTRICITY

SLOPE INTERCEPT

R/W

REMOVE SMALL CULVERT PIPE
STA. 289+38
83' CPRC CLASS IV 24-INCH REQ'D
2-APRON ENDWALLS FOR CPRC 24-INCH REQ'D
SEE CONSTRUCTION DETAILS FOR CULVERT INSTALLATION

REMOVE SMALL PIPE CULVERT
STA. 301+44
72' CPRC CLASS IV 24-INCH REQ'D
2-APRON ENDWALLS FOR CPRC 24-INCH REQ'D
SEE CONSTRUCTION DETAILS FOR CULVERT INSTALLATION

303+00.00

REMOVING GUARDRAIL, 304' RT,
STA. 287+66 - STA. 290+68

STA. 292+39, RT
BASE AGG., FE

STA. 298+11, RT
BASE AGG., PE

SCALE, FEET 0 50 100

PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	PLAN	SHEET 60	E

FILE NAME : W:\7522\CAD\I 8949-02-31\IMODELS\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - 6

PLOT DATE : 1/8/2021 9:01 AM

PLOT BY : KAKACEK, JOHN

PLOT NAME :

PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

303+00.00

STA. 304+89, LT
ASPHALT, PE

INLETS 2X3-FT
INLET COVER TYPE F REQ'D
STA. 304+36, 18' OFF. LT
RIM ELEV. 1092.60
IE 1087.60

PI: 303+78.10

ADJUST EXISTING
INLET COVER

MIDWEST NATURAL GAS INC.

CONCRETE CURB & GUTTER
6-INCH SLOPED 36-INCH TYPE D REQ'D
STA. 305+25 - STA. 306+85

ASPHALTIC FLUME

R/W

AT&T
WISCONSIN

SLOPE INTERCEPT

AT&T WISCONSIN

N

305+00

310+00

USH 12

315+00

OH

XCEL ENERGY - ELECTRICITY

REMOVE SMALL CULVERT PIPE
STA. 304+36
51' CPRC CLASS IV 24-INCH REQ'D
1-APRON ENDWALL FOR CPRC 24-INCH REQ'D
SEE CONSTRUCTION DETAILS FOR CULVERT INSTALLATION

REMOVE SMALL CULVERT PIPE
STA. 307+88
60' CPRC CLASS IV 24-INCH REQ'D
2-APRON ENDWALLS FOR CPRC 24-INCH REQ'D
SEE CONSTRUCTION DETAILS FOR CULVERT INSTALLATION

R/W

XCEL ENERGY - ELECTRICITY

SLOPE INTERCEPT

318+25.00

STA. 316+69, RT
BASE AGG., PE

SCALE, FEET 0 50 100

STA. 306+12, RT
BASE AGG., PE

LEGEND

BUTT JOINT LIMITS

CULVERT INSTALLATION LIMITS

STA. 320+06, LT
BASE AGG., PE

STA. 333+28, LT
BASE AGG., FE

N

318+25.00

AT&T WISCONSIN

XCEL ENERGY - ELECTRICITY

MIDWEST NATURAL GAS INC.

SLOPE INTERCEPT

R/W

REMOVE SMALL CULVERT PIPE
STA. 330+48
52' CPRC CLASS IV 24-INCH REQ'D
2-APRON ENDWALLS FOR CPRC 24-INCH REQ'D
SEE CONSTRUCTION DETAILS FOR CULVERT INSTALLATION

MIDWEST NATURAL GAS INC.

320+00

USH 12

325+00

330+00

CAUTION

XCEL ENERGY - ELECTRICITY

SLOPE INTERCEPT

R/W

MIDWEST NATURAL GAS INC.

XCEL ENERGY - ELECTRICITY UG

AT&T WISCONSIN

TLE

AT&T WISCONSIN

333+50.00

REMOVE SMALL CULVERT PIPE
STA. 318+92
47' CPRC CLASS IV 18-INCH REQ'D
2-APRON ENDWALLS FOR CPRC 18-INCH REQ'D
SEE CONSTRUCTION DETAILS FOR CULVERT INSTALLATION

STA. 327+88, RT
ASPHALT, PE

STA. 329+77, RT
ASPHALT, PE

SCALE, FEET 0 50 100

PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	PLAN	SHEET 61	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - 7

PLOT DATE : 1/8/2021 9:02 AM PLOT BY : KAKACEK, JOHN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

LEGEND

BUTT JOINT LIMITS

CULVERT INSTALLATION LIMITS

333+50.00

STA. 336+57, LT
ASPHALT, PE

STA. 338+62, LT
ASPHALT/BASE AGG., PE

REMOVING GUARDRAIL - 241'
STA. 342+69 - STA. 345+08, LT

N

PI: 348+54.10

MIDWEST NATURAL GAS INC.

XCEL ENERGY - ELECTRICITY

AT&T WISCONSIN

XCEL ENERGY - ELECTRICITY

AT&T WISCONSIN

TLE REQ'D

CP29

R/W

SLOPE INTERCEPT

USH 12

335+00

340+00

345+00

CP28

CP30

AT&T WISCONSIN

XCEL ENERGY - ELECTRICITY

MIDWEST NATURAL GAS INC.

R/W

SLOPE INTERCEPT

ASPHALTIC FLUME

TLE REQ'D

CONCRETE CURB & GUTTER
6-INCH SLOPED 36-INCH TYPE D REQ'D
STA. 345+70 - STA. 348+55

REMOVE SMALL CULVERT PIPE
STA. 343+65
77' CPRC CLASS IV 30-INCH REQ'D
2-APRON ENDWALLS FOR CPRC 30-INCH REQ'D
SEE CONSTRUCTION DETAILS FOR CULVERT INSTALLATION

348+75.00

NOTE:
- CLEARING AND GRUBBING STA. 344+00 - STA 347+50 RT TO R/W LINE.

STA. 333+65, RT
BASE AGG., PE

STA. 336+54, RT
ASPHALT, PE

STA. 338+93, RT
ASPHALT, PE

SCALE, FEET 0 50 100

NOTE:
- CLEARING AND GRUBBING STA. 352+00 - STA 355+00 LT TO R/W LINE.

STA. 354+89, LT
BASE AGG., PE

N

348+75.00

SAWCUT & BUTT JOINT REQ'D

AT&T WISCONSIN

MIDWEST NATURAL GAS INC.

CP31

SLOPE INTERCEPT

AT&T WISCONSIN

R/W

WETLAND IMPACTS
= 0.0153 ACRES

350+00

USH 12

355+00

360+00

XCEL ENERGY - ELECTRICITY

SAWCUT & BUTT JOINT REQ'D

110TH ST

R/W

SLOPE INTERCEPT

REMOVE SMALL CULVERT PIPE
STA. 361+40
70' CPRC CLASS IV 30-INCH REQ'D
2-APRON ENDWALLS FOR CPRC 30-INCH REQ'D
SEE CONSTRUCTION DETAILS FOR CULVERT INSTALLATION

WETLAND IMPACTS
= 0.0236 ACRES

364+00.00

SCALE, FEET 0 50 100

PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	PLAN	SHEET 62	E

STA. 364+55, LT
BASE AGG., PE

STA. 365+91, LT
ASPHALT, PE

STA. 375+58, LT
BASE AGG., PE

364+00.00

AT&T WISCONSIN

MIDWEST NATURAL GAS INC.

AT&T WISCONSIN

R/W

SLOPE INTERCEPT

PI: 377+45.10

365+00

USH 12

370+00

375+00

R/W

SLOPE INTERCEPT

XCEL ENERGY - ELECTRICITY

XCEL ENERGY - ELECTRICITY

379+25.00

LEGEND

BUTT JOINT LIMITS

CULVERT INSTALLATION LIMITS

STA. 367+61, RT
BASE AGG., FE

STA. 370+32, RT
BASE AGG., PE

SCALE, FEET 0 50 100

STA. 379+22, LT
BASE AGG., PE

379+25.00

MIDWEST NATURAL GAS INC.

TLE REQ'D

AT&T WISCONSIN

SLOPE INTERCEPT

MIDWEST NATURAL GAS INC.

PI: 393+81.38

380+00

USH 12

385+00

390+00

R/W

SLOPE INTERCEPT

XCEL ENERGY - ELECTRICITY

AT&T WISCONSIN

394+50.00

STA. 394+41, RT
BASE AGG., PE

STA. 380+94, RT
BASE AGG., PE

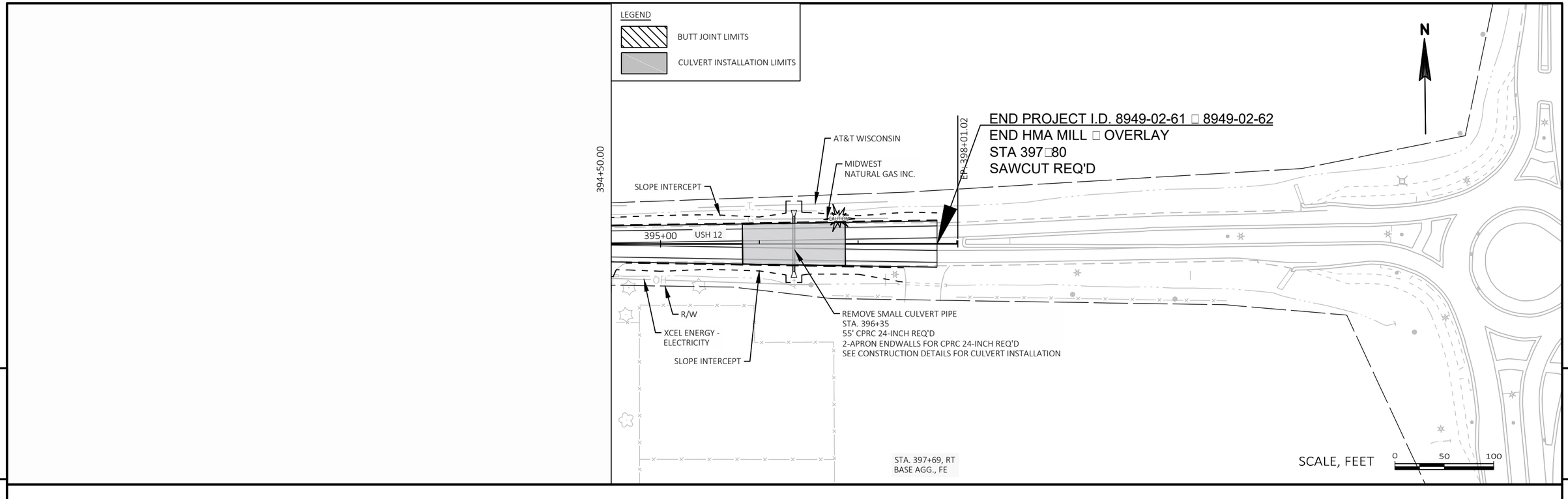
STA. 388+89, RT
BASE AGG., PE

SCALE, FEET 0 50 100

PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	PLAN	SHEET 63	E

FILE NAME : W:\7522\CAD\I 8949-02-31\IMODELS\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - 9

PLOT DATE : 1/8/2021 9:02 AM PLOT BY : KAKACEK, JOHN PLOT NAME : PLOT SCALE : 1 IN:100 FT



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	PLAN	SHEET 64	E

Standard Detail Drawing List

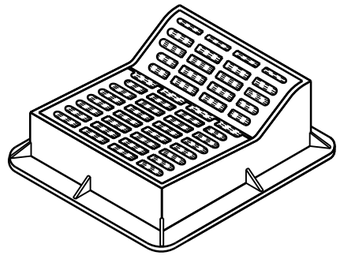
08A05-19C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08C07-02	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08D01-21A	CONCRETE CURB & GUTTER
08D01-21B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D02-07A	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D02-07B	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D21-01	DRIVEWAYS WITHOUT CURB & GUTTER
08D22-01	DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
09A01-13A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
09A01-13B	AT-GRADE SIDE ROAD INTERSECTION, TYPE "A1" & "A2"
13A03-06	CONCRETE PAVEMENT SHOULDERS
13A08-01	ASPHALTIC RUMBLE STRIPS AT INTERSECTION
13A10-02A	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02B	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02C	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02D	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A11-03A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-03B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13B02-09A	CONCRETE PAVEMENT APPROACH SLAB
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C11-12A	RURAL DOWELED CONCRETE PAVEMENT
13C11-12B	RURAL DOWELED CONCRETE PAVEMENT
13C18-07C	CONCRETE PAVEMENT JOINT TYPES
14B42-06A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-06B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-06C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-06D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-05A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05K	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05L	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B53-01A	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01B	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01C	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01D	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01E	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01F	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01G	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01H	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-01I	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
15A01-13A	MARKER POST FOR RIGHT-OF-WAY
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-08C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C08-20B	PAVEMENT MARKING (TURN LANES)
15C08-20C	PAVEMENT MARKING (TURN LANES)
15C11-07A	CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST

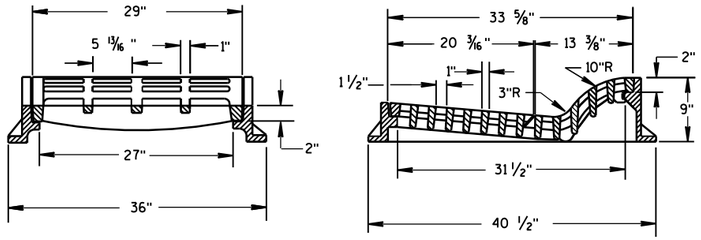
6

Standard Detail Drawing List

15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-07	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

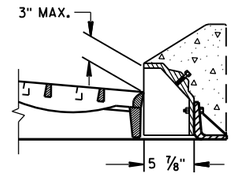
6





TYPE "F"

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

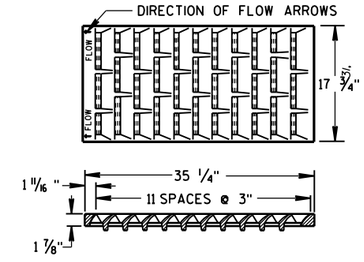
USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

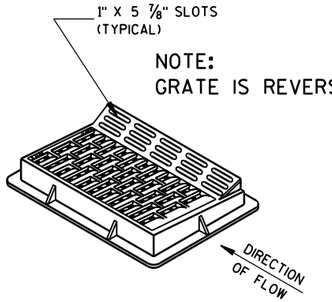
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

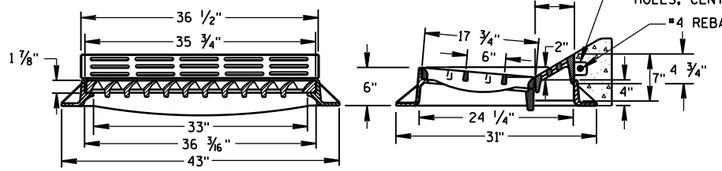
GENERAL NOTES

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

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



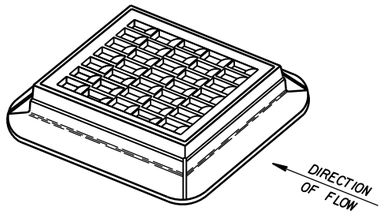


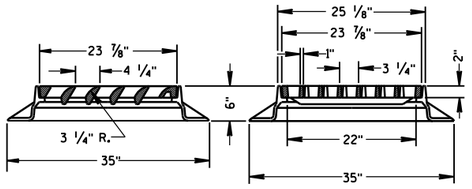


TYPE "HM"

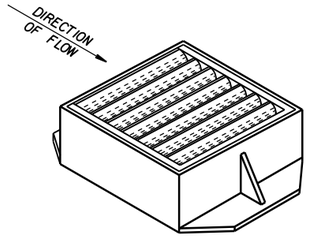
USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

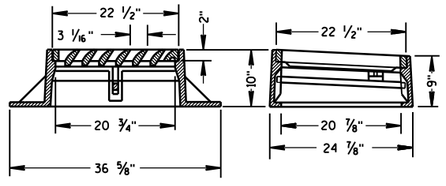
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE



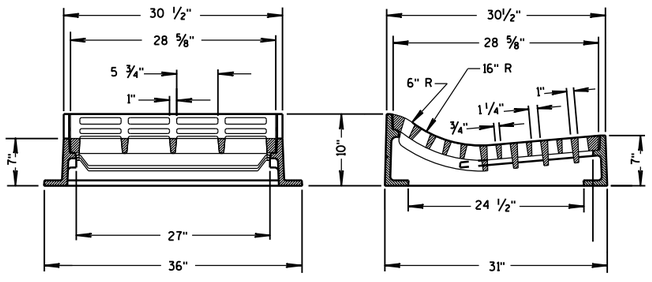


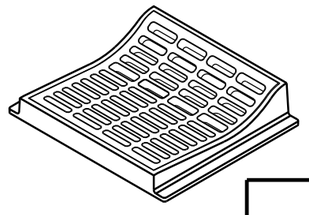
TYPE "S"





TYPE "V"





TYPE "T"

USE WITH TYPES R & T CONCRETE CURB & GUTTER, 36 INCH.

INLET COVERS
TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

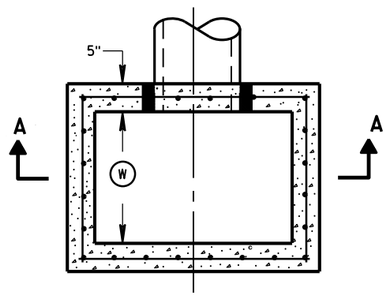
APPROVED
11/27/2013
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

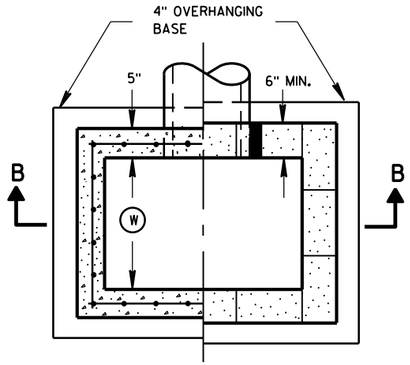
FHWA

6

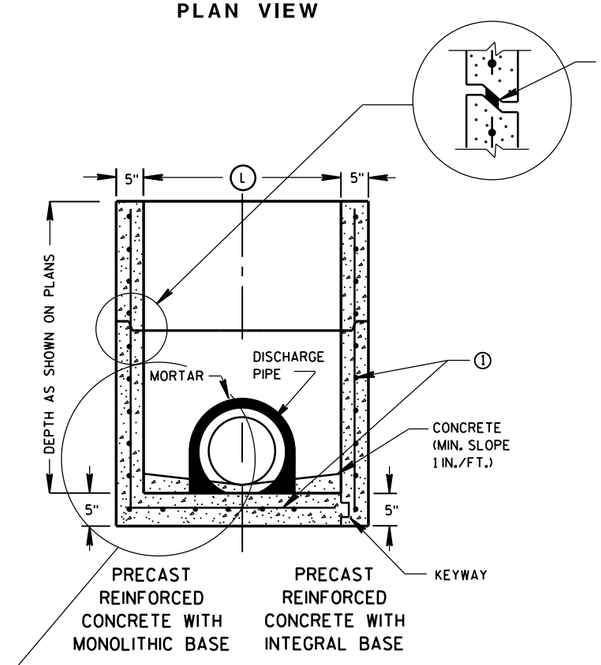
S.D.D. 8 A 5-19c



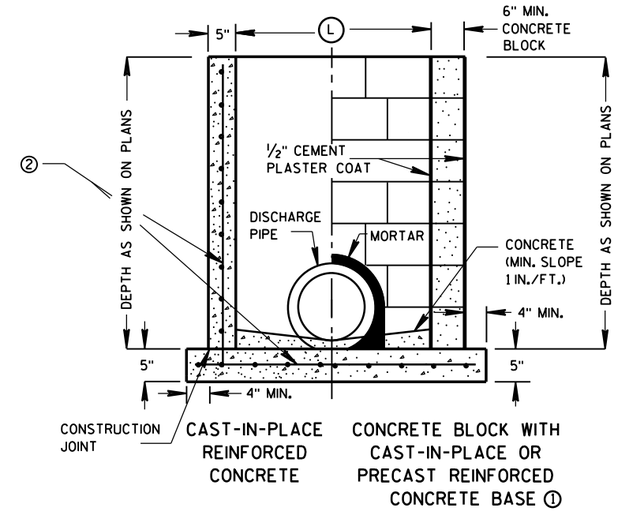
PLAN VIEW



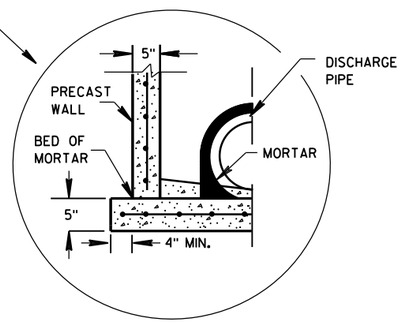
PLAN VIEW



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

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.

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

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

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

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

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

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

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

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

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

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

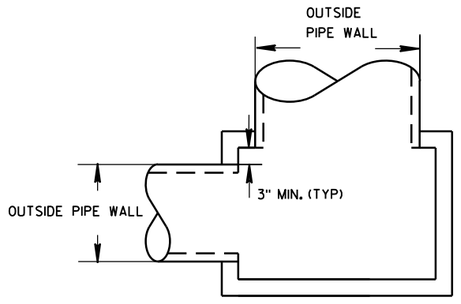
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE		INLET COVER TYPE	ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
	WIDTH (W) (FT)	LENGTH (L) (FT)									
2X2-FT	2	2	X	X				X		X	
2X2.5-FT	2	2.5			X			X	X	X	X
2X3-FT	2	3					X				
2.5X3-FT	2.5	3				X					

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
2X2-FT	12	12
2X2.5-FT	12	18
2X3-FT	12	24
2.5X3-FT	18	24



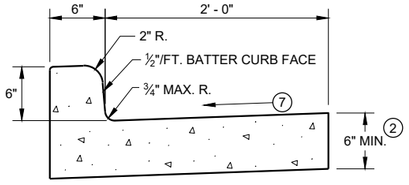
DETAIL "A"

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

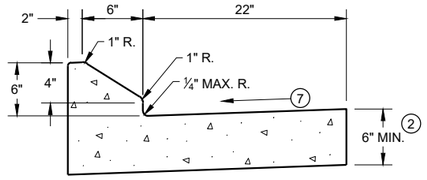
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016 — DATE
/S/ Rodney Taylor
ROADWAY STANDARDS D IT UNIT SUPERVIS
FHWA

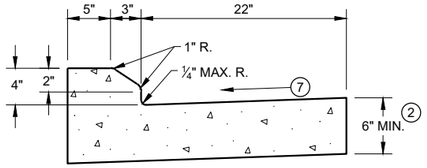
INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT



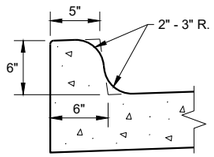
TYPES A (1) & D



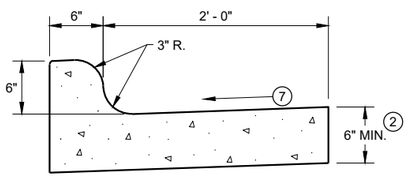
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

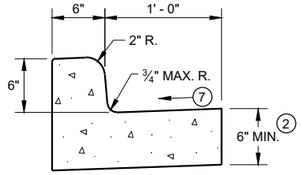


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



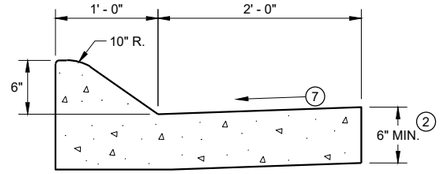
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

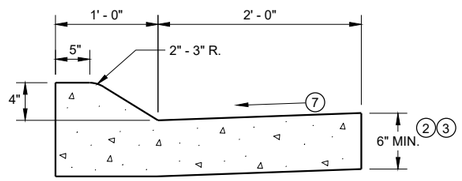


TYPES A (1) & D

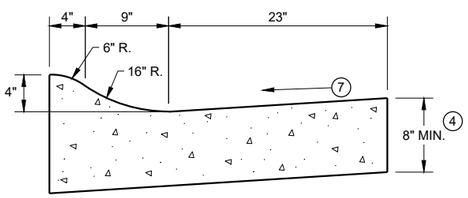
CONCRETE CURB AND GUTTER 18"



6" SLOPED CURB TYPES A (1) & D



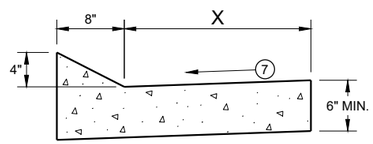
4" SLOPED CURB TYPES A (1) & D



4" SLOPED CURB TYPES R (1) & T (5)

CONCRETE CURB AND GUTTER 36"

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

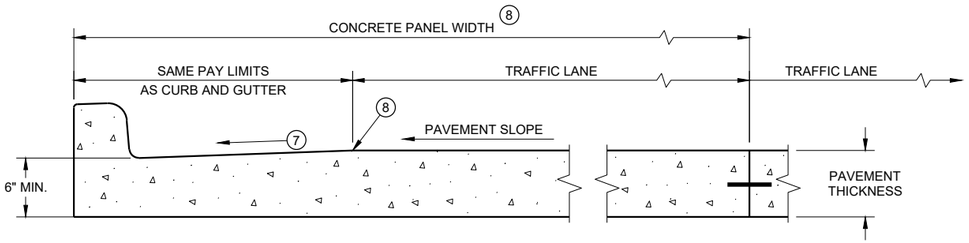


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

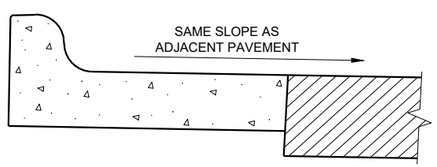
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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) 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.

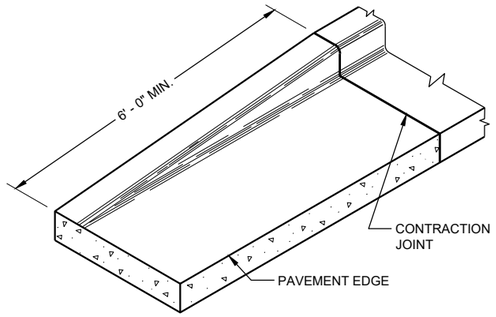
(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

(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.

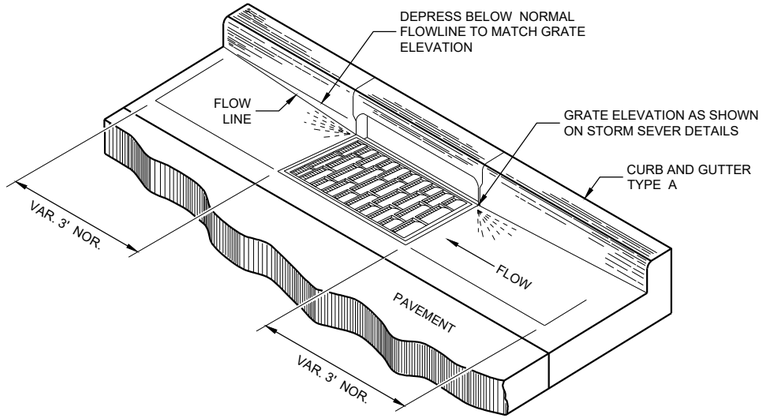
CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 08D01 - 21a



END SECTIONCURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS

(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

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

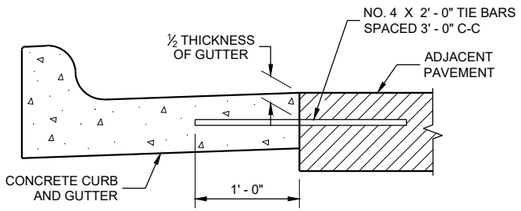
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

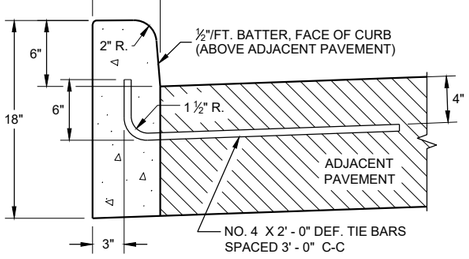
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

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

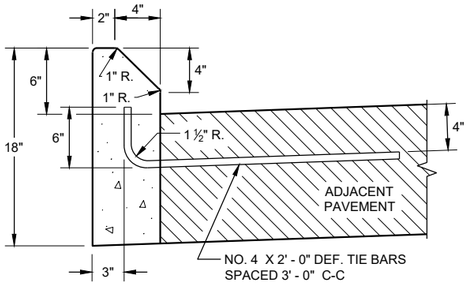
(9) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.



TYPICAL TIE BAR LOCATION (1)

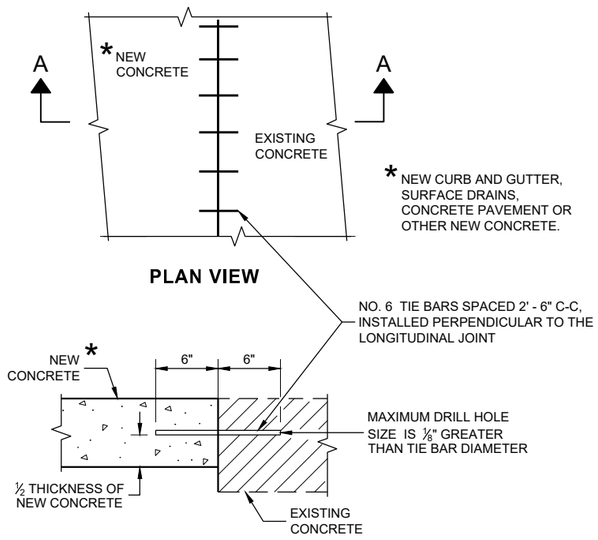


TYPES A (1) & D



TYPES G (1) & J

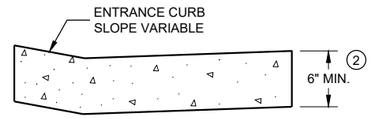
CONCRETE CURB



PLAN VIEW

SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



DRIVEWAY ENTRANCE CURB (9)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

SDD08D01 - 21b

GENERAL NOTES

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

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

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

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

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

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

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

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

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

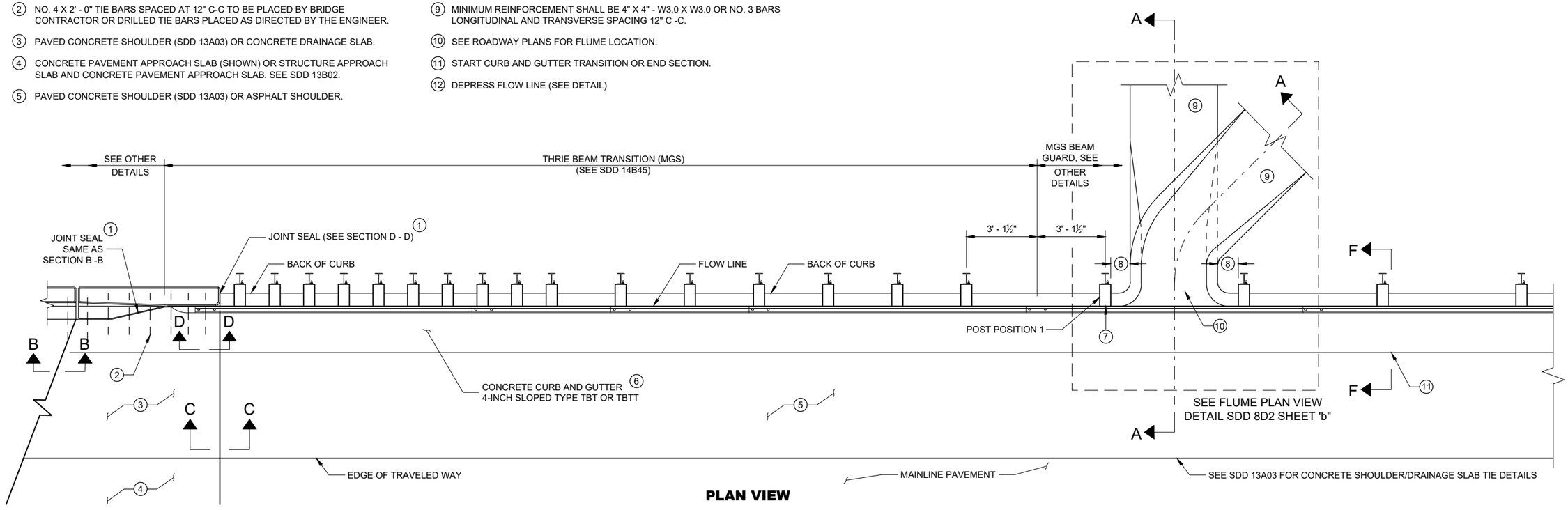
(8) CENTER FLUME BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE EDGE OF FLUME TO POSTS.

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

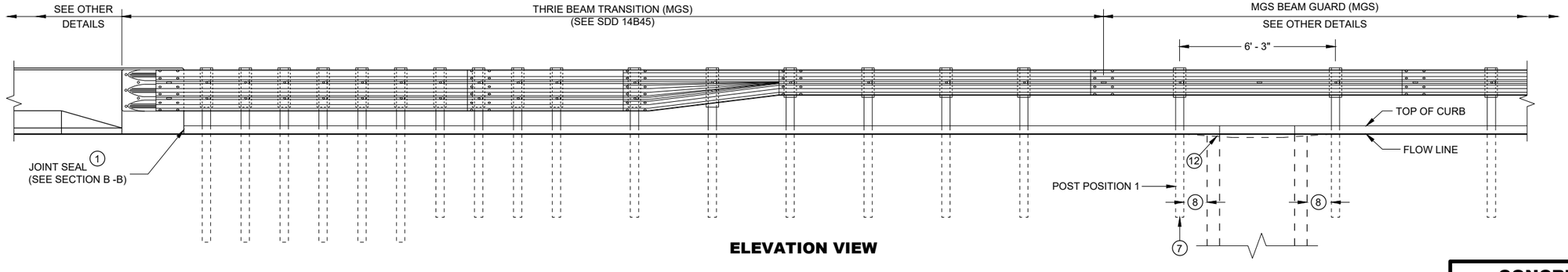
(10) SEE ROADWAY PLANS FOR FLUME LOCATION.

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

(12) DEPRESS FLOW LINE (SEE DETAIL)



PLAN VIEW



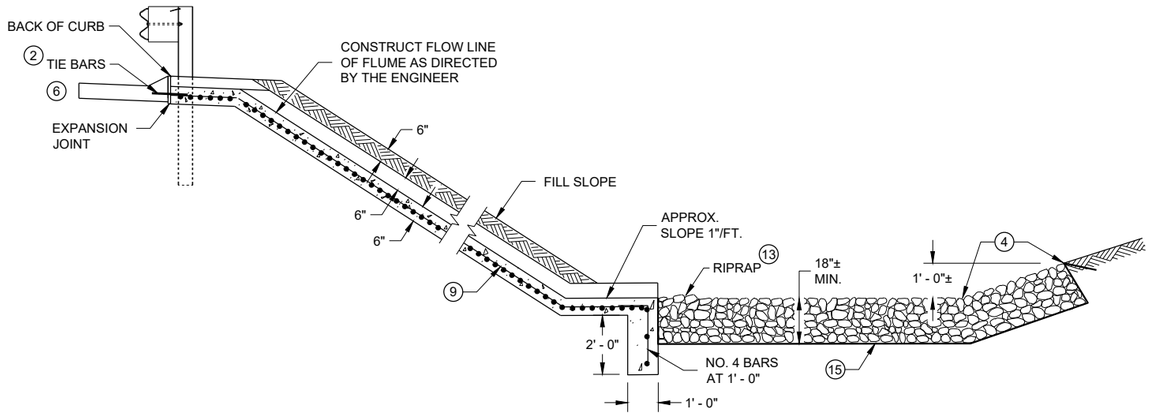
ELEVATION VIEW

CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

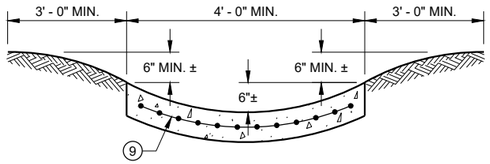
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D02 - 07a

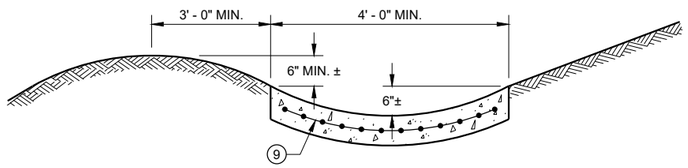
SDD 08D02 - 07a



SECTION A - A



SECTION G - G



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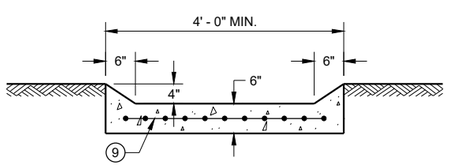
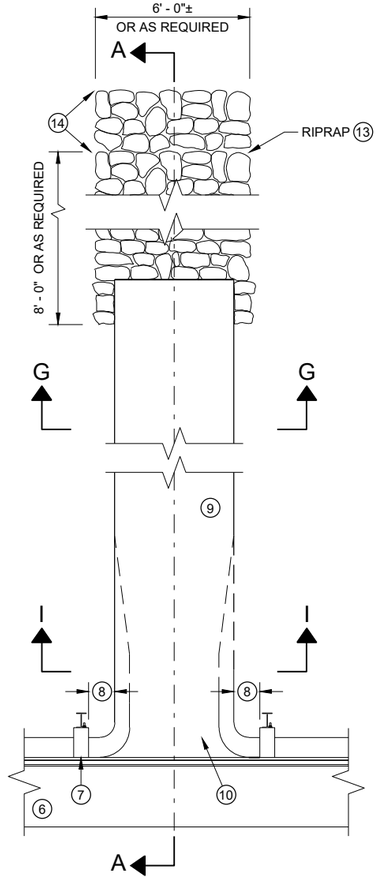
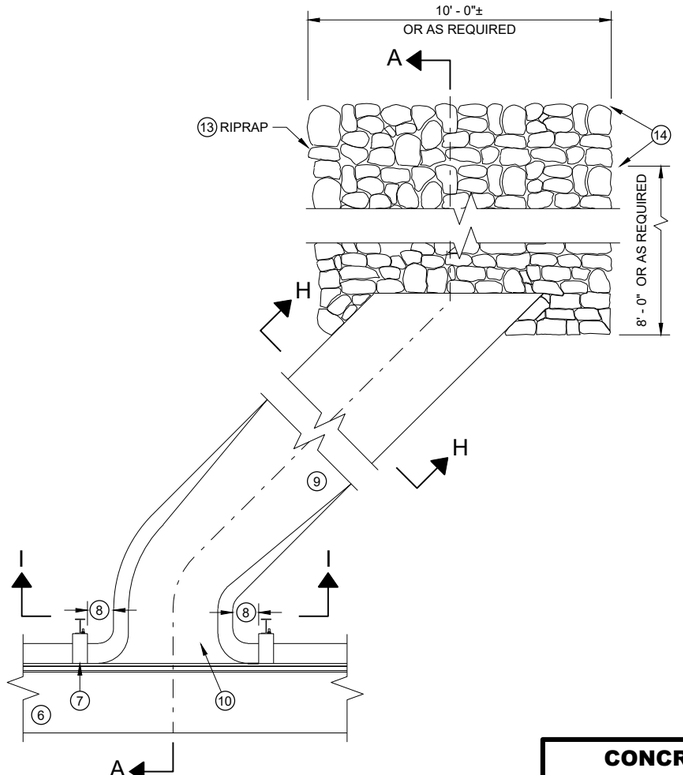


SECTION I - I



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.

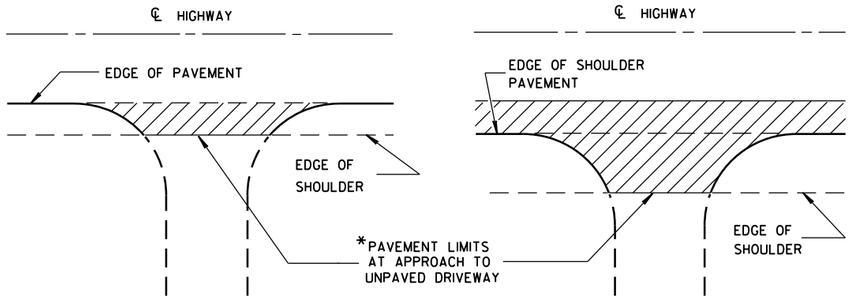
ALL STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

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 FABRIC TYPE HR.

CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 08D02 - 07b

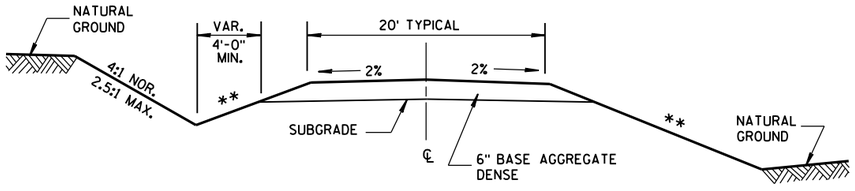


*WHERE DRIVEWAY IS PAVED, APPROACH PAVEMENT SHOULD BE EXTENDED TO MATCH DRIVEWAY PAVEMENT.

PLAN VIEW
(UNPAVED SHOULDER ON HIGHWAY)

PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

RURAL DRIVEWAY INTERSECTION DETAIL
(NO CURB & GUTTER OR SIDEWALK)

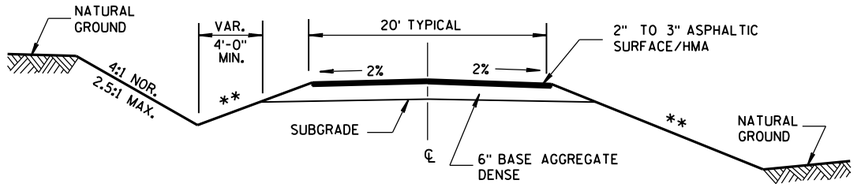


IN CUT **IN FILL**

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE AGGREGATE SURFACE

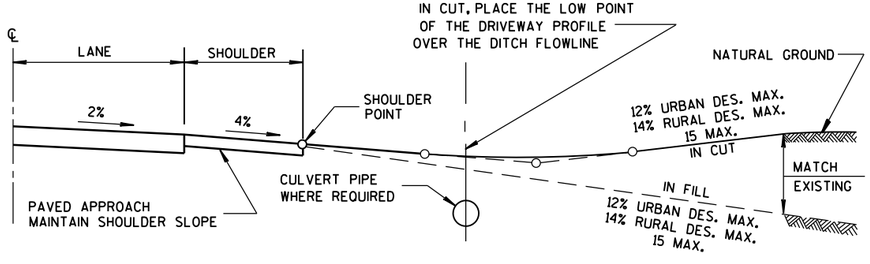
** SLOPE CAN VARY WITH SPEED. SEE 11-45-2.6.2.

POSTED SPEED MPH	MAX. SLOPE
<35	4:1
≥35 TO <60	6:1
≥60	10:1



IN CUT **IN FILL**

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE ASPHALTIC SURFACE



TYPICAL DRIVEWAY PROFILES

DRIVEWAYS WITHOUT CURB & GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December, 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERV
ENT
FHWA

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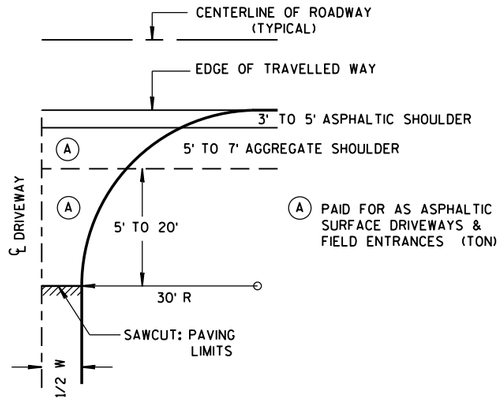
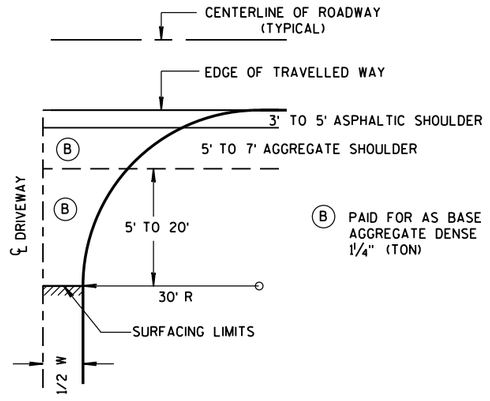
S.D.D. 8 D 21-1



PLAN VIEW
HALF SECTION

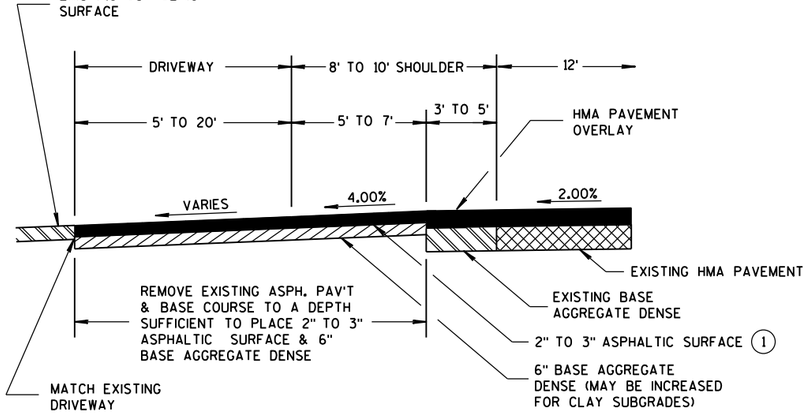
W MIN. = 16'
W MAX. = 24'



PLAN VIEW
HALF SECTION

GENERAL NOTES

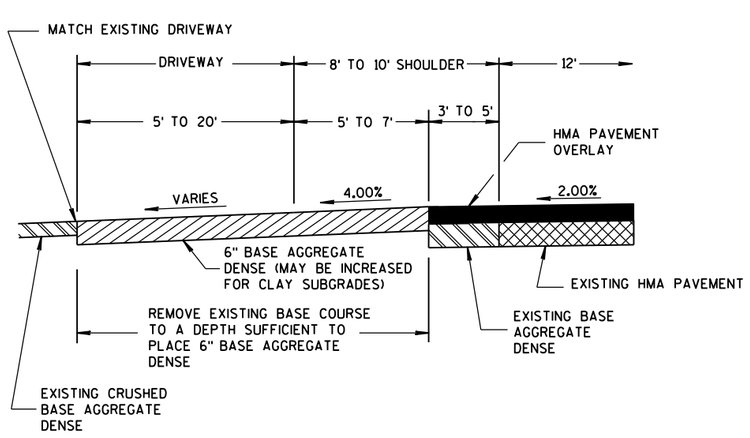
(1) DESIGN WILL DETERMINE FINAL DRIVEWAY ASPHALTIC THICKNESS BASED ON TYPE OF USAGE AND LOADINGS.



PROFILE VIEW

RURAL ENTRANCE WITH ASPHALTIC SURFACE

RESURFACING PROJECTS



PROFILE VIEW

RURAL ENTRANCE WITH AGGREGATE SURFACE

6" BASE AGGREGATE DENSE
RESURFACING PROJECTS

DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December, 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERV
ENT
FHWA

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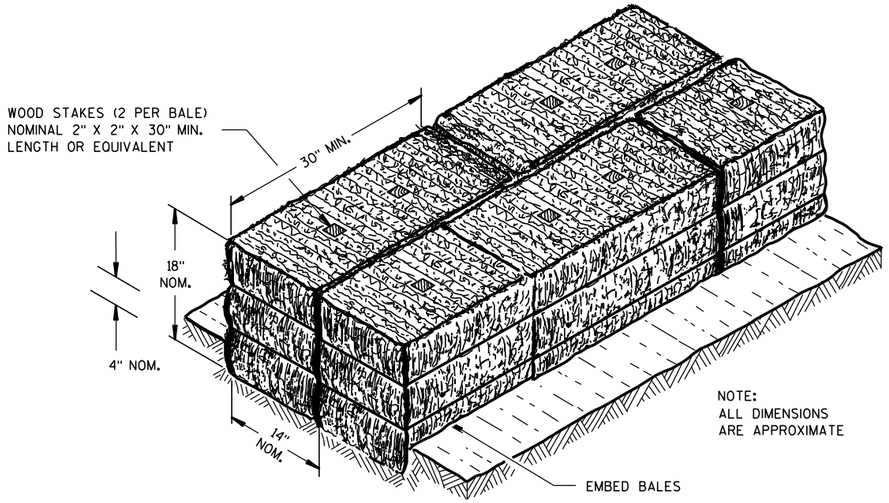
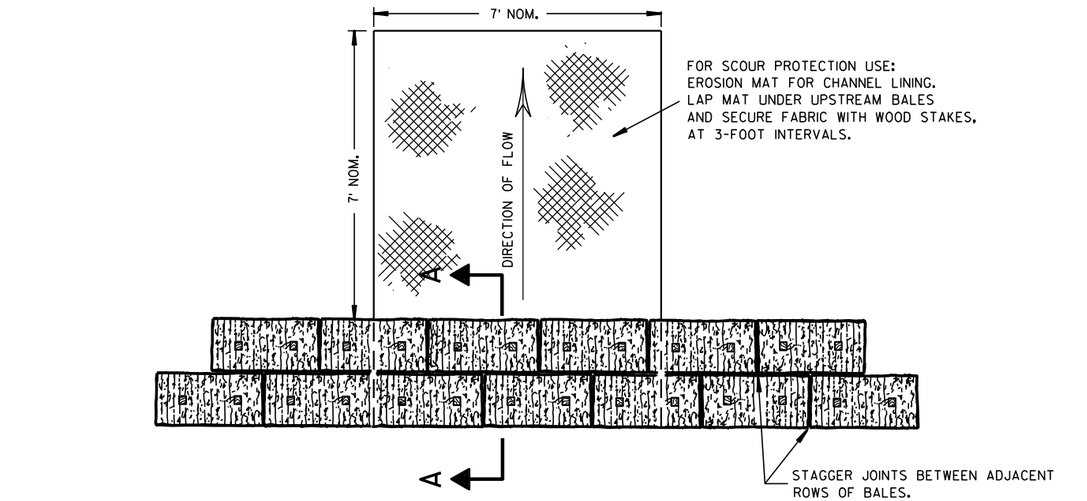
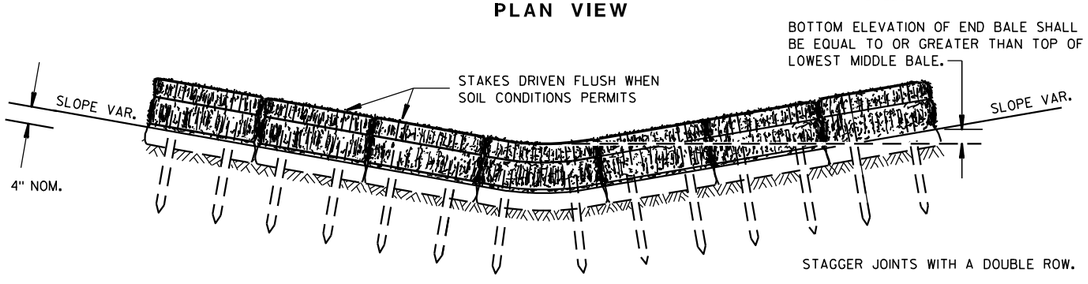
S.D.D. 8 D 22-1



SECTION A-A



PLAN VIEW



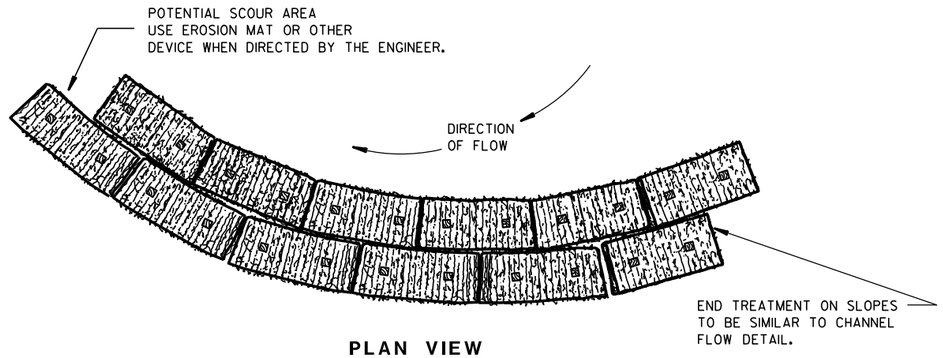
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

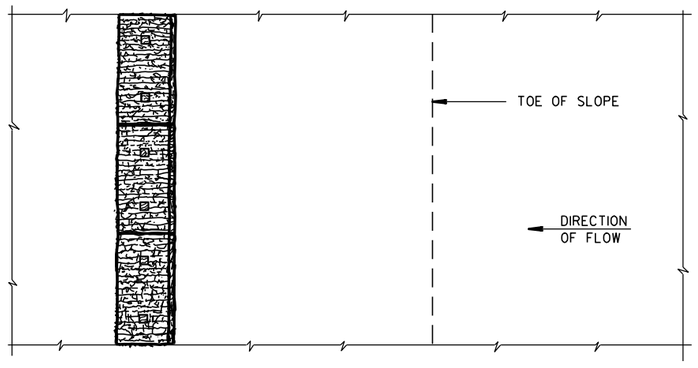
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

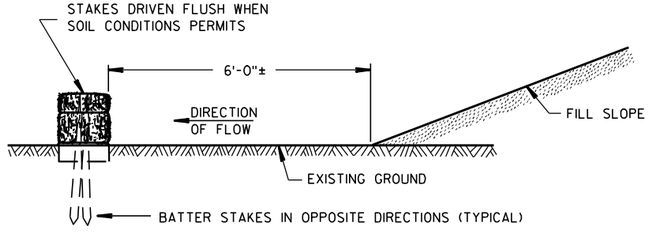


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

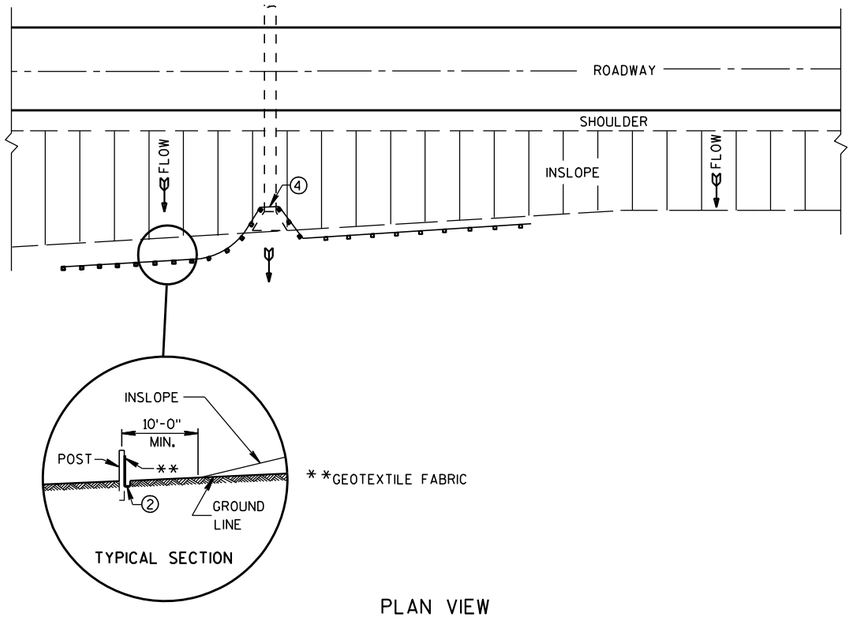
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

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

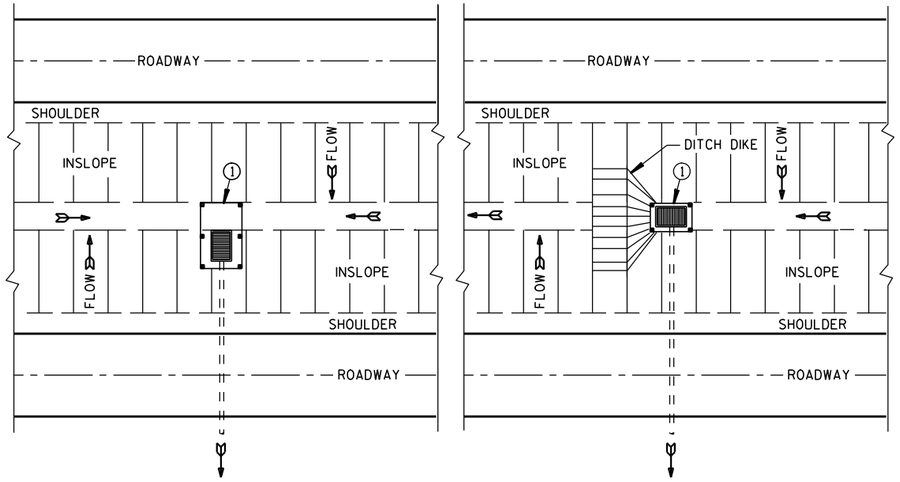
FHWA

6
S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

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

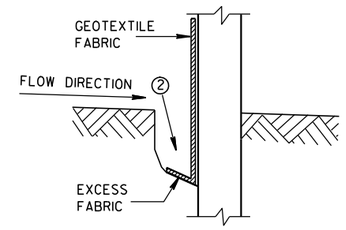
(1) HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

(2) FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.

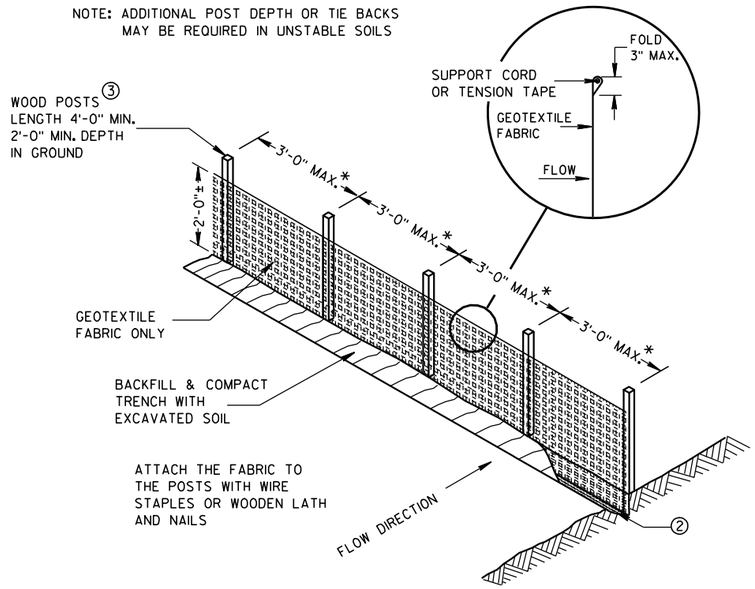
(3) WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

(4) SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.

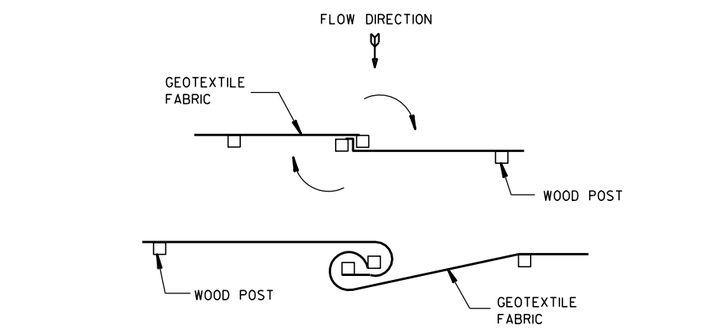
(5) CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



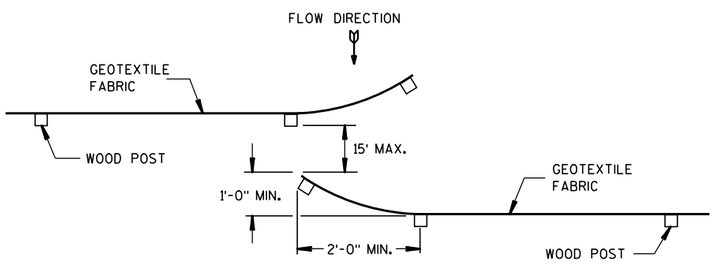
TRENCH DETAIL



SILT FENCE

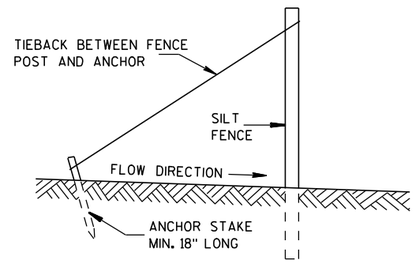


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

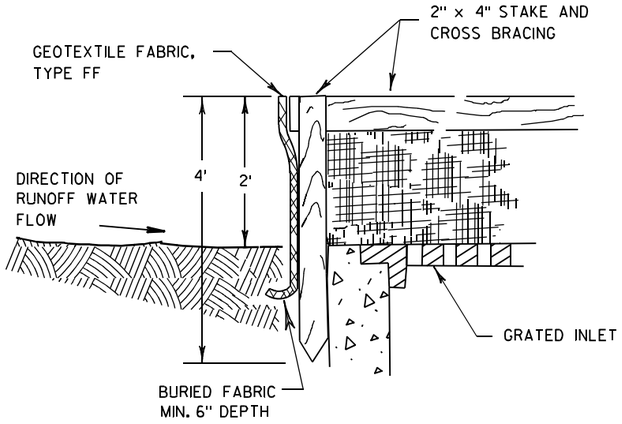
(WHEN REQUIRED BY THE ENGINEER)

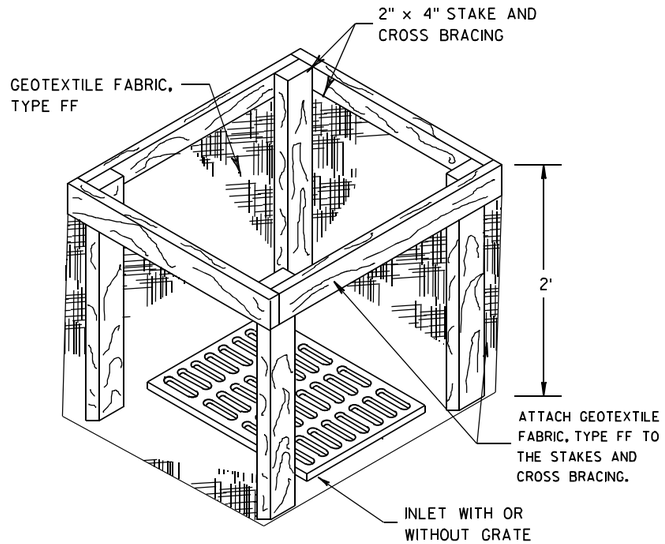
SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

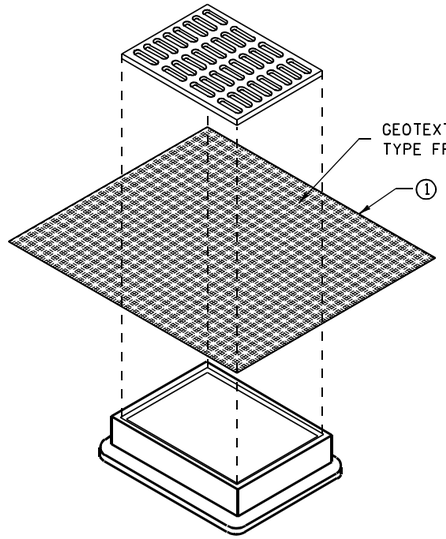
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 E 9-6



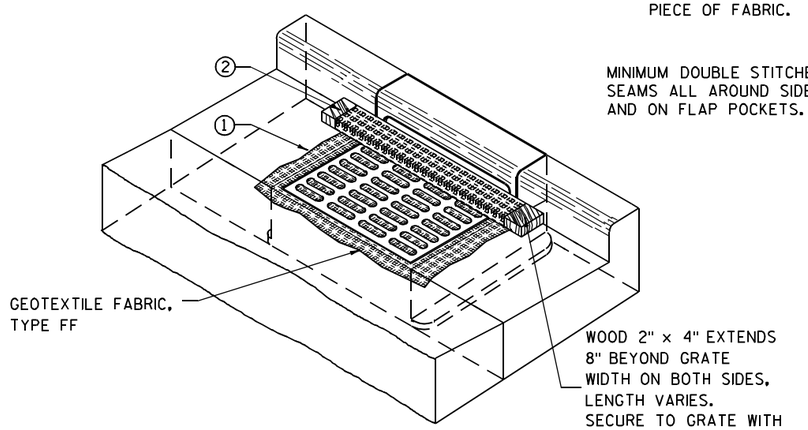


INLET PROTECTION, TYPE A

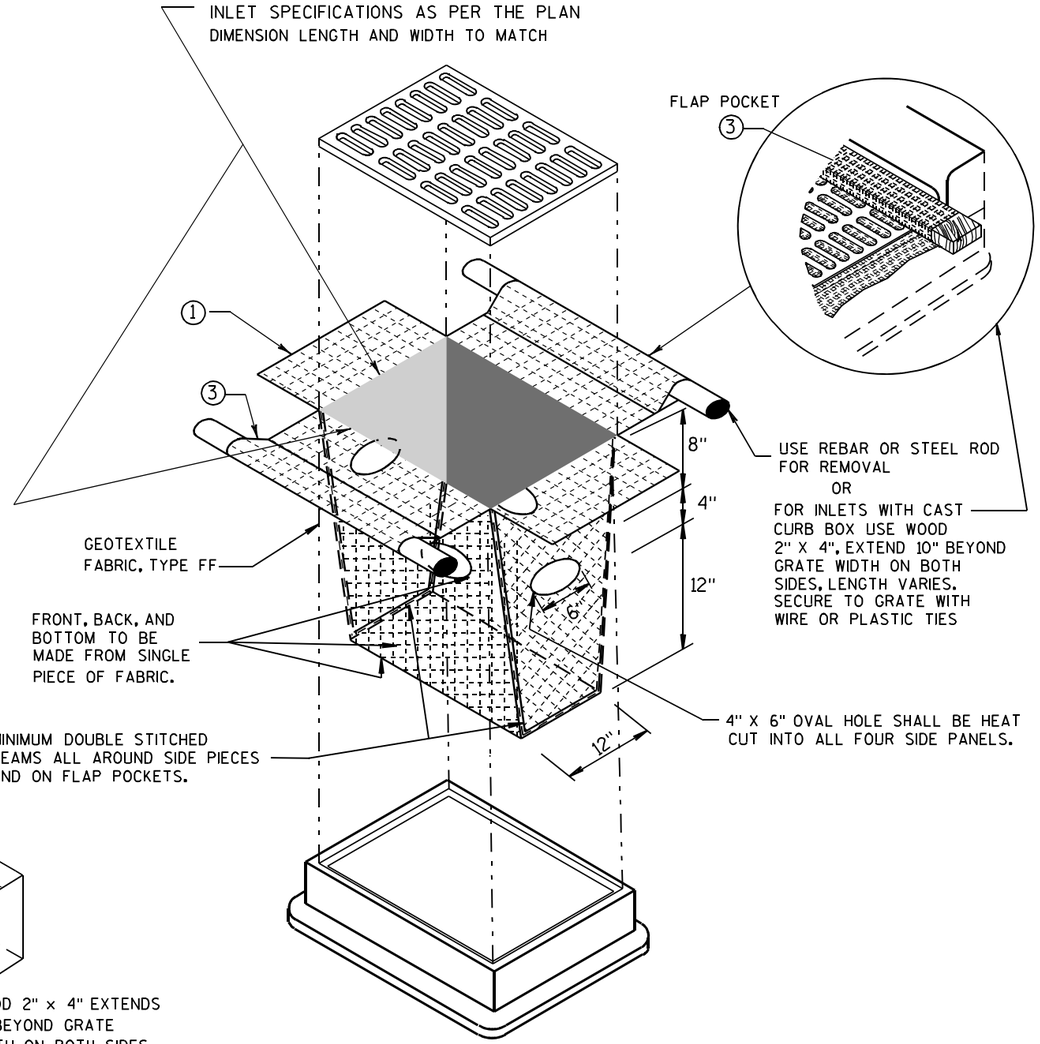


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH
OR WITHOUT A CURB BOX AS PER NOTE ②)

GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

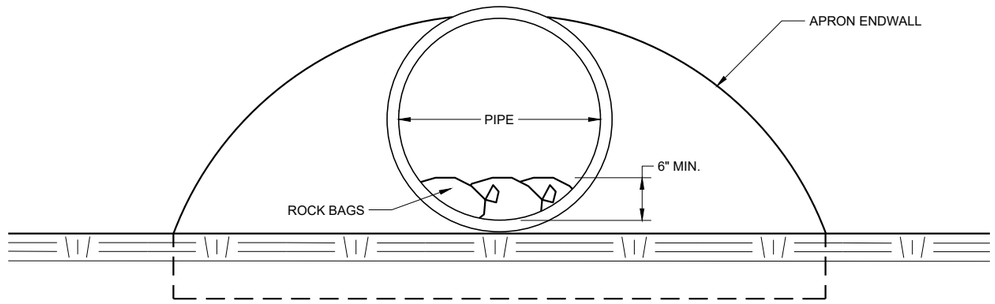
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION
TYPE A, B, C, AND D

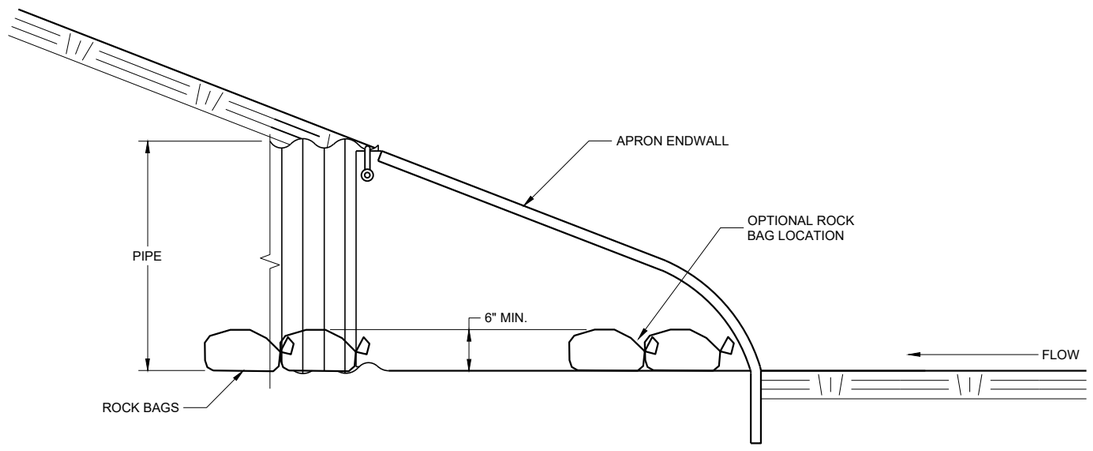
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 E 10-2



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

6

SDD 08E15 - 01

6

SDD 08E15 - 01

CULVERT PIPE CHECK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Danie□S□□a□e
EROSION CONTROL ENGI

FHWA

METAL APRON ENDWALLS

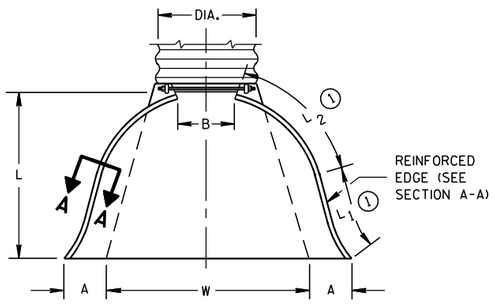
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	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

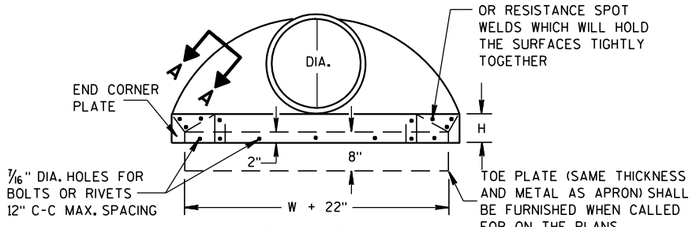
REINFORCED CONCRETE APRON ENDWALLS

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



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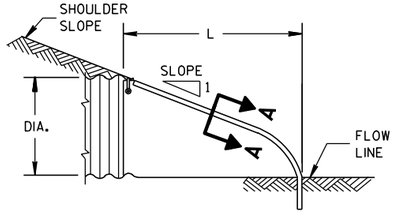
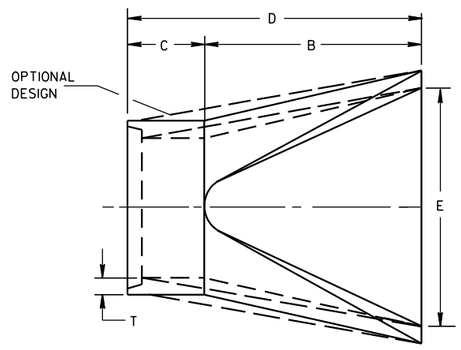
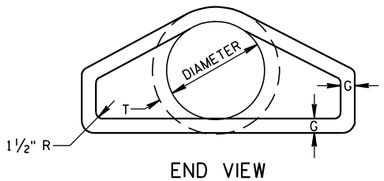


SIDE ELEVATION

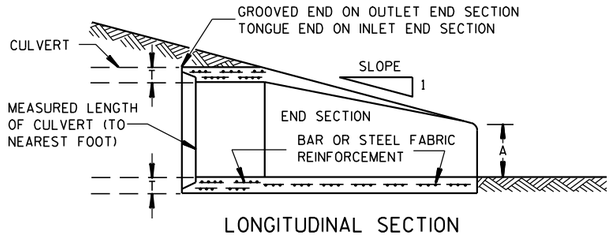
METAL ENDWALLS



PLAN

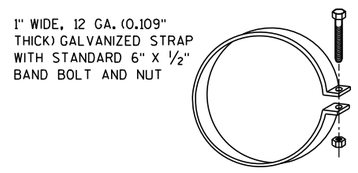


END VIEW



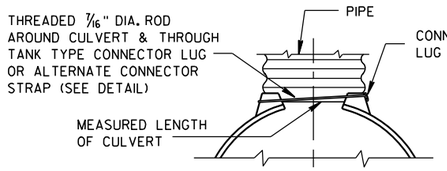
LONGITUDINAL SECTION

CONCRETE ENDWALLS

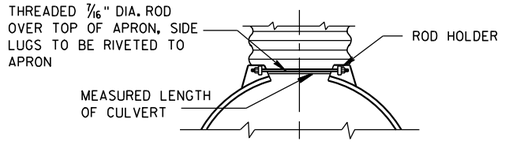


ALTERNATE FOR TYPE 1 CONNECTION

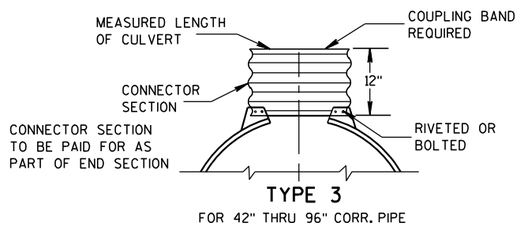
END SECTION CONNECTOR STRAP



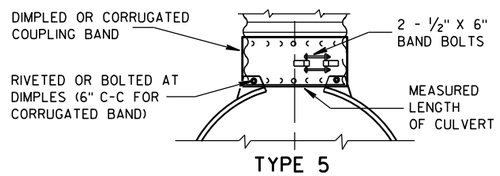
TYPE 1
FOR 12" THRU 24" CORR. PIPE



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

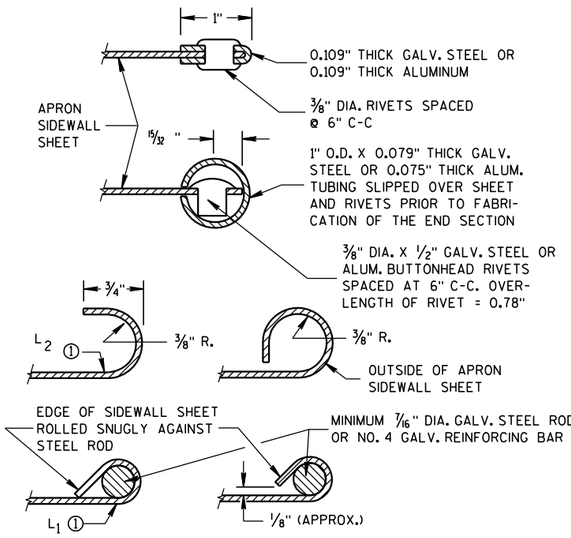
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

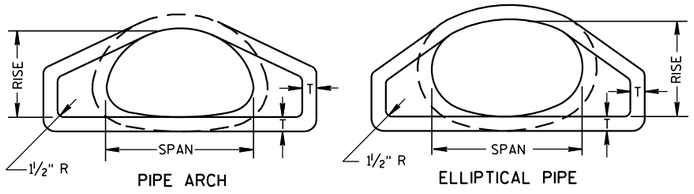
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

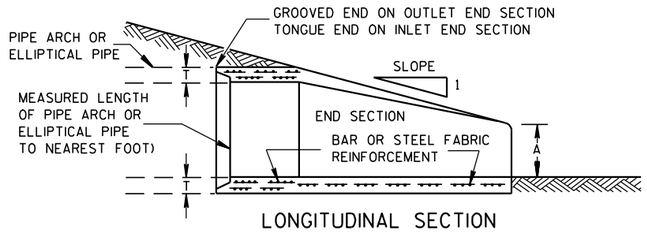
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

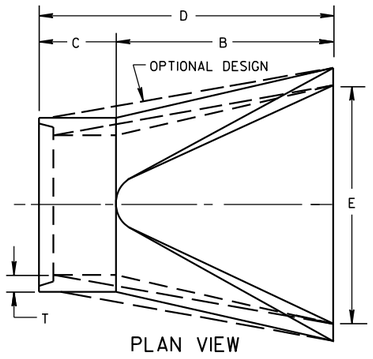
6
S.D.D. 8 F 1-11



END VIEW

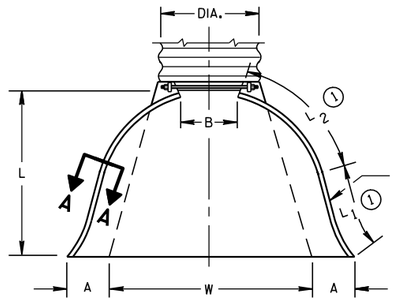


LONGITUDINAL SECTION

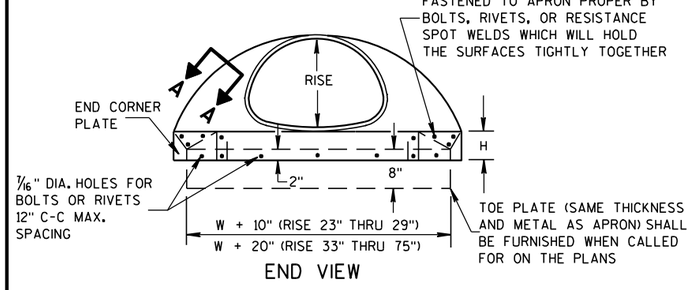


PLAN VIEW

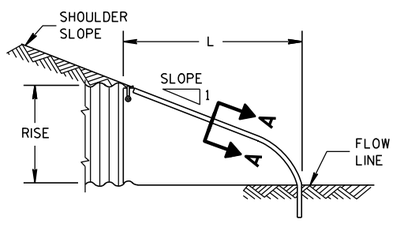
CONCRETE ENDWALLS



PLAN VIEW

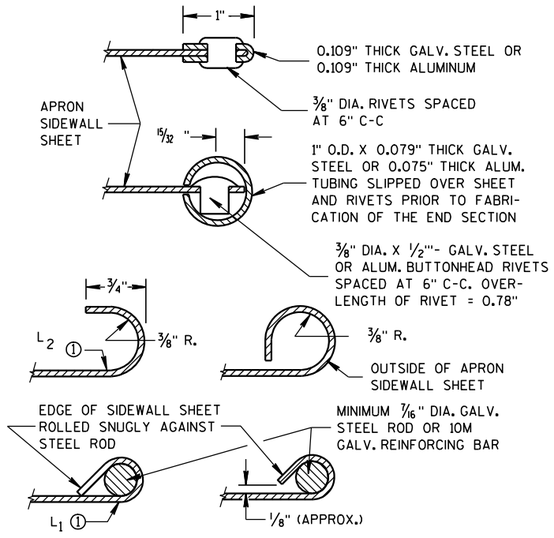


END VIEW



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

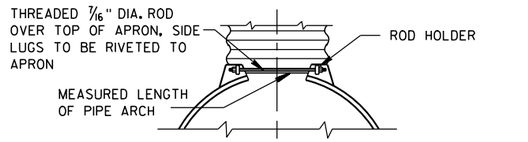
REINFORCED CONCRETE PIPE ARCH

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

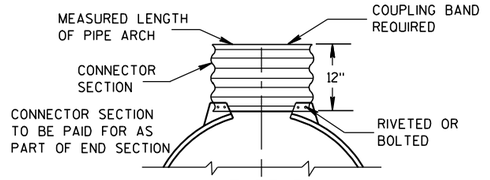
EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48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

**NOMINAL SIZE



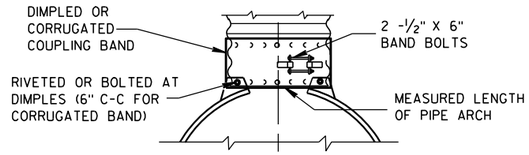
TYPE 2

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

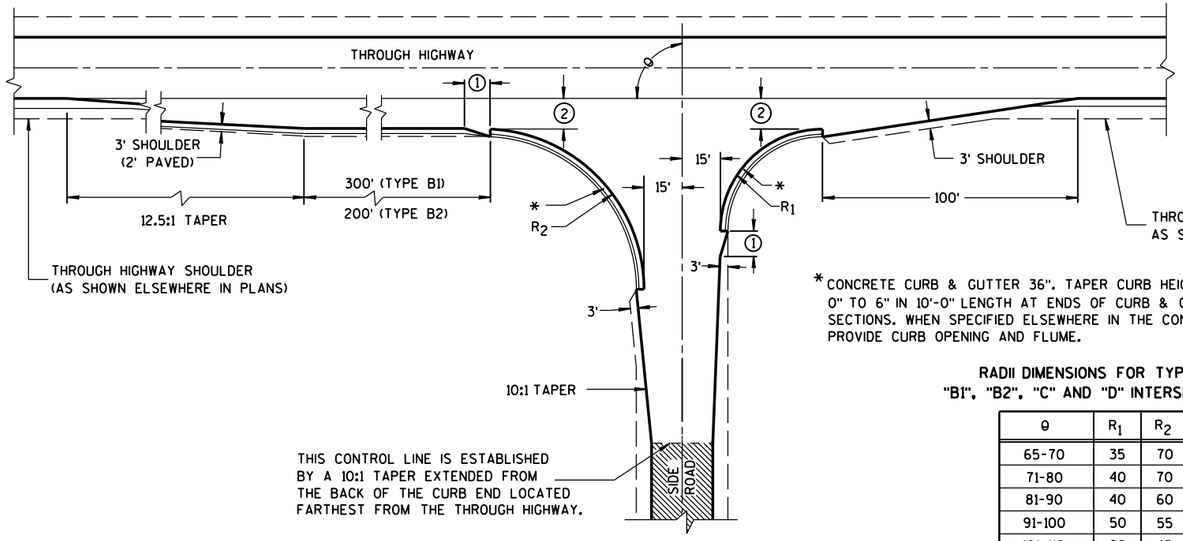
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/94 — DATE

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

FHWA

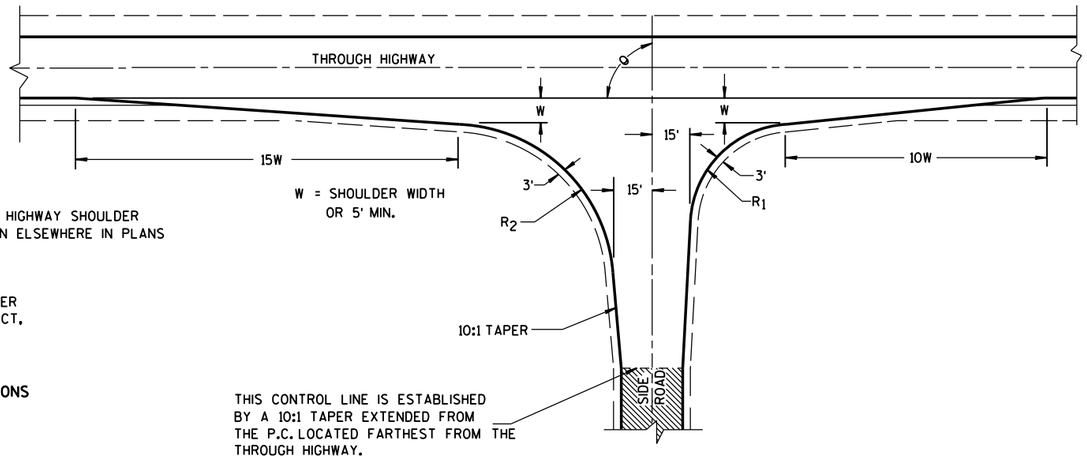


TYPE "B1" AND "B2"

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

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

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



TYPE "C"

GENERAL NOTES

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

SIDE ROAD SURFACING NOTE

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

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

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

EXISTING PAVED SURFACE

BYPASS LANE

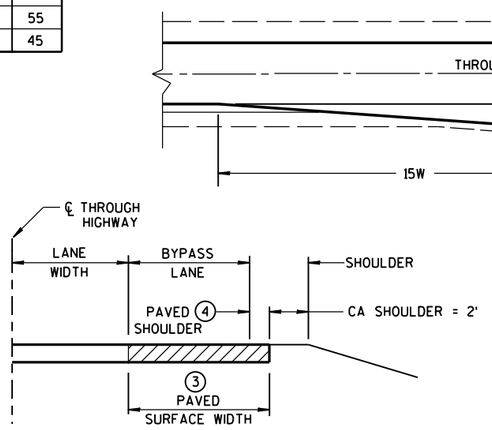
(1) 10-FT TYPICAL.

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

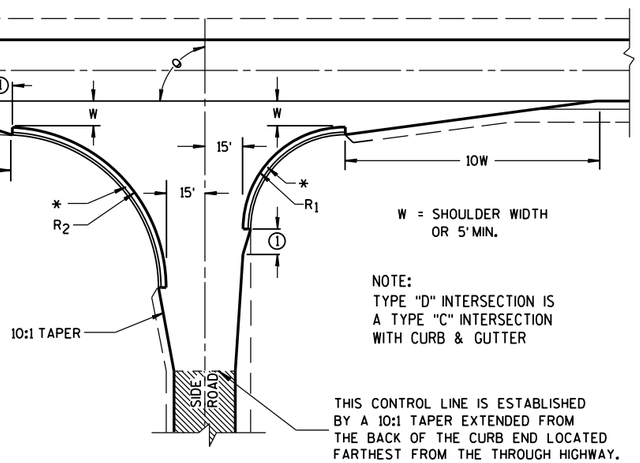
**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

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

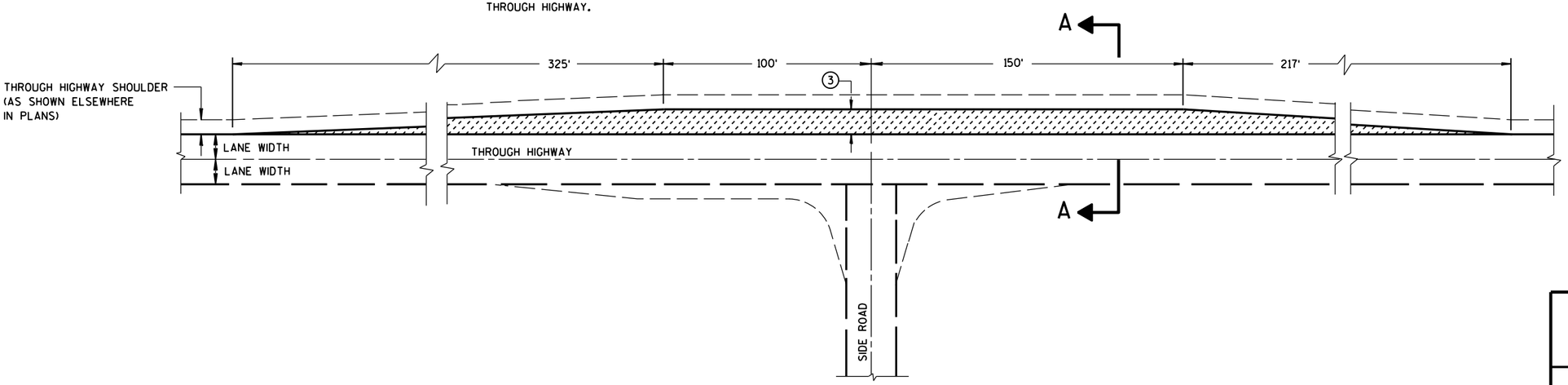
(4) BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.



SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)



TYPE "D"



TEE INTERSECTION BYPASS LANE DETAIL

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

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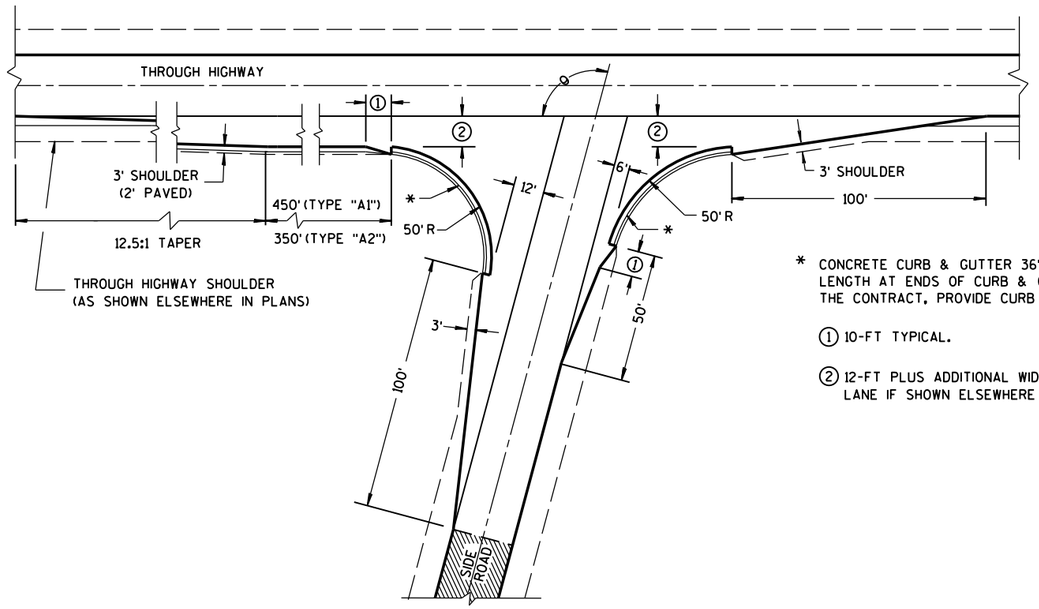
S.D.D. 9 A 1-13a

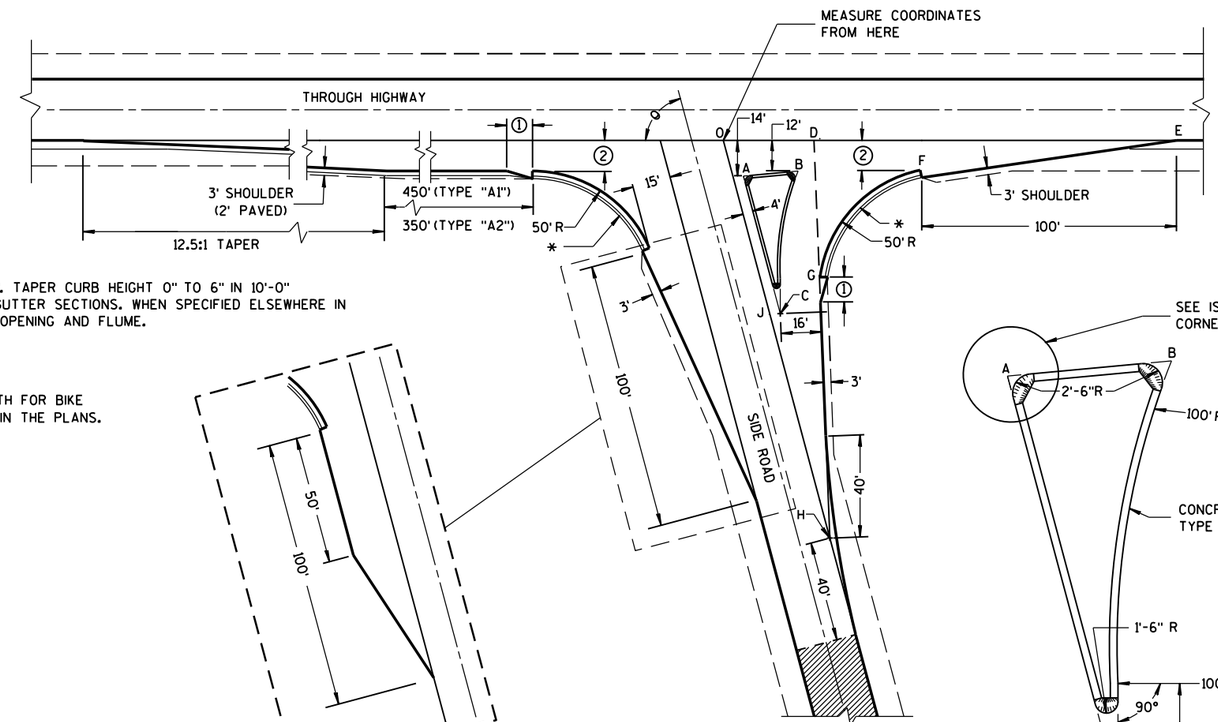


θ = MORE THAN 80°

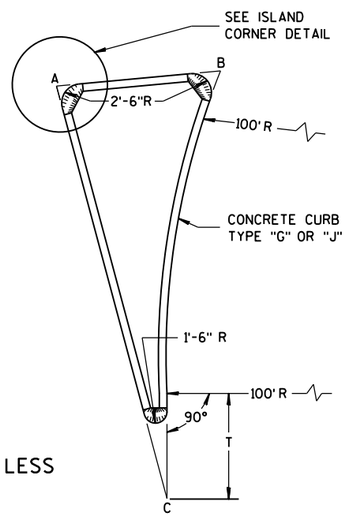
* CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

① 10-FT TYPICAL.

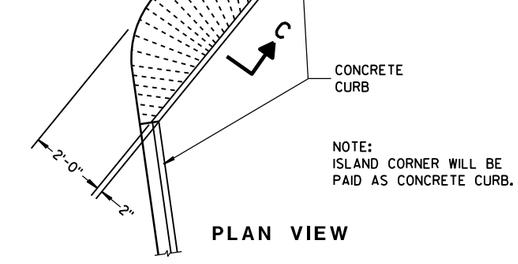
② 12-FT PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLANS.



θ = ACUTE ANGLES 80° OR LESS

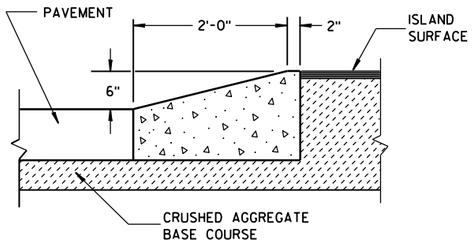


SIDE ROAD WIDENING AND TAPER REQUIRED WHERE THE THROUGH HIGHWAY CARRIES TWO-WAY TRAFFIC
θ = ACUTE ANGLES 70° OR LESS



NOTE:
ISLAND CORNER WILL BE PAID AS CONCRETE CURB.

PLAN VIEW



SECTION C-C

ISLAND CORNER DETAIL

(TO BE CONSTRUCTED AT ALL ISLAND CORNERS)

TABLE OF DIMENSIONS FOR
VARIABLE SIDE ROAD INTERSECTION ANGLES
(INTERPOLATE VALUES FOR ANGLES NOT SHOWN)

ANGLE θ DEGREES	COORDINATES IN FEET (MEASURED FROM POINT "O") X / Y								LENGTH IN FEET				
	A	B	C	D	E	F	G	H	AB	AC	T	OJ	OH
60	12.7 / -14.0	44.9 / -12.0	46.4 / -72.4	41.9 / 0.0	205.0 / 0.0	104.6 / -12.0	64.0 / -75.5	85.0 / -147.1	32.3	67.4	4.9	85.9	169.9
65	10.9 / -14.0	39.0 / -12.0	37.8 / -71.6	39.4 / 0.0	196.1 / 0.0	95.7 / -12.0	54.1 / -71.5	70.5 / -151.3	28.2	63.6	8.5	80.9	166.9
70	9.4 / -14.0	33.9 / -12.0	29.8 / -70.1	37.4 / 0.0	188.3 / 0.0	87.8 / -12.0	45.6 / -67.5	56.1 / -154.2	24.6	59.7	11.5	76.1	164.1
75	7.9 / -14.0	29.3 / -12.0	22.3 / -67.9	35.7 / 0.0	181.2 / 0.0	80.7 / -12.0	38.2 / -63.4	41.8 / -155.9	21.5	55.8	13.8	71.4	161.4
80	6.5 / -14.0	25.4 / -12.0	15.6 / -65.2	34.4 / 0.0	174.8 / 0.0	74.4 / -12.0	31.8 / -59.3	27.6 / -156.5	18.9	52.0	15.6	66.9	158.9

TYPE "A1" & "A2" SIDE ROAD INTERSECTION DETAILS

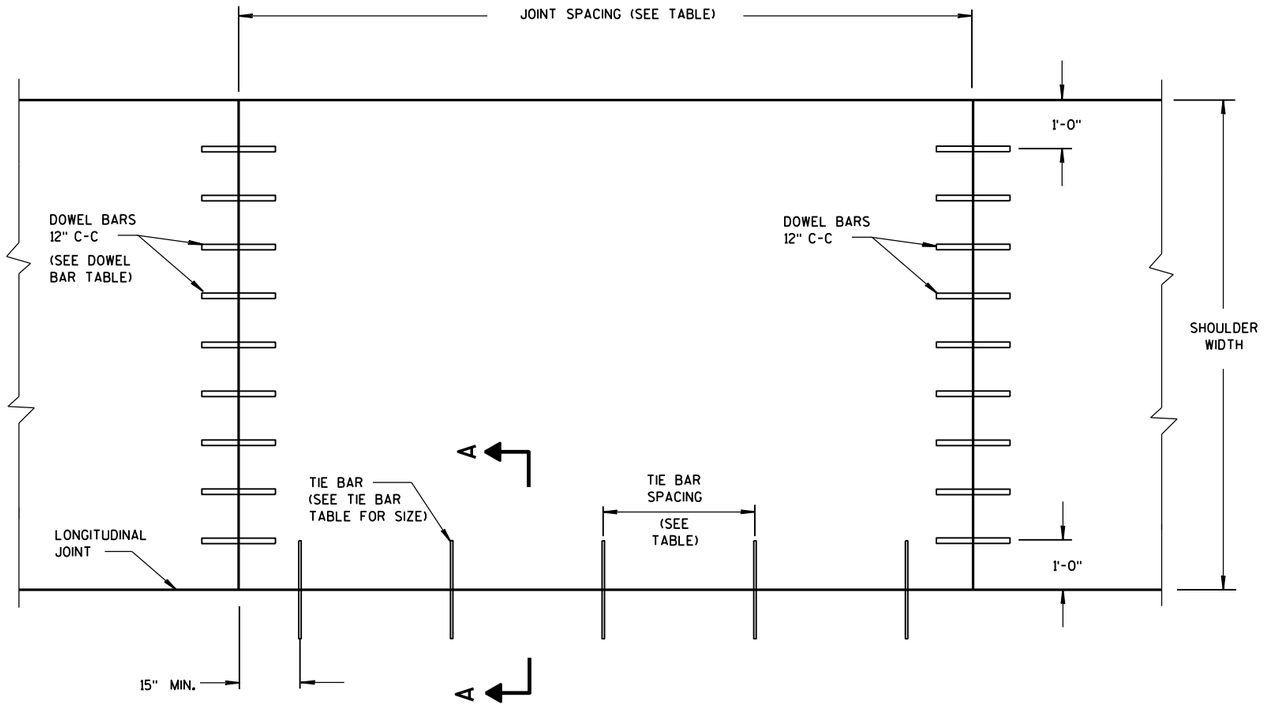
AT-GRADE SIDE ROAD
INTERSECTION, TYPE "A1" & "A2"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/18/12 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 9 A 1-13b



PLAN VIEW

CONCRETE PAVEMENT SHOULDER

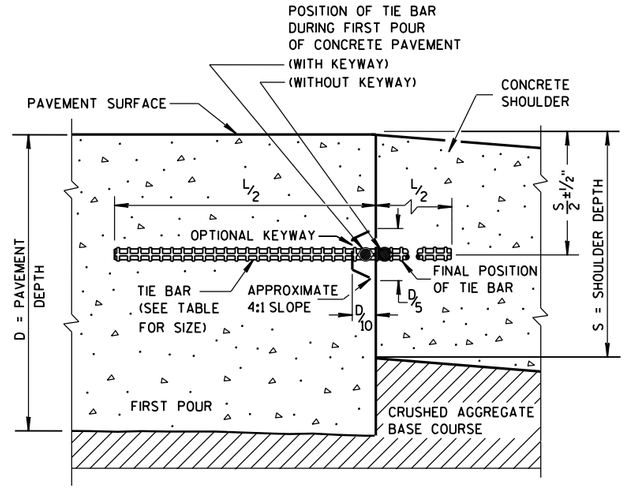
GENERAL NOTES

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.

TRANSVERSE JOINT DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

FINISH THE SHOULDER PAVEMENT CONFORMING TO SUBSECTION 415.3.8 OF THE STANDARD SPECIFICATIONS.

TIE BARS SHALL CONFORM TO SUBSECTION 505.2.4 OF THE STANDARD SPECIFICATIONS.



SECTION A-A

LONGITUDINAL CONSTRUCTION JOINT

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4*	30"	24"**

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER***	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'

*** FOR DOWELED CONCRETE SHOULDERS WITH TRAPEZOIDAL CROSS SECTIONS, CHOSE THE APPROPRIATE DOWEL BAR DIAMETER BASED ON THE SMALLER PAVEMENT DEPTH (LIKELY THE OUTSIDE EDGE OF THE SHOULDER). IF USING BASKETS, USE BASKETS FOR THE AVERAGE THICKNESS OF THE CROSS SECTION.

CONCRETE PAVEMENT SHOULDERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPERV
FHWA

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S.D.D. 13 A 3-6

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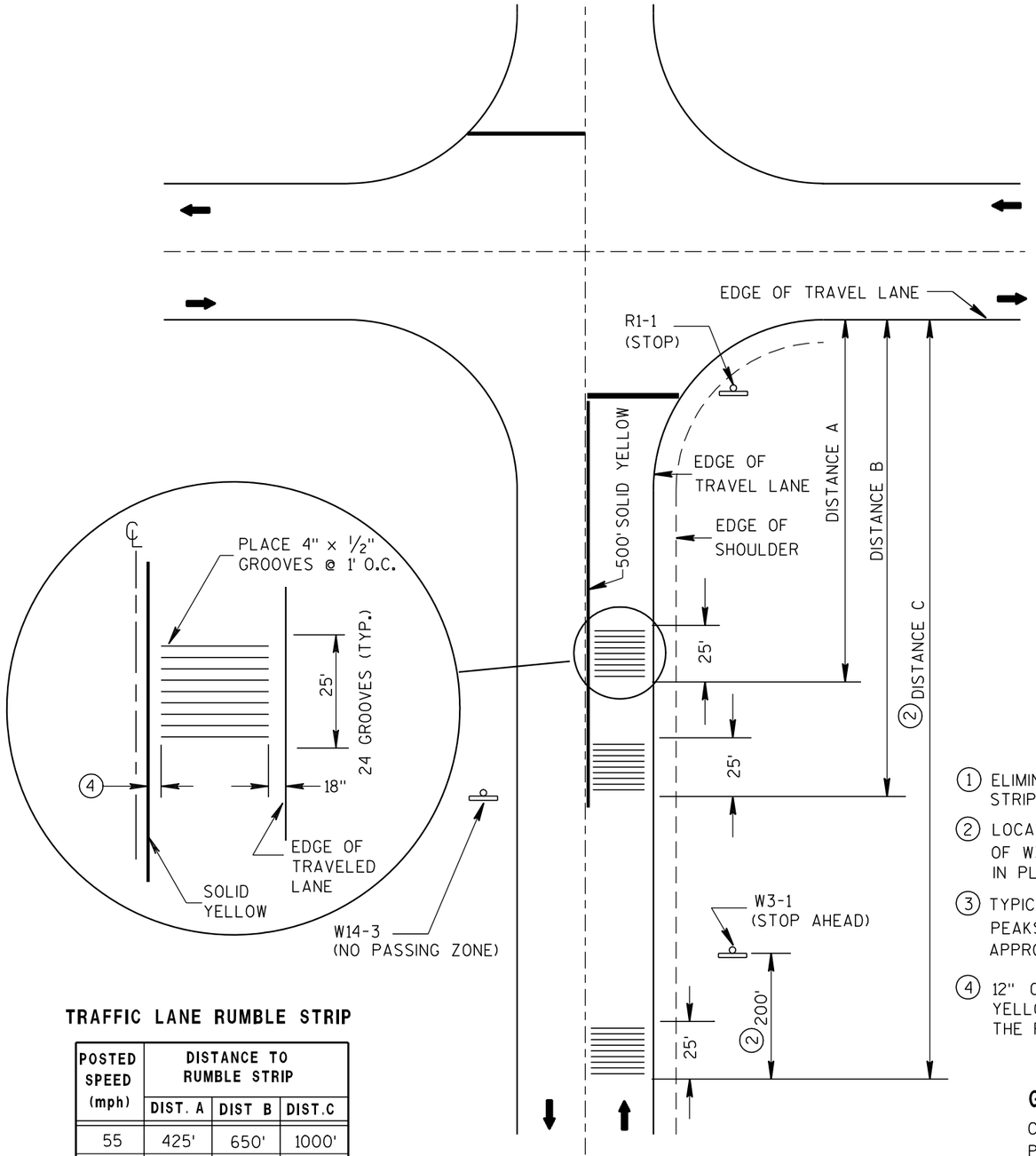
S.D.D. 13 A 3-6



ARROW SYMBOL (➡) SHOWS DIRECTION OF TRAVEL

PLAN VIEW

RUMBLE STRIP LOCATION

TRAFFIC LANE RUMBLE STRIP

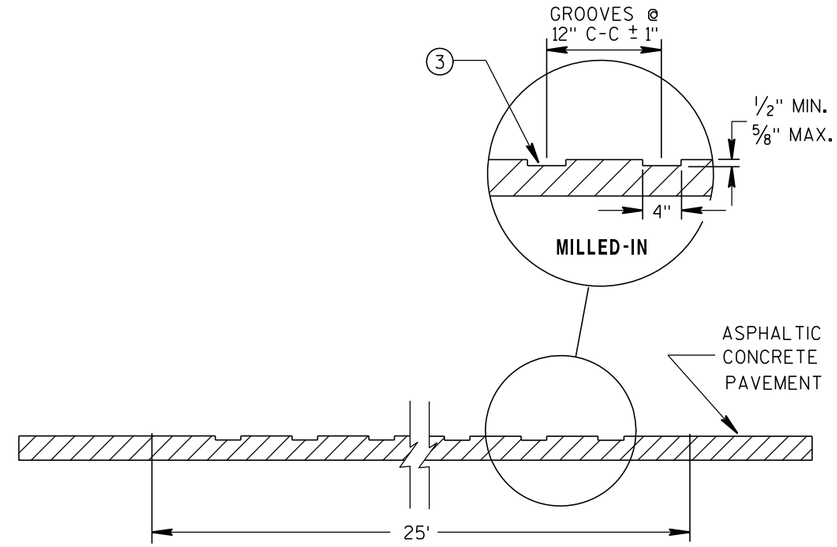
POSTED SPEED (mph)	DISTANCE TO RUMBLE STRIP		
	DIST. A	DIST B	DIST.C
55	425'	650'	1000'
50	325'	450'	800'
45	275'	400'	650'
40	225'	(1)	550'
35	175'	(1)	475'
≤ 30	125'	(1)	425'

(1) ELIMINATE THE MIDDLE SET OF RUMBLE STRIPS.

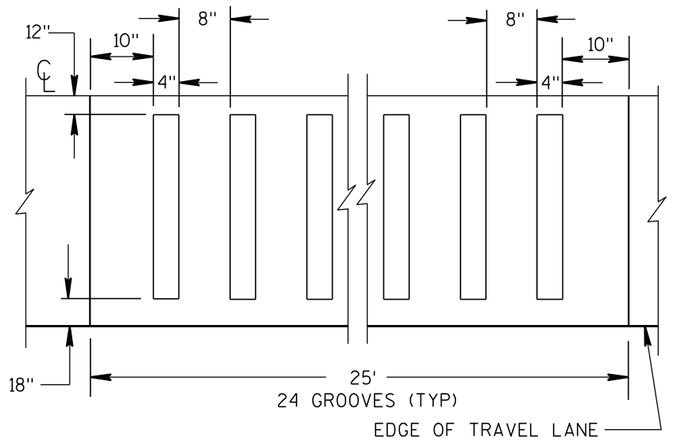
(2) LOCATE RUMBLE STRIP 200' IN ADVANCE OF W3-1 SIGN AS SHOWN. IF W3-1 IS NOT IN PLACE, USE DISTANCE C.

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

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



ELEVATION VIEW



PLAN VIEW

ASPHALTIC PAVEMENT MILLED-IN

GENERAL NOTES

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

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

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

ASPHALTIC RUMBLE STRIPS AT INTERSECTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

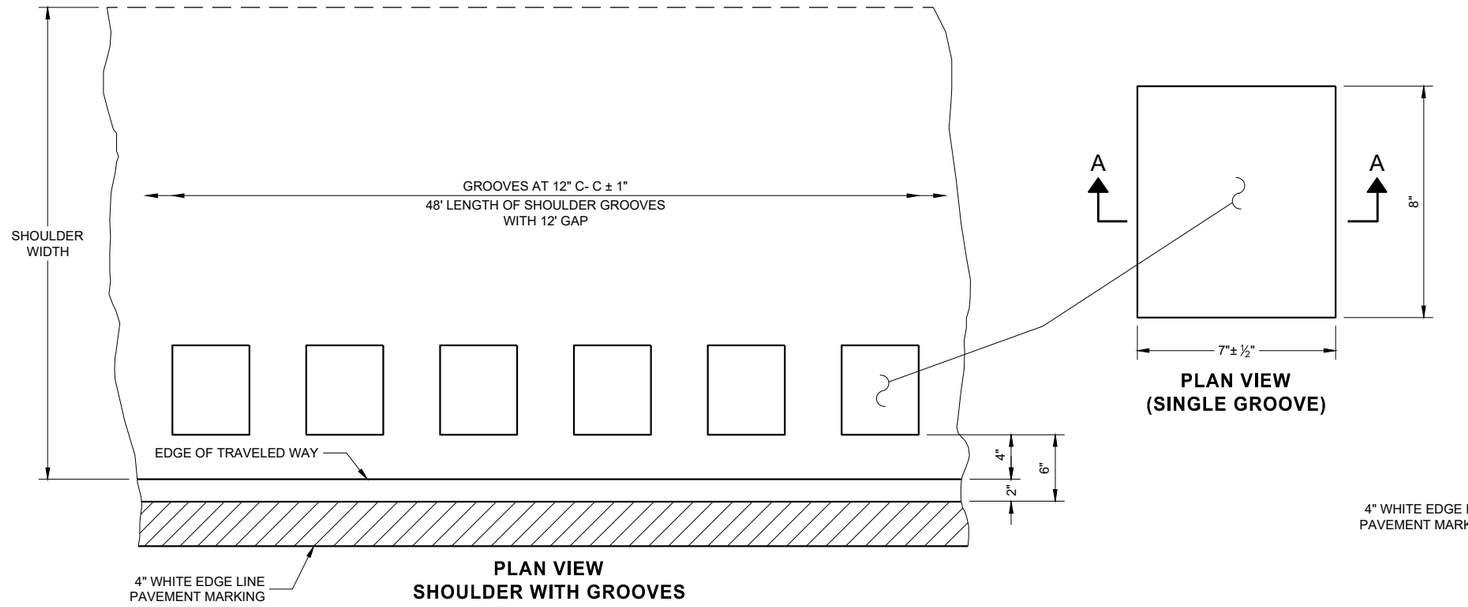
8/17/2011
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS I 84
ENGINEER

FHWA

6

S.D.D. 13 A 8-1



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

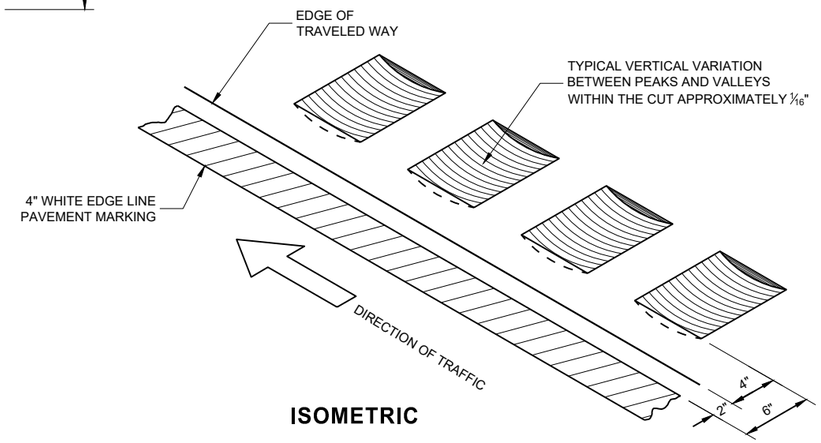
PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP

GENERAL NOTES

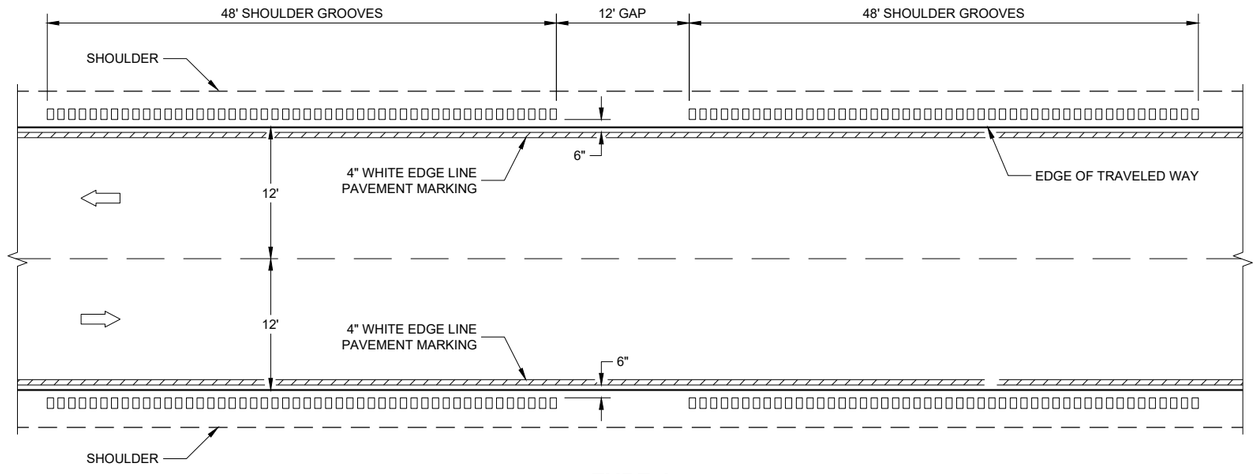
DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

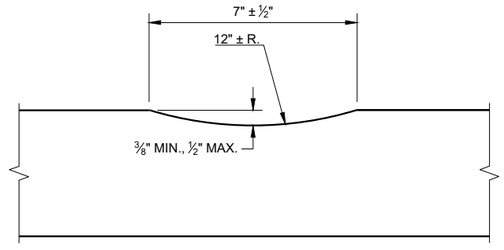
(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



ISOMETRIC



TYPE 1
2 - LANE SHOULDER RUMBLE STRIP



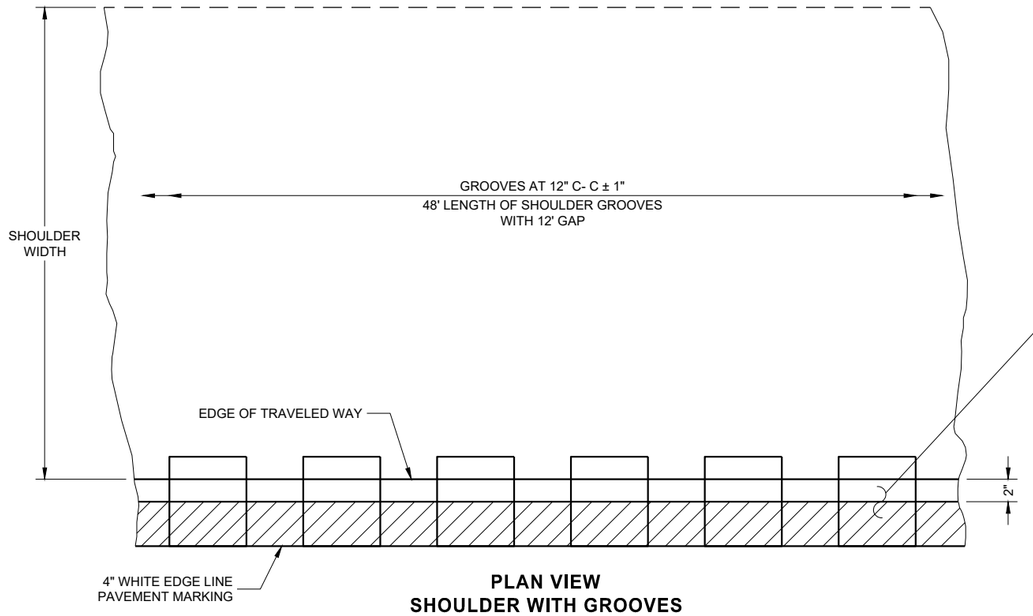
SECTION A - A

2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

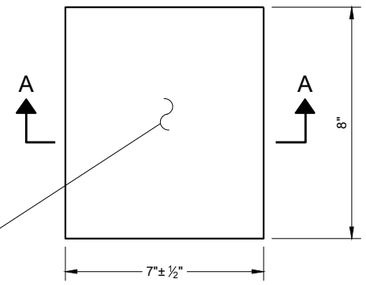
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 13A10 - 02a

SDD 13A10 - 02a



PLAN VIEW
SHOULDER WITH GROOVES



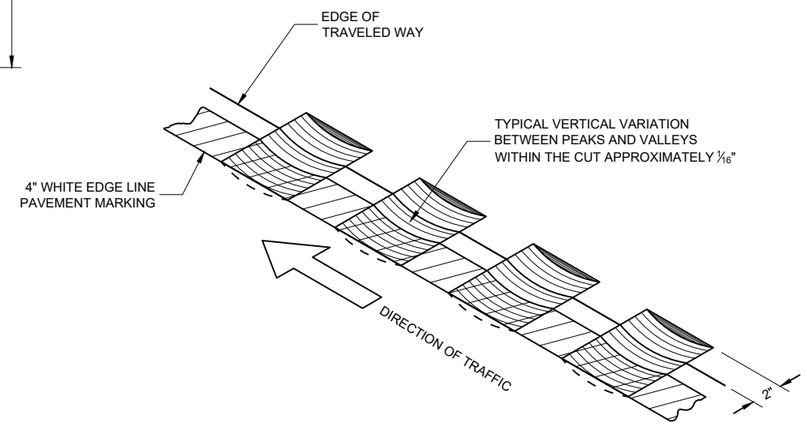
PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

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

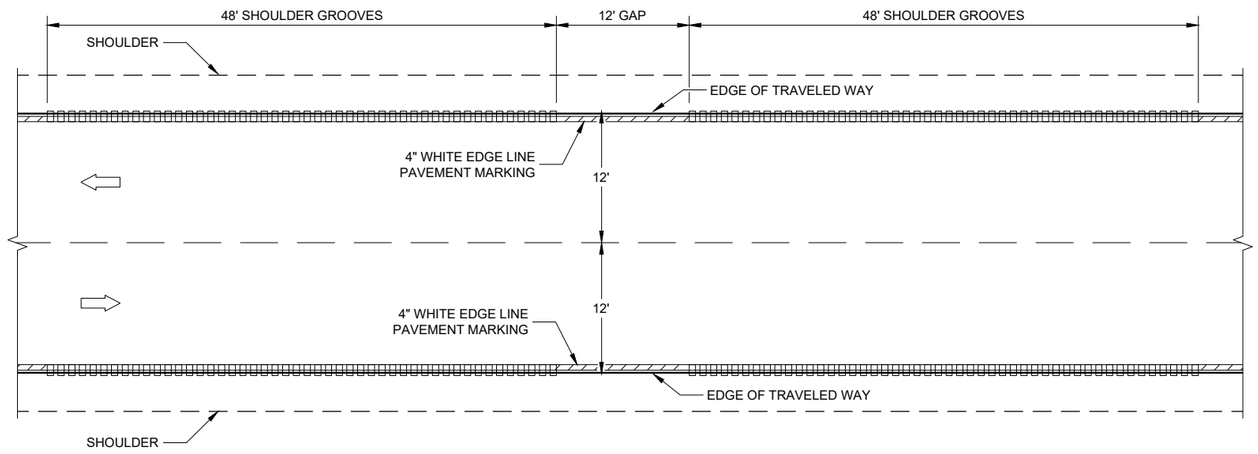
DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

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

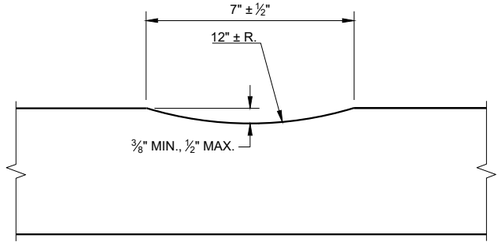


ISOMETRIC

PLACEMENT DETAIL FOR TYPE 2 MILLED RUMBLE STRIP



TYPE 2
2 - LANE SHOULDER RUMBLE STRIP



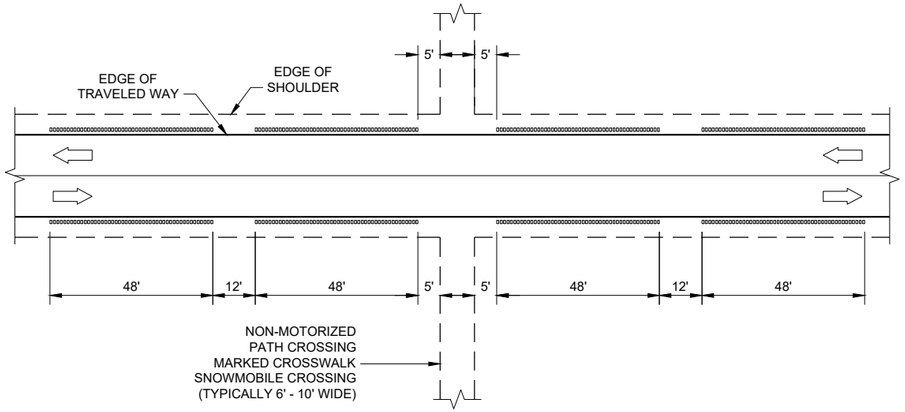
SECTION A - A

2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

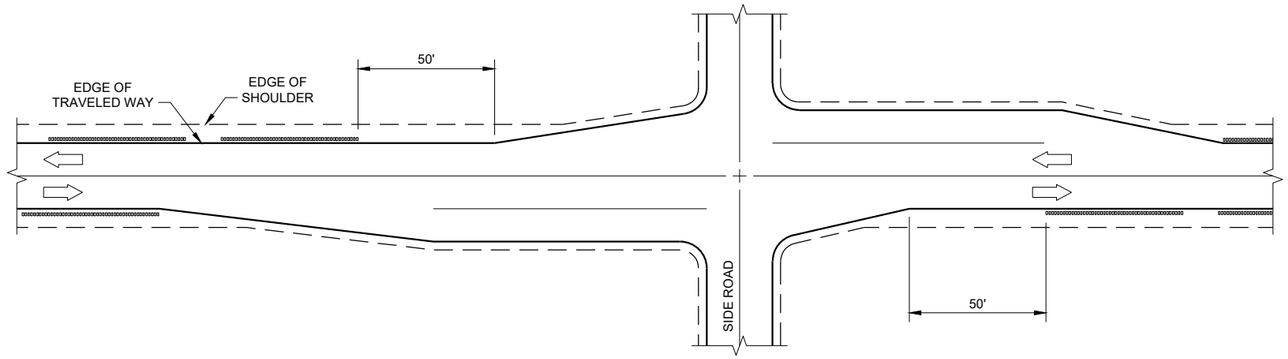
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 13A10 - 02b

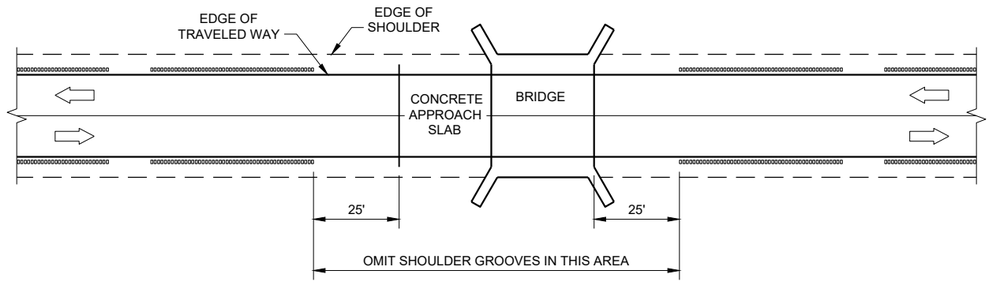
SDD 13A10 - 02b



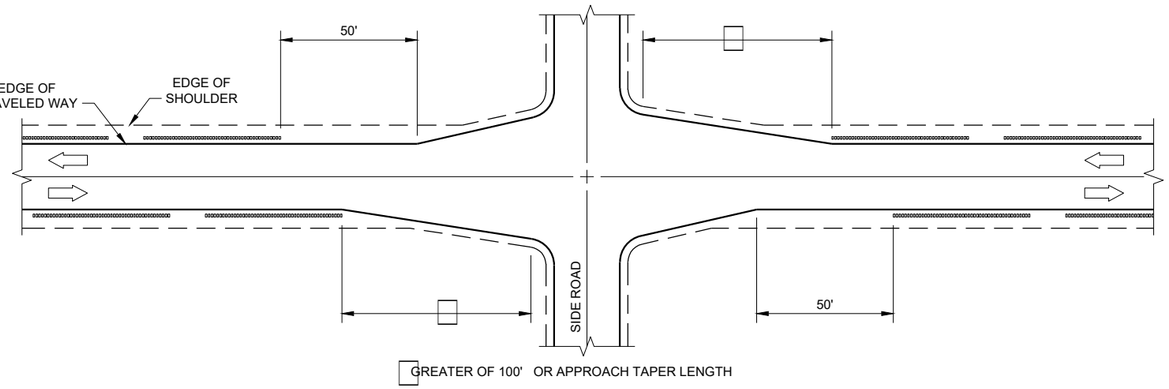
SHOULDER GROOVES AT MISCELLANEOUS CROSSINGS



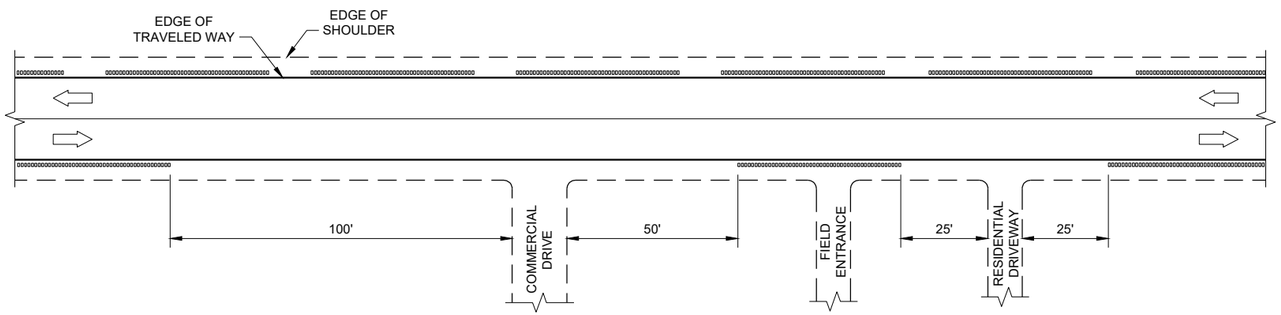
SHOULDER GROOVES AT RIGHT TURN LANE



SHOULDER GROOVES AT BRIDGES



SHOULDER GROOVES AT INTERSECTIONS WITH APPROACH TAPER



SHOULDER GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

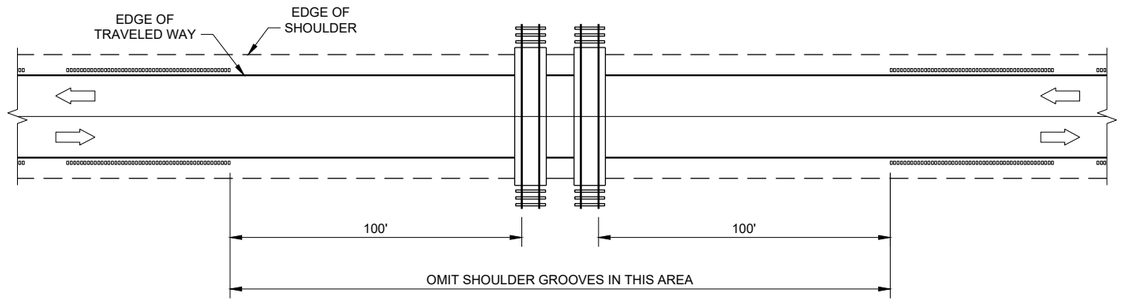
(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.

2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

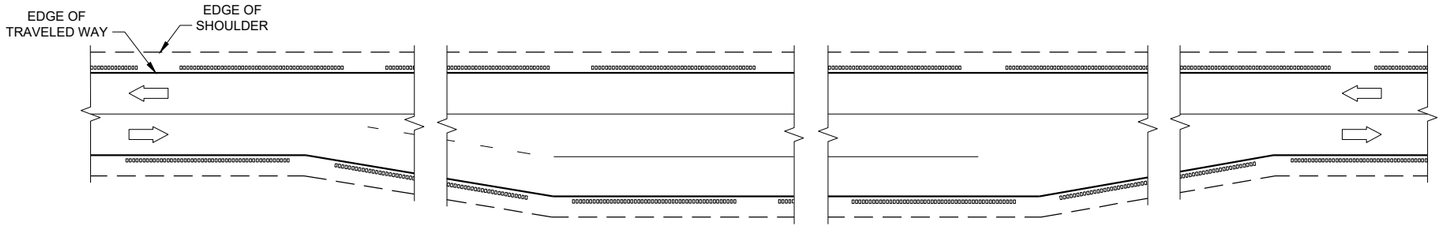
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

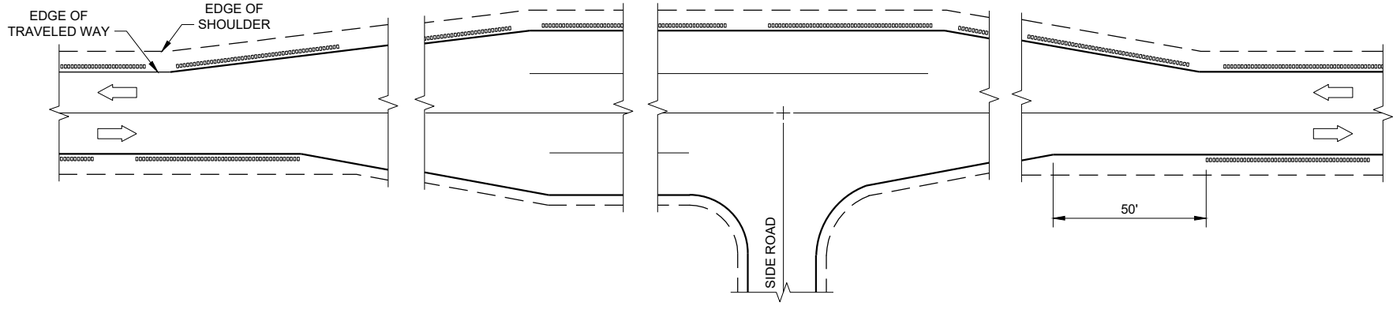
SDD 13A10 - 02c
SDD 13A10 - 02c



SHOULDER GROOVES AT RAILROADS



SHOULDER GROOVES AT PASSING AND CLIMBING LANES



SHOULDER GROOVES AT BYPASS LANES

6

6

SDD 13A10 - 02d

SDD13A10 - 02d

2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

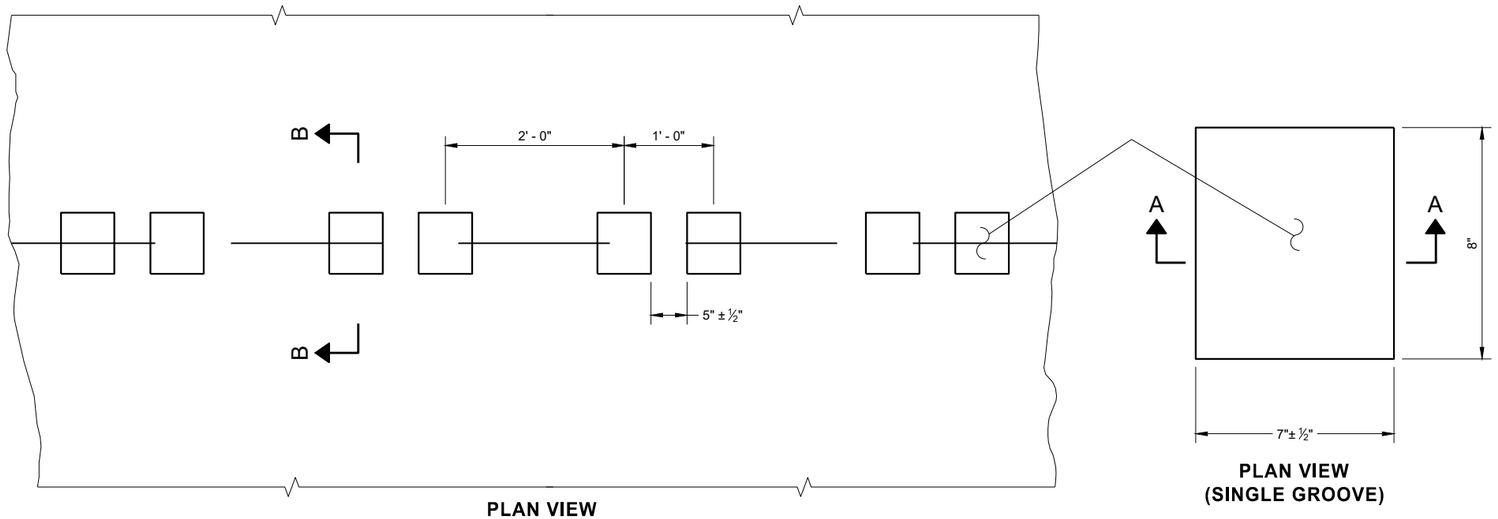
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018
DATE

/S/ R□dney Tay□r
ROADWAY STANDARDS DEVE
ENGINEER

FHWA



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP

GENERAL NOTES

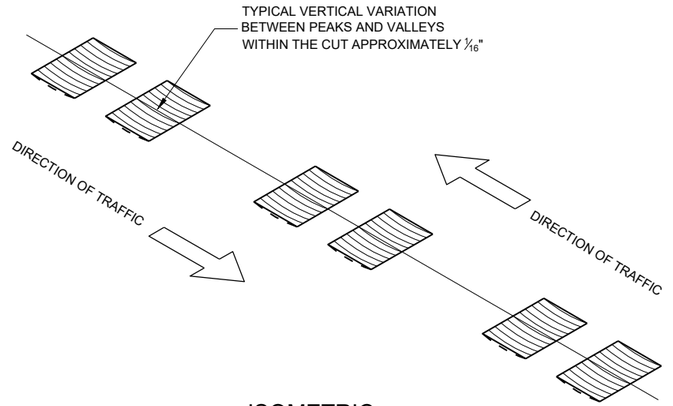
DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

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



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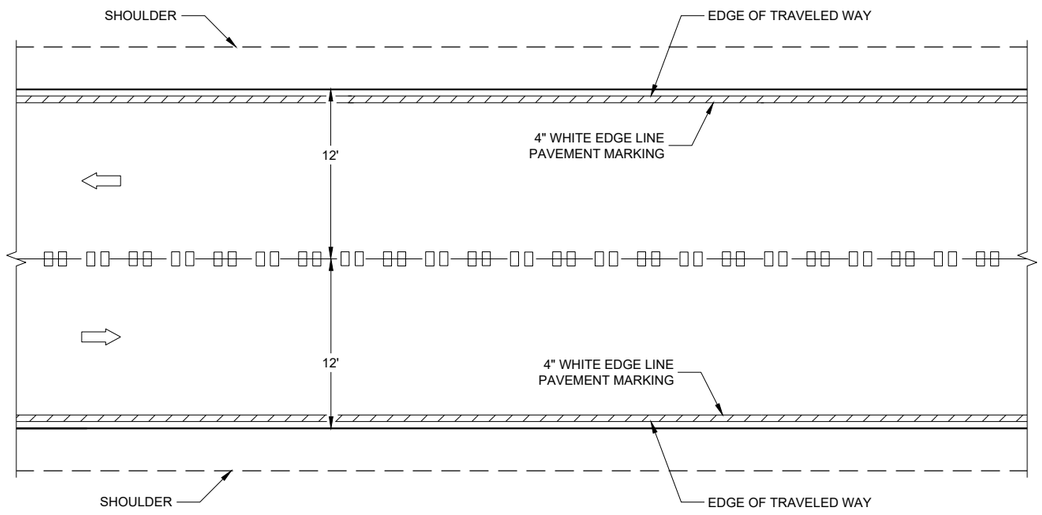
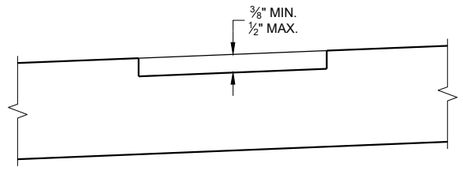
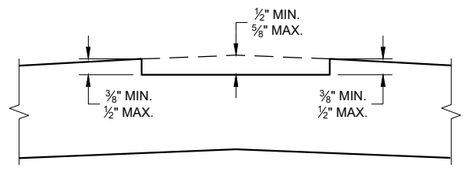


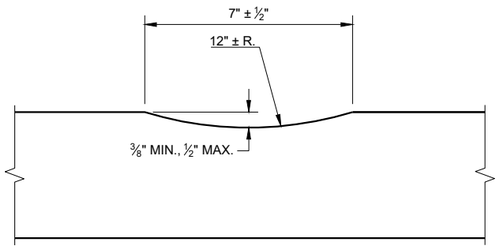
CENTERLINE GROOVES ON TWO-WAY ROADWAYS



SECTION B - B
SUPERELEVATED ROADWAY



SECTION B - B
CROWNED ROADWAY



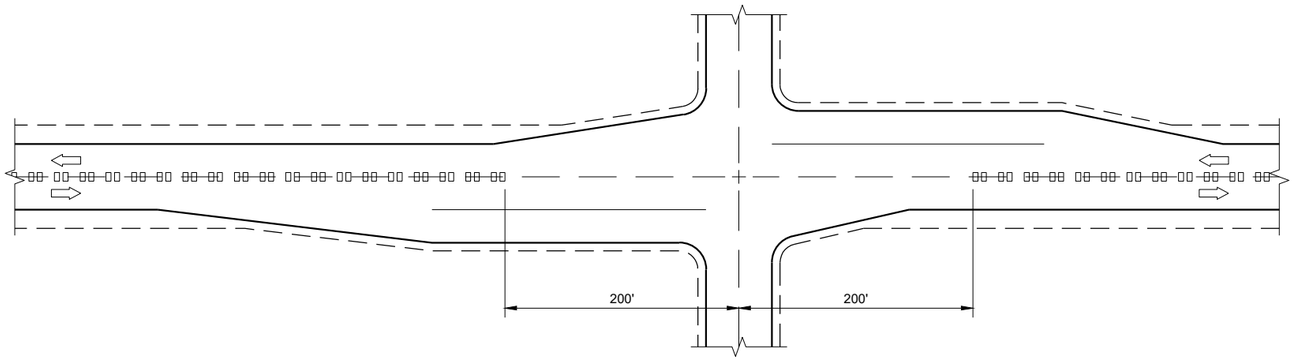
SECTION A - A

2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

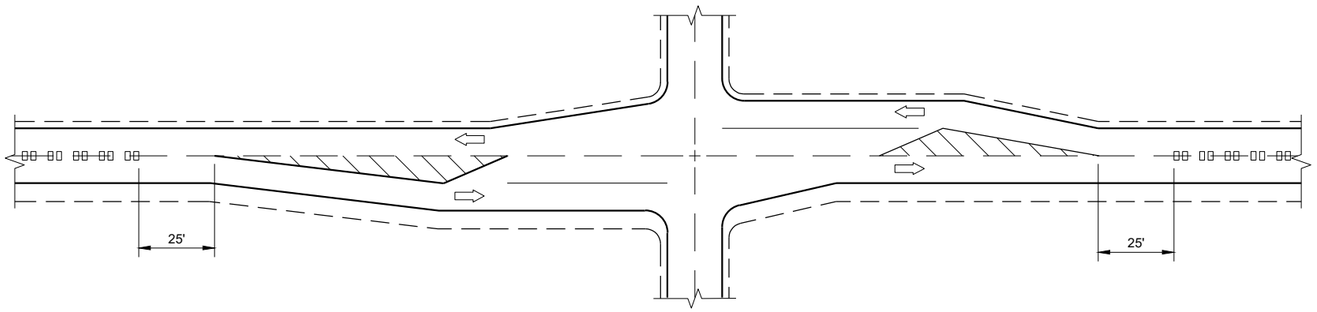
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 13A11 - 03a

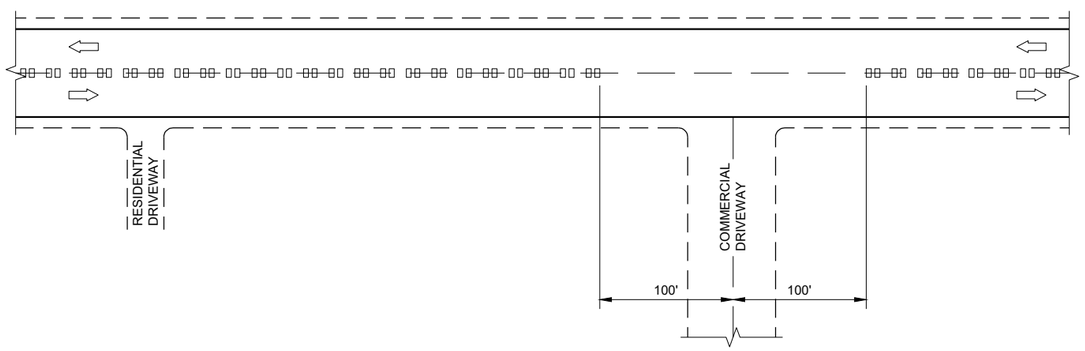
SDD 13A11 - 03a



CENTERLINE GROOVES AT INTERSECTIONS



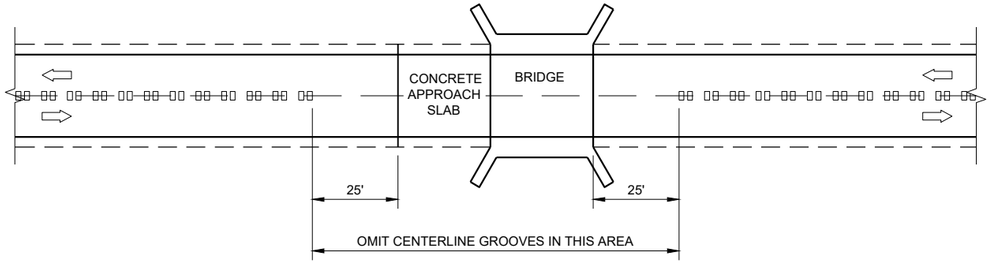
CENTERLINE GROOVES AT INTERSECTIONS (WITH LEFT TURN LANES)



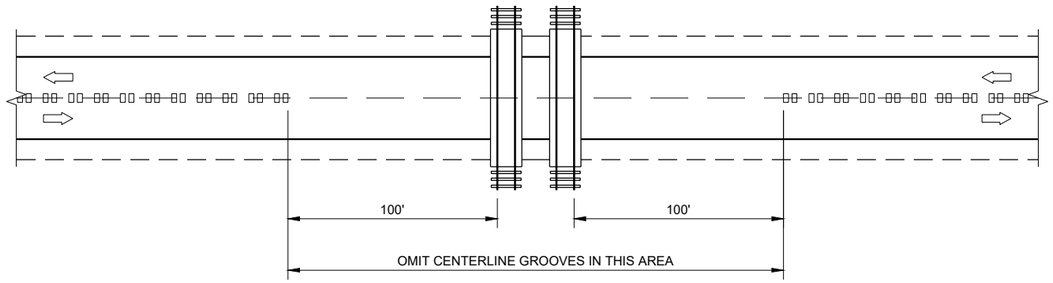
CENTERLINE GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

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



CENTERLINE GROOVES AT BRIDGES



CENTERLINE GROOVES AT RAILROADS

2-LANE RURAL CENTERLINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE

/S/ R□dney Tay□r
ROADWAY STANDARDS DEVE ENGINEER

FHWA

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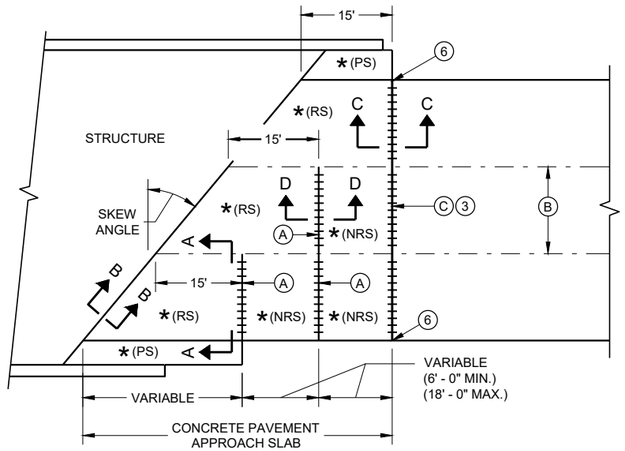
SDD 13A11 - 03b



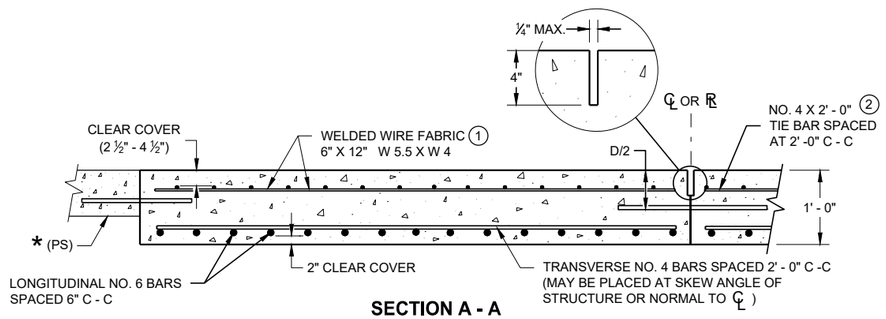
SKEWED APPROACH
(PAVEMENT MORE THAN TWO LANES)

* (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

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.

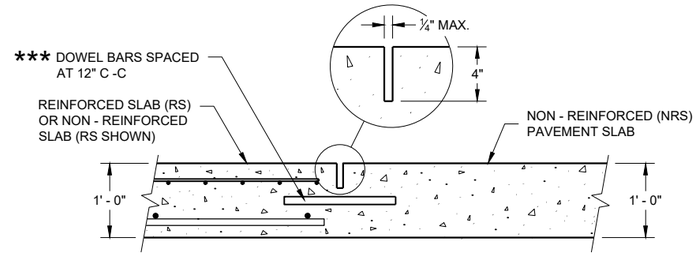
(5) PLACE EXPANSION CAP ON THE END OF THE DOWEL THAT IS NOT TACK WELDED TO THE BASKET. DO NOT FORCE DOWEL BAR PAST THE DOWEL STOP.

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

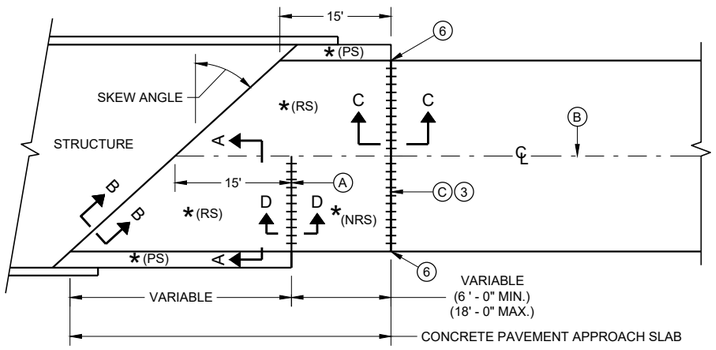
(A) STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℞.

(B) STANDARD LONGITUDINAL JOINT WITH TIE BARS.

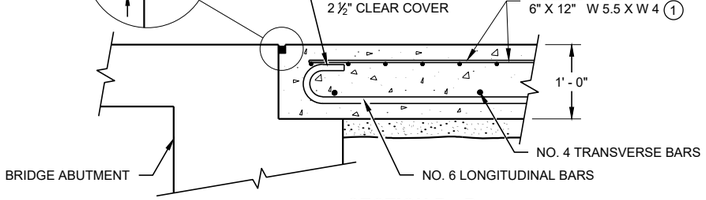
(C) 1 ½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℞ .



SECTION D - D
CONTRACTION JOINT

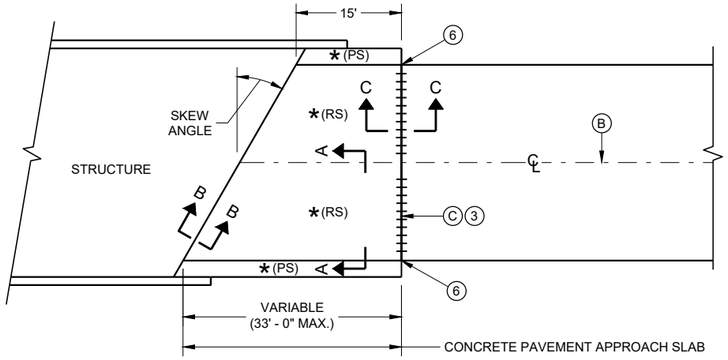


SKEWS > 20°
(PAVEMENT WIDTH ≤ 30')



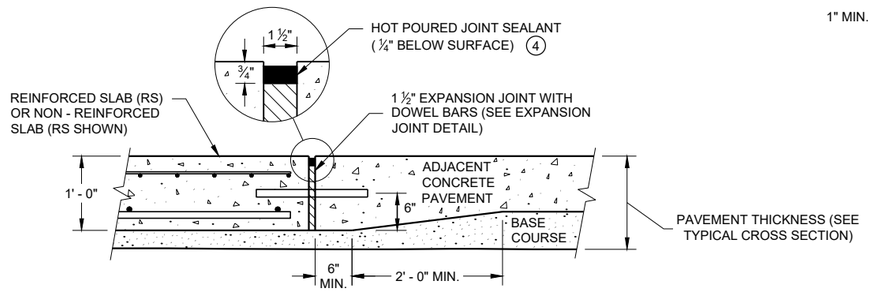
SECTION B - B
BEND DETAIL
BOTTOM REINFORCEMENT

EXPANSION JOINT DETAIL



SKEWS ≤ 20°
(PAVEMENT WIDTH ≤ 30')

APPROACH SLAB AND ADJACENT PAVEMENT



SECTION C - C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT

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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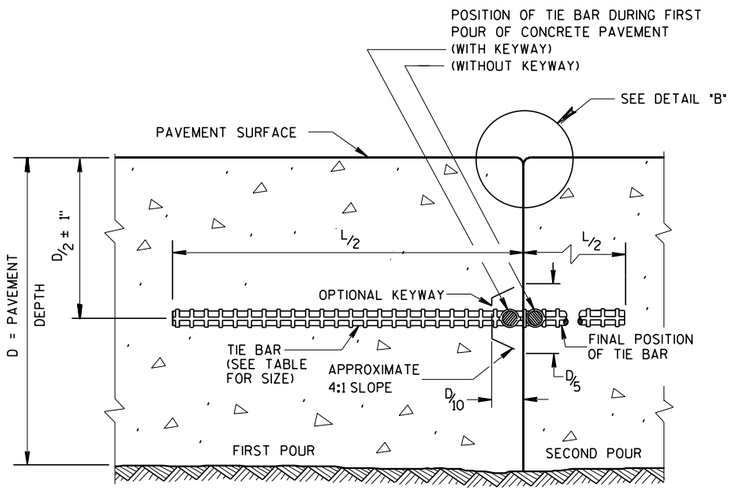
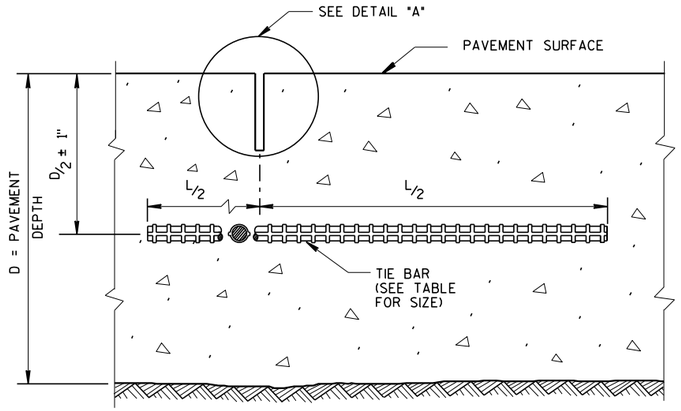
SDD 13B02 - 09a



CONSTRUCTION JOINT



SAWED JOINT

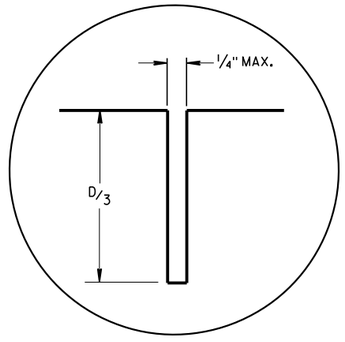
GENERAL NOTES

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

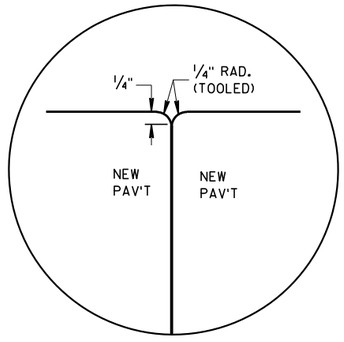
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

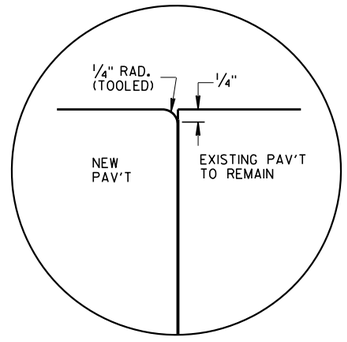
(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.



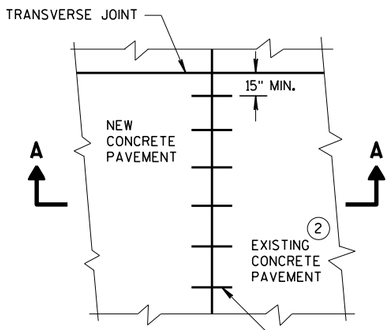
DETAIL "A"



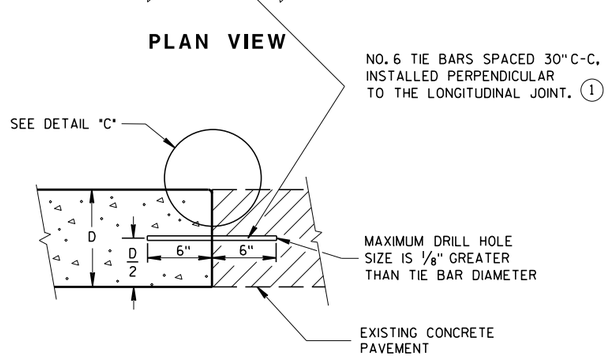
DETAIL "B"



DETAIL "C"



PLAN VIEW



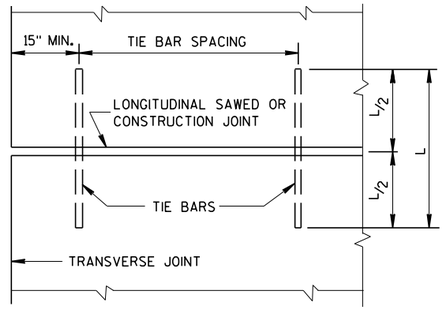
SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Peter Kemp — PAVEMENT SUPE
FHWA

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S.D.D. 13 C 1-19

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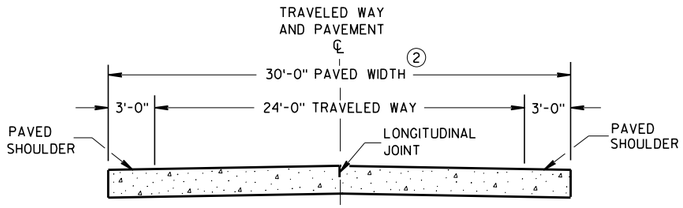
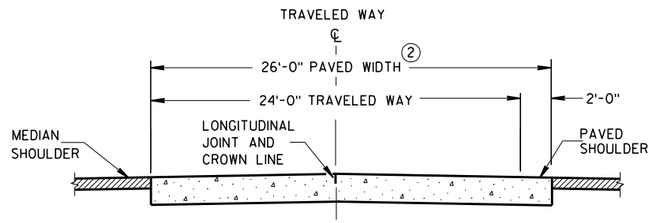
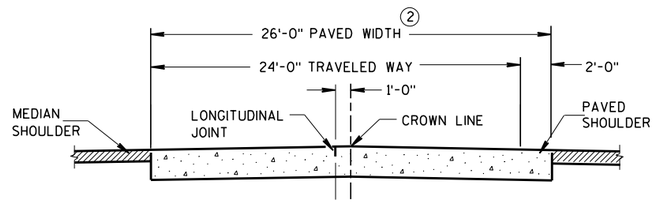
S.D.D. 13 C 1-19



SECTION A-A
TWO-LANE TWO-WAY HIGHWAY (1)



SECTION B-B



ALTERNATIVE SECTION B-B
(1)
DIVIDED HIGHWAY

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES AND A MAXIMUM OF 18 INCHES FROM THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

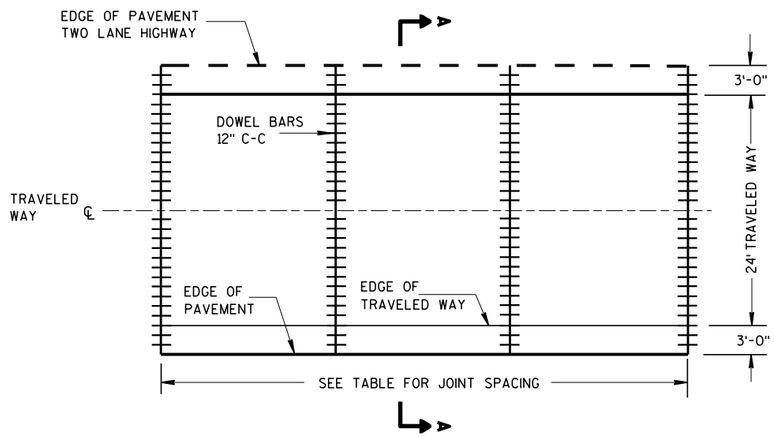
LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

(1) REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.

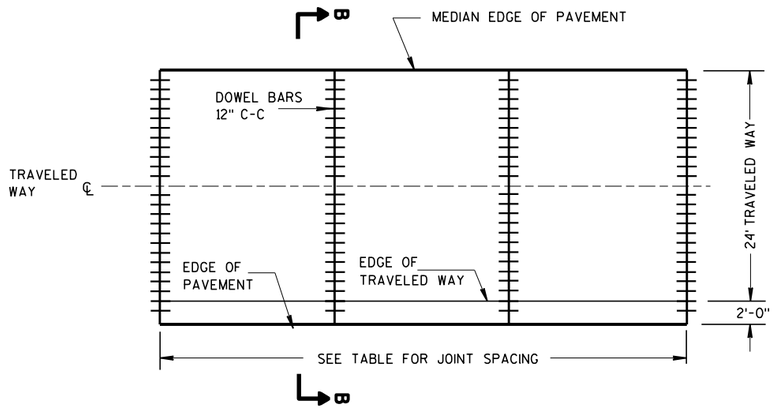
(2) MEASURE THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED PAVED SHOULDER AS CONCRETE PAVEMENT.

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'



CONTRACTION JOINT LAYOUT
FOR TWO-LANE TWO-WAY HIGHWAY



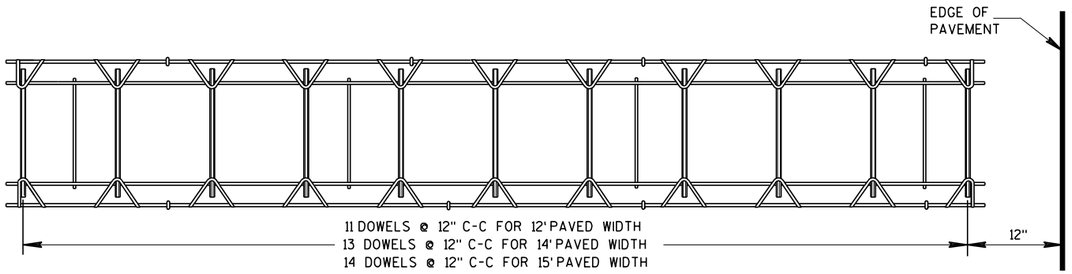
CONTRACTION JOINT LAYOUT
FOR DIVIDED HIGHWAY

RURAL DOWELED CONCRETE PAVEMENT

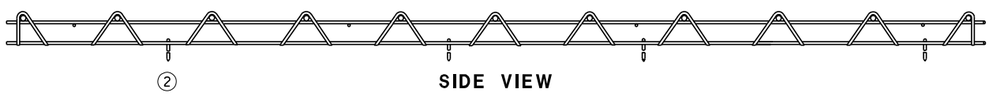
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 13 C 11-12a



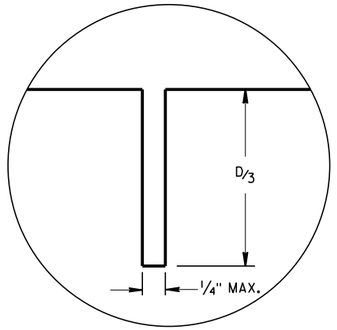
PLAN VIEW



SIDE VIEW

(NORMAL TO CENTERLINE)

CONTRACTION JOINT DOWEL ASSEMBLY ①



JOINT DETAIL

GENERAL NOTES

① OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.

② SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

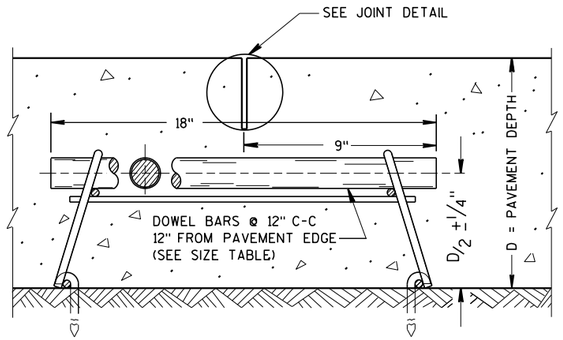
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A 1/4-INCH RADIUS AT FORMED JOINTS.

④ PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

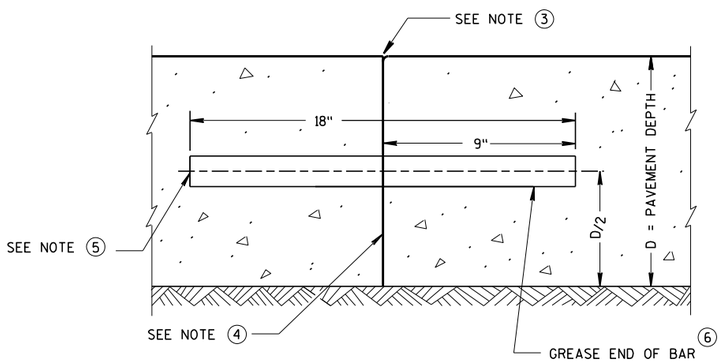
⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.

⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

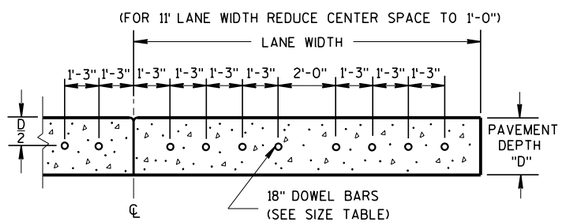
⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS 1/8-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



DOWELED CONTRACTION JOINT



TRANSVERSE CONSTRUCTION JOINT



DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦

RURAL DOWELED CONCRETE PAVEMENT	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED March 2018 DATE FHWA	/S/ Peter Kemp P.E. PAVEMENT SUP

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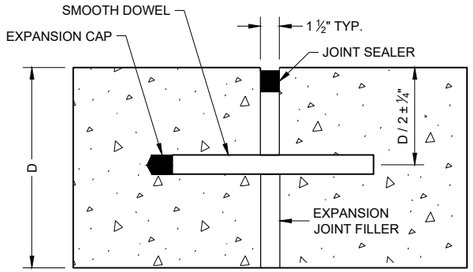
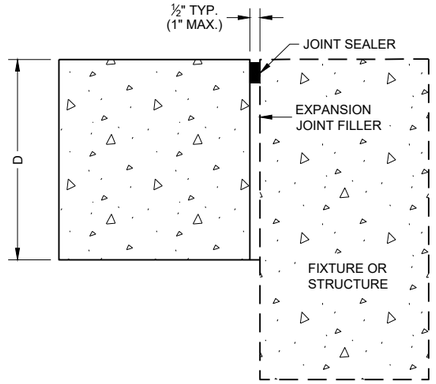
S.D.D. 13 C 11-12b



DOWELED TRANSVERSE (1)



UNTIED - LONGITUDINAL

EXPANSION JOINTS

TIE BAR TABLE

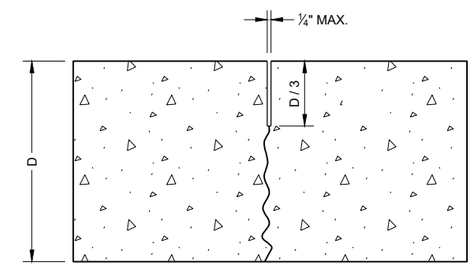
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
□ 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4 □	30"	24" □□

□ SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.□ AUXILIARY LANES OR TURN LANES)

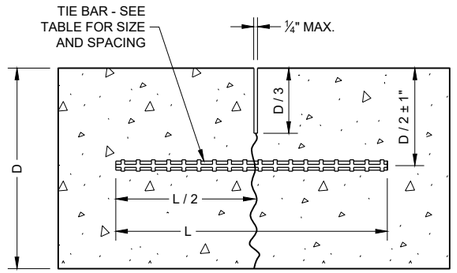
□□ CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS□SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

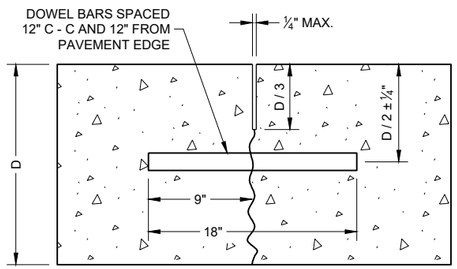
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATETHE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
5. IF JOINT IS FORMED, PROVIDE A ¼" RADIUS.
6. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



UNDOWELED TRANSVERSE

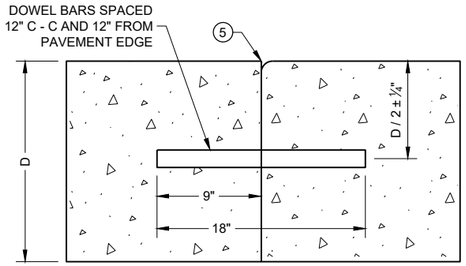


TIED LONGITUDINAL

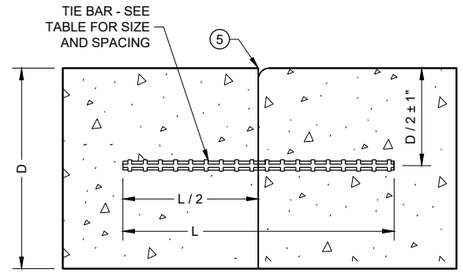


DOWELED TRANSVERSE

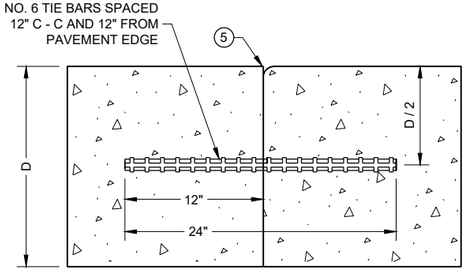
CONTRACTION JOINTS (2)



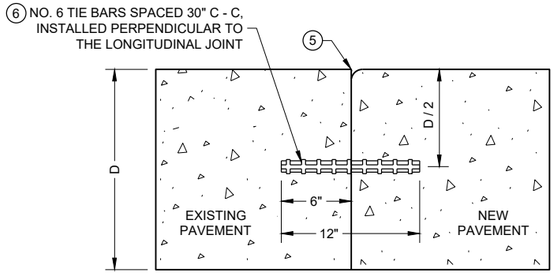
DOWELED TRANSVERSE (3)



TIED LONGITUDINAL



TIED TRANSVERSE (3)
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

CONSTRUCTION JOINTS (4)

CONCRETE PAVEMENT JOINT TYPES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 13C18 - 07c

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

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

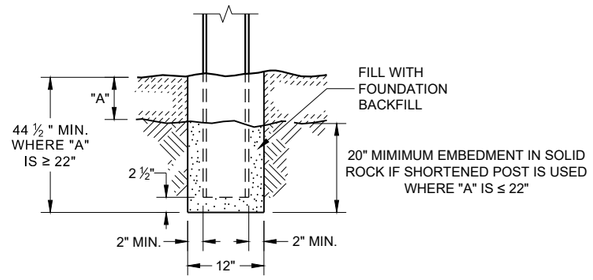
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL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

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

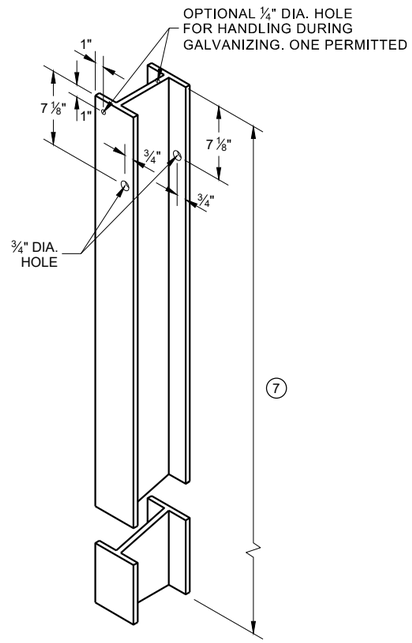
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS +1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

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

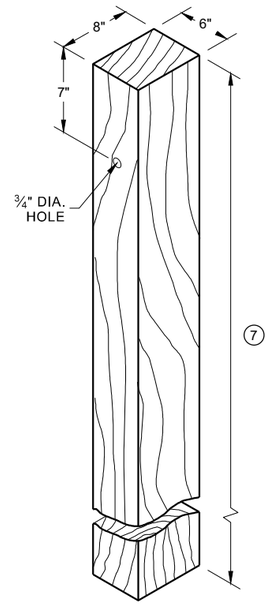
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



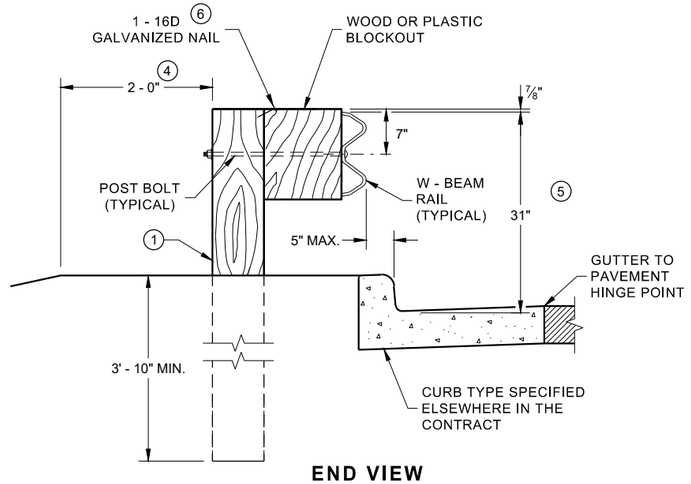
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



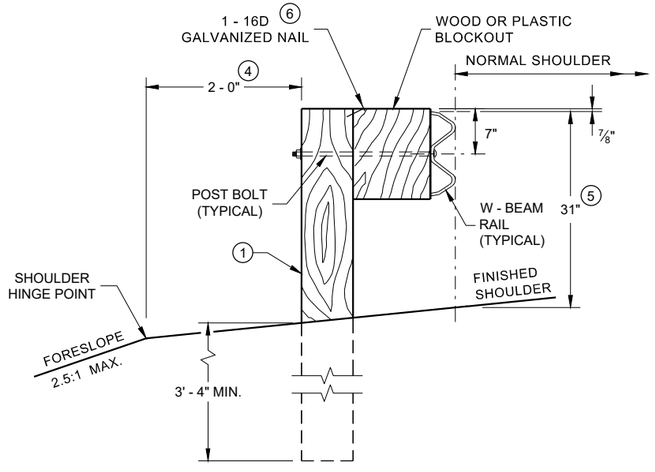
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



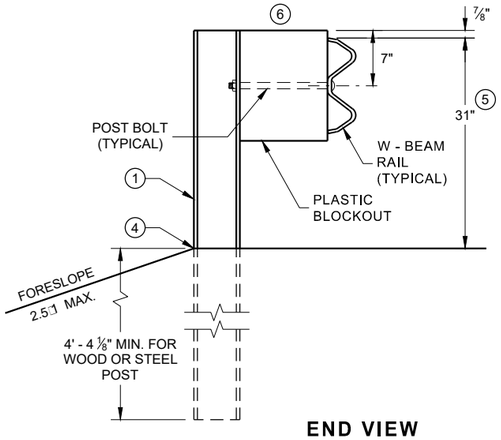
WOOD POST (6" X 8") NOMINAL (1)



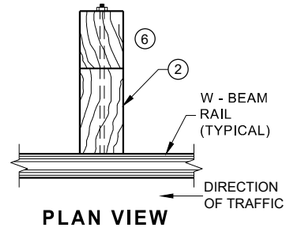
END VIEW
LOCATED ALONG A CURBED ROADWAY



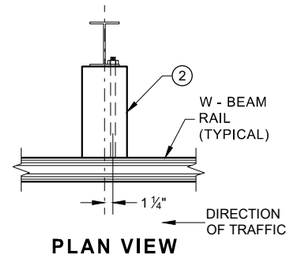
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



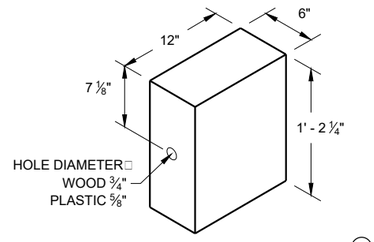
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM

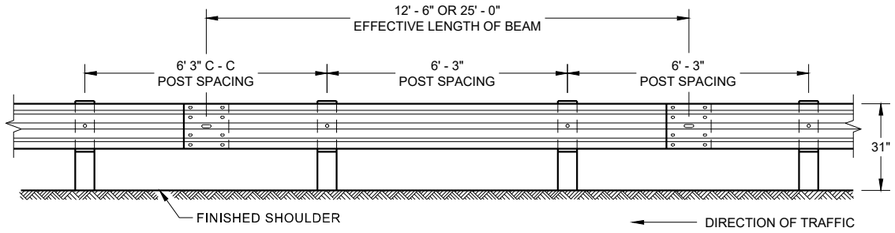


WOOD OR PLASTIC BLOCKOUT (2)

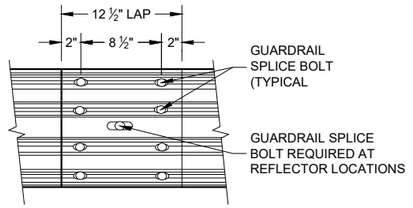
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B42 - 06a



FRONT VIEW
POST SPACING STANDARD INSTALLATION



FRONT VIEW
MID-SPAN BEAM SPLICE

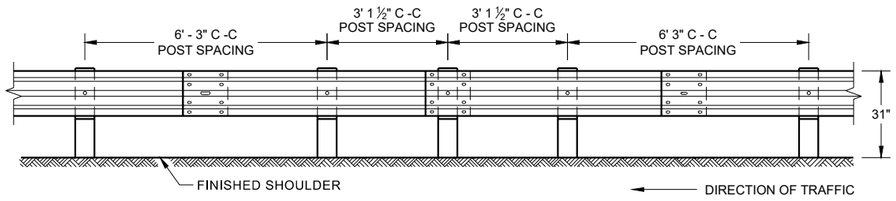
GENERAL NOTES

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

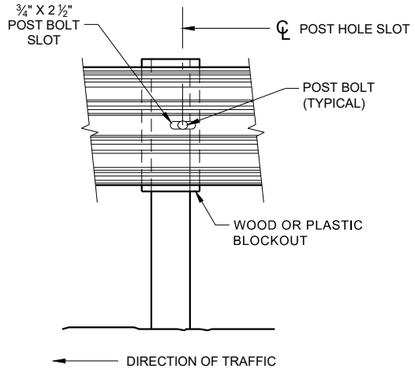
(9) 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

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.

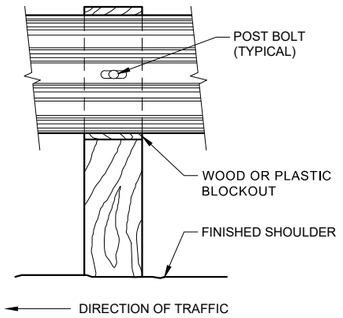
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



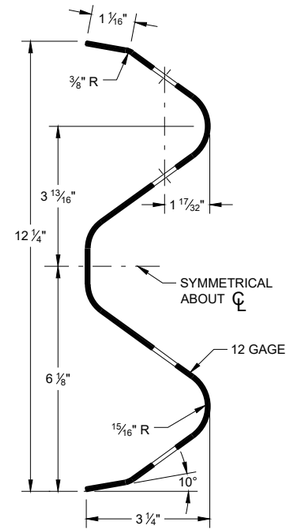
FRONT VIEW
HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)



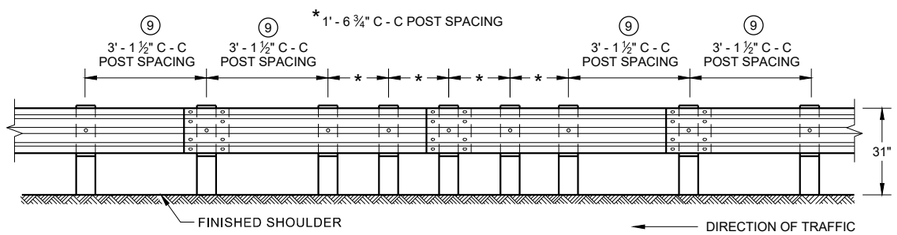
FRONT VIEW AT STEEL POST



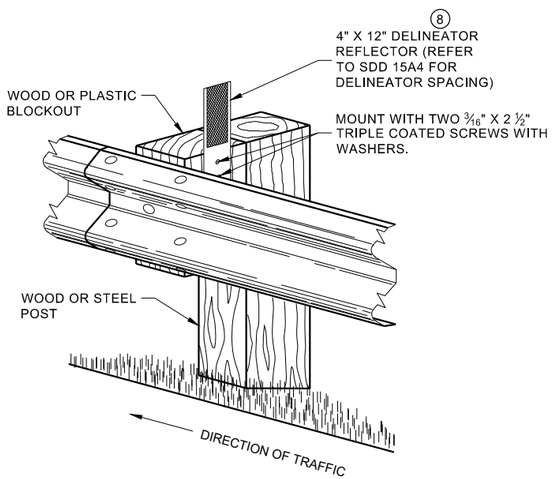
FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



FRONT VIEW
QUARTER POST SPACING (QS)



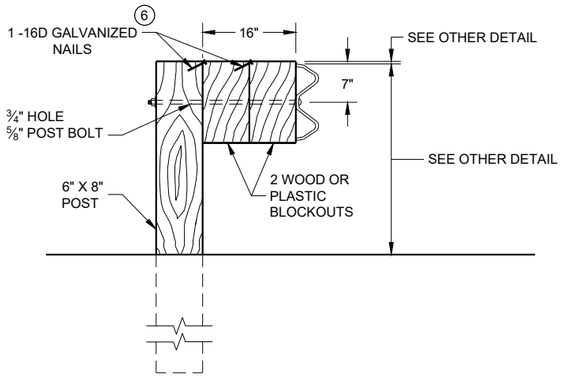
ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B42 - 06b

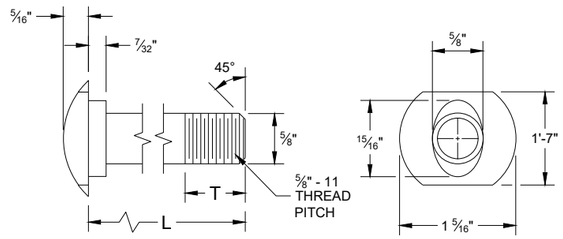


DETAIL FOR 16" BLOCKOUT DEPTH

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

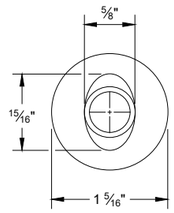
NOTE:

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

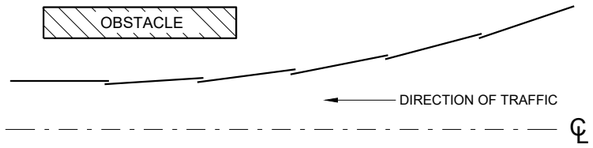


POST BOLT TABLE

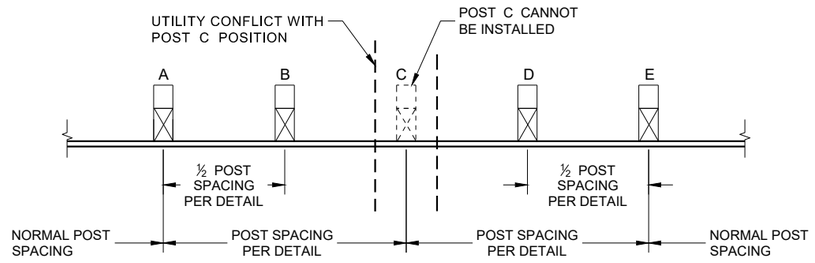
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



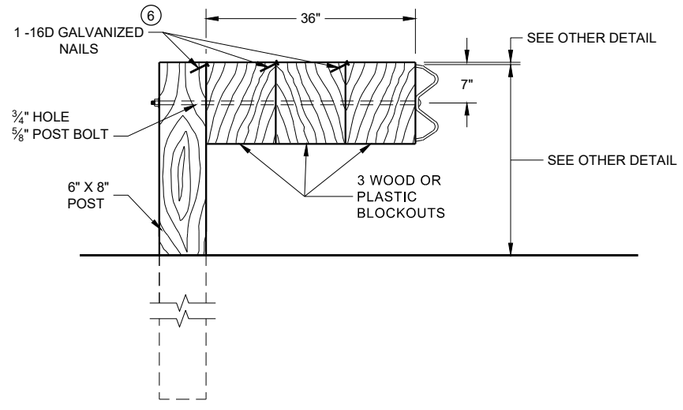
ALTERNATE BOLT HEAD



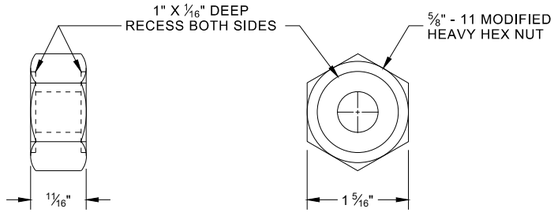
PLAN VIEW
BEAM LAPPING DETAIL



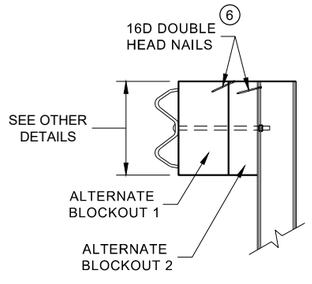
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



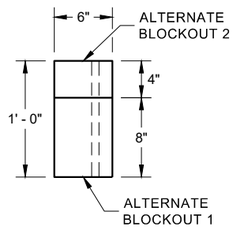
DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW



PLAN VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

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

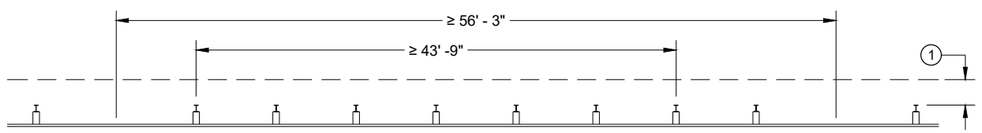
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

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

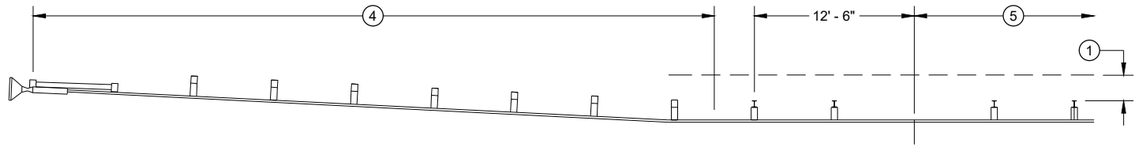
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

6

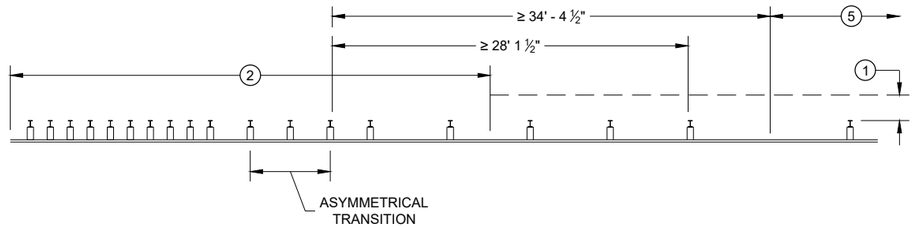
SDD 14B42 - 06c



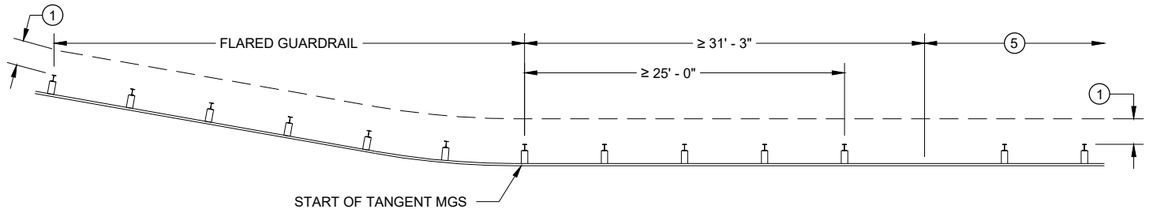
MISSING POST IN NORMAL BEAM GUARD RUN



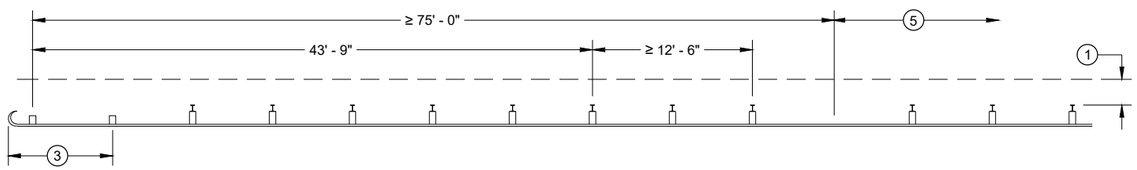
MISSING POST IN NORMAL BEAM GUARD RUN NEAR EAT



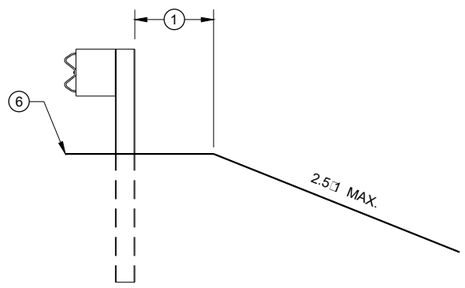
MISSING POST NEAR APPROACH THRIE BEAM TRANSITION



MISSING POST IN NORMAL BEAM GUARD RUN NEAR FLARED BEAM GUARD



MISSING POST IN NORMAL BEAM GUARD RUN NEAR TYPE 2 TERMINAL



CROSS SECTION VIEW

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

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 — DATE
/S/ R□dney Tay□r — ROADWAY STANDARDS DEVE UNIT SUPERVISOR
FHWA

SDD 14B42 - 06d

SDD 14B42 - 06d

GENERAL NOTES

(A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL) AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED

(C) DIFFERENT MANUFACTURERS REQUIRE DIFFERENT PERFORATED W - BEAM RAIL END PANELS. SEE MANUFACTURER'S INFORMATION.

(D) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF - TAPPING SCREWS. ONE SCREW PER CORNER.

(E) HARDWARE MAY VARY BETWEEN MANUFACTURER. SEE MANUFACTURER'S DRAWING FOR INFORMATION.

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

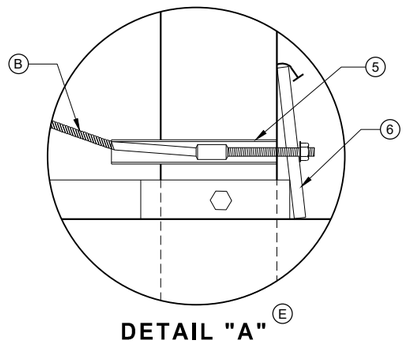
SEE SDD 14B42 FOR MORE INFORMATION.

DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

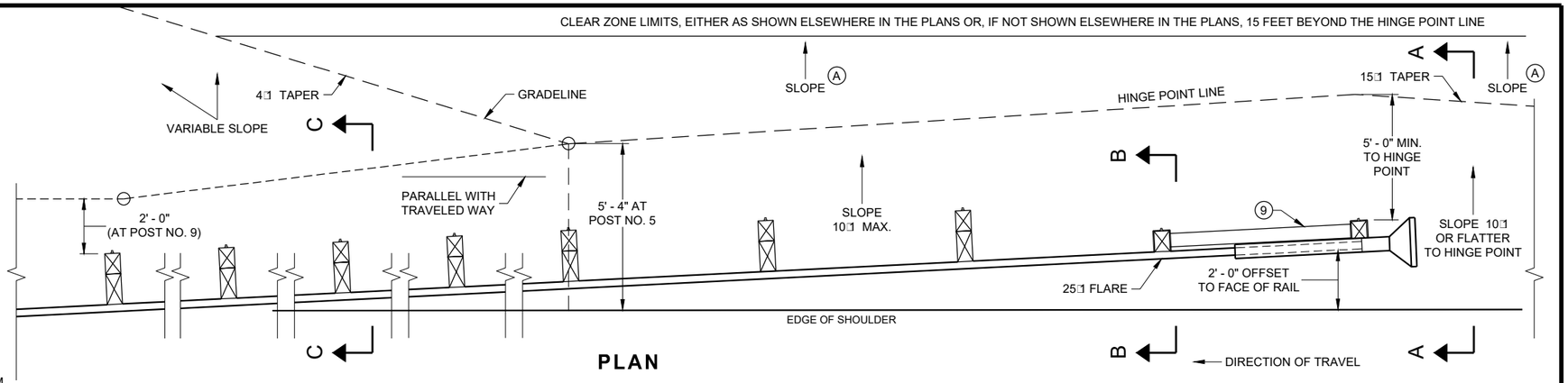
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

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

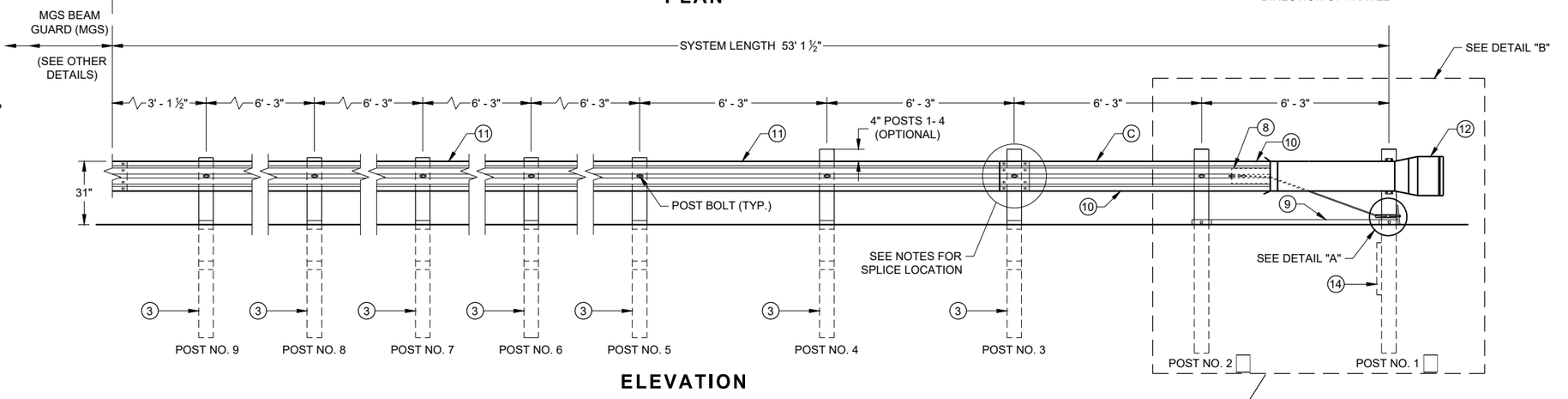
THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



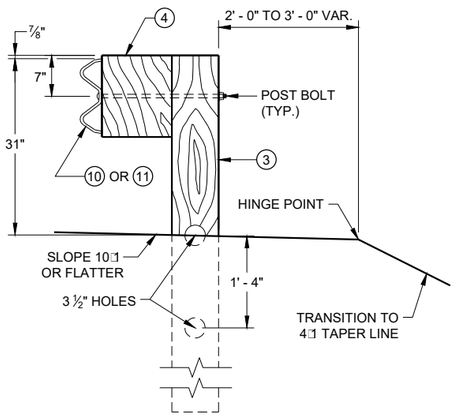
DETAIL "A" (E)



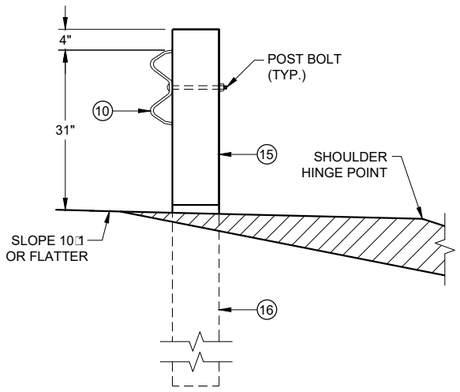
PLAN



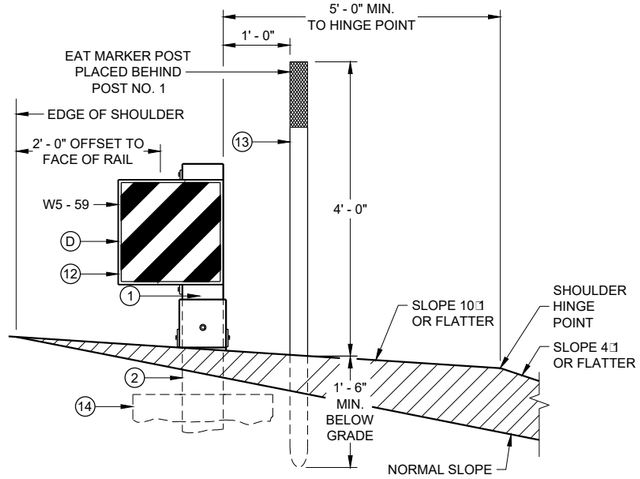
ELEVATION



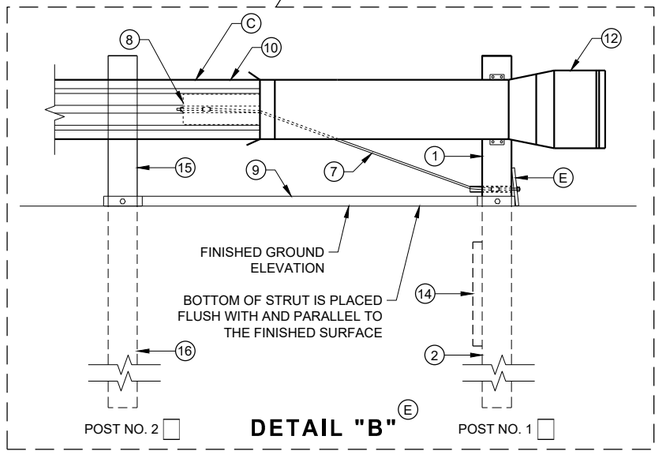
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2 (E)



SECTION A - A
TYPICAL AT POST NO. 1 (E)



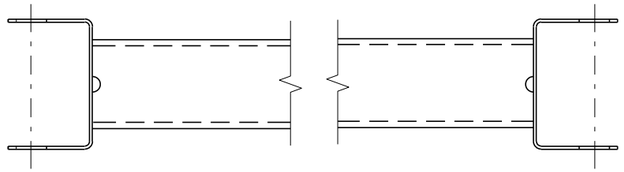
DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

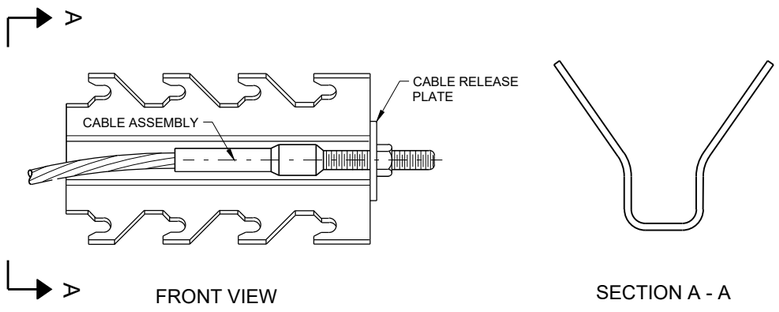
SDD 14B44 - 04a



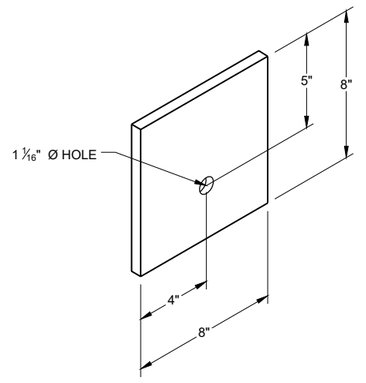
GENERIC GROUND STRUT ⑨ Ⓔ

BILL OF MATERIALS

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



GENERIC ANCHOR CABLE BOX ⑨ Ⓔ



BEARING PLATE ⑥ Ⓔ

6

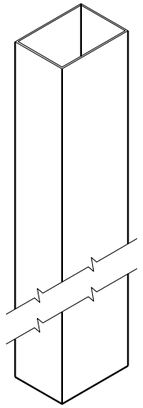
6

SDD 14B44 - 04b

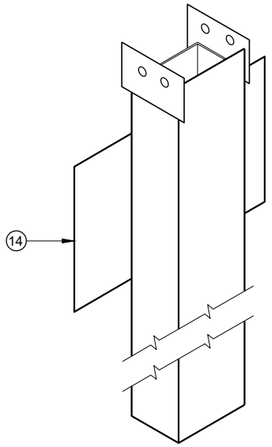
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

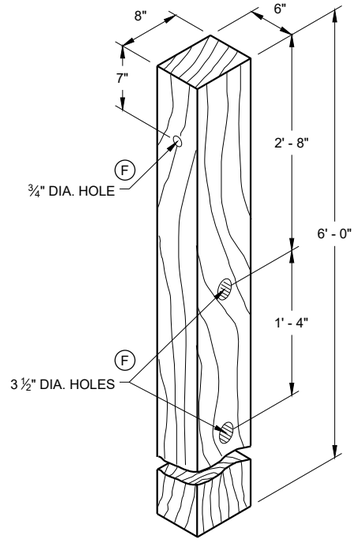
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



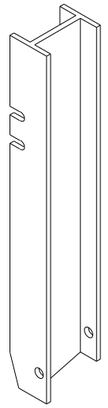
UPPER POST NO. 1 (1) (E)



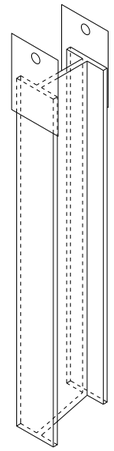
LOWER POST NO. 1 (2) (E)



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



UPPER POST NO. 2 (15) (E)



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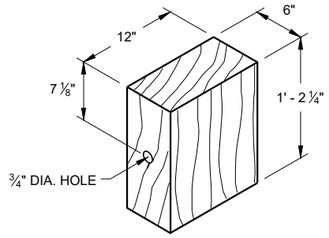
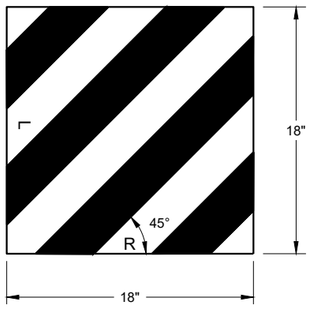
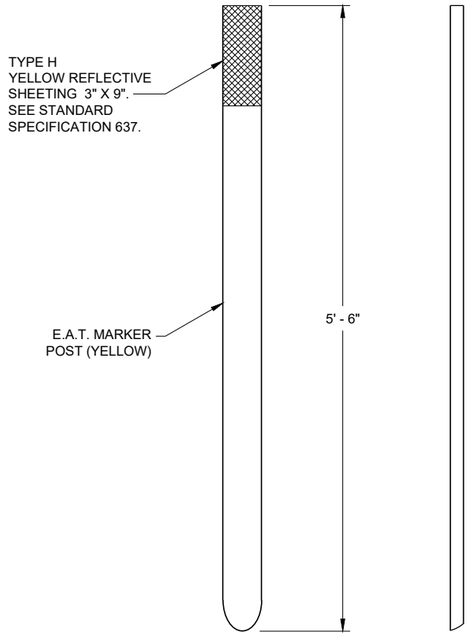


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 □ 2

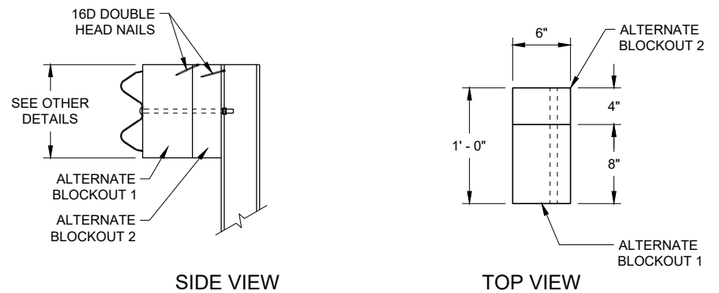


W5 - 59

REFLECTIVE SHEETING DETAIL (E)



E.A.T. MARKER POST (13)



ALTERNATE WOOD BLOCKOUT DETAIL

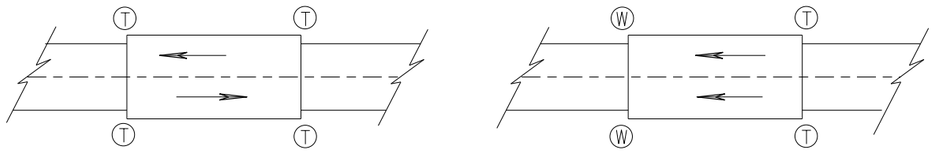
MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
/S/ R□dney Tay□r
ROADWAY STANDARDS DEVE
UNIT SUPERVISOR
FHWA

6

SDD 14B44 - 04c
SDD 14B44 - 04c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

(T) THRIE BEAM CONNECTION

(W) W-BEAM CONNECTION WHEN REQUIRED

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

GENERAL NOTES

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

TRANSITION USES STEEL POSTS ONLY.

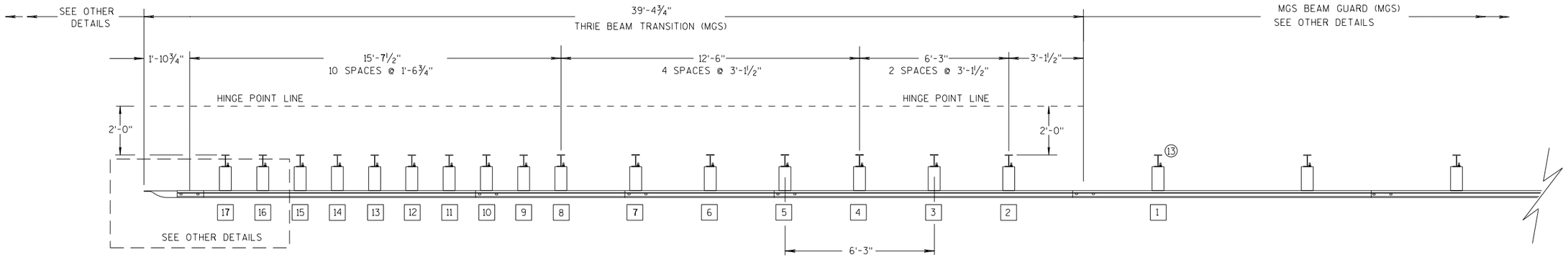
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

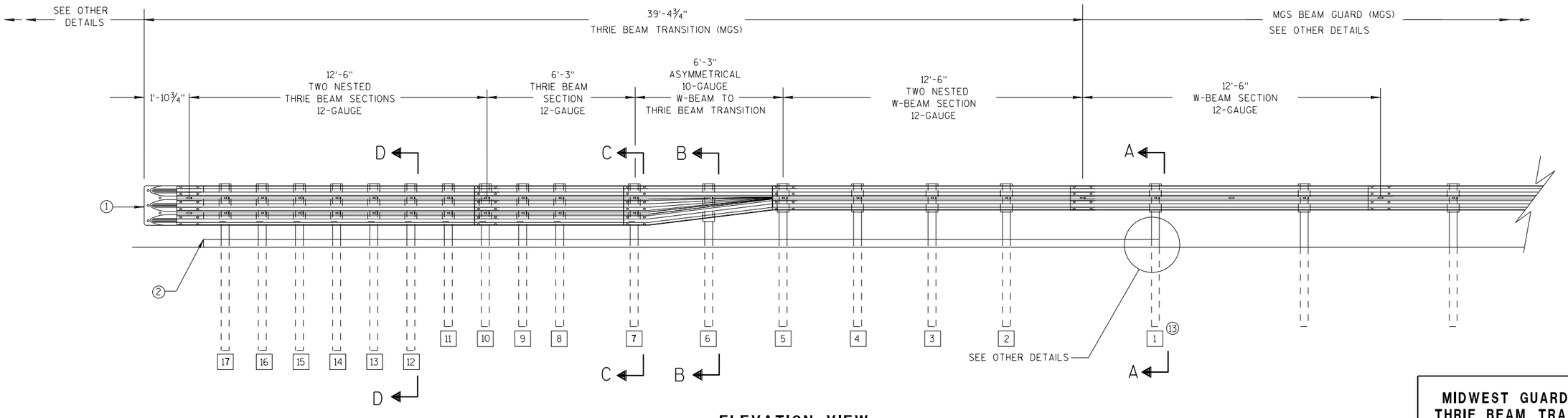
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

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

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



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

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

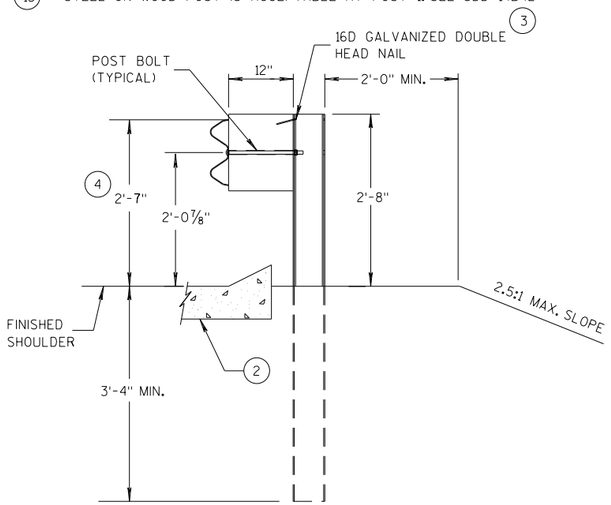
GENERAL NOTES

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

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

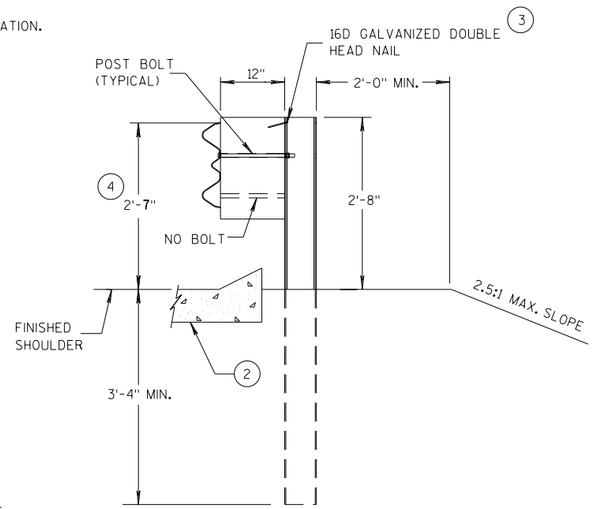
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

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



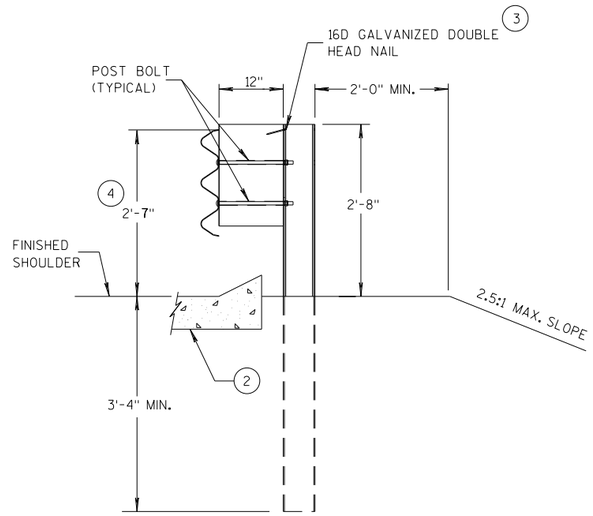
SECTION A-A (13)

POSTS 1-5



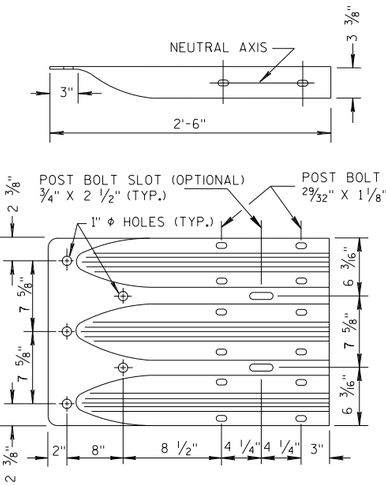
SECTION B-B

POST 6

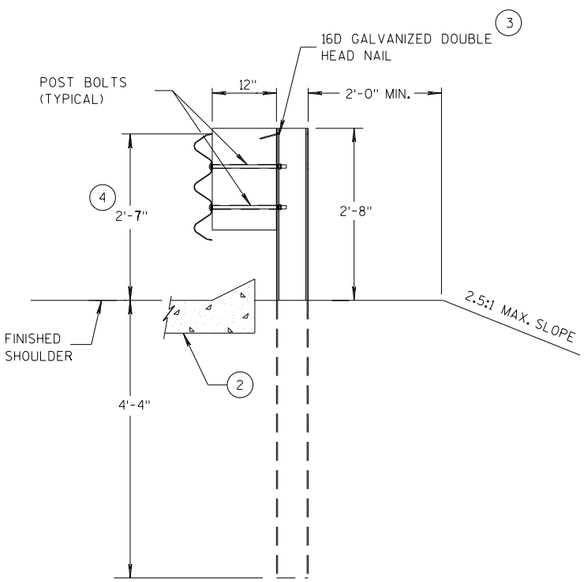


SECTION C-C

POSTS 7-11

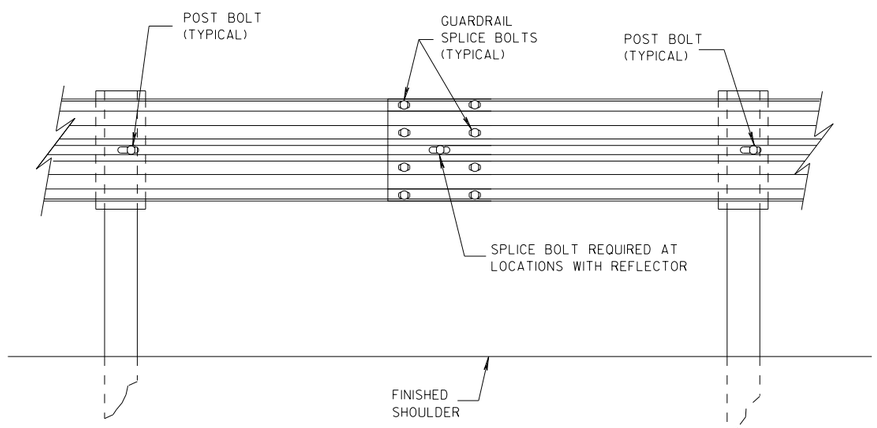


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-17



SPLICE DETAIL

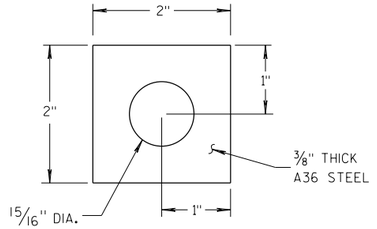
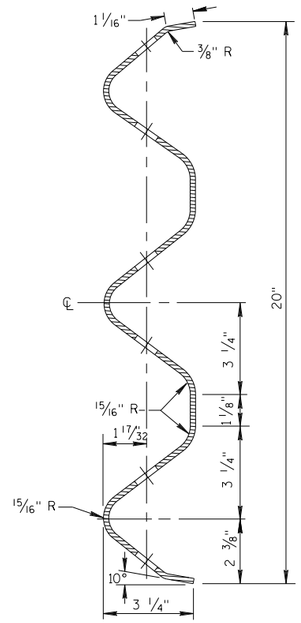


PLATE WASHER DETAIL



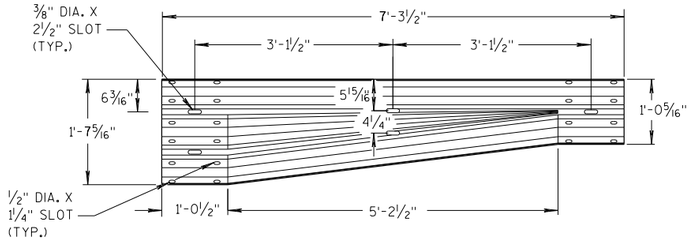
SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

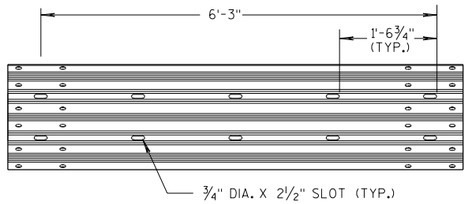
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

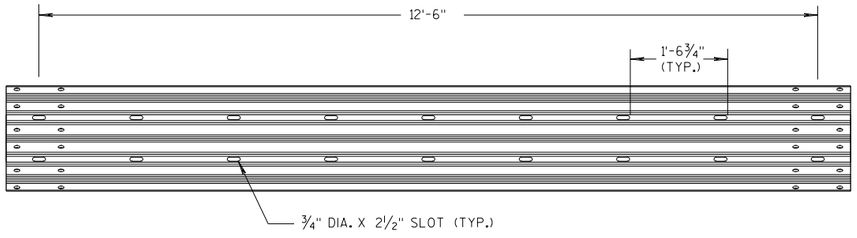
S.D.D. 14 B 45-5b



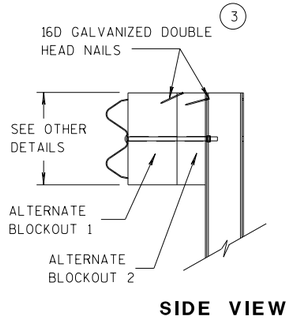
W-BEAM TO THRIE BEAM TRANSITION SECTION



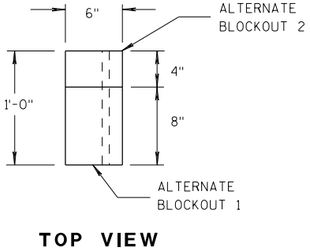
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

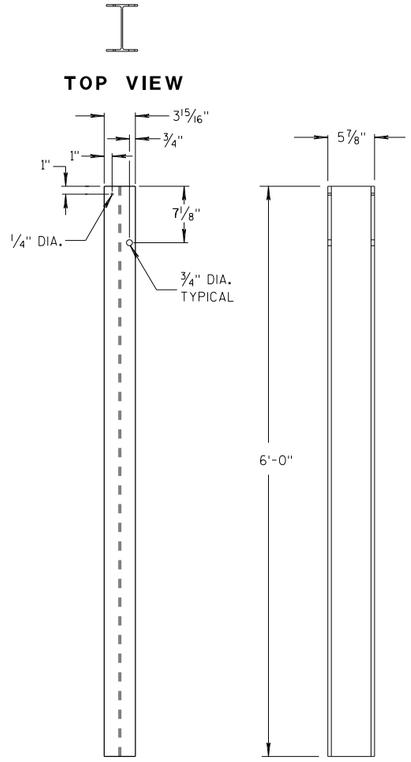


SIDE VIEW



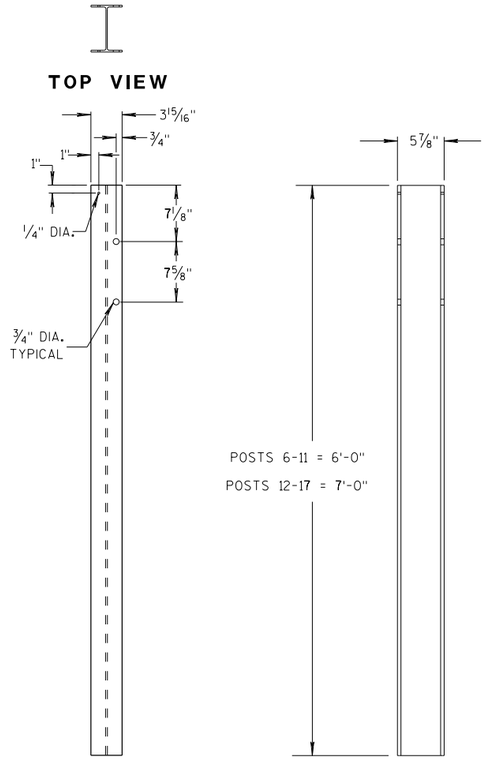
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



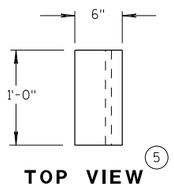
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

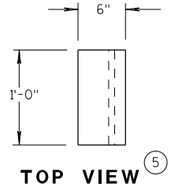


FRONT VIEW SIDE VIEW

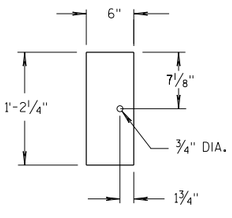
STEEL POSTS 6-17



TOP VIEW (5)

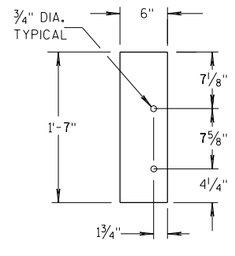


TOP VIEW (5)



FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-17

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

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

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

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

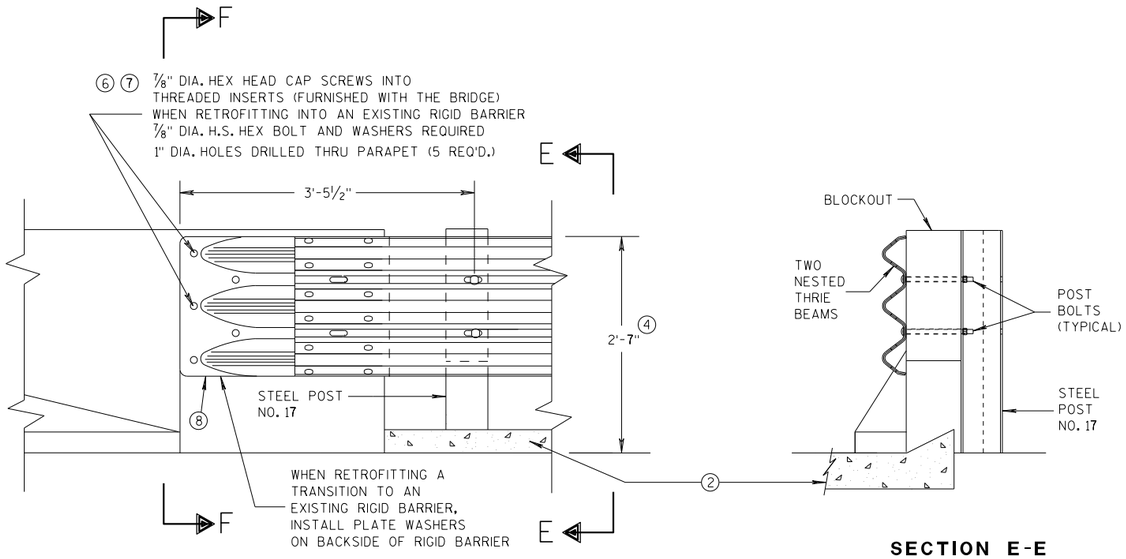
(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOF

6

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



FRONT VIEW

SECTION E-E

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

GENERAL NOTES

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

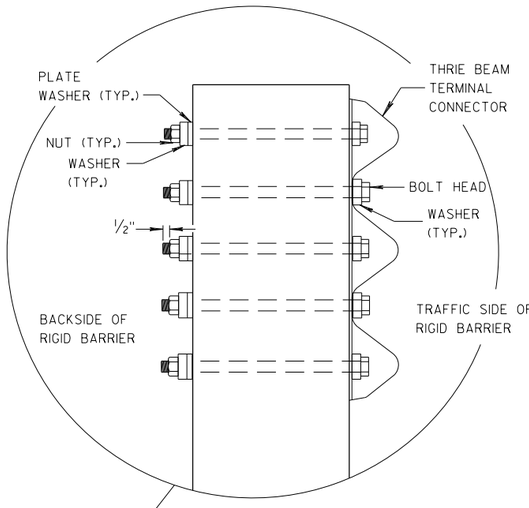
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

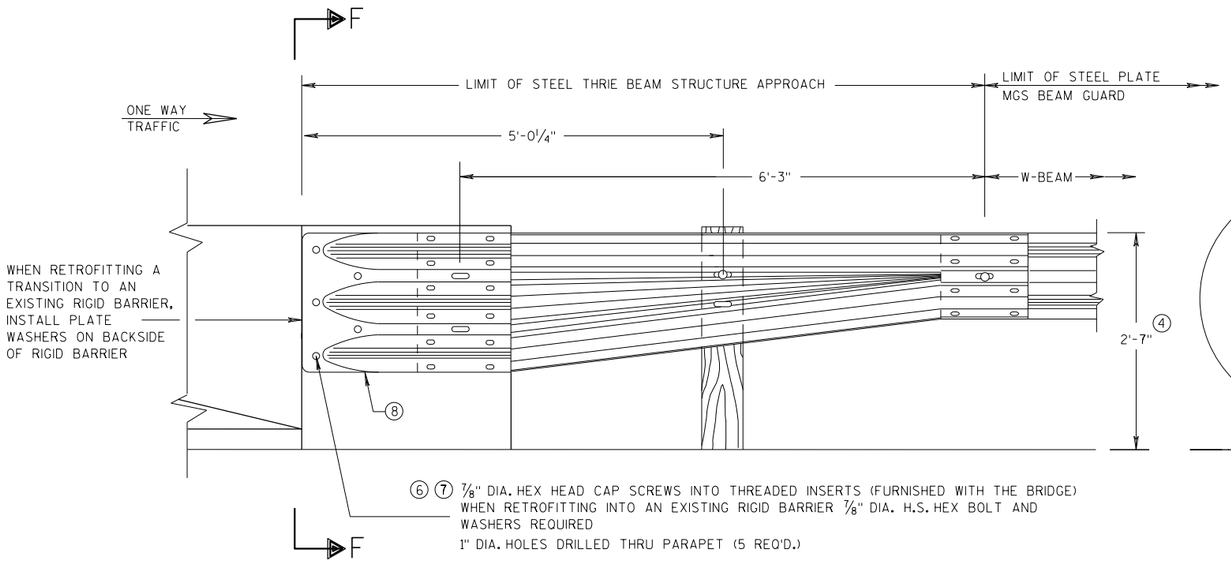
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

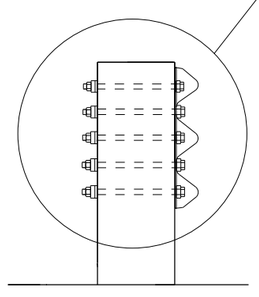
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE.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

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

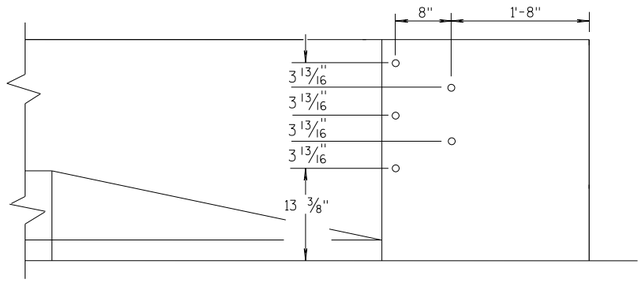




FRONT VIEW



SECTION F-F



DRILL HOLE LOCATION

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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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.

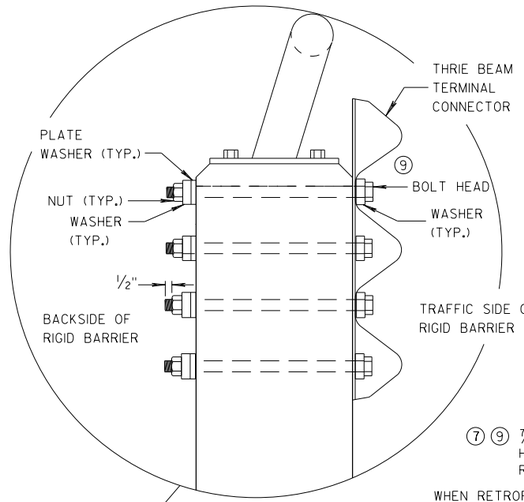
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

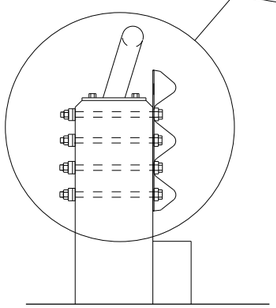
(6) DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(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.

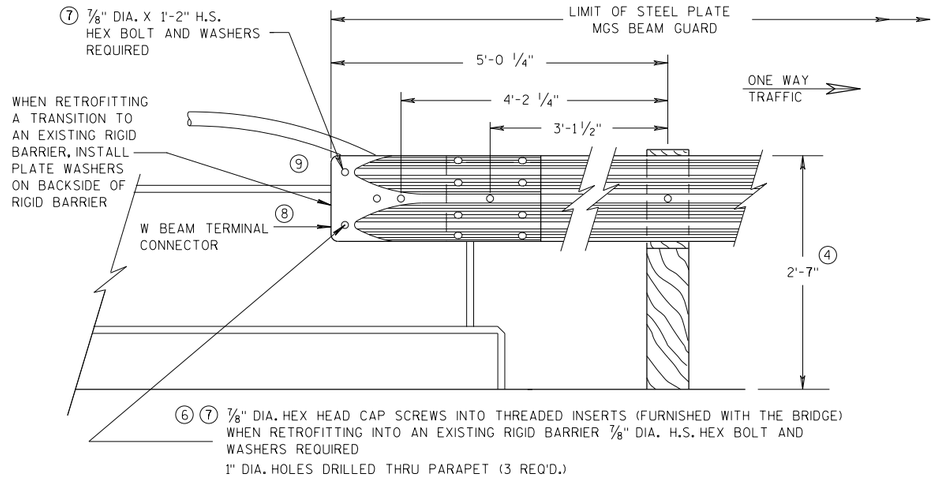
(8) THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 ½".

(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.





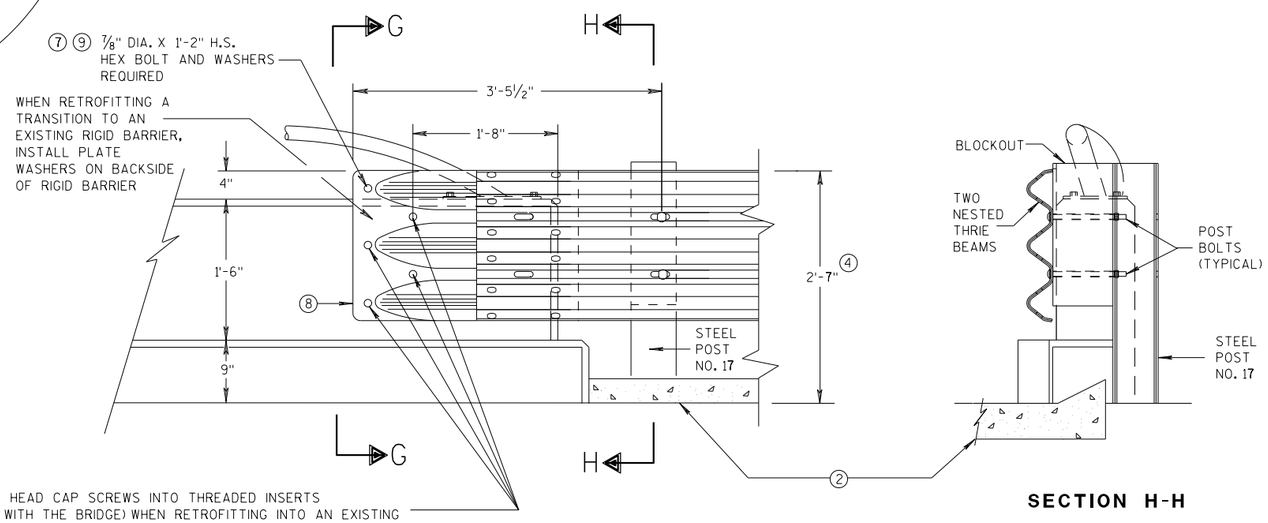
SECTION G-G



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

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



FRONT VIEW

SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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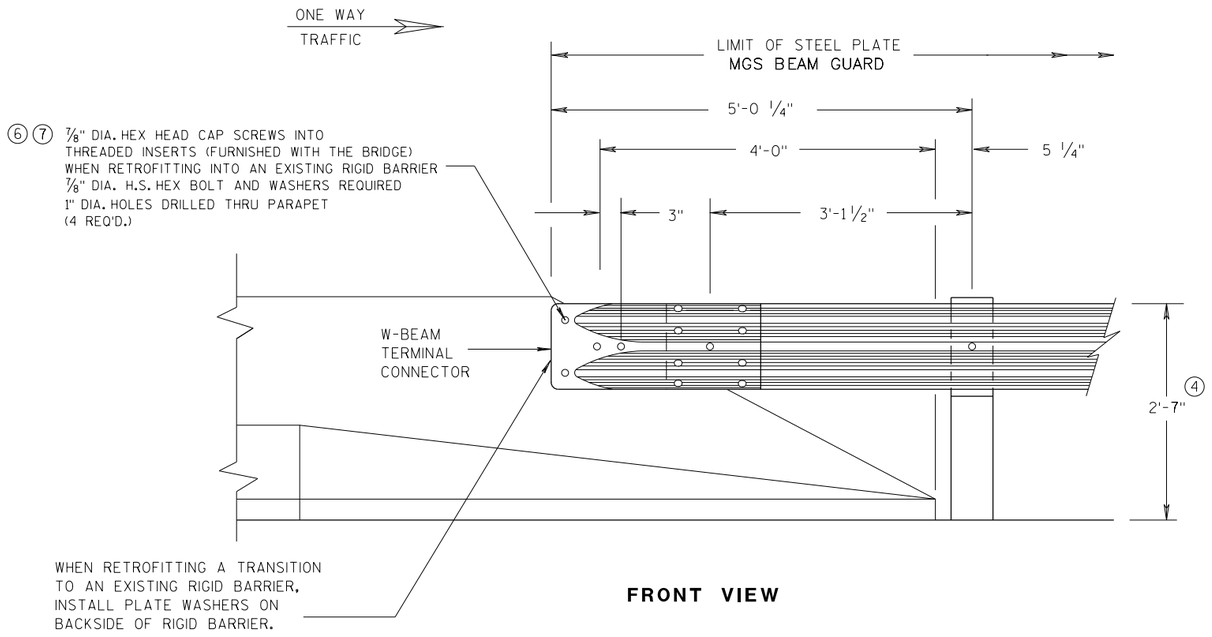


FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

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

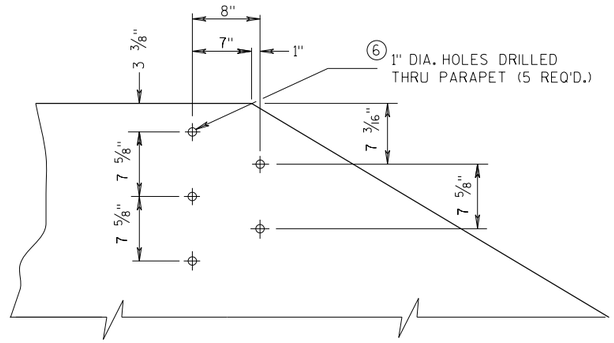
GENERAL NOTES

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

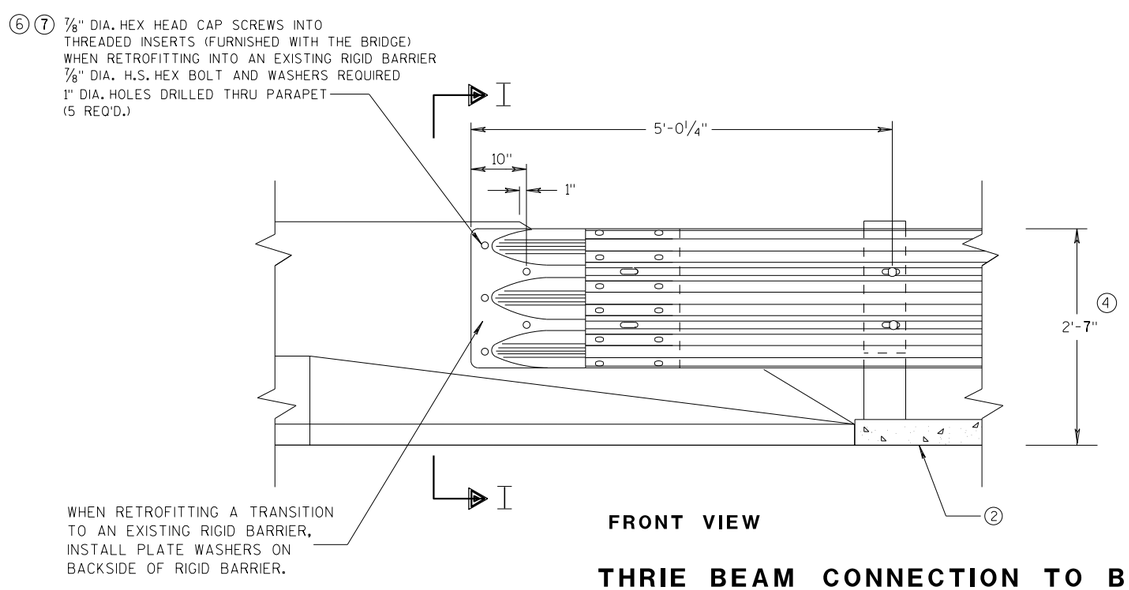
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

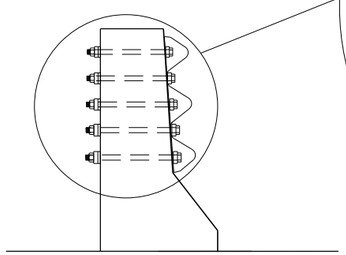
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE.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



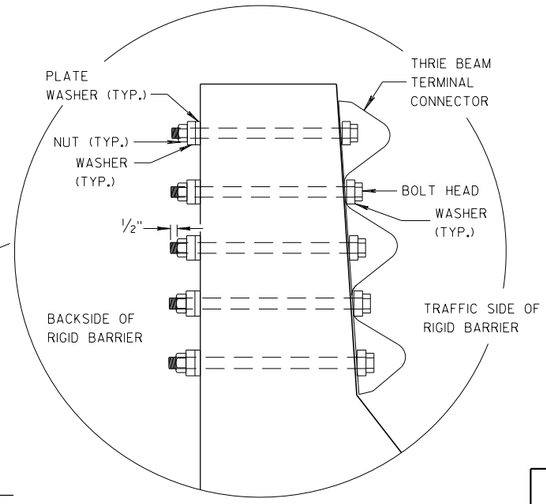
DRILL HOLE LOCATION AND PATTERN FOR THRIE BEAM CONNECTION



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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07/2018 — DATE
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FHWA

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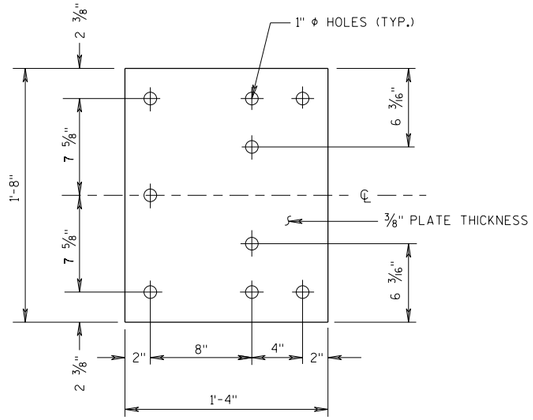
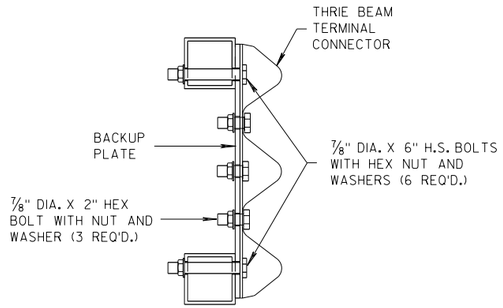
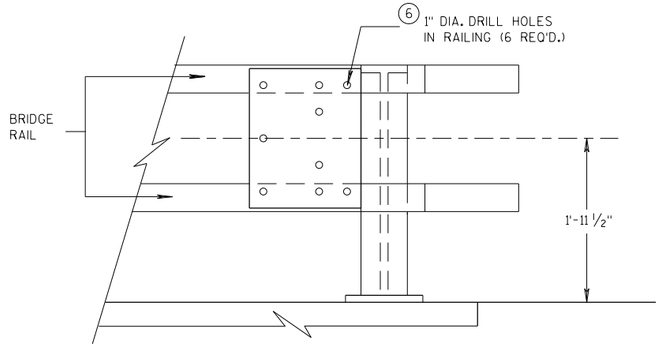


BACK-UP PLATE DETAIL



SECTION J-J

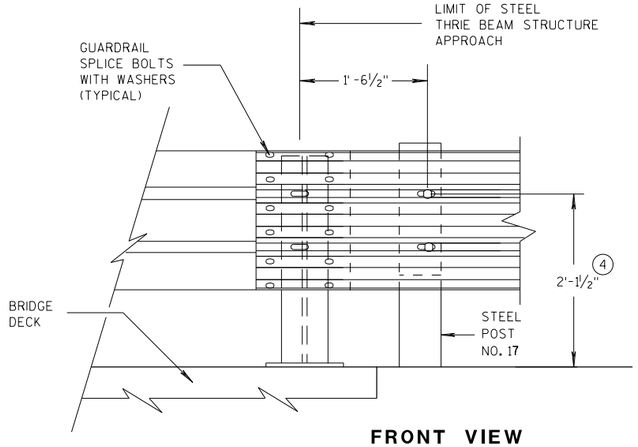


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

GENERAL NOTES

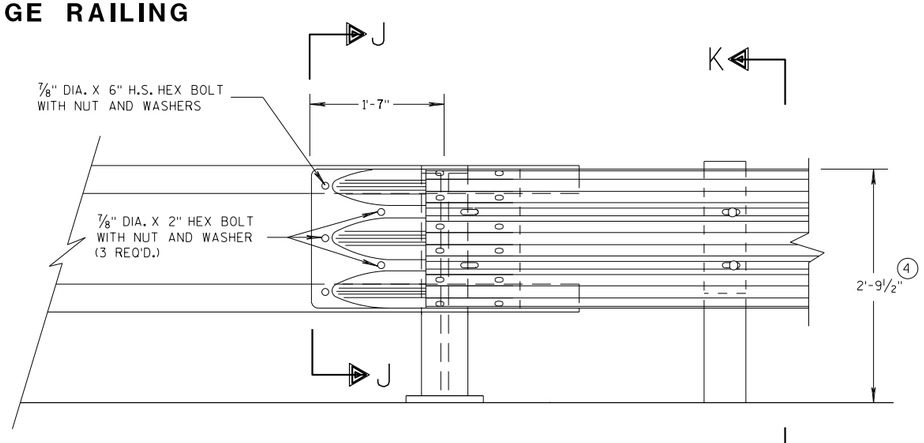
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

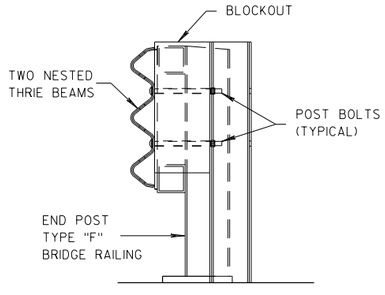


FRONT VIEW

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
FHWA

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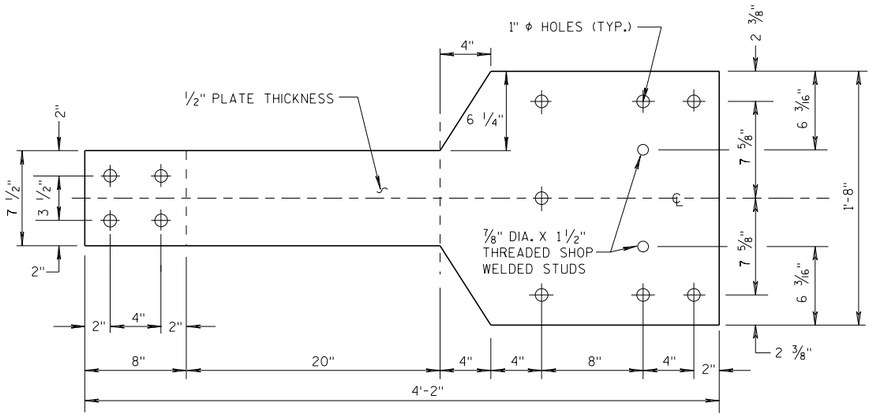
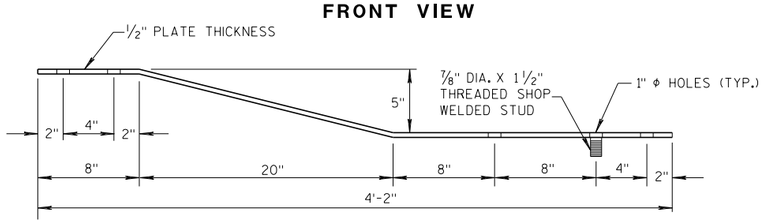
S.D.D. 14 B 45-5g

GENERAL NOTES

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

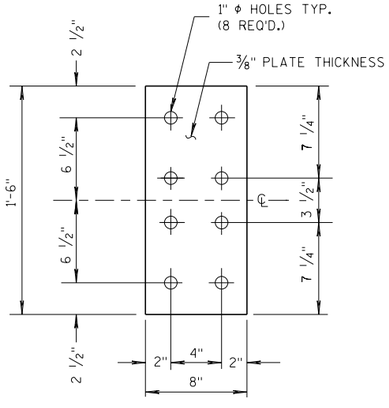


FRONT VIEW



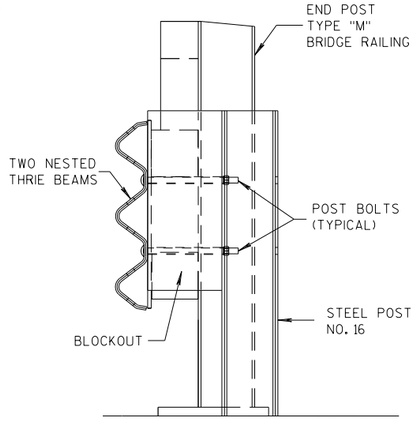
PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

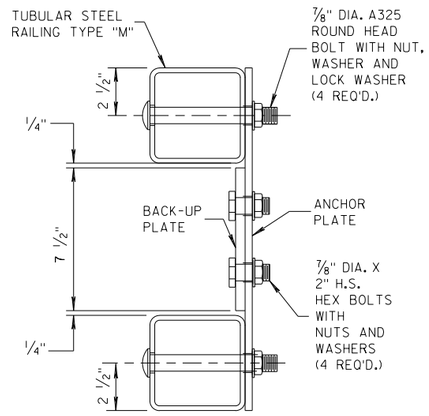


FRONT VIEW

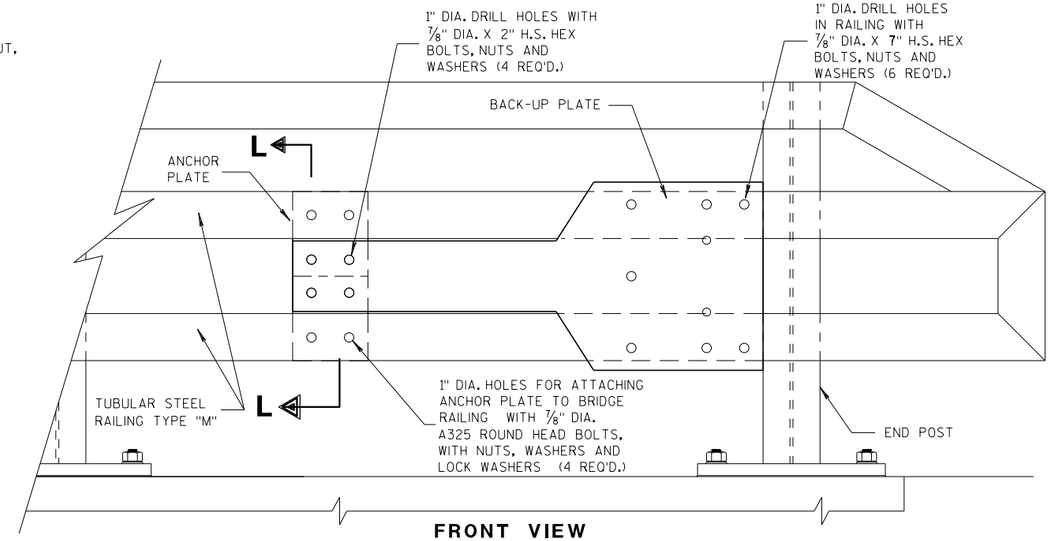
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M

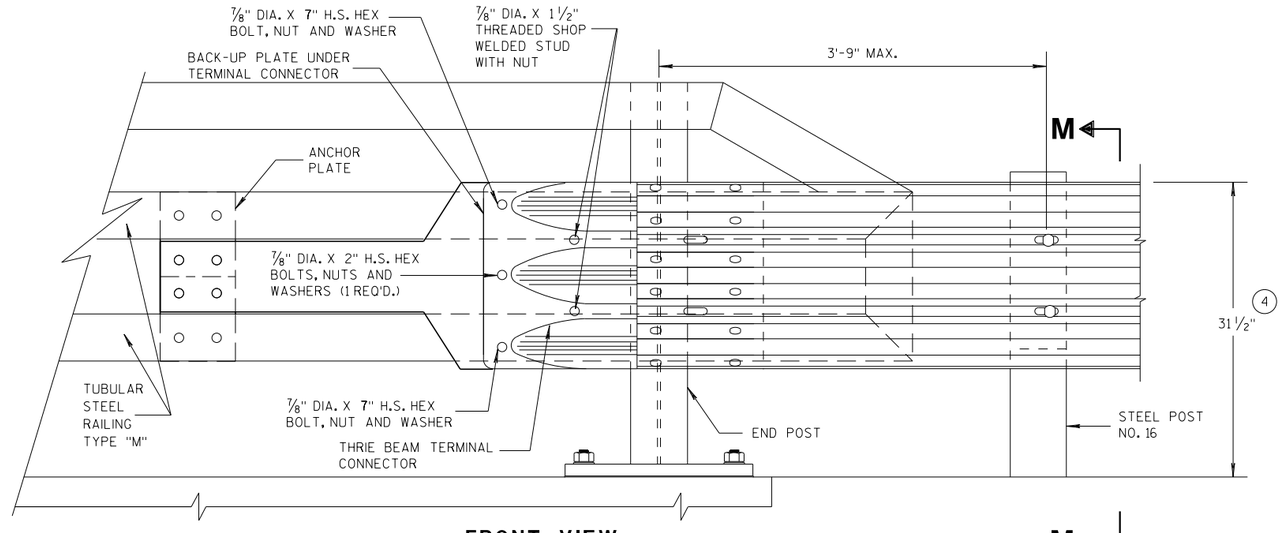


SECTION L-L

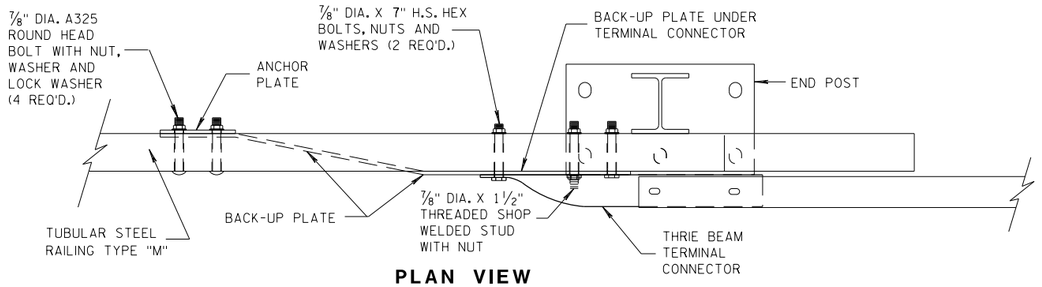


FRONT VIEW

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

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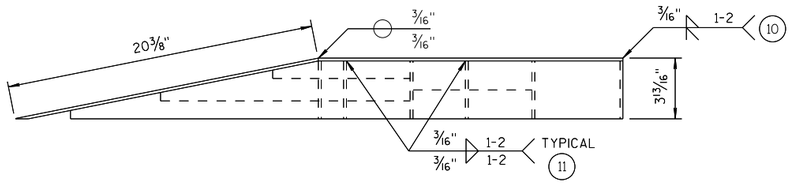
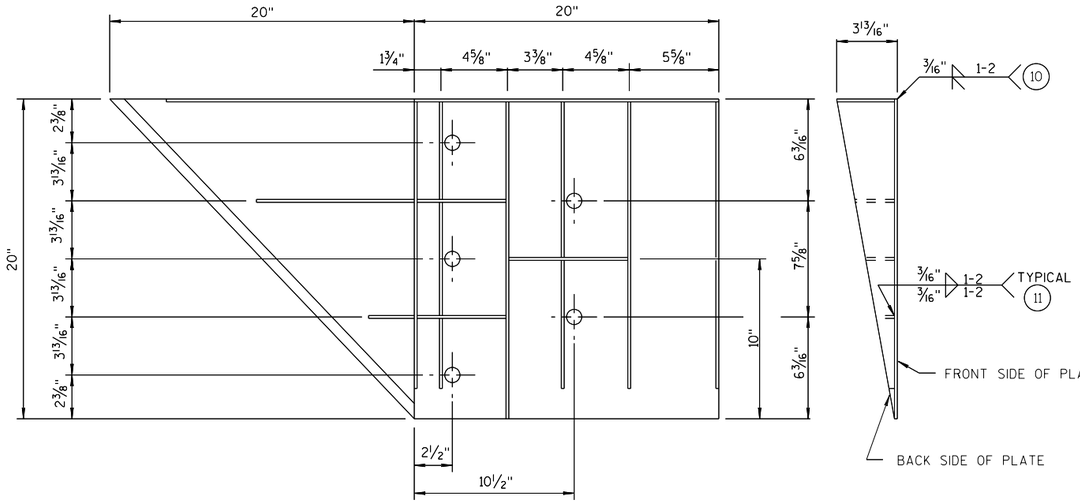
S.D.D. 14 B 45-5h





WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

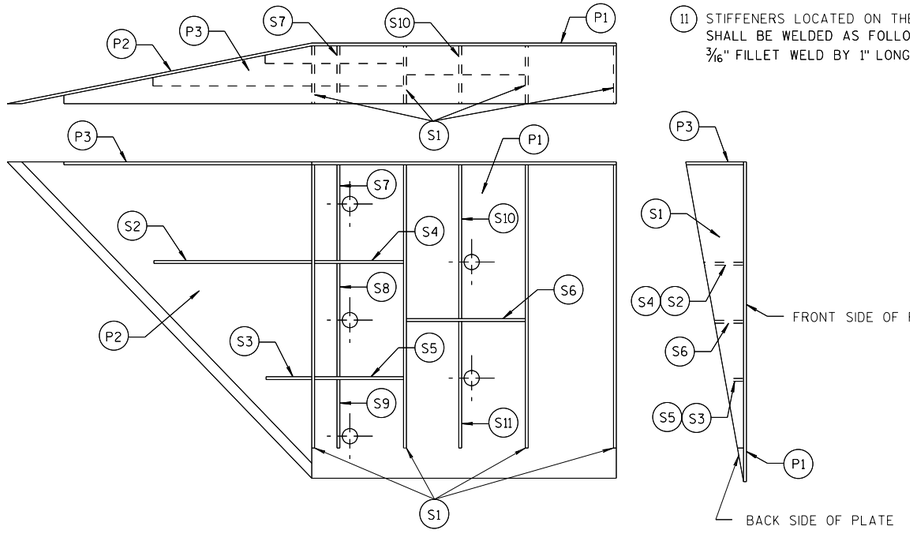


PLATE AND STIFFENER IDENTIFICATION

(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

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7/2018
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS I
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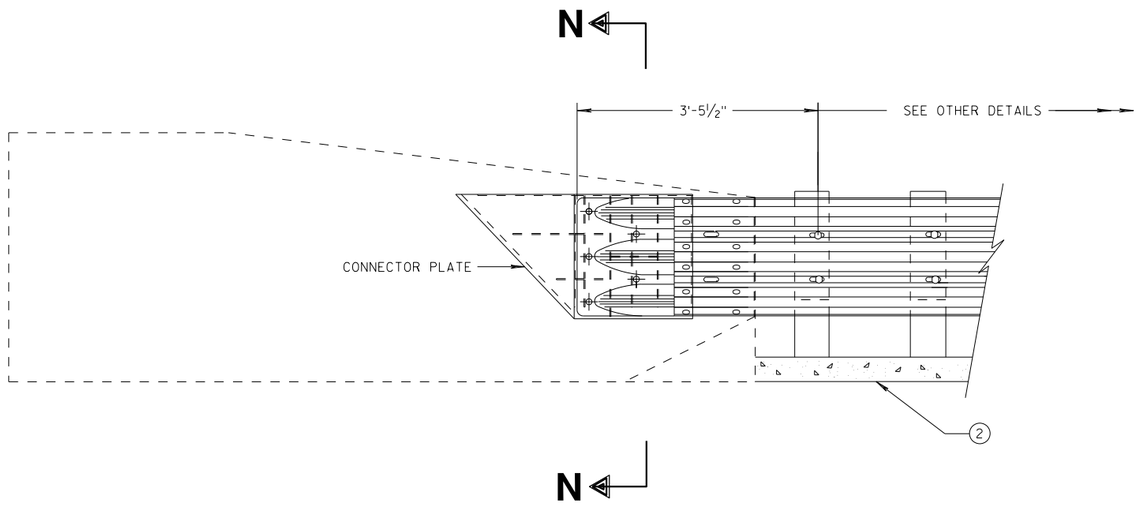
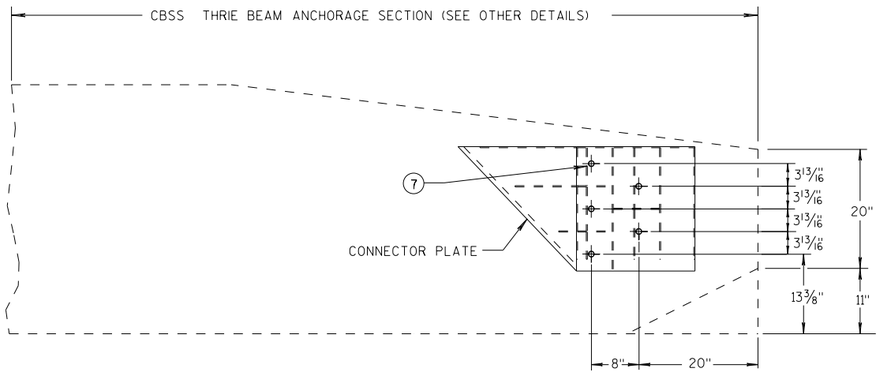
S.D.D. 14 B 45-5i



THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



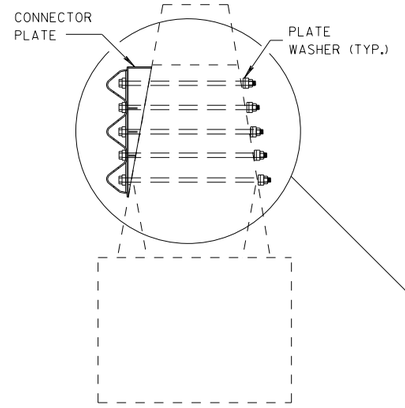
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

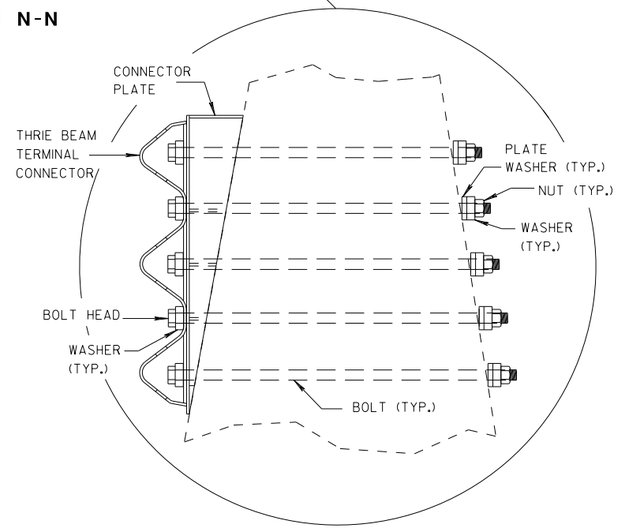
CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(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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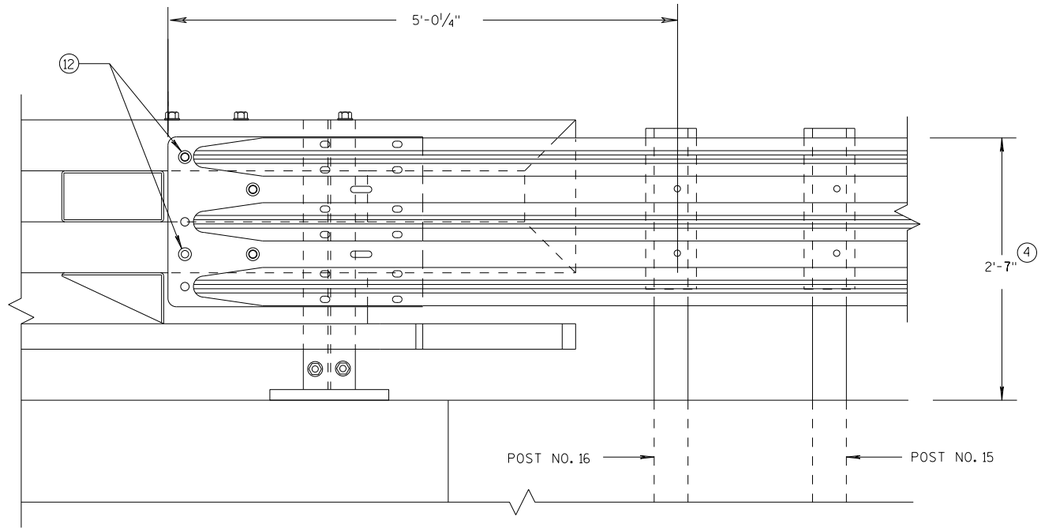
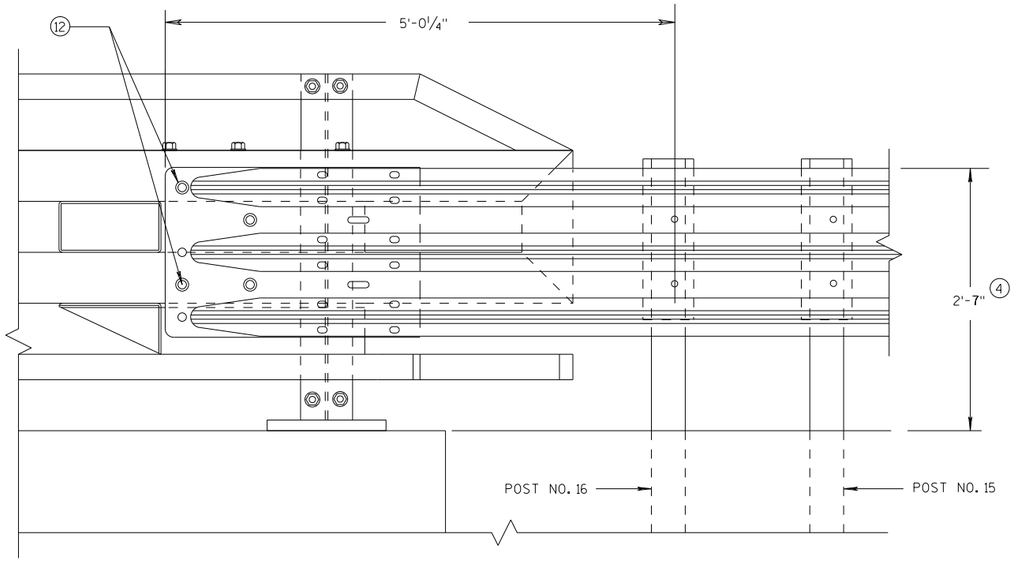


ELEVATION OF DETAIL AT NY3 END POST

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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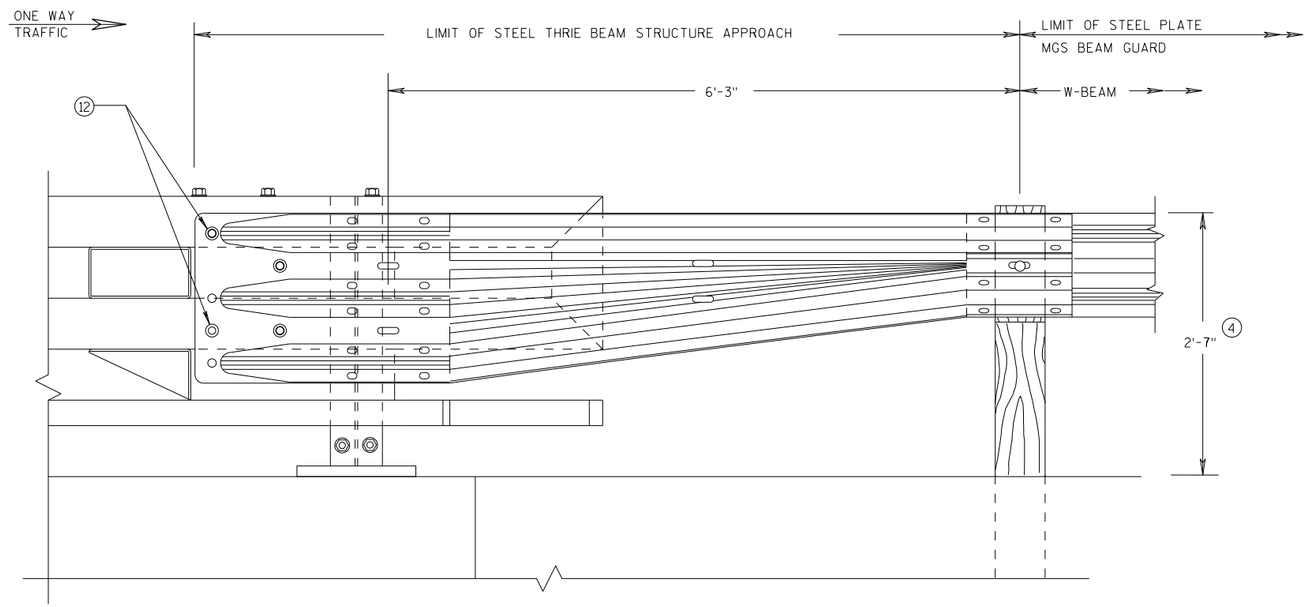


FRONT VIEW

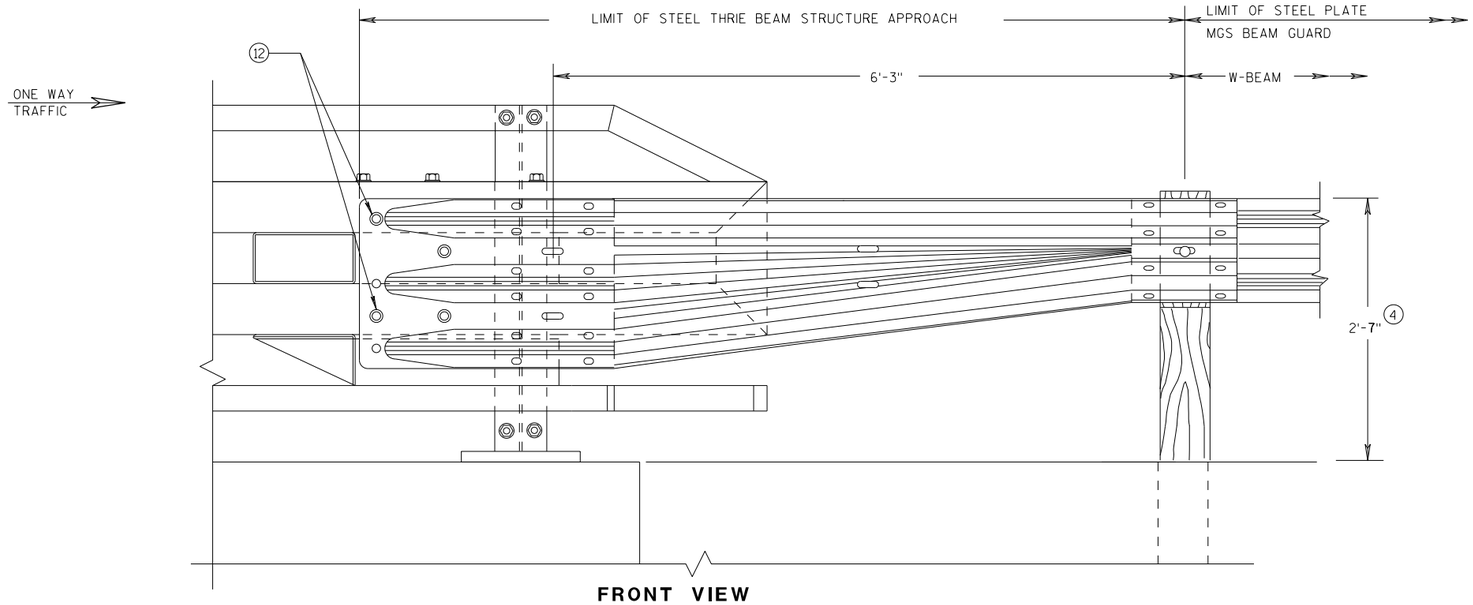
W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY3"

(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 1/2-INCH BEYOND NUT.



FRONT VIEW

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

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

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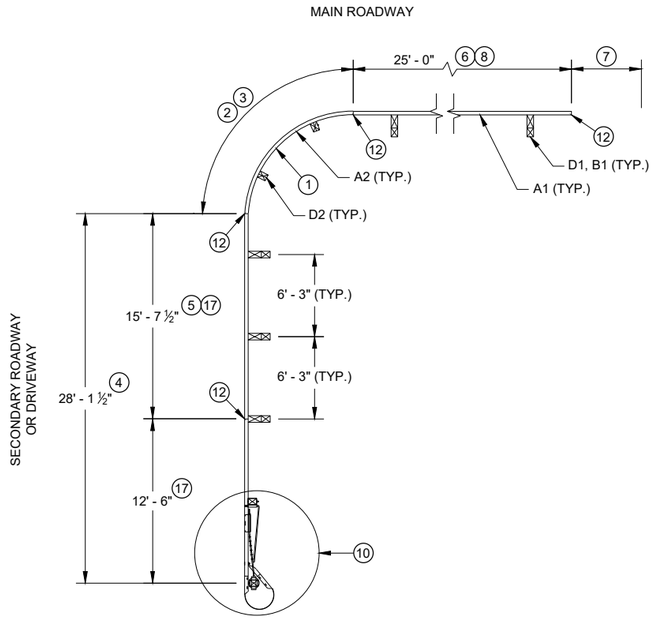
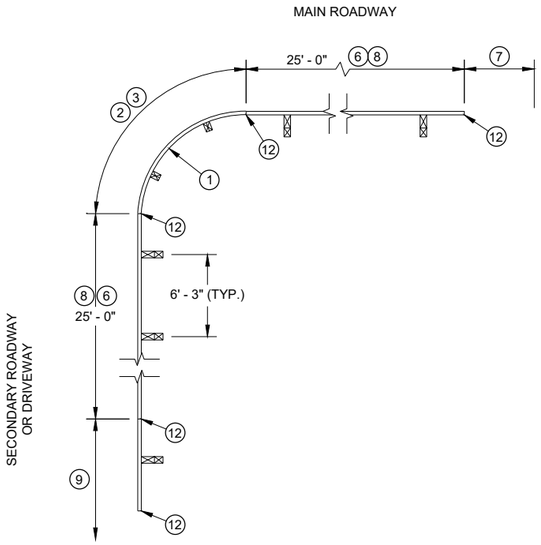


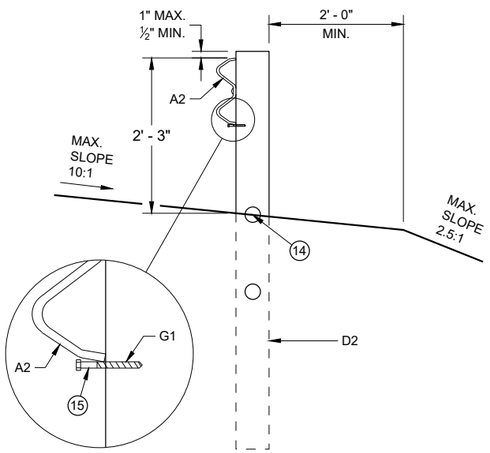
PLAN VIEW

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

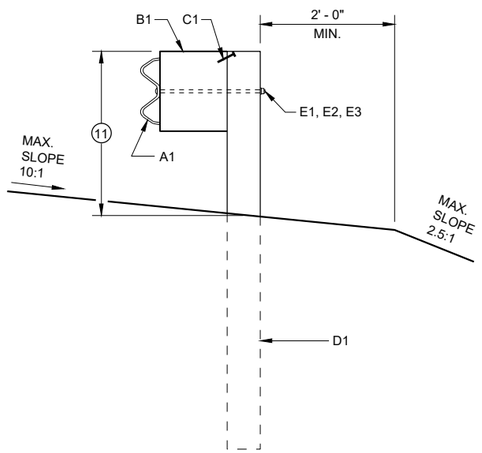


PLAN VIEW

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



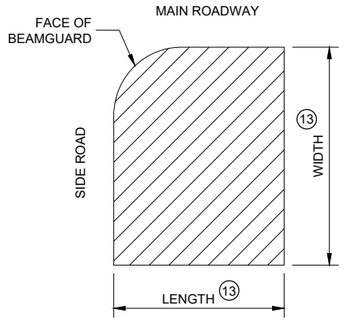
CONTROLLED RELEASE TERMINAL POST (CRT) IN RADIUS



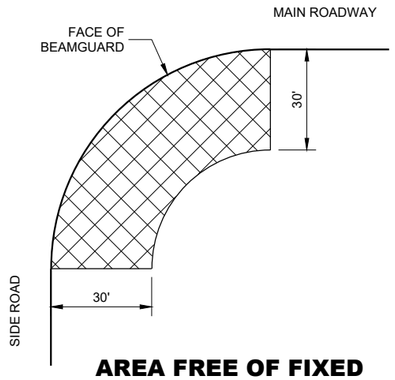
BEAM GUARD POSTS IN HEIGHT TRANSITION

TABLE FOR RADIUS OF 32' AND LESS

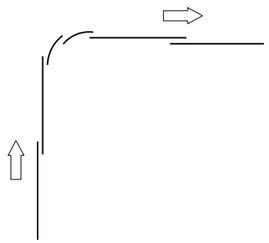
RADIUS (FT)	LENGTH (FT)	WIDTH (FT)
8	25	15
16	30	15
24	40	20
32	50	30



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.

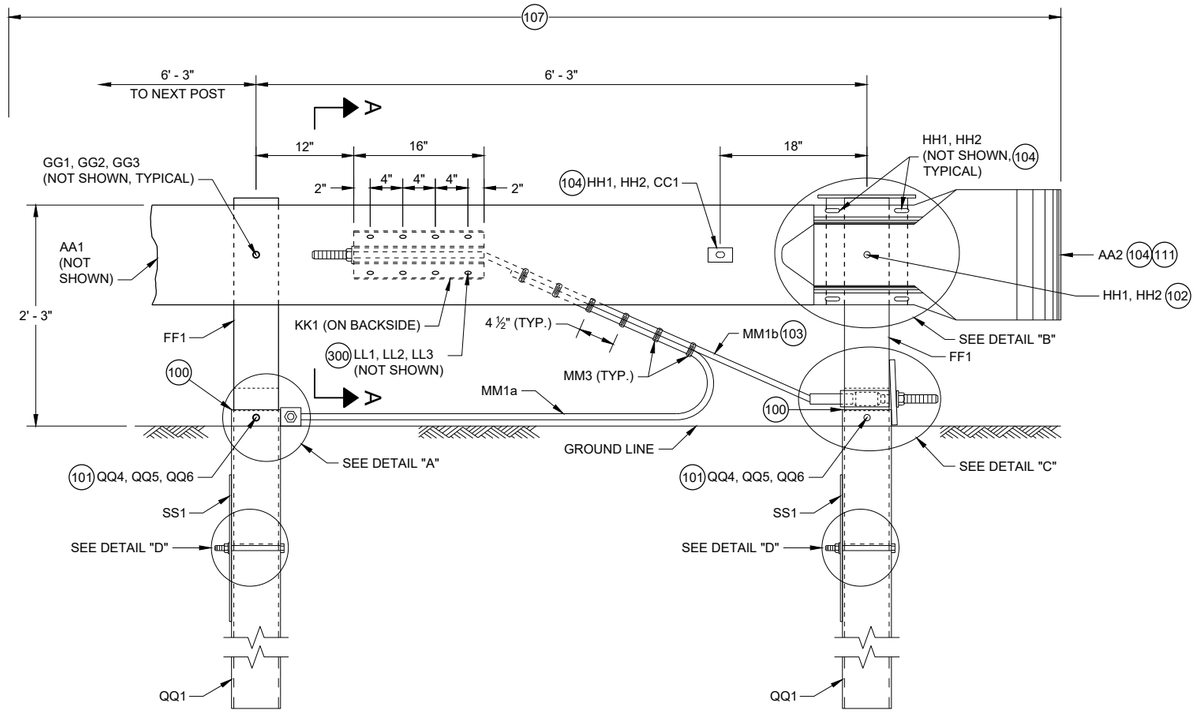
(14) MAXIMUM HEIGHT FOR CENTER OF HOLE IS ¾" ABOVE FINISHED GROUND ±1".

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

(16) SMALL SIGNS ON BREAKAWAY HARDWARE ARE ACCEPTABLE.

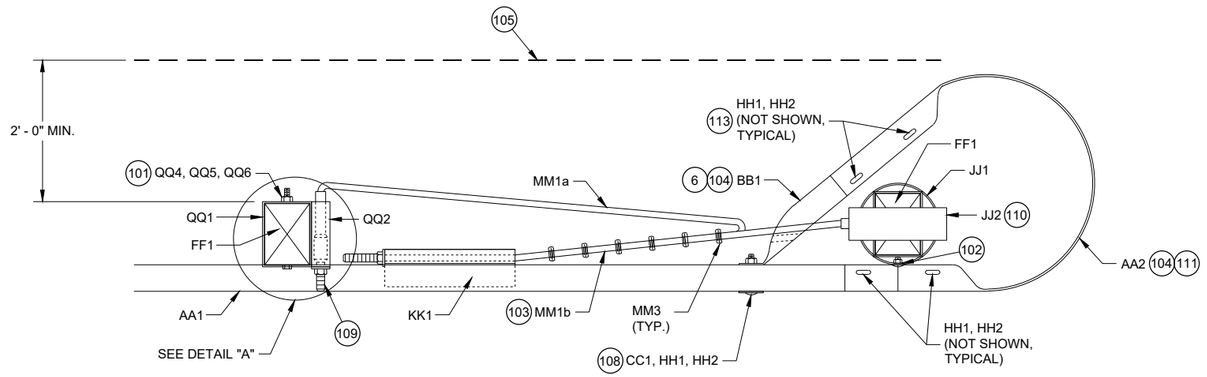
(17) TOP OF RAIL HEIGHT IS 27" WHEN USING A SHORT RADIUS TERMINAL (CRT).

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



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.

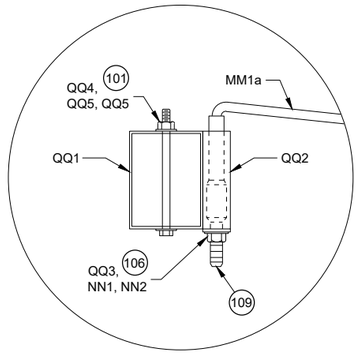
109 CUT OR PROVIDE THREADED STUD THAT IS FLUSH WITH FACE OF BEAM GUARD RAIL KK1 (PLUS OR MINUS ½" TOLERANCE). DEBURR AFTER CUTTING.

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.

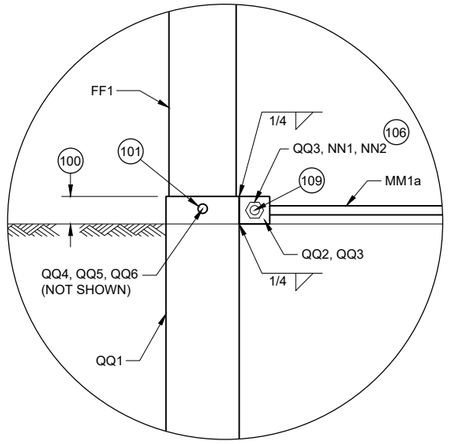
113 FOUR (4) HH1 AND HH2 REQUIRED TO ATTACH AA2 TO BB1.



TOP VIEW

DETAIL "A"

(WOOD BREAKAWAY AND BEAM GUARD RAIL POSTS NOT SHOWN)



PROFILE VIEW

DETAIL "A"

6

SDD 14B53 - 01b

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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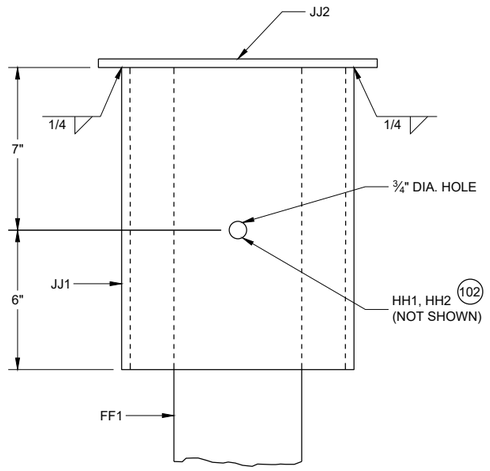
SDD 14B53 - 01b

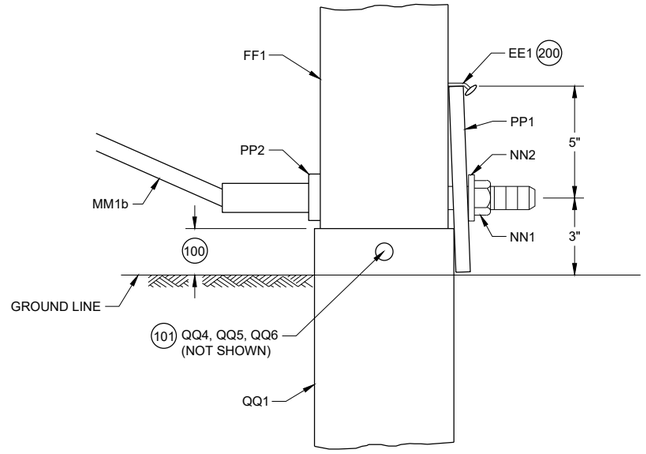
GENERAL NOTES

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



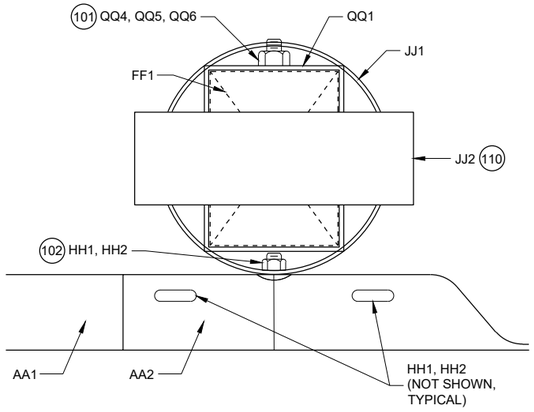
PROFILE VIEW

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



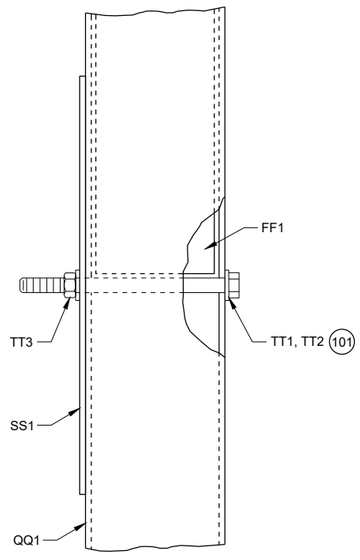
PROFILE VIEW

DETAIL "C"



PLAN VIEW

DETAIL "B"
STEEL PIPE ASSEMBLY



PROFILE VIEW

DETAIL "D"

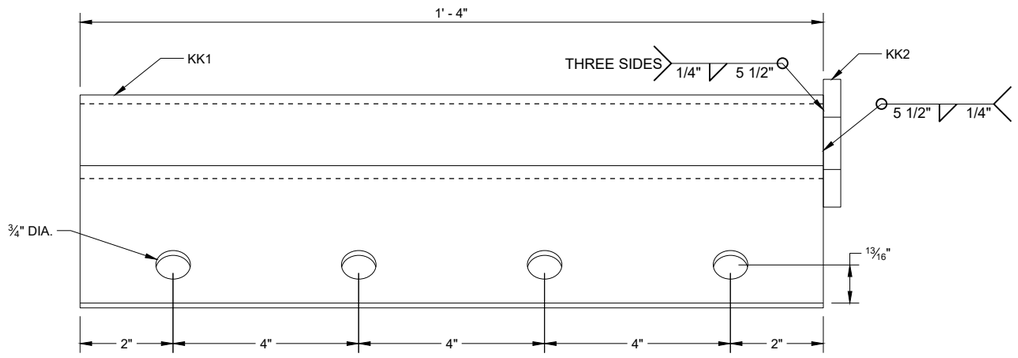
SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

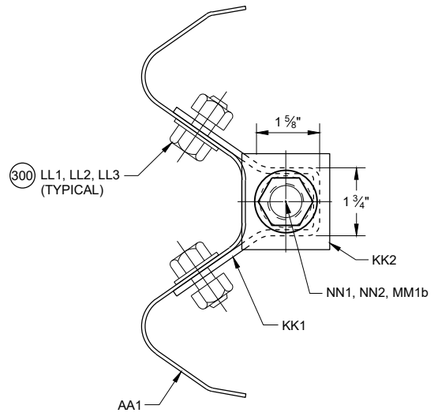
6

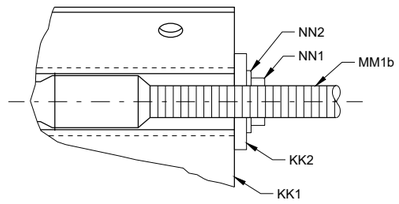
SDD 14B53 - 01c

GENERAL NOTES

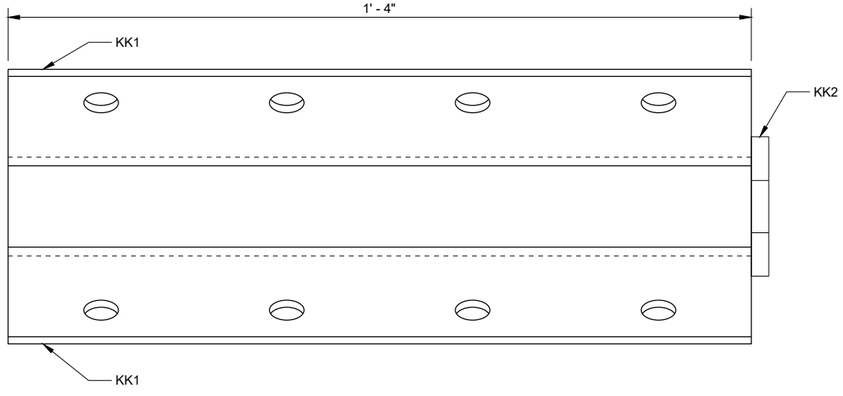
(300) WASHERS REQUIRED BETWEEN BOLT HEAD AND BEAM GUARD RAIL AND BETWEEN NUT AND ANCHOR BRACKET. EIGHT (8) LL1 AND LL3 REQUIRED. SIXTEEN (16) LL2 REQUIRED.

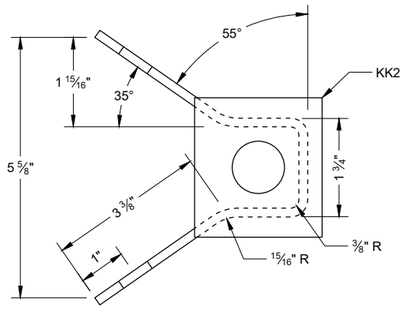




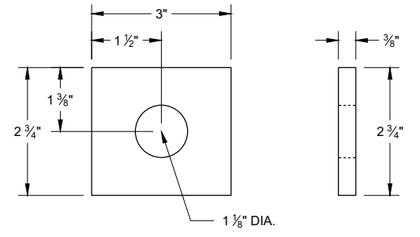


SECTION A - A





ANCHOR BRACKET (KK1, KK2)



ANCHOR BRACKET BEARING PLATE (KK2)

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

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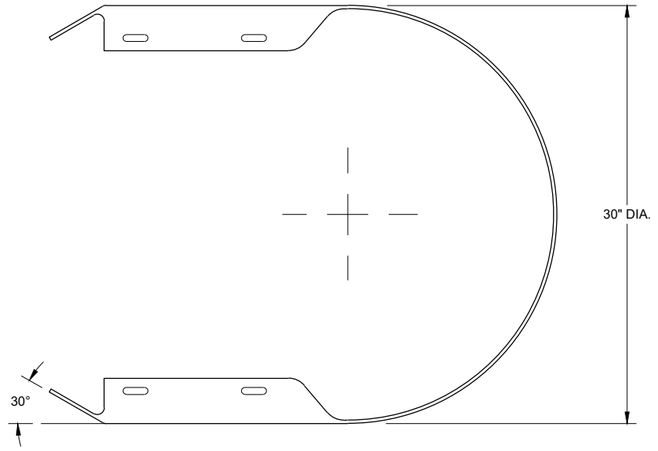
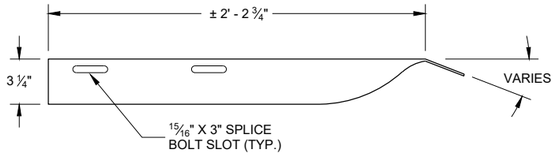
GENERAL NOTES

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

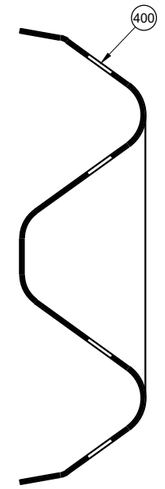
(401) CROSS SECTION OF PART IS TO FIT OVER OR UNDER AA1 .



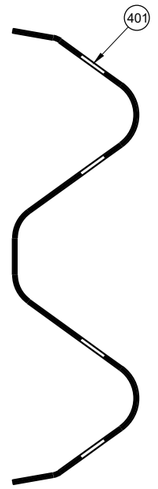
TOP VIEW



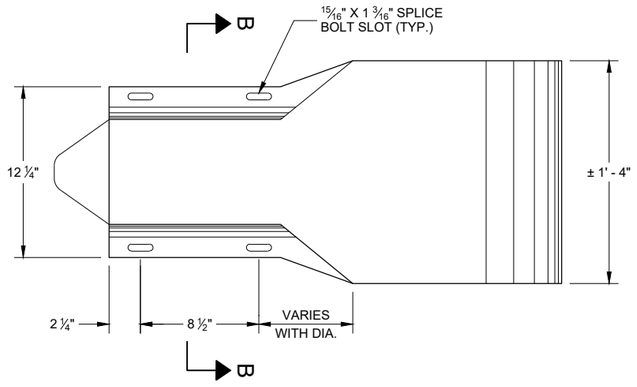
TOP VIEW



SECTION B -B

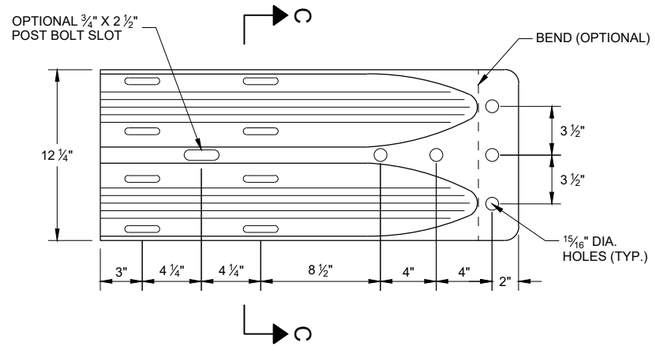


SECTION C -C



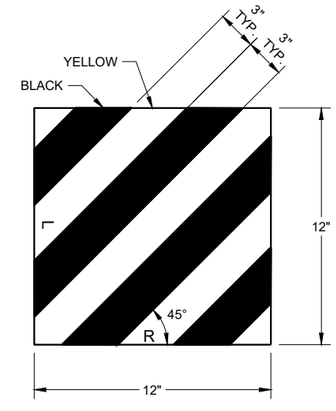
PROFILE VIEW

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
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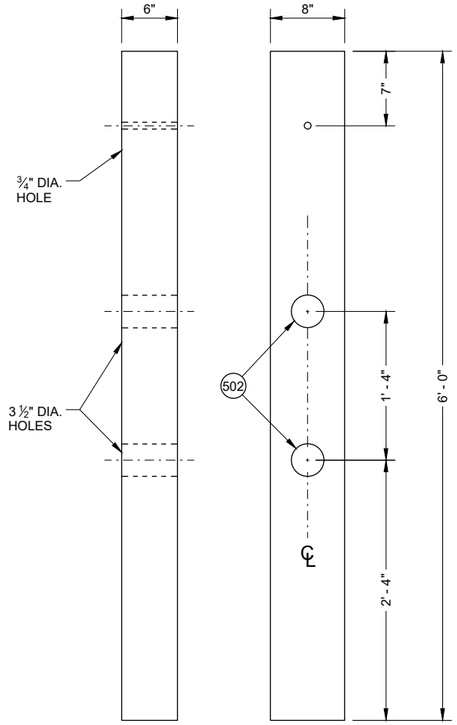
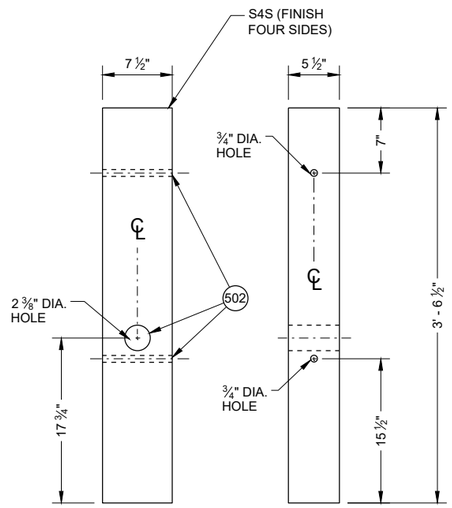


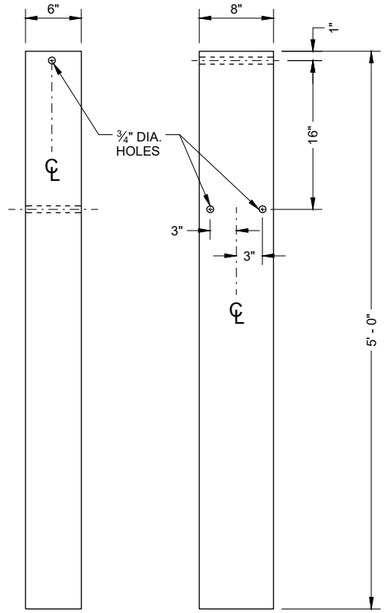
FRONT VIEW SIDE VIEW

CONTROLLED RELEASE POST (CRT) (DD2)



FRONT VIEW SIDE VIEW

WOOD BREAKAWAY POST (FF1)



FRONT VIEW SIDE VIEW

FOUNDATION TUBE (QQ1) 500

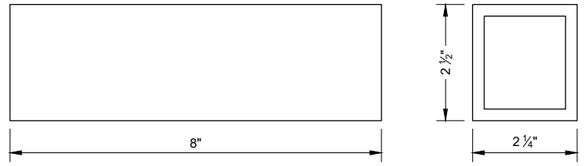
GENERAL NOTES

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

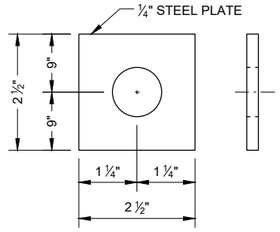
501 FOR MM1a THREADED STUD ONLY REQUIRED ON ONE END. SWAGED FITTING REQUIRED.

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

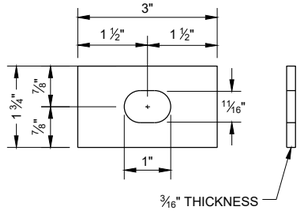
503 MM1a MAY HAVE ONE THREADED STUD 4 INCHES LONG. SEE NOTE 109.



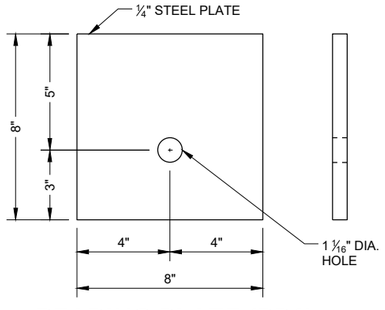
FOUNDATION TUBE - ANCHOR CABLE TUBE (QQ2)



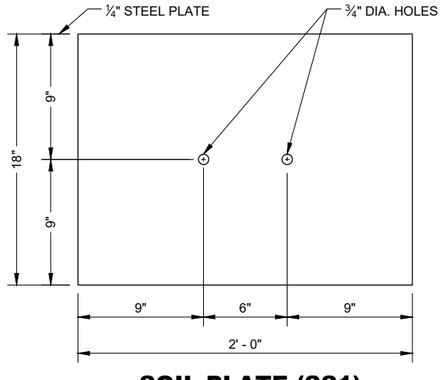
ANCHOR CABLE TUBE END PLATE (QQ3)



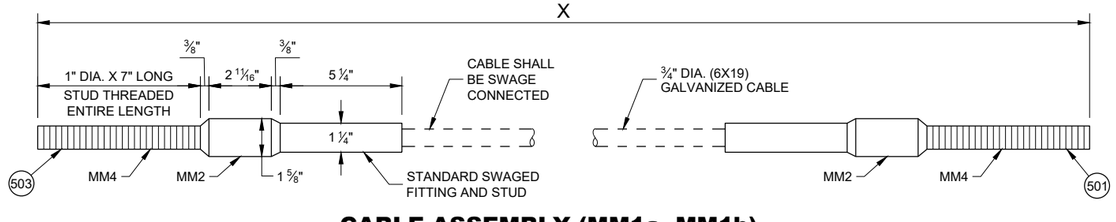
RECTANGULAR PLATE WASHER (CC1)



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

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SDD 14B53 - 01f

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 TRANSPORTA

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SDD 14B53 - 01g

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	

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

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SDD 14B53 - 01h

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)

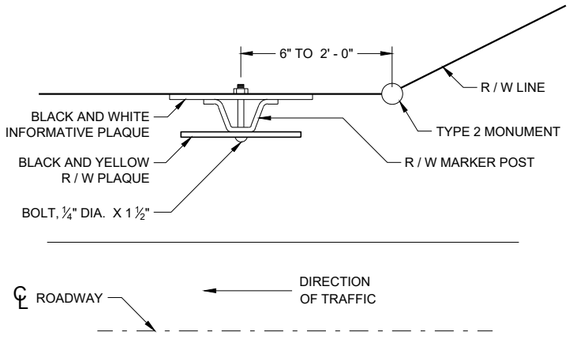
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

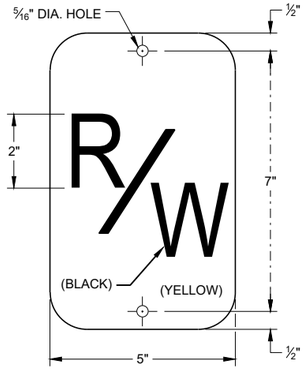
FHWA

6

SDD 14B53 - 01i



PLAN VIEW
STEEL MARKER POST



R / W PLAQUE

THE RIGHT-OF-WAY PLAQUE AND INFORMATIVE PLAQUE WILL BE FURNISHED BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

INFORMATIVE PLAQUE

GENERAL NOTES

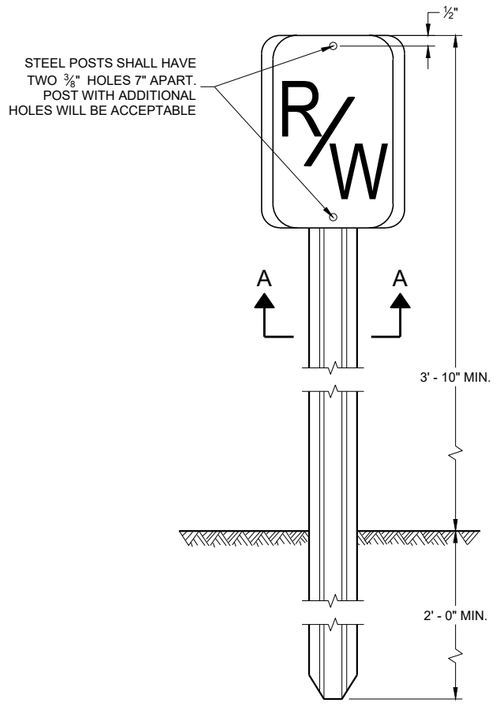
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

A STEEL MARKER POST FOR RIGHT -OF-WAY SHALL BE PLACED IN THE RIGHT-OF-WAY WITH THE BACK OF THE POST ON THE LONGER RIGHT-OF-WAY TANGENT, 6 INCHES TO 24 INCHES FROM EACH TYPE 2 MONUMENT TO SERVE AS A GUARD POST, AND AT OTHER LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

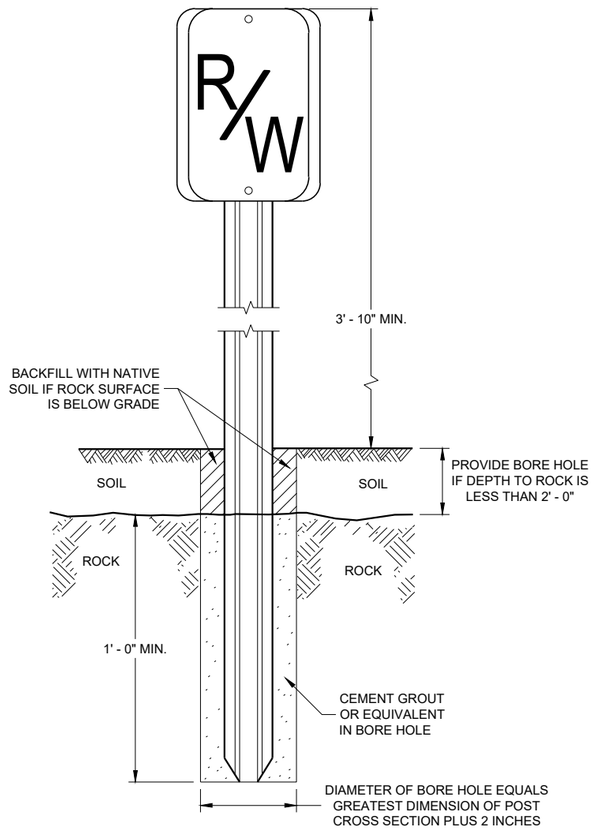
THE "R/W" PLAQUE SHALL FACE THE ROADWAY AND THE INFROMATIVE PLAQUE SHALL FACE AWAY FROM THE ROADWAY. "R/W" AND INFORMATIVE PLAQUES WILL BE FURNISHED BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

STEEL MARKER POSTS SHALL MEET THE MINIMUM MATERIAL REQUIREMENTS FOR STEEL DELINEATOR POSTS; EXCEPT POSTS PAINTED WITH FEDERAL YELLOW ENAMEL NEED NOT BE ZINC COATED.

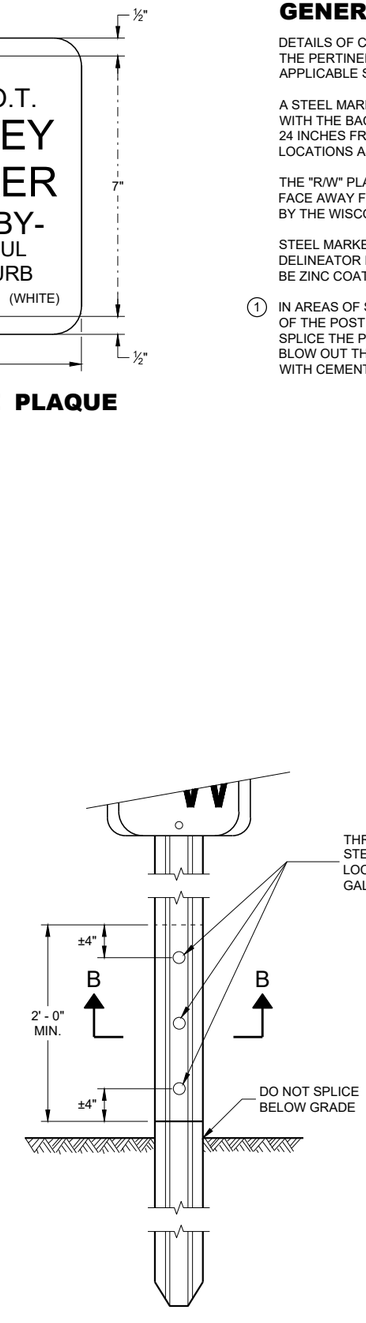
(1) IN AREAS OF SOLID ROCK, DRILL A BORE HOLE 2" GREATER THAN THE WIDEST DIMENSION OF THE POST CROSS SECTION INTO THE ROCK A MINIMUM DEPTH OF 12 INCHES. CUT OR SPLICE THE POST SO THAT A MINIMUM LENGTH OF 3' - 10" PROTRUDES ABOVE THE GROUND. BLOW OUT THE BORE HOLE IN THE ROCK USING COMPRESSED AIR. FILL THE BORE HOLE WITH CEMENT GROUT OR EQUIVALENT, DEPENDING ON THE STABILITY OF THE ROCK.



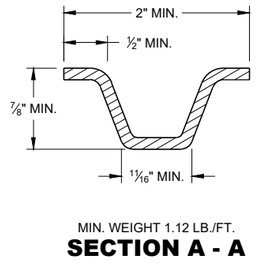
FRONT VIEW
STEEL MARKER POST



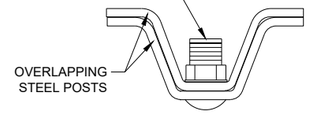
FRONT VIEW
ROCK INSTALLATION (1)



FRONT VIEW
SPLICE DETAIL



MIN. WEIGHT 1.12 LB./FT.
SECTION A - A



SECTION B - B

MARKER POST
FOR RIGHT - OF - WAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2/18/2016
DATE
/S/ Ray Kumapayi
CHIEF SURVEYING AND MA
ENGINEER

FHWA

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SDD 15A01 - 13a

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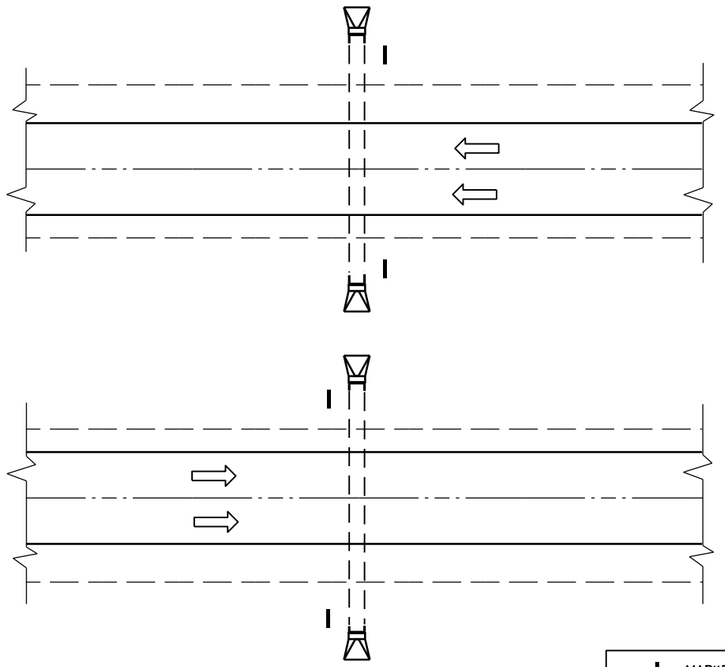
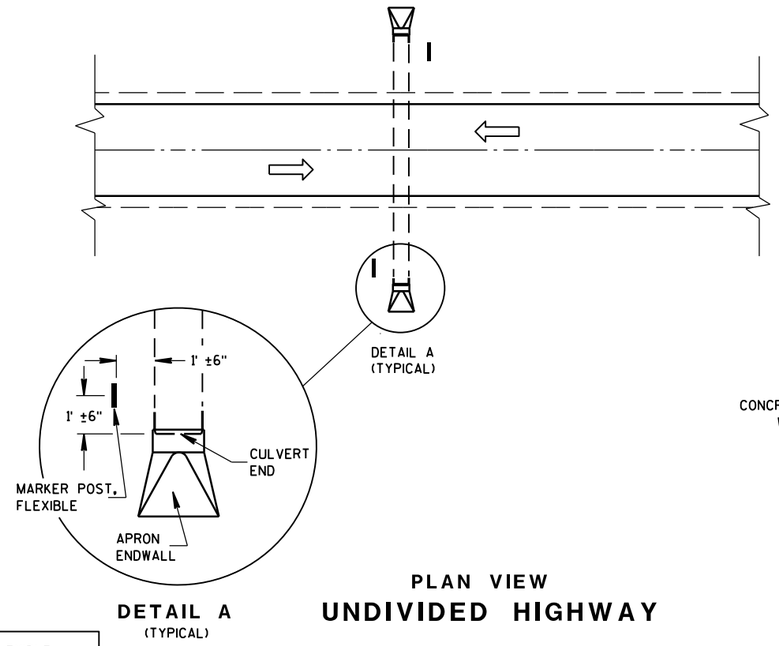
SDD15A01 - 13a



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

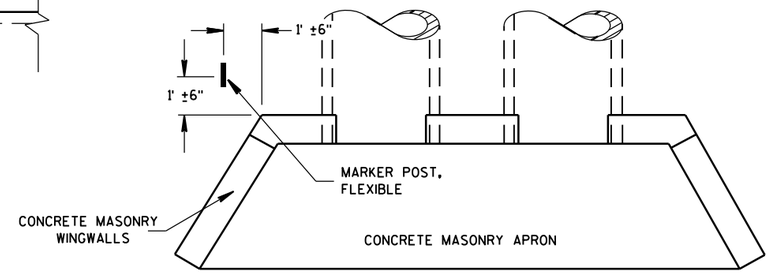
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

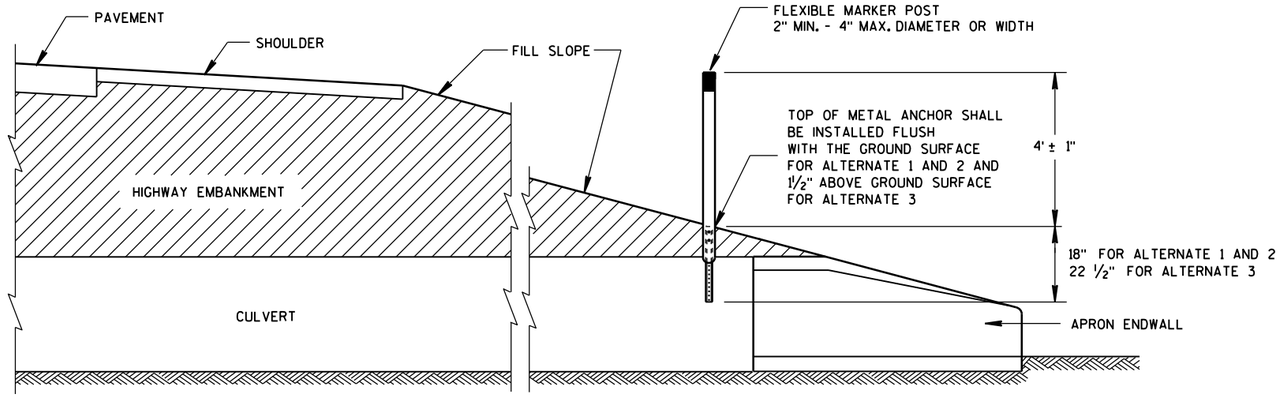
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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

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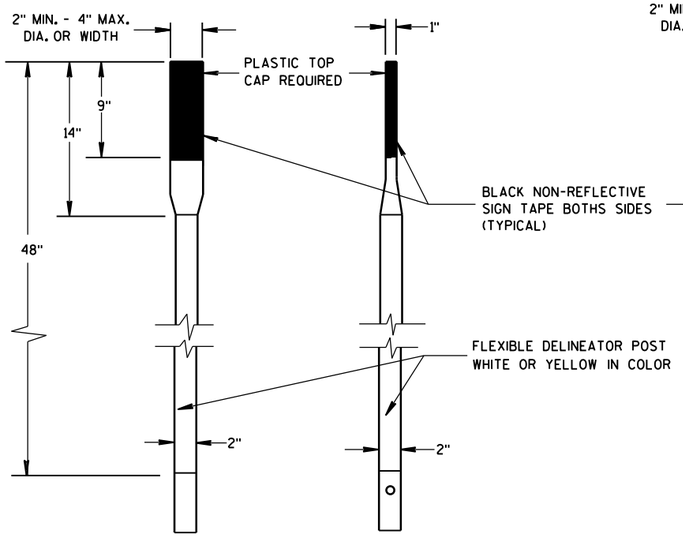
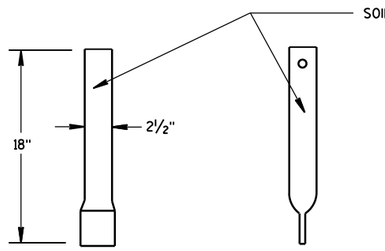
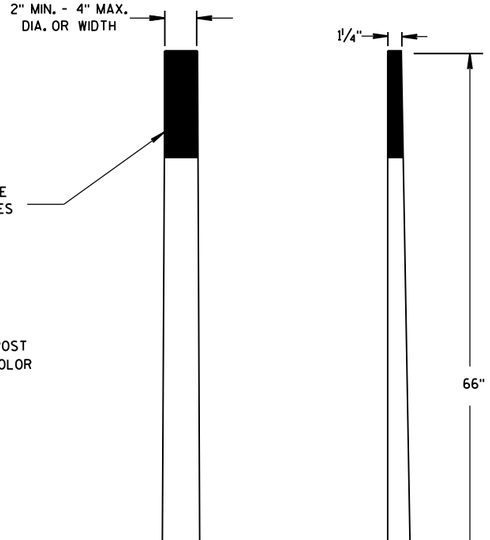
S.D.D. 15 A 3-2a





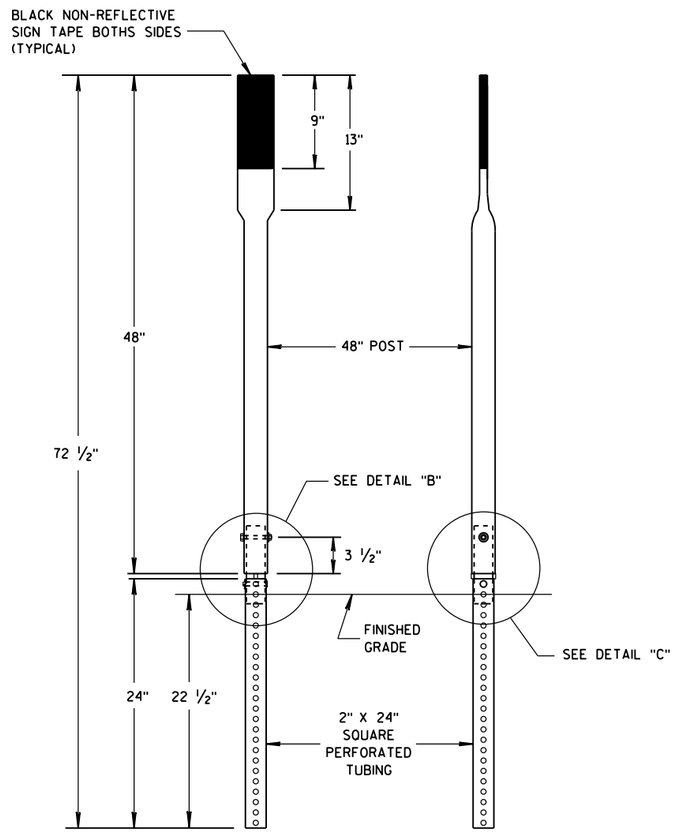
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

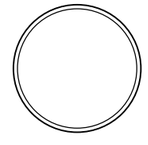
ALTERNATE 2



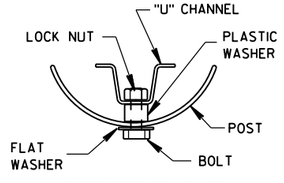
FRONT VIEW SIDE VIEW

ALTERNATE 3

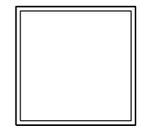
FLEXIBLE MARKER POSTS



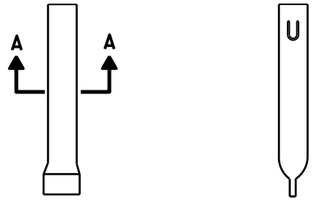
SECTION A-A



SECTION B-B

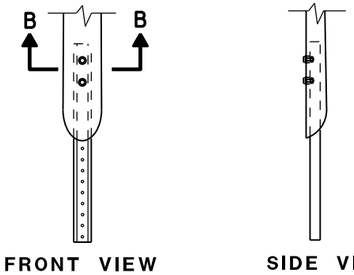


SECTION C-C



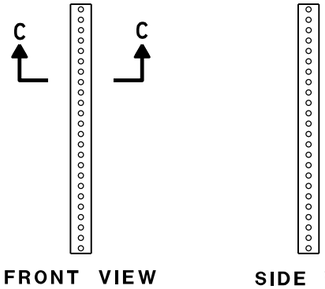
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

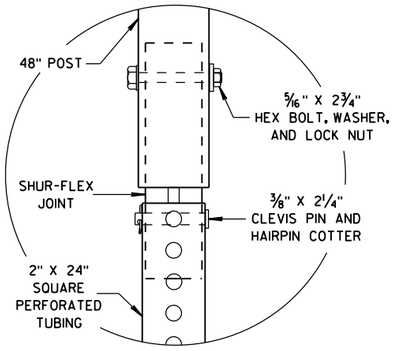
ALTERNATE 2



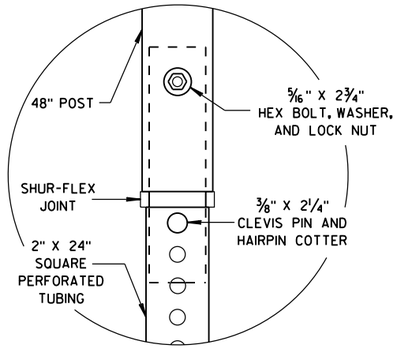
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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

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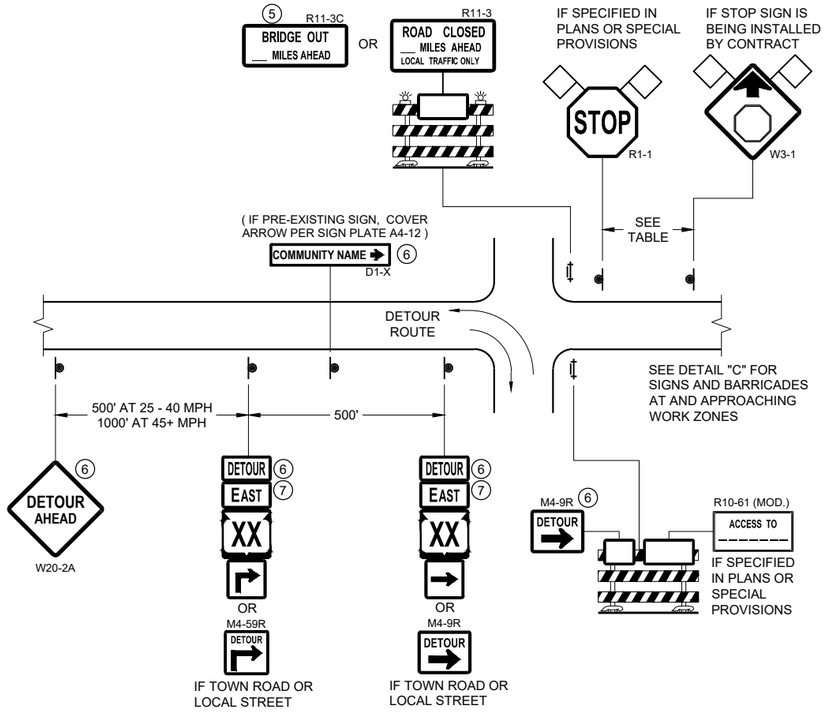
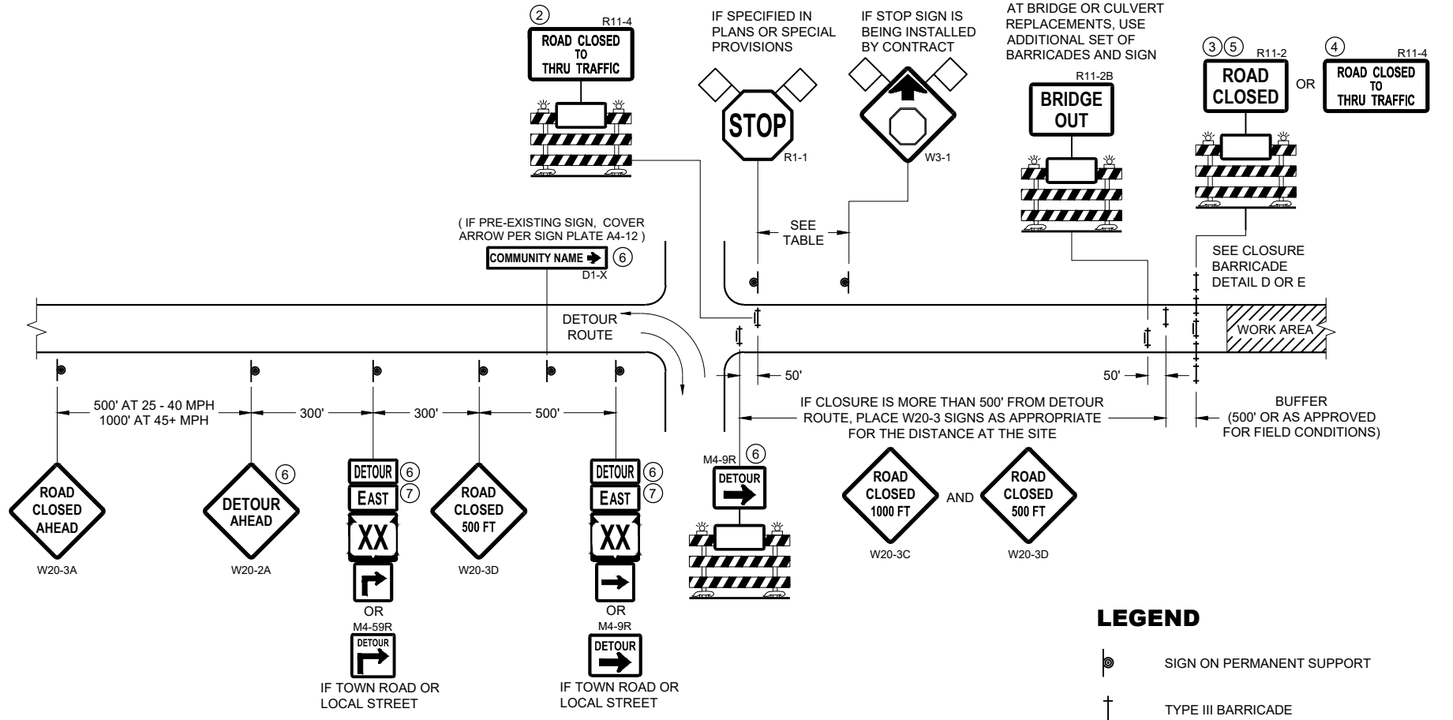
S.D.D. 15 A 3-2b



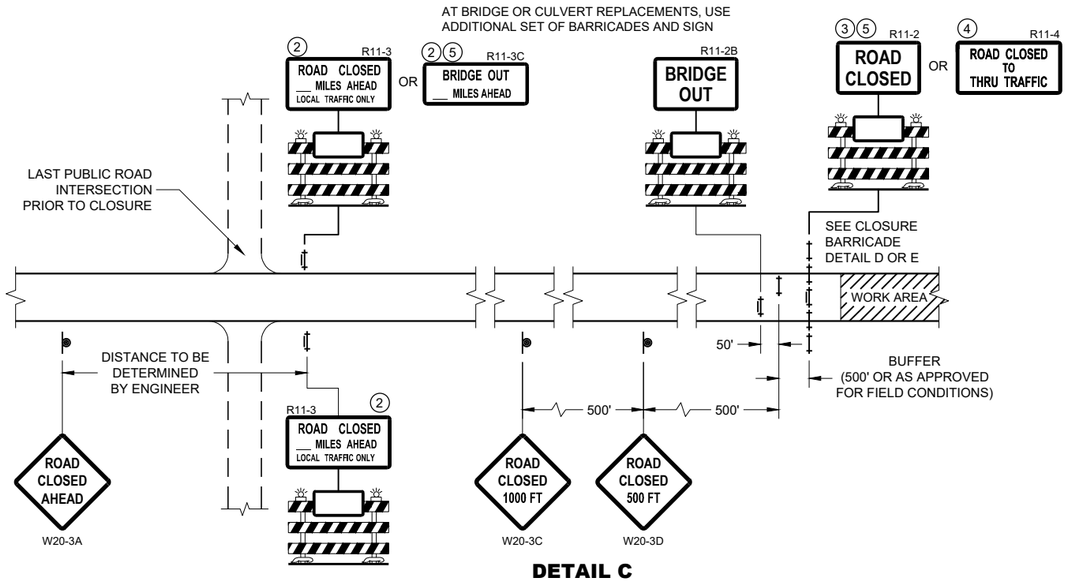


DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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

DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

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

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

LEGEND

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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

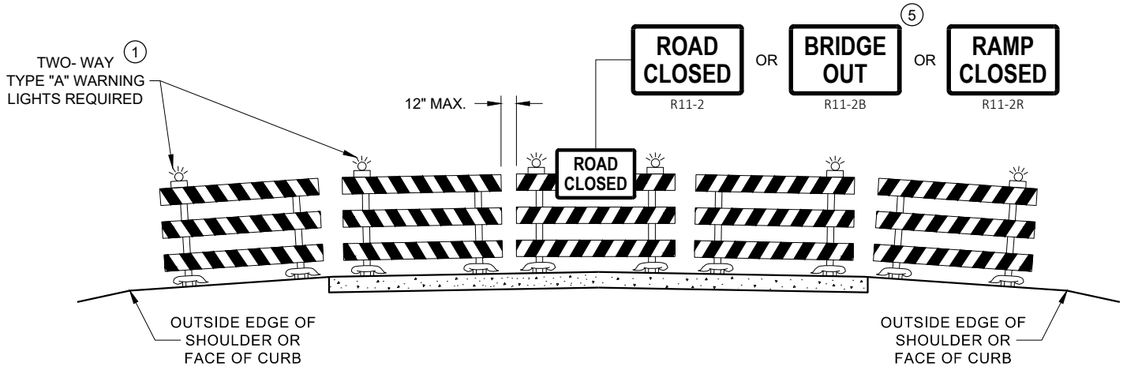
APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

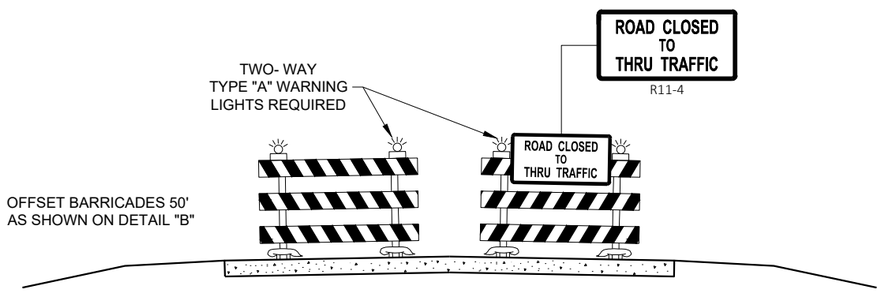
6

SDD 15C02 - 08a

SDD 15C02 - 08a



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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SDD 15C02 - 08b

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

LEGEND

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

GENERAL NOTES

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

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

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

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

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

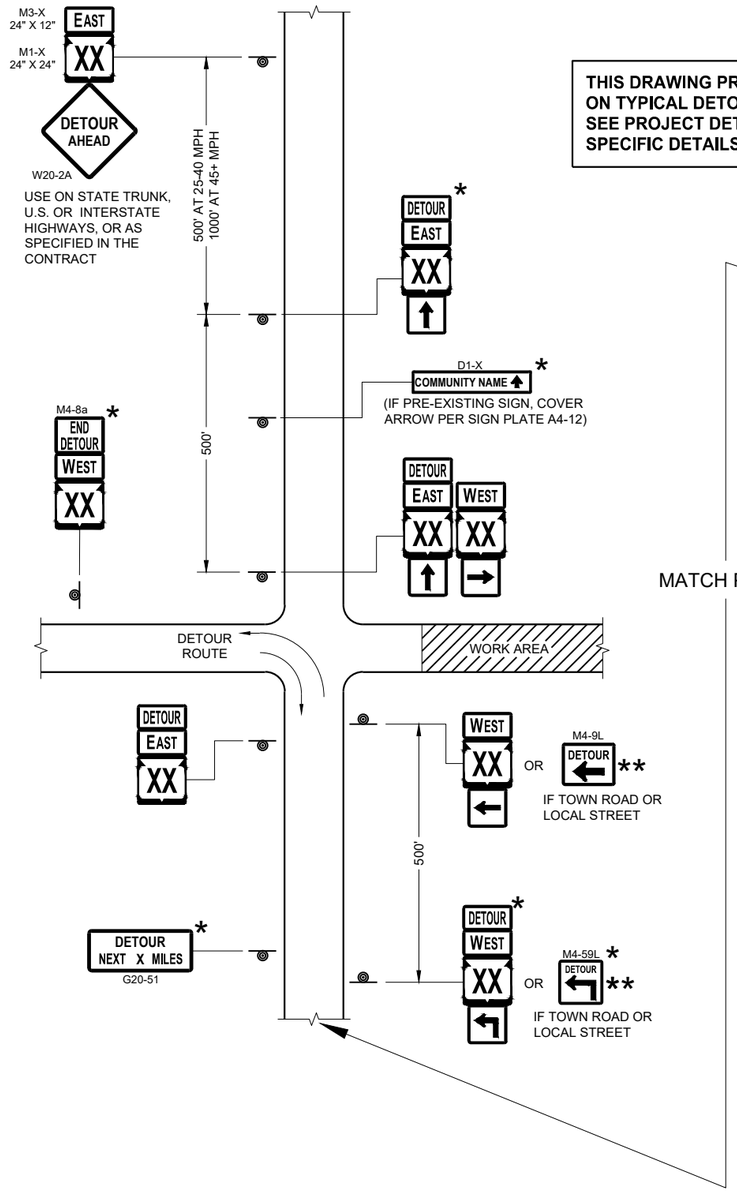
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

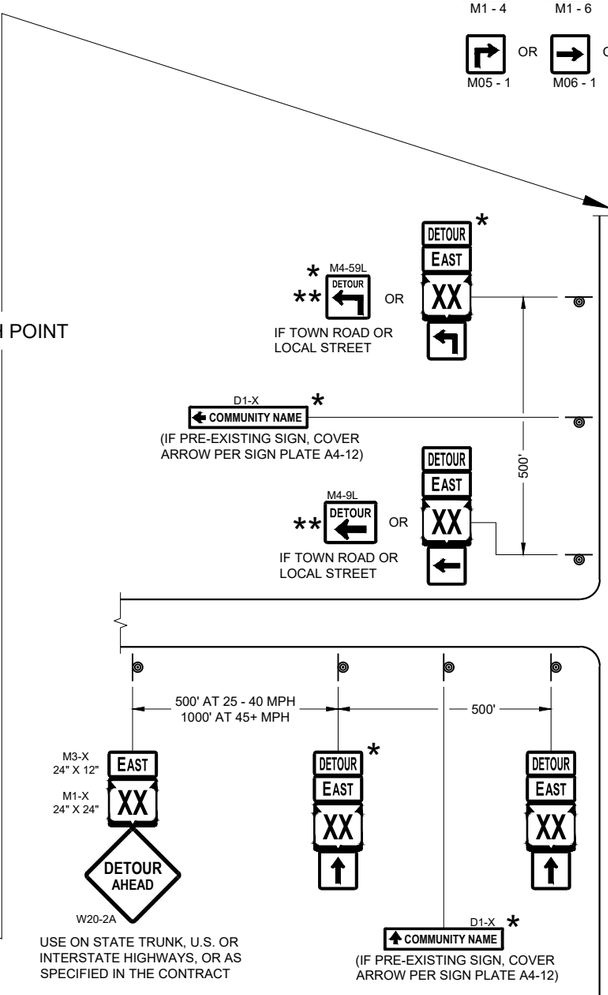
- M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING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

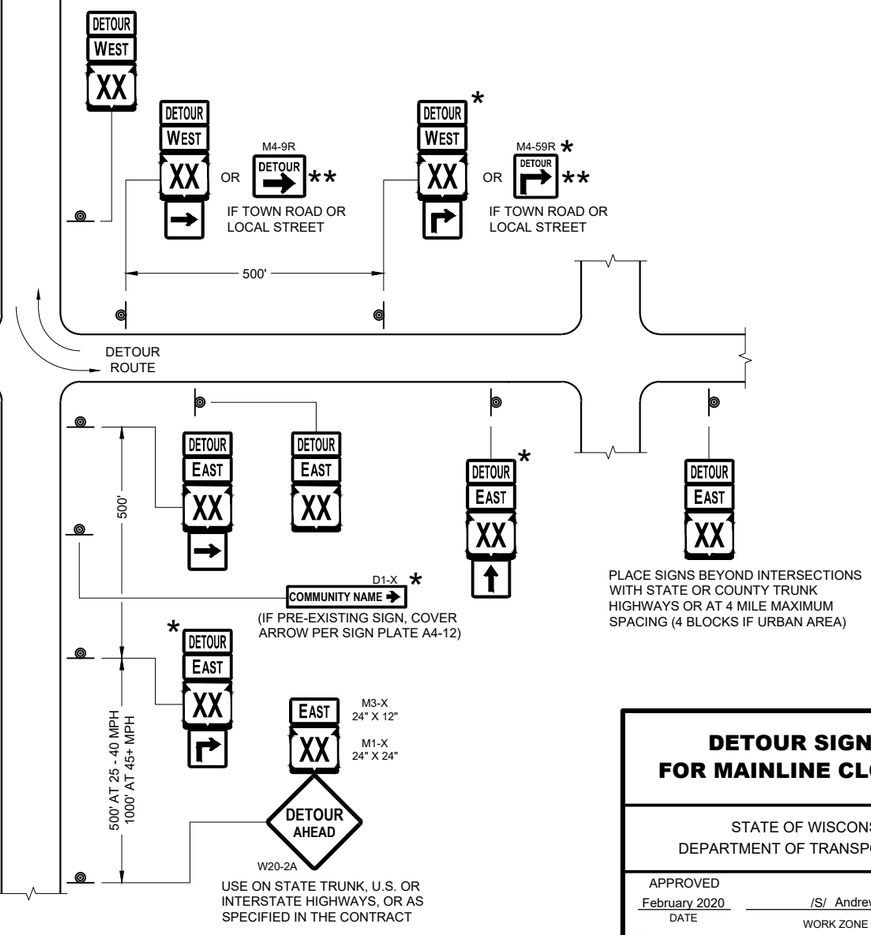
* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** 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.



MATCH POINT





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

DETAIL F
DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

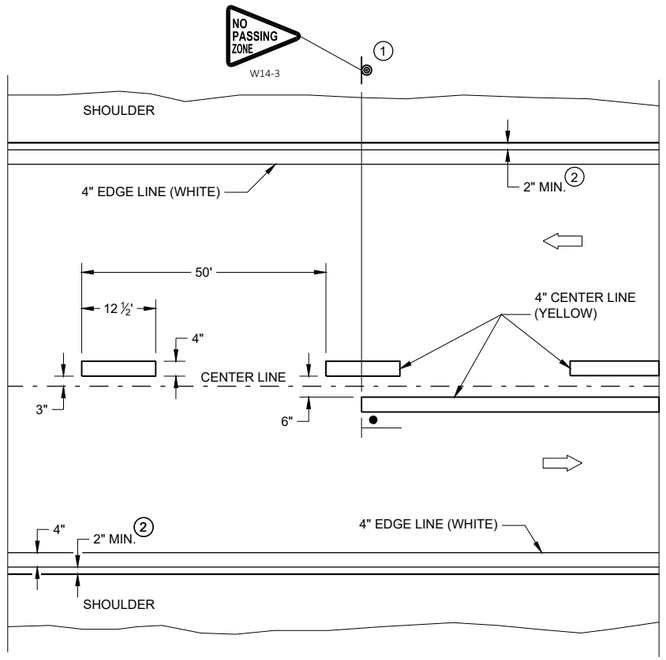
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

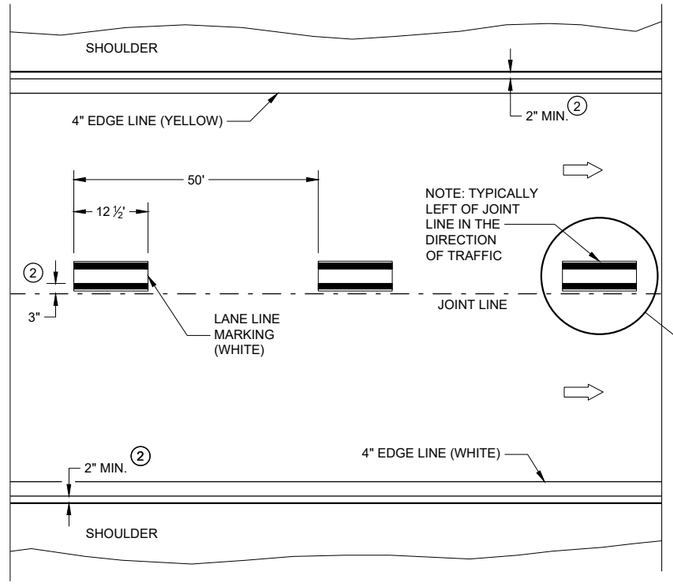
SDD 15C02 - 08c

6

SDD 15C02 - 08c

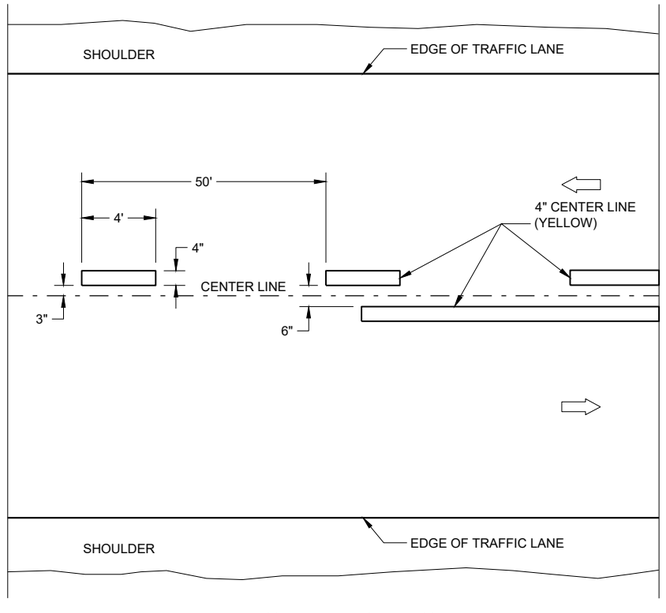


TWO WAY TRAFFIC

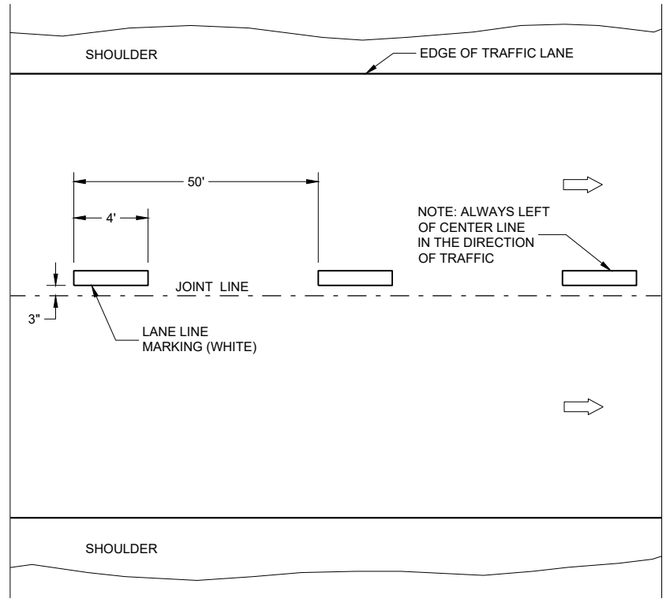


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

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

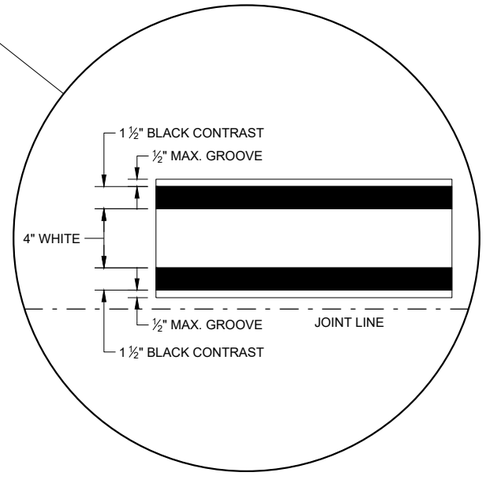
1. LOCATE THE NO PASSING ZONE W14-3 SIGN WITH 50 FEET OF THE "T" MARKING
2. MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

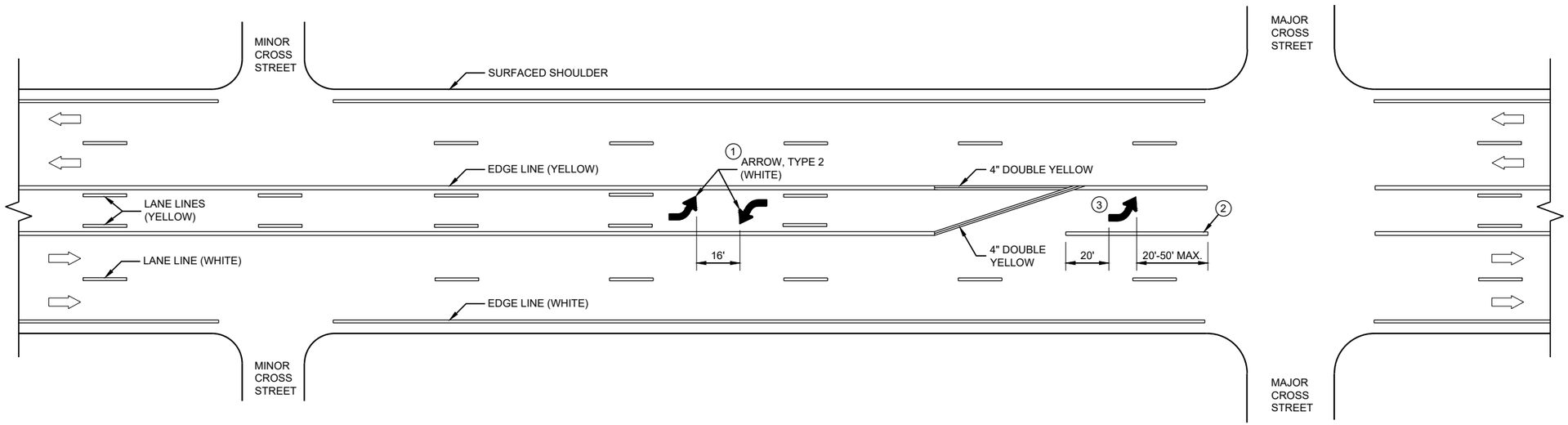
SDD 15C08 - 20a

SDD 15C08 - 20a

GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 8" WHITE
3. TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

DIRECTION OF TRAFFIC



TWO WAY LEFT TURN LANE

6

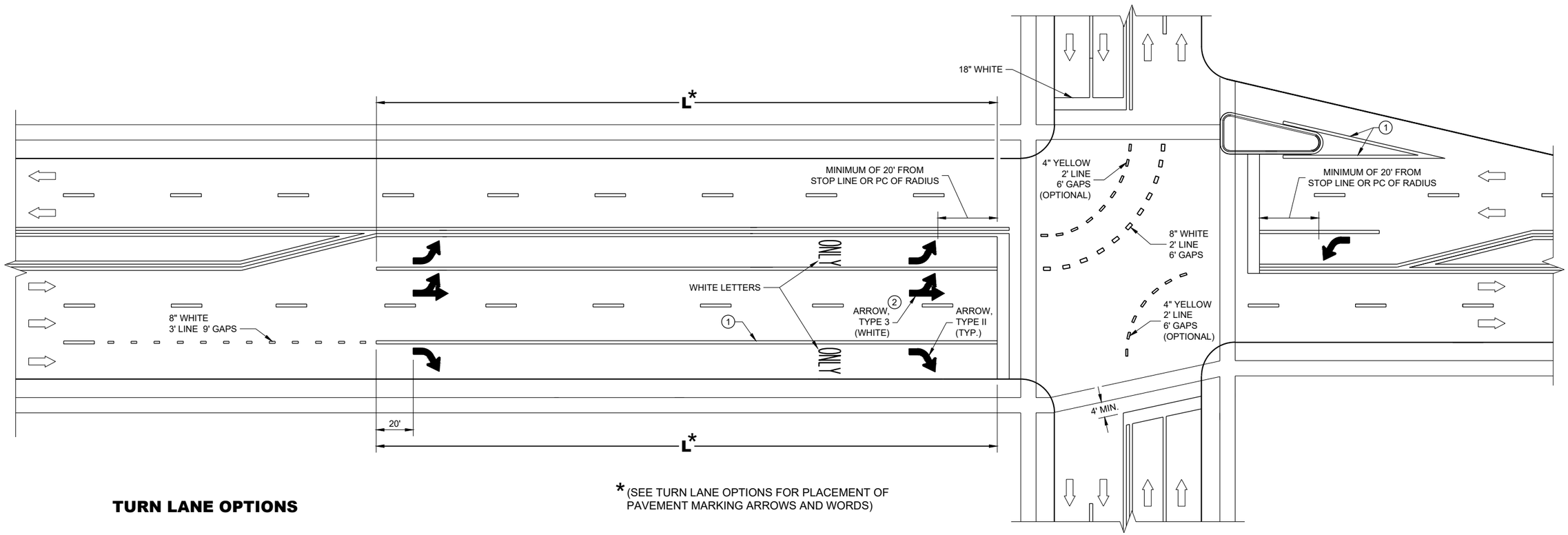
SDD 15C08 - 20b

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

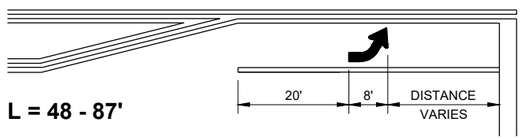
SDD 15C08 - 20b



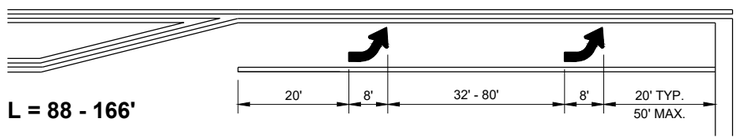
* (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

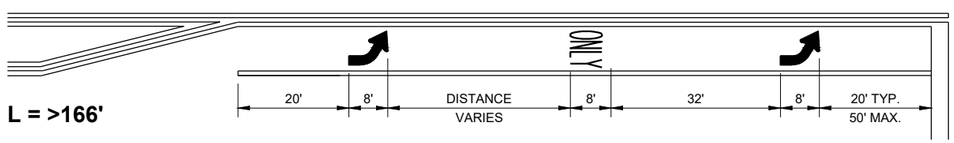
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

GENERAL NOTES

1. 8" WHITE
2. 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

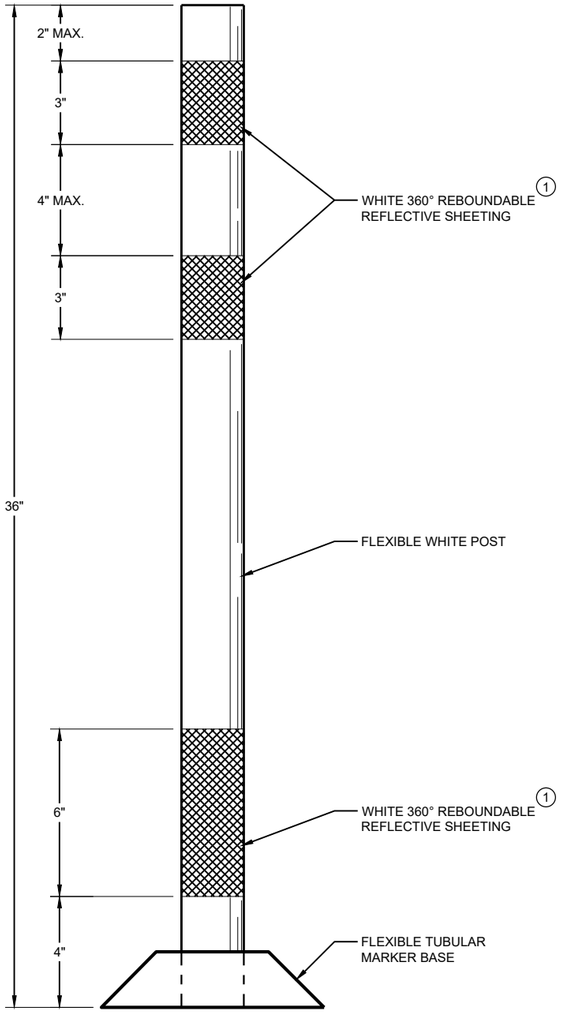
L = LENGTH OF TURN BAY

PAVEMENT MARKING (TURN LANES)

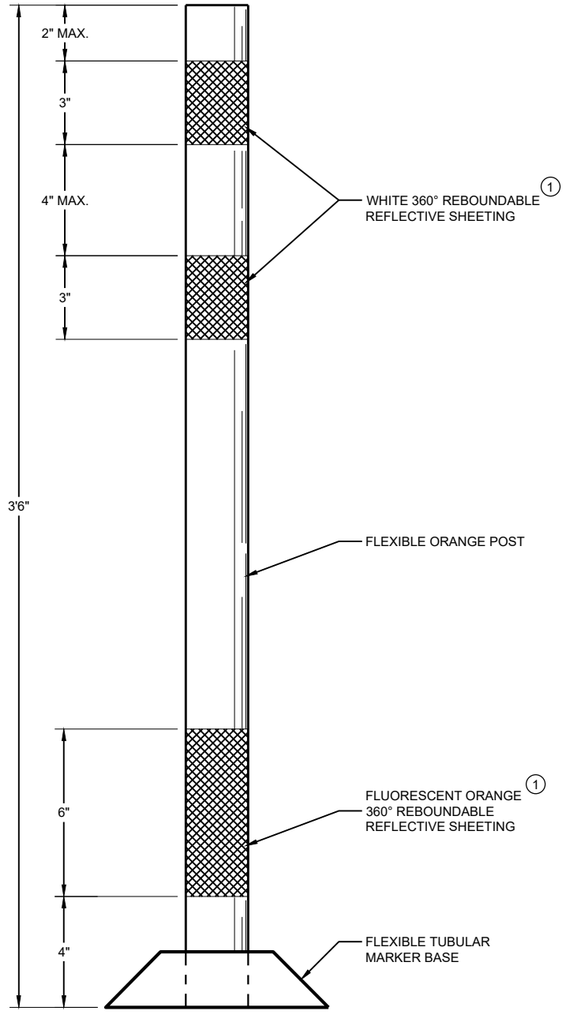
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 15C08 - 20c

6
SDD 15C08 - 20c



FLEXIBLE TUBULAR MARKER POST PERMANENT CROSSOVER



FLEXIBLE TUBULAR MARKER POST WORK ZONE

GENERAL NOTES

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

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS, UNLESS DIRECTED BY THE ENGINEER TO USE BOLTS.

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

6

SDD 15C11 - 07a

CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

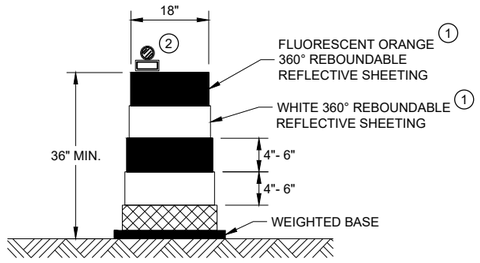
FHWA

6

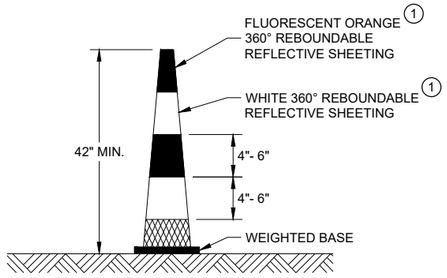
SDD 15C11 - 07a

GENERAL NOTES

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

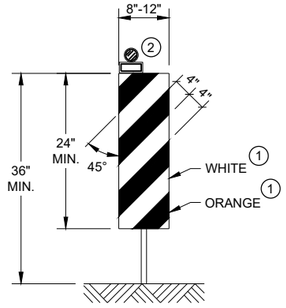


DRUM



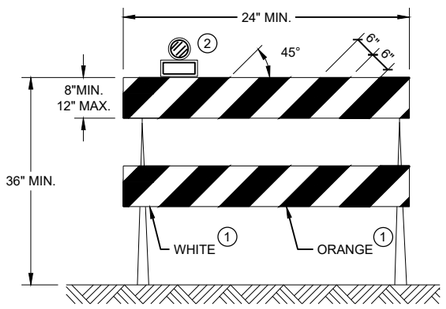
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



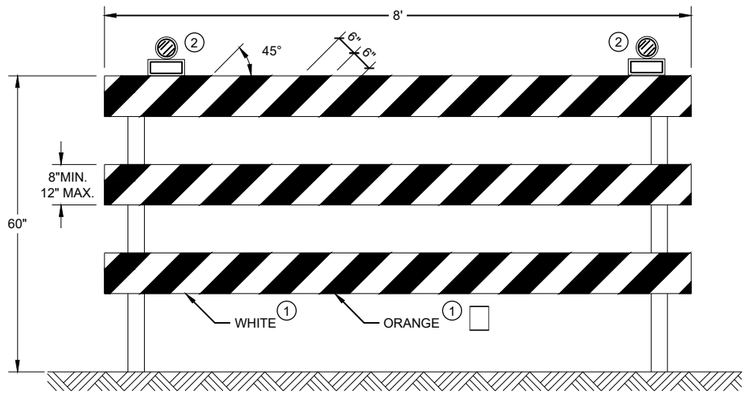
VERTICAL PANEL

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



TYPE II BARRICADE

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



TYPE III BARRICADE

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

□IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
J□ne 2017
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C11 - 07b

6

SDD 15C11 - 07b

LEGEND

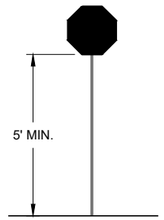
SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

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



STOP/SLOW PADDLE ON SUPPORT STAFF

GENERAL NOTES

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

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

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

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

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

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

FLAGGING

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

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

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

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

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

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

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

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

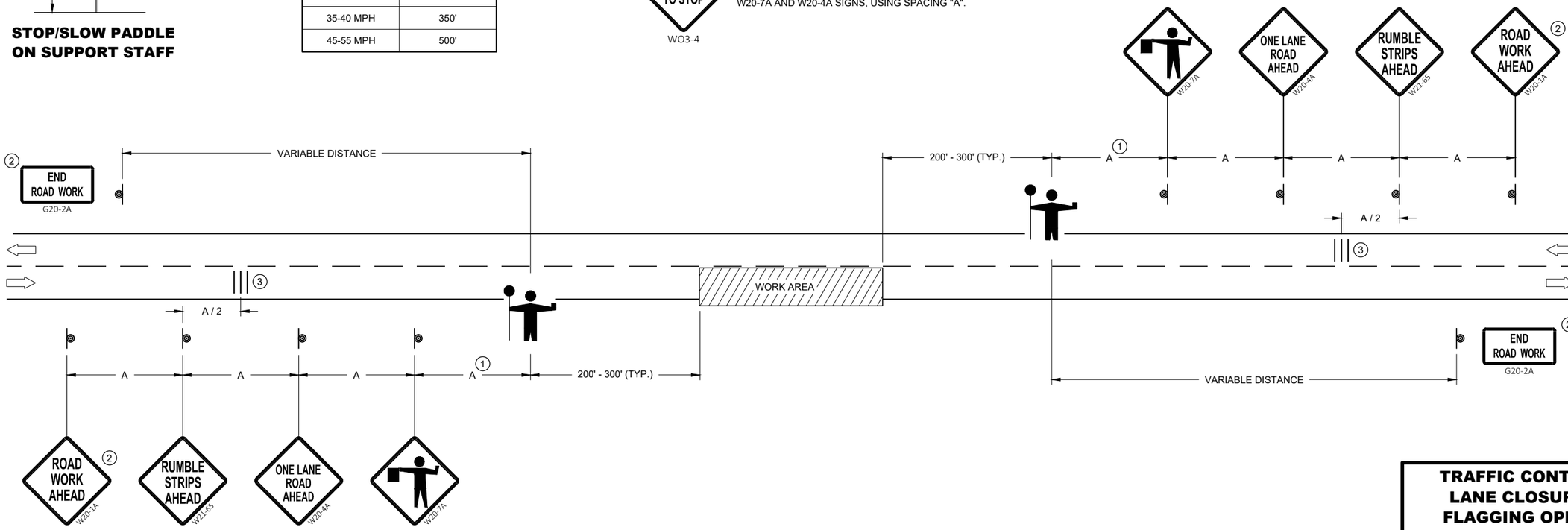
DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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

WO3-4

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



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15C12 - 07

SDD 15C12 - 07

LEGEND

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL DRUM

DIRECTION OF TRAFFIC

WORK ZONE

GENERAL NOTES

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

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

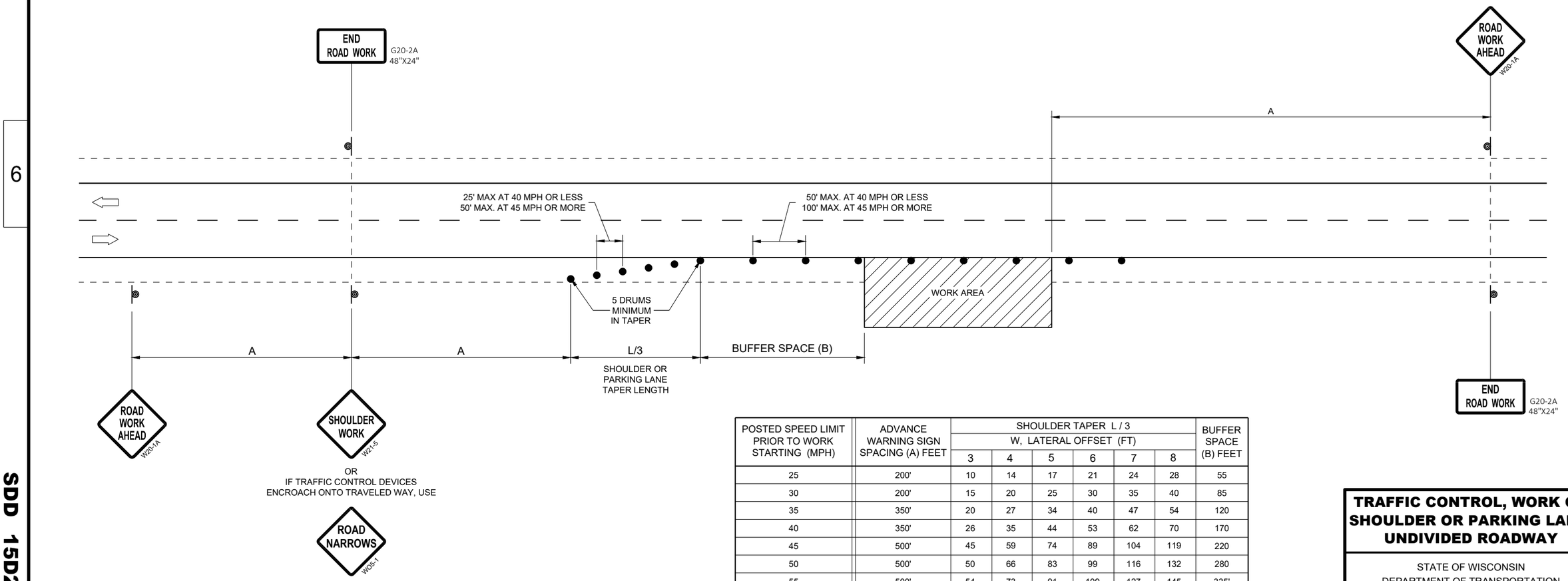
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

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

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

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



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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

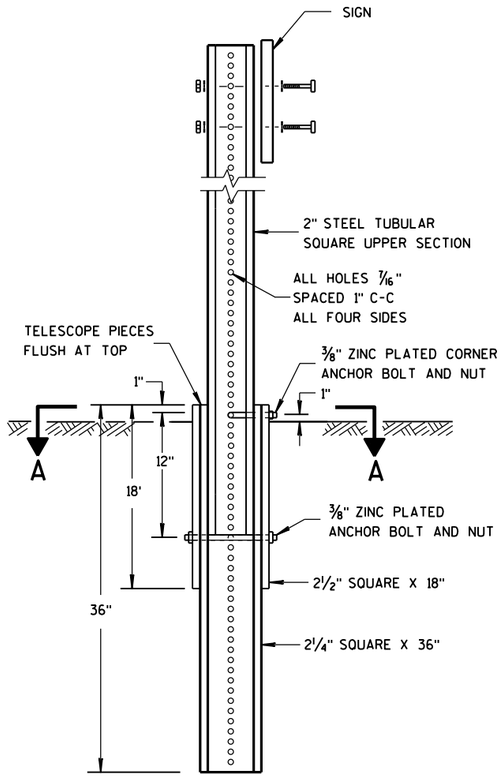
APPROVED
May 2020
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE T SAFETY ENGINEER

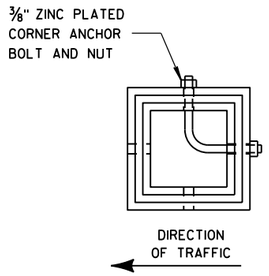
FHWA

SDD 15D28 - 04

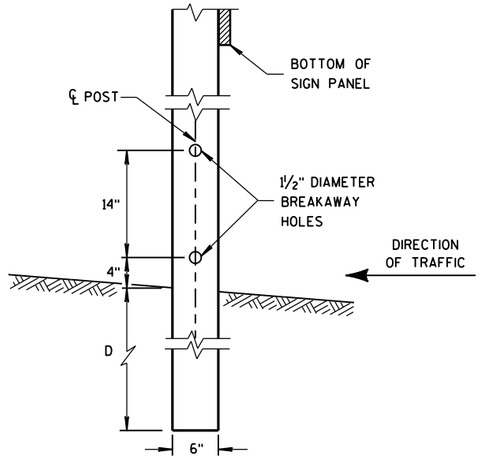
SDD 15D28 - 04



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



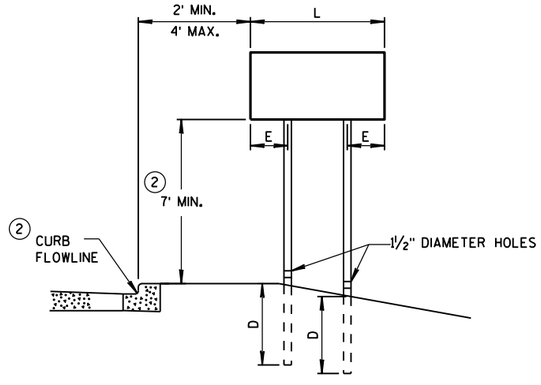
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

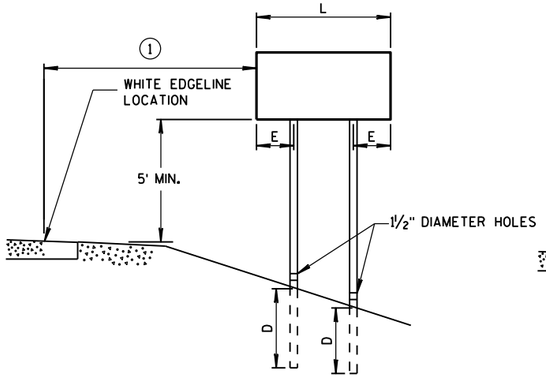
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

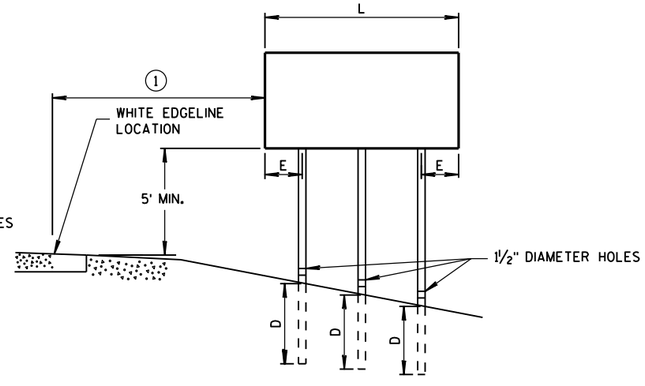
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK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

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



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

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

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

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

WOOD POST EMBEDMENT DEPTH

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

4" X 6" WOOD POST

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

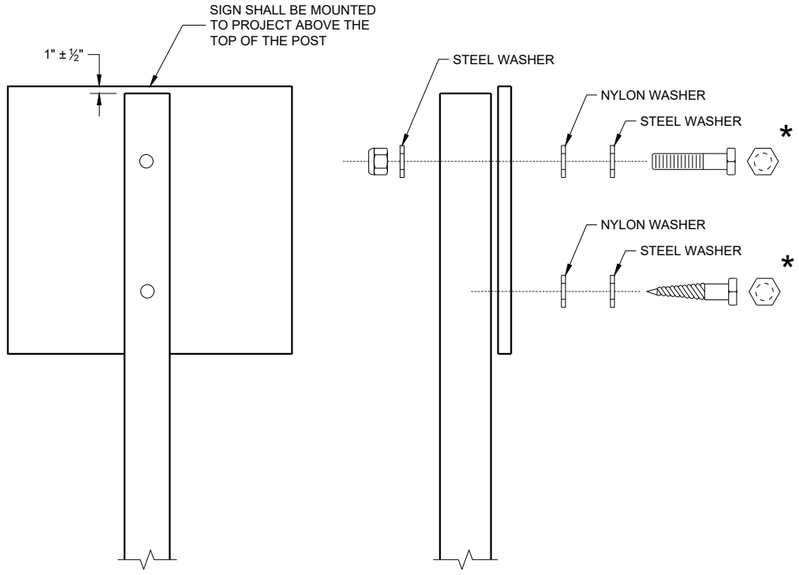
SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

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



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

A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3
B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC 3

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

WOOD POST (4" x 6")
LAG SCREWS - ⅜" x 3"
MACHINE BOLTS - 5/16" x 6 ½" OR 7" LENGTH W/NUTS

SQUARE STEEL POST (2" x 2")
MACHINE BOLTS - ⅜" x 3 ¼" LENGTH W/NUTS
RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE 0.720 - 0.765 INCH, GRIP RANGE 0.042 - 0.375 INCH

WASHERS (ALL POSTS) -
1 ¼" O.D. x ⅜" I.D. x 1/16" STEEL
1 ¼" O.D. x ⅜" I.D. x 0.080 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. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

6

6

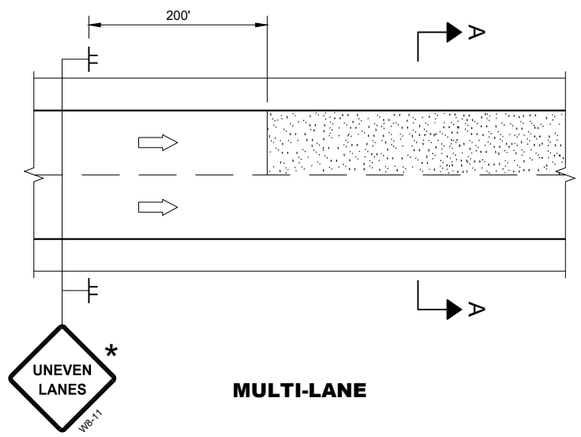
SDD 15D38 - 02b

SDD15D38 - 02b

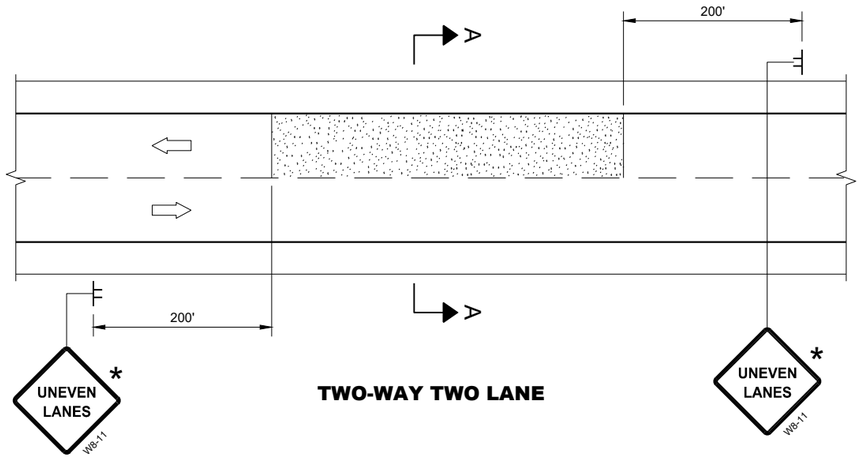
ATTACHMENT OF SIGNS TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA



MULTI-LANE



TWO-WAY TWO LANE

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.

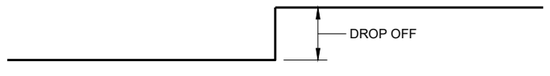
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

* 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.

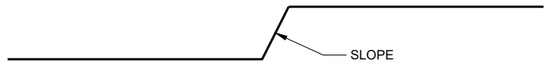
LEGEND

- 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

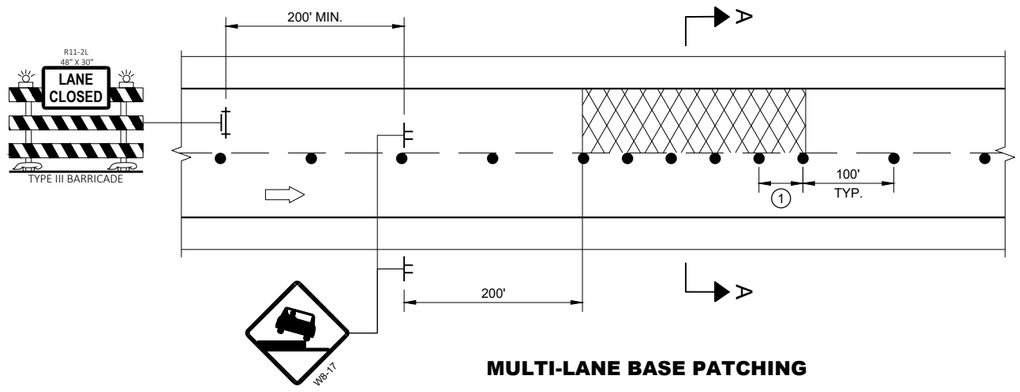


SECTION A - A

OR

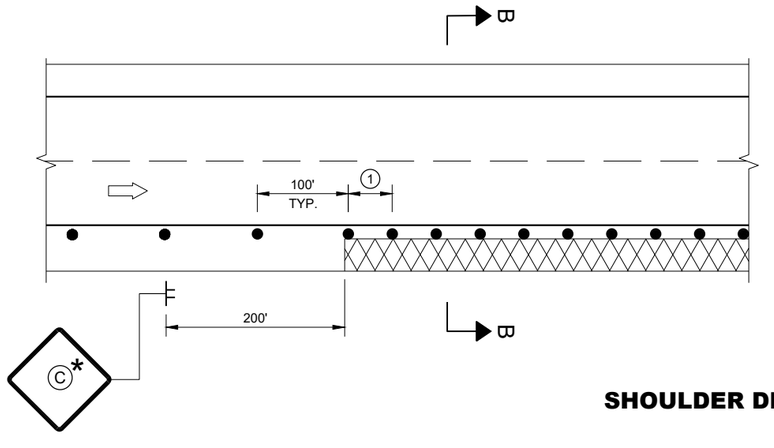


SECTION A - A

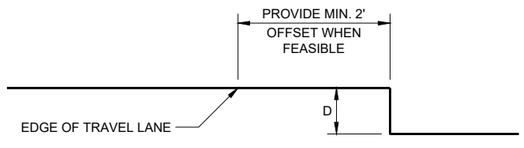


MULTI-LANE BASE PATCHING

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

TRAFFIC CONTROL, DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D39 - 02

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.

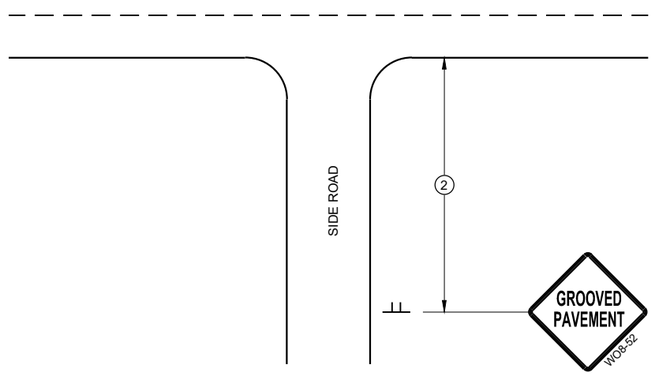
(1) PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

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

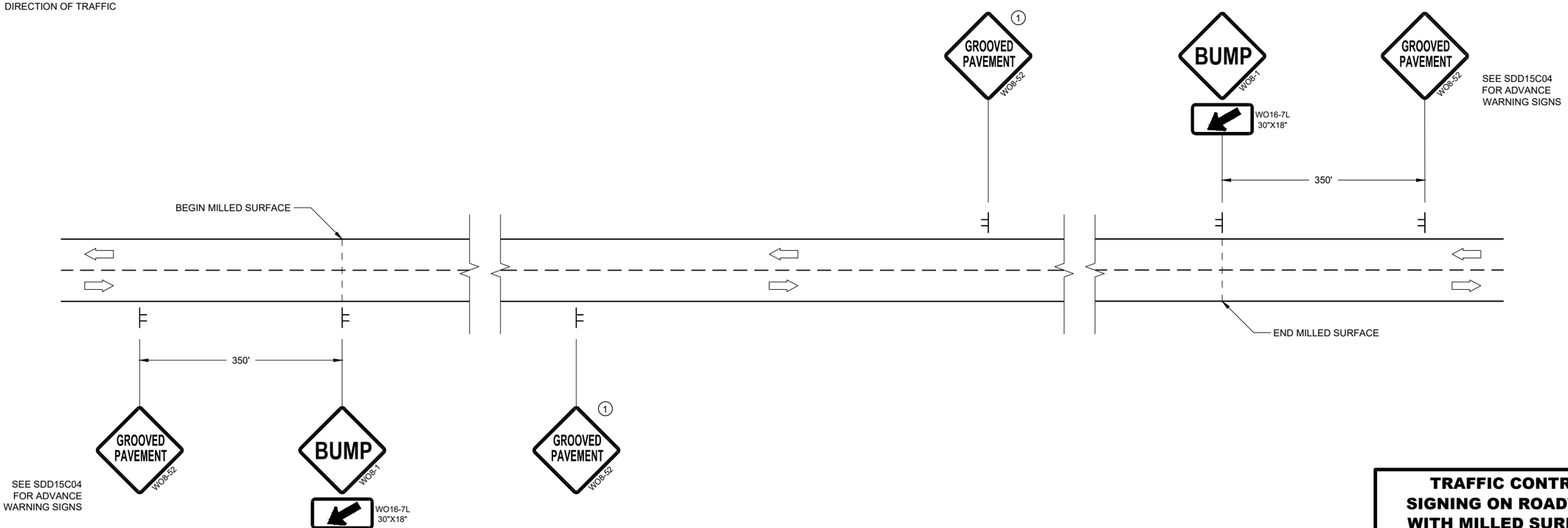
LEGEND

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

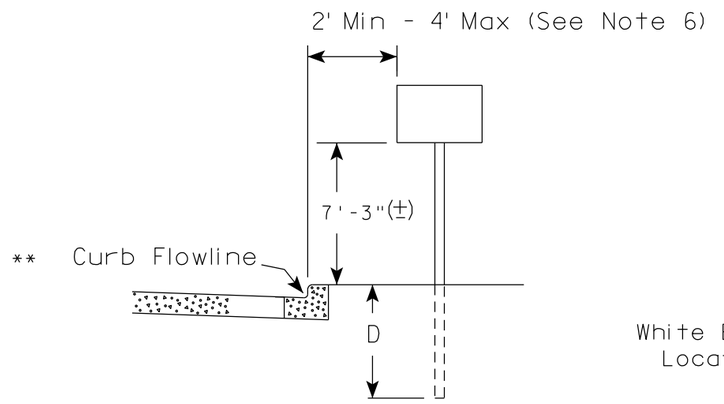
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

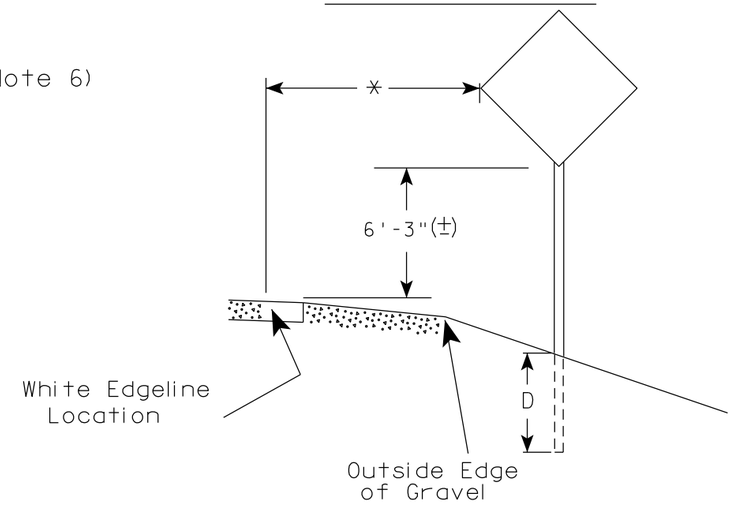
FHWA

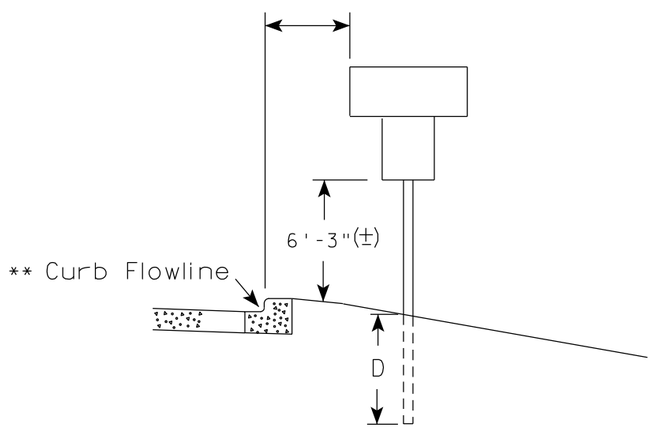
6
SDD 15D44 - 02

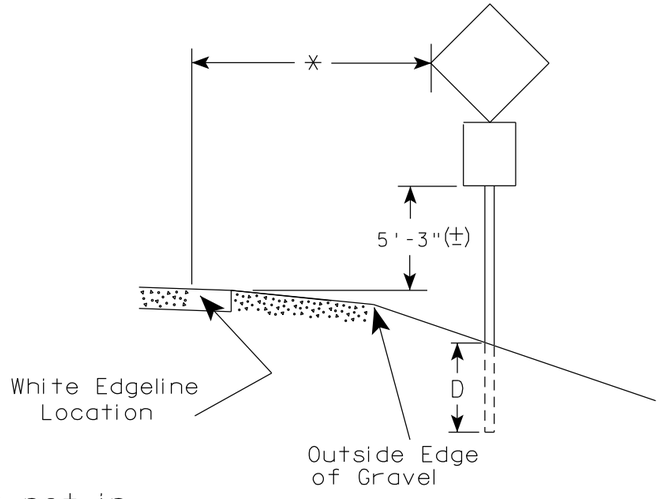
URBAN AREA



RURAL AREA (See Note 2)







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

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

POST EMBEDMENT DEPTH

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

GENERAL NOTES

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

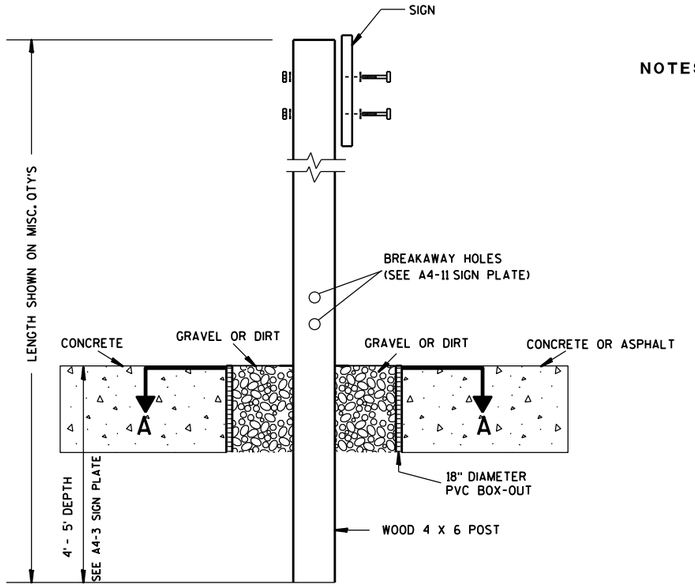
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/13/2020 PLATE NO. A4-3.22

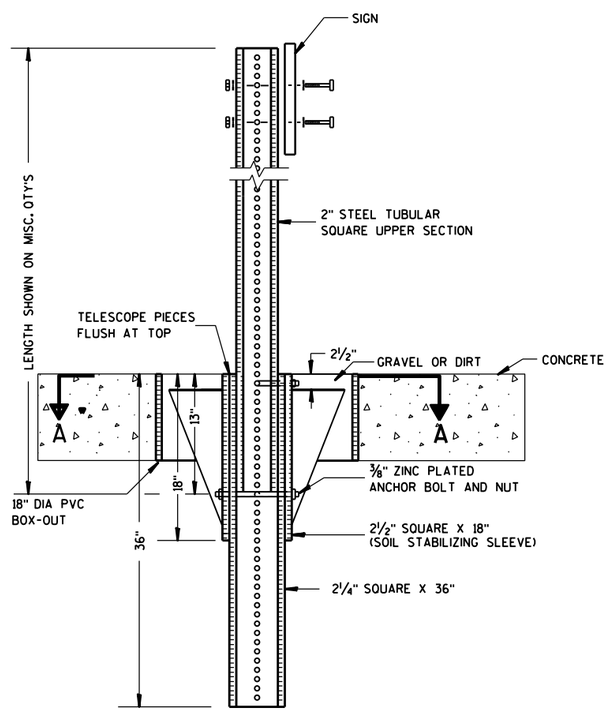
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 141	E



ELEVATION VIEW

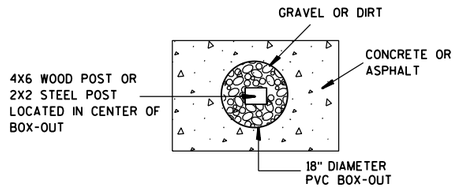
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

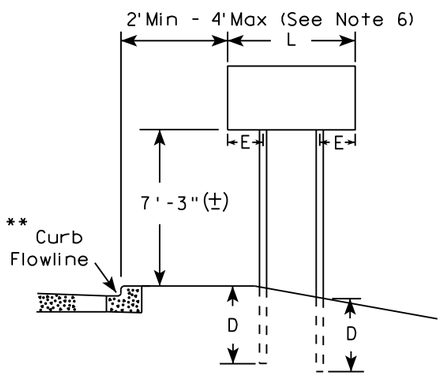
APPROVED Matthew R Rauch
for State Traffic Engineer

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

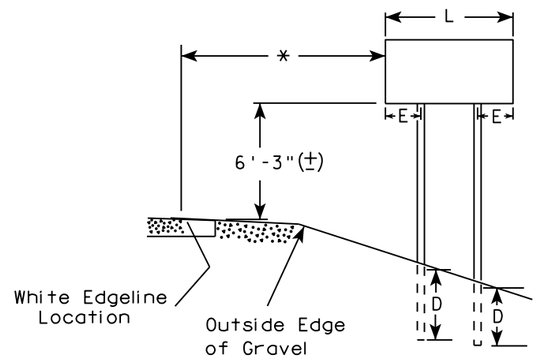
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

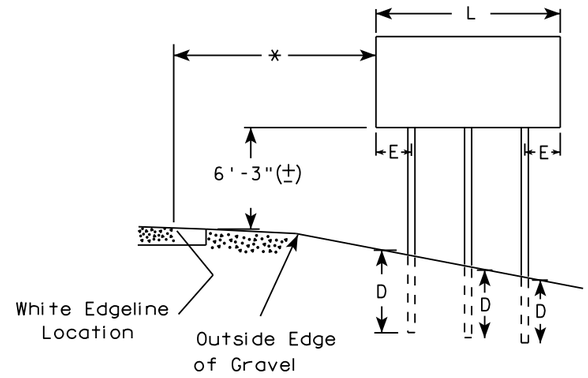
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

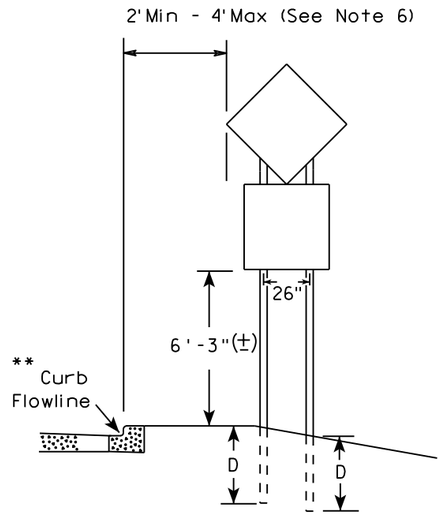
URBAN AREA



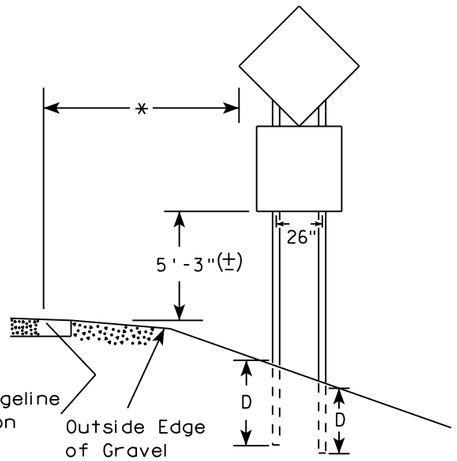
RURAL AREA (See Note 3)







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" (±) or 6'-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" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-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" (±).

* 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'

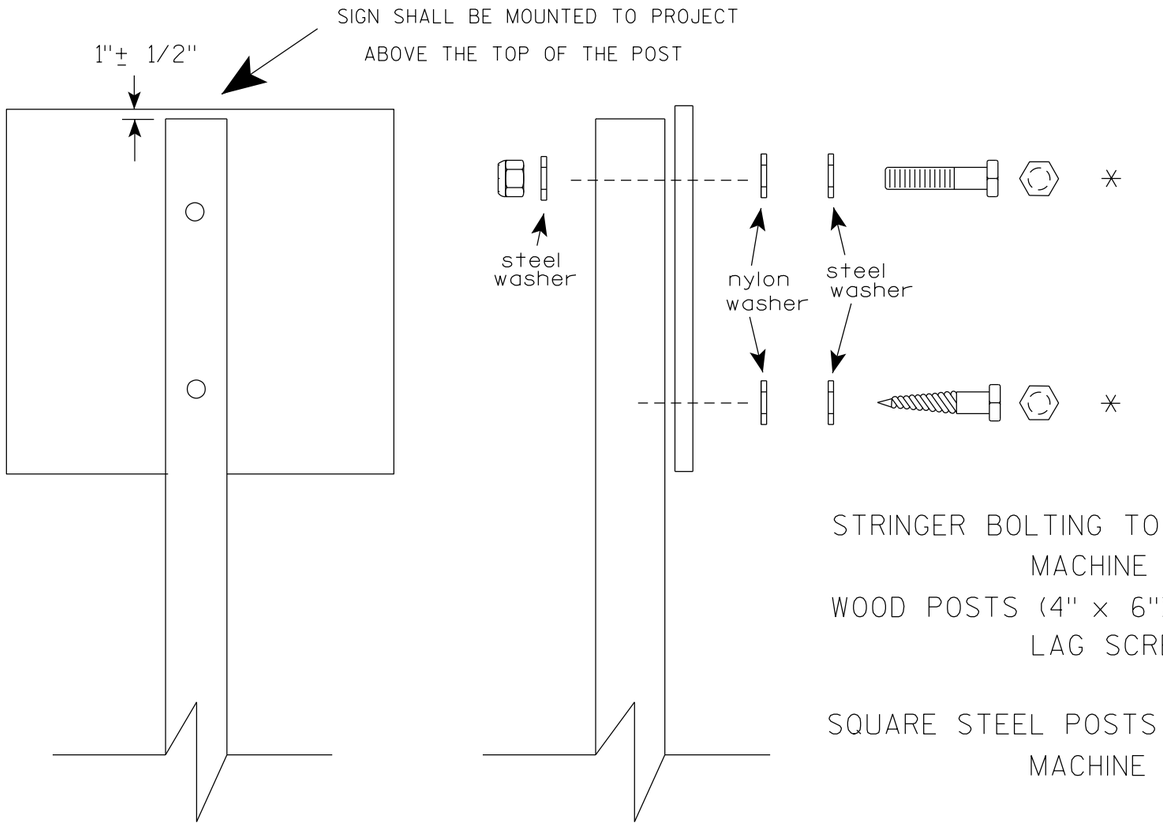
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 143	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

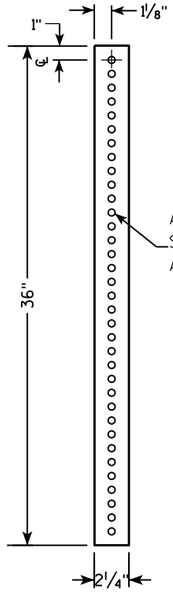
DATE 4/1/2020 PLATE NO. A4-8.9

PROJECT NO:

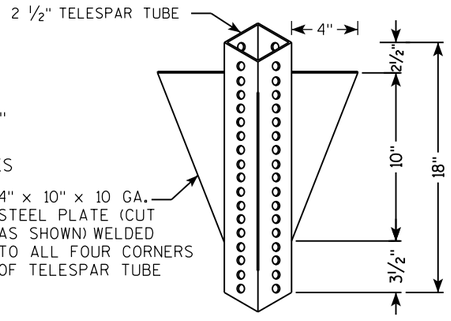
SHEET NO: 144 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

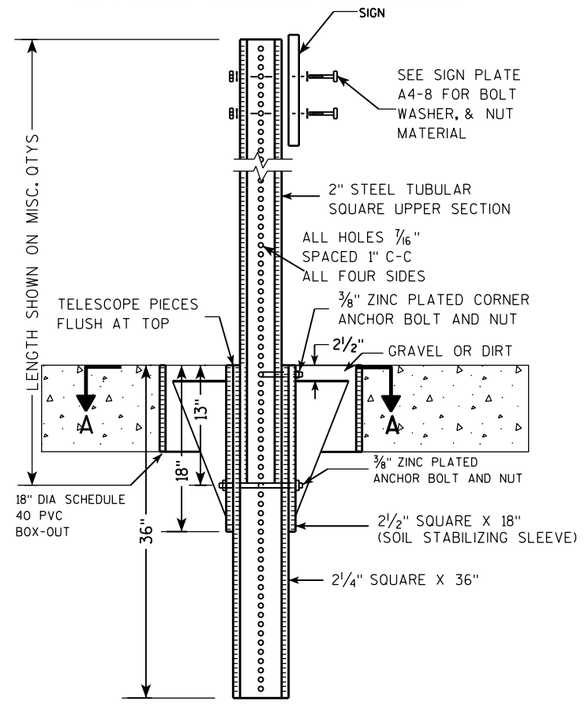
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



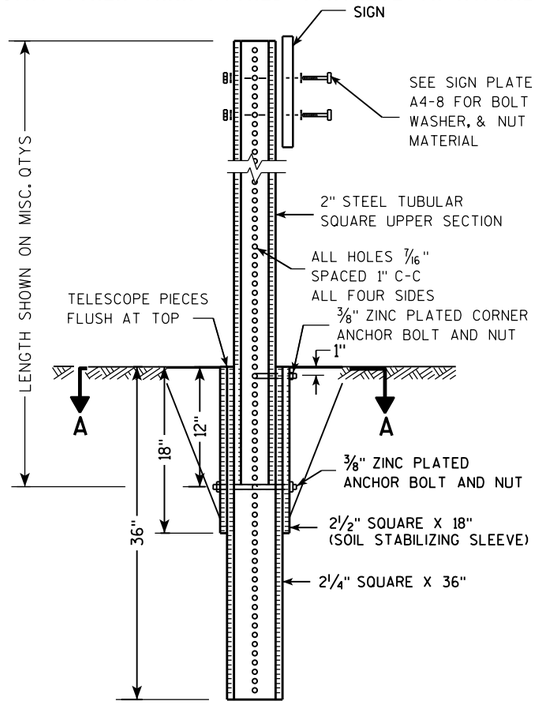
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

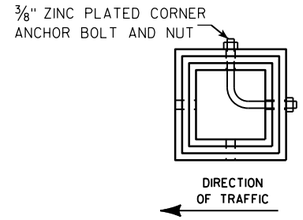


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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

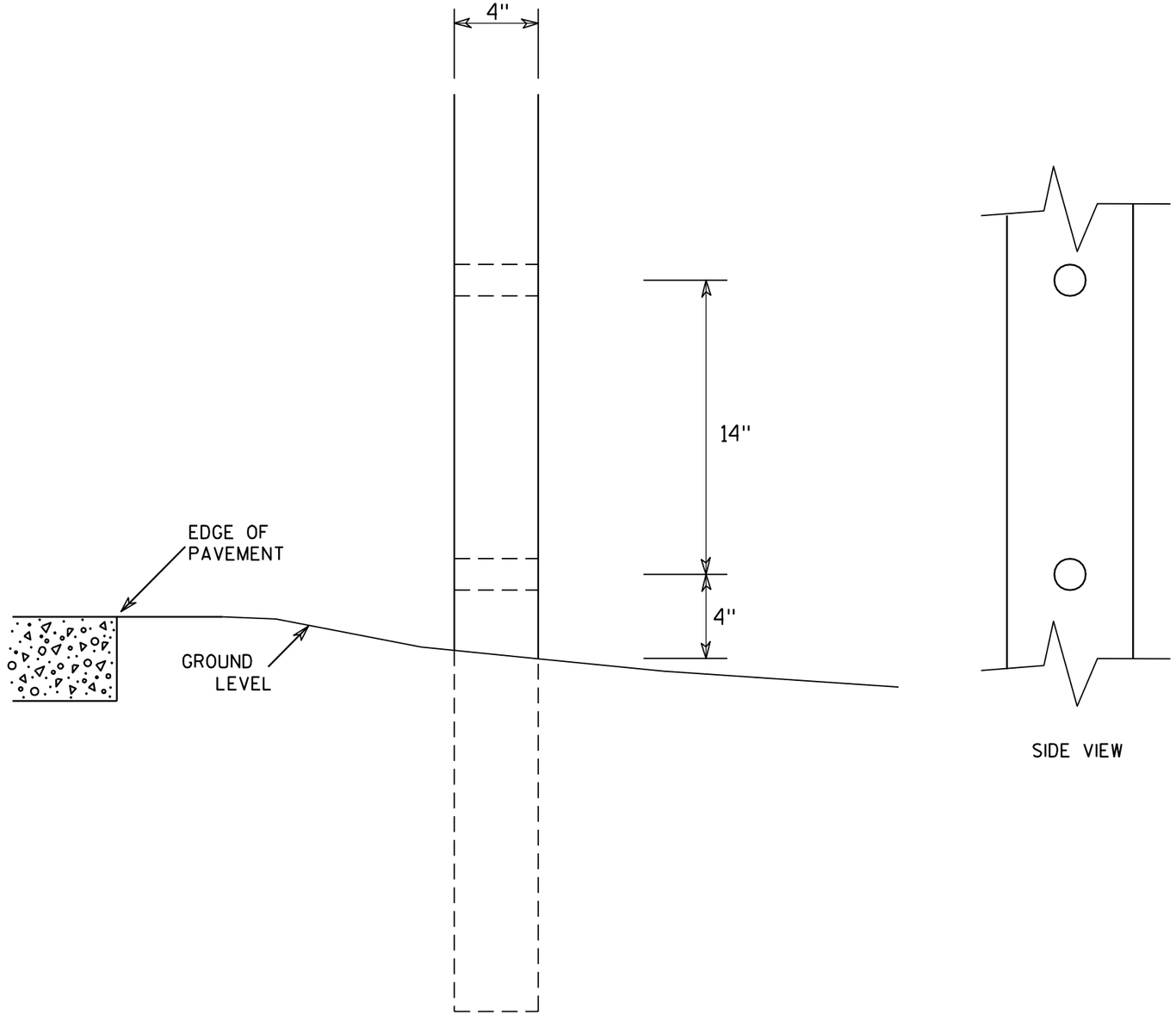
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

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

7

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

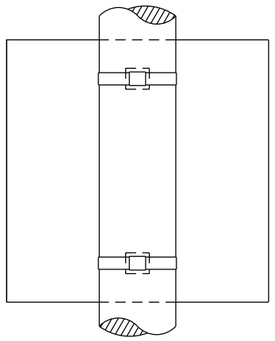
APPROVED Chester J Spang
for State Traffic Engineer

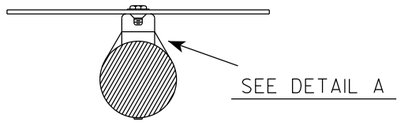
DATE 3/27/97 PLATE NO. A4-11.2

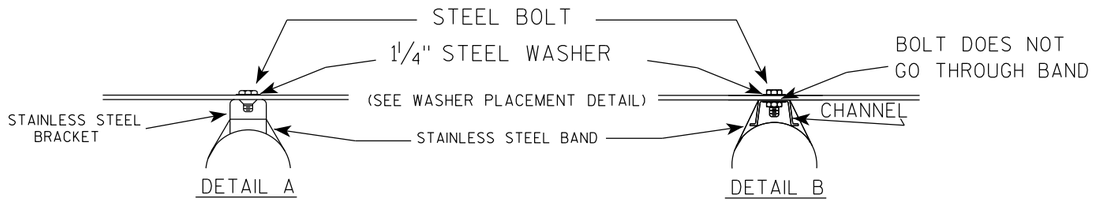
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 146	E

BANDING

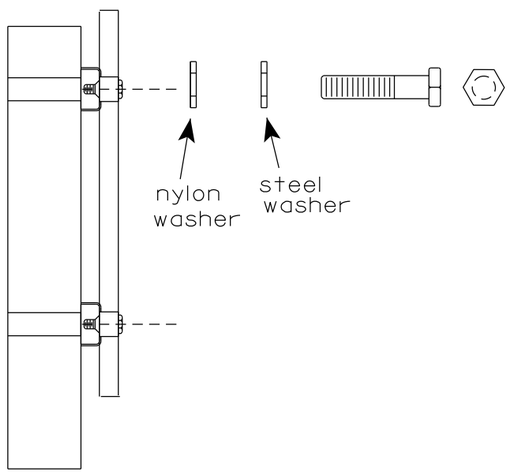
SINGLE SIGN







WASHER PLACEMENT

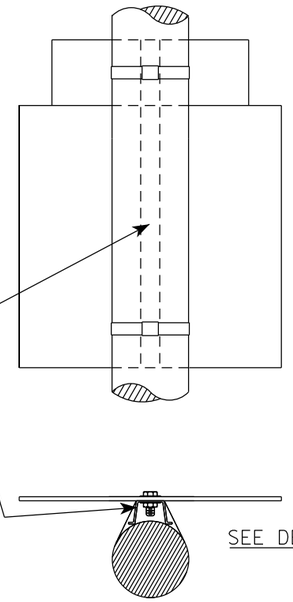


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

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

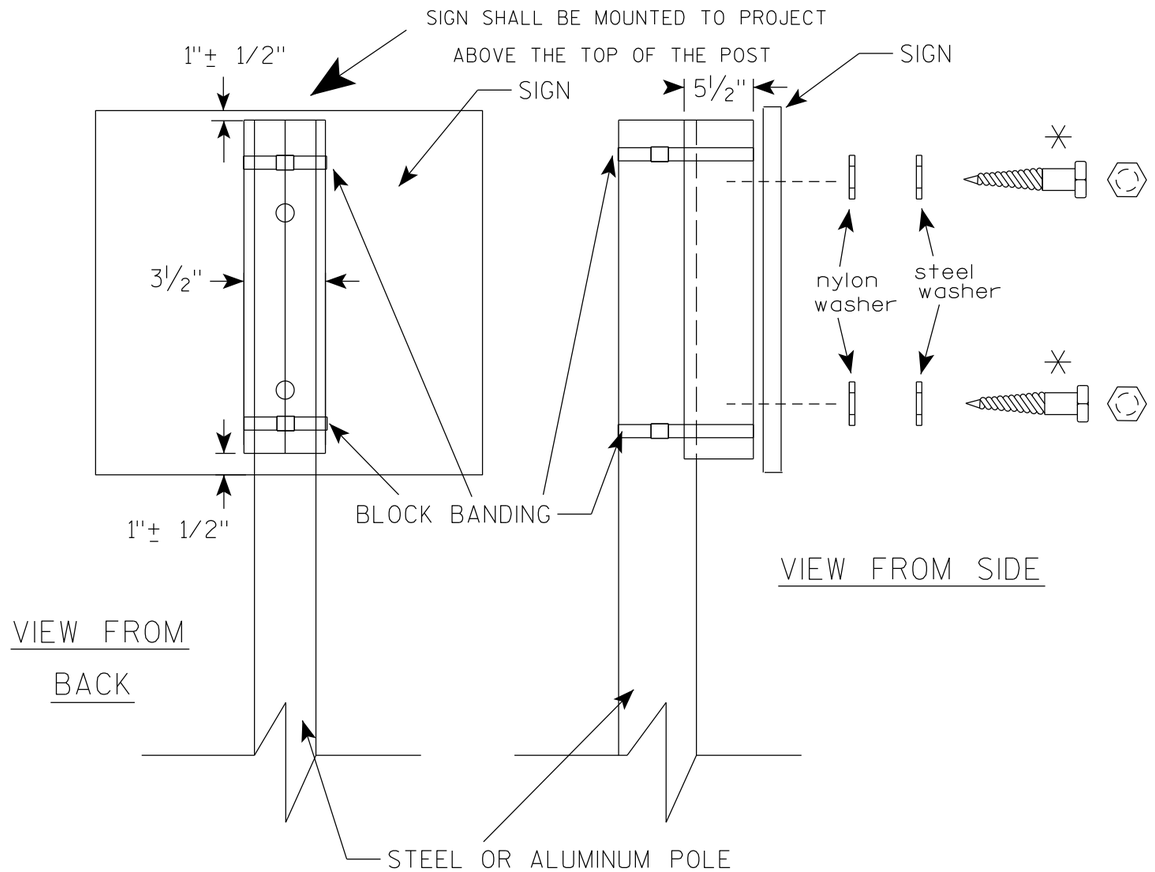
DATE 6/10/19 PLATE NO. A5-9.4

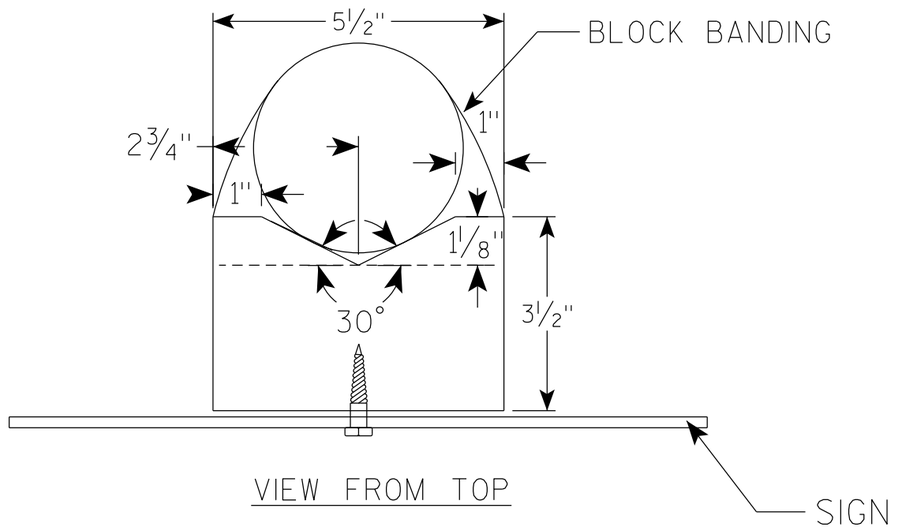
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 147	E

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

7

7





GENERAL NOTES

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

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

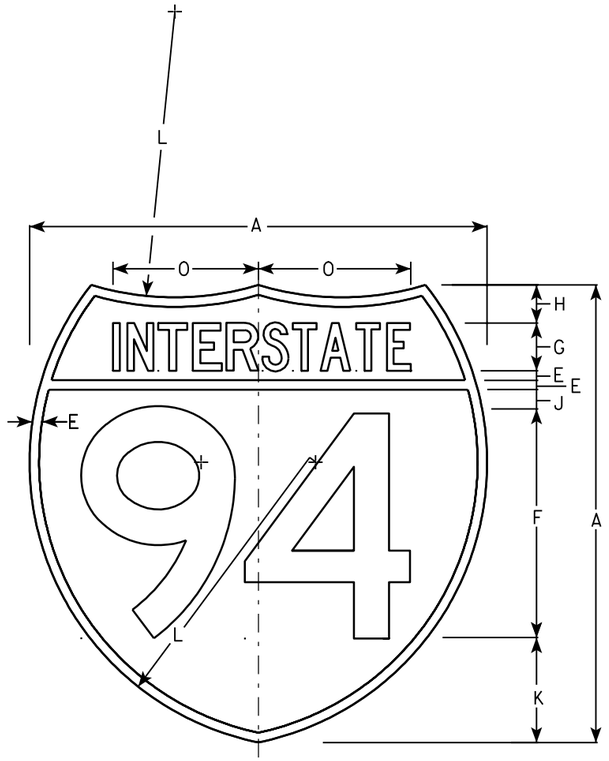
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

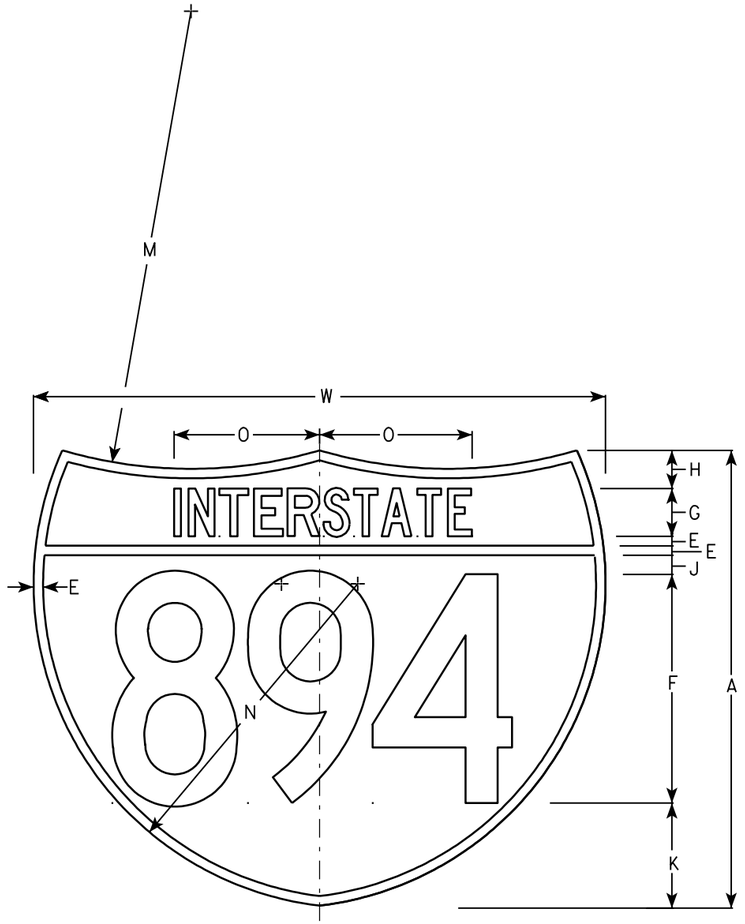
DATE 6/10/19 PLATE NO. A5-10.2

PROJECT NO:

SHEET NO: 148 E



M1-1



M1-1A

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Top Red - Bottom Blue (See Note 6)
   Message - White - See Note 6
3. Message Series - See note 5
4. Substitute appropriate numerals & ajust spacing as per plate A10-1.
5. M1-1 - Numerals - D
   Interstate - C
   M1-1A - All copy - C
6. Permanent Signs
   Message - Type H Reflective
   Detour or other temporary signs
   Background - Reflective
   Message - Reflective

Metric equivalent for these signs are:

SIZE	M1-1	SIZE	M1-1A
1			
2	600 mm X 600 mm	2	600 mm X 750 mm
3	900 mm X 900 mm	3	900 mm X 1125 mm
4	900 mm X 900 mm	4	900 mm X 1125 mm
5	900 mm X 900 mm	5	900 mm X 1125 mm

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	M1-1 Area sq. ft.	M1-1A Area sq. ft.	M1-1 Area m2	M1-1A Area m2
1																													
2	24				1/2	12	2 1/2	2		1	5 1/2	15	24	17	7 7/8								30			3.13	3.91	.36	.46
3	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
4	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
5	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05

INTERSTATE ROUTE MARKER
M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

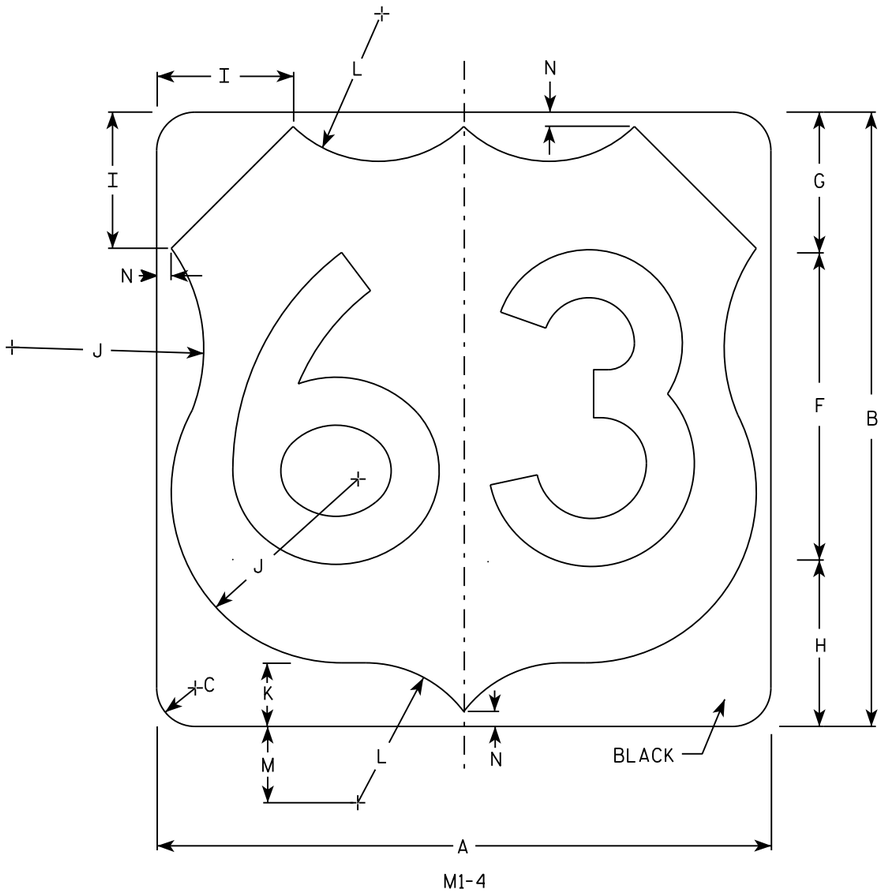
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 08/23/05 PLATE NO. M1-1.8

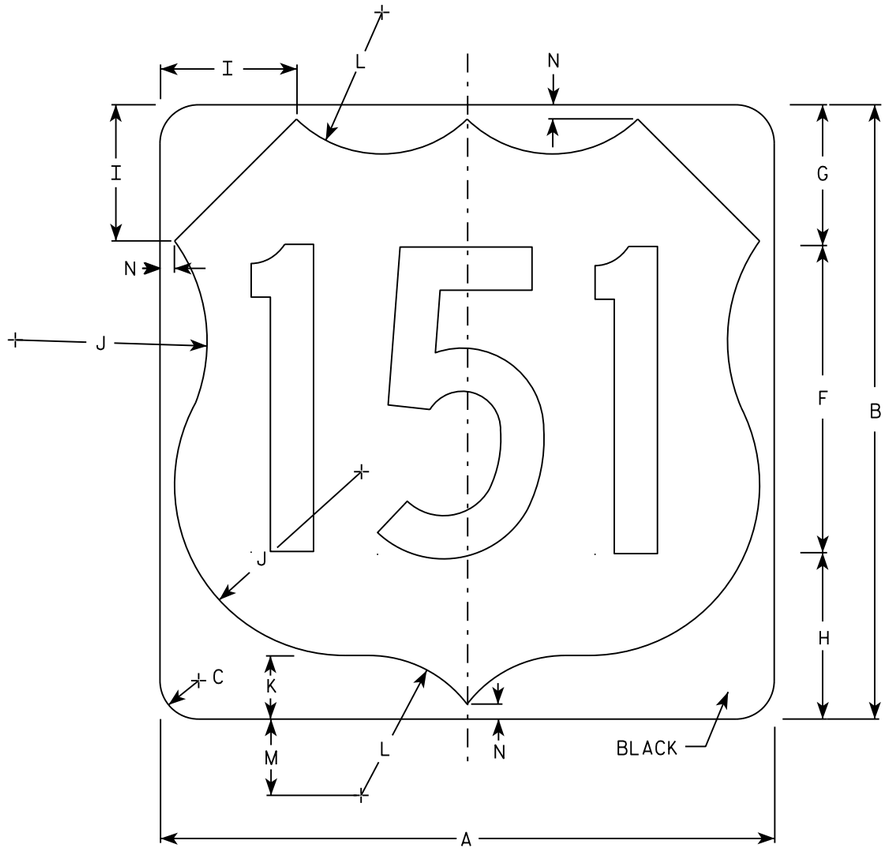
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 149	E

NOTES

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



M1-4



M1-4

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

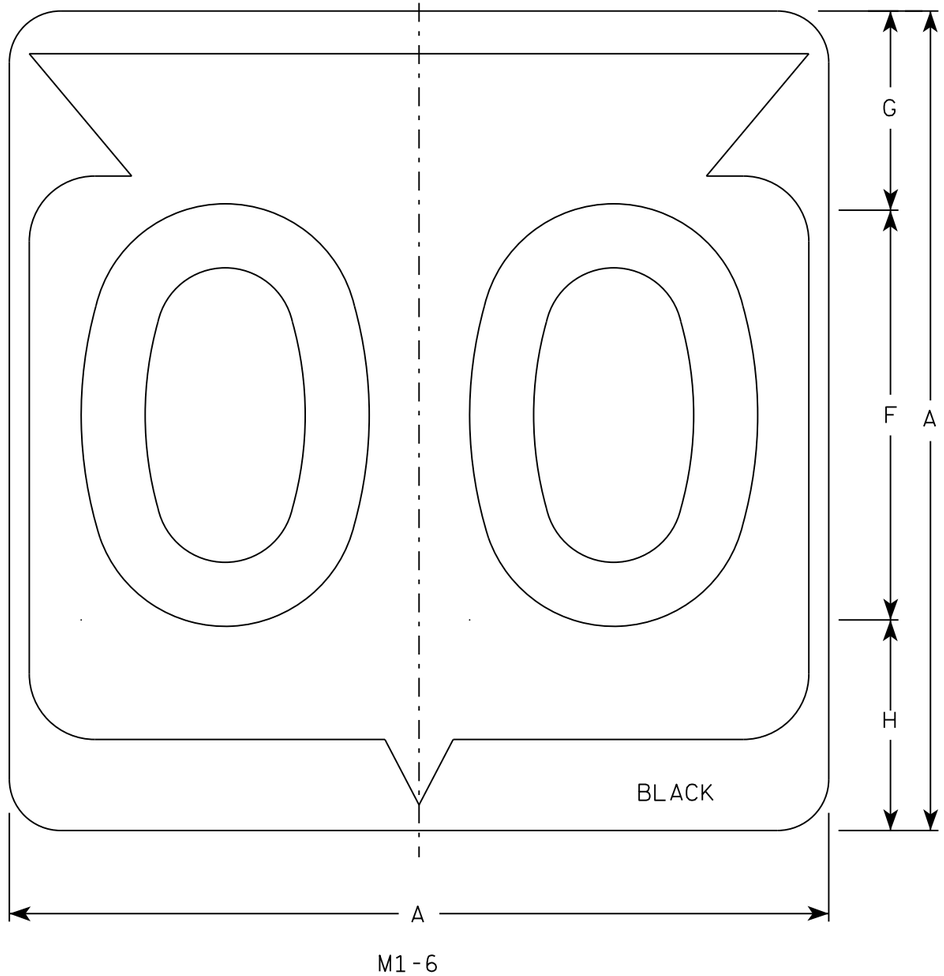
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-4.10

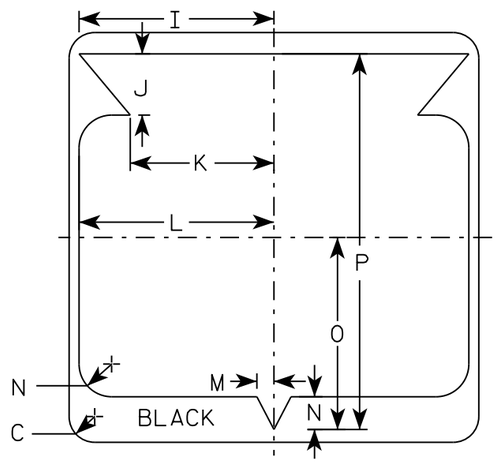
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 150	E



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
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		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

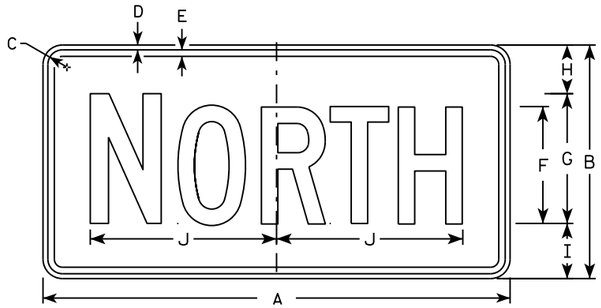
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

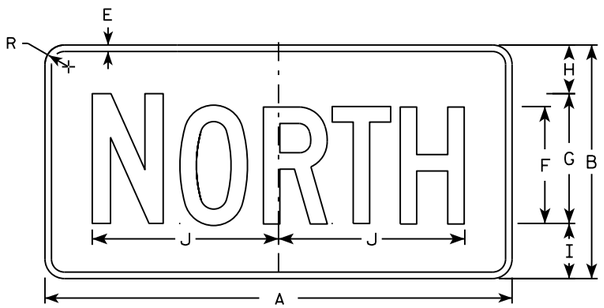
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-6.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 151 | E



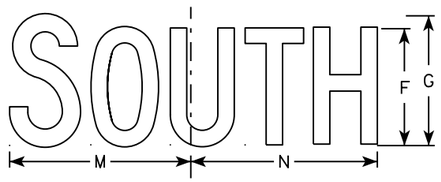
M3-1
MM3-1
MP3-1



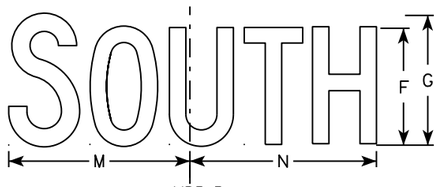
MB3-1
MK3-1
MN3-1

M3-2
MM3-2
MP3-2

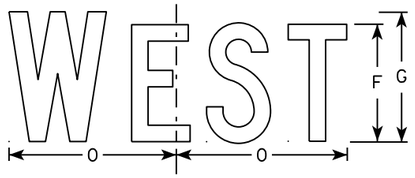
MB3-2
MK3-2
MN3-2



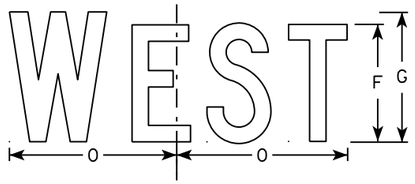
M3-3
MM3-3
MP3-3



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
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																											
2	24	12	1 1/8	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			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

STANDARD SIGNS
M3-1 thur M3-4
SERIES

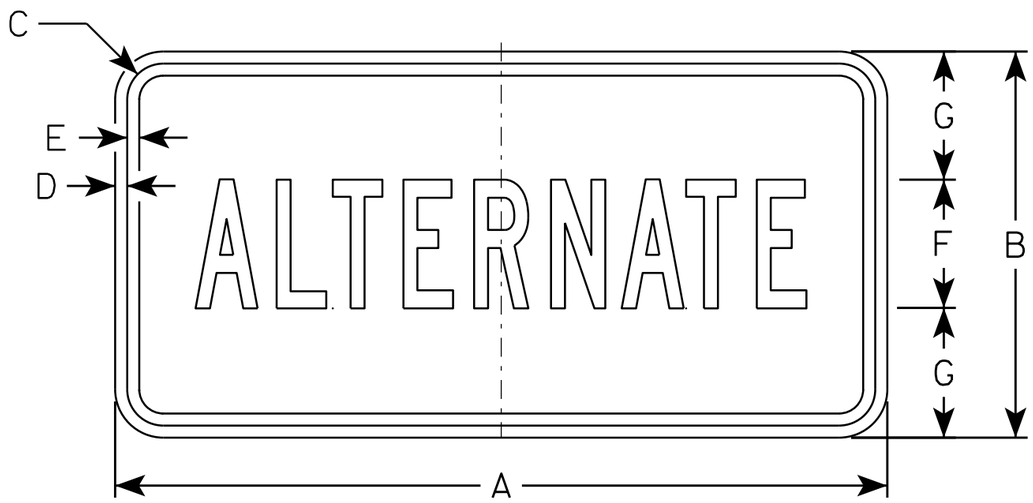
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

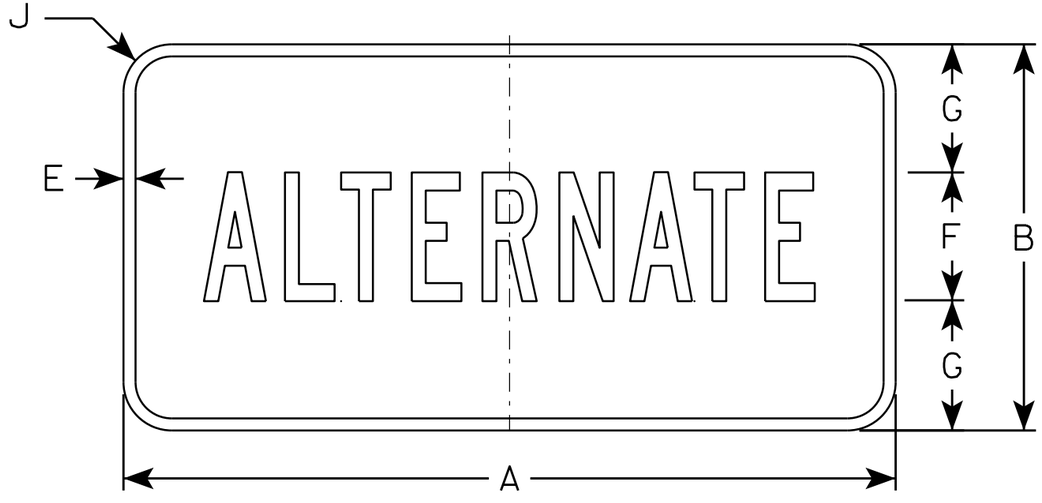
DATE 10/15/15 PLATE NO M3-1.14

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



M4-1
MO4-1



MB4-1

NOTES

1. Sign is Type II - Type H except as Shown
2. Color:
   Background - See Note 5
   Message - See note 5
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.
5. M4-1 Background - White
   Message - Black

   MB4-1 Background - Blue
   Message - White

   MO4-1 Background - Orange - Type F
   Message - Black

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 1/8	3/8	3/8	4	4	9 3/4	9 1/2	1 1/2																	2.00
3	36	18	1 1/8	3/8	1/2	7	5 1/2	16 3/8	16 1/2	1 1/2																	4.5
4	36	18	1 1/8	3/8	1/2	7	5 1/2	16 3/8	16 1/2	1 1/2																	4.5
5	36	18	1 1/8	3/8	1/2	7	5 1/2	16 3/8	16 1/2	1 1/2																	4.5

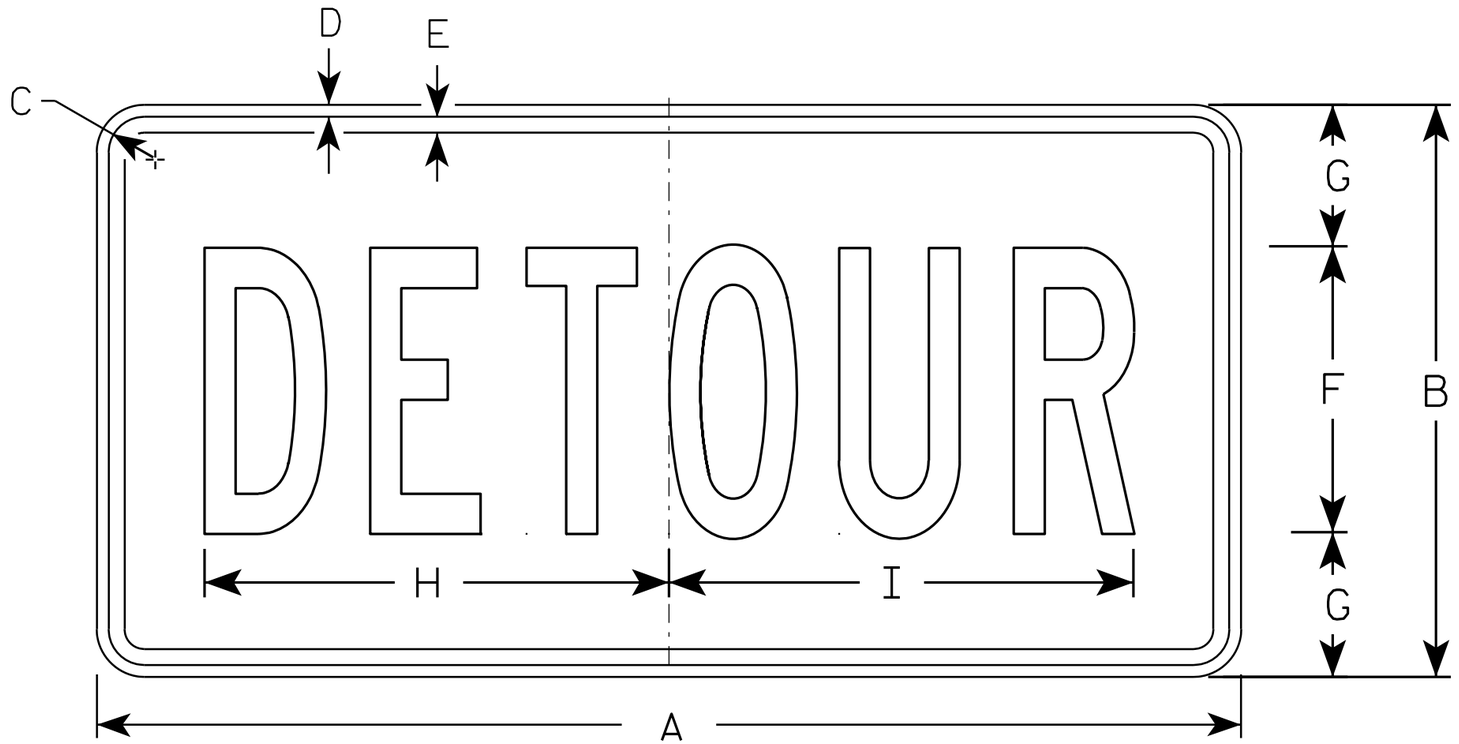
STANDARD SIGN
M4-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/30/14 PLATE 153 '14-1.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



M4-8

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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 1/8	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

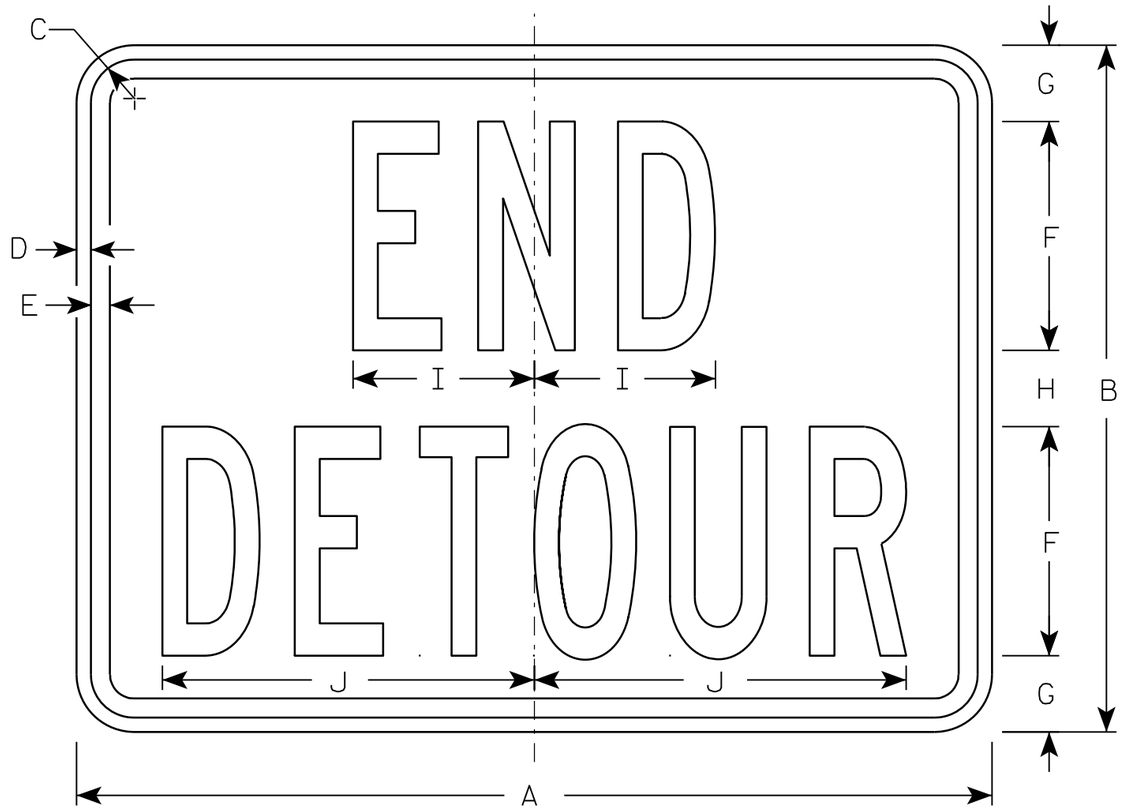
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 154	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\M48.DGN PLOT DATE : 10-NOV-2010 13:18 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 4.767233:1.000000

WISDOT/CADDS SHEET 42

7

7



M4-8A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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 1/8	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/8	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4																											
5																											

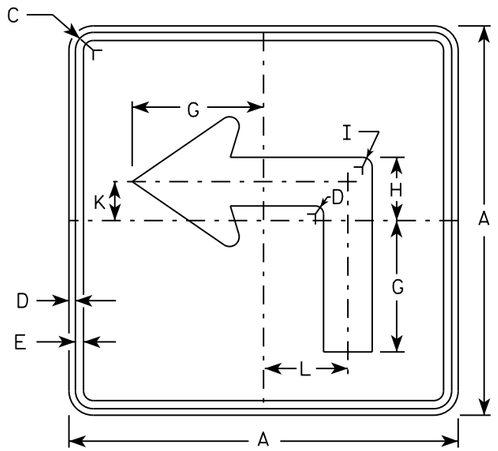
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

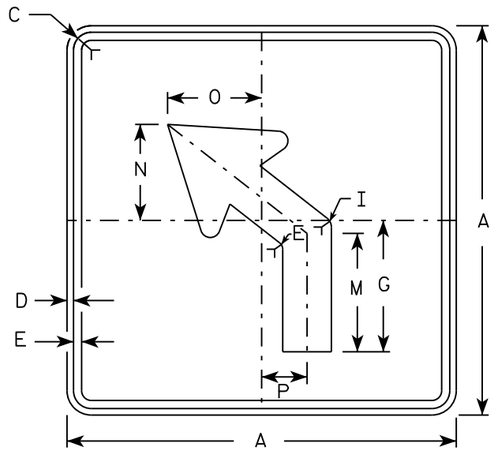
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

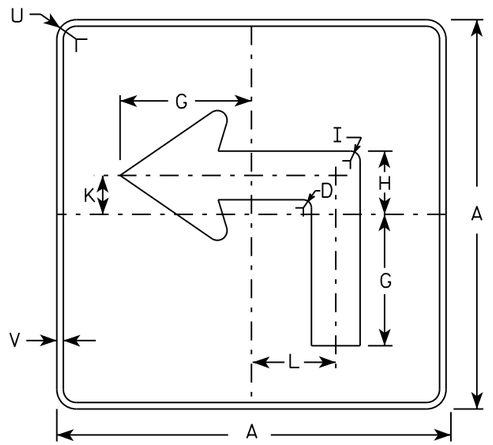
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 155	E



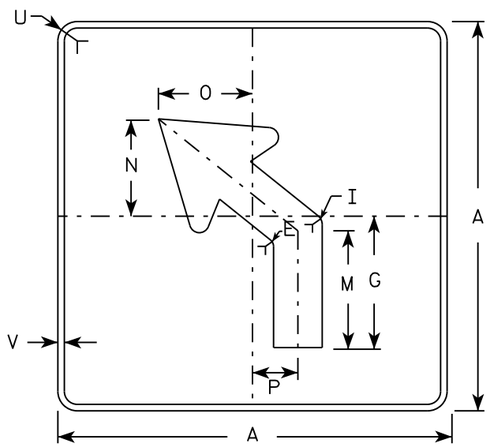
M5-1L
MM5-1L
MO5-1L
MP5-1L



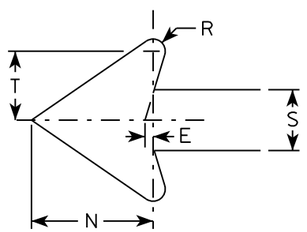
M5-2L
MM5-2L
MO5-2L
MP5-2L



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 - Type H Reflective
   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.

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	21		1 1/8	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 1/2	1/2					3.06
3	30		1 3/8	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 7/8	1/2					6.25
4	30		1 3/8	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 7/8	1/2					6.25
5	30		1 3/8	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 7/8	1/2					6.25

STANDARD SIGN
M5-1 & M5-2

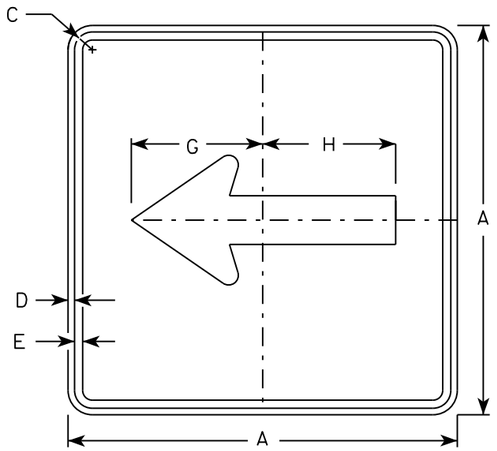
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

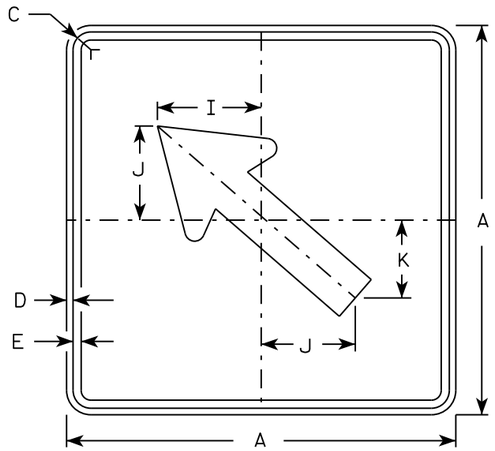
DATE 10/15/15 PLATE NO. M5-1.13

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



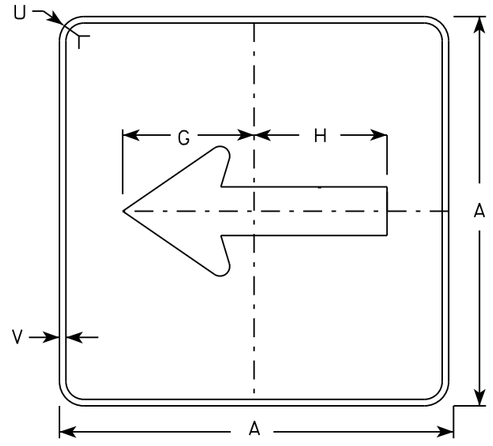
M6-1
MM6-1
MO6-1
MP6-1



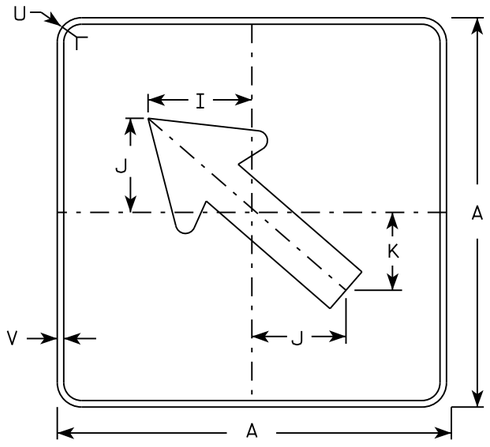
M6-2
MM6-2
MO6-2
MP6-2

NOTES

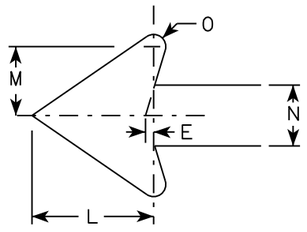
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - 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



MB6-1
MK6-1
MN6-1
MR6-1



MB6-2
MK6-2
MN6-2
MR6-2



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	21		1 1/8	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 1/2	1/2						3.06
3	30		1 3/8	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 7/8	1/2						6.25
4	30		1 3/8	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 7/8	1/2						6.25
5	30		1 3/8	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 7/8	1/2						6.25

STANDARD SIGN
M6-1 & M6-2
SERIES

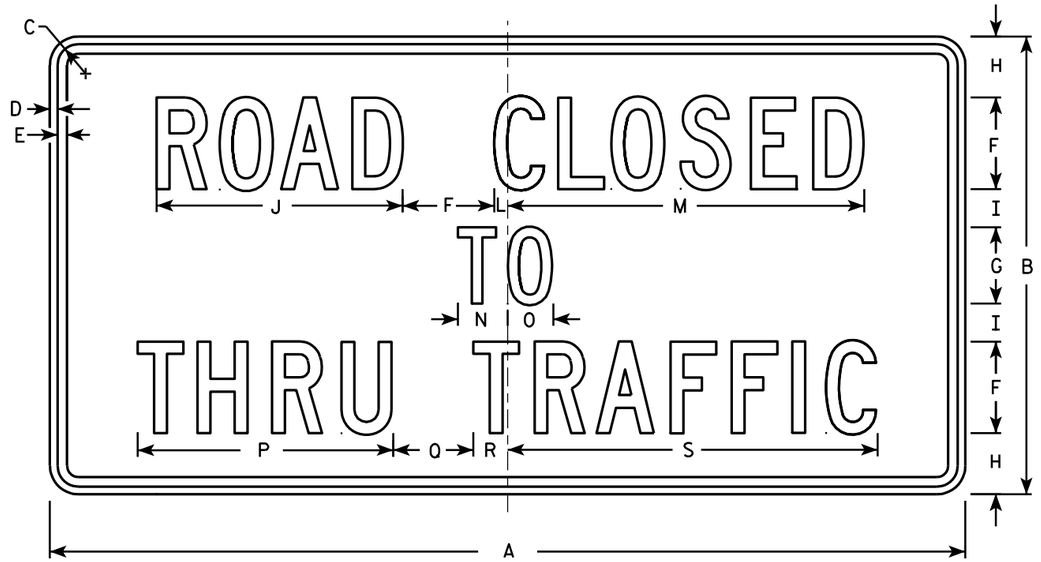
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 157 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



R11-4

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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.

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	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
3																											
4																											
5																											

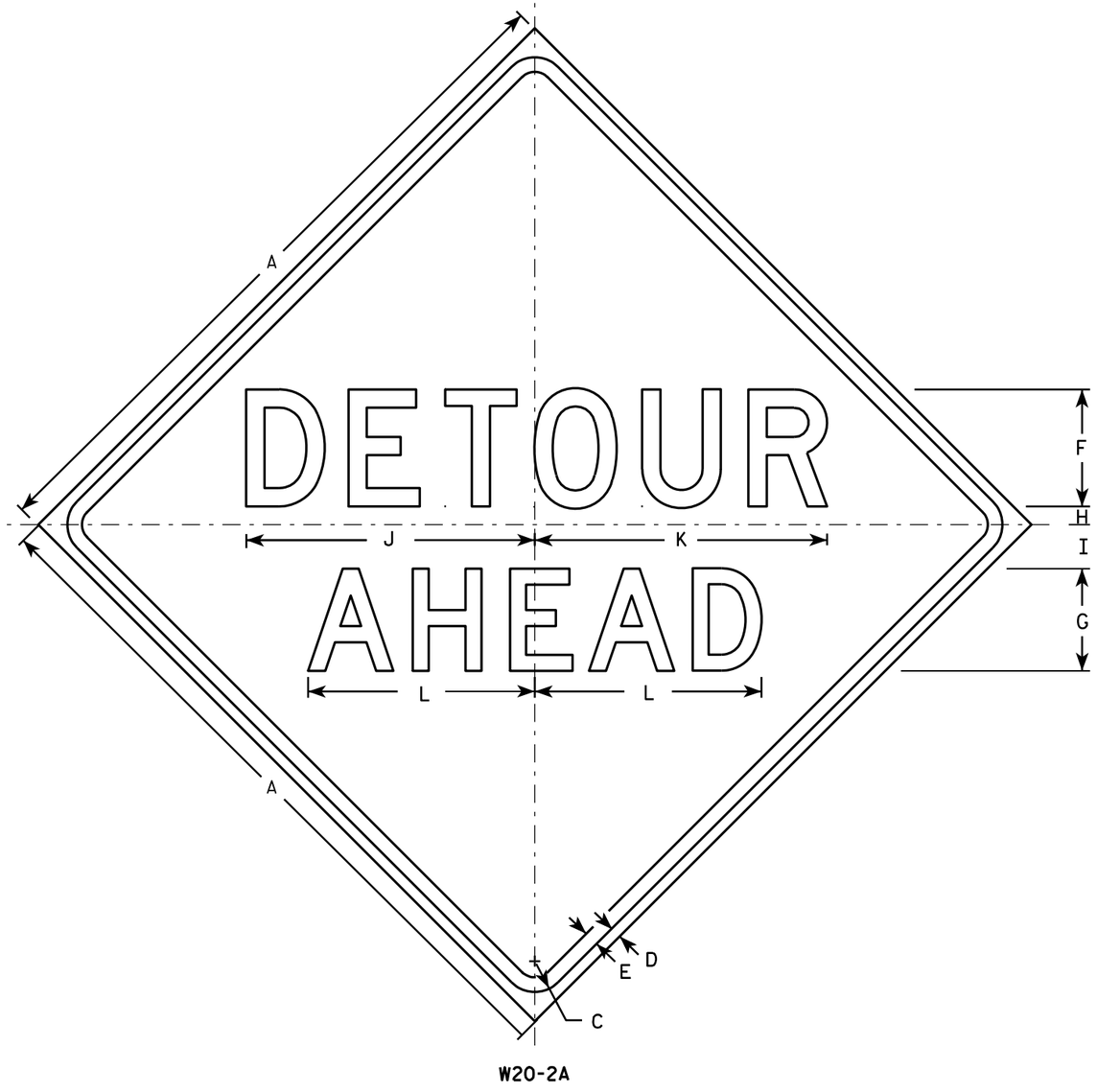
STANDARD SIGN
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

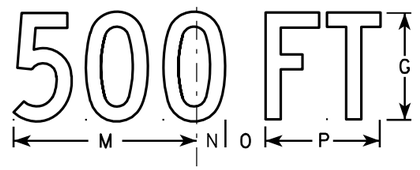
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-4.3

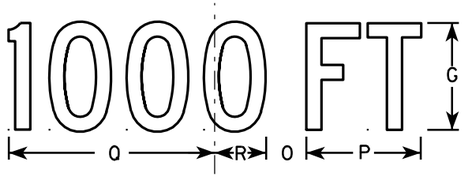
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 158 | E



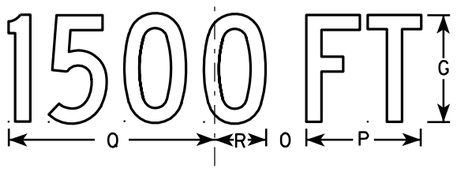
W20-2A



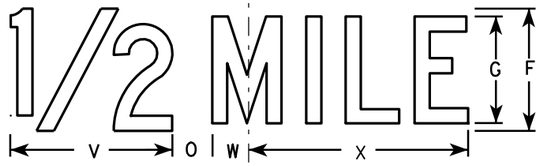
W20-2D



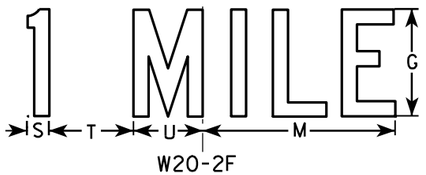
W20-2C



W20-2B



W20-2G



W20-2F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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		1 5/8	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		2 1/4	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		2 1/4	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		2 1/4	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		2 1/4	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		2 1/4	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 3/18/11 PLATE NO. W20-2.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 159	E

DIVISION 1 - USH 12 STATION	REAL STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL	REDUCED EBS IN FILL	MASS ORDINATE
							NOTE 1	NOTE 2	NOTE 3		1.00 NOTE 1	1.30	1.00 NOTE 5	1.00 NOTE 7	NOTE 8
120+50	12050.00	0.00	47.80	0.00	24.40	0.00	0	0	0	0	0	0	0	0	0
121+00	12100.00	50.00	49.50	0.00	26.60	0.00	90	0	47	0	90	61	0	0	29
121+50	12150.00	50.00	48.70	0.00	29.50	0.00	91	0	52	0	181	129	0	0	52
122+00	12200.00	50.00	49.20	0.00	31.00	0.00	91	0	56	0	272	202	0	0	71
122+50	12250.00	50.00	48.10	0.00	32.10	0.00	90	0	58	0	362	277	0	0	85
123+00	12300.00	50.00	48.90	0.00	23.60	0.00	90	0	52	0	452	345	0	0	108
123+50	12350.00	50.00	50.30	0.00	15.90	0.00	92	0	37	0	544	393	0	0	151
124+00	12400.00	50.00	50.80	0.00	13.00	0.00	94	0	27	0	638	428	0	0	210
124+50	12450.00	50.00	50.50	0.00	12.50	0.00	94	0	24	0	732	459	0	0	273
125+00	12500.00	50.00	50.40	0.00	12.00	0.00	93	0	23	0	825	489	0	0	336
125+50	12550.00	50.00	51.30	0.00	11.90	0.00	94	0	22	0	919	517	0	0	402
126+00	12600.00	50.00	52.60	0.00	11.50	0.00	96	0	22	0	1,015	546	0	0	469
126+50	12650.00	50.00	51.00	0.00	15.70	0.00	96	0	25	0	1,111	579	0	0	533
127+00	12700.00	50.00	16.31	0.00	5.25	0.00	62	0	19	0	1,173	603	0	0	570
128+00	12800.00	100.00	12.58	0.00	10.07	0.00	47	0	37	0	1,220	651	0	0	569
128+50	12850.00	50.00	13.03	0.00	9.03	0.00	24	0	18	0	1,244	675	0	0	569
129+00	12900.00	50.00	16.39	0.00	12.58	0.00	27	0	20	0	1,271	701	0	0	570
129+50	12950.00	50.00	18.17	0.00	14.12	0.00	32	0	25	0	1,303	733	0	0	570
130+00	13000.00	50.00	18.80	0.00	9.85	0.00	34	0	22	0	1,337	762	0	0	575
130+50	13050.00	50.00	15.27	0.00	10.82	0.00	32	0	19	0	1,369	787	0	0	583
131+00	13100.00	50.00	17.43	0.00	11.27	0.00	30	0	20	0	1,399	813	0	0	587
131+50	13150.00	50.00	13.06	0.00	14.15	0.00	28	0	24	0	1,427	844	0	0	583
132+00	13200.00	50.00	13.07	0.00	14.57	0.00	24	0	27	0	1,451	879	0	0	572
132+50	13250.00	50.00	12.00	0.00	14.35	0.00	23	0	27	0	1,474	914	0	0	560
133+00	13300.00	50.00	12.59	0.00	14.43	0.00	23	0	27	0	1,497	949	0	0	548
133+50	13350.00	50.00	13.55	0.00	14.24	0.00	24	0	27	0	1,521	984	0	0	537
134+00	13400.00	50.00	15.33	0.00	14.74	0.00	27	0	27	0	1,548	1,019	0	0	529
134+50	13450.00	50.00	11.97	0.00	18.66	0.00	25	0	31	0	1,573	1,060	0	0	514
135+00	13500.00	50.00	16.36	0.00	17.35	0.00	26	0	33	0	1,599	1,102	0	0	497
135+50	13550.00	50.00	14.11	0.00	17.76	0.00	28	0	33	0	1,627	1,145	0	0	482
136+00	13600.00	50.00	15.87	0.00	10.88	0.00	28	0	27	0	1,655	1,180	0	0	475
136+50	13650.00	50.00	17.88	0.00	6.53	0.00	31	0	16	0	1,686	1,201	0	0	485
137+00	13700.00	50.00	21.22	0.00	4.58	0.00	36	0	10	0	1,722	1,214	0	0	508
137+50	13750.00	50.00	23.88	0.00	3.59	0.00	42	0	8	0	1,764	1,225	0	0	539
139+00	13900.00	150.00	22.74	0.00	4.48	0.00	126	0	25	0	1,890	1,257	0	0	633
139+50	13950.00	50.00	18.06	0.00	12.21	0.00	38	0	15	0	1,928	1,277	0	0	651
140+00	14000.00	50.00	15.66	0.00	14.77	0.00	31	0	25	0	1,959	1,309	0	0	650
140+50	14050.00	50.00	13.57	0.00	12.51	0.00	27	0	25	0	1,986	1,342	0	0	644
141+00	14100.00	50.00	14.02	0.00	8.08	0.00	26	0	19	0	2,012	1,366	0	0	646
141+50	14150.00	50.00	13.99	0.00	9.99	0.00	26	0	17	0	2,038	1,388	0	0	650
142+00	14200.00	50.00	11.60	0.00	9.13	0.00	24	0	18	0	2,062	1,412	0	0	650
142+50	14250.00	50.00	33.55	0.00	5.27	0.00	42	0	13	0	2,104	1,429	0	0	675
143+50	14350.00	100.00	38.13	0.00	2.75	0.00	133	0	15	0	2,237	1,448	0	0	789
144+00	14400.00	50.00	22.39	0.00	3.28	0.00	56	0	6	0	2,293	1,456	0	0	837
144+50	14450.00	50.00	15.93	0.00	6.96	0.00	35	0	9	0	2,328	1,468	0	0	860
145+00	14500.00	50.00	15.76	0.00	17.59	0.00	29	0	23	0	2,357	1,498	0	0	859
145+50	14550.00	50.00	12.29	0.00	16.30	0.00	26	0	31	0	2,383	1,538	0	0	845
146+00	14600.00	50.00	17.86	0.00	9.44	0.00	28	0	24	0	2,411	1,569	0	0	842
146+50	14650.00	50.00	16.42	0.00	7.68	0.00	32	0	16	0	2,443	1,590	0	0	853
147+00	14700.00	50.00	13.15	0.00	14.59	0.00	27	0	21	0	2,470	1,617	0	0	853
147+50	14750.00	50.00	14.23	0.00	15.53	0.00	25	0	28	0	2,495	1,654	0	0	841
148+00	14800.00	50.00	16.50	0.00	22.33	0.00	28	0	35	0	2,523	1,699	0	0	824
148+50	14850.00	50.00	16.66	0.00	30.91	0.00	31	0	49	0	2,554	1,763	0	0	791
149+00	14900.00	50.00	17.09	0.00	28.92	0.00	31	0	55	0	2,585	1,834	0	0	751
149+50	14950.00	50.00	15.18	0.00	13.77	0.00	30	0	40	0	2,615	1,886	0	0	729

DIVISION 1 - USH 12 STATION	REAL STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL	REDUCED EBS IN FILL	MASS ORDINATE
							NOTE 1	NOTE 2	NOTE 3		1.00 NOTE 1	1.30	1.00 NOTE 5	1.00 NOTE 7	NOTE 8
150+00	15000.00	50.00	14.17	0.00	5.86	0.00	27	0	18	0	2,642	1,910	0	0	732
150+50	15050.00	50.00	18.73	0.00	2.75	0.00	30	0	8	0	2,672	1,920	0	0	752
151+00	15100.00	50.00	20.50	0.00	1.94	0.00	36	0	4	0	2,708	1,925	0	0	783
151+50	15150.00	50.00	18.53	0.00	3.19	0.00	36	0	5	0	2,744	1,932	0	0	812
153+00	15300.00	150.00	21.12	0.00	0.23	0.00	117	0	1	0	2,861	1,933	0	0	928
153+50	15350.00	50.00	17.77	0.00	1.70	0.00	36	0	2	0	2,897	1,936	0	0	961
154+00	15400.00	50.00	16.80	0.00	4.55	0.00	32	0	6	0	2,929	1,944	0	0	986
154+50	15450.00	50.00	17.69	0.00	11.80	0.00	32	0	15	0	2,961	1,963	0	0	998
155+00	15500.00	50.00	21.57	0.00	14.65	0.00	36	0	24	0	2,997	1,994	0	0	1,003
155+50	15550.00	50.00	15.38	0.00	49.05	0.00	34	0	59	0	3,031	2,071	0	0	960
156+00	15600.00	50.00	16.80	0.00	26.66	0.00	30	0	70	0	3,061	2,162	0	0	899
156+50	15650.00	50.00	20.41	0.00	0.54	0.00	34	0	25	0	3,095	2,194	0	0	901
157+00	15700.00	50.00	18.69	0.00	5.63	0.00	36	0	6	0	3,131	2,202	0	0	929
158+00	15800.00	100.00	21.07	0.00	19.54	0.00	78	0	72	0	3,209	2,296	0	0	913
158+50	15850.00	50.00	10.25	0.00	24.46	0.00	29	0	41	0	3,238	2,349	0	0	889
159+00	15900.00	50.00	9.06	0.00	56.93	0.00	18	0	75	0	3,256	2,447	0	0	809
159+50	15950.00	50.00	15.38	0.00	14.32	0.00	23	0	66	0	3,279	2,532	0	0	747
160+00	16000.00	50.00	13.15	0.00	18.57	0.00	26	0	30	0	3,305	2,571	0	0	734
160+50	16050.00	50.00	13.52	0.00	16.87	0.00	25	0	33	0	3,330	2,614	0	0	716
161+00	16100.00	50.00	17.87	0.00	0.79	0.00	29	0	16	0	3,359	2,635	0	0	724
161+50	16150.00	50.00	14.13	0.00	1.76	0.00	30	0	2	0	3,389	2,638	0	0	751
162+00	16200.00	50.00	14.35	0.00	2.00	0.00	26	0	3	0	3,415	2,642	0	0	773
163+00	16300.00	100.00	17.67	0.00	0.01	0.00	65	0	0	0	3,480	2,642	0	0	838
163+50	16350.00	50.00	23.71	0.00	0.44	0.00	38	0	0	0	3,518	2,642	0	0	876
164+00	16400.00	50.00	18.06	0.00	0.00	0.00	39	0	0	0	3,557	2,642	0	0	915
166+00	16600.00	200.00	39.45	0.00	0.00	0.00	292	0	0	0	3,849	2,642	0	0	1,207
166+50	16650.00	50.00	41.12	0.00	0.01	0.00	75	0	0	0	3,924	2,642	0	0	1,282
167+00	16700.00	50.00	19.23	0.00	1.51	0.00	56	0	1	0	3,980	2,643	0	0	1,337
167+50	16750.00	50.00	17.63	0.00	2.60	0.00	34	0	4	0	4,014	2,648	0	0	1,366
168+00	16800.00	50.00	17.45	0.00	9.75	0.00	32	0	11	0	4,046	2,662	0	0	1,384
168+50	16850.00	50.00	14.98	0.00	8.58	0.00	30	0	17	0	4,076	2,685	0	0	1,392
169+00	16900.00	50.00	13.88	0.00	9.65	0.00	27	0	17	0	4,103	2,707	0	0	1,396
169+50	16950.00	50.00	12.44	0.00	8.65	0.00	24	0	17	0	4,127	2,729	0	0	1,398
170+00	17000.00	50.00	15.86	0.00	5.79	0.00	26	0	13	0	4,153	2,746	0	0	1,407
170+50	17050.00	50.00	17.41	0.00	5.68	0.00	31	0	11	0	4,184	2,760	0	0	1,424
171+00	17100.00	50.00	16.20	0.00	2.90	0.00	31	0	8	0	4,215	2,770	0	0	1,445
171+50	17150.00	50.00	15.16	0.00	1.41	0.00	29	0	4	0	4,244	2,776	0	0	1,469
172+50	17250.00	100.00	13.89	0.00	3.01	0.00	51	0	11	0	4,295	2,790	0	0	1,505
173+00	17300.00	50.00	8.79	0.00	5.94	0.00	21	0	8	0	4,316	2,800	0	0	1,516
173+50	17350.00	50.00	7.45	0.00	6.73	0.00	15	0	12	0	4,331	2,816	0	0	1,515
174+00	17400.00	50.00	15.22	0.00	6.10	0.00	21	0	12	0	4,352	2,831	0	0	1,521
174+50	17450.00	50.00	12.77	0.00	5.51	0.00	26	0	11	0	4,378	2,846	0	0	1,532
175+00	17500.00	50.00	24.00	0.00	4.81	0.00	34	0	10	0	4,412	2,859	0	0	1,553
175+50	17550.00	50.00	33.57	0.00	4.66	0.00	53	0	9	0	4,465	2,870	0	0	1,595
176+00	17600.00	50.00	27.37	0.00	4.94	0.00	56	0	9	0	4,521	2,882	0	0	1,639
176+50	17650.00	50.00	8.77	0.00	10.44	0.00	33	0	14	0	4,554	2,900	0	0	1,654
177+00	17700.00	50.00	11.97	0.00	14.03	0.00	19	0	23	0	4,573	2,930	0	0	1,643
177+50	17750.00	50.00	15.00	0.00	8.83	0.00	25	0	21	0	4,598	2,958	0	0	1,641
178+00	17800.00	50.00	16.21	0.00	7.11	0.00	29	0	15	0	4,627	2,977	0	0	1,650
178+50	17850.00	50.00	37.02	0.00	1.90	0.00	49	0	8	0	4,676	2,987	0	0	1,689
179+00	17900.00	50.00	54.37	0.00	1.27	0.00	85	0	3	0	4,761	2,991	0	0	1,770
179+50	17950.00	50.00	15.90	0.00	51.70	0.00	65	0	49	0	4,826	3,055	0	0	1,771
180+00	18000.00	50.00	15.00	0.00	34.55	0.00	29	0	80	0	4,855	3,159	0	0	1,696

DIVISION 1 - USH 12 STATION	REAL STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL	REDUCED EBS IN FILL	MASS ORDINATE
							NOTE 1	NOTE 2	NOTE 3		1.00 NOTE 1	1.30	1.00 NOTE 5	1.00 NOTE 7	NOTE 8
180+50	18050.00	50.00	22.78	0.00	15.58	0.00	35	0	46	0	4,890	3,219	0	0	1,671
181+00	18100.00	50.00	19.47	0.00	15.68	0.00	39	0	29	0	4,929	3,257	0	0	1,673
181+50	18150.00	50.00	28.31	0.00	2.33	0.00	44	0	17	0	4,973	3,279	0	0	1,694
183+00	18300.00	150.00	28.45	0.00	12.35	0.00	158	0	69	0	5,131	3,368	0	0	1,763
183+50	18350.00	50.00	14.62	0.00	26.94	0.00	40	0	36	0	5,171	3,415	0	0	1,756
184+00	18400.00	50.00	20.27	0.00	14.54	0.00	32	0	38	0	5,203	3,465	0	0	1,739
184+50	18450.00	50.00	17.18	0.00	11.22	0.00	35	0	24	0	5,238	3,496	0	0	1,742
185+00	18500.00	50.00	18.33	0.00	5.34	0.00	33	0	15	0	5,271	3,515	0	0	1,756
185+50	18550.00	50.00	19.55	0.00	3.37	0.00	35	0	8	0	5,306	3,526	0	0	1,780
186+00	18600.00	50.00	20.24	0.00	10.93	0.00	37	0	13	0	5,343	3,543	0	0	1,801
186+50	18650.00	50.00	22.80	0.00	12.40	0.00	40	0	22	0	5,383	3,571	0	0	1,812
187+00	18700.00	50.00	17.59	0.00	22.96	0.00	37	0	33	0	5,420	3,614	0	0	1,806
188+00	18800.00	100.00	16.96	0.00	85.67	0.00	63	0	317	0	5,483	4,026	0	0	1,457
188+50	18850.00	50.00	17.73	0.00	7.06	0.00	32	0	86	0	5,515	4,138	0	0	1,377
189+00	18900.00	50.00	17.90	0.00	65.72	0.00	33	0	67	0	5,548	4,225	0	0	1,323
189+50	18950.00	50.00	17.02	0.00	136.67	0.00	32	0	187	0	5,580	4,468	0	0	1,112
190+00	19000.00	50.00	17.23	0.00	197.16	0.00	32	0	309	0	5,612	4,870	0	0	742
190+50	19050.00	50.00	17.67	0.00	203.99	0.00	32	0	371	0	5,644	5,352	0	0	292
191+00	19100.00	50.00	44.58	0.00	139.44	0.00	58	0	318	0	5,702	5,766	0	0	-64
191+50	19150.00	50.00	17.84	0.00	148.44	0.00	58	0	267	0	5,760	6,113	0	0	-353
192+00	19200.00	50.00	15.15	0.00	212.72	0.00	31	0	334	0	5,791	6,547	0	0	-756
192+50	19250.00	50.00	16.55	0.00	247.41	0.00	29	0	426	0	5,820	7,101	0	0	-1,281
193+00	19300.00	50.00	17.18	0.00	243.23	0.00	31	0	454	0	5,851	7,691	0	0	-1,840
193+50	19350.00	50.00	16.62	0.00	183.04	0.00	31	0	395	0	5,882	8,204	0	0	-2,322
194+00	19400.00	50.00	18.49	0.00	80.99	0.00	33	0	244	0	5,915	8,522	0	0	-2,607
195+00	19500.00	100.00	25.54	0.00	4.80	0.00	95	0	18	0	6,010	8,545	0	0	-2,535
195+50	19550.00	50.00	25.41	0.00	1.01	0.00	47	0	5	0	6,057	8,551	0	0	-2,494
196+00	19600.00	50.00	45.09	0.00	0.38	0.00	65	0	1	0	6,122	8,553	0	0	-2,431
196+50	19650.00	50.00	175.02	0.00	0.00	0.00	204	0	0	0	6,326	8,553	0	0	-2,227
197+00	19700.00	50.00	121.83	0.00	1.09	0.00	275	0	1	0	6,601	8,554	0	0	-1,953
197+50	19750.00	50.00	81.30	0.00	2.20	0.00	188	0	3	0	6,789	8,558	0	0	-1,769
198+00	19800.00	50.00	55.21	0.00	3.40	0.00	126	0	5	0	6,915	8,564	0	0	-1,649
198+50	19850.00	50.00	42.19	0.00	5.05	0.00	90	0	8	0	7,005	8,575	0	0	-1,570
199+00	19900.00	50.00	19.51	0.00	6.17	0.00	57	0	10	0	7,062	8,588	0	0	-1,526
199+50	19950.00	50.00	19.72	0.00	8.33	0.00	36	0	13	0	7,098	8,605	0	0	-1,507
200+00	20000.00	50.00	15.77	0.00	12.69	0.00	33	0	19	0	7,131	8,629	0	0	-1,498
201+00	20100.00	100.00	19.15	0.00	15.46	0.00	71	0	57	0	7,202	8,704	0	0	-1,502
201+50	20150.00	50.00	18.70	0.00	12.61	0.00	35	0	26	0	7,237	8,737	0	0	-1,500
202+00	20200.00	50.00	16.89	0.00	13.25	0.00	33	0	24	0	7,270	8,769	0	0	-1,499
202+50	20250.00	50.00	19.00	0.00	8.36	0.00	33	0	20	0	7,303	8,795	0	0	-1,492
203+00	20300.00	50.00	18.11	0.00	4.18	0.00	34	0	12	0	7,337	8,810	0	0	-1,473
203+50	20350.00	50.00	22.42	0.00	1.59	0.00	38	0	5	0	7,375	8,817	0	0	-1,442
204+00	20400.00	50.00	22.34	0.00	0.88	0.00	41	0	2	0	7,416	8,819	0	0	-1,403
204+50	20450.00	50.00	29.01	0.00	0.00	0.00	48	0	1	0	7,464	8,821	0	0	-1,357
205+00	20500.00	50.00	40.22	0.00	0.17	0.00	64	0	0	0	7,528	8,821	0	0	-1,293
205+50	20550.00	50.00	38.28	0.00	0.00	0.00	73	0	0	0	7,601	8,821	0	0	-1,220
207+50	20750.00	200.00	18.99	0.00	0.19	0.00	141	0	1	0	7,742	8,822	0	0	-1,080
208+00	20800.00	50.00	18.58	0.00	10.35	0.00	35	0	10	0	7,777	8,835	0	0	-1,058
208+50	20850.00	50.00	18.08	0.00	8.11	0.00	34	0	17	0	7,811	8,857	0	0	-1,046
209+00	20900.00	50.00	16.49	0.00	10.43	0.00	32	0	17	0	7,843	8,879	0	0	-1,036
209+50	20950.00	50.00	17.66	0.00	9.95	0.00	32	0	19	0	7,875	8,904	0	0	-1,029
210+00	21000.00	50.00	18.19	0.00	8.46	0.00	33	0	17	0	7,908	8,926	0	0	-1,018

DIVISION 1 - USH 12 STATION	REAL STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL	REDUCED EBS IN FILL	MASS ORDINATE
							NOTE 1	NOTE 2	NOTE 3		1.00 NOTE 1	1.30	1.00 NOTE 5	1.00 NOTE 7	NOTE 8
210+50	21050.00	50.00	18.01	0.00	11.88	0.00	34	0	19	0	7,942	8,951	0	0	-1,009
211+00	21100.00	50.00	24.42	0.00	8.84	0.00	39	0	19	0	7,981	8,975	0	0	-994
211+50	21150.00	50.00	57.45	0.00	6.41	0.00	76	0	14	0	8,057	8,993	0	0	-936
212+00	21200.00	50.00	74.70	0.00	6.18	0.00	122	0	12	0	8,179	9,009	0	0	-830
212+50	21250.00	50.00	85.19	0.00	9.17	0.00	148	0	14	0	8,327	9,027	0	0	-700
213+00	21300.00	50.00	19.62	0.00	2.41	0.00	97	0	11	0	8,424	9,042	0	0	-618
213+50	21350.00	50.00	19.01	0.00	6.93	0.00	36	0	9	0	8,460	9,053	0	0	-593
214+00	21400.00	50.00	22.02	0.00	4.24	0.00	38	0	10	0	8,498	9,066	0	0	-568
214+50	21450.00	50.00	89.70	0.00	0.33	0.00	103	0	4	0	8,601	9,071	0	0	-470
215+00	21500.00	50.00	26.27	0.00	31.04	0.00	107	0	29	0	8,708	9,109	0	0	-401
215+50	21550.00	50.00	22.33	0.00	48.97	0.00	45	0	74	0	8,753	9,205	0	0	-452
216+00	21600.00	50.00	22.46	0.00	64.23	0.00	41	0	105	0	8,794	9,342	0	0	-548
217+50	21750.00	150.00	20.13	0.00	40.91	0.00	112	0	227	0	8,906	9,637	0	0	-731
218+00	21800.00	50.00	20.22	0.00	48.33	0.00	37	0	83	0	8,943	9,745	0	0	-802
218+50	21850.00	50.00	17.47	0.00	86.00	0.00	35	0	124	0	8,978	9,906	0	0	-928
219+00	21900.00	50.00	18.69	0.00	38.72	0.00	33	0	115	0	9,011	10,056	0	0	-1,045
219+50	21950.00	50.00	22.69	0.00	17.36	0.00	38	0	52	0	9,049	10,123	0	0	-1,074
220+00	22000.00	50.00	19.55	0.00	1.98	0.00	39	0	18	0	9,088	10,147	0	0	-1,059
220+50	22050.00	50.00	26.11	0.00	0.00	0.00	42	0	2	0	9,130	10,149	0	0	-1,019
221+00	22100.00	50.00	32.08	0.00	5.24	0.00	54	0	5	0	9,184	10,156	0	0	-972
221+50	22150.00	50.00	18.93	0.00	2.66	0.00	47	0	7	0	9,231	10,165	0	0	-934
222+00	22200.00	50.00	36.89	0.00	3.67	0.00	52	0	6	0	9,283	10,173	0	0	-890
222+50	22250.00	50.00	39.37	0.00	1.93	0.00	71	0	5	0	9,354	10,179	0	0	-825
223+00	22300.00	50.00	62.84	0.00	0.85	0.00	95	0	3	0	9,449	10,183	0	0	-734
223+50	22350.00	50.00	81.09	0.00	1.83	0.00	133	0	2	0	9,582	10,186	0	0	-604
224+00	22400.00	50.00	75.60	0.00	0.98	0.00	145	0	3	0	9,727	10,189	0	0	-462
225+00	22500.00	100.00	34.62	0.00	2.61	0.00	128	0	10	0	9,855	10,202	0	0	-347
225+50	22550.00	50.00	12.19	0.00	45.02	0.00	43	0	44	0	9,898	10,260	0	0	-362
226+00	22600.00	50.00	15.73	0.00	100.46	0.00	26	0	135	0	9,924	10,435	0	0	-511
226+50	22650.00	50.00	20.75	0.00	59.36	0.00	34	0	148	0	9,958	10,628	0	0	-670
227+00	22700.00	50.00	17.04	0.00	35.30	0.00	35	0	88	0	9,993	10,742	0	0	-749
227+50	22750.00	50.00	22.97	0.00	52.66	0.00	37	0	81	0	10,030	10,847	0	0	-817
228+00	22800.00	50.00	21.01	0.00	68.45	0.00	41	0	112	0	10,071	10,993	0	0	-922
228+50	22850.00	50.00	18.73	0.00	15.49	0.00	37	0	78	0	10,108	11,094	0	0	-986
229+00	22900.00	50.00	20.44	0.00	2.70	0.00	36	0	17	0	10,144	11,116	0	0	-972
229+50	22950.00	50.00	23.15	0.00	0.80	0.00	40	0	3	0	10,184	11,120	0	0	-936
230+00	23000.00	50.00	19.76	0.00	72.48	0.00	40	0	68	0	10,224	11,209	0	0	-985
230+50	23050.00	50.00	18.64	0.00	58.13	0.00	36	0	121	0	10,260	11,366	0	0	-1,106
231+00	23100.00	50.00	19.41	0.00	55.51	0.00	35	0	105	0	10,295	11,502	0	0	-1,207
231+50	23150.00	50.00	20.44	0.00	62.90	0.00	37	0	110	0	10,332	11,645	0	0	-1,313
232+00	23200.00	50.00	24.01	0.00	5.88	0.00	41	0	64	0	10,373	11,729	0	0	-1,356
232+50	23250.00	50.00	44.75	0.00	0.00	0.00	64	0	5	0	10,437	11,735	0	0	-1,298
233+00	23300.00	50.00	112.59	0.00	0.00	0.00	146	0	0	0	10,583	11,735	0	0	-1,152
233+50	23350.00	50.00	113.00	0.00	0.00	0.00	209	0	0	0	10,792	11,735	0	0	-943
234+00	23400.00	50.00	75.99	0.00	0.29	0.00	175	0	0	0	10,967	11,735	0	0	-768
234+50	23450.00	50.00	43.84	0.00	4.85	0.00	111	0	5	0	11,078	11,742	0	0	-664
235+00	23500.00	50.00	35.21	0.00	6.73	0.00	73	0	11	0	11,151	11,756	0	0	-605
236+00	23600.00	100.00	20.52	0.00	60.84	0.00	76	0	225	0	11,227	12,048	0	0	-821
236+50	23650.00	50.00	13.60	0.00	69.72	0.00	32	0	121	0	11,259	12,206	0	0	-947
237+00	23700.00	50.00	17.15	0.00	45.50	0.00	28	0	107	0	11,287	12,345	0	0	-1,058
237+50	23750.00	50.00	21.45	0.00	17.18	0.00	36	0	58	0	11,323	12,420	0	0	-1,097
238+50	23850.00	100.00	17.71	0.00	22.48	0.00	66	0	83	0	11,389	12,528	0	0	-1,139
239+00	23900.00	50.00	20.33	0.00	2.90	0.00	35	0	24	0	11,424	12,559	0	0	-1,135
239+50	23950.00	50.00	20.57	0.00	0.60	0.00	38	0	3	0	11,462	12,563	0	0	-1,101
240+00	24000.00	50.00	24.17	0.00	41.37	0.00	41	0	39	0	11,503	12,614	0	0	-1,111

DIVISION 1 - USH 12 STATION	REAL STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL	REDUCED EBS IN FILL	MASS ORDINATE
											1.00	1.30	1.00	1.00	
							NOTE 1	NOTE 2	NOTE 3		NOTE 1		NOTE 5	NOTE 7	NOTE 8
240+50	24050.00	50.00	19.68	0.00	164.76	0.00	41	0	191	0	11,544	12,862	0	0	-1,318
241+00	24100.00	50.00	19.02	0.00	236.76	0.00	36	0	372	0	11,580	13,346	0	0	-1,766
241+50	24150.00	50.00	25.23	0.00	29.26	0.00	41	0	246	0	11,621	13,666	0	0	-2,045
242+00	24200.00	50.00	19.33	0.00	10.87	0.00	41	0	37	0	11,662	13,714	0	0	-2,052
242+50	24250.00	50.00	18.99	0.00	13.40	0.00	35	0	22	0	11,697	13,742	0	0	-2,045
243+00	24300.00	50.00	16.92	0.00	10.27	0.00	33	0	22	0	11,730	13,771	0	0	-2,041
243+50	24350.00	50.00	12.75	0.00	20.69	0.00	27	0	29	0	11,757	13,809	0	0	-2,052
244+00	24400.00	50.00	19.58	0.00	12.17	0.00	30	0	30	0	11,787	13,848	0	0	-2,061
244+50	24450.00	50.00	45.21	0.00	6.33	0.00	60	0	17	0	11,847	13,870	0	0	-2,023
245+00	24500.00	50.00	64.51	0.00	2.70	0.00	102	0	8	0	11,949	13,880	0	0	-1,931
245+50	24550.00	50.00	113.03	0.00	3.92	0.00	164	0	6	0	12,113	13,888	0	0	-1,775
246+00	24600.00	50.00	129.36	0.00	2.73	0.00	224	0	6	0	12,337	13,896	0	0	-1,559
246+50	24650.00	50.00	116.30	0.00	2.61	0.00	227	0	5	0	12,564	13,902	0	0	-1,338
247+00	24700.00	50.00	58.91	0.00	5.40	0.00	162	0	7	0	12,726	13,911	0	0	-1,185
248+00	24800.00	100.00	14.91	0.00	24.58	0.00	55	0	91	0	12,781	14,030	0	0	-1,249
248+50	24850.00	50.00	12.73	0.00	30.78	0.00	26	0	51	0	12,807	14,096	0	0	-1,289
249+00	24900.00	50.00	16.49	0.00	12.48	0.00	27	0	40	0	12,834	14,148	0	0	-1,314
249+50	24950.00	50.00	27.66	0.00	11.53	0.00	41	0	22	0	12,875	14,177	0	0	-1,302
250+00	25000.00	50.00	17.33	0.00	0.00	0.00	42	0	11	0	12,917	14,191	0	0	-1,274
252+00	25200.00	200.00	13.50	0.00	8.02	0.00	114	0	30	0	13,031	14,230	0	0	-1,199
252+50	25250.00	50.00	31.62	0.00	0.95	0.00	42	0	8	0	13,073	14,240	0	0	-1,167
254+00	25400.00	150.00	24.97	0.00	6.81	0.00	139	0	38	0	13,212	14,290	0	0	-1,078
254+50	25450.00	50.00	24.12	0.00	2.05	0.00	45	0	8	0	13,257	14,300	0	0	-1,043
255+00	25500.00	50.00	20.11	0.00	3.97	0.00	41	0	6	0	13,298	14,308	0	0	-1,010
255+50	25550.00	50.00	13.95	0.00	15.44	0.00	32	0	18	0	13,330	14,331	0	0	-1,001
256+00	25600.00	50.00	16.55	0.00	30.52	0.00	28	0	43	0	13,358	14,387	0	0	-1,029
256+50	25650.00	50.00	13.76	0.00	29.83	0.00	28	0	56	0	13,386	14,460	0	0	-1,074
257+00	25700.00	50.00	16.24	0.00	1.24	0.00	28	0	29	0	13,414	14,498	0	0	-1,084
257+50	25750.00	50.00	18.89	0.00	0.16	0.00	33	0	1	0	13,447	14,499	0	0	-1,052
258+00	25800.00	50.00	19.18	0.00	0.78	0.00	35	0	1	0	13,482	14,500	0	0	-1,018
258+50	25850.00	50.00	16.44	0.00	0.48	0.00	33	0	1	0	13,515	14,502	0	0	-987
259+00	25900.00	50.00	19.16	0.00	0.32	0.00	33	0	1	0	13,548	14,503	0	0	-955
259+50	25950.00	50.00	19.82	0.00	0.48	0.00	36	0	1	0	13,584	14,504	0	0	-920
260+00	26000.00	50.00	16.17	0.00	2.00	0.00	33	0	2	0	13,617	14,507	0	0	-890
260+50	26050.00	50.00	14.48	0.00	5.59	0.00	28	0	7	0	13,645	14,516	0	0	-871
261+00	26100.00	50.00	13.65	0.00	6.98	0.00	26	0	12	0	13,671	14,531	0	0	-860
261+50	26150.00	50.00	13.22	0.00	7.94	0.00	25	0	14	0	13,696	14,550	0	0	-854
262+50	26250.00	100.00	15.31	0.00	12.95	0.00	57	0	48	0	13,753	14,612	0	0	-859
263+00	26300.00	50.00	16.54	0.00	7.93	0.00	29	0	19	0	13,782	14,637	0	0	-855
263+50	26350.00	50.00	15.65	0.00	7.77	0.00	30	0	15	0	13,812	14,656	0	0	-844
264+00	26400.00	50.00	16.00	0.00	7.45	0.00	29	0	14	0	13,841	14,674	0	0	-833
264+50	26450.00	50.00	10.99	0.00	11.44	0.00	25	0	17	0	13,866	14,697	0	0	-831
265+00	26500.00	50.00	12.83	0.00	10.99	0.00	22	0	21	0	13,888	14,724	0	0	-836
265+50	26550.00	50.00	12.41	0.00	9.96	0.00	23	0	19	0	13,911	14,749	0	0	-838
266+00	26600.00	50.00	13.22	0.00	7.33	0.00	24	0	16	0	13,935	14,769	0	0	-834
266+50	26650.00	50.00	12.26	0.00	5.72	0.00	24	0	12	0	13,959	14,785	0	0	-826
267+00	26700.00	50.00	9.01	0.00	11.59	0.00	20	0	16	0	13,979	14,806	0	0	-827
267+50	26750.00	50.00	13.56	0.00	6.02	0.00	21	0	16	0	14,000	14,827	0	0	-827
268+00	26800.00	50.00	15.01	0.00	5.46	0.00	26	0	11	0	14,026	14,841	0	0	-815
268+50	26850.00	50.00	15.10	0.00	7.17	0.00	28	0	12	0	14,054	14,856	0	0	-802
269+00	26900.00	50.00	15.84	0.00	7.79	0.00	29	0	14	0	14,083	14,875	0	0	-792
269+50	26950.00	50.00	16.64	0.00	7.63	0.00	30	0	14	0	14,113	14,893	0	0	-780
270+00	27000.00	50.00	16.26	0.00	5.11	0.00	30	0	12	0	14,143	14,908	0	0	-765

DIVISION 1 - USH 12 STATION	REAL STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL	REDUCED EBS IN FILL	MASS ORDINATE
							NOTE 1	NOTE 2	NOTE 3		1.00 NOTE 1	1.30	1.00 NOTE 5	1.00 NOTE 7	NOTE 8
270+50	27050.00	50.00	12.87	0.00	12.81	0.00	27	0	17	0	14,170	14,931	0	0	-761
271+00	27100.00	50.00	12.72	0.00	8.87	0.00	24	0	20	0	14,194	14,957	0	0	-763
271+50	27150.00	50.00	14.41	0.00	6.27	0.00	25	0	14	0	14,219	14,975	0	0	-756
272+00	27200.00	50.00	6.36	0.00	16.69	0.00	19	0	21	0	14,238	15,002	0	0	-764
272+50	27250.00	50.00	10.35	0.00	6.58	0.00	15	0	22	0	14,253	15,031	0	0	-778
273+00	27300.00	50.00	9.72	0.00	10.96	0.00	19	0	16	0	14,272	15,051	0	0	-779
274+00	27400.00	100.00	12.41	0.00	16.58	0.00	46	0	61	0	14,318	15,131	0	0	-813
275+00	27500.00	100.00	14.69	0.00	11.14	0.00	54	0	41	0	14,372	15,184	0	0	-812
275+50	27550.00	50.00	13.10	0.00	22.20	0.00	26	0	31	0	14,398	15,224	0	0	-826
276+00	27600.00	50.00	12.92	0.00	32.05	0.00	24	0	50	0	14,422	15,289	0	0	-867
276+50	27650.00	50.00	18.09	0.00	44.41	0.00	29	0	71	0	14,451	15,382	0	0	-931
277+00	27700.00	50.00	12.89	0.00	61.97	0.00	29	0	99	0	14,480	15,510	0	0	-1,030
277+50	27750.00	50.00	8.03	0.00	83.97	0.00	19	0	135	0	14,499	15,686	0	0	-1,187
278+00	27800.00	50.00	14.26	0.00	53.88	0.00	21	0	128	0	14,520	15,852	0	0	-1,332
278+50	27850.00	50.00	21.57	0.00	32.54	0.00	33	0	80	0	14,553	15,956	0	0	-1,403
279+00	27900.00	50.00	28.08	0.00	0.00	0.00	46	0	30	0	14,599	15,995	0	0	-1,396
279+50	27950.00	50.00	36.60	0.00	0.00	0.00	60	0	0	0	14,659	15,995	0	0	-1,336
280+00	28000.00	50.00	49.42	0.00	0.00	0.00	80	0	0	0	14,739	15,995	0	0	-1,256
281+00	28100.00	100.00	50.21	0.00	0.03	0.00	186	0	0	0	14,925	15,995	0	0	-1,070
282+00	28200.00	100.00	77.48	0.00	0.01	0.00	287	0	0	0	15,212	15,995	0	0	-783
282+50	28250.00	50.00	27.30	0.00	0.00	0.00	97	0	0	0	15,309	15,995	0	0	-686
283+00	28300.00	50.00	25.67	0.00	0.02	0.00	49	0	0	0	15,358	15,995	0	0	-637
283+50	28350.00	50.00	21.04	0.00	0.85	0.00	43	0	1	0	15,401	15,997	0	0	-596
284+00	28400.00	50.00	11.41	0.00	7.28	0.00	30	0	8	0	15,431	16,007	0	0	-576
284+50	28450.00	50.00	11.48	0.00	61.66	0.00	21	0	64	0	15,452	16,090	0	0	-638
285+50	28550.00	100.00	8.57	0.00	101.70	0.00	32	0	377	0	15,484	16,580	0	0	-1,096
286+00	28600.00	50.00	16.55	0.00	28.29	0.00	23	0	120	0	15,507	16,736	0	0	-1,229
286+50	28650.00	50.00	15.88	0.00	4.93	0.00	30	0	31	0	15,537	16,777	0	0	-1,240
287+00	28700.00	50.00	51.75	0.00	0.64	0.00	63	0	5	0	15,600	16,783	0	0	-1,183
287+50	28750.00	50.00	28.50	0.00	0.00	0.00	74	0	1	0	15,674	16,784	0	0	-1,110
288+00	28800.00	50.00	23.20	0.00	1.69	0.00	48	0	2	0	15,722	16,787	0	0	-1,065
288+50	28850.00	50.00	18.31	0.00	25.26	0.00	38	0	25	0	15,760	16,819	0	0	-1,059
289+00	28900.00	50.00	15.77	0.00	102.08	0.00	32	0	118	0	15,792	16,973	0	0	-1,181
289+50	28950.00	50.00	13.73	0.00	172.23	0.00	27	0	254	0	15,819	17,303	0	0	-1,484
290+00	29000.00	50.00	14.64	0.00	83.04	0.00	26	0	236	0	15,845	17,610	0	0	-1,765
290+50	29050.00	50.00	15.24	0.00	30.02	0.00	28	0	105	0	15,873	17,746	0	0	-1,873
291+00	29100.00	50.00	14.00	0.00	10.00	0.00	27	0	37	0	15,900	17,794	0	0	-1,894
291+50	29150.00	50.00	15.29	0.00	6.03	0.00	27	0	15	0	15,927	17,814	0	0	-1,887
293+00	29300.00	150.00	16.91	0.00	1.34	0.00	94	0	7	0	16,021	17,823	0	0	-1,802
293+50	29350.00	50.00	16.59	0.00	0.44	0.00	31	0	2	0	16,052	17,826	0	0	-1,774
294+00	29400.00	50.00	20.36	0.00	0.00	0.00	34	0	0	0	16,086	17,826	0	0	-1,740
294+50	29450.00	50.00	18.38	0.00	0.00	0.00	36	0	0	0	16,122	17,826	0	0	-1,704
295+00	29500.00	50.00	14.82	0.00	3.69	0.00	31	0	3	0	16,153	17,830	0	0	-1,677
295+50	29550.00	50.00	13.11	0.00	11.02	0.00	26	0	14	0	16,179	17,848	0	0	-1,669
296+00	29600.00	50.00	13.81	0.00	37.53	0.00	25	0	45	0	16,204	17,906	0	0	-1,702
296+50	29650.00	50.00	13.93	0.00	27.93	0.00	26	0	61	0	16,230	17,986	0	0	-1,756
297+00	29700.00	50.00	18.17	0.00	28.04	0.00	30	0	52	0	16,260	18,053	0	0	-1,793
297+50	29750.00	50.00	15.90	0.00	13.05	0.00	32	0	38	0	16,292	18,103	0	0	-1,811
298+50	29850.00	100.00	21.06	0.00	5.96	0.00	78	0	22	0	16,370	18,131	0	0	-1,761
299+00	29900.00	50.00	20.29	0.00	8.56	0.00	38	0	13	0	16,408	18,148	0	0	-1,740
299+50	29950.00	50.00	20.98	0.00	1.78	0.00	38	0	10	0	16,446	18,161	0	0	-1,715
300+00	30000.00	50.00	22.88	0.00	5.73	0.00	41	0	7	0	16,487	18,170	0	0	-1,683

DIVISION 1 - USH 12 STATION	REAL STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL	REDUCED EBS IN FILL	MASS ORDINATE
							NOTE 1	NOTE 2	NOTE 3		1.00 NOTE 1	1.30	1.00 NOTE 5	1.00 NOTE 7	NOTE 8
300+50	30050.00	50.00	25.85	0.00	6.01	0.00	45	0	11	0	16,532	18,184	0	0	-1,652
301+00	30100.00	50.00	19.01	0.00	33.46	0.00	42	0	37	0	16,574	18,233	0	0	-1,659
301+50	30150.00	50.00	16.88	0.00	55.27	0.00	33	0	82	0	16,607	18,339	0	0	-1,732
302+00	30200.00	50.00	19.45	0.00	11.19	0.00	34	0	62	0	16,641	18,420	0	0	-1,779
302+50	30250.00	50.00	18.67	0.00	0.86	0.00	35	0	11	0	16,676	18,434	0	0	-1,758
303+00	30300.00	50.00	23.11	0.00	16.16	0.00	39	0	16	0	16,715	18,455	0	0	-1,740
303+50	30350.00	50.00	23.51	0.00	19.28	0.00	43	0	33	0	16,758	18,498	0	0	-1,740
304+00	30400.00	50.00	24.08	0.00	16.59	0.00	44	0	33	0	16,802	18,541	0	0	-1,739
304+50	30450.00	50.00	22.71	0.00	25.02	0.00	43	0	39	0	16,845	18,591	0	0	-1,746
305+50	30550.00	100.00	39.42	0.00	0.48	0.00	146	0	2	0	16,991	18,594	0	0	-1,603
306+50	30650.00	100.00	22.42	0.00	0.00	0.00	83	0	0	0	17,074	18,594	0	0	-1,520
307+00	30700.00	50.00	21.19	0.00	9.50	0.00	40	0	9	0	17,114	18,606	0	0	-1,492
307+50	30750.00	50.00	19.32	0.00	0.07	0.00	38	0	9	0	17,152	18,617	0	0	-1,465
308+00	30800.00	50.00	22.33	0.00	7.17	0.00	39	0	7	0	17,191	18,626	0	0	-1,435
308+50	30850.00	50.00	13.83	0.00	28.87	0.00	33	0	33	0	17,224	18,669	0	0	-1,445
309+00	30900.00	50.00	12.18	0.00	40.54	0.00	24	0	64	0	17,248	18,753	0	0	-1,505
309+50	30950.00	50.00	15.43	0.00	33.64	0.00	26	0	69	0	17,274	18,842	0	0	-1,568
310+00	31000.00	50.00	16.03	0.00	14.24	0.00	29	0	44	0	17,303	18,899	0	0	-1,596
310+50	31050.00	50.00	15.20	0.00	4.49	0.00	29	0	17	0	17,332	18,922	0	0	-1,590
311+00	31100.00	50.00	13.09	0.00	5.19	0.00	26	0	9	0	17,358	18,933	0	0	-1,575
311+50	31150.00	50.00	13.60	0.00	4.26	0.00	25	0	9	0	17,383	18,945	0	0	-1,562
312+00	31200.00	50.00	15.60	0.00	3.46	0.00	27	0	7	0	17,410	18,954	0	0	-1,544
312+50	31250.00	50.00	17.14	0.00	1.77	0.00	30	0	5	0	17,440	18,961	0	0	-1,521
313+00	31300.00	50.00	15.67	0.00	1.01	0.00	30	0	3	0	17,470	18,964	0	0	-1,494
313+50	31350.00	50.00	18.90	0.00	0.72	0.00	32	0	2	0	17,502	18,967	0	0	-1,465
314+00	31400.00	50.00	16.81	0.00	1.93	0.00	33	0	2	0	17,535	18,970	0	0	-1,435
314+50	31450.00	50.00	18.27	0.00	5.05	0.00	32	0	6	0	17,567	18,977	0	0	-1,410
315+00	31500.00	50.00	17.68	0.00	6.14	0.00	33	0	10	0	17,600	18,990	0	0	-1,390
315+50	31550.00	50.00	15.40	0.00	7.64	0.00	31	0	13	0	17,631	19,007	0	0	-1,376
316+00	31600.00	50.00	11.43	0.00	16.70	0.00	25	0	23	0	17,656	19,037	0	0	-1,381
316+50	31650.00	50.00	13.87	0.00	11.70	0.00	23	0	26	0	17,679	19,071	0	0	-1,392
317+00	31700.00	50.00	10.48	0.00	19.23	0.00	23	0	29	0	17,702	19,109	0	0	-1,407
317+50	31750.00	50.00	11.77	0.00	16.24	0.00	21	0	33	0	17,723	19,152	0	0	-1,429
318+00	31800.00	50.00	11.26	0.00	17.48	0.00	21	0	31	0	17,744	19,192	0	0	-1,448
318+50	31850.00	50.00	11.89	0.00	14.46	0.00	21	0	30	0	17,765	19,231	0	0	-1,466
319+00	31900.00	50.00	7.91	0.00	39.64	0.00	18	0	50	0	17,783	19,296	0	0	-1,513
319+50	31950.00	50.00	15.35	0.00	5.31	0.00	22	0	42	0	17,805	19,351	0	0	-1,546
320+50	32050.00	100.00	20.93	0.00	2.64	0.00	78	0	10	0	17,883	19,364	0	0	-1,481
321+00	32100.00	50.00	17.79	0.00	1.65	0.00	36	0	4	0	17,919	19,369	0	0	-1,450
321+50	32150.00	50.00	16.86	0.00	3.49	0.00	32	0	5	0	17,951	19,375	0	0	-1,424
322+00	32200.00	50.00	15.88	0.00	4.64	0.00	30	0	8	0	17,981	19,386	0	0	-1,405
322+50	32250.00	50.00	12.93	0.00	3.64	0.00	27	0	8	0	18,008	19,396	0	0	-1,388
323+00	32300.00	50.00	19.75	0.00	0.74	0.00	30	0	4	0	18,038	19,401	0	0	-1,363
323+50	32350.00	50.00	19.21	0.00	0.32	0.00	36	0	1	0	18,074	19,403	0	0	-1,329
324+00	32400.00	50.00	15.69	0.00	3.98	0.00	32	0	4	0	18,106	19,408	0	0	-1,302
324+50	32450.00	50.00	14.12	0.00	7.43	0.00	28	0	11	0	18,134	19,422	0	0	-1,288
325+00	32500.00	50.00	12.29	0.00	24.85	0.00	24	0	30	0	18,158	19,461	0	0	-1,303
325+50	32550.00	50.00	12.72	0.00	29.03	0.00	23	0	50	0	18,181	19,526	0	0	-1,345
326+00	32600.00	50.00	14.23	0.00	20.64	0.00	25	0	46	0	18,206	19,586	0	0	-1,380
326+50	32650.00	50.00	13.56	0.00	21.89	0.00	26	0	39	0	18,232	19,637	0	0	-1,405
327+00	32700.00	50.00	13.97	0.00	18.21	0.00	25	0	37	0	18,257	19,685	0	0	-1,428
327+50	32750.00	50.00	17.48	0.00	7.43	0.00	29	0	24	0	18,286	19,716	0	0	-1,430
328+50	32850.00	100.00	10.40	0.00	7.87	0.00	39	0	29	0	18,325	19,754	0	0	-1,429
329+00	32900.00	50.00	12.54	0.00	7.21	0.00	21	0	14	0	18,346	19,772	0	0	-1,426
329+50	32950.00	50.00	14.50	0.00	11.40	0.00	25	0	17	0	18,371	19,794	0	0	-1,423
330+00	33000.00	50.00	11.95	0.00	32.08	0.00	24	0	40	0	18,395	19,846	0	0	-1,451

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PROJECT NO: 8949-02-61 & 62 | **HWY: USH 12** | **COUNTY: ST. CROIX** | **EARTHWORK SUMMARY** | **SHEET NO:** 166 | **E**

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

DIVISION 1 - USH 12 STATION	REAL STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT 1.00 NOTE 1	EXPANDED FILL 1.30	EXPANDED EBS BACKFILL 1.00 NOTE 5	REDUCED EBS IN FILL 1.00 NOTE 7	MASS ORDINATE NOTE 8
							NOTE 1	NOTE 2	NOTE 3						
330+50	33050.00	50.00	11.17	0.00	44.44	0.00	21	0	71	0	18,416	19,938	0	0	-1,522
331+00	33100.00	50.00	11.58	0.00	35.38	0.00	21	0	74	0	18,437	20,034	0	0	-1,597
331+50	33150.00	50.00	12.10	0.00	36.14	0.00	22	0	66	0	18,459	20,120	0	0	-1,661
332+00	33200.00	50.00	12.85	0.00	23.21	0.00	23	0	55	0	18,482	20,192	0	0	-1,710
332+50	33250.00	50.00	13.43	0.00	16.17	0.00	24	0	36	0	18,506	20,238	0	0	-1,732
333+00	33300.00	50.00	14.15	0.00	6.90	0.00	26	0	21	0	18,532	20,266	0	0	-1,734
334+00	33400.00	100.00	14.78	0.00	6.85	0.00	55	0	25	0	18,587	20,298	0	0	-1,711
334+50	33450.00	50.00	13.95	0.00	9.29	0.00	27	0	15	0	18,614	20,318	0	0	-1,704
335+00	33500.00	50.00	12.67	0.00	8.55	0.00	25	0	17	0	18,639	20,340	0	0	-1,701
335+50	33550.00	50.00	11.00	0.00	10.04	0.00	22	0	17	0	18,661	20,362	0	0	-1,701
336+00	33600.00	50.00	13.52	0.00	6.55	0.00	23	0	15	0	18,684	20,381	0	0	-1,697
337+00	33700.00	100.00	12.57	0.00	7.79	0.00	47	0	29	0	18,731	20,419	0	0	-1,688
337+50	33750.00	50.00	11.05	0.00	25.63	0.00	22	0	31	0	18,753	20,459	0	0	-1,706
338+00	33800.00	50.00	10.76	0.00	28.67	0.00	20	0	50	0	18,773	20,524	0	0	-1,751
339+50	33950.00	150.00	13.67	0.00	8.93	0.00	76	0	50	0	18,849	20,589	0	0	-1,740
340+00	34000.00	50.00	11.99	0.00	13.10	0.00	24	0	20	0	18,873	20,615	0	0	-1,742
340+50	34050.00	50.00	13.16	0.00	6.08	0.00	23	0	18	0	18,896	20,639	0	0	-1,743
341+00	34100.00	50.00	13.28	0.00	3.68	0.00	24	0	9	0	18,920	20,651	0	0	-1,731
341+50	34150.00	50.00	15.45	0.00	2.78	0.00	27	0	6	0	18,947	20,658	0	0	-1,711
342+00	34200.00	50.00	55.31	0.00	1.37	0.00	66	0	4	0	19,013	20,664	0	0	-1,651
342+50	34250.00	50.00	27.21	0.00	0.15	0.00	76	0	1	0	19,089	20,665	0	0	-1,576
343+00	34300.00	50.00	18.15	0.00	27.41	0.00	42	0	26	0	19,131	20,699	0	0	-1,568
343+50	34350.00	50.00	16.38	0.00	107.20	0.00	32	0	125	0	19,163	20,861	0	0	-1,698
344+00	34400.00	50.00	15.32	0.00	119.24	0.00	29	0	210	0	19,192	21,134	0	0	-1,942
344+50	34450.00	50.00	15.33	0.00	134.09	0.00	28	0	235	0	19,220	21,440	0	0	-2,220
345+00	34500.00	50.00	25.46	0.00	0.45	0.00	38	0	125	0	19,258	21,602	0	0	-2,344
345+50	34550.00	50.00	20.68	0.00	0.00	0.00	43	0	0	0	19,301	21,602	0	0	-2,301
346+00	34600.00	50.00	20.74	0.00	10.14	0.00	38	0	9	0	19,339	21,614	0	0	-2,275
346+50	34650.00	50.00	21.57	0.00	16.14	0.00	39	0	24	0	19,378	21,645	0	0	-2,267
347+00	34700.00	50.00	24.19	0.00	8.64	0.00	42	0	23	0	19,420	21,675	0	0	-2,255
347+50	34750.00	50.00	21.17	0.00	7.95	0.00	42	0	15	0	19,462	21,694	0	0	-2,232
348+00	34800.00	50.00	19.09	0.00	6.79	0.00	37	0	14	0	19,499	21,713	0	0	-2,214
348+50	34850.00	50.00	18.02	0.00	1.92	0.00	34	0	8	0	19,533	21,723	0	0	-2,190
349+00	34900.00	50.00	25.54	0.00	0.00	0.00	40	0	2	0	19,573	21,726	0	0	-2,153
349+50	34950.00	50.00	24.82	0.00	0.00	0.00	47	0	0	0	19,620	21,726	0	0	-2,106
350+00	35000.00	50.00	37.23	0.00	0.00	0.00	57	0	0	0	19,677	21,726	0	0	-2,049
352+00	35200.00	200.00	29.53	0.00	0.00	0.00	219	0	0	0	19,896	21,726	0	0	-1,830
352+50	35250.00	50.00	20.81	0.00	0.09	0.00	47	0	0	0	19,943	21,726	0	0	-1,783
353+00	35300.00	50.00	19.48	0.00	1.08	0.00	37	0	1	0	19,980	21,727	0	0	-1,747
353+50	35350.00	50.00	19.13	0.00	1.63	0.00	36	0	3	0	20,016	21,731	0	0	-1,715
354+00	35400.00	50.00	18.96	0.00	1.62	0.00	35	0	3	0	20,051	21,735	0	0	-1,684
354+50	35450.00	50.00	20.60	0.00	1.85	0.00	37	0	3	0	20,088	21,739	0	0	-1,651
355+50	35550.00	100.00	14.52	0.00	23.14	0.00	54	0	86	0	20,142	21,850	0	0	-1,708
356+00	35600.00	50.00	18.28	0.00	21.59	0.00	30	0	41	0	20,172	21,904	0	0	-1,732
356+50	35650.00	50.00	14.43	0.00	35.55	0.00	30	0	53	0	20,202	21,973	0	0	-1,771
357+00	35700.00	50.00	13.77	0.00	39.41	0.00	26	0	69	0	20,228	22,062	0	0	-1,834
357+50	35750.00	50.00	13.97	0.00	33.76	0.00	26	0	68	0	20,254	22,151	0	0	-1,897
358+00	35800.00	50.00	20.22	0.00	38.33	0.00	32	0	67	0	20,286	22,238	0	0	-1,952
358+50	35850.00	50.00	23.93	0.00	34.73	0.00	41	0	68	0	20,327	22,326	0	0	-1,999
359+00	35900.00	50.00	17.41	0.00	51.35	0.00	38	0	80	0	20,365	22,430	0	0	-2,065
359+50	35950.00	50.00	15.53	0.00	70.65	0.00	31	0	113	0	20,396	22,577	0	0	-2,181
360+00	36000.00	50.00	16.10	0.00	63.24	0.00	29	0	124	0	20,425	22,738	0	0	-2,313

DIVISION 1 - USH 12 STATION	REAL STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL	REDUCED EBS IN FILL	MASS ORDINATE
							NOTE 1	NOTE 2	NOTE 3		1.00 NOTE 1	1.30	1.00 NOTE 5	1.00 NOTE 7	NOTE 8
360+50	36050.00	50.00	13.72	0.00	65.22	0.00	28	0	119	0	20,453	22,893	0	0	-2,440
361+00	36100.00	50.00	11.61	0.00	66.98	0.00	23	0	122	0	20,476	23,052	0	0	-2,576
361+50	36150.00	50.00	8.68	0.00	119.64	0.00	19	0	173	0	20,495	23,277	0	0	-2,782
362+00	36200.00	50.00	16.44	0.00	57.52	0.00	23	0	164	0	20,518	23,490	0	0	-2,972
362+50	36250.00	50.00	16.10	0.00	22.63	0.00	30	0	74	0	20,548	23,586	0	0	-3,038
363+00	36300.00	50.00	15.93	0.00	3.39	0.00	30	0	24	0	20,578	23,617	0	0	-3,039
363+50	36350.00	50.00	14.39	0.00	11.00	0.00	28	0	13	0	20,606	23,634	0	0	-3,028
364+00	36400.00	50.00	29.83	0.00	6.92	0.00	41	0	17	0	20,647	23,656	0	0	-3,009
365+00	36500.00	100.00	14.96	0.00	5.35	0.00	55	0	20	0	20,702	23,682	0	0	-2,980
365+50	36550.00	50.00	16.11	0.00	4.62	0.00	29	0	9	0	20,731	23,694	0	0	-2,963
366+50	36650.00	100.00	14.40	0.00	11.48	0.00	53	0	43	0	20,784	23,750	0	0	-2,966
367+00	36700.00	50.00	12.40	0.00	19.69	0.00	25	0	29	0	20,809	23,787	0	0	-2,978
368+00	36800.00	100.00	12.86	0.00	13.49	0.00	48	0	50	0	20,857	23,852	0	0	-2,995
368+50	36850.00	50.00	15.86	0.00	15.98	0.00	27	0	27	0	20,884	23,888	0	0	-3,004
369+00	36900.00	50.00	14.04	0.00	9.42	0.00	28	0	24	0	20,912	23,919	0	0	-3,007
369+50	36950.00	50.00	15.35	0.00	11.80	0.00	27	0	20	0	20,939	23,945	0	0	-3,006
370+00	37000.00	50.00	27.35	0.00	8.96	0.00	40	0	19	0	20,979	23,969	0	0	-2,990
370+50	37050.00	50.00	30.47	0.00	6.27	0.00	54	0	14	0	21,033	23,988	0	0	-2,955
371+00	37100.00	50.00	28.04	0.00	6.39	0.00	54	0	12	0	21,087	24,003	0	0	-2,916
371+50	37150.00	50.00	15.09	0.00	7.47	0.00	40	0	13	0	21,127	24,020	0	0	-2,893
372+00	37200.00	50.00	12.48	0.00	17.16	0.00	26	0	23	0	21,153	24,050	0	0	-2,897
372+50	37250.00	50.00	12.81	0.00	35.80	0.00	23	0	49	0	21,176	24,114	0	0	-2,938
373+00	37300.00	50.00	11.88	0.00	82.60	0.00	23	0	110	0	21,199	24,257	0	0	-3,058
373+50	37350.00	50.00	10.93	0.00	66.61	0.00	21	0	138	0	21,220	24,436	0	0	-3,216
374+00	37400.00	50.00	16.89	0.00	28.31	0.00	26	0	88	0	21,246	24,551	0	0	-3,305
374+50	37450.00	50.00	11.75	0.00	17.78	0.00	27	0	43	0	21,273	24,606	0	0	-3,333
375+00	37500.00	50.00	15.56	0.00	11.81	0.00	25	0	27	0	21,298	24,642	0	0	-3,344
376+00	37600.00	100.00	14.45	0.00	12.80	0.00	54	0	47	0	21,352	24,703	0	0	-3,351
376+50	37650.00	50.00	14.07	0.00	10.50	0.00	26	0	22	0	21,378	24,731	0	0	-3,353
377+00	37700.00	50.00	11.88	0.00	14.01	0.00	24	0	23	0	21,402	24,761	0	0	-3,359
377+50	37750.00	50.00	12.25	0.00	6.02	0.00	22	0	19	0	21,424	24,786	0	0	-3,362
378+00	37800.00	50.00	21.40	0.00	3.80	0.00	31	0	9	0	21,455	24,798	0	0	-3,343
378+50	37850.00	50.00	24.04	0.00	2.91	0.00	42	0	6	0	21,497	24,805	0	0	-3,308
380+00	38000.00	150.00	13.01	0.00	4.09	0.00	72	0	23	0	21,569	24,835	0	0	-3,266
380+50	38050.00	50.00	17.75	0.00	4.04	0.00	28	0	8	0	21,597	24,846	0	0	-3,249
381+50	38150.00	100.00	14.35	0.00	7.54	0.00	53	0	28	0	21,650	24,882	0	0	-3,232
382+00	38200.00	50.00	13.87	0.00	3.46	0.00	26	0	10	0	21,676	24,895	0	0	-3,219
382+50	38250.00	50.00	15.04	0.00	2.76	0.00	27	0	6	0	21,703	24,903	0	0	-3,200
383+00	38300.00	50.00	13.05	0.00	4.37	0.00	26	0	7	0	21,729	24,912	0	0	-3,183
383+50	38350.00	50.00	12.99	0.00	5.65	0.00	24	0	9	0	21,753	24,924	0	0	-3,171
384+00	38400.00	50.00	15.45	0.00	8.70	0.00	26	0	13	0	21,779	24,941	0	0	-3,162
384+50	38450.00	50.00	12.96	0.00	11.22	0.00	26	0	18	0	21,805	24,964	0	0	-3,159
385+00	38500.00	50.00	13.51	0.00	11.28	0.00	25	0	21	0	21,830	24,991	0	0	-3,161
385+50	38550.00	50.00	13.28	0.00	12.48	0.00	25	0	22	0	21,855	25,020	0	0	-3,165
386+00	38600.00	50.00	12.15	0.00	16.21	0.00	24	0	27	0	21,879	25,055	0	0	-3,176
386+50	38650.00	50.00	13.91	0.00	16.22	0.00	24	0	30	0	21,903	25,094	0	0	-3,191
387+00	38700.00	50.00	12.66	0.00	13.97	0.00	25	0	28	0	21,928	25,130	0	0	-3,202
387+50	38750.00	50.00	13.33	0.00	16.94	0.00	24	0	29	0	21,952	25,168	0	0	-3,216
388+00	38800.00	50.00	18.06	0.00	2.43	0.00	29	0	18	0	21,981	25,191	0	0	-3,210
388+50	38850.00	50.00	27.29	0.00	1.62	0.00	42	0	4	0	22,023	25,197	0	0	-3,174
389+50	38950.00	100.00	12.03	0.00	8.57	0.00	45	0	32	0	22,068	25,238	0	0	-3,170
390+00	39000.00	50.00	14.52	0.00	6.91	0.00	25	0	14	0	22,093	25,256	0	0	-3,163

DIVISION 1 - USH 12 STATION	REAL STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL	REDUCED EBS IN FILL	MASS ORDINATE
							NOTE 1	NOTE 2	NOTE 3		1.00 NOTE 1	1.30	1.00 NOTE 5	1.00 NOTE 7	NOTE 8
390+50	39050.00	50.00	14.35	0.00	2.58	0.00	27	0	9	0	22,120	25,268	0	0	-3,148
391+00	39100.00	50.00	13.73	0.00	3.46	0.00	26	0	6	0	22,146	25,276	0	0	-3,130
391+50	39150.00	50.00	16.84	0.00	2.53	0.00	28	0	6	0	22,174	25,284	0	0	-3,110
392+00	39200.00	50.00	16.71	0.00	3.55	0.00	31	0	6	0	22,205	25,292	0	0	-3,087
392+50	39250.00	50.00	15.53	0.00	1.14	0.00	30	0	4	0	22,235	25,297	0	0	-3,062
393+00	39300.00	50.00	18.35	0.00	0.34	0.00	31	0	1	0	22,266	25,298	0	0	-3,032
393+50	39350.00	50.00	23.54	0.00	0.00	0.00	39	0	0	0	22,305	25,298	0	0	-2,993
394+00	39400.00	50.00	26.56	0.00	0.00	0.00	46	0	0	0	22,351	25,298	0	0	-2,947
395+00	39500.00	100.00	15.69	0.00	1.04	0.00	58	0	4	0	22,409	25,303	0	0	-2,894
395+50	39550.00	50.00	19.76	0.00	0.00	0.00	33	0	1	0	22,442	25,305	0	0	-2,863
396+00	39600.00	50.00	20.00	0.00	0.01	0.00	37	0	0	0	22,479	25,305	0	0	-2,826
396+50	39650.00	50.00	24.66	0.00	1.51	0.00	41	0	1	0	22,520	25,306	0	0	-2,786
397+00	39700.00	50.00	28.13	0.00	0.00	0.00	49	0	1	0	22,569	25,307	0	0	-2,738
397+80.002	39780.00	80.00	0.00	0.00	0.00	0.00	0	0	0	0	22,569	25,307	0	0	-2,738

Notes:

1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
4 - EXPANDED MARSH BACKFILL	WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORROW)
5 - EXPANDED EBS	WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORROW)
6 - REDUCED MARSH IN FILL	REDUCED MARSH EXCAVATION THAT CAN BE USED IN FILL
7 - REDUCED EBS IN FILL	REDUCED EBS EXCAVATION THAT CAN BE USED IN FILL
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAVT - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - EXPANDED ROCK) * FILL FACTOR)]
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAVT - ((FILL - EXPANDED ROCK) * FILL FACTOR)]

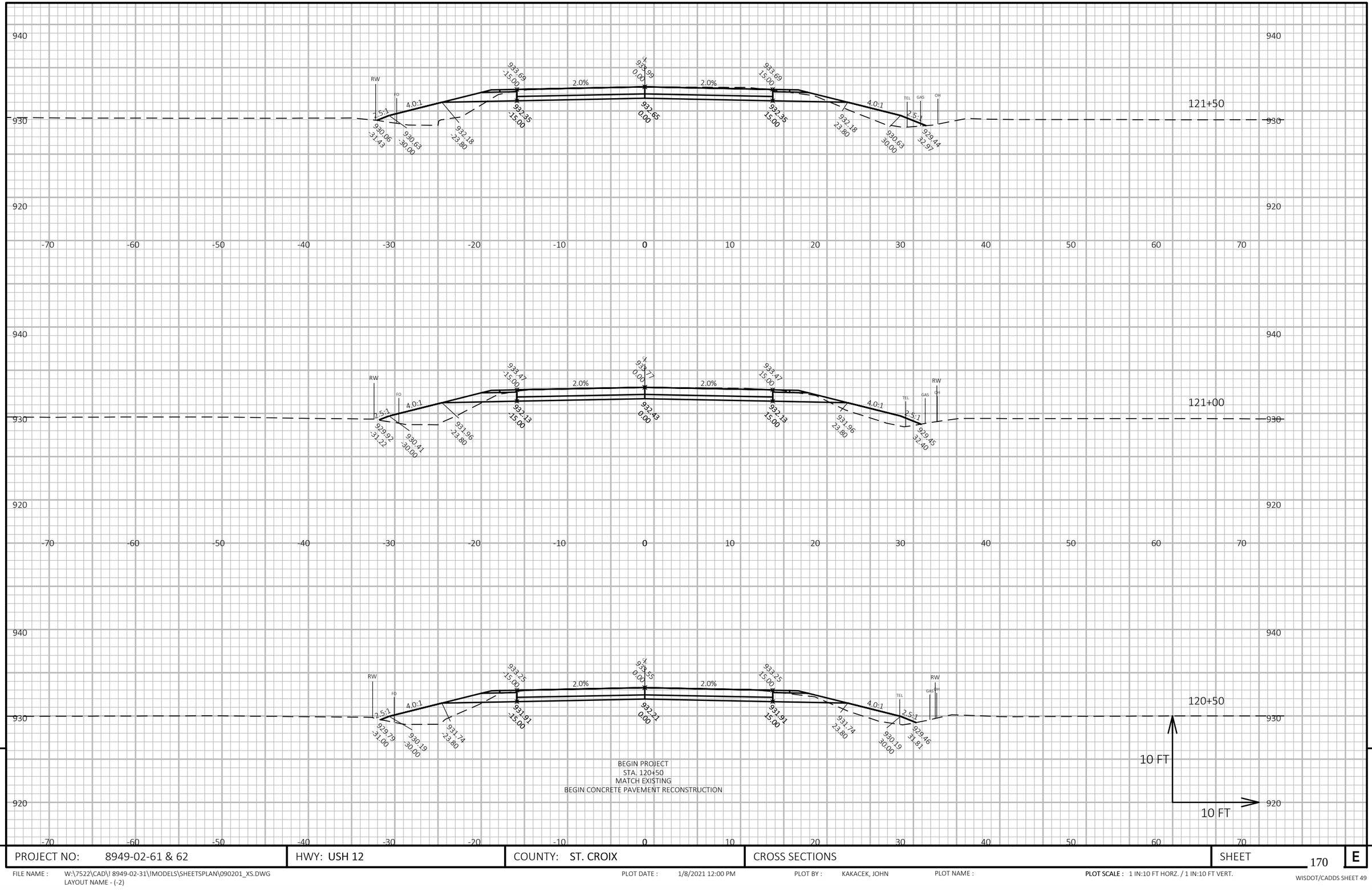
NOTE 4 - SELECT ONE BASED ON INPUT DIALOG SELECTION
NOTE 5 - SELECT ONE BASED ON INPUT DIALOG SELECTION
NOTE 6 - IF EXCAVATED MARSH CAN BE USED IN FILL
NOTE 7 - IF EXCAVATED EBS CAN BE USED IN FILL
NOTE 8 - SELECT ONE BASED ON MASS HAUL INPUT DIALOG SELECTION. EBS AND MARSH EXC USED OUTSIDE 1:1 IN FILL SLOPES
EBS AND MARSH EXC USED OUTSIDE 1:1 IN FILL SLOPES
MARSH AND EBS ARE NOT USABLE OUTSIDE THE 1:1 SLOPES
MARSH AND EBS ARE NOT USABLE OUTSIDE THE 1:1 SLOPES

9

9

PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	EARTHWORK SUMMARY	SHEET NO: 169	E

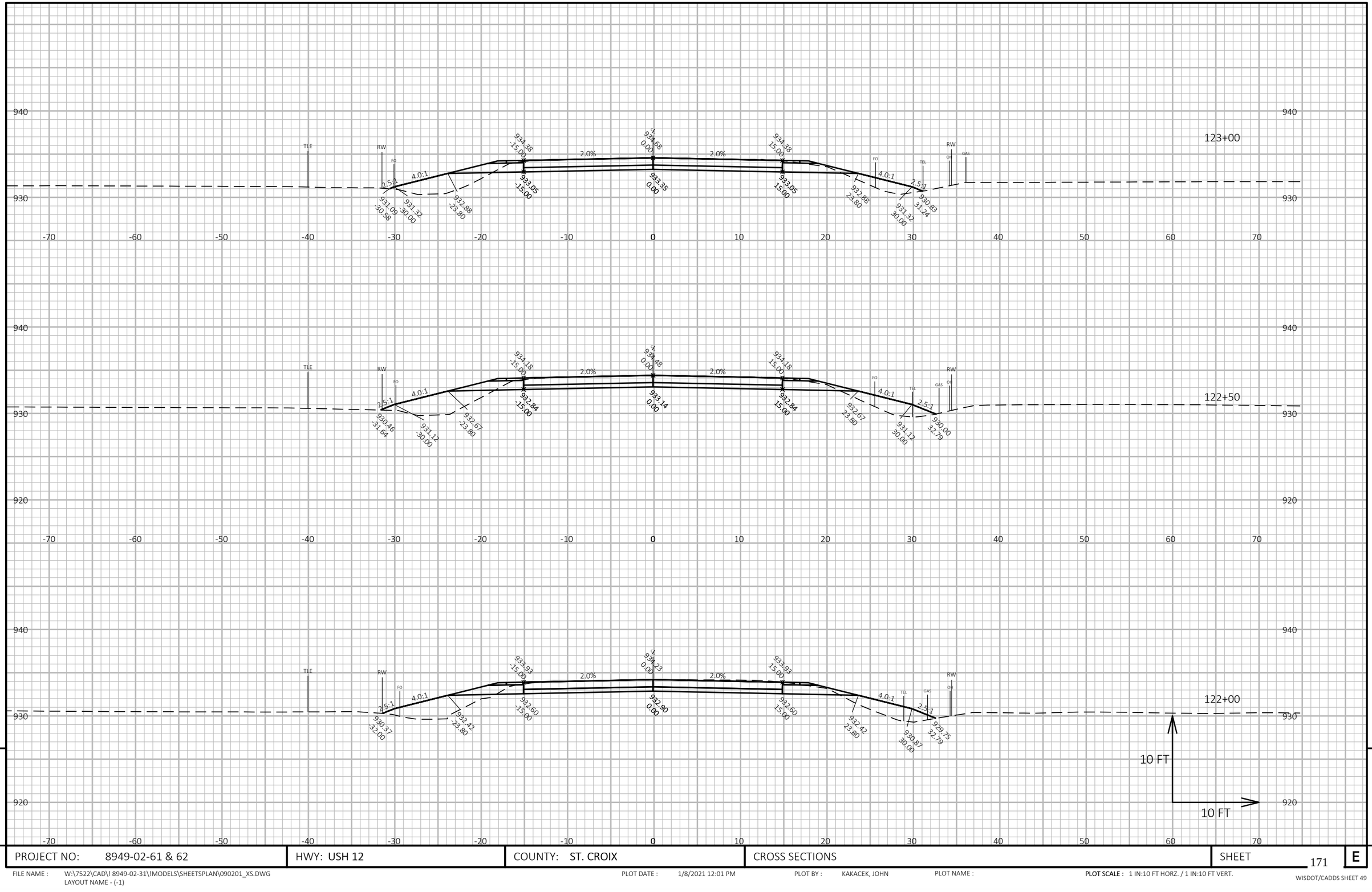
FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ ORIGINATOR : DIST _ PLOT SCALE : 1:1



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 170	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (-2)

PLOT DATE : 1/8/2021 12:00 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

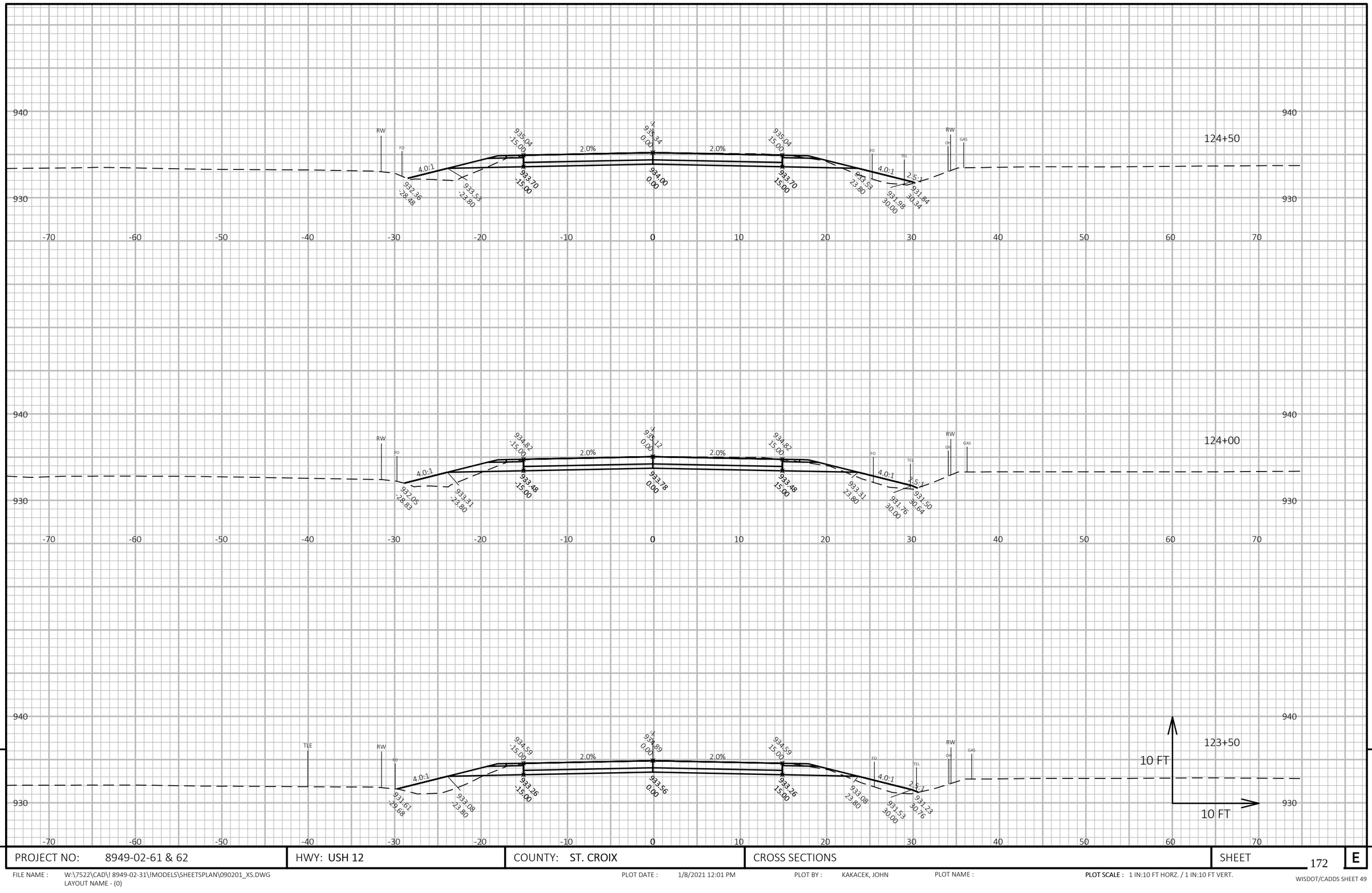


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 171	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (-1)

PLOT DATE : 1/8/2021 12:01 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

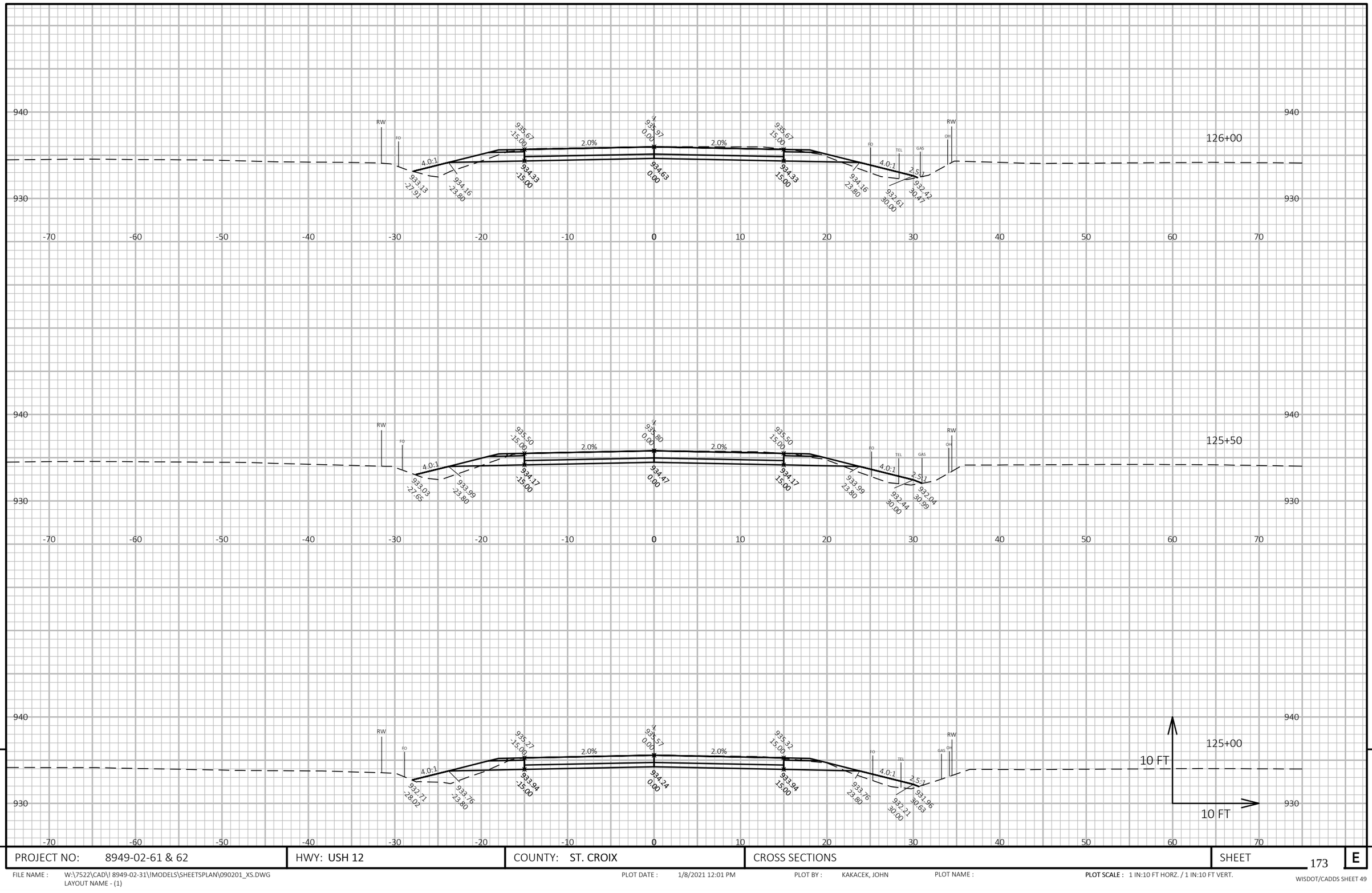


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 172	E

FILE NAME : W:\7522\CAD\I 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (0)

PLOT DATE : 1/8/2021 12:01 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



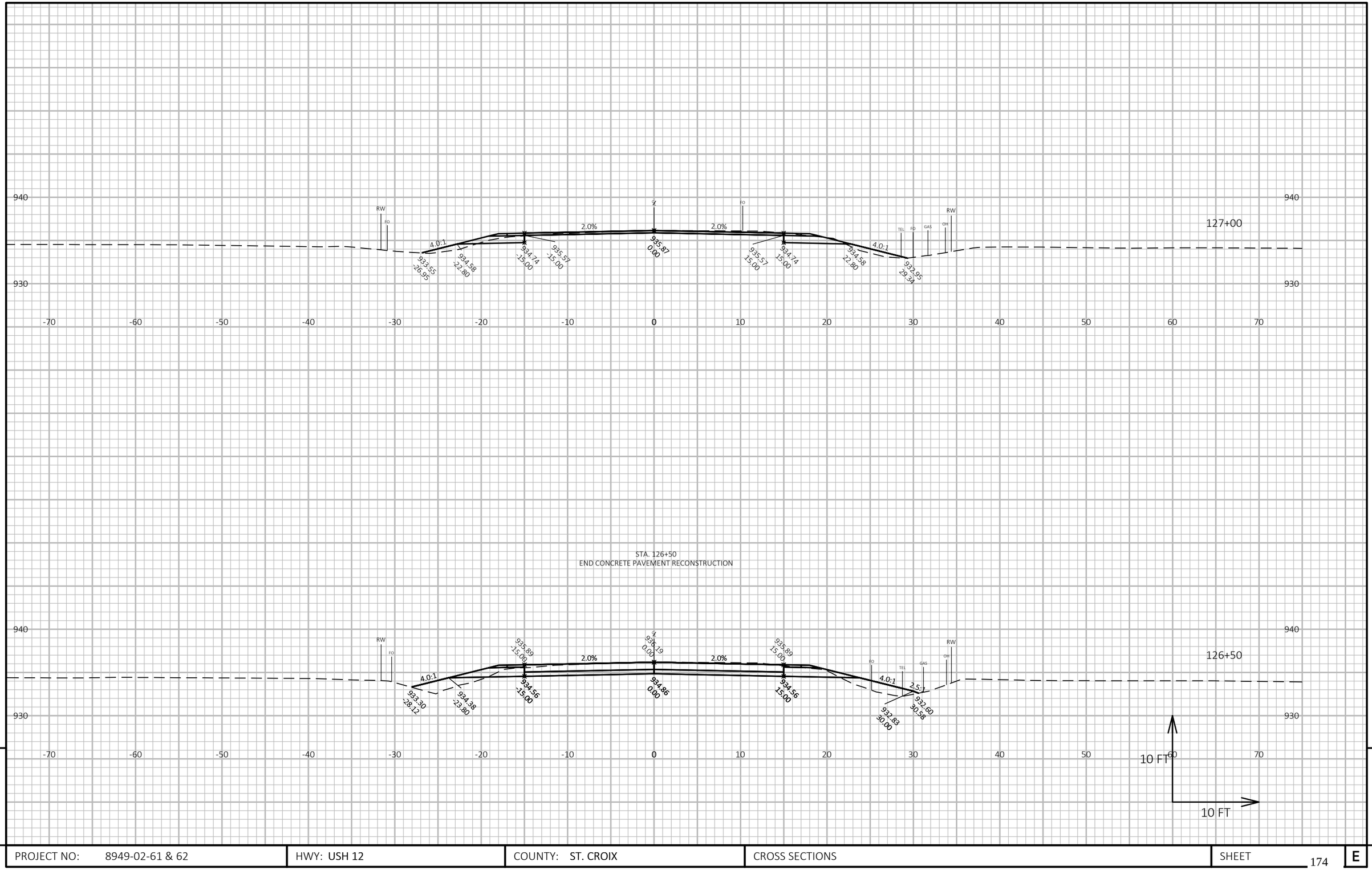
PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 173	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (1)

PLOT DATE : 1/8/2021 12:01 PM PLOT BY : KAKACEK, JOHN PLOT NAME :

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

WISDOT/CADDS SHEET 49



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 174	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (2)

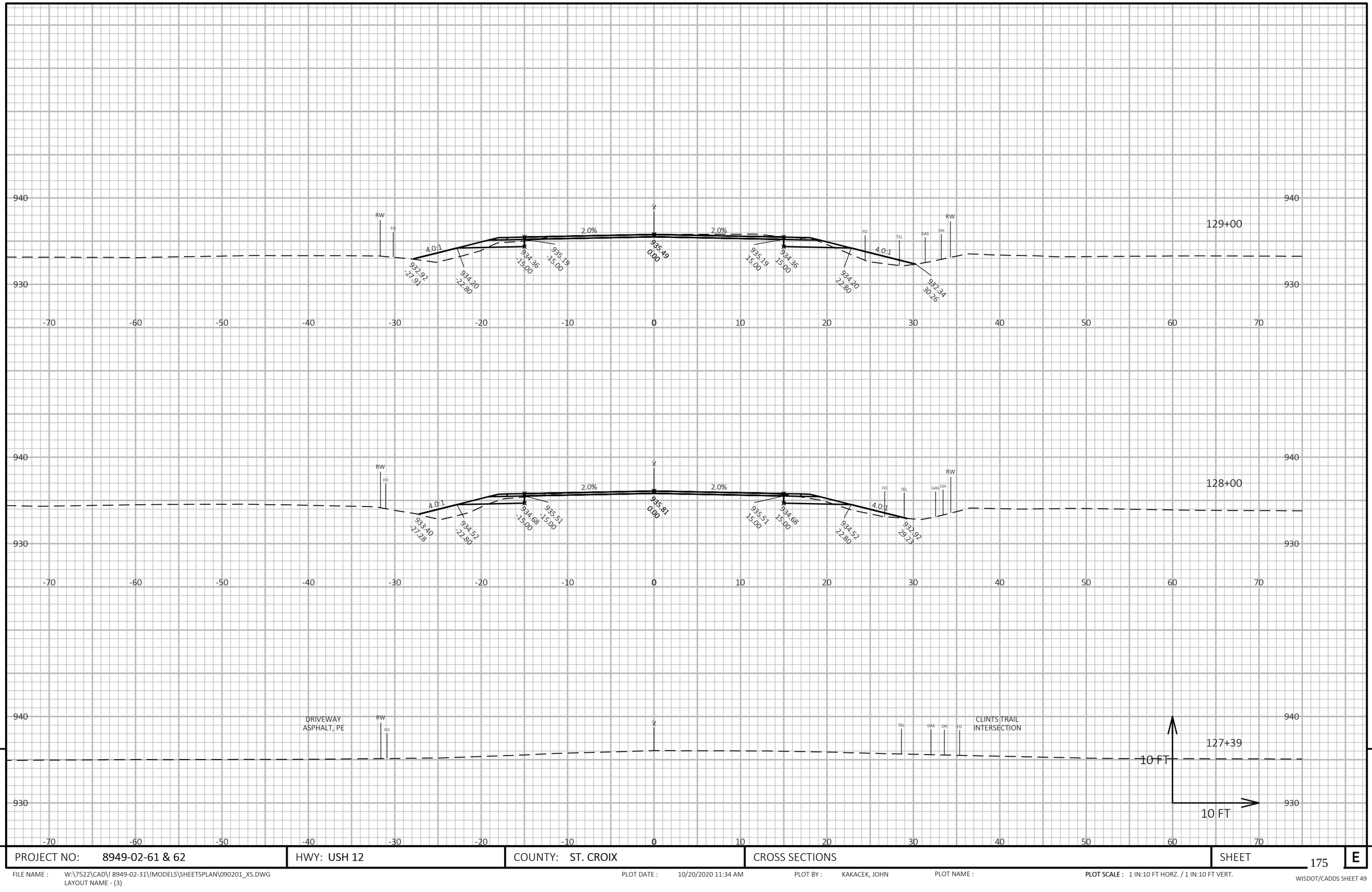
PLOT DATE : 1/8/2021 12:02 PM

PLOT BY : KAKACEK, JOHN

PLOT NAME :

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

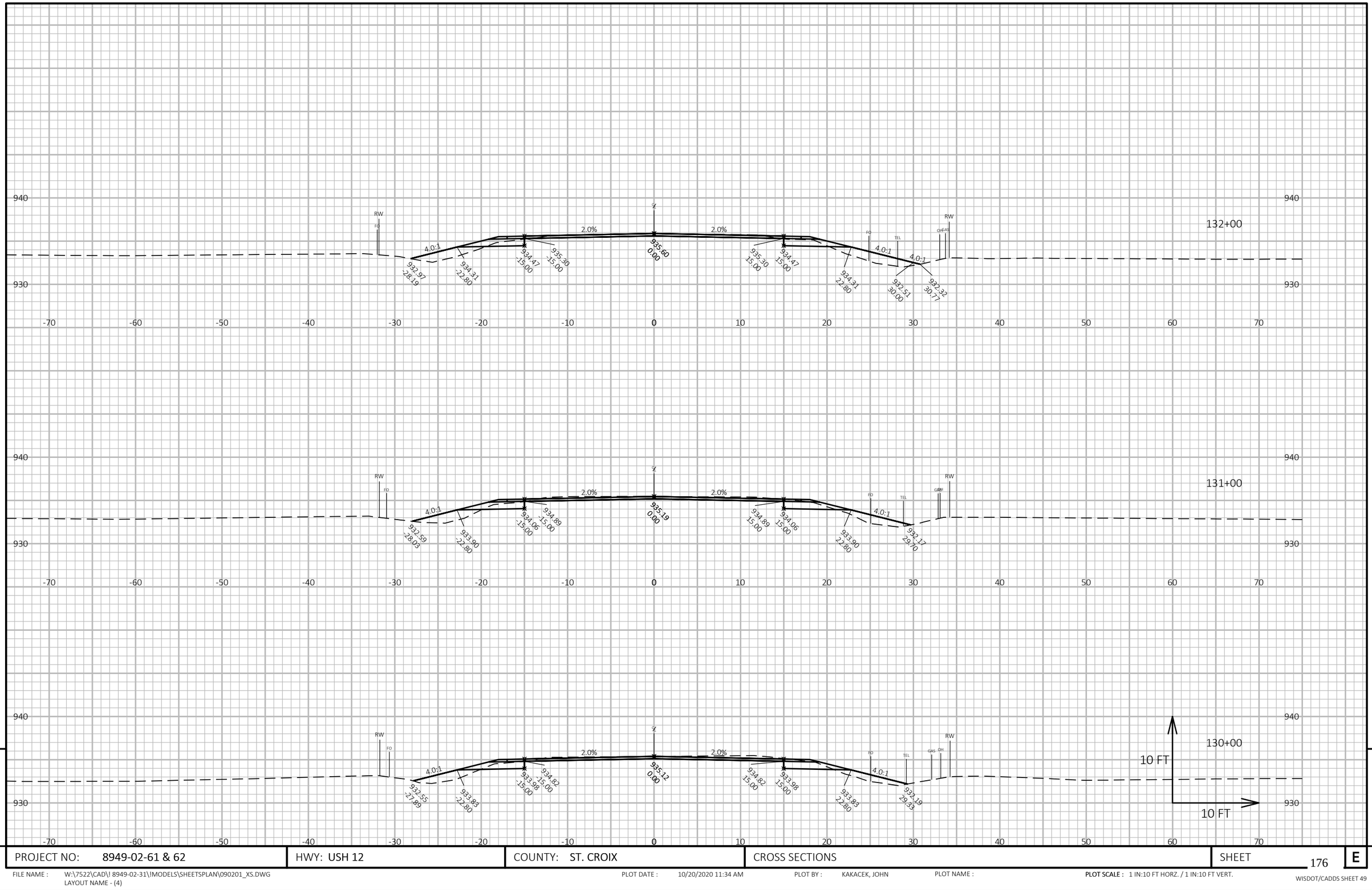
WISDOT/CADDS SHEET 49



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 175	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (3)

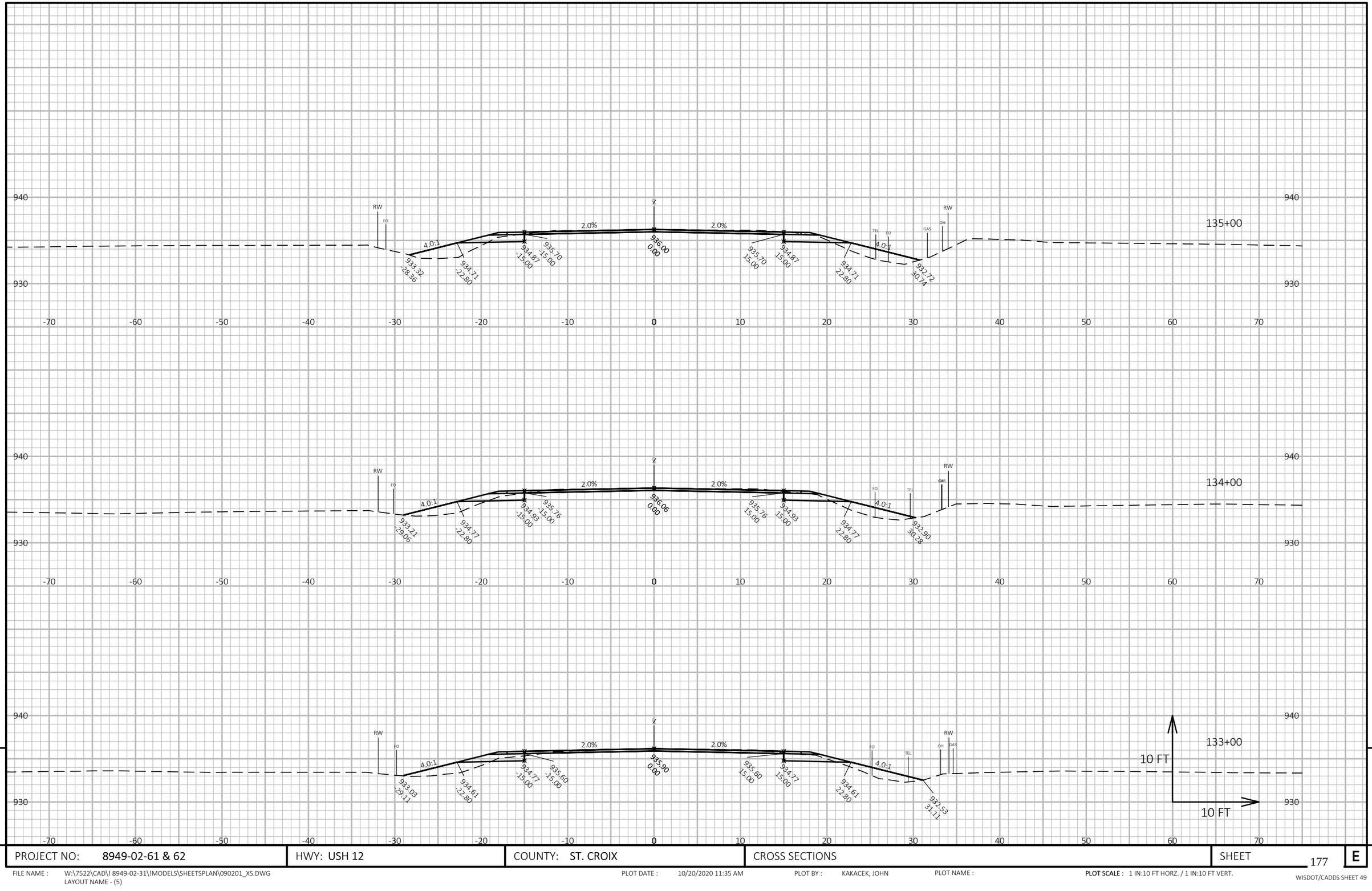
PLOT DATE : 10/20/2020 11:34 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 176	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (4)

PLOT DATE : 10/20/2020 11:34 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 177	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (5)

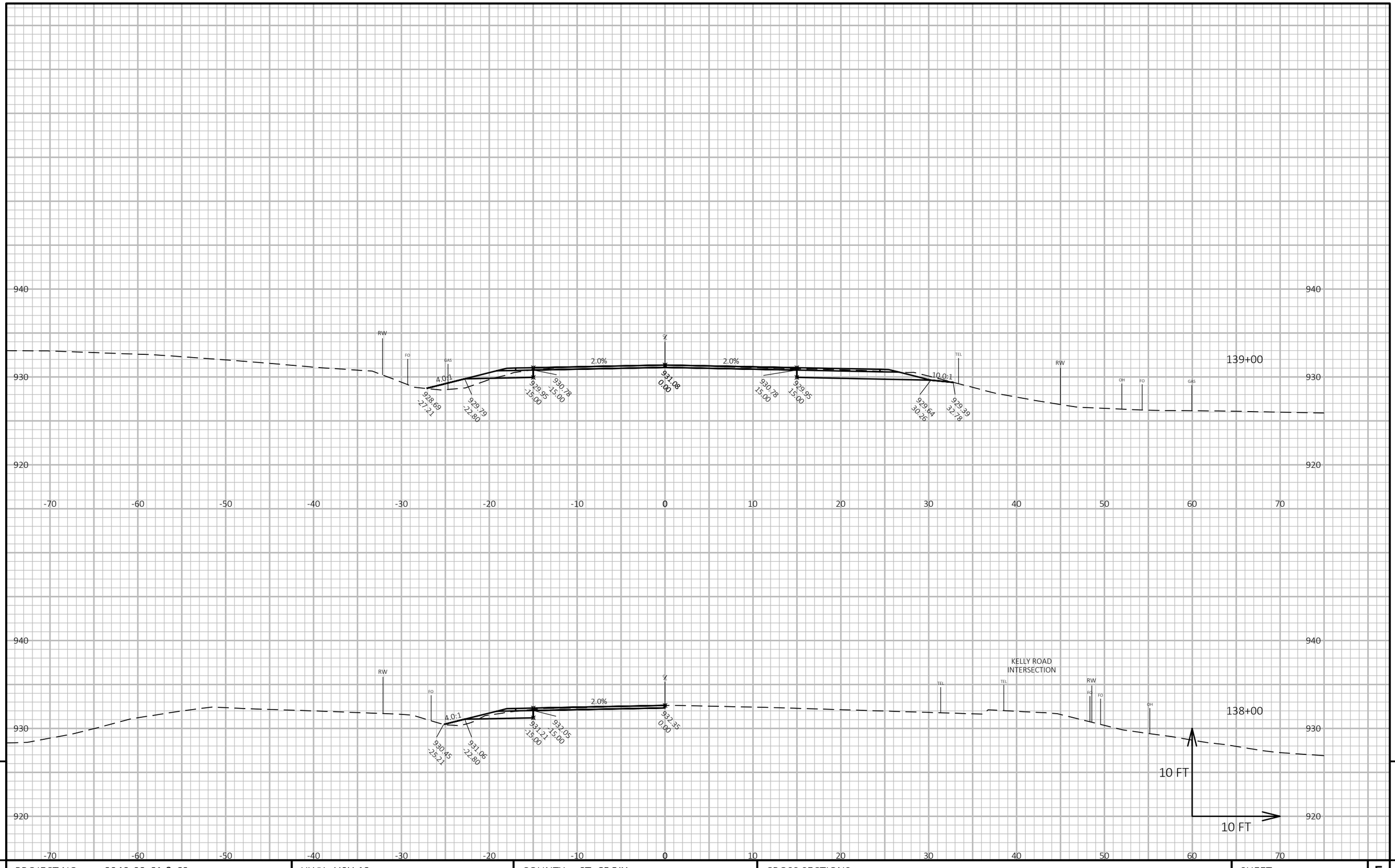
PLOT DATE : 10/20/2020 11:35 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 178	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (6)

PLOT DATE : 10/20/2020 11:35 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

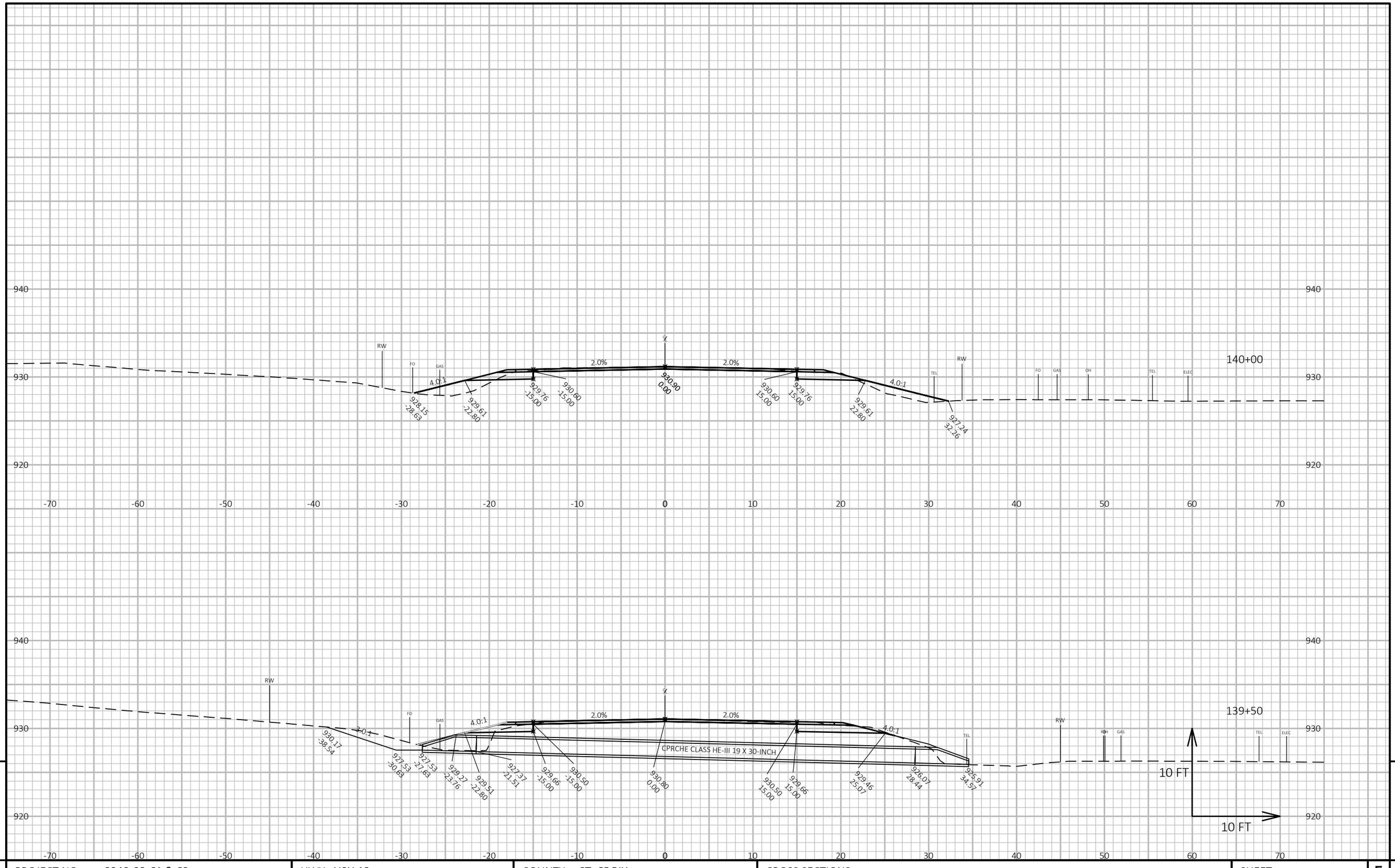


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 179	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (7)

PLOT DATE : 10/20/2020 11:35 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

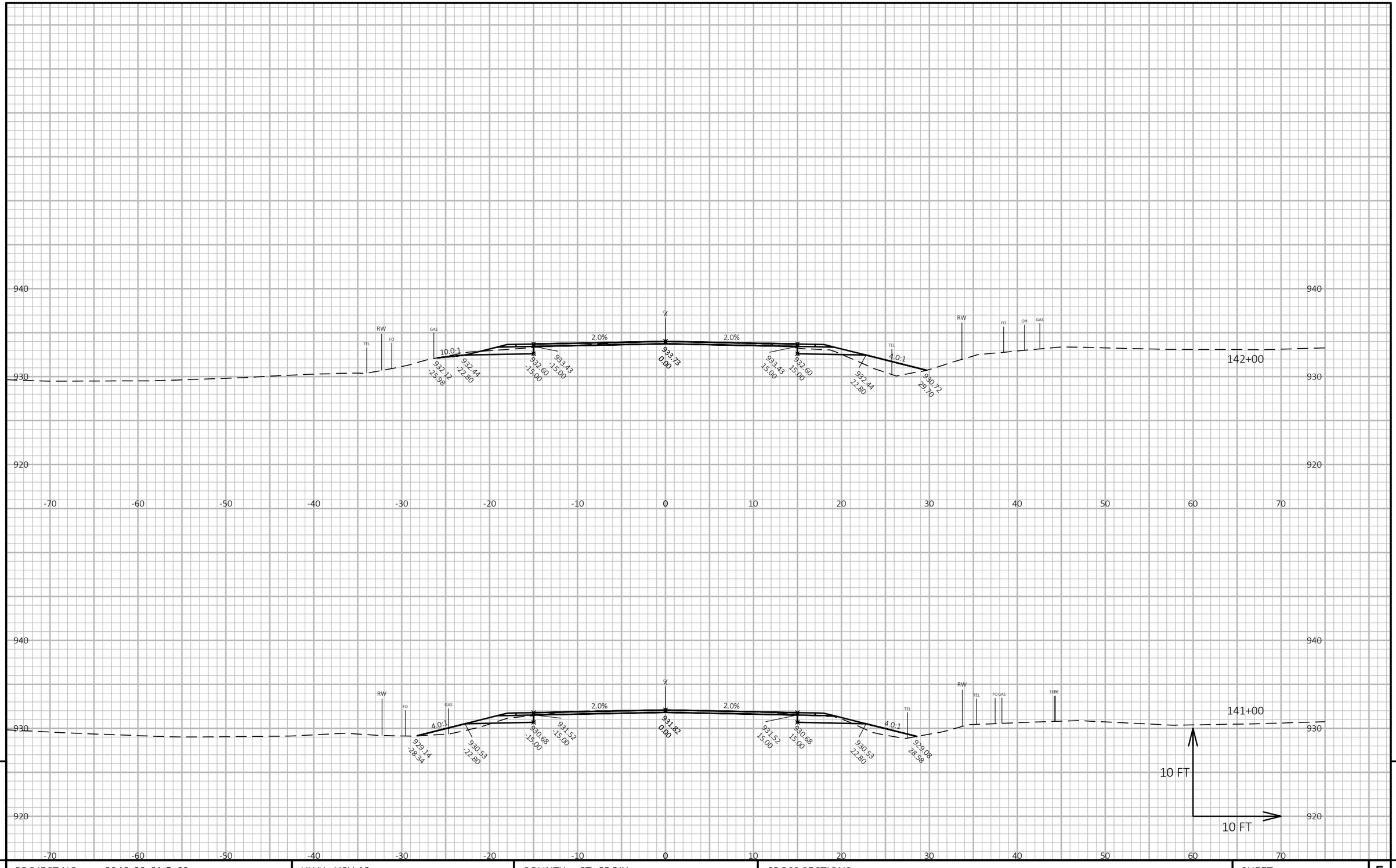
WISDOT/CADDS SHEET 49



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 180	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (8)

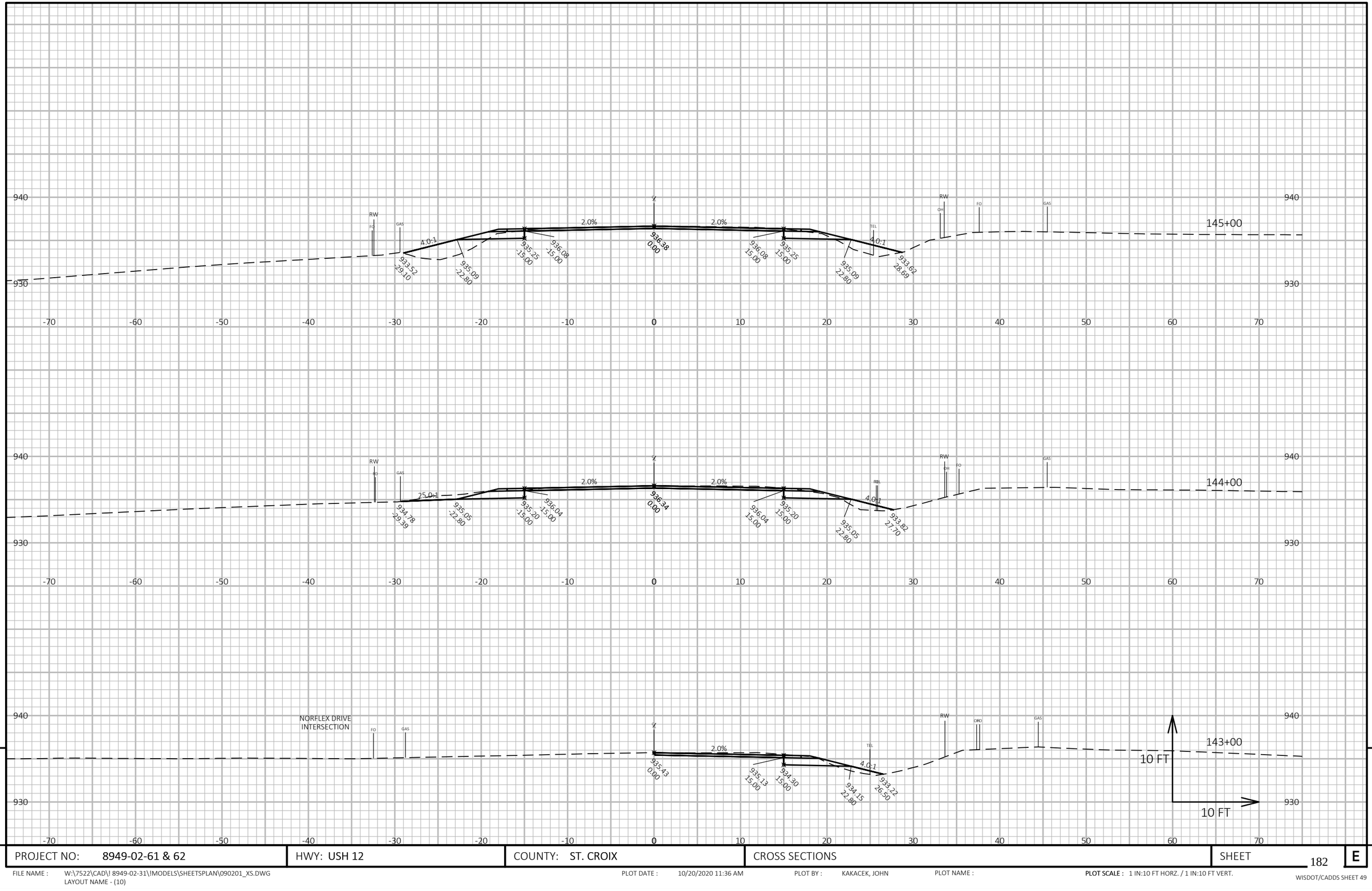
PLOT DATE : 10/20/2020 11:36 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 181	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (9)

PLOT DATE : 10/20/2020 11:36 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



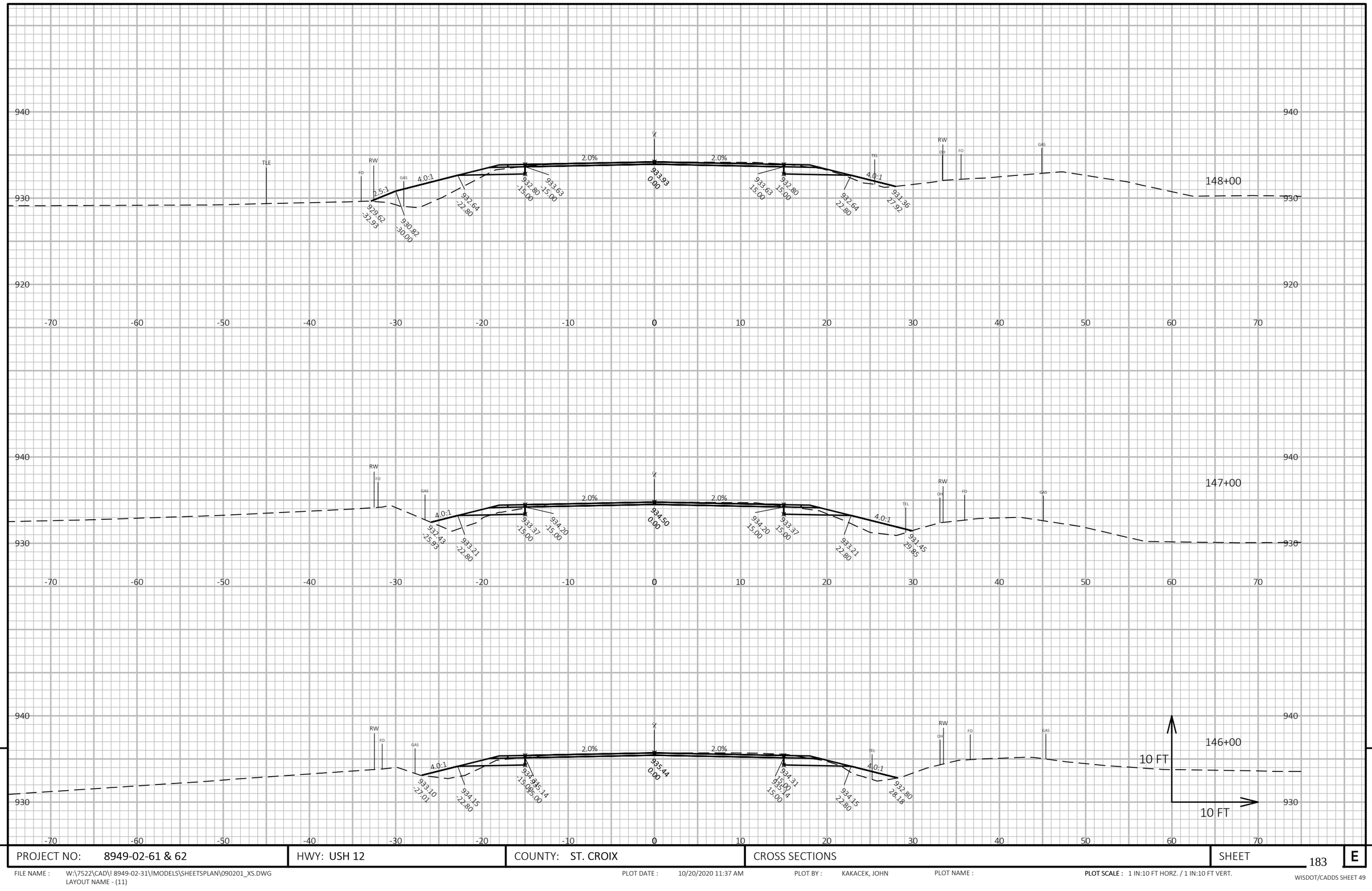
PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 182	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (10)

PLOT DATE : 10/20/2020 11:36 AM PLOT BY : KAKACEK, JOHN PLOT NAME :

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

WISDOT/CADDS SHEET 49

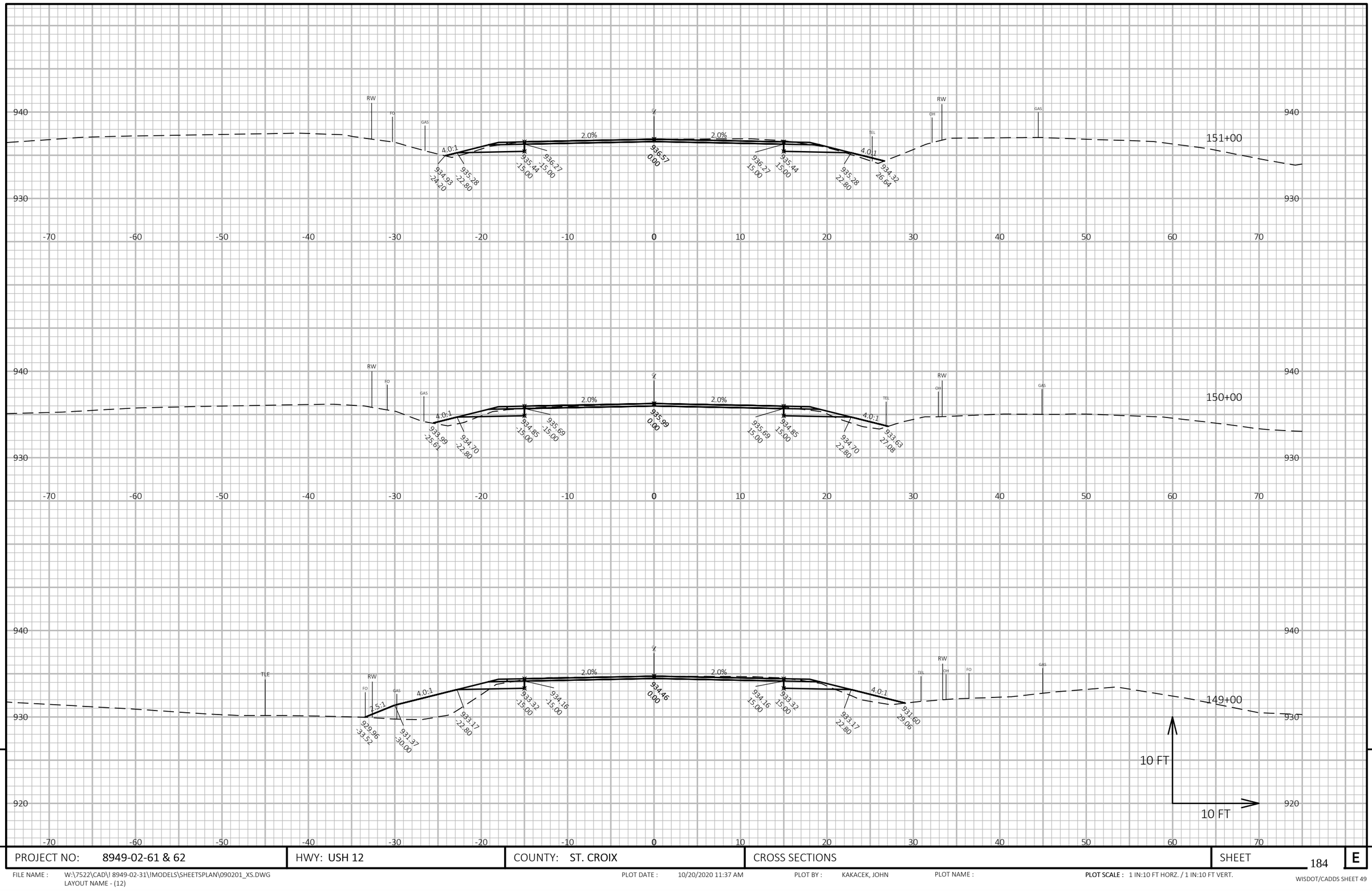


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 183	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (11)

PLOT DATE : 10/20/2020 11:37 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

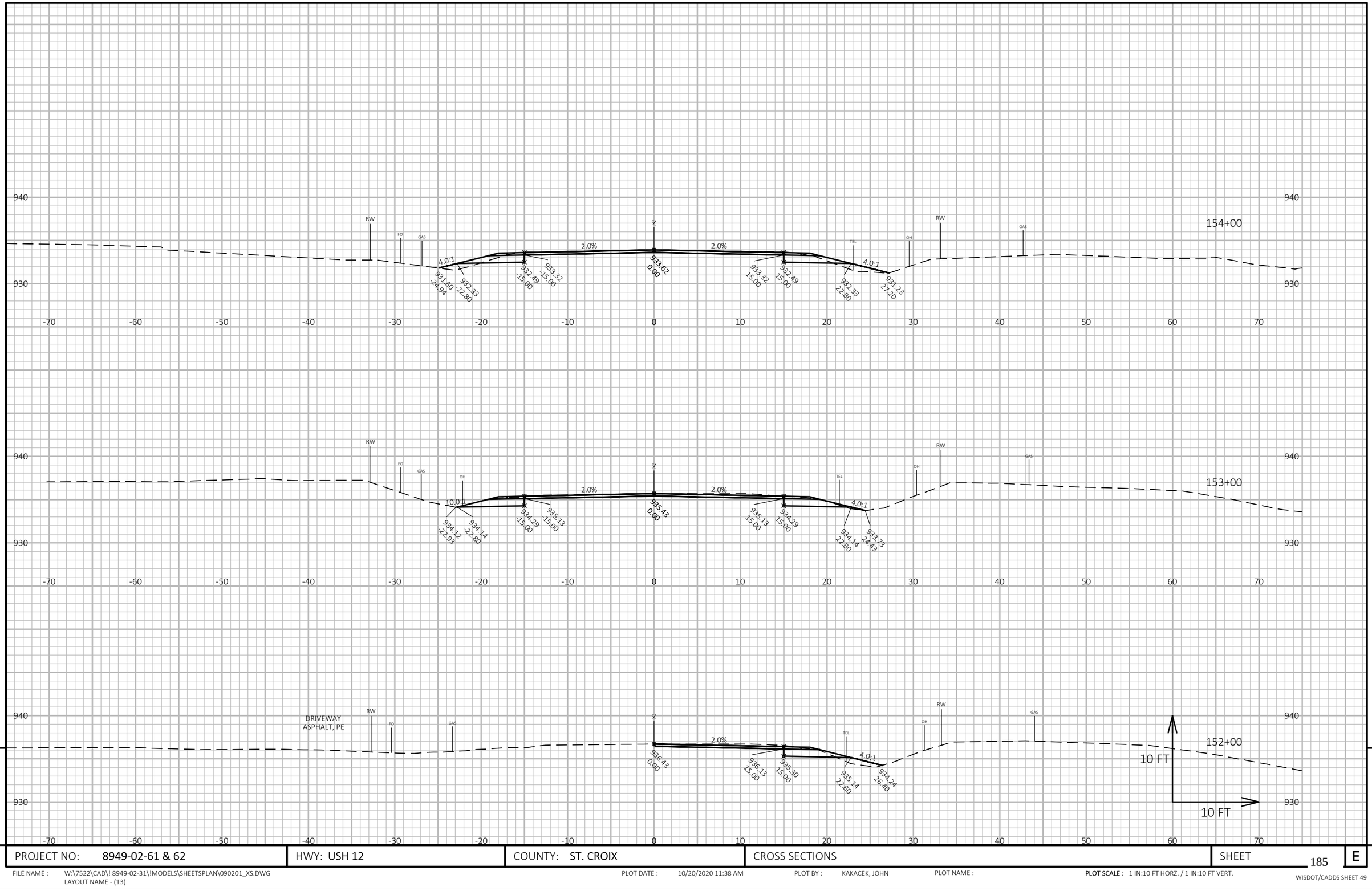


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 184	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (12)

PLOT DATE : 10/20/2020 11:37 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

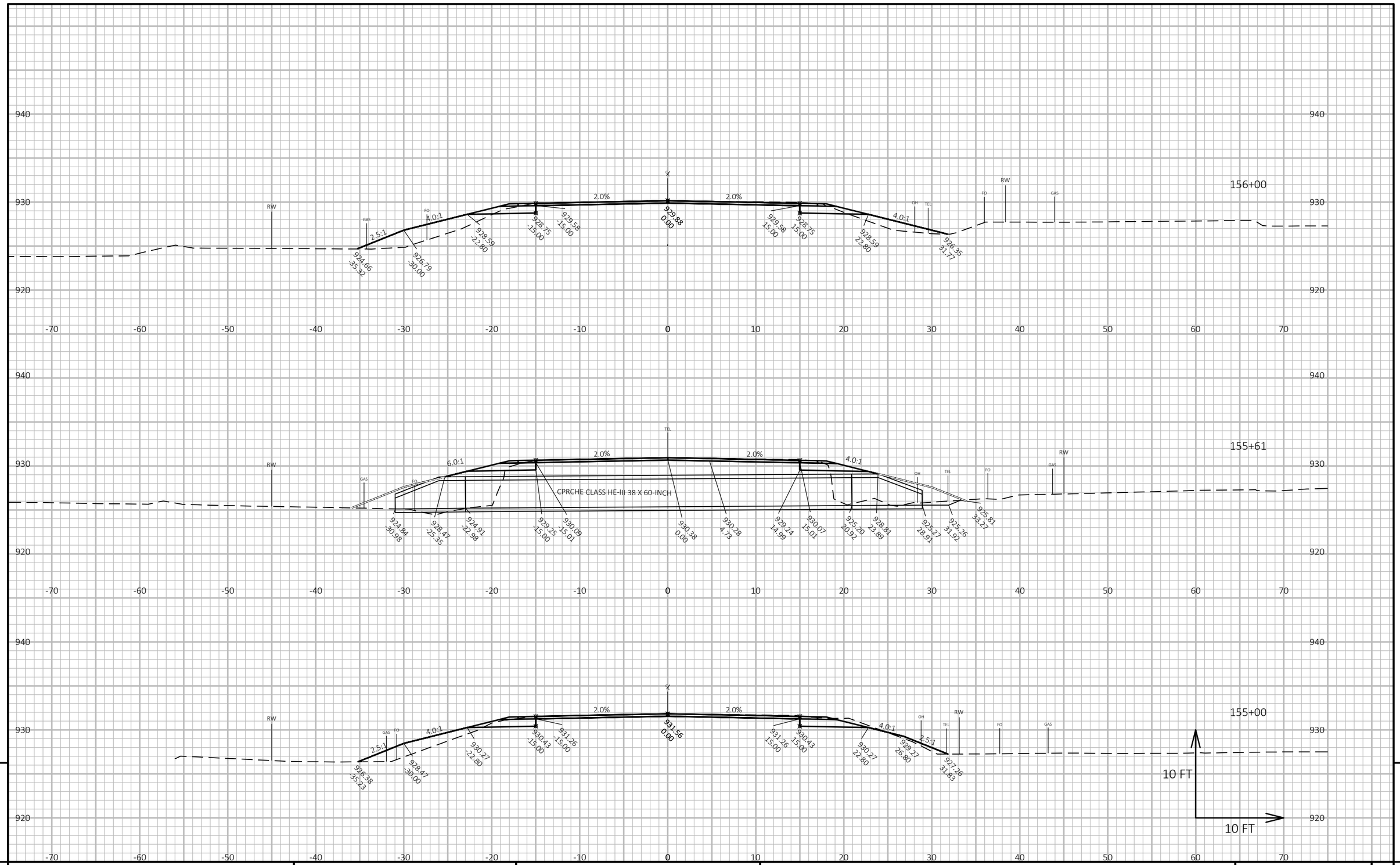


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 185	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (13)

PLOT DATE : 10/20/2020 11:38 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



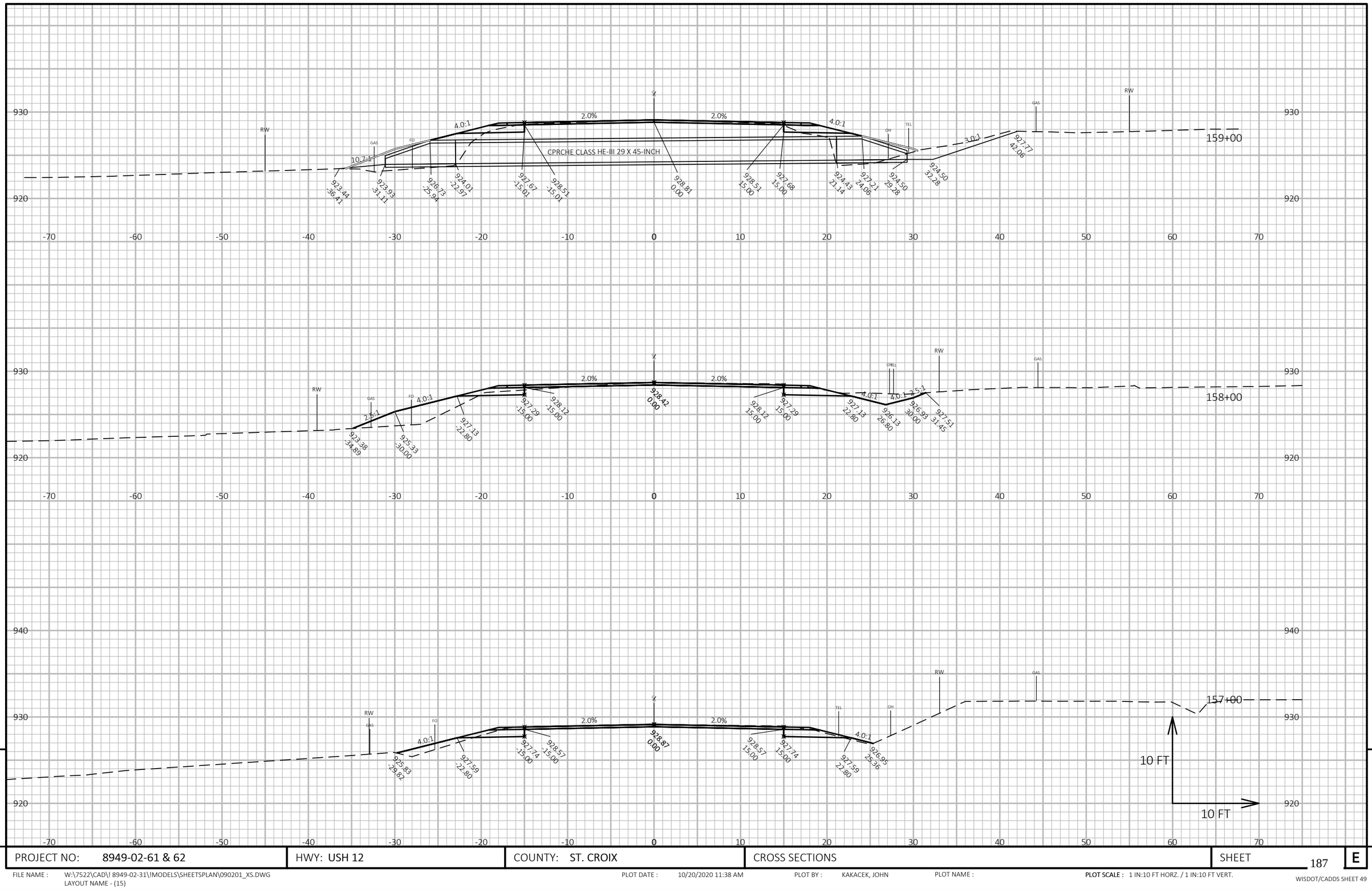
PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 186	E

FILE NAME : W:\7522\CAD\I 8949-02-31\IMODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (14)

PLOT DATE : 10/20/2020 11:38 AM PLOT BY : KAKACEK, JOHN PLOT NAME :

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

WISDOT/CADDS SHEET 49

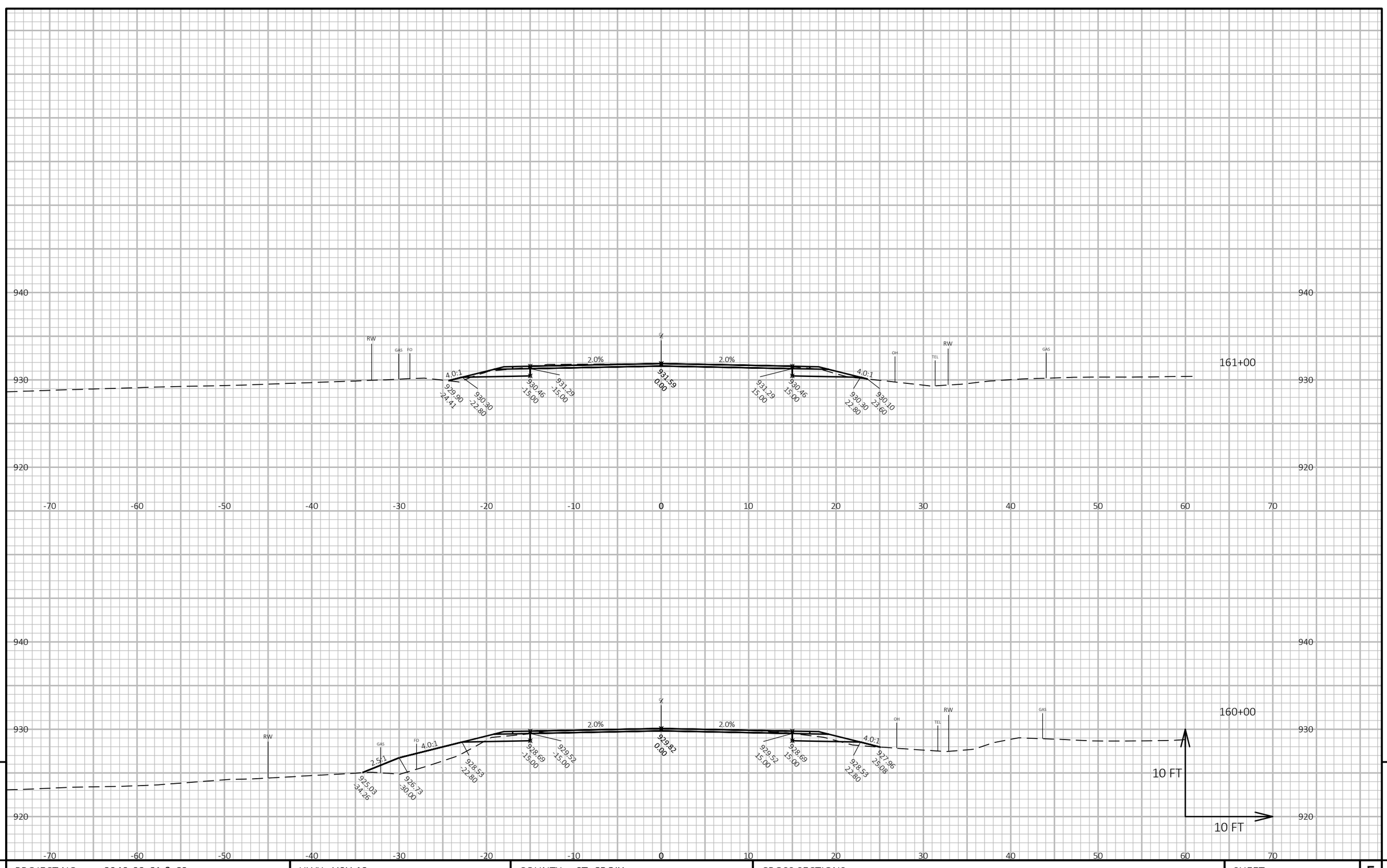


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 187	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (15)

PLOT DATE : 10/20/2020 11:38 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

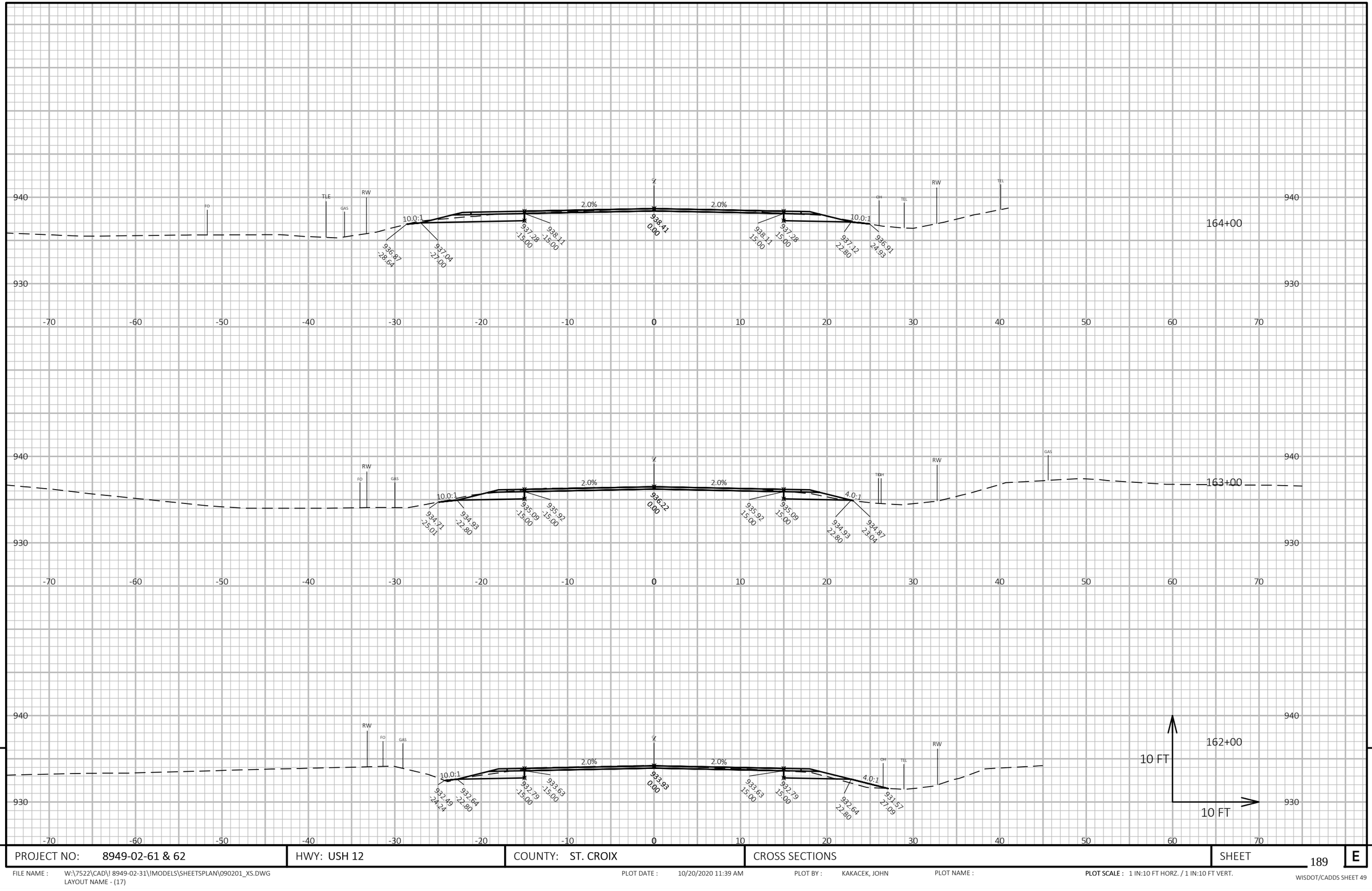
WISDOT/CADDS SHEET 49



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 188	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (16)

PLOT DATE : 10/20/2020 11:39 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

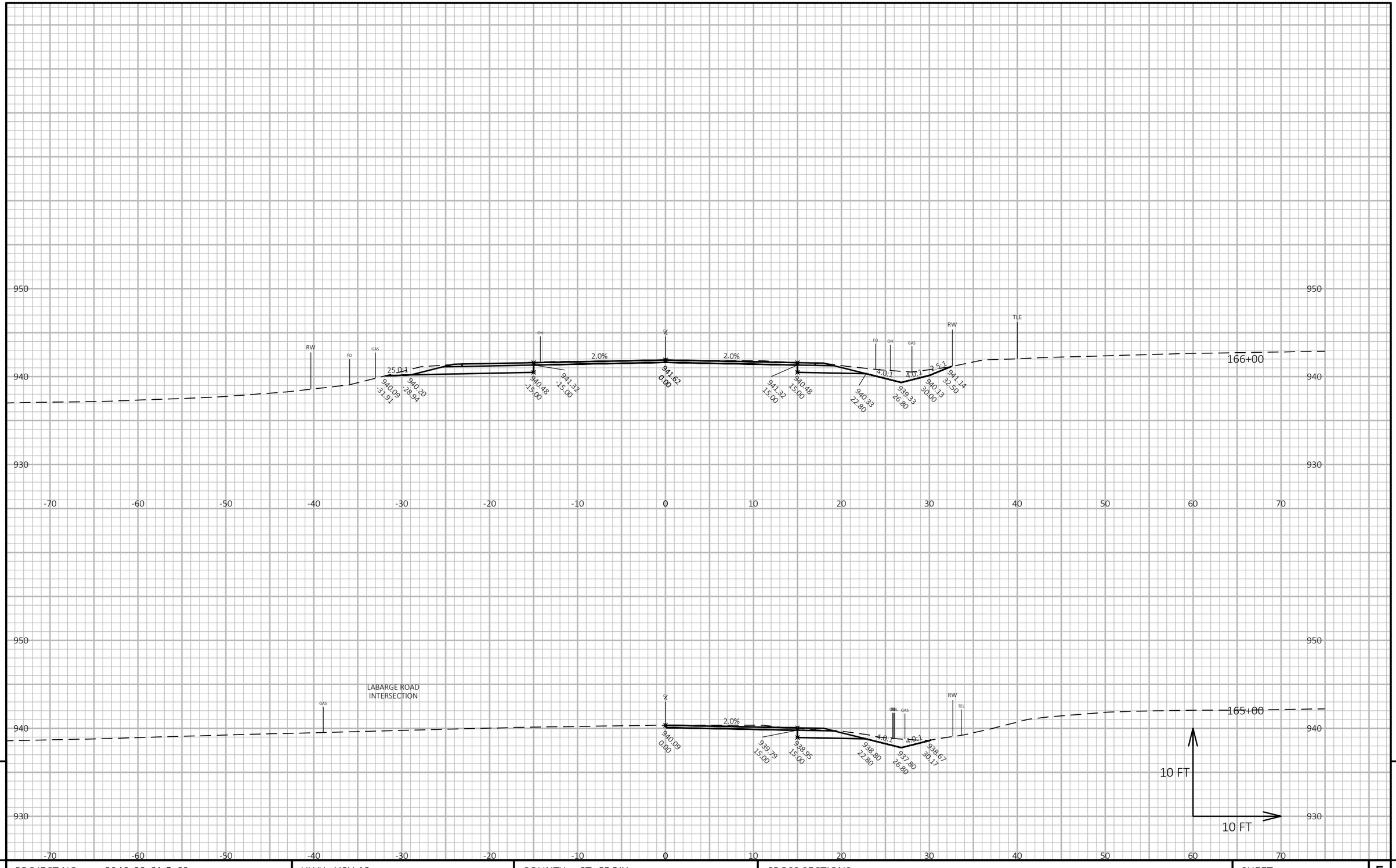


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 189	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (17)

PLOT DATE : 10/20/2020 11:39 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



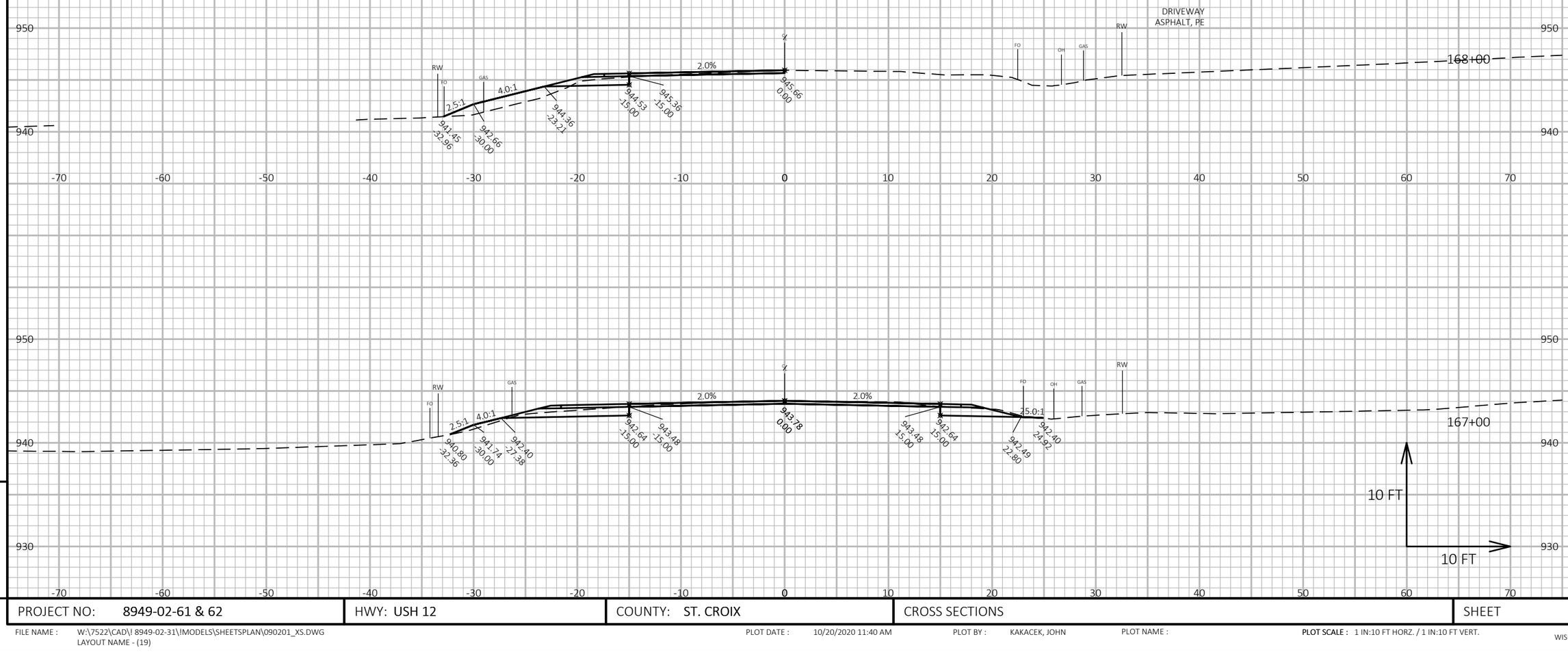
PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 190	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (18)

PLOT DATE : 10/20/2020 11:39 AM PLOT BY : KAKACEK, JOHN PLOT NAME :

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

WISDOT/CADDS SHEET 49

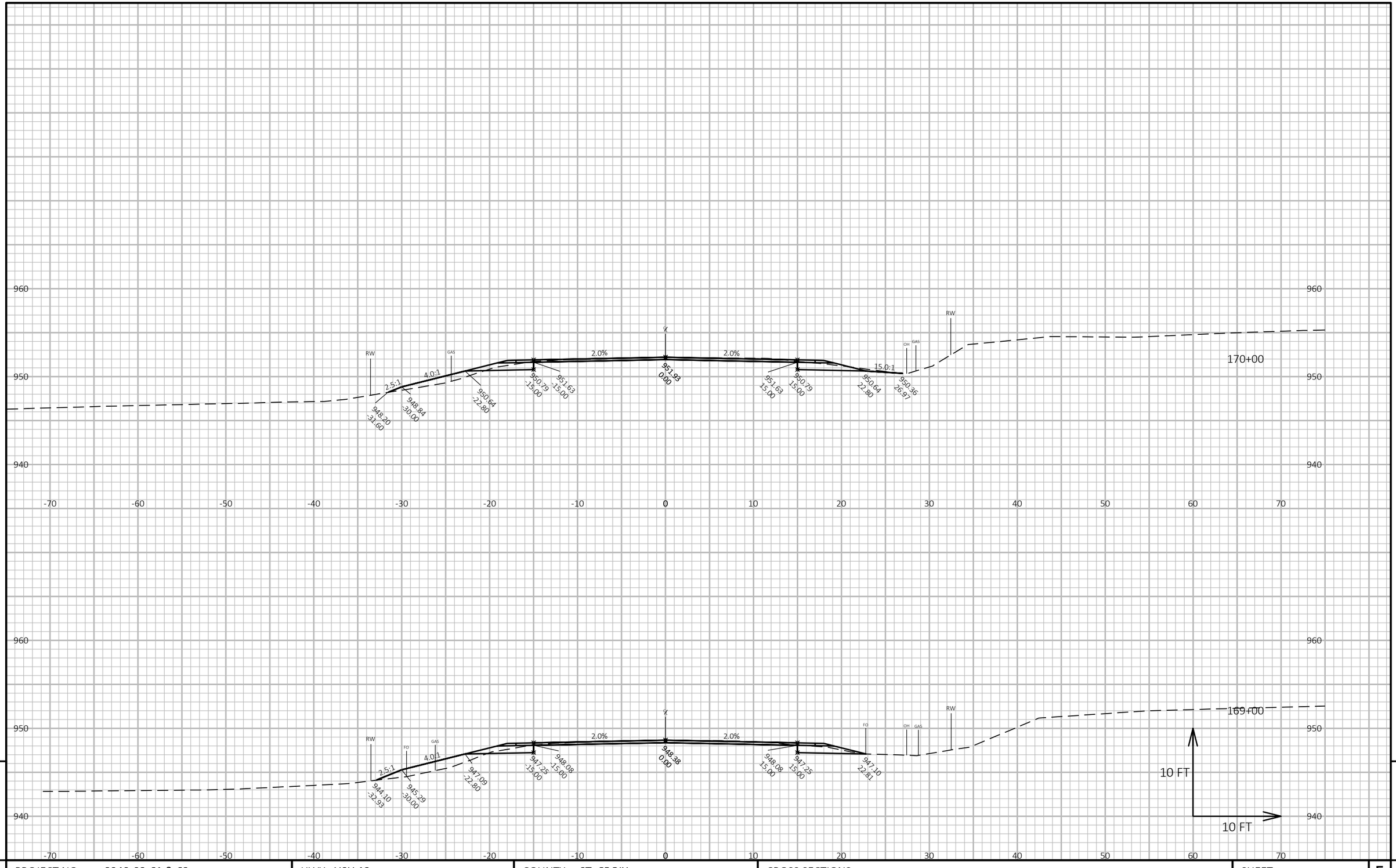


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 191	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (19)

PLOT DATE : 10/20/2020 11:40 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

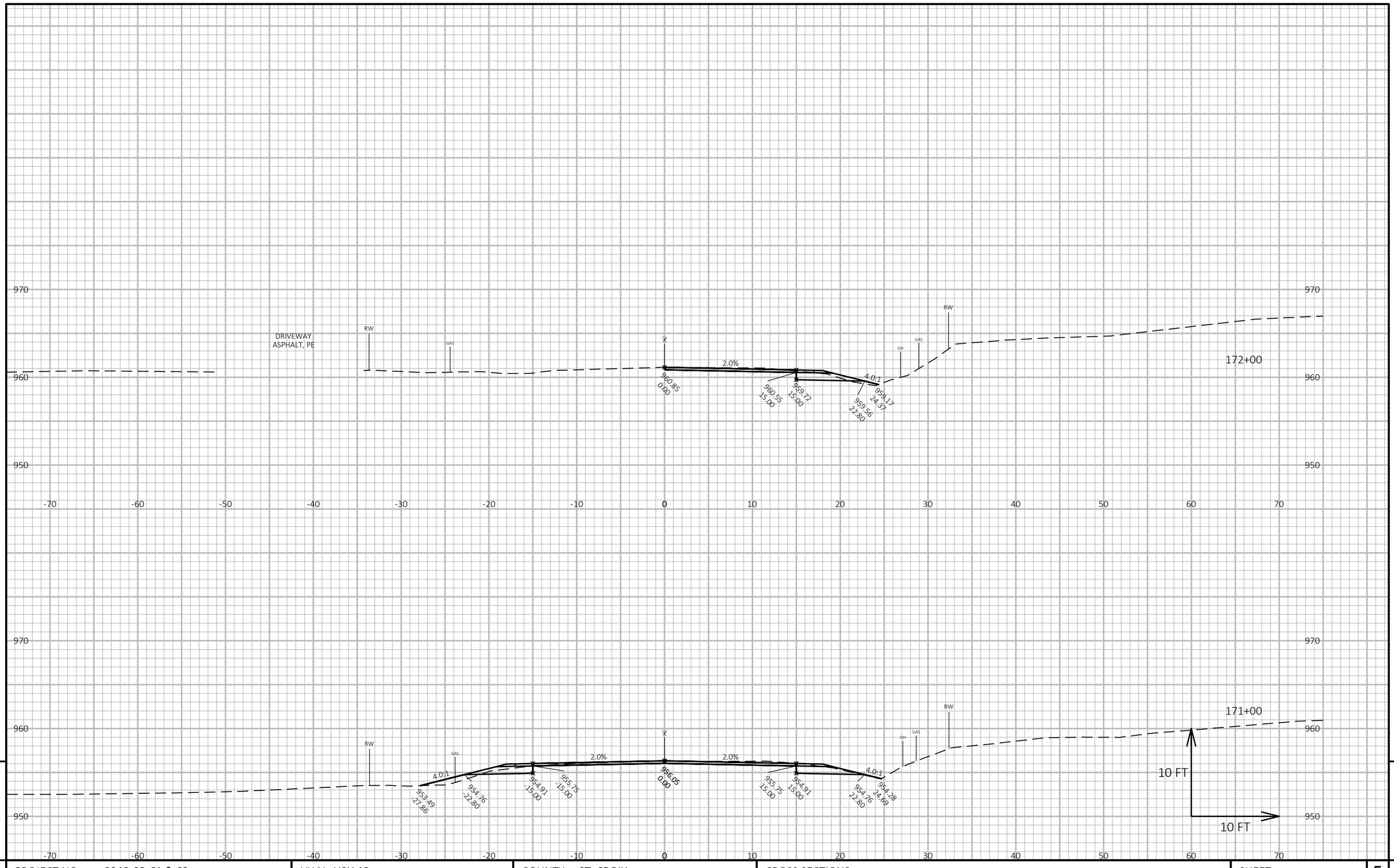
WISDOT/CADDS SHEET 49



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 192	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (20)

PLOT DATE : 10/20/2020 11:40 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

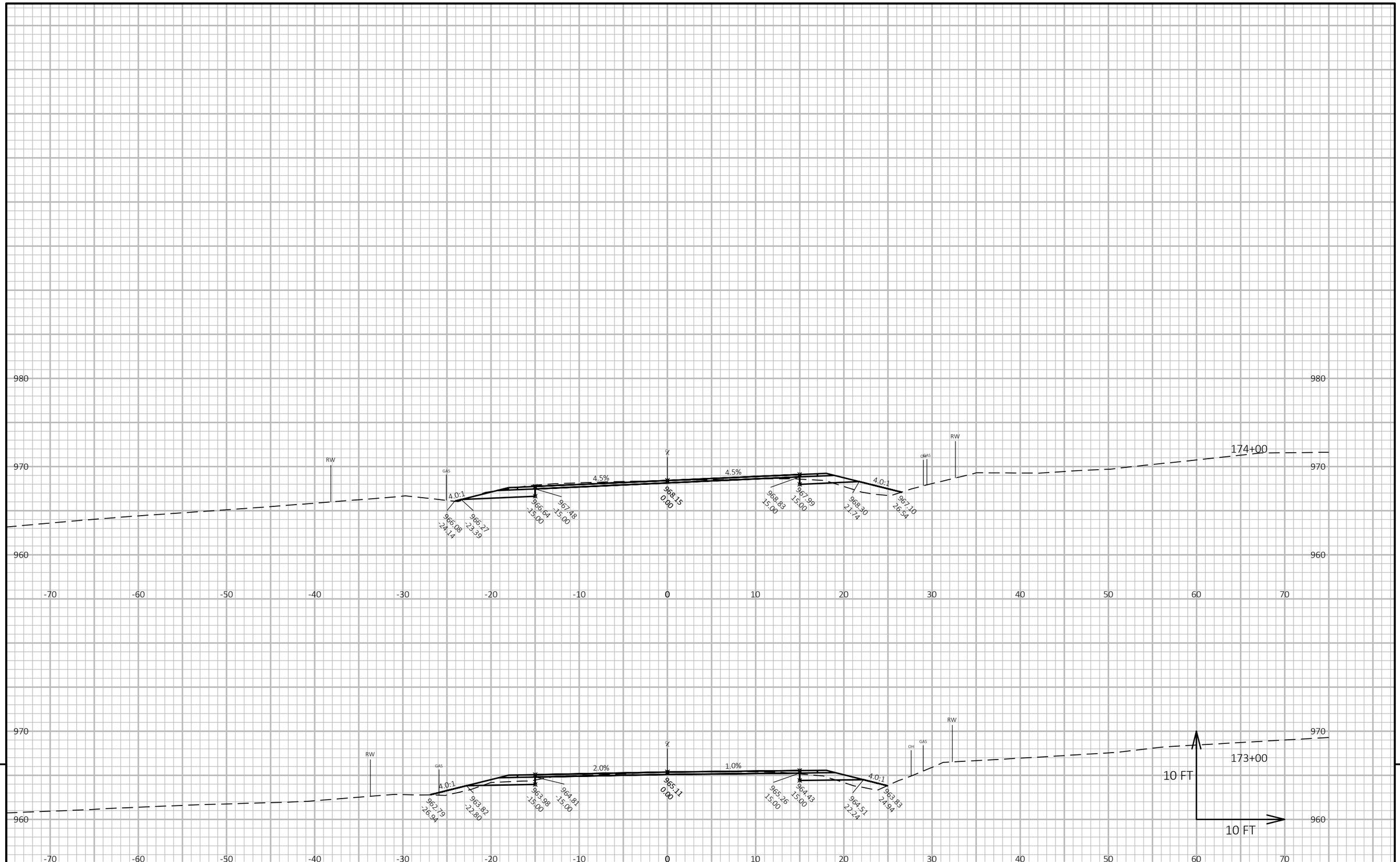


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 193	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (21)

PLOT DATE : 10/20/2020 11:40 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

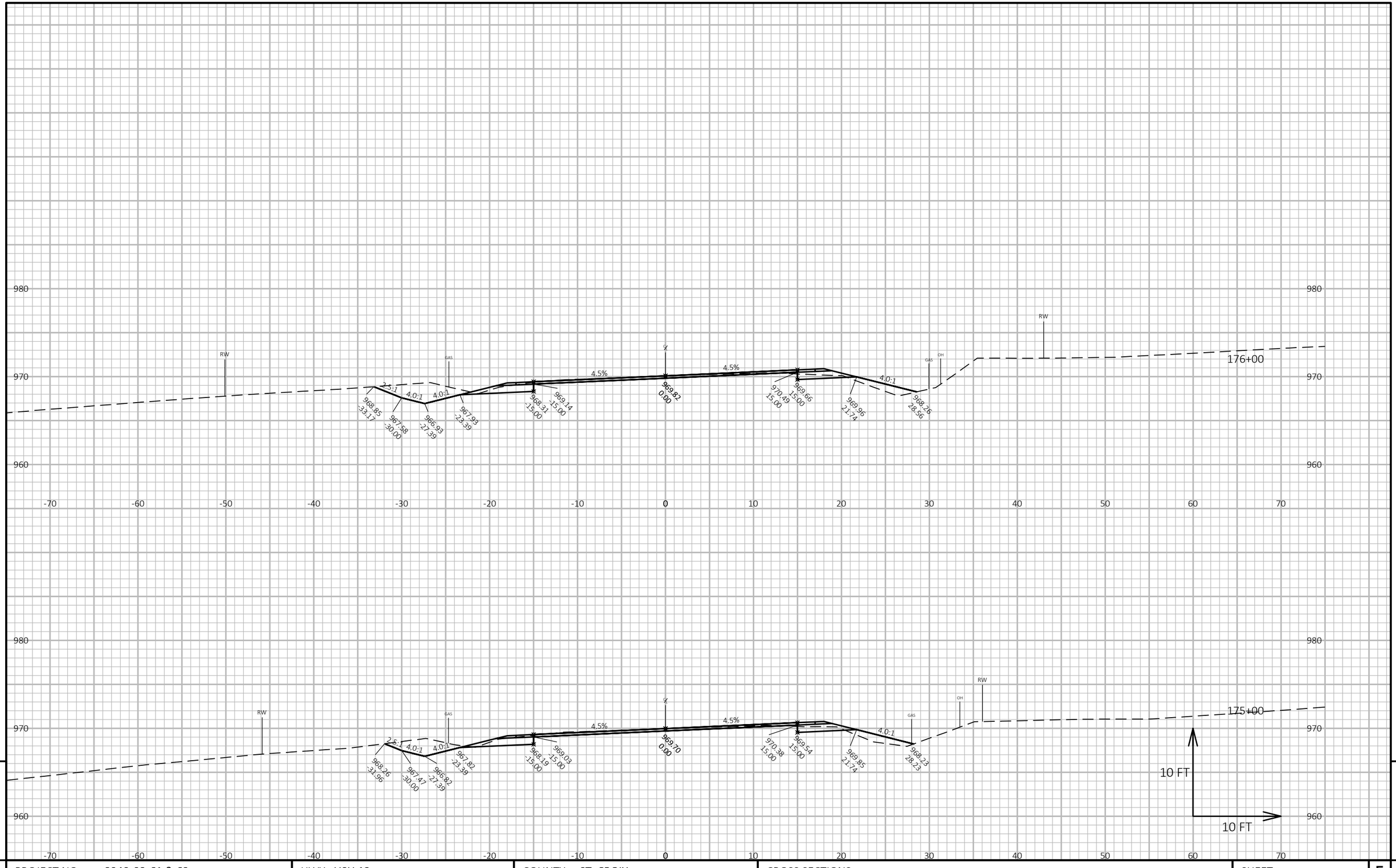


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 194	E

FILE NAME : W:\7522\CAD\| 8949-02-31\IMODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (22)

PLOT DATE : 10/20/2020 11:41 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

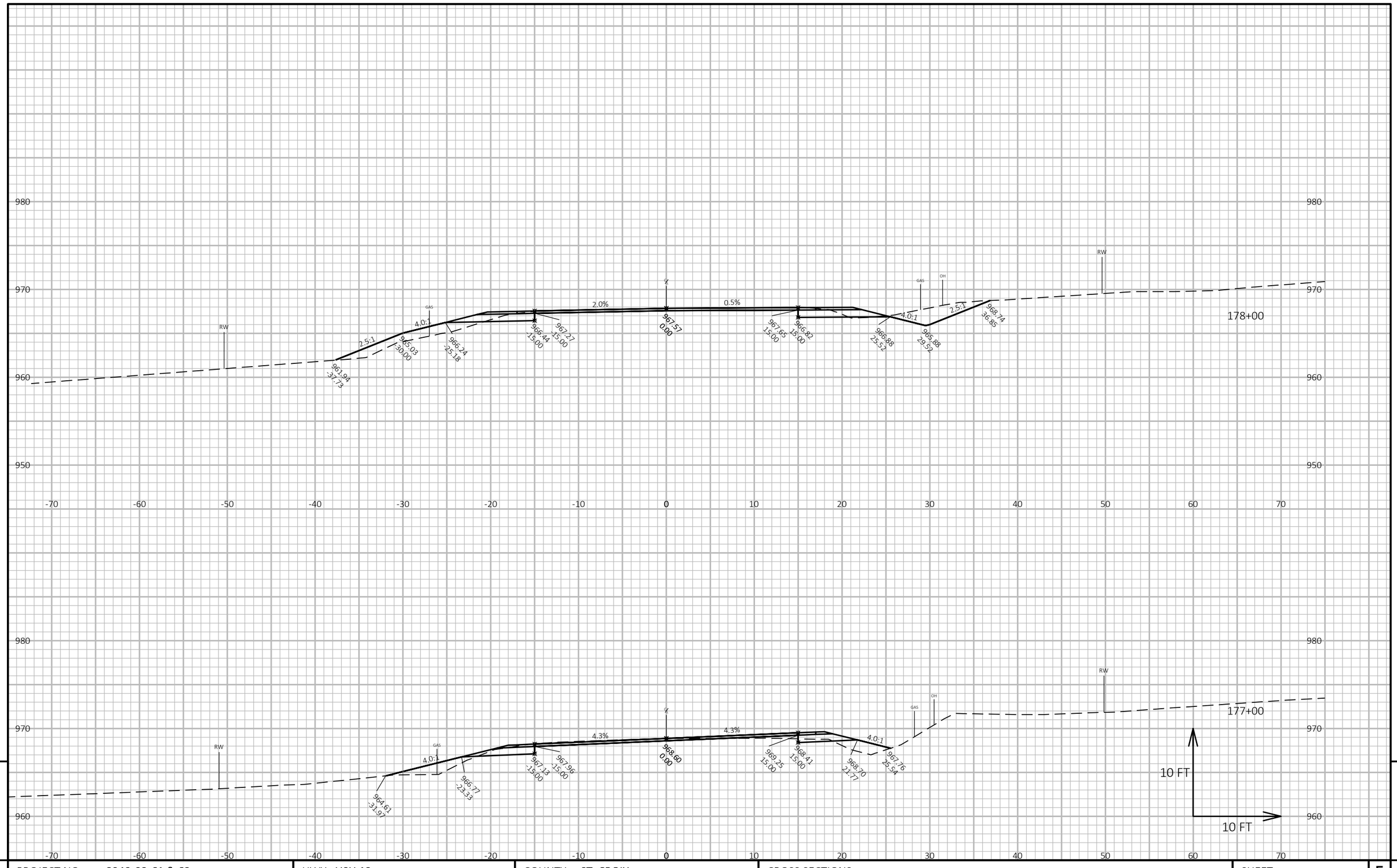


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 195	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (23)

PLOT DATE : 10/20/2020 11:41 AM PLOT BY : KAKACEK, JOHN PLOT NAME :

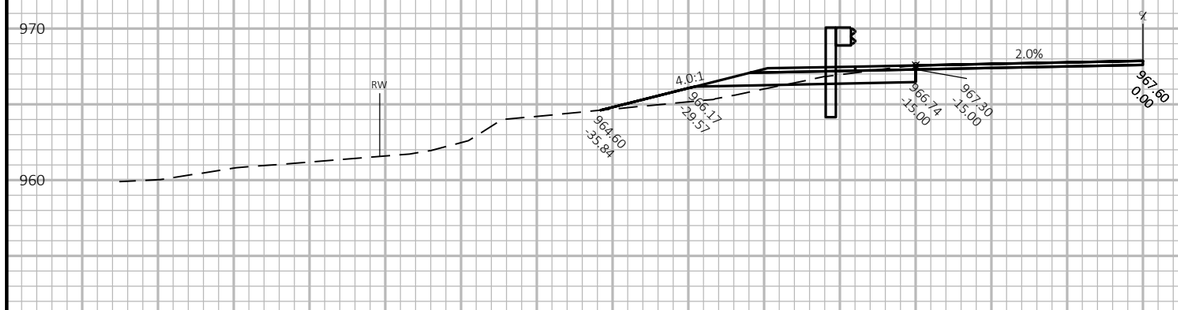
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 196	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (24)

PLOT DATE : 10/20/2020 11:42 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



178+66
POST #1

178+54
POST #1

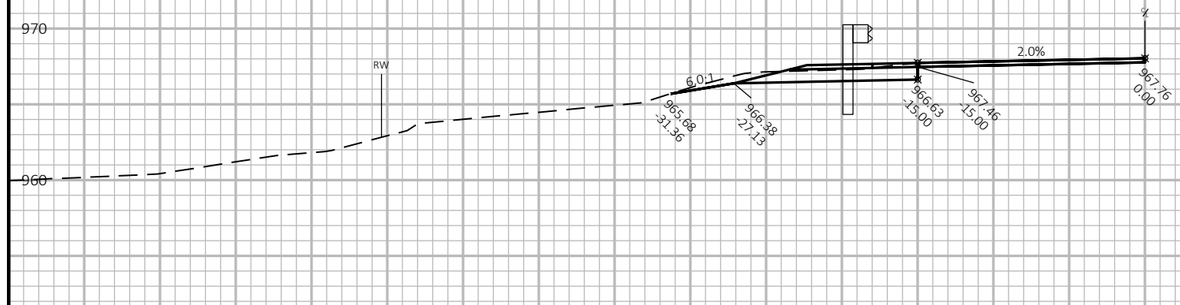
10 FT
10 FT

PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 197	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (25)

PLOT DATE : 10/20/2020 11:42 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

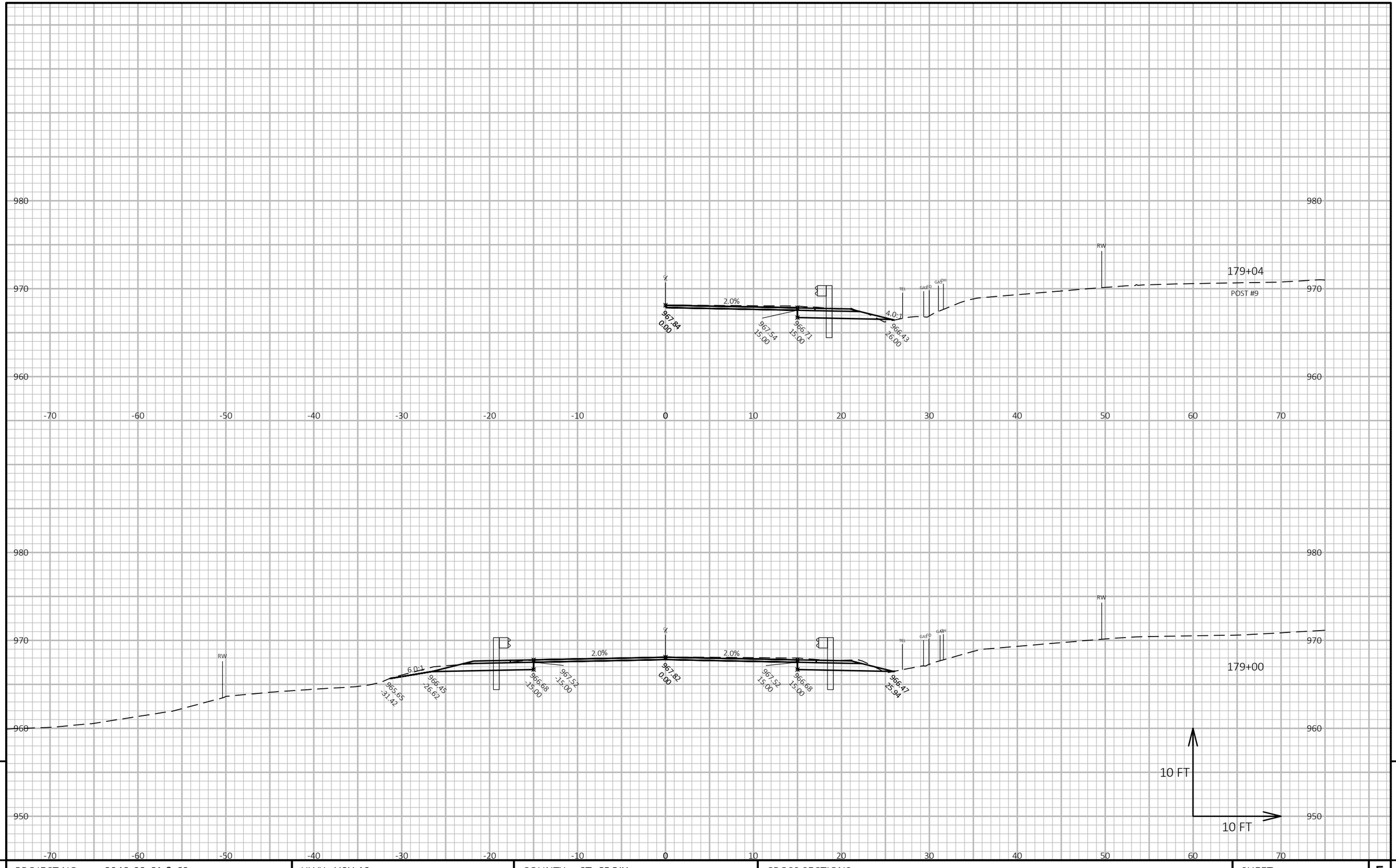
WISDOT/CADDS SHEET 49



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 198	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (26)

PLOT DATE : 10/20/2020 11:42 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



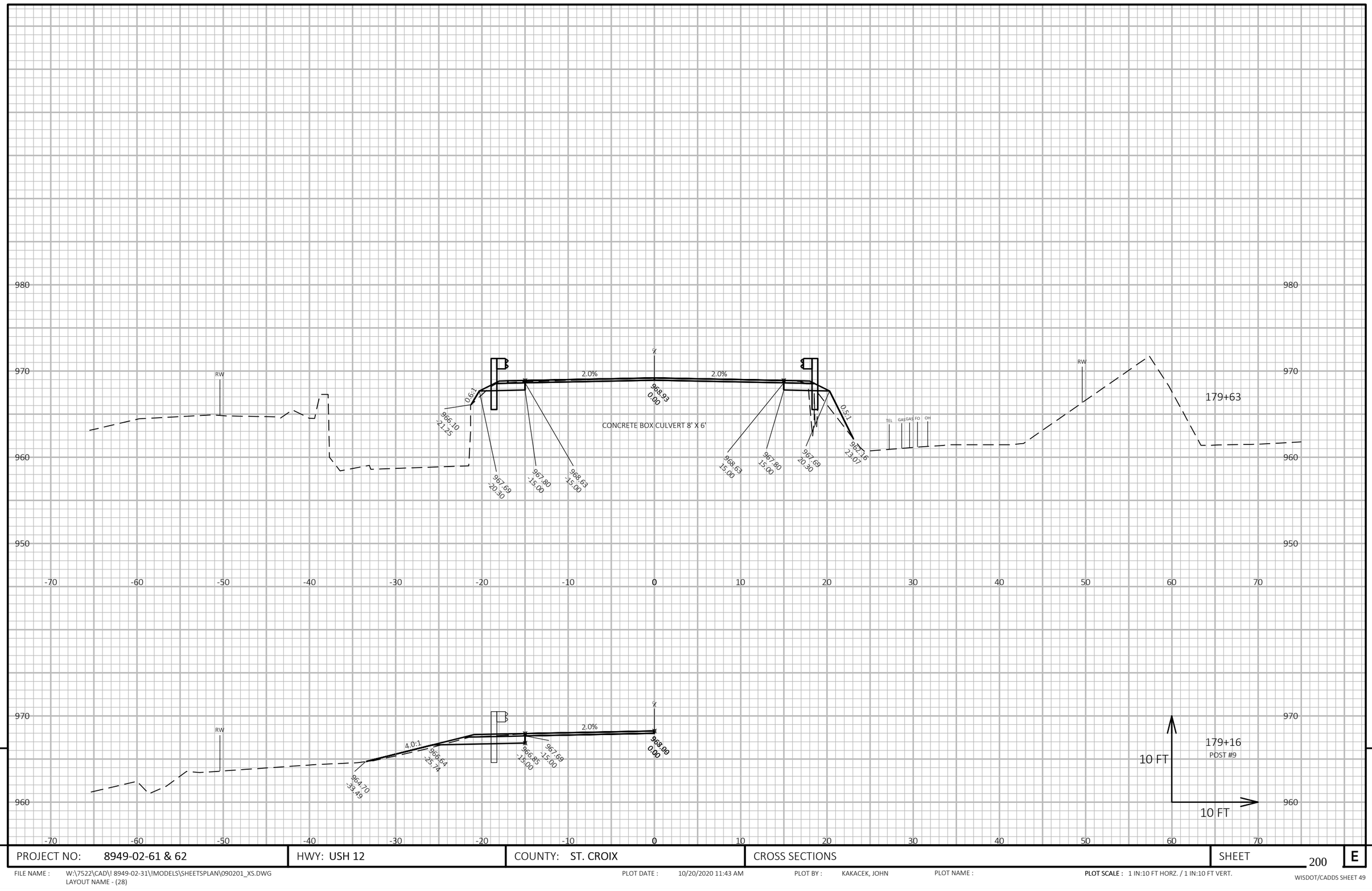
PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 199	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (27)

PLOT DATE : 10/20/2020 11:43 AM PLOT BY : KAKACEK, JOHN PLOT NAME :

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

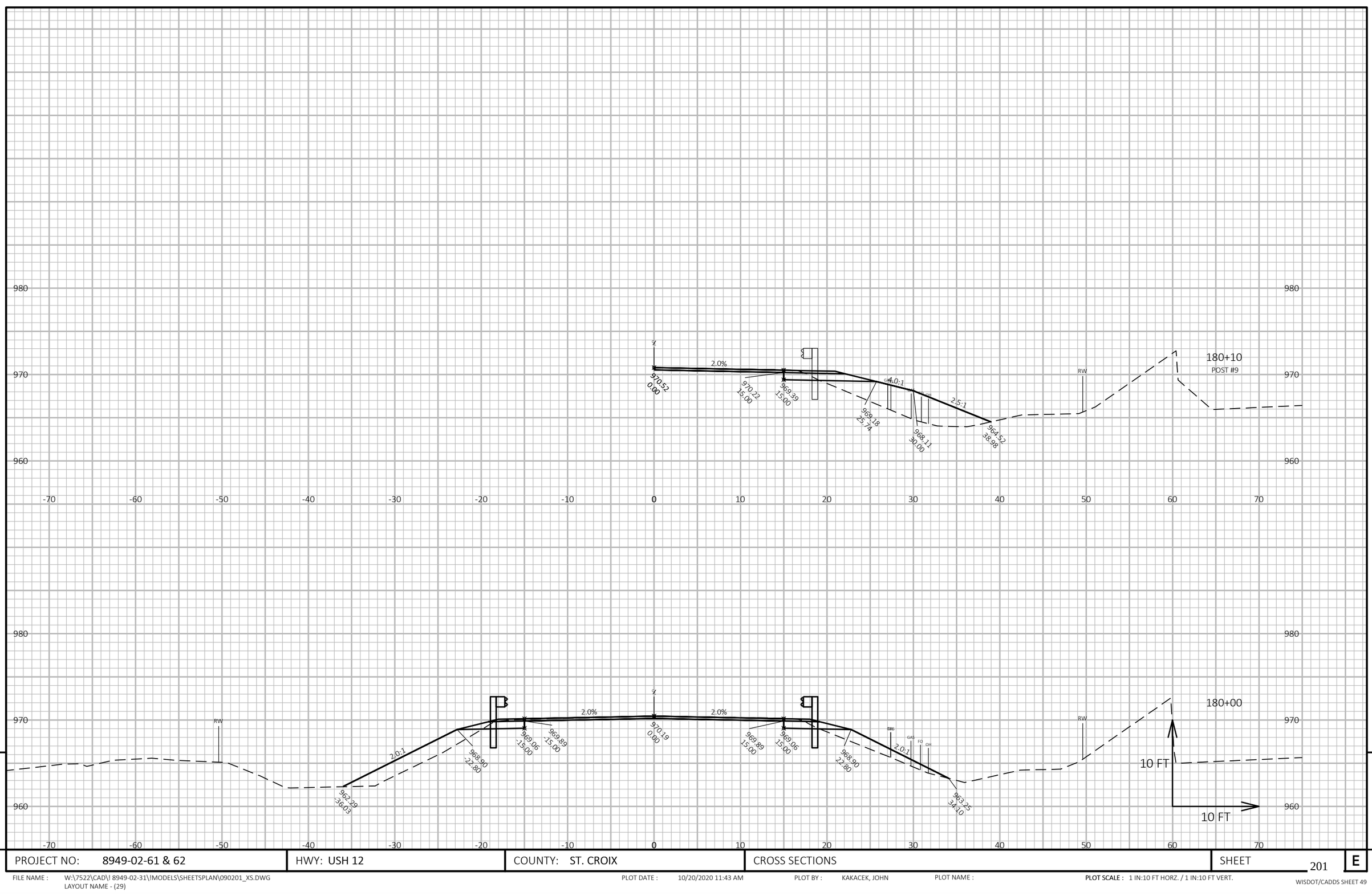
WISDOT/CADDS SHEET 49



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 200	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (28)

PLOT DATE : 10/20/2020 11:43 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

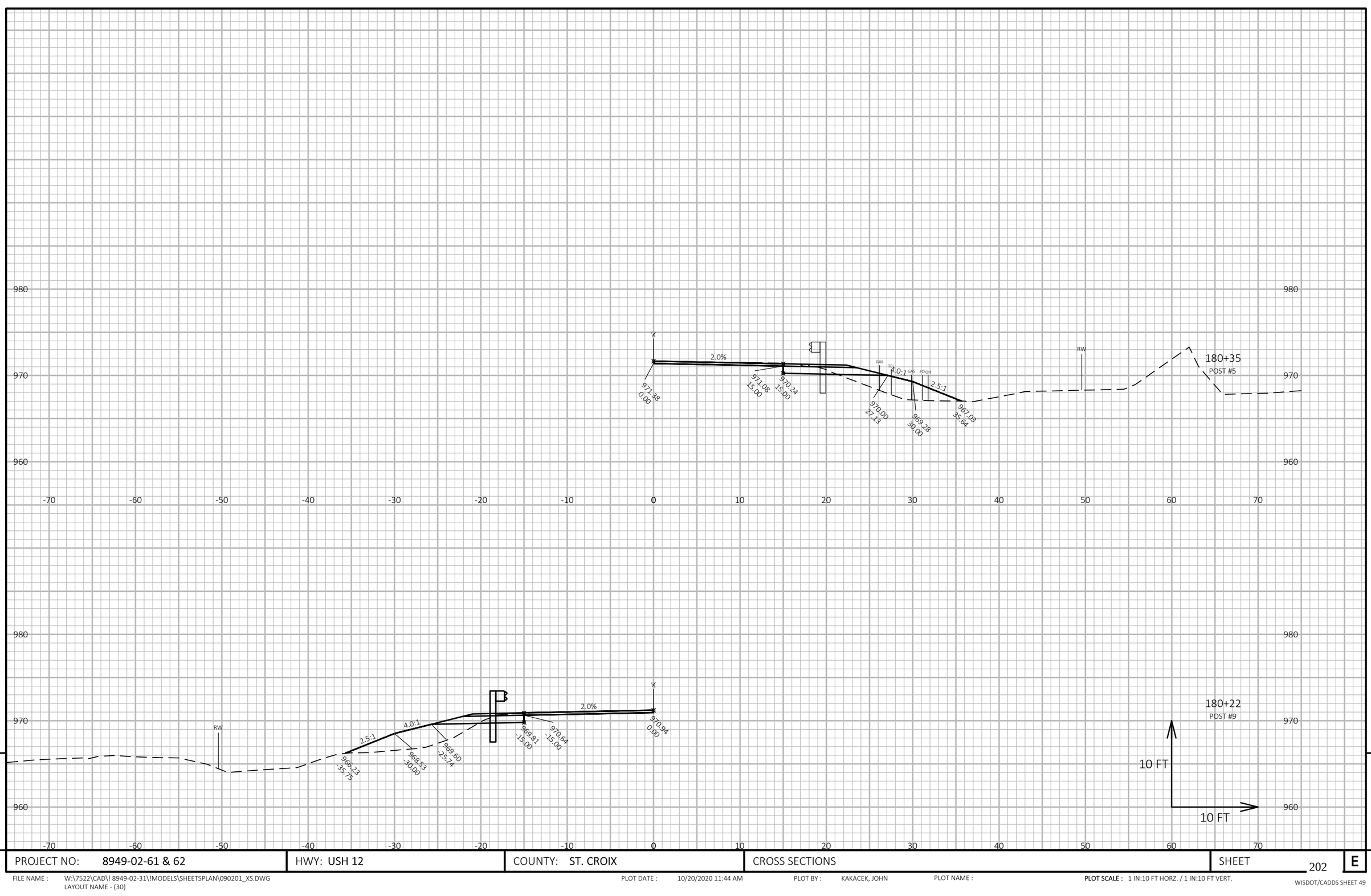


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 201	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (29)

PLOT DATE : 10/20/2020 11:43 AM PLOT BY : KAKACEK, JOHN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

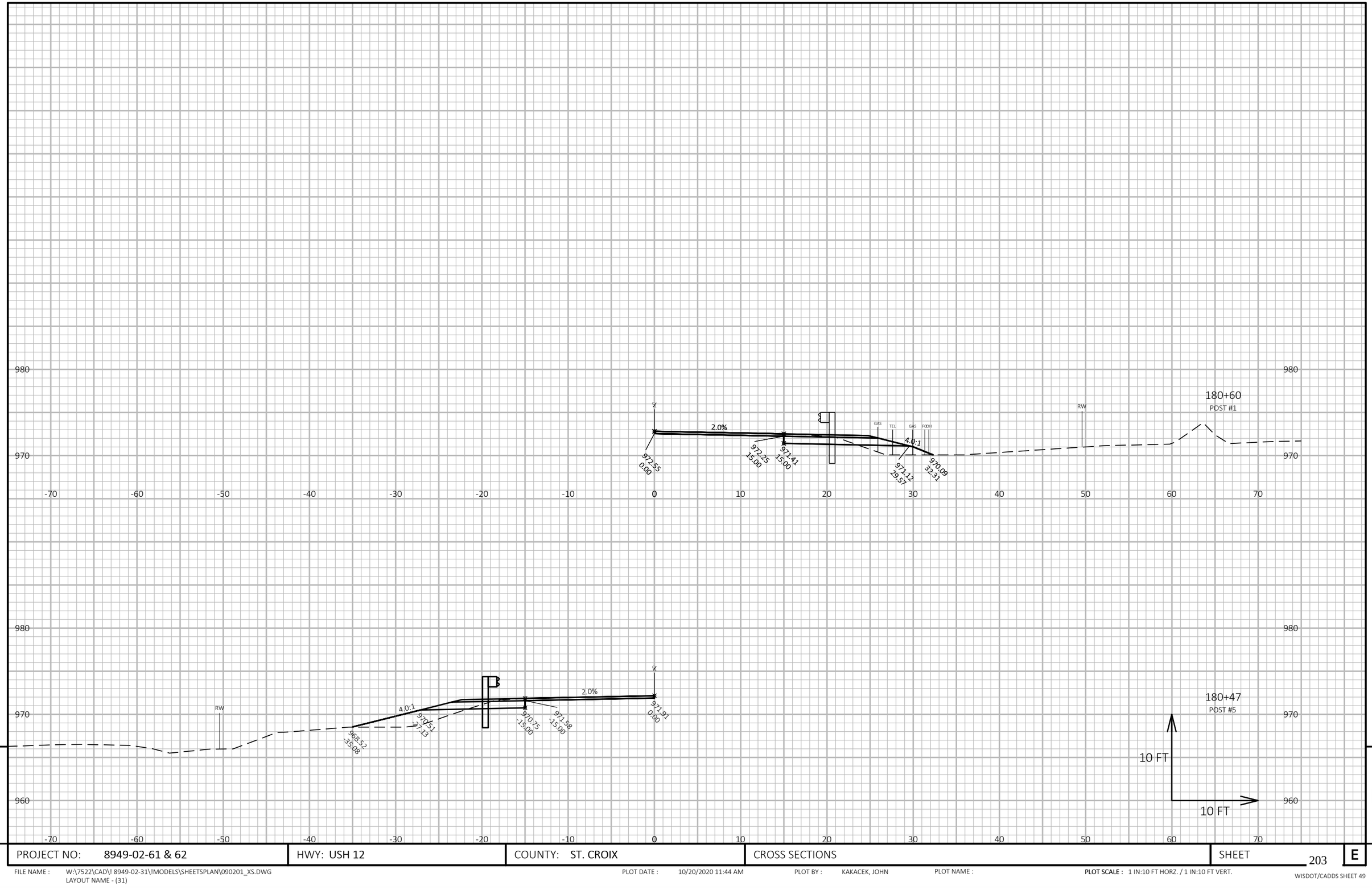
WISDOT/CADDS SHEET 49



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 202	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (30)

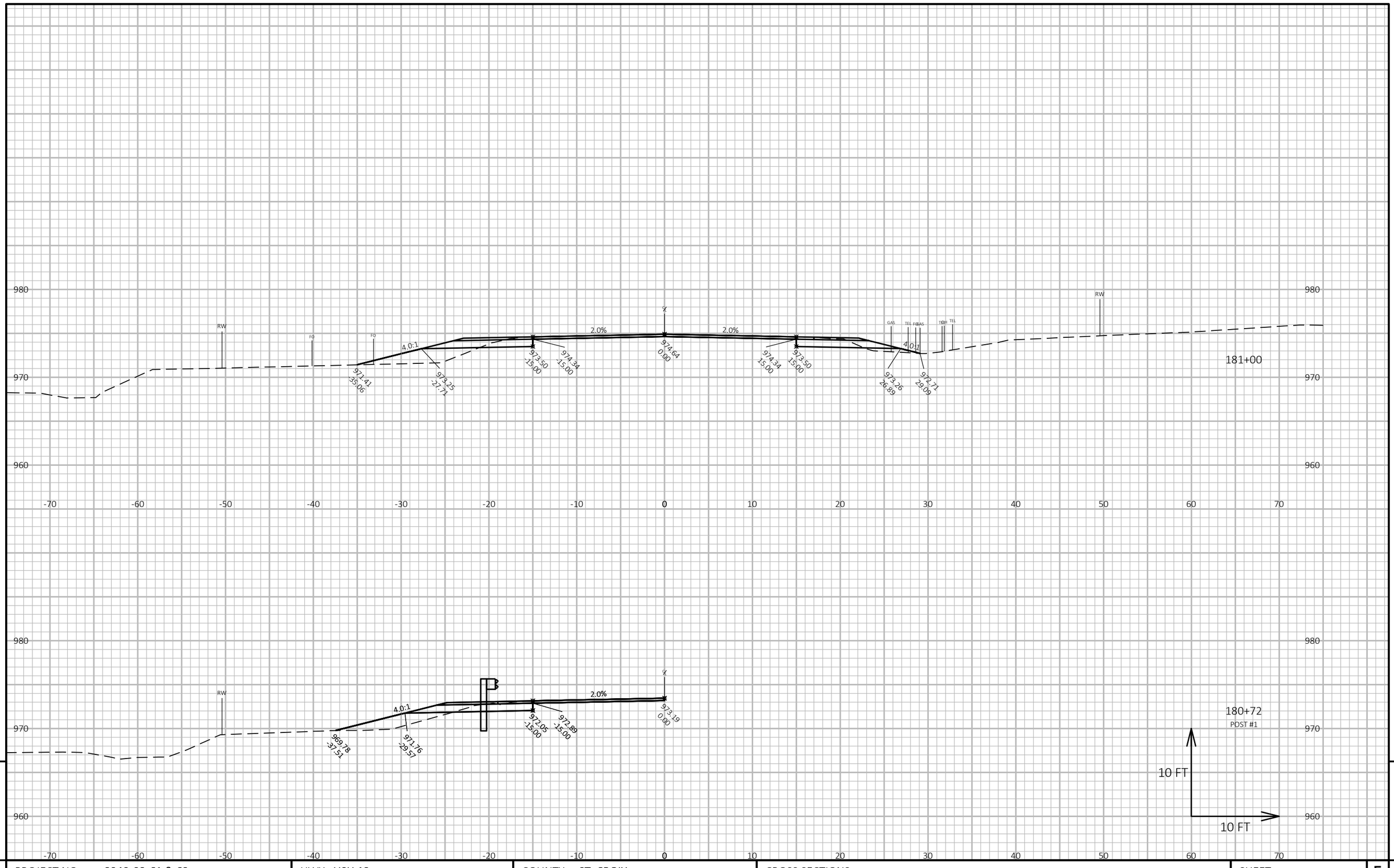
PLOT DATE : 10/20/2020 11:44 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 203	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (31)

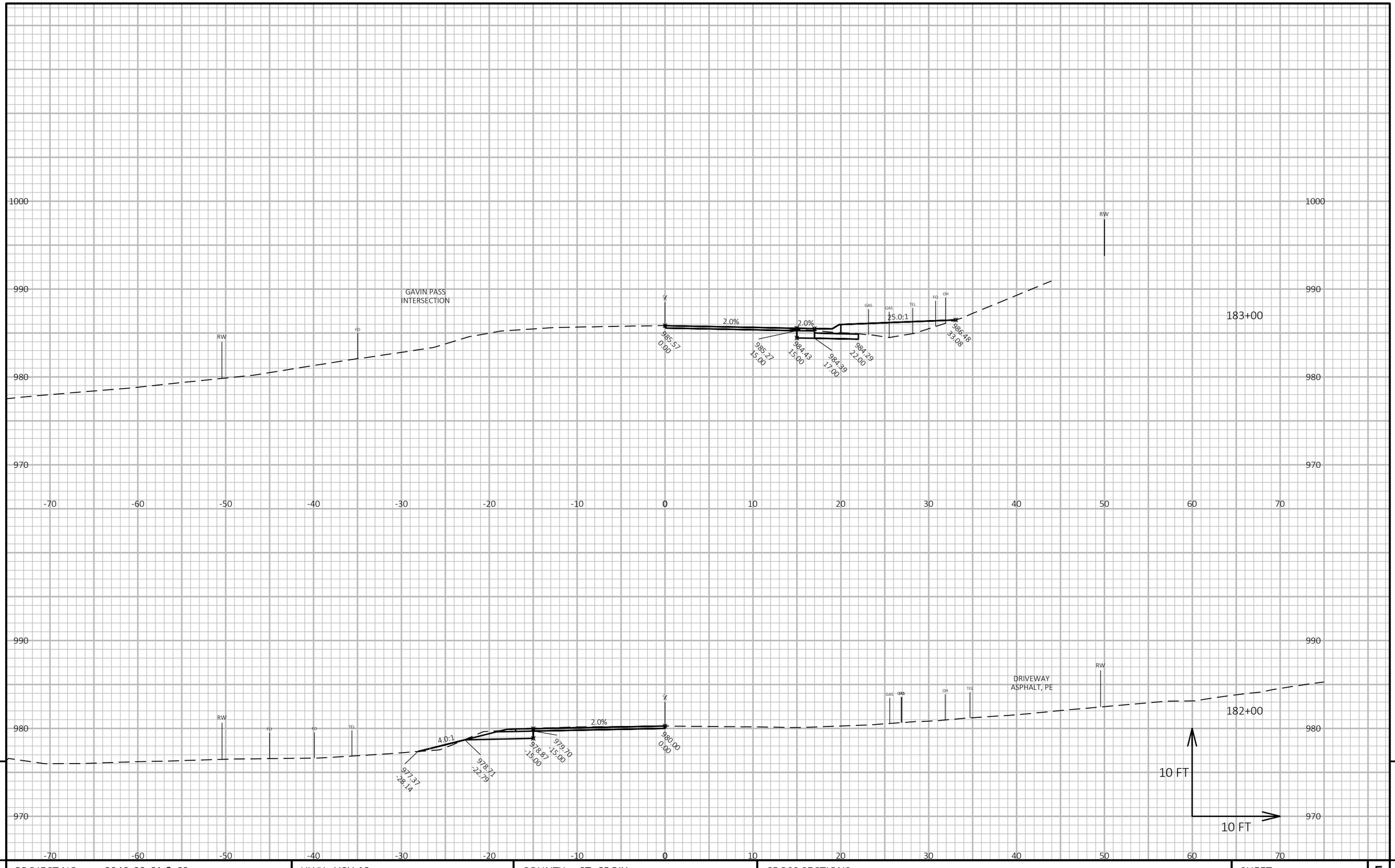
PLOT DATE : 10/20/2020 11:44 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 204	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (32)

PLOT DATE : 10/20/2020 11:44 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

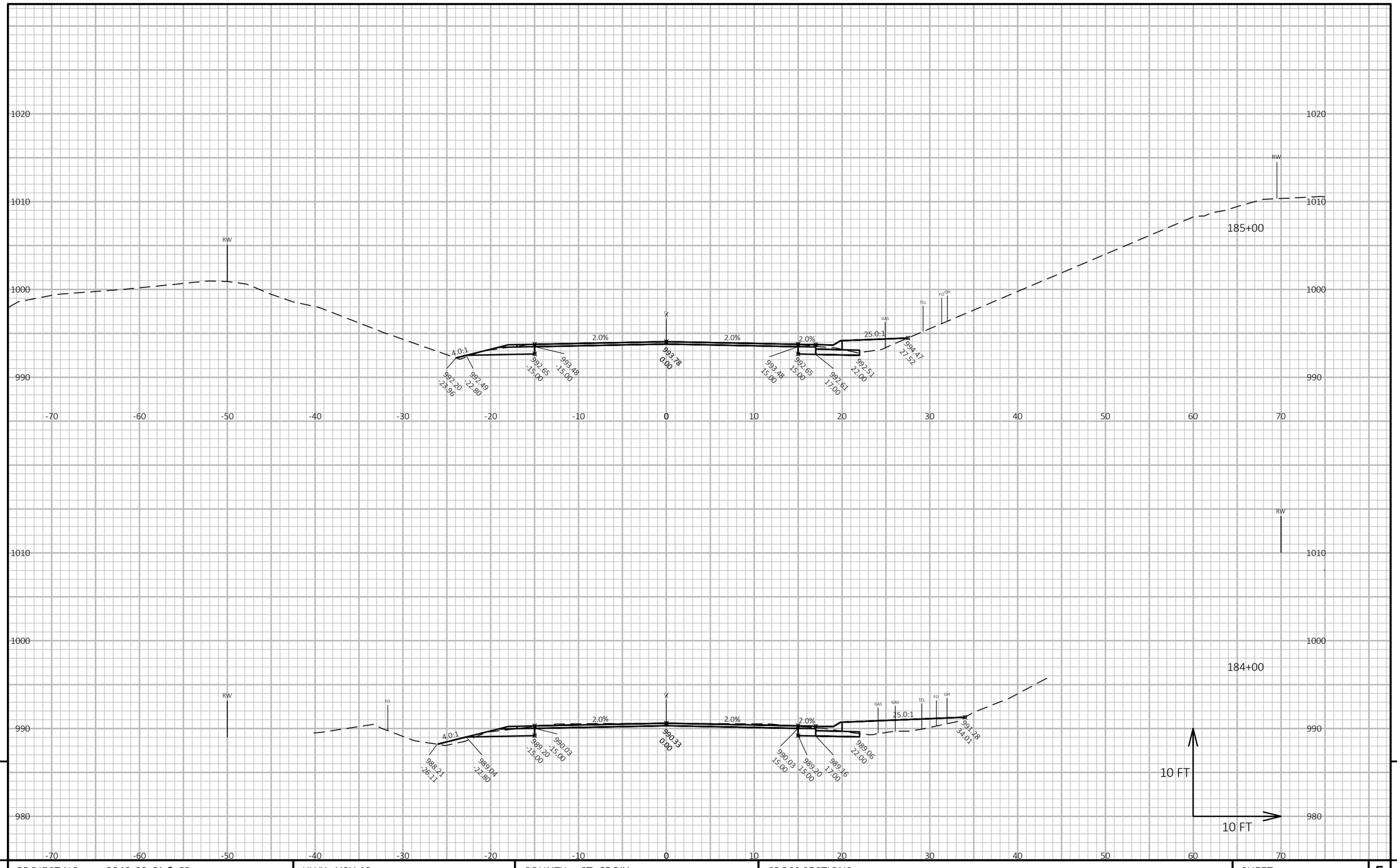


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 205	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (33)

PLOT DATE : 10/20/2020 11:45 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



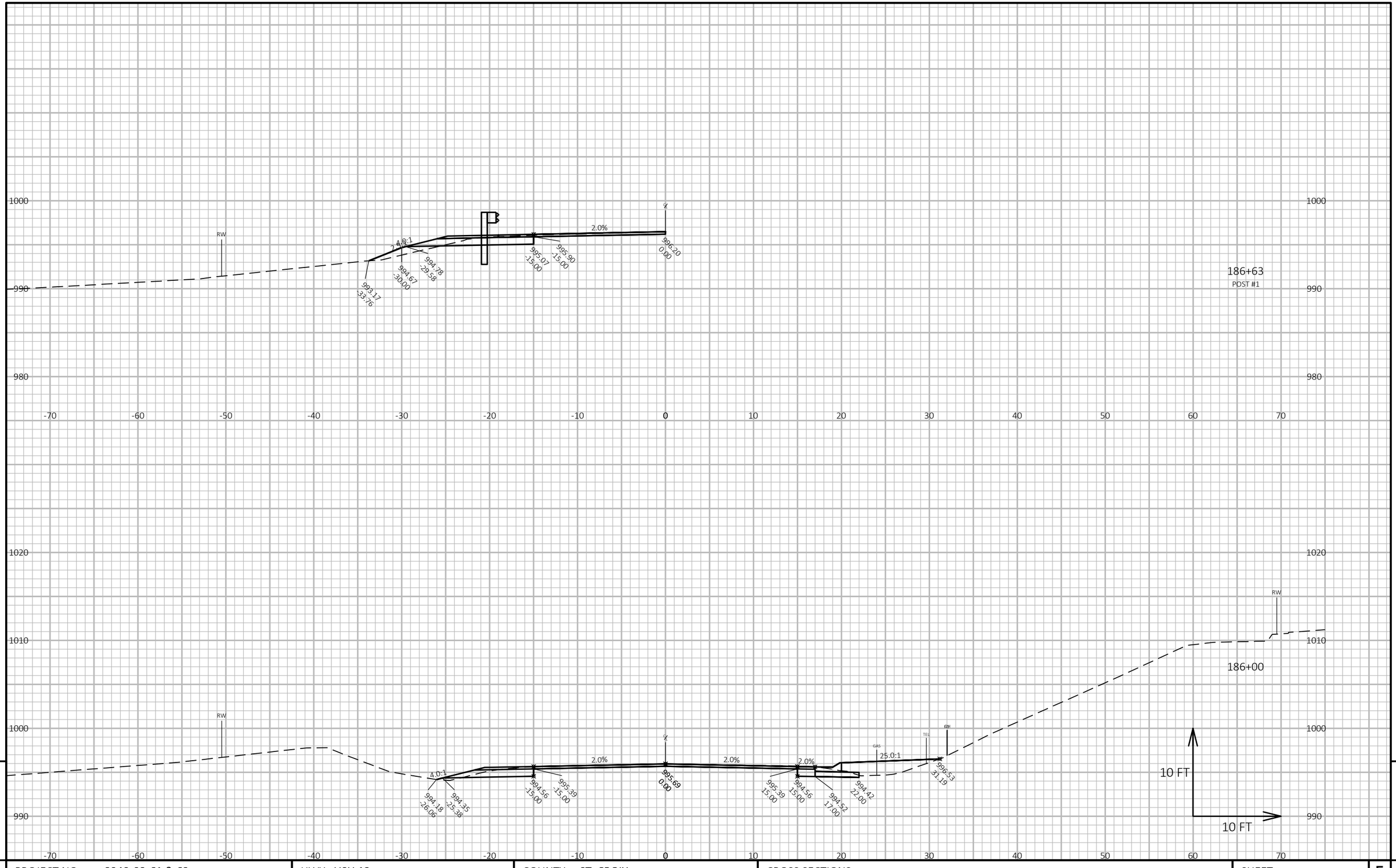
PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 206	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (34)

PLOT DATE : 10/20/2020 11:45 AM PLOT BY : KAKACEK, JOHN PLOT NAME :

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

WISDOT/CADDS SHEET 49

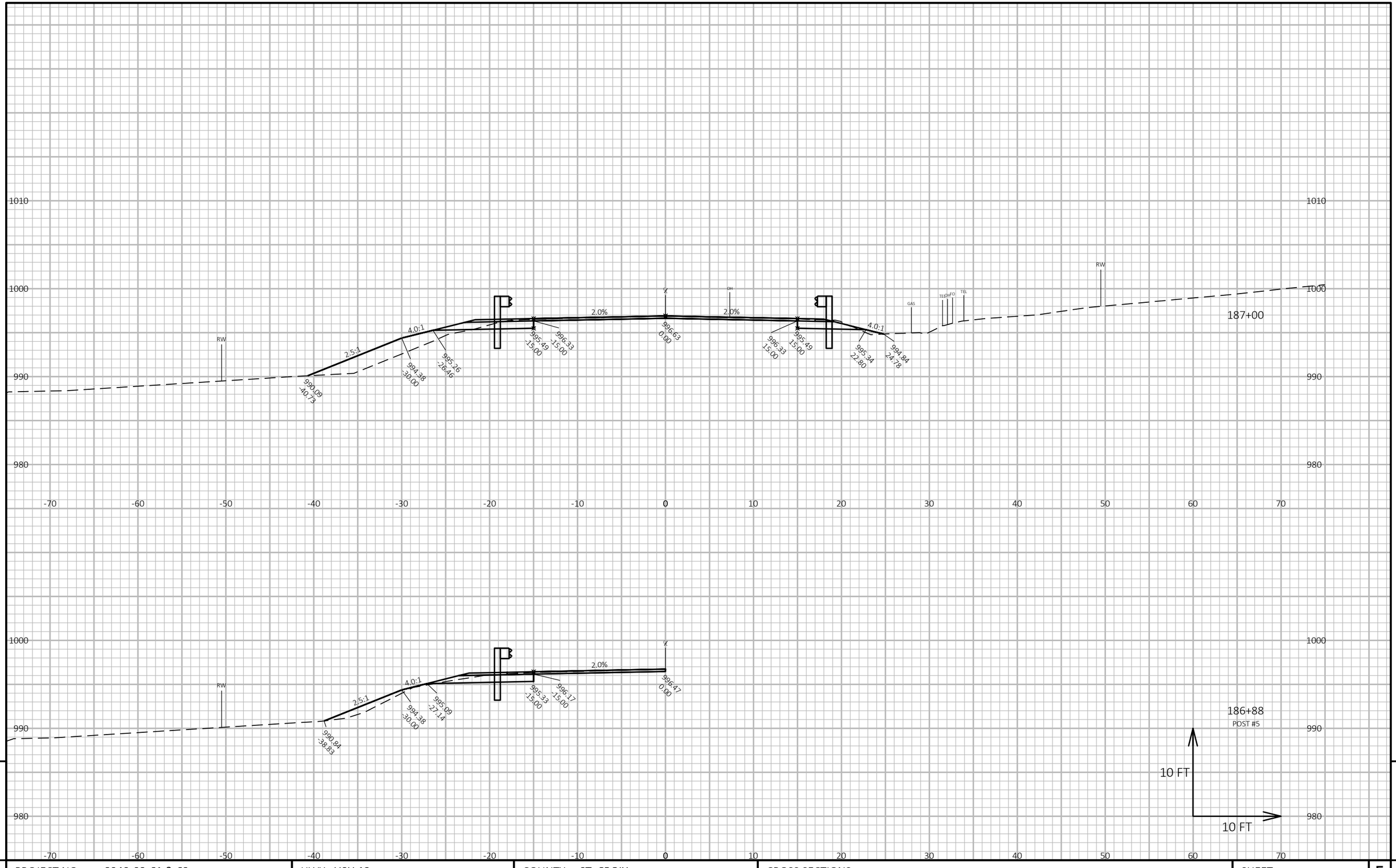


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 207	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (35)

PLOT DATE : 10/20/2020 11:46 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



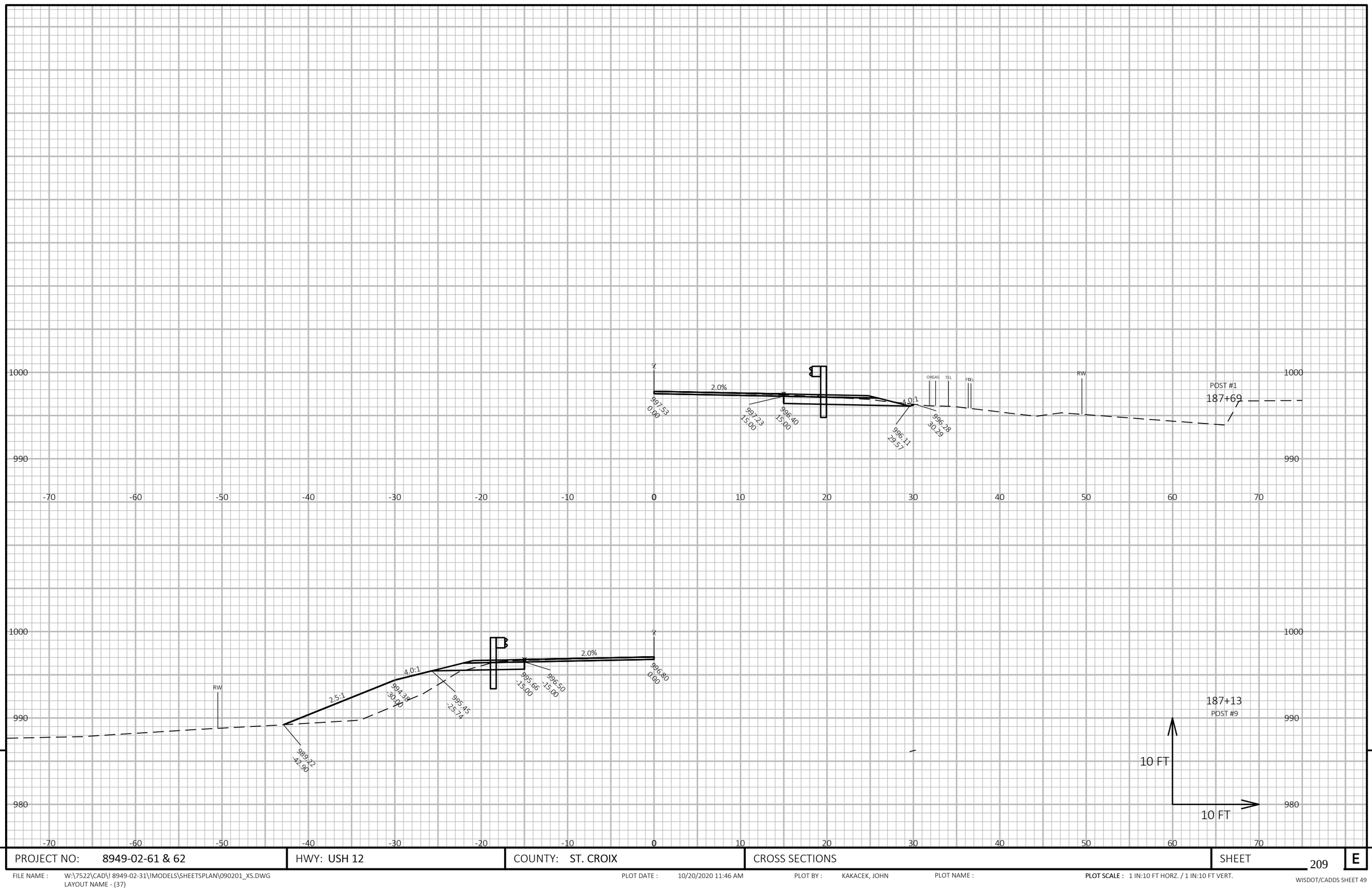
PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 208	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (36)

PLOT DATE : 10/20/2020 11:46 AM PLOT BY : KAKACEK, JOHN PLOT NAME :

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

WISDOT/CADDS SHEET 49

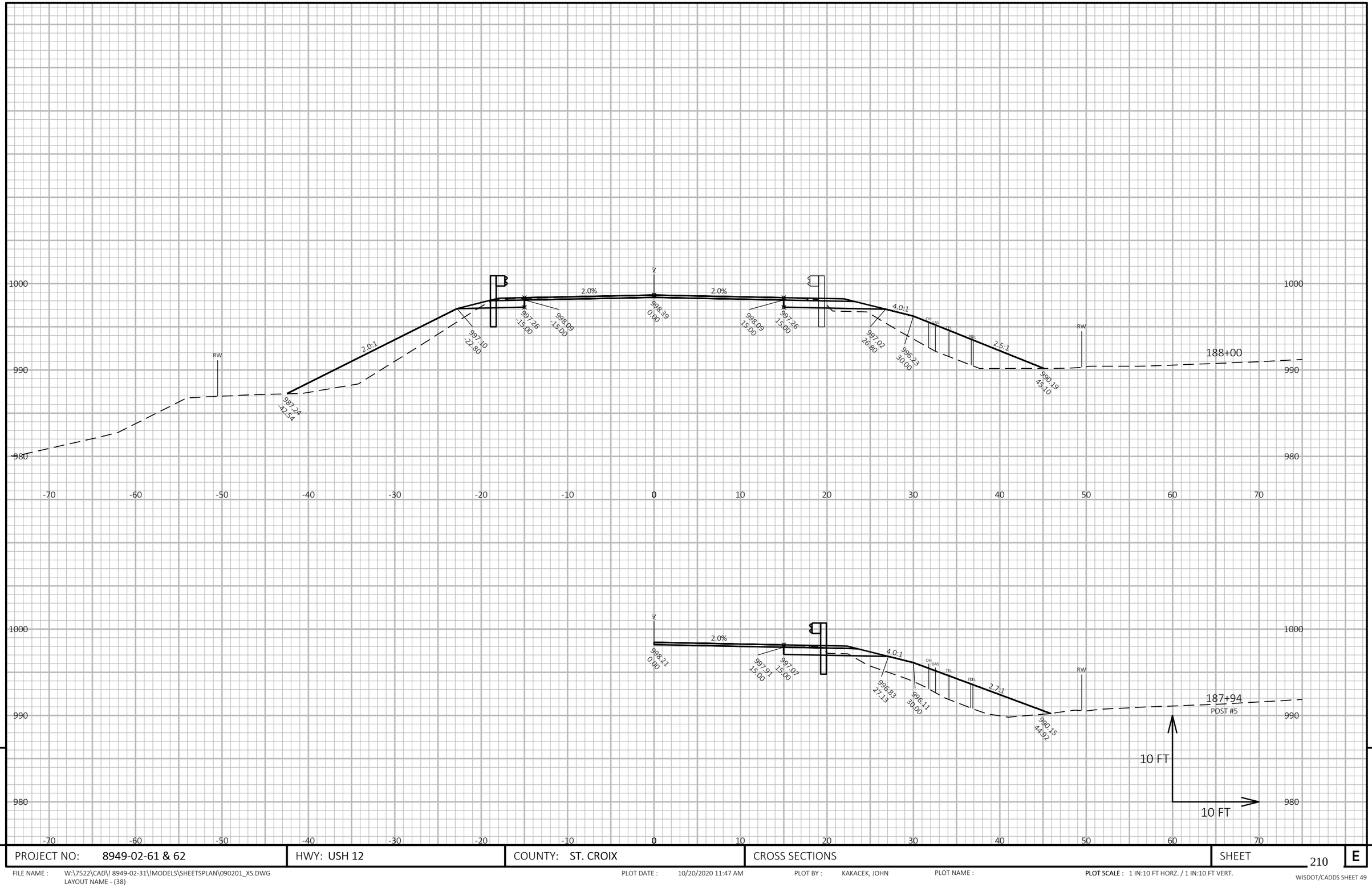


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 209	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (37)

PLOT DATE : 10/20/2020 11:46 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

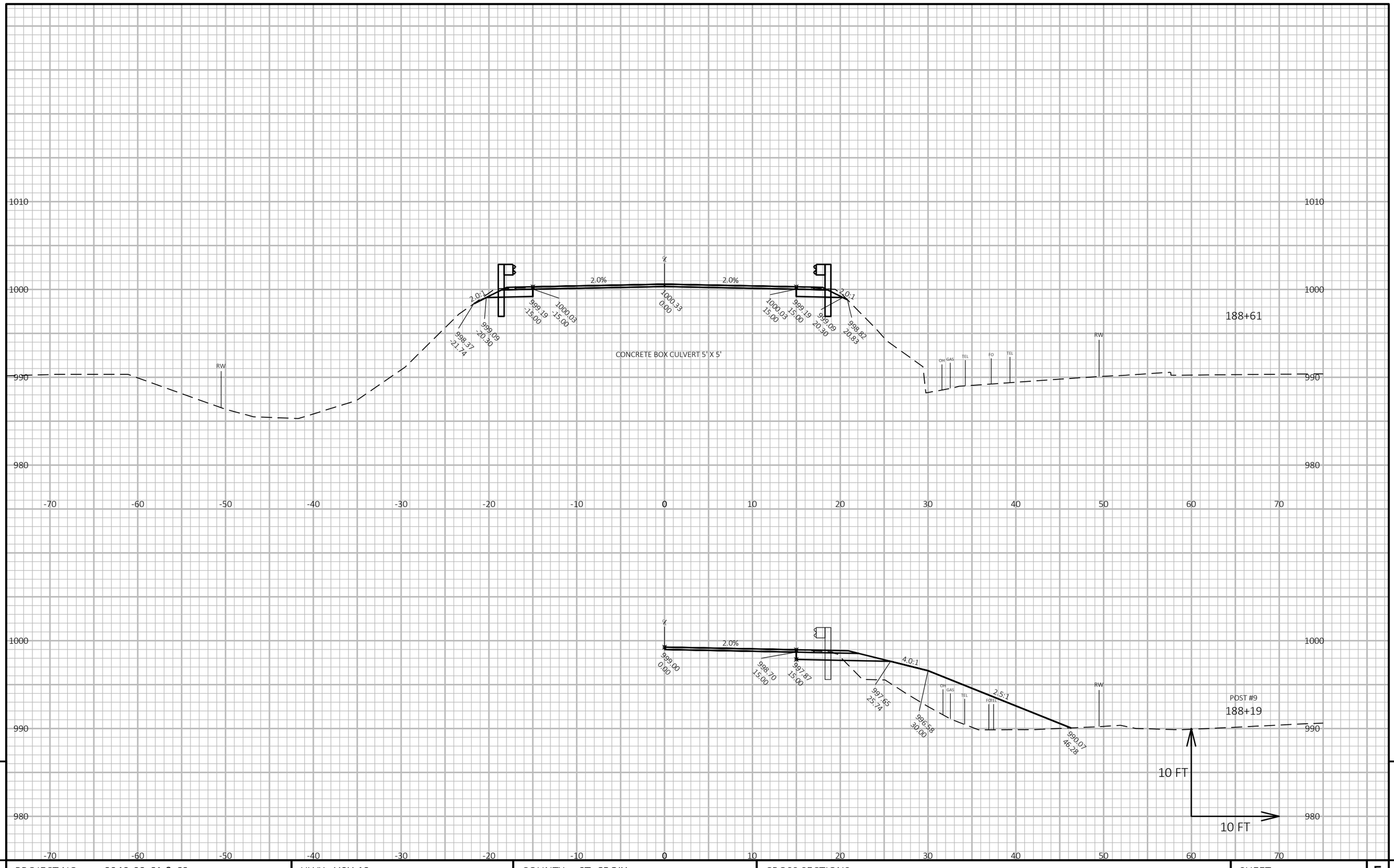


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 210	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (38)

PLOT DATE : 10/20/2020 11:47 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



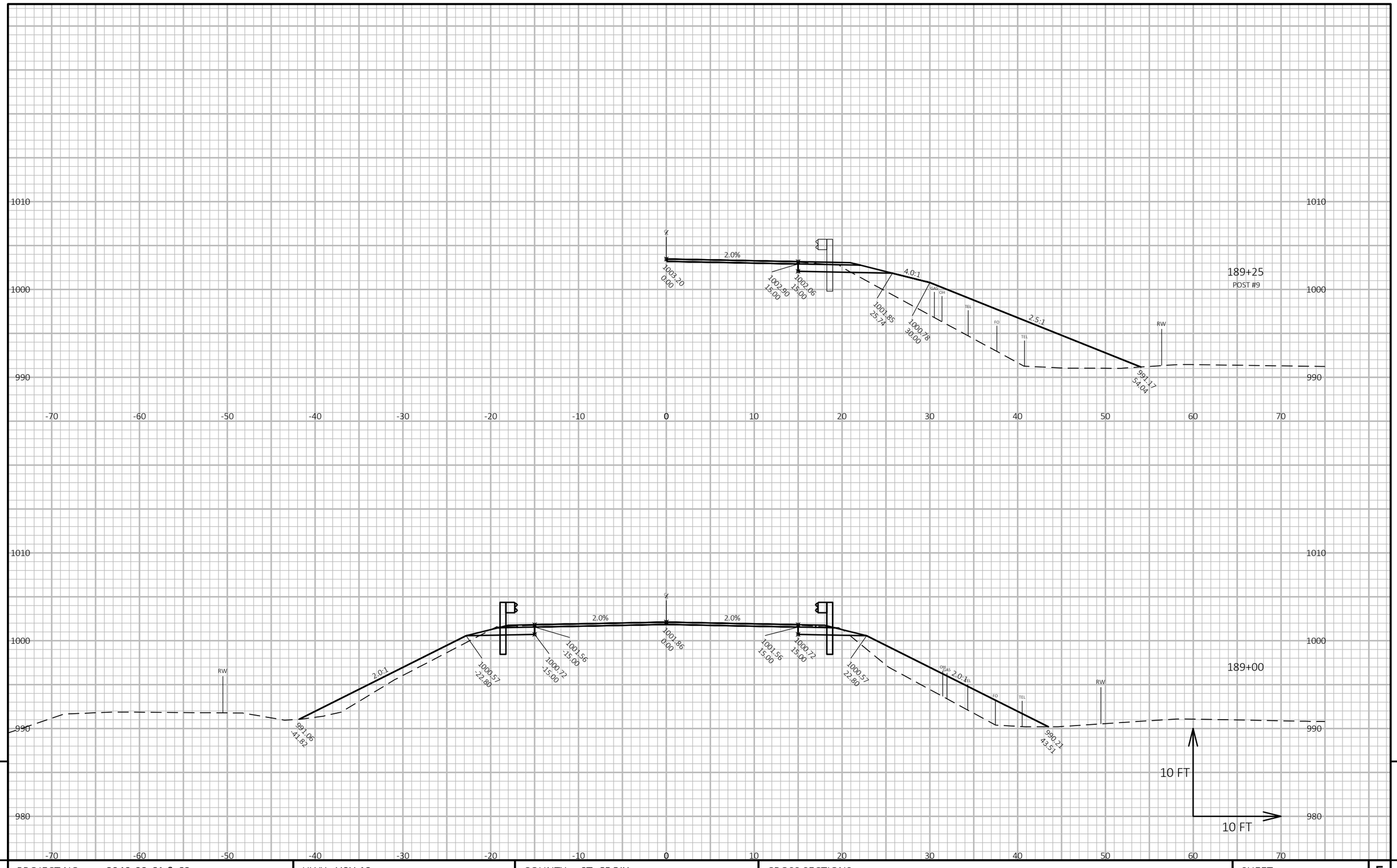
PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 211	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (39)

PLOT DATE : 10/20/2020 11:47 AM PLOT BY : KAKACEK, JOHN PLOT NAME :

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

WISDOT/CADDS SHEET 49



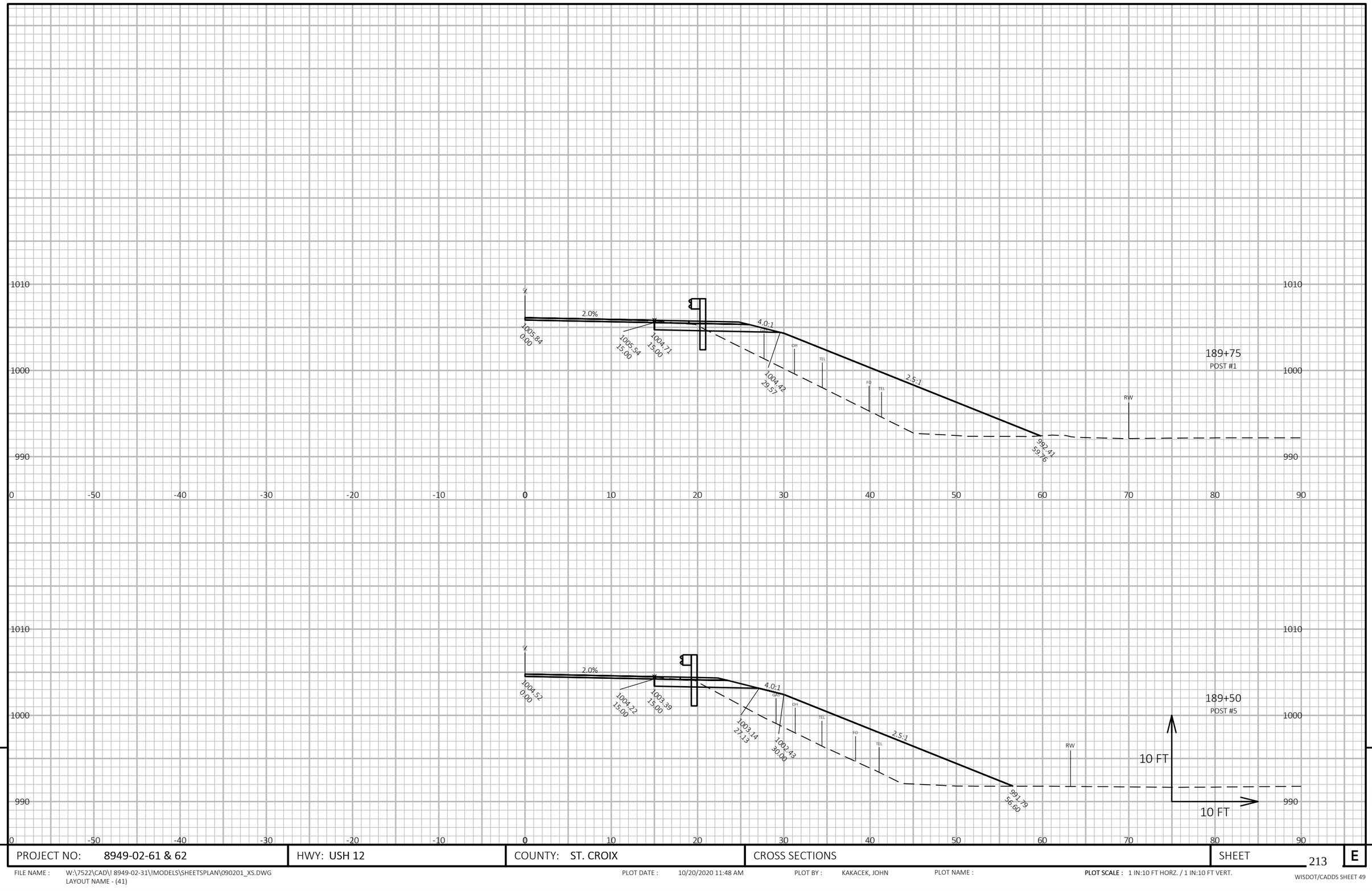
PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 212	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (40)

PLOT DATE : 10/20/2020 11:48 AM PLOT BY : KAKACEK, JOHN PLOT NAME :

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

WISDOT/CADDS SHEET 49

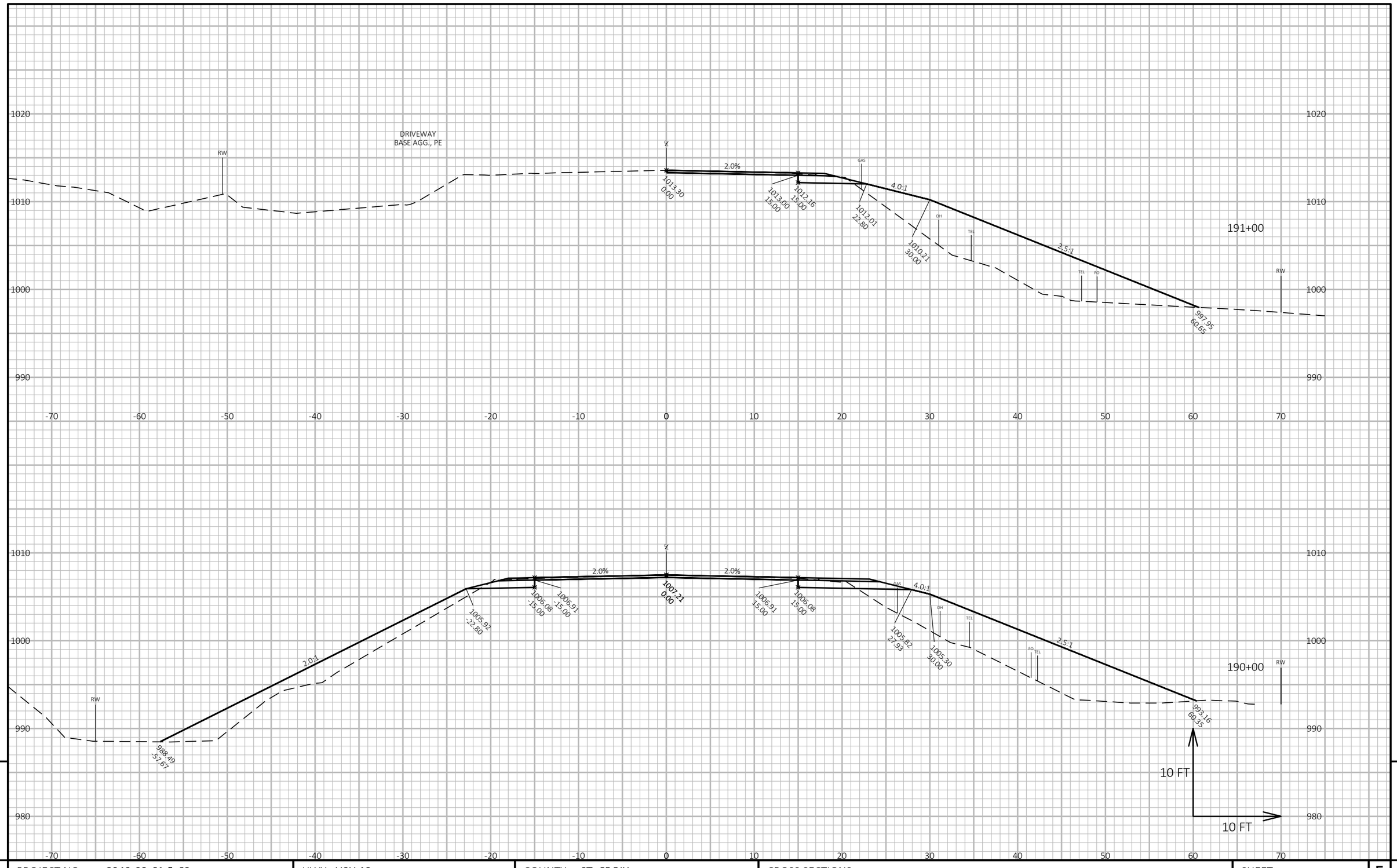


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 213	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (41)

PLOT DATE : 10/20/2020 11:48 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



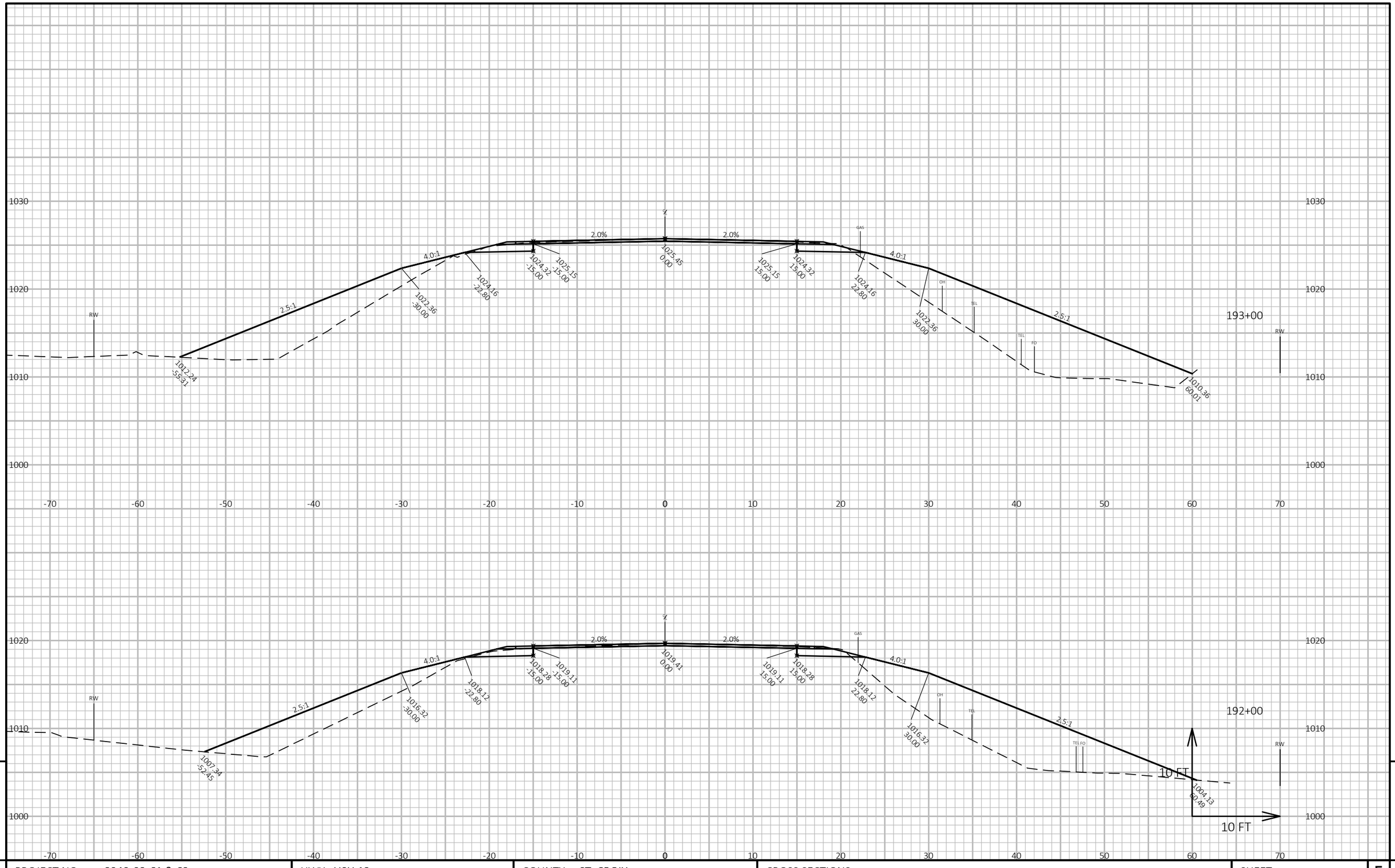
PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 214	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (42)

PLOT DATE : 10/20/2020 11:48 AM PLOT BY : KAKACEK, JOHN PLOT NAME :

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

WISDOT/CADDS SHEET 49

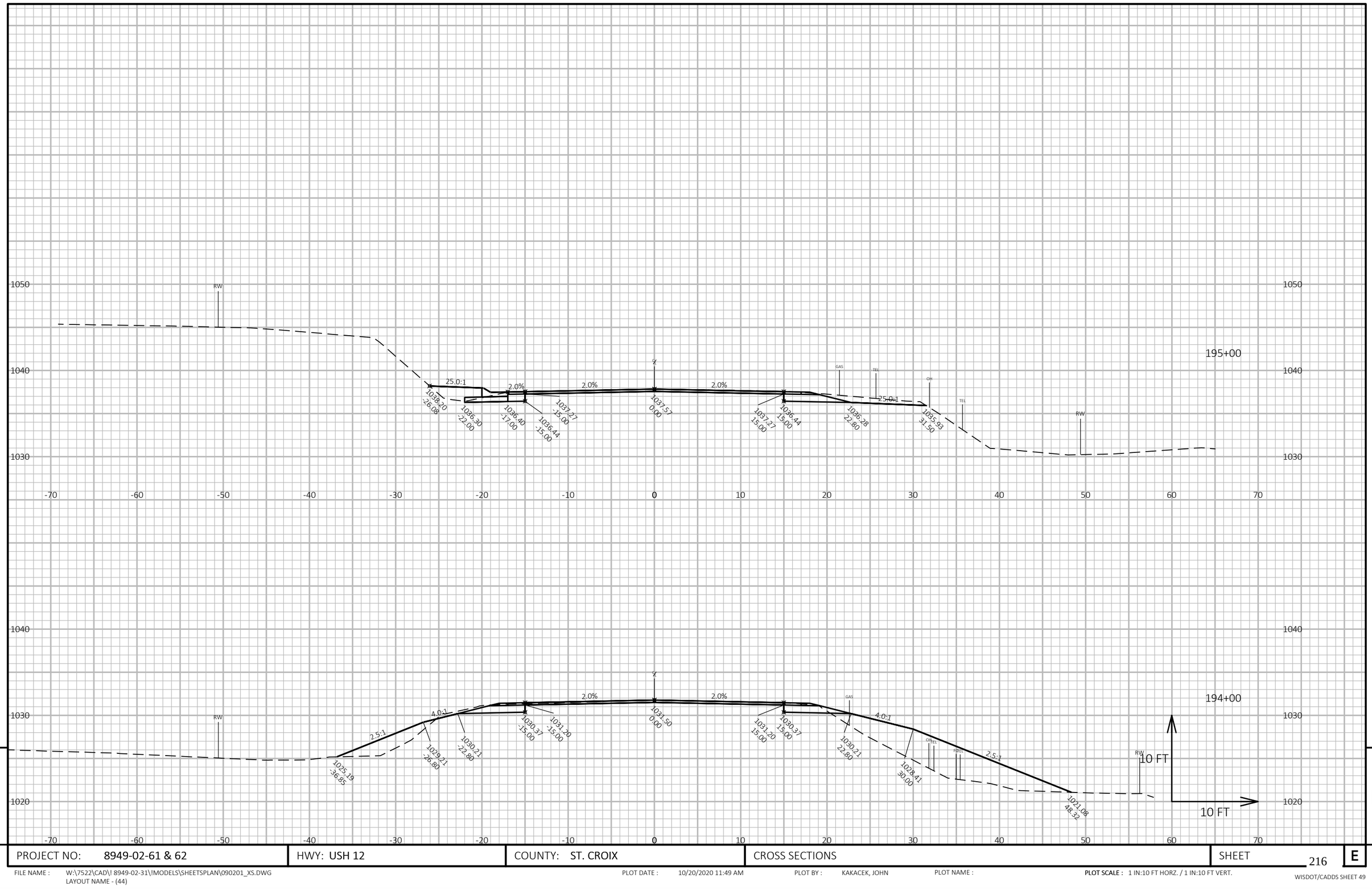


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 215	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (43)

PLOT DATE : 10/20/2020 11:49 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

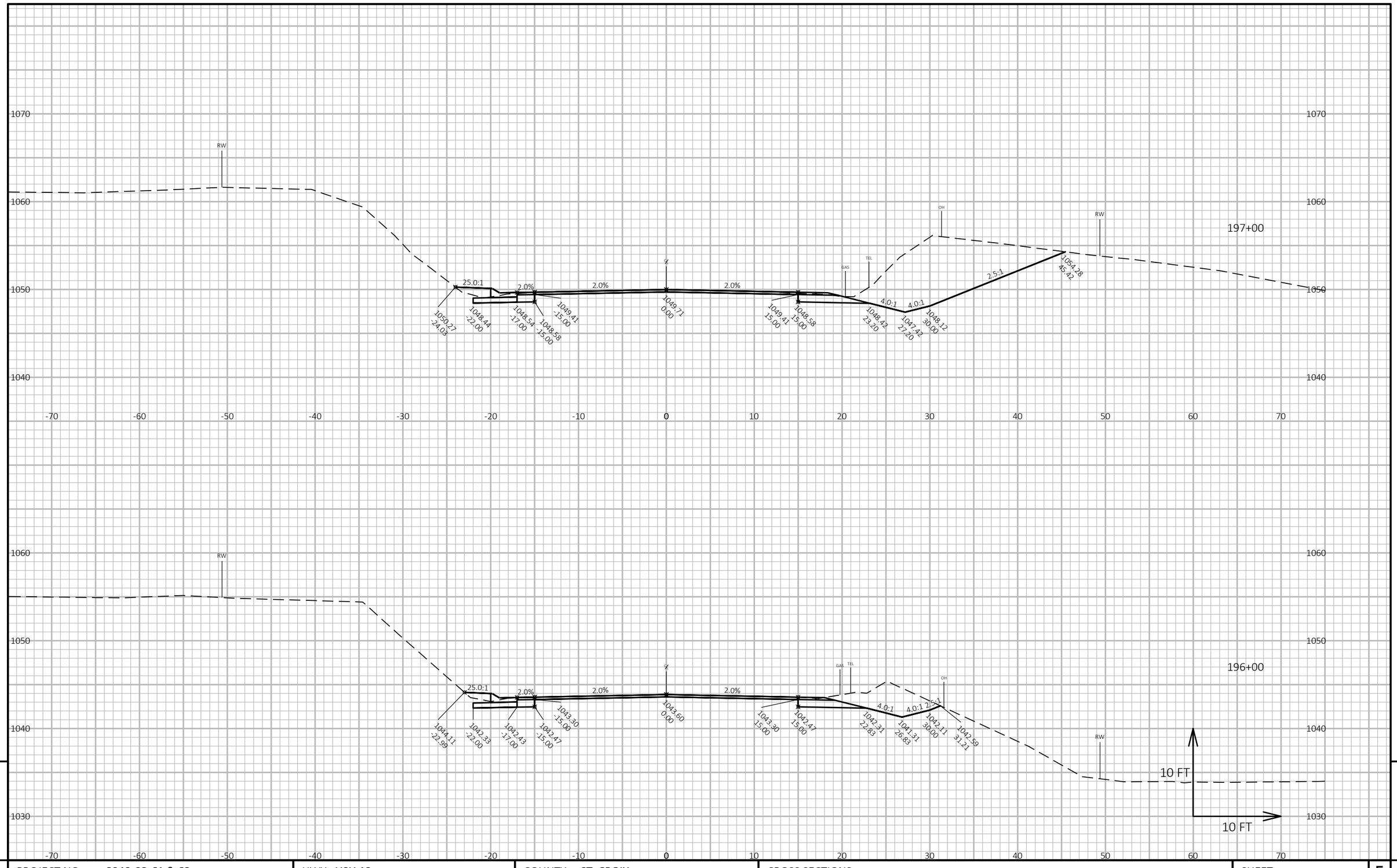


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 216	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (44)

PLOT DATE : 10/20/2020 11:49 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

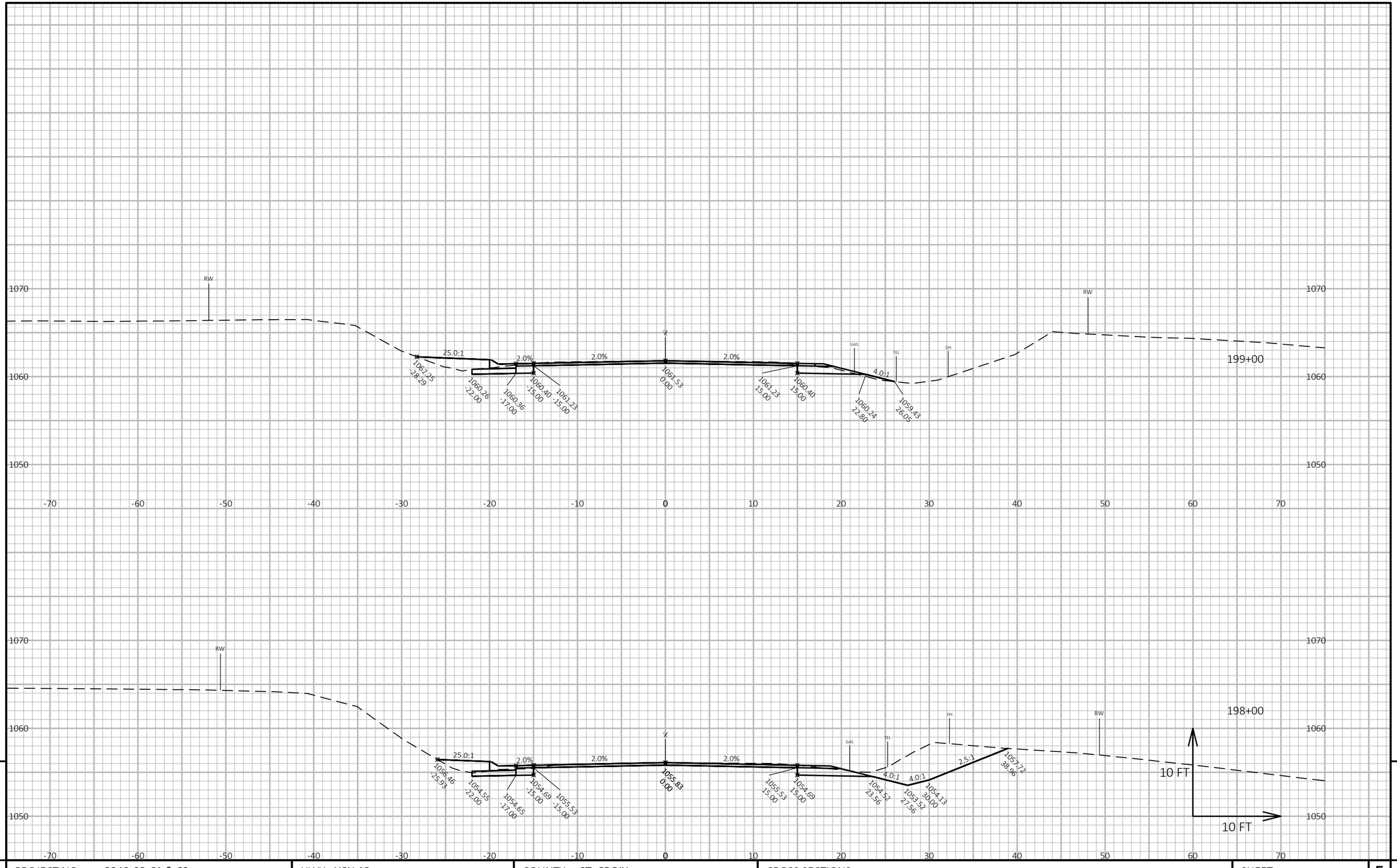
WISDOT/CADDS SHEET 49



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 217	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (45)

PLOT DATE : 10/20/2020 11:50 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

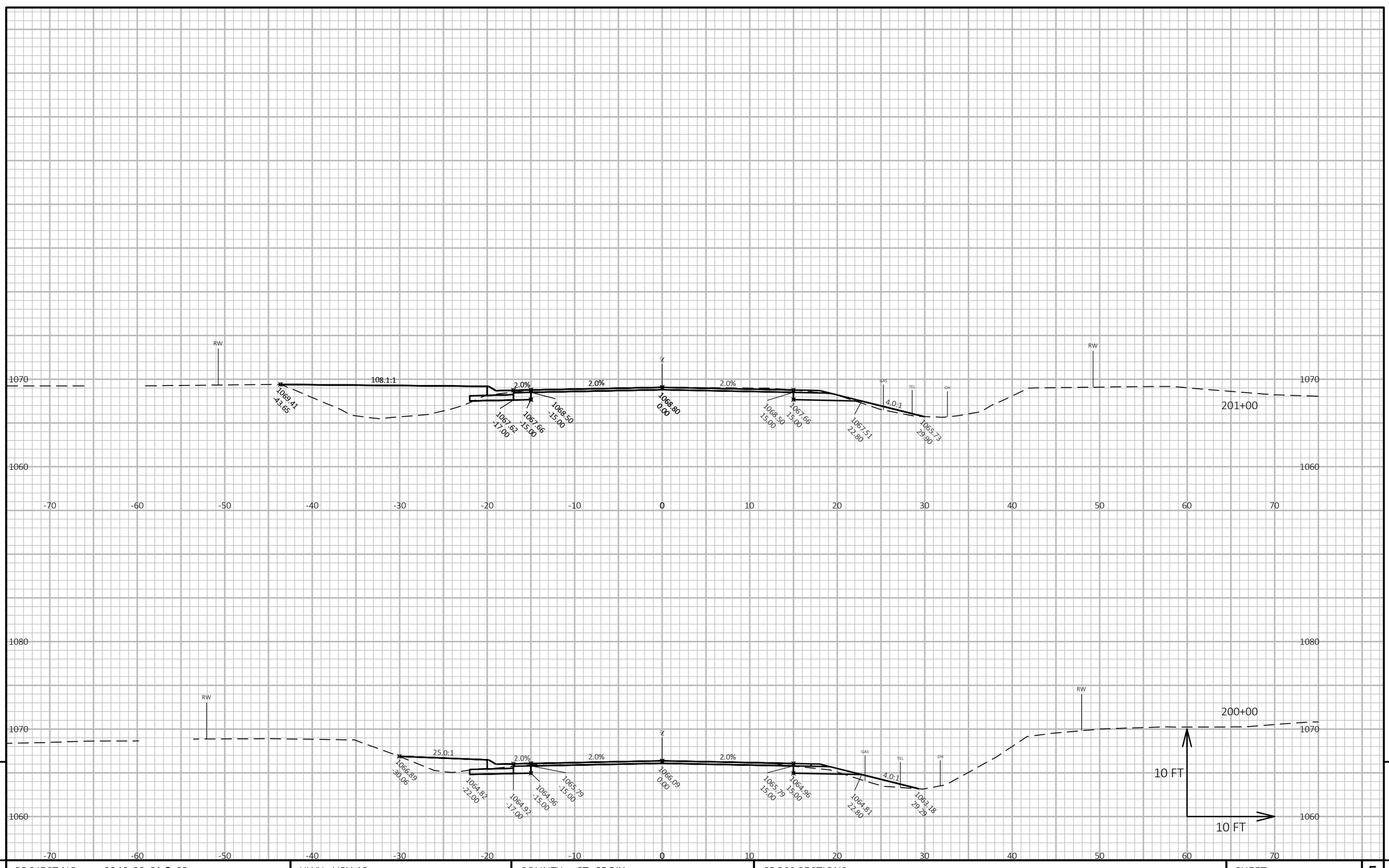


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 218	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (46)

PLOT DATE : 10/20/2020 11:50 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



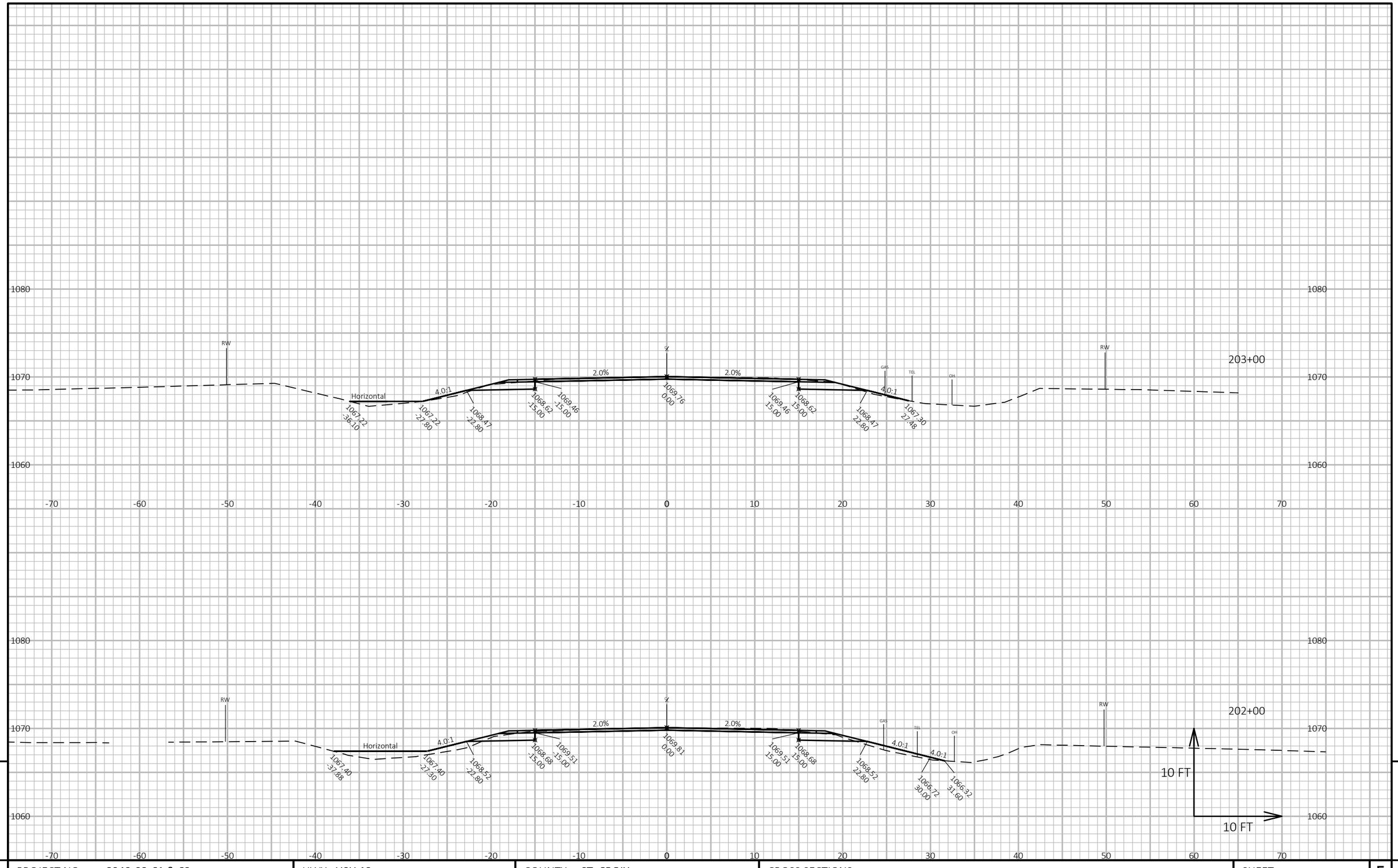
PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 219	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (47)

PLOT DATE : 10/20/2020 11:50 AM PLOT BY : KAKACEK, JOHN PLOT NAME :

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

WISDOT/CADDS SHEET 49



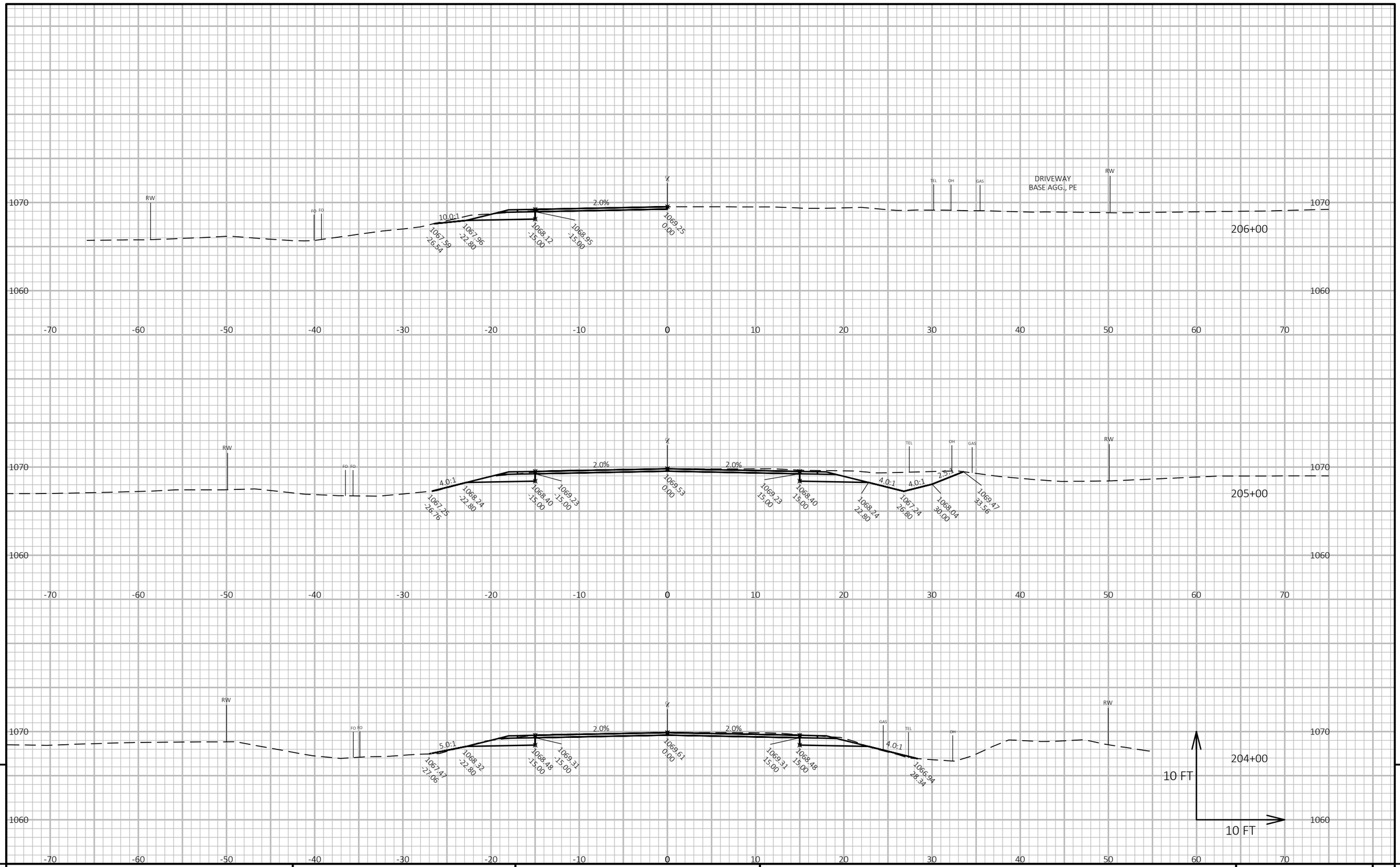
PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 220	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (48)

PLOT DATE : 10/20/2020 11:51 AM PLOT BY : KAKACEK, JOHN PLOT NAME :

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

WISDOT/CADDS SHEET 49



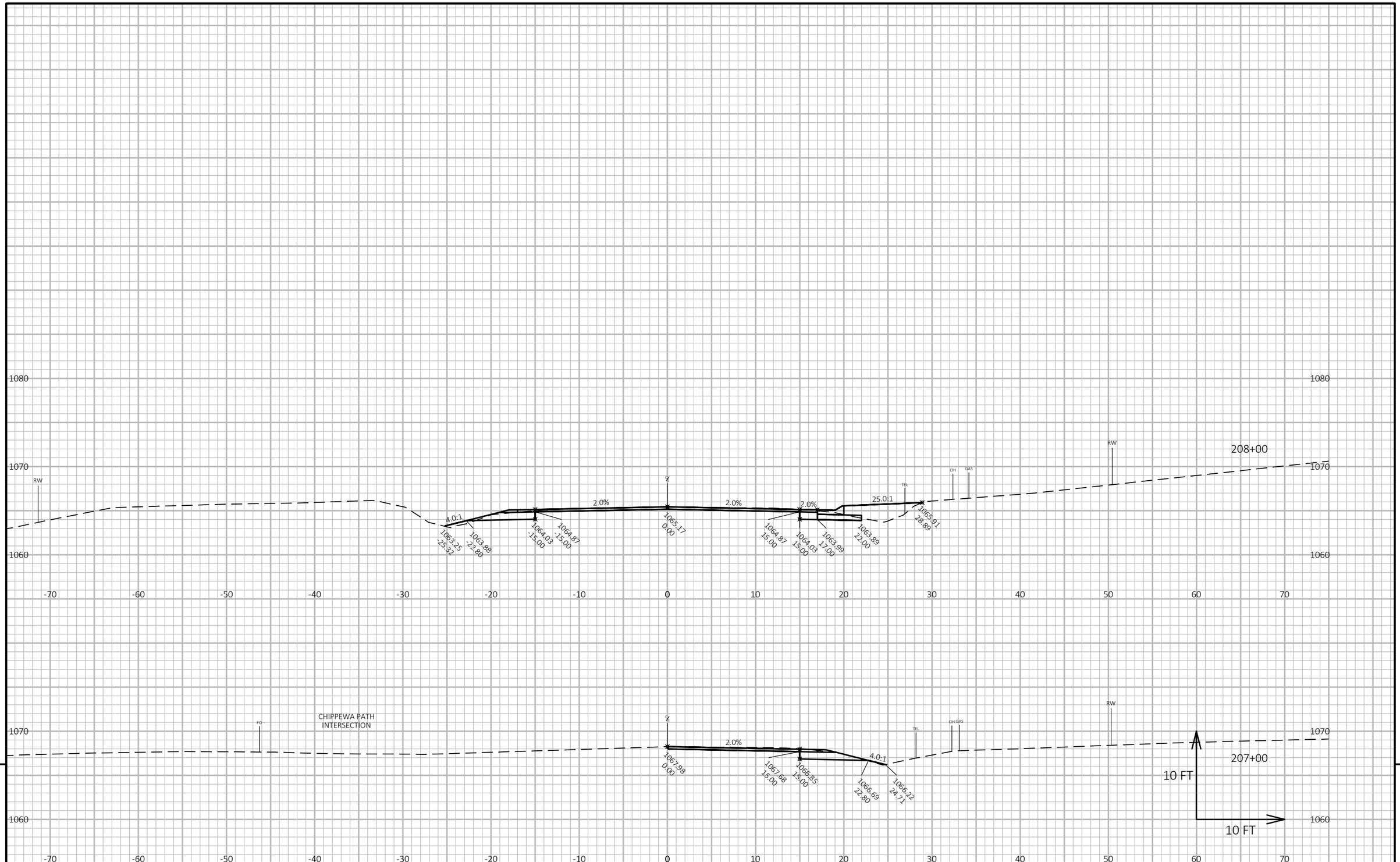
PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 221	E

FILE NAME : W:\7522\CAD\I 8949-02-31\IMODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (49)

PLOT DATE : 10/20/2020 11:51 AM PLOT BY : KAKACEK, JOHN PLOT NAME :

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

WISDOT/CADDS SHEET 49

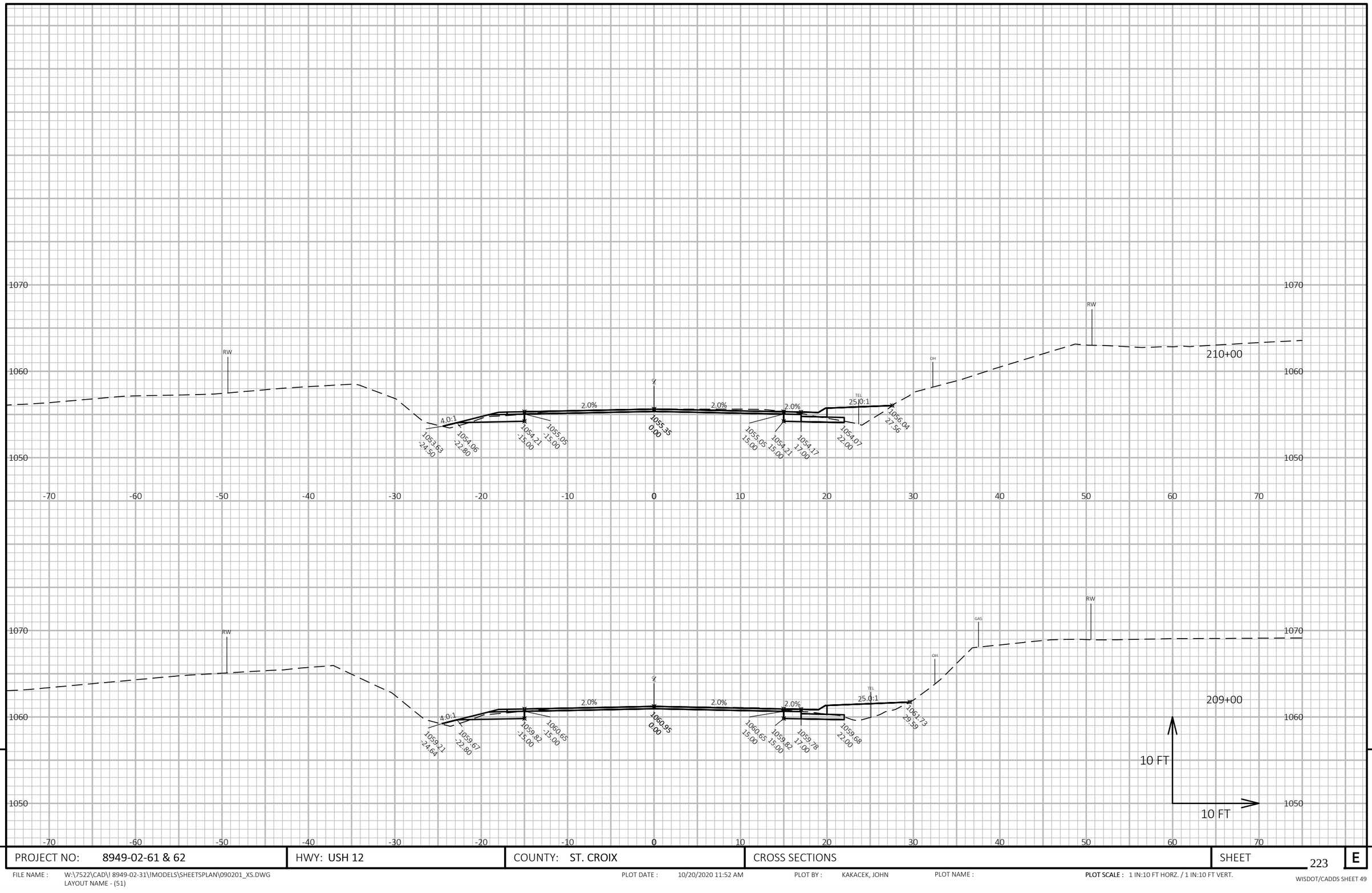


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 222	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (50)

PLOT DATE : 10/20/2020 11:51 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

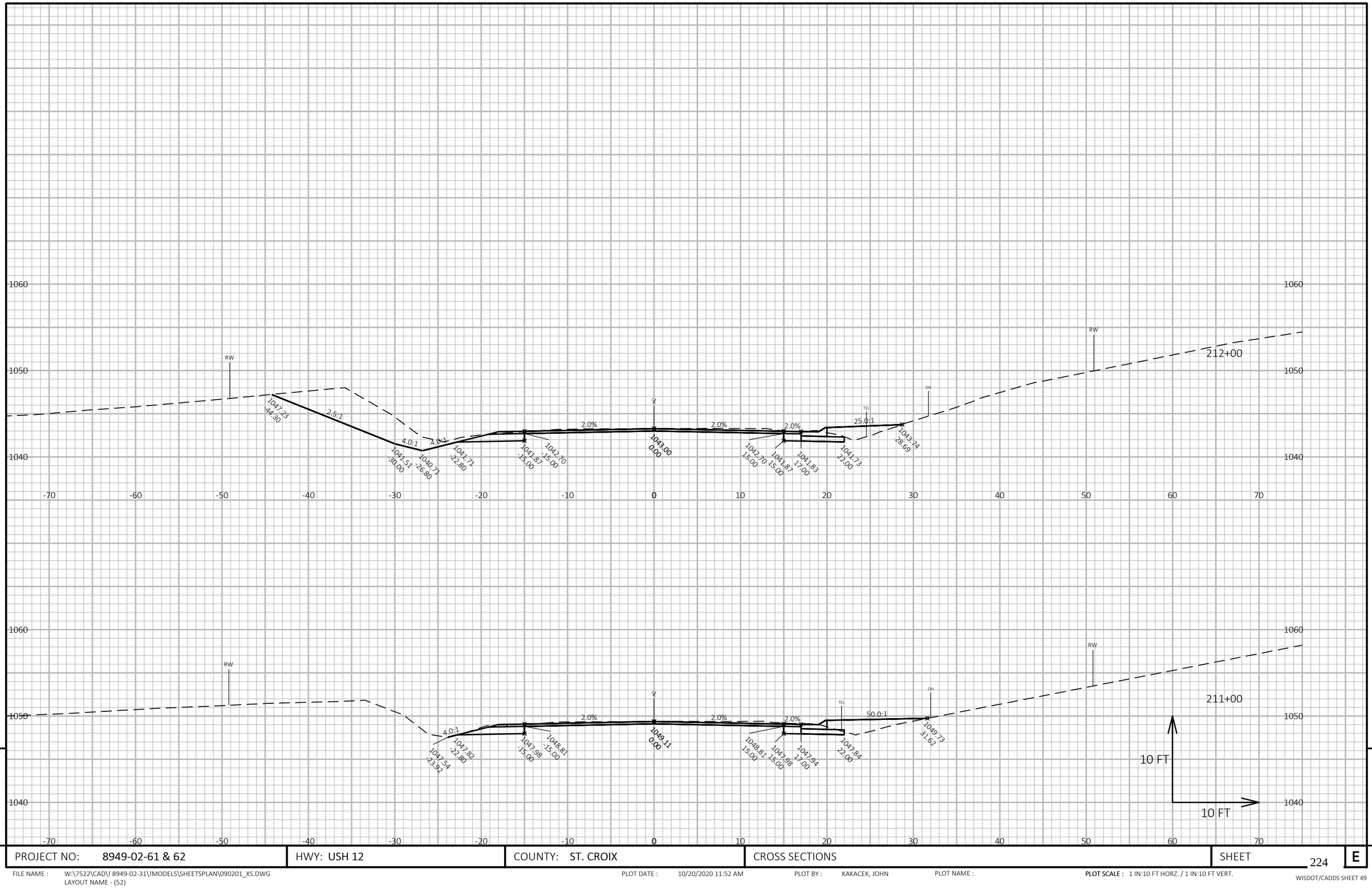


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 223	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (51)

PLOT DATE : 10/20/2020 11:52 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

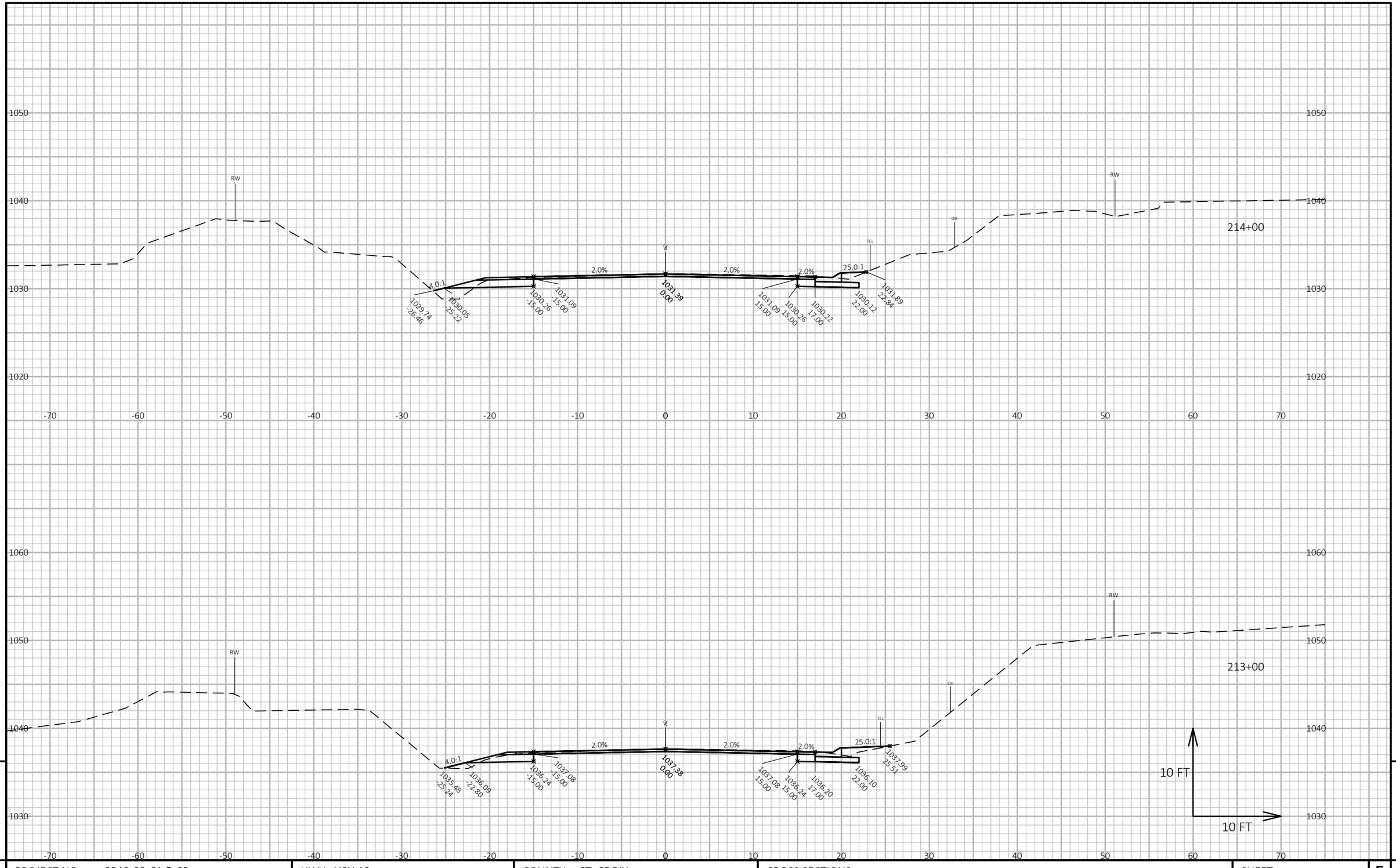
WISDOT/CADDS SHEET 49



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 224	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (52)

PLOT DATE : 10/20/2020 11:52 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

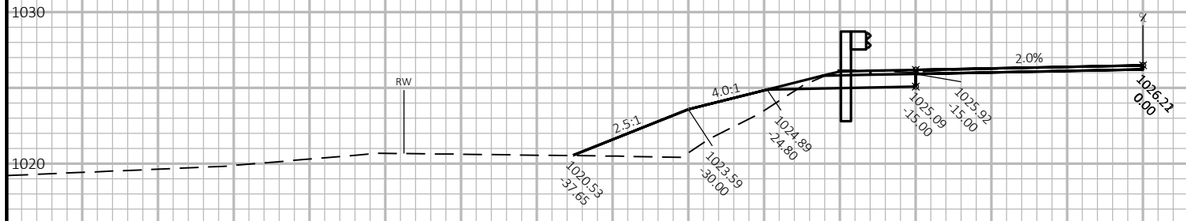


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 225	E

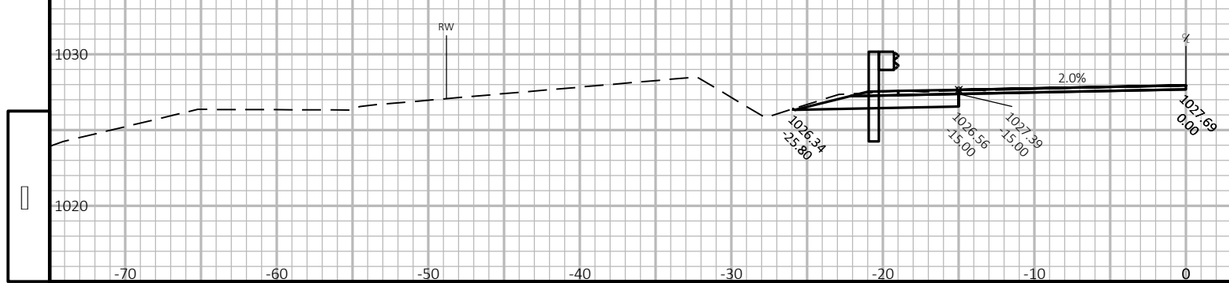
FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (53)

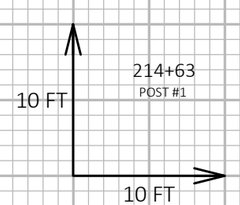
PLOT DATE : 10/20/2020 11:53 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



214+88
POST #5





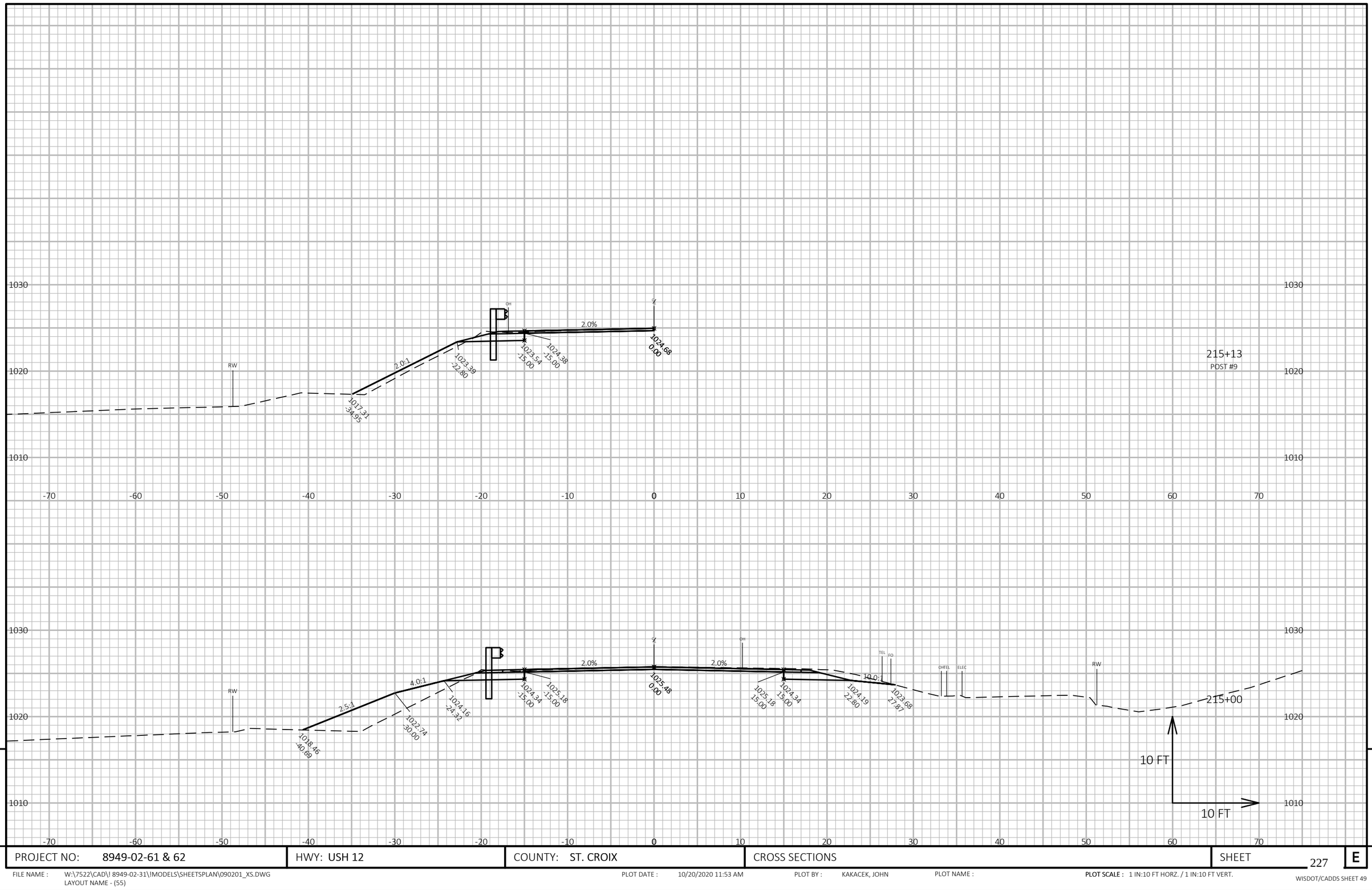
214+63
POST #1

PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 226	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (54)

PLOT DATE : 10/20/2020 11:53 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

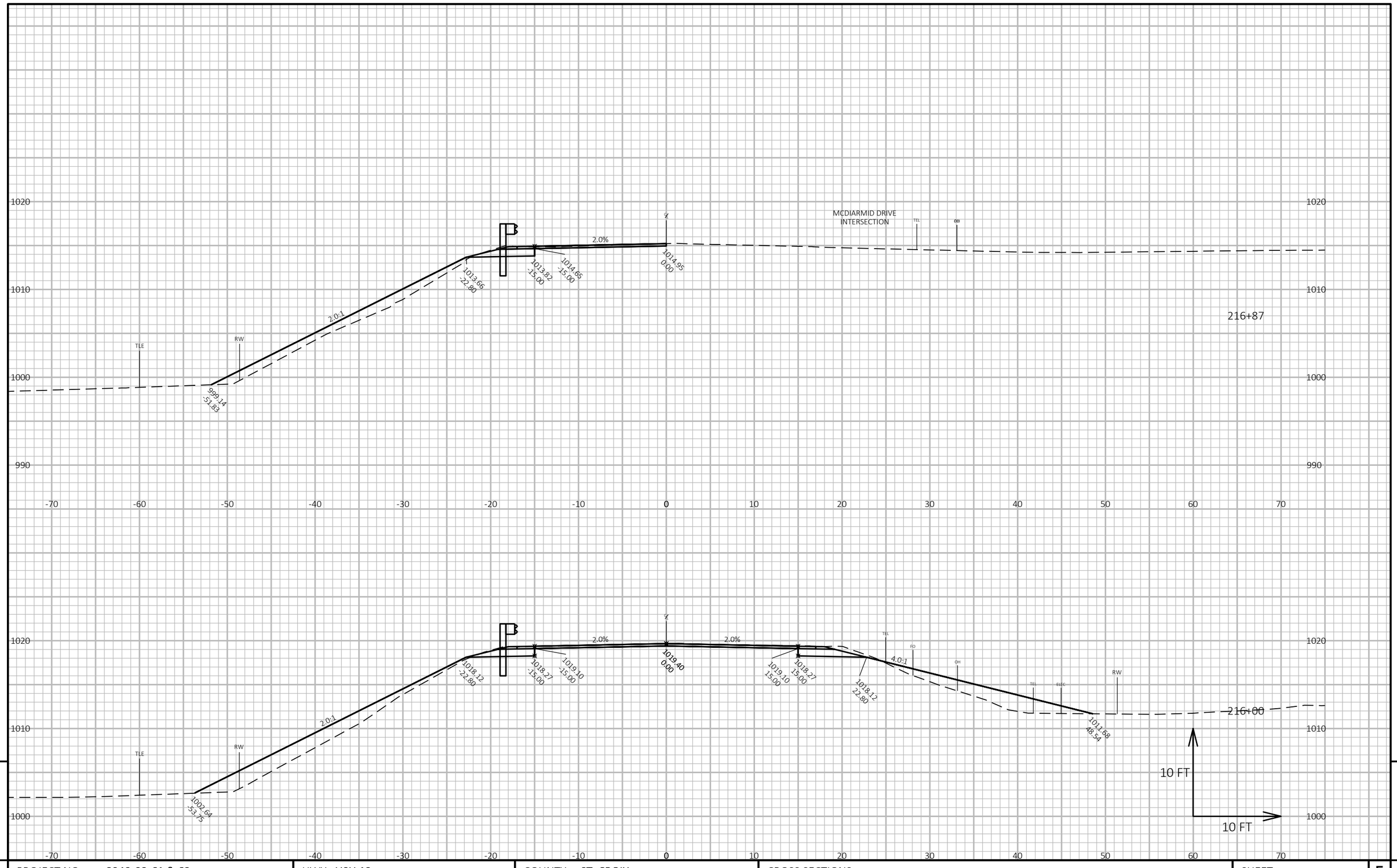


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 227	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (55)

PLOT DATE : 10/20/2020 11:53 AM PLOT BY : KAKACEK, JOHN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

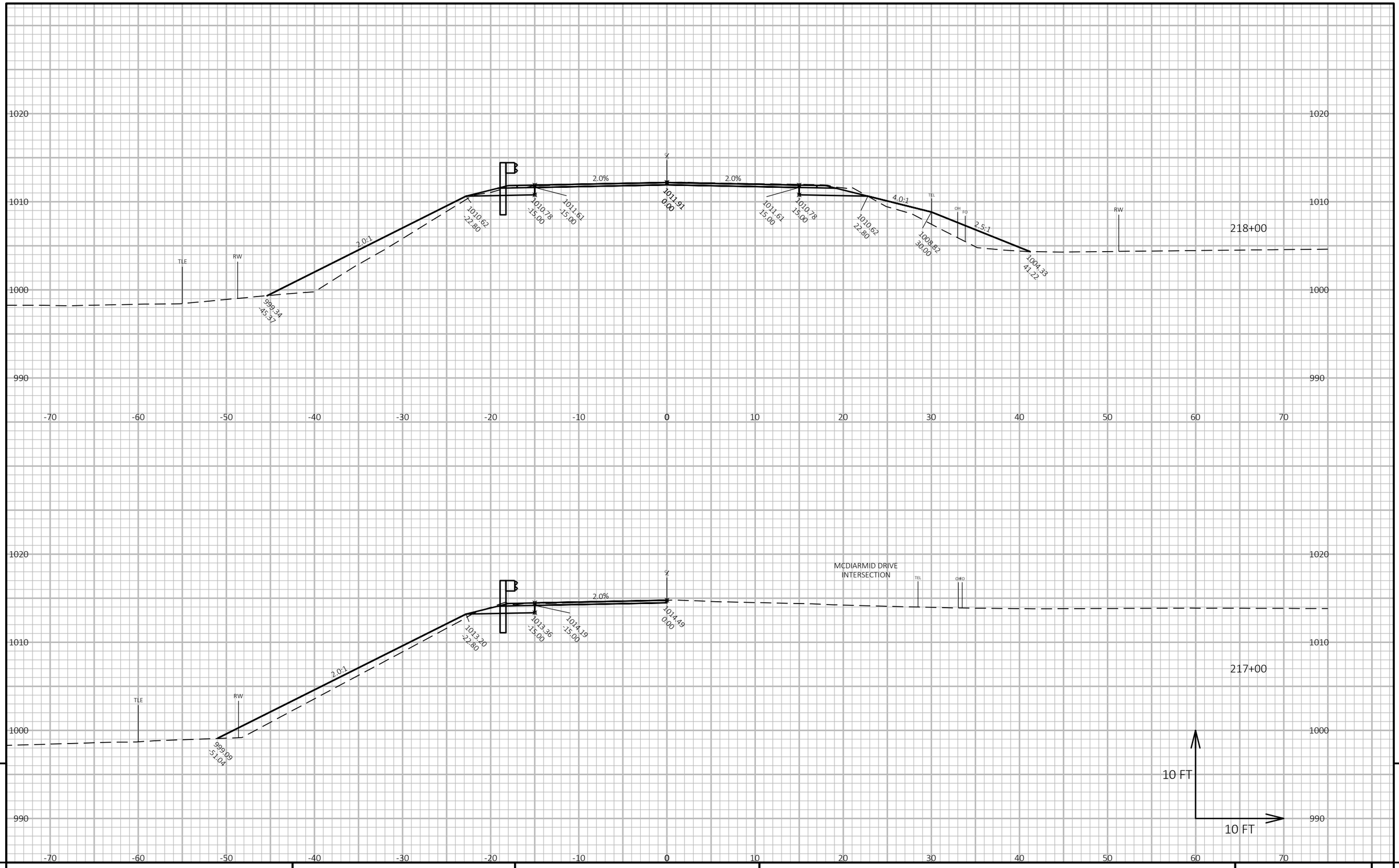
WISDOT/CADDS SHEET 49



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 228	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (56)

PLOT DATE : 10/20/2020 11:54 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



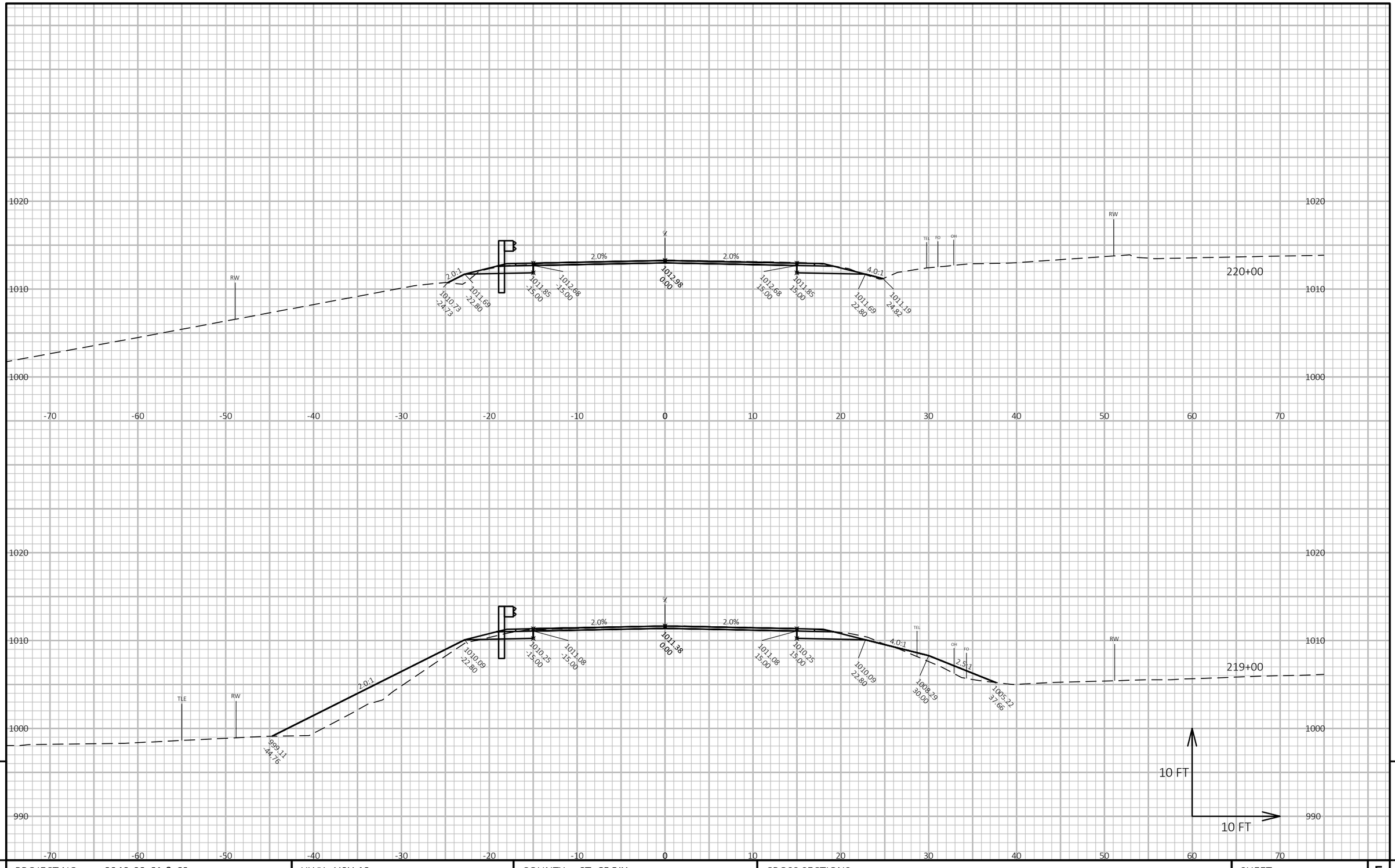
PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 229	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (57)

PLOT DATE : 10/20/2020 11:54 AM PLOT BY : KAKACEK, JOHN PLOT NAME :

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

WISDOT/CADDS SHEET 49



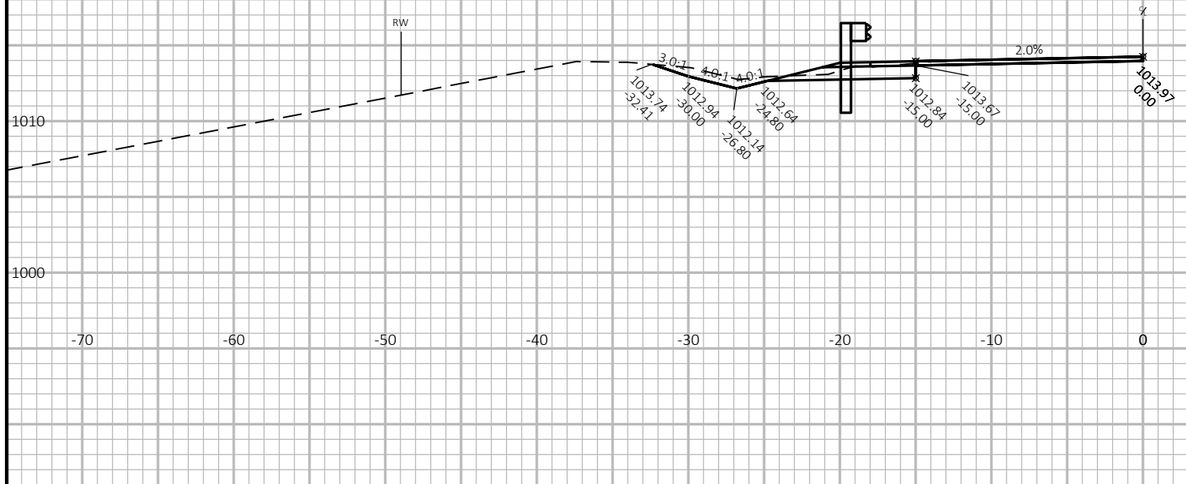
PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 230	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (58)

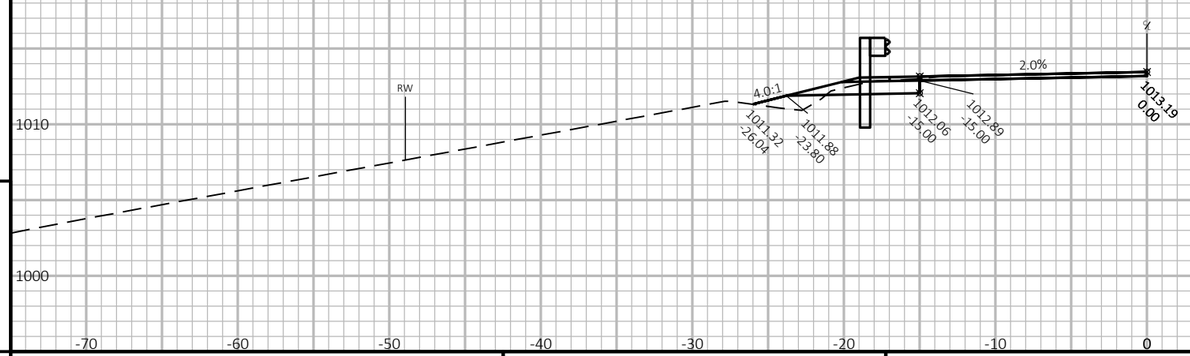
PLOT DATE : 10/20/2020 11:54 AM PLOT BY : KAKACEK, JOHN PLOT NAME :

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

WISDOT/CADDS SHEET 49



220+32
POST #5



220+07
POST #9

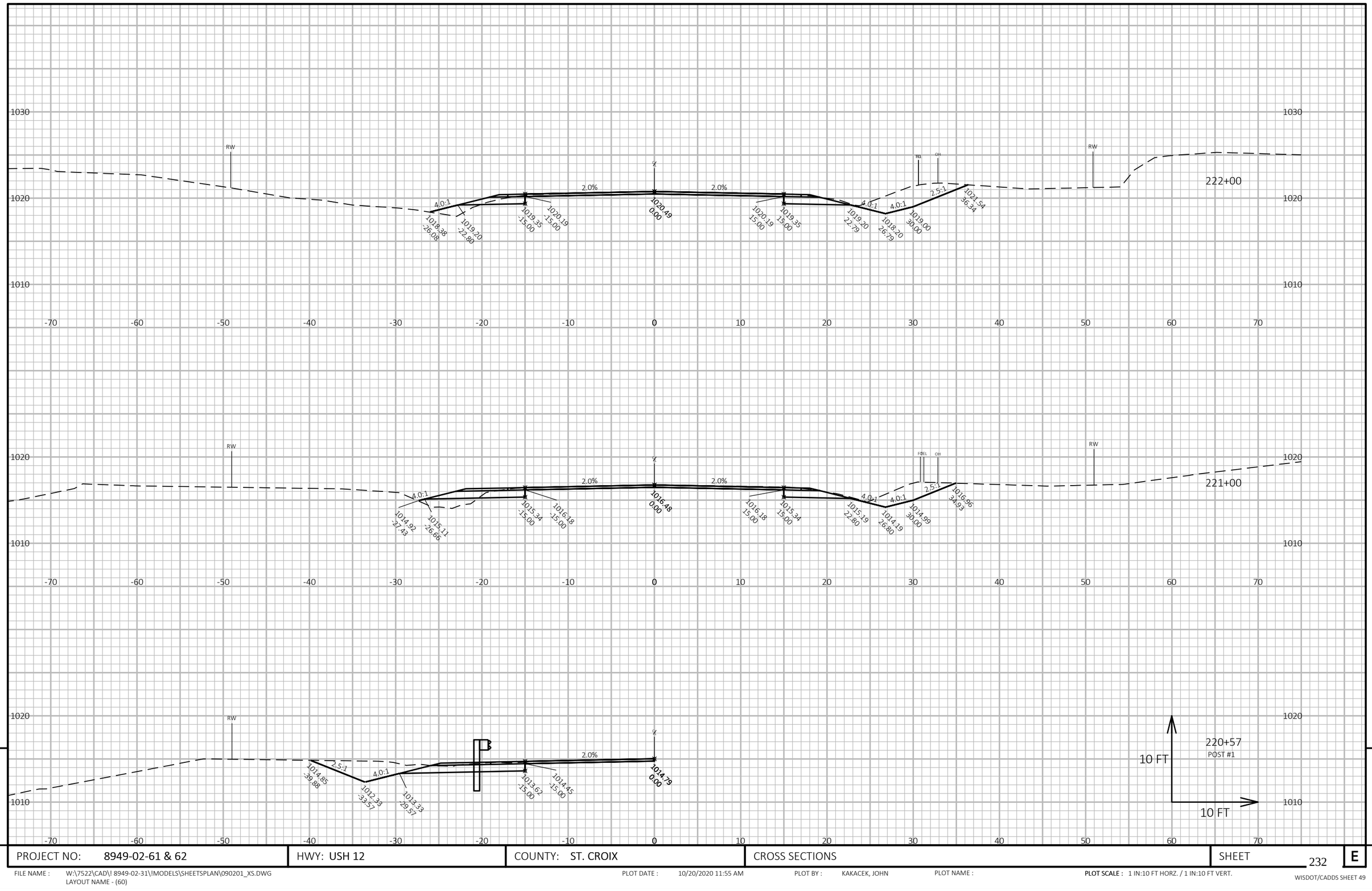
10 FT
10 FT

PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 231	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (59)

PLOT DATE : 10/20/2020 11:55 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

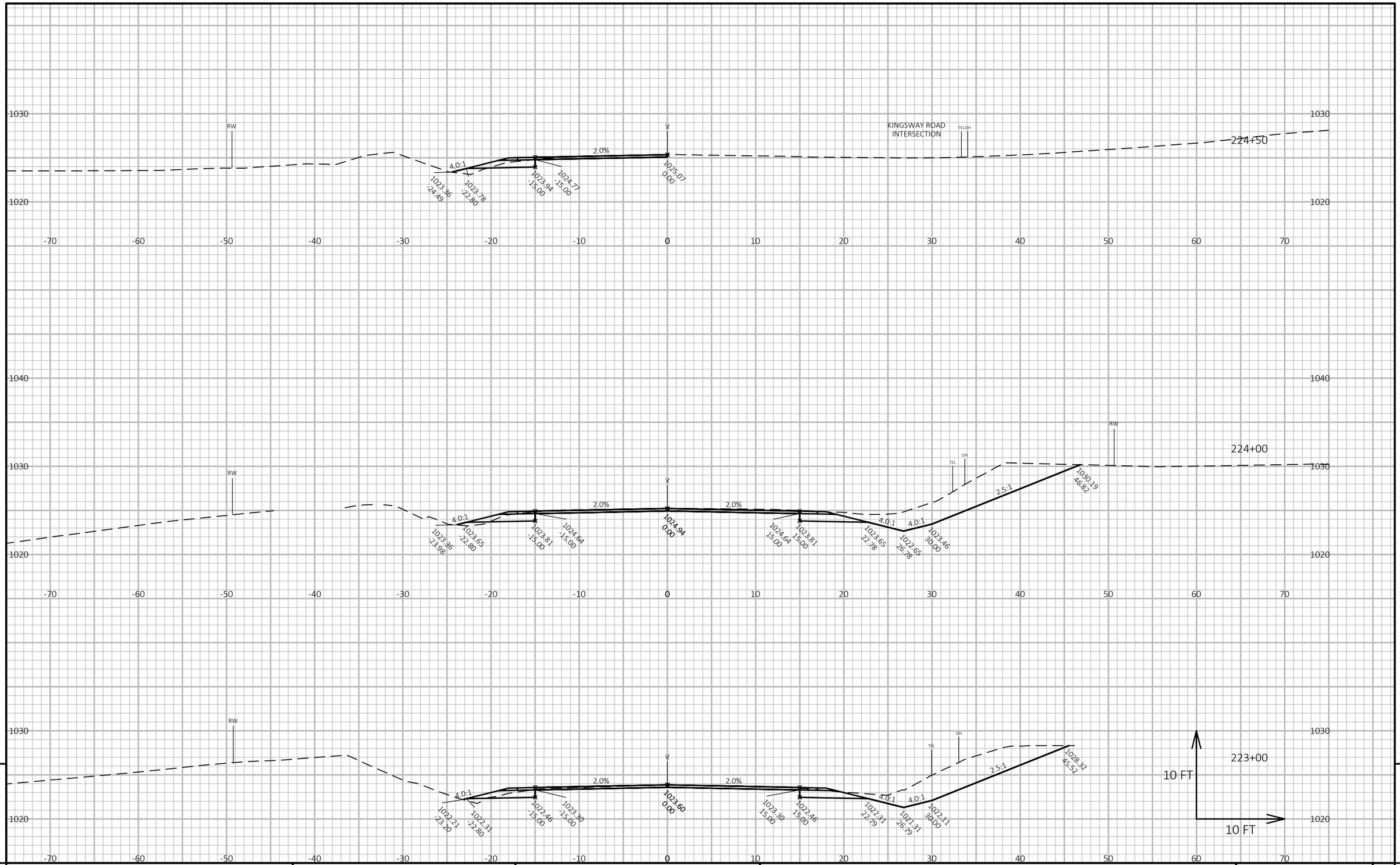
WISDOT/CADDS SHEET 49



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 232	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (60)

PLOT DATE : 10/20/2020 11:55 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

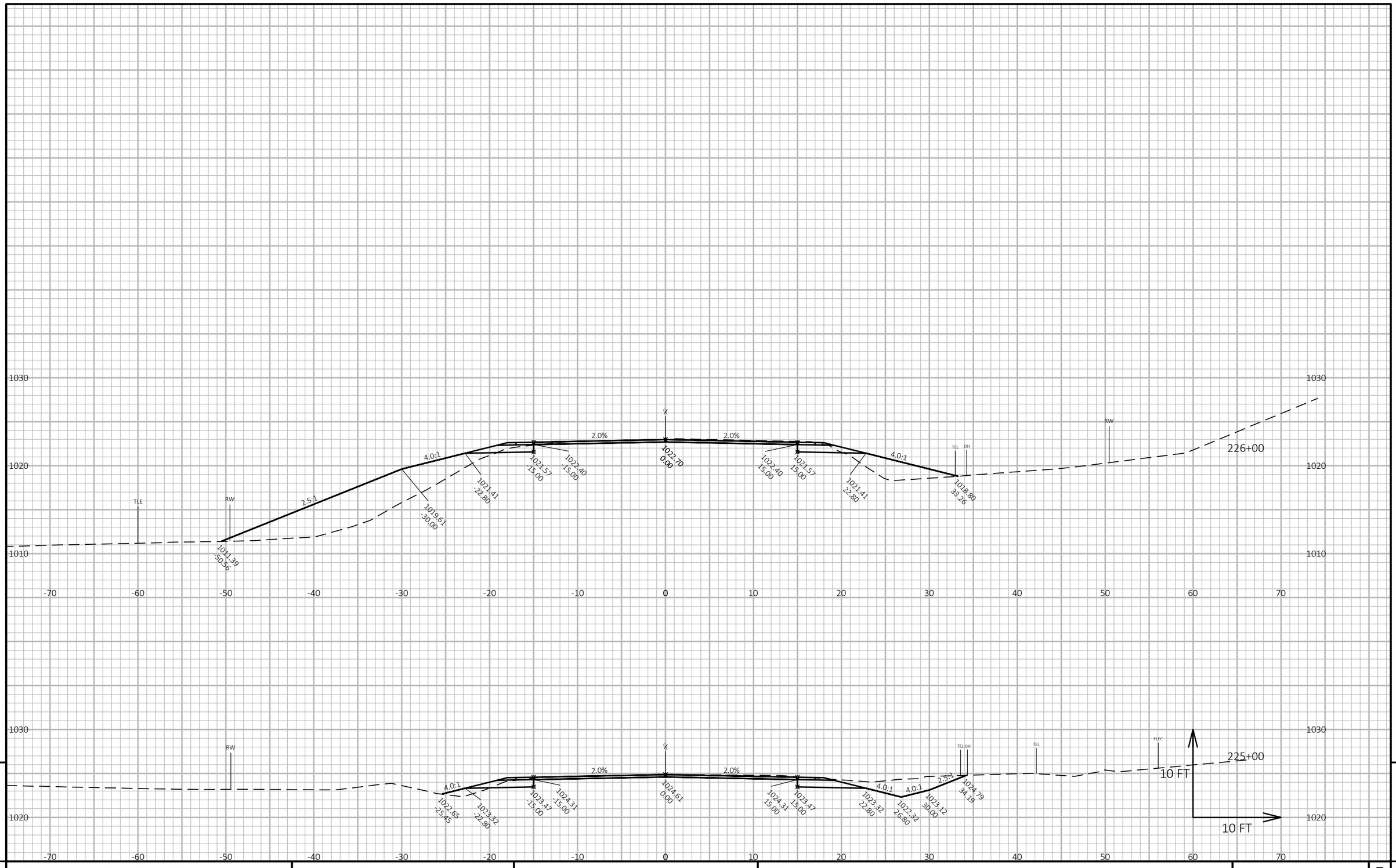


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 233	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (61)

PLOT DATE : 10/20/2020 11:56 AM PLOT BY : KAKACEK, JOHN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

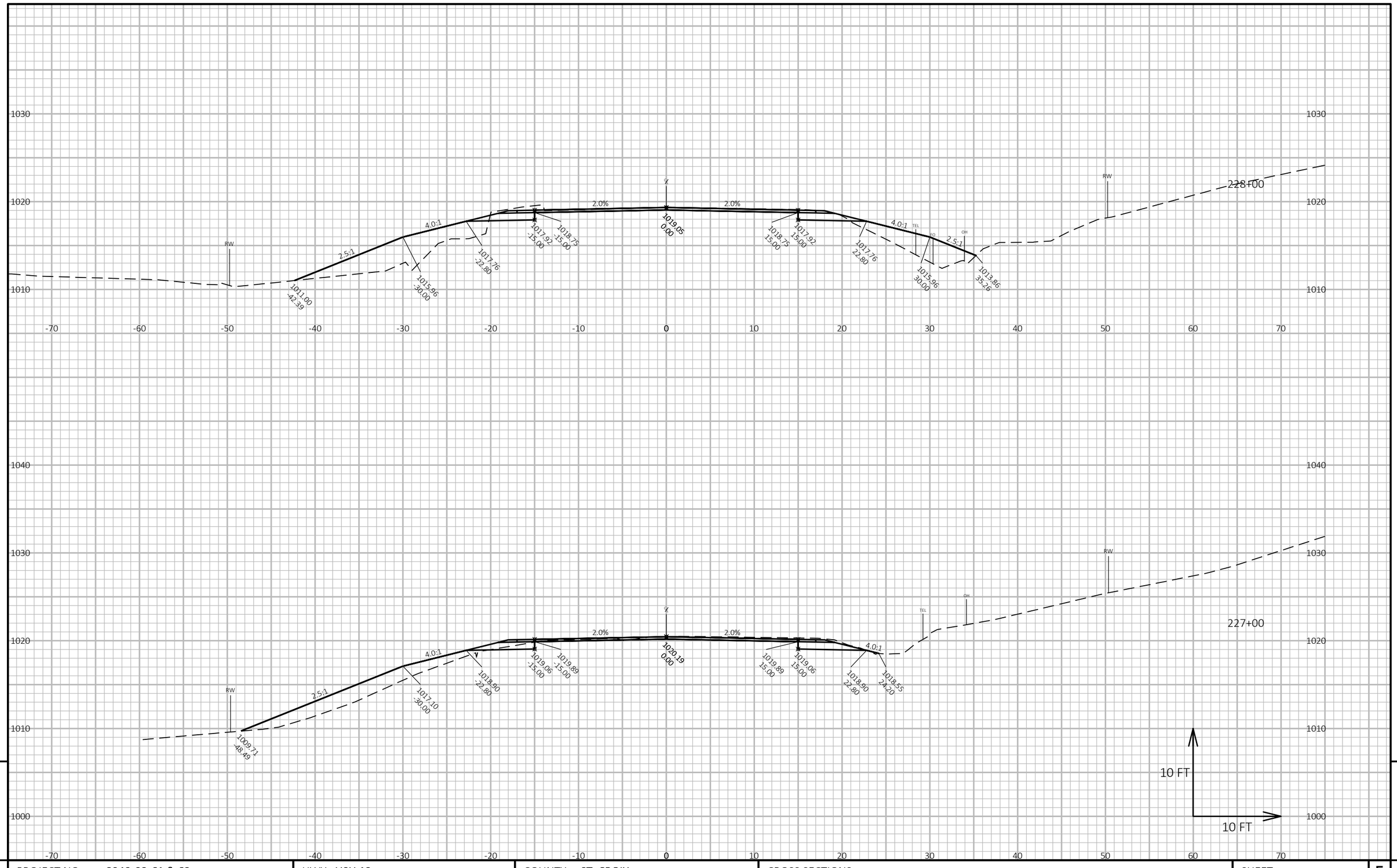
WISDOT/CADDS SHEET 49



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 234	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (62)

PLOT DATE : 10/20/2020 11:56 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



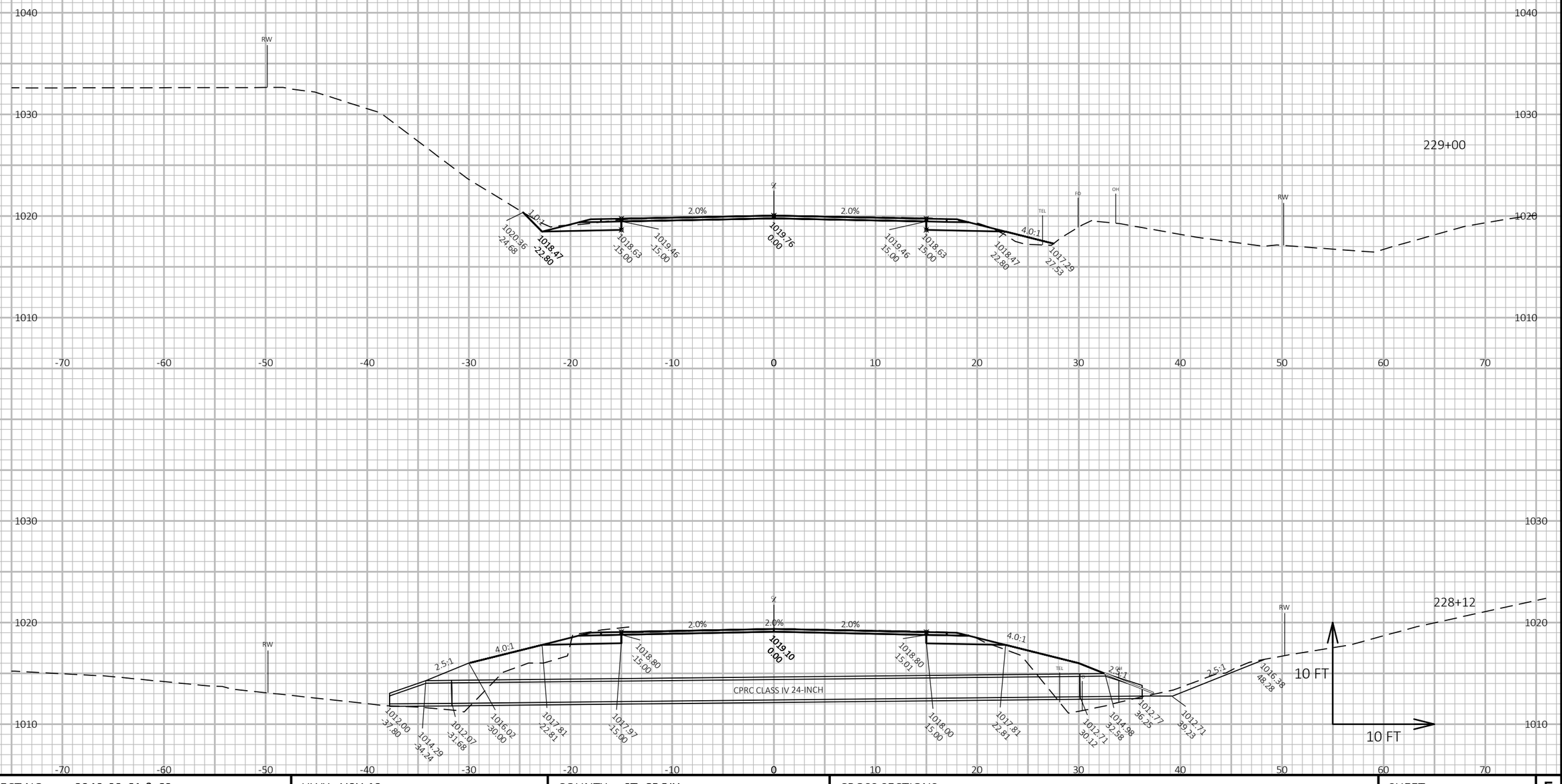
PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 235	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (63)

PLOT DATE : 10/20/2020 11:56 AM PLOT BY : KAKACEK, JOHN PLOT NAME :

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

WISDOT/CADDS SHEET 49

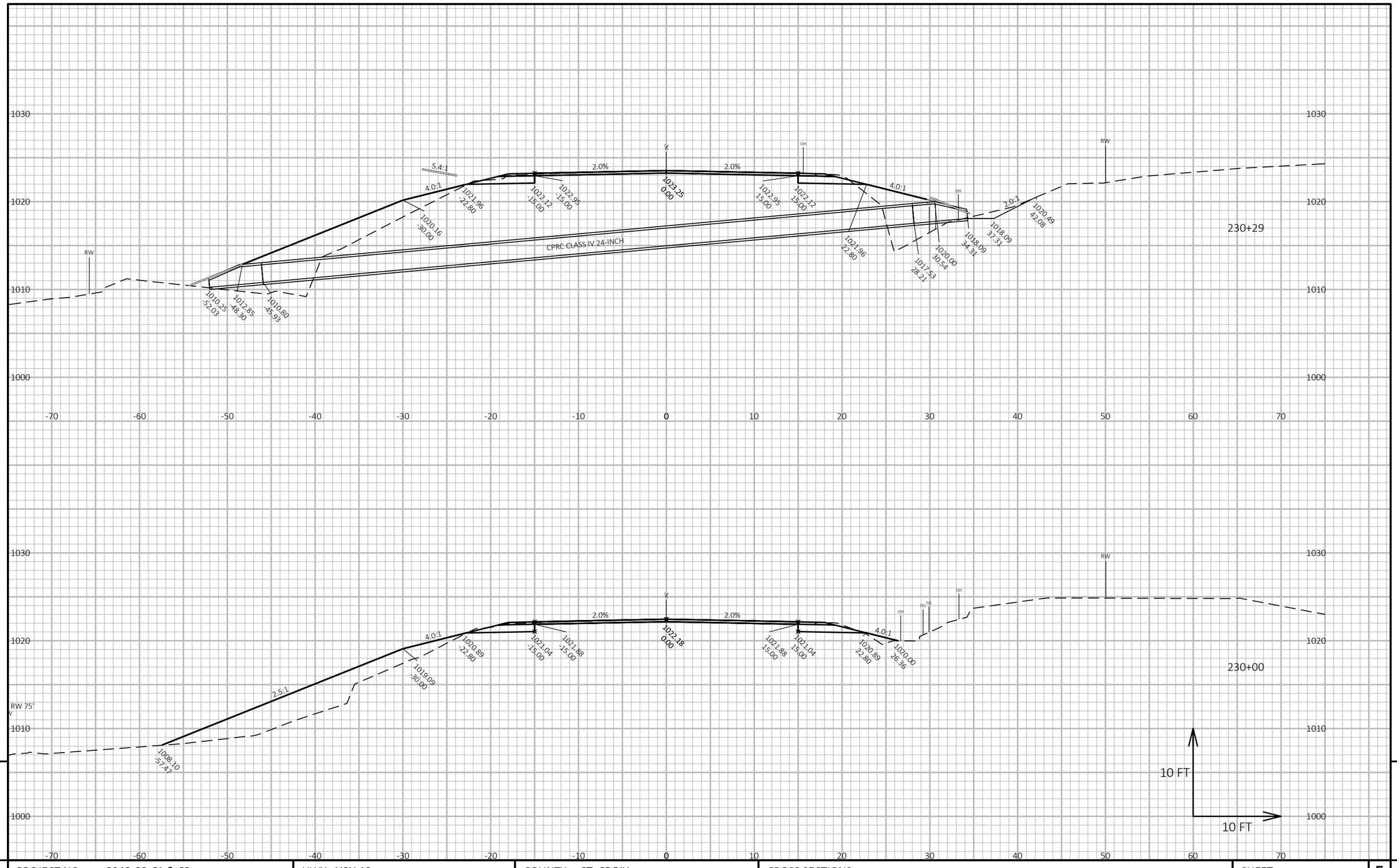


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 236	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (64)

PLOT DATE : 10/20/2020 11:57 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

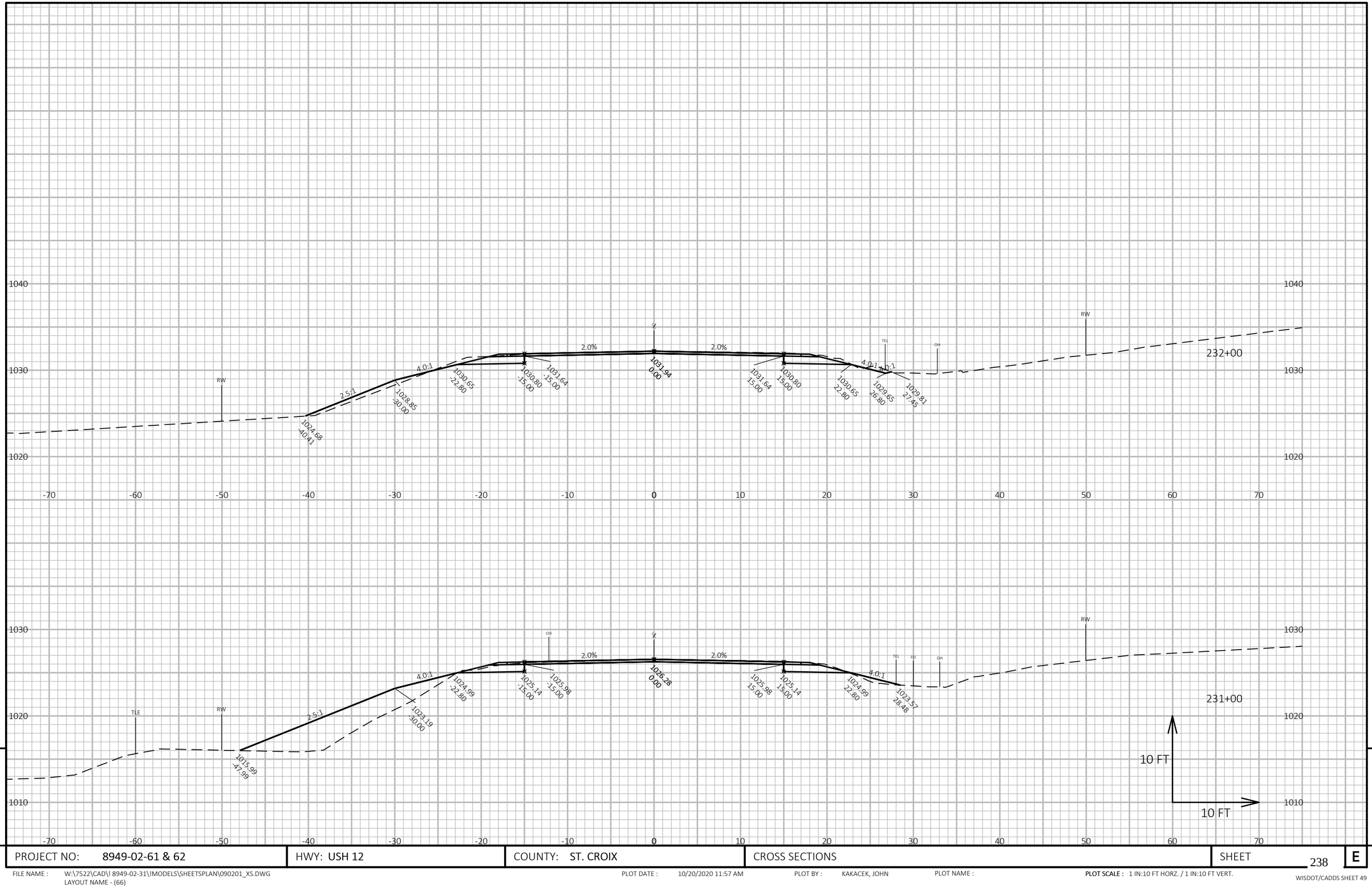


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 237	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (65)

PLOT DATE : 10/20/2020 11:57 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

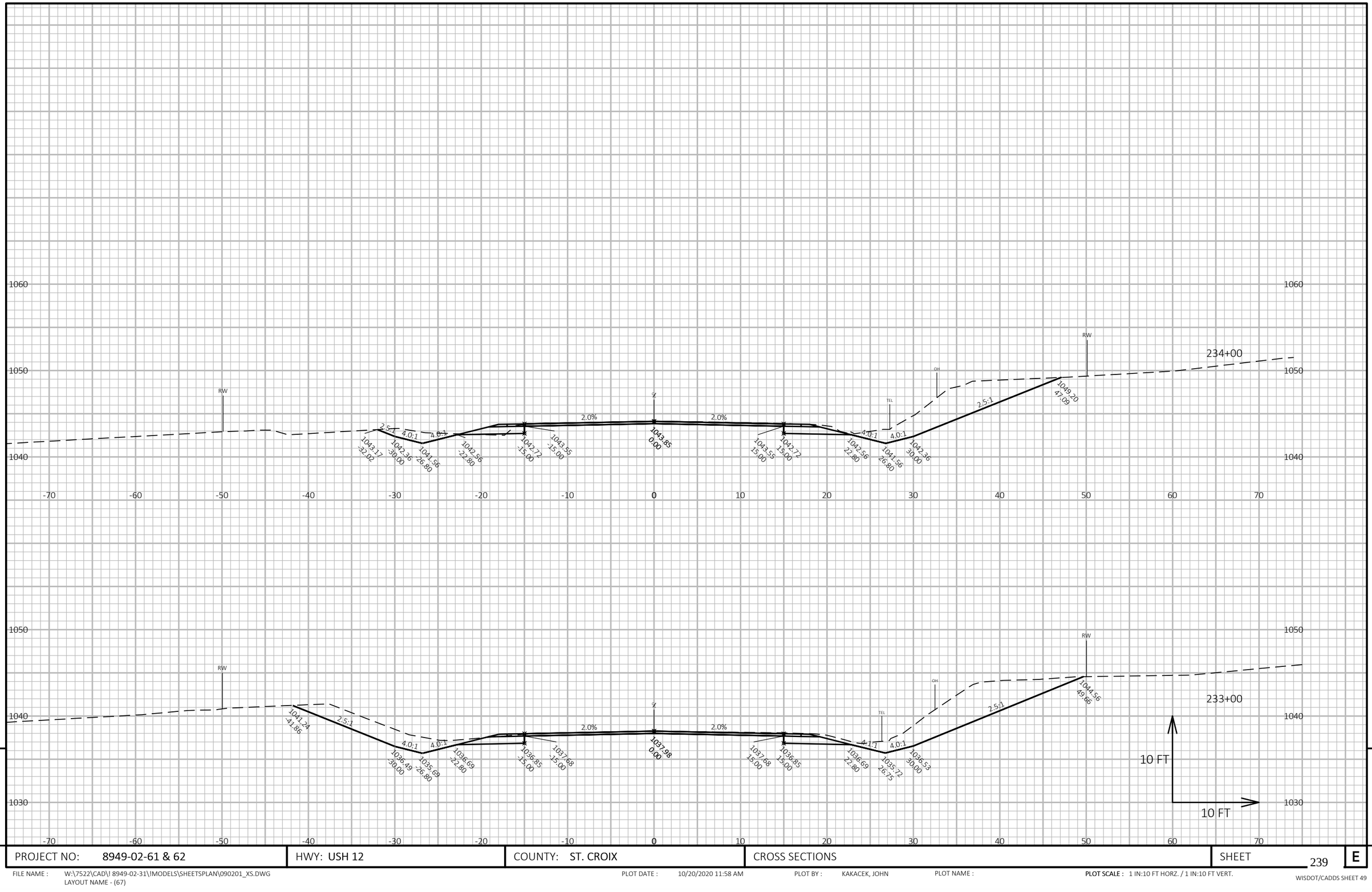


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 238	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (66)

PLOT DATE : 10/20/2020 11:57 AM PLOT BY : KAKACEK, JOHN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

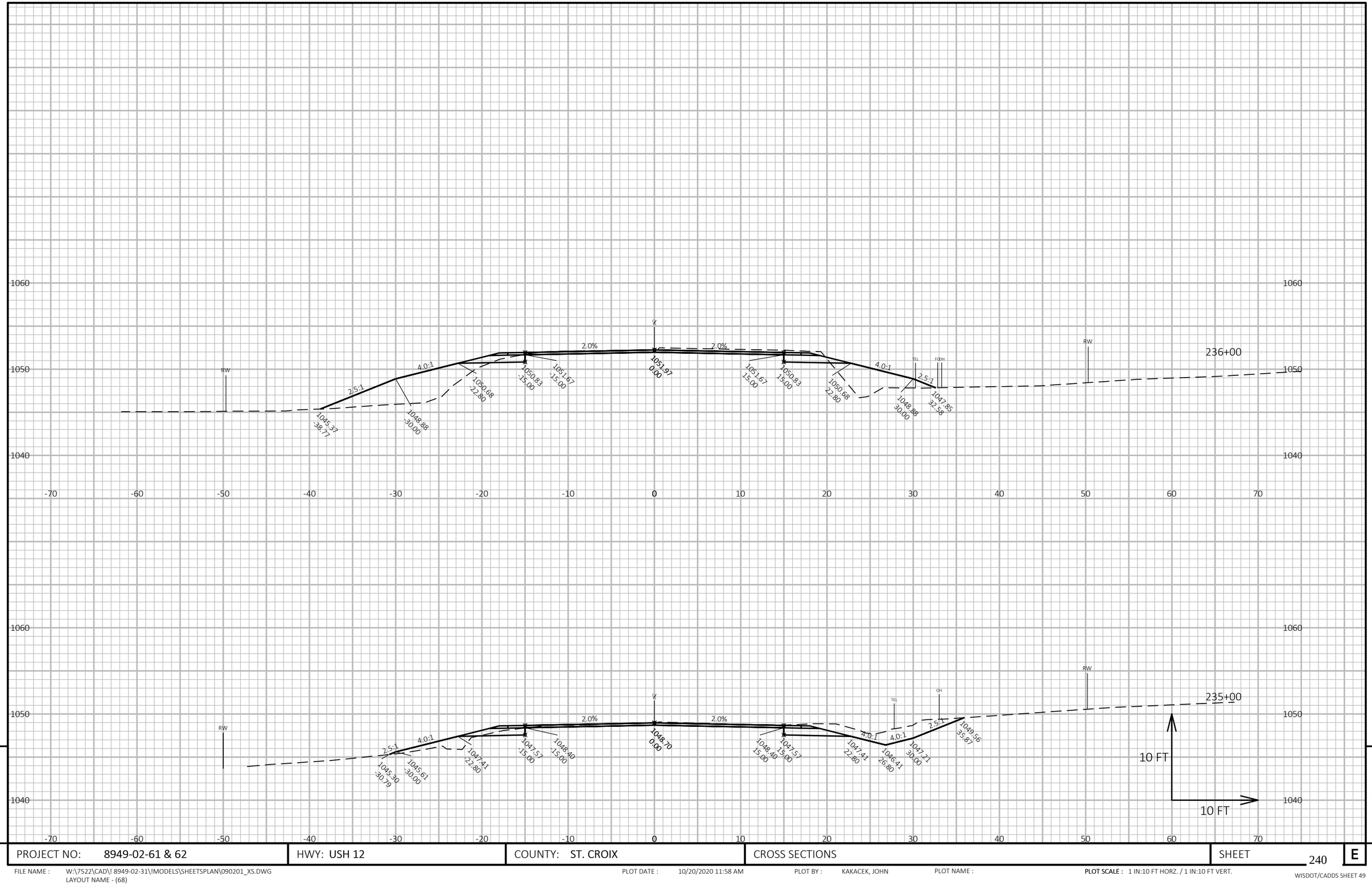
WISDOT/CADDS SHEET 49



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 239	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (67)

PLOT DATE : 10/20/2020 11:58 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

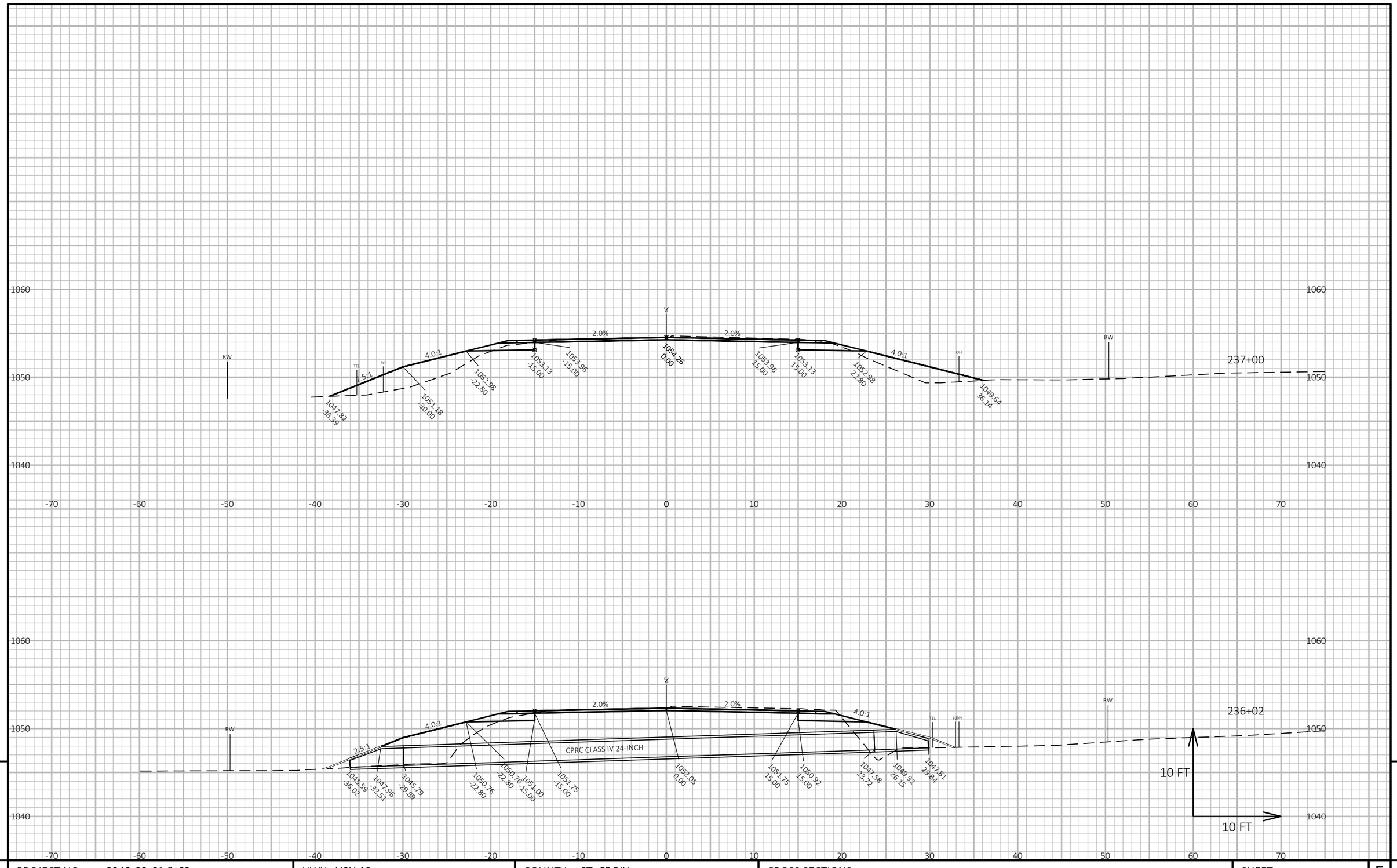


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 240	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (68)

PLOT DATE : 10/20/2020 11:58 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



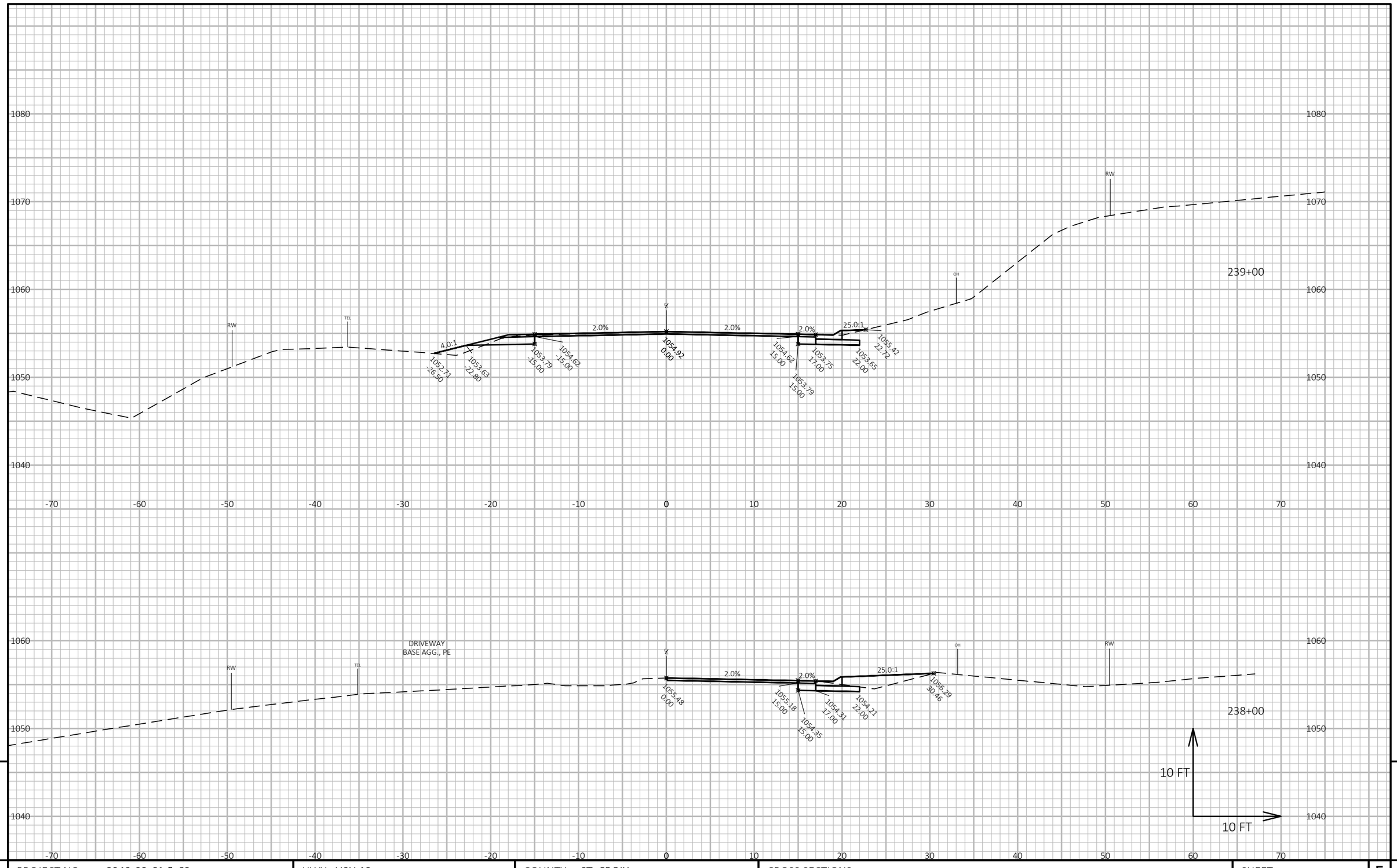
PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 241	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (69)

PLOT DATE : 10/20/2020 11:59 AM PLOT BY : KAKACEK, JOHN PLOT NAME :

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

WISDOT/CADDS SHEET 49



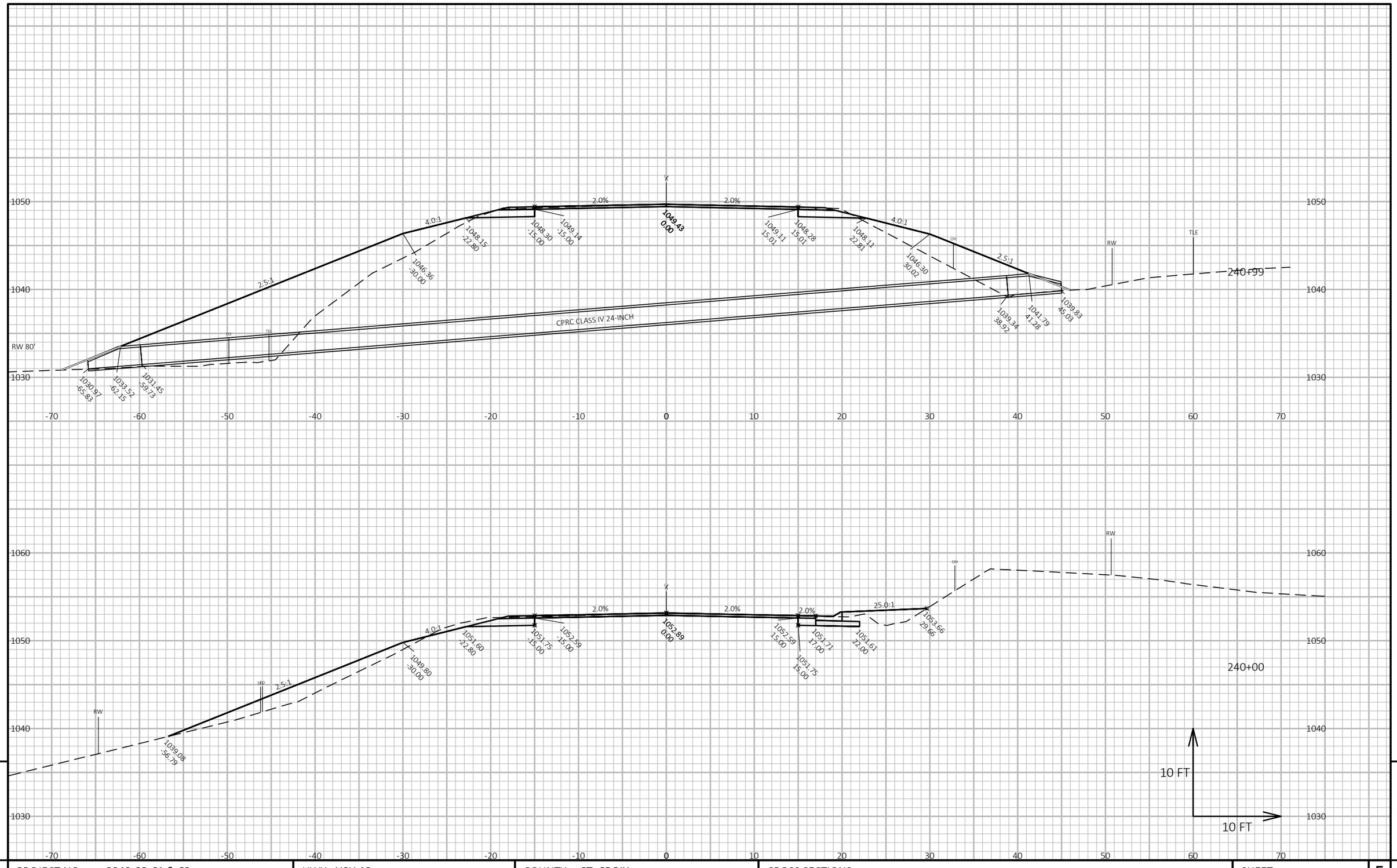
PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 242	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (70)

PLOT DATE : 10/20/2020 11:59 AM PLOT BY : KAKACEK, JOHN PLOT NAME :

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

WISDOT/CADDS SHEET 49



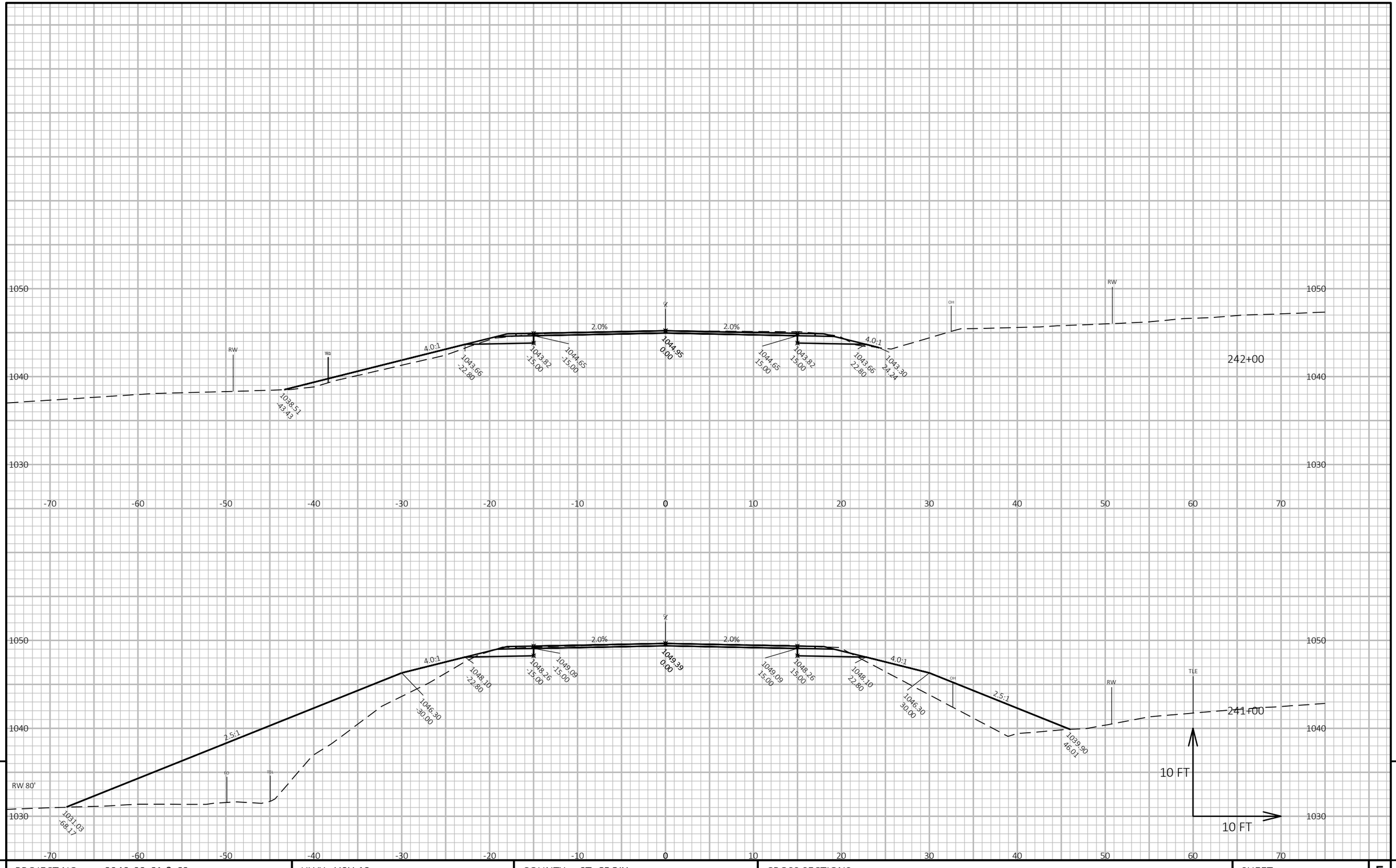
PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 243	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (71)

PLOT DATE : 10/20/2020 11:59 AM PLOT BY : KAKACEK, JOHN PLOT NAME :

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

WISDOT/CADDS SHEET 49



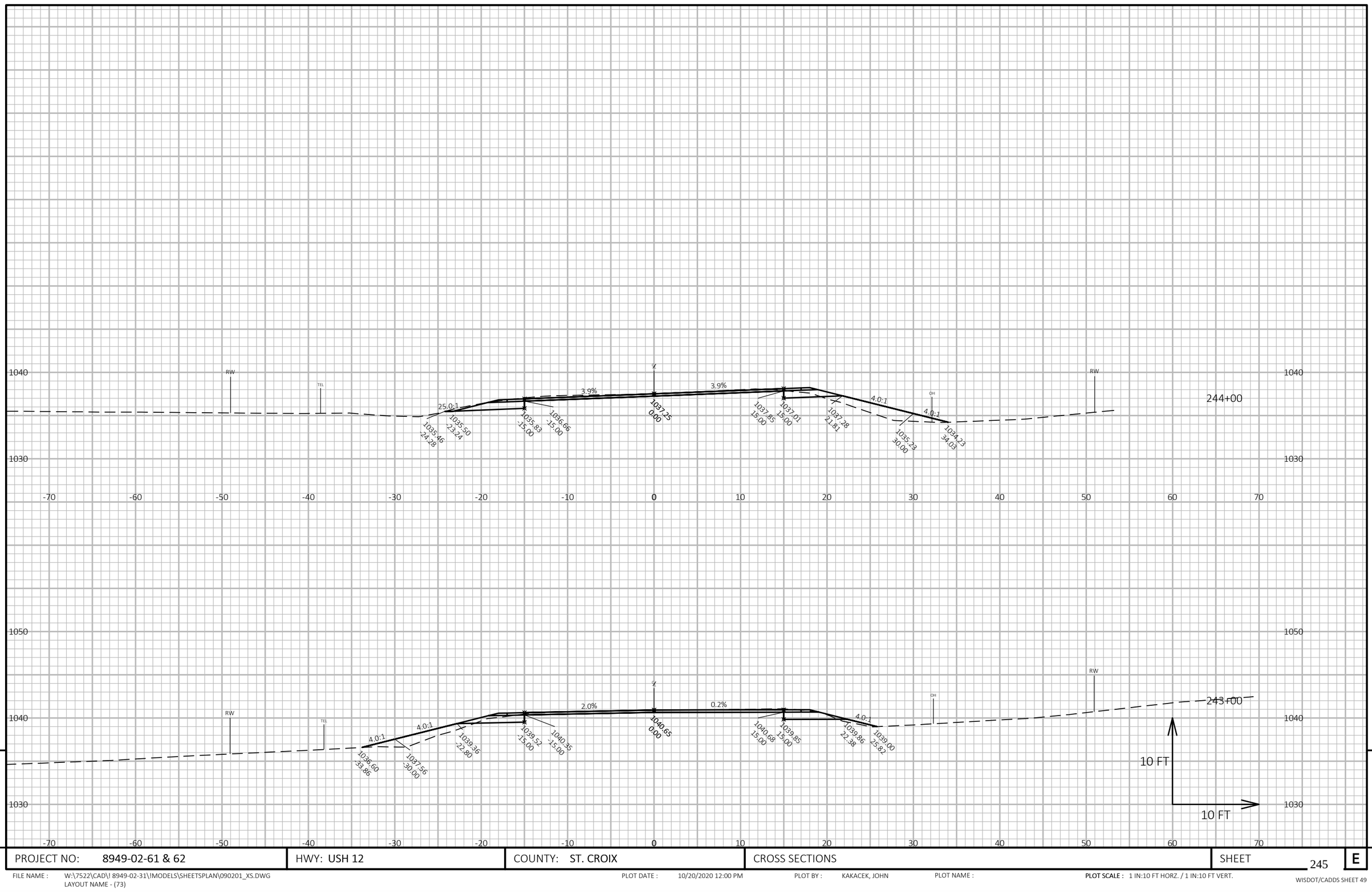
PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 244	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (72)

PLOT DATE : 10/20/2020 12:00 PM PLOT BY : KAKACEK, JOHN PLOT NAME :

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

WISDOT/CADDS SHEET 49

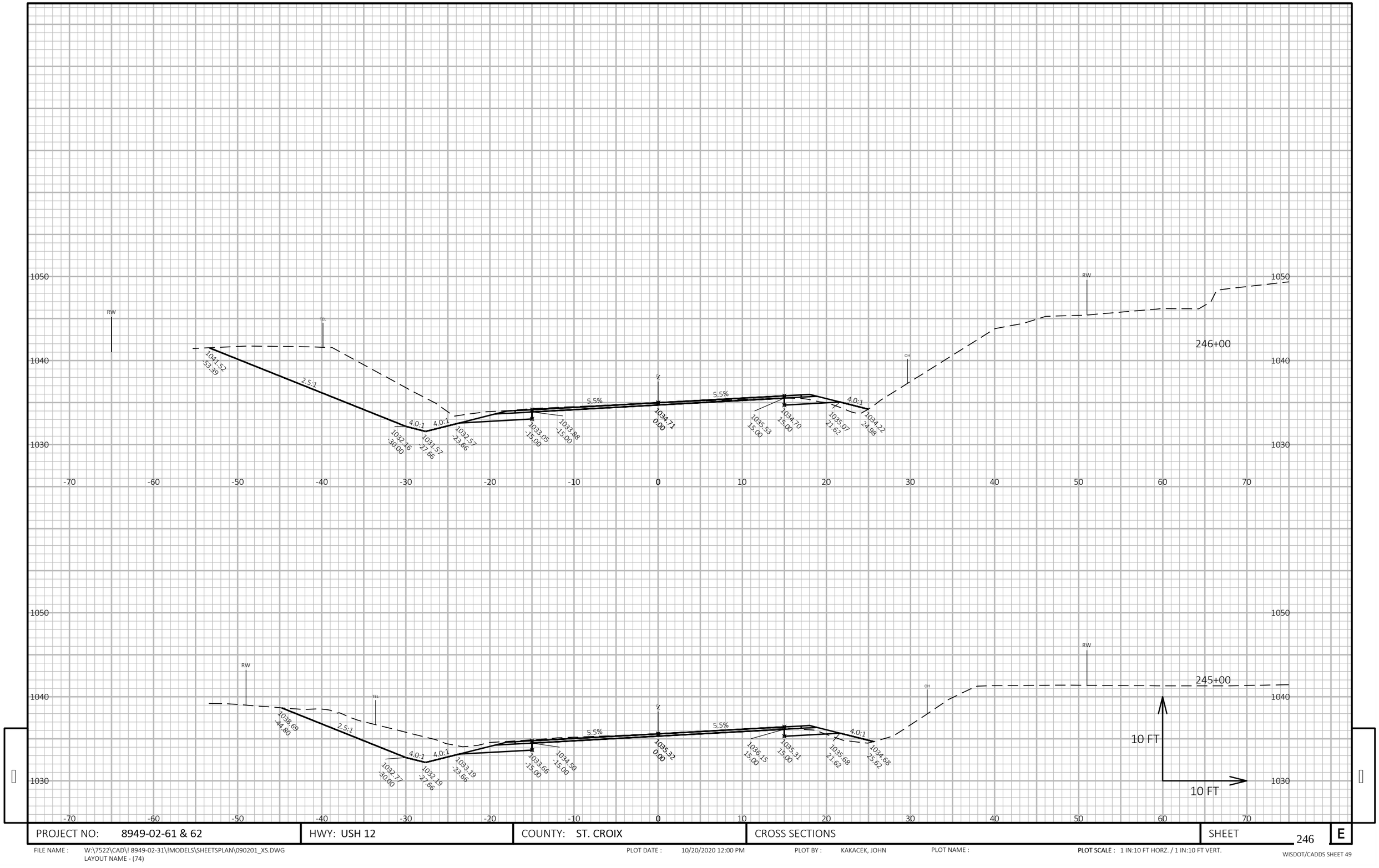


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 245	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (73)

PLOT DATE : 10/20/2020 12:00 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

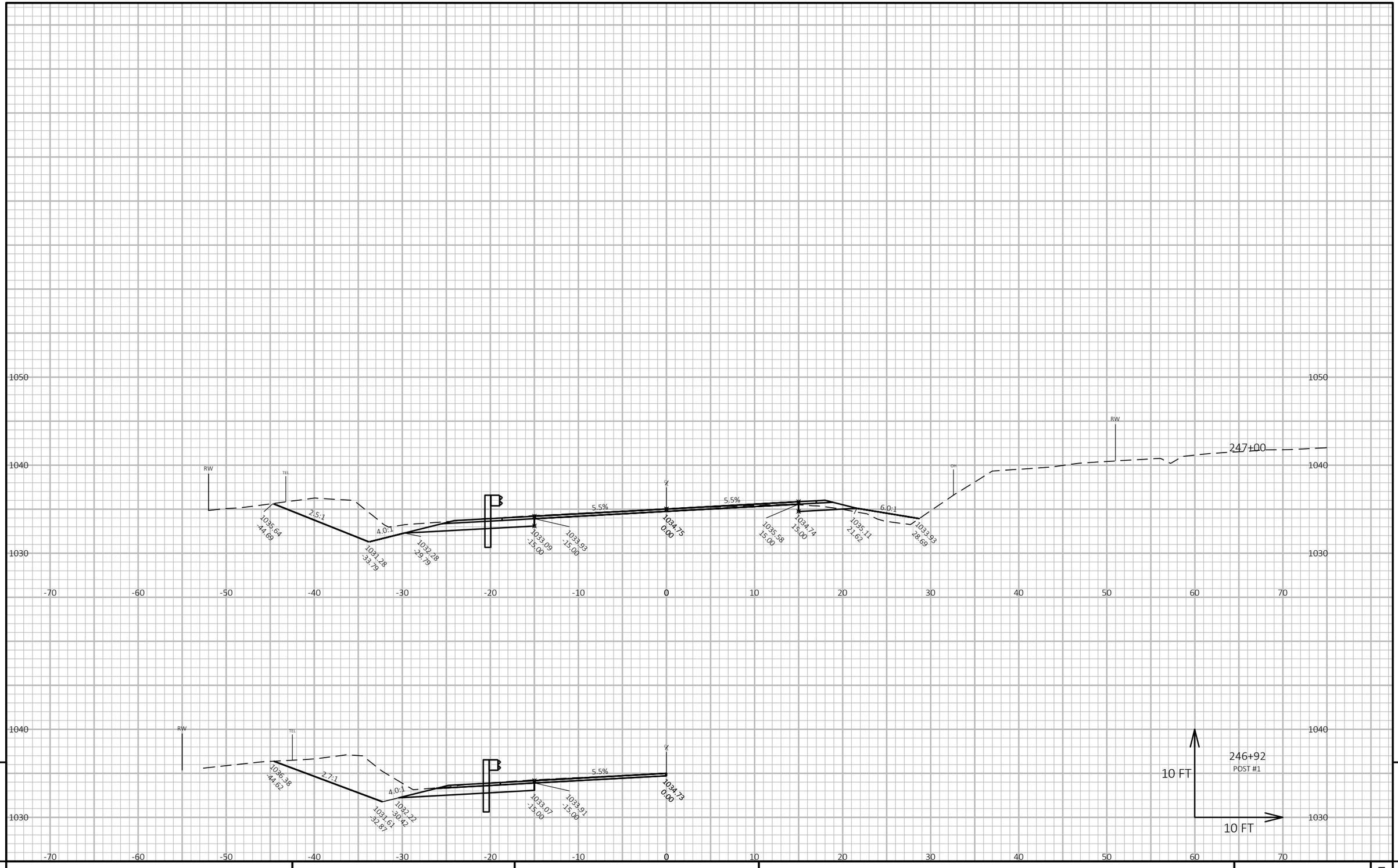


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 246	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (74)

PLOT DATE : 10/20/2020 12:00 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

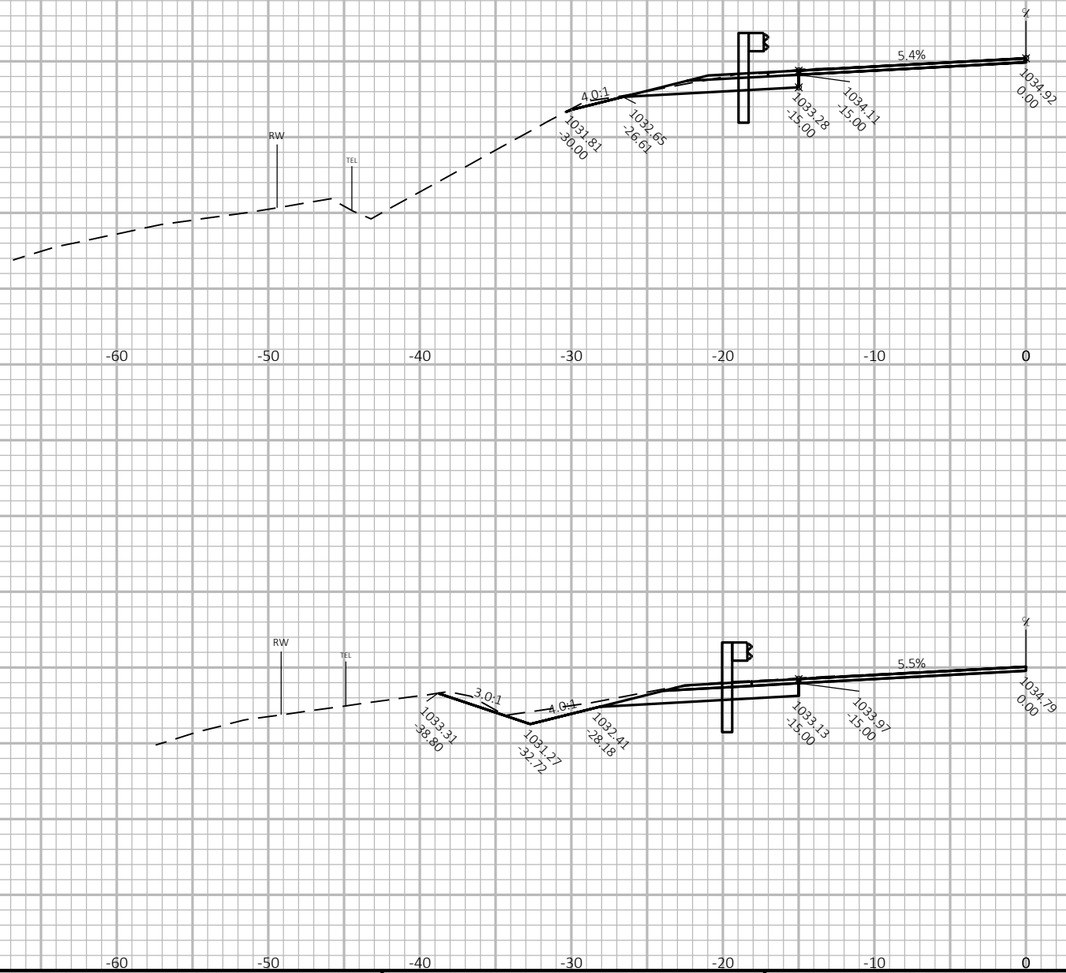


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 247	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (75)

PLOT DATE : 10/20/2020 12:01 PM PLOT BY : KAKACEK, JOHN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

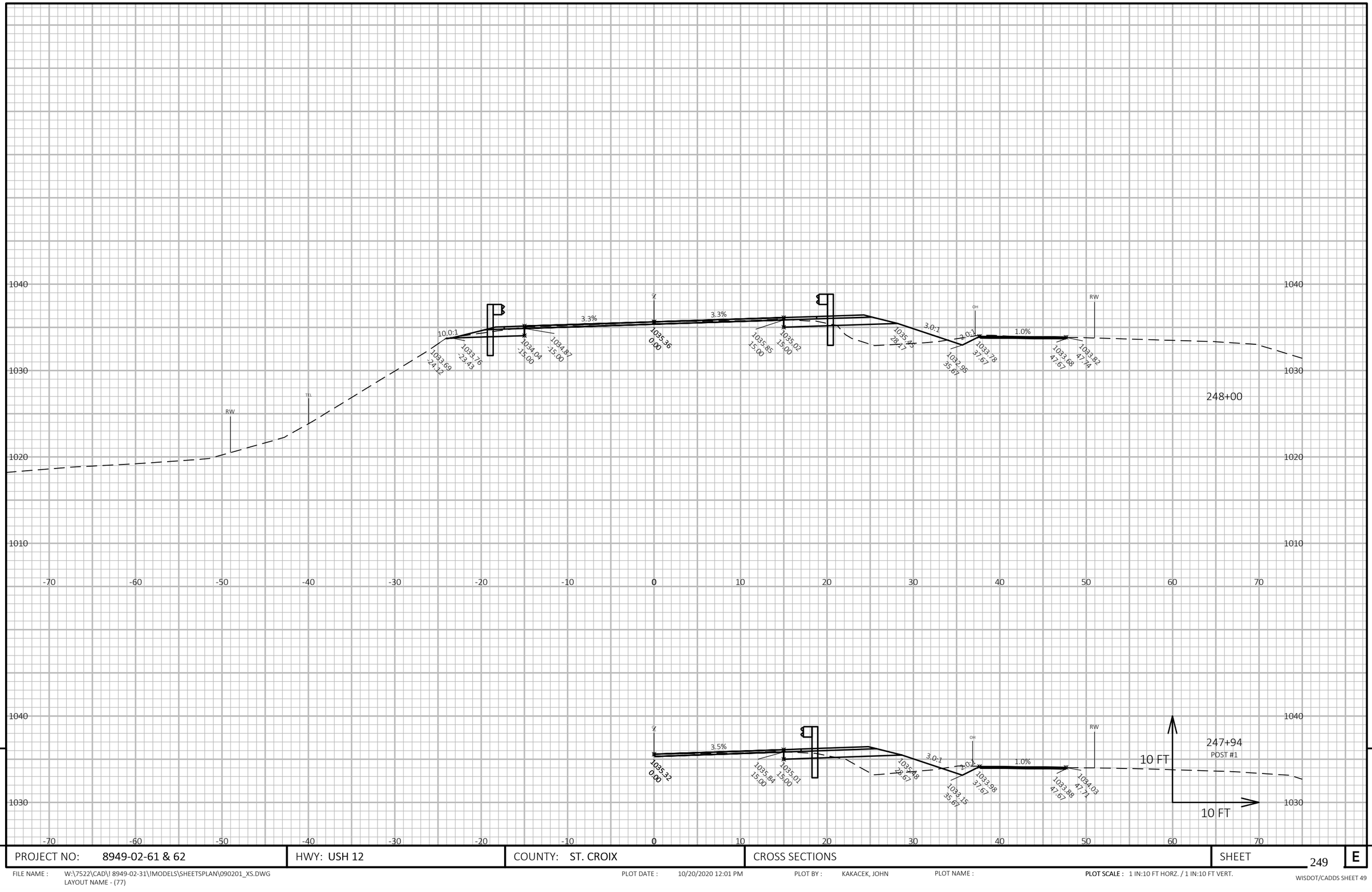


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 248	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (76)

PLOT DATE : 10/20/2020 12:01 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

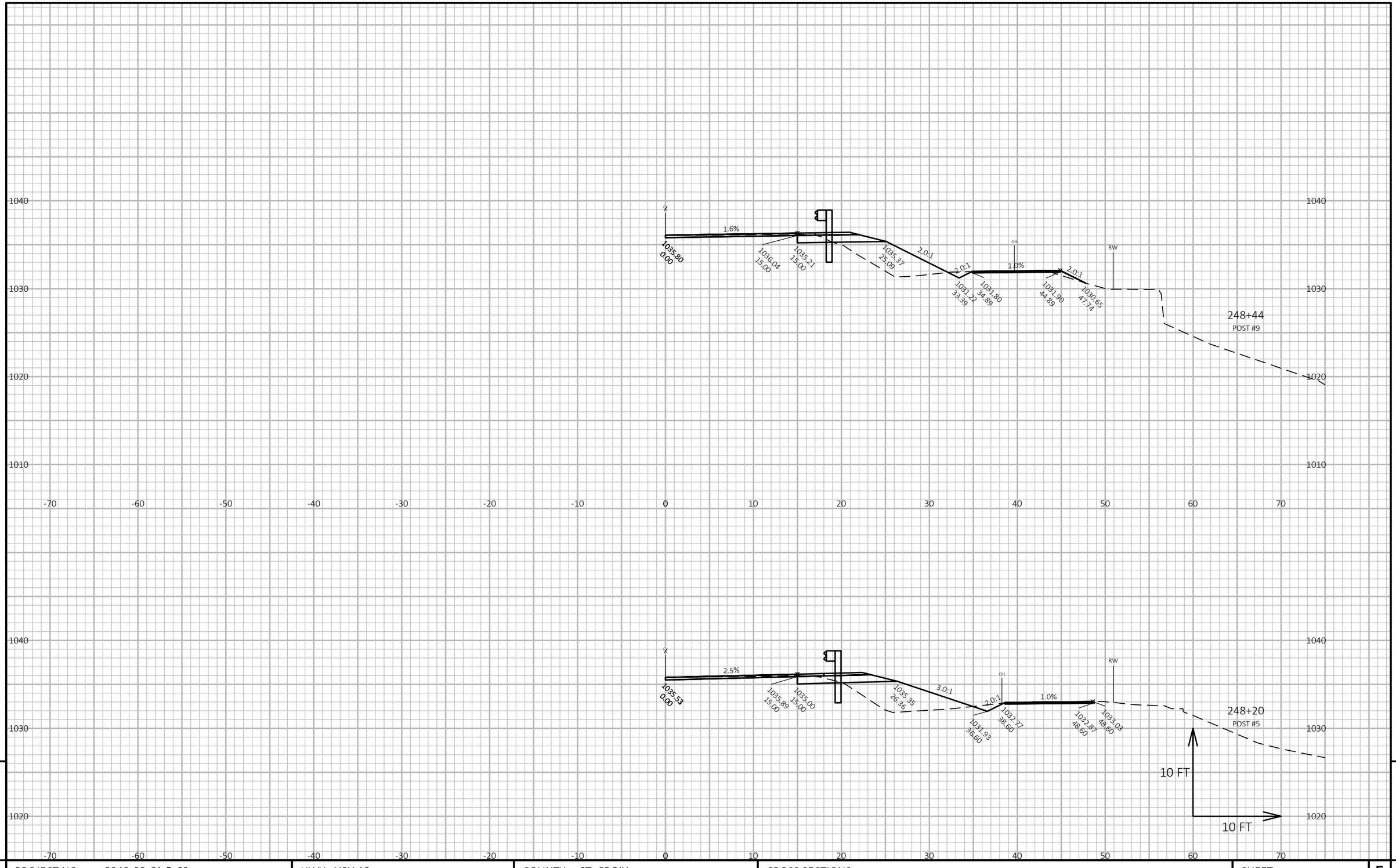
WISDOT/CADDS SHEET 49



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 249	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (77)

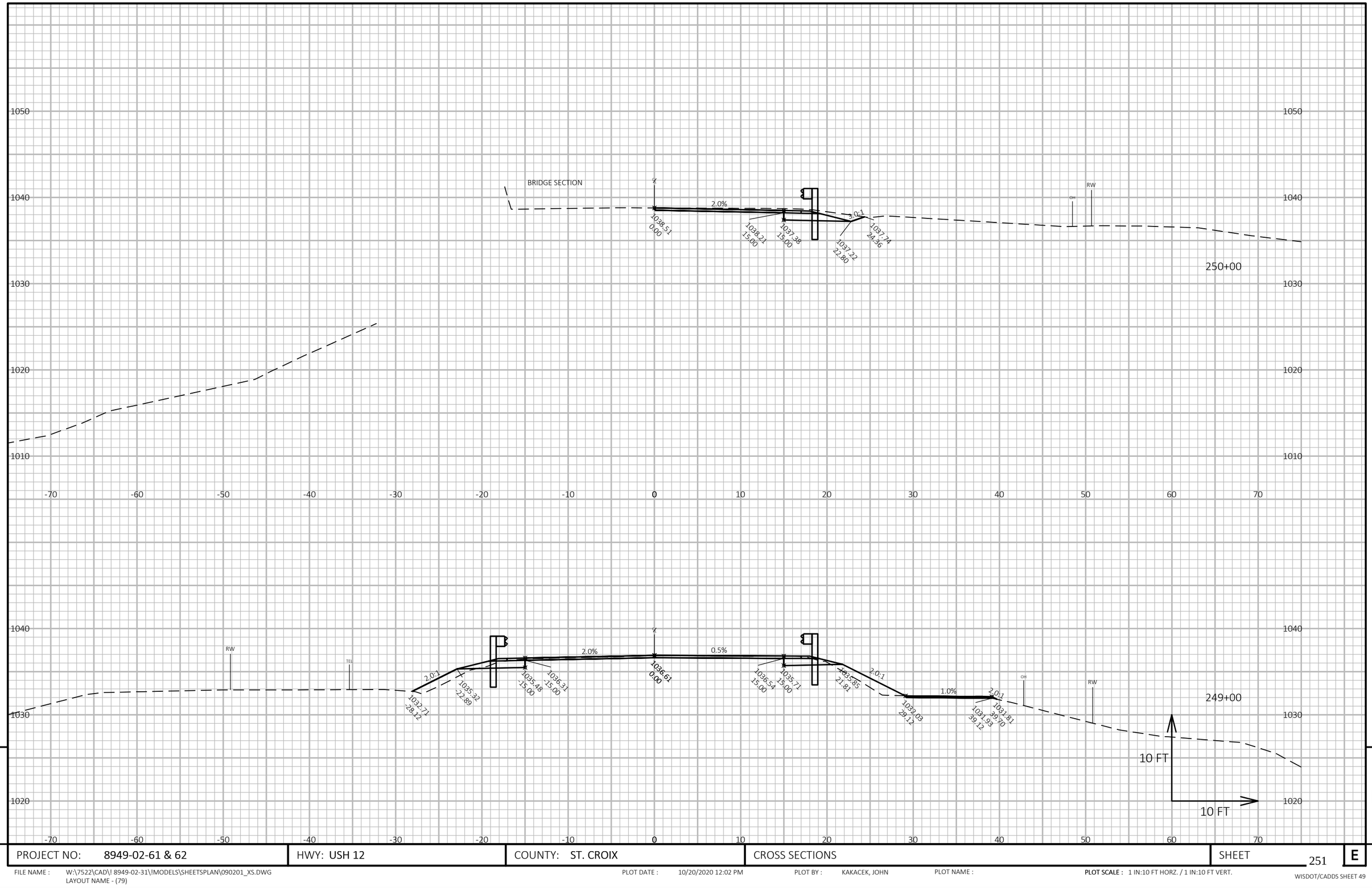
PLOT DATE : 10/20/2020 12:01 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 250	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (78)

PLOT DATE : 10/20/2020 12:02 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

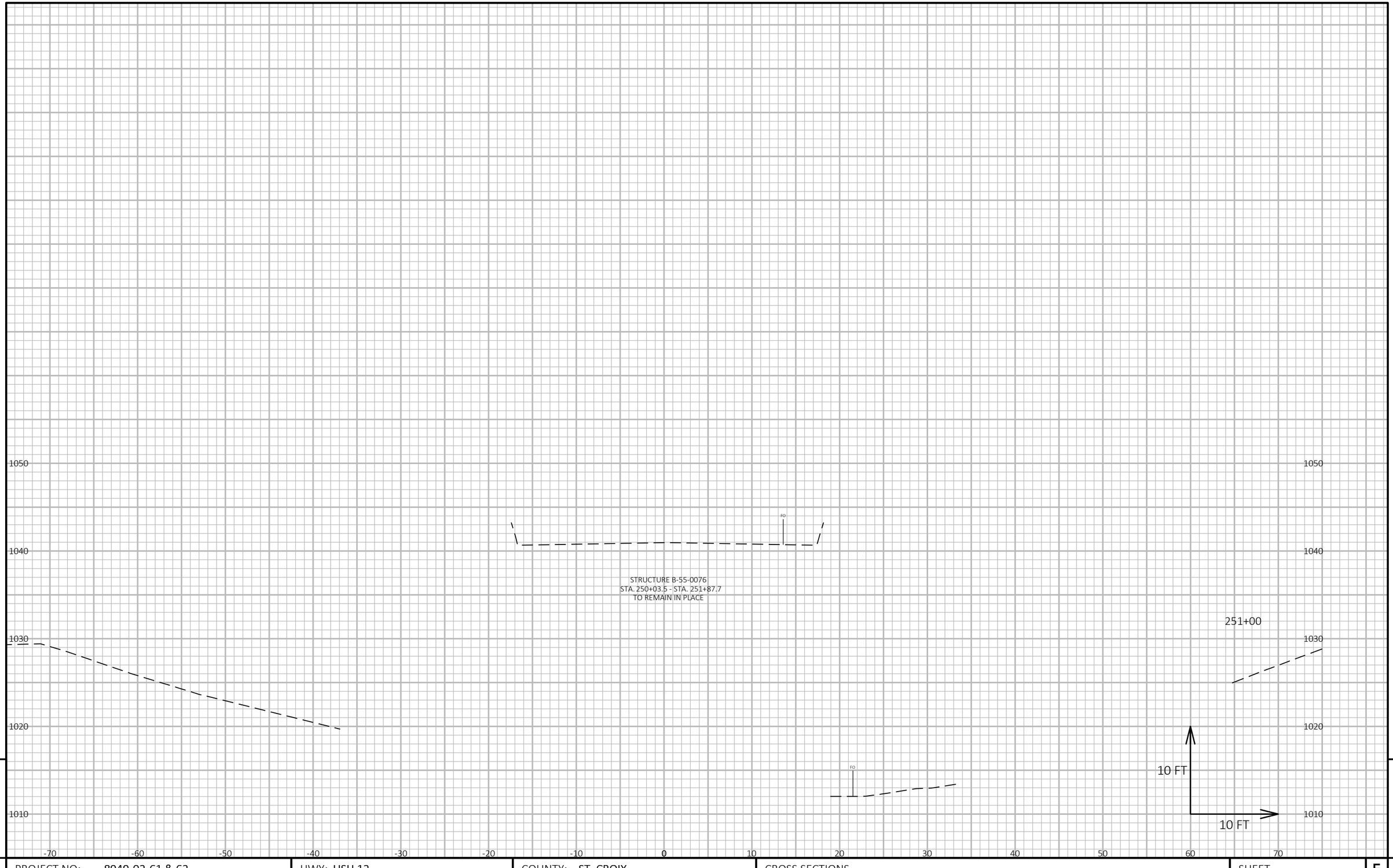


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 251	E

FILE NAME : W:\7522\CAD\I 8949-02-31\IMODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (79)

PLOT DATE : 10/20/2020 12:02 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 252	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (80)

PLOT DATE : 10/20/2020 12:03 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

ALEXANDER ROAD
INTERSECTION

253+00

2.0%

2.0:1

1044.74
0.00

1044.44
15.00

1043.61
15.00

1043.42
24.50

1042.85
25.65

RW

OH

FO

℄

1050
1040
1030

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

BRIDGE SECTION

252+00

2.0%

2.0:1

1042.63
0.00

1042.33
-15.00

1041.50
-15.00

1041.30
-24.76

1036.57
-34.23

RW

rdEL

OH

10 FT

10 FT

1050
1040
1030
1020
1010

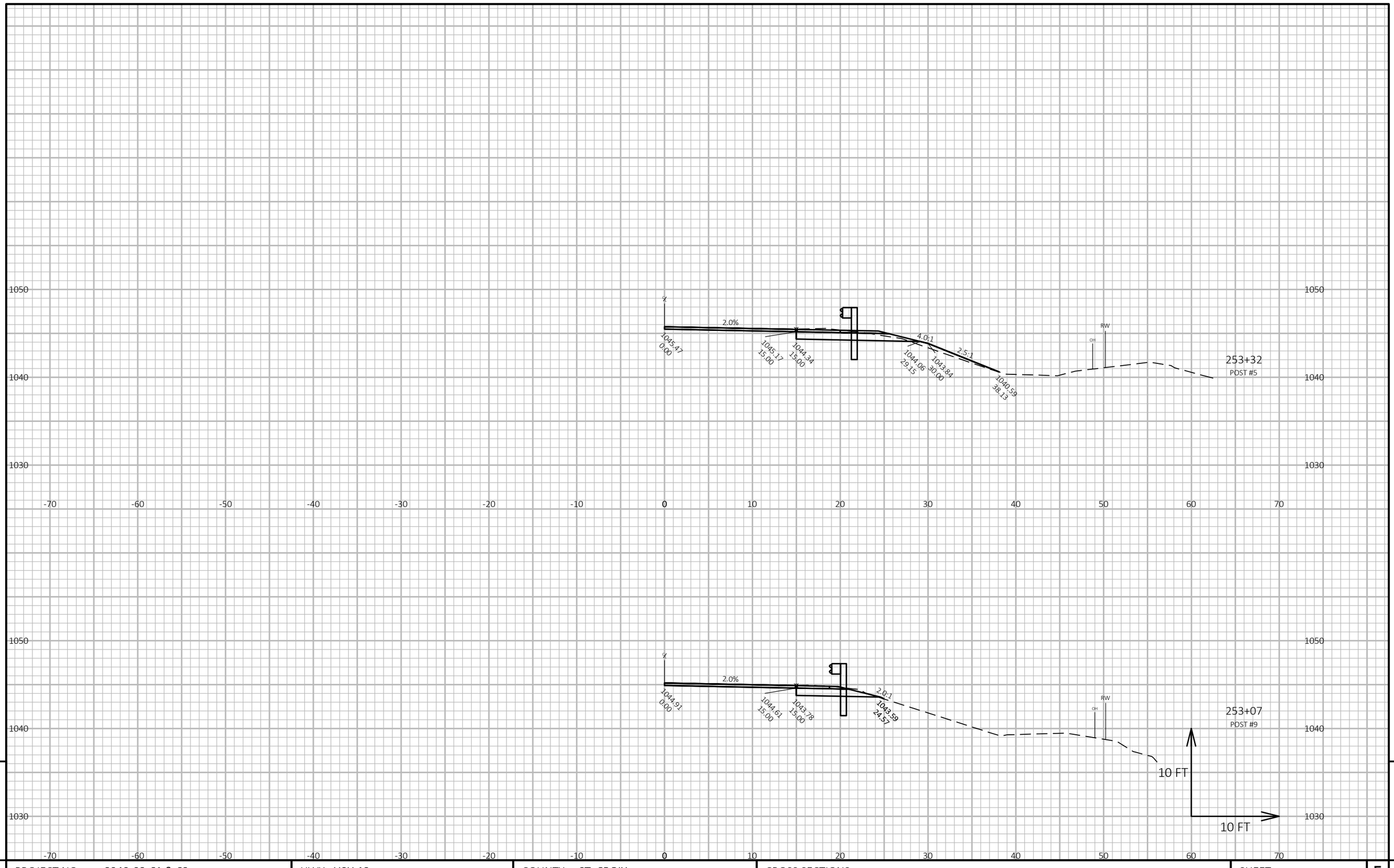
-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 253	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (81)

PLOT DATE : 10/20/2020 12:03 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

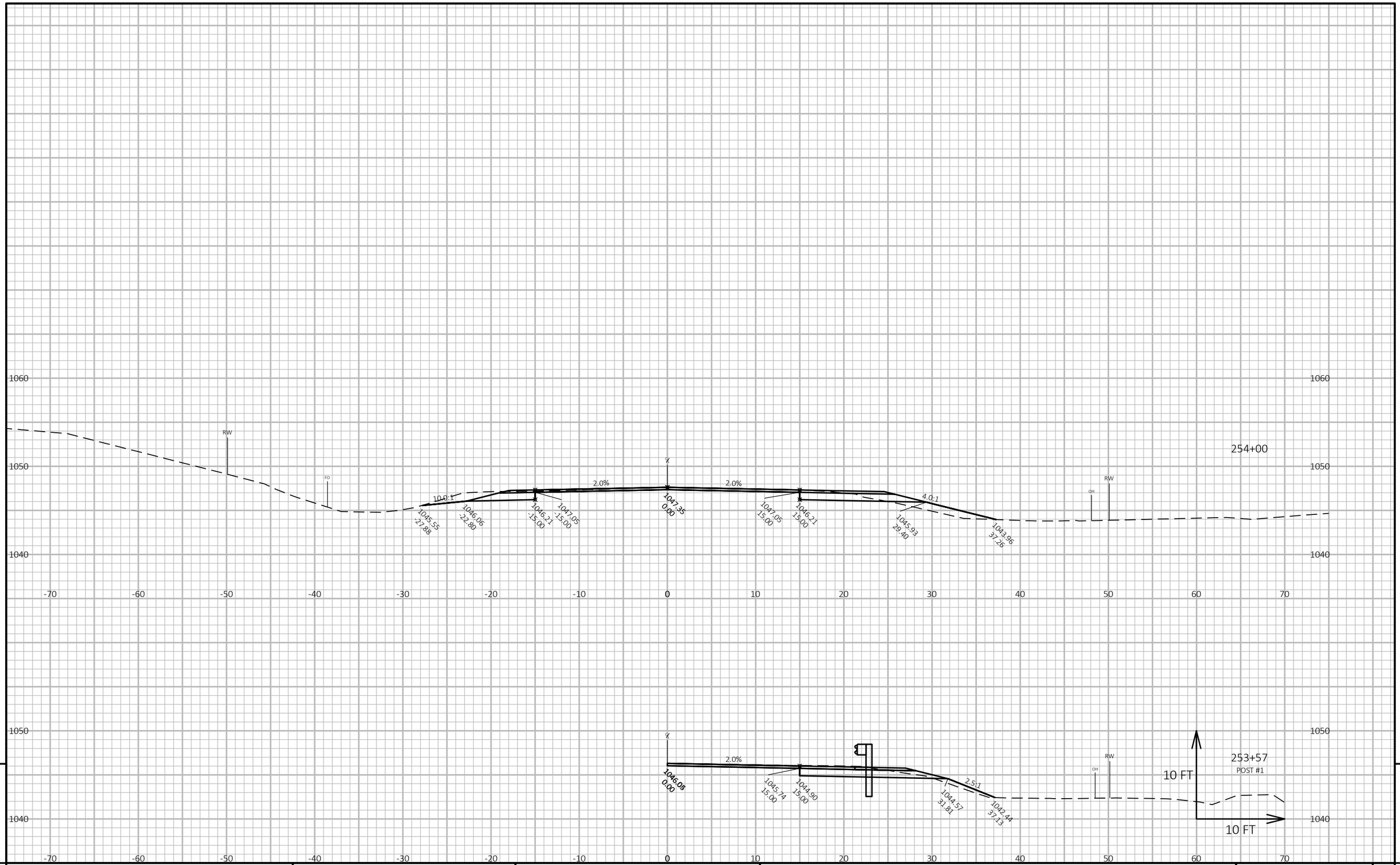
WISDOT/CADDS SHEET 49



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 254	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (82)

PLOT DATE : 10/20/2020 12:03 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

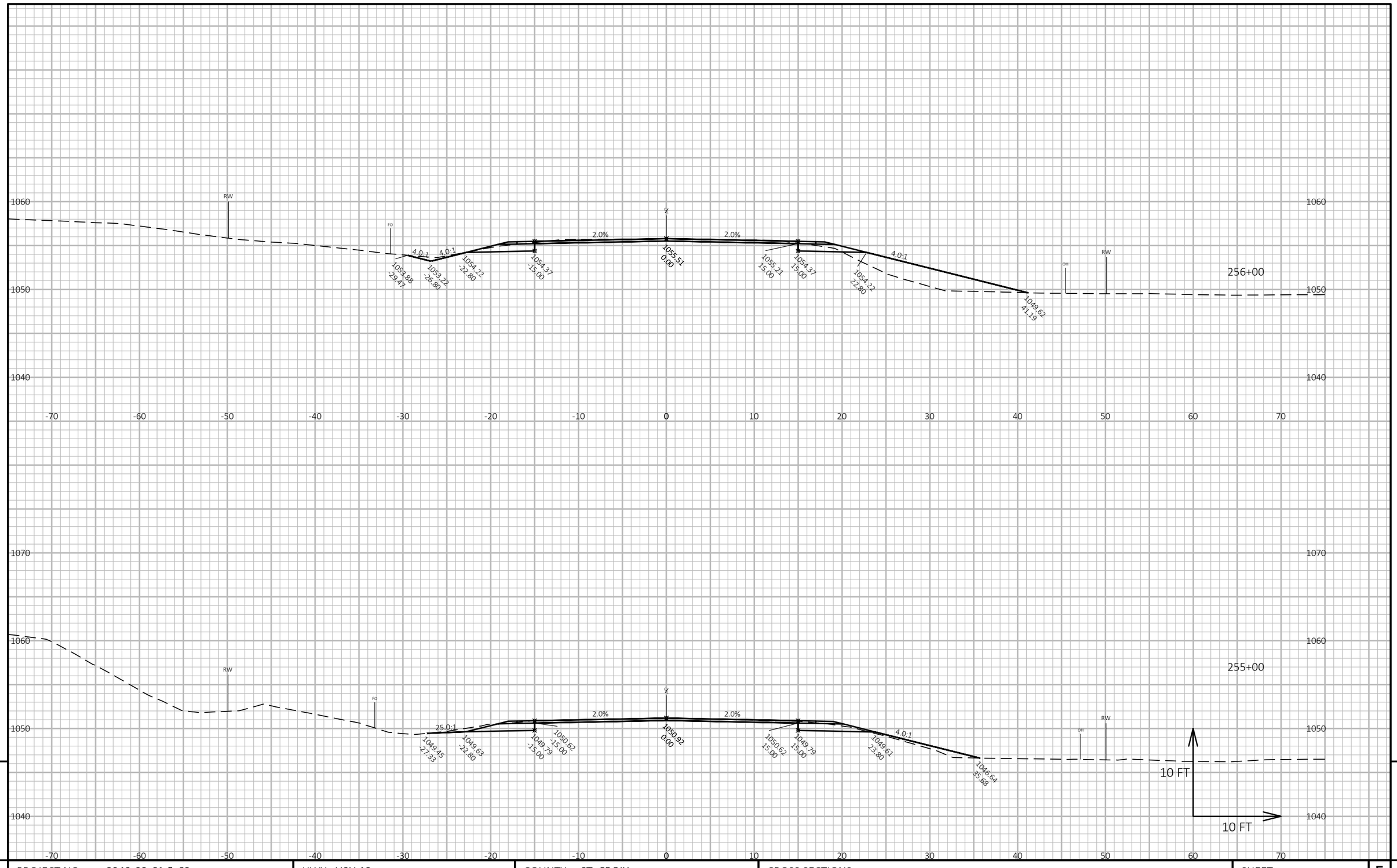


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 255	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (83)

PLOT DATE : 10/20/2020 12:04 PM PLOT BY : KAKACEK, JOHN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

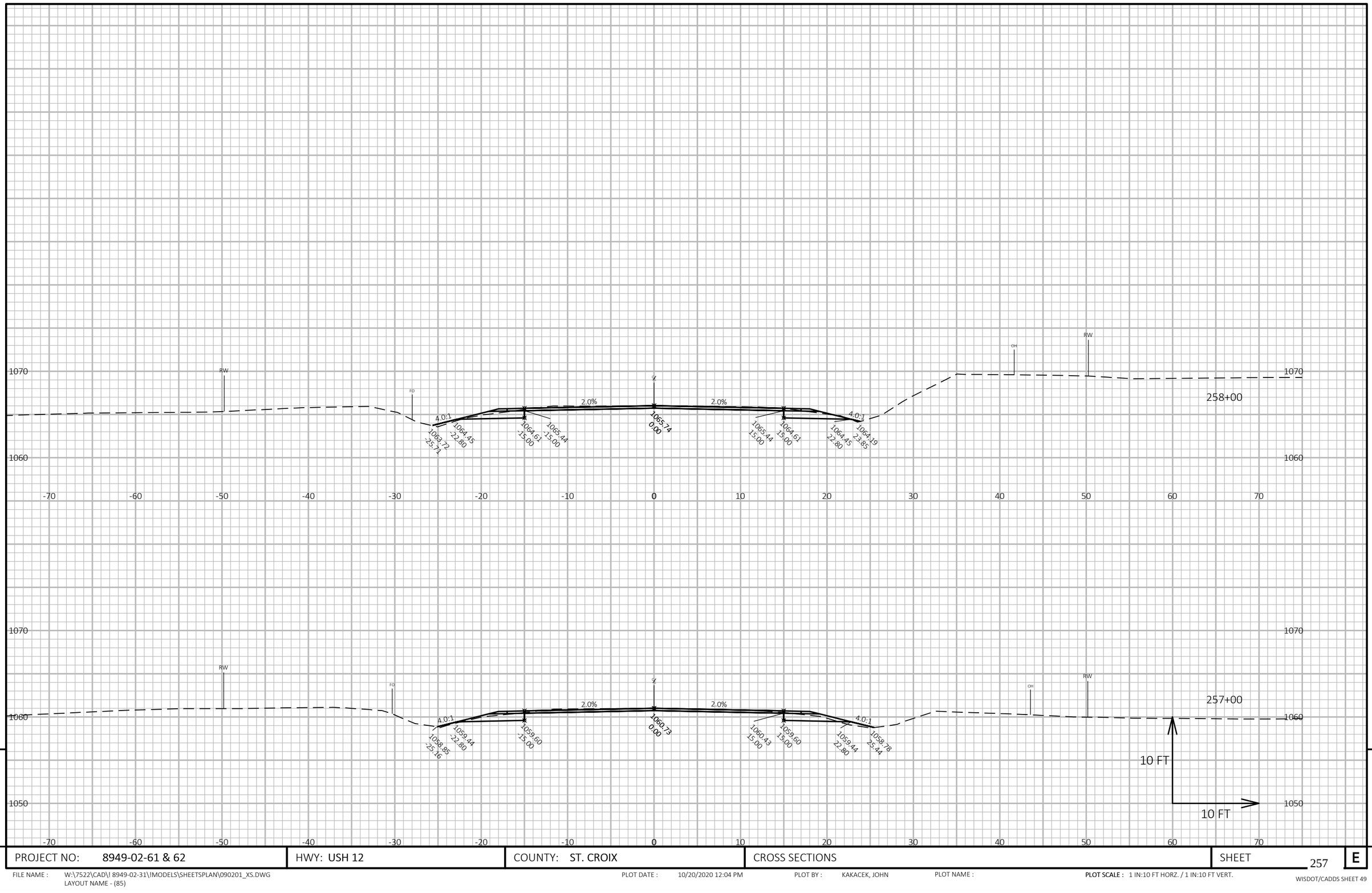


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 256	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (84)

PLOT DATE : 10/20/2020 12:04 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

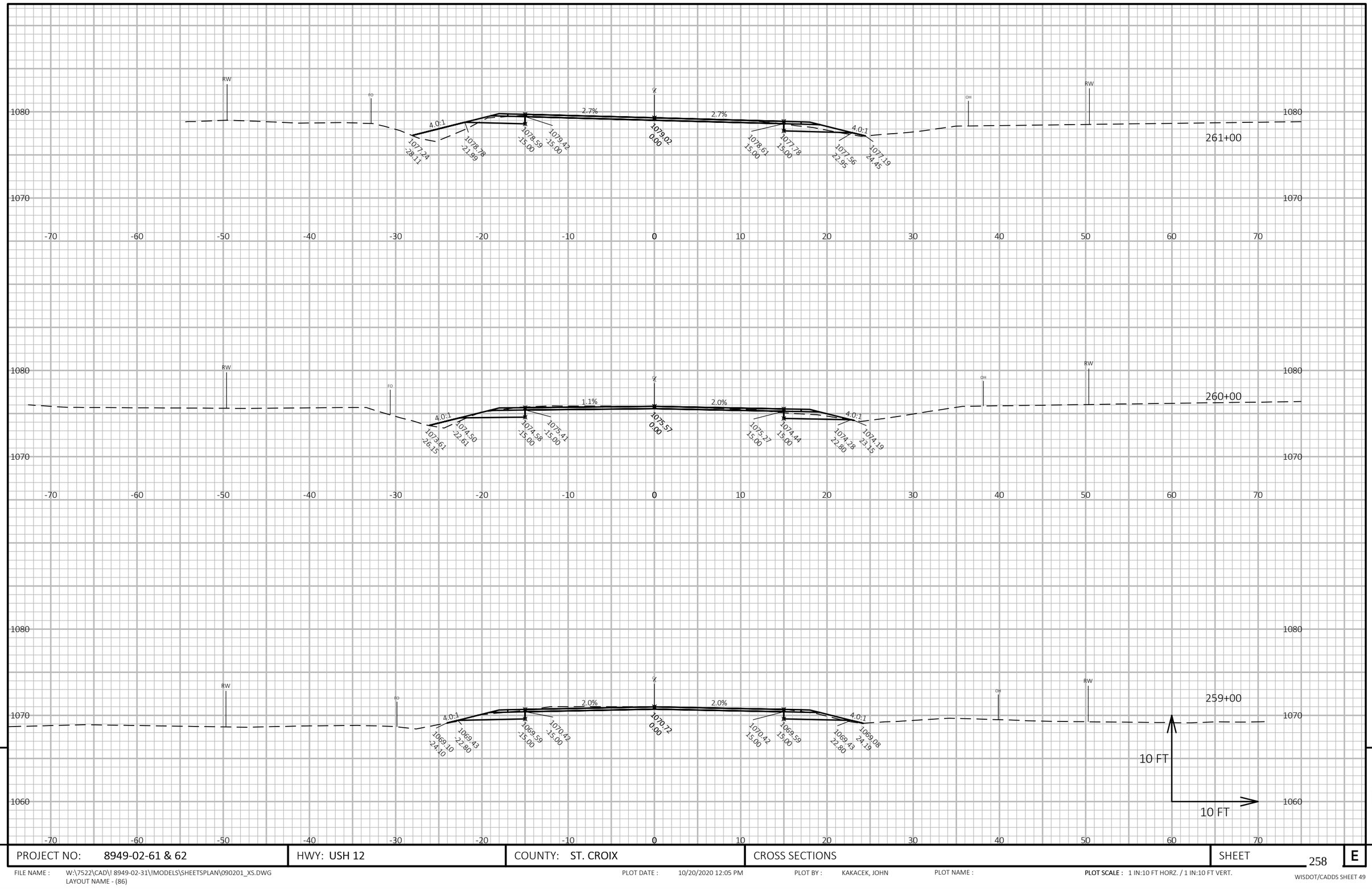


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 257	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (85)

PLOT DATE : 10/20/2020 12:04 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

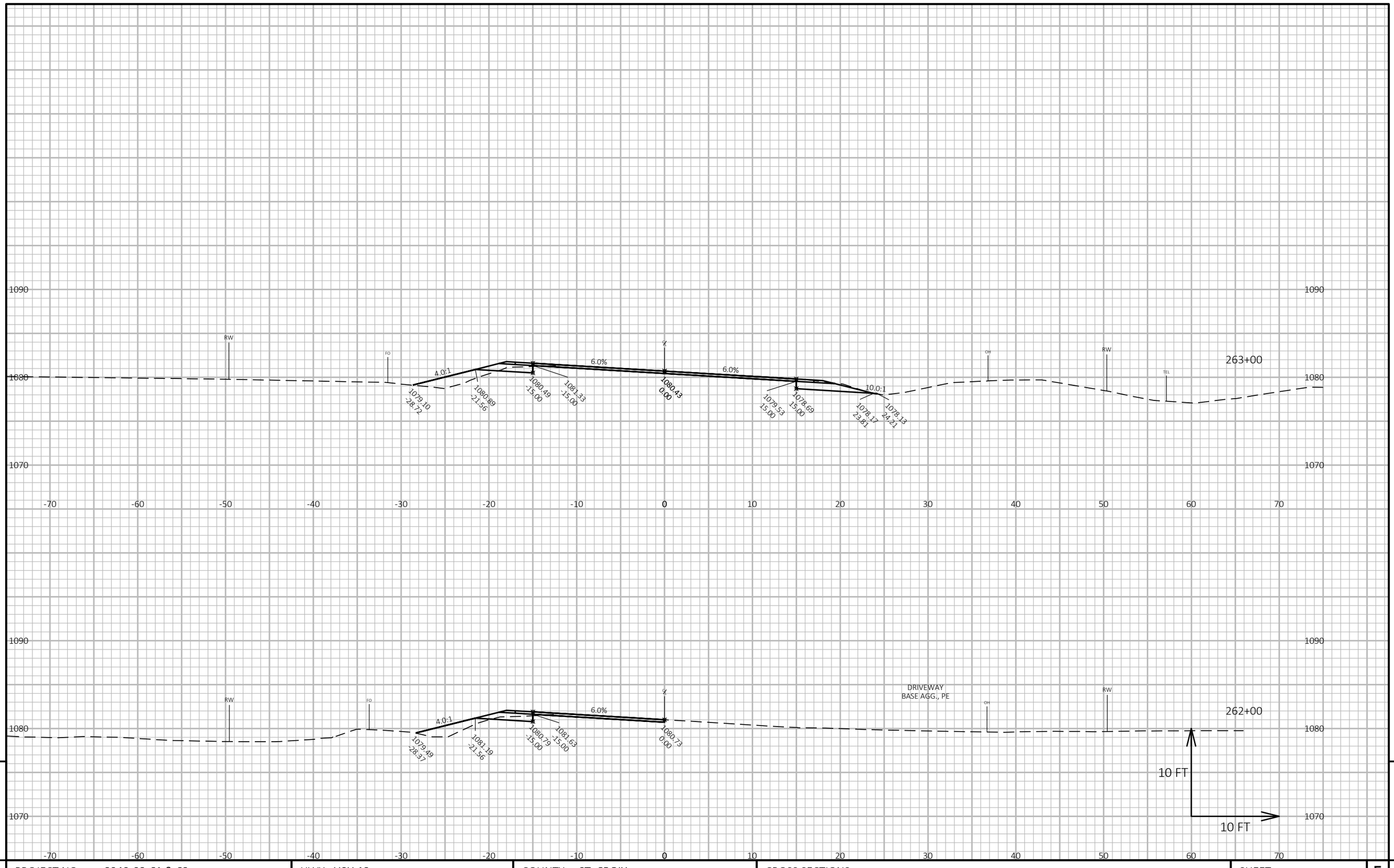
WISDOT/CADDS SHEET 49



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 258	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (86)

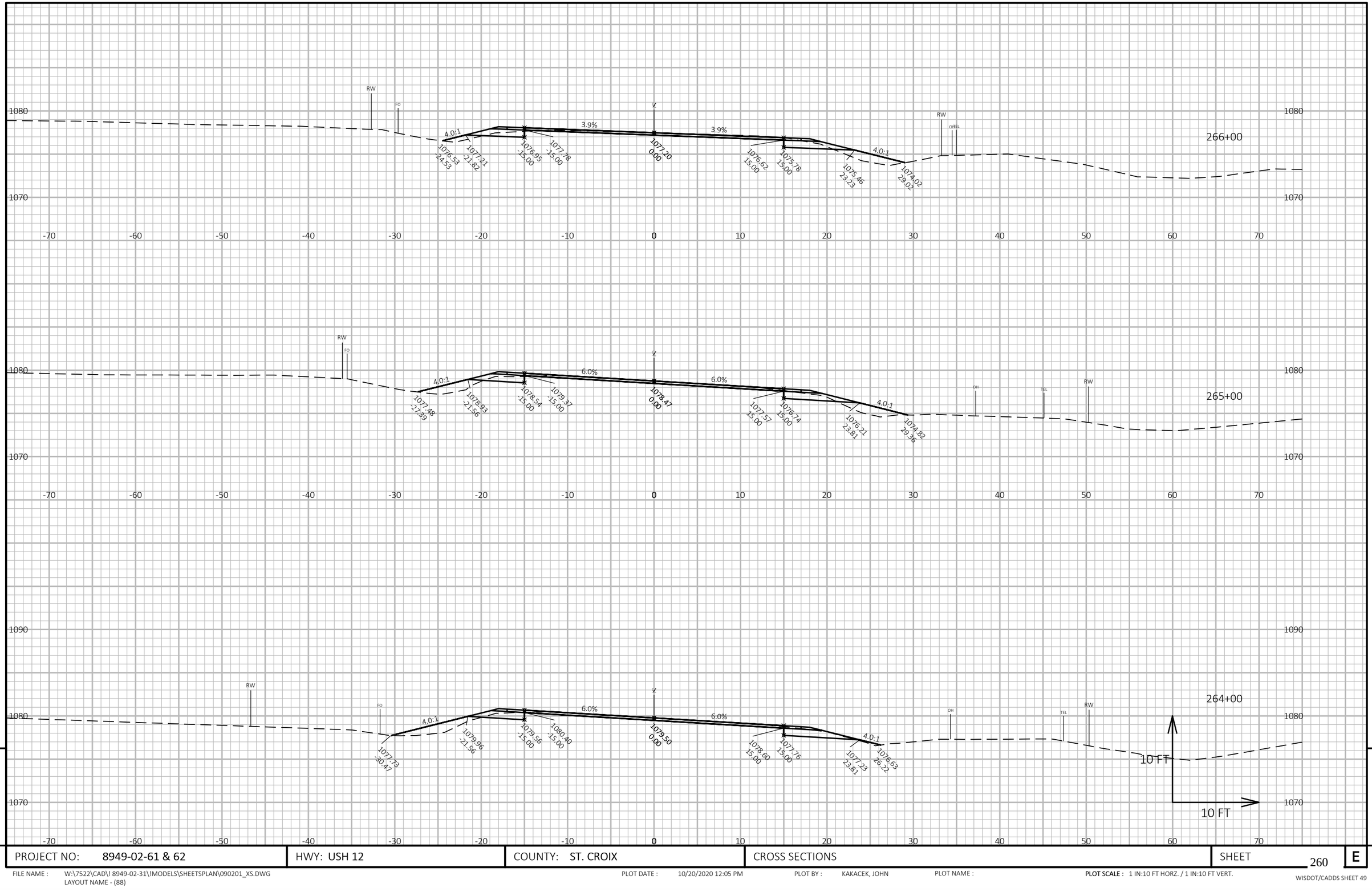
PLOT DATE : 10/20/2020 12:05 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 259	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (87)

PLOT DATE : 10/20/2020 12:05 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

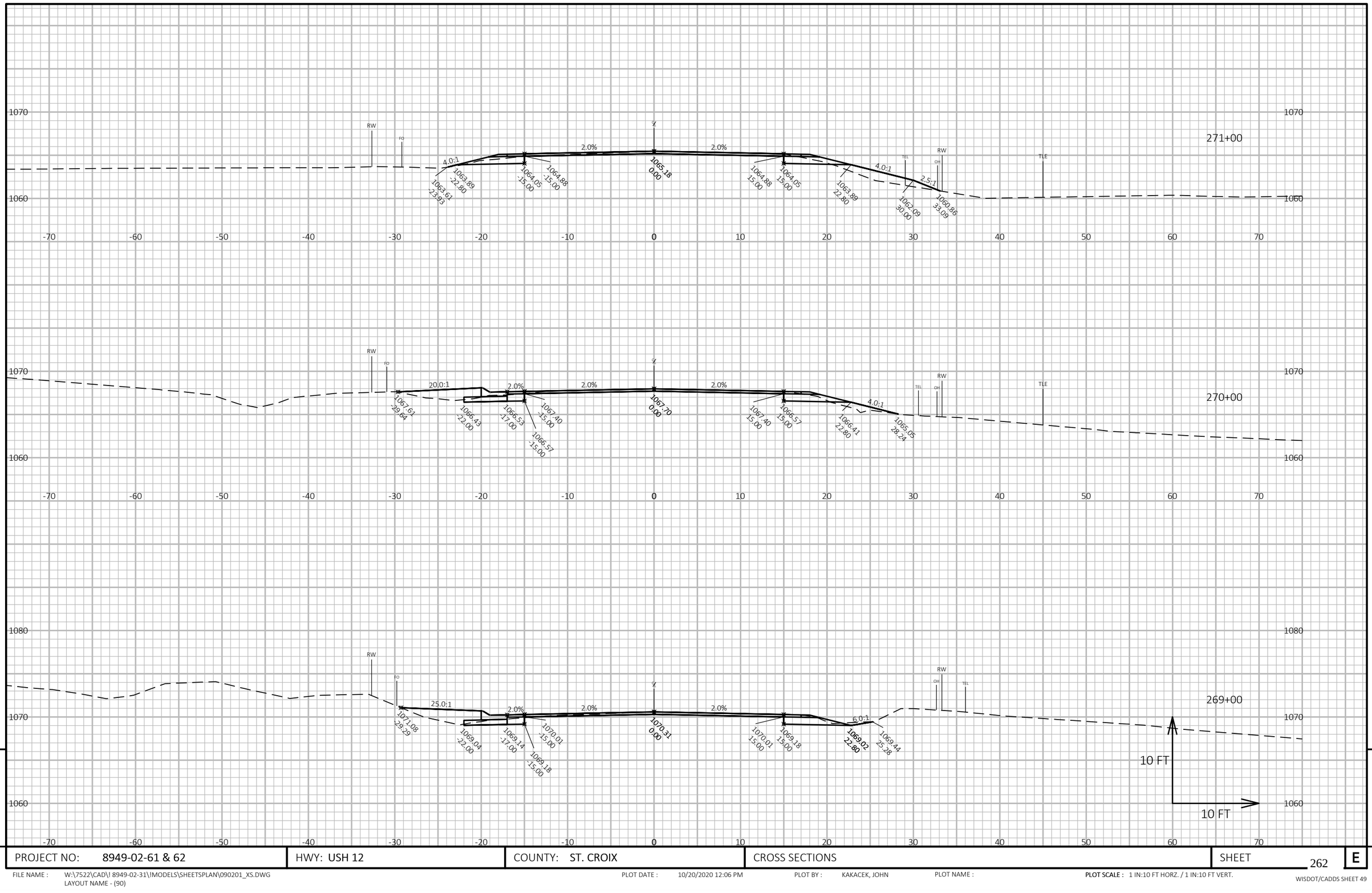


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 260	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (88)

PLOT DATE : 10/20/2020 12:05 PM PLOT BY : KAKACEK, JOHN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 261	E

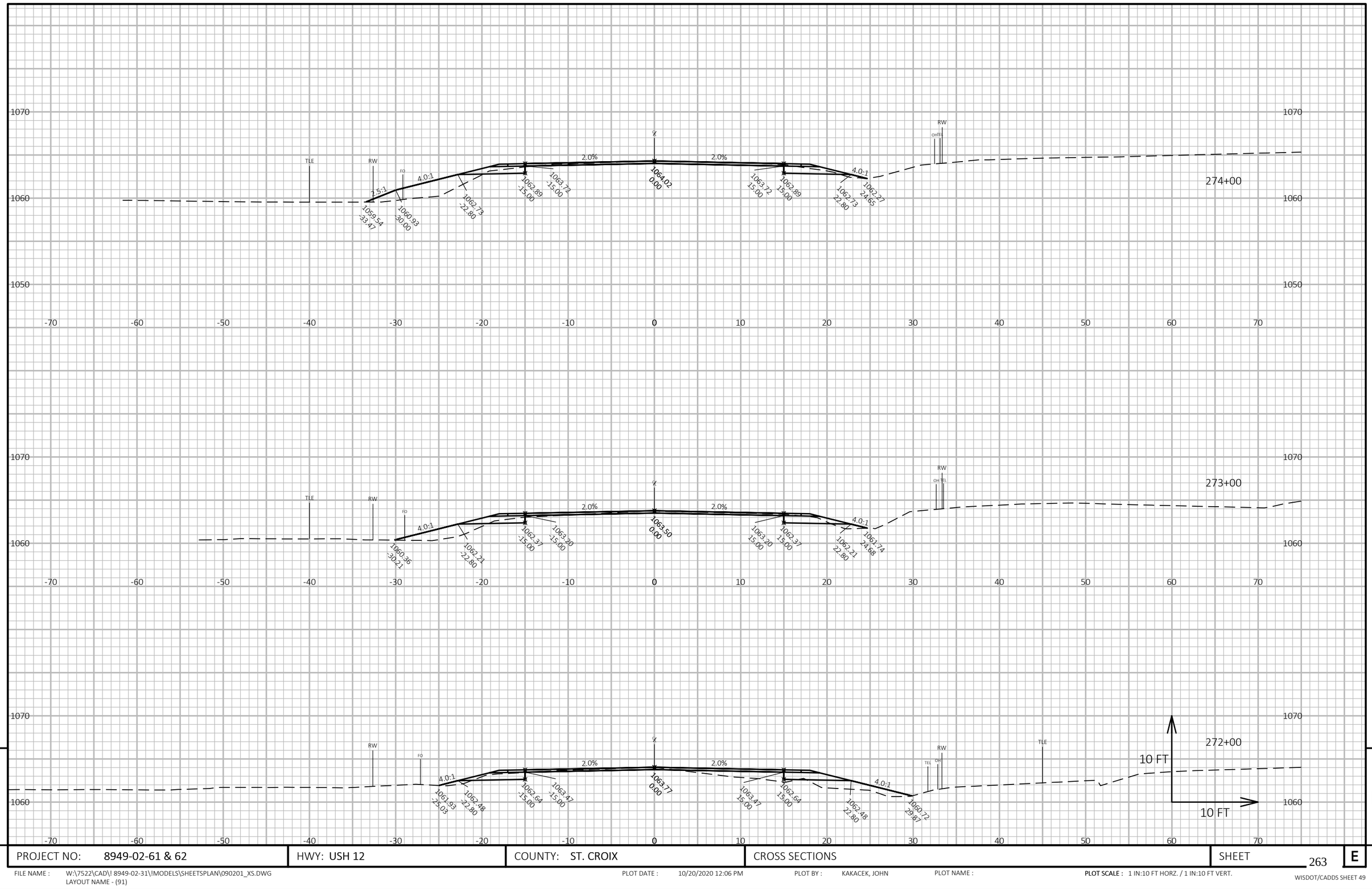


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 262	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (90)

PLOT DATE : 10/20/2020 12:06 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

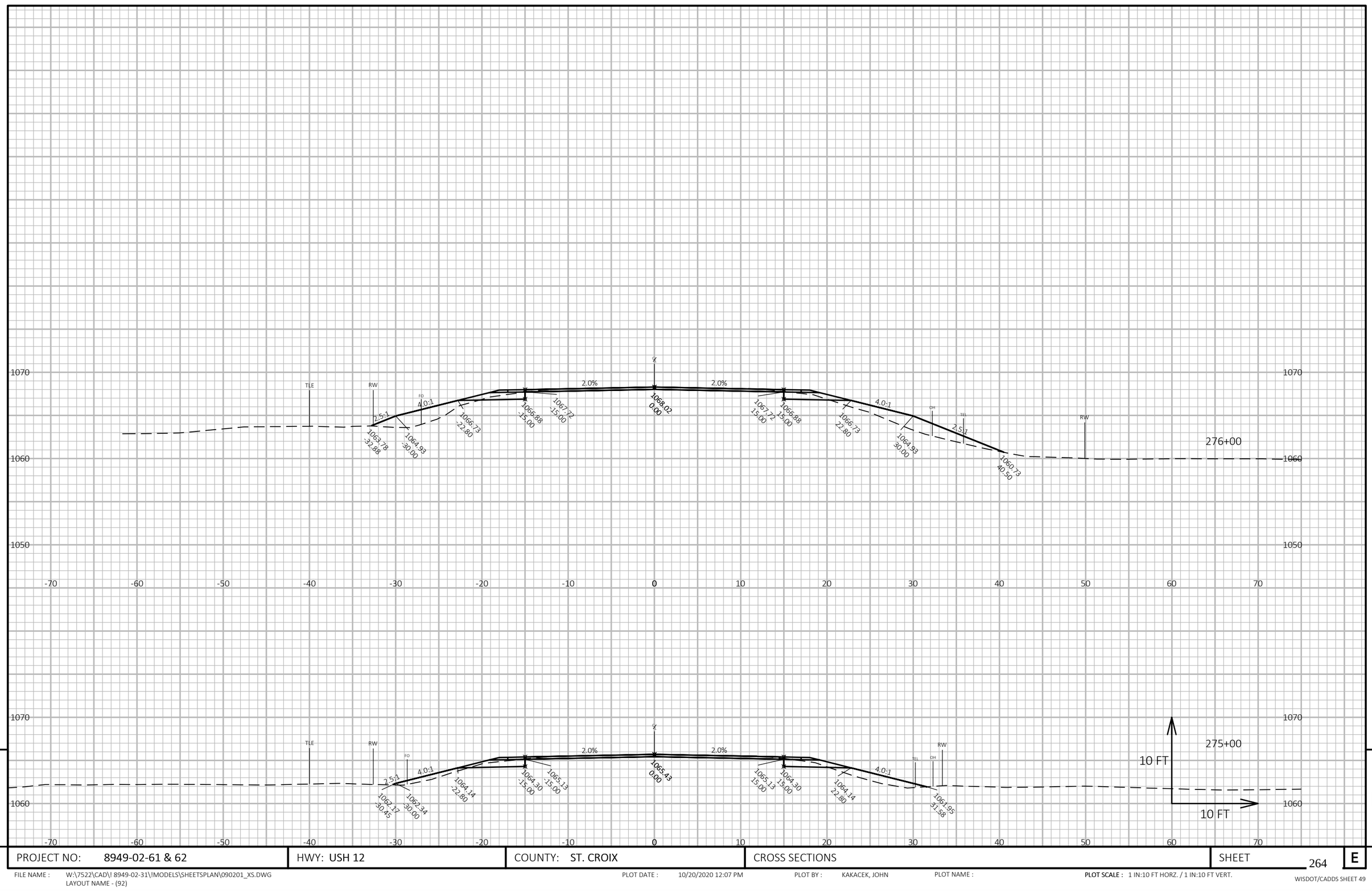


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 263	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (91)

PLOT DATE : 10/20/2020 12:06 PM PLOT BY : KAKACEK, JOHN PLOT NAME :

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

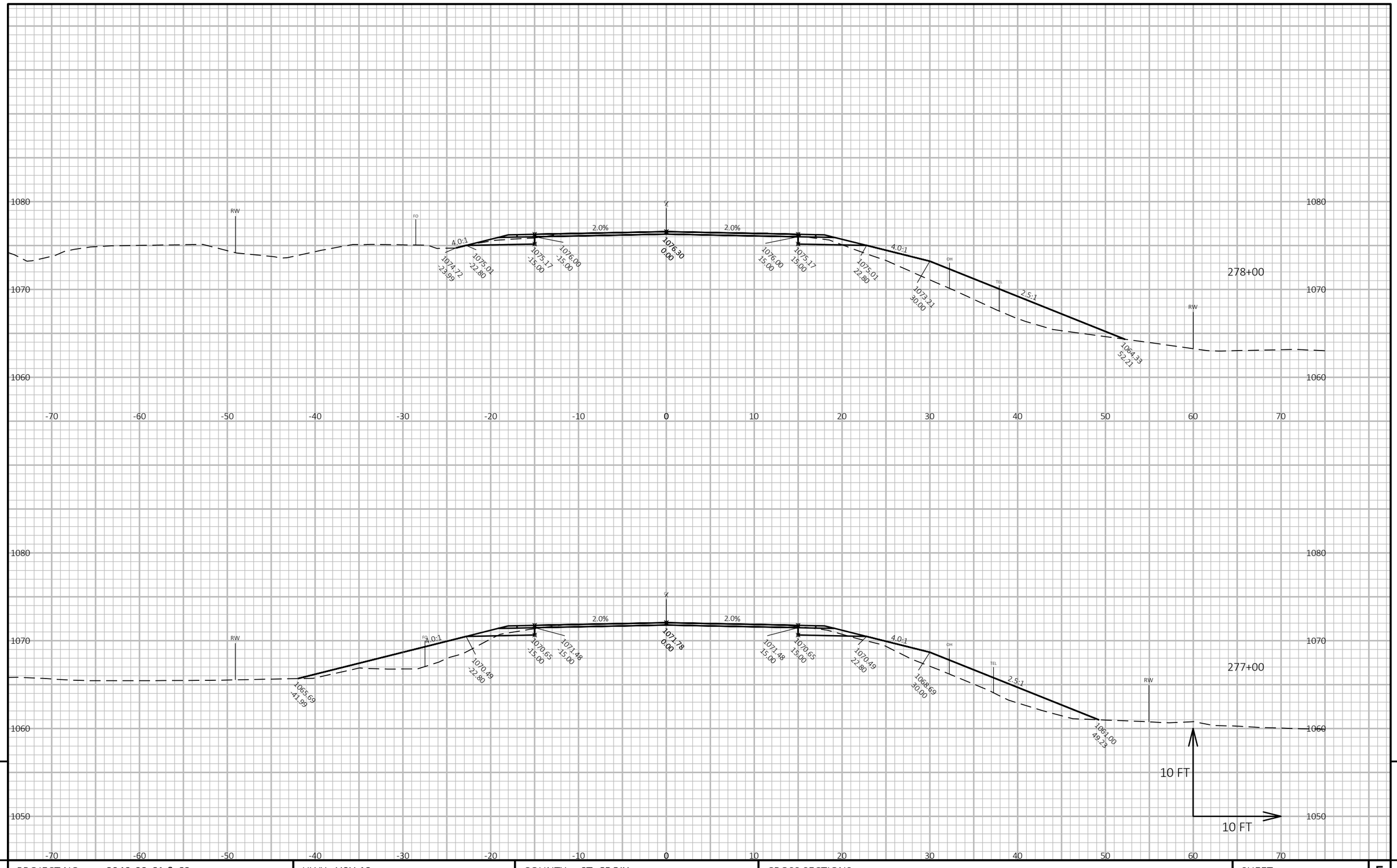


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 264	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (92)

PLOT DATE : 10/20/2020 12:07 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

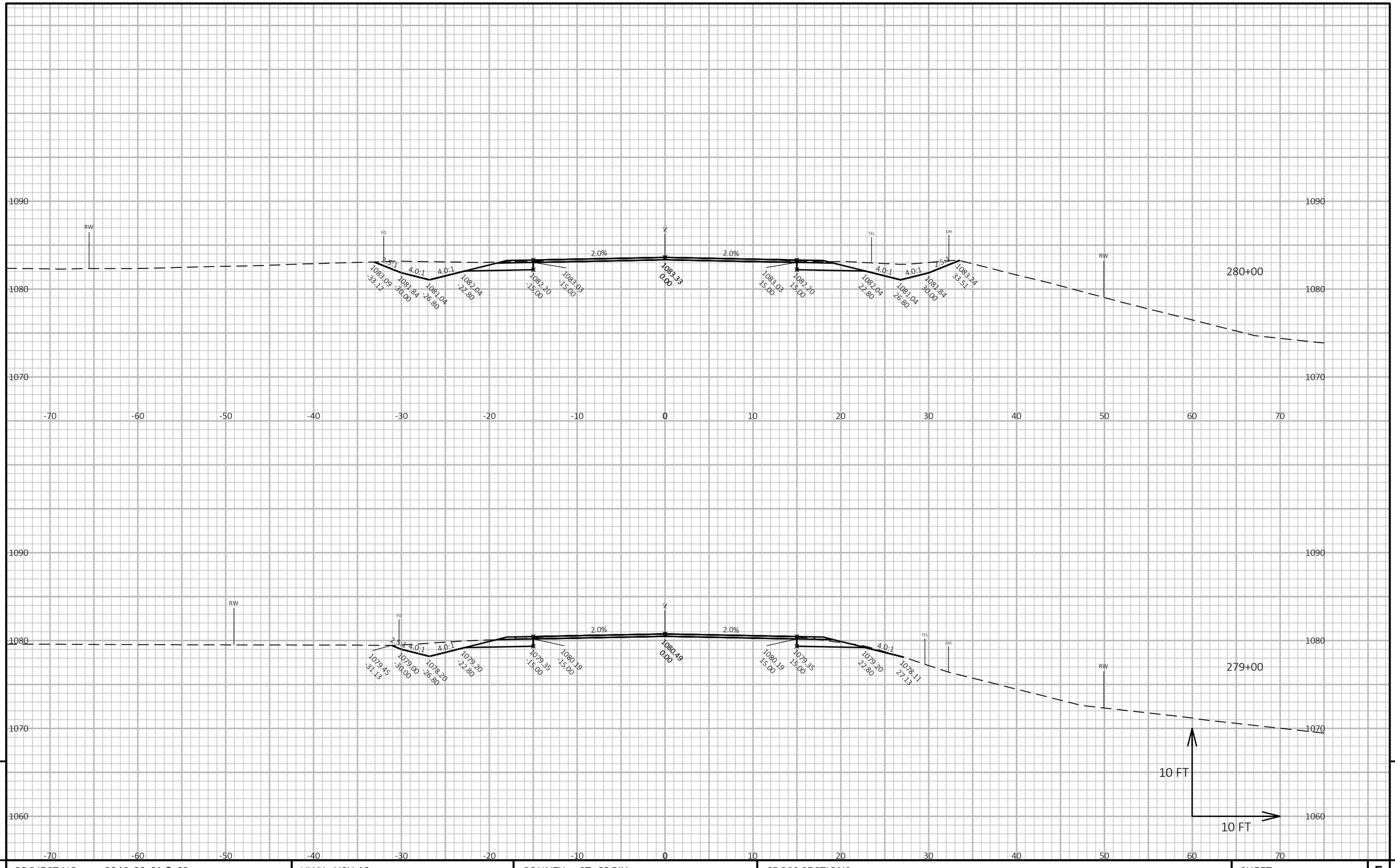


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 265	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (93)

PLOT DATE : 10/20/2020 12:07 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

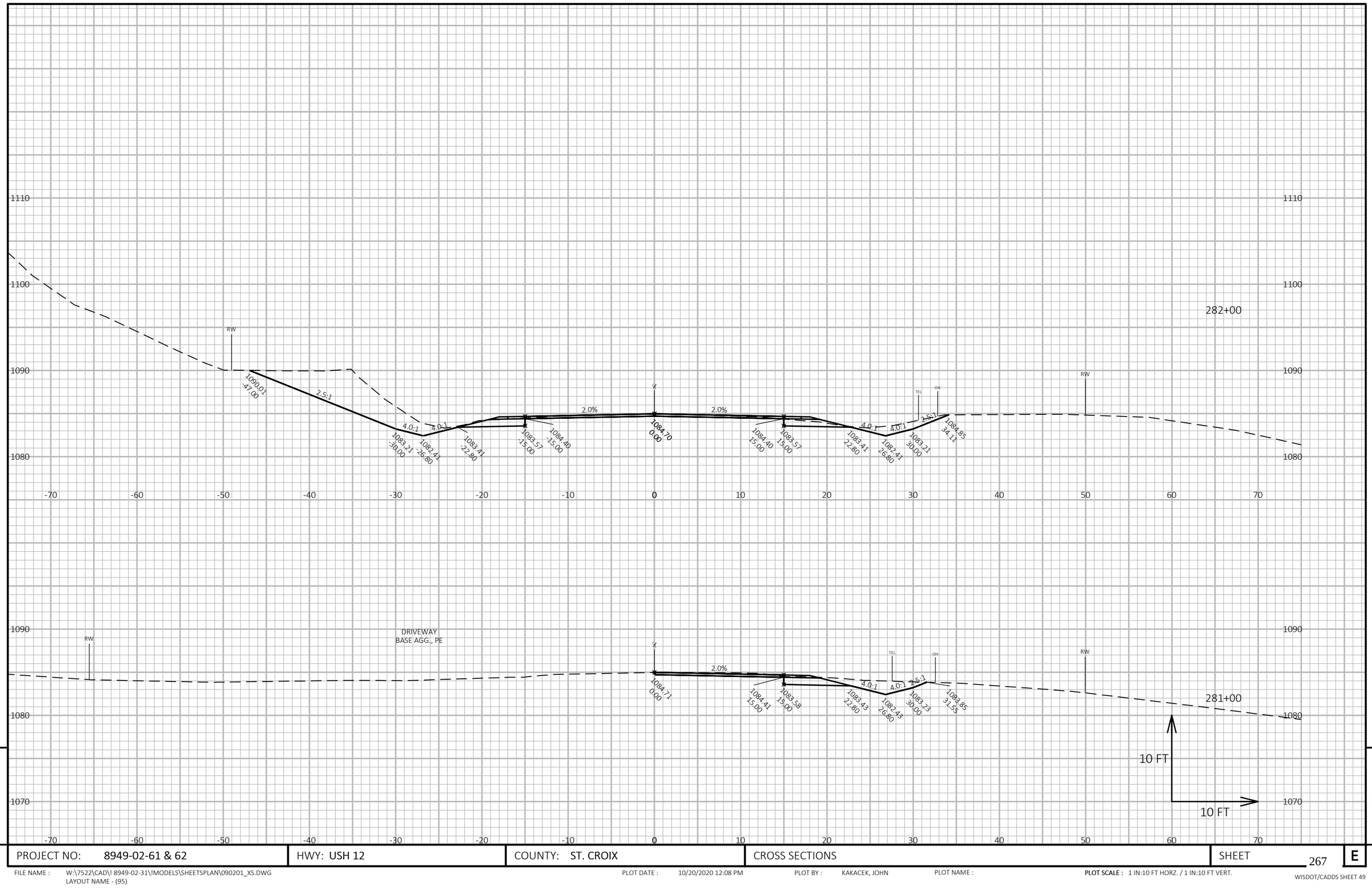


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 266	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (94)

PLOT DATE : 10/20/2020 12:08 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

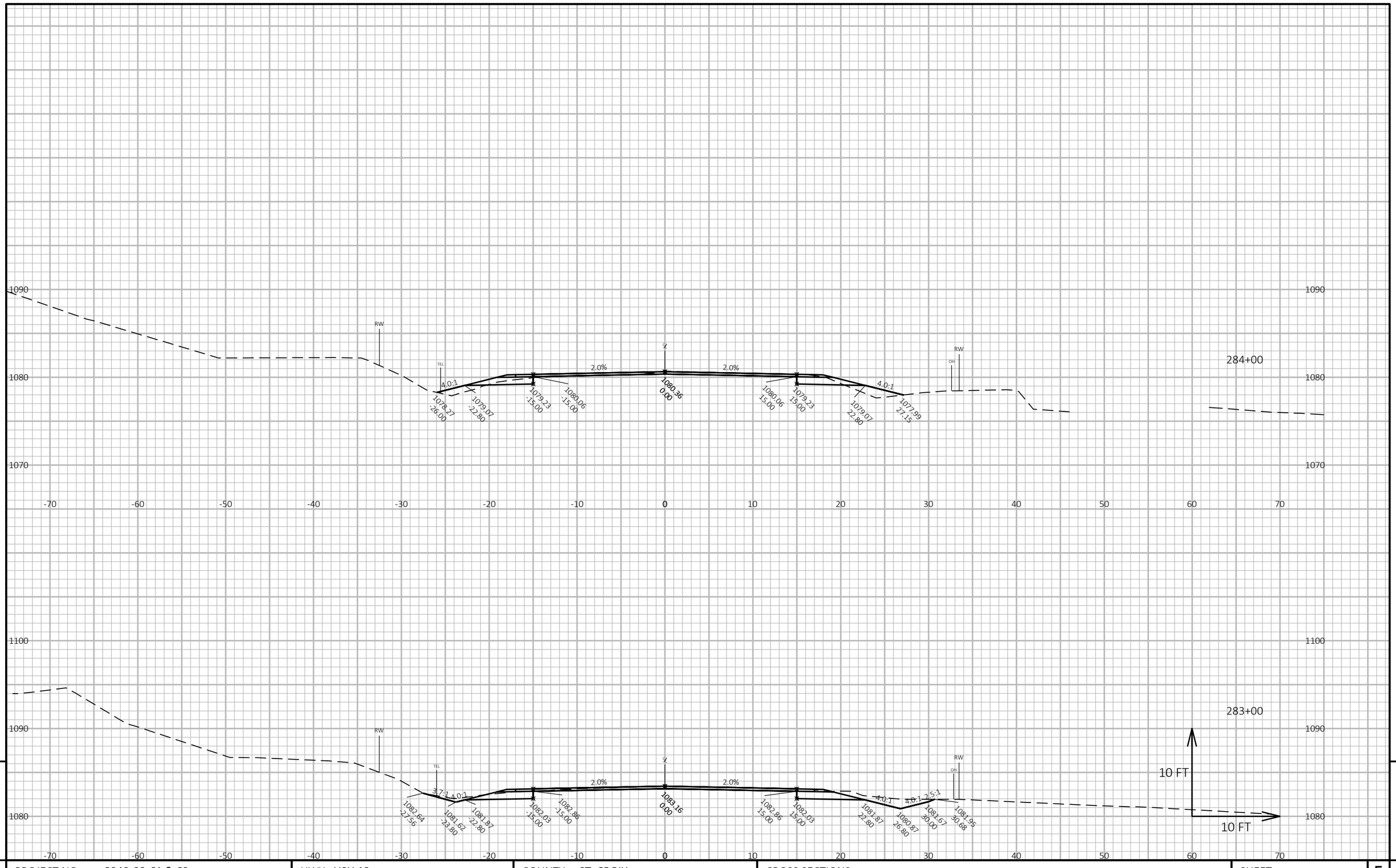


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 267	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (95)

PLOT DATE : 10/20/2020 12:08 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

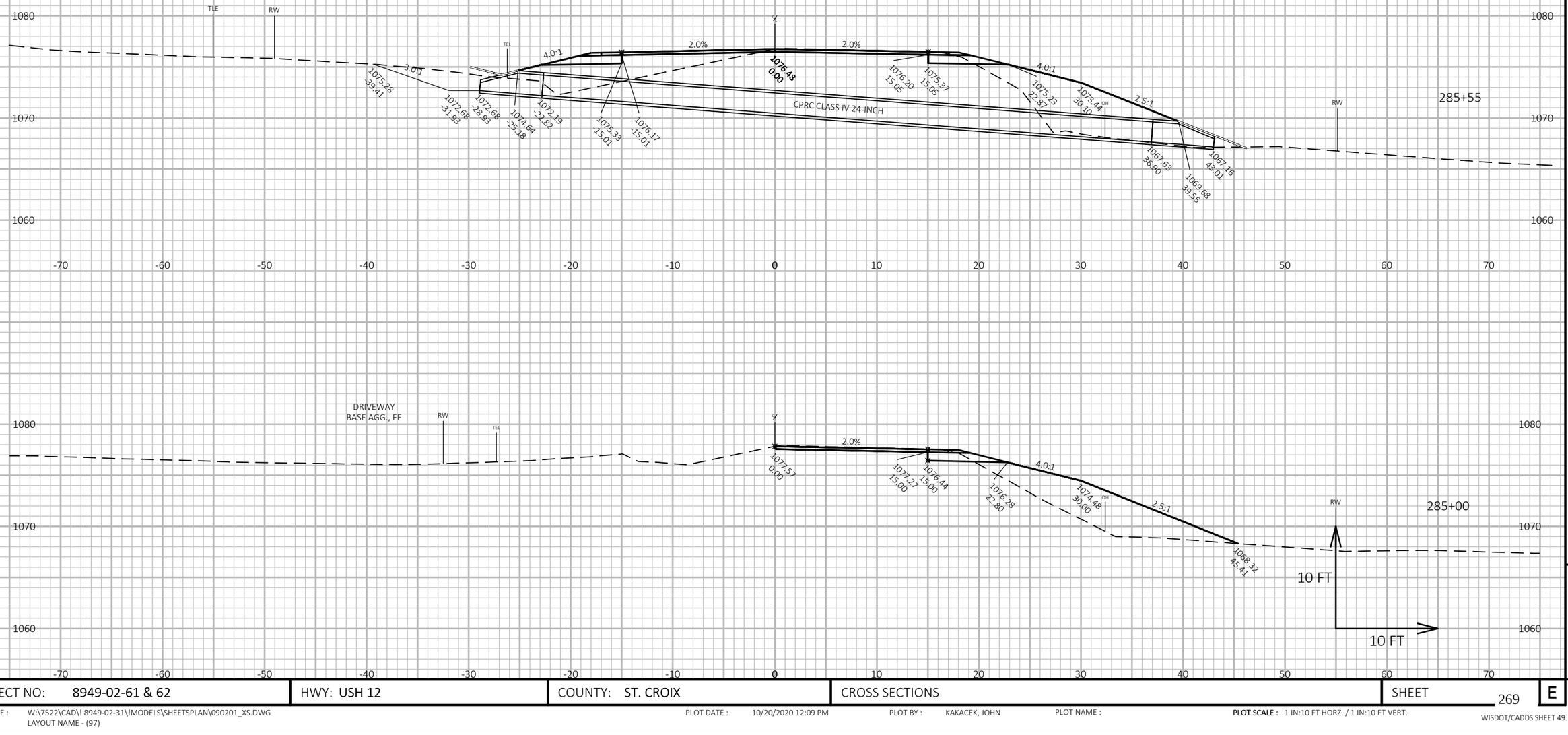


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 268	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (96)

PLOT DATE : 10/20/2020 12:08 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

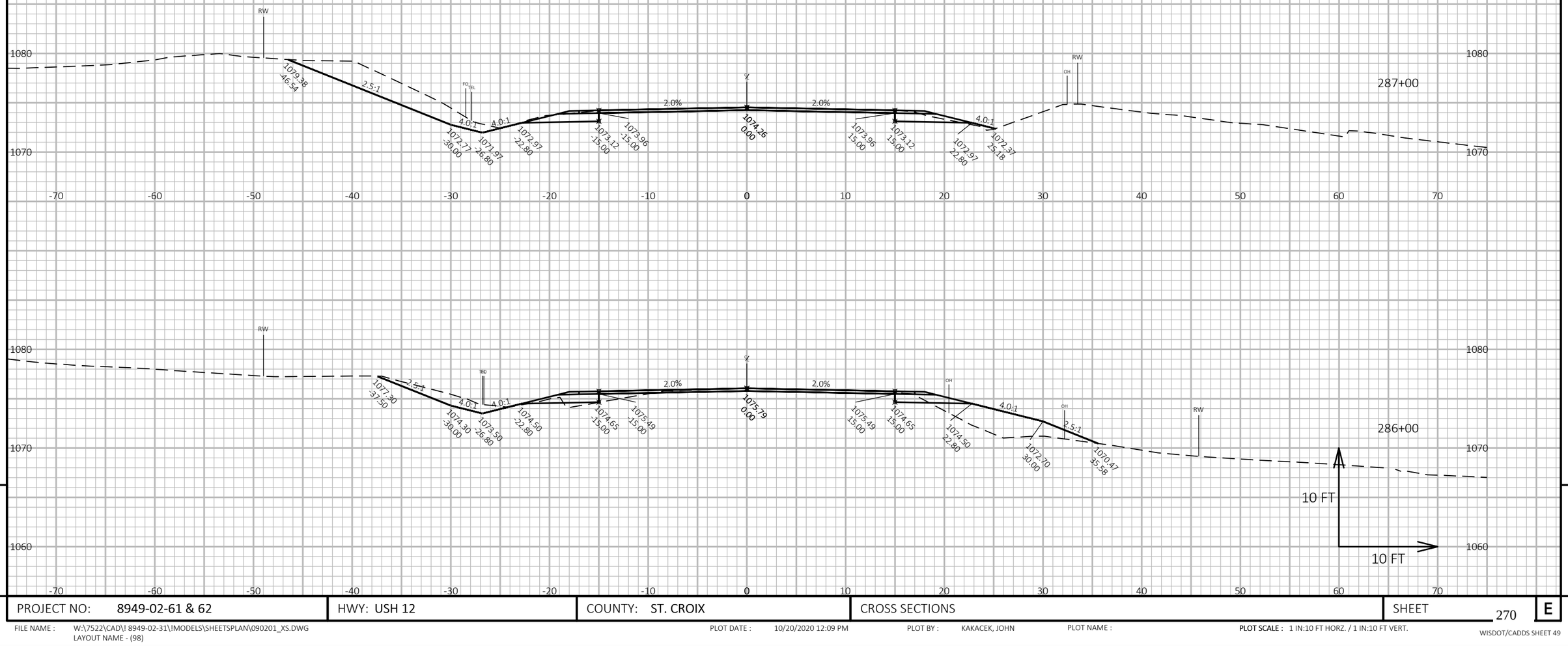


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 269	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (97)

PLOT DATE : 10/20/2020 12:09 PM PLOT BY : KAKACEK, JOHN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

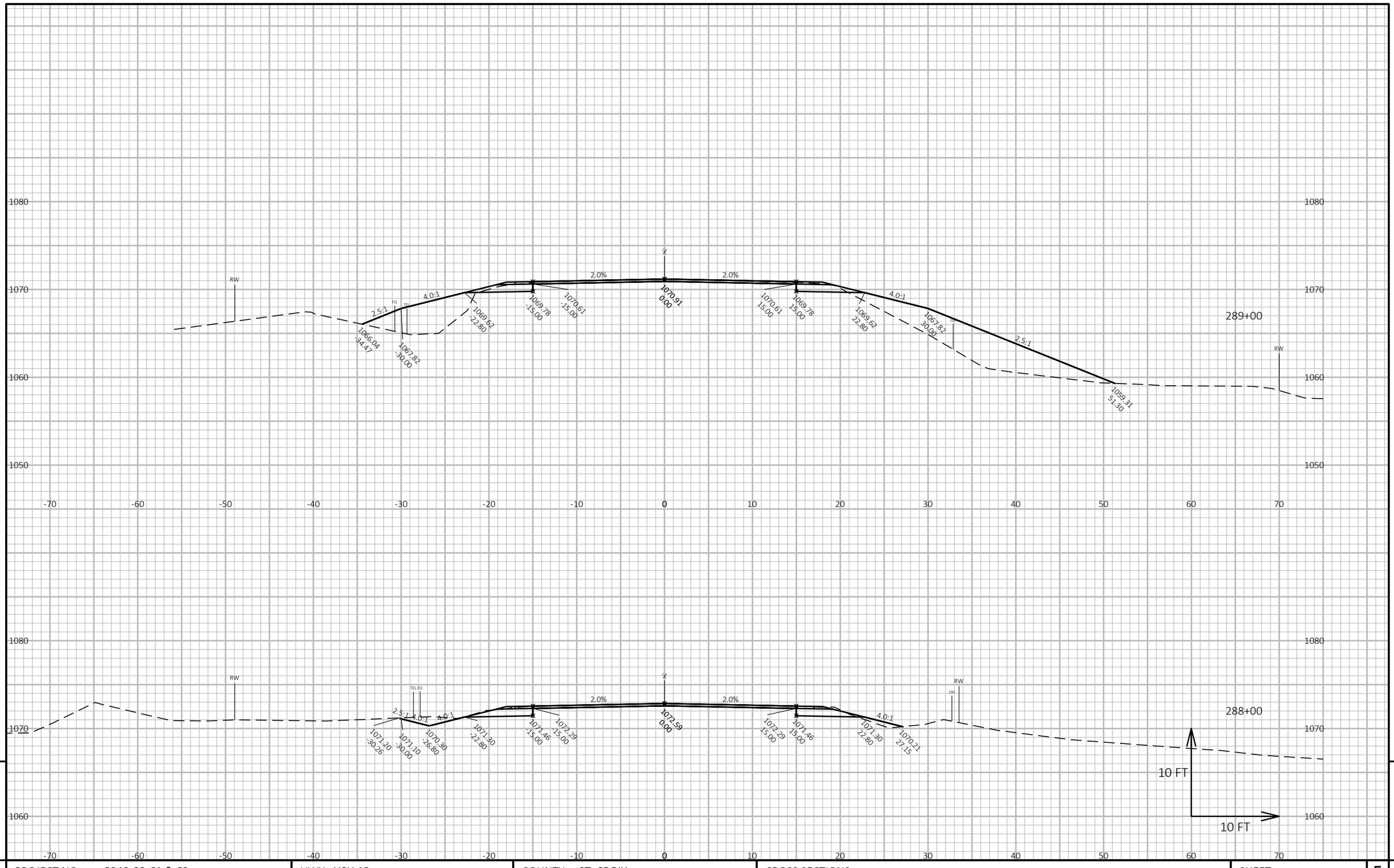


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 270	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (98)

PLOT DATE : 10/20/2020 12:09 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

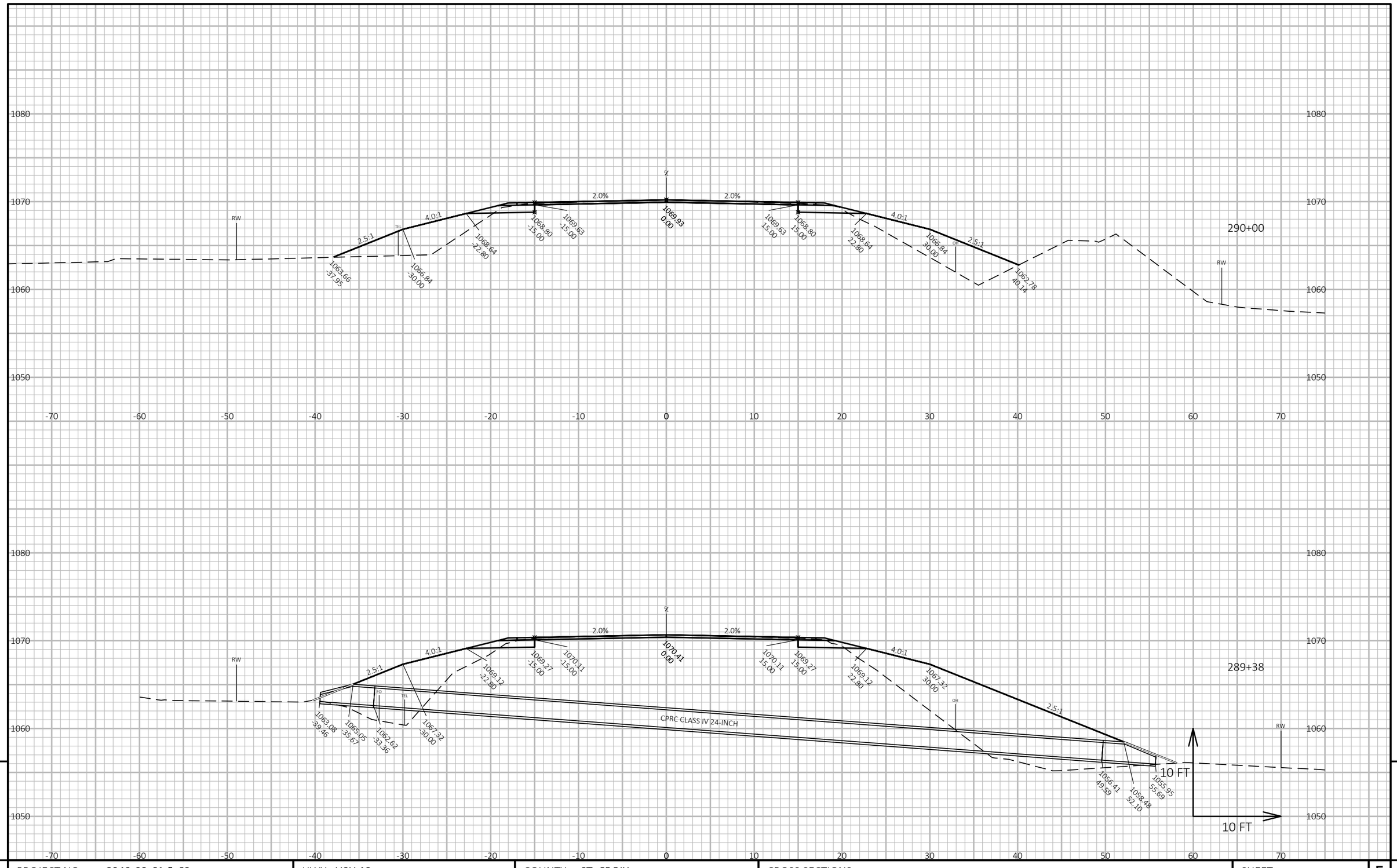


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 271	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (99)

PLOT DATE : 10/20/2020 12:09 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

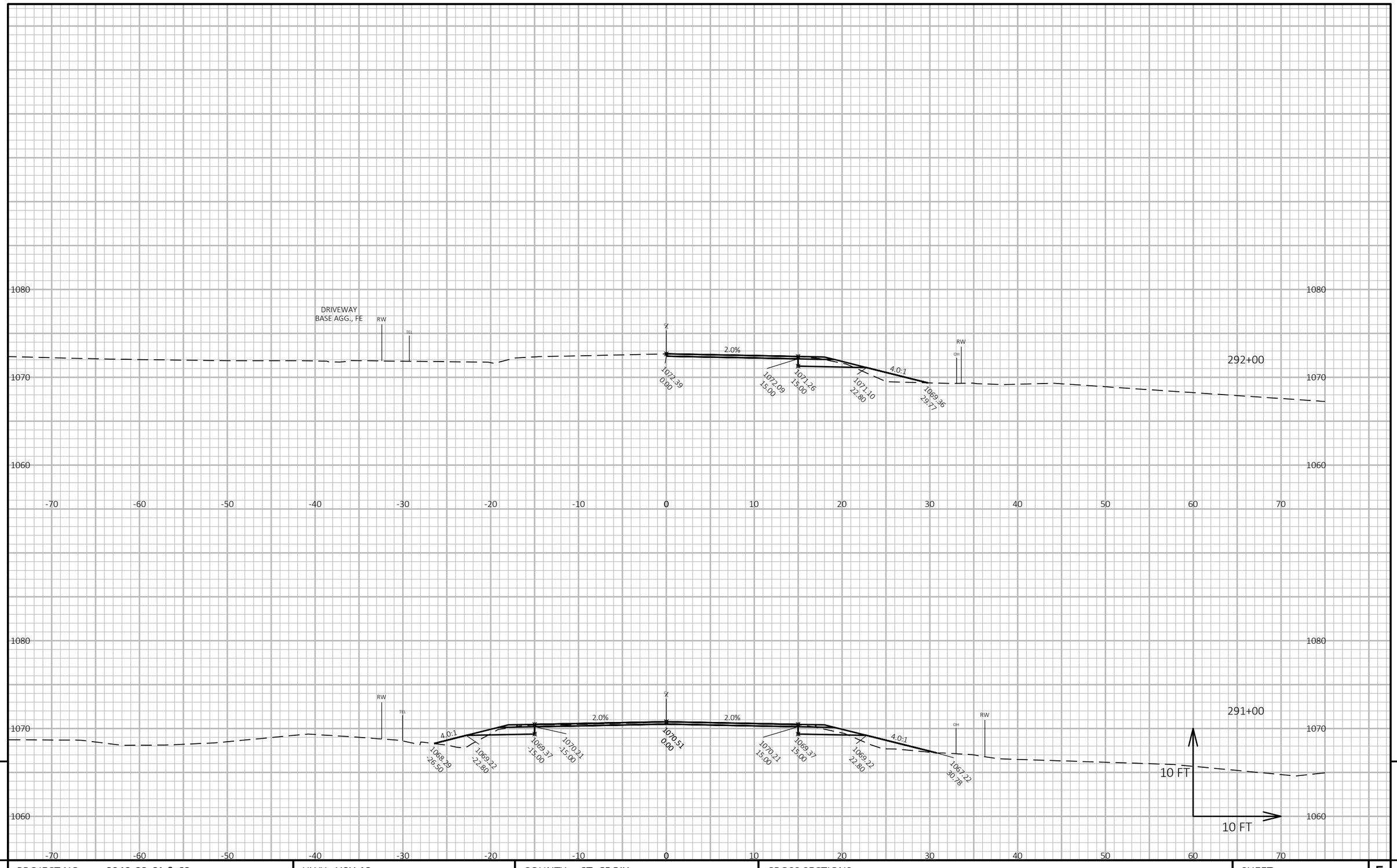


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 272	E

FILE NAME : W:\7522\CAD\| 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (100)

PLOT DATE : 10/20/2020 12:10 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

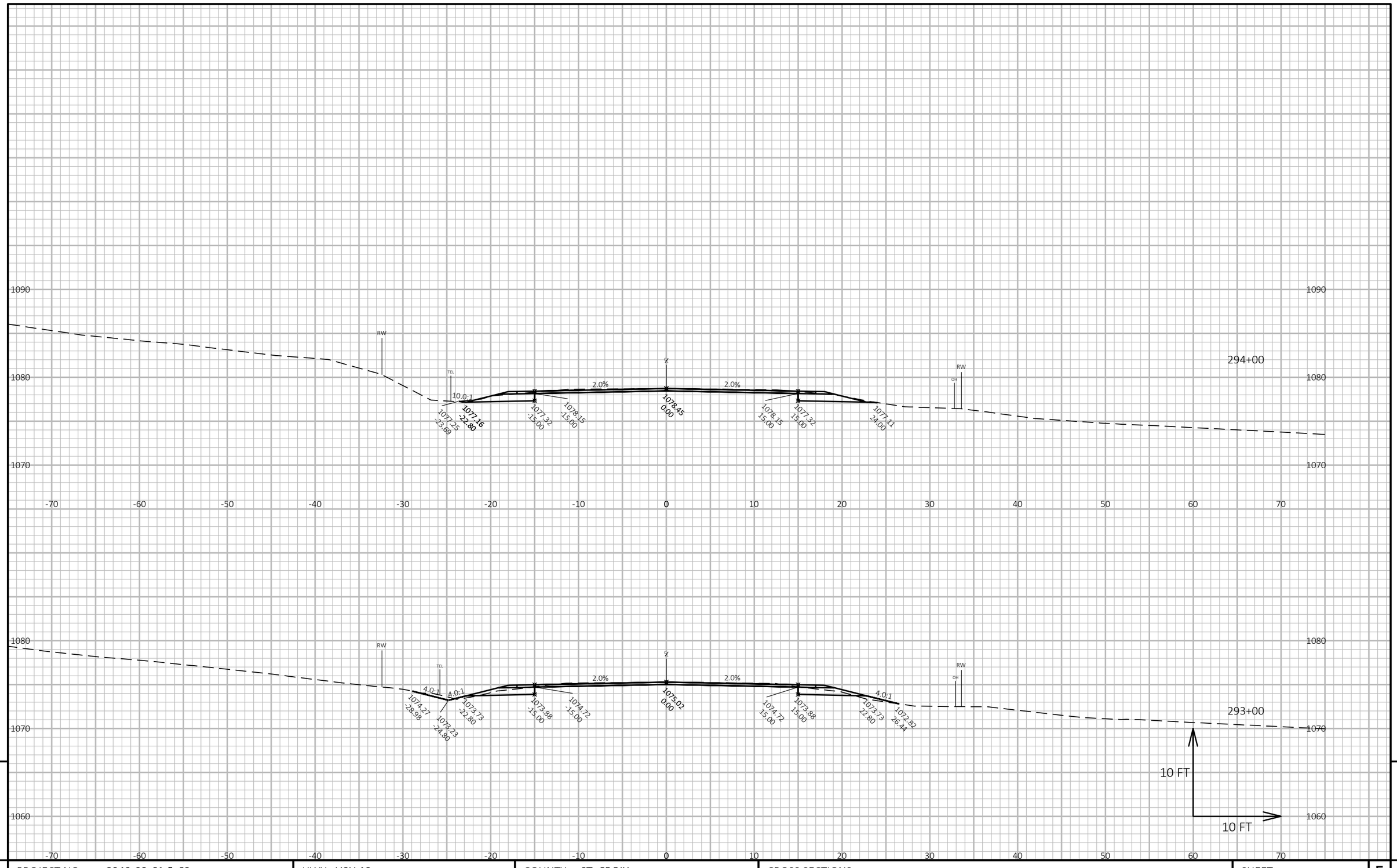


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 273	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (101)

PLOT DATE : 10/20/2020 12:10 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

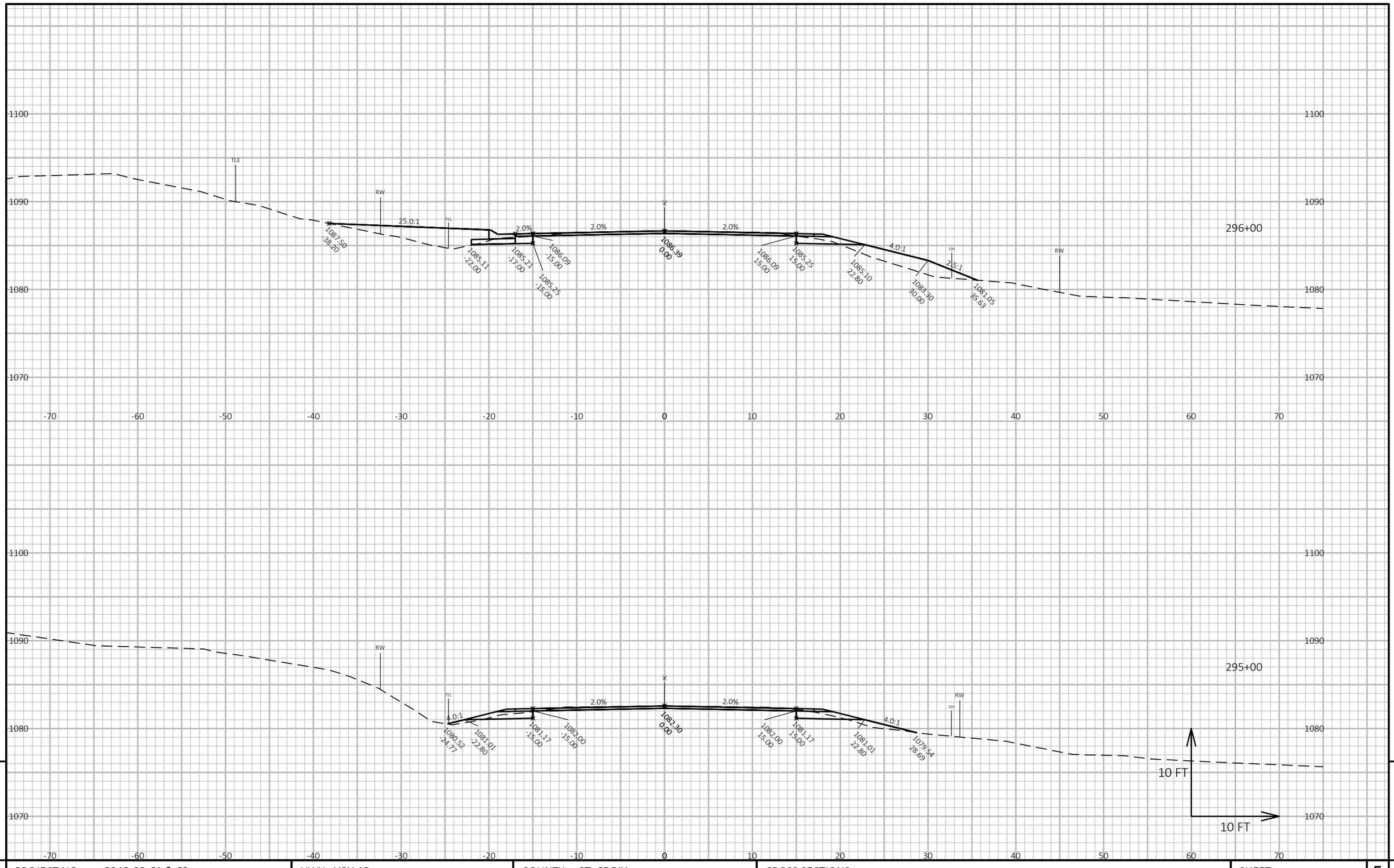
WISDOT/CADDS SHEET 49



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 274	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (102)

PLOT DATE : 10/20/2020 12:10 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

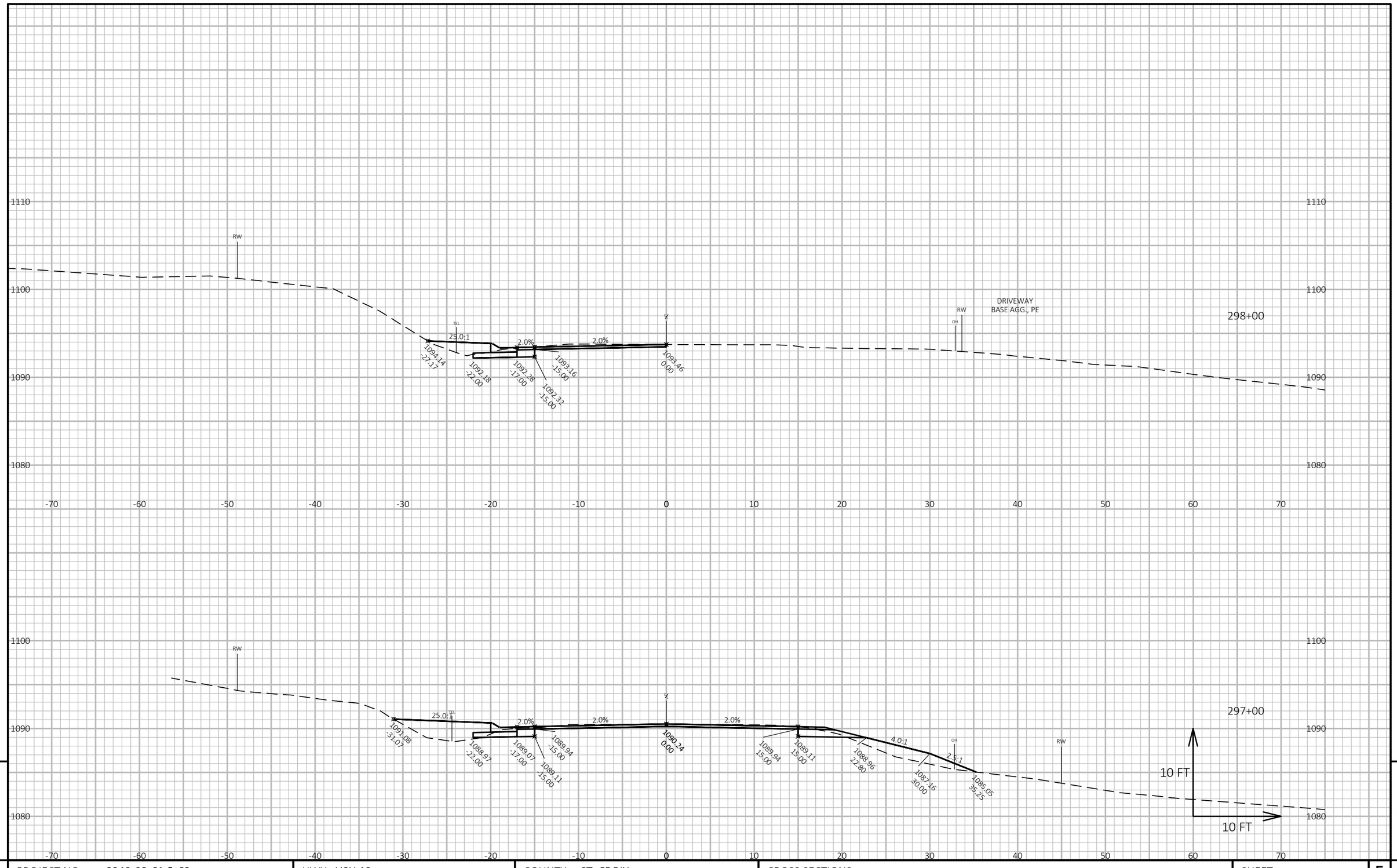


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 275	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (103)

PLOT DATE : 10/20/2020 12:11 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

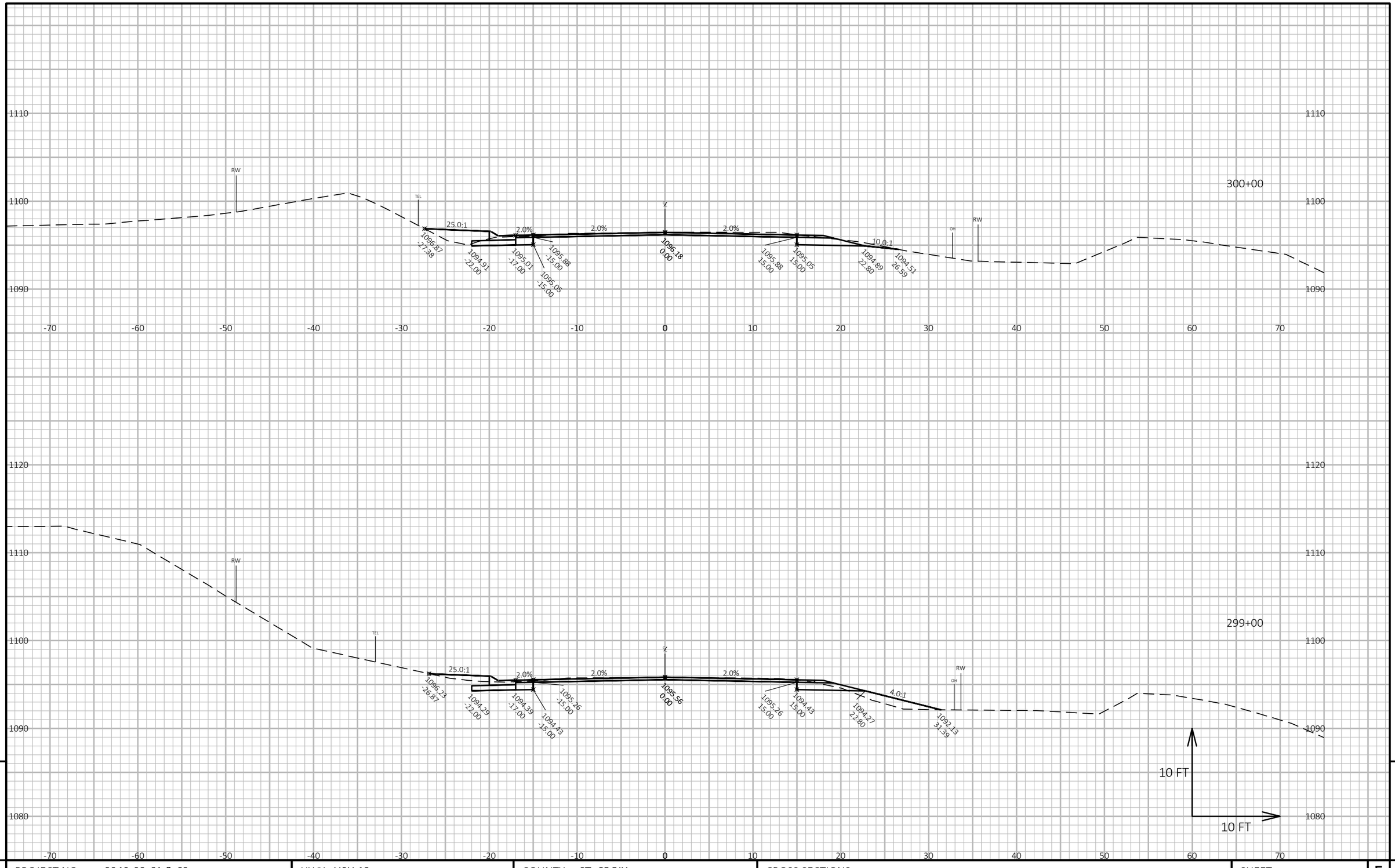
WISDOT/CADDS SHEET 49



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 276	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (104)

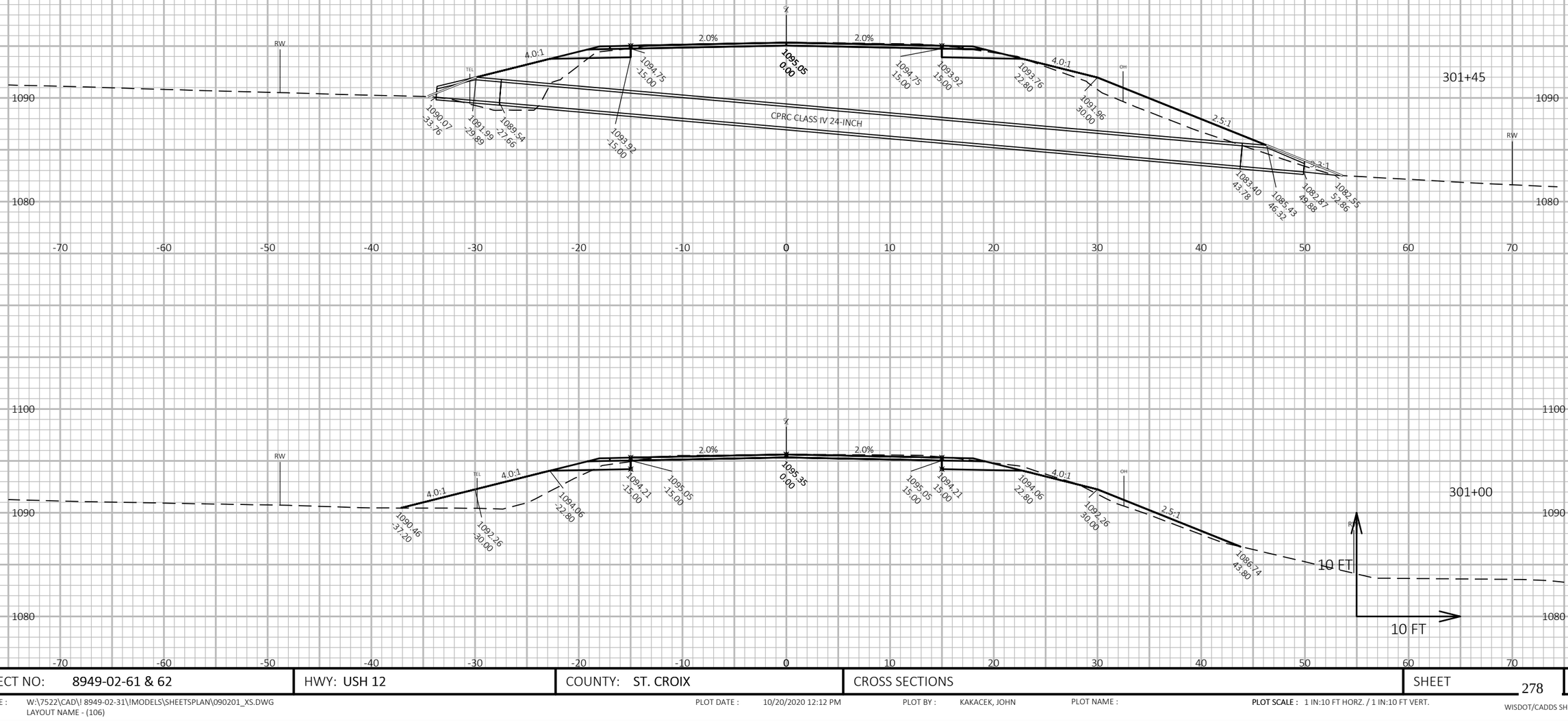
PLOT DATE : 10/20/2020 12:11 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 277	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (105)

PLOT DATE : 10/20/2020 12:11 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

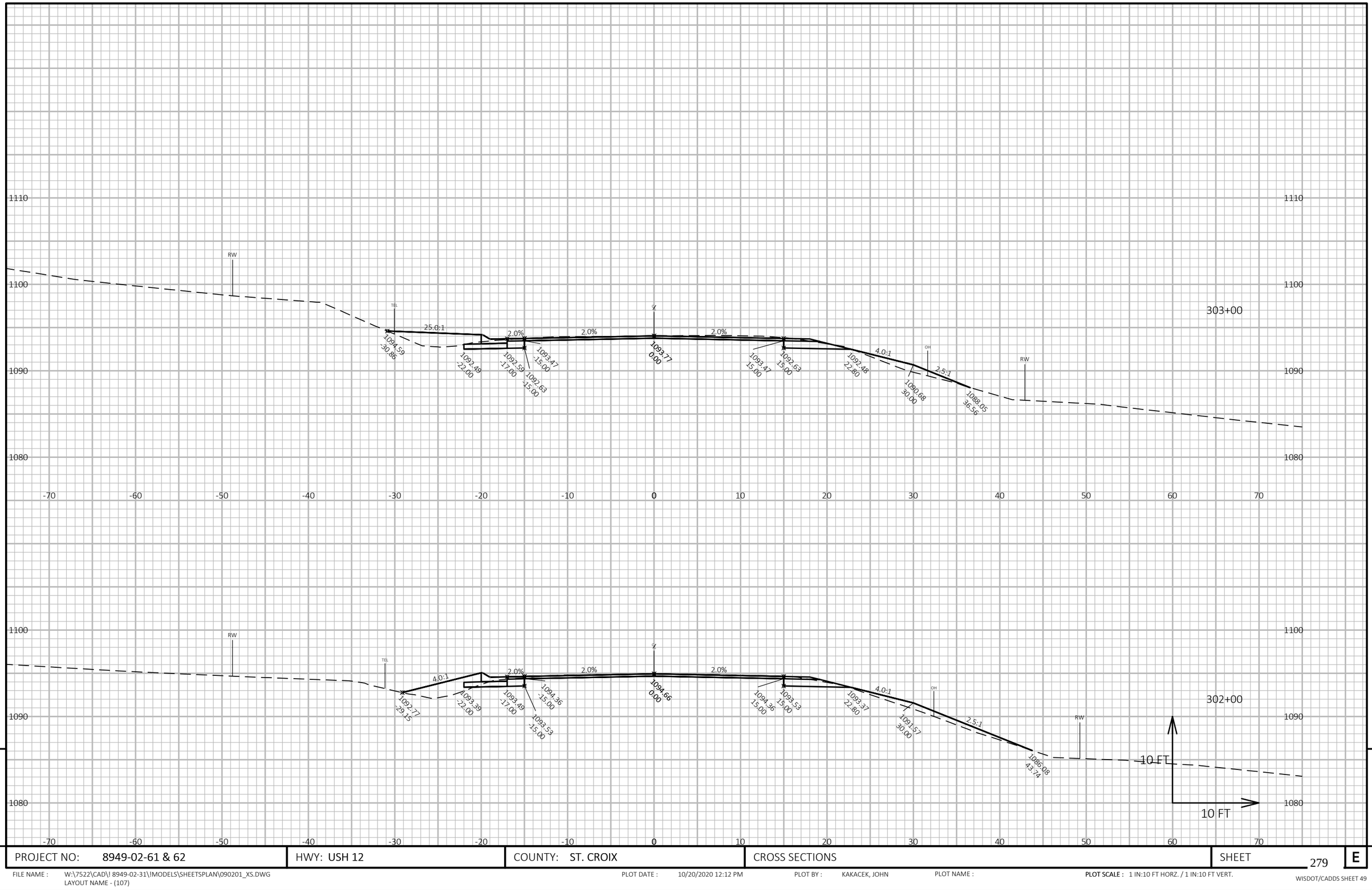


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 278	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (106)

PLOT DATE : 10/20/2020 12:12 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

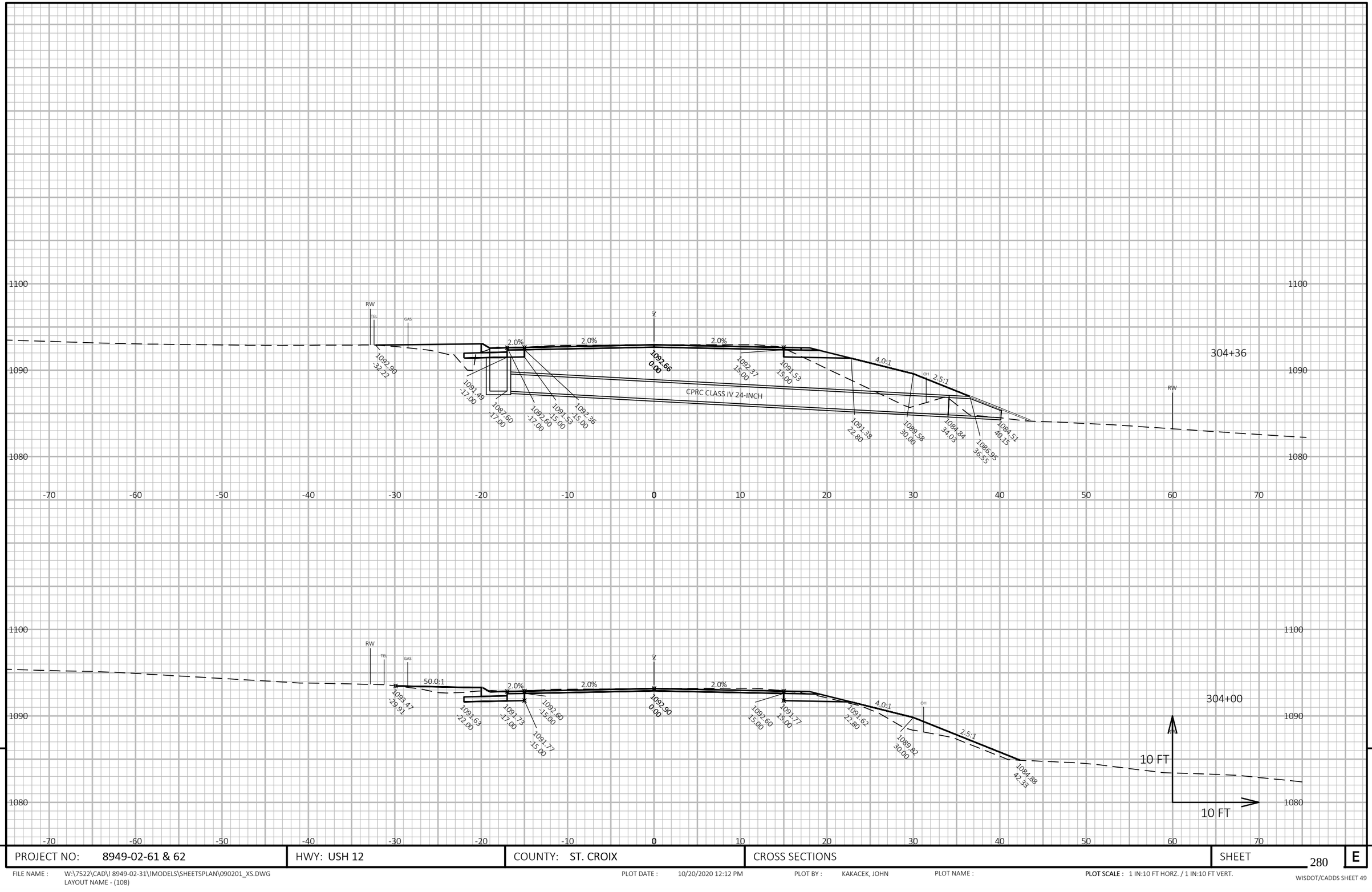


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 279	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (107)

PLOT DATE : 10/20/2020 12:12 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

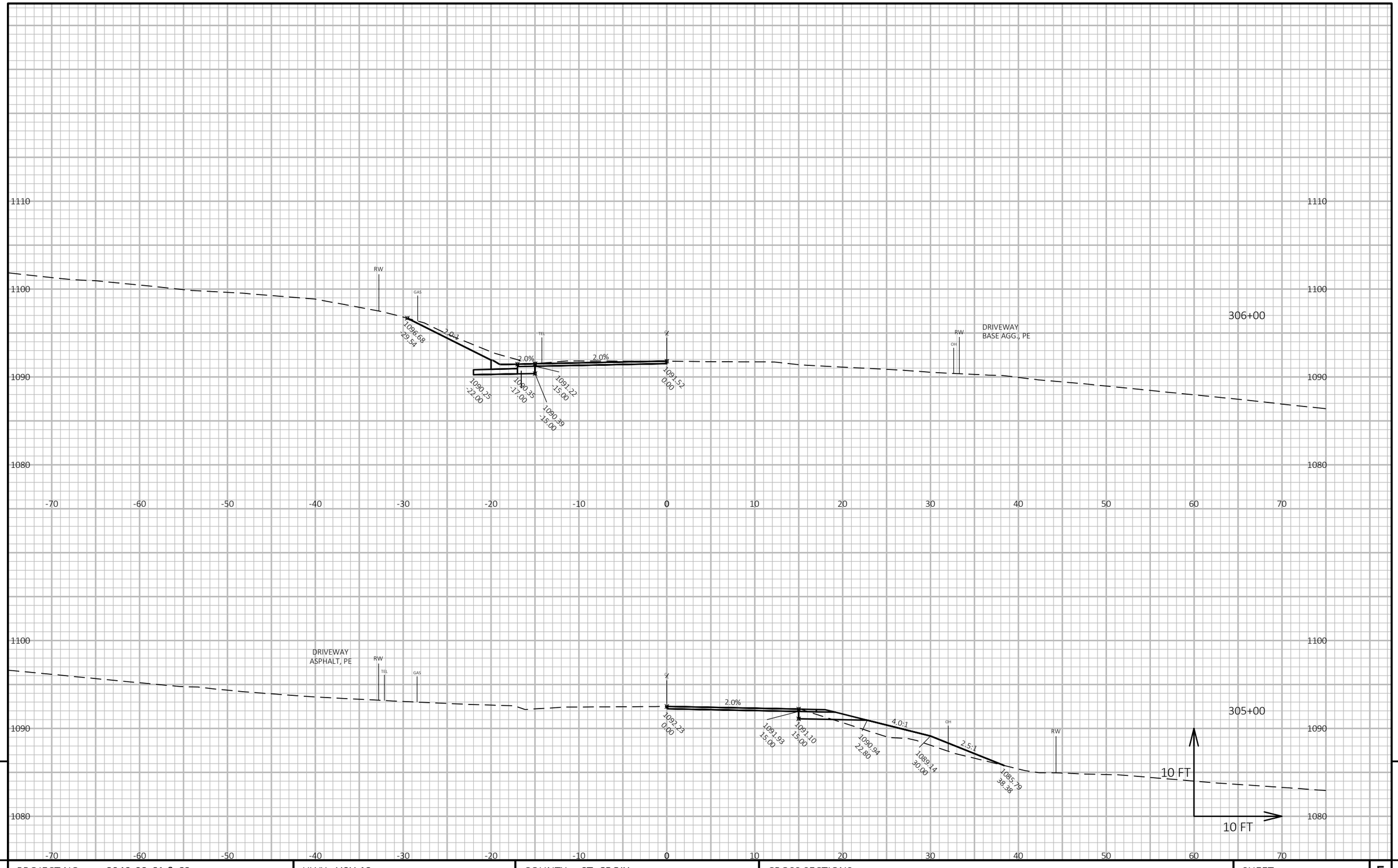


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 280	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (108)

PLOT DATE : 10/20/2020 12:12 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

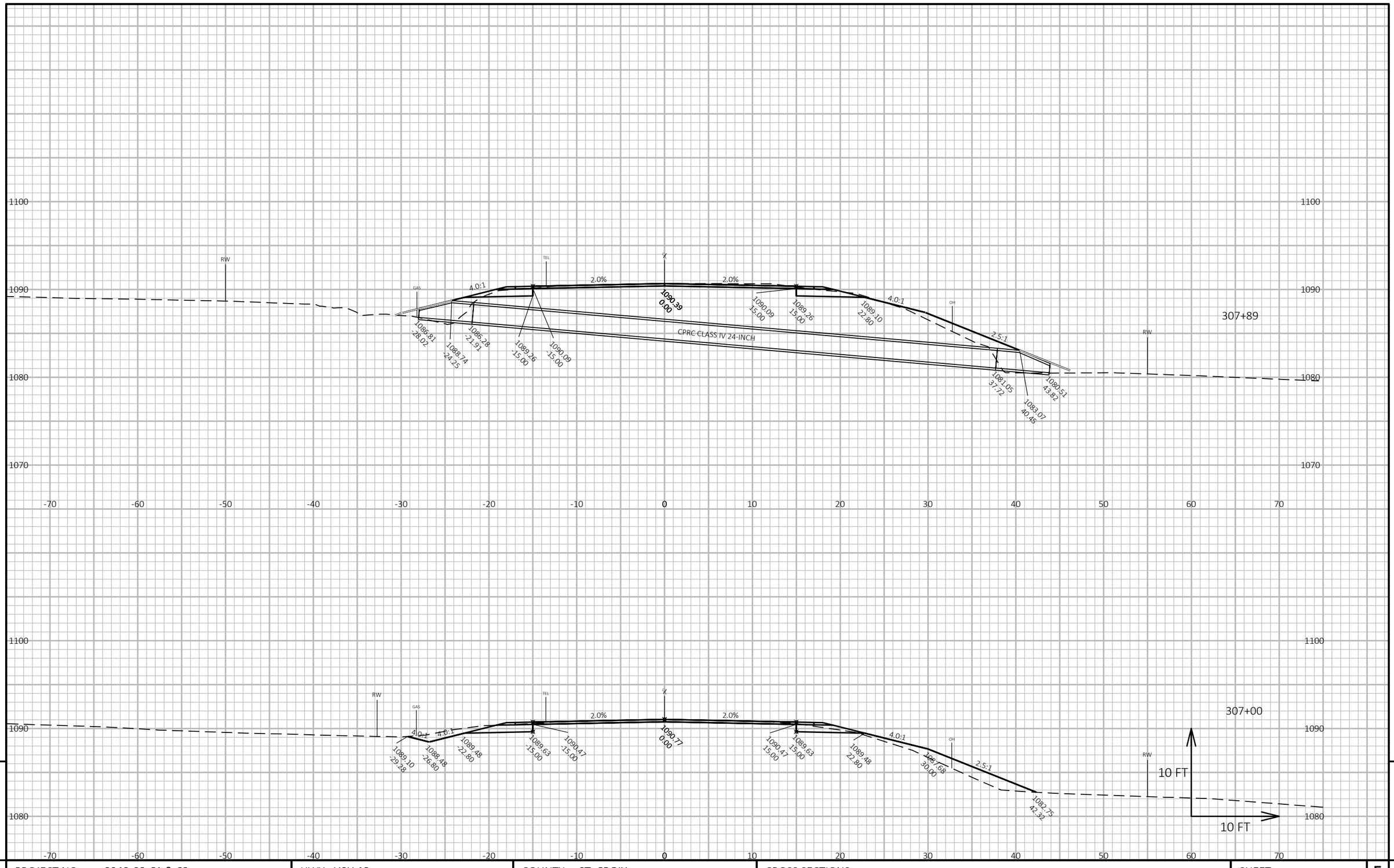


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 281	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (109)

PLOT DATE : 10/20/2020 12:13 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

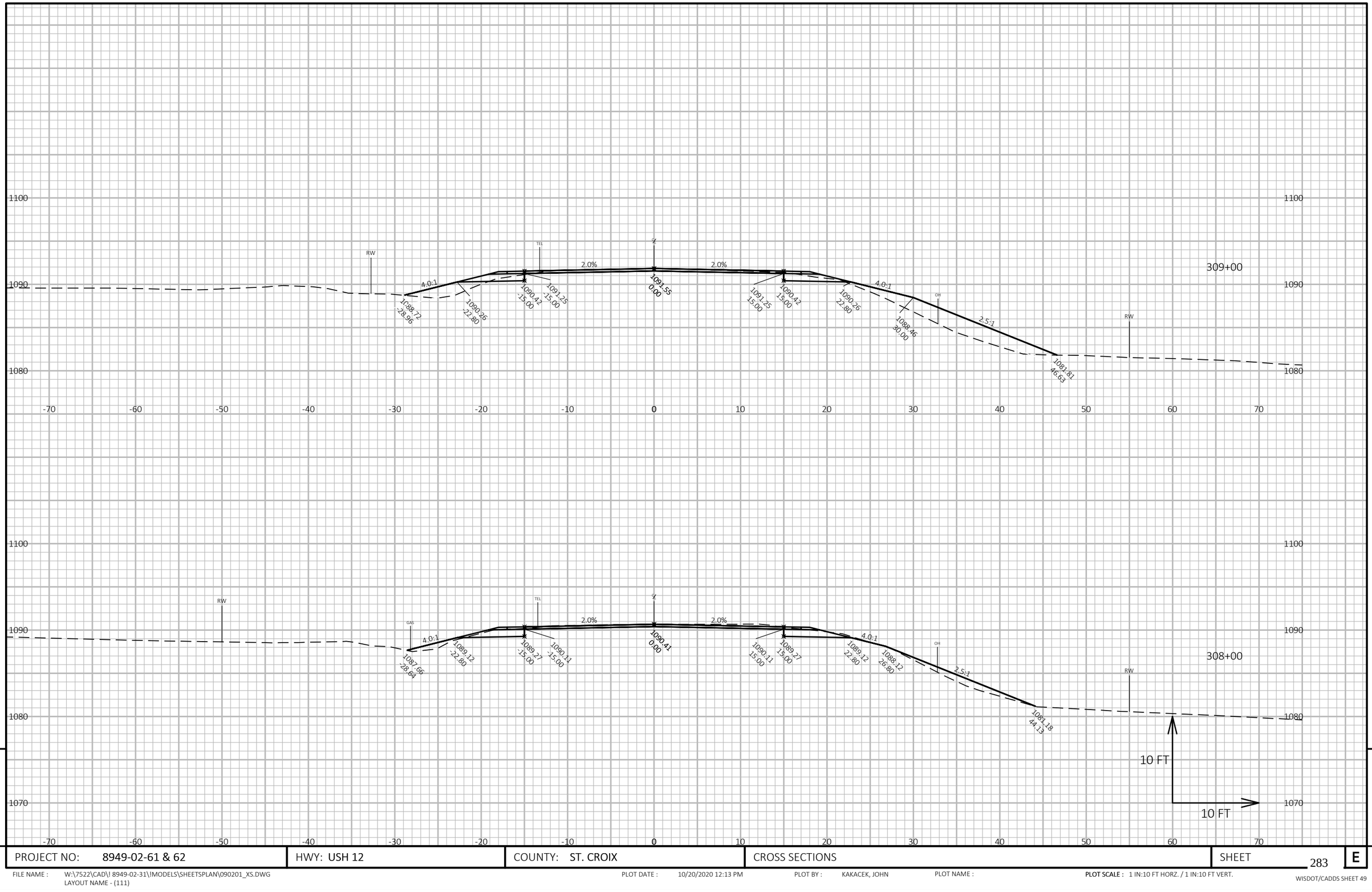


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 282	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (110)

PLOT DATE : 10/20/2020 12:13 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

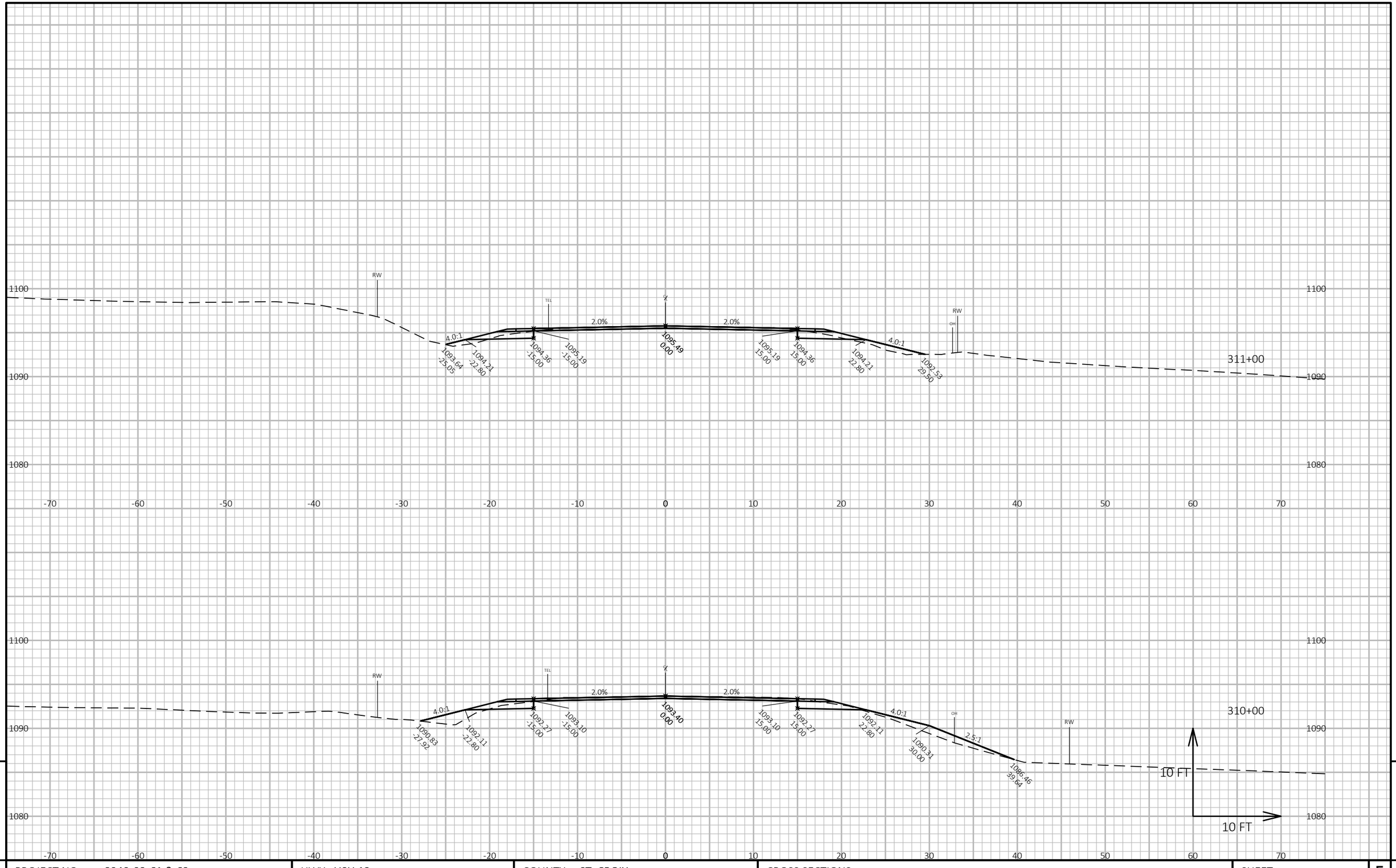


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 283	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (111)

PLOT DATE : 10/20/2020 12:13 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

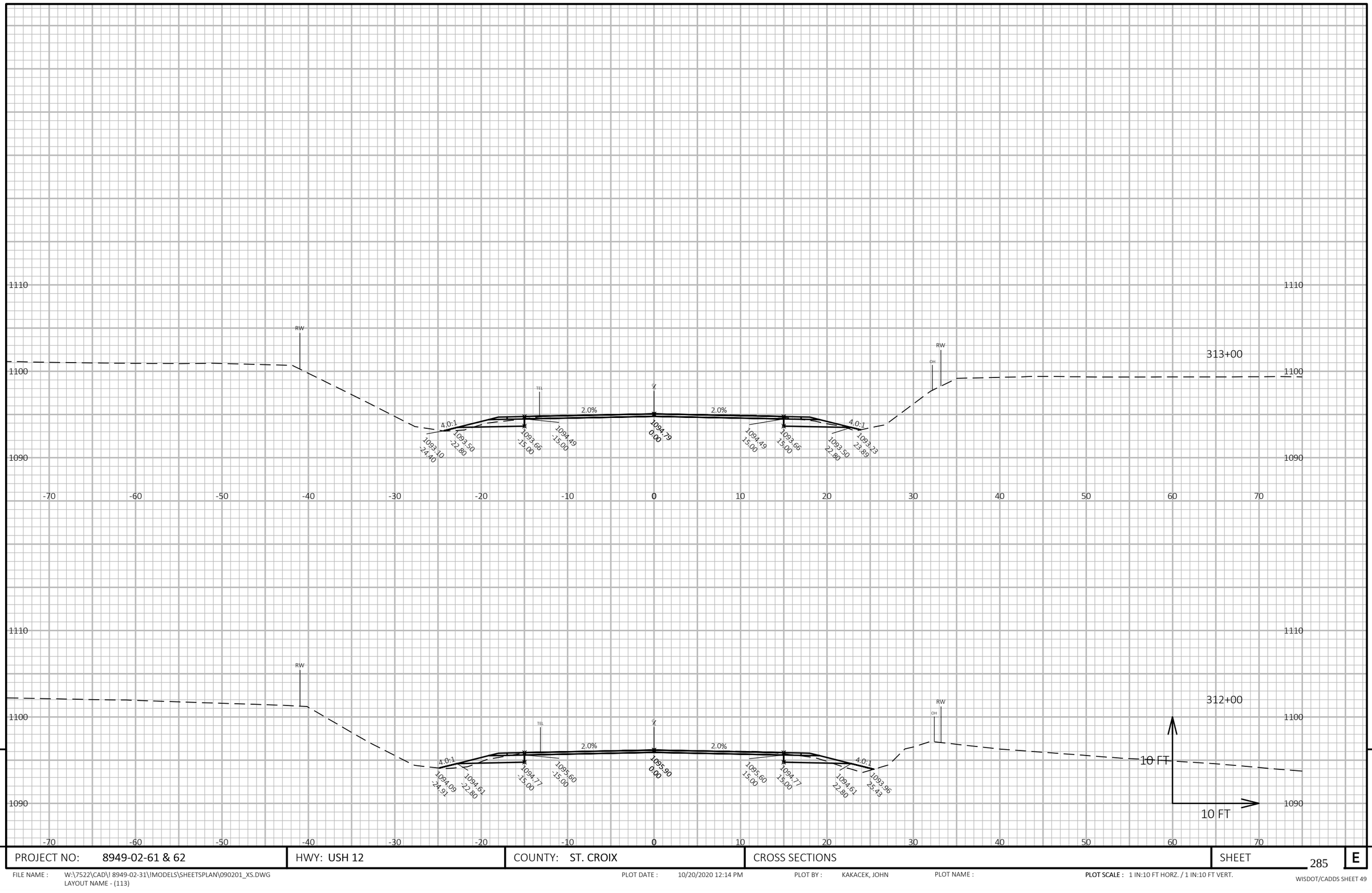
WISDOT/CADDS SHEET 49



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 284	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (112)

PLOT DATE : 10/20/2020 12:14 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

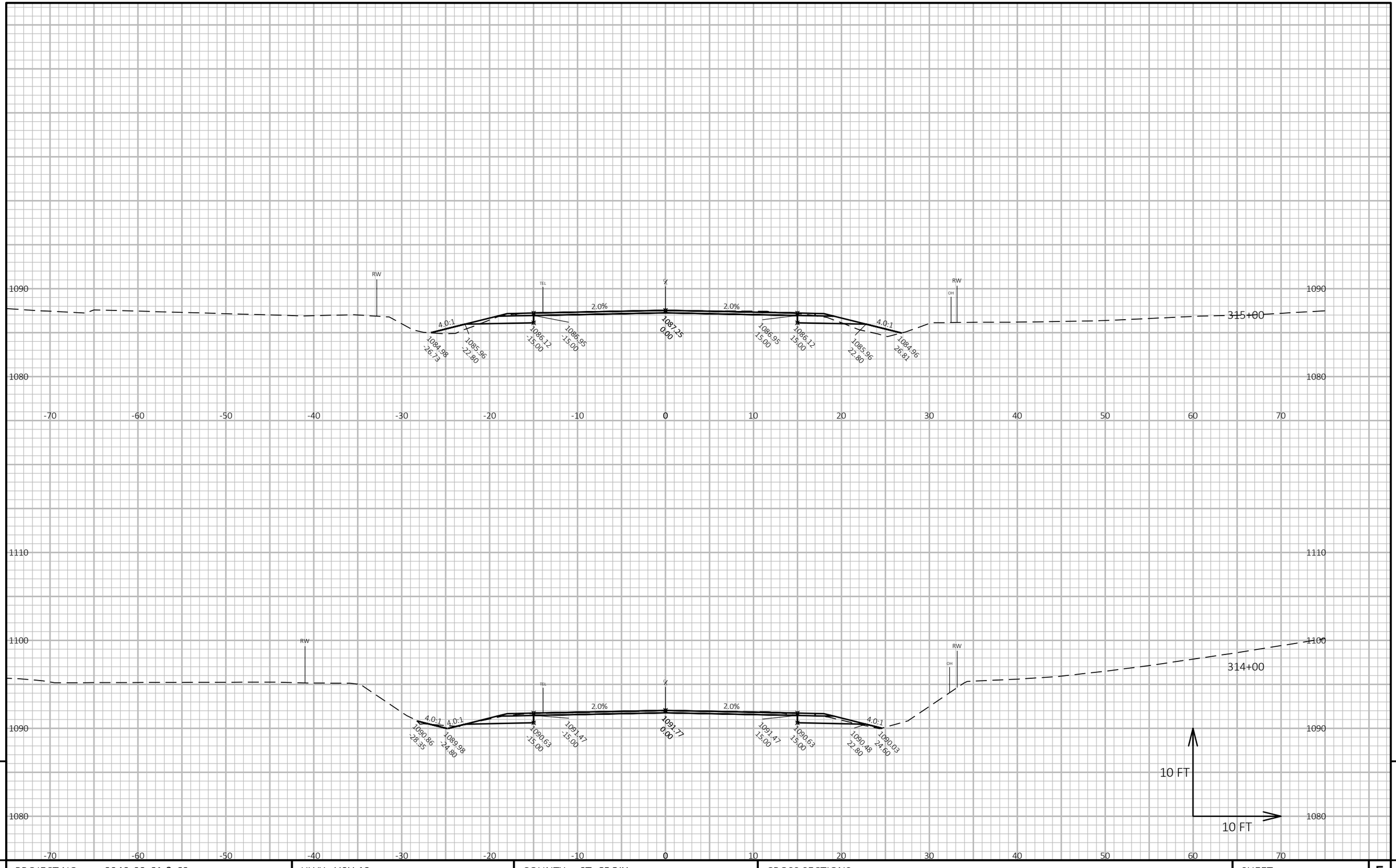


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 285	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (113)

PLOT DATE : 10/20/2020 12:14 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

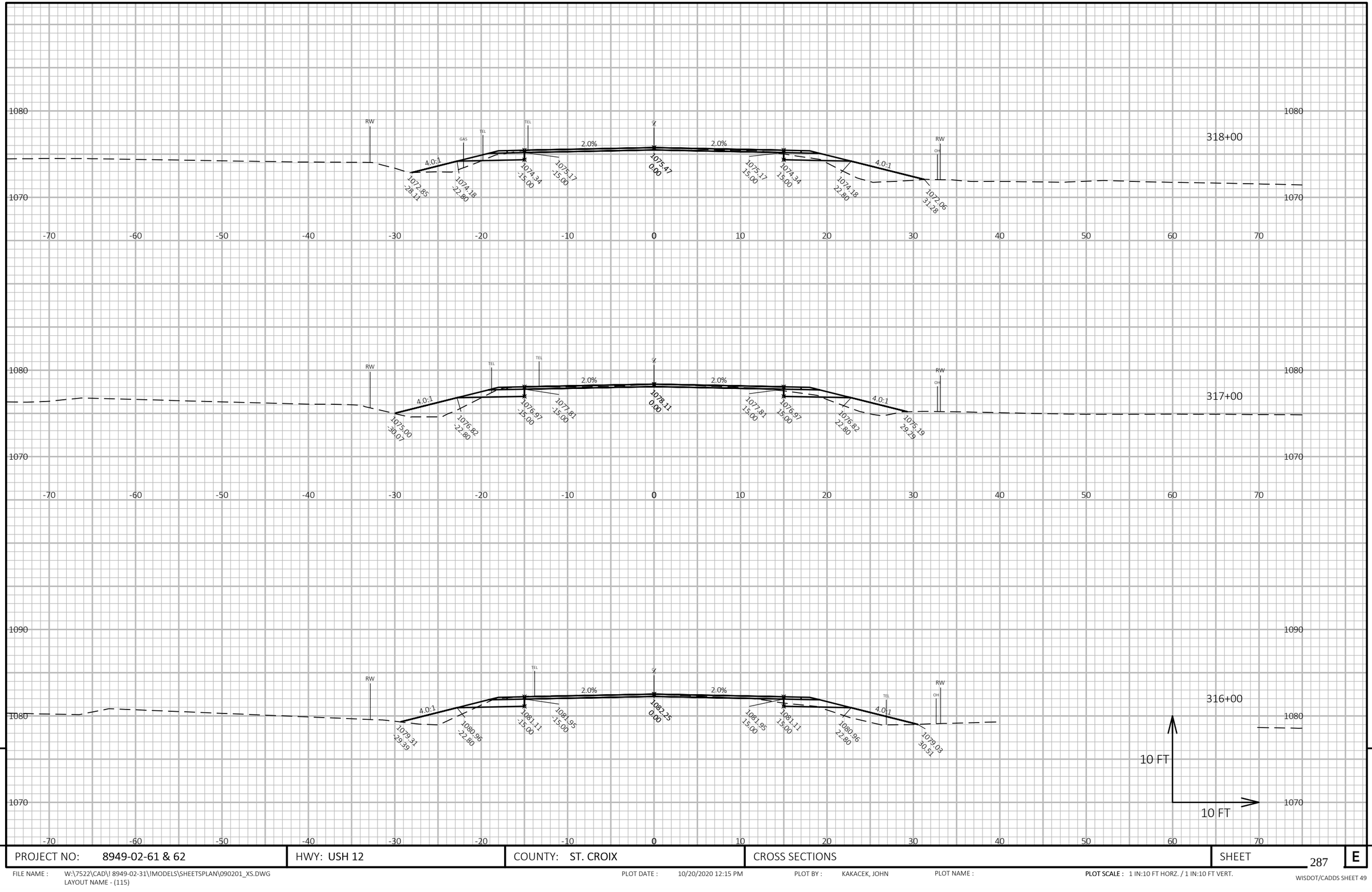


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 286	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (114)

PLOT DATE : 10/20/2020 12:14 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

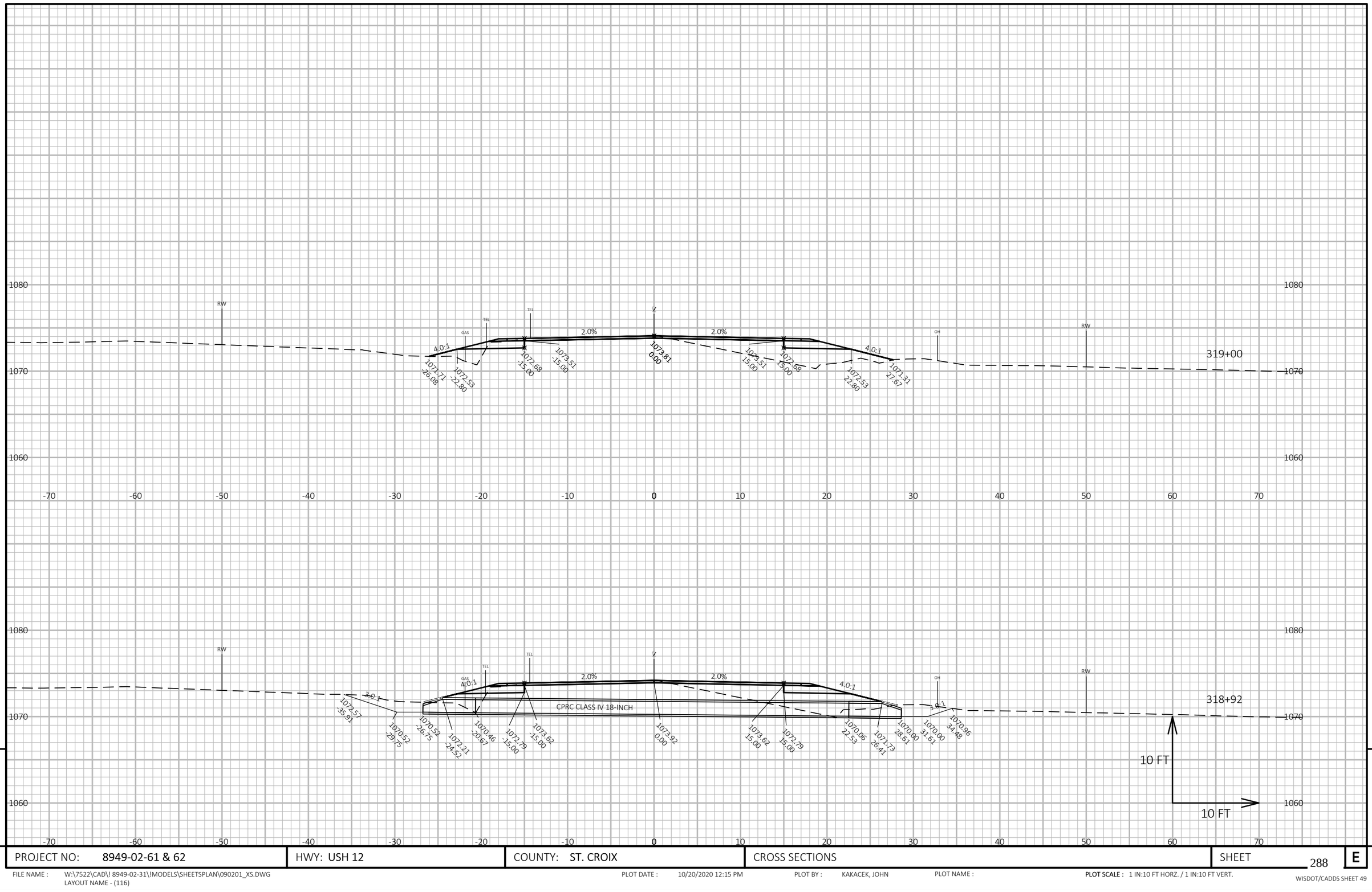


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 287	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (115)

PLOT DATE : 10/20/2020 12:15 PM PLOT BY : KAKACEK, JOHN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

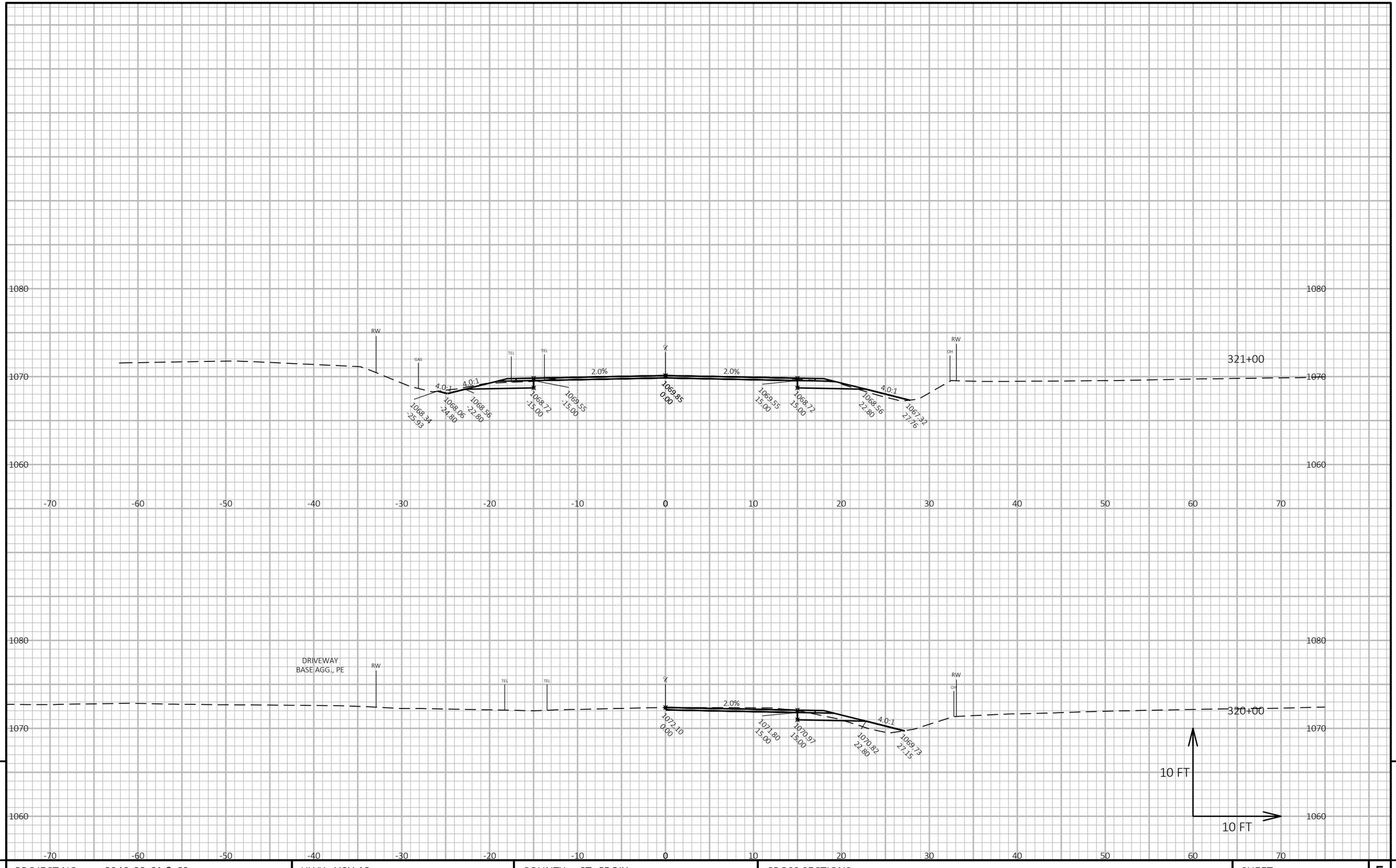


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 288	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (116)

PLOT DATE : 10/20/2020 12:15 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

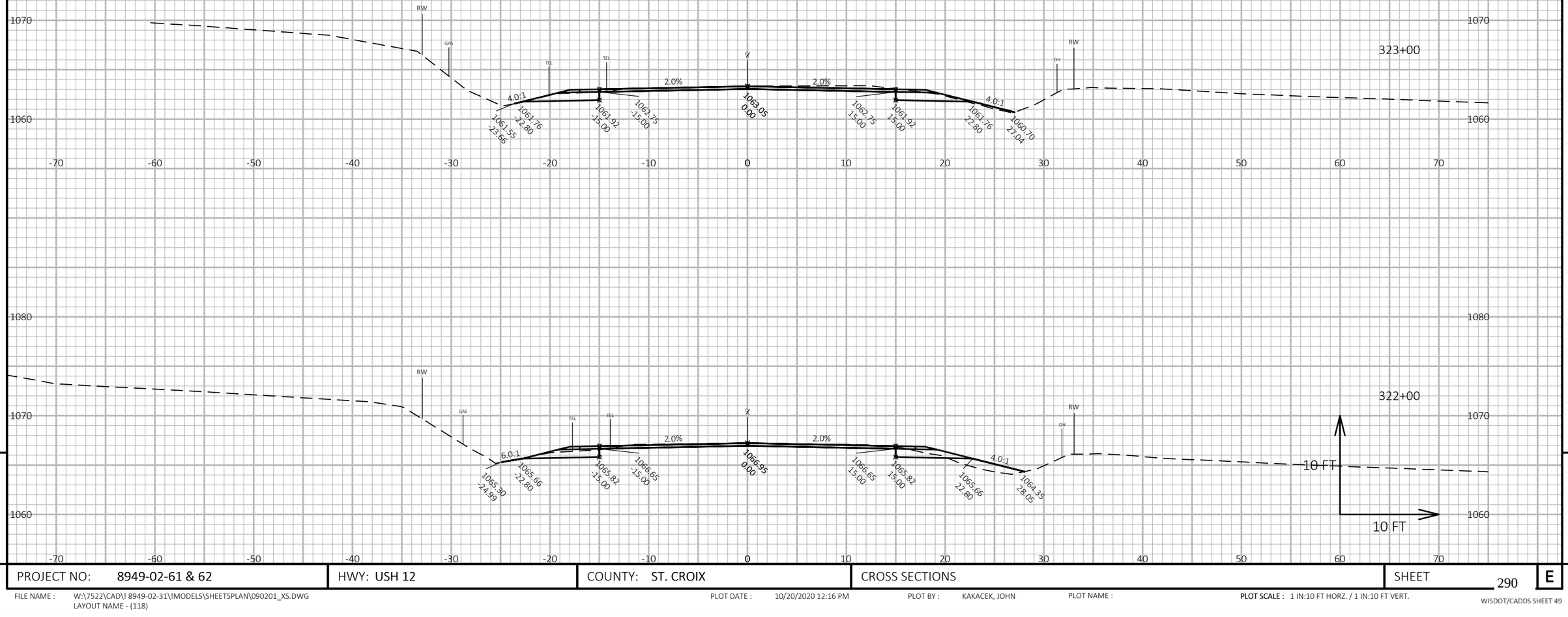


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 289	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (117)

PLOT DATE : 10/20/2020 12:16 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

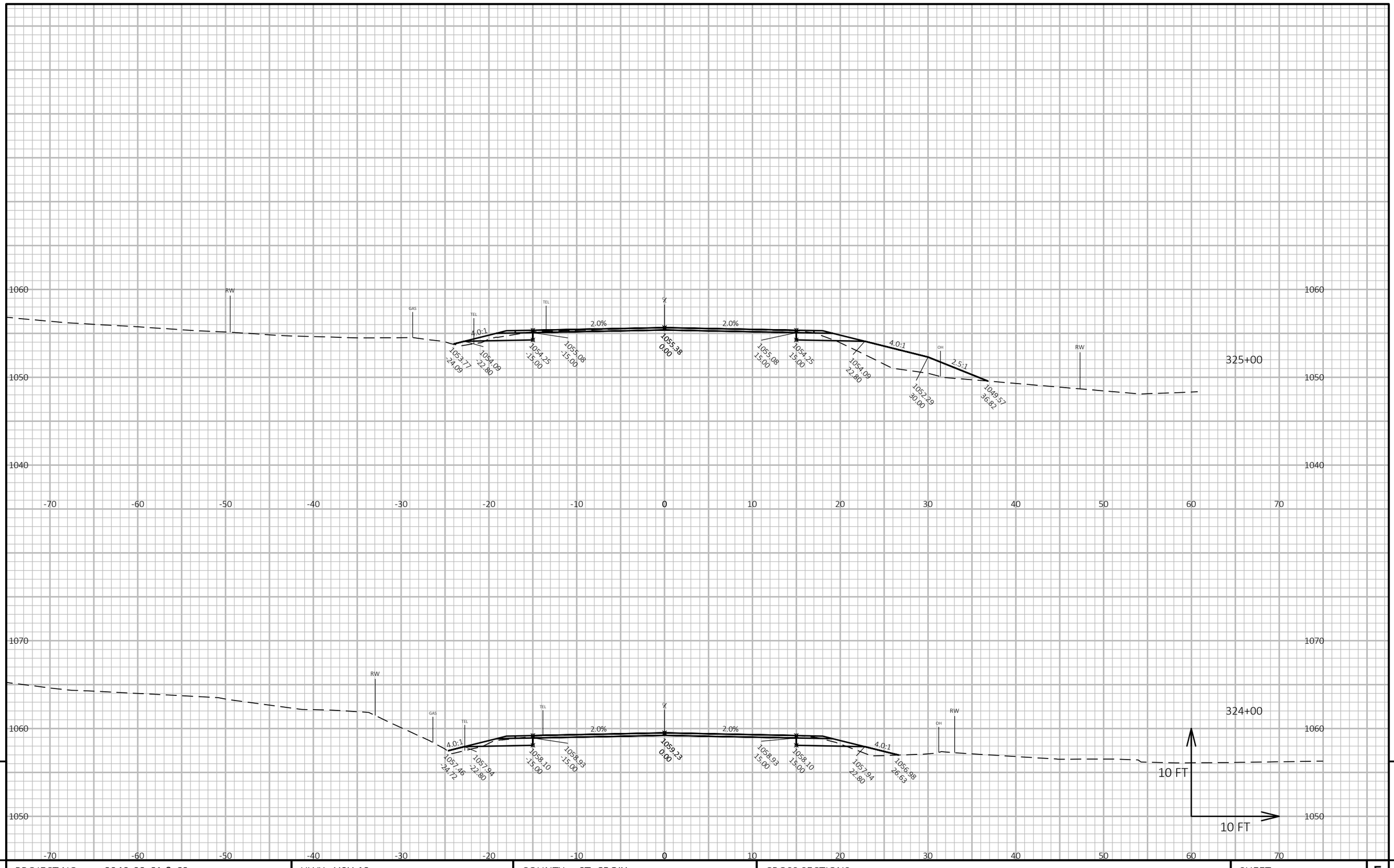


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 290	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (118)

PLOT DATE : 10/20/2020 12:16 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

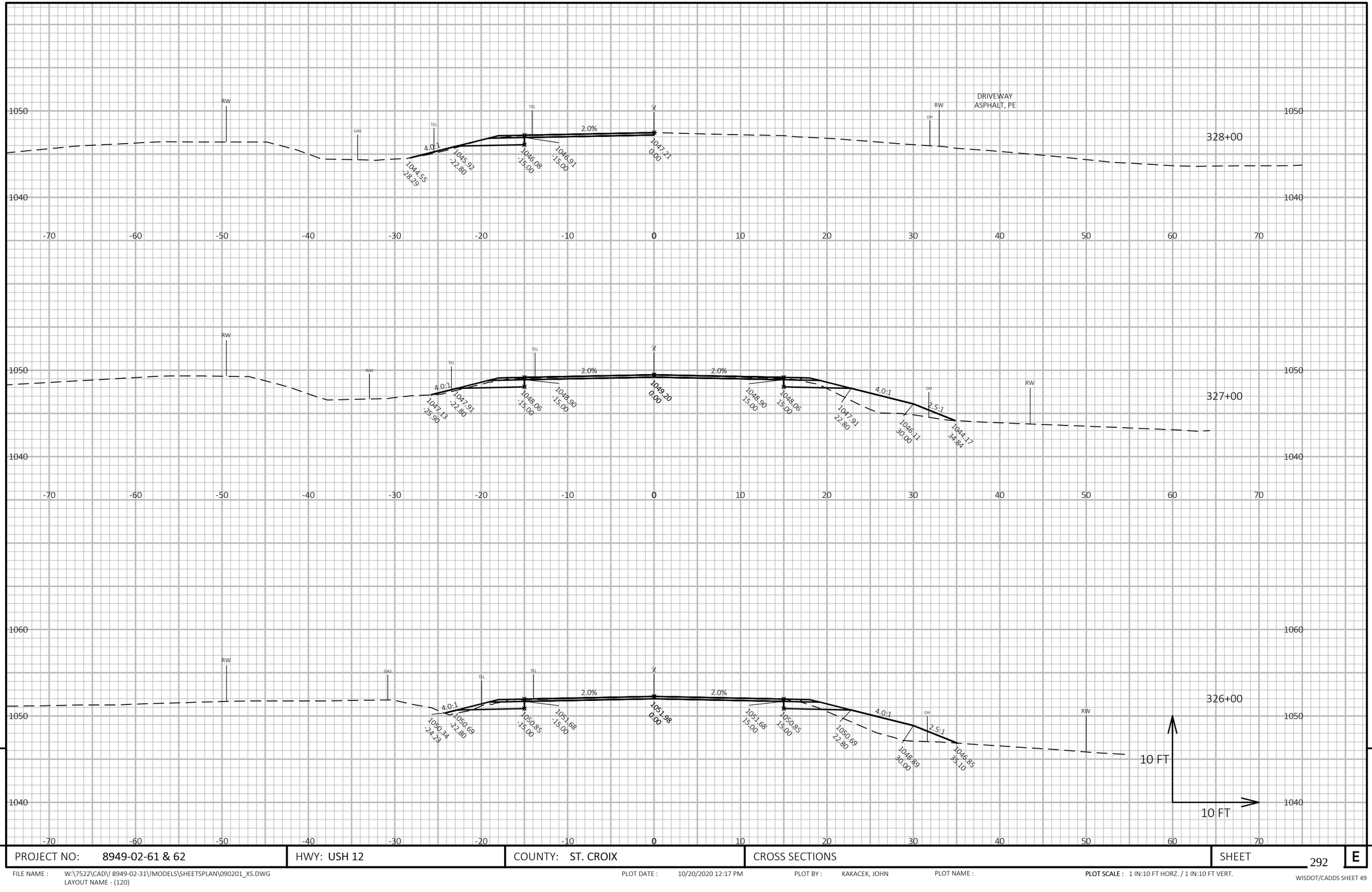
WISDOT/CADDS SHEET 49



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 291	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (119)

PLOT DATE : 10/20/2020 12:16 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

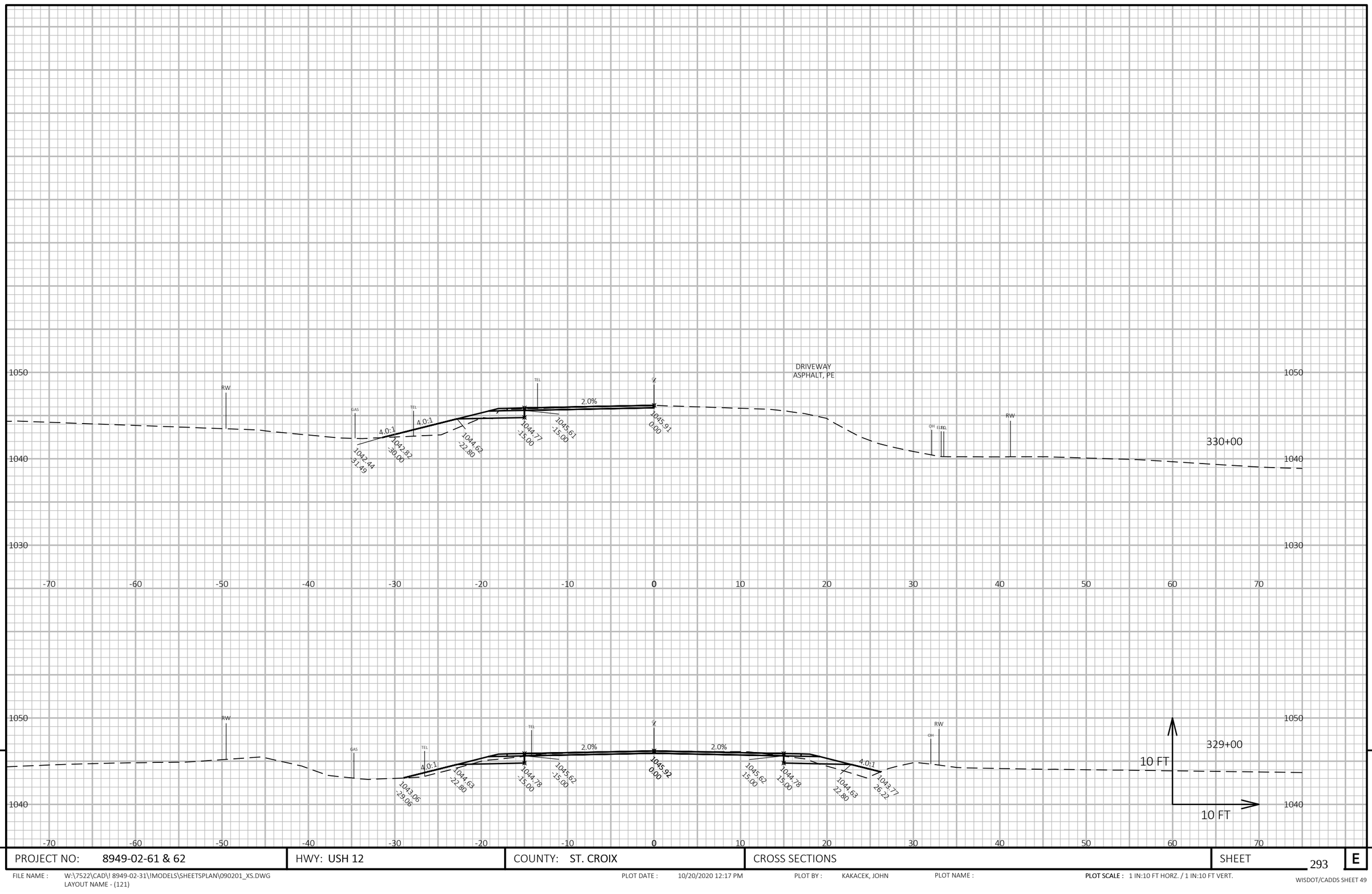


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 292	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (120)

PLOT DATE : 10/20/2020 12:17 PM PLOT BY : KAKACEK, JOHN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

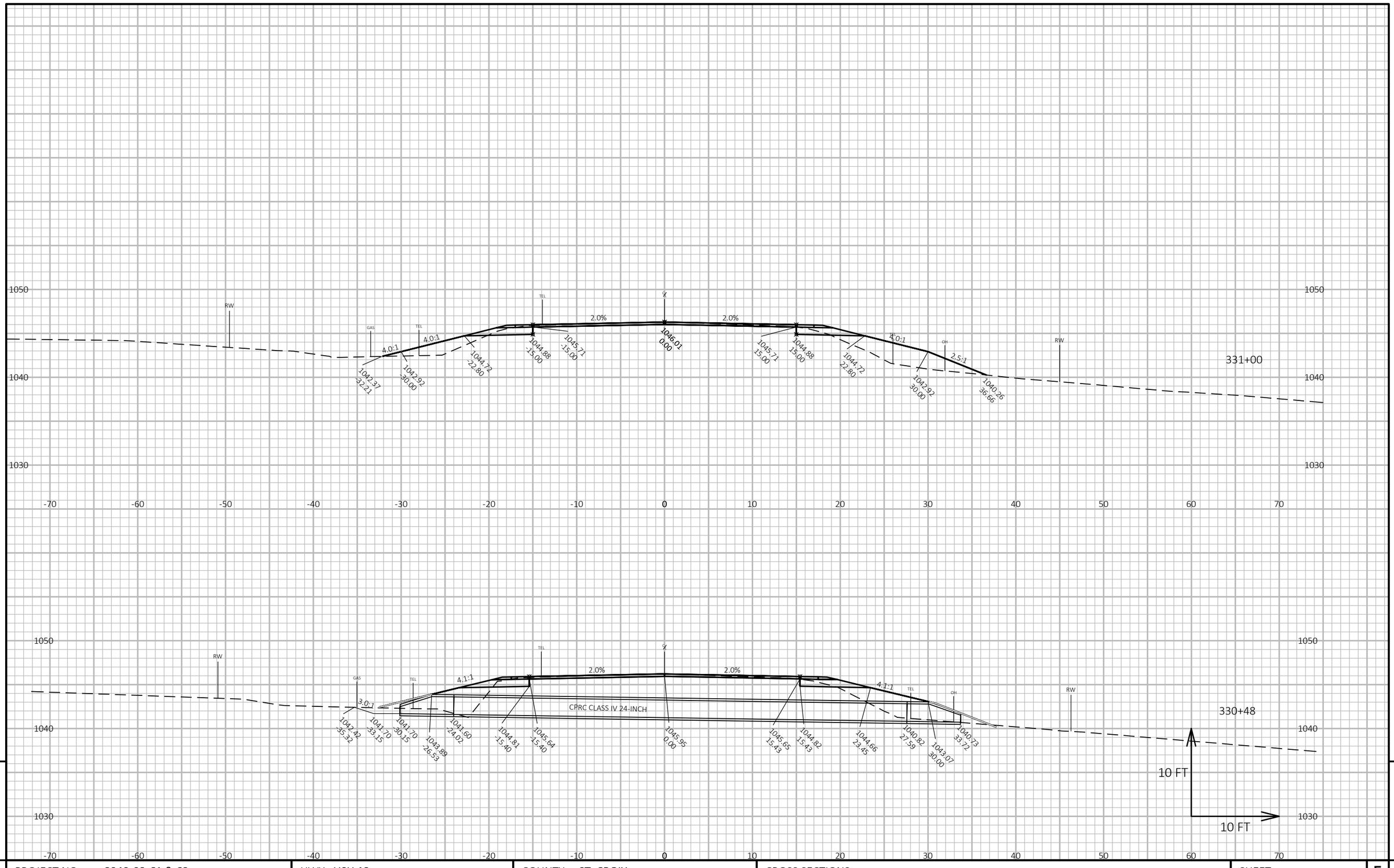
WISDOT/CADDS SHEET 49



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 293	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (121)

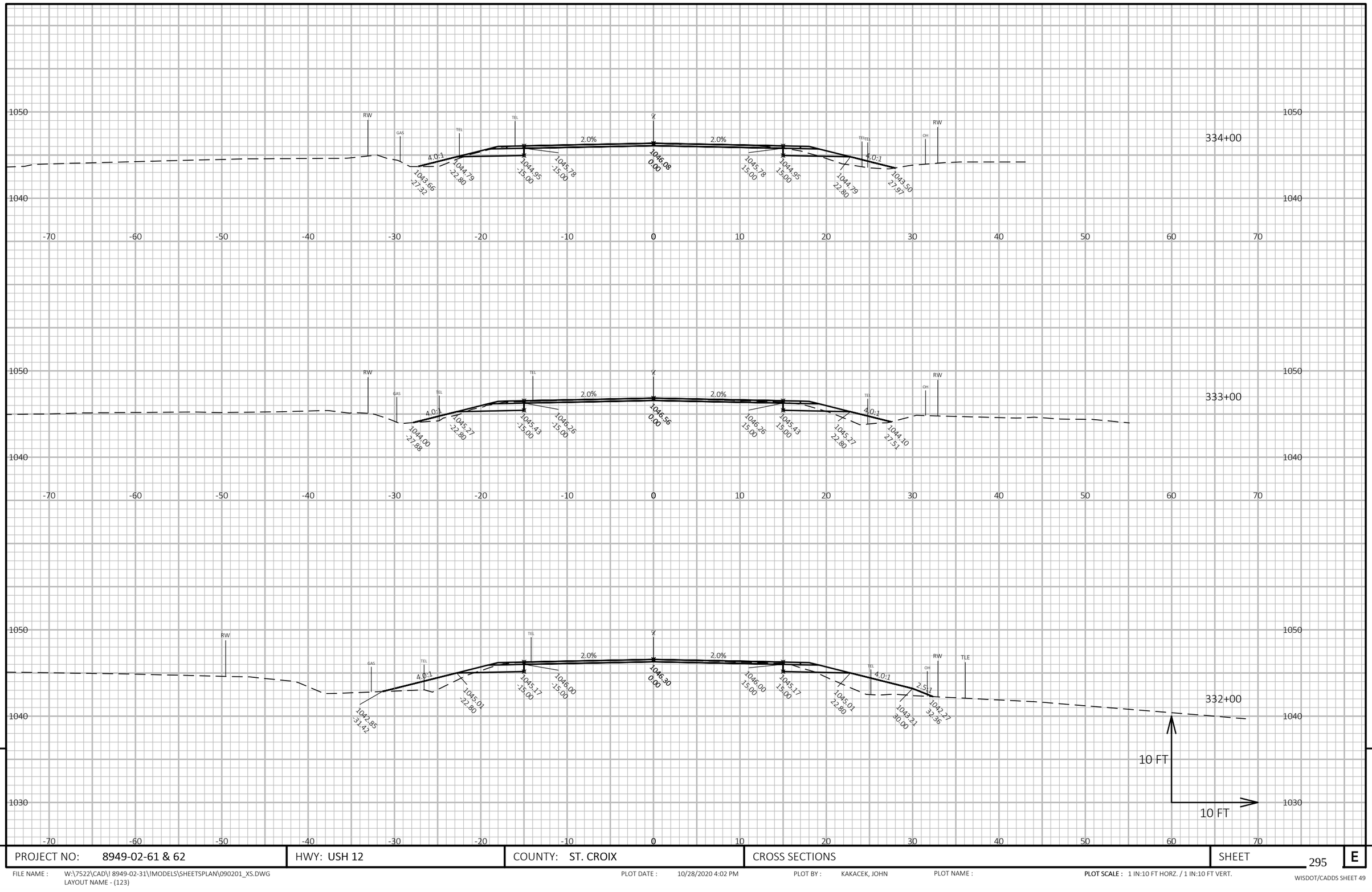
PLOT DATE : 10/20/2020 12:17 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 294	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (122)

PLOT DATE : 10/20/2020 12:17 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

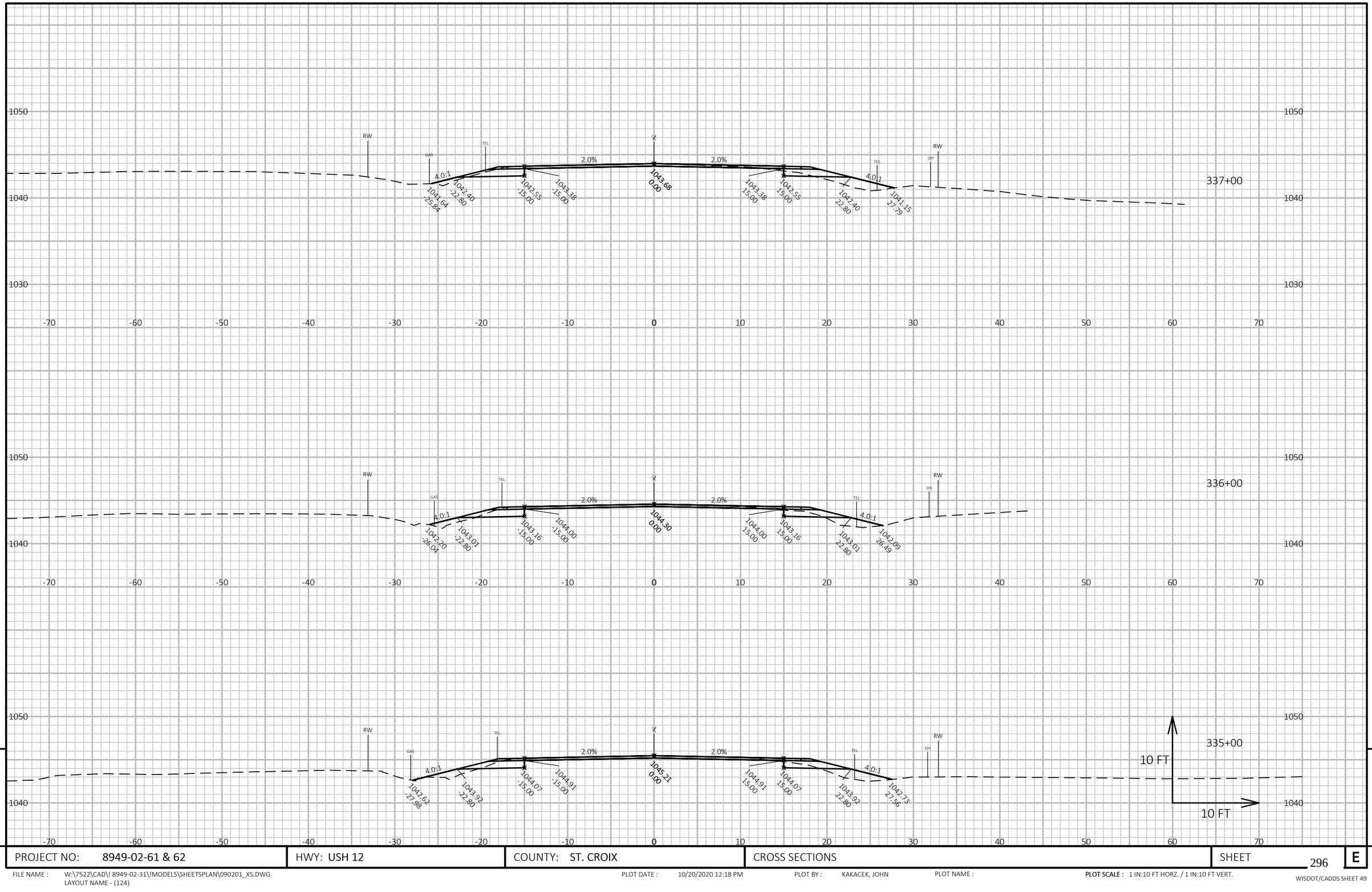


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 295	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (123)

PLOT DATE : 10/28/2020 4:02 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 296	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (124)

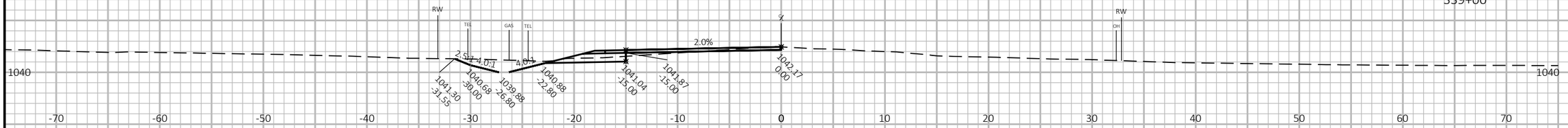
PLOT DATE : 10/20/2020 12:18 PM PLOT BY : KAKACEK, JOHN PLOT NAME :

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

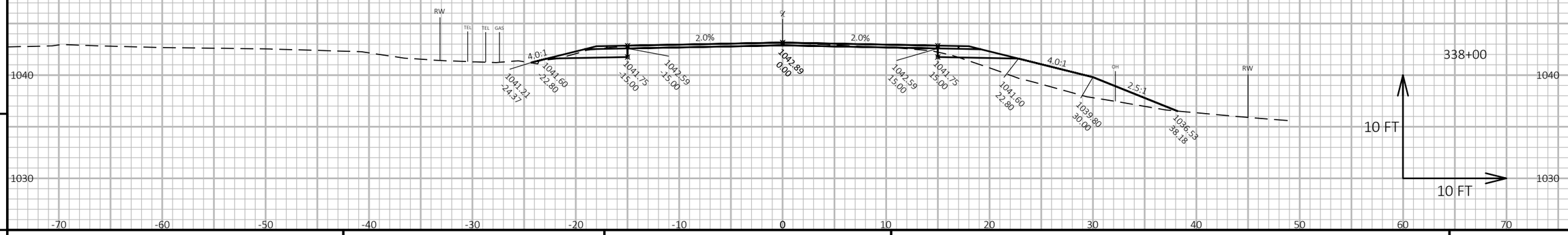
WISDOT/CADDS SHEET 49

DRIVEWAY
ASPHALT, PE

339+00



338+00

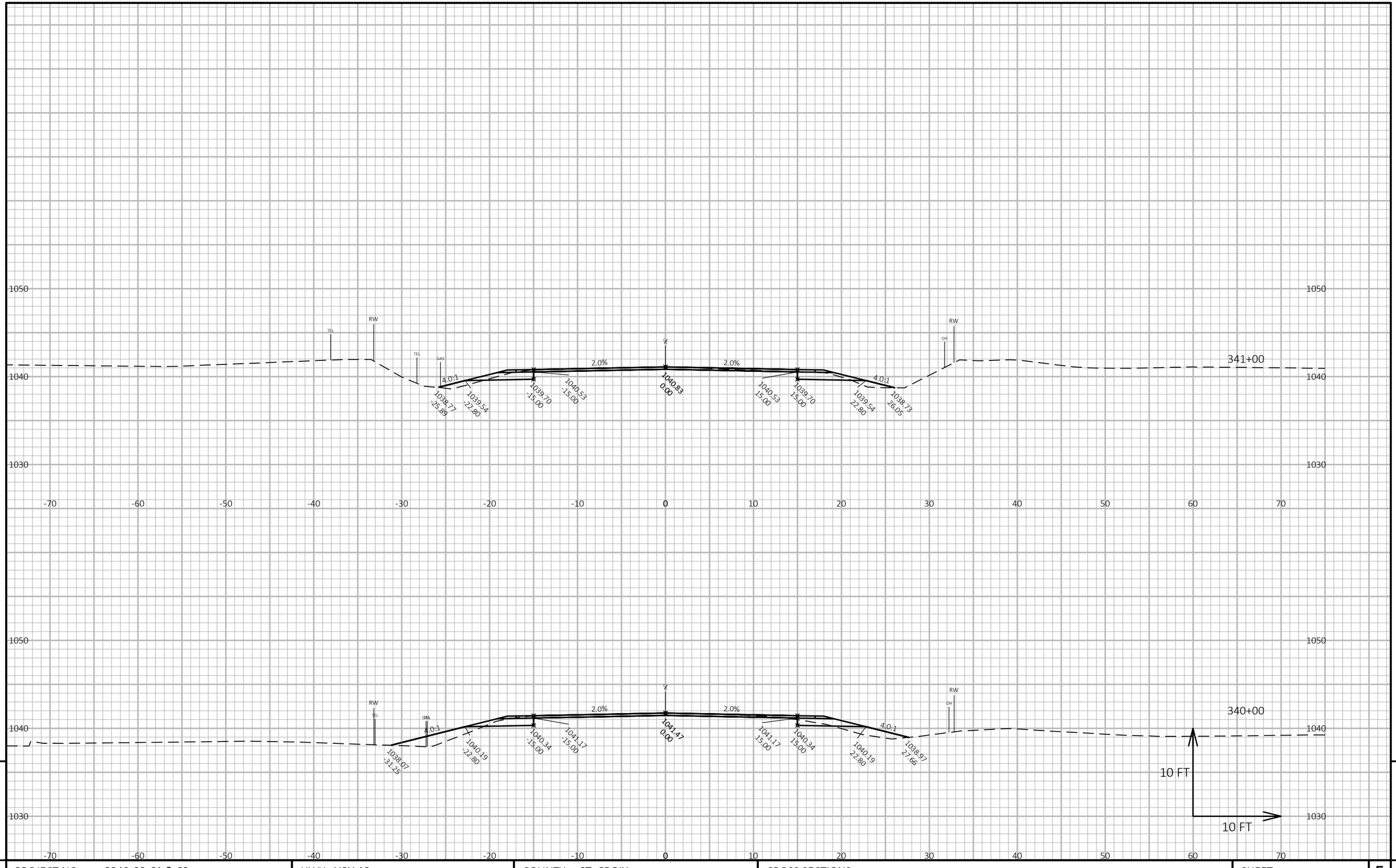


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 297	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (125)

PLOT DATE : 10/20/2020 12:18 PM PLOT BY : KAKACEK, JOHN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

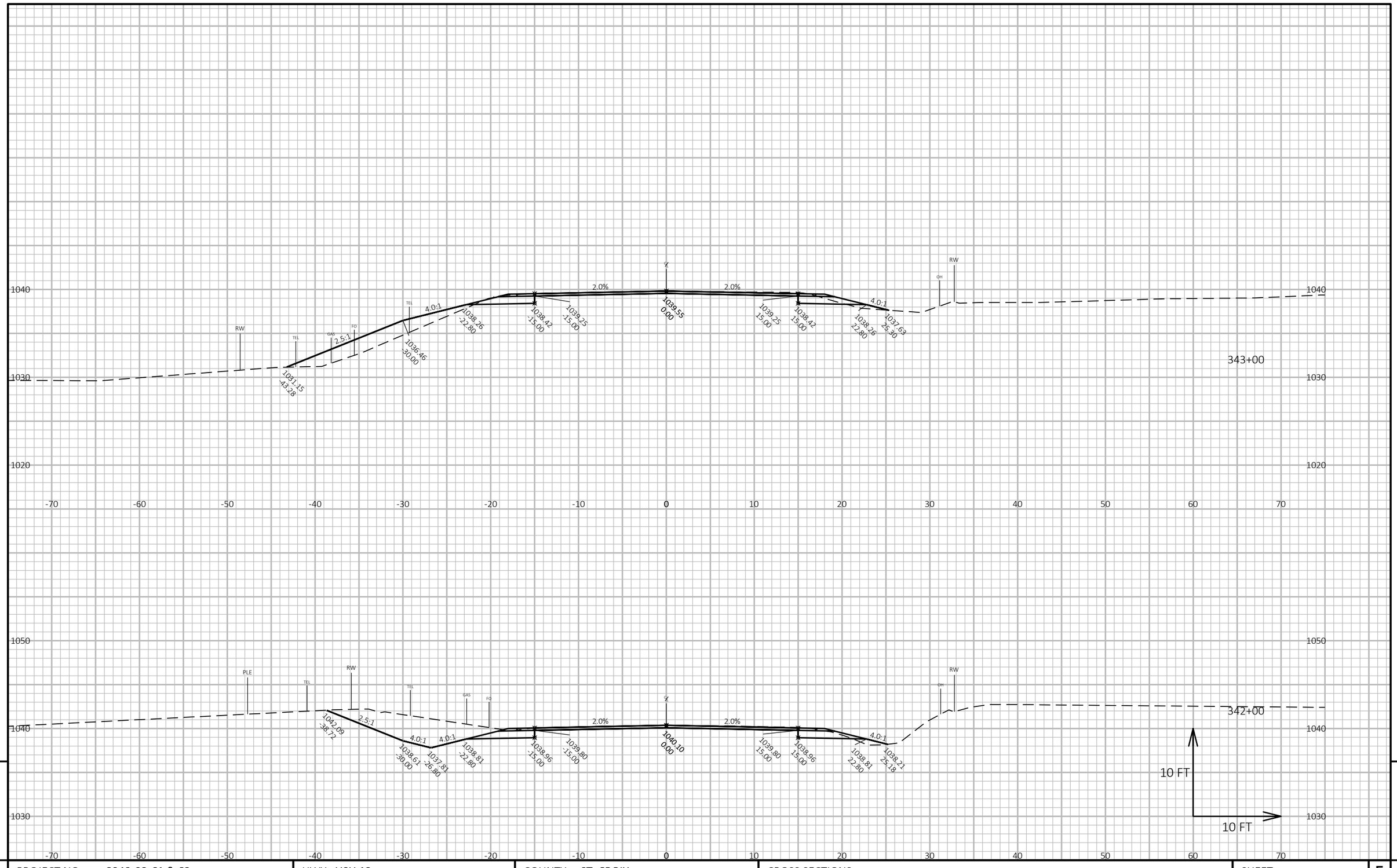


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 298	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (126)

PLOT DATE : 10/20/2020 12:19 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

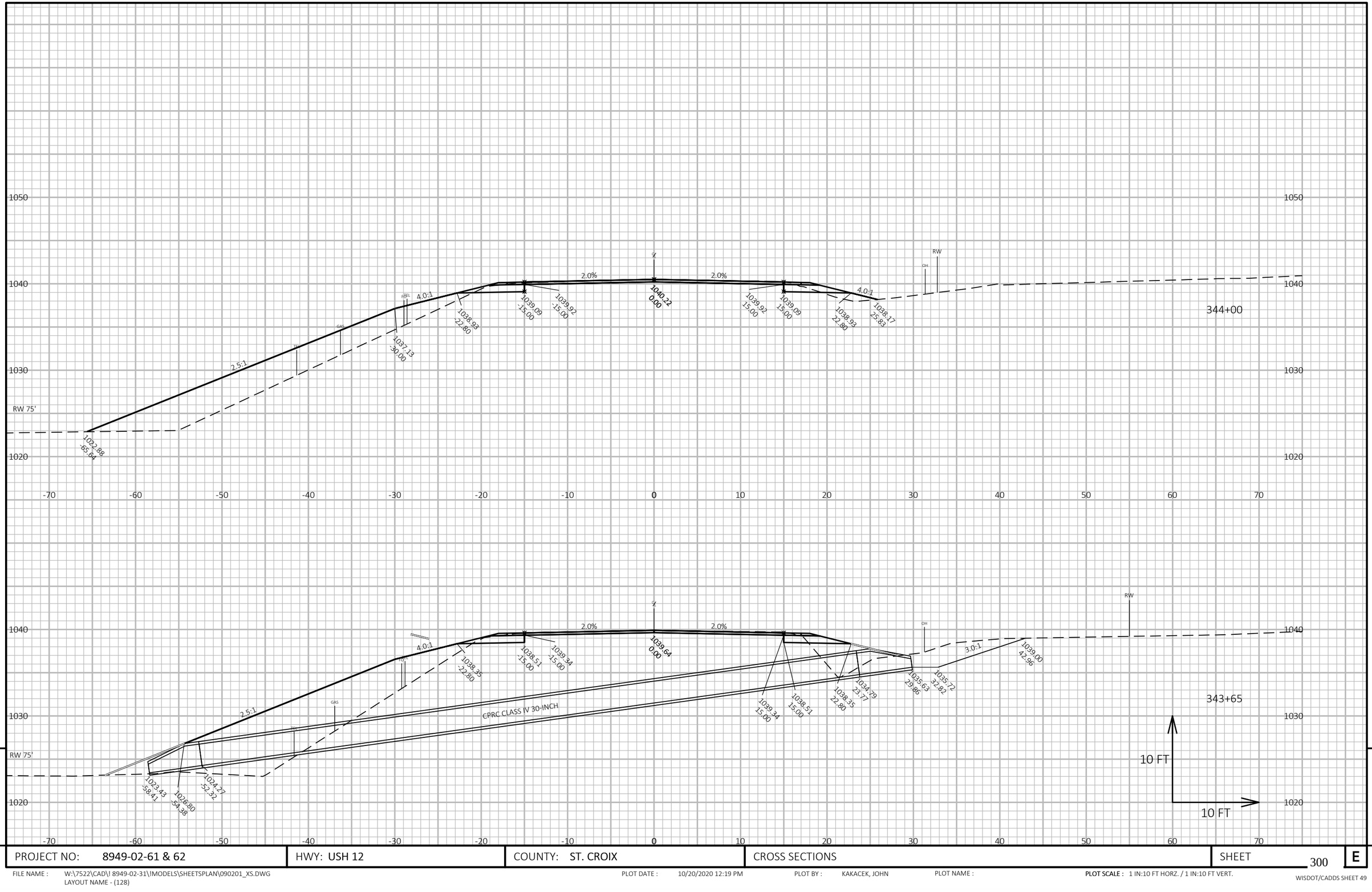


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 299	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (127)

PLOT DATE : 10/20/2020 12:19 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

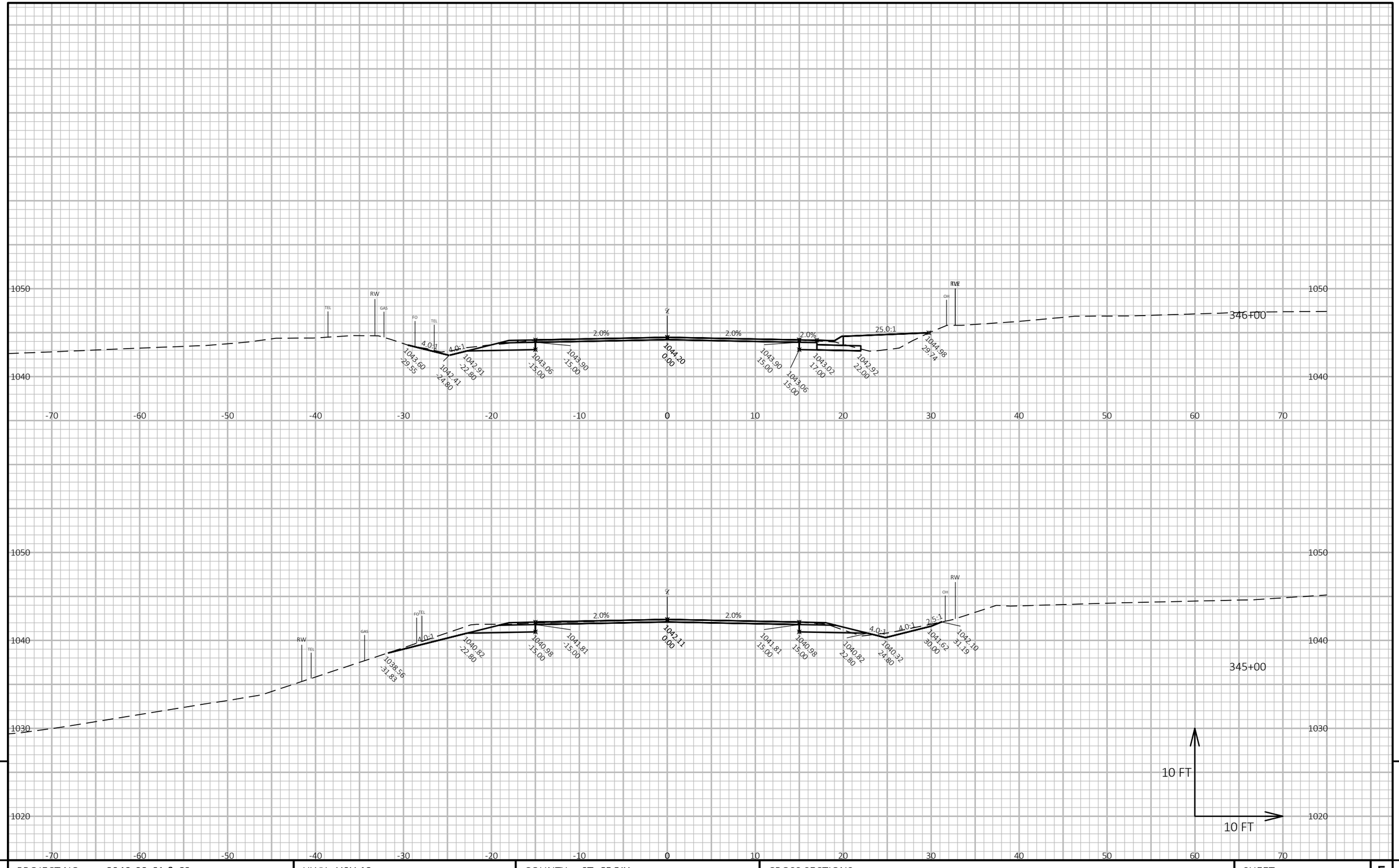


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 300	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (128)

PLOT DATE : 10/20/2020 12:19 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

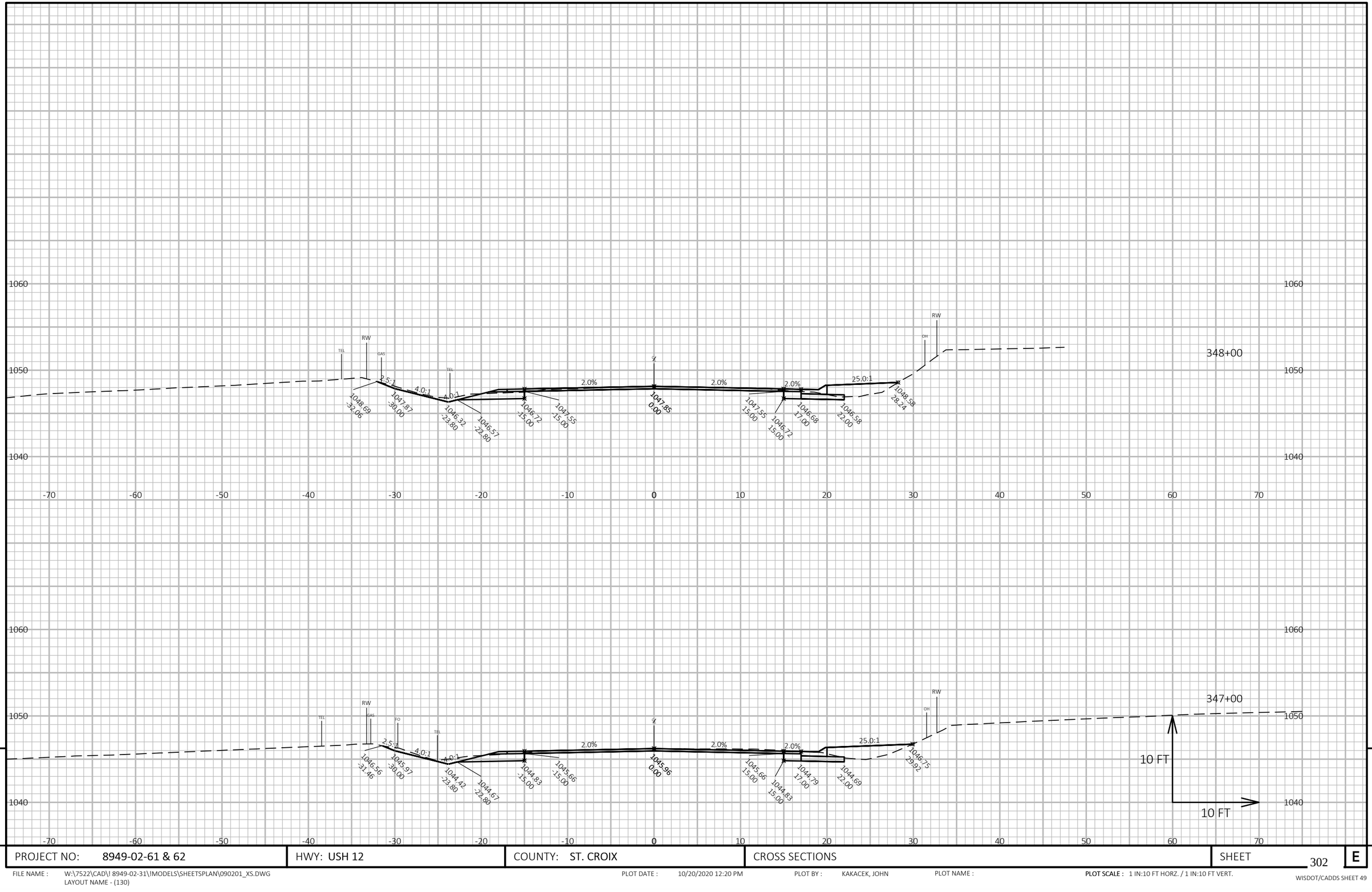
WISDOT/CADDS SHEET 49



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 301	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (129)

PLOT DATE : 10/20/2020 12:20 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

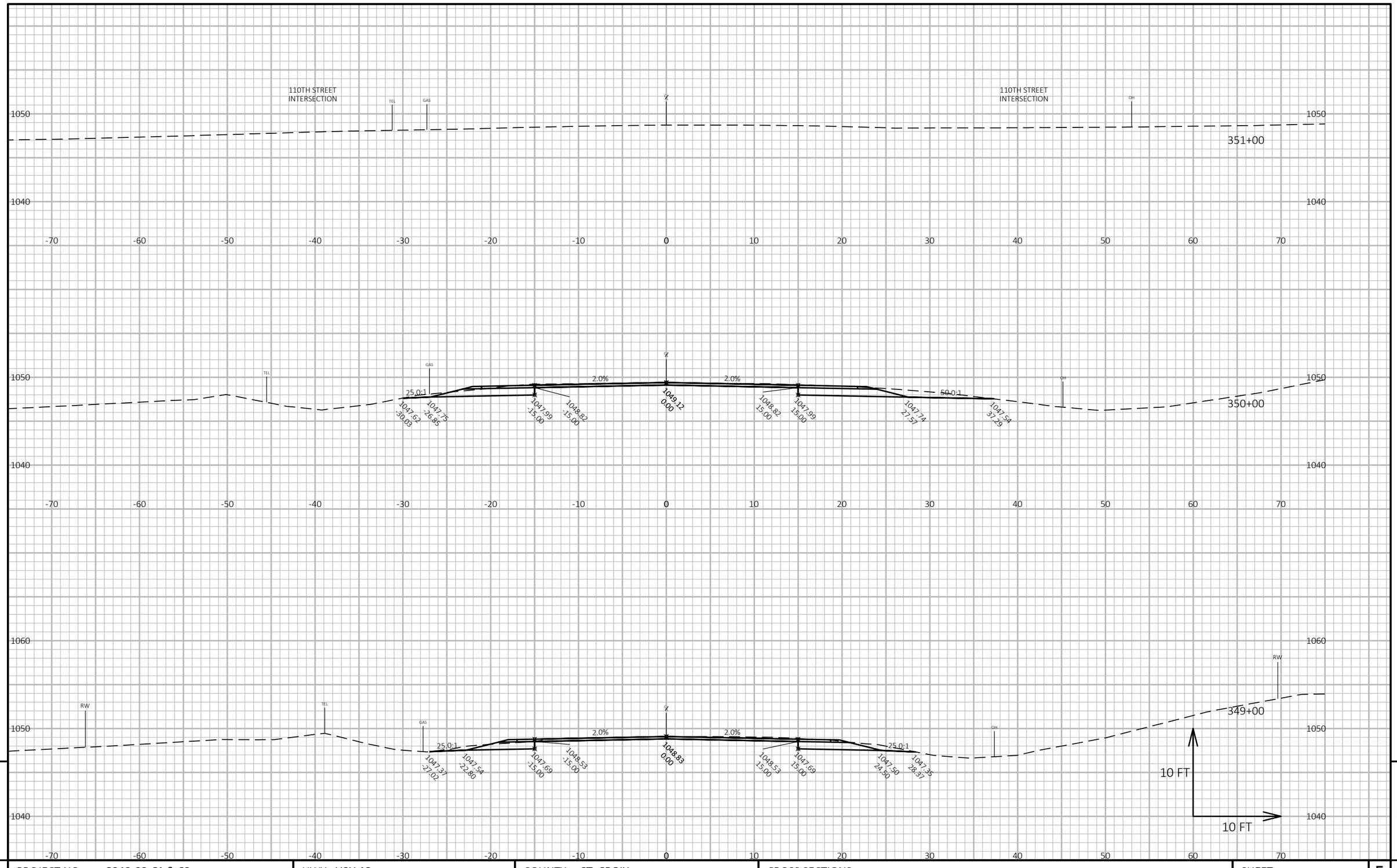


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 302	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (130)

PLOT DATE : 10/20/2020 12:20 PM PLOT BY : KAKACEK, JOHN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

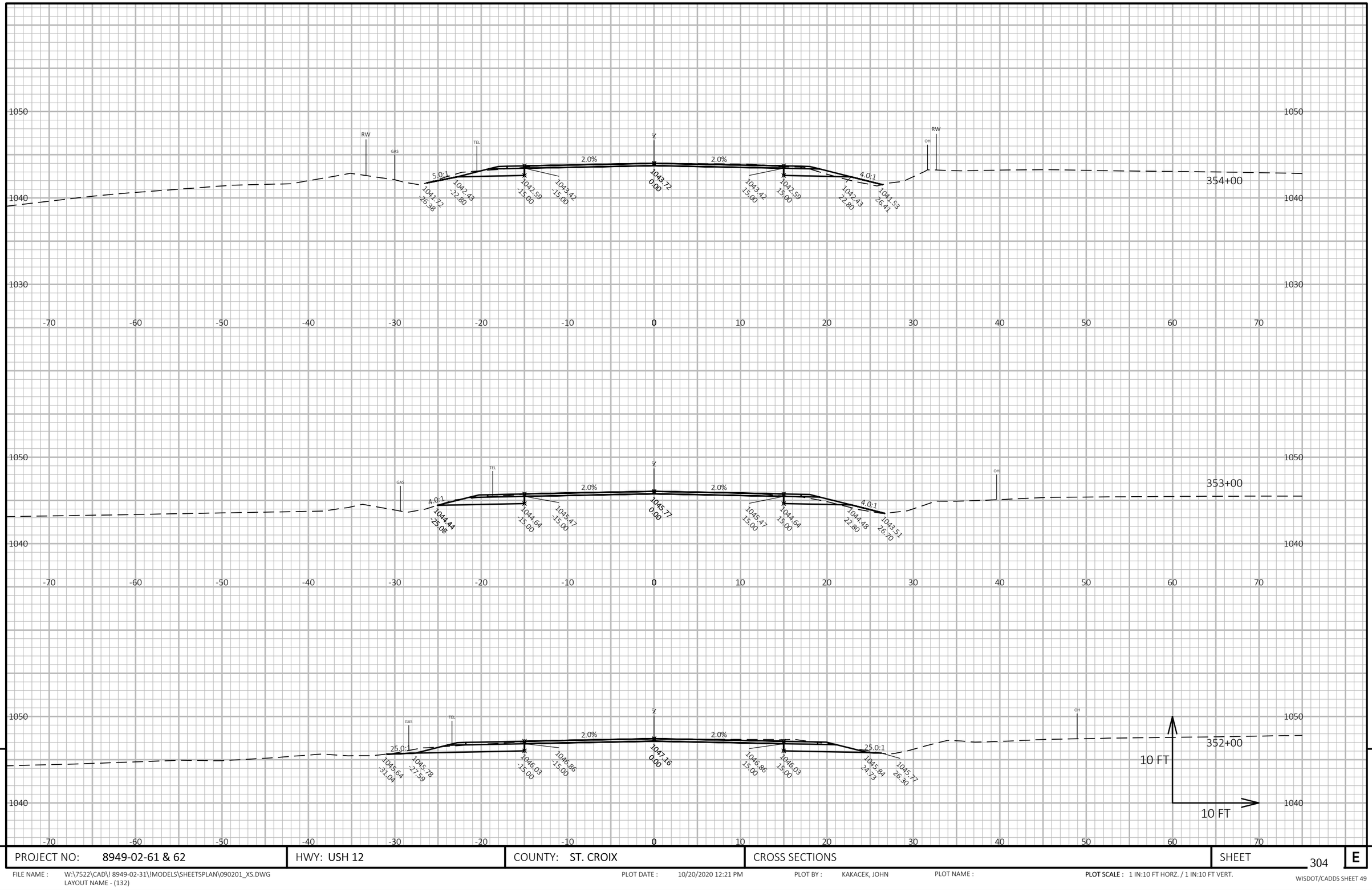


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 303	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (131)

PLOT DATE : 10/20/2020 12:20 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

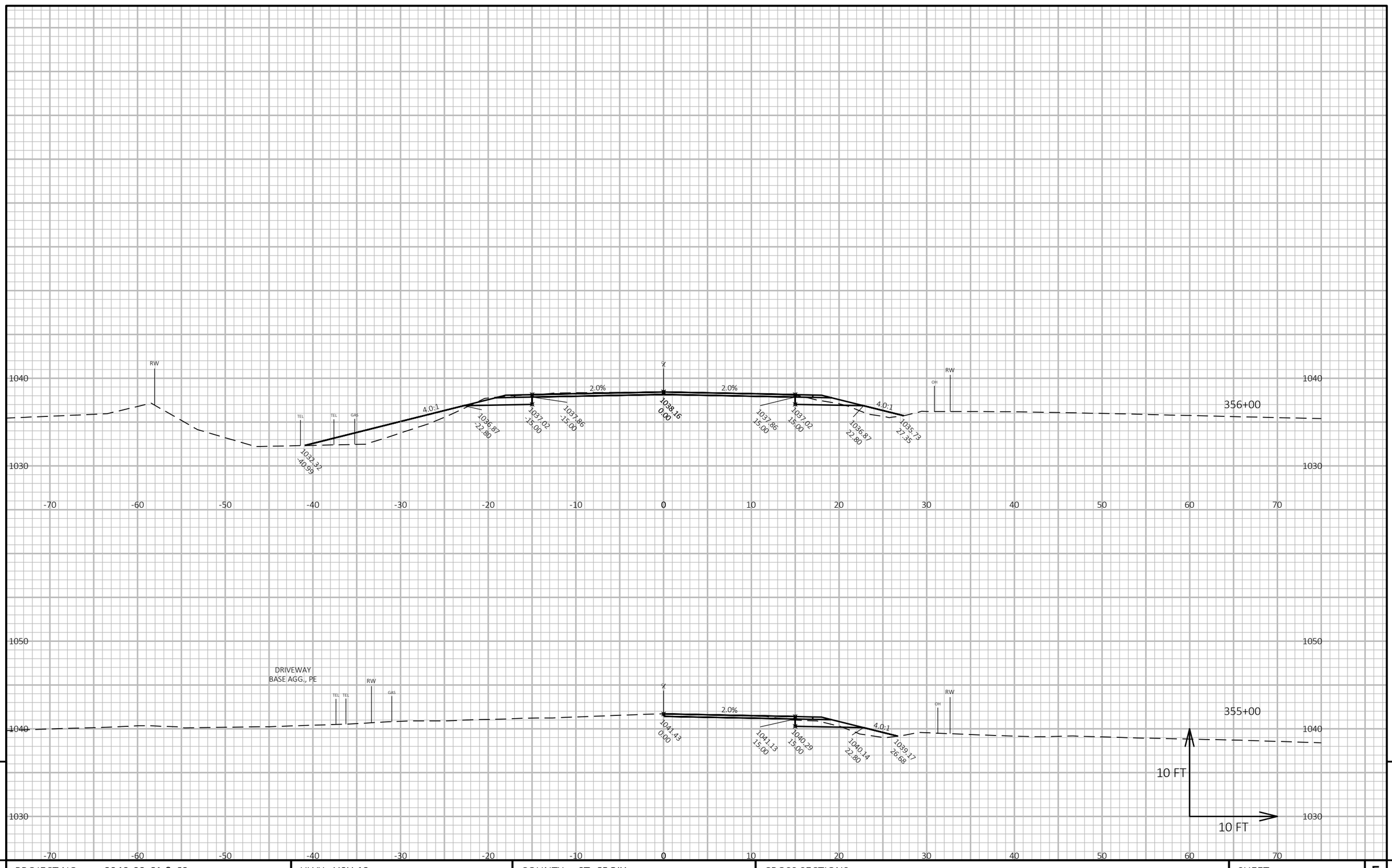


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 304	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (132)

PLOT DATE : 10/20/2020 12:21 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

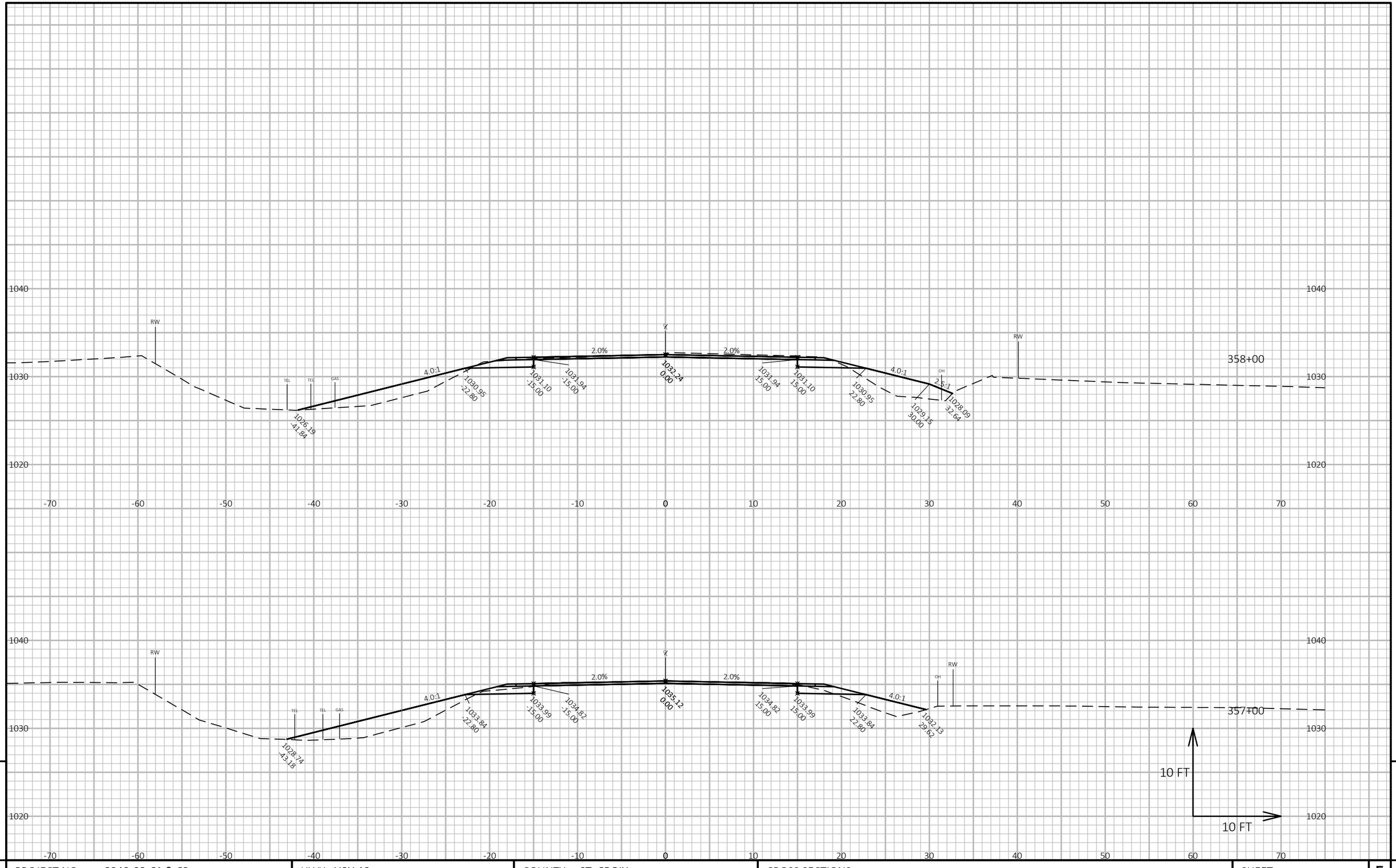
WISDOT/CADDS SHEET 49



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 305	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (133)

PLOT DATE : 10/20/2020 12:21 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

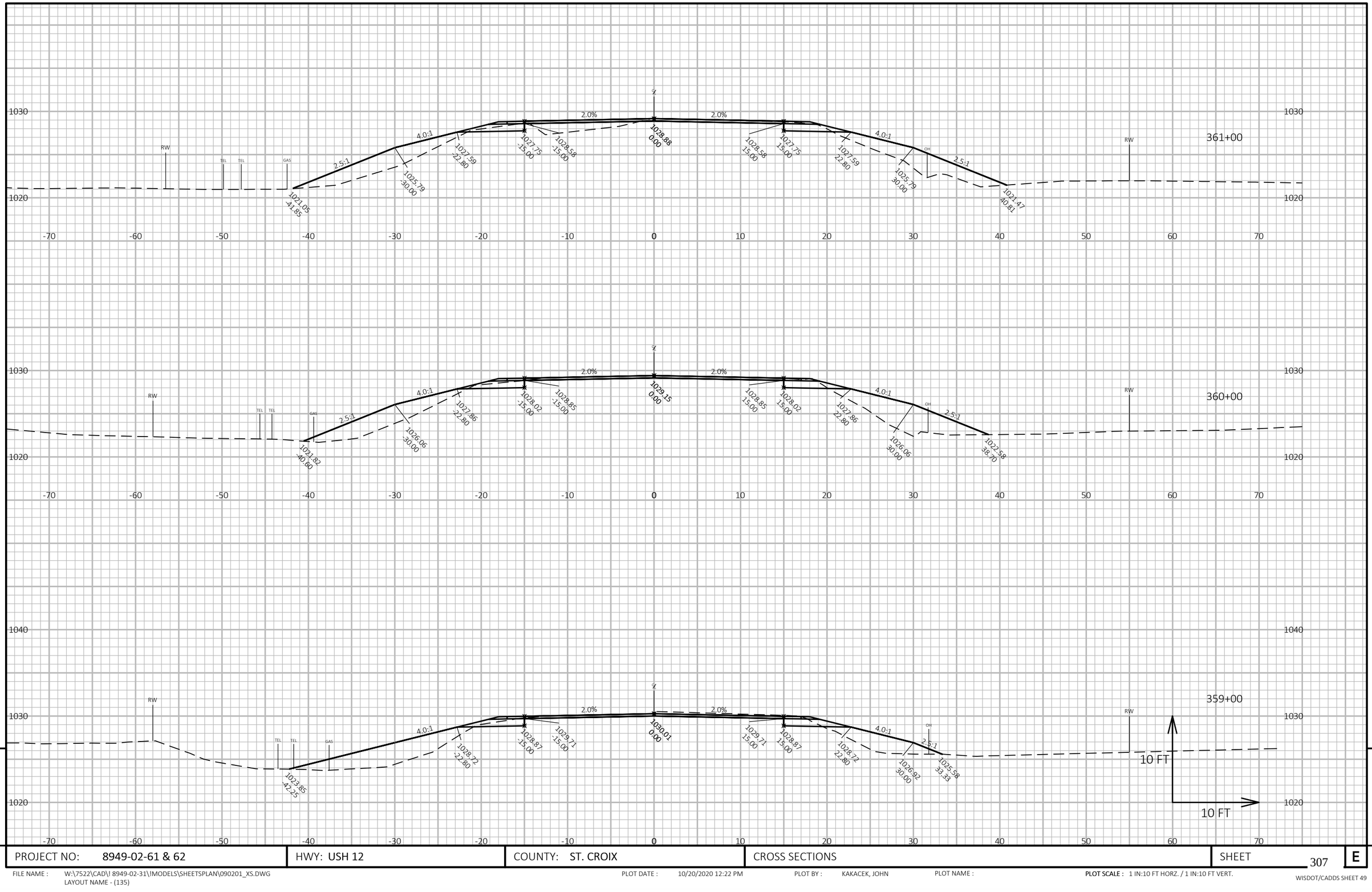


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 306	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (134)

PLOT DATE : 10/20/2020 12:21 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

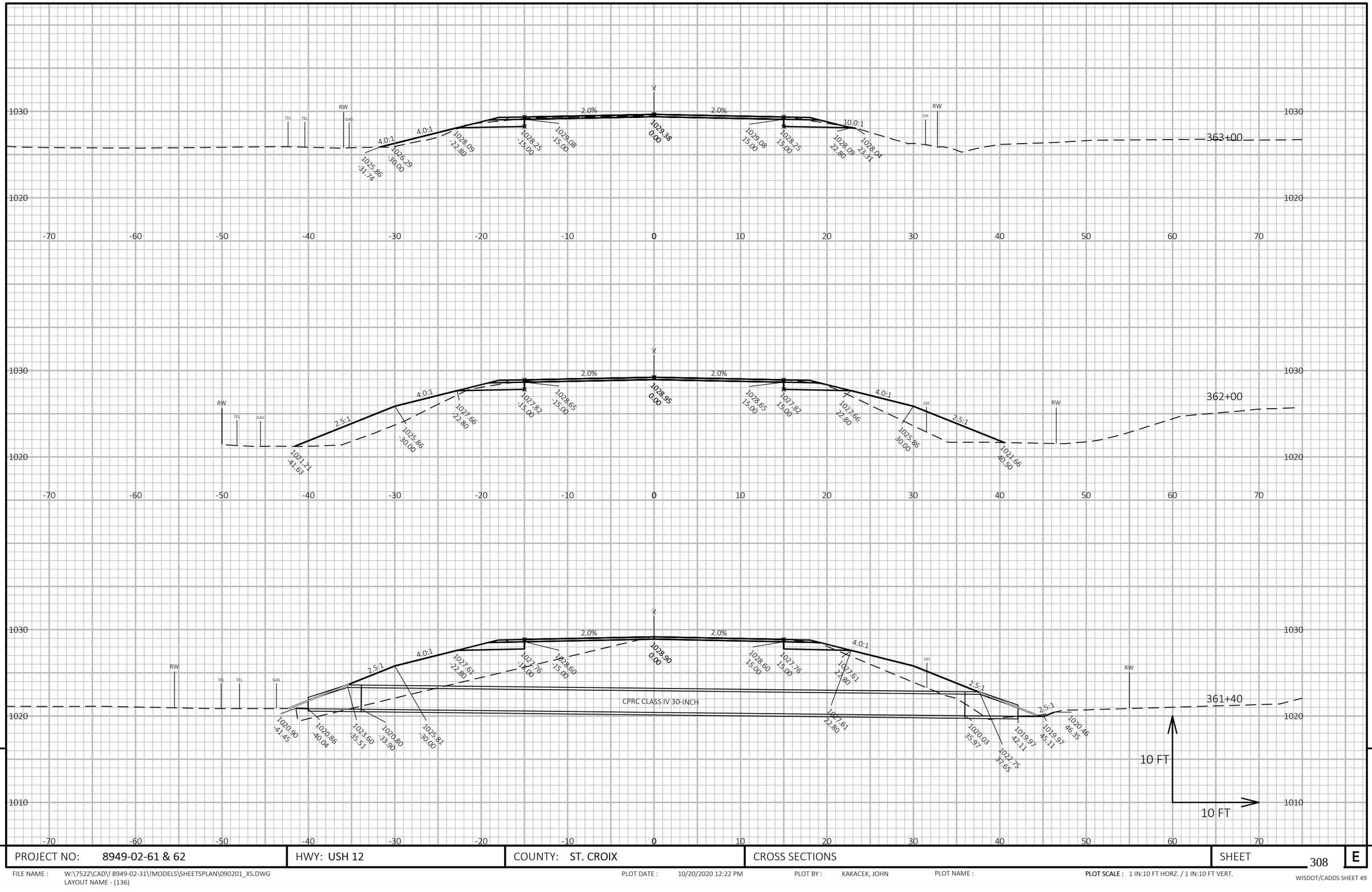
WISDOT/CADDS SHEET 49



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 307	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (135)

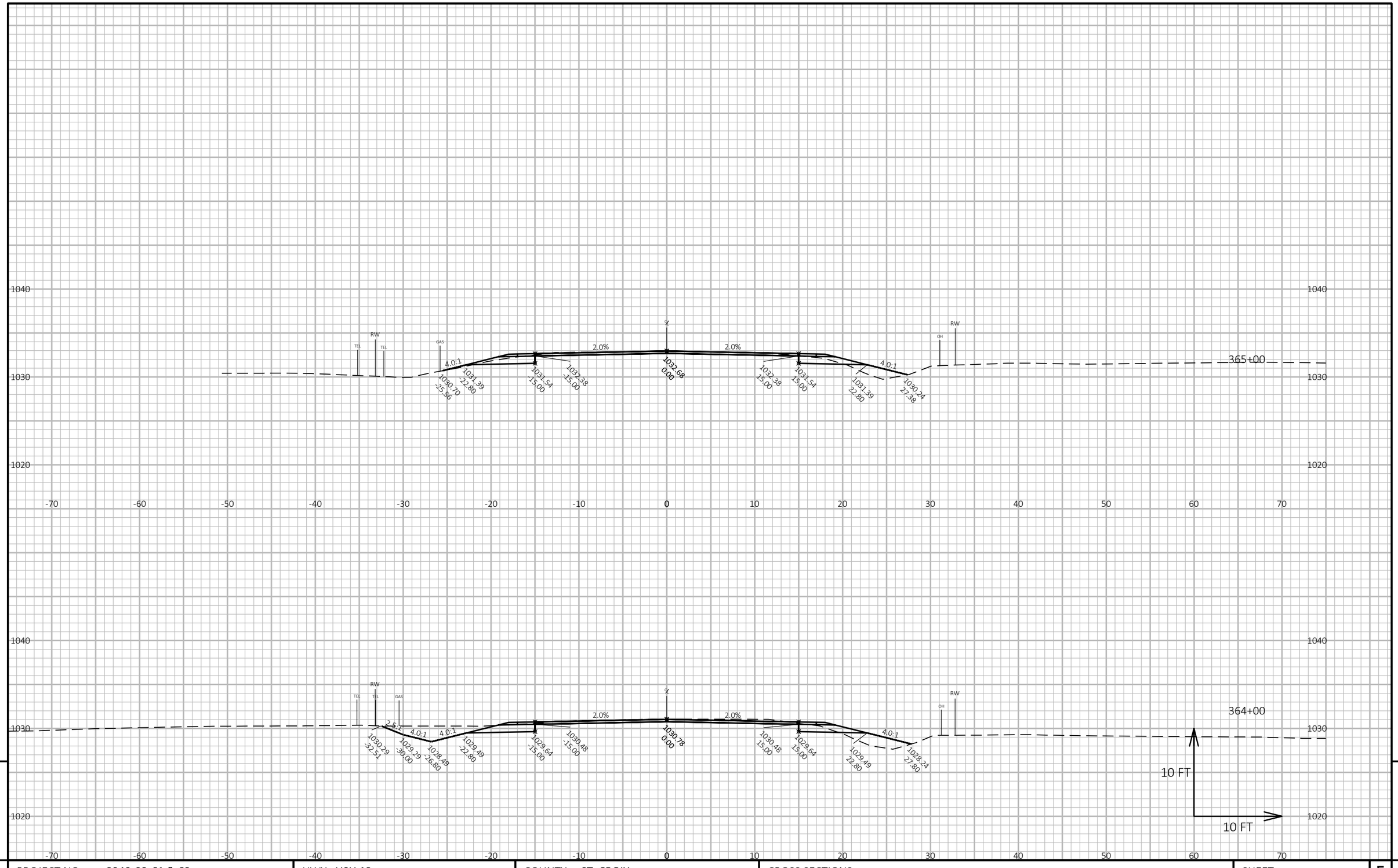
PLOT DATE : 10/20/2020 12:22 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 308	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (136)

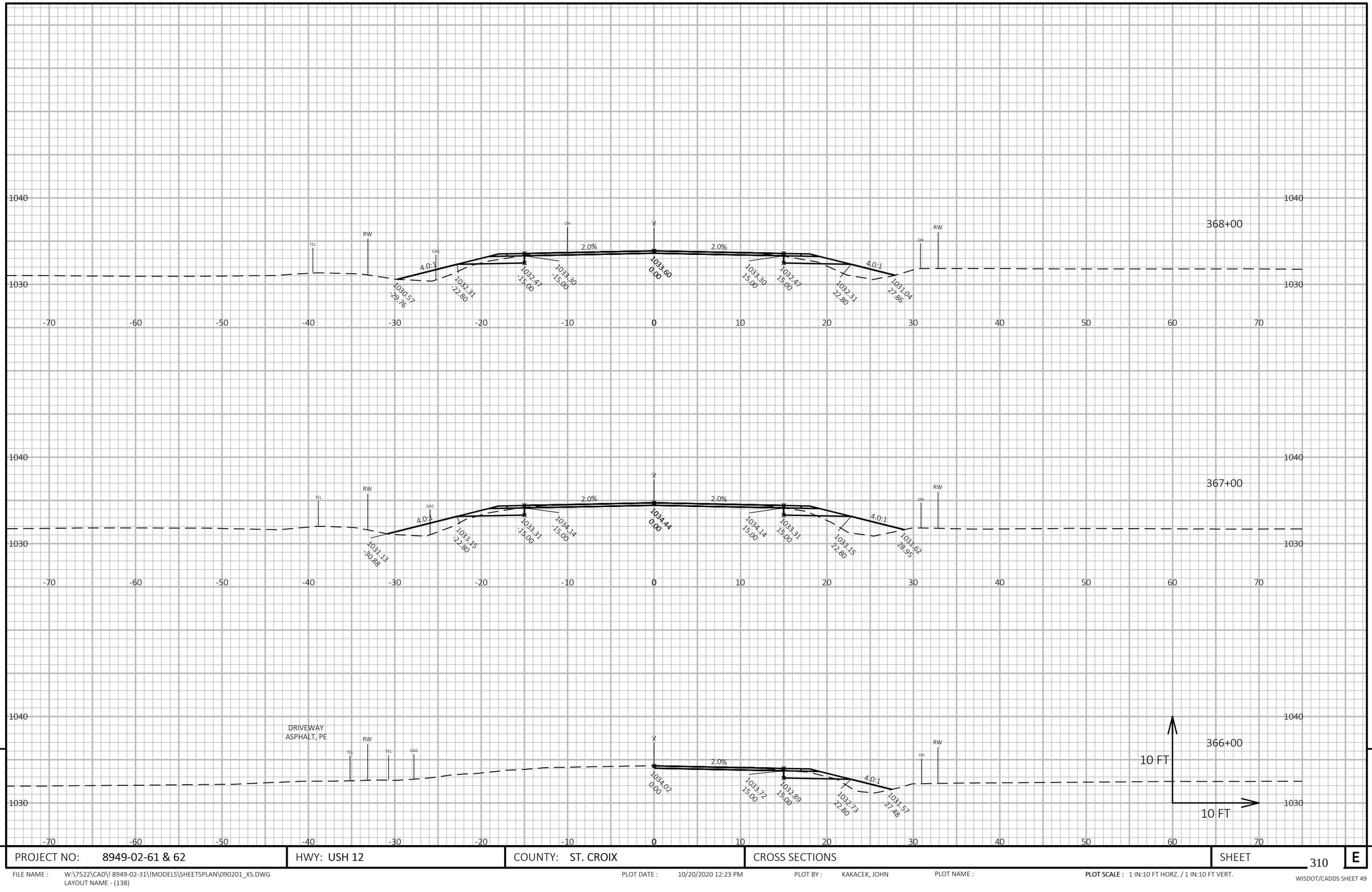
PLOT DATE : 10/20/2020 12:22 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 309	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (137)

PLOT DATE : 10/20/2020 12:22 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



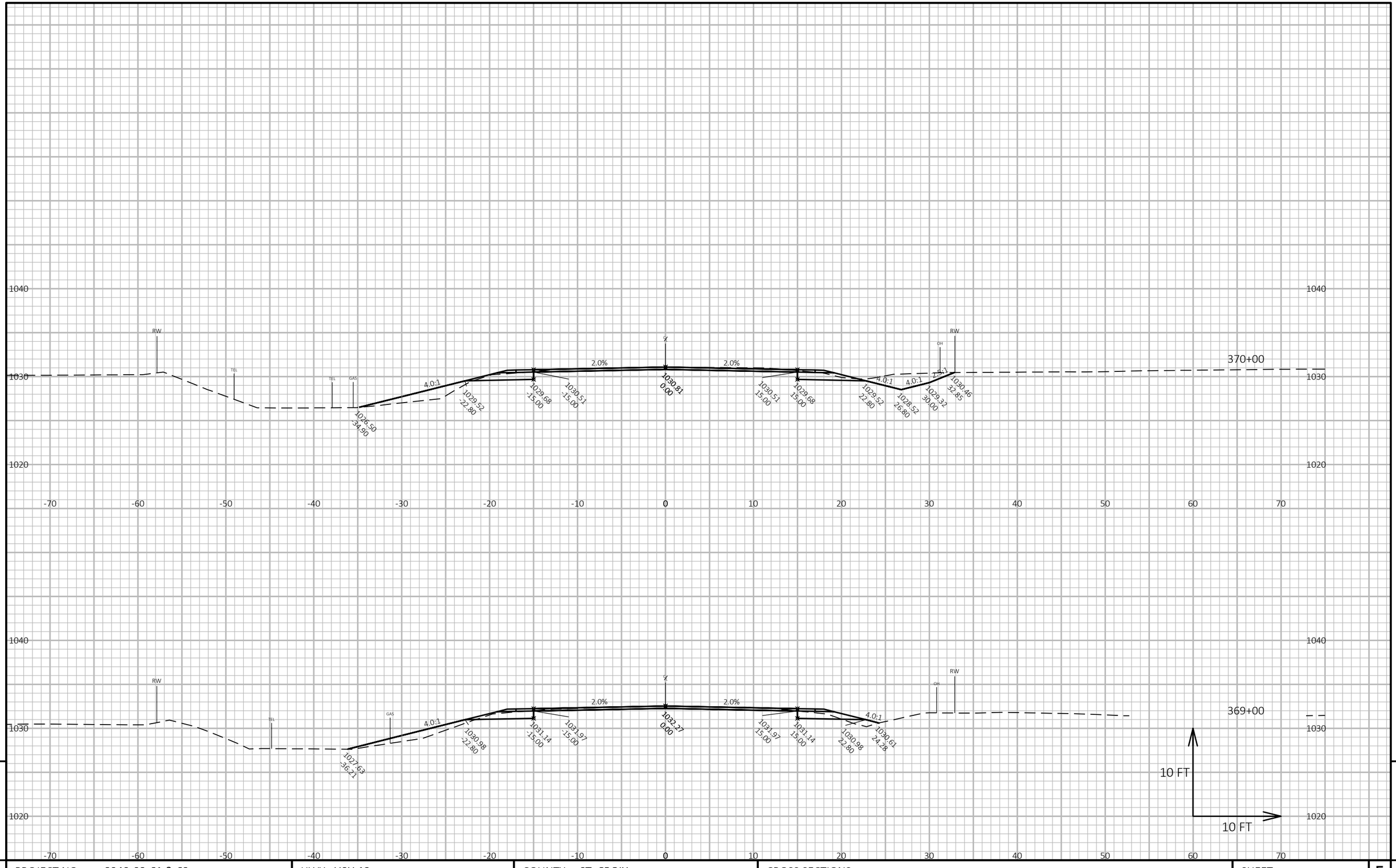
PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 310	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (138)

PLOT DATE : 10/20/2020 12:23 PM PLOT BY : KAKACEK, JOHN PLOT NAME :

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

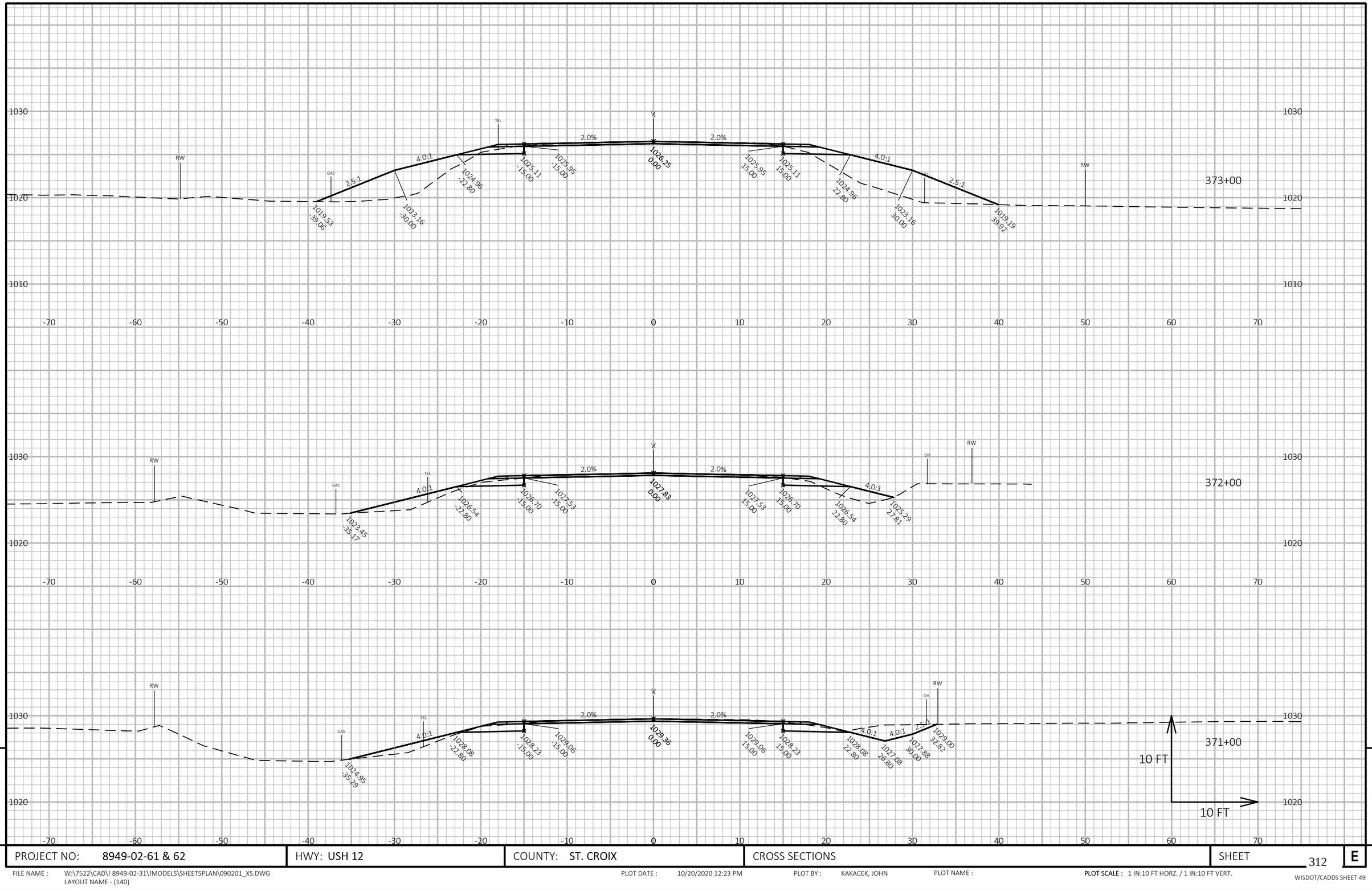
WISDOT/CADDS SHEET 49



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 311	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (139)

PLOT DATE : 10/20/2020 12:23 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

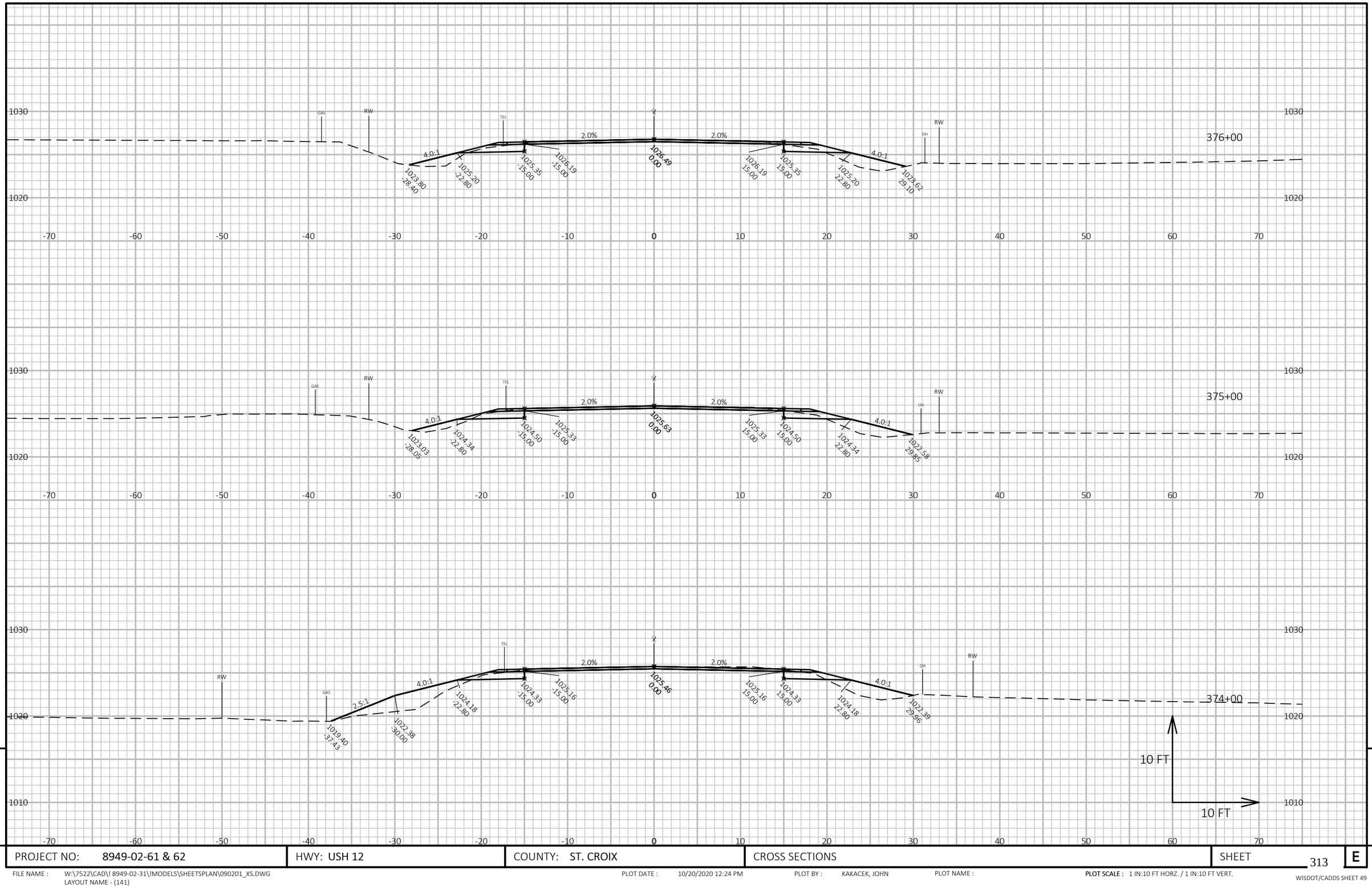


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 312	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (140)

PLOT DATE : 10/20/2020 12:23 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

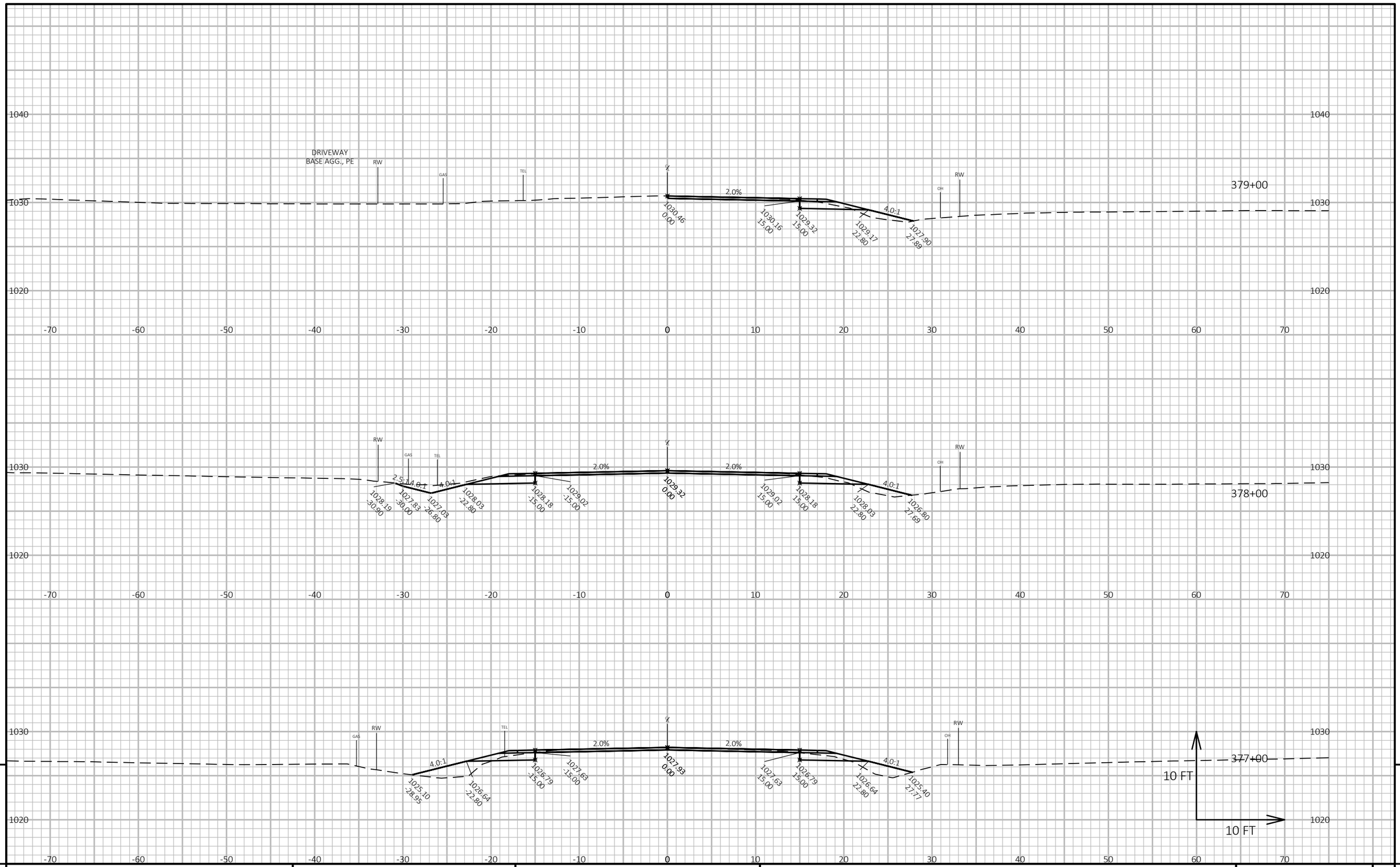


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 313	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (141)

PLOT DATE : 10/20/2020 12:24 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

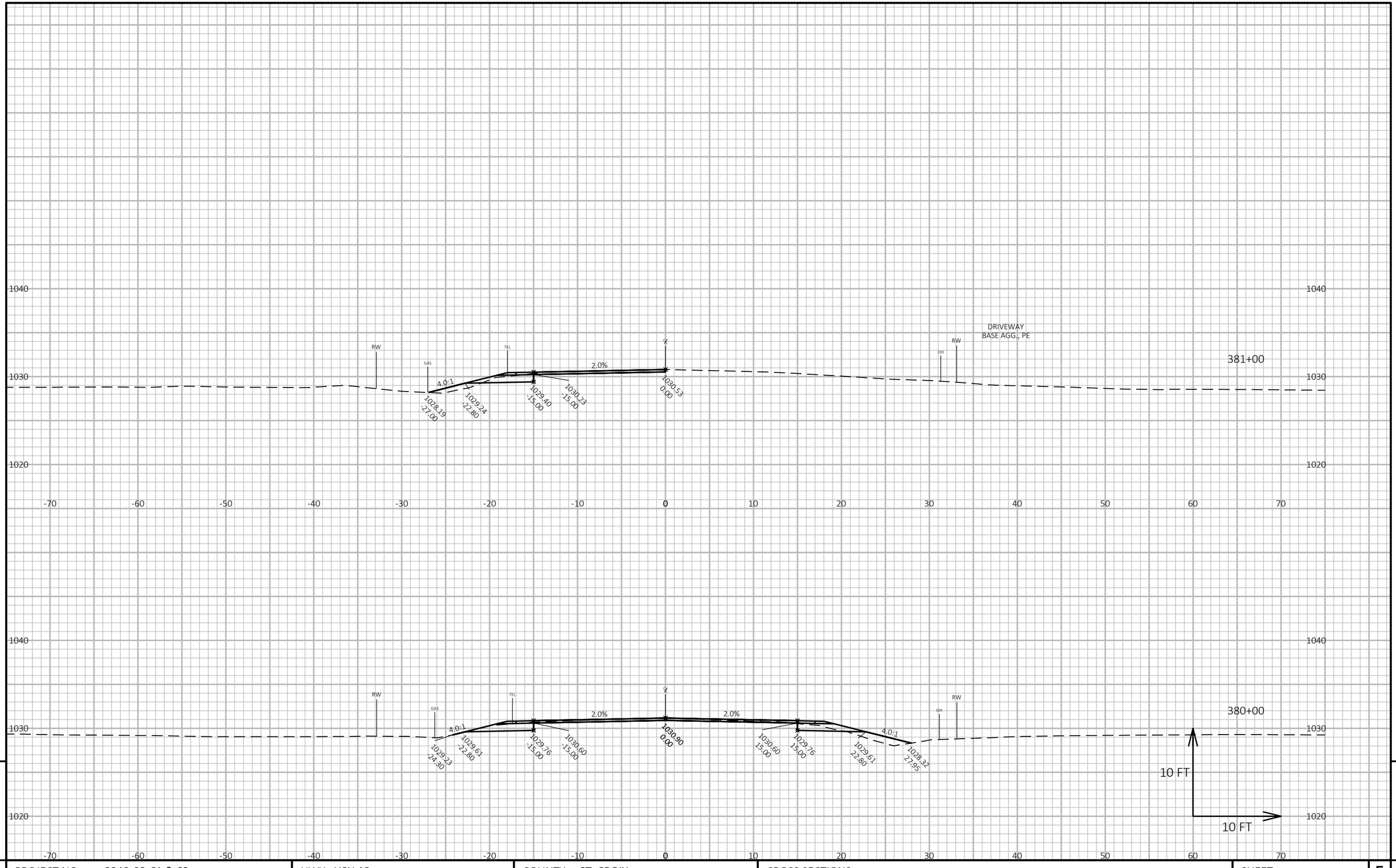


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 314	E

FILE NAME : W:\7522\CAD\I 8949-02-31\IMODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (142)

PLOT DATE : 10/20/2020 12:24 PM PLOT BY : KAKACEK, JOHN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

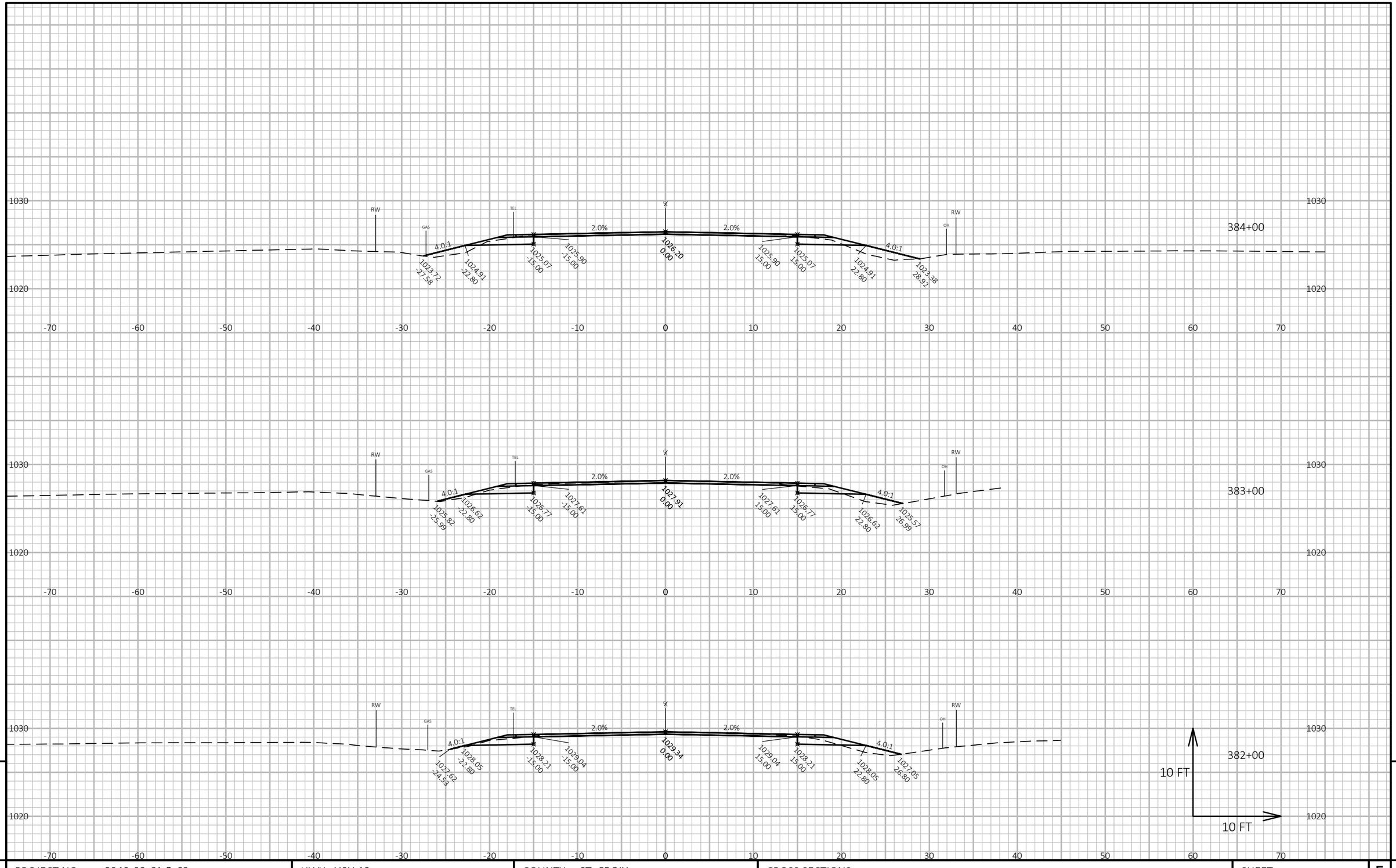
WISDOT/CADDS SHEET 49



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 315	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (143)

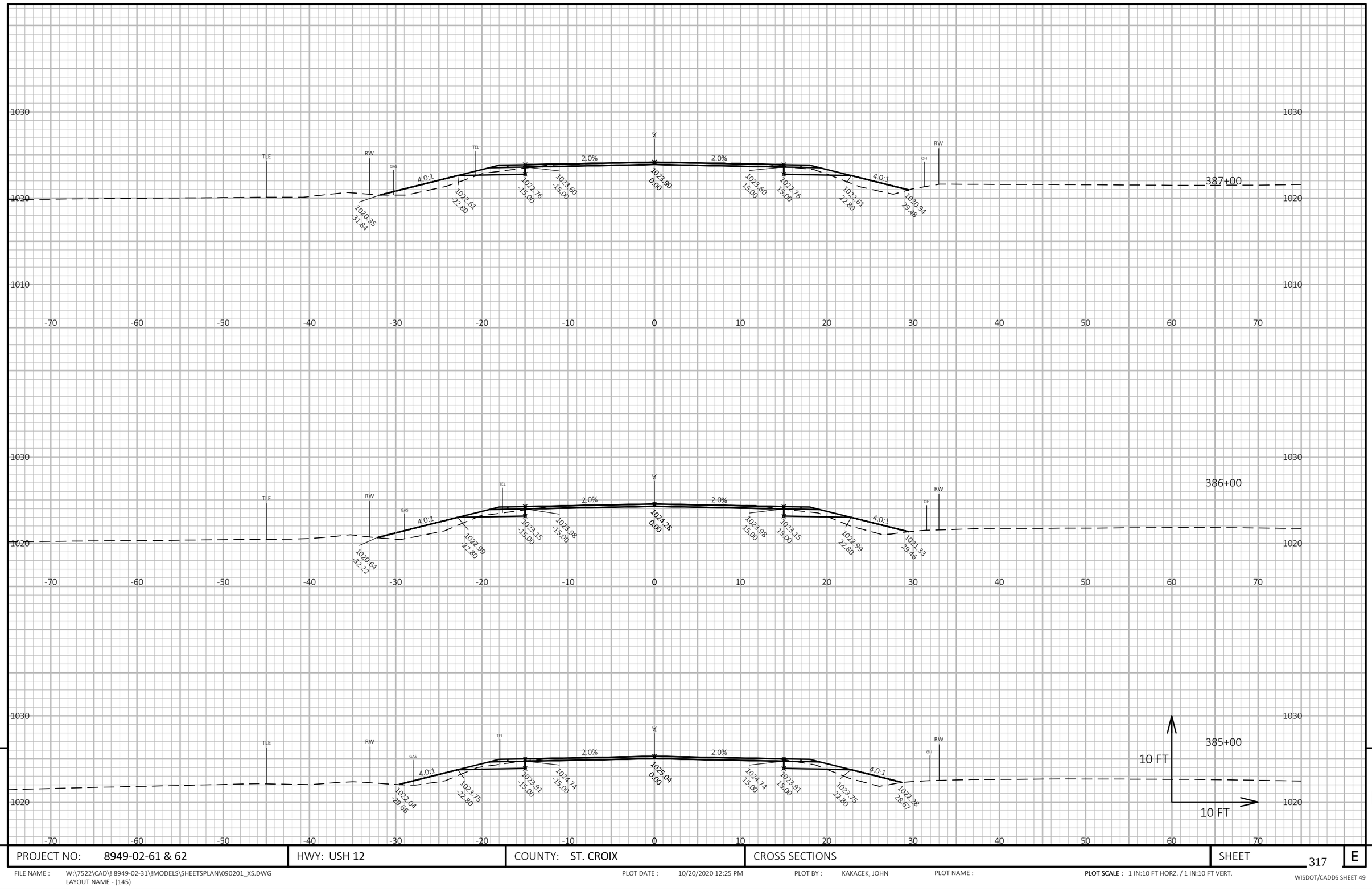
PLOT DATE : 10/20/2020 12:24 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 316	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (144)

PLOT DATE : 10/20/2020 12:25 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

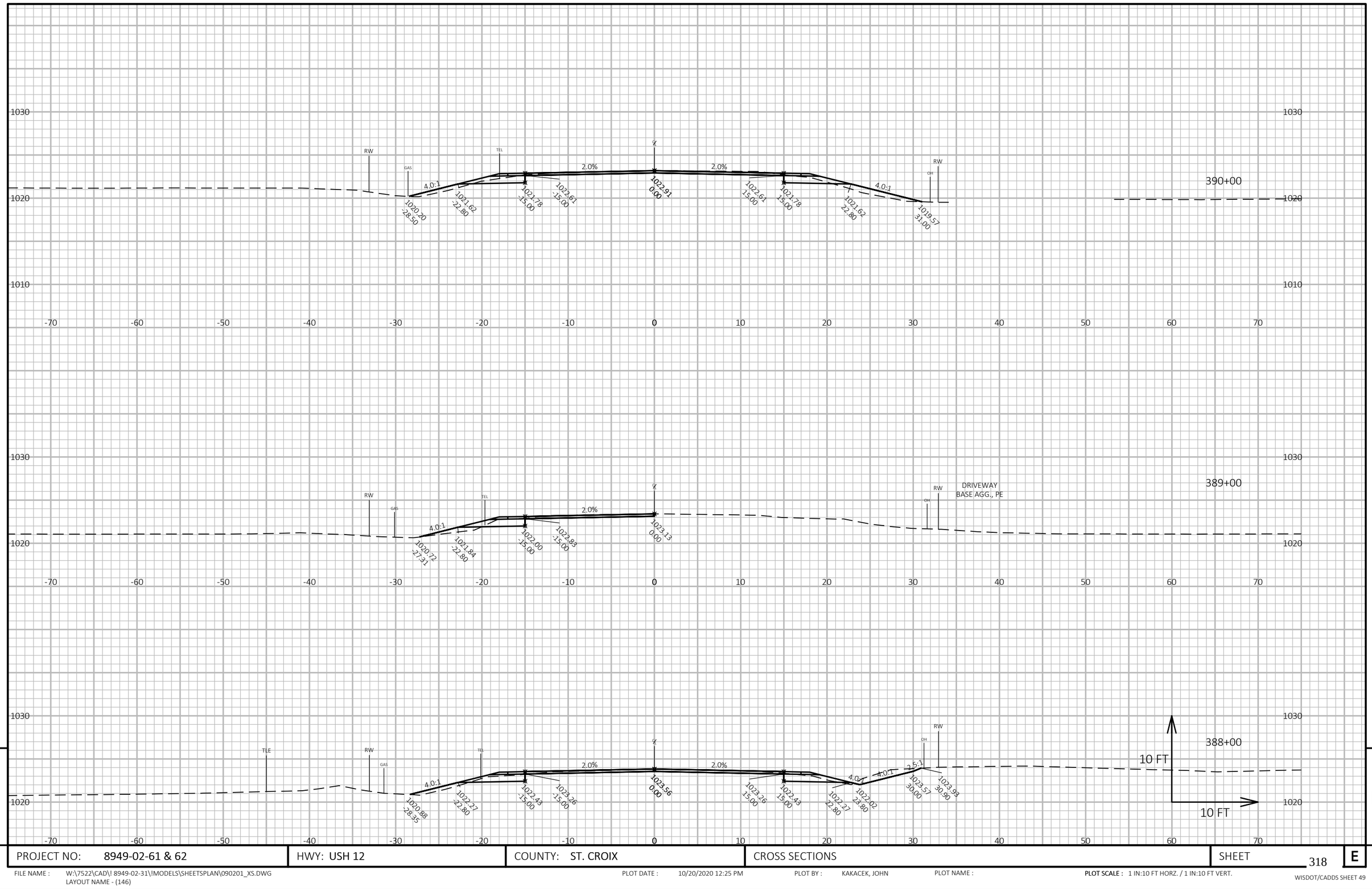


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 317	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (145)

PLOT DATE : 10/20/2020 12:25 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

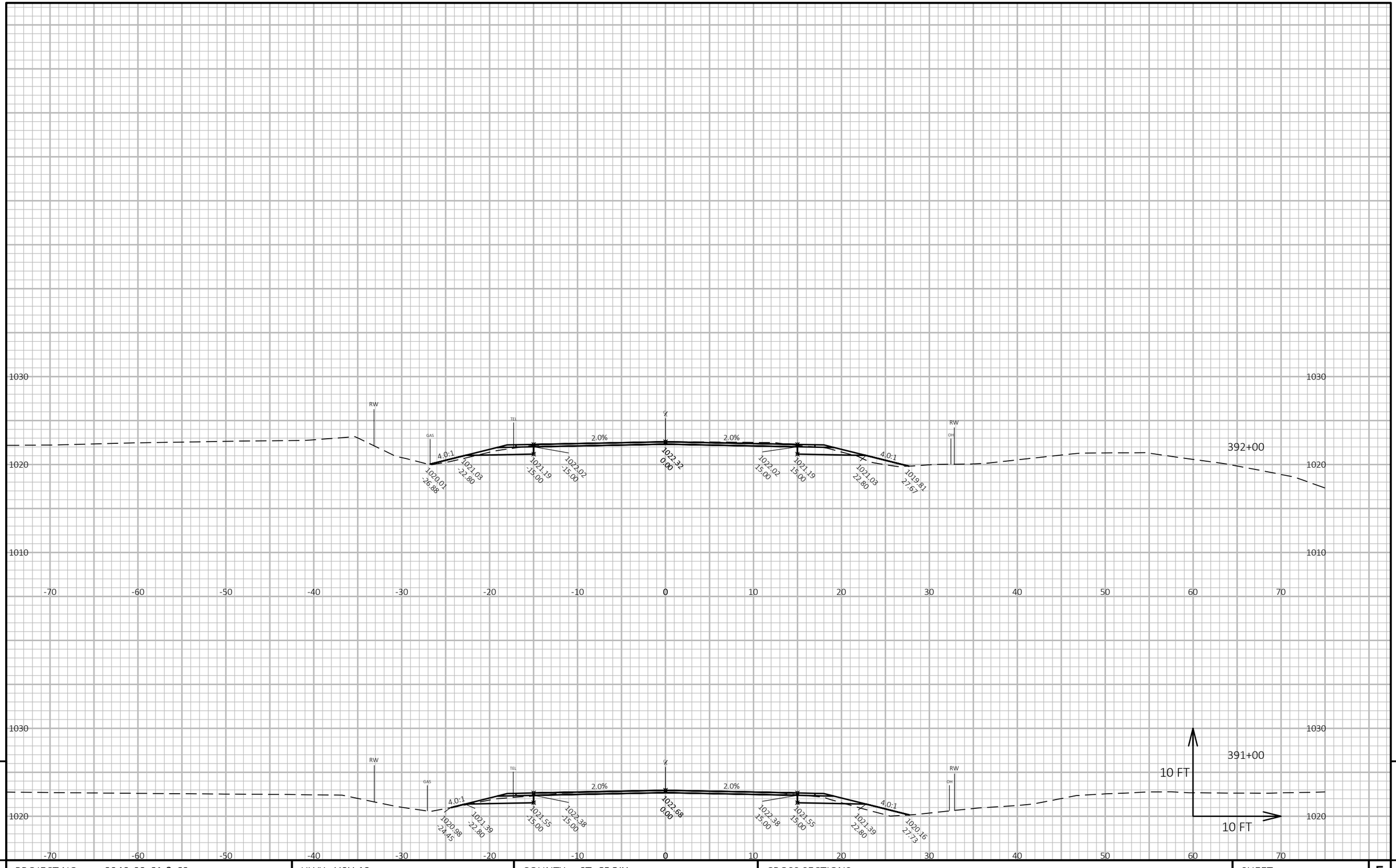


PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 318	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (146)

PLOT DATE : 10/20/2020 12:25 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

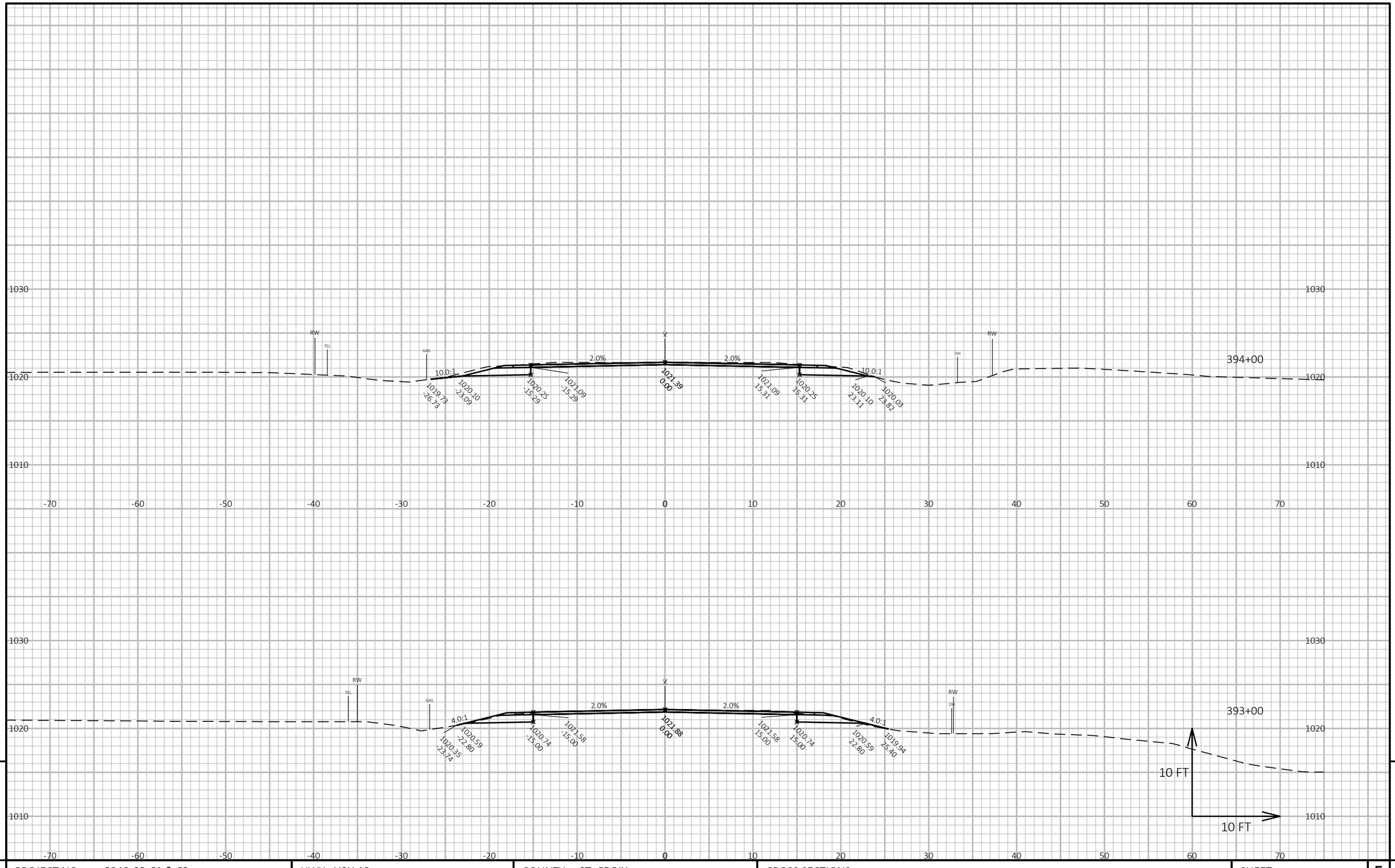
WISDOT/CADDS SHEET 49



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 319	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (147)

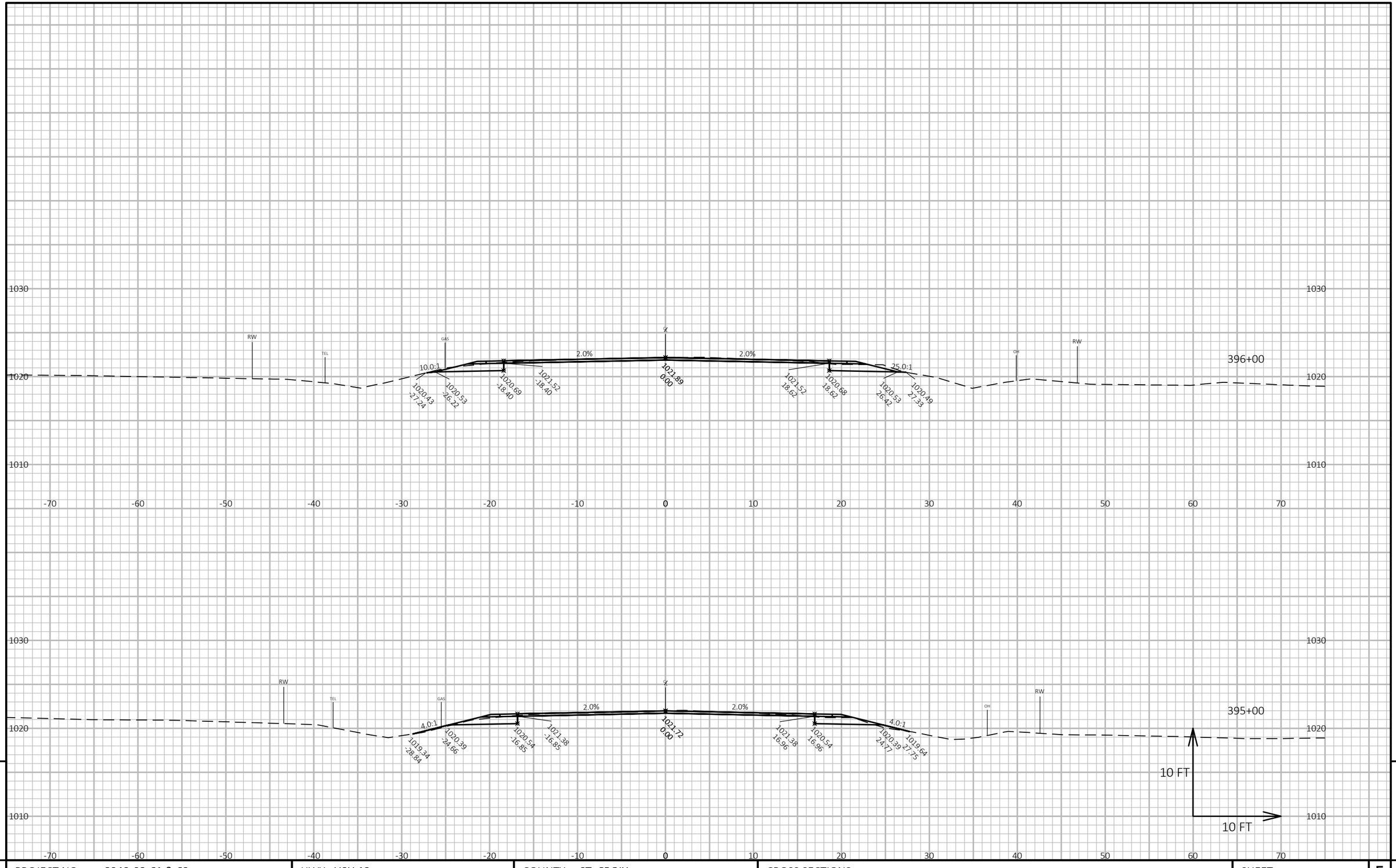
PLOT DATE : 10/20/2020 12:26 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 320	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (148)

PLOT DATE : 10/20/2020 12:26 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



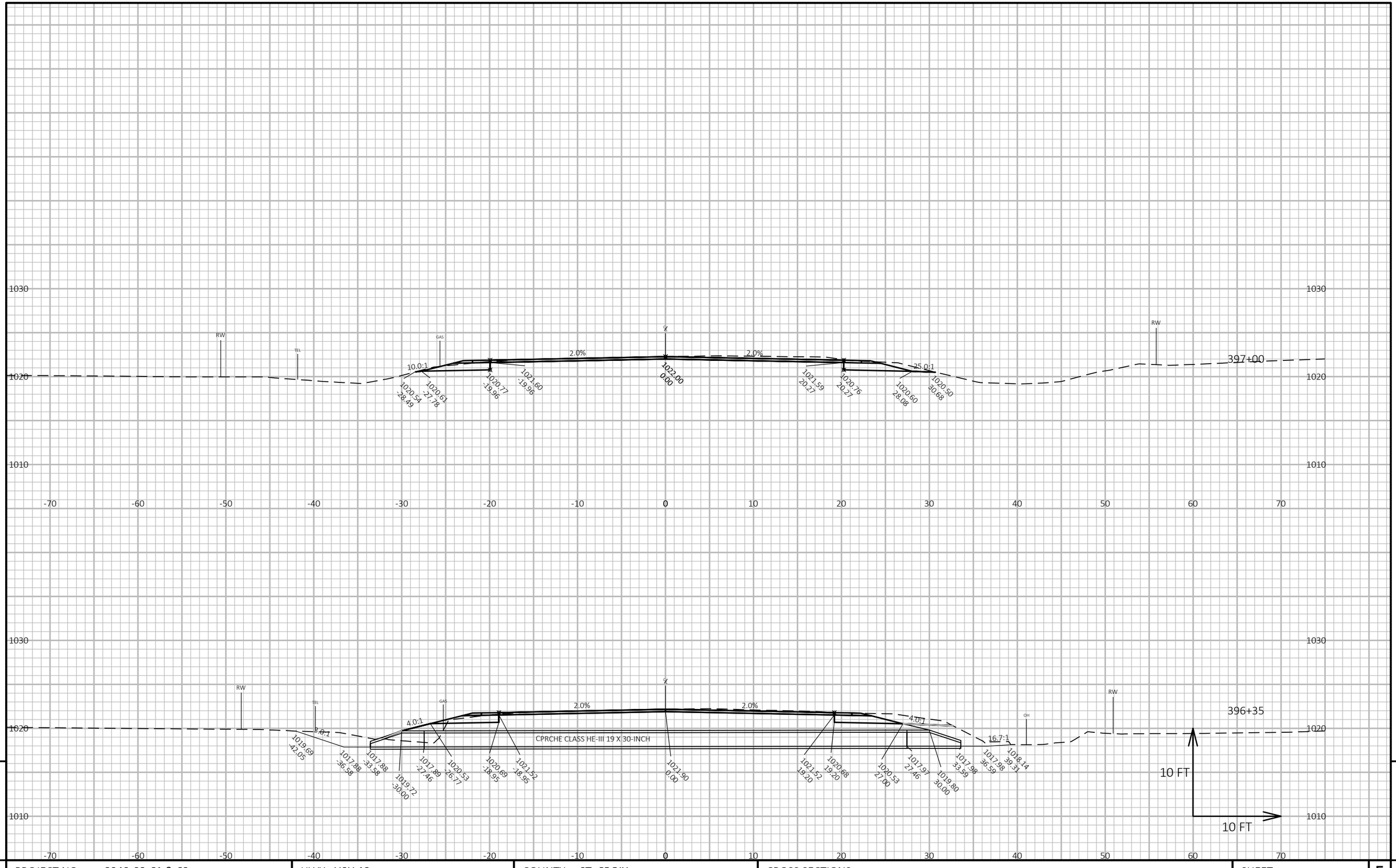
PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 321	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (149)

PLOT DATE : 10/20/2020 12:26 PM PLOT BY : KAKACEK, JOHN PLOT NAME :

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

WISDOT/CADDS SHEET 49



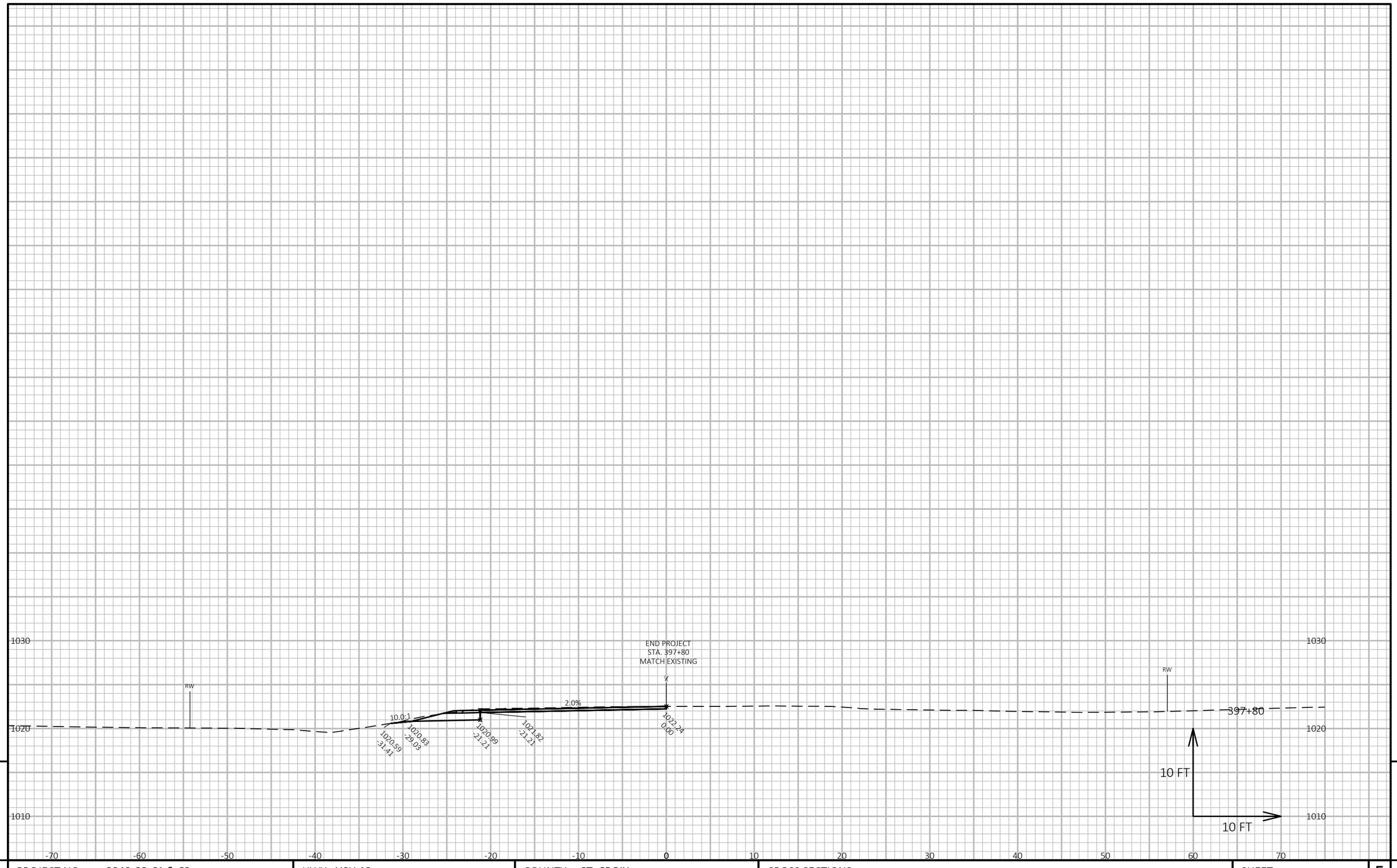
PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 322	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (150)

PLOT DATE : 10/20/2020 12:27 PM PLOT BY : KAKACEK, JOHN PLOT NAME :

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

WISDOT/CADDS SHEET 49



PROJECT NO: 8949-02-61 & 62	HWY: USH 12	COUNTY: ST. CROIX	CROSS SECTIONS	SHEET 323	E

FILE NAME : W:\7522\CAD\! 8949-02-31\!MODELS\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - (151)

PLOT DATE : 10/20/2020 12:27 PM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

Wisconsin Department of Transportation

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