RHI

FEBRUARY 2025

PROJECT ID: 1590-18-71,1590-18-81

WITH: 1590-18-82, 1590-18-83, 9813-02-70

COUNTY: FOREST

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 = 438



33

N

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1590-18-71		
1590-18-81		

MONICO - LAONA
STH 55 SOUTH TO OTTER CREEK RD

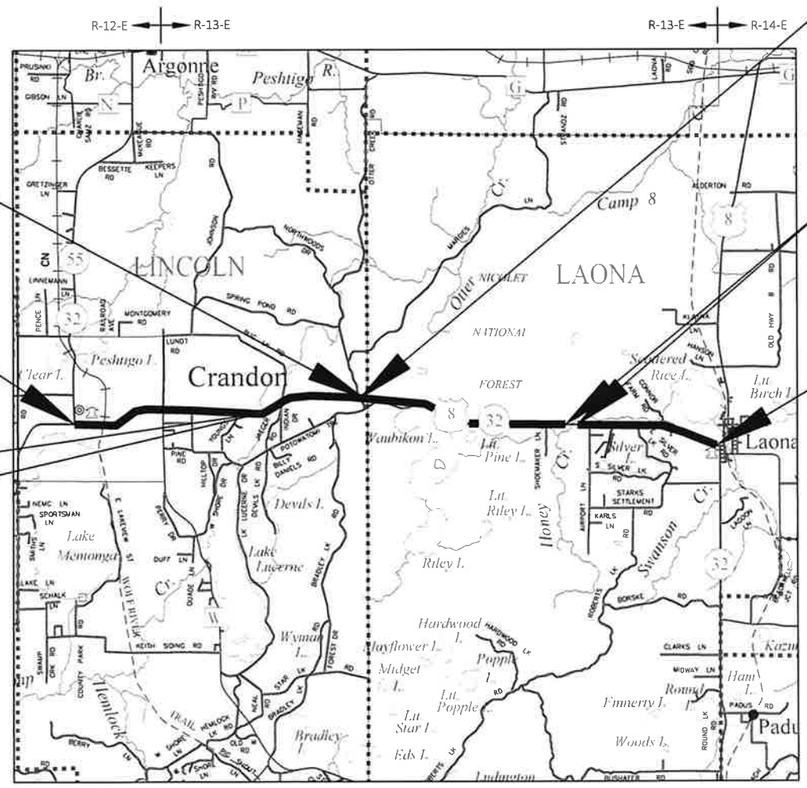
USH 8
FOREST

STATE PROJECT NUMBER
1590-18-71

MONICO - LAONA
OTTER CREEK RD TO STH 32 SOUTH

USH 8
FOREST

STATE PROJECT NUMBER
1590-18-81



END PROJECT 1590-18-71
STA 682+74.60

BEGIN PROJECT 1590-18-71
STA 416+22.56
Y = 568,599.252
X = 836,195.722

B-21-0035
C-21-9703

BEGIN PROJECT 1590-18-81
STA 682+74.60
Y = 570,893.039
X = 861,938.067

NET EXCEPTION TO CENTERLINE
PROJECT ID: 1590-18-81

END PROJECT 1590-18-81
STA 1012+86.06

DESIGN DESIGNATION 1590-18-01

A.A.D.T.	2025	=	4620
A.A.D.T.	2045	=	5570
D.H.V.		=	760
D.D.		=	61/39
T.		=	10.0
DESIGN SPEED		=	30-60
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 (303 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

LAYOUT
SCALE 0 2.5MI

1590-18-71 NET LENGTH CENTERLINE = 5.048 MI
1590-18-81 NET LENGTH CENTERLINE = 6.109 MI
TOTAL NET LENGTH OF CENTERLINE = 11.199 MI

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

ORIGINAL PLANS PREPARED BY

JT ENGINEERING

WISCONSIN
BRIAN C. CHLOPEK
39370-6
PULASKI, WI
PROFESSIONAL ENGINEER

DATE: 10/29/24 (Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	POINT OF BEGINNING
Designer	JT ENGINEERING
Project Manager	STACY HAGENBUCHER, P.E.
Regional Examiner	FRED SCHUNKE, P.E.
Regional Supervisor	KAI KILEN, P.E.

APPROVED FOR THE DEPARTMENT

DATE: 10/29/2024 (Signature)

E

FILE NAME :

PLOT DATE : 10/29/2024 1:39 PM PLOT BY : ADAM SARAUER PLOT NAME :

GENERAL NOTES

1. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
2. HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112LBS/SY/IN
3. NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK. ANY LOCAL MUNICIPALITY, INCLUDING FOREST COUNTY POTAWATOMI COMMUNITY UTILITIES, WHICH ARE NOT MEMBERS OF DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.
4. RIGHT-OF-WAY INFORMATION SHOWN OUTSIDE OF ACQUISITION AREAS IN THE PLAN ARE APPROXIMATE.
5. CURB AND GUTTER PLAN GRADES AND RADII ARE AT THE FLANGE LINE UNLESS OTEHRWISE NOTED.
6. CONTRACTOR MUST CONTACT THE PROJECT ENGINEER AND THE FOREST COUNTY SURVEYOR (CONTACT INFO BELOW) AT LEAST TWO WEEKS PRIOR TO ANY WORK NEAR PUBLIC SURVEY MONUMENT.

JAMIE ANDERSON
FOREST COUNTY SURVEYOR
200 E MADISON ST
CRANDON, WI 54520
PHONE: (715) 478-1387
EMAIL: JAMIE.ANDERSON@CO.FOREST.WI.US

SEQUENCE OF PLANS AND DETAILS IN SECTION 2

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
INTERSECTION DETAILS
CURB RAMP DETAILS
EROSION CONTROL
STORM SEWER
PERMANENT SIGNING & PAVEMENT MARKING
TRAFFIC CONTROL
DETOUR

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

RUNOFF COEFFICIENT TABLE

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	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 = 63.85 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 35.13 ACRES

PROJECT CONTACTS

WISCONSIN DNR LIAISON

JON SIMONSEN
NORTHERN REGION
107 SUTCLIFF AVE
RHINELANDER, WI 54501
PHONE: (715) 367-1963
EMAIL: JONATHAN.SIMONSEN@WISCONSIN.GOV

NC REGION SURVEY COORDINATOR

CHRIS STEBBINS
NC REGION
510 N HANSON LAKE ROAD
RHINELANDER, WI 54501
PHONE: 715-365-5744
CHRISTOPHER.STEBBINS@DOT.WI.GOV

UTILITY CONTACTS

CENTURY LINK - COMMUNICATION LINE
CHUCK BRUN
224 INDUSTRIAL DR
NORTH PRAIRIE, WI 53153
PHONE: (262) 392-5200
EMAIL: RELOCATION@LUMEN.COM

FRONTIER COMMUNICATIONS OF WI LLC - COMMUNICATION LINE
CHRIS POLLACK
421 4TH ST
WAUSAU, WI 54403
PHONE: (715) 847-1240
EMAIL: CHRISTOPHER.POLLACK@FTR.COM

BUG TUSSEL WIRELESS - COMMUNICATION LINE
TOM LIEBERHERR
417 PINE STREET
GREEN BAY, WI 54301
PHONE: (920) 366-1735
EMAIL: TOM.LIEBERHERR@BTUSSEL.COM

FOREST COUNTY POTAWATOMI COMMUNITY IT DEPT - COMMUNICATION LINE
ERIC BYERS
P.O. BOX 3409
CRANDON, WI 54520
PHONE: (715) 478-4952
EMAIL: ERIC.BYERS@ FCP-NSN.GOV

LAONA SANITARY DISTRICT NO. 1 - SEWER
CHAD BELLAND
P.O. BOX 303
LAONA, WI 54541
PHONE: (715) 674-7005
EMAIL: LAONASANITARYDISTRICT@CENTURYLINK.NET

FOREST COUNTY POTAWATOMI UTILITY DEPT - SEWER
JENNIFER SPENCER
8355 MISH KO SWEN DRIVE
P.O. BOX 340
CRANDON, WI 54520
PHONE: (715) 478-7398
EMAIL: JENNIFER.SPENCER@FCP-NSN.GOV

FOREST COUNTY POTAWATOMI UTILITY DEPT - WATER
JENNIFER SPENCER
8355 MISH KO SWEN DRIVE
P.O. BOX 340
CRANDON, WI 54520
PHONE: (715) 478-7398
EMAIL: JENNIFER.SPENCER@FCP-NSN.GOV

NSIGHT TELESERVICES
RICK VINCENT
470 SECURITY BLVD
P.O. BOX 19079
GREEN BAY, WI 54307-9079
PHONE: (920) 617-7316
EMAIL: RICK.VINCENT.COM

WISCONSIN PUBLIC SERVICE CORPORATION - GAS/PETROLEUM
SHANE SARKKINEN
2027 NAVAJO ST
RHINELANDER, WI 54501
PHONE: (715) 369-7133
EMAIL: SHANE.SARKKINEN@WISCONSINPUBLICSERVICE.COM

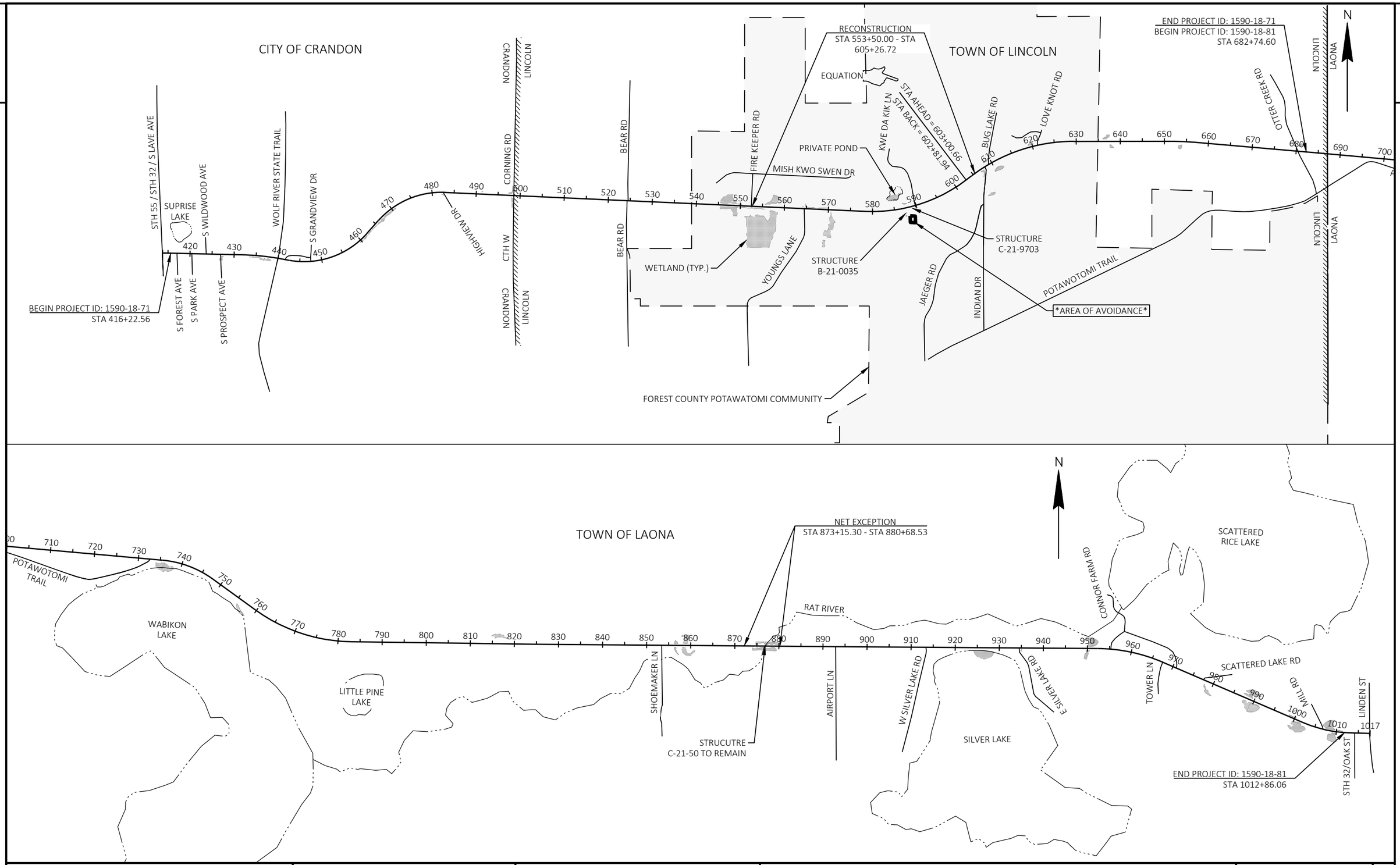
WISCONSIN PUBLIC SERVICE CORPORATION - ELECTRICITY
JESSE PATTEN
P.O. BOX 1166
WAUSAU, WI 54448
PHONE: (715) 848-7405
EMAIL: JESSE.PATTEN@WISCONSINPUBLICSERVICE.COM

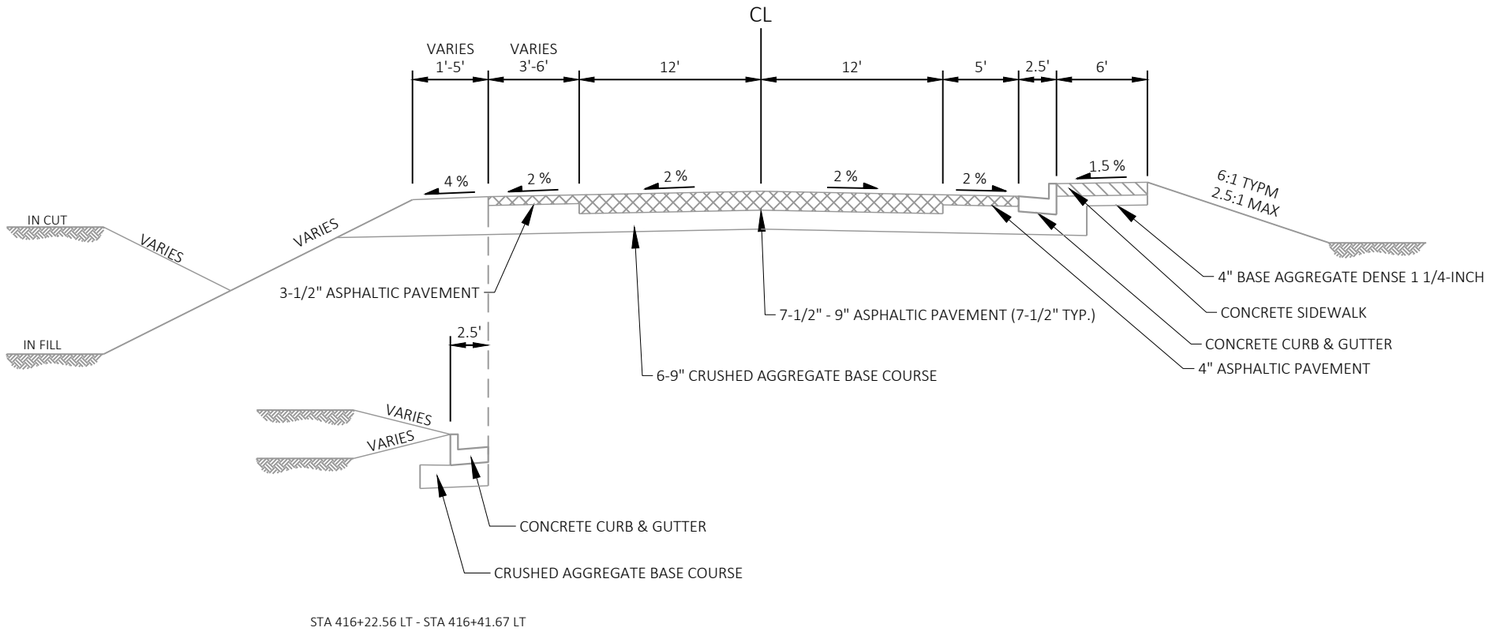
CRANDON WATER AND SEWER UTILITY - SEWER
ROSS CRUM
P.O. BOX 176
CRANDON, WI 54520-0176
PHONE: (715) 478-2836
EMAIL: CRANDONW@FRONTIERNET.COM

CRANDON WATER AND SEWER UTILITY - WATER
ROSS CRUM
P.O. BOX 176
CRANDON, WI 54520-0176
PHONE: (715) 478-2836
EMAIL: CRANDONW@FRONTIERNET.COM

LAONA SANITARY DISTRICT NO. 1 - WATER
CHAD BELLAND
P.O. BOX 303
LAONA, WI 54541
PHONE: (715) 674-7005
EMAIL: LAONASANITARYDISTRICT@CENTURYLINK.NET

SPECTRUM - COMMUNICATION LINE
ALAN ZARECKI
1201 MCCANN DRIVE
ALTOONA, WI 54720
PHONE: (715) 214-1175
EMAIL: CHRT_WI_CONST@CHARTER.COM

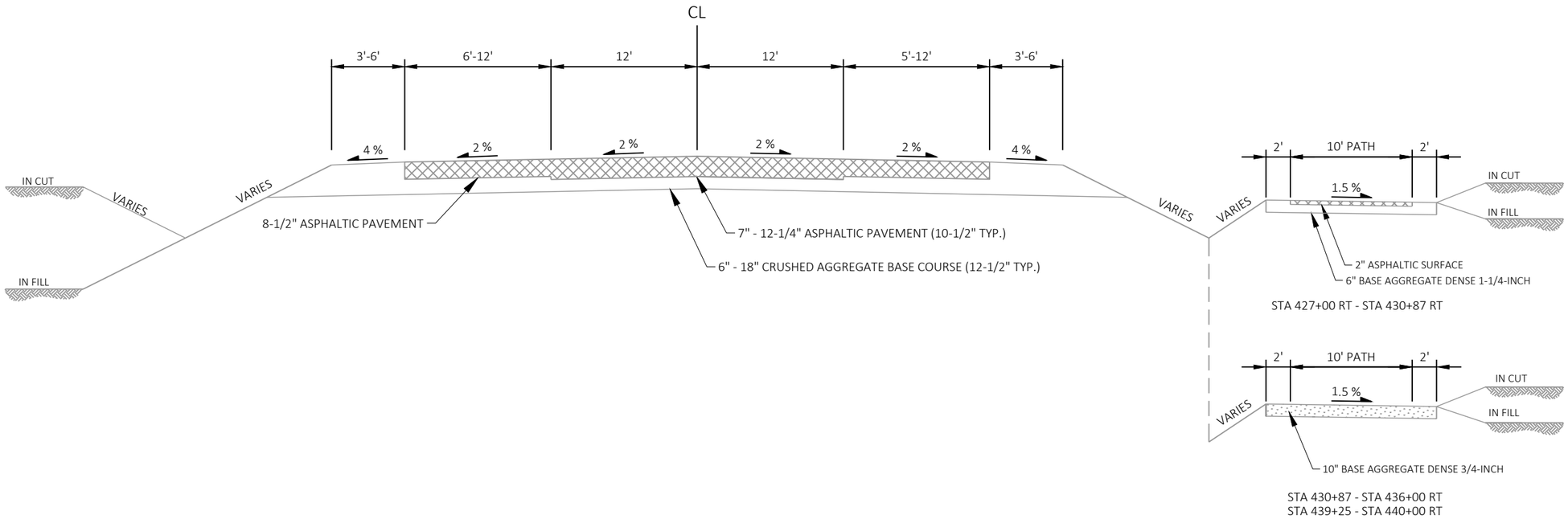

CITY OF CRANDON
TOWN OF LINCOLN
TOWN OF LAONA
BEGIN PROJECT ID: 1590-18-71
STA 416+22.56
END PROJECT ID: 1590-18-71
BEGIN PROJECT ID: 1590-18-81
STA 682+74.60
END PROJECT ID: 1590-18-81
STA 1012+86.06
RECONSTRUCTION
STA 553+50.00 - STA 605+26.72
EQUATION
STA AHEAD = 603+00.66
STA BACK = 602+81.94
NET EXCEPTION
STA 873+15.30 - STA 880+68.53
STH 55 / STH 32 / S LAVE AVE
SUPRISE LAKE
S WILDWOOD AVE
WOLF RIVER STATE TRAIL
S GRANDVIEW DR
HIGHVIEW DR
CORNING RD
CTH W
CRANDON
LINCOLN
BEAR RD
FIRE KEEPER RD
PRIVATE POND
MISH KWO SWEN DR
KWE DA KIK LN
BUG LAKE RD
LOVE KNOT RD
OTTER CREEK RD
LAONA
S FOREST AVE
S PARK AVE
S PROSPECT AVE
WETLAND (TYP.)
YOUNGS LANE
STRUCTURE
B-21-0035
STRUCTURE
C-21-9703
JAEGER RD
INDIAN DR
POTAWOTOMI TRAIL
AREA OF AVOIDANCE
FOREST COUNTY POTAWATOMI COMMUNITY
POTAWOTOMI TRAIL
WABIKON LAKE
LITTLE PINE LAKE
RAT RIVER
SHOEMAKER LN
AIRPORT LN
W SILVER LAKE RD
E SILVER LAKE RD
CONNOR FARM RD
SCATTERED RICE LAKE
SILVER LAKE
TOWER LN
SCATTERED LAKE RD
MILL RD
LINDEN ST
STH 32/OAK ST
STRUCUTRE
C-21-50 TO REMAIN
N



STA 416+22.56 LT - STA 416+41.67 LT

EXISTING TYPICAL SECTION - USH 8

STA 416+22.56 - STA 427+00



STA 427+00 RT - STA 430+87 RT

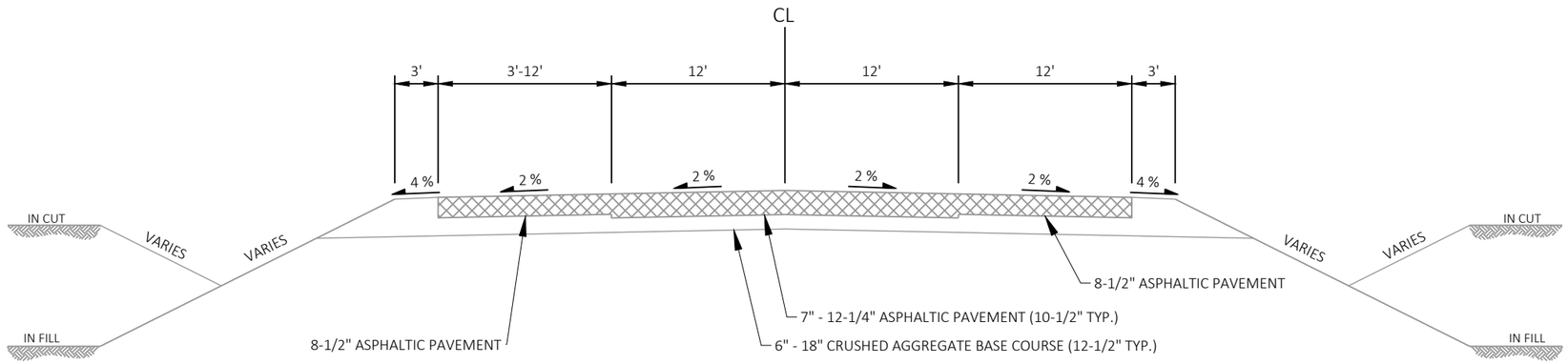
STA 430+87 - STA 436+00 RT
STA 439+25 - STA 440+00 RT

EXISTING TYPICAL SECTION - USH 8

STA 427+00 - STA 440+00

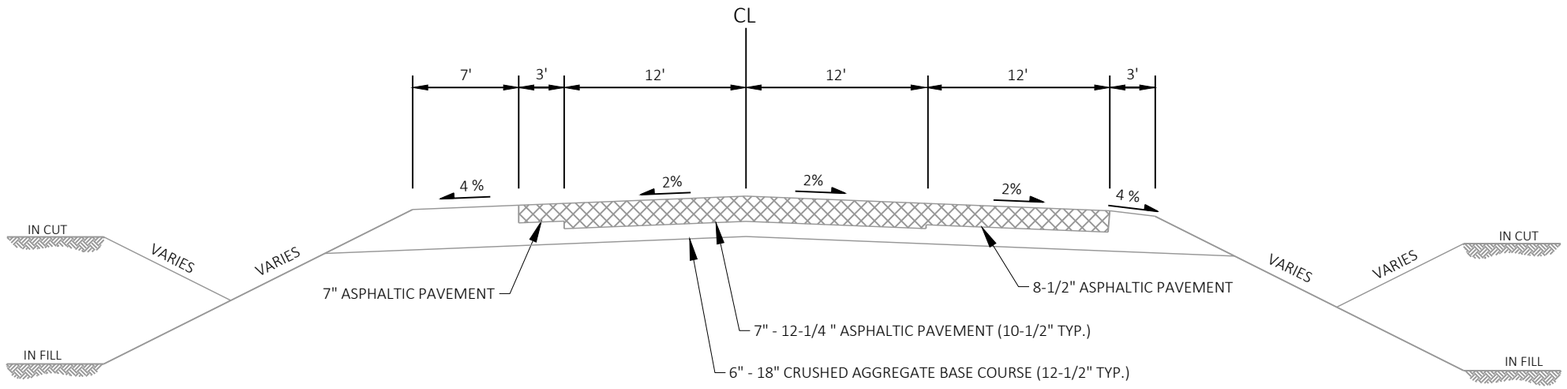
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2



EXISTING TYPICAL SECTION - USH 8

STA 440+00 - STA 445+76

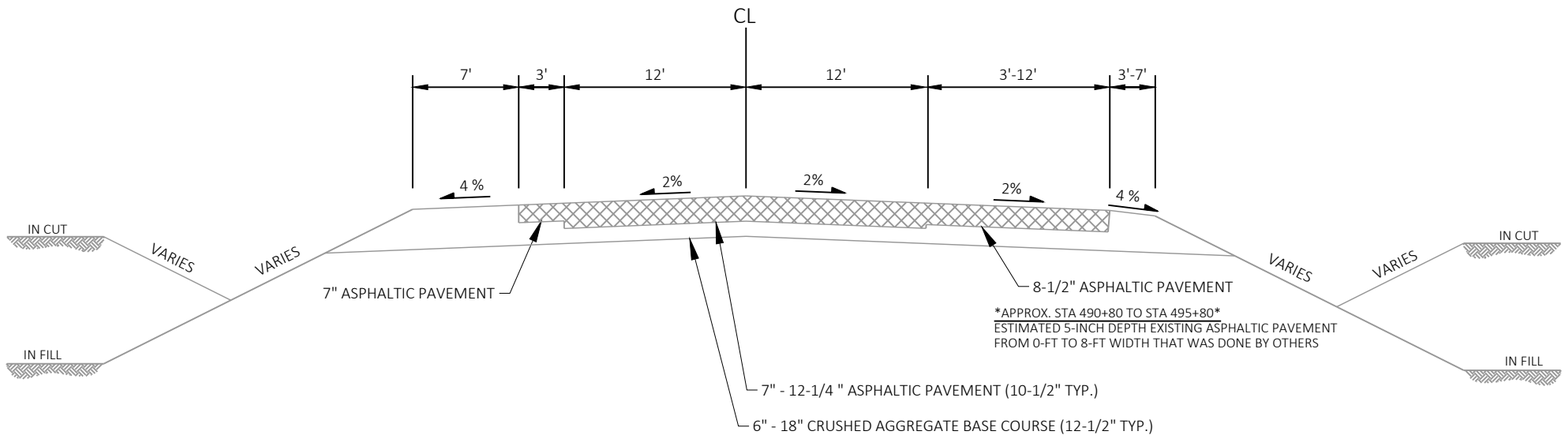


EXISTING TYPICAL SECTION - USH 8

STA 445+76 - STA 483+07

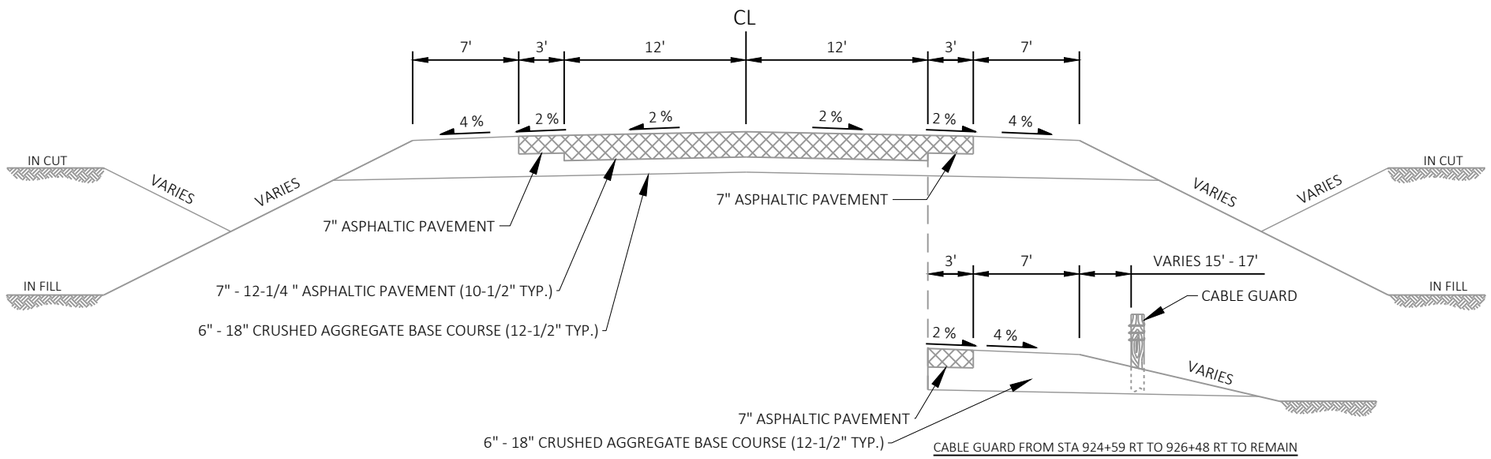
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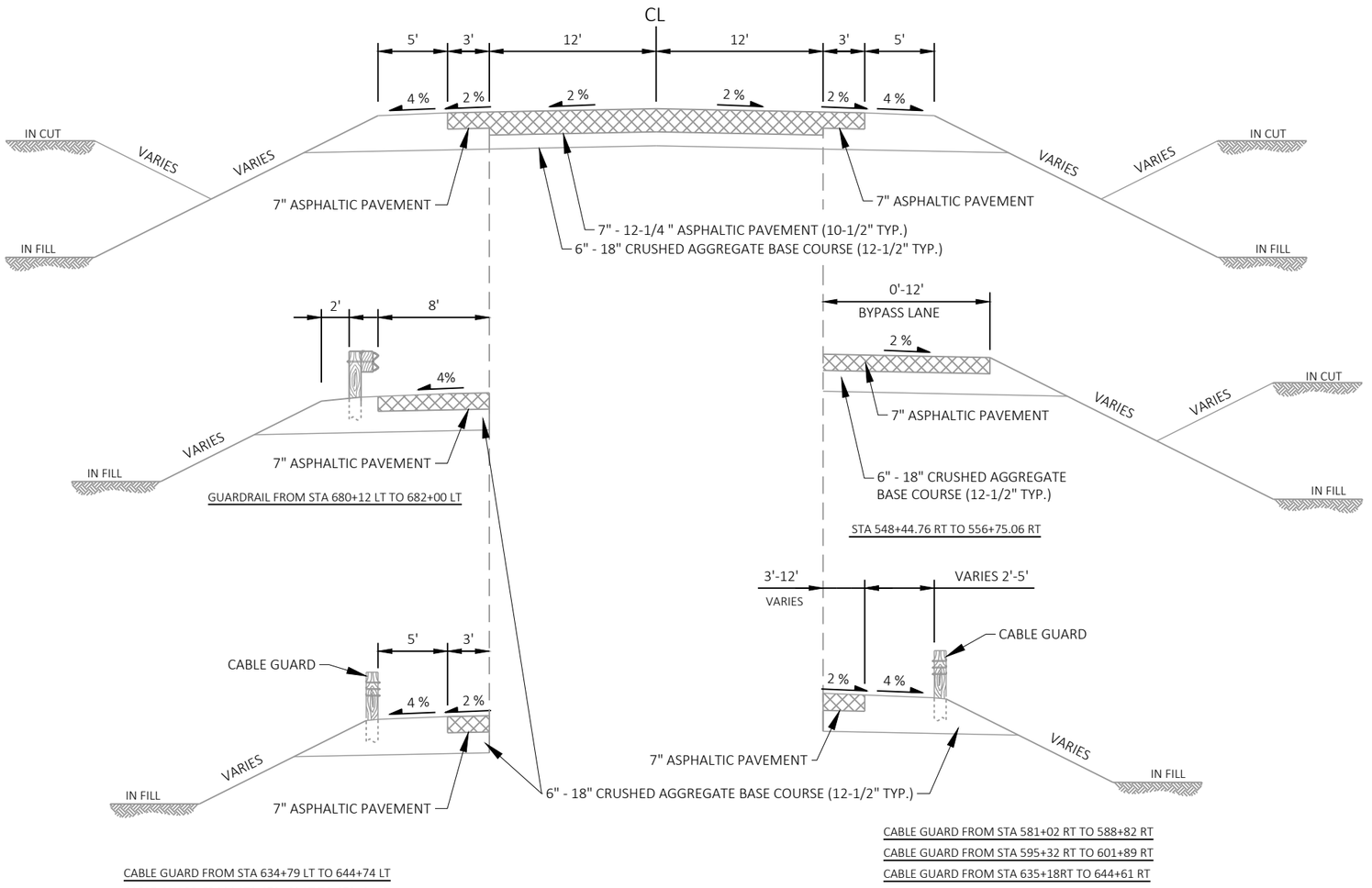
STA 483+07 - STA 498+54



EXISTING TYPICAL SECTION - USH 8

STA 896+14 - STA 909+51
STA 917+25 - STA 928+32
STA 938+91 - STA 964+15
STA 970+27 - STA 1012+86.06

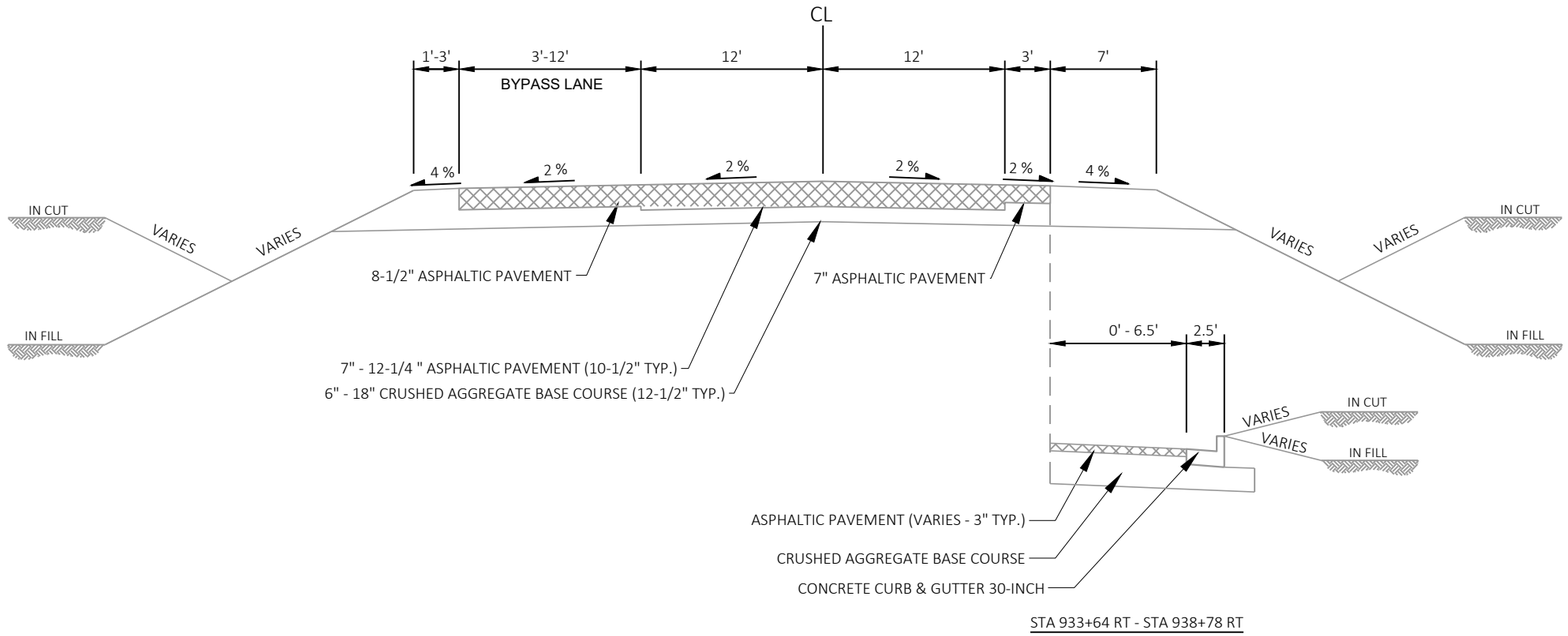
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EXISTING TYPICAL SECTION - USH 8

STA 498+54 - STA 873+15.30
STA 880+68.53 - STA 889+06

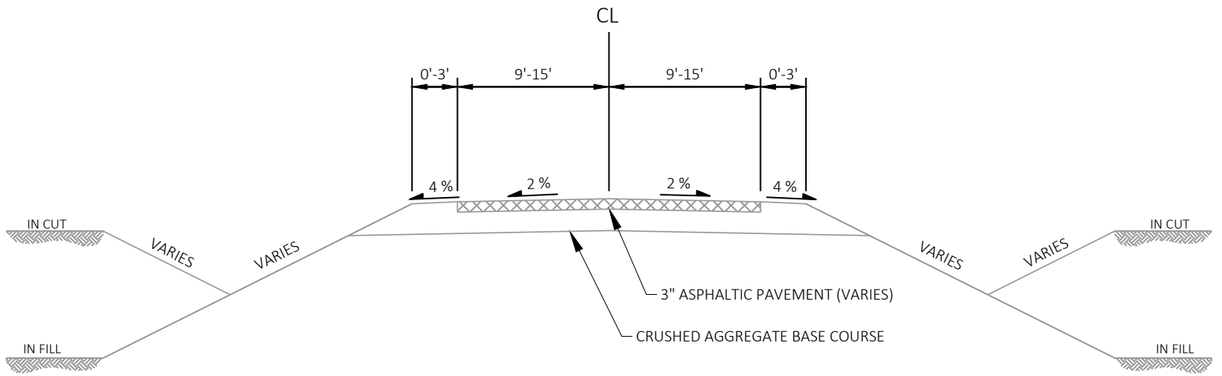
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STA 933+64 RT - STA 938+78 RT

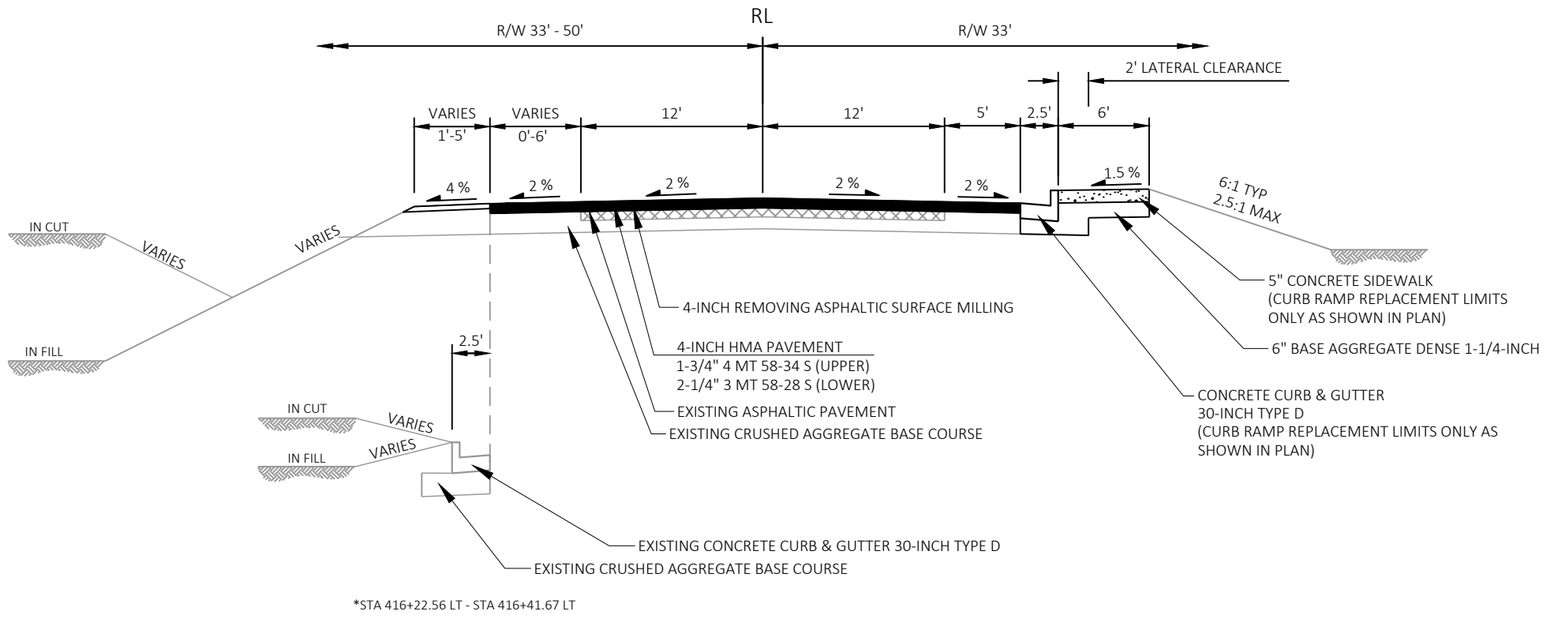
EXISTING TYPICAL SECTION - USH 8

STA 889+06 - STA 896+14
STA 909+51 - STA 917+25
STA 928+32 - STA 938+91
STA 964+15 - STA 970+27



EXISTING TYPICAL SECTION - SIDEROADS

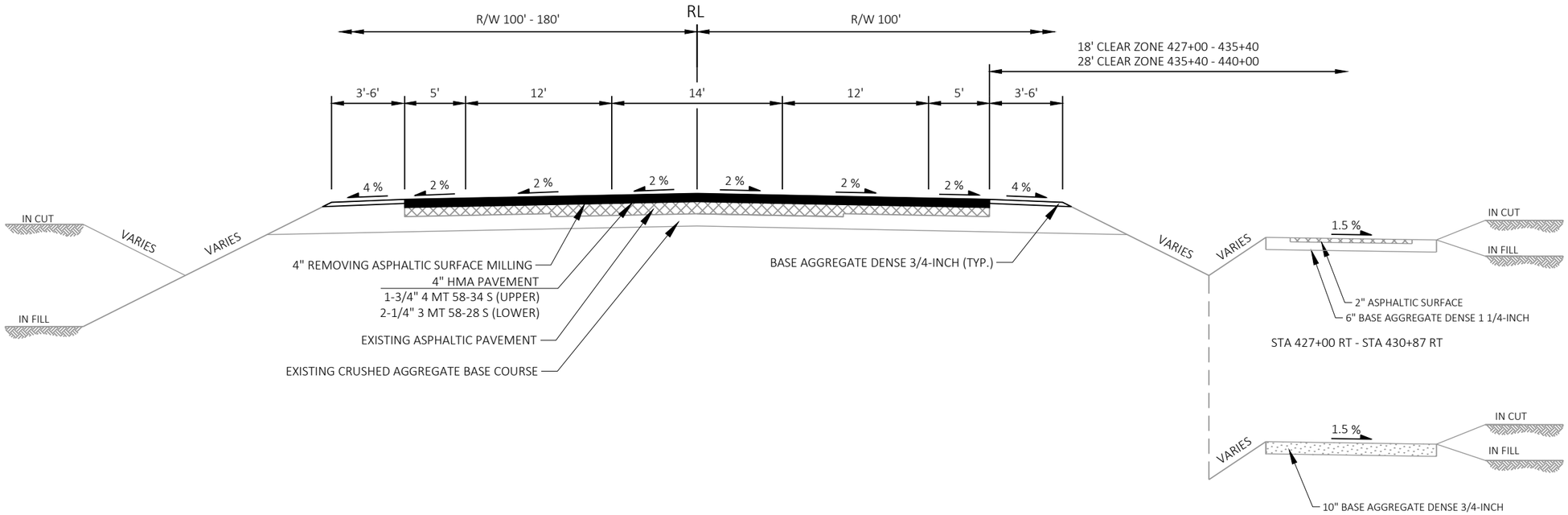
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S PARK AVE	YOUNGS LANE	E SILVER LAKE RD
S PROSPECT AVE	KWE DA KIK LANE	CONNOR FARM RD
S GRANDVIEW DR	INDIAN DR	TOWER LN
HIGHVIEW DR	BUG LAKE RD	SCATTERED LAKE RD
CTH W	LOVE KNOT RD	MILL RD
CORNING RD	OTTER CREEK RD	
BEAR RD	AIRPORT LANE	



*STA 416+22.56 LT - STA 416+41.67 LT

FINISHED TYPICAL SECTION - USH 8

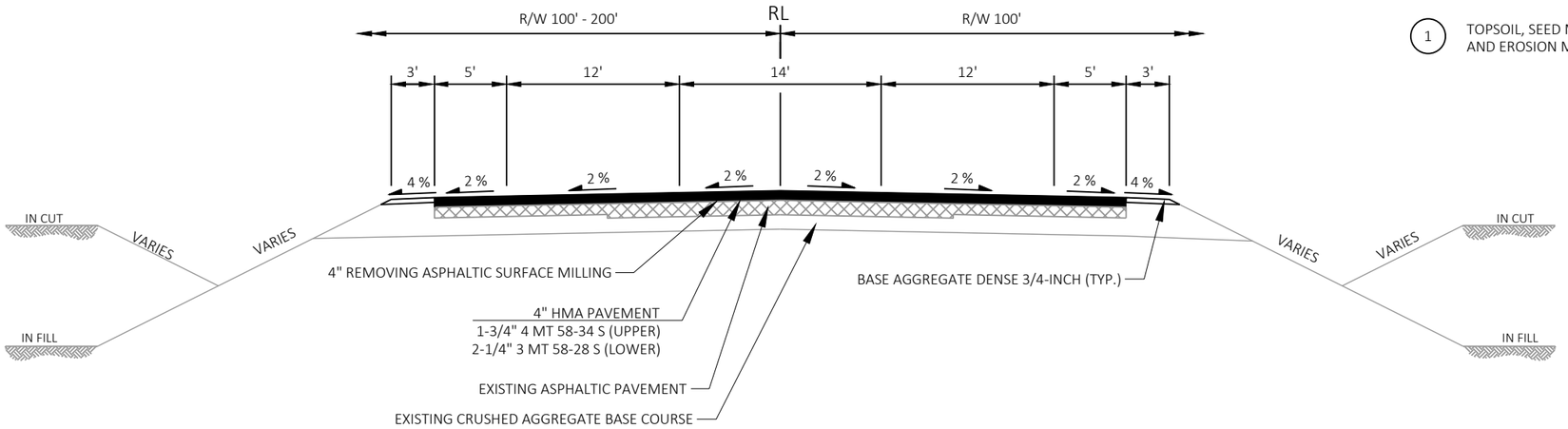
STA 416+22.56 - STA 427+00*



FINISHED TYPICAL SECTION - USH 8

STA 427+00 - STA 440+00

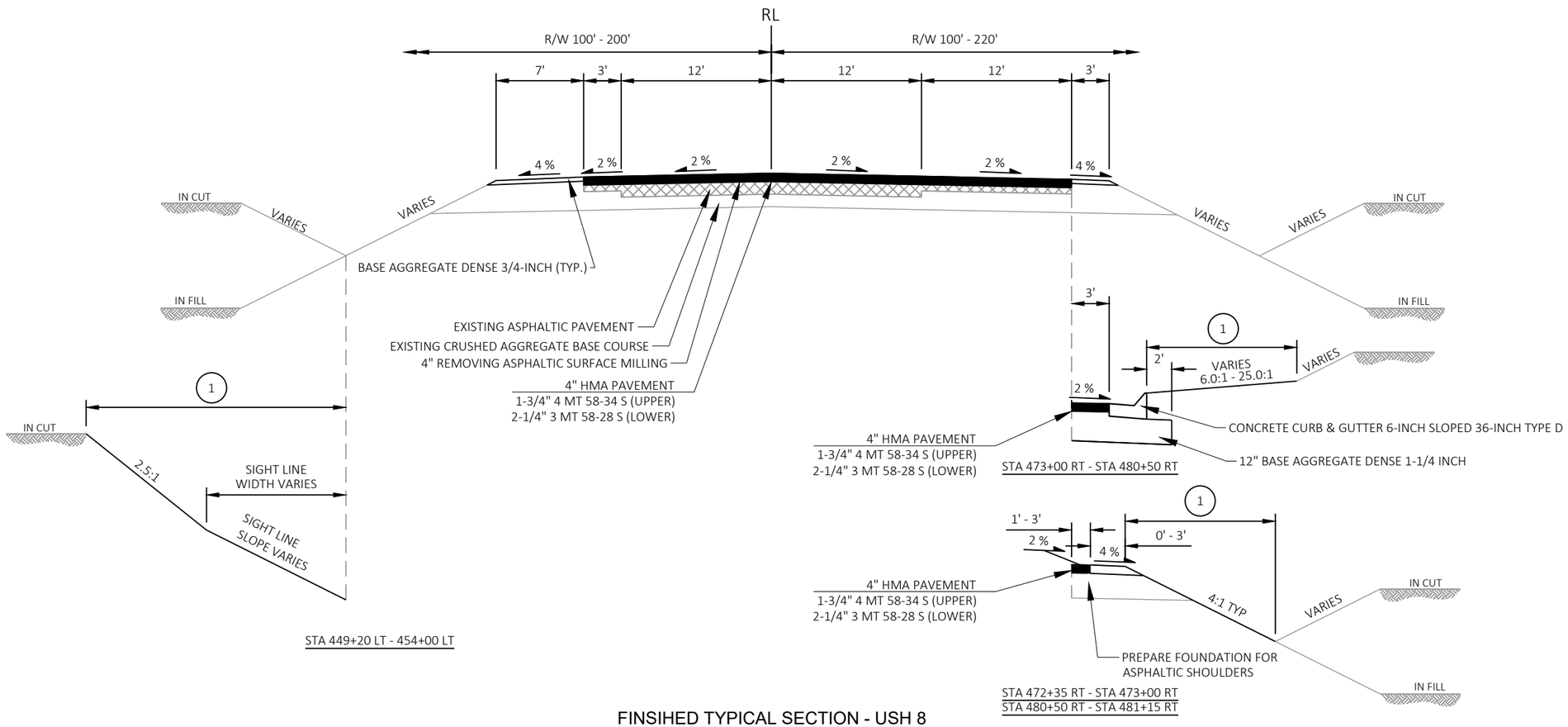
PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	TYPICAL SECTION	SHEET 9	E



1 TOPSOIL, SEED MIXTURE #20, FERTILIZER TYPE B, AND EROSION MAT URBAN CLASS I TYPE A

FINISHED TYPICAL SECTION - USH 8

STA 440+00 - STA 445+76

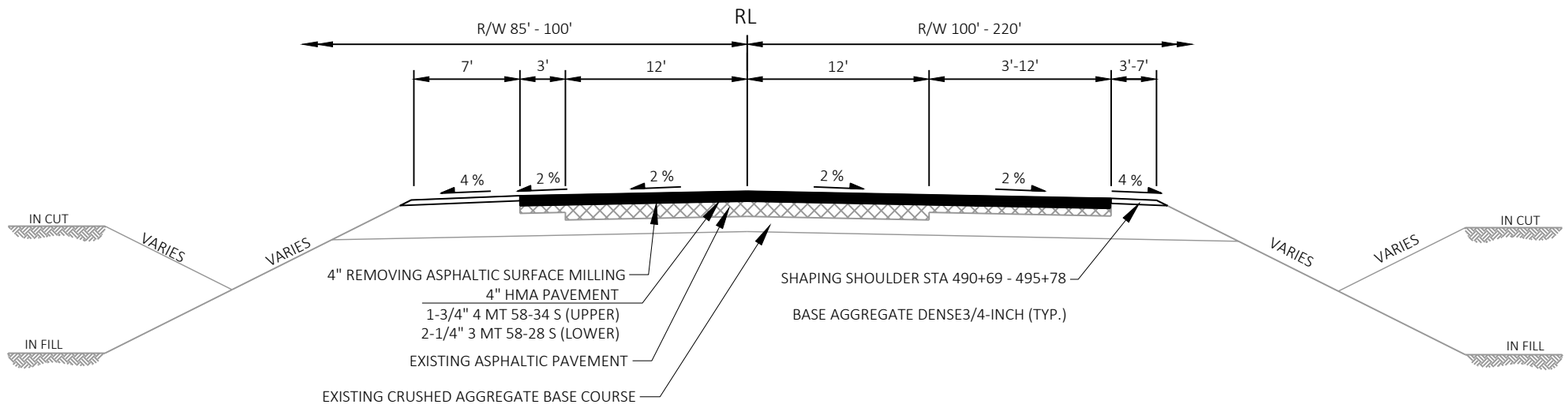


FINSIHED TYPICAL SECTION - USH 8

STA 445+76 - STA 483+07

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	TYPICAL SECTION	SHEET 10	E

2



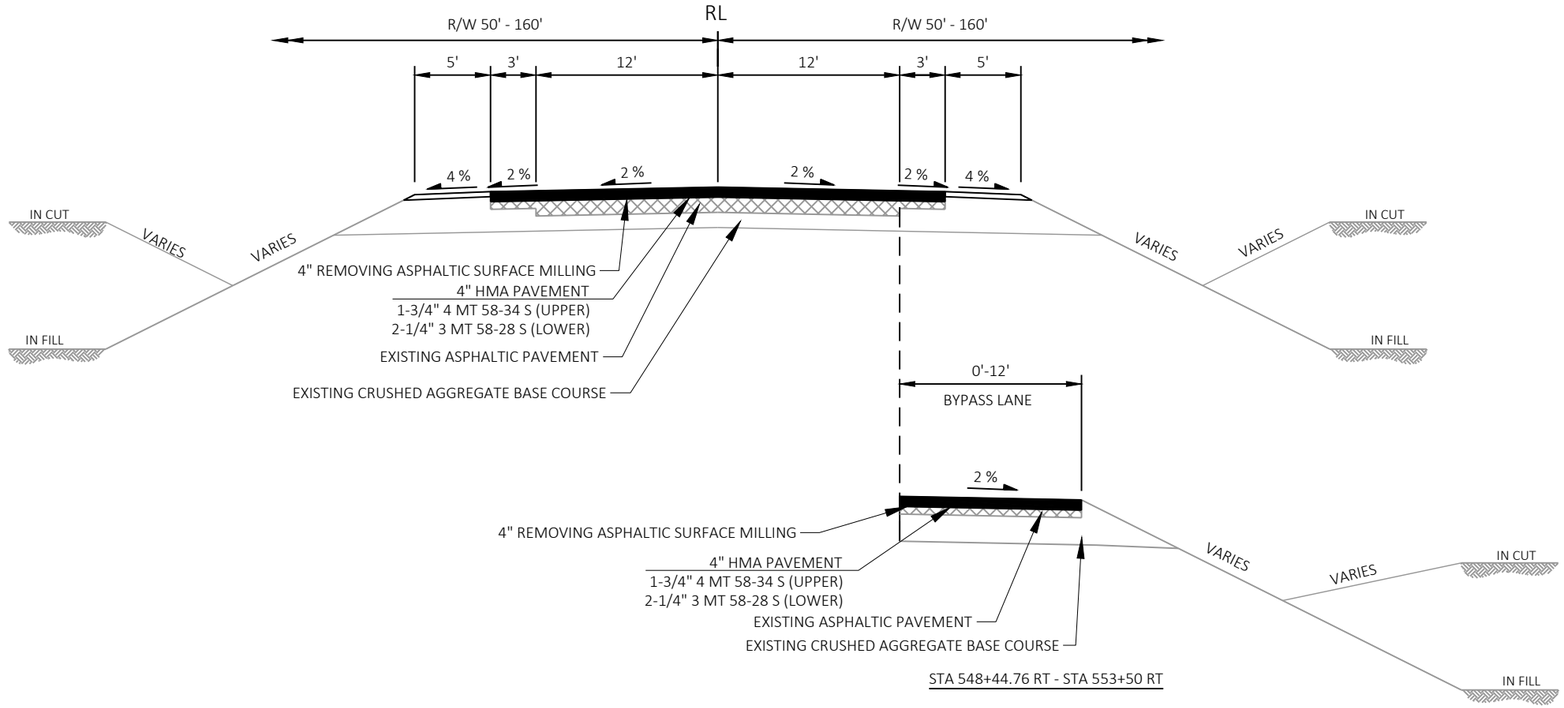
FINISHED TYPICAL SECTION - USH 8

STA 483+07 - STA 498+54

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	TYPICAL SECTION	SHEET 11	E

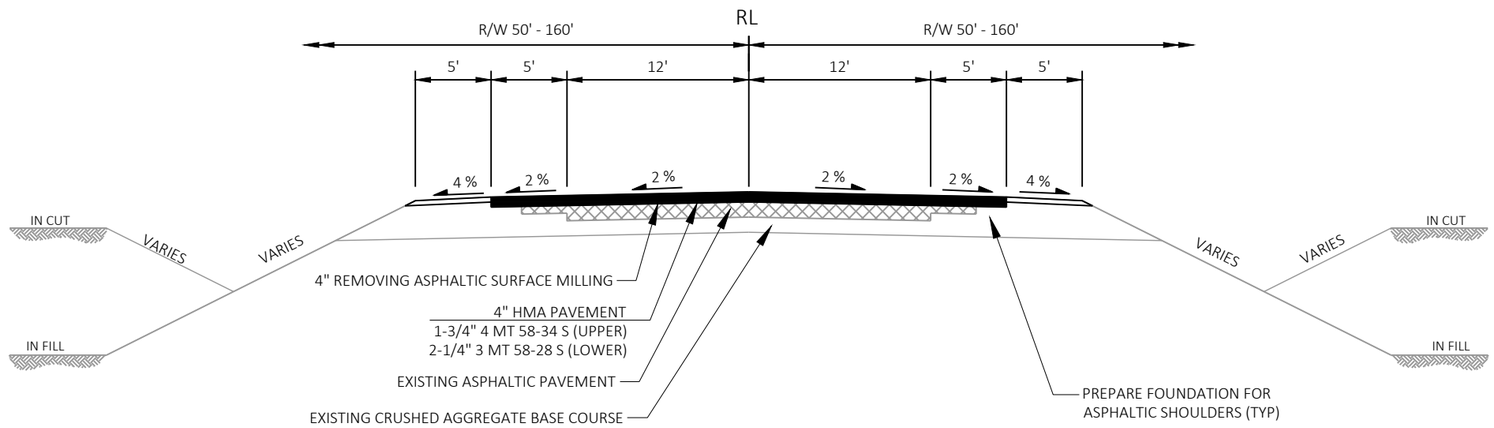
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LAYOUT NAME - 03-FINISHED

PLOT DATE : 12/17/2024 10:24 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1:10



FINISHED TYPICAL SECTION - USH 8

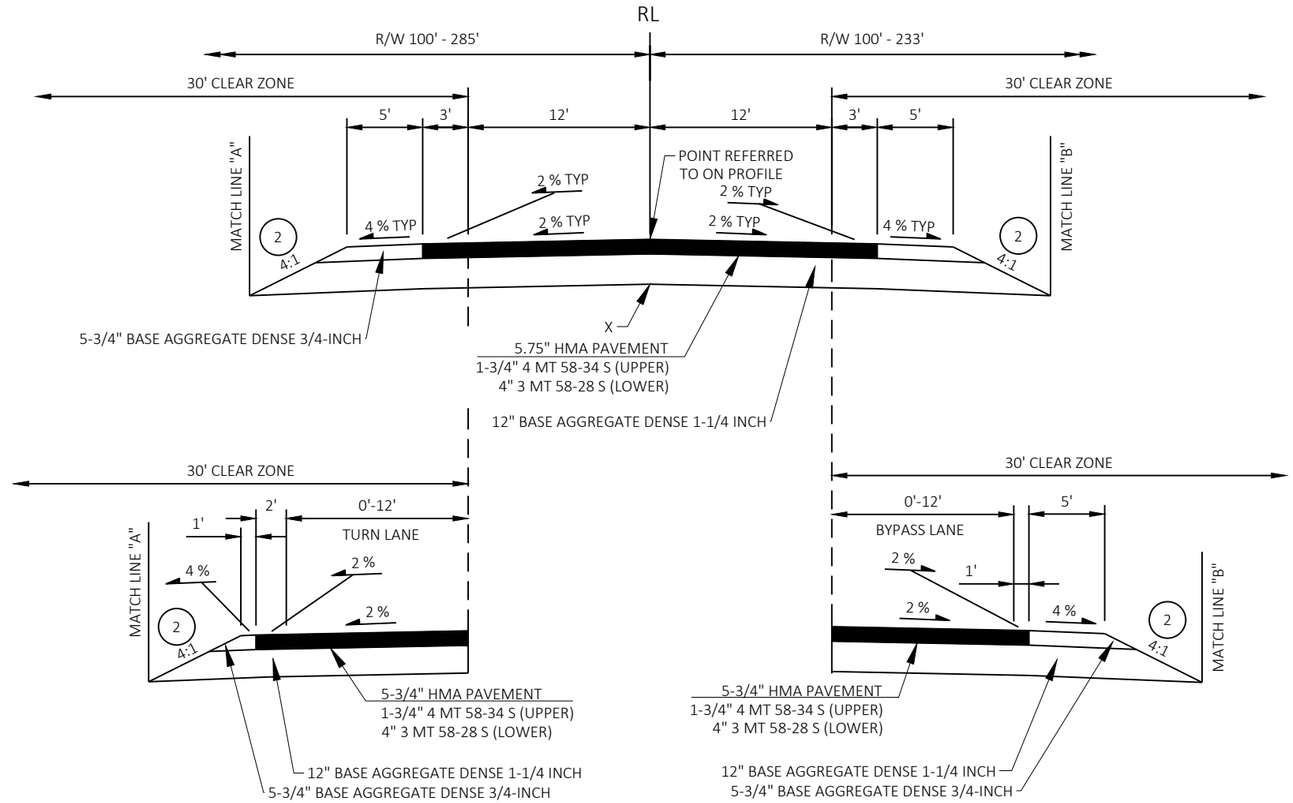
STA 498+54 - STA 553+50
STA 621+56.16 - STA 634+50
STA 645+00 - 670+00
STA 673+75 - STA 680+50
STA 683+25 - STA 873+15.30
STA 880+68.53 - STA 889+06



FINISHED TYPICAL SECTION - USH 8

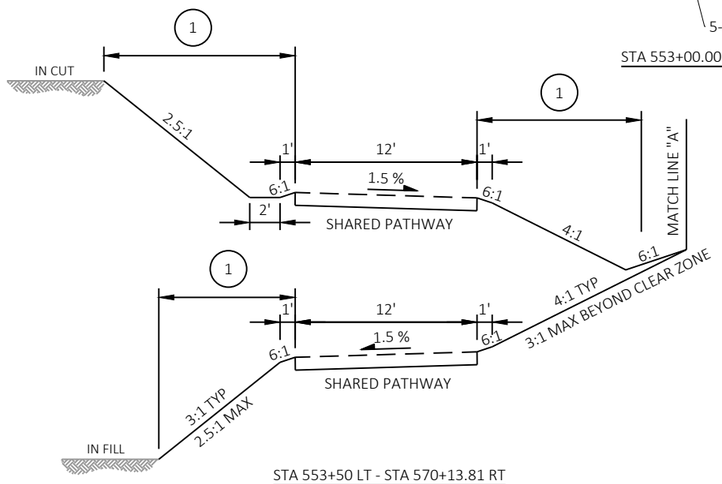
STA 896+14 - STA 909+51
STA 917+25 - STA 928+32
STA 938+91 - STA 964+15
STA 970+27 - STA 1012+86.06

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	TYPICAL SECTION	SHEET 12	E



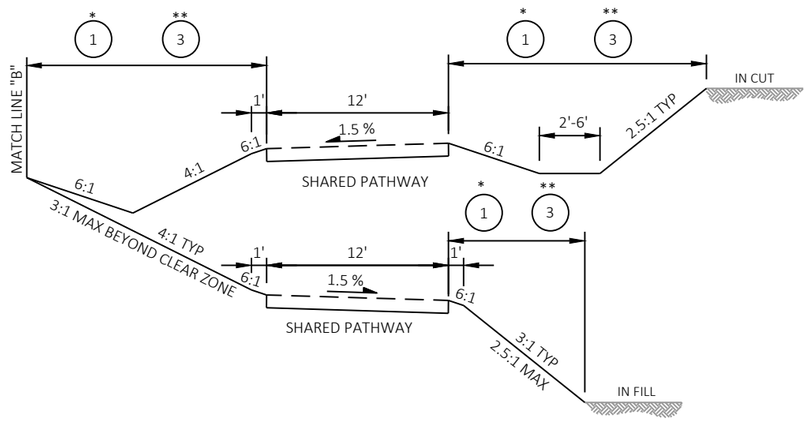
STA 553+00.00 LT - STA 556+85.48 LT

STA 553+50.00 RT - STA 556+75.00 RT



STA 553+50 LT - STA 570+13.81 RT

STA 589+80.37 LT - STA 605+26.72 LT



* STA 553+50 RT - STA 585+85.57 RT

** STA 589+92.26 RT - STA 605+26.72

NOTES:

ATV TRAIL GRADING OUTSIDE
OF 1590-18-71 PROJECT LIMITS
IS CONSTRUCTED UNDER
PROJECT ID: 1590-18-82

X = POINT REFERRED TO ON CROSS SECTION

GRADING UNDER ID: 1590-18-71

SHARED PATHWAY PAVEMENT
STRUCTURE UNDER ID: 9813-02-70

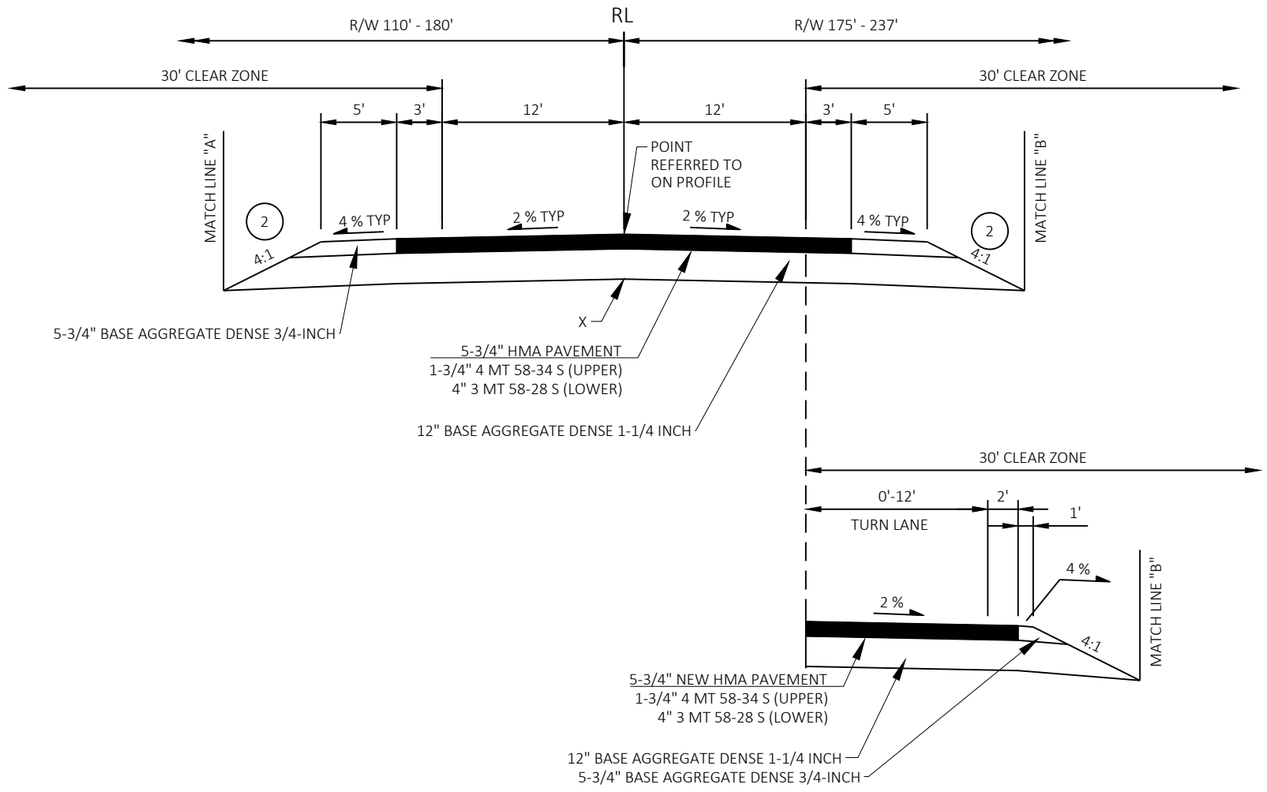
GRADING UNDER ID: 1590-18-71

SHARED PATHWAY PAVEMENT
STRUCTURE UNDER ID: 9813-02-70

FINISHED TYPICAL SECTION - USH 8

STA 553+50 - STA 586+00.22
STA 589+80.37 - STA 605+26.72

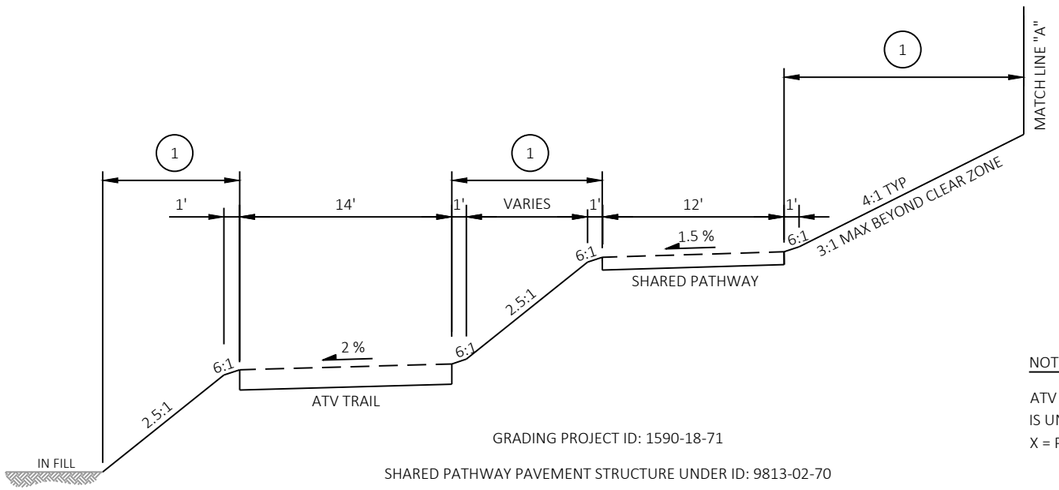
1. TOPSOIL, SEED MIXTURE #20, FERTILIZER TYPE B, AND EROSION MAT CLASS II TYPE B
2. SEED MIXTURE #20, FERTILIZER TYPE B
3. TOPSOIL, SEED MIXTURE #20, FERTILIZER TYPE B, AND EROSION MAT URBAN CLASS I TYPE A



STA 586+00.22 RT - STA 589+02.90 RT

1 TOPSOIL, SEED MIXTURE #20, FERTILIZER TYPE B, AND EROSION MAT CLASS II TYPE B

2 SEED MIXTURE #20, FERTILIZER TYPE B



GRADING PROJECT ID: 1590-18-71

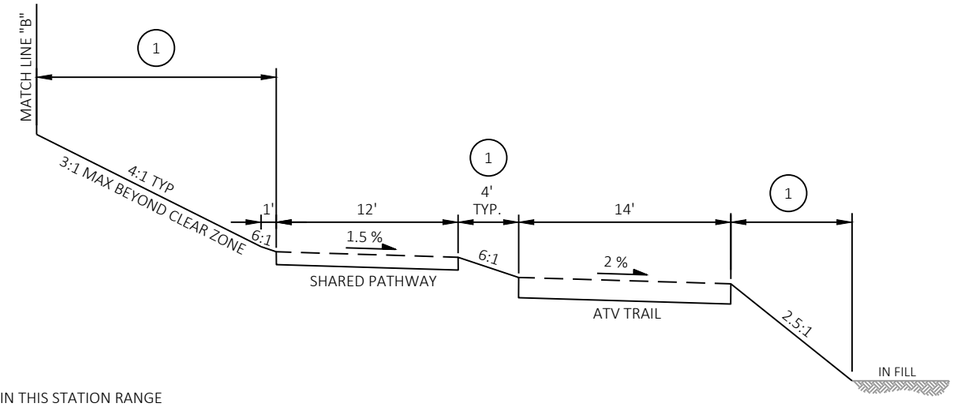
SHARED PATHWAY PAVEMENT STRUCTURE UNDER ID: 9813-02-70

ATV TRAIL PAVEMENT STRUCTURE UNDER ID: 1590-18-82

NOTES:

ATV TRAIL GRADING IN THIS STATION RANGE IS UNDER PROJECT ID: 1590-18-71

X = POINT REFERRED TO ON CROSS SECTION



GRADING PROJECT ID: 1590-18-71

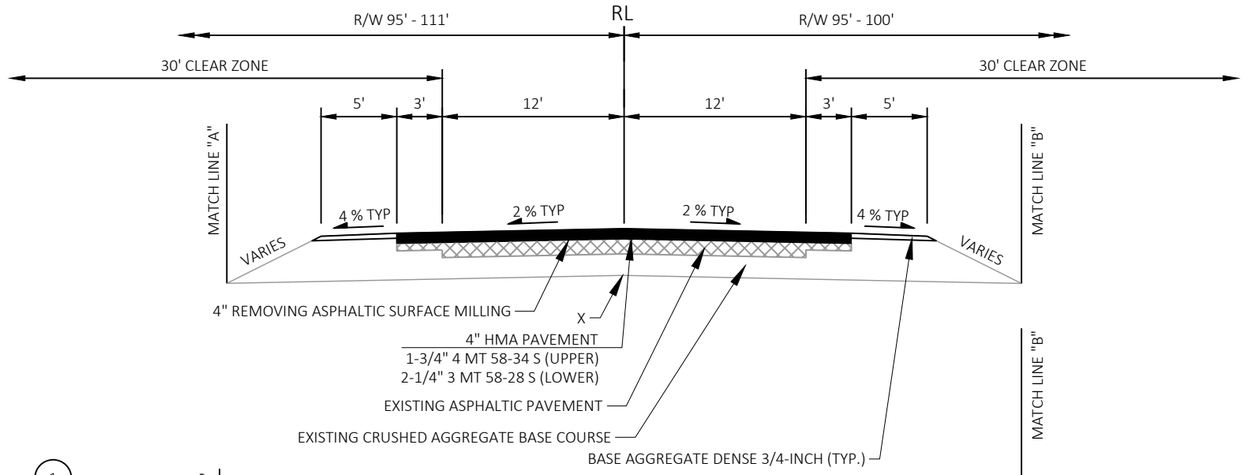
SHARED PATHWAY PAVEMENT STRUCTURE UNDER ID: 9813-02-70

ATV TRAIL PAVEMENT STRUCTURE UNDER ID: 1590-18-82

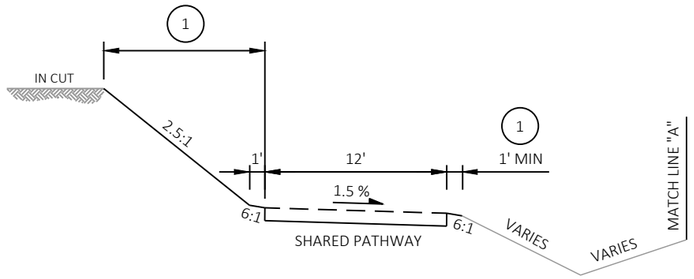
FINISHED TYPICAL SECTION - USH 8

STA 586+00.22 - STA 589+80.37

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	TYPICAL SECTION	SHEET 14	E



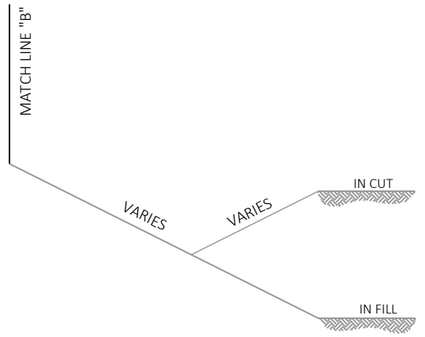
(1) TOPSOIL, SEED MIXTURE #20, FERTILIZER TYPE B, AND EROSION MAT CLASS II TYPE B



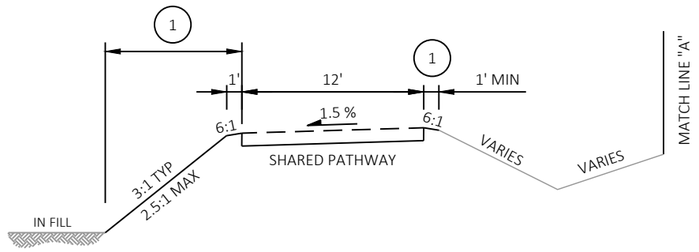
GRADING UNDER ID: 1590-18-71

SHARED PATHWAY PAVEMENT
STRUCTURE UNDER ID: 9813-02-70

STA 605+26.72 LT - STA 621+56.16 LT



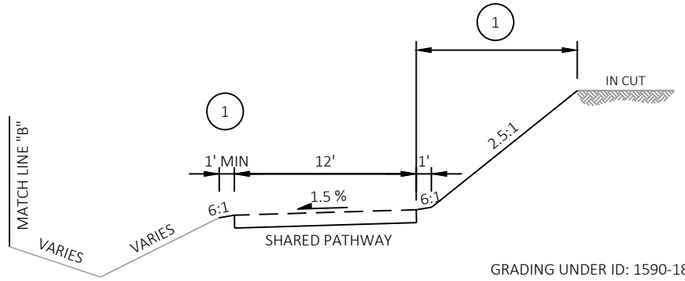
STA 608+49.61 RT - STA 621+56.16 RT



STA 605+26.72 LT - STA 621+56.16 LT

GRADING UNDER ID: 1590-18-71

SHARED PATHWAY PAVEMENT
STRUCTURE UNDER ID: 9813-02-70



STA 605+26.72 RT - STA 608+49.61 RT

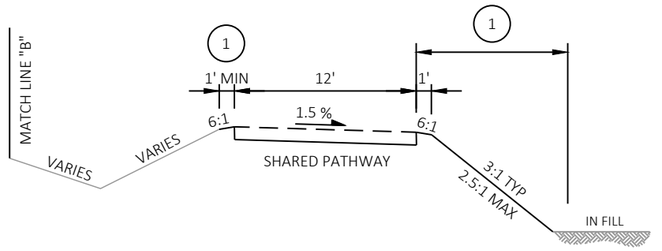
GRADING UNDER ID: 1590-18-71

SHARED PATHWAY PAVEMENT
STRUCTURE UNDER ID: 9813-02-70

NOTES:

ATV TRAIL GRADING OUTSIDE
OF 1590-18-71 PROJECT LIMITS
IS CONSTRUCTED UNDER
PROJECT ID: 1590-18-82

X = POINT REFERRED TO ON CROSS SECTION



STA 605+26.72 RT - STA 608+49.61 RT

GRADING UNDER ID: 1590-18-71

SHARED PATHWAY PAVEMENT
STRUCTURE UNDER ID: 9813-02-70

FINISHED TYPICAL SECTION - USH 8

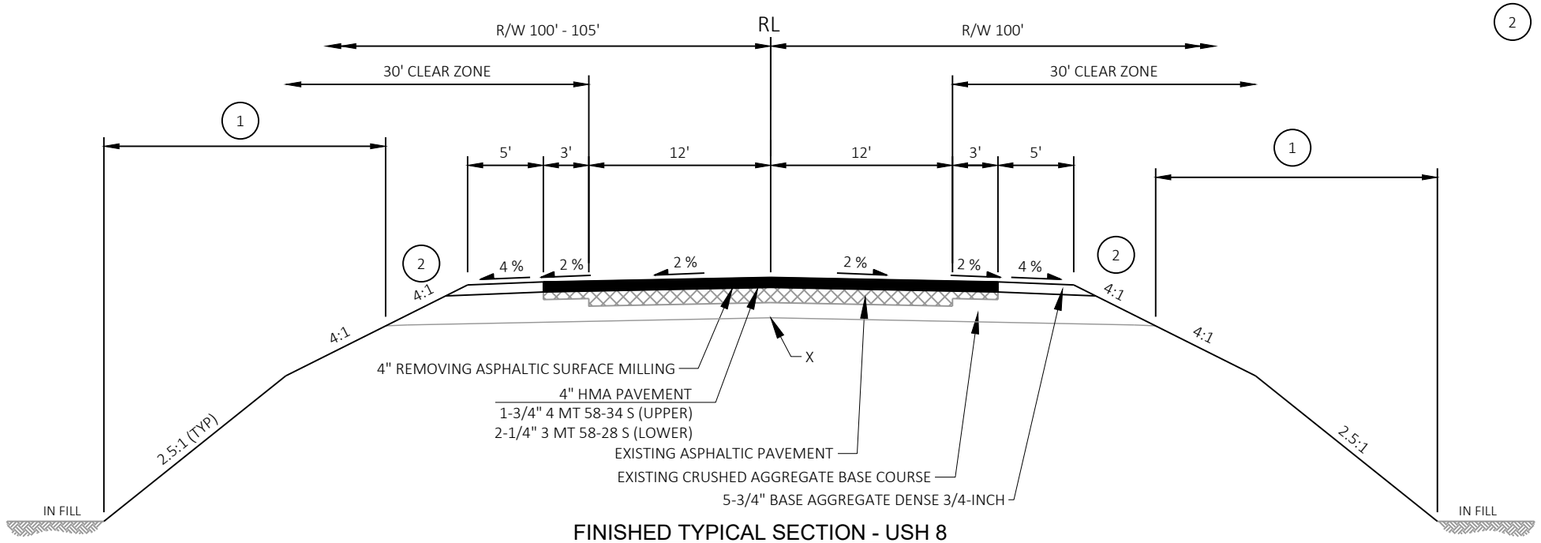
STA 605+26.72 - STA 621+56.16

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	TYPICAL SECTION	SHEET 15	E

2

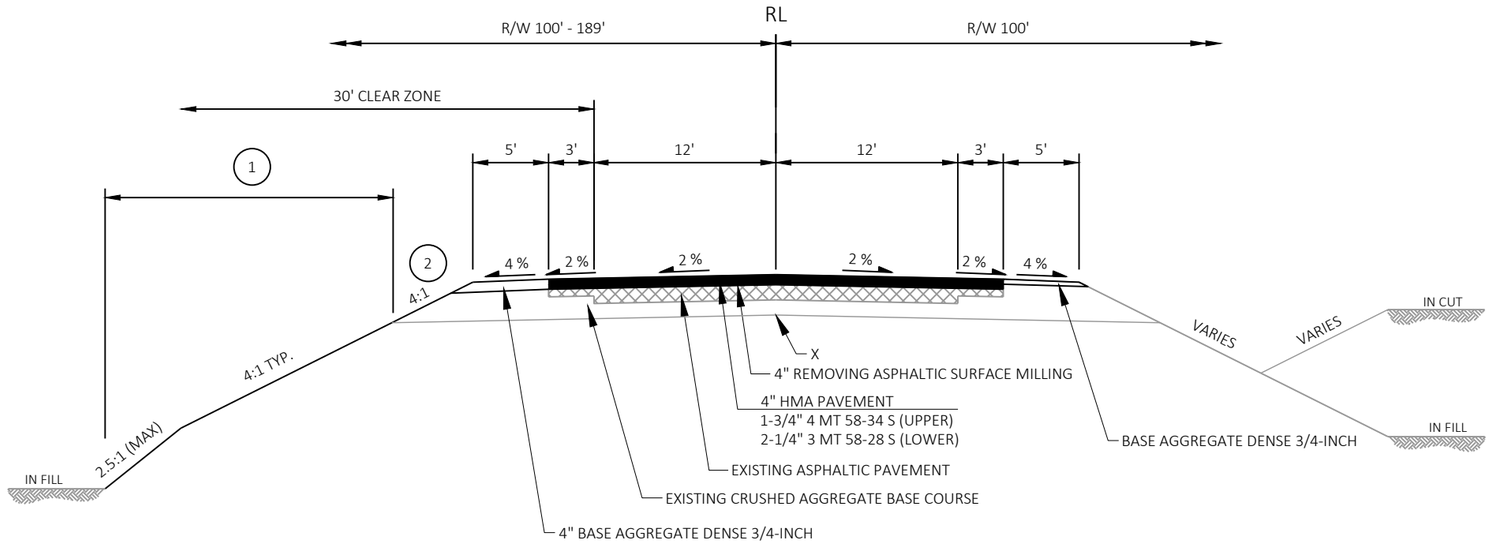
1 TOPSOIL, SEED MIXTURE #20, FERTILIZER TYPE B, AND EROSION MAT CLASS II TYPE B

2 SEED MIXTURE #20, FERTILIZER TYPE B



FINISHED TYPICAL SECTION - USH 8

STA 634+50 - STA 645+00



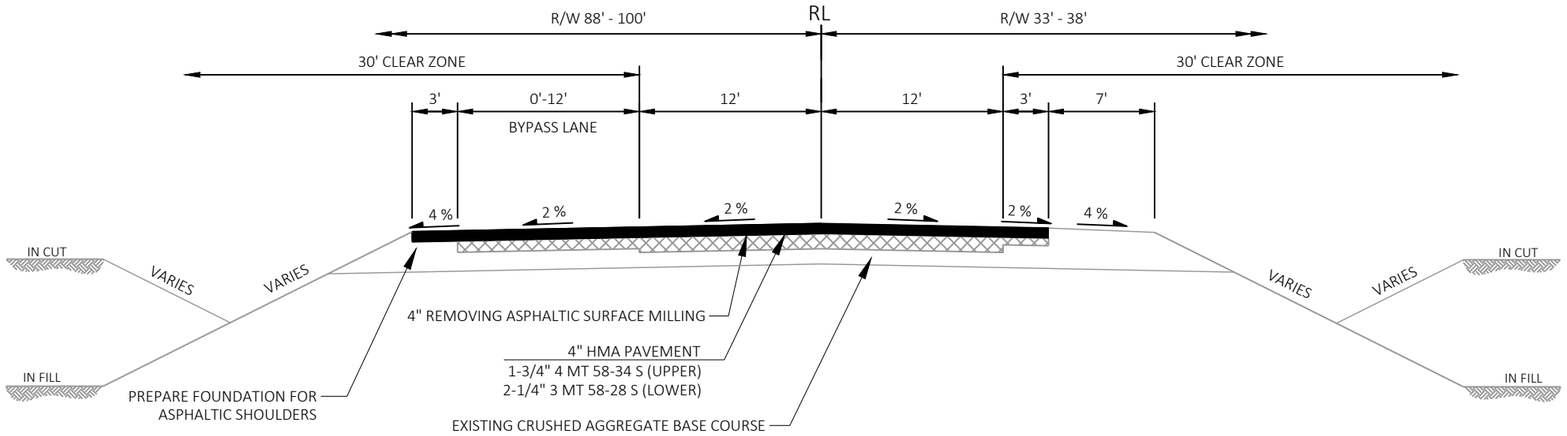
FINISHED TYPICAL SECTION - USH 8

STA 670+00 - STA 673+75
STA 680+50 - STA 683+25

NOTES:

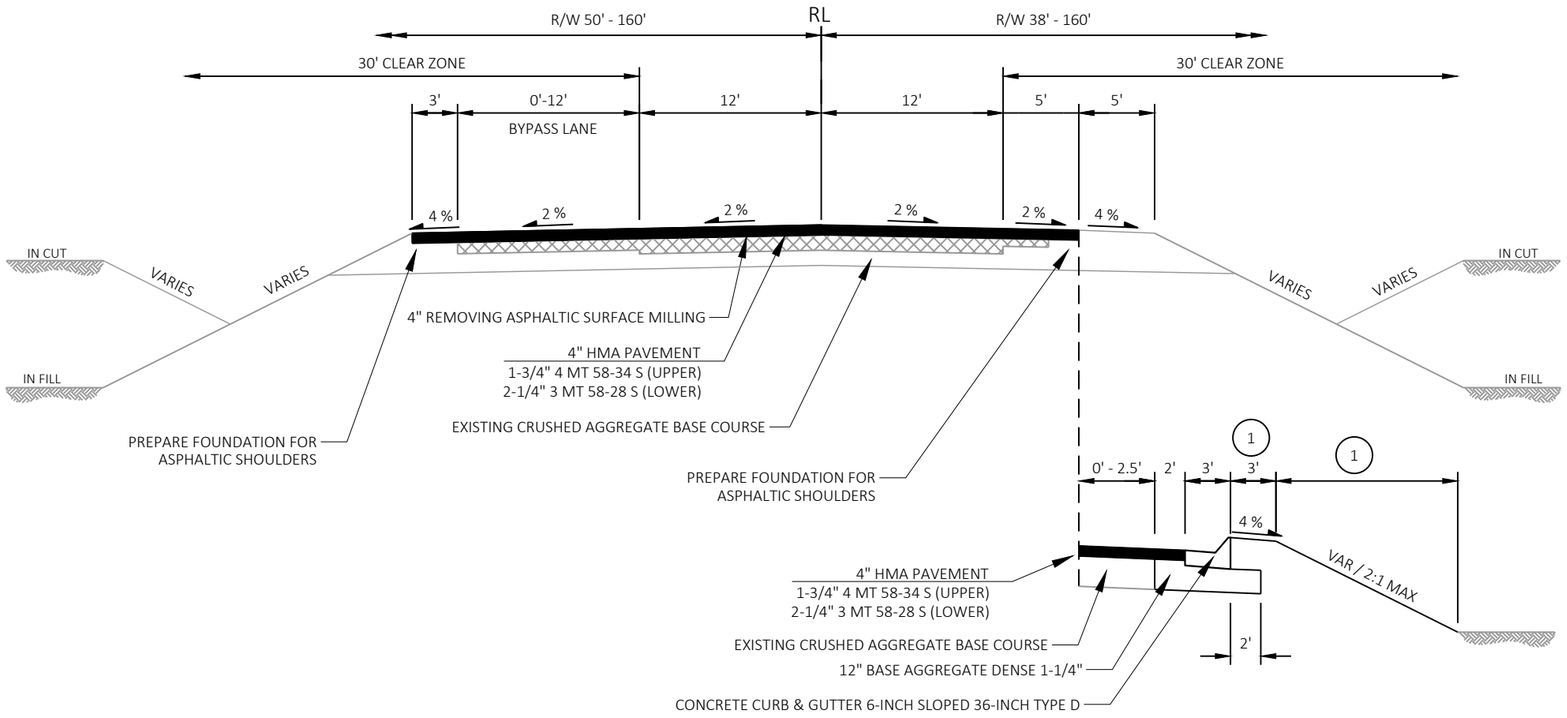
X = POINT REFERRED TO ON CROSS SECTION

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	TYPICAL SECTION	SHEET 16	E



FINISHED TYPICAL SECTION - USH 8

STA 889+06 - STA 893+50



STA 933+64 RT - STA 938+78 RT

FINISHED TYPICAL SECTION - USH 8

STA 893+50 - STA 896+14
STA 909+51 - STA 917+25
STA 928+32 - STA 938+91
STA 964+15 - STA 970+27

(1) TOPSOIL, SEED MIXTURE #20, FERTILIZER TYPE B, AND EROSION MAT URBAN CLASS I TYPE A

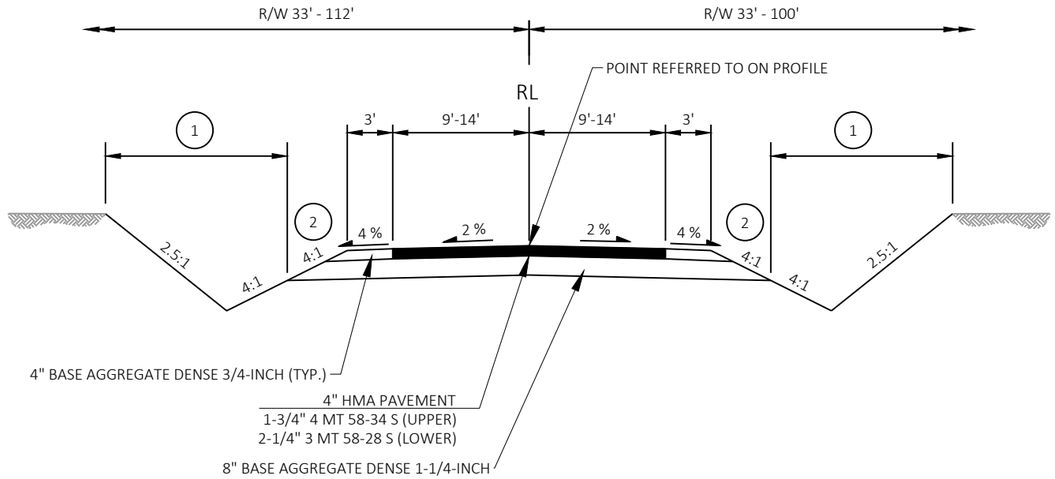
PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	TYPICAL SECTION	SHEET 17	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\020302-TS-FINISHED.DWG
LAYOUT NAME - 09-FINISHED
PLOT DATE : 12/17/2024 10:24 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1:10

2

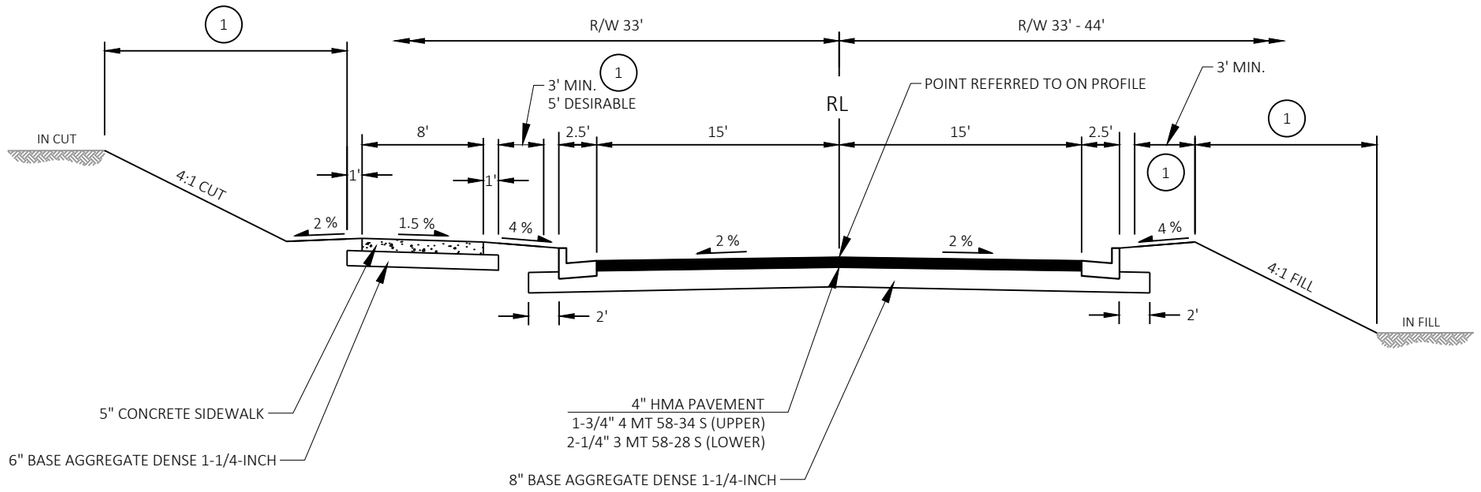
(1) TOPSOIL, SEED MIXTURE #20, FERTILIZER TYPE B, AND EROSION MAT CLASS II TYPE B

(2) SEED MIXTURE #20, FERTILIZER TYPE B



FINISHED TYPICAL SECTION - SIDEROADS

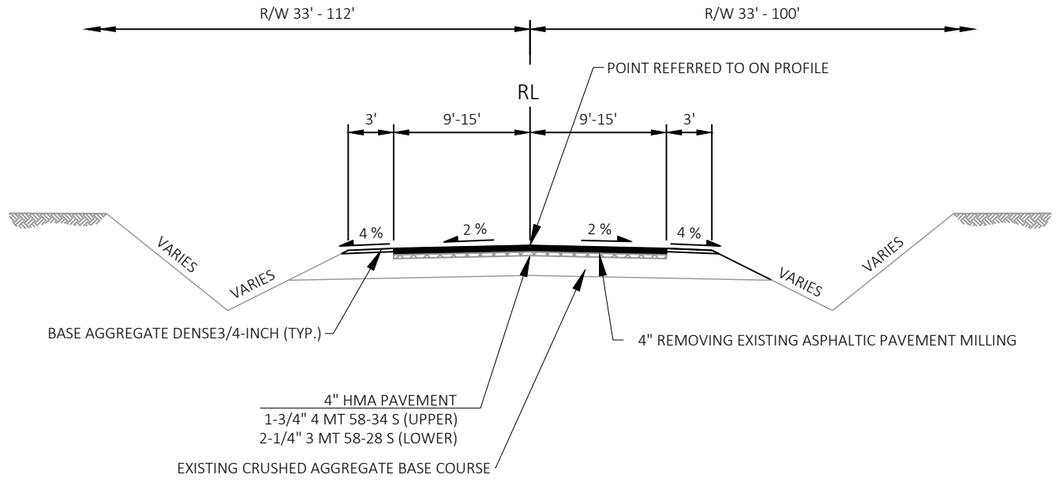
YOUNGS LANE
STA 12+89.66 'Y' TO STA 17+77.35 'Y'



FINISHED TYPICAL SECTION - SIDEROADS

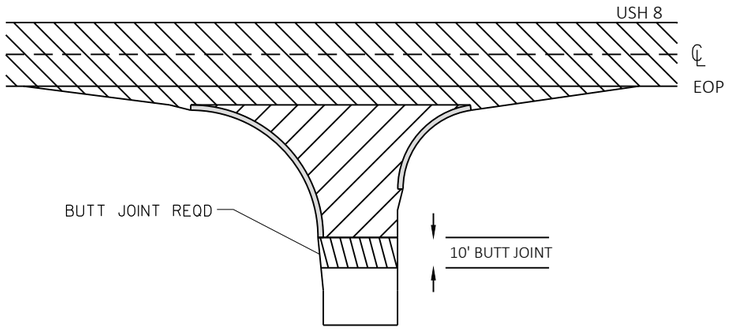
KWE DA KIK LANE
STA 20+84.56 'KDK' TO STA 21+65.00 'KDK'

2



FINISHED TYPICAL SECTION - SIDEROADS

S FOREST AVE	FIREKEEPER RD	CONNOR FARM RD
S PARK AVE	INDIAN DR	TOWER LN
S PROSPECT AVE	BUG LAKE RD	SCATTERED LAKE RD
S GRANDVIEW DR	LOVE KNOT RD	MILL RD
HIGHVIEW DR	OTTER CREEK RD	
CTH W	AIRPORT LANE	
CORNING RD	W SILVER LAKE RD	
BEAR RD	E SILVER LAKE RD	



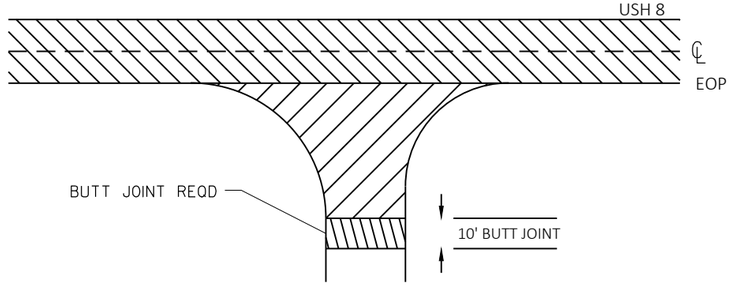
REMOVING ASPHALTIC SURFACE MILLING (1.75" DEPTH)

REMOVING ASPHALTIC SURFACE MILLING (4" DEPTH)

REMOVING ASPHALTIC SURFACE BUTT JOINTS
SEE BUTT JOINT DETAIL

SIDE ROAD CONSTRUCTION LIMITS

WITH CURB AND GUTTER



REMOVING ASPHALTIC SURFACE MILLING (1.75" DEPTH)

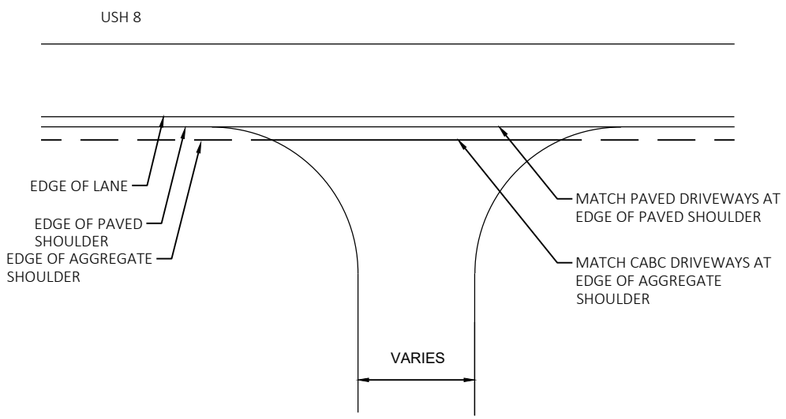
REMOVING ASPHALTIC SURFACE MILLING (4" DEPTH)

REMOVING ASPHALTIC SURFACE BUTT JOINTS
SEE BUTT JOINT DETAIL

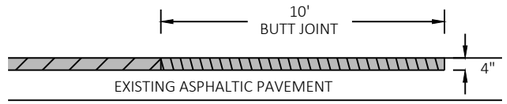
NOTE: MATCH AT EXISTING PAVING LIMITS WHEN SIDE ROAD IS UNPAVED (NO BUTT JOINT REQD).

SIDE ROAD CONSTRUCTION LIMITS

WITHOUT CURB AND GUTTER



DETAIL FOR TYPICAL DRIVEWAY CONSTRUCTION LIMITS



MAINLINE AND SIDEROADS

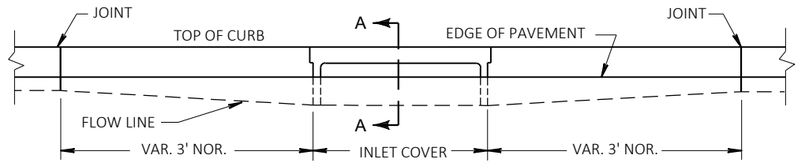
HMA PAVEMENT

REMOVING ASPHALTIC SURFACE MILLING

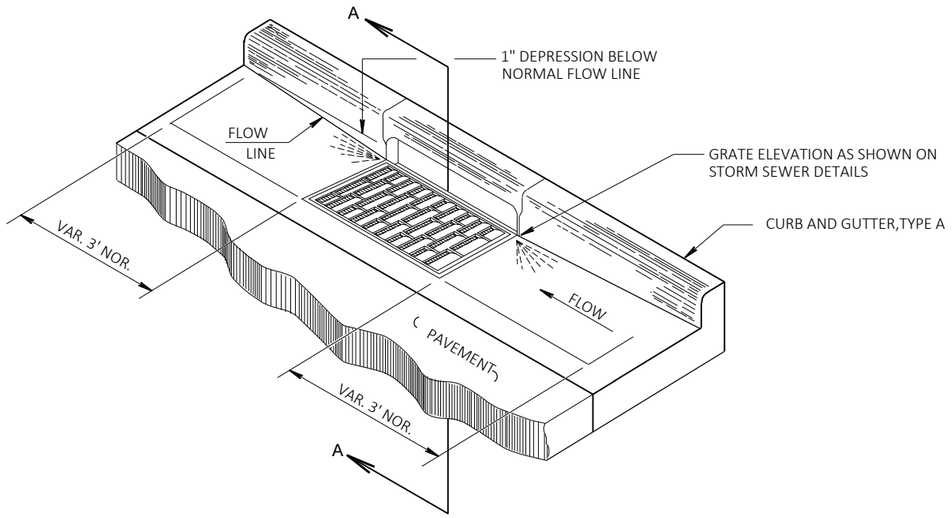
REMOVING ASPHALTIC SURFACE BUTT JOINTS

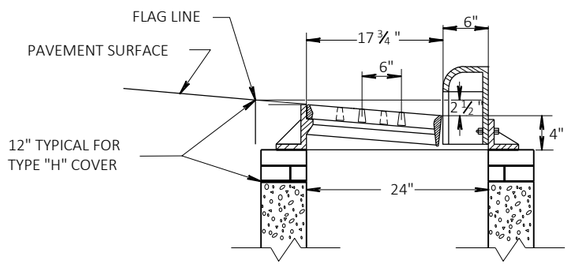
BUTT JOINT

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CONSTRUCTION DETAIL	SHEET 20	E



ELEVATION

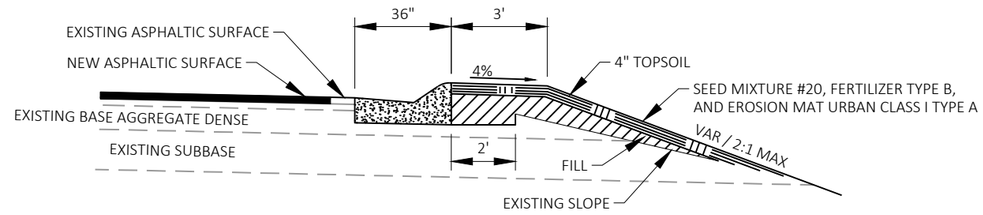




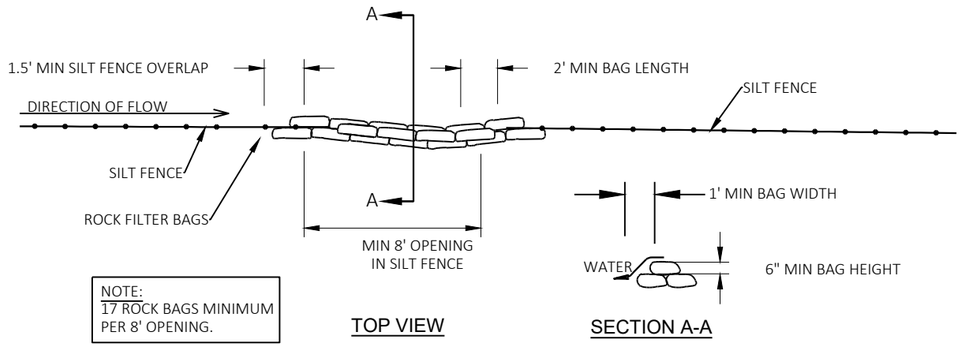
SECTION A-A

DETAIL OF CURB AND GUTTER AT INLETS

(TYPE 2x3-H INLET SHOWN)



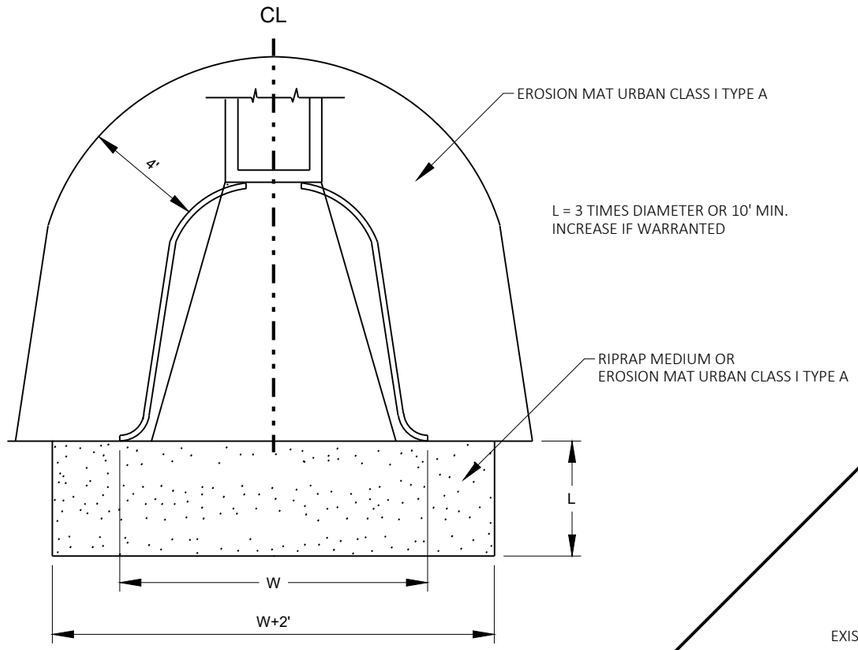
DETAIL OF CURB & GUTTER INSTALLATION AT INTERSECTIONS



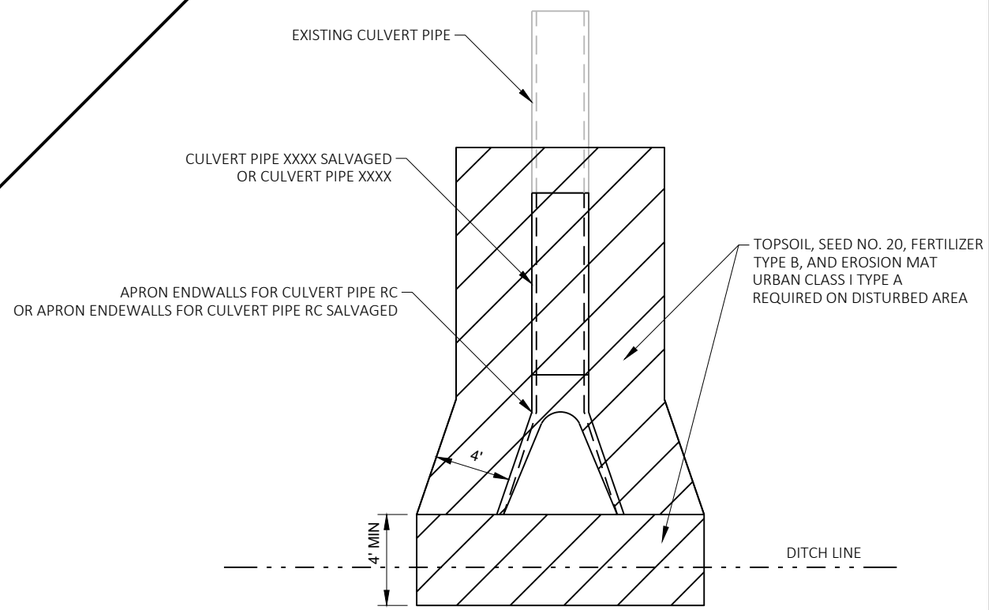
TOP VIEW

SECTION A-A

ROCK BAGS USED FOR SILT FENCE RELIEF

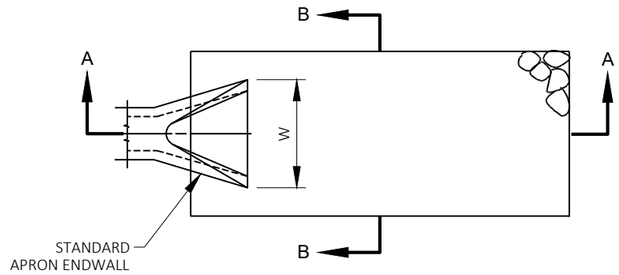


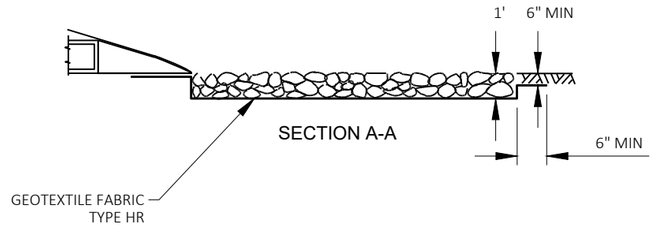
EROSION CONTROL AT PIPE ENDS

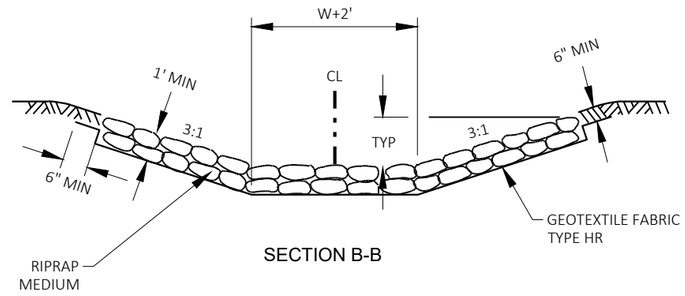


EROSION CONTROL FOR CROSS DRAIN RESTORATION

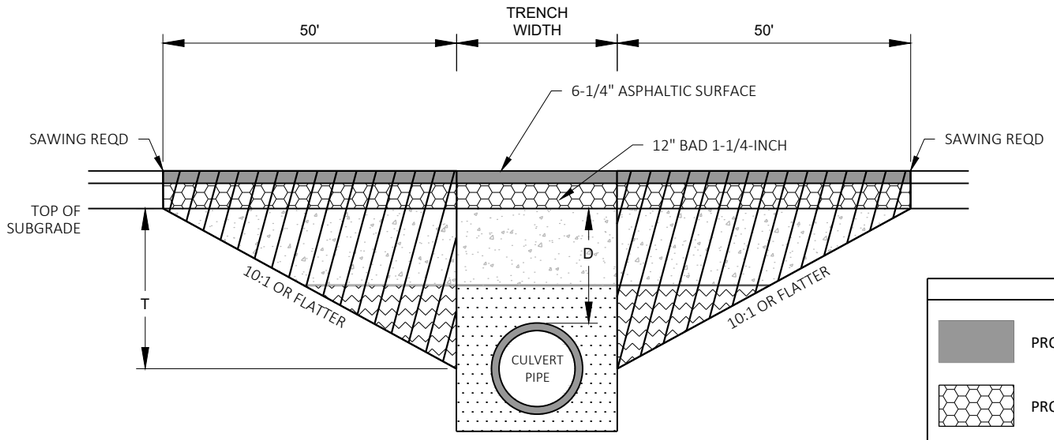
SEE MISCELLANEOUS QUANTITIES FOR LOCATIONS





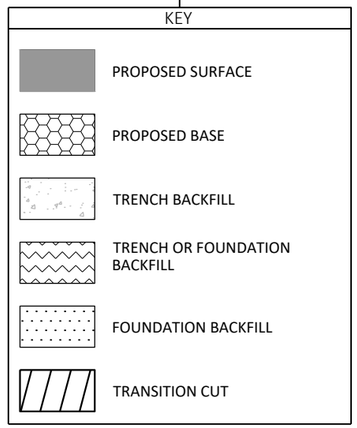


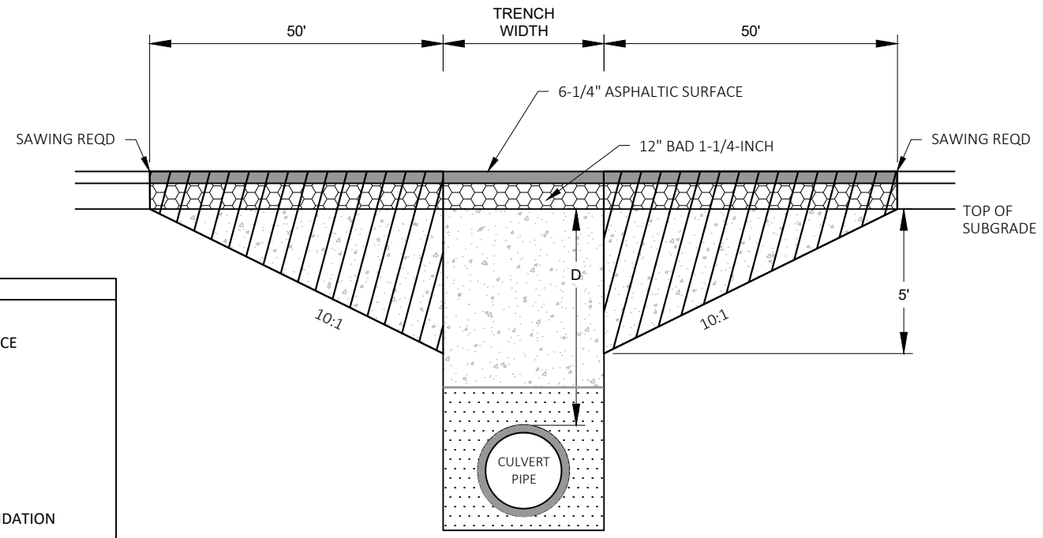
RIP RAP AND GEOTEXTILE



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.

DEPTH D < 6 FT





DEPTH D ≥ 6 FT

NOTES

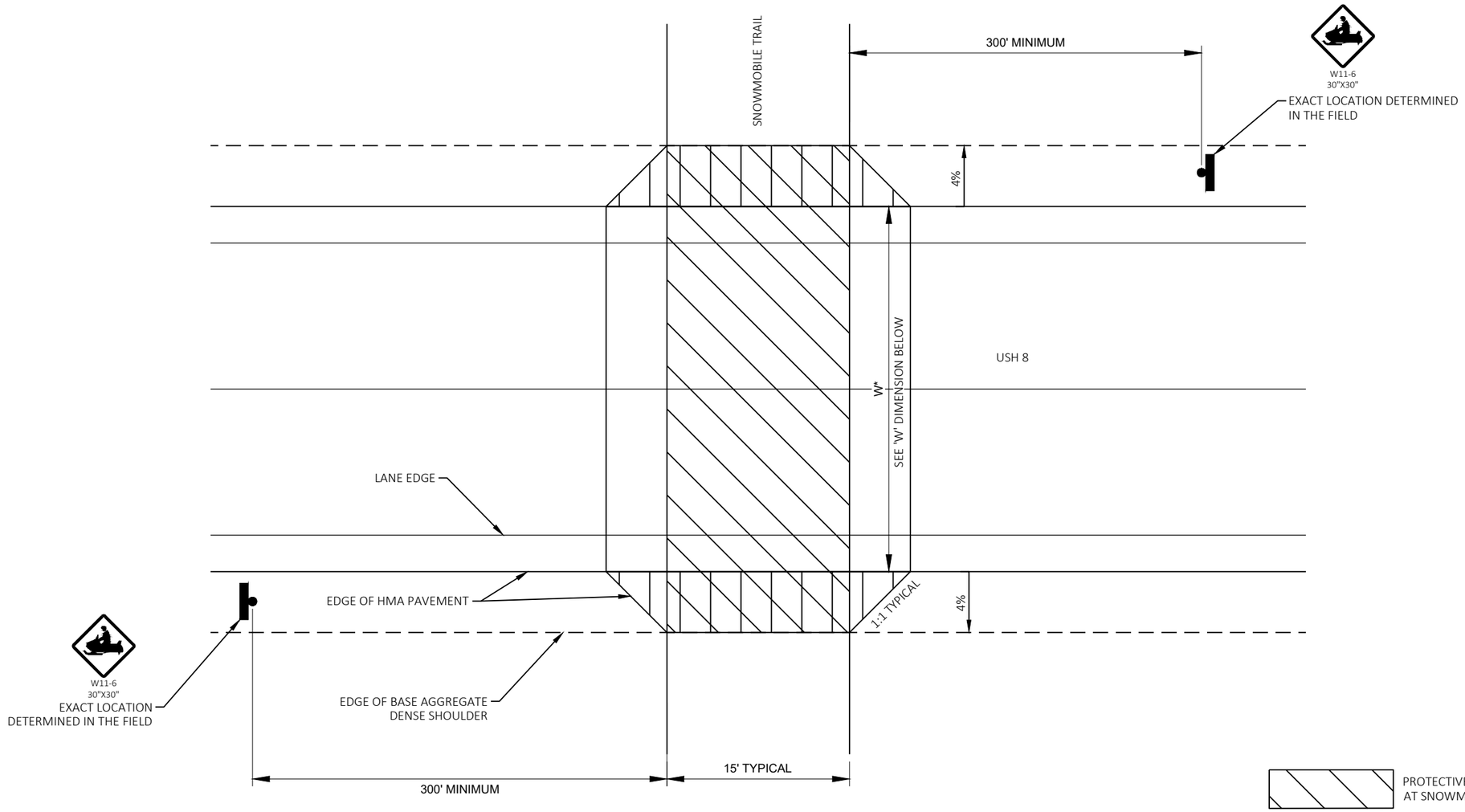
TRANSITION CUT IS PAID AS EXCAVATION COMMON.
TRANSITION CUT WIDTH IS FROM SUBGRADE SHOULDER POINT TO SUBGRADE SHOULDER POINT.
BACKFILL THE TRANSITION CUT AREAS WITH FOUNDATION AND TRENCH BACKFILL AS SPECIFIED IN STANDARD SPEC 520.
PERFORM CULVERT PIPE INSTALLATION BEFORE MILLING AND PAVING.
PLACE ASPHALTIC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

CULVERT PIPE TRANSITION

ROUTE	STA (CL)	DEPTH D (FT)	PIPE DIA (IN)	REMARKS
USH 8	491+29	3.7	24	21008000181
USH 8	498+03	2.3	36	21008000182*
USH 8	736+29	6.2	24	21008000203
USH 8	757+80	0.7	24	21008000205
USH 8	816+21	7.8	30	21008000208
USH 8	858+72	4.7	30	21008000211
USH 8	911+83	3.1	24	21008000212
USH 8	926+54	2.2	24	21008000213

ROUTE	STA (CL)	DEPTH D (FT)	PIPE DIA (IN)	REMARKS
USH 8	935+03	1.3	HE-14X23	21008000214
USH 8	950+47	4.8	48	21008000215
USH 8	979+99	2.0	24	21008000216
USH 8	989+41	3.5	30	21008000217
USH 8	1000+94	2.5	24	21008000218
USH 8	1000+07	1.9	24	21008000219

*SEE PLAN/PROFILE SHEETS FOR SAW CUT LAYOUT AT CTH W INTERSECTION



PROTECTIVE THERMOPLASTIC COATING AT SNOWMOBILE TRAIL CROSSING

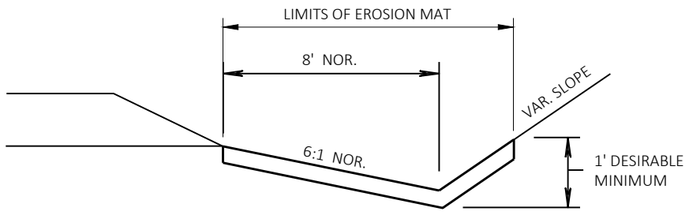
HMA PAVEMENT WIDENING 4-INCHES FOR SNOWMOBILE TRAIL CROSSING

NOTE:PREPARATION FOR PAVEMENT WIDENING FALLS UNDER PREPARE FOUNDATION FOR ASPHALTIC PAVING.

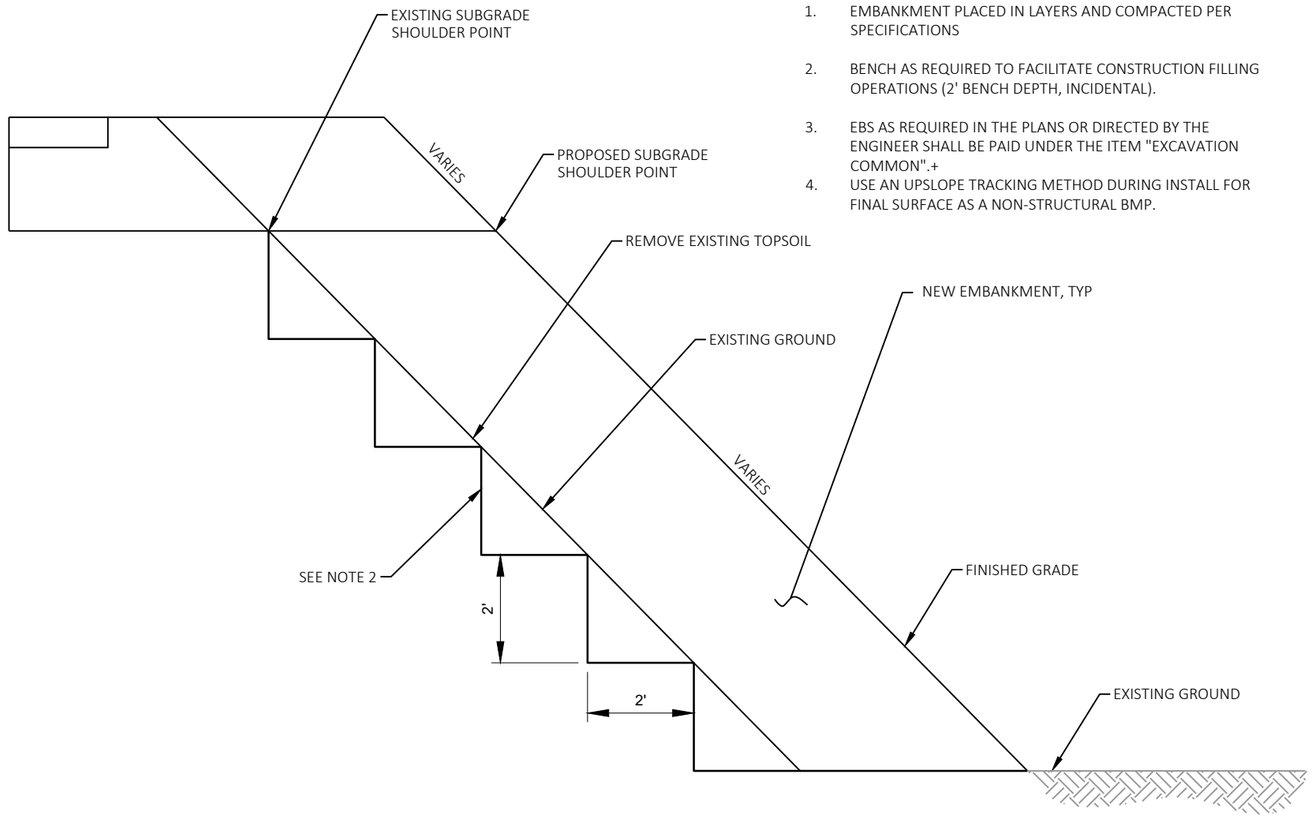
EXACT LOCATIONS TO BE MARKED IN THE FIELD BY THE PROJECT PERSONAL.

SNOWMOBILE TRAIL CROSSING

STA 440+02	W = 48' TYP
STA 679+70	W = 30' TYP
STA 732+00	W = 30' TYP
STA 909+32	W = 35' TYP



EROSION MAT DETAIL FOR DITCHES



STEPPED EMBANKMENT DETAIL

NOTES

1. EMBANKMENT PLACED IN LAYERS AND COMPACTED PER SPECIFICATIONS
2. BENCH AS REQUIRED TO FACILITATE CONSTRUCTION FILLING OPERATIONS (2' BENCH DEPTH, INCIDENTAL).
3. EBS AS REQUIRED IN THE PLANS OR DIRECTED BY THE ENGINEER SHALL BE PAID UNDER THE ITEM "EXCAVATION COMMON".+
4. USE AN UPSLOPE TRACKING METHOD DURING INSTALL FOR FINAL SURFACE AS A NON-STRUCTURAL BMP.

① TOPSOIL, EROSION MAT URBAN CLASS I TYPE A, SOIL STABILIZER TYPE B, NO. 20 SEED MIXTURE, AND SEEDING AT RATE SPECIFIED IN THE SPECIAL PROVISIONS.

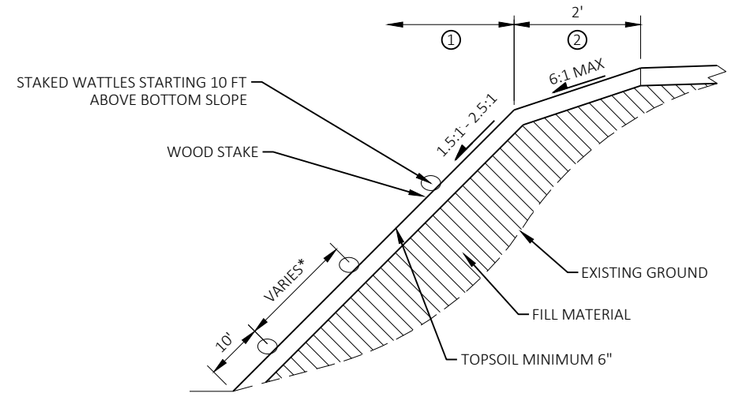
② TOPSOIL, MULCH, NO. 20 SEED MIXTURE AND SEEDING AT RATE SPECIFIED IN THE SPECIAL PROVISIONS.

NOTES:

TOPSOIL SHALL NOT BE SCREENED

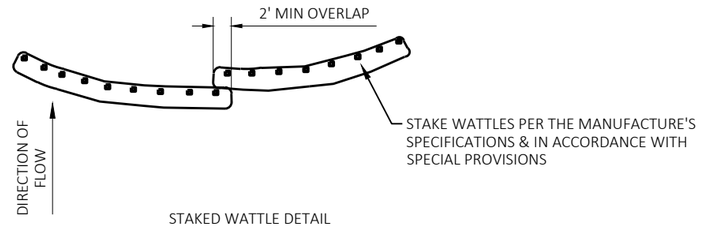
*SEE 12" DIAMETER MINIMUM STAKED WATTLE SPACING TABLE FOR STAKED WATTLE INTERVALS

WOOD STAKE SHOULD PENETRATE CONTAINMENT MATERIAL, NOT WATTLE FIBERS



EROSION CONTROL DETAIL FOR STEEP SLOPE AREAS

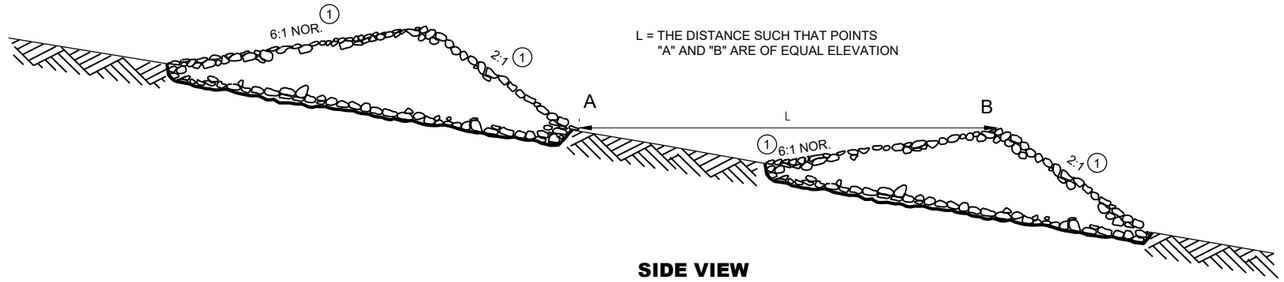
12" DIAMETER MINIMUM STAKED WATTLE SPACING TABLE	
SLOPE	MAXIMUM SPACING
1H : 1V	5' - 0"
1.5H : 1V	7' - 6"
2H : 1V	10' - 0"
2.5H : 1V	12' - 6"
3H : 1V	15' - 0"



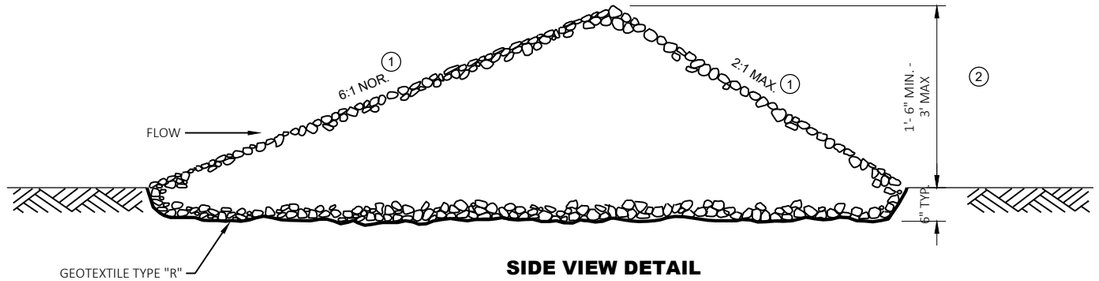
STAKED WATTLE DETAIL

(SEE EROSION CONTROL PLANS FOR LOCATIONS)

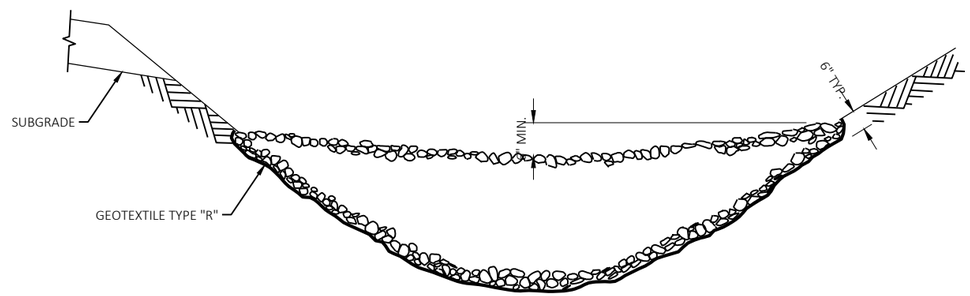
2



SIDE VIEW



SIDE VIEW DETAIL



SECTION VIEW

STONE DITCH CHECK

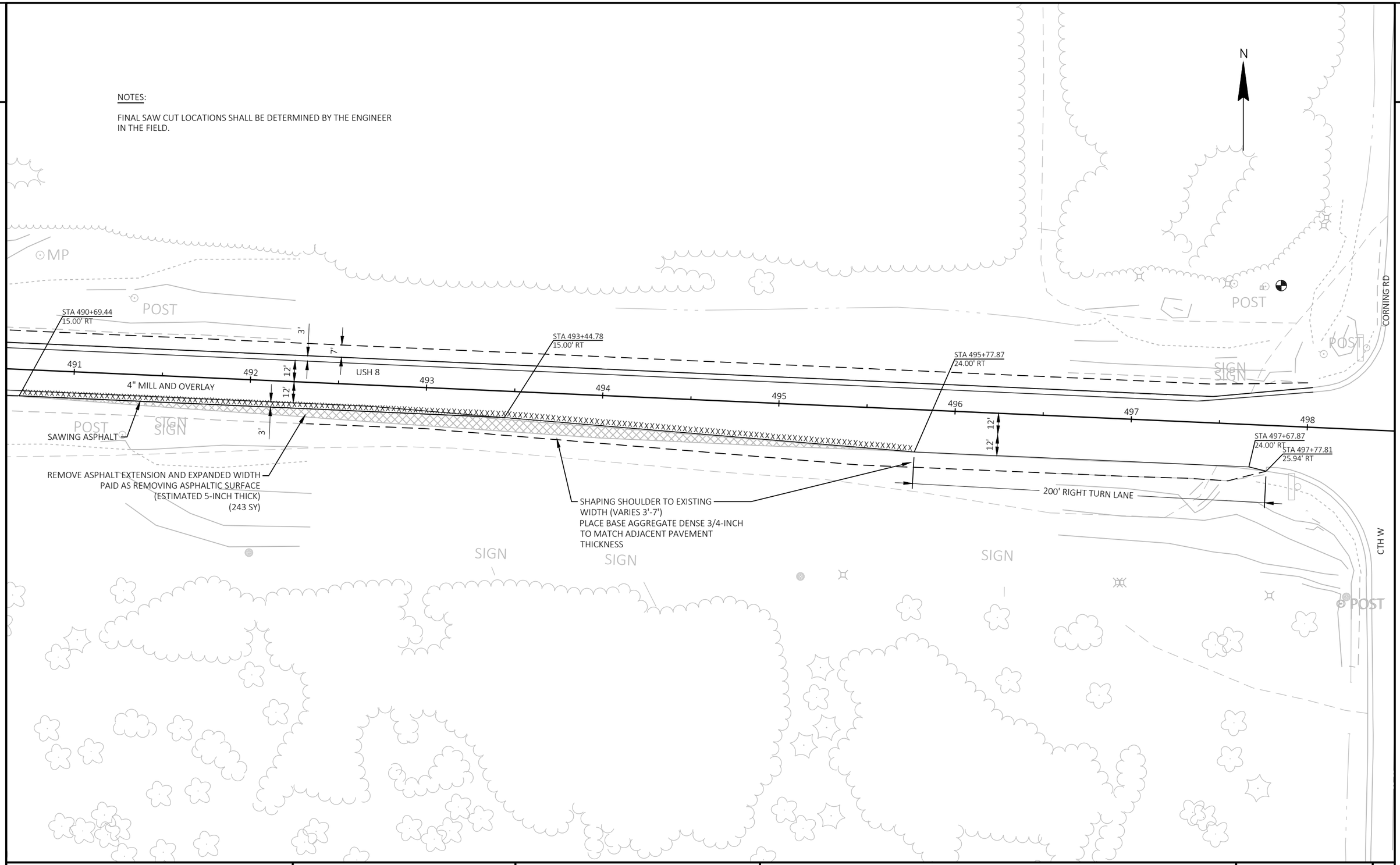
(1) WHEN PLACED WITHIN THE CLEAR ZONE, SLOPED AT 6:1 OR FLATTER.

(2) MEASURED AT THE CENTER OF THE DITCH CHECK.

2

NOTES:

FINAL SAW CUT LOCATIONS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.



PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CONSTRUCTION DETAIL - PAVEMENT REMOVAL AT CTH W	SHEET 27	E

2

N

SHARED PATHWAY UNDER ID 9813-02-70

USH 8 R/L

USH 8

562 563 564 565 566 567

CONCRETE CURB & GUTTER
6-INCH SLOPED 36-INCH TYPE D

1842.74

+81.14
20.00' RT

1843.22

SHARED PATHWAY UNDER ID 9813-02-70

CONCRETE SIDEWALK 5-INCH
UNDER ID 9813-02-70 (TYP.)

R60

1

1843.70

+77.36'Y'
-15.00' LT

STA 18+52.68 'Y'
STA 564+51.12 'USH 8'

CONCRETE CURB & GUTTER
6-INCH SLOPED 36-INCH TYPE D

1842.49

1842.95

+10.12
20.00' RT

18'Y'

1843.42

R40'

2

+89.01'Y'
15.00' RT

SHARED PATHWAY UNDER ID 9813-02-70

YOUNGS LANE R/L

YOUNGS LANE

EXJSTING R/W

SI

R/W

17'Y'

16'Y'

EXJSTING R/W

SI

R/W

NOTES:
1. CONTRACTOR TO VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND STATION/OFFSETS PRIOR TO CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS.

LEGEND:

(X) POINT NUMBER

END CONSTRUCTION
STA 12+89.66

STATION & OFFSET TABLE							
POINT	STATION	OFFSET	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
1	563+81.15	79.98 RT	17+77.38	74.98 LT	569535.712	850432.661	60'
2	565+10.13	60.02 RT	17+88.98	55.02 RT	569549.880	850562.405	40'

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	INTERSECTION DETAIL - YOUNGS LANE	SHEET 28	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\021101-ID.DWG
LAYOUT NAME - 01

PLOT DATE : 10/16/2024 12:47 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

NOTES:
1. CONTRACTOR TO VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND STATION/OFFSETS PRIOR TO CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS.
3. CURB ELEVATIONS ARE AT THE FLANGE LINE AND LOCATED AT THE END POINTS AND MID POINTS FOR EACH QUADRANT OF THE INTERSECTION.
4. SEE STANDARD DETAIL 08D01-21a FOR 6-INCH SLOPED 36-INCH TYPE D CURB AND GUTTER FOR CURB REQUIREMENTS

LEGEND:

(X) POINT NUMBER

STA 21'KDK'+65
-15.00' LT

22'KDK'

END CONSTRUCTION
STA 21'KDK'+65
MATCH EXISTING
BUTT JOINT REQ'D

STA 21'KDK'+65
15.00' RT

SI

1760.04

XXXXXXX

KWE DA KIK R/L

KWE DA KIK LANE

EXJSTING R/W

R/W

21'KDK'

STA 20'KDK'+84.56
15.00' RT

3

CONCRETE CURB & GUTTER
6-INCH SLOPED 36-INCH TYPE D

SHARED PATHWAY UNDER 9813-02-70

USH 8 R/L

1757.41

R55'

592

ATV TRAIL CONSTRUCTION UNDER 1590-18-82

STA 20'KDK'+63.40
-15.00' LT

4

1757.05

R50'

1756.20

1755.00

STA 590+54.48
-20.00' LT

591

N09°14'42"W

CONCRETE CURB & GUTTER
6-INCH SLOPED 36-INCH TYPE D

1757.75

STA 589+73.45
STA 20+00.00 'KDK'

STA 589+15.03
-20.00' LT

1758.44

590

STA 590+29.17
24.00' RT

1757.34

589

USH 8

EP: 3+03.23

CONCRETE SIDEWALK 5-INCH
UNDER ID 9813-02-70 (TYP.)

C-21-9703

588

1757.16

R50'

2

CONCRETE CURB & GUTTER
6-INCH SLOPED 36-INCH TYPE D

1760.63

1758.73

STA 588+95.66
24.00' RT

1756.98

STA 589+80.54
67.78' RT

CONCRETE CURB & GUTTER
6-INCH SLOPED 36-INCH TYPE D

R55'

WAYSIDE WEST ENTRANCE

587

SHARED PATHWAY UNDER 9813-02-70

1756.98

STA 589+49.13
84.55' RT

1

BP: 2+00.00

ATV TRAIL CONSTRUCTION UNDER 1590-18-82

XXXXXXXX

SI

EXISTING R/W

SIGN

BORE

595

USH 8

594

1745.43

STA 594+84.76
20.00' RT

CONCRETE CURB & GUTTER
6-INCH SLOPED 36-INCH TYPE D

1747.28

WAYSIDE EAST ENTRANCE

1748.94

1749.04

R50'

6

R45'

STA 593+62
19.99' RT

1747.87

STA 594+35.67
69.38' RT

1749.14

5

XXXXXXX

SI

STA 594+06.24
64.56' RT

EXISTING R/W

STATION & OFFSET TABLE

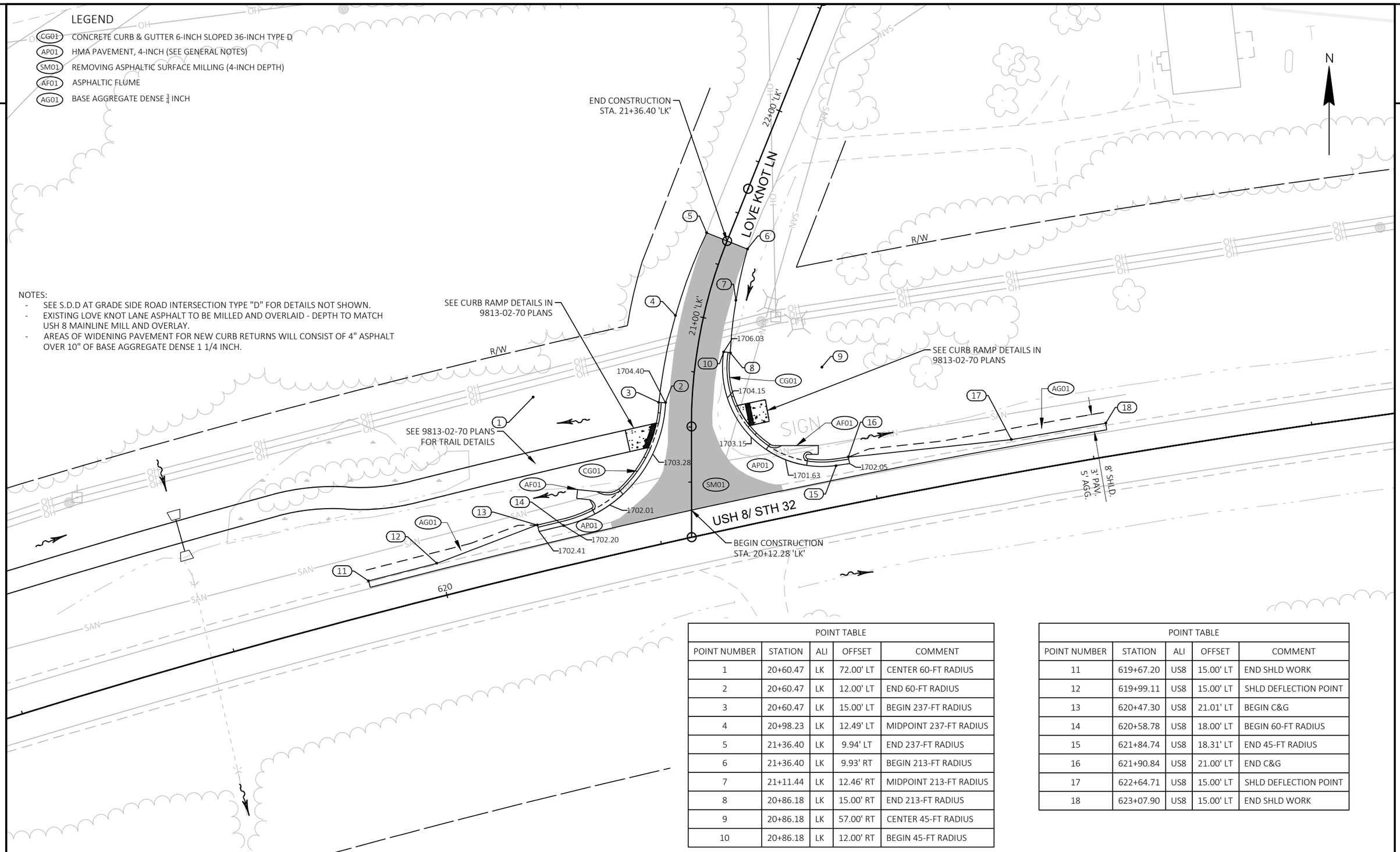
POINT	STATION	OFFSET	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
1	588+95.66	79.00 RT	—	—	569583.101	852959.520	55
2	590+29.17	74.00 RT	—	—	569624.807	853089.508	50
3	590+54.48	75.00 LT	20+84.56	70.00 RT	569774.700	853070.176	55
4	589+15.03	70.00 LT	20+63.40	65.00 LT	569732.127	852940.329	50
5	593+62.06	64.99 RT	—	—	569746.621	853406.388	45
6	594+84.69	70.00 RT	—	—	569791.327	853523.218	50

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	INTERSECTION DETAIL - KWE DA KIK	SHEET 29	E

LEGEND

- CG01 — CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D
- AP01 — HMA PAVEMENT, 4-INCH (SEE GENERAL NOTES)
- SM01 — REMOVING ASPHALTIC SURFACE MILLING (4-INCH DEPTH)
- AF01 — ASPHALTIC FLUME
- AG01 — BASE AGGREGATE DENSE $\frac{3}{4}$ INCH

NOTES:
- SEE S.D.D AT GRADE SIDE ROAD INTERSECTION TYPE "D" FOR DETAILS NOT SHOWN.
- EXISTING LOVE KNOT LANE ASPHALT TO BE MILLED AND OVERLAID - DEPTH TO MATCH USH 8 MAINLINE MILL AND OVERLAY.
- AREAS OF WIDENING PAVEMENT FOR NEW CURB RETURNS WILL CONSIST OF 4" ASPHALT OVER 10" OF BASE AGGREGATE DENSE 1 1/4 INCH.



POINT TABLE				
POINT NUMBER	STATION	ALI	OFFSET	COMMENT
1	20+60.47	LK	72.00' LT	CENTER 60-FT RADIUS
2	20+60.47	LK	12.00' LT	END 60-FT RADIUS
3	20+60.47	LK	15.00' LT	BEGIN 237-FT RADIUS
4	20+98.23	LK	12.49' LT	MIDPOINT 237-FT RADIUS
5	21+36.40	LK	9.94' LT	END 237-FT RADIUS
6	21+36.40	LK	9.93' RT	BEGIN 213-FT RADIUS
7	21+11.44	LK	12.46' RT	MIDPOINT 213-FT RADIUS
8	20+86.18	LK	15.00' RT	END 213-FT RADIUS
9	20+86.18	LK	57.00' RT	CENTER 45-FT RADIUS
10	20+86.18	LK	12.00' RT	BEGIN 45-FT RADIUS

POINT TABLE				
POINT NUMBER	STATION	ALI	OFFSET	COMMENT
11	619+67.20	US8	15.00' LT	END SHLD WORK
12	619+99.11	US8	15.00' LT	SHLD DEFLECTION POINT
13	620+47.30	US8	21.01' LT	BEGIN C&G
14	620+58.78	US8	18.00' LT	BEGIN 60-FT RADIUS
15	621+84.74	US8	18.31' LT	END 45-FT RADIUS
16	621+90.84	US8	21.00' LT	END C&G
17	622+64.71	US8	15.00' LT	SHLD DEFLECTION POINT
18	623+07.90	US8	15.00' LT	END SHLD WORK

PROJECT NO: 1590-18-71	HWY: USH 8	COUNTY: FOREST	LOVE KNOT LN - INTERSECTION DETAIL	SHEET 30	E

2

S FOREST AVE SW					
POINT NUMBER	STATION	OFFSET	ELEVATION	Y	X
01	416+53.74	14.98' RT	1613.55	568583.58	836226.56
02	416+66.50	14.97' RT	1613.57	568583.30	836239.32
03	416+75.07	15.90' RT	1613.52	568582.18	836247.86
04	416+84.84	20.41' RT	1613.34	568577.45	836257.53
05	416+91.41	26.75' RT	1613.13	568570.96	836263.96
06	416+94.00	30.80' RT	1613.02	568566.86	836266.45
07	416+94.43	31.63' RT	1613.00	568566.02	836266.86
08	416+53.74	16.98' RT	1613.47	568581.58	836226.52
09	416+66.91	16.97' RT	1613.49	568581.29	836239.68
10	416+75.05	17.97' RT	1613.44	568580.11	836247.79
11	416+85.25	23.23' RT	1613.21	568574.62	836257.88
12	416+88.45	26.29' RT	1613.10	568571.49	836261.00
13	416+92.63	32.51' RT	1612.92	568565.17	836265.05
14	416+53.74	17.48' RT	1613.97	568581.08	836226.51
15	416+61.91	17.47' RT	1613.98	568580.90	836234.67
16	416+66.91	17.47' RT	1613.99	568580.79	836239.67
17	416+74.92	18.45' RT	1613.44	568579.63	836247.65
18	416+84.94	23.62' RT	1613.21	568574.24	836257.55

S FOREST AVE SW					
POINT NUMBER	STATION	OFFSET	ELEVATION	Y	X
19	416+88.07	26.62' RT	1613.60	568571.17	836260.62
20	416+53.76	23.63' RT	1614.06	568574.93	836226.38
21	416+61.91	23.60' RT	1613.91	568574.78	836234.53
22	416+66.91	23.60' RT	1613.90	568574.66	836239.53
23	416+74.91	23.61' RT	1613.36	568574.47	836247.53

LEGEND

XXX — CURB RAMP TYPE

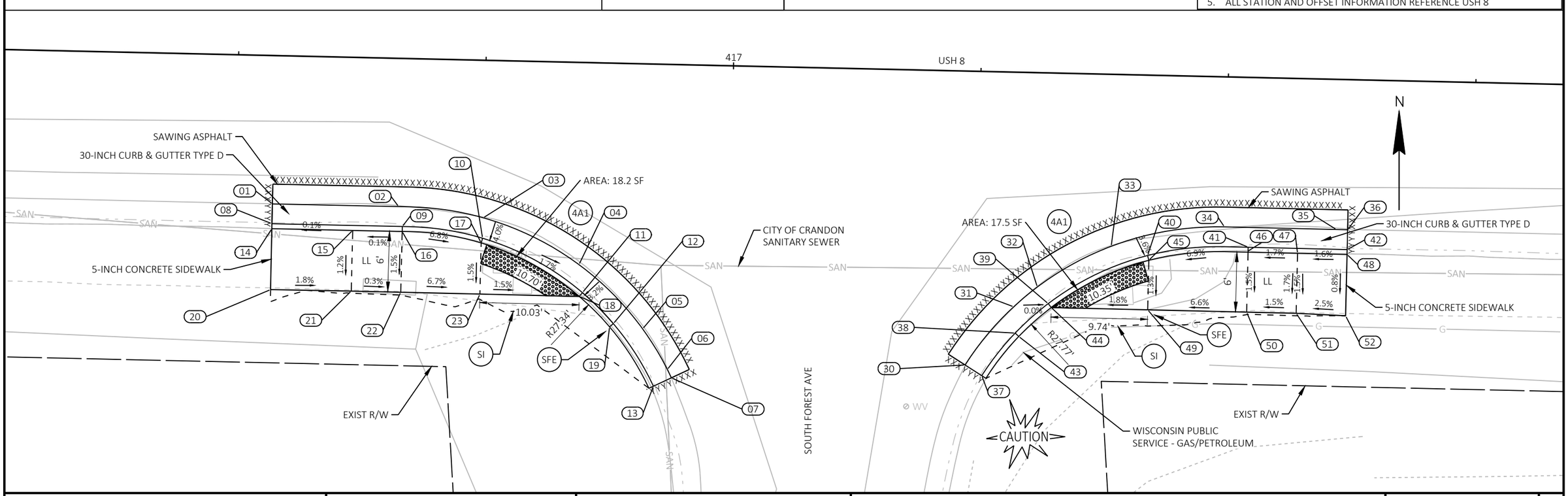
SI — SLOPE INTERCEPT

SFE — SEED, FERTILIZER, & EMAT

S FOREST AVE SE					
POINT NUMBER	STATION	OFFSET	ELEVATION	Y	X
30	417+24.05	29.66' RT	1613.39	568567.32	836296.52
31	417+28.83	23.68' RT	1613.68	568573.19	836301.43
32	417+31.17	21.64' RT	1613.77	568575.19	836303.82
33	417+38.55	17.36' RT	1613.95	568579.30	836311.29
34	417+49.93	15.14' RT	1614.15	568581.26	836322.72
35	417+61.25	15.15' RT	1614.34	568580.99	836334.04
36	417+62.38	15.15' RT	1613.78	568580.97	836335.17
37	417+25.76	30.70' RT	1613.31	568566.24	836298.21
38	417+29.04	26.33' RT	1613.53	568570.54	836301.59
39	417+32.31	23.28' RT	1613.69	568573.52	836304.93
40	417+42.24	18.20' RT	1613.93	568578.37	836314.96
41	417+52.38	17.15' RT	1614.12	568579.20	836325.12
42	417+62.38	17.17' RT	1614.77	568578.95	836335.12
43	417+29.41	26.67' RT	1614.03	568570.19	836301.95
44	417+32.63	23.67' RT	1613.69	568573.12	836305.23
45	417+42.38	18.68' RT	1613.93	568577.89	836315.09
46	417+52.38	17.65' RT	1614.62	568578.70	836325.11
47	417+57.38	17.65' RT	1614.70	568578.58	836330.11

S FOREST AVE SE					
POINT NUMBER	STATION	OFFSET	ELEVATION	Y	X
48	417+62.38	17.66' RT	1614.77	568578.47	836335.11
49	417+42.37	23.68' RT	1613.86	568572.89	836314.97
50	417+52.37	23.70' RT	1614.52	568572.65	836324.97
51	417+57.37	23.70' RT	1614.60	568572.54	836329.97
52	417+62.37	23.84' RT	1614.72	568572.28	836334.96

NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION
2. THE ENGINEER MAY ADJUST CURB RAMP ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE REQUIREMENTS OF THE STANDARD DETAILS.
3. DASHED SIDEWALK LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATIONAL PURPOSES ONLY AND DO NOT INDICATE EXACT JOINT LOCATIONS
4. SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS
5. ALL STATION AND OFFSET INFORMATION REFERENCE USH 8



PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CURB RAMP DETAIL - S FOREST AVE - SW & SE	SHEET 31	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\021301-CR.DWG
LAYOUT NAME - S FOREST AVE

PLOT DATE : 10/23/2024 8:05 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:10 FT

2

S PARK AVE SW					
POINT NUMBER	STATION	OFFSET	ELEVATION	Y	X
60	419+96.62	15.07' RT	1617.44	568575.80	836569.35
61	420+01.98	15.06' RT	0.00	568575.69	836574.71
62	420+10.72	16.40' RT	1617.67	568574.15	836583.41
63	420+18.64	20.32' RT	1617.82	568570.05	836591.24
64	420+25.93	27.77' RT	1618.02	568562.45	836598.36
65	420+28.39	32.21' RT	1618.15	568557.95	836600.72
66	419+96.62	17.07' RT	1617.36	568573.80	836569.31
67	420+03.66	17.11' RT	1617.48	568573.60	836576.34
68	420+09.77	18.20' RT	1617.59	568572.38	836582.43
69	420+19.22	23.29' RT	1617.78	568567.08	836591.76
70	420+22.33	26.35' RT	1617.87	568563.95	836594.80
71	420+26.56	33.02' RT	1618.07	568557.18	836598.88
72	419+96.62	17.57' RT	1617.86	568573.30	836569.30
73	420+03.63	17.61' RT	1617.98	568573.11	836576.30
74	420+09.63	18.68' RT	1617.59	568571.90	836582.27
75	420+18.90	23.67' RT	1617.78	568566.70	836591.43
76	420+21.95	26.67' RT	1618.36	568563.63	836594.41
77	419+96.63	23.69' RT	1617.78	568567.19	836569.16

S PARK AVE SW					
POINT NUMBER	STATION	OFFSET	ELEVATION	Y	X
78	420+03.63	23.68' RT	1617.89	568567.03	836576.16
79	420+09.63	23.68' RT	1617.66	568566.90	836582.16

LEGEND

(XXX) CURB RAMP TYPE

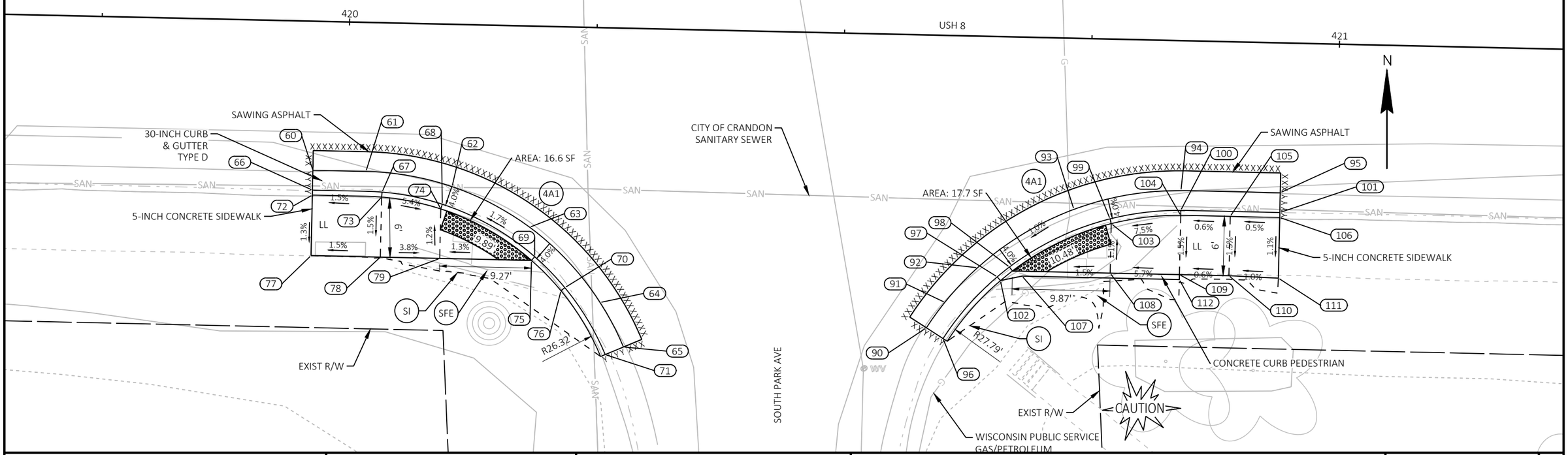
(SI) SLOPE INTERCEPT

(SFE) SEED, FERTILIZER, & EMAT

S PARK AVE SE					
POINT NUMBER	STATION	OFFSET	ELEVATION	Y	X
90	420+58.93	29.59' RT	1618.31	568559.89	836631.32
91	420+60.73	26.97' RT	1618.30	568562.46	836633.18
92	420+63.96	23.41' RT	1618.32	568565.96	836636.48
93	420+73.55	17.29' RT	1618.41	568571.86	836646.21
94	420+84.32	15.15' RT	1618.49	568573.76	836657.03
95	420+94.36	15.14' RT	1618.55	568573.54	836667.06
96	420+60.63	30.64' RT	1618.23	568558.80	836633.00
97	420+65.97	24.28' RT	1618.25	568565.04	836638.47
98	420+67.18	23.26' RT	1618.26	568566.03	836639.71
99	420+77.23	18.16' RT	1618.36	568570.90	836649.87
100	420+84.35	17.15' RT	1618.41	568571.76	836657.01
101	420+94.36	17.14' RT	1618.47	568571.54	836667.02
102	420+66.30	24.65' RT	1618.75	568564.66	836638.80
103	420+77.36	18.64' RT	1618.36	568570.42	836649.99
104	420+84.36	17.65' RT	1618.91	568571.26	836657.01
105	420+89.36	17.64' RT	1618.95	568571.15	836662.01
106	420+94.36	17.64' RT	1618.97	568571.04	836667.01
107	420+68.48	24.15' RT	1618.76	568565.11	836640.99

S PARK AVE SE					
POINT NUMBER	STATION	OFFSET	ELEVATION	Y	X
108	420+77.36	23.64' RT	1618.42	568565.42	836649.88
109	420+84.36	23.64' RT	1618.82	568565.26	836656.88
110	420+89.36	23.64' RT	1618.85	568565.15	836661.88
111	420+94.36	23.77' RT	1618.91	568564.91	836666.87
112	420+84.36	24.14' RT	1618.82	568564.76	836656.87

NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION
2. THE ENGINEER MAY ADJUST CURB RAMP ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE REQUIREMENTS OF THE STANDARD DETAILS.
3. DASHED SIDEWALK LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATIONAL PURPOSES ONLY AND DO NOT INDICATE EXACT JOINT LOCATIONS
4. SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS
5. ALL STATION AND OFFSET INFORMATION REFERENCE USH 8



PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CURB RAMP DETAIL - S PARK AVE - SW & SE	SHEET 32	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\021301-CR.DWG
LAYOUT NAME - S PARK AVE
PLOT DATE : 10/23/2024 8:05 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 41

2

DOLLAR GENERAL SW					
POINT NUMBER	STATION	OFFSET	ELEVATION	Y	X
120	423+15.98	15.43' RT	1617.93	568568.28	836888.62
121	423+27.48	15.44' RT	1617.84	568568.01	836900.12
122	423+38.54	17.56' RT	1617.73	568565.65	836911.13
123	423+42.24	19.33' RT	1617.68	568563.80	836914.79
124	423+48.05	23.60' RT	1617.58	568559.39	836920.50
125	423+53.66	30.76' RT	1617.44	568552.11	836925.94
126	423+15.98	17.43' RT	1617.85	568566.28	836888.58
127	423+25.98	17.44' RT	1617.78	568566.05	836898.57
128	423+35.12	18.51' RT	1617.68	568564.78	836907.68
129	423+45.00	23.60' RT	1617.54	568559.47	836917.45
130	423+51.91	31.74' RT	1617.36	568551.17	836924.18
131	423+15.98	17.93' RT	1618.35	568565.78	836888.56
132	423+20.98	17.94' RT	1618.31	568565.66	836893.56
133	423+25.98	17.93' RT	1618.28	568565.55	836898.56
134	423+34.98	18.99' RT	1617.68	568564.30	836907.54
135	423+44.68	23.99' RT	1617.54	568559.08	836917.13
136	423+47.87	26.99' RT	1617.97	568556.01	836920.25
137	423+15.98	24.14' RT	1618.31	568559.57	836888.42

DOLLAR GENERAL SW					
POINT NUMBER	STATION	OFFSET	ELEVATION	Y	X
138	423+20.98	23.99' RT	1618.23	568559.61	836893.43
139	423+25.98	23.99' RT	1618.20	568559.50	836898.43
140	423+34.98	23.99' RT	1617.63	568559.30	836907.42

LEGEND

(XXX) CURB RAMP TYPE

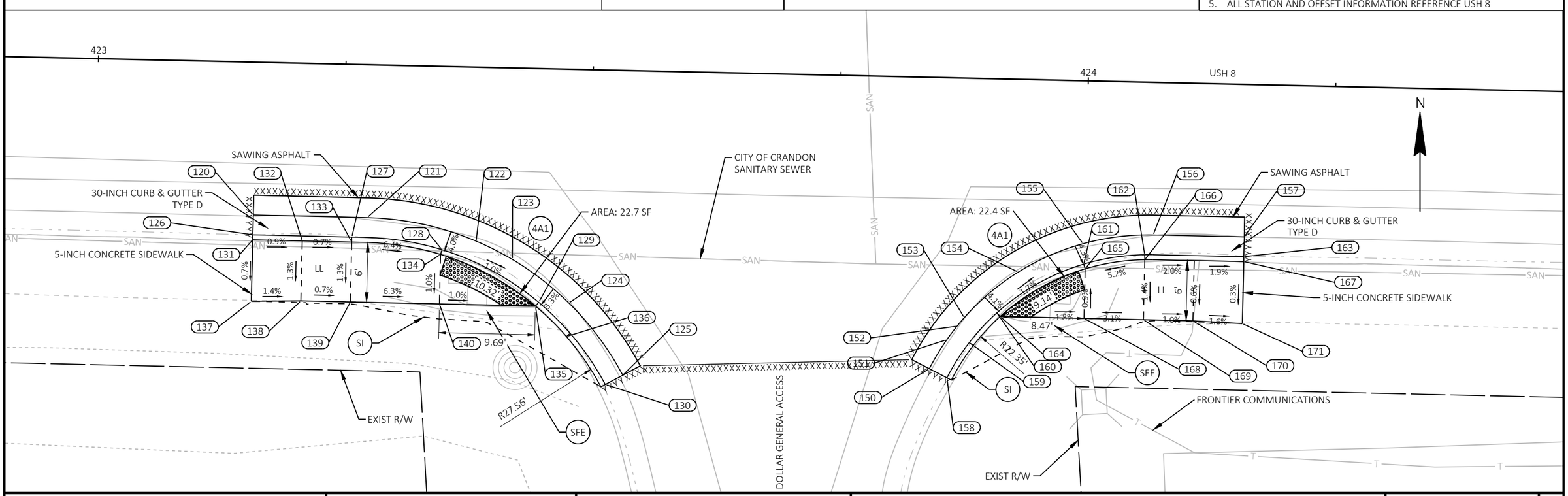
(SI) SLOPE INTERCEPT

(SFE) SEED, FERTILIZER, & EMAT

DOLLAR GENERAL SE					
POINT NUMBER	STATION	OFFSET	ELEVATION	Y	X
150	423+84.59	29.42' RT	1617.41	568552.76	836956.90
151	423+86.30	26.44' RT	1617.43	568555.69	836958.68
152	423+87.30	25.06' RT	1617.42	568557.06	836959.70
153	423+88.00	24.18' RT	1617.42	568557.91	836960.43
154	423+93.36	19.46' RT	1617.33	568562.52	836965.89
155	423+99.83	16.45' RT	1617.17	568565.38	836972.43
156	424+06.89	15.41' RT	1617.02	568566.26	836979.51
157	424+16.10	15.39' RT	1616.84	568566.08	836988.71
158	423+86.39	30.29' RT	1617.33	568551.85	836958.68
159	423+88.57	26.69' RT	1617.34	568555.40	836960.94
160	423+91.29	23.62' RT	1617.31	568558.40	836963.73
161	423+99.95	18.51' RT	1617.10	568563.32	836972.50
162	424+06.08	17.43' RT	1616.96	568564.26	836978.66
163	424+16.10	17.39' RT	1616.76	568564.08	836988.67
164	423+91.63	23.99' RT	1617.31	568558.03	836964.06
165	424+00.10	18.99' RT	1617.10	568562.84	836972.64
166	424+06.10	17.93' RT	1617.46	568563.76	836978.66
167	424+16.10	17.89' RT	1617.26	568563.58	836988.66

DOLLAR GENERAL SE					
POINT NUMBER	STATION	OFFSET	ELEVATION	Y	X
168	424+00.10	23.99' RT	1617.18	568557.84	836972.53
169	424+06.10	23.99' RT	1617.37	568557.71	836978.53
170	424+11.10	23.99' RT	1617.32	568557.59	836983.53
171	424+16.10	24.15' RT	1617.24	568557.32	836988.52

NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION
2. THE ENGINEER MAY ADJUST CURB RAMP ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE REQUIREMENTS OF THE STANDARD DETAILS.
3. DASHED SIDEWALK LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATIONAL PURPOSES ONLY AND DO NOT INDICATE EXACT JOINT LOCATIONS
4. SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS
5. ALL STATION AND OFFSET INFORMATION REFERENCE USH 8



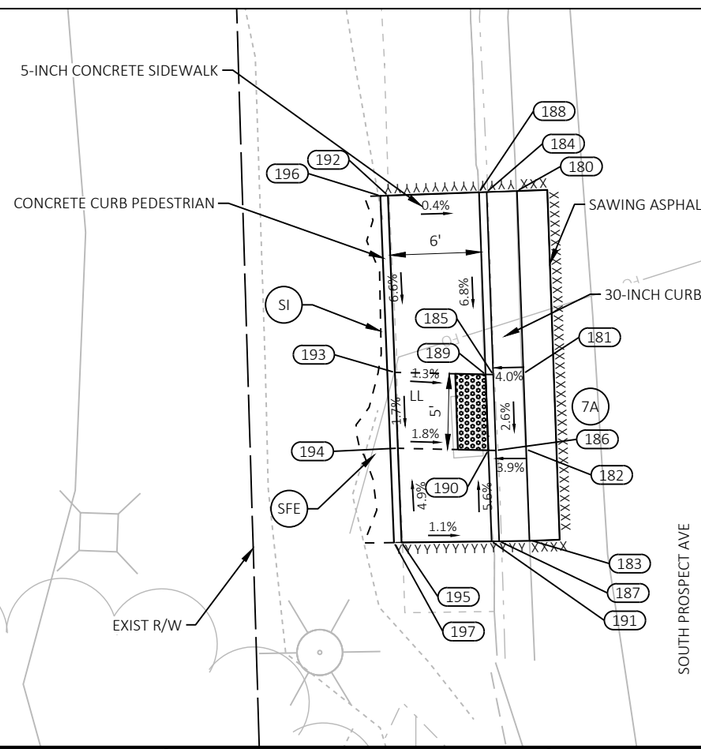
PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CURB RAMP DETAIL - DOLLAR GENERAL ACCESS - SW & SE	SHEET 33	E

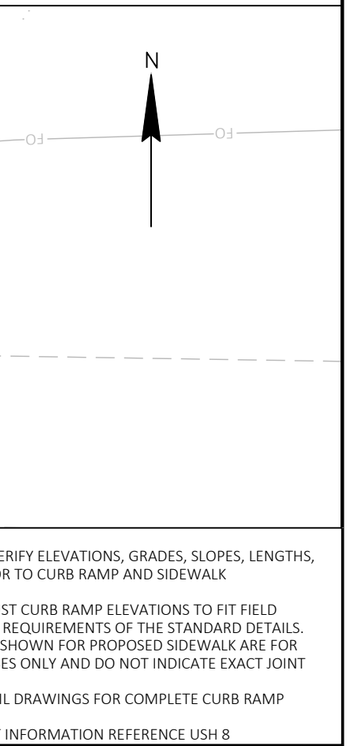
2

LEGEND

(XXX)	CURB RAMP TYPE
(SI)	SLOPE INTERCEPT
(SFE)	SEED, FERTILIZER, & EMAT

S PROSPECT AVE W					
POINT NUMBER	STATION	OFFSET	ELEVATION	Y	X
180	426+84.23	61.78' RT	1611.18	568513.68	837255.74
181	426+84.93	73.81' RT	1610.86	568501.64	837256.17
182	426+85.22	78.81' RT	1610.73	568496.64	837256.35
183	426+85.57	84.78' RT	1610.57	568490.66	837256.56
184	426+82.23	61.90' RT	1611.10	568513.61	837253.74
185	426+82.93	73.93' RT	1610.78	568501.57	837254.17
186	426+83.22	78.93' RT	1610.65	568496.57	837254.35
187	426+83.57	84.90' RT	1610.49	568490.59	837254.56
188	426+81.73	61.93' RT	1611.59	568513.59	837253.24
189	426+82.43	73.93' RT	1610.78	568501.58	837253.67
190	426+82.72	78.93' RT	1610.65	568496.58	837253.85
191	426+83.07	84.93' RT	1610.99	568490.57	837254.06
192	426+75.72	62.28' RT	1611.62	568513.38	837247.22
193	426+76.44	73.93' RT	1610.84	568501.72	837247.68
194	426+76.75	78.93' RT	1610.76	568496.71	837247.88
195	426+77.13	85.14' RT	1611.06	568490.49	837248.12
196	426+75.22	62.31' RT	1611.62	568513.36	837246.72
197	426+76.63	85.16' RT	1611.06	568490.49	837247.62





NOTES:
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2. THE ENGINEER MAY ADJUST CURB RAMP ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE REQUIREMENTS OF THE STANDARD DETAILS.
3. DASHED SIDEWALK LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATIONAL PURPOSES ONLY AND DO NOT INDICATE EXACT JOINT LOCATIONS
4. SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS
5. ALL STATION AND OFFSET INFORMATION REFERENCE USH 8

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CURB RAMP DETAIL - S PROSPECT AVE - MID-BLOCK	SHEET 34	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\021301-CR.DWG
LAYOUT NAME - S PROSPECT AVE
PLOT DATE : 10/23/2024 8:06 PM
PLOT BY : ADAM SARAUER
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 41

EROSION CONTROL LEGEND

- EROSION MAT CLASS II, TYPE B
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- SILT FENCE RELIEF
- RIPRAP MEDIUM
- STAKED WATTLES
- SILT FENCE
- A — INLET PROTECTION
- C — INLET PROTECTION

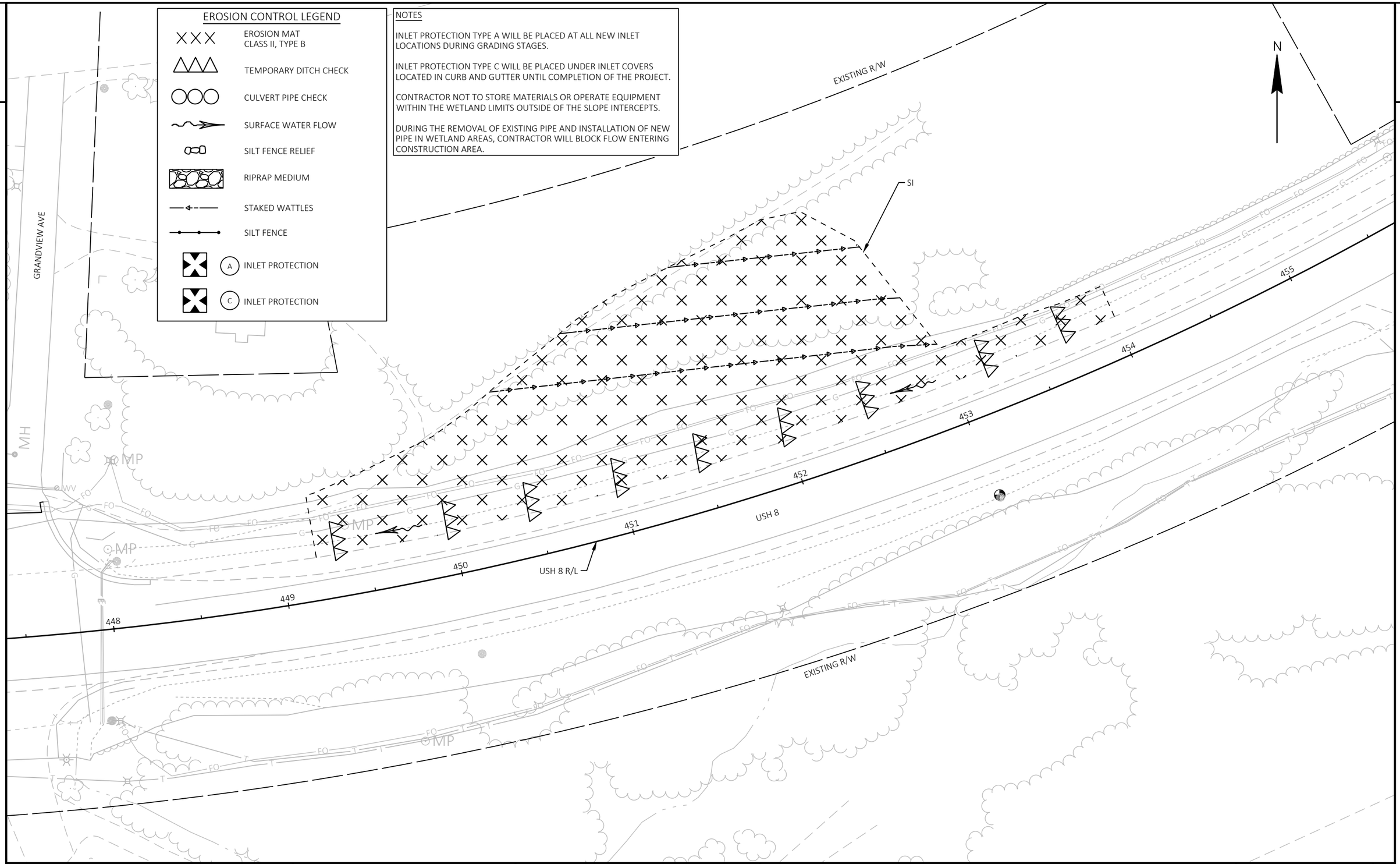
NOTES

INLET PROTECTION TYPE A WILL BE PLACED AT ALL NEW INLET LOCATIONS DURING GRADING STAGES.

INLET PROTECTION TYPE C WILL BE PLACED UNDER INLET COVERS LOCATED IN CURB AND GUTTER UNTIL COMPLETION OF THE PROJECT.

CONTRACTOR NOT TO STORE MATERIALS OR OPERATE EQUIPMENT WITHIN THE WETLAND LIMITS OUTSIDE OF THE SLOPE INTERCEPTS.

DURING THE REMOVAL OF EXISTING PIPE AND INSTALLATION OF NEW PIPE IN WETLAND AREAS, CONTRACTOR WILL BLOCK FLOW ENTERING CONSTRUCTION AREA.



PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	EROSION CONTROL	SHEET 35	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 01A

PLOT DATE : 12/17/2024 10:33 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

EROSION CONTROL LEGEND

- EROSION MAT CLASS II, TYPE B
- EROSION MAT URBAN CLASS I, TYPE A
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- SILT FENCE RELIEF
- RIPRAP MEDIUM
- STAKED WATTLES
- SILT FENCE
- A INLET PROTECTION
- C INLET PROTECTION

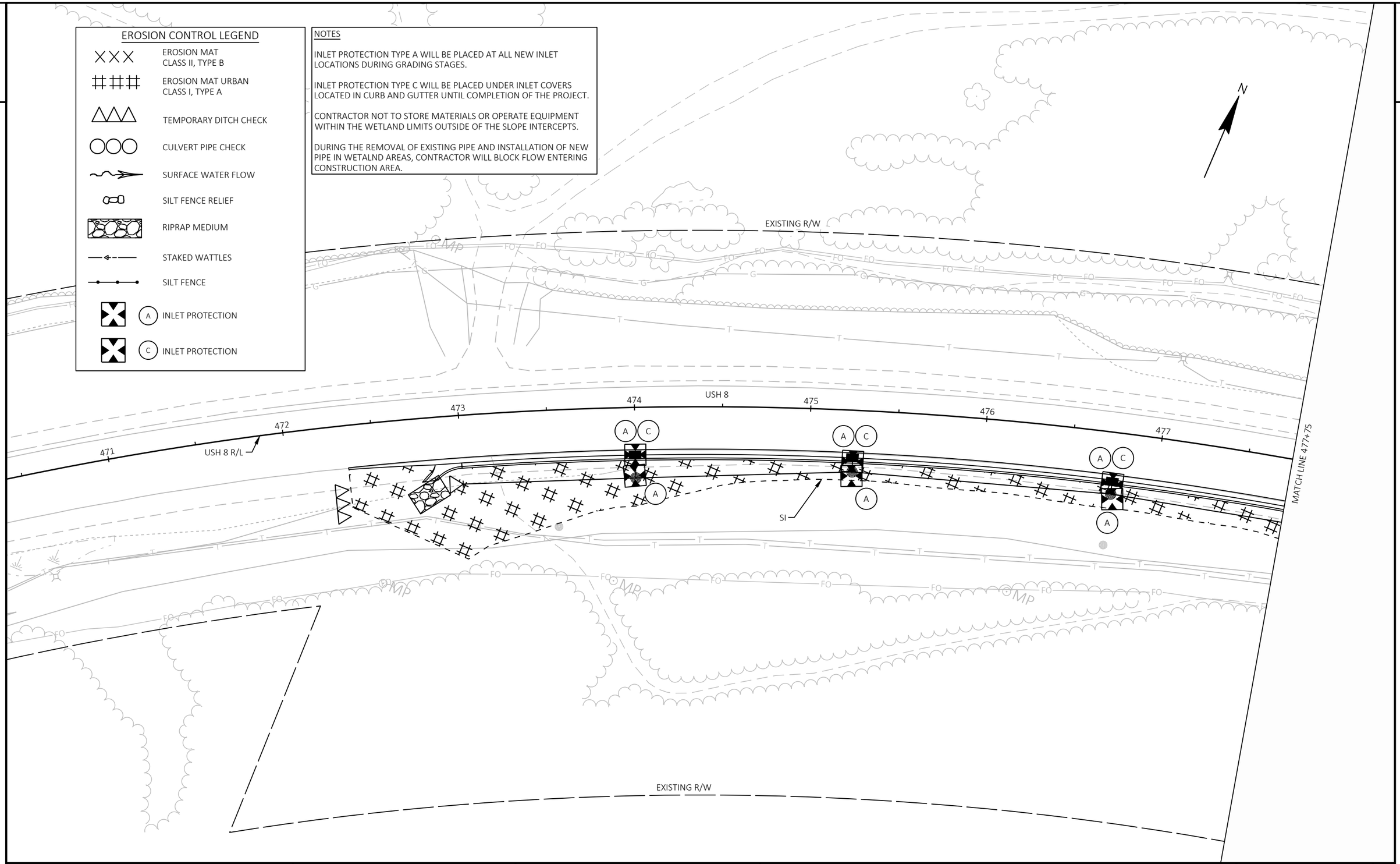
NOTES

INLET PROTECTION TYPE A WILL BE PLACED AT ALL NEW INLET LOCATIONS DURING GRADING STAGES.

INLET PROTECTION TYPE C WILL BE PLACED UNDER INLET COVERS LOCATED IN CURB AND GUTTER UNTIL COMPLETION OF THE PROJECT.

CONTRACTOR NOT TO STORE MATERIALS OR OPERATE EQUIPMENT WITHIN THE WETLAND LIMITS OUTSIDE OF THE SLOPE INTERCEPTS.

DURING THE REMOVAL OF EXISTING PIPE AND INSTALLATION OF NEW PIPE IN WETALND AREAS, CONTRACTOR WILL BLOCK FLOW ENTERING CONSTRUCTION AREA.



2

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	EROSION CONTROL	SHEET 36	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 01

PLOT DATE : 12/17/2024 10:33 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

EROSION CONTROL LEGEND

- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- SILT FENCE RELIEF
- RIPRAP MEDIUM
- STAKED WATTLES
- SILT FENCE
- (A) INLET PROTECTION
- (C) INLET PROTECTION

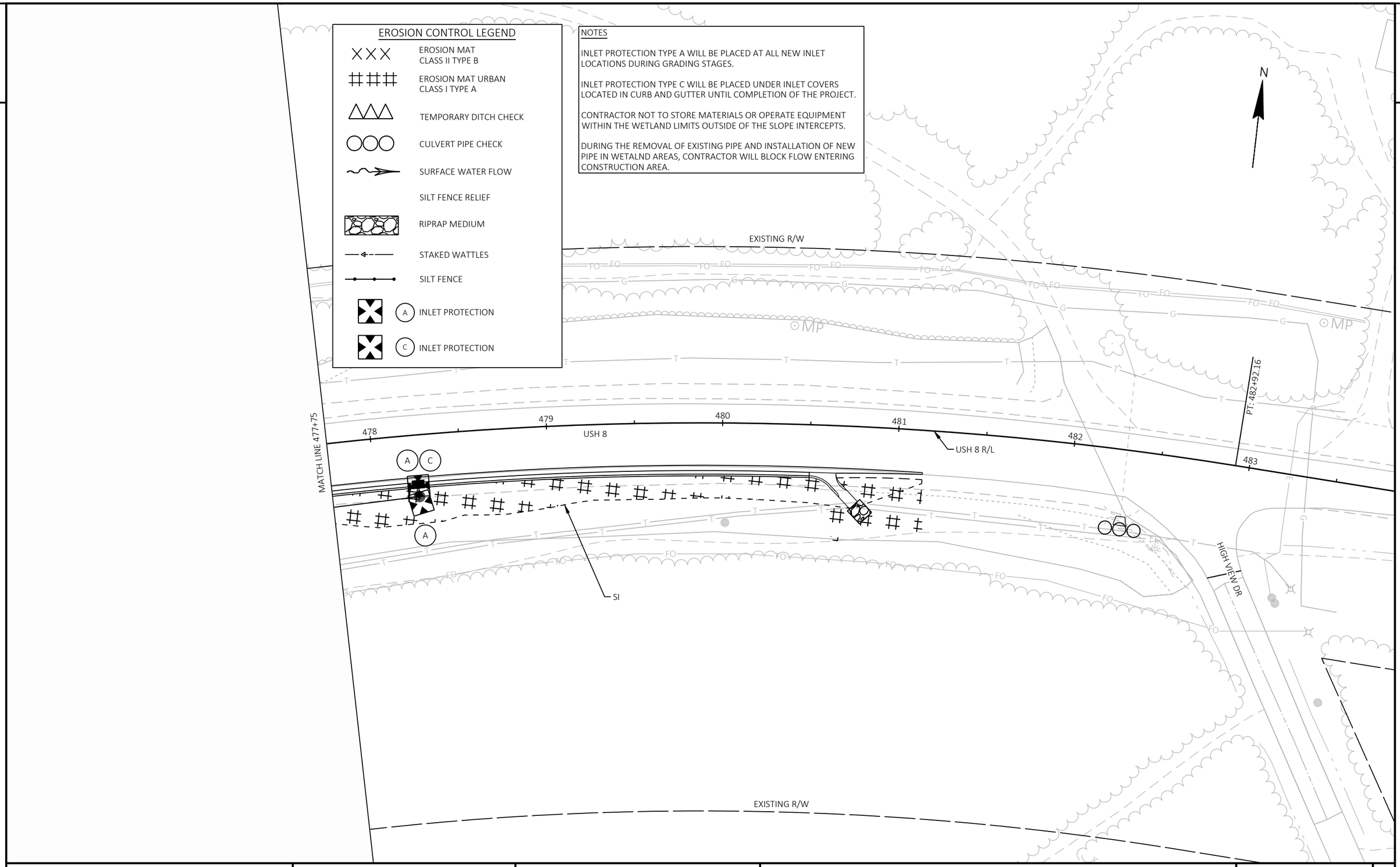
NOTES

INLET PROTECTION TYPE A WILL BE PLACED AT ALL NEW INLET LOCATIONS DURING GRADING STAGES.

INLET PROTECTION TYPE C WILL BE PLACED UNDER INLET COVERS LOCATED IN CURB AND GUTTER UNTIL COMPLETION OF THE PROJECT.

CONTRACTOR NOT TO STORE MATERIALS OR OPERATE EQUIPMENT WITHIN THE WETLAND LIMITS OUTSIDE OF THE SLOPE INTERCEPTS.

DURING THE REMOVAL OF EXISTING PIPE AND INSTALLATION OF NEW PIPE IN WETALND AREAS, CONTRACTOR WILL BLOCK FLOW ENTERING CONSTRUCTION AREA.



PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	EROSION CONTROL	SHEET 37	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 02

PLOT DATE : 12/17/2024 10:33 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

NOTES

INLET PROTECTION TYPE A WILL BE PLACED AT ALL NEW INLET LOCATIONS DURING GRADING STAGES.

INLET PROTECTION TYPE C WILL BE PLACED UNDER INLET COVERS LOCATED IN CURB AND GUTTER UNTIL COMPLETION OF THE PROJECT.

CONTRACTOR NOT TO STORE MATERIALS OR OPERATE EQUIPMENT WITHIN THE WETLAND LIMITS OUTSIDE OF THE SLOPE INTERCEPTS.

DURING THE REMOVAL OF EXISTING PIPE AND INSTALLATION OF NEW PIPE IN WETALND AREAS, CONTRACTOR WILL BLOCK FLOW ENTERING CONSTRUCTION AREA.

N

R/W

EXISTING R/W

FIRE KEEPER RD

SI

USH 8 R/L

USH 8

553 554 555 556 557 558 559

MATCH LINE 559+50

SEE PROJECT ID 9813-02-70

EXISTING R/W

EROSION CONTROL LEGEND

- EROSION MAT CLASS II TYPE B
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- RIPRAP MEDIUM
- STONE DITCH CHECKS
- SILT FENCE RELIEF
- SILT FENCE
- STAKED WATTLES
- A INLET PROTECTION
- C INLET PROTECTION

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	EROSION CONTROL	SHEET 38	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 03

PLOT DATE : 12/17/2024 10:33 PM PLOT BY : ADAM SARAUER PLOT NAME :

EROSION CONTROL LEGEND

- EROSION MAT CLASS II TYPE B
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- RIPRAP MEDIUM
- STONE DITCH CHECKS
- SILT FENCE RELIEF
- SILT FENCE
- STAKED WATTLES
- (A) INLET PROTECTION
- (C) INLET PROTECTION

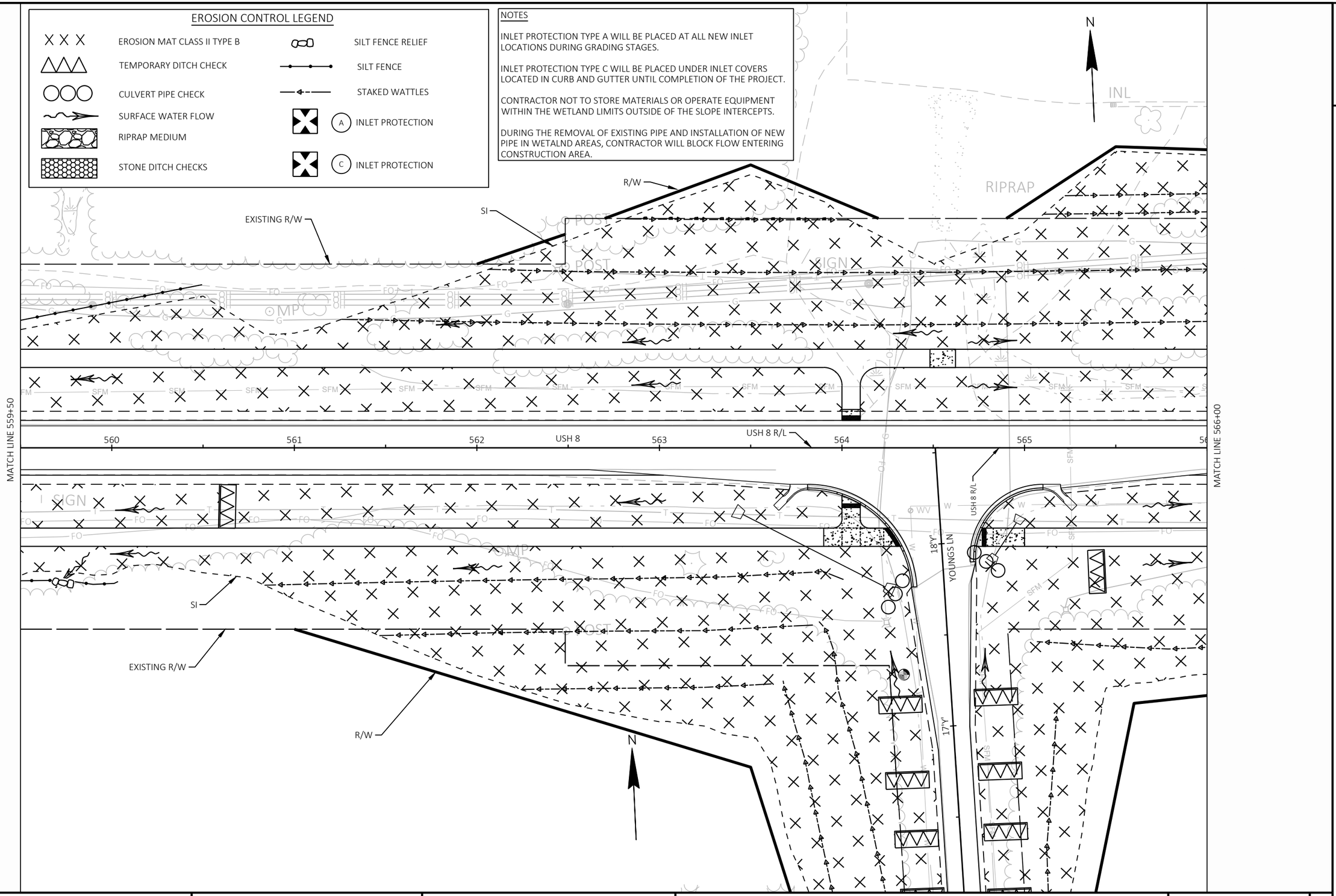
NOTES

INLET PROTECTION TYPE A WILL BE PLACED AT ALL NEW INLET LOCATIONS DURING GRADING STAGES.

INLET PROTECTION TYPE C WILL BE PLACED UNDER INLET COVERS LOCATED IN CURB AND GUTTER UNTIL COMPLETION OF THE PROJECT.

CONTRACTOR NOT TO STORE MATERIALS OR OPERATE EQUIPMENT WITHIN THE WETLAND LIMITS OUTSIDE OF THE SLOPE INTERCEPTS.

DURING THE REMOVAL OF EXISTING PIPE AND INSTALLATION OF NEW PIPE IN WETALND AREAS, CONTRACTOR WILL BLOCK FLOW ENTERING CONSTRUCTION AREA.

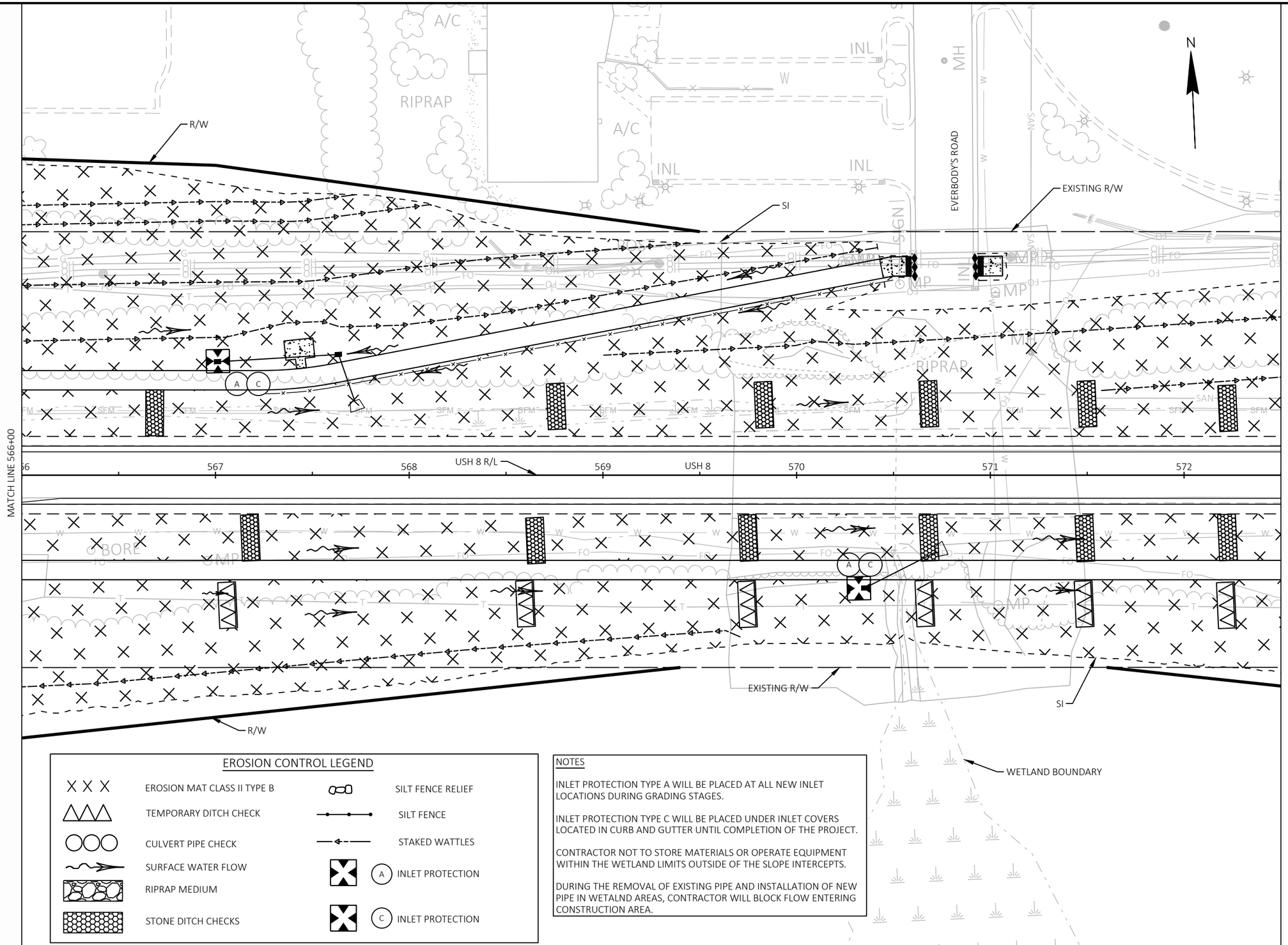


PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	EROSION CONTROL	SHEET 39	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 04

PLOT DATE : 12/17/2024 10:33 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:50 FT

2



EROSION CONTROL LEGEND

- EROSION MAT CLASS II TYPE B
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- RIPRAP MEDIUM
- STONE DITCH CHECKS
- SILT FENCE RELIEF
- SILT FENCE
- STAKED WATTLES
- A INLET PROTECTION
- C INLET PROTECTION

NOTES

INLET PROTECTION TYPE A WILL BE PLACED AT ALL NEW INLET LOCATIONS DURING GRADING STAGES.

INLET PROTECTION TYPE C WILL BE PLACED UNDER INLET COVERS LOCATED IN CURB AND GUTTER UNTIL COMPLETION OF THE PROJECT.

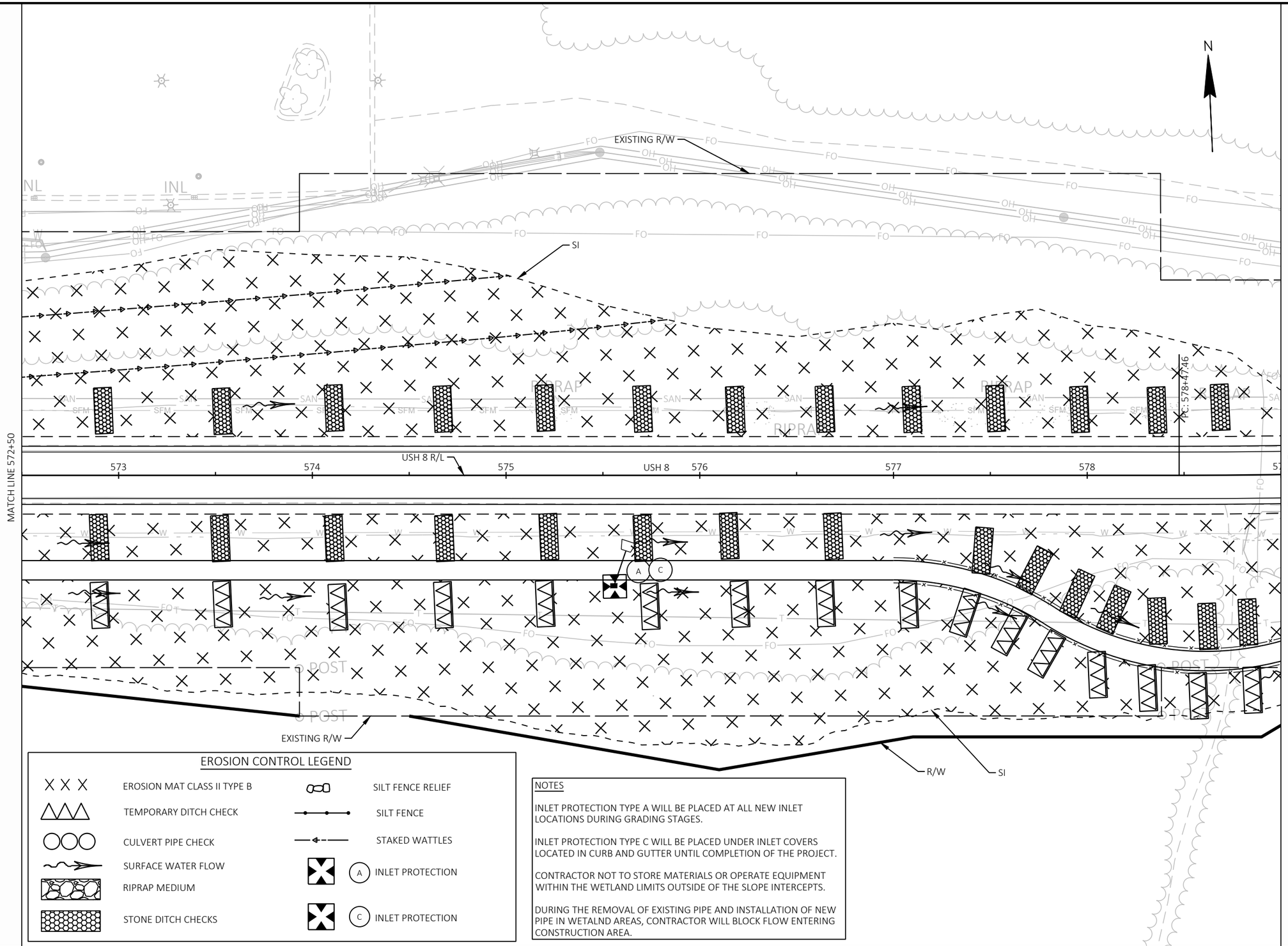
CONTRACTOR NOT TO STORE MATERIALS OR OPERATE EQUIPMENT WITHIN THE WETLAND LIMITS OUTSIDE OF THE SLOPE INTERCEPTS.

DURING THE REMOVAL OF EXISTING PIPE AND INSTALLATION OF NEW PIPE IN WETALND AREAS, CONTRACTOR WILL BLOCK FLOW ENTERING CONSTRUCTION AREA.

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	EROSION CONTROL	SHEET 40	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 05
PLOT DATE : 12/17/2024 10:33 PM
PLOT BY : ADAM SARAUER
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2



EROSION CONTROL LEGEND

- EROSION MAT CLASS II TYPE B
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- RIPRAP MEDIUM
- STONE DITCH CHECKS
- SILT FENCE RELIEF
- SILT FENCE
- STAKED WATTLES
- A INLET PROTECTION
- C INLET PROTECTION

NOTES

INLET PROTECTION TYPE A WILL BE PLACED AT ALL NEW INLET LOCATIONS DURING GRADING STAGES.

INLET PROTECTION TYPE C WILL BE PLACED UNDER INLET COVERS LOCATED IN CURB AND GUTTER UNTIL COMPLETION OF THE PROJECT.

CONTRACTOR NOT TO STORE MATERIALS OR OPERATE EQUIPMENT WITHIN THE WETLAND LIMITS OUTSIDE OF THE SLOPE INTERCEPTS.

DURING THE REMOVAL OF EXISTING PIPE AND INSTALLATION OF NEW PIPE IN WETALND AREAS, CONTRACTOR WILL BLOCK FLOW ENTERING CONSTRUCTION AREA.

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	EROSION CONTROL	SHEET 41	E

EROSION CONTROL LEGEND

- EROSION MAT CLASS II TYPE B
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- RIPRAP MEDIUM
- STONE DITCH CHECKS
- SILT FENCE RELIEF
- SILT FENCE
- STAKED WATTLES
- (A) INLET PROTECTION
- (C) INLET PROTECTION

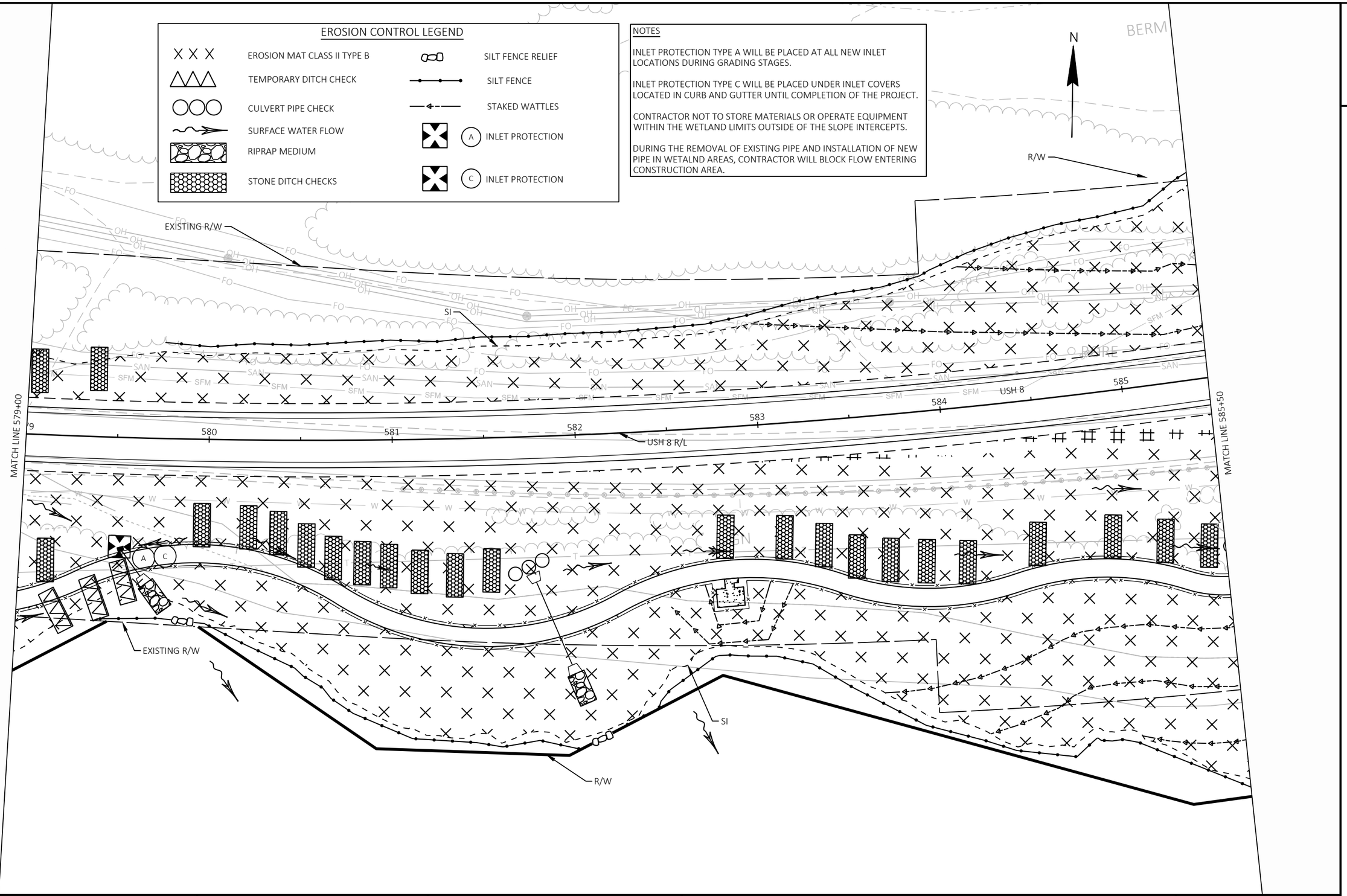
NOTES

INLET PROTECTION TYPE A WILL BE PLACED AT ALL NEW INLET LOCATIONS DURING GRADING STAGES.

INLET PROTECTION TYPE C WILL BE PLACED UNDER INLET COVERS LOCATED IN CURB AND GUTTER UNTIL COMPLETION OF THE PROJECT.

CONTRACTOR NOT TO STORE MATERIALS OR OPERATE EQUIPMENT WITHIN THE WETLAND LIMITS OUTSIDE OF THE SLOPE INTERCEPTS.

DURING THE REMOVAL OF EXISTING PIPE AND INSTALLATION OF NEW PIPE IN WETALND AREAS, CONTRACTOR WILL BLOCK FLOW ENTERING CONSTRUCTION AREA.



PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	EROSION CONTROL	SHEET 42	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 07

PLOT DATE : 12/17/2024 10:34 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

NOTE:
IN THE EVENT WATER IS PRESENT DURING CONSTRUCTION; PLACE ROCK BAGS TO FILTER WATER ENTERING THE CONCRETE BOX CULVERT ON THE UPSTREAM END

EXISTING R/W

R/W

RIPRAP

B-21-0035

C-21-9703

USH 8 R/L

KWE DA KIK LN

USH 8

WAYSIDE

SI

R/W

AREA OF AVOIDANCE

MATCH LINE 585+50

MATCH LINE 592+00

NOTES

INLET PROTECTION TYPE A WILL BE PLACED AT ALL NEW INLET LOCATIONS DURING GRADING STAGES.

INLET PROTECTION TYPE C WILL BE PLACED UNDER INLET COVERS LOCATED IN CURB AND GUTTER UNTIL COMPLETION OF THE PROJECT.

CONTRACTOR NOT TO STORE MATERIALS OR OPERATE EQUIPMENT WITHIN THE WETLAND LIMITS OUTSIDE OF THE SLOPE INTERCEPTS.

DURING THE REMOVAL OF EXISTING PIPE AND INSTALLATION OF NEW PIPE IN WETALND AREAS, CONTRACTOR WILL BLOCK FLOW ENTERING CONSTRUCTION AREA.

EROSION CONTROL LEGEND

- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT CLASS II, TYPE B
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- RIPRAP MEDIUM
- STONE DITCH CHECKS
- SILT FENCE RELIEF
- SILT FENCE
- STAKED WATTLES
- A INLET PROTECTION
- C INLET PROTECTION

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	EROSION CONTROL	SHEET 43	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 08

PLOT DATE : 12/17/2024 10:34 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

EROSION CONTROL LEGEND

- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT CLASS II, TYPE B
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- RIPRAP MEDIUM
- STONE DITCH CHECKS
- SILT FENCE RELIEF
- SILT FENCE
- STAKED WATTLES
- A INLET PROTECTION
- C INLET PROTECTION

SI

R/W

EXISTING R/W

MATCH LINE 592+00

MATCH LINE 598+50

592 593 594 595 596 597 598

USH 8

USH 8 R/L

WAYSIDE

SI

EXISTING R/W

NOTES

INLET PROTECTION TYPE A WILL BE PLACED AT ALL NEW INLET LOCATIONS DURING GRADING STAGES.

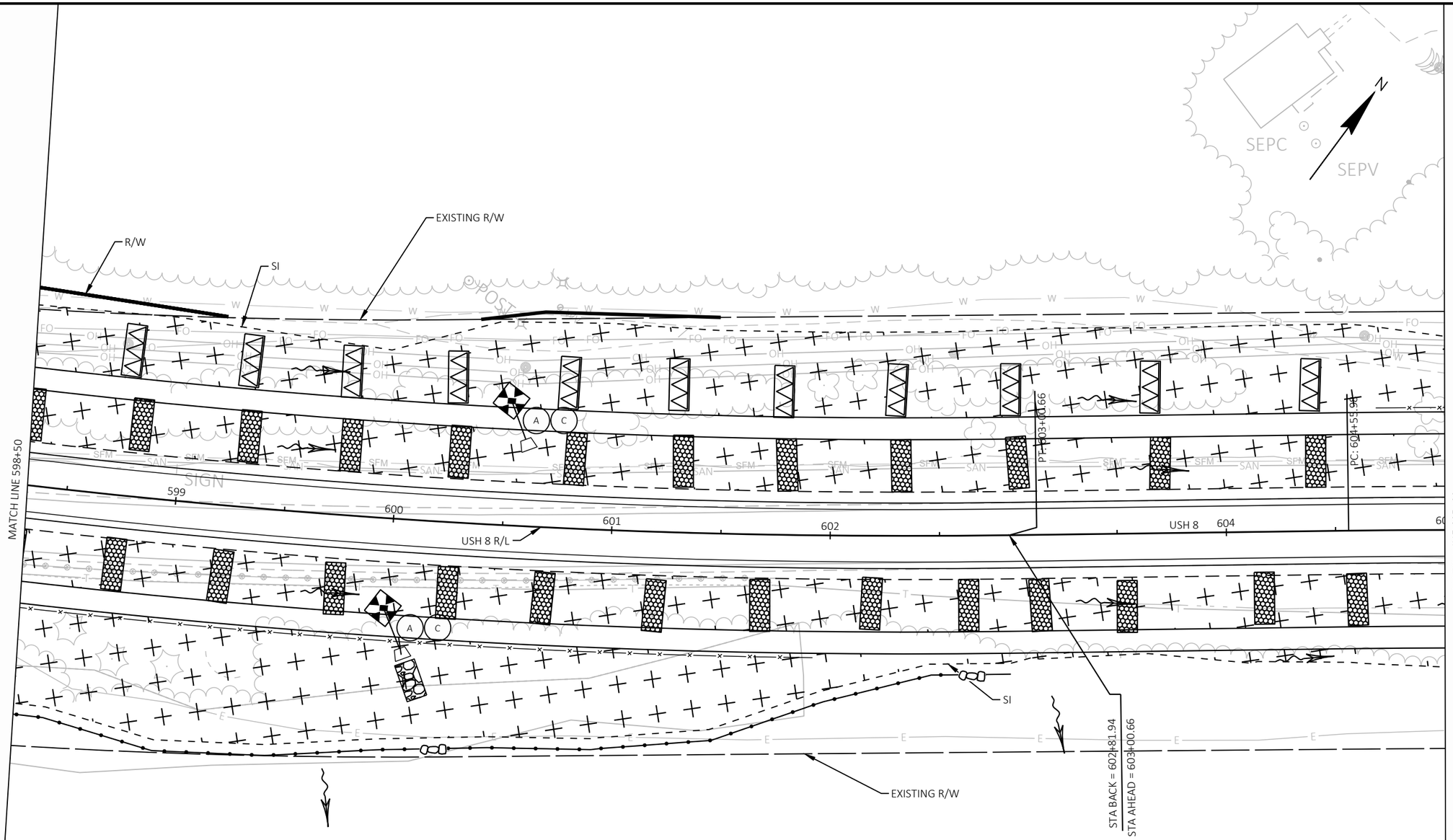
INLET PROTECTION TYPE C WILL BE PLACED UNDER INLET COVERS LOCATED IN CURB AND GUTTER UNTIL COMPLETION OF THE PROJECT.

CONTRACTOR NOT TO STORE MATERIALS OR OPERATE EQUIPMENT WITHIN THE WETLAND LIMITS OUTSIDE OF THE SLOPE INTERCEPTS.

DURING THE REMOVAL OF EXISTING PIPE AND INSTALLATION OF NEW PIPE IN WETALND AREAS, CONTRACTOR WILL BLOCK FLOW ENTERING CONSTRUCTION AREA.

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	EROSION CONTROL	SHEET 44	E

2



EROSION CONTROL LEGEND

X X X EROSION MAT CLASS II TYPE B	SILT FENCE RELIEF
TEMPORARY DITCH CHECK	SILT FENCE
CULVERT PIPE CHECK	STAKED WATTLES
SURFACE WATER FLOW	A INLET PROTECTION
RIPRAP MEDIUM	
STONE DITCH CHECKS	C INLET PROTECTION

NOTES

INLET PROTECTION TYPE A WILL BE PLACED AT ALL NEW INLET LOCATIONS DURING GRADING STAGES.

INLET PROTECTION TYPE C WILL BE PLACED UNDER INLET COVERS LOCATED IN CURB AND GUTTER UNTIL COMPLETION OF THE PROJECT.

CONTRACTOR NOT TO STORE MATERIALS OR OPERATE EQUIPMENT WITHIN THE WETLAND LIMITS OUTSIDE OF THE SLOPE INTERCEPTS.

DURING THE REMOVAL OF EXISTING PIPE AND INSTALLATION OF NEW PIPE IN WETALND AREAS, CONTRACTOR WILL BLOCK FLOW ENTERING CONSTRUCTION AREA.

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	EROSION CONTROL	SHEET 45	E

EROSION CONTROL LEGEND

- EROSION MAT CLASS II TYPE B
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- RIPRAP MEDIUM
- STONE DITCH CHECKS
- SILT FENCE RELIEF
- SILT FENCE
- STAKED WATTLES
- (A) INLET PROTECTION
- (C) INLET PROTECTION

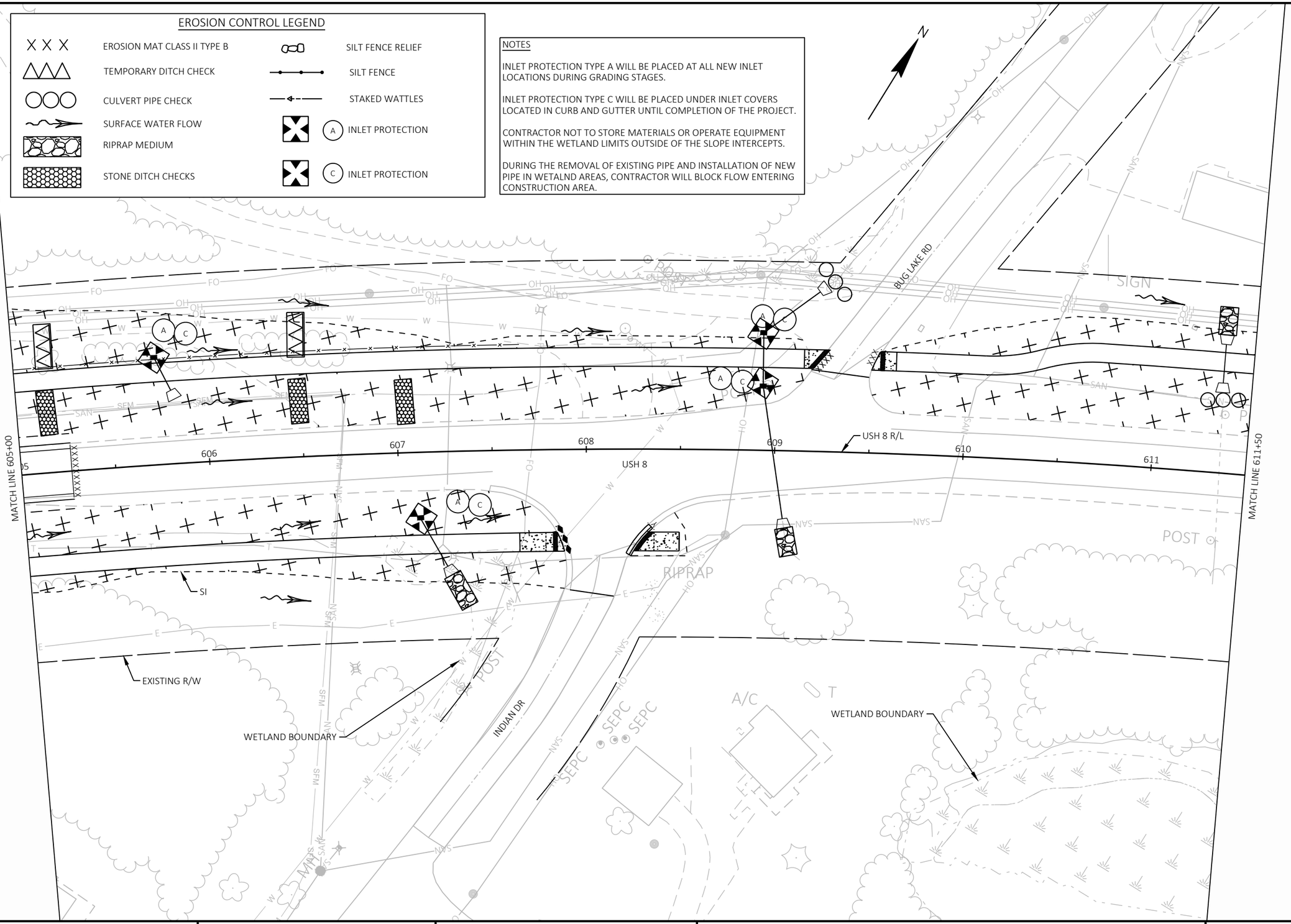
NOTES

INLET PROTECTION TYPE A WILL BE PLACED AT ALL NEW INLET LOCATIONS DURING GRADING STAGES.

INLET PROTECTION TYPE C WILL BE PLACED UNDER INLET COVERS LOCATED IN CURB AND GUTTER UNTIL COMPLETION OF THE PROJECT.

CONTRACTOR NOT TO STORE MATERIALS OR OPERATE EQUIPMENT WITHIN THE WETLAND LIMITS OUTSIDE OF THE SLOPE INTERCEPTS.

DURING THE REMOVAL OF EXISTING PIPE AND INSTALLATION OF NEW PIPE IN WETALND AREAS, CONTRACTOR WILL BLOCK FLOW ENTERING CONSTRUCTION AREA.



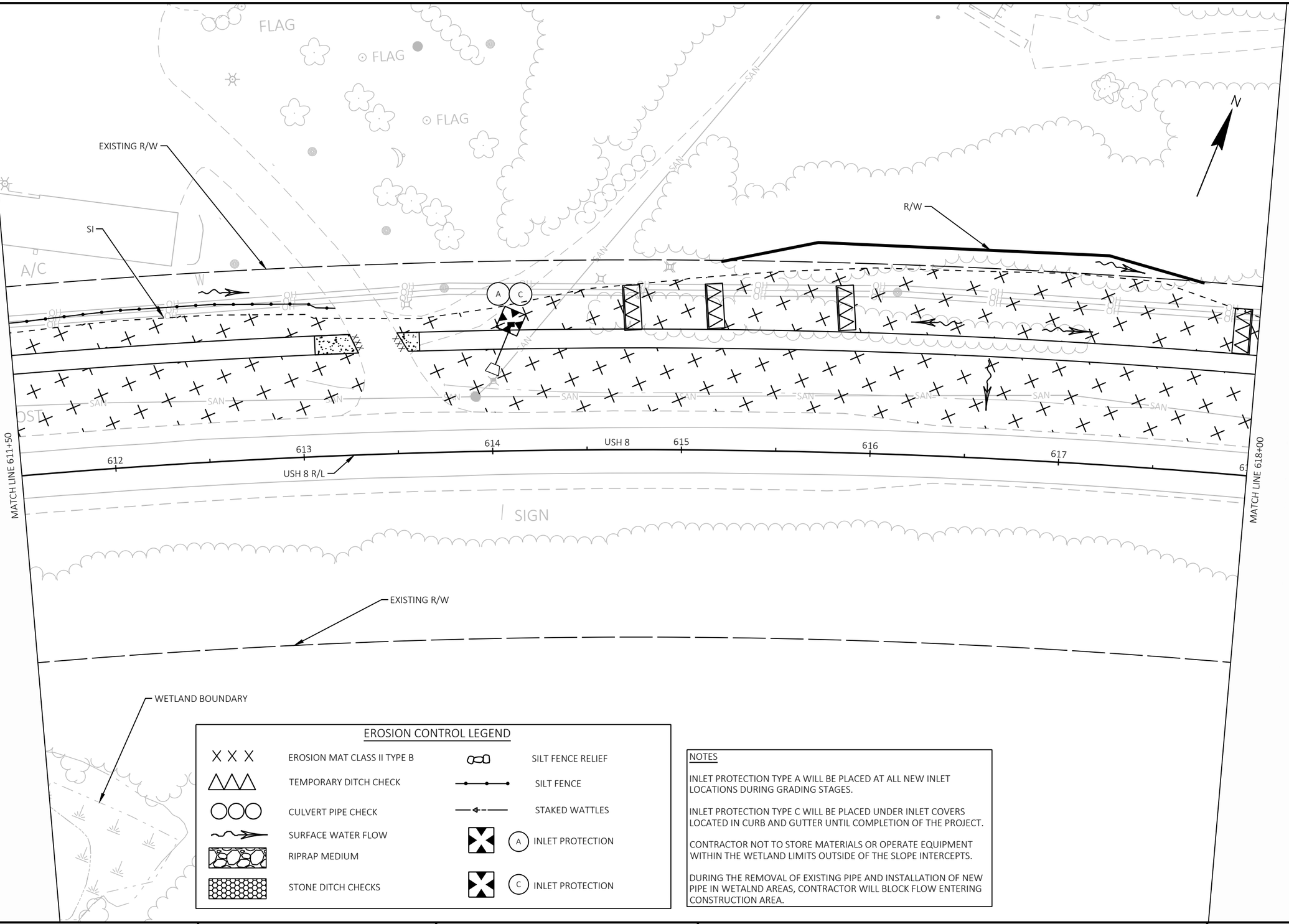
PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	EROSION CONTROL	SHEET 46	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 11

PLOT DATE : 12/17/2024 10:34 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2



EROSION CONTROL LEGEND

X X X	EROSION MAT CLASS II TYPE B		SILT FENCE RELIEF
	TEMPORARY DITCH CHECK		SILT FENCE
	CULVERT PIPE CHECK		STAKED WATTLES
	SURFACE WATER FLOW	A	INLET PROTECTION
	RIPRAP MEDIUM		
	STONE DITCH CHECKS	C	INLET PROTECTION

NOTES

INLET PROTECTION TYPE A WILL BE PLACED AT ALL NEW INLET LOCATIONS DURING GRADING STAGES.

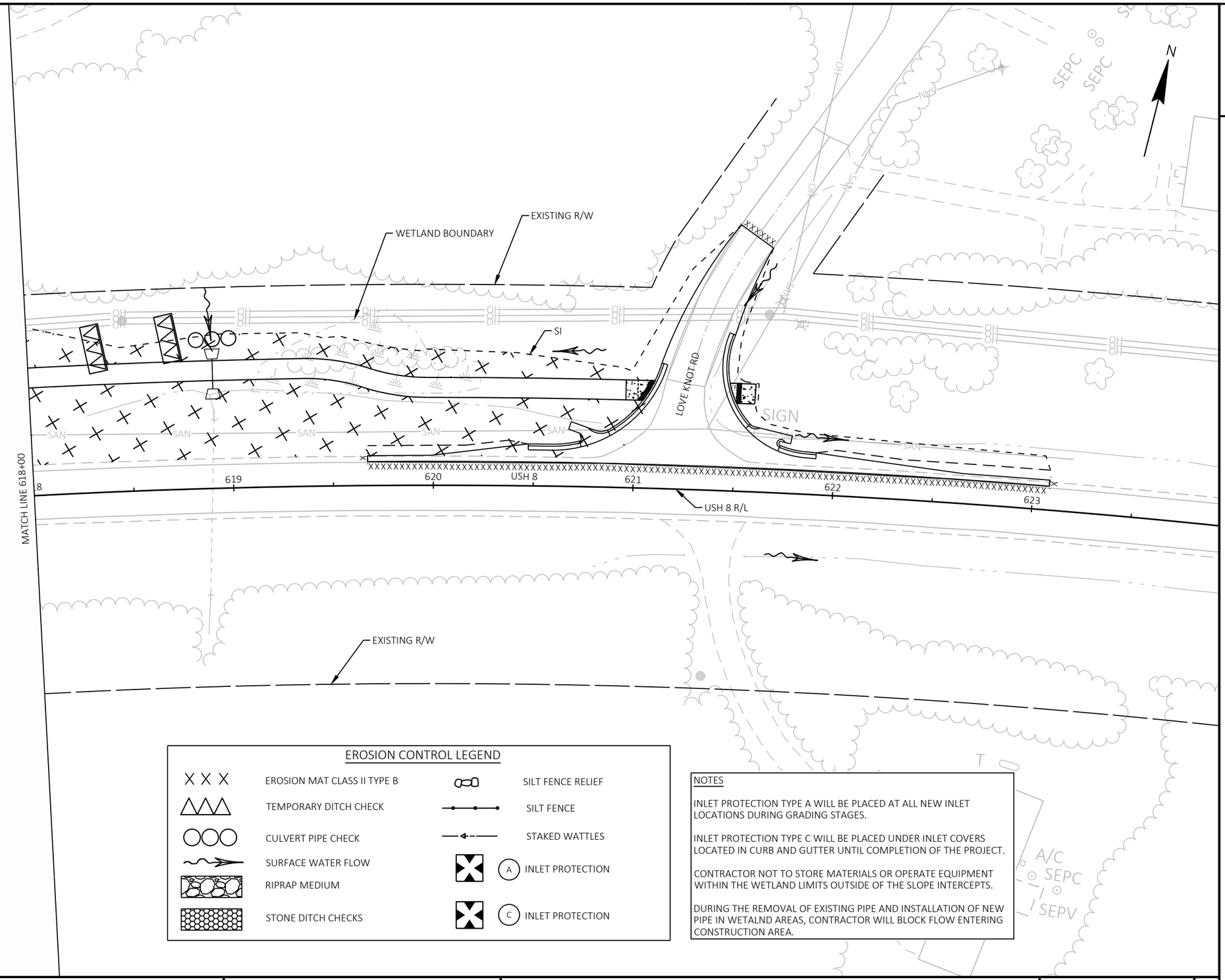
INLET PROTECTION TYPE C WILL BE PLACED UNDER INLET COVERS LOCATED IN CURB AND GUTTER UNTIL COMPLETION OF THE PROJECT.

CONTRACTOR NOT TO STORE MATERIALS OR OPERATE EQUIPMENT WITHIN THE WETLAND LIMITS OUTSIDE OF THE SLOPE INTERCEPTS.

DURING THE REMOVAL OF EXISTING PIPE AND INSTALLATION OF NEW PIPE IN WETALND AREAS, CONTRACTOR WILL BLOCK FLOW ENTERING CONSTRUCTION AREA.

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	EROSION CONTROL	SHEET 47	E

2



EROSION CONTROL LEGEND

X X X EROSION MAT CLASS II TYPE B	SILT FENCE RELIEF
TEMPORARY DITCH CHECK	SILT FENCE
CULVERT PIPE CHECK	STAKED WATTLES
SURFACE WATER FLOW	A INLET PROTECTION
RIPRAP MEDIUM	
STONE DITCH CHECKS	C INLET PROTECTION

NOTES

INLET PROTECTION TYPE A WILL BE PLACED AT ALL NEW INLET LOCATIONS DURING GRADING STAGES.

INLET PROTECTION TYPE C WILL BE PLACED UNDER INLET COVERS LOCATED IN CURB AND GUTTER UNTIL COMPLETION OF THE PROJECT.

CONTRACTOR NOT TO STORE MATERIALS OR OPERATE EQUIPMENT WITHIN THE WETLAND LIMITS OUTSIDE OF THE SLOPE INTERCEPTS.

DURING THE REMOVAL OF EXISTING PIPE AND INSTALLATION OF NEW PIPE IN WETALND AREAS, CONTRACTOR WILL BLOCK FLOW ENTERING CONSTRUCTION AREA.

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	EROSION CONTROL	SHEET 48	E

2

N

SEPC
SEPC
SEPC
SEPV
POST
R/W
SI
EXISTING R/W
13'Y'
14'Y'
15'Y'
16'Y'
17'Y'
18'Y'
YOUNGS LN
YOUNGS LANE R/L
USH 8 R/L
EXISTING R/W
R/W
SI
563
564
565
566
USH 8
SFM

EROSION CONTROL LEGEND

- EROSION MAT CLASS II TYPE B
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- RIPRAP MEDIUM
- STONE DITCH CHECKS
- SILT FENCE RELIEF
- SILT FENCE
- STAKED WATTLES
- (A) INLET PROTECTION
- (C) INLET PROTECTION

NOTES

INLET PROTECTION TYPE A WILL BE PLACED AT ALL NEW INLET LOCATIONS DURING GRADING STAGES.

INLET PROTECTION TYPE C WILL BE PLACED UNDER INLET COVERS LOCATED IN CURB AND GUTTER UNTIL COMPLETION OF THE PROJECT.

CONTRACTOR NOT TO STORE MATERIALS OR OPERATE EQUIPMENT WITHIN THE WETLAND LIMITS OUTSIDE OF THE SLOPE INTERCEPTS.

DURING THE REMOVAL OF EXISTING PIPE AND INSTALLATION OF NEW PIPE IN WETALND AREAS, CONTRACTOR WILL BLOCK FLOW ENTERING CONSTRUCTION AREA.

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	EROSION CONTROL	SHEET 49	E

2

2

N

WETLAND BOUNDARY

R/W

EXISTING R/W

SI

RIPRAP

634 635 636 637 638 639 640

USH 8 R/L

USH 8

MATCH LINE 640+50

SI

EXISTING R/W

WETLAND BOUNDARY

EROSION CONTROL LEGEND

EROSION MAT CLASS II TYPE B	SILT FENCE RELIEF
TEMPORARY DITCH CHECK	SILT FENCE
CULVERT PIPE CHECK	STAKED WATTLES
SURFACE WATER FLOW	(A) INLET PROTECTION
RIPRAP MEDIUM	
STONE DITCH CHECKS	(C) INLET PROTECTION

NOTES

INLET PROTECTION TYPE A WILL BE PLACED AT ALL NEW INLET LOCATIONS DURING GRADING STAGES.

INLET PROTECTION TYPE C WILL BE PLACED UNDER INLET COVERS LOCATED IN CURB AND GUTTER UNTIL COMPLETION OF THE PROJECT.

CONTRACTOR NOT TO STORE MATERIALS OR OPERATE EQUIPMENT WITHIN THE WETLAND LIMITS OUTSIDE OF THE SLOPE INTERCEPTS.

DURING THE REMOVAL OF EXISTING PIPE AND INSTALLATION OF NEW PIPE IN WETALND AREAS, CONTRACTOR WILL BLOCK FLOW ENTERING CONSTRUCTION AREA.

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	EROSION CONTROL	SHEET 50	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 15

PLOT DATE : 12/17/2024 10:34 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

N

EXISTING R/W

SI

POST

641 642 643 USH 8 644 USH 8 R/L 645 646 647

MATCH LINE 640+50

SI

EXISTING R/W

POST

EROSION CONTROL LEGEND

X X X	EROSION MAT CLASS II TYPE B		SILT FENCE RELIEF
	TEMPORARY DITCH CHECK		SILT FENCE
	CULVERT PIPE CHECK		STAKED WATTLES
	SURFACE WATER FLOW	A	INLET PROTECTION
	RIPRAP MEDIUM		
	STONE DITCH CHECKS	C	INLET PROTECTION

NOTES

INLET PROTECTION TYPE A WILL BE PLACED AT ALL NEW INLET LOCATIONS DURING GRADING STAGES.

INLET PROTECTION TYPE C WILL BE PLACED UNDER INLET COVERS LOCATED IN CURB AND GUTTER UNTIL COMPLETION OF THE PROJECT.

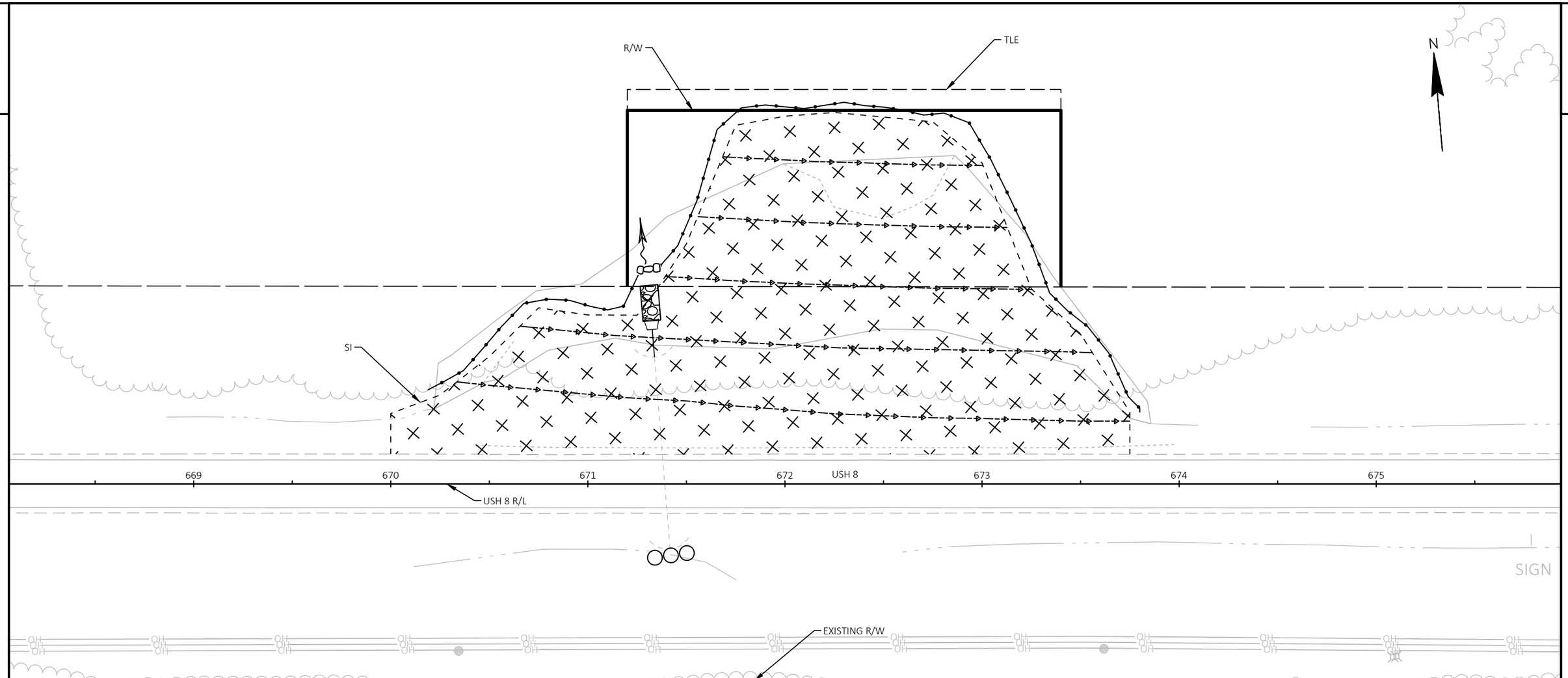
CONTRACTOR NOT TO STORE MATERIALS OR OPERATE EQUIPMENT WITHIN THE WETLAND LIMITS OUTSIDE OF THE SLOPE INTERCEPTS.

DURING THE REMOVAL OF EXISTING PIPE AND INSTALLATION OF NEW PIPE IN WETALND AREAS, CONTRACTOR WILL BLOCK FLOW ENTERING CONSTRUCTION AREA.

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	EROSION CONTROL	SHEET 51	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 16
PLOT DATE : 12/17/2024 10:34 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2



EROSION CONTROL LEGEND

- EROSION MAT CLASS II TYPE B
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- RIPRAP MEDIUM
- STONE DITCH CHECKS
- SILT FENCE RELIEF
- SILT FENCE
- STAKED WATTLES
- (A) INLET PROTECTION
- (C) INLET PROTECTION

NOTES

INLET PROTECTION TYPE A WILL BE PLACED AT ALL NEW INLET LOCATIONS DURING GRADING STAGES.

INLET PROTECTION TYPE C WILL BE PLACED UNDER INLET COVERS LOCATED IN CURB AND GUTTER UNTIL COMPLETION OF THE PROJECT.

CONTRACTOR NOT TO STORE MATERIALS OR OPERATE EQUIPMENT WITHIN THE WETLAND LIMITS OUTSIDE OF THE SLOPE INTERCEPTS.

DURING THE REMOVAL OF EXISTING PIPE AND INSTALLATION OF NEW PIPE IN WETALND AREAS, CONTRACTOR WILL BLOCK FLOW ENTERING CONSTRUCTION AREA.

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	EROSION CONTROL	SHEET 52	E

2

2

N

WETLAND BOUNDARY

R/W

EXISTING R/W

SI

OTTER CREEK RD

XXX

PI: 684+10.56

678 679 680 681 USH 8 682 683 684 685

USH 8 R/L

SIGN

OTTER CREEK RD

EXISTING R/W

EROSION CONTROL LEGEND

X X X EROSION MAT CLASS II TYPE B	SILT FENCE RELIEF
TEMPORARY DITCH CHECK	SILT FENCE
CULVERT PIPE CHECK	STAKED WATTLES
SURFACE WATER FLOW	(A) INLET PROTECTION
RIPRAP MEDIUM	
STONE DITCH CHECKS	(C) INLET PROTECTION

NOTES

INLET PROTECTION TYPE A WILL BE PLACED AT ALL NEW INLET LOCATIONS DURING GRADING STAGES.

INLET PROTECTION TYPE C WILL BE PLACED UNDER INLET COVERS LOCATED IN CURB AND GUTTER UNTIL COMPLETION OF THE PROJECT.

CONTRACTOR NOT TO STORE MATERIALS OR OPERATE EQUIPMENT WITHIN THE WETLAND LIMITS OUTSIDE OF THE SLOPE INTERCEPTS.

DURING THE REMOVAL OF EXISTING PIPE AND INSTALLATION OF NEW PIPE IN WETALND AREAS, CONTRACTOR WILL BLOCK FLOW ENTERING CONSTRUCTION AREA.

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	EROSION CONTROL	SHEET 53	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 18

PLOT DATE : 12/17/2024 10:34 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:50 FT

EROSION CONTROL LEGEND

- EROSION MAT URBAN CLASS I TYPE A
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- RIPRAP MEDIUM
- SILT FENCE RELIEF
- SILT FENCE
- STAKED WATTLES
- (A) INLET PROTECTION
- (C) INLET PROTECTION

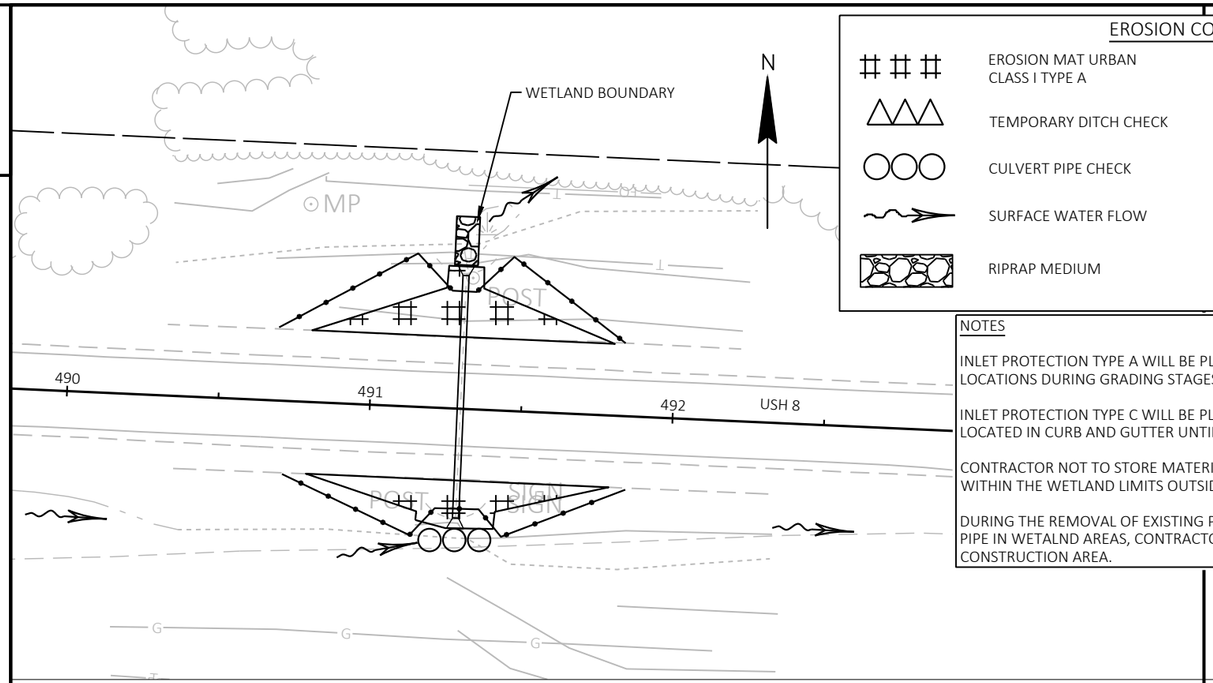
NOTES

INLET PROTECTION TYPE A WILL BE PLACED AT ALL NEW INLET LOCATIONS DURING GRADING STAGES.

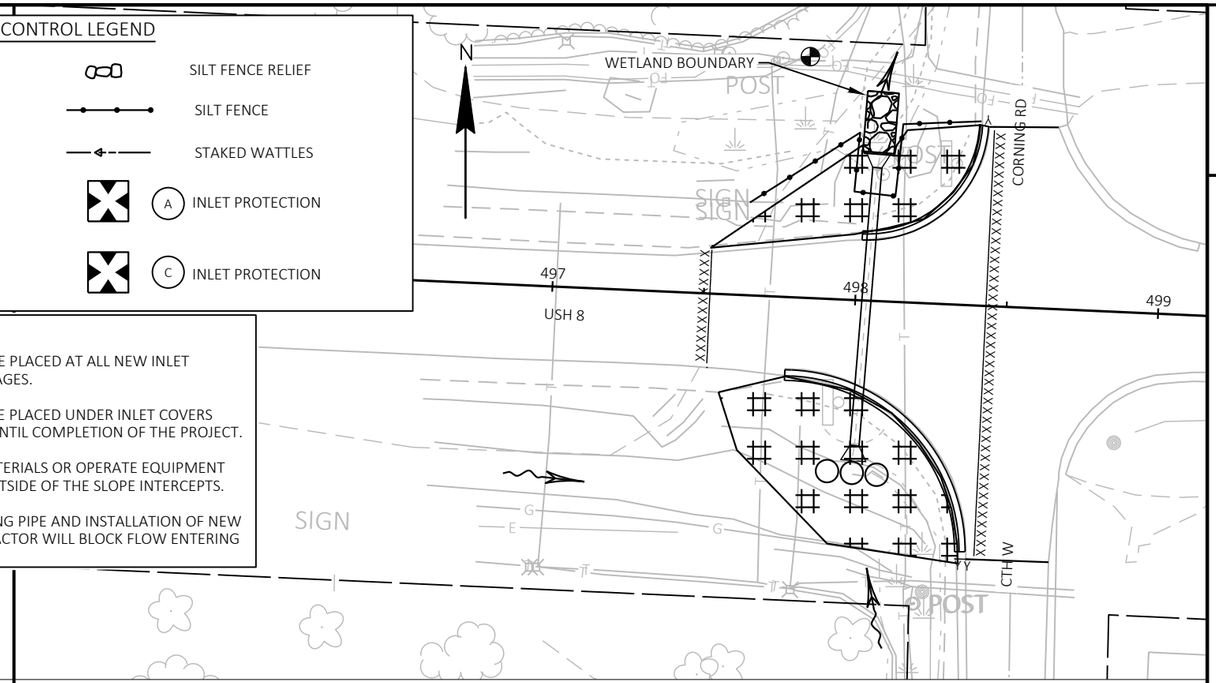
INLET PROTECTION TYPE C WILL BE PLACED UNDER INLET COVERS LOCATED IN CURB AND GUTTER UNTIL COMPLETION OF THE PROJECT.

CONTRACTOR NOT TO STORE MATERIALS OR OPERATE EQUIPMENT WITHIN THE WETLAND LIMITS OUTSIDE OF THE SLOPE INTERCEPTS.

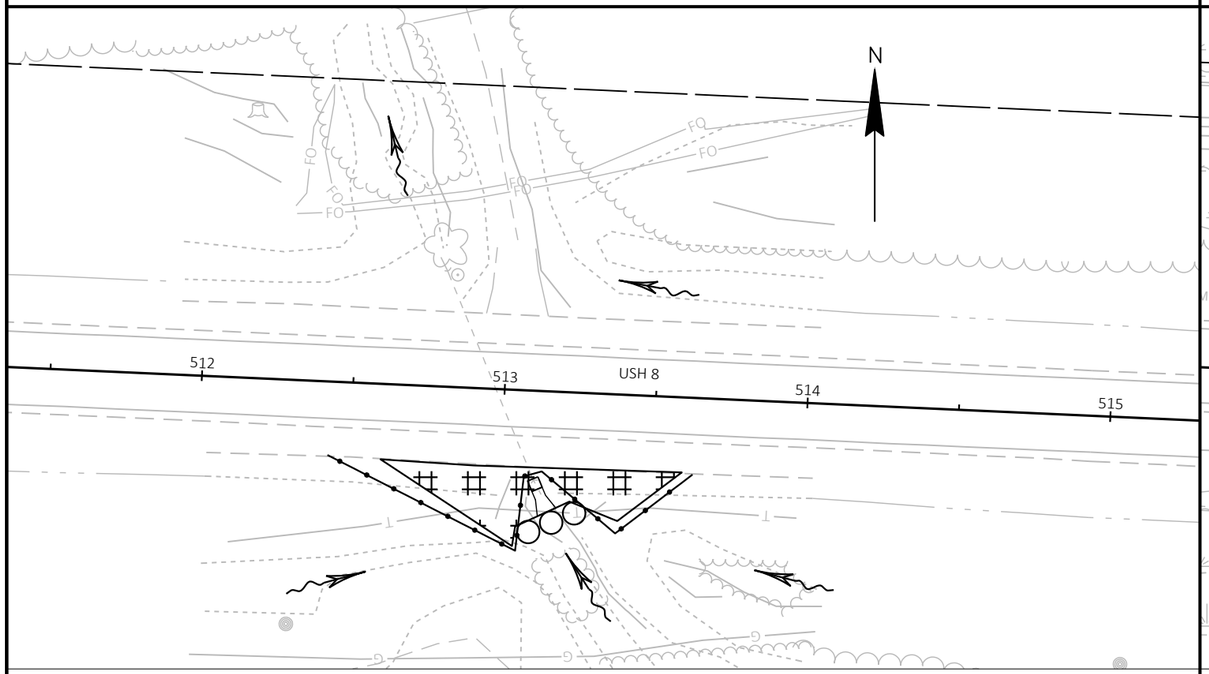
DURING THE REMOVAL OF EXISTING PIPE AND INSTALLATION OF NEW PIPE IN WETALND AREAS, CONTRACTOR WILL BLOCK FLOW ENTERING CONSTRUCTION AREA.



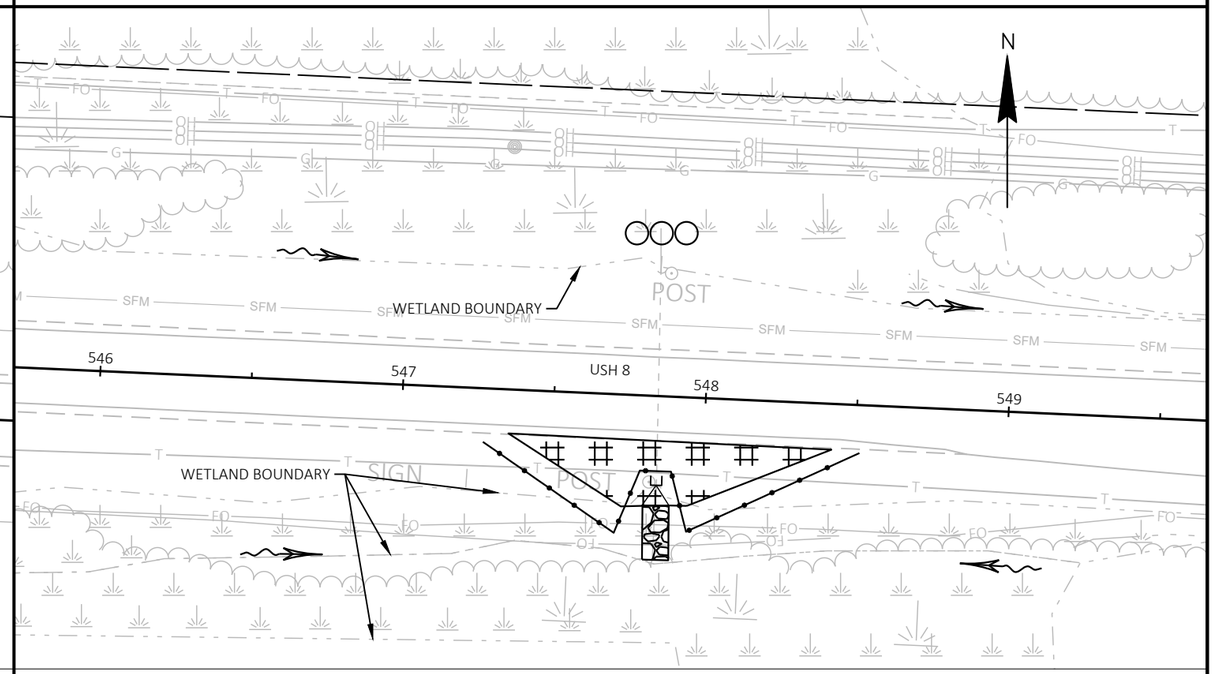
CULV: 2100800181 STA 491+29 EROSION CONTROL



CULV: 2100800182 STA 498+03 EROSION CONTROL



CULV: 2100800184 STA 512+97 EROSION CONTROL



CULV: 2100800186 STA 547+84 EROSION CONTROL

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	EROSION CONTROL - CULVERTS	SHEET 54	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\022002-EC.DWG
LAYOUT NAME - 01

PLOT DATE : 12/17/2024 10:46 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : #######

WISDOT/CADDS SHEET 42

2

EROSION CONTROL LEGEND

- EROSION MAT URBAN CLASS I TYPE A
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- RIPRAP MEDIUM
- SILT FENCE RELIEF
- SILT FENCE
- STAKED WATTLES
- (A) INLET PROTECTION
- (C) INLET PROTECTION

NOTES

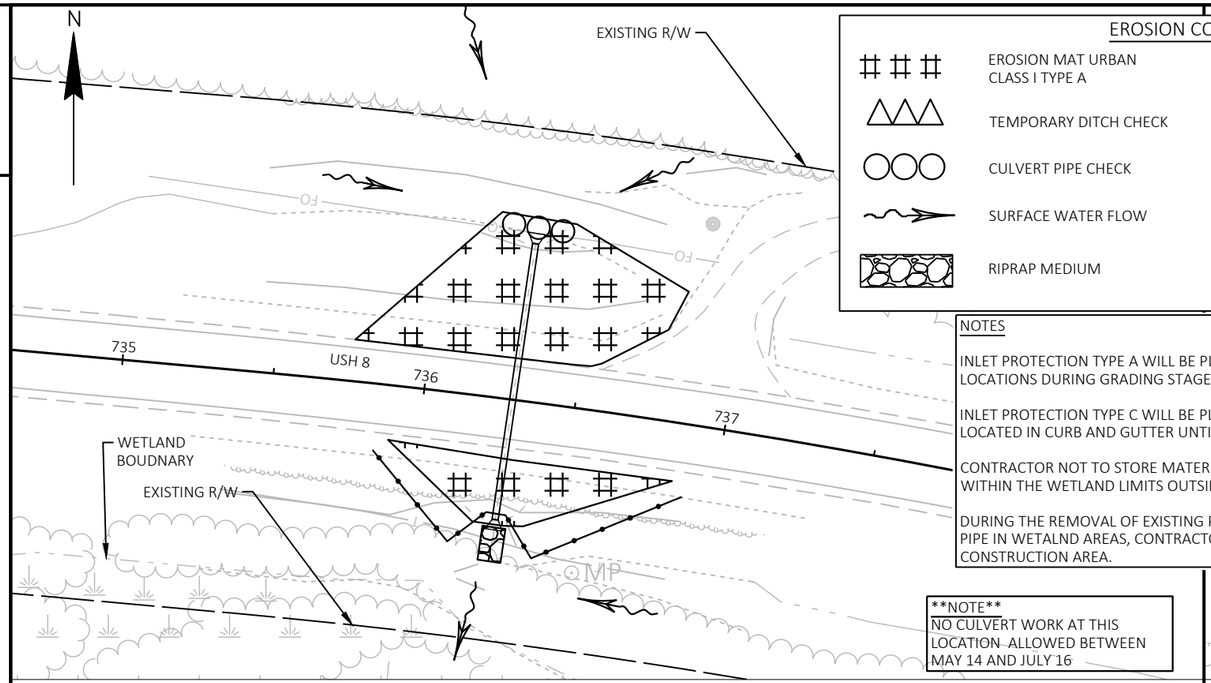
INLET PROTECTION TYPE A WILL BE PLACED AT ALL NEW INLET LOCATIONS DURING GRADING STAGES.

INLET PROTECTION TYPE C WILL BE PLACED UNDER INLET COVERS LOCATED IN CURB AND GUTTER UNTIL COMPLETION OF THE PROJECT.

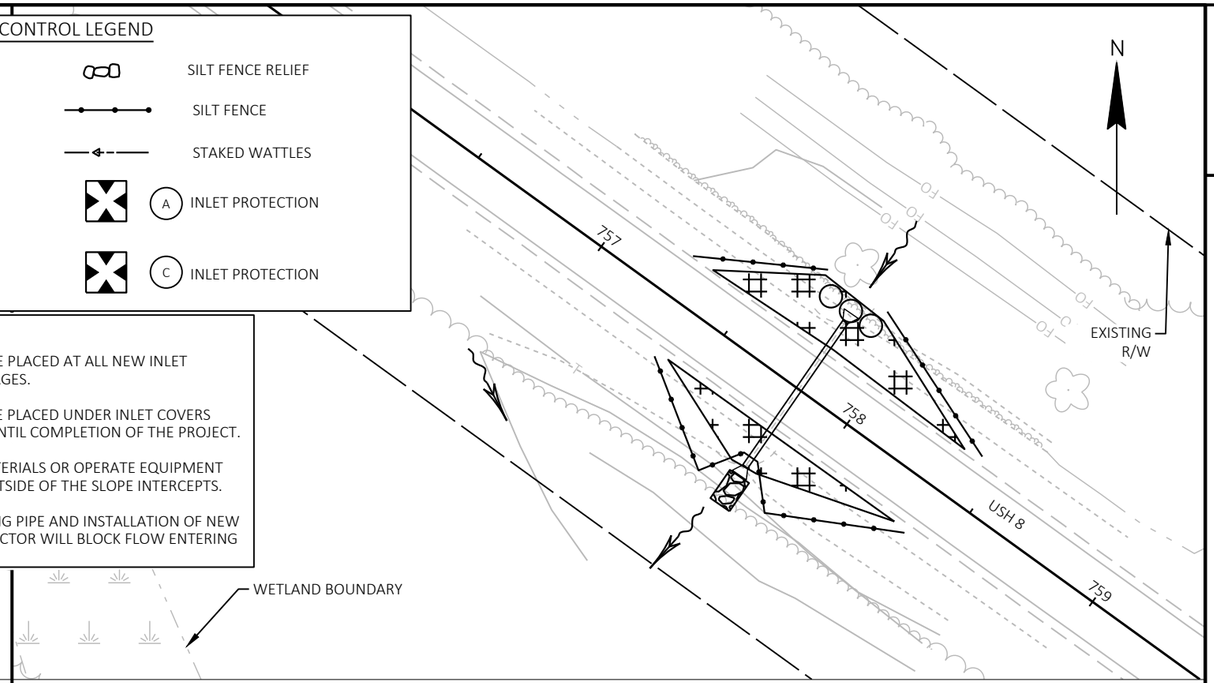
CONTRACTOR NOT TO STORE MATERIALS OR OPERATE EQUIPMENT WITHIN THE WETLAND LIMITS OUTSIDE OF THE SLOPE INTERCEPTS.

DURING THE REMOVAL OF EXISTING PIPE AND INSTALLATION OF NEW PIPE IN WETALND AREAS, CONTRACTOR WILL BLOCK FLOW ENTERING CONSTRUCTION AREA.

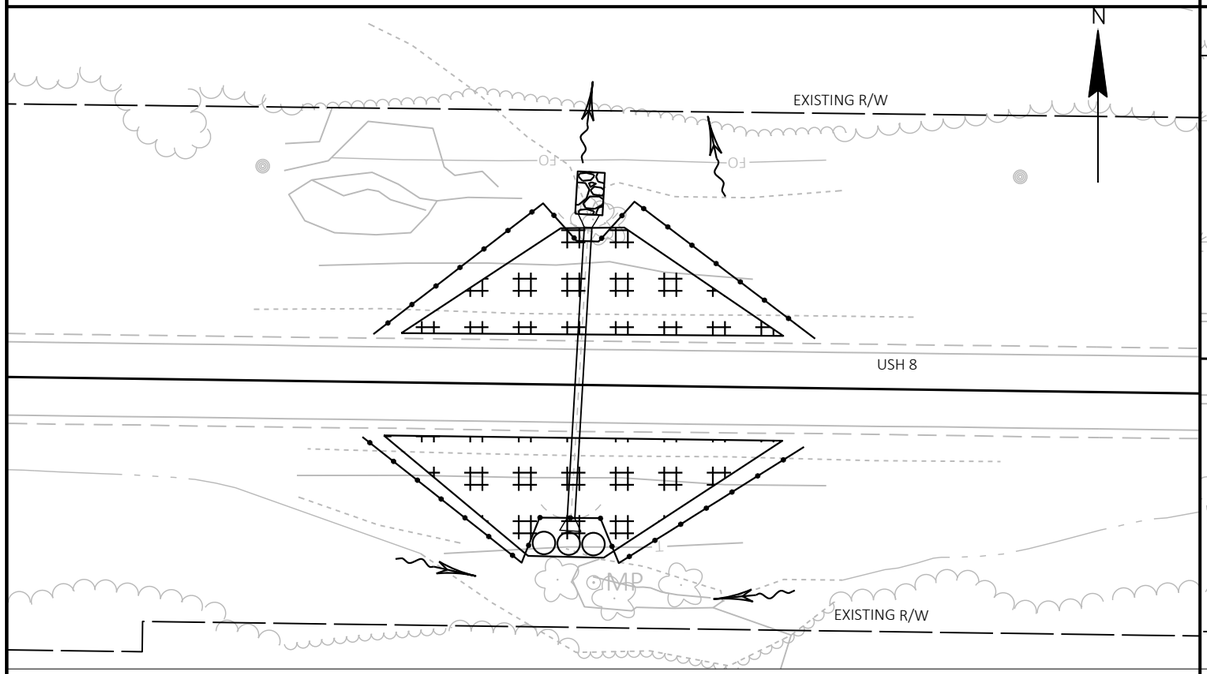
NOTE
NO CULVERT WORK AT THIS LOCATION ALLOWED BETWEEN MAY 14 AND JULY 16



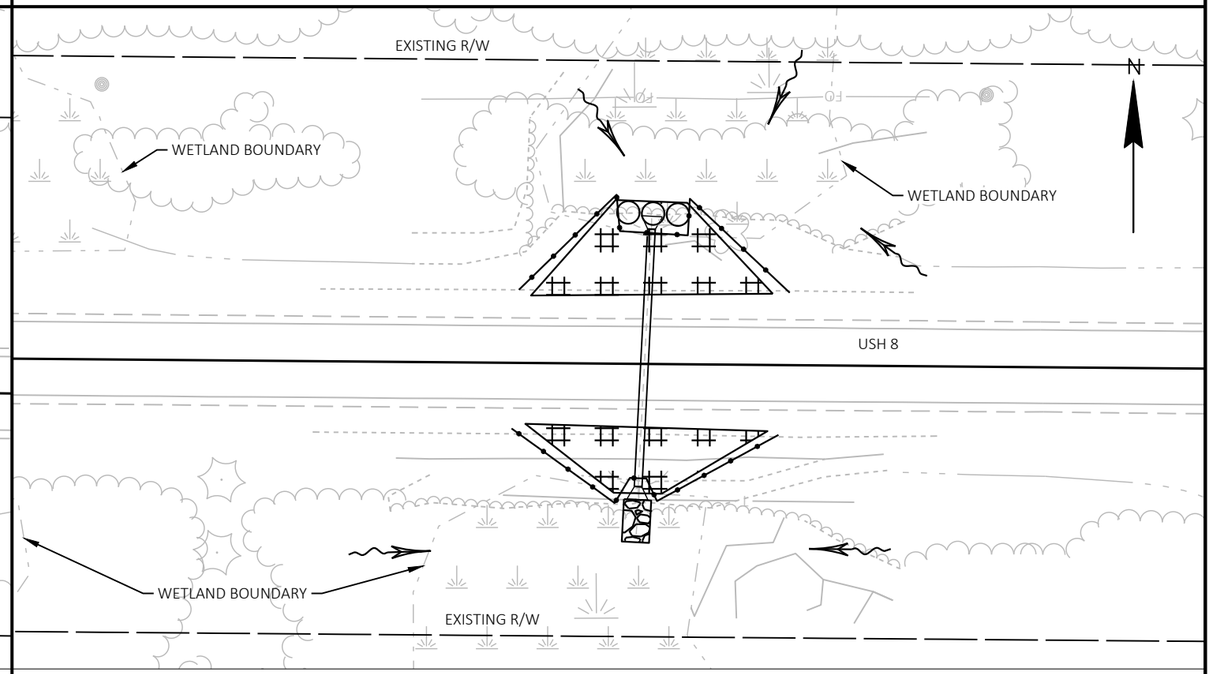
CULV: 2100800203 STA 736+29 EROSION CONTROL



CULV: 2100800205 STA 757+80 EROSION CONTROL



CULV: 2100800208 STA 816+21 EROSION CONTROL



CULV: 2100800211 STA 858+72 EROSION CONTROL

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	EROSION CONTROL - CULVERTS	SHEET 55	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\022002-EC.DWG
LAYOUT NAME - 02

PLOT DATE : 12/17/2024 10:46 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : ######

WISDOT/CADDS SHEET 42

EROSION CONTROL LEGEND

- EROSION MAT URBAN CLASS I TYPE A
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- RIPRAP MEDIUM
- SILT FENCE RELIEF
- SILT FENCE
- STAKED WATTLES
- (A) INLET PROTECTION
- (C) INLET PROTECTION

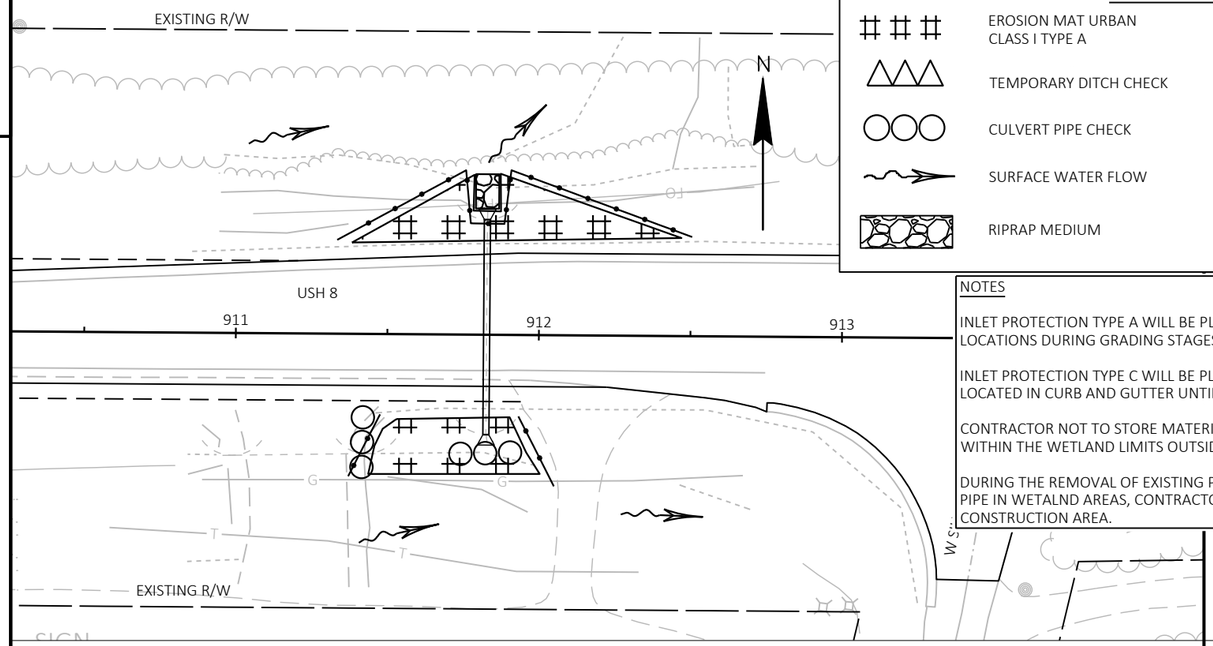
NOTES

INLET PROTECTION TYPE A WILL BE PLACED AT ALL NEW INLET LOCATIONS DURING GRADING STAGES.

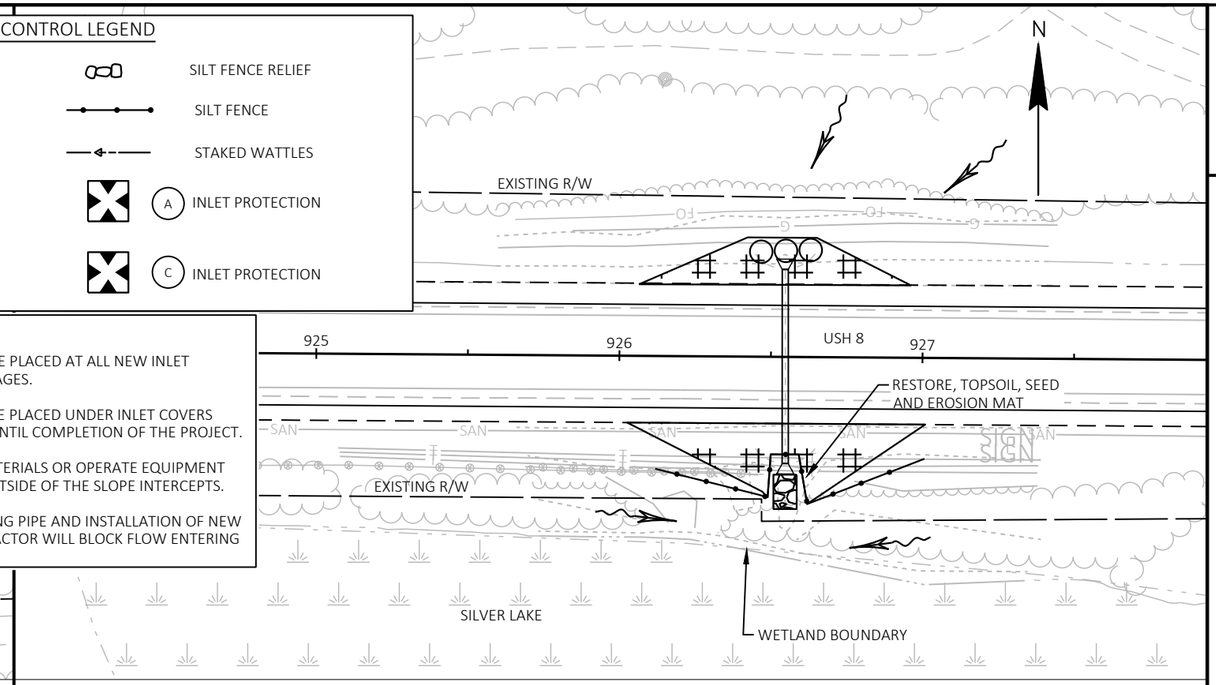
INLET PROTECTION TYPE C WILL BE PLACED UNDER INLET COVERS LOCATED IN CURB AND GUTTER UNTIL COMPLETION OF THE PROJECT.

CONTRACTOR NOT TO STORE MATERIALS OR OPERATE EQUIPMENT WITHIN THE WETLAND LIMITS OUTSIDE OF THE SLOPE INTERCEPTS.

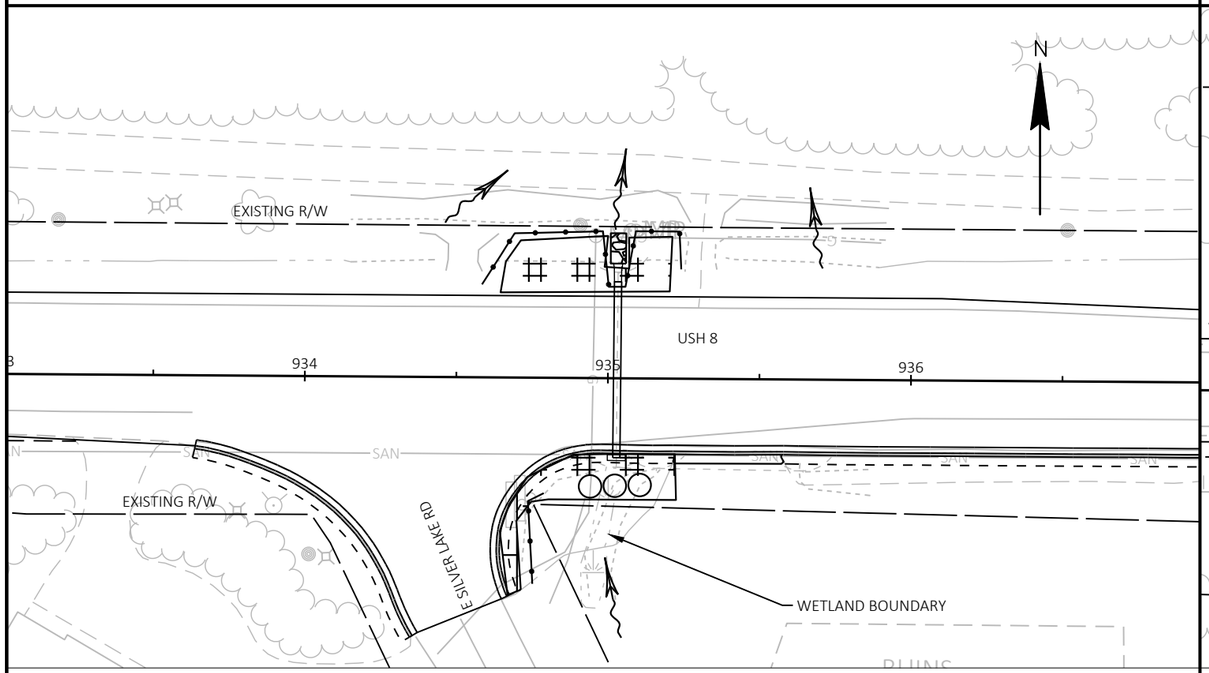
DURING THE REMOVAL OF EXISTING PIPE AND INSTALLATION OF NEW PIPE IN WETALND AREAS, CONTRACTOR WILL BLOCK FLOW ENTERING CONSTRUCTION AREA.



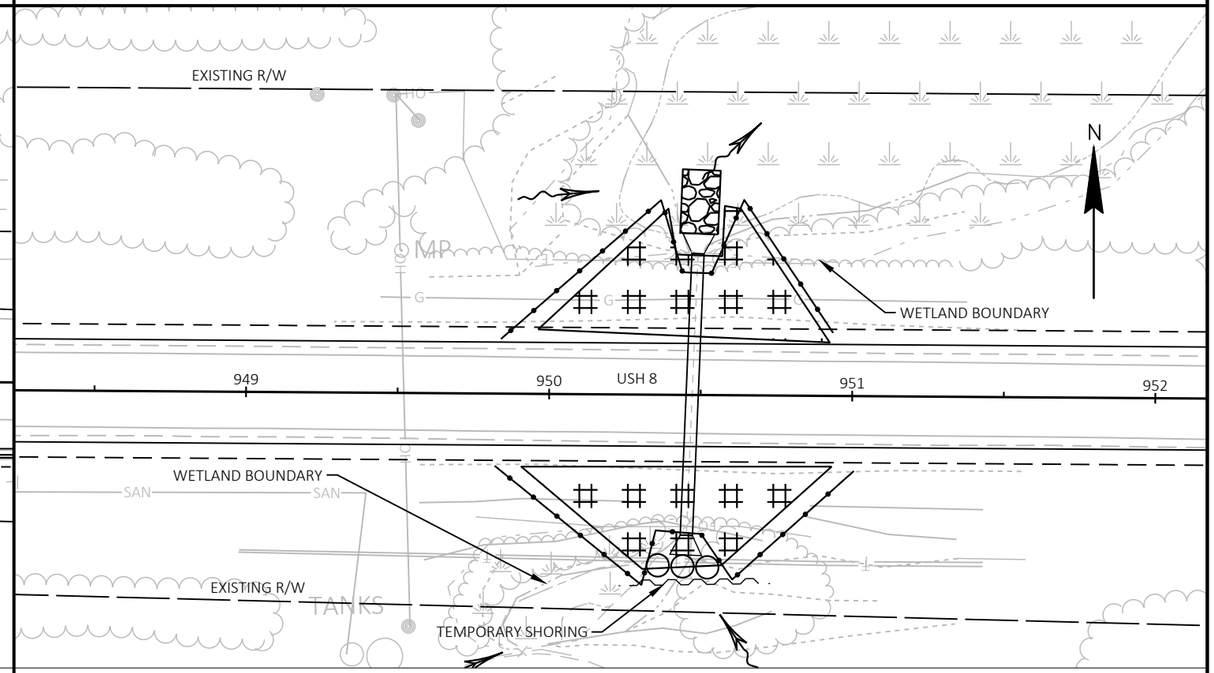
CULV: 2100800212 STA 911+82 EROSION CONTROL



CULV: 2100800213 STA 926+54 EROSION CONTROL



CULV: 2100800214 STA 935+03 EROSION CONTROL



CULV: 2100800215 STA 950+47 EROSION CONTROL

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	EROSION CONTROL - CULVERTS	SHEET 56	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\022002-EC.DWG
LAYOUT NAME - 03
PLOT DATE : 12/17/2024 10:47 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : ######
WISDOT/CADDS SHEET 42

EROSION CONTROL LEGEND

- EROSION MAT URBAN CLASS I TYPE A
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- RIPRAP MEDIUM
- SILT FENCE RELIEF
- SILT FENCE
- STAKED WATTLES
- (A) INLET PROTECTION
- (C) INLET PROTECTION

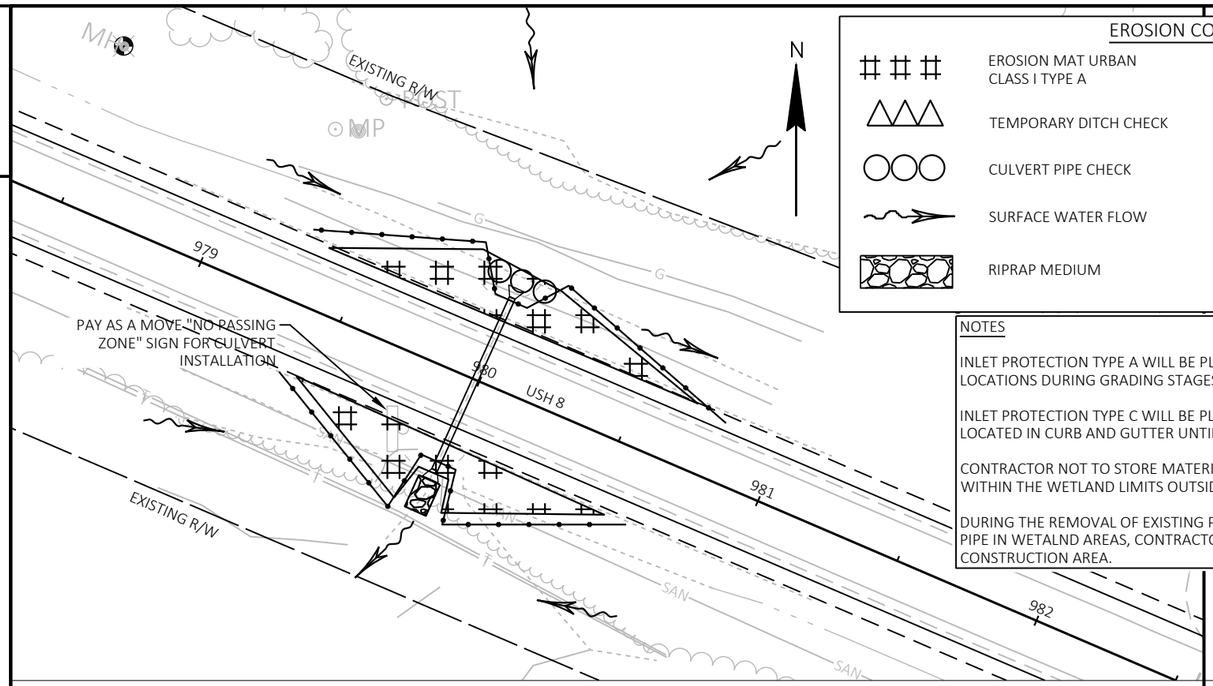
NOTES

INLET PROTECTION TYPE A WILL BE PLACED AT ALL NEW INLET LOCATIONS DURING GRADING STAGES.

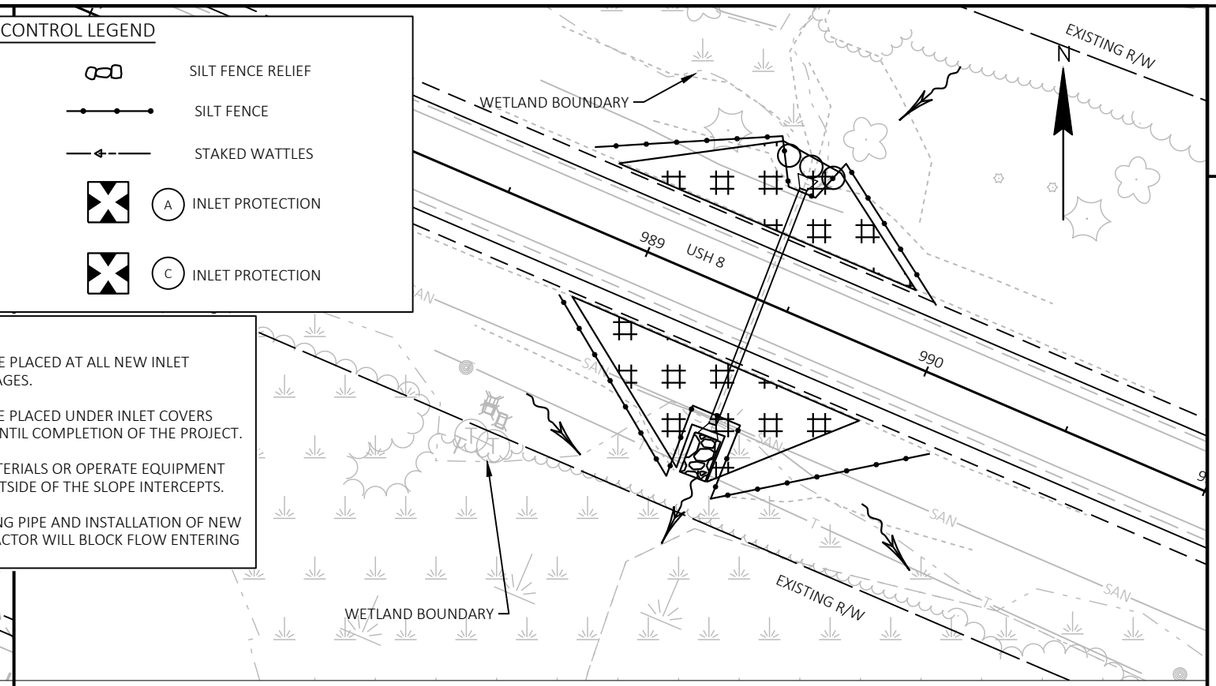
INLET PROTECTION TYPE C WILL BE PLACED UNDER INLET COVERS LOCATED IN CURB AND GUTTER UNTIL COMPLETION OF THE PROJECT.

CONTRACTOR NOT TO STORE MATERIALS OR OPERATE EQUIPMENT WITHIN THE WETLAND LIMITS OUTSIDE OF THE SLOPE INTERCEPTS.

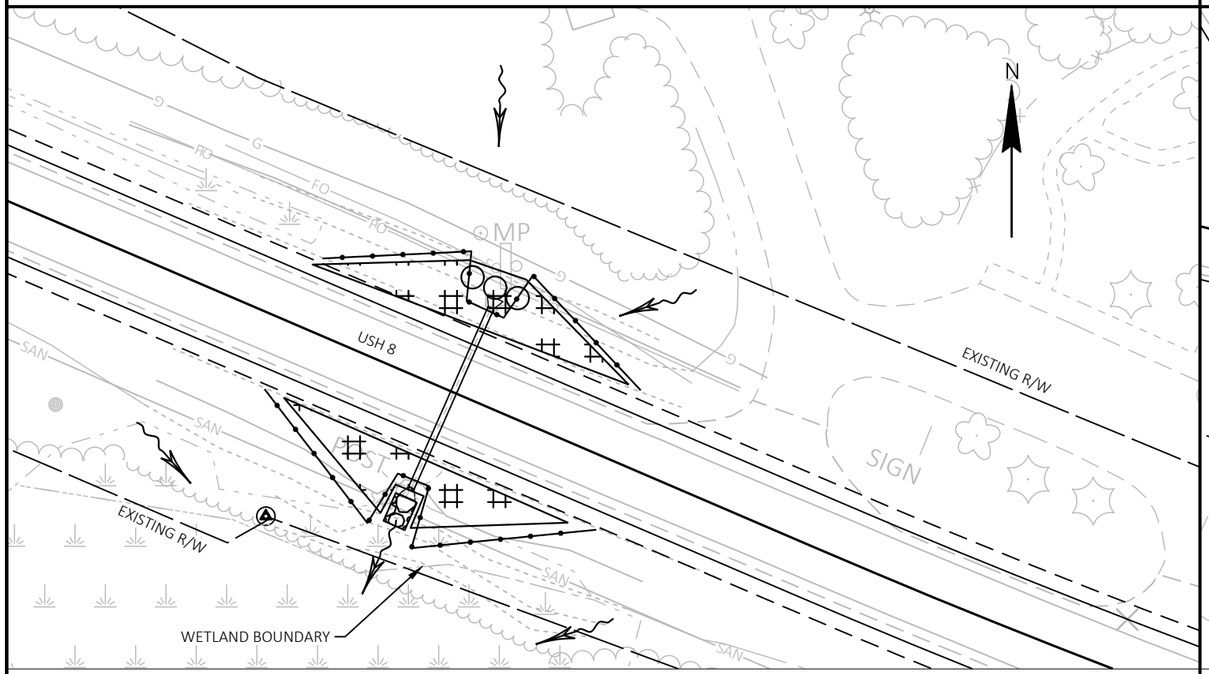
DURING THE REMOVAL OF EXISTING PIPE AND INSTALLATION OF NEW PIPE IN WETALND AREAS, CONTRACTOR WILL BLOCK FLOW ENTERING CONSTRUCTION AREA.



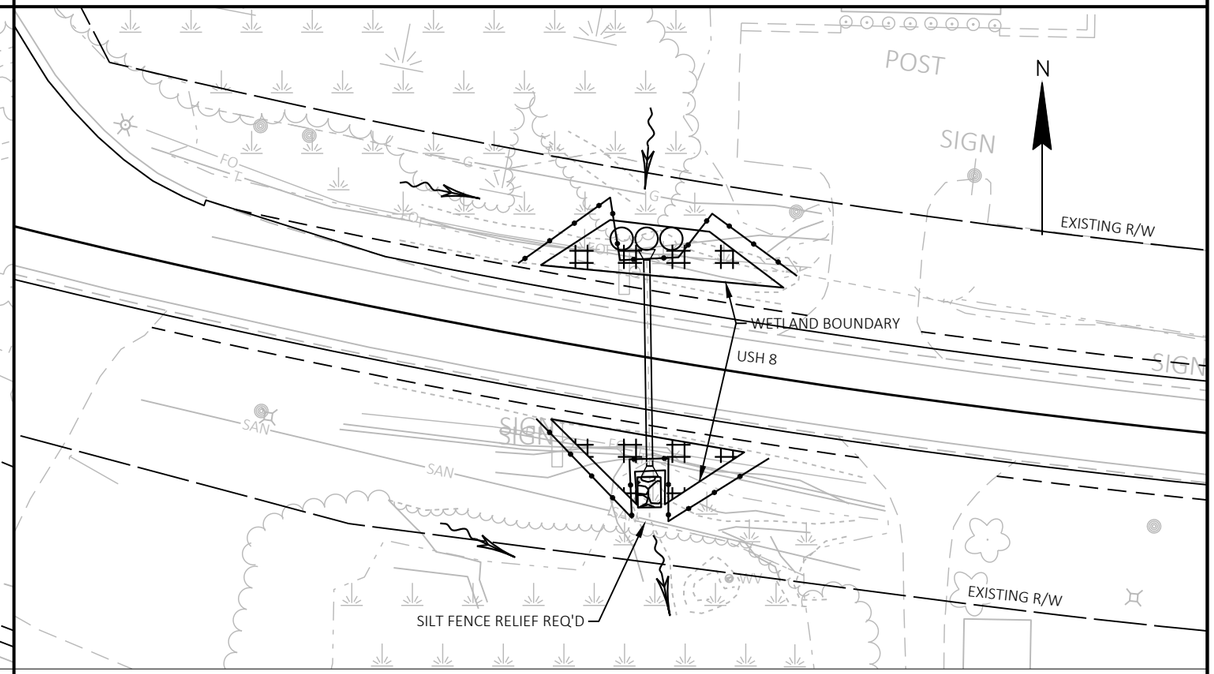
CULV: 2100800216 STA 979+98 EROSION CONTROL



CULV: 2100800217 STA 989+40 EROSION CONTROL



CULV: 2100800218 STA 1000+94 EROSION CONTROL



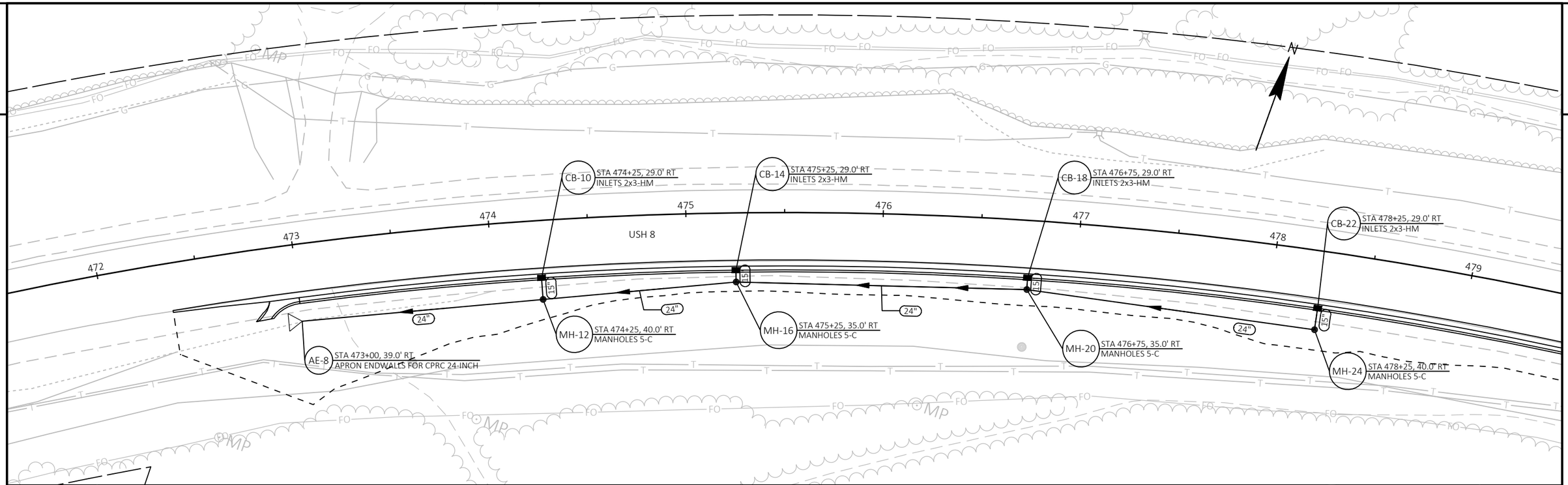
CULV: 2100800219 STA 1009+07 EROSION CONTROL

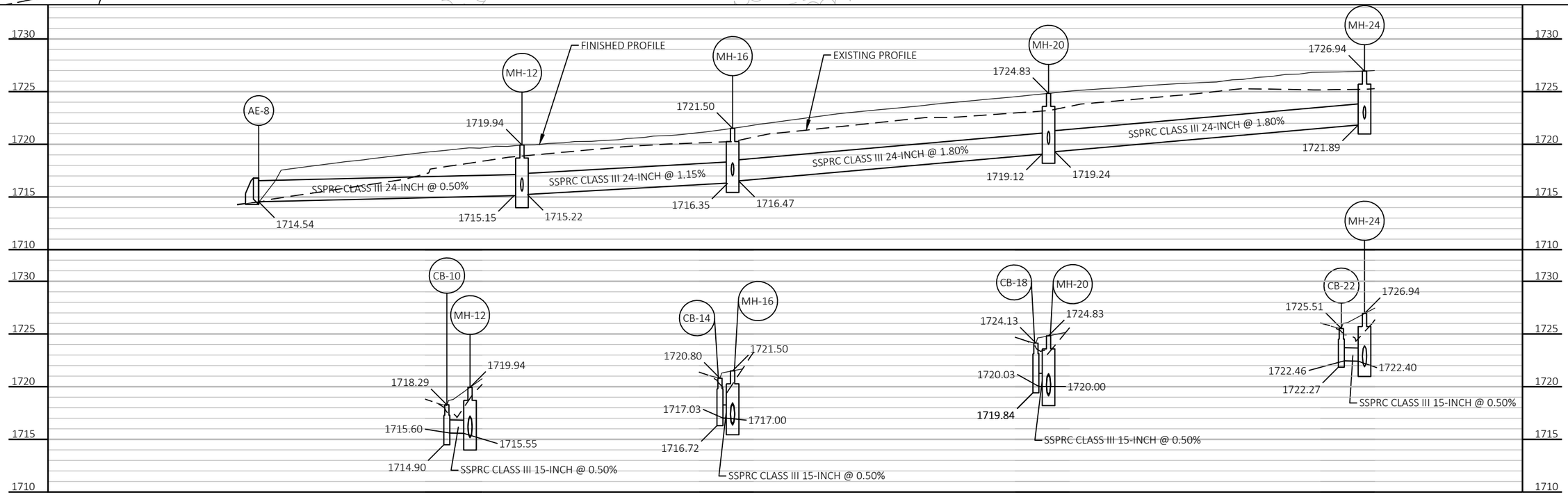
PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	EROSION CONTROL - CULVERTS	SHEET 57	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\022002-EC.DWG
LAYOUT NAME - 04

PLOT DATE : 12/17/2024 10:47 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : #######

2

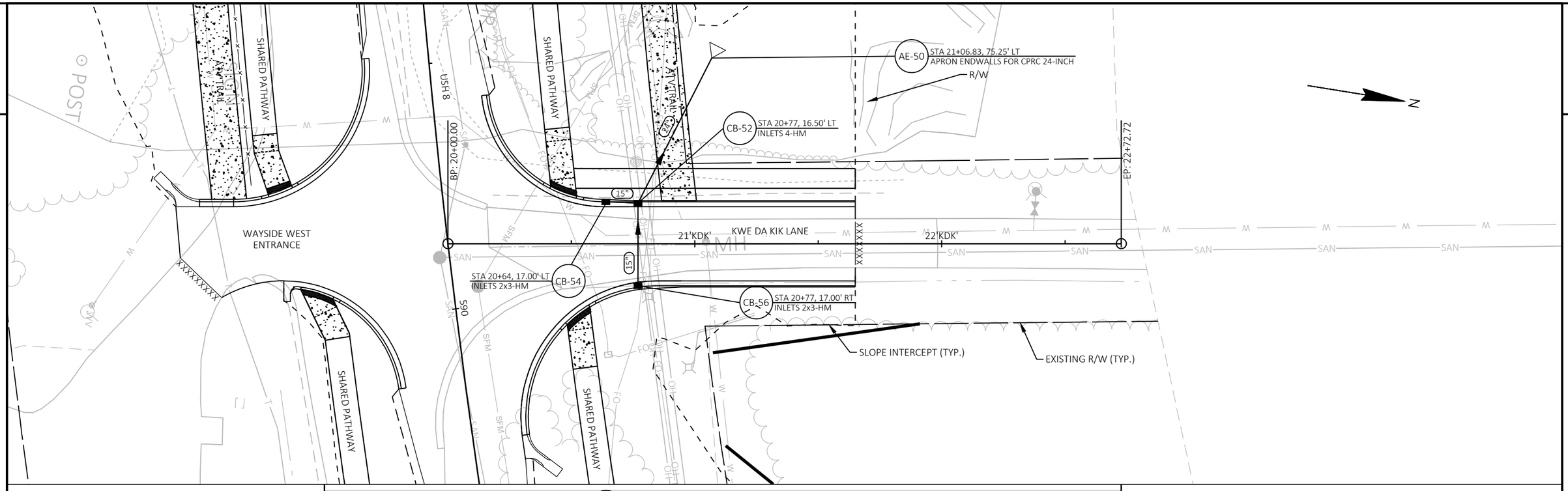


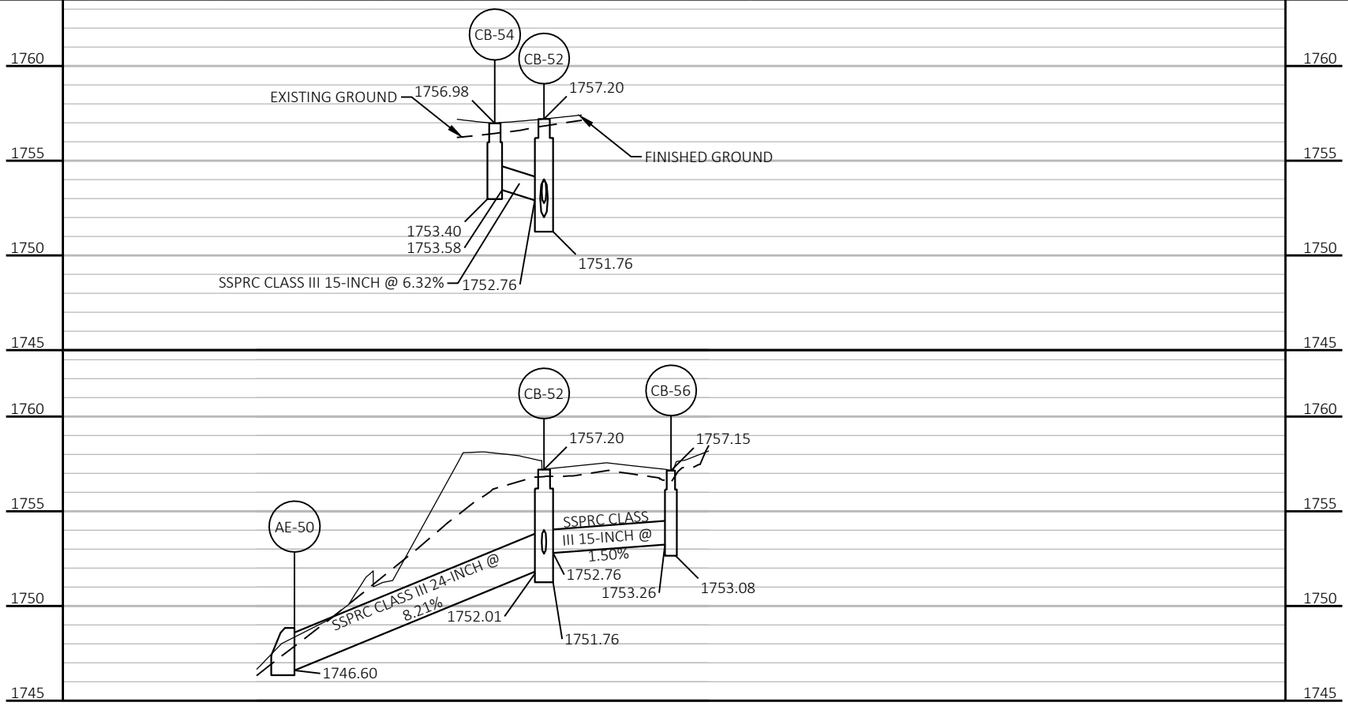


PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	STORM SEWER - USH 8	SHEET 58	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\022501-SS.DWG
LAYOUT NAME - 01
PLOT DATE : 10/23/2024 8:20 PM
PLOT BY : ADAM SARAUER
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 41

2

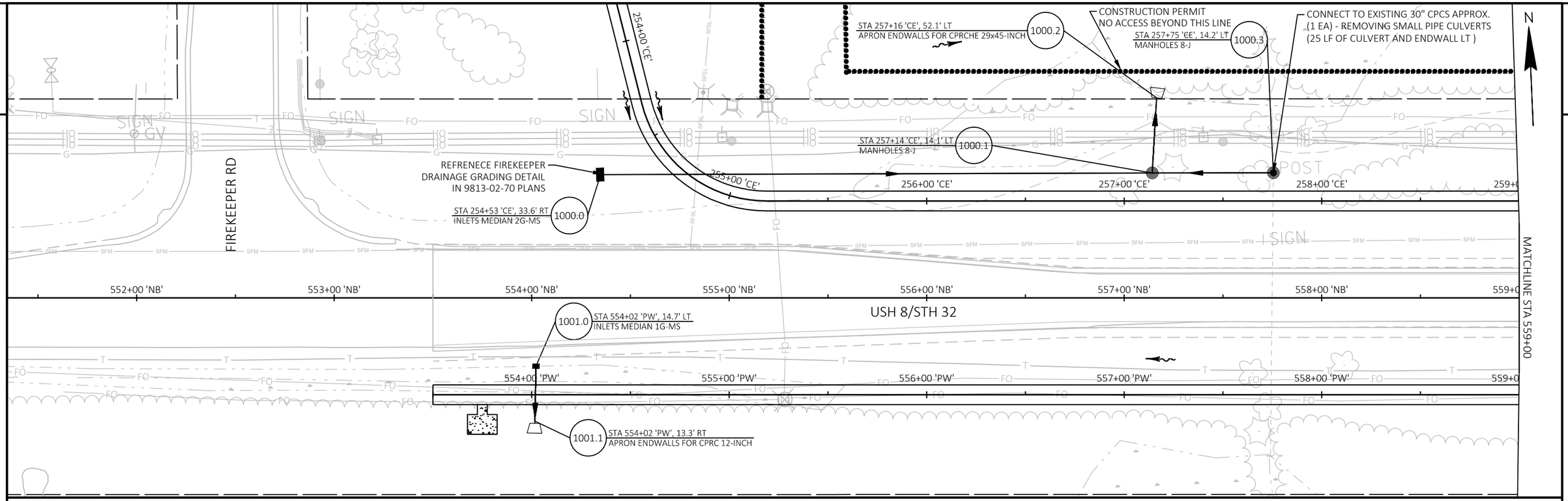


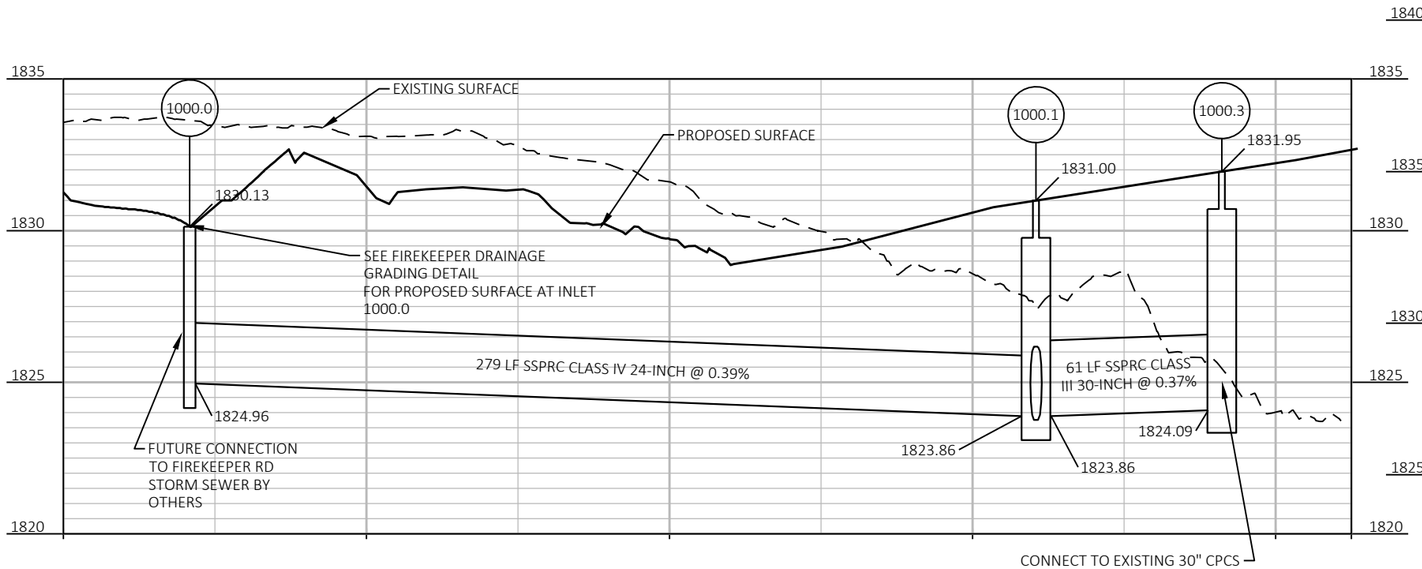


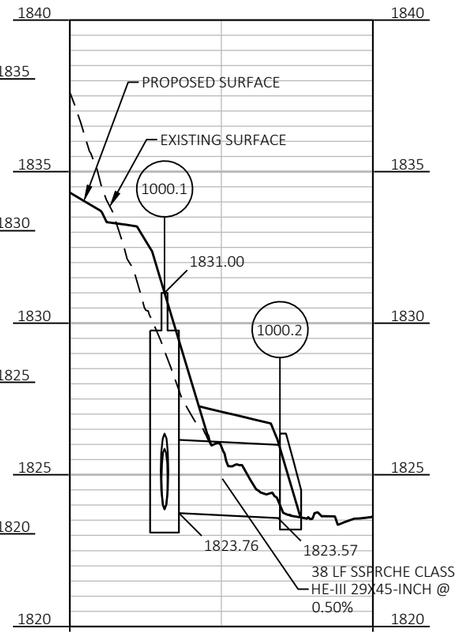
PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	STORM SEWER - KWE DA KIK LANE	SHEET 59	E

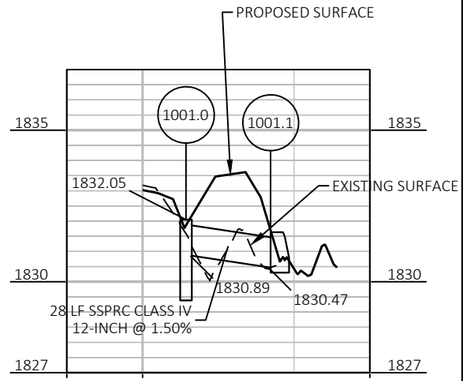
FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\022501-SS-KDK.DWG
LAYOUT NAME - 01

PLOT DATE : 12/17/2024 11:05 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:40 FT



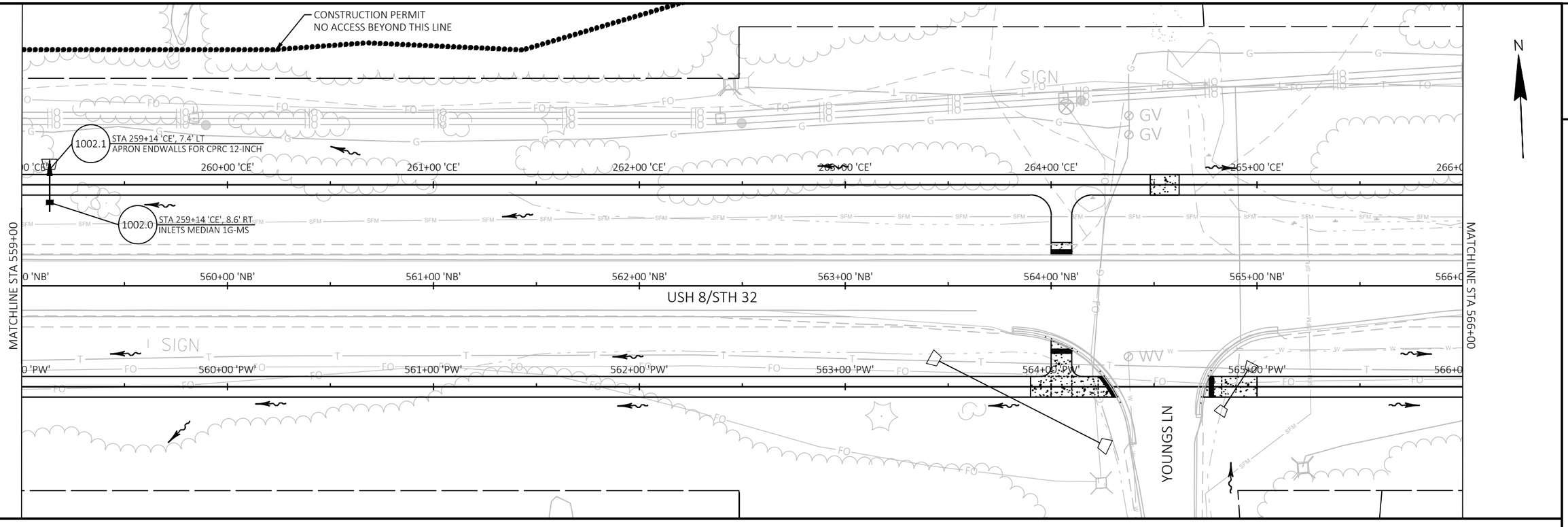


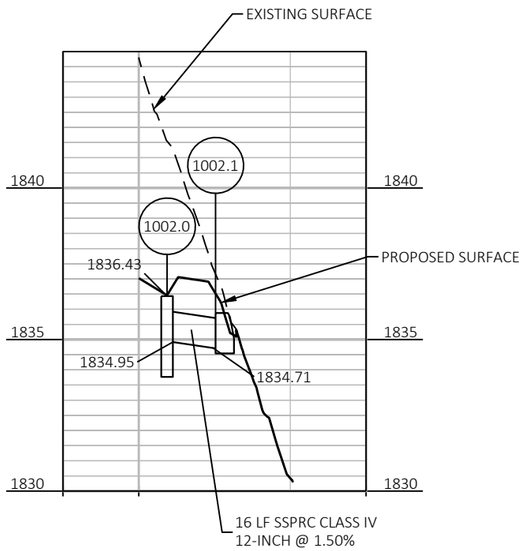




PROJECT NO: 1590-18-71	HWY: USH 8	COUNTY: FOREST	STORM SEWER	SHEET 60	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\022501-SS.DWG
LAYOUT NAME - SS-01
PLOT DATE : 12/18/2024 1:16 PM
PLOT BY : ARIELLE LEWIEN
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44





PROJECT NO: 1590-18-71	HWY: USH 8	COUNTY: FOREST	STORM SEWER	SHEET 61	E

2

N

MATCHLINE STA 566+00

MATCHLINE STA 573+00

POST

RIPRAP

MH SAN

EVERY-BODYS RD

271+00 'CE'

270+00 'CE'

269+00 'CE'

268+00 'CE'

267+00 'CE'

STA 267+01 'CE', 10.0' LT
INLETS MEDIAN 1G-MS
1003.0

1003.1
STA 267+66 'CE', 9.1' LT
INLETS MEDIAN 1G-MS

1003.2
STA 267+69 'CE', 15.0' RT
APRON ENDWALLS FOR CPRC 12-INCH

PROPOSED RAILING (TYP.)
SEE 9813-02-70 PLANS

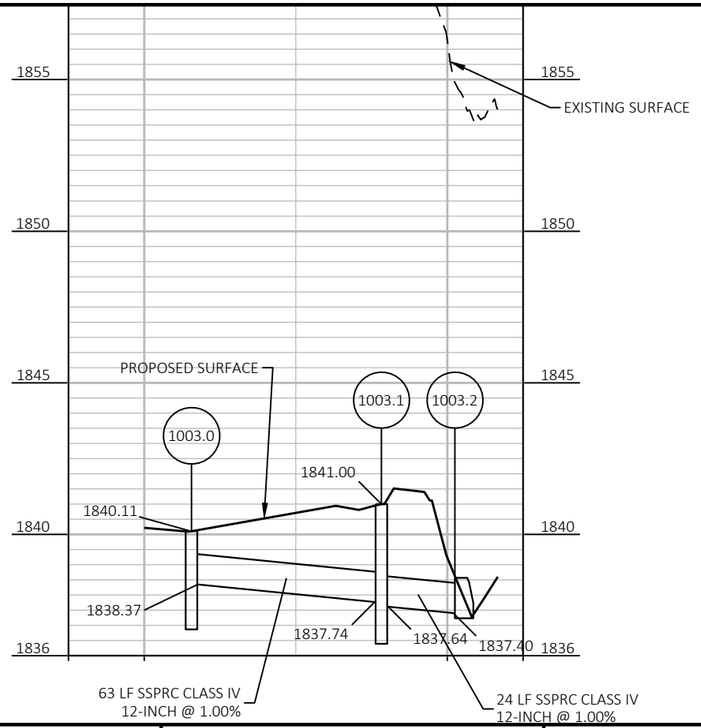
567+00 'NB' 568+00 'NB' 569+00 'NB' 570+00 'NB' 571+00 'NB' 572+00 'NB'

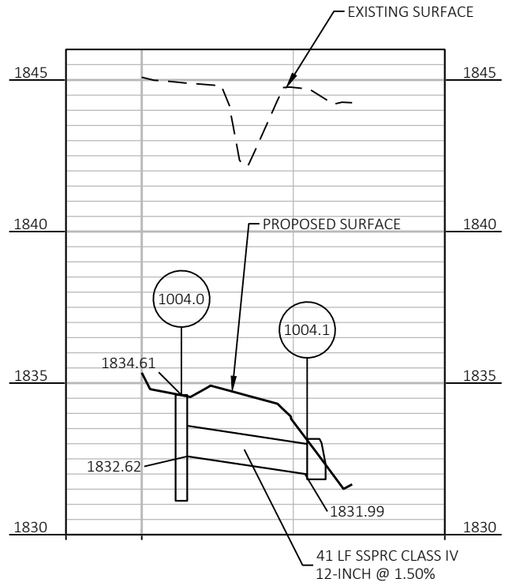
USH 8/STH 32

567+00 'PW' 568+00 'PW' 569+00 'PW' 570+00 'PW' 571+00 'PW' 572+00 'PW'

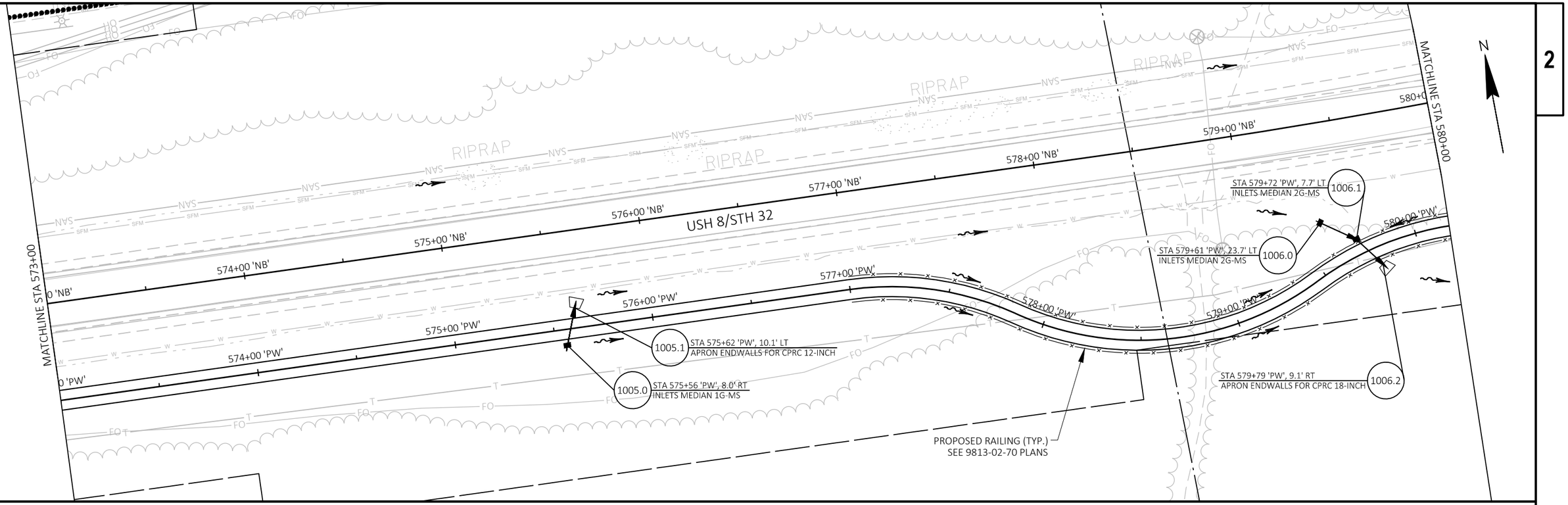
STA 570+35 'PW', 9.3' RT
INLETS MEDIAN 1G-MS
1004.0

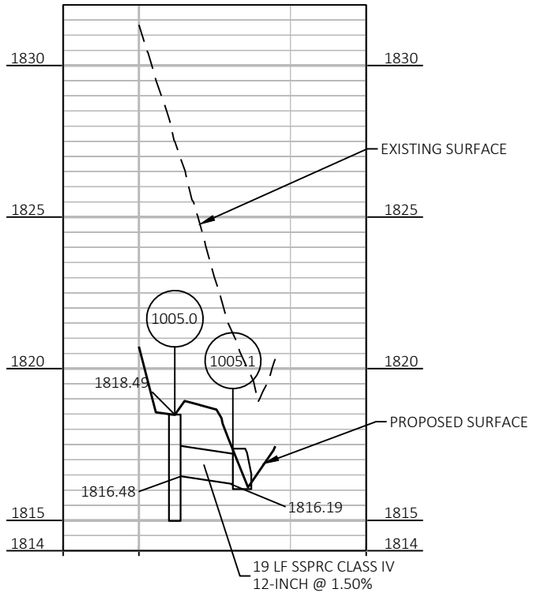
1004.1
STA 570+72 'PW', 9.4' LT
APRON ENDWALLS FOR CPRC 12-INCH

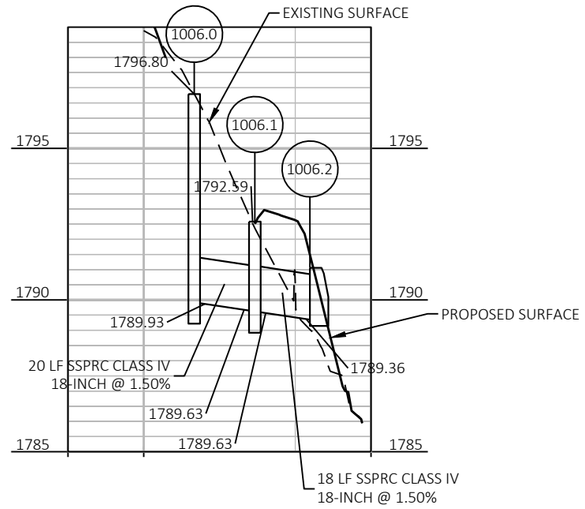




PROJECT NO: 1590-18-71	HWY: USH 8	COUNTY: FOREST	STORM SEWER	SHEET 62	E





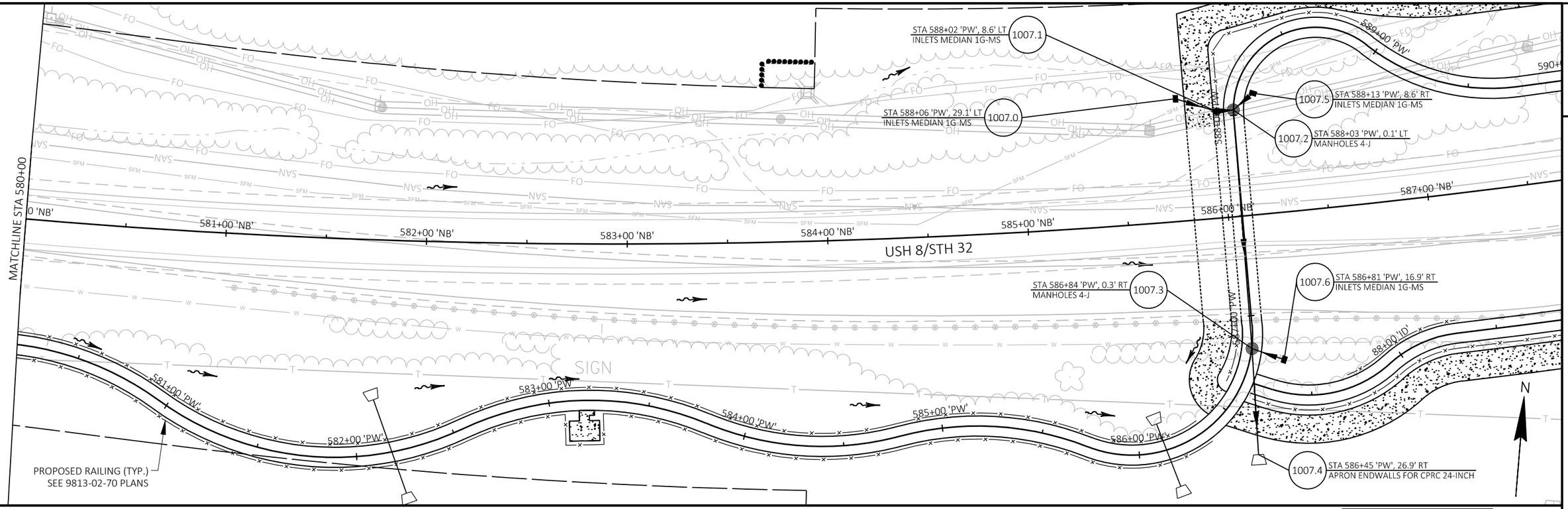


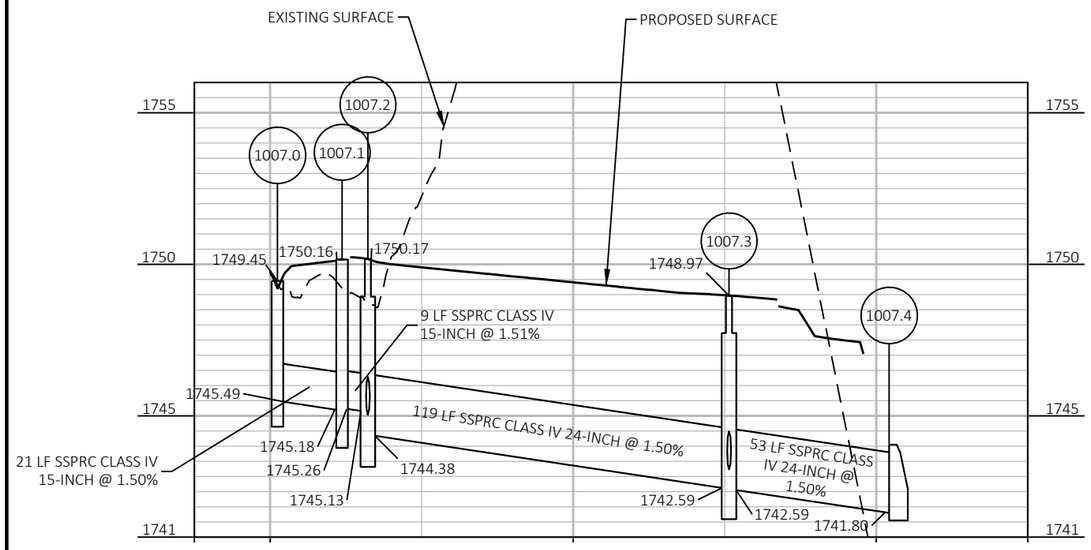
PROJECT NO: 1590-18-71	HWY: USH 8	COUNTY: FOREST	STORM SEWER	SHEET 63	E

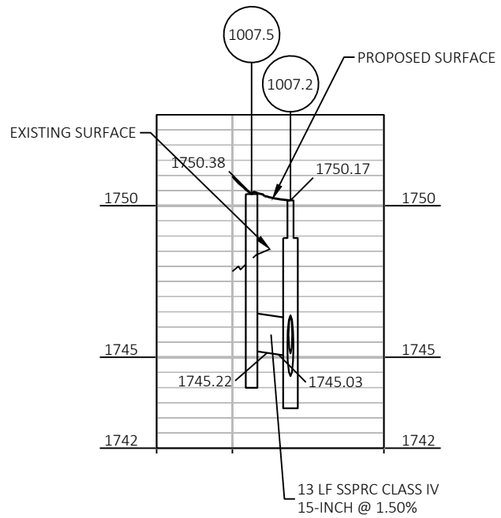
FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\022501-SS.DWG
LAYOUT NAME - SS-04

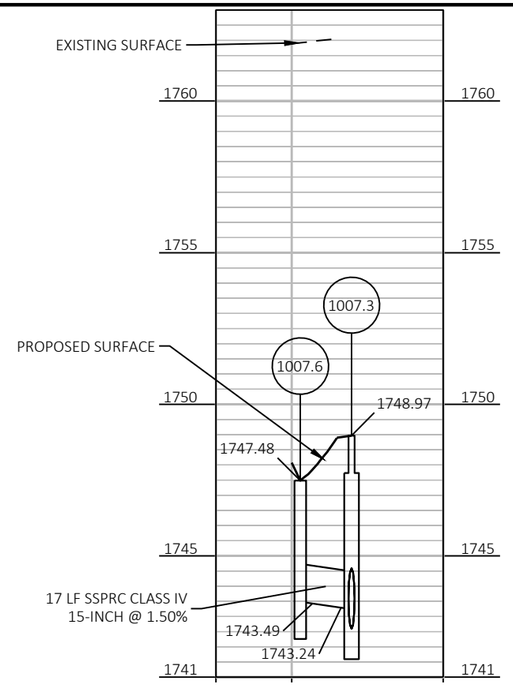
PLOT DATE : 12/18/2024 1:18 PM PLOT BY : ARIELLE LEWIEN PLOT NAME : PLOT SCALE : 1 IN:50 FT

2



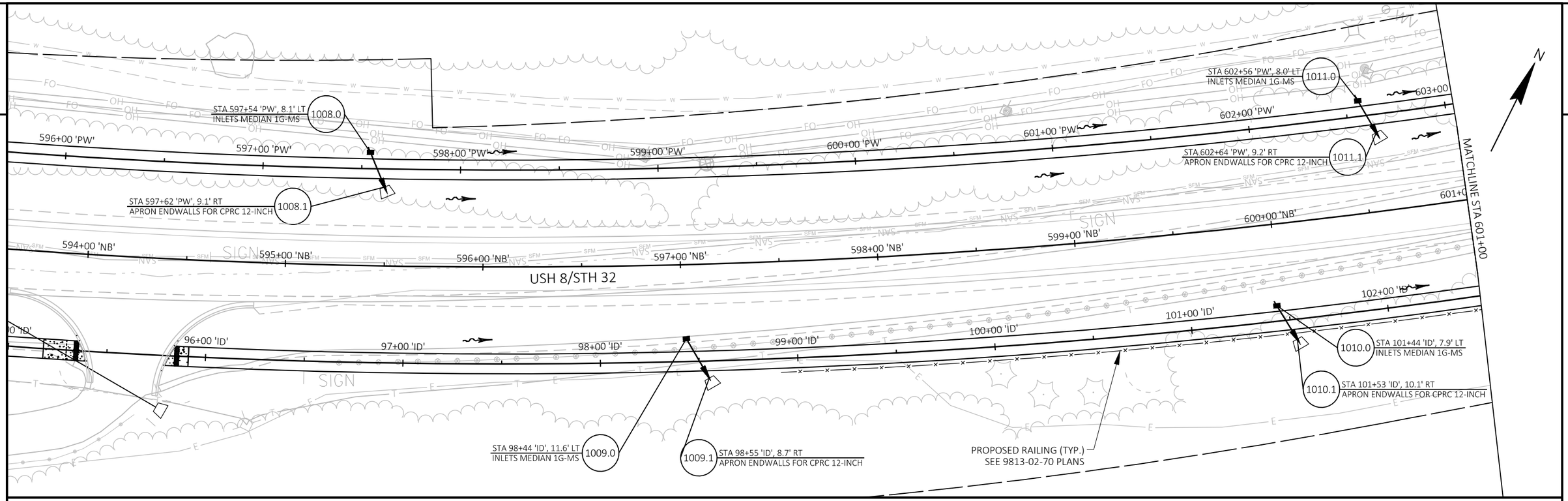


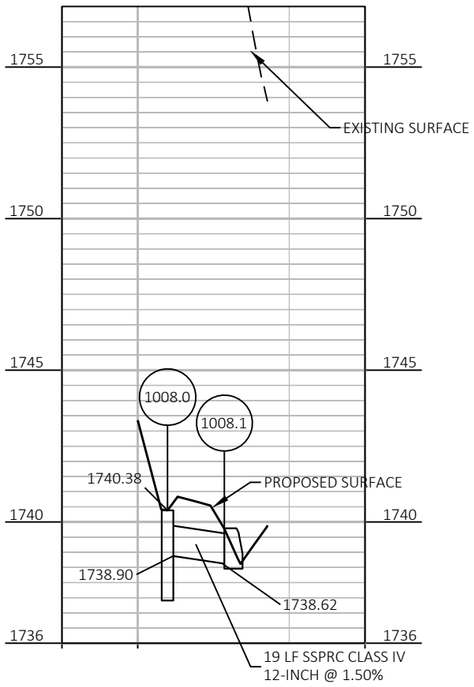


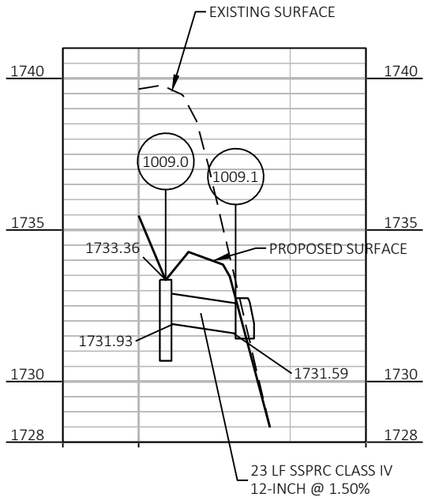


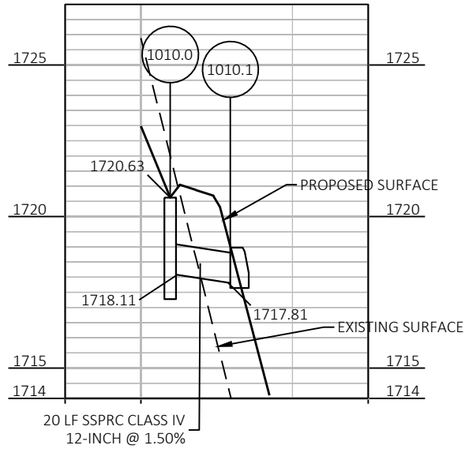
PROJECT NO: 1590-18-71	HWY: USH 8	COUNTY: FOREST	STORM SEWER	SHEET 64	E

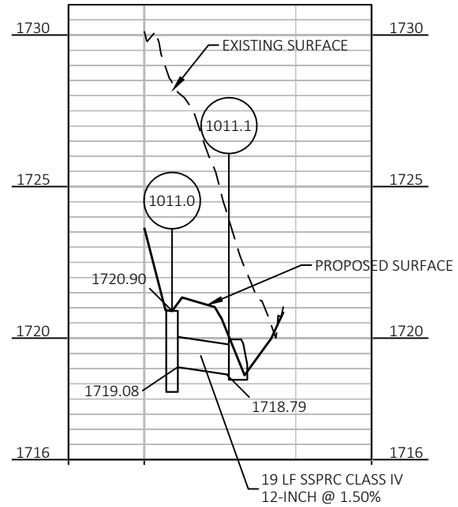
FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\022501-SS.DWG
LAYOUT NAME - SS-05
PLOT DATE : 12/18/2024 1:19 PM
PLOT BY : ARIELLE LEWIEN
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44





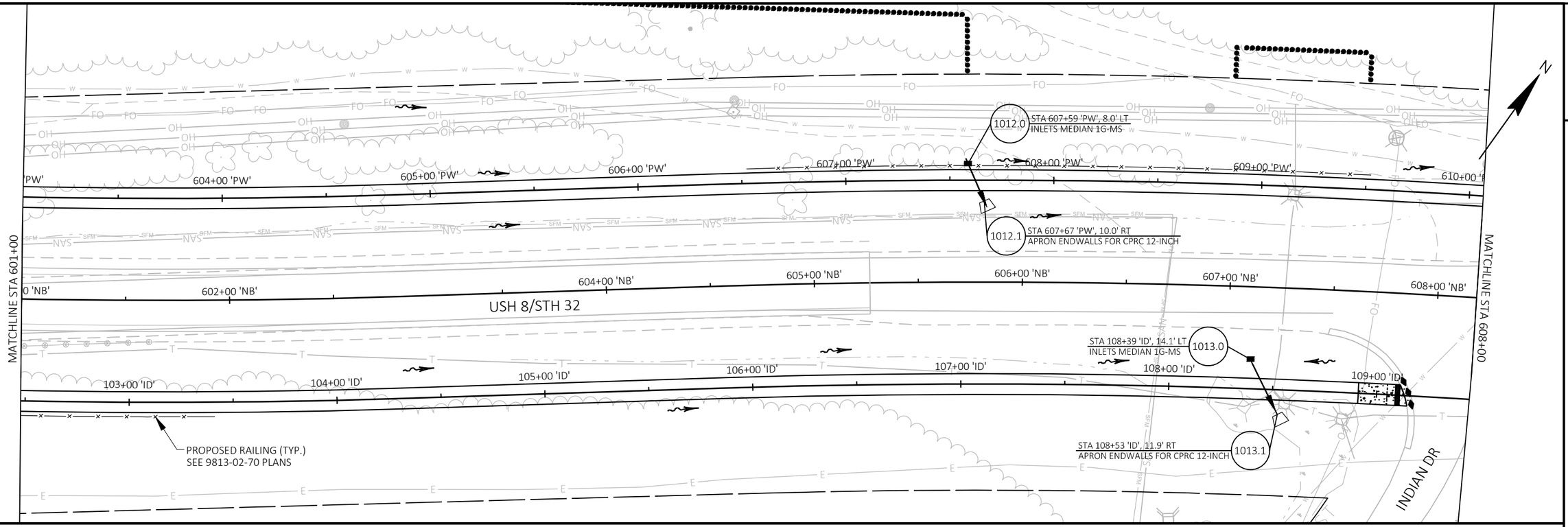


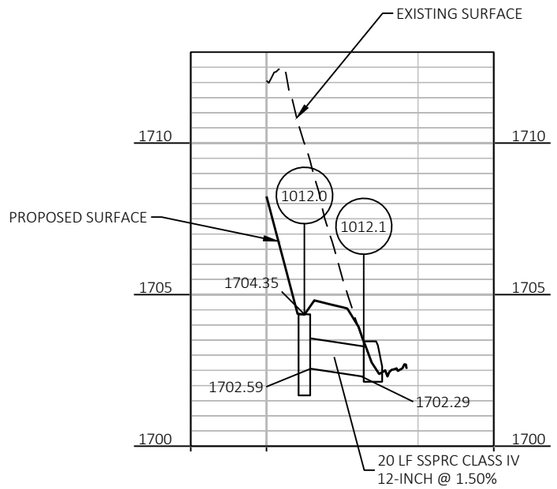


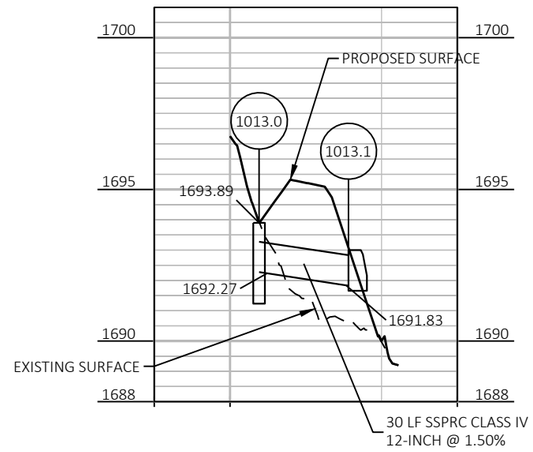


PROJECT NO: 1590-18-71	HWY: USH 8	COUNTY: FOREST	STORM SEWER	SHEET 65	E

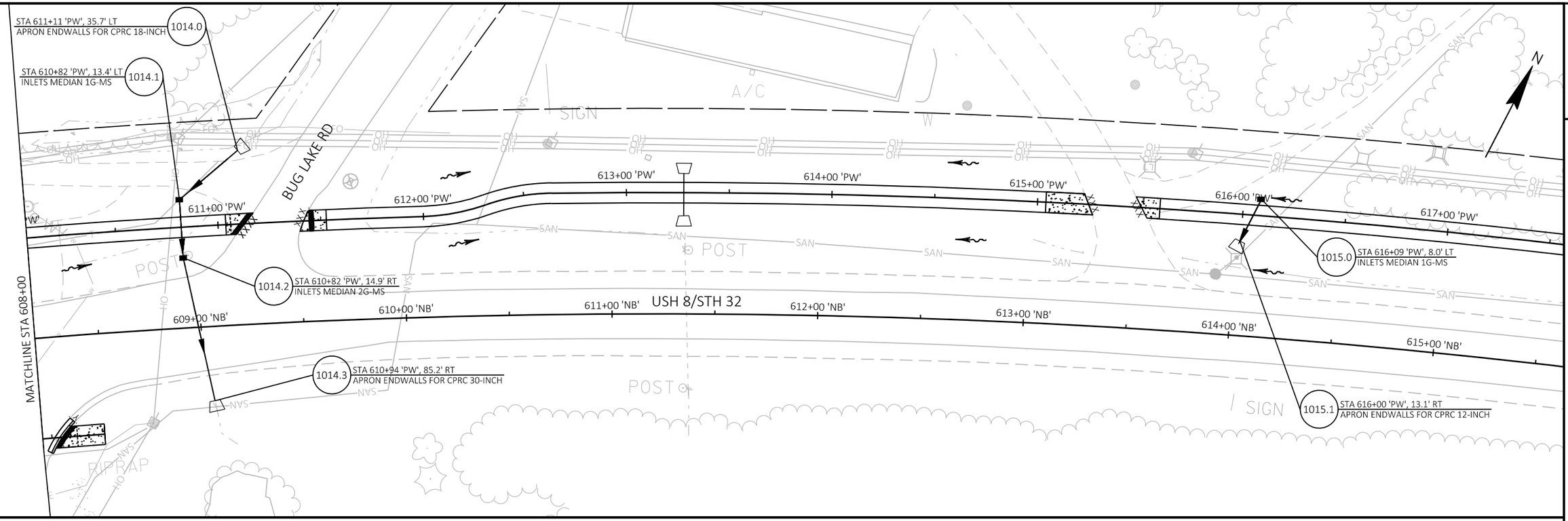
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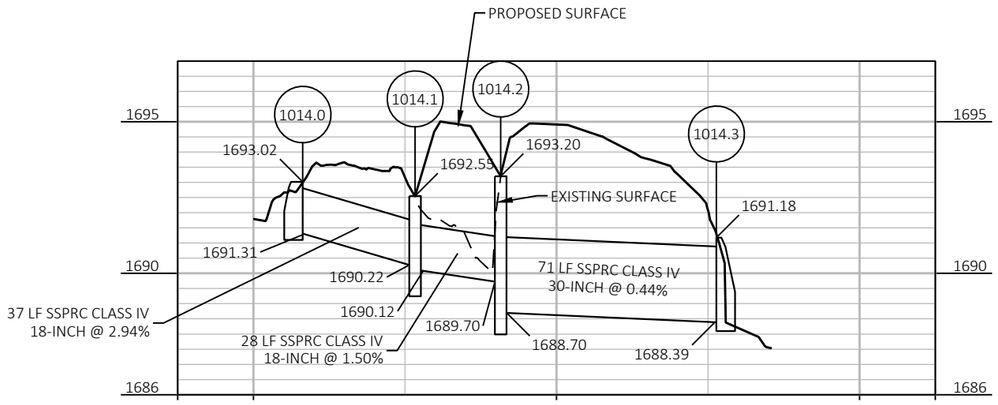


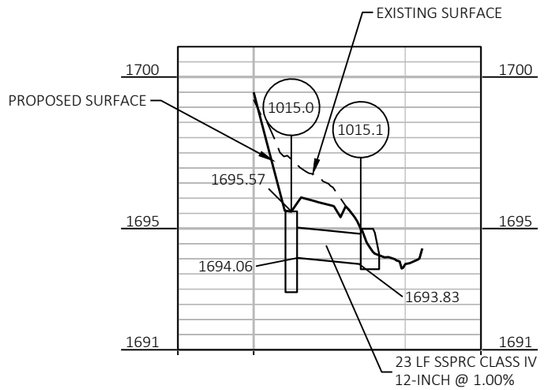




PROJECT NO: 1590-18-71	HWY: USH 8	COUNTY: FOREST	STORM SEWER	SHEET 66	E







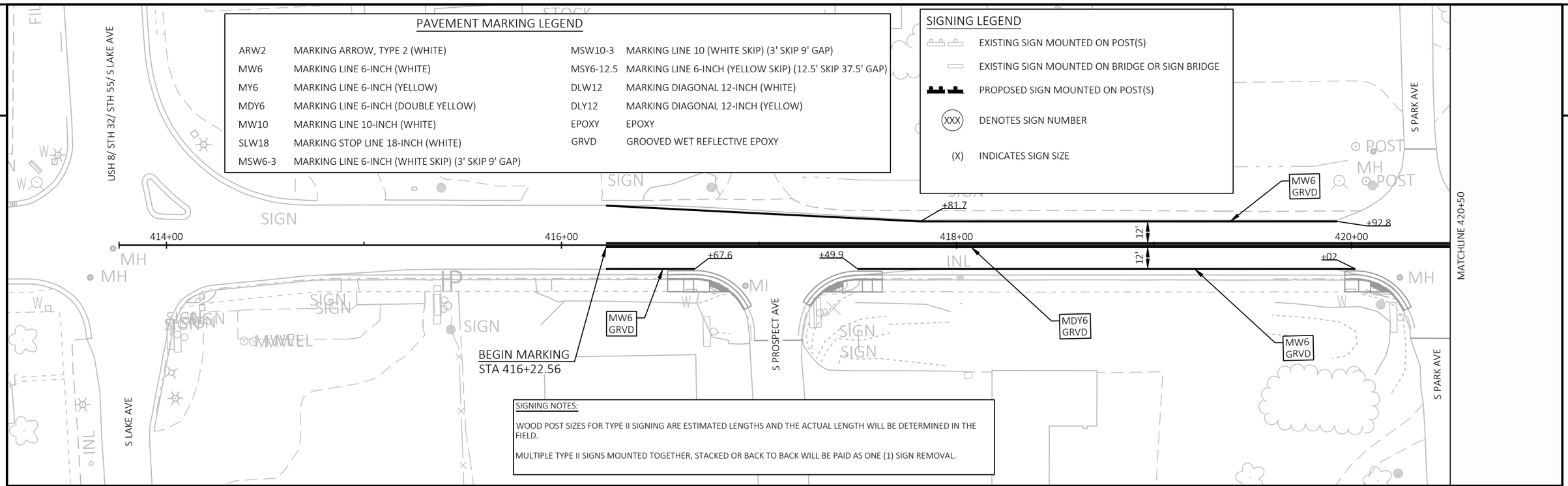
PROJECT NO: 1590-18-71	HWY: USH 8	COUNTY: FOREST	STORM SEWER	SHEET 67	E

PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MSW10-3	MARKING LINE 10 (WHITE SKIP) (3' SKIP 9' GAP)
MW6	MARKING LINE 6-INCH (WHITE)	MSY6-12.5	MARKING LINE 6-INCH (YELLOW SKIP) (12.5' SKIP 37.5' GAP)
MY6	MARKING LINE 6-INCH (YELLOW)	DLW12	MARKING DIAGONAL 12-INCH (WHITE)
MDY6	MARKING LINE 6-INCH (DOUBLE YELLOW)	DLY12	MARKING DIAGONAL 12-INCH (YELLOW)
MW10	MARKING LINE 10-INCH (WHITE)	EPOXY	EPOXY
SLW18	MARKING STOP LINE 18-INCH (WHITE)	GRVD	GROOVED WET REFLECTIVE EPOXY
MSW6-3	MARKING LINE 6-INCH (WHITE SKIP) (3' SKIP 9' GAP)		

SIGNING LEGEND

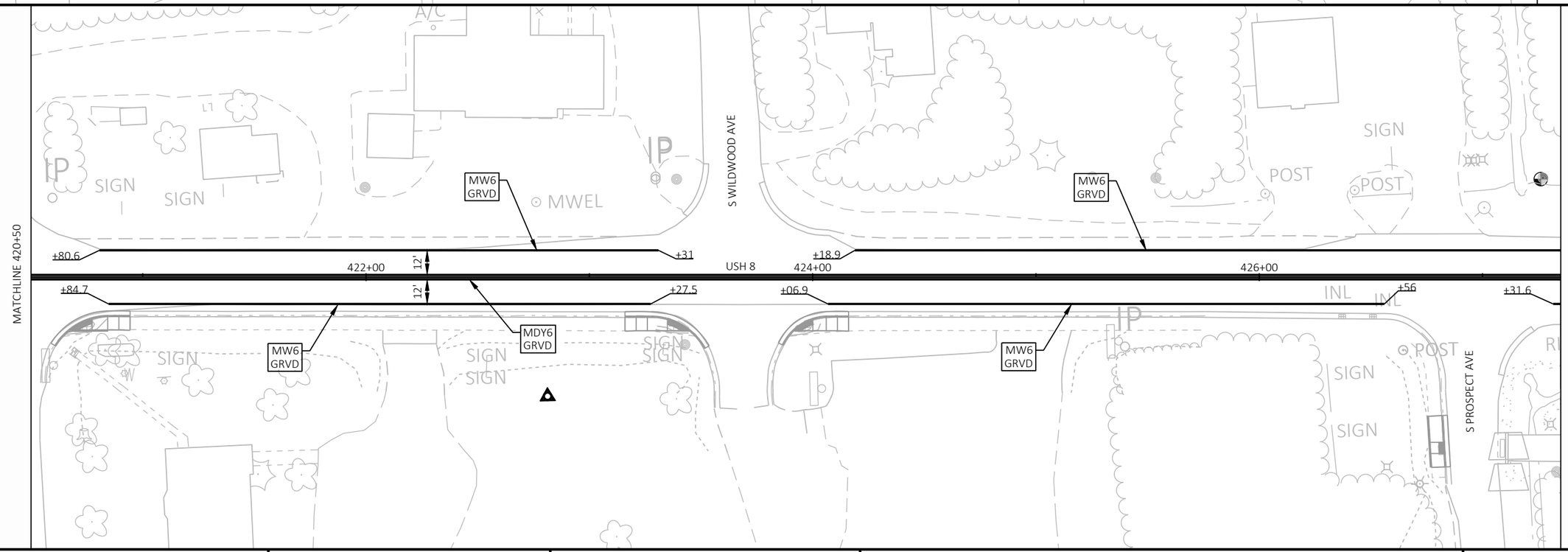
- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE



SIGNING NOTES:

WOOD POST SIZES FOR TYPE II SIGNING ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

MULTIPLE TYPE II SIGNS MOUNTED TOGETHER, STACKED OR BACK TO BACK WILL BE PAID AS ONE (1) SIGN REMOVAL.



PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 68	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 01

PLOT DATE : 10/24/2024 2:32 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

2

SIGNING LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

INSTALL R3-9B 24"X36" CENTER LANE ONLY END (1) R3-9D 24"X6" (1A)

REMOVE (3)

INSTALL R3-9B 24"X36" CENTER LANE ONLY BEGIN (2) R3-9C 24"X6" (2A)

REMOVE (4) SLOWER TRAFFIC KEEP RIGHT

MATCHLINE 427+35

MATCHLINE 434+00

MATCHLINE 434+00

MATCHLINE 440+75

MDY6 GRVD

DLY12 EPOXY

MW6 GRVD

MW6 GRVD

ARW2 EPOXY

MYS6-12.5 GRVD

MW6 GRVD

MY6 GRVD

ARW2 EPOXY

MY6 GRVD

MW6 GRVD

MSY6-12.5 GRVD

MW6 GRVD

+69.4

+69.7

428+00

25'

45°

+15

+15

+11.5

430+00

+09.5

12'

14'

12'

432+00

+52.5

434

+56

436+00

438+00

440+00

+00

RIPRAP

RIPRAP

FOOTBRIDGE

FOOTBRIDGE

SIGN

SIGN

MH

MP

MP

PIONEER PLAZA ENTRANCE

PIONEER PLAZA ENTRANCE

W11-6 (4A) (4B)

SEE CONSTRUCTION DETAILS, "SNOWMOBILE TRAIL CROSSING"

PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MSW10-3	MARKING LINE 10 (WHITE SKIP) (3' SKIP 9' GAP)
MW6	MARKING LINE 6-INCH (WHITE)	MSY6-12.5	MARKING LINE 6-INCH (YELLOW SKIP) (12.5' SKIP 37.5' GAP)
MY6	MARKING LINE 6-INCH (YELLOW)	DLW12	MARKING DIAGONAL 12-INCH (WHITE)
MDY6	MARKING LINE 6-INCH (DOUBLE YELLOW)	DLY12	MARKING DIAGONAL 12-INCH (YELLOW)
MW10	MARKING LINE 10-INCH (WHITE)	EPOXY	EPOXY
SLW18	MARKING STOP LINE 18-INCH (WHITE)	GRVD	GROOVED WET REFLECTIVE EPOXY
MSW6-3	MARKING LINE 6-INCH (WHITE SKIP) (3' SKIP 9' GAP)		

SIGNING NOTES:

WOOD POST SIZES FOR TYPE II SIGNING ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

MULTIPLE TYPE II SIGNS MOUNTED TOGETHER, STACKED OR BACK TO BACK WILL BE PAID AS ONE (1) SIGN REMOVAL.

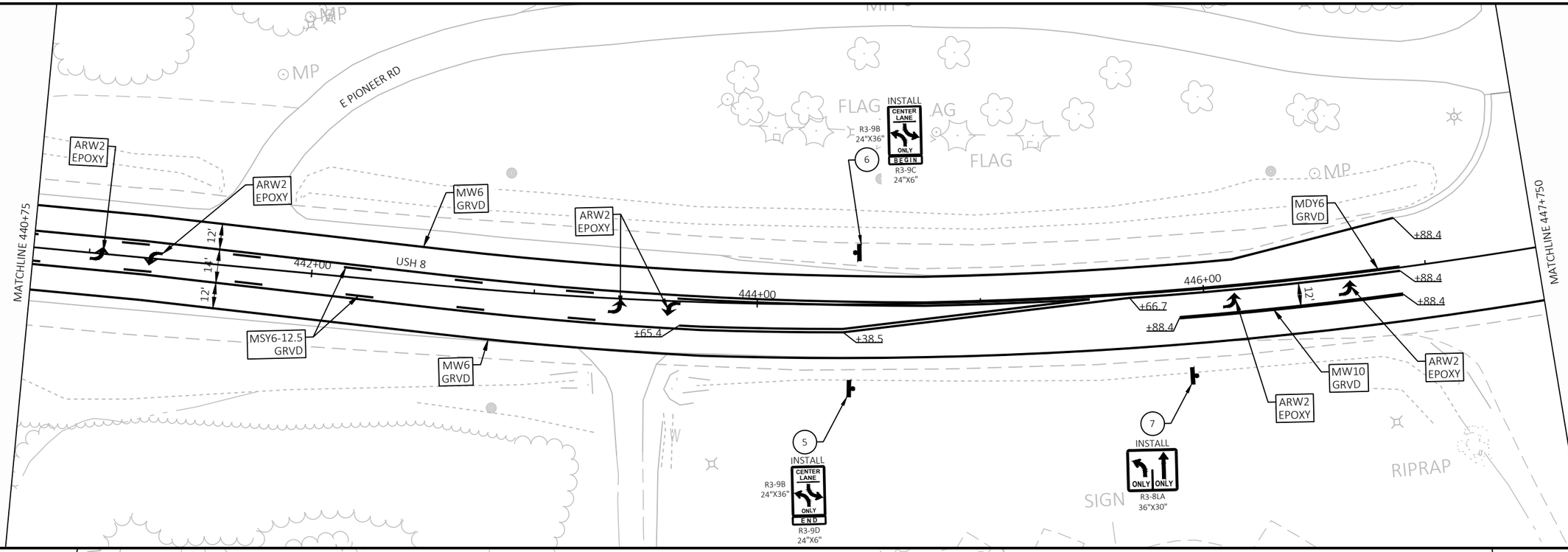
PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 69	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 02

PLOT DATE : 10/24/2024 2:32 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

2

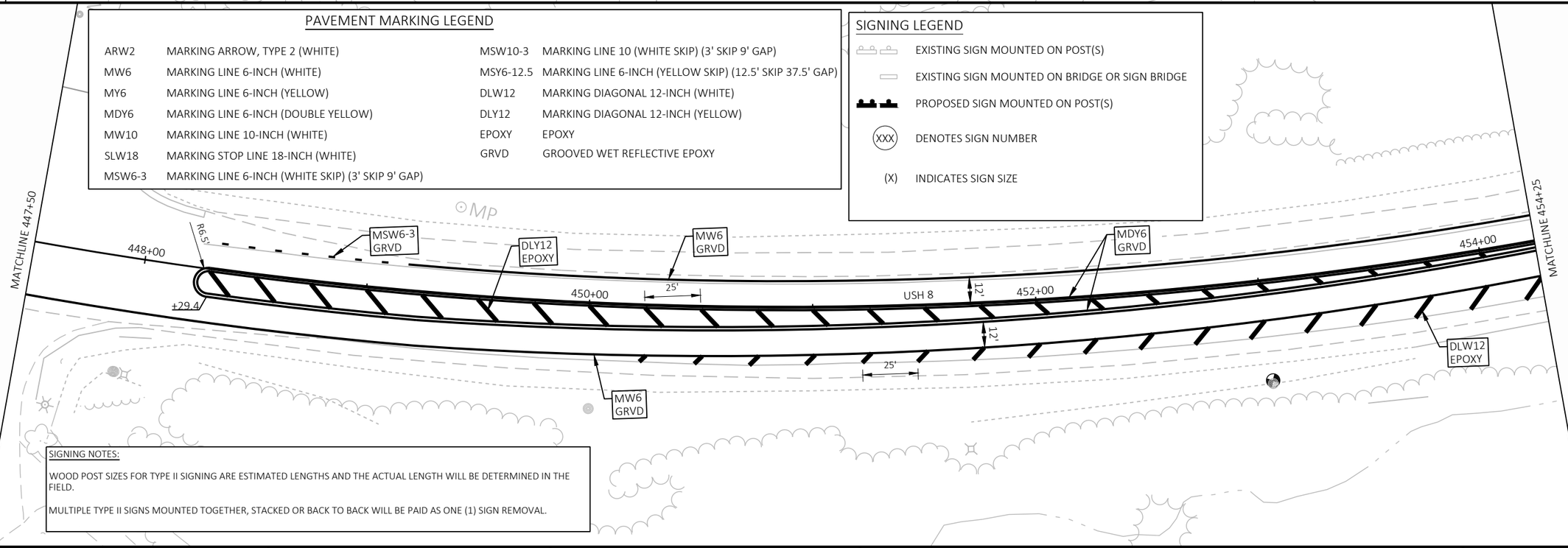


PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MSW10-3	MARKING LINE 10 (WHITE SKIP) (3' SKIP 9' GAP)
MW6	MARKING LINE 6-INCH (WHITE)	MSY6-12.5	MARKING LINE 6-INCH (YELLOW SKIP) (12.5' SKIP 37.5' GAP)
MY6	MARKING LINE 6-INCH (YELLOW)	DLW12	MARKING DIAGONAL 12-INCH (WHITE)
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MW10	MARKING LINE 10-INCH (WHITE)	EPOXY	EPOXY
SLW18	MARKING STOP LINE 18-INCH (WHITE)	GRVD	GROOVED WET REFLECTIVE EPOXY
MSW6-3	MARKING LINE 6-INCH (WHITE SKIP) (3' SKIP 9' GAP)		

SIGNING LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE



SIGNING NOTES:

WOOD POST SIZES FOR TYPE II SIGNING ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

MULTIPLE TYPE II SIGNS MOUNTED TOGETHER, STACKED OR BACK TO BACK WILL BE PAID AS ONE (1) SIGN REMOVAL.

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 70	E

PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MSW10-3	MARKING LINE 10 (WHITE SKIP) (3' SKIP 9' GAP)
MW6	MARKING LINE 6-INCH (WHITE)	MSY6-12.5	MARKING LINE 6-INCH (YELLOW SKIP) (12.5' SKIP 37.5' GAP)
MY6	MARKING LINE 6-INCH (YELLOW)	DLW12	MARKING DIAGONAL 12-INCH (WHITE)
MDY6	MARKING LINE 6-INCH (DOUBLE YELLOW)	DLY12	MARKING DIAGONAL 12-INCH (YELLOW)
MW10	MARKING LINE 10-INCH (WHITE)	EPOXY	EPOXY
SLW18	MARKING STOP LINE 18-INCH (WHITE)	GRVD	GROOVED WET REFLECTIVE EPOXY
MSW6-3	MARKING LINE 6-INCH (WHITE SKIP) (3' SKIP 9' GAP)		

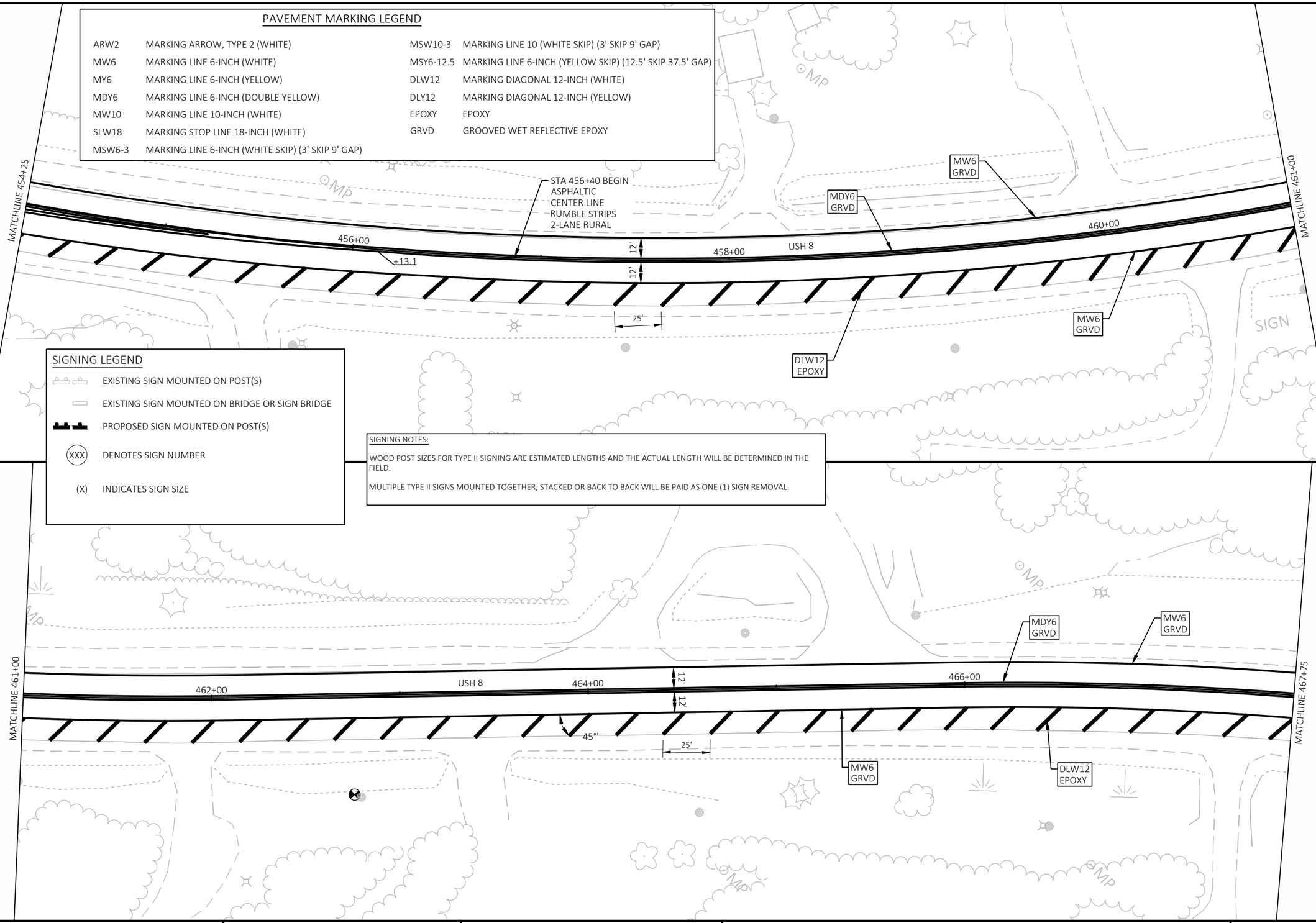
SIGNING LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

SIGNING NOTES:

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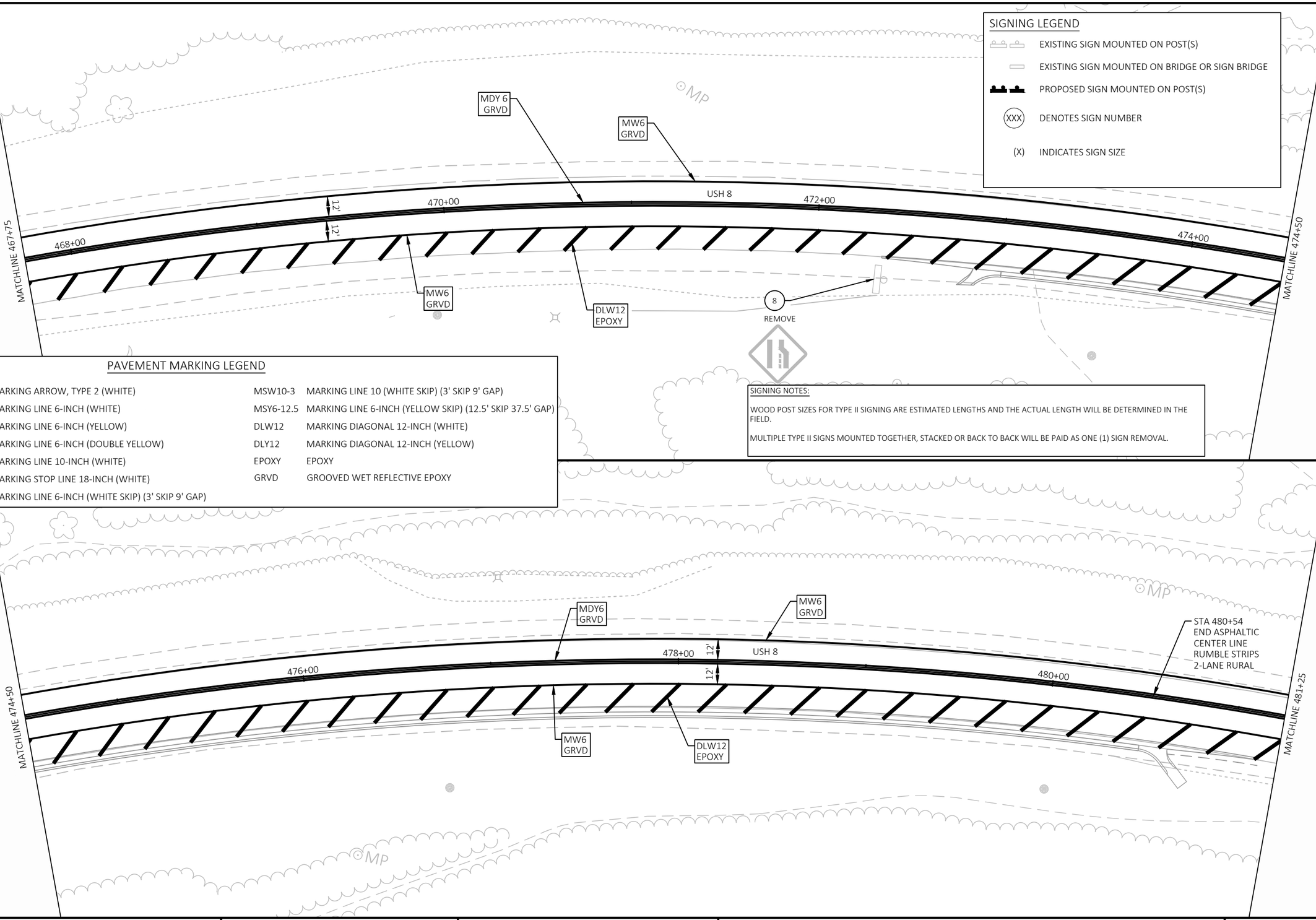


PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 71	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 04

PLOT DATE : 10/24/2024 2:32 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:50 FT

2



SIGNING LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE

PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MSW10-3	MARKING LINE 10 (WHITE SKIP) (3' SKIP 9' GAP)
MW6	MARKING LINE 6-INCH (WHITE)	MSY6-12.5	MARKING LINE 6-INCH (YELLOW SKIP) (12.5' SKIP 37.5' GAP)
MY6	MARKING LINE 6-INCH (YELLOW)	DLW12	MARKING DIAGONAL 12-INCH (WHITE)
MDY6	MARKING LINE 6-INCH (DOUBLE YELLOW)	DLY12	MARKING DIAGONAL 12-INCH (YELLOW)
MW10	MARKING LINE 10-INCH (WHITE)	EPOXY	EPOXY
SLW18	MARKING STOP LINE 18-INCH (WHITE)	GRVD	GROOVED WET REFLECTIVE EPOXY
MSW6-3	MARKING LINE 6-INCH (WHITE SKIP) (3' SKIP 9' GAP)		

SIGNING NOTES:

WOOD POST SIZES FOR TYPE II SIGNING ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

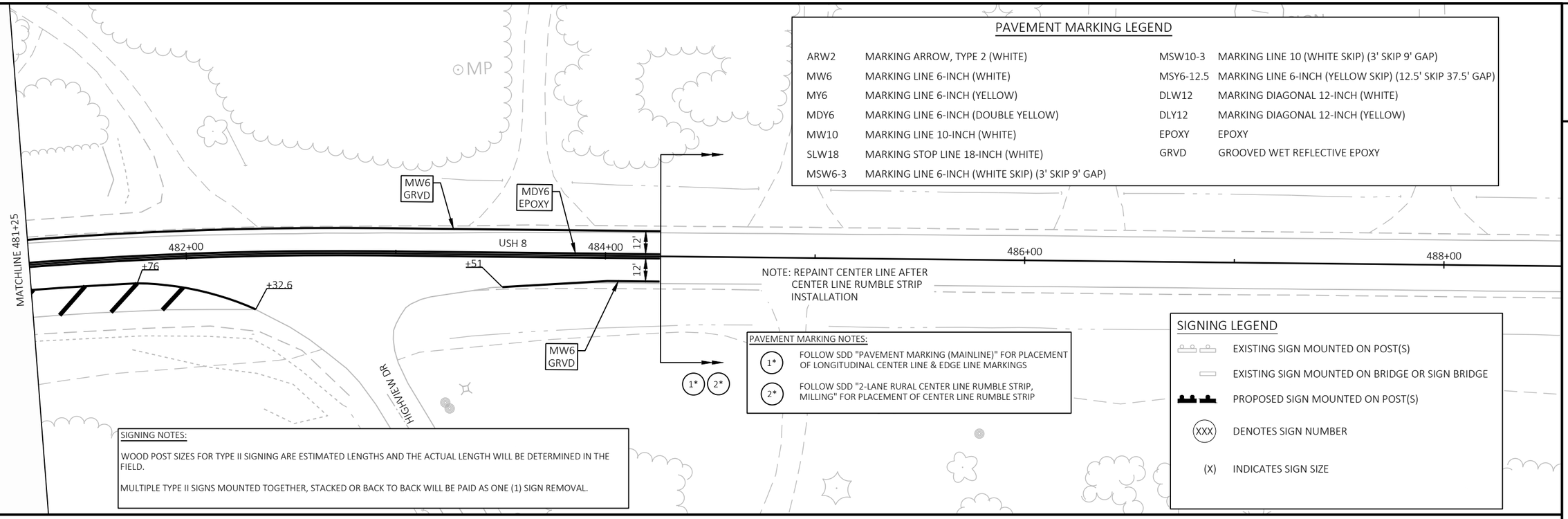
MULTIPLE TYPE II SIGNS MOUNTED TOGETHER, STACKED OR BACK TO BACK WILL BE PAID AS ONE (1) SIGN REMOVAL.

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 72	E

2

PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MSW10-3	MARKING LINE 10 (WHITE SKIP) (3' SKIP 9' GAP)
MW6	MARKING LINE 6-INCH (WHITE)	MSY6-12.5	MARKING LINE 6-INCH (YELLOW SKIP) (12.5' SKIP 37.5' GAP)
MY6	MARKING LINE 6-INCH (YELLOW)	DLW12	MARKING DIAGONAL 12-INCH (WHITE)
MDY6	MARKING LINE 6-INCH (DOUBLE YELLOW)	DLY12	MARKING DIAGONAL 12-INCH (YELLOW)
MW10	MARKING LINE 10-INCH (WHITE)	EPOXY	EPOXY
SLW18	MARKING STOP LINE 18-INCH (WHITE)	GRVD	GROOVED WET REFLECTIVE EPOXY
MSW6-3	MARKING LINE 6-INCH (WHITE SKIP) (3' SKIP 9' GAP)		



PAVEMENT MARKING NOTES:

1* FOLLOW SDD "PAVEMENT MARKING (MAINLINE)" FOR PLACEMENT OF LONGITUDINAL CENTER LINE & EDGE LINE MARKINGS

2* FOLLOW SDD "2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING" FOR PLACEMENT OF CENTER LINE RUMBLE STRIP

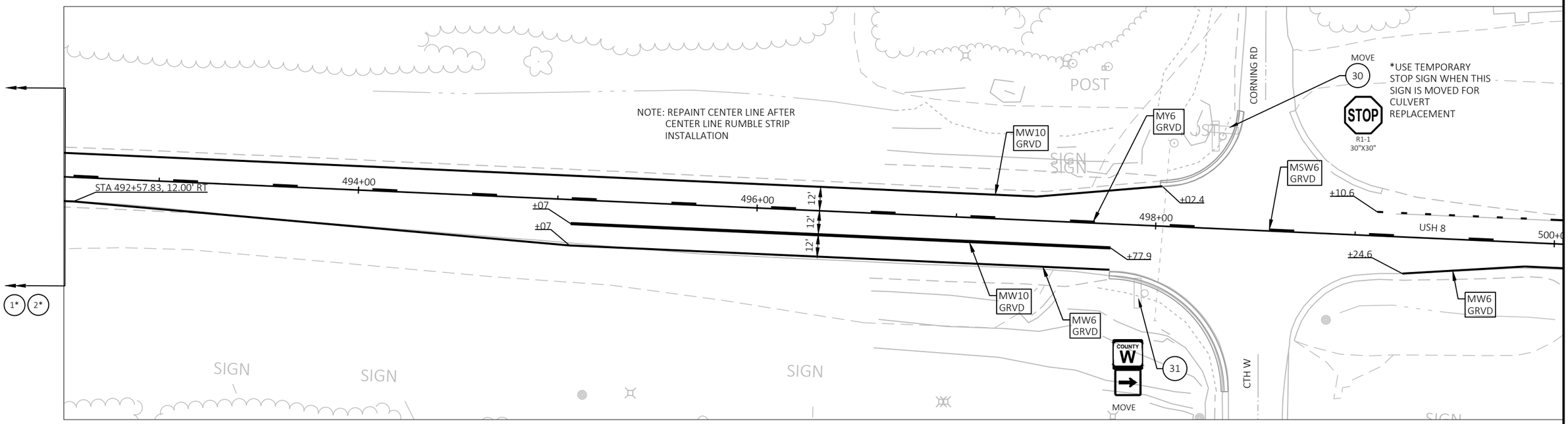
SIGNING NOTES:

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MULTIPLE TYPE II SIGNS MOUNTED TOGETHER, STACKED OR BACK TO BACK WILL BE PAID AS ONE (1) SIGN REMOVAL.

SIGNING LEGEND

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- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE



DETAIL "A" - SIGN MOVES FOR CULVERT REPLACEMENT AND RIGHT TURN LANE AT CTH W

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 73	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 06
PLOT DATE : 10/24/2024 2:32 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44

SIGNING NOTES:

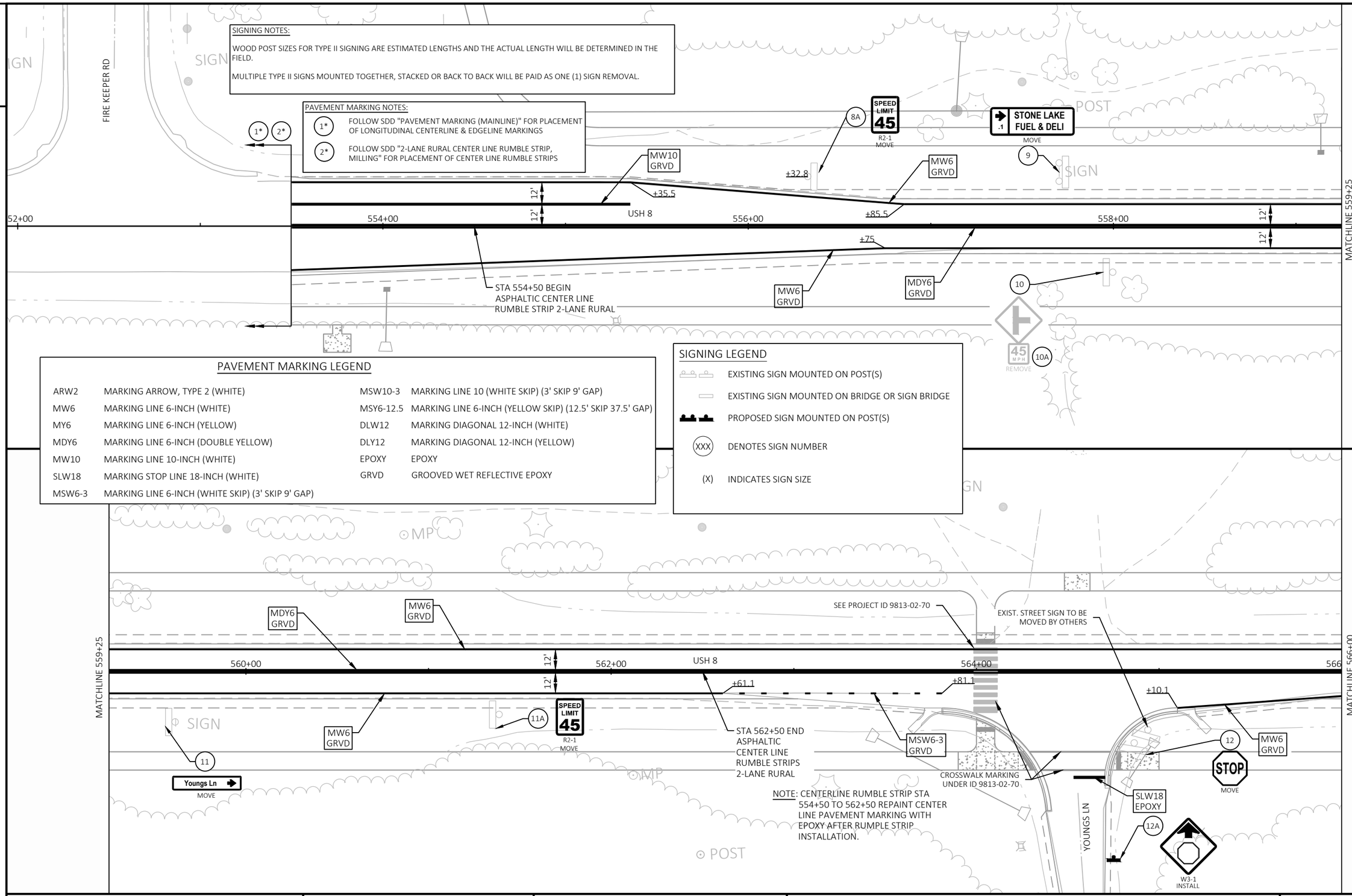
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MULTIPLE TYPE II SIGNS MOUNTED TOGETHER, STACKED OR BACK TO BACK WILL BE PAID AS ONE (1) SIGN REMOVAL.

PAVEMENT MARKING NOTES:

1* FOLLOW SDD "PAVEMENT MARKING (MAINLINE)" FOR PLACEMENT OF LONGITUDINAL CENTERLINE & EDGELINE MARKINGS

2* FOLLOW SDD "2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING" FOR PLACEMENT OF CENTER LINE RUMBLE STRIPS



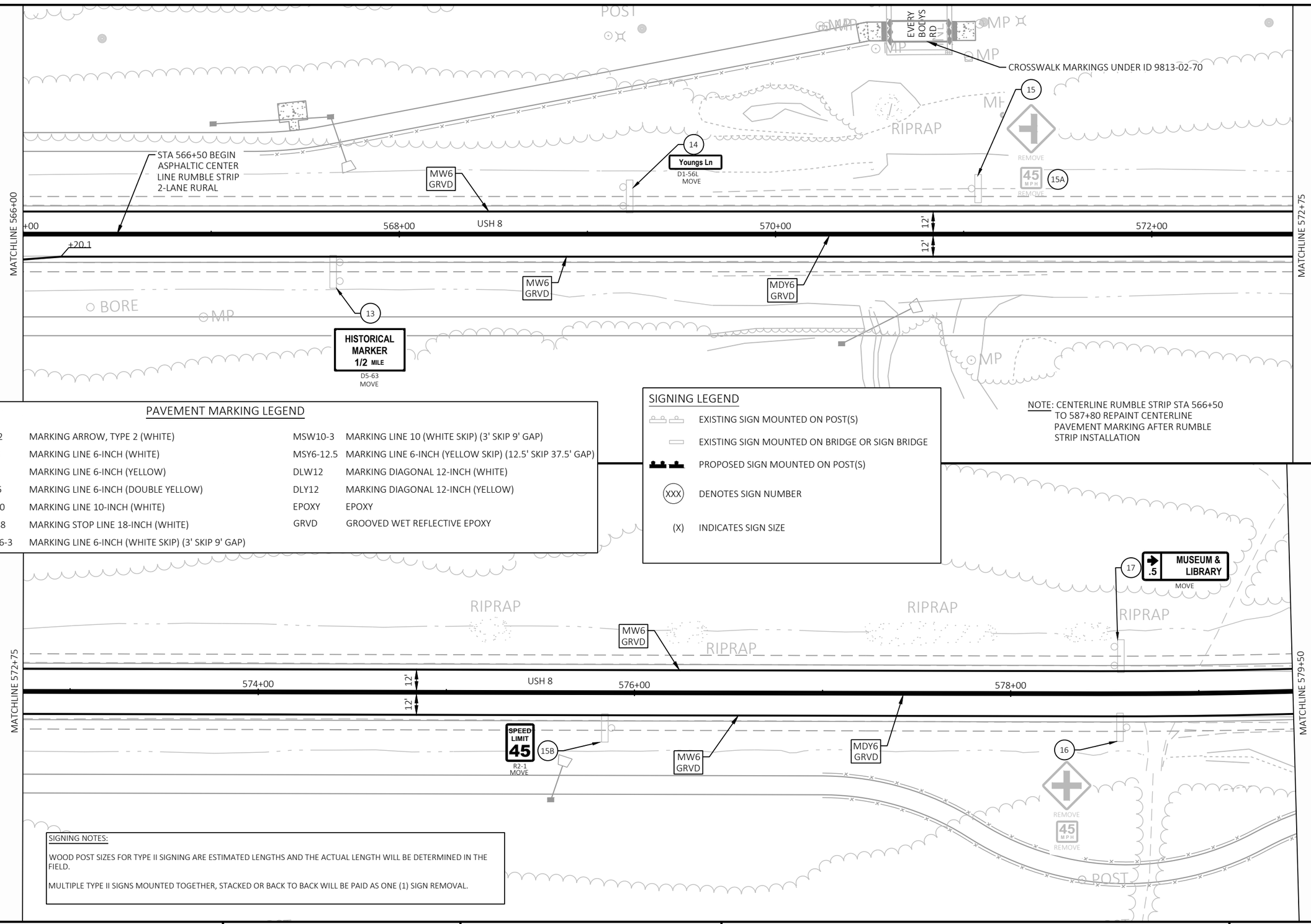
PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MSW10-3	MARKING LINE 10 (WHITE SKIP) (3' SKIP 9' GAP)
MW6	MARKING LINE 6-INCH (WHITE)	MSY6-12.5	MARKING LINE 6-INCH (YELLOW SKIP) (12.5' SKIP 37.5' GAP)
MY6	MARKING LINE 6-INCH (YELLOW)	DLW12	MARKING DIAGONAL 12-INCH (WHITE)
MDY6	MARKING LINE 6-INCH (DOUBLE YELLOW)	DLY12	MARKING DIAGONAL 12-INCH (YELLOW)
MW10	MARKING LINE 10-INCH (WHITE)	EPOXY	EPOXY
SLW18	MARKING STOP LINE 18-INCH (WHITE)	GRVD	GROOVED WET REFLECTIVE EPOXY
MSW6-3	MARKING LINE 6-INCH (WHITE SKIP) (3' SKIP 9' GAP)		

SIGNING LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 74	E



NOTE: CENTERLINE RUMBLE STRIP STA 566+50 TO 587+80 REPAINT CENTERLINE PAVEMENT MARKING AFTER RUMBLE STRIP INSTALLATION

PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MSW10-3	MARKING LINE 10 (WHITE SKIP) (3' SKIP 9' GAP)
MW6	MARKING LINE 6-INCH (WHITE)	MSY6-12.5	MARKING LINE 6-INCH (YELLOW SKIP) (12.5' SKIP 37.5' GAP)
MY6	MARKING LINE 6-INCH (YELLOW)	DLW12	MARKING DIAGONAL 12-INCH (WHITE)
MDY6	MARKING LINE 6-INCH (DOUBLE YELLOW)	DLY12	MARKING DIAGONAL 12-INCH (YELLOW)
MW10	MARKING LINE 10-INCH (WHITE)	EPOXY	EPOXY
SLW18	MARKING STOP LINE 18-INCH (WHITE)	GRVD	GROOVED WET REFLECTIVE EPOXY
MSW6-3	MARKING LINE 6-INCH (WHITE SKIP) (3' SKIP 9' GAP)		

SIGNING LEGEND

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- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
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- XXX — DENOTES SIGN NUMBER
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SIGNING NOTES:

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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 75	E

PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MSW10-3	MARKING LINE 10 (WHITE SKIP) (3' SKIP 9' GAP)
MW6	MARKING LINE 6-INCH (WHITE)	MSY6-12.5	MARKING LINE 6-INCH (YELLOW SKIP) (12.5' SKIP 37.5' GAP)
MY6	MARKING LINE 6-INCH (YELLOW)	DLW12	MARKING DIAGONAL 12-INCH (WHITE)
MDY6	MARKING LINE 6-INCH (DOUBLE YELLOW)	DLY12	MARKING DIAGONAL 12-INCH (YELLOW)
MW10	MARKING LINE 10-INCH (WHITE)	EPOXY	EPOXY
SLW18	MARKING STOP LINE 18-INCH (WHITE)	GRVD	GROOVED WET REFLECTIVE EPOXY
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SIGNING LEGEND

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- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE

MATCHLINE 579+50

580+00

582+00

584+00

586+00

+96.7

MATCHLINE 586+25

USH 8

12'

12'

17B — SPEED LIMIT 45 — R2-1 — MOVE

MDY6 GRVD

17A — REMOVE

18 — Kwe da Kik Ln — MOVE

MDY6 GRVD

MDY6 GRVD

BORE

SIGNING NOTES:

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MULTIPLE TYPE II SIGNS MOUNTED TOGETHER, STACKED OR BACK TO BACK WILL BE PAID AS ONE (1) SIGN REMOVAL.

SLW18 EPOXY

KWE DA KIK LN

EXISTING 25 MPH SIGN TO BE MOVED BY OTHERS

CROSSWALK MARKING UNDER ID 9813-02-70

STA 587+80 BEGIN CENTER LINE RUMBLE STRIP

MOVE — STOP — R1-1 30"X30" — 20

MDY6 GRVD

MW6 GRVD

MSW6-3 GRVD

MDY6 GRVD

MW6 GRVD

MATCHLINE 586+25

+34.8

+15

588+00

USH 8

590+00

+54.5

+74.9

592+00

MATCHLINE 593+00

12'

12'

12'

+46.2

+95.7

+48.8

+29.2

MW6 GRVD

MSW10-3 GRVD

MW6 GRVD

MW10 GRVD

STA 587+80 END ASPHALTIC CENTER LINE RUMBLE STRIP 2-LANE RURAL

SEE PROJECT ID 9813-02-70

19 — HISTORICAL MARKER — D5-64R 60"X36" MOVE

WAYSIDE ENTRANCE

21 — STOP — R1-1 30"X30" MOVE

NOTE: CENTERLINE RUMBLE STRIP STA 566+50 TO 587+80 REPAINT CENTER LINE PAVEMENT MARKING AFTER RUMBLE STRIP INSTALLATION

21A — SPEED LIMIT 45 — R2-1 — MOVE

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 76	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 09

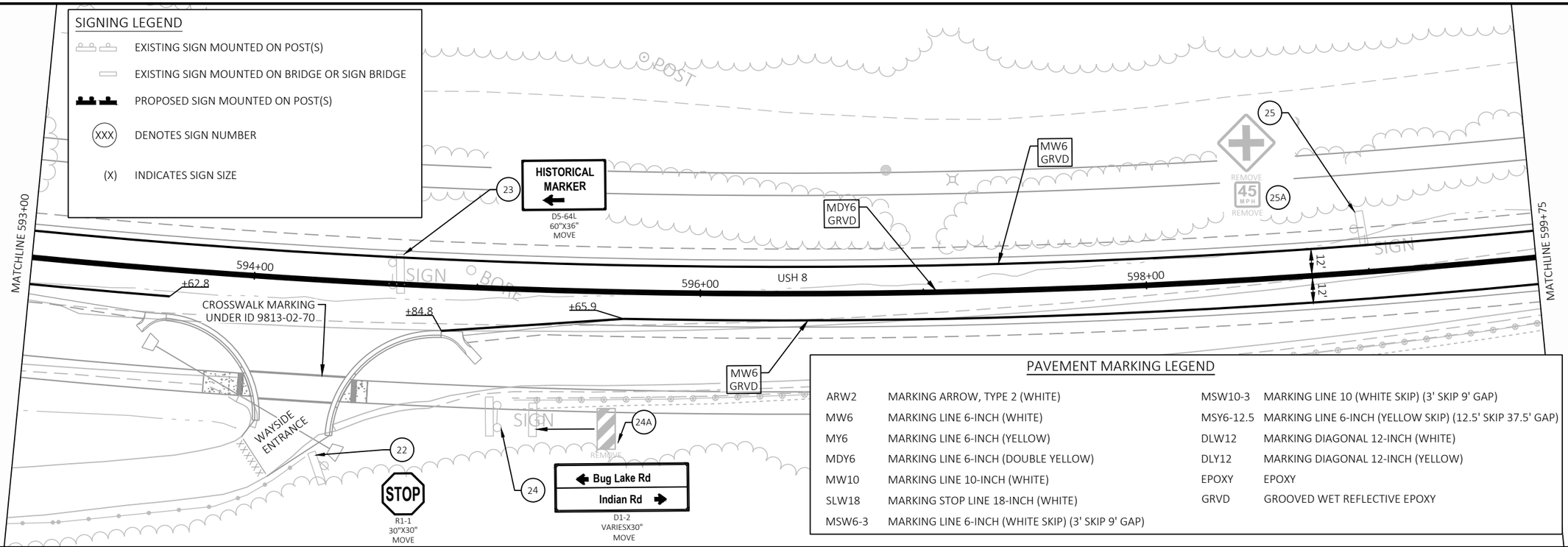
PLOT DATE : 10/24/2024 2:32 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

2

SIGNING LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE



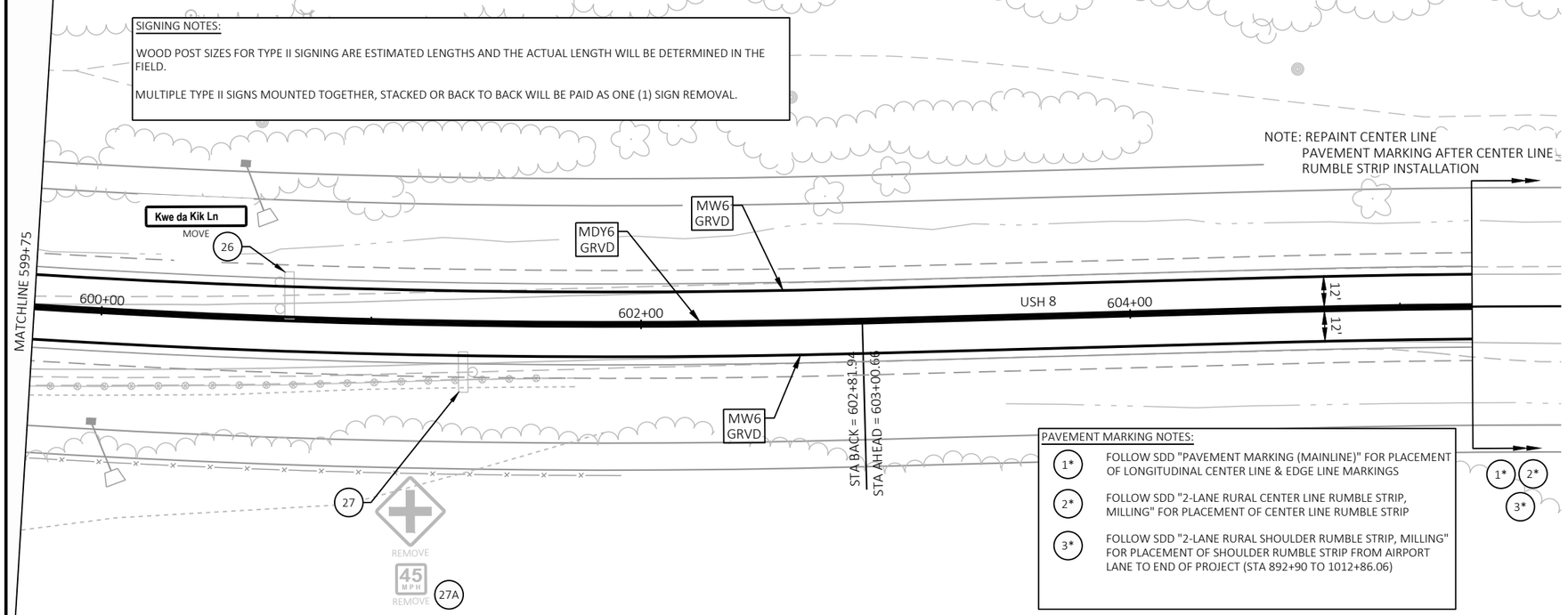
PAVEMENT MARKING LEGEND

ARW2	MARKING ARROW, TYPE 2 (WHITE)	MSW10-3	MARKING LINE 10 (WHITE SKIP) (3' SKIP 9' GAP)
MW6	MARKING LINE 6-INCH (WHITE)	MSY6-12.5	MARKING LINE 6-INCH (YELLOW SKIP) (12.5' SKIP 37.5' GAP)
MY6	MARKING LINE 6-INCH (YELLOW)	DLW12	MARKING DIAGONAL 12-INCH (WHITE)
MDY6	MARKING LINE 6-INCH (DOUBLE YELLOW)	DLY12	MARKING DIAGONAL 12-INCH (YELLOW)
MW10	MARKING LINE 10-INCH (WHITE)	EPOXY	EPOXY
SLW18	MARKING STOP LINE 18-INCH (WHITE)	GRVD	GROOVED WET REFLECTIVE EPOXY
MSW6-3	MARKING LINE 6-INCH (WHITE SKIP) (3' SKIP 9' GAP)		

SIGNING NOTES:

WOOD POST SIZES FOR TYPE II SIGNING ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

MULTIPLE TYPE II SIGNS MOUNTED TOGETHER, STACKED OR BACK TO BACK WILL BE PAID AS ONE (1) SIGN REMOVAL.



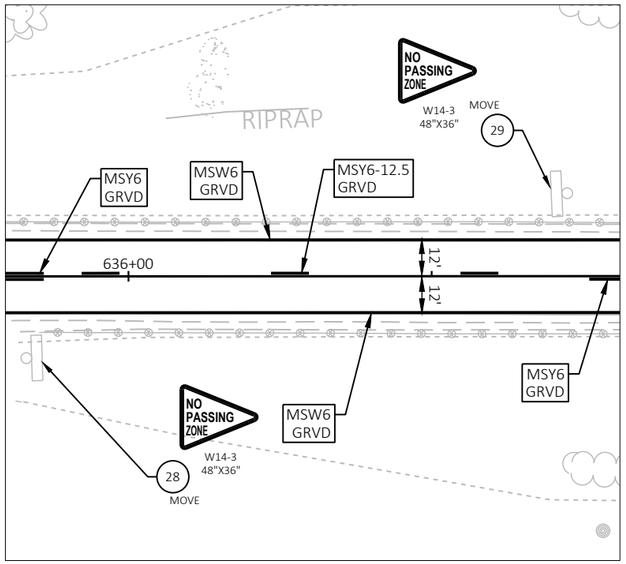
PAVEMENT MARKING NOTES:

1* FOLLOW SDD "PAVEMENT MARKING (MAINLINE)" FOR PLACEMENT OF LONGITUDINAL CENTER LINE & EDGE LINE MARKINGS

2* FOLLOW SDD "2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING" FOR PLACEMENT OF CENTER LINE RUMBLE STRIP

3* FOLLOW SDD "2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING" FOR PLACEMENT OF SHOULDER RUMBLE STRIP FROM AIRPORT LANE TO END OF PROJECT (STA 892+90 TO 1012+86.06)

1* 2* 3*



DETAIL "B" - PERMANENT SIGNING & PAVEMENT MARKING - MOVE SIGNS AT CABLE GUARD REMOVAL LOCATIONS FOR GRADING OPERATIONS

2

GENERAL NOTES

- PLACE G20-57 SIGNS (72" X 36") AT THE PROJECT LIMITS 7 DAYS BEFORE THE PROJECT BEGINS AND REMOVE WHEN CONSTRUCTION STARTS.
- USE STANDARD DETAIL DRAWINGS "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION" WHEN MILLING & PAVING, WORK ON SHOULDER OR PARKING LANE IS BEING PERFORMED
- USE STANDARD DETAIL DRAWINGS "TRAFFIC CONTROL, SINGLE RIGHT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY" AT THE PASSING LANE LOCATION BETWEEN GRANDVIEW AVE. AND HIGH VIEW DR. WHEN CONSTRUCTING NEW GRADING, STORM SEWER AND CURB & GUTTER ADJACENT TO ROADWAY.
- USE STANDARD DETAIL DRAWINGS "BARRICADES AND SIGNS FOR MAINLINE CLOSURE" AND "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES"
- THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER
- SEE TRAFFIC CONTROL - CURB RAMPS AND TRAFFIC CONTROL - PEDESTRIAN ACCOMMODATION DETAILS FOR SIDEWALK TRAFFIC CONTROL
- ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED
- BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUED OPERATIONS, AT THE END OF EACH WORKDAY
- ** DETAIL IN USE WHILE WORK IS TAKING PLACE AT THIS LOCATION, USE SDD "BARRICADES AND SIGNS FOR SIDEROAD CLOSURE," DETAIL 3 WHEN USH 8 RECONSTRUCTION HAS COMMENCED AND OPEN TO LOCAL BUSINESS AND RESIDENT ACCESS

LEGEND

1. USE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" DETAIL A
2. USE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" DETAIL B
3. USE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" DETAIL C
4. USE SDD "BARRICADES AND SIGNS FOR SIDE ROAD CLOSURES" DETAIL 1
5. USE SDD "BARRICADES AND SIGNS FOR SIDE ROAD CLOSURES" DETAIL 2
6. USE SDD "BARRICADES AND SIGNS FOR SIDE ROAD CLOSURES" DETAIL 3
7. USE SDD "BARRICADES AND SIGNS FOR SIDE ROAD CLOSURES" DETAIL 4

CITY OF CRANDON

TOWN OF LINCOLN

TOWN OF LAONA

**NOTE:
WHEN SANITARY SEWER AND WATER WORK IS BEING PERFORMED, MOVE 'ROAD CLOSED' BARRICADES TO THE LIMITS OF WORK OPERATIONS

ROAD CLOSED TO ALL TRAFFIC DURING GRADING OPERATIONS STA 553+50.00 - STA 605+26.72

HWY 8 / 32 ROAD WORK BEGINS XXX-XX
G20-57
72"X36"

BEGIN PROJECT ID: 1590-18-71
STA 416+22.56

END PROJECT ID: 1590-18-71
BEGIN PROJECT ID: 1590-18-81
STA 682+75.00

PROJECT ID: 1590-18-82
STA 586+04.00

SHOULDER CLOSURE DURING WORK OPERATION

SINGLE RIGHT LANE CLOSURE DURING WORK OPERATION STA 450+29.82 - STA 482+32.56

STRUCTURE C-21-9703

WETLAND (TYP.)

PRIVATE POND

SUPRISE LAKE

STH 55 / STH 32 / S LAVE AVE

S WILDWOOD AVE

WOLF RIVER STATE TRAIL

S GRANDVIEW DR

HIGHVIEW DR

CORNING RD

CTH W

CRANDON

LINCOLN

BEAR RD

FIRE KEEPER RD

MISH KWO SWEN DR

KWE DA KIK LN

YOUNGS LANE

BUG LAKE RD

LOVE KNOT RD

OTTER CREEK RD

JAEGER RD

INDIAN DR

POTAWOTOMI TRAIL

LAONA

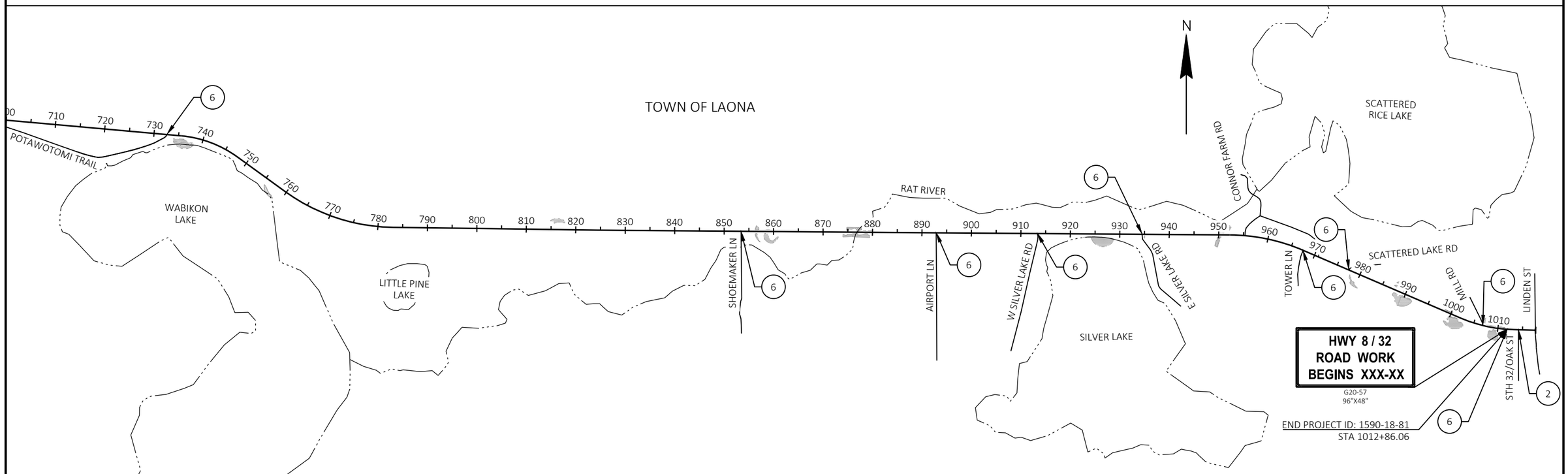
S FOREST AVE

S PARK AVE

S PROSPECT AVE

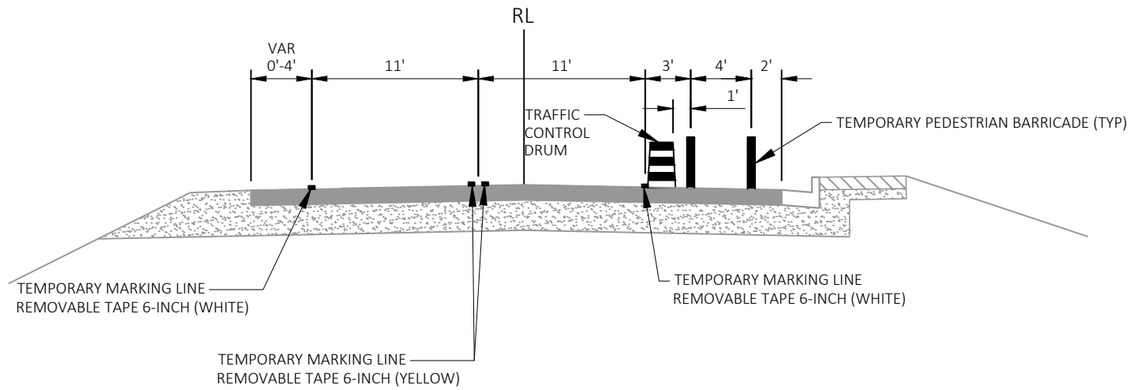
420 430 440 450 460 470 480 490 500 510 520 530 540 550 560 570 580 590 600 610 620 630 640 650 660 670 680 690 700

N

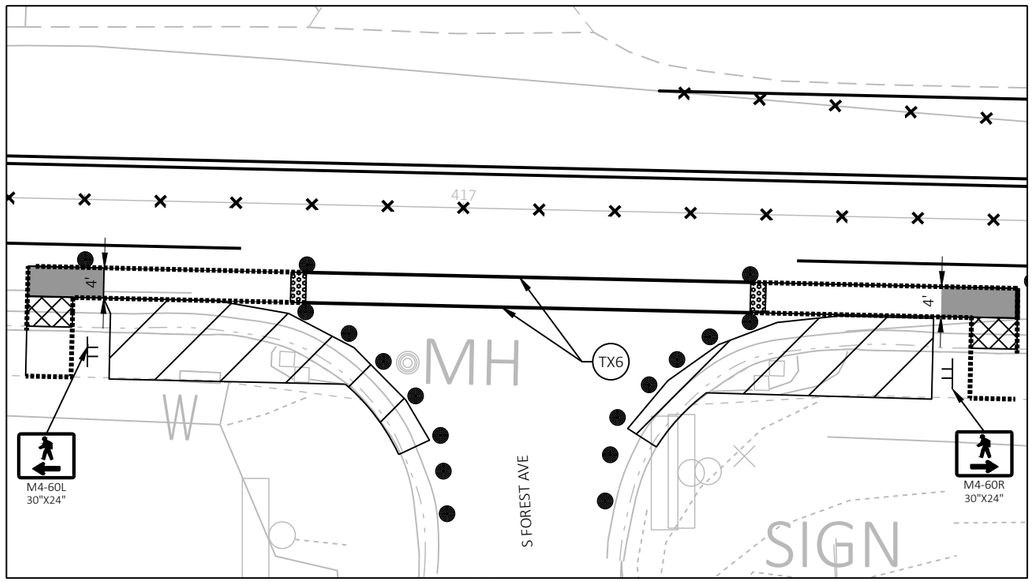


PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	TRAFFIC CONTROL	SHEET 79	E

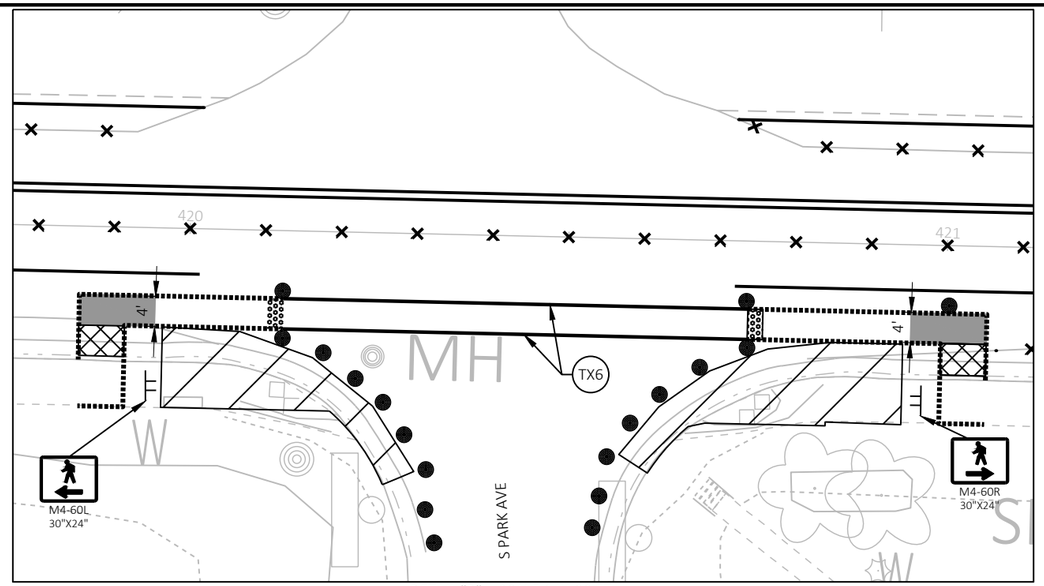
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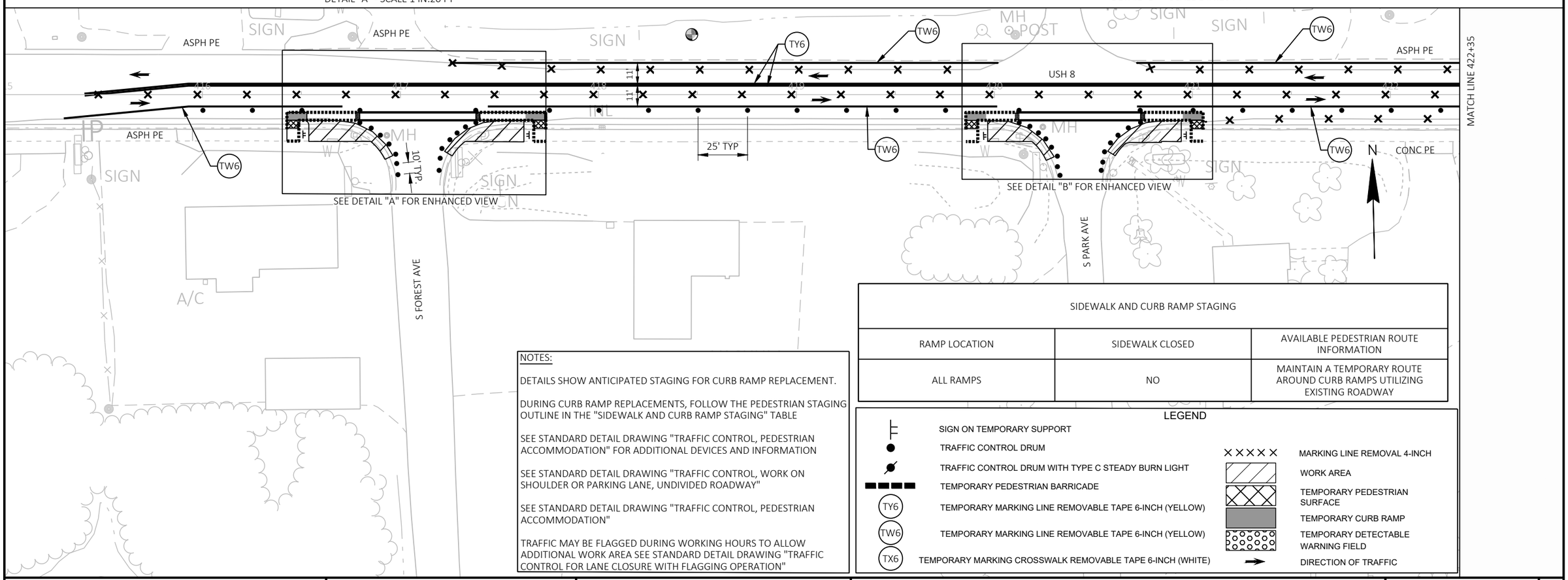
PEDESTRIAN CROSSING TRAFFIC CONTROL - USH 8



DETAIL "A" - SCALE 1 IN:20 FT



DETAIL "B" - SCALE 1 IN:20 FT



SIDEWALK AND CURB RAMP STAGING		
RAMP LOCATION	SIDEWALK CLOSED	AVAILABLE PEDESTRIAN ROUTE INFORMATION
ALL RAMPS	NO	MAINTAIN A TEMPORARY ROUTE AROUND CURB RAMPS UTILIZING EXISTING ROADWAY

NOTES:

DETAILS SHOW ANTICIPATED STAGING FOR CURB RAMP REPLACEMENT.

DURING CURB RAMP REPLACEMENTS, FOLLOW THE PEDESTRIAN STAGING OUTLINE IN THE "SIDEWALK AND CURB RAMP STAGING" TABLE

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR ADDITIONAL DEVICES AND INFORMATION

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY"

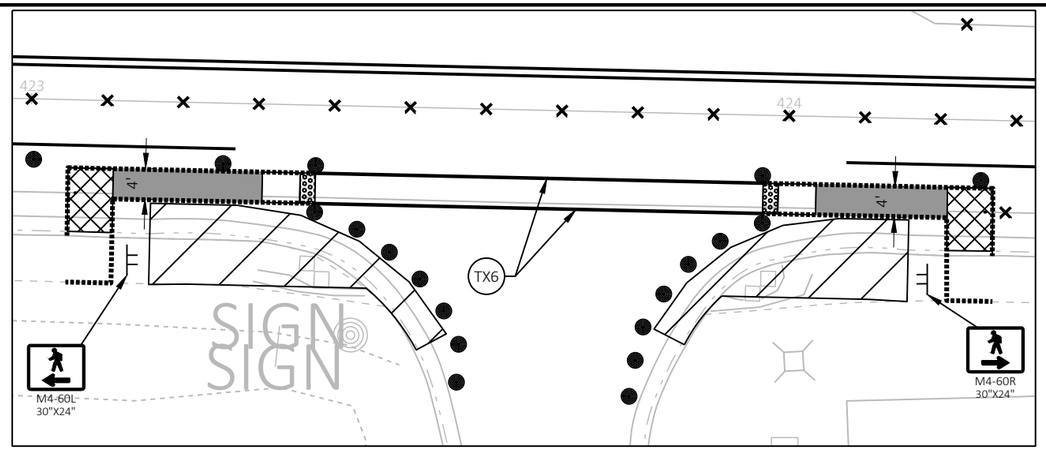
SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION"

TRAFFIC MAY BE FLAGGED DURING WORKING HOURS TO ALLOW ADDITIONAL WORK AREA SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION"

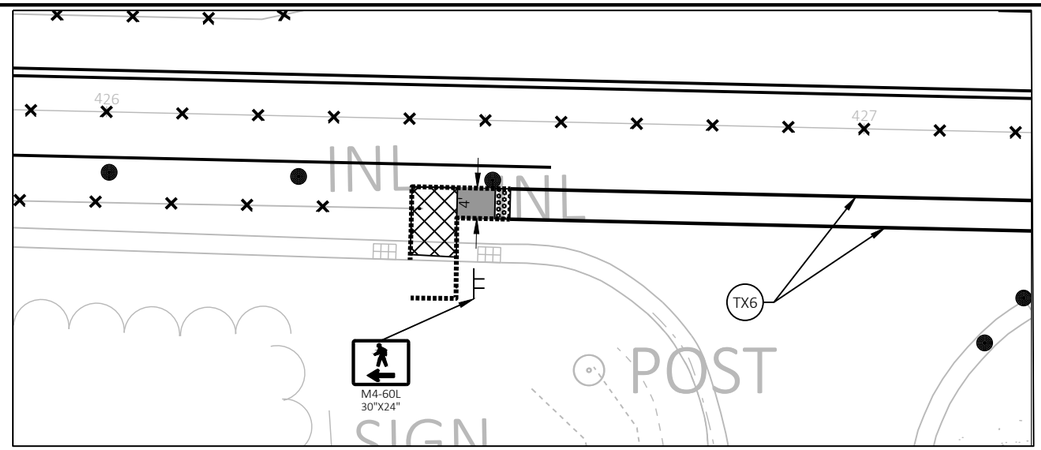
LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TEMPORARY PEDESTRIAN BARRICADE
- TY6 — TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
- TW6 — TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
- TX6 — TEMPORARY MARKING CROSSWALK REMOVABLE TAPE 6-INCH (WHITE)
- MARKING LINE REMOVAL 4-INCH
- WORK AREA
- TEMPORARY PEDESTRIAN SURFACE
- TEMPORARY CURB RAMP
- TEMPORARY DETECTABLE WARNING FIELD
- DIRECTION OF TRAFFIC

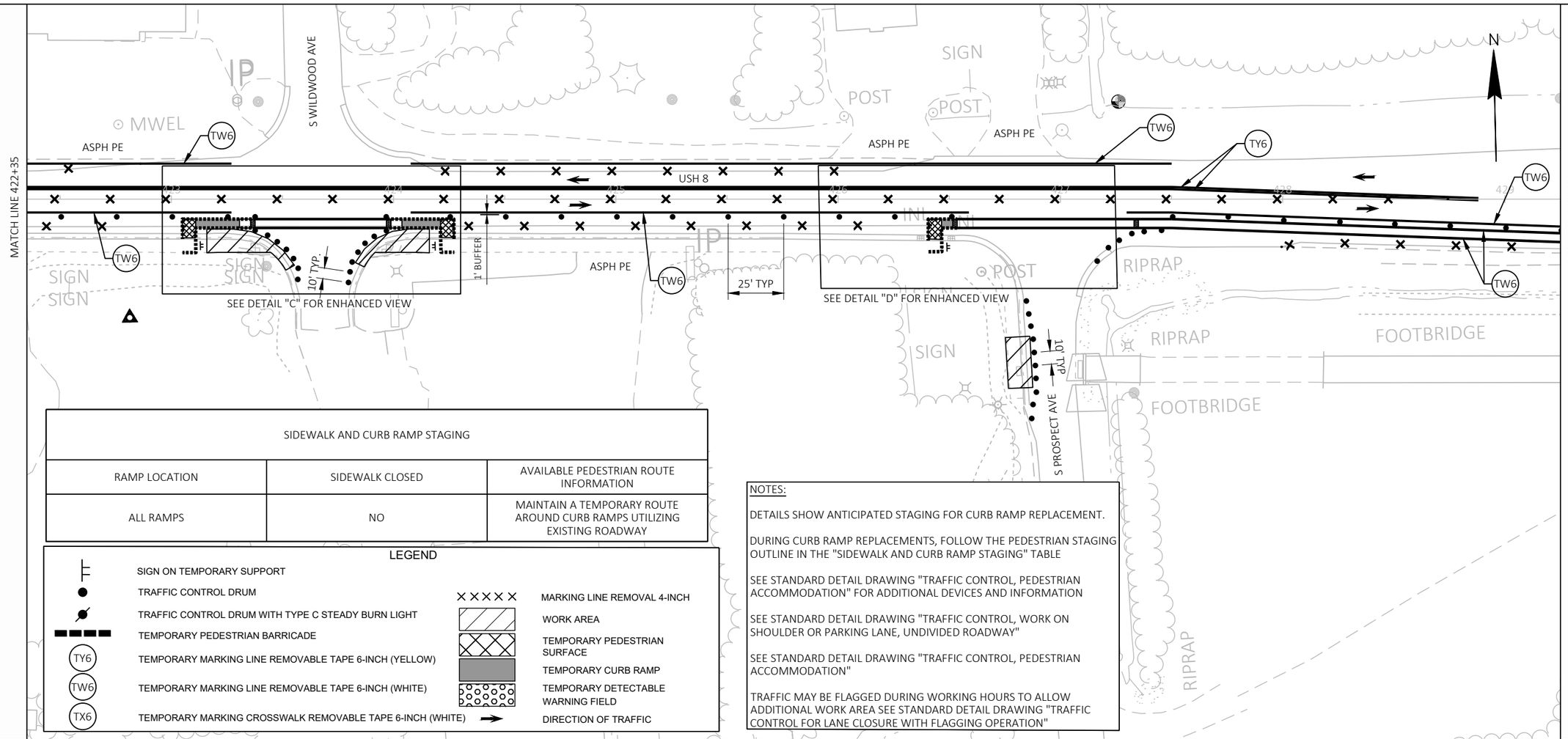
PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	TRAFFIC CONTROL - PEDESTRIAN ACCOMMODATION	SHEET 81	E



DETAIL "C" - SCALE 1 IN:20 FT



DETAIL "D" - SCALE 1 IN:20 FT



SIDEWALK AND CURB RAMP STAGING		
RAMP LOCATION	SIDEWALK CLOSED	AVAILABLE PEDESTRIAN ROUTE INFORMATION
ALL RAMPS	NO	MAINTAIN A TEMPORARY ROUTE AROUND CURB RAMPS UTILIZING EXISTING ROADWAY

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TEMPORARY PEDESTRIAN BARRICADE
- TY6 — TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
- TW6 — TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
- TX6 — TEMPORARY MARKING CROSSWALK REMOVABLE TAPE 6-INCH (WHITE)
- MARKING LINE REMOVAL 4-INCH
- WORK AREA
- TEMPORARY PEDESTRIAN SURFACE
- TEMPORARY CURB RAMP
- TEMPORARY DETECTABLE WARNING FIELD
- DIRECTION OF TRAFFIC

NOTES:

DETAILS SHOW ANTICIPATED STAGING FOR CURB RAMP REPLACEMENT.

DURING CURB RAMP REPLACEMENTS, FOLLOW THE PEDESTRIAN STAGING OUTLINE IN THE "SIDEWALK AND CURB RAMP STAGING" TABLE

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR ADDITIONAL DEVICES AND INFORMATION

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY"

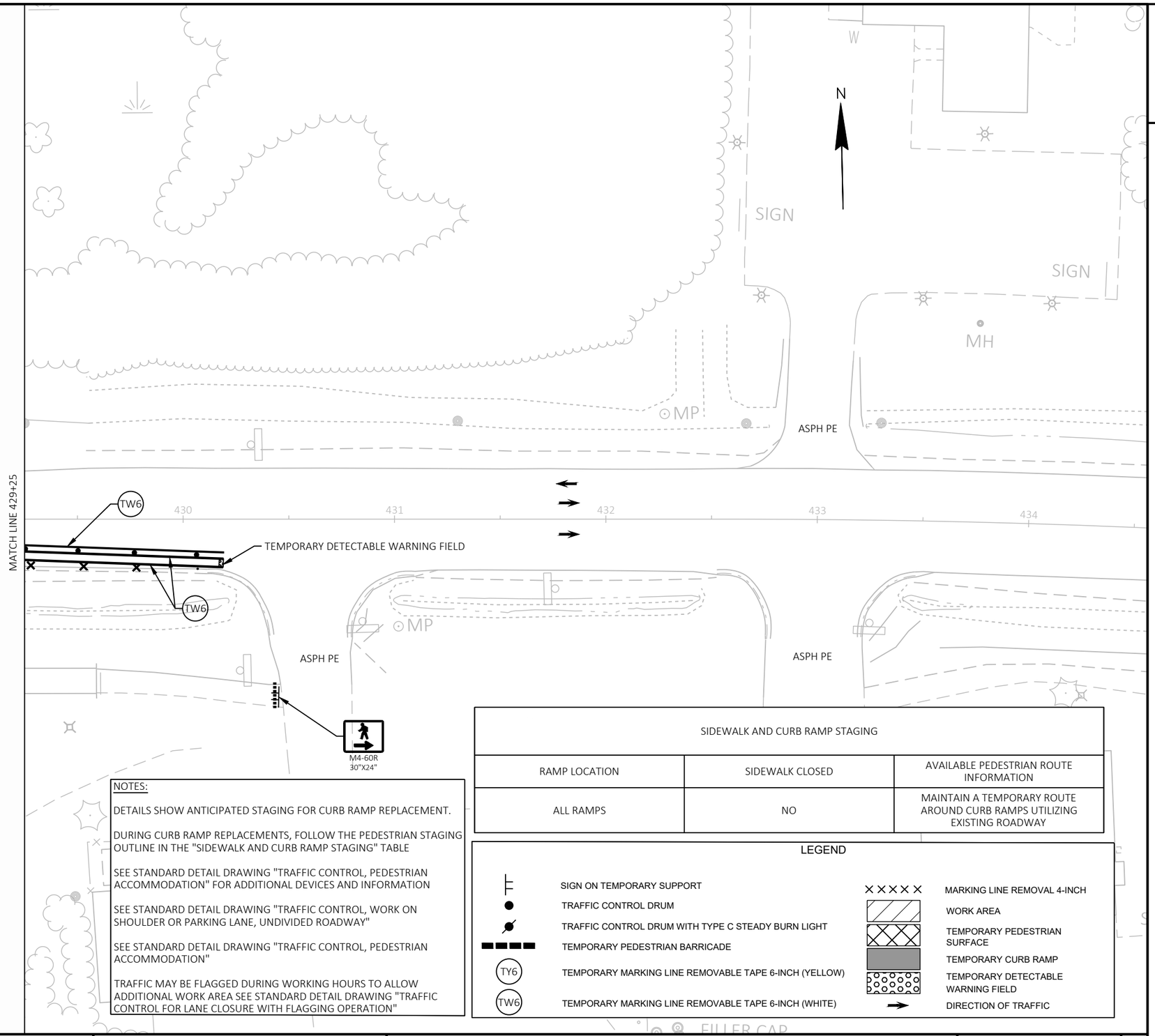
SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION"

TRAFFIC MAY BE FLAGGED DURING WORKING HOURS TO ALLOW ADDITIONAL WORK AREA SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION"

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	TRAFFIC CONTROL - PEDESTRIAN ACCOMMODATION	SHEET 82	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\025102-TC-PED-PN.DWG
LAYOUT NAME - 02
PLOT DATE : 10/28/2024 9:48 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2



NOTES:

DETAILS SHOW ANTICIPATED STAGING FOR CURB RAMP REPLACEMENT.

DURING CURB RAMP REPLACEMENTS, FOLLOW THE PEDESTRIAN STAGING OUTLINE IN THE "SIDEWALK AND CURB RAMP STAGING" TABLE

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR ADDITIONAL DEVICES AND INFORMATION

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY"

SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION"

TRAFFIC MAY BE FLAGGED DURING WORKING HOURS TO ALLOW ADDITIONAL WORK AREA SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION"

SIDEWALK AND CURB RAMP STAGING

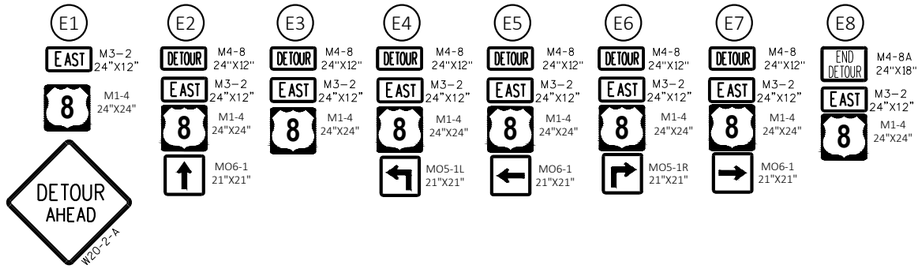
RAMP LOCATION	SIDEWALK CLOSED	AVAILABLE PEDESTRIAN ROUTE INFORMATION
ALL RAMPS	NO	MAINTAIN A TEMPORARY ROUTE AROUND CURB RAMPS UTILIZING EXISTING ROADWAY

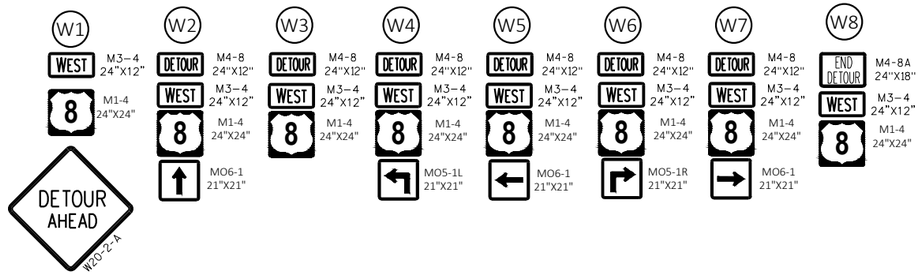
LEGEND

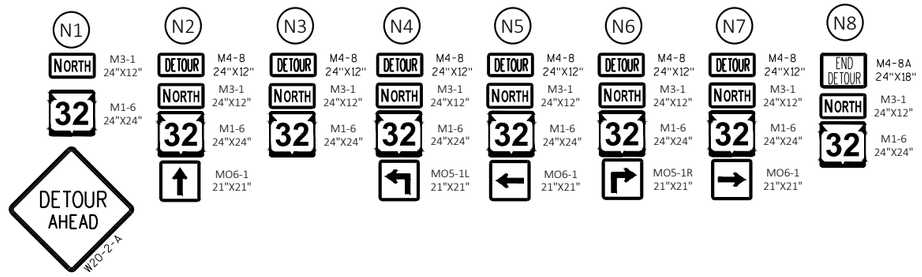
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TEMPORARY PEDESTRIAN BARRICADE
- TY6 — TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
- TW6 — TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
- MARKING LINE REMOVAL 4-INCH
- WORK AREA
- TEMPORARY PEDESTRIAN SURFACE
- TEMPORARY CURB RAMP
- TEMPORARY DETECTABLE WARNING FIELD
- DIRECTION OF TRAFFIC

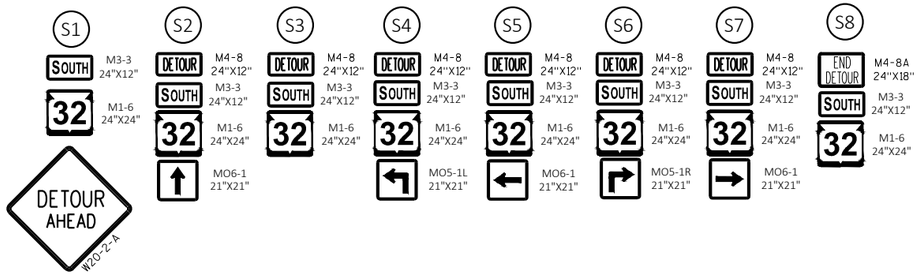
PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	TRAFFIC CONTROL - PEDESTRIAN ACCOMMODATION	SHEET 83	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\025102-TC-PED-PN.DWG
LAYOUT NAME - 03
PLOT DATE : 10/28/2024 9:48 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

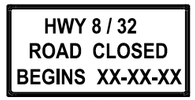








9



G20-57C
72"X36"

INSTALL G20-57C SIGNS 7 DAYS PRIOR TO CLOSURE AND REMOVE WHEN CLOSURE BEGINS.

LEGEND:

DETOUR ROUTE

PROJECT AREA

FIXED MESSAGE SIGN GROUND MOUNT

DETOUR PLAN NOTES:

SEE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" & "DETOUR SIGNING FOR MAINLINE CLOSURES" FOR SIGN SPACING AND LOCATIONS

SEE TRAFFIC CONTROL FIXED MESSAGE SIGNS FOR ADDITIONAL DETAILS.

FIXED MESSAGE SIGNS MUST BE PLACED TO PROJECT AREA 7 DAYS PRIOR TO USH 8 / STH 32 CLOSURE. LOCATIONS OF ALL SIGNING SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY ENGINEER.

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATIONS OF THE DETOUR SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES.

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.

ALL EXISTING SIGN MESSAGES THAT CONFLICT WITH TRAFFIC CONTROL DETOUR SIGNS SHALL BE COVERED OR REMOVED.

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

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

ALL M3 SERIES SIGNS WHICH ARE PART OF THE DETOUR ROUTE MARKING SIGNING ASSEMBLY OR ATTACHED TO ANY WARNING SIGN SHALL BE BLACK LETTERING ON A WHITE BACKGROUND

ALL SIGNS TO BE 48" X 48" UNLESS OTHERWISE NOTED

2

2

N

DETAIL 5

Crandon

HWY 8 EAST
HWY 32 SOUTH
CLOSED
FOLLOW DETOUR
78"X48"

HWY 8 WEST
HWY 32 NORTH
CLOSED
FOLLOW DETOUR
78"X48"

DETAIL 4

Laona

ONEIDA COUNTY
FOREST COUNTY

Nashville

NASHVILLE

MOLE LAKE INDIAN RESERVATION

WOLF RIVER TRAIL

Blackwell

Padus

NICOLET NATIONAL FOREST

ONEIDA COUNTY
LANGLADE COUNTY

FOREST COUNTY
LANGLADE COUNTY

DETAIL 3

INSTALL JUST WEST OF CTH H INTERSECTION

Wabeno

FREEDOM

WABENO

INSTALL JUST
EAST OF CTH H
INTERSECTION

FOREST COUNTY
MARINETTE COUNTY

Elcho

ELCHO

Summit Lake

Carter

FOREST COUNTY
LANGLADE COUNTY

FOREST COUNTY
OCONTO COUNTY

TOWNSEND

Pearson

Pickerel

UPHAM

AINSWORTH

DETAIL 6

Townsend

LAKEWOOD

Lily

WOLF RIVER NATIONAL FOREST

Kempster

NEVA

LANGLADE

Lakewood

RIVERVIEW

PRICE

LANGLADE COUNTY
OCONTO COUNTY

DOTY

OCONTO COUNTY
MARINETTE COUNTY

DETAIL 2

Neva

Deerbrook

Neva Corners

Bryant

DETAIL 1

Langlade

White Lake

Mountain

HWY 8 WEST
HWY 32 NORTH
CLOSED AT LAONA
CRANDON TRAFFIC
USE WIS 64
90"X60"

ANTIGO

POLAR

EVERGREEN

Polar

Elton

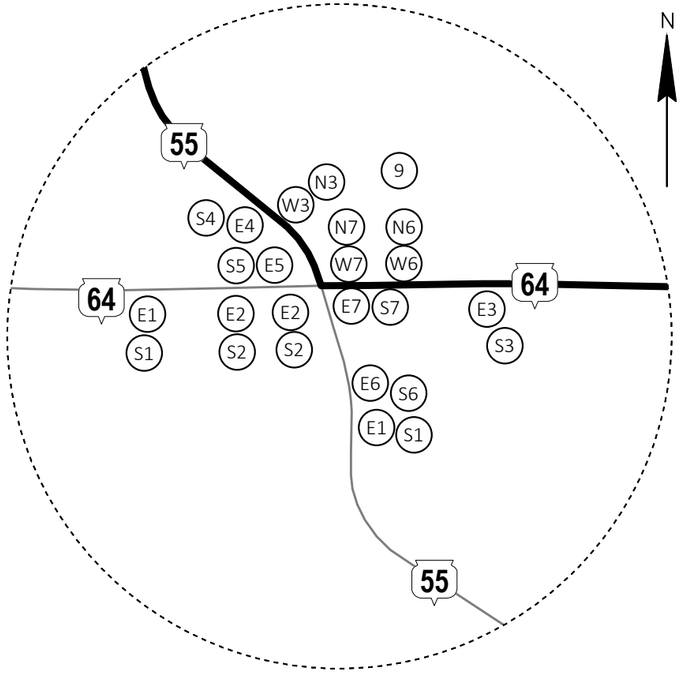
Antigo

PROJECT NO: 1590-18-01	HWY: USH 8	COUNTY: FOREST	DETOUR PLAN - OVERVIEW	SHEET 85 E

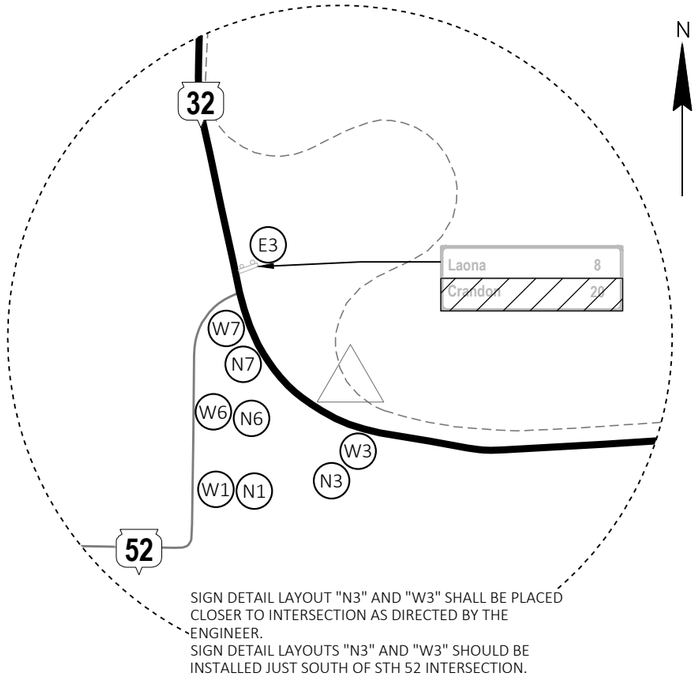
FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\027001-DT.DWG
LAYOUT NAME - OVERVIEW

PLOT DATE : 10/9/2024 2:03 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN: 3MI

WISDOT/CADDS SHEET 42

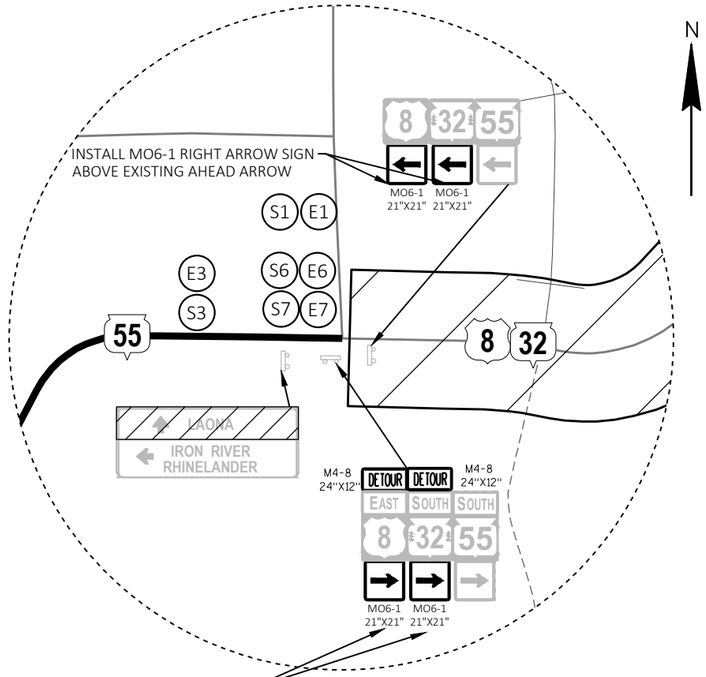


DETAIL 1

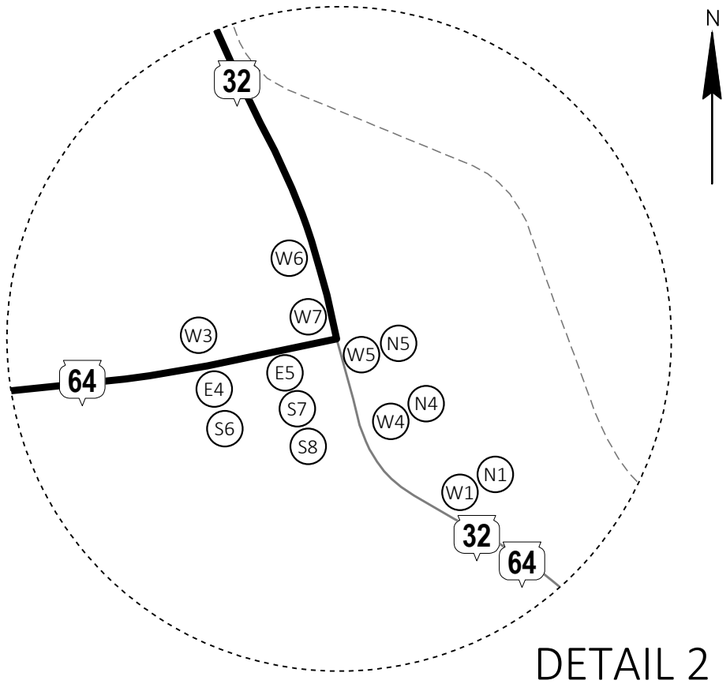


SIGN DETAIL LAYOUT "N3" AND "W3" SHALL BE PLACED CLOSER TO INTERSECTION AS DIRECTED BY THE ENGINEER.
SIGN DETAIL LAYOUTS "N3" AND "W3" SHOULD BE INSTALLED JUST SOUTH OF STH 52 INTERSECTION.

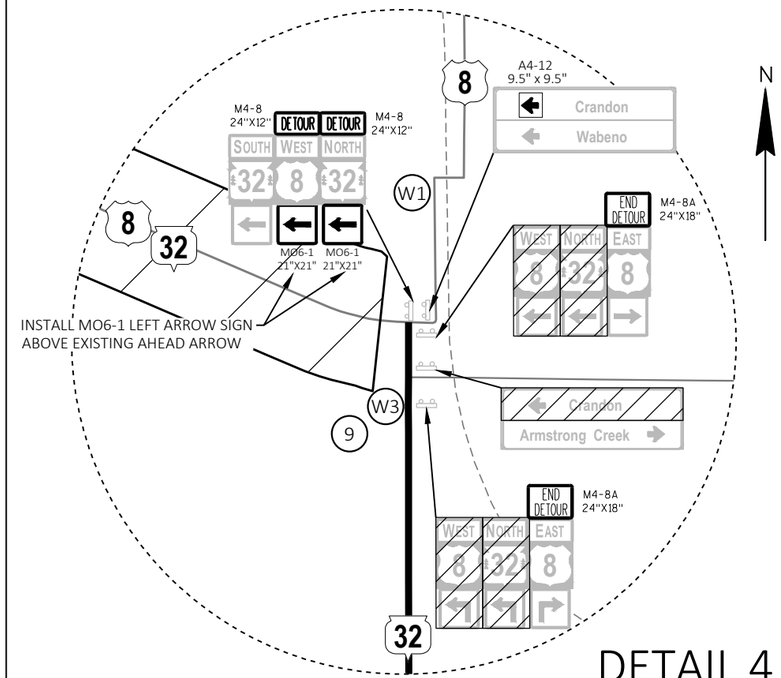
DETAIL 3



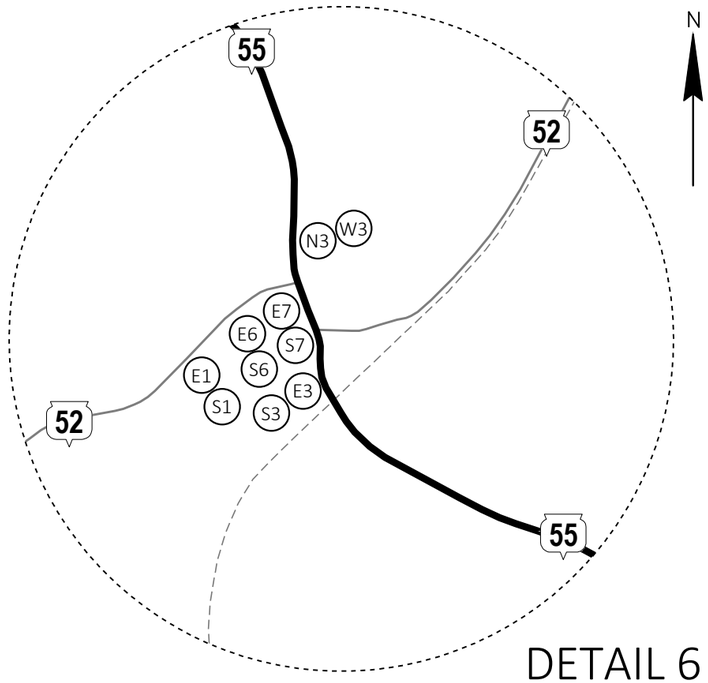
DETAIL 5



DETAIL 2



DETAIL 4



DETAIL 6

PROJECT NO: 1590-18-01	HWY: USH 8	COUNTY: FOREST	DETOUR PLAN - INTERSECTION DETAILS	SHEET 86	E

					1590-18-71	1590-18-81
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0002	201.0205	Grubbing	STA	85.000	84.000	1.000
0008	203.0100	Removing Small Pipe Culverts	EACH	20.000	8.000	12.000
0010	203.0250	Removing Structure Over Waterway Remove Debris (structure) 001. C-21-9703	EACH	1.000	1.000	
0012	204.0110	Removing Asphaltic Surface	SY	243.000	243.000	
0014	204.0115	Removing Asphaltic Surface Butt Joints	SY	905.000	550.000	355.000
0016	204.0120	Removing Asphaltic Surface Milling	SY	199,310.000	86,215.000	113,095.000
0018	204.0150	Removing Curb & Gutter	LF	1,439.000	882.000	557.000
0020	204.0155	Removing Concrete Sidewalk	SY	107.000	107.000	
0022	204.0165	Removing Guardrail	LF	205.000	205.000	
0024	204.0167	Removing Cable Barrier	LF	3,740.000	3,740.000	
0026	204.0170	Removing Fence	LF	290.000	290.000	
0030	204.0270	Abandoning Culvert Pipes	EACH	1.000	1.000	
0032	205.0100	Excavation Common	CY	310,026.000	303,722.000	6,304.000
0034	206.2001	Excavation for Structures Culverts (structure) 001. C-21-9703	EACH	1.000	1.000	
0038	206.5001	Cofferdams (structure) 001. 21008000215	EACH	1.000		1.000
0044	210.2500	Backfill Structure Type B	TON	1,270.000	1,270.000	
0046	211.0101	Prepare Foundation for Asphaltic Paving (project) 001. 1590-18-71	EACH	1.000	1.000	
0048	211.0101	Prepare Foundation for Asphaltic Paving (project) 002. 1590-18-81	EACH	1.000		1.000
0050	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	261.000	25.000	236.000
0052	213.0100	Finishing Roadway (project) 001. 1590-18-71	EACH	1.000	1.000	
0054	213.0100	Finishing Roadway (project) 002. 1590-18-81	EACH	1.000		1.000
0056	305.0110	Base Aggregate Dense 3/4-Inch	TON	18,230.000	9,450.000	8,780.000
0058	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	26,155.000	21,745.000	4,410.000
0062	305.0500	Shaping Shoulders	STA	6.000	6.000	
0064	311.0110	Breaker Run	TON	140.000	140.000	
0068	450.4000	HMA Cold Weather Paving	TON	22,500.000	12,500.000	10,000.000
0070	455.0605	Tack Coat	GAL	15,260.000	7,360.000	7,900.000
0072	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	2.000	2.000	
0074	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	3.000	3.000	
0076	460.2005	Incentive Density PWL HMA Pavement	DOL	41,097.000	21,524.000	19,573.000
0078	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	29,840.000	13,330.000	16,510.000
0080	460.2010	Incentive Air Voids HMA Pavement	DOL	51,010.000	25,720.000	25,290.000
0086	460.6223	HMA Pavement 3 MT 58-28 S	TON	29,490.000	15,265.000	14,225.000
0088	460.6244	HMA Pavement 4 MT 58-34 S	TON	21,520.000	10,455.000	11,065.000
0092	465.0110	Asphaltic Surface Patching	TON	525.000	270.000	255.000
0094	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	275.000	165.000	110.000
0096	465.0125	Asphaltic Surface Temporary	TON	1,210.000	230.000	980.000
0098	465.0315	Asphaltic Flumes	SY	130.000	130.000	
0100	465.0520	Asphaltic Rumble Strips, Shoulder	LF	23,992.000		23,992.000
0102	465.0560	Asphaltic Rumble Strips, Centerline	LF	46,685.000	18,772.000	27,913.000
0106	502.4205	Adhesive Anchors No. 5 Bar	EACH	52.000	52.000	
0108	504.0100	Concrete Masonry Culverts	CY	100.000	100.000	
0110	505.0400	Bar Steel Reinforcement HS Structures	LB	12,790.000	12,790.000	
0112	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	1,800.000	1,800.000	
0114	511.1200	Temporary Shoring (structure) 001. C-21-9703	SF	555.000	555.000	
0116	516.0500	Rubberized Membrane Waterproofing	SY	25.000	25.000	
0126	520.1024	Apron Endwalls for Culvert Pipe 24-Inch	EACH	17.000	3.000	14.000
0128	520.1030	Apron Endwalls for Culvert Pipe 30-Inch	EACH	8.000	2.000	6.000
0130	520.1036	Apron Endwalls for Culvert Pipe 36-Inch	EACH	3.000	3.000	

					1590-18-71	1590-18-81
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0132	520.3324	Culvert Pipe Class III-A 24-Inch	LF	560.000	80.000	480.000
0134	520.3330	Culvert Pipe Class III-A 30-Inch	LF	286.000	22.000	264.000
0136	520.3336	Culvert Pipe Class III-A 36-Inch	LF	106.000	106.000	
0138	520.8000	Concrete Collars for Pipe	EACH	6.000	6.000	
0140	521.1048	Apron Endwalls for Culvert Pipe Steel 48-Inch	EACH	2.000		2.000
0142	521.3148	Culvert Pipe Corrugated Steel 48-Inch	LF	93.000		93.000
0144	522.0124	Culvert Pipe Reinforced Concrete Class III 24-Inch	LF	36.000	36.000	
0146	522.0136	Culvert Pipe Reinforced Concrete Class III 36-Inch	LF	8.000	8.000	
0154	522.1012	Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	EACH	11.000	11.000	
0156	522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	EACH	2.000	2.000	
0158	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	4.000	4.000	
0160	522.1036	Apron Endwalls for Culvert Pipe Reinforced Concrete 36-Inch	EACH	2.000	2.000	
0162	522.2314	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 14x23-Inch	LF	64.000		64.000
0166	522.2614	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 14x23-Inch	EACH	2.000		2.000
0168	522.2629	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 29x45-Inch	EACH	1.000	1.000	
0170	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	443.000	443.000	
0174	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	2,060.000	1,509.000	551.000
0178	601.0600	Concrete Curb Pedestrian	LF	43.000	43.000	
0180	602.0410	Concrete Sidewalk 5-Inch	SF	935.000	935.000	
0182	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	10.000	10.000	
0186	602.0605	Curb Ramp Detectable Warning Field Radial Yellow	SF	105.000	105.000	
0192	606.0200	Riprap Medium	CY	390.000	315.000	75.000
0194	606.0300	Riprap Heavy	CY	45.000	45.000	
0196	606.0400	Riprap Extra-Heavy	CY	50.000	50.000	
0198	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	80.000	80.000	
0200	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	583.000	583.000	
0202	608.0330	Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	LF	61.000	61.000	
0204	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	345.000	345.000	
0206	608.0415	Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	LF	60.000	60.000	
0208	608.0418	Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	LF	103.000	103.000	
0210	608.0424	Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch	LF	451.000	451.000	
0212	608.2329	Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 29x45-Inch	LF	38.000	38.000	
0216	611.0530	Manhole Covers Type J	EACH	4.000	4.000	
0218	611.0612	Inlet Covers Type C	EACH	4.000	4.000	
0220	611.0627	Inlet Covers Type HM	EACH	7.000	7.000	
0222	611.0642	Inlet Covers Type MS	EACH	26.000	26.000	
0224	611.2004	Manholes 4-FT Diameter	EACH	2.000	2.000	
0226	611.2005	Manholes 5-FT Diameter	EACH	4.000	4.000	
0228	611.2008	Manholes 8-FT Diameter	EACH	2.000	2.000	
0230	611.3004	Inlets 4-FT Diameter	EACH	1.000	1.000	
0232	611.3230	Inlets 2x3-FT	EACH	6.000	6.000	
0234	611.3901	Inlets Median 1 Grate	EACH	18.000	18.000	
0236	611.3902	Inlets Median 2 Grate	EACH	4.000	4.000	
0242	618.0100	Maintenance and Repair of Haul Roads (project) 001. 1590-18-71	EACH	1.000	1.000	
0244	618.0100	Maintenance and Repair of Haul Roads (project) 002. 1590-18-81	EACH	1.000		1.000
0246	619.1000	Mobilization	EACH	0.650	0.460	0.190
0248	624.0100	Water	MGAL	851.000	600.000	251.000
0250	625.0100	Topsoil	SY	122,596.000	119,004.000	3,592.000
0254	628.1504	Silt Fence	LF	12,384.000	9,159.000	3,225.000

					1590-18-71	1590-18-81
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0256	628.1520	Silt Fence Maintenance	LF	12,384.000	9,159.000	3,225.000
0258	628.1905	Mobilizations Erosion Control	EACH	23.000	10.000	13.000
0260	628.1910	Mobilizations Emergency Erosion Control	EACH	10.000	8.000	2.000
0262	628.2006	Erosion Mat Urban Class I Type A	SY	6,252.000	2,660.000	3,592.000
0264	628.2023	Erosion Mat Class II Type B	SY	116,344.000	116,344.000	
0268	628.7005	Inlet Protection Type A	EACH	19.000	19.000	
0270	628.7015	Inlet Protection Type C	EACH	16.000	16.000	
0274	628.7504	Temporary Ditch Checks	LF	1,761.000	1,761.000	
0276	628.7515.S	Stone Ditch Checks	CY	133.000	133.000	
0278	628.7555	Culvert Pipe Checks	EACH	131.000	76.000	55.000
0282	628.7570	Rock Bags	EACH	580.000	500.000	80.000
0286	629.0210	Fertilizer Type B	CWT	86.000	79.000	7.000
0288	630.0120	Seeding Mixture No. 20	LB	5,518.000	5,357.000	161.000
0290	630.0500	Seed Water	MGAL	2,756.000	2,675.000	81.000
0292	633.5200	Markers Culvert End	EACH	37.000	13.000	24.000
0296	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	57.000	42.000	15.000
0298	637.2210	Signs Type II Reflective H	SF	35.500	35.500	
0300	637.2230	Signs Type II Reflective F	SF	59.000	34.000	25.000
0302	638.2102	Moving Signs Type II	EACH	35.000	24.000	11.000
0304	638.2602	Removing Signs Type II	EACH	10.000	10.000	
0306	638.3000	Removing Small Sign Supports	EACH	41.000	41.000	
0310	642.5001	Field Office Type B	EACH	1.000	1.000	
0312	643.0300	Traffic Control Drums	DAY	16,510.000	14,400.000	2,110.000
0314	643.0420	Traffic Control Barricades Type III	DAY	24,599.000	16,792.000	7,807.000
0316	643.0705	Traffic Control Warning Lights Type A	DAY	46,688.000	31,074.000	15,614.000
0318	643.0715	Traffic Control Warning Lights Type C	DAY	5,865.000	5,865.000	
0320	643.0800	Traffic Control Arrow Boards	DAY	180.000	180.000	
0322	643.0900	Traffic Control Signs	DAY	98,328.000	86,723.000	11,605.000
0324	643.0910	Traffic Control Covering Signs Type I	EACH	7.000	7.000	
0326	643.1000	Traffic Control Signs Fixed Message	SF	89.500	89.500	
0328	643.3165	Temporary Marking Line Paint 6-Inch	LF	84,407.000	36,383.000	48,024.000
0330	643.3180	Temporary Marking Line Removable Tape 6-Inch	LF	3,895.000	3,895.000	
0332	643.3350	Temporary Marking Crosswalk Removable Tape 6-inch	LF	1,094.000	1,094.000	
0334	643.5000	Traffic Control	EACH	0.980	0.680	0.300
0336	644.1430	Temporary Pedestrian Surface Plate	SF	238.000	238.000	
0338	644.1601	Temporary Pedestrian Curb Ramp	DAY	120.000	120.000	
0340	644.1605	Temporary Pedestrian Detectable Warning Field	SF	56.000	56.000	
0342	644.1810	Temporary Pedestrian Barricade	LF	452.000	452.000	
0344	645.0105	Geotextile Type C	SY	275.000	275.000	
0346	645.0120	Geotextile Type HR	SY	951.000	804.000	147.000
0348	645.0130	Geotextile Type R	SY	2,580.000	2,580.000	
0354	646.2040	Marking Line Grooved Wet Ref Epoxy 6-Inch	LF	101,470.000	53,170.000	48,300.000
0356	646.4040	Marking Line Grooved Wet Ref Epoxy 10-Inch	LF	670.000	670.000	
0358	646.5020	Marking Arrow Epoxy	EACH	12.000	12.000	
0360	646.6120	Marking Stop Line Epoxy 18-Inch	LF	65.000	65.000	
0362	646.6466	Cold Weather Marking Epoxy 6-Inch	LF	45,000.000	25,000.000	20,000.000
0364	646.6470	Cold Weather Marking Epoxy 10-Inch	LF	400.000	400.000	
0366	646.7120	Marking Diagonal Epoxy 12-Inch	LF	2,550.000	2,550.000	
0372	646.9000	Marking Removal Line 4-Inch	LF	2,915.000	2,915.000	

					1590-18-71	1590-18-81
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0374	648.0100	Locating No-Passing Zones	MI	3.330	0.980	2.350
0376	650.4000	Construction Staking Storm Sewer	EACH	55.000	55.000	
0378	650.4500	Construction Staking Subgrade	LF	7,130.000	7,080.000	50.000
0380	650.5000	Construction Staking Base	LF	7,130.000	7,080.000	50.000
0382	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	2,546.000	1,995.000	551.000
0384	650.6000	Construction Staking Pipe Culverts	EACH	35.000	11.000	24.000
0386	650.6501	Construction Staking Structure Layout (structure) 001. C-21-9703	EACH	1.000	1.000	
0392	650.8000	Construction Staking Resurfacing Reference	LF	53,261.000	20,300.000	32,961.000
0394	650.9000	Construction Staking Curb Ramps	EACH	7.000	7.000	
0396	650.9500	Construction Staking Sidewalk (project) 001. 1590-18-71	EACH	1.000	1.000	
0400	650.9911	Construction Staking Supplemental Control (project) 001. 1590-18-71	EACH	1.000	1.000	
0402	650.9911	Construction Staking Supplemental Control (project) 002. 1590-18-81	EACH	1.000		1.000
0408	650.9920	Construction Staking Slope Stakes	LF	7,130.000	7,080.000	50.000
0426	690.0150	Sawing Asphalt	LF	6,408.000	4,808.000	1,600.000
0428	690.0250	Sawing Concrete	LF	108.000	90.000	18.000
0430	715.0502	Incentive Strength Concrete Structures	DOL	500.000	500.000	
0434	740.0440	Incentive IRI Ride	DOL	45,200.000	20,190.000	25,010.000
0442	SPV.0060	Special 001. Adjusting Water Valves	EACH	8.000	8.000	
0444	SPV.0060	Special 002. Adjusting Sanitary Manhole Covers	EACH	4.000	4.000	
0446	SPV.0060	Special 003. Foam Sealant Joint Repair C-21-9703	EACH	1.000	1.000	
0518	SPV.0090	Special 103. Staked Wattles	LF	12,400.000	10,750.000	1,650.000
0568	SPV.0180	Special 001. Protective Thermoplastic Coating at Snowmobile Trail Crossings	SY	315.000	170.000	145.000

GRUBBING

STA	TO	STA	LOCATION	201.0205 GRUBBING STA
PROJECT ID 1590-18-71				
CAT 0010				
449+00	-	454+00	USH 8 LT/RT	6
634+00	-	645+00	USH 8 LT/RT	11
670+00	-	673+50	USH 8 LT	4
680+00	-	683+00	USH 8 LT	3
CAT 0010 TOTALS				24
CAT 0030				
553+00	-	606+00	USH 8 LT/RT	52
13+00'Y'	-	18+00'Y'	YOUNGS LN LT/RT	6
20+00'KDK	-	22+00'KDK'	KWE DA KIK	2
CAT 0030 TOTALS				60
1590-18-71 SUBTOTALS				84
PROJECT ID 1590-18-81				
CAT 0010				
683+00	-	684+00	USH 8 LT/RT	1
1590-18-81 SUBTOTALS				1
CONTRACT TOTAL				85

REMVOING SMALL PIPE CULVERTS

STA	LOCATION	203.0100 REMOVING SMALL PIPE CULVERTS EACH	204.0270 ABANDONING CULVERT PIPES EACH	REMARKS
PROJECT ID 1590-18-71				
CAT 0010				
491+30	USH 8	1	-	Existing 24" CMCP
498+03	USH 8	1	-	Existing 36"CMCP
512+97	USH 8, RT	1	-	Ex. 36" CPRC AEW Removal for Pipe Extension
547+84	USH 8, RT	1	-	Ex. 36" CPRC AEW Removal for Pipe Extension
608+99	USH 8	1	-	Existing 24" RCCP
671+42	USH 8, LT	1	-	Stone Wall End Removal for Pipe Extension
680+57	USH 8, RT	1	-	Ex. 24" CPRC AEW Removal for Pipe Extension
CAT 0010 TOTALS		7	-	
CAT 0030				
570+51	USH 8	1	-	24" CMCP
599+77	USH 8	-	1	24" CMCP
CAT 0030 TOTALS		1	1	
1590-18-71 SUBTOTALS		8	1	
PROJECT ID 1590-18-81				
CAT 0010				
736+29	USH 8	1	-	24" CMCP
757+80	USH 8	1	-	24" CMCP
816+21	USH 8	1	-	30" CMCP
858+72	USH 8	1	-	30" CMCP
911+83	USH 8	1	-	24" CMCP
926+55	USH 8	1	-	24" CMCP
935+03	USH 8	1	-	14"X23" CMCP
950+47	USH 8	1	-	48" CMCP
979+99	USH 8	1	-	24" CMCP
989+41	USH 8	1	-	30" CMCP
1000+94	USH 8	1	-	24" CMCP
1009+07	USH 8	1	-	24" CMCP
1590-18-81 SUBTOTALS		12	--	
CONTRACT TOTAL		20	1	

REMOVING ASPHALTIC SURFACE

STA	TO	STA	204.0110 REMOVING ASPHALTIC SURFACE SY	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY
PROJECT ID 1590-18-71					
CAT 0010					
USH 8					
416+22	-	439+00	--	170	10,970
439+00	-	489+00	--	80	22,500
489+00	-	539+00	243	105	18,455
539+00	-	589+00	--	50	6,120
589+00	-	639+00	--	90	12,855
639+00	-	682+75	--	55	15,315
1590-18-71 SUBTOTALS			243	550	86,215
PROJECT ID 1590-18-81					
CAT 0010					
USH 8					
682+75	-	689+00	--	--	2,070
689+00	-	739+00	--	25	16,775
739+00	-	789+00	--	--	16,540
789+00	-	839+00	--	--	16,510
839+00	-	889+00	--	85	14,090
889+00	-	939+00	--	85	19,945
939+00	-	989+00	--	90	18,305
989+00	-	1012+86	--	70	8,860
1590-18-81 SUBTOTALS			0	355	113,095
CONTRACT TOTAL			243	905	199,310

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REMOVING ANCILLARY CONCRETE

STA	TO	STA	LOCATION	204.0150 REMOVING CURB & GUTTER LF	204.0155 REMOVING CONCRETE SIDEWALK SY
PROJECT ID 1590-18-71					
CAT 0010					
416+22.56	-	427+50	USH 8	276	107
497+77	-	498+40	USH 8 & CTH W	157	-
CAT 0010 TOTALS				433	107
CAT 0030					
563+50	-	565+25	USH 8	156	--
589+00	-	590+75	USH 8	229	--
594+00	-	595+00	USH 8	64	--
CAT 0030 TOTALS				449	--
1590-18-71 SUBTOTALS				882	107
PROJECT ID 1590-18-81					
CAT 0010					
933+50	-	938+78	SILVER LAKE RD	557	--
1590-18-81 SUBTOTALS				557	--
CONTRACT TOTAL				1,439	107

REMOVING FENCE

STA	TO	STA	LOCATION	204.0170 REMOVING FENCE LF	REMARKS
PROJECT ID 1590-18-71					
CAT 0010					
587+25	-	590+10	USH 8, LT	290	AVOIDANCE AREA PROTECTION
CAT 0010 TOTALS				290	REMOVE ONLY ONCE ALL WORK IS COMPLETE
1590-18-71 SUBTOTALS				290	
CONTRACT TOTAL				290	

REMOVING GUARDRAIL

STA	TO	STA	LOCATION	204.0165 REMOVING GUARDRAIL LF	REMARKS
PROJECT ID 1590-18-71					
CAT 0010					
680+00	-	682+00	USH 8, LT	205	EXISTING GUARDRAIL NE OTTER CREEK RD
CAT 0010 TOTALS				205	
1590-18-71 SUBTOTALS				205	
CONTRACT TOTAL				205	

SHAPING SHOULDERS

STA	TO	STA	LOCATION	305.0500 SHAPING SHOULDERS STA
CAT 0010				
PROJECT ID 1590-18-71				
490+69	-	495+78	RT	6
1590-18-71 SUBTOTALS				6
CONTRACT TOTAL				6

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EARTHWORK SUMMARY TABLE

PROJECT ID	CATEGORY	DIVISION	FROM/TO STATION	LOCATION	205.0100 COMMON EXCAVATION (1)		SALVAGED/UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	UNEXPANDED FILL	EXPANDED FILL (13)	MASS ORDINATE +/- (14)	WASTE
					CUT (2)	EBS EXCAVATION (3)				FACTOR 1.25		
1590-18-71	0010	DIVISION 1										
		STA 449+40 - 454+00	449+20.00/454+00.00	USH 8	3,605	0	0	3,605	4	5	3,600	
		STA 472+35 - 481+15	472+35.00/481+15.00	USH 8	244	0	0	244	431	539	-295	
		STA 634+50 - 645+00	634+50.00/645+00.00	USH 8	96	0	0	96	14,174	17,718	-17,622	
		STA 670+00 - 673+75	670+00.00/673+75.00	USH 8	22	0	0	22	8,228	10,285	-10,263	
		STA 680+00 - 683+25	680+00.00/683+25.00	USH 8	26	0	0	26	2,797	3,496	-3,470	
		CULVERT REPLACEMENTS	-	USH 8	1,222	0	0	1,222	79	99	1,123	
		SUBTOTAL			5,215	0	0	5,215	25,713	32,141	-26,926	-26,926
1590-18-71	0030	DIVISION 1										
		STA 553+50 - 605+26	553+50.00/605+26.72	USH 8	274,795	0	0	274,795	44,087	55,109	219,686	
		STA 605+50 - 620+97	605+50.00/620+97.00	USH 8	2,751	0	0	2,751	2,589	3,236	-485	
		YOUNGS LANE	12+89.66/18+40.64	YOUNGS LANE	20,431	0	0	20,431	14	18	20,414	
		KWE DA KIK LANE	20+15.00/21+65.00	KWE DA KIK LANE	530	0	0	530	510	638	-108	
		SUBTOTAL			298,507	0	0	298,507	47,200	59,000	239,507	239,507
1590-18-81	0010	DIVISION 1										
		CULVERT REPLACEMENTS	-	USH 8	6,304	0	0	6,304	415	519	5,785	
		SUBTOTAL			6,304	0	0	6,304	415	519	5,785	5,785
TOTALS		1590-18-71 SUBTOTAL			303,722	0	0	303,722	72,913	91,141	212,581	212,581
		1590-18-81 SUBTOTAL			6,304	0	0	6,304	415	519	5,785	5,785
		GRAND TOTAL			310,026	0	0	310,026	73,328	91,660	218,366	218,366
		TOTAL COMMON EXC			310,026							

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.
(4) SALVAGED/UNUSABLE PAVEMENT MATERIAL
5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL
(13) EXPANDED FILL FACTOR = 1.25

REMOVING CABLEGUARD

STA	TO	STA	LOCATION	REMOVING CABLEGUARD 204.0167 LF	REMARKS
PROJECT ID 1590-18-71					
CAT 0010					
634+75	-	644+75	USH 8, LT	995	EXISTING CABLE BARRIER SYSTEM
635+75	-	644+75	USH 8, RT	890	EXISTING CABLE BARRIER SYSTEM
670+00	-	674+00	USH 8, LT	410	EXISTING CABLE BARRIER SYSTEM
CAT 0010 TOTALS				2,295	
CAT 0030					
581+00	-	589+00	USH 8, RT	785	EXISTING CABLE BARRIER SYSTEM
595+25	-	602+00	USH 8, RT	660	EXISTING CABLE BARRIER SYSTEM
CAT 0030 TOTALS				1,445	
1590-18-71 SUBTOTALS				3,740	
CONTRACT TOTAL				3,740	

PREPARE FOUNDATION FOR ASHPHALTIC SHOULDERS

STA	TO	STA	LOCATION	211.0400 PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS STA
CAT 0010				
PROJECT ID 1590-18-71				
416+22.56	-	427+00	LT & RT	22
472+35	-	473+00	RT	1
480+50	-	481+15	RT	2
SUBTOTALS				25
CAT 0010				
PROJECT ID 1590-18-81				
893+50	-	1012+86.06	LT	120
893+50	-	933+64	RT	41
938+78	-	1012+86.06	RT	75
SUBTOTALS				236
CONTRACT TOTAL				261

BASE AGGREGATE SUMMARY

STA	TO	STA	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1-1/4-INCH TON	624.0100 WATER MGAL
PROJECT ID 1590-18-71					
CAT 0010					
416+22	-	440+00	385	65	10
440+00	-	498+54	1,395	--	30
498+54	-	539+00	1,050	--	20
539+00	-	553+50	375	--	10
605+27	-	639+00	875	--	20
639+00	-	682+75	1,135	--	25
CULVERTS X-ING PATCHES			--	650	15
UNDISTRIBUTED			1,305	180	5
CAT 0010 TOTALS			6,520	895	135
CAT 0030					
553+50	-	605+27	2,265	18,890	425
YOUNGS LN			80	730	15
KWE DA KIK			--	235	5
UNDISTRIBUTED			585	995	20
CAT 0030 TOTALS			2,930	20,850	465
1590-18-71 SUBTOTALS			9,450	21,745	600
PROJECT ID 1590-18-81					
682+75	-	689+00	155	--	3
689+00	-	739+00	1,235	--	25
739+00	-	789+00	1,235	--	25
789+00	-	839+00	1,235	--	25
839+00	-	889+00	1,235	--	25
889+00	-	939+00	1,125	95	25
939+00	-	989+00	1,170	--	25
989+00	-	1012+86	590	--	10
CULVERTS X-ING PATCHES			--	4,105	80
UNDISTRIBUTED			800	210	8
1590-18-81 SUBTOTALS			8,780	4,410	251
CONTRACT TOTAL			18,230	26,155	851

COFFERDAM

STA	TO	STA	206.5001 (21008000215) COFFERDAMS EACH	COMMENTS
CAT 0010				
PROJECT ID 1590-18-81				
			1.0	UPSTREAM AND DOWNSTREAM OF CULVERT
SUBTOTALS			1.0	
CONTRACT TOTAL			1.0	

HMA SUMMARY

STA	TO	STA	455.0605 TACK COAT GAL	460.6223 HMA PAVEMENT 3 MT 58-28 S TON	460.6244 HMA PAVEMENT 4 MT 58-34 S TON	460.0105.S HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP VOLUMETRICS EACH	460.0110.S HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP DENSITY EACH
PROJECT ID 1590-18-71							
CAT 0010							
416+23	-	439+00	765	1,380	1,070	--	--
439+00	-	489+00	1,565	2,815	2,190	--	--
489+00	-	539+00	1,300	2,340	1,820	--	--
539+00	-	589+00	1,315	3,515	1,855	--	--
589+00	-	639+00	1,340	3,280	2,015	--	--
639+00	-	682+75	1,075	1,935	1,505	--	--
416+23	-	682+75	--	--	--	2	3
1590-18-71 SUBTOTALS			7,360	15,265	10,455	2	3
PROJECT ID 1590-18-81							
CAT 0010							
682+75	-	689+00	145	260	205	--	--
689+00	-	739+00	1,175	2,115	1,645	--	--
739+00	-	789+00	1,160	2,085	1,620	--	--
789+00	-	839+00	1,155	2,080	1,620	--	--
839+00	-	889+00	995	1,790	1,395	--	--
889+00	-	939+00	1,395	2,510	1,950	--	--
939+00	-	989+00	1,270	2,290	1,780	--	--
989+00	-	1012+86	605	1,095	850	--	--
682+75	-	1012+86	--	--	--	--	--
1590-18-81 SUBTOTALS			7,900	14,225	11,065	0	0
CONTRACT TOTAL			15,260	29,490	21,520	2	3

HMA COLD WEATHER PAVING

	LOCATION	450.4000 TON
PROJECT ID 1590-18-71		
CAT 0010		
	USH 8	12,500
1590-18-71 SUBTOTAL		12,500
PROJECT ID 1590-18-81		
CAT 0010		
	USH 8	10,000
1590-18-81 SUBTOTALS		10,000
CONTRACT TOTAL		22,500

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PWL MIXTURE USE TABLE

LOCATION	STATION / LOCATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEMS	TONS	THICKNESS	MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
2-12 FOOT DRIVING LANES	416+22.56 - 553+50	LOWER LAYER	MILLED EXISTING HMA SURFACE	HMA PAVEMENT 3 MT 58-28 S	4610	2.25"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
2-12 FOOT DRIVING LANES	416+22.56 - 553+50	UPPER LAYER	3 MT 58-28 S	HMA PAVEMENT 4 MT 58-34 S	3590	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
5 FOOT SHOULDERS	416+22.56- 429+15	LOWER LAYER	AGGREGATE	HMA PAVEMENT 3 MT 58-28 S	150	2.25"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCPETANCE TESTING BY THE DEPARTMENT NOT ELIGIBLE FOR INCENTIVE
5 FOOT SHOULDERS	416+22.56 - 429+15	UPPER LAYER	3 MT 58-28 S	HMA PAVEMENT 4 MT 58-34 S	120	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT NOT ELEIGIBLE FOR INCENTIVE
TWLTL	429+15 - 444+39	LOWER LAYER	MILLED EXISTING HMA SURFACE	HMA PAVEMENT 3 MT 58-28 S	300	2.25"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
TWLTL	429+15 - 444+39	UPPER LAYER	3MT 58-28S	HMA PAVEMENT 4 MT 58-34 S	230	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
TURN LANES	444+39 - 498+54	LOWER LAYER	MILLED EXISTING HMA SURFACE	HMA PAVEMENT 3 MT 58-28 S	95	2.25"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT. NOT ELEIGIBLE FOR INCENTIVE
TURN LANES	444+39 - 498+54	UPPER LAYER	3 MT 58-28 S	HMA PAVEMENT 4 MT 58-34 S	80	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT. NOT ELEIGIBLE FOR INCENTIVE
AUXILLARY LANE	445+76 - 483+07	LOWER LAYER	MILLED EXISTING HMA SURFACE	HMA PAVEMENT 3 MT 58-28 S	625	2.25"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT. NOT ELEIGIBLE FOR INCENTIVE
AUXILLARY LANE	445+76 - 483+07	LOWER LAYER	3 MT 58-28 S	HMA PAVEMENT 4 MT 58-34 S	490	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT. NOT ELEIGIBLE FOR INCENTIVE
3 FOOT SHOULDERS RT	445+76 - 483+07	LOWER LAYER	AGGREGATE	HMA PAVEMENT 3 MT 58-28 S	155	2.25"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT. NOT ELEIGIBLE FOR INCENTIVE
3 FOOT SHOULDERS RT	445+76 - 483+07	UPPER LAYER	3 MT 58-28 S	HMA PAVEMENT 4 MT 58-34 S	120	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT. NOT ELEIGIBLE FOR INCENTIVE
3 FOOT SHOULDERS LT	445+76 - 483+07	LOWER LAYER	MILLED EXISTNG HMA SURFACE	HMA PAVEMENT 3 MT 58-28 S	155	2.25"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT. NOT ELEIGIBLE FOR INCENTIVE
3 FOOT SHOULDERS LT	445+76 - 483+07	UPPER LAYER	3 MT 58-28 S	HMA PAVEMENT 4 MT 58-34 S	120	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT. NOT ELEIGIBLE FOR INCENTIVE
3 FOOT SHOULDERS	483+07 - 553+50	LOWER LAYER	MILLED EXISTNG HMA SURFACE	HMA PAVEMENT 3 MT 58-28 S	570	2.25"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT. NOT ELEIGIBLE FOR INCENTIVE
3 FOOT SHOULDERS	483+07 - 553+50	UPPER LAYER	3 MT 58-28 S	HMA PAVEMENT 4 MT 58-34 S	445	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT. NOT ELEIGIBLE FOR INCENTIVE

PWL MIXTURE USE TABLE (CONT'D)

LOCATION	STATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEMS	TONS	THICKNESS	MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
BYPASS LANE	548+44.76 - 553+50	LOWER LAYER	MILLED EXISTNG HMA SURFACE	HMA PAVEMENT 3 MT 58-28 S	60	2.25"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT. NOT ELEIGIBLE FOR INCENTIVE
BYPASS LANE	548+44.76 - 553+50	LOWER LAYER	3 MT 58-28 S	HMA PAVEMENT 4 MT 58-34 S	45	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT. NOT ELEIGIBLE FOR INCENTIVE
2-12 FOOT DIRVING LANES	553+50 - 605+26.72	LOWER LAYER	AGGREGATE	HMA PAVEMENT 3 MT 58-28 S	3,090	4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
2-12 FOOT DRIVING LANES	553+50 - 605+26.72	UPPER LAYER	3 MT 58-28 S	HMA PAVEMENT 4 MT 58-34 S	1,350	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
3 FOOT SHOULDERS	553+50 - 605+26.72	LOWER LAYER	AGGREGATE	HMA PAVEMENT 3 MT 58-28 S	775	4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT. NOT ELEIGIBLE FOR INCENTIVE
3 FOOT SHOULDERS	553+50 - 605+26.72	UPPER LAYER	3 MT 58-28 S	HMA PAVEMENT 4 MT 58-34 S	340	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT. NOT ELEIGIBLE FOR INCENTIVE
TURN LANES / BYPASS LANE	553+50 605+26.72	LOWER LAYER	AGGREGATE	HMA PAVEMENT 3 MT 58-28 S	210	4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT. NOT ELEIGIBLE FOR INCENTIVE
TURN LANES / BYPASS LANE	553+50 - 605+26.72	UPPER LAYER	3 MT 58-28 S	HMA PAVEMENT 4 MT 58-34 S	105	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT. NOT ELEIGIBLE FOR INCENTIVE
2-12 FOOT DIRVING LANES	605+26.72 - 1012+86.06	LOWER LAYER	AGGREGATE	HMA PAVEMENT 3 MT 58-28 S	13,695	2.25"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
2-12 FOOT DRIVING LANES	605+26.72 - 1012+86.06	UPPER LAYER	3 MT 58-28 S	HMA PAVEMENT 4 MT 58-34 S	10,650	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
3 FOOT SHOULDERS	605+26.72 - 1012+86.06	LOWER LAYER	MILLED EXISTNG HMA SURFACE	HMA PAVEMENT 3 MT 58-28 S	2,950	2.25"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT. NOT ELEIGIBLE FOR INCENTIVE
3 FOOT SHOULDERS	605+26.72 - 1012+86.06	UPPER LAYER	3 MT 58-28 S	HMA PAVEMENT 4 MT 58-34 S	2,270	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT. NOT ELEIGIBLE FOR INCENTIVE
3 FOOT SHOULDERS	605+26.72 - 1012+86.06	LOWER LAYER	AGGREGATE	HMA PAVEMENT 3 MT 58-28 S	155	2.25"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT. NOT ELEIGIBLE FOR INCENTIVE
3 FOOT SHOULDERS	605+26.72 - 1012+86.06	UPPER LAYER	3 MT 58-28 S	HMA PAVEMENT 4 MT 58-34 S	120	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT. NOT ELEIGIBLE FOR INCENTIVE
2 FOOT WIDENING (ACHIEVE 5 FOOT PAVED SHOULDER)	605+26.72 - 1012+86.06	LOWER LAYER	AGGREGATE	HMA PAVEMENT 3 MT 58-28 S	725	2.25"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT. NOT ELEIGIBLE FOR INCENTIVE
2 FOOT WIDENING (ACHIEVE 5 FOOT PAVED SHOULDER)	605+26.72 - 1012+86.06	UPPER LAYER	3 MT 58-28 S	HMA PAVEMENT 4 MT 58-34 S	560	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT. NOT ELEIGIBLE FOR INCENTIVE

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PWL MIXTURE USE TABLE (CONT'D)

LOCATION	STATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEMS	TONS	THICKNESS	MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
BYPASS LANES	889+06 - 970+27	LOWER LAYER	MILLED EXISTNG HMA SURFACE	HMA PAVEMENT 3 MT 58-28 S	360	2.25"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT. NOT ELEIGIBLE FOR INCENTIVE
BYPASS LANES	889+06 - 970+27	UPPER LAYER	3 MT 58-28 S	HMA PAVEMENT 4 MT 58-34 S	280	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT. NOT ELEIGIBLE FOR INCENTIVE
SIDE ROADS	VARIES	LOWER LAYER	MILLED EXISTING HMA SURFACE	HMA PAVEMENT 3 MT 58-28 S	540	2.25"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT. NOT ELEIGIBLE FOR INCENTIVE
SIDE ROADS	VARIES	UPPER LAYER	3 MT 58-28 S	HMA PAVEMENT 4 MT 58-34 S	410	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT. NOT ELEIGIBLE FOR INCENTIVE
SIDE ROADS	YOUNGS & KWE DA KIK	LOWER LAYER	AGGREGATE	HMA PAVEMENT 3 MT 58-28 S	240	2.25"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT. NOT ELEIGIBLE FOR INCENTIVE
SIDE ROADS	YOUNGS & KWE DA KIK	UPPER LAYER	3 MT 58-28 S	HMA PAVEMENT 4 MT 58-34 S	180	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT. NOT ELEIGIBLE FOR INCENTIVE

ASPHALTIC SURFACE SUMMARY

STA	LOCATION	465.0110 ASPHALTIC SURFACE PATCHING TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS & FIELD ENTRANCES TON	465.0125 ASPHALTIC SURFACE TEMPORARY TON	465.0315 ASPHALTIC FLUMES SY
PROJECT ID 1590-18-71					
CAT 0010					
423+75	USH 8, RT	--	16	--	--
472+92	USH 8, RT	--	--	--	15
480+57	USH 8, RT	--	--	--	15
563+75	USH 8, RT	--	--	--	15
565+17	USH 8, RT	--	--	--	15
589+44	USH 8, RT	--	--	--	15
589+84	USH 8, RT	--	--	--	15
590+62	USH 8, LT	--	--	--	10
593+57	USH 8, RT	--	--	--	15
594+90	USH 8, RT	--	--	--	15
589+75	USH 8, RT	--	89	--	--
594+25	USH 8, RT	--	60	--	--
CULVERT X-ING PATCHES		--	--	230	--
CURB & GUTTER PATCHES		15	--	--	--
UNDISTRIBUTED		255	--	--	--
1590-18-71 SUBTOTALS		270	165	230	130
PROJECT ID 1590-18-81					
CAT 0010					
USH 8, RT & LT		--	95	--	--
CULVERT X-ING PATCHES		--	--	980	--
UNDISTRIBUTED		255	15	--	--
1590-18-81 SUBTOTALS		255	110	980	0
CONTRACT TOTAL		525	275	1,210	130

RUMBLE STRIPS

STATION	TO	STATION	465.0520 ASPHALTIC SHOULDER RUMBLE STRIPS 2-LANE RURAL LF	465.0560 ASPHALTIC CENTERLINE RUMBLE STRIPS 2-LANE RURAL LF	REMARKS
PROJECT ID 1590-18-71					
CAT 0010					
456+40	-	480+54	---	2,414	BEGIN PROJECT LIMTS
484+54	-	496+53	---	1,199	
500+53	-	522+31	---	2,178	
526+47	-	550+53	---	2,406	
554+53	-	562+51	---	798	RECONSTRUCT ALIGNMENT
566+51	-	587+74	---	2,123	RECONSTRUCT ALIGNMENT
591+74	-	605+08	---	1,334	RECONSTRUCT ALIGNMENT
611+34	-	619+26	---	792	
623+26	-	678+21	---	5,495	
682+42	-	682+75	---	33	END PROJECT LIMITS
1590-18-71 SUBTOTALS			0	18,772	
PROJECT ID 1590-18-81					
CAT 0010					
682+75	-	730+50	---	4,775	BEGIN PROJECT LIMITS
734+50	-	851+40	---	11,690	
855+40	-	873+15	---	1,775	
880+68	-	890+89	---	1,021	
894+89	-	911+46	---	1,657	
915+46	-	932+36	---	1,690	
936+36	-	953+35	---	1,699	
957+35	-	965+65	---	829	
972+73	-	1000+50	---	2,777	END 55 MPH ZONE
892+90	-	1012+86	23,992	---	TYPE 1
1590-18-81 SUBTOTALS			23,992	27,913	
CONTRACT TOTAL			23,992	46,685	

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APRON ENDWALLS

STA	* 520.1024 APRON ENDWALLS FOR CULVERT PIPE 24-INCH EACH	520.1030 APRON ENDWALLS FOR CULVERT PIPE 30-INCH EACH	520.1036 APRON ENDWALLS FOR CULVERT PIPE 36-INCH EACH	* 522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	522.1036 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH EACH	521.1048 APRON ENDWALLS FOR CULVERT PIPE STEEL 48-INCH EACH	522.2614 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HE 14X23-INCH LF
PROJECT ID 1590-18-71							
CAT 0010							
482+30	1	--	--	--	--	--	--
491+29	2	--	--	--	--	--	--
498+03	--	--	2	--	--	--	--
512+97	--	--	--	--	1	--	--
547+84	--	--	--	--	1	--	--
557+75	--	1	--	--	--	--	--
638+91	--	--	1	--	--	--	--
671+42	--	1	--	--	--	--	--
680+57	--	--	--	1	--	--	--
CAT 0010 TOTALS	3	2	3	1	2	0	0
1590-18-71 SUBTOTALS	3	2	3	1	2	0	0
PROJECT ID 1590-18-81							
CAT 0010							
736+29	2	--	--	--	--	--	--
757+80	2	--	--	--	--	--	--
816+21	--	2	--	--	--	--	--
858+72	--	2	--	--	--	--	--
911+83	2	--	--	--	--	--	--
926+54	2	--	--	--	--	--	--
935+03	--	--	--	--	--	--	2
950+47	--	--	--	--	--	2	--
979+99	2	--	--	--	--	--	--
989+41	--	2	--	--	--	--	--
1000+94	2	--	--	--	--	--	--
1009+07	2	--	--	--	--	--	--
1590-18-81 SUBTOTALS	14	6	0	0	0	2	2
CONTRACT TOTAL	17	8	3	1	2	2	2

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

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APRON ENDWALLS

PROJECT ID 1590-18-71

CATEGORY	STRUCTURE	STATION	OFFSET**	LOCATION	522.1012 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH EACH	522.1018 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH EACH	* 522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	522.2629 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 29X45-INCH EACH	* 650.4000 CONSTRUCTION STAKING STORM SEWER EACH	INVERT*** ELEVATION	REMARKS
0030	1000.2	257+16 'CE'	52.1' LT	CE	--	--	--	1	1	1823.57	
0030	1001.1	554+02 'PW'	13.3' RT	PW	1	--	--	--	1	1830.47	
0030	1002.1	259+14 'CE'	7.4' LT	CE	1	--	--	--	1	1834.71	
0030	1003.2	267+69 'CE'	15.0' RT	CE	1	--	--	--	1	1837.50	
0030	1004.1	570+72 'PW'	9.4' LT	PW	1	--	--	--	1	1831.99	
0030	1005.1	575+62 'PW'	10.1' LT	PW	1	--	--	--	1	1816.19	
0030	1006.1	579+79 'PW'	9.1' RT	PW	--	1	--	--	1	1789.36	
0030	1007.4	586+45 'PW'	26.9' RT	PW	--	--	1	--	1	1741.80	
0030	1008.1	597+62 'PW'	9.1' RT	PW	1	--	--	--	1	1738.62	
0030	1009.1	98+60 'ID'	8.7' RT	ID	1	--	--	--	1	1731.59	
0030	1010.1	101+58 'ID'	10.1' RT	ID	1	--	--	--	1	1717.81	
0030	1011.1	602+64 'PW'	9.2' RT	PW	1	--	--	--	1	1718.79	
0030	1012.1	607+67 'PW'	10.0' RT	PW	1	--	--	--	1	1702.29	
0030	1013.1	108+58 'ID'	11.9' RT	ID	1	--	--	--	1	1691.83	
0030	1014.0	611+20 'PW'	42.3' LT	PW	--	1	--	--	1	1691.71	
0030	1015.1	616+00 'PW'	13.1' RT	PW	--	--	--	--	1	1693.83	
CATEGORY 0030 TOTAL					11	2	1	1	16		

REMARKS:

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

**STATIONS AND OFFSETS ARE TO END OF PIPE

***THE INVERT ELEVATION IS THE ELEVATION AT THE END OF PIPE

CULVERT PIPE SUMMARY

STA	520.3324 CULVERT PIPE CLASS III-A 24-INCH LF	520.3330 CULVERT PIPE CLASS III-A 30-INCH LF	520.3336 CULVERT PIPE CLASS III-A 36-INCH LF	520.8000 CONCRETE COLLARS FOR PIPE EACH	521.3148 CULVERT PIPE CORRUGATED STEEL 48-INCH LF	* 522.0124 CULVERT PIPE REINFORCED CONCRETE CLASS III 24-INCH LF	522.0136 CULVERT PIPE REINFORCED CONCRETE CLASS III 36-INCH LF	522.2314 CULVERT PIPE REINFORCED CONCRETE HE CLASS HE-III 14X23-INCH LF	* 633.5200 MARKERS CULVERT END EACH	650.6000 CONSTRUCTION STAKING PIPE CULVERTS EACH	INVERT OFFSET	INVERT ELEV.	INVERT OFFSET	INVERT ELEV.	MIN. THICKNESS (INCHES)
PROJECT ID 1590-18-71															
CAT 0010															
482+30	--	--	--	--	--	--	--	--	1	1	EXIST RT	EXIST	--	--	--
491+29	80	--	--	--	--	--	--	--	2	2	36.13 RT	1699.98	44.00 LT	1697.82	0.064
498+03	--	--	92	--	--	--	--	--	2	2	43.97 LT	4679.70	47.97 RT	1679.60	0.079
512+97	--	--	--	1	--	--	4	--	1	1	32.47 RT	1733.22	38.27 LT	1731.89	--
547+84	--	--	--	1	--	--	4	--	1	1	29.43 RT	1827.25	41.43 LT	1827.15	--
557+75	--	6	--	1	--	--	--	--	1	1	86.08 RT	1824.41	84.47 LT	1824.04	0.079
638+91	--	--	14	1	--	--	--	--	1	1	55.92 RT	1666.99	86.08 LT	1665.90	0.079
671+42	--	16	--	1	--	--	--	--	1	1	27.85 RT	1688.20	78.28 LT	1672.37	0.079
680+57	--	--	--	1	--	36	--	--	1	1	39.26 RT	1671.58	113.20 LT	1643.26	--
CAT 0010 TOTALS	80	22	106	6	0	36	8	0	11	11					
1590-18-71 SUBTOTALS	80	22	106	6	0	36	8	0	11	11					
PROJECT ID 1590-18-81															
CAT 0010															
736+29	92	--	--	--	--	--	--	--	2	2	51.99 LT	1597.31	39.99 RT	1,596	0.064
757+80	58	--	--	--	--	--	--	--	2	2	27.01 LT	1599.90	30.99 RT	1,599	0.064
816+21	--	96	--	--	--	--	--	--	2	2	43.96 RT	1605.18	51.95 LT	1,603	0.079
858+72	--	85	--	--	--	--	--	--	2	2	44.50 LT	1571.80	50.54 RT	1,571	0.079
911+83	71	--	--	--	--	--	--	--	2	2	32.97 RT	1579.02	38.00 LT	1,578	0.064
926+54	64	--	--	--	--	--	--	--	2	2	28.83 LT	1570.73	35.16 RT	1,570	0.064
935+03	--	--	--	--	--	--	--	64	2	2	26.20 RT	1570.87	31.80 LT	1,571	0.079
950+47	--	--	--	--	93	--	--	--	2	2	46.32 RT	1563.62	46.63 LT	1,563	0.079
979+99	62	--	--	--	--	--	--	--	2	2	29.42 LT	1573.49	32.58 RT	1,573	0.064
989+41	--	83	--	--	--	--	--	--	2	2	39.26 LT	1559.41	43.74 RT	1,559	0.079
1000+94	65	--	--	--	--	--	--	--	2	2	30.59 LT	1559.62	34.41 RT	1,558	0.064
1009+07	68	--	--	--	--	--	--	--	2	2	31.67 LT	1556.26	35.25 RT	1,556	0.064
1590-18-81 SUBTOTALS	480	264	0	0	93	0	0	64	24	24					
CONTRACT TOTAL	560	286	106	6	93	36	8	64	35	35					

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

CONCRETE SUMMARY

STA	TO	STA	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF	601.0557 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D LF	601.0600 CONCRETE CURB PEDESTRIAN LF	602.0410 CONCRETE SIDEWALK 5-INCH SF	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF	602.0605 CURB RAMP DETECTABLE WARNING FIELD RADIAL YELLOW SF
PROJECT ID 1590-18-71								
CAT 0010								
416+54	-	416+94	45	--	--	158	--	18
417+24	-	417+62	42	--	--	145	--	18
419+97	-	420+28	36	--	--	104	--	17
420+59	-	420+94	38	--	19	129	--	18
423+16	-	423+54	41	--	--	141	--	18
423+85	-	424+16	35	--	--	120	--	16
426+84	-	426+86	24	--	24	138	10	--
473+00	-	480+50	---	739	--	--	--	--
497+25	-	498+40	---	150	--	--	--	--
563+50	-	565+25	--	150	--	--	--	--
589+00	-	590+75	182	328	--	--	--	--
594+00	-	595+00	--	142	--	--	--	--
1590-18-71 SUBTOTALS			443	1,509	43	935	10	105
PROJECT ID 1590-18-81								
CAT 0010								
933+50	-	938+78	--	551	--	--	--	--
1590-18-81 SUBTOTALS			0	551	0	0	0	0
CONTRACT TOTAL			443	2,060	43	935	10	105

RIPRAP SUMMARY

STA	LOCATION	606.0200 RIPRAP MEDIUM CY	645.0120 GEOTEXTILE FABRIC TYPE HR SY
PROJECT ID 1590-18-71			
CAT 0010			
472+80	USH 8, RT	15	30
480+80	USH 8, RT	6	11
491+30	USH 8, LT	7	14
498+04	USH 8, LT	12	23
547+84	USH 8, RT	9	18
554+00	USH 8, RT	6	11
585+50	USH 8, RT	11	22
587+73	USH 8, LT	132	263
589+00	USH 8, LT	11	22
596+00	USH 8, LT	85	170
608+99	USH 8, RT	6	11
671+42	USH 8, LT	10	19
680+57	USH 8, LT	5	10
1590-18-71 SUBTOTALS		315	624
PROJECT ID 1590-18-81			
CAT 0010			
736+29	USH 8, RT	5	10
757+80	USH 8, RT	5	10
816+21	USH 8, LT	7	14
858+72	USH 8, RT	7	14
911+83	USH 8, LT	5	10
926+55	USH 8, RT	5	10
935+03	USH 8, LT	4	7
950+47	USH 8, LT	15	30
979+99	USH 8, RT	5	10
989+41	USH 8, RT	7	14
1000+94	USH 8, RT	5	9
1009+07	USH 8, RT	5	9
1590-18-81 SUBTOTALS		75	147
CONTRACT TOTAL		390	771

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STORM SEWER PIPE REINFORCED CONCRETE

PROJECT 1590-18-71

CAT 0010			608.0315 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH	608.0324 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH	INLET	DISCHARGE	SLOPE
FROM	TO	LOCATION	LF	LF	ELEVATION	ELEVATION	FT/FT
MH-12	AE-8	STA 473+00	--	123	1715.15	1714.54	0.005
CB-10	MH-12	STA 474+00	11	--	1715.61	1715.55	0.005
MH-16	MH-12	STA 474+75	--	98	1716.35	1715.22	0.012
CB-14	MH-16	STA 475+25	6	--	1717.03	1717.00	0.005
MH-20	MH-16	STA 476+75	--	148	1719.12	1716.47	0.018
CB-18	MH-20	STA 476+00	6	--	1720.03	1720.00	0.005
MH-24	MH-20	STA 477+50	--	148	1721.89	1719.24	0.018
CB-22	MH-20	STA 478+25	11	--	1722.46	1722.40	0.005
	CAT 0010 TOTAL		34	517			

PROJECT 1590-18-71

CAT 0030			608.0315 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH	608.0324 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH	INLET	DISCHARGE	SLOPE
FROM	TO	LOCATION	LF	LF	ELEVATION	ELEVATION	
AE-50	CB-52	STA 20+77 'KDK'	--	66	1752.01	1746.60	0.082
CB-56	CB-52	STA 20+64 'KDK'	12	--	1753.58	1752.76	0.069
CB-54	CB-56	STA 20+64 'KDK'	34	--	1753.27	1752.76	0.015
	CAT 0030 SUBTOTAL		46	66			
1590-18-71 SUBTOTAL / CONTRACT TOTAL			80	583			

ADJUSTING

PROJECT 1590-18-71

CAT 0040	SPV.0060.01	SPV.0060.02
STATION	ADJUSTING WATER VALVES EACH	ADJUSTING SANITARY MANHOLE COVERS EACH
STA 416+63, 9.6' LT	1	---
STA 417+06, 40.6' RT	1	---
STA 417+06, 15.3' RT	---	1
STA 417+33, 7.8' LT	1	
STA 420+18, 3.7' RT	---	1
STA 420+39, 35.6' RT	1	---
STA 420+40, 6.7' LT	1	---
STA 420+52, 56.7' LT	1	---
STA 423+47, 17.2' LT	1	---
STA 423+66, 11.3' RT	---	1
STA 426+69, 12.3'RT	---	1
STA 427+14, 17.2' RT	1	---
CONTRACT TOTAL	8	4

608 STORM SEWER PIPE

STORM SEWER PIPE

PROJECT ID 1590-18-71

CATEGORY	FROM	TO	LOCATION	608.0330 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 30-INCH LF	608.0412 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH LF	608.0415 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 15-INCH LF	608.0418 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 18-INCH LF	608.0424 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 24-INCH LF	608.2329 STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 29X45-INCH LF	INLET ELEVATION	DISCHARGE ELEVATION	SLOPE FT/FT	REMARKS
0030	1000.0	1000.1	CE	--	--	--	--	279	--	1824.96	1823.86	0.004	
0030	1000.1	1000.2	CE	--	--	--	--	--	38	1823.76	1823.57	0.005	
0030	1000.3	1000.1	CE	61	--	--	--	--	--	1824.00	1823.86	0.002	
0030	1001.0	1001.1	PW	--	28	--	--	--	--	1830.89	1830.47	0.015	
0030	1002.0	1002.1	CE	--	16	--	--	--	--	1834.95	1834.71	0.015	
0030	1003.0	1003.1	CE	--	63	--	--	--	--	1838.37	1837.74	0.010	
0030	1003.1	1003.2	CE	--	24	--	--	--	--	1837.64	1837.40	0.010	
0030	1004.0	1004.1	PW	--	41	--	--	--	--	1832.62	1831.99	0.015	
0030	1005.0	1005.1	PW	--	19	--	--	--	--	1816.48	1816.19	0.015	
0030	1006.0	1006.1	PW	--	--	--	20	--	--	1789.93	1789.63	0.015	
0030	1006.1	1006.2	PW	--	--	--	18	--	--	1789.63	1789.36	0.015	
0030	1007.0	1007.1	PW	--	--	21	--	--	--	1745.49	1745.18	0.015	
0030	1007.1	1007.2	PW	--	--	9	--	--	--	1745.26	1745.13	0.014	
0030	1007.2	1007.3	PW	--	--	--	--	119	--	1744.38	1742.59	0.015	
0030	1007.3	1007.4	PW	--	--	--	--	53	--	1742.59	1741.80	0.015	
0030	1007.5	1007.2	PW	--	--	13	--	--	--	1745.22	1745.03	0.015	
0030	1007.6	1007.3	PW	--	--	17	--	--	--	1743.49	1743.24	0.015	
0030	1008.0	1008.1	PW	--	19	--	--	--	--	1738.90	1738.62	0.015	
0030	1009.0	1009.1	ID	--	23	--	--	--	--	1731.93	1731.59	0.015	
0030	1010.0	1010.1	ID	--	20	--	--	--	--	1718.11	1717.81	0.015	
0030	1011.0	1011.1	PW	--	19	--	--	--	--	1719.08	1718.79	0.015	
0030	1012.0	1012.1	PW	--	20	--	--	--	--	1702.59	1702.29	0.015	
0030	1013.0	1013.1	ID	--	30	--	--	--	--	1692.27	1691.83	0.015	
0030	1014.0	1014.1	PW	--	--	--	37	--	--	1691.31	1690.12	0.032	
0030	1014.1	1014.2	PW	--	--	--	28	--	--	1690.12	1689.70	0.015	
0030	1015.0	1015.1	PW	--	23	--	--	--	--	1694.06	1693.83	0.010	
CATEGORY 0030 TOTALS				61	345	60	103	451	38				

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STORM SEWER STRUCTURES & COVERS

PROJECT 1590-18-71

STR NO.	STATION	* 522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	611.0612 INLET COVERS TYPE C EACH	611.0627 INLET COVERS TYPE HM EACH	611.2005 MANHOLES 5-FT DIAMETER EACH	611.3004 INLETS 4-FT DIAMETER EACH	611.3230 INLETS 2X3-FT EACH	* 633.5200 MARKERS CULVERT END EACH	* 650.4000 CONSTRUCTION STAKING STORM SEWER EACH	RIM ELEVATION	INVERT ELEVATION	DEPTH FT
CAT 0010												
AE-8	STA 473+00, 39.0' RT	1	--	--	--	--	--	1	1	--	1714.54	--
CB-10	STA 474+00, 29.0' RT	--	--	1	--		1	--	1	1718.29	1715.60	2.69
MH-12	STA 474+00, 40.0' RT	--	1	--	1	--	--	--	1	1719.94	1715.15	4.79
CB-14	STA 475+25, 29.0' RT	--	--	1	--	--	1	--	1	1720.80	1717.03	3.77
MH-16	STA 475+25, 35.0' RT	--	1	--	1	--	--	--	1	1721.50	1716.35	5.15
CB-18	STA 476+75, 29.0' RT	--	--	1	--	--	1	--	1	1724.13	1720.03	4.10
MH-20	STA 476+75, 35.0' RT	--	1	--	1	--	--	--	1	1724.83	1719.12	5.71
CB-22	STA 478+25, 29.0' RT	--	--	1	--	--	1	--	1	1725.51	1722.46	3.05
MH-24	STA 478+25, 35.0' RT	--	1	--	1	--	--	--	1	1726.94	1721.89	5.05
	CAT 0010 TOTALS	1	4	4	4	0	4	1	9			

PROJECT 1590-18-71

STR NO.	STATION	* 522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	611.0612 INLET COVERS TYPE C EACH	611.0627 INLET COVERS TYPE HM EACH	611.2005 MANHOLES 5-FT DIAMETER EACH	611.3004 INLETS 4-FT DIAMETER EACH	611.3230 INLETS 2X3-FT EACH	* 633.5200 MARKERS CULVERT END EACH	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	RIM ELEVATION	INVERT ELEVATION	DEPTH FT
CAT 0030												
AE-50	STA 21+07'KDK', 75.3' LT	1	--	--	--	-	--	1	1	--	1746.60	--
CB-52	STA 20+77'KDK', 16.5' LT	--	--	1	--	1	--	--	1	1757.20	1752.01	5.19
CB-54	STA 20+64'KDK', 17.0' LT	--	--	1	--	--	1	--	1	1756.98	1753.58	3.40
CB-56	STA 20+77'KDK', 17.0' RT	--	--	1	--	--	1	--	1	1757.15	1753.26	3.89
	CAT 0030 TOTALS	1	0	3	0	1	2	1	4			
1590-18-71 SUBTOTAL / CONTRACT TOTAL		2	4	7	4	1	6	2	13			

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

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MANHOLES AND INLETS

PROJECT ID 1590-18-71

CATEGORY	STRUCTURE	STATION	OFFSET	LOCATION	611.0530 MANHOLE COVERS TYPE J EACH	611.0642 INLET COVERS TYPE MS EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.2008 MANHOLES 8-FT DIAMETER EACH	611.3901 INLETS MEDIAN 1 GRATE EACH	611.3902 INLETS MEDIAN 2 GRATE EACH	* 650.4000 CONSTRUCTION STAKING STORM SEWER EACH	RIM** ELEVATION	INVERT*** ELEVATION	DEPTH**** FT
0030	1000.0	254+61 'CE'	6.3' RT	CE	--	2	--	--	--	1	1	1832.47	1829.15	3.32
0030	1000.1	257+14 'CE'	14.1' LT	CE	1	--	--	1	--	--	1	1831.00	1823.86	7.14
0030	1000.3	257+75 'CE'	14.2' LT	CE	1	--	--	1	--	--	1	1831.95	1824.00	7.95
0030	1001.0	554+02 'PW'	14.7' LT	PW	--	1	--	--	1	--	1	1832.05	1830.30	1.75
0030	1002.0	259+14 'CE'	8.6' RT	CE	--	1	--	--	1	--	1	1836.46	1834.78	1.68
0030	1003.0	267+01 'CE'	10.0' LT	CE	--	1	--	--	1	--	1	1840.11	1838.51	1.60
0030	1003.1	267+66 'CE'	9.1' LT	CE	--	1	--	--	1	--	1	1841.00	1837.64	3.36
0030	1004.0	570+35 'PW'	9.3' RT	PW	--	1	--	--	1	--	1	1834.61	1832.45	2.16
0030	1005.0	575+56 'PW'	8.0' RT	PW	--	1	--	--	1	--	1	1818.49	1816.31	2.18
0030	1006.0	579+72 'PW'	23.7' LT	PW	--	2	--	--	-	1	1	1796.80	1789.93	6.87
0030	1006.1	579+72 'PW'	7.7' LT	PW	--	2	--	--	--	1	1	1792.59	1789.63	2.96
0030	1007.0	588+06 'PW'	29.1' LT	PW	--	1	--	--	1	--	1	1749.45	1745.30	4.15
0030	1007.1	588+02 'PW'	8.6' LT	PW	--	1	--	--	1	--	1	1750.16	1745.07	5.09
0030	1007.2	588+03 'PW'	0.1' LT	PW	1	--	1	--	--	--	1	1750.17	1744.13	4.29
0030	1007.3	586+84 'PW'	0.3' RT	PW	1	--	1	--	--	--	1	1748.97	1742.34	4.88
0030	1007.5	588+13 'PW'	8.6' RT	PW	--	1	--	--	1	--	1	1750.38	1745.03	5.35
0030	1007.6	586+81 'PW'	16.9' RT	PW	--	1	--	--	1	--	1	1746.53	1743.30	3.23
0030	1008.0	597+54 'PW'	8.1' LT	PW	--	1	--	--	1	--	1	1740.38	1738.73	1.65
0030	1009.0	98+49 'ID'	11.6' LT	ID	--	1	--	--	1	--	1	1733.35	1731.76	1.59
0030	1010.0	101+49 'ID'	7.9' LT	ID	--	1	--	--	1	--	1	1720.63	1717.94	2.69
0030	1011.0	602+56 'PW'	8.0' LT	PW	--	1	--	--	1	--	1	1720.90	1718.91	1.99
0030	1012.0	607+59 'PW'	8.0' LT	PW	--	1	--	--	1	--	1	1704.35	1702.42	1.93
0030	1013.0	108+44 'ID'	14.1' LT	ID	--	1	--	--	1	--	1	1693.89	1692.10	1.79
0030	1014.1	610+82 'PW'	12.4' LT	PW	--	1	--	--	1	--	1	1692.55	1689.91	2.64
0030	1014.2	610+82 'PW'	12.6' RT	PW	--	2	--	--	--	1	1	1693.20	1688.34	4.86
0030	1015.0	616+09 'PW'	8.0' LT	PW	--	1	--	--	1	--	1	1695.57	1693.89	1.68
CATEGORY 0030 TOTALS					4	26	2	2	18	4	26			

*ADDITIONAL QUANTITIES LISTED ELSEWHERE
**STATIONS AND OFFSETS ARE TO END OF PIPE
***THE INVERT ELEVATION IS THE ELEVATION AT THE END OF PIPE

EROSION CONTROL SUMMARY

STA	TO	STA	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATION EROSION CONTROL EACH	628.1910 MOBILIZATION EMERGENCY EROSION CONTROL EACH	628.7005 INLET PROTECTION TYPE A EACH	628.7015 INLET PROTECTION TYPE C EACH	628.7504 TEMPORARY DITCH CHECKS LF	628.7515.S STONE DITCH CHECKS CY	628.7555 CULVERT PIPE CHECKS EACH	628.7570 ROCK BAGS EACH	SPV.0090.103 STAKED WATTLES LF
PROJECT ID 1590-18-71													
CAT 0010													
439+00	-	489+00	--	--	--	--	--	--	135	--	3	--	560
473+00	-	485+50	--	--	--	--	6	3	--	--		--	--
489+00	-	539+00	--	--	--	--	--	--	--	--	17	--	--
539+00	-	589+00	4,124	4,124	--	--	6	6	672	66	13	225	5,140
589+00	-	639+00	2,110	2,110	--	--	7	7	724	52	23	170	3,220
639+00	-	682+75	1,730	1,730	--	--	--	--	--	--	8	40	1,830
UNDISTRIBUTED			1,195	1,195	10	8	--	--	230	15	12	65	--
1590-18-71 SUBTOTALS			9,159	9,159	10	8	19	16	1,761	133	76	500	10,750
PROJECT ID 1590-18-81													
CAT 0010													
682+75	-	689+00	---	---	--	--	--	--	---	---	--	---	1,650
689+00	-	739+00	130	130	--	--	--	--	---	---	3	5	--
739+00	-	789+00	225	225	--	--	--	--	---	---	3	5	--
789+00	-	839+00	325	325	--	--	--	--	---	---	5	10	--
839+00	-	889+00	225	225	--	--	--	--	---	---	5	5	--
889+00	-	939+00	430	430	--	--	--	--	---	---	8	10	--
939+00	-	989+00	685	685	--	--	--	--	---	---	13	15	--
989+00	-	1012+86	785	785	--	--	--	--	---	---	11	20	--
UNDISTRIBUTED			420	420	13	2	--	--	---	---	7	10	--
1590-18-81 SUBTOTALS			3,225	3,225	13	2	0	0	0	0	55	80	1,650
CONTRACT TOTAL			12,384	12,384	23	10	19	16	1,761	133	131	580	12,400

GEOTEXTILE FABRIC FOR STONE DITCH CHECKS

STA	LOCATION	645.0130 GEOTEXTILE FABRIC TYPE R SY
PROJECT ID 1590-18-71		
CAT 0010		
539+00 TO 639+00	USH 8, RT	2,435
UNDISTRIBUTED	USH 8, RT	145
1590-18-71 SUBTOTALS		2,580
CONTRACT TOTAL		2,580

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LANDSCAPING SUMMARY

STA	TO	STA	625.0100 TOPSOIL SY	628.2006 EROSION MAT URBAN CLASS I, TYPE A SY	628.2023 EROSION MAT CLASS II, TYPE B SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0500 SEED WATER MGAL
PROJECT ID 1590-18-71								
CAT 0010								
416+22	-	439+00	3,714	--	3,714	3	167	83
439+00	-	489+00	1,810	1,810	--	2	81	41
489+00	-	539+00	850	850	--	1	38	19
605+00	-	683+25	29,500	--	29,500	19	1,328	663
CAT 0010 TOTALS			35,874	2,660	33,214	25	1,614	806
CAT 0030								
553+50	-	605+27	83,130	--	83,130	54	3,743	1,869
CAT 0030 TOTALS			83,130	0	83,130	54	3,743	1,869
1590-18-71 SUBTOTALS			119,004	2,660	116,344	79	5,357	2,675
PROJECT ID 1590-18-81								
689+00	-	739+00	508	508	--	1	23	11
739+00	-	789+00	207	207	--	1	9	5
789+00	-	839+00	629	629	--	1	28	14
839+00	-	889+00	293	293	--	1	13	7
889+00	-	939+00	291	291	--	1	13	7
939+00	-	989+00	1,207	1,207	--	1	54	27
989+00	-	1012+86	457	457	--	1	21	10
SUBTOTALS			3,592	3,592	0	7	161	81
CONTRACT TOTAL			122,596	6,252		86	5,518	2,756

PERMANENT SIGNING SUMMARY

PROJECT 1590-18-71
CAT 0010

SIGN NO.	STA	LOCATION	SIGN CODE	SIZE	SIGN WORDING & PICTORIALS	634.0616 POSTS WOOD 4X6 INCH X 16-FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	638.2102 MOVING SIGNS TYPE II EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
1	429+25	USH 8, LT	R3-9B	24"X36"	CENTER LANE LT TURN ONLY	1	6.00	---	---	--	---	
1A	429+25	USH 8, LT	R3-9D	24"X6"	END	---	1.00	---	---	---	---	MOUNT WITH SIGN R3-9B
2	429+25	USH 8, RT	R3-9B	24"X36"	CENTER LANE LT TURN ONLY	1	6.00	---	---	---	---	
2A	429+25	USH 8, RT	R3-9C	24"X6"	BEGIN	---	1.00	---	---	---	---	MOUNT WITH SIGN R3-9B
3	430+32	USH 8, LT	W4-2R	36"X36"	RIGHT LANE ENDS	---	---	---	---	1	1	
4	431+73	USH 8, RT	R4-3	24"X30"	SLOWER TRAFFIC KEEP RT	---	---	---	---	1	1	
4A	440+02	USH 8, LT	W11-6	30"x30"	SNOWMOBILE CROSSING	1	---	6.25	---	---	---	
4B	440+02	USH 8, RT	W11-6	30"x30"	SNOWMOBILE CROSSING	1	---	6.25	---	---	---	
5	0+00	USH 8, RT	R3-9B	24"X36"	CENTER LANE LT TURN ONLY	1	6.00	---	---	---	---	
5A	0+00	USH 8, RT	R3-9D	24"X6"	END	---	1.00	---	---	---	---	MOUNT WITH SIGN R3-9B
6	444+43	USH 8, LT	R3-9B	24"X36"	CENTER LANE LT TURN ONLY	1	6.00	---	---	---	---	
6A	444+43	USH 8, LT	R3-9C	24"X30"	BEGIN	---	1.00	---	---	---	---	MOUNT WITH SIGN R3-9B
7	445+97	USH 8, RT	R3-8LA	36"X30"	LANE CONTROL	1	7.50	---	---	---	---	
8	472+40	USH 8, RT	W4-2R	36"X36"	RIGHT LANE ENDS	---	---	---	---	1	1	
8A	556+33	USH 8, LT	R2-1	24"x30"	SPEED LIMIT	1	---	---	1	---	1	
9	557+70	USH 8, LT	---	---	STONE LAKE FUEL & DELI	2	---	---	1	---	2	
10	558+00	USH 8, RT	W2-4	---	"T" INTERSECTION	---	---	---	---	1	1	
10A	558+00	USH 8, RT	W13-1	---	45 MPH	---	---	---	---	---	---	
11	559+61	USH 8, RT	D1-1	---	YOUNGS LN	2	---	---	1	---	1	
11A	561+39	USH 8, RT	R2-1	24"x30"	SPEED LIMIT	1	---	---	1	---	1	
12	564+87	USH 8, RT	R1-1	---	STOP	1	---	---	1	---	1	
12A	564+75	USH 8, RT	W3-1	36"X36"	STOP AHEAD	1	---	9.00	---	---	---	
13	567+68	USH 8, RT	D5-63	---	HISTORICAL MARKER 1/2 MILE	2	---	---	1	---	2	
14	569+19	USH 8, LT	D1-56L	---	YOUNGS LN	2	---	---	1	---	2	
15	571+00	USH 8, LT	W2-4	---	"T" INTERSECTION	---	---	---	---	1	1	
15A	571+00	USH 8, LT	W13-1	---	45 MPH	---	---	---	---	---	---	
15B	575+88	USH 8, LT	R2-1	24"x30"	SPEED LIMIT	1	---	---	1	---	1	
16	578+62	USH 8, RT	W2-1	---	CROSSROAD	---	---	---	---	1	1	
16A	578+62	USH 8, RT	W13-1	---	45 MPH	---	---	---	---	---	---	
17	578+55	USH 8, LT	---	---	MUSEUM & LIBRARY	2	---	---	1	---	2	
17A	581+00	USH 8, RT	W5-60R	13"X27 1/2"	BEAM GUARD TREATMENT	---	---	---	---	1	1	
17B	583+19	USH 8, LT	R2-1	24"x30"	SPEED LIMIT	1	---	---	1	---	1	
18	582+87	USH 8, RT	D1-1	---	KWE DA KIK LN	2	---	---	1	---	2	
19	589+17	USH 8, RT	D5-64R	---	HISTORICAL MARKER	2	---	---	1	---	2	
20	589+50	USH 8, LT	R1-1	---	STOP	1	---	---	1	---	1	
21	589+87	USH 8, RT	R1-1	---	STOP	1	---	---	1	---	1	
21A	591+99	USH 8, LT	R2-1	24"x30"	SPEED LIMIT	1	---	---	1	---	1	
22	594+38	USH 8, RT	R1-1	---	STOP	1	---	---	1	---	1	
23	594+62	USH 8, LT	D5-64L	---	HISTORICAL MARKER	2	---	---	1	---	2	
24	595+11	USH 8, RT	D1-2	---	BUG LAKE RD / INDIAN RD	2	---	---	1	---	2	
24A	595+30	USH 8, RT	W5-60R	13"X27 1/2"	BEAM GUARD TREATMENT	---	---	---	---	1	1	
					1590-18-71 SUBTOTALS	35	35.50	21.50	18	8	34	

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PERMANENT SIGNING SUMMARY (CONT'D)

PROJECT 1590-18-71

CAT 0010

SIGN NO.	STA	LOCATION	SIGN CODE	SIZE	SIGN WORDING & PICTORIALS	634.0616 POSTS WOOD 4X6 INCH X 16-FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	638.2102 MOVING SIGNS TYPE II EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
CAT 0010												
25	598+75	USH 8, LT	W2-1	---	CROSSROAD	---	---	---	---	1	1	
25A	598+75	USH 8, LT	W13-1	---	45 MPH	---	---	---	---	---	---	
26	600+70	USH 8, LT	D1-1	---	KWE DA KIK LN	1	---	---	1	---	1	
27	601+38	USH 8, RT	W2-1	---	CROSSROAD	---	---	---	---	1	1	
27A	601+38	USH 8, RT	W13-1	---	45 MPH	---	---	---	---	---	---	
28	635+66	USH 8, RT	W14-3	---	NO PASSING ZONE	1	---	---	1	---	1	
29	635+45	USH 8, LT	W14-3	---	NO PASSING ZONE	1	---	---	1	---	1	
30	498+32	USH 8, LT	R1-1	---	STOP	1	---	---	1	---	1	
31	497+95	USH 8, RT	M1-5A / M6-1R	---	CTH W / RT ARROW ASSEMBLY	1	---	---	2	---	1	
32	679+70	USH 8, LT	W13-1	---	45 MPH	1	---	6.25	---	---	---	
33	679+70	USH 8, RT	W13-1	---	45 MPH	1	---	6.25	---	---	---	
					1590-18-71 SUBTOTALS	7	0	12.5	6	2	7	
					1590-18-71 TOTAL	42	35.5	34.0	24	10	41	

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PERMANENT SIGNING SUMMARY (CONT'D)

PROJECT 1590-18-81

CAT 0010

SIGN NO.	STA	LOCATION	SIGN CODE	SIZE	SIGN WORDING & PICTORIALS	634.0616 POSTS WOOD 4X6 INCH X 16-FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	638.2102 MOVING SIGNS TYPE II EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
CAT 0010												
34	732+00	USH 8, LT	W11-6	---	SNOWMOBILE CROSSING	1	---	6.25	---	---	---	
35	732+00	USH 8, RT	W11-6	---	SNOWMOBILE CROSSING	1	---	6.25	---	---	---	
36	790+63	USH 8, LT	W14-3	---	NO PASSING ZONE	1	---	---	1	---	---	
37	792+16	USH 8, RT	W14-3	---	NO PASSING ZONE	1	---	---	1	---	---	
38	835+60	USH 8, LT	W14-3	---	NO PASSING ZONE	1	---	---	1	---	---	
39	854+27	USH 8, LT	W14-3	---	NO PASSING ZONE	1	---	---	1	---	---	
40	874+06	USH 8, RT	W14-3	---	NO PASSING ZONE	1	---	---	1	---	---	
41	885+09	USH 8, LT	W14-3	---	NO PASSING ZONE	1	---	---	1	---	---	
42	907+54	USH 8, LT	W14-3	---	NO PASSING ZONE	1	---	---	1	---	---	
43	909+32	USH 8, LT	W11-6	---	SNOWMOBILE CROSSING	1	---	6.25	---	---	---	
44	907+54	USH 8, RT	W14-3	---	SNOWMOBILE CROSSING	1	---	6.25	---	---	---	
45	955+34	USH 8, RT	W14-3	---	NO PASSING ZONE	1	---	---	1	---	---	
46	957+38	USH 8, LT	W14-3	---	NO PASSING ZONE	1	---	---	1	---	---	
47	979+83	USH 8, RT	W14-3	---	NO PASSING ZONE	1	---	---	1	---	---	
48	1002+44	USH 8, LT	W14-3	---	NO PASSING ZONE	1	---	---	1	---	---	
					1590-18-81 TOTALS	15	0.00	25.00	11	0	0	
					CONTRACT TOTAL	57	35.5	59.0	35	10	41	

TRAFFIC CONTROL

ROADWAY / LOCATION	DURATION DAYS	643.0300 TRAFFIC CONTROL DRUMS DRUMS	643.0300 DAY	643.0420 TRAFFIC CONTROL BARRICADES TYPE III BARRICADES	643.0420 DAY	643.0705 TRAFFIC CONTROL WARNING LIGHTS, TYPE A LIGHTS	643.0705 DAY	643.0715 TRAFFIC CONTROL WARNING LIGHTS, TYPE C LIGHTS	643.0715 DAY	643.0800 TRAFFIC CONTROL ARROW BOARDS BOARDS	643.0800 DAY	643.0900 TRAFFIC CONTROL SIGNS SIGNS	643.0900 DAY	643.0910 TRAFFIC CONTROL COVERING SIGNS CYCLE	643.0910 EACH	643.1000 TRAFFIC CONTROL SIGNS FIXED MESSAGE SF	643.5000 TRAFFIC CONTROL EACH
PROJECT ID 1590-18-71																	
CAT 0010																	
PROJECT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.7
USH 8 - PED. ACCOMMODATION	45	120	5,400	--	--	18	810	1	45	--	--	9	405	--	--	--	--
USH 8 SHOULDER CLOSURES	60	60	3,600	--	--	--	--	52	3,120	--	--	2	120	--	--	--	--
USH 8 SINGLE RIGHT LANE CLOSURE	45	120	5,400	8	360	16	720	60	2,700	4	180	1	45	--	--	--	--
USH 8 ROAD CLOSED	160	--	--	20	3,200	40	6400	--	--	--	--	8	1,280	--	--	--	--
FOREST AVE	211	--	--	4	844	8	1688	--	--	--	--	6	1,266	--	--	--	--
PARK AVE	211	--	--	4	844	8	1688	--	--	--	--	6	1,266	--	--	--	--
PROSPECT AVE	211	--	--	4	844	8	1688	--	--	--	--	6	1,266	--	--	--	--
GRANDVIEW AVE	211	--	--	4	844	8	1688	--	--	--	--	6	1,266	--	--	--	--
HIGHLAND VIEW	211	--	--	4	844	8	1688	--	--	--	--	6	1,266	--	--	--	--
CTH W / CORNING RD	211	--	--	4	844	8	1688	--	--	--	--	6	1,266	--	--	--	--
BEAR RD	211	--	--	4	844	8	1688	--	--	--	--	6	1,266	--	--	--	--
FIRE KEEPER RD	211	--	--	6	1,266	8	1688	--	--	--	--	9	1,899	--	--	--	--
YOUNGS LANE	211	--	--	8	1,688	8	1688	--	--	--	--	12	2,532	--	--	--	--
KWE DA KIK LANE	211	--	--	8	1,688	8	1688	--	--	--	--	12	2,532	--	--	--	--
INDIAN DR / BUG LAKE RD	211	--	--	4	844	8	1688	--	--	--	--	6	1,266	--	--	--	--
LOVE KNOT LANE	211	--	--	4	844	8	1688	--	--	--	--	6	1,266	--	--	--	--
OTTER CREEK RD	211	--	--	4	844	8	1688	--	--	--	--	6	1,266	--	--	--	--
DETOUR ROUTE	150	--	--	1	150	8	1200	--	--	--	--	435	65,250	1	7	89.5	--
1590-18-71 SUBTOTALS		300	14,400	91	16,792	186	31,074	113	5,865	4	180	548	86,723	1	7	89.5	0.7
PROJECT ID 1590-18-81																	
CAT 0010																	
PROJECT	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.3
POTAWATOMI TRAIL	211	--	--	4	844	8	1688	--	--	--	--	6	1,266	--	--	--	
SHOEMAKER LN	211	--	--	4	844	8	1688	--	--	--	--	6	1,266	--	--	--	-
AIRPORT LN	211	--	--	4	844	8	1688	--	--	--	--	6	1,266	--	--	--	-
W SILVER LAKE RD	211	--	--	4	844	8	1688	--	--	--	--	6	1,266	--	--	--	-
E SILVER LAKE RD	211	10	2,110	5	1,055	10	2110	--	--	--	--	7	1,477	--	--	--	-
CONNOR FARM RD	211	--	--	4	844	8	1688	--	--	--	--	6	1,266	--	--	--	-
TOWER LN	211	--	--	4	844	8	1688	--	--	--	--	6	1,266	--	--	--	-
SCATTERED LAKE RD	211	--	--	4	844	8	1688	--	--	--	--	6	1,266	--	--	--	-
MILL RD	211	--	--	4	844	8	1688	--	--	--	--	6	1,266	--	--	--	-
1590-18-81 SUBTOTALS		10	2,110	37	7,807	74	15,614	0	0	0	0	55	11,605	--	--	--	0.3
CONTRACT TOTAL		310	16,510	128	24,599	260	46,688	113	5,865	4	180	603	98,328	1	7	89.5	1

TRAFFIC CONTROL - PEDESTRIAN ACCOMMODATION

STAGE	ROADWAY	643.3180 TEMPORARY MARKING LINE REMOVEABLE TAPE 6-INCH (WHITE) LF	643.3180 TEMPORARY MARKING LINE REMOVEABLE TAPE 6-INCH (YELLOW) LF	643.3350 TEMPORARY MARKING CROSSWALK REMOVALBLE TAPE 6-INCH (WHITE) LF	644.1430 TEMPORARY PEDESTRIAN SURFACE PLATE SF	644.1601 TEMPORARY PEDESTRIAN CURB RAMP DAY	644.1605 TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD SF	644.1810 TEMPORARY PEDESTRIAN BARRICADE LF
PROJECT ID 1590-18-71								
CAT 0010								
1	USH 8	1,195	2,700	538	-	-	-	-
1	S FOREST AVE X- WALK	-	-	120	60	30	16	92
1	S PARK AVE X-WALK	-	-	124	88	30	16	155
1	COMMERCIAL DWY X-WALK	-	-	120	60	30	16	165
1	S PROSPECT AVE X-WALK	-	-	192	30	30	8	40
1590-18-71 SUBTOTALS		1,195	2,700	1,094	238	120	56	452
PROJECT ID 1590-18-81								
CAT 0010	NO PED. ACCOMMODATION REQUIRED FOR THIS ID							
1590-18-81 SUBTOTALS		-	-	-	-	-	-	-
CONTRACT TOTAL		1,195	2,700	1,094	238	120	56	452

COLD WEATHER MARKING

	LOCATION	EPOXY 6-INCH 646.6466 LF	EPOXY 10-INCH 646.6470 LF
PROJECT ID 1590-18-71			
CAT 0010			
	USH 8	25,000	400
1590-18-71 SUBTOTAL		25,000	400
PROJECT ID 1590-18-81			
CAT 0010			
	USH 8	20,000	--
1590-18-81 SUBTOTALS		20,000	0
CONTRACT TOTAL		45,000	400

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PAVEMENT MARKING SUMMARY

STA	TO	STA	643.3165 TEMPORARY MARKING LINE PAINT 6-INCH LF	646.2040 MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE) LF	646.2040 MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW) LF	646.4040 MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE) LF	646.5020 MARKING ARROW EPOXY EACH	646.6120 MARKING STOP LINE EPOXY 18-INCH LF	646.7120 MARKING DIAGONAL EPOXY 12-INCH LF	646.9000 MARKING LINE REMOVAL 4-INCH LF	648.0100 LOCATING NO-PASSING ZONES MI	COMMENTS
PROJECT ID 1590-18-71												
CAT 0010												
416+22	-	439+00	---	---	5,280	--	6	--	40	2,915	--	
439+00	-	489+00	900	20	11,745	45	6	--	2,390	--	--	
489+00	-	539+00	6,305	20	6,305	270	--	--	--	--	--	
539+00	-	589+00	9,985	90	9,985	335	--	30	--	--	--	
589+00	-	639+00	9,969	30	9,970	--	--	30	--	--	--	
639+00	-	682+75	8,174	---	8,175	--	--	--	--	--	--	
UNDISTRIBUTED			1,050	---	1,550	20	--	5	120	--	0.98	LOCATING NO PASSING ZONE IS RECONSTRUCT LIMITS
1590-18-71 SUBTOTALS			36,383	160	53,010	670	12	65	2,550	2,915	0.98	
PROJECT ID 1590-18-81												
CAT 0010												
682+75	-	689+00	1,251	--	1,250	--	--	--	--	--	--	
689+00	-	739+00	7,444	--	7,445	--	--	--	--	--	--	
739+00	-	789+00	7,422	--	7,420	--	--	--	--	--	--	
789+00	-	839+00	7,500	--	7,500	--	--	--	--	--	--	
839+00	-	889+00	7,440	--	7,440	--	--	--	--	--	--	
889+00	-	939+00	6,953	--	6,955	--	--	--	--	--	0.95	
939+00	-	989+00	7,215	25	7,215	--	--	--	--	--	0.95	
989+00	-	1012+86	1,650	--	1,650	--	--	--	--	--	0.45	
UNDISTRIBUTED - SHOULDER WIDENING			1,150	--	1,400	--	--	--	--	--	--	
1590-18-81 SUBTOTALS			48,024	25	48,275	0	0	0	0	0	2.35	
CONTRACT TOTAL			84,407	185	101,285	670	12	65	2,550	2,915	3.33	

PROTECTIVE THERMOPLASTIC COATING AT SNOWMOBILE TRAIL CROSSINGS

STA	LOCATION	SPV.0180.001 SY
PROJECT ID 1590-18-71		
CAT 0010		
440+02	USH 8	95
679+70	USH 8	75
1590-18-71 SUBTOTALS		170
PROJECT ID 1590-18-81		
CAT 0010		
732+00	USH 8	75
909+32	USH 8	70
1590-18-81 SUBTOTALS		145
CONTRACT TOTAL		315

SAWING SUMMARY

STA	TO	STA	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF	REMARKS
PROJECT ID 1590-18-71					
CAT 0010					
416+22	-	439+00	342	85	INCLUDES ADJUSTING VALVES AND SAN. MANHOLE COVERS
439+00	-	489+00	3,203	--	
489+00	-	539+00	785	5	
539+00	-	553+50	--	--	
605+27	-	639+00	--	--	
639+00	-	682+75	--	--	
CAT 0010 TOTALS			4,330	90	
CAT 0030					
553+50	-	605+27	318	--	
CAT 0030 TOTALS			318	0	
CAT 0040					
416+22	-	439+00	160	--	
CAT 0040 TOTALS			160	0	
1590-18-71 SUBTOTALS			4,808	90	
PROJECT ID 1590-18-81					
CAT 0010					
682+75	-	689+00	--	--	
689+00	-	739+00	80	--	
739+00	-	789+00	80	--	
789+00	-	839+00	80	--	
839+00	-	889+00	80	--	
889+00	-	939+00	270	15	
939+00	-	989+00	746	3	
989+00	-	1017+68	264	--	
1590-18-81 SUBTOTALS			1,600	18	
CONTRACT TOTAL			6,408	108	

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CONSTRUCTION STAKING SUMMARY

STATION		STATION	LOCATION	650.4500 SUBGRADE LF	650.5000 BASE LF	650.5500 CURB & GUTTER LF	650.8000 RESURFACING REFERENCE LF	650.9000 CURB RAMPS EACH	650.9911 SUPPLEMENTAL CONTROL 001. 1590-18-71 EACH	650.9911 SUPPLEMENTAL CONTROL 002.1590-18-81 EACH	650.9920 SLOPE STAKES LF	650.9500 SIDEWALK 001. 1590-18-71 EACH
PROJECT ID 1590-18-71 (CAT 0010)												
416+23	-	439+00	USH 8	---	---	304	2,277	7	1	---	---	1
439+00	-	489+00	USH 8	---	---	739	5,000	---			---	
489+00	-	539+00	USH 8	---	---	150	5,000	---			---	
539+00	-	589+00	USH 8	3,550	3,550	150	1,450	---			3,550	
589+00	-	639+00	USH 8	1,627	1,627	652	3,373	---			1,627	
639+00	-	682+75	USH 8	1,175	1,175	---	3,200	---			1,175	
12+90	-	18+53	YOUNGS LN	563	563	---	---	---			563	
20+00	-	21+65	KWE DA KIK	165	165	---	---	---			165	
		1590-18-71	SUBTOTAL:	7,080	7,080	1,995	20,300	7	1	0	7,080	1
PROJECT ID 1590-18-81 (CAT 0010)												
682+75	-	733+00	USH 8	50	50	---	4,975	---	---	1	50	---
733+00	-	783+00	USH 8	---	---	---	5,000	---			---	
783+00	-	833+00	USH 8	---	---	---	5,000	---			---	
833+00	-	883+00	USH 8	---	---	---	5,000	---			---	
883+00	-	933+00	USH 8	---	---	---	5,000	---			---	
933+00	-	983+00	USH 8	---	---	551	5,000	---			---	
983+00	-	1012+86	USH 8	---	---	---	2,986	---			---	
		1590-18-81	SUBTOTAL:	50	50	551	32,961	0	0	1	50	0
			CONTRACT TOTAL:	7,130	7,130	2,546	53,261	7	1	1	7,130	1

CONVENTIONAL SYMBOLS

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

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

	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 UTILITY SYMBOLS

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

CONVENTIONAL ABBREVIATIONS

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

CURVE DATA ABBREVIATIONS

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

NOTES:

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

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.

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

R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
1590-18-22		
FEDERAL PROJECT NUMBER	4.00	7

PLAT OF RIGHT OF WAY REQUIRED FOR

CRANDON-LAONA
STH 55 SOUTH TO STH 32 SOUTH

USH 8	FOREST COUNTY

CONSTRUCTION PROJECT NUMBER
1590-18-71/82

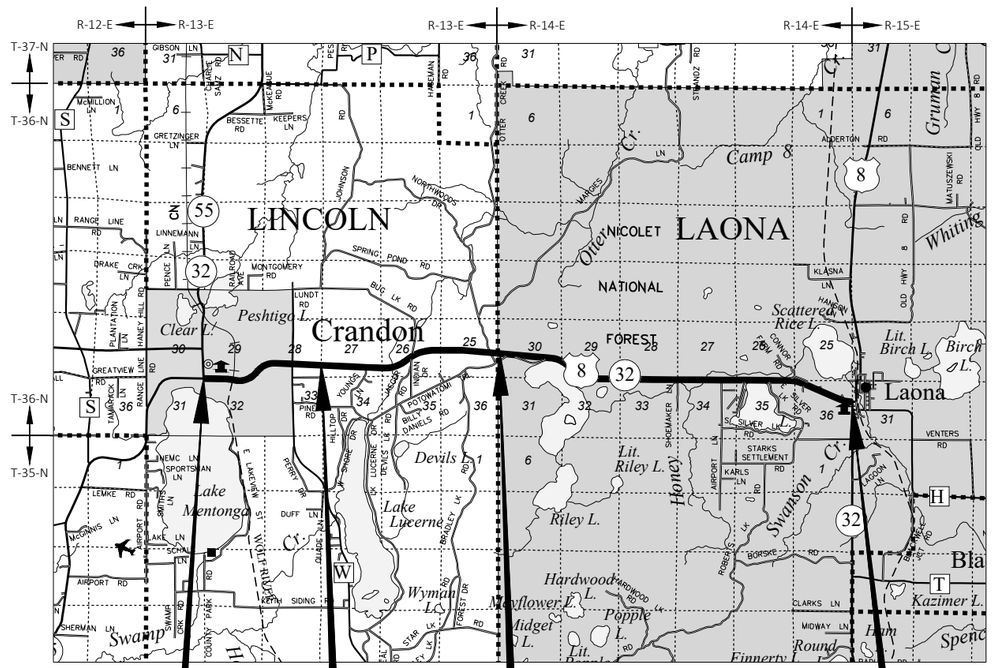
NOTES (CONTINUED):

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

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.



LAYOUT
SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 11.275 MILES

N

APPROVED
FOR
DEPARTMENT OF TRANSPORTATION - NC REGION
4/5/24 DATE
Brent L Stella (SIGNATURE)

JT ENGINEERING, INC Consultant Services

THE SURVEY IS PREPARED AT THE REQUEST OF THE DEPARTMENT OF TRANSPORTATION- NC REGION. THE TOPOGRAPHY AND UTILITY SURVEY WAS PERFORMED IN 2022. THIS THIS SURVEY IS ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

WISCONSIN
RYAN T. KLARNER
3156-8
GREEN BAY WIS.
LAND SURVEYOR

Ryan Klarner
RYAN KLARNER
REGISTRATION NUMBER S-3156
04/04/2024 DATE

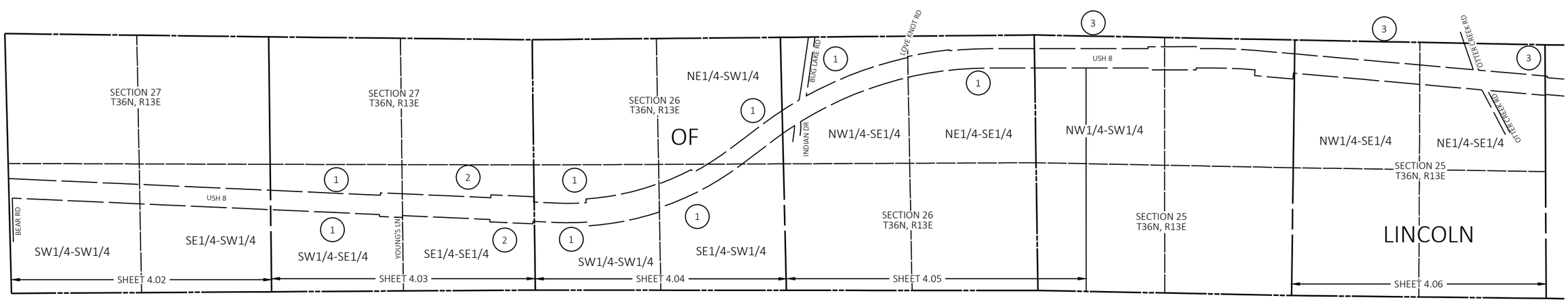
FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\RW\040100-TI.DWG
PLOT DATE : 4/4/2024 12:25 PM
PLOT BY : RYAN KLARNER
PLOT NAME :

4

4

GN

TOWN



REVISION DATE	DATE: 04-04-2024	NO SCALE	HWY: USH 8	STATE R/W PROJECT NUMBER 1590-18-22	PLAT SHEET 4. 01	
	GRID FACTOR: N/A		COUNTY: FOREST	CONSTRUCTION PROJECT NUMBER 1590-18-71/82	PS&E SHEET — 119	E

FILE NAME : 040101-PO.DWG PLOT DATE : 4/4/2024 12:10 PM PLOT BY : JAMES CAPPEART PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 75

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATE SYSTEM, FOREST COUNTY, NAD83 (2011) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

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.

EXISTING HIGHWAY RIGHT-OF-WAY HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:

EXISTING HIGHWAY RIGHT-OF-WAY FOR USH 8 IS ESTABLISHED FROM PROJECT F 021-3(14)

R/W POINT TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
100	137+32.35	100.00' RT	569572.633	849171.521
101	137+26.77	0.00' RT	569672.783	849170.408
102	137+21.19	100.00' LT	569772.932	849169.295
500	110+53.98	100.00' RT	569692.082	846495.810
501	110+20.89	100.00' RT	569693.558	846462.761
502	110+13.71	0.00' RT	569793.779	846460.043
503	110+06.81	100.00' LT	569893.987	846457.607
504	123+76.58	100.00' RT	569633.097	847817.101
505	123+63.86	100.00' LT	569833.466	847813.310

COURSE TABLE		
COURSE	BEARING	DISTANCE
100-500	N87° 26' 38"W	2678.38'
500-501	N87° 26' 38"W	33.08'
501-502	N01° 33' 13"W	100.26'
502-503	N01° 23' 32"W	100.24'
503-102	S87° 26' 38"E	2714.39'
102-101	S00° 38' 11"E	100.16'
101-100	S00° 38' 11"E	100.16'
100-504	N87° 26' 38"W	1355.77'
504-500	N87° 26' 38"W	1322.61'
503-505	S87° 26' 38"E	1357.05'
505-102	S87° 26' 38"E	1357.34'
504-505	N01° 05' 03"W	200.40'

GN

FOUND 2" IRON PIPE
Y 571392.376
X 846419.078

T36N R13E Sec 28 27

COR TO PNT 503
S1°28'23"E, 1498.88'

COR TO COR
S1°28'23"E, 2686.40'

SECTION LINE P.L.

SIXTEENTH LINE

TOWN

TAX PARCEL ID:
020-01504-0000

FRONTIER COMMUNICATION FACILITIES

503 505 110 502 112 114 116 118 120 122 124 126 128 130 132 134 136 102 101 100

FO FO POST

100'

S87°26'38"E

USH 8

500 501

WPS ELECTRIC FACILITIES

WPS GAS FACILITIES

BEAR RD P.L.

COR TO PNT 501
N1°28'23"W, 987.02'

66'

SW-SW

TAX PARCEL ID:
020-01504-0000

OF

504

SIXTEENTH LINE P.L.

BLDG

SE-SW

TAX PARCEL ID:
020-01503-0000
TRACT 434 T 2047

LINCOLN

TAX PARCEL ID:
020-01503-0000
TRACT 434 T 2047

TOTAL HIGHWAY EASEMENT FOR LANDS OWNED BY UNITED STATES OF AMERICA TAX ID 020-01503-0000 (TRACT 434 T 2047) ADDED TO PARCEL 1 ON SHEET 4.03 IN SCHEDULE OF LANDS

CALCULATED LOCATION FROM POS BY
ZACK STEVENS 06-08-2012
Y 571359.016
X 849151.674

T36N R13E Sec 27

COR TO PNT 102
S0°38'11"E, 1586.18'

MATCH LINE SHEET 4.03

COR TO PNT 100
N0°38'11"W, 867.90'

QUARTER LINE

COR TO COR
N0°38'11"W, 2654.40'

CALCULATED LOCATION FROM POS BY
ZACK STEVENS 06-08-2012
Y 568704.780
X 849181.162

T36N R13E Sec 28 27 33 34

FOUND MAG NAIL
Y 568706.863
X 846488.133

T36N R13E Sec 27 34

4

4

REVISION DATE	DATE 04-04-2024	SCALE, FEET 0 100 200	HWY: USH 8	STATE R/W PROJECT NUMBER 1590-18-22	PLAT SHEET 4.02
	GRID FACTOR N/A		COUNTY: FOREST	CONSTRUCTION PROJECT NUMBER 1590-18-71/82	PS&E SHEET 120 E

FILE NAME : 040102-RP.DWG
LAYOUT NAME - 4.02

PLOT DATE : 4/4/2024 12:02 PM PLOT BY : JAMES CAPPEART PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 75

SCHEDULE OF LANDS & INTERESTS REQUIRED					
PARCEL NUMBER	OWNER (S)	INTEREST(S) REQUIRED	R/W S.F, REQUIRED		
			NEW	EXISTING	TOTAL
1	UNITED STATES OF AMERICA	H.E	58892	555697	614589
	TRACT 434 T 2047				
2	UNITED STATES OF AMERICA IN TRUST FOR THE FOREST COUNTY POTOWATOMI COMMUNITY	H.E	41212	342036	383248
	TRACT 434 T 2047				

TOTAL EXISTING HIGHWAY EASEMENT FOR LANDS OWNED BY UNITED STATES OF AMERICA (TRACT 434 T 2047) ADDED TO PARCEL 1 FROM SHEET 4.02 AND SHOWN FOR PARCELS 1 AND 2 ON SHEET 4.03. ALL EXISTING HIGHWAY EASEMENT AREAS SHOWN IN EXISTING HIGHWAY EASEMENT COLUMN HAVE BEEN ACQUIRED PREVIOUSLY AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.

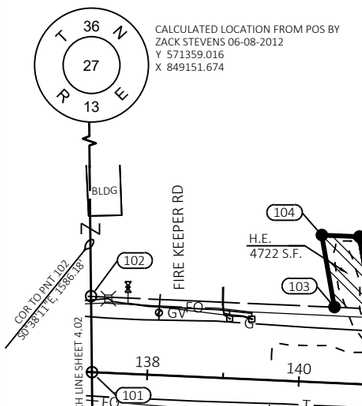
OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

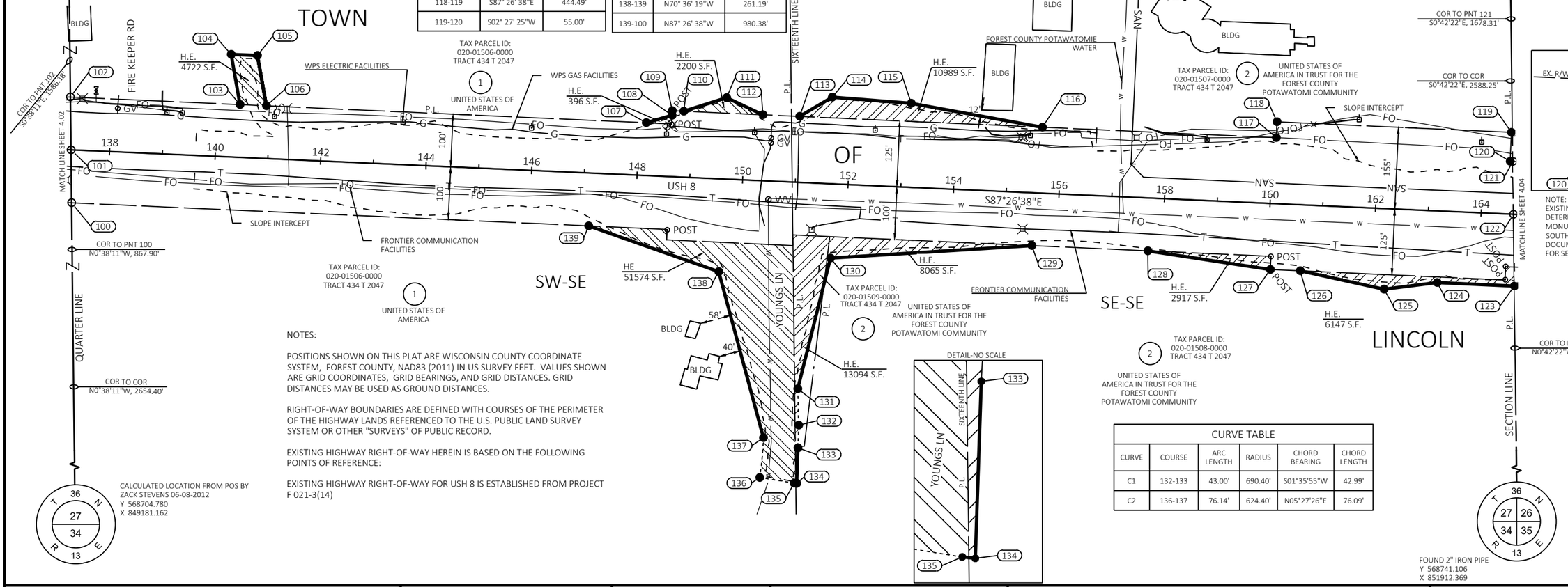
ALL AREAS SHOWN IN SQUARE FEET UNLESS OTHERWISE NOTED.

COURSE TABLE		
COURSE	BEARING	DISTANCE
100-101	N00° 38' 11"W	100.16'
101-102	N00° 38' 11"W	100.16'
102-103	S87° 26' 38"E	321.56'
103-104	N10° 02' 40"W	96.76'
104-105	S87° 26' 38"E	50.00'
105-106	S10° 02' 40"E	96.76'
106-107	S87° 26' 38"E	720.00'
107-108	N73° 53' 53"E	51.10'
108-109	N02° 33' 22"E	8.65'
109-110	S87° 26' 38"E	21.59'
110-111	N72° 25' 01"E	85.21'
111-112	S64° 42' 12"E	75.90'
112-113	S87° 26' 38"E	70.00'
113-114	N59° 19' 13"E	71.74'
114-115	S85° 31' 45"E	150.08'
115-116	S79° 37' 50"E	252.34'
116-117	S87° 26' 38"E	443.33'
117-118	N02° 33' 22"E	30.00'
118-119	S87° 26' 38"E	444.49'
119-120	S02° 27' 25"W	55.00'

COURSE TABLE		
COURSE	BEARING	DISTANCE
120-121	S87° 26' 38"E	5.11'
121-122	S00° 42' 22"E	100.16'
122-123	S00° 42' 22"E	136.03'
123-124	N87° 26' 18"W	146.49'
124-125	S82° 56' 14"W	101.43'
125-126	N77° 36' 23"W	162.38'
126-127	N87° 26' 38"W	56.65'
127-128	N81° 19' 44"W	234.69'
128-129	N87° 26' 38"W	220.00'
129-130	S86° 26' 44"W	382.18'
130-131	S13° 59' 10"W	255.28'
131-132	S01° 07' 18"E	68.78'
132-133	SEE CURVE TABLE C1	
133-134	S01° 55' 43"W	67.49'
134-135	N83° 57' 42"W	5.00'
135-136	N80° 49' 44"W	66.00'
136-137	SEE CURVE TABLE C2	
137-138	N15° 03' 42"W	325.72'
138-139	N70° 36' 19"W	261.19'
139-100	N87° 26' 38"W	980.38'

R/W POINT TABLE					R/W POINT TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS	POINT	STATION	OFFSET	Y COORDS	X COORDS
100	137+32.35	100.00' RT	569572.633	849171.521	120	164+50.67	100.00' LT	569651.204	851896.053
101	137+26.77	0.00' RT	569672.783	849170.408	121	164+55.78	100.00' LT	569650.976	851901.156
102	137+21.19	100.00' LT	569772.932	849169.295	122	164+61.48	0.00' RT	569550.821	851902.390
103	140+42.75	100.00' LT	569758.591	849490.532	123	164+69.22	135.81' RT	569414.801	851904.067
104	140+21.64	194.43' LT	569853.871	849473.656	124	163+22.73	135.80' RT	569421.348	851757.725
105	140+71.64	194.43' LT	569851.641	849523.606	125	162+22.73	152.74' RT	569408.877	851657.067
106	140+92.75	100.00' LT	569756.361	849540.483	126	160+62.73	125.00' RT	569443.729	851498.466
107	148+12.75	100.00' LT	569724.251	850259.766	127	160+06.08	125.00' RT	569446.255	851441.877
108	148+61.17	116.35' LT	569738.424	850308.864	128	157+72.73	100.00' RT	569481.637	851209.872
109	148+61.17	125.00' LT	569747.067	850309.250	129	155+52.73	100.00' RT	569491.449	850990.091
110	148+82.75	125.00' LT	569746.104	850330.814	130	151+72.73	140.68' RT	569467.754	850608.650
111	149+62.76	154.34' LT	569771.846	850412.046	131	151+22.14	390.90' RT	569220.045	850546.954
112	150+32.75	125.00' LT	569739.414	850480.665	132	151+26.55	459.54' RT	569151.275	850548.300
113	151+02.75	125.00' LT	569736.293	850550.595	133	151+27.27	502.52' RT	569108.300	850547.101
114	151+62.76	164.32' LT	569772.896	850612.293	134	151+28.01	570.01' RT	569040.847	850544.829
115	153+12.76	159.30' LT	569761.197	850761.920	135	151+23.02	569.71' RT	569041.373	850539.857
116	155+62.75	125.00' LT	569715.778	851010.138	136	150+57.46	562.10' RT	569051.893	850474.700
117	160+06.08	125.00' LT	569696.006	851453.026	137	150+61.31	486.11' RT	569127.642	850481.937
118	160+06.08	155.00' LT	569725.976	851454.364	138	149+62.72	175.66' RT	569442.176	850397.296
119	164+50.57	155.00' LT	569706.153	851898.411	139	147+12.73	100.00' RT	569528.911	850150.927





NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATE SYSTEM, FOREST COUNTY, NAD83 (2011) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

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.

EXISTING HIGHWAY RIGHT-OF-WAY HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:

EXISTING HIGHWAY RIGHT-OF-WAY FOR USH 8 IS ESTABLISHED FROM PROJECT F 021-3(14)

CURVE TABLE					
CURVE	COURSE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	132-133	43.00'	690.40'	S01°35'55"W	42.99'
C2	136-137	76.14'	624.40'	N05°27'26"E	76.09'

FOUND 2" IRON PIPE
Y 571329.162
X 851880.475

FOUND 2" IRON PIPE
Y 568741.106
X 851912.369

REVISION DATE	DATE 04-04-2024	SCALE, FEET 0 100 200	HWY: USH 8	STATE R/W PROJECT NUMBER 1590-18-22	PLAT SHEET 4.03
	GRID FACTOR N/A		COUNTY: FOREST	CONSTRUCTION PROJECT NUMBER 1590-18-71/82	PS&E SHEET 121 E

FILE NAME : 040103-RP.DWG
LAYOUT NAME - 4.03
PLOT DATE : 4/4/2024 12:14 PM PLOT BY : JAMES CAPPEART PLOT NAME : PLOT SCALE :
WISDOT/CADDS SHEET 75

R/W POINT TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
121	164+55.78	100.00' LT	569650.976	851901.156
122	164+61.48	0.00' RT	569550.821	851902.390
123	164+69.22	135.81' RT	569414.801	851904.067
200	166+88.70	100.00' LT	569640.588	852133.848
201	170+05.81	100.00' LT	569643.871	852439.712
202	170+05.92	140.00' LT	569683.791	852437.175
203	171+32.69	140.00' LT	569694.416	852557.271
204	172+52.66	178.78' LT	569747.689	852664.512
205	174+22.58	178.67' LT	569776.400	852821.199
206	174+92.58	218.63' LT	569829.813	852875.846
207	175+78.33	211.33' LT	569842.435	852954.494
208	175+80.56	233.72' LT	569864.584	852950.584
209	176+51.66	224.66' LT	569873.891	853015.956
210	176+52.44	140.00' LT	569793.017	853040.998
211	176+92.42	140.00' LT	569804.210	853077.338
212	178+34.23	255.96' LT	569956.697	853164.570
213	180+32.65	316.93' LT	570080.919	853306.557
214	180+99.00	292.19' LT	570083.540	853370.752
215	183+22.02	118.19' LT	570026.650	853635.030

R/W POINT TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
216	186+66.89	100.00' LT	570194.793	853921.341
217	190+86.59	100.00' LT	570447.417	854256.491
218	193+40.51	100.00' LT	570597.232	854469.629
219	192+78.11	0.00' RT	570478.962	854472.449
220	192+11.64	100.00' RT	570359.400	854475.301
221	190+86.59	100.00' RT	570287.707	854376.875
222	186+66.89	100.00' RT	570035.082	854041.726
223	177+41.35	100.00' RT	569590.997	853197.742
225	174+32.38	140.00' RT	569467.006	852898.156
226	173+72.37	201.29' RT	569394.079	852848.347
227	171+32.46	201.14' RT	569355.326	852594.609
228	168+92.60	116.98' RT	569421.913	852336.344
229	168+12.60	160.92' RT	569376.920	852253.023
230	167+12.63	160.85' RT	569378.977	852147.464
231	166+12.73	100.00' RT	569444.175	852049.036
232	165+62.73	100.00' RT	569446.405	851999.086
233	165+02.73	135.81' RT	569413.303	851937.545
234	185+51.86	100.00' LT	570129.766	853831.370

COURSE TABLE		
COURSE	BEARING	DISTANCE
121-200	S87° 26' 38"E	232.92'
200-201	SEE CURVE TABLE C3	
201-202	N03° 38' 11"W	40.00'
202-203	SEE CURVE TABLE C4	
203-204	N63° 35' 01"E	119.74'
204-205	N79° 36' 59"E	159.30'
205-206	N45° 39' 17"E	76.42'
206-207	N80° 52' 57"E	79.65'
207-208	N10° 00' 37"W	22.49'
208-209	N81° 53' 50"E	66.03'
209-210	S17° 12' 17"E	84.66'
210-211	SEE CURVE TABLE C5	
211-212	N29° 46' 20"E	175.68'
212-213	N48° 49' 04"E	188.66'
213-214	N87° 39' 45"E	64.25'
214-215	S77° 51' 06"E	270.33'
215-234	N62° 17' 31"E	221.77'
234-216	SEE CURVE TABLE C6	
216-217	N52° 59' 32"E	419.70'

COURSE TABLE		
COURSE	BEARING	DISTANCE
217-218	SEE CURVE TABLE C7	
218-219	S01° 21' 58"E	118.30'
219-220	S01° 21' 58"E	119.60'
220-221	SEE CURVE TABLE C8	
221-222	S52° 59' 32"W	419.70'
222-223	SEE CURVE TABLE C9	
223-224	S01° 02' 16"E	41.90'
224-225	SEE CURVE TABLE C10	
225-226	S34° 20' 00"W	88.31'
226-227	S81° 18' 59"W	256.68'
227-228	N75° 32' 33"W	266.71'
228-229	S61° 37' 51"W	94.69'
229-230	N88° 53' 01"W	105.58'
230-231	N56° 28' 47"W	118.06'
231-232	N87° 26' 38"W	50.00'
232-233	S61° 43' 29"W	69.88'
233-123	N87° 26' 18"W	33.51'
123-122	N00° 42' 22"W	136.03'
122-121	N00° 42' 22"W	100.16'

CURVE TABLE					
CURVE	COURSE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C3	200-201	306.04'	2764.79'	N89°23'06"E	305.88'
C4	202-203	120.58'	2724.79'	N84°56'39"E	120.57'
C5	210-211	38.02'	2724.79'	N72°52'54"E	38.02'
C6	234-216	111.02'	2764.79'	N54°08'33"E	111.01'
C7	217-218	260.57'	3919.72'	N54°53'48"E	260.52'
C8	220-221	121.77'	3719.72'	S53°55'48"W	121.77'
C9	222-223	957.85'	2964.79'	S62°14'52"W	953.69'
C10	224-225	311.50'	3004.79'	S74°42'46"W	311.36'

TLE STATION & OFFSET TABLE		
POINT	STATION	OFFSET
T250	186+71.61	100.00' LT
T251	187+01.22	103.08' LT
T252	187+81.24	100.00' LT

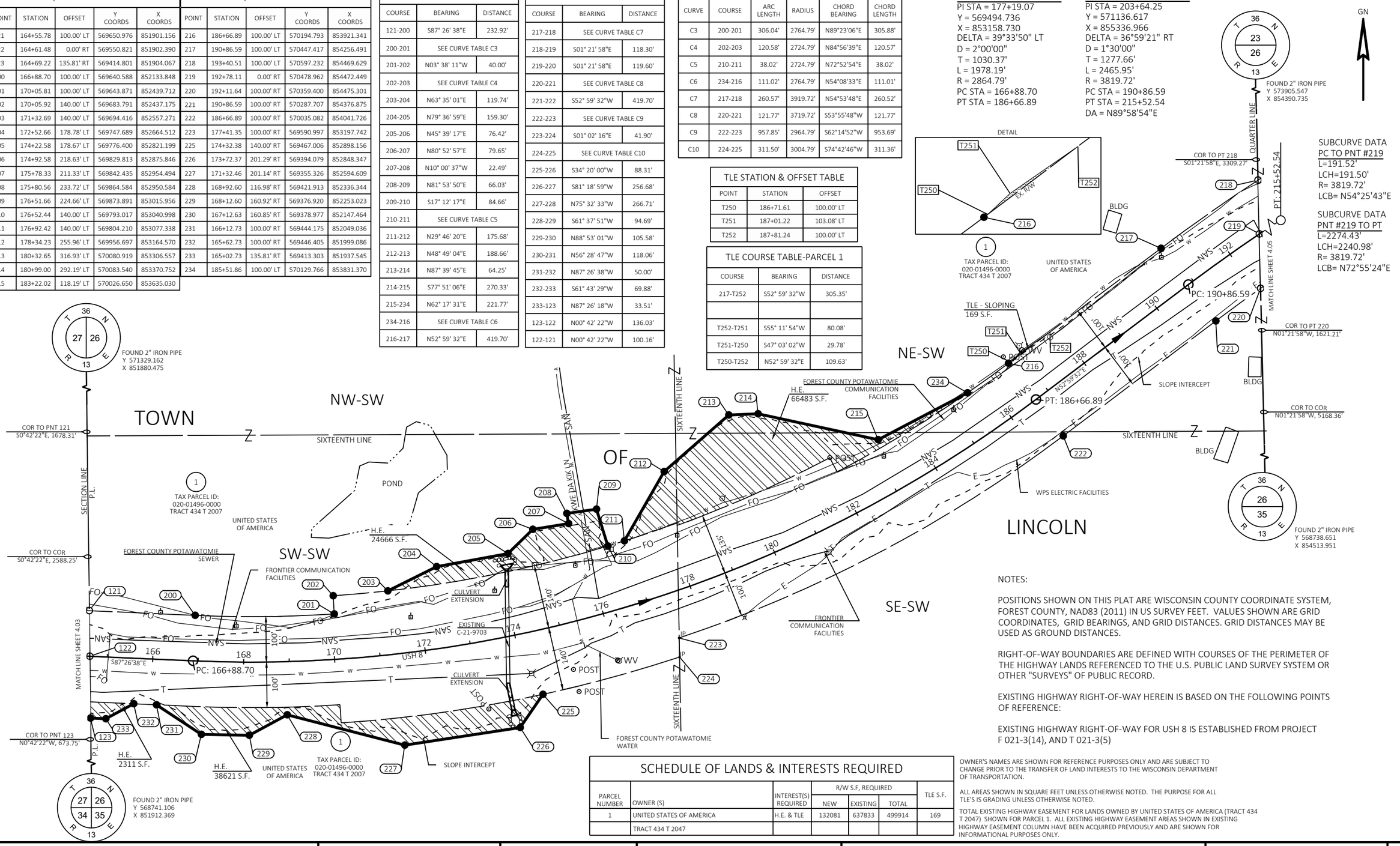
TLE COURSE TABLE-PARCEL 1		
COURSE	BEARING	DISTANCE
217-T252	S52° 59' 32"W	305.35'
T252-T251	S55° 11' 54"W	80.08'
T251-T250	S47° 03' 02"W	29.78'
T250-T252	N52° 59' 32"E	109.63'

CURVE 1 DATA- RL CURVE
PI STA = 177+19.07
Y = 569494.736
X = 853158.730
DELTA = 39°33'50" LT
D = 2°00'00"
T = 1030.37'
L = 1978.19'
R = 2864.79'
PC STA = 166+88.70
PT STA = 186+66.89

CURVE 2 DATA- RL CURVE
PI STA = 203+64.25
Y = 571136.617
X = 855336.966
DELTA = 36°59'21" RT
D = 1°30'00"
T = 1277.66'
L = 2465.95'
R = 3819.72'
PC STA = 190+86.59
PT STA = 215+52.54
DA = N89°58'54"E

SUBCURVE DATA
PC TO PNT #219
L=191.52'
LCH=191.50'
R= 3819.72'
LCB= N54°25'43"E

SUBCURVE DATA
PNT #219 TO PT
L=2274.43'
LCH=2240.98'
R= 3819.72'
LCB= N72°55'24"E



NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATE SYSTEM, FOREST COUNTY, NAD83 (2011) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

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.

EXISTING HIGHWAY RIGHT-OF-WAY HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:

EXISTING HIGHWAY RIGHT-OF-WAY FOR USH 8 IS ESTABLISHED FROM PROJECT F 021-3(14), AND T 021-3(5)

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER (S)	INTEREST(S) REQUIRED	R/W S.F, REQUIRED NEW	EXISTING	TOTAL	TLE S.F.
1	UNITED STATES OF AMERICA	H.E. & TLE	132081	637833	499914	169
	TRACT 434 T 2047					

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

ALL AREAS SHOWN IN SQUARE FEET UNLESS OTHERWISE NOTED. THE PURPOSE FOR ALL TLE'S IS GRADING UNLESS OTHERWISE NOTED.

TOTAL EXISTING HIGHWAY EASEMENT FOR LANDS OWNED BY UNITED STATES OF AMERICA (TRACT 434 T 2047) SHOWN FOR PARCEL 1. ALL EXISTING HIGHWAY EASEMENT AREAS SHOWN IN EXISTING HIGHWAY EASEMENT COLUMN HAVE BEEN ACQUIRED PREVIOUSLY AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.

REVISION DATE	DATE: 04-04-24	SCALE, FEET 0 100 200	HWY: USH 8	STATE R/W PROJECT NUMBER 1590-18-22	PLAT SHEET 4.04
	GRID FACTOR: N/A		COUNTY: FOREST	CONSTRUCTION PROJECT NUMBER 1590-18-71/82	PS&E SHEET 122 E

FILE NAME : 040104-RP.DWG PLOT DATE : 4/4/2024 12:18 PM PLOT BY : JAMES CAPPEART PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 75

FOUND 2" IRON PIPE
Y 573905.547
X 854390.735

T 36 N
R 23 26 E
13

COR TO PT 218
S01°21'58"E, 3309.27'

COR TO COR
S01°21'58"E, 5168.36'

SCHEDULE OF LANDS & INTERESTS REQUIRED

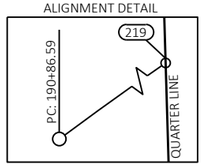
PARCEL NUMBER	OWNER (S)	INTEREST(S) REQUIRED	R/W S.F, REQUIRED		
			NEW	EXISTING	TOTAL
1	UNITED STATES OF AMERICA	H.E.	2186	553186	555372
	TRACT 434 T 2047				
3	FOREST COUNTY	H.E.	903	0	903

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

ALL AREAS SHOWN IN SQUARE FEET UNLESS OTHERWISE NOTED. THE PURPOSE FOR ALL TLE'S IS GRADING UNLESS OTHERWISE NOTED.

TOTAL EXISTING HIGHWAY EASEMENT FOR LANDS OWNED BY UNITED STATES OF AMERICA (TRACT 434 T 2047) SHOWN FOR PARCEL 1. ALL EXISTING HIGHWAY EASEMENT AREAS SHOWN IN EXISTING HIGHWAY EASEMENT COLUMN HAVE BEEN ACQUIRED PREVIOUSLY AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.

ALIGNMENT DETAIL



SUBCURVE DATA
PC TO PNT #219
L=191.52'
LCH=191.50'
R= 3819.72'
LCB= N54°25'43"E

SUBCURVE DATA
PNT #219 TO PT
L=2274.43'
LCH=2240.98'
R= 3819.72'
LCB= N72°55'24"E

CURVE 2 DATA- RL CURVE
PI STA = 203+64.25
Y = 571136.617
X = 855336.966
DELTA = 36°59'21" RT
D = 1°30'00"
T = 1277.66'
L = 2465.95'
R = 3819.72'
PC STA = 190+86.59
PT STA = 215+52.54
DB = N52°59'32"E

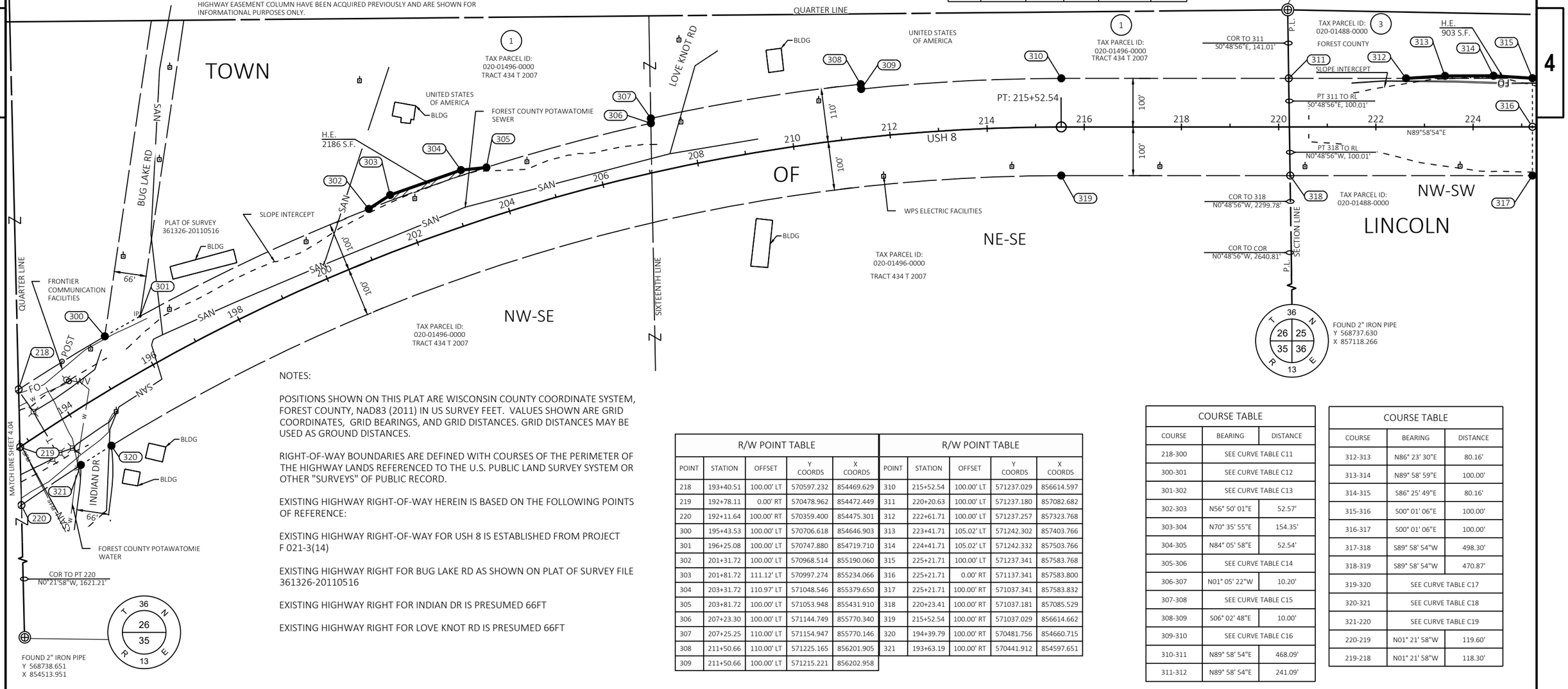
CURVE TABLE					
CURVE	COURSE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C11	218-300	208.33'	3919.72'	N58°19'25"E	208.31'
C12	300-301	83.69'	3919.72'	N60°27'29"E	83.69'
C13	301-302	519.91'	3919.72'	N64°52'10"E	519.53'
C14	305-306	350.52'	3919.72'	N74°58'52"E	350.40'
C15	307-308	437.66'	3929.72'	N80°45'46"E	437.43'
C16	309-310	412.41'	3919.72'	N86°58'03"E	412.22'
C17	319-320	2057.44'	3719.72'	S74°08'09"W	2031.31'
C18	320-321	74.60'	3719.72'	S57°42'27"W	74.60'
C19	321-220	147.58'	3719.72'	S56°00'16"W	147.57'

CURVE TABLE					
CURVE	COURSE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C20	218-302	811.93'	3919.72'	N62°44'07"E	810.48'
C21	319-220	2279.62'	3719.72'	S72°25'29"W	2244.11'

GN

FOUND 2" IRON PIPE
Y 571378.177
X 857080.675

T 36 N
R 26 25 E
13



NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATE SYSTEM, FOREST COUNTY, NAD83 (2011) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

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.

EXISTING HIGHWAY RIGHT-OF-WAY HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:

EXISTING HIGHWAY RIGHT-OF-WAY FOR USH 8 IS ESTABLISHED FROM PROJECT F 021-3(14)

EXISTING HIGHWAY RIGHT FOR BUG LAKE RD AS SHOWN ON PLAT OF SURVEY FILE 361326-20110516

EXISTING HIGHWAY RIGHT FOR INDIAN DR IS PRESUMED 66FT

EXISTING HIGHWAY RIGHT FOR LOVE KNOT RD IS PRESUMED 66FT

R/W POINT TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
218	193+40.51	100.00' LT	570597.232	854469.629
219	192+78.11	0.00' RT	570478.962	854472.449
220	192+11.64	100.00' RT	570359.400	854475.301
300	195+43.53	100.00' LT	570706.618	854646.903
301	196+25.08	100.00' LT	570747.880	854719.710
302	201+31.72	100.00' LT	570968.514	855190.060
303	201+81.72	111.12' LT	570997.274	855234.066
304	203+31.72	110.97' LT	571048.546	855379.650
305	203+81.72	100.00' LT	571053.948	855431.910
306	207+23.30	100.00' LT	571144.749	855770.340
307	207+25.25	110.00' LT	571154.947	855770.146
308	211+50.66	110.00' LT	571225.165	856201.905
309	211+50.66	100.00' LT	571215.221	856202.958

R/W POINT TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
310	215+52.54	100.00' LT	571237.029	856614.597
311	220+20.63	100.00' LT	571237.180	857082.682
312	222+61.71	100.00' LT	571237.257	857323.768
313	223+41.71	105.02' LT	571242.302	857403.766
314	224+41.71	105.02' LT	571242.332	857503.766
315	225+21.71	100.00' LT	571237.341	857583.768
316	225+21.71	0.00' RT	571137.341	857583.800
317	225+21.71	100.00' RT	571037.341	857583.832
318	220+23.41	100.00' RT	571037.181	857085.529
319	215+52.54	100.00' RT	571037.029	856614.662
320	194+39.79	100.00' RT	570481.756	854660.715
321	193+63.19	100.00' RT	570441.912	854597.651

COURSE TABLE		
COURSE	BEARING	DISTANCE
218-300	SEE CURVE TABLE C11	
300-301	SEE CURVE TABLE C12	
301-302	SEE CURVE TABLE C13	
302-303	N56° 50' 01"E	52.57'
303-304	N70° 35' 55"E	154.35'
304-305	N84° 05' 58"E	52.54'
305-306	SEE CURVE TABLE C14	
306-307	N01° 05' 22"W	10.20'
307-308	SEE CURVE TABLE C15	
308-309	S06° 02' 48"E	10.00'
309-310	SEE CURVE TABLE C16	
310-311	N89° 58' 54"E	468.09'
311-312	N89° 58' 54"E	241.09'

COURSE TABLE		
COURSE	BEARING	DISTANCE
312-313	N86° 23' 30"E	80.16'
313-314	N89° 58' 59"E	100.00'
314-315	S86° 25' 49"E	80.16'
315-316	S00° 01' 06"E	100.00'
316-317	S00° 01' 06"E	100.00'
317-318	S89° 58' 54"W	498.30'
318-319	S89° 58' 54"W	470.87'
319-320	SEE CURVE TABLE C17	
320-321	SEE CURVE TABLE C18	
321-220	SEE CURVE TABLE C19	
220-219	N01° 21' 58"W	119.60'
219-218	N01° 21' 58"W	118.30'

REVISION DATE	DATE 04-04-2024	SCALE, FEET 0 100 200	HWY: USH 8	STATE R/W PROJECT NUMBER 1590-18-22	PLAT SHEET 4.05	
	GRID FACTOR N/A		COUNTY: FOREST	CONSTRUCTION PROJECT NUMBER 1590-18-71/82	PS&E SHEET 123	E

FILE NAME : 040105-RP.DWG
LAYOUT NAME - 4.05

PLOT DATE : 4/4/2024 12:25 PM PLOT BY : JAMES CAPPEART PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 75

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATE SYSTEM, FOREST COUNTY, NAD83 (2011) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

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.

EXISTING HIGHWAY RIGHT-OF-WAY HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:

EXISTING HIGHWAY RIGHT-OF-WAY FOR USH 8 IS ESTABLISHED FROM PROJECT NO F 021-3(14)

EXISTING HIGHWAY RIGHT-OF-WAY FOR OTTER CREEK RD IS PRESUMED TO BE 50' CENTERED ON CENTERLINE PER STATE STATUE 82.31(2), ALONG WITH WISCONSIN GAS TAX MAPPING AND TREE CLEARING

TLE STATION & OFFSET TABLE

POINT	STATION	OFFSET
T450	257+31.58	199.91' LT
T451	259+51.58	200.13' LT

TLE COURSE TABLE-PARCEL 3

COURSE	BEARING	DISTANCE
409-T450	N04° 58' 57"E	10.59'
T450-T451	S85° 01' 03"E	220.00'
T451-410	S04° 58' 57"W	10.59'
410-409	N85° 01' 03"W	220.00'

R/W POINT TABLE

POINT	STATION	OFFSET	Y COORDS	X COORDS
400	273+14.40	100.00' LT	570954.008	862373.130
401	273+23.73	0.00' RT	570853.575	862373.637
402	273+33.06	100.00' RT	570753.142	862374.144
403	267+32.68	100.00' RT	570805.879	861776.090
404	266+73.13	100.00' RT	570811.110	861716.764
405	247+23.97	100.00' RT	570982.324	859775.147
406	247+16.47	0.00' RT	571082.597	859776.452
407	247+08.96	100.00' LT	571182.870	859777.757
408	257+31.68	100.00' LT	571093.034	860796.521
409	257+31.59	189.32' LT	571182.015	860804.279
410	259+51.59	189.54' LT	571162.907	861023.448
411	259+51.68	100.00' LT	571073.709	861015.671
412	265+67.03	100.00' LT	571019.657	861628.642
413	265+57.92	120.36' LT	571040.735	861621.360
414	266+03.56	140.77' LT	571057.062	861668.619
415	267+01.64	140.87' LT	571048.544	861766.322
416	268+21.68	100.00' LT	570997.289	861882.309

COURSE TABLE

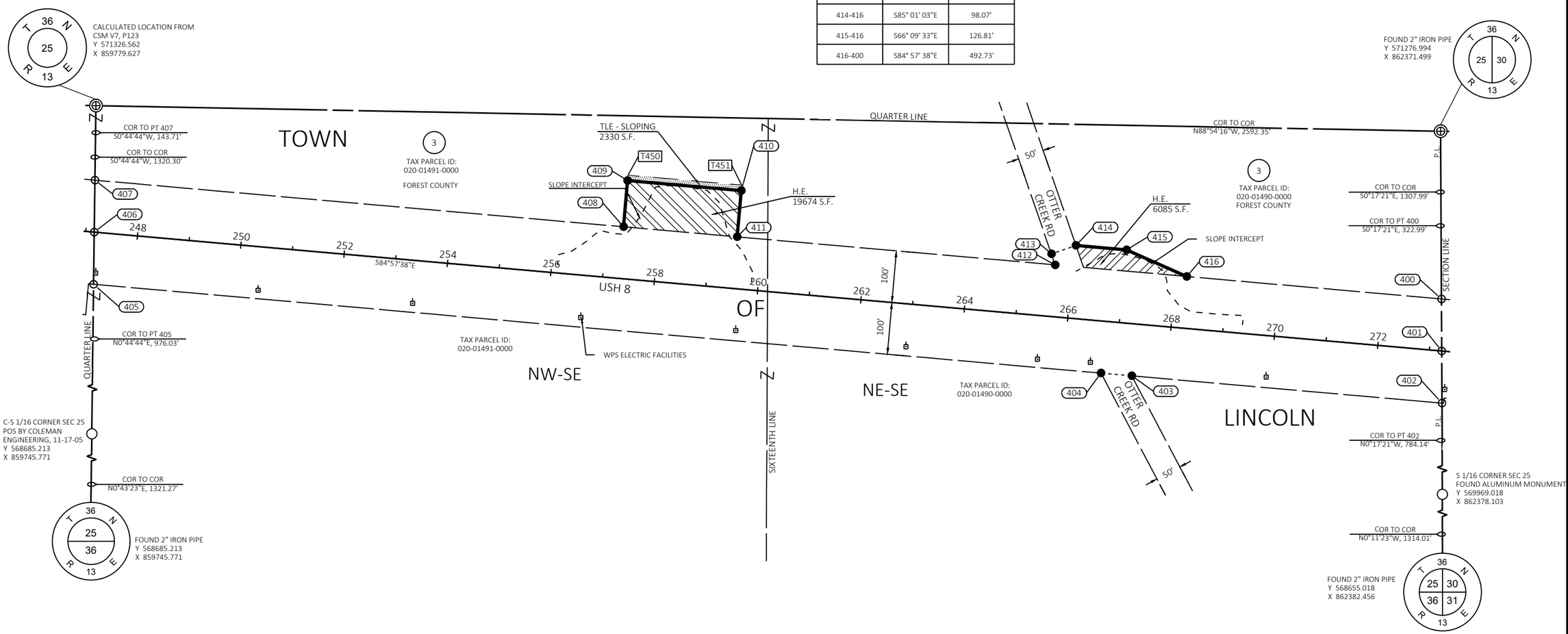
COURSE	BEARING	DISTANCE
400-401	S00° 17' 21"E	100.43'
401-402	S00° 17' 21"E	100.43'
402-403	N84° 57' 38"W	600.37'
403-404	N84° 57' 38"W	59.56'
404-405	N84° 57' 38"W	1949.15'
405-406	N00° 44' 44"E	100.28'
406-407	N00° 44' 44"E	100.28'
407-408	S84° 57' 38"E	1022.72'
408-409	N04° 58' 57"E	89.32'
409-410	S85° 01' 03"E	220.00'
410-411	S04° 58' 57"W	89.54'
411-412	S84° 57' 38"E	615.35'
412-413	N19° 03' 33"W	22.30'
413-414	N70° 56' 27"E	50.00'
414-416	S85° 01' 03"E	98.07'
415-416	S66° 09' 33"E	126.81'
416-400	S84° 57' 38"E	492.73'

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER (S)	INTEREST(S) REQUIRED	R/W S.F, REQUIRED NEW	EXISTING	TOTAL	TLE S.F
3	FOREST COUNTY	H.E. & TLE	25759	0	25759	2330

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

ALL AREAS SHOWN IN SQUARE FEET UNLESS OTHERWISE NOTED. THE PURPOSE FOR ALL TLE'S IS GRADING UNLESS OTHERWISE NOTED.



REVISION DATE	DATE 04-04-2024	SCALE, FEET 0 100 200	HWY: USH 8	STATE R/W PROJECT NUMBER 1590-18-22	PLAT SHEET 4.06	
	GRID FACTOR N/A		COUNTY: FOREST	CONSTRUCTION PROJECT NUMBER 1590-18-71/82	PS&E SHEET 124	E

FILE NAME : 040106-RP.DWG
LAYOUT NAME - 4.06

PLOT DATE : 4/4/2024 12:31 PM PLOT BY : JAMES CAPPEART PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 75

4

BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
BM1	STA 418+47.17, -30.27' LT	1615.25	RR SPIKE IN PPOL 64FF76
BM2	STA 427+26.00, 53.34' RT	1607.37	RR SPIKE IN PPOL 65AA71
CP1	STA 422+81.30, -43.86' LT	1618.64	3/4-INCH REBAR W/ CAP

CRANDON SANITARY AND WATER LEGEND:

(1) ADJUSTING SANITARY MANHOLE COVERS

(2) ADJUSTING WATER VALVES

SAWCUT REQUIRED FOR ADJUSTING VALVES AND COVERS

BEGIN PROJECT
STA 416+22.56
Y=568,599.252
X=836,195.722

STH 32/55 USH 8

S LAKE AVE

S FOREST AVE

S PARK AVE

S WILDWOOD AVE

USH 8

S88°42'56"E

S79°48'50"E

BM1

BM2

CP1

EXISTING R/W

BUTT JOINT REQ'D MATCH EXISTING

WISCONSIN PUBLIC SERVICE (GAS/PETROLEUM)

CAUTION

CITY OF CRANDON (SANITARY)

SPECTRUM (COMMUNICATION LINE)

REMOVING CURB & GUTTER REMOVING SIDEWALK

WISCONSIN PUBLIC SERVICE (ELECTRIC)

FRONTIER (COMMUNICATION LINE)

CULV:21008000179
STA 427+18.87
EXISTING 60-IN CPRC
TO REMAIN

WETLAND BOUNDARY

MATCH LINE 427+50

MATCH LINE 441+25

PC: 432+62.69

PT: 439+61.81

CABC PE

ASPH PE

CONC PE

XXXX

FOOTBRIDGE

BUG TUSSEL (COMMUNICATION LINE)

PI STA = 436+12.95
Y = 568554.631
X = 838185.616
DELTA = 8°54'06" RT
D = 1°16'24"
T = 350.27'
L = 699.13'
R = 4500.00'
PC STA = 432+62.69
PT STA = 439+61.81
SE = 2.0%
RO = 125'

STA 440+02
PROTECTIVE THERMOPLASTIC COATING AT SNOWMOBILE CROSSING REQ'D SEE CONSTRUCTION DETAIL

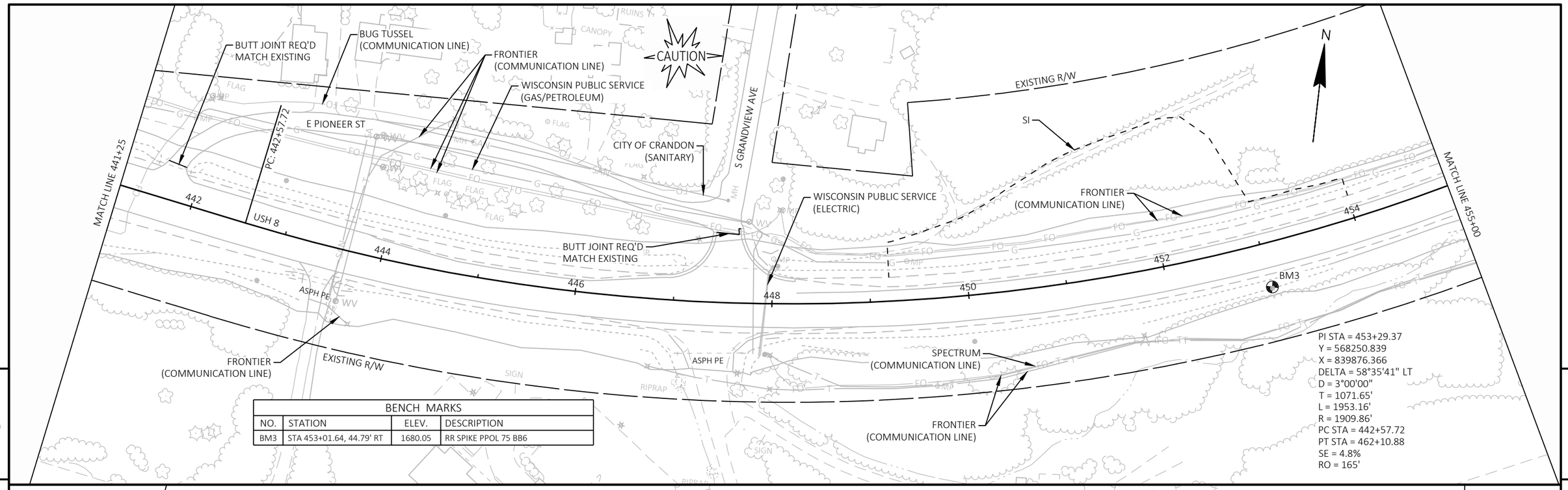
WOLF RIVER STATE TRAIL

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	PLAN SHEETS	SHEET 125 E

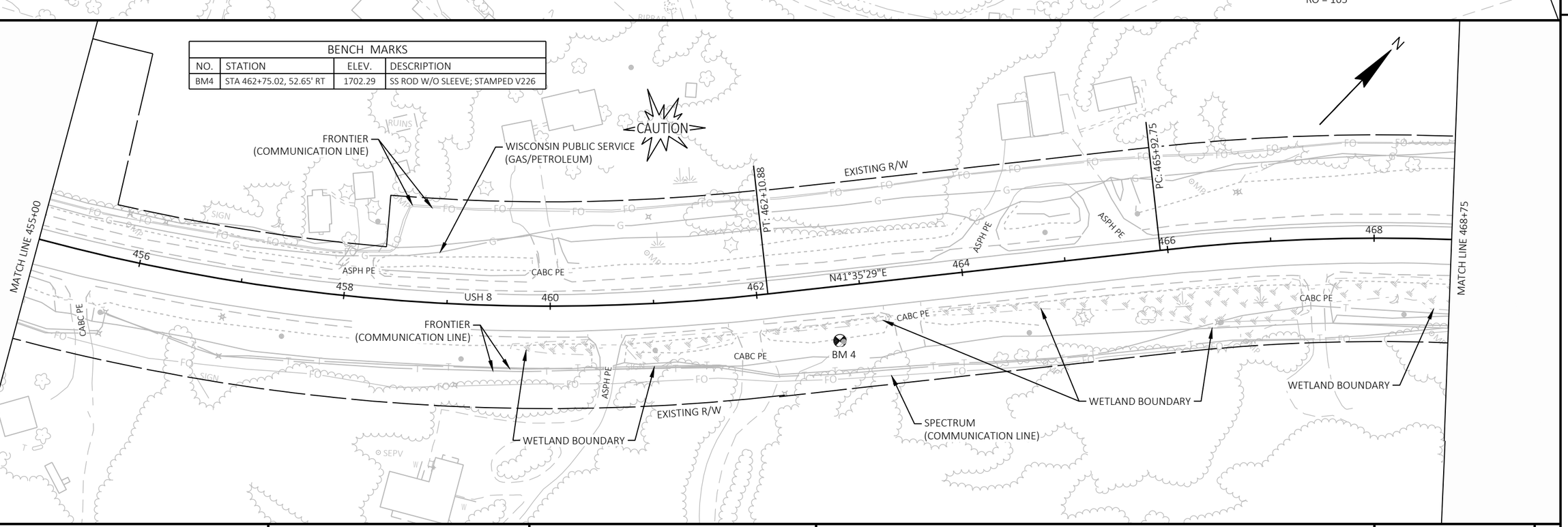
FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\050201-PN-US8.DWG
LAYOUT NAME - 01

PLOT DATE : 10/23/2024 3:17 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
BM3	STA 453+01.64, 44.79' RT	1680.05	RR SPIKE PPOL 75 BB6



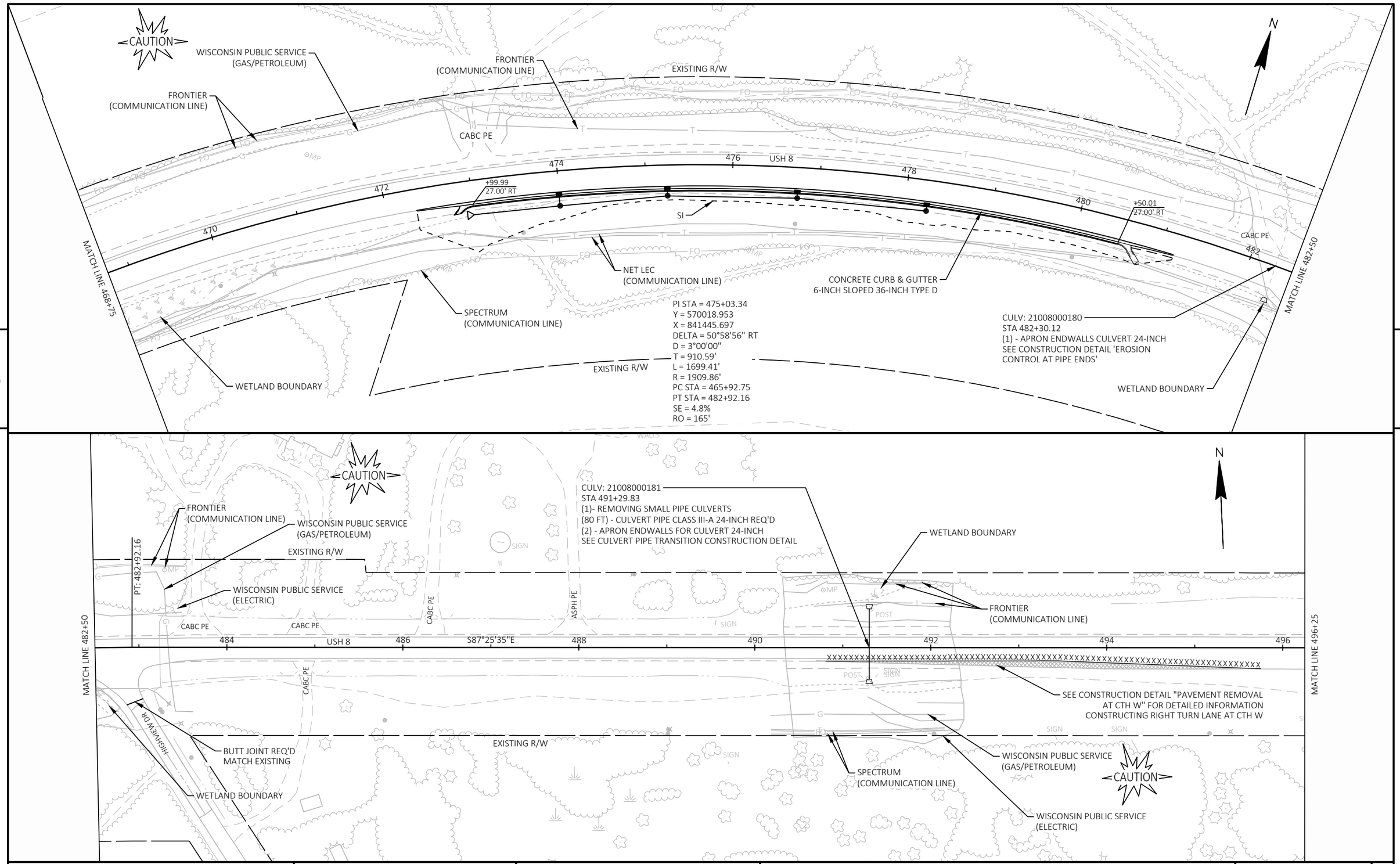
BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
BM4	STA 462+75.02, 52.65' RT	1702.29	SS ROD W/O SLEEVE; STAMPED V226

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	PLAN SHEETS	SHEET 126	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\050201-PN-US8.DWG
LAYOUT NAME - 02

PLOT DATE : 10/23/2024 3:17 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

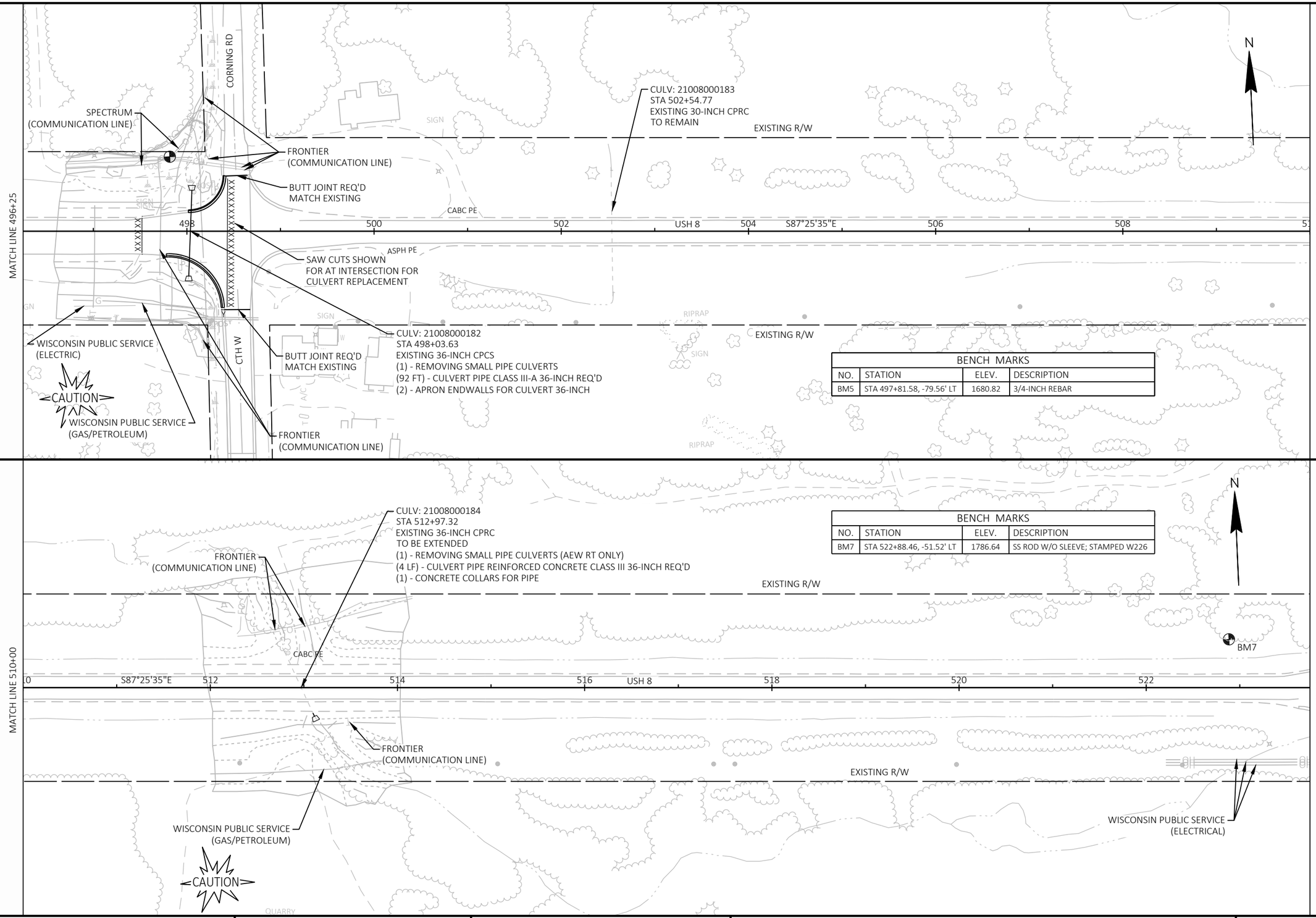


PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	PLAN SHEETS	SHEET 127	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\050201-PN-US8.DWG
LAYOUT NAME - 03

PLOT DATE : 10/23/2024 3:17 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



5

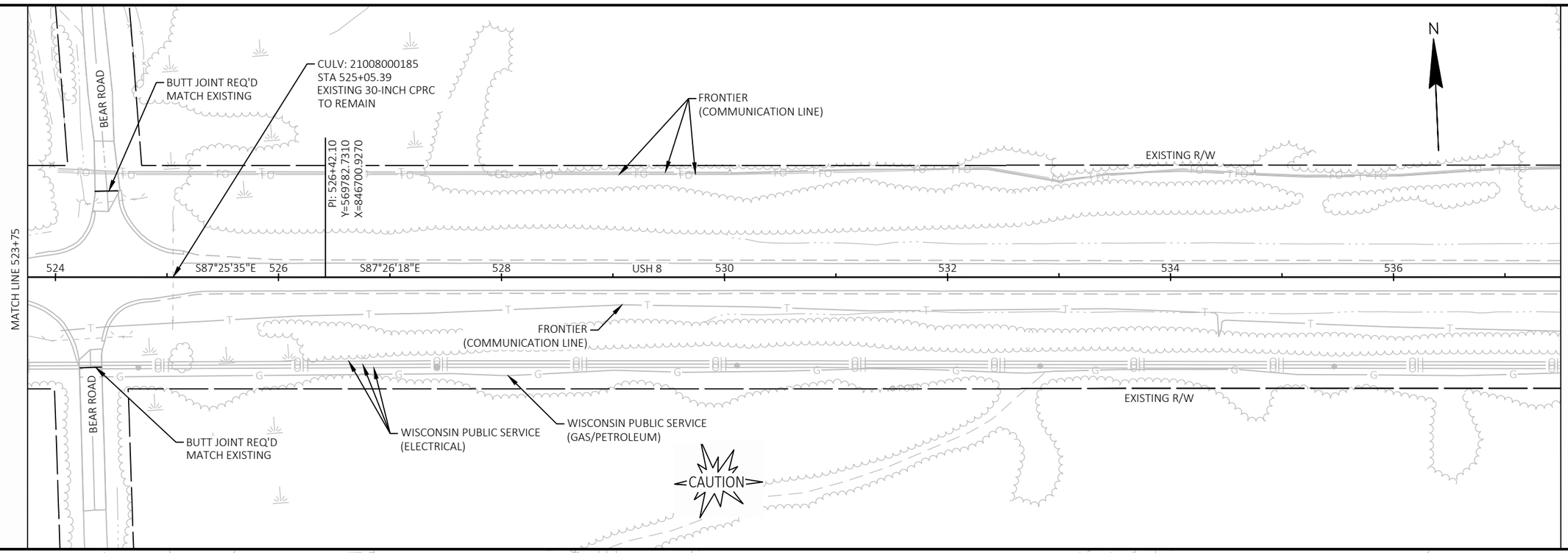
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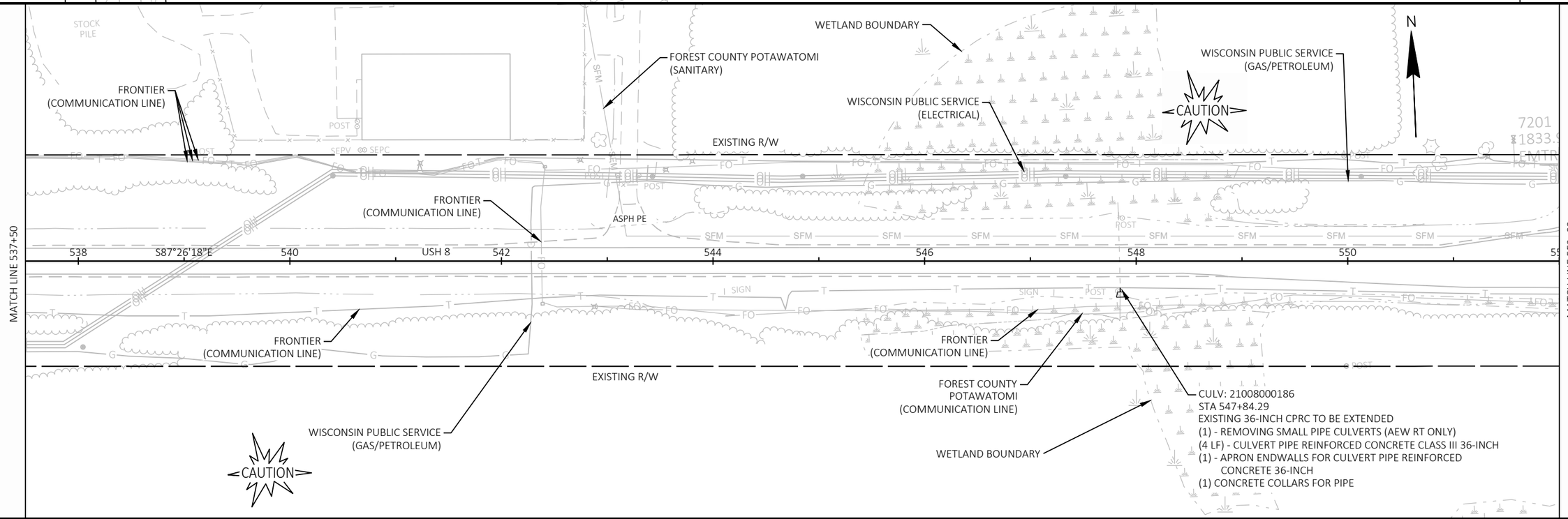
PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	PLAN SHEETS	SHEET 128	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\050201-PN-US8.DWG
LAYOUT NAME - 04

PLOT DATE : 10/23/2024 3:17 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44





PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	PLAN SHEETS	SHEET 129 E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\050201-PN-US8.DWG
LAYOUT NAME - 05
PLOT DATE : 10/23/2024 3:17 PM
PLOT BY : ADAM SARAUER
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

UNDER 9813-02-70
WETLAND BOUNDARY
CAUTION
WISCONSIN PUBLIC SERVICE (GAS/PETROLEUM)
WETLAND BOUNDARY
FRONTIER (COMMUNICATION LINE)
FOREST COUNTY POTAWATOMI (SANITARY)
N
FRONTIER (COMMUNICATION LINE)
R/W
FIRE KEEPER RD
BUTT JOINT REQ'D MATCH EXISTING
BM8
WISCONSIN PUBLIC SERVICE (ELECTRICAL)
SI
EXISTING R/W
WETLAND BOUNDARY
MATCH LINE 552+00
MATCH LINE 566+25
S87°26'18"E
USH 8
USH 8 R/L
UNDER 9813-02-70
WETLAND BOUNDARY
SI
EXISTING R/W
CULV: 21008000187
STA 557+74.84
EXISTING 30-INCH CPCS TO BE EXTENDED
(1) - REMOVING SMALL PIPE CULVERTS (STONE ENDWALL RT ONLY)
(6 LF) - CULVERT PIPE CORRUGATED STEEL 30-INCH
(1) - APRON ENDWALLS FOR CULVERT PIPE STEEL 30-INCH
(1) - CONCRETE COLLARS FOR PIPE
STA 564+51.12 US 8 R/L = STA 18+52.68 YOUNGS LN
REMOVE CURB & GUTTER
BM9
FRONTIER (COMMUNICATION LINE)
FOREST COUNTY POTAWATOMI (WATER)
R/W
R/W
LEGEND:
CONCRETE PAVEMENT
WETLAND BOUNDARY
NOTE:
SHARED PATHWAYS 'CE' AND 'PW' GRADING OPERATIONS UNDER 1590-18-71
REMAINING SHARED PATHWAYS CONSTRUCTION, INCLUDING YOUNGS LANE CURB RAMPS UNDER 9813-02-70

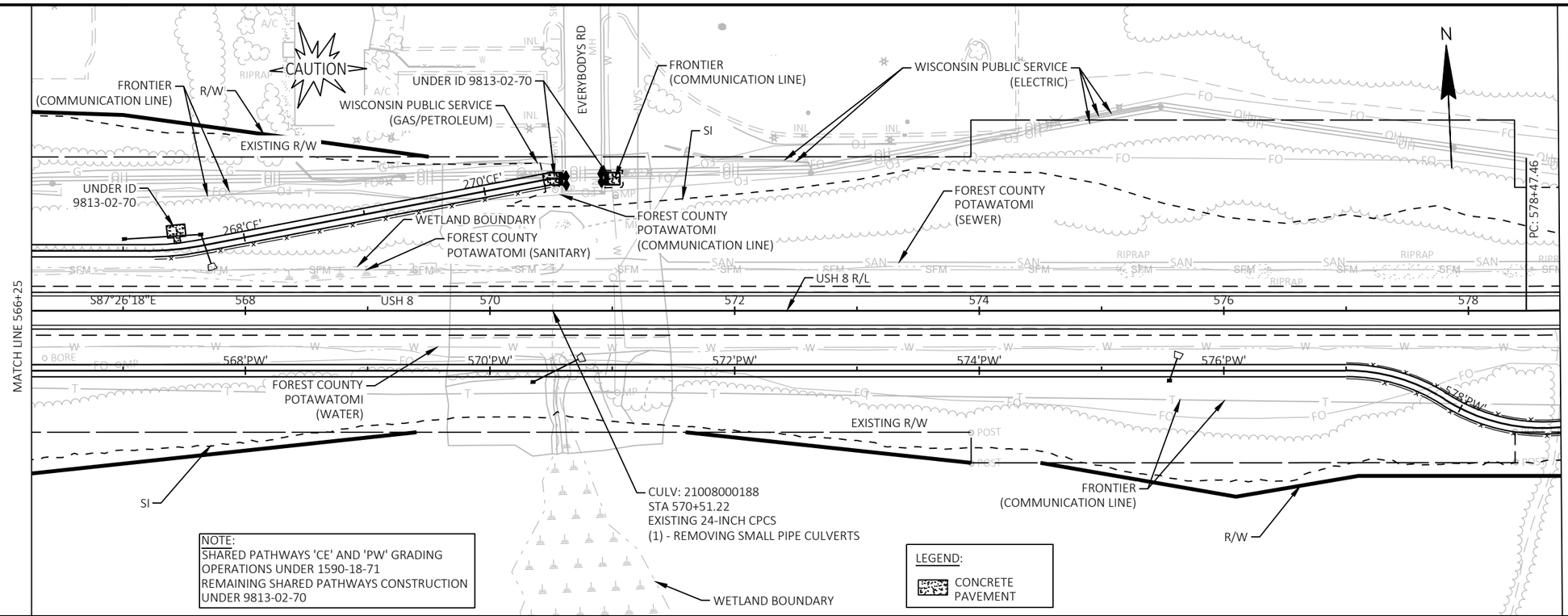
BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
BM8	STA 552+91.86, -109.90' LT	1833.99	CHISEL 'X' IN CONC SIGN BASE
BM9	STA 564+33.89, 124.30' RT	1861.62	RR SPIKE IN PPOL

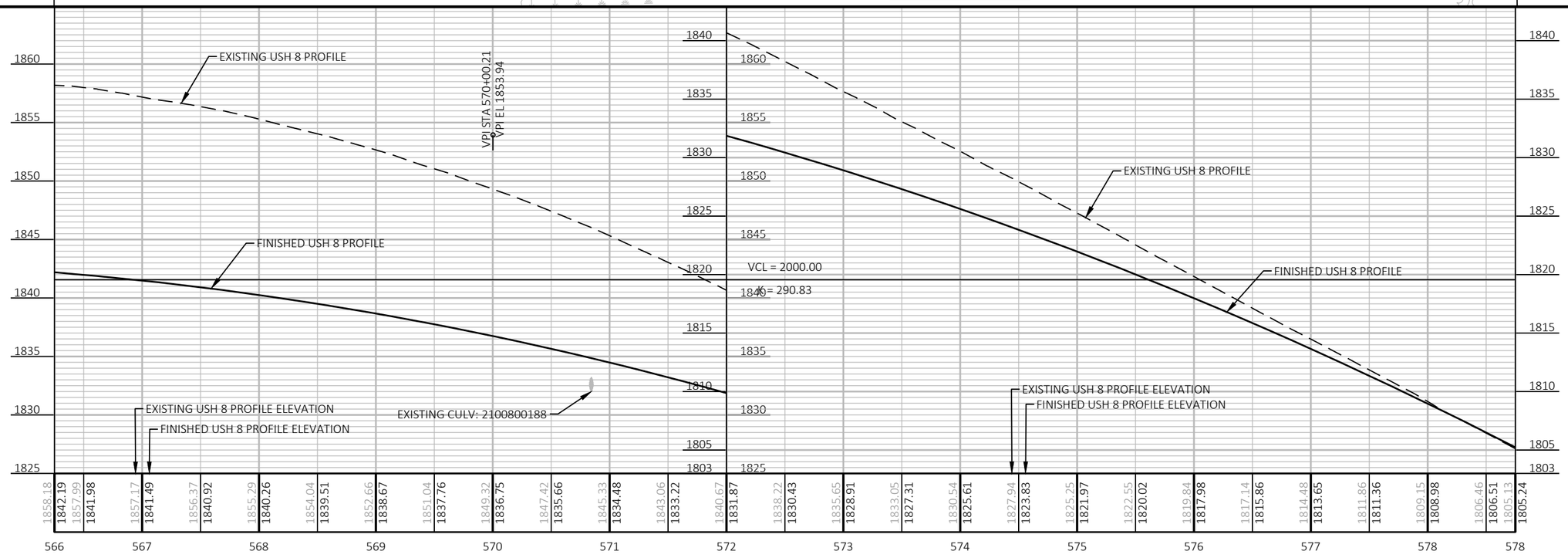
BEGIN RECONSTRUCTION
STA 553+50 USH 8 R/L
END RESURFACING
SAW CUT REQ'D

RESURFACING | RECONSTRUCTION

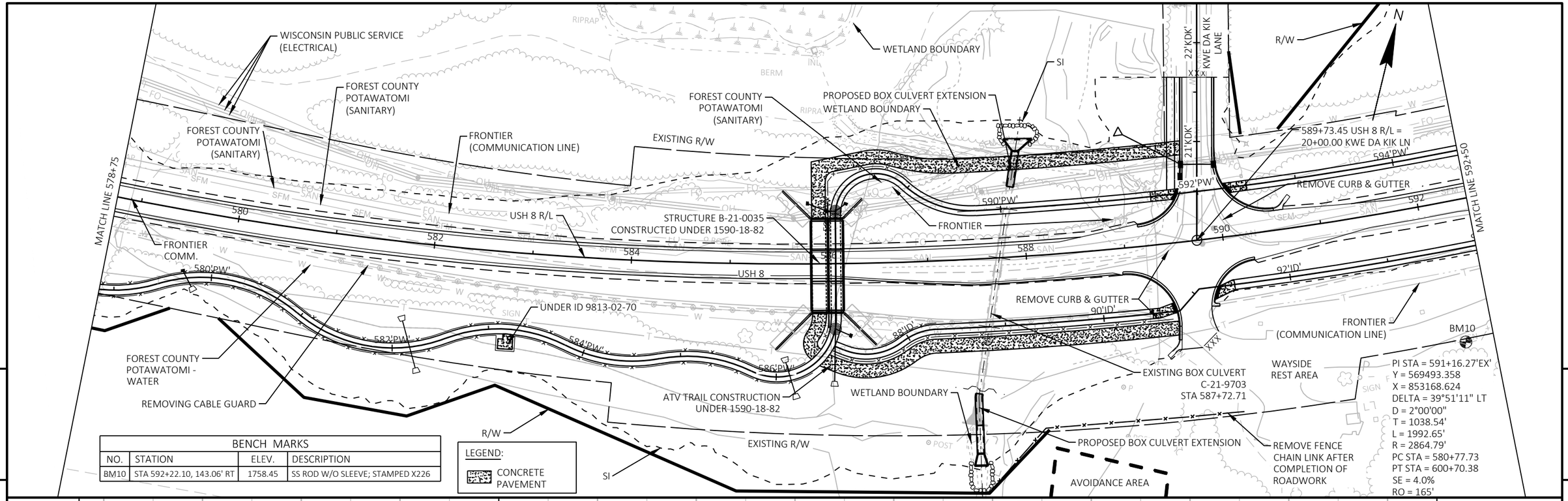
EXISTING USH 8 PROFILE
FINISHED USH 8 PROFILE
VCL = 180.00
K = 148.99
VCL = 2000.00
K = 290.83
STA 553+50.00 EL 1833.34
VPC STA 553+87.62 VPC EL 1833.39
VPI STA 554+77.62 VPI EL 1833.51
VPT STA 555+67.62 VPT EL 1834.72
VPC STA 560+00.21 VPC EL 1840.52
HP STA 563+90.31 HP EL 1843.14
0.13%
1.34%
EXISTING CULV: 2100800187
EXISTING USH 8 PROFILE ELEVATION
FINISHED USH 8 PROFILE ELEVATION

| | | |





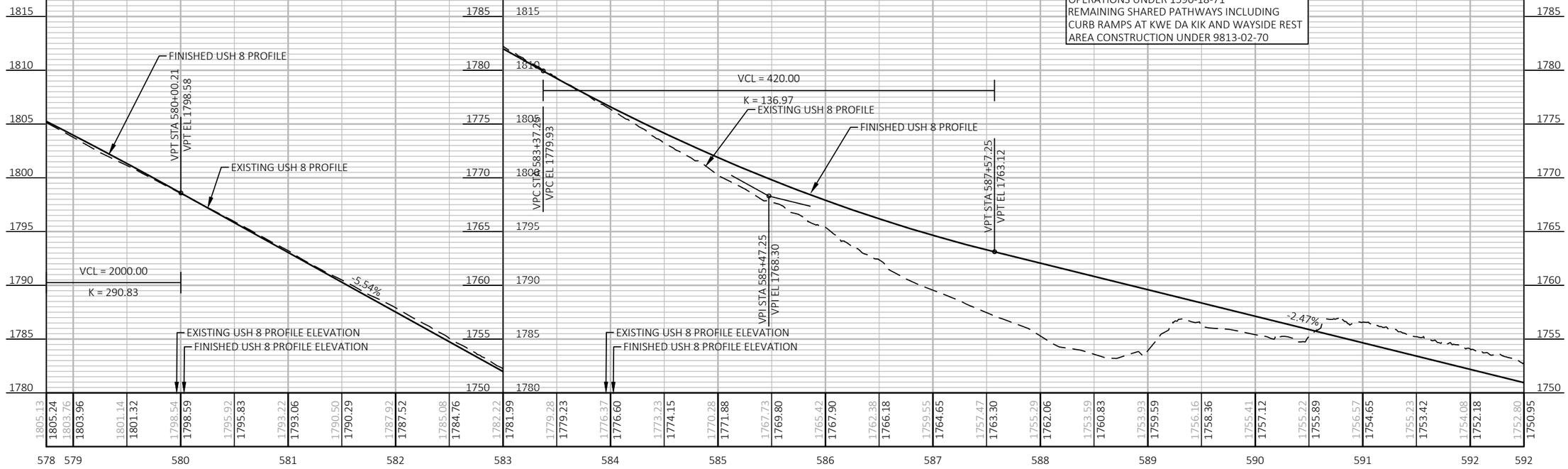
PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	PLAN AND PROFILE: USH 8	SHEET 131 E



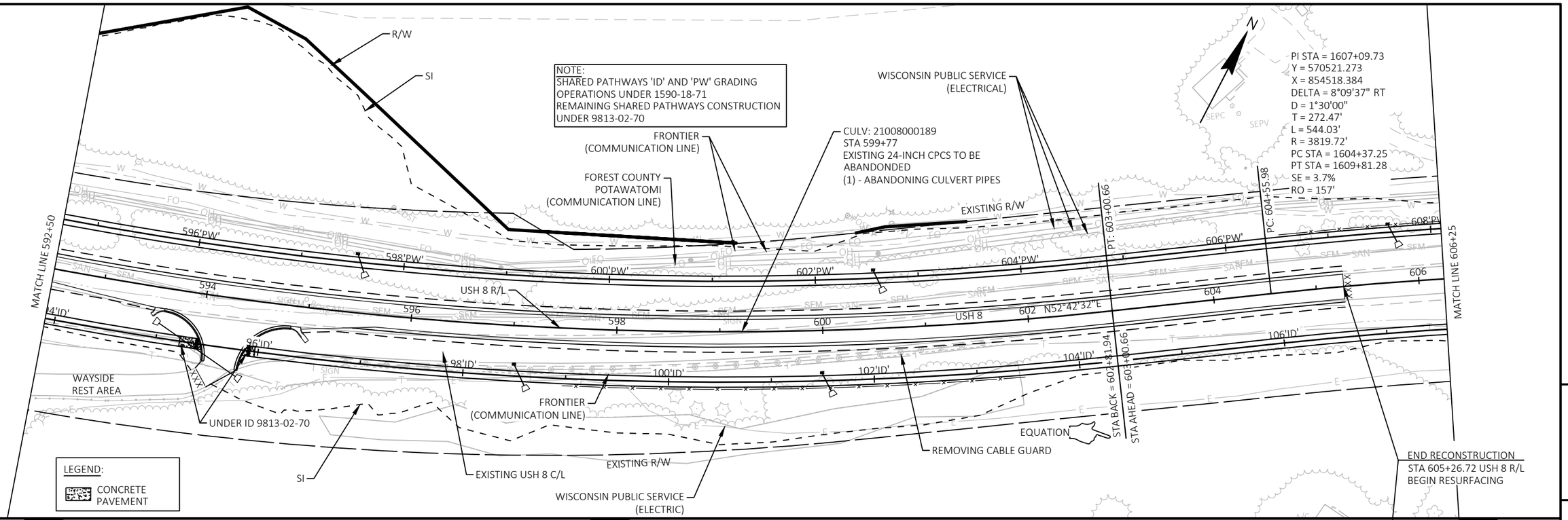
BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
BM10	STA 592+22.10, 143.06' RT	1758.45	SS ROD W/O SLEEVE; STAMPED X226

LEGEND:
CONCRETE PAVEMENT

NOTE:
SHARED PATHWAYS 'ID' AND 'PW' GRADING OPERATIONS UNDER 1590-18-71
REMAINING SHARED PATHWAYS INCLUDING CURB RAMPS AT KWE DA KIK AND WAYSIDE REST AREA CONSTRUCTION UNDER 9813-02-70

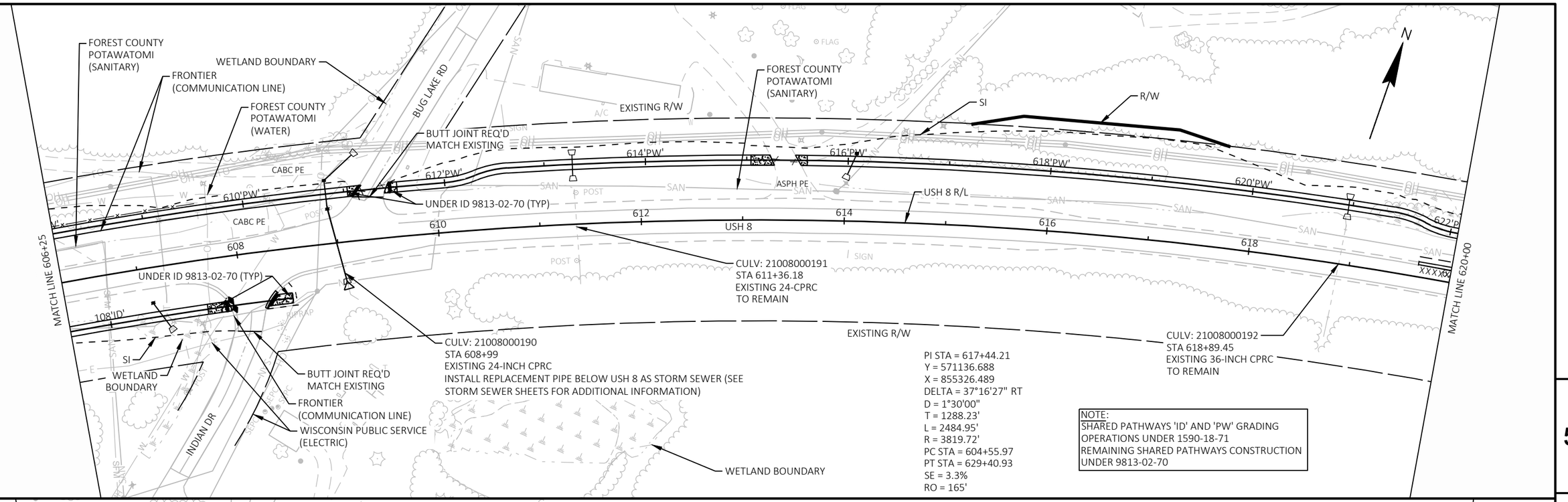


PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	PLAN AND PROFILE: USH 8	SHEET 132 E



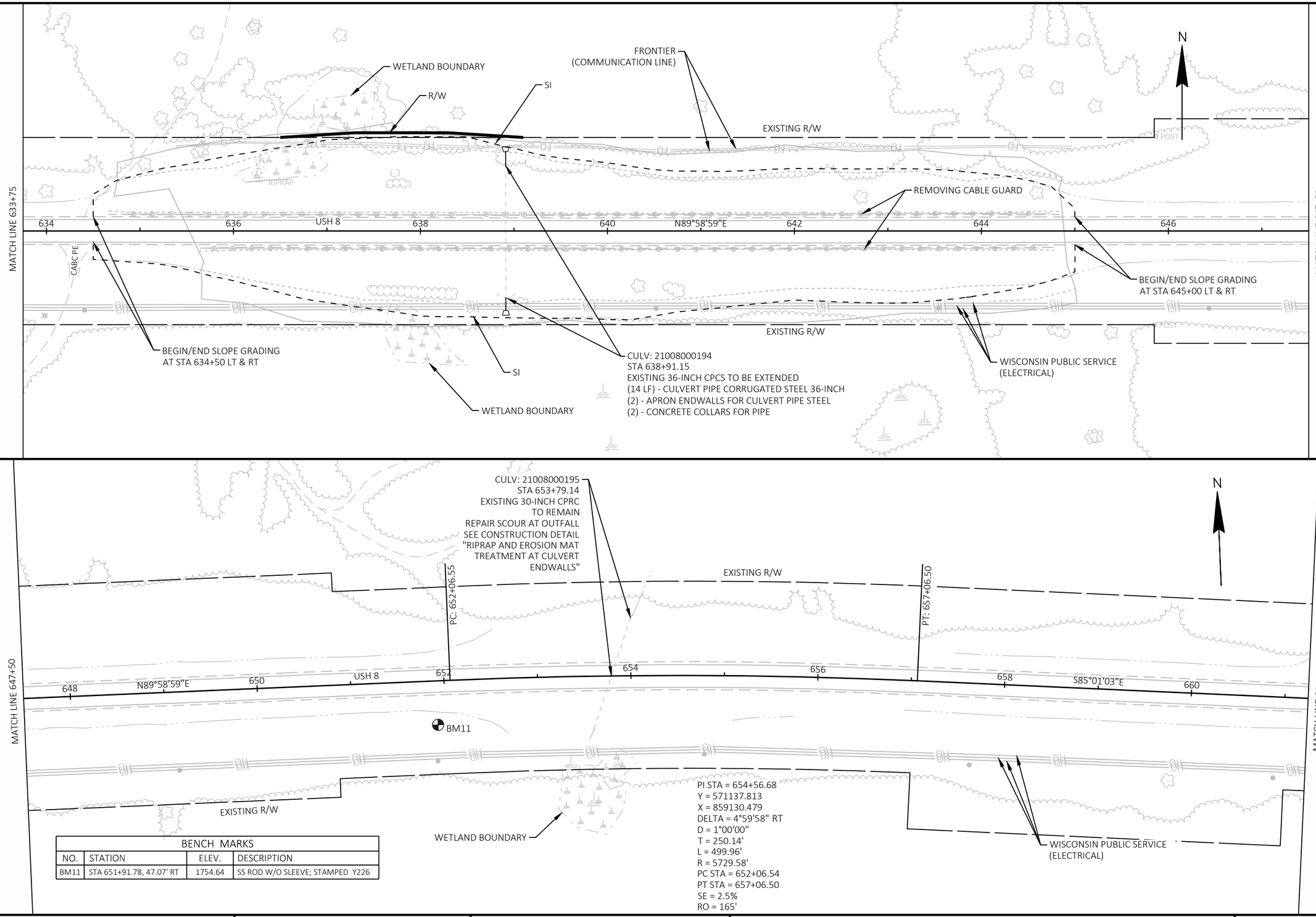
PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	PLAN AND PROFILE: USH 8	SHEET 133 E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\050201-PN-US8.DWG
LAYOUT NAME - 09
PLOT DATE : 10/29/2024 3:21 PM
PLOT BY : ADAM SARAUER
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



5

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	PLAN SHEETS	SHEET 134	E



BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
BM11	STA 651+91.78, 47.07' RT	1754.64	SS ROD W/O SLEEVE; STAMPED Y226

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	PLAN SHEETS	SHEET 135	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\050201-PN-US8.DWG
LAYOUT NAME - 11

PLOT DATE : 10/23/2024 3:37 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

MATCH LINE 661+25

TLE

R/W

SI

N

EXISTING R/W

REMOVING CABLE GUARD

BEGIN/END SLOPE GRADING
STA 670+00 LT

BEGIN/END SLOPE GRADING
STA 673+50 LT

CULV: 21008000196
STA 665+00
EXISTING 24-INCH CPRC
TO REMAIN

662 S85°01'03"E 664 666 668 USH 8 670 672 674

MATCH LINE 675+00

EXISTING R/W

WISCONSIN PUBLIC SERVICE
(ELECTRICAL)

CULV: 21008000197
STA 671+41.68
(1) - REMOVING SMALL PIPE CULVERTS (STONE WALL END LT)
EXISTING 30-INCH CPCS
(16 LF) - CULVERT PIPE CORRUGATED STEEL 30-INCH

5

5

MATCH LINE 675+00

SI

END PROJECT 1590-18-71
STA 682+74.60

CP4

BEGIN/END SLOPE GRADING
STA 679+95.75 LT

R/W

WETLAND BOUNDARY

BEGIN PROJECT 1590-18-81
STA 682+74.60
Y=570,893.039
X=861,938.067

BEGIN/END SLOPE GRADING
STA 683+25 LT

BUTT JOINT REQ'D
MATCH EXISTING

OTTER CREEK RD

EXISTING R/W

PI: 684+10.56
Y=570881.2309
X=862073.5131

STA 679+70
PROTECTIVE THERMOPLASTIC COATING AT
SNOWMOBILE CROSSING
REQ'D. SEE CONSTRUCTION DETAIL

676 S85°01'03"E 678 680 682 USH 8 684 686 S84°56'06"E 688

MATCH LINE 688+75

CABC PE

SIGN

SIGN

REMOVING GUARDRAIL

EXISTING R/W

OTTER CREEK RD

CULV: 21008000198
STA 680+56.61
EXISTING 24-INCH CPRC
TO BE EXTENDED NORTH TO
MATCH NEW SLOPE GRADE
(1) - REMOVING SMALL PIPE CULVERTS (AEW LT ONLY)
(36 FT) - CULVERT PIPE REINFORCED CONCRETE CLASS III 24-INCH REQ'D
(1) - APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH
(1) - CONCRETE COLLARS FOR PIPE

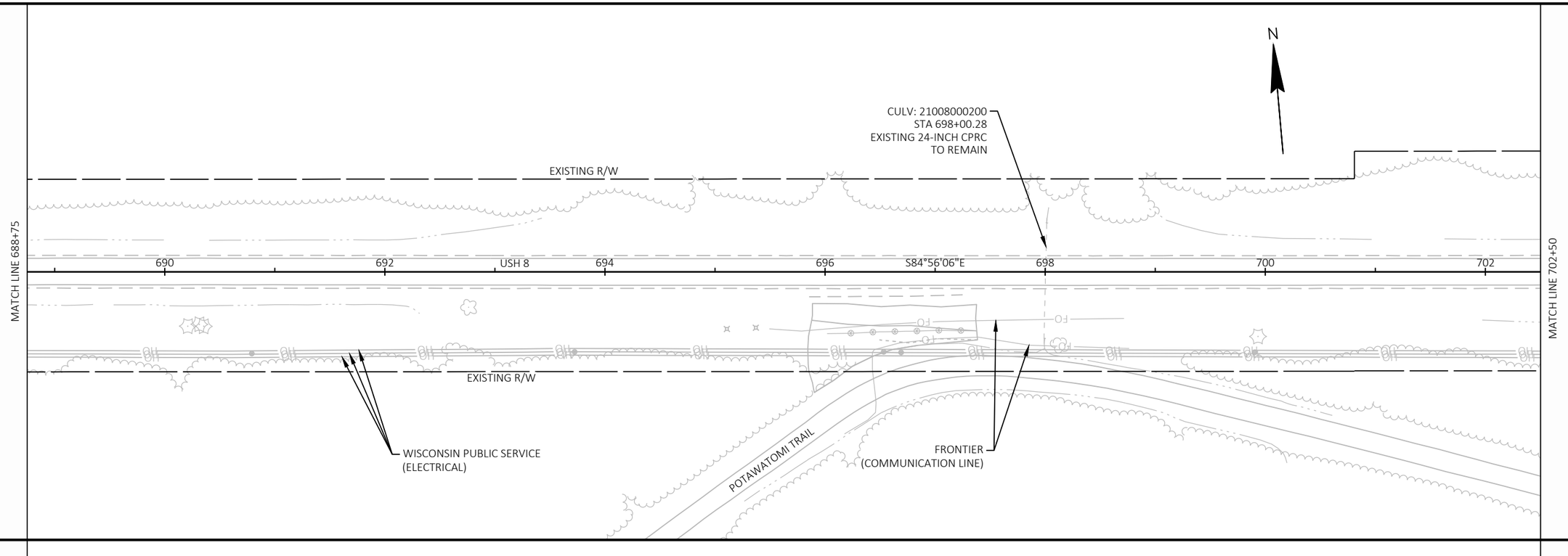
BUTT JOINT REQ'D
MATCH EXISTING

CULV: 21008000199
STA 685+88.64
EXISTING 30-INCH CPRC
TO REMAIN

BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
CP4	STA 679+74.82	1665.21	3/4-INCH REBAR W CAP

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	PLAN SHEETS	SHEET 136	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\050201-PN-US8.DWG
LAYOUT NAME - 12
PLOT DATE : 10/23/2024 3:19 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
BM12	STA 714+92.88	1655.65	SS ROD W/O SLEEVE; STAMPED Z226

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	PLAN SHEETS	SHEET 137	E

MATCH LINE 716+25

WISCONSIN PUBLIC SERVICE
(ELECTRICAL)

EXISTING R/W

FOREST COUNTY
POTAWATOMI
(COMMUNICATION LINE)

CULV: 21008000202
STA 727+94.84
EXISTING 24-INCH CPCS
TO REMAIN

718 USH 8 720 722 S84°52'21"E 724 726 728

EXISTING R/W

CENTURY LINK
COMMUNICATIONS

MATCH LINE 730+00

5

5

CULV: 21008000203
STA 736+29.39
EXISTING 24-INCH CPCS
(1) - REMOVING SMALL PIPE CULVERTS
(92 LF) - CULVERT PIPE CLASS III-A 24-INCH
(2) - APRON ENDWALLS FOR CULVERT PIPE 24-INCH
SEE CULVERT PIPE TRANSITION CONSTRUCTION DETAIL

FOREST COUNTY
POTAWATOMI
(FIBER)

WISCONSIN PUBLIC SERVICE
(ELECTRICAL)

STA 732+00
PROTECTIVE THERMOPLASTIC COATING
AT SNOWMOBILE CROSSING REQ'D.
SEE CONSTRUCTION DETAIL

PC: 735+43.65

EXISTING R/W

CABC PE

730 S84°52'21"E 732 734 USH 8 736 738 740 742

MATCH LINE 730+00

CENTURYLINK

EXISTING R/W

MATCH LINE 743+75

BUTT JOINT REQ'D
MATCH EXISTING

POTAWATOMI TRAIL

WETLAND BOUNDARY

WABIKON LAKE

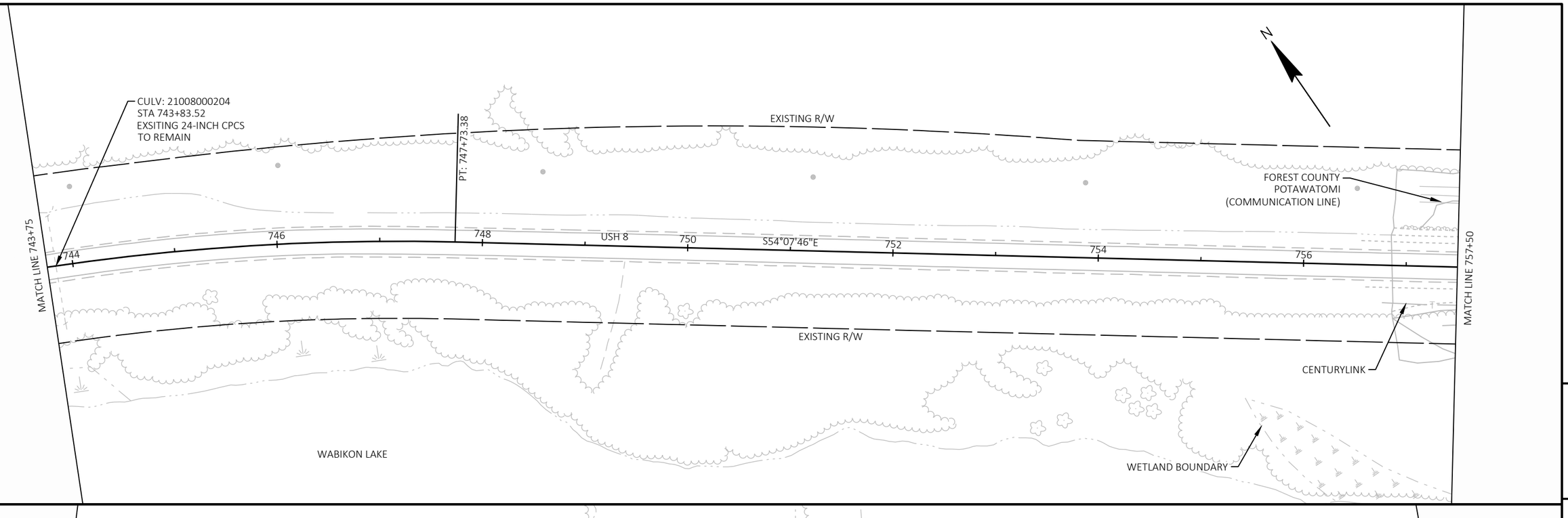
PI STA = 741+73.70
Y = 570368.988
X = 867813.842
DELTA = 30°44'35" RT
D = 2°30'00"
T = 630.05'
L = 1229.72'
R = 2291.83'
PC STA = 735+43.65
PT STA = 747+73.37
SE = 4.3%
RO = 165'

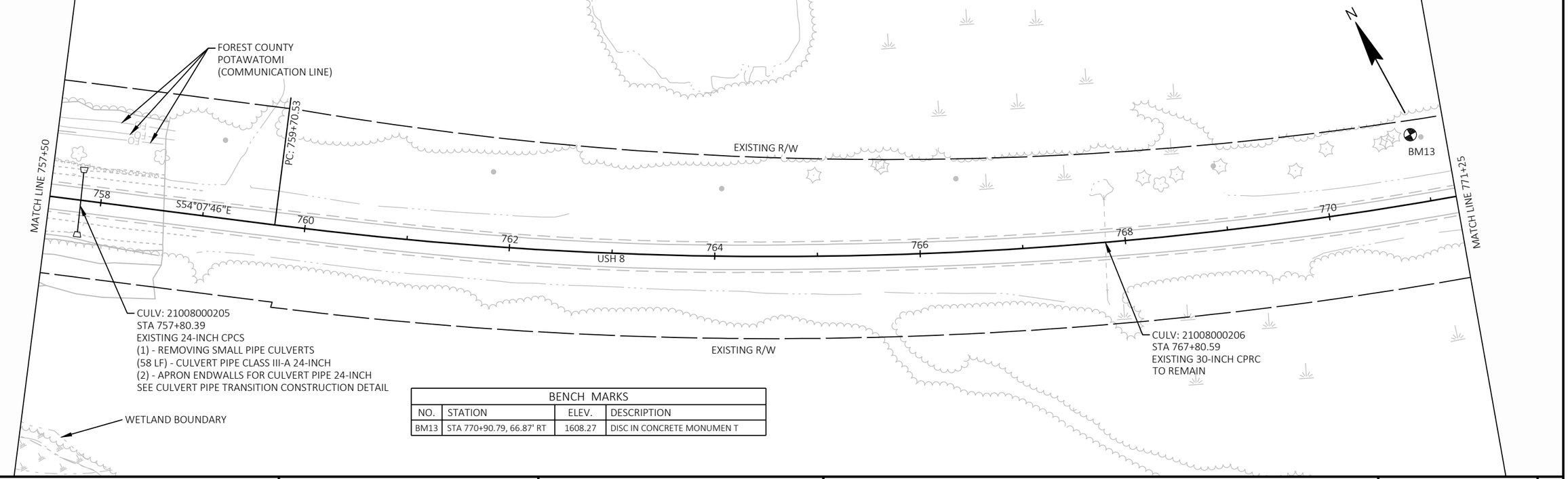
PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	PLAN SHEETS	SHEET 138	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\050201-PN-US8.DWG
LAYOUT NAME - 14

PLOT DATE : 10/23/2024 3:21 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44





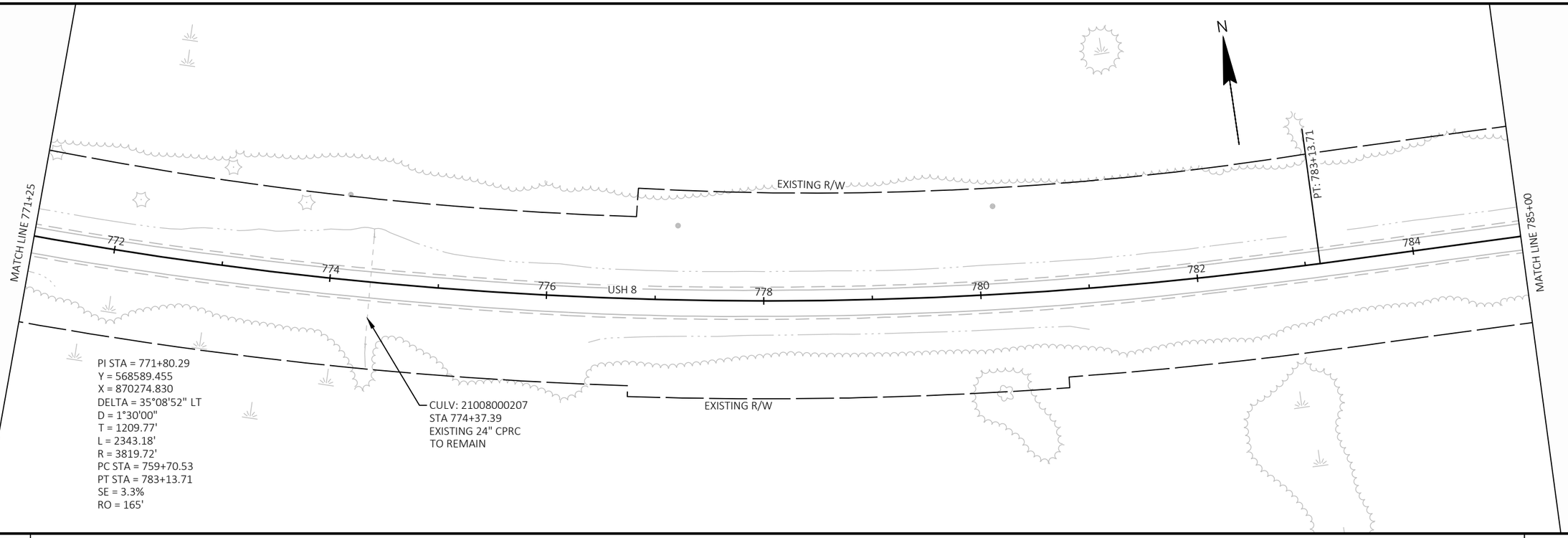
BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
BM13	STA 770+90.79, 66.87' RT	1608.27	DISC IN CONCRETE MONUMEN T

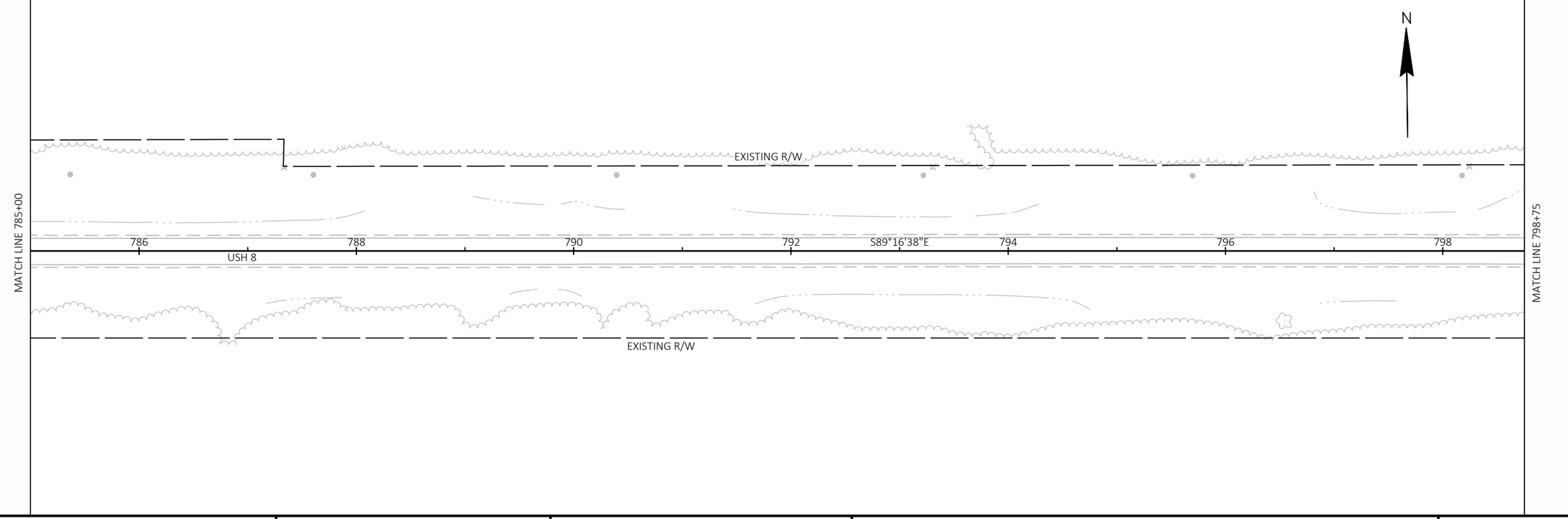
PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	PLAN SHEETS	SHEET 139 E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\050201-PN-US8.DWG
LAYOUT NAME - 15

PLOT DATE : 10/23/2024 3:21 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

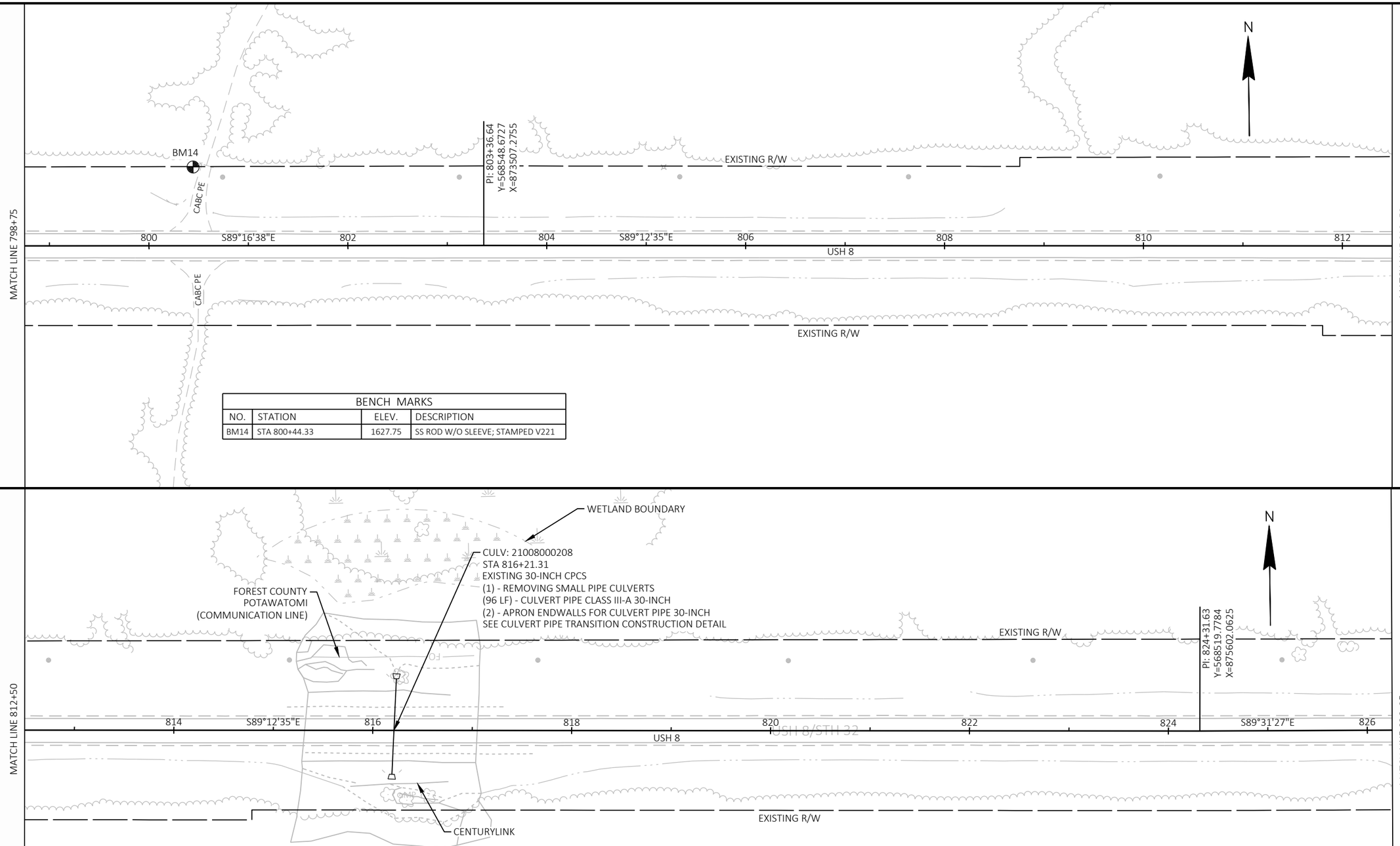




PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	PLAN SHEETS	SHEET 140	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\050201-PN-US8.DWG
LAYOUT NAME - 16

PLOT DATE : 10/23/2024 3:22 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT



BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
BM14	STA 800+44.33	1627.75	SS ROD W/O SLEEVE; STAMPED V221

5

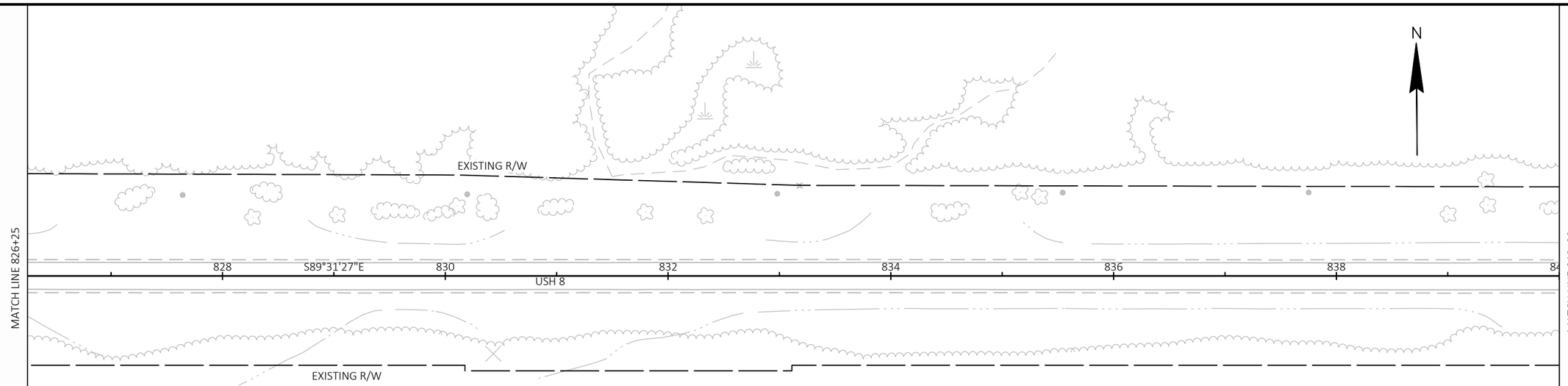
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	PLAN SHEETS	SHEET 141	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\050201-PN-US8.DWG
LAYOUT NAME - 17

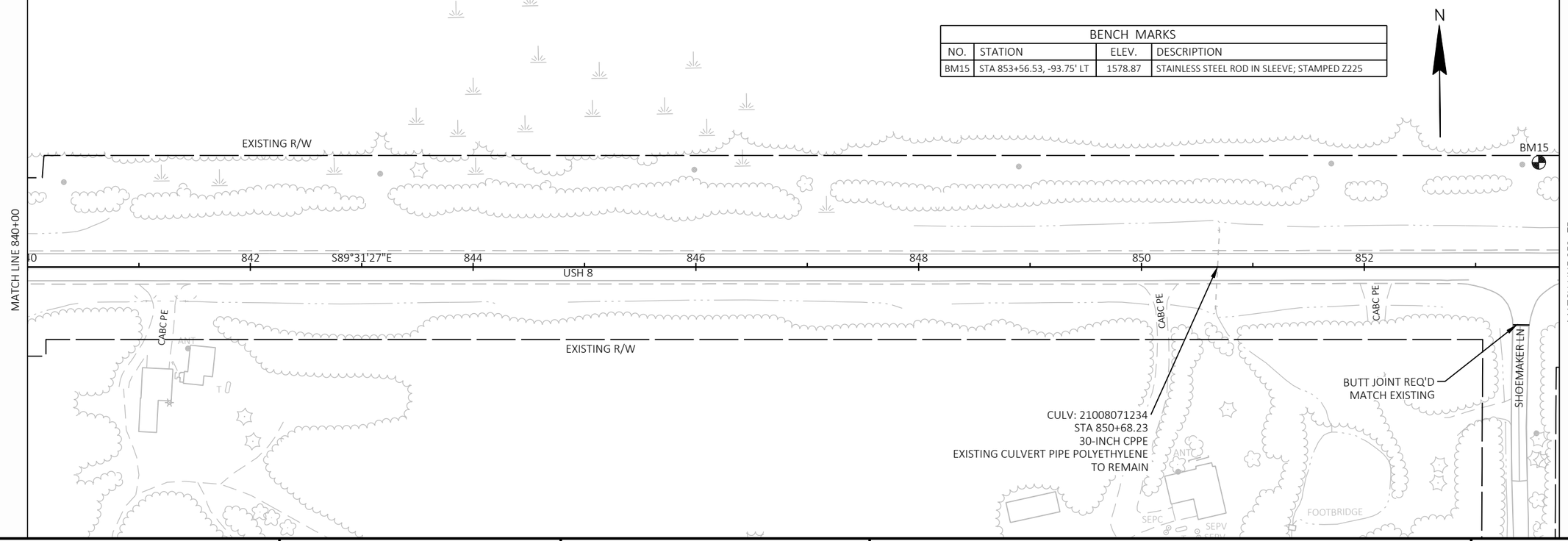
PLOT DATE : 10/23/2024 3:23 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



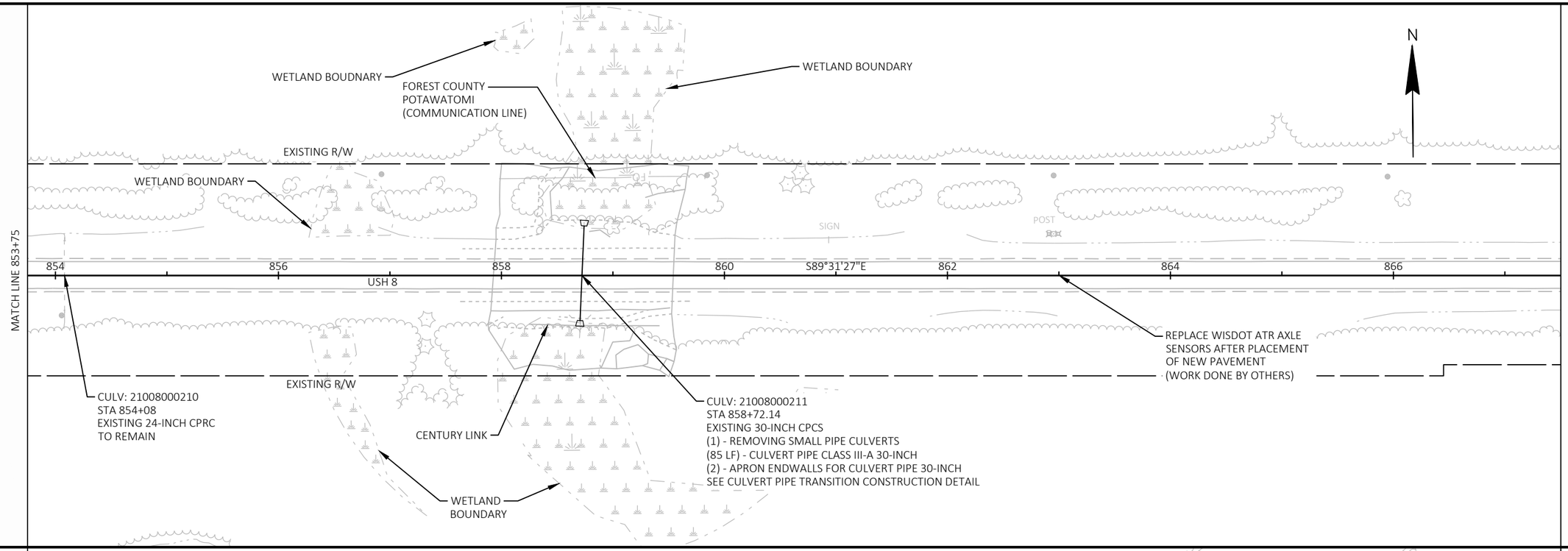
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5

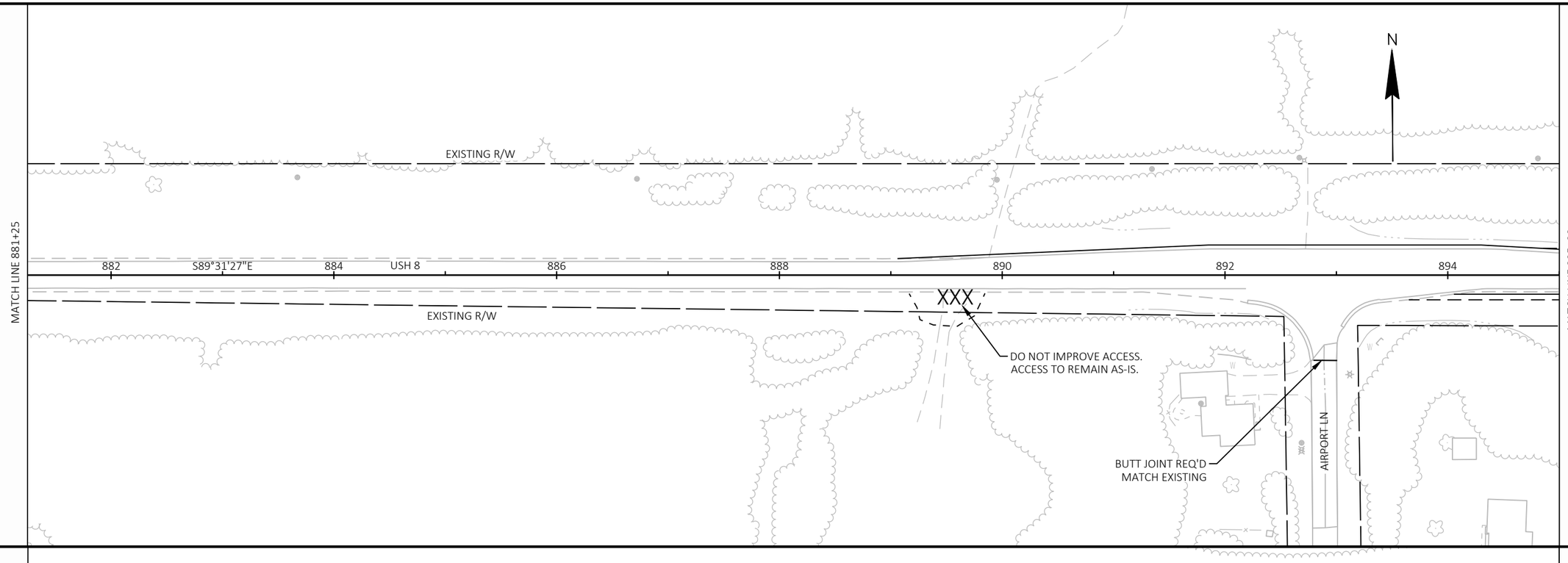


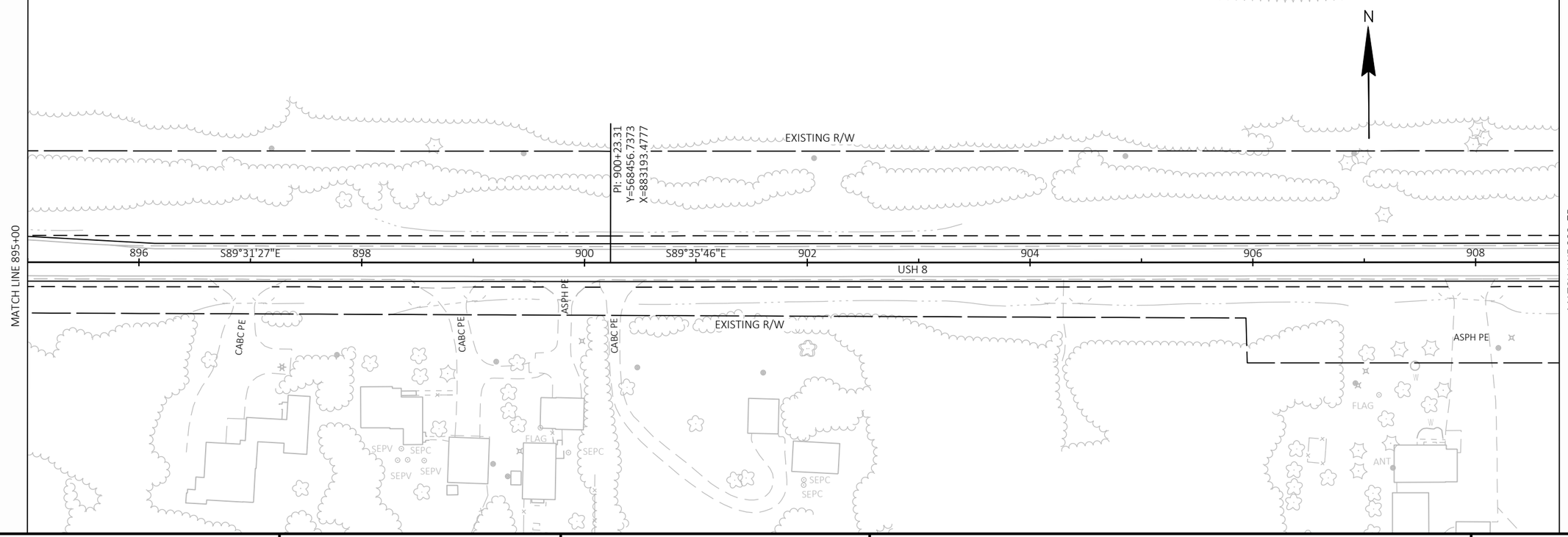
PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	PLAN SHEETS	SHEET 142	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\050201-PN-US8.DWG
LAYOUT NAME - 18
PLOT DATE : 10/23/2024 3:24 PM
PLOT BY : ADAM SARAUER
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	PLAN SHEETS	SHEET 143	E





PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	PLAN SHEETS	SHEET 144	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\050201-PN-US8.DWG
LAYOUT NAME - 20

PLOT DATE : 12/18/2024 1:14 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT

FOREST COUNTY POTAWATOMI (COMMUNICATION LINE)

STA 909 + 32
PROTECTIVE THERMOPLASTIC COATING AT SNOWMOBILE CROSSING REQ'D. SEE CONSTRUCTION DETAIL

CULV: 21008000212
STA 911+82.75
EXISTING 24-INCH CPCS
(1) - REMOVING SMALL PIPE CULVERTS
(71 FT) - CULVERT PIPE CLASS III-A 24-INCH
(2) - APRON ENDWALLS FOR CULVERT PIPE 24-INCH
SEE CULVERT PIPE TRANSITION CONSTRUCTION DETAIL

BM16

EXISTING R/W

MATCH LINE 908+75

910 912 914 S89°35'46"E 916 918 920 922

USH 8

CABC PE

RIPRAP

SIGN

CENTURYLINK (COMMUNICATION LINE)

WISCONSIN PUBLIC SERVICE (GAS/PETROLEUM)

CAUTION

W SILVER LAKE RD

BUTT JOINT REQ'D MATCH EXISTING

LAONA SANITARY DISTRICT NO. 1

WALLS

POST

ASPH PE

SAN

MATCH LINE 922+50

SILVER LAKE

BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
BM16	STA 913+64.68, -99.94' LT	1577.14	SS ROD W/O SLEEVE; STAMPED U221

WISCONSIN PUBLIC SERVICE (GAS/PETROLEUM)

CAUTION

CULV: 21008000213
EXISTING 24-INCH CPCS
STA 926+54.71
(1) - REMOVING SMALL PIPE CULVERTS
(64 FT) - CULVERT PIPE CLASS III-A 24-INCH
(2) - APRON ENDWALLS FOR CLASS 24-INCH
SEE CULVERT PIPE TRANSITION CONSTRUCTION DETAIL

CULV: 21008000214
STA 935+03.05
EXISTING 24-INCH CPHECS
(1) - REMOVING SMALL PIPE CULVERTS
(64 FT) CULVERT PIPE REINFORCED CONCRETE PIPE HORIZONTAL ELLIPTICAL CLASS HE-IV 14X23-INCH
(2) - APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 14X23-INCH
SEEN CULVERT PIPE TRANSITION CONSTRUCTION DETAIL

FOREST COUNTY POTAWATOMI (COMMUNICATION LINE)

EXISTING R/W

MATCH LINE 922+50

924 S89°35'46"E 926 928 930 932 934 936

USH 8

CABC FE

WETLAND BOUNDARY

CENTURYLINK

LAONA SANITARY SEWER DISTRICT NO. 1

REMOVING CURB & GUTTER
INSTALL CONCRETE CURB & GUTTER
6-INCH SLOPED 36-INCH TYPE D

STA 935+40.29
EXISTING 18-INCH CPCS
TO REMAIN

BUTT JOINT REQ'D MATCH EXISTING

E SILVER LAKE RD

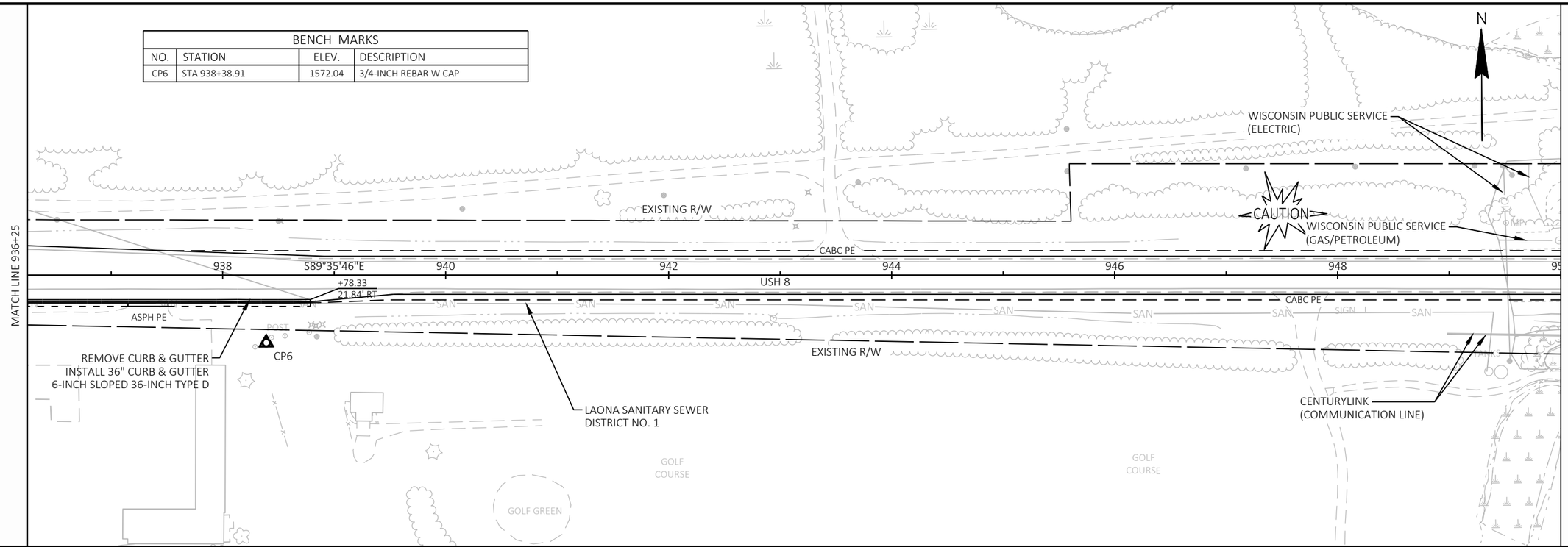
RUINS

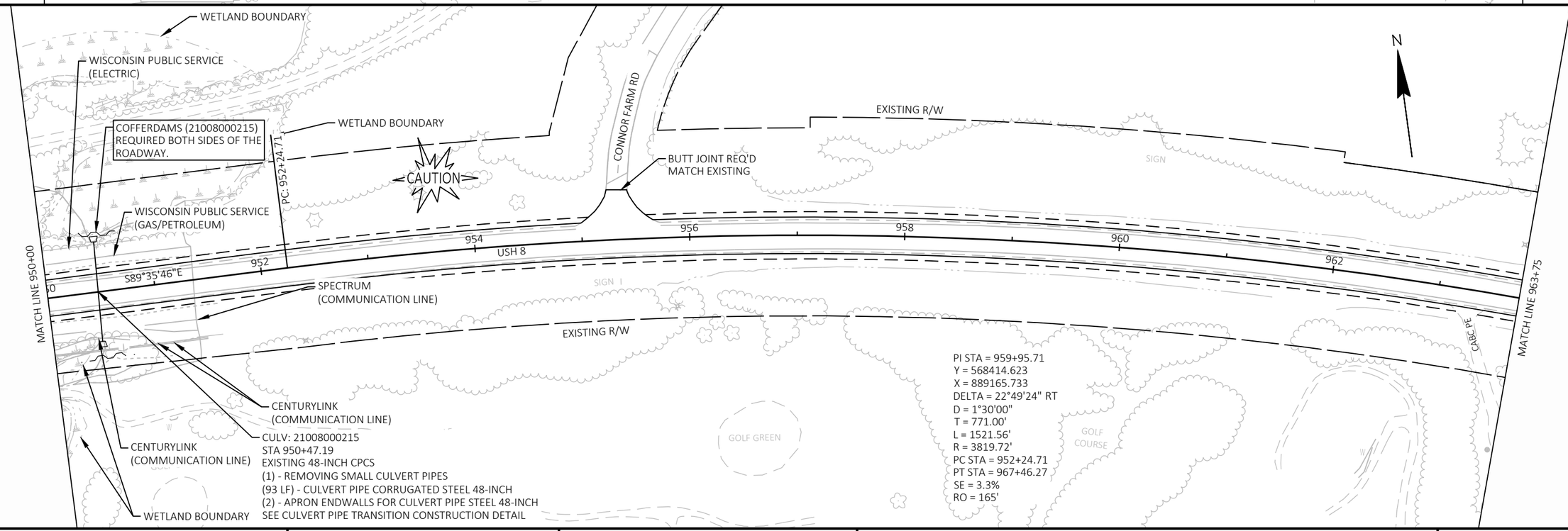
MATCH LINE 936+25

SILVER LAKE

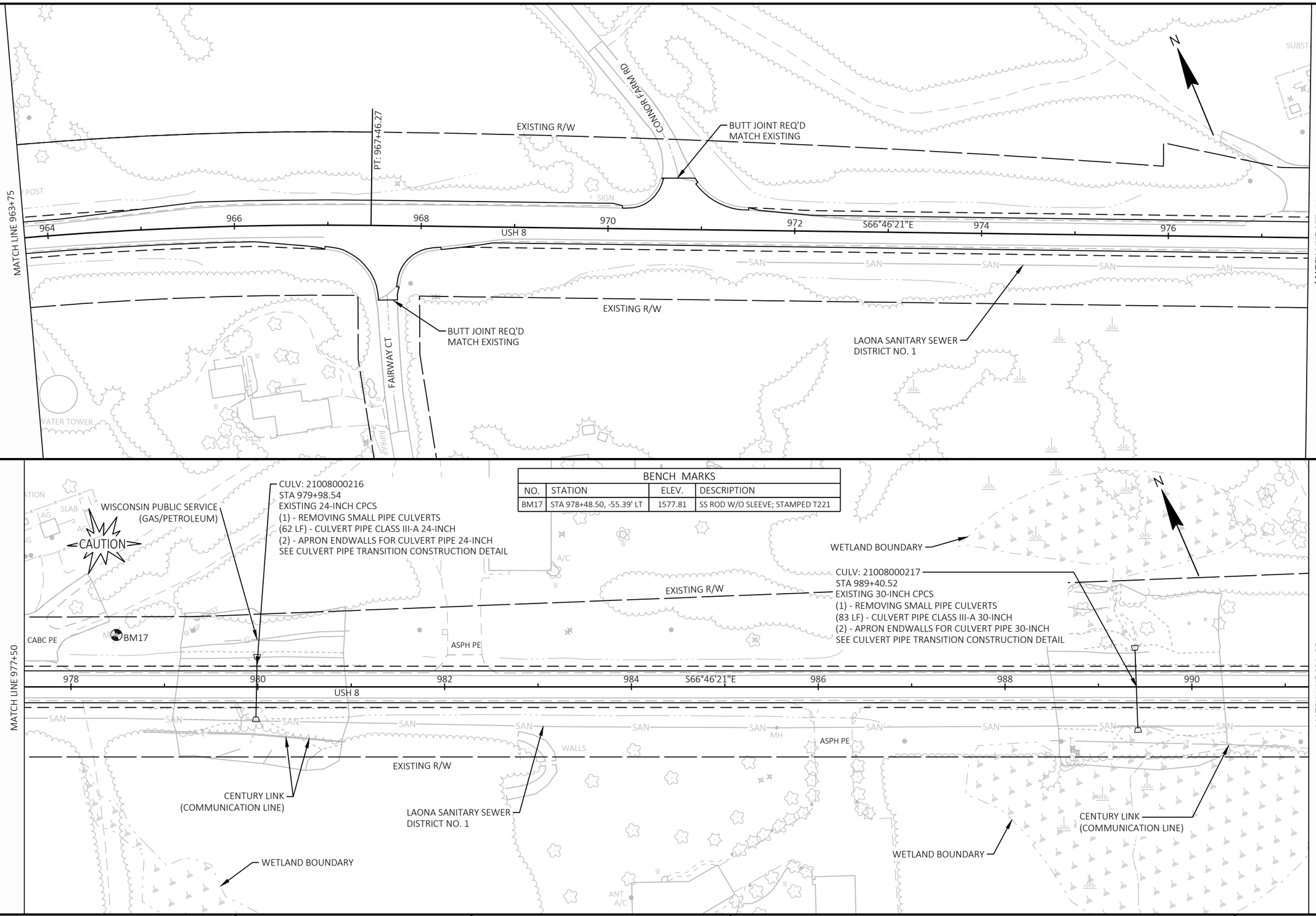
PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	PLAN SHEETS	SHEET 145	E

BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
CP6	STA 938+38.91	1572.04	3/4-INCH REBAR W CAP





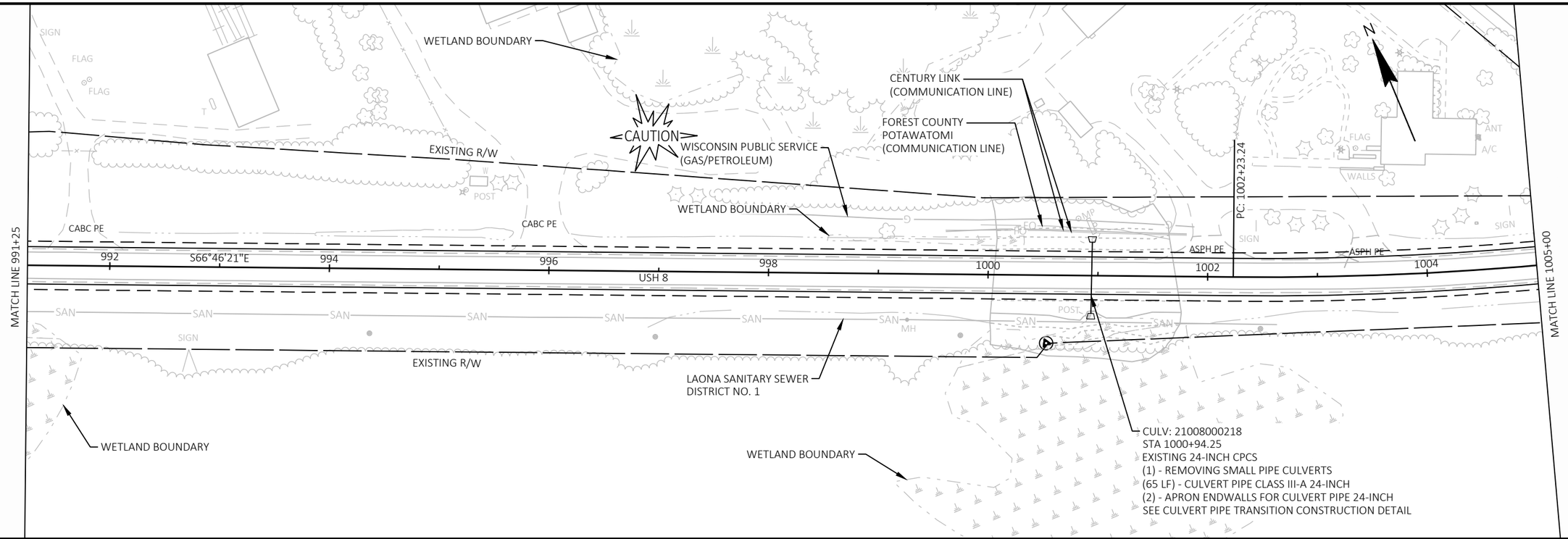
PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	PLAN SHEETS	SHEET 146	E



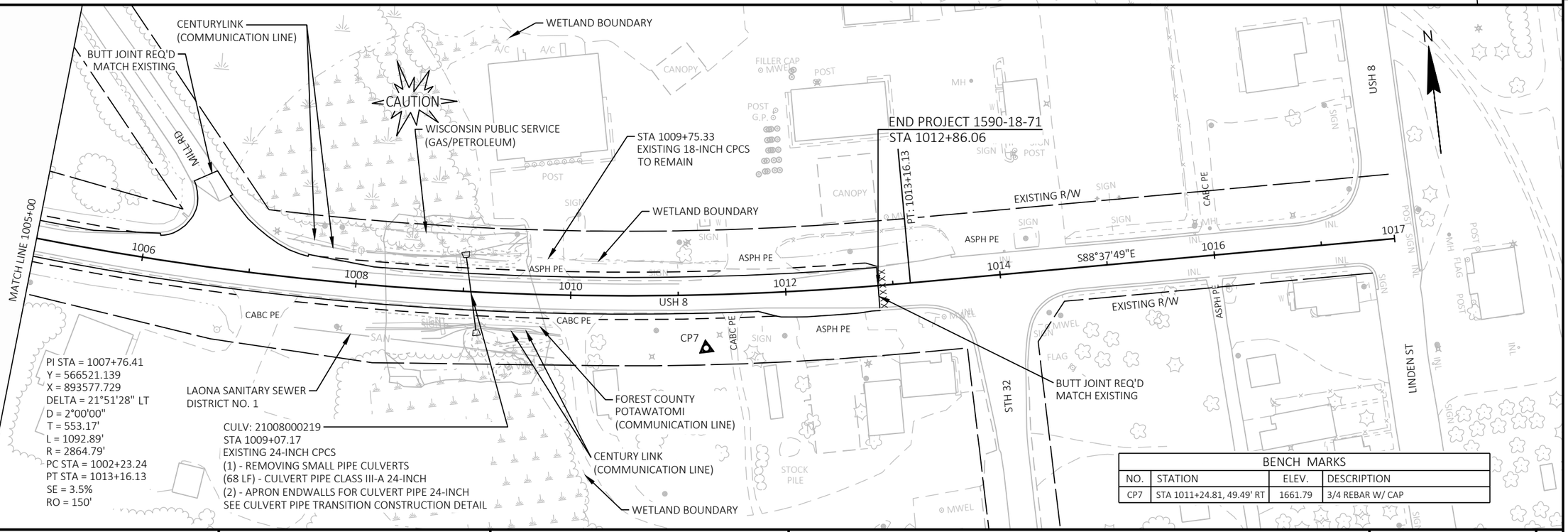
PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	PLAN SHEETS	SHEET 147 E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\050201-PN-US8.DWG
LAYOUT NAME - 23

PLOT DATE : 10/23/2024 3:28 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:100 FT



5



BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
CP7	STA 1011+24.81, 49.49' RT	1661.79	3/4 REBAR W/ CAP

LEGEND:
CONCRETE PAVEMENT

NOTE:
SHARED PATHWAYS 'CE' AND 'PW' GRADING OPERATIONS UNDER 1590-18-71
REMAINING SHARED PATHWAYS CONSTRUCTION UNDER 9813-02-70

BEGIN CONSTRUCTION
STA 12+89.66
MATCH EXISTING
SAW CUT REQ'D

BUTT JOINT REQ'D
MATCH EXISTING

BENCH MARKS			
NO.	STATION	ELEV.	DESCRIPTION
BM8	STA 564+33.89	1861.62	RR SPIKE IN PPOL

STA 564+51.12
STA 18+52.68 'Y'

STA 12+89.66
EL 1855.68

VPC STA 13+33.39
VPC EL 1857.08

VPI STA 14+53.39
VPI EL 1860.90

VPT STA 15+73.39
VPT EL 1853.93

VPC STA 16+56.71
VPC EL 1849.08

VPI STA 17+39.21
VPI EL 1844.29

VPT STA 18+21.71
VPT EL 1843.13

STA 18+40.66
EL 1842.87

STA 18+52.68
EL 1843.11

3.19%
-5.81%
-1.40%
2.01%

VCL = 240.00
K = 26.66

VCL = 165.00
K = 37.38

EXISTING PROFILE AT YOUNGS LANE R/L
FINISHED PROFILE AT YOUNGS LANE R/L
EXISTING PROFILE ELEVATION AT YOUNGS RD
FINISHED PROFILE ELEVATION AT YOUNGS RD

1853.93	1854.76	1855.96	1856.01	1857.55	1857.56	1859.24	1858.37	1860.49	1858.25	1860.74	1857.18	1860.55	1855.18	1860.58	1852.38	1860.25	1849.47	1859.96	1846.82	1859.66	1844.82	1858.75	1843.50	1858.57	1843.05

12'Y' 13'Y' 14'Y' 15'Y' 16'Y' 17'Y' 18'Y' 19'Y' 19'Y'

1860 1855 1850 1845 1841

R/W
SLOPE INTERCEPT
CAUTION
WISCONSIN PUBLIC SERVICE GAS/PETROLEUM
FRONTIER COMMUNICATIONS
WPS - ELECTRIC
FOREST COUNTY POTAWATOMI - WATER
EXISTING R/W
BM8
CABC PE
YOUNGS LANE
FOREST COUNTY POTAWATOMI - SANITARY
EXISTING R/W
R/W
SLOPE INTERCEPT
FRONTIER COMMUNICATIONS
EP: 18+52.68
564
USH 8
SIGN
FRONTIER COMMUNICATIONS
WETLAND BOUNDARY
SLOPE INTERCEPT
WETLAND BOUNDARY
N

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	PLAN AND PROFILE - YOUNGS LANE	SHEET 149	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\050202-PN-YOUNGS-LN.DWG
LAYOUT NAME - 25
PLOT DATE : 10/23/2024 3:55 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44

AREA OF AVOIDANCE

SLOPE INTERCEPT

ATV TRAIL CONSTRUCTED UNDER 1590-18-82

FOREST COUNTY POTAWATOMI-WATER

WAYSIDE WEST ENTRANCE

INSTALL CHAIN LINK FENCE TO PROTECT DEBRIS OR CONSTRUCTION ACTIVITY FROM ENTERING AREA OF AVOIDANCE (SEE PROVISION)

EXISTING R/W

FRONTIER COMMUNICATIONS - TELEPHONE

USH 8 R/L

BP: 20+00.00

FRONTIER COMM. - FIBER

FOREST COUNTY POTAWATOMI - FIBER

WPS ELECTRIC

ATV TRAIL CONSTRUCTED UNDER 1590-18-82

EXISTING R/W

STA 22+72.72
0.00'
Y=569949.171
X=852970.856

EP: 22+72.72

KWE DA KIK LN

21'KDK'

22'KDK'

FOREST COUNTY POTAWATOMI - SANITARY

LEGEND:
CONCRETE PAVEMENT

NOTE:
SHARED PATHWAYS 'ID' AND 'PW' GRADING OPERATIONS UNDER 1590-18-71
REMAINING SHARED PATHWAYS CONSTRUCTION UNDER 9813-02-70

STA 20+00.00 'KDK'
STA 589+73.45

FOREST COUNTY POTAWATOMI - SANITARY

SLOPE INTERCEPT R/W

BEGIN CONSTRUCTION
STA 21+65 'KDK'
MATCH EXISTING
SAW CUT REQ'D

5

5

1770

1765

1760

1755

1750

VCL = 75.00

K = 20.30

STA 20+00.00
EL 1757.78

STA 20+12.08
EL 1757.27

LP STA 20+39.83
LP EL 1757.22

VPC STA 20+35.34
VPC EL 1757.22

VPI STA 20+72.84
VPI EL 1757.14

VPT STA 21+10.34
VPT EL 1758.44

STA 21+65.00
EL 1760.34

FINISHED PROFILE AT KWE DA KIK LANE R/L

EXISTING PROFILE AT KWE DA KIK LANE R/L

-4.16%

-0.22%

3.47%

EXISTING PROFILE ELEVATION

FINISHED PROFILE ELEVATION

1755.93 1757.78 | 1756.20 1757.24 | 1757.96 1758.11 | 1759.77 1759.82 | 1761.68 | 1764.11

16'KDK' 17'KDK' 18'KDK' 19'KDK' 20'KDK' 21'KDK' 22'KDK' 23'KDK' 24'KDK' 24'KDK'

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	PLAN AND PROFILE - KWE DA KIK	SHEET 150	E

Standard Detail Drawing List

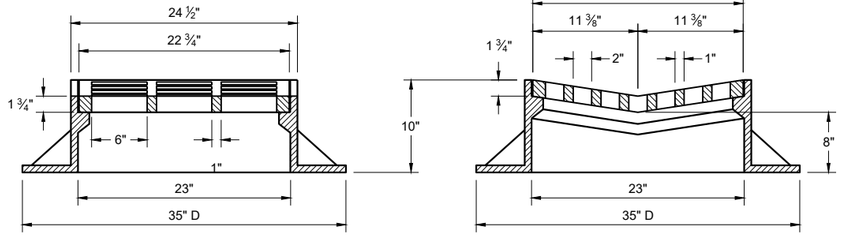
08A05-21B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-21C	INLET COVERS TYPE F, HM, HM-S, S, T, HM-GJ & HM-GJ-S
08A05-21E	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08B09-04	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT, 10-FT DIAMETER
08C06-03	INLETS 3-FT AND 4-FT DIAMETER
08C07-03	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT, 2.5X3-FT & 2X3.5-FT
08C08-03	INLETS MEDIAN 1 AND 2 GRATE
08D01-23A	CONCRETE CURB & GUTTER
08D01-23B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-07	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-21A	CURB RAMPS TYPES 1 AND 1-A
08D05-21B	CURB RAMPS TYPES 2 AND 3
08D05-21C	CURB RAMPS TYPES 4A AND 4A1
08D05-21D	CURB RAMPS TYPE 4B AND 4B1
08D05-21E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-21F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-21G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D18-04	DRIVEWAY AND SIDEWALK RAMPS TYPES X & Y
08D19-04	DRIVEWAY AND SIDEWALK RAMPS TYPE Z
08D20-01	DRIVEWAYS WITH CURB & GUTTER RETURNS
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
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09A01-14A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
13A10-03A	SHOULDER RUMBLE STRIPS - ASPHALT
13A10-03G	SHOULDER AND EDGE LINE RUMBLE STRIPS - CROSSINGS, INTERSECTIONS, BRIDGES, DRIVEWAYS
13A10-03H	SHOULDER AND EDGE LINE RUMBLE STRIPS - RAILROAD, PASSING, CLIMBING AND BYPASS LANES
13A11-04A	CENTERLINE RUMBLE STRIPS - ASPHALT
13A11-04D	CENTERLINE RUMBLE STRIPS - INTERSECTIONS, DRIVEWAYS, BRIDGES, RAILROADS
13C19-03	HMA LONGITUDINAL JOINTS
14B29-01	SAFETY EDGE
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-09C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-15C	PAVEMENT MARKING ARROWS
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-23B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C08-23C	PAVEMENT MARKING (TURN LANES)
15C08-23D	PAVEMENT MARKING (TURN LANES)
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C12-09B	TRAFFIC CONTROL, LANE CLOSURE WITH AUTOMATED FLAGGER ASSISTANCE DEVICE
15C19-09A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C33-05	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-06A	PAVEMENT MARKING (INTERSECTIONS)
15C35-06B	PAVEMENT MARKING AND SIGNING (CLIMBING LANE & PASSING LANE)
15C35-06C	PAVEMENT MARKING AND SIGNING (CLIMBING LANE & PASSING LANE)
15D12-13A	TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
15D20-08B	TRAFFIC CONTROL, SINGLE RIGHT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY
15D27-03	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D30-09A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09B	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09D	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09E	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

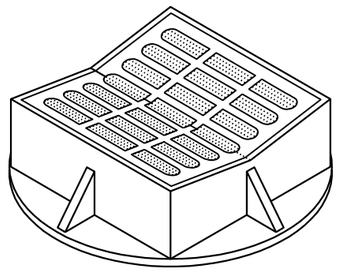
6

Standard Detail Drawing List

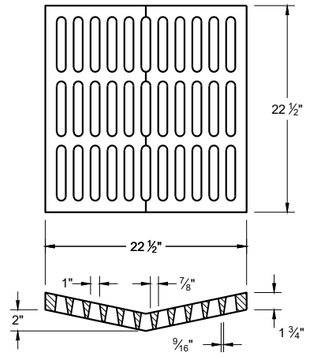
15D30-09F	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09G	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09H	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09I	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09J	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09K	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09L	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D48-01	TRAFFIC CONTROL, LANE SHIFT IN FLAGGING OPERATION
15D51-01	TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY

6





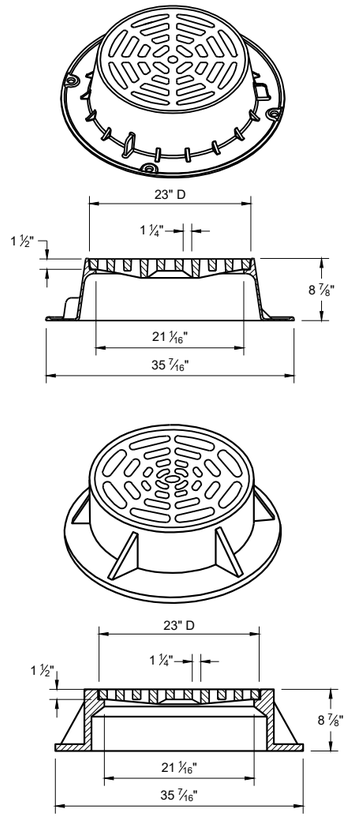
TYPE "B"



ALTERNATIVE GRATE FOR TYPE "B" COVER

USE WHERE PEDESTRIAN OF BICYCLE TRAFFIC IS POSSIBLE

NOTED AS TYPE B - A ON THE DRAINAGE TABLE



TYPE "C"

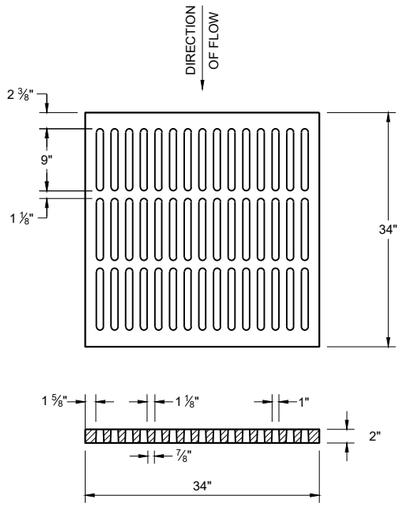
NOTE: EITHER CASTING IS ACCEPTABLE

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 CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

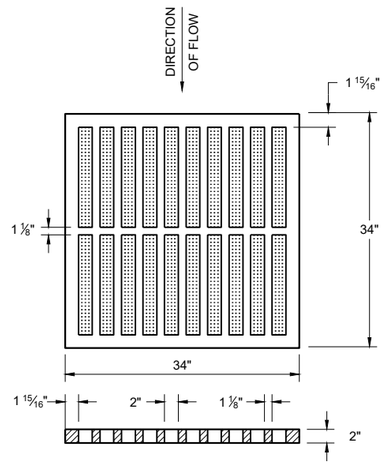
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OF BICYCLE TRAFFIC IS PERMITTED

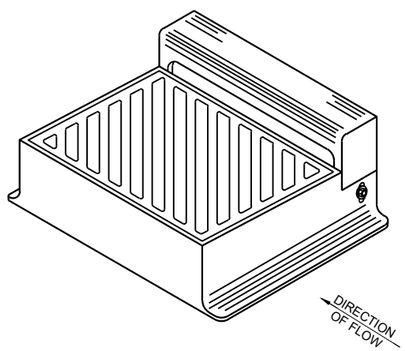
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE



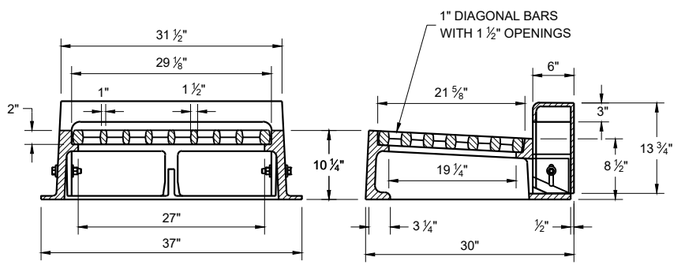
TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS

NOTED AS TYPE MS ON THE DRAINAGE TABLE



DIAGONAL SLOTS SHALL BE ORIENTEDTO THE DIRECTION OF FLOW AS ILLUSTRATED.
GRATES ARE MANUFACTURED TO BE REVERSIBLE.



TYPE "WM"

NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"

INLET COVERS TYPES B, B-A, C, MS, MS-A AND WM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

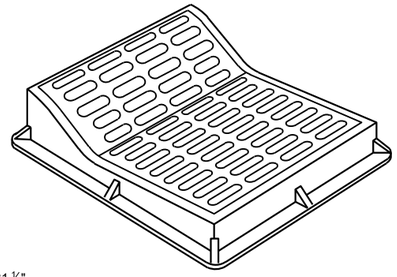
6

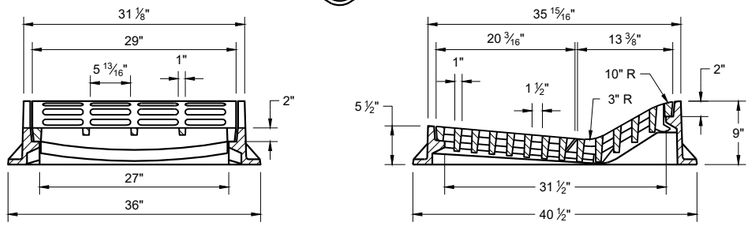
SDD 08A05-21b

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.

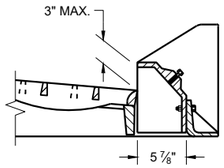
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.





TYPE "F"

USE WITH TYPES "A" AND "D" CONCRETE CURB AND GUTTER, 36"

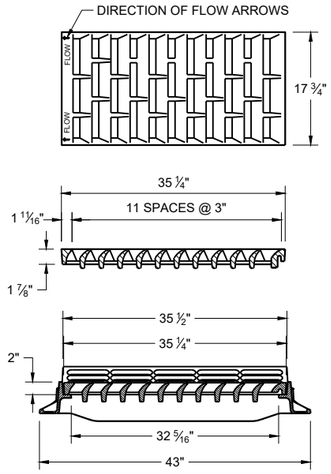


ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

USE WITH TYPES "G" AND "J" CONCRETE CURB AND GUTTER, 30 INCH
NOTED AS TYP "HM-GJ" ON DRAINAGE TABLE

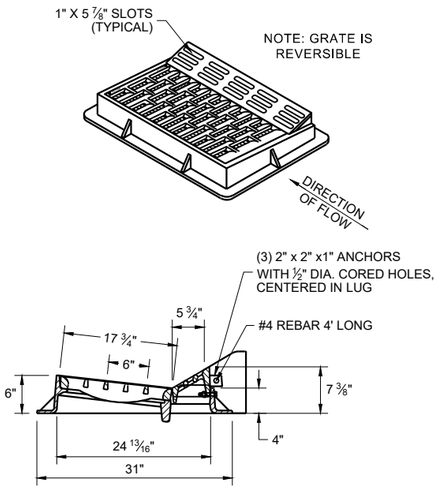
NOTE:
SPECIAL GRATE FOR THE TYPE "H" COVER MAY ALSO BE USED FOR THE TYPE "HM-GJ" COVER.

NOTED AS TYPE HM-GJ-S ON THE DRAINAGE TABLE.



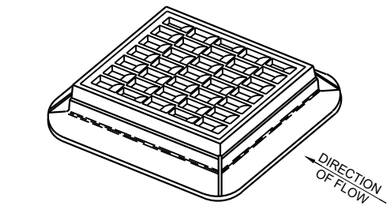
TYPE "HM"

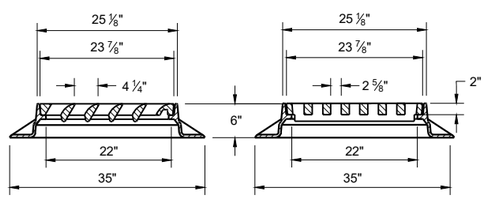
USE WITH TYPES "A" AND "D" CONCRETE CURB AND GUTTER, 36"



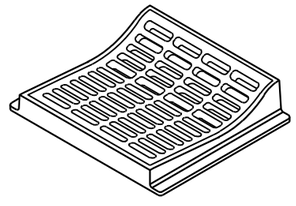
NOTE:
SPECIAL GRATE FOR THE TYPE "H" COVER MAY ALSO BE USED FOR THE TYPE "HM-GJ" COVER.

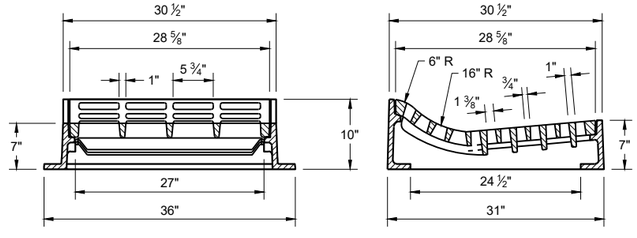
NOTED AS TYPE HM-GJ-S ON THE DRAINAGE TABLE.





TYPE "S"





TYPE "T"

USE WITH TYPES "R" AND "T" CONCRETE CURB AND GUTTER, 36"

INLET COVERS
TYPES F, HM, HM-S, S, T, HM-GJ AND HM-GJ-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

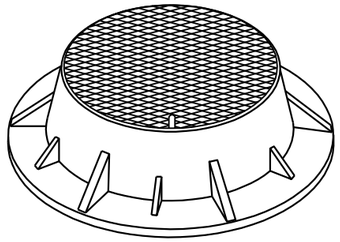
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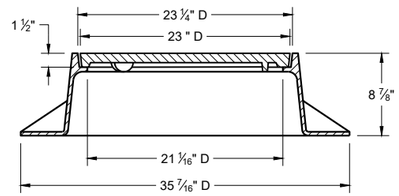
GENERAL NOTES

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

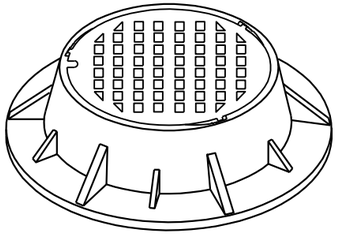
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

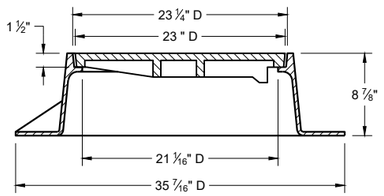




TYPE "J"

NOTE: EITHER CASTING IS ACCEPTABLE

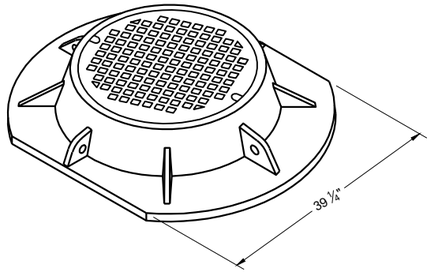


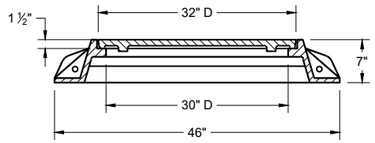


TYPE "J" SPECIAL

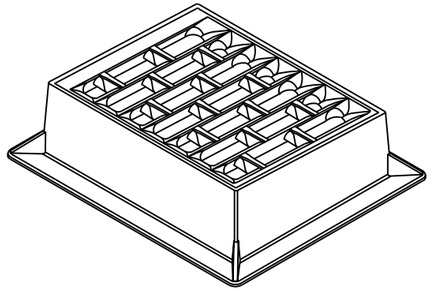
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

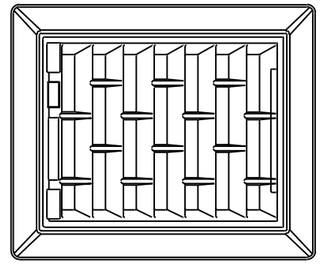
NOTE: EITHER CASTING IS ACCEPTABLE

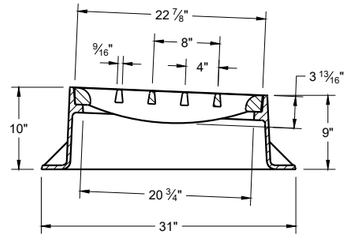


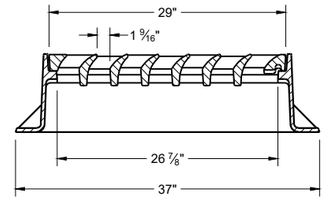


TYPE "K"

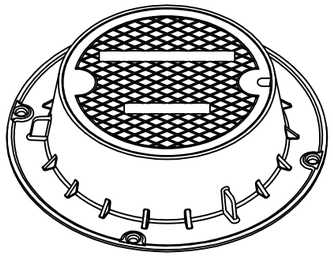


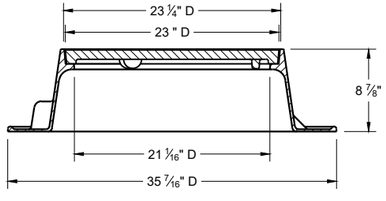






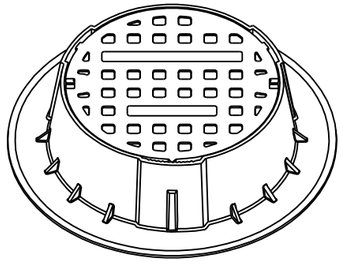
INLET COVER TYPE "BW"

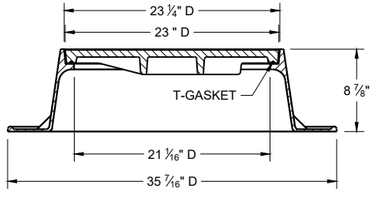




TYPE "J"

NOTE: EITHER CASTING IS ACCEPTABLE

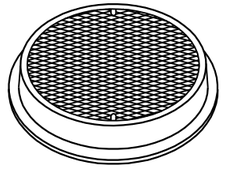


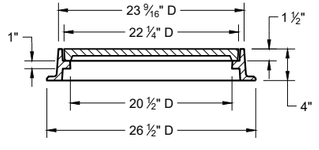


TYPE "J" SPECIAL

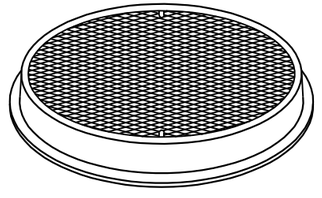
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

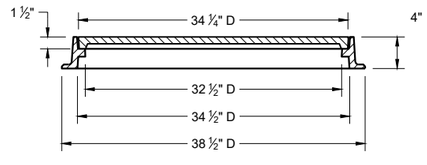
NOTE: EITHER CASTING IS ACCEPTABLE





TYPE "L"





TYPE "M"

INLET COVERS TYPES BW
MANHOLE COVERS TYPES K, J, J-S, L, AND M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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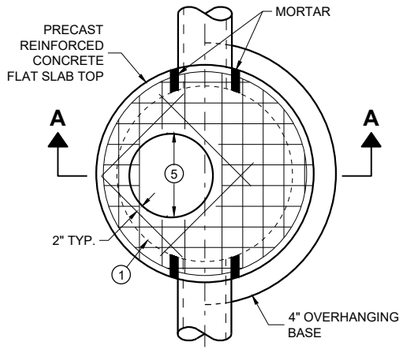
December 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR

FHWA

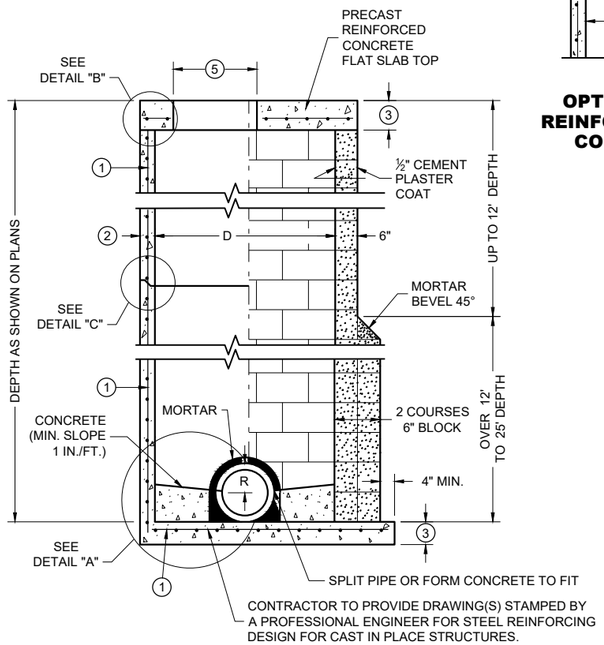
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PLAN VIEW

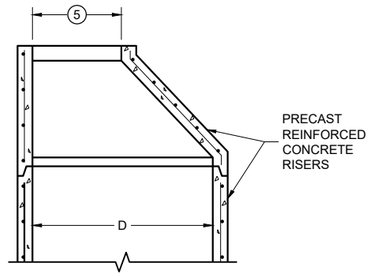
CIRCULAR OPENING



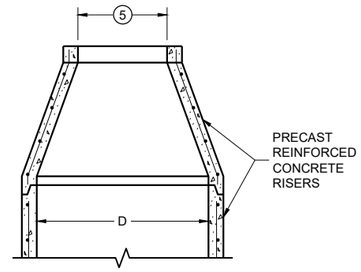
SECTION A - A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

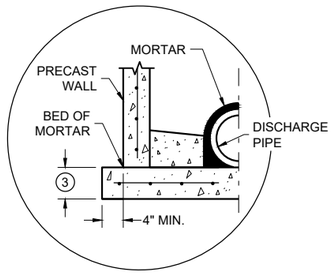
CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (1)



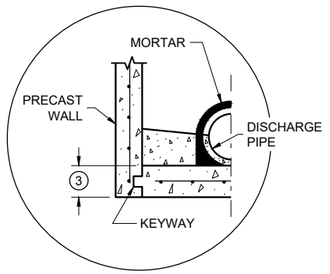
OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP



OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

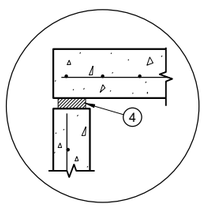


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

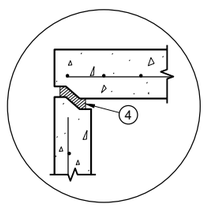


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

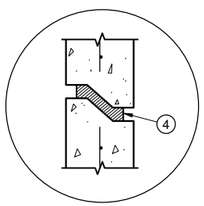
DETAIL "A"



TOP WITH PLAIN END JOINT



TOP WITH TONGUE AND GROOVE JOINT



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

DETAIL "C"

MANHOLE COVER OPENING MATRIX

OPENING SIZE (FT.) (5) \ MANHOLE COVER TYPE	C	ALL J'S	K	L	M
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

MANHOLE SIZE (DIA.)	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES		MINIMUM WALL THICKNESS (IN)	MINIMUM PRECAST FLAT SLAB TOP AND BASE THICKNESS
	180° SEPARATION (IN)	90° SEPARATION (IN)		
3-FT	15	12	4	6
4-FT	24	18	4	6
5-FT	36	24	5	8
6-FT	42	36	6	8
7-FT	48	36/42 *	7	8
8-FT	60	42	8	8
9-FT	66	54	9	10
10-FT	72	60	10	10

*A 36" PIPE AND A 42" PIPE CAN BE PLACED WITHIN 90 DEGREES. SEE MINIMUM HORIZONTAL PIPE SEPARATION DETAIL.

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 MANHOLE 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 DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE 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.

PRECAST REINFORCED CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES. CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL IMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½ INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

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

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

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

CONCRETE BLOCK WILL NOT BE PERMITTED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

4" OVERHANGING BASES ARE REQUIRED FOR ALL 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.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "D".

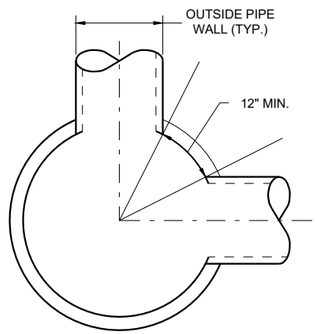
(1) FOR PRECAST MANHOLES AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

(2) SEE PIPE MATRIX TABLE FOR MINIMUM WALL THICKNESS FOR PRECAST MANHOLES

(3) SEE PIPE MATRIX TABLE FOR MINIMUM THICKNESS OF PRECAST FLAT SLAB TOPS AND BASES.

(4) JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 OR RUBBER GASKETS CONFORMING TO ASTM C443.

(5) SEE MANHOLE COVER OPENING MATRIX.



MINIMUM HORIZONTAL PIPE SEPARATION

DETAIL "D"

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER

MANHOLES, 3-FT, 4-FT 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER

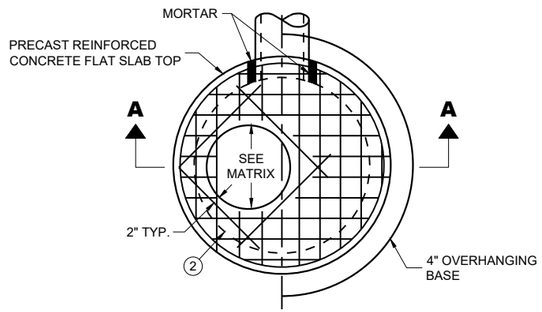
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

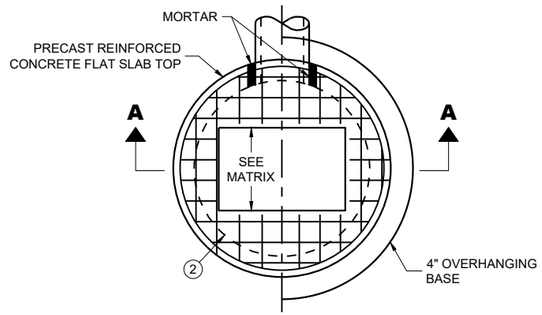
FHWA

SDD 08B09-04

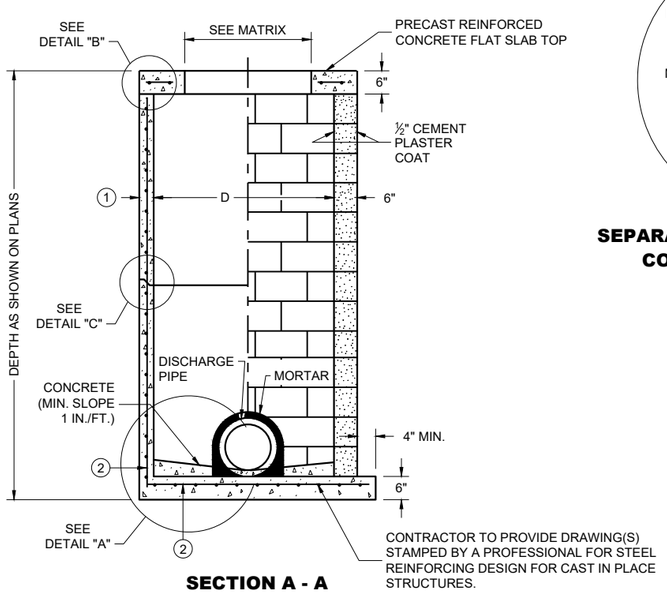
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PLAN VIEW CIRCULAR OPENING



PLAN VIEW RECTANGULAR OPENING



SECTION A - A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (2)

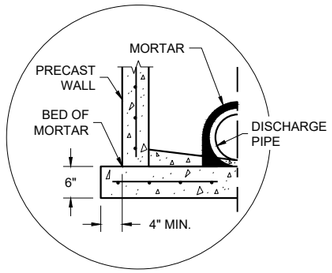
CIRCULAR INLETS WITH FLAT TOP

CATCH BASIN COVER OPENING MATRIX

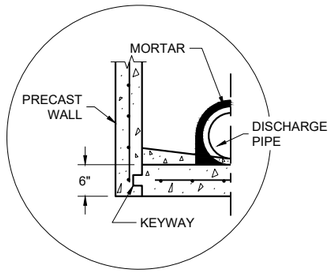
INLET SIZE	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
	OPENING SIZE (FT.)											
3-FT	2 DIA.				X							X
	2 X 2	X	X					X		X		
4-FT	2 DIA.				X							X
	2 X 2	X	X					X		X		
	2 X 2.5			X				X	X	X	X	
	2 X 3						X					
	2.5 X 3					X						

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18

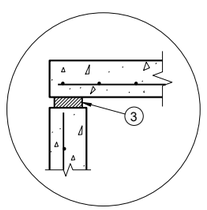


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

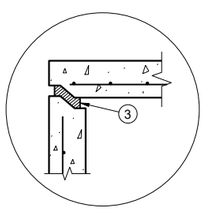


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

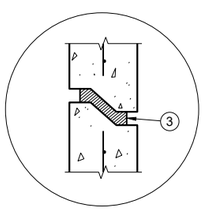
DETAIL "A"



TOP WITH PLAIN END JOINT



TOP WITH TONGUE AND GROOVE JOINT



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B" **DETAIL "C"**

INLETS 3-FT AND 4-FT DIAMETER

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 DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE 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.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

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

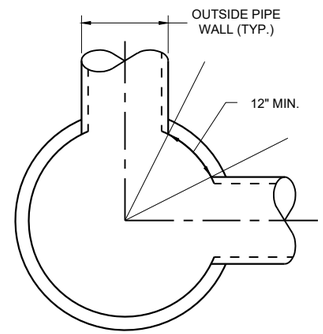
4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "D".

(1) MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT DIAMETER AND 5 INCHES FOR 4-FT DIAMTER PRECAST INLETS.

(2) FOR PRECAST INLETS AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

(3) JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 OR RUBBER GASKETS CONFORMING TO ASTM C443.



MINIMUM HORIZONTAL PIPE SEPARATION

DETAIL "D"

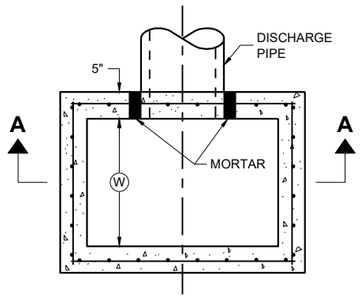
INLETS 3-FT AND 4-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

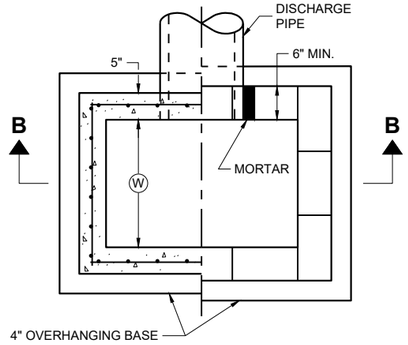
APPROVED
December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

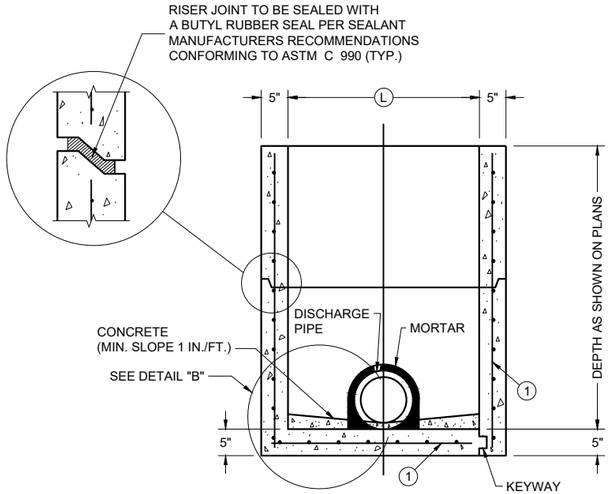
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PLAN VIEW



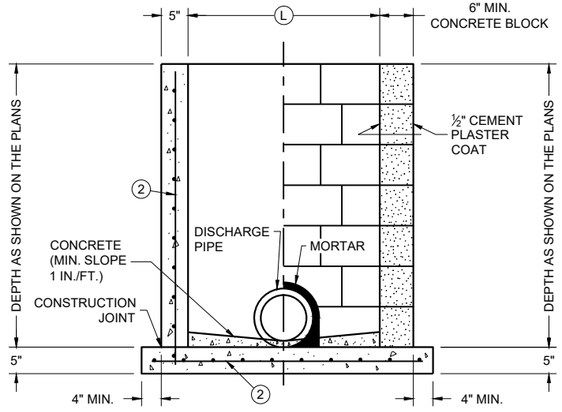
PLAN VIEW



PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE

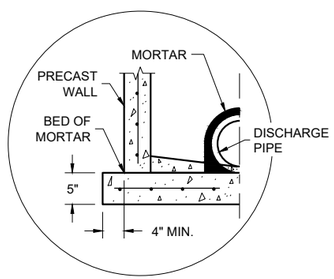
SECTION A - A



CAST IN PLACE REINFORCED CONCRETE

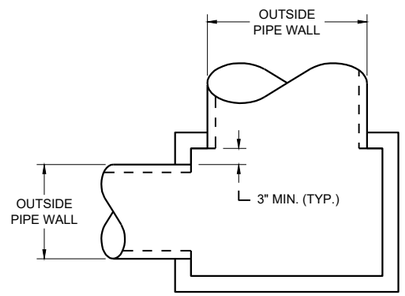
CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (1)

SECTION B - B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "B"



DETAIL "A"

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP N0T 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" 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 AND REINFORCED CONCRETE BASES 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.

CATCH BASIN COVER MATRIX

INLET SIZE	WIDTH (W) (FT.)	LENGTH (L) (FT.)	INLET COVER TYPE									
			ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM	V V-B
2 X 2-FT	2	2	X	X				X				
2 X 2.5-FT	2	2.5			X			X	X	X	X	
2 X 3-FT	2	3					X					
2.5 X 3-FT	2.5	3				X						
2 X 3.5-FT	2	3.5										X

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	WIDTH (IN)	LENGTH (IN)
2 X 2-FT	12	12
2 X 2.5-FT	12	18
2 X 3-FT	12	24
2.5 X 3-FT	18	24
2 X 3.5-FT	12	30

INLETS 2 X 2-FT, 2 X 2.5-FT, 2 X 3-FT, 2.5 X 3-FT AND 2X3.5-FT

INLETS 2 X 2-FT, 2 X 2.5-FT, 2 X 3-FT, 2.5 X 3-FT AND 2 X 3.5-FT

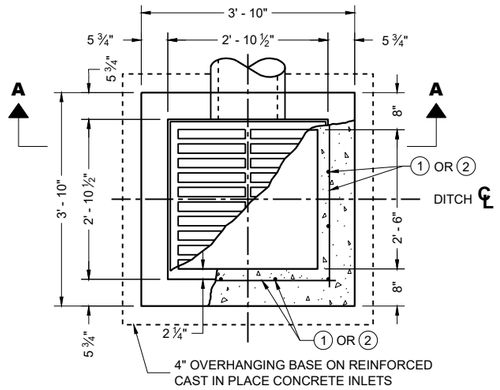
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023
DATE

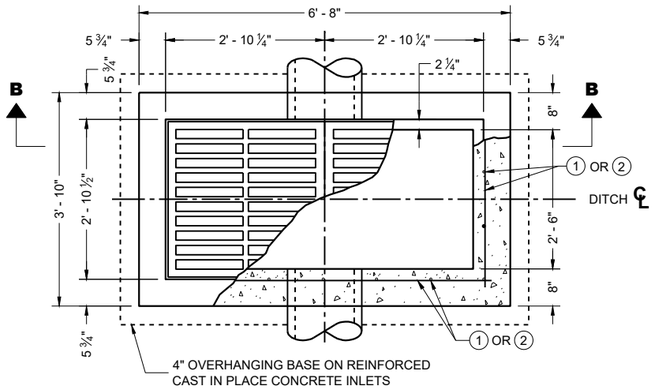
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

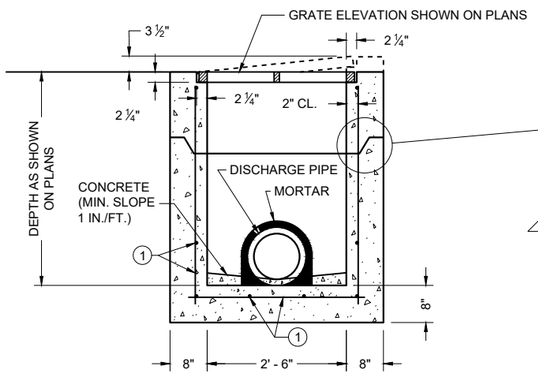
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SDD 08C07-03



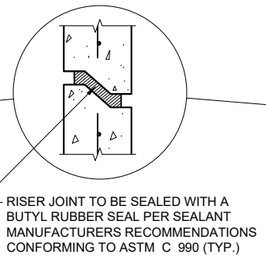
PLAN VIEW

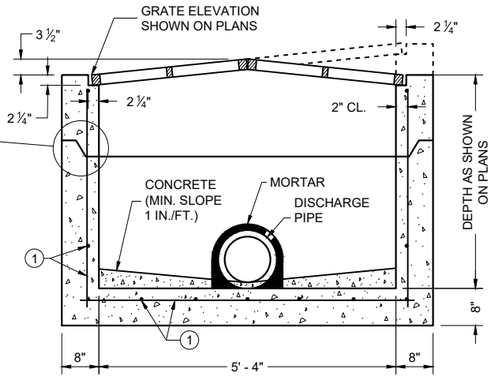


PLAN VIEW

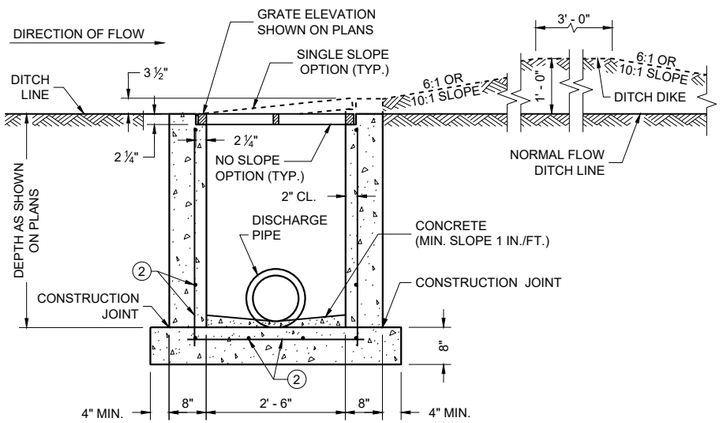


PRECAST REINFORCED CONCRETE SECTION A - A



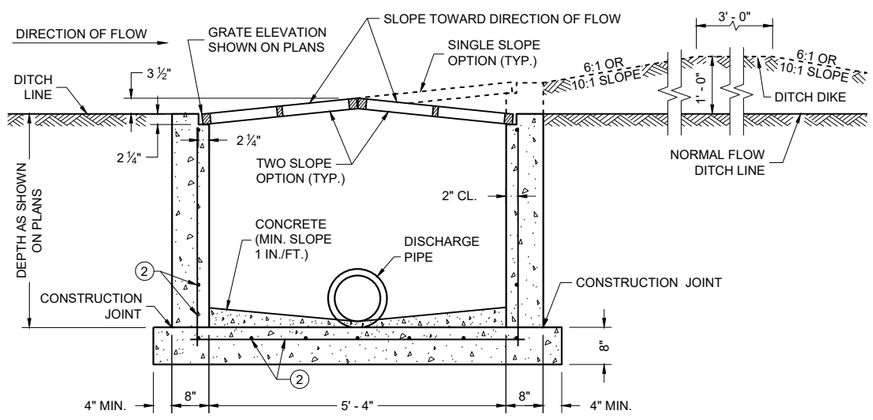


PRECAST REINFORCED CONCRETE SECTION B - B



REINFORCED CAST IN PLACE CONCRETE SECTION A - A

INLETS MEDIAN 1 GRATE



REINFORCED CAST IN PLACE CONCRETE SECTION B - B

INLETS MEDIAN 2 GRATE

GENERAL NOTES

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DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL MEDIAN INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 1G-MS", ETC. THE FIRST NUMBER AND LETTER DESIGNATE THE TYPE OF STRUCTURE, AND THE FOLLOWING LETTERS DESIGNATE 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 PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

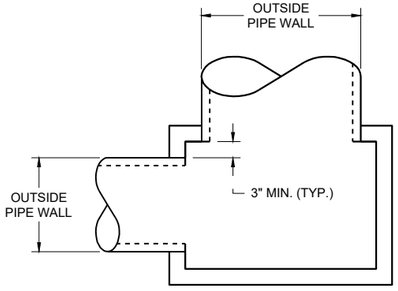
ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

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

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" 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 AND REINFORCED CONCRETE BASES 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.



DETAIL "A"

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
1 GRATE	18	18
2 GRATE	18	42

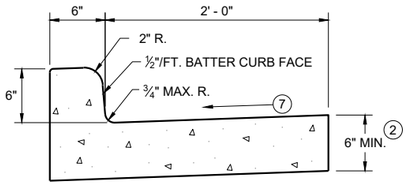
INLETS
MEDIAN 1 AND 2 GRATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

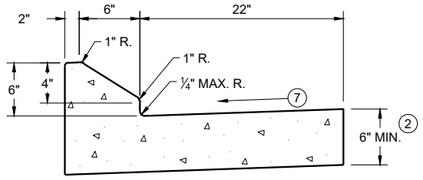
APPROVED
December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

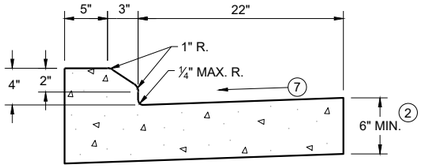
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SDD 08C08-03



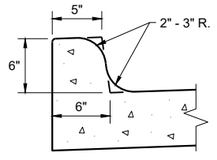
TYPES A (1) & D



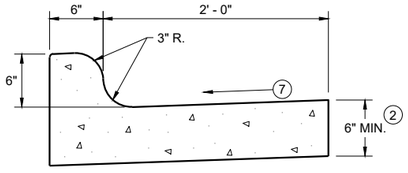
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

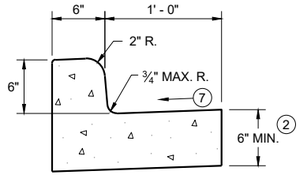


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



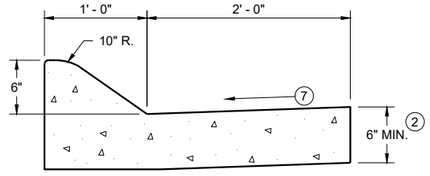
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

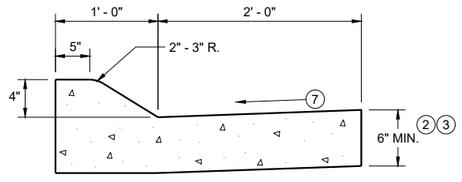


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

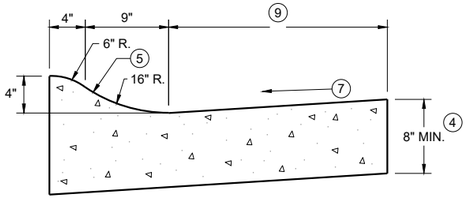


6" SLOPED CURB TYPES A (1) & D



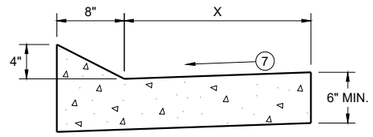
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

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

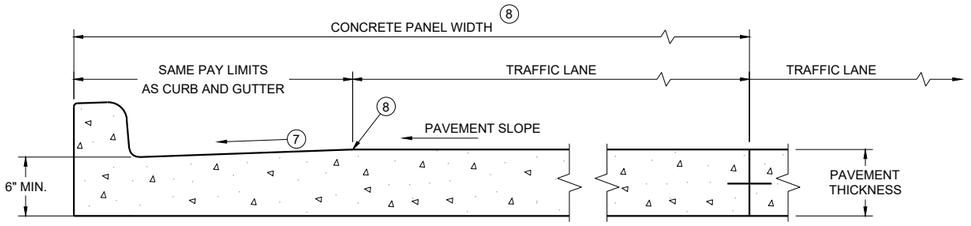


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

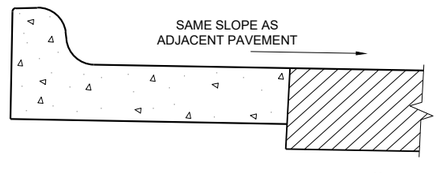
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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



PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



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

GENERAL NOTES

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

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

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

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

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

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

(3) USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

(4) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(5) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

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

(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

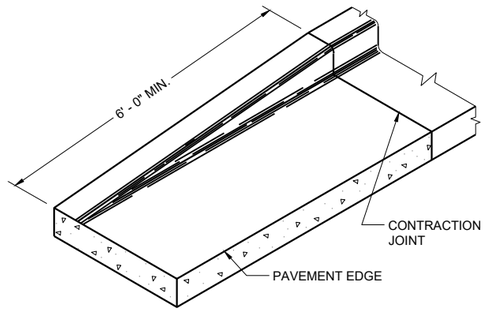
(9) CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

CONCRETE CURB AND GUTTER

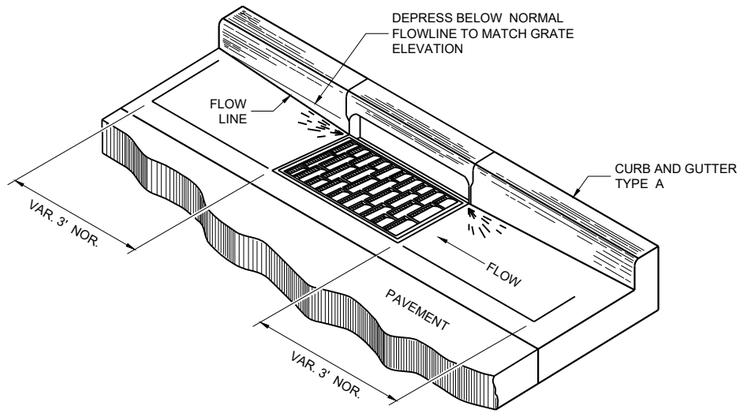
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D01-23a

6



END SECTION CURB 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.

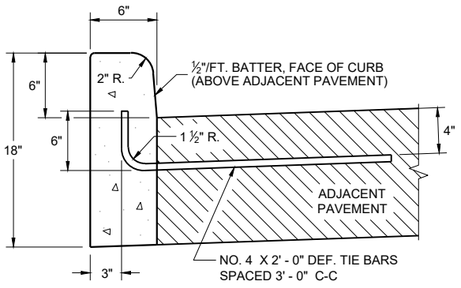
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

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

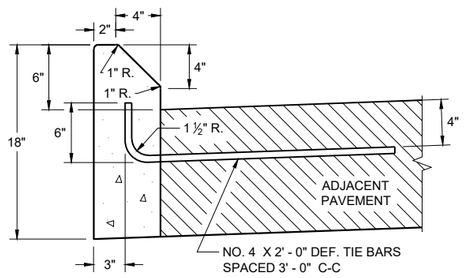
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

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

(11) PLACE 1" THICK EXPANSION JOINT MATERIAL BETWEEN VERTICAL FACE CURB TYPES EXTENDING FROM THE TOP OF CURB TO 1 INCH BELOW THE ADJOINING CONCRETE SURFACE. RIGID CONCRETE STRUCTURES INCLUDE RAISED CONCRETE MEDIANS, CONCRETE SAFETY ISLANDS, SPLITTER ISLANDS, OR LOCATIONS IDENTIFIED ON THE PLANS.

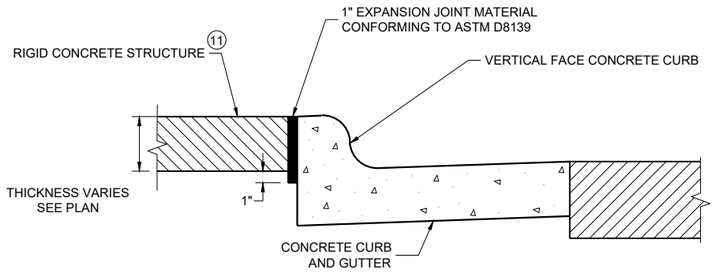


TYPES A (1) & D

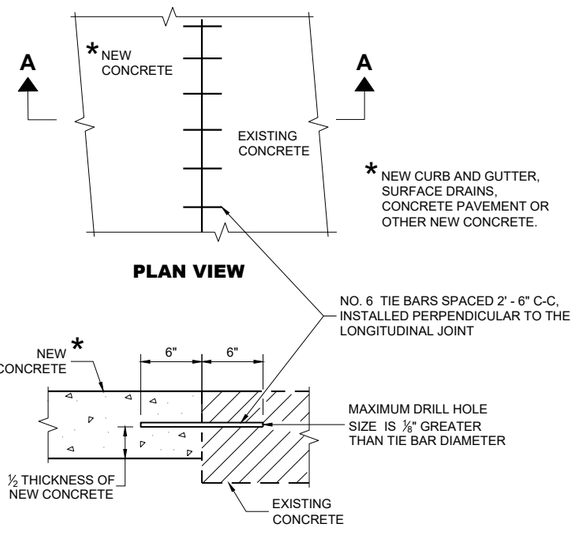


TYPES G (1) & J

CONCRETE CURB



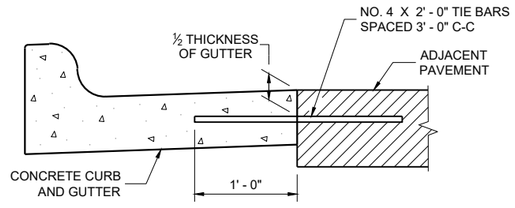
EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE (11)



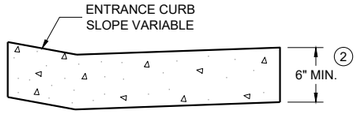
PLAN VIEW

SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (10)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

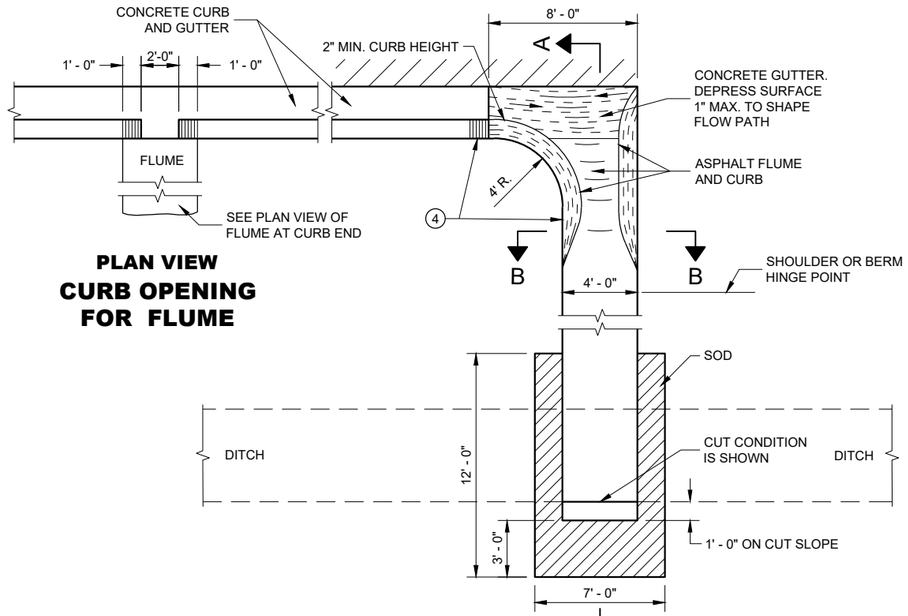
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

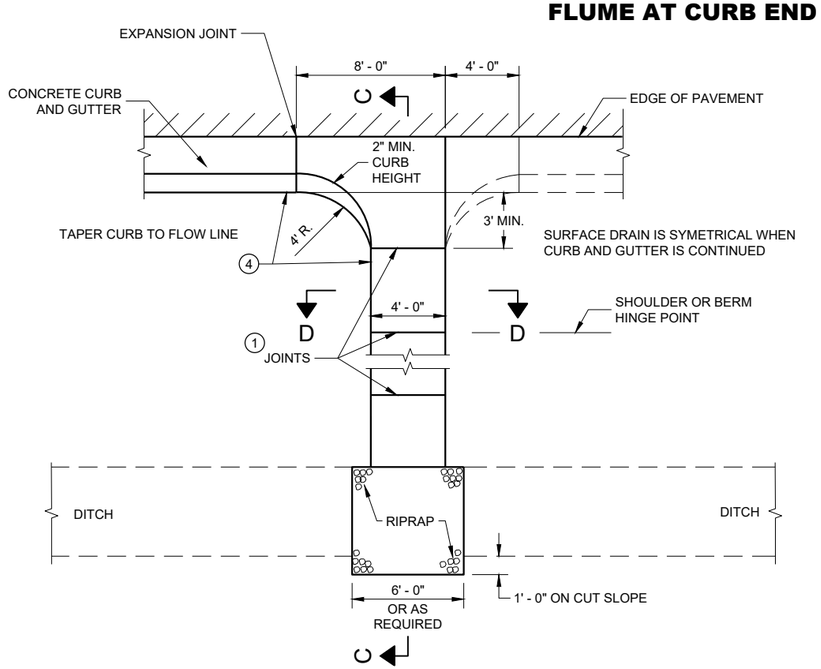
NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

ASPHALTIC FLUME



PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



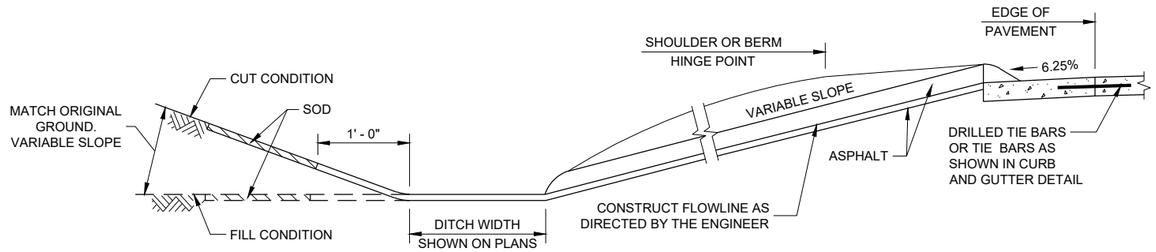
PLAN VIEW
CONCRETE SURFACE DRAIN

GENERAL NOTES

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

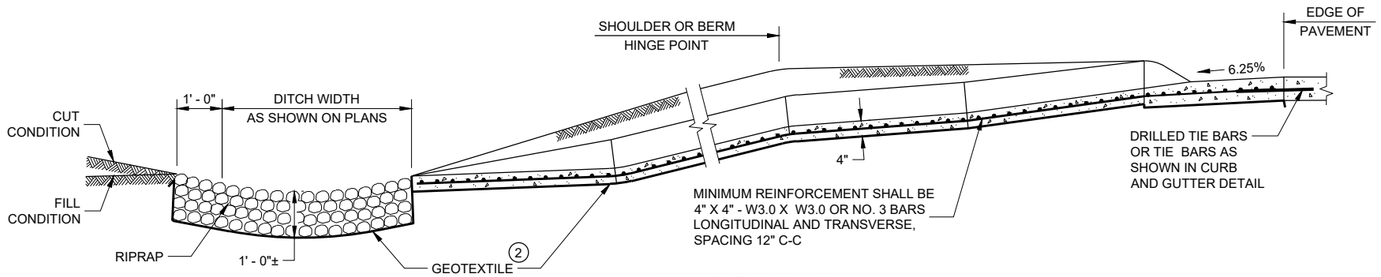
4" X 4" - W3.0 X W3.0 CONCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

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

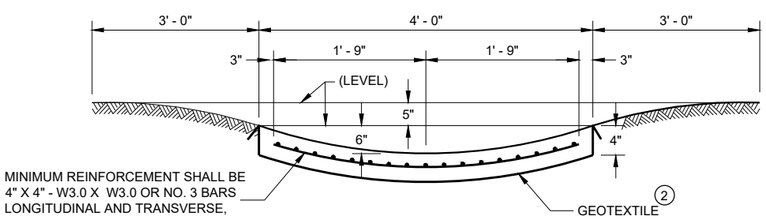


SECTION A - A

SECTION B - B



SECTION C - C



SECTION D - D

CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

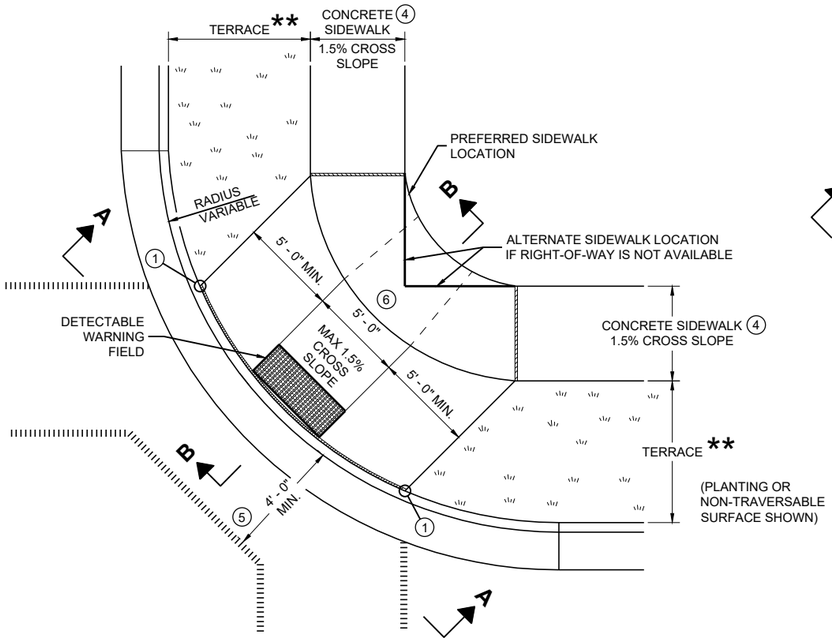
APPROVED
May 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

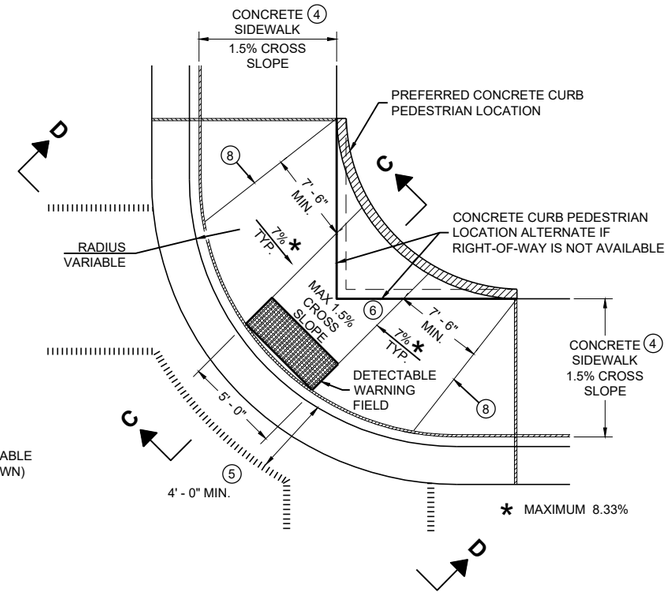
SDD 08D04 - 07



PLAN VIEW

CURB RAMP TYPE 1

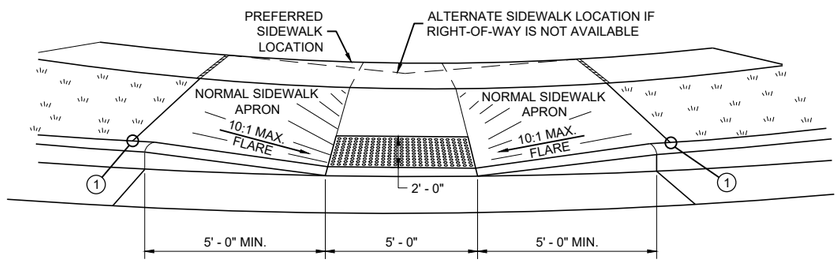
(CENTER OF CORNER RADIUS)



PLAN VIEW

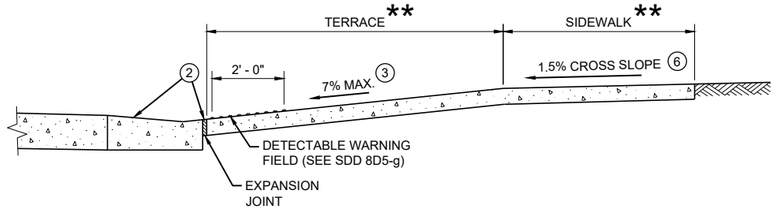
CURB RAMP TYPE 1 - A

(NO TERRACE)

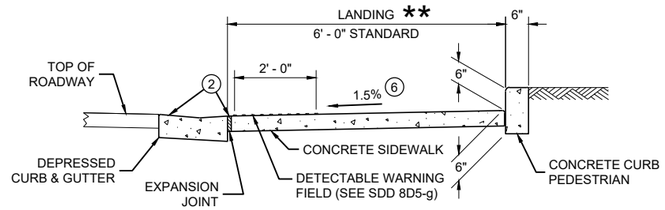


VIEW A - A FOR TYPE 1

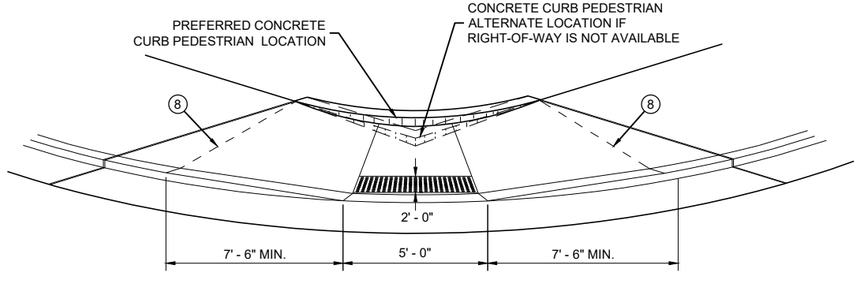
** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B - B FOR TYPE 1



SECTION C - C FOR TYPE 1 - A



VIEW D - D FOR TYPE 1 - A

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 CURB RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FILED SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAR FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD"

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ½ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA. 4 FOOT WIDTH IS MEASURED FROM THE FLANGE LINE

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

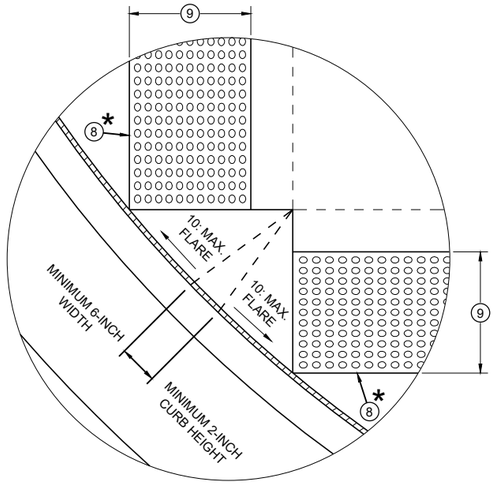
LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

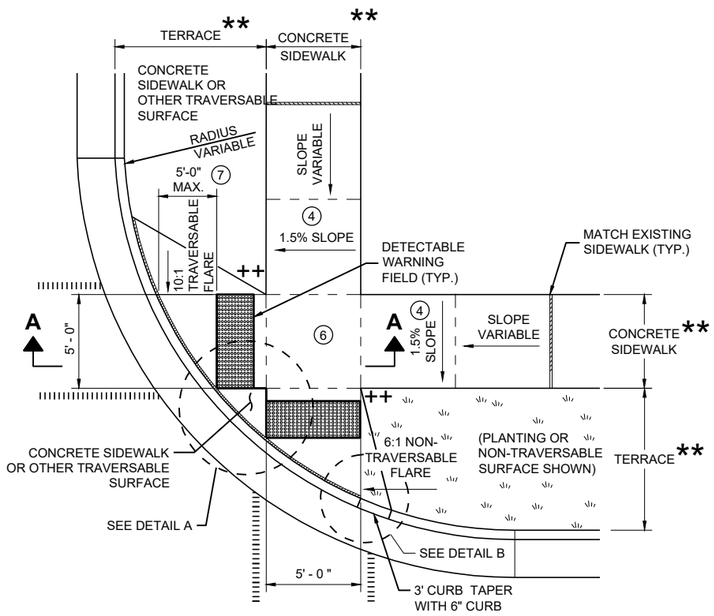
CURB RAMPS TYPE 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 08D05-21a



DETAIL A



PLAN VIEW
CURB RAMP TYPE 2
(CENTER OF CORNER RADIUS)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE (2.67% OR LESS) AND NOT TO EXCEED 11% GRADE CHANGE.

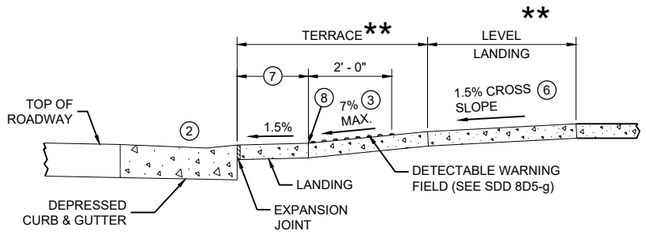
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET X 5 FEET.

(7) WHEN GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(9) WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.

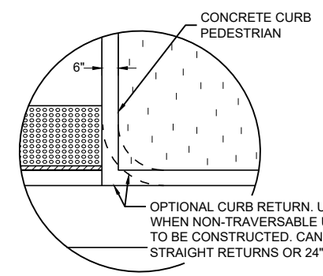


SECTION A - A FOR TYPE 2

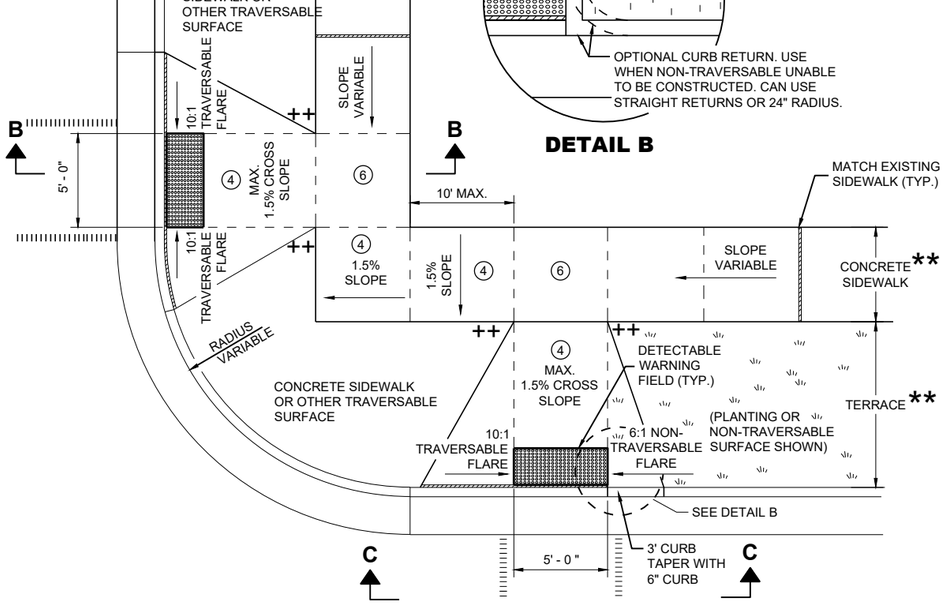
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

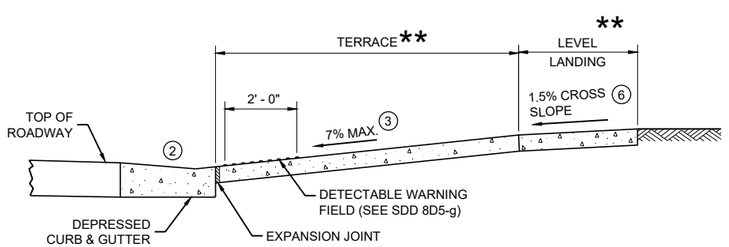
++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE



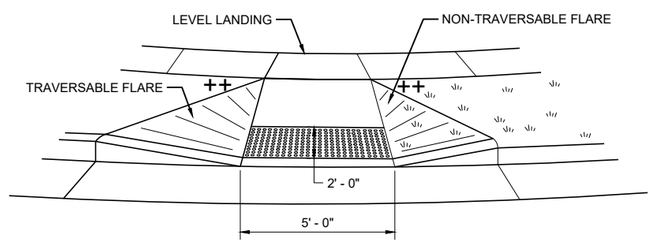
DETAIL B



PLAN VIEW
CURB RAMP TYPE 3
(OUTSIDE OF CROSSWALK AREA)



SECTION B - B FOR TYPE 3



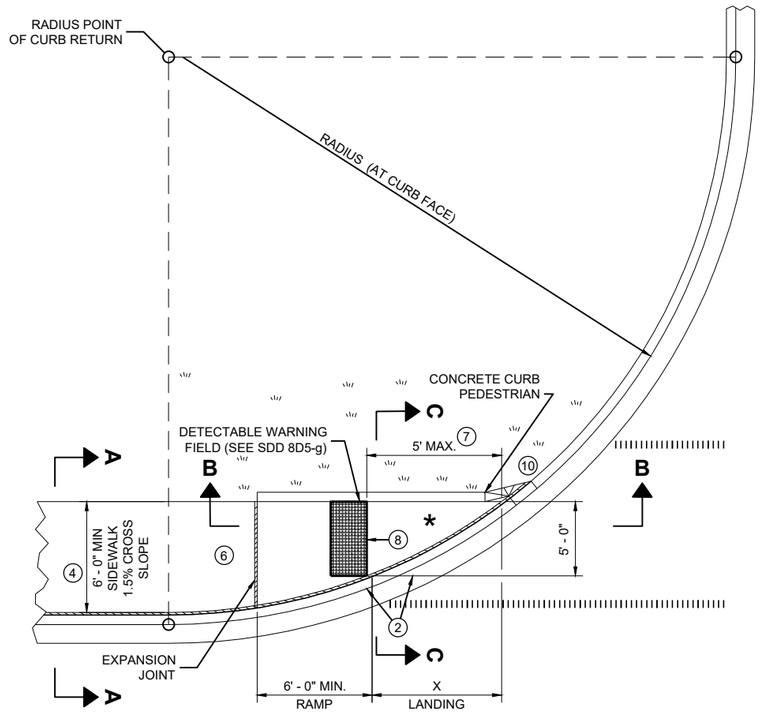
VIEW C - C FOR TYPE 3

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPE 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

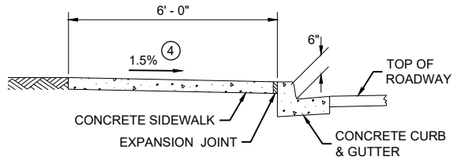


PLAN VIEW

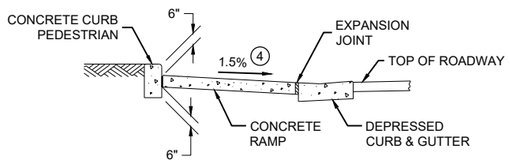
CURB RAMP TYPE 4A

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"

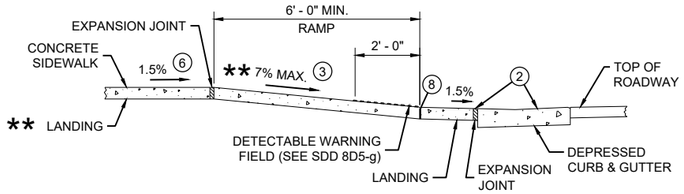
INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A - A FOR TYPE 4A



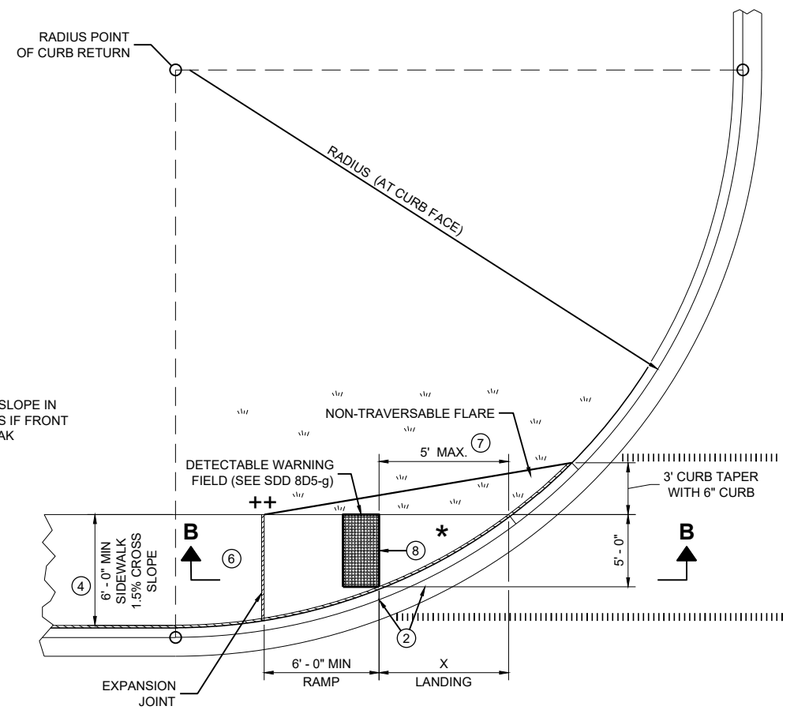
SECTION C - C FOR TYPE 4A



SECTION B - B FOR TYPE 4A AND TYPE 4A1

** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

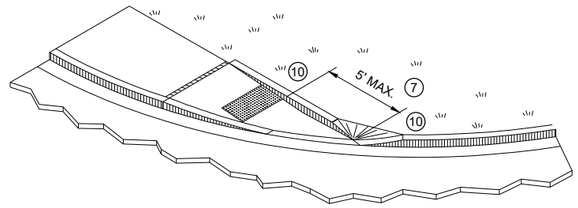
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK



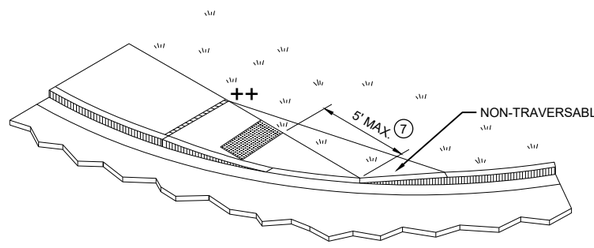
PLAN VIEW

CURB RAMP TYPE 4A1

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE



ISOMETRIC VIEW FOR TYPE 4A



ISOMETRIC VIEW FOR TYPE 4A1

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

LEGEND

½" EXPANSION JOINT SIDEWALK

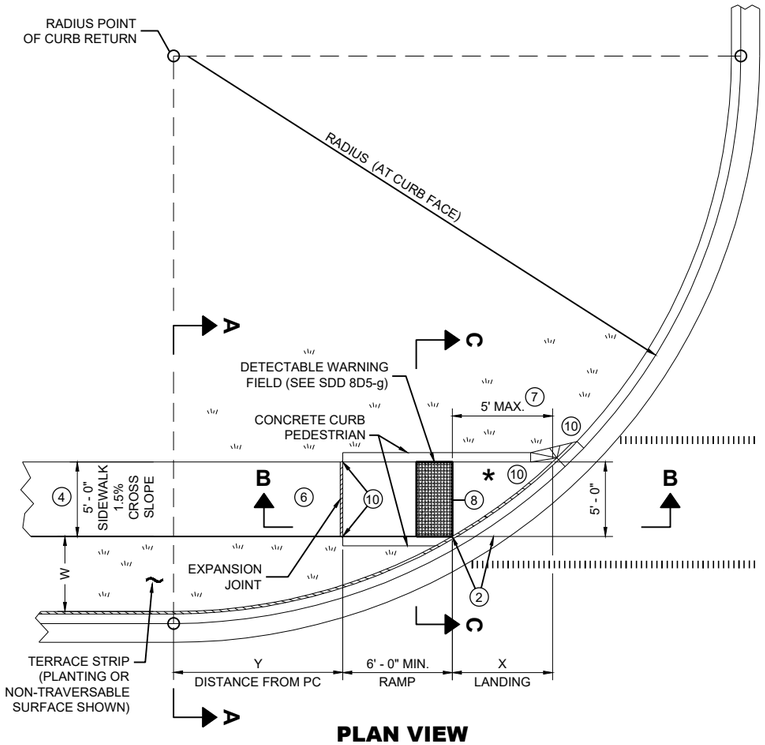
CONTRACTION JOINT SIDEWALK

PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPE 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

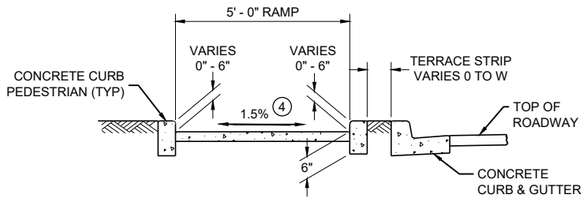
SDD 08D05-21c



PLAN VIEW
CURB RAMP TYPE 4B

RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"		W = 8' - 0"		W = 9' - 0"		W = 10' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2' - 10 1/4"	0' - 5"	2' - 1"	1' - 4 1/2"	1' - 5"	2' - 1"	0' - 10"	2' - 7 1/2"	0' - 3 1/4"	3' - 0 1/4"						
15 FEET	4' - 6 3/4"	2' - 1 3/4"	3' - 9"	3' - 5 3/4"	3' - 1 1/4"	4' - 6"	2' - 6 3/4"	5' - 4 1/2"	2' - 1"	6' - 1"	1' - 8"	6' - 8 1/2"	1' - 3 1/4"	7' - 2 1/2"	0' - 10 3/4"	7' - 7 1/4"
20 FEET			4' - 11 1/2"	5' - 1 3/4"	4' - 3 1/4"	6' - 5 1/2"	3' - 8 3/4"	7' - 7"	3' - 3"	8' - 6 1/2"	2' - 10"	9' - 4 1/2"	2' - 5 1/2"	10' - 1 1/4"	2' - 1 1/4"	10' - 9"
30 FEET									4' - 10 3/4"	12' - 5 3/4"	4' - 5 1/2"	13' - 7 3/4"	4' - 0 3/4"	14' - 8 1/2"	3' - 8 1/2"	15' - 8 1/4"
40 FEET															4' - 10 3/4"	19' - 8 1/4"

INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH



SECTION C - C FOR TYPE 4B

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

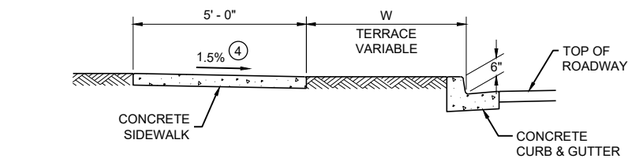
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

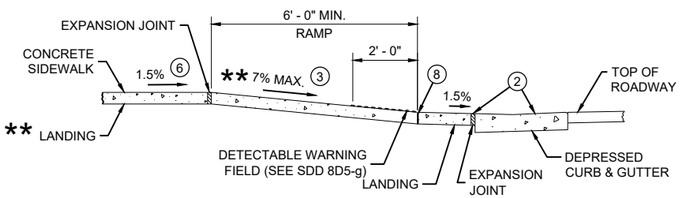
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

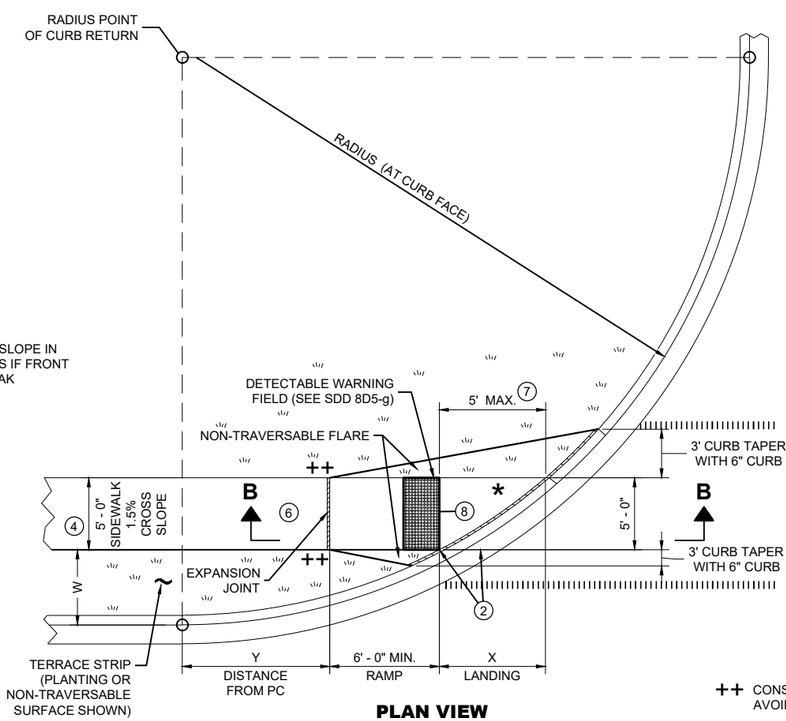


SECTION A - A FOR TYPE 4B



** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

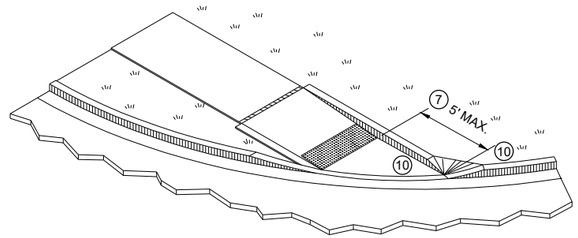
SECTION B - B FOR TYPE 4B AND TYPE 4B1



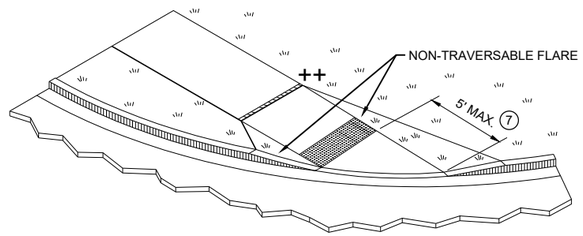
PLAN VIEW
CURB RAMP TYPE 4B1

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE



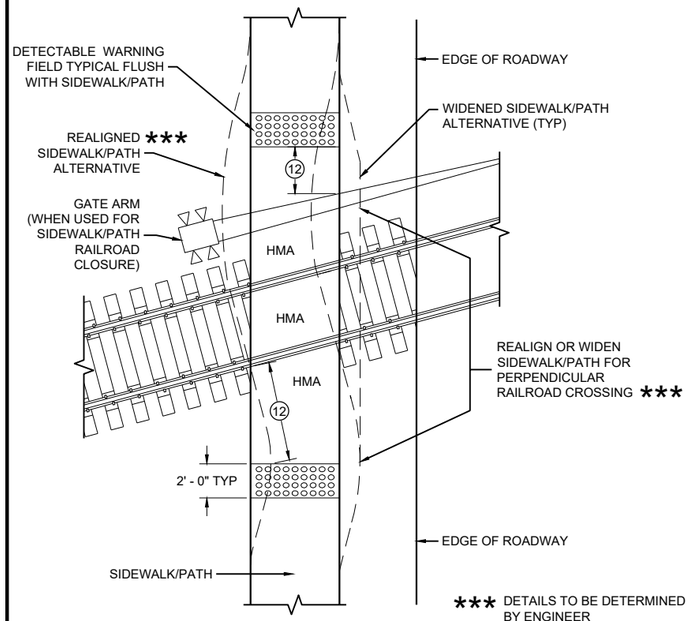
ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1

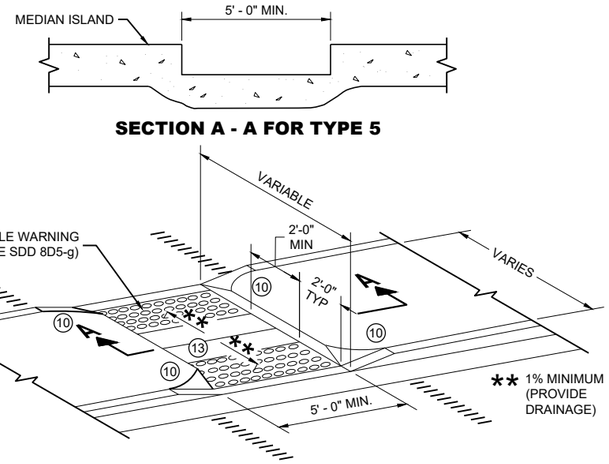
CURB RAMPS
TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CURB RAMP TYPE 8

DETECTABLE WARNINGS FOR SIDEWALKS OR SHARED USE PATHS AT RAILROAD CROSSINGS



SECTION A - A FOR TYPE 5

CURB RAMP TYPE 5

MEDIAN ISLAND NON-ELEVATED PEDESTRIAN CROSSING

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

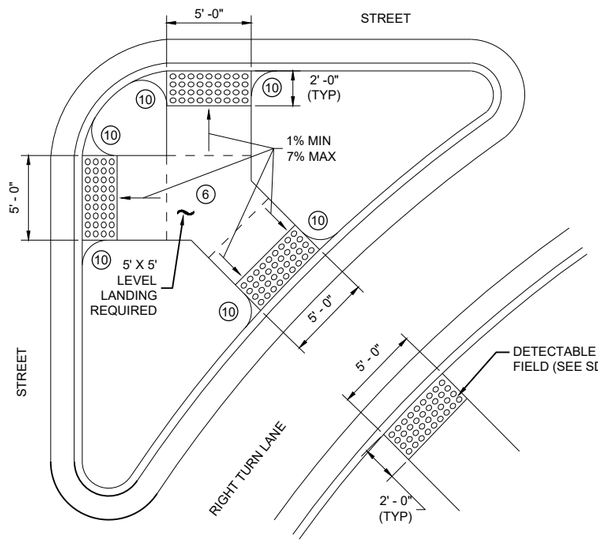
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ±0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK/PATH. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD TRACK IS 15 FEET MAXIMUM AND 12 FEET MINIMUM, 15 FEET TYPICAL FROM THE NEAREST RAIL.

(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STEET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

LEGEND

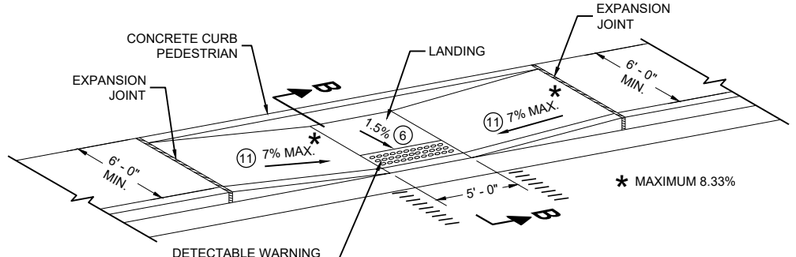
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



CURB RAMP TYPE 6

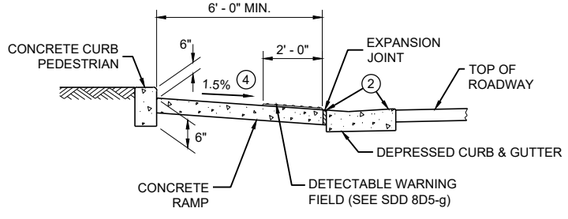
DETECTABLE WARNING AT ISLANDS

REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS

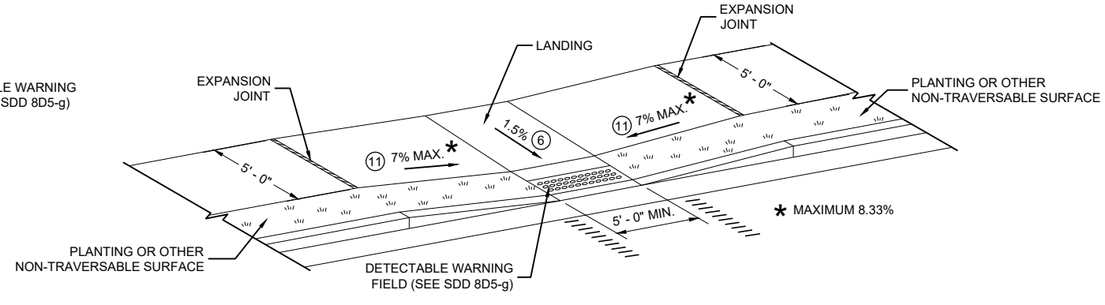


CURB RAMP TYPE 7A

FOR INTERSECTIONS AND MID BLOCK CROSSINGS



SECTION B - B FOR TYPE 7A



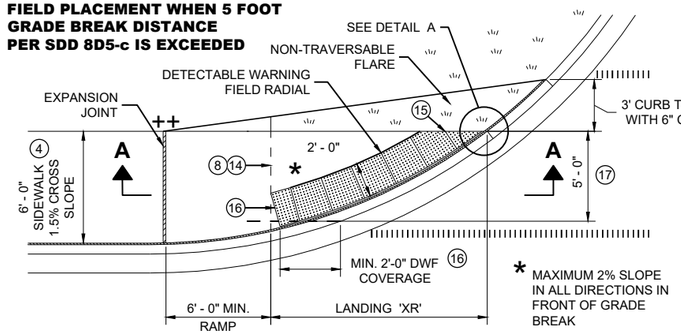
CURB RAMP TYPE 7B

FOR INTERSECTIONS AND MID BLOCK CROSSINGS

CURB RAMPS TYPE 5, 6, 7A, 7B & 8

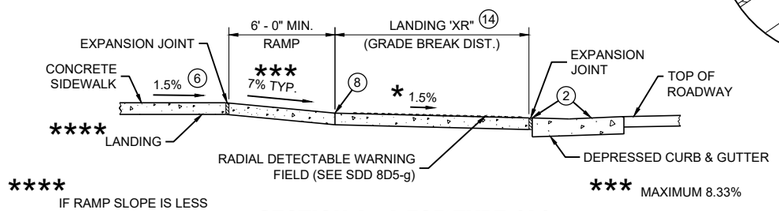
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED

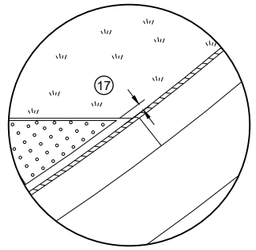


PLAN VIEW

CURB RAMP TYPE 4A1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



SECTION A - A FOR TYPE 4A1



DETAIL A

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.

REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AD ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

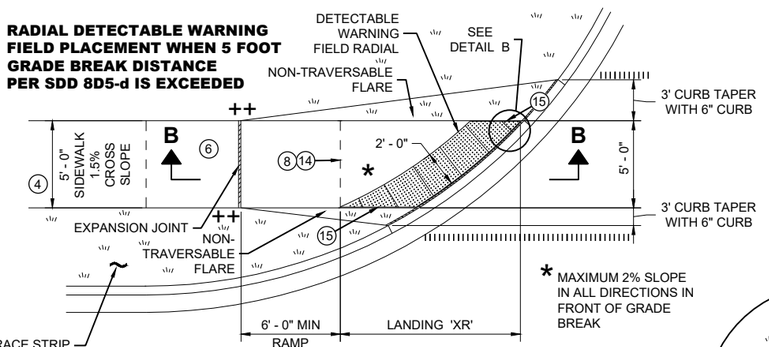
(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

(16) USE 1' X 2" RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2' - 0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.

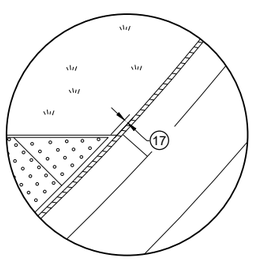
(17) A MAXIMUM 3 INCH CONCRETE BORDER WIDTH IS ALLOWABLE IN FRONT OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED

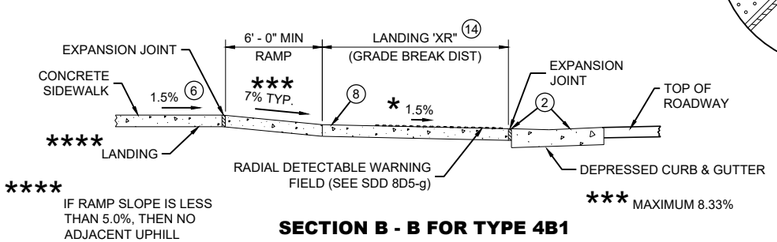


PLAN VIEW

CURB RAMP TYPE 4B1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)

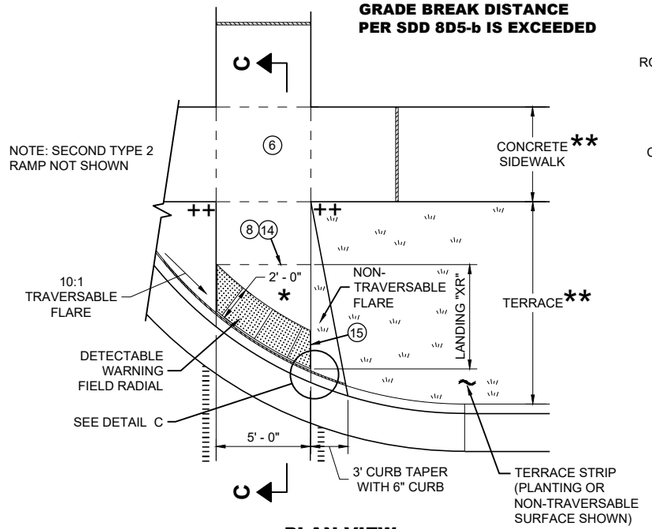


DETAIL B



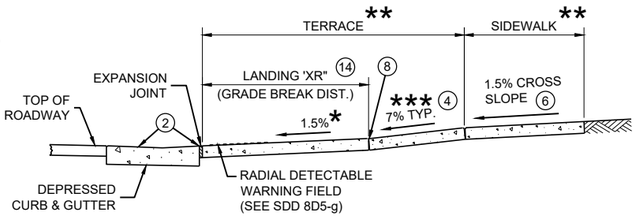
SECTION B - B FOR TYPE 4B1

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-b IS EXCEEDED

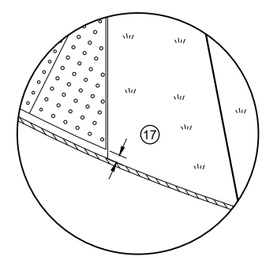


PLAN VIEW

CURB RAMP TYPE 2
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)
(ON LINE WITH SIDEWALK)



SECTION C - C FOR TYPE 2



DETAIL C

* MAXIMUM 2% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** MAXIMUM 8.33%

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

CURB RAMPS
RADIAL DETECTABLE WARNING

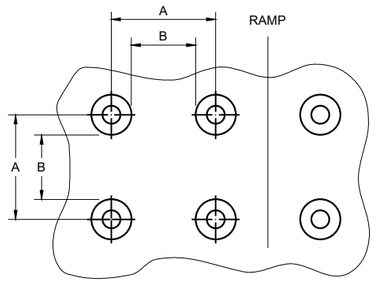
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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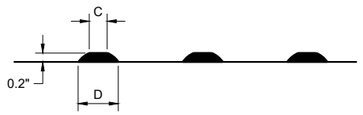
SDD 08D05-21f

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

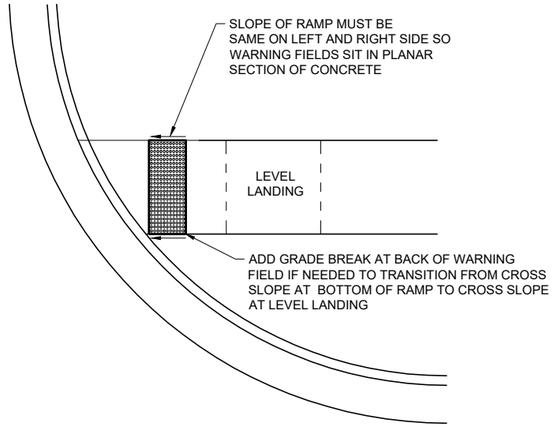
* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



PLAN VIEW



ELEVATION VIEW



DETECTABLE WARNING FIELD

PLANAR INSTALLATION

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AT A CURB RAMP SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

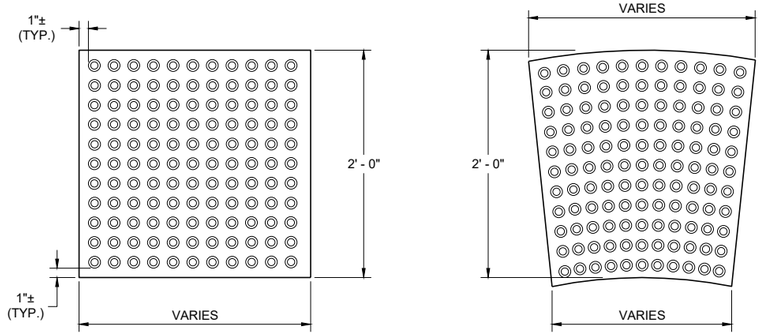
FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL

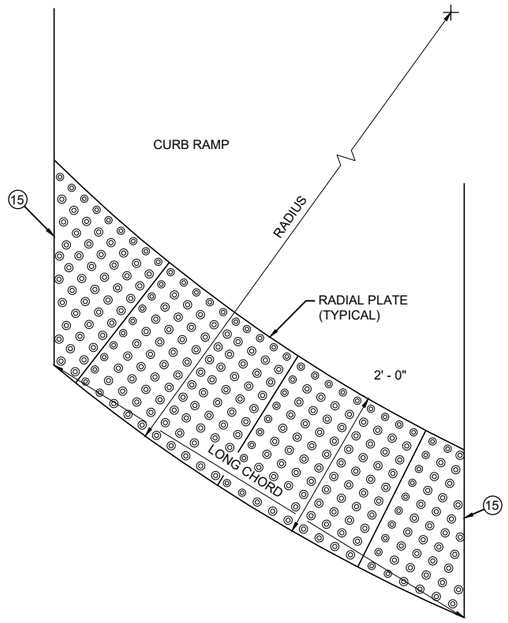


RECTANGULAR PLATES

RADIAL PLATES

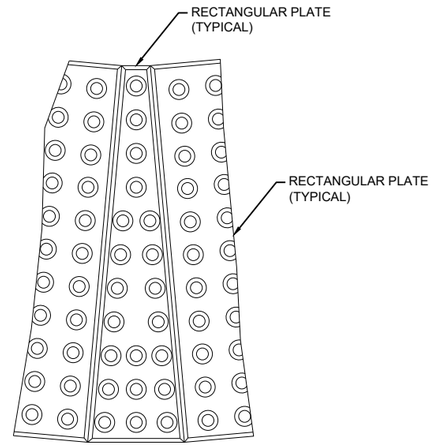
PLAN VIEW

DETECTABLE WARNING FIELDS (TYPICAL)



PLAN VIEW

RADIAL DETECTABLE WARNING FIELD ATTRIBUTES



PLAN VIEW

RADIAL WEDGE PLATE CONNECTION DETAIL

CURB RAMPS
RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES

STATE OF WISCONSIN
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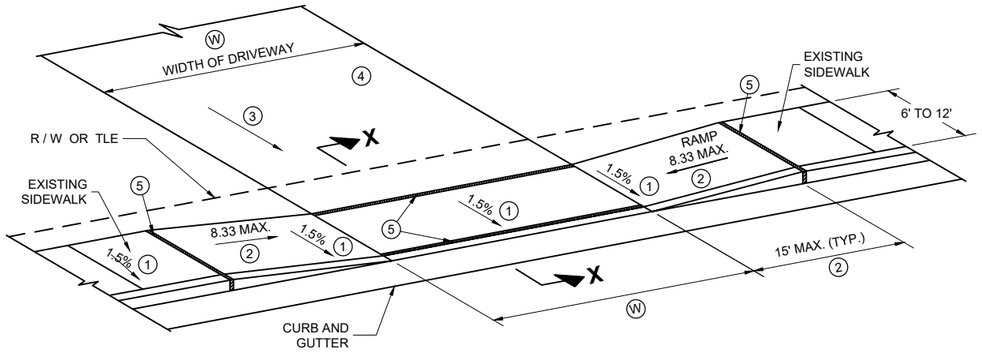
APPROVED

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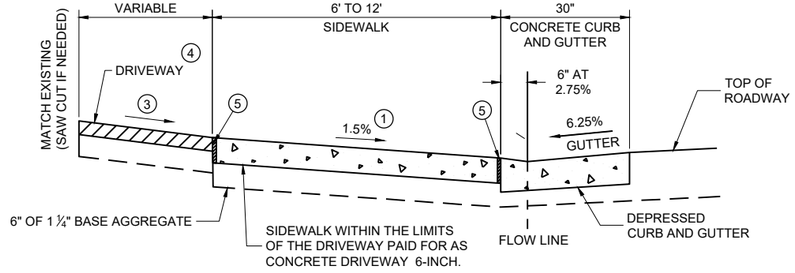
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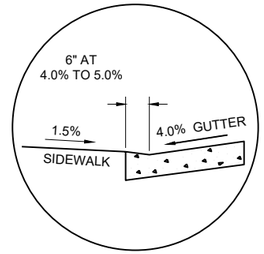
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TYPE X
SIDEWALK ABUTS CURB AND GUTTER
TERRACE VARIES 0 TO 3 FEET



SECTION X - X



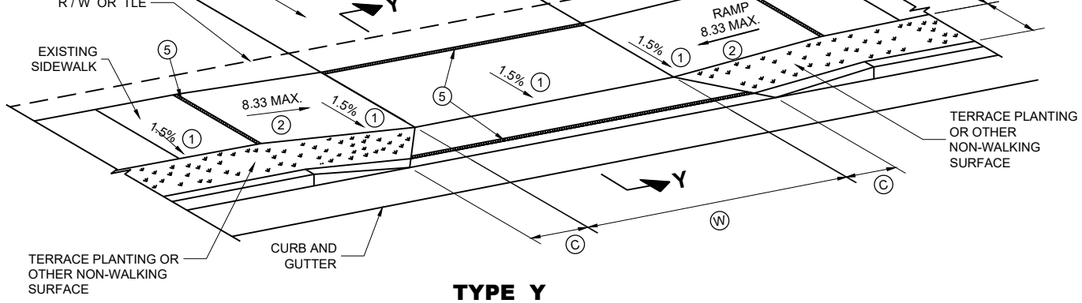
SECTION X - X
4% GUTTER SLOPE

Ⓦ: 12' MIN. - 24' MAX. RESIDENTIAL AND NON-COMMERCIAL (PE & FE)

16' MIN. - 35' MAX. COMMERCIAL (CE)

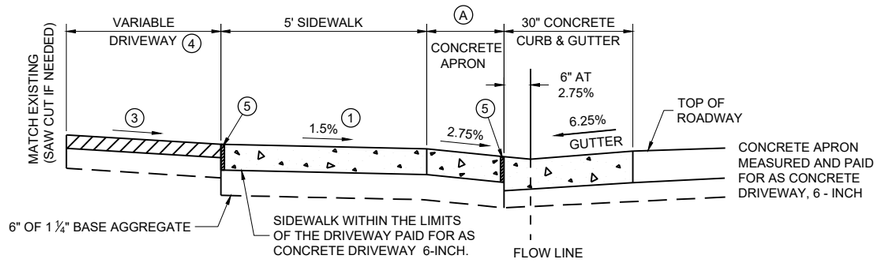
TABLE Y

Ⓐ FEET	Ⓒ FEET
3.5'	2.0'
4.5'	3.0'
5.5'	3.5'

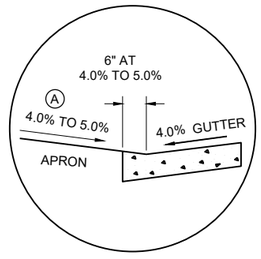


Ⓐ:MEASURE FROM BACK OF CURB

TYPE Y
SIDEWALK WITH NARROWER TERRACE
TERRACE VARIES 4 TO 6 FEET



NOTE: SIDEWALK MY BE DEPRESSED IN DRIVEWAY AREAS



SECTION Y - Y
4% GUTTER SLOPE

SECTION Y - Y
DRIVEWAY DETAIL WITH CONCRETE CURB AND GUTTER
(URBAN AND SUBURBAN)

GENERAL NOTES

PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.

Ⓦ IS SHOWN ON PLAN AND PROFILE SHEETS.

OFFSETS, ELEVATIONS, AND PERCENT GRADE ARE SHOWN ON THE CROSS SECTIONS.

① CONSTRUCTION TOLERANCE OF 0.5%± FOR SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

② THE SIDEWALK RAMP MAXIMUM RUNNING SLOPE SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAXIMUM LENGTH, THE RUNNING SLOPE OF THE SIDEWALK SHALL BE AS FLAT AS FEASIBLE AND NOT EXCEED THE LONGITUDINAL GRADE OF THE ROADWAY. SLOPE SIDEWALK RAMP TOWARD APRON AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

③ DRIVEWAY SLOPES: DESIRABLE MAXIMUM
- 10.5% UP AWAY FROM SIDEWALK (SAG)
- 8.5% DOWN AWAY FROM SIDEWALK (CREST)
- ABSOLUTE MAXIMUM 15% FOR BOTH CREST AND SAG

④ DRIVEWAY TYPES
- 6-INCH CONCRETE DRIVEWAY PAVEMENT OVER 6-INCH BASE AGGREGATE
- 2-INCH TO 3-INCH ASPHALTIC SURFACE OVER 6-INCH BASE AGGREGATE
- 6-INCH BASE AGGREGATE (MAY BE INCREASED FOR CLAY SUBGRADES.)

⑤ ½" EXPANSION JOINT FILLER

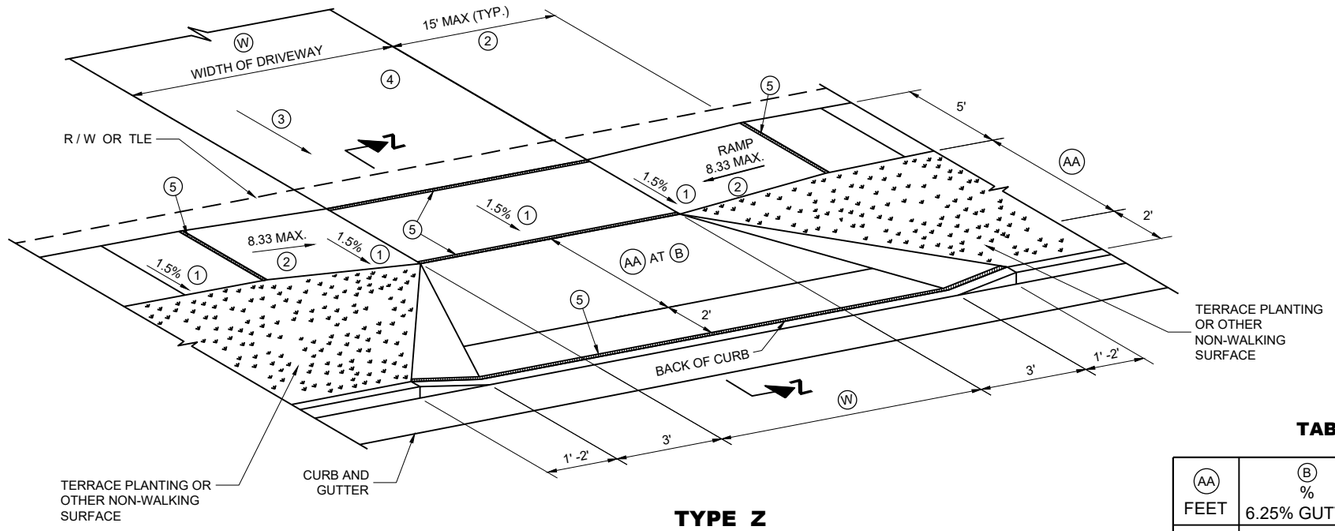
DRIVEWAY AND SIDEWALK RAMPS TYPES X AND Y

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TYPE Z

SIDEWALK WITH WIDER TERRACE
TERRACE VARIES 7 TO 12 FEET

GENERAL NOTES

PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.

(W) IS SHOWN ON PLAN AND PROFILE SHEETS.

OFFSETS, ELEVATIONS, AND PERCENT GRADE ARE SHOWN ON THE CROSS SECTIONS.

(1) CONSTRUCTION TOLERANCE OF 0.5%± FOR SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

(2) THE SIDEWALK RAMP MAXIMUM RUNNING SLOPE SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAXIMUM LENGTH, THE RUNNING SLOPE OF THE SIDEWALK SHALL BE AS FLAT AS FEASIBLE AND NOT EXCEED THE LONGITUDINAL GRADE OF THE ROADWAY.

(3) DRIVEWAY SLOPES: DESIRABLE MAXIMUM
- 10.5% UP AWAY FROM SIDEWALK (SAG)
- 8.5% DOWN AWAY FROM SIDEWALK (CREST)
- ABSOLUTE MAXIMUM 15% FOR BOTH CREST AND SAG

(4) DRIVEWAY TYPES
- 6-INCH CONCRETE DRIVEWAY PAVEMENT OVER 6-INCH BASE AGGREGATE
- 2-INCH TO 3-INCH ASPHALTIC SURFACE OVER 6-INCH BASE AGGREGATE
- 6-INCH BASE AGGREGATE (MAY BE INCREASED FOR CLAY SUBGRADES.)

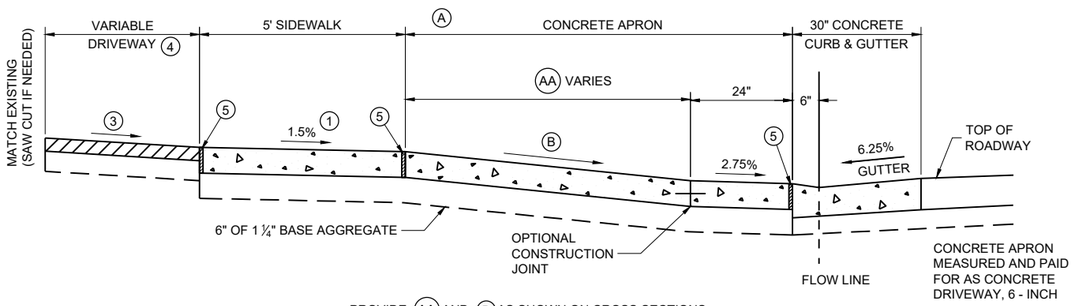
(5) ½" EXPANSION JOINT FILLER.

TABLE Z

(AA) FEET	(B) % 6.25% GUTTER	(B) % 4% GUTTER
4.5'	11.5%	9% TO 11.5%
5.5'	9% TO 11.5%	8% TO 11.5%
6.5'	8% TO 11.5%	6% TO 11.5%
7.5'	7% TO 11.5%	6% TO 11.5%
8.5'	6% TO 11.5%	5% TO 11.5%
9.5'	5% TO 11.5%	4% TO 11.5%

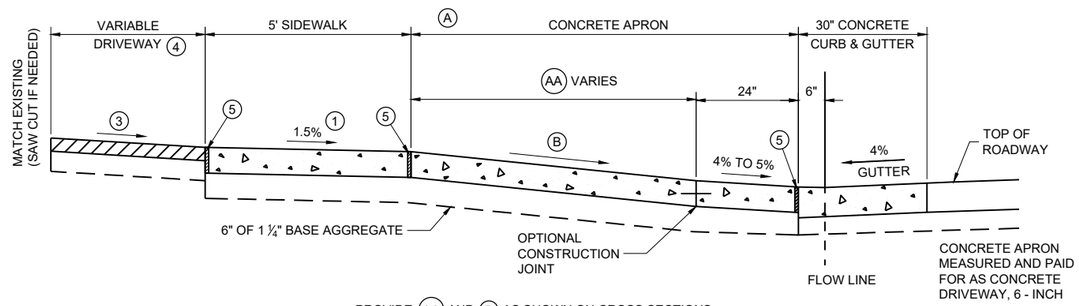
(W): 12' MIN. - 24' MAX. RESIDENTIAL AND NON-COMMERCIAL (PE & FE)

16' MIN. - 35' MAX. COMMERCIAL (CE)



PROVIDE (AA) AND (B) AS SHOWN ON CROSS SECTIONS.

6.25% GUTTER SLOPE



PROVIDE (AA) AND (B) AS SHOWN ON CROSS SECTIONS.

4% GUTTER SLOPE

NOTE: SIDEWALK MY BE DEPRESSED IN DRIVEWAY AREAS FOR (B) VALUES NOT SHOWN IN TABLE Z.

SIDEWALK WITHIN THE LIMITS OF THE DRIVEWAY PAID FOR AS CONCRETE DRIVEWAY 6-INCH.

SECTION Z - Z
DRIVEWAY DETAIL WITH CONCRETE CURB AND GUTTER
(URBAN AND SUBURBAN)

DRIVEWAY AND SIDEWALK RAMPS TYPE Z

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GENERAL NOTES

A MAXIMUM RADIUS OF 10 FEET SHALL BE USED FOR NON-COMMERCIAL PRIVATE ENTRANCES. RADII FOR COMMERCIAL DRIVEWAYS SHALL BE DETERMINED BY THE ENGINEER BASED ON TRAFFIC AND DRIVEWAY PERMIT RESTRICTIONS.

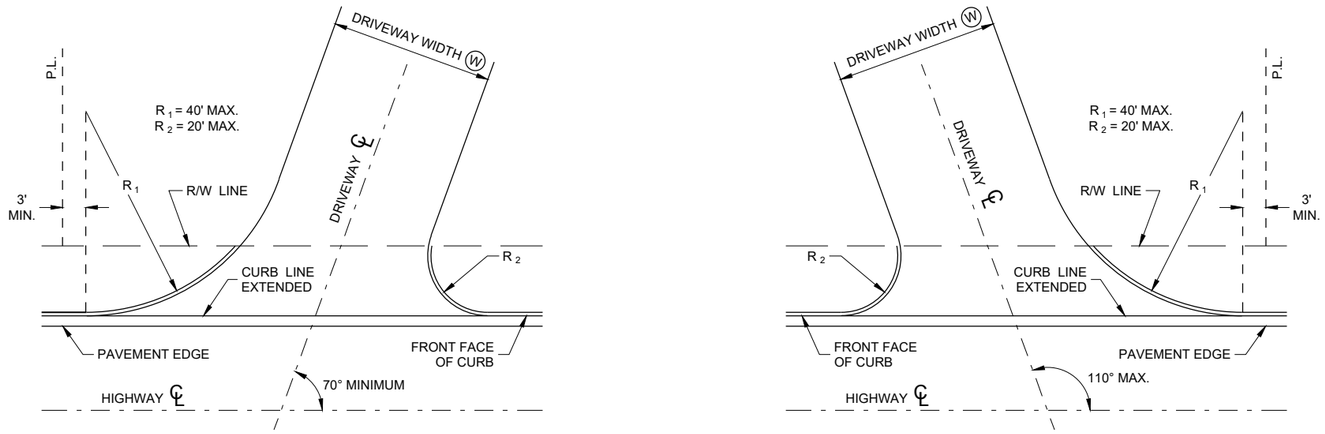
THE MINIMUM ANGLE OF INTERSECTION BETWEEN THE DRIVEWAY AND HIGHWAY CENTERLINES SHALL BE 70°.

ALL CURVILINEAR PRIVATE ENTRANCE OUTLINES SHALL BE CONTAINED WITHIN THE HIGHWAY R/W.

NO DRIVEWAY SHALL BE BUILT WITHIN 3 FEET OF THE PROPERTY LINE EXCEPT FOR EXISTING JOINT DRIVEWAY SHARED BY TWO OWNERS.

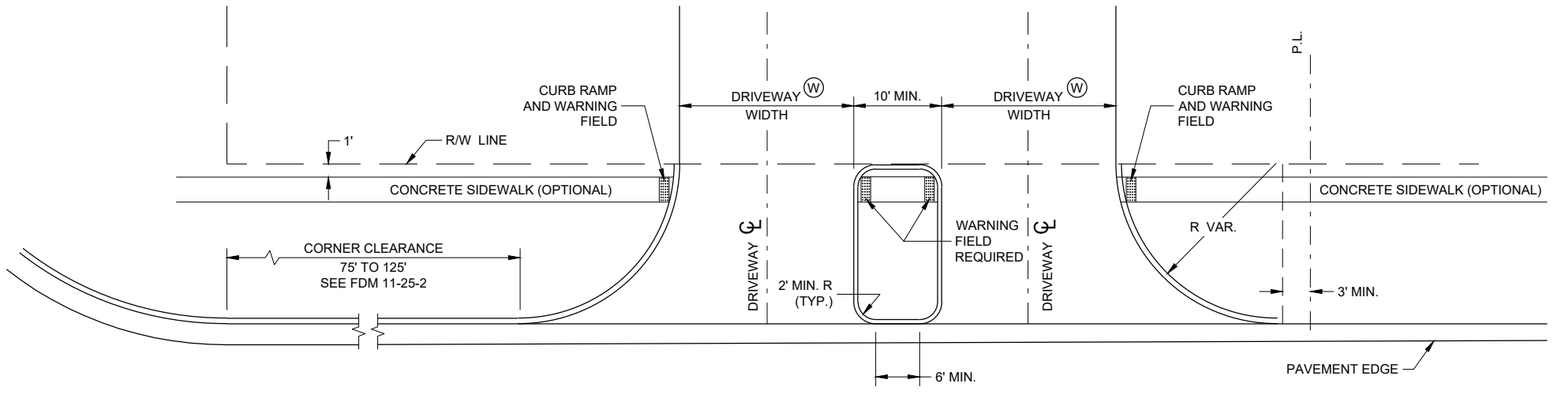
Ⓦ: 12' MIN. - 24' MAX. RESIDENTIAL AND NON-COMMERCIAL (PE & FE)

16' MIN. - 35' MAX. COMMERCIAL (CE)



SKEWED DRIVEWAY DETAILS (COMMERCIAL AND NON-COMMERCIAL)

SIDEWALK NOT SHOWN



DRIVEWAY LOCATION AND SPACING DETAILS

SIDEWALK SHOWN

DRIVEWAYS WITH CURB AND GUTTER RETURNS

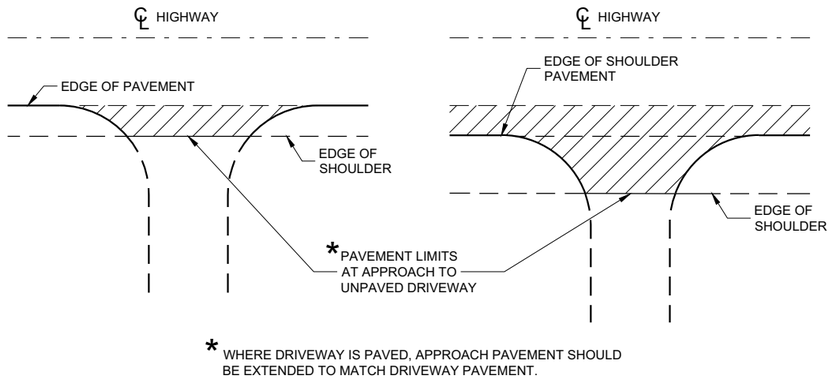
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/S/ <AUTHOR> — ROADWAY STANDARDS DEVE ENGINEER

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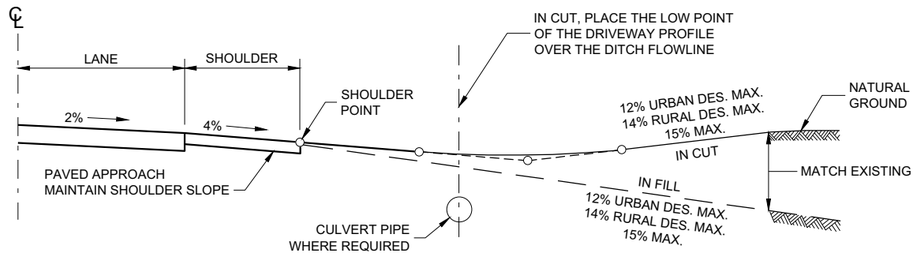
SDD 08D20 - 01
SDD 08D20 - 01



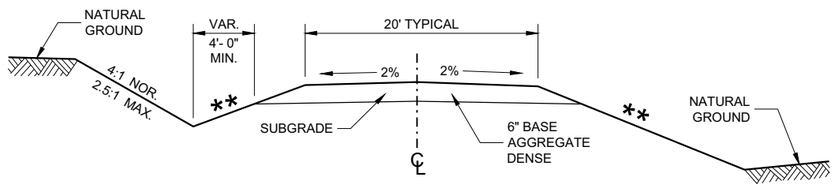
PLAN VIEW
(UNPAVED SHOULDER ON HIGHWAY)

PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

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



TYPICAL DRIVEWAY PROFILES

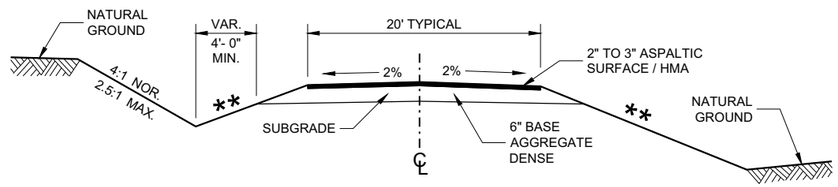


IN CUT **IN FILL**

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE AGGREGATE SURFACE

** SLOPE CAN VARY WITH SPEED. SEE 11-45-30.6.2

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

DRIVEWAYS WITHOUT CURB AND GUTTER

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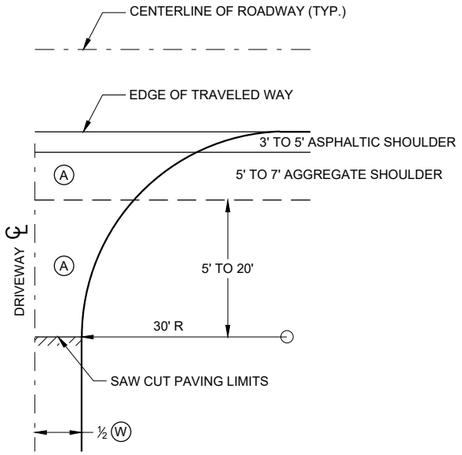
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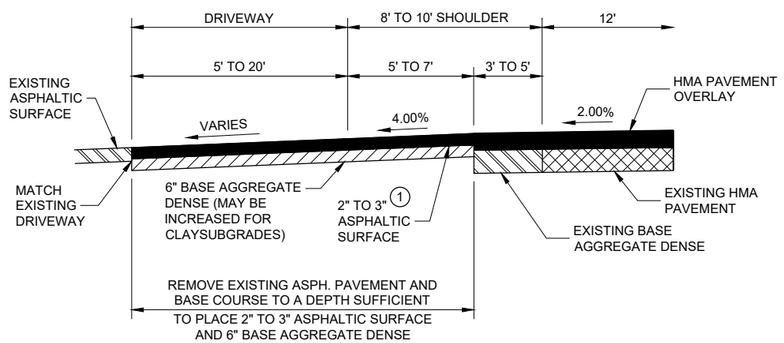
GENERAL NOTES

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



PLAN VIEW

HALF SECTION



PROFILE VIEW

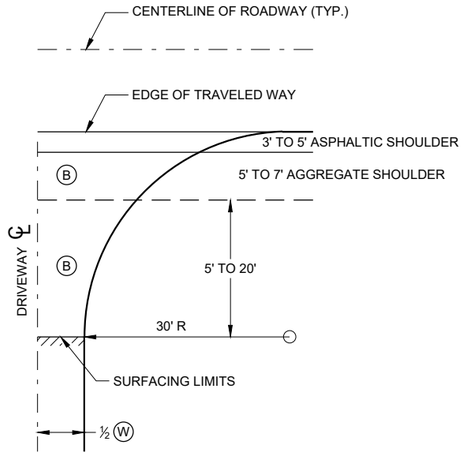
RURAL ENTRANCE WITH ASPHALTIC SURFACE

RESURFACING PROJECTS

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

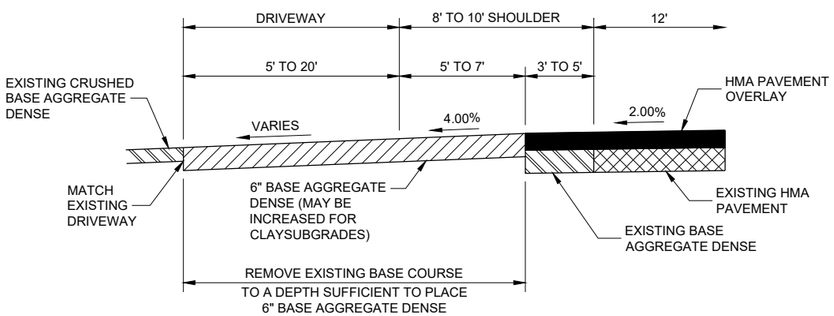
(B) : PAID FOR AS BASE AGGREGATE DENSE 1 ¼" (TON)

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



PLAN VIEW

HALF SECTION



PROFILE VIEW

RURAL ENTRANCE WITH AGGREGATE SURFACE

6" BASE AGGREGATE DENSE

RESURFACING PROJECTS

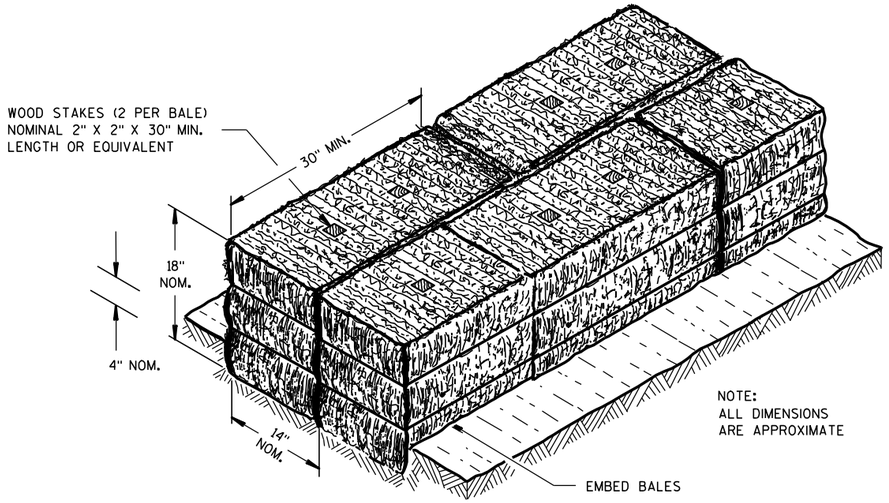
DRIVEWAYS WITHOUT CURB AND GUTTER RESURFACING PROJECTS RURAL

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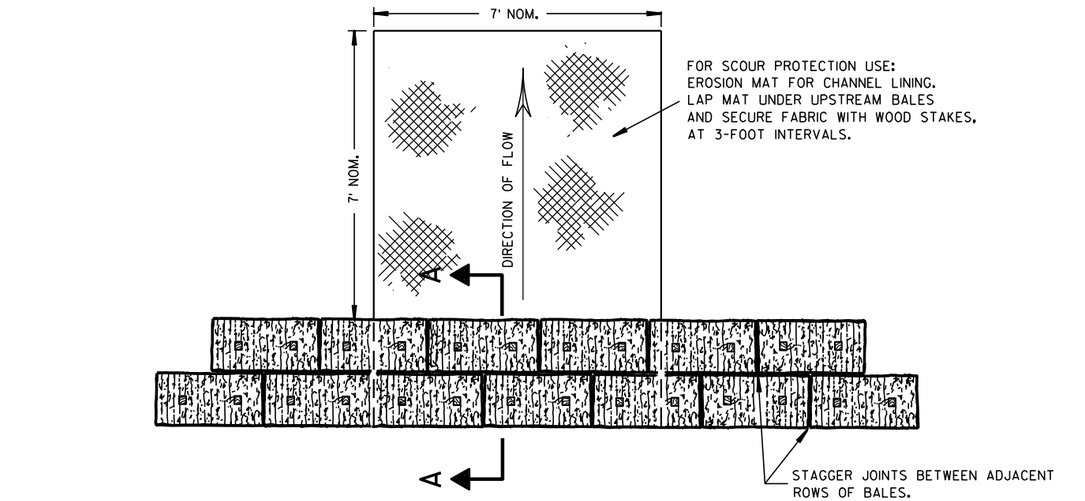
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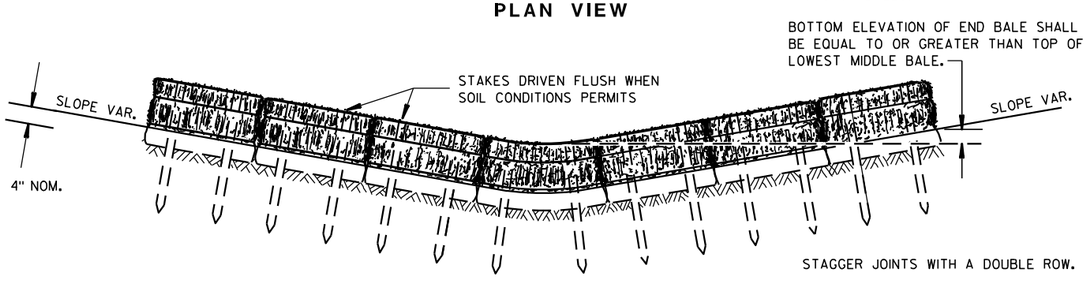
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SECTION A-A



PLAN VIEW



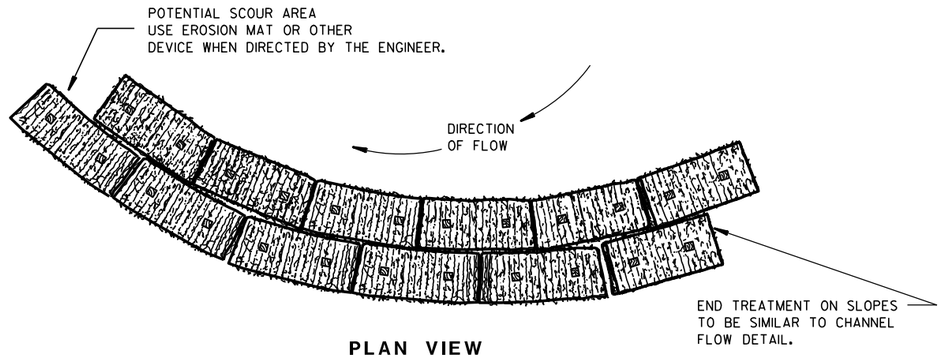
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

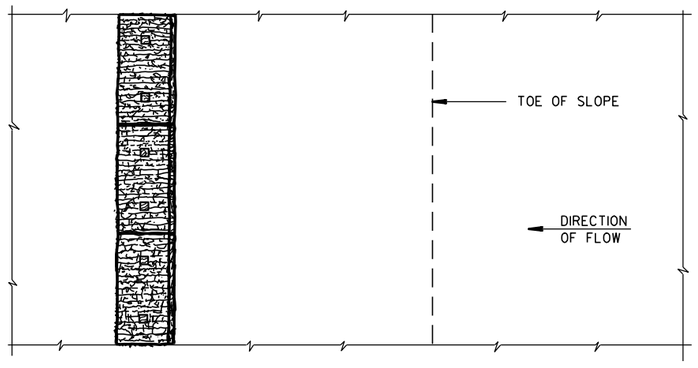
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

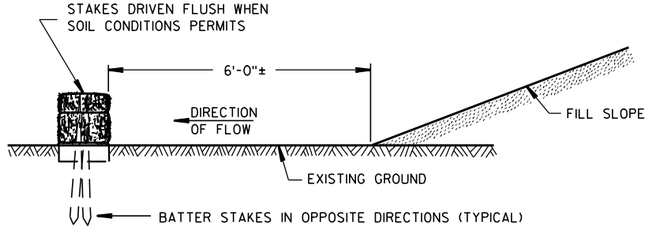


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02 DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

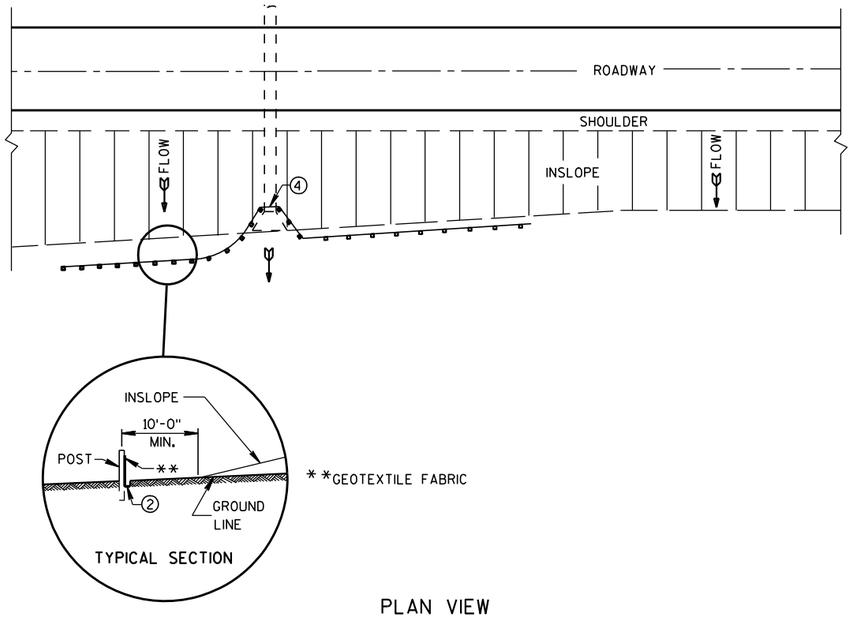
FHWA

6

S.D.D. 8 E 8-3

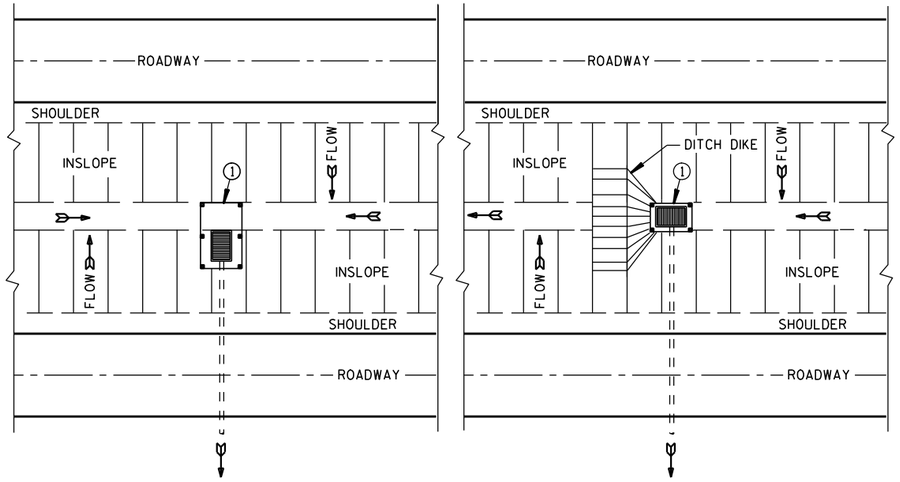
6

S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



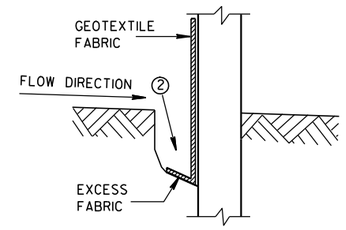
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

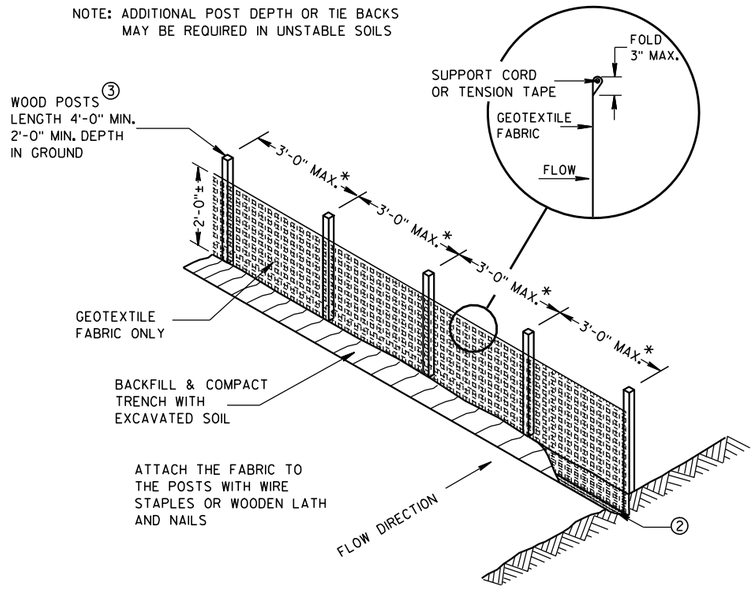
GENERAL NOTES

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

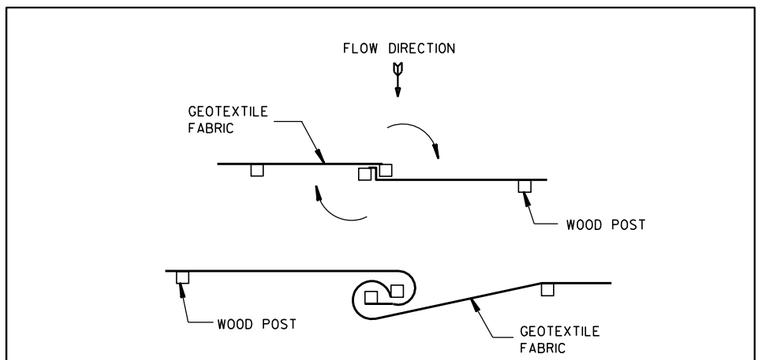
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL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



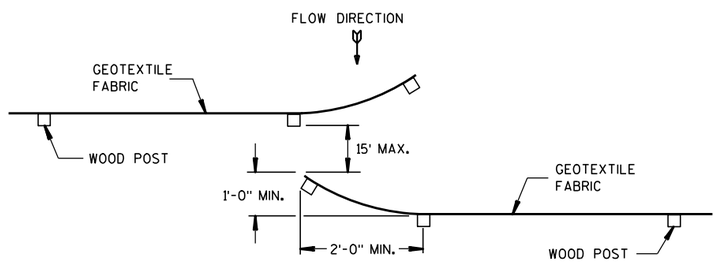
TRENCH DETAIL



SILT FENCE

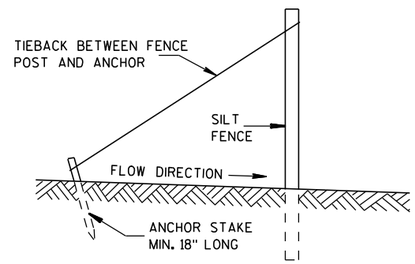


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

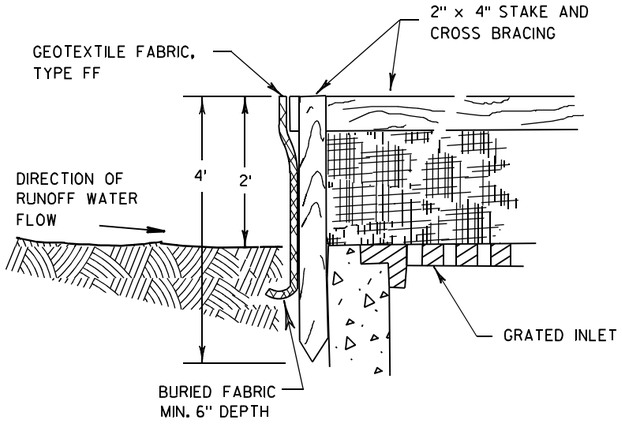
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

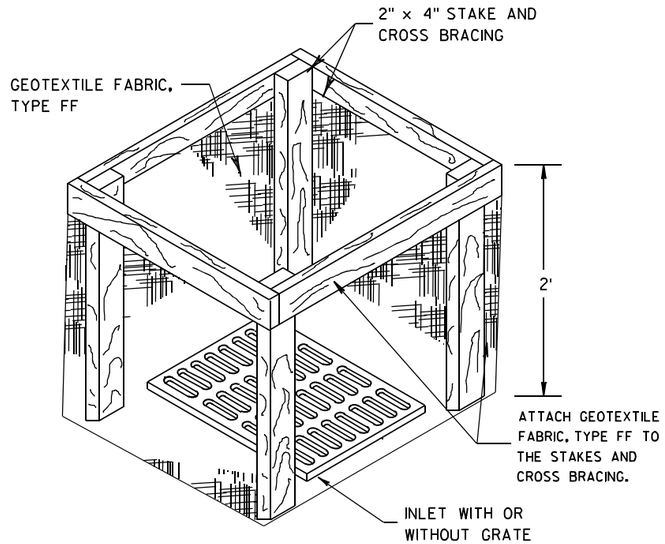
6

S.D.D. 8 E 9-6

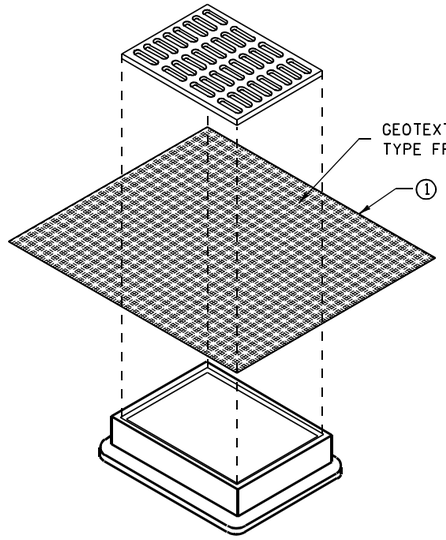
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S.D.D. 8 E 9-6



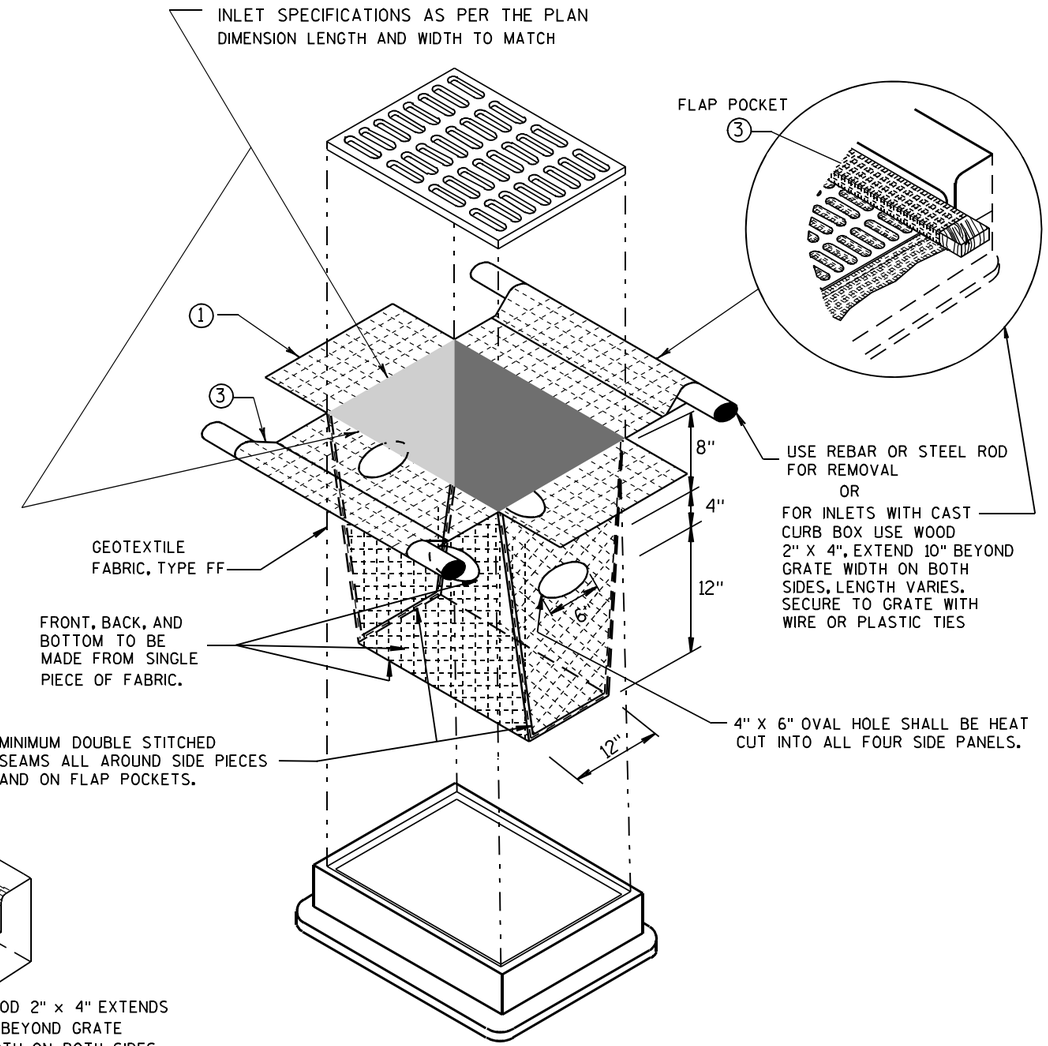


INLET PROTECTION, TYPE A



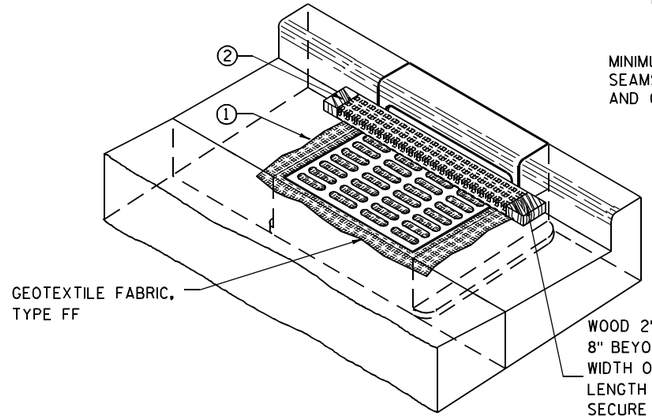
INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE D

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

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.

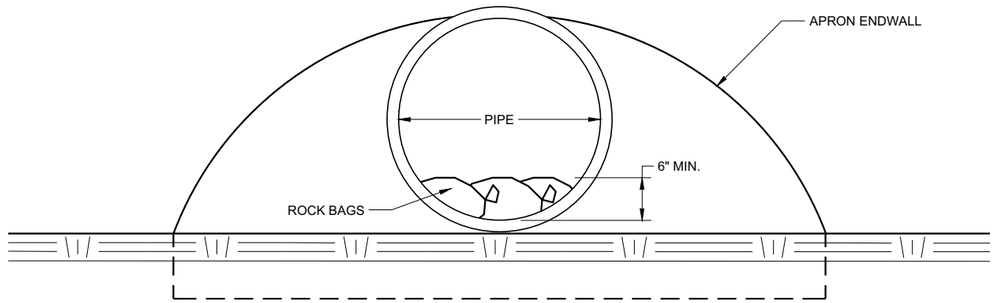
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE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

INLET PROTECTION
TYPE A, B, C, AND D

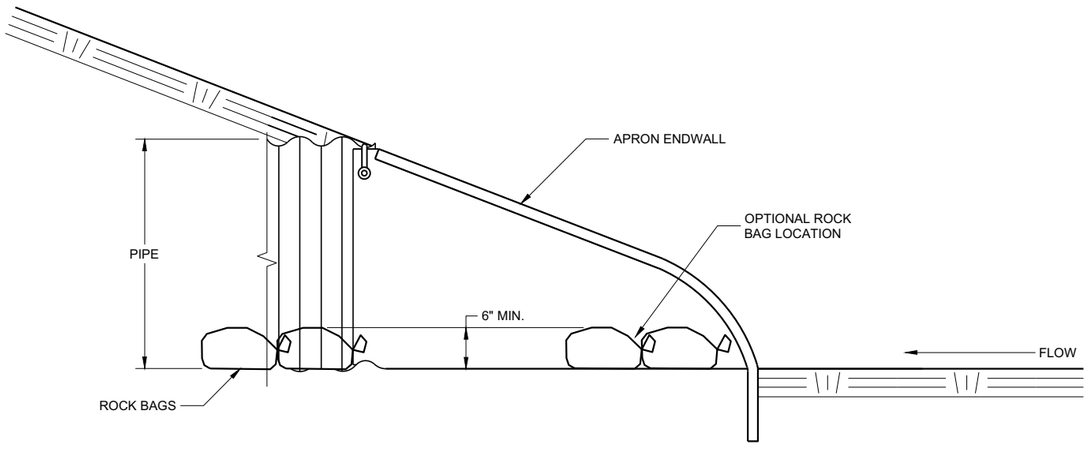
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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)

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

6
SDD 08E15 - 01

METAL APRON ENDWALLS

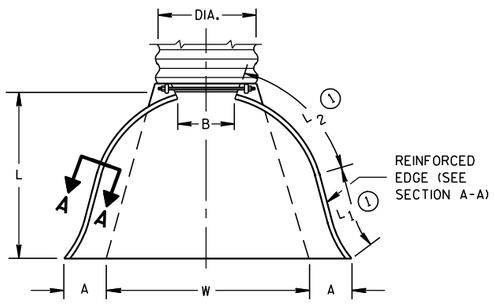
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4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

× EXCEPT CENTER PANEL SEE GENERAL NOTES

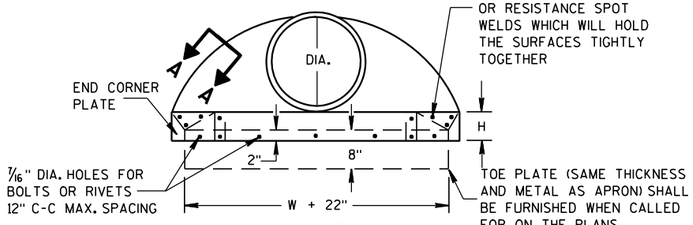
REINFORCED CONCRETE APRON ENDWALLS

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

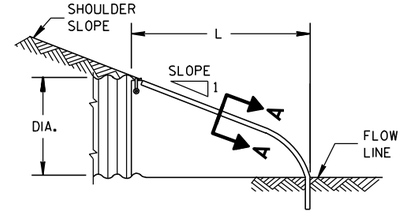
*MINIMUM
**MAXIMUM



PLAN VIEW

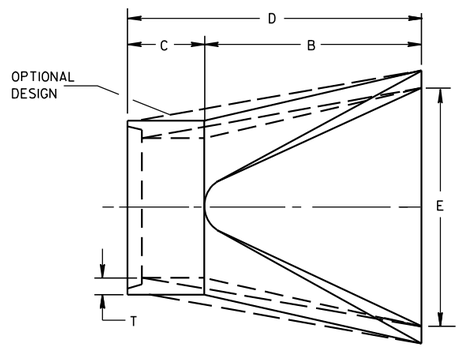


END VIEW

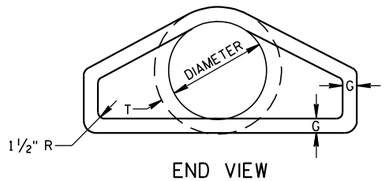


SIDE ELEVATION

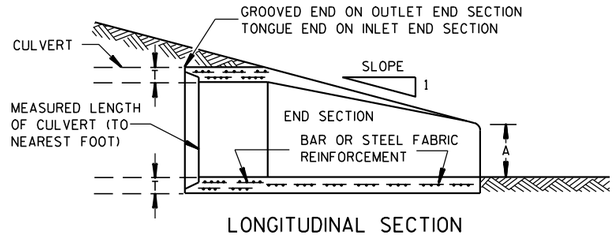
METAL ENDWALLS



PLAN

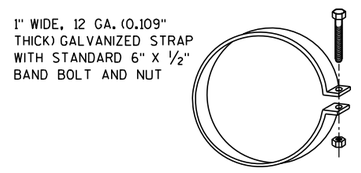


END VIEW



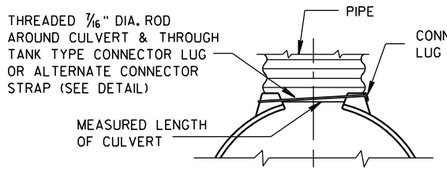
LONGITUDINAL SECTION

CONCRETE ENDWALLS

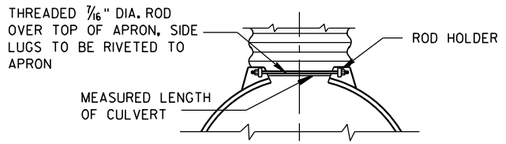


ALTERNATE FOR TYPE 1 CONNECTION

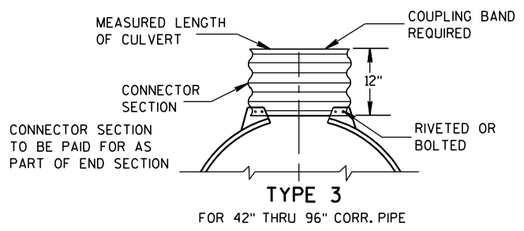
END SECTION CONNECTOR STRAP



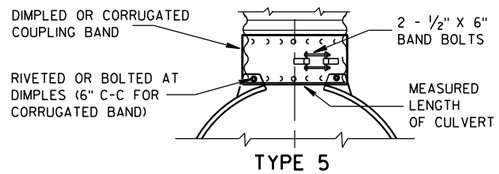
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

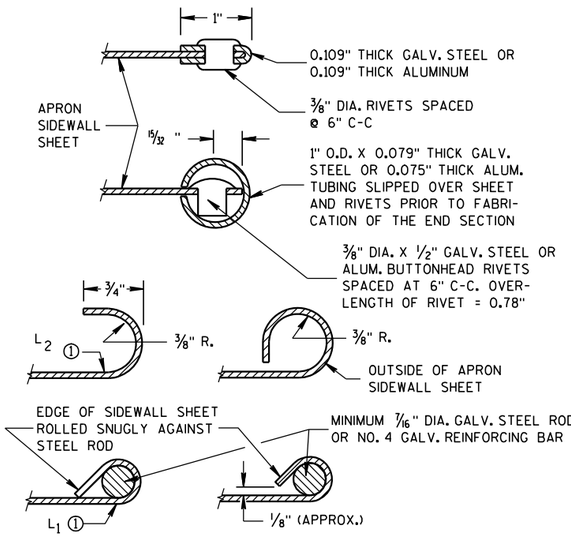
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

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

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

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

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

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

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

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

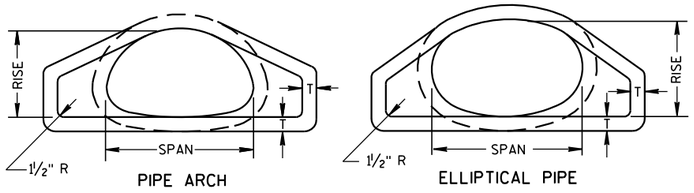
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

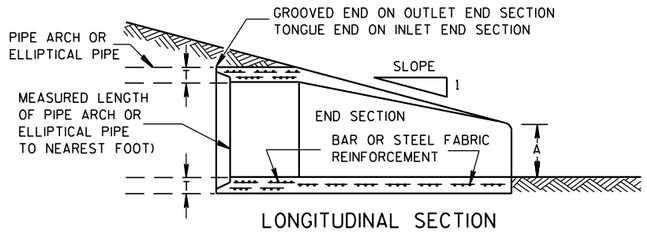
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

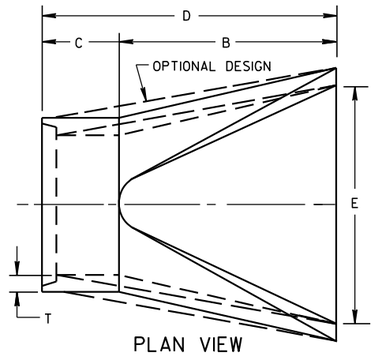
6
S.D.D. 8 F 1-11



END VIEW

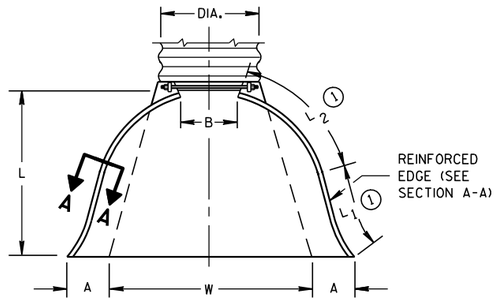


LONGITUDINAL SECTION

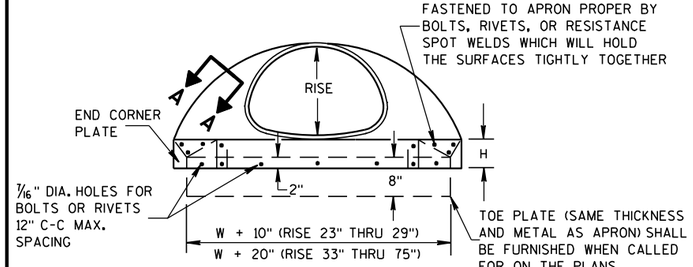


PLAN VIEW

CONCRETE ENDWALLS

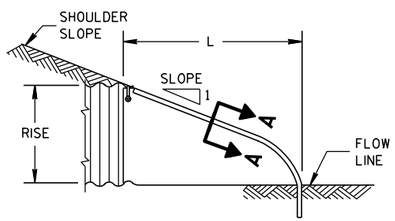


PLAN VIEW



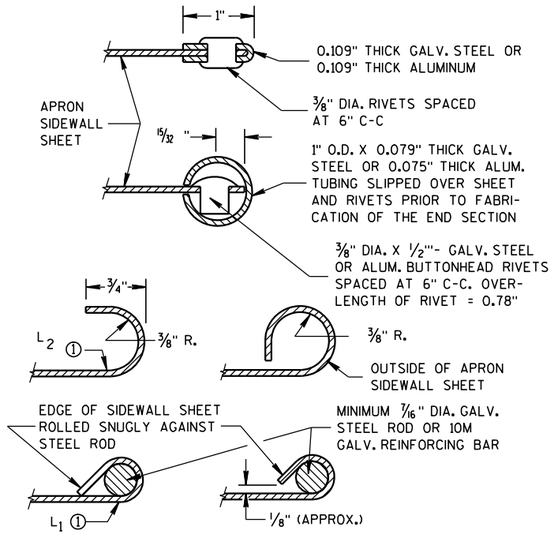
END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER

END VIEW



SIDE ELEVATION

METAL ENDWALLS



SECTION A-A

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

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

3" X 1" CORRUGATIONS

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

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL SEE GENERAL NOTES

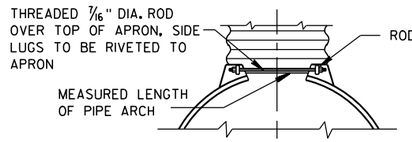
REINFORCED CONCRETE PIPE ARCH

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

REINFORCED CONCRETE ELLIPTICAL PIPE

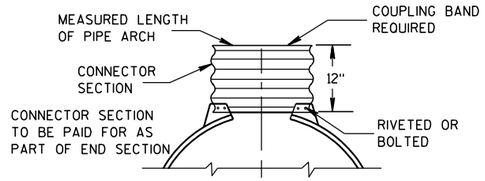
EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48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

**NOMINAL SIZE



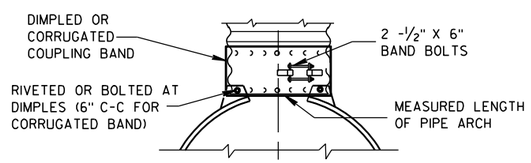
TYPE 2

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



TYPE 3

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



TYPE 5

ALTERNATE FOR:

ALL SIZES CORRUGATED PIPE ARCHES

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

CONNECTION DETAILS

GENERAL NOTES

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

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

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

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

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

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

APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

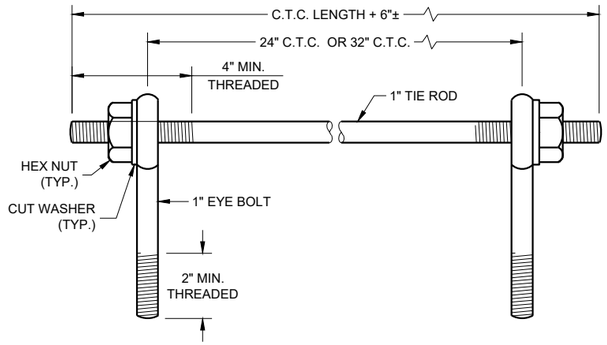
11/30/94 — DATE

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

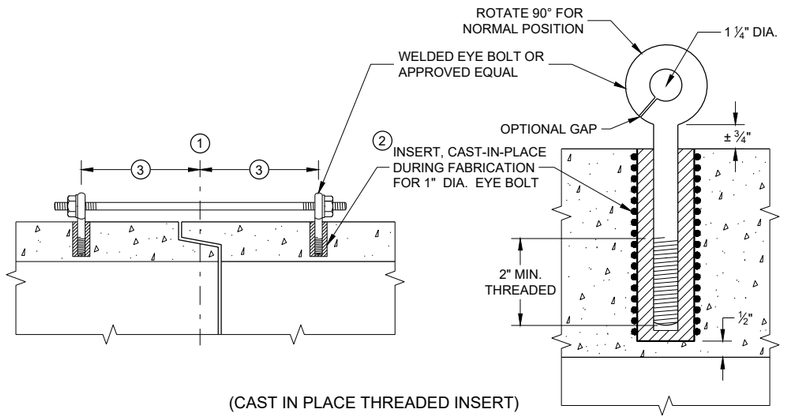
FHWA

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S.D.D. 8 F 2-1



EYE BOLTS AND TIE ROD



(CAST IN PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

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

GENERAL NOTES

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

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

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

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

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

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

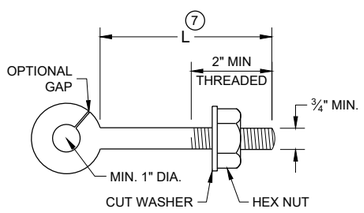
(3) HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.

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

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

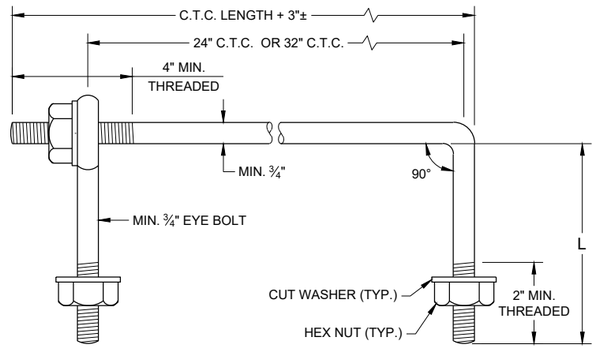
(6) LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.

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

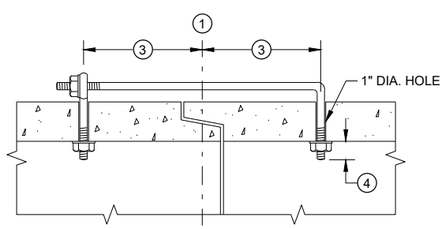


EYE BOLT (7)

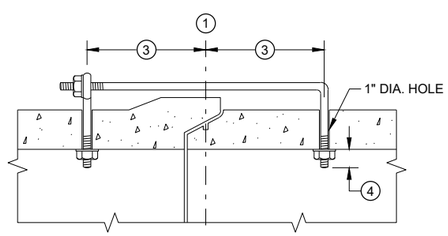
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD



(TONGUE AND GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

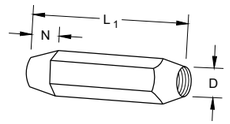
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

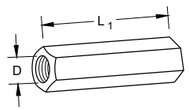
ADJUSTABLE TIE ROD TABLE

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

DIMENSIONS SHOWN ARE IN INCHES



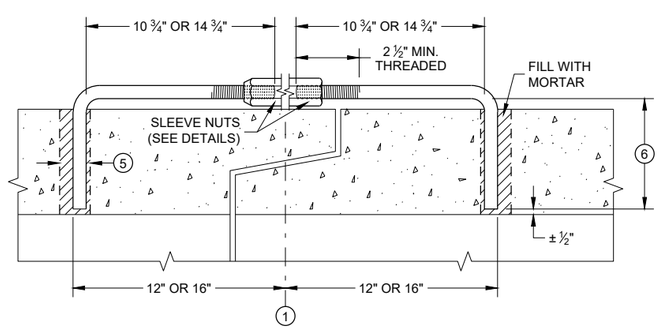
TAPERED



PLAIN

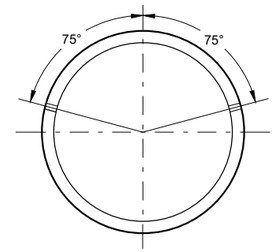
RIGHT AND LEFT THREADS

SLEEVE NUTS



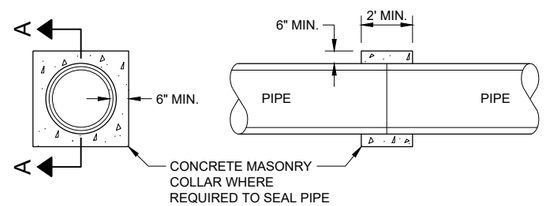
LONGITUDINAL SECTION

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



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

TRANSVERSE SECTION



SECTION A - A

CONCRETE COLLAR DETAIL

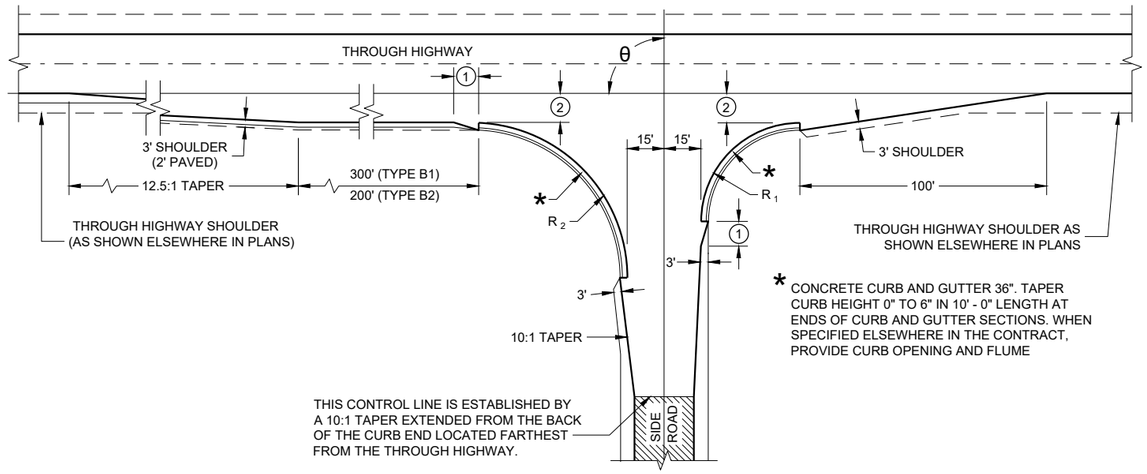
JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

SDD 08F04 - 08

SDD 08F04 - 08



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

TYPE "B1" AND "B2"

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

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.

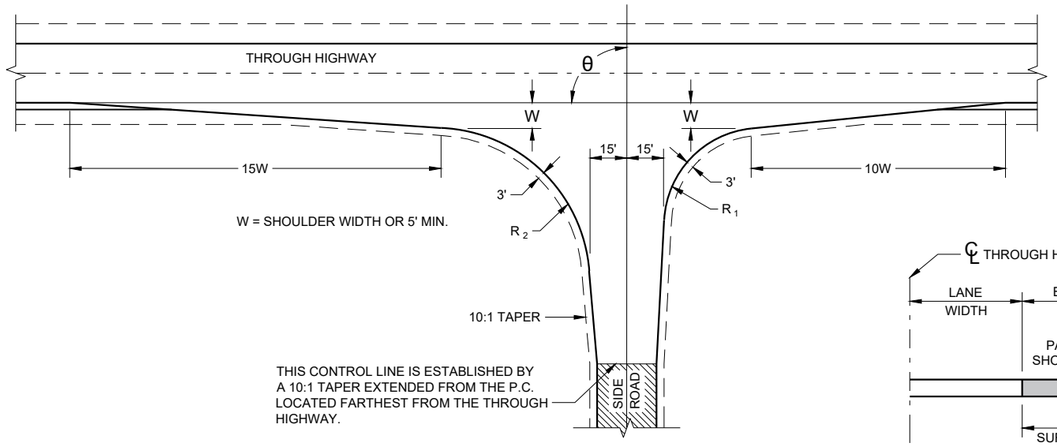
(1) 10-FT TYPICAL.

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

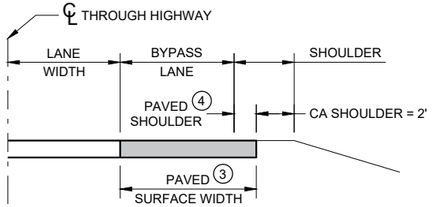
**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

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

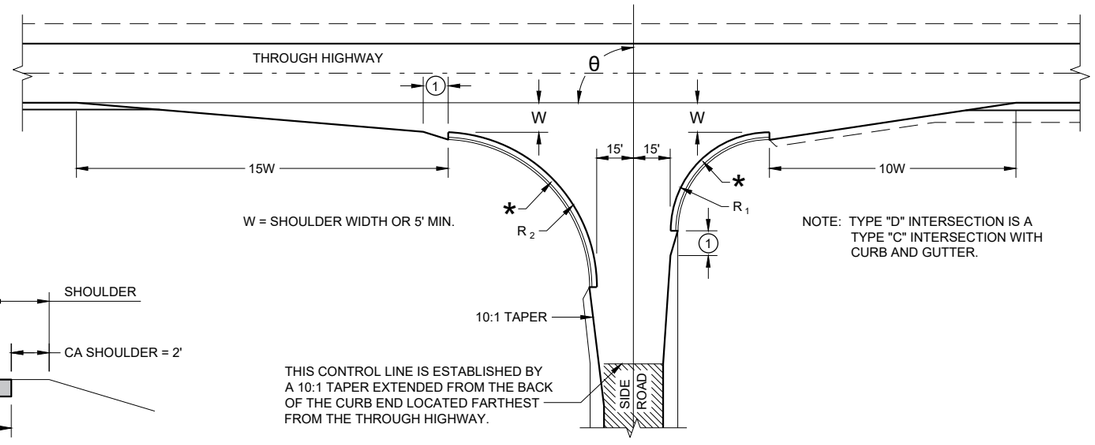
(4) BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.



TYPE "C"

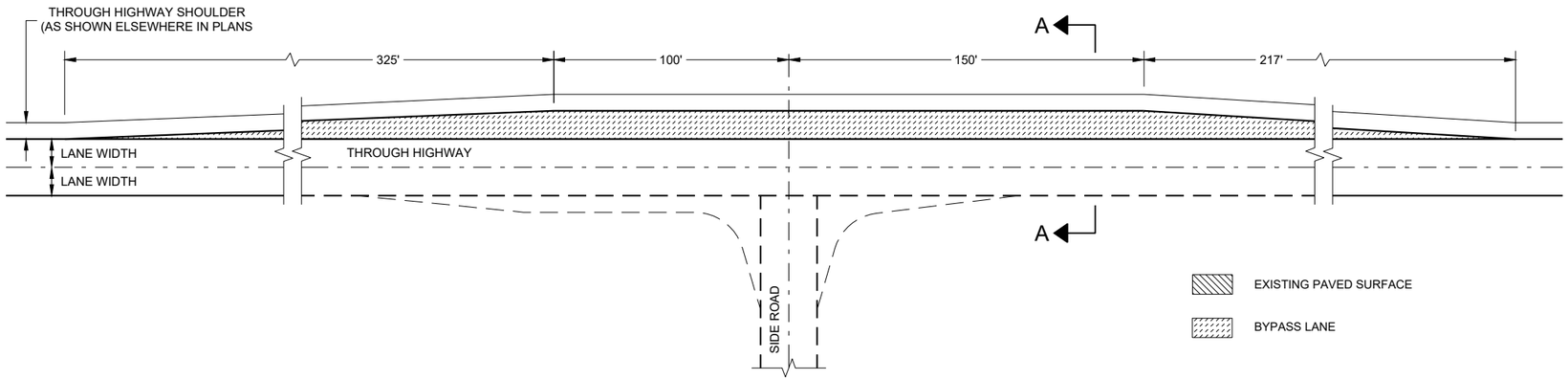


SECTION A - A
(SHOWING BYPASS LANE AND SHOULDER)



NOTE: TYPE "D" INTERSECTION IS A TYPE "C" INTERSECTION WITH CURB AND GUTTER.

TYPE "D"



TEE INTERSECTION BYPASS LANE DETAIL

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

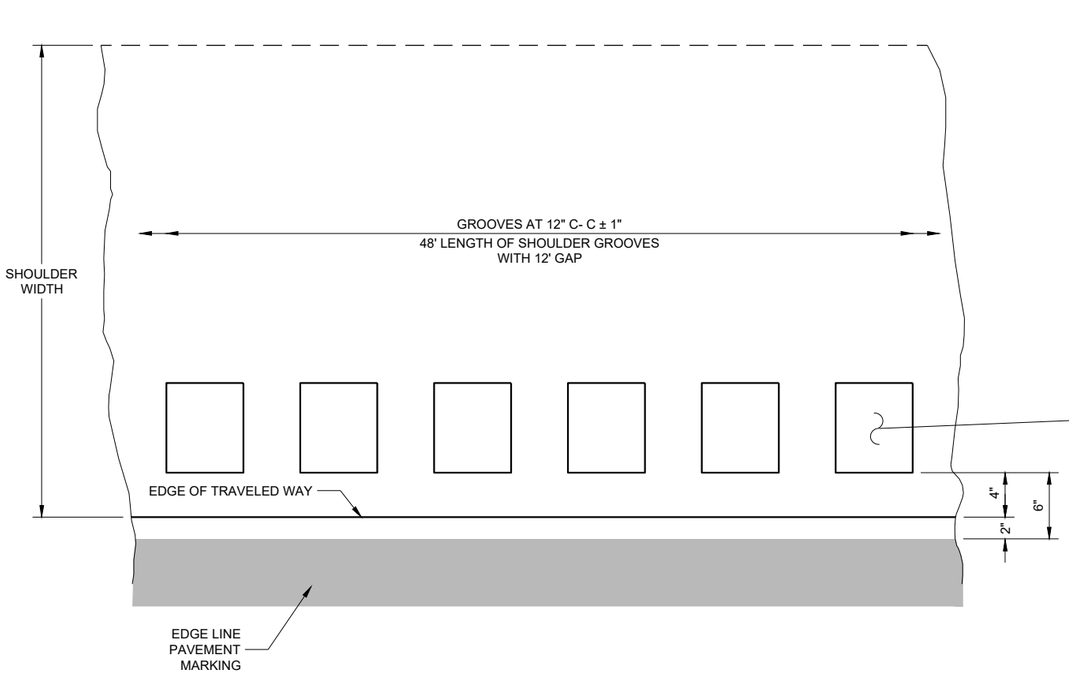
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

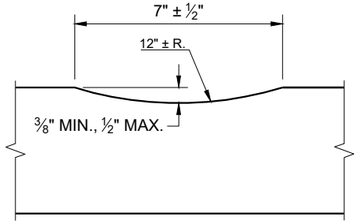
SDD 09A01 - 14a

6

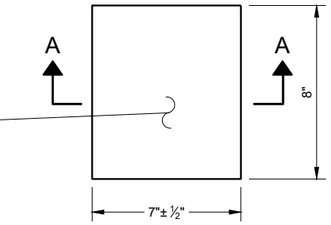
SDD 09A01 - 14a



PLAN DETAIL VIEW
SHOULDER WITH GROOVES



SECTION A - A

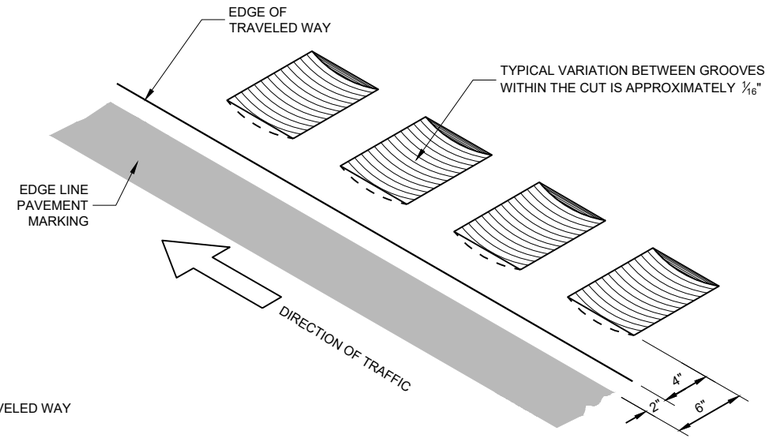


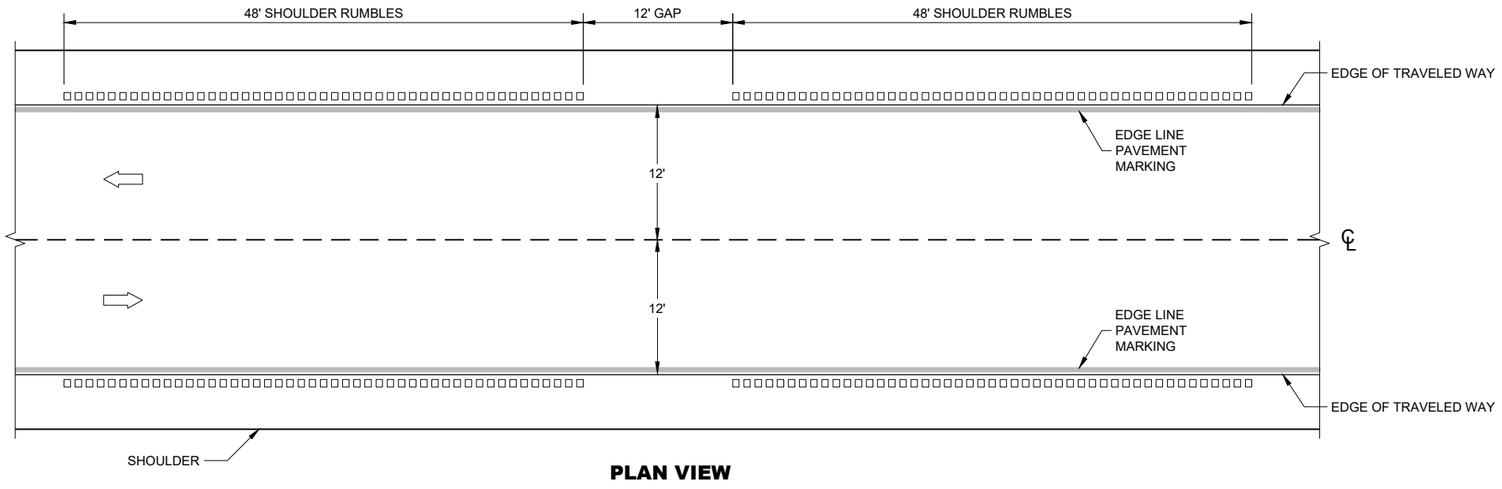
PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

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

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





PLAN VIEW

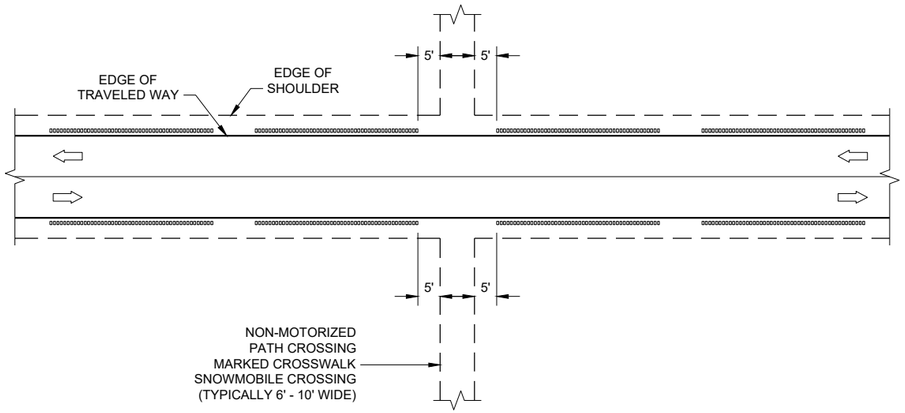
SHOULDER RUMBLE STRIPS - ASPHALT

SHOULDER RUMBLE STRIPS ASPHALT

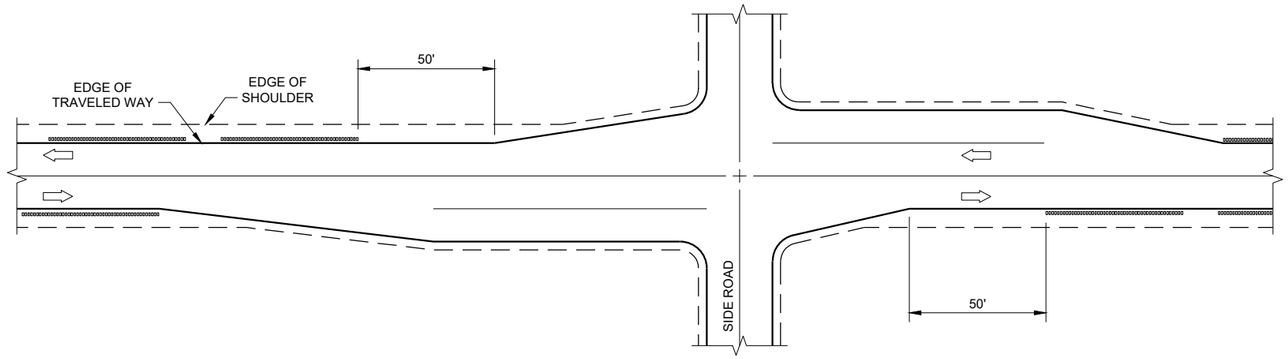
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

6

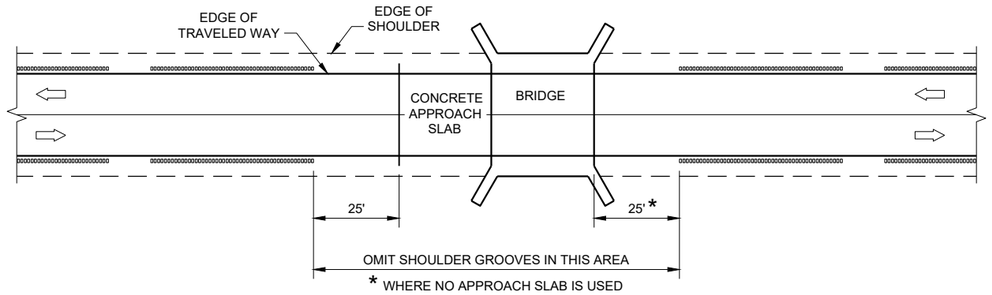
SDD 13A10 - 03a



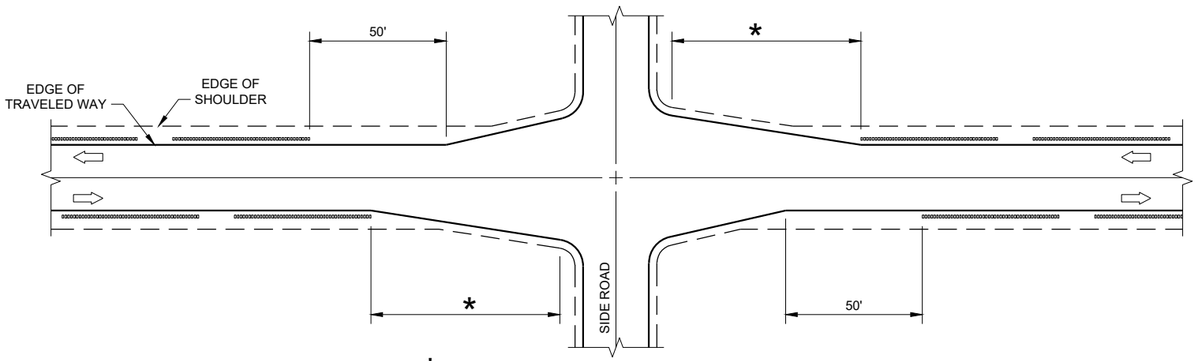
GROOVES AT MISCELLANEOUS CROSSINGS



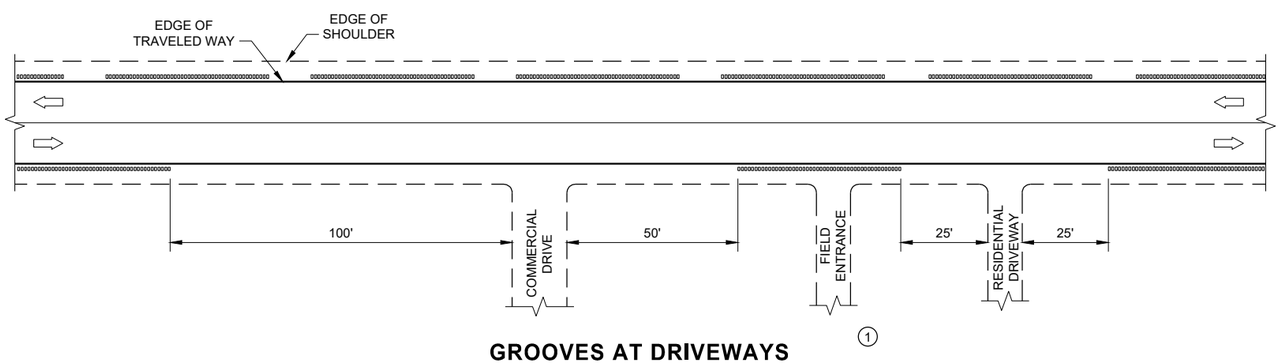
GROOVES AT RIGHT TURN LANE



GROOVES AT BRIDGES



GROOVES AT INTERSECTIONS WITH APPROACH TAPER



GROOVES AT DRIVEWAYS ①

GENERAL NOTES

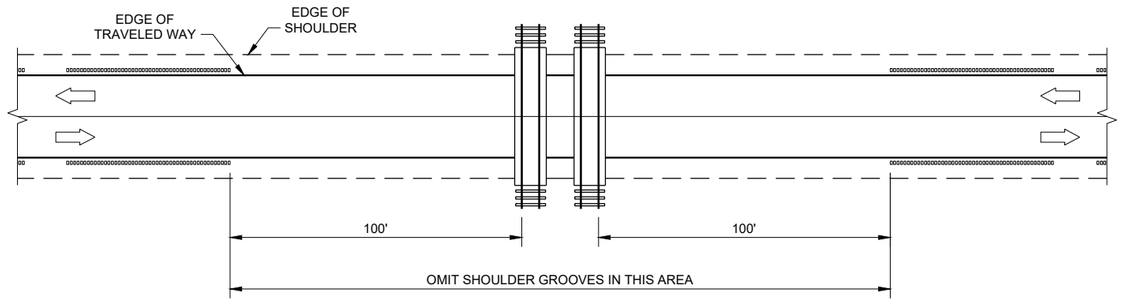
① SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.

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

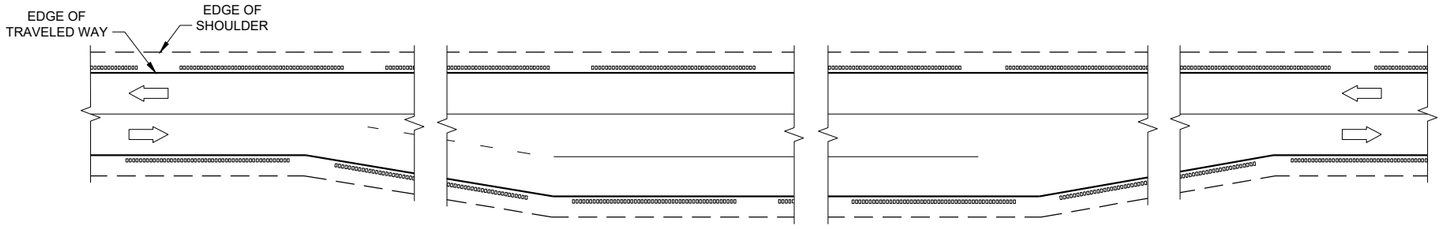
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

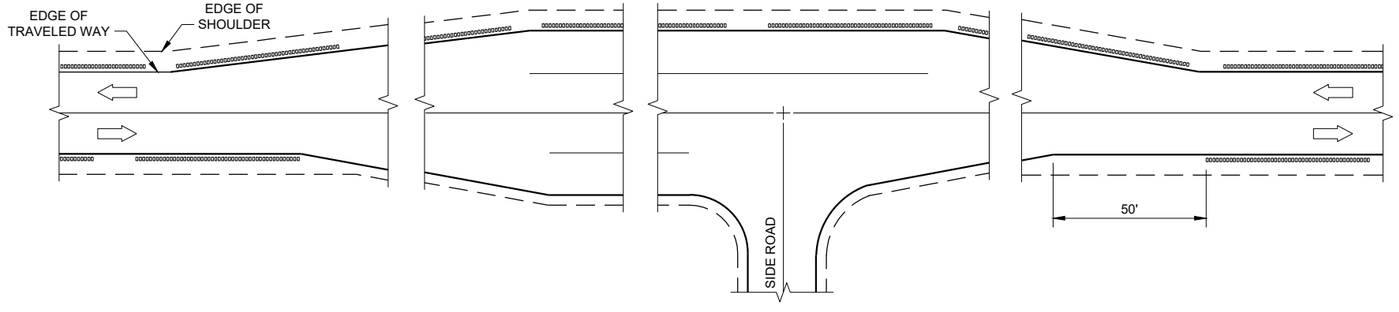
SDD 13A10 - 03g
SDD 13A10 - 03g



GROOVES AT RAILROADS



GROOVES AT PASSING AND CLIMBING LANES



GROOVES AT BYPASS LANES

6

SDD 13A10 - 03h

SHOULDER AND EDGE LINE RUMBLE STRIPS - RAILROAD, PASSING, CLIMBING AND BYPASS LANES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2023
DATE

/S/ John Jenkins
ROADWAY STANDARDS DEVE ENGINEER

FHWA

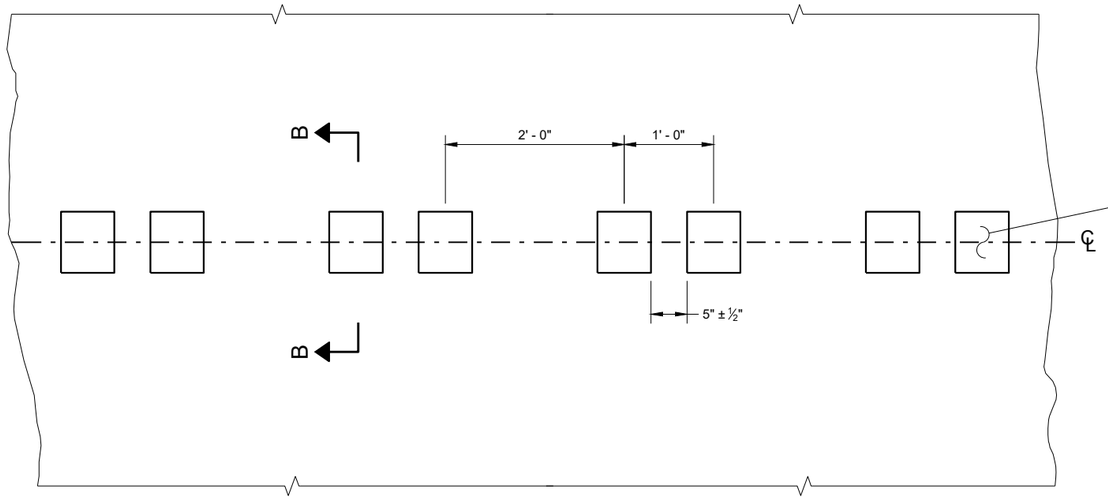
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SDD 13A10 - 03h

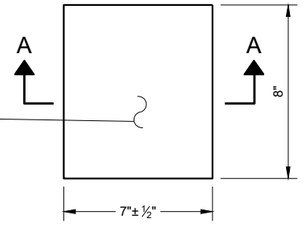
GENERAL NOTES

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

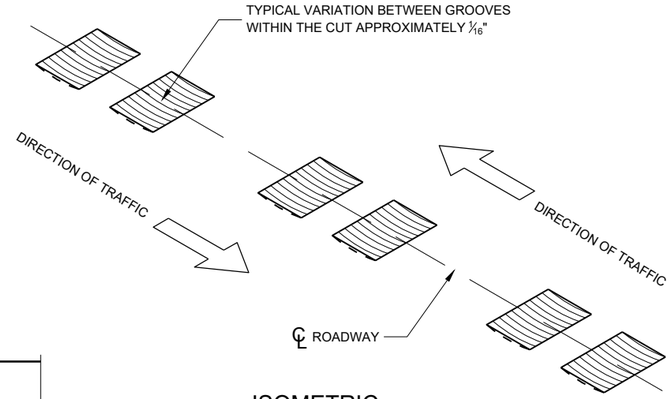
CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS WHEN DIRECTED BY THE ENGINEER.



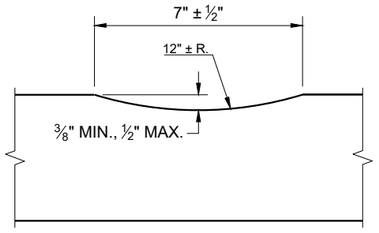
PLAN DETAIL VIEW



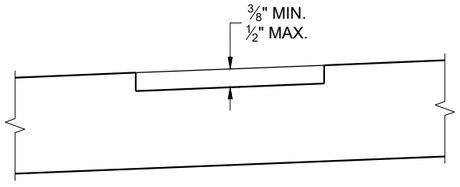
PLAN VIEW
(SINGLE GROOVE)



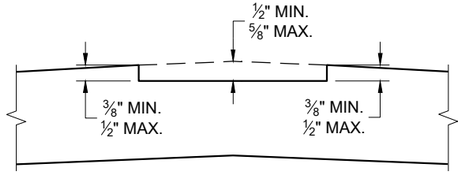
ISOMETRIC



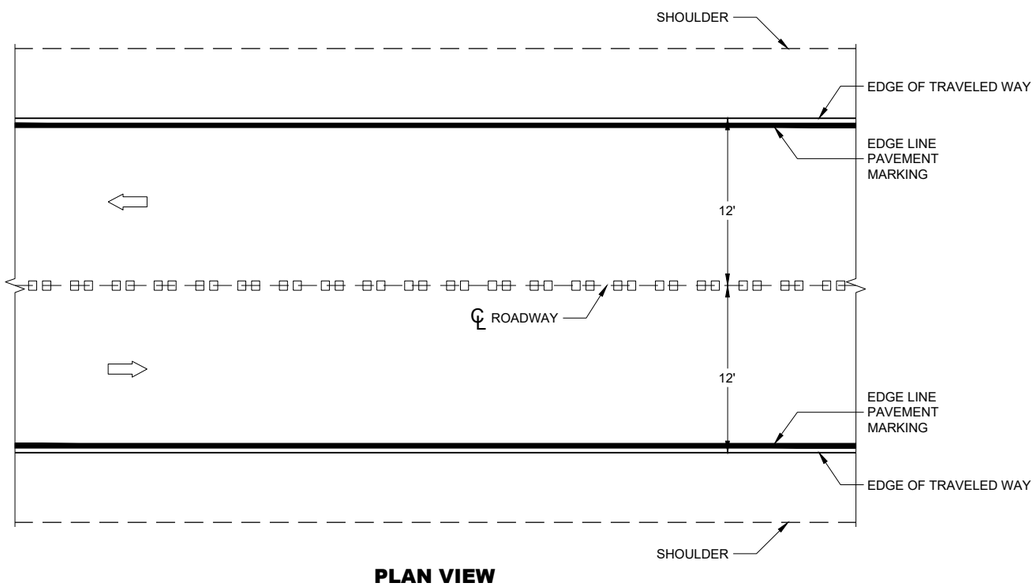
SECTION A - A



SECTION B - B
SUPERELEVATED ROADWAY



SECTION B - B
CROWNED ROADWAY



PLAN VIEW

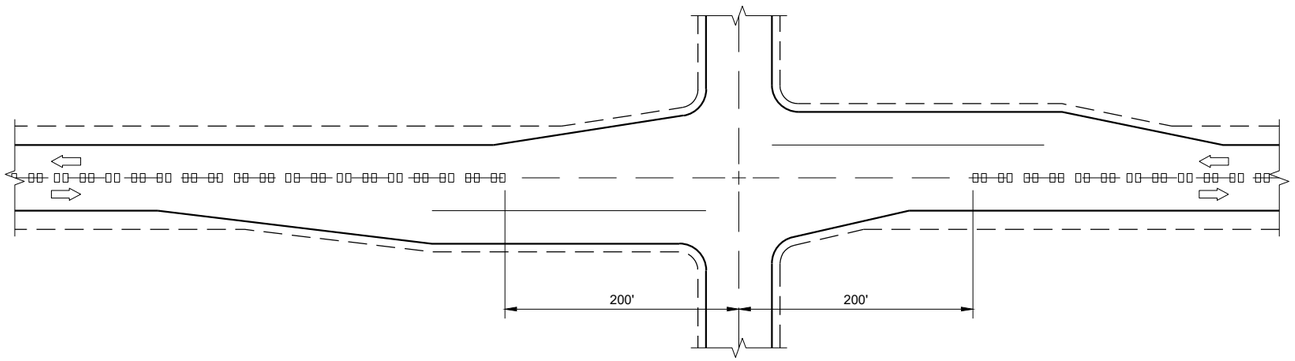
CENTERLINE RUMBLE STRIPS - ASPHALT

CENTERLINE RUMBLE STRIPS - ASPHALT

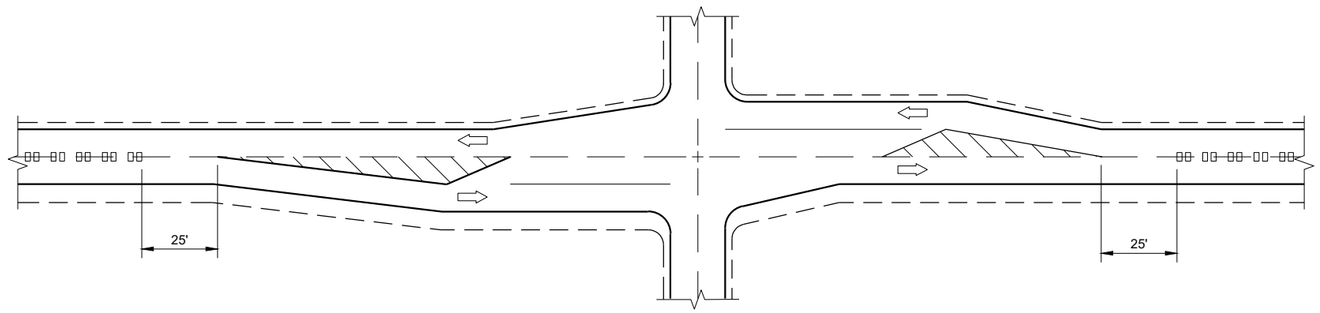
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

6

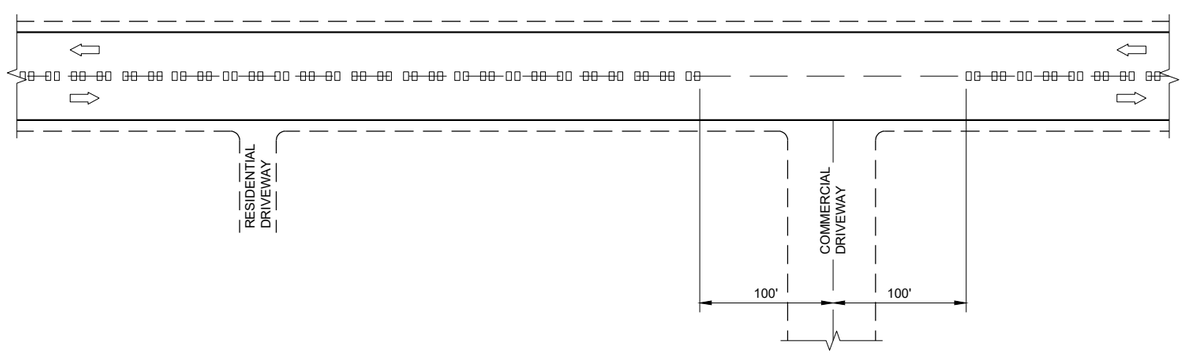
SDD13A11 - 04a



CENTERLINE GROOVES AT INTERSECTIONS



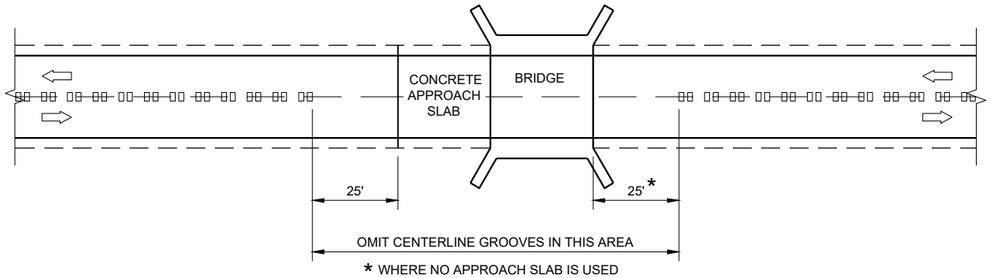
CENTERLINE GROOVES AT INTERSECTIONS (WITH LEFT TURN LANES)



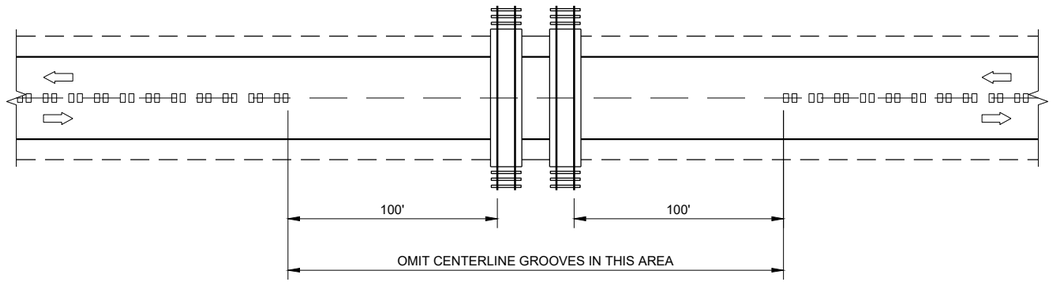
CENTERLINE GROOVES AT DRIVEWAYS (1)

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

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

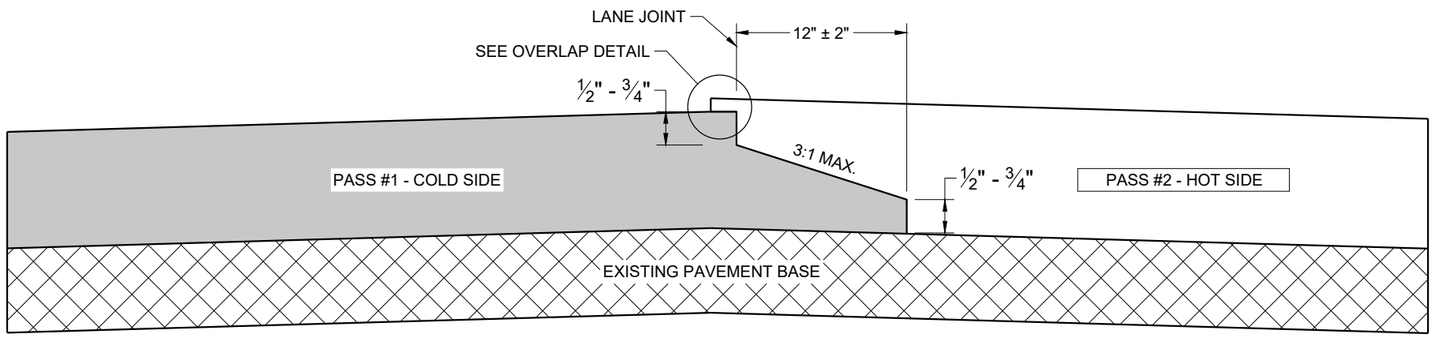
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ John Jenkins — ROADWAY STANDARDS DEVE ENGINEER

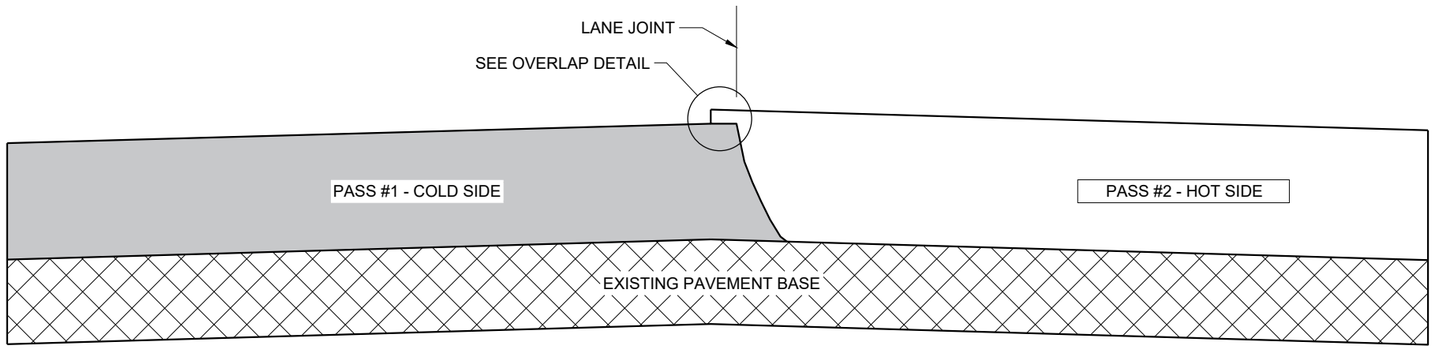
FHWA

6

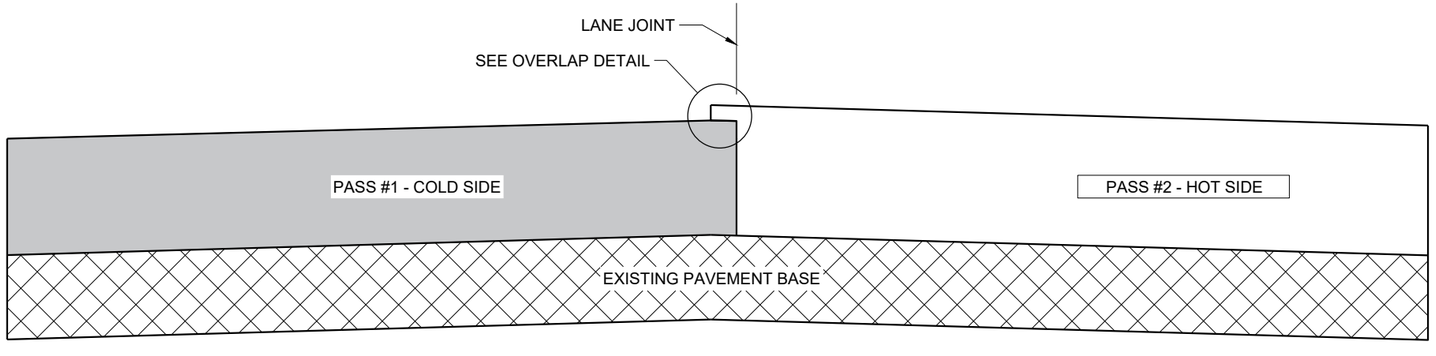
SDD 13A11 - 04d
SDD 13A11 - 04d



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

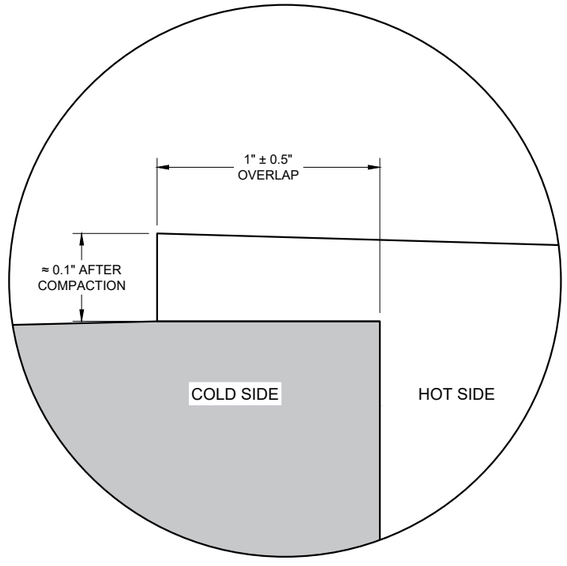
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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

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

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

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



OVERLAP DETAIL (TYPICAL)

6

6

SDD 13C19 - 03

SDD 13C19 - 03

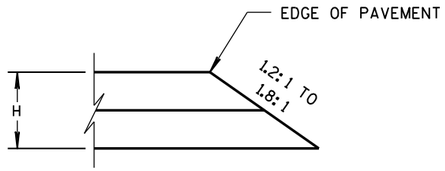
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

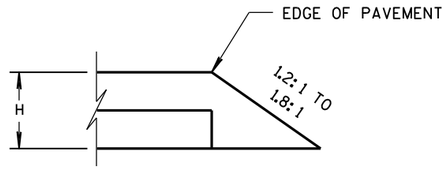
/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA



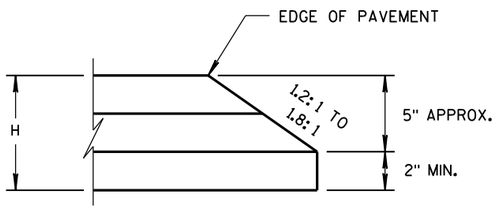
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



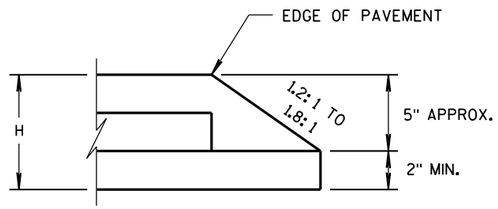
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

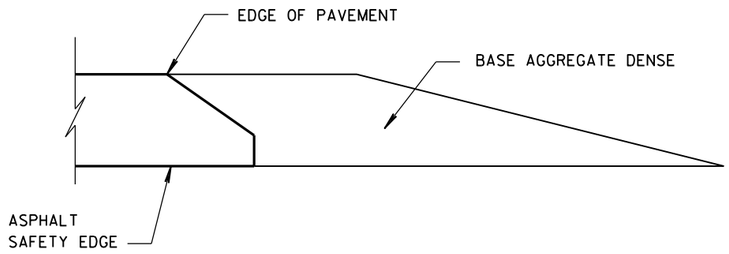
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

6

6

S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

SAFETY EDGE SM

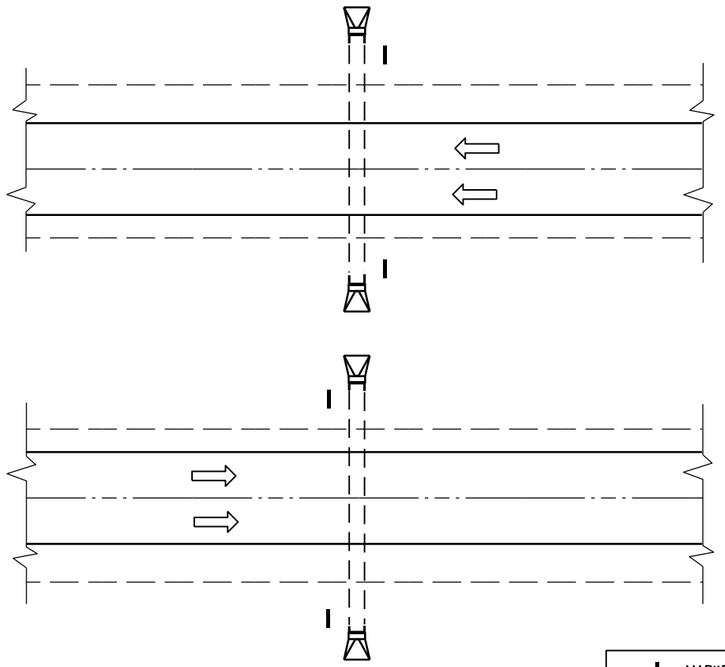
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/2012
DATE

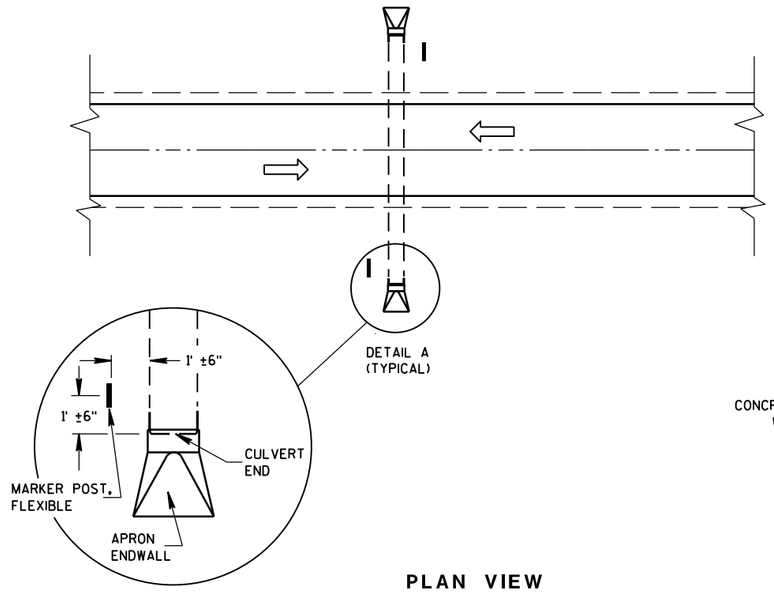
/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

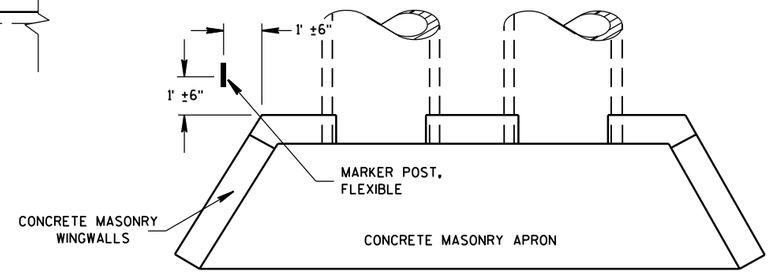
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

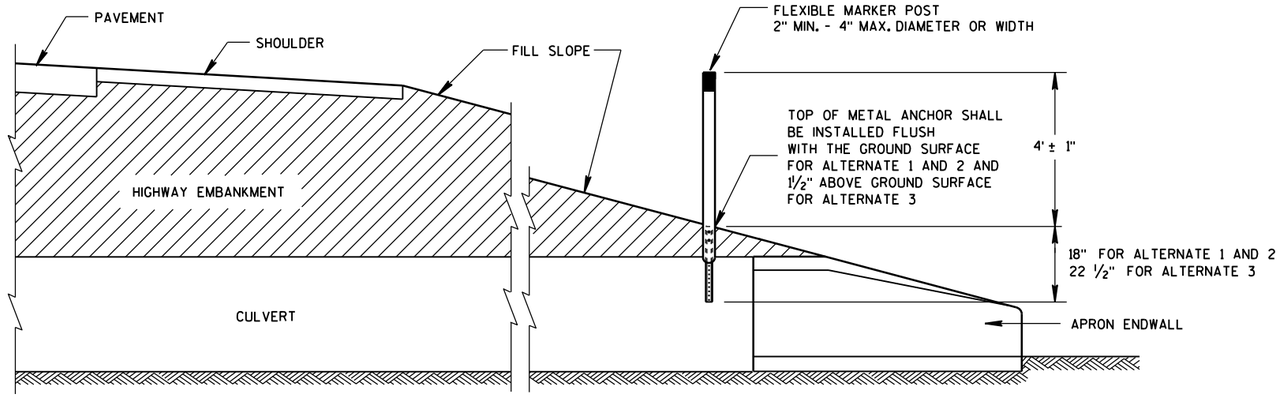
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



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

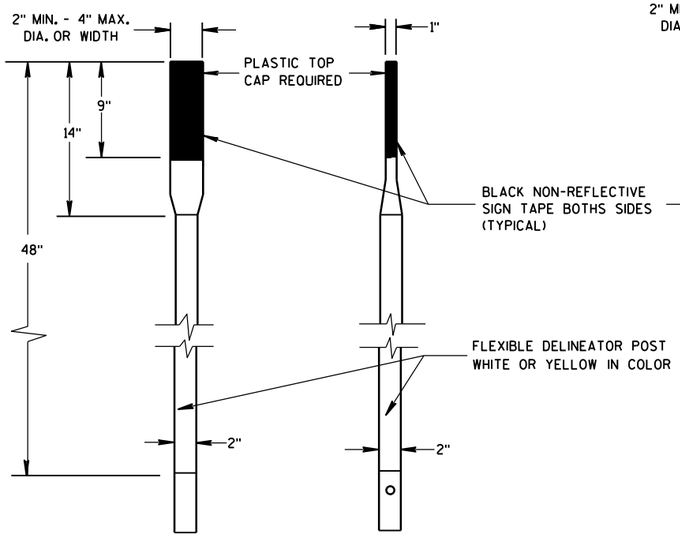
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

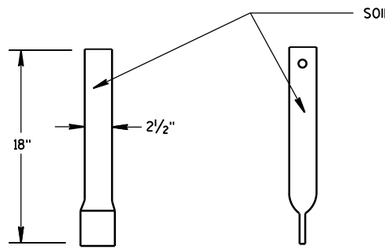
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S.D.D. 15 A 3-2a

6

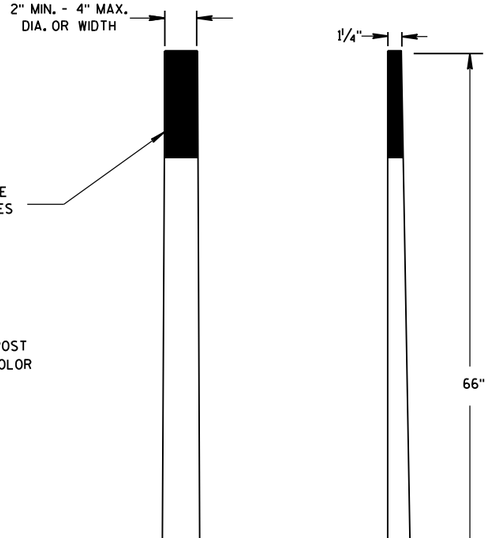
S.D.D. 15 A 3-2a





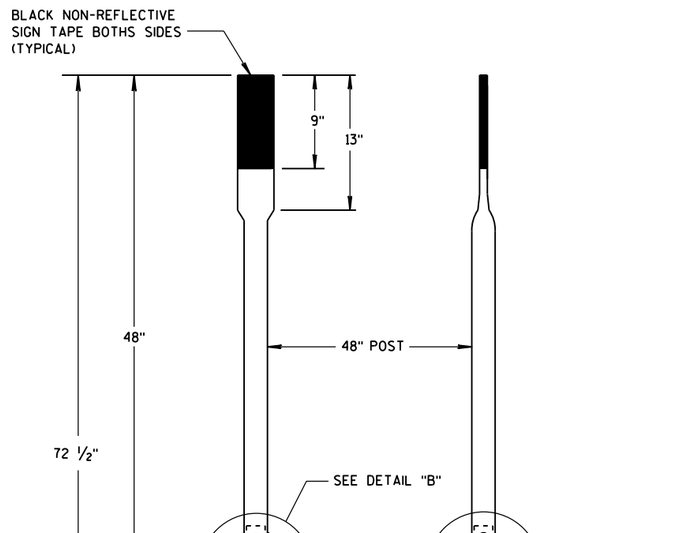
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

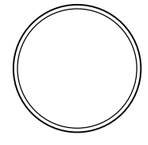
ALTERNATE 2



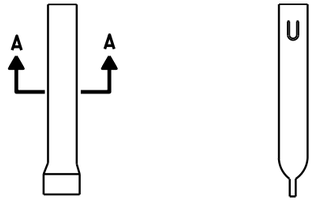
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POSTS

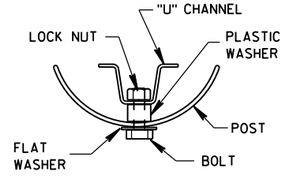


SECTION A-A

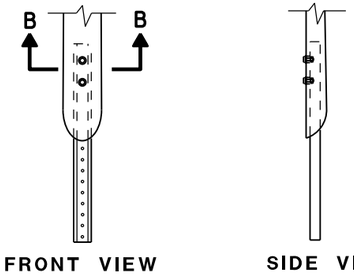


FRONT VIEW SIDE VIEW

ALTERNATE 1

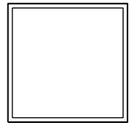


SECTION B-B

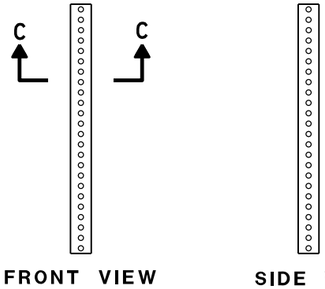


FRONT VIEW SIDE VIEW

ALTERNATE 2



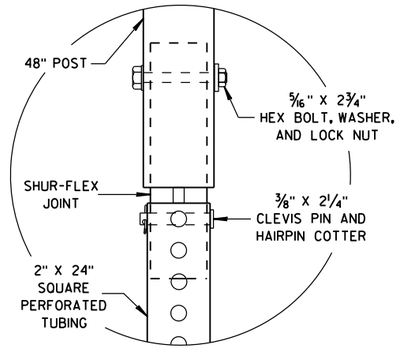
SECTION C-C



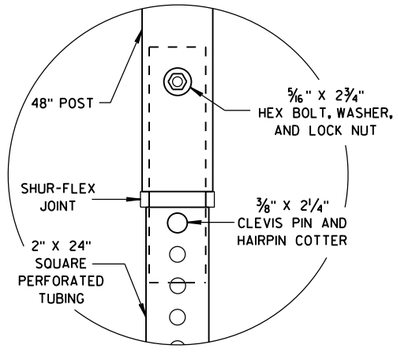
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

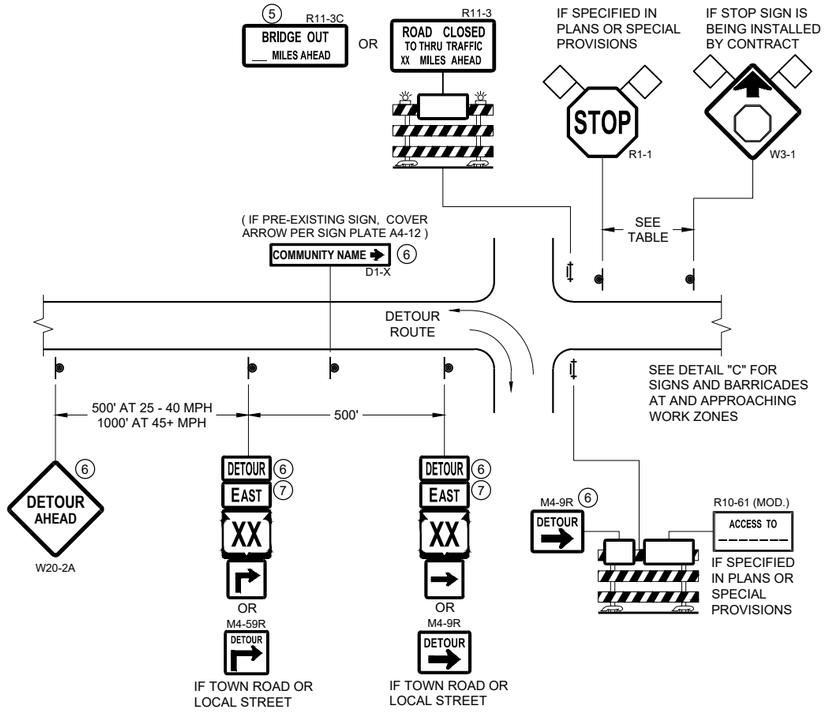
APPROVED
10/1/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

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

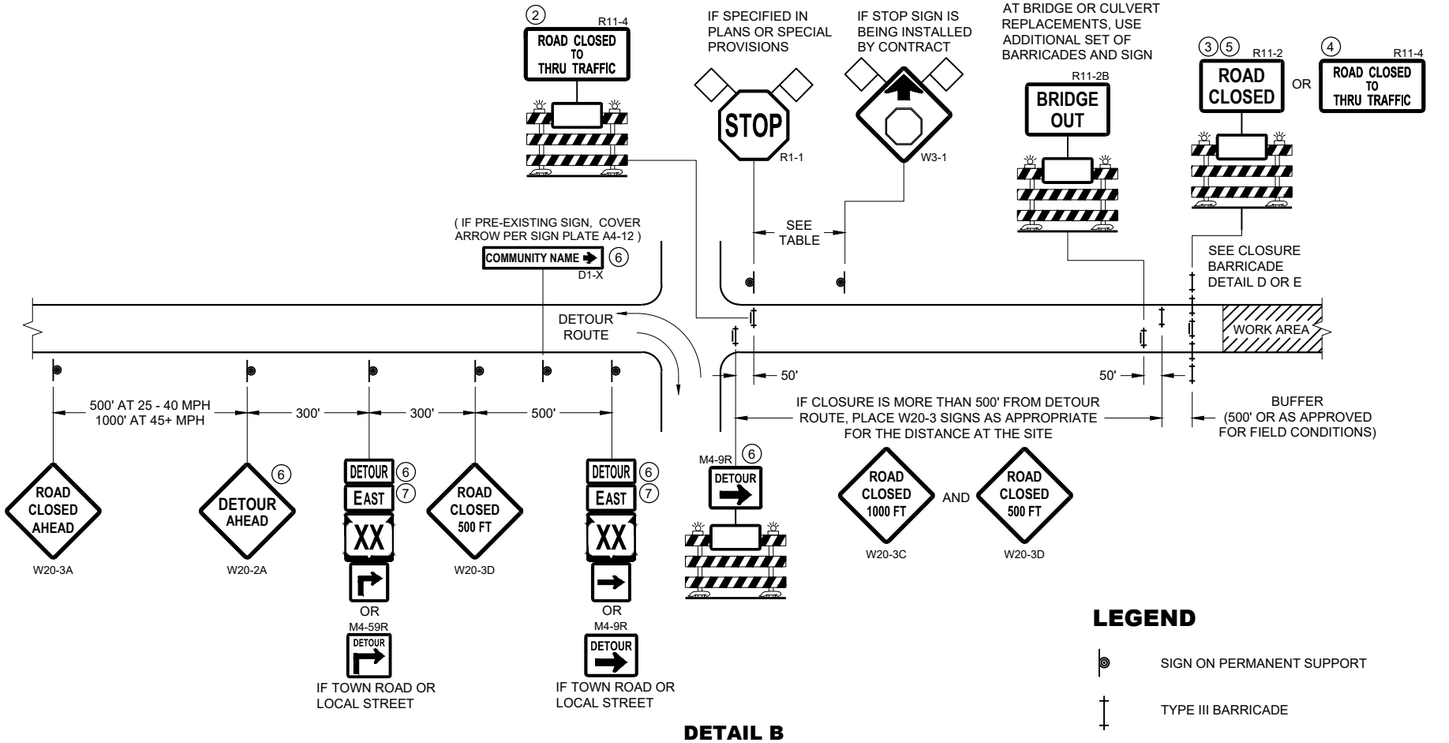
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S.D.D. 15 A 3-2b



DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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



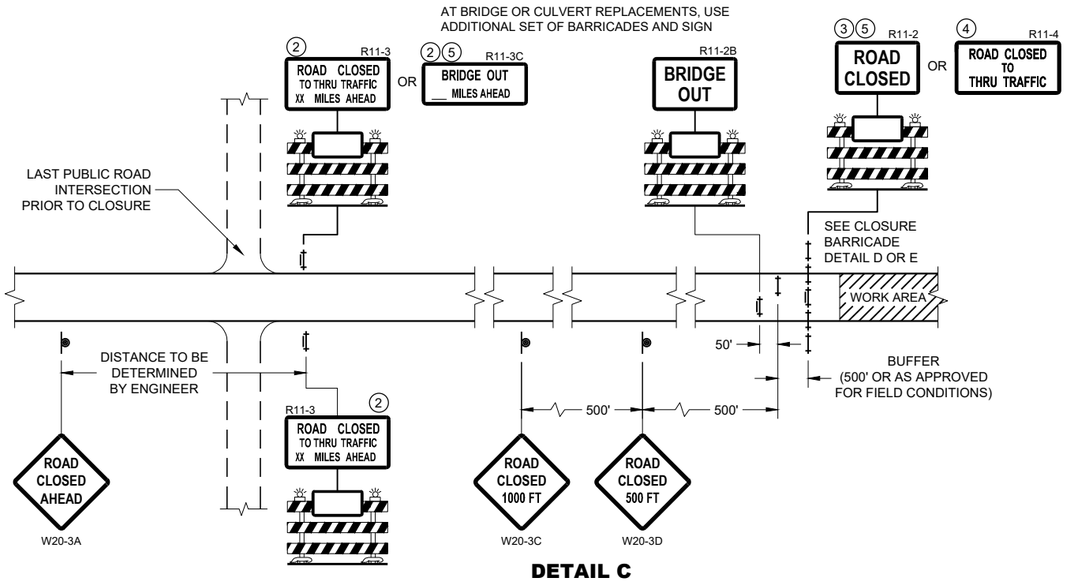
DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

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

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



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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

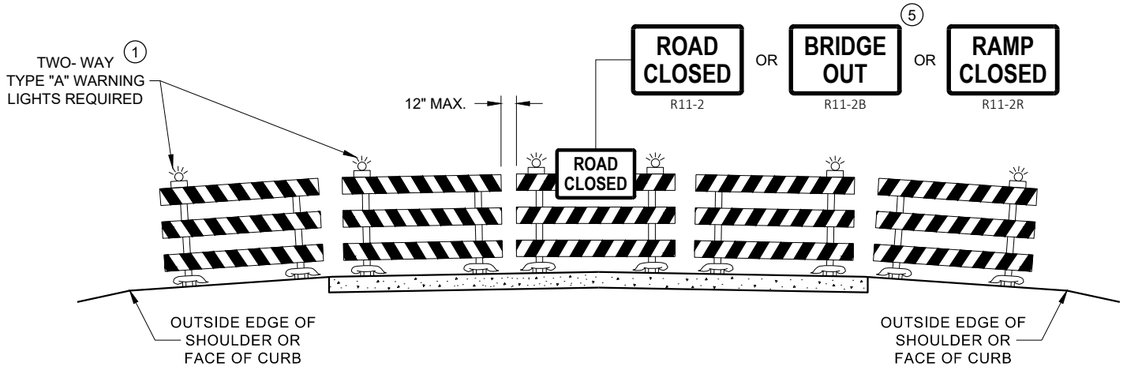
FHWA

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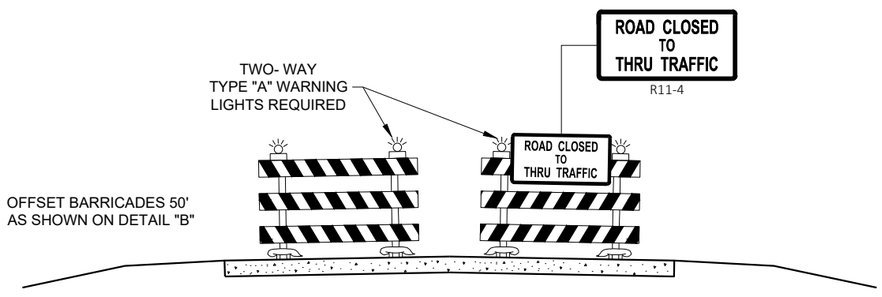
SDD 15C02 - 09a

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DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

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SDD 15C02 - 09b

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

LEGEND

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

GENERAL NOTES

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

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

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

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

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

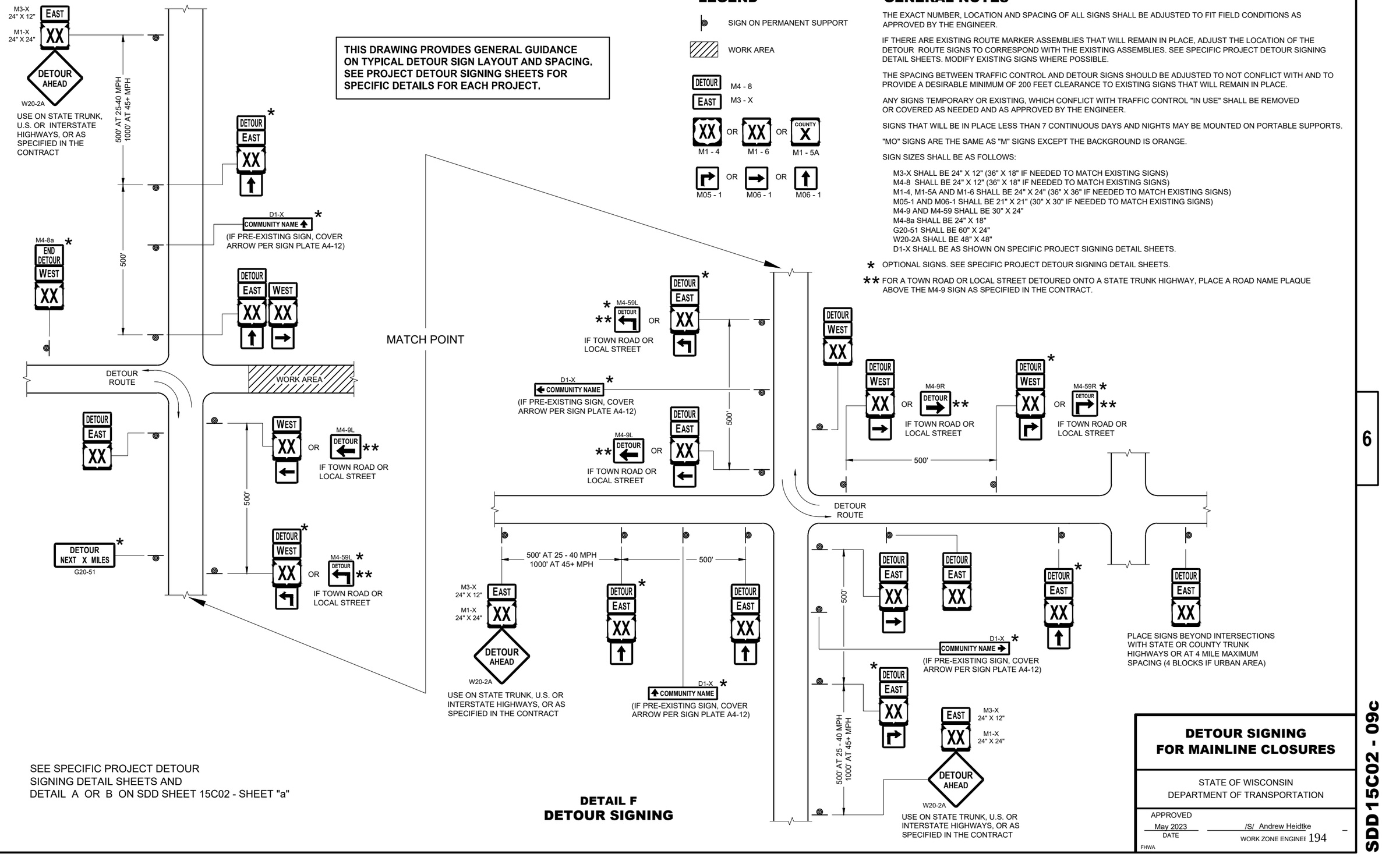
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

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

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

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



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

DETAIL F
DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

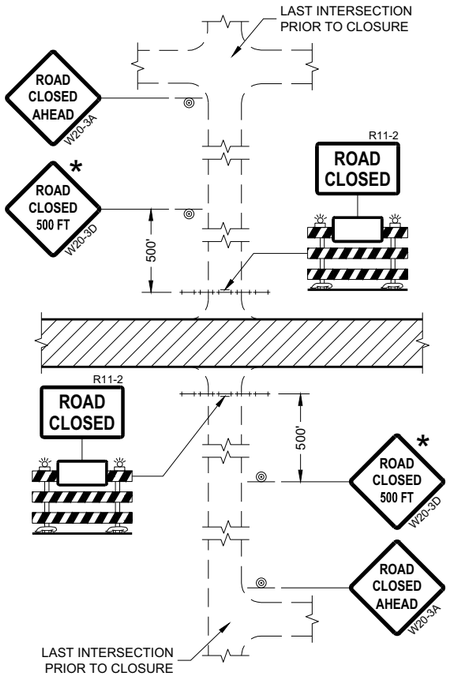
APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

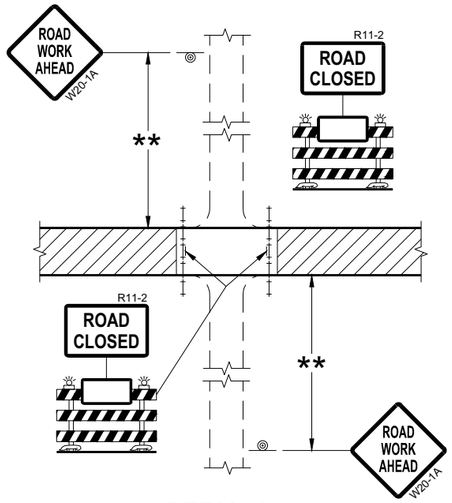
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SDD 15C02 - 09c

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SDD 15C02 - 09c



DETAIL 1
(NO ACCESS TO PROJECT)



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

GENERAL NOTES

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

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

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

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

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

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

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

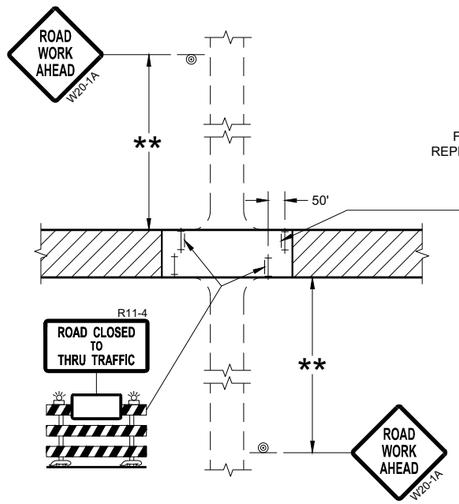
TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

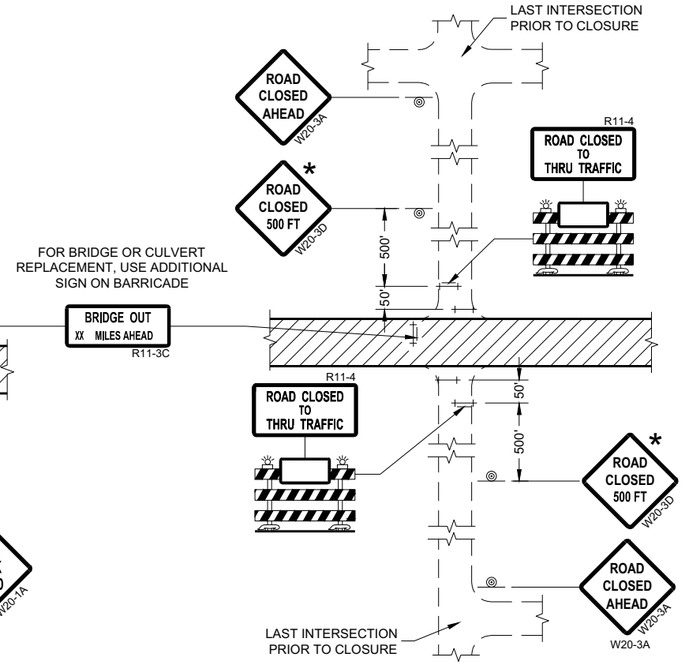
THE R11-2, R11-3, AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

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

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

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





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

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

LEGEND

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

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15C03 - 05

GENERAL NOTES

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

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

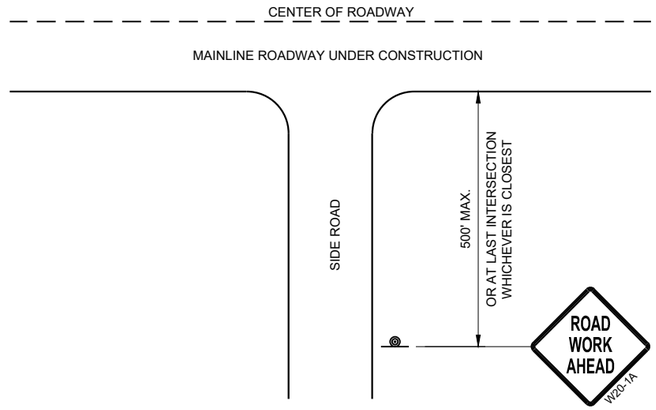
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

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

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

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



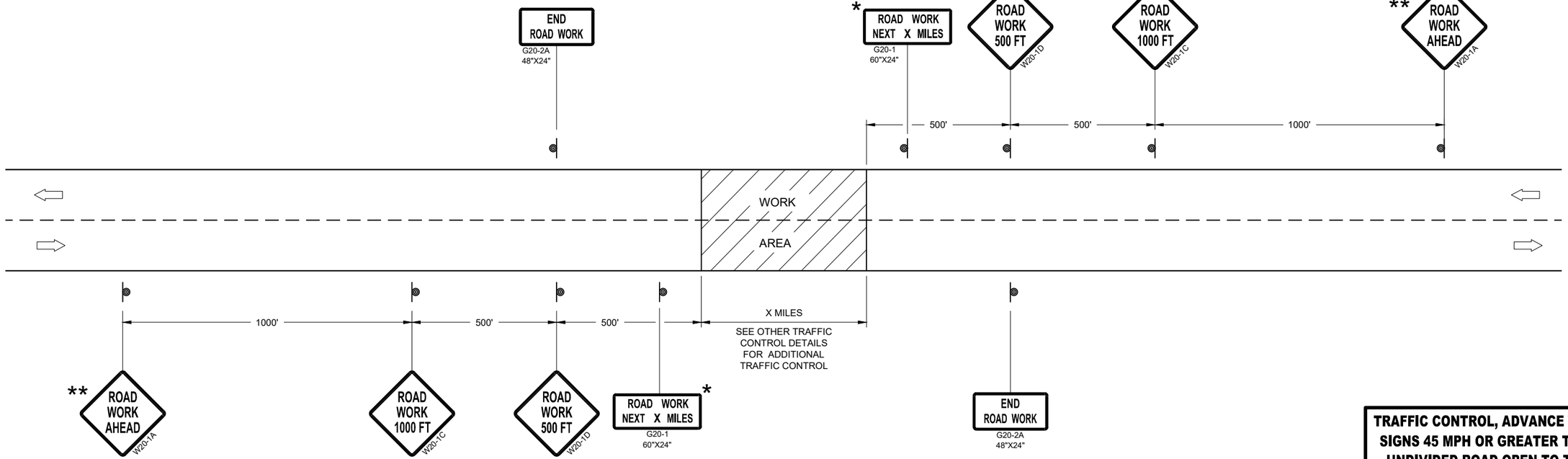
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

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SDD 15C04 - 05

GENERAL NOTES

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

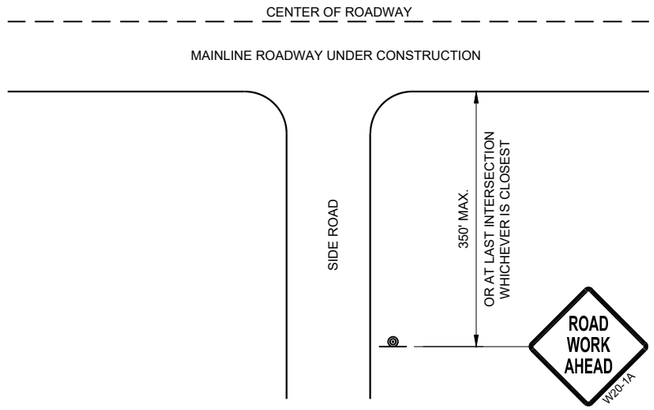
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"X36" SIGNS MAY BE USED INSTEAD OF 48" X 48" SIGNS.

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

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

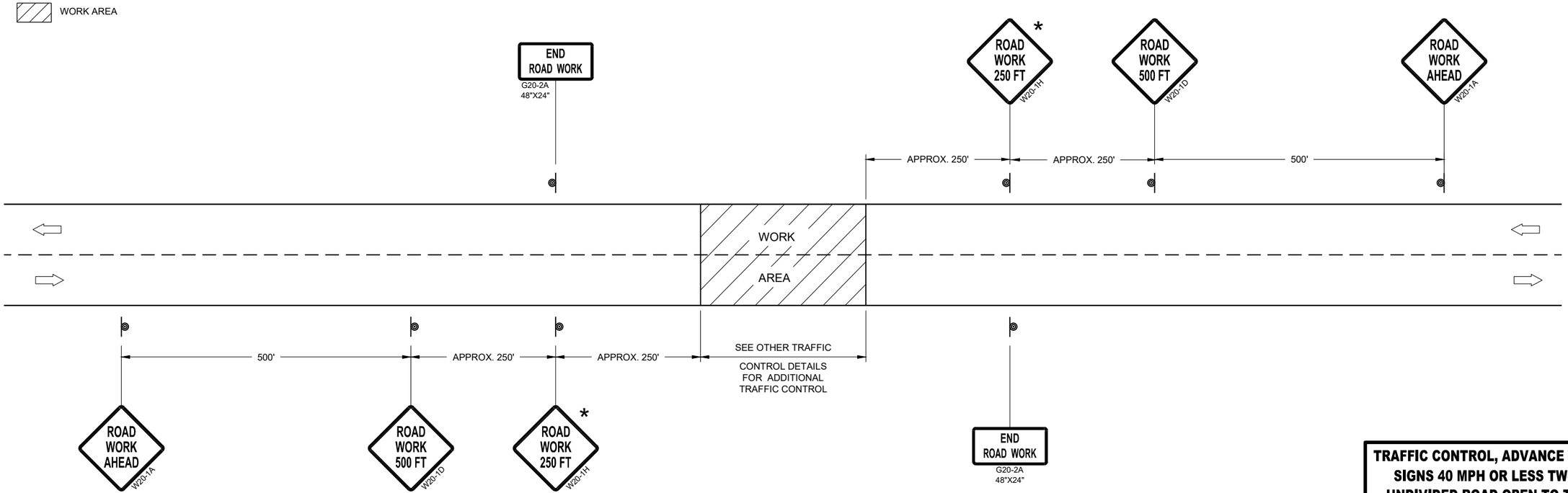
* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FEET" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

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



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40MPH OR LESS

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

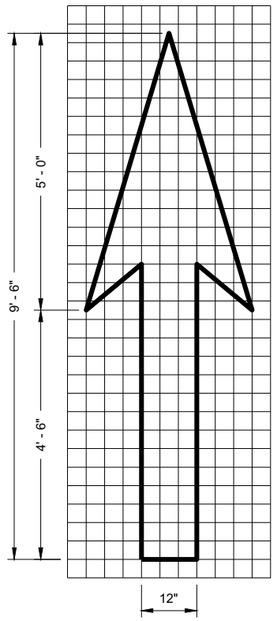
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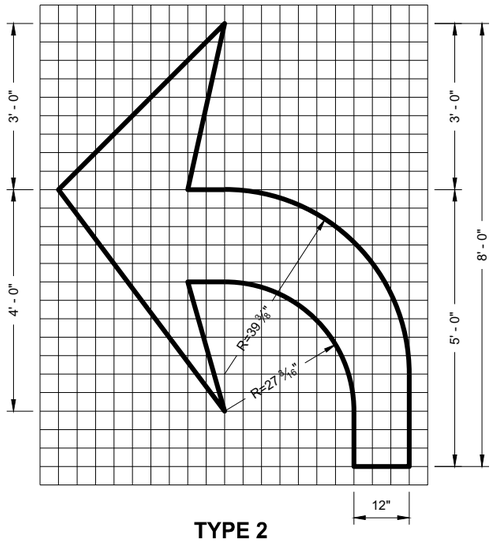
SDD 15C05 - 05

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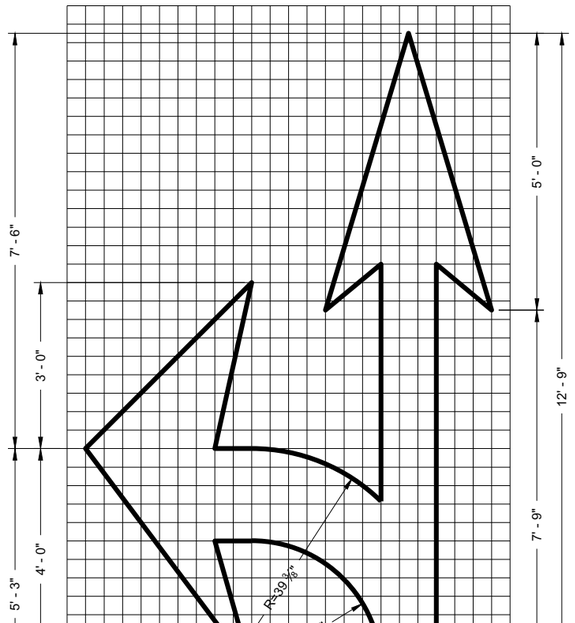
SDD 15C05 - 05



TYPE 1



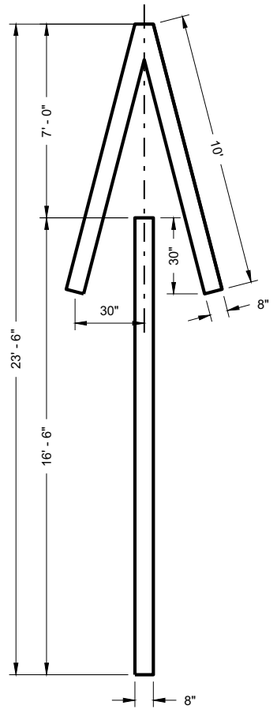
TYPE 2



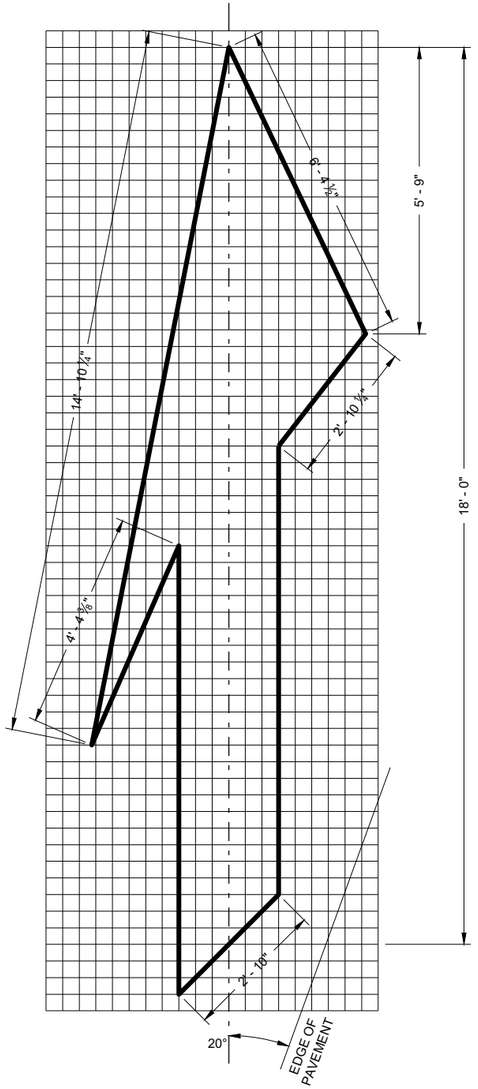
TYPE 3

GENERAL NOTES

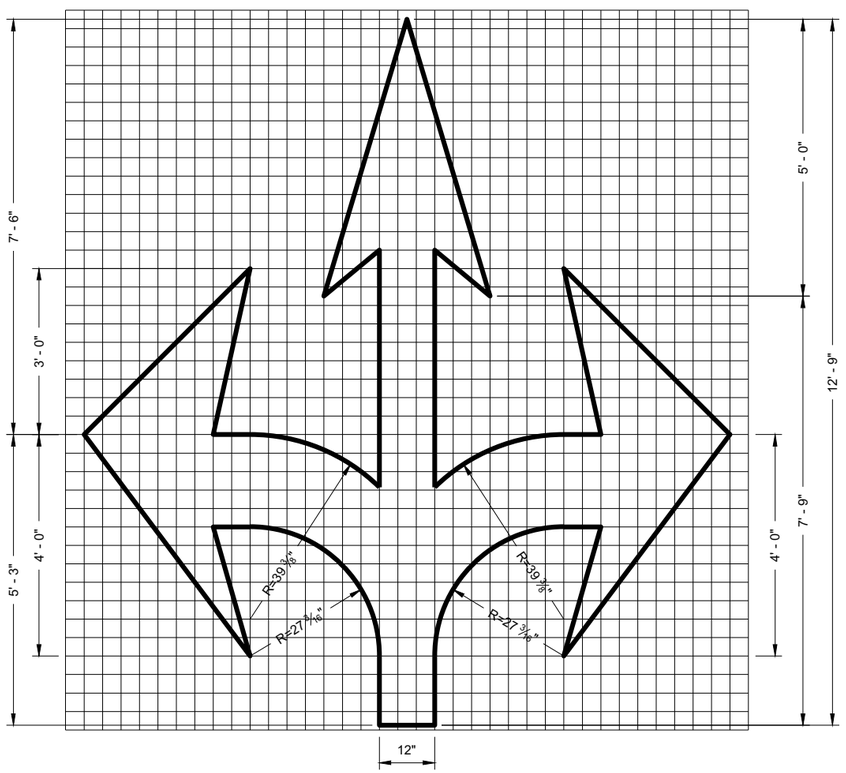
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



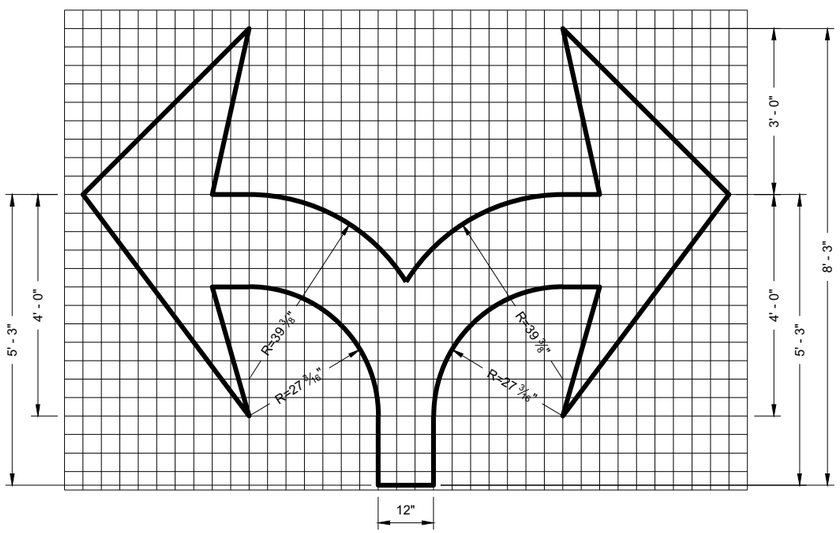
TYPE 4



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

6

SDD 15C07 - 15c

6

SDD 15C07 - 15c

GENERAL NOTES

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

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

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

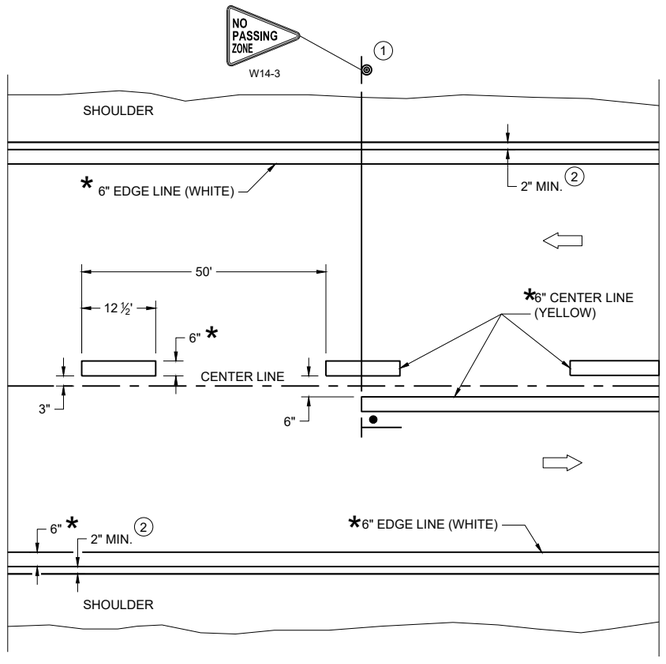
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

LEGEND

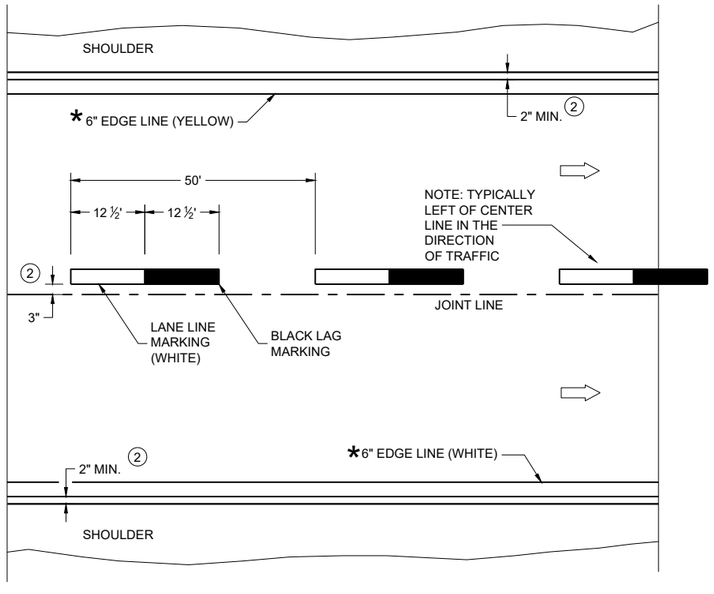
"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

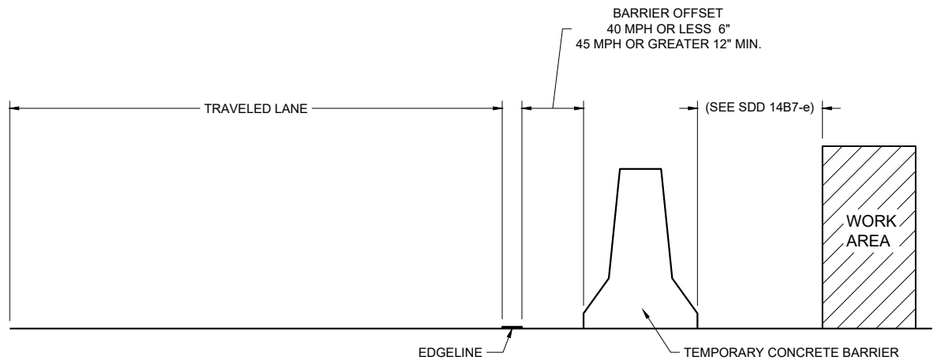
PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

SDD 15C08-23a



TEMPORARY BARRIER OFFSET FROM EDGELINE

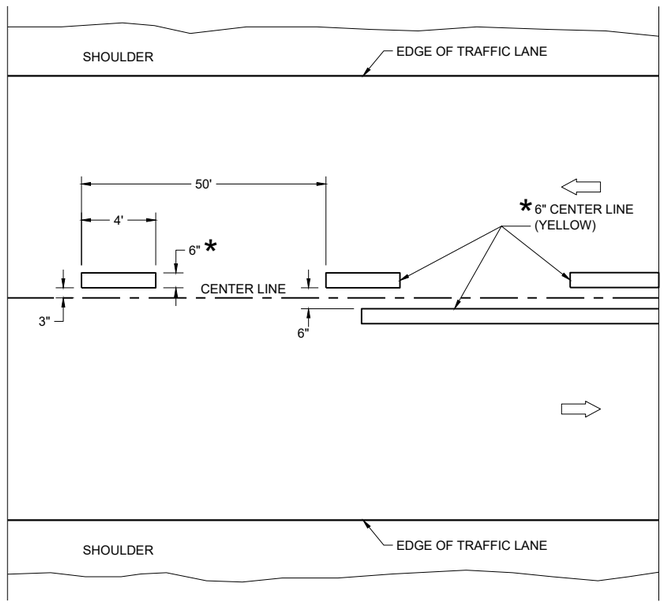
GENERAL NOTES

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

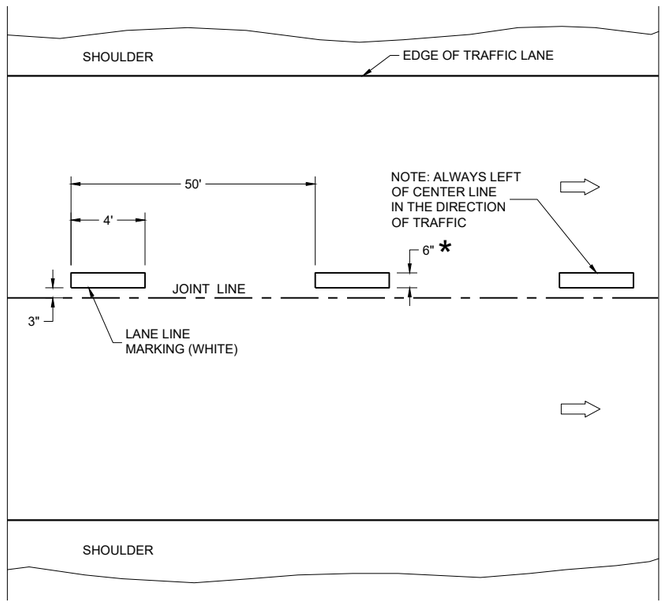
LEGEND

DIRECTION OF TRAFFIC

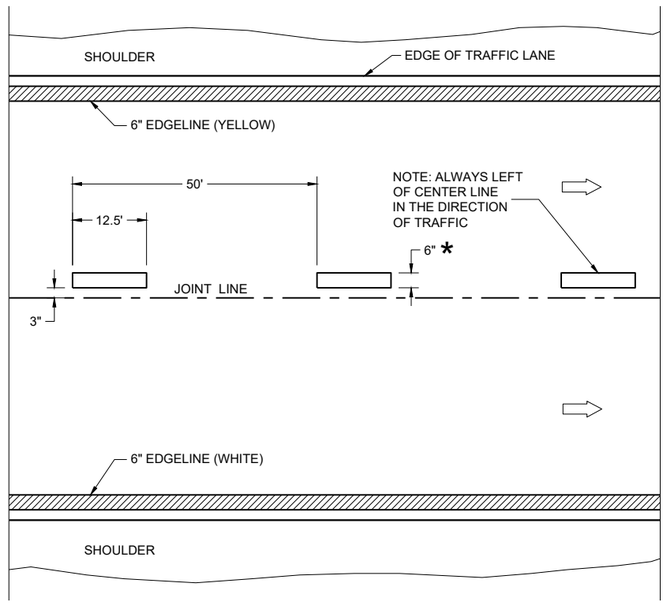
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

TEMPORARY PAVEMENT MARKING

TEMPORARY LONGITUDINAL PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

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SDD 15C08-23b

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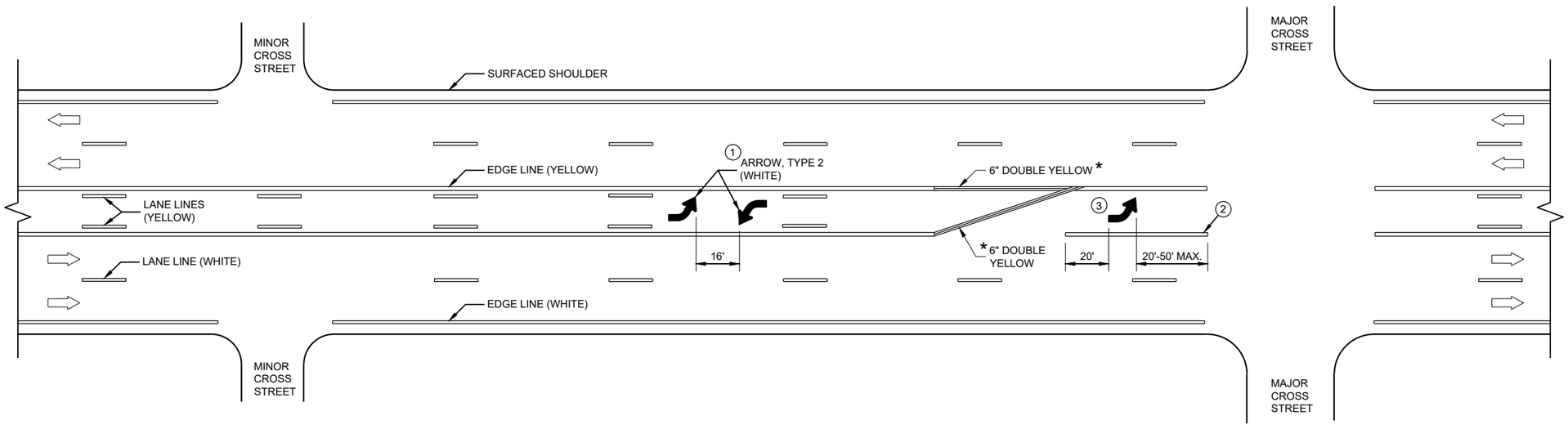
SDD 15C08-23b

GENERAL NOTES

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

DIRECTION OF TRAFFIC

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



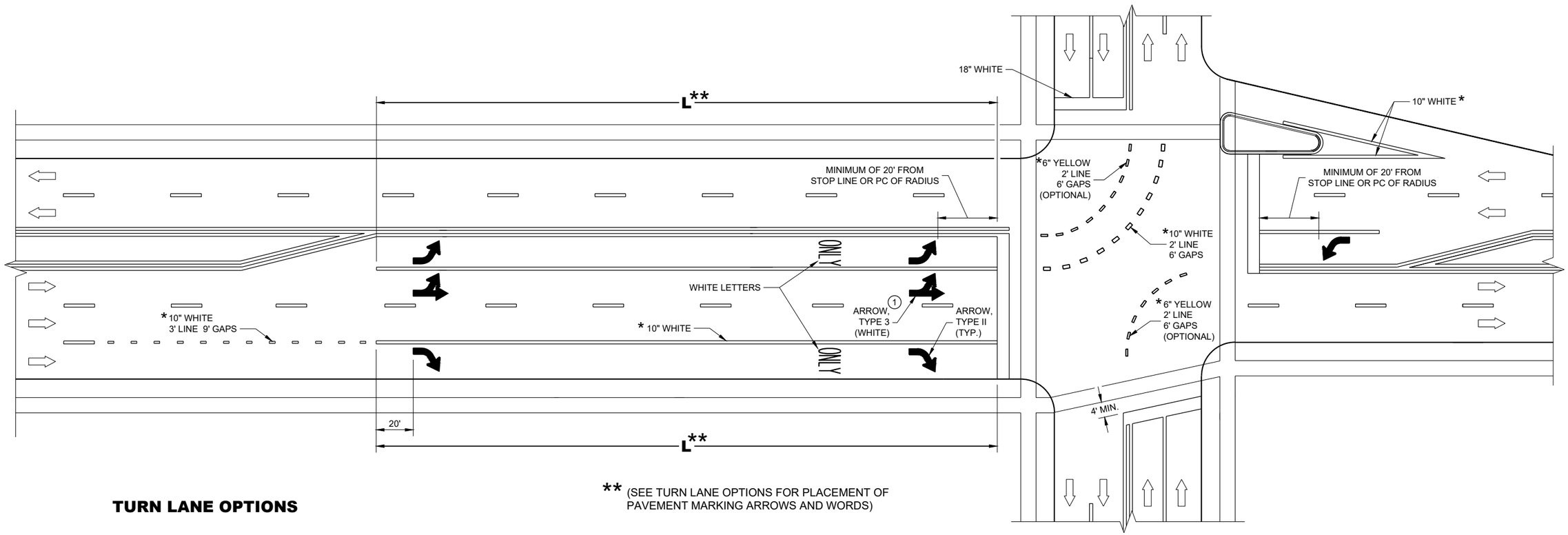
TWO WAY LEFT TURN LANE

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA· 201

SDD 15C08-23c

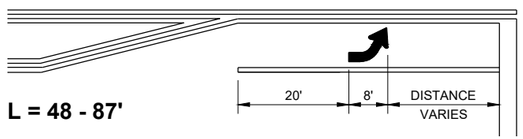
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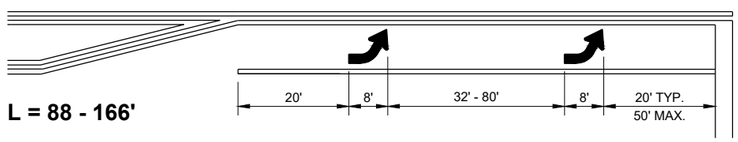
** (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

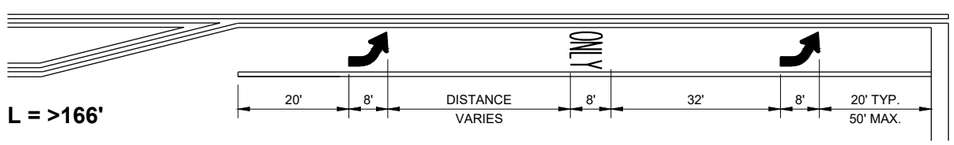
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

GENERAL NOTES

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

DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

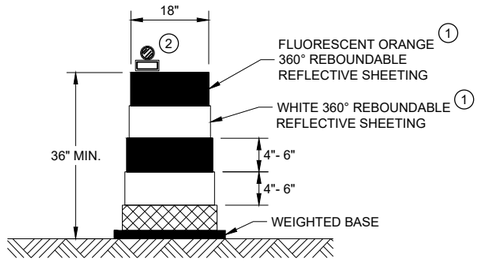
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SDD 15C08-23d

SDD 15C08-23d

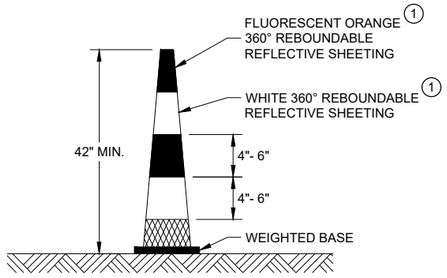
GENERAL NOTES

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



DRUM

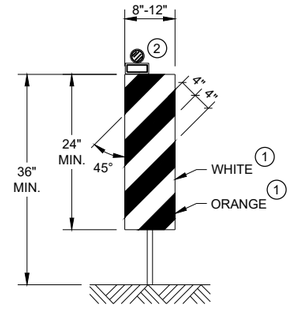
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

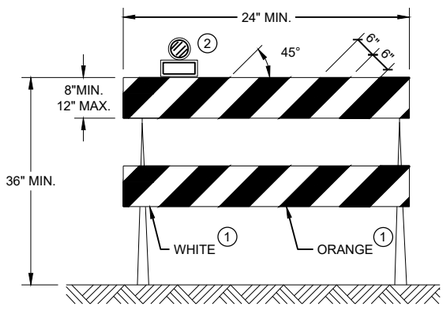
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



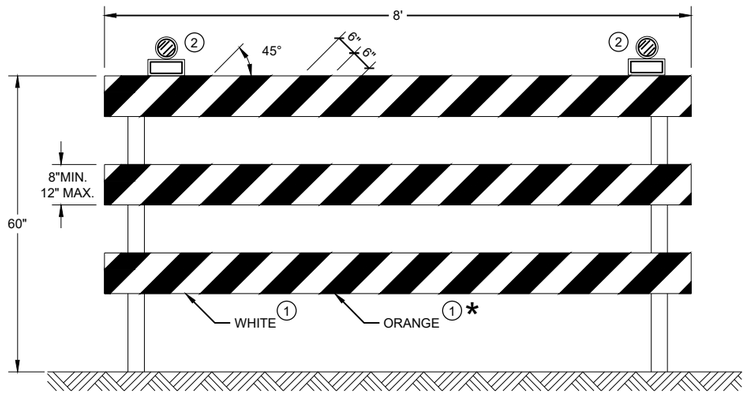
VERTICAL PANEL

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



TYPE II BARRICADE

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



TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C11 - 10b

6

SDD 15C11 - 10b

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

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

GENERAL NOTES

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

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

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

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

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

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

FLAGGING

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

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

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

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

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

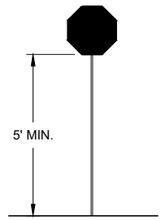
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

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

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

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



STOP/SLOW PADDLE ON SUPPORT STAFF

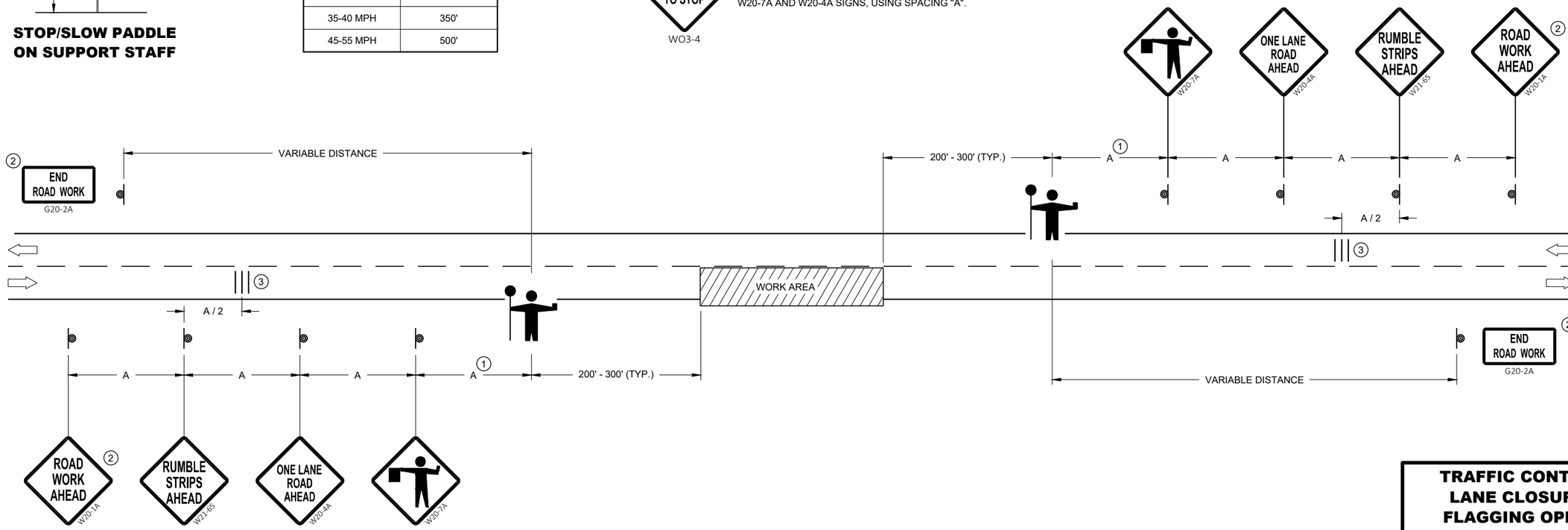
SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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



WO3-4

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



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C12 - 09a

6

SDD 15C12 - 09a

GENERAL NOTES

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL CONE 42-INCH

TRAFFIC CONTROL DRUM

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

AFAD — AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD)

GENERAL NOTES

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

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

"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

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

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

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

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

TEMPORARY PORTABLE RUMBLE STRIPS

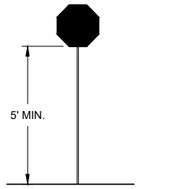
UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

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

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

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

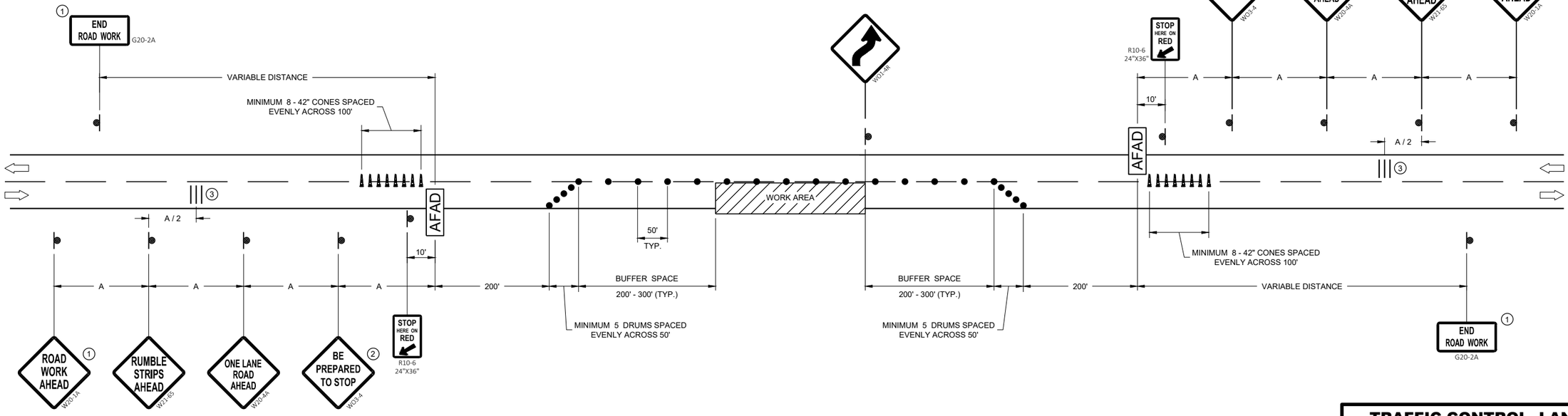
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSELY AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER.



STOP/SLOW PADDLE ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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



TRAFFIC CONTROL, LANE CLOSURE WITH AUTOMATED FLAGGER ASSISTANCE DEVICE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

SDD 15C12 - 09b

SDD 15C12 - 09b

LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

GENERAL NOTES

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

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

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

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

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

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

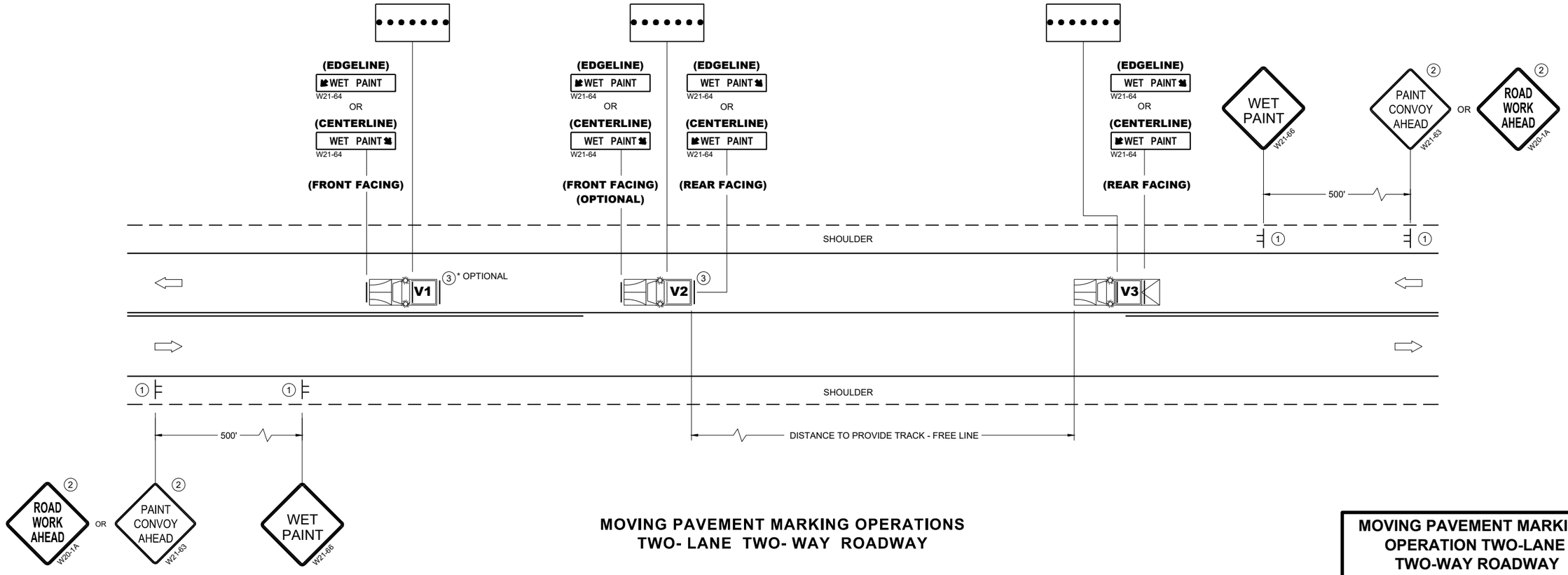
CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

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

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

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

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



MOVING PAVEMENT MARKING OPERATIONS TWO- LANE TWO- WAY ROADWAY

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

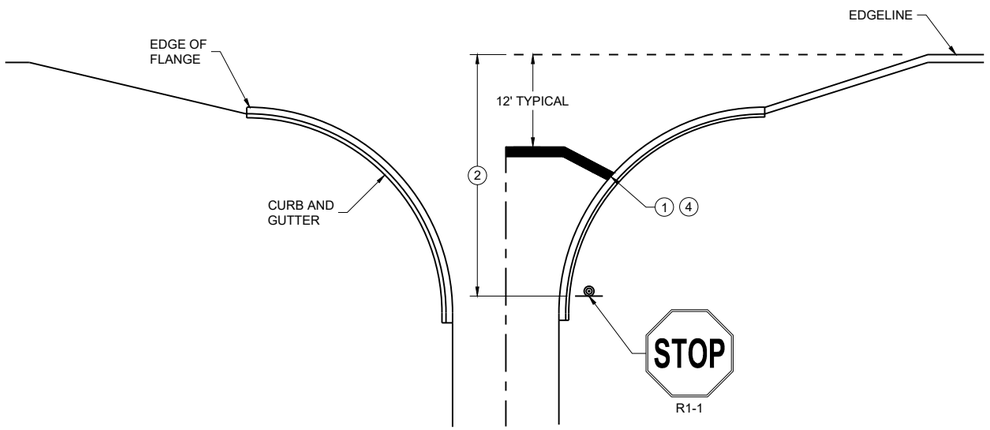
APPROVED
March 2024 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

6
SDD 15C19-9a

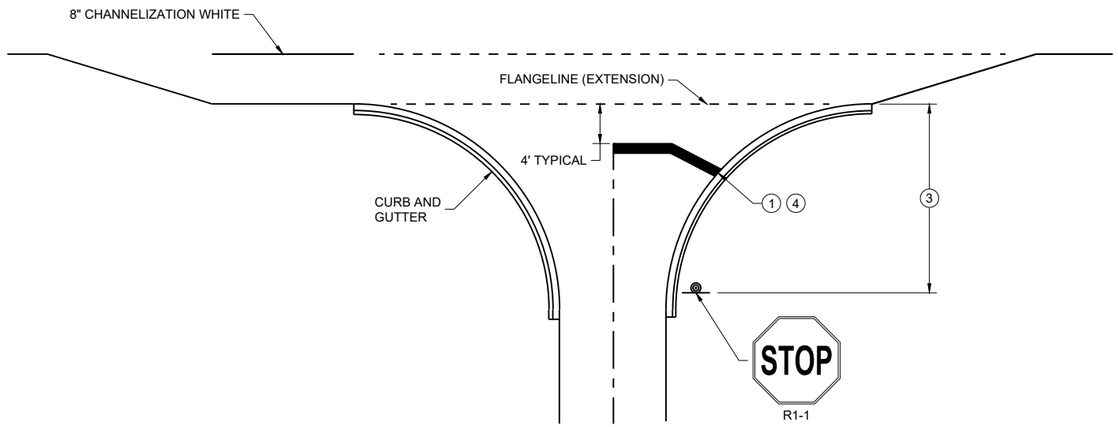
GENERAL NOTES

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

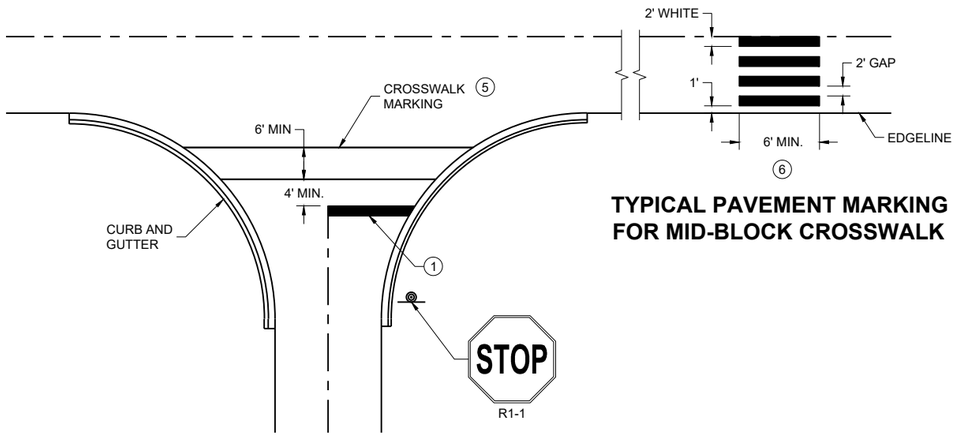
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGE LINE EXTENSION.
4. MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
5. LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES.
6. POSTED SPEED LIMITS OF 40 MPH OR GREATER USE A MINIMUM WIDTH OF 8' FOR MIDBLOCK CROSSWALKS



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

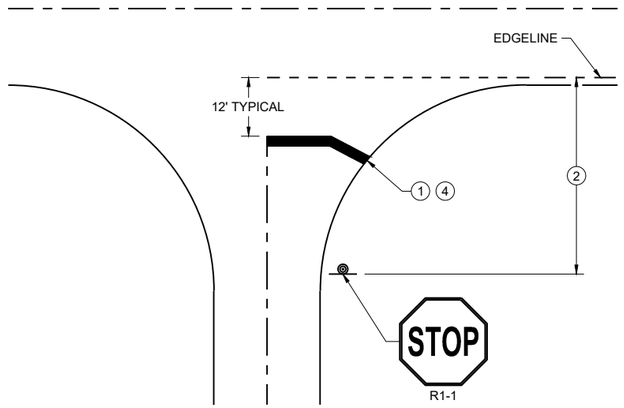


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDE ROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK (5)

TYPICAL STOP LINE PAVEMENT MARKING FOR SIDE ROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2024 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER

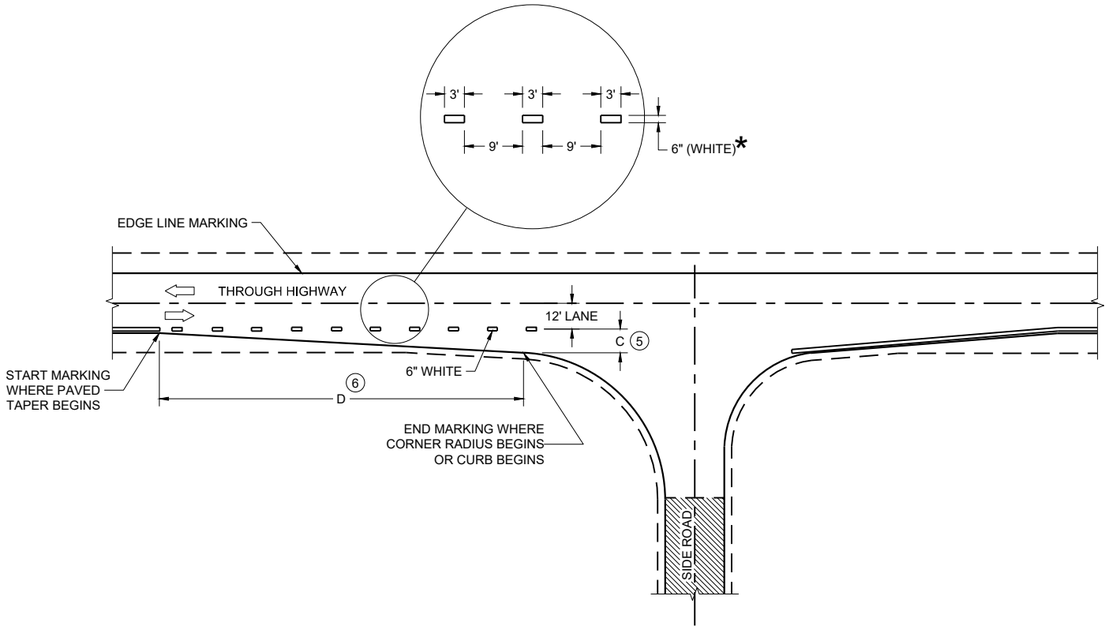
FHWA

6

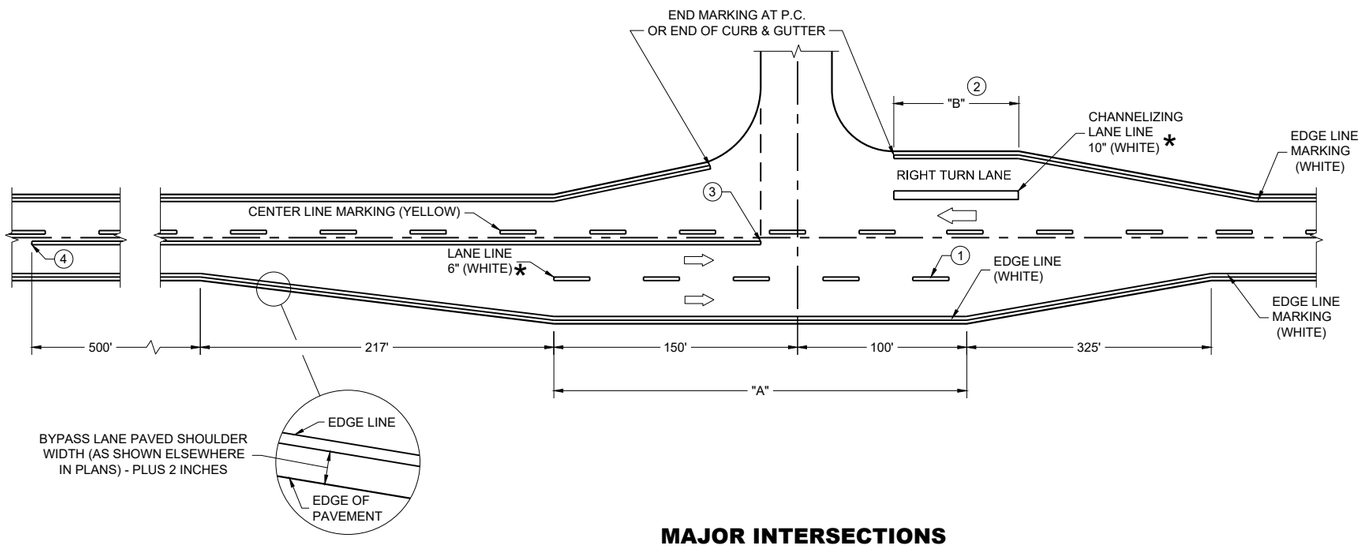
SDD 15C33-05

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SDD 15C33-05



MINOR INTERSECTION



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

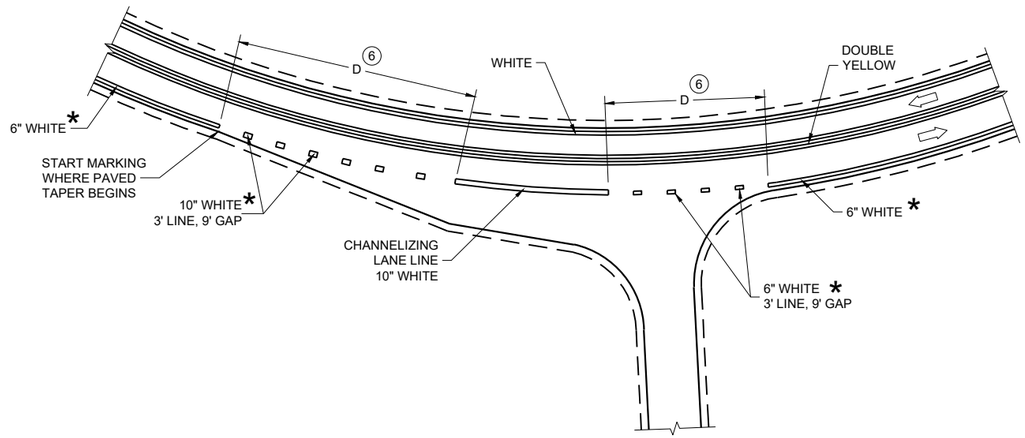
GENERAL NOTES

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

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

LEGEND

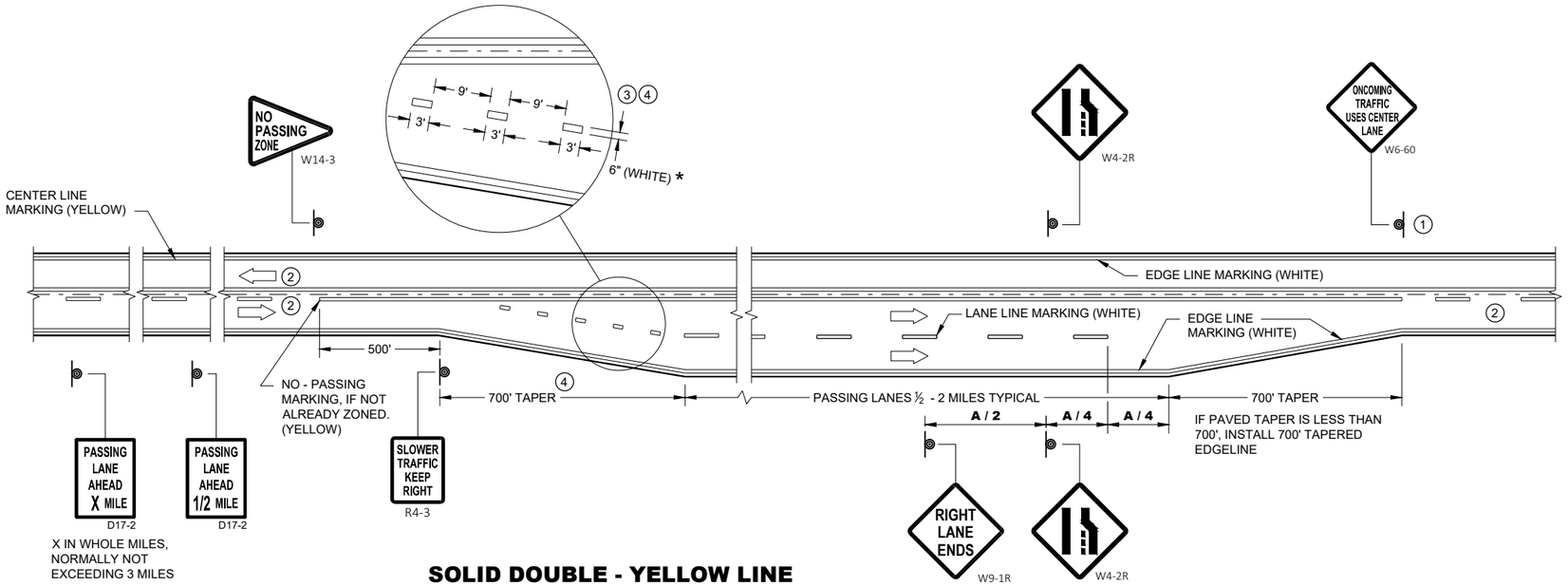
DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE

PAVEMENT MARKING (INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



X IN WHOLE MILES, NORMALLY NOT EXCEEDING 3 MILES

SOLID DOUBLE - YELLOW LINE
(THROUGHOUT ENTIRE PASSING / CLIMBING LANE)

GENERAL NOTES

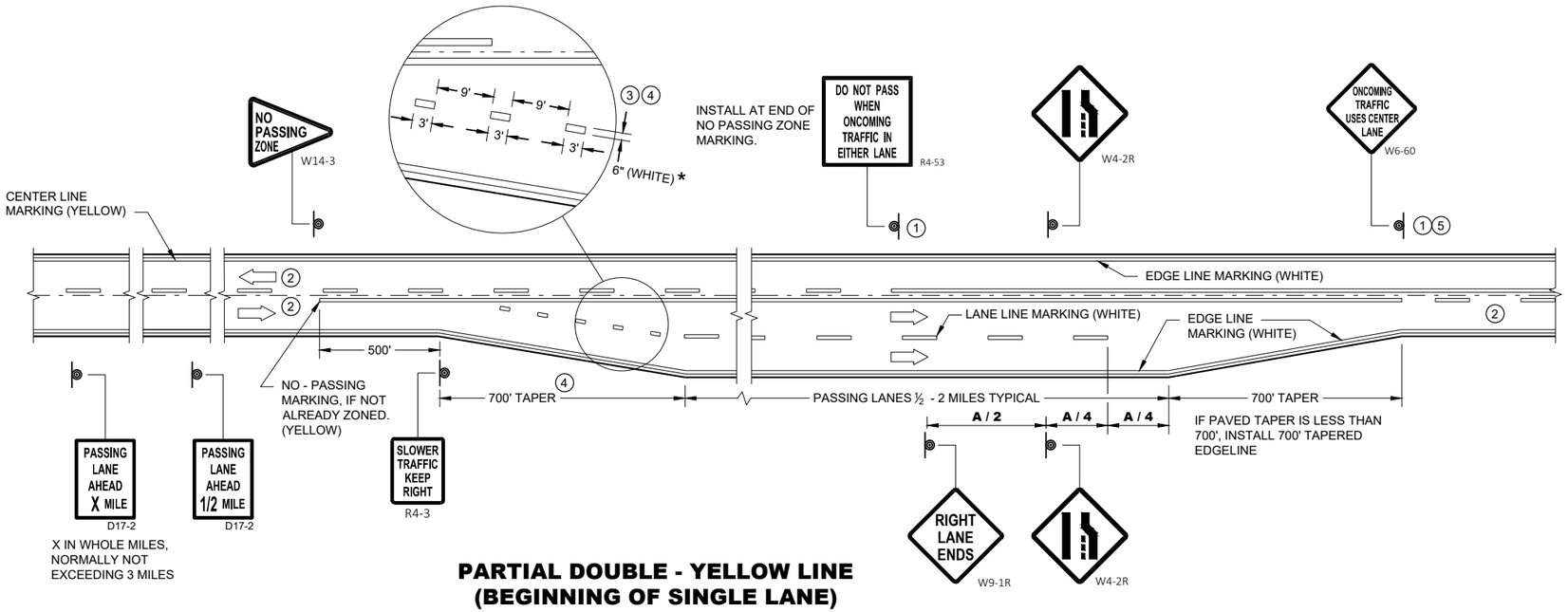
1. SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
2. THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
3. THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE, 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
4. WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING / CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.
5. REPEAT EVERY 1 MILE UP UNTIL R4-53.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	775
50	885
55	990

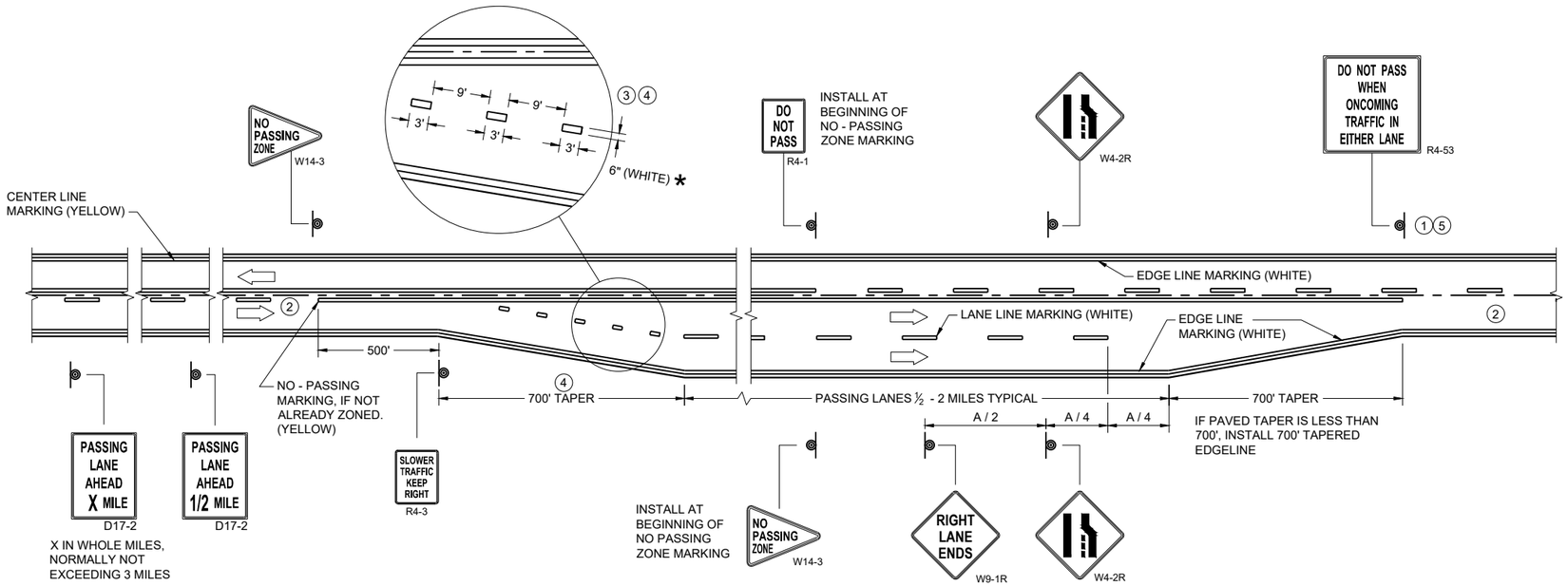
* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



X IN WHOLE MILES, NORMALLY NOT EXCEEDING 3 MILES

PARTIAL DOUBLE - YELLOW LINE
(BEGINNING OF SINGLE LANE)

PAVEMENT MARKING & SIGNING (CLIMBING LANE & PASSING LANE)



SOLID DOUBLE - YELLOW LINE
(END OF SINGLE LANE)

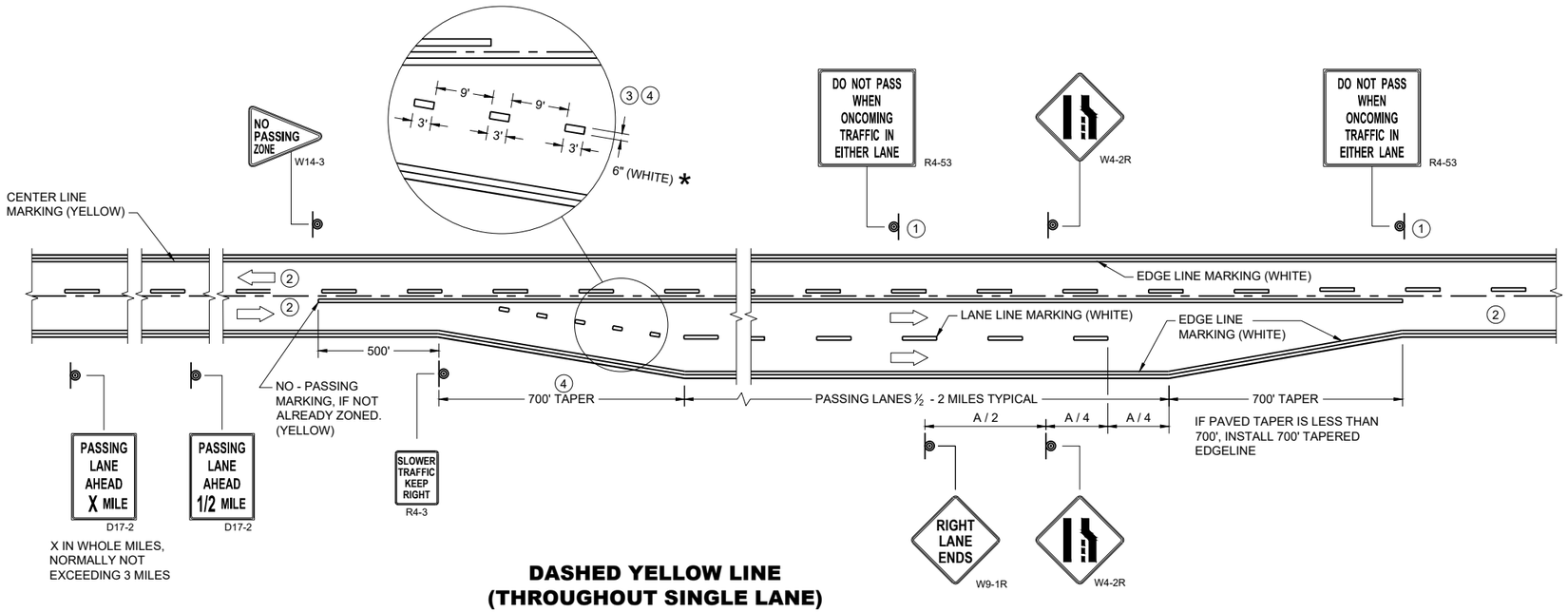
GENERAL NOTES

1. SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
2. THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
3. THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE, 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
4. WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING / CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.
5. REPEAT EVERY ONE MILE UP UNTIL NO PASSING ZONE.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	775
50	885
55	990



DASHED YELLOW LINE
(THROUGHOUT SINGLE LANE)

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

PAVEMENT MARKING & SIGNING (CLIMBING LANE & PASSING LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

6

SDD 15C35-06c

SDD 15C35-06c

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

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

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

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

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

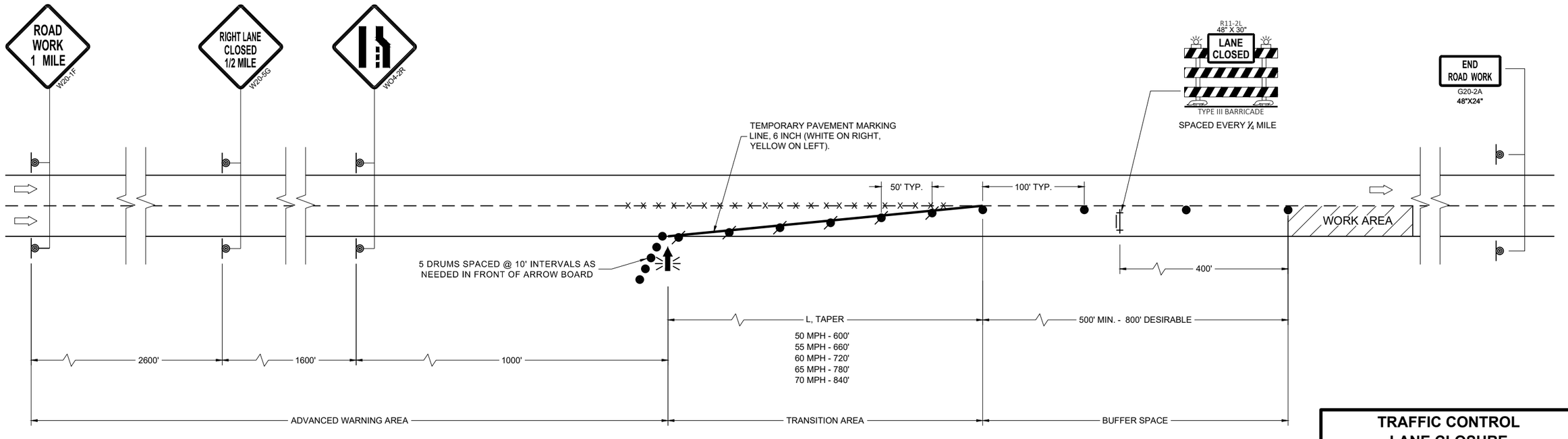
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- FLASHING ARROW BOARD



TRAFFIC CONTROL LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2024
DATE

/S/ Andrew Heidtke
Work Zone Engineer

FHWA

6

SDD 15D12-13a

6

SDD 15D12-13a

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- WORK AREA

GENERAL NOTES

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

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 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. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON TEMPORARY SUPPORTS.

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

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

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

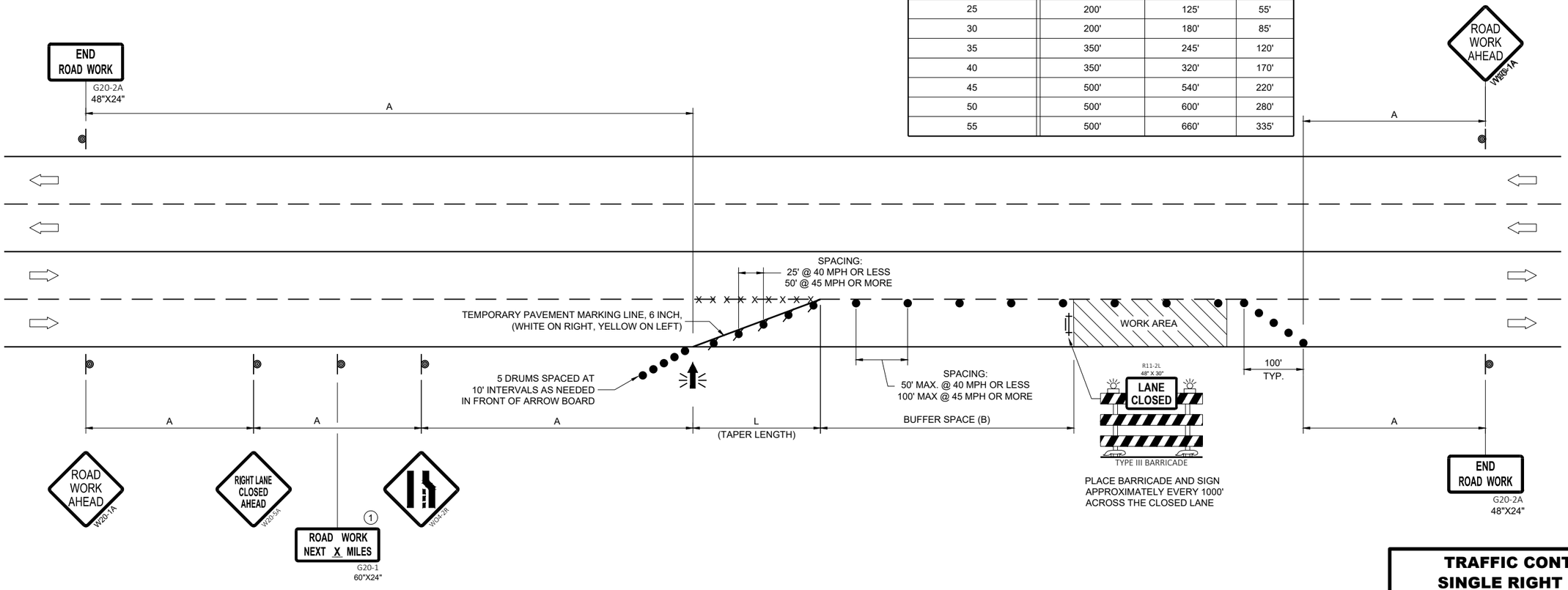
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

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

(1) OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'
50	500'	600'	280'
55	500'	660'	335'



TRAFFIC CONTROL, SINGLE RIGHT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

March 2024
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D20-08b

6

SDD 15D20-08b

LEGEND

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

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

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

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

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

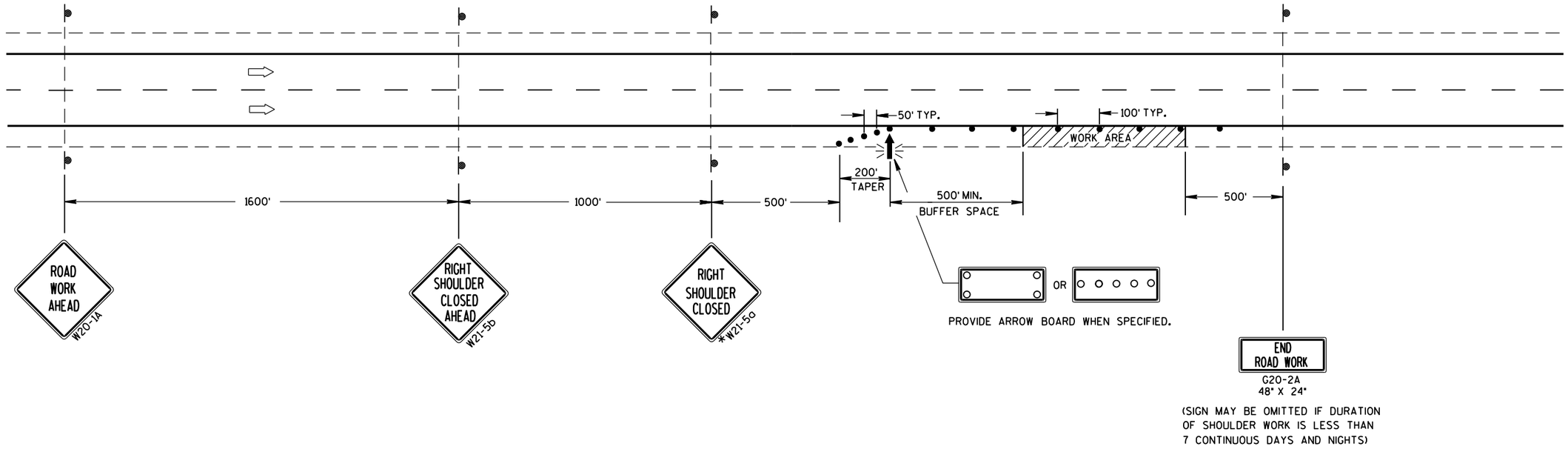
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

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

WHEN A 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.

*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.



TRAFFIC CONTROL SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2016 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible] SAFETY ENGI[illegible]

FHWA

6

S.D.D. 15 D 27-3

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.

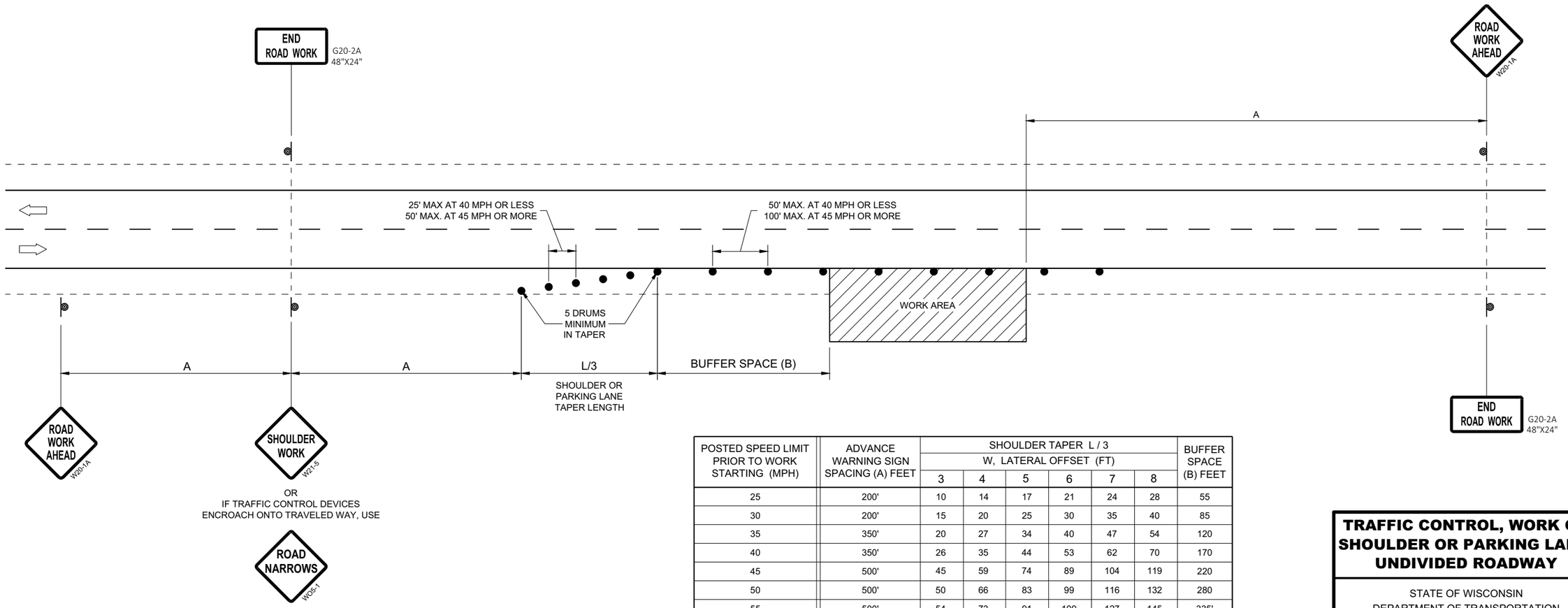
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

GENERAL NOTES

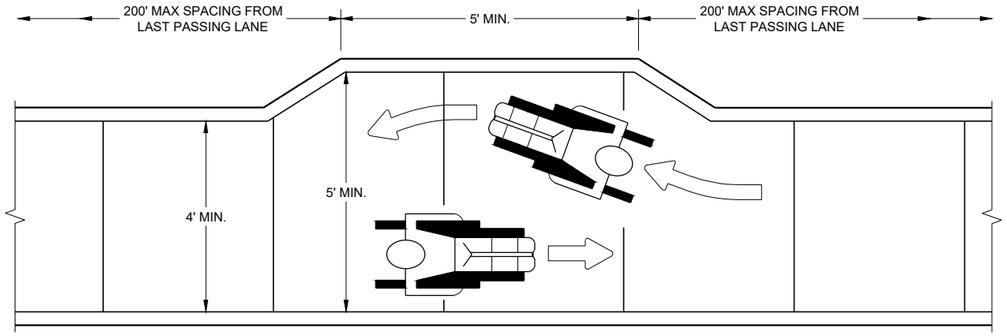
BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

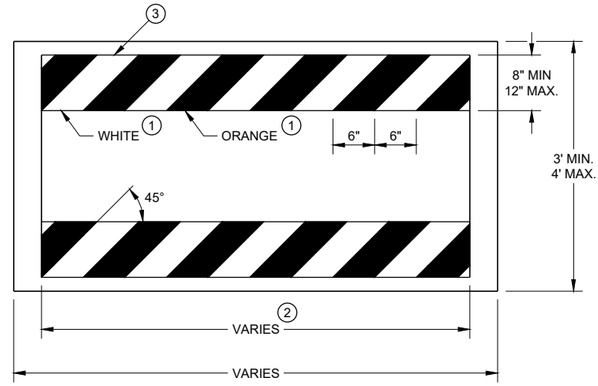
(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

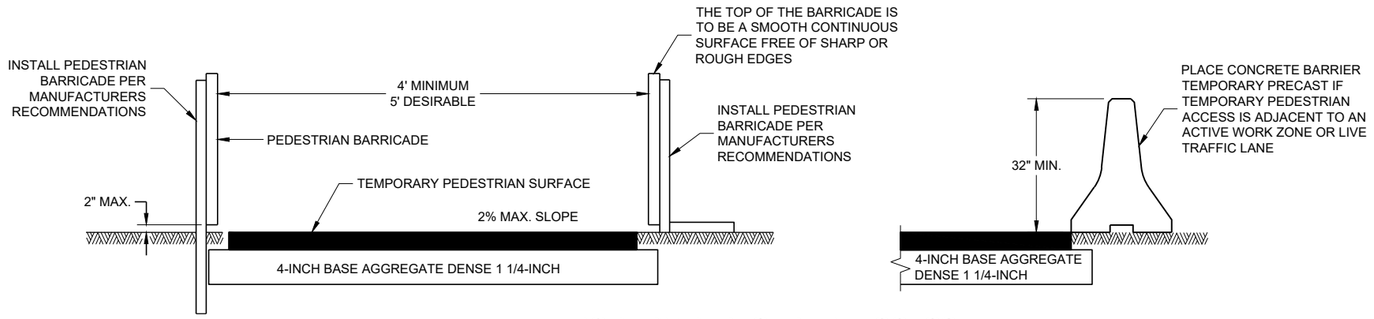
* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.



NARROW SIDEWALK PASSING DETAIL



TEMPORARY PEDESTRIAN BARRICADE*



TEMPORARY PEDESTRIAN ACCESS

6

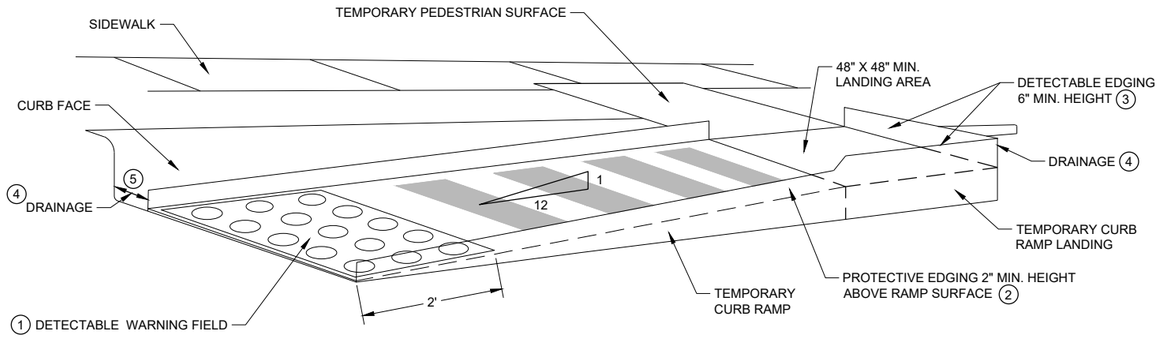
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SDD 15D30 - 09a

SDD 15D30 - 09a

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



PERSPECTIVE VIEW

GENERAL NOTES

CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

(1) INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS.

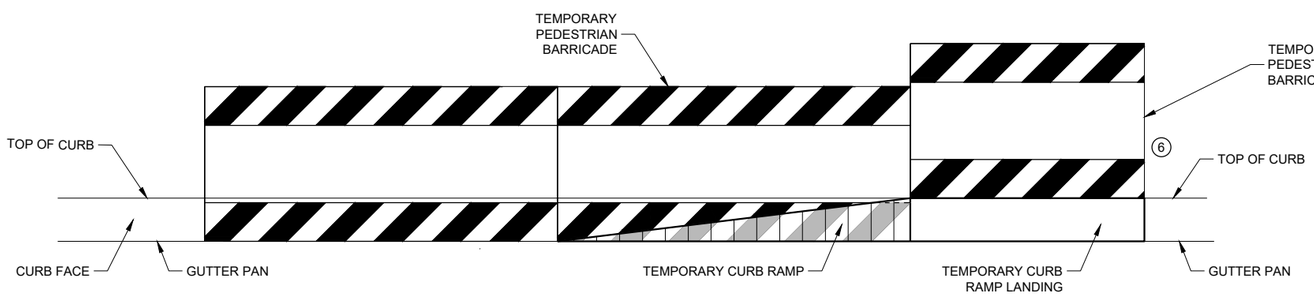
(2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

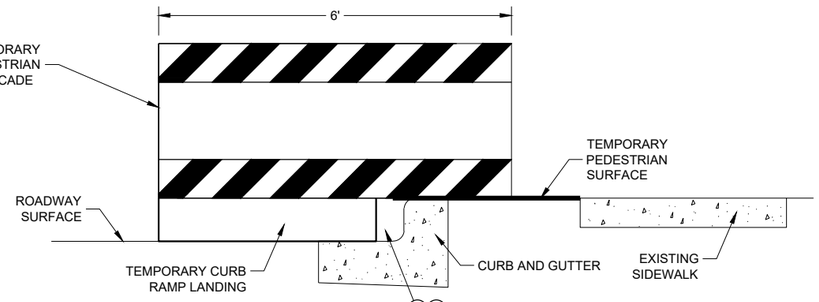
(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(5) ENSURE CURB RAMP IS OUT OF THE GUTTER PAN.

(6) IF ONLY PART OF THE END PANEL OF TEMPORARY PEDESTRIAN BARRICADE PANEL IS NEEDED, EXTEND EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL HERE.



FRONT VIEW



SIDE VIEW

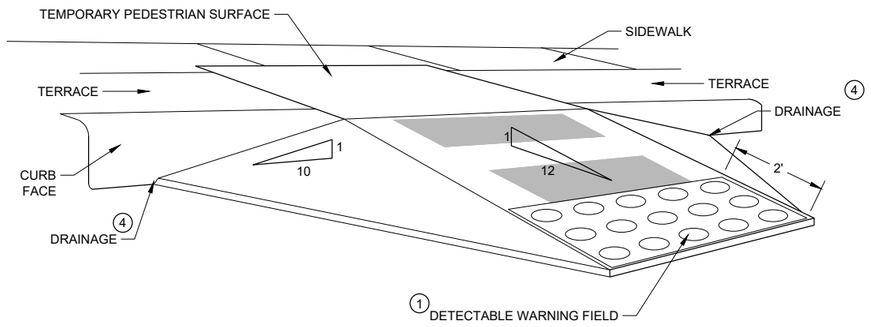
TEMPORARY CURB RAMP PARALLEL TO CURB

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

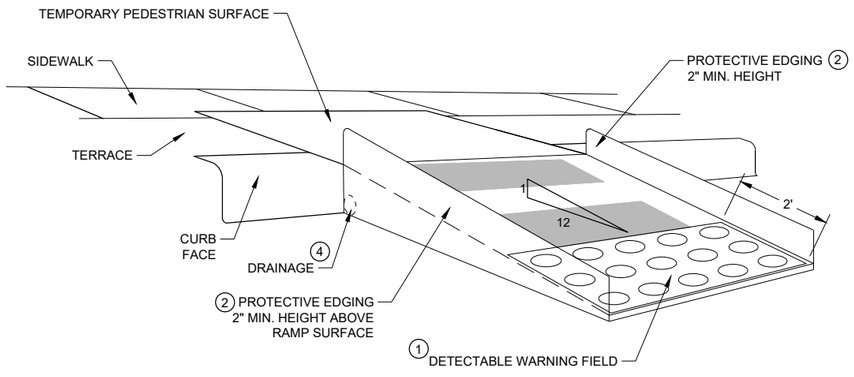
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D30 - 09b



WITH SIDE APRON (5)



WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP PERPENDICULAR TO CURB

GENERAL NOTES

CURB RAMPS SHALL BE 48" MINIMUM WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

(1) INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS

(2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(5) CAN ONLY BE USED FOR RAMPS WITH 6" OR LESS OF VERTICAL CHANGE.

6

SDD 15D30 - 09c

GENERAL NOTES

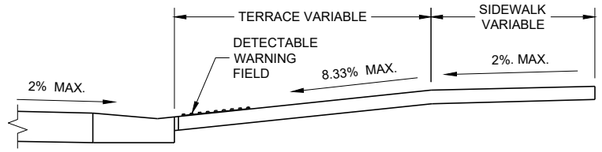
BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

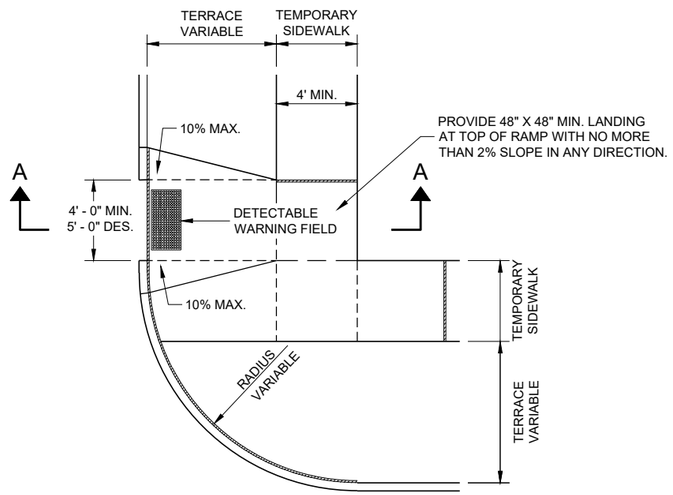
(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.



SECTION A - A



PLAN VIEW

TEMPORARY TYPE 3 RAMP

(OUTSIDE OF CROSSWALK AREA)

6

SDD 15D30-09d

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

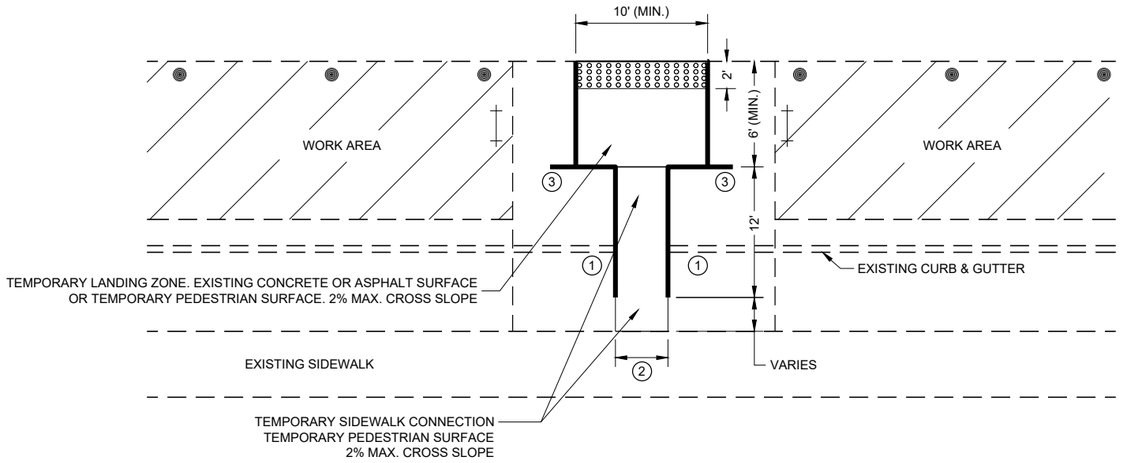
APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

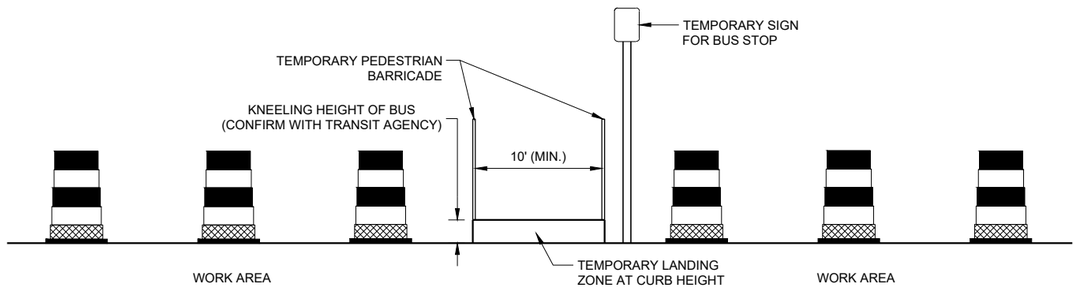
FHWA

6

SDD 15D30-09d



PLAN VIEW



PROFILE VIEW

TEMPORARY BUS STOP PAD

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

(1) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(2) 5' WIDE MIN. WITH TEMPORARY PEDESTRIAN BARRICADE, 10' WIDE MIN. WITHOUT TEMPORARY PEDESTRIAN BARRICADE.

(3) PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE INTO THIS SPACE.

LEGEND

- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD
- WORK AREA

6

6

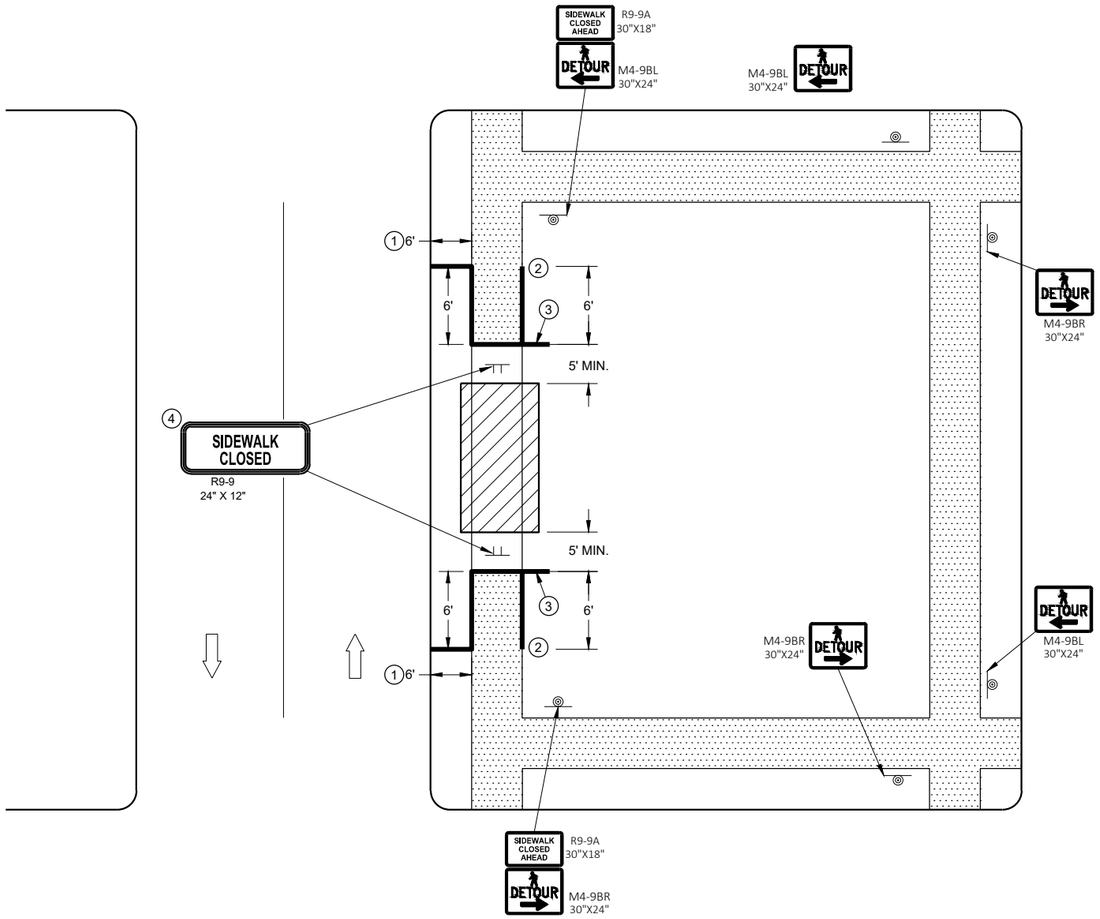
SDD 15D30 - 09e

SDD 15D30 - 09e

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC



GENERAL NOTES

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

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

PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICTS WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

1. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
2. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
3. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
4. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.

SIDEWALK DETOUR, SIDEWALK ONLY ON ONE SIDE

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

6

SDD 15D30 - 09f

LEGEND

- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY PEDESTRIAN SURFACE
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

GENERAL NOTES

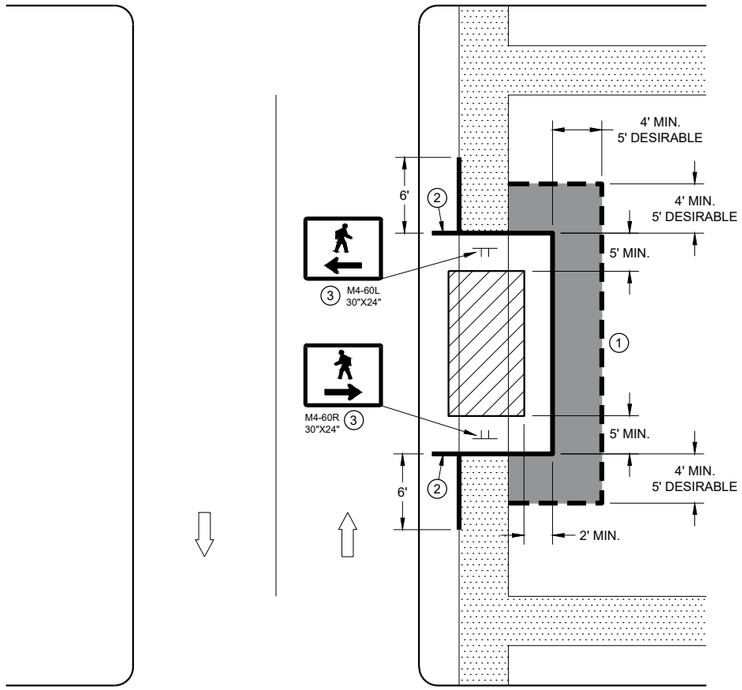
TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

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

1. USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
2. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
3. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.



SIDEWALK DIVERSION
SINGLE SIDE

6

SDD 15D30 - 09g

6

SDD15D30 - 09g

TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

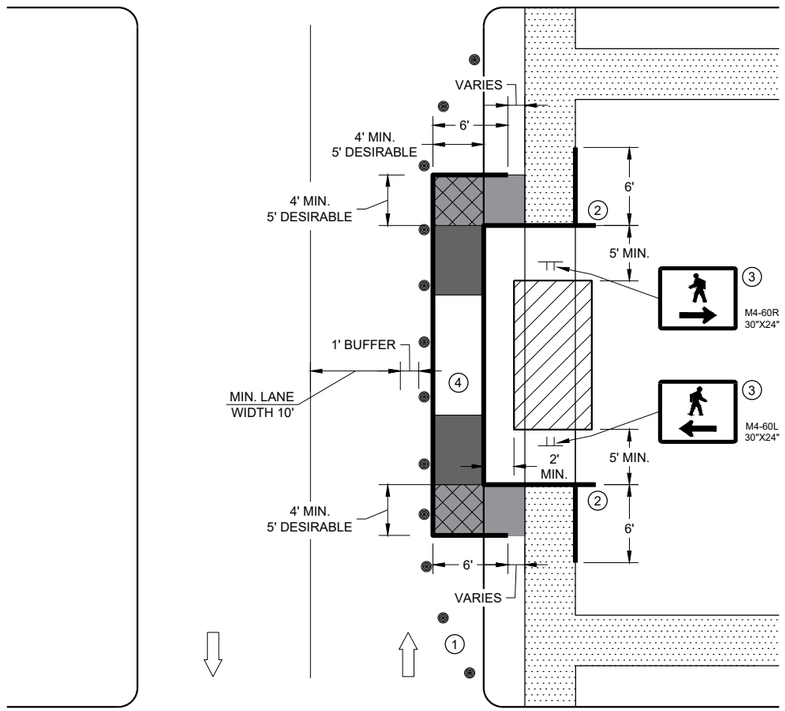
GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

1. SHOULDER OR LANE CLOSURE ADVANCE WARNING AND BUFFER SPACE REQUIRED.
2. PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL PAST THE SIDEWALK ON THE SIDE AWAY FROM THE ROAD.
3. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.
4. USE EXISTING PAVEMENT SURFACE. IF EXISTING PAVEMENT SURACE HAS BEEN REMOVED, USE A TEMPORARY PEDESTRIAN SURFACE.



SIDEWALK DIVERSION, SINGLE SIDE

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

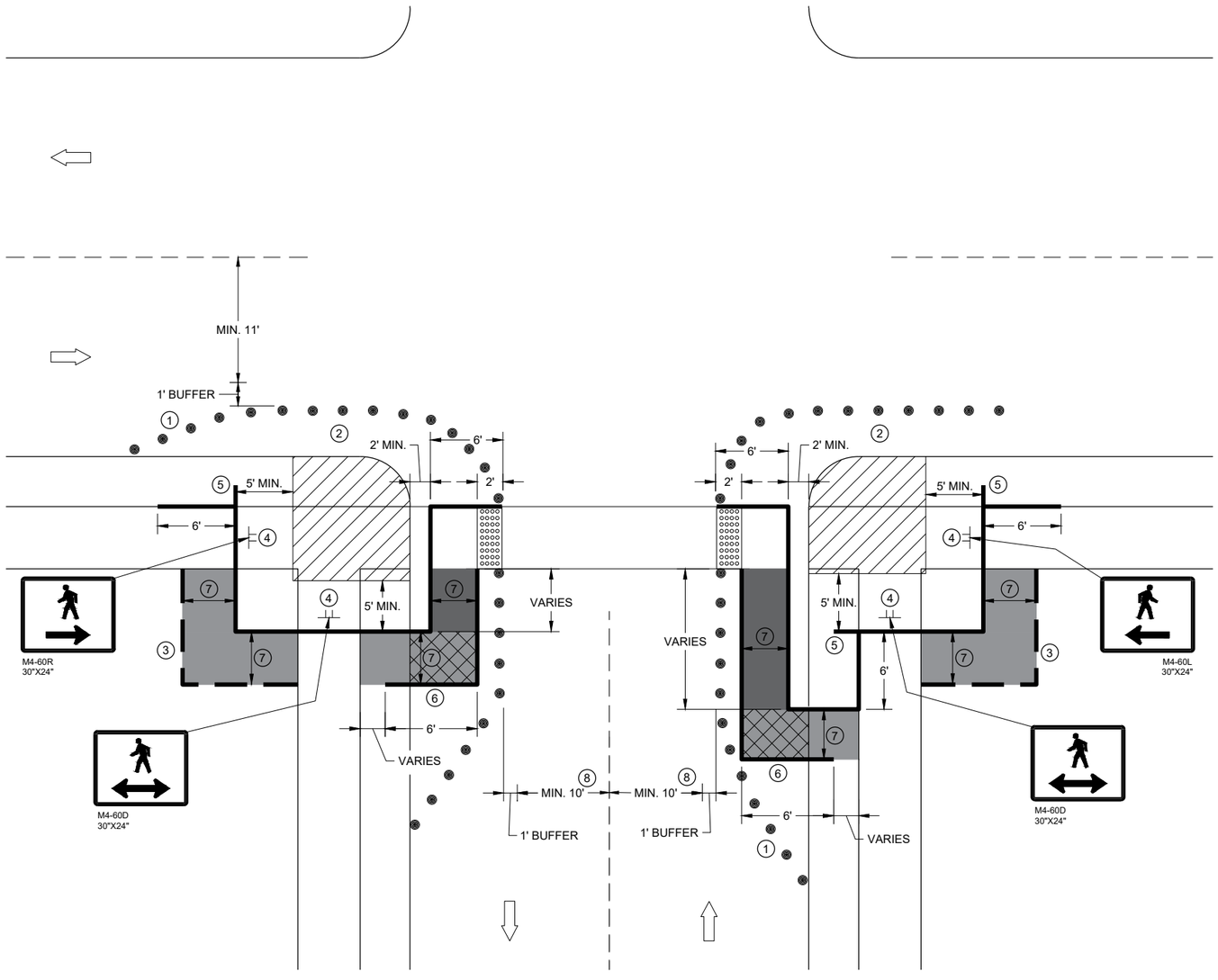
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 15D30 - 09h

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SDD 15D30 - 09h



CURB RAMP PEDESTRIAN TRAFFIC CONTROL
SIDEWALK ON SINGLE SIDE

GENERAL NOTES

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

1. SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.
2. PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS
3. USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
4. MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.
5. PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.
6. IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.
7. 4 FEET MINIMUM, 5 FEET DESIRABLE
8. IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

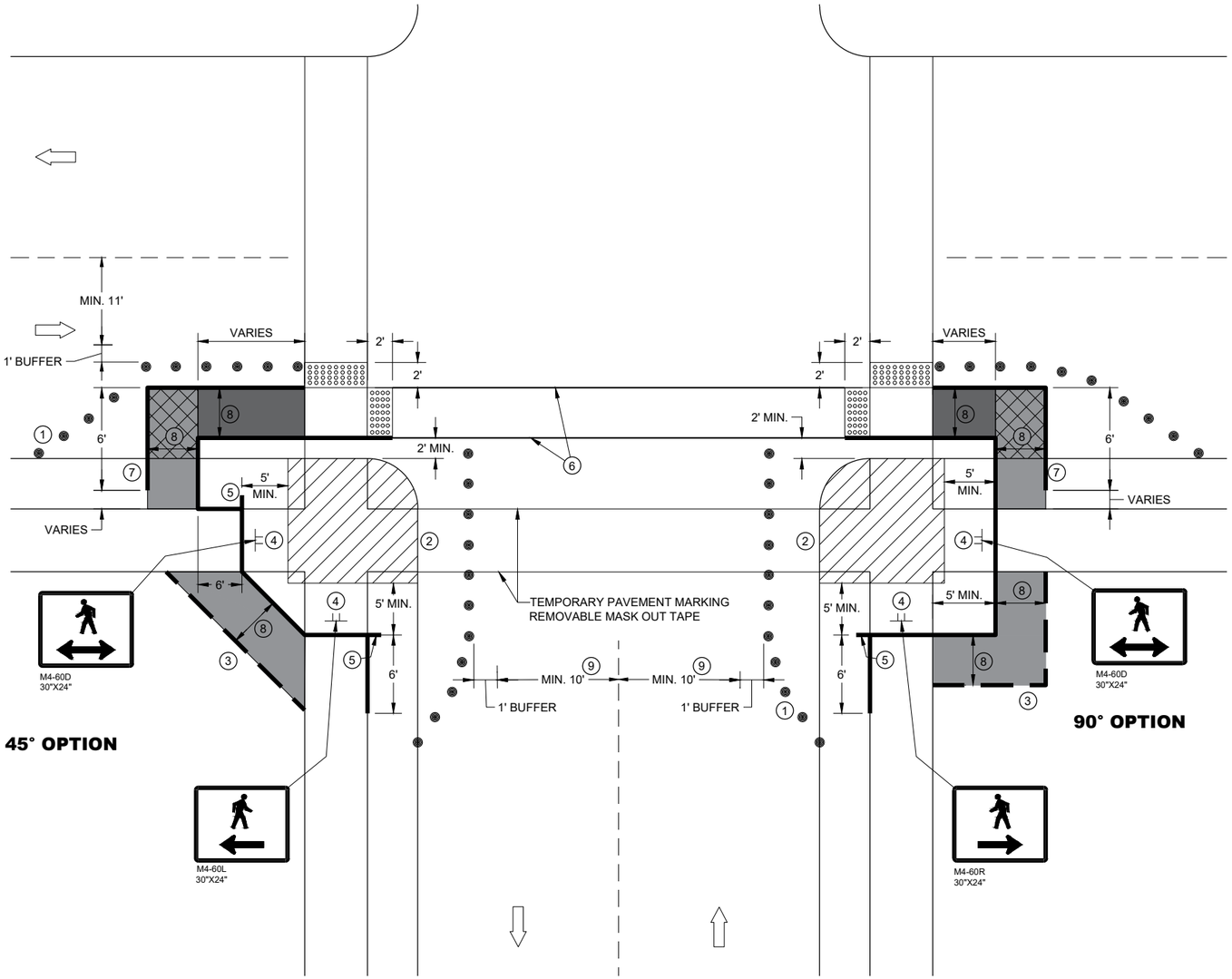
LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

SDD 15D30 - 09i

6



CURB RAMP PEDESTRIAN TRAFFIC CONTROL

GENERAL NOTES

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

1. SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.
2. PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS
3. USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
4. MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.
5. PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.
6. WHITE 6" TEMPORARY PAVEMENT MARKING
7. IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.
8. 4 FEET MINIMUM, 5 FEET DESIRABLE
9. IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

6

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

SDD 15D30 - 09j

LEGEND

SIGN ON PERMANENT SUPPORT

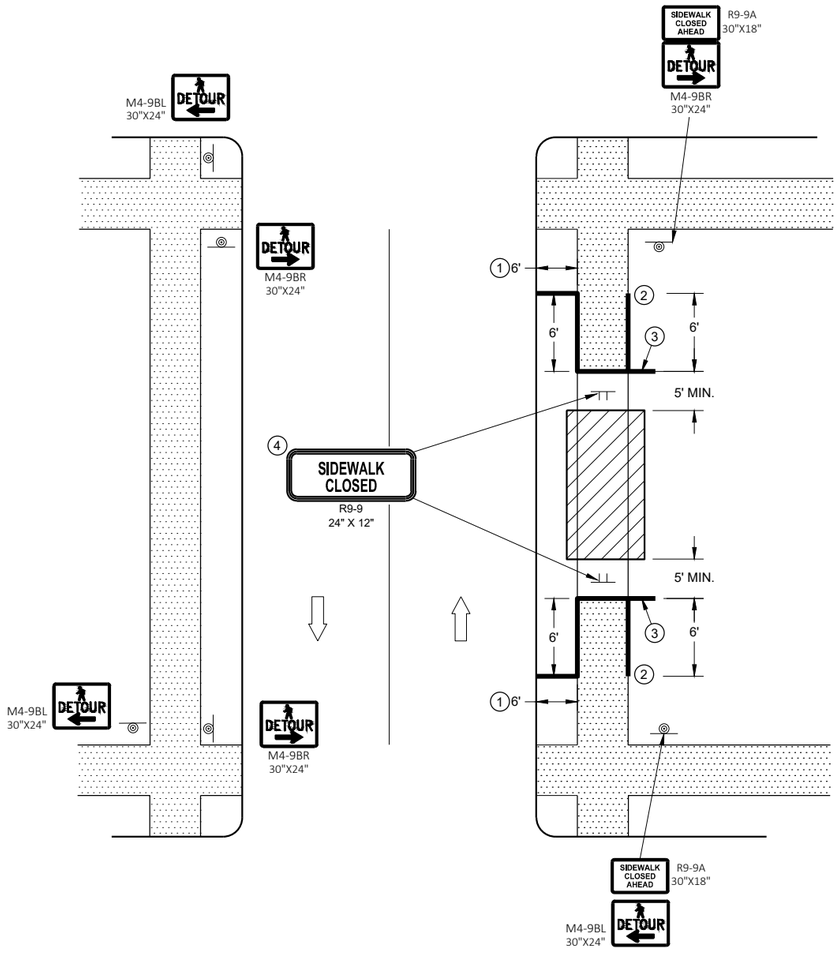
SIGN ON TEMPORARY SUPPORT

UNDER PEDESTRIAN TRAFFIC

WORK AREA

TEMPORARY PEDESTRIAN BARRICADE

DIRECTION OF TRAFFIC



GENERAL NOTES

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

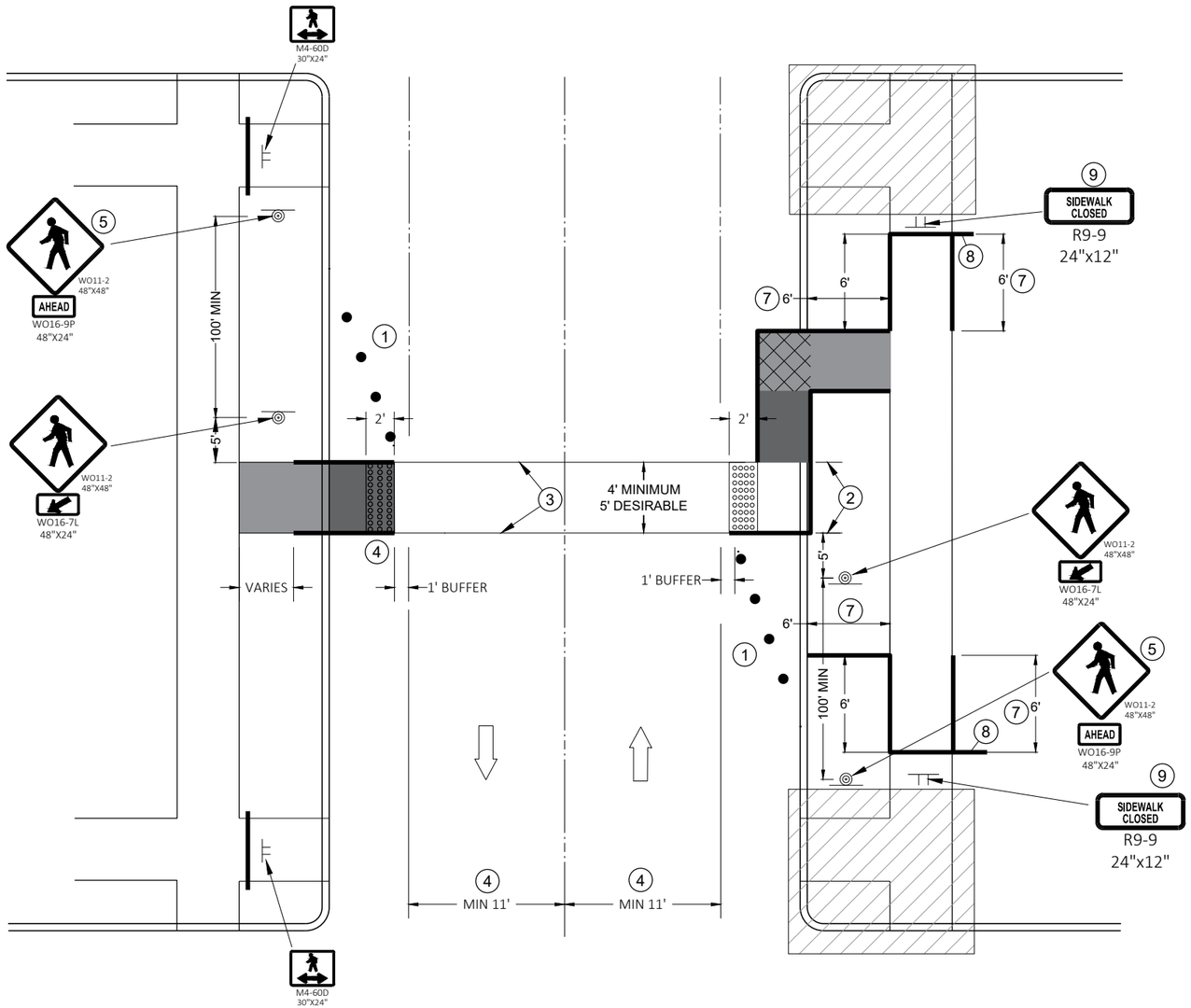
WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

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

PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICT WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

1. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
2. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
3. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
4. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.

SIDEWALK DETOUR, SIDEWALK ON BOTH SIDES



TEMPORARY PEDESTRIAN CROSSING

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

SEE OTHER PEDESTRIAN ACCOMMODATION DETAILS FOR SIGNING AND DEVICES FOR DIFFERENT PEDESTRIAN FACILITIES CLOSURES.

1. SHOULDER OR LANE CLOSURE ADVANCED WARNING AND PROPER BUFFER SPACE REQUIRED.
2. 4 FEET MINIMUM, 5 FEET DESIRABLE.
3. WHITE 6" TEMPORARY PAVEMENT MARKING.
4. IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, PERPENDICULAR CURB RAMPS MAY NEED TO BE UTILIZED.
5. IF MINIMUM 100' SPACING FROM THE MID-BLOCK CROSSING CANNOT BE ATTAINED BEFORE THE INTERSECTION, REMOVE THIS SIGN ASSEMBLY.
6. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
7. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
8. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF THE EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
9. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF THE SIGN.

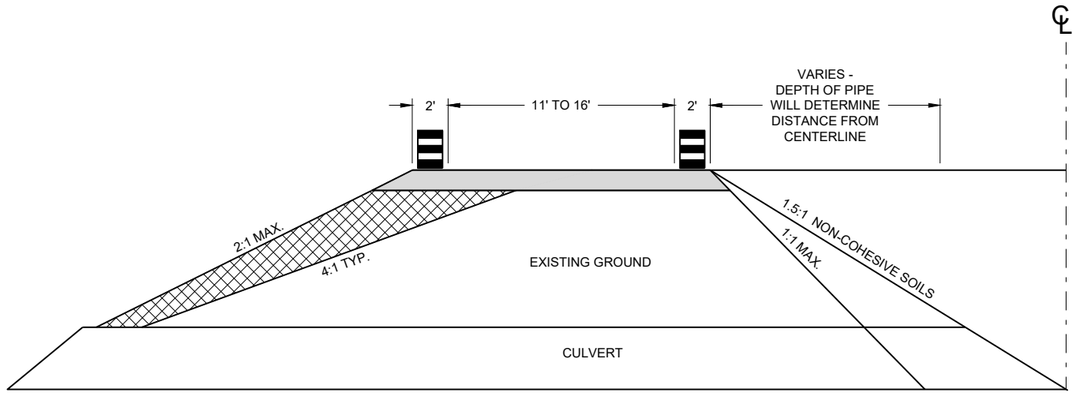
LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY CURB RAMP
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

6

SDD 15D30 - 09L

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION



CROSS SECTION

GENERAL NOTES

USE 1:1 FOR COHESIVE CLAYS AND SILTS, LOAMS, SANDY CLAYS AND ANGULAR GRAVEL SOILS.
USE 1.5:1 FOR NON-COHESIVE SOILS.

THE TAPER SHOULD EXTEND ACROSS THE SHOULDER UNLESS DOING SO WOULD GREATLY CONFLICT WITH THE WORK OPERATION.

ALL LANE CLOSURE SIGNS SHALL BE REMOVED OR COVERED AND ALL DEVICES REMOVED BEYOND THE SHOULDER WHEN WORK IS NOT IN PROGRESS AND THE LANE IS RESTORED TO A SAFE OPERATING CONDITION.

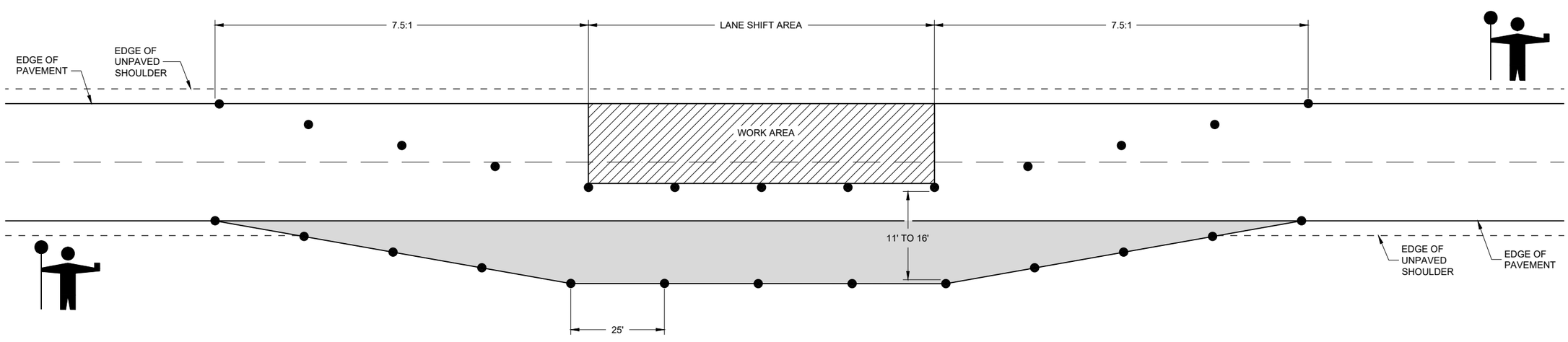
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

USE WITH SDD 15C12 "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATIONS"

USE WITH SDD 15D45 "SIGNING ON ROADWAYS WITH LOOSE GRAVEL"

LEGEND

- DRUM WITHOUT WARNING LIGHT
- 6" BASE AGGREGATE DENSE 1 ¼" -INCIDENTAL TO LANE SHIFT ITEM
- FILL - INCIDENTAL TO LANE SHIFT ITEM
- WORK AREA
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF



LANE SHIFT IN FLAGGING OPERATION

TRAFFIC CONTROL, TEMPORARY LANE SHIFT DURING CULVERT WORK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15D48 - 01

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SDD 15D48 - 01

LEGEND

V1 WORK VEHICLE

V2 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

FLASHING ARROW PANEL (CAUTION)

WORK AREA

DIRECTION OF TRAFFIC

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

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

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

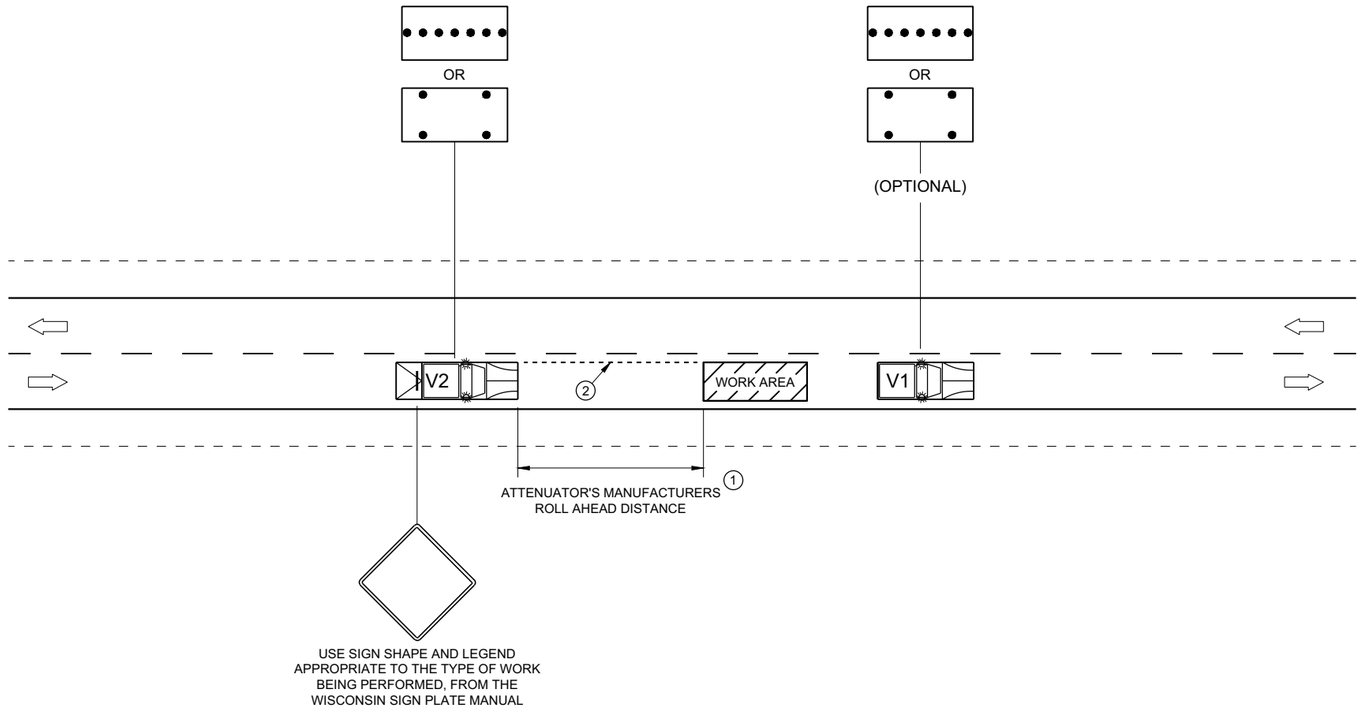
ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

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

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

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

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

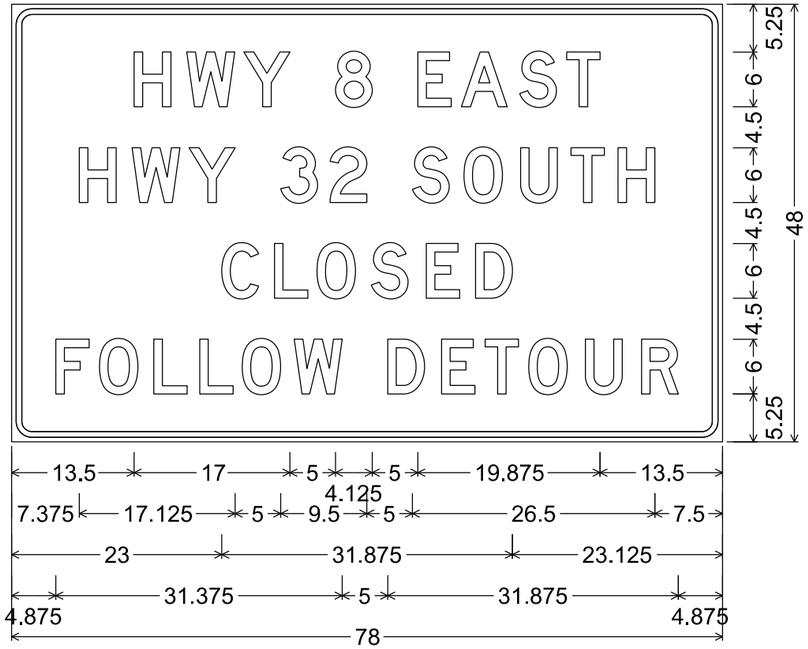


TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY

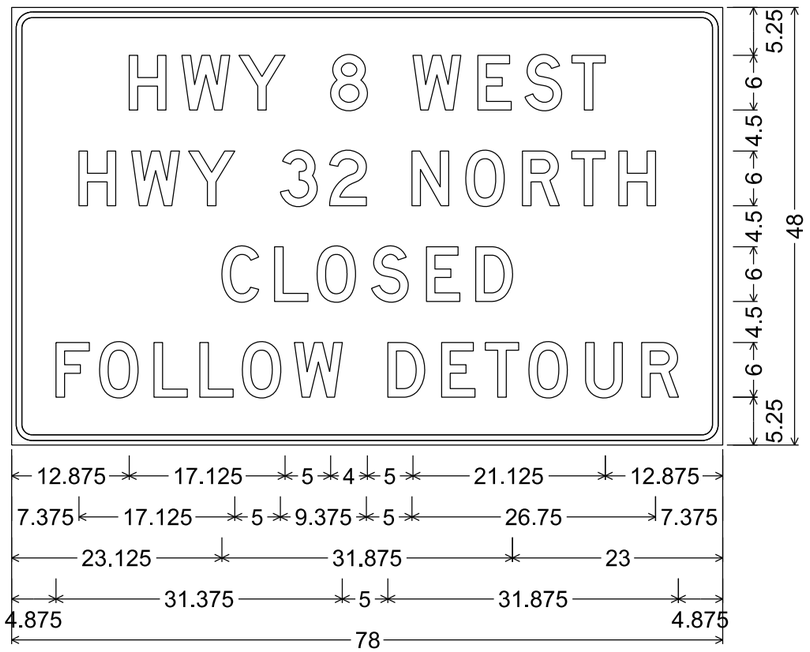
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6
SDD 15D51 - 01



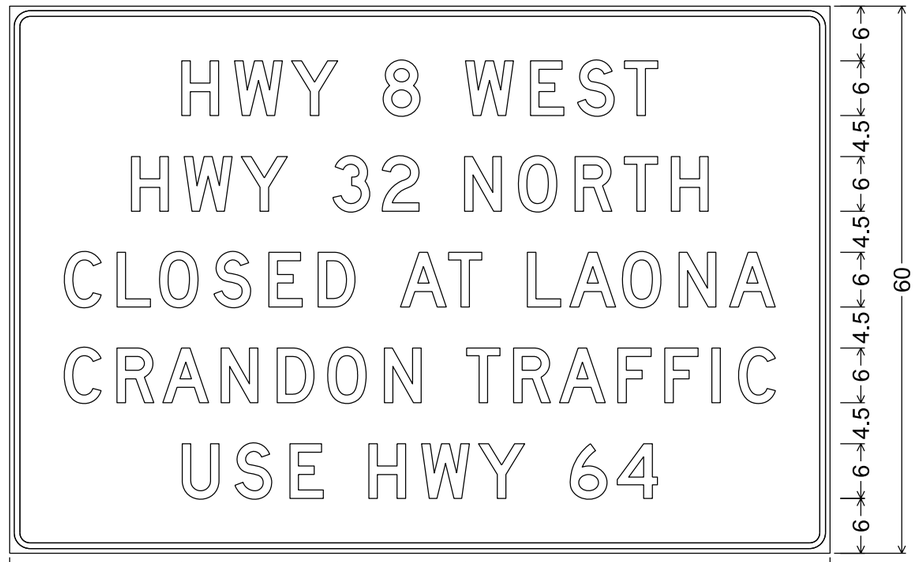
2.250" Radius, 0.625" Border, 0.500" Indent



2.250" Radius, 0.625" Border, 0.500" Indent

NOTES

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



2.250" Radius, 0.625" Border, 0.500" Indent

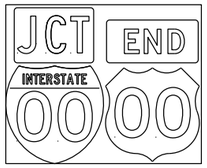
7

7

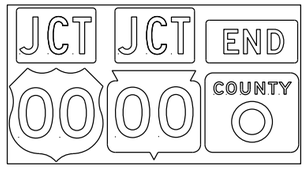
TYPICAL ASSEMBLIES



J1-1



J1-2



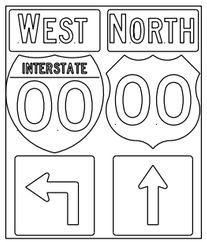
J1-3



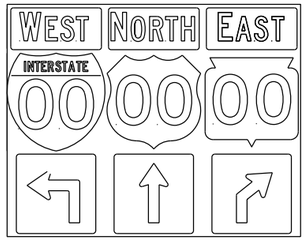
JR1-1



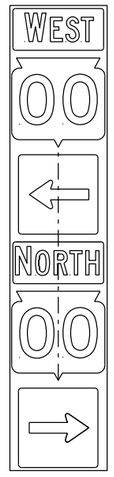
J2-1



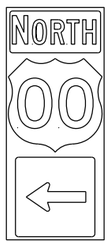
J2-2



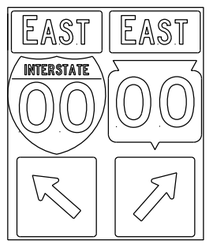
J2-3



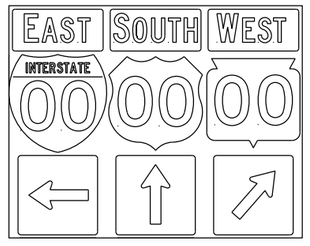
JV
(Typical Vertical J-Assembly
See Note 10 and 11)



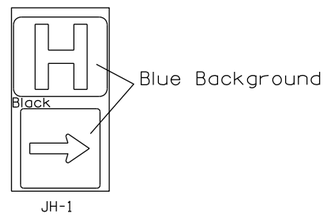
J3-1



J3-2



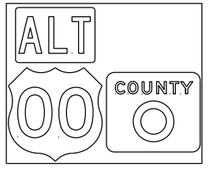
J3-3



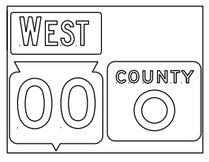
JH-1



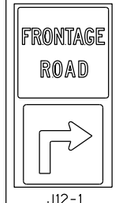
J4-1



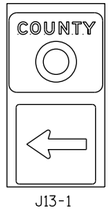
J4-2



J4-2



J12-1



J13-1



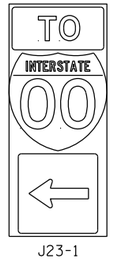
J32-1



J33-1



J22-1



J23-1



JR13-1



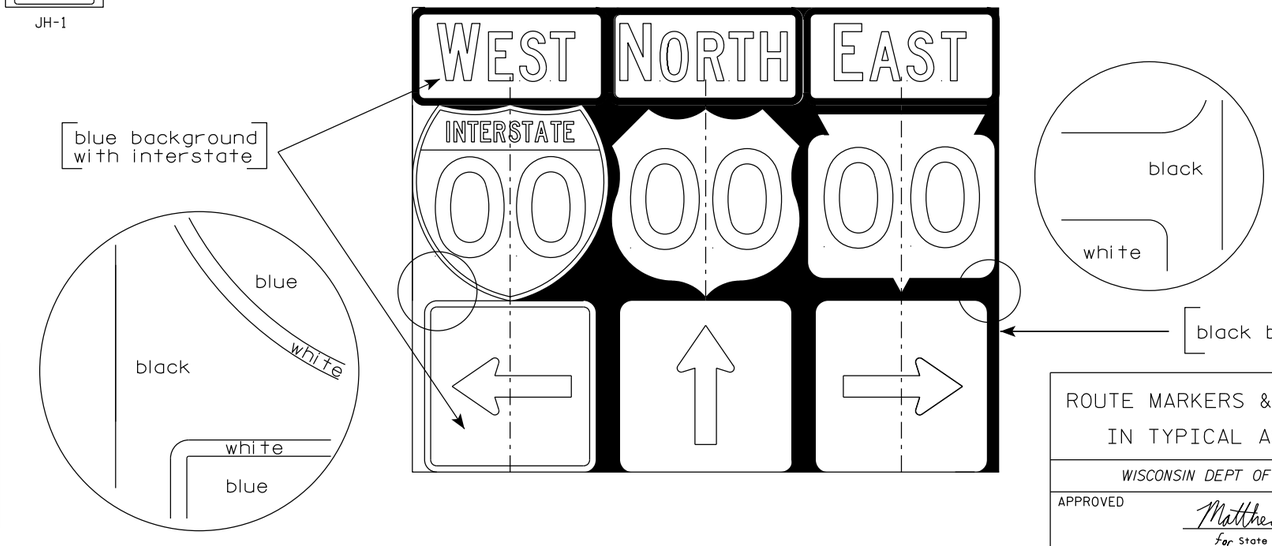
JR23-1



JR99-1

NOTES

1. Signs are Type II - Type H Reflective
2. Color:
   Background - Black Non-reflective
   Message - see Note 4
3. Message Series - See Note 4
4. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
5. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
6. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
7. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
8. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. All Vertical J Assemblies are given a Sign Code of JV
10. For JV Assemblies that have a mixture of Interstate and Non-Interstate shields, arrows and cardinals shall be white on blue.
11. For JV Assemblies that have a mixture of Non-Interstate and Auto-Tour shields, arrows and cardinals shall be black on white.



ROUTE MARKERS & COMPONENTS IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

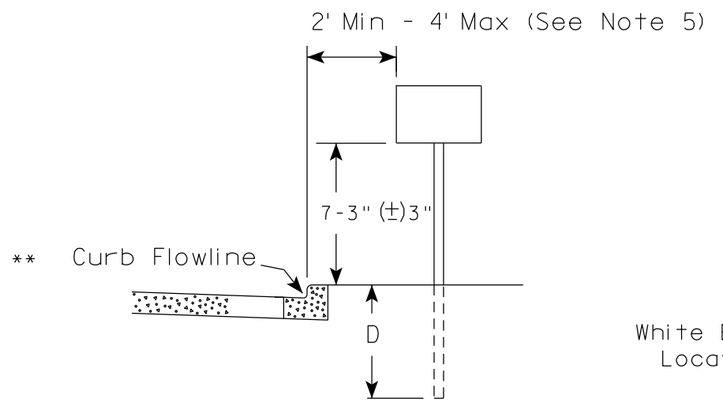
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/23 PLATE NO. A2-1S.10

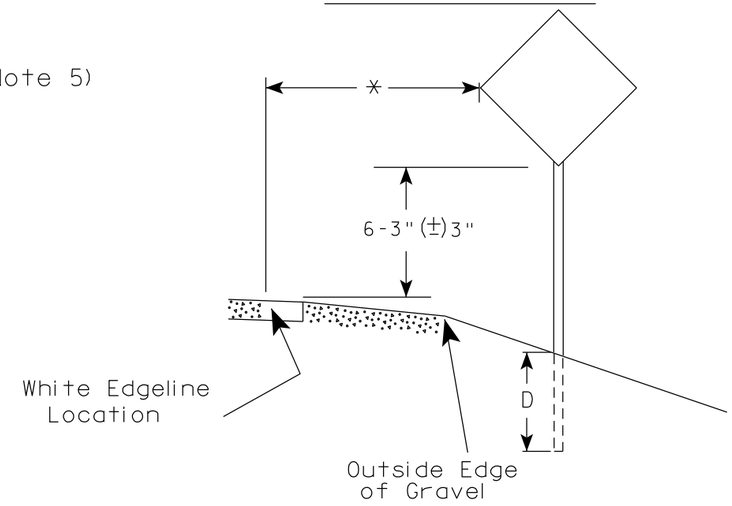
PROJECT NO:

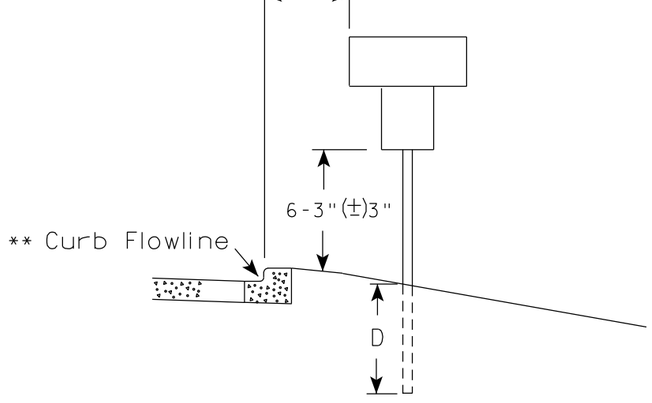
SHEET NO: 230 E

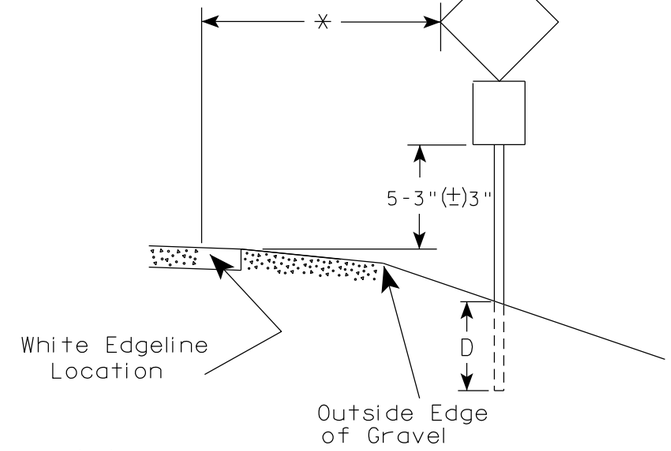
URBAN AREA



RURAL AREA (See Note 2)







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

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

GENERAL NOTES

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

POST EMBEDMENT DEPTH

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

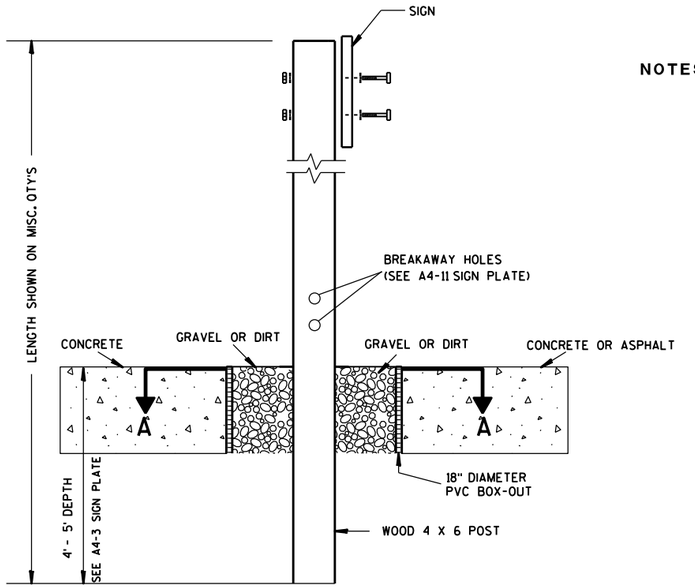
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

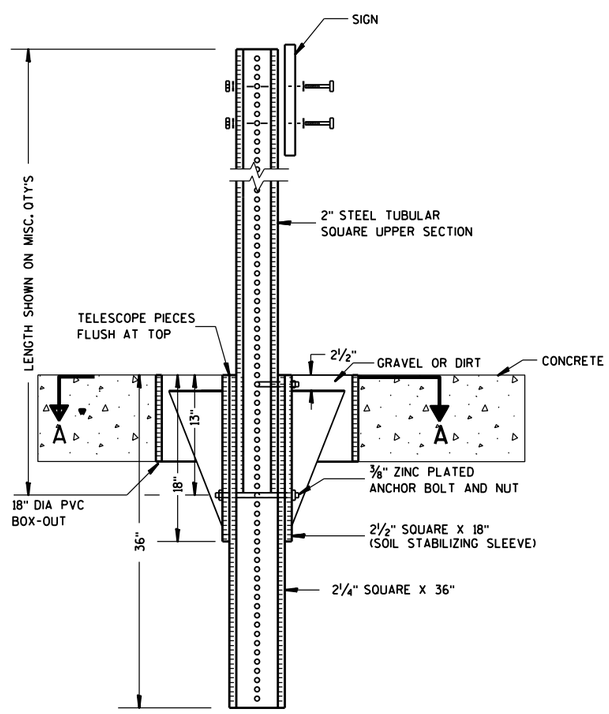
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 231	E



ELEVATION VIEW

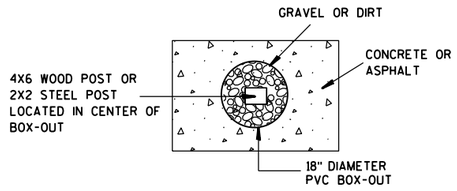
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

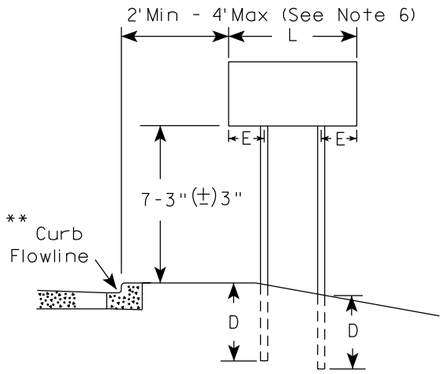
APPROVED Matthew R Rauch
for State Traffic Engineer

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

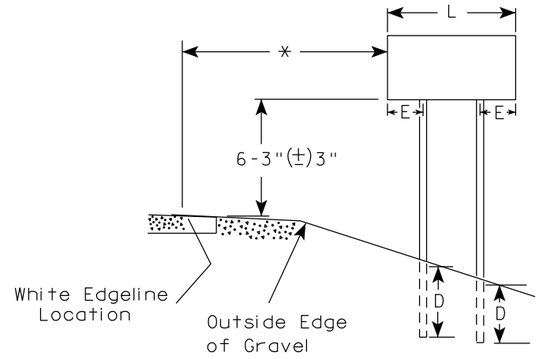
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

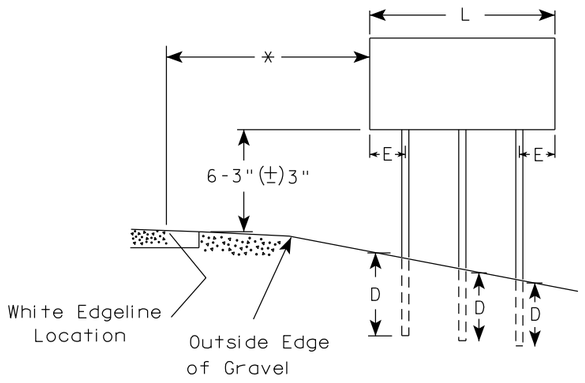
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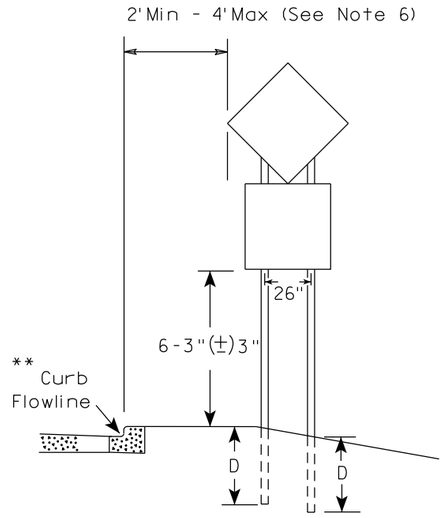
URBAN AREA



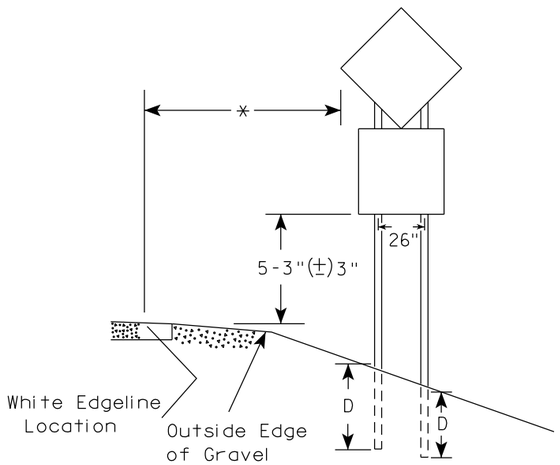
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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

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

GENERAL NOTES

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

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

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

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

POST EMBEDMENT DEPTH

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

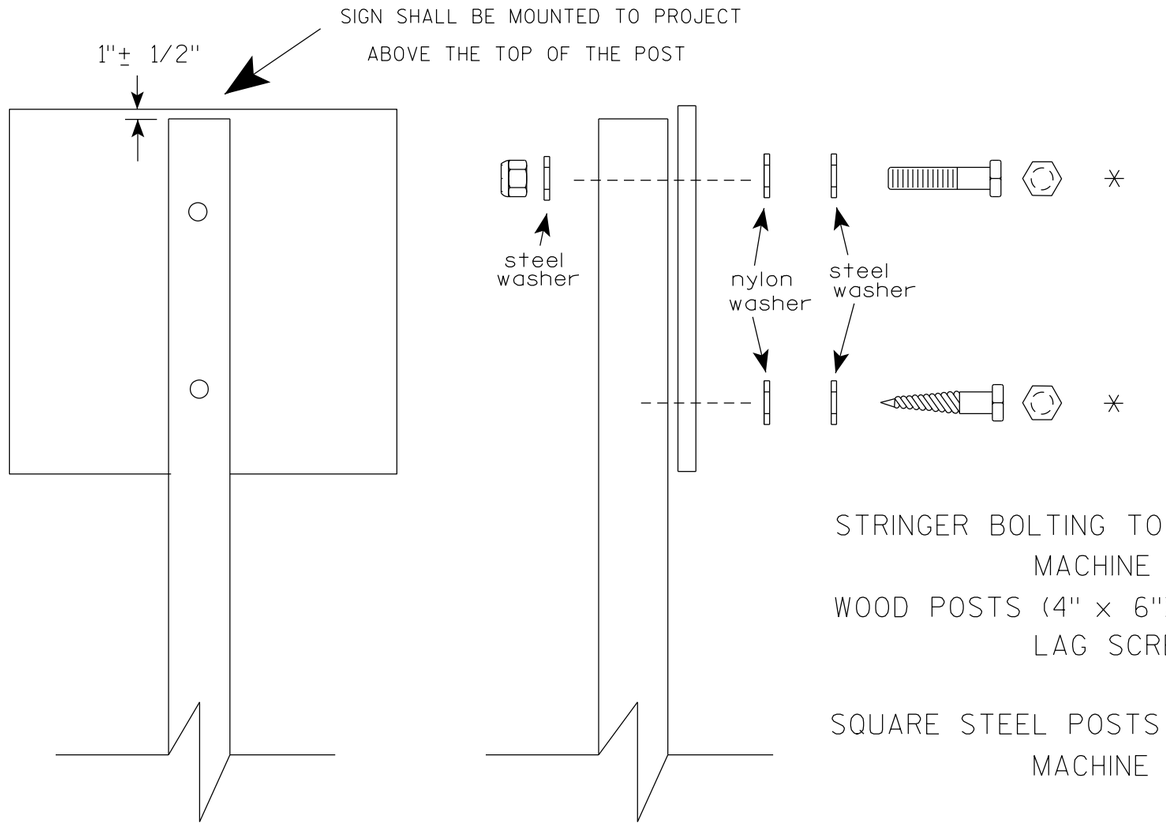
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 233	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

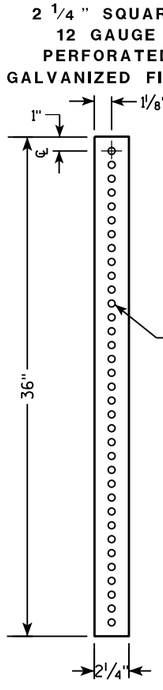
DATE 4/1/2020 PLATE NO. A4-8.9

PROJECT NO:

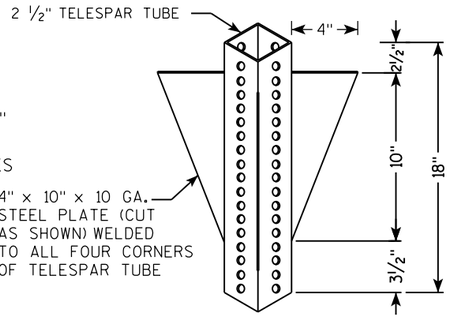
SHEET NO: 234 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

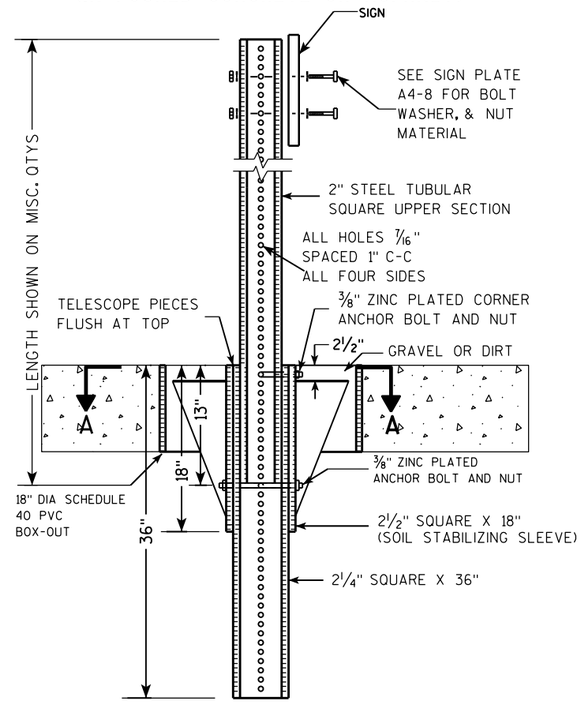
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



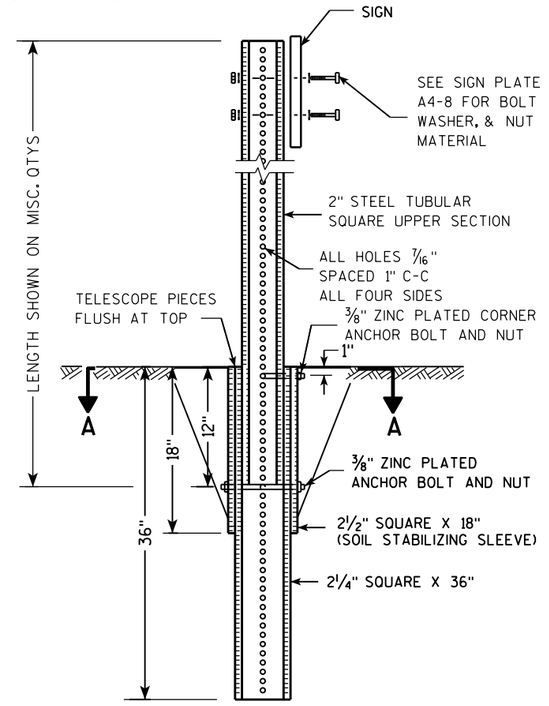
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

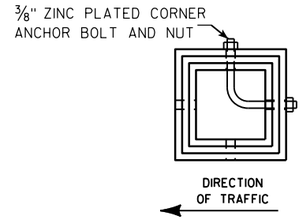


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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).

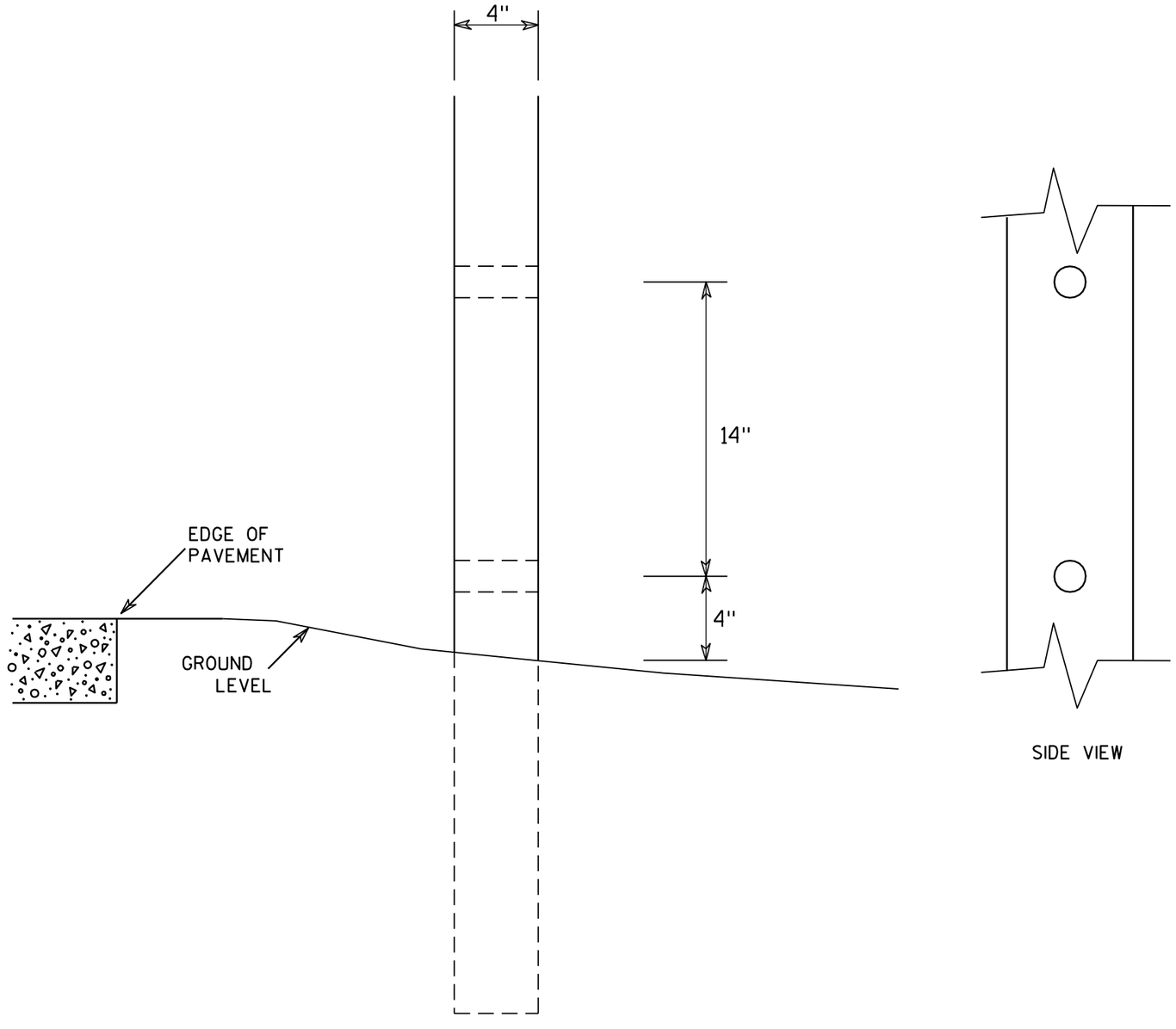
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 235 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



SIDE VIEW

GENERAL NOTES

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

7

7

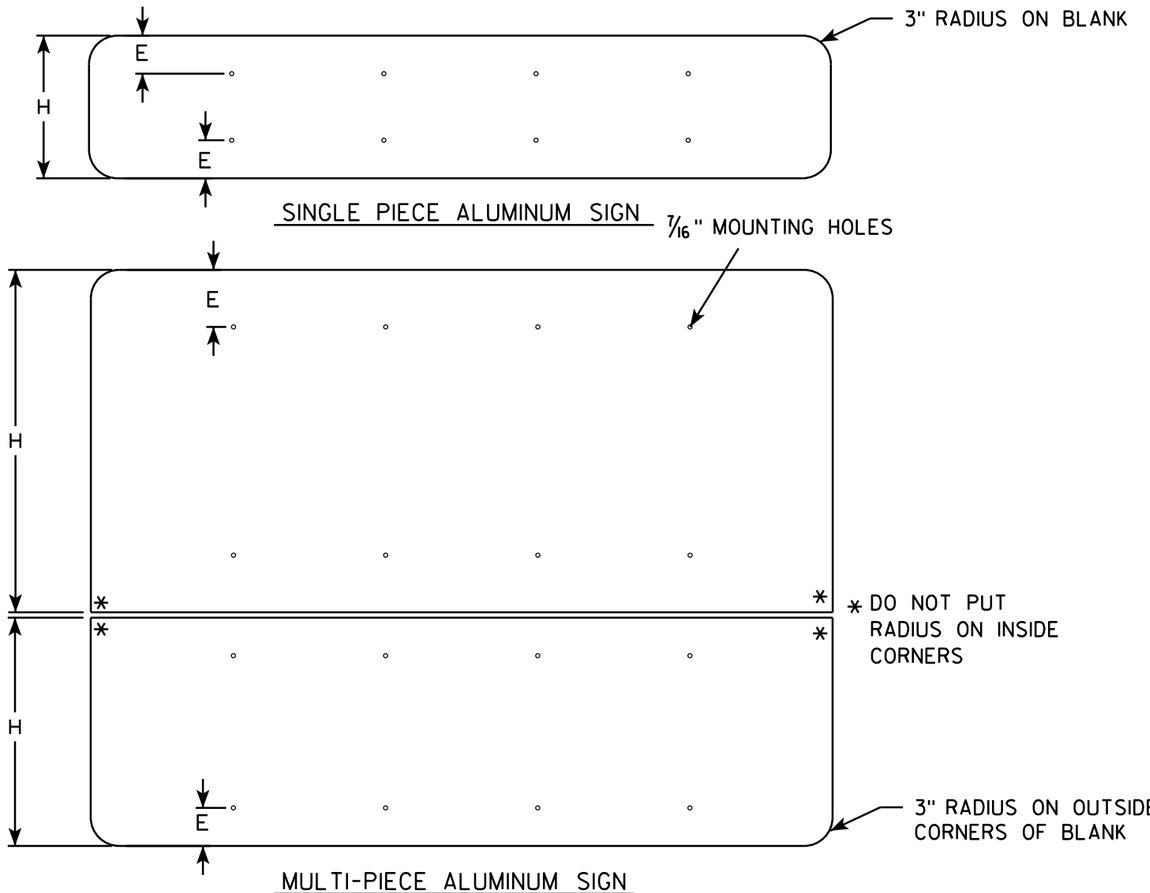
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

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

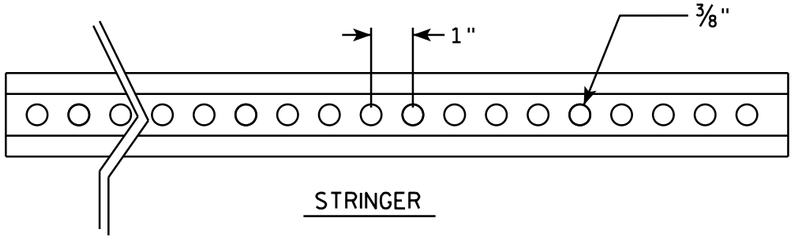
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 236	E



GENERAL NOTES

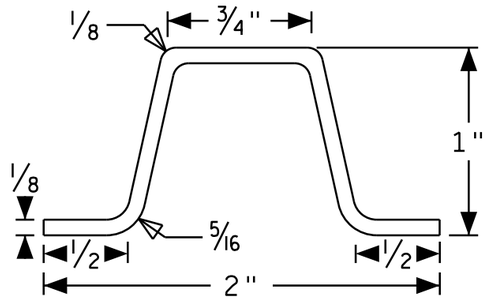
- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER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

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

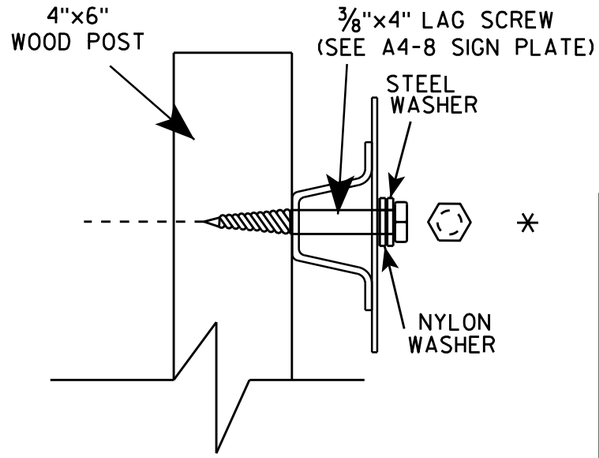


STRINGER

CROSS SECTION VIEW OF CHANNEL



POST MOUNTING



SIGN STRINGER MOUNTING REQUIREMENTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

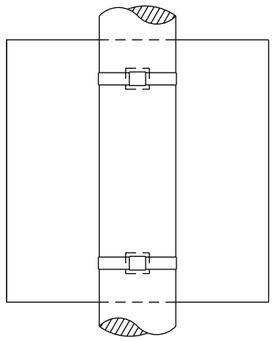
DATE 4/26/16 PLATE NO A4-18.1

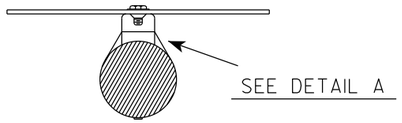
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

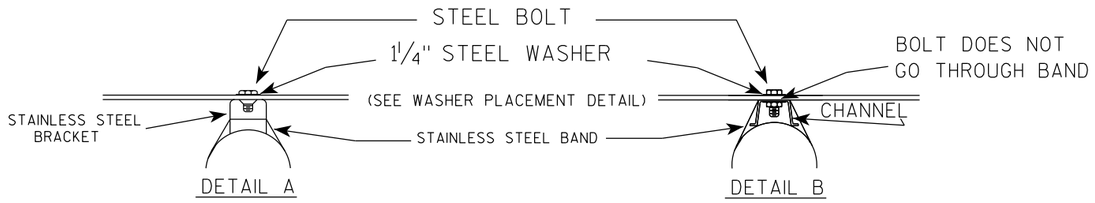
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A418.dgn PLOT DATE : 27-APR-2016 13:56 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 41.805205:1.000000 WISDOT/CADDS SHEET 42

BANDING

SINGLE SIGN



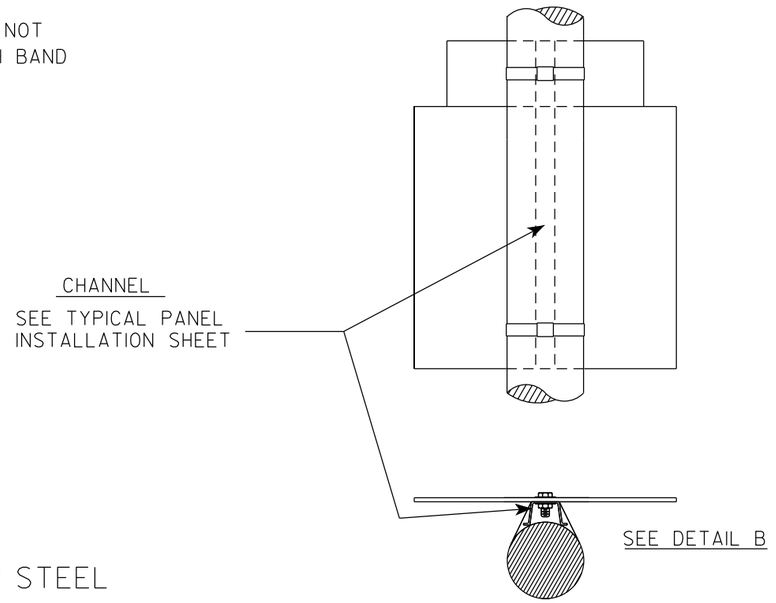




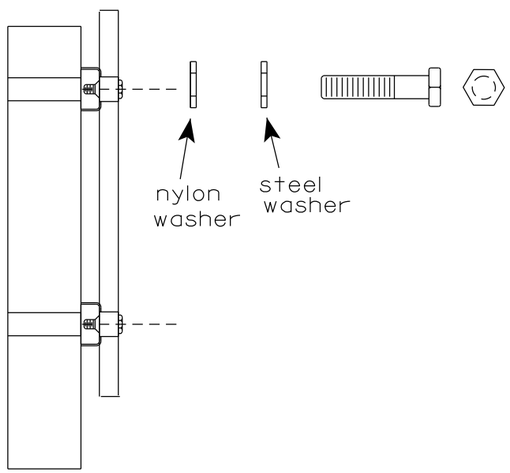
GENERAL NOTES

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



WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X ⅜" I.D. X 1/16" STEEL
1-1/4" O.D. X ⅜" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

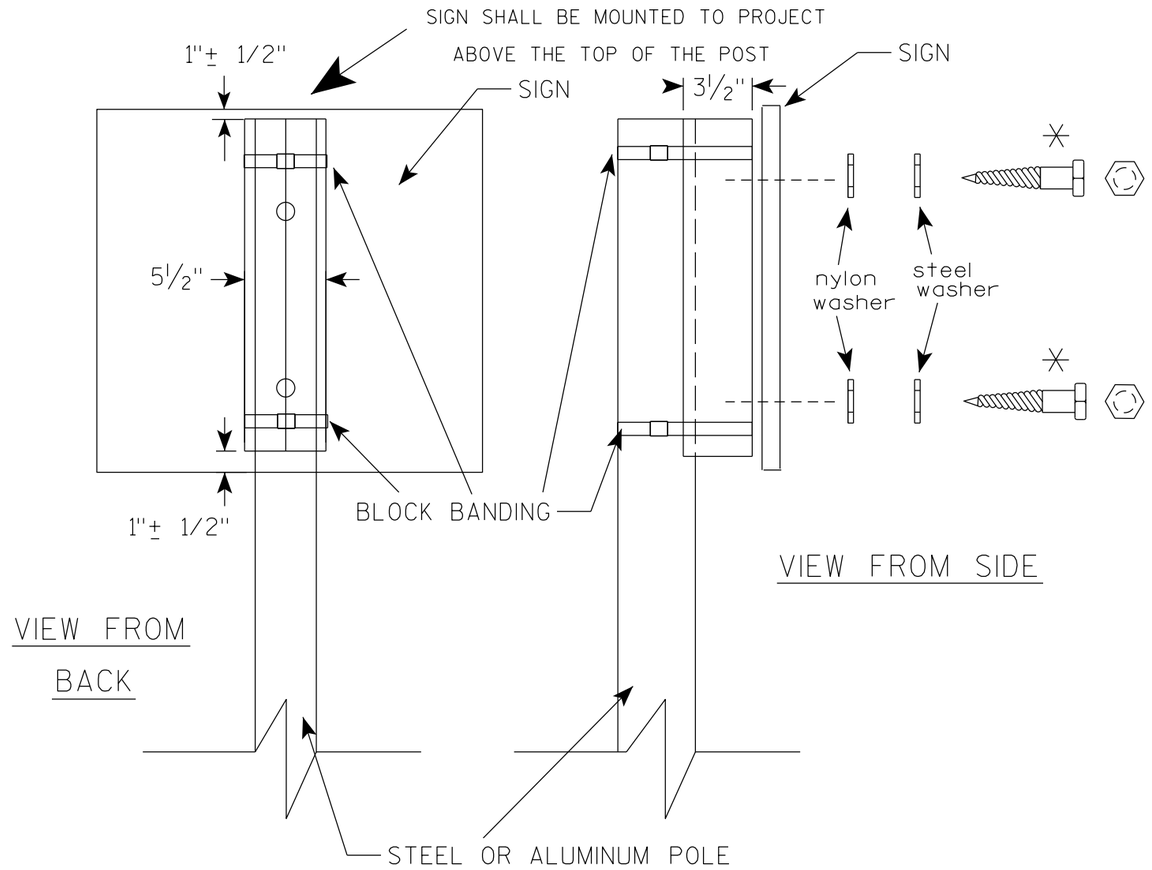
DATE 6/10/19 PLATE NO. A5-9.4

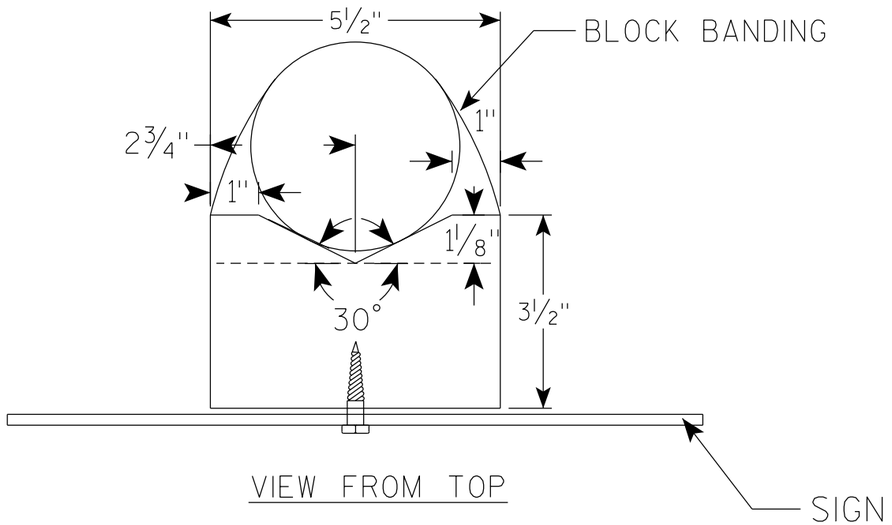
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 238	E

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

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GENERAL NOTES

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

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

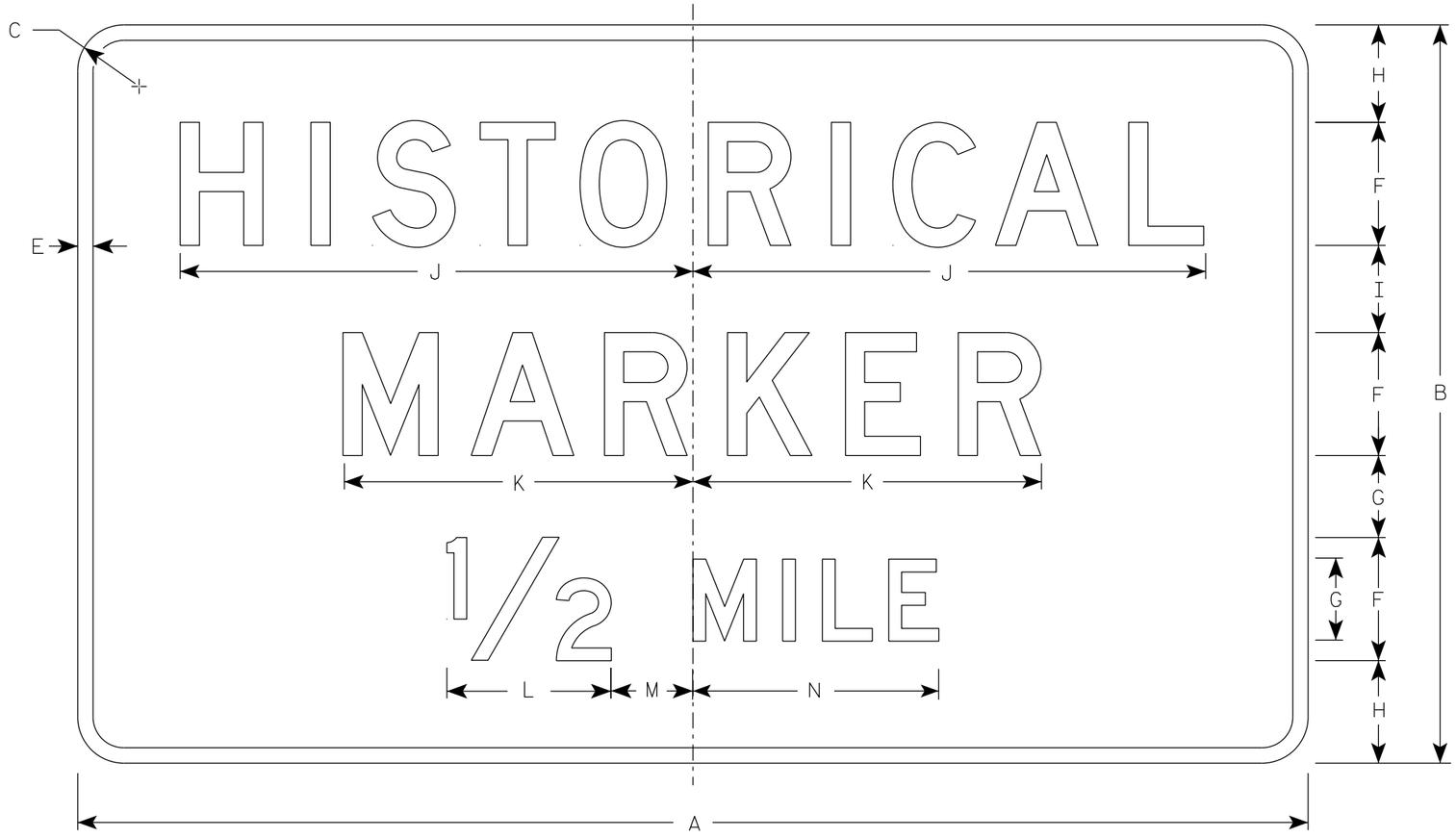
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:

SHEET NO: 239 E



D5-63 * See Note 4

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Brown
   Message - White
3. Message Series - D
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	36	1 7/8		3/4	6	4	4 3/4	4 1/2	25	17	8	4	12													15.0
2M	60	36	1 7/8		3/4	6	4	4 3/4	4 1/2	25	17	8	4	12													15.0
3	78	48	3		1	8	6	6	6	32 3/4	22 3/8	10 5/8	6	18 7/8													26.0
4																											
5																											

STANDARD SIGN
D5-63

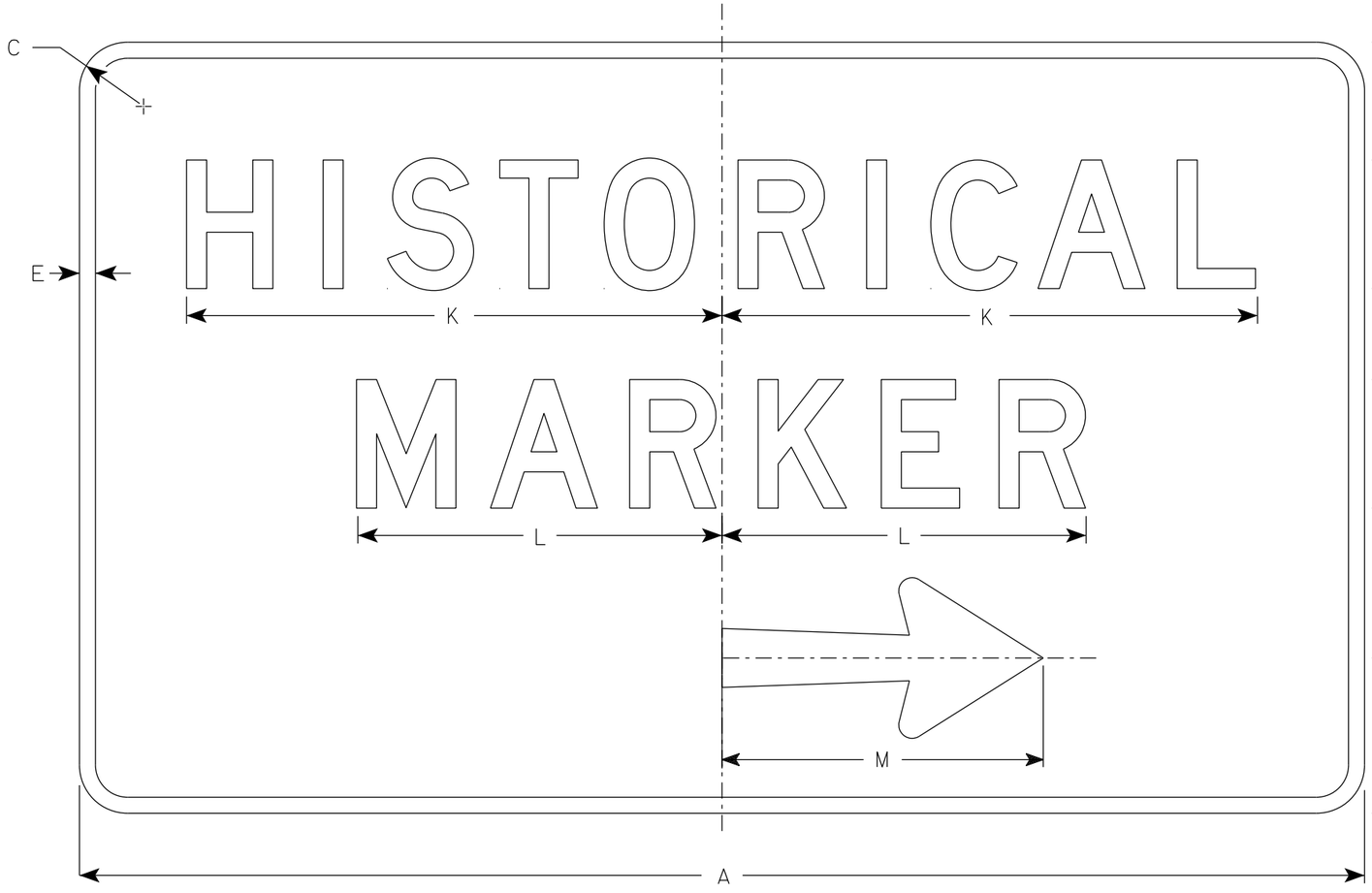
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/26/2024 PLATE NO. D5-63.11

PROJECT NO:

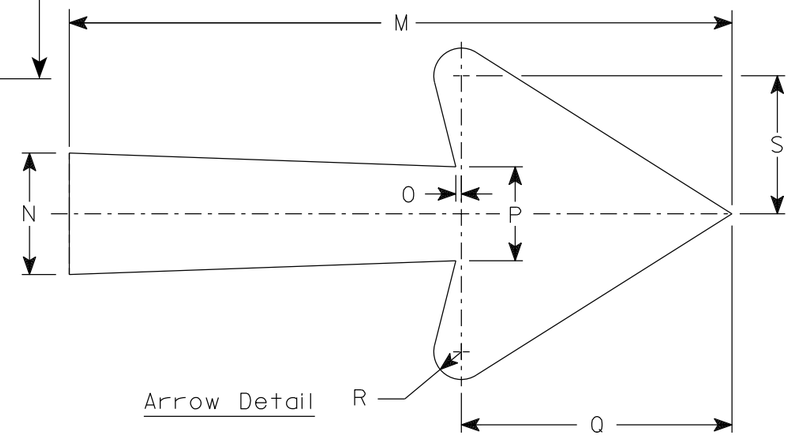
SHEET NO: 240 E



D5-64R

NOTES

1. Sign is Type II - Type H Reflective - reference
2. Color:
   Background - Brown
   Message - White
3. Message Series - D
4. D5-64L is the same as D5-64R except the arrow is reversed.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	36	1 7/8		3/4	6	4 5/8	4 1/2	7 1/8	7 3/4	25	17	15	2 3/4	1/8	2 1/8	6 1/8	5/8	3 1/8								15.0
2M	60	36	1 7/8		3/4	6	4 5/8	4 1/2	7 1/8	7 3/4	25	17	15	2 3/4	1/8	2 1/8	6 1/8	5/8	3 1/8								15.0
3	78	48	3		1	8	6	6	10	10	32 3/4	22 3/8	21	4 1/4	1/4	2 3/4	7 7/8	3/4	4								26.0
4																											
5																											

STANDARD SIGN
D5-64

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

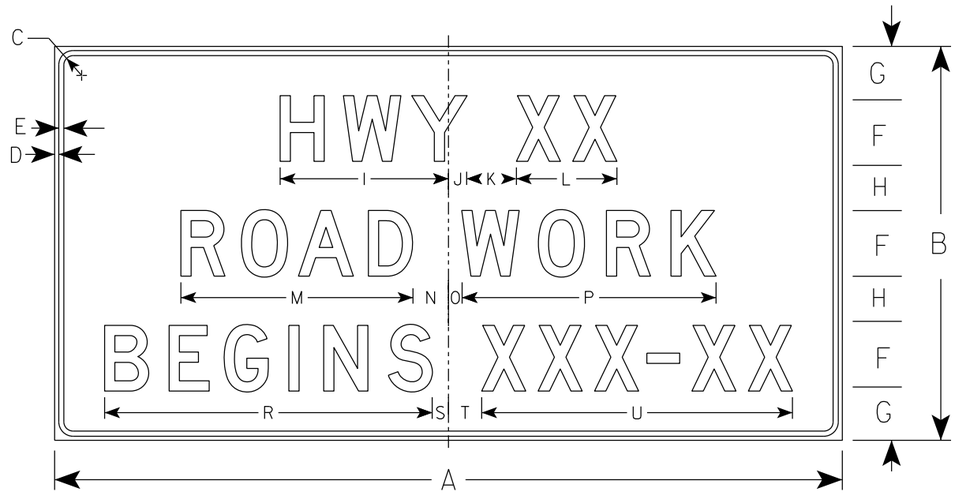
DATE 3/27/2024 PLATE NO. D5-64.7

PROJECT NO:

SHEET NO: 241 E

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Substitute appropriate numeral and adjust spacing to achieve proper balance.



G20-57

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																											
3	72	36	1 1/8	1/2	5/8	6	5	4	15 5/8	1 5/8	5	9 1/4	21 1/4	3 1/2	1 1/2	23 1/4		29 7/8	1 3/4	3 1/4	28 1/2						18.0
4	96	48	2 1/4	3/4	1	8	6 1/2	5 1/2	20 5/8	2 1/4	6	12 1/4	28 1/4	4 3/8	1 5/8	31		39 1/4	2	4	37 7/8						32.0
5																											

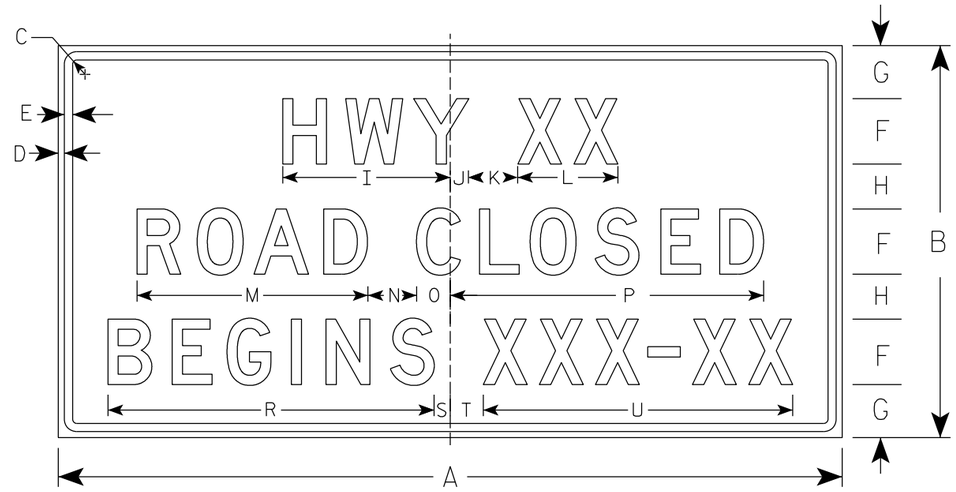
STANDARD SIGN
G20-57

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

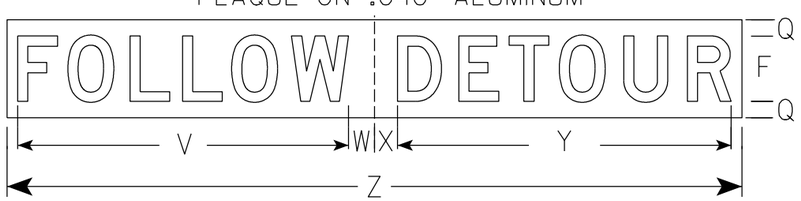
DATE 1/22/19 PLATE NO. G20-57.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 242 | E



G20-57C

PLAQUE ON .040" ALUMINUM



USE ONLY ONCE WHEN ROAD IS CLOSED

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Substitute appropriate numeral and adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2																											
3	72	36	1 1/8	1/2	5/8	6	5	4	15 5/8	1 5/8	5	9 1/4	21 1/8	5	2 7/8	29	2	30	1 3/4	3 1/4	28 3/8	40 1/2	2	2	29 3/4	66	18.0
4	96	48	2 1/4	3/4	1	8	6 1/2	5 1/2	20 5/8	2 1/4	6	12 1/4	28 1/4	6	4 1/8	38 3/8	2	39 7/8	2	4	37 7/8	29 3/4	3 1/8	2 7/8	40 7/8	90	32.0
5																											

STANDARD SIGN
G20-57C

WISCONSIN DEPT OF TRANSPORTATION

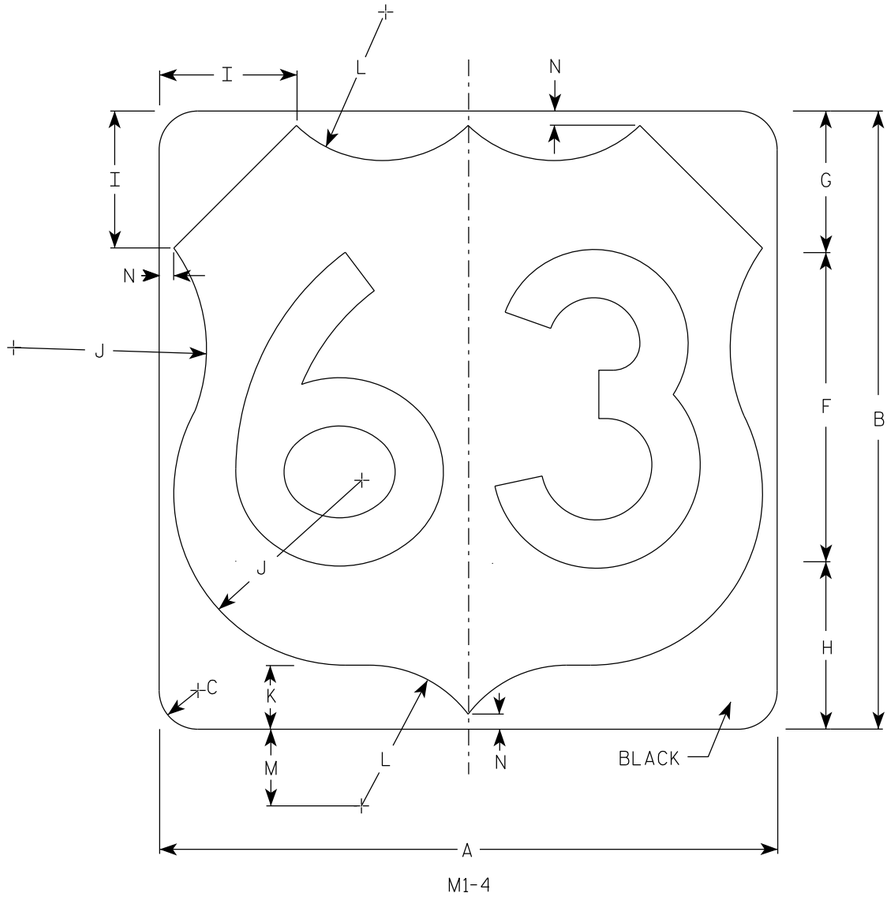
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/25/19 PLATE NO. G20-57C.1

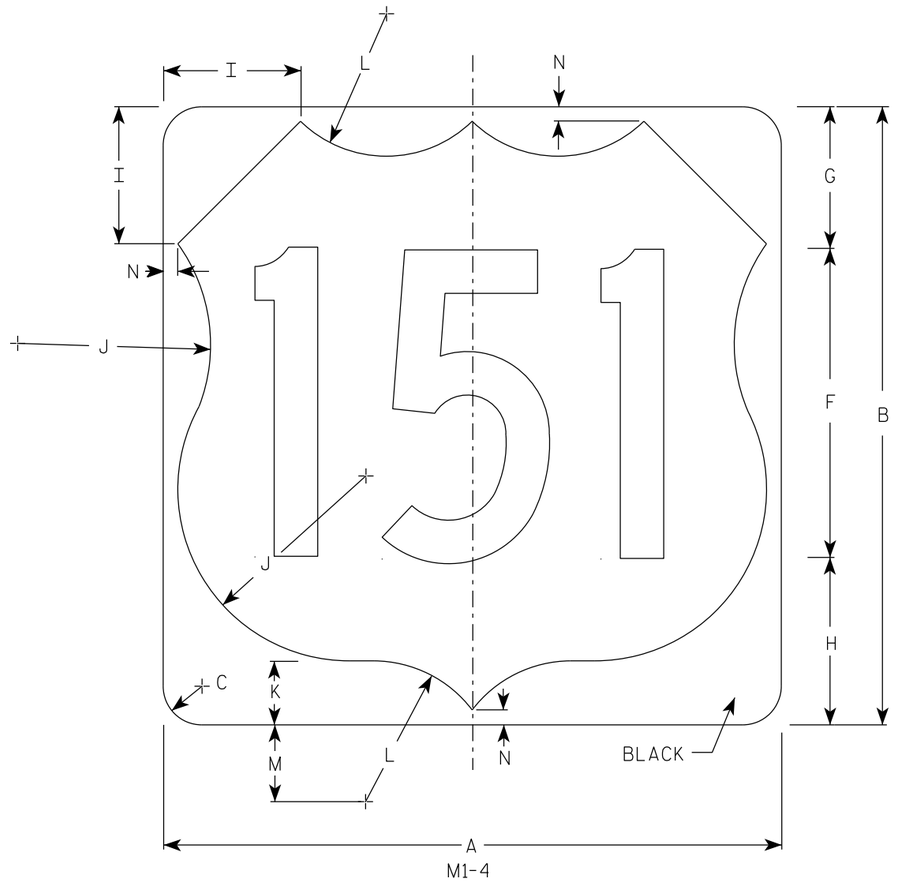
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 243 E

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



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
2M	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

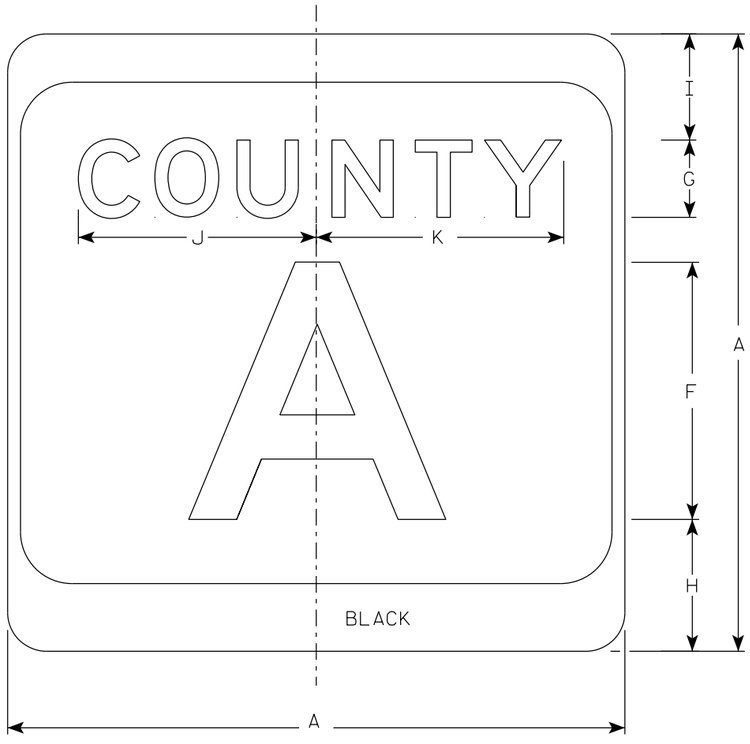
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

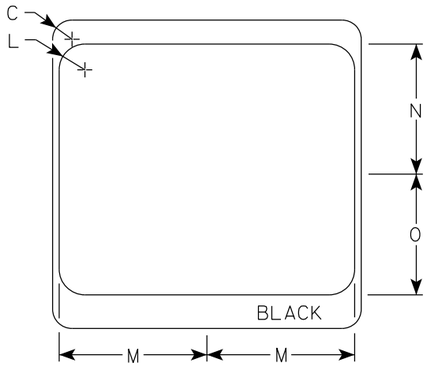
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/20/22 PLATE NO. M1-4.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 244 E

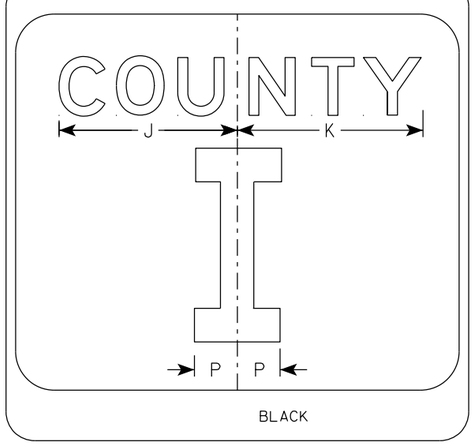


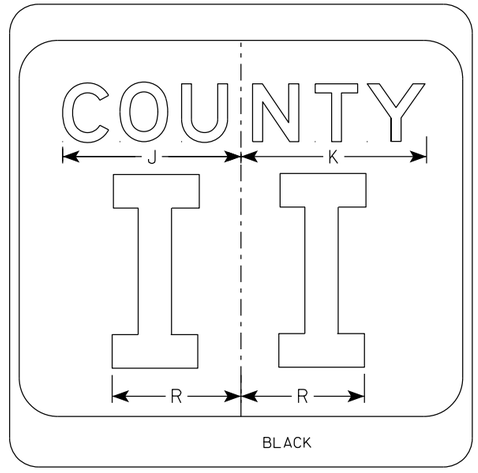
M1-5A



NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White & Black
   Message - Black
3. Message Series - see Note 4
4. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
5. Substitute appropriate letters & optically center to achieve proper balance.





SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
2M	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

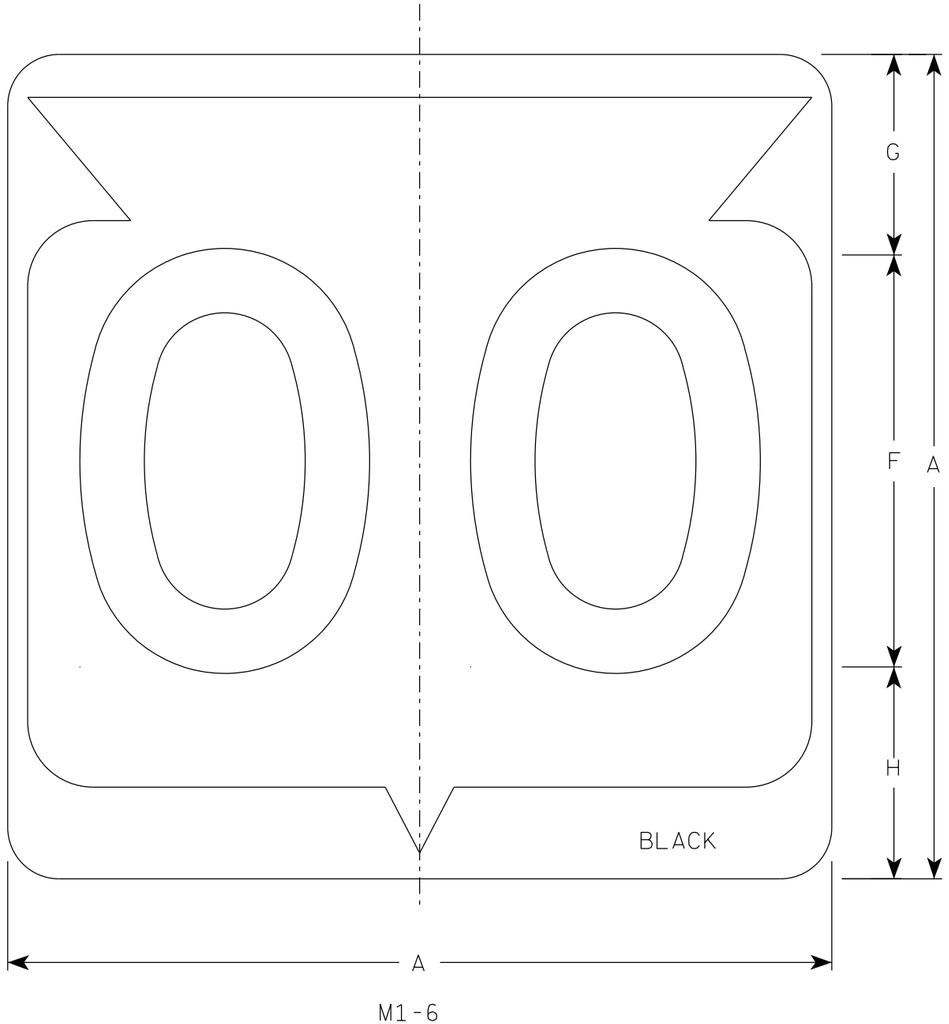
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/8/2022 PLATE NO. M1-5A.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M15A.dgn PLOT DATE : 8-NOV 2022 8:26 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

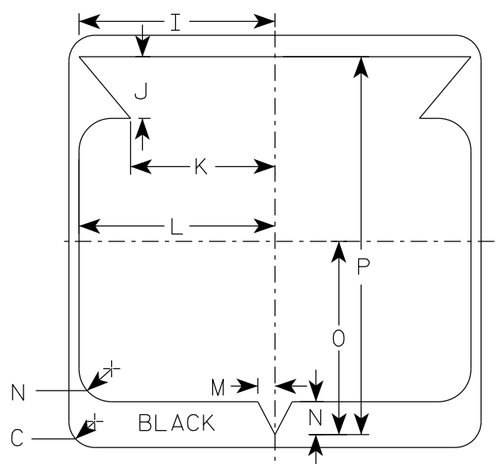
7



M1-6

NOTES

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



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

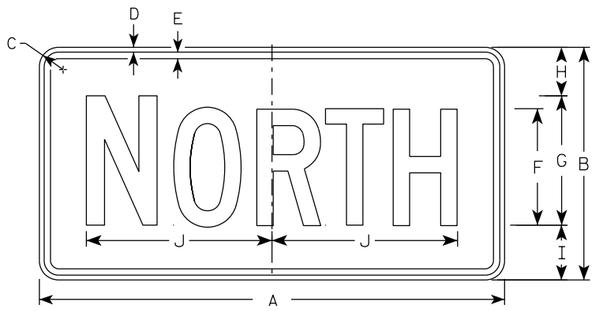
STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

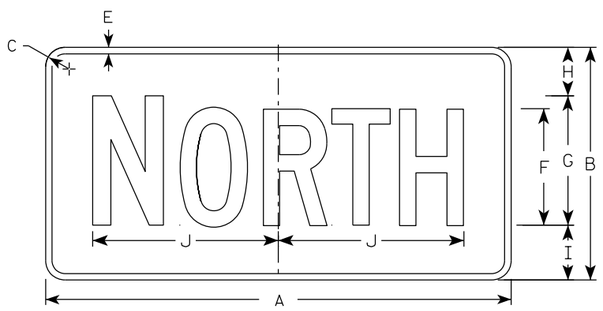
APPROVED Matthew R Rauch
for State Traffic Engineer

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

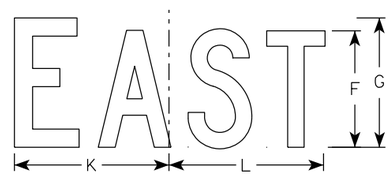
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 246	E



M3-1
MM3-1
MP3-1



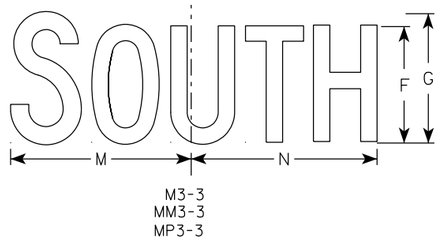
MB3-1
MK3-1
MN3-1



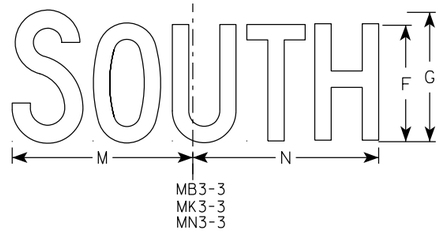
M3-2
MM3-2
MP3-2



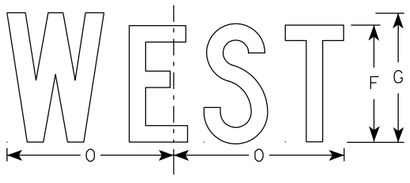
MB3-2
MK3-2
MN3-2



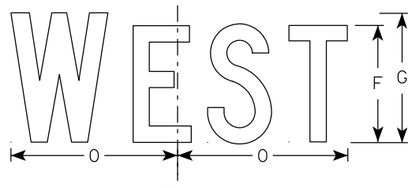
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

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

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

STANDARD SIGNS
M3-1 THRU M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

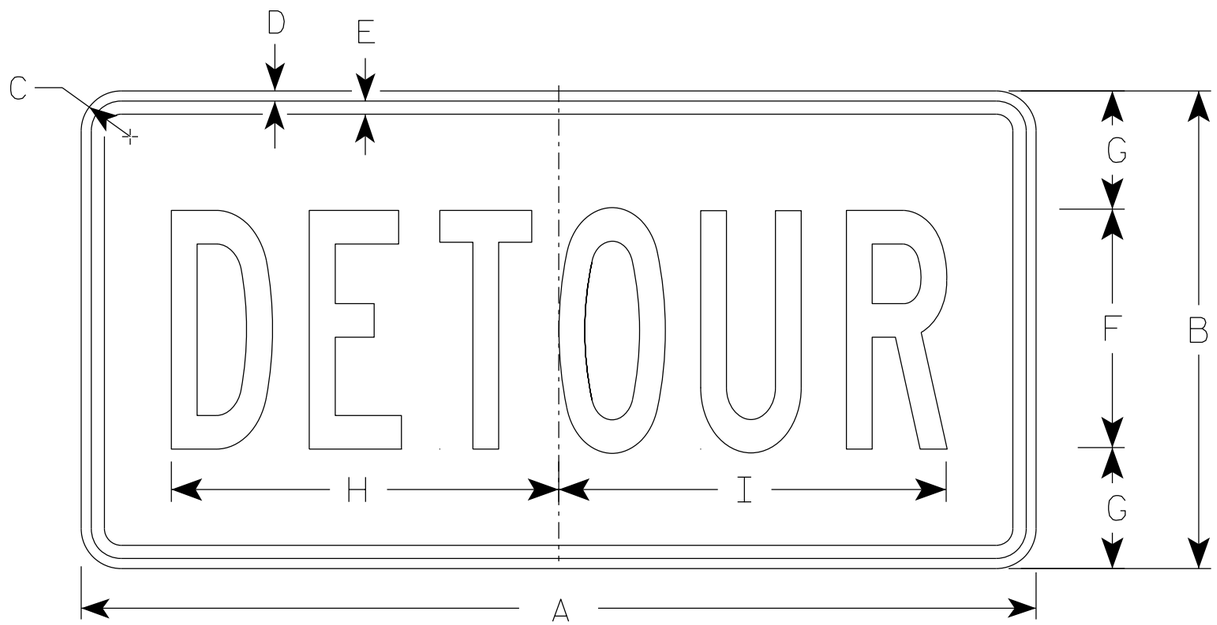
APPROVED Matthew R Rauch
For State Traffic Engineer

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

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 247 | E

NOTES

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



M4-8

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

STANDARD SIGN
M4-8

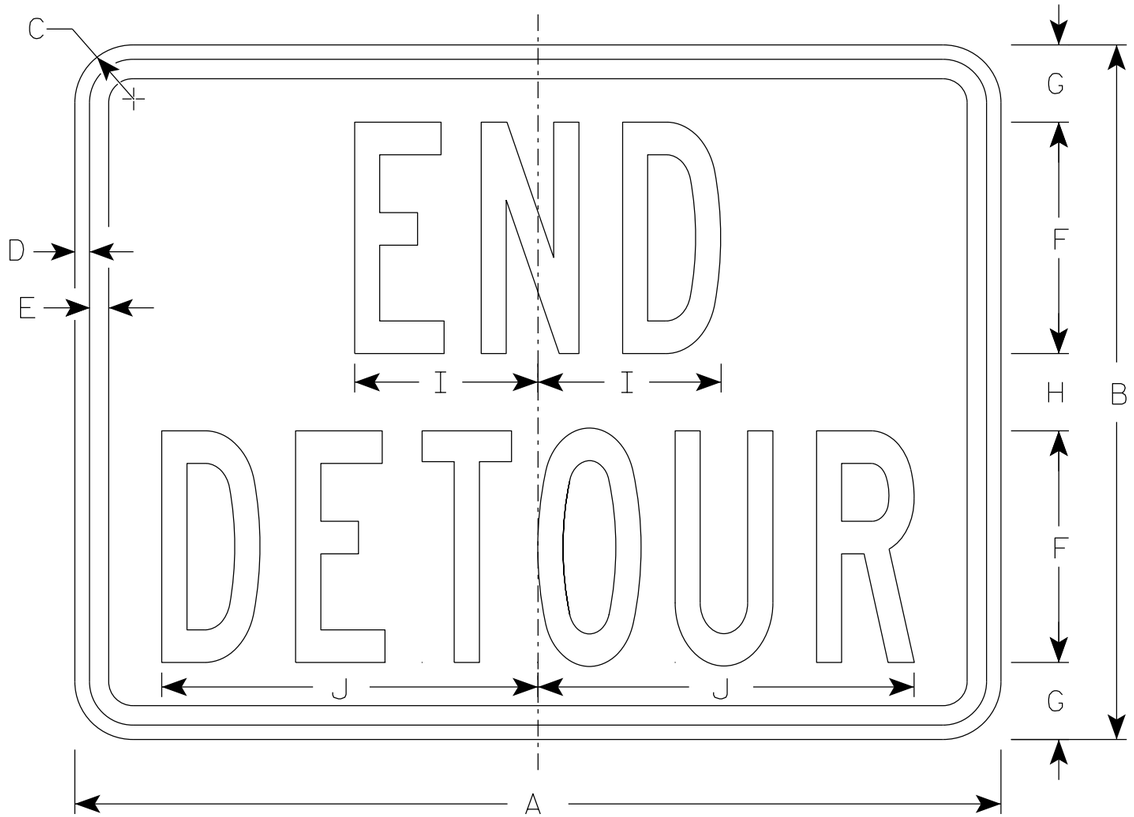
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M48.dgn PLOT DATE : 9-FEB 2023 7:38 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



M4-8A

NOTES

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

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

STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

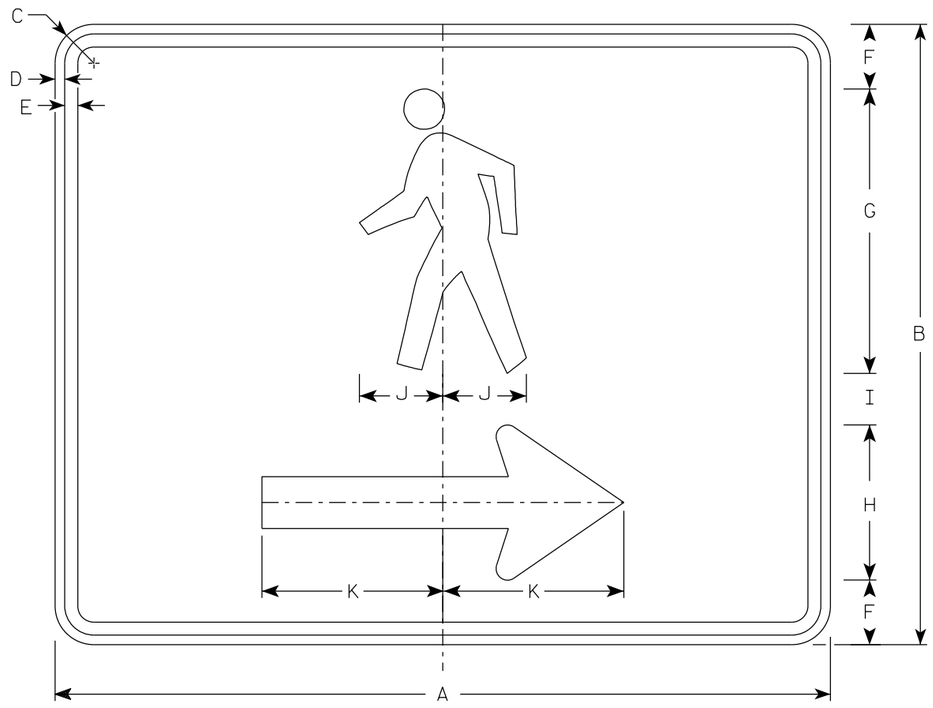
APPROVED Matthew R Rauch
for State Traffic Engineer

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

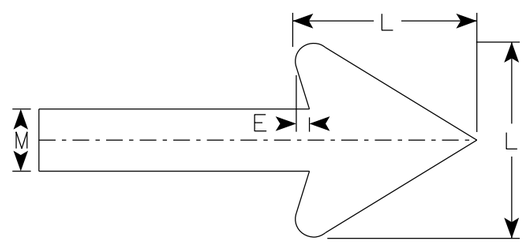
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 249 | E

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Orange
   Message - Black
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. M4-60L is the same as M4-60R except the arrow is reversed.



M4-60R



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	24	1 ½	⅜	½	2 ½	11	6	2	3 ¼	7	6	2														5.00
2M	30	24	1 ½	⅜	½	2 ½	11	6	2	3 ¼	7	6	2														5.00
3																											
4																											
5																											

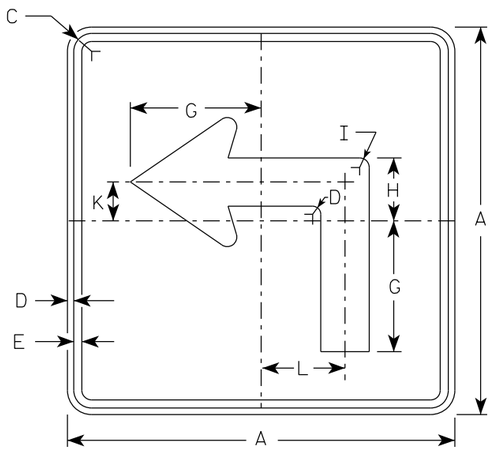
STANDARD SIGN
M4-60 L&R

WISCONSIN DEPT OF TRANSPORTATION

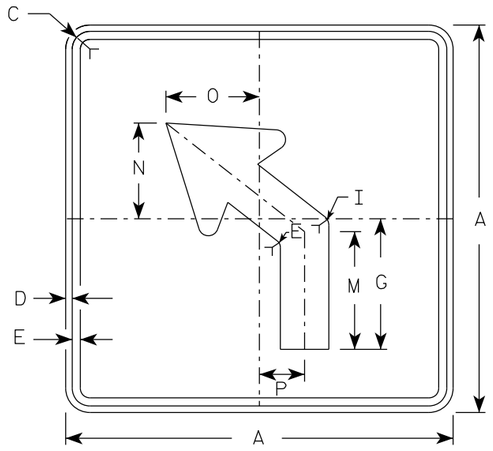
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/14/2023 PLATE NO. M4-60.2

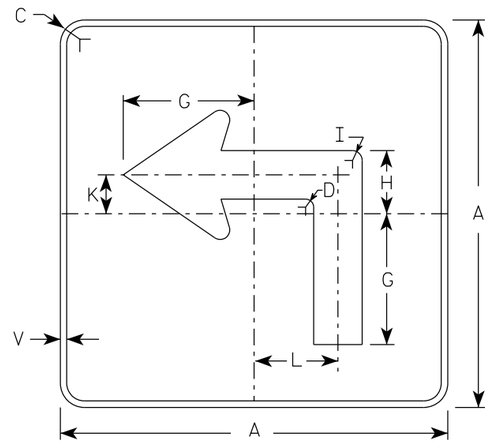
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 250 | E



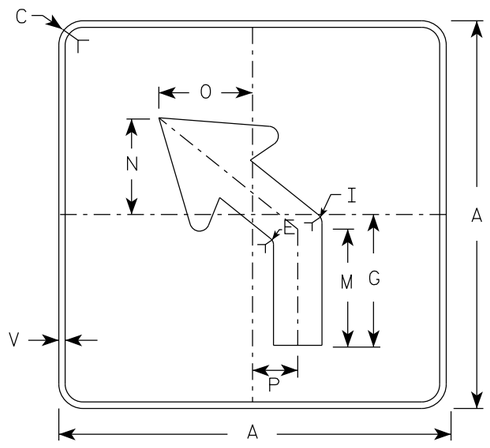
M5-1L
MM5-1L
MO5-1L
MP5-1L



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



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

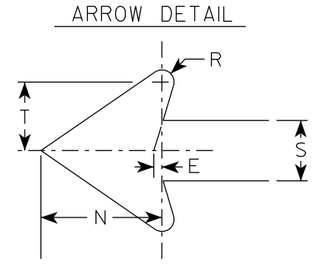


MB5-2L
MK5-2L
MN5-2L
MR5-2L

NOTES

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

ARROW DETAIL



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

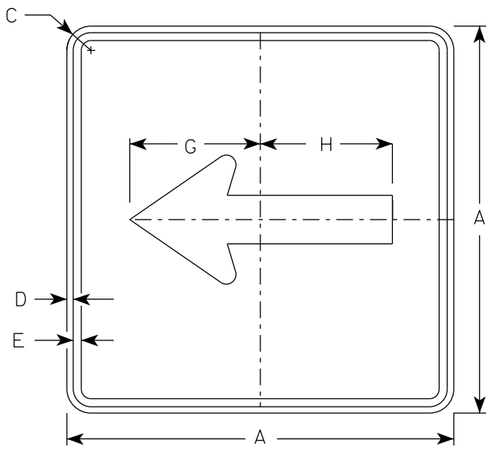
STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

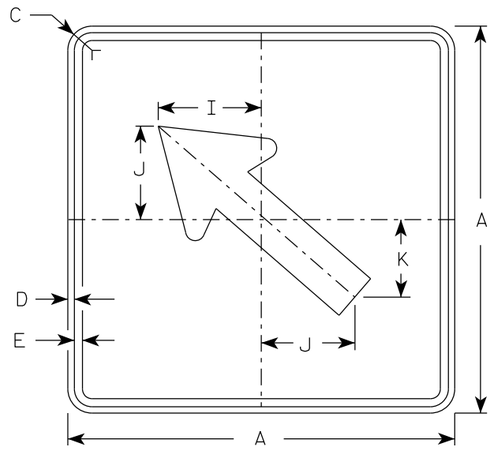
APPROVED Matthew R Rauch
for State Traffic Engineer

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

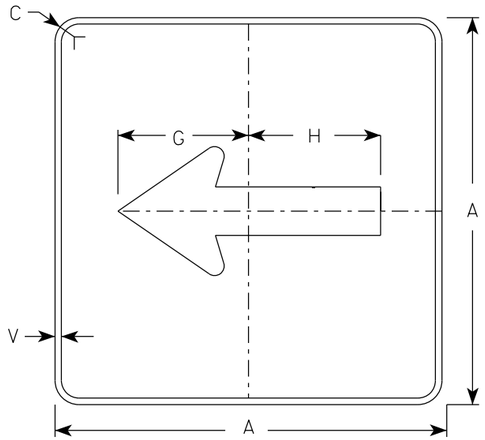
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 251 | E



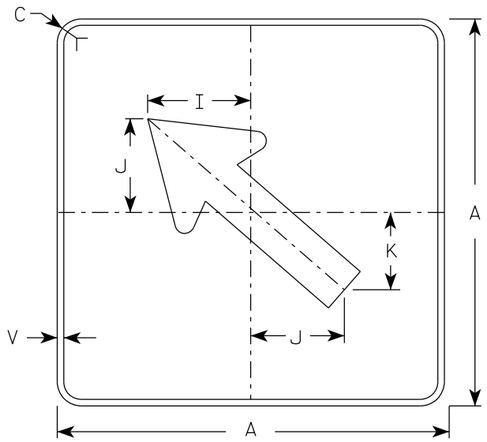
M6-1
MM6-1
MO6-1
MP6-1



M6-2
MM6-2
MO6-2
MP6-2



MB6-1
MK6-1
MN6-1
MR6-1

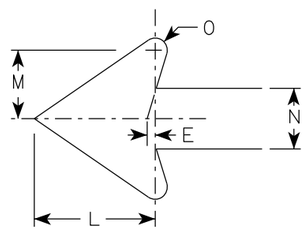


MB6-2
MK6-2
MN6-2
MR6-2

NOTES

1. Signs are Type II - Type H Reflective except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow

ARROW DETAIL



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

STANDARD SIGN
M6-1 & M6-2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

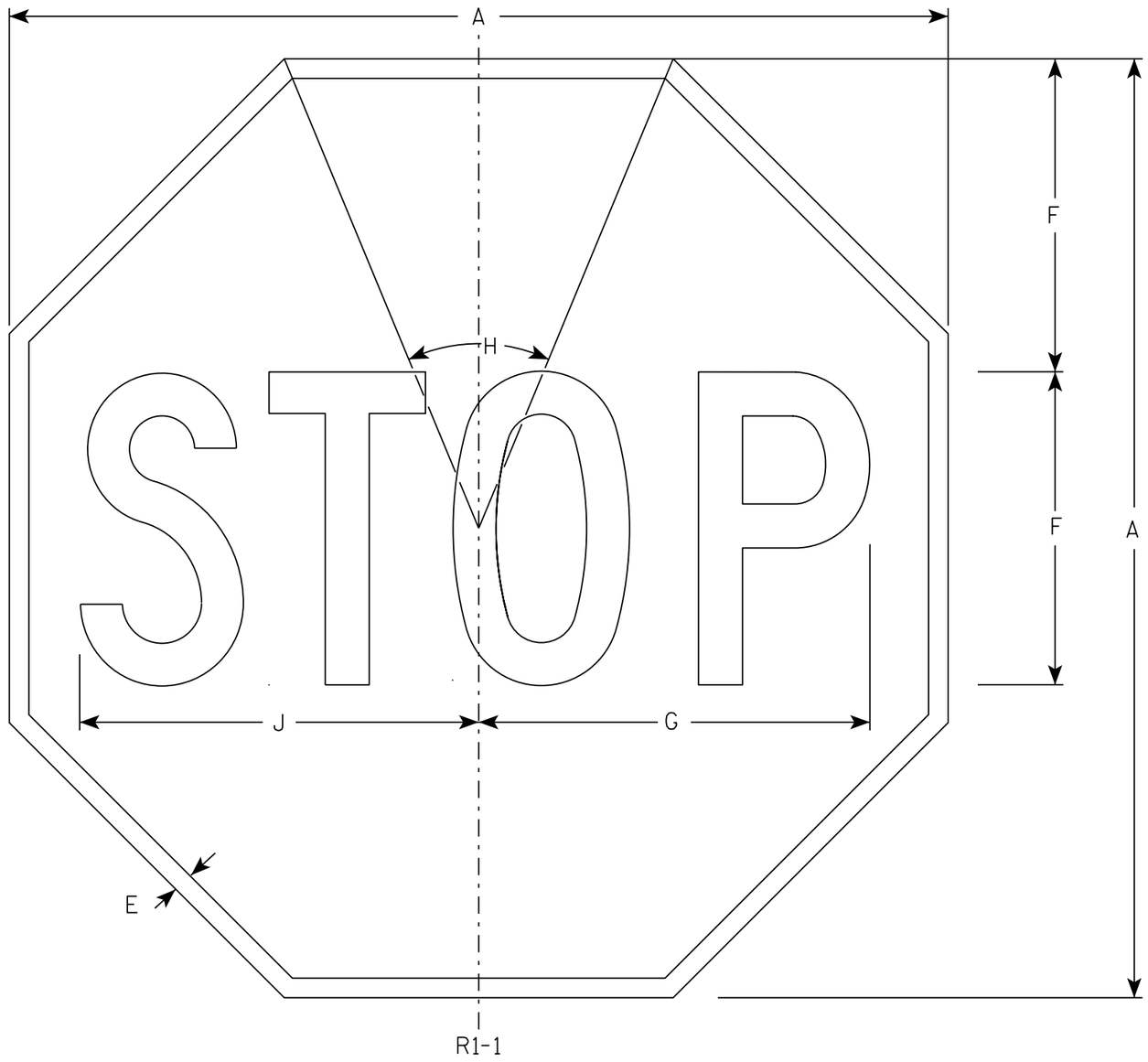
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/13/2023 PLATE NO. M6-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 252 | E

7

7



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

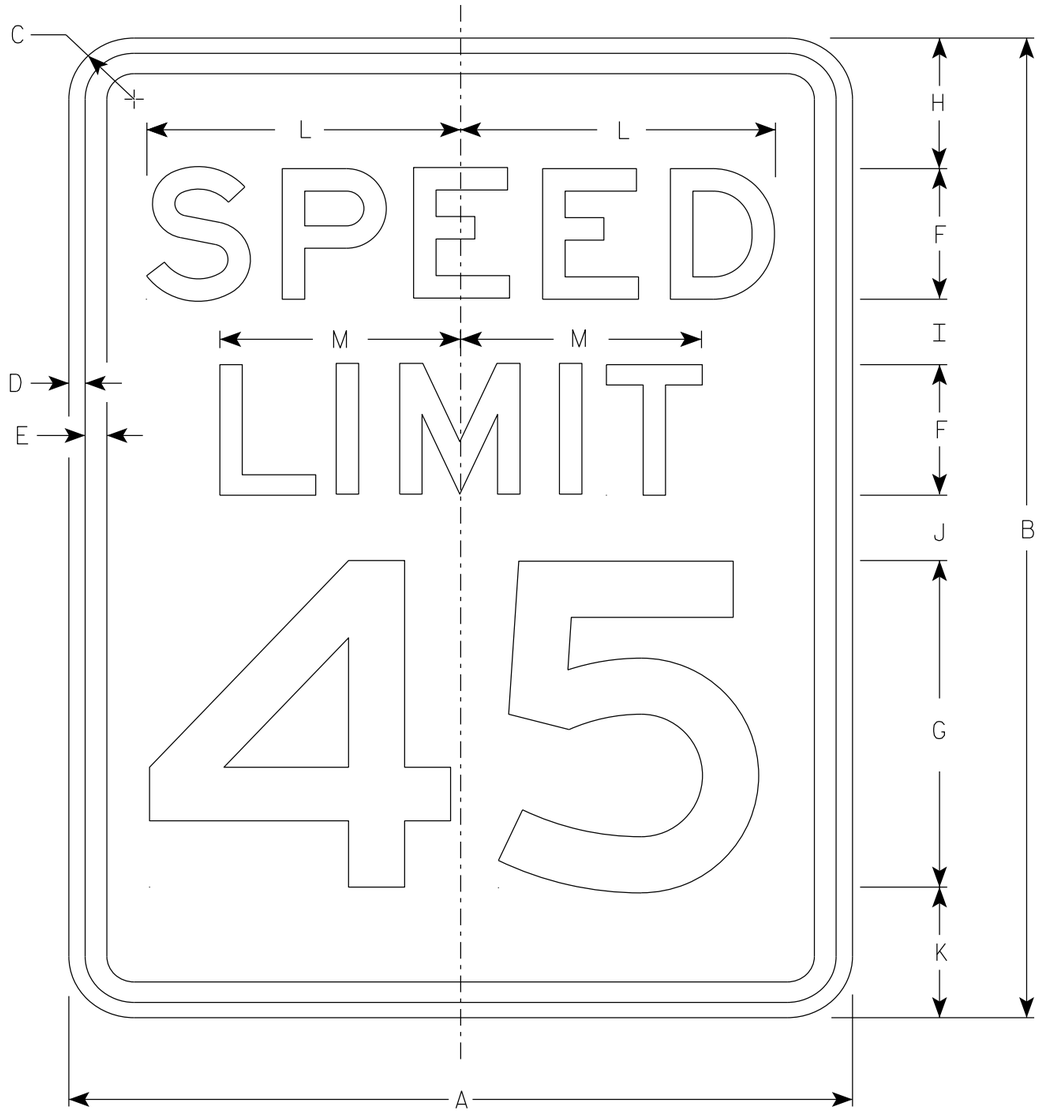
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 253	E



R2-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/2	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/2	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 7/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 7/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 7/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	3	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

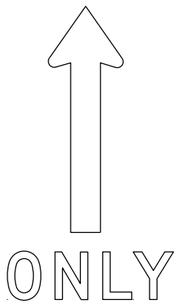
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/1/23 PLATE NO. R2-1.14

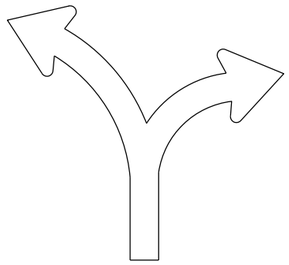
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 254 | E

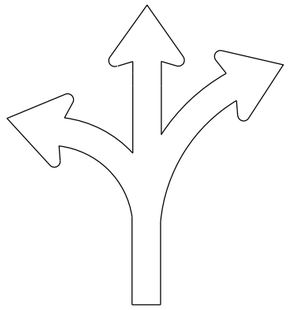


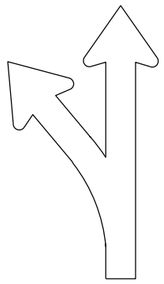
(A)

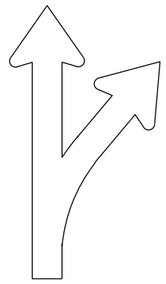


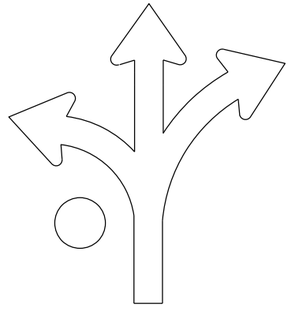
(B)

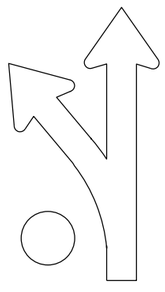

(C)

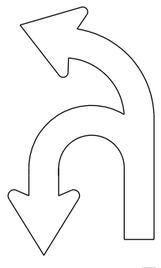

(D)

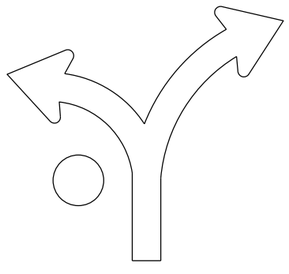

(E)

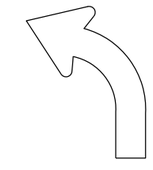

(F)


(G)

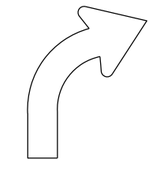

(H)


(I)


(J)



(L)



(R)

NOTES

1. Sigs are Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Use appropriate Letter for Sign Code
   Each letter added makes sign wider. Example R3-8EAR
5. Square footage of sign varies by letters

1	Letter =	3.75 sq ft for Size 2
		6.0 sq ft for Size 3
		10.0 sq ft for Size 4 or 5
2	Letters =	7.5 sq ft for Size 2
		12.0 sq ft for Size 3
		20.0 sq ft for Size 4 or 5
3	Letters =	11.25 sq ft for Size 2
		18.0 sq ft for Size 3
		30.0 sq ft for Size 4 or 5
4	Letters =	15.0 sq ft for Size 2
		24.0 sq ft for Size 3
		40.0 sq ft for Size 4 or 5
5	Letters =	18.75 sq ft for Size 2
		30.0 sq ft for Size 3
		50.0 sq ft for Size 4 or 5
6	Letters =	22.5 sq ft for Size 2
		36.0 sq ft for Size 3
		60.0 sq ft for Size 4 or 5

6. When letters C,D,G,J are used on the Left or Right end of the sign the Sq. Ft. changes.
   Add the amounts when these letters are used:
   1.25 sq ft for Size 2
   1.5 sq ft for Size 3
   2.0 sq ft for Size 4 or 5

STANDARD SIGN
R3-8 Series

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

PROJECT NO:

SHEET NO: 255 E

FILE NAME : C:\CAEfiles\Projects\stdplate_R38.dgn PLOT DATE : 14-FEB 2023 3:01 PLOT BY : mscj9h PLOT NAME :

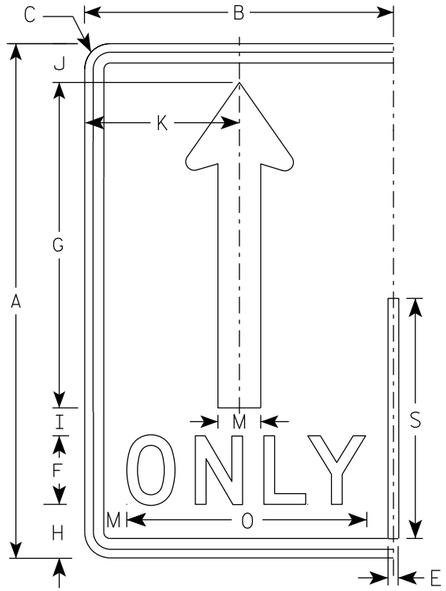
WISDOT/CADDS SHEET 42

7

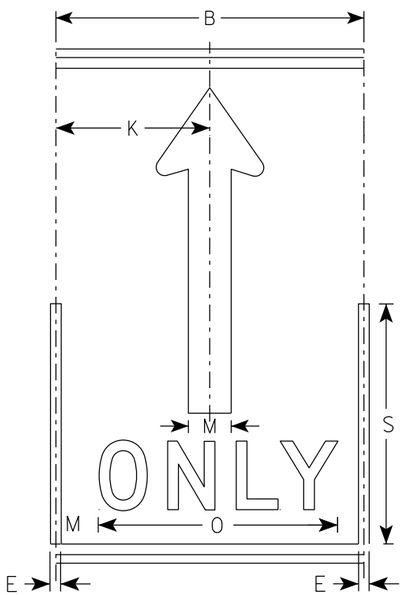
7

NOTES

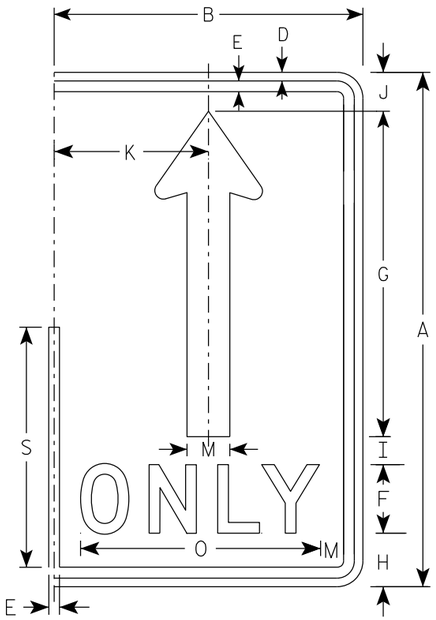
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



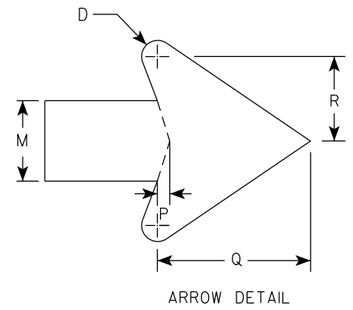
(A)



(A)



(A)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8	4	19	3 1/8	1 5/8	2 1/4	9		2 1/2		14	3/8	4 3/4	2 5/8	14								3.75
2M	30	18	1 1/2	1/2	5/8	4	19	3 1/8	1 5/8	2 1/4	9		2 1/2		14	3/8	4 3/4	2 5/8	14								3.75
3	36	24	1 1/2	1/2	5/8	5	22 3/4	3 3/4	1 3/4	2 3/4	12		3		17 5/8	1/2	5 3/4	3 1/8	16 3/4								6.0
4	48	30	2 1/4	3/4	1	6	30 3/8	5 1/8	2 7/8	3 5/8	15		4		21 3/4	5/8	7 5/8	4 1/4	22 3/8								10.0
5	48	30	2 1/4	3/4	1	6	30 3/8	5 1/8	2 7/8	3 5/8	15		4		21 3/4	5/8	7 5/8	4 1/4	22 3/8								10.0

STANDARD SIGN
R3-8 (A) Arrow

WISCONSIN DEPT OF TRANSPORTATION

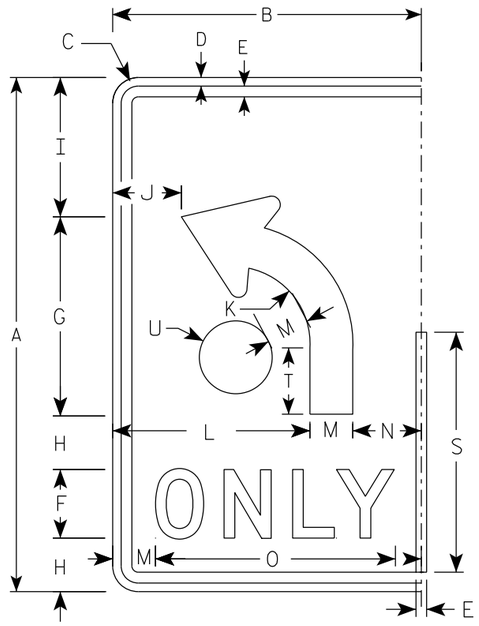
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

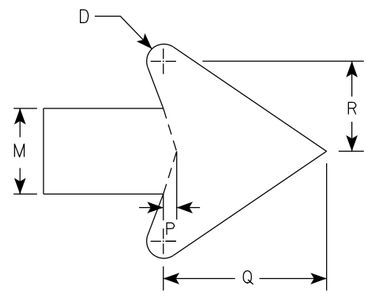
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 256 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
   Message Series - D



(B)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8	2 1/8						3.75
2M	30	18	1 1/2	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8	2 1/8						3.75
3	36	24	1 1/2	1/2	5/8	5	14	3 1/2	9 3/4	6	5 3/8	15	3	6	17 5/8	1/2	5 3/4	3 1/8	16 3/4	4 5/8	2 1/2						6.0
4	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4	3 3/8						10.0
5	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4	3 3/8						10.0

STANDARD SIGN

R3-8 (B) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

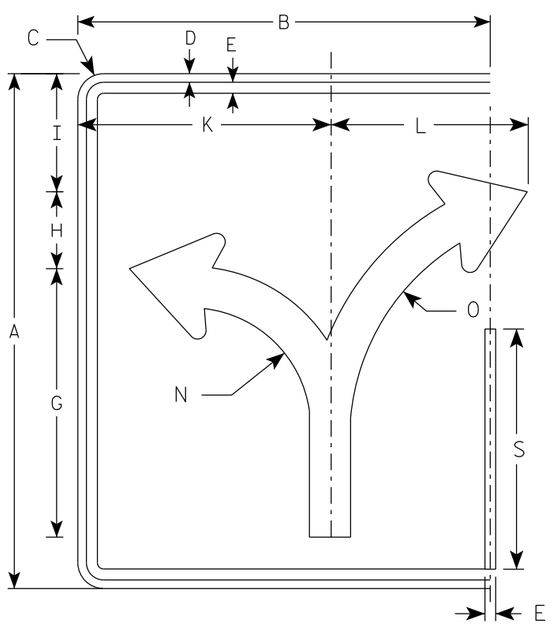
DATE 2/14/23 PLATE NO. R3-8.2

PROJECT NO:

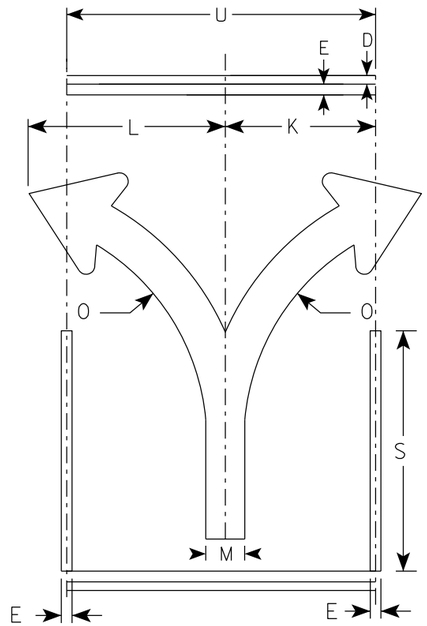
SHEET NO: 257 E

NOTES

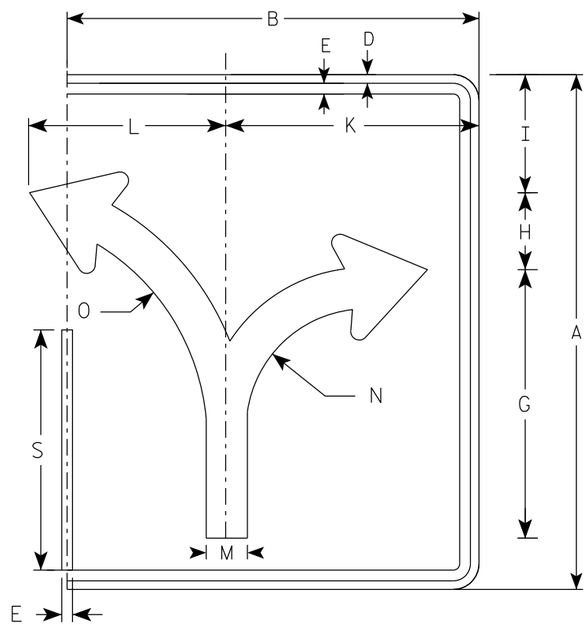
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



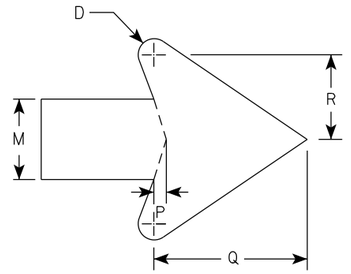
(C)



(C)



(C)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	ENDS Area sq. ft.	MIDDLE Area sq. ft.
1																												
2S	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
2M	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
3	36	30	1 1/2	1/2	5/8		18 3/4	5 1/2	8 1/4		17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		24						7.5	6.0
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0

STANDARD SIGN
R3-8 (C) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

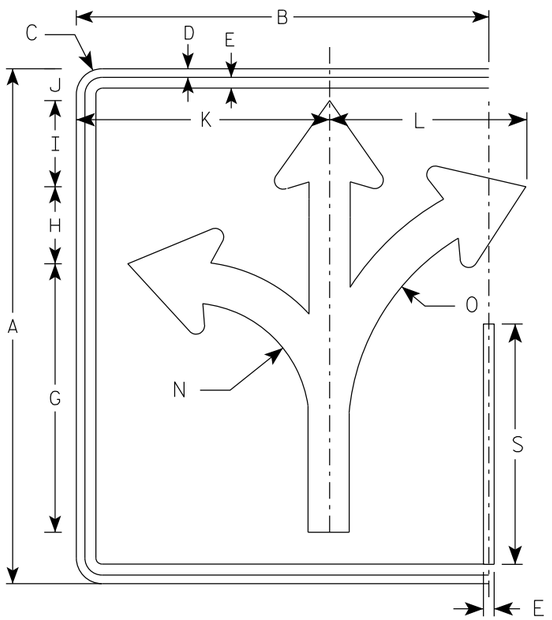
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 258 | E

7

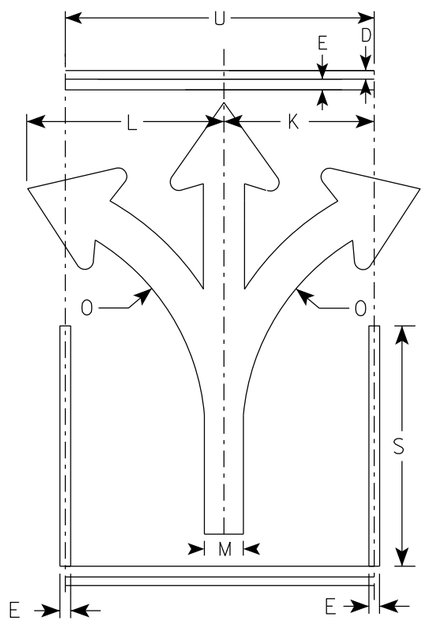
7

NOTES

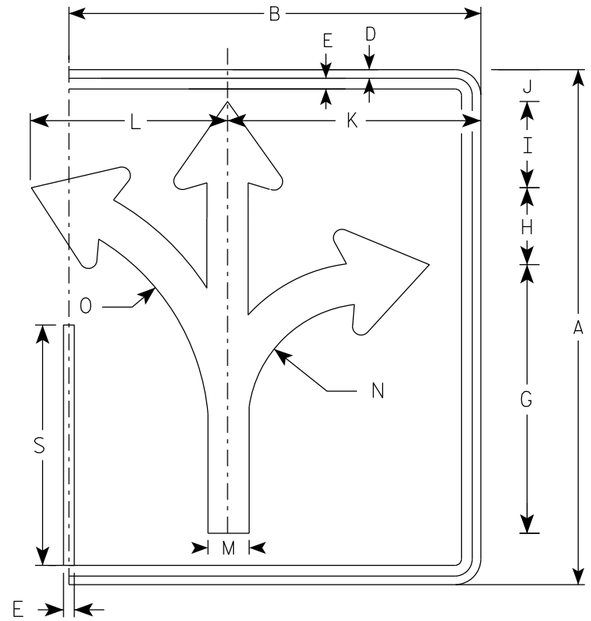
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



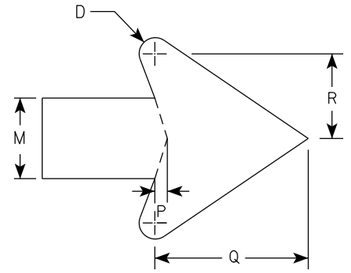
(D)



(D)



(D)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	ENDS Area sq. ft.	MIDDLE Area sq. ft.
1																												
2S	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
2M	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
3	36	30	1 1/2	1/2	5/8		18 3/4	5 1/2	6	2 1/4	17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		24						7.5	6.0
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0

STANDARD SIGN
R3-8 (D) Arrow

WISCONSIN DEPT OF TRANSPORTATION

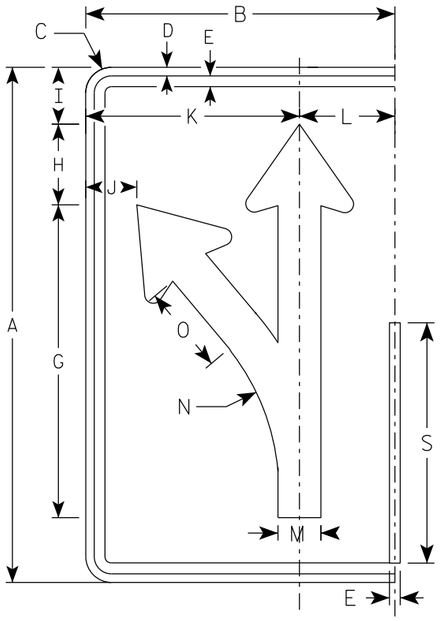
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

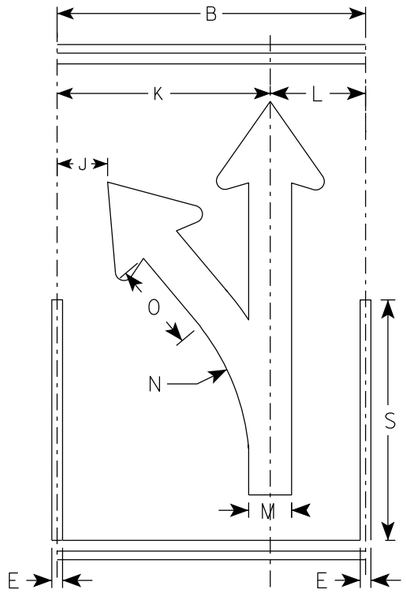
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 259 | E

NOTES

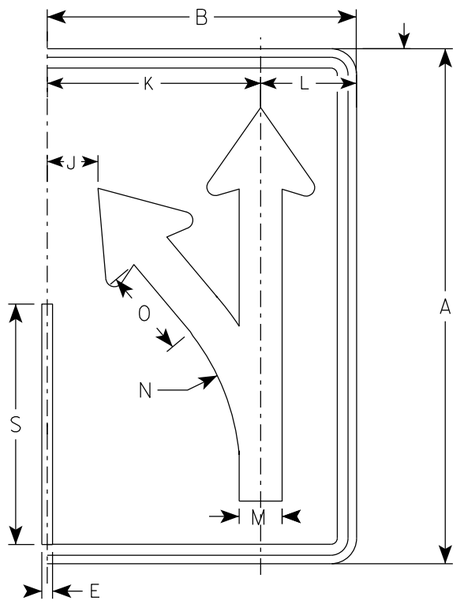
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



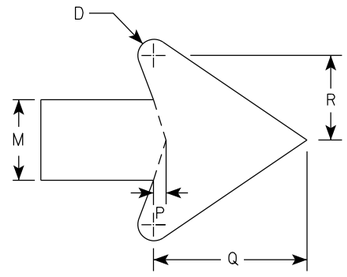
(E)



(E)



(E)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
2M	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
3	36	24	1 1/2	1/2	5/8		21 7/8	5 5/8	4	4 7/8	16 1/8	7 3/4	3	15 7/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4								6.0
4	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0
5	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0

STANDARD SIGN
R3-8 (E) Arrow

WISCONSIN DEPT OF TRANSPORTATION

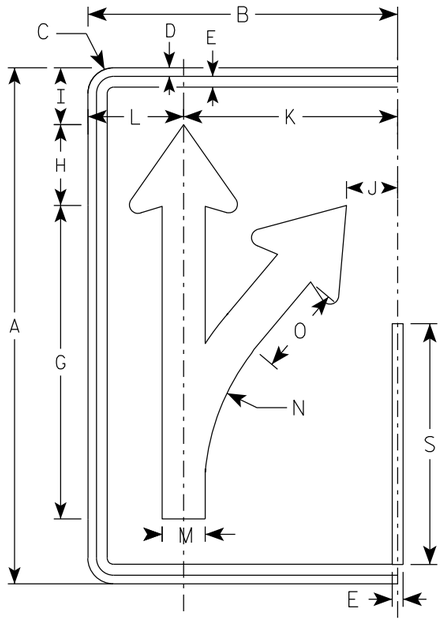
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

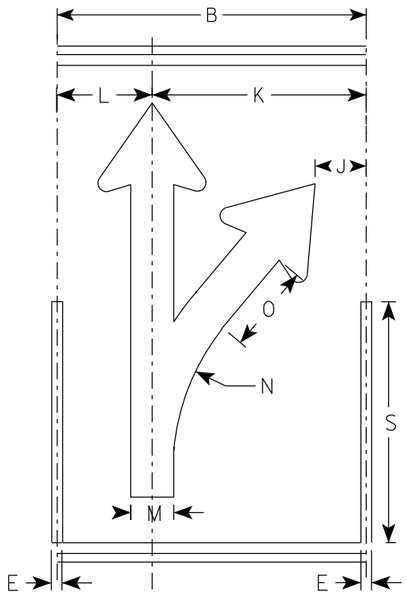
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 260 | E

NOTES

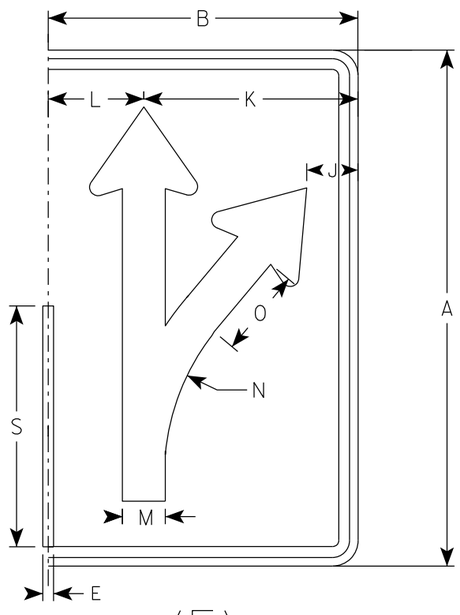
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



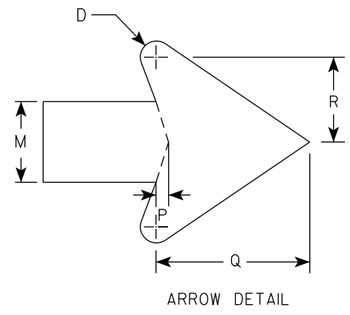
(F)



(F)



(F)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
2M	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
3	36	24	1 1/2	1/2	5/8		21 7/8	5 5/8	4	4 7/8	16 1/8	7 3/4	3	15 7/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4								6.0
4	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0
5	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0

STANDARD SIGN
R3-8 (F) Arrow

WISCONSIN DEPT OF TRANSPORTATION

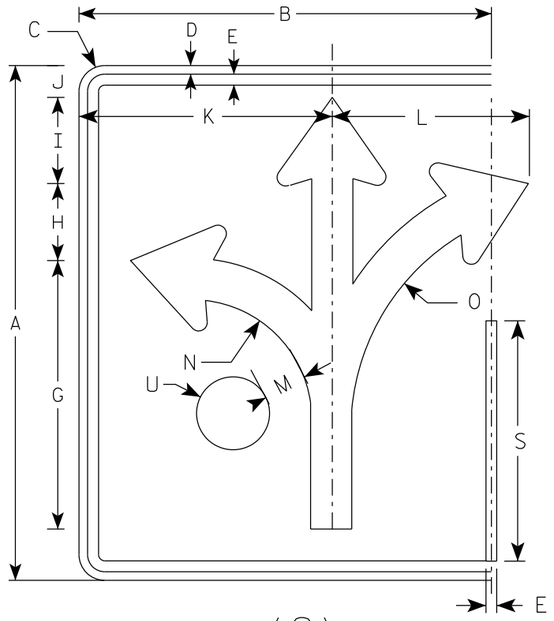
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

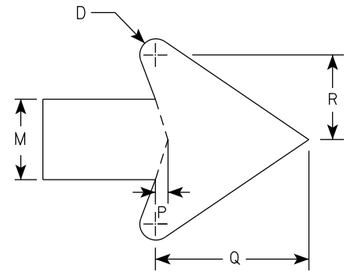
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 261 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(G)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
2M	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
3	36	30	1 1/2	1/2	5/8		18 3/4	5 1/2	6	3 1/8	17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		2 1/2						7.5
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0

STANDARD SIGN
R3-8 (G) Arrow

WISCONSIN DEPT OF TRANSPORTATION

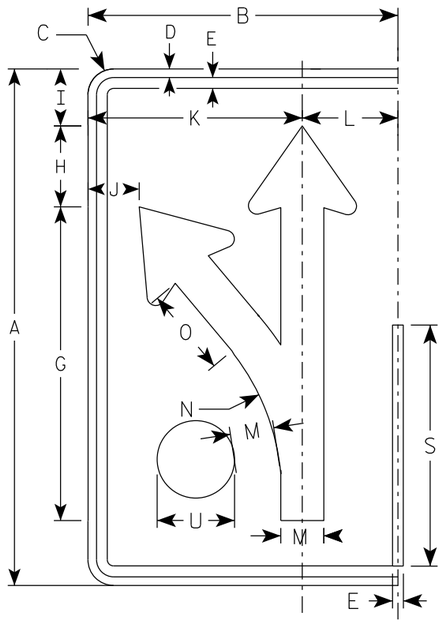
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

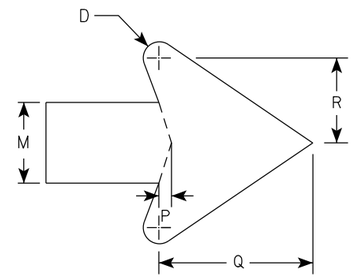
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 262	E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(H)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14		2 1/8						3.75
2M	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14		2 1/8						3.75
3	36	24	1 1/2	1/2	5/8		21 7/8	5 5/8	4	4 7/8	16 1/8	7 3/4	3	15 7/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4		2 1/2						6.0
4	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8		3 3/8						10.0
5	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8		3 3/8						10.0

STANDARD SIGN
R3-8 (H) Arrow

WISCONSIN DEPT OF TRANSPORTATION

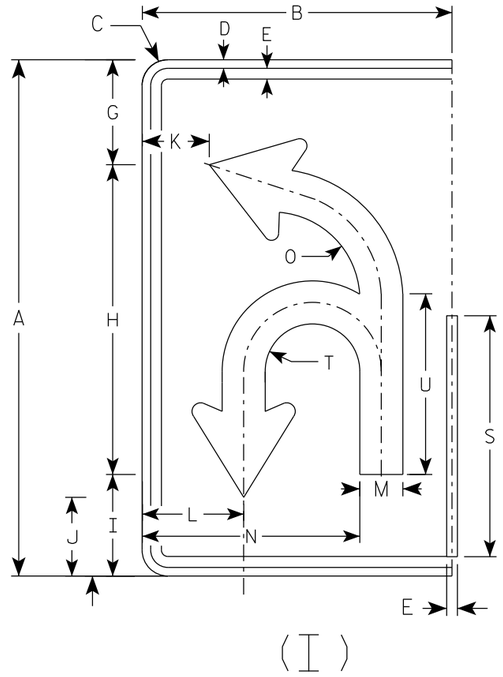
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

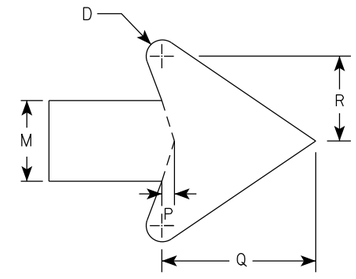
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 263 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(I)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8		6 1/8	18	5 7/8	4 5/8	3 7/8	5 7/8	2 1/2	12 5/8	5 1/8	3/8	4 3/4	2 5/8	14	2 3/4	10 1/2						3.75
2M	30	18	1 1/2	1/2	5/8		6 1/8	18	5 7/8	4 5/8	3 7/8	5 7/8	2 1/2	12 5/8	5 1/8	3/8	4 3/4	2 5/8	14	2 3/4	10 1/2						3.75
3	36	24	1 1/2	1/2	5/8		21 7/8	21 5/8	7 1/8	5 1/2	5 7/8	8 1/4	3	16 3/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4	3 1/4	12 5/8						6.0
4	48	30	2 1/4	3/4	1		29 1/8	28 3/4	9 3/8	7 1/4	6 7/8	10	4	20 7/8	8 1/8	5/8	7 5/8	4 1/4	22 3/8	4 3/8	16 3/4						10.0
5	48	30	2 1/4	3/4	1		29 1/8	28 3/4	9 3/8	7 1/4	6 7/8	10	4	20 7/8	8 1/8	5/8	7 5/8	4 1/4	22 3/8	4 3/8	16 3/4						10.0

STANDARD SIGN
R3-8 (I) Arrow

WISCONSIN DEPT OF TRANSPORTATION

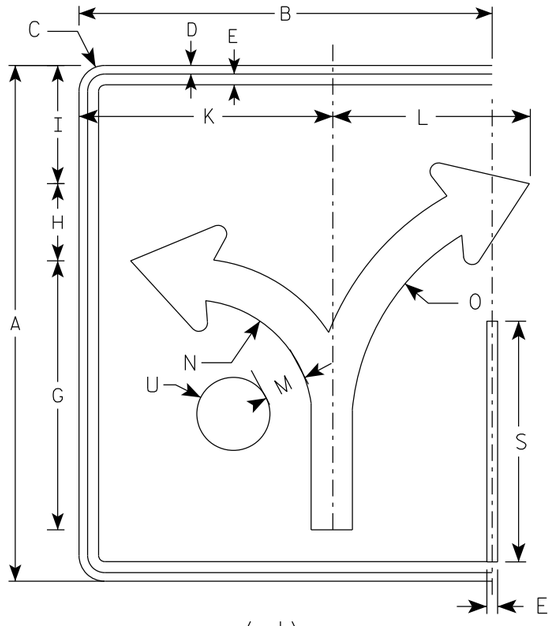
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

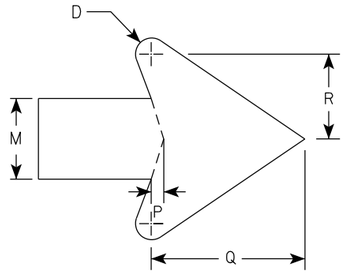
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 264 E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(J)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
2M	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
3	36	30	1 1/2	1/2	5/8		18 3/4	5 1/2	8 1/4		17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		2 1/2						7.5
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0

STANDARD SIGN
R3-8 (J) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

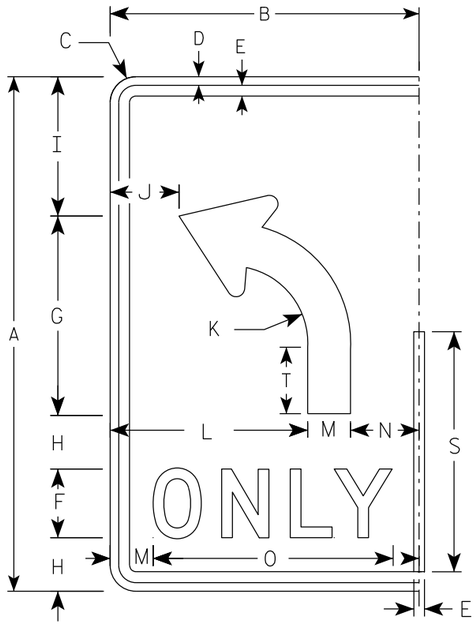
DATE 2/14/23 PLATE NO. R3-8.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 265 | E

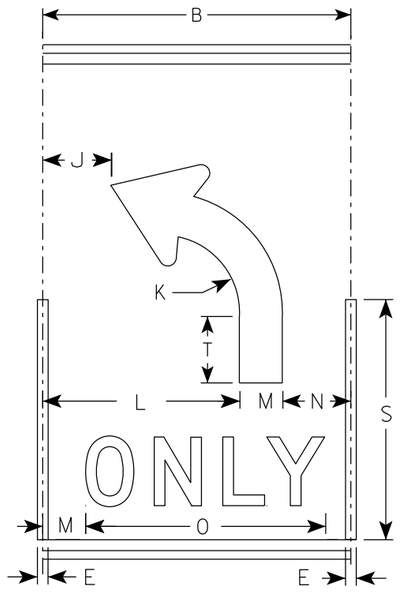
FILE NAME : C:\CAEfiles\Projects\stdplate_R38.dgn PLOT DATE : 14-FEB 2023 3:18 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

NOTES

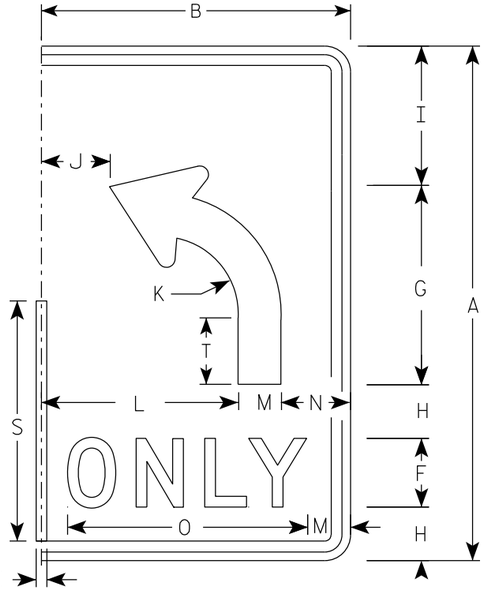
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



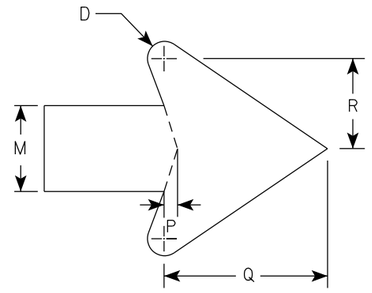
(L)



(L)



(L)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 ½	½	⅝	4	11 ⅝	3 ⅛	8 ⅛	4	4 ½	11 ½	2 ½	4	14	⅜	4 ¾	2 ⅝	14	3 ⅞							3.75
2M	30	18	1 ½	½	⅝	4	11 ⅝	3 ⅛	8 ⅛	4	4 ½	11 ½	2 ½	4	14	⅜	4 ¾	2 ⅝	14	3 ⅞							3.75
3	36	24	1 ½	½	⅝	5	14	3 ½	9 ¾	6	5 ⅜	15	3	6	17 ⅝	½	5 ¾	3 ⅛	16 ¾	4 ⅝							6.0
4	48	30	2 ¼	¾	1	6	18 ⅝	5 ⅛	13 ⅛	6 ⅛	7 ¼	18	4	8	21 ¾	⅝	7 ⅝	4 ¼	22 ⅜	6 ¼							10.0
5	48	30	2 ¼	¾	1	6	18 ⅝	5 ⅛	13 ⅛	6 ⅛	7 ¼	18	4	8	21 ¾	⅝	7 ⅝	4 ¼	22 ⅜	6 ¼							10.0

STANDARD SIGN

R3-8 (L) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

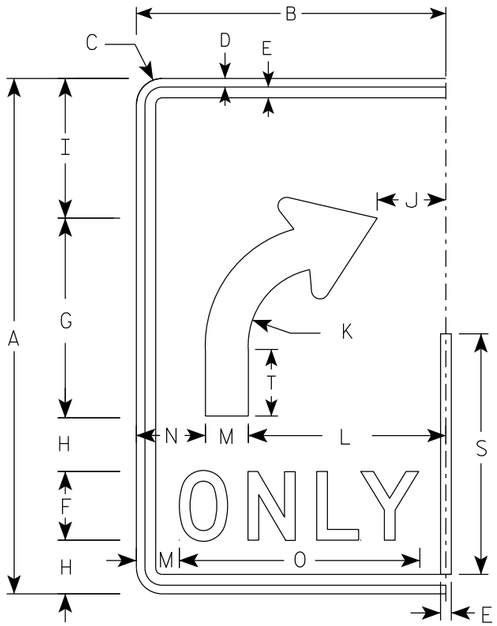
DATE 2/14/23 PLATE NO. R3-8.2

PROJECT NO:

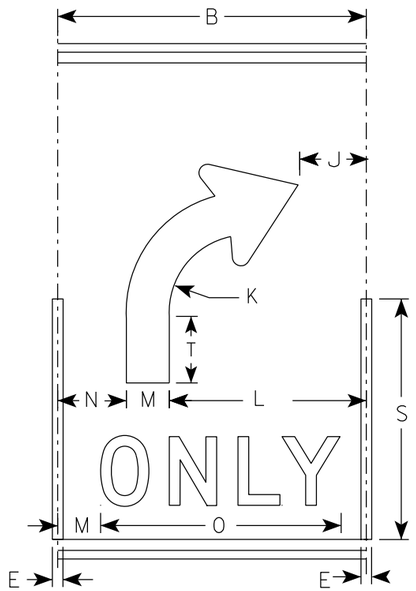
SHEET NO: 266 E

NOTES

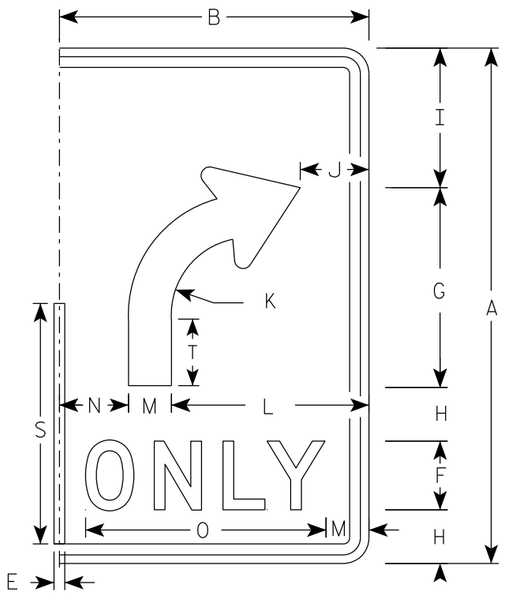
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



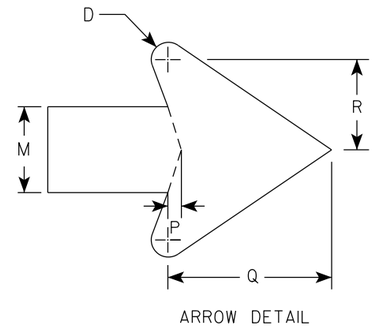
(R)



(R)



(R)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8							3.75
2M	30	18	1 1/2	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8							3.75
3	36	24	1 1/2	1/2	5/8	5	14	3 1/2	9 3/4	6	5 3/8	15	3	6	17 5/8	1/2	5 3/4	3 1/8	16 3/4	4 5/8							6.0
4	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4							10.0
5	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4							10.0

STANDARD SIGN

R3-8 (R) Arrow

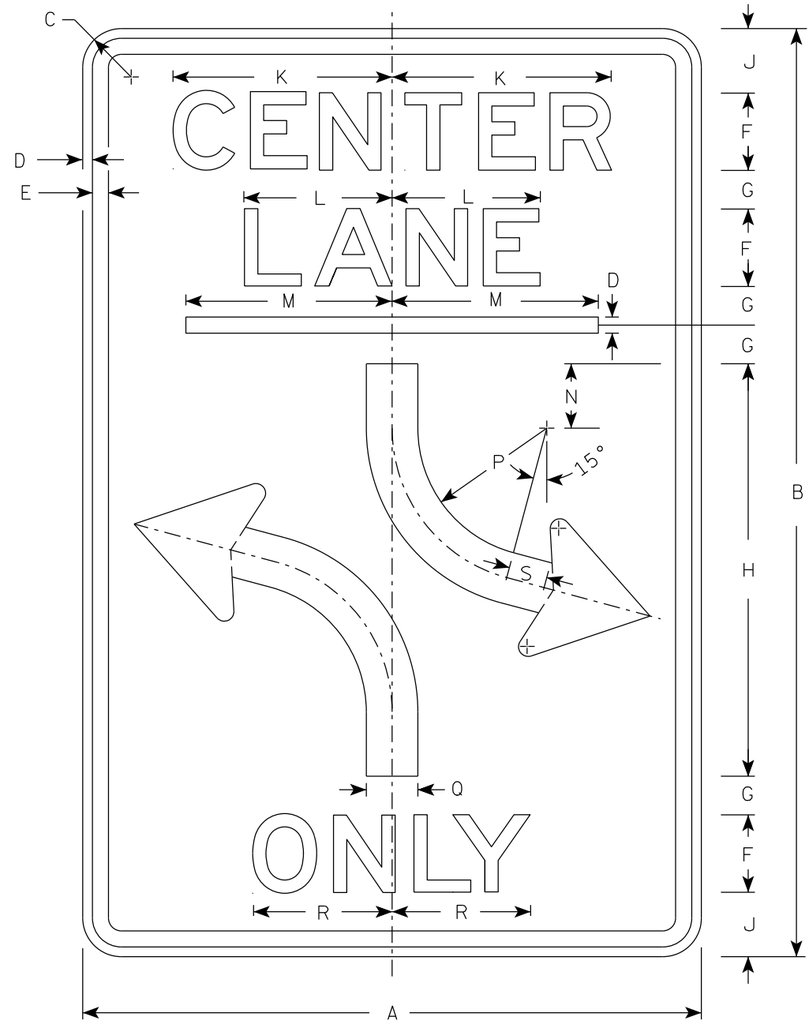
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

PROJECT NO:

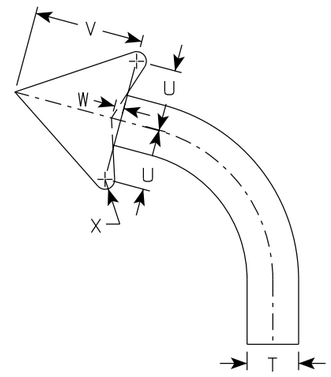
SHEET NO: 267 E



R3-9B

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - E



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 ½	⅜	½	3	1 ½	16		2 ½	8 ½	5 ¾	8	2 ½		6	2	5 ⅛	1 ½		2 ⅜	4 ⅜	⅜				6.0
2M	24	36	1 ½	⅜	½	3	1 ½	16		2 ½	8 ½	5 ¾	8	2 ½		6	2	5 ⅛	1 ½		2 ⅜	4 ⅜	⅜				6.0
3	36	48	1 ⅞	⅝	⅞	5	1 ½	20		3 ½	14 ⅛	9 ½	12	3		4	3	9 ⅞	2		3 ½	6 ⅛	½				12.0
4																											
5																											

STANDARD SIGN
R3-9B

WISCONSIN DEPT OF TRANSPORTATION

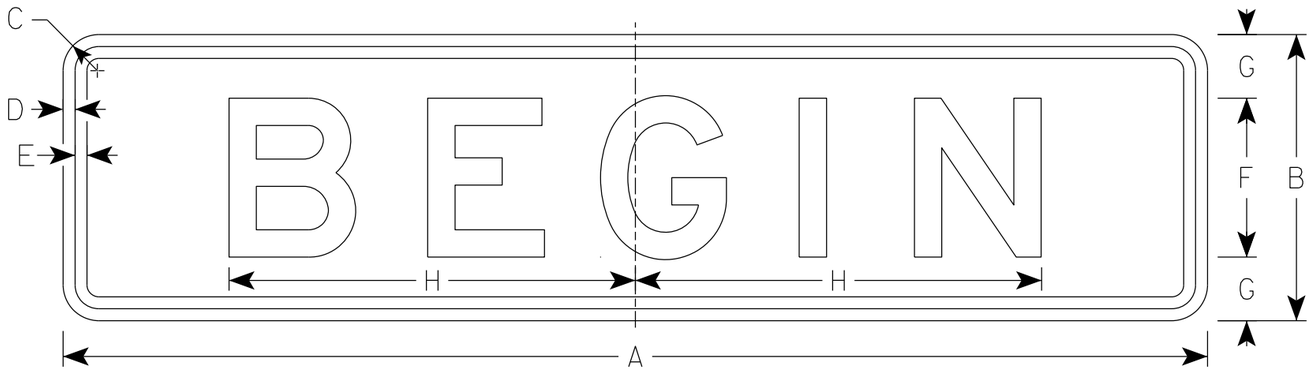
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/15/23 PLATE NO. R3-9B.6

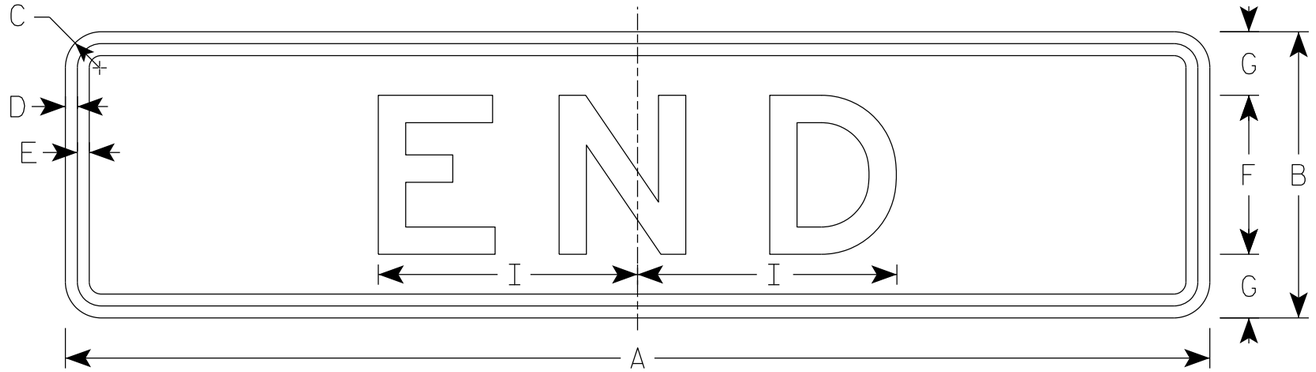
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 268 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - E



R3-9C



R3-9D

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	6	1 1/2	3/8	3/8	3	1 1/2	7 3/4	4 7/8																		1.0
2M	24	6	1 1/2	3/8	3/8	3	1 1/2	7 3/4	4 7/8																		1.0
3	36	9	1 1/2	3/8	3/8	5	2	12 3/4	8 1/8																		2.25
4																											
5																											

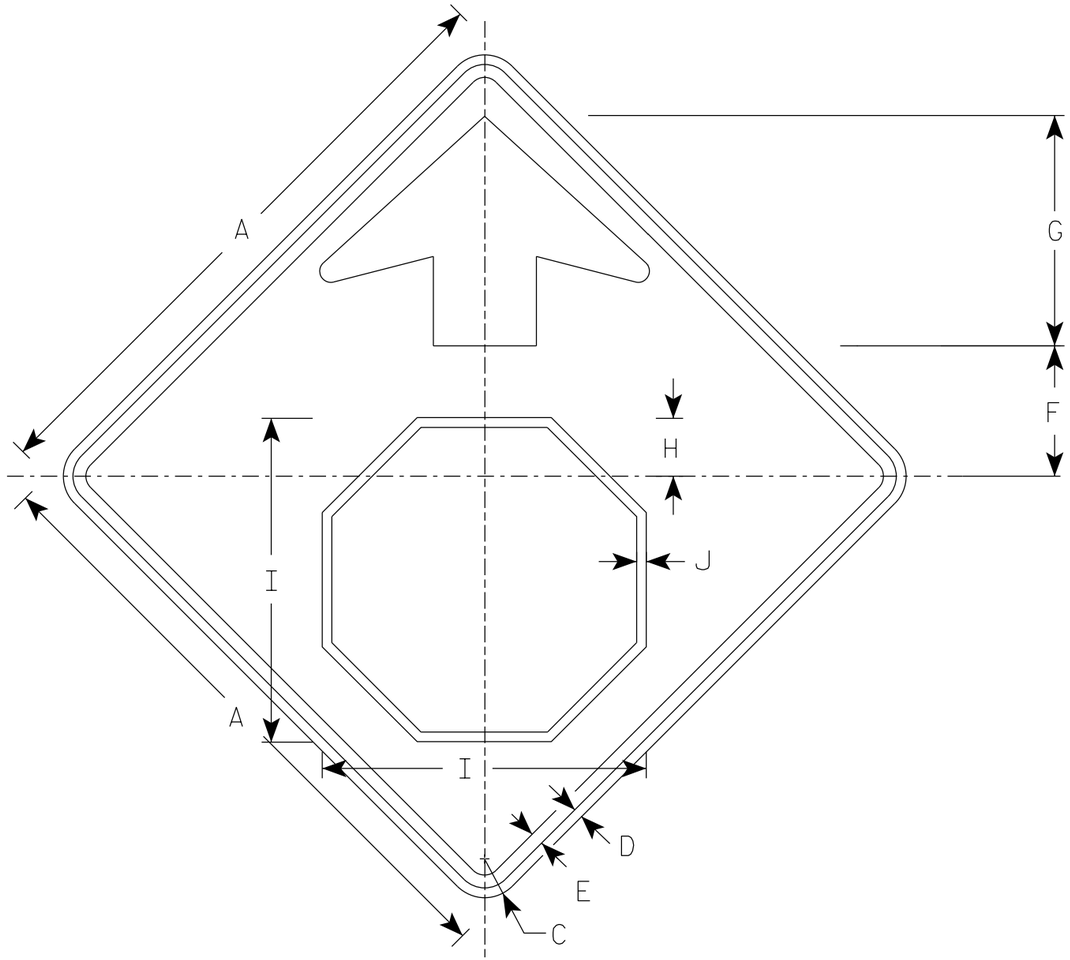
STANDARD SIGN
R3-9C & R3-9D

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/23/23 PLATE NO. R3-9C.4

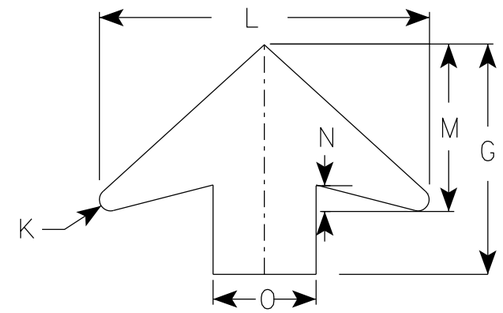
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 269 | E



W3-1

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Arrow & Border - Black
   Stop Symbol - White Border on Red Background



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 7/8	1/2	5/8	6 1/4	11 1/4	2 7/8	15 3/4	1/2	1/2	16	8	1 1/4	5												6.25
2S	36		2 1/4	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
2M	36		2 1/4	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
3	36		2 1/4	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
4	48		3	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
5	48		3	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0

STANDARD SIGN
W3-1

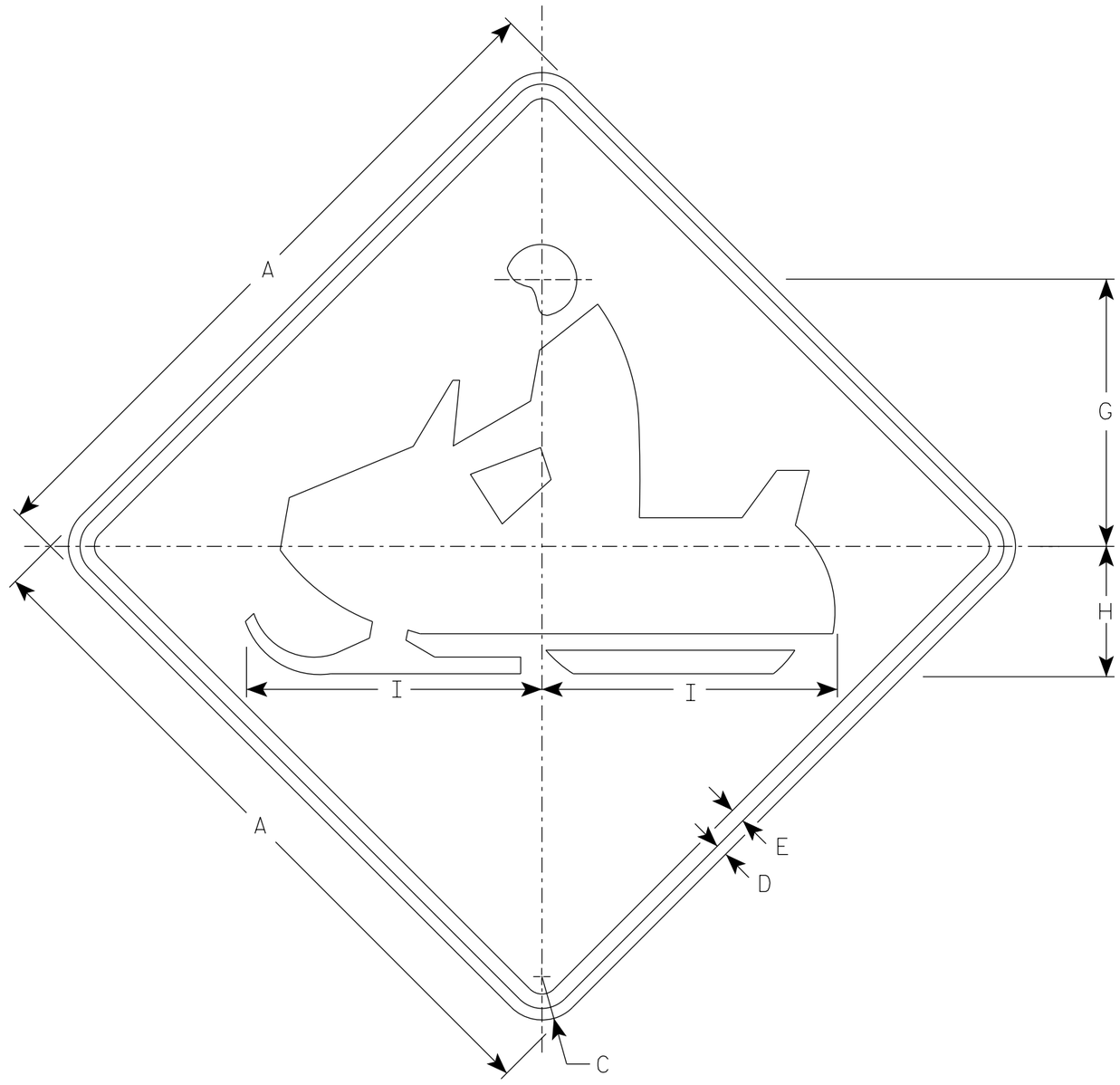
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/17/2023 PLATE NO. W3-1.13

PROJECT NO:

SHEET NO: 270 E



W11-6

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   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	24		1 1/2	3/8	1/2		9 1/2	4 1/2	10 1/4																		4.0
2S	30		1 7/8	1/2	5/8		11 1/2	5 5/8	12 3/4																		6.25
2M	30		1 7/8	1/2	5/8		11 1/2	5 5/8	12 3/4																		6.25
3	36		2 1/4	5/8	3/4		14 1/8	6 3/4	15 1/4																		9.0
4	48		3	3/4	1		19	9	20 1/2																		16.0
5																											

STANDARD SIGN
W11-6

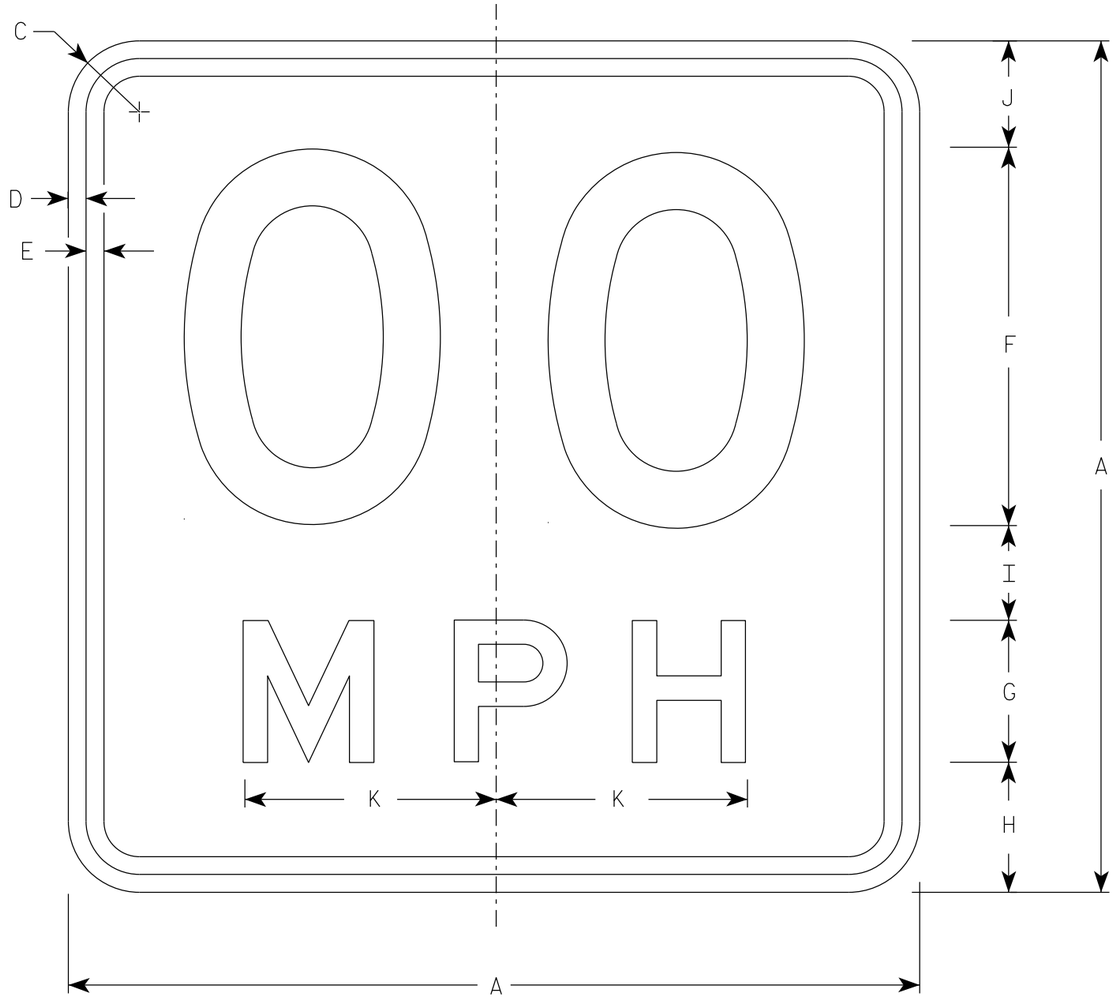
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/15/2023 PLATE NO. W11-6.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W116.dgn PLOT DATE : 15-NOV 2023 8:45 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



W13-1

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - See Note 5
4. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
5. Line 1 is Series D
   Line 2 is Series E

* For 30" x 30" Warning Signs, use 18" x 18" W13-1 signs.
For 36" x 36" Warning Signs, use 24" x 24" W13-1 signs.

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	18		1 1/2	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
* 2S	18		1 1/2	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
* 2M	18		1 1/2	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
3	24		1 1/2	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00
4	36		2 1/4	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
5	36		2 1/4	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

STANDARD SIGN
W13-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

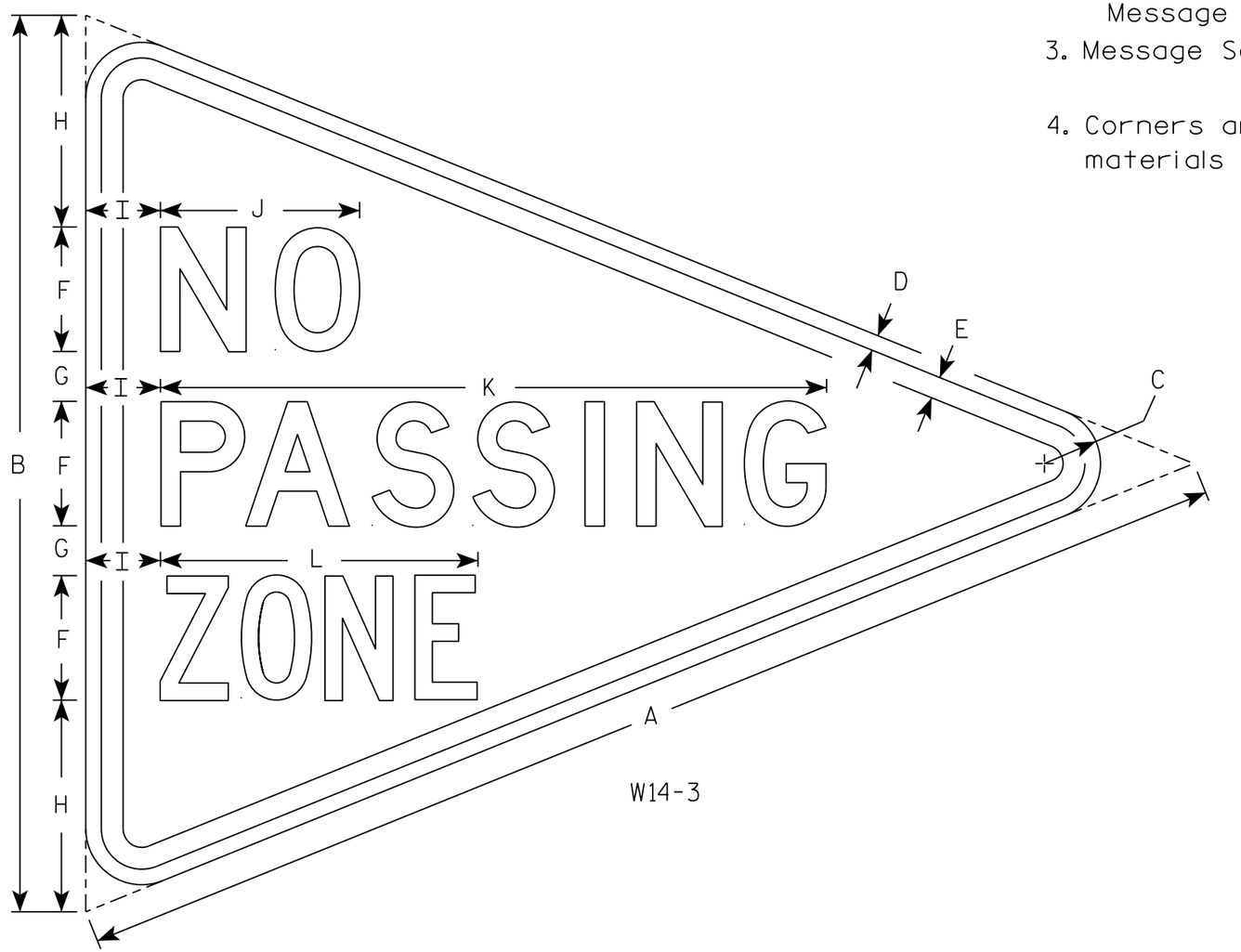
DATE 1/8/2024 PLATE NO. W13-1.17

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W131.dgn PLOT DATE : 8-Jan 2024 11:07 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - Lines 1 and 2 are Series D.
   Line 3 is series C.
4. Corners and borders shall be rounded on all base materials for this sign.



W14-3

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															5.56
2M																											
3																											
4																											
5																											

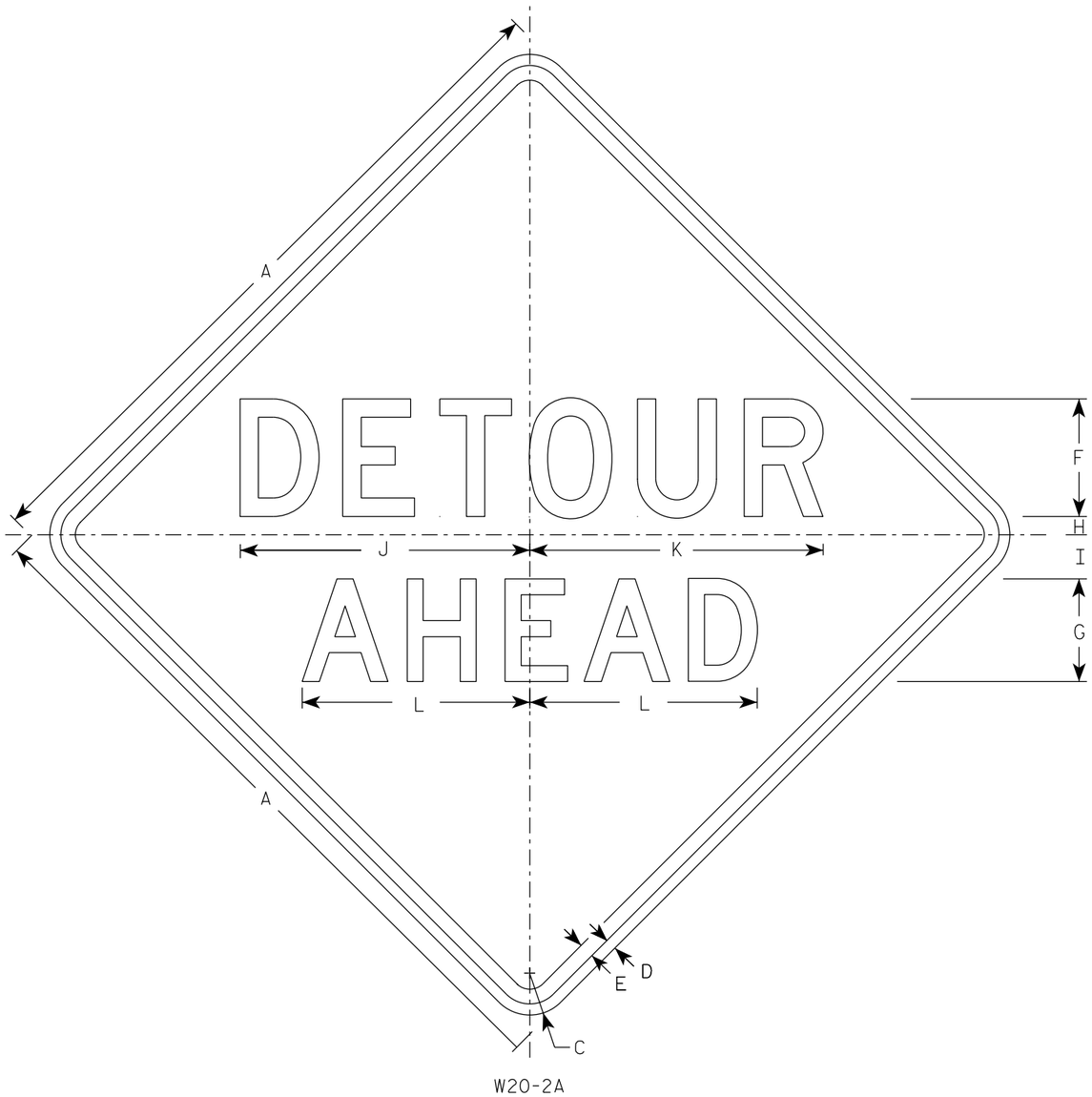
STANDARD SIGN
W14-3

WISCONSIN DEPT OF TRANSPORTATION

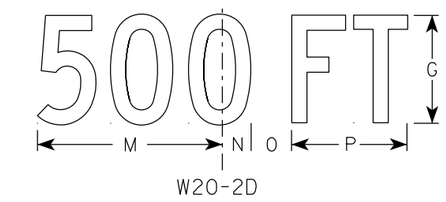
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/17 PLATE NO. W14-3.10

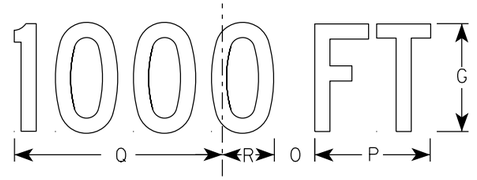
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 273	E



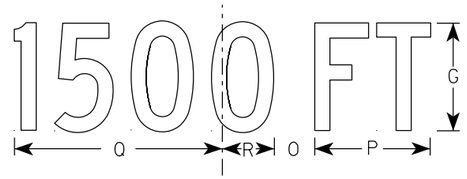
W20-2A



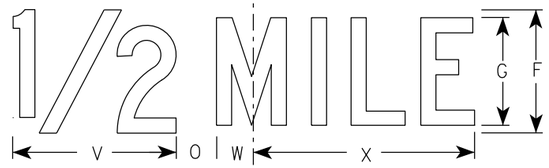
W20-2D



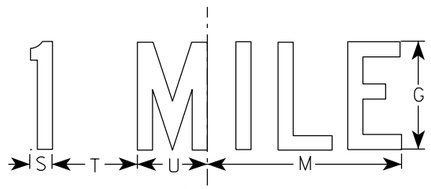
W20-2C



W20-2B



W20-2G



W20-2F

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

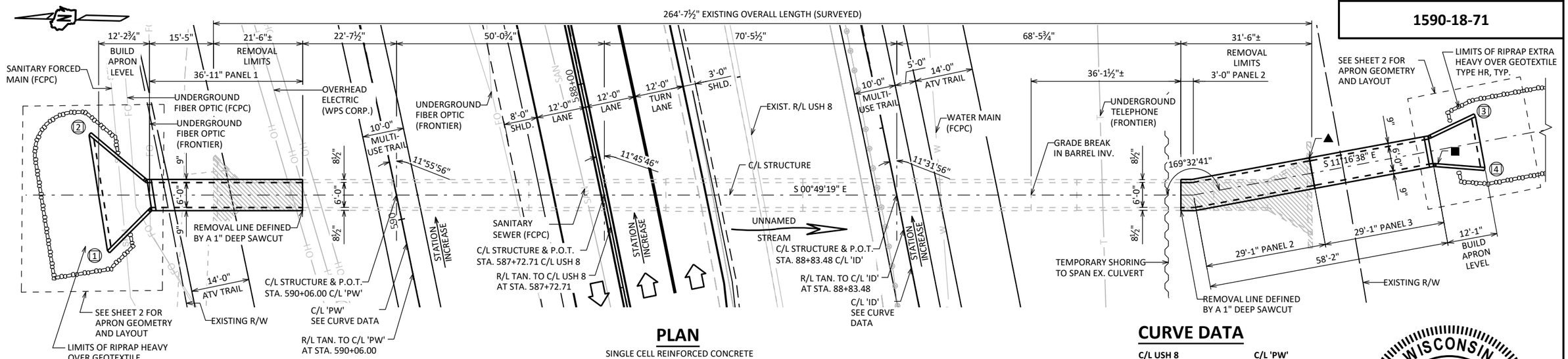
DATE 1/10/2024 PLATE NO. W20-2.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W202.DGN PLOT DATE : 10-JAN 2024 11:36 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

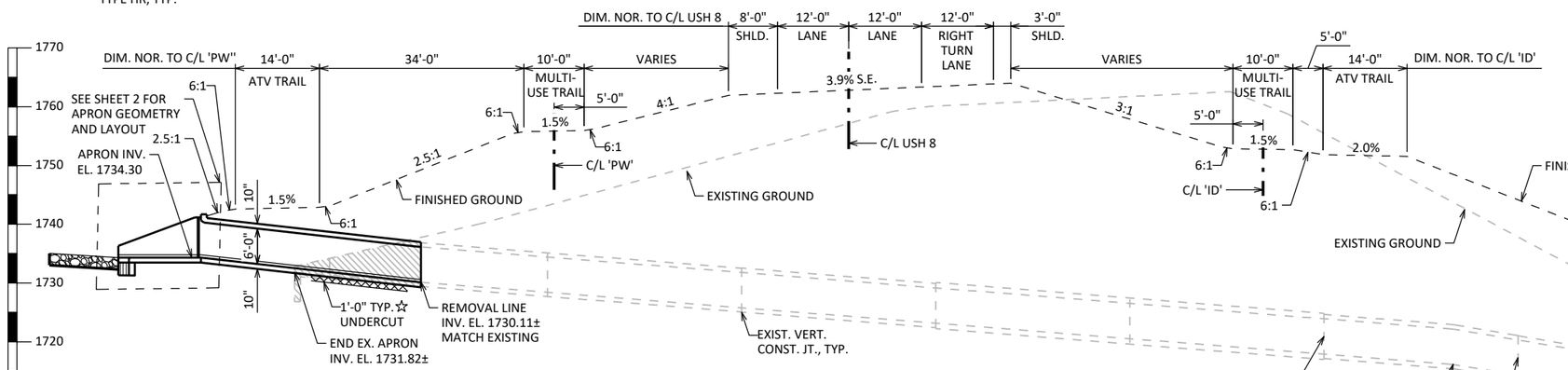
STATE PROJECT NUMBER

1590-18-71



PLAN

SINGLE CELL REINFORCED CONCRETE BOX CULVERT EXTENSION



CURVE DATA

C/L USH 8
P.I. = STA. 591+16.27
Δ = 39°51'11"LT
D = 1°38'13"
T = 1268.81'
L = 2434.48'
R = 3500.00'
S.E. = 3.9%
P.C. = STA. 578+47.46
P.T. = STA. 602+81.94

C/L 'PW'
P.I. = STA. 597+41.51
Δ = 25°03'29"LT
D = 1°39'37"
T = 766.91'
L = 1509.29'
R = 3451.00'
S.E. = 1.5%
P.C. = STA. 589+74.60
P.T. = STA. 604+83.89

C/L 'ID'
P.I. = STA. 89+53.69
Δ = 3°58'14"LT
D = 1°36'19"
T = 123.71'
L = 247.33'
R = 3569.00'
S.E. = 1.5%
P.C. = STA. 88+29.97
P.T. = STA. 90+77.30

WISCONSIN
VINCENT J. DIFRANCES
E-45790
MILWAUKEE
WI
PROFESSIONAL ENGINEER
10/31/2024

STRUCTURE DESIGN CONTACTS:
AARON BONK, P.E. 608-261-0261
VINCENT DIFRANCES, P.E. 262-573-3864

LIST OF DRAWINGS

1. CULVERT OVERALL PLAN
2. CULVERT EXTENSION PLAN
3. GENERAL NOTES AND QUANTITIES
4. SUBSURFACE EXPLORATION
5. PANEL 1 BARREL REINFORCEMENT
6. PANEL 2 BARREL REINFORCEMENT
7. PANEL 3 BARREL REINFORCEMENT
8. BARREL DETAILS
9. INLET APRON AND WINGWALLS
10. OUTLET APRON AND WINGWALLS
11. APRON DETAILS 1
12. APRON DETAILS 2

HYDRAULIC DATA

100-YEAR FREQUENCY:
Q_{100}= 50 C.F.S.
V_{100}= 18.87 F.P.S.
HW_{100}= EL. 1739.99
WATERWAY AREA = 2.65 SQ. FT.
DRAINAGE AREA = 0.3 SQ. MI.
ROADWAY OVERTOPPING = N/A
SCOUR CRITICAL CODE = 8

2-YEAR FREQUENCY:
Q_2= 20 C.F.S.
V_2= 13.45 F.P.S.
HW_2= EL. 1739.76

TRAFFIC DATA

USH 8:
ADT = 4,400 (2021)
ADT = 5,300 (2041)
R.D.S. = 60 MPH

LEGEND

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

☆ IN LIEU OF USING BREAKER RUN FOR THE BOX CONSTRUCTION PLATFORM, THE CONTRACTOR MAY ELECT TO SUBSTITUTE #1 OR #2 CONCRETE COARSE AGGREGATE, SELECT CRUSHED MATERIAL, OR OTHER GRANULAR MATERIAL AS APPROVED BY THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR BASE STABILITY WITH ANY SUBSTITUTED MATERIAL. THE REGION GEOTECHNICAL ENGINEER MAY BE CONTACTED TO DETERMINE IF "OTHER GRANULAR MATERIAL" IS ACCEPTABLE.

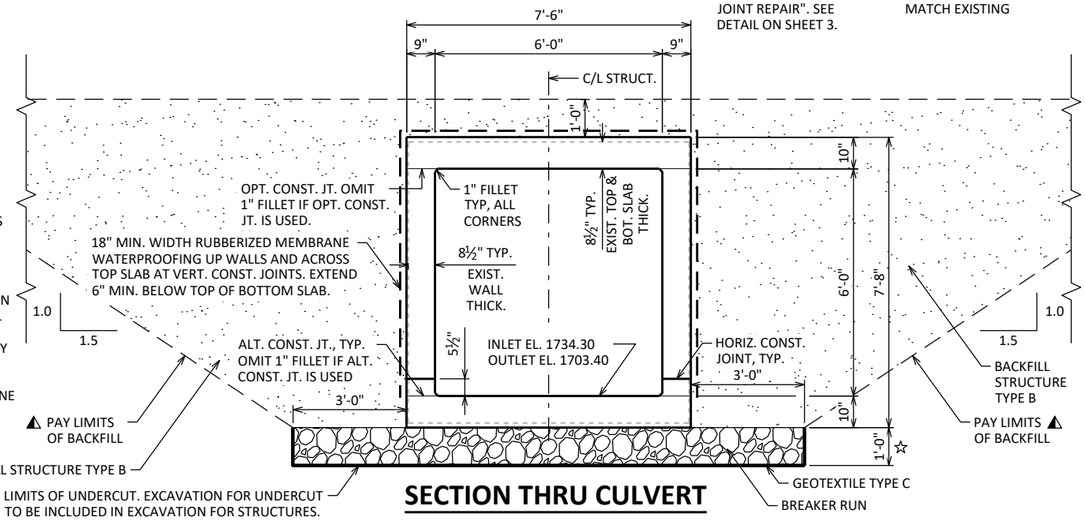
(X) INDICATES WING WALL NUMBER

▲ VERTICAL CONSTRUCTION JOINT

■ NAME PLATE LOCATION

ELEVATION

LOOKING EAST



SECTION THRU CULVERT

NO.	DATE	REVISION	BY

jt ENGINEERING
REAL. TRUSTED. PROVEN.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORATION

ACCEPTED SDR 11/05/24
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE C-21-9703

USH 8 OVER UNNAMED STREAM

COUNTY	TOWN
FOREST	LINCOLN

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
MPG	VJD	MPG	VJD

CULVERT OVERALL PLAN

SHEET 1 OF 12
275

I.D. 1590-18-01 DATE: 10/31/2024

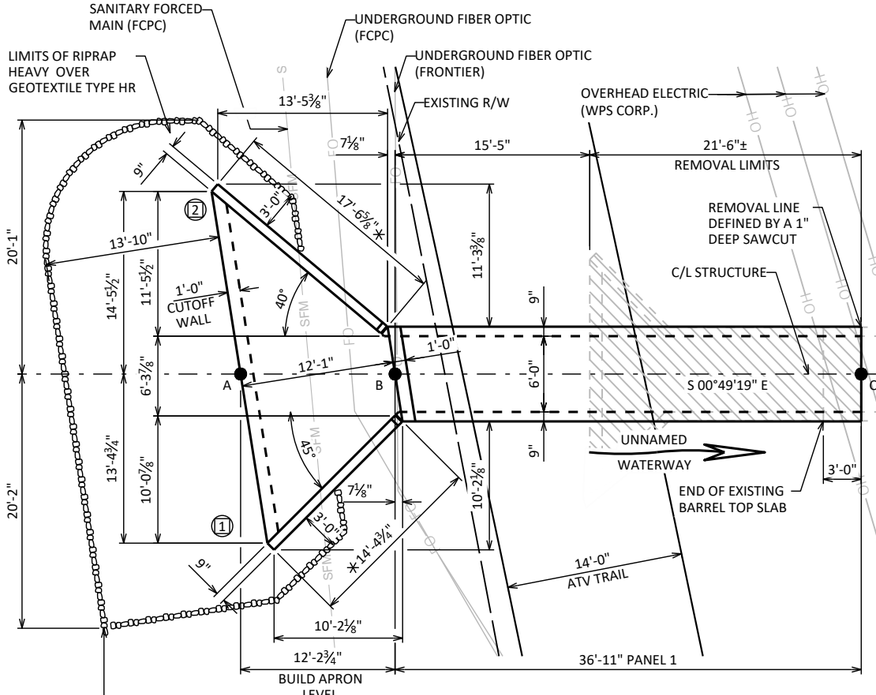
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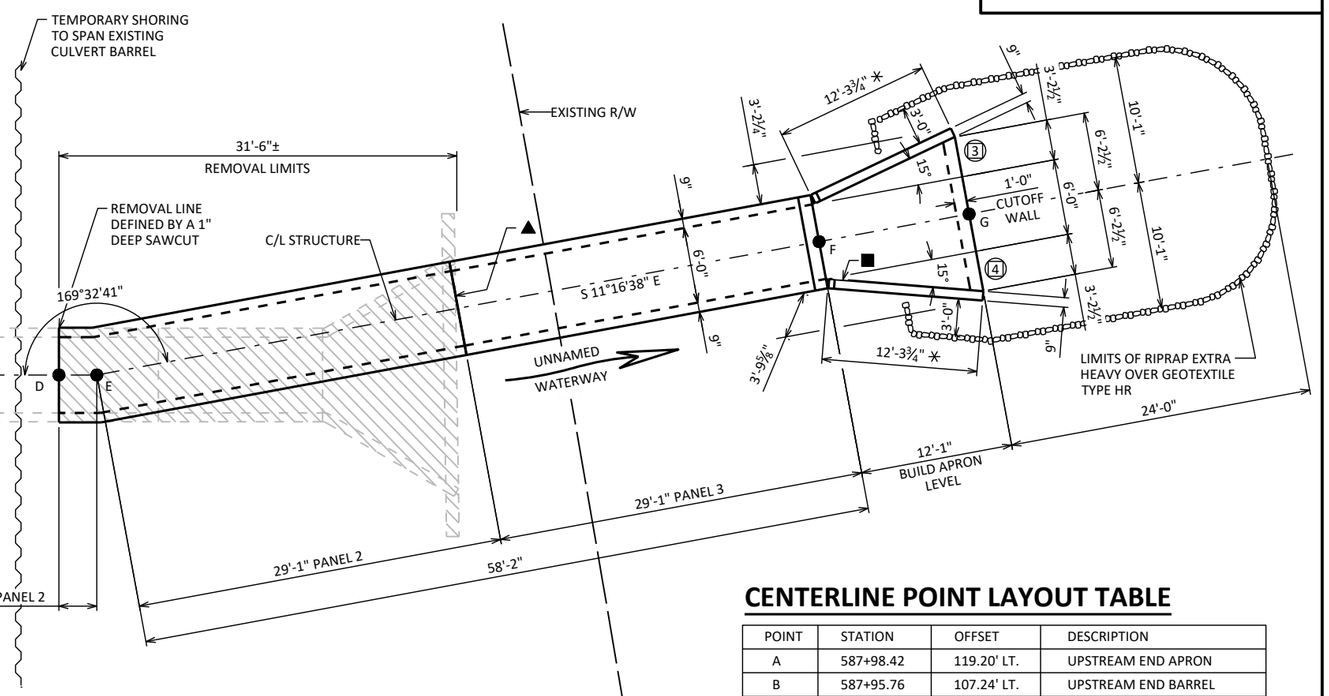
8

STATE PROJECT NUMBER

1590-18-71



NORTH (INLET) EXTENSION PLAN

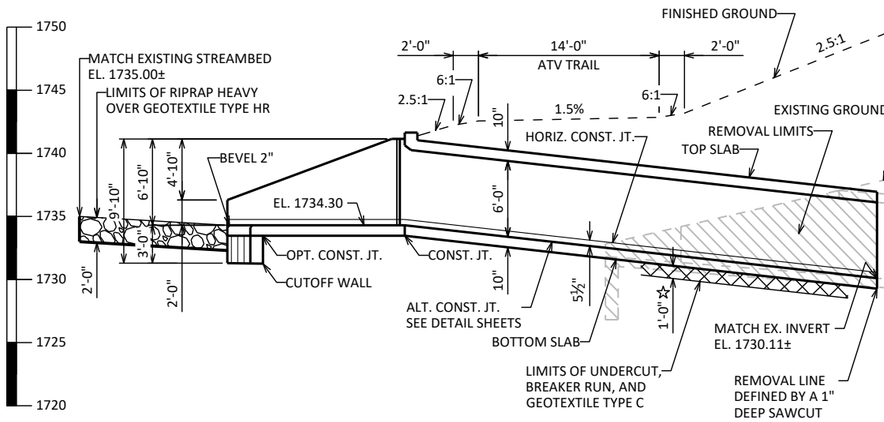


SOUTH (OUTLET) EXTENSION PLAN

CENTERLINE POINT LAYOUT TABLE

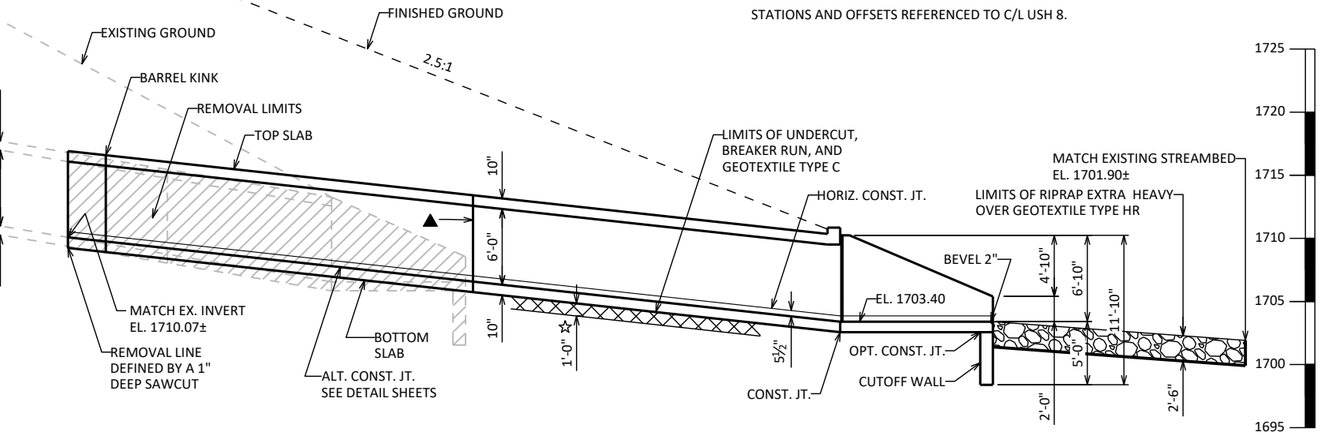
POINT	STATION	OFFSET	DESCRIPTION
A	587+98.42	119.20' LT.	UPSTREAM END APRON
B	587+95.76	107.24' LT.	UPSTREAM END BARREL
C	587+87.84	71.14' LT.	UPSTREAM MATCH POINT
D	587+45.45	136.11' RT.	DOWNSTREAM MATCH POINT
E	587+44.88	139.06' RT.	DOWNSTREAM KINK POINT
F	587+44.06	197.22' RT.	DOWNSTREAM END BARREL
G	587+43.90	209.30' RT.	DOWNSTREAM END APRON

STATIONS AND OFFSETS REFERENCED TO C/L USH 8.



NORTH (INLET) EXTENSION ELEVATION

LOOKING EAST



SOUTH (OUTLET) EXTENSION ELEVATION

LOOKING EAST

LEGEND

☆ IN LIEU OF USING BREAKER RUN FOR THE BOX CONSTRUCTION PLATFORM, THE CONTRACTOR MAY ELECT TO SUBSTITUTE #1 OR #2 CONCRETE COARSE AGGREGATE, SELECT CRUSHED MATERIAL, OR OTHER GRANULAR MATERIAL AS APPROVED BY THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR BASE STABILITY WITH ANY SUBSTITUTED MATERIAL. THE REGION GEOTECHNICAL ENGINEER MAY BE CONTACTED TO DETERMINE IF "OTHER GRANULAR MATERIAL" IS ACCEPTABLE.

(X) INDICATES WING WALL NUMBER

▲ VERTICAL CONSTRUCTION JOINT

■ NAME PLATE LOCATION

* LENGTH INCLUDES ¾" FILLER.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-21-9703

DRAWN BY VJD | PLANS CK'D MPG

CULVERT EXTENSION PLAN

SHEET 2 OF 12

276

SCALE = N.T.S.

8

8

STATE PROJECT NUMBER

1590-18-71

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS UNLESS OTHERWISE NOTED.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES CULVERTS C-21-9703" SHALL BE THE EXISTING GROUNDLINE.

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

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

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK, UNLESS SPECIFIED OTHERWISE.

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1-INCH DEEP SAWCUT UNLESS THE OTHERWISE SHOWN OR NOTED.

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.

THE CONCRETE IN THE CUT OFF WALL MAY BE PLACED UNDERWATER IF THE EXCAVATION CANNOT BE DEWATERED.

THE "ALTERNATE CUTOFF WALL" DETAIL SHOWN ON SHEET 11 MAY BE USED IN LIEU OF THE CAST-IN-PLACE CONCRETE CUTOFF WALLS. PAYMENT SHALL BE BASED ON CONCRETE CUTOFF WALLS.

THE CONTRACTOR MAY FURNISH PRECAST BOX CULVERT BARREL SECTIONS IN LIEU OF THE CAST-IN-PLACE BOX CULVERT WITH THE ACCEPTANCE OF THE SHOP DRAWINGS BY THE STRUCTURES MAINTENANCE SECTION. THE PRECAST CONCRETE BOX CULVERT SECTIONS SHALL CONFORM TO PRECAST DETAILS IN CHAPTER 36 STANDARDS OF THE CURRENT WISCONSIN DOT BRIDGE MANUAL. PAYMENT FOR THE PRECAST CULVERT BARREL SECTIONS SHALL BE BASED ON THE QUANTITIES AND PRICES BID FOR THE ITEMS LISTED IN THE "TOTAL ESTIMATED QUANTITIES".

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

ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL TO THE TOP OF THE WING WITHIN THE LENGTH OF THE WING AND TO 1'-0" ABOVE THE BARREL.

PREFORMED FILLER SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O. DESIGNATION M153, TYPES I, II, OR III OR A.A.S.H.T.O. DESIGNATION M213.

THE CONTRACTOR SHALL SUPPLY A NEW NAME PLATE IN ACCORDANCE WITH SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS AND THE STANDARD DETAIL DRAWINGS. NAME PLATE TO SHOW ORIGINAL CONSTRUCTION YEAR 1952.

THE UTILITY INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND AND OVERHEAD UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATIONS AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

"REMOVING STRUCTURE OVER WATERWAY REMOVE DEBRIS C-21-9703" INCLUDES REMOVAL OF INLET AND OUTLET WINGWALLS AND APRONS, AND THE EXISTING CULVERT BARREL TO THE EXTENTS SHOWN.

BENCH MARK

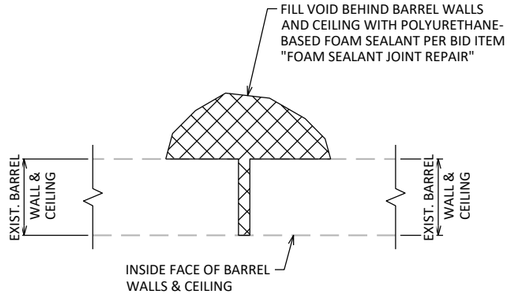
NO.	STATION	DESCRIPTION	ELEV.
BM10	592+22.10, 143.06' RT.	SS ROD W/O SLEEVE; STAMPED X226	1758.45

TOTAL ESTIMATED QUANTITIES

	BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
	203.0250	REMOVING STRUCTURE OVER WATERWAY REMOVE DEBRIS C-21-9703	EACH	1
	206.2001	EXCAVATION FOR STRUCTURES CULVERTS C-21-9703	EACH	1
	210.2500	BACKFILL STRUCTURE TYPE B	TON	1,270
	311.0110	BREAKER RUN	TON	140
△	502.4205	ADHESIVE ANCHORS NO. 5 BAR	EACH	52
	504.0100	CONCRETE MASONRY CULVERTS	CY	100
	505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	12,790
	505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	1,800
	511.1200	TEMPORARY SHORING C-21-9703	SF	555
	516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	25
	606.0300	RIPRAP HEAVY	CY	45
	606.0400	RIPRAP EXTRA-HEAVY	CY	50
	645.0105	GEOTEXTILE TYPE C	SY	275
	645.0120	GEOTEXTILE TYPE HR	SY	180
	SPV.0060.03	FOAM SEALANT JOINT REPAIR C-21-9703	EACH	1
		NON-BID ITEMS		
		PREFORMED JOINT FILLER	SIZE	¾"
		NON-STAINING GRAY, NON-BITUMINOUS JOINT SEALER	SIZE	1"
		NAME PLATE	EACH	1

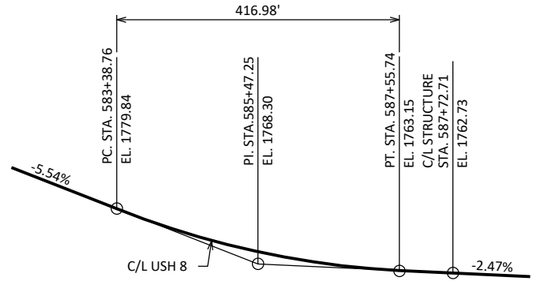
ALL C-21-9703 BID ITEMS ARE CATEGORY 0020

△ IF EXISTING REINFORCEMENT IS DAMAGED OR CORRODED, SUPPLEMENT REINFORCEMENT WITH ADHESIVE ANCHOR NO. 5 BAR AND BARS SHOWN ON THE PANEL REINFORCEMENT SHEETS . EMBED 1'-0" MIN. INTO EXISTING CONCRETE. MAINTAIN A MINIMUM EDGE DISTANCE OF 3¾". QUANTITY SHOWN IS TENTATIVE.

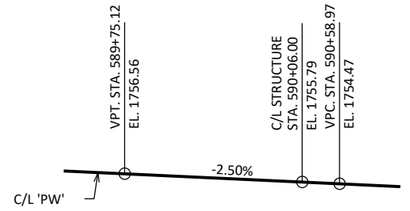


JOINT SEALING DETAIL

SEE SHEET 1 FOR LOCATIONS

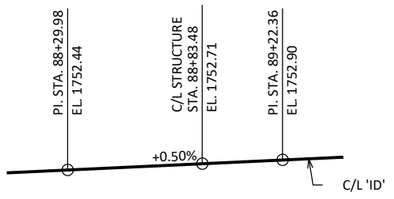


PROFILE GRADE LINE - C/L USH 8



PROFILE GRADE LINE - C/L 'PW'

SEE PROJECT ID 9813-02-70



PROFILE GRADE LINE - C/L 'ID'

SEE PROJECT ID 9813-02-70

DESIGN DATA

LIVE LOAD: (EXISTING CULVERT)

PER WISCONSIN BRIDGE MANUAL, 45.8.3.3
DESIGN LOADING: HS-15
INVENTORY RATING: HS-15
OPERATING RATING: HS-25
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 190 (KIPS)

LIVE LOAD: (CULVERT EXTENSION)

DESIGN LOADING: HL-93
INVENTORY RATING: RF = 1.53
OPERATING RATING: RF = 1.99

MATERIAL PROPERTIES:

CONCRETE MASONRY:
ALL ——— f'_c = 3,500 PSI
BAR STEEL REINFORCEMENT
GRADE 60 ——— f_y = 60,000 PSI

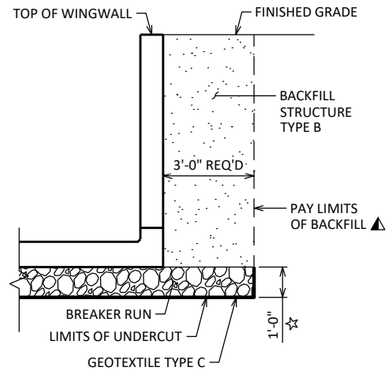
EARTH LOAD: (CULVERT EXTENSION)

DESIGNED FOR FILL HEIGHT RANGE OF 2.0 TO 15.0 FEET.

LEGEND

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

☆ IN LIEU OF USING BREAKER RUN FOR THE BOX CONSTRUCTION PLATFORM, THE CONTRACTOR MAY ELECT TO SUBSTITUTE #1 OR #2 CONCRETE COARSE AGGREGATE, SELECT CRUSHED MATERIAL, OR OTHER GRANULAR MATERIAL AS APPROVED BY THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR BASE STABILITY WITH ANY SUBSTITUTED MATERIAL. THE REGION GEOTECHNICAL ENGINEER MAY BE CONTACTED TO DETERMINE IF "OTHER GRANULAR MATERIAL" IS ACCEPTABLE.



TYPICAL SECTION THRU BOX CULVERT WINGWALL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-21-9703

DRAWN BY VJD | PLANS CK'D MPG

GENERAL NOTES AND QUANTITIES

SHEET 3 OF 12
277

SCALE = N.T.S.

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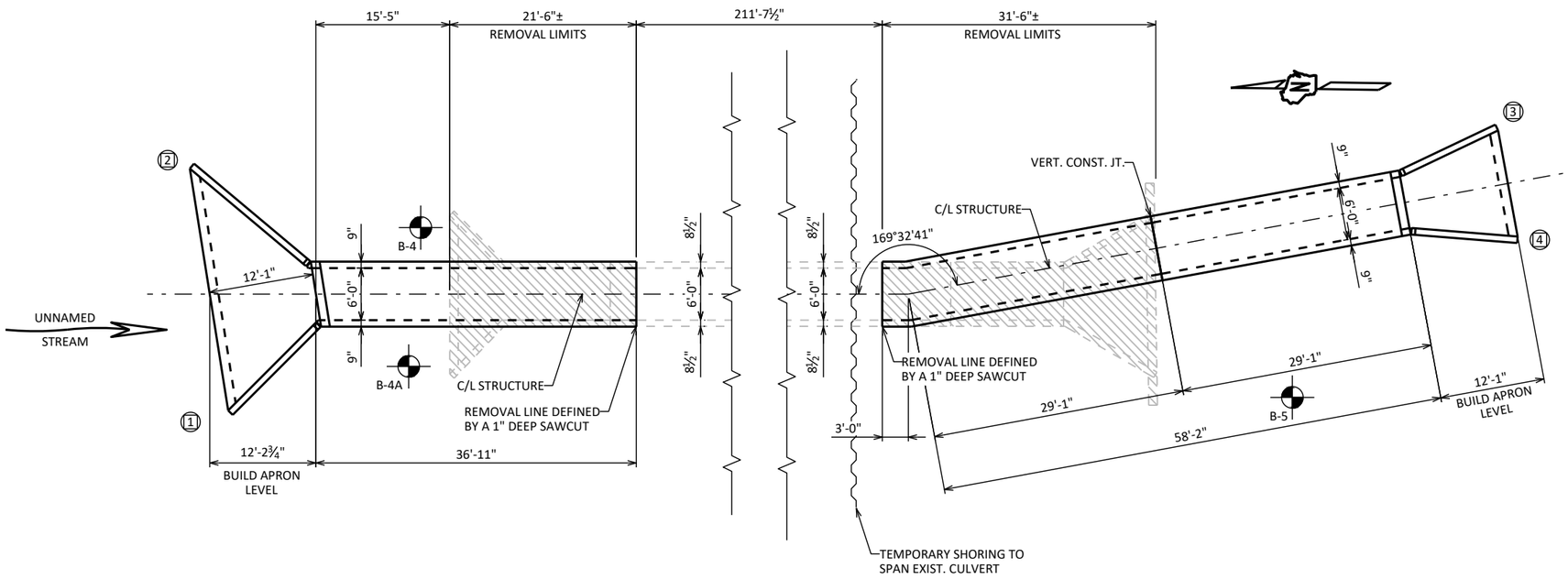
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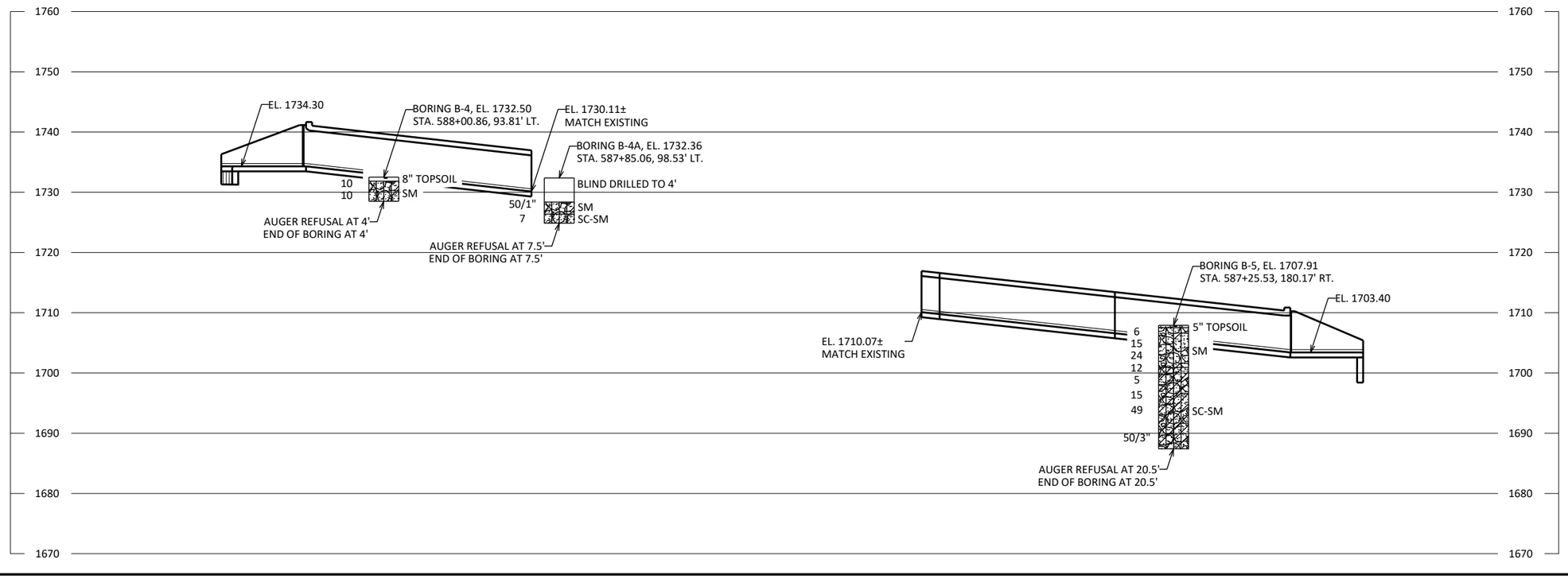
BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
B-4	OCTOBER 5, 2022	569728.296	852826.381
B-4A	OCTOBER 5, 2022	569729.455	852810.358
B-5	OCTOBER 6, 2022	569444.341	852810.878
BORINGS COMPLETED BY: ECS MIDWEST, LLC			
REPORT COMPLETED BY: ECS MIDWEST, LLC			
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) FOREST COUNTY			

NOTES:

BORING STATIONS AND OFFSETS ARE REFERENCED TO C/L USH 8.

THE SUBSURFACE INFORMATION PRESENTED HEREIN IS AN ABBREVIATED VERSION OF THE INFORMATION PRESENTED IN THE GEOTECHNICAL ENGINEERING REPORT. REVIEW THE APPROPRIATE GEOTECHNICAL REPORT AND SOIL BORING LOGS FOR ADDITIONAL SUBSURFACE INFORMATION.





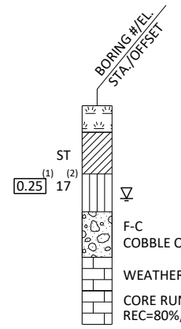
STATE PROJECT NUMBER

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MATERIAL SYMBOLS

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

LEGEND OF BORING



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

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

GROUND WATER ELEVATION

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

ABBREVIATIONS

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

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

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

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-21-9703

DRAWN BY VJD | PLANS CK'D MPG

SUBSURFACE EXPLORATION

SHEET 4 OF 12

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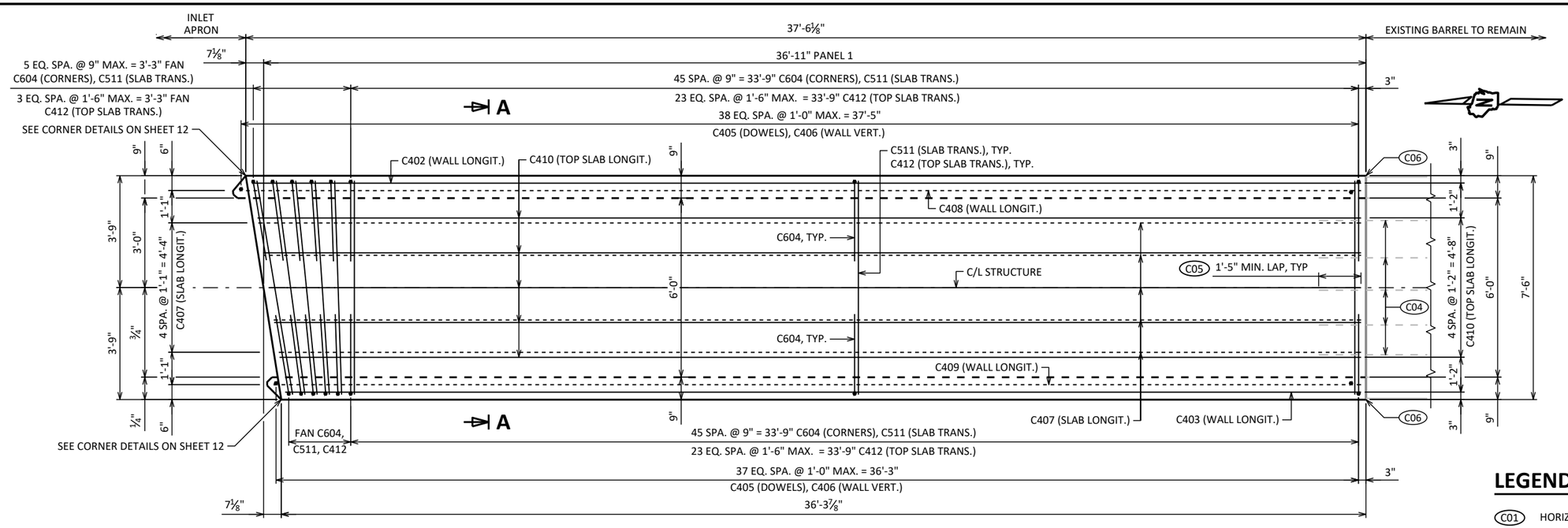
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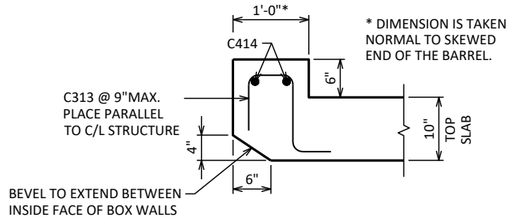
STATE PROJECT NUMBER

1590-18-71



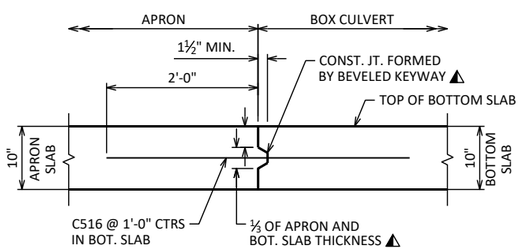
REINFORCEMENT PLAN - PANEL 1

HEADER NOT SHOWN TO CLARIFY FANNED REINFORCEMENT



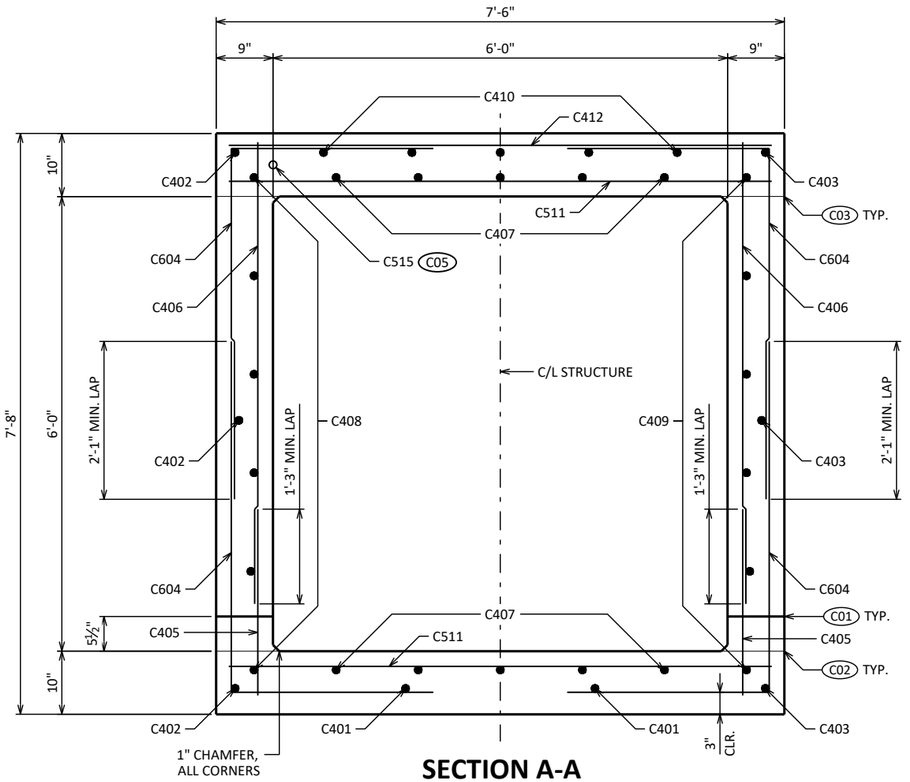
SECTION THRU HEADER

AT TOP SLAB ONLY. TOP SLAB BARS ARE NOT SHOWN FOR CLARITY.



APRON CONNECTION DETAIL

⚠ 2" DEEP SAWCUT WITHIN 12 HOURS AFTER POUTING MAY BE USED IN LIEU OF CONST. JT. IN BOTTOM SLAB



SECTION A-A

18" RUBBERIZED MEMBRANE WATERPROOFING AT VERT. CONSTRUCTION JOINT NOT SHOWN. SEE DETAIL ON SHEET 1.

LEGEND

- (C01) HORIZONTAL CONSTRUCTION JOINT
- (C02) ALT. CONST. JOINT. OMIT 1" FILLET IF ALT. CONST. JOINT IS USED.
- (C03) OPTIONAL CONST. JOINT. OMIT 1" FILLET IF OPTIONAL CONST. JOINT IS USED.
- (C04) EXISTING #4 LONGITUDINAL REINFORCEMENT, TYP. INCORPORATE EXISTING REINFORCEMENT INTO NEW WORK AND LAP WITH NEW REINFORCEMENT AS SHOWN.
- (C05) LAP LONGITUDINAL REINFORCEMENT WITH EXISTING REINFORCEMENT. IF EXISTING REINFORCEMENT IS DAMAGED OR CORRODED, SUPPLEMENT REINFORCEMENT WITH ADHESIVE ANCHORS NO. 5 BAR AND C515. EMBED 1'-0" MIN. INTO EXISTING CONCRETE. MAINTAIN A MINIMUM EDGE DISTANCE OF 3¾". CENTER ADHESIVE ANCHOR AT THE MID-DEPTH OF SLAB OR WALL.
- (C06) 18" MIN. WIDTH RUBBERIZED MEMBRANE WATERPROOFING (RMW) UP WALLS AND ACROSS TOP OF SLAB AT VERTICAL CONSTRUCTION JOINT. EXTEND RMW 6" MIN. BELOW THE TOP OF BOT. SLAB. SEE DETAIL ON SHEET 1.

NOTES

FOR PANEL 1 BILL OF BARS, SEE BARREL DETAILS ON SHEET 8.

THE CONTRACTOR MAY TRIM UNCOATED REINFORCEMENT AS NEEDED TO FIT.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-21-9703

DRAWN BY VJD | PLANS CK'D ZRM

PANEL 1 BARREL REINFORCEMENT

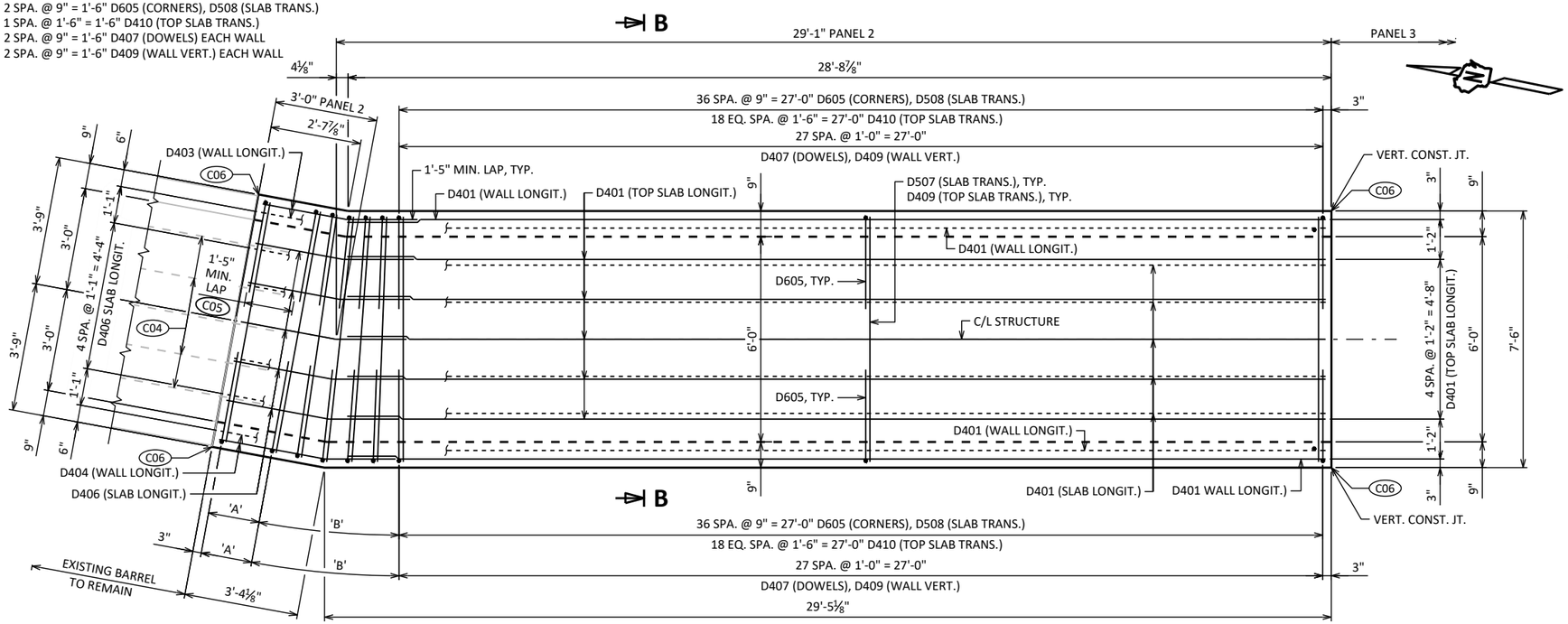
SHEET 5 OF 12

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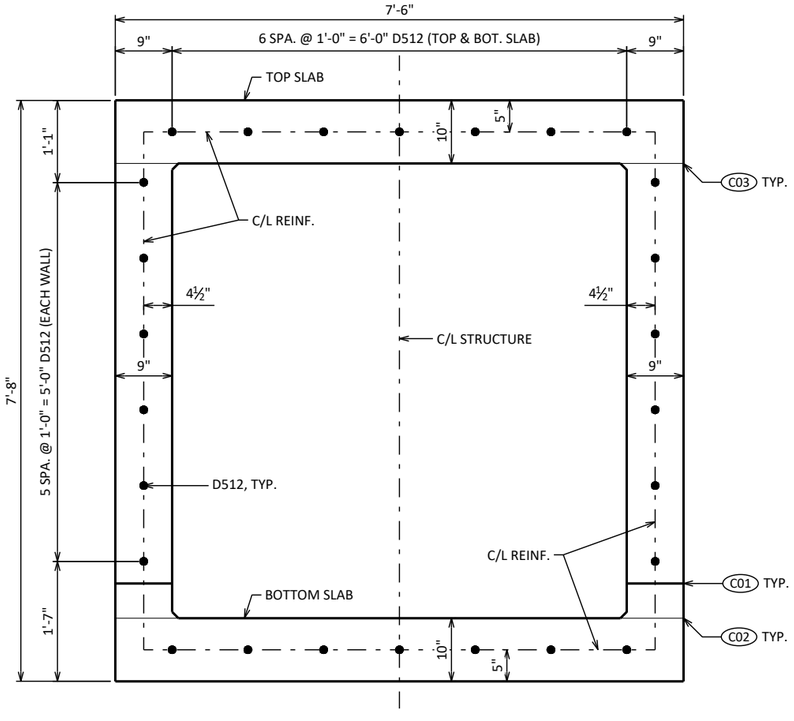
8

'A' = 2 SPA. @ 9" = 1'-6" D605 (CORNERS), D508 (SLAB TRANS.)
1 SPA. @ 1'-6" = 1'-6" D410 (TOP SLAB TRANS.)
2 SPA. @ 9" = 1'-6" D407 (DOWELS) EACH WALL
2 SPA. @ 9" = 1'-6" D409 (WALL VERT.) EACH WALL



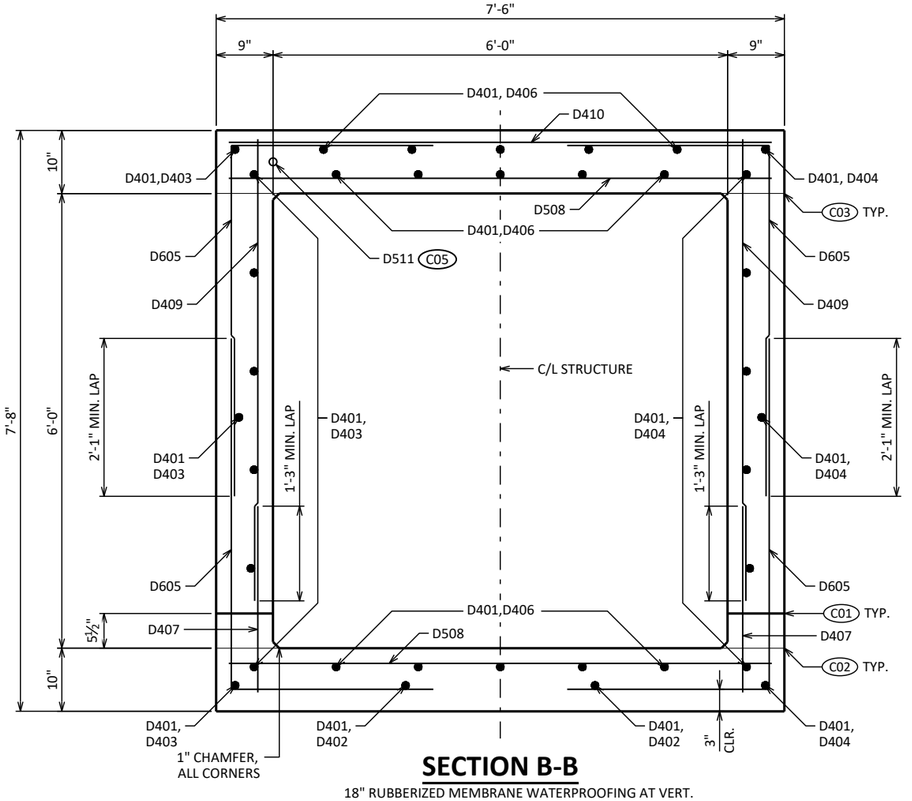
REINFORCEMENT PLAN - PANEL 2

'B' = 5 EQ. SPA. @ 9" MAX. FAN D605 (CORNERS), D508 (SLAB TRANS.)
3 EQ. SPA. @ 1'-6" MAX. FAN D410 (TOP SLAB TRANS.)
4 EQ. SPA. @ 1'-0" MAX. D407 (DOWELS), D409 (WALL VERT.) WEST WALL
3 EQ. SPA. @ 1'-0" MAX. D407 (DOWELS), D409 (WALL VERT.) EAST WALL



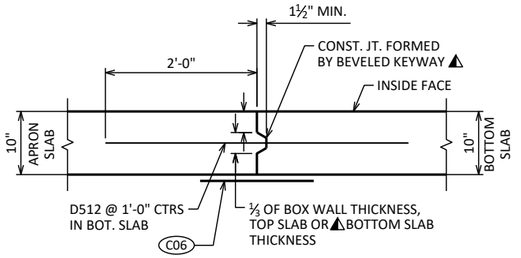
SECTION THRU VERT. CONST. JT.

18" RUBBERIZED MEMBRANE WATERPROOFING AT VERT.
CONSTRUCTION JOINT NOT SHOWN. SEE DETAIL ON SHEET 1.



SECTION B-B

18" RUBBERIZED MEMBRANE WATERPROOFING AT VERT.
CONSTRUCTION JOINT NOT SHOWN. SEE DETAIL ON SHEET 1.



VERTICAL CONST. JOINT

⚠ 2" DEEP SAWCUT WITHIN 12 HOURS AFTER POUTING MAY BE USED IN LIEU OF CONST. JT. IN BOTTOM SLAB

LEGEND

- C01 HORIZONTAL CONSTRUCTION JOINT
- C02 ALT. CONST. JOINT. OMIT 1" FILLET IF ALT. CONST. JOINT IS USED.
- C03 OPTIONAL CONST. JOINT. OMIT 1" FILLET IF OPTIONAL CONST. JOINT IS USED.
- C04 EXISTING #4 LONGITUDINAL REINFORCEMENT, TYP. INCORPORATE EXISTING REINFORCEMENT INTO NEW WORK AND LAP WITH NEW REINFORCEMENT AS SHOWN.
- C05 LAP LONGITUDINAL REINFORCEMENT WITH EXISTING REINFORCEMENT. IF EXISTING REINFORCEMENT IS DAMAGED OR CORRODED, SUPPLEMENT REINFORCEMENT WITH ADHESIVE ANCHORS NO. 5 BAR AND D511. EMBED 1'-0" MIN. INTO EXISTING CONCRETE. MAINTAIN A MINIMUM EDGE DISTANCE OF 3¾". CENTER ADHESIVE ANCHOR AT THE MID-DEPTH OF SLAB OR WALL.
- C06 18" MIN. WIDTH RUBBERIZED MEMBRANE WATERPROOFING (RMW) UP WALLS AND ACROSS TOP OF SLAB AT VERTICAL CONSTRUCTION JOINT. EXTEND RMW 6" MIN. BELOW THE TOP OF BOT. SLAB. SEE DETAIL ON SHEET 1.

NOTES

FOR PANEL 2 BILL OF BARS, SEE BARREL DETAILS ON SHEET 8.

THE CONTRACTOR MAY TRIM UNCOATED REINFORCEMENT AS NEEDED TO FIT.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STATE PROJECT NUMBER
1590-18-71

STRUCTURE C-21-9703

DRAWN BY VJD | PLANS CK'D ZRM

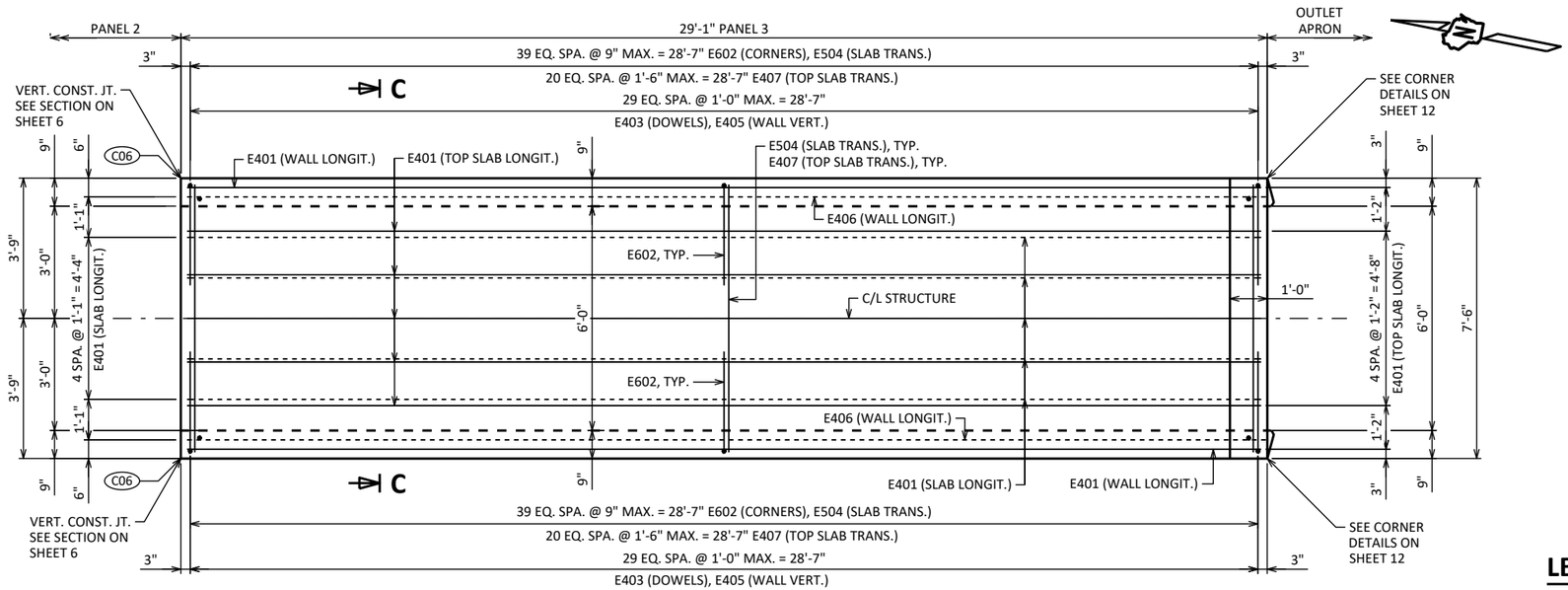
PANEL 2 BARREL REINFORCEMENT

SHEET 6 OF 12
280

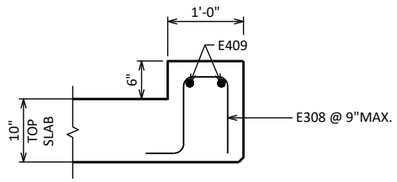
8

STATE PROJECT NUMBER

1590-18-71

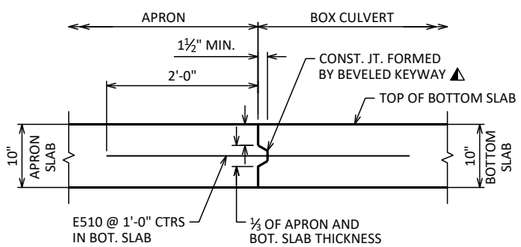


REINFORCEMENT PLAN - PANEL 3



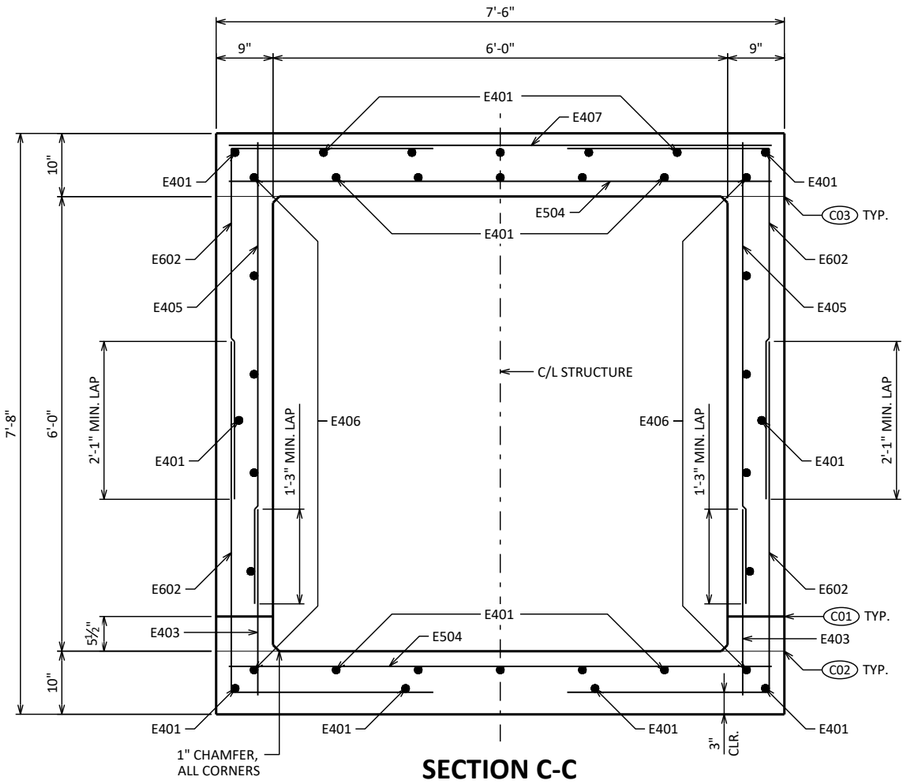
SECTION THRU HEADER

AT TOP SLAB ONLY. TOP SLAB BARS ARE NOT SHOWN FOR CLARITY.



APRON CONNECTION DETAIL

⚠ 2" DEEP SAWCUT WITHIN 12 HOURS AFTER POUTING MAY BE USED IN LIEU OF CONST. JT. IN BOTTOM SLAB



SECTION C-C

18" RUBBERIZED MEMBRANE WATERPROOFING AT VERT. CONSTRUCTION JOINT NOT SHOWN. SEE DETAIL ON SHEET 1.

LEGEND

- C01 — HORIZONTAL CONSTRUCTION JOINT
- C02 — ALT. CONST. JOINT. OMIT 1" FILLET IF ALT. CONST. JOINT IS USED.
- C03 — OPTIONAL CONST. JOINT. OMIT 1" FILLET IF OPTIONAL CONST. JOINT IS USED.
- C06 — 18" MIN. WIDTH RUBBERIZED MEMBRANE WATERPROOFING (RMW) UP WALLS AND ACROSS TOP OF SLAB AT VERTICAL CONSTRUCTION JOINT. EXTEND RMW 6" MIN. BELOW THE TOP OF BOT. SLAB. SEE DETAIL ON SHEET 1.

NOTES

FOR PANEL 3 BILL OF BARS, SEE BARREL DETAILS ON SHEET 8.

THE CONTRACTOR MAY TRIM UNCOATED REINFORCEMENT AS NEEDED TO FIT.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-21-9703

DRAWN BY VJD | PLANS CK'D ZRM

PANEL 3 BARREL REINFORCEMENT

SHEET 7 OF 12

STATE PROJECT NUMBER

1590-18-71

BILL OF BARS - PANEL 1

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

COATED: 0
UNCOATED: 4,530

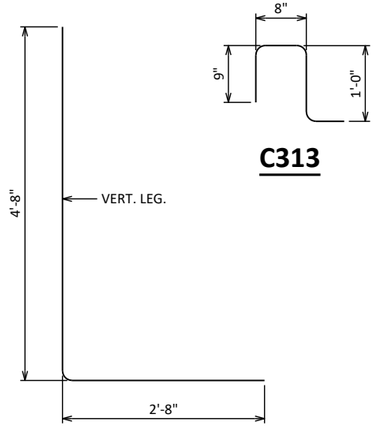
	BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
⚠	C401		2	36'-7"		X	BOTTOM SLAB - LONGIT. - SPACERS
	C402		3	37'-3"			EAST WALL - LONGIT.
	C403		3	36'-2"			WEST WALL - LONGIT.
	C604		204	7'-2"	X		CORNERS - VERT.
	C405		77	2'-6"			BOTTOM SLAB - VERT. DOWELS
	C406		77	6'-1"			WALLS - VERT.
⚠	C407		10	36'-9"		X	TOP & BOT. SLAB - LONGIT.
	C408		6	37'-8"			EAST WALL - LONGIT.
	C409		6	36'-7"			WEST WALL - LONGIT.
⚠	C410		5	36'-9"		X	TOP SLAB - LONGIT.
	C511		102	7'-2"			TOP & BOT. SLAB - TRANS.
	C412		27	7'-2"			TOP SLAB - TRANS.
	C313		11	2'-9"	X		HEADER - VERT.
	C414		2	7'-3"			HEADER - TRANS.
C05	C515		26	2'-9"			ADHESIVE ANCHORS - CONST. JT. AT EXISTING BOX
	C516		7	4'-0"			BOTTOM SLAB - APRON DOWELS

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

BAR SERIES TABLE - PANEL 1

BUNDLE AND TAG EACH SERIES SEPARATELY.

BAR MARK	NO. REQ'D.	LENGTH
C401	1 SERIES OF 2	36'-5" TO 36'-9"
C407	2 SERIES OF 5	36'-4" TO 37'-2"
C410	1 SERIES OF 5	36'-4" TO 37'-2"

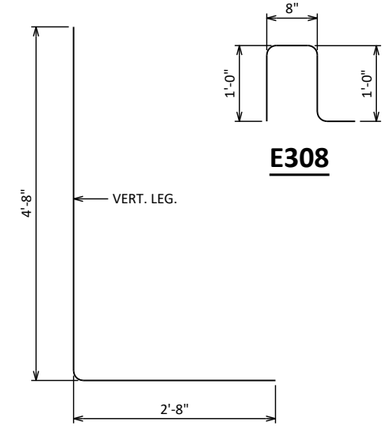


BILL OF BARS - PANEL 3

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

COATED: 0
UNCOATED: 3,500

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
E401		23	28'-10"			SLABS & WALLS - LONGIT.
E602		160	7'-2"	X		CORNERS - VERT.
E403		60	2'-6"			BOTTOM SLAB - VERT. DOWELS
E504		80	7'-2"			TOP & BOT. SLAB - TRANS.
E405		60	6'-1"			WALLS - VERT.
E406		12	29'-0"			WALLS - LONGIT.
E407		21	7'-2"			TOP SLAB - TRANS.
E308		11	3'-0"	X		HEADER - VERT.
E409		2	7'-2"			HEADER - TRANS.
E510		7	4'-0"			BOTTOM SLAB - APRON DOWELS



BILL OF BARS - PANEL 2

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

COATED: 0
UNCOATED: 4,030

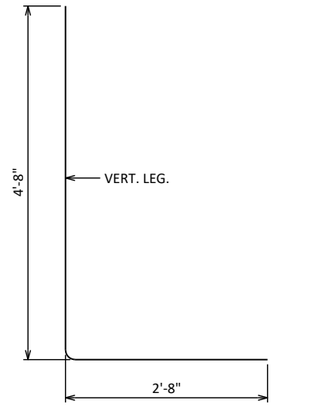
	BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
	D401		35	28'-8"			TOP & BOT. SLAB - LONGIT.
⚠	D402		2	5'-0"	X	X	BOTTOM SLAB - LONGIT. - SPACERS AT KINK
	D403		9	4'-8"	X		EAST WALL - LONGIT. - AT KINK
	D404		9	5'-4"	X		WEST WALL - LONGIT. - AT KINK
	D605		176	7'-2"	X		CORNERS - VERT.
⚠	D406		15	4'-11"	X	X	TOP & BOT. SLAB - LONGIT. - AT KINK
	D407		67	2'-6"			BOTTOM SLAB - VERT. DOWELS
	D508		88	7'-2"			TOP & BOT. SLAB - TRANS.
	D409		67	6'-1"			WALLS - VERT.
	D410		23	7'-2"			TOP SLAB - TRANS.
C05	D511		26	2'-9"			ADHESIVE ANCHORS - CONST. JT. AT EXISTING BOX
	D512		26	4'-0"			DOWELS - HORIZ. - AT VERT. CONST. JT.

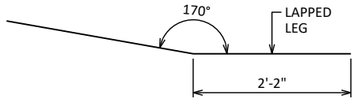
⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE - PANEL 2

BUNDLE AND TAG EACH SERIES SEPARATELY.

BAR MARK	NO. REQ'D.	LENGTH
D402	1 SERIES OF 2	4'-11" TO 5'-1"
D406	3 SERIES OF 5	4'-9" TO 5'-1"





LEGEND

C05 LAP LONGITUDINAL REINFORCEMENT WITH EXISTING REINFORCEMENT. IF EXISTING REINFORCEMENT IS DAMAGED OR CORRODED, SUPPLEMENT REINFORCEMENT WITH ADHESIVE ANCHORS NO. 5 BAR AND THIS BAR. EMBED 1'-0" MIN. INTO EXISTING CONCRETE. MAINTAIN A MINIMUM EDGE DISTANCE OF 3¾". CENTER ADHESIVE ANCHOR AT THE MID-DEPTH OF SLAB OR WALL.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-21-9703

DRAWN BY VJD | PLANS CK'D ZRM

BARREL DETAILS

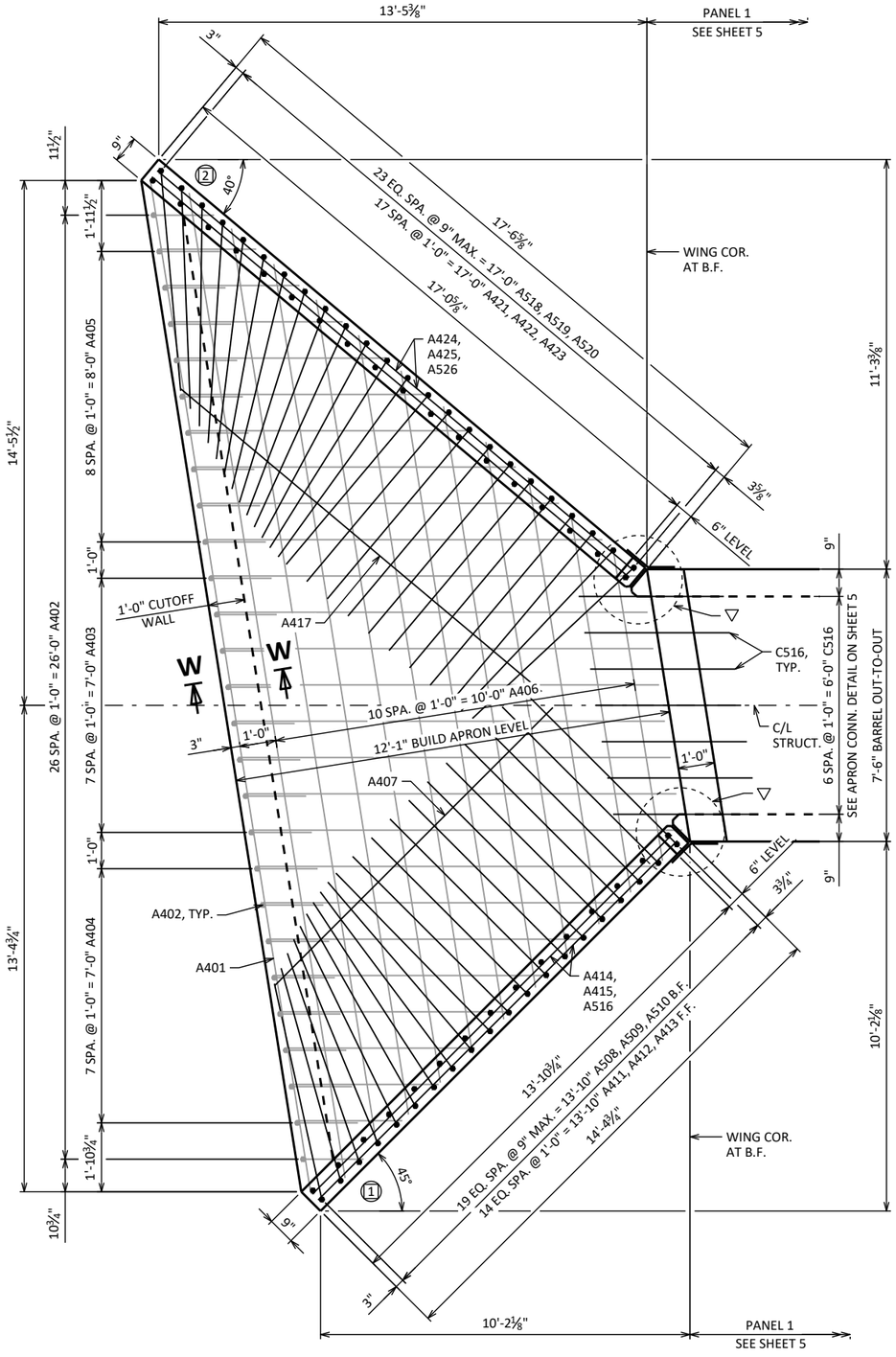
SHEET 8 OF 12

8

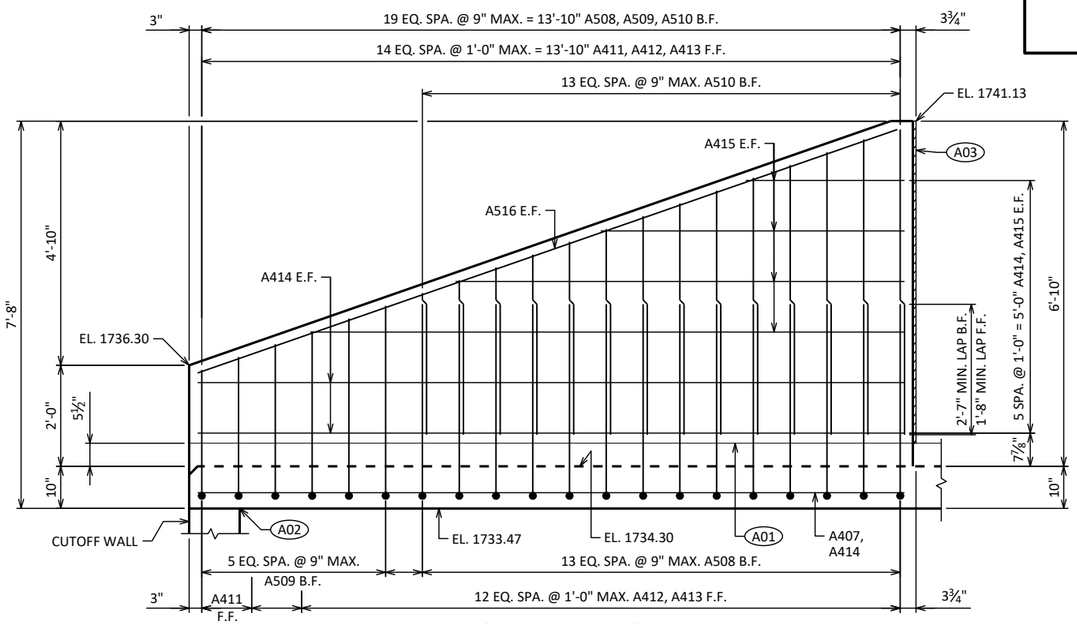
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STATE PROJECT NUMBER

1590-18-71

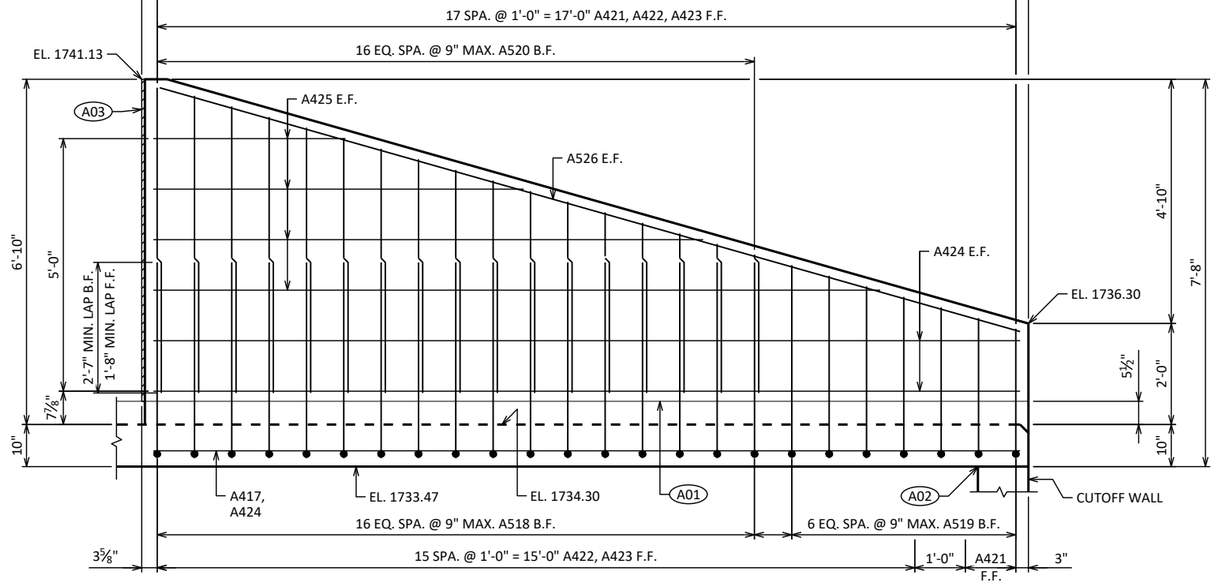


INLET APRON PLAN



WING 1 ELEVATION

LOOKING AT BACK FACE, SHOWING BACK FACE REINFORCEMENT



WING 2 ELEVATION

LOOKING AT BACK FACE, SHOWING BACK FACE REINFORCEMENT

LEGEND

- (A01) HORIZONTAL CONSTRUCTION JOINT
- (A02) OPTIONAL CONSTRUCTION JOINT
- (A03) ¾" FILLER TO EXTEND FROM HORIZONTAL CONSTRUCTION JOINT TO TOP OF WING
- ▽ SEE CORNER DETAILS ON SHEET 12

B.F. = BACK FACE F.F. = FRONT FACE

E.F. = EACH FACE

NOTES

SEE SECTION W-W ON SHEET 11.

FOR BILL OF BARS, SEE APRON DETAILS ON SHEET 12.

FOR SECTION THRU CUTOFF WALLS, SEE APRON DETAILS ON SHEET 11.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-21-9703

DRAWN BY VJD PLANS CK'D ZRM

INLET APRON AND WINGWALLS

SHEET 9 OF 12

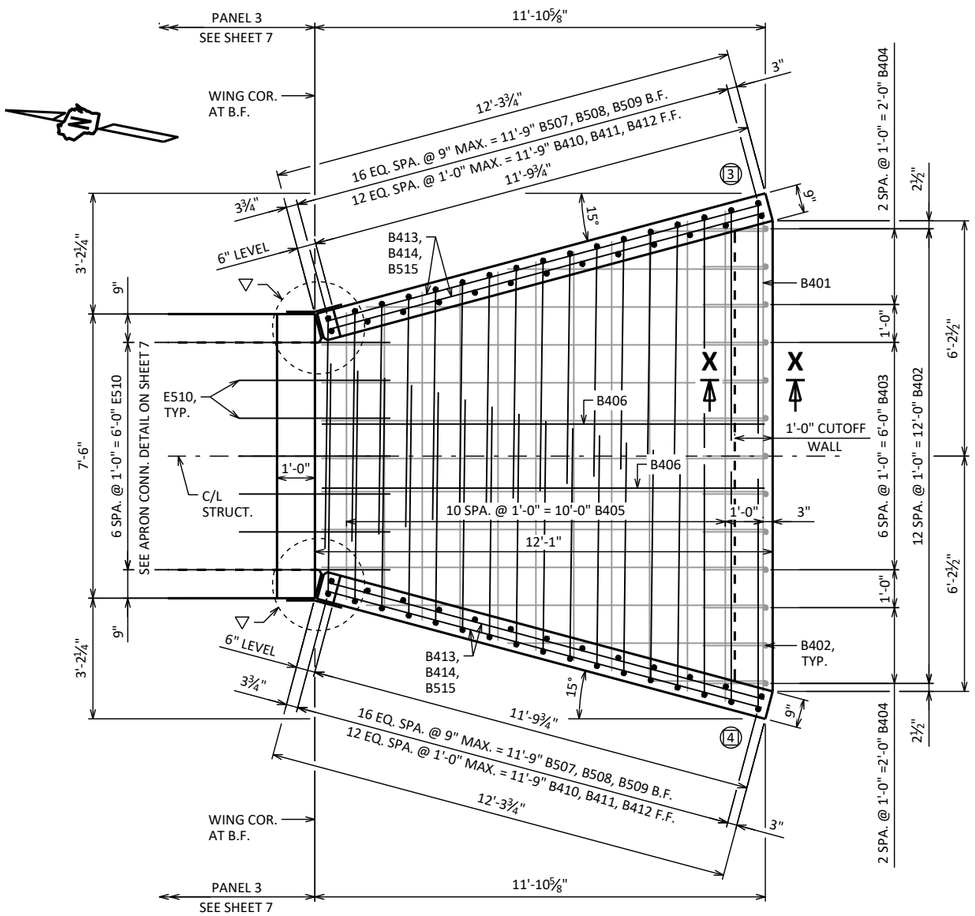
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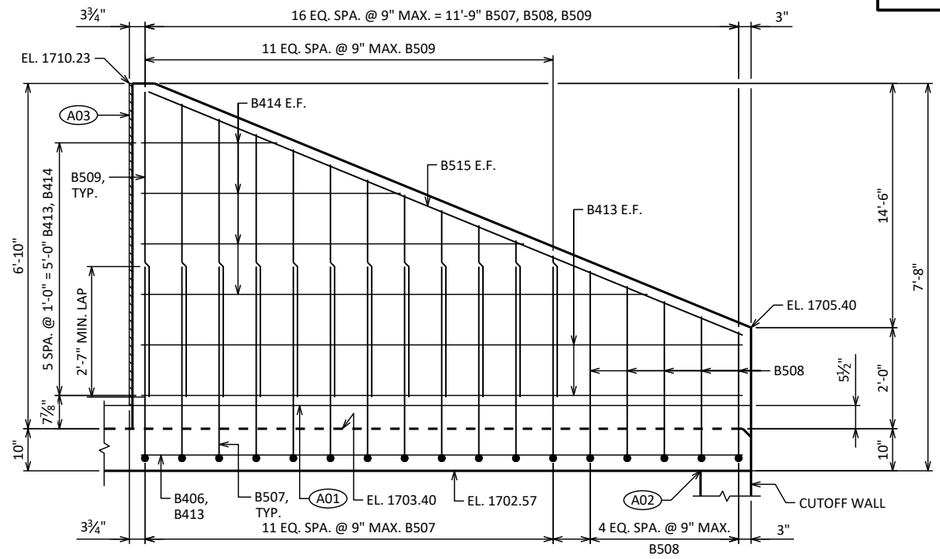
8

STATE PROJECT NUMBER

1590-18-71



OUTLET APRON PLAN



WING 4 ELEVATION

WING 3 SIMILAR
LOOKING AT BACK FACE, SHOWING BACK FACE REINFORCEMENT

WING 4 ELEVATION

WING 3 SIMILAR
LOOKING AT FRONT FACE, SHOWING FRONT FACE REINFORCEMENT

LEGEND

- (A01) HORIZONTAL CONSTRUCTION JOINT
- (A02) OPTIONAL CONSTRUCTION JOINT
- (A03) ¾" FILLER TO EXTEND FROM HORIZONTAL CONSTRUCTION JOINT TO TOP OF WING
- ▽ SEE CORNER DETAILS ON SHEET 12

B.F. = BACK FACE F.F. = FRONT FACE

E.F. = EACH FACE

NOTES

SEE SECTION X-X ON SHEET 11.

FOR BILL OF BARS, SEE APRON DETAILS ON SHEET 12.

FOR SECTION THRU CUTOFF WALLS, SEE APRON DETAILS ON SHEET 11.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-21-9703

DRAWN BY VJD PLANS CK'D ZRM

OUTLET APRON AND WINGWALLS

SHEET 10 OF 12

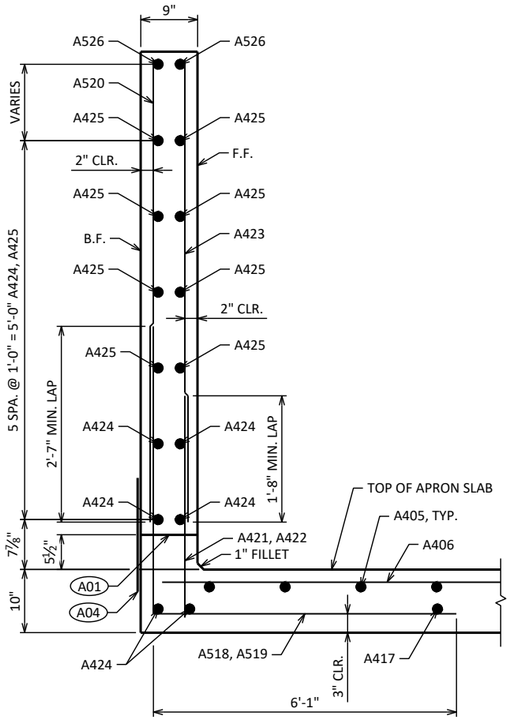
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8

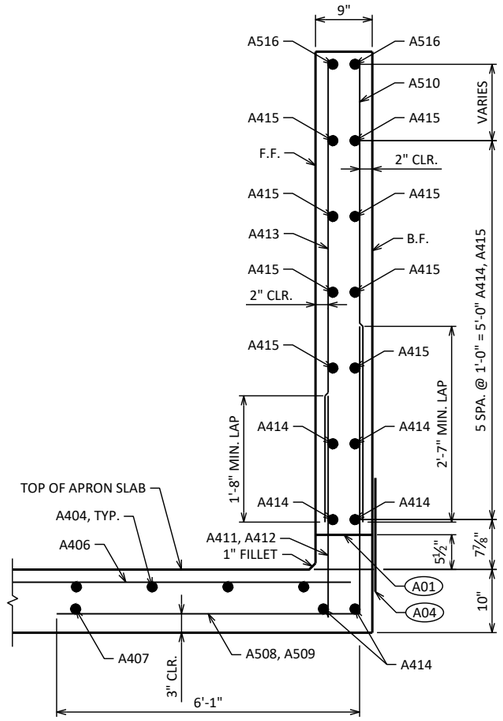
STATE PROJECT NUMBER

1590-18-71



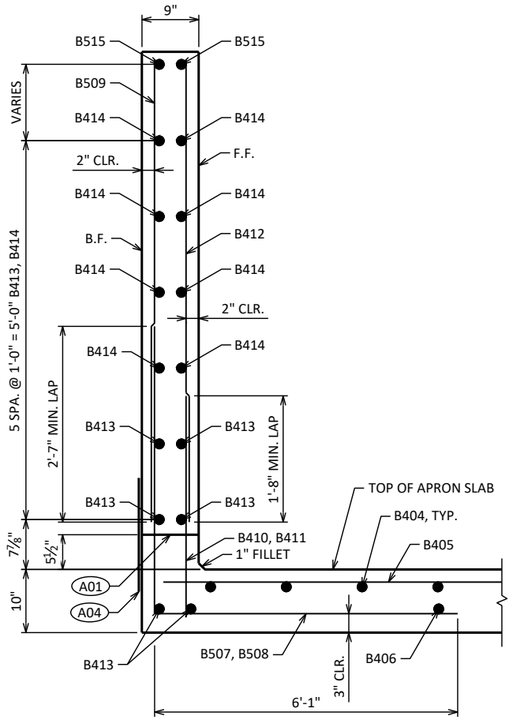
SECTION THRU WING 2

LOOKING SOUTH



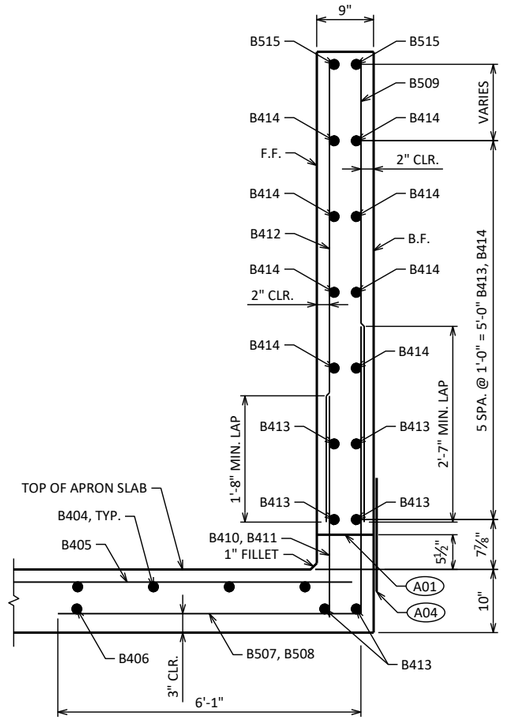
SECTION THRU WING 1

LOOKING SOUTH



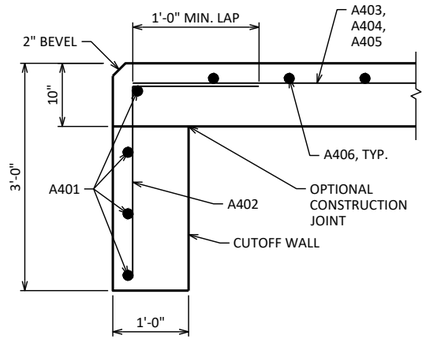
SECTION THRU WING 4

LOOKING NORTH



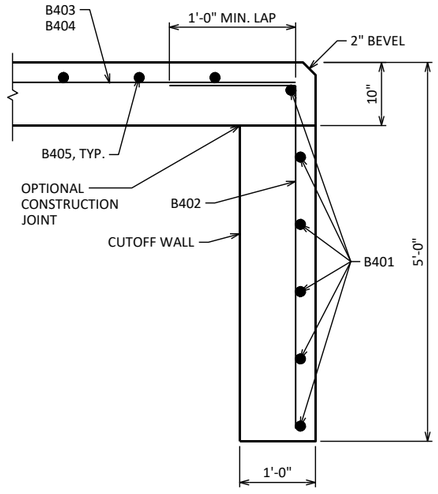
SECTION THRU WING 3

LOOKING NORTH



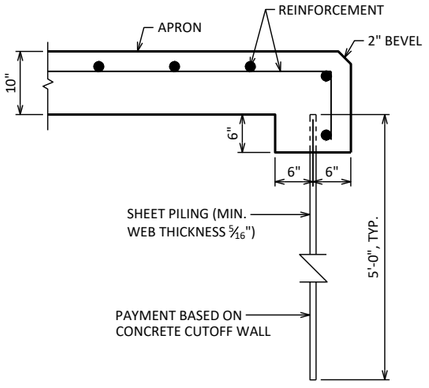
SECTION W-W

INLET CUTOFF WALL
SEE SHEET 9

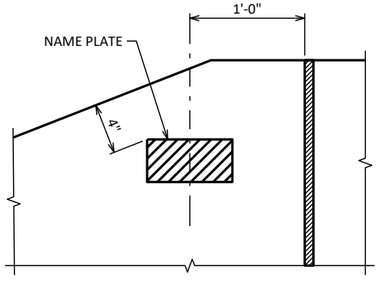


SECTION X-X

OUTLET CUTOFF WALL
SEE SHEET 10



ALTERNATE CUTOFF WALL



NAME PLATE DETAIL

WING 4

LEGEND

(A01) HORIZONTAL CONSTRUCTION JOINT

(A04) 18" MIN. WIDTH RUBBERIZED MEMBRANE WATERPROOFING ALONG HORIZ. CONST. JOINT IN WING

B.F. = BACK FACE F.F. = FRONT FACE

NOTES

SEE SHEETS 9 AND 10 SECTION W-W AND SECTION X-X LOCATIONS

FOR BILL OF BARS, SEE APRON DETAILS ON SHEET 12.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-21-9703

DRAWN BY VJD | PLANS CK'D ZRM

APRON DETAILS 1

SHEET 11 OF 12

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8

8

STATE PROJECT NUMBER

1590-18-71

BILL OF BARS - INLET APRON & WINGWALLS

COATED: 1,010
UNCOATED: 450

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

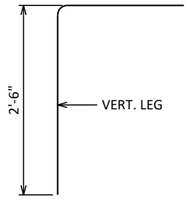
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A401		4	28'-3"			CUTOFF WALL - HORIZ.
A402		27	4'-1"	X		CUTOFF WALL - VERT.
A403		8	11'-10"			APRON SLAB - LONGIT.
⚠ A404		8	6'-11"		X	APRON SLAB - LONGIT. - WING 1
⚠ A405		9	6'-9"		X	APRON SLAB - LONGIT. - WING 2
⚠ A406		11	18'-1"		X	APRON SLAB - TRANS.
A407		1	10'-10"			APRON SLAB - SPACER - WING 1
A508	X	14	9'-10"	X		WING 1 - VERT. - BACK FACE
⚠ A509	X	6	9'-1"	X	X	WING 1 - VERT. - BACK FACE
⚠ A510	X	14	4'-5"		X	WING 1 - VERT. - BACK FACE
⚠ A411	X	2	2'-7"		X	WING 1 - VERT. - FRONT FACE - TIP
A412	X	13	2'-11"			WING 1 - VERT. - FRONT FACE
⚠ A413	X	13	4'-0"		X	WING 1 - VERT. - FRONT FACE
A414	X	6	14'-0"			WING 1 - HORIZ. - EACH FACE
⚠ A415	X	8	7'-5"		X	WING 1 - HORIZ. - EACH FACE
A516	X	2	14'-8"			WING 1 - HORIZ. - EACH FACE
A417		1	13'-0"			APRON SLAB - SPACER - WING 2
A518	X	17	9'-10"	X		WING 2 - VERT. - BACK FACE
⚠ A519	X	7	9'-1"	X	X	WING 2 - VERT. - BACK FACE
⚠ A520	X	17	8'-10"		X	WING 2 - VERT. - BACK FACE
⚠ A421	X	2	2'-7"		X	WING 2 - VERT. - FRONT FACE - TIP
A422	X	16	2'-11"			WING 2 - VERT. - FRONT FACE
⚠ A423	X	16	3'-11"		X	WING 2 - VERT. - FRONT FACE
A424	X	6	17'-2"			WING 2 - HORIZ. - EACH FACE
⚠ A425	X	8	9'-1"		X	WING 2 - HORIZ. - EACH FACE
A526	X	2	17'-8"			WING 2 - HORIZ. - EACH FACE

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

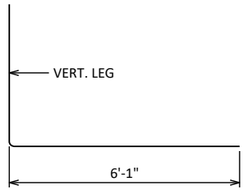
BAR SERIES TABLE - INLET APRON & WINGWALLS

BUNDLE AND TAG EACH SERIES SEPARATELY.

BAR MARK	NO. REQ'D.	LENGTH
A404	1 SERIES OF 8	2'-10" TO 11'-0"
A405	1 SERIES OF 9	2'-8" TO 10'-10"
A406	1 SERIES OF 11	8'-8" TO 27'-6"
A509	1 SERIES OF 6	8'-5" TO 9'-9"
A510	1 SERIES OF 14	2'-10" TO 6'-0"
A411	1 SERIES OF 2	2'-5" TO 2'-9"
A413	1 SERIES OF 13	2'-0" TO 6'-0"
A415	2 SERIES OF 4	3'-2" TO 11'-8"
A519	1 SERIES OF 7	8'-6" TO 9'-8"
A520	1 SERIES OF 17	2'-9" TO 6'-1"
A421	1 SERIES OF 2	2'-5" TO 2'-9"
A423	1 SERIES OF 16	1'-10" TO 6'-0"
A425	2 SERIES OF 4	3'-9" TO 14'-5"



A402



A508, A509, A518, A519

BILL OF BARS - OUTLET APRON & WINGWALLS

COATED: 790
UNCOATED: 280

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

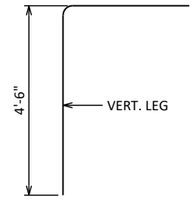
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
B401		6	12'-5"			CUTOFF WALL - HORIZ.
B402		13	6'-1"	X		CUTOFF WALL - VERT.
B403		7	11'-9"			APRON SLAB - LONGIT.
⚠ B404		6	6'-10"		X	APRON SLAB - LONGIT.
⚠ B405		11	10'-3"		X	APRON SLAB - TRANS.
B406		2	11'-6"			APRON SLAB - SPACERS
B507	X	24	9'-10"	X		WINGS - VERT. - BACK FACE
⚠ B508	X	10	9'-1"	X	X	WINGS - VERT. - BACK FACE
⚠ B509	X	24	4'-5"		X	WINGS - VERT. - BACK FACE
⚠ B410	X	4	2'-8"		X	WINGS - VERT. - FRONT FACE
B411	X	22	2'-11"			WINGS - VERT. - FRONT FACE
⚠ B412	X	22	4'-1"		X	WINGS - VERT. - FRONT FACE
B413	X	12	11'-11"			WINGS - HORIZ. - EACH FACE
⚠ B414	X	16	6'-4"		X	WINGS - HORIZ. - EACH FACE
B515	X	4	12'-8"			WINGS - HORIZ. - EACH FACE

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

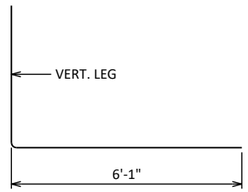
BAR SERIES TABLE - OUTLET APRON & WINGWALLS

BUNDLE AND TAG EACH SERIES SEPARATELY.

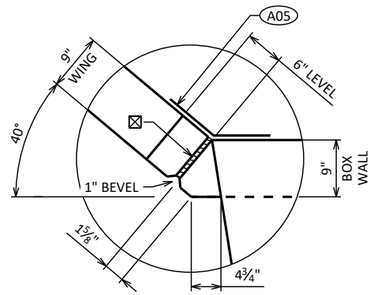
BAR MARK	NO. REQ'D.	LENGTH
B404	2 SERIES OF 3	3'-1" TO 10'-7"
B405	1 SERIES OF 11	7'-7" TO 12'-11"
B508	2 SERIES OF 5	8'-6" TO 9'-8"
B509	2 SERIES OF 12	2'-10" TO 6'-0"
B410	2 SERIES OF 2	2'-6" TO 2'-10"
B412	2 SERIES OF 11	2'-1" TO 6'-1"
B414	4 SERIES OF 4	2'-8" TO 10'-0"



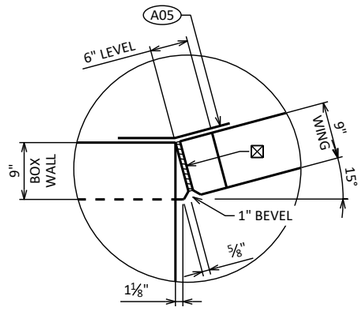
B402



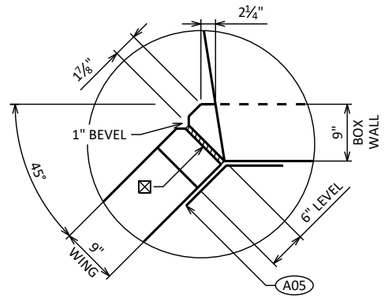
B507, B508



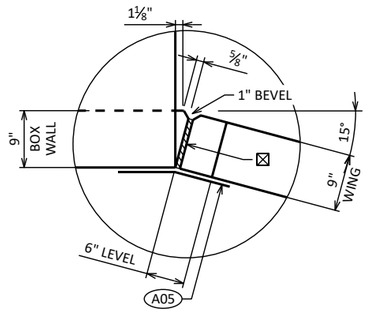
WING 2 CORNER



WING 3 CORNER



WING 1 CORNER



WING 4 CORNER

CORNER DETAILS

LEGEND

(A05) 18" RUBBERIZED MEMBRANE WATERPROOFING EXTEND FROM HORIZ. CONST. JT. TO TOP OF WALL (FLUSH WITH FACE OF CONCRETE)

☒ ¾" FILLER TO EXTEND FROM HORIZONTAL CONSTRUCTION JOINT TO TOP OF WING. FILLER IS INCLUDED IN WING LENGTH.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-21-9703

DRAWN BY VJD | PLANS CK'D ZRM

APRON DETAILS 2

SHEET 12 OF 12

8

8

STA 449+20 TO 454+00 - USH 8								
STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
		CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
449+20.00	0.00	50.71	0.07	0	0	0	0	0
450+00.00	80.00	178.71	0.10	340	0	340	0	340
451+00.00	100.00	347.81	0.28	975	1	1,315	1	1314
452+00.00	100.00	412.23	0.25	1407	1	2,722	3	2720
453+00.00	100.00	24.22	0.43	808	1	3,530	4	3526
454+00.00	100.00	16.07	0.23	75	1	3,605	5	3600

STA 472+35 TO 481+15 - USH 8								
STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
		CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
472+35.00	0.00	2.44	2.26	0	0	0	0	0
473+00.00	65.00	5.93	10.02	10	15	10	19	-9
474+00.00	100.00	8.57	27.52	27	70	37	106	-69
475+00.00	100.00	7.72	8.16	30	66	67	189	-122
476+00.00	100.00	7.46	10.16	28	34	95	231	-136
477+00.00	100.00	8.84	10.90	30	39	125	280	-155
478+00.00	100.00	9.25	22.99	33	63	158	359	-201
479+00.00	100.00	9.14	16.38	34	73	192	450	-258
480+00.00	100.00	9.27	10.48	34	50	226	513	-287
481+00.00	100.00	0.51	0.69	18	21	244	539	-295
481+15.00	15.00	0.44	0.51	0	0	244	539	-295

STA 553+50 TO STA 605+26.72 - USH 8 (TABLE 1 OF 3)								
STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
		CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
553+50.00	0.00	94.87	33.86	0	0	0	0	0
554+00.00	50.00	163.77	45.41	239	73	239	91	148
555+00.00	100.00	172.11	92.57	622	256	861	411	450
556+00.00	100.00	220.61	113.00	727	381	1,588	888	701
557+00.00	100.00	322.22	261.45	1005	693	2,593	1,754	839
558+00.00	100.00	485.02	148.77	1495	760	4,088	2,704	1,384
559+00.00	100.00	730.61	18.37	2251	310	6,339	3,091	3,248
560+00.00	100.00	951.68	5.46	3115	44	9,454	3,146	6,308
561+00.00	100.00	1332.26	0.00	4230	10	13,684	3,159	10,525
562+00.00	100.00	2943.35	0.00	7918	0	21,602	3,159	18,443
563+00.00	100.00	4561.43	0.00	13898	0	35,500	3,159	32,341
563+81.14	81.14	5468.85	0.00	15071	0	50,571	3,159	47,412
563+85.00	3.86	3569.69	0.00	646	0	51,217	3,159	48,058
563+90.00	5.00	3324.19	0.00	638	0	51,855	3,159	48,696
563+95.00	5.00	3065.90	0.02	592	0	52,447	3,159	49,288
564+00.00	5.00	2806.46	0.00	544	0	52,991	3,159	49,832
564+05.00	5.00	2578.09	1.21	499	0	53,490	3,159	50,331
564+10.00	5.00	2362.70	2.81	457	0	53,947	3,159	50,788
564+15.00	5.00	2185.49	8.56	421	1	54,368	3,160	51,208
564+20.00	5.00	2039.35	16.39	391	2	54,759	3,163	51,597
564+25.00	5.00	1927.25	27.17	367	4	55,126	3,168	51,959
564+30.00	5.00	1842.56	23.58	349	5	55,475	3,174	52,301
564+35.00	5.00	1773.29	13.04	335	3	55,810	3,178	52,633
564+40.00	5.00	1709.78	5.41	323	2	56,133	3,180	52,953
564+45.00	5.00	1648.43	0.98	311	1	56,444	3,181	53,263
564+50.00	5.00	1580.95	0.00	299	0	56,743	3,181	53,562
564+55.00	5.00	1607.07	0.58	295	0	57,038	3,181	53,857
564+60.00	5.00	1692.77	2.51	306	0	57,344	3,181	54,163
564+65.00	5.00	1769.61	6.80	321	1	57,665	3,183	54,483
564+70.00	5.00	1838.10	14.83	334	2	57,999	3,185	54,814
564+75.00	5.00	1900.92	21.42	346	3	58,345	3,189	55,156
564+80.00	5.00	1982.26	24.97	360	4	58,705	3,194	55,511
564+85.00	5.00	2070.85	23.59	375	4	59,080	3,199	55,881
564+90.00	5.00	2198.45	13.24	395	3	59,475	3,203	56,273
564+95.00	5.00	2381.60	3.14	424	2	59,899	3,205	56,694
565+00.00	5.00	2600.48	0.00	461	0	60,360	3,205	57,155
565+05.00	5.00	2876.44	0.00	507	0	60,867	3,205	57,662
565+10.00	5.00	3172.71	0.00	560	0	61,427	3,205	58,222
565+10.12	0.12	6149.58	0.00	21	0	61,448	3,205	58,243
566+00.00	89.88	4644.55	0.00	17966	0	79,414	3,205	76,209
567+00.00	100.00	4142.15	0.00	16272	0	95,686	3,205	92,481
568+00.00	100.00	3687.70	0.00	14500	0	110,186	3,205	106,981
569+00.00	100.00	2721.75	0.00	11869	0	122,055	3,205	118,850
570+00.00	100.00	1957.70	0.00	8666	0	130,721	3,205	127,516

STA 553+50 TO 605+26.72 - USH 8 (TABLE 2 OF 3)								
STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
		CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
571+00.00	100.00	1692.94	0.00	6760	0	137,481	3,205	134,276
572+00.00	100.00	1775.63	0.00	6423	0	143,904	3,205	140,699
573+00.00	100.00	1719.72	0.00	6473	0	150,377	3,205	147,172
574+00.00	100.00	1446.49	0.00	5863	0	156,240	3,205	153,035
575+00.00	100.00	1284.96	0.00	5058	0	161,298	3,205	158,093
576+00.00	100.00	1058.22	0.00	4339	0	165,637	3,205	162,432
577+00.00	100.00	862.05	0.00	3556	0	169,193	3,205	165,988
578+00.00	100.00	938.27	0.78	3334	1	172,527	3,206	169,321
579+00.00	100.00	346.14	11.83	2379	23	174,906	3,235	171,671
580+00.00	100.00	64.41	237.63	760	462	175,666	3,813	171,854
581+00.00	100.00	76.57	838.12	261	1992	175,927	6,303	169,625
582+00.00	100.00	143.31	766.02	407	2971	176,334	10,016	166,318
583+00.00	100.00	192.56	372.13	622	2108	176,956	12,651	164,305
584+00.00	100.00	266.91	1045.08	851	2624	177,807	15,931	161,876
585+00.00	100.00	264.07	1265.78	983	4279	178,790	21,280	157,510
586+00.00	100.00	591.25	1377.02	1584	4894	180,374	27,398	152,977
587+00.00	100.00	351.76	2165.75	1746	6561	182,120	35,599	146,521
588+00.00	100.00	220.66	1753.33	1060	7258	183,180	44,671	138,509
588+96.72	96.72	106.12	778.89	585	4535	183,765	50,340	133,425
589+00.00	3.28	106.76	632.66	13	86	183,778	50,448	133,331
589+05.00	5.00	98.90	544.62	19	109	183,797	50,584	133,213
589+10.00	5.00	90.97	456.24	18	93	183,815	50,700	133,115
589+15.00	5.00	84.26	354.14	16	75	183,831	50,794	133,037
589+20.00	5.00	74.64	276.06	15	58	183,846	50,866	132,980
589+25.00	5.00	67.39	172.96	13	42	183,859	50,919	132,940
589+30.00	5.00	57.69	144.50	12	29	183,871	50,955	132,916
589+35.00	5.00	52.46	110.02	10	24	183,881	50,985	132,896
589+40.00	5.00	56.86	77.31	10	17	183,891	51,006	132,885
589+45.00	5.00	71.81	51.01	12	12	183,903	51,021	132,882
589+50.00	5.00	74.70	36.74	14	8	183,917	51,031	132,886
589+55.00	5.00	76.96	28.44	14	6	183,931	51,039	132,892
589+60.00	5.00	79.03	24.29	14	5	183,945	51,045	132,900
589+65.00	5.00	64.17	19.49	13	4	183,958	51,050	132,908
589+70.00	5.00	53.12	15.01	11	3	183,969	51,054	132,915
589+75.00	5.00	56.02	11.38	10	2	183,979	51,056	132,923
589+80.00	5.00	59.14	10.51	11	2	183,990	51,059	132,931
589+85.00	5.00	62.82	9.76	11	2	184,001	51,061	132,940
589+90.00	5.00	47.46	8.73	10	2	184,011	51,064	132,947
589+95.00	5.00	37.66	7.73	8	2	184,019	51,066	132,953
590+00.00	5.00	31.52	10.38	6	2	184,025	51,069	132,956
590+05.00	5.00	38.78	10.77	7	2	184,032	51,071	132,961
590+10.00	5.00	46.70	11.32	8	2	184,040	51,074	132,966
590+15.00	5.00	63.07	12.63	10	2	184,050	51,076	132,974
590+20.00	5.00	102.09	12.96	15	2	184,065	51,079	132,986

STA 553+50 TO 605+26.72 - USH 8 (TABLE 3 OF 3)								
STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
		CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
590+25.00	5.00	184.29	12.72	27	2	184,092	51,081	133,011
590+30.00	5.00	296.86	5.07	45	2	184,137	51,084	133,053
590+35.00	5.00	414.86	4.01	66	1	184,203	51,085	133,118
590+40.00	5.00	534.21	3.16	88	1	184,291	51,086	133,205
590+45.00	5.00	635.31	2.39	108	1	184,399	51,088	133,312
590+50.00	5.00	737.45	2.23	127	0	184,526	51,088	133,439
590+54.44	4.44	854.22	2.58	131	0	184,657	51,088	133,570
591+00.00	45.56	1644.82	0.28	2108	2	186,765	51,090	135,675
592+00.00	100.00	3784.10	0.00	10054	1	196,819	51,091	145,728
593+00.00	100.00	5317.06	0.00	16854	0	213,673	51,091	162,582
594+00.00	100.00	5261.52	0.00	19590	0	233,263	51,091	182,172
595+00.00	100.00	3693.24	0.00	16583	0	249,846	51,091	198,755
596+00.00	100.00	1523.73	0.00	9661	0	259,507	51,091	208,416
597+00.00	100.00	568.79	48.18	3875	89	263,382	51,203	212,180
598+00.00	100.00	470.14	89.20	1924	254	265,306	51,520	213,786
599+00.00	100.00	393.34	177.69	1599	494	266,905	52,138	214,768
600+00.00	100.00	265.05	193.81	1219	688	268,124	52,998	215,127
601+00.00	100.00	449.62	236.12	1323	796	269,447	53,993	215,455
602+00.00	100.00	364.61	77.97	1508	582	270,955	54,720	216,235
604+00.00	181.28	328.27	5.45	2326	280	273,281	55,070	218,211
605+00.00	100.00	320.32	8.87	1201	27	274,482	55,104	219,378
605+26.72	26.72	312.08	0.00	313	4	274,795	55,109	219,686

STA 605+50 TO 620+97 - USH 8								
STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
		CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
605+50.00	0.00	177.15	0.02	0	0	0	0	0
606+00.00	50.00	120.30	2.13	275	2	275	3	273
607+00.00	100.00	40.59	71.37	298	136	573	173	401
608+00.00	100.00	0.02	27.64	75	183	648	401	247
609+00.00	100.00	0.00	56.02	0	155	648	595	53
610+00.00	100.00	0.00	80.22	0	252	648	910	-262
611+00.00	100.00	0.01	79.80	0	296	648	1,280	-632
612+00.00	100.00	0.10	78.04	0	292	648	1,645	-997
613+00.00	100.00	0.02	70.98	0	276	648	1,990	-1,342
614+00.00	100.00	30.86	0.01	57	131	705	2,154	-1,449
615+00.00	100.00	141.68	0.00	320	0	1,025	2,154	-1,129
616+00.00	100.00	157.59	30.72	554	57	1,579	2,225	-646
617+00.00	100.00	184.94	0.01	634	57	2,213	2,296	-83
618+00.00	100.00	51.67	0.00	438	0	2,651	2,296	355
619+00.00	100.00	0.86	110.07	97	204	2,748	2,551	197
620+00.00	100.00	0.37	87.01	2	365	2,750	3,008	-258
620+97.00	97.00	0.00	14.97	1	183	2,751	3,236	-485

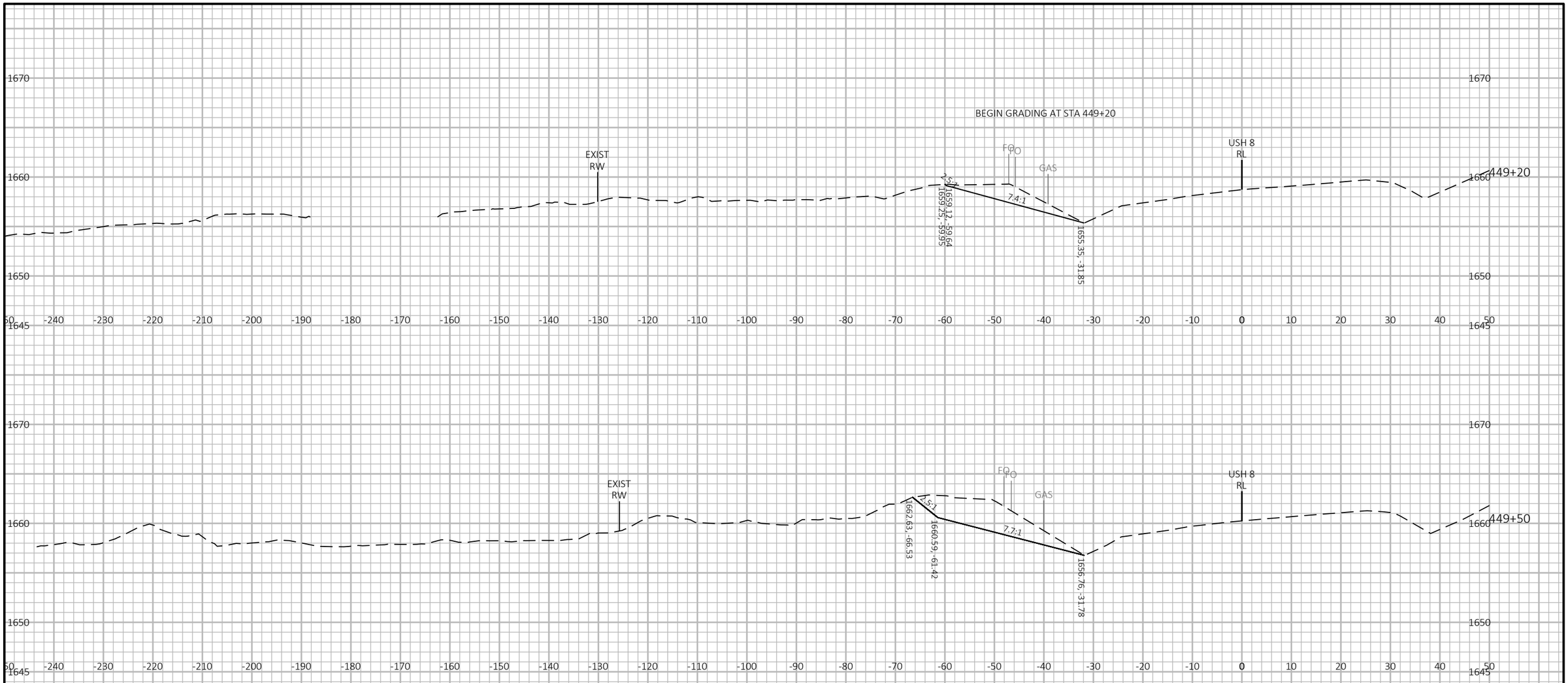
STA 634+50 TO 645+00 - USH 8								
STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
		CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
634+50.00	0.00	4.47	9.78	0	0	0	0	0
635+00.00	50.00	2.59	91.64	7	94	7	118	-111
635+50.00	50.00	3.85	189.32	6	260	13	443	-430
636+00.00	50.00	3.14	301.63	6	455	19	1,011	-992
636+50.00	50.00	1.61	413.16	4	662	23	1,839	-1,816
637+00.00	50.00	2.04	558.18	3	899	26	2,963	-2,937
637+50.00	50.00	1.28	623.50	3	1094	29	4,330	-4,301
638+00.00	50.00	2.80	679.36	4	1206	33	5,838	-5,805
638+50.00	50.00	3.91	650.54	6	1231	39	7,376	-7,337
639+00.00	50.00	2.62	509.32	6	1074	45	8,719	-8,674
639+50.00	50.00	2.89	508.43	5	942	50	9,896	-9,846
640+00.00	50.00	2.56	484.86	5	920	55	11,046	-10,991
640+50.00	50.00	2.89	394.08	5	814	60	12,064	-12,004
641+00.00	50.00	3.26	328.33	6	669	66	12,900	-12,834
641+50.00	50.00	3.13	294.63	6	577	72	13,621	-13,549
642+00.00	50.00	3.62	290.51	6	542	78	14,299	-14,221
642+50.00	50.00	1.19	300.97	4	548	82	14,984	-14,902
643+00.00	50.00	0.30	343.96	1	597	83	15,730	-15,647
643+50.00	50.00	0.62	331.48	1	625	84	16,511	-16,427
644+00.00	50.00	1.85	235.61	2	525	86	17,168	-17,082
644+50.00	50.00	3.07	116.81	5	326	91	17,575	-17,484
645+00.00	50.00	2.20	6.36	5	114	96	17,718	-17,622

STA 670+00 TO 673+75 - USH 8								
STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
		CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
670+00.00	0.00	0.49	8.39	0	0	0	0	0
670+50.00	50.00	4.11	117.06	4	116	4	145	-141
671+00.00	50.00	3.29	131.39	7	230	11	433	-422
671+50.00	50.00	0.23	402.50	3	494	14	1,050	-1,036
672+00.00	50.00	0.24	1301.10	0	1577	14	3,021	-3,007
672+50.00	50.00	0.47	1610.93	1	2696	15	6,391	-6,376
673+00.00	50.00	0.16	788.57	1	2222	16	9,169	-9,153
673+50.00	50.00	3.37	114.09	3	836	19	10,214	-10,195
673+75.00	25.00	3.52	8.49	3	57	22	10,285	-10,263

STA 680+00 TO 683+25 - USH 8								
STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
		CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
680+00.00	0.00	7.32	0.05	0	0	0	0	0
680+50.00	50.00	2.28	312.97	9	290	9	363	-354
681+00.00	50.00	2.14	620.41	4	864	13	1,443	-1,430
681+50.00	50.00	0.37	543.38	2	1078	15	2,790	-2,775
682+00.00	50.00	2.81	19.90	3	522	18	3,443	-3,425
682+50.00	50.00	1.25	7.14	4	25	22	3,474	-3,452
683+00.00	50.00	1.61	5.79	3	12	25	3,489	-3,464
683+25.00	25.00	1.41	7.66	1	6	26	3,496	-3,470

STA 12+89.66 'Y' TO 18+40.64 'Y' YOUNGS LANE								
STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
		CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
12+89.66	0.00	34.85	2.60	0	0	0	0	0
13+00.00	10.34	31.32	3.82	13	1	13	1	12
13+50.00	50.00	34.45	5.24	61	8	74	11	63
14+00.00	50.00	89.65	0.00	115	5	189	18	172
14+17.50	17.50	83.04	0.00	56	0	245	18	228
14+50.00	32.50	176.16	0.00	156	0	401	18	384
15+00.00	50.00	350.58	0.00	488	0	889	18	872
15+50.00	50.00	649.94	0.00	926	0	1,815	18	1,798
16+00.00	50.00	1143.63	0.00	1661	0	3,476	18	3,459
16+50.00	50.00	1667.34	0.00	2603	0	6,079	18	6,062
17+00.00	50.00	2286.70	0.00	3661	0	9,740	18	9,723
17+50.00	50.00	3405.26	0.00	5270	0	15,010	18	14,993
17+77.34	27.34	2312.53	0.00	2895	0	17,905	18	17,888
17+80.00	2.66	2192.58	0.00	222	0	18,127	18	18,110
17+85.00	5.00	1952.73	0.00	384	0	18,511	18	18,494
17+90.00	5.00	1719.90	0.00	340	0	18,851	18	18,834
17+95.00	5.00	1514.49	0.00	299	0	19,150	18	19,133
18+00.00	5.00	1336.55	0.00	264	0	19,414	18	19,397
18+05.00	5.00	1171.21	0.00	232	0	19,646	18	19,629
18+10.00	5.00	1011.88	0.00	202	0	19,848	18	19,831
18+15.00	5.00	854.52	0.00	173	0	20,021	18	20,004
18+20.00	5.00	695.09	0.00	143	0	20,164	18	20,147
18+25.00	5.00	530.65	0.00	113	0	20,277	18	20,260
18+30.00	5.00	362.00	0.00	83	0	20,360	18	20,343
18+35.00	5.00	194.14	0.00	51	0	20,411	18	20,394
18+40.00	5.00	22.78	0.00	20	0	20,431	18	20,414
18+40.64	0.64	0.63	0.00	0	0	20,431	18	20,414

STA 20+12.09 'KDK' TO 21+65'KDK' - KWE DA KIK LANE								
STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
		CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
20+15.00	0.00	0.00	1.24	0	0	0	0	0
20+20.00	5.00	0.00	3.46	0	0	0	0	0
20+25.00	5.00	0.03	3.85	0	1	0	1	-1
20+30.00	5.00	1.84	5.12	0	1	0	3	-3
20+35.00	5.00	5.83	9.16	1	1	1	4	-3
20+40.00	5.00	13.97	9.42	2	2	3	6	-3
20+45.00	5.00	24.53	15.65	4	2	7	9	-2
20+50.00	5.00	39.94	25.16	6	4	13	14	-1
20+55.00	5.00	71.20	51.26	10	7	23	23	1
20+60.00	5.00	116.18	68.25	17	11	40	36	4
20+65.00	5.00	109.21	74.17	21	13	61	53	9
20+70.00	5.00	129.86	89.01	22	15	83	71	12
20+75.00	5.00	134.79	103.99	25	18	108	94	14
20+80.00	5.00	135.79	90.66	25	18	133	116	17
20+84.56	4.56	141.16	80.48	23	14	156	134	22
21+00.00	15.44	83.17	80.96	64	46	220	191	29
21+50.00	50.00	167.63	194.28	232	255	452	510	-58
21+65.00	15.00	112.00	173.07	78	102	530	638	-108



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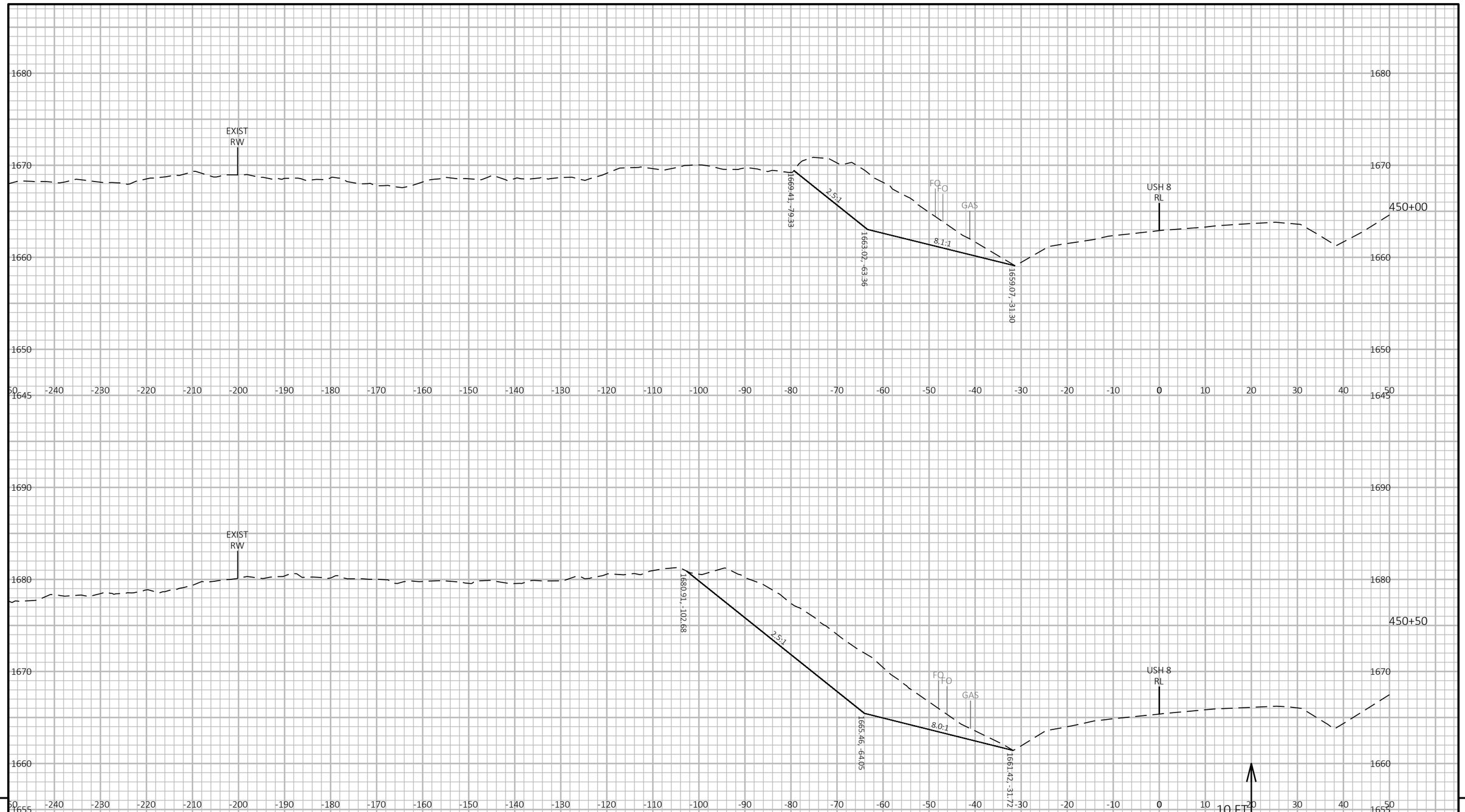
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 294	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-44920-45400.DWG
LAYOUT NAME - 01

PLOT DATE : 10/11/2024 9:54 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 295	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-44920-45400.DWG
LAYOUT NAME - 02

PLOT DATE : 10/11/2024 9:54 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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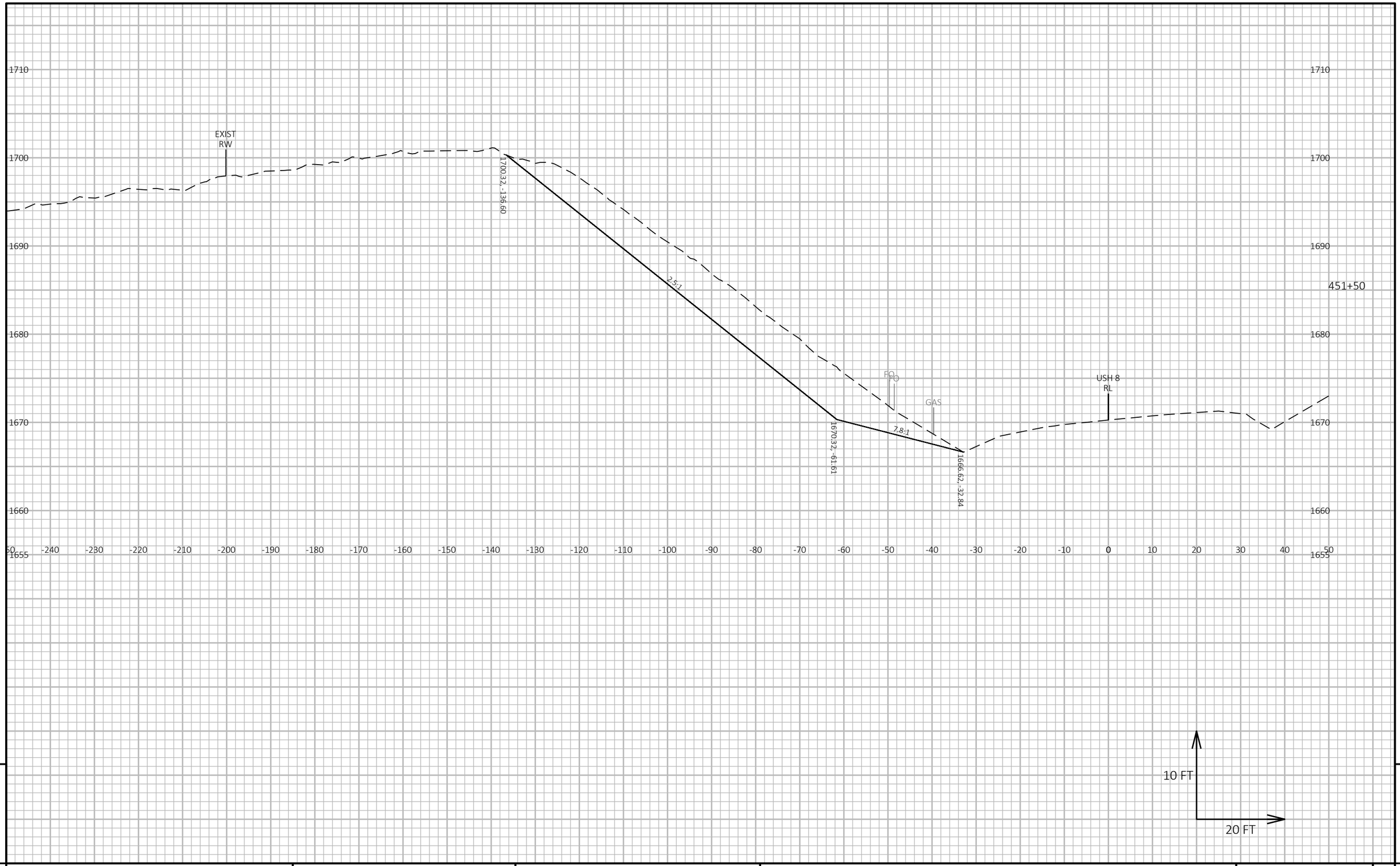
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FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-44920-45400.DWG
LAYOUT NAME - 03

PLOT DATE : 10/11/2024 9:54 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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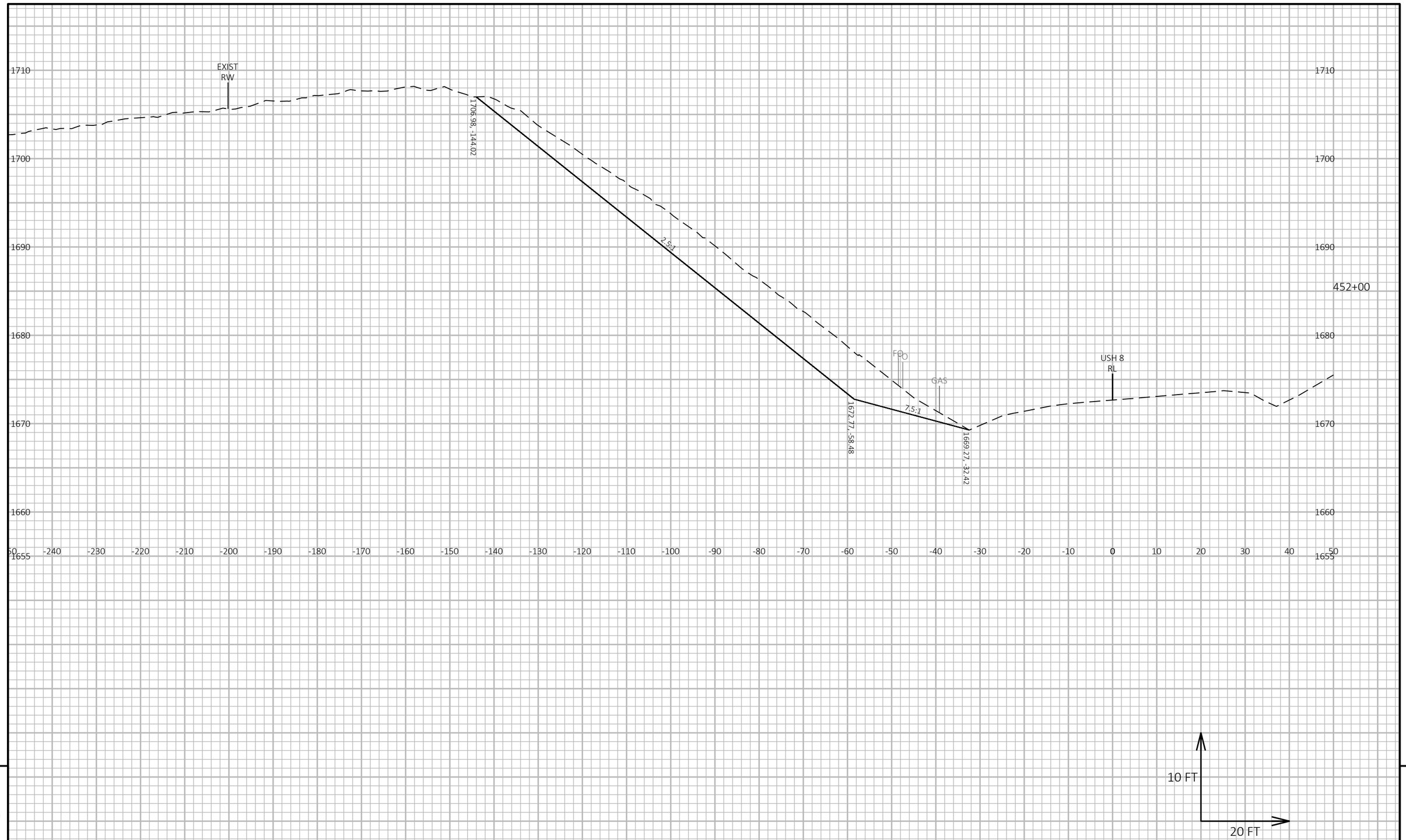
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FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-44920-45400.DWG
LAYOUT NAME - 04

PLOT DATE : 10/11/2024 9:54 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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9

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 298	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-44920-45400.DWG
LAYOUT NAME - 05

PLOT DATE : 10/11/2024 9:54 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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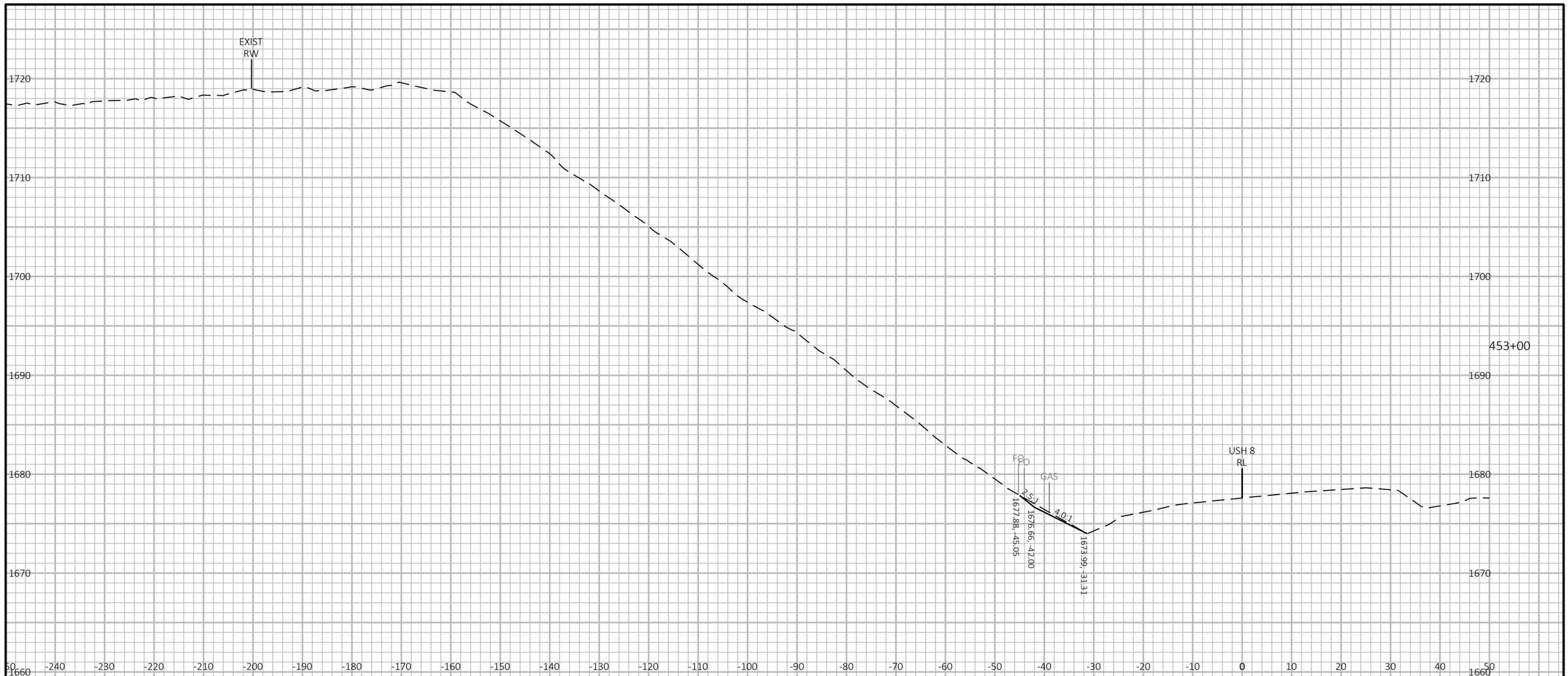
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LAYOUT NAME - 06

PLOT DATE : 10/11/2024 9:54 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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9

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 300	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-44920-45400.DWG
LAYOUT NAME - 07

PLOT DATE : 10/11/2024 9:54 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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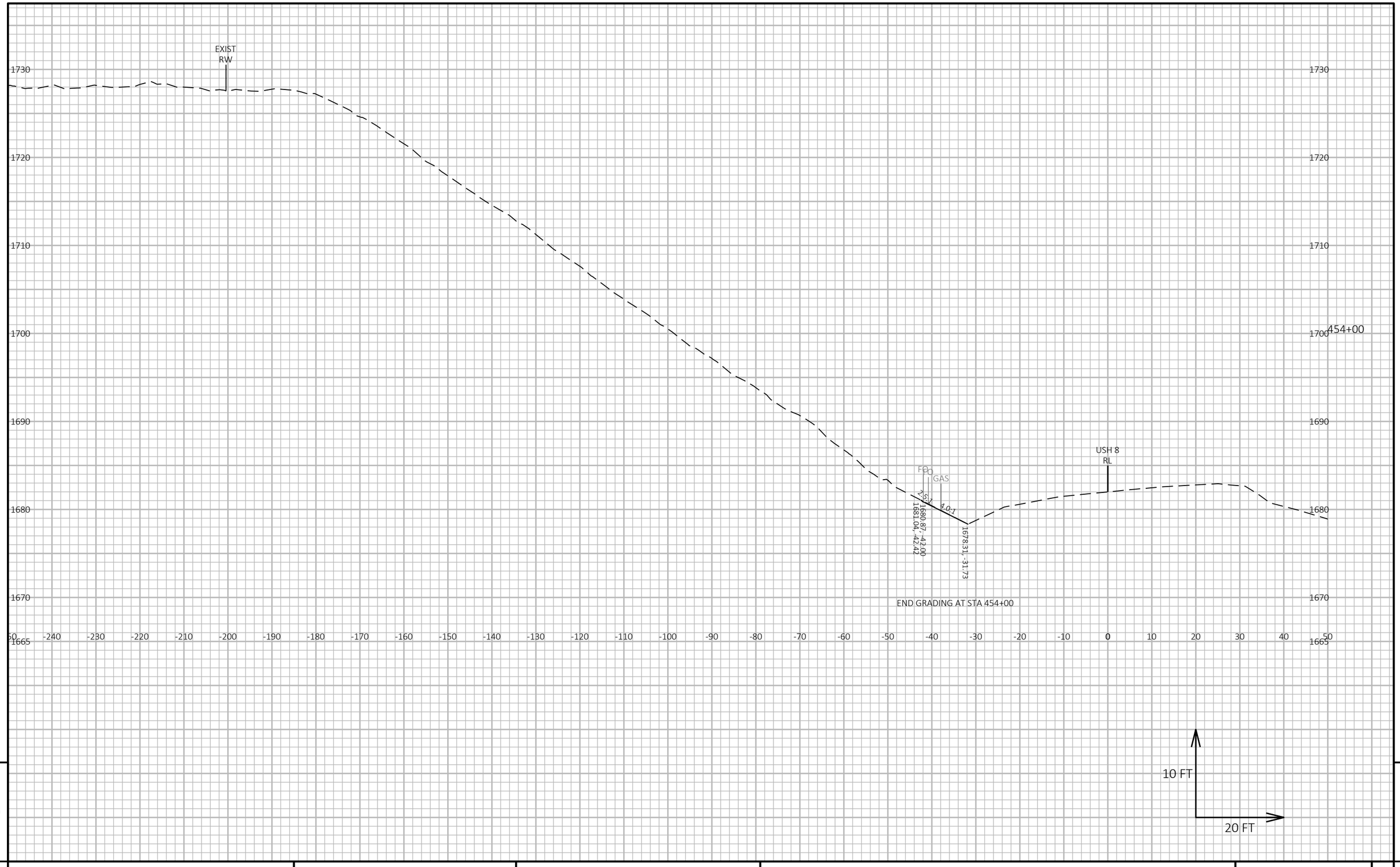
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FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-44920-45400.DWG
LAYOUT NAME - 08

PLOT DATE : 10/11/2024 9:54 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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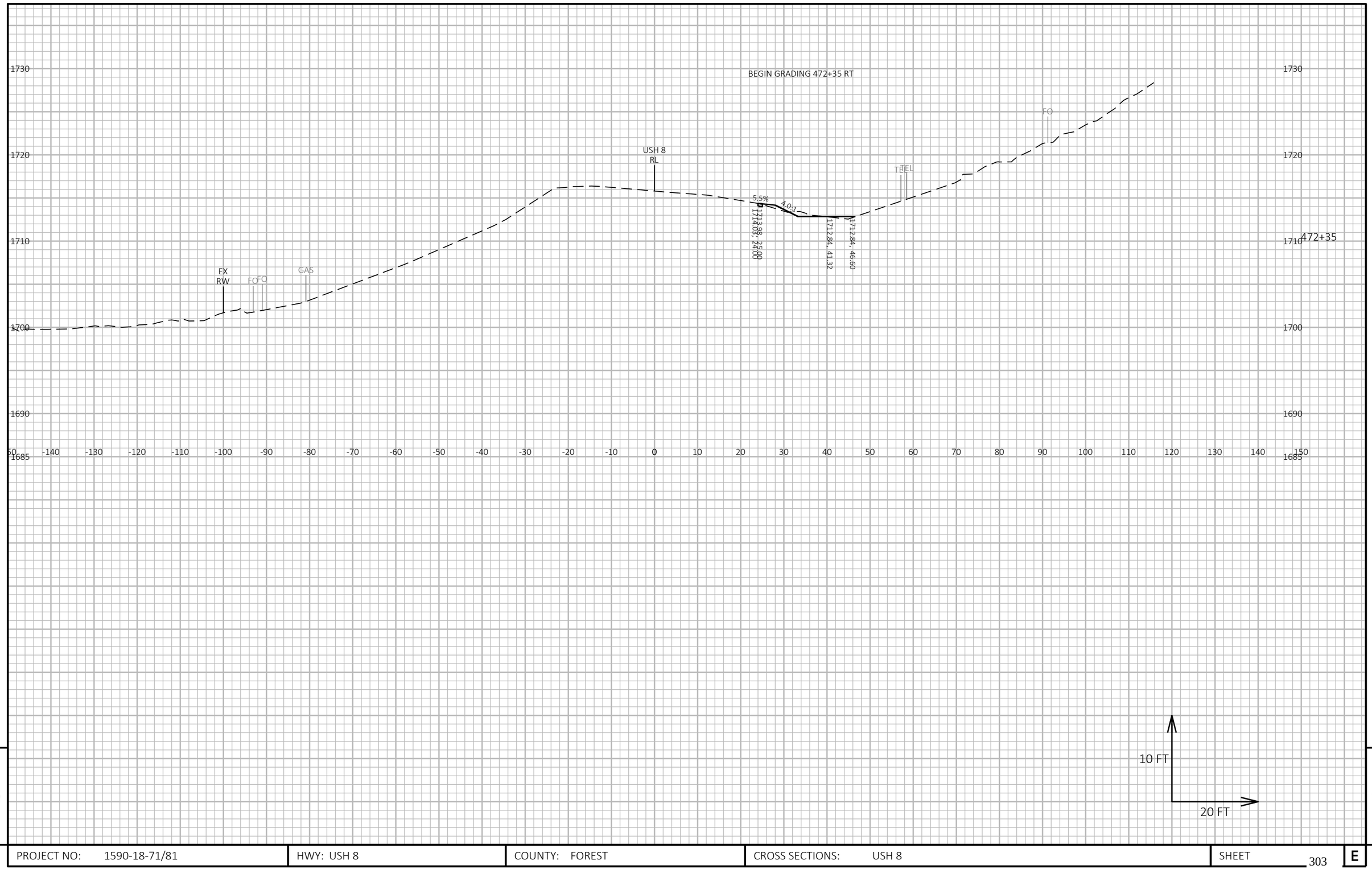
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FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-44920-45400.DWG
LAYOUT NAME - 09

PLOT DATE : 10/11/2024 9:54 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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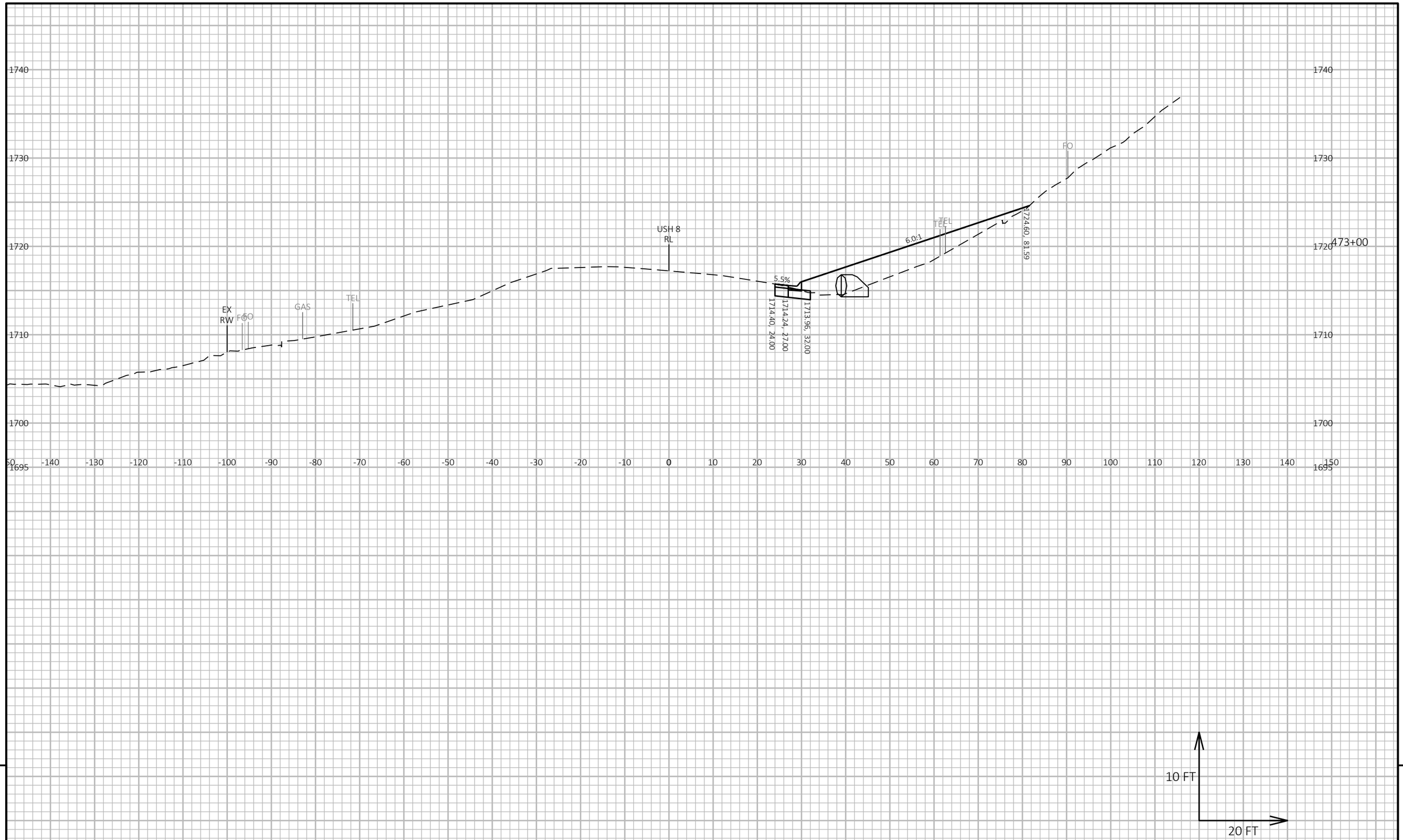
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FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-47235-48115.DWG
LAYOUT NAME - 01

PLOT DATE : 10/11/2024 9:56 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

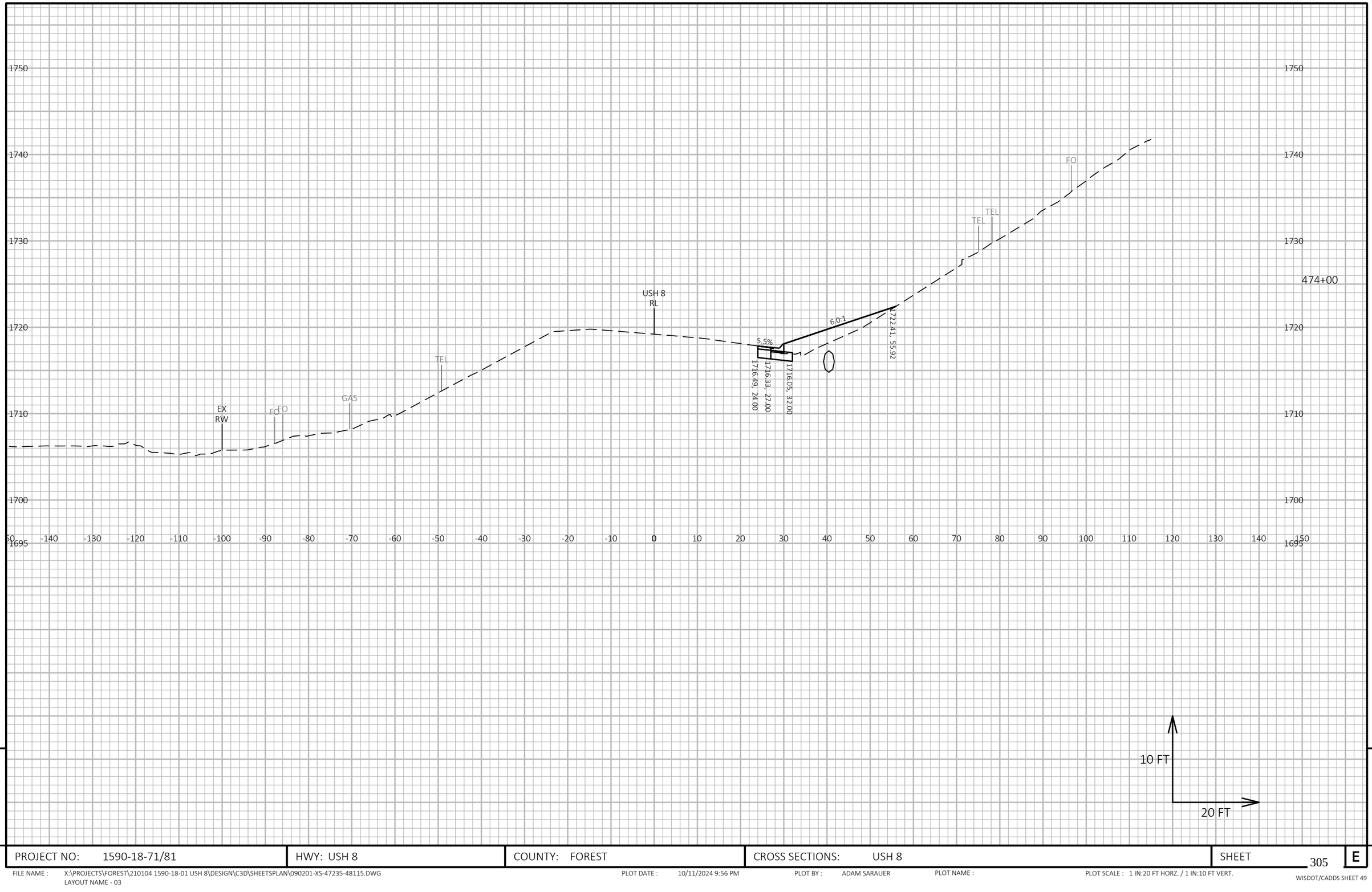
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FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-47235-48115.DWG
LAYOUT NAME - 02

PLOT DATE : 10/11/2024 9:56 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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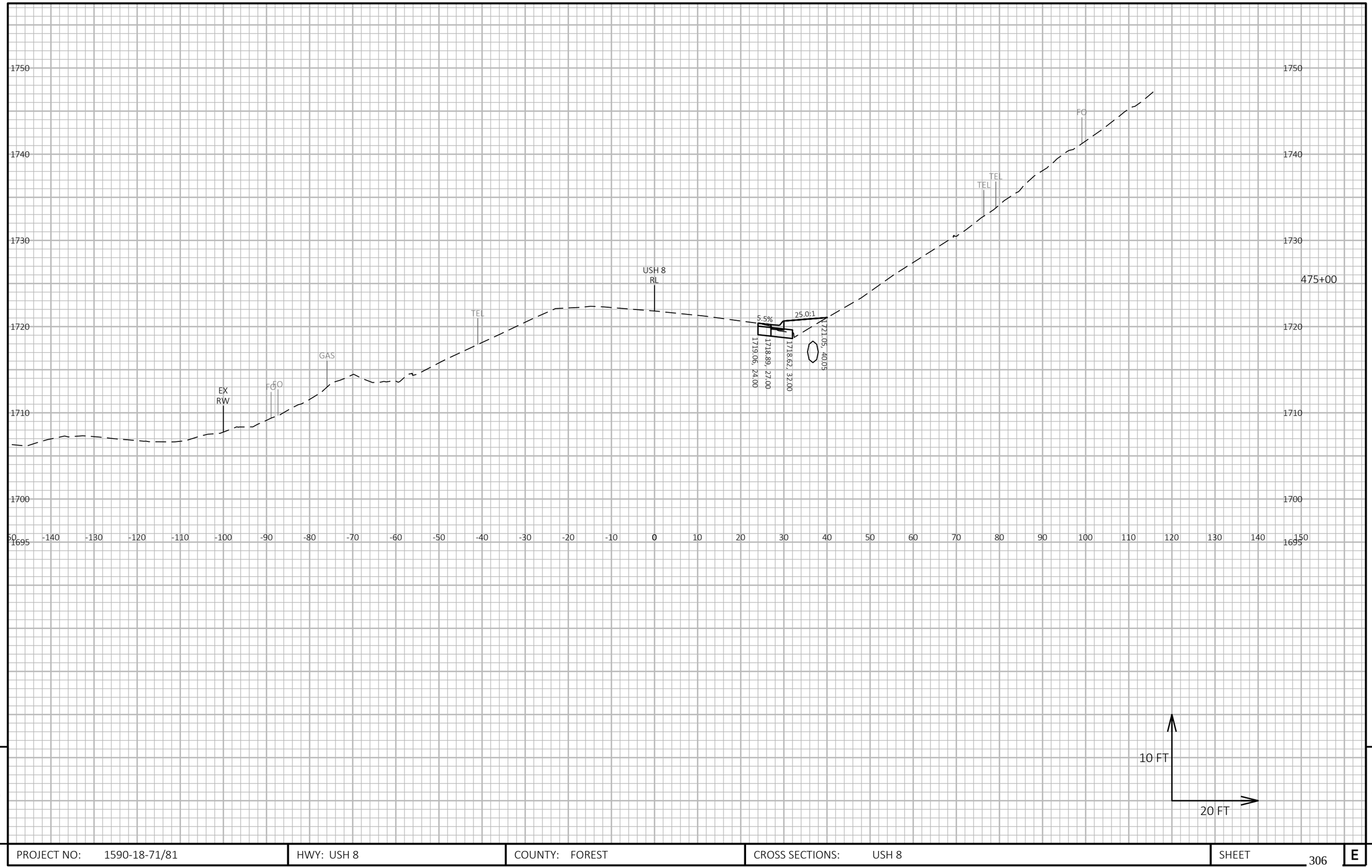
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FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-47235-48115.DWG
LAYOUT NAME - 03

PLOT DATE : 10/11/2024 9:56 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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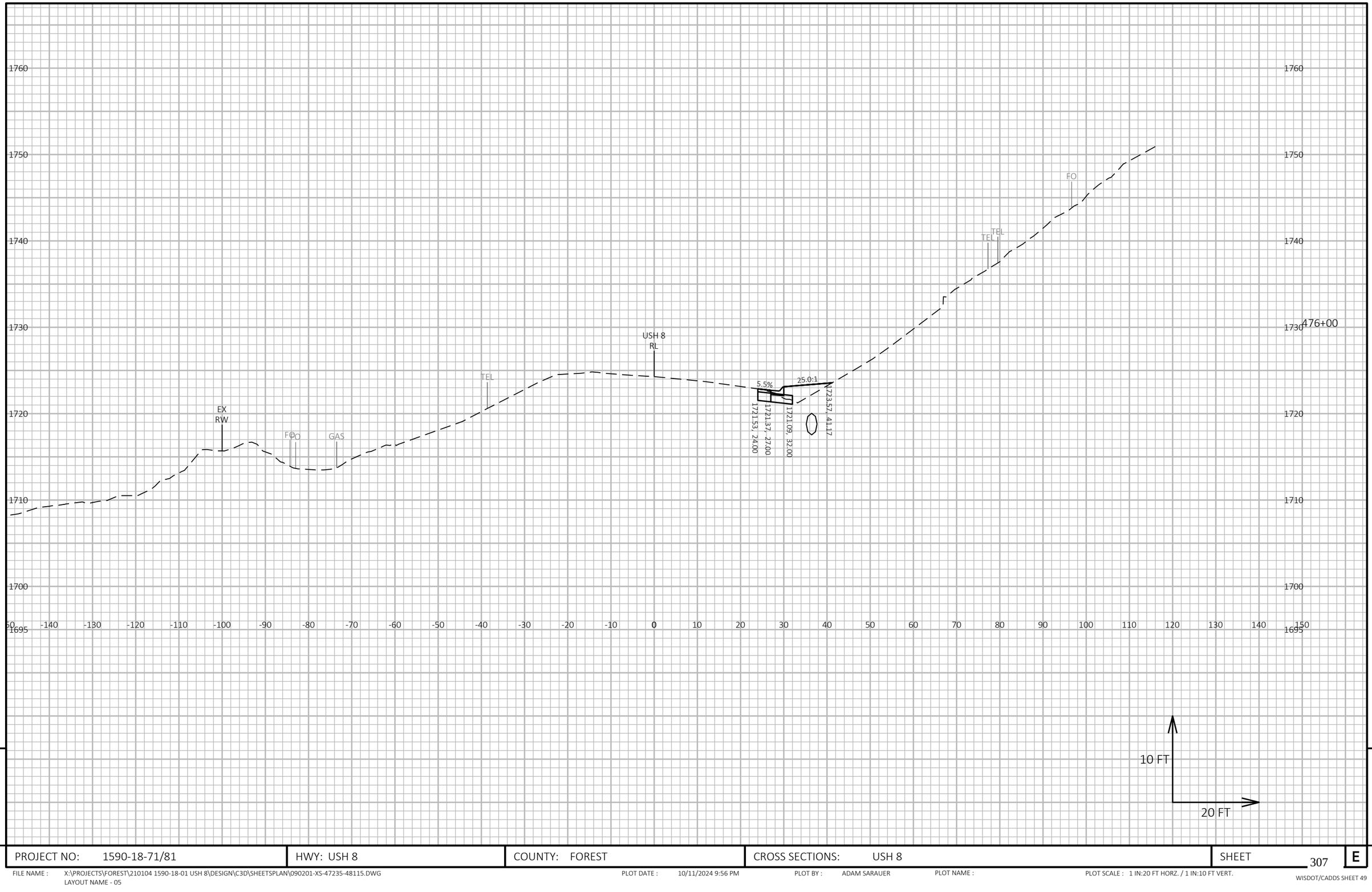
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FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-47235-48115.DWG
LAYOUT NAME - 04

PLOT DATE : 10/11/2024 9:56 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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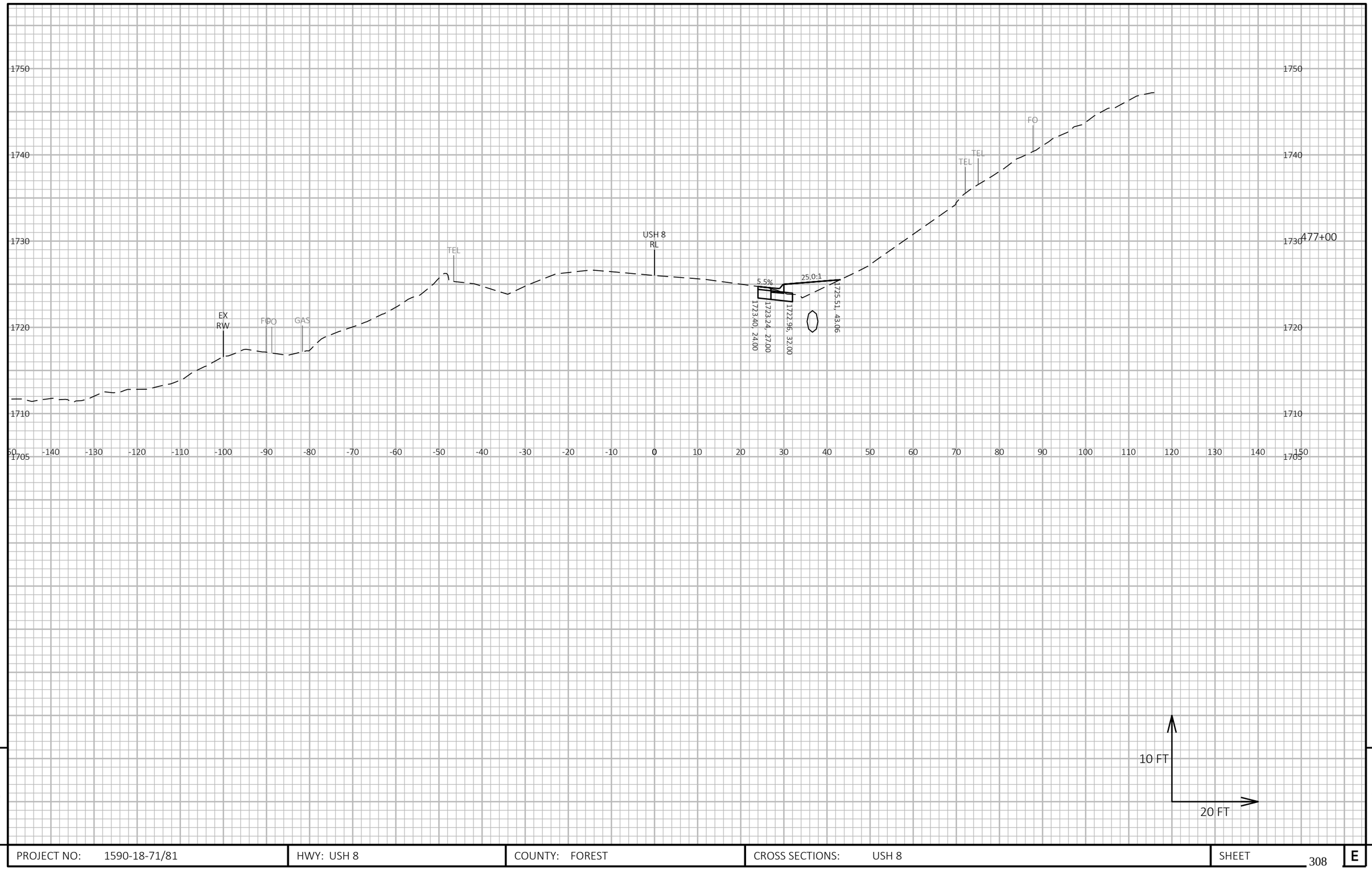
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LAYOUT NAME - 05

PLOT DATE : 10/11/2024 9:56 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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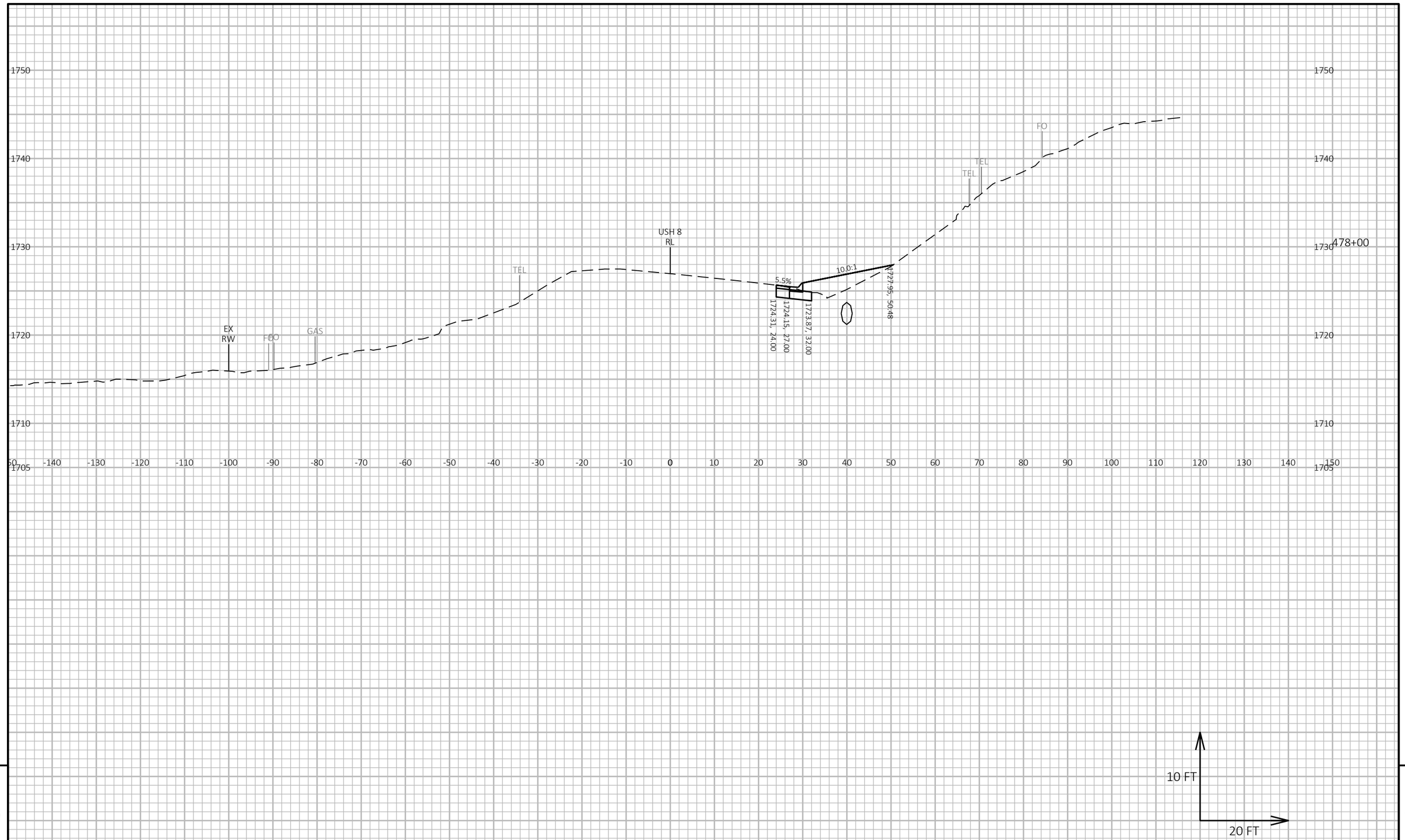
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FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-47235-48115.DWG
LAYOUT NAME - 06

PLOT DATE : 10/11/2024 9:56 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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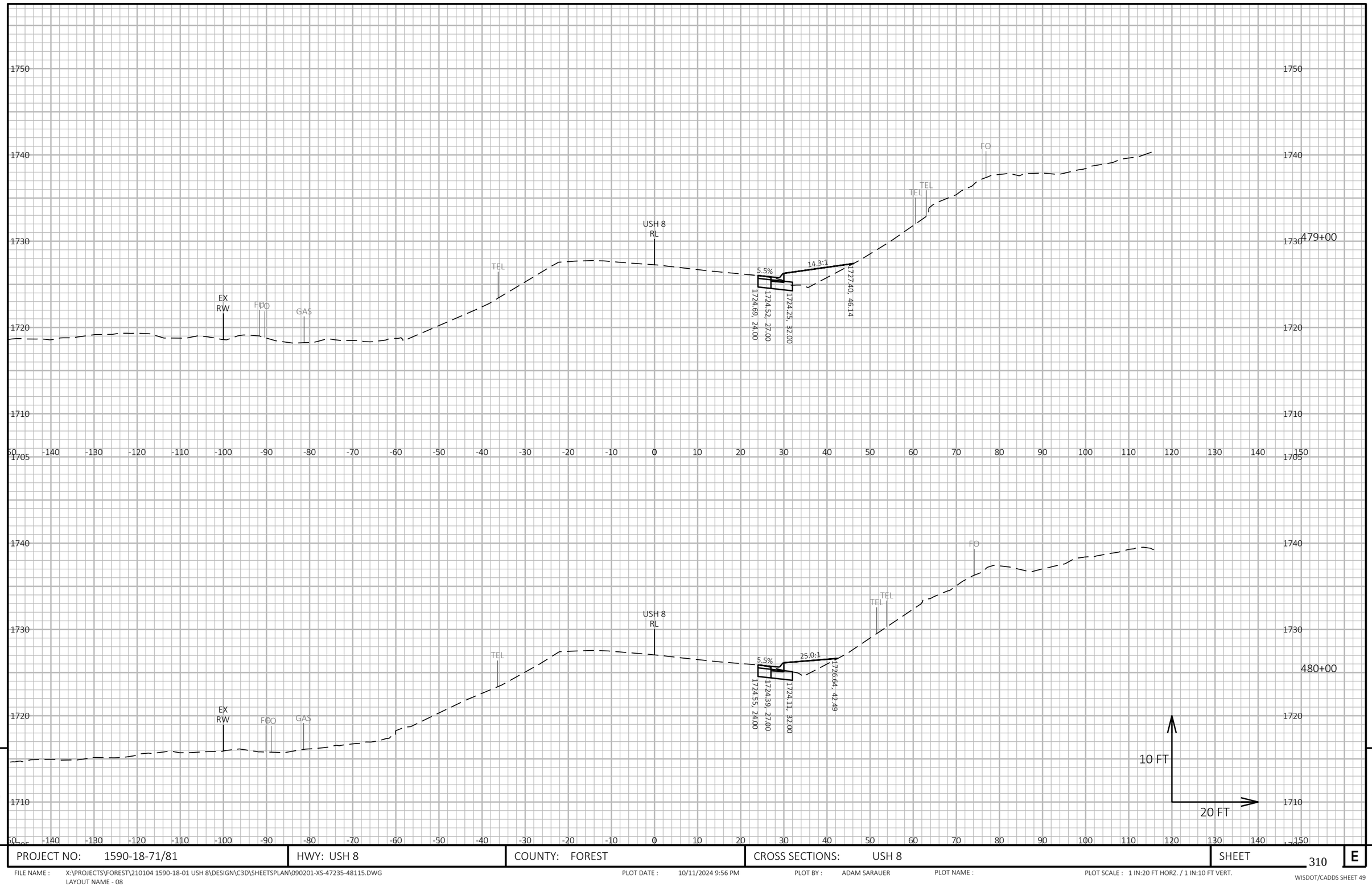
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FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-47235-48115.DWG
LAYOUT NAME - 07

PLOT DATE : 10/11/2024 9:56 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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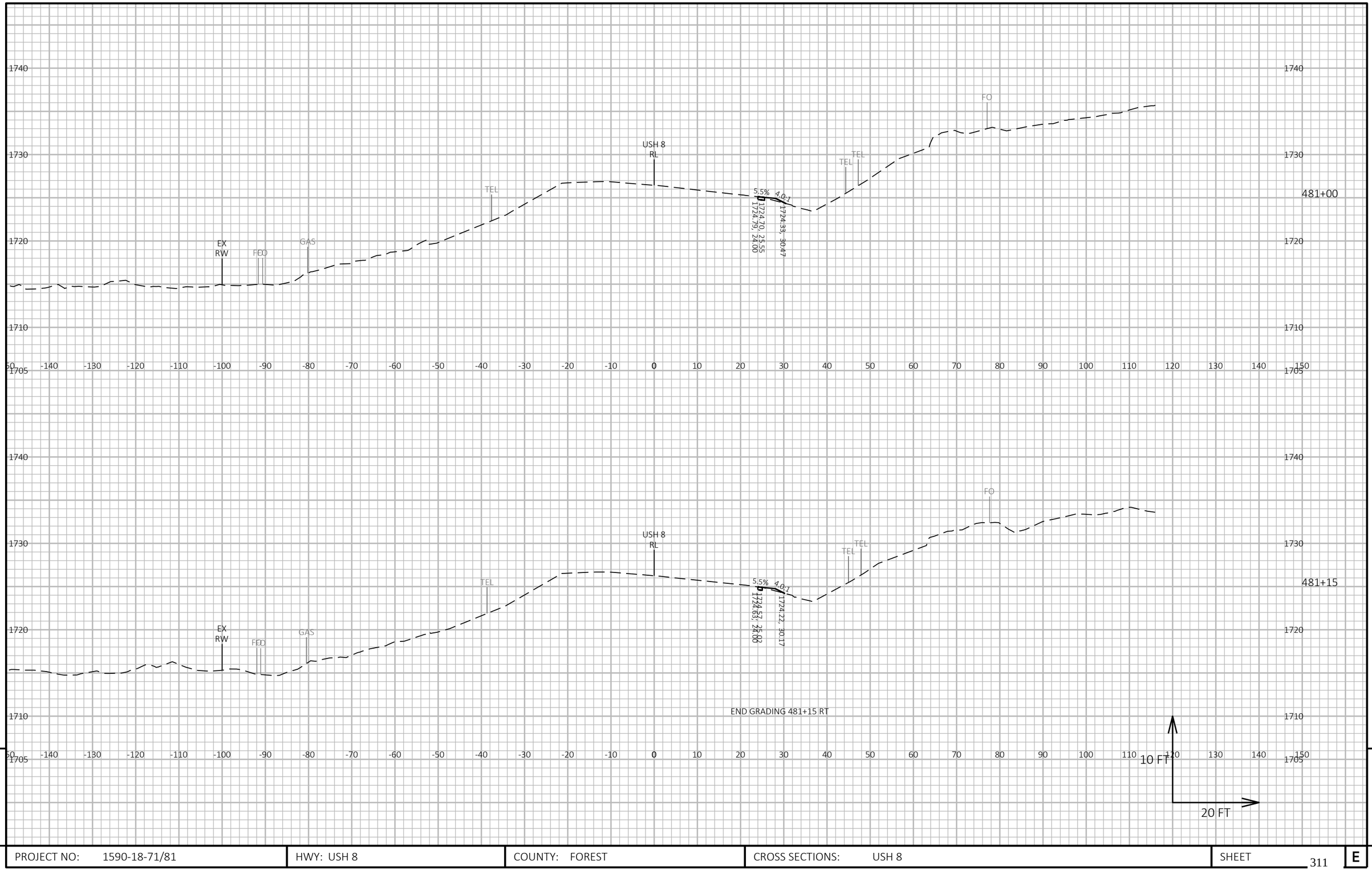
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FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-47235-48115.DWG
LAYOUT NAME - 08

PLOT DATE : 10/11/2024 9:56 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



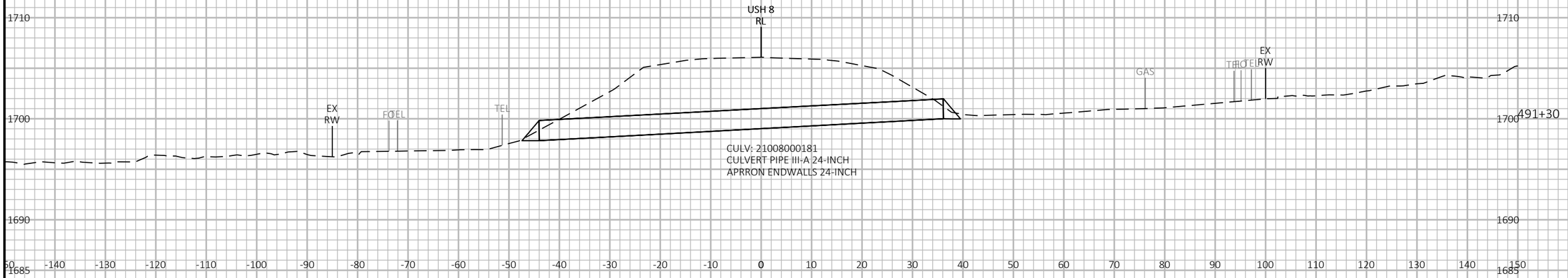
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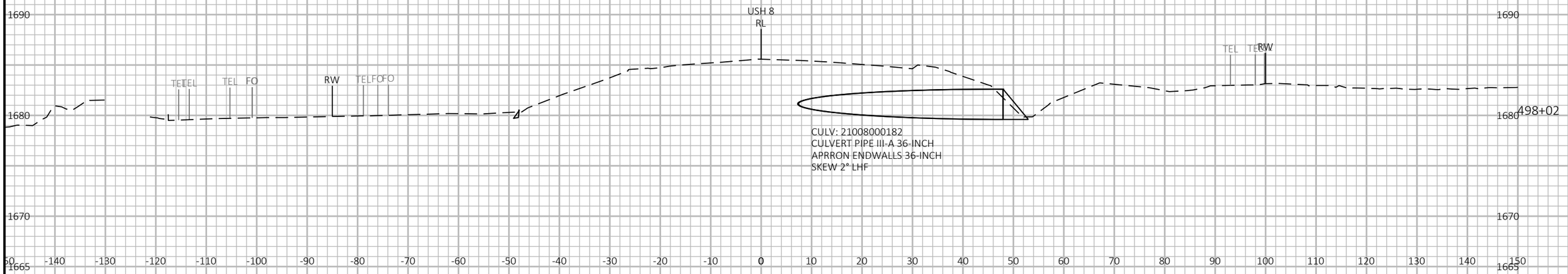
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LAYOUT NAME - 09

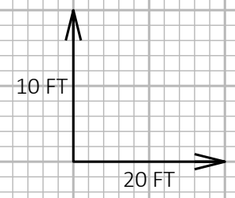
PLOT DATE : 10/11/2024 9:56 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

9 9





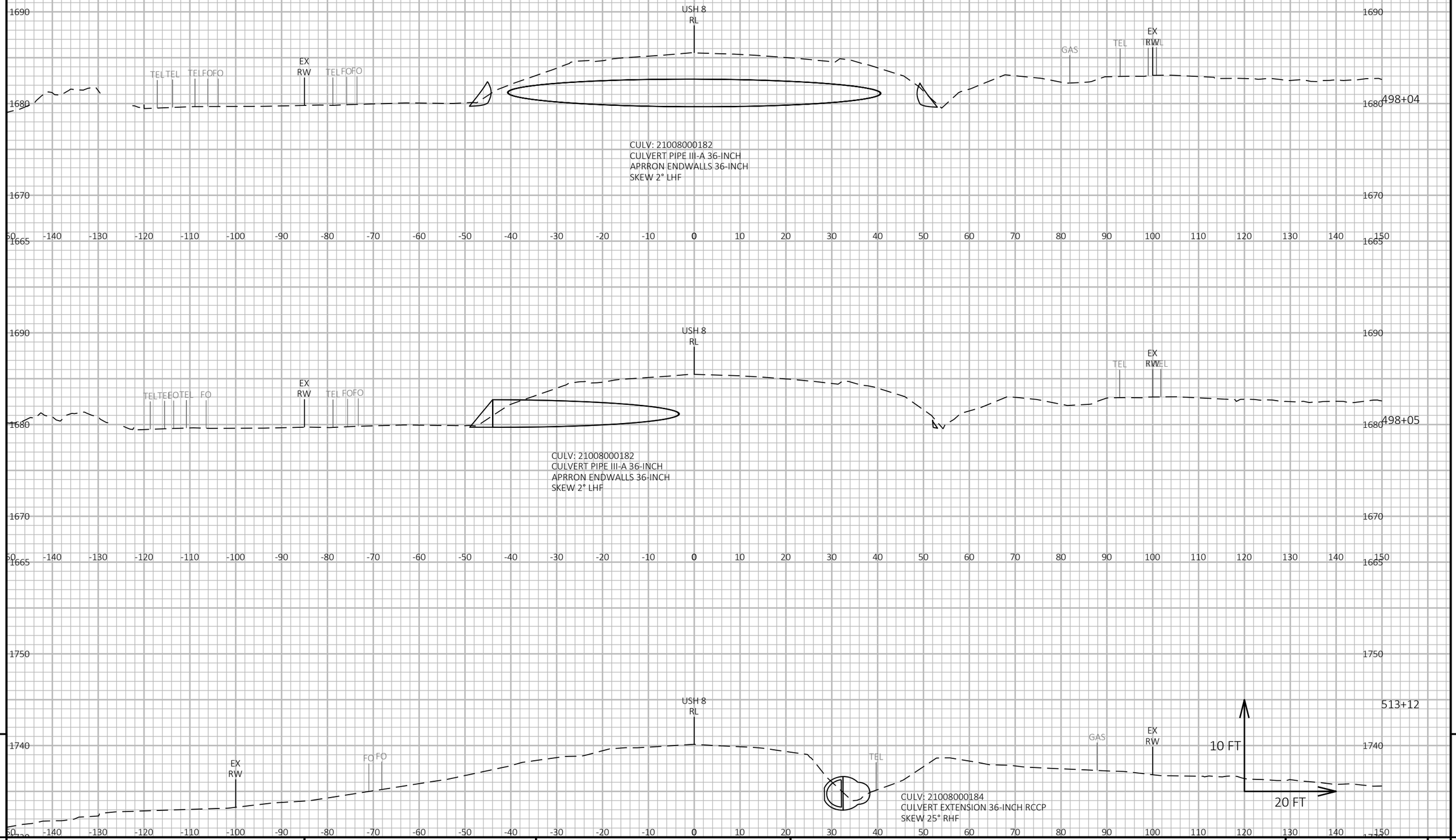


PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 312	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090204-XS-CULV-RPLCMNT.DWG
LAYOUT NAME - 01

PLOT DATE : 10/11/2024 10:18 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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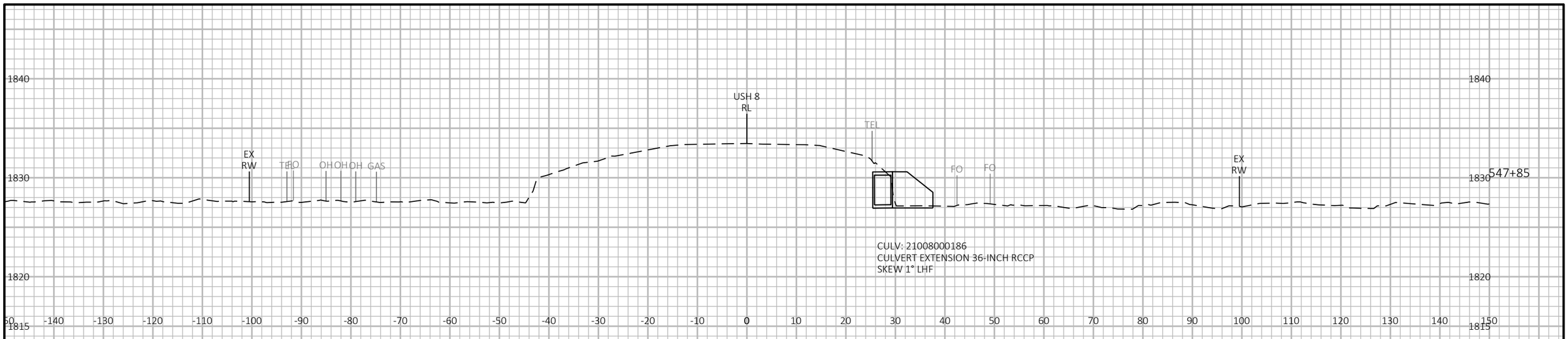
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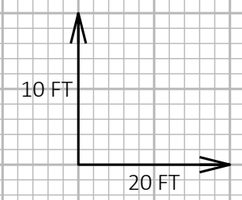
PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 313	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090204-XS-CULV-RPLCMNT.DWG
LAYOUT NAME - 02

PLOT DATE : 10/11/2024 10:18 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49





9

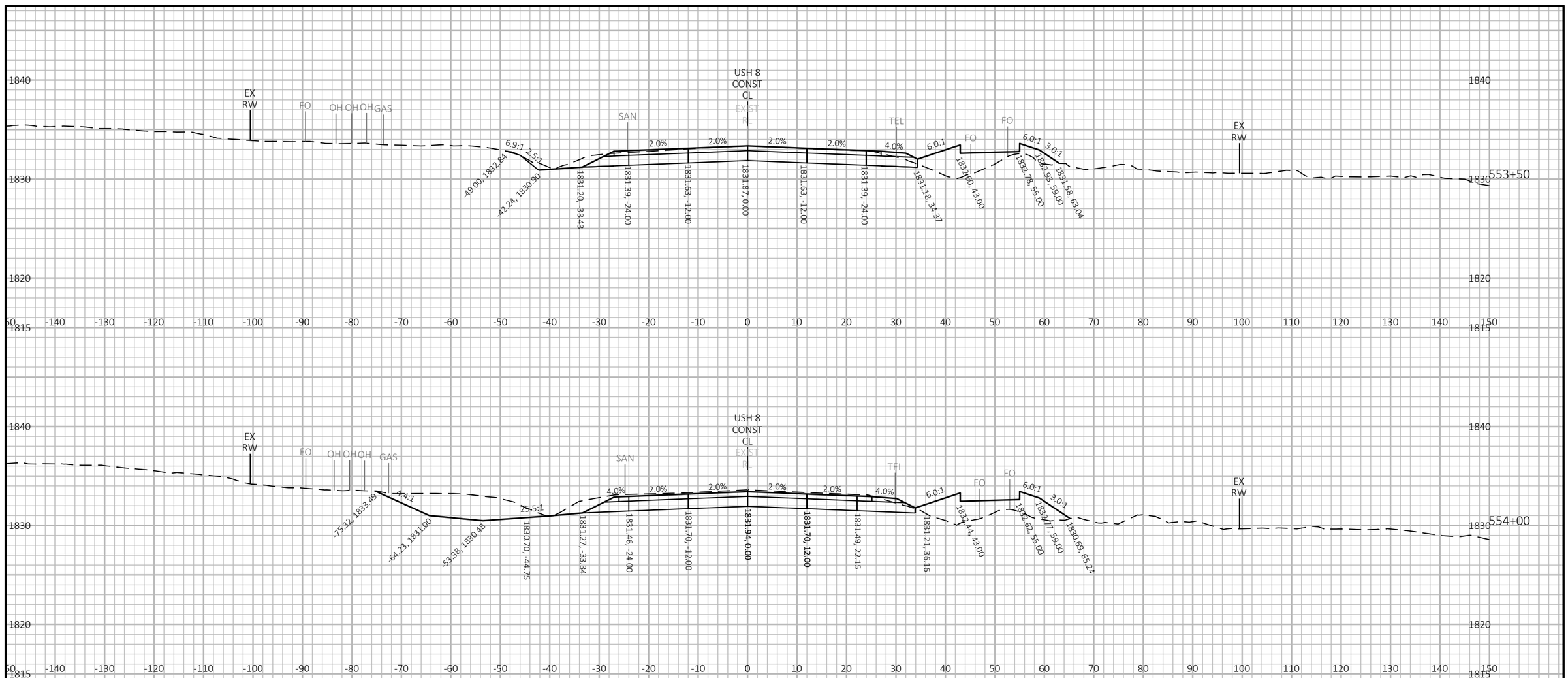
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 314	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090204-XS-CULV-RPLCMNT.DWG
LAYOUT NAME - 03

PLOT DATE : 10/11/2024 10:18 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

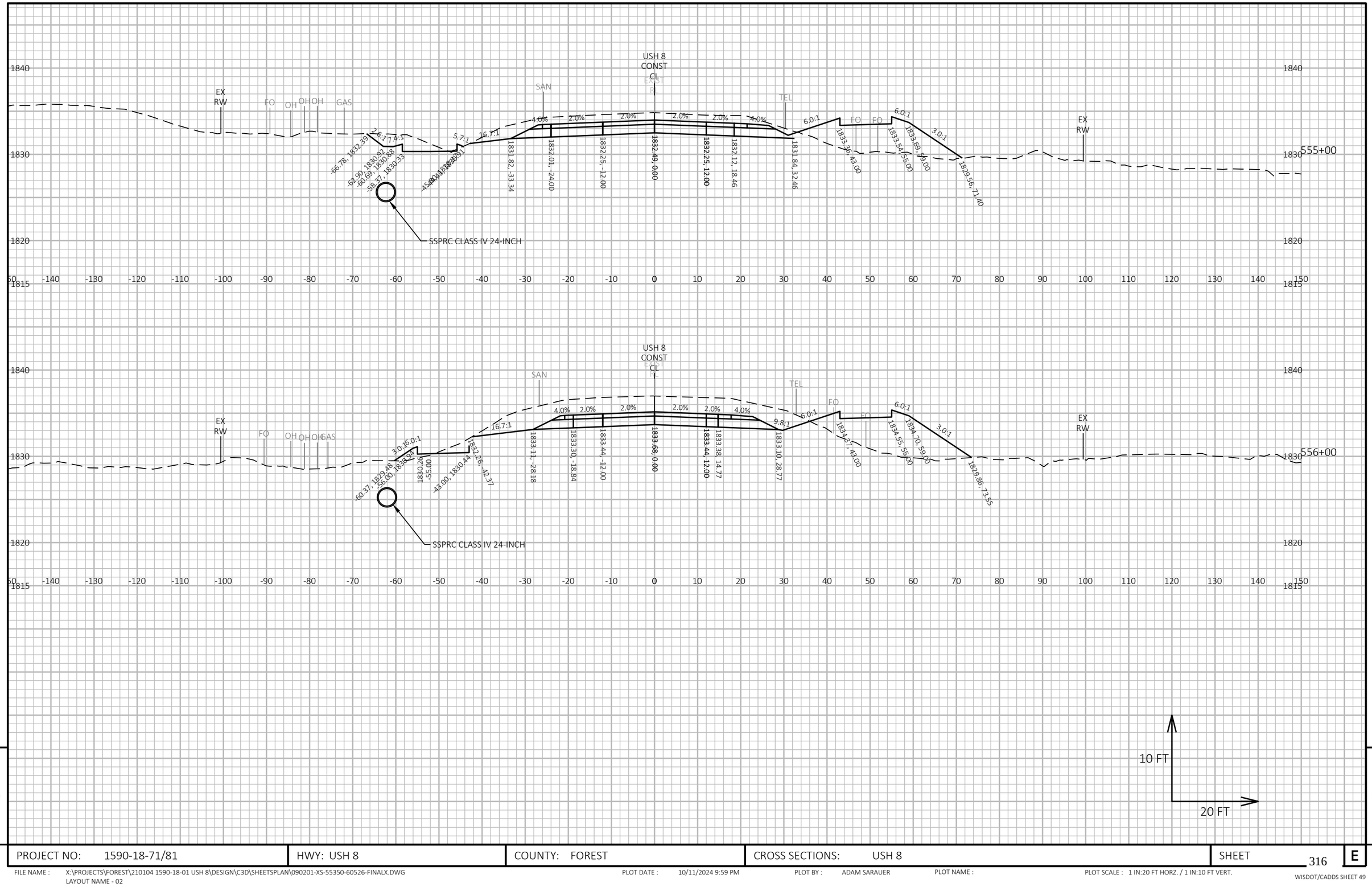
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 315	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 01

PLOT DATE : 10/11/2024 9:59 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

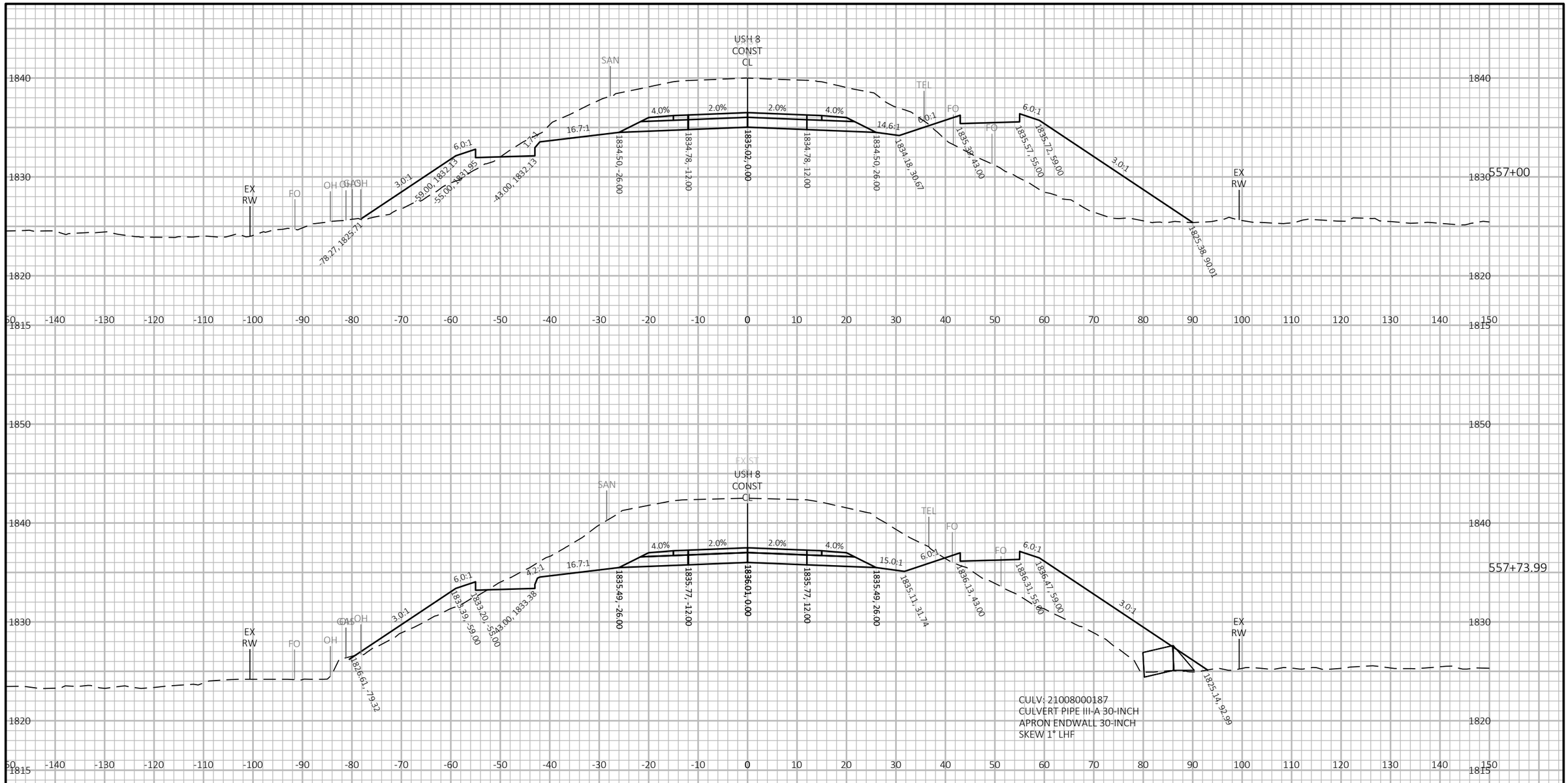
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 316	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 02

PLOT DATE : 10/11/2024 9:59 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

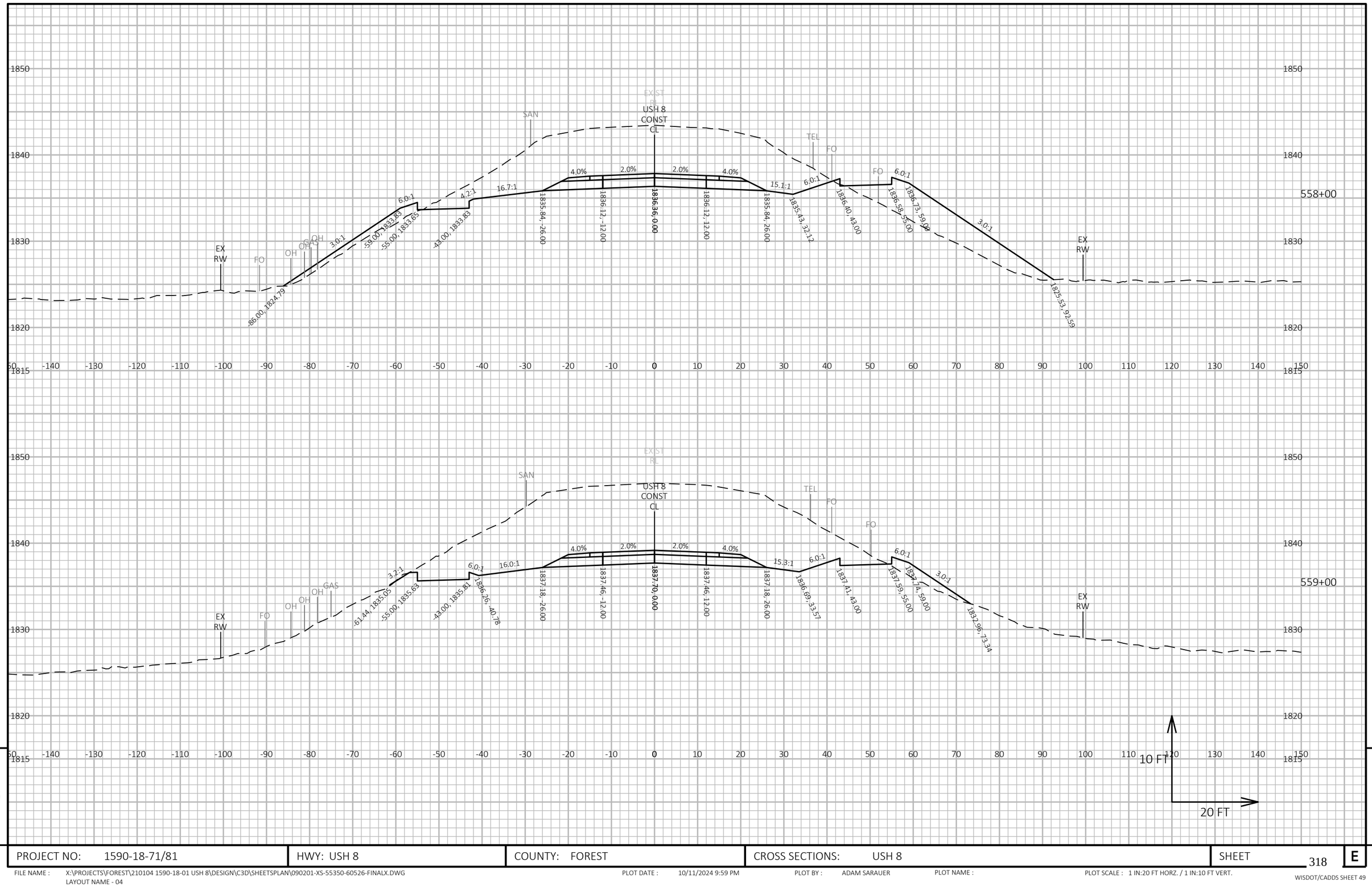
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 317	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 03

PLOT DATE : 10/11/2024 9:59 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

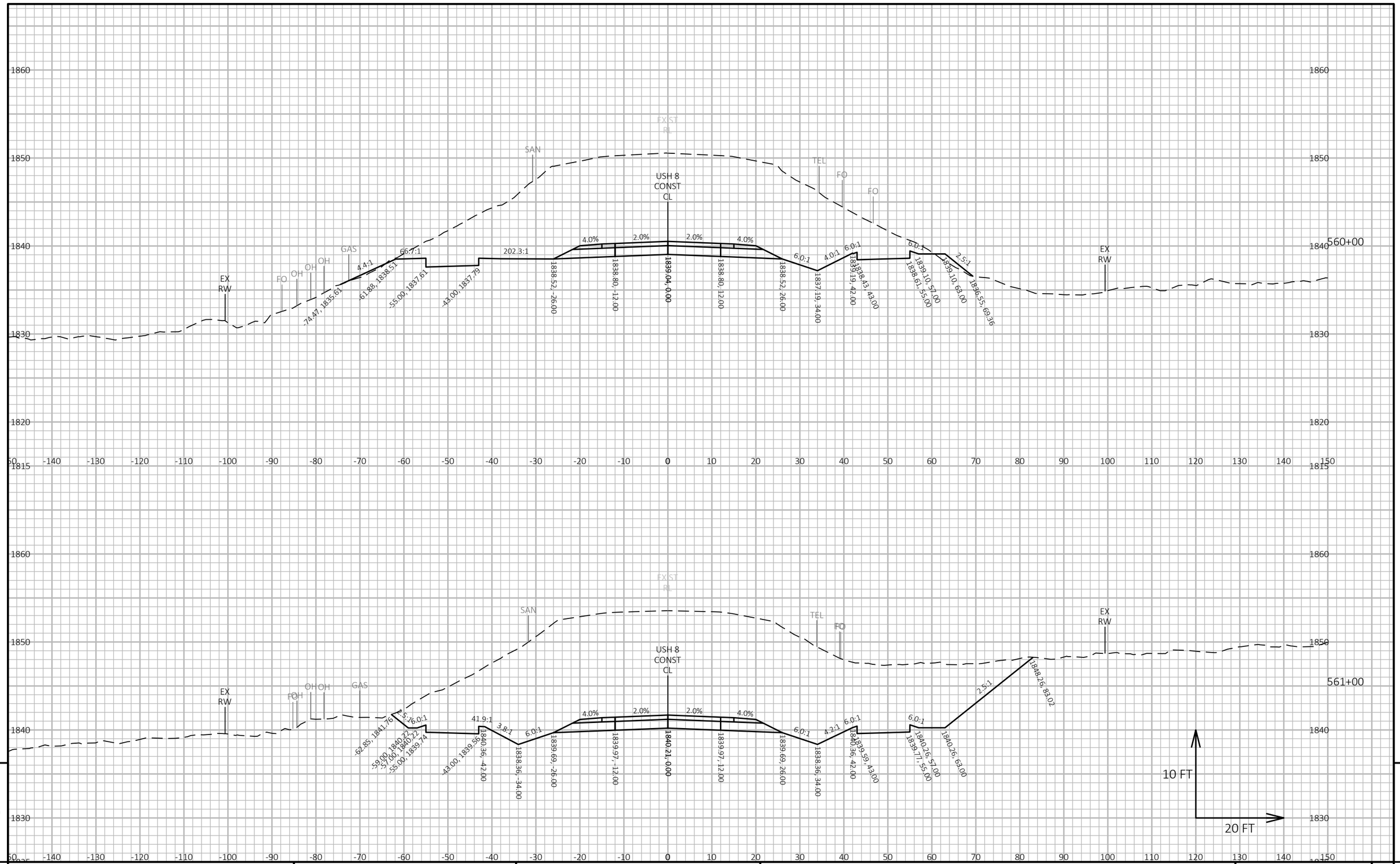
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 318	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 04

PLOT DATE : 10/11/2024 9:59 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

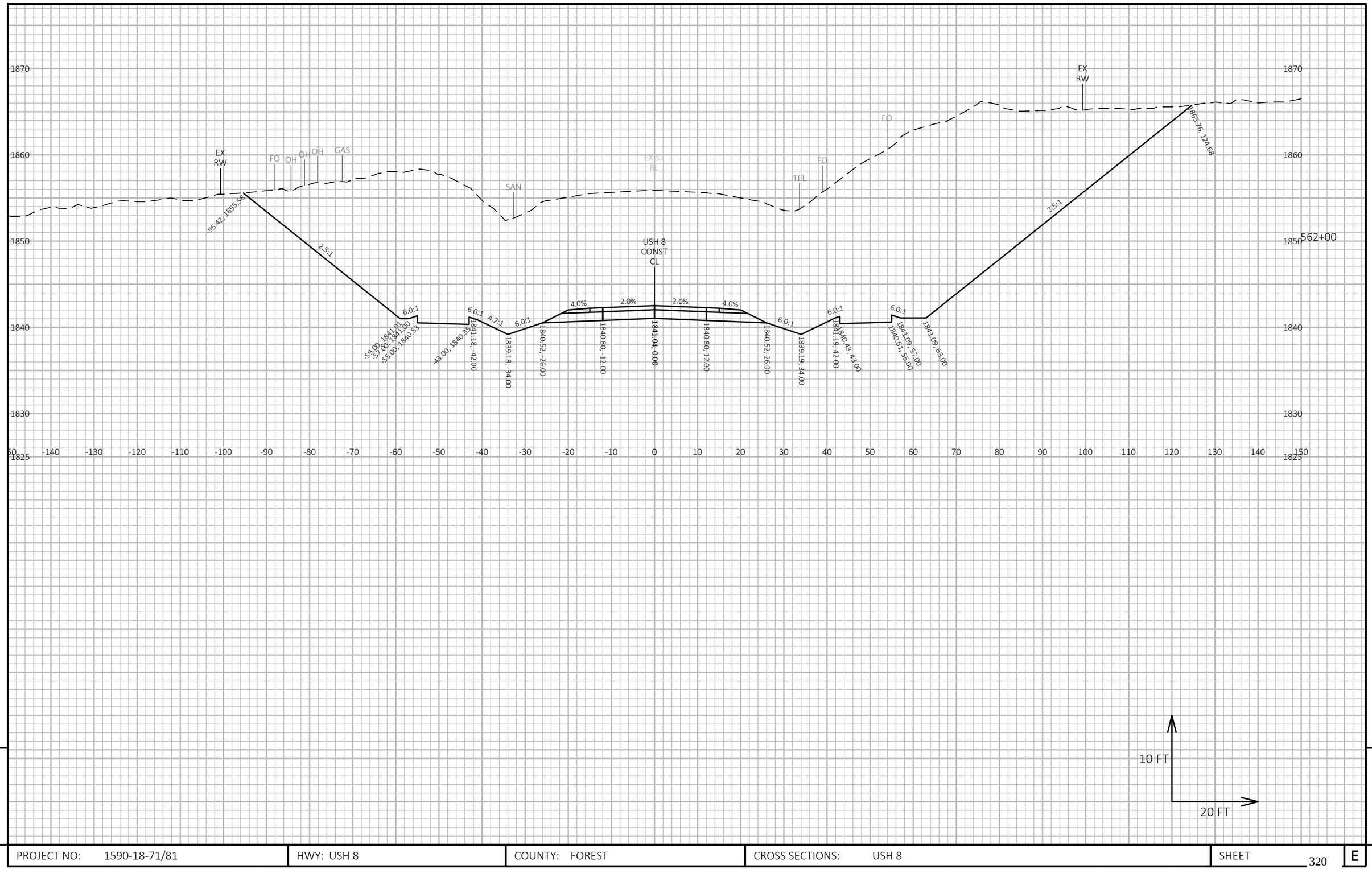


PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 319	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 05

PLOT DATE : 10/11/2024 9:59 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

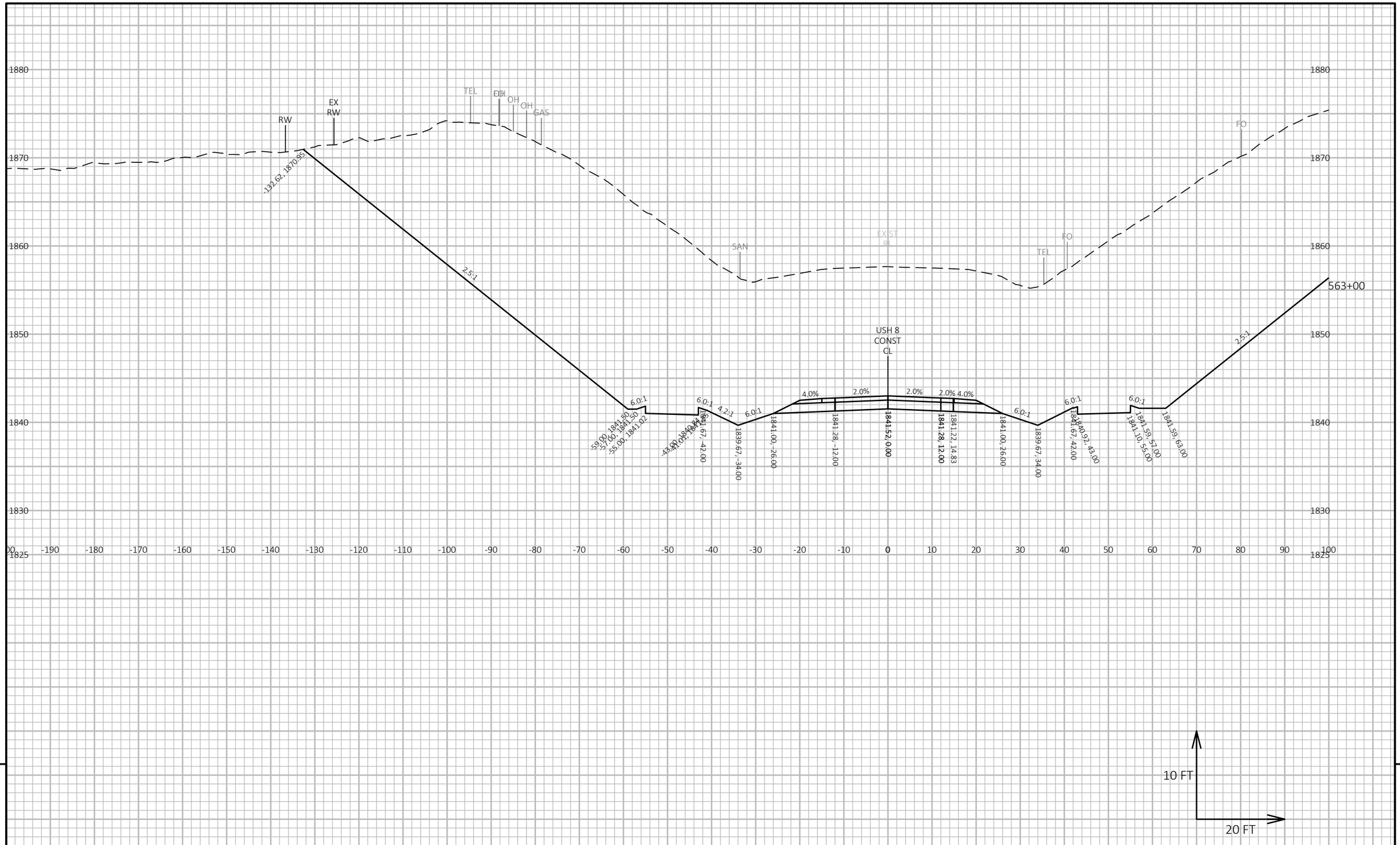
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 320	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 06

PLOT DATE : 10/11/2024 9:59 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

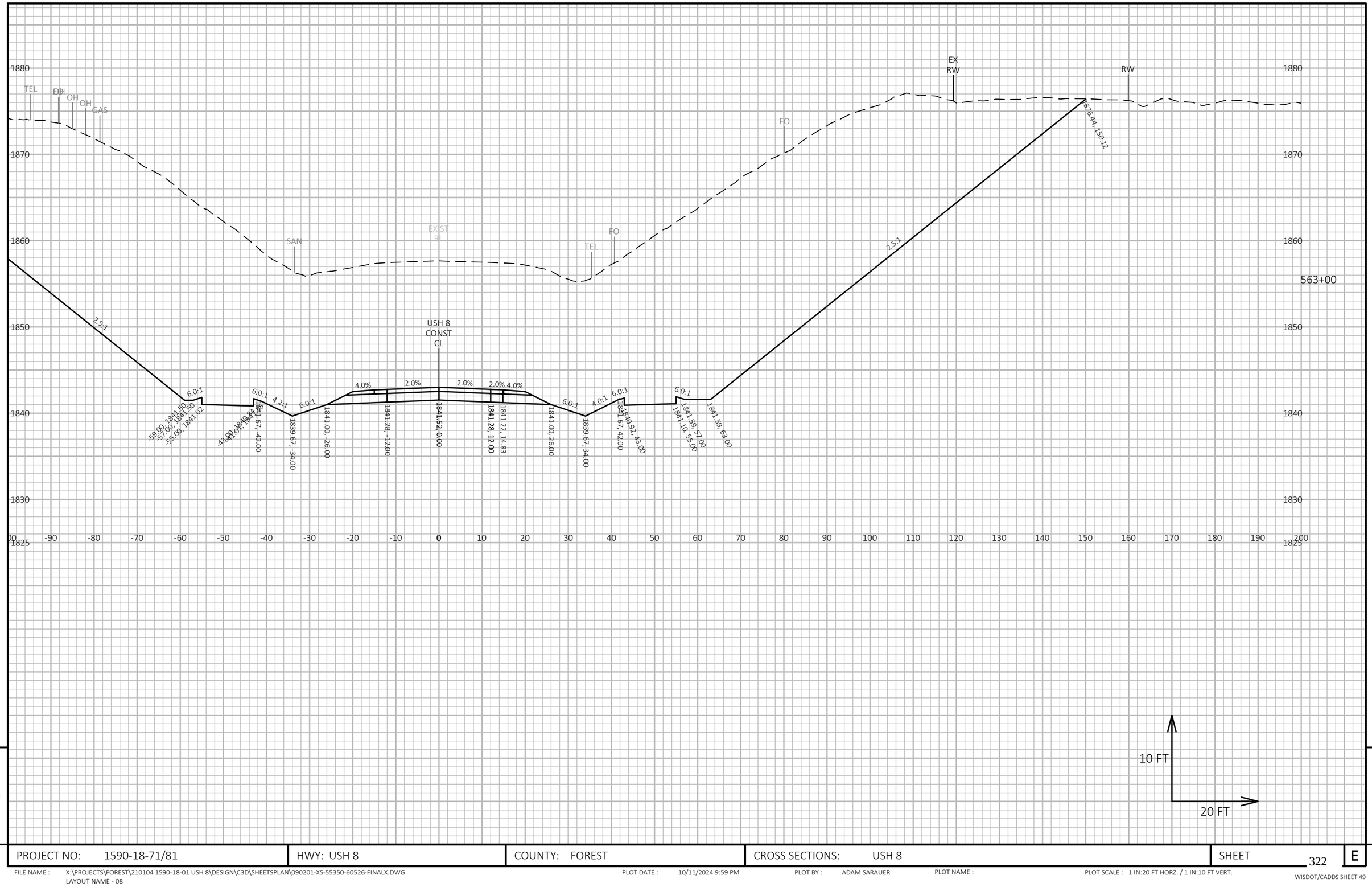
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 321	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 07

PLOT DATE : 10/11/2024 9:59 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

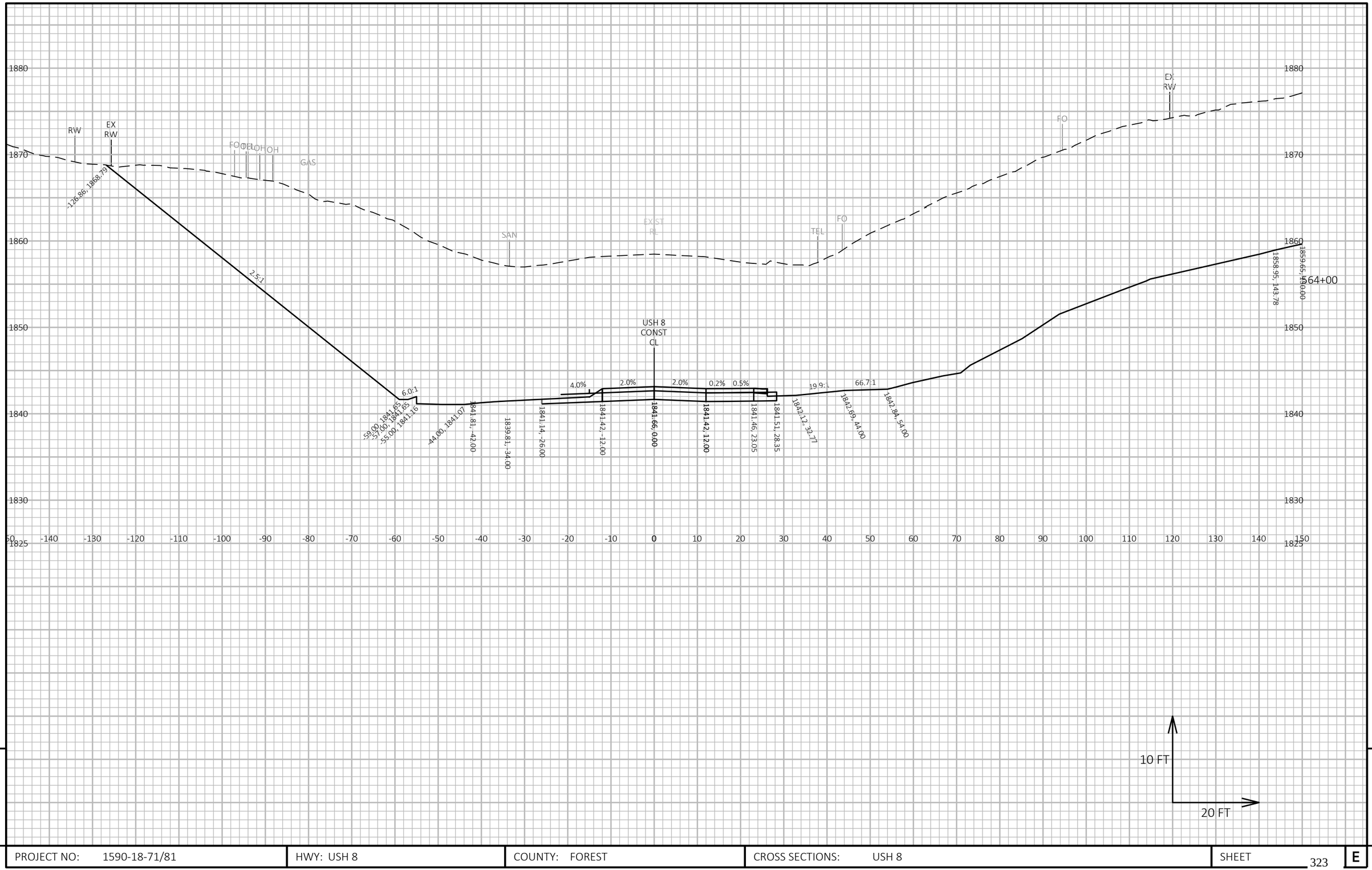
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 322	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 08

PLOT DATE : 10/11/2024 9:59 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

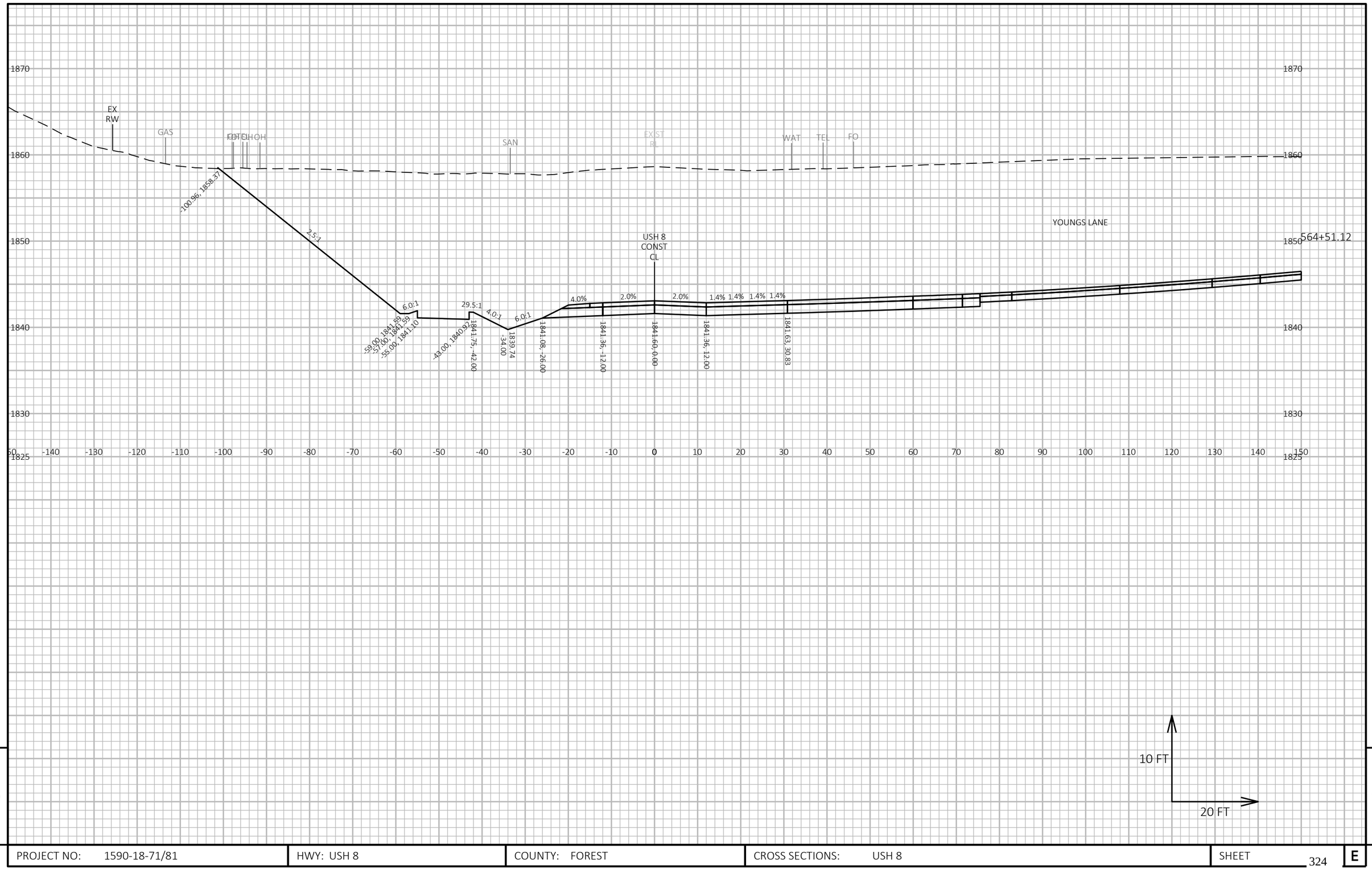
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 323	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 09

PLOT DATE : 10/11/2024 9:59 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

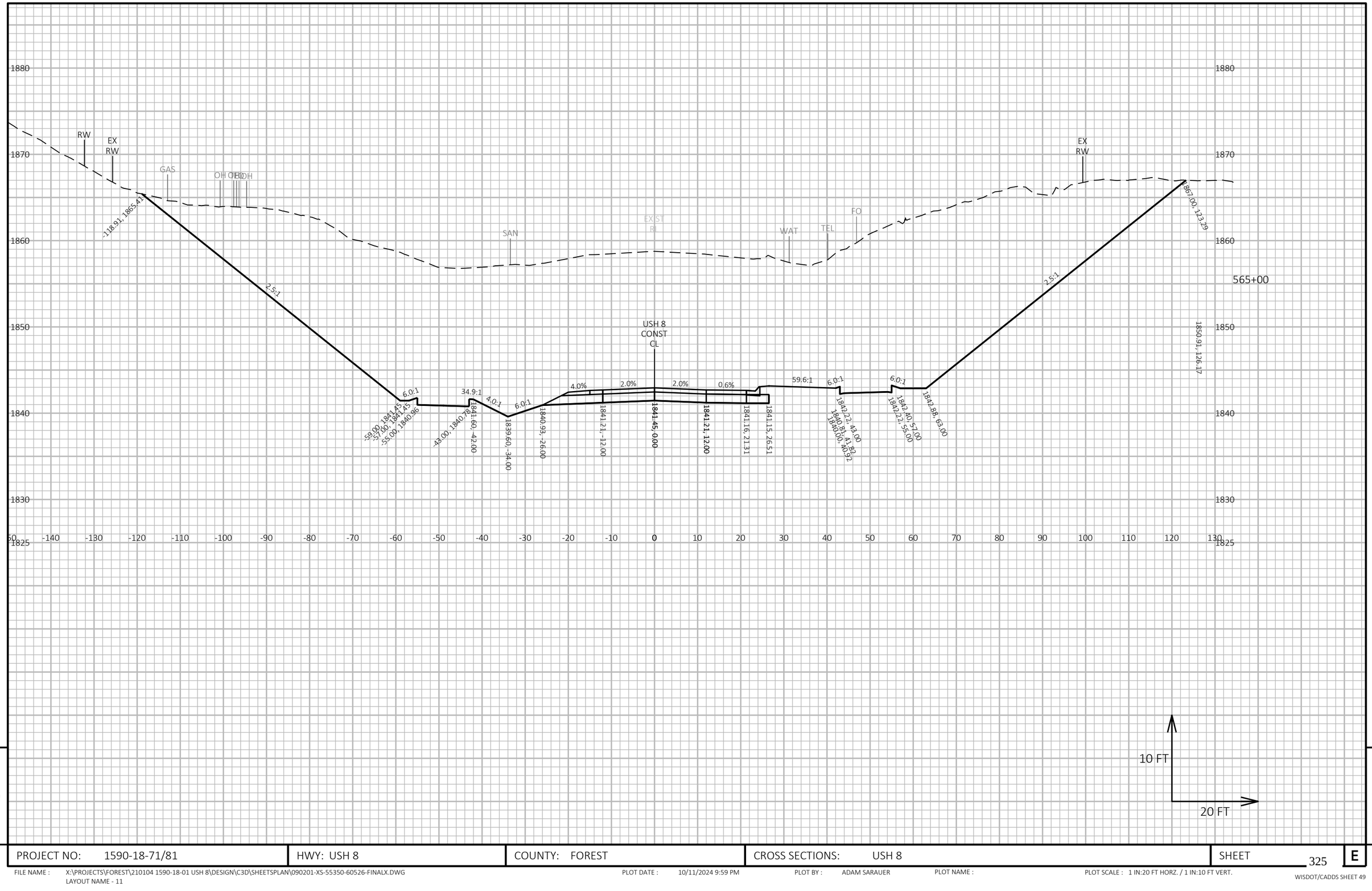
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 324	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 10

PLOT DATE : 10/11/2024 9:59 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

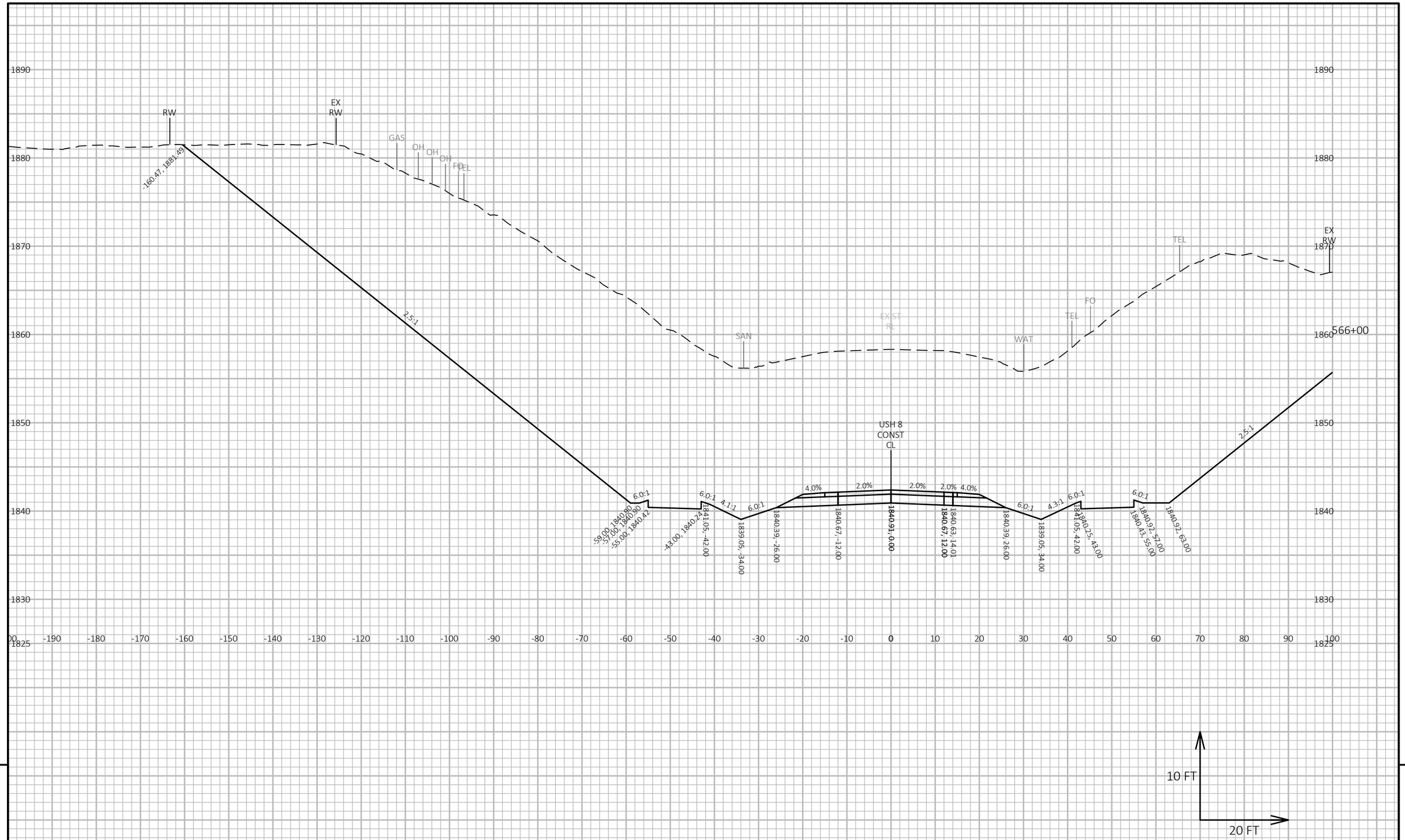
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 325	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 11

PLOT DATE : 10/11/2024 9:59 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

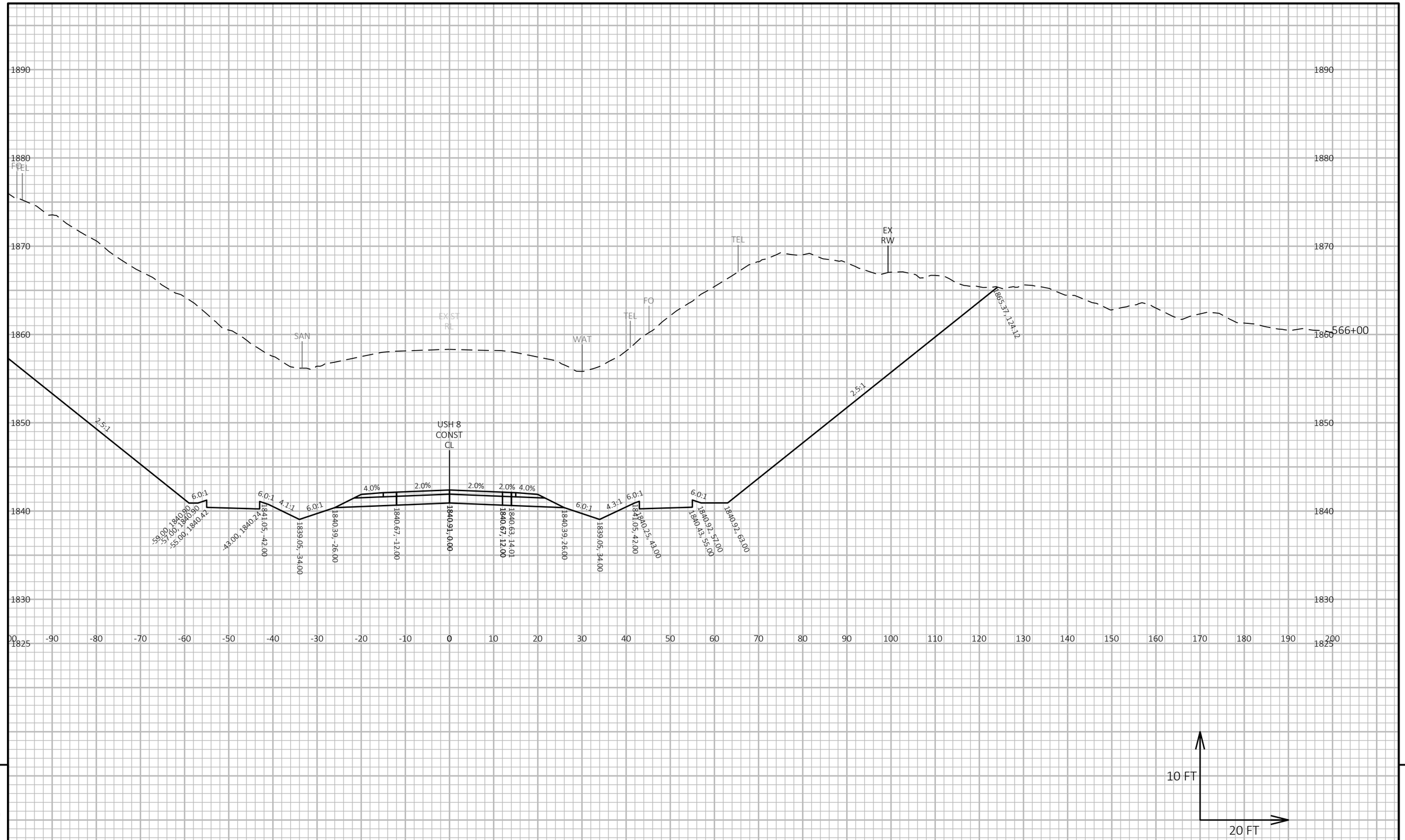


PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 326	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 12

PLOT DATE : 10/11/2024 9:59 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

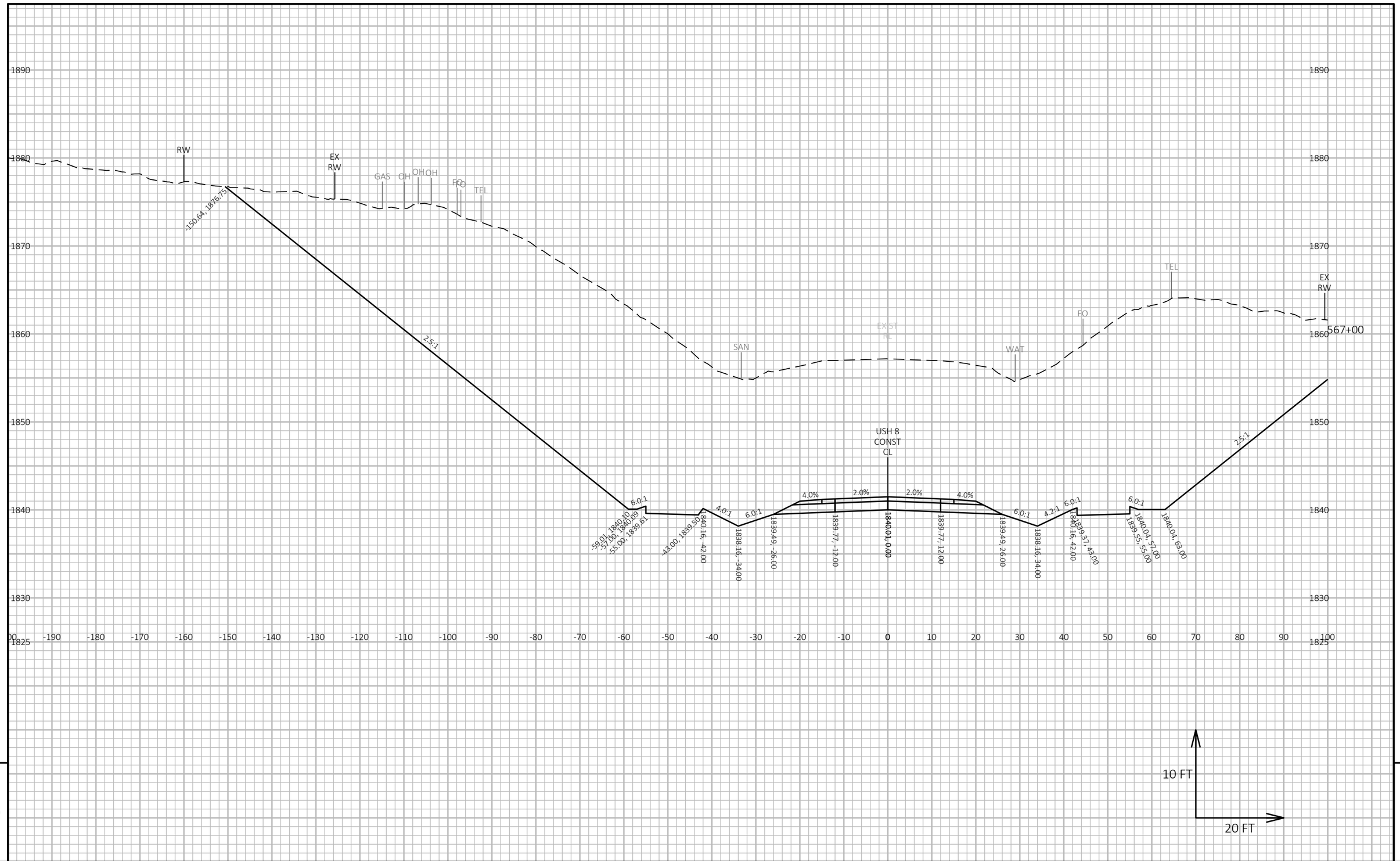
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 327	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 13

PLOT DATE : 10/11/2024 9:59 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

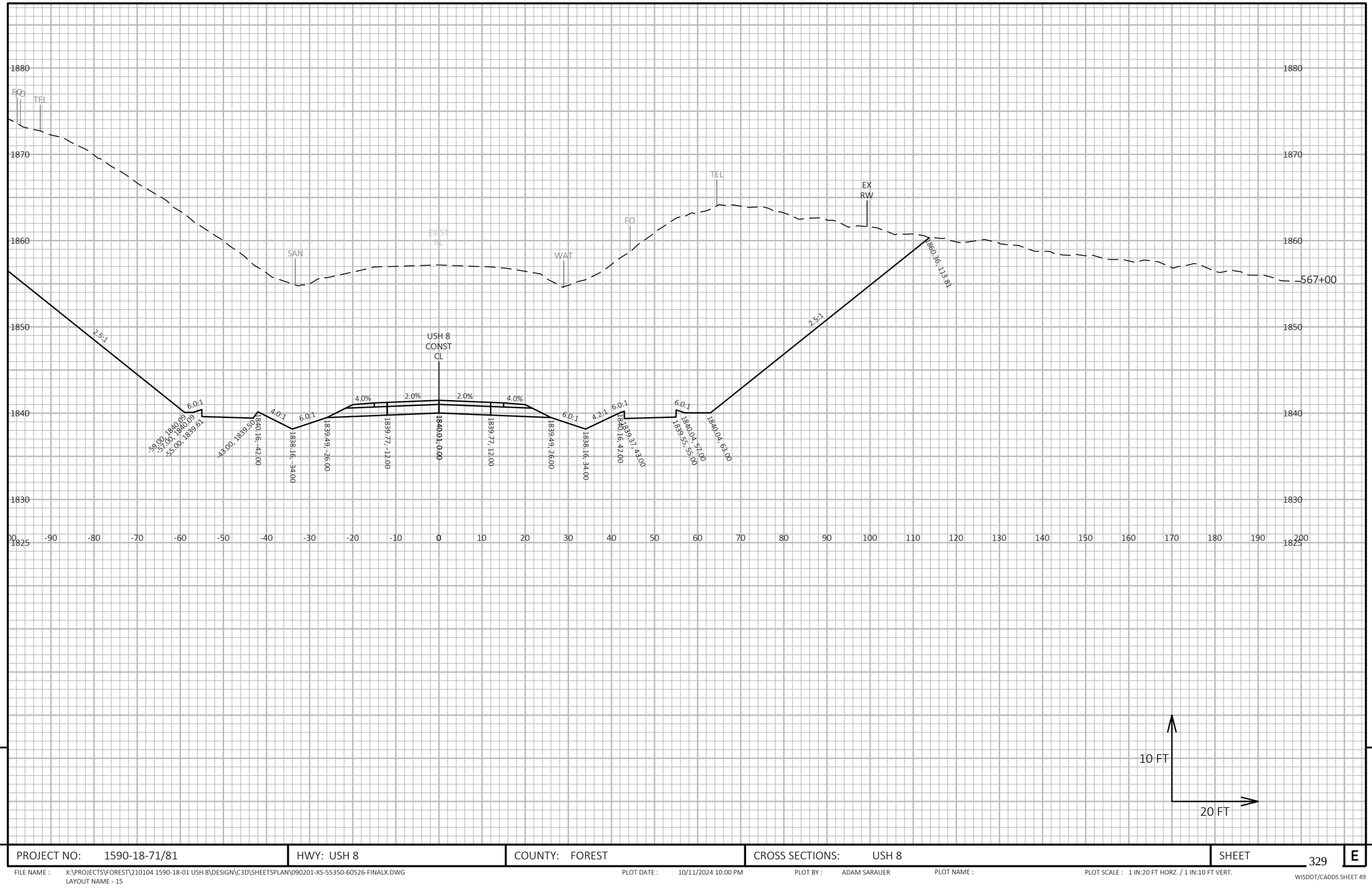
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 328	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 14

PLOT DATE : 10/11/2024 9:59 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

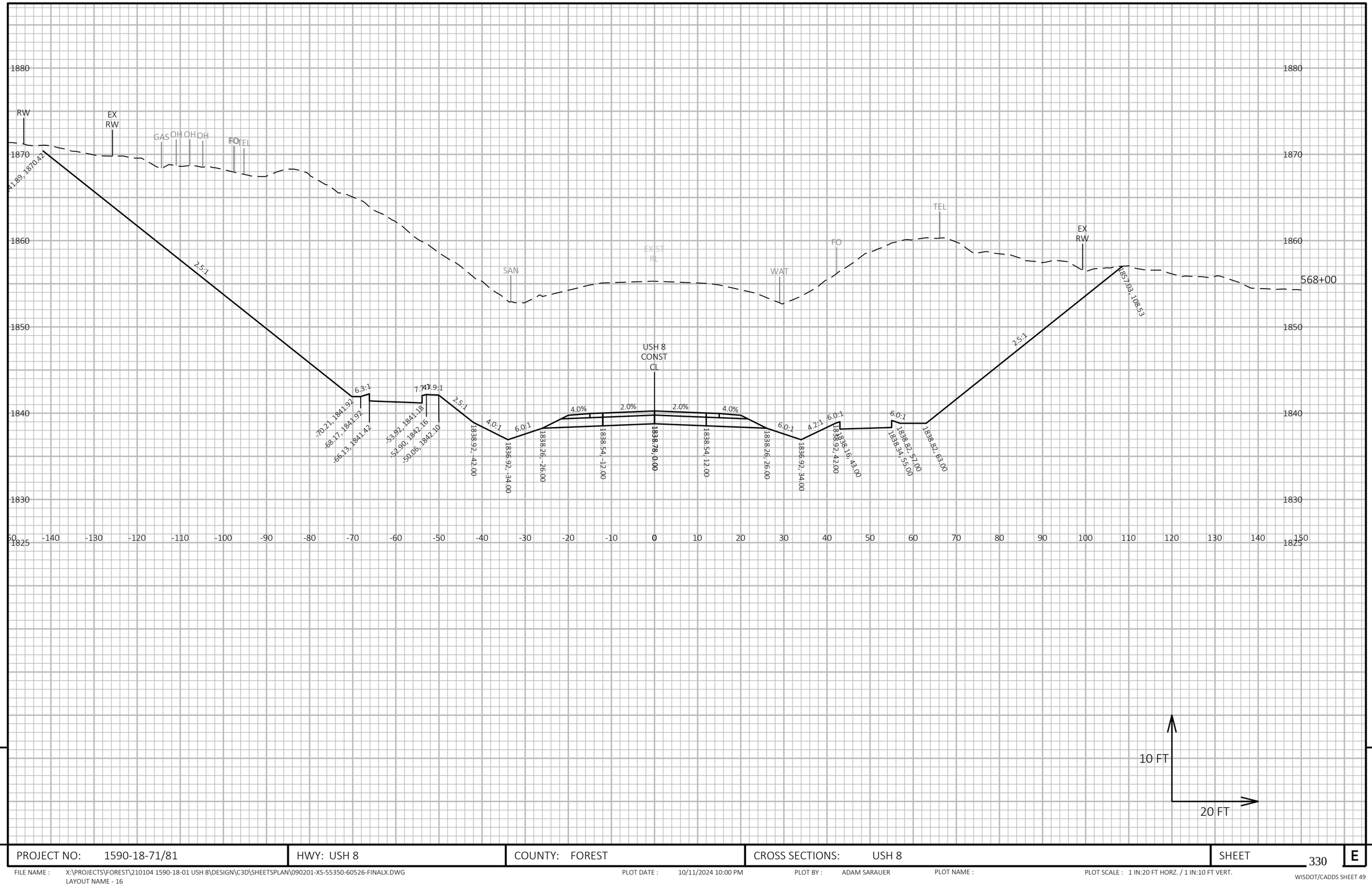
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 329	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 15

PLOT DATE : 10/11/2024 10:00 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

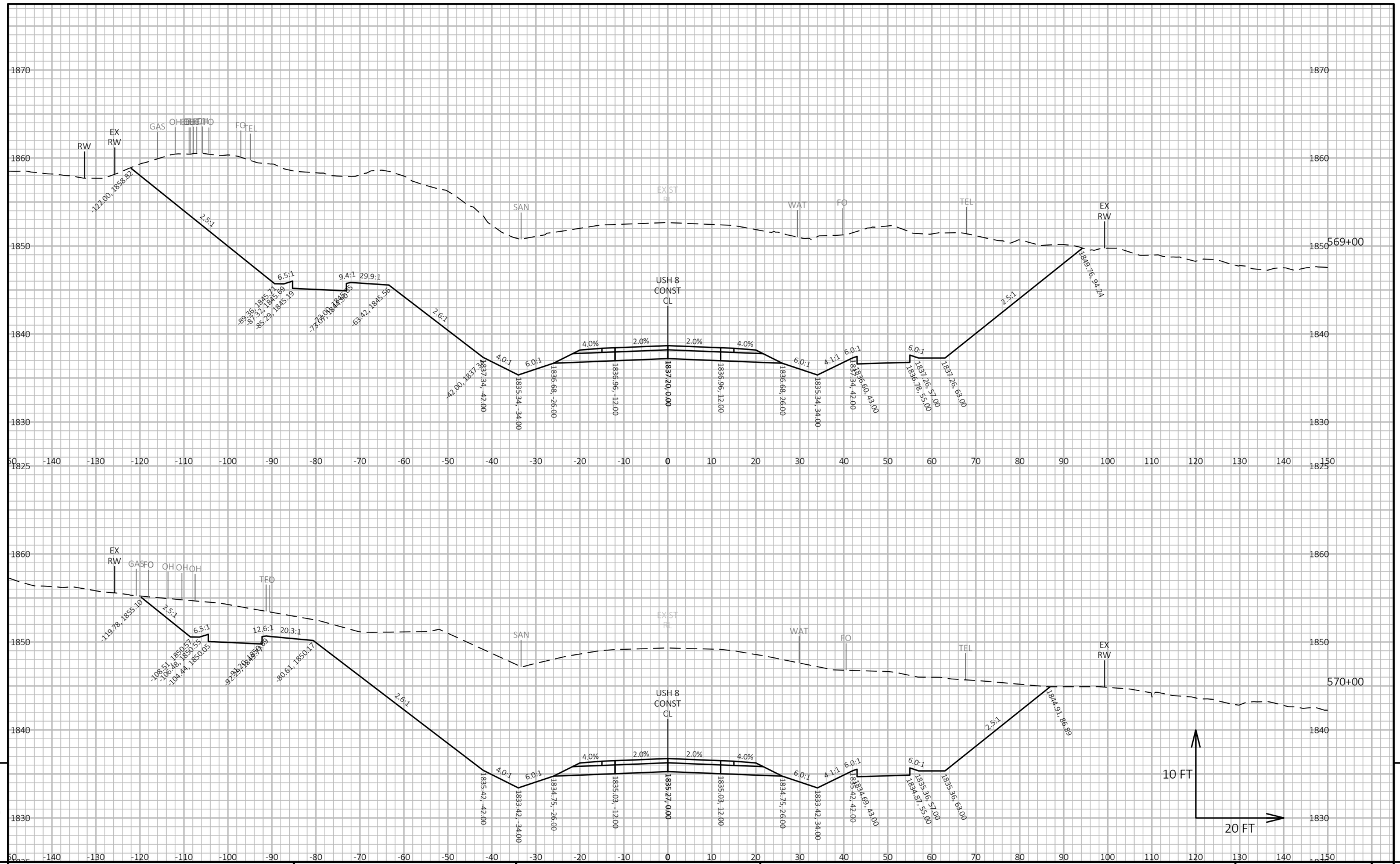
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 330	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 16

PLOT DATE : 10/11/2024 10:00 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

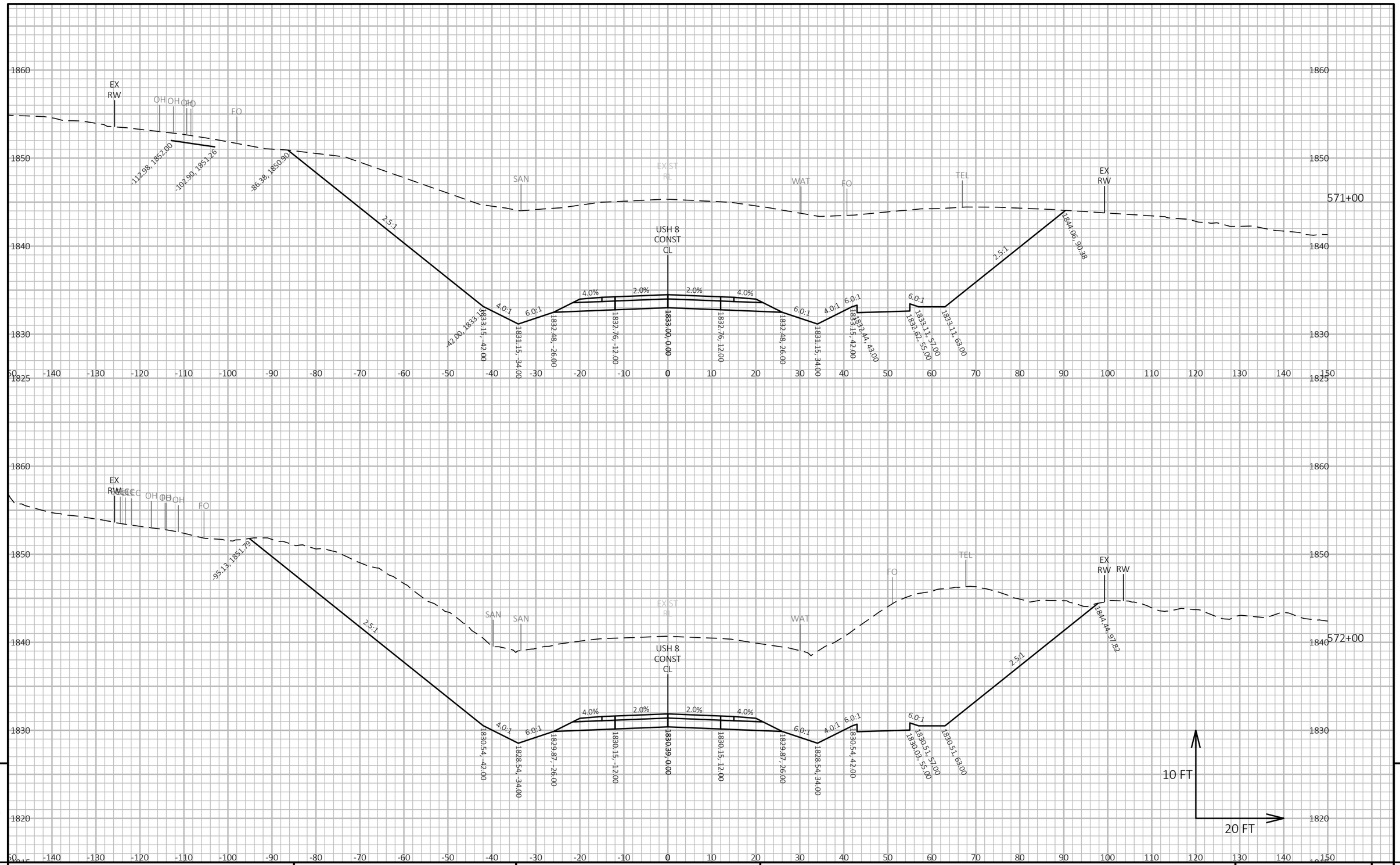


PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 331	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 17

PLOT DATE : 10/11/2024 10:00 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

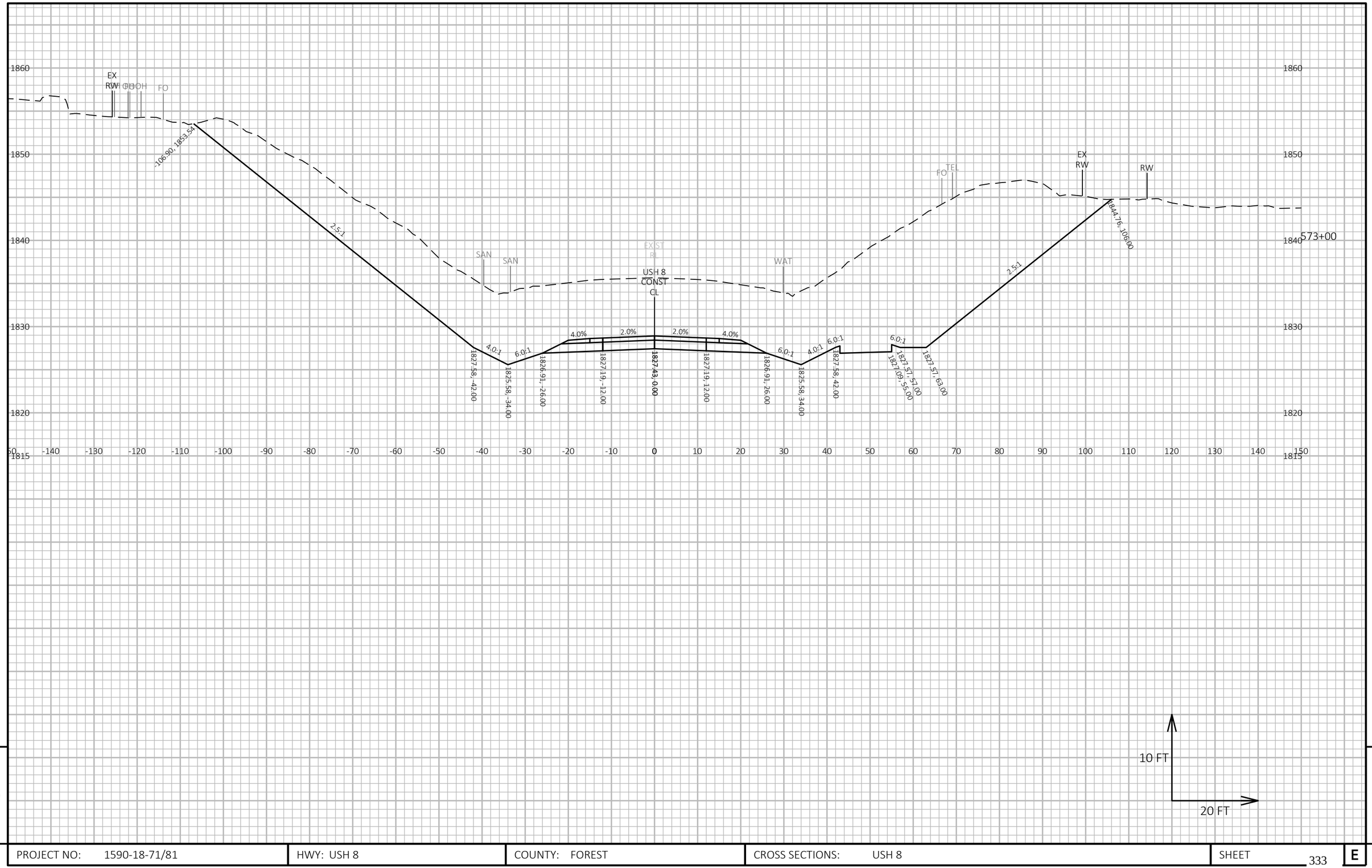


PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 332 E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 18

PLOT DATE : 10/11/2024 10:00 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 333	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 19

PLOT DATE : 10/11/2024 10:00 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

EX RW
OH
OH
OH
OH
FO
-113.79, 1853.00
2.5:1
SAN
SAN
EX ST
USH 8
CONST
CL
WAT
4.0:1
6.0:1
4.0%
2.0%
2.0%
4.0%
6.0:1
4.0:1
6.0:1
6.0:1
1824.28, -42.00
1822.28, -34.00
1823.61, -26.00
1823.89, -12.00
1824.13, 0.00
1823.89, 12.00
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1822.28, 34.00
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1824.28, 42.00
1824.29, 57.00
1823.80, 55.00
1824.29, 64.00
TEL
FO
1843.89, 112.00
2.5:1
EX RW
574+00
1860
1850
1840
1830
1820
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10 FT
20 FT

9

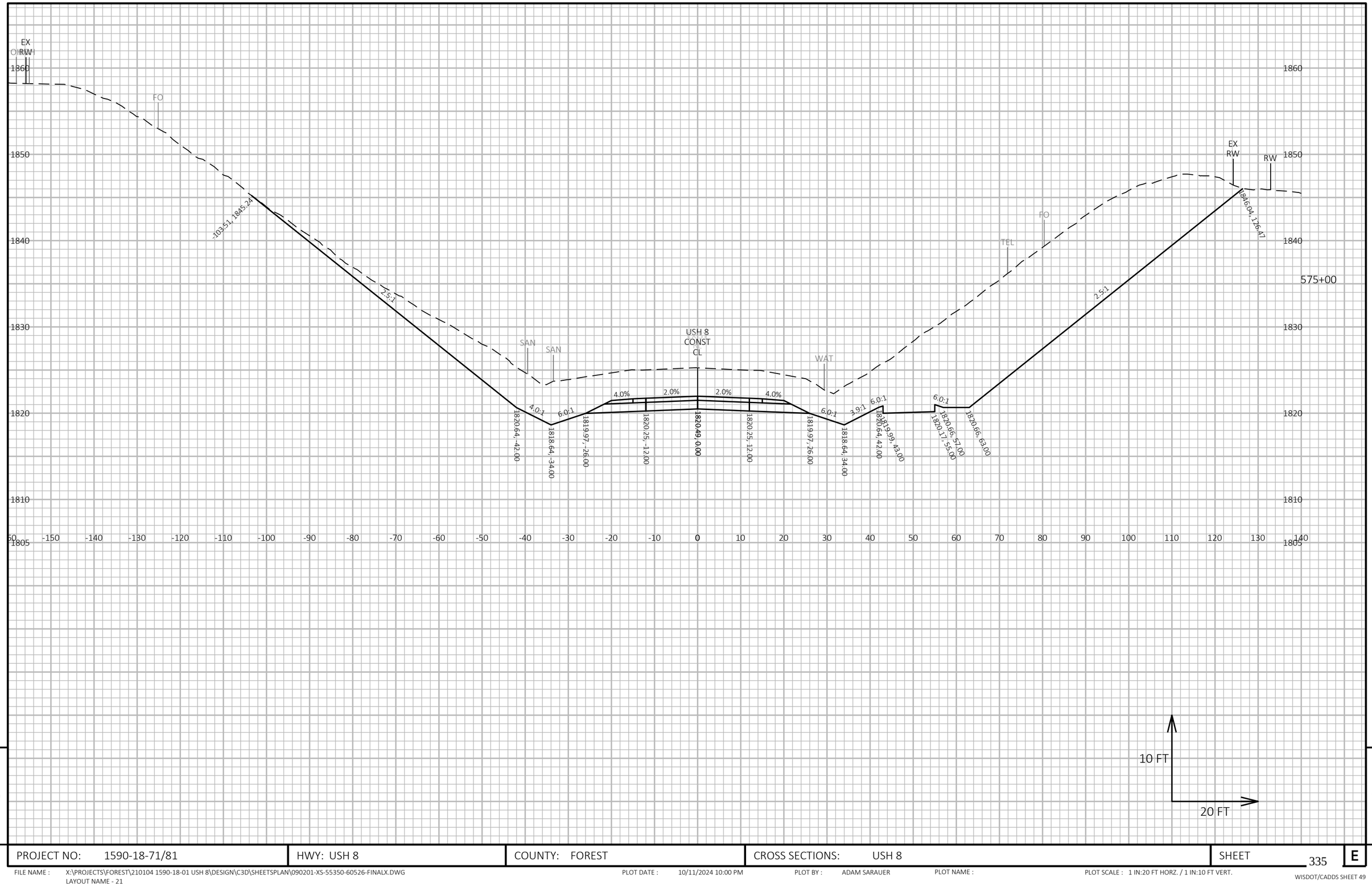
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 334	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 20

PLOT DATE : 10/11/2024 10:00 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 335	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 21

PLOT DATE : 10/11/2024 10:00 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

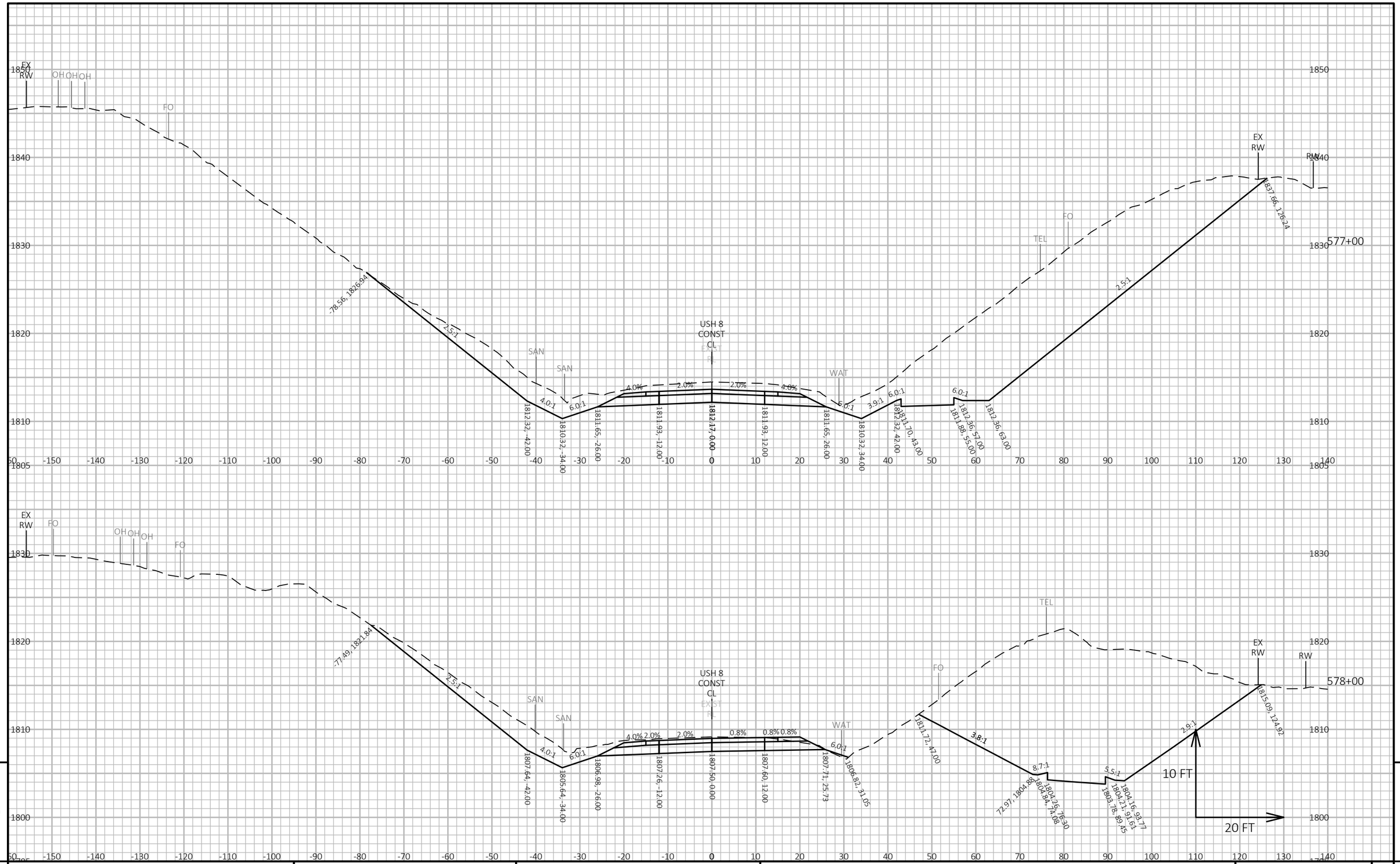
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 336	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 22

PLOT DATE : 10/11/2024 10:00 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



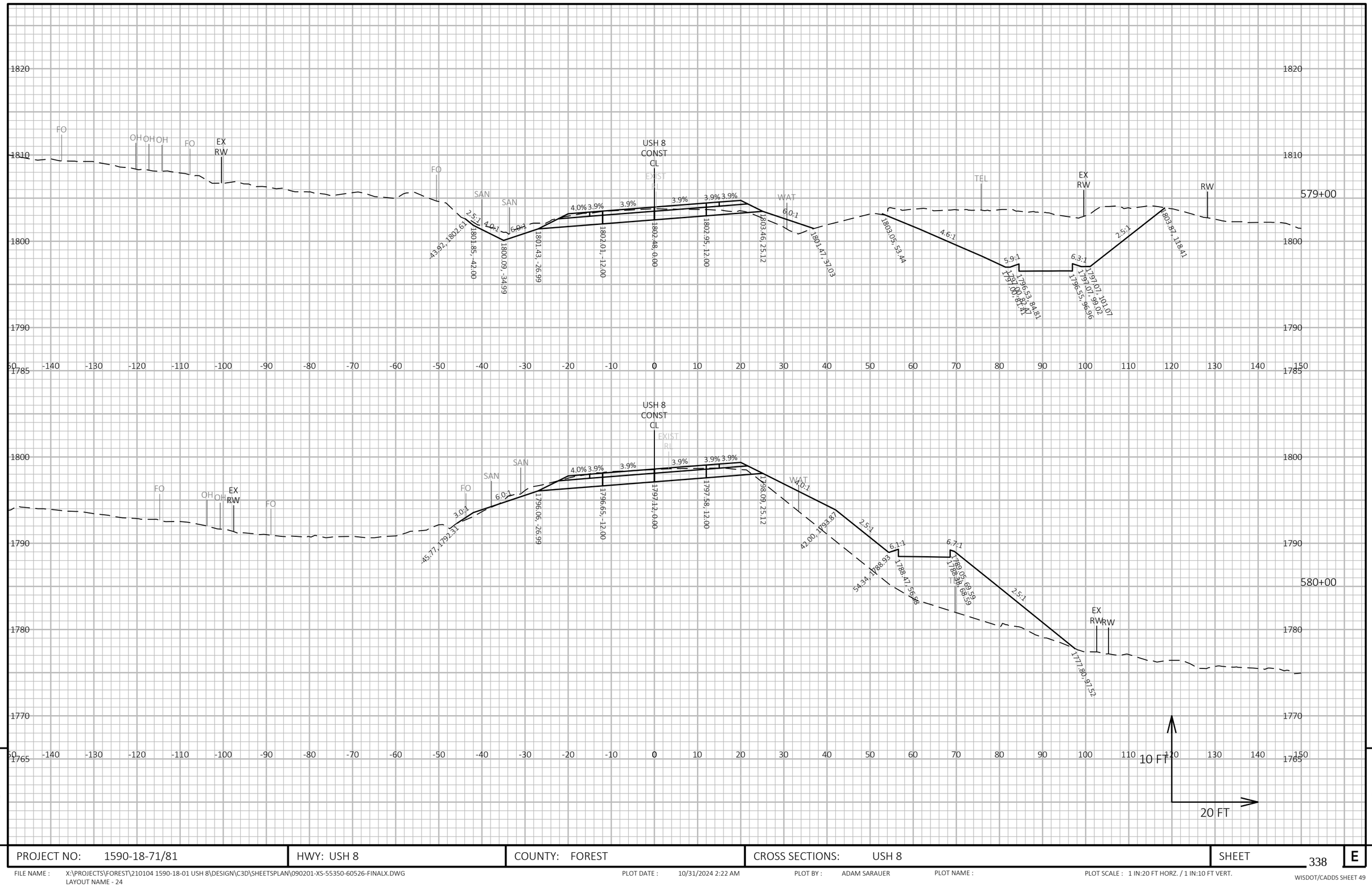
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 337	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 23

PLOT DATE : 10/11/2024 10:00 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

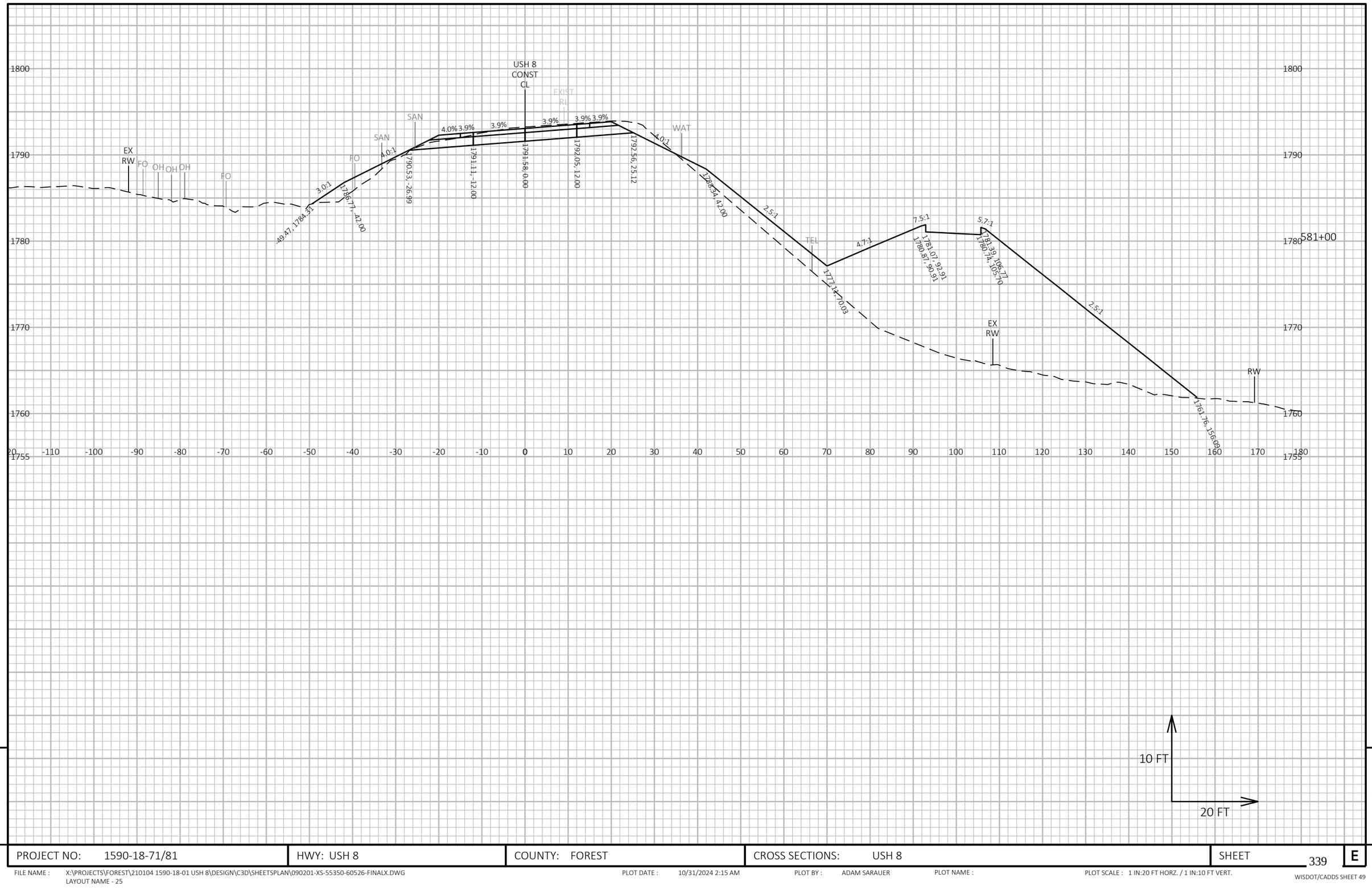


PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 338	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 24

PLOT DATE : 10/31/2024 2:22 AM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



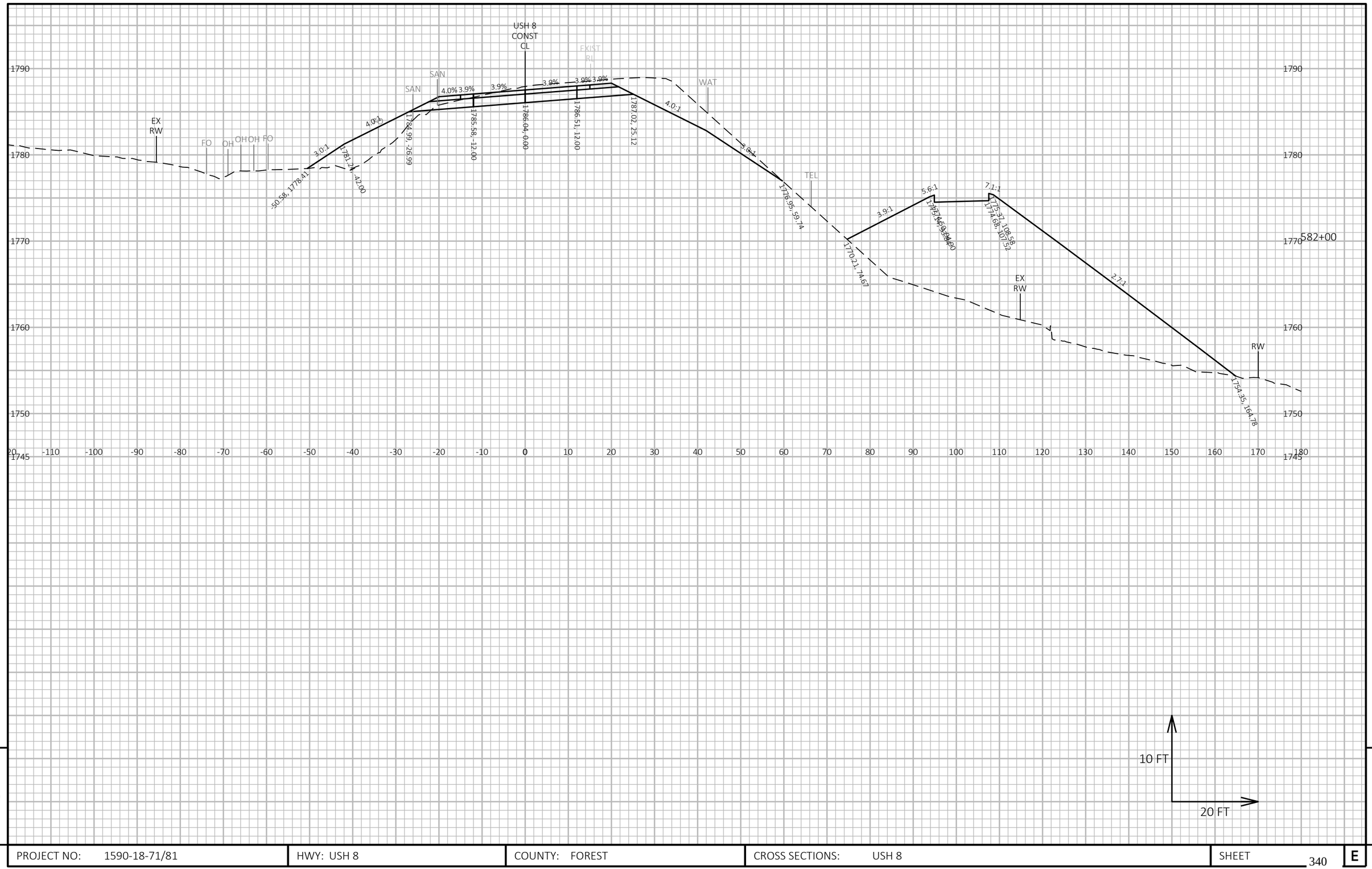
9

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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 339	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 25

PLOT DATE : 10/31/2024 2:15 AM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



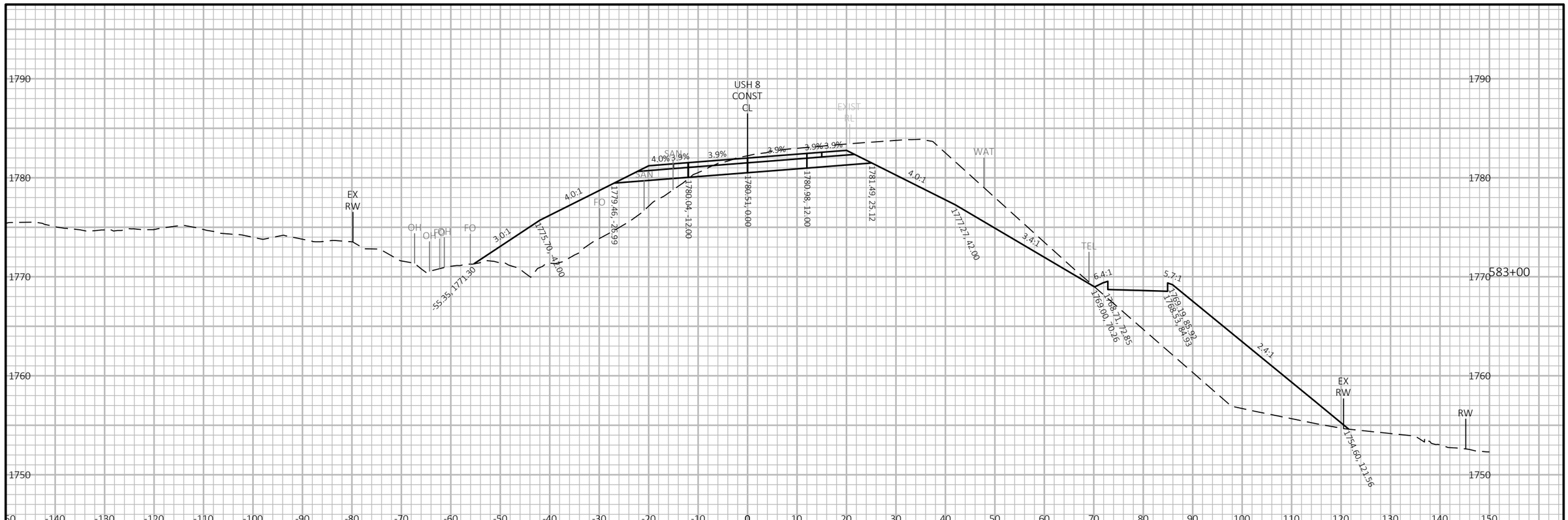
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 340	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 26

PLOT DATE : 10/11/2024 10:00 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

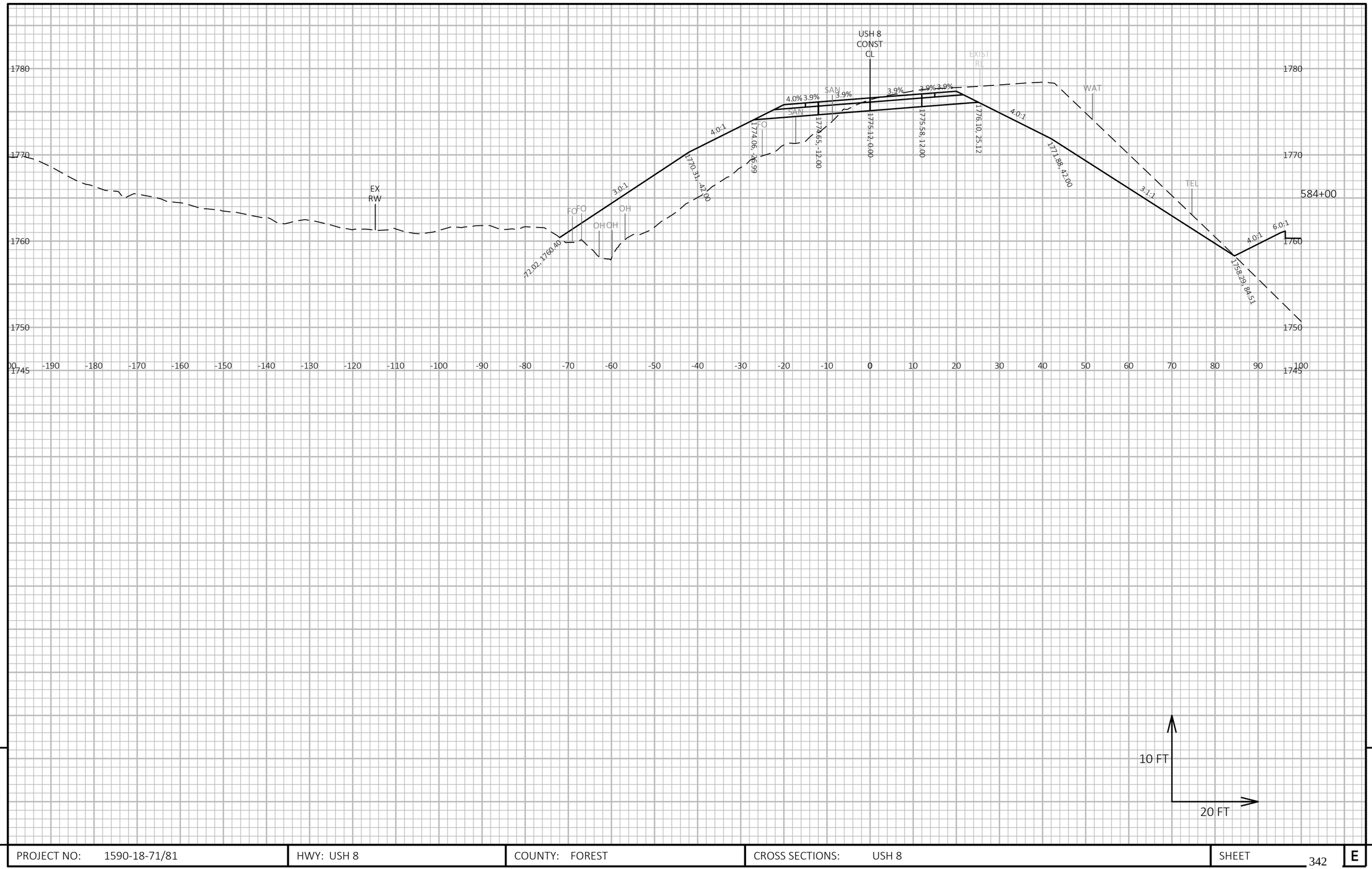
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 341	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 27

PLOT DATE : 10/11/2024 10:00 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

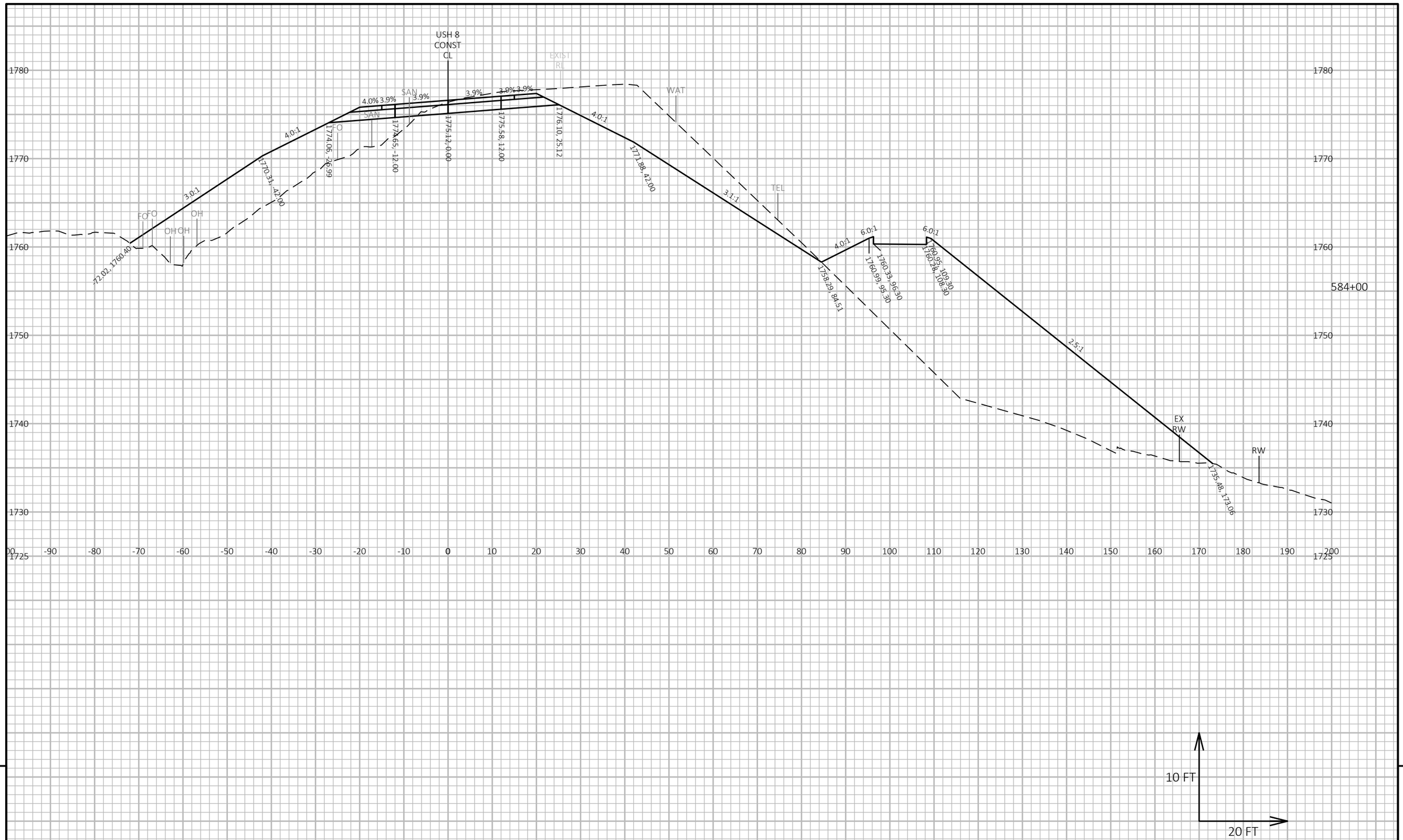
9

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 342	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 28

PLOT DATE : 10/11/2024 10:00 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

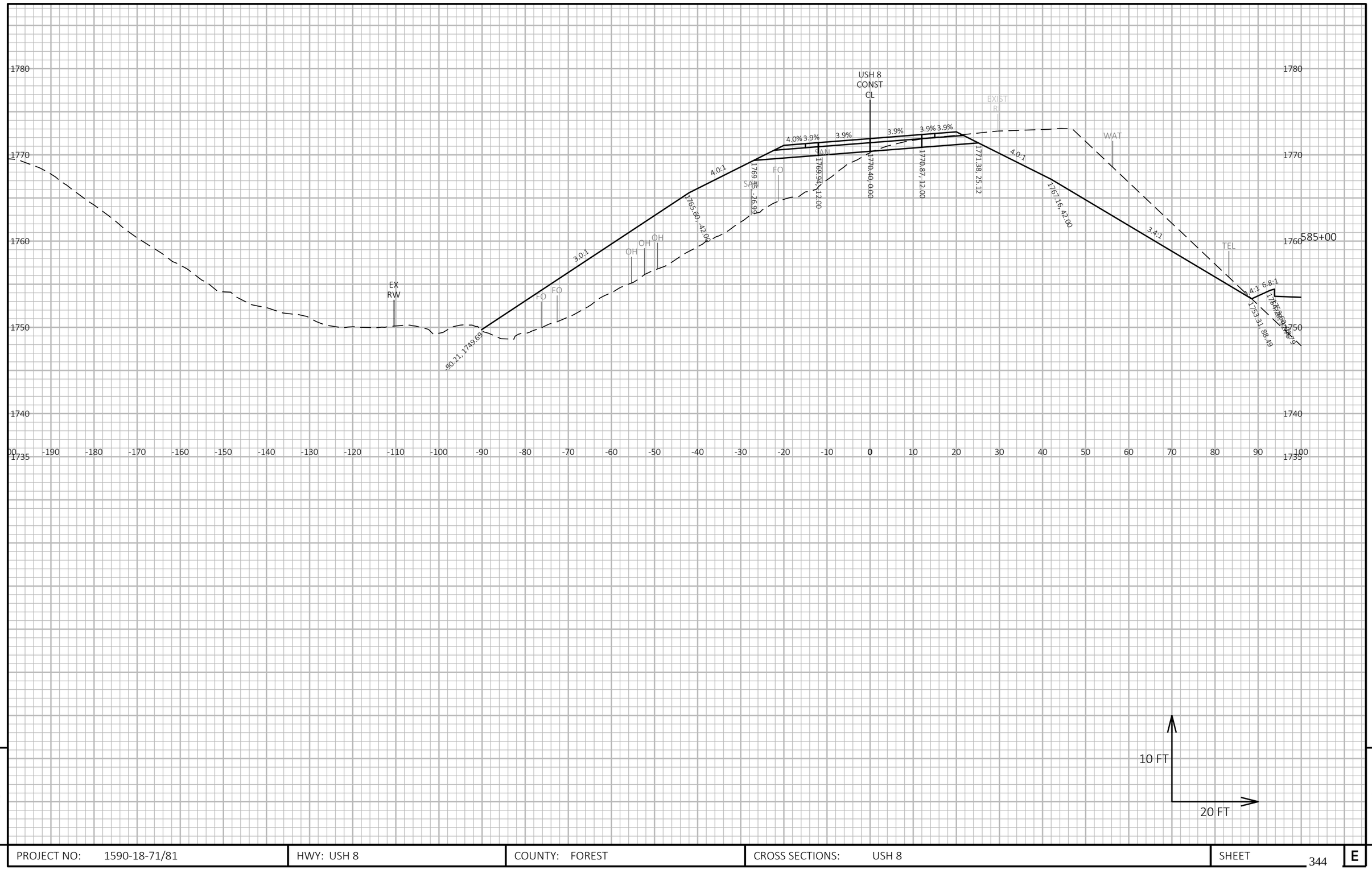
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 343	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 29

PLOT DATE : 10/11/2024 10:00 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

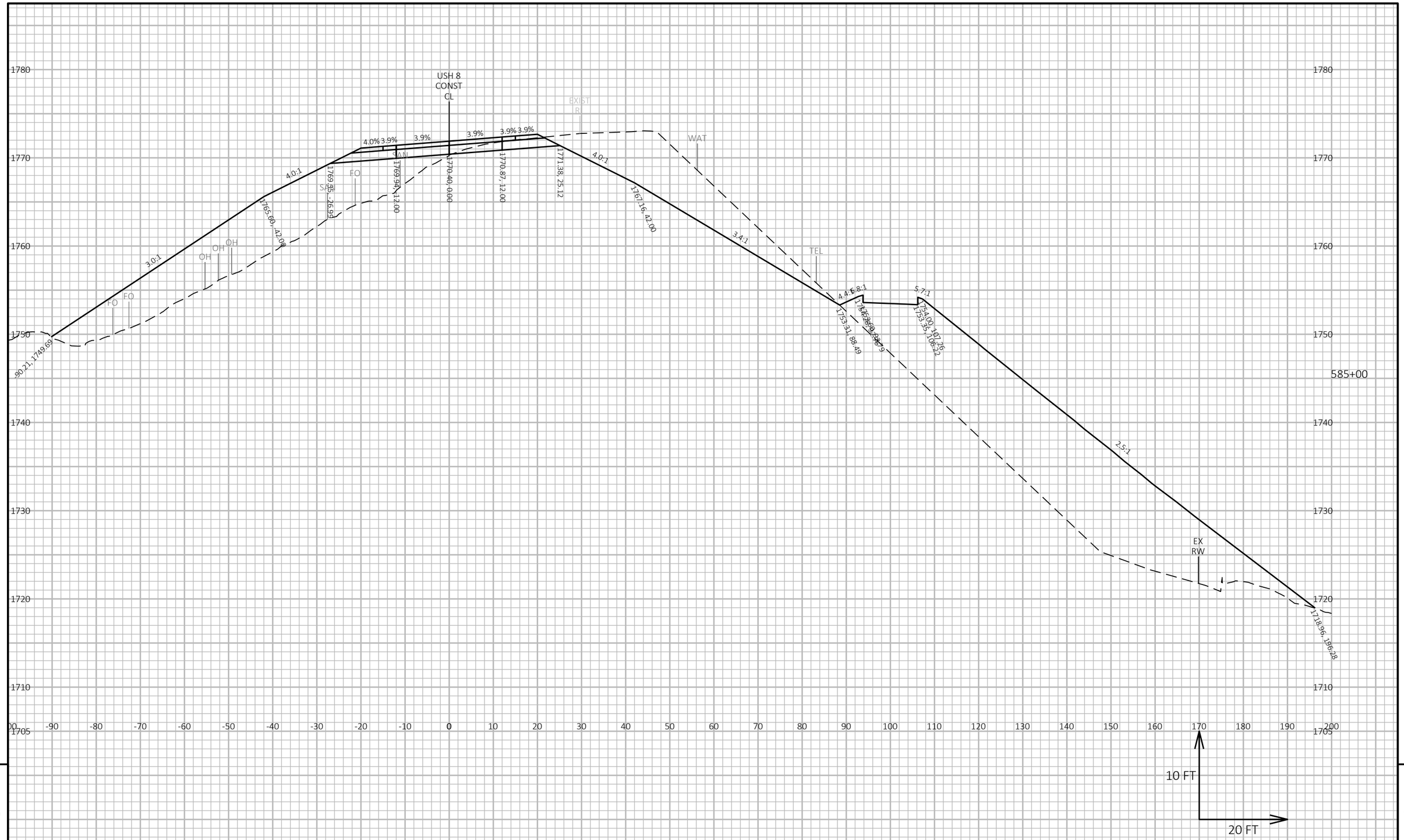
PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 344	E

9

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 30

PLOT DATE : 10/11/2024 10:00 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

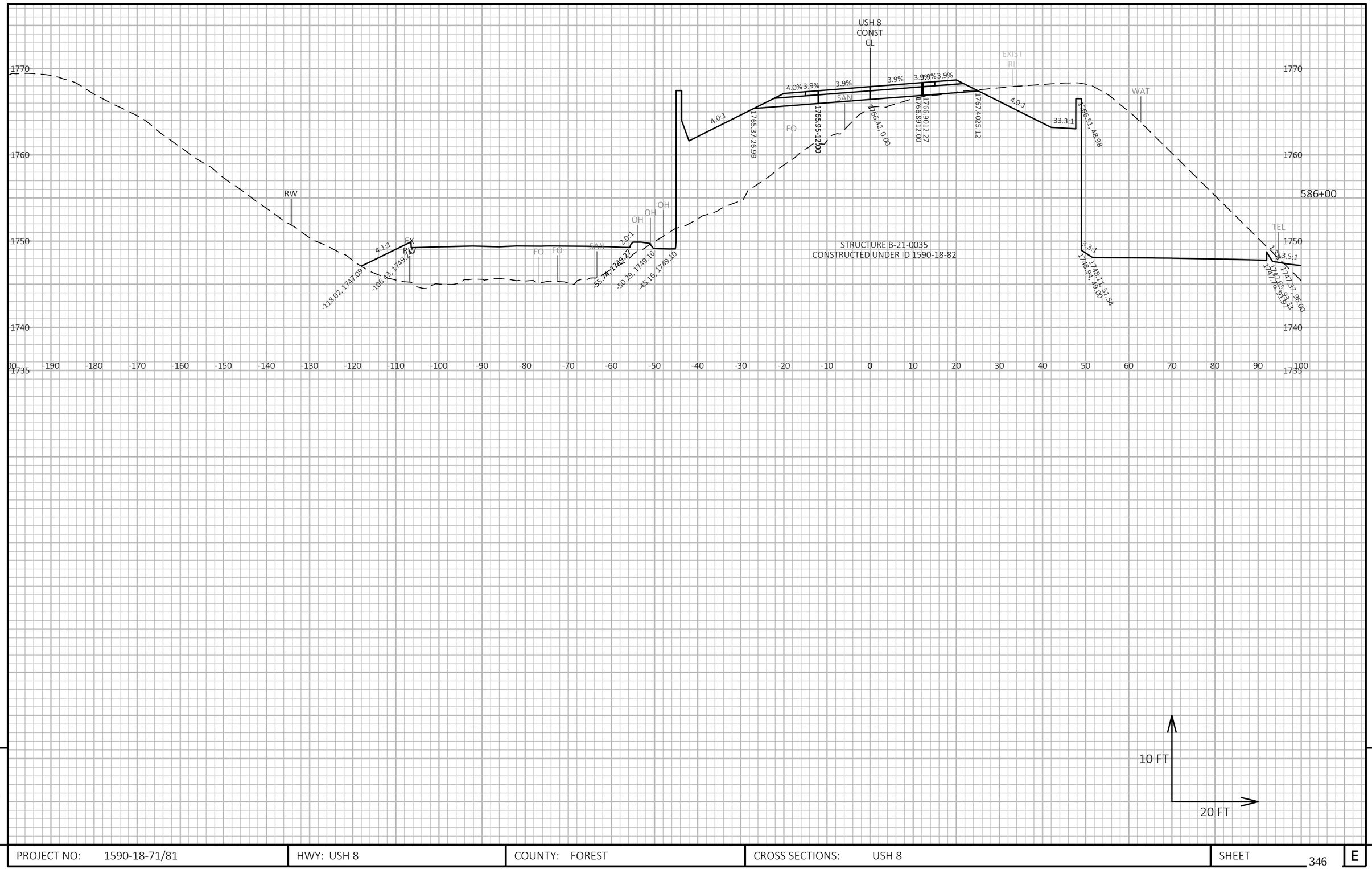
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 345	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 31

PLOT DATE : 10/11/2024 10:00 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

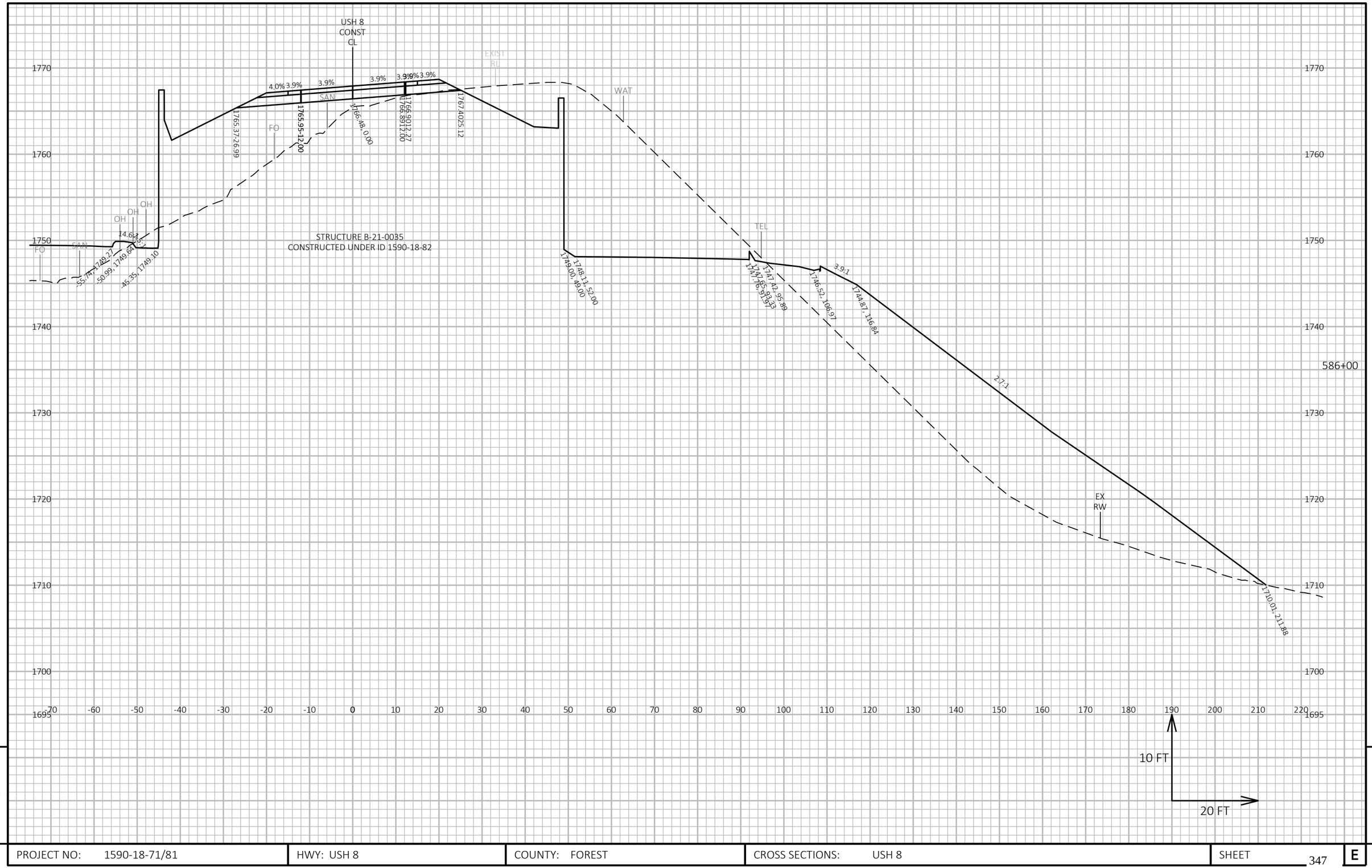


PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 346	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 32

PLOT DATE : 10/11/2024 10:00 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

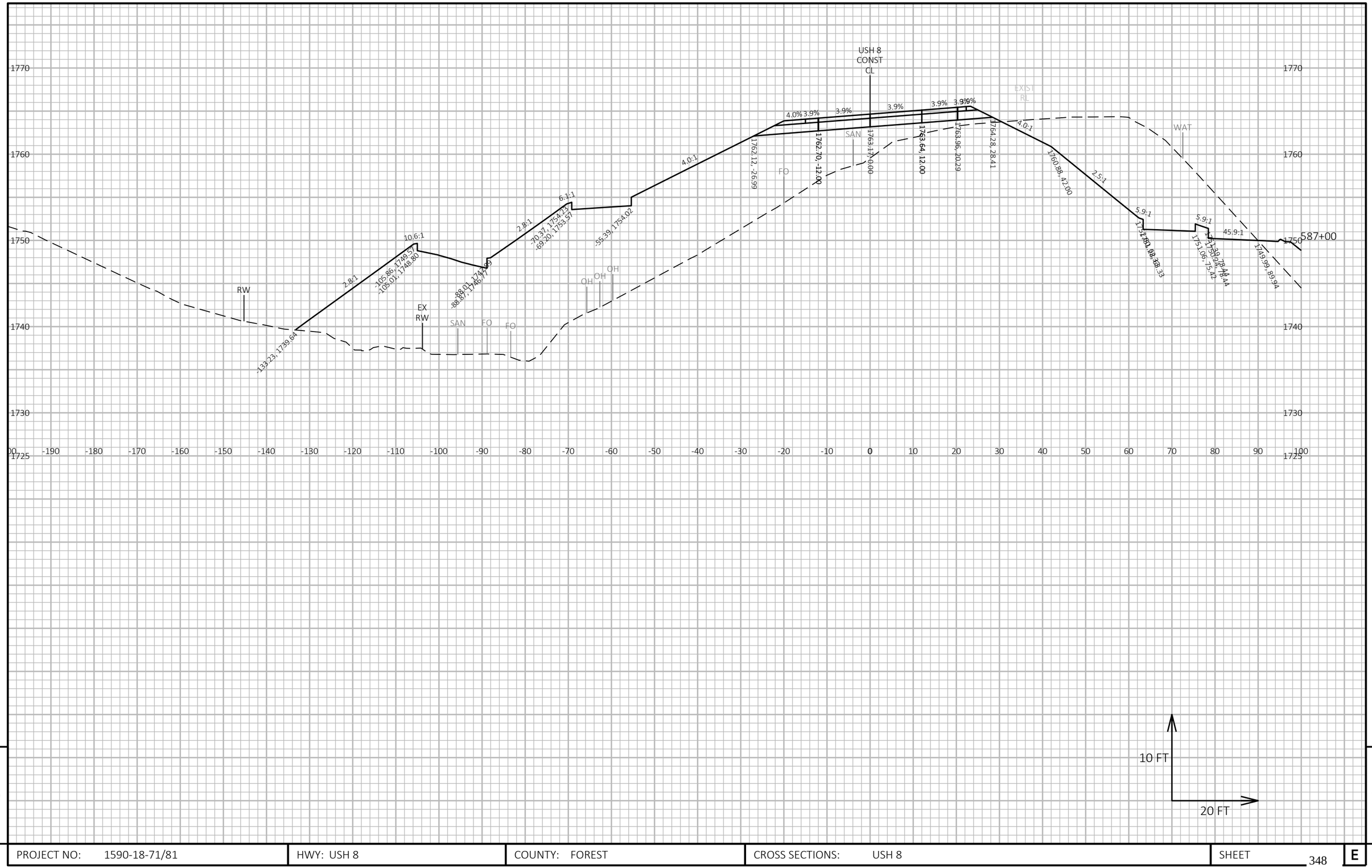


PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 347 E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 33

PLOT DATE : 10/11/2024 10:00 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

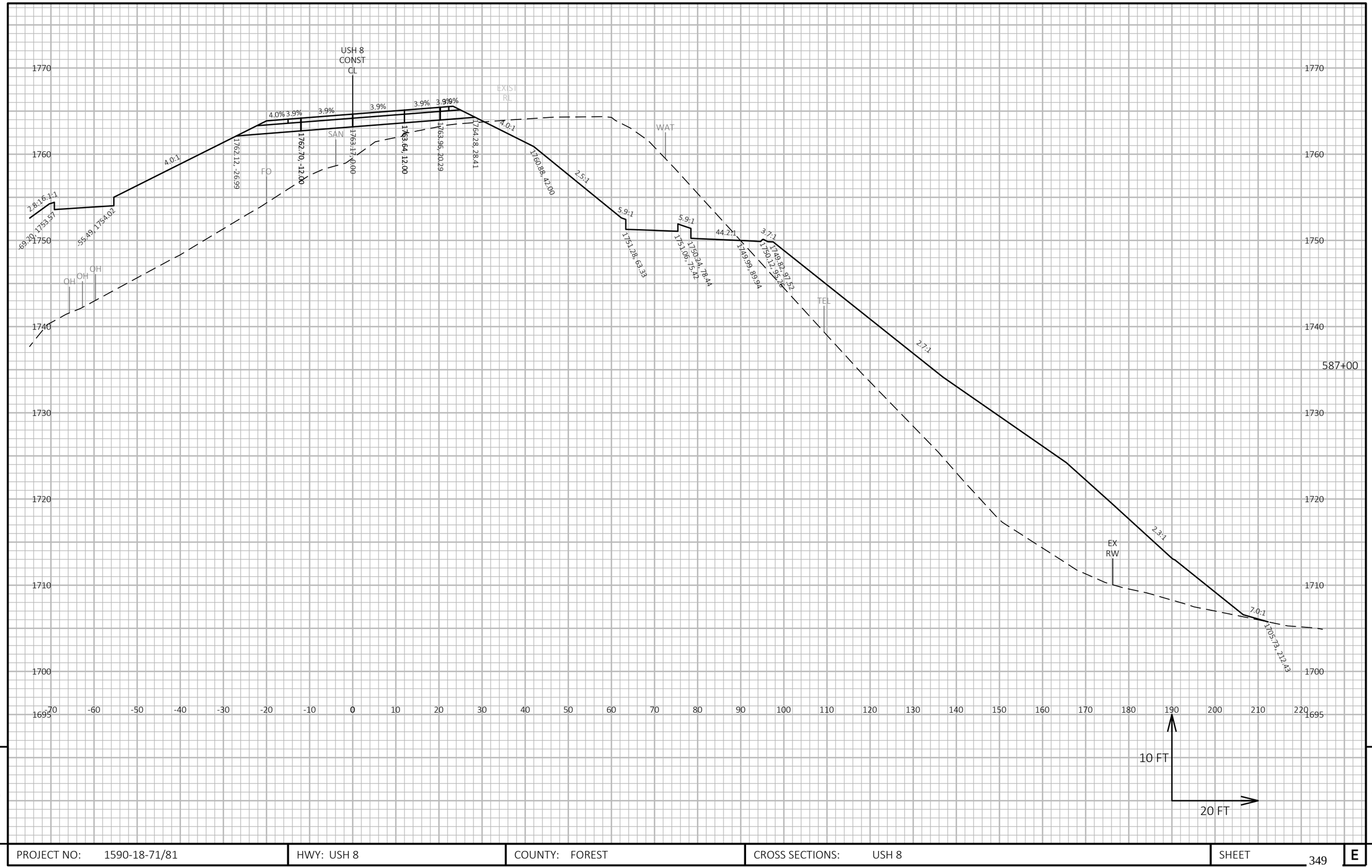
PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 348	E

9

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 34

PLOT DATE : 10/11/2024 10:01 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

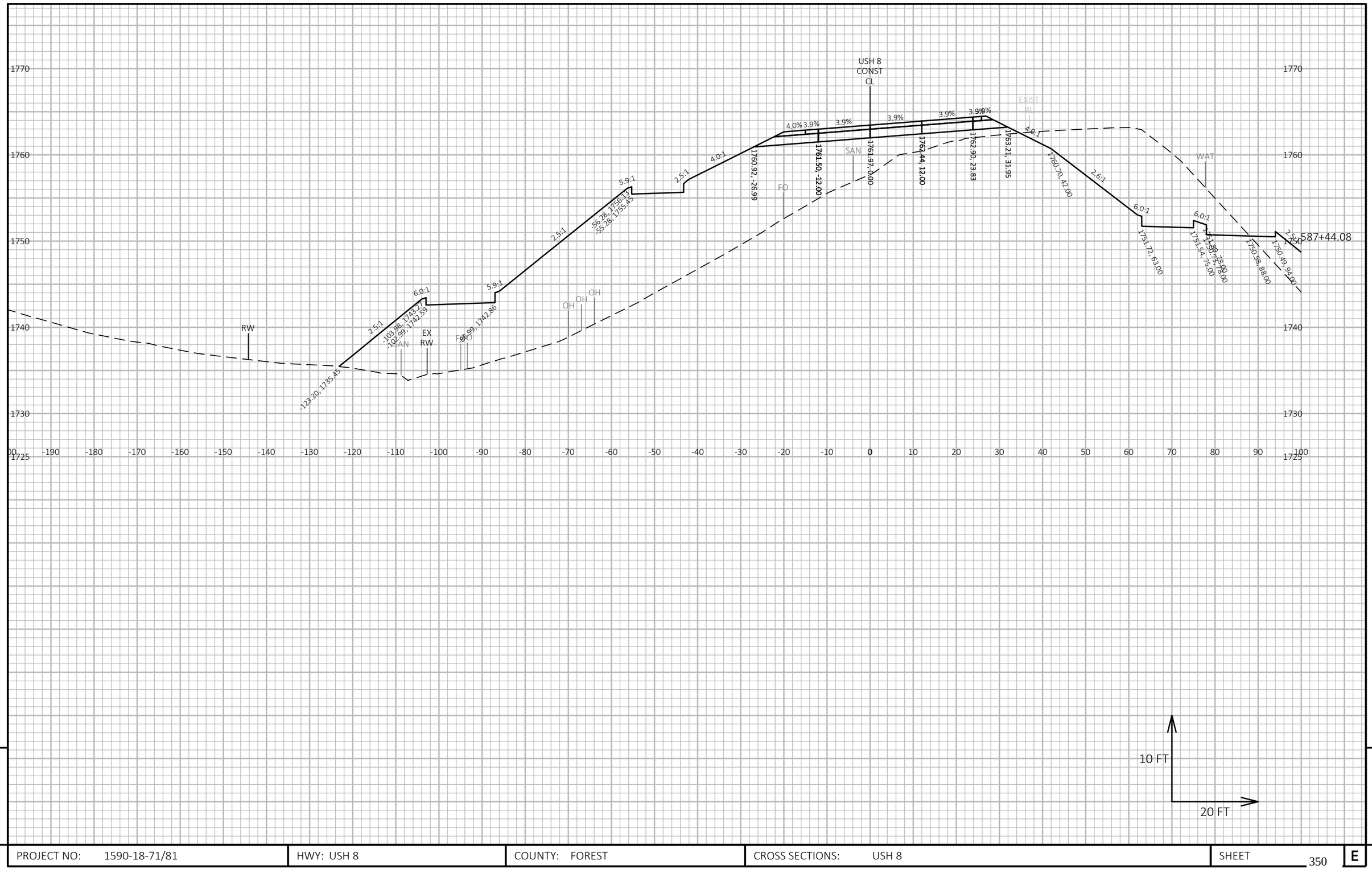
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 349	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 35

PLOT DATE : 10/11/2024 10:01 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

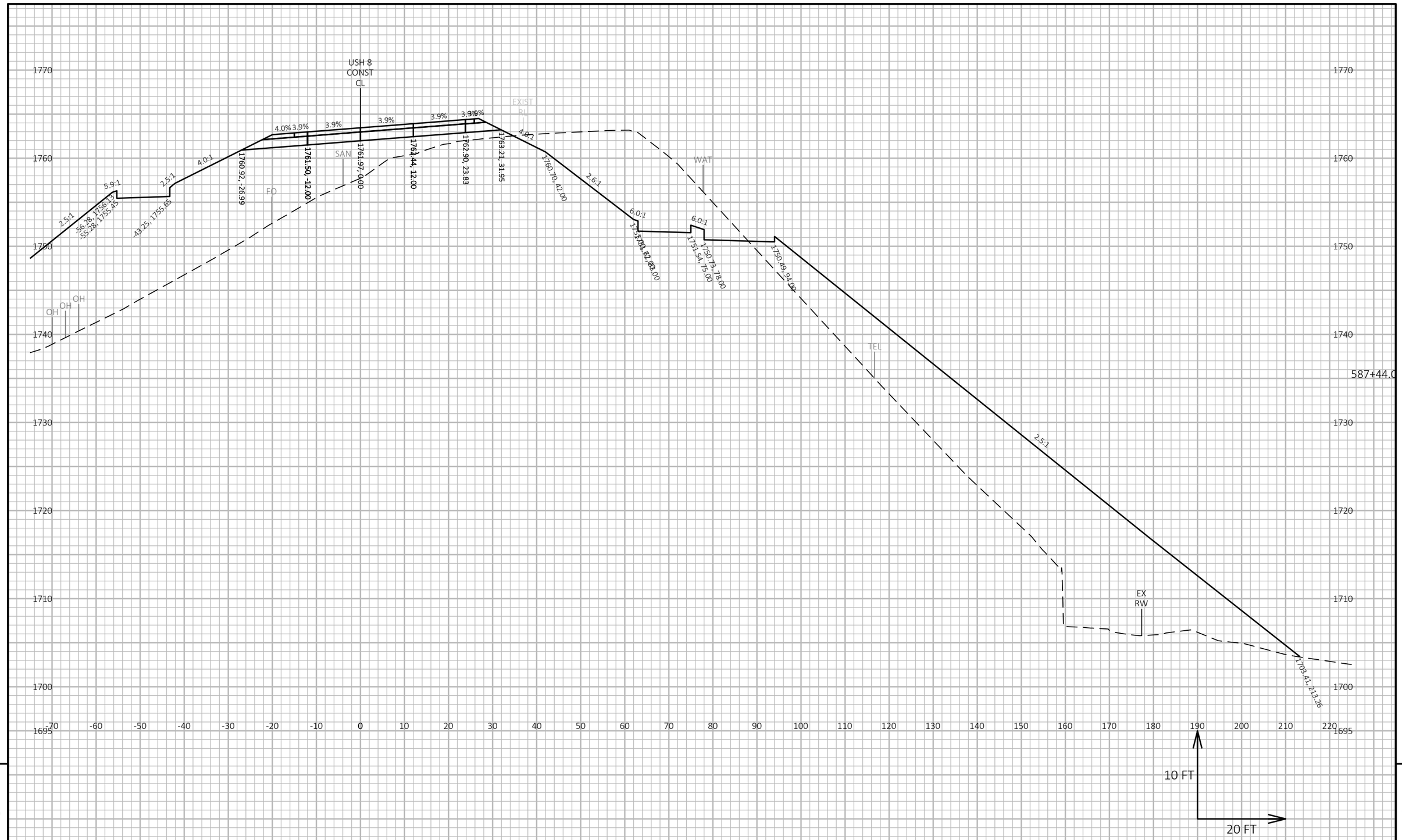
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 350	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 36

PLOT DATE : 10/11/2024 10:01 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



587+44.0

9

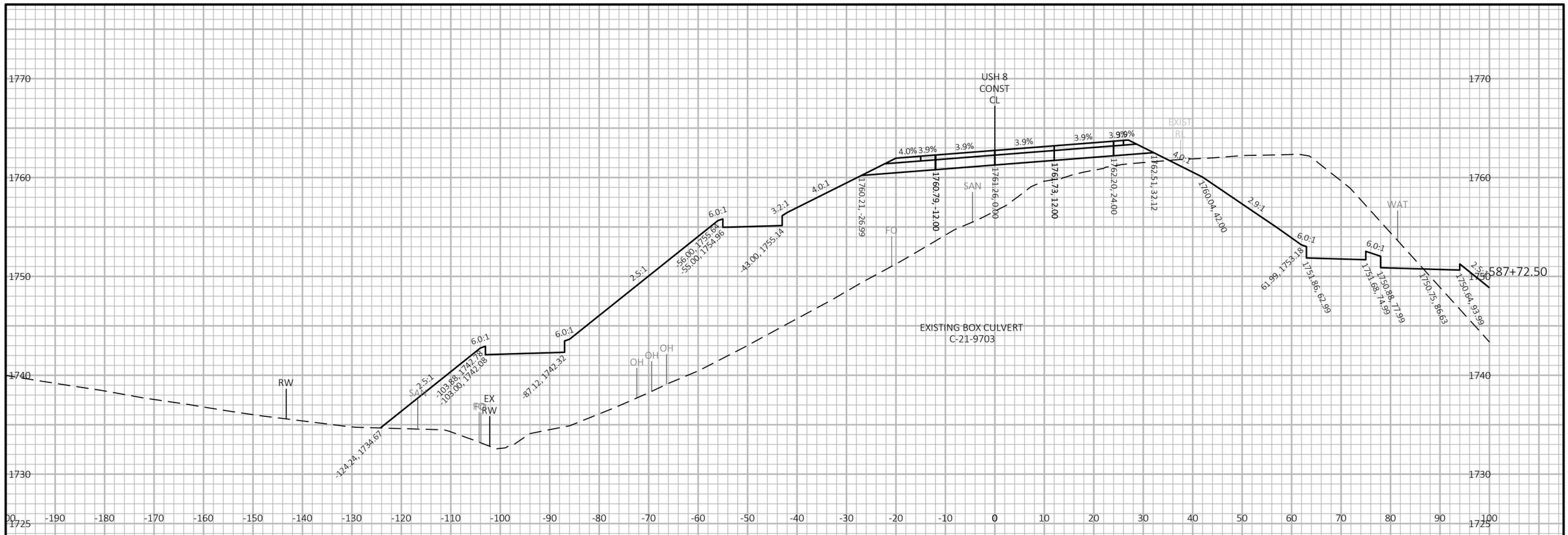
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 351	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 37

PLOT DATE : 10/11/2024 10:01 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

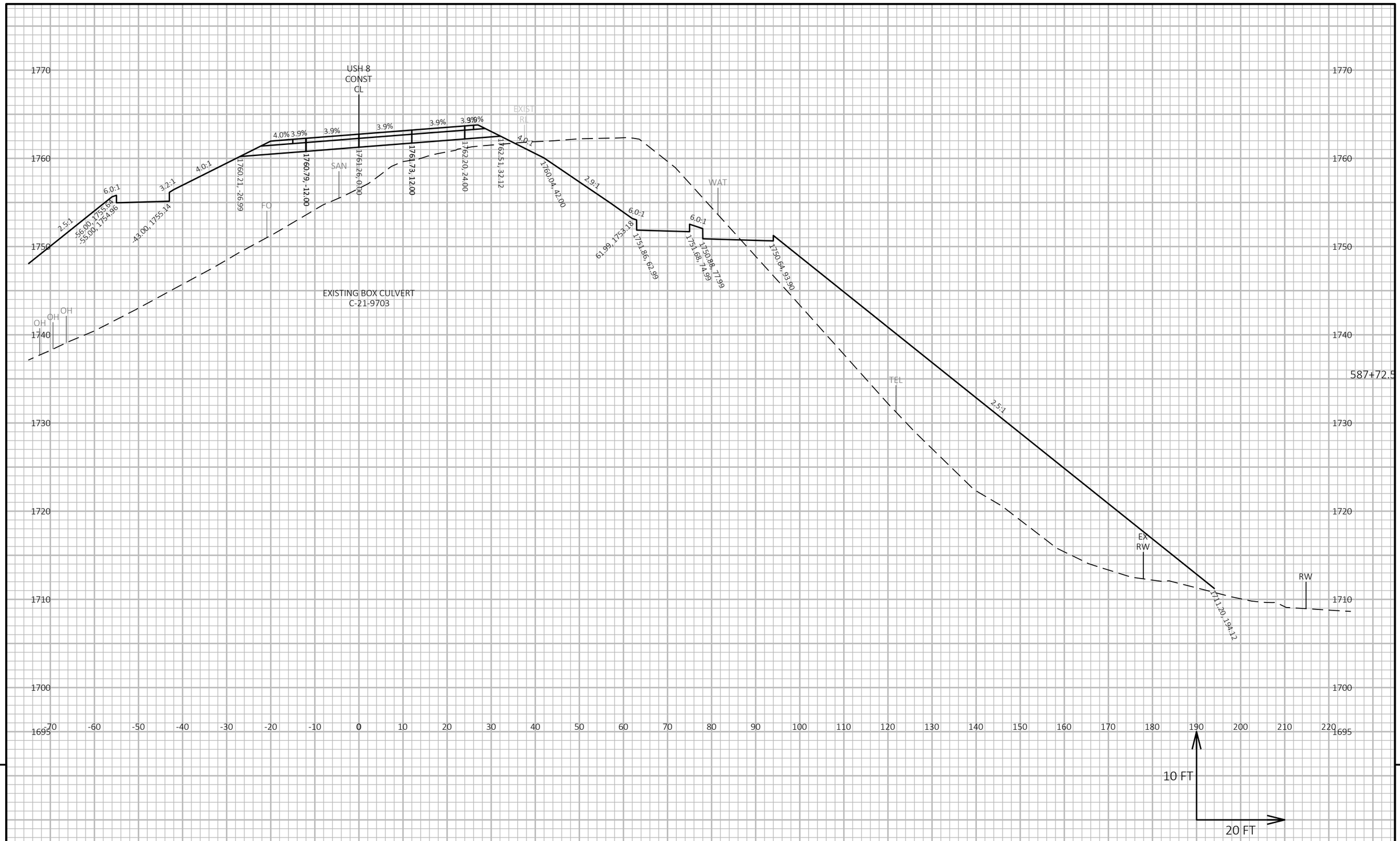
PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 352	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 38

PLOT DATE : 10/11/2024 10:01 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

9



9

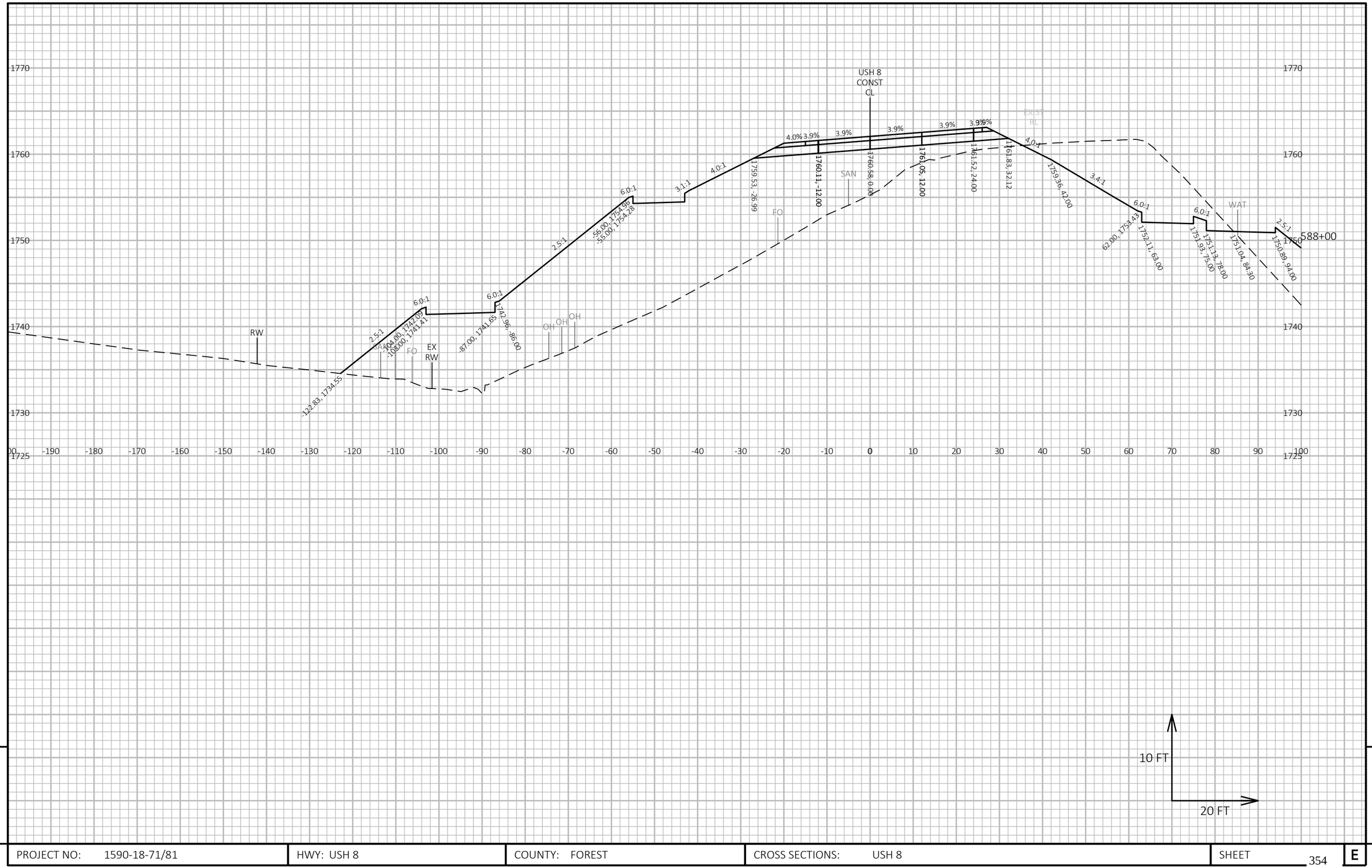
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 353	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 39

PLOT DATE : 10/11/2024 10:01 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

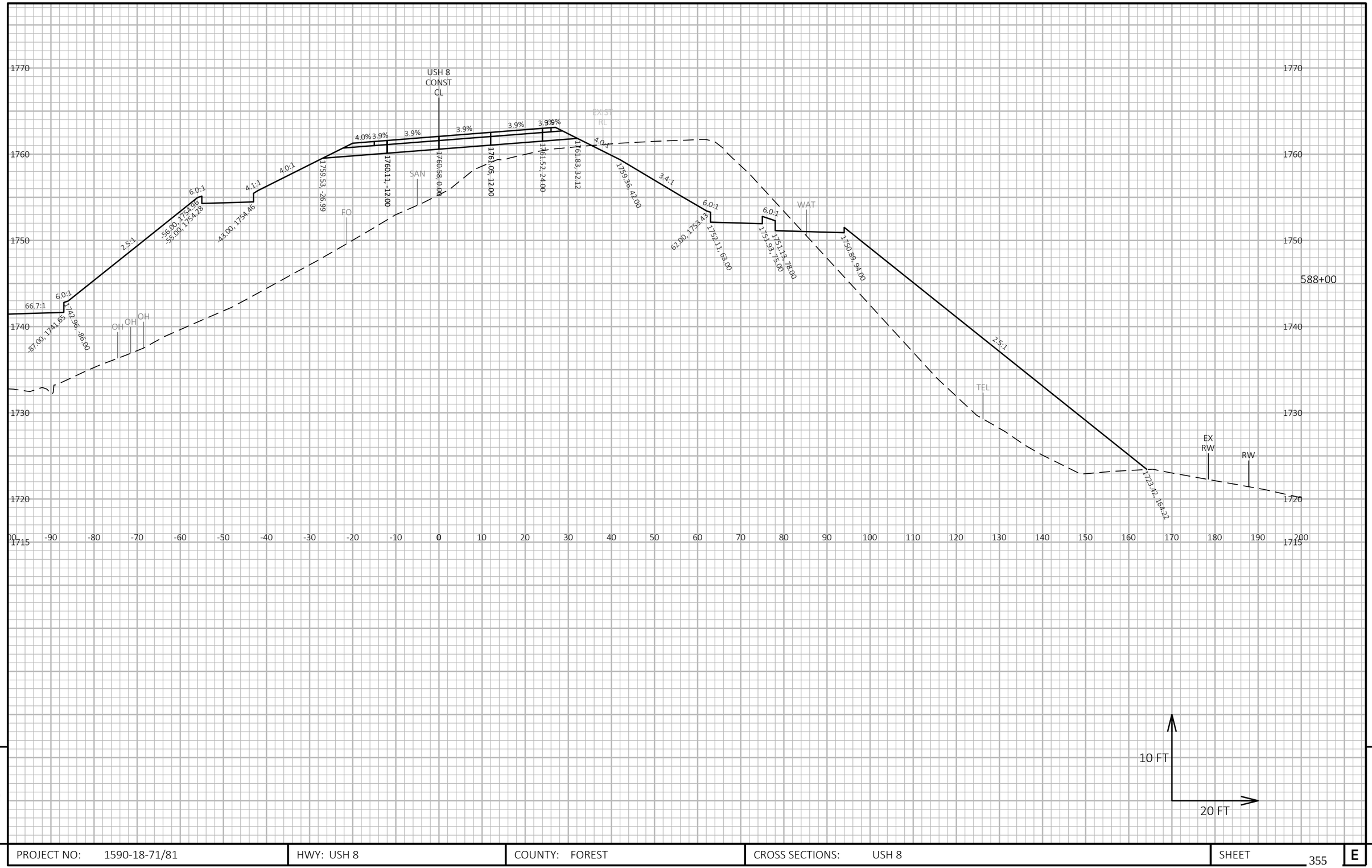
PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 354	E

9

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 40

PLOT DATE : 10/11/2024 10:01 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

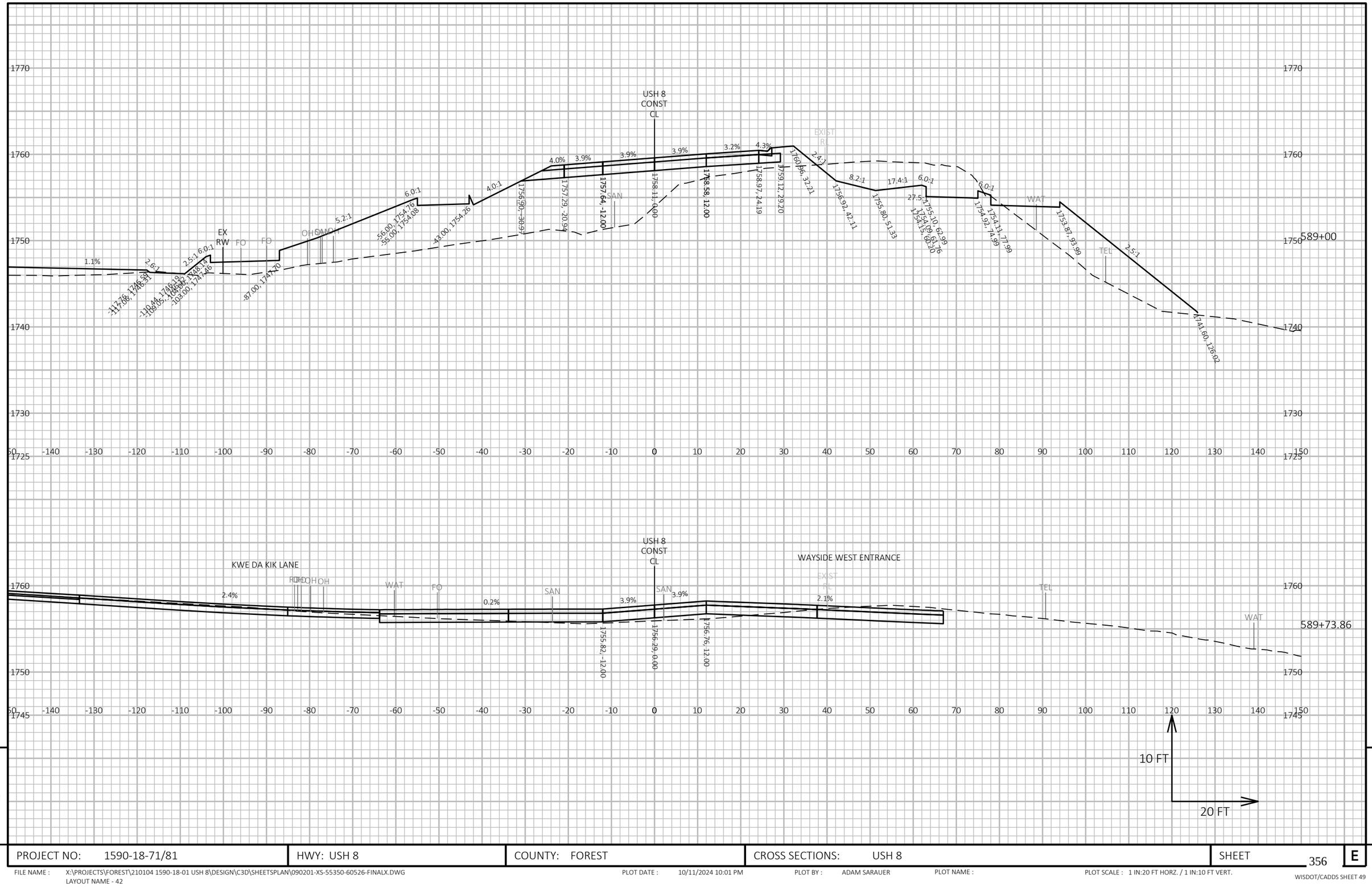


PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 355	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 41

PLOT DATE : 10/11/2024 10:01 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

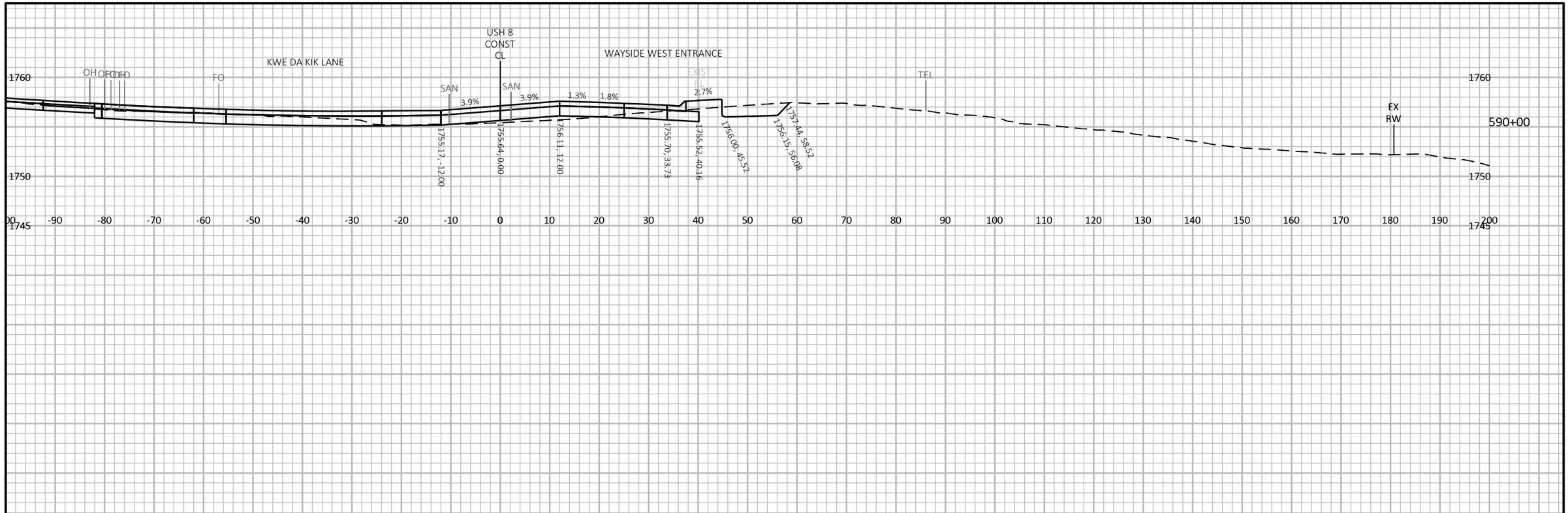


PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 356	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 42

PLOT DATE : 10/11/2024 10:01 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

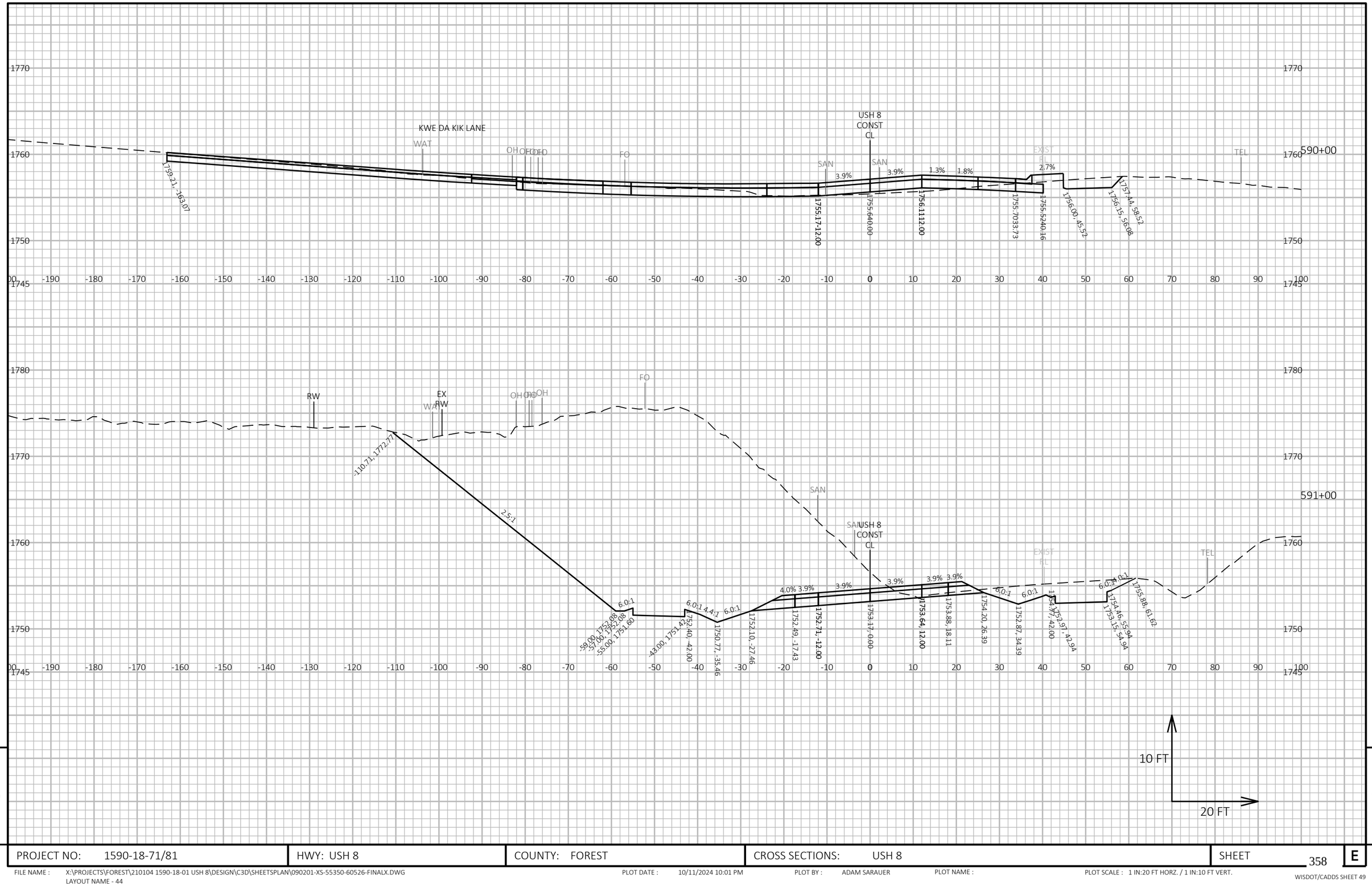
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 357	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 43

PLOT DATE : 10/11/2024 10:01 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

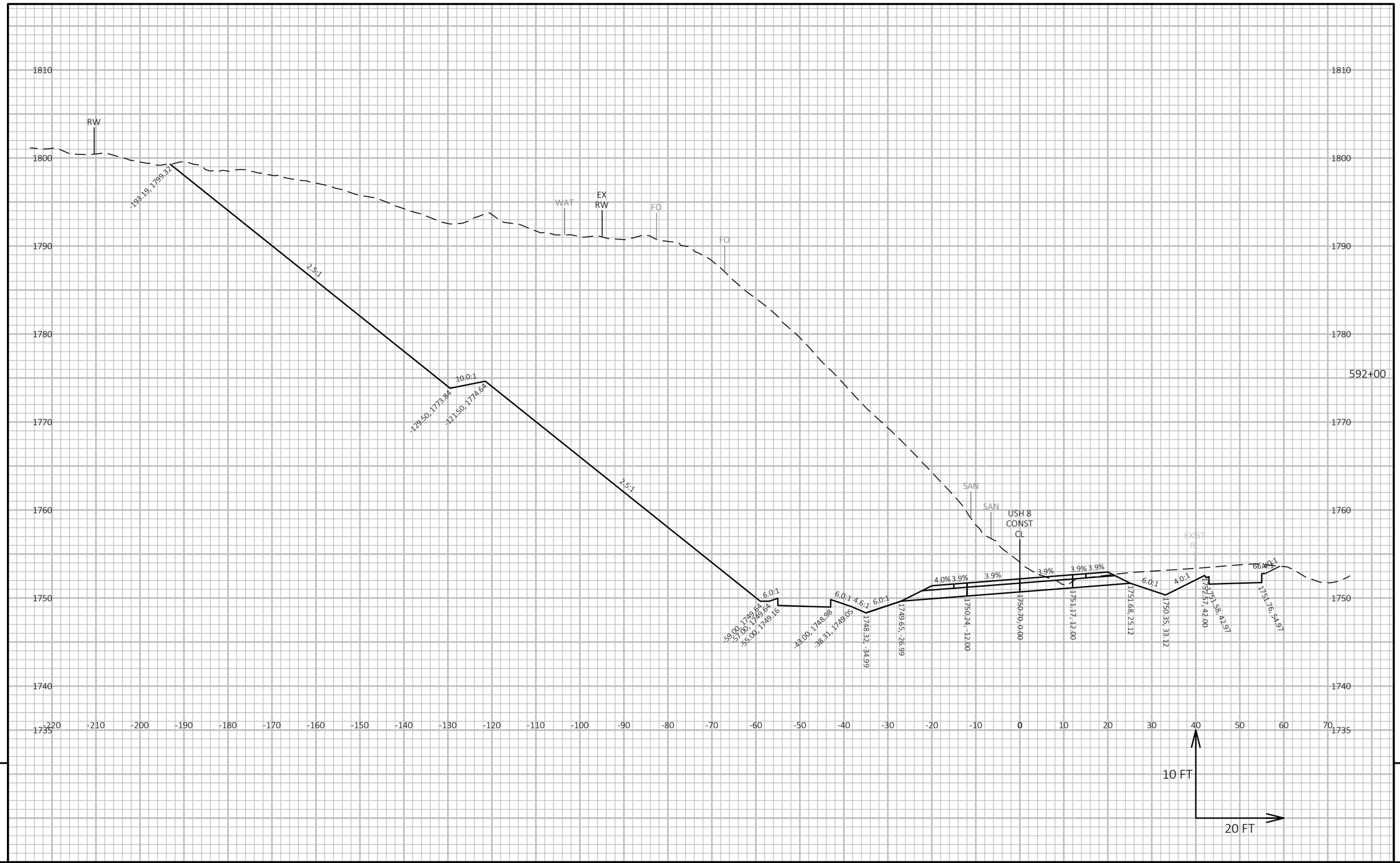
9

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 358	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 44

PLOT DATE : 10/11/2024 10:01 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 359	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 47

PLOT DATE : 10/11/2024 10:01 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



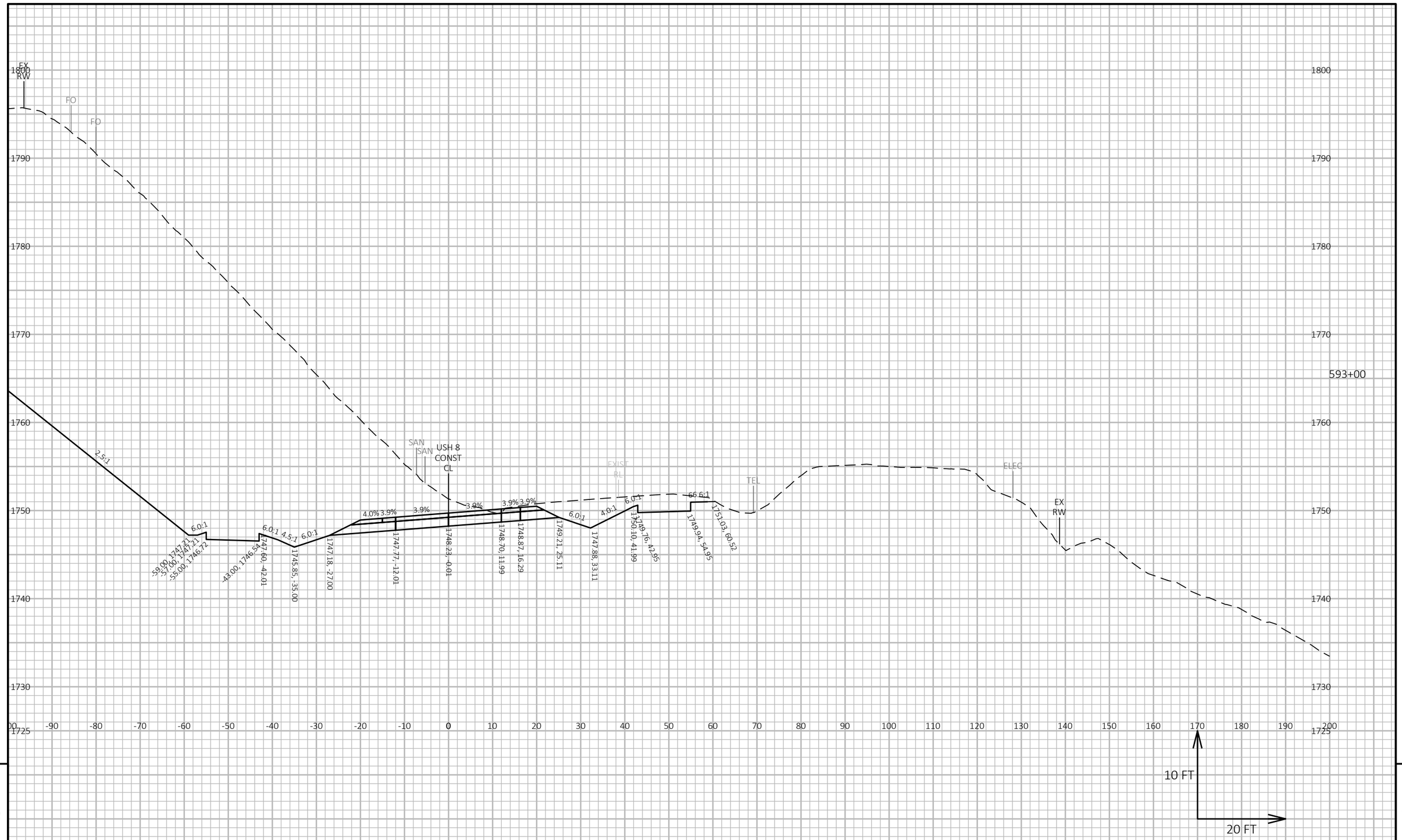
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 360	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 48

PLOT DATE : 10/11/2024 10:01 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 361	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 49

PLOT DATE : 10/11/2024 10:01 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

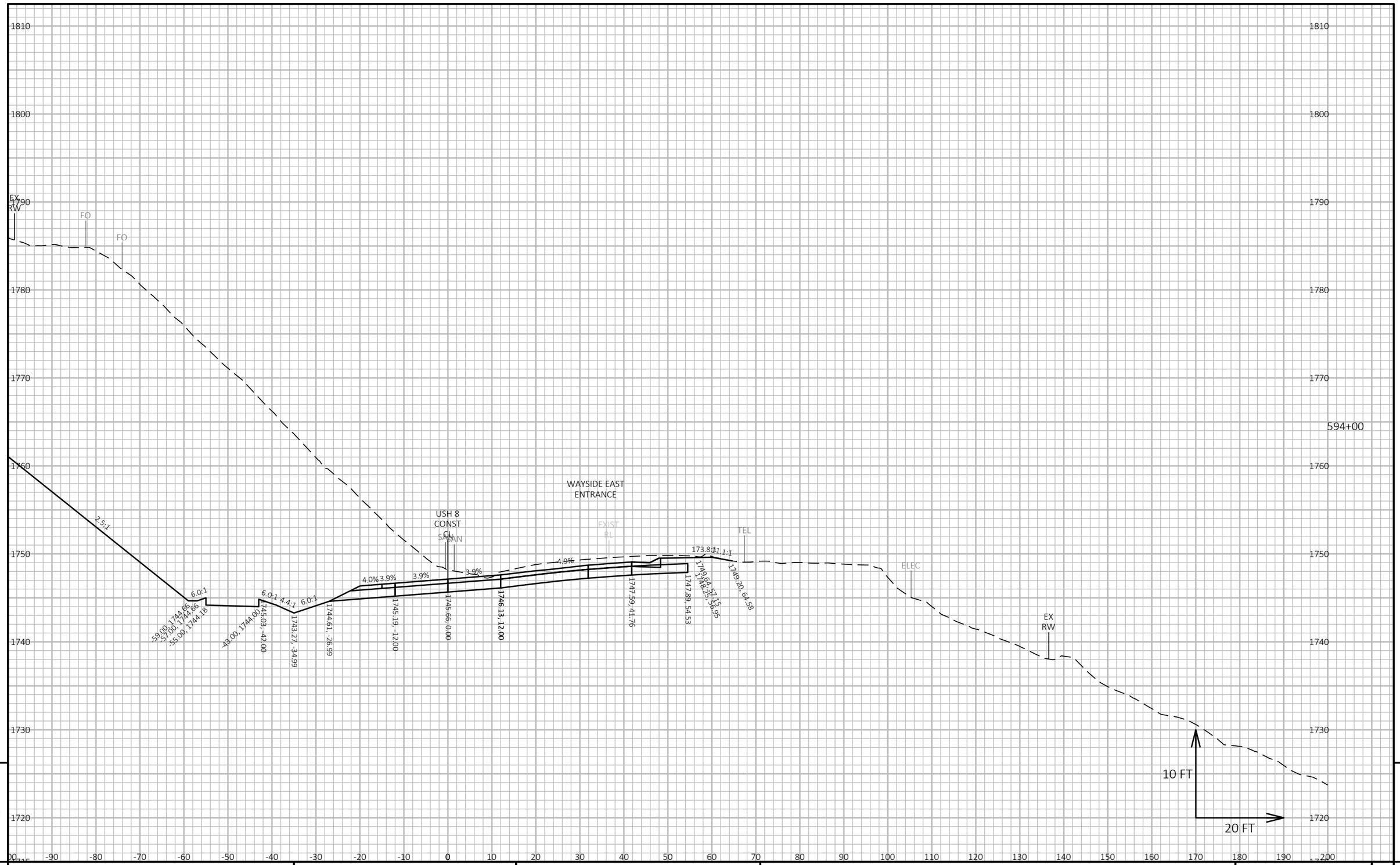
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 362	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 50

PLOT DATE : 10/11/2024 10:01 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

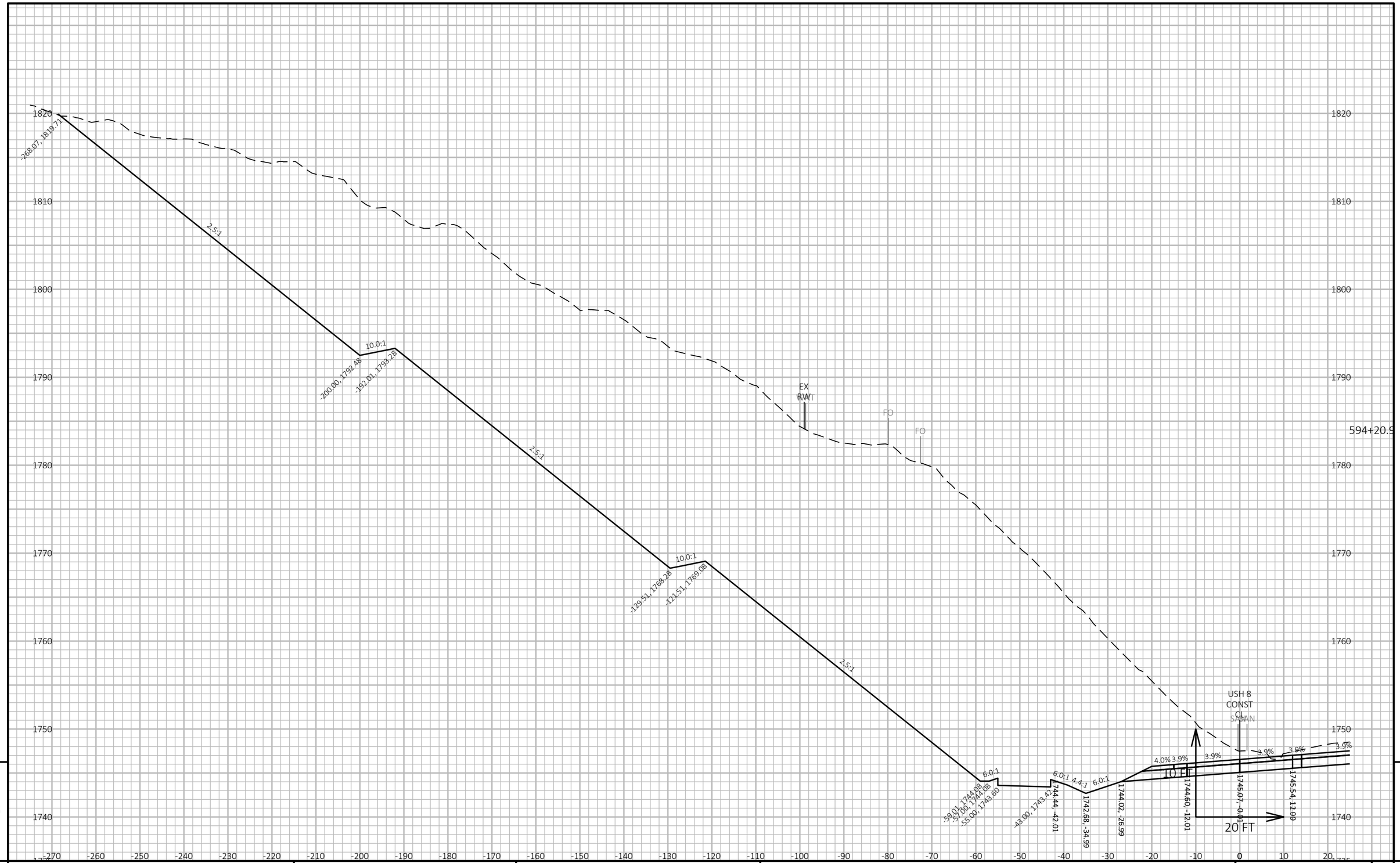
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 363	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 51

PLOT DATE : 10/11/2024 10:01 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

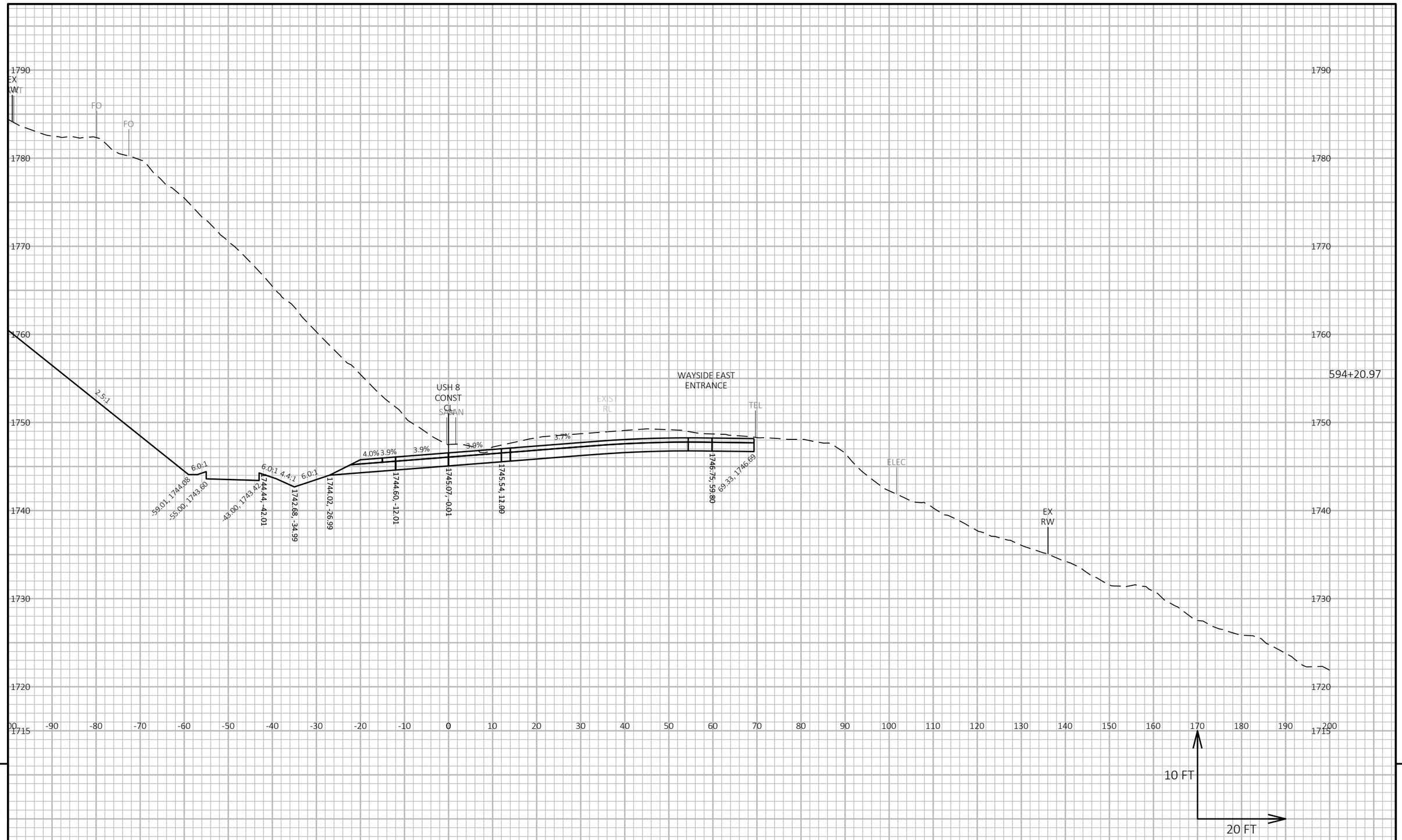
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 364	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 52

PLOT DATE : 10/11/2024 10:01 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

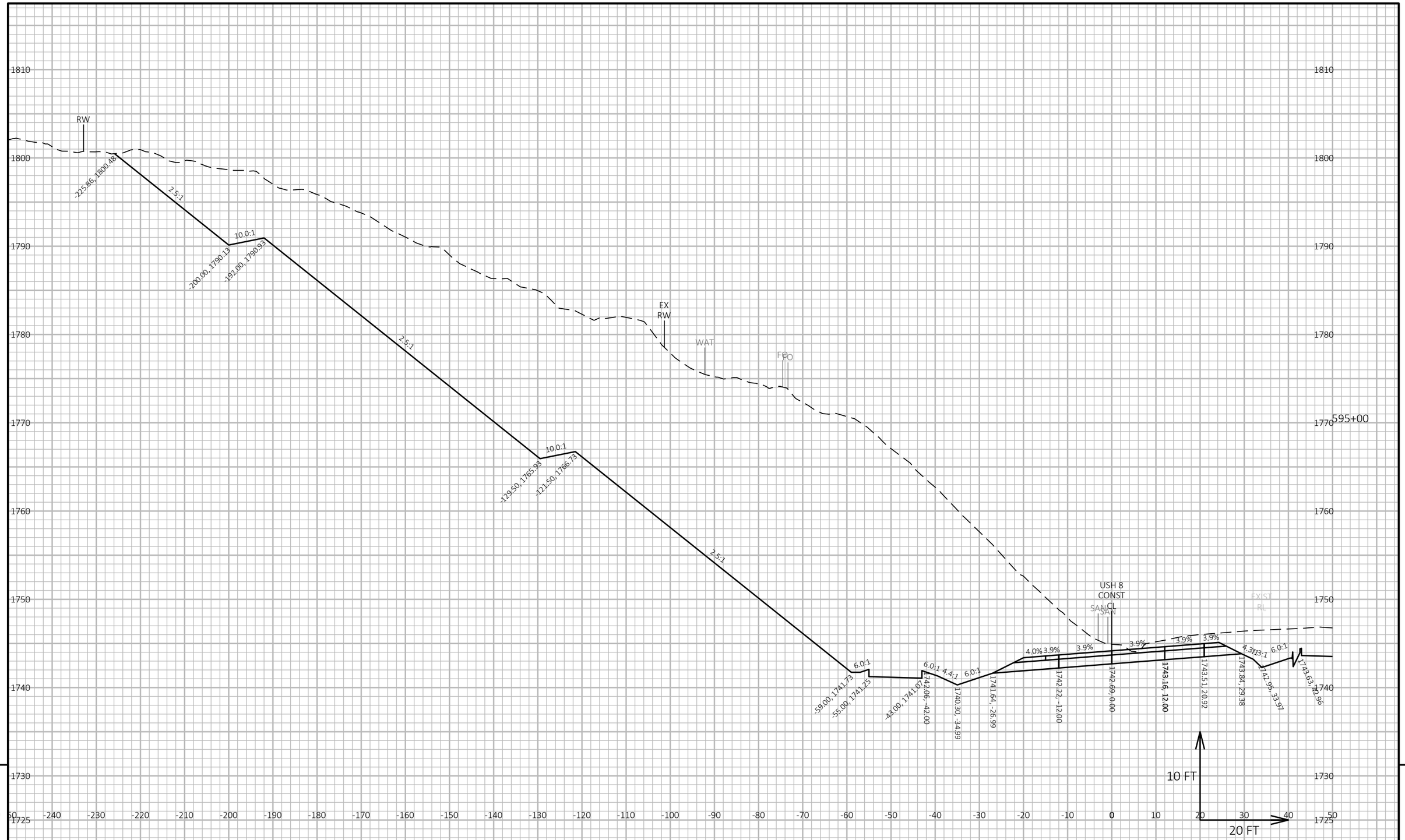
9

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 365	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 53

PLOT DATE : 10/11/2024 10:01 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 366	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 54

PLOT DATE : 10/11/2024 10:01 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

595+00

WAT

FO

USH 8
CONST
CL

SAN

STM

EX ST
RL

TEL

ELEC

EX
RW

2.5:1

6.0:1

4.4:1

4.0%

3.9%

3.0:1

7.4:1

9.7:1

-59.00, 1741.73
-57.00, 1741.73
-55.00, 1741.25
-43.00, 1741.07
1742.06, -42.00
1740.30, -34.99
1741.64, -26.99
1742.22, -12.00
1742.69, 0.00
1743.16, 12.00
1743.51, 20.92
1743.84, 29.38
1743.63, 42.96
1743.45, 54.96
1743.69, 58.61
1737.80, 76.31
1734.87, 101.15

10 FT

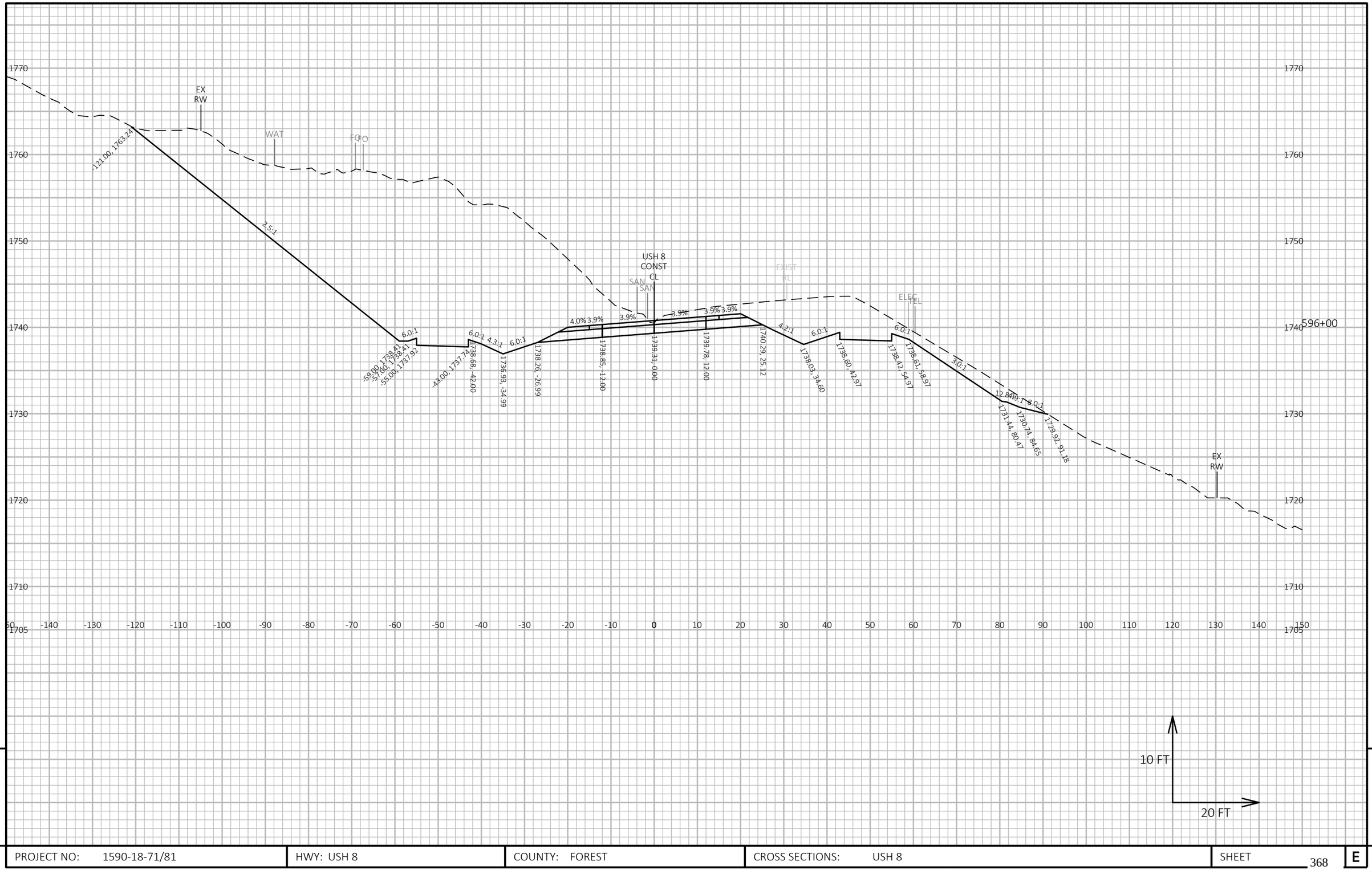
20 FT

9

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 367	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 55

PLOT DATE : 10/11/2024 10:02 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

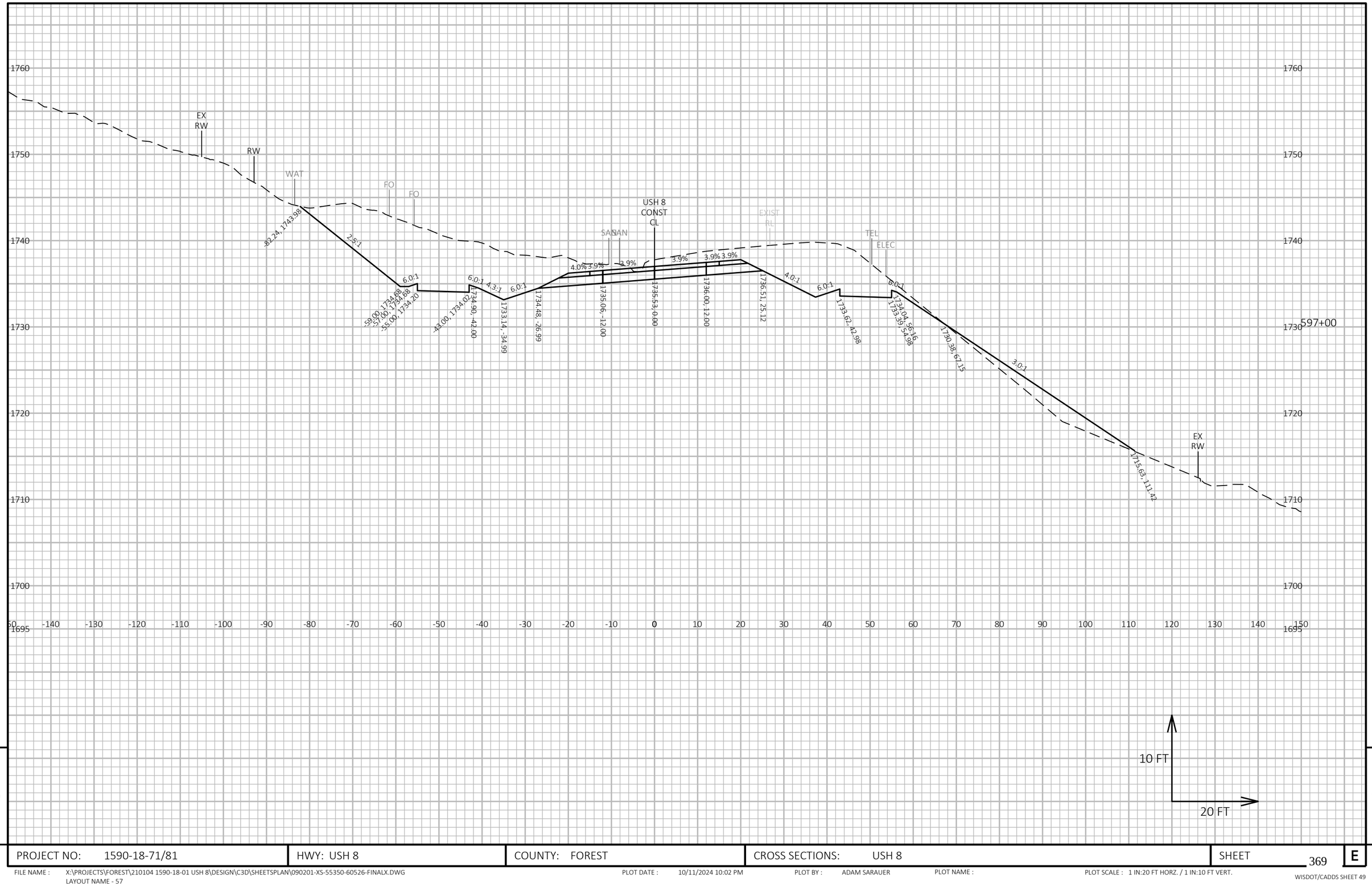


PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 368	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 56

PLOT DATE : 10/11/2024 10:02 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

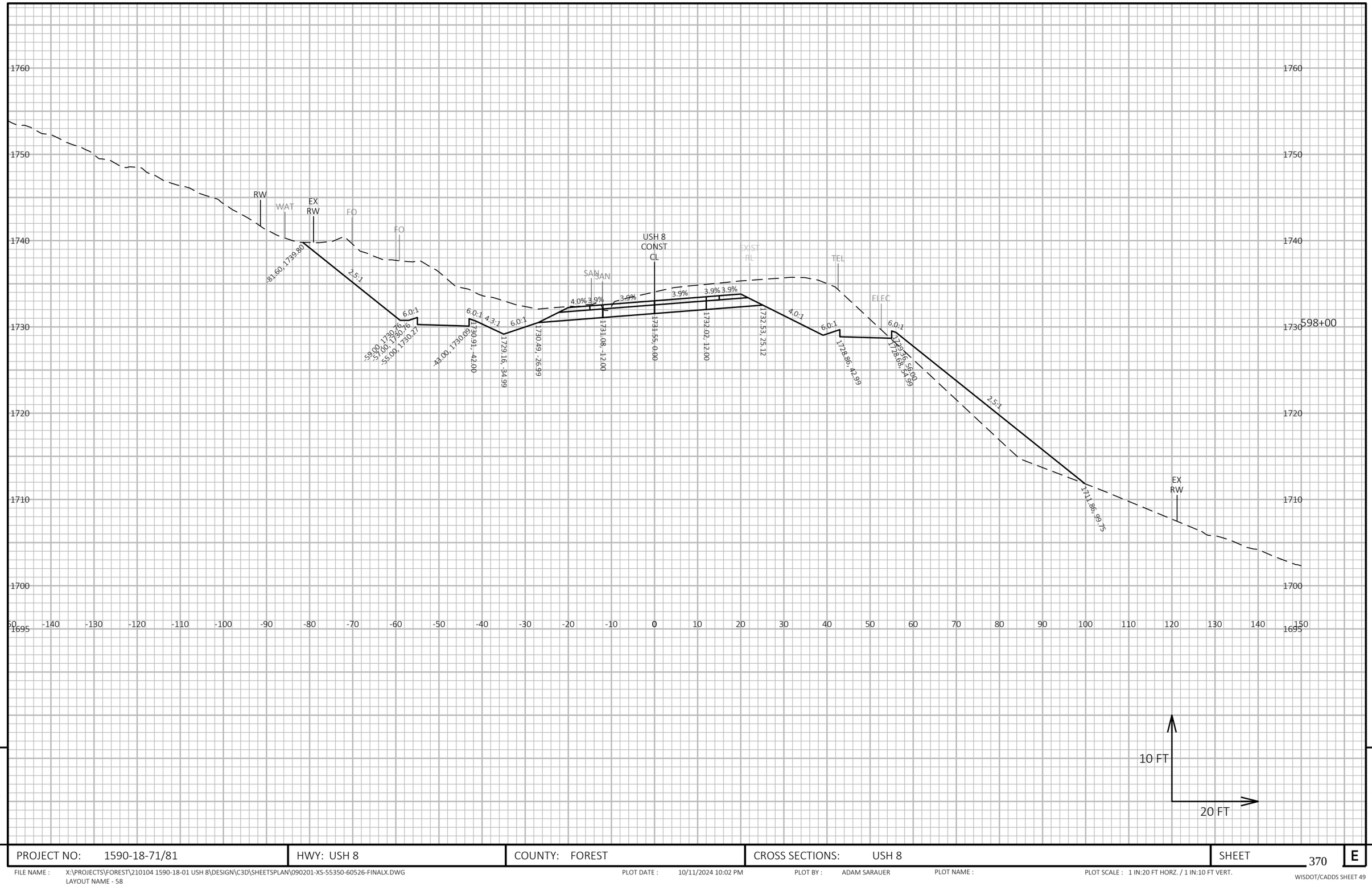
9

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 369	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 57

PLOT DATE : 10/11/2024 10:02 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

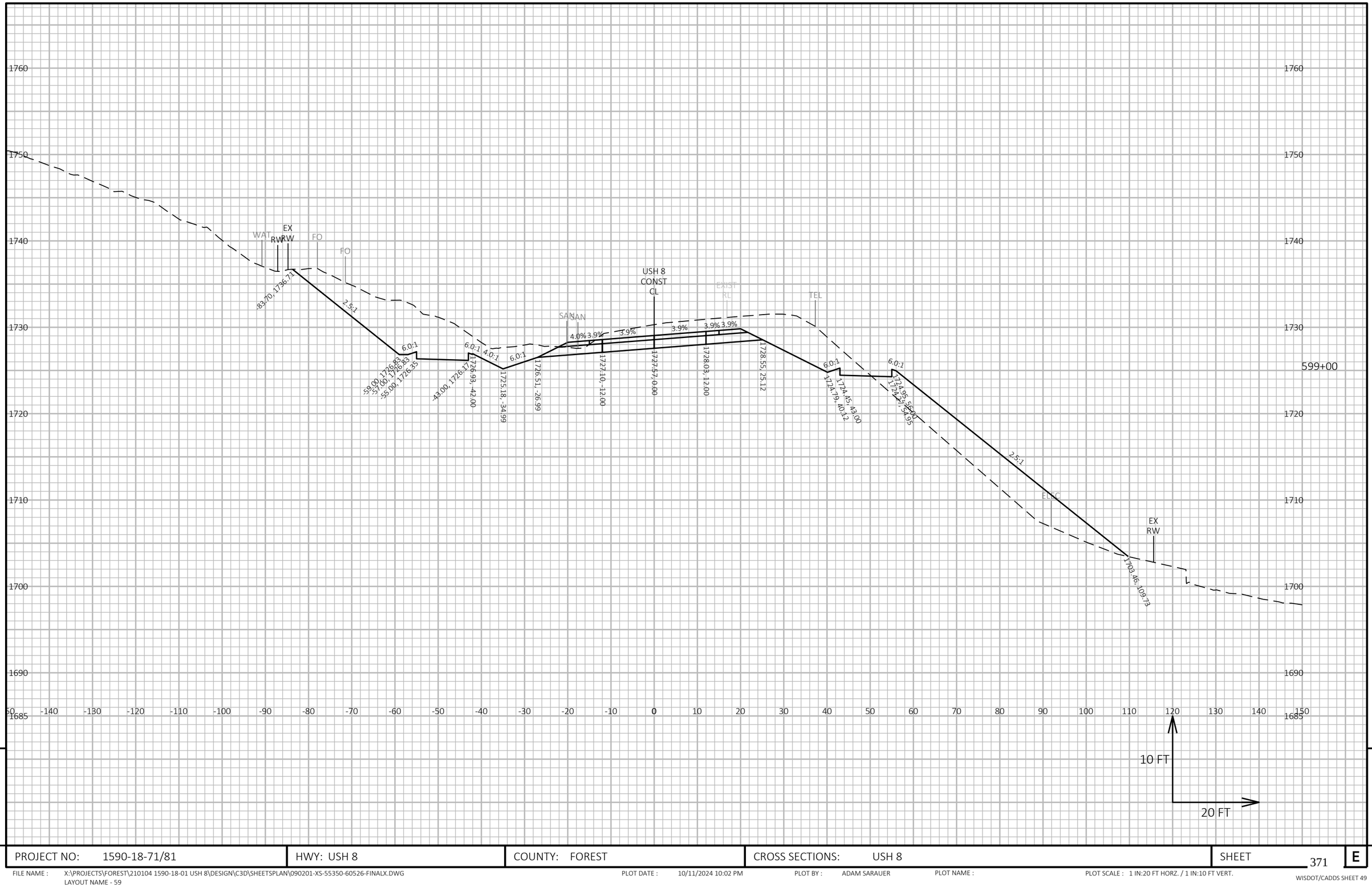
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 370	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 58

PLOT DATE : 10/11/2024 10:02 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

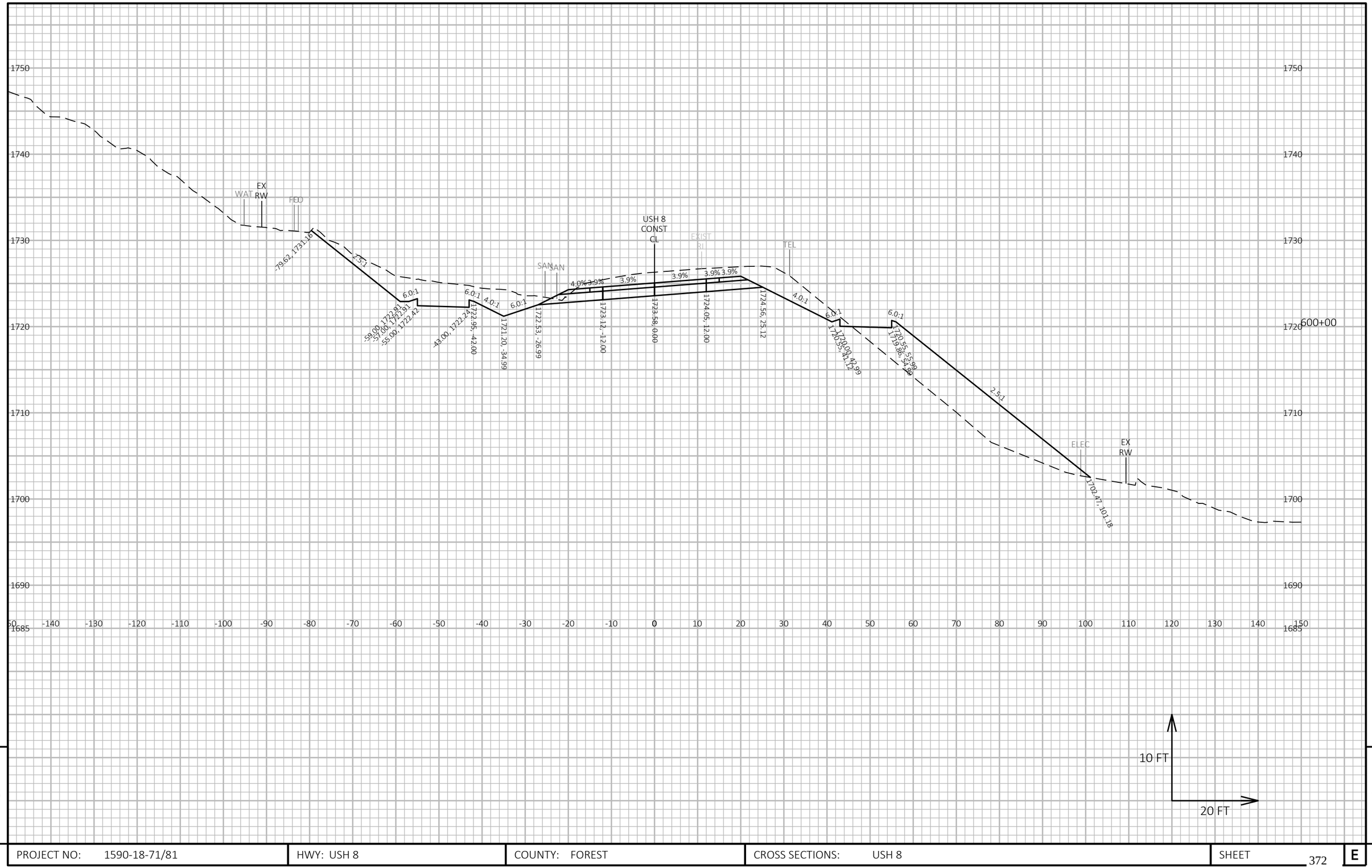


PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 371	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 59

PLOT DATE : 10/11/2024 10:02 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

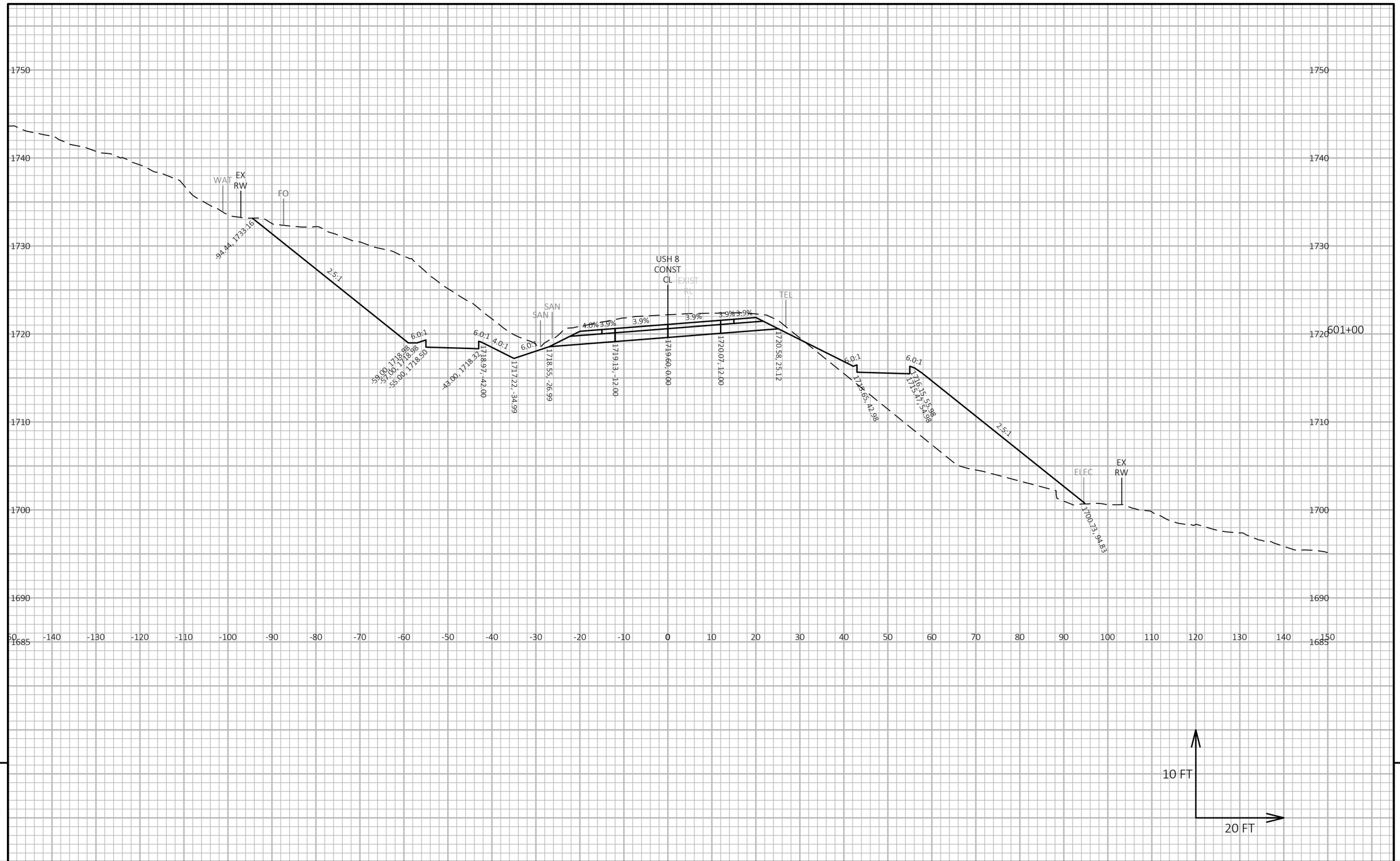


PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 372	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 60

PLOT DATE : 10/11/2024 10:02 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

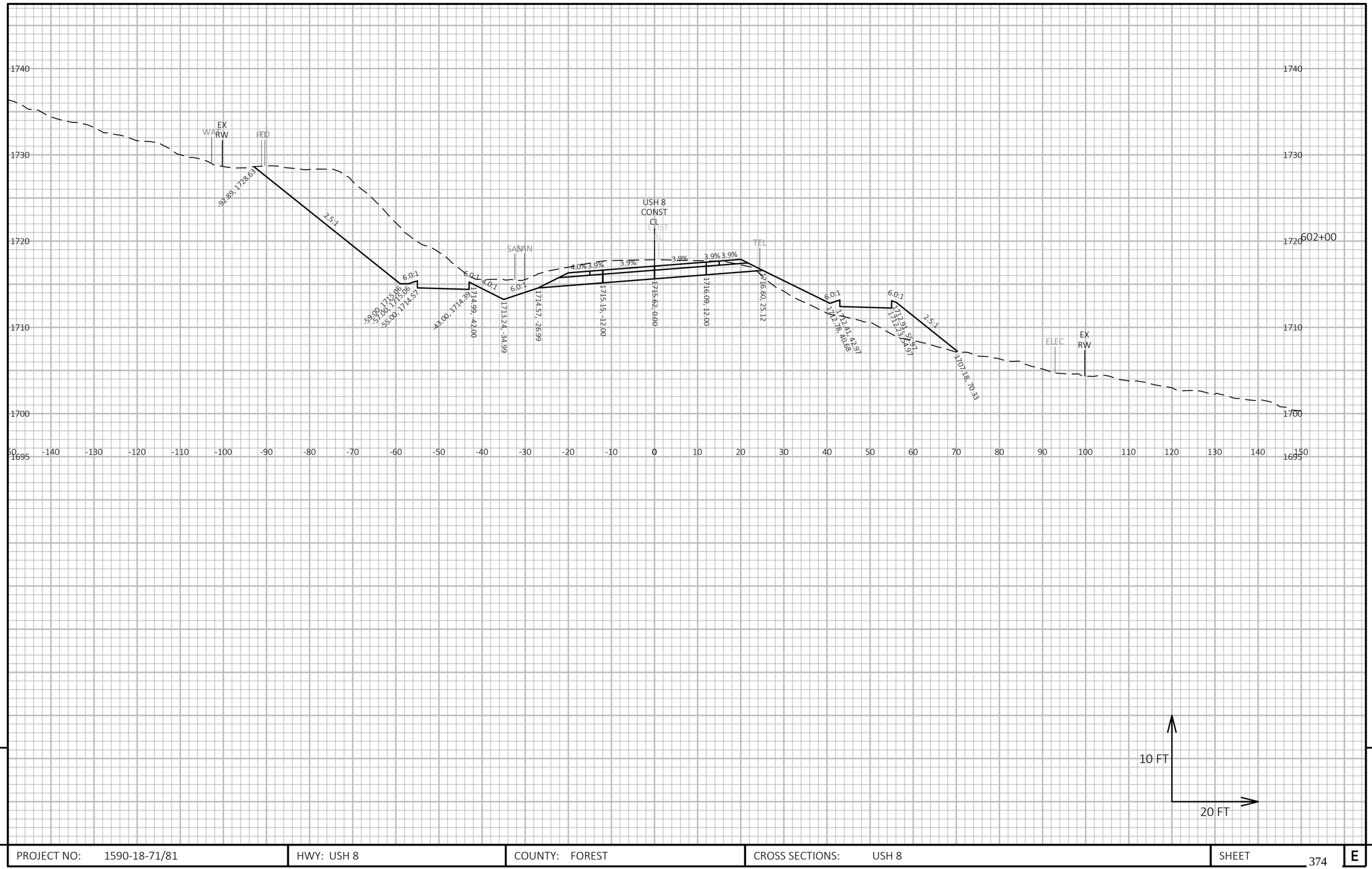
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 373	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 61

PLOT DATE : 10/11/2024 10:02 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

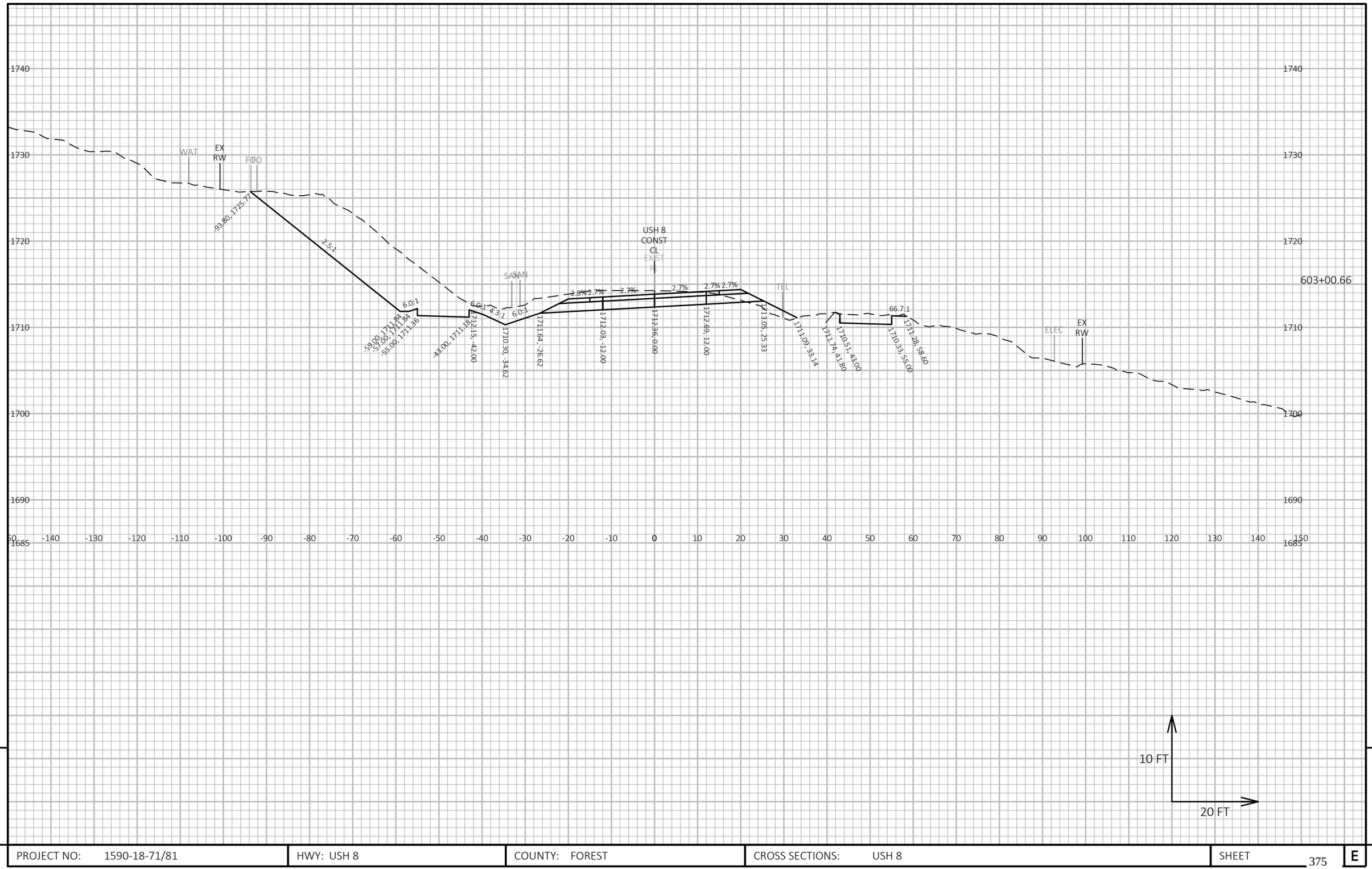
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 374	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 62

PLOT DATE : 10/11/2024 10:02 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

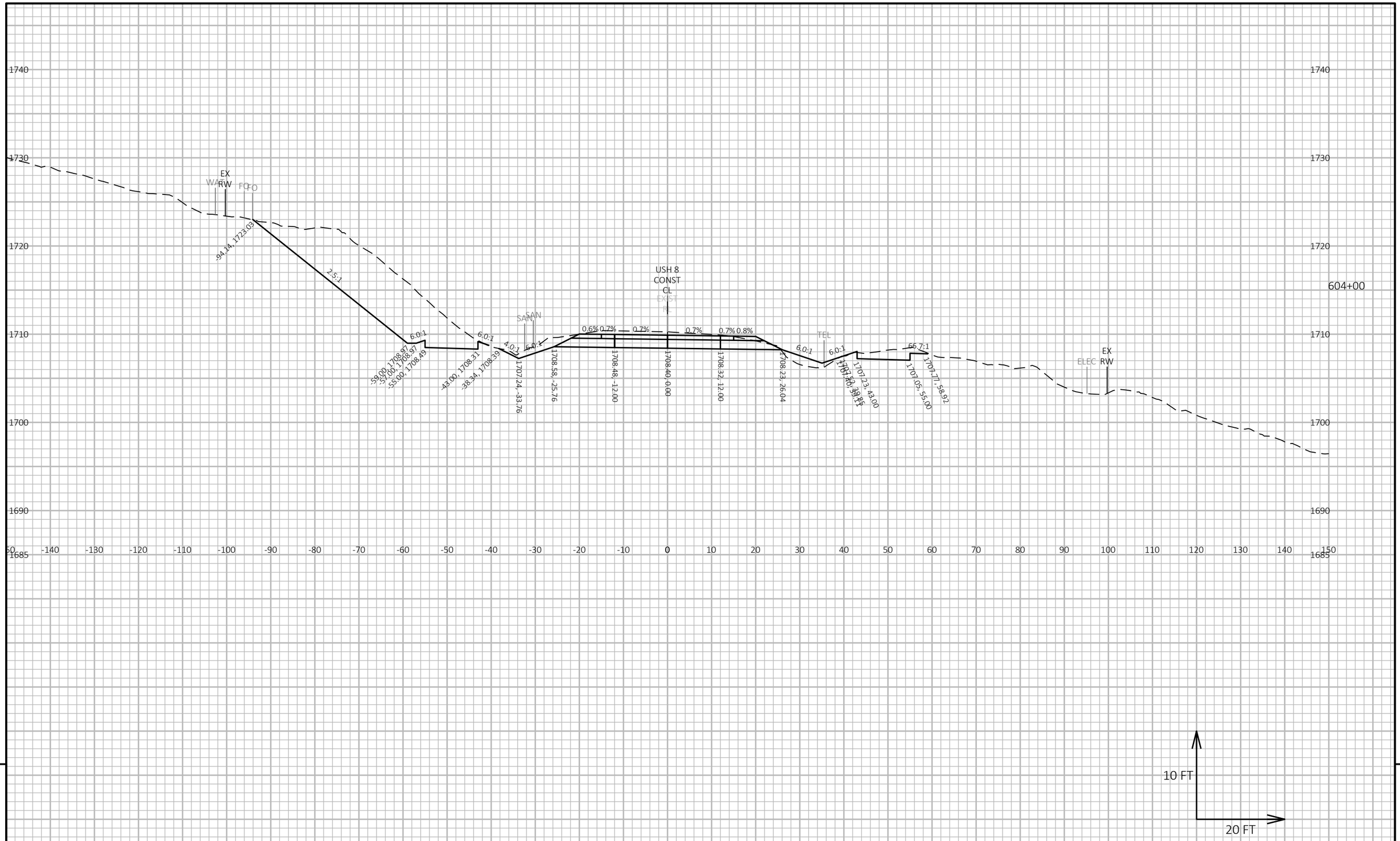
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 375	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 63

PLOT DATE : 10/11/2024 10:02 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

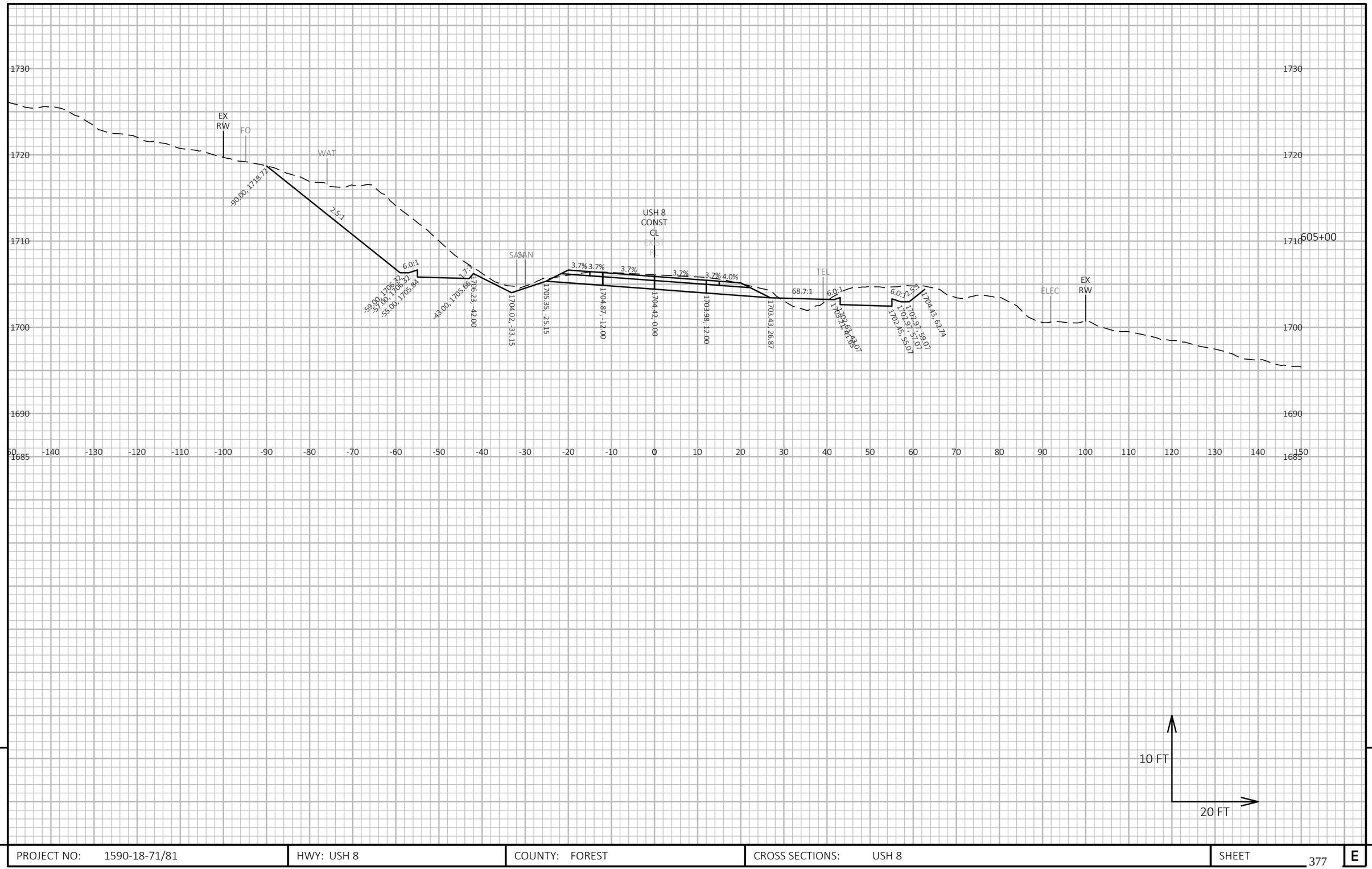
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 376	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 64

PLOT DATE : 10/11/2024 10:02 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

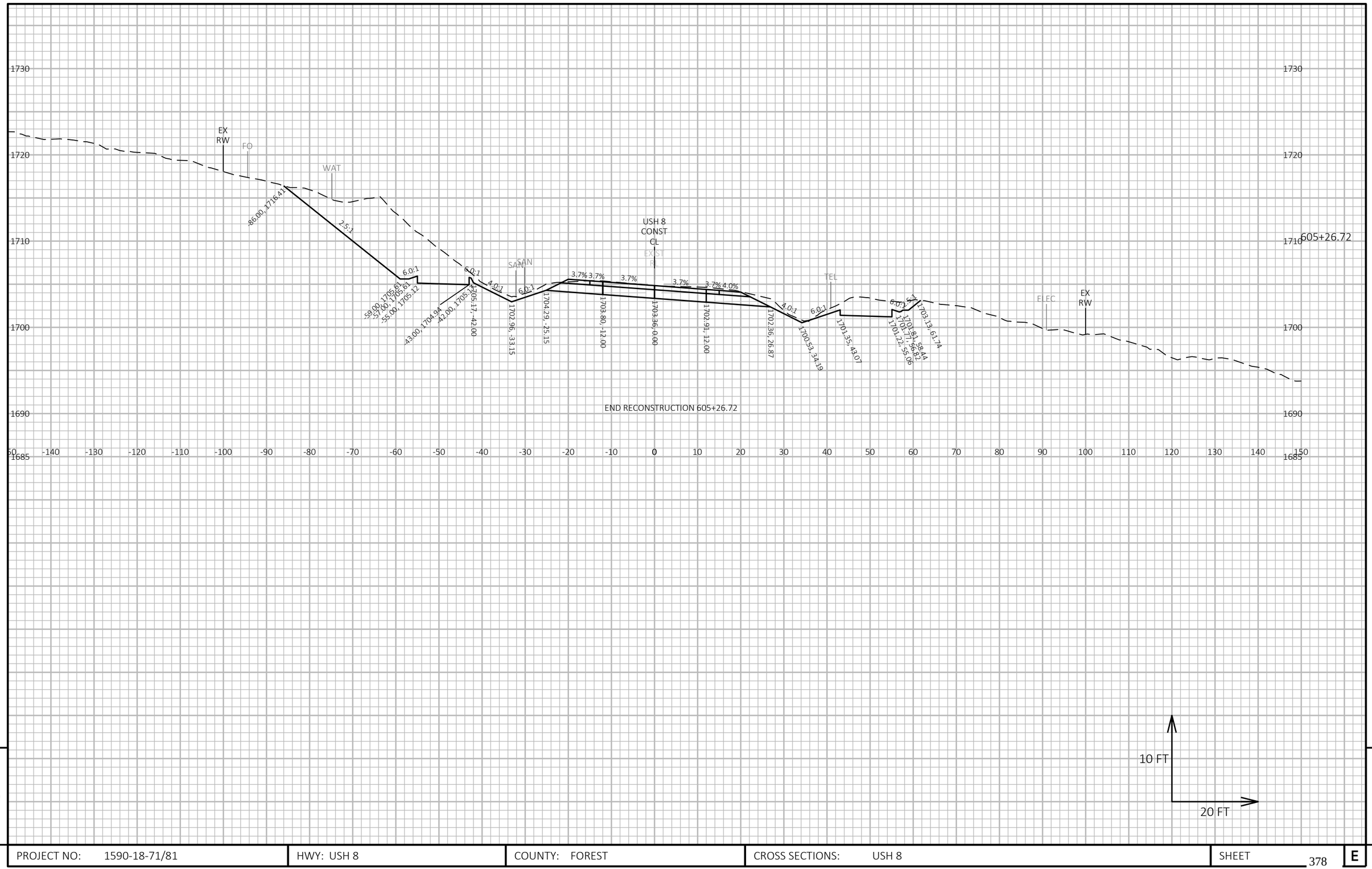
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 377	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 65

PLOT DATE : 10/11/2024 10:02 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

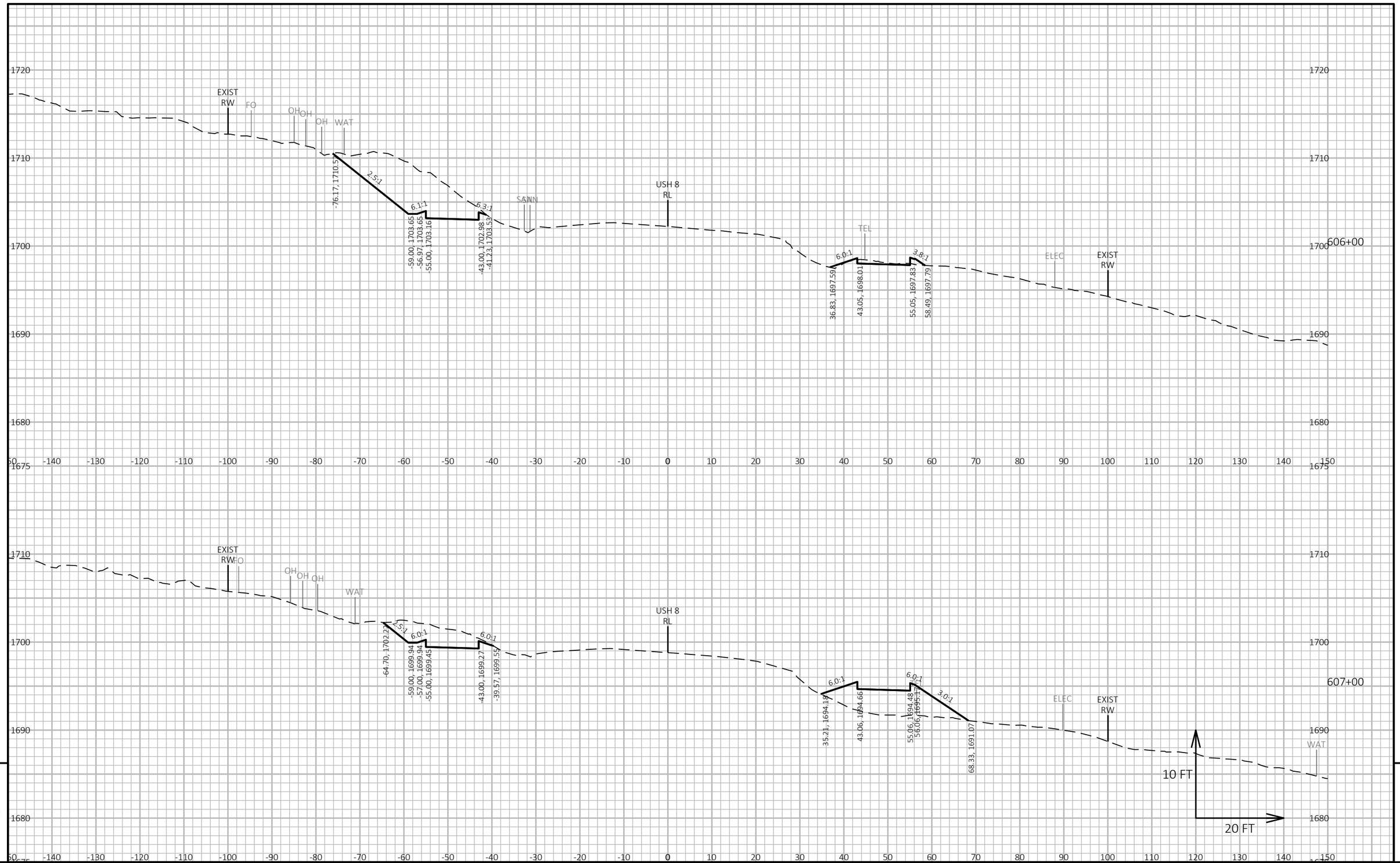


PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 378	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-55350-60526-FINALX.DWG
LAYOUT NAME - 66

PLOT DATE : 10/11/2024 10:02 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 379 E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-60550-62097.DWG
LAYOUT NAME - 01

PLOT DATE : 10/11/2024 10:06 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

608+00

EXIST RW

OH OH OH

WAT

TEL

3.0:1 6.0:1

6.0:1

-61.25, 1694.43

-55.00, 1694.13

-55.00, 1695.33

-43.00, 1695.35

-33.89, 1694.68

USH 8 RL

WAT

TEL

ELEC

SAN

EXIST RW

609+00

EXIST RW

OH OH OH OH OH

TEL

3.0:1 6.0:1

6.0:1

-61.96, 1692.61

-55.00, 1694.59

-55.00, 1695.94

-43.00, 1693.76

-35.07, 1693.29

USH 8 RL

SAN

EXIST RW

CULVERT PIPE UNDER TRAIL IS UNDER PROJECT ID 9813-02-70

CULV: 21008000190
CULVERT PIPE REINFORCED CONCRETE CLASS III 30-INCH
APRON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH
SKEW 9° RHF

10 FT

20 FT

9

9

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 380	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-60550-62097.DWG
LAYOUT NAME - 02

PLOT DATE : 10/11/2024 10:06 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

609+05

3.0:1 6.0:1 6.0:1

-61.09, 1692.84
-55.00, 1694.53
-55.00, 1693.88
-43.00, 1693.70
-38.15, 1693.74

CULVERT PIPE UNDER TRAIL IS
UNDER PROJECT ID 9813-02-70

CULV: 21008000190
CULVERT PIPE REINFORCED CONCRETE CLASS III 30-INCH
APRON ENDWALL FOR CULVERT PIPE REINFORCED
CONCRETE 30-INCH
SKEW 9° RHF

1700 1690 1680 1675

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FO OH OH OH

SAN

USH 8
RL

4.0:1 6.0:1 6.0:1 4.0:1

-69.51, 1689.82
-55.95, 1692.21
-54.95, 1692.56
-42.95, 1692.38
-41.95, 1693.06
-33.57, 1690.97

EXIST
RW

610+00

1700 1690 1680 1670 1665

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

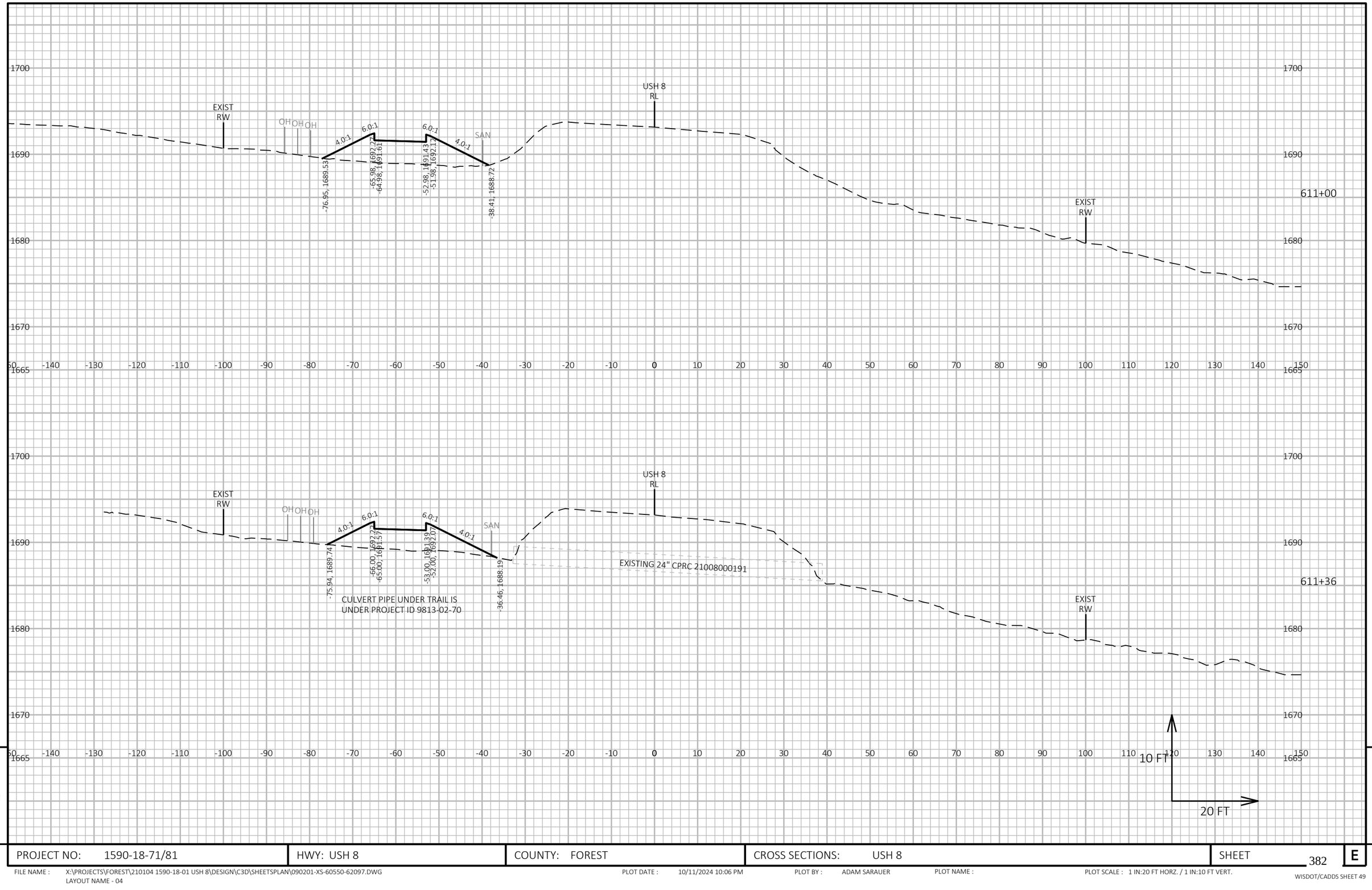
10 FT
20 FT

9 9

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 381	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-60550-62097.DWG
LAYOUT NAME - 03

PLOT DATE : 10/11/2024 10:06 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



9 9

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 382	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-60550-62097.DWG
LAYOUT NAME - 04

PLOT DATE : 10/11/2024 10:06 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

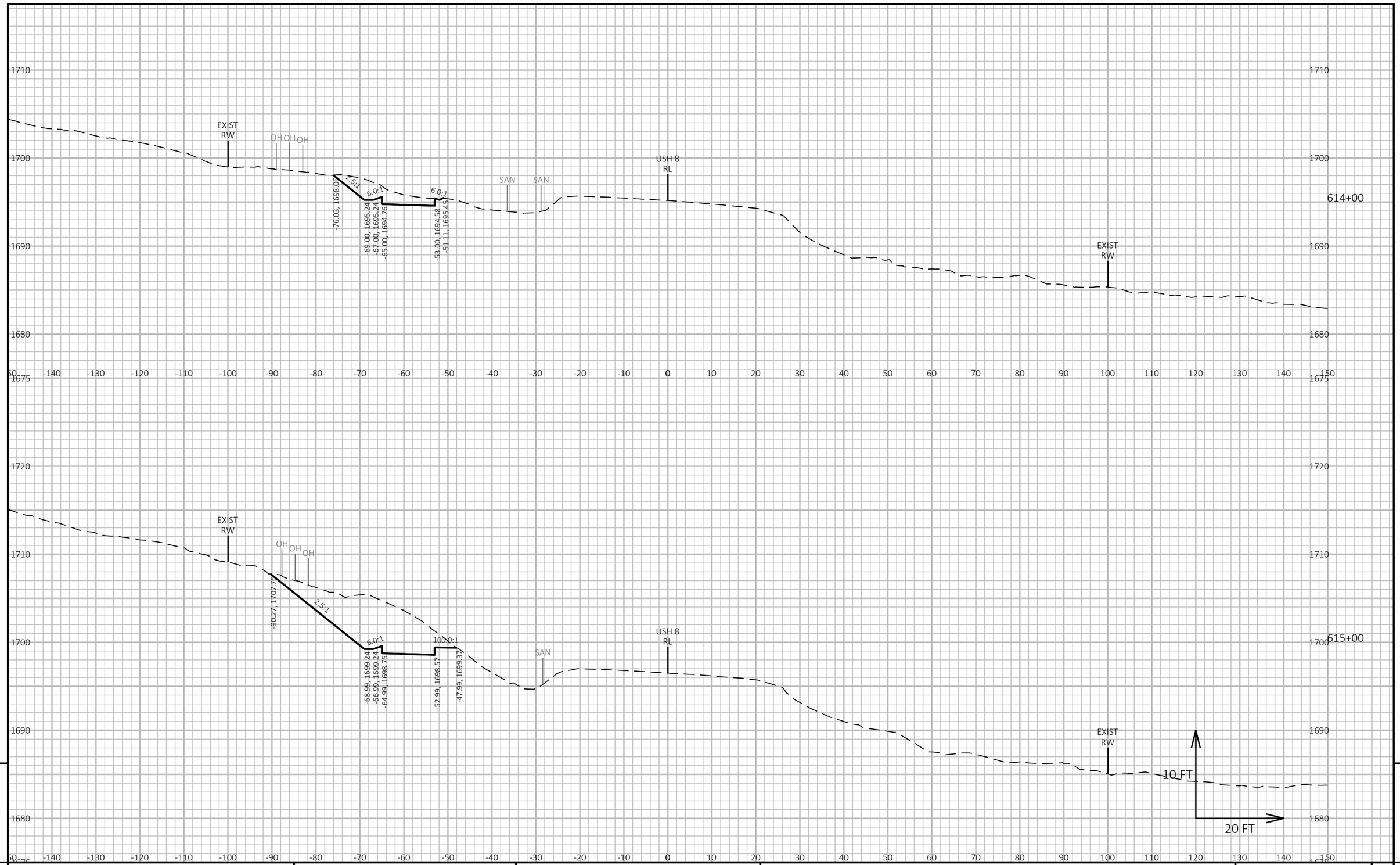


PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 383	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-60550-62097.DWG
LAYOUT NAME - 05

PLOT DATE : 10/11/2024 10:06 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

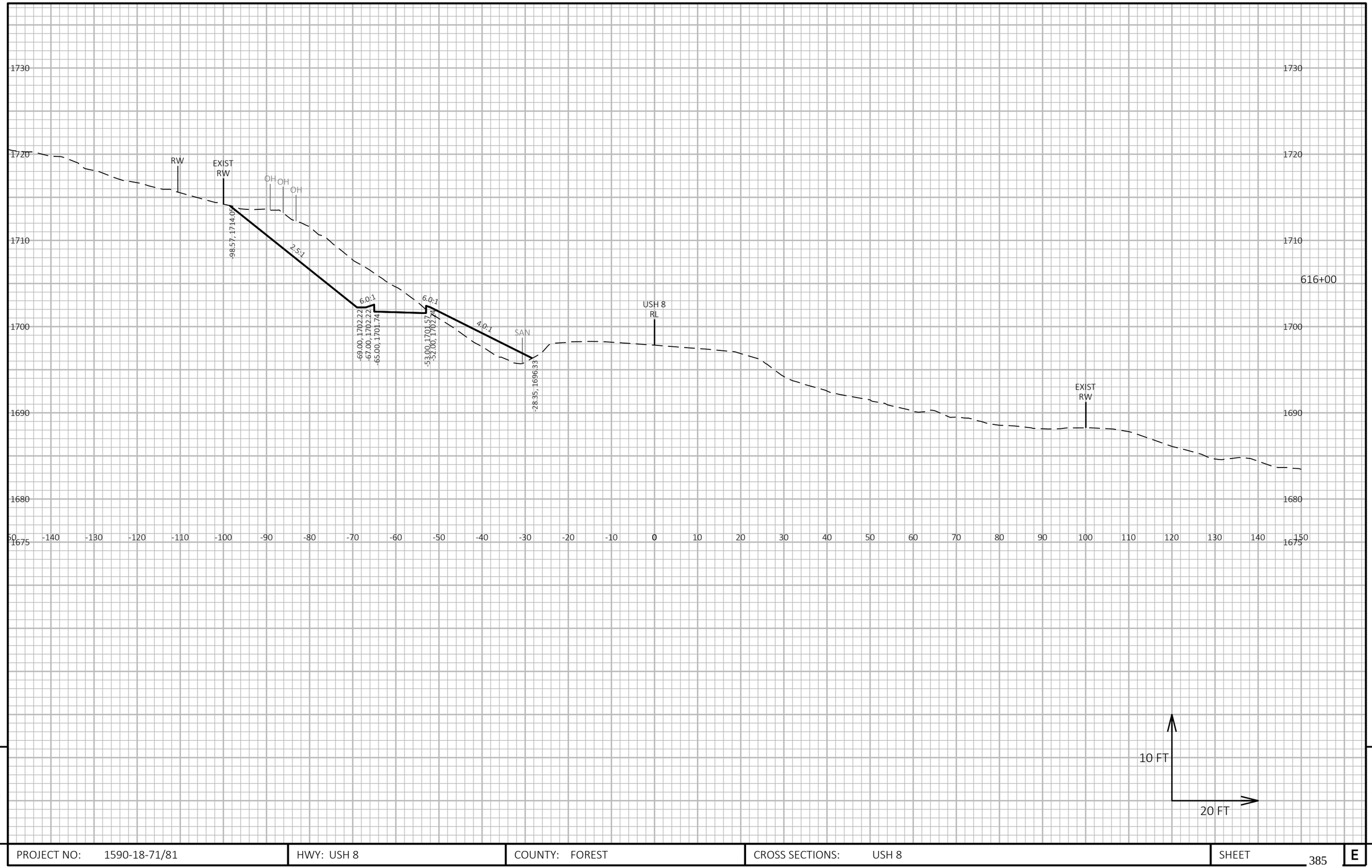


PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 384 E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-60550-62097.DWG
LAYOUT NAME - 06

PLOT DATE : 10/11/2024 10:06 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

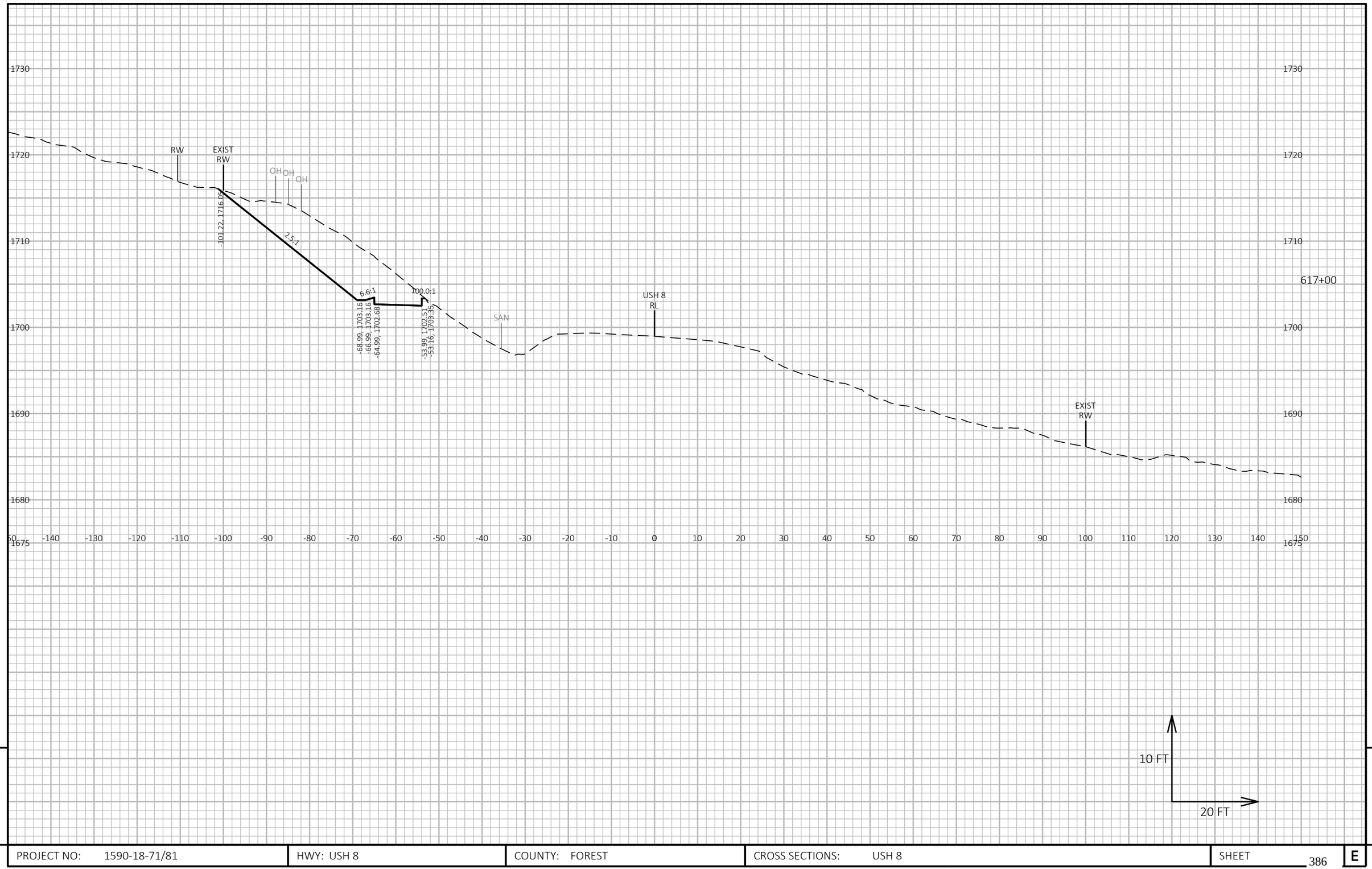
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 385	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-60550-62097.DWG
LAYOUT NAME - 07

PLOT DATE : 10/11/2024 10:06 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

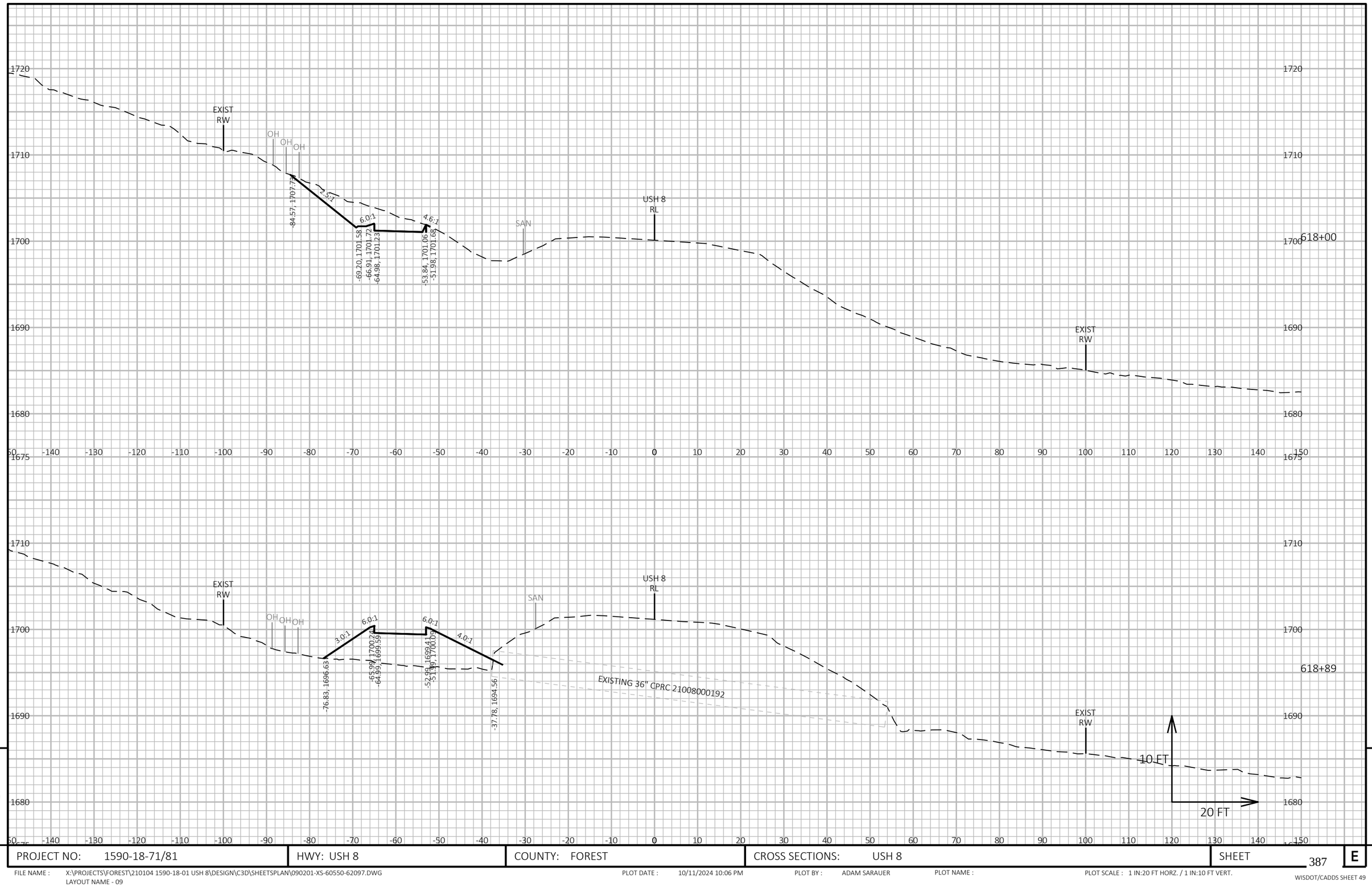
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 386	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-60550-62097.DWG
LAYOUT NAME - 08

PLOT DATE : 10/11/2024 10:06 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

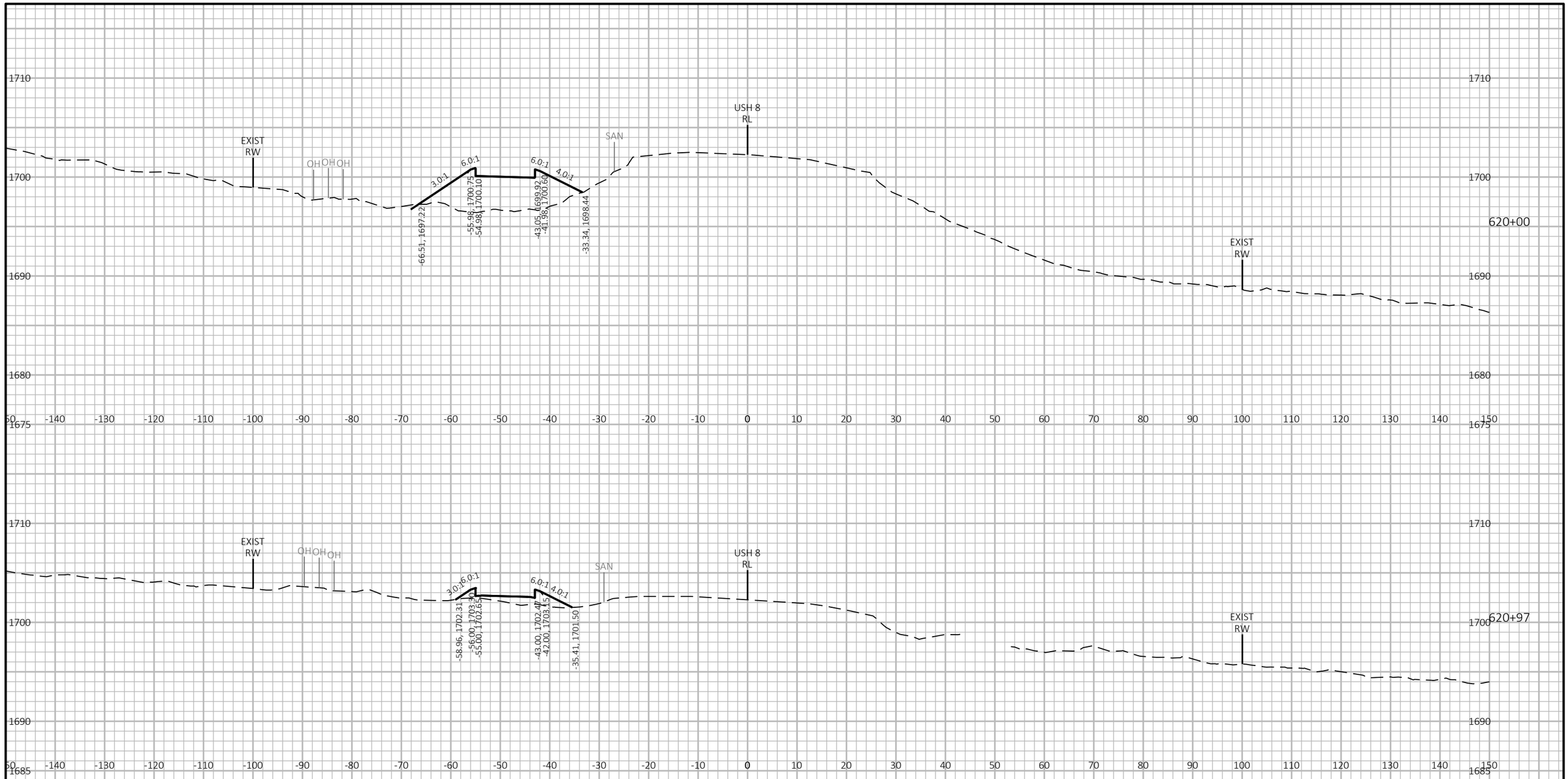
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 387	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-60550-62097.DWG
LAYOUT NAME - 09

PLOT DATE : 10/11/2024 10:06 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

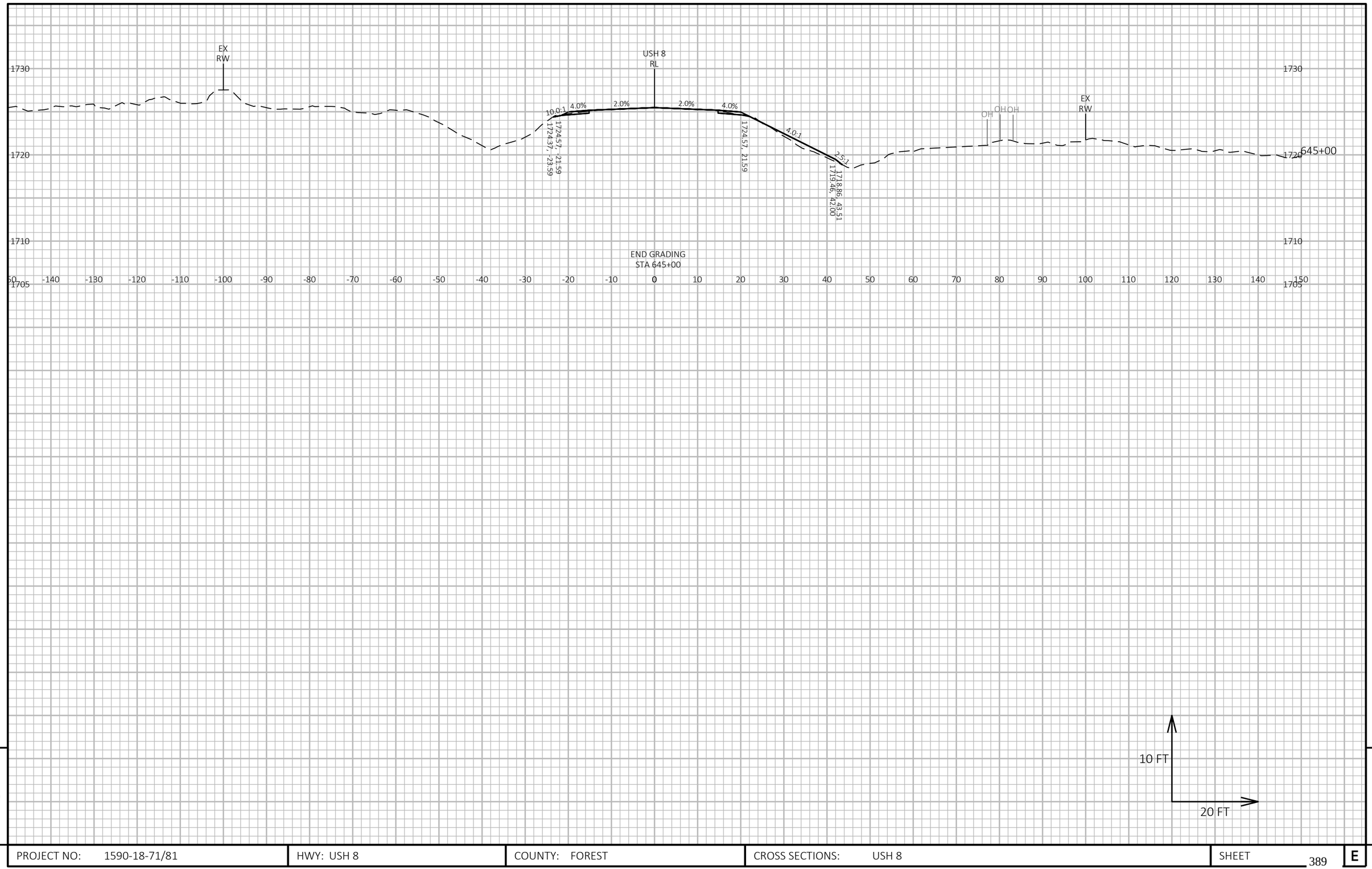


PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 388	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-60550-62097.DWG
LAYOUT NAME - 10

PLOT DATE : 10/11/2024 10:07 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

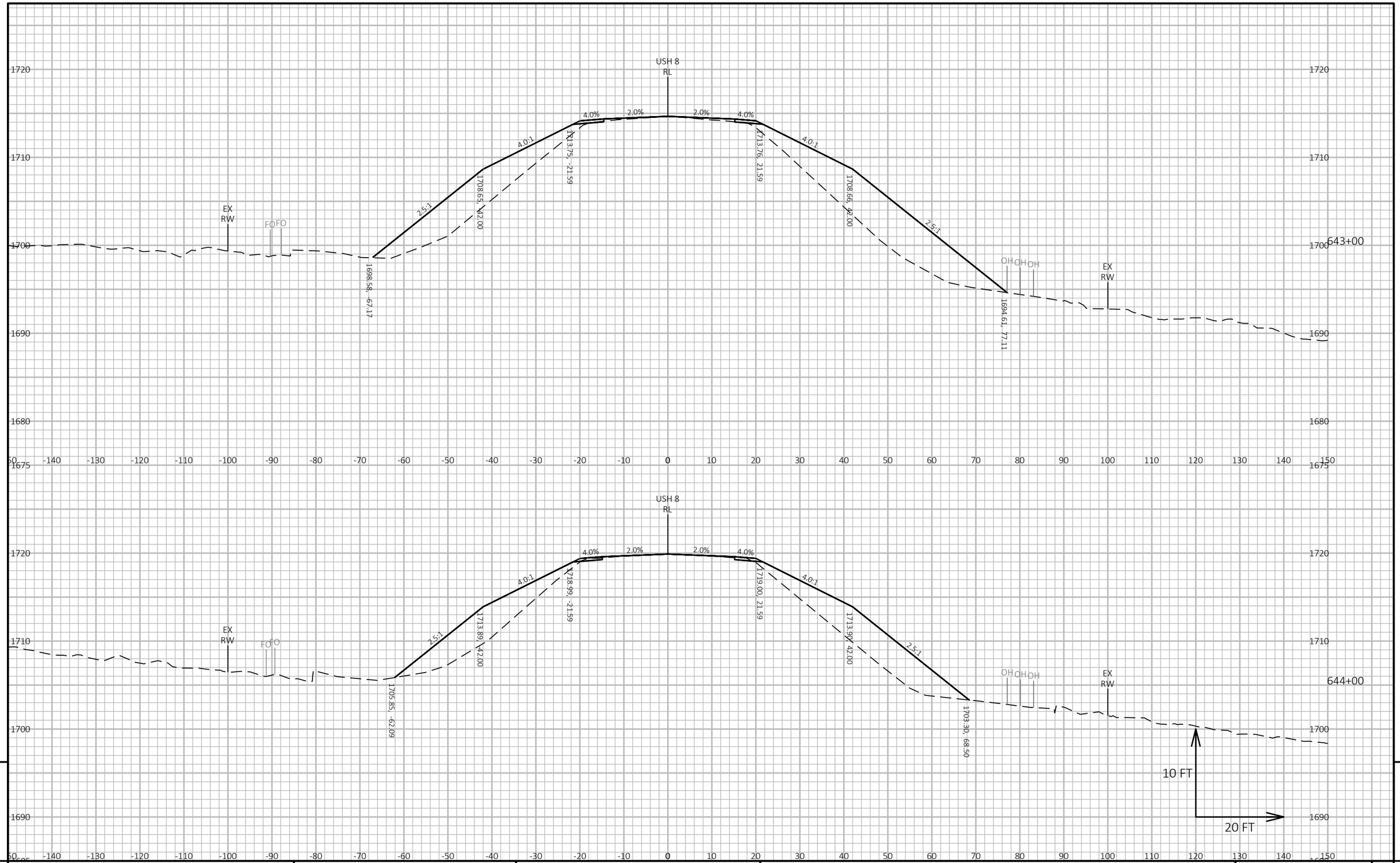
9

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 389	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-63450-64500.DWG
LAYOUT NAME - 09

PLOT DATE : 10/11/2024 10:10 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

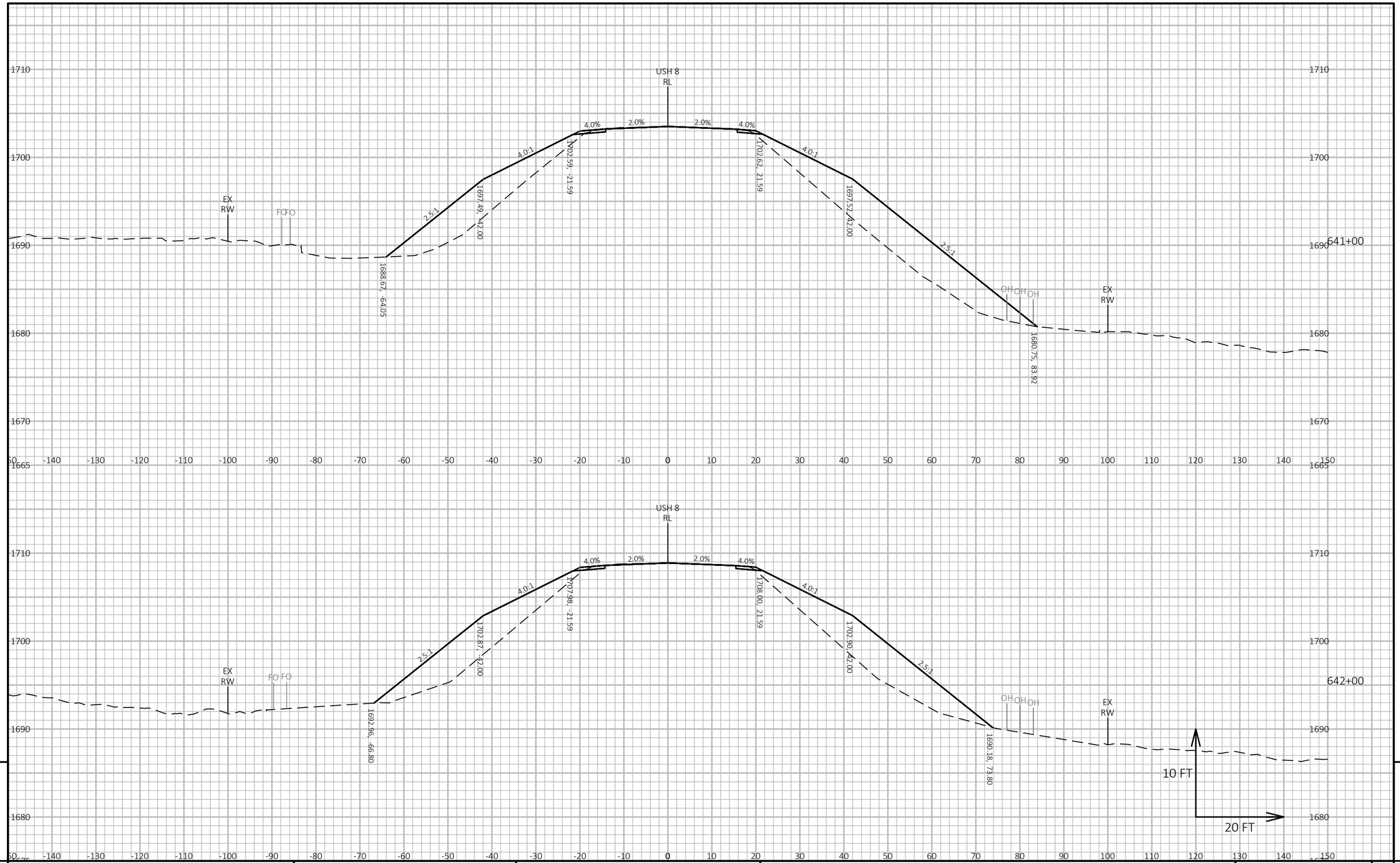


PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 390	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-63450-64500.DWG
LAYOUT NAME - 08

PLOT DATE : 10/11/2024 10:10 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

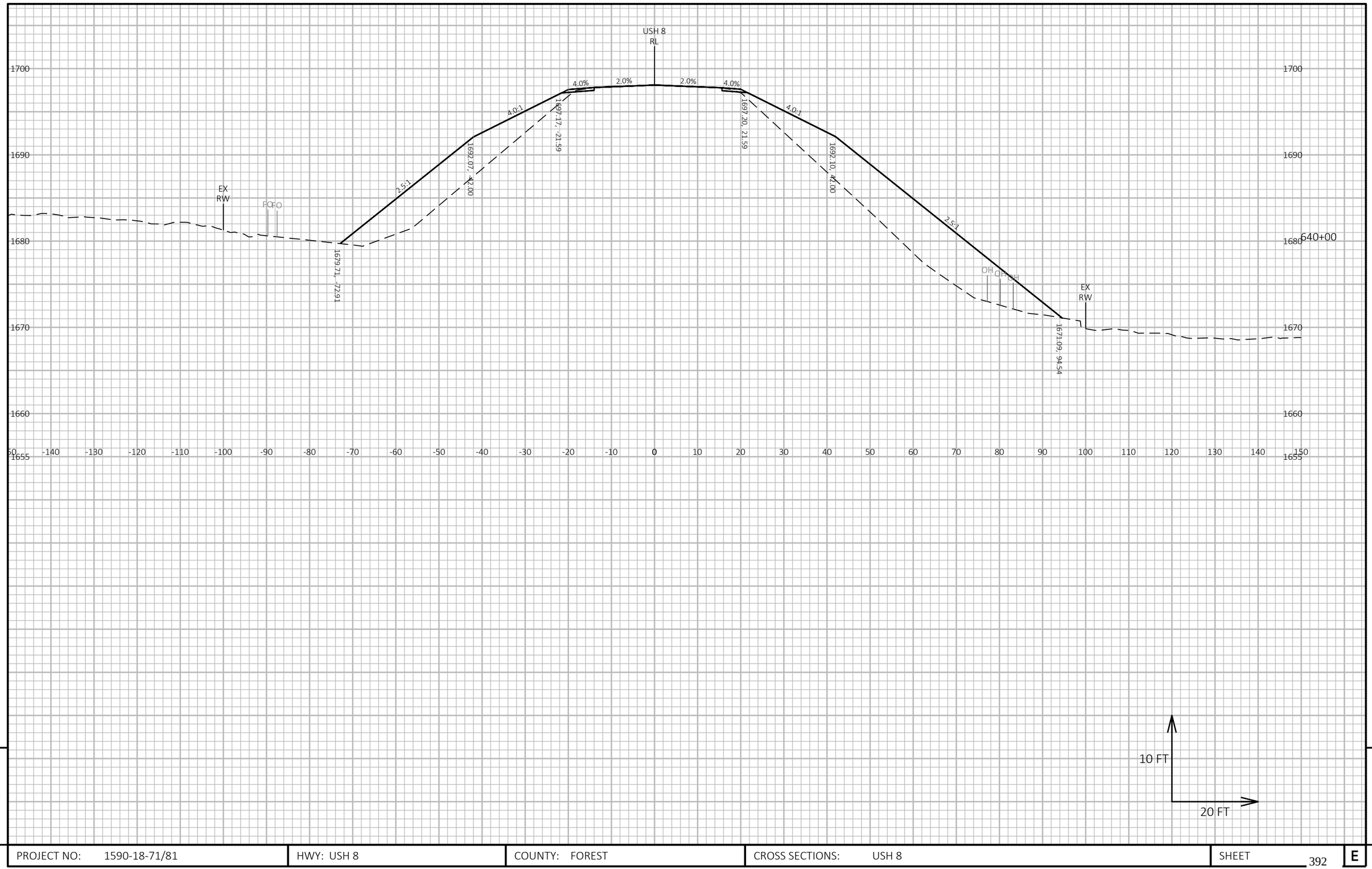


PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 391	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-63450-64500.DWG
LAYOUT NAME - 07

PLOT DATE : 10/11/2024 10:10 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

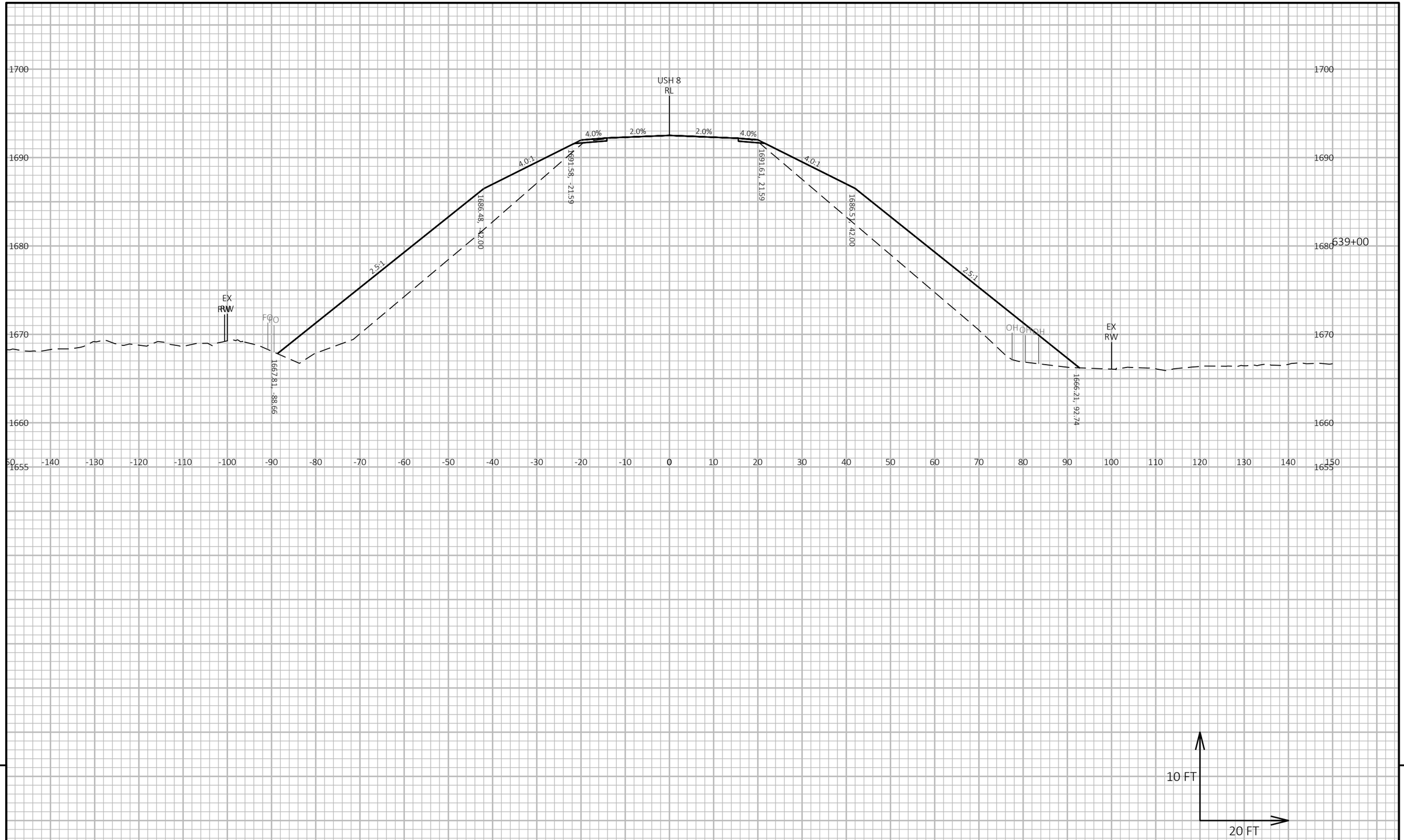
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 392	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-63450-64500.DWG
LAYOUT NAME - 06

PLOT DATE : 10/11/2024 10:10 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

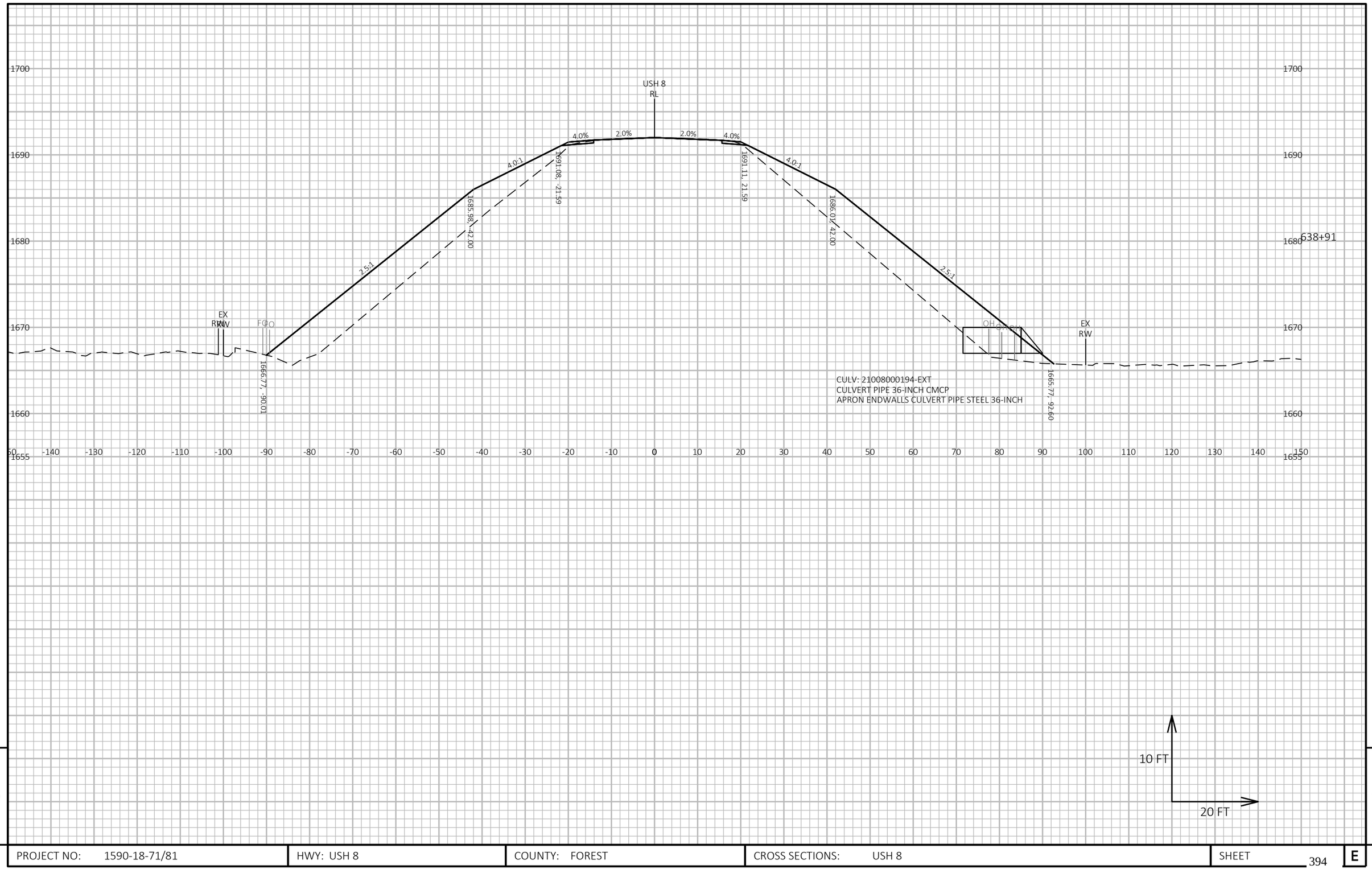
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 393	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-63450-64500.DWG
LAYOUT NAME - 05

PLOT DATE : 10/11/2024 10:10 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

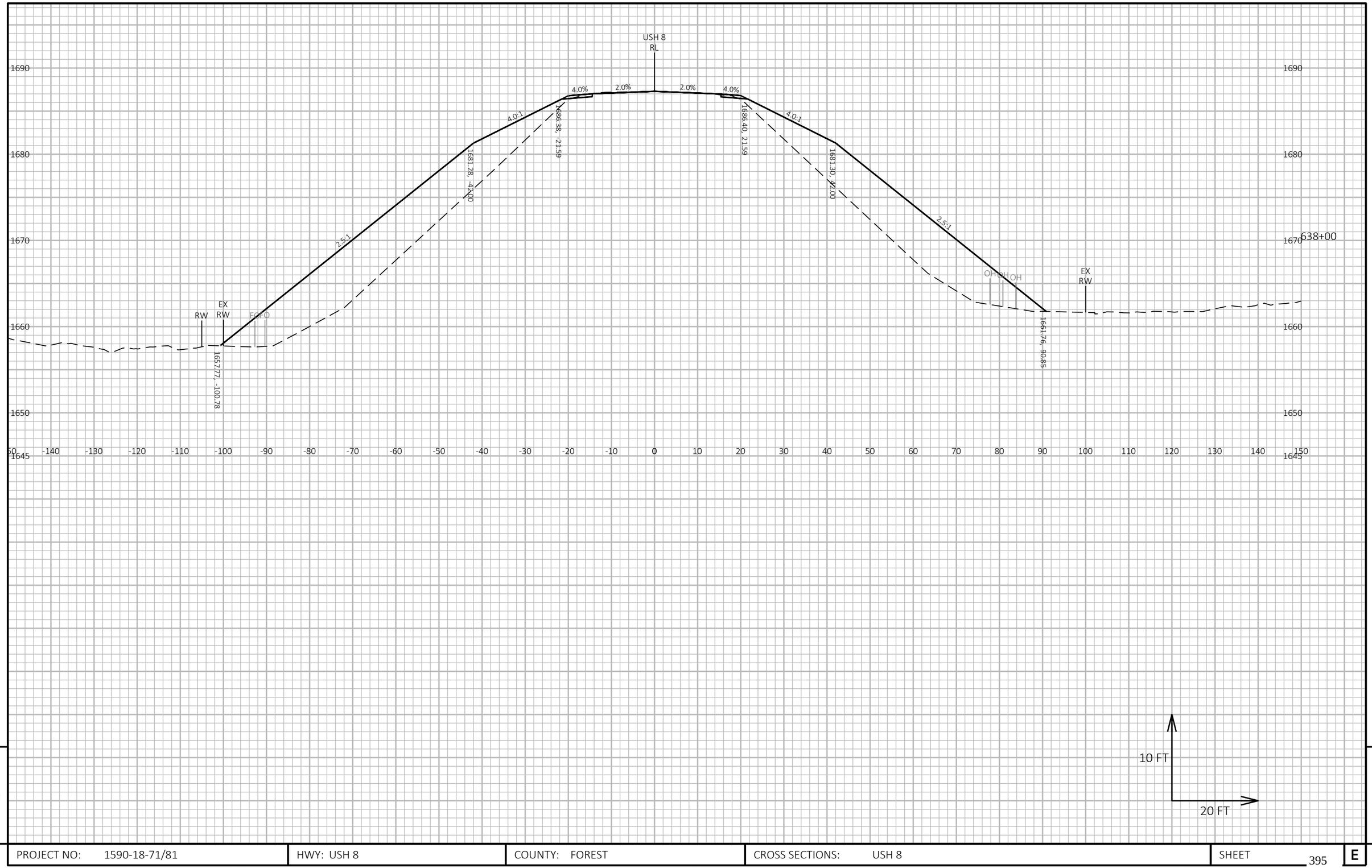
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 394	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-63450-64500.DWG
LAYOUT NAME - 04

PLOT DATE : 10/11/2024 10:10 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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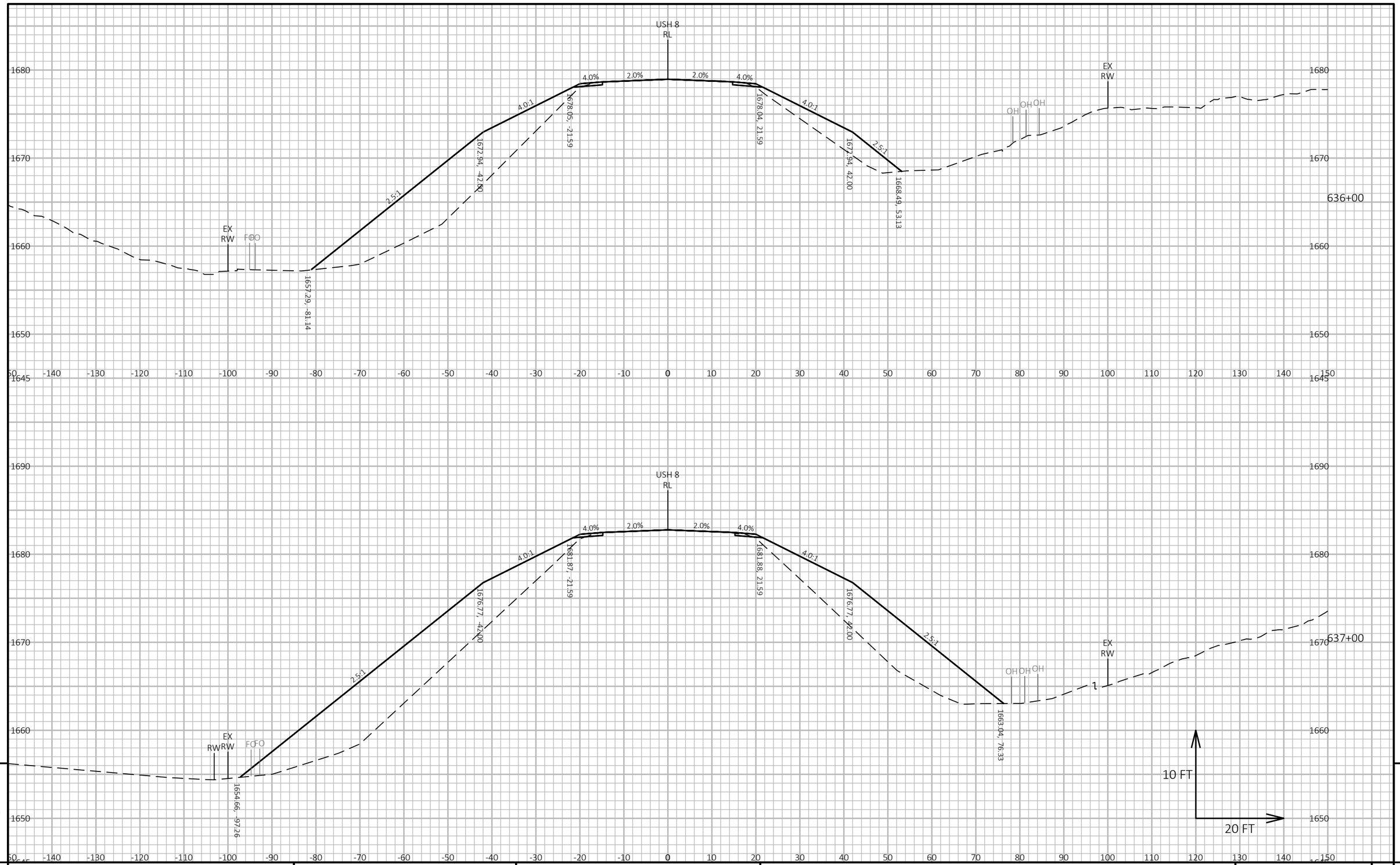
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 395	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-63450-64500.DWG
LAYOUT NAME - 03

PLOT DATE : 10/11/2024 10:10 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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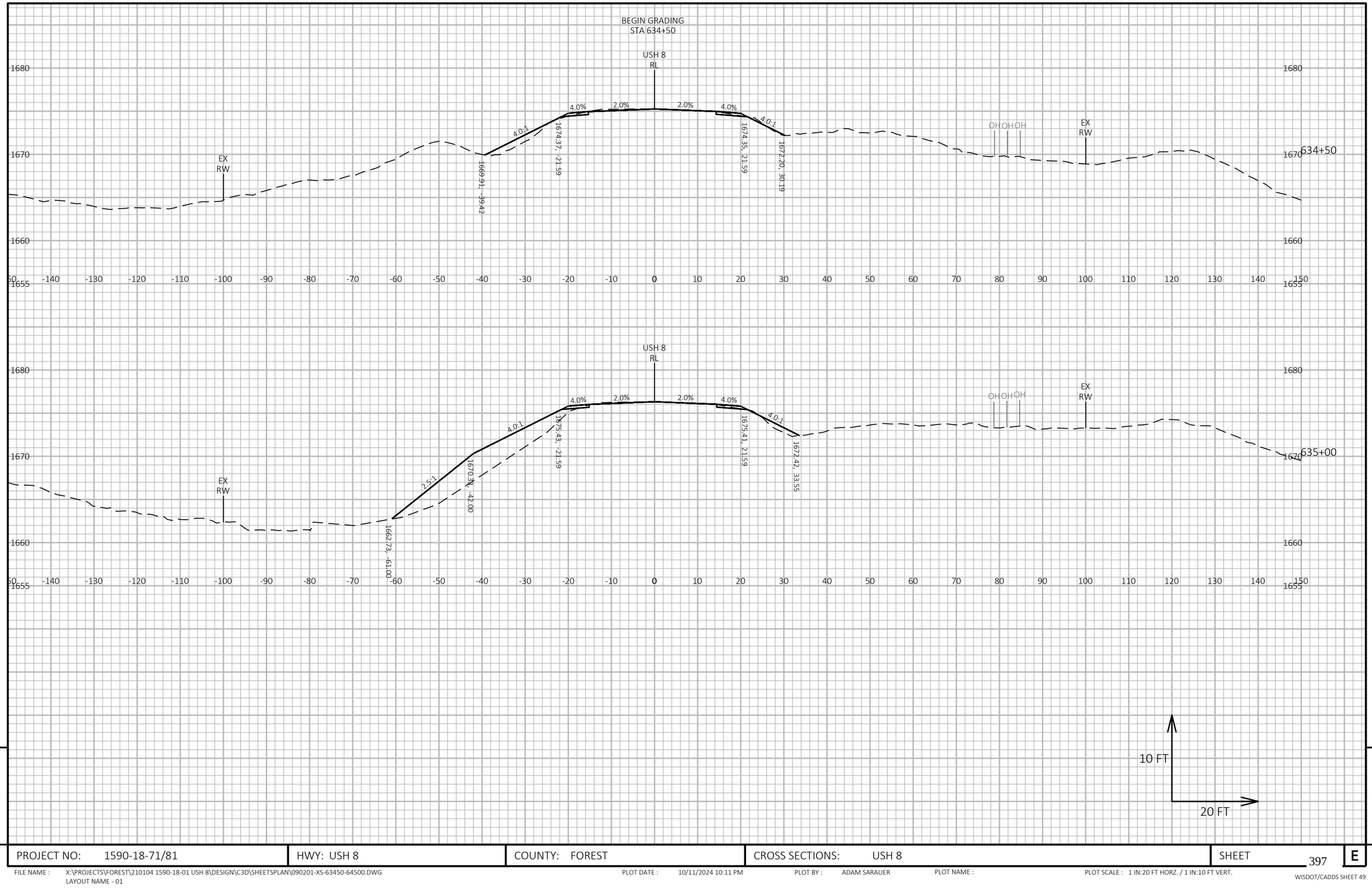
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 396	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-63450-64500.DWG
LAYOUT NAME - 02

PLOT DATE : 10/11/2024 10:10 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

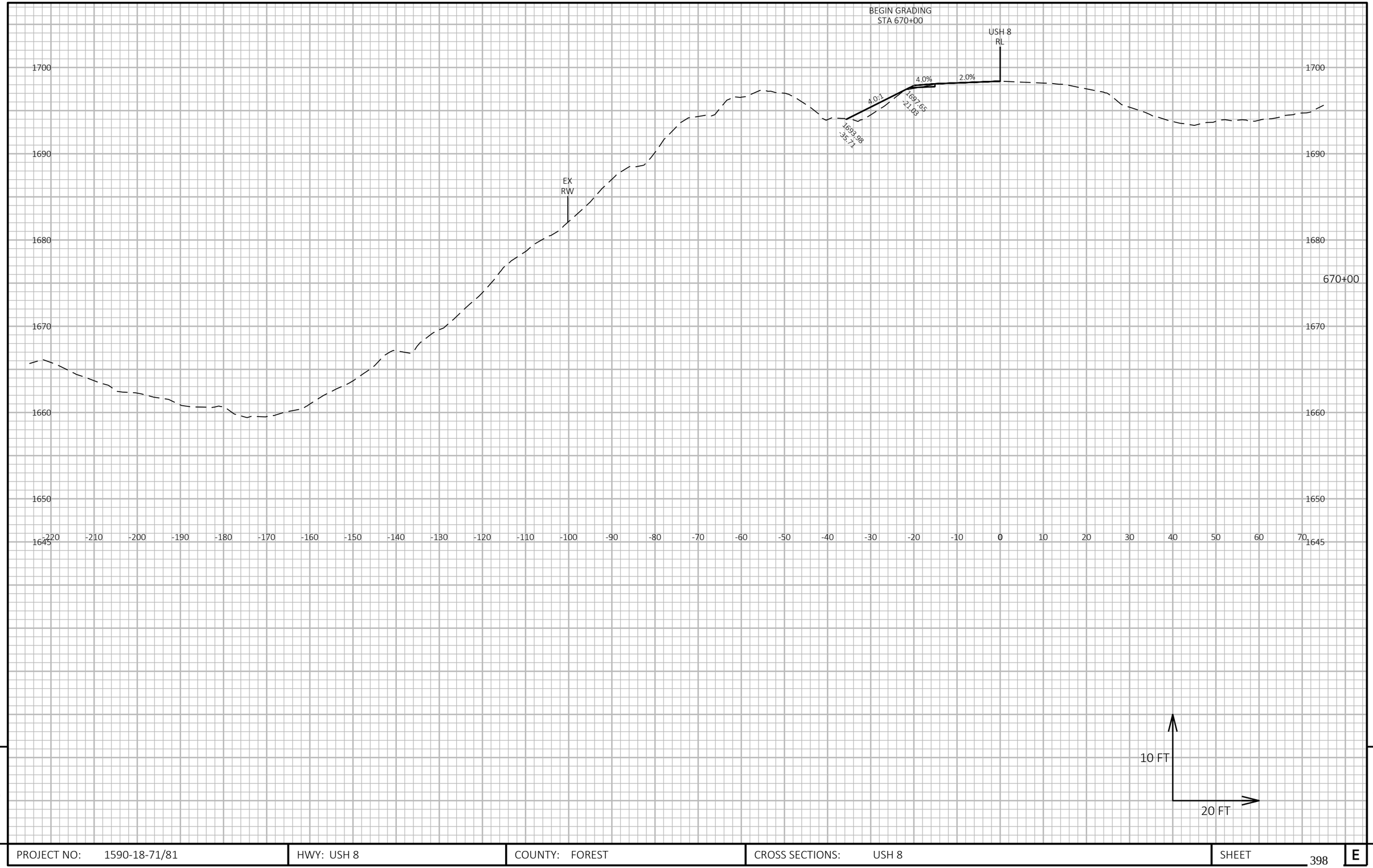
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 397	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-63450-64500.DWG
LAYOUT NAME - 01

PLOT DATE : 10/11/2024 10:11 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



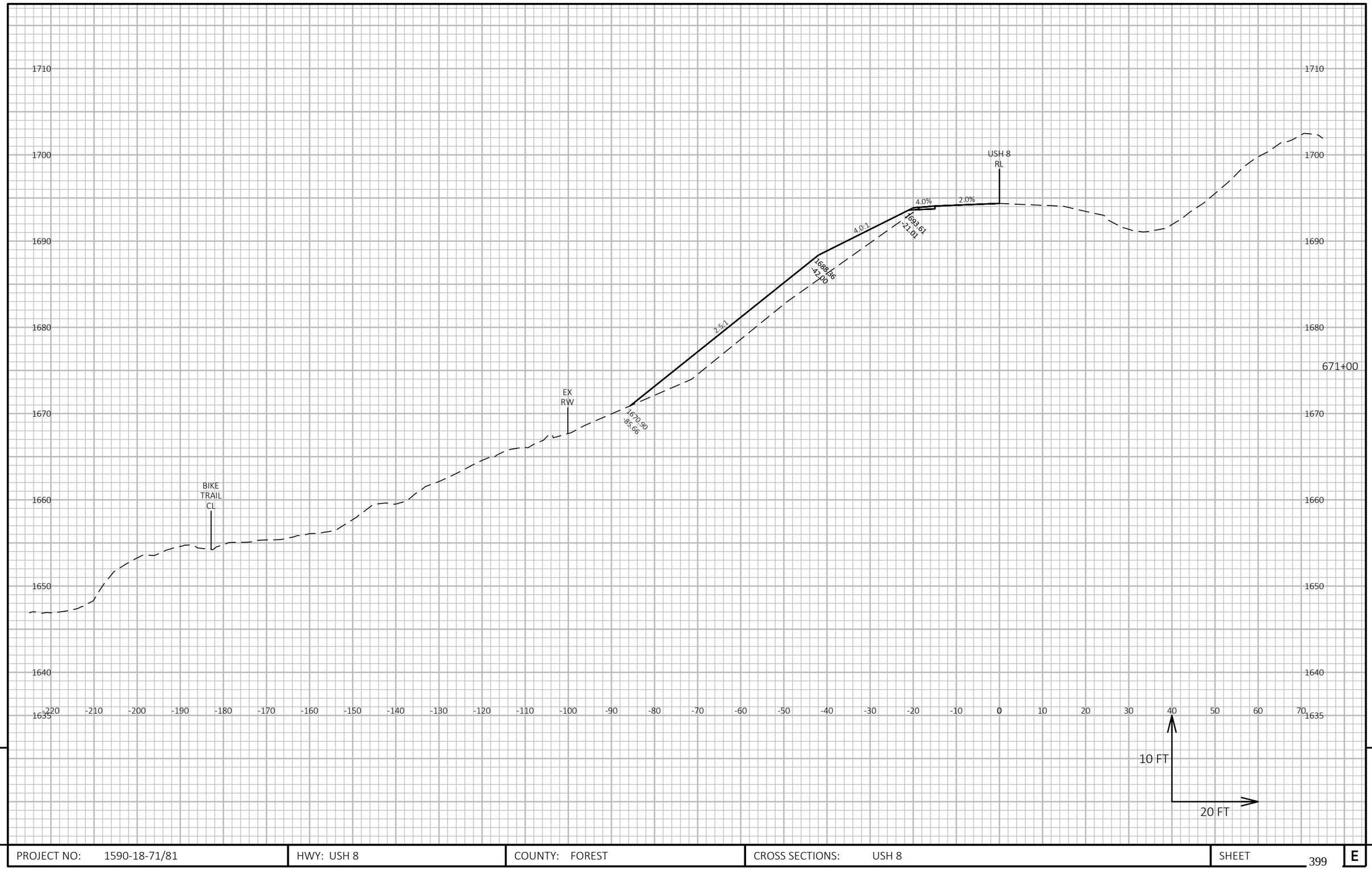
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 398	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-67000-67375.DWG
LAYOUT NAME - 01

PLOT DATE : 10/11/2024 10:12 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

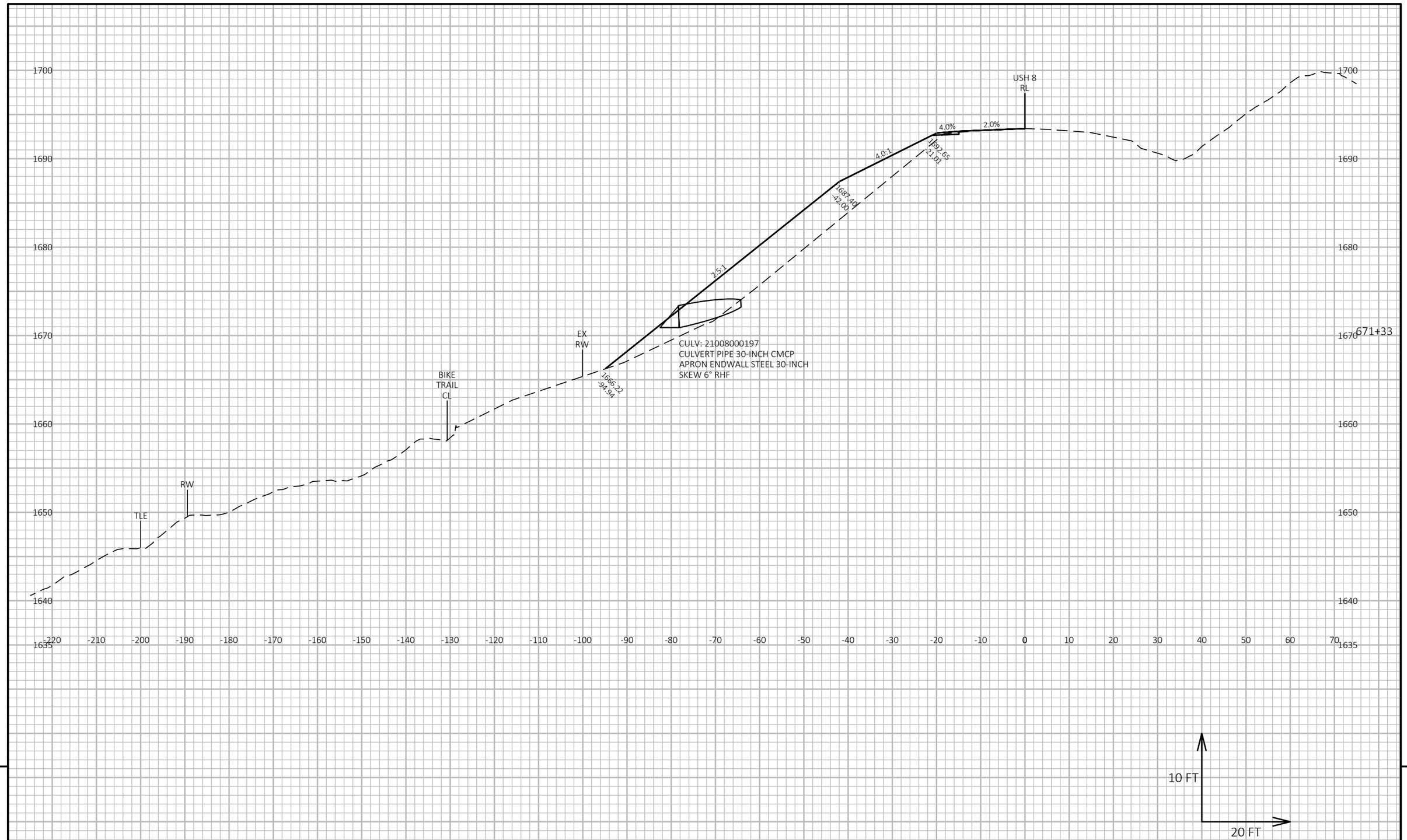


PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 399	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-67000-67375.DWG
LAYOUT NAME - 02

PLOT DATE : 10/11/2024 10:12 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

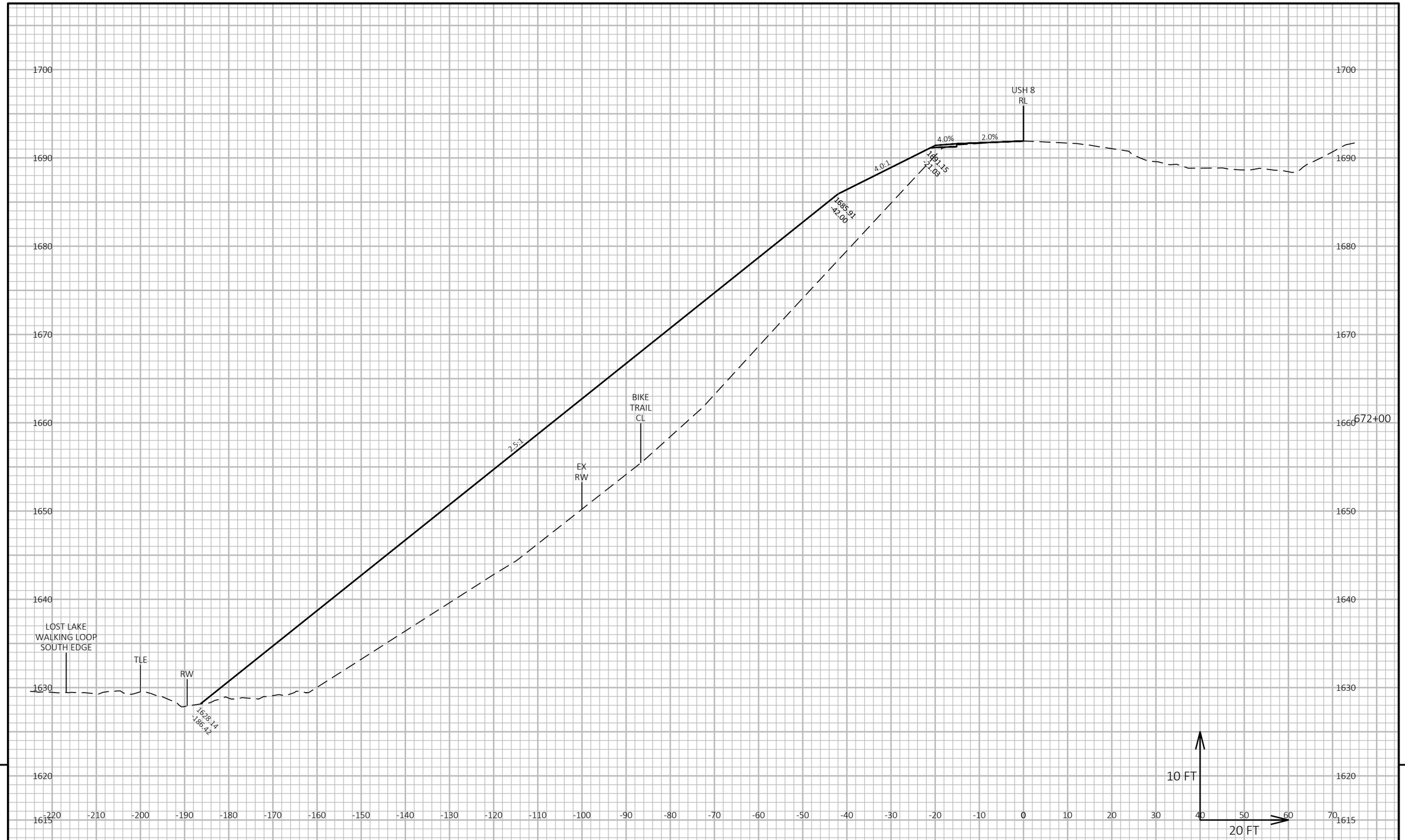
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 400	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-67000-67375.DWG
LAYOUT NAME - 03

PLOT DATE : 10/11/2024 10:12 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



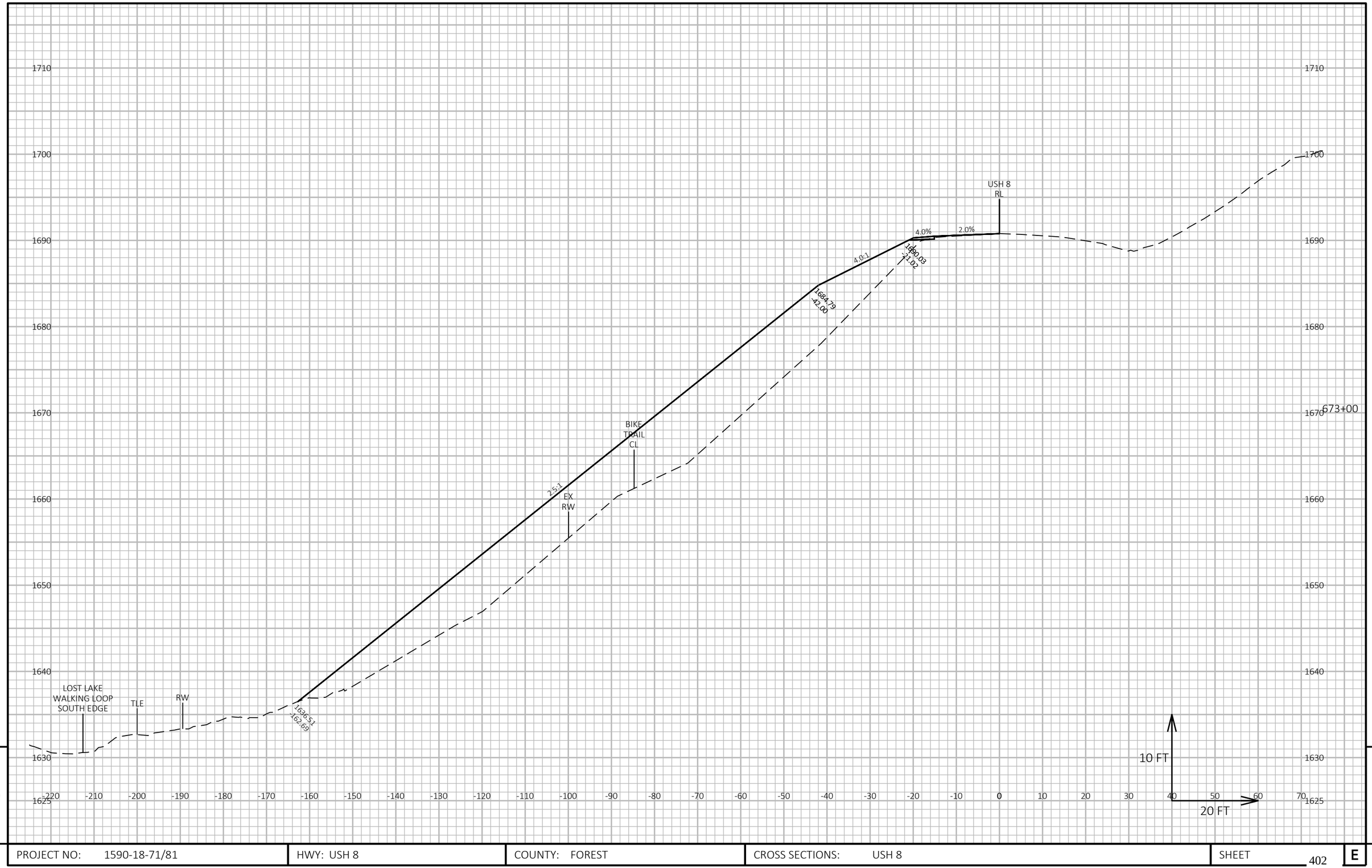
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 401	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-67000-67375.DWG
LAYOUT NAME - 04

PLOT DATE : 10/11/2024 10:12 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

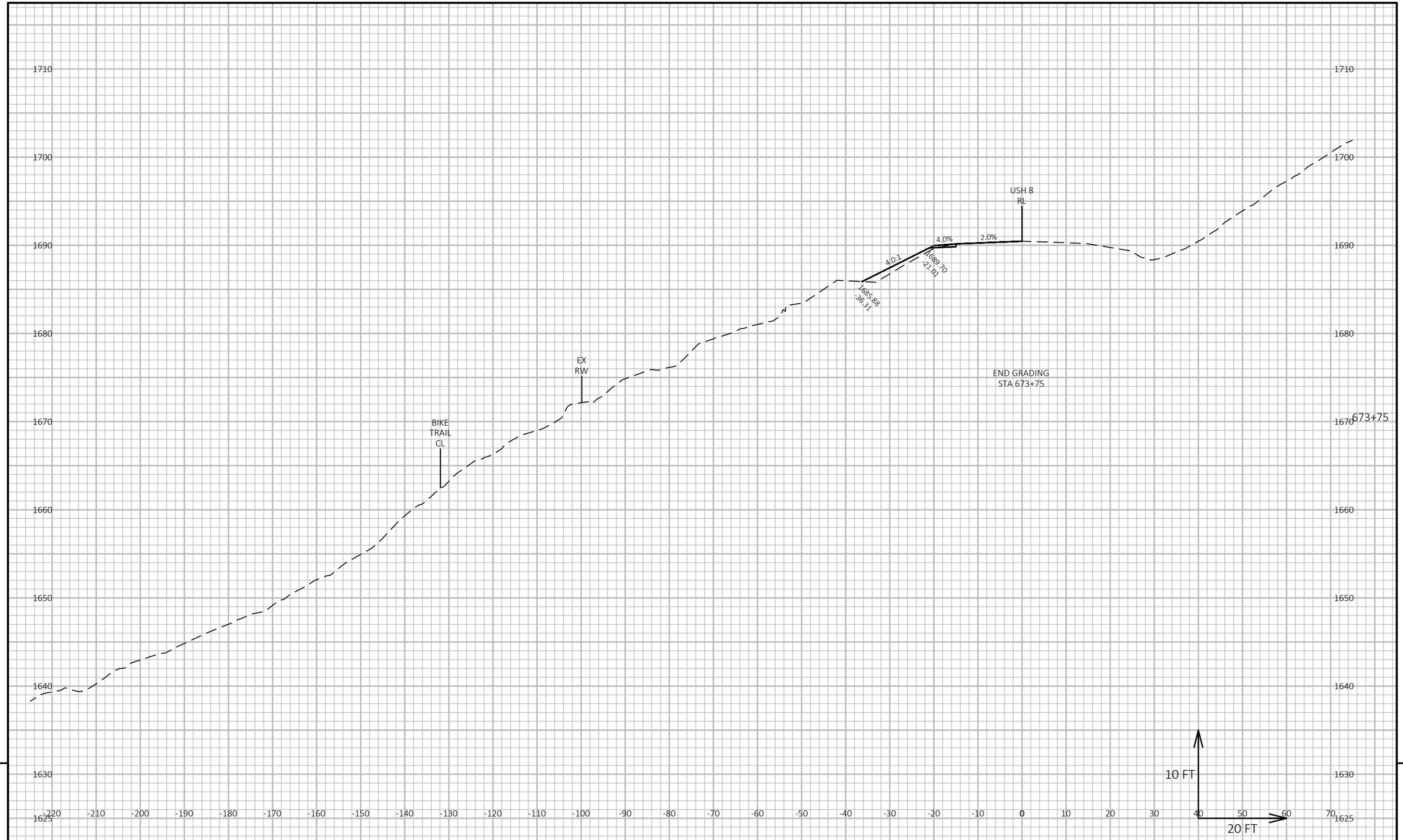


PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 402	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-67000-67375.DWG
LAYOUT NAME - 05

PLOT DATE : 10/11/2024 10:12 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

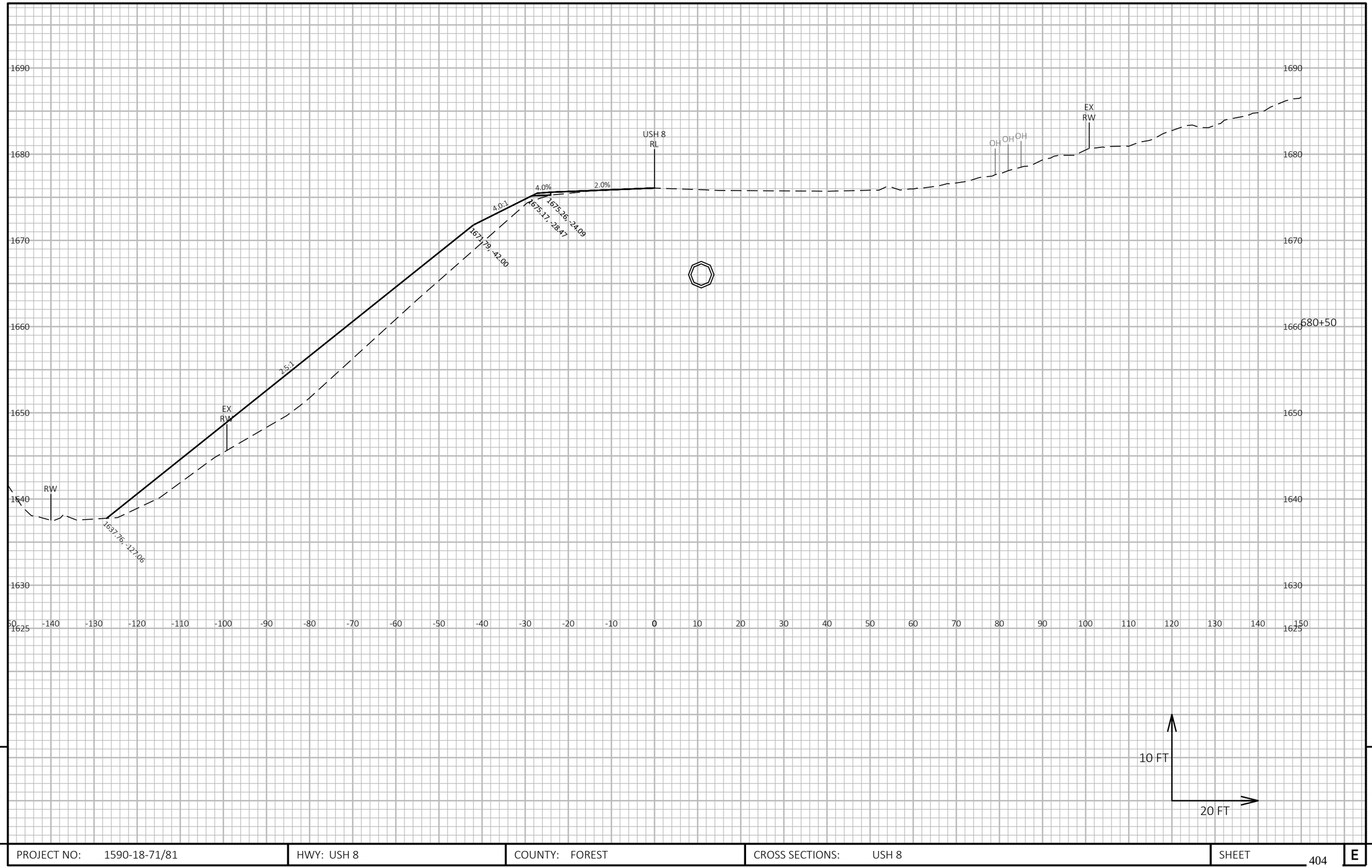
PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 403	E

9

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-67000-67375.DWG
LAYOUT NAME - 06

PLOT DATE : 10/11/2024 10:12 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

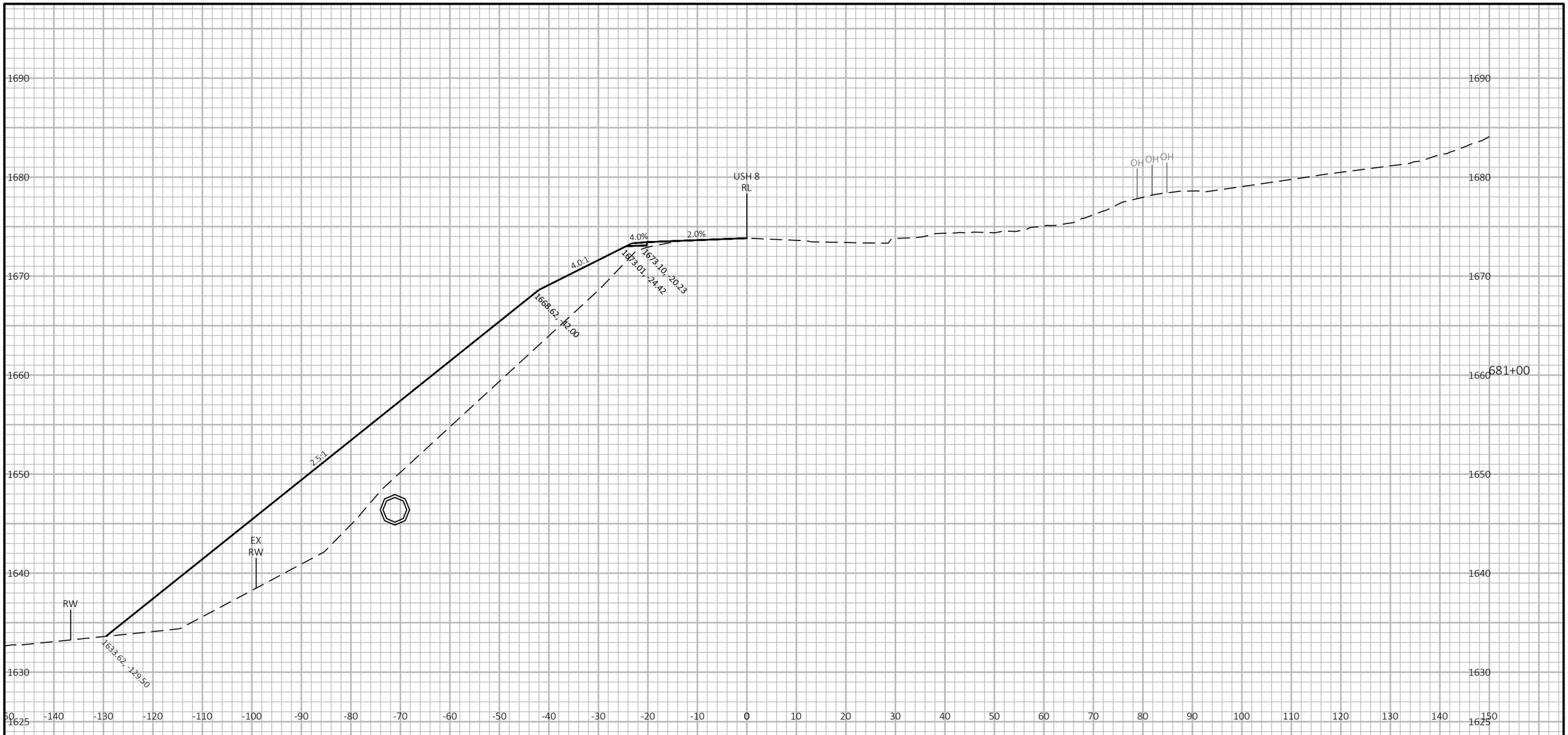
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 404	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-68050-68325.DWG
LAYOUT NAME - 01

PLOT DATE : 10/11/2024 10:13 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 405	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-68050-68325.DWG
LAYOUT NAME - 02

PLOT DATE : 10/11/2024 10:13 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

1690
1680
1670
1660
1650
1640
1630
1625

-140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

USH 8
RL

4.0%
2.0%
4.0:1
2.5:1
1672.00, -20.06
1671.92, -24.25
1667.48, -32.00
1634.46, -124.56

EX
RW
EX
RW
EX
RW
RW

OH OH OH

CULV: 21008000198
CULVERT PIPE 30-INCH CPRC
APRON ENDWALLS 30-INCH
SKEW 32° LHF

681+26

10 FT
20 FT

9

9

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 406	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-68050-68325.DWG
LAYOUT NAME - 03

PLOT DATE : 10/11/2024 10:13 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

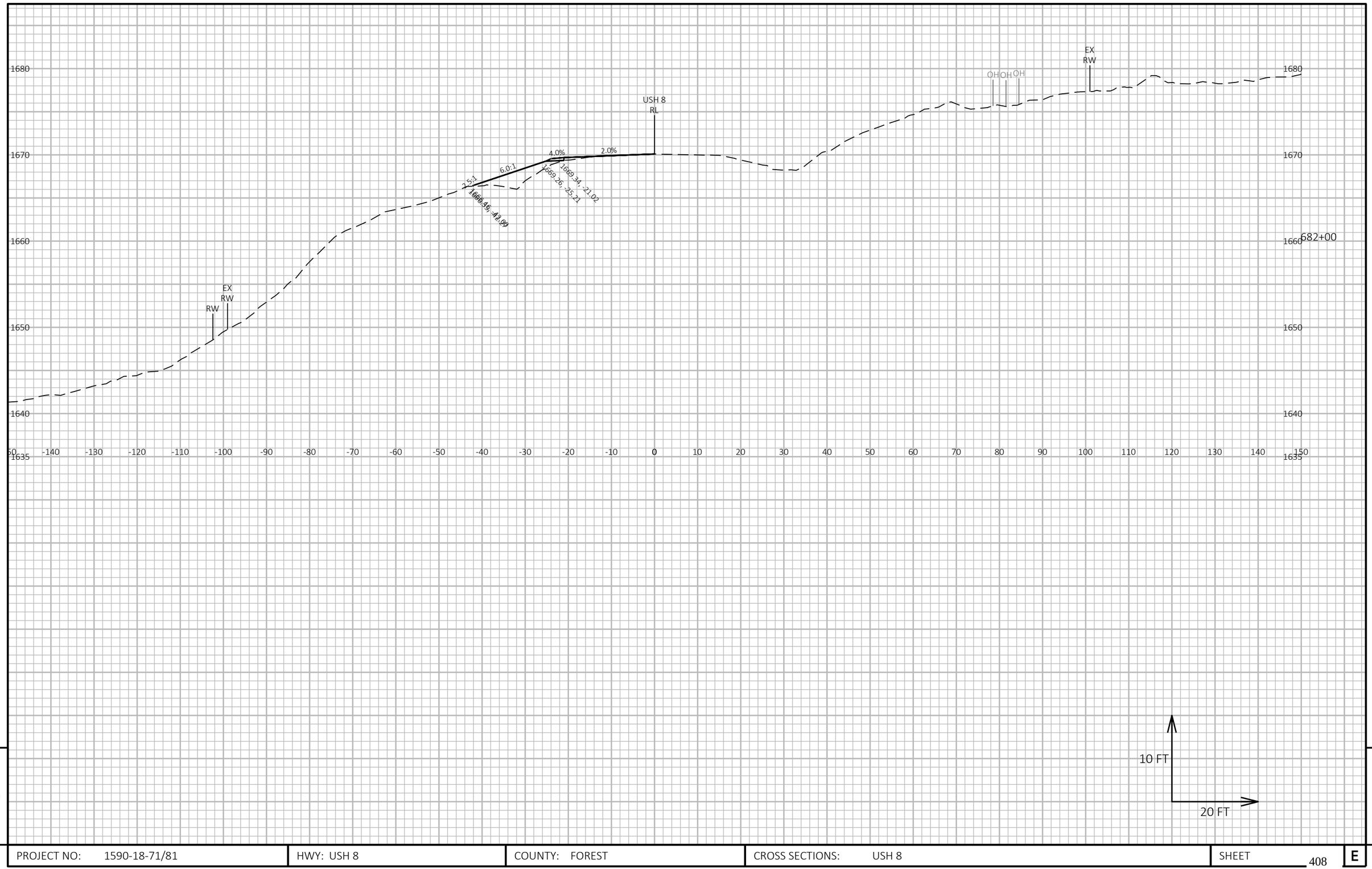
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 407	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-68050-68325.DWG
LAYOUT NAME - 04

PLOT DATE : 10/11/2024 10:13 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

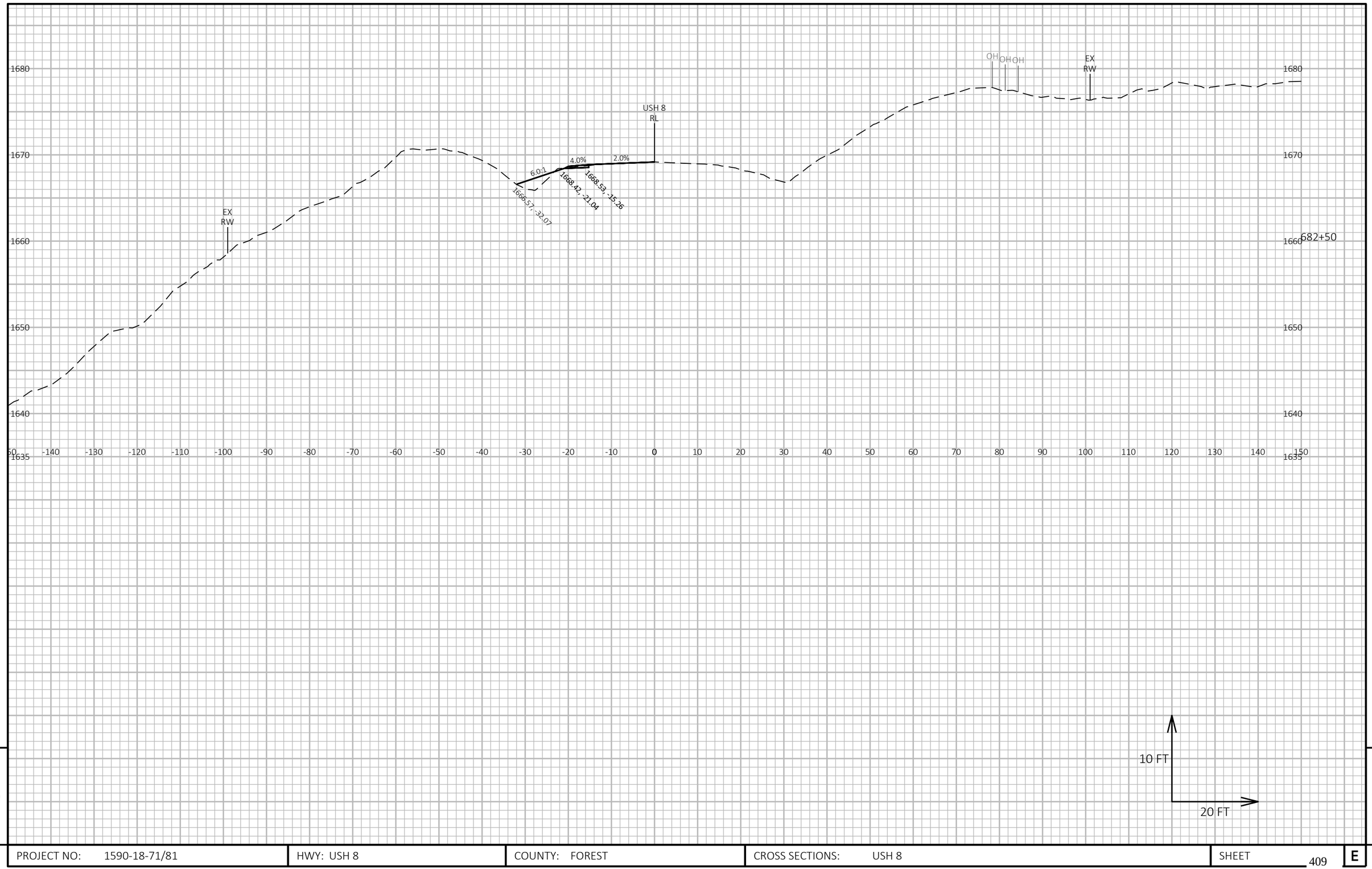
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 408	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-68050-68325.DWG
LAYOUT NAME - 05

PLOT DATE : 10/11/2024 10:13 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 409	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-68050-68325.DWG
LAYOUT NAME - 06

PLOT DATE : 10/11/2024 10:13 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

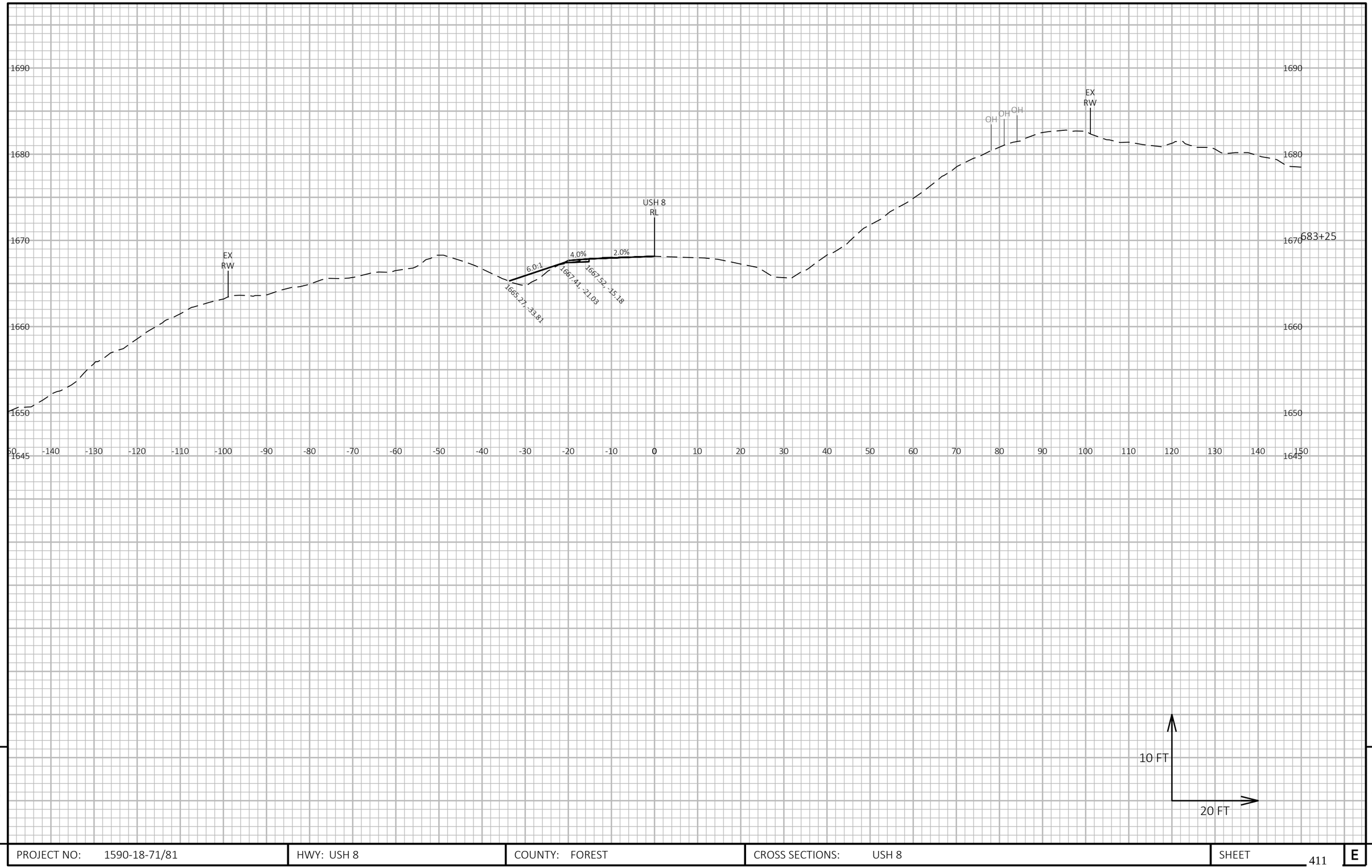
PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 410	E

9

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-68050-68325.DWG
LAYOUT NAME - 07

PLOT DATE : 10/11/2024 10:13 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

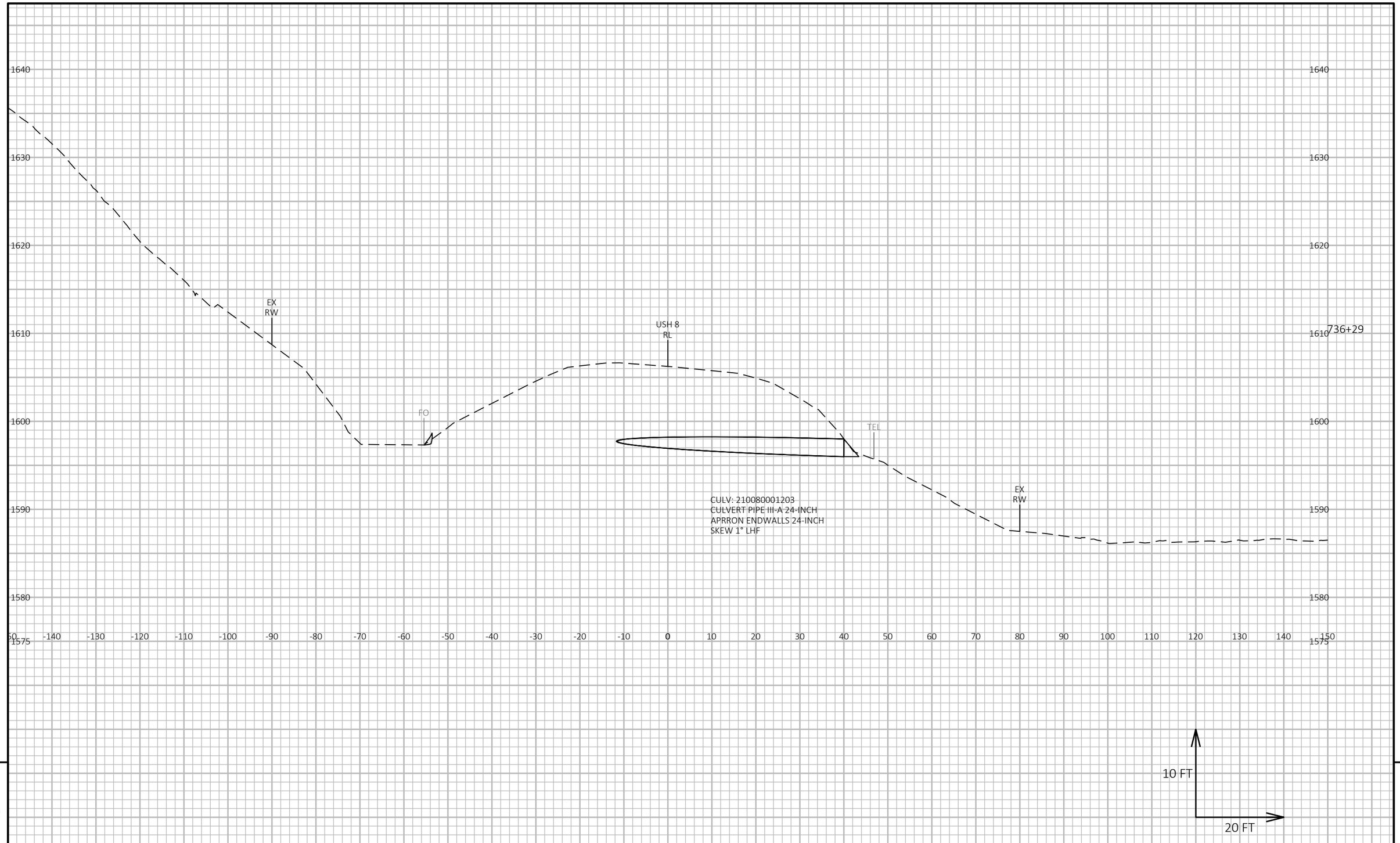
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 411	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090201-XS-68050-68325.DWG
LAYOUT NAME - 08

PLOT DATE : 10/11/2024 10:13 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



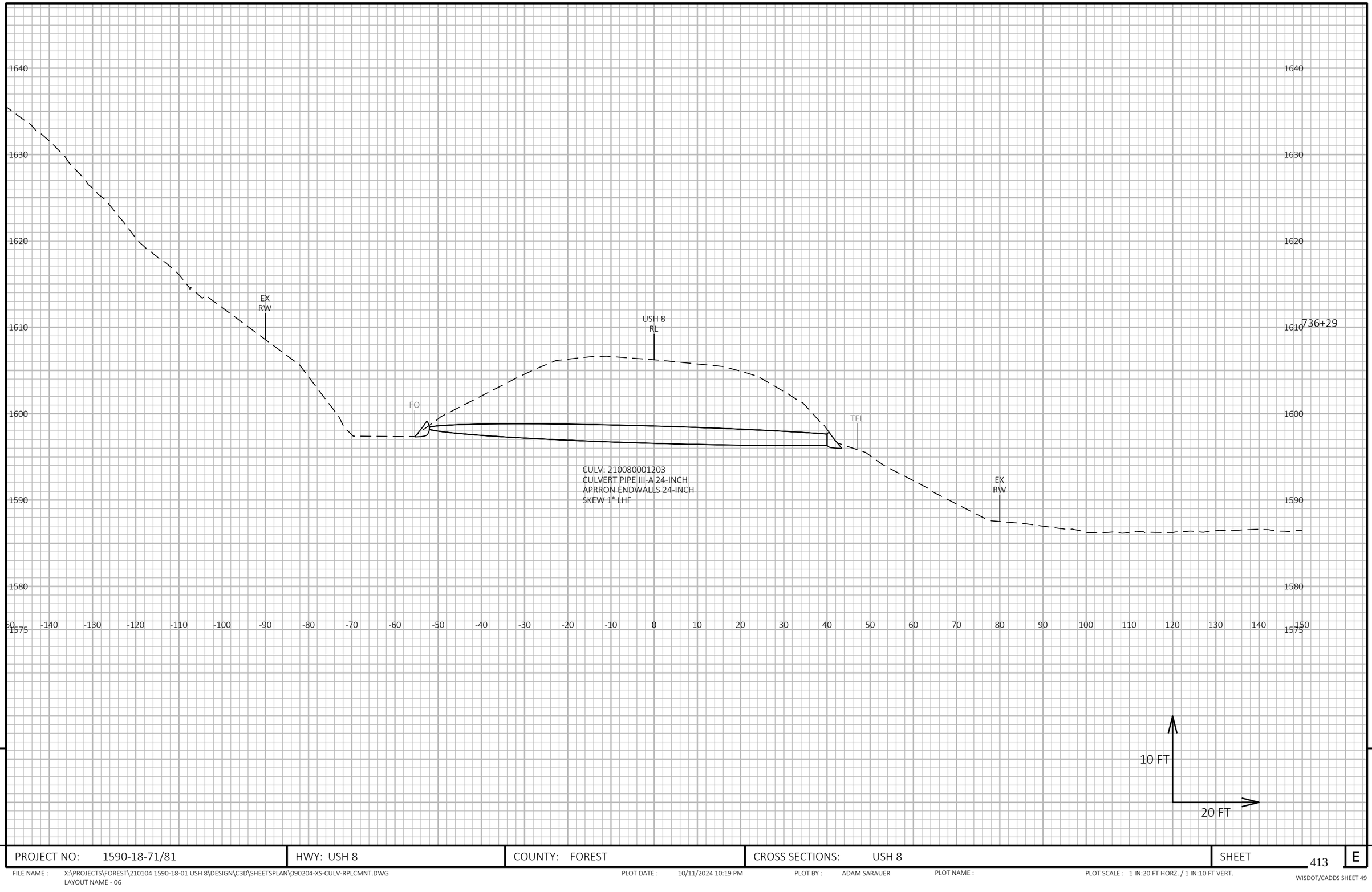
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9

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 412	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090204-XS-CULV-RPLCMNT.DWG
LAYOUT NAME - 05

PLOT DATE : 10/11/2024 10:19 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



9

9

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 413	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090204-XS-CULV-RPLCMNT.DWG
LAYOUT NAME - 06

PLOT DATE : 10/11/2024 10:19 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

1640
1630
1620
1610
1600
1590
1580
1575

EX
RW

USH 8
RL

FO

TEL

736+30

CULV: 210080001203
CULVERT PIPE III-A 24-INCH
APRRON ENDWALLS 24-INCH
SKEW 1° LHF

EX
RW

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

10 FT

20 FT

9

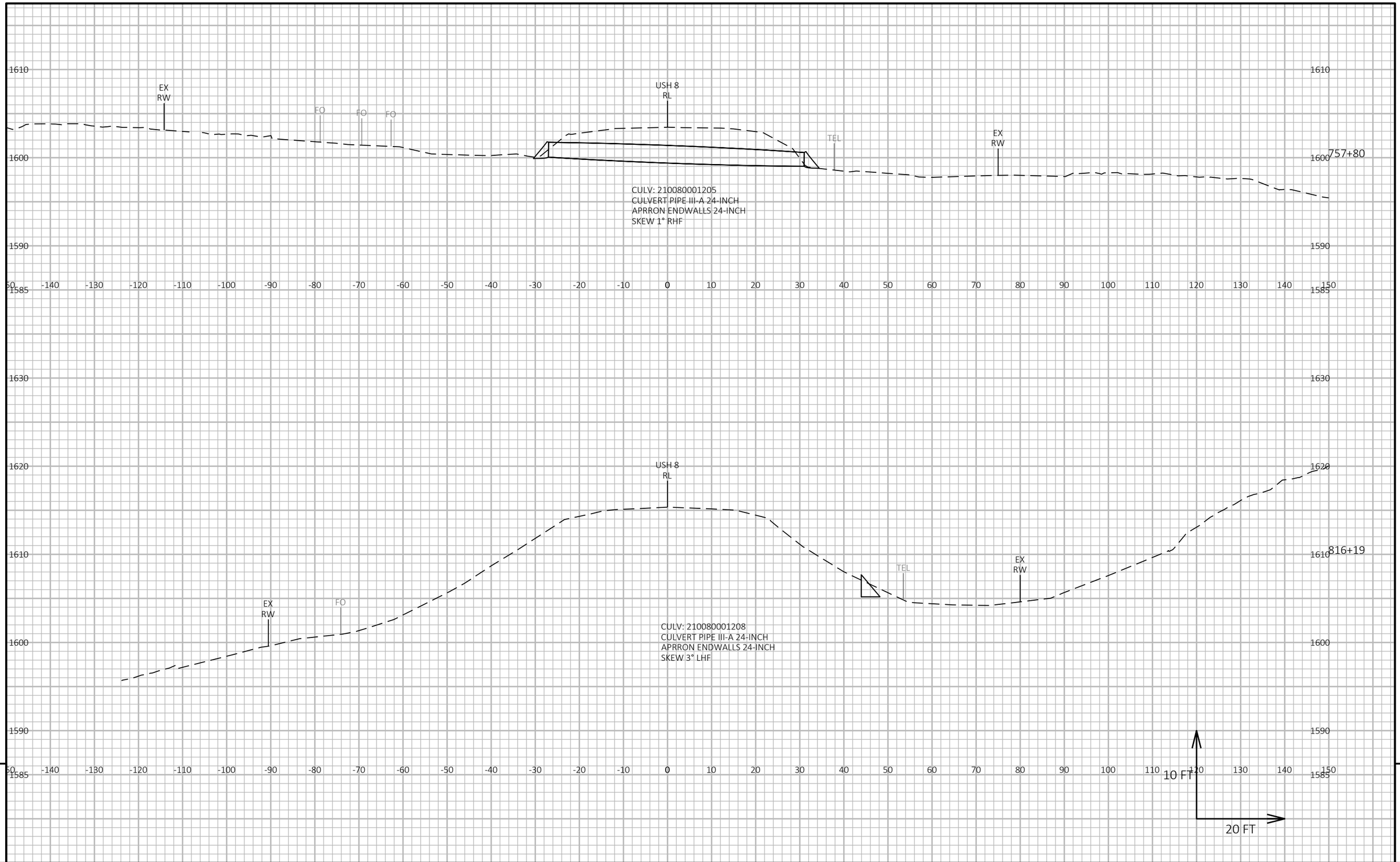
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 414	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090204-XS-CULV-RPLCMNT.DWG
LAYOUT NAME - 07

PLOT DATE : 10/11/2024 10:19 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

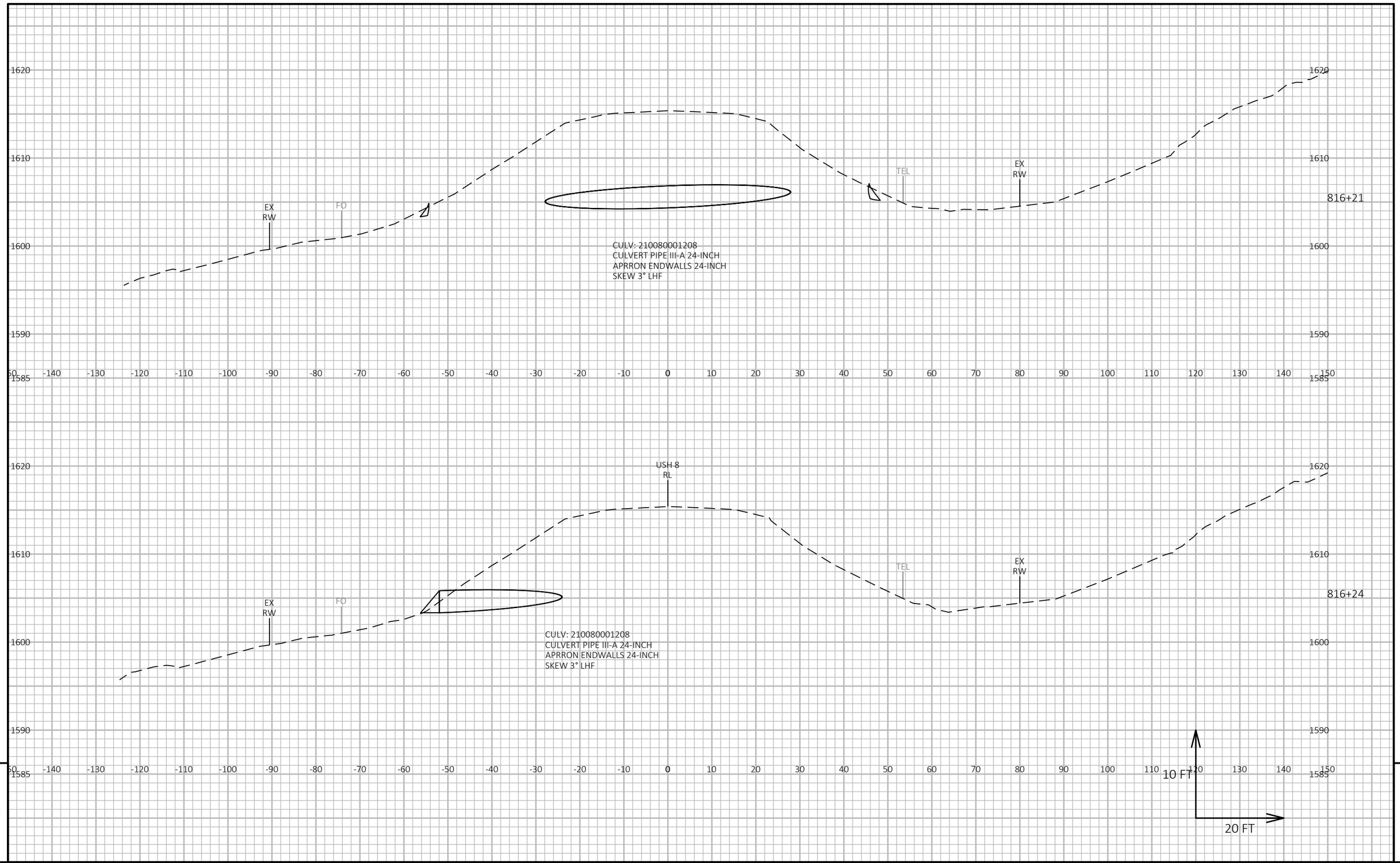
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 415	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090204-XS-CULV-RPLCMNT.DWG
LAYOUT NAME - 08

PLOT DATE : 10/11/2024 10:19 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 416	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090204-XS-CULV-RPLCMNT.DWG
LAYOUT NAME - 09

PLOT DATE : 10/11/2024 10:19 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

858+70

USH 8
RL

EX
RW

FO

TEL

EX
RW

CULV: 210080001211
CULVERT PIPE III-A 30-INCH
APRRON ENDWALLS 30-INCH
SKEW 2° LHF

1590
1580
1570
1565

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

858+72

USH 8
RL

EX
RW

FO

TEL

EX
RW

CULV: 2100800001211
CULVERT PIPE III-A 30-INCH
APRRON ENDWALLS 30-INCH
SKEW 2° LHF

1590
1580
1570
1565

-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

10 FT

20 FT

9

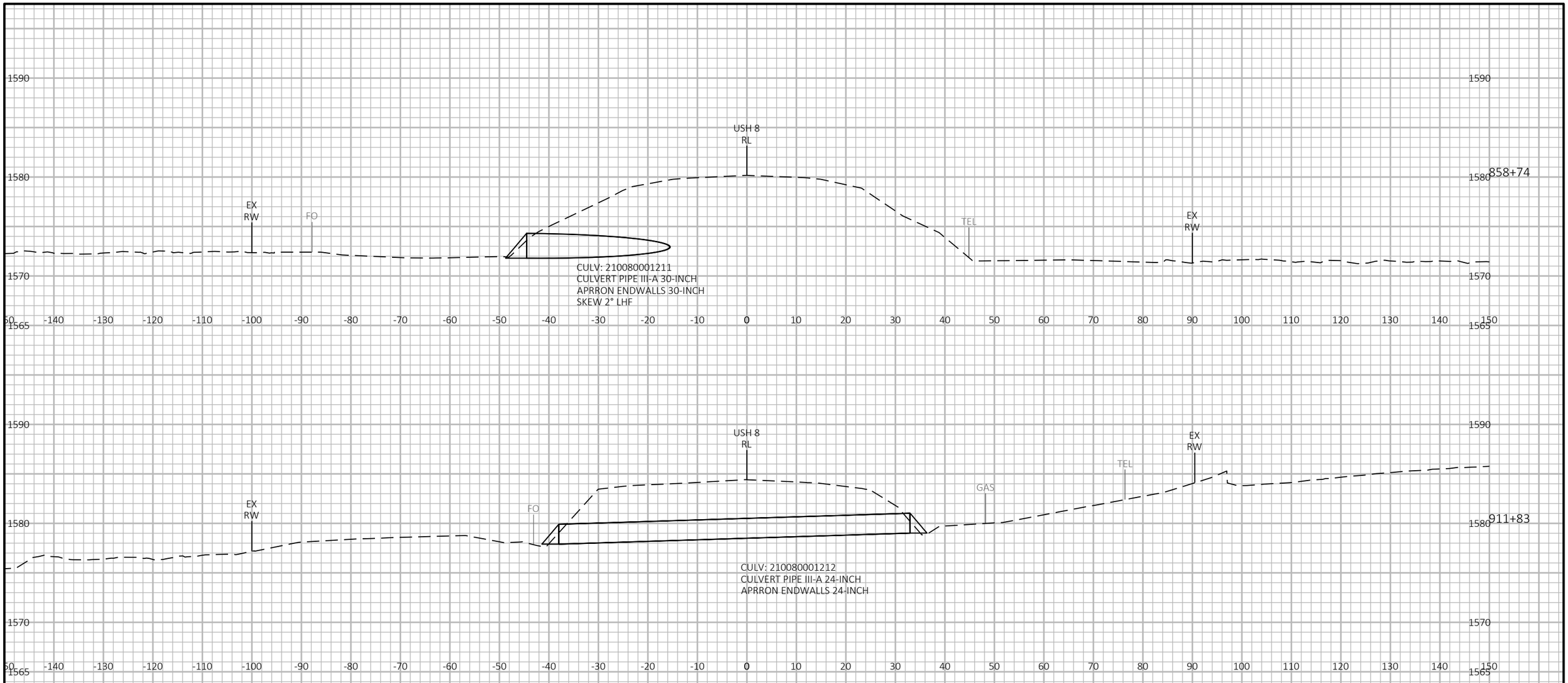
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 417	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090204-XS-CULV-RPLCMNT.DWG
LAYOUT NAME - 10

PLOT DATE : 10/11/2024 10:19 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

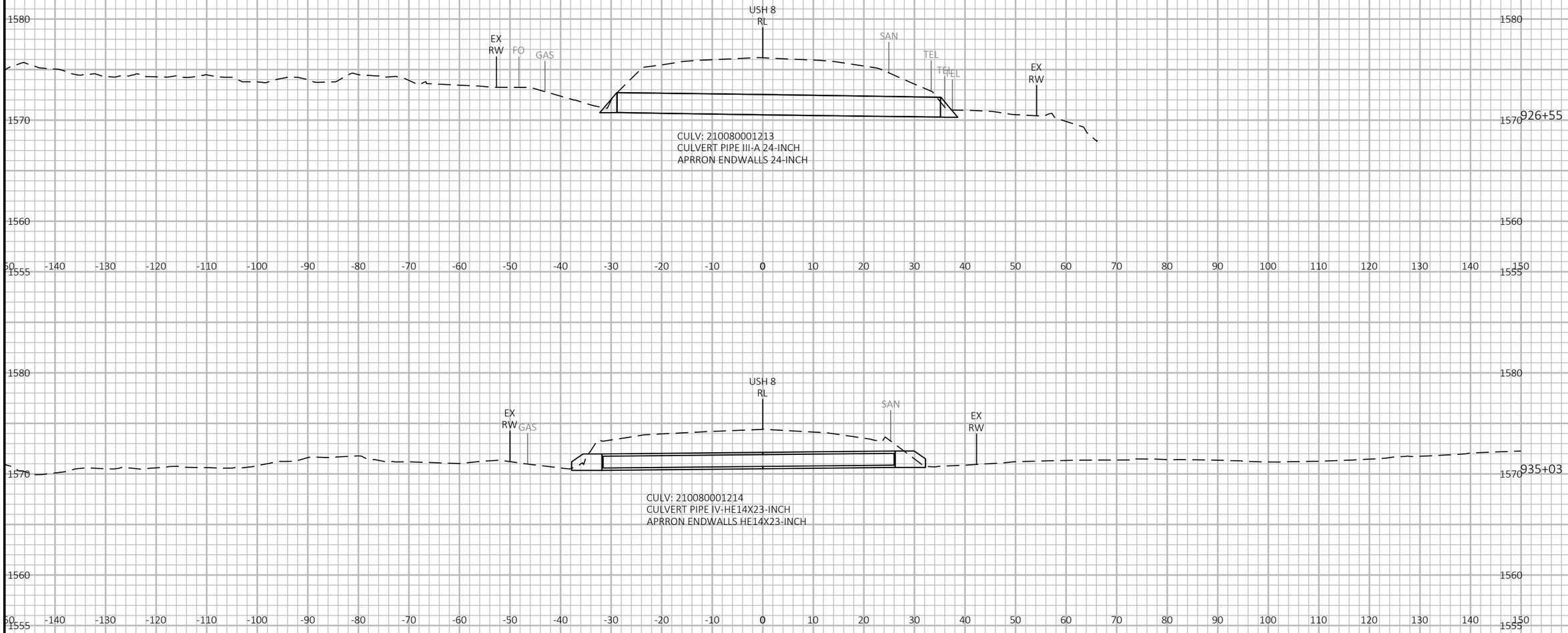
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 418	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090204-XS-CULV-RPLCMNT.DWG
LAYOUT NAME - 11

PLOT DATE : 10/11/2024 10:19 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

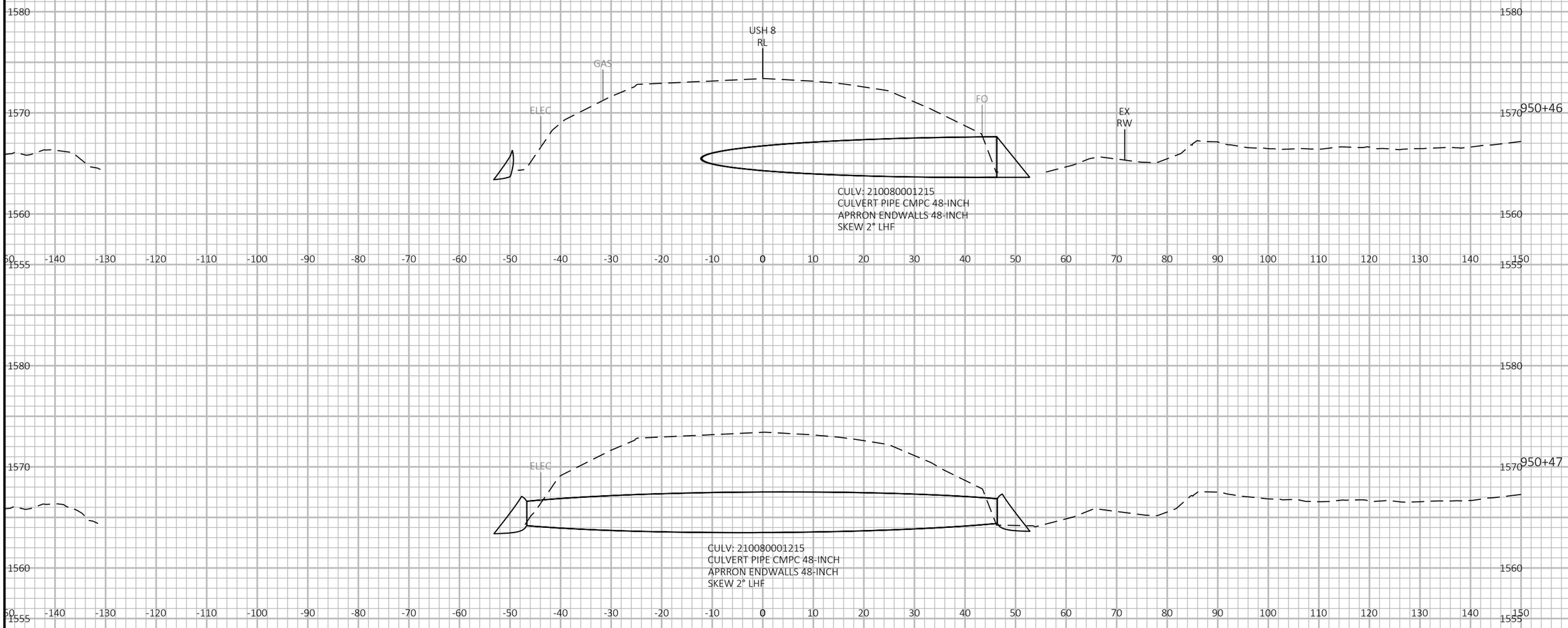
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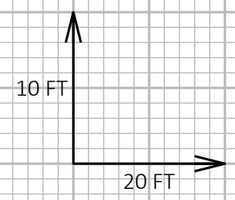
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FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090204-XS-CULV-RPLCMNT.DWG
LAYOUT NAME - 12

PLOT DATE : 10/11/2024 10:20 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49





9

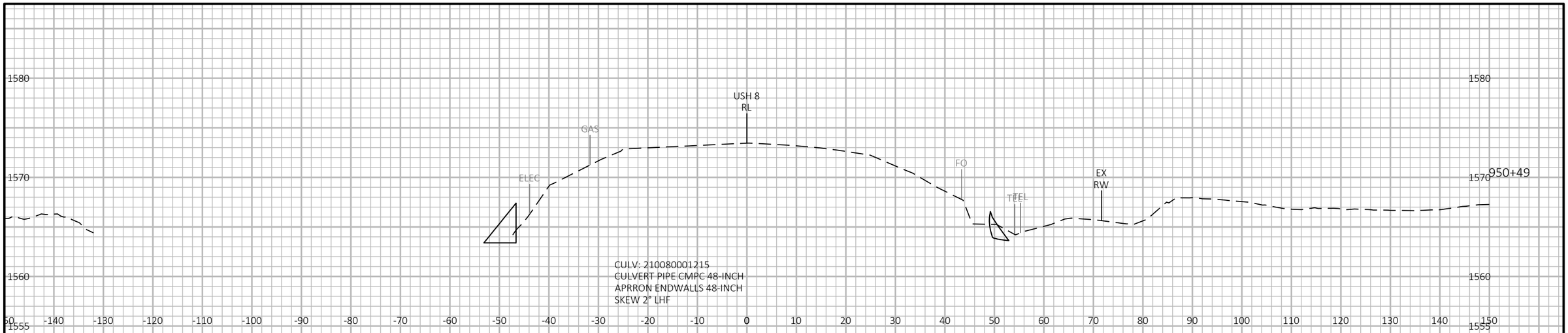
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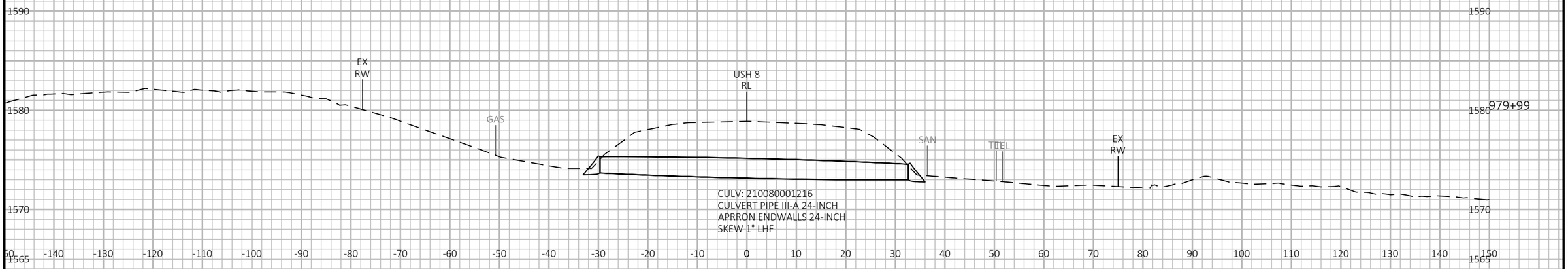
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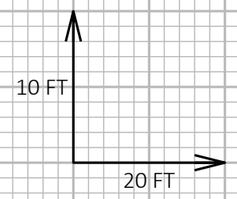
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LAYOUT NAME - 13

PLOT DATE : 10/11/2024 10:20 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49







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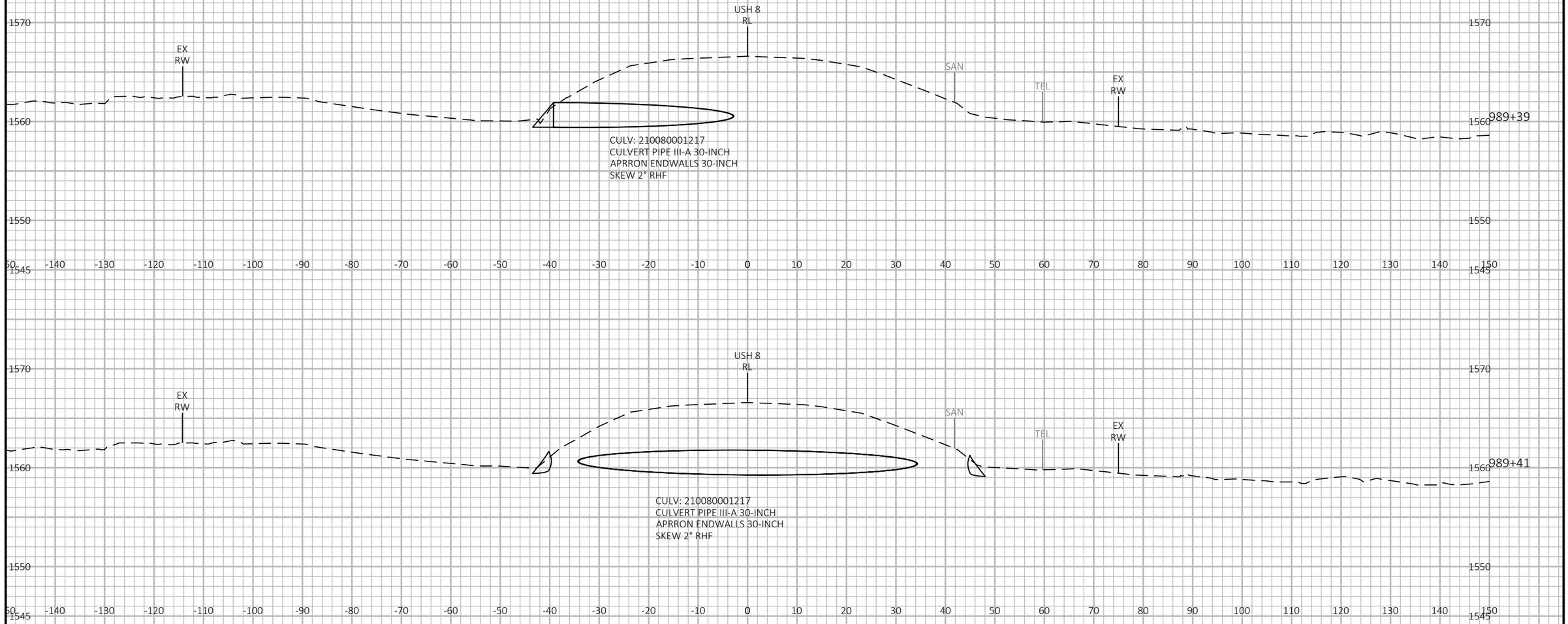
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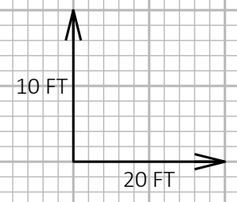
PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 421	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090204-XS-CULV-RPLCMNT.DWG
LAYOUT NAME - 14

PLOT DATE : 10/11/2024 10:20 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49





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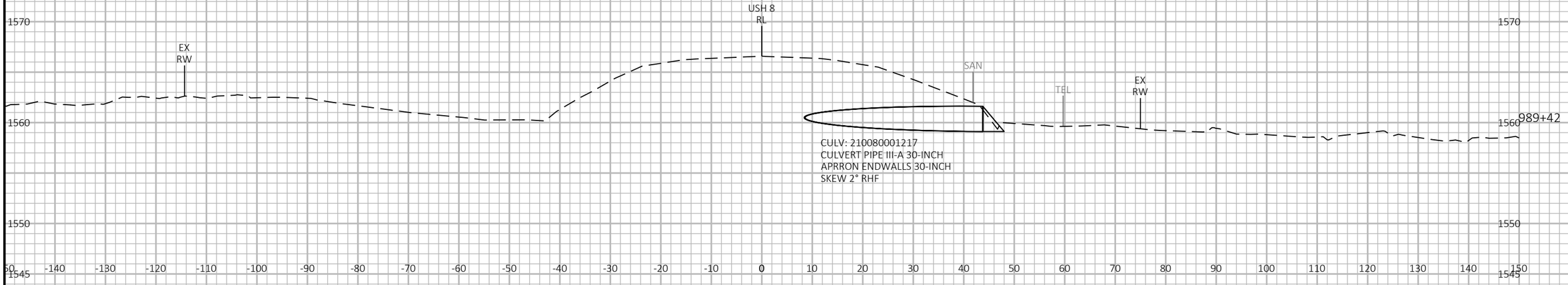
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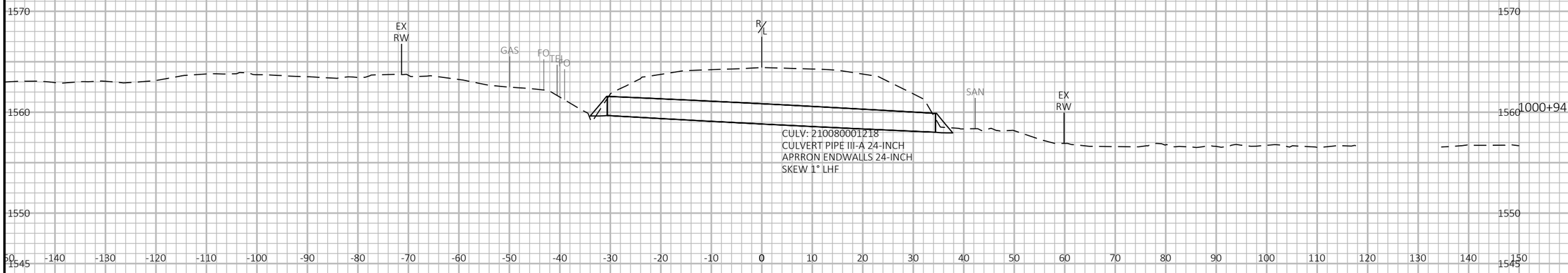
PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 422	E

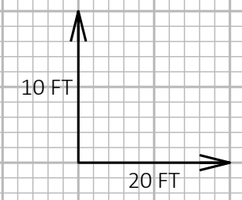
FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090204-XS-CULV-RPLCMNT.DWG
LAYOUT NAME - 15

PLOT DATE : 10/11/2024 10:20 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49







9

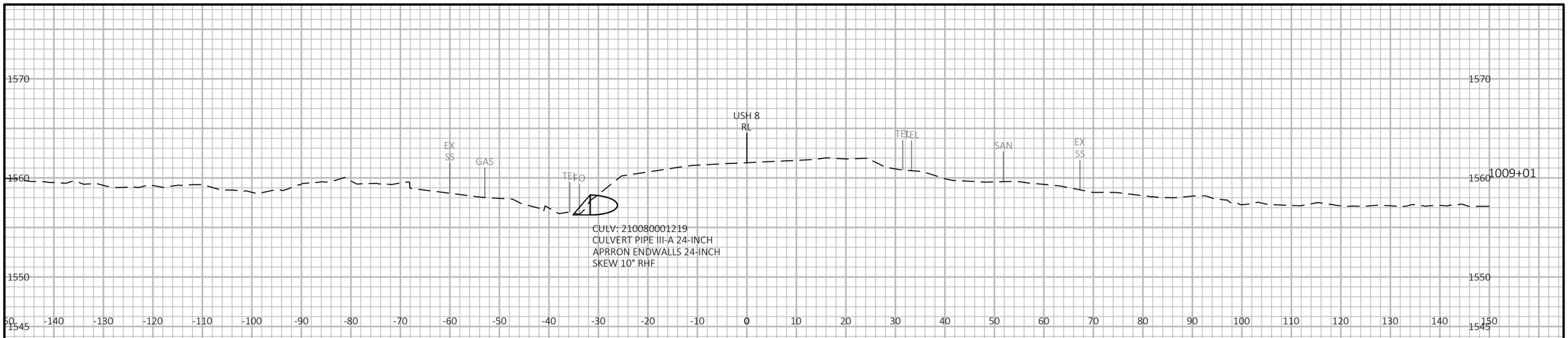
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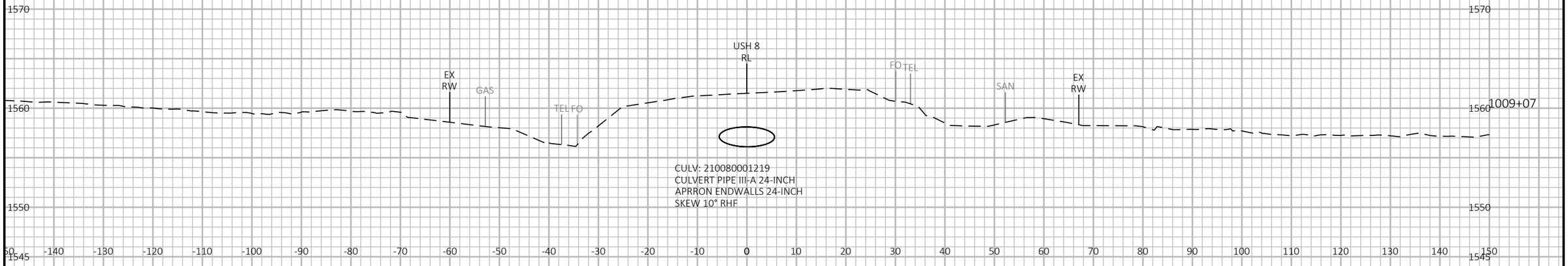
PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 423	E

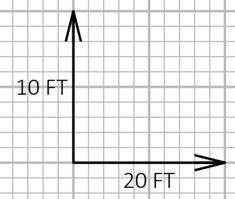
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LAYOUT NAME - 16

PLOT DATE : 10/11/2024 10:20 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49







9

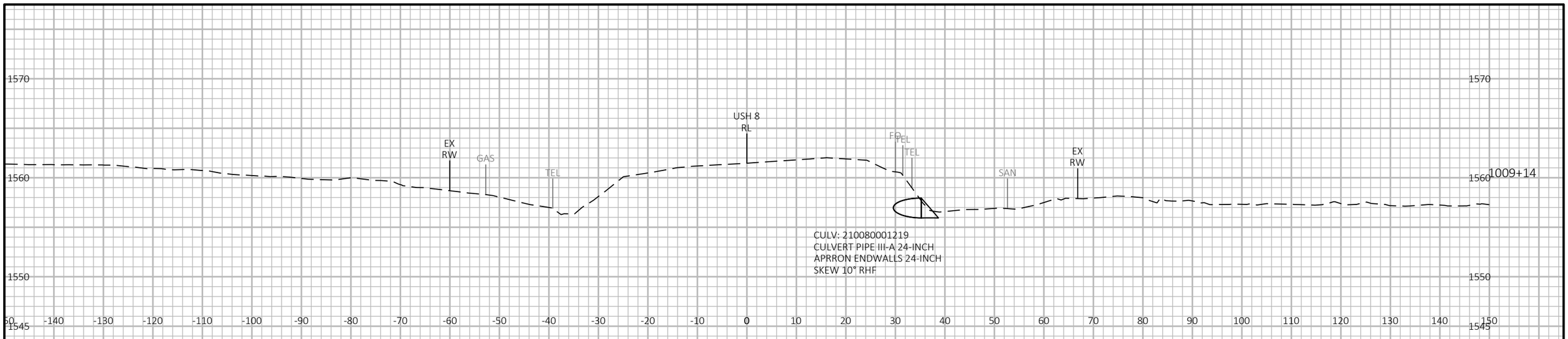
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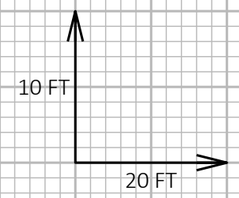
PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 424	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090204-XS-CULV-RPLCMNT.DWG
LAYOUT NAME - 17

PLOT DATE : 10/11/2024 10:20 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49





9

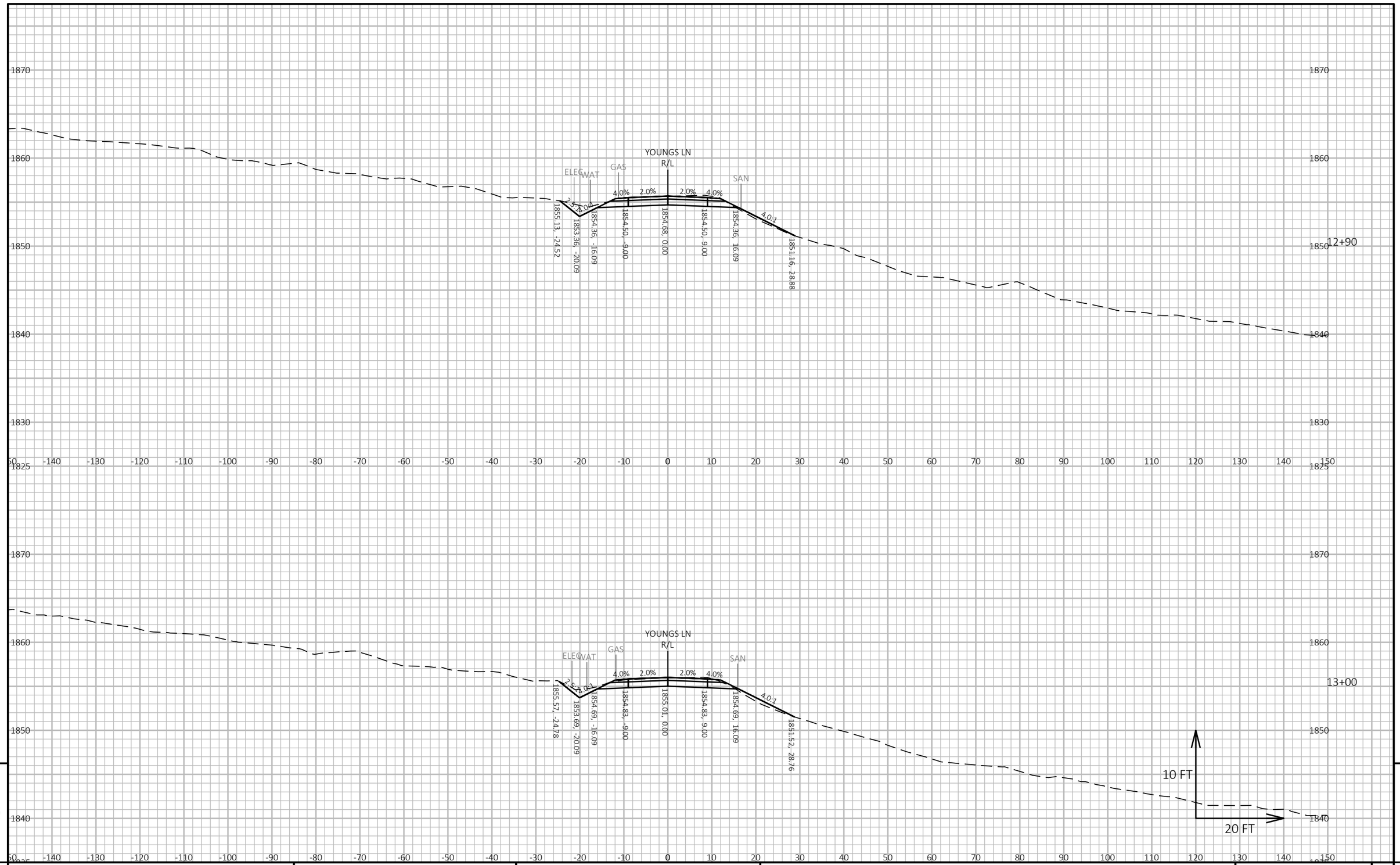
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: USH 8	SHEET 425	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090204-XS-CULV-RPLCMNT.DWG
LAYOUT NAME - 18

PLOT DATE : 10/11/2024 10:20 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

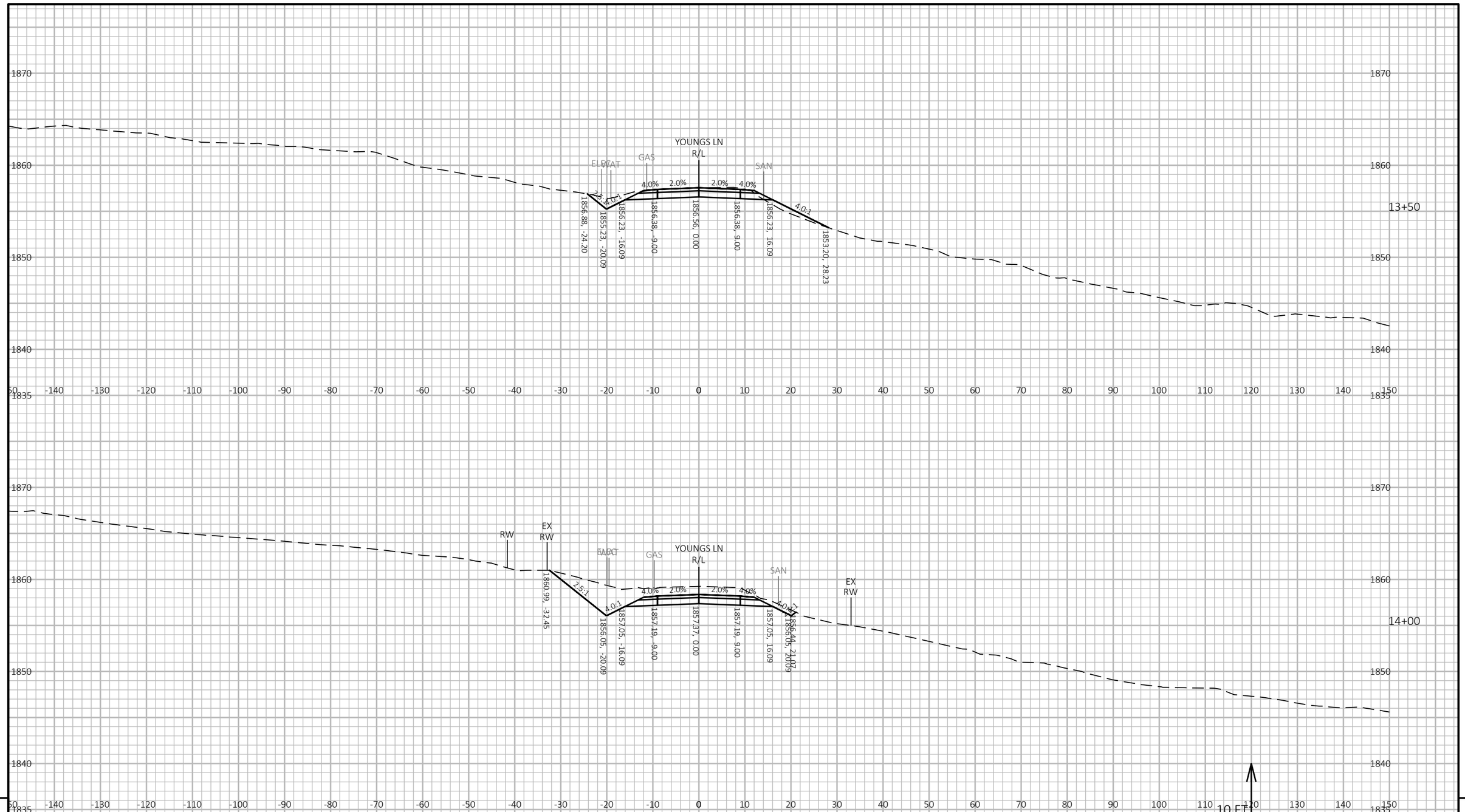
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: YOUNGS LANE	SHEET 426	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090202-XS-YOUNGS-LANE.DWG
LAYOUT NAME - 01

PLOT DATE : 10/11/2024 10:15 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

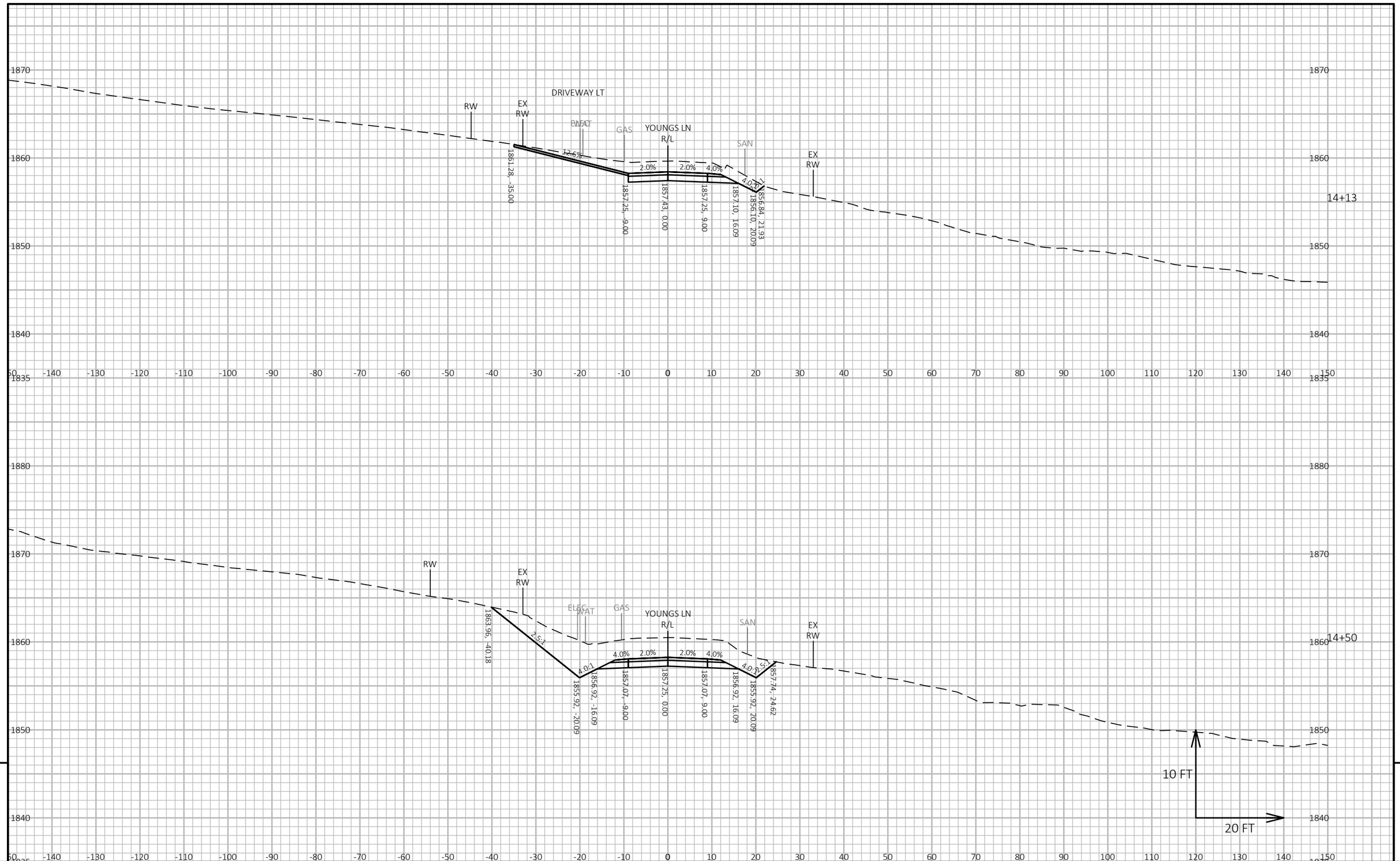


PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: YOUNGS LANE	SHEET 427	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090202-XS-YOUNGS-LANE.DWG
LAYOUT NAME - 02

PLOT DATE : 10/11/2024 10:15 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



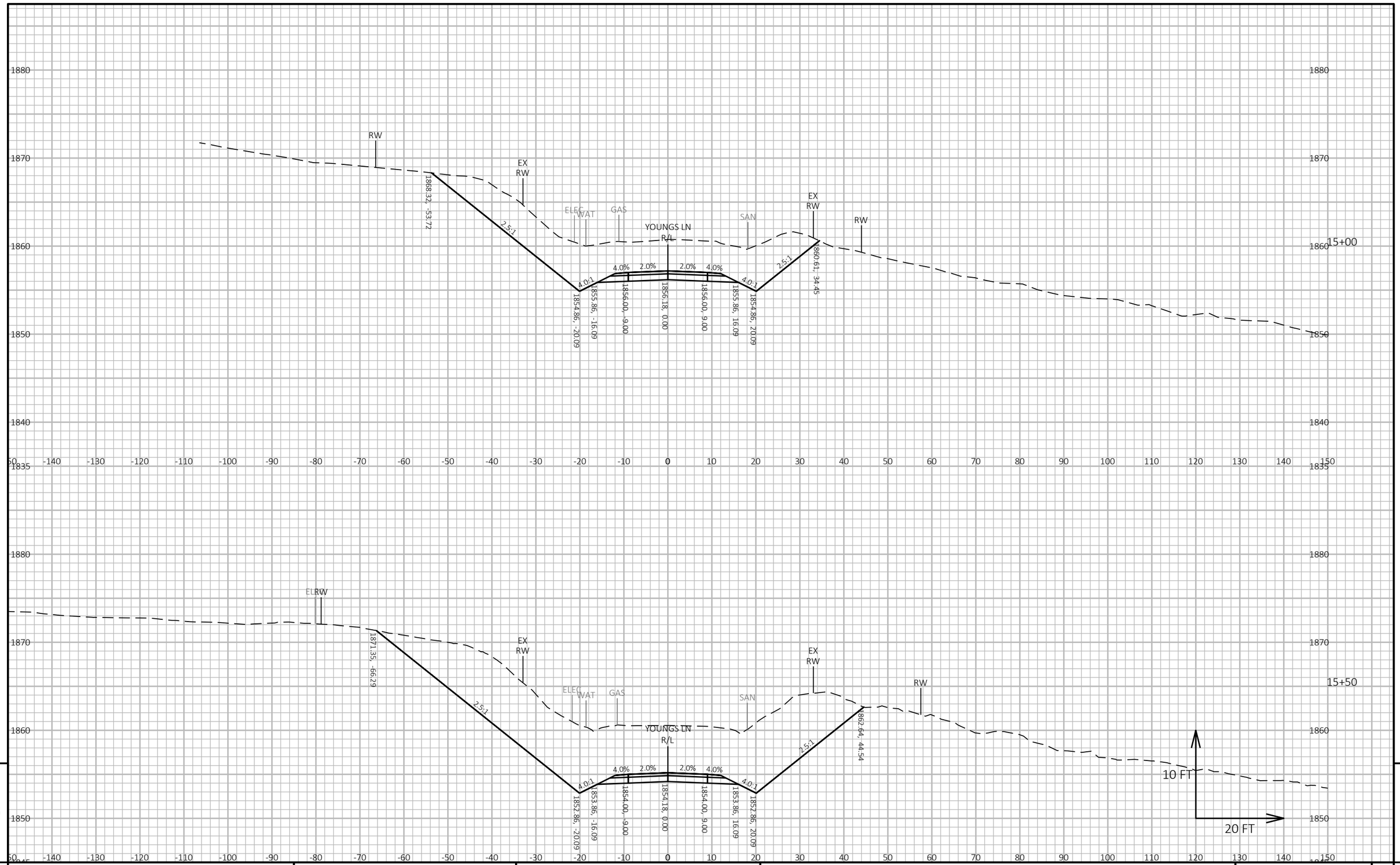
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: YOUNGS LANE	SHEET 428	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090202-XS-YOUNGS-LANE.DWG
LAYOUT NAME - 03

PLOT DATE : 10/11/2024 10:15 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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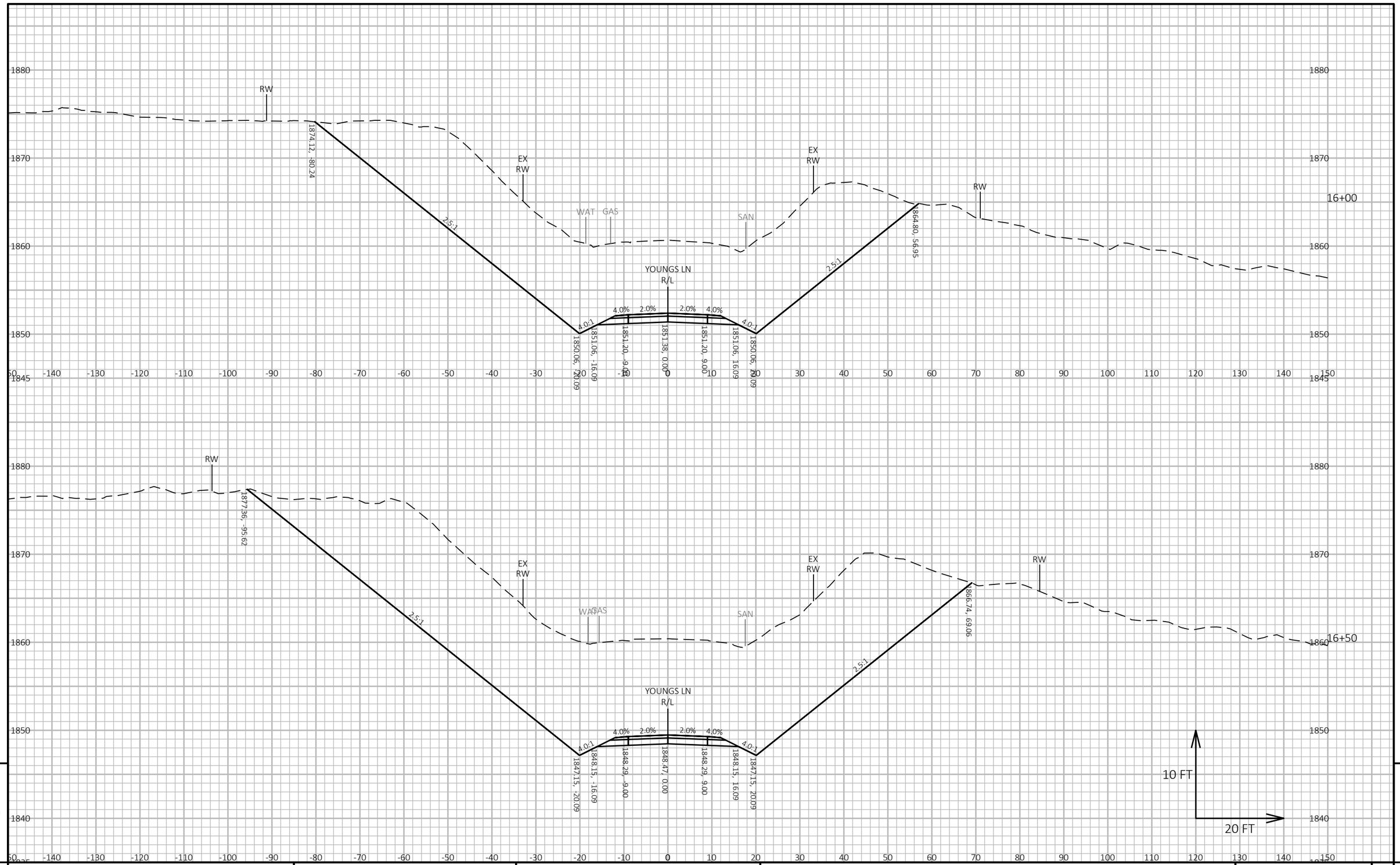
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: YOUNGS LANE	SHEET 429	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090202-XS-YOUNGS-LANE.DWG
LAYOUT NAME - 04

PLOT DATE : 10/11/2024 10:15 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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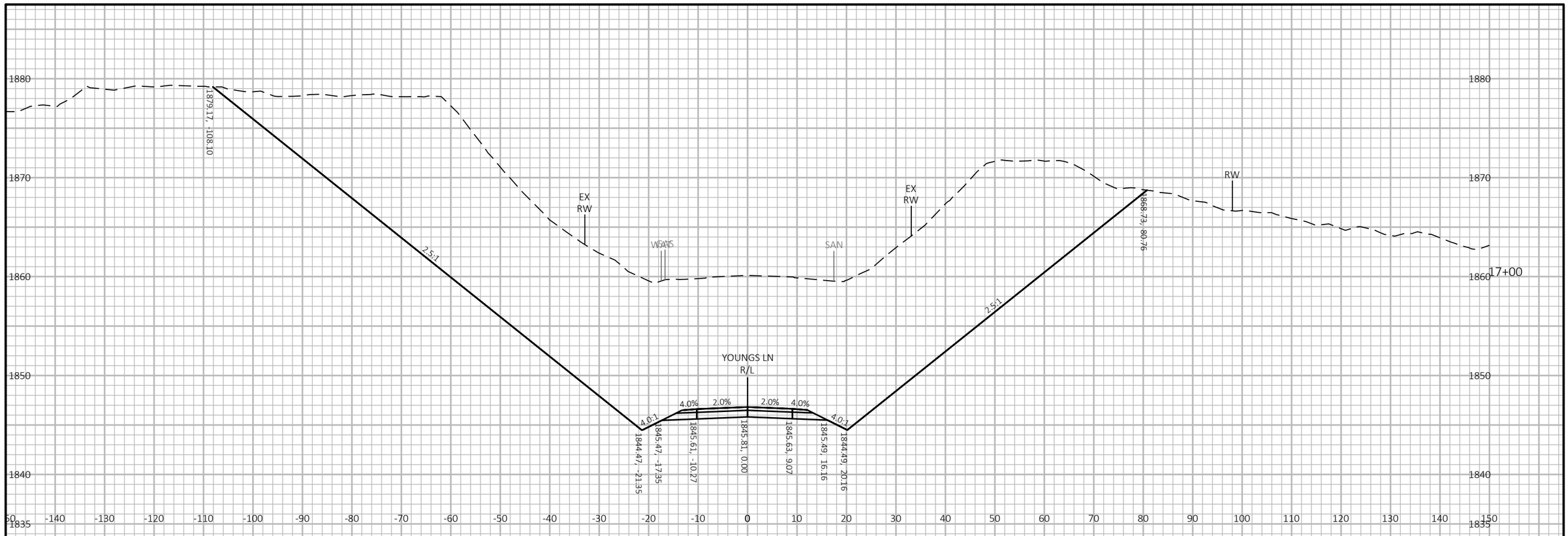
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: YOUNGS LANE	SHEET 430	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090202-XS-YOUNGS-LANE.DWG
LAYOUT NAME - 05

PLOT DATE : 10/11/2024 10:15 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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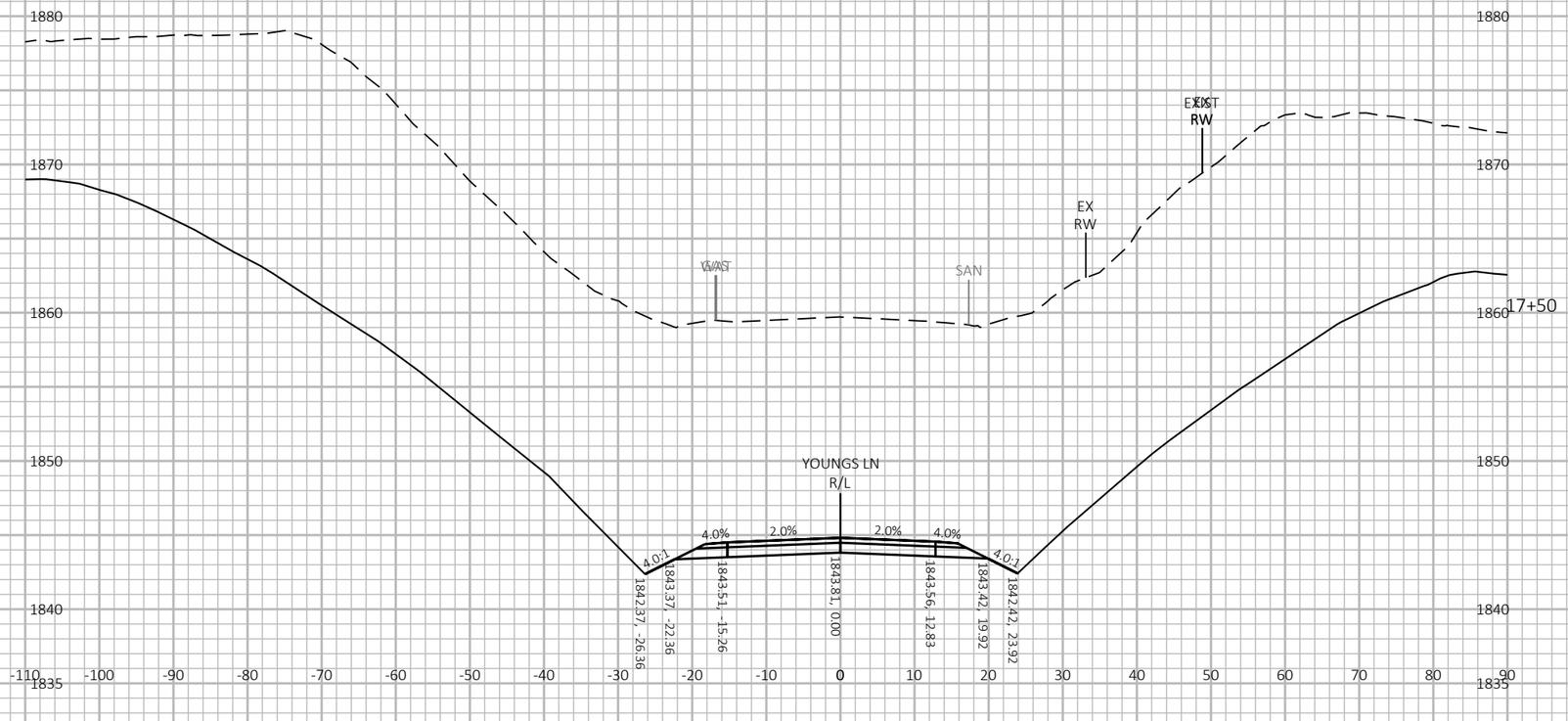
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FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090202-XS-YOUNGS-LANE.DWG
LAYOUT NAME - 06

PLOT DATE : 10/11/2024 10:15 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



10 FT

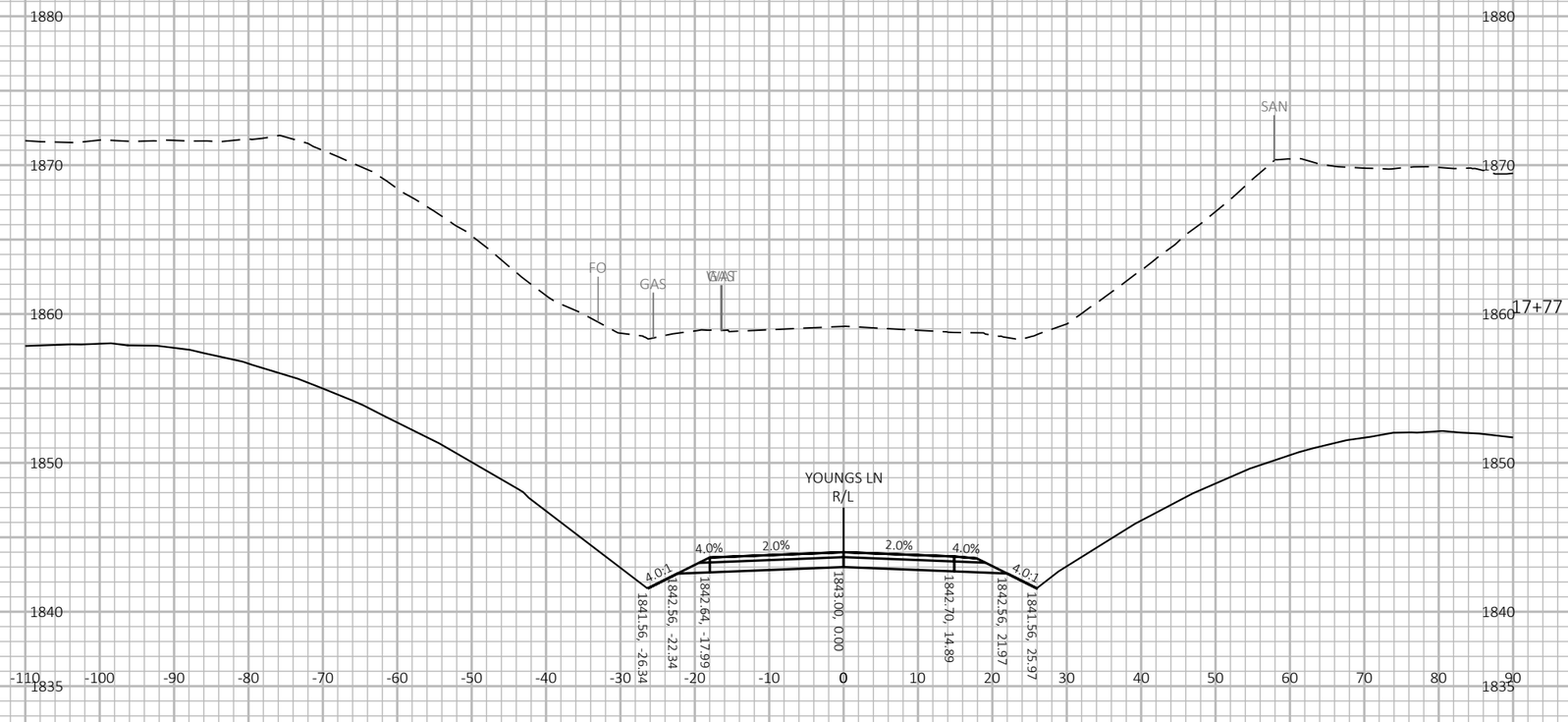
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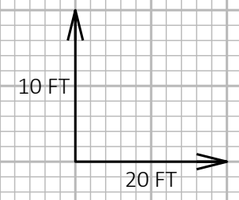
PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: YOUNGS LANE	SHEET 432	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090202-XS-YOUNGS-LANE.DWG
LAYOUT NAME - 07

PLOT DATE : 10/11/2024 10:15 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49





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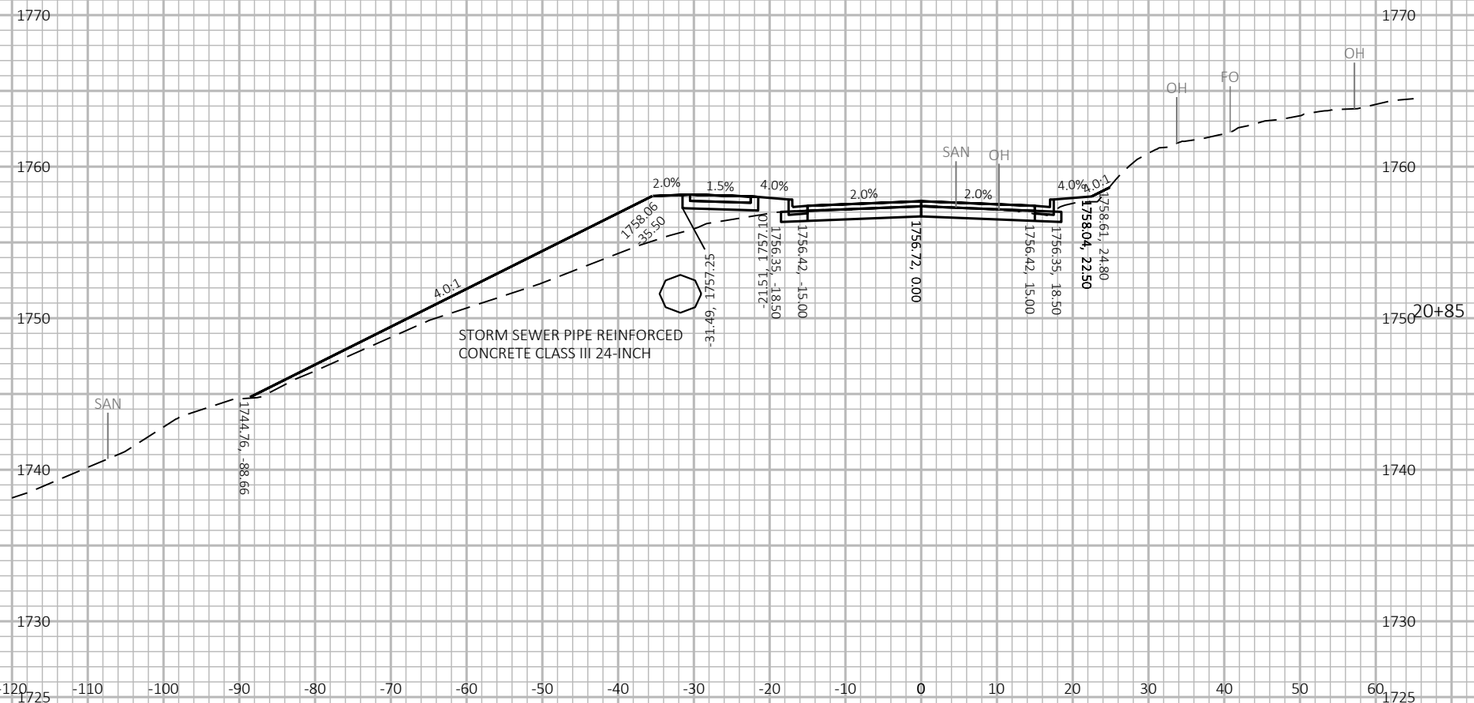
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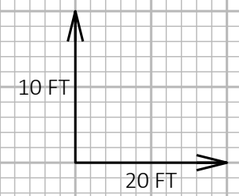
PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: YOUNGS LANE	SHEET 433	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090202-XS-YOUNGS-LANE.DWG
LAYOUT NAME - 08

PLOT DATE : 10/11/2024 10:15 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49





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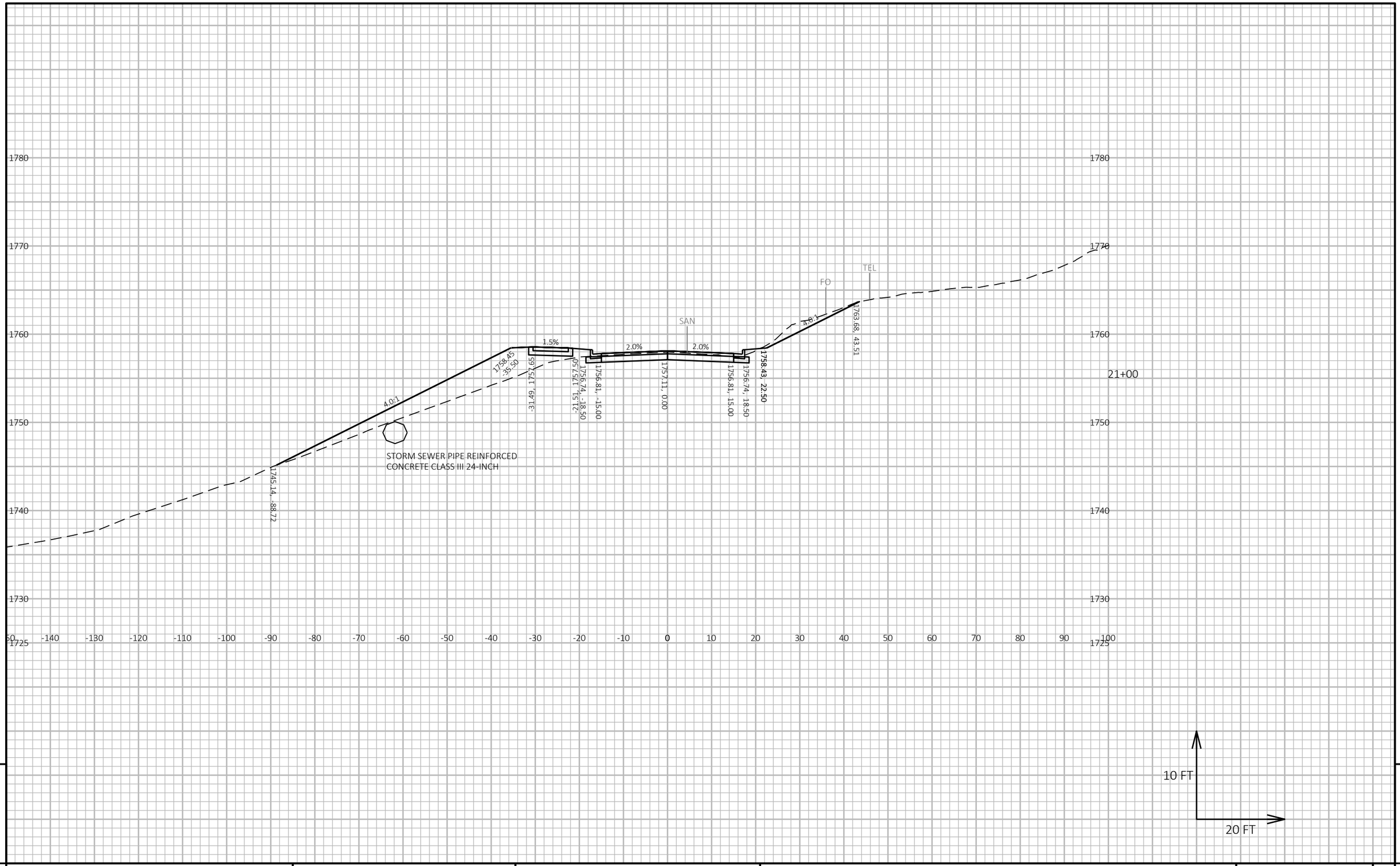
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: KWE DA KIK LANE	SHEET 434	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090203-XS-KWE-DA-KIK-LANE.DWG
LAYOUT NAME - 01

PLOT DATE : 10/11/2024 10:16 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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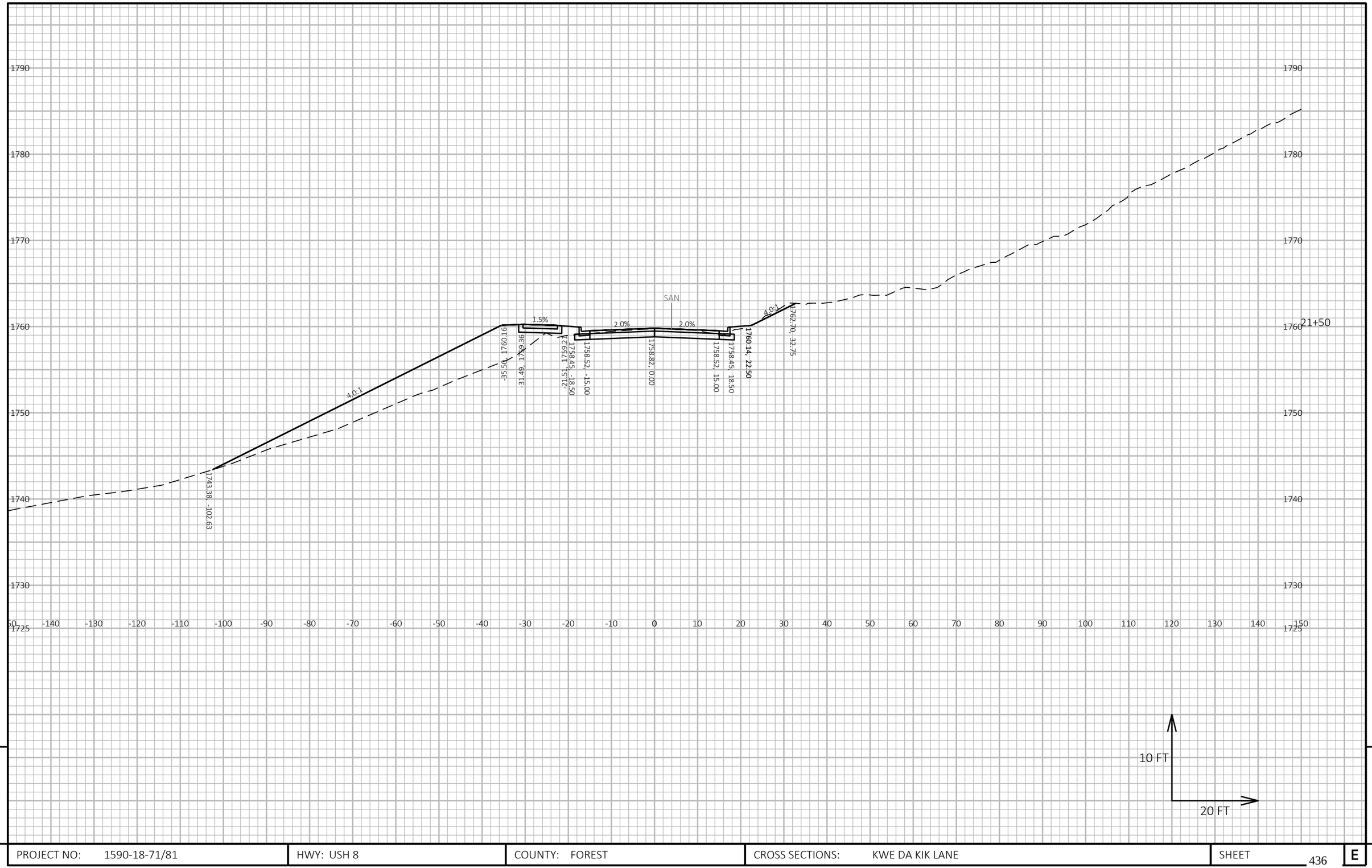
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: KWE DA KIK LANE	SHEET 435	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090203-XS-KWE-DA-KIK-LANE.DWG
LAYOUT NAME - 02

PLOT DATE : 10/11/2024 10:16 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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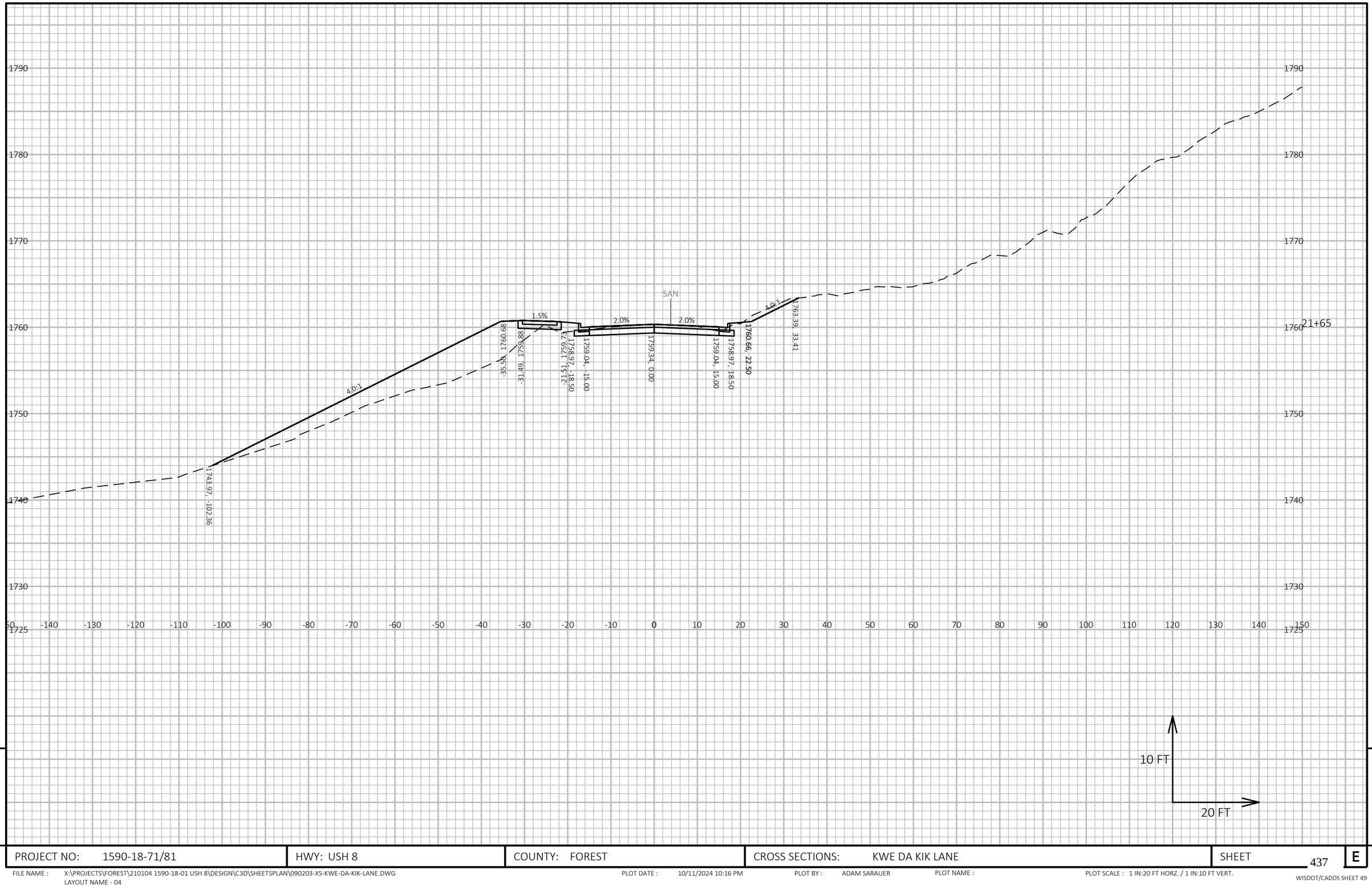
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PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: KWE DA KIK LANE	SHEET 436	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090203-XS-KWE-DA-KIK-LANE.DWG
LAYOUT NAME - 03

PLOT DATE : 10/11/2024 10:16 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1590-18-71/81	HWY: USH 8	COUNTY: FOREST	CROSS SECTIONS: KWE DA KIK LANE	SHEET 437	E

FILE NAME : X:\PROJECTS\FOREST\210104 1590-18-01 USH 8\DESIGN\C3D\SHEETSPLAN\090203-XS-KWE-DA-KIK-LANE.DWG
LAYOUT NAME - 04

PLOT DATE : 10/11/2024 10:16 PM PLOT BY : ADAM SARAUER PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov

RHI

FEBRUARY 2025

PROJECT ID: **1590-18-82**

WITH: 1590-18-71, 1590-18-83, 9813-02-70

COUNTY: **FOREST**

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 = 172



N

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

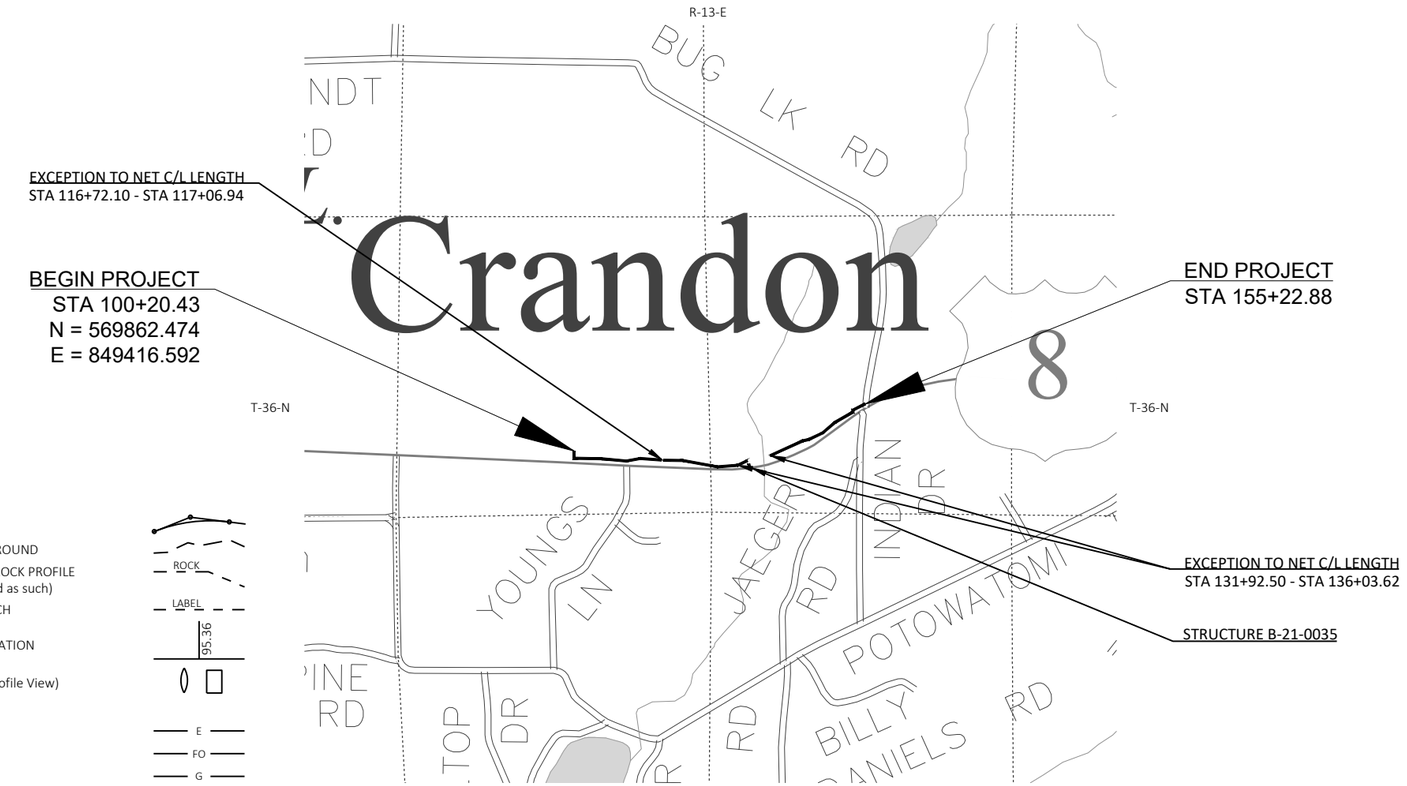
MONICO - LAONA

MULTI MODAL TUNNEL

USH 008
FOREST COUNTY

STATE PROJECT NUMBER
1590-18-82

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1590-18-82		



EXCEPTION TO NET C/L LENGTH
STA 116+72.10 - STA 117+06.94

BEGIN PROJECT
STA 100+20.43
N = 569862.474
E = 849416.592

END PROJECT
STA 155+22.88

EXCEPTION TO NET C/L LENGTH
STA 131+92.50 - STA 136+03.62

STRUCTURE B-21-0035

LAYOUT

SCALE 0 0.5 MI

TOTAL NET LENGTH OF CENTERLINE = 0.958 MI

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

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), FOREST COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES.

ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

ACCEPTED FOR
FOREST COUNTY
POTAWATOMI COMMUNITY

Date 10/29/24 (Signature and Title of Official)

ORIGINAL PLANS PREPARED BY

KL Engineering
[A] Better Experience

WISCONSIN PROFESSIONAL ENGINEER
JOSHUA MERCIER
44677-6
OREGON, WI

DATE: 10/28/2024 (Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	FOREST COUNTY POTAWATOMI COMMUNITY
Designer	KL ENGINEERING
Project Manager	TODD MULVEY
Regional Examiner	FRED SCHUNKE
Regional Supervisor	KAI KILEN

ACCEPTED FOR THE DEPARTMENT

DATE 10/29/2024 (Signature)

E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\010101-TI_UTV.DWG

PLOT DATE : 10/29/2024 11:24 AM PLOT BY : JOSH MERCIER PLOT NAME :

GENERAL NOTES

THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN IN THE PLAN, ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. CONTACT DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO START OF WORK.

STATIONING AND OFFSETS TO APRON ENDWALLS FOR CULVERT PIPES ARE SHOWN TO THE END OF THE PIPE.

ALL RADII ARE MEASURED TO THE EDGE OF THE PAVEMENT UNLESS OTHERWISE SHOWN OR NOTED IN THE PLANS.

CURVE DATA IS BASED ON THE ARC DEFINITION.

INLET AND DISCHARGE ELEVATIONS FOR DRAINAGE STRUCTURES ARE APPROXIMATE AND SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.

BEARINGS SHOWN IN THE PLANS ARE GRID/GROUND/PROJECT BEARINGS TO THE NEAREST SECOND.

SEE PROJECT 1590-18-71 FOR SOIL BORING LOCATIONS. BASED ON FIELD CONDITIONS, PROJECT ENGINEER MAY MODIFY TYPICAL SECTION TO INCLUDE INCREASED EXCAVATION, GEOTEXTILE FABRIC OR GEOGRID, AND STONE.

SEE PROJECT 1590-18-71 FOR USH 8 ROADWAY RECONSTRUCTION DETAILS.

SEE PROJECT 9813-02-70 FOR PHASE 1 SHARED PATHWAY DETAILS.

UTILITY CONTACTS

COMMUNICATION LINE

SPECTRUM
RYAN LUCKEN (PRIMARY CONTACT)
1201 McCANN Drive
ALTOONA, WI 54720
PHONE: 715.833.7390
EMAIL: CHTR_WI_CONST@CHARTER.COM

COMMUNICATION LINE

NSIGHT TELESERVICES
RICK VINCENT (PRIMARY CONTACT)
450 SECURITY BLVD
P.O. BOX 19079
GREEN BAY, WI 54307-9079
PHONE: 920.617.7316
EMAIL: RICK.VINCENT@NSIGHT.COM

GAS/PETROLEUM

WISCONSIN PUBLIC SERVICE CORPORATION
WENDY CHRIST (PRIMARY CONTACT)
P.O. BOX 19001
GREEN BAY, WI 54307-9001
PHONE: 920.617.5173
EMAIL: UTILITIESRELOCATION@WISCONSINPUBLICSERVICE.COM

SEWER

FOREST COUNTY POTAWATOMI UTILITY DEPT
BRUCE JOHNSON (PRIMARY CONTACT)
8355 MISH KO SWEN DRIVE
CRANDON, WI 54520
PHONE: 715.478.7398
EMAIL: BRUCE.JOHNSON@FCPOTAWATOMI-NSN.GOV

WATER

FOREST COUNTY POTAWATOMI UTILITY DEPT
BRUCE JOHNSON (PRIMARY CONTACT)
8355 MISH KO SWEN DRIVE
CRANDON, WI 54520
PHONE: 715.478.7398
EMAIL: BRUCE.JOHNSON@FCPOTAWATOMI-NSN.GOV

ELECTRICITY

WISCONSIN PUBLIC SERVICE CORPORATION
WENDY CHRIST (PRIMARY CONTACT)
P.O. BOX 19001
GREEN BAY, WI 54307-9001
PHONE: 920.617.5173
EMAIL: UTILITIESRELOCATION@WISCONSINPUBLICSERVICE.COM

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

ORDER OF SECTION 2 SHEETS

PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
PLAN DETAILS
EROSION CONTROL PLANS
STORM SEWER PLANS
PERMANENT SIGNING PLANS
LIGHTING PLANS
ALIGNMENT DIAGRAM

2

N

BEGIN PROJECT I.D. 1590-18-82
STA 100+20.43

ENVIRONMENTALLY SENSITIVE AREA (DELINEATED WETLAND)

MATCH EXISTING STA 116+72.10

MATCH EXISTING STA 117+06.94

MATCH PROPOSED PATH PROJECT 9813-02-70 STA 131+92.50

MATCH PROPOSED ROADWAY PROJECT 1590-18-71 STA 136+03.62

P.L.

FIREKEEPER RD

EVERYBODYS RD

YOUNGS LN

KWE DA KIK LN

BUG LAKE RD

LOVE KNOT LN

INDIAN RD

USH 8

105+00

110+00

115+00

120+00

125+00

130+00

135+00

140+00

145+00

150+00

155+00

R/W

END PROJECT I.D. 1590-18-82
STA 155+22.88

SHARED-USE PATH CONSTRUCTION COMPLETED UNDER PROJECT 9813-02-70

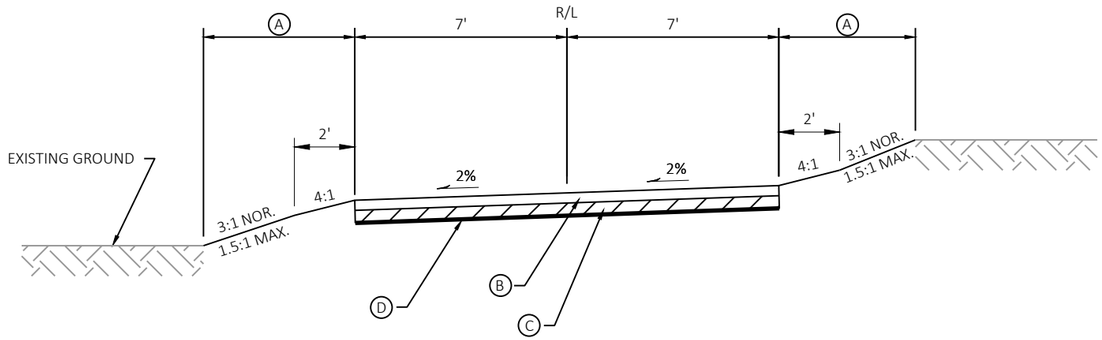
STRUCTURE B-21-0035

USH 8 CONSTRUCTION COMPLETED UNDER PROJECT 1590-18-71

PROJECT NO: 1590-18-82	USH 8 - ATV	COUNTY: FOREST	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\020102-PO_UTV.DWG
LAYOUT NAME - 01

PLOT DATE : 10/14/2024 10:48 AM PLOT BY : JASON VOELKER PLOT NAME : PLOT SCALE : 1 IN:500 FT



TYPICAL PROPOSED SECTION - ATV TRAIL

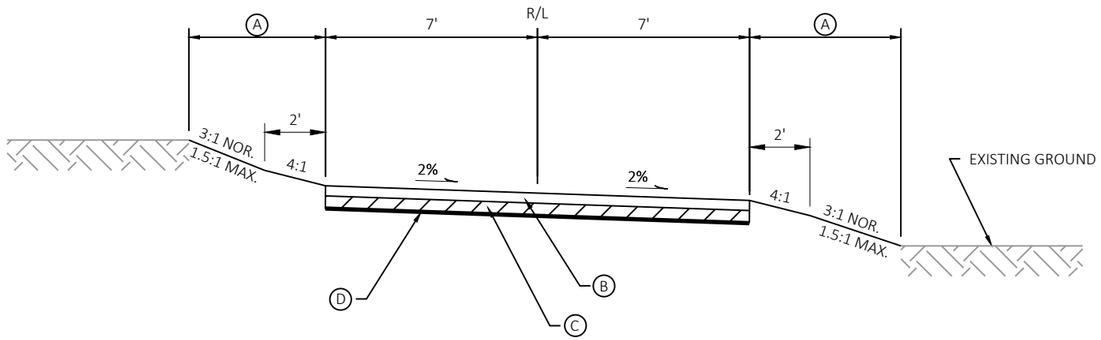
STA. 100+20 - STA. 107+75
STA. 125+75 - STA. 131+75

(A) TOPSOIL, MULCH OR EROSION MAT (TYPE AND LOCATION AS SHOWN IN EROSION CONTROL PLANS AND CONSTRUCTION DETAILS), No. 20 SEEDING MIXTURE, SOIL STABILIZER TYPE B, FERTILIZER TYPE A

(B) BASE AGGREGATE DENSE 3/4-INCH, 3-INCH

(C) BASE AGGREGATE DENSE 1 1/4-INCH, 5-INCH

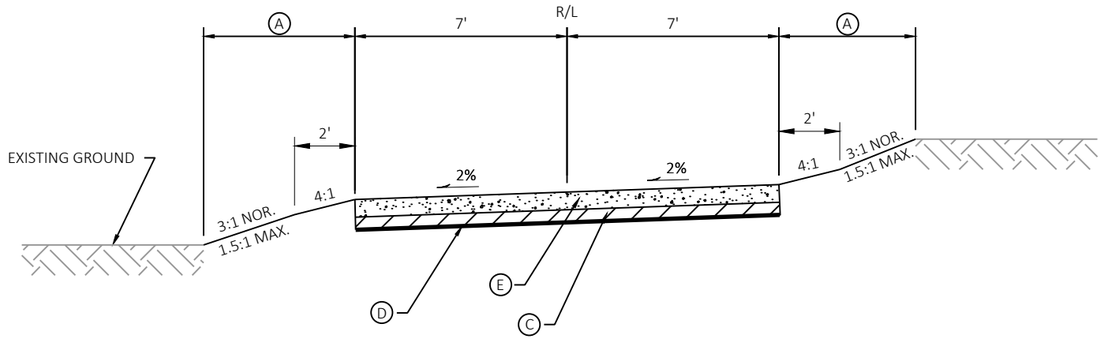
(D) GEOGRID TYPE SR



TYPICAL PROPOSED SECTION - ATV TRAIL

STA. 107+75 - STA. 125+75
STA. 131+75 - STA. 155+23

PROJECT NO: 1590-18-82	USH 8 - ATV	COUNTY: FOREST	TYPICAL SECTIONS	SHEET 4	E



TYPICAL PROPOSED SECTION - CONCRETE APPROACH

STA. 100+20 - STA. 100+70
STA. 131+42 - STA. 131+92

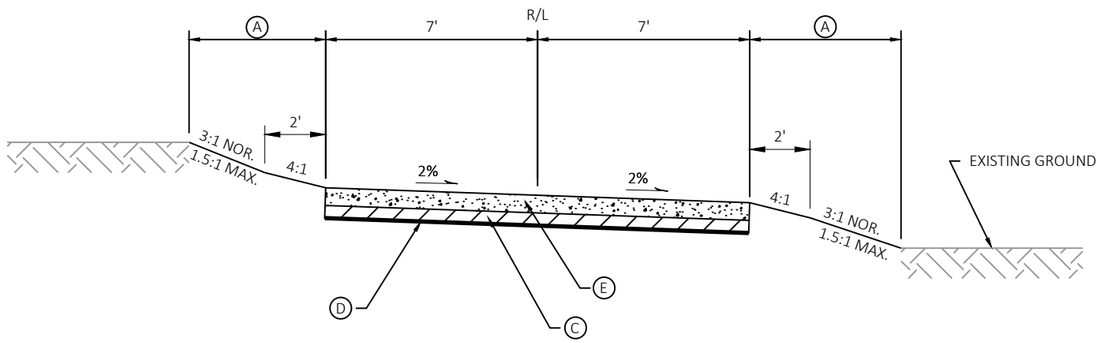
(A) TOPSOIL, MULCH OR EROSION MAT (TYPE AND LOCATION AS SHOWN IN EROSION CONTROL PLANS AND CONSTRUCTION DETAILS), No. 20 SEEDING MIXTURE, SOIL STABILIZER TYPE B, FERTILIZER TYPE A

(B) BASE AGGREGATE DENSE 3/4-INCH, 3-INCH

(C) BASE AGGREGATE DENSE 1 1/4-INCH, 5-INCH

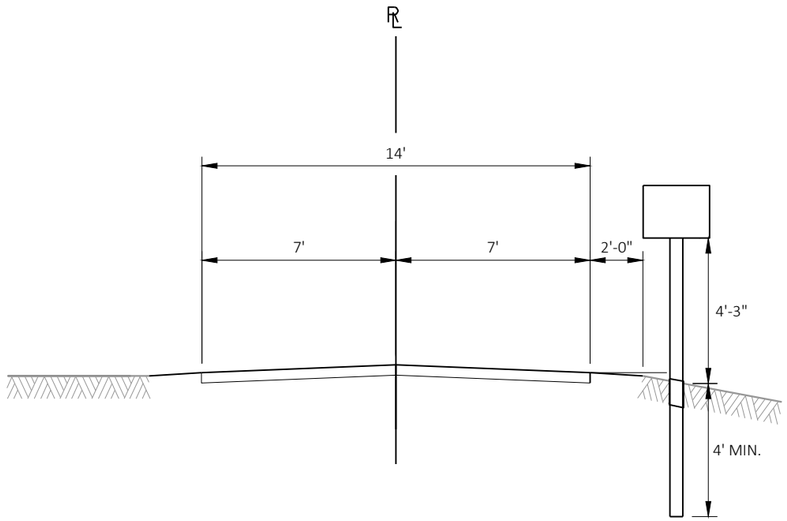
(D) GEOGRID TYPE SR

(E) 7" CONCRETE PAVEMENT



TYPICAL PROPOSED SECTION - CONCRETE APPROACH

STA. 116+22 - STA. 116+72
STA. 117+07 - STA. 117+57
STA. 136+04 - STA. 136+55
STA. 154+68 - STA. 155+21



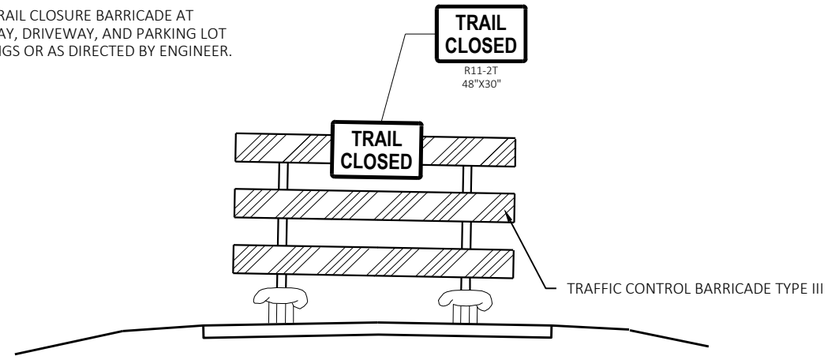
TYPICAL TRAIL SIGNAGE LAYOUT

GENERAL NOTES

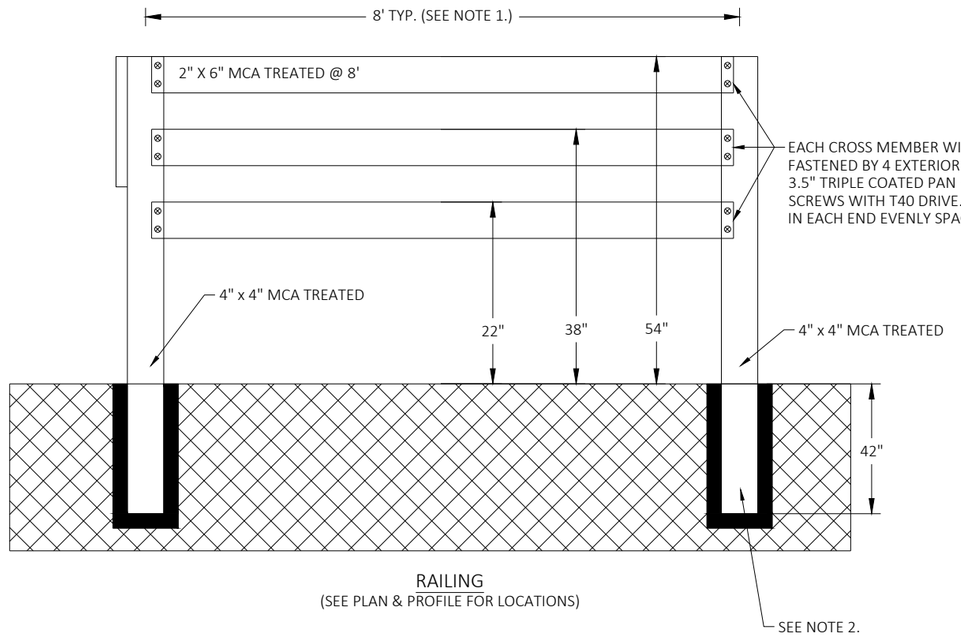
1. ALL UPPER CASE MESSAGES SHALL BE "SERIES E. MODIFIED"
2. DO NOT SCALE.
3. FOR ROADWAY SIGNAGE SEE TYPICAL WISDOT INSTALLATION FOR PERMANENT TYPE II SIGNS ON SINGLE POSTS.
4. SCREWS FOR SIGNS SHALL BE TAMPER RESISTANT TORX HEAD INSTALLATIONS.

NOTES:

1. PLACE TRAIL CLOSURE BARRICADE AT ROADWAY, DRIVEWAY, AND PARKING LOT CROSSINGS OR AS DIRECTED BY ENGINEER.



TRAIL CLOSURE BARRICADE DETAIL

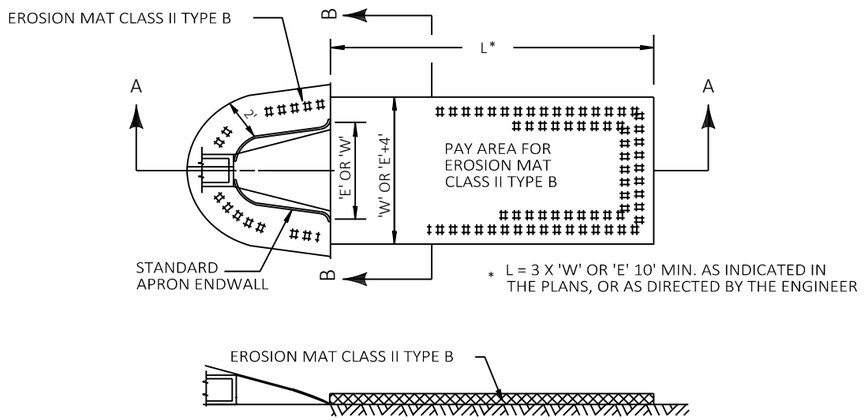


RAILING
(SEE PLAN & PROFILE FOR LOCATIONS)

NOTES:

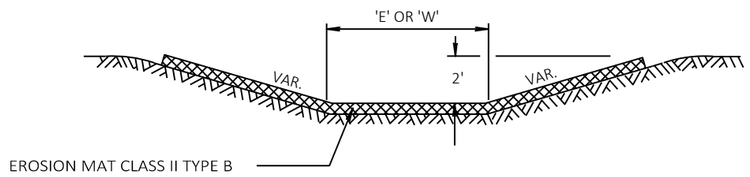
1. IF REQUIRED BY FIELD CONDITIONS, EXTEND POST SPACING UP TO 10' WIDTH. PLACE POSTS IN CONCRETE. LOCATIONS AS APPROVED BY THE ENGINEER.

2. IF FIELD CONDITIONS DO NOT ALLOW FOR REQUIRED 3.5' INSTALLATION DEPTH, CONTRACTOR SHALL FILL WITH CONCRETE UPON APPROVAL BY THE ENGINEER. ADDITIONAL CONCRETE SHALL BE PAID AS SPV.0060.108 CONCRETE FOOTINGS (CONCRETE BASE).



NOTES: REFER TO S.D.D. APRON ENDWALLS FOR CULVERT PIPE FOR 'E' OR 'W' DIMENSIONS

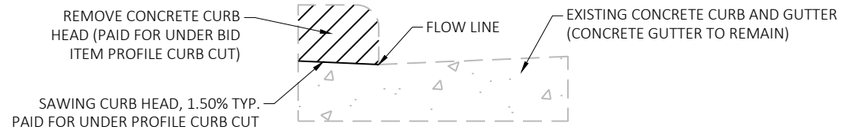
SECTION A-A



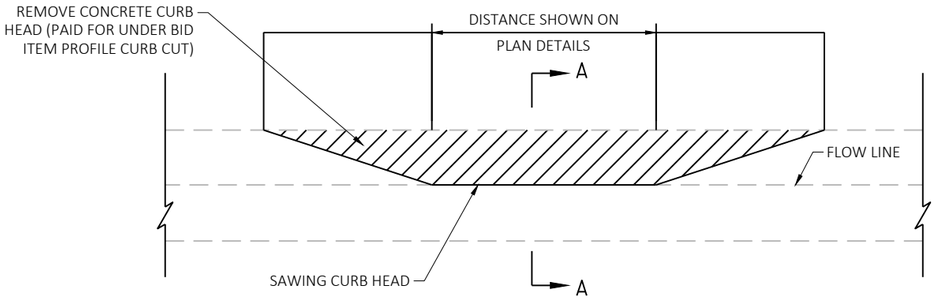
SECTION B-B

EROSION MAT TREATMENT AT PIPE ENDWALL DETAIL

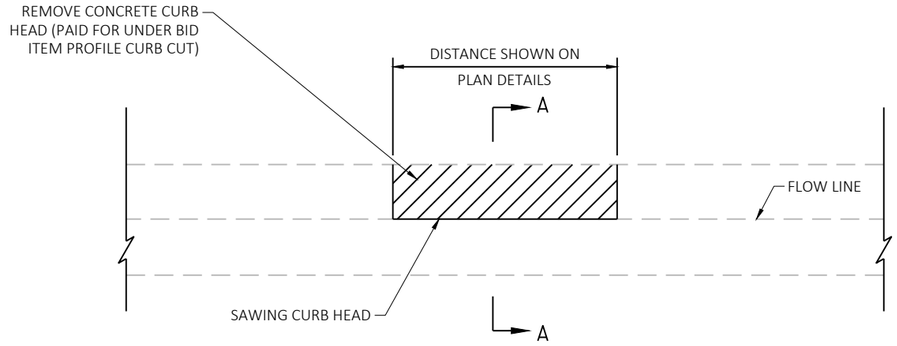
SEE EROSION CONTROL PLAN FOR LOCATIONS



SECTION A-A

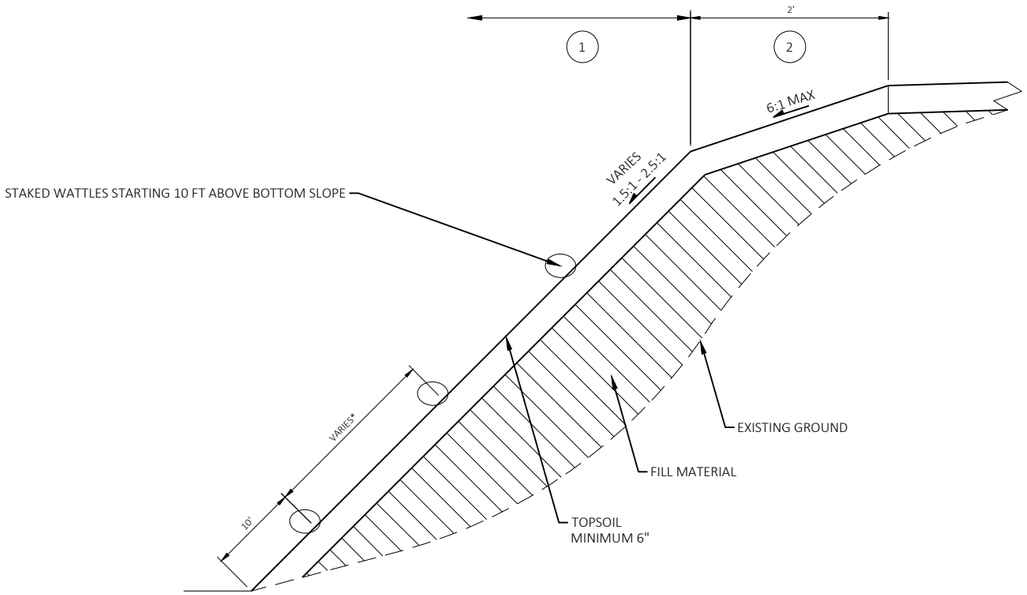


TAPERED



VERTICAL

PROFILE CURB CUT DETAIL



EROSION CONTROL DETAIL FOR STEEP SLOPE AREAS

(1) TOPSOIL, EROSION MAT CLASS II TYPE B, SOIL STABILIZER TYPE B AND NO. 20 SEED MIXTURE AT RATE SPECIFIED IN THE SPECIAL PROVISIONS.

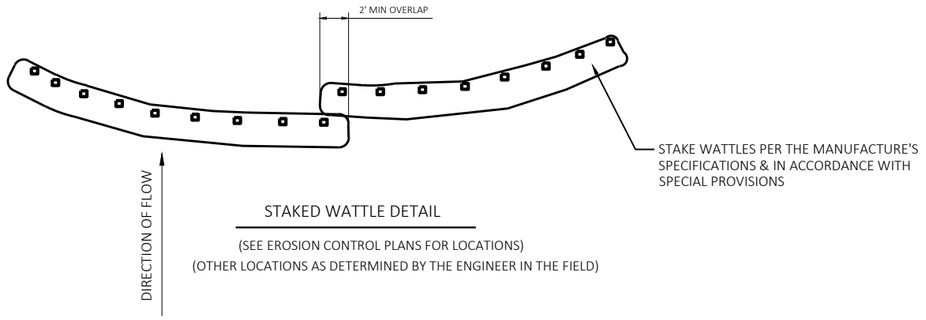
(2) TOPSOIL, MULCH, NO. 20 SEED MIXTURE AT RATE SPECIFIED IN THE SPECIAL PROVISIONS.

NOTES:

TOPSOIL SHALL NOT BE SCREENED

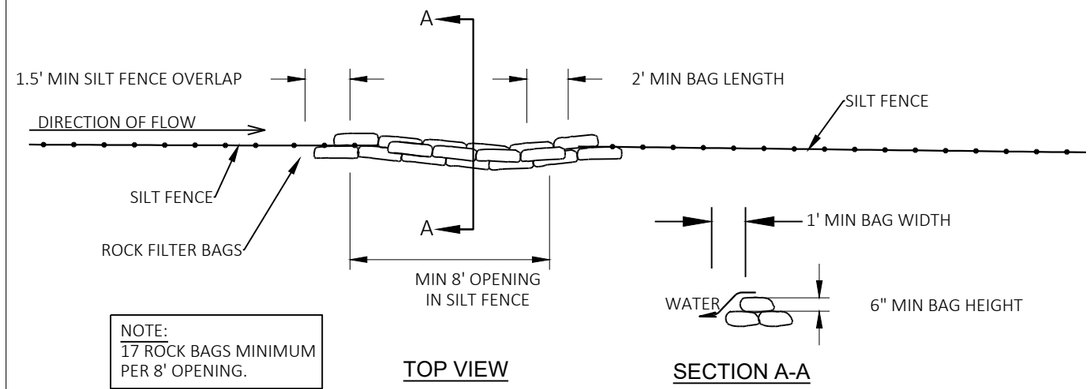
*SEE 12" DIAMETER MINIMUM STAKED WATTLE SPACING TABLE FOR STAKED WATTLE INTERVALS

12" DIAMETER MINIMUM STAKED WATTLE SPACING TABLE	
SLOPE	MAXIMUM SPACING
1H : 1V	5' - 0"
1.5H : 1V	7' - 6"
2H : 1V	10' - 0"
2.5H : 1V	12' - 6"
3H : 1V	15' - 0"



STAKED WATTLE DETAIL

(SEE EROSION CONTROL PLANS FOR LOCATIONS)
(OTHER LOCATIONS AS DETERMINED BY THE ENGINEER IN THE FIELD)



NOTE:
17 ROCK BAGS MINIMUM PER 8' OPENING.

TOP VIEW

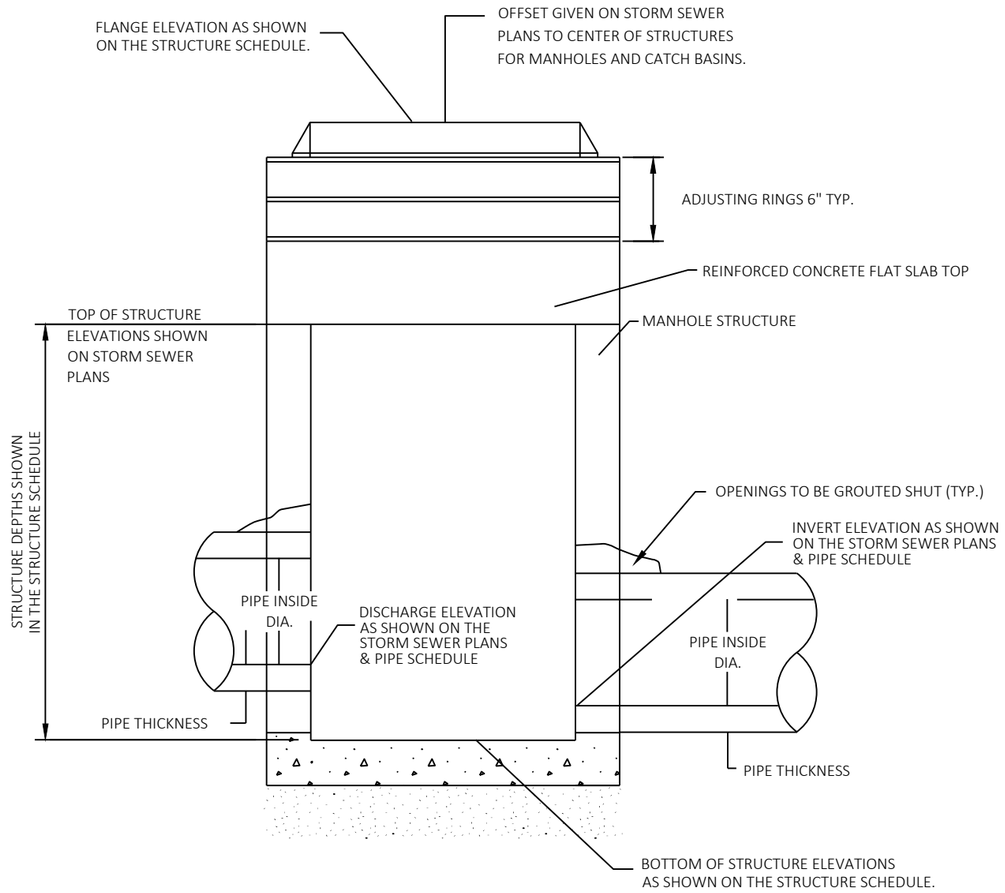
SECTION A-A

ROCK BAGS USED FOR SILT FENCE RELIEF

GENERAL NOTES:

GRANULAR BACKFILL REQUIRED AROUND MANHOLE
(INCIDENTAL TO CONSTRUCTION OF MANHOLE)

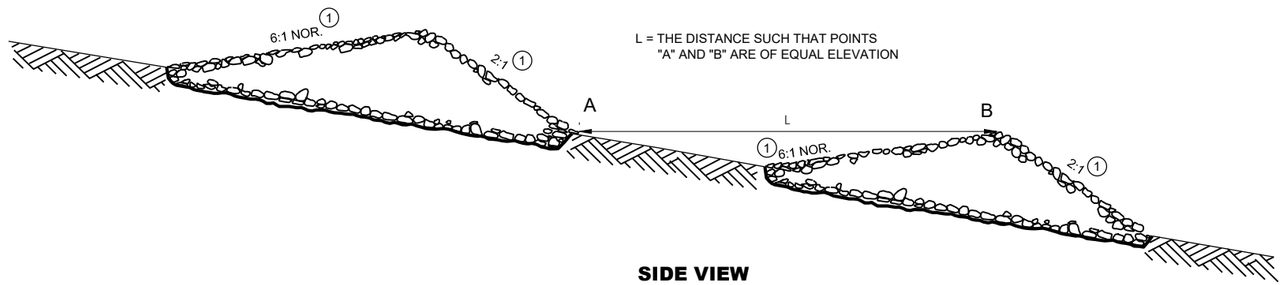
DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, APPLICABLE SPECIAL PROVISIONS, AND S.D.D. FOR MANHOLES 4-FT, 6-FT, & 8-FT DIAMETER, MANHOLES 3x3-FT, 4x4-FT, 5x5-FT & 6x6-FT, CATCH BASINS 4-FT, 6-FT, & 8-FT DIAMETER, CATCH BASINS 6x6-FT, PIPE UNDERDRAIN DETAIL, CITY OF BROOKFIELD STORM INLET DETAIL, STORM CATCH BASIN DETAIL, AND STORM CATCH BASIN DETAIL FOR PIPE GREATER THAN 18" DIAMETER.



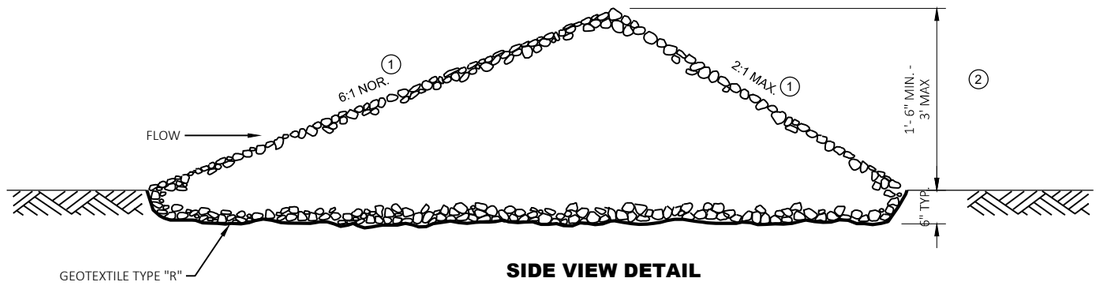
DETAIL OF MANHOLE W/CASTING

(SEE STORM SEWER PLANS FOR LOCATIONS)

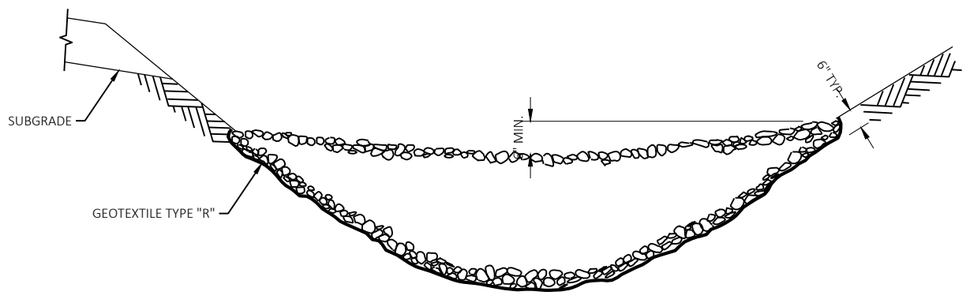
PROJECT NO: 3500-00-76	USH 8 - ATV	COUNTY: JEFFERSON	CONSTRUCTION DETAILS	SHEET 9	E



SIDE VIEW



SIDE VIEW DETAIL



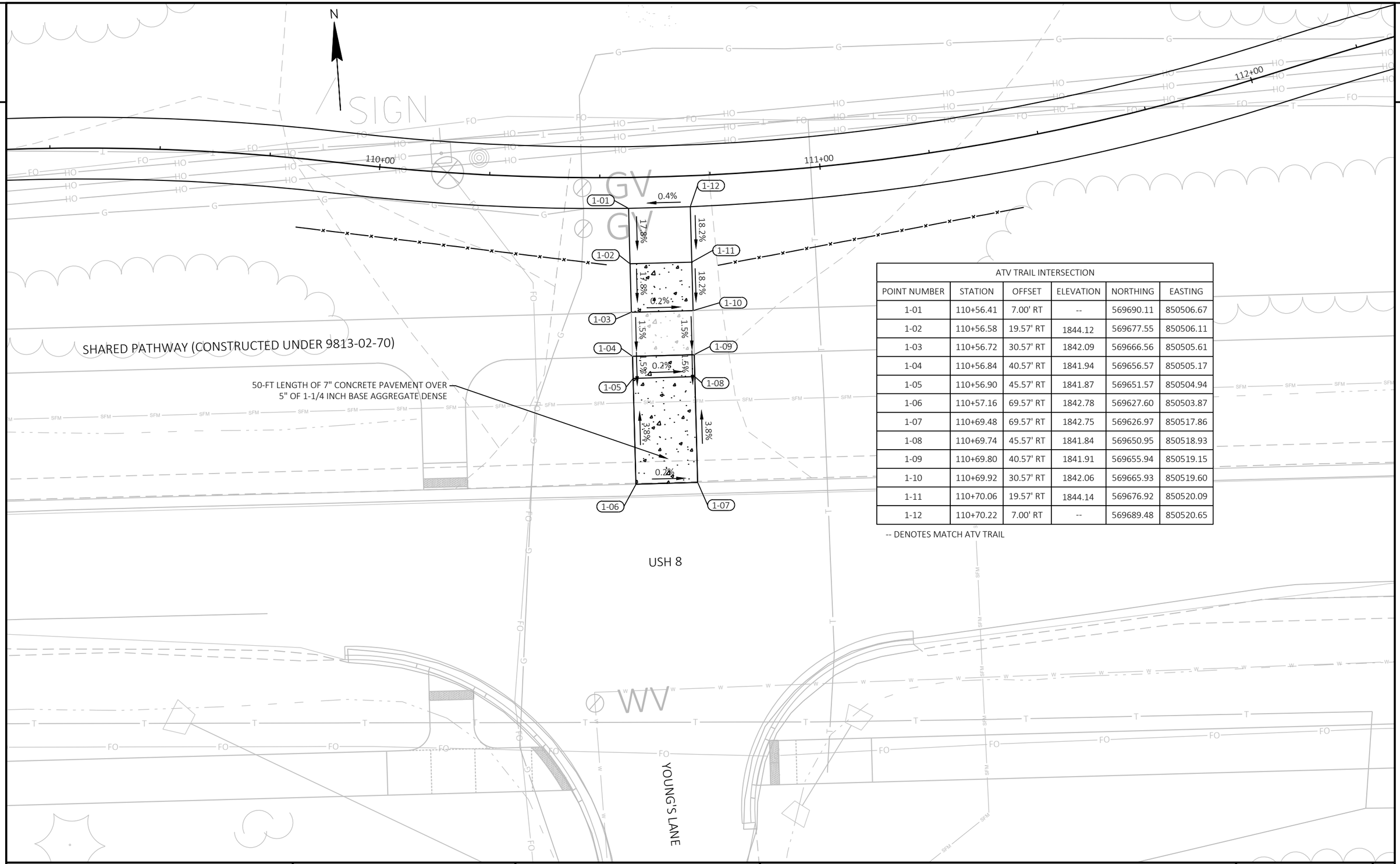
SECTION VIEW

STONE DITCH CHECK

(1) WHEN PLACED WITHIN THE CLEAR ZONE, SLOPED AT 6:1 OR FLATTER.

(2) MEASURED AT THE CENTER OF THE DITCH CHECK.

PROJECT NO: 1590-18-82	USH 8 - ATV	COUNTY: FOREST	CONSTRUCTION DETAILS	SHEET 10	E



ATV TRAIL INTERSECTION					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1-01	110+56.41	7.00' RT	--	569690.11	850506.67
1-02	110+56.58	19.57' RT	1844.12	569677.55	850506.11
1-03	110+56.72	30.57' RT	1842.09	569666.56	850505.61
1-04	110+56.84	40.57' RT	1841.94	569656.57	850505.17
1-05	110+56.90	45.57' RT	1841.87	569651.57	850504.94
1-06	110+57.16	69.57' RT	1842.78	569627.60	850503.87
1-07	110+69.48	69.57' RT	1842.75	569626.97	850517.86
1-08	110+69.74	45.57' RT	1841.84	569650.95	850518.93
1-09	110+69.80	40.57' RT	1841.91	569655.94	850519.15
1-10	110+69.92	30.57' RT	1842.06	569665.93	850519.60
1-11	110+70.06	19.57' RT	1844.14	569676.92	850520.09
1-12	110+70.22	7.00' RT	--	569689.48	850520.65

-- DENOTES MATCH ATV TRAIL

PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	INTERSECTION DETAIL - ATV TRAIL	SHEET 11	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\021101-ID_UTV YOUNGS CONNECTION.DWG
LAYOUT NAME - 01

PLOT DATE : 10/22/2024 7:53 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT

NOTE: SEE OTHER PLANS FOR GRADING DETAILS OUTSIDE OF WINGWALL AREAS

N

2

2

1748.92
1748.96
1748.97
587+00 'PW'
1748.86
1749.77
1749.57
1748.58
1748.21
1749.73
1749.52
1750.29
1750.50
1747.49
R6.0
R20.0
1750.60
1750.39
1747.81
585+00 'PW'
SHARED PATHWAY CONSTRUCTED UNDER 9813-02-70
586+00 'PW'
ATV TRAIL CONSTRUCTED UNDER 9813-02-70
88'ID'+00
ATV TRAIL CONSTRUCTED UNDER 9813-02-70
R10.0
R10.0
1751.07
1750.09
1749.39
1750.03
1753.24
1753.00
1752.79
1751.23
1751.44
1749.21
1749.87
1752.87
1751.25
1751.00
1750.40
1752.54
1752.75
1751.12
1751.33
1750.40
1749.90
588+00 'PW'
589+00 'PW'

N

NOTE: SEE OTHER PLANS FOR GRADING DETAILS OUTSIDE OF WINGWALL AREAS

PROJECT NO: 1590-18-82	USH 8 - ATV	COUNTY: FOREST	PLAN AND GRADING DETAILS - TUNNEL ENTRANCE	SHEET 12	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\WING WALL DETAILS.DWG
LAYOUT NAME - Wing Wall Details
PLOT DATE : 10/22/2024 11:49 AM PLOT BY : JASON VOELKER PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 44

NOTE: SEE 1590-18-71 FOR EROSION CONTROL TREATMENTS ASSOCIATED WITH THE ROADWAY AND SHARED PATHWAY CONSTRUCTION

WETLAND BOUNDARY (TYP.)

SLOPE INTERCEPT (TYP.)

CONSTRUCTION PERMIT NO ACCESS BEYOND THIS LINE

MATCH LINE 106+50

SHARED PATHWAY CONSTRUCTED UNDER 9813-02-70

R/W

ERW

101 102 103 104 105 106

LEGEND

- EROSION MAT CLASS II TYPE B
- STAKED WATTLES
- SILT FENCE
- SURFACE WATER FLOW
- INLET PROTECTION
- INLET PROTECTION TYPE (A B)
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK

CONSTRUCTION PERMIT NO ACCESS BEYOND THIS LINE

P.L.

R/W

ERW

MATCH LINE 106+50

MATCH LINE 112+50

107 108 109 110 111 112

SLOPE INTERCEPT (TYP.)

SHARED PATHWAY CONSTRUCTED UNDER 9813-02-70

WETLAND BOUNDARY (TYP.)

PROJECT NO: 1590-18-82	USH 8 - ATV	COUNTY: FOREST	EROSION CONTROL	SHEET 13	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\022001-EC_UTV.DWG
LAYOUT NAME - 01

PLOT DATE : 10/28/2024 1:25 PM PLOT BY : NATHAN RULLMAN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

NOTE: SEE 1590-18-71 FOR EROSION CONTROL TREATMENTS ASSOCIATED WITH THE ROADWAY AND SHARED PATHWAY CONSTRUCTION

2

2

N

R/W

ERW

EVERYBODYS RD

CONSTRUCTION PERMIT NO ACCESS BEYOND THIS LINE

MATCH LINE 112+50

MATCH LINE 118+50

113 114 115 116 117 118

SLOPE INTERCEPT (TYP.)

SHARED PATHWAY CONSTRUCTED UNDER 9813-02-70

WETLAND BOUNDARY (TYP.)

RIPRAP

A/C

INL

W

POST

MH

N

CONSTRUCTION PERMIT NO ACCESS BEYOND THIS LINE

ERW

MATCH LINE 118+50

MATCH LINE 124+50

119 120 121 122 123 124

SLOPE INTERCEPT (TYP.)

RIPRAP

LEGEND

EROSION MAT CLASS II TYPE B		INLET PROTECTION	
STAKED WATTLES		INLET PROTECTION TYPE	A B
SILT FENCE		TEMPORARY DITCH CHECK	
SURFACE WATER FLOW		CULVERT PIPE CHECK	

PROJECT NO: 1590-18-82	USH 8 - ATV	COUNTY: FOREST	EROSION CONTROL	SHEET 14	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\022001-EC_UTV.DWG
LAYOUT NAME - 02

PLOT DATE : 10/28/2024 1:25 PM PLOT BY : NATHAN RULLMAN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

NOTE: SEE 1590-18-71 FOR EROSION CONTROL TREATMENTS ASSOCIATED WITH THE ROADWAY AND SHARED PATHWAY CONSTRUCTION

LEGEND

- EROSION MAT CLASS II TYPE B
- STAKED WATTLES
- SILT FENCE
- SURFACE WATER FLOW
- INLET PROTECTION
- INLET PROTECTION TYPE (A / B)
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK

MATCH LINE 124+50

ERW

125

P.L.

RIPRAP

126

127

128

129

130

CONSTRUCTION PERMIT NO ACCESS BEYOND THIS LINE

SLOPE INTERCEPT (TYP.)

MATCH LINE 130+50

RIPRAP

ATV TRAIL FROM STA 131+92.50 TO 136+03.62 TO BE CONSTRUCTED BY PROJECT 1590-18-71 AND 9813-02-70. SEE OTHER PLANS FOR EROSION CONTROL MEASURES IN THIS AREA

R/W

WETLAND BOUNDARY (TYP.)

MATCH LINE 130+50

131

132

133

ERW

134

135

136

SLOPE INTERCEPT (TYP.)

MH

KWE DA KIK LN

MATCH LINE 136+50

SHARED PATHWAY CONSTRUCTED UNDER 9813-02-70

PROJECT NO: 1590-18-82	USH 8 - ATV	COUNTY: FOREST	EROSION CONTROL	SHEET 15 E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\022001-EC_UTV.DWG
LAYOUT NAME - 03

PLOT DATE : 10/28/2024 1:25 PM PLOT BY : NATHAN RULLMAN PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

EROSION MAT CLASS II TYPE B		INLET PROTECTION	
STAKED WATTLES		A B	INLET PROTECTION TYPE
SILT FENCE		TEMPORARY DITCH CHECK	
SURFACE WATER FLOW		CULVERT PIPE CHECK	

NOTE: SEE 1590-18-71 FOR EROSION CONTROL TREATMENTS ASSOCIATED WITH THE ROADWAY AND SHARED PATHWAY CONSTRUCTION

N

CONSTRUCTION PERMIT NO ACCESS BEYOND THIS LINE

R/W

137 138 139 140 141 142

MATCH LINE 136+50

MATCH LINE 142+50

SLOPE INTERCEPT (TYP.)

ERW

CONSTRUCTION PERMIT NO ACCESS BEYOND THIS LINE

MATCH LINE 142+50

143 144 145 146 147 148

MATCH LINE 148+50

SLOPE INTERCEPT (TYP.)

R/W

ERW

SHARED PATHWAY CONSTRUCTED UNDER 9813-02-70

PROJECT NO: 1590-18-82	USH 8 - ATV	COUNTY: FOREST	EROSION CONTROL	SHEET 16	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\022001-EC_UTV.DWG
LAYOUT NAME - 04

PLOT DATE : 10/28/2024 1:26 PM PLOT BY : NATHAN RULLMAN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

NOTE: SEE 1590-18-71 FOR EROSION CONTROL TREATMENTS ASSOCIATED WITH THE ROADWAY AND SHARED PATHWAY CONSTRUCTION

CONSTRUCTION PERMIT NO ACCESS BEYOND THIS LINE

SLOPE INTERCEPT (TYP.)

ERW

MATCH LINE 148+50

MATCH LINE 154+00

149

150

151

152

153

SHARED PATHWAY CONSTRUCTED UNDER 9813-02-70

WETLAND BOUNDARY (TYP.)

BUG LAKE RD

154

155

SLOPE INTERCEPT (TYP.)

SHARED PATHWAY CONSTRUCTED UNDER 9813-02-70

SEPC

SEPV

POST

SIGN

A/C

FLAG

LEGEND

	EROSION MAT CLASS II TYPE B		INLET PROTECTION
	STAKED WATTLES	A B	INLET PROTECTION TYPE
	SILT FENCE		TEMPORARY DITCH CHECK
	SURFACE WATER FLOW		CULVERT PIPE CHECK

PROJECT NO: 1590-18-82	USH 8 - ATV	COUNTY: FOREST	EROSION CONTROL	SHEET 17	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\022001-EC_UTV.DWG
LAYOUT NAME - 05

PLOT DATE : 10/28/2024 1:26 PM PLOT BY : NATHAN RULLMAN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

NOTE: SEE 1590-18-71 FOR STORM SEWER PLANS ASSOCIATED WITH THE ROADWAY AND SHARED PATHWAY CONSTRUCTION

CONSTRUCTION PERMIT NO ACCESS BEYOND THIS LINE

EX-1 STA 111+79, 92.8' LT
EXISTING INLET

SLOPE INTERCEPTS (TYP.)

2 STA 112+82, 12.9' LT
MANHOLES 4-C

STA 115+82, 15.2' LT 3
MANHOLES 4-C

ERW

110'UTV

112'UTV

114'UTV

116'UTV

SHARED PATHWAY
CONSTRUCTED UNDER
9813-02-70

STA 116+63, 29.8' RT 4
MANHOLES 4-C

STA 116+95, 33.9' RT 5
MANHOLES 4-C

REMOVING STORM SEWER
15-INCH

STA 117+03, 27.6' RT EX-6
EXISTING INLET

USH 8 (CONSTRUCTED
UNDER 1590-18-71)

SHARED PATHWAY
CONSTRUCTED UNDER
9813-02-70

EVERYBODYS RD

YOUNGS LN

N

PROJECT NO: TBD	TRAIL: USH 8 - ATV	COUNTY: FOREST	STORM SEWER PLAN - UTV	SHEET 18	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\DESIGN\PIPENETWORKS\ATV-PIPENETWORKS_ALTDESIGN-UPDATE.DWG
LAYOUT NAME - SS 1 IN 50 FT - PN

PLOT DATE : 10/22/2024 8:52 AM PLOT BY : JASON VOELKER PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 41

2

1885
1880
1875
1870
1865
1860
1855
1850
1845
1840

EX-1
1880.30
1875.61
131 LF STORM SEWER PIPE CLASS III-A 18-INCH @ 18.78%
EXISTING SURFACE (AFTER ROADWAY & BIKE/PED GRADING)
2
1864.24
PROPOSED SURFACE
1851.02
1851.02
302 LF STORM SEWER PIPE CLASS III-A 18-INCH @ 1.00%
3
1855.16
1848.00
1848.00
91 LF STORM SEWER PIPE CLASS III-A 18-INCH @ 1.00%
4
1852.08
1847.09
1847.09
32 LF STORM SEWER PIPE CLASS III-A 18-INCH @ 1.00%
5
EX-6
1851.31
1851.63
1846.77
1846.50
1846.50
10 LF STORM SEWER PIPE CLASS III-A 18-INCH @ 2.81%

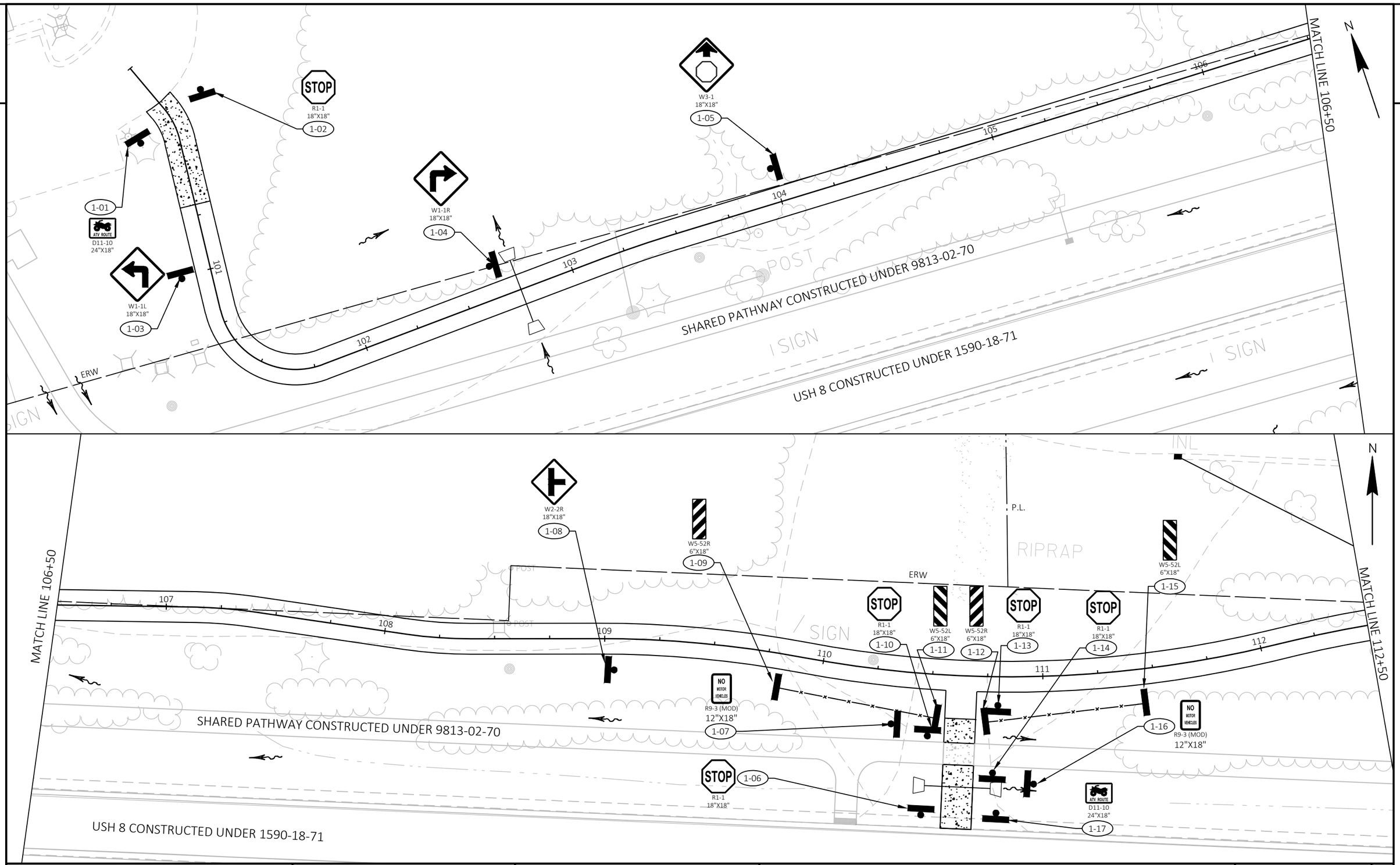
2

PROJECT NO: TBD	TRAIL: USH 8 - UTV	COUNTY: FOREST	STORM SEWER PLAN - UTV	SHEET 19	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\DESIGN\PIPENETWORKS\ATV-PIPENETWORKS_ALTDESIGN-UPDATE.DWG
LAYOUT NAME - SS 1 IN 50 FT - PROF
PLOT DATE : 10/22/2024 8:53 AM PLOT BY : JASON VOELKER PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 41

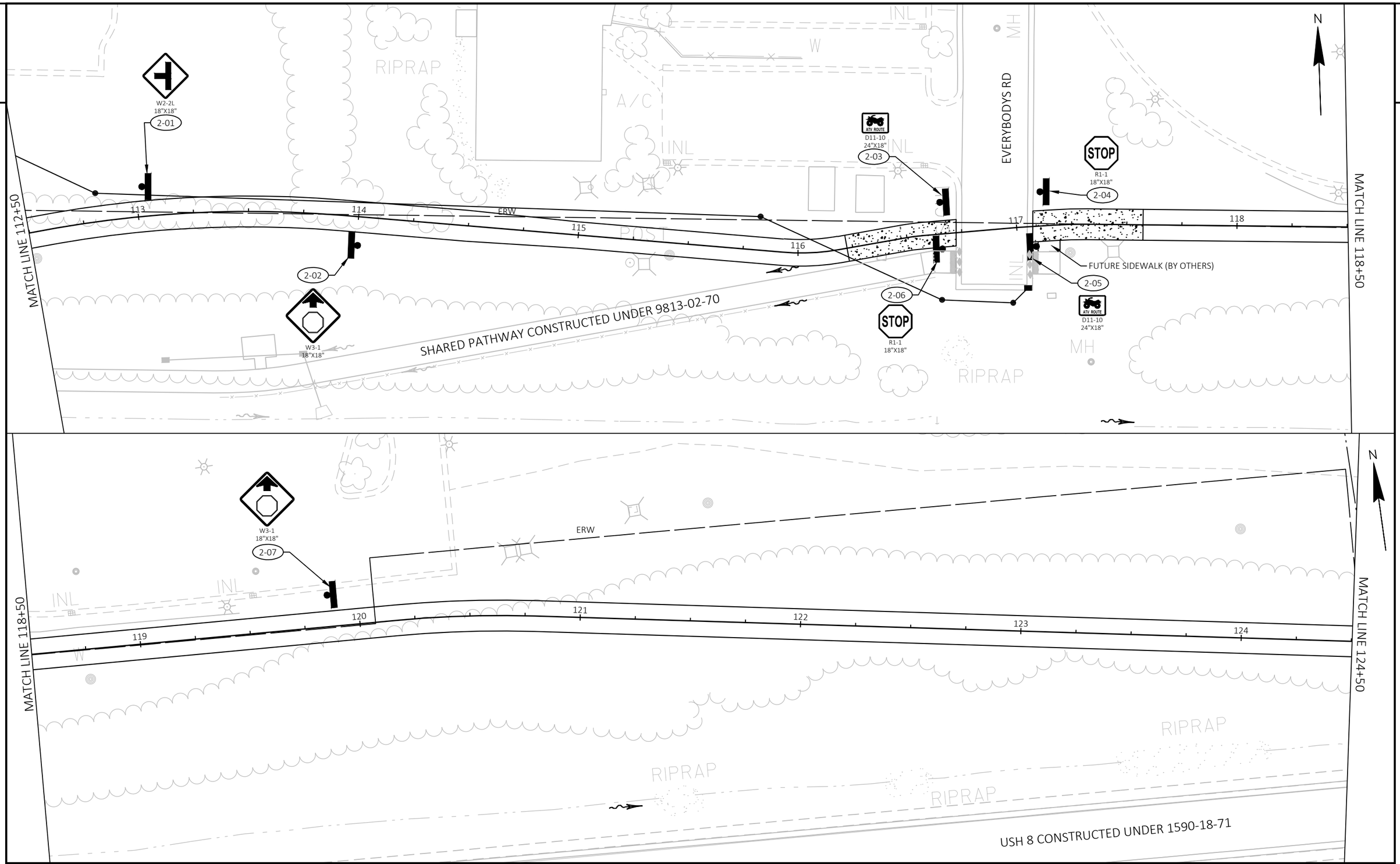
2



PROJECT NO: 1590-18-82	USH 8 - ATV	COUNTY: FOREST	PERMANENT SIGNING	SHEET 20	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\023201-PS_UTV.DWG
LAYOUT NAME - 01

PLOT DATE : 10/22/2024 9:01 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT



PROJECT NO: 1590-18-82	USH 8 - ATV	COUNTY: FOREST	PERMANENT SIGNING	SHEET 21	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\023201-PS_UTV.DWG
LAYOUT NAME - 02

PLOT DATE : 10/22/2024 9:01 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

MATCH LINE 124+50

ERW

125

126

127

128

129

130

MATCH LINE 130+50

RIPRAP

USH 8 CONSTRUCTED UNDER 1590-18-71

W2-2R
18"X18"
3-01

N

MATCH LINE 130+50

131

132

133

134

135

136

ERW

RIPRAP

STOP
R1-1
18"X18"
3-03

W3-1
18"X18"
3-04

W1-2L
18"X18"
3-05

W2-2L
18"X18"
3-06

TRAIL CROSSING
W11-15A
30"X30"
3-07

STOP
R1-1
18"X18"
3-08

ATV ROUTE
D11-10
24"X18"
3-09

3-02

W1-2R
18"X18"

W1-2L
18"X18"
3-10

3-11

STOP
R1-1
18"X18"

3-12

ATV ROUTE
D11-10
24"X18"

MH

KWE DA KIK LN

USH 8 CONSTRUCTED UNDER 1590-18-71

SHARED PATHWAY CONSTRUCTED UNDER 9813-02-70

N

MATCH LINE 136+50

PROJECT NO: 1590-18-82	USH 8 - ATV	COUNTY: FOREST	PERMANENT SIGNING	SHEET 22	E

2

N

W1-2L
18"X18"
4-02

W3-1
18"X18"
4-03

13%
GRADE
W7-3
24"X18"
4-04

HILL
BLOCKS
VIEW
W7-6
18"X18"
4-05

MATCH LINE 136+50

137 138 139 140 141 142

4-01

HILL
BLOCKS
VIEW
W7-6
18"X18"

ERW

MATCH LINE 142+50

MATCH LINE 142+50

13%
GRADE
W7-3
24"X18"
4-06

143 144 145 146 147 148

ERW

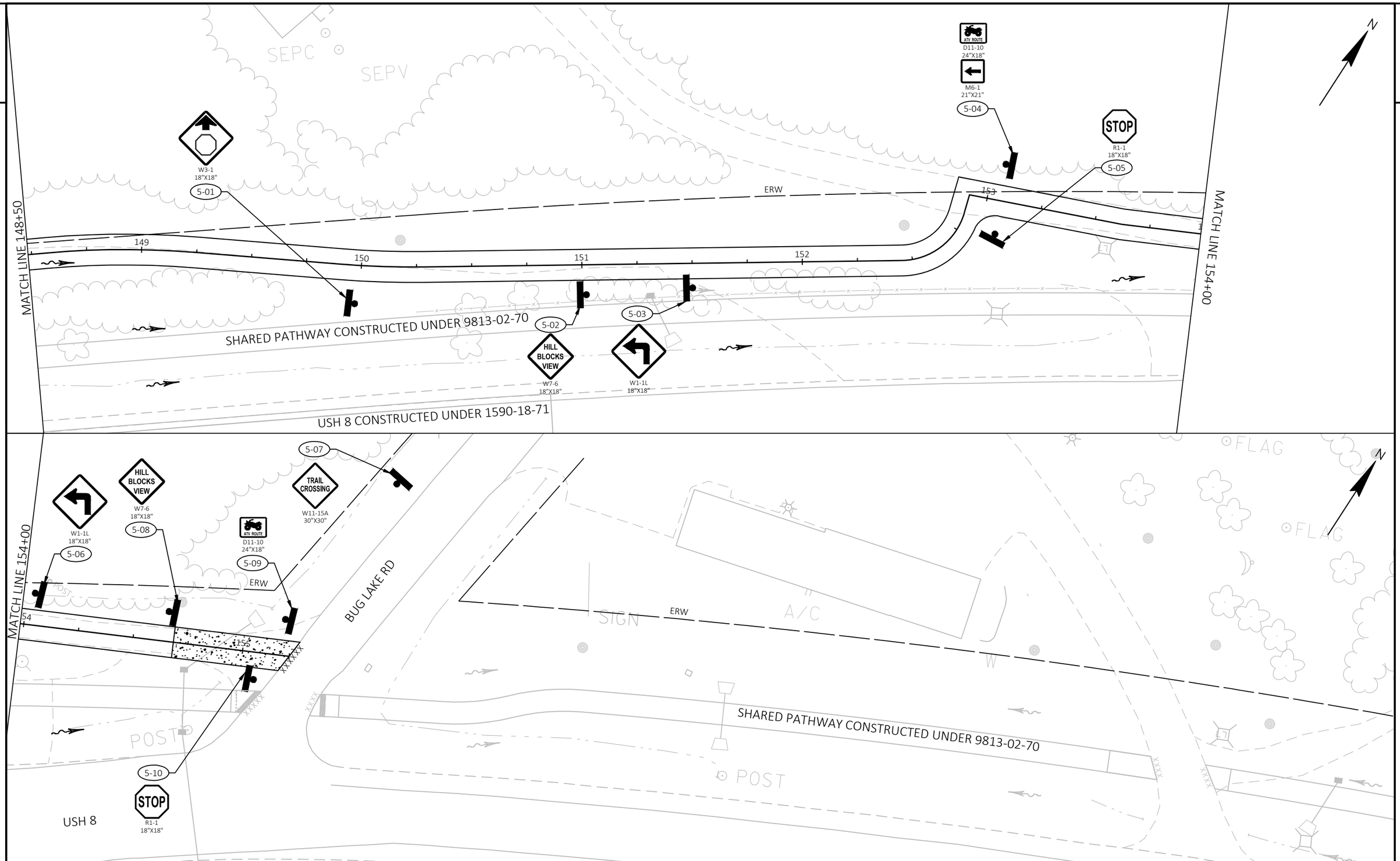
MATCH LINE 148+50

SHARED PATHWAY CONSTRUCTED UNDER 9813-02-70

PROJECT NO: 1590-18-82	USH 8 - ATV	COUNTY: FOREST	PERMANENT SIGNING	SHEET 23	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\023201-PS_UTV.DWG
LAYOUT NAME - 04

PLOT DATE : 10/22/2024 9:01 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT



PROJECT NO: 1590-18-82	USH 8 - ATV	COUNTY: FOREST	PERMANENT SIGNING	SHEET 24	E

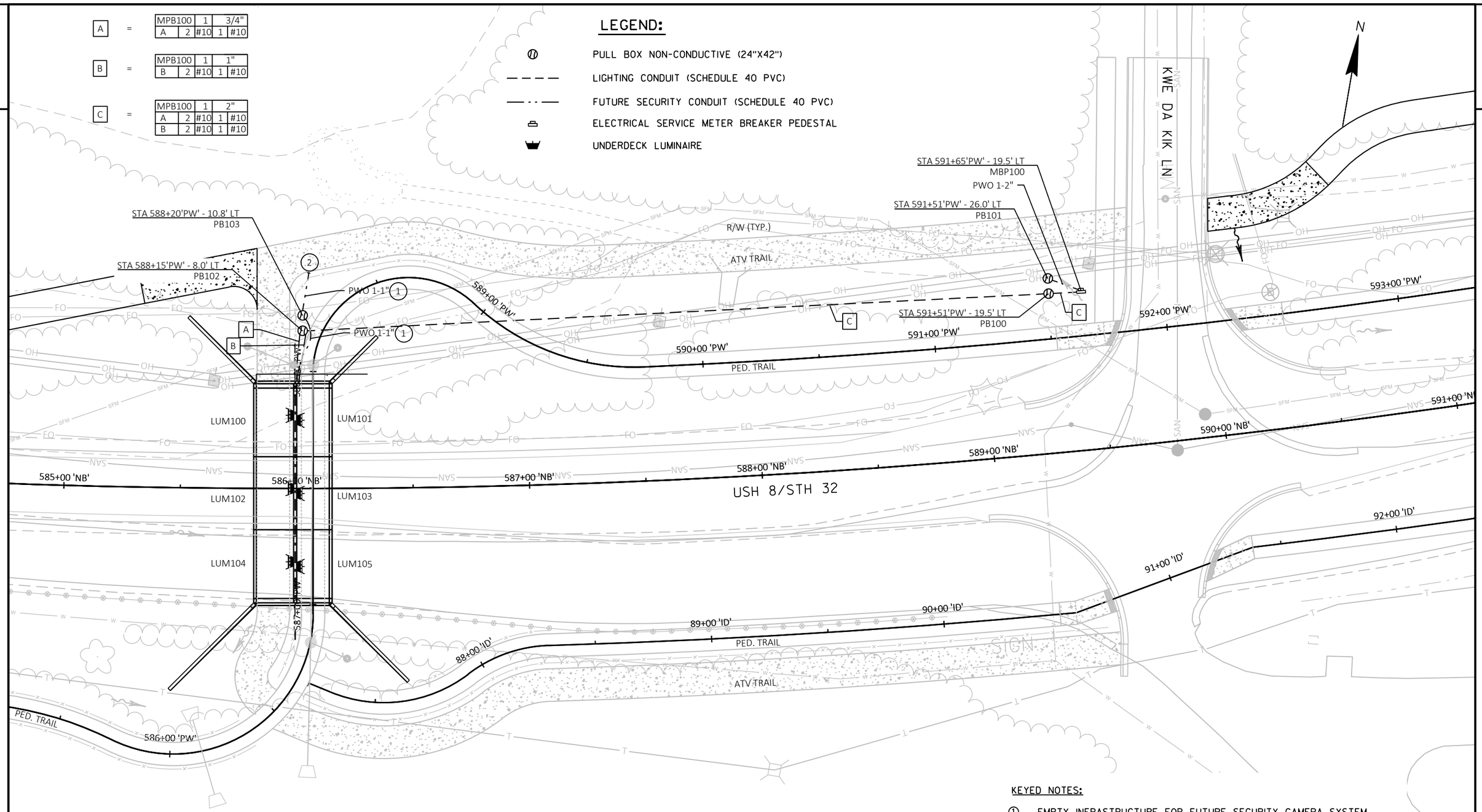
FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\023201-PS_UTV.DWG
LAYOUT NAME - 05

PLOT DATE : 10/22/2024 9:01 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

A =	MPB100	1	3/4"		
	A	2	#10	1	#10
B =	MPB100	1	1"		
	B	2	#10	1	#10
C =	MPB100	1	2"		
	A	2	#10	1	#10
	B	2	#10	1	#10

LEGEND:

- PULL BOX NON-CONDUCTIVE (24"X42")
- LIGHTING CONDUIT (SCHEDULE 40 PVC)
- FUTURE SECURITY CONDUIT (SCHEDULE 40 PVC)
- ELECTRICAL SERVICE METER BREAKER PEDESTAL
- UNDERDECK LUMINAIRE



CONSTRUCTION NOTES:

1) SEE STRUCTURE PLANS FOR ELECTRICAL INFRASTRUCTURE EMBEDDED IN STRUCTURE

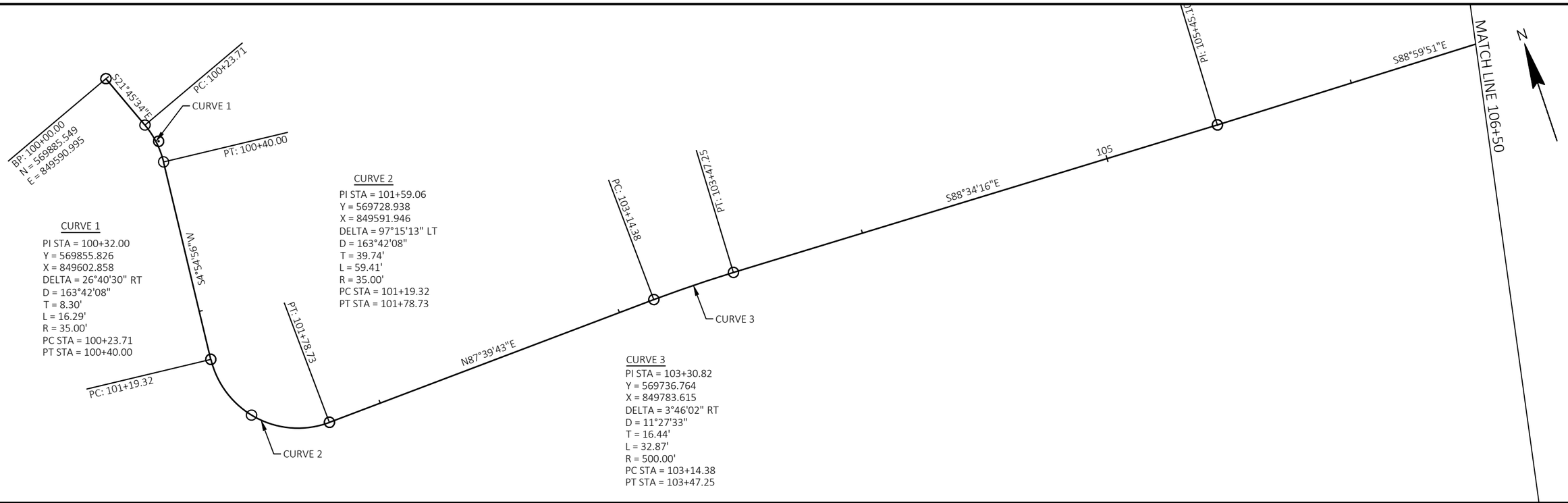
KEYED NOTES:

① EMPTY INFRASTRUCTURE FOR FUTURE SECURITY CAMERA SYSTEM.

② FIELD LOCATE TERMINATION POINT WITH THE COUNTY AND ENGINEER IN THE FIELD TO FACILITATE SPLICING INTO FIBER NETWORK.

SHEET 3 OF 3

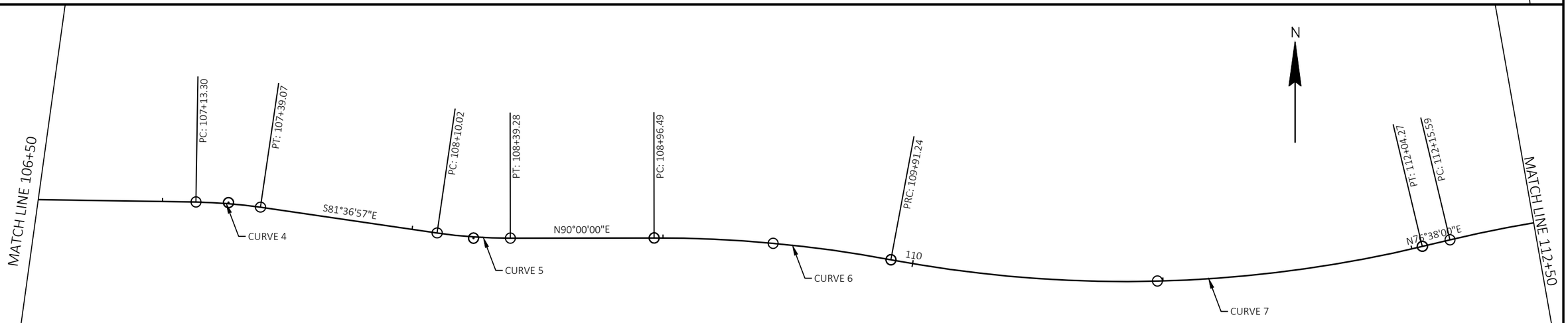
PROJECT NO: 1590-18-82	HWY: USH 8	COUNTY: FOREST	LIGHTING PLANS	SHEET 25	E



CURVE 1
PI STA = 100+32.00
Y = 569855.826
X = 849602.858
DELTA = 26°40'30" RT
D = 163°42'08"
T = 8.30'
L = 16.29'
R = 35.00'
PC STA = 100+23.71
PT STA = 100+40.00

CURVE 2
PI STA = 101+59.06
Y = 569728.938
X = 849591.946
DELTA = 97°15'13" LT
D = 163°42'08"
T = 39.74'
L = 59.41'
R = 35.00'
PC STA = 101+19.32
PT STA = 101+78.73

CURVE 3
PI STA = 103+30.82
Y = 569736.764
X = 849783.615
DELTA = 3°46'02" RT
D = 11°27'33"
T = 16.44'
L = 32.87'
R = 500.00'
PC STA = 103+14.38
PT STA = 103+47.25



CURVE 4
PI STA = 107+26.20
Y = 569728.252
X = 850178.911
DELTA = 7°22'54" RT
D = 28°38'52"
T = 12.90'
L = 25.77'
R = 200.00'
PC STA = 107+13.30
PT STA = 107+39.07

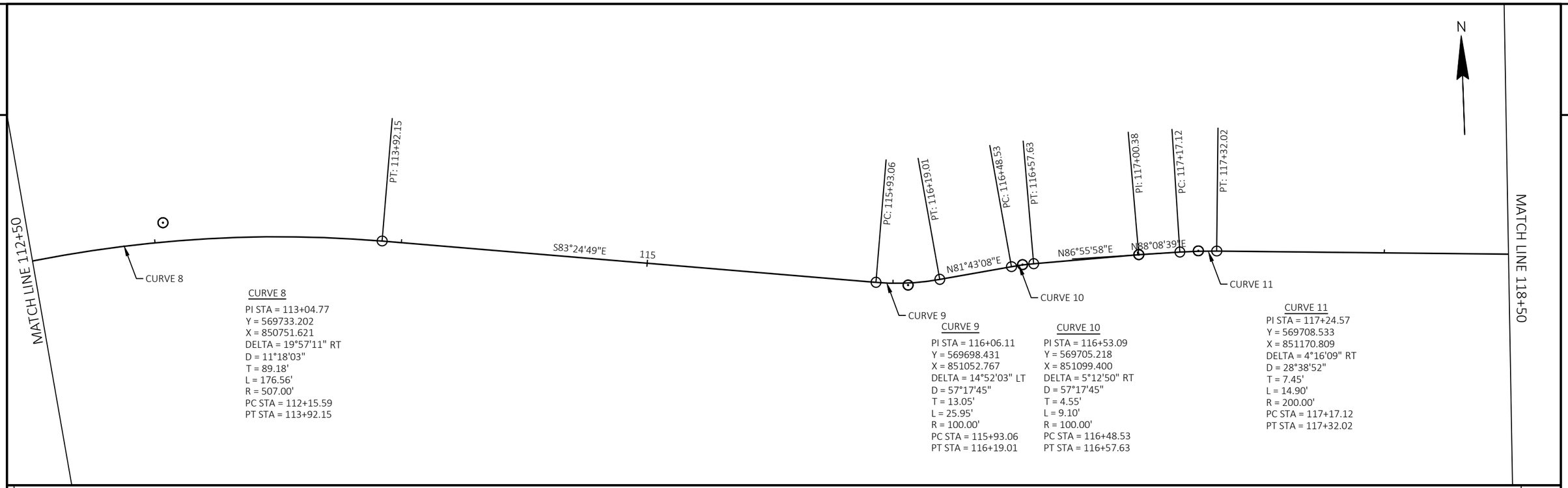
CURVE 5
PI STA = 108+24.67
Y = 569713.888
X = 850276.367
DELTA = 8°23'03" LT
D = 28°38'52"
T = 14.66'
L = 29.27'
R = 200.00'
PC STA = 108+10.02
PT STA = 108+39.28

CURVE 6
PI STA = 109+44.00
Y = 569713.888
X = 850395.750
DELTA = 10°42'27" RT
D = 11°18'03"
T = 47.51'
L = 94.75'
R = 507.00'
PC STA = 108+96.49
PT STA = 109+91.24

CURVE 7
PI STA = 110+99.35
Y = 569684.975
X = 850548.661
DELTA = 24°04'27" LT
D = 11°18'03"
T = 108.11'
L = 213.03'
R = 507.00'
PC STA = 109+91.24
PT STA = 112+04.27

PROJECT NO: 1590-18-82	USH 8 - ATV	COUNTY: FOREST	ALIGNMENT DIAGRAM	SHEET 26	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\027201-AD_UTV.DWG
LAYOUT NAME - 01
PLOT DATE : 10/14/2024 1:39 PM
PLOT BY : JASON VOELKER
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

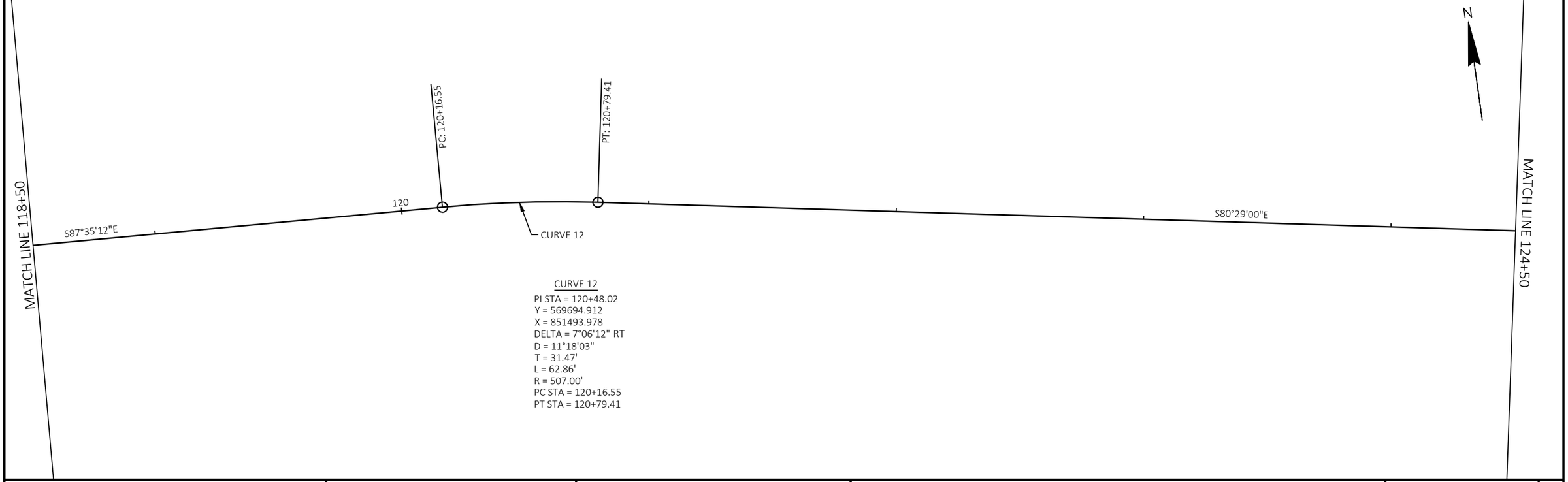


CURVE 8
PI STA = 113+04.77
Y = 569733.202
X = 850751.621
DELTA = 19°57'11" RT
D = 11°18'03"
T = 89.18'
L = 176.56'
R = 507.00'
PC STA = 112+15.59
PT STA = 113+92.15

CURVE 9
PI STA = 116+06.11
Y = 569698.431
X = 851052.767
DELTA = 14°52'03" LT
D = 57°17'45"
T = 13.05'
L = 25.95'
R = 100.00'
PC STA = 115+93.06
PT STA = 116+19.01

CURVE 10
PI STA = 116+53.09
Y = 569705.218
X = 851099.400
DELTA = 5°12'50" RT
D = 57°17'45"
T = 4.55'
L = 9.10'
R = 100.00'
PC STA = 116+48.53
PT STA = 116+57.63

CURVE 11
PI STA = 117+24.57
Y = 569708.533
X = 851170.809
DELTA = 4°16'09" RT
D = 28°38'52"
T = 7.45'
L = 14.90'
R = 200.00'
PC STA = 117+17.12
PT STA = 117+32.02



CURVE 12
PI STA = 120+48.02
Y = 569694.912
X = 851493.978
DELTA = 7°06'12" RT
D = 11°18'03"
T = 31.47'
L = 62.86'
R = 507.00'
PC STA = 120+16.55
PT STA = 120+79.41

PROJECT NO: 1590-18-82	USH 8 - ATV	COUNTY: FOREST	ALIGNMENT DIAGRAM	SHEET 27	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\027201-AD_UTV.DWG
LAYOUT NAME - 02
PLOT DATE : 10/14/2024 1:39 PM
PLOT BY : JASON VOELKER
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

2

2

N

MATCH LINE 124+50

125

PC: 125+99.62

CURVE 13

PI STA = 126+54.64
Y = 569594.602
X = 852092.333
DELTA = 12°33'33" LT
D = 11°27'33"
T = 55.02'
L = 109.60'
R = 500.00'
PC STA = 125+99.62
PT STA = 127+09.22

PT: 127+09.22

CURVE 13

N86°57'27"E

PC: 128+98.08

CURVE 14

PI STA = 129+75.92
Y = 569611.678
X = 852413.594
DELTA = 17°41'48" LT
D = 11°27'33"
T = 77.84'
L = 154.43'
R = 500.00'
PC STA = 128+98.08
PT STA = 130+52.51

130

CURVE 14

MATCH LINE 130+50

N

ATV TRAIL FROM STA 131+92.50 TO 136+03.62
TO BE CONSTRUCTED BY PROJECT 1590-18-71
AND 9813-02-70. SEE OTHER PLANS FOR
EROSION CONTROL MEASURES IN THIS AREA.

MATCH LINE 130+50

PT: 130+52.51

N69°15'39"E

PC: 132+47.85

PRC: 132+75.66

PCC: 133+38.40

CURVE 15

CURVE 16

CURVE 15

PI STA = 132+62.03
Y = 569713.433
X = 852682.324
DELTA = 27°28'43" RT
D = 98°47'09"
T = 14.18'
L = 27.82'
R = 58.00'
PC STA = 132+47.85
PT STA = 132+75.66

CURVE 16

PI STA = 133+07.31
Y = 569708.054
X = 852727.837
DELTA = 18°37'31" LT
D = 29°41'13"
T = 31.65'
L = 62.74'
R = 193.00'
PC STA = 132+75.66
PT STA = 133+38.40

135

CURVE 17

CURVE 17

PI STA = 134+77.57
Y = 569743.236
X = 852894.993
DELTA = 4°40'52" LT
D = 1°40'58"
T = 139.17'
L = 278.19'
R = 3405.00'
PC STA = 133+38.40
PT STA = 136+16.59

CURVE 18

PI STA = 136+38.06
Y = 569789.039
X = 853048.965
DELTA = 39°22'41" LT
D = 95°29'35"
T = 21.47'
L = 41.24'
R = 60.00'
PC STA = 136+16.59
PT STA = 136+57.82

PCC: 136+16.59

CURVE 18

MATCH LINE 136+50

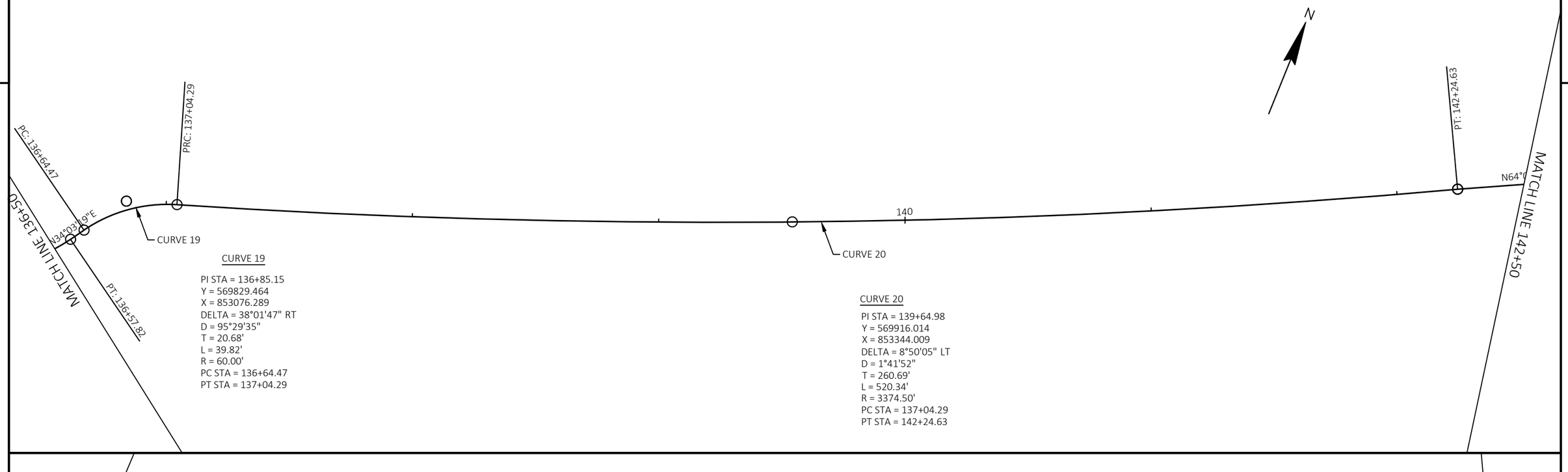
PROJECT NO: 1590-18-82	USH 8 - ATV	COUNTY: FOREST	ALIGNMENT DIAGRAM	SHEET 28	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\027201-AD_UTV.DWG
LAYOUT NAME - 03

PLOT DATE : 10/14/2024 1:39 PM PLOT BY : JASON VOELKER PLOT NAME : PLOT SCALE : 1 IN:40 FT

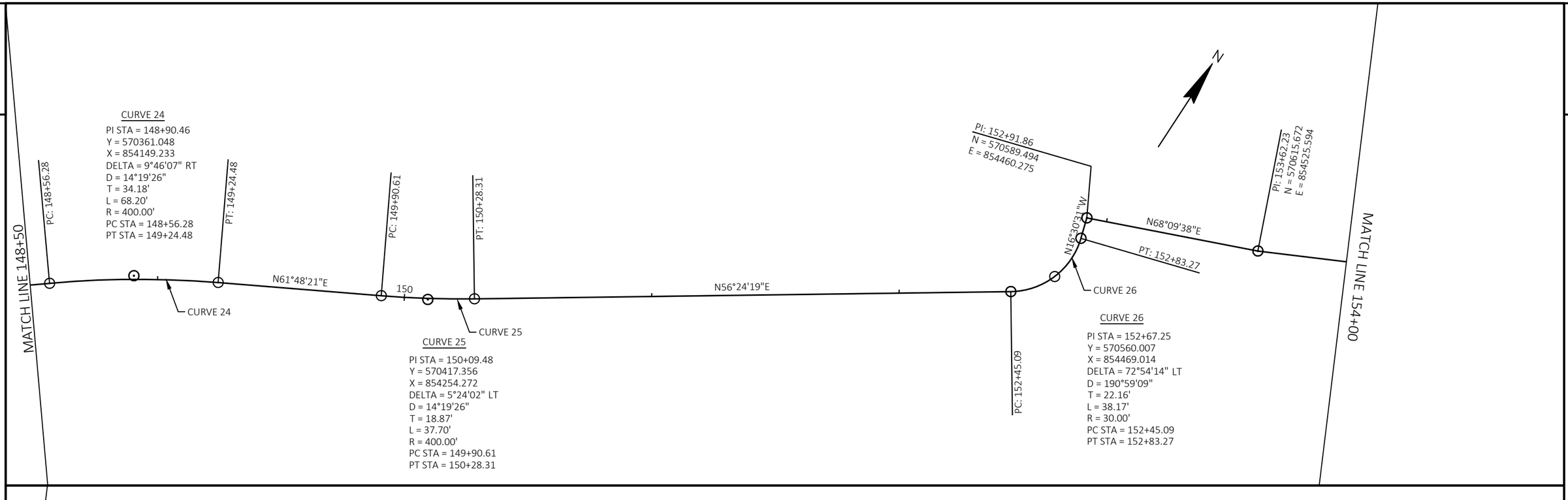
WISDOT/CADDS SHEET 44

2



PROJECT NO: 1590-18-82	USH 8 - ATV	COUNTY: FOREST	ALIGNMENT DIAGRAM	SHEET 29	E

2



CURVE 24

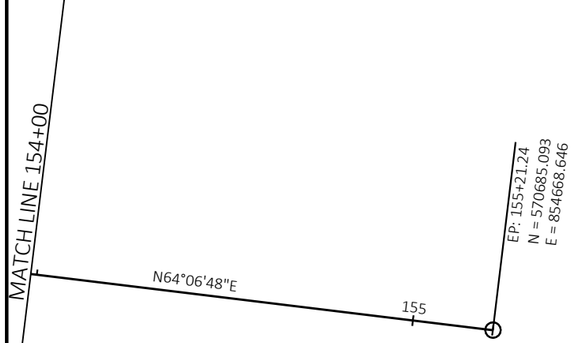
PI STA = 148+90.46
Y = 570361.048
X = 854149.233
DELTA = 9°46'07" RT
D = 14°19'26"
T = 34.18'
L = 68.20'
R = 400.00'
PC STA = 148+56.28
PT STA = 149+24.48

CURVE 25

PI STA = 150+09.48
Y = 570417.356
X = 854254.272
DELTA = 5°24'02" LT
D = 14°19'26"
T = 18.87'
L = 37.70'
R = 400.00'
PC STA = 149+90.61
PT STA = 150+28.31

CURVE 26

PI STA = 152+67.25
Y = 570560.007
X = 854469.014
DELTA = 72°54'14" LT
D = 190°59'09"
T = 22.16'
L = 38.17'
R = 30.00'
PC STA = 152+45.09
PT STA = 152+83.27



PROJECT NO: 1590-18-82	USH 8 - ATV	COUNTY: FOREST	ALIGNMENT DIAGRAM	SHEET 30	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\027201-AD_UTV.DWG
LAYOUT NAME - 05
PLOT DATE : 10/14/2024 1:39 PM
PLOT BY : JASON VOELKER
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

1590-18-82

Line	Item	Item Description	Unit	Total	Qty
0002	201.0205	Grubbing	STA	34.000	34.000
0028	204.0245	Removing Storm Sewer (size) 001. 15-Inch	LF	37.000	37.000
0032	205.0100	Excavation Common	CY	27,434.000	27,434.000
0036	206.2001	Excavation for Structures Culverts (structure) 002. B-21-35	EACH	1.000	1.000
0040	208.1100	Select Borrow	CY	1,736.000	1,736.000
0042	210.1500	Backfill Structure Type A	TON	5,160.000	5,160.000
0056	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,299.000	1,299.000
0058	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	2,313.000	2,313.000
0066	415.0070	Concrete Pavement 7-Inch	SY	624.000	624.000
0104	502.3210	Pigmented Surface Sealer	SY	121.000	121.000
0108	504.0100	Concrete Masonry Culverts	CY	844.000	844.000
0110	505.0400	Bar Steel Reinforcement HS Structures	LB	79,130.000	79,130.000
0112	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	17,230.000	17,230.000
0116	516.0500	Rubberized Membrane Waterproofing	SY	47.000	47.000
0118	516.0610.S	Sheet Membrane Waterproofing for Buried Structures	SY	646.000	646.000
0120	517.1010.S	Concrete Staining (structure) 001. B-21-35	SF	2,997.000	2,997.000
0122	517.1015.S	Concrete Staining Multi-Color (structure) 001. B-21-35	SF	3,926.000	3,926.000
0124	517.1050.S	Architectural Surface Treatment (structure) 001. B-21-35	SF	3,804.000	3,804.000
0148	522.0418	Culvert Pipe Reinforced Concrete Class IV 18-Inch	LF	72.000	72.000
0156	522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	EACH	6.000	6.000
0214	608.3018	Storm Sewer Pipe Class III-A 18-Inch	LF	571.000	571.000
0218	611.0612	Inlet Covers Type C	EACH	4.000	4.000
0224	611.2004	Manholes 4-FT Diameter	EACH	4.000	4.000
0238	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	207.000	207.000
0246	619.1000	Mobilization	EACH	0.110	0.110
0248	624.0100	Water	MGAL	181.000	181.000
0250	625.0100	Topsoil	SY	20,632.000	20,632.000
0252	627.0200	Mulching	SY	4,669.000	4,669.000
0254	628.1504	Silt Fence	LF	1,050.000	1,050.000
0256	628.1520	Silt Fence Maintenance	LF	3,150.000	3,150.000
0264	628.2023	Erosion Mat Class II Type B	SY	15,970.000	15,970.000
0266	628.6510	Soil Stabilizer Type B	ACRE	3.300	3.300
0268	628.7005	Inlet Protection Type A	EACH	5.000	5.000
0270	628.7015	Inlet Protection Type C	EACH	3.000	3.000
0274	628.7504	Temporary Ditch Checks	LF	130.000	130.000
0276	628.7515.S	Stone Ditch Checks	CY	28.000	28.000
0278	628.7555	Culvert Pipe Checks	EACH	8.000	8.000
0280	628.7560	Tracking Pads	EACH	8.000	8.000
0282	628.7570	Rock Bags	EACH	51.000	51.000
0284	629.0205	Fertilizer Type A	CWT	13.020	13.020
0288	630.0120	Seeding Mixture No. 20	LB	1,859.000	1,859.000
0292	633.5200	Markers Culvert End	EACH	6.000	6.000
0296	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	2.000	2.000
0298	637.2210	Signs Type II Reflective H	SF	57.060	57.060
0300	637.2230	Signs Type II Reflective F	SF	65.500	65.500
0314	643.0420	Traffic Control Barricades Type III	DAY	615.000	615.000
0316	643.0705	Traffic Control Warning Lights Type A	DAY	1,230.000	1,230.000
0322	643.0900	Traffic Control Signs	DAY	615.000	615.000
0334	643.5000	Traffic Control	EACH	0.010	0.010

1590-18-82

Line	Item	Item Description	Unit	Total	Qty
0348	645.0130	Geotextile Type R	SY	67.000	67.000
0352	645.0220	Geogrid Type SR	SY	7,926.000	7,926.000
0376	650.4000	Construction Staking Storm Sewer	EACH	10.000	10.000
0378	650.4500	Construction Staking Subgrade	LF	5,035.000	5,035.000
0380	650.5000	Construction Staking Base	LF	5,035.000	5,035.000
0388	650.6501	Construction Staking Structure Layout (structure) 002. B-21-35	EACH	1.000	1.000
0390	650.7000	Construction Staking Concrete Pavement	LF	400.000	400.000
0404	650.9911	Construction Staking Supplemental Control (project) 003. 1590-18-82	EACH	1.000	1.000
0408	650.9920	Construction Staking Slope Stakes	LF	5,435.000	5,435.000
0410	652.0105	Conduit Rigid Metallic 3/4-Inch	LF	25.000	25.000
0412	652.0110	Conduit Rigid Metallic 1-Inch	LF	23.000	23.000
0414	652.0205	Conduit Rigid Nonmetallic Schedule 40 3/4-Inch	LF	94.000	94.000
0416	652.0210	Conduit Rigid Nonmetallic Schedule 40 1-Inch	LF	471.000	471.000
0418	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	385.000	385.000
0420	653.0164	Pull Boxes Non-Conductive 24x42-Inch	EACH	4.000	4.000
0422	653.0208	Junction Boxes 8x8x8-Inch	EACH	2.000	2.000
0424	655.0615	Electrical Wire Lighting 10 AWG	LF	1,686.000	1,686.000
0426	690.0150	Sawing Asphalt	LF	46.000	46.000
0430	715.0502	Incentive Strength Concrete Structures	DOL	5,118.000	5,118.000
0432	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	500.000	500.000
0448	SPV.0060	Special 101. Precast Concrete Panel	EACH	2.000	2.000
0452	SPV.0060	Special 103. Posts Wood 4X4-Inch X 14-FT	EACH	46.000	46.000
0454	SPV.0060	Special 104. Tunnel Luminare	EACH	6.000	6.000
0456	SPV.0060	Special 106. Electrical Service Meter Breaker Pedestal Special	EACH	1.000	1.000
0462	SPV.0060	Special 108. Concrete Footing (Concrete Base)	EACH	4.000	4.000
0514	SPV.0090	Special 101. Railing	LF	143.000	143.000
0516	SPV.0090	Special 102. Profile Curb Cut	LF	40.000	40.000
0518	SPV.0090	Special 103. Staked Wattles	LF	9,275.000	9,275.000

3

GRUBBING

CATEGORY	STATION	TO	STATION	LOCATION	201.0205 GRUBBING STA	REMARKS
0020	100+20	-	116+75	C-STORE-EVERYBODY'S ROAD	9	
0020	117+07	-	135+68	EVERYBODY'S ROAD - KWE DA KIK LN	10	
0020	136+04	-	155+23	KWE DA KIK LN - END	15	
				PROJECT TOTAL	**34**	

REMOVALS

CATEGORY	STATION	TO	STATION	LOCATION	204.0245.01 REMOVING STORM SEWER (SIZE) (01. 15-INCH) LF	REMARKS
0020	100+20	-	116+75	C-STORE-EVERYBODY'S ROAD	-	
0020	117+07	-	135+68	EVERYBODY'S ROAD - KWE DA KIK LN	37	
0020	136+04	-	155+23	KWE DA KIK LN - END	-	
				PROJECT TOTAL	**37**	

3

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 (9) FACTOR 0.70	208.1100 SELECT BORROW EXPANDED EBS BACKFILL (11) FACTOR 1.33	EXPANDED ROCK (12) FACTOR 1.33	UNEXPANDED FILL	EXPANDED FILL (13) FACTOR 1.25	MASS ORDINATE +/- (14)(15)	WASTE	COMMENT
1-1	00+20 - 155+2	JSH 8 ATV TRAIL	26,129	1,305	0	26,129	914	1,736	0	2,394	2,993	23,858	23,858	
GRAND TOTAL			26,129	1,305				**1,736**	0					
TOTAL COMMON EXC			**27,434**											

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 SELECT BORROW MATERIAL, ITEM 208.1100. EBS EXCAVATION CALCULATED AS 5% OF CUT AS UNDISTRIBUTED AMOUNT AS NEEDED.
(4) SALVAGED/UNUSABLE PAVEMENT MATERIAL
(5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL
(9) REDUCED EBS IN FILL - EXCAVATED EBS MATERIAL IS USUABLE IN FILLS OUTSIDE THE 1:1 SLOPE. EBS IN FILL REDUCTION FACTOR = .70
(11) EXPANDED EBS BACKFILL - THIS IS TO BE FILLED WITH SELECT BORROW MATERIAL. EBS BACKFILL FACTOR = 1.33. ITEM NUMBER 208.1100
(12) EXPANDED ROCK FACTOR = 1.33. THIS TO BE FILLED WITH BORROW.
(13) EXPANDED FILL FACTOR = 1.33
EXPANDED FILL = UNEXPANDED FILL * FILL FACTOR
(14) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.
(15) MASS ORDINATE = AVAILABLE MATERIAL + REDUCED EBS IN FILL - EXPANDED FILL

3

BASE AGGREGATE

CATEGORY	STATION	TO	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	624.0100 WATER MGAL	645.0220 GEOGRID TYPE SR SY	REMARKS
0020	100+20	-	116+75	C-STORE-EVERYBODY'S ROAD	427	768	60	2632	
0020	117+07	-	135+68	EVERYBODY'S ROAD - KWE DA KIK LN	378	675	53	2311	EXCLUDES AREA AT TUNNEL THAT IS PART OF PH 1
0020	136+04	-	155+23	KWE DA KIK LN - END	494	870	68	2983	
				PROJECT TOTAL	1,299	2,313	181	7,926	

CONCRETE PAVEMENT

CATEGORY	STATION	TO	STATION	LOCATION	415.0070 CONCRETE PAVEMENT 7-INCH SY	REMARKS
0020	100+20	-	116+75	C-STORE - EVERYBODY'S ROAD	234	
0020	117+07	-	135+68	EVERYBODY'S ROAD - KWE DA KIK LN	234	
0020	136+04	-	155+23	KWE DA KIK LN - END	156	
				PROJECT TOTAL	624	

3

APRON ENDWALLS

CATEGORY	STRUCTURE	STATION	OFFSET***	LOCATION	522.1018 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH EACH	633.5200 MARKERS CULVERT END EACH	* 650.4000 CONSTRUCTION STAKING STORM SEWER EACH	INVERT** ELEVATION	REMARKS
0020	8	102+75	15.65' LT	'ATV'	1	1	1	1825.67	
0020	9	102+75	14.14' RT	'ATV'	1	1	1	1826.47	
0020	10	110+45	50.89' RT	'ATV'	1	1	1	1839.76	
0020	11	110+82	50.89' RT	'ATV'	1	1	1	1839.67	
0020	12	126+00	14.95' RT	'ATV'	1	1	1	1794.46	
0020	13	126+00	15.00' LT	'ATV'	1	1	1	1793.67	
				PROJECT TOTAL	6	6	6		

*ADDITIONAL QUANTITY FOUND IN 'STORM SEWER STRUCTURES'
** THE INVERT ELEVATIONS IS THE ELEVATION AT THE END OF PIPE
***STATIONS AND OFFSETS ARE TO END OF PIPE

CULVERT PIPE

CATEGORY	STATION	TO	STATION	SIDE	LOCATION	522.0418 REINFORCED CONCRETE CLASS IV 18-INCH LF	INLET ELEVATION	OUTLET ELEVATION	SLOPE FT/FT	REMARKS
0020			102+75	LT/RT	'ATV'	18	1826.31	1825.84	0.0261	
0020	110+50	-	110+77	RT	'ATV'	30	1839.76	1839.67	0.0030	
0020			126+00	LT/RT	'ATV'	24	1794.02	1792.16	0.0775	
					PROJECT TOTAL	72				

3

STORM SEWER PIPE

CATEGORY	FROM	TO	LOCATION	608.3018 STORM SEWER PIPE CLASS III-A 18-INCH LF	INLET ELEVATION	DISCHARGE ELEVATION	SLOPE FT/FT	REMARKS
0020	EX-1	2	'ATV'	134	1875.61	1851.02	0.185	
0020	2	3	'ATV'	303	1851.02	1848.00	0.010	
0020	3	4	'ATV'	91	1848.00	1847.09	0.010	
0020	4	5	'ATV'	33	1847.09	1846.77	0.010	
0020	5	EX-6	ATV'	10	1846.77	1846.50	0.028	
			PROJECT TOTAL	571				

* THE INVERT ELEVATIONS IS THE ELEVATION AT THE END OF PIPE
**STATIONS AND OFFSETS ARE TO END OF PIPE

STORM SEWER STRUCTURES

CATEGORY	STRUCTURE	STATION	OFFSET***	LOCATION	611.0612 INLET COVERS TYPE C EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	* 650.4000 CONSTRUCTION STAKING STORM SEWER EACH	RIM ELEVATION	INVERT** ELEVATION	DEPTH FT	REMARKS
0020	2	112+82	12.1' LT	'ATV'	1	1	1	1863.66	1851.02	12.64	
0020	3	115+83	8.3' LT	'ATV'	1	1	1	1851.96	1848.00	3.96	
0020	4	116+64	30.6' RT	'ATV'	1	1	1	1852.08	1847.09	4.99	
0020	5	116+96	34.0' RT	'ATV'	1	1	1	1851.31	1846.77	4.54	
				PROJECT TOTAL	4	4	4				

*ADDITIONAL QUANTITY FOUND IN 'APRON ENDWALLS'
** THE INVERT ELEVATIONS IS THE ELEVATION AT THE END OF PIPE
***STATIONS AND OFFSETS ARE AT THE CENTER OF THE STRUCTURE

3

LANDSCAPING

CATEGORY	STATION	TO	STATION	LOCATION	625.0100 TOPSOIL SY	627.0200 MULCHING SY	629.0205 FERTILIZER TYPE A CWT	630.0120 SEEDING MIXTURE NO. 20 LB	REMARKS
0020	100+20	-	116+75	C-STORE-EVERYBODY'S ROAD	4,063	653	2.56	366	
0020	117+07	-	135+68	EVERYBODY'S ROAD - KWE DA KIK LN	3,674	1,114	2.32	331	
0020	136+04	-	155+23	KWE DA KIK LN - END	8,768	1,968	5.53	790	
0020				UNDISTRIBUTED	4,127	934	2.61	372	
				PROJECT TOTAL	20,632	4,669	13.02	1,859	

3

EROSION CONTROL

CATEGORY	STATION	TO	STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.2023 EROSION MAT CLASS II TYPE B SY	628.6510 SOIL STABILIZER TYPE B ACRE	628.7005 INLET PROTECTION TYPE A EACH	628.7015 INLET PROTECTION TYPE C EACH	628.7504 TEMPORARY DITCH CHECKS LF	628.7515.S STONE DITCH CHECKS CY	628.7555 CULVERT PIPE CHECKS EACH	628.7560 TRACKING PADS EACH	628.7570 ROCK BAGS EACH	645.0130 GEOTEXTILE TYPE R SY	SPV.0090.103 SPECIAL (103. STAKED WATTLES) LF	REMARKS
0020	100+20	-	116+75	C-STORE-EVERYBODY'S ROAD	170	510	3,410	0.7	4	1	-	-	4	2	-	-	2,270	
0020	117+07	-	135+68	EVERYBODY'S ROAD - KWE DA KIK LN	670	2,010	2,560	0.5	-	1	-	-	2	2	-	-	960	
0020	136+04	-	155+23	KWE DA KIK LN - END	-	-	6,800	1.4	-	-	100	-	-	2	-	-	4,190	
0020				UNDISTRIBUTED	210	630	3,200	0.7	1	1	30	28	2	2	51	67	1,855	
				PROJECT TOTAL	1,050	3,150	15,970	3.3	5	3	130	28	8	8	51	67	9,275	

PERMANENT SIGNING

CATEGORY	SIGN #	SIGN CODE	SIGN SIZE	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	SPV.0060.103 SPECIAL (103. POSTS WOOD 4 X 4-INCH X 14-FT) EACH	SIGN MOUNTED ON SAME POST AS	REMARKS
0020	1-01	D11-10	24X18	---	3.00	---	1	---	ATV ROUTE WITH SYMBOL
0020	1-02	R1-1	18X18	---	2.25	---	1	---	STOP SIGN
0020	1-03	W1-1L	18X18	---	---	2.25	1	---	ROAD TURNS LEFT
0020	1-04	W1-1R	18X18	---	---	2.25	1	---	ROAD TURNS RIGHT
0020	1-05	W3-1	18X18	---	---	2.25	1	---	STOP AHEAD
0020	1-06	R1-1	18X18	---	2.25	---	1	---	STOP SIGN
0020	1-07	R9-3 (MOD)	12x18	---	1.50	---	1	---	NO MOTOR VEHICLES
0020	1-08	W2-2R	18X18	---	---	2.25	1	---	SIDE ROAD (RIGHT ANGLE) SYMBOL
0020	1-09	W5-52R	18X18	---	---	0.75	---	RAILING	CLEARANCE STRIPER DOWN LEFT
0020	1-10	R1-1	18X18	---	2.25	---	1	---	STOP SIGN
0020	1-11	W5-52L	6X18	---	---	0.75	---	RAILING	CLEARANCE STRIPER DOWN RIGHT
0020	1-12	W5-52R	6X18	---	---	0.75	---	RAILING	CLEARANCE STRIPER DOWN LEFT
0020	1-13	R1-1	18X18	---	2.25	---	1	---	STOP SIGN
0020	1-14	R1-1	18X18	---	2.25	---	1	---	STOP SIGN
0020	1-15	W5-52L	6X18	---	---	0.75	---	RAILING	CLEARANCE STRIPER DOWN RIGHT
0020	1-16	R9-3 (MOD)	12X18	---	1.50	---	1	---	NO MOTOR VEHICLES
0020	1-17	D11-10	24X18	---	3.00	---	1	---	ATV ROUTE WITH SYMBOL
0020	2-01	W2-2L	18X18	---	---	2.25	1	---	SIDE ROAD (RIGHT ANGLE) SYMBOL
0020	2-02	W3-1	18X18	---	---	2.25	1	---	STOP AHEAD
0020	2-03	D11-10	24X18	---	3.00	---	1	---	ATV ROUTE WITH SYMBOL
0020	2-04	R1-1	18X18	---	2.25	---	1	---	STOP SIGN
0020	2-05	D11-10	24X18	---	3.00	---	1	---	ATV ROUTE WITH SYMBOL
0020	2-06	R1-1	18X18	---	2.25	---	1	---	STOP SIGN
0020	2-07	W3-1	18X18	---	---	2.25	1	---	STOP AHEAD
0020	3-01	W2-2R	18X18	---	---	2.25	1	---	SIDE ROAD (RIGHT ANGLE) SYMBOL
0020	3-02	W1-2R	18X18	---	---	2.25	1	---	ROAD CURVES RIGHT
0020	3-03	R1-1	18X18	---	2.25	---	1	---	STOP AHEAD
0020	3-04	W3-1	18X18	---	---	2.25	1	---	STOP AHEAD
0020	3-05	W1-2L	18X18	---	---	2.25	1	---	ROAD CURVES LEFT
0020	3-06	W2-2L	18X18	---	---	2.25	1	---	SIDE ROAD (RIGHT ANGLE) SYMBOL
0020	3-07	W11-15-A	30X30	1	---	6.25	---	---	TRAIL CROSSING (WORD MESSAGE)
0020	3-08	R1-1	18X18	---	2.25	---	1	---	STOP SIGN
0020	3-09	D11-10	24X18	---	3.00	---	1	---	ATV ROUTE WITH SYMBOL
0020	3-10	W1-2L	18X18	---	---	2.25	1	---	ROAD CURVES LEFT
0020	3-11	R1-1	18X18	---	2.25	---	1	---	STOP SIGN
0020	3-12	D11-10	24X18	---	3.00	---	1	---	ATV ROUTE WITH SYMBOL
0020	4-01	W7-6	18X18	---	---	2.25	1	---	HILL BLOCKS VIEW
0020	4-02	W1-2L	18X18	---	---	2.25	1	---	ROAD CURVES LEFT
0020	4-03	W3-1	18X18	---	---	2.25	1	---	STOP AHEAD
0020	4-04	W7-3	18X18	---	---	2.25	1	---	[%] GRADE (TO BE USED UNDER W7-1)
0020	4-05	W7-6	18X18	---	---	2.25	1	---	HILL BLOCKS VIEW
0020	4-06	W7-3	18X18	---	---	2.25	1	---	[%] GRADE (TO BE USED UNDER W7-1)
0020	5-01	W3-1	18X18	---	---	2.25	1	---	STOP AHEAD
0020	5-02	W7-6	18X18	---	---	2.25	1	---	HILL BLOCKS VIEW
0020	5-03	W1-1L	18X18	---	---	2.25	1	---	ROAD TURNS LEFT
0020	5-04	D11-10	24X18	---	3.00	---	1	---	ATV ROUTE WITH SYMBOL
0020		M6-1	21X21	---	3.06	---	---	D11-10	DIRECTIONAL ARROW (LEFT)
0020	5-05	R1-1	18X18	---	2.25	---	1	---	STOP SIGN
0020	5-06	W1-1L	18X18	---	---	2.25	1	---	ROAD TURNS LEFT
0020	5-07	W11-15-A	30X30	1	---	2.25	---	---	TRAIL CROSSING (WORD MESSAGE)
0020	5-08	W7-6	18X18	---	---	2.25	1	---	HILL BLOCKS VIEW
0020	5-09	D11-10	24X18	---	3.00	---	1	---	ATV ROUTE WITH SYMBOL
0020	5-10	R1-1	18X18	---	2.25	---	1	---	STOP SIGN
			PROJECT TOTAL	2	57.06	65.50	46		

3

TRAFFIC CONTROL

CATEGORY	STATION	TO	STATION	LOCATION	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	643.0900 TRAFFIC CONTROL SIGNS DAY	REMARKS
0020	100+20	-	116+75	C-STORE-EVERYBODY'S ROAD	246	492	246	
0020	117+07	-	135+68	EVERYBODY'S ROAD - KWE DA KIK LN	246	492	246	
0020	136+04	-	155+23	KWE DA KIK LN - END	123	246	123	
				PROJECT TOTAL	615	1,230	615	

STAKING ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	650.7000 CONSTRUCTION STAKING CONCRETE PAVEMENT LF	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF	REMARKS
0020	100+20	-	116+75	C-STORE-EVERYBODY'S ROAD	1,505	1,505	150	1,655	
0020	117+07	-	135+68	EVERYBODY'S ROAD - KWE DA KIK LN	1,711	1,711	150	1,861	
0020	136+04	-	155+23	KWE DA KIK LN - END	1,819	1,819	100	1,919	
				PROJECT TOTAL	5,035	5,035	400	5,435	

3

SAWING

CATEGORY	STATION	TO	STATION	LOCATION	690.0150 SAWING ASPHALT LF	SPV.0090.102 SPECIAL (102. PROFILE CURB CUT) LF	REMARKS
0020	100+20	-	116+75	C-STORE-EVERYBODY'S ROAD	15	40	
0020	117+07	-	135+68	EVERYBODY'S ROAD - KWE DA KIK LN	-	-	
0020	136+04	-	155+23	KWE DA KIK LN - END	31	-	
				PROJECT TOTAL	46	40	

RAILING

CATEGORY	STATION	TO	STATION	LOCATION	SPV.0060.108 SPECIAL (108. CONCRETE FOOTING) EACH	SPV.0090.101 SPECIAL (101. RAILING) LF	REMARKS
0020	100+20	-	116+75	C-STORE - EVERYBODY'S ROAD	-	143	
0020	117+07	-	135+68	EVERYBODY'S ROAD - KWE DA KIK LN	-	-	
0020	136+04	-	155+23	KWE DA KIK LN - END	-	-	
				UNDISTRIBUTED	4		
				PROJECT TOTAL	4	143	

ELECTRICAL SERVICE AND CONTROL

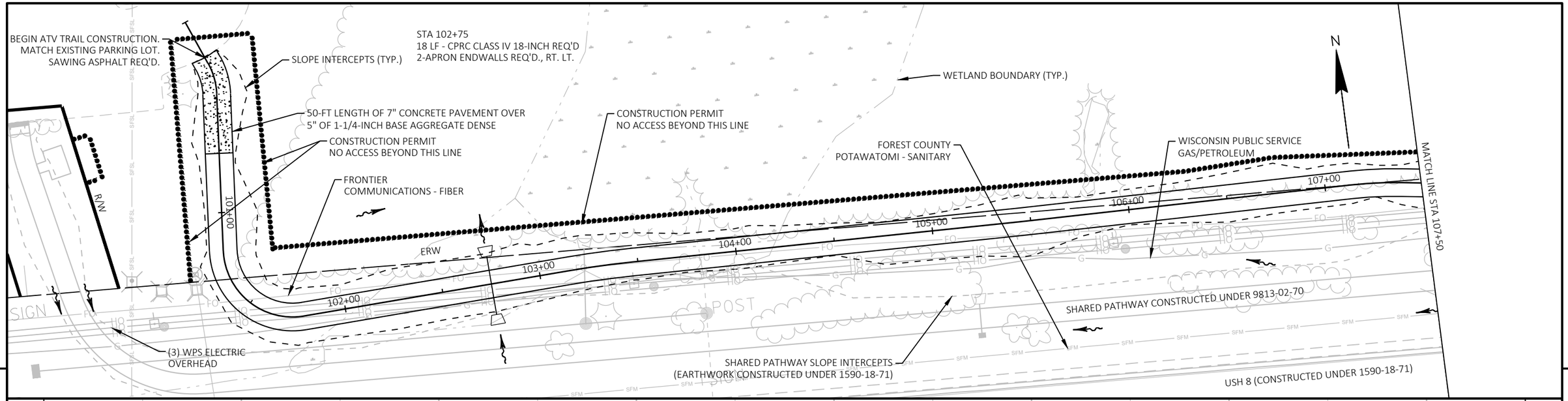
CABINET NUMBER	STATION	OFFSET	R/L	SPV.0060.105 ELECTRICAL SERVICE METER BREAKER PEDESTAL SPECIAL EACH
ALL ITEMS ARE CATEGORY 0010				
MBP100	591+65'PW'	19.5'	LR	1
PROJECT TOTALS				1

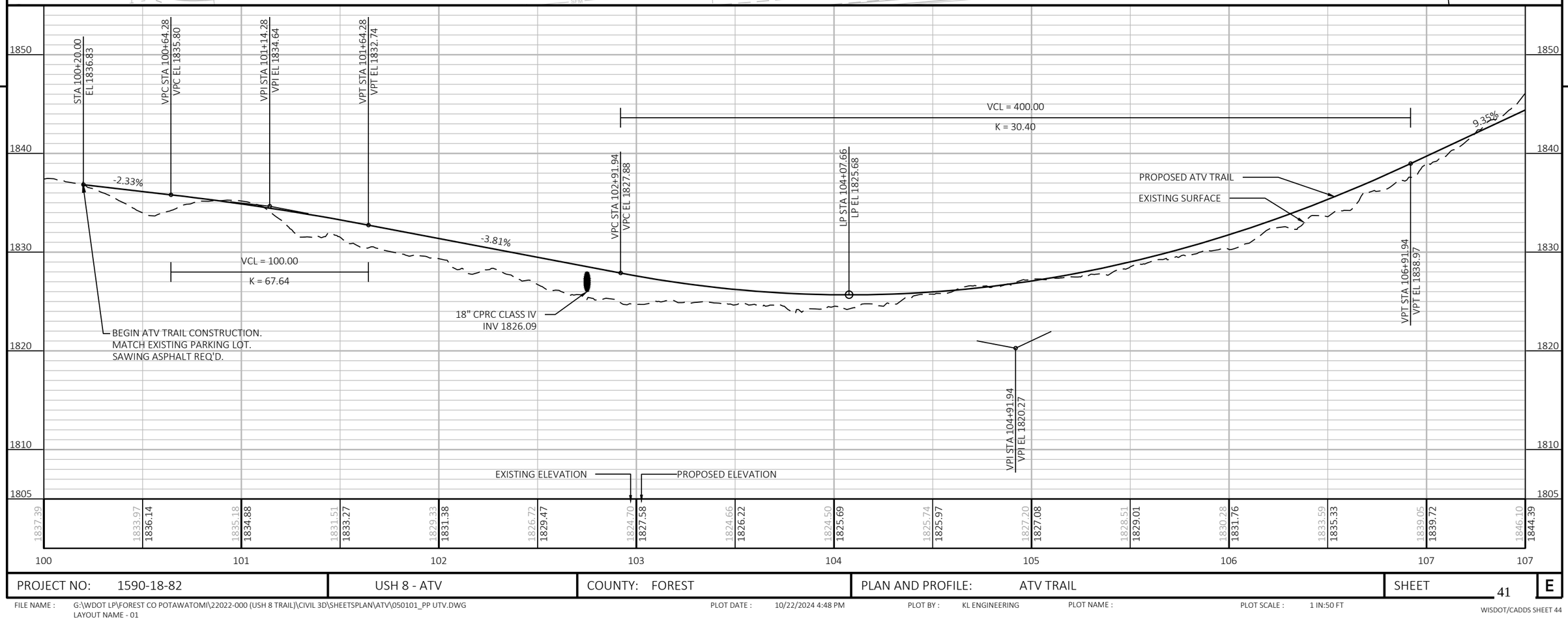
PULLBOXES

PULLBOX NUMBER	STATION	OFFSET	R/L	653.0164 PULL BOXES NON-CONDUCTIVE 24X42-INCH EACH
ALL ITEMS ARE CATEGORY 0010				
PB 100	591+51'PW'	19.5'	LT	1
PB 102	588+15'PW'	8.0'	LT	1
CATEGORY 0010 SUBTOTAL				**2**
ALL ITEMS ARE CATEGORY 0010				
PB 101	591+51'PW'	26.0'	LT	1
PB 103	588+20'PW'	10.8'	LT	1
CATEGORY 0010 SUBTOTAL				**2**
PROJECT TOTAL				**4**

				CONDUIT AND WIRE				
				*	*			
				652.0205	652.0210	652.0225	655.0615	
				CONDUIT RIGID NONMETALLIC			ELECTRICAL WIRE	
				SCHEDULE 40	SCHEDULE 40	SCHEDULE 40	LIGHTING	
				3/4-INCH	1-INCH	2-INCH	10 AWG	
FROM	-	TO		LF	LF	LF	LF	REMARKS
ALL ITEMS ARE CATEGORY 0010								
MBP 100	-	PB 100		--	--	15	99	--
PB 100	-	PB 102		--	--	325	1023	--
PB 102	-	LUM 100		--	--	25	189	CONDUIT IN STRUCTURE
LUM 100	-	LUM 101		--	--	--	45	CONDUIT IN STRUCTURE
LUM 101	-	LUM 102		--	--	--	120	CONDUIT IN STRUCTURE
LUM 102	-	LUM 103		--	--	--	45	CONDUIT IN STRUCTURE
LUM 103	-	LUM 104		--	--	--	120	CONDUIT IN STRUCTURE
LUM 104	-	LUM 105		--	--	--	45	CONDUIT IN STRUCTURE
CATEGORY 0010 SUBTOTAL				**0**	**0**	**365**	**1686**	
ALL ITEMS ARE CATEGORY 0010								
MBP 100	-	PB 101		--	--	20	--	PULL WIRE ONLY
PB 101	-	PB 103		--	325	--	--	PULL WIRE ONLY
PB 103	-	STRUCTURE		--	35	--	--	PULL WIRE ONLY/CONDUIT IN STRUCTURE
PB 102	-	CAMERA BOX		17	--			PULL WIRE ONLY/CONDUIT IN STRUCTURE
PB 103	-	FIBER NETWORK		--	100	--	--	PULL WIRE ONLY
CATEGORY 0010 SUBTOTAL				**17**	**360**	**20**	**0**	
PROJECT TOTAL				**17**	**360**	**385**	**1686**	

* ADDITIONAL QUANTITIES ELSEWHERE



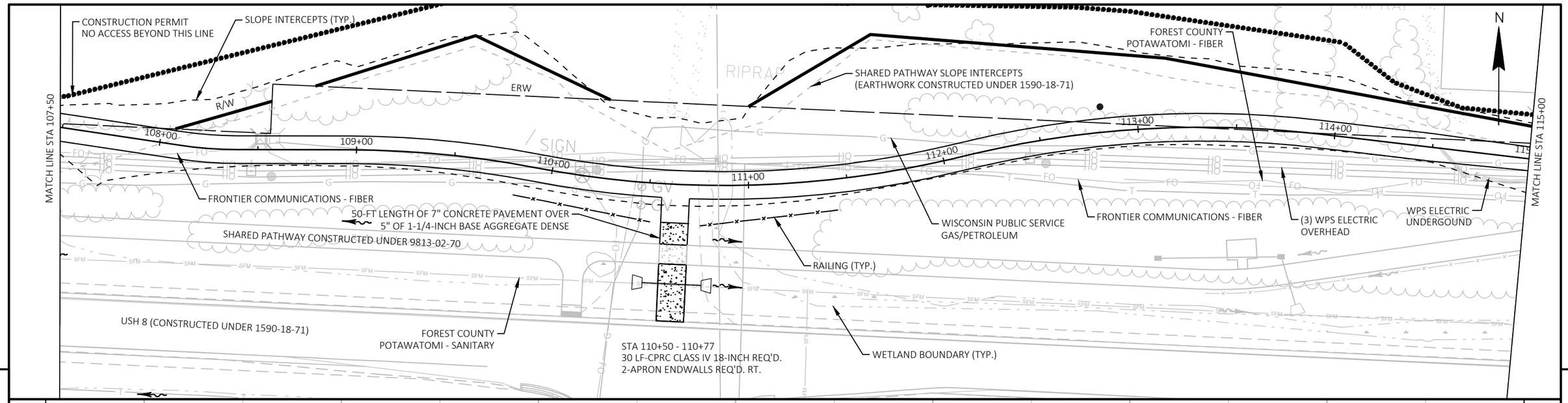


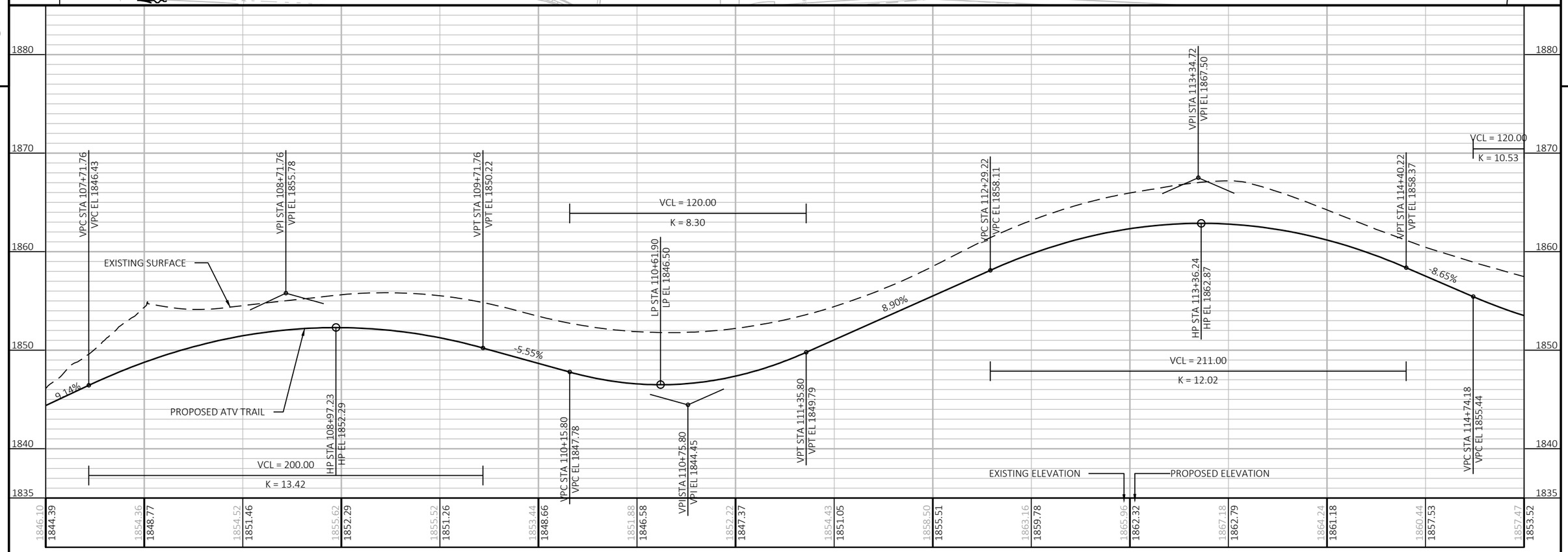
PROJECT NO: 1590-18-82	USH 8 - ATV	COUNTY: FOREST	PLAN AND PROFILE: ATV TRAIL	SHEET 41 E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\050101_PP UTV.DWG
LAYOUT NAME - 01

PLOT DATE : 10/22/2024 4:48 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:50 FT

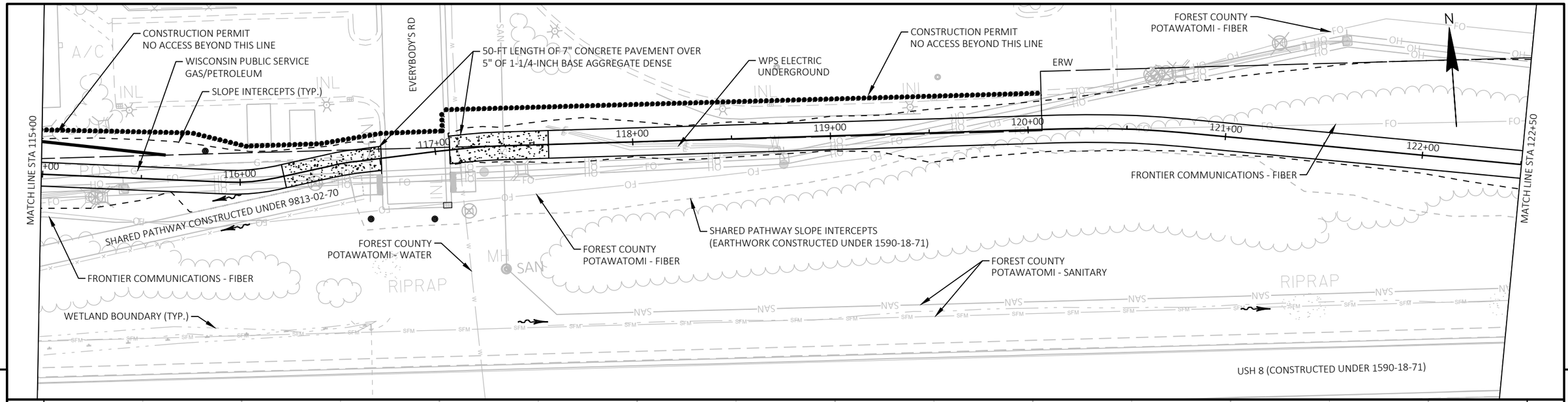
WISDOT/CADDS SHEET 44

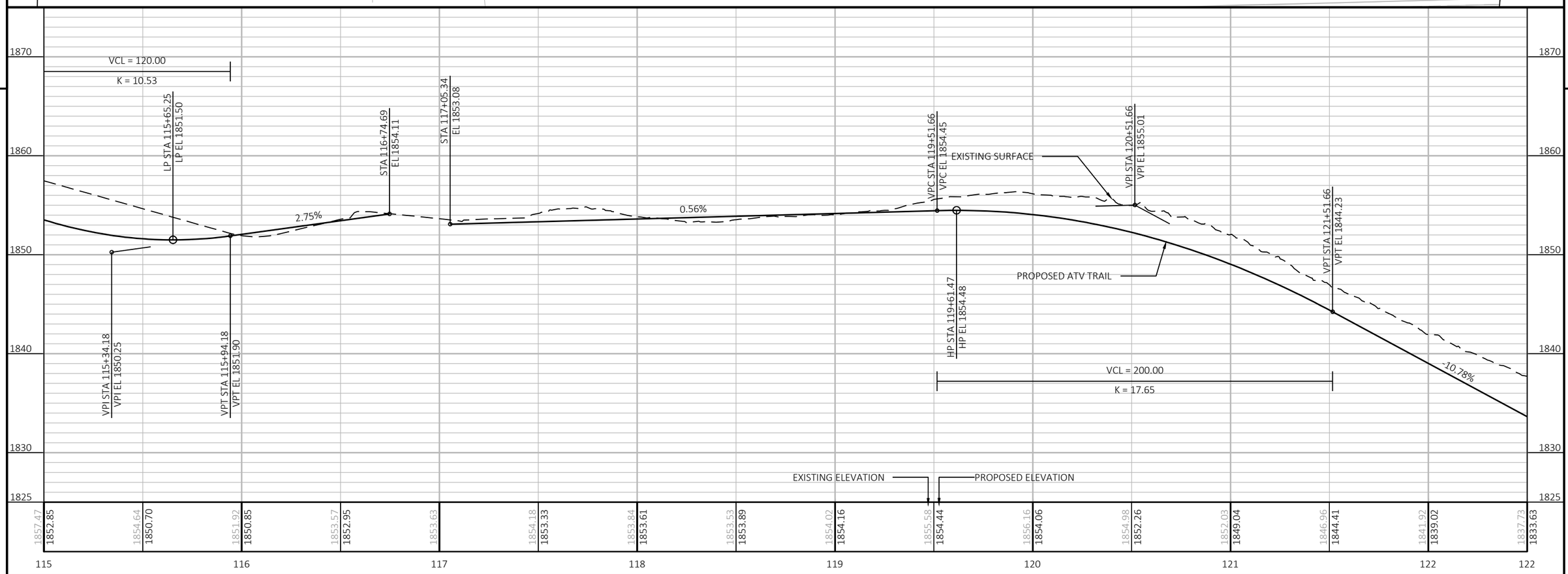




PROJECT NO: 1590-18-82	USH 8 - ATV	COUNTY: FOREST	PLAN AND PROFILE: ATV TRAIL	SHEET 42	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\050101_PP UTV.DWG
LAYOUT NAME - 02
PLOT DATE : 10/22/2024 10:53 AM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44

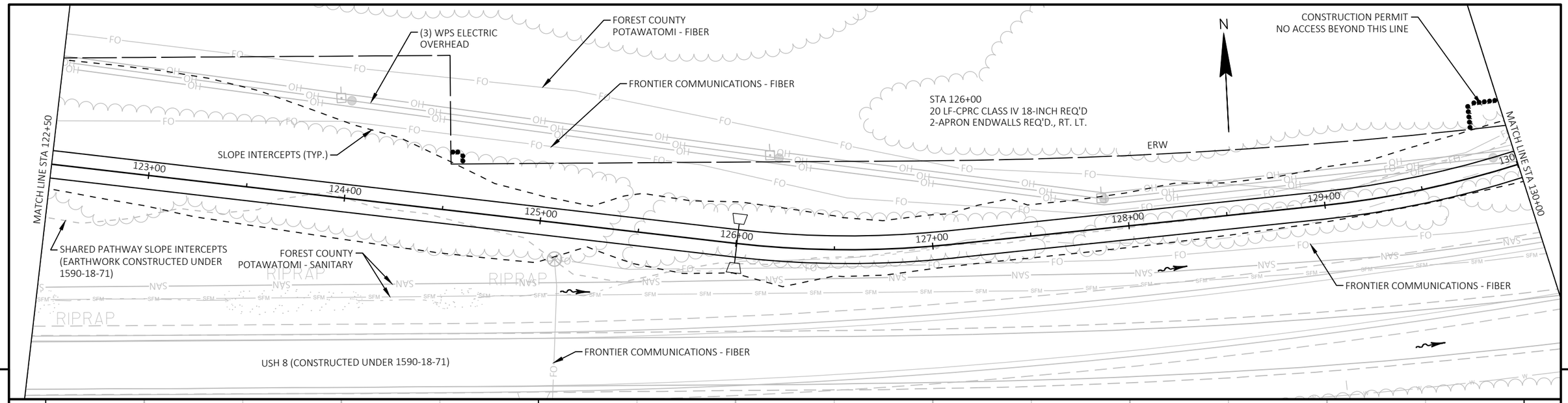


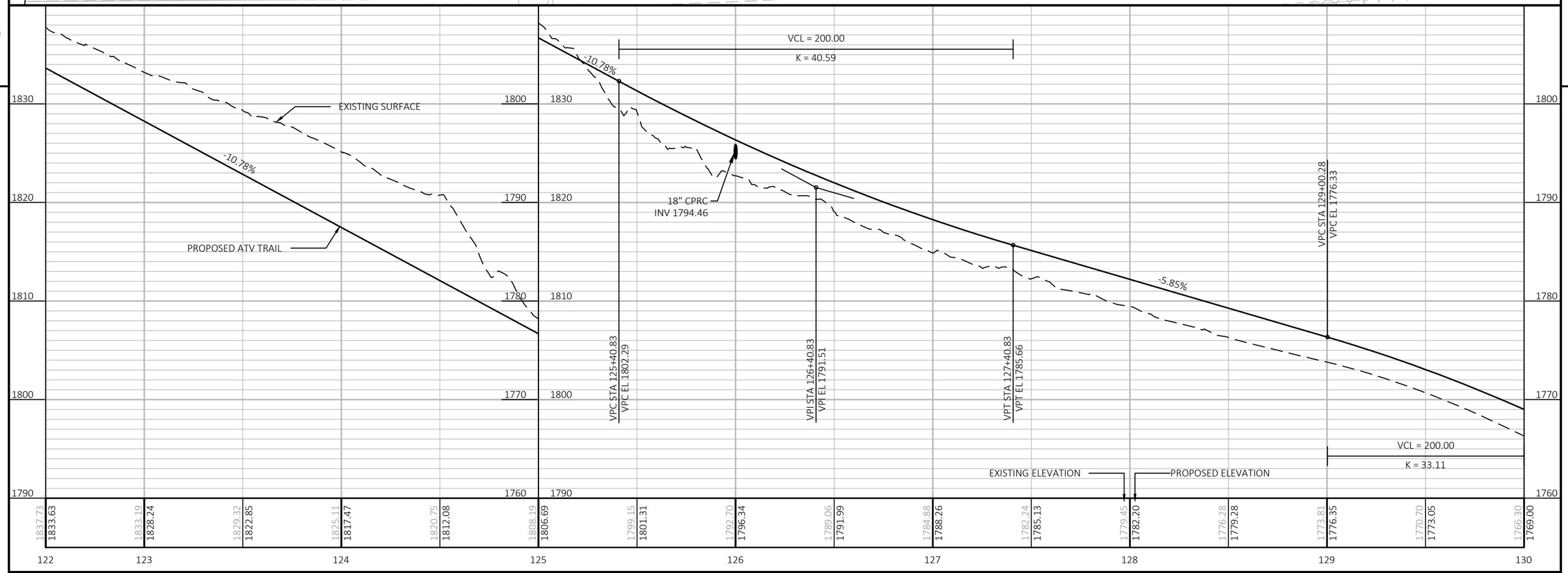


PROJECT NO: 1590-18-82	USH 8 - ATV	COUNTY: FOREST	PLAN AND PROFILE: ATV TRAIL	SHEET 43	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\050101_PP UTV.DWG
LAYOUT NAME - 03

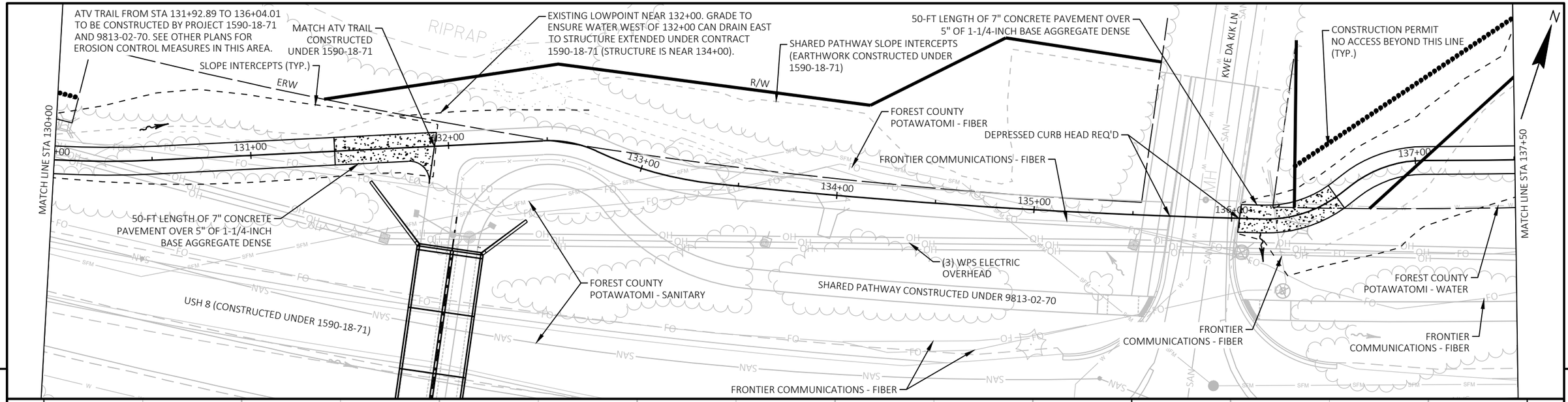
PLOT DATE : 10/22/2024 10:53 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:50 FT

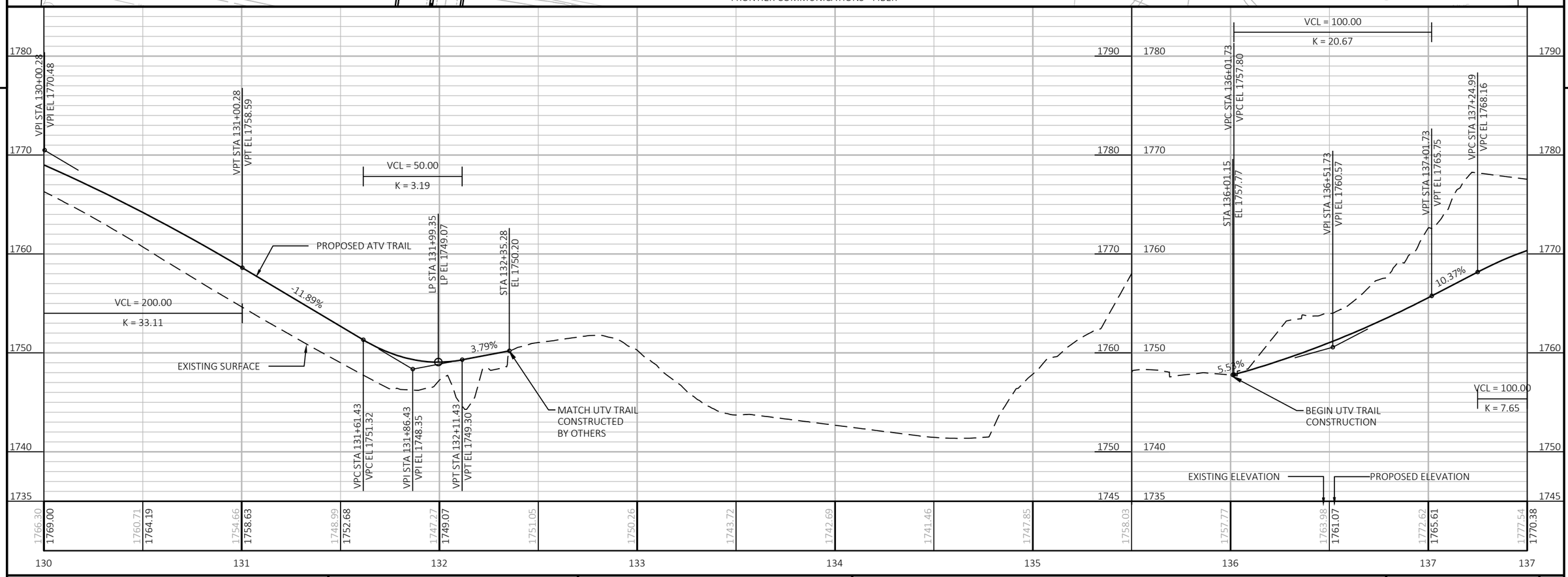




PROJECT NO: 1590-18-82	USH 8 - ATV	COUNTY: FOREST	PLAN AND PROFILE: ATV TRAIL	SHEET 44	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\050101_PP UTV.DWG
LAYOUT NAME - 04
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PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44



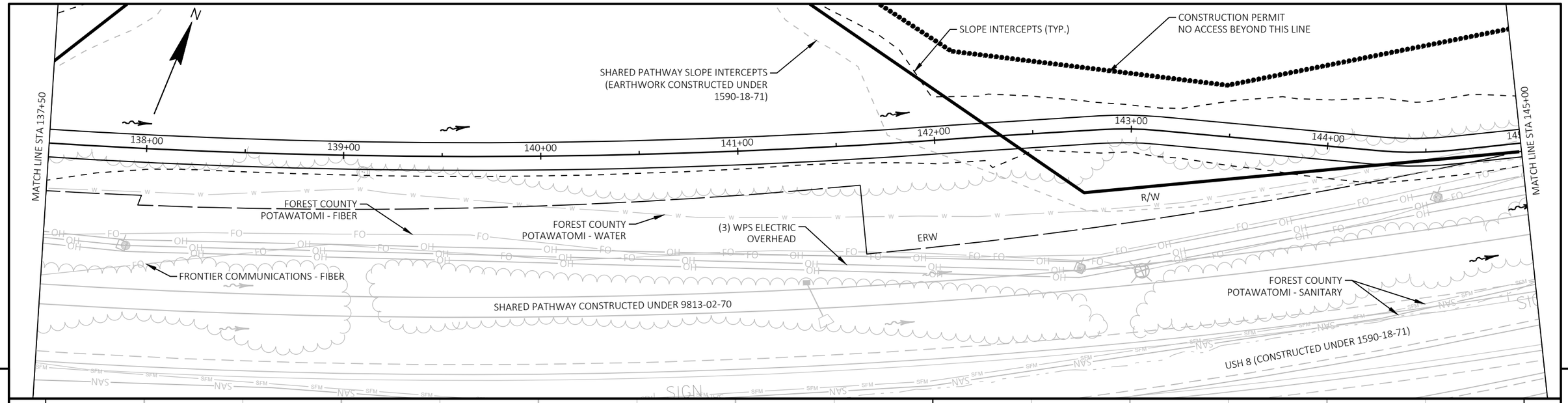


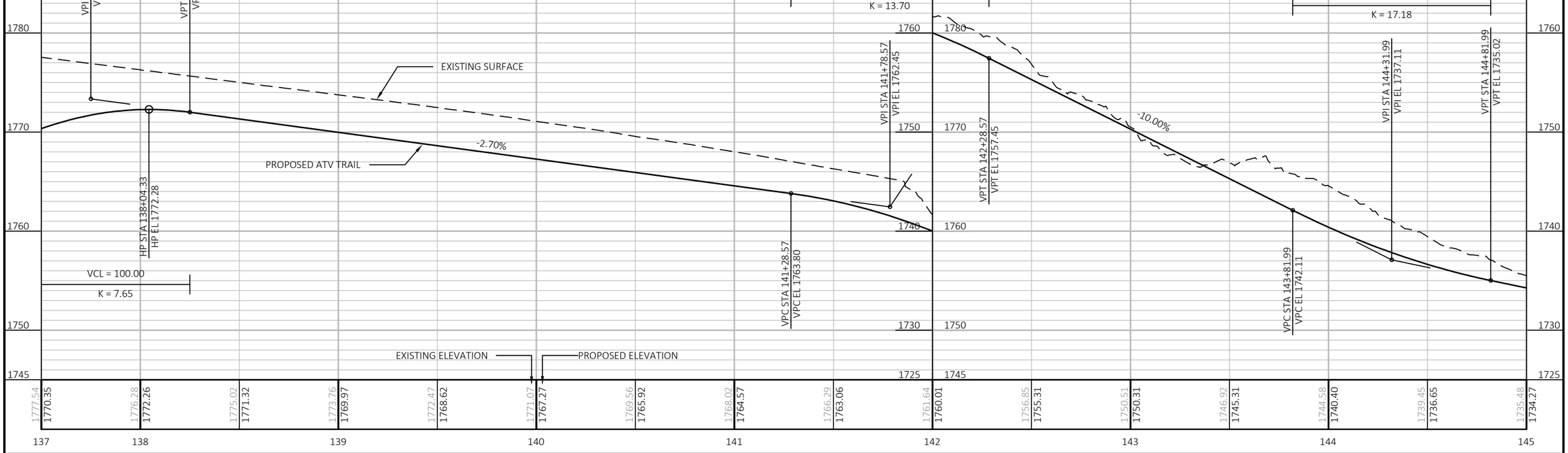
PROJECT NO: 1590-18-82	USH 8 - ATV	COUNTY: FOREST	PLAN AND PROFILE: ATV TRAIL	SHEET 45	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\050101_PP UTV.DWG
LAYOUT NAME - 05

PLOT DATE : 10/22/2024 10:53 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:50 FT

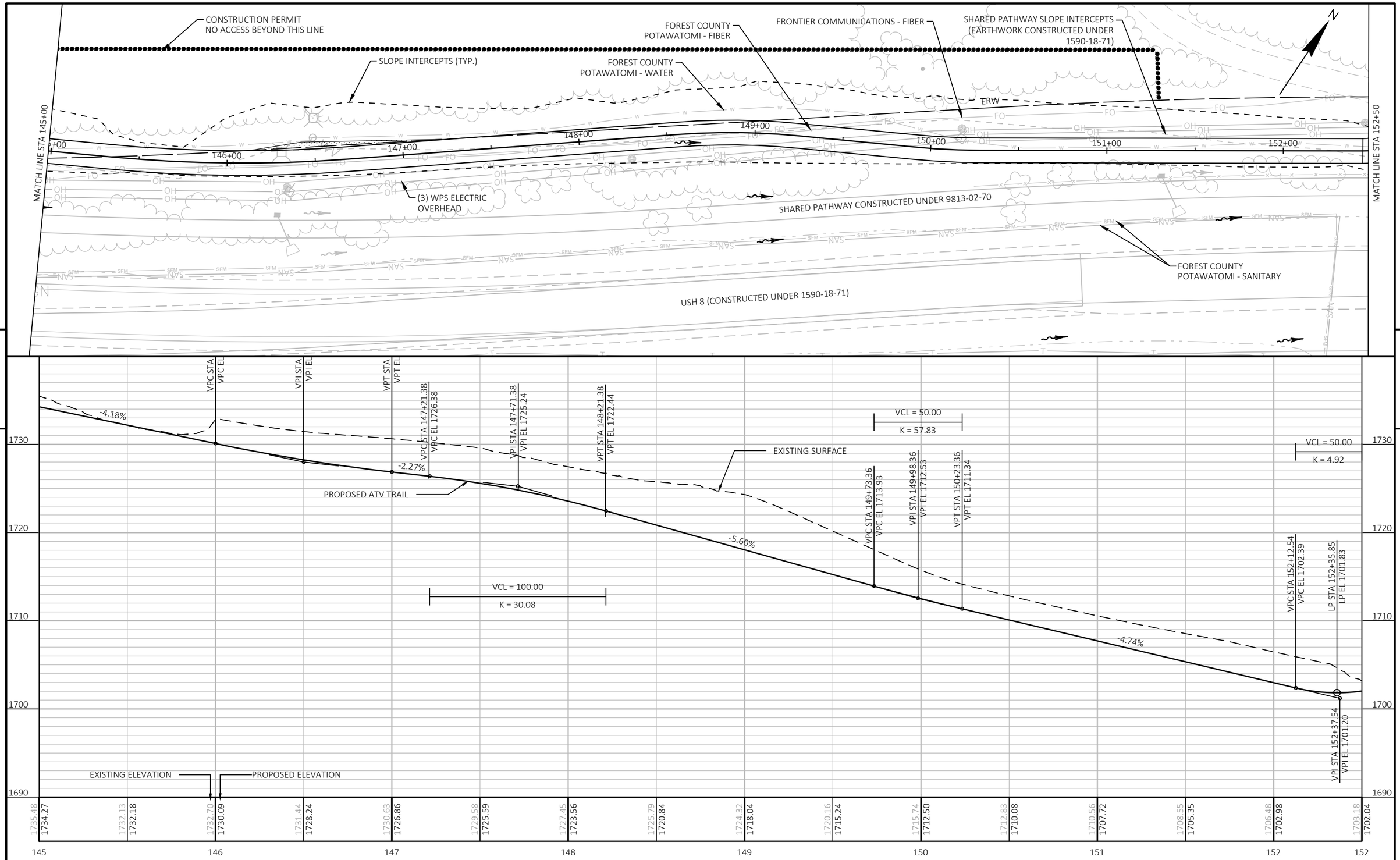
WISDOT/CADDS SHEET 44





PROJECT NO: 1590-18-82	USH 8 - ATV	COUNTY: FOREST	PLAN AND PROFILE: ATV TRAIL	SHEET 46	E

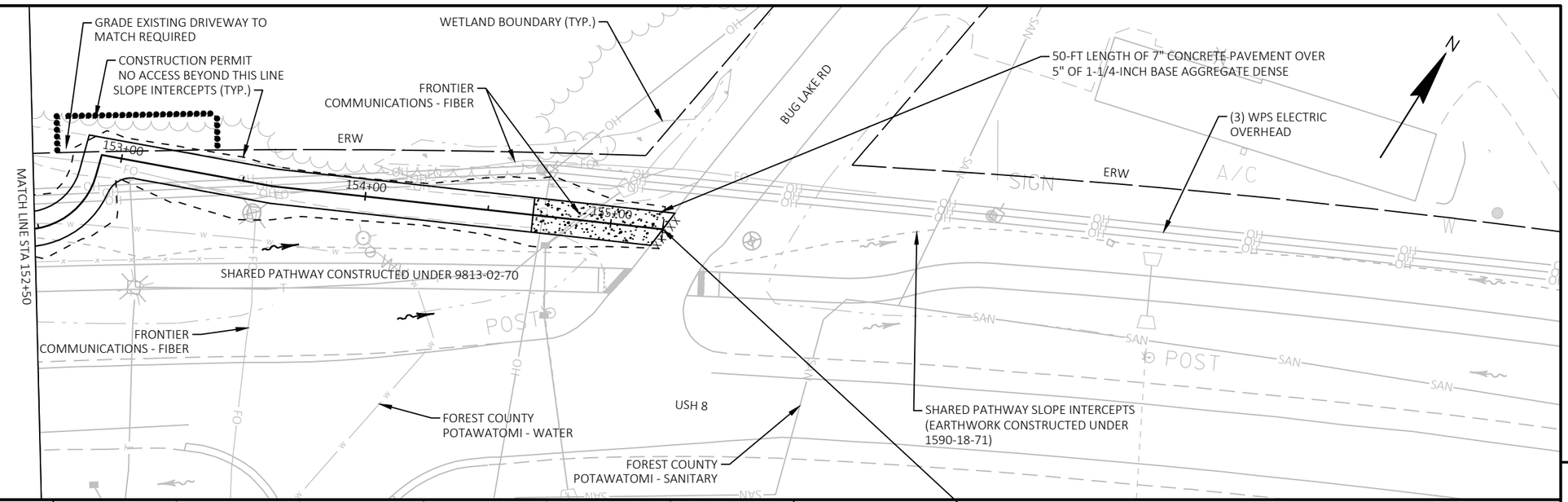
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LAYOUT NAME - 06
PLOT DATE : 10/22/2024 10:54 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:50 FT



PROJECT NO: 1590-18-82	USH 8 - ATV	COUNTY: FOREST	PLAN AND PROFILE: ATV TRAIL	SHEET 47	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\050101_PP UTV.DWG
LAYOUT NAME - 07

PLOT DATE : 10/22/2024 10:54 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:50 FT



PROJECT NO: 1590-18-82	USH 8 - ATV	COUNTY: FOREST	PLAN AND PROFILE: ATV TRAIL	SHEET 48	E

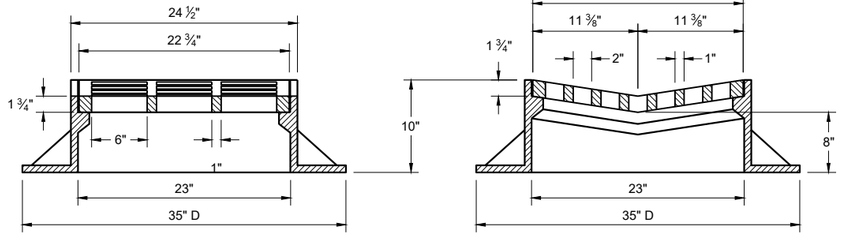
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LAYOUT NAME - 08

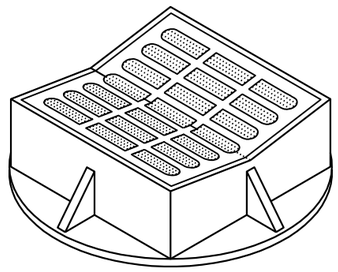
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WISDOT/CADDS SHEET 44

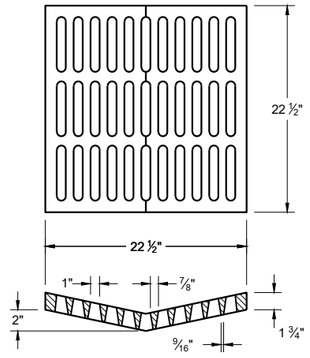
Standard Detail Drawing List

08A05-21B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08B09-04	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT, 10-FT DIAMETER
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E14-01	TRACKING PAD
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09B02-10	CONDUIT
09B16-02	PULL BOX NON-CONDUCTIVE
12A03-10	NAME PLATE (STRUCTURES)
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C11-14A	RURAL DOWELED CONCRETE PAVEMENT
13C11-14B	RURAL DOWELED CONCRETE PAVEMENT
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS





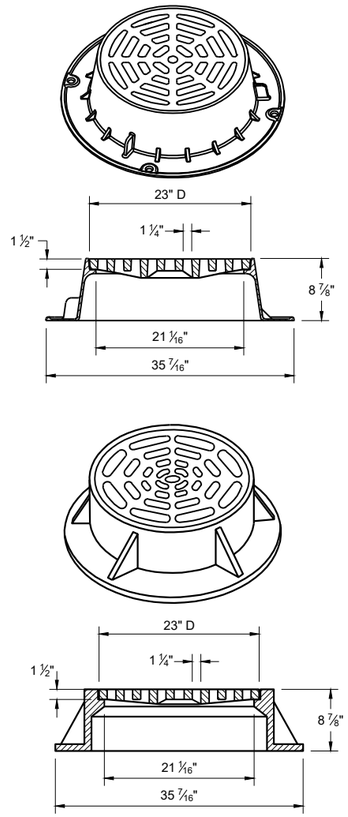
TYPE "B"



ALTERNATIVE GRATE FOR TYPE "B" COVER

USE WHERE PEDESTRIAN OF BICYCLE TRAFFIC IS POSSIBLE

NOTED AS TYPE B - A ON THE DRAINAGE TABLE



TYPE "C"

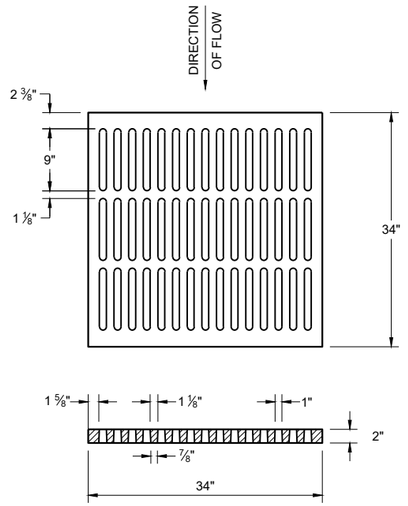
NOTE: EITHER CASTING IS ACCEPTABLE

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 CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

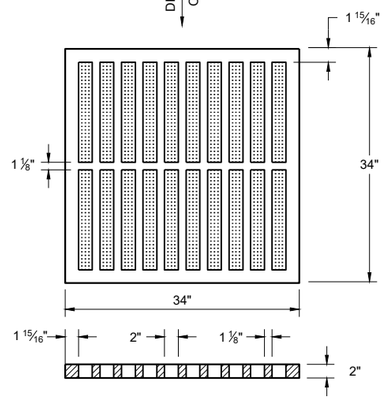
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OF BICYCLE TRAFFIC IS PERMITTED

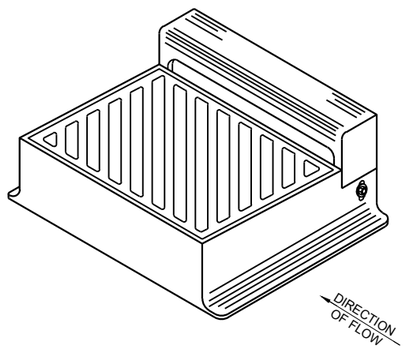
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE



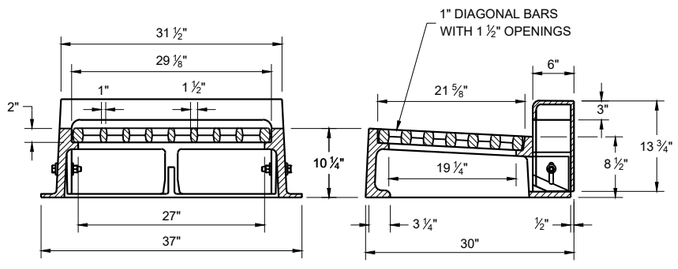
TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS

NOTED AS TYPE MS ON THE DRAINAGE TABLE



DIAGONAL SLOTS SHALL BE ORIENTEDTO THE DIRECTION OF FLOW AS ILLUSTRATED.
GRATES ARE MANUFACTURED TO BE REVERSIBLE.



TYPE "WM"

NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"

INLET COVERS TYPES B, B-A, C, MS, MS-A AND WM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

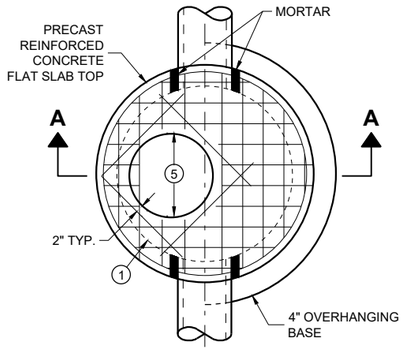
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December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

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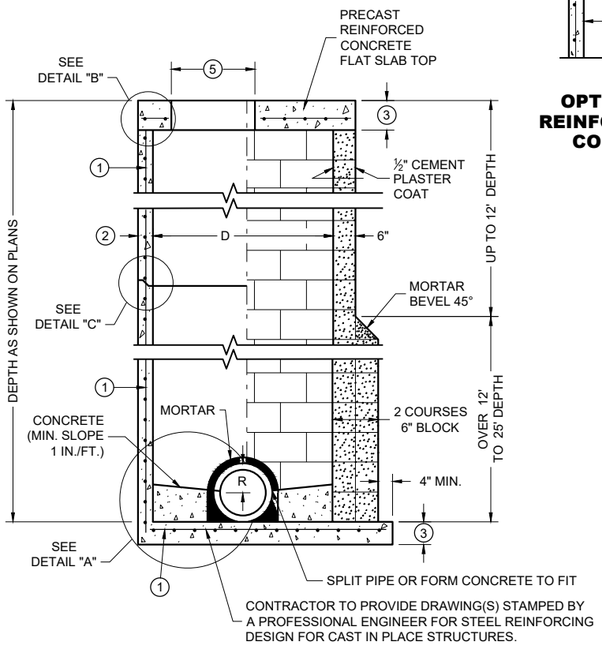
SDD 08A05-21b

SDD 08A05-21b



PLAN VIEW

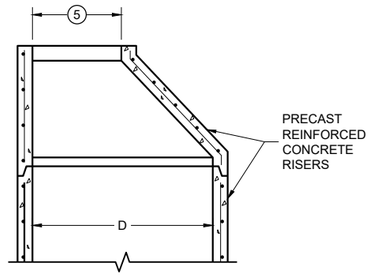
CIRCULAR OPENING



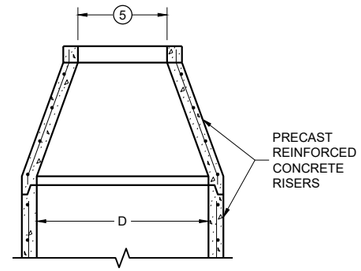
SECTION A - A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

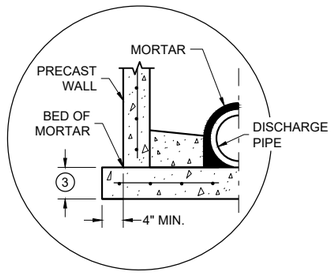
CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (1)



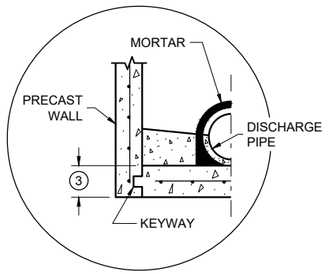
OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP



OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

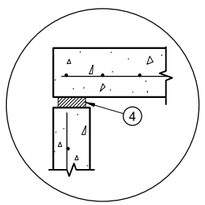


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

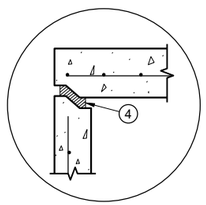


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

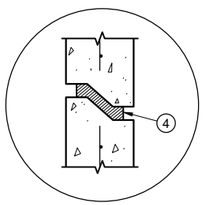
DETAIL "A"



TOP WITH PLAIN END JOINT



TOP WITH TONGUE AND GROOVE JOINT



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

DETAIL "C"

MANHOLE COVER OPENING MATRIX

OPENING SIZE (FT.) (5) \ MANHOLE COVER TYPE	C	ALL J'S	K	L	M
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

MANHOLE SIZE (DIA.)	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES		MINIMUM WALL THICKNESS (IN)	MINIMUM PRECAST FLAT SLAB TOP AND BASE THICKNESS
	180° SEPARATION (IN)	90° SEPARATION (IN)		
3-FT	15	12	4	6
4-FT	24	18	4	6
5-FT	36	24	5	8
6-FT	42	36	6	8
7-FT	48	36/42 *	7	8
8-FT	60	42	8	8
9-FT	66	54	9	10
10-FT	72	60	10	10

*A 36" PIPE AND A 42" PIPE CAN BE PLACED WITHIN 90 DEGREES. SEE MINIMUM HORIZONTAL PIPE SEPARATION DETAIL.

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 MANHOLE 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 DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE 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.

PRECAST REINFORCED CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES. CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL IMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½ INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

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

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

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

CONCRETE BLOCK WILL NOT BE PERMITTED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

4" OVERHANGING BASES ARE REQUIRED FOR ALL 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.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "D".

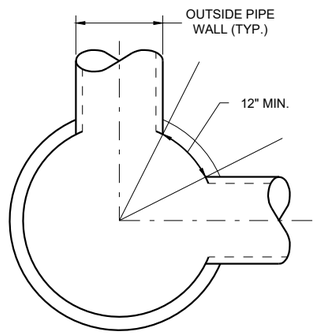
(1) FOR PRECAST MANHOLES AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

(2) SEE PIPE MATRIX TABLE FOR MINIMUM WALL THICKNESS FOR PRECAST MANHOLES

(3) SEE PIPE MATRIX TABLE FOR MINIMUM THICKNESS OF PRECAST FLAT SLAB TOPS AND BASES.

(4) JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 OR RUBBER GASKETS CONFORMING TO ASTM C443.

(5) SEE MANHOLE COVER OPENING MATRIX.



MINIMUM HORIZONTAL PIPE SEPARATION

DETAIL "D"

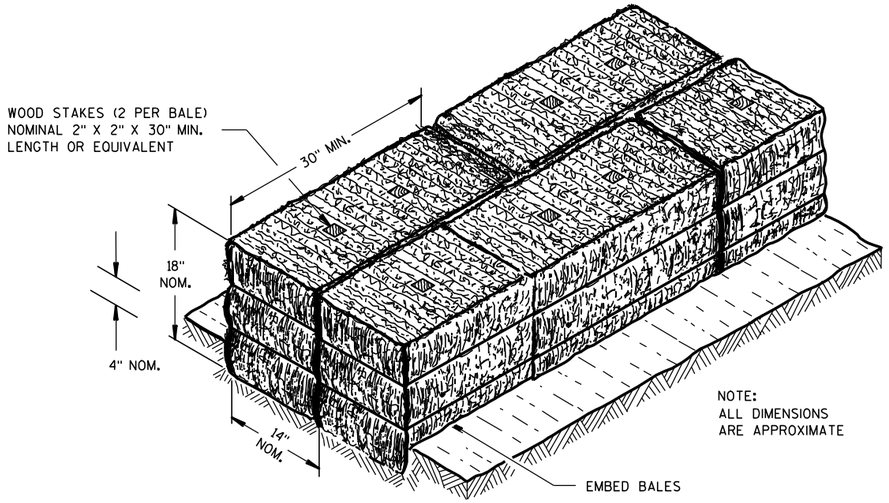
MANHOLES, 3-FT, 4-FT 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

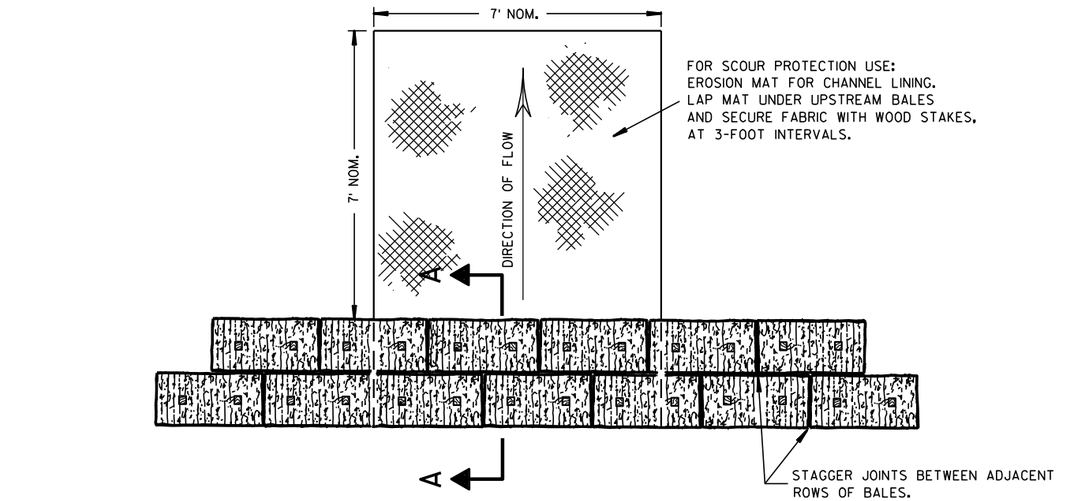
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December 2023 — DATE
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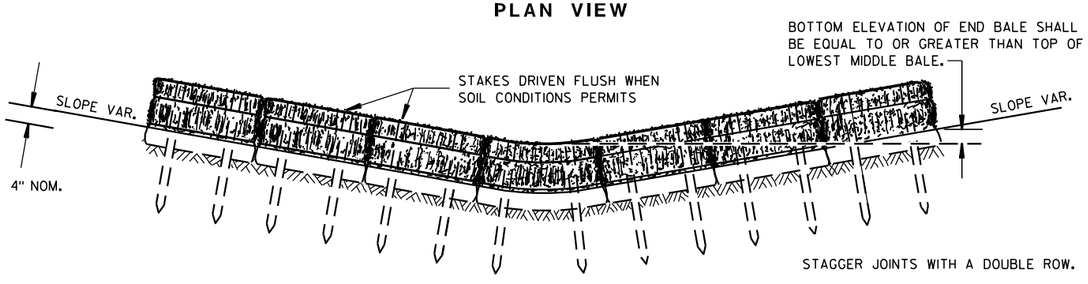
MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER



SECTION A-A



PLAN VIEW



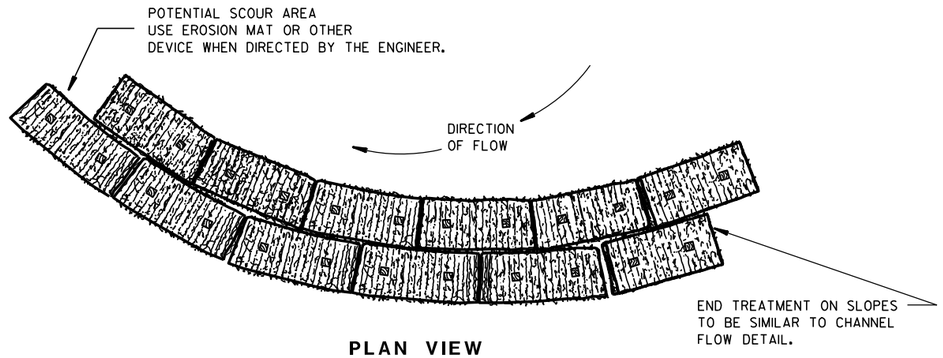
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

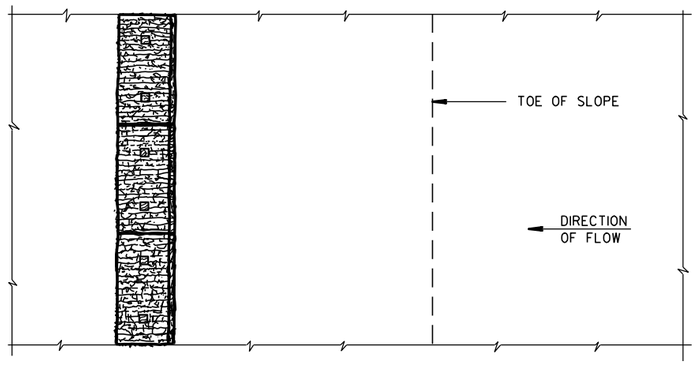
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

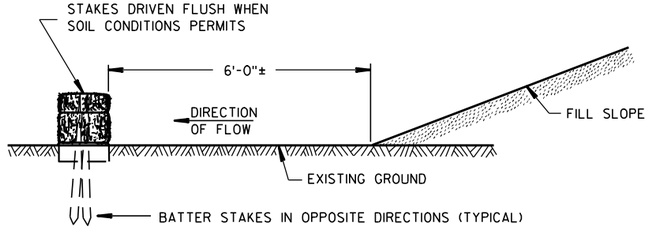


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

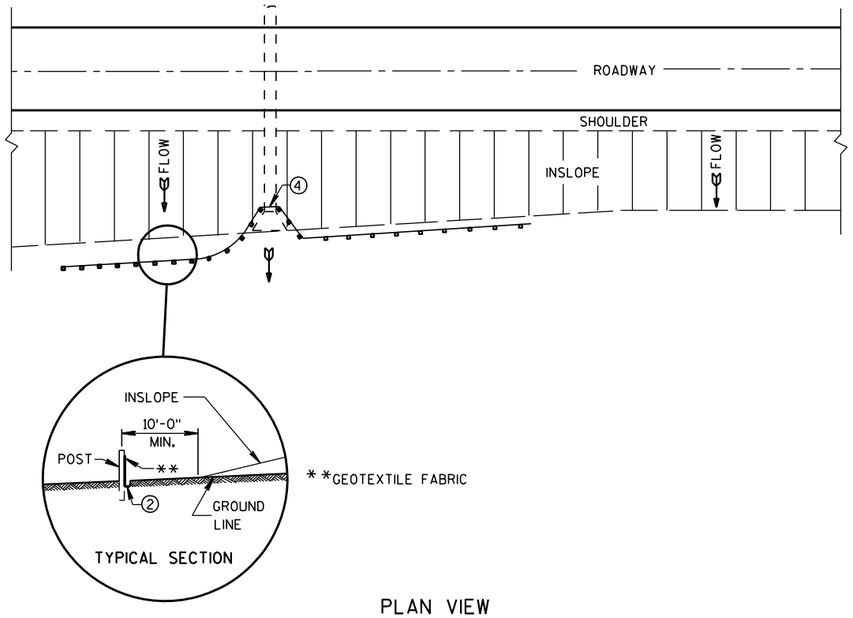
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02 — DATE

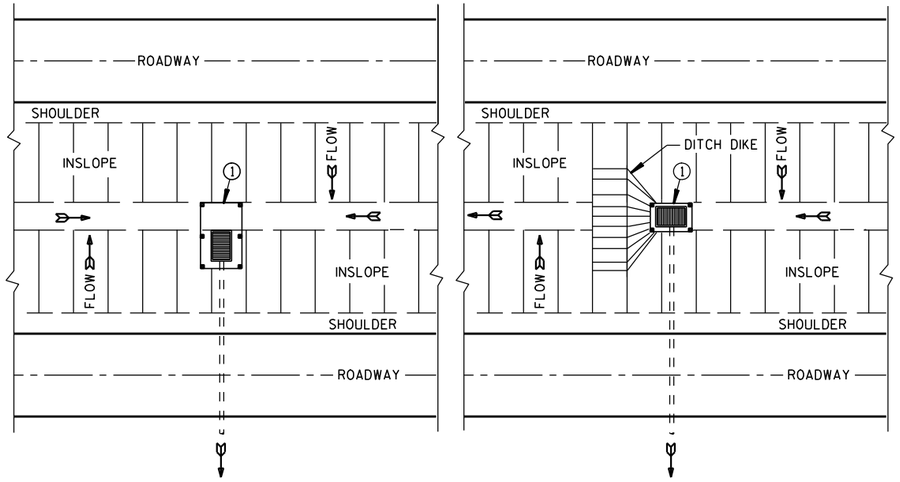
/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



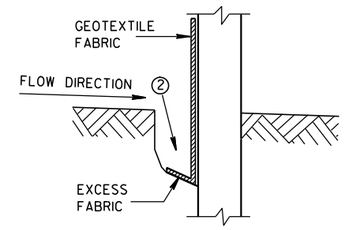
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

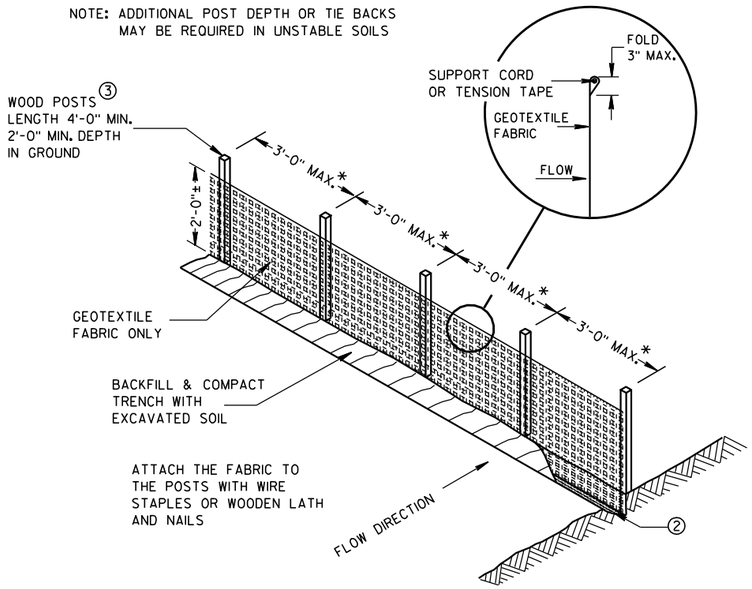
GENERAL NOTES

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

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

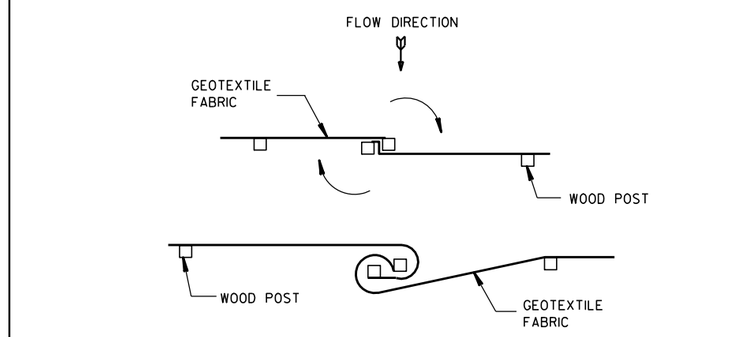


TRENCH DETAIL

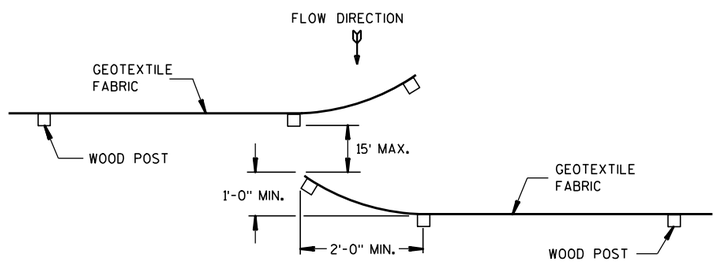


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

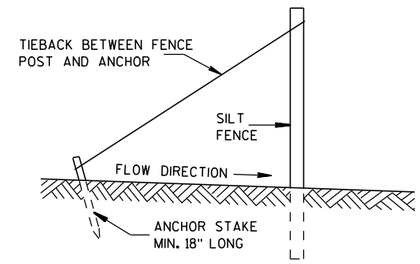


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

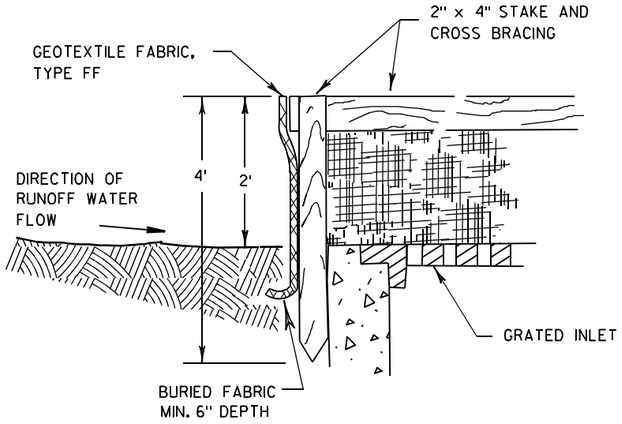
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

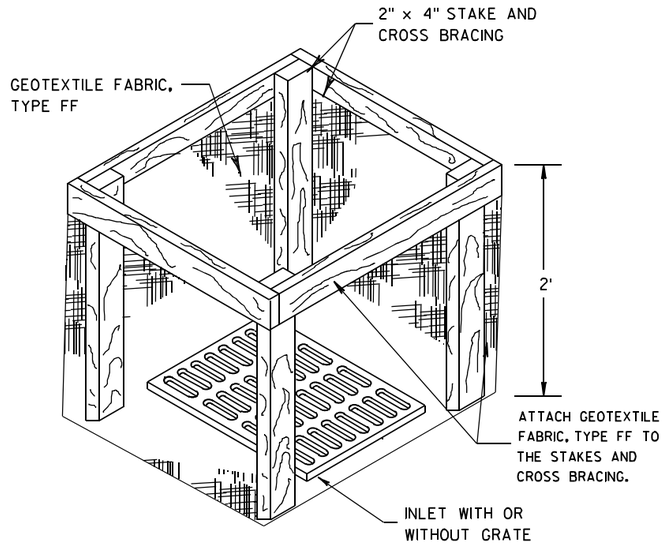
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S.D.D. 8 E 9-6

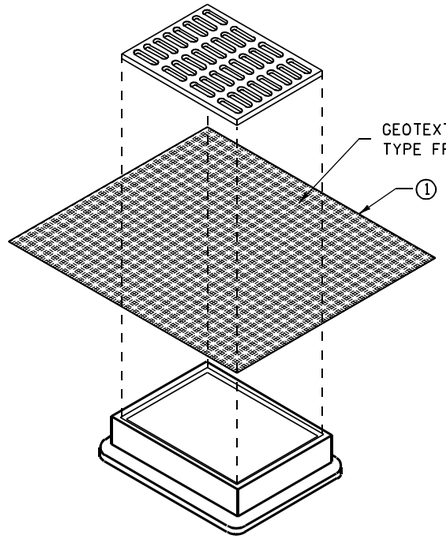
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S.D.D. 8 E 9-6



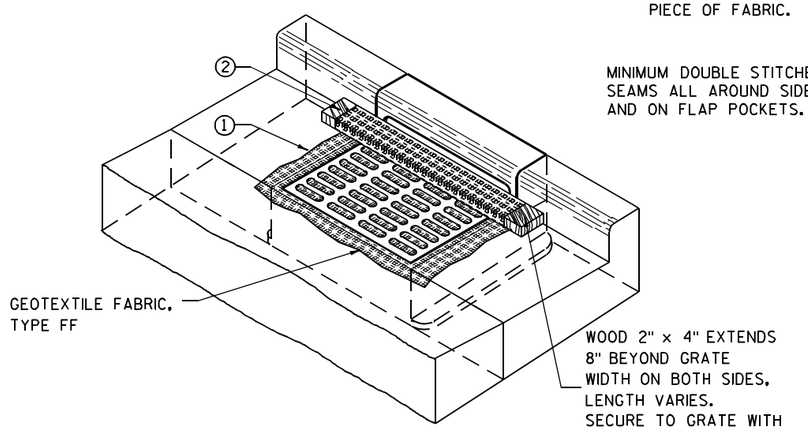


INLET PROTECTION, TYPE A

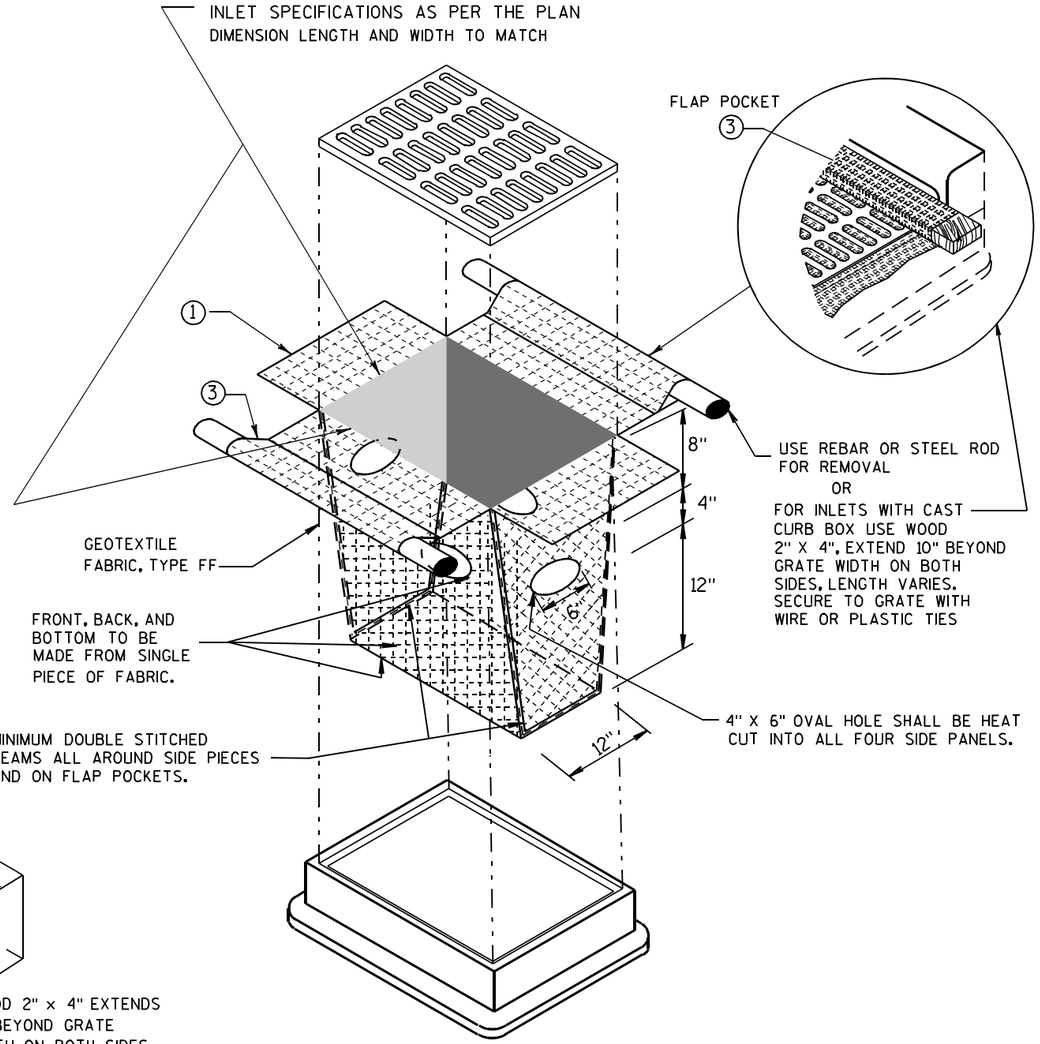


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(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

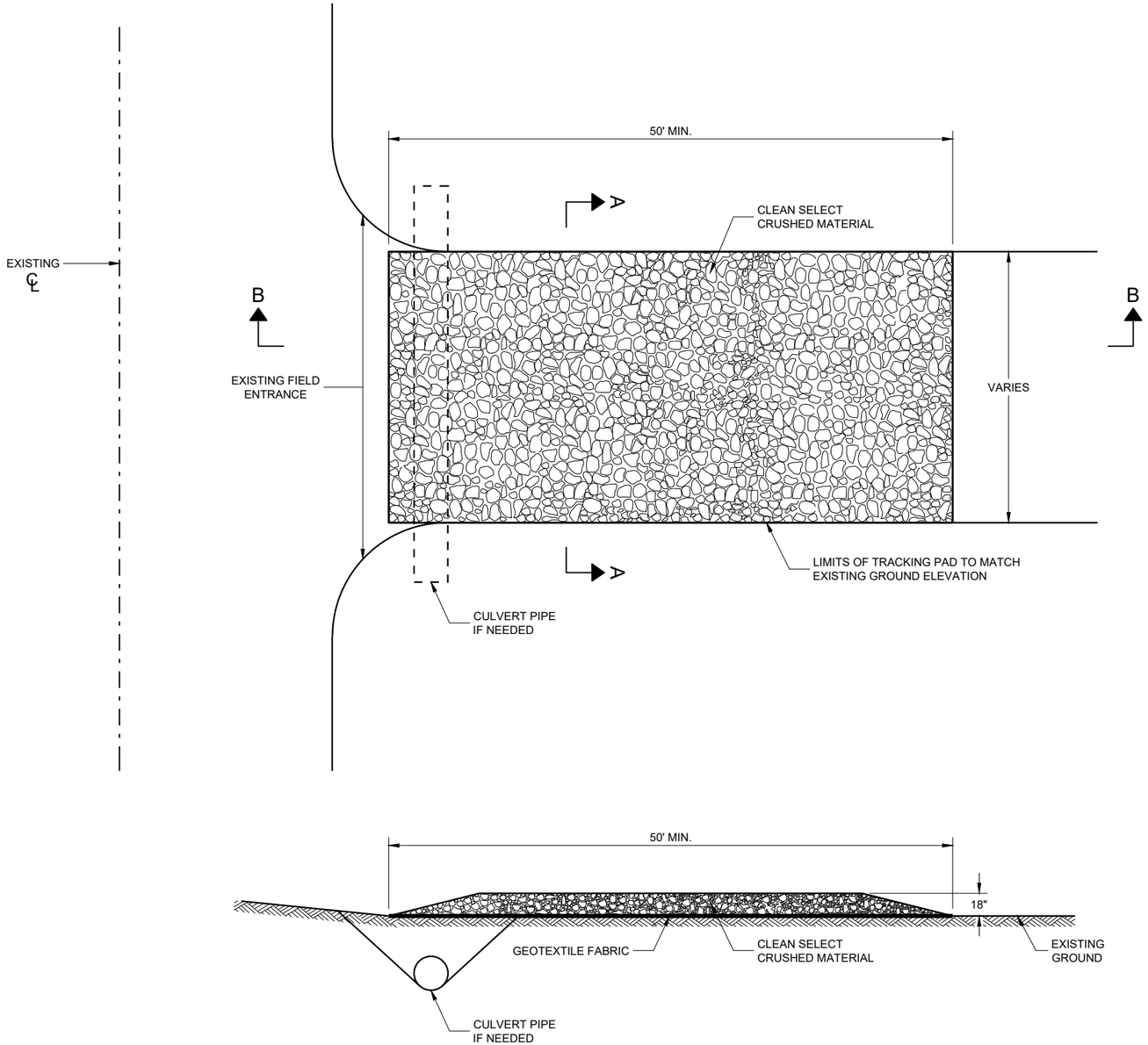
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10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 10-2

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S.D.D. 8 E 10-2



SECTION B - B

GENERAL NOTES

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

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

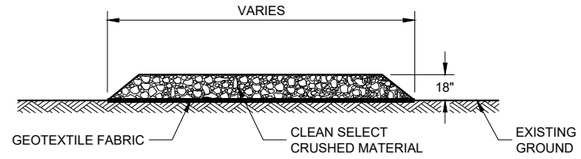
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

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

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

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

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



SECTION A - A

6

SDD 08E14 - 01

TRACKING PAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

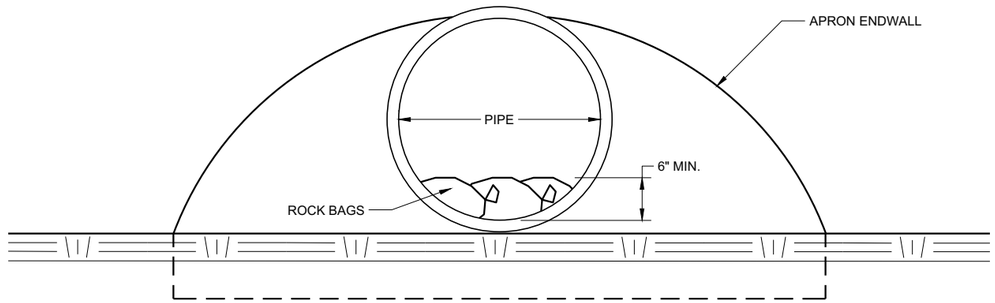
3/24/2011
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVE ENGINEER

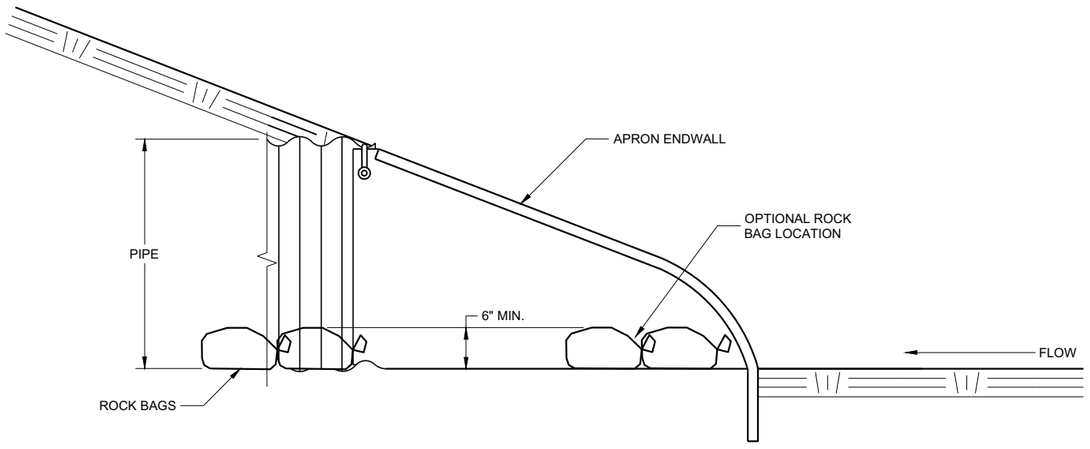
FHWA

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SDD 08E14 - 01



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Daniel Schave
EROSION CONTROL ENGI

FHWA

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SDD 08E15 - 01

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SDD 08E15 - 01

METAL APRON ENDWALLS

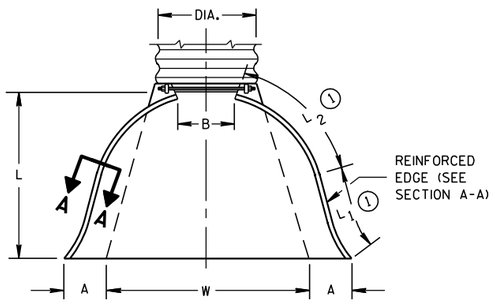
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4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

× EXCEPT CENTER PANEL SEE GENERAL NOTES

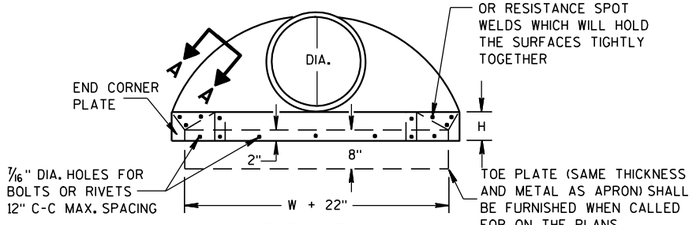
REINFORCED CONCRETE APRON ENDWALLS

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

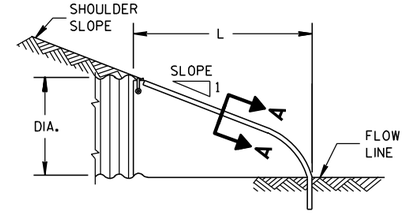
*MINIMUM
**MAXIMUM



PLAN VIEW

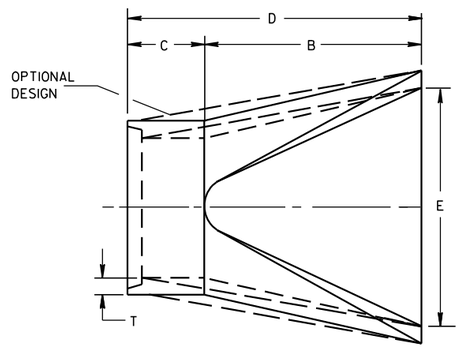


END VIEW

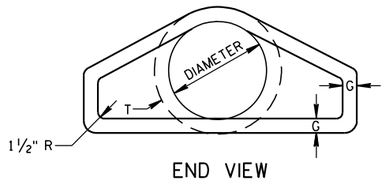


SIDE ELEVATION

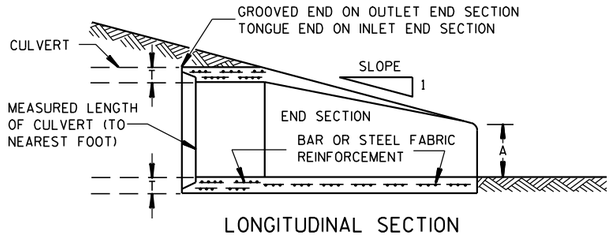
METAL ENDWALLS



PLAN

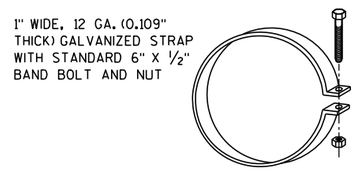


END VIEW



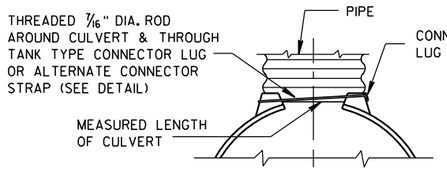
LONGITUDINAL SECTION

CONCRETE ENDWALLS

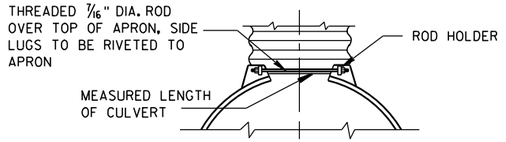


ALTERNATE FOR TYPE 1 CONNECTION

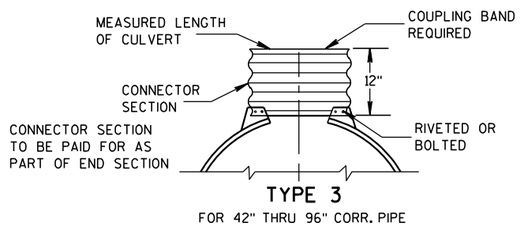
END SECTION CONNECTOR STRAP



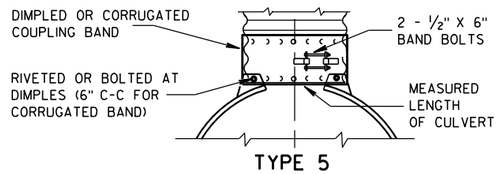
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

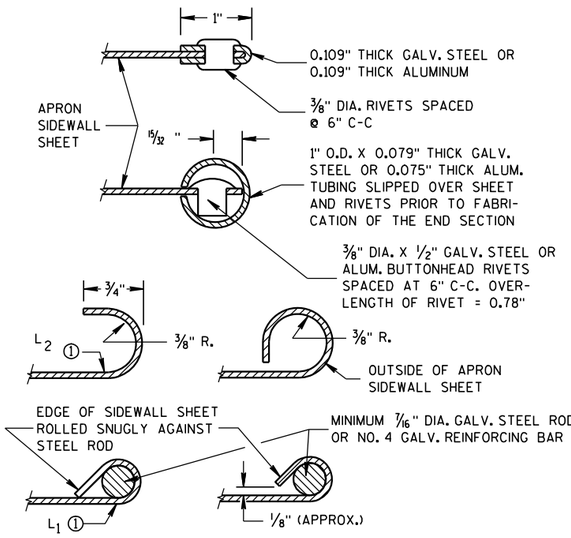
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

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

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

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

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

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

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

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

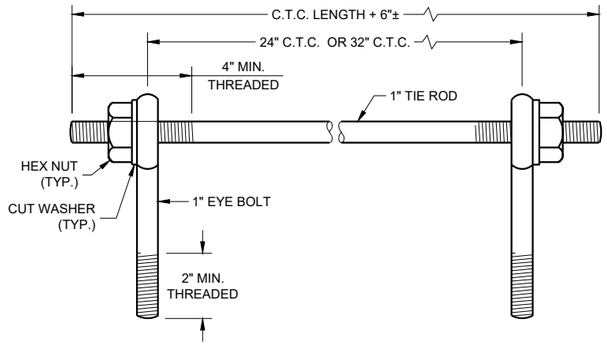
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

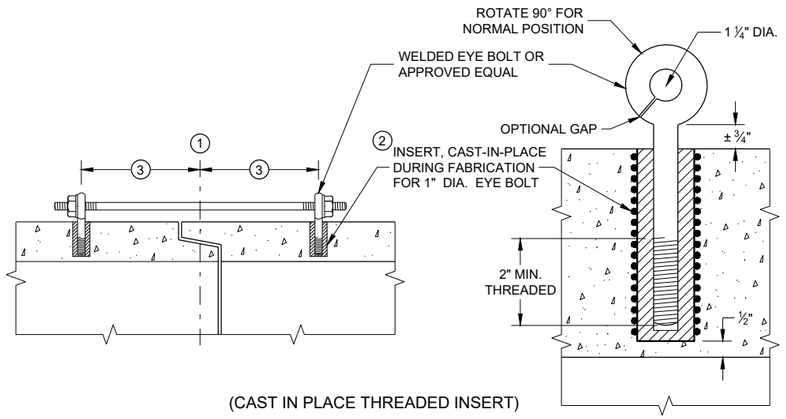
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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



EYE BOLTS AND TIE ROD



(CAST IN PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

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

GENERAL NOTES

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

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

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

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

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

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

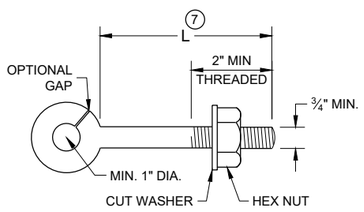
(3) HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.

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

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

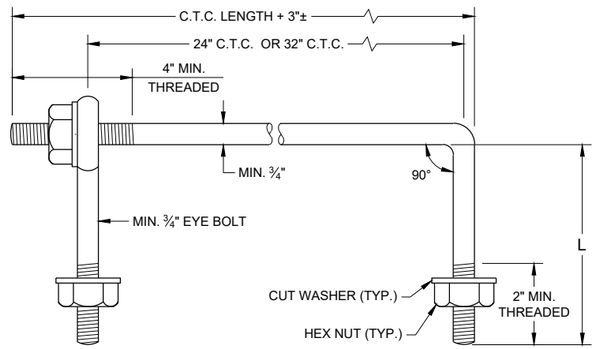
(6) LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.

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

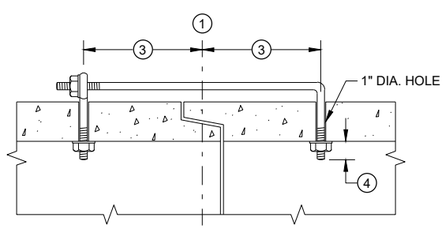


EYE BOLT (7)

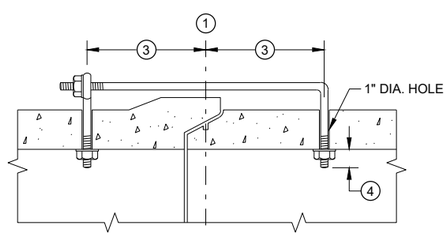
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD



(TONGUE AND GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

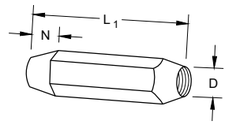
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

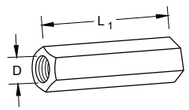
ADJUSTABLE TIE ROD TABLE

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

DIMENSIONS SHOWN ARE IN INCHES



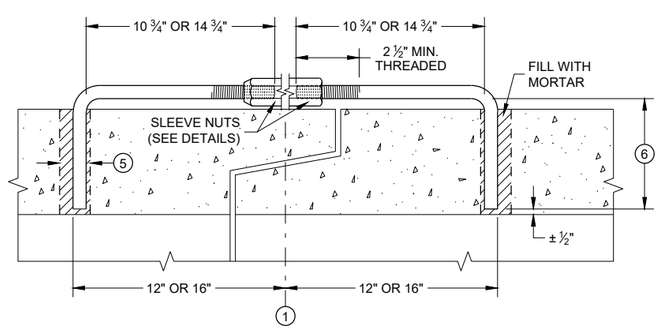
TAPERED



PLAIN

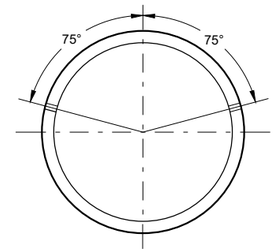
RIGHT AND LEFT THREADS

SLEEVE NUTS



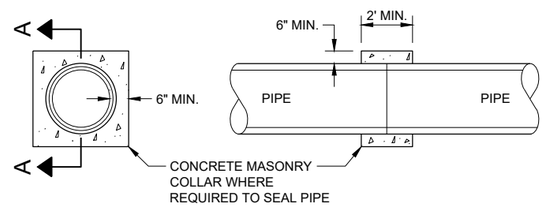
LONGITUDINAL SECTION

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



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

TRANSVERSE SECTION



SECTION A - A

CONCRETE COLLAR DETAIL

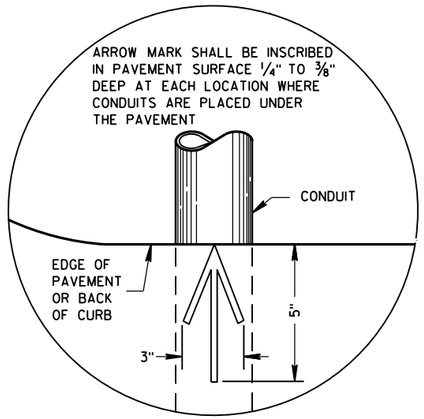
JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

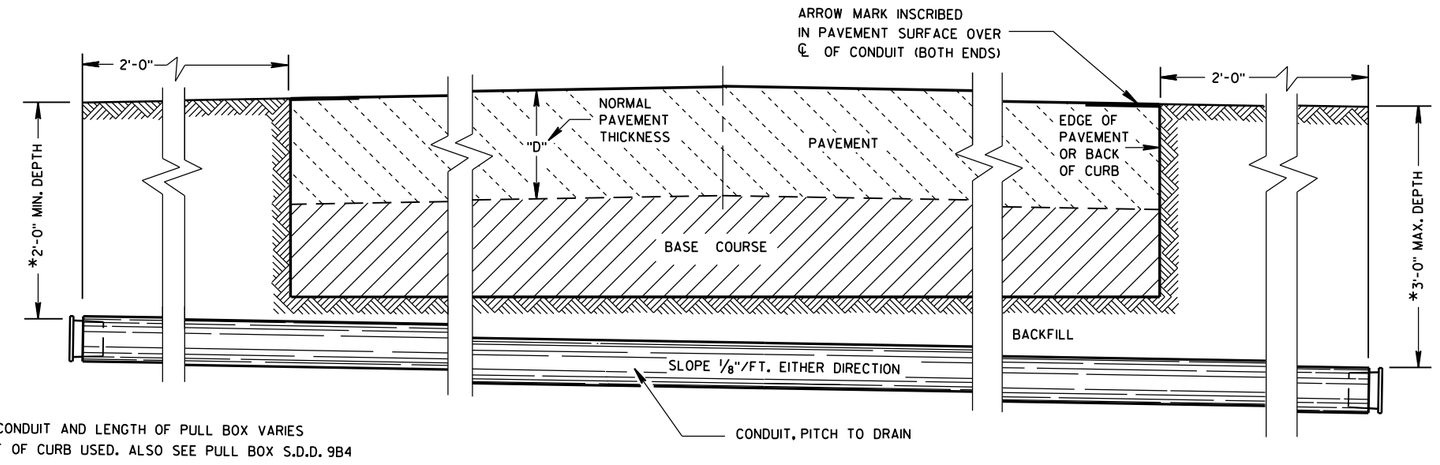
SDD 08F04 - 08

SDD 08F04 - 08



PLAN VIEW

ARROW MARK



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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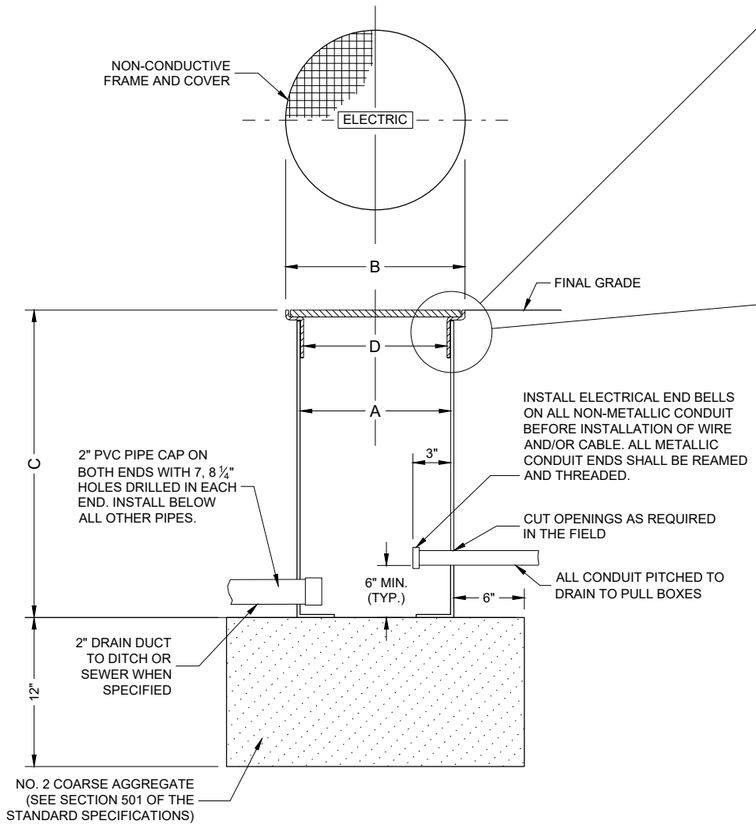
S.D.D. 9 B 2-10

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

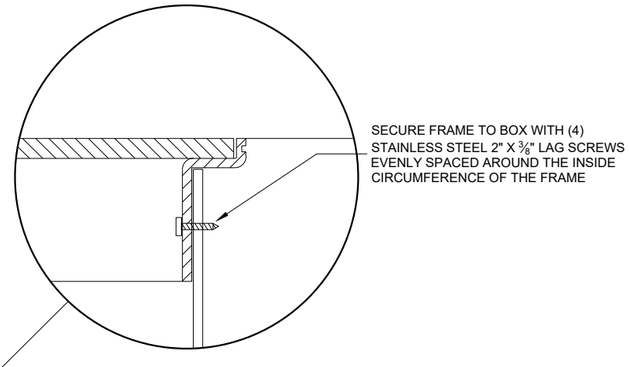
DIMENSION IN INCHES		NON- CONDUCTIVE PULL BOX	
BOX DIAMETER ** (INSIDE)	A	24	24
BOX OVERALL OUTSIDE DIAMETER	B	27	27
BOX LENGTH	C	36	42
FRAME OPENING	D	22 ½	22 ½
WEIGHT IN POUNDS *			
COVER		50	50
BOX ONLY		75	85

* THE ACTUAL WEIGHT OF THE COVER OR BOX ONLY MAY VARY NOT TO EXCEED 100 LBS INDIVIDUALLY.

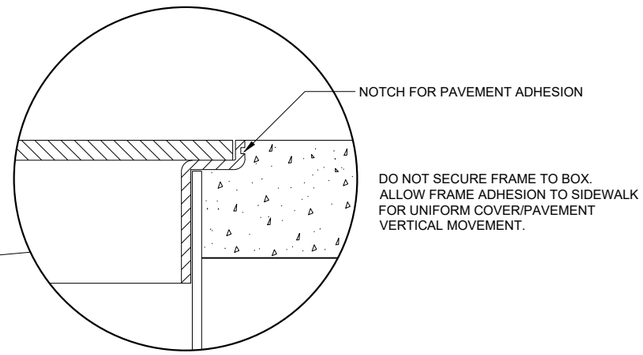
** DIAMETER VARIES FROM TOP TO BOTTOM WITH THE DIAMETER LARGER AT THE BOTTOM TO PREVENT FROST HEAVE.



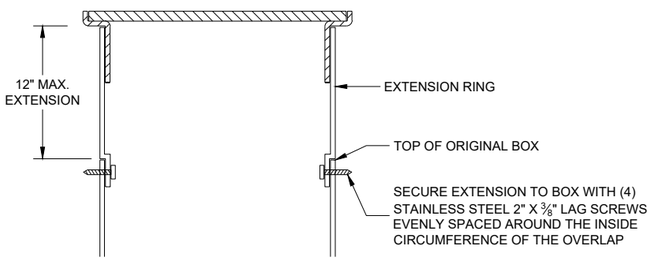
NON-CONDUCTIVE PULL BOX



INSTALLED IN SOD OR CRUSHED AGGREGATE



INSTALLED IN SIDEWALK



BOX EXTENSION

GENERAL NOTES

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

ALL BOXES, FRAMES AND COVERS SHALL BE SUITABLE FOR TIER 15 LOADING AS SPECIFIED IN ANSI/SCTE 77.

PROVIDE AN OPENING FOR TOOL ASSISTED COVER REMOVAL NOT LARGE ENOUGH TO PERMIT PASSAGE OF A SPHERE MORE THAN ½" DIAMETER

ENSURE COVER SURFACE IS SKID RESISTANT WITH A COEFFICIENT OF FRICTION OF AT LEAST 0.5 AND VERTICAL SURFACE DICONTINUITIES LESS THAN ¼".

COVER SHALL BE MAGNETICALLY LOCATABLE.

BOXES AND EXTENSIONS ARE TRIMMABLE FOR CUSTOM LENGTHS. TRIMMED PIECES SHALL MAINTAIN A UNIFORM LENGTH.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN ¼".

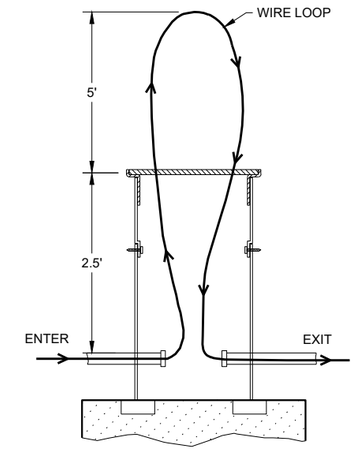
THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

ENTIRE BOX MUST BE CONSTRUCTED OF NON-CONDUCTIVE MATERIALS WITH THE EXCEPTION OF STAINLESS STEEL FASTENERS AND MAGNETIC LOCATABLE DEVICE.

WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE.

LABEL ON COVER SHALL READ "ELECTRIC" FOR SIGNAL AND LIGHTING SYSTEMS, "WISDOT ITS" FOR COMMUNICATIONS AND ITS EQUIPMENT SYSTEMS.



MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX

PULL BOXES NON-CONDUCTIVE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

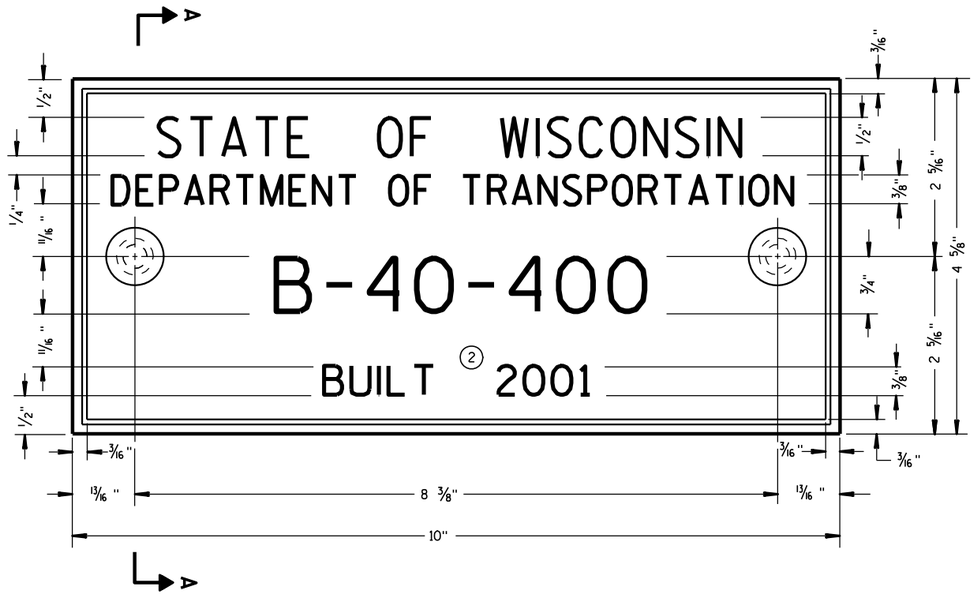
APPROVED
May 2022
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

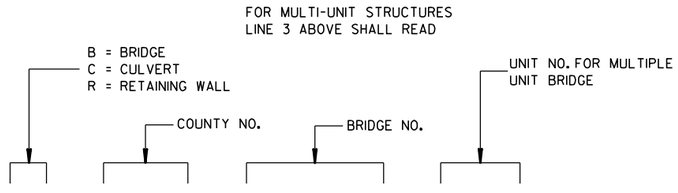
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SDD 09B16 - 02



TYPICAL NAME PLATE
(BRIDGES, CULVERTS, AND RETAINING WALLS)



NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES

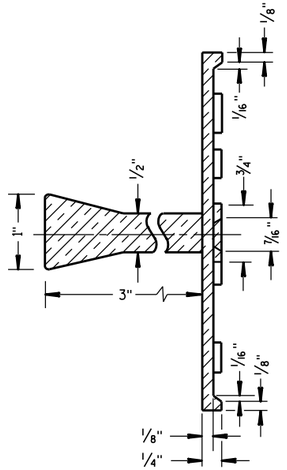
GENERAL NOTES

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

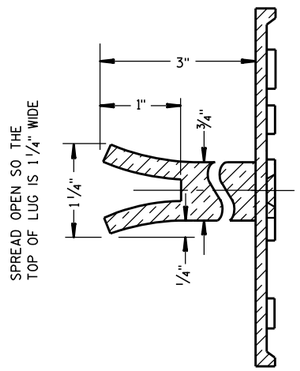
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

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

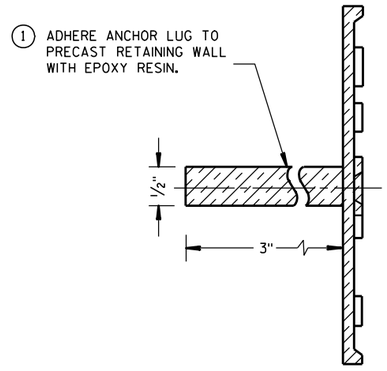
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

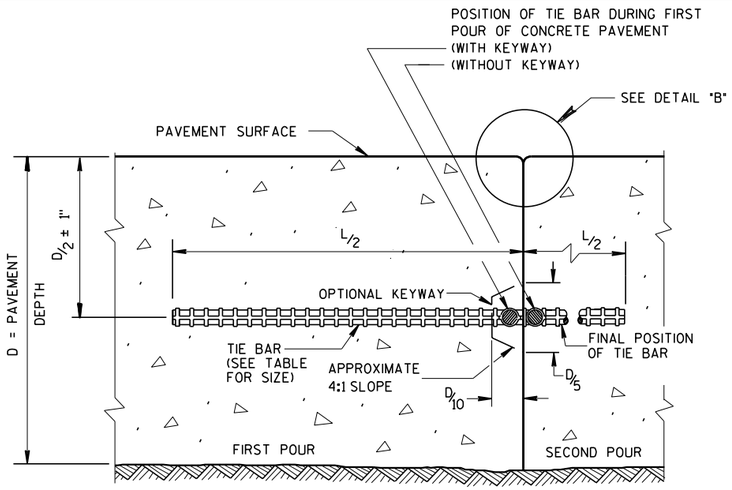
3/26/10 DATE

/S/ Scot Beck CHIEF STRUCTURAL DEVELOPMENT ENGINEER

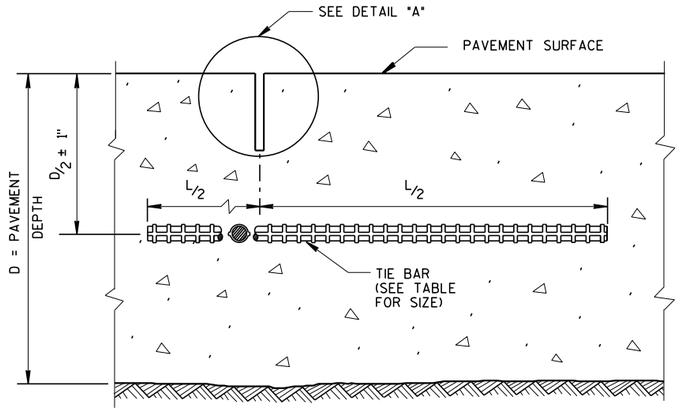
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S.D.D. 12 A 3-10



CONSTRUCTION JOINT



SAWED JOINT

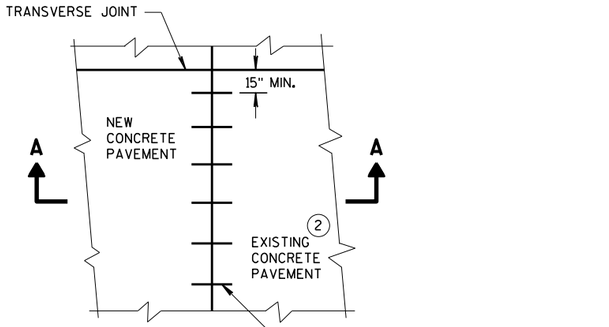
GENERAL NOTES

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

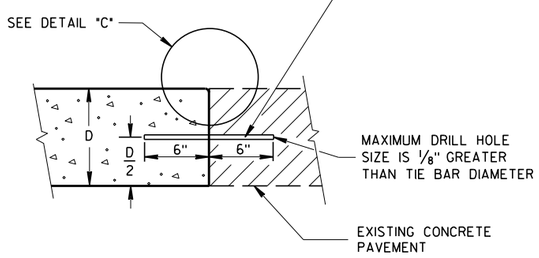
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

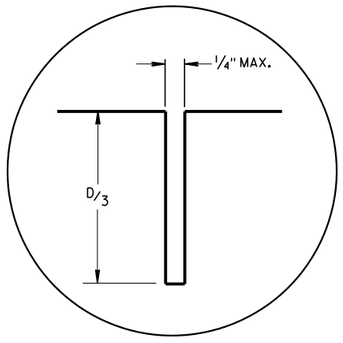


PLAN VIEW

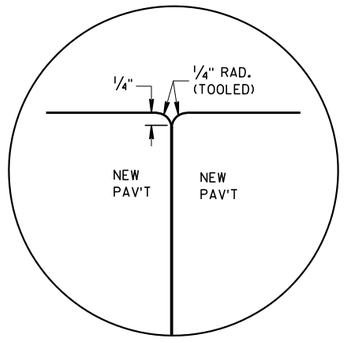


SECTION A-A

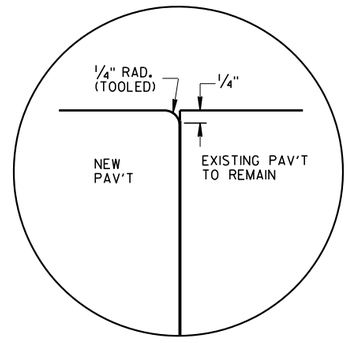
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT



DETAIL "A"



DETAIL "B"



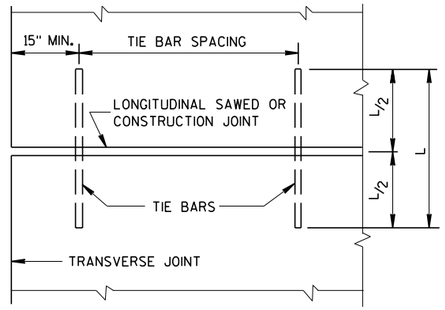
DETAIL "C"

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

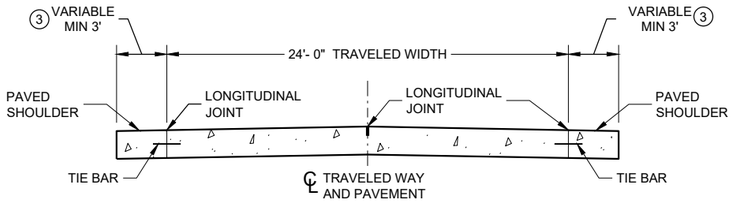
APPROVED
March 2018 — DATE
/S/ Peter Kemp — PAVEMENT SUPE
FHWA

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S.D.D. 13 C 1-19

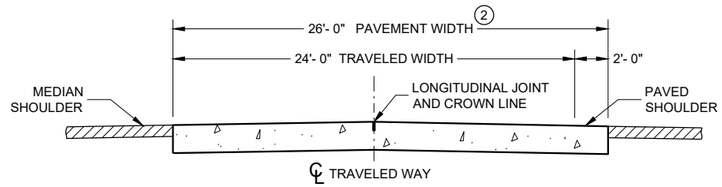
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S.D.D. 13 C 1-19

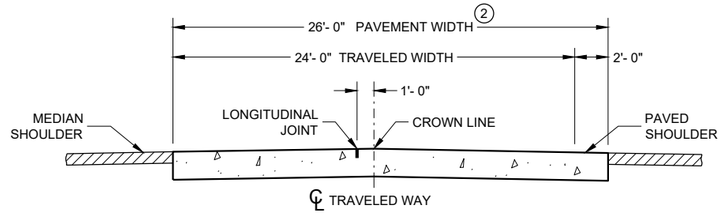


SECTION A - A

TWO-LANE TWO-WAY HIGHWAY (1)



SECTION B - B



ALTERNATIVE SECTION B - B

DIVIDED HIGHWAY (1)

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 FROM 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 THE CONTRACTION JOINTS.

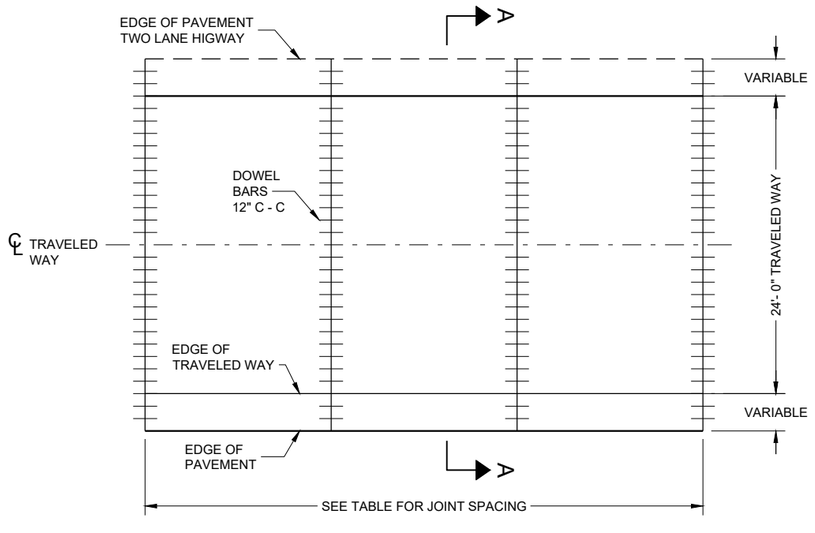
(1) REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.

(2) MEASURE THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED "PAVED SHOULDER" AS CONCRETE PAVEMENT.

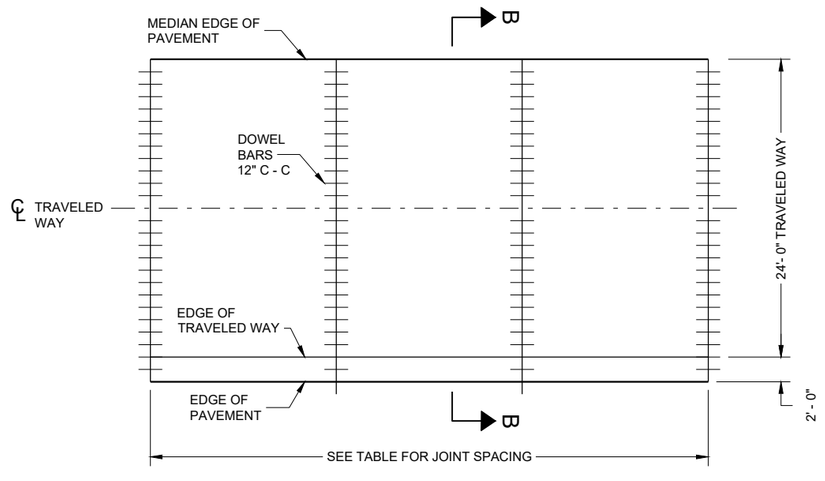
(3) SHOULDER WIDTHS LESS THAN 3 FEET SHALL BE PAVED INTEGRAL TO THE MAINLINE CONCRETE PAVEMENT, SEE SECTION B-B.

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

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



CONTRACTION JOINT LAYOUT FOR TWO-LANE TWO-WAY HIGHWAY



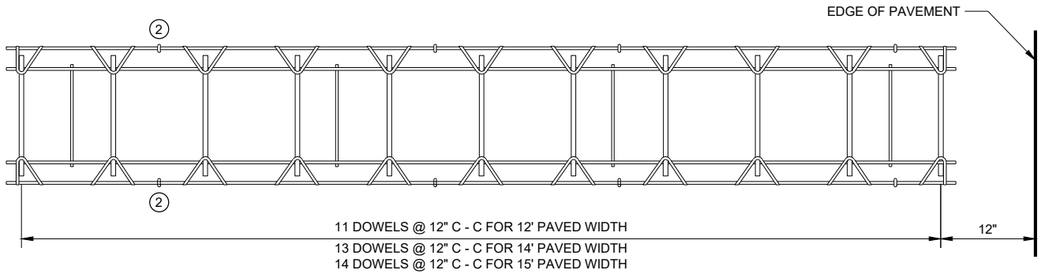
CONTRACTION JOINT LAYOUT FOR DIVIDED HIGHWAY

RURAL DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA 63

SDD 13C11 - 14a

SDD 13C11 - 14a



PLAN VIEW



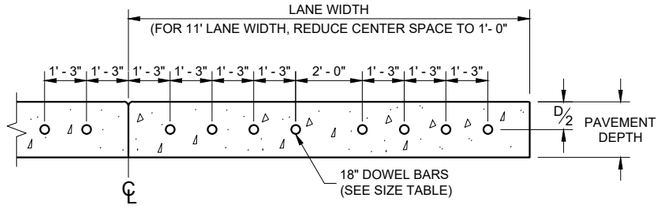
SIDE VIEW

(NORMAL TO CENTERLINE)

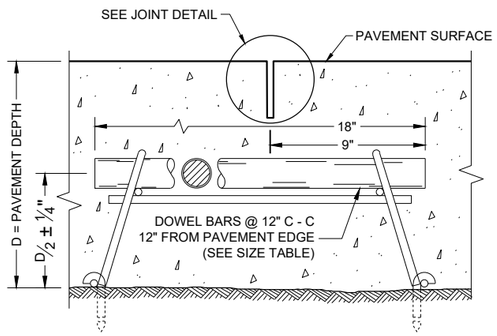
CONTRACTION JOINT DOWEL ASSEMBLY (1)

GENERAL NOTES

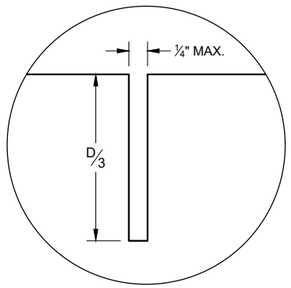
1. OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTION CONTRACTION JOINTS.
2. SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.
3. FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼" 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 THE "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 AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛" GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



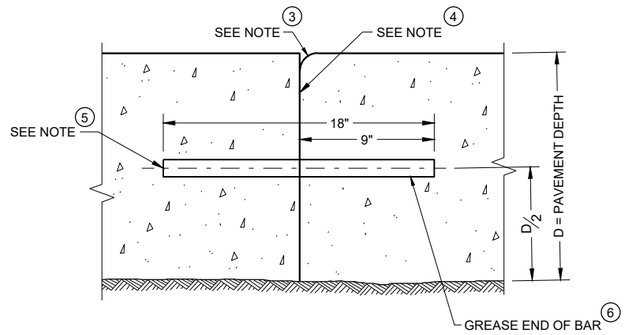
DRILLED DOWEL BAR CONSTRUCTION JOINT (7)



DOWELED CONTRACTION JOINT



JOINT DETAIL



TRANSVERSE CONSTRUCTION JOINT

RURAL DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVISOR

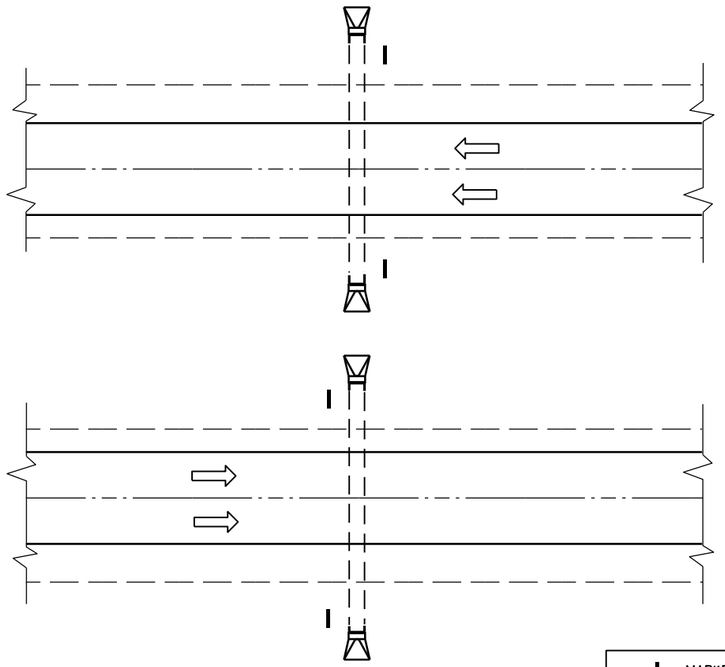
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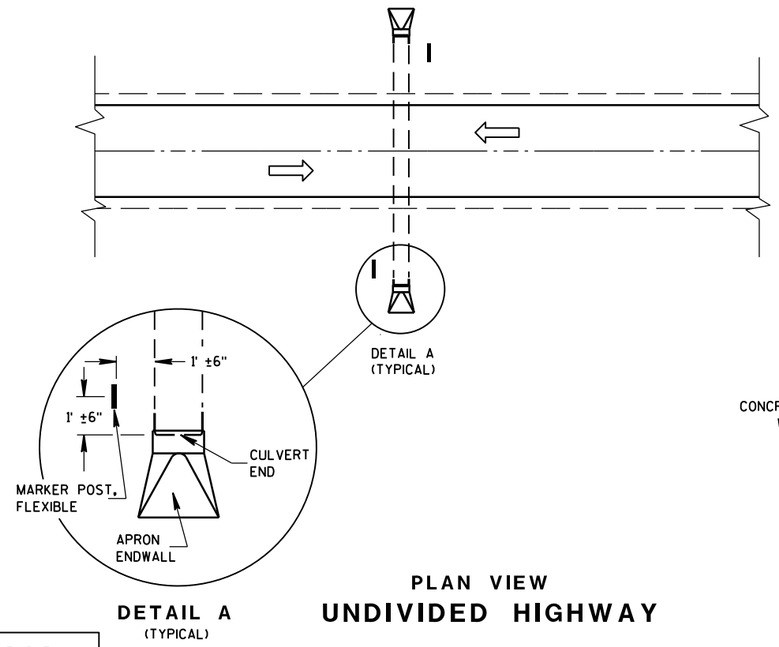
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SDD 13C11 - 14b



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

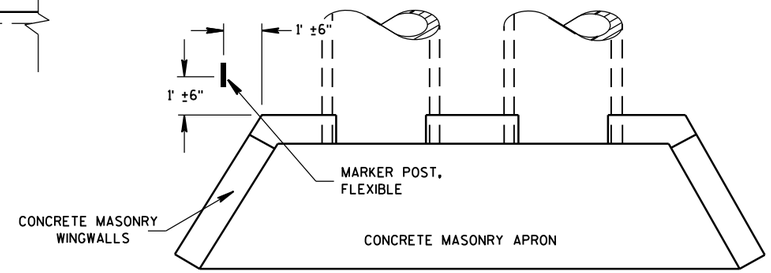
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

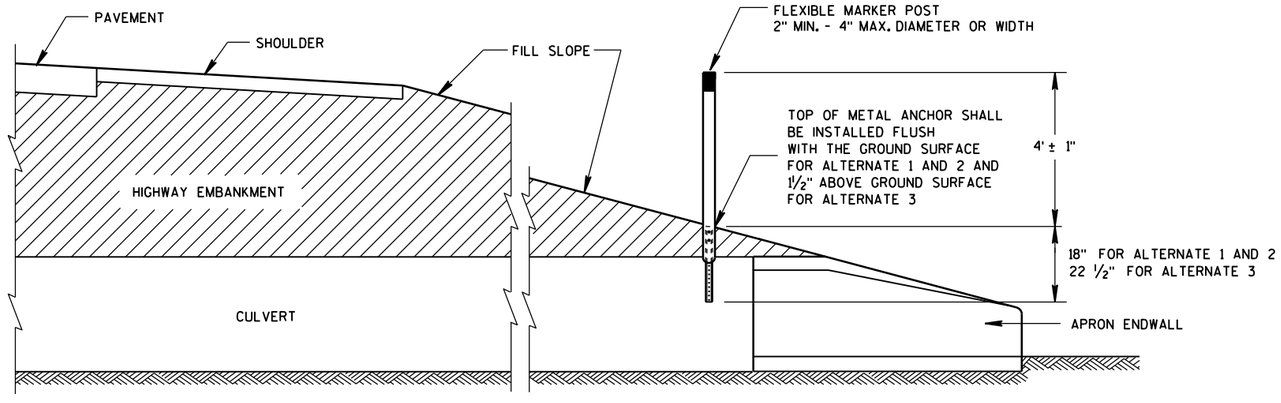
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



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

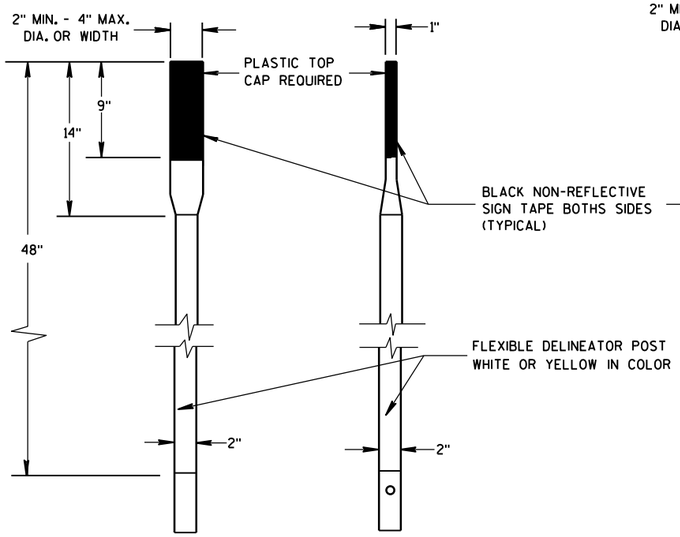
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

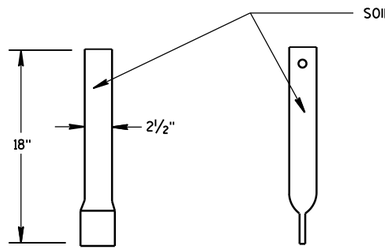
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S.D.D. 15 A 3-2a

6

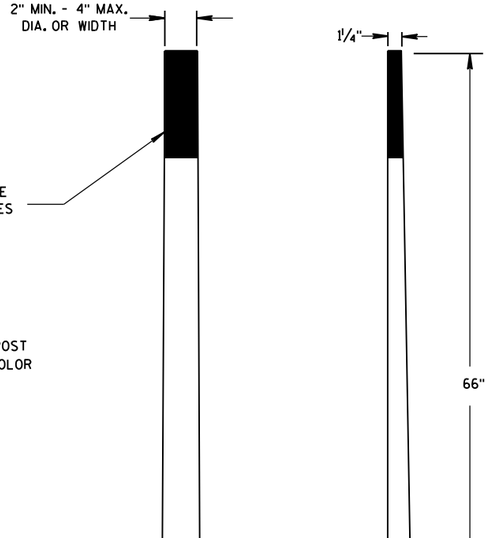
S.D.D. 15 A 3-2a





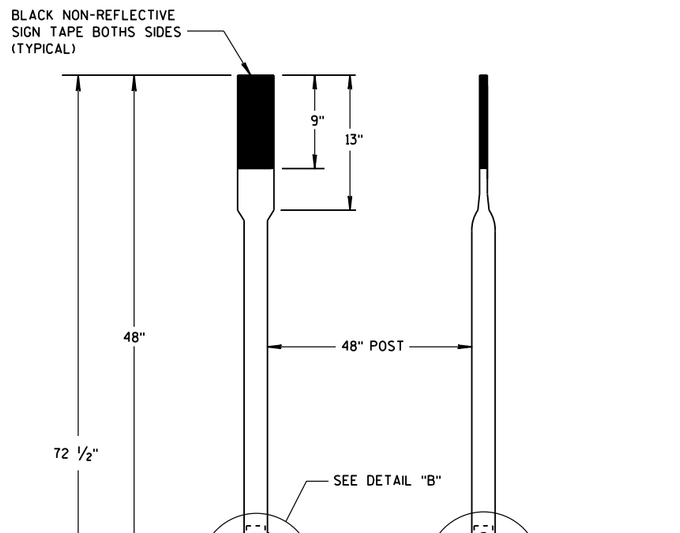
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

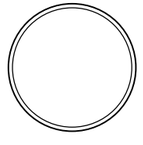
ALTERNATE 2



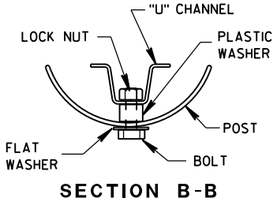
FRONT VIEW SIDE VIEW

ALTERNATE 3

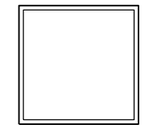
FLEXIBLE MARKER POSTS



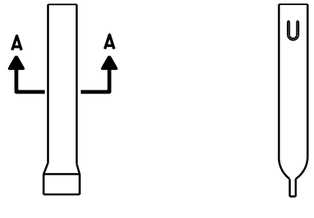
SECTION A-A



SECTION B-B

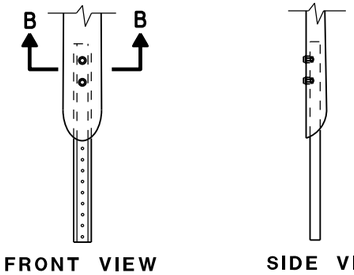


SECTION C-C



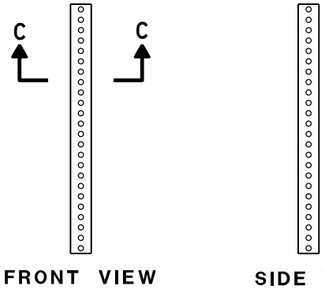
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

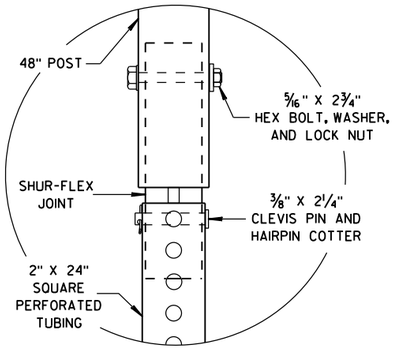
ALTERNATE 2



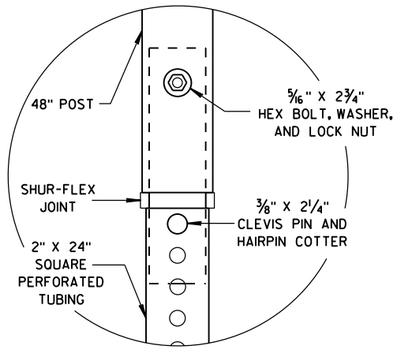
FRONT VIEW SIDE VIEW

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

6

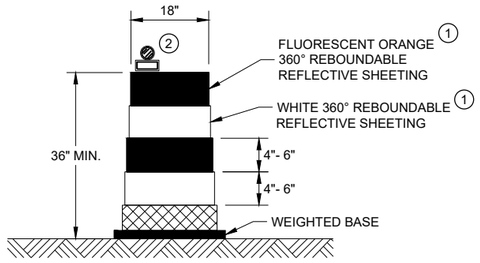
S.D.D. 15 A 3-2b

6

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

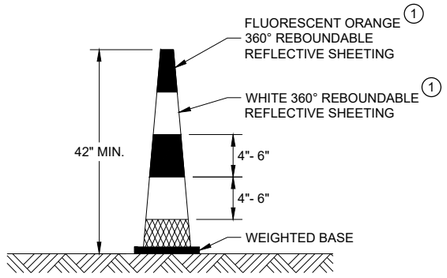
GENERAL NOTES

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



DRUM

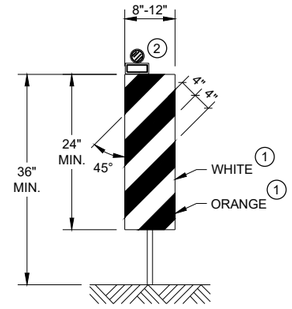
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

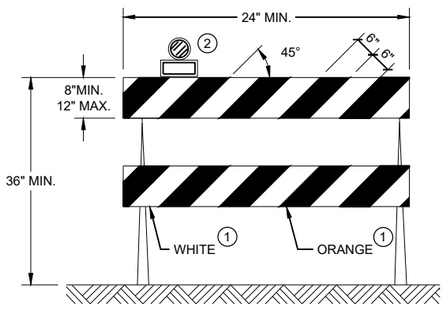
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



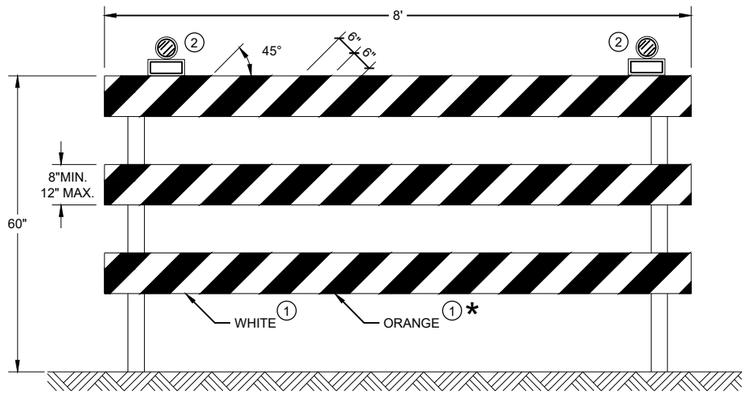
VERTICAL PANEL

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



TYPE II BARRICADE

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



TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

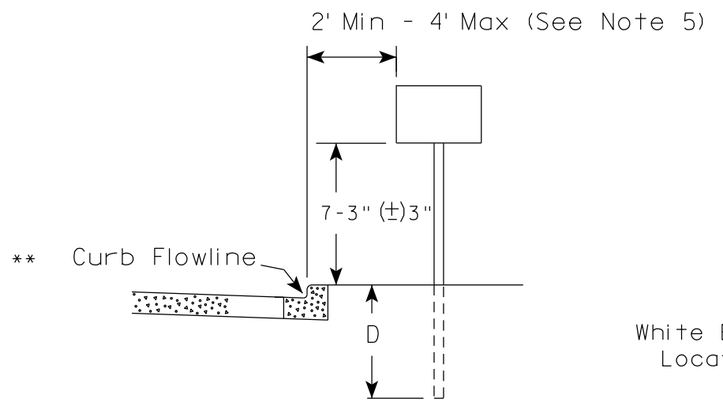
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

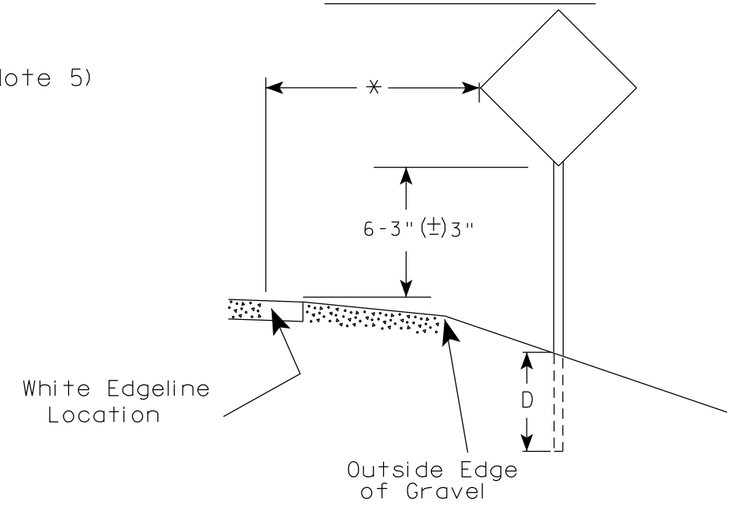
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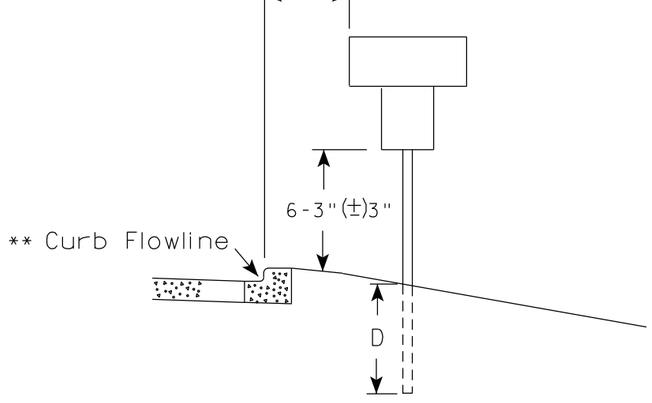
SDD 15C11 - 10b
SDD 15C11 - 10b

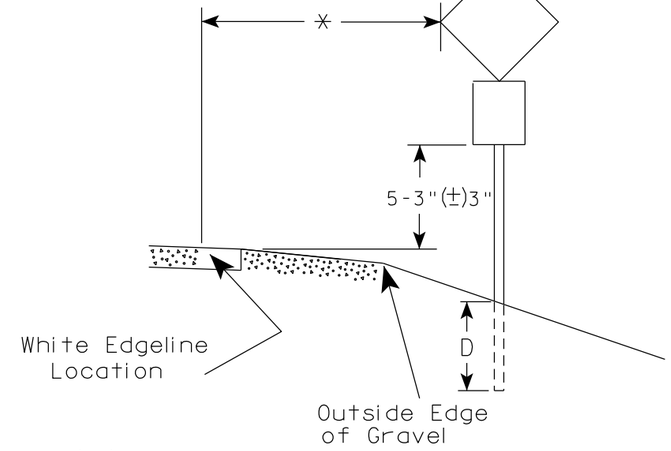
URBAN AREA



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" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±) 3".
3. For expressways and freeways, mounting height is 7'- 3" (±) 3" or 6'-3" (±) 3" depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±) 3".
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directd by the Engineer.

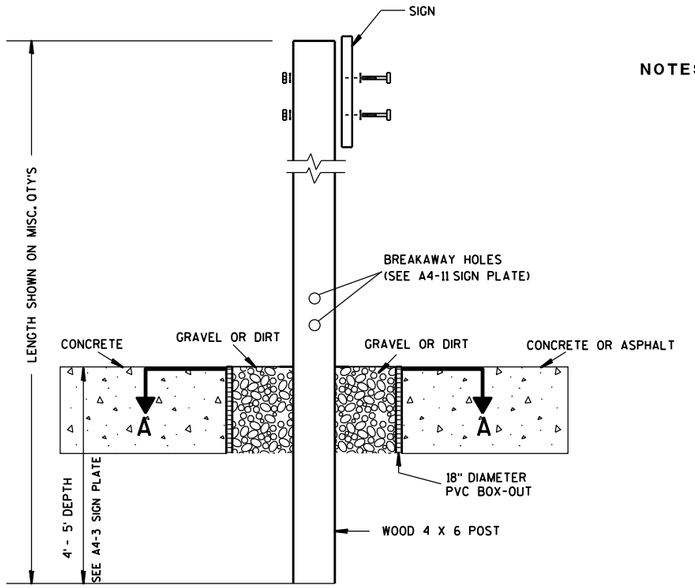
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

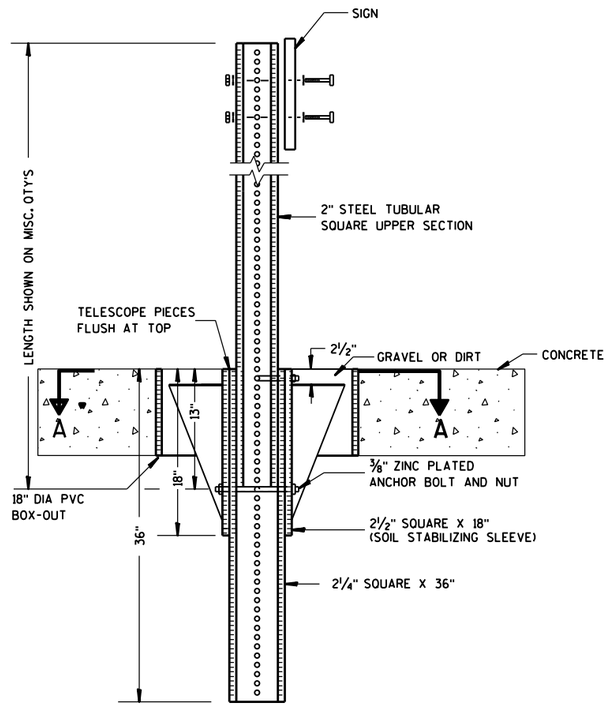
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 68	E



ELEVATION VIEW

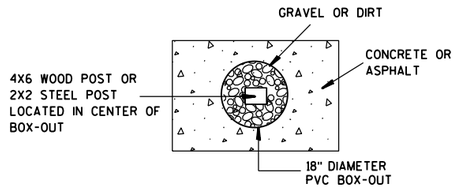
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

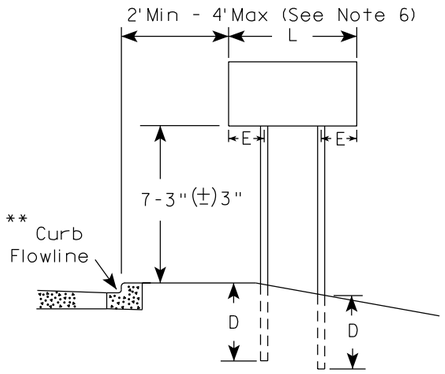
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

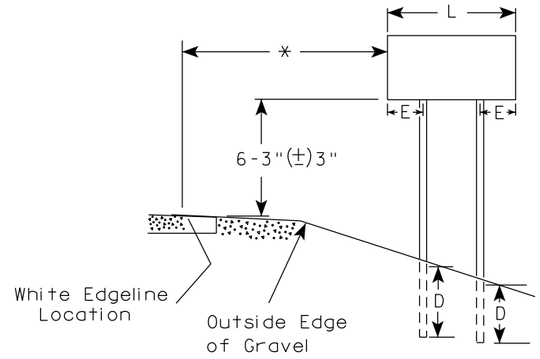
DATE 1/27/14 PLATE NO. A4-3B.1

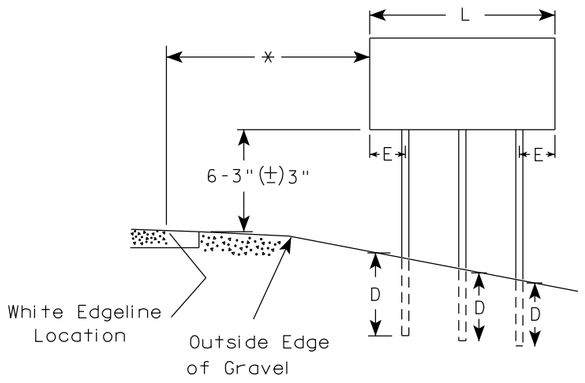
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

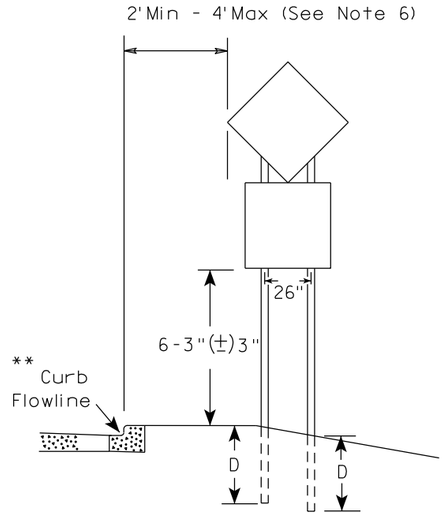
URBAN AREA



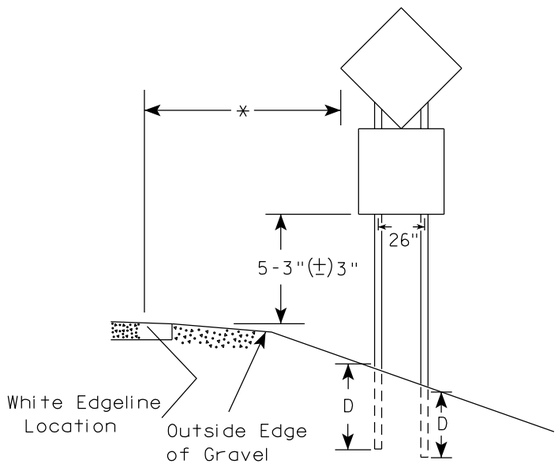
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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

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

GENERAL NOTES

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

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

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

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

POST EMBEDMENT DEPTH

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

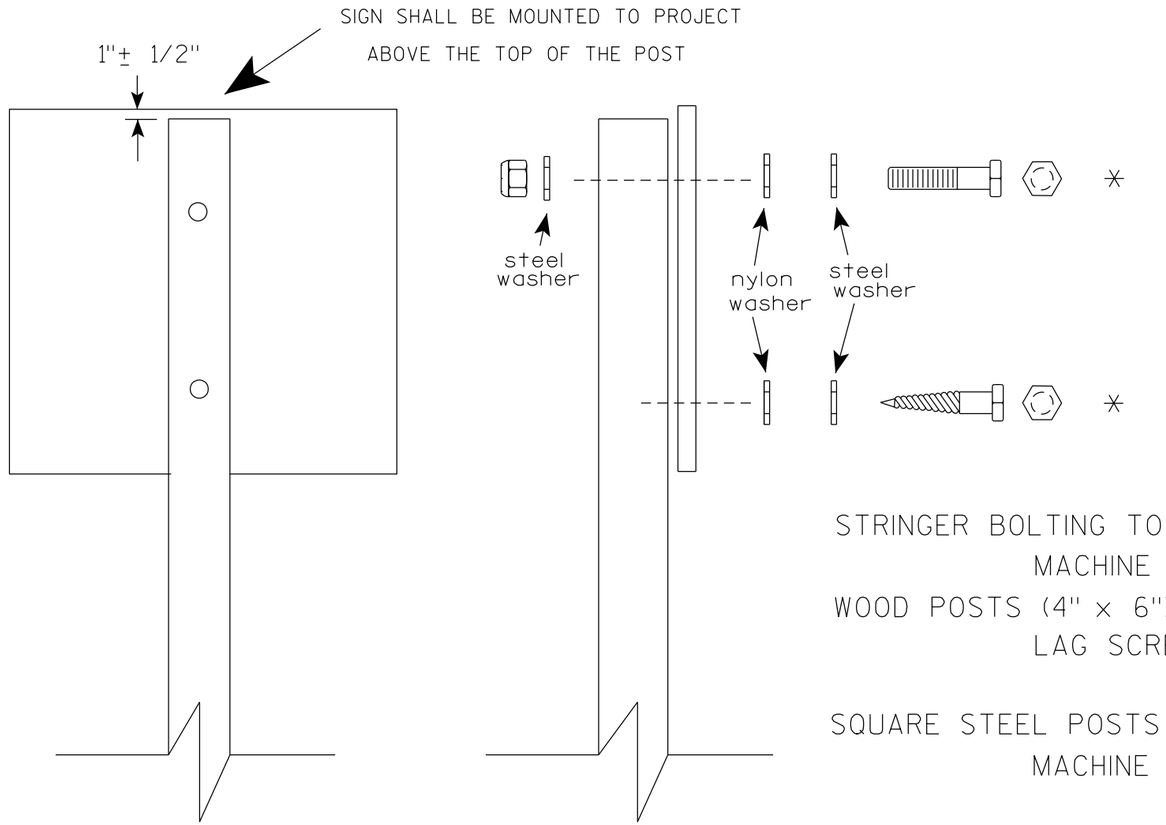
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 70	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

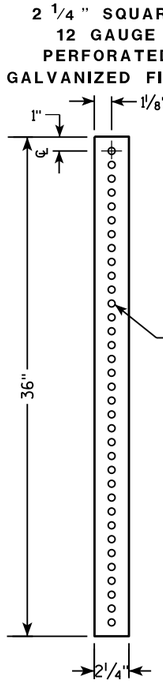
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

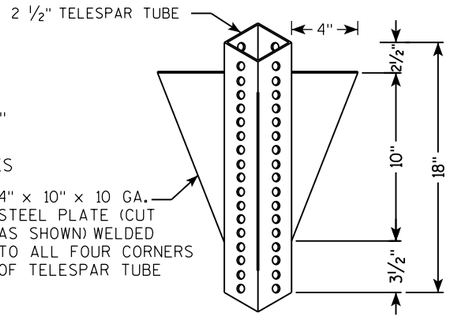
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

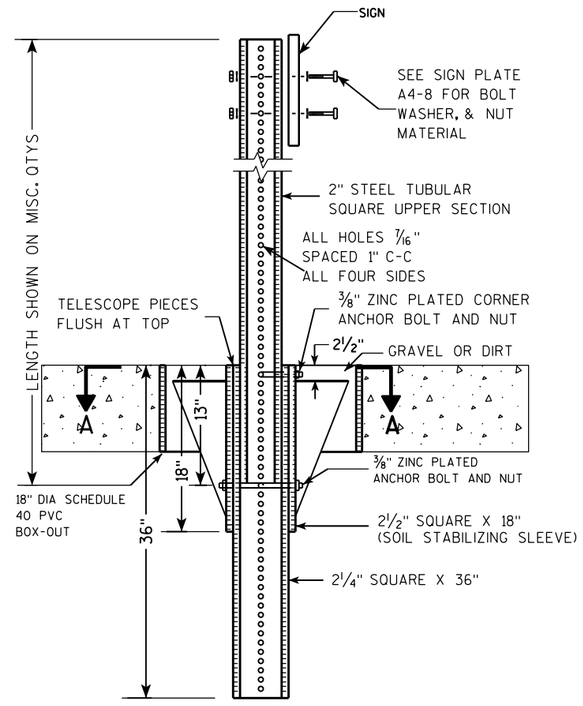
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



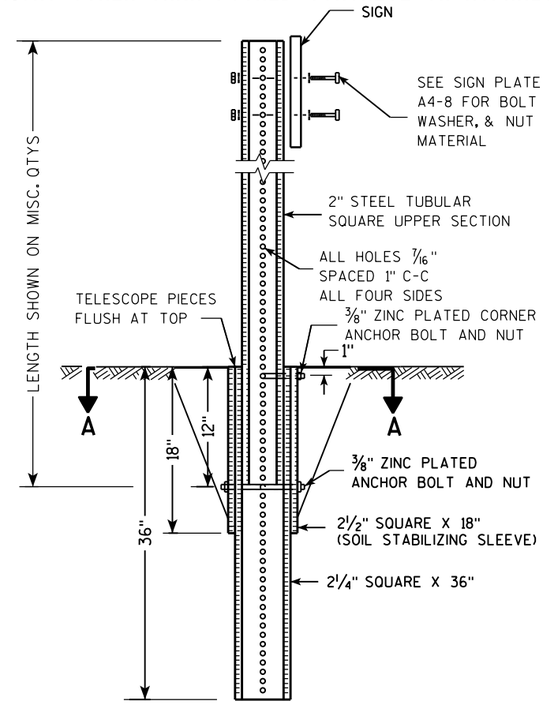
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

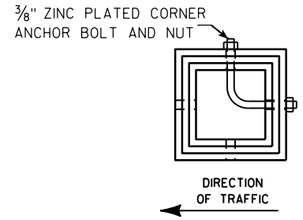


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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

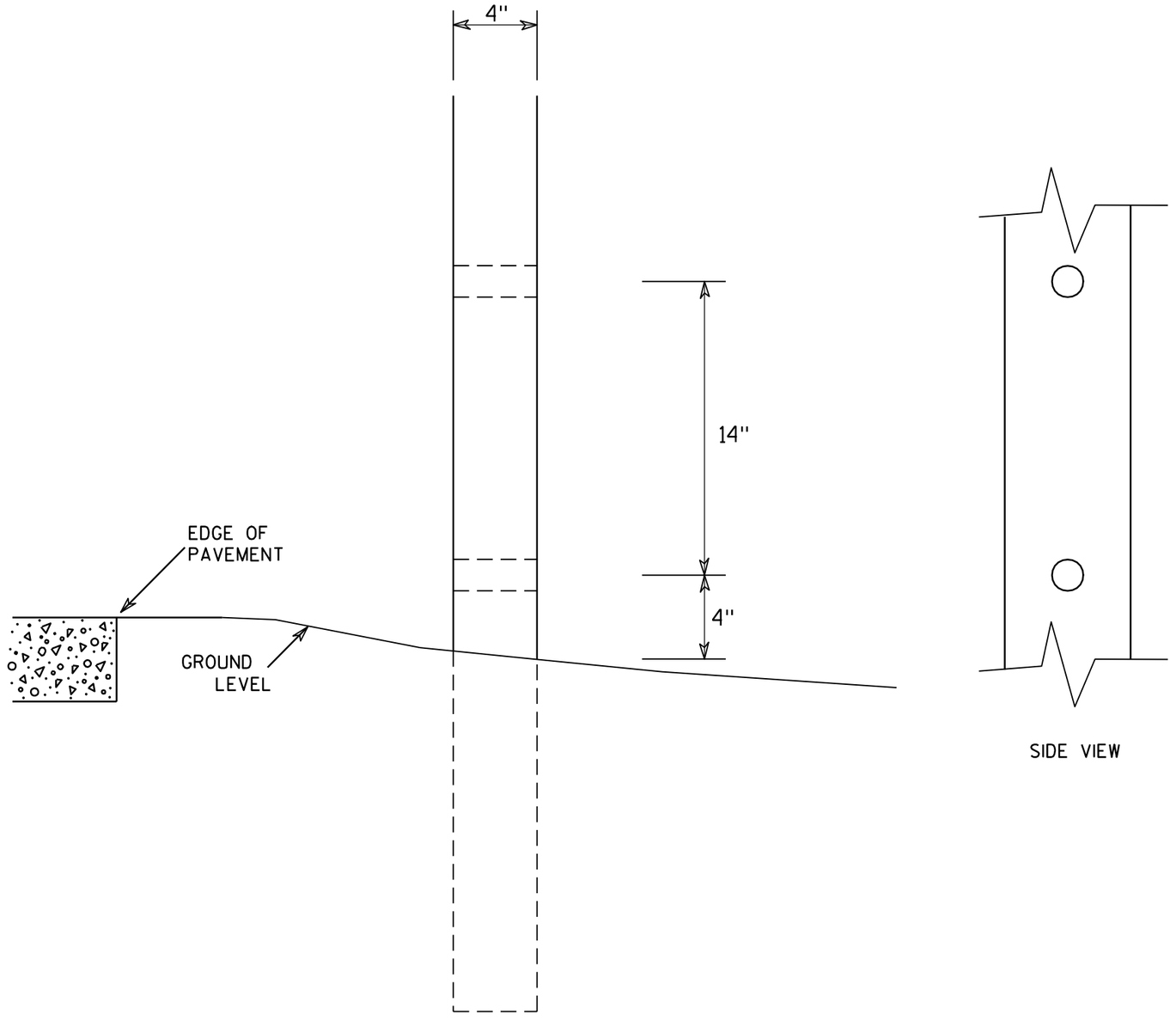
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 72 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

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4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

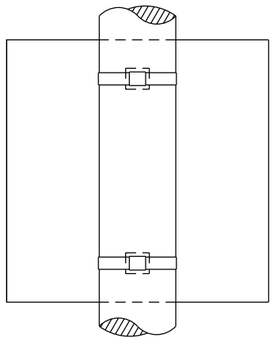
APPROVED Chester J Spang for State Traffic Engineer

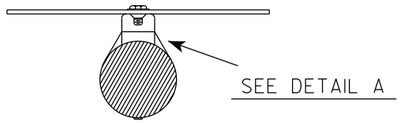
DATE 3/27/97 PLATE NO. A4-11.2

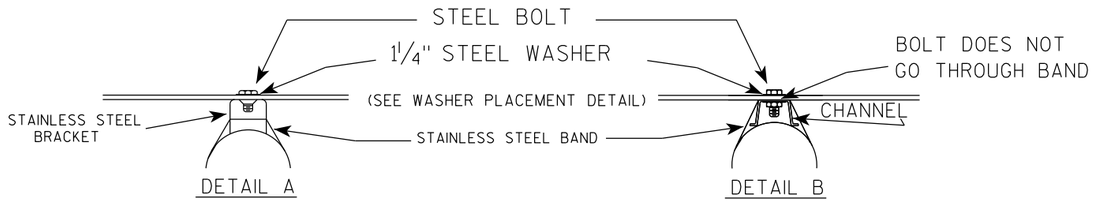
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 73	E

BANDING

SINGLE SIGN



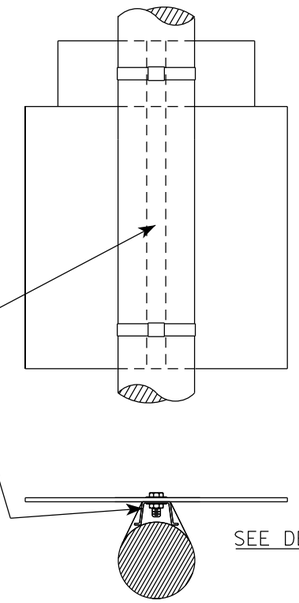




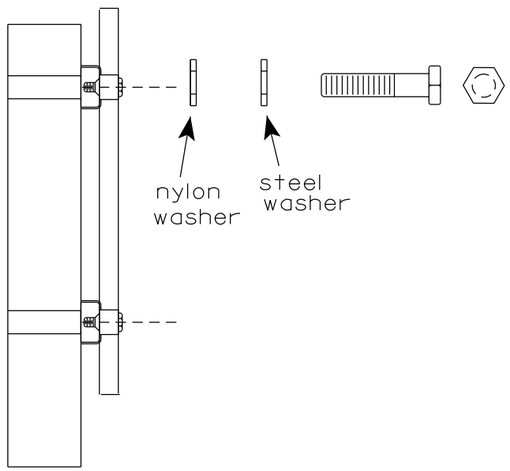
GENERAL NOTES

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



WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X ⅜" I.D. X 1/16" STEEL
1-1/4" O.D. X ⅜" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

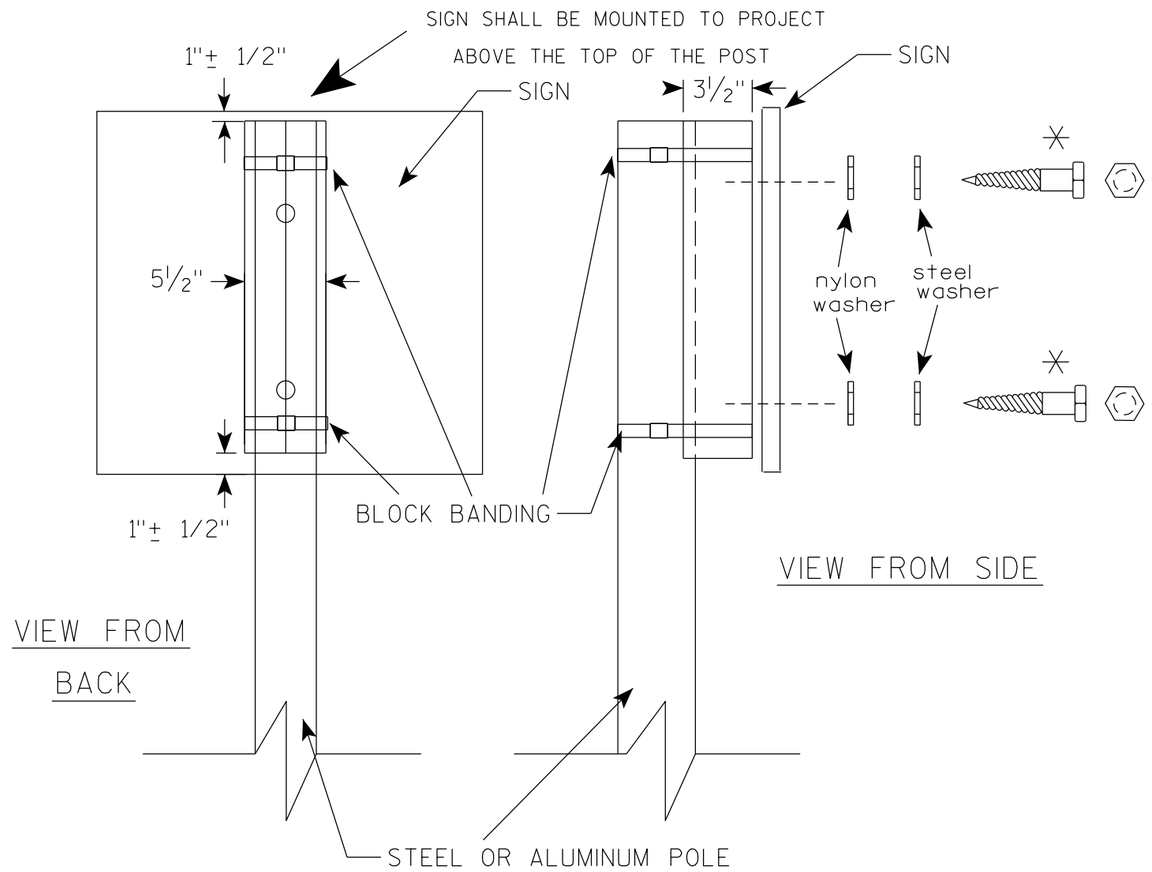
DATE 6/10/19 PLATE NO. A5-9.4

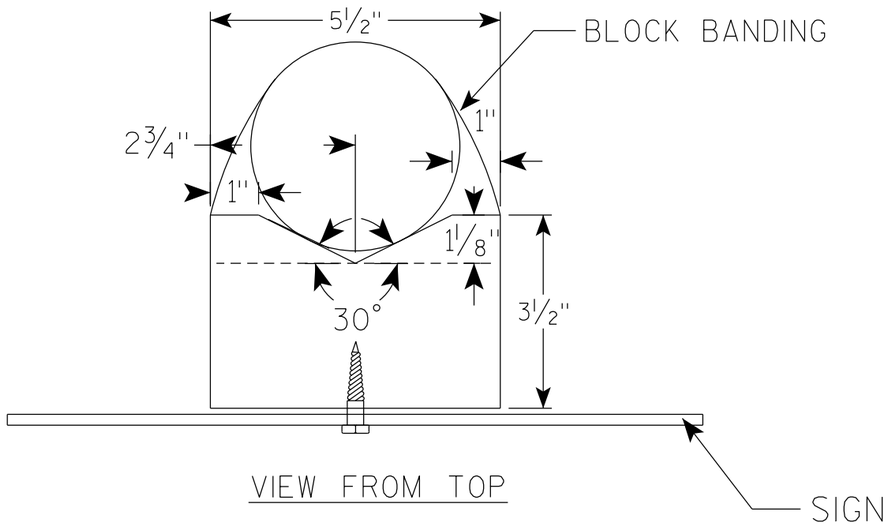
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 74	E

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

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GENERAL NOTES

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

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

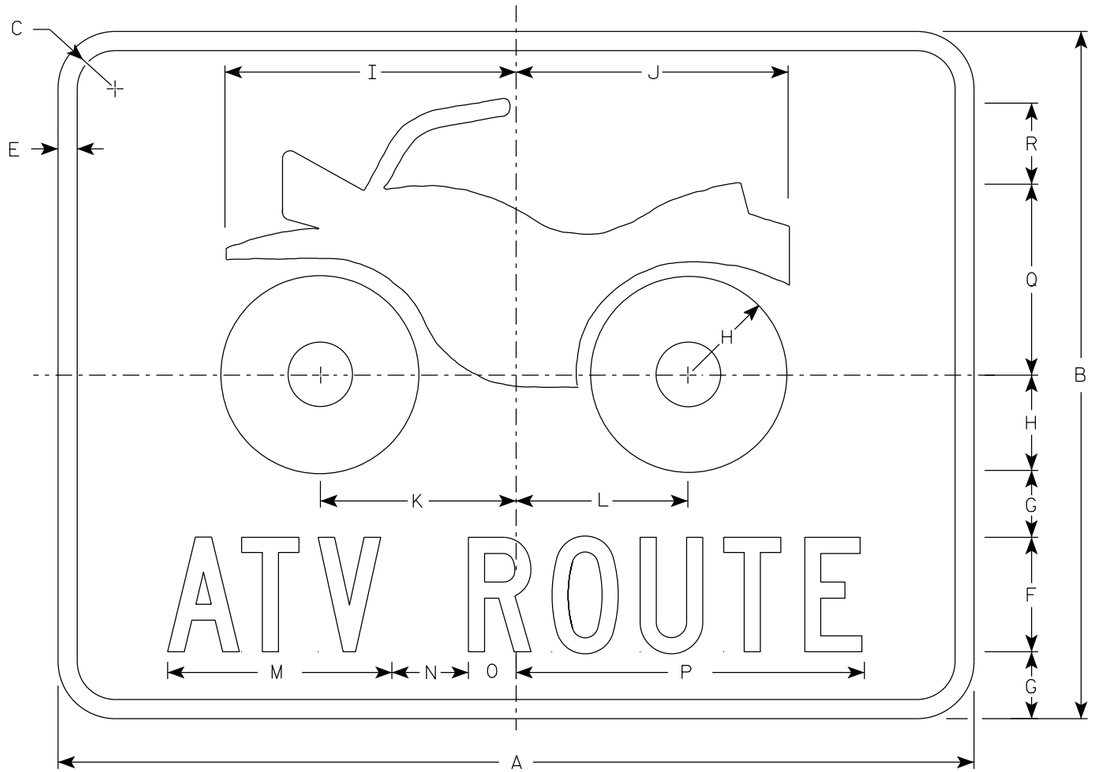
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:

SHEET NO: 75 E



D11-10

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	18	1 ½		½	3	1 ¾	2 ½	7 ⅝	7 ⅛	5 ⅛	5 ½	5 ⅞	2	1 ¼	9 ⅛	5	2 ⅛									3.0
2M	24	18	1 ½		½	3	1 ¾	2 ½	7 ⅝	7 ⅛	5 ⅛	5 ½	5 ⅞	2	1 ¼	9 ⅛	5	2 ⅛									3.0
3																											
4																											
5																											

STANDARD SIGN
D11-10

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

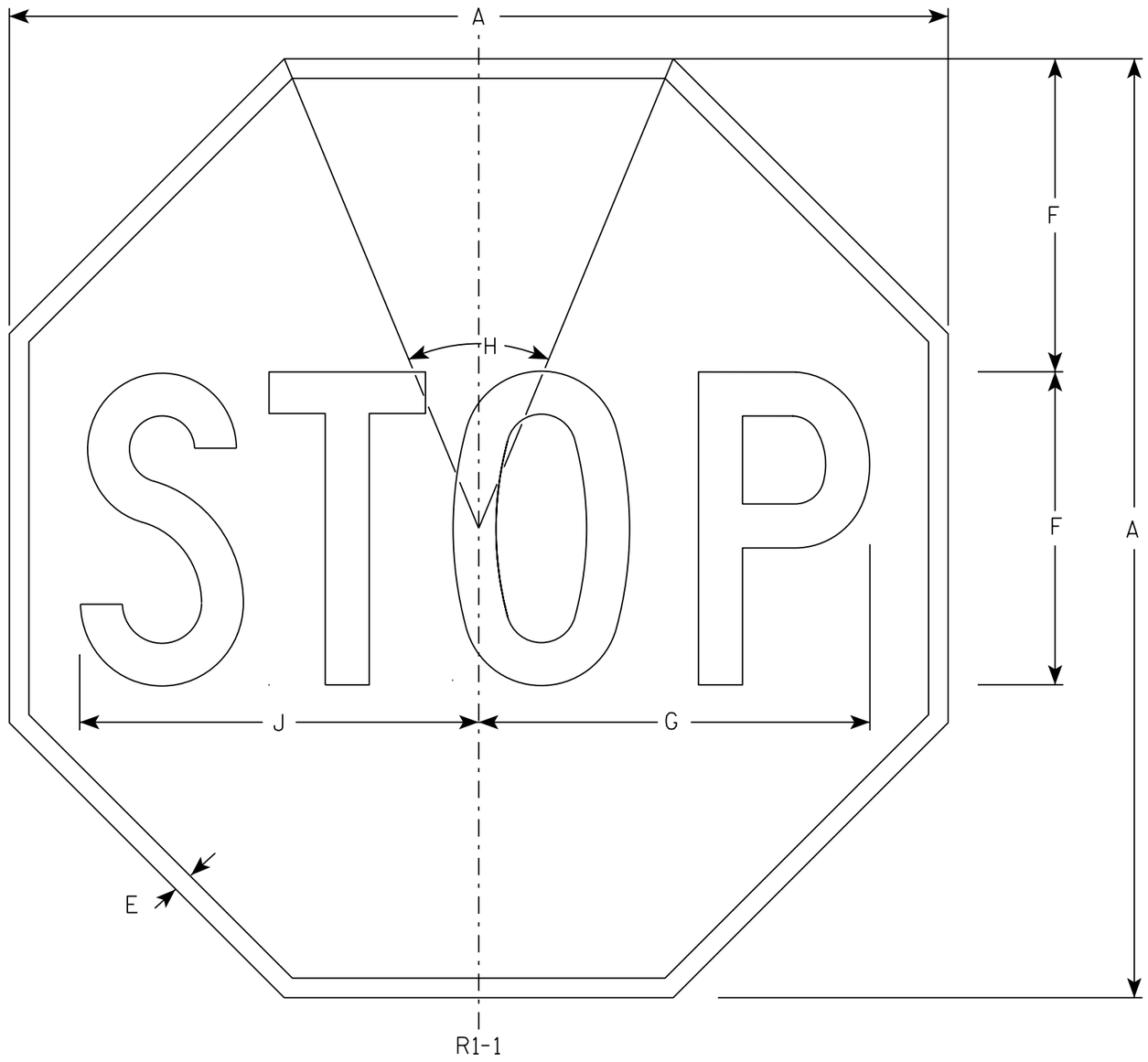
DATE 1/25/2023 PLATE NO. D11-10.6

PROJECT NO:

SHEET NO: 76 E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\D1110.DGN PLOT DATE : 25-JAN 2023 2:36 PLOT BY : dotc4c

WISDOT/CADDS SHEET 42



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

STANDARD SIGN

R1-1

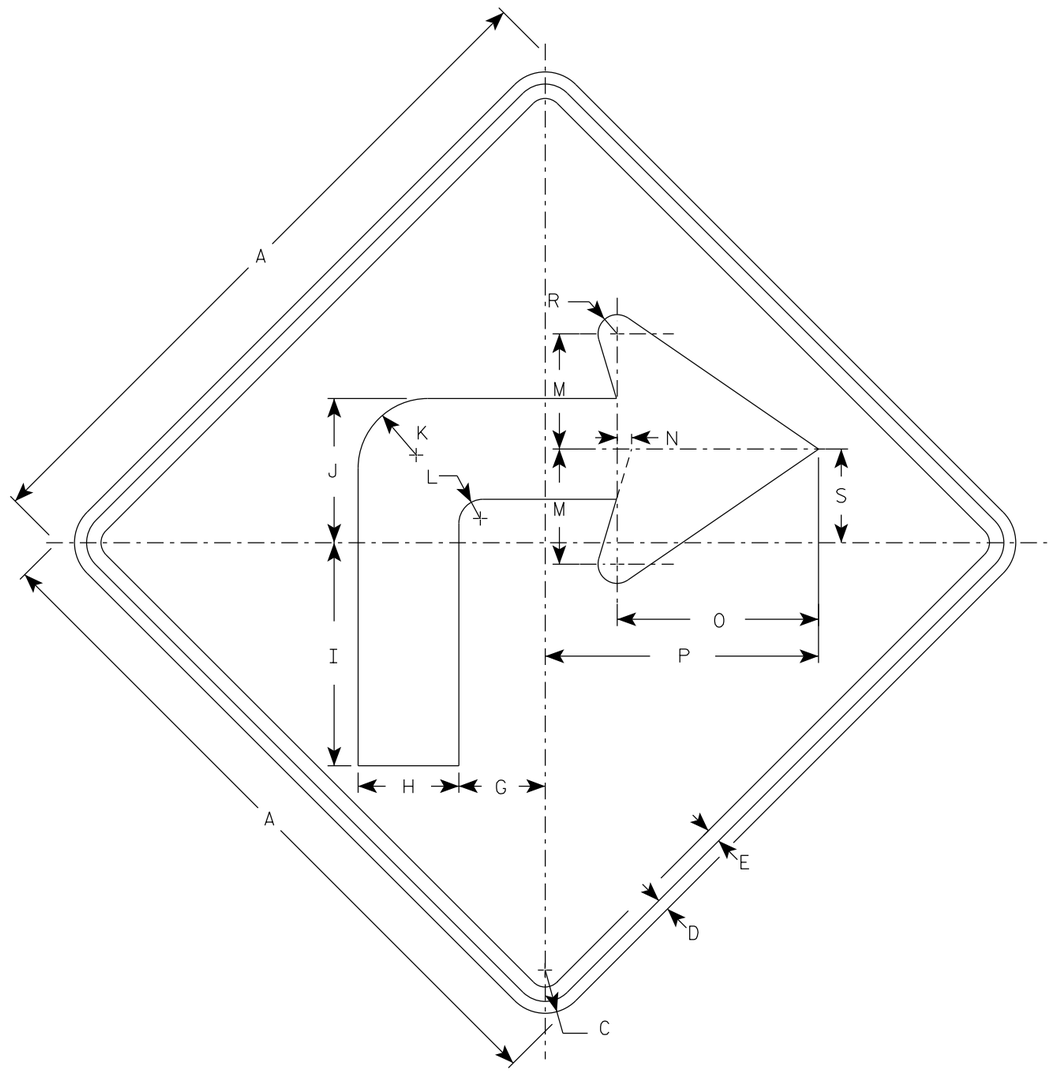
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 77	E



W1-1R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. W1-1L is the same as W1-1R except the arrow is reversed along the vertical centerline.

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	24		1 1/2	3/8	1/2		3	3 1/2	7 3/4	5	2 1/2	7/8	4	1/2	7	9 1/2		5/8	3 1/4								4.0
2S	36		2 1/4	5/8	3/4		4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	1 1/4	6	3/4	10 1/2	14 1/4		1	4 7/8								9.0
2M	36		2 1/4	5/8	3/4		4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	1 1/4	6	3/4	10 1/2	14 1/4		1	4 7/8								9.0
3	36		2 1/4	5/8	3/4		4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	1 1/4	6	3/4	10 1/2	14 1/4		1	4 7/8								9.0
4	48		3	3/4	1		6	7	15 1/2	10	4 7/8	1 5/8	8	1	14	19		1 1/4	6 1/2								16.0
5	48		3	3/4	1		6	7	15 1/2	10	4 7/8	1 5/8	8	1	14	19		1 1/4	6 1/2								16.0

STANDARD SIGN
W1-1

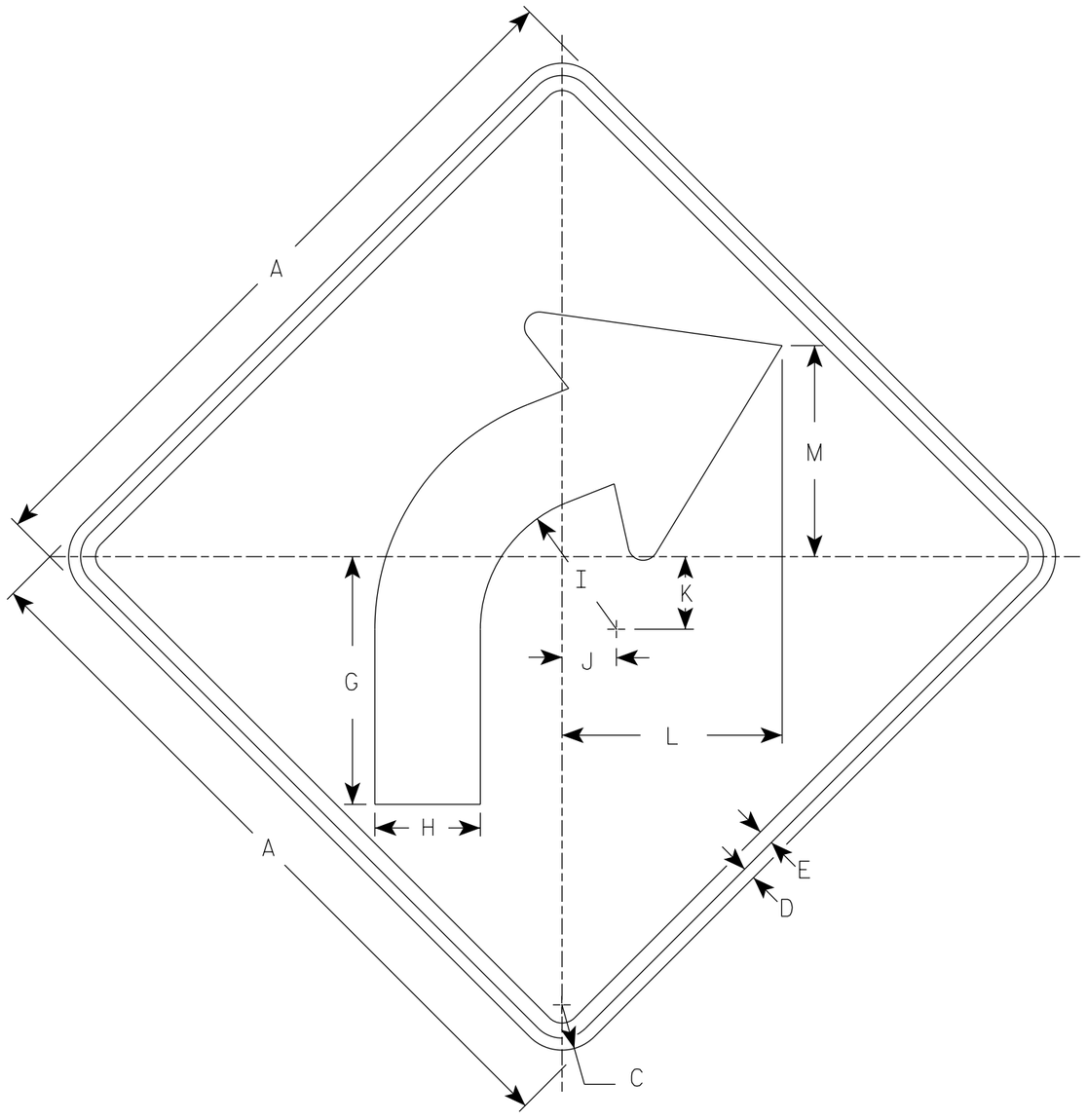
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/22/2023 PLATE NO. W1-1.12

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

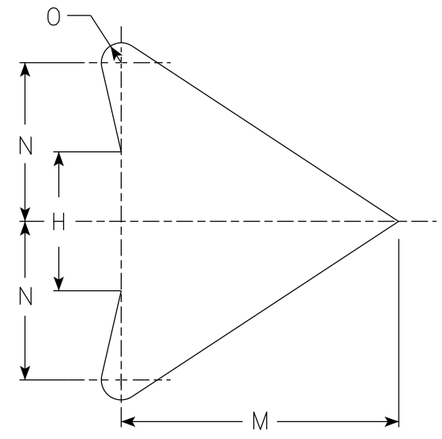
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W11.dgn PLOT DATE : 23-MARCH 2023 6:01 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



W1-2R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. W1-2L is the same as W1-2R except the arrow is reversed along the vertical centerline.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/2	3/8	1/2		8 1/4	3 1/2	4 1/2	1 3/4	2 3/8	7 1/4	7	4	1/2												4.0
2S	30		1 7/8	1/2	5/8		10 1/4	4 3/8	5 5/8	2 1/4	3	9 1/8	8 3/4	5	5/8												6.25
2M	36		2 1/4	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
3	36		2 1/4	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
4	36		2 1/4	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
5	48		3	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0

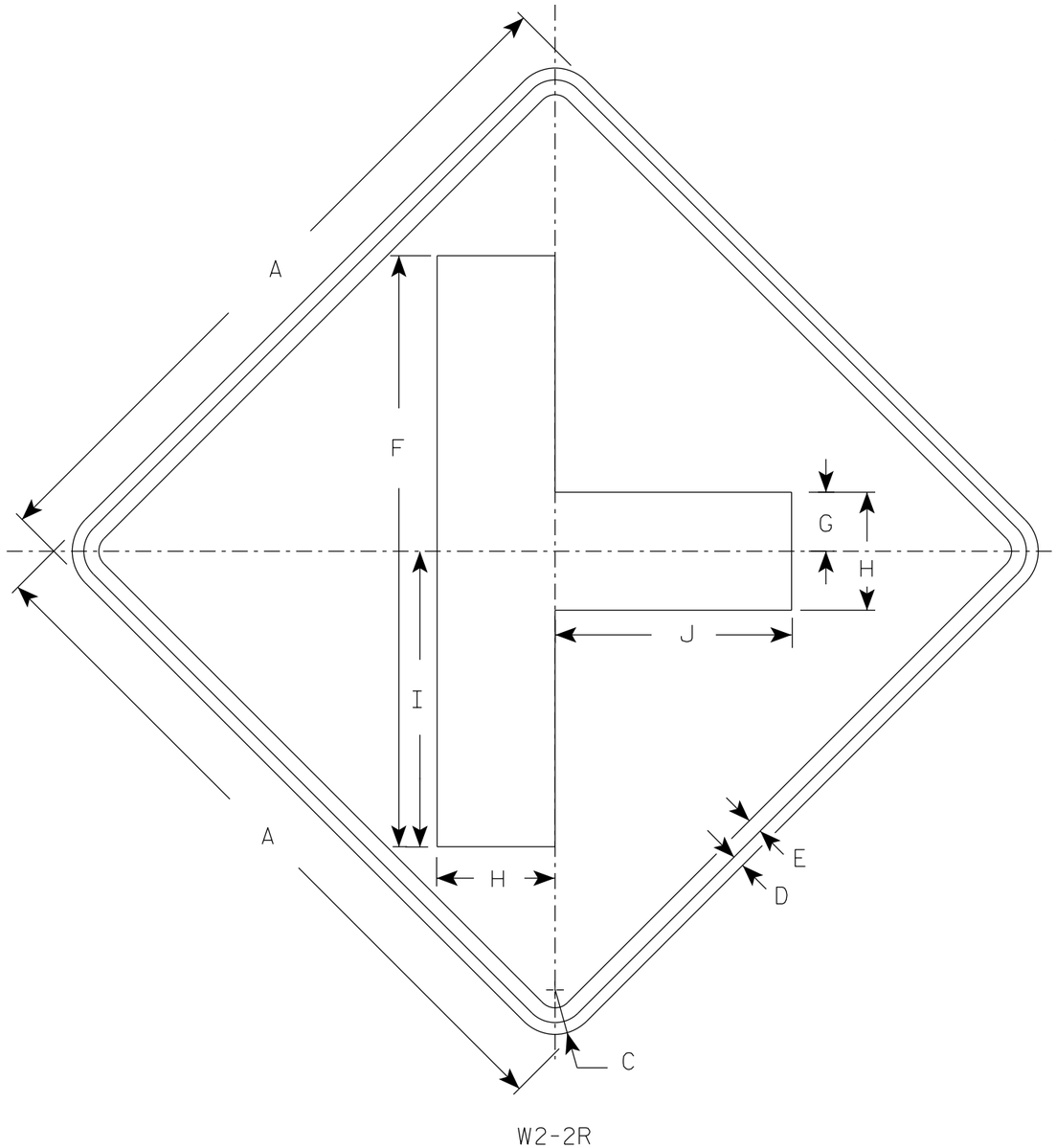
STANDARD SIGN
W1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/23/2023 PLATE NO. W1-2.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 79	E



W2-2R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. W2-2L same as W2-2R but is rotated 180° when mounted.

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	24		1 1/2	3/8	1/2	20	2	4	10	8																	4.0
2S	30		1 7/8	1/2	5/8	25	2 1/2	5	12 1/2	10																	6.25
2M	30		1 7/8	1/2	5/8	25	2 1/2	5	12 1/2	10																	6.25
3	36		2 1/4	5/8	3/4	30	3	6	15	12																	9.0
4	48		3	3/4	1	40	4	8	20	16																	16.0
5																											

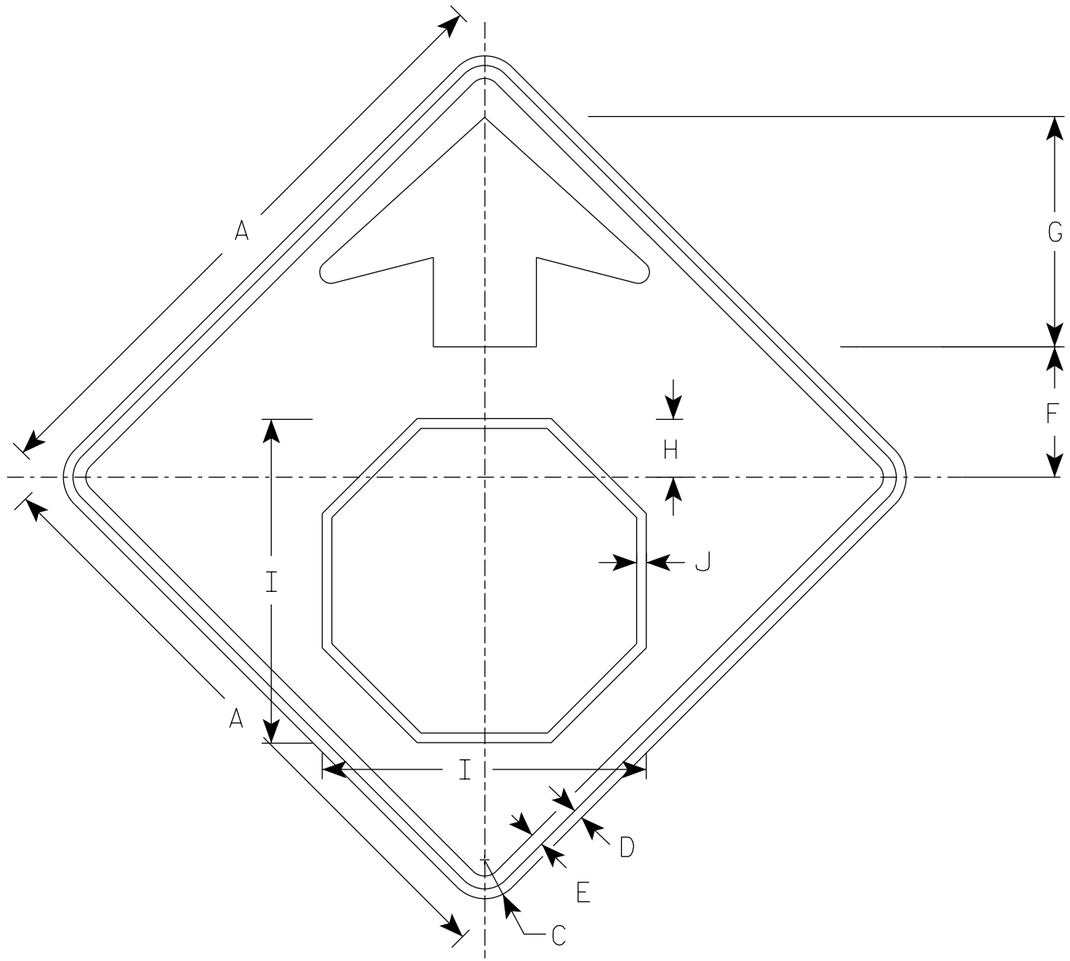
STANDARD SIGN
W2-2 L&R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/16/2023 PLATE NO. W2-2.8

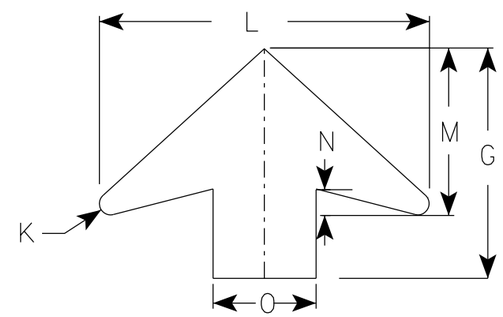
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 80 | E



W3-1

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Arrow & Border - Black
   Stop Symbol - White Border on Red Background



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 7/8	1/2	5/8	6 1/4	11 1/4	2 7/8	15 3/4	1/2	1/2	16	8	1 1/4	5												6.25
2S	36		2 1/4	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
2M	36		2 1/4	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
3	36		2 1/4	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
4	48		3	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
5	48		3	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0

STANDARD SIGN
W3-1

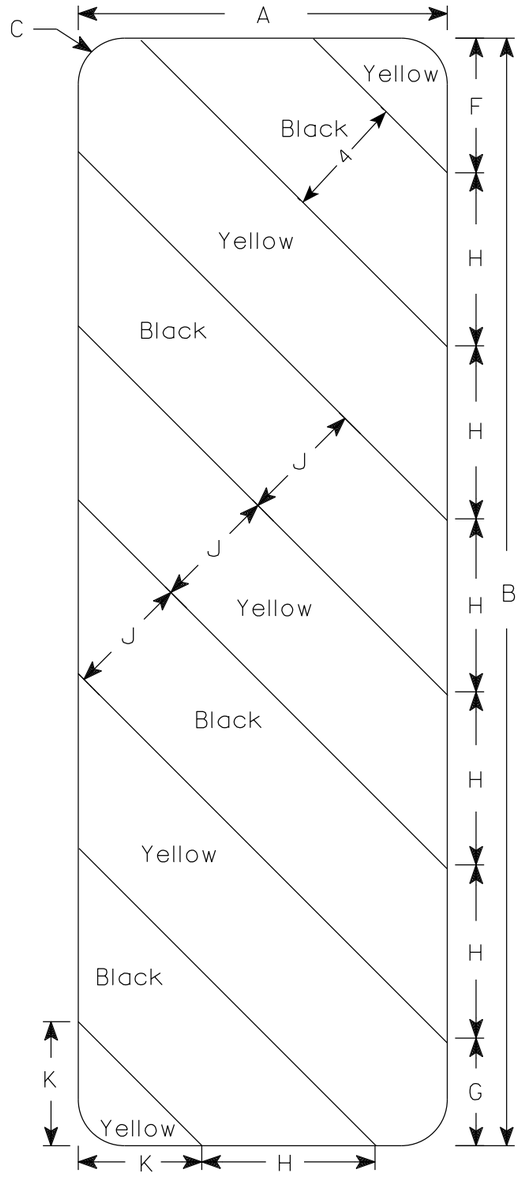
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

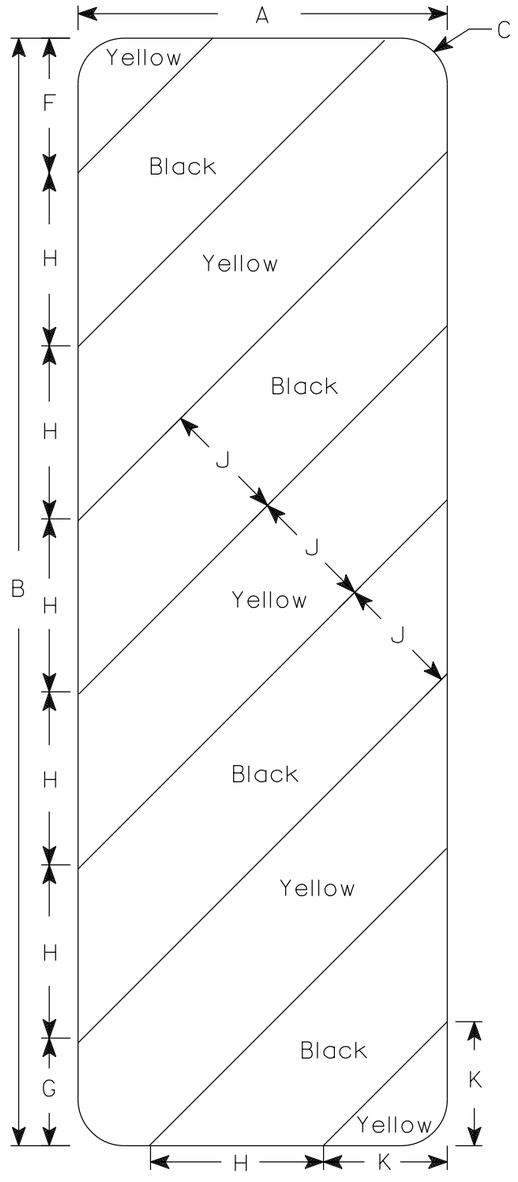
DATE 8/17/2023 PLATE NO. W3-1.13

PROJECT NO:

SHEET NO: 81 E



W5-52L



W5-52R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Alternate colors of stripes as shown.

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	12	36	1 1/2			4 3/8	3 1/2	5 5/8	45°	4	4																3.0
2M	12	36	1 1/2			4 3/8	3 1/2	5 5/8	45°	4	4																3.0
3	18	54	1 1/2			6	5 1/2	8 1/2	45°	6	6 9/16																6.75
4																											
5																											

STANDARD SIGN

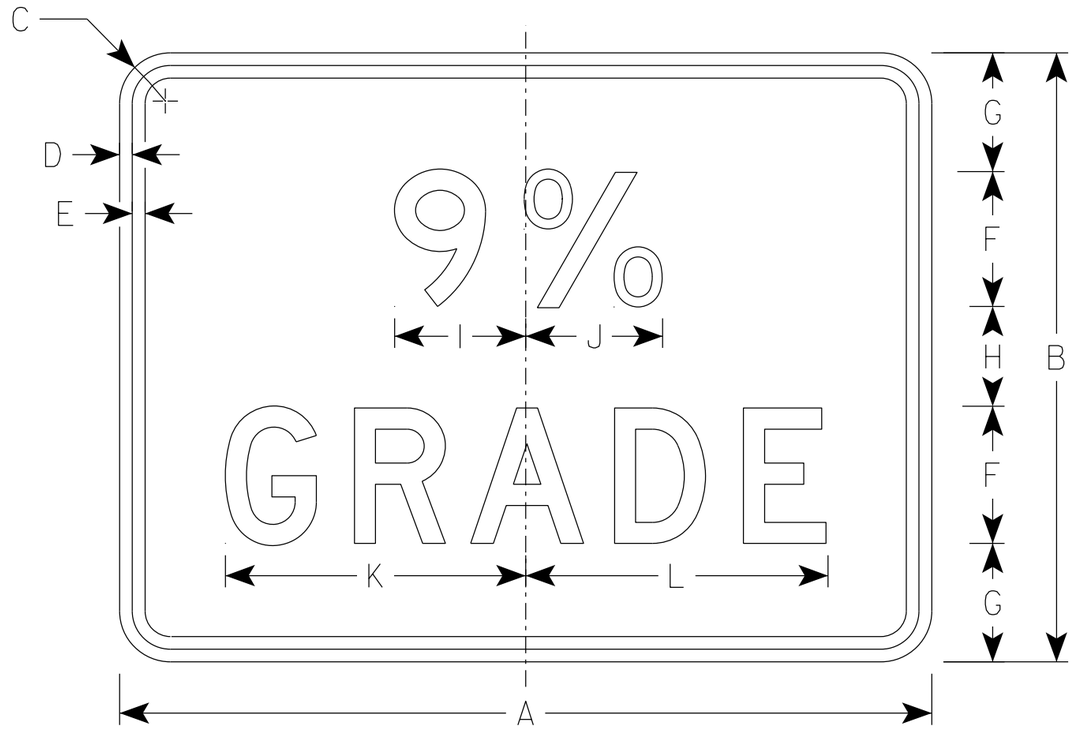
W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/4/2024 PLATE NO. W5-52.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 82 E



W7-3

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - D
4. Substitute appropriate numeral and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	18	1 1/2	3/8	3/8	4	3 1/2	3	3 7/8	4	8 7/8	9															3.0
2M	24	18	1 1/2	3/8	3/8	4	3 1/2	3	3 7/8	4	8 7/8	9															3.0
3																											
4																											
5																											

STANDARD SIGN
W7-3

WISCONSIN DEPT OF TRANSPORTATION

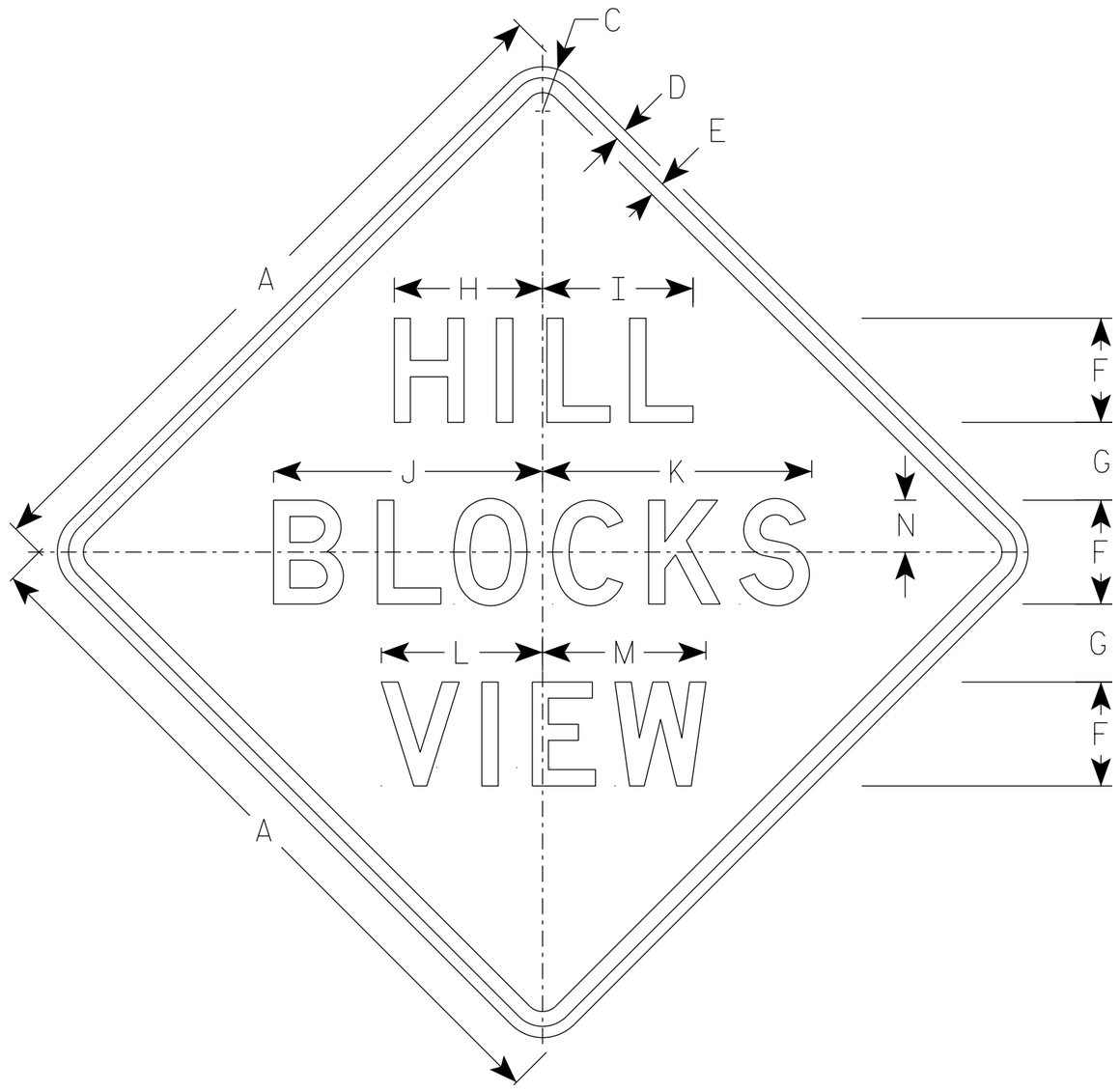
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/19/2023 PLATE NO. W7-3.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 83 | E

7

7



W7-6

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - YELLOW
   Message - BLACK
3. Message Series - D

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	30		1 7/8	1/2	5/8	5	3 3/4	6	8 3/8	12 7/8	13	7 7/8	7 3/4	2 1/2													6.25
2M	36		2 1/4	5/8	3/4	6	4 1/2	7 3/4	10 3/4	16	16 1/8	9 7/8	9 7/8	3													9.0
3	36		2 1/4	5/8	3/4	6	4 1/2	7 3/4	10 3/4	16	16 1/8	9 7/8	9 7/8	3													9.0
4	36		2 1/4	5/8	3/4	6	4 1/2	7 3/4	10 3/4	16	16 1/8	9 7/8	9 7/8	3													9.0
5	48		3	3/4	1	7	5 1/4	10	10 1/8	18 1/8	18 1/8	10 7/8	11	3 1/2													16.0

STANDARD SIGN
W7-6

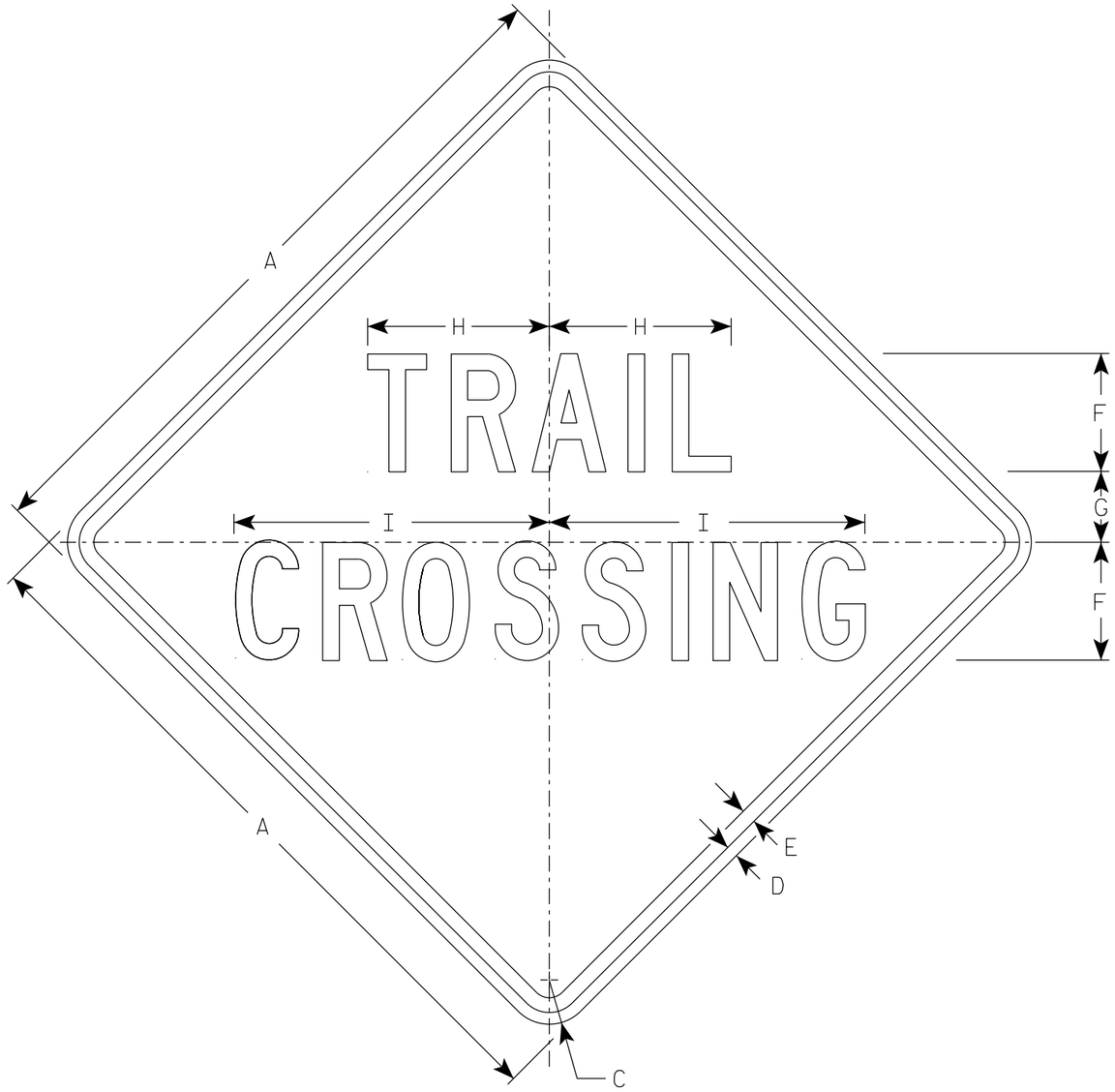
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/24/2023 PLATE NO. W7-6.4

PROJECT NO:

SHEET NO: E



W11-15A

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/2	3/8	1/2	4	2 3/8	6 1/8	10 3/4																		4.0
2S	30		1 7/8	1/2	5/8	5	3	7 3/4	13 3/8																		6.25
2M	36		2 1/4	5/8	3/4	6	3 1/2	9 1/4	16																		9.0
3	36		2 1/4	5/8	3/4	6	3 1/2	9 1/4	16																		9.0
4	48		3	3/4	1	8	5	12 7/8	21 1/4																		16.0
5																											

STANDARD SIGN
W11-15A

WISCONSIN DEPT OF TRANSPORTATION

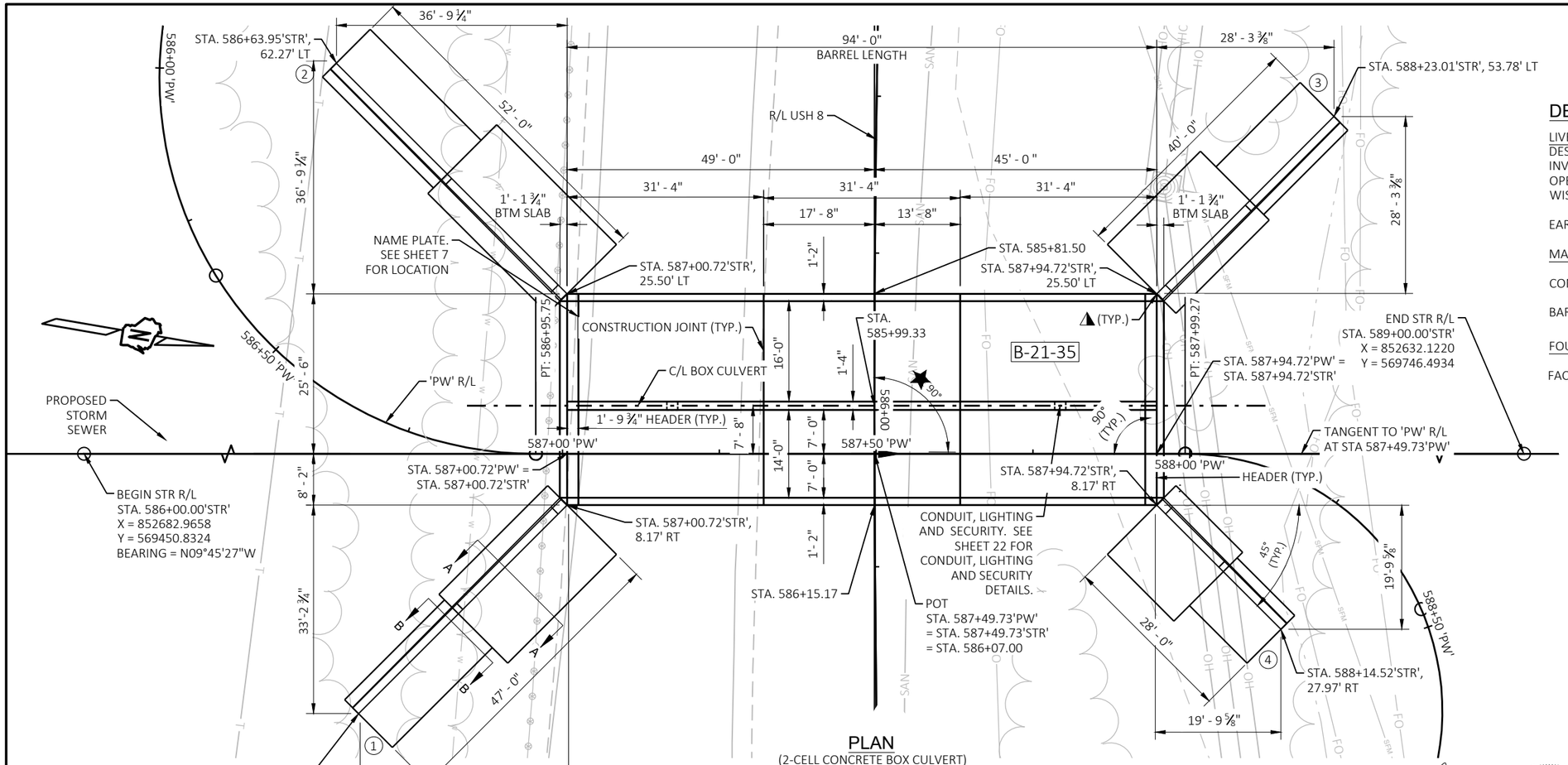
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 11/21/2023 PLATE NO. W11-15A.2

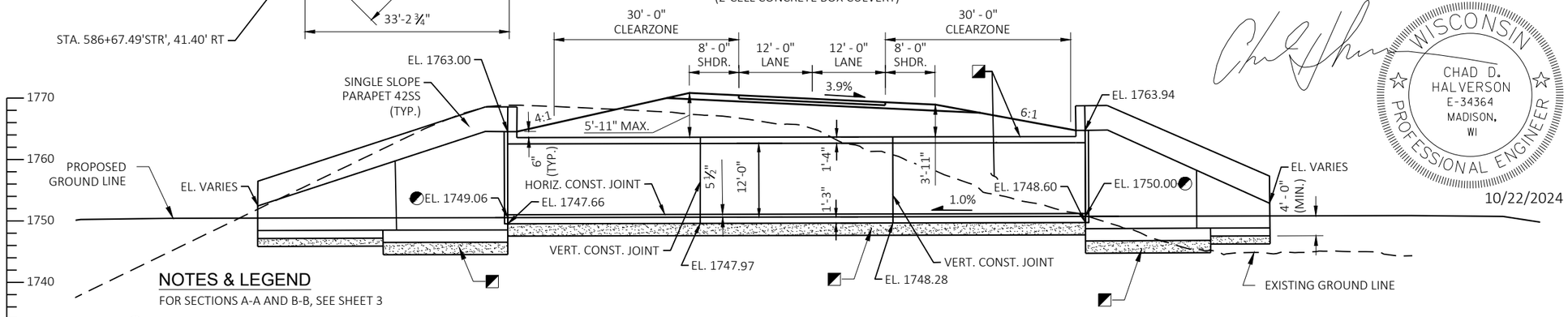
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 85 | E

STATE PROJECT NUMBER

1590-18-82



PLAN
(2-CELL CONCRETE BOX CULVERT)



ELEVATION
(LOOKING WEST)

NOTES & LEGEND

FOR SECTIONS A-A AND B-B, SEE SHEET 3

(1) INDICATES WING NUMBER

FOR CORNER DETAILS, SEE "BOX CULVERT DETAILS - 1" SHEET.

SHEET MEMBRANE WATERPROOFING REQUIRED ON THE WALLS AND ACROSS TOP SLAB FOR ENTIRE CULVERT LENGTH. EXTEND 6" MIN. BELOW THE TOP OF BOTTOM SLAB.

STRUCTURE R/L IS PERPENDICULAR TO TANGENT LINE TO USH 8 R/L AT STATION 586+07.00.

ELEVATION IS GIVEN AT THE STRUCTURE REFERENCE LINE.

UNDERCUT 1'-0". EXCAVATION FOR UNDERCUT TO BE INCLUDED IN EXCAVATION FOR STRUCTURES. BACKFILL WITH "BACKFILL STRUCTURE TYPE A". IN FILL SECTIONS, PROVIDE 1'-0" MINIMUM "BACKFILL STRUCTURE TYPE A".

BENCH MARKS

NO.	NORTHING	EASTING	STATION	OFFSET	ELEVATION	DESCRIPTION
BM 10	569621.9460	853300.0190	592+22.10	143.058 RT	1758.450	CHISLED 'X' IN SIGN BASE - X226 BM 10 IN ROAD PLAN
CP 3	570170.3840	852965.3750	590+74.17	483.842 LT	1775.705	CP 902 - ¾ -INCH REBAR W/ CAP

DESIGN DATA

LIVE LOAD:
DESIGN LOADING: HL-93
INVENTORY RATING FACTOR RF: 1.12
OPERATING RATING FACTOR RF: 1.45
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 250 KIPS

EARTH LOAD: DESIGNED FOR FILL HEIGHT OF 4 TO 6 FEET

MATERIAL PROPERTIES:

CONCRETE MASONRY CULVERT.....f'c = 3500 P.S.I.

BAR STEEL REINFORCEMENT HIGH STRENGTH GRADE 60 fy = 60000 P.S.I.

FOUNDATION DATA:

FACTORED BEARING RESISTANCE.....4,000 PSF

TRAFFIC DATA:

USH 8
A.A.D.T. = 4500 (2021)
A.A.D.T. = 5300 (2041)
RDS = 60 MPH
T = 10.0%

CURVE DATA

PI STA = 591+16.27
Y = 569493.358
X = 853168.624
DELTA = 39°51'11" LT
D = 1°38'13"
T = 1268.81'
L = 2434.48'
R = 3500.00'
PC STA = 578+47.46
PT STA = 603+00.66
SE = 3.9%
RO = 157'

LIST OF DRAWINGS

1. GENERAL PLAN & ELEVATION
2. TYPICAL SECTIONS & NOTES
3. WING WALL SECTIONS
4. WING WALL ELEVATIONS
5. SUBSURFACE EXPLORATION
6. BOX CULVERT DETAILS - 1
7. BOX CULVERT DETAILS - 2
8. BOX CULVERT DETAILS - 3
9. WING WALL 1 DETAILS
10. WING WALL 1 SECTIONS AND REINFORCEMENT
11. WING WALL 2 DETAILS
12. WING WALL 2 SECTIONS AND REINFORCEMENT
13. WING WALL 3 DETAILS
14. WING WALL 3 SECTIONS AND REINFORCEMENT
15. WING WALL 4 DETAILS
16. WING WALL 4 SECTIONS AND REINFORCEMENT
17. WING WALL PARAPET SECTIONS & REINFORCEMENTS
18. BOX CULVERT EXTERIOR WALL AESTHETIC DETAILS
19. WING WALL 1 & 2 AESTHETIC DETAILS
20. WING WALL 3 & 4 AESTHETIC DETAILS
21. AESTHETIC DETAILS
22. LIGHTING AND SECURITY DETAIL

WISCONSIN
CHAD D. HALVERSON
E-34364
MADISON, WI
PROFESSIONAL ENGINEER

10/22/2024

STRUCTURE DESIGN CONTACTS

BUREAU OF STRUCTURES:
AARON BONK (608) 261-0261
CONSULTANT:
CHAD HALVERSON (608) 663-1218

NO.	DATE	REVISION	BY

KL Engineering
[A] Better Experience

STATE OF WISCONSIN DEPARTMENT OF TRANSPORATION

ACCEPTED SDR 11/11/24
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-21-35

USH 8 OVER TRAIL

COUNTY	TOWN
FOREST	LINCOLN

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATION

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
CAH	CDH	JAL	WAH

GENERAL PLAN & ELEVATION

SHEET 1 OF 22
86

SCALE =

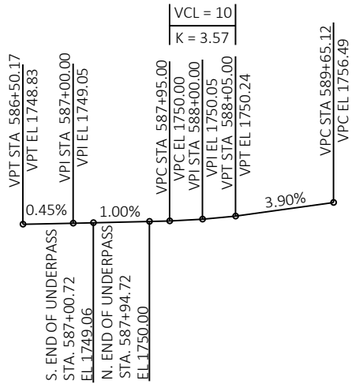
I.D.

DATE:

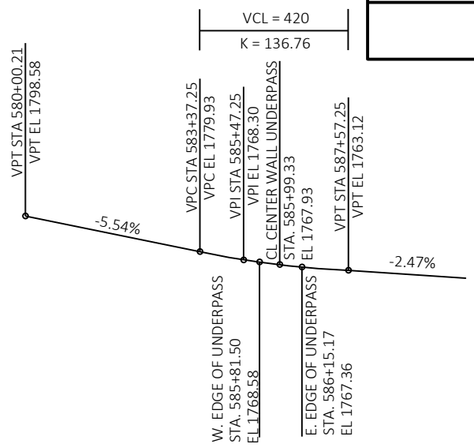
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ITEM NUMBER	ITEM DESCRIPTION	UNIT	BOX	WALL 1	WALL 2	WALL 3	WALL 4	TOTAL
206.2001	EXCAVATION FOR STRUCTURES CULVERTS B-21-35	EACH	---	---	---	---	---	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	3,460	470	510	420	300	5,160
502.3210	PIGMENTED SURFACE SEALER	SY	37	24	26	20	14	121
504.0100	CONCRETE MASONRY CULVERTS	CY	490	101	112	83	58	844
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	65,840	3,720	4,120	3,190	2,260	79,130
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	3,420	3,830	4,240	3,370	2,370	17,230
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	---	12	13	12	10	47
516.0610.S	SHEET MEMBRANE WATERPROOFING FOR BURIED STRUCTURES	SY	646	---	---	---	---	646
517.1010.S	CONCRETE STAINING B-21-35	SF	2,412	165	182	140	98	2,997
517.1015.S	CONCRETE STAINING MULTI-COLOR B-21-35	SF	2,582	378	419	322	225	3,926
517.1050.S	ARCHITECTURAL SURFACE TREATMENT B-21-35	SF	2,460	378	419	322	225	3,804
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	---	57	62	50	38	207
652.0105	CONDUIT RIGID METALLIC 3/4-INCH	LF	25	---	---	---	---	25
652.0110	CONDUIT RIGID METALLIC 1-INCH	LF	23	---	---	---	---	23
652.0205	CONDUIT RIGID NONMETALLIC SCHEDULE 40 3/4-INCH	LF	77	---	---	---	---	77
652.0210	CONDUIT RIGID NONMETALLIC SCHEDULE 40 1-INCH	LF	111	---	---	---	---	111
653.0208	JUNCTION BOXES 8X8X8-INCH	EACH	2	---	---	---	---	2
SPV.0060.101	PRECAST CONCRETE PANEL	EACH	2	---	---	---	---	2
SPV.0060.104	TUNNEL LUMINAIRE	EACH	6	---	---	---	---	6
	NON-BID ITEMS							
	NAME PLATE	EACH						1
	PREFORMED JOINT FILLER	SIZE						1/2" & 3/4"



PROFILE GRADE LINE R/L PATH 'PW'



PROFILE GRADE LINE R/L USH 8

STATE PROJECT NUMBER

1590-18-82

NOTES

DRAWINGS SHALL NOT BE SCALED.

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

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

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES CULVERTS B-21-35" SHALL BE THE EXISTING GROUND LINE.

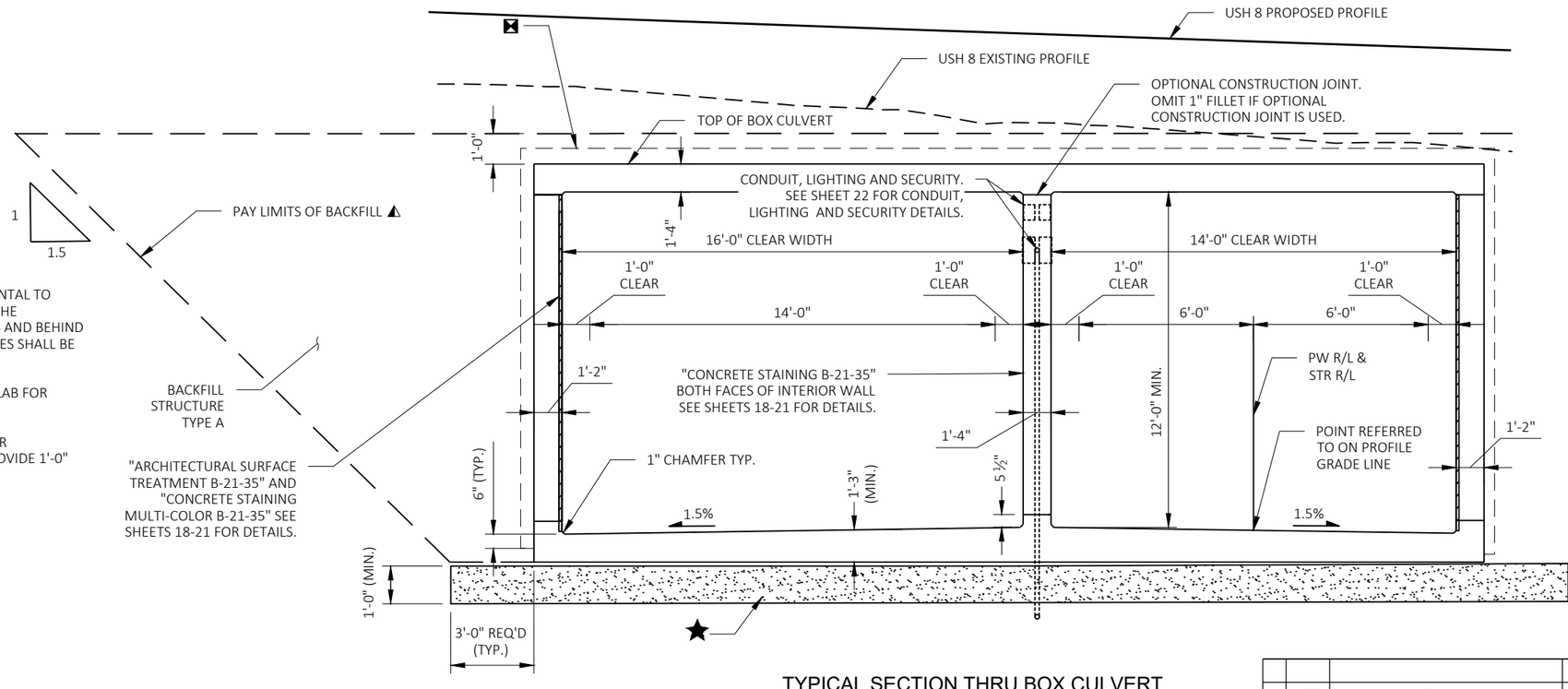
ALL STATIONS AND ELEVATIONS ARE IN FEET. ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.

LEGEND

◭ BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS IS CONSIDERED INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR "BACKFILL STRUCTURE TYPE A" REQUIRED ON THE BOX CULVERT SIDES AND BEHIND WING WALLS. BACKFILL PLACED BEYOND PAY LIMITS OR EXCEEDING PLAN QUANTITIES SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES.

⊠ SHEET MEMBRANE WATERPROOFING REQUIRED ON THE WALLS AND ACROSS TOP SLAB FOR ENTIRE CULVERT LENGTH. EXTEND 6" MIN. BELOW THE TOP OF BOTTOM SLAB.

★ UNDERCUT 1'-0". EXCAVATION FOR UNDERCUT TO BE INCLUDED IN EXCAVATION FOR STRUCTURES. BACKFILL WITH " BACKFILL STRUCTURE TYPE A". IN FILL SECTIONS, PROVIDE 1'-0" MINIMUM "BACKFILL STRUCTURE TYPE A".



TYPICAL SECTION THRU BOX CULVERT

(LOOKING NORTH)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-21-35

DRAWN BY JAL | PLANS CK'D WAH

TYPICAL SECTION & NOTES

SHEET 2 OF 22

87

SCALE =

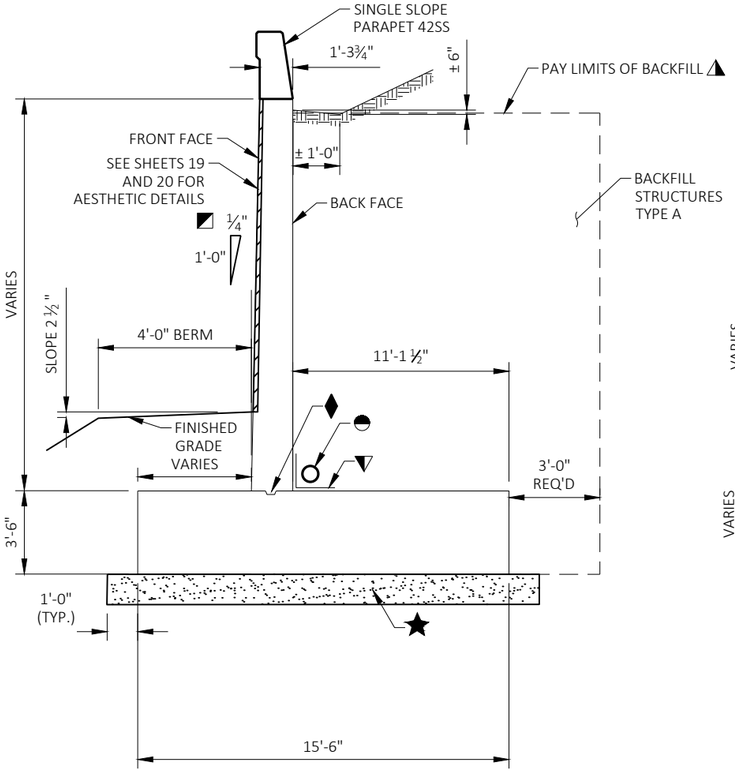
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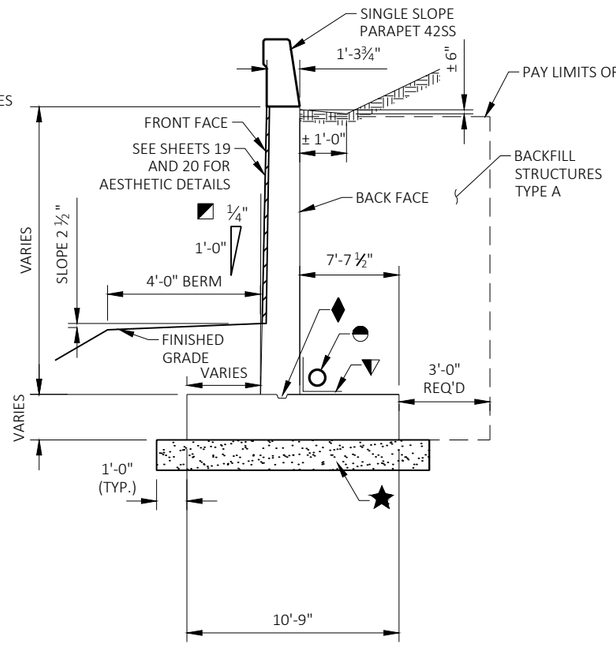
STATE PROJECT NUMBER
1590-18-82

NOTES

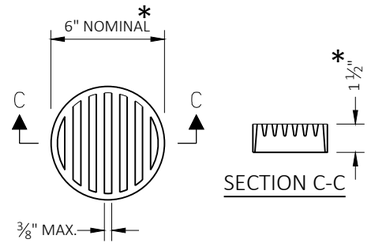
THE BACKFILL QUANTITIES ARE BASED ON THE PAY LIMITS SHOWN ON THE PLANS AND MAY NOT REFLECT ACTUAL PLACED QUANTITIES. "BACKFILL STRUCTURE TYPE A" REQUIRED FOR THE ENTIRE WALL LENGTH. BACKFILL PLACED BEYOND PAY LIMITS OR EXCEEDING PLAN QUANTITIES SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES.



SECTION A-A



SECTION B-B



RODENT SHIELD DETAIL

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL. THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN 6-INCH".
THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

LEGEND

- ◭ BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DTERMINED BY THE CONTRACTOR.
- ◓ PIPE UNDERDRAIN WRAPPED (6-INCH), SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT OUTLET ENDS OF PIPE UNDERDRAIN.
- ♦ KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2"X6" .
- ▽ RUBBERIZED MEMBRANE WATERPROOFING ON BACK FACE.
- ◩ BATTER FRONT FACE OF WALL ¼" PER FOOT.
- ★ UNDERCUT 1'-0". EXCAVATION TO BE INCLUDED IN EXCAVATION FOR STRUCTURES. BACKFILL WITH "BACKFILL STRUCTURE TYPE A." IN FILL SECTIONS, PROVIDE 1'-0" MINIMUM "BACKFILL STRUCTURE TYPE A".

TYPICAL SECTION THRU WING WALL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-21-35

DRAWN BY JAL | PLANS CK'D WAH

WING WALL SECTIONS

SHEET 3 OF 22
88

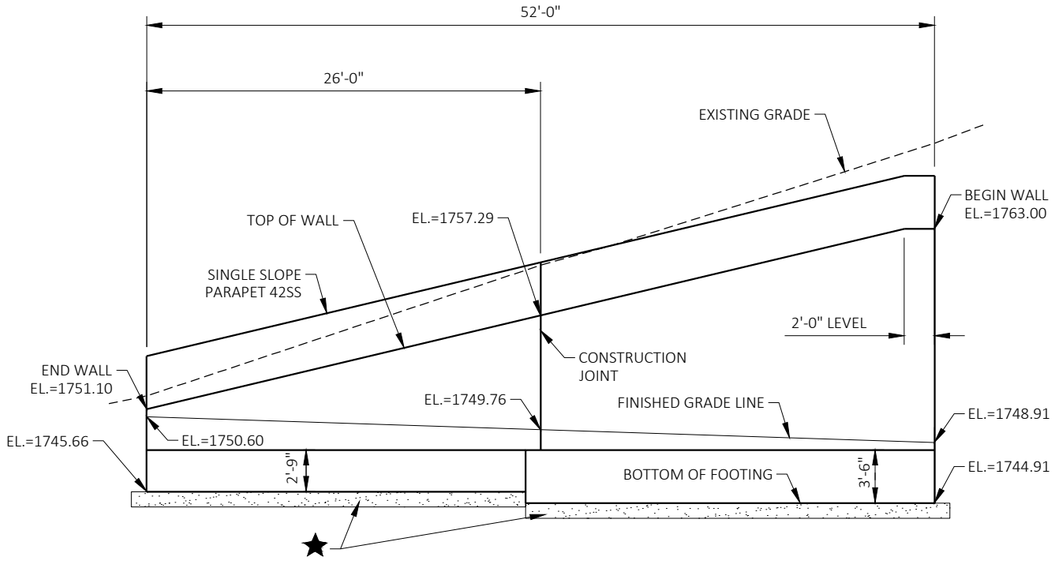
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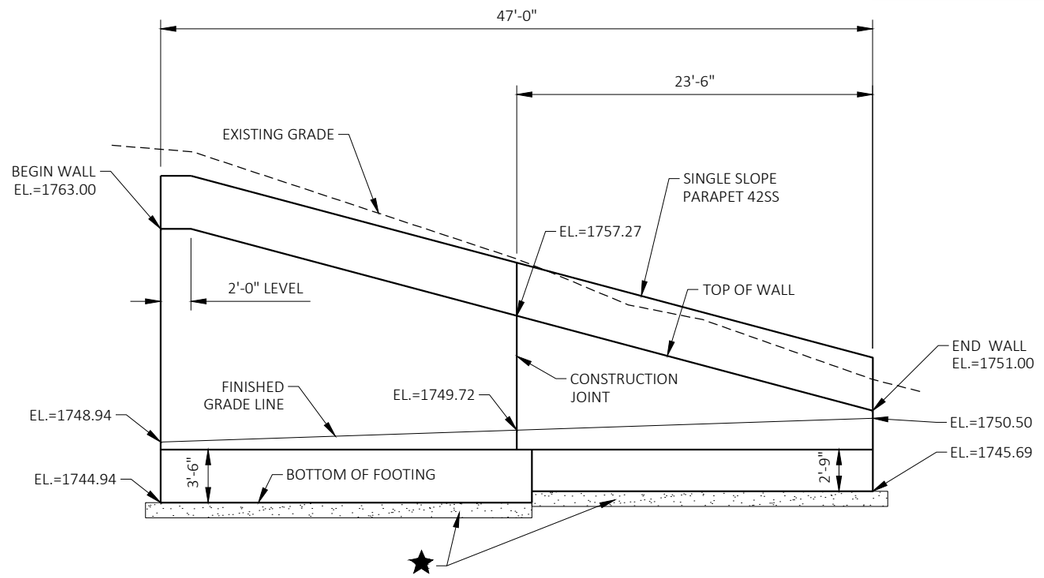
STATE PROJECT NUMBER

1590-18-82



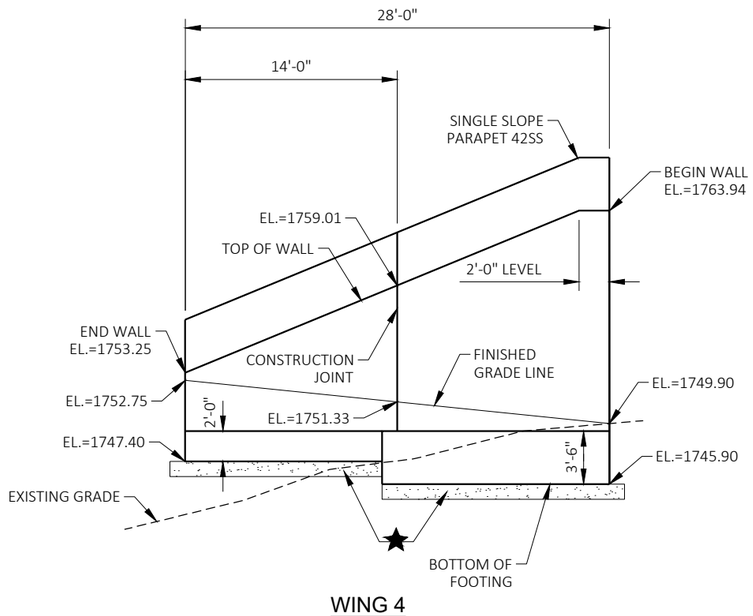
WING 2

(F.F. ELEVATION LOOKING NORTH)



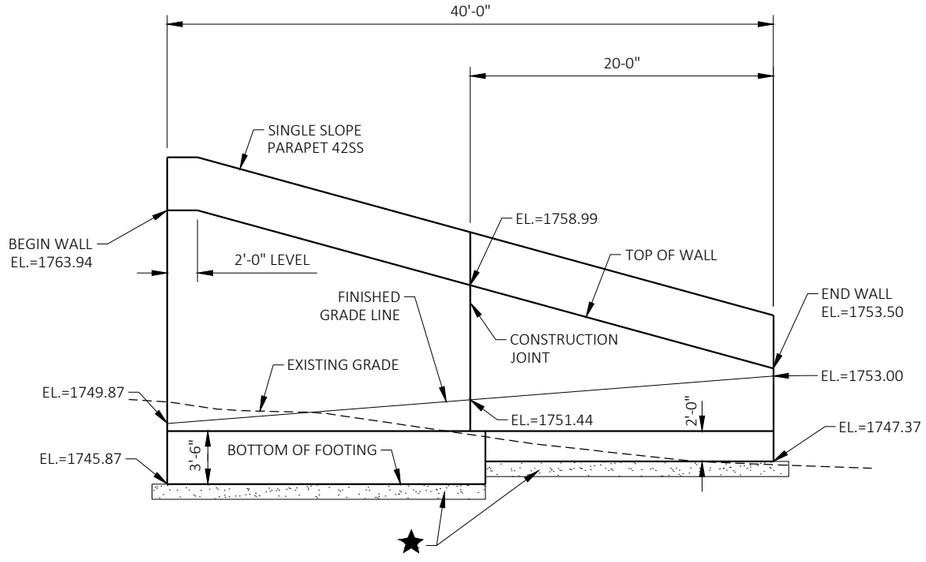
WING 1

(F.F. ELEVATION LOOKING NORTH)



WING 4

(F.F. ELEVATION LOOKING SOUTH)



WING 3

(F.F. ELEVATION LOOKING SOUTH)

LEGEND

★ UNDERCUT 1'-0". EXCAVATION FOR UNDERCUT TO BE INCLUDED IN EXCAVATION FOR STRUCTURES. BACKFILL WITH " BACKFILL STRUCTURE TYPE A". IN FILL SECTIONS, PROVIDE 1'-0" MINIMUM "BACKFILL STRUCTURE TYPE A".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-21-35

DRAWN BY JAL | PLANS CK'D WAH

WING WALL ELEVATIONS

SHEET 4 OF 22

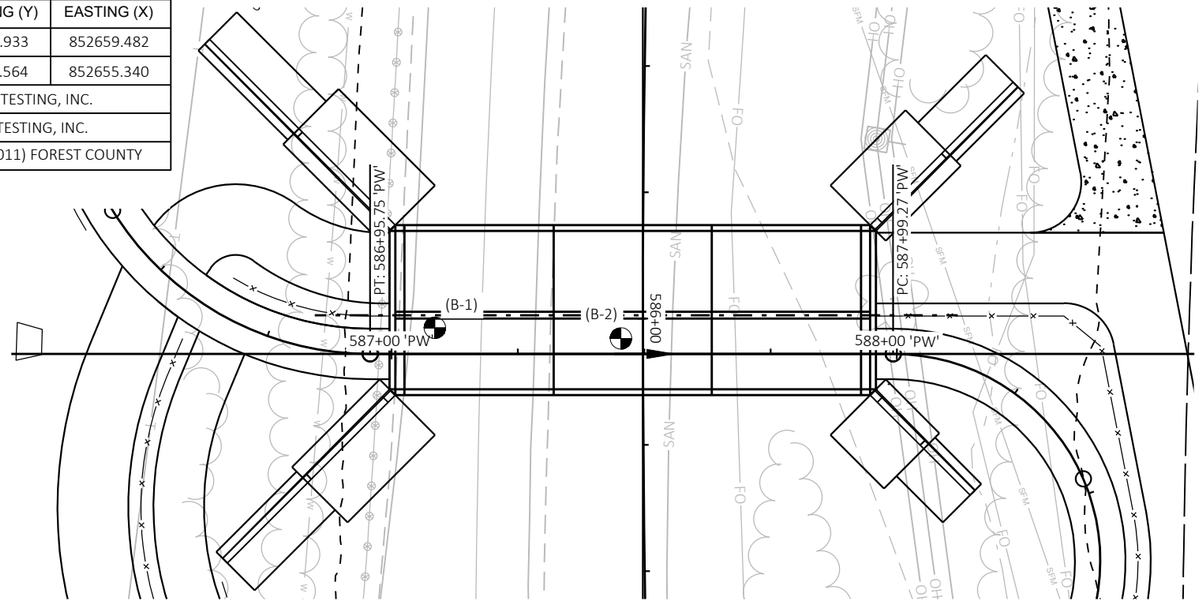
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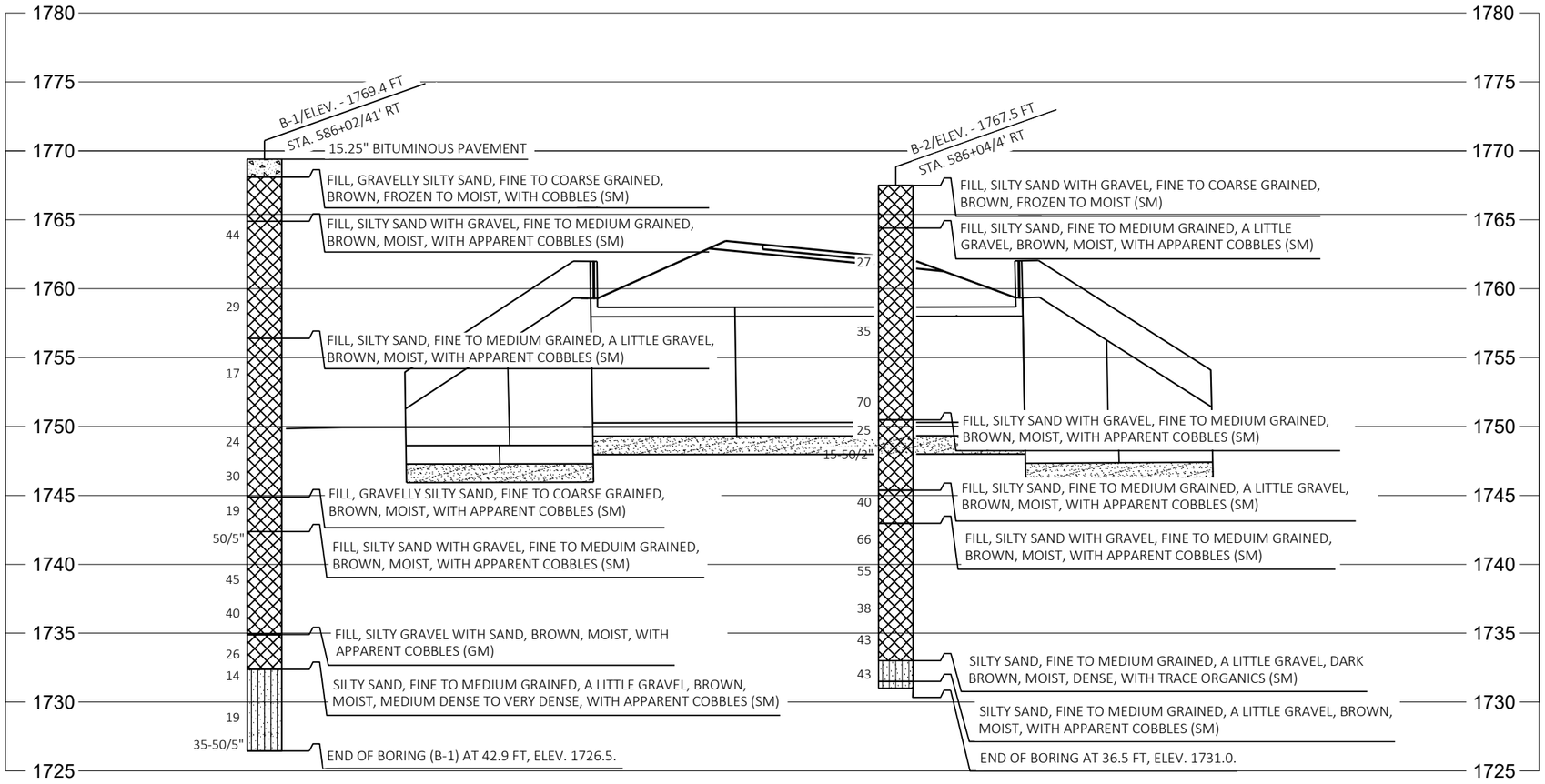
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BORING INFORMATION			
BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
B-1	MARCH 30, 2023	569556.933	852659.482
B-2	MARCH 30, 2023	569593.564	852655.340
BORINGS COMPLETED BY: AMERICAN ENGINEERING TESTING, INC.			
REPORT COMPLETED BY: AMERICAN ENGINEERING TESTING, INC.			
ALL COORDINATES REFERENCED TO WISCRS NAD 83(2011) FOREST COUNTY			





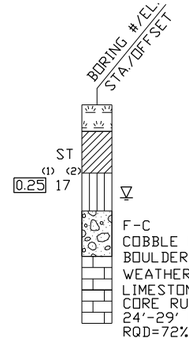
STATE PROJECT NUMBER

1590-18-82

MATERIAL SYMBOLS

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

LEGEND OF BORING



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

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

GROUND WATER ELEVATION

▽ AT TIME OF DRILLING

▼ END OF DRILLING

▼ AFTER DRILLING

ABBREVIATIONS

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

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

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

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-21-35

DRAWN BY JAL | PLANS CK'D WAH

SUBSURFACE EXPLORATION

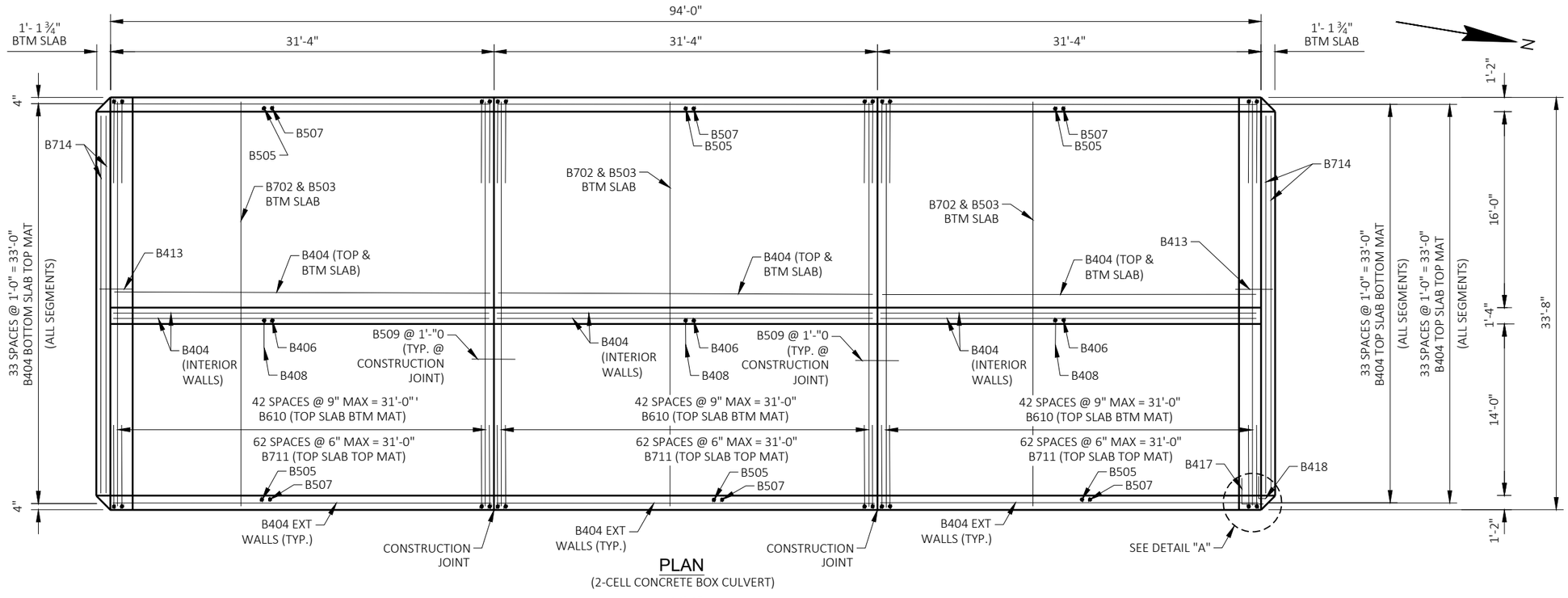
SHEET 5 OF 22

90

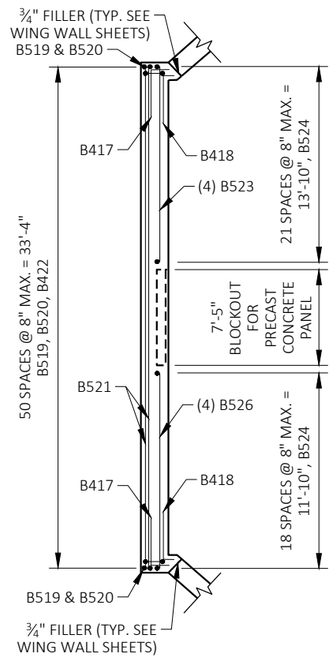
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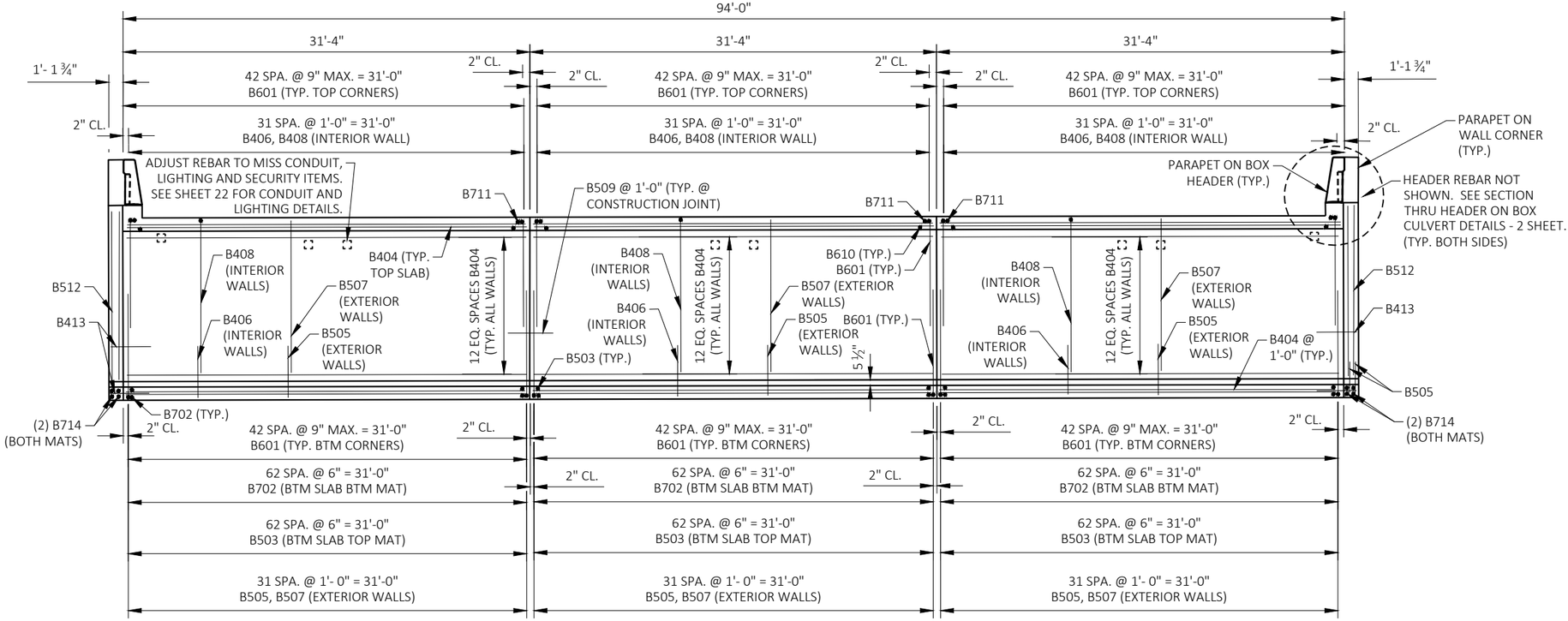
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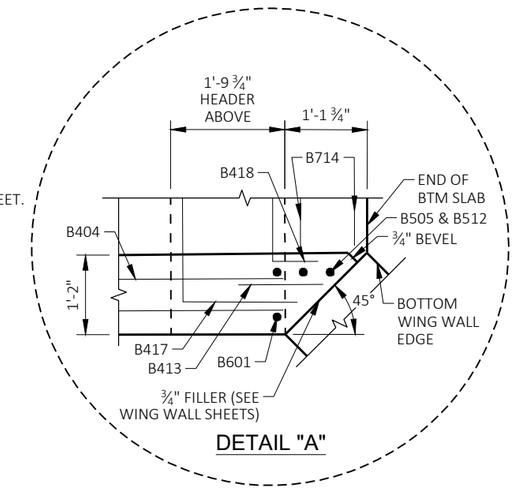
PLAN
(2-CELL CONCRETE BOX CULVERT)



PARAPET PLAN VIEW
(SEE SECTION VIEWS ON SHEET 7)



ELEVATION
(LOOKING WEST)



DETAIL "A"

STATE PROJECT NUMBER

1590-18-82

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-21-35

DRAWN BY JAL | PLANS CK'D WAH

BOX CULVERT DETAILS - 1

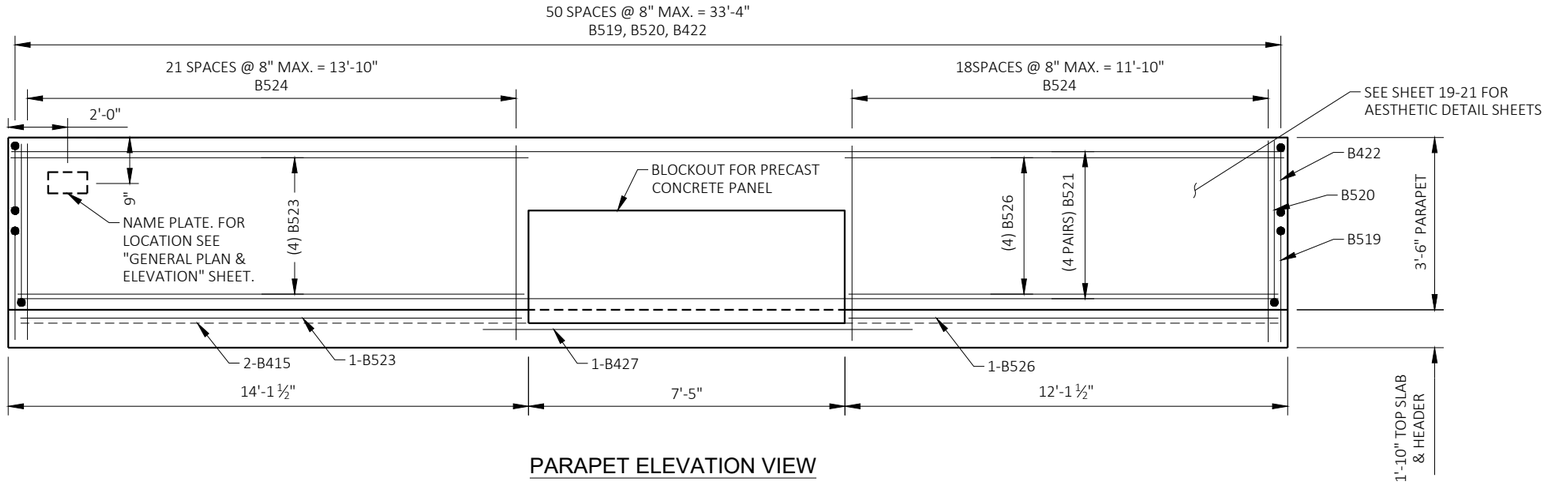
SHEET 6 OF 22

91

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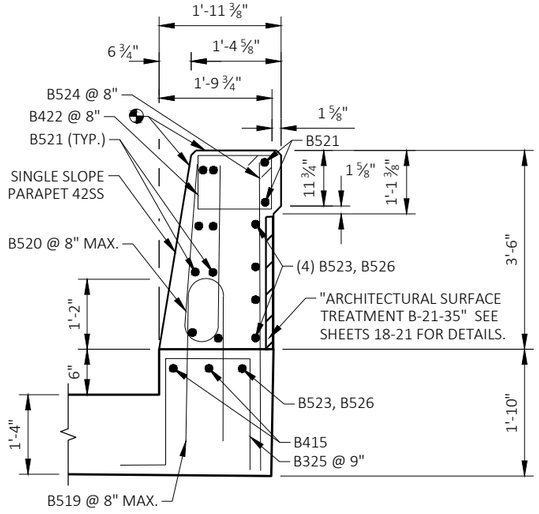
STATE PROJECT NUMBER

1590-18-82

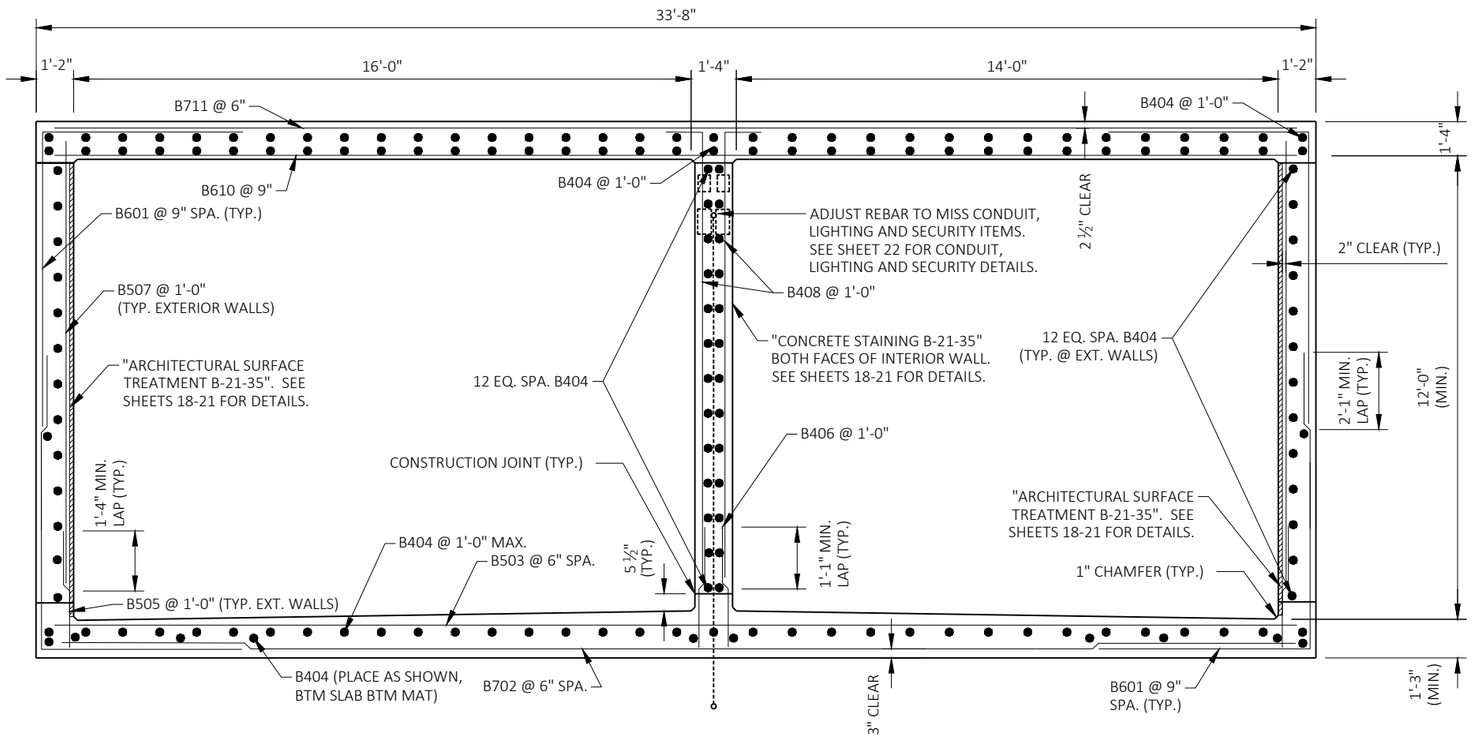


PARAPET ELEVATION VIEW

(LOOKING NORTH, BOTH SIDES SIMILAR)

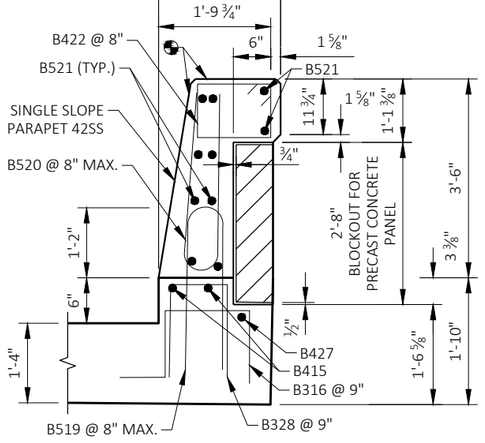


SECTION THRU HEADER & PARAPET



TYPICAL SECTION THRU BOX CULVERT

(LOOKING NORTH)



SECTION THRU HEADER & PARAPET AT PRECAST CONCRETE PANEL

LEGEND

- PIGMENTED SURFACE SEALER SHALL BE APPLIED TO THE FRONT FACE AND TOP OF CONCRETE PARAPETS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-21-35

DRAWN BY JAL | PLANS CK'D WAH

BOX CULVERT DETAILS - 2

SHEET 7 OF 22

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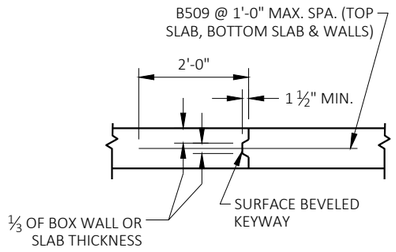
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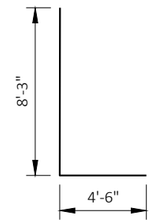
STATE PROJECT NUMBER

1590-18-82

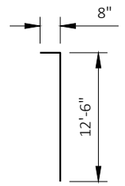


VERTICAL CONSTRUCTION JOINT

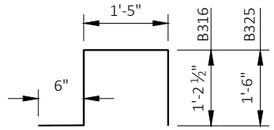
2" DEEP SAW CUT WITHIN 12 HOURS AFTER POURING MAY BE USED IN LIEU OF CONSTRUCTION JOINT IN BOTTOM SLAB.
#5 BARS @ 1'-0" CENTERS REQUIRED



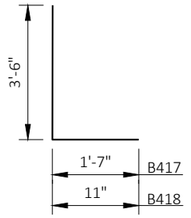
B601



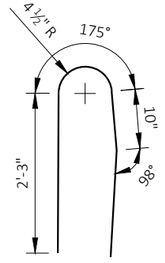
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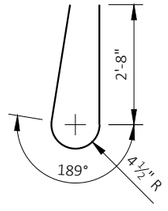
B316, B325



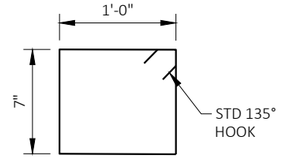
B417, B418



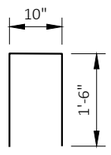
B519



B520



B422



B328

BILL OF BARS

COATED TOTAL = 3,420 LBS
UNCOATED TOTAL = 65,840 LBS

BAR MARK	NO. REQ'D.	LENGTH	COAT	BENT	LOCATION
B601	516	12'-7"		X	CORNERS
B702	189	33'-4"			BTM SLAB - BTM MAT - TRANS.
B503	189	33'-4"			BTM SLAB - TOP MAT - TRANS.
B404	494	31'-0"			LONGITUDINAL
B505	200	3'-1"			EXT. WALLS - VERT. DOWELS
B406	192	3'-1"			INT. WALLS - VERT. DOWELS
B507	192	12'-6"			EXT. WALL - VERT.
B408	192	13'-1"		X	INT. WALL - VERT.
B509	218	4'-0"			BOX DOWELS - HORIZ.
B610	129	33'-4"			TOP SLAB - BTM MAT - TRANS.
B711	189	33'-4"			TOP SLAB - TOP MAT - TRANS.
B512	8	13'-0"			WALL CORNERS - VERT.
B413	140	3'-6"			BOX END DOWELS - HORIZ.
B714	8	31'-0"			BOX END - BTM SLAB - HORIZ.
B415	4	33'-4"	X		HEADER - HORIZ.
B316	22	4'-1"	X	X	HEADER - STIRRUP
B417	24	5'-0"	X	X	HEADER ENDS - HORIZ.
B418	24	4'-5"	X	X	HEADER ENDS - HORIZ.
B519	102	5'-10"	X	X	PARAPET - VERT.
B520	102	6'-8"	X	X	PARAPET - VERT.
B521	20	33'-4"	X		PARAPET - HORIZ.
B422	102	3'-8"	X	X	PARAPET - STIRRUP.
B523	10	13'-10"	X		PARAPET ENDS - HORIZ.
B524	82	5'-0"	X		PARAPET ENDS - VERT.
B325	72	4'-8"	X	X	HEADER - STIRRUP
B526	10	11'-10"	X		PARAPET ENDS - HORIZ.
B427	2	12'-4"	X		HEADER - HORIZ.
B328	22	3'-8"	X	X	HEADER - STIRRUP

THE FIRST OR FIRST AND SECOND DIGIT OF THE MARK SIGNIFIES THE BAR SIZE.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-21-35

DRAWN BY JAL | PLANS CK'D WAH

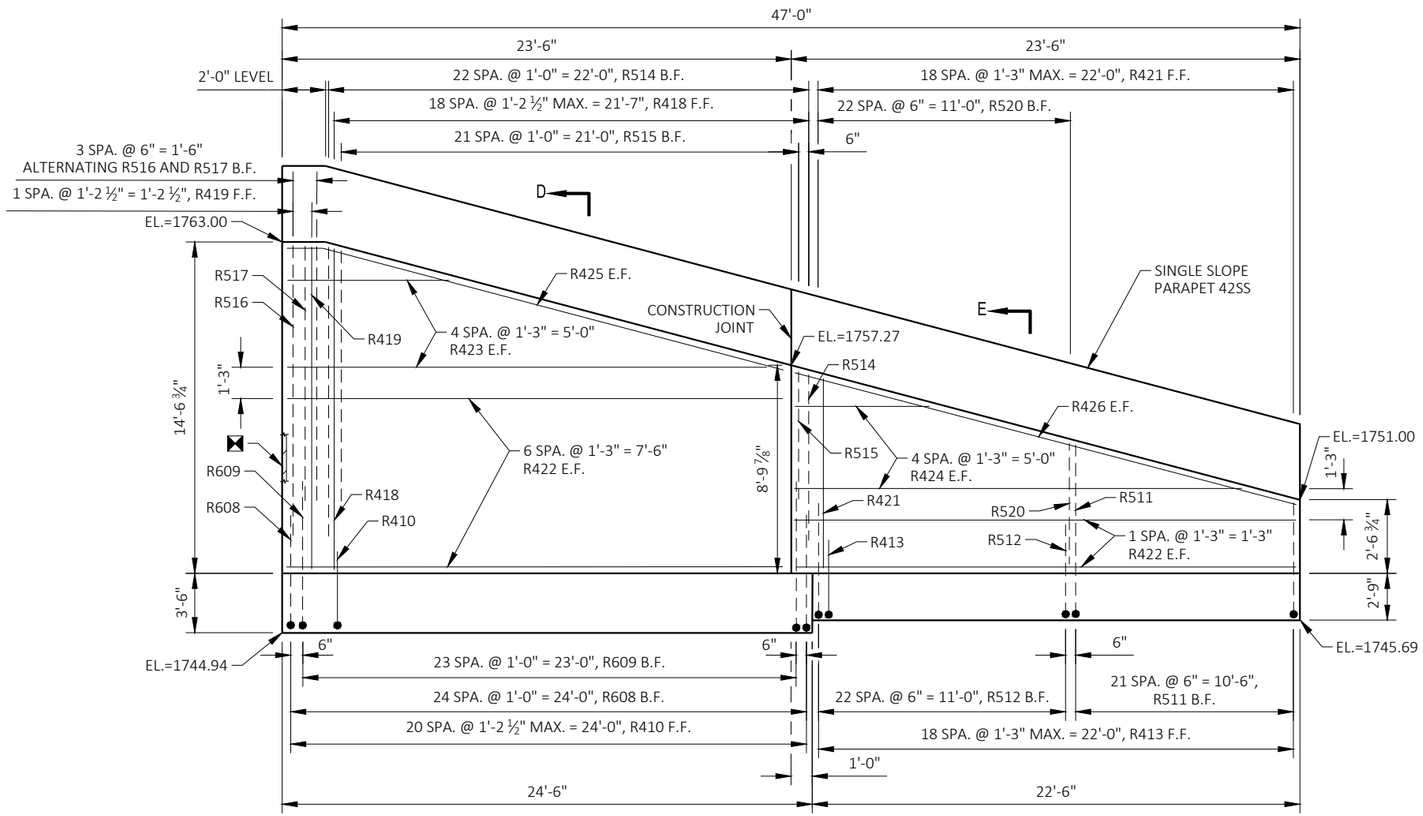
BOX CULVERT DETAILS - 3

SHEET 8 OF 22
93

SCALE =

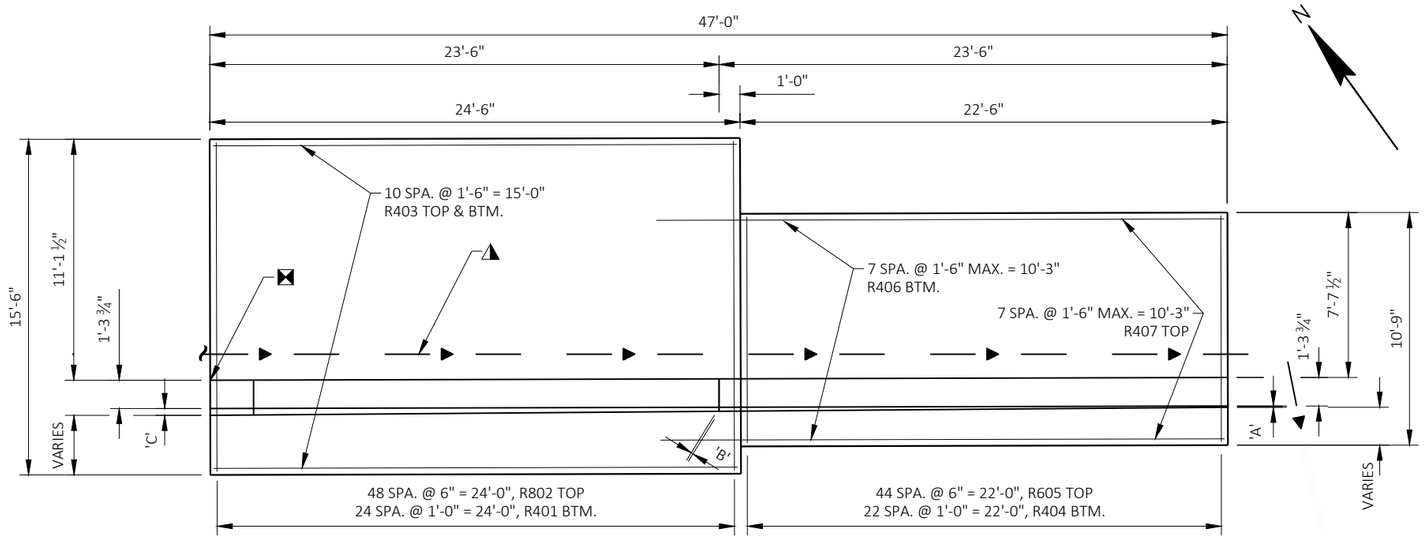
STATE PROJECT NUMBER

1590-18-82

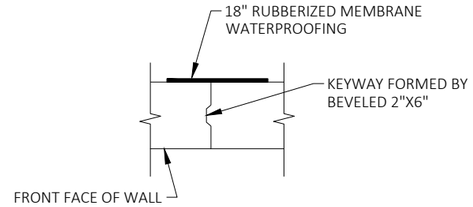


WING WALL 1

(F.F. ELEVATION LOOKING NORTH)



PLAN



VERTICAL CONSTRUCTION JOINT

(DO NOT RUN ANY BAR STEEL THRU JOINT)

LEGEND

⚠ PIPE UNDERDRAIN WRAPPED (6-INCH), SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT OUTLET ENDS OF PIPE UNDERDRAIN.

⧓ ¾" PREFORMED FILLER BETWEEN WALL AND CULVERT. SEAL HORIZ. & VERT. SURFACES WITH NON-STAINING (MATCH STAINING COLOR OF ADJACENT CONCRETE) NON-BITUMINOUS JOINT SEALER (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). RUBBERIZED MEMBRANE WATERPROOFING ON BACKFACE. FILLER IS INCLUDED IN TOTAL WALL LENGTH.

LOC	DIM.
A	⅝"
B	2 ¼"
C	3 ⅝"

DIMENSION AT TOP OF FOOTING.
BATTER WALL FRONT FACE ¼" PER FOOT.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-21-35

DRAWN BY JAL | PLANS CK'D WAH

WING WALL 1 DETAILS

SHEET 9 OF 22

94

SCALE =

8

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STATE PROJECT NUMBER

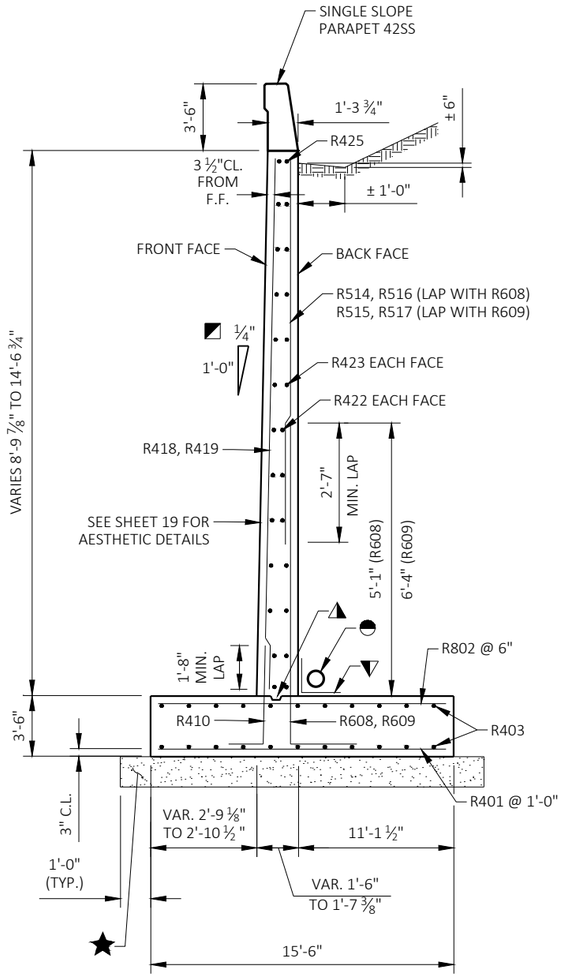
1590-18-82

NOTES

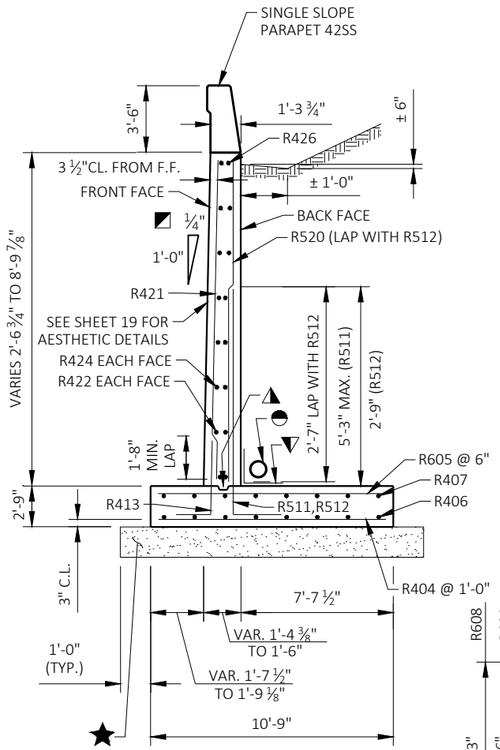
REINFORCEMENT SHALL HAVE A MINIMUM TWO INCH CLEAR DISTANCE FROM THE EDGE OF CONCRETE AND FROM THE EDGE OF ANY AESTHETIC DETAILS INSET INTO THE WING WALL UNLESS OTHERWISE NOTED.

LEGEND

- PIPE UNDERDRAIN WRAPPED (6-INCH), SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT OUTLET ENDS OF PIPE UNDERDRAIN.
- KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2"X6" .
- RUBBERIZED MEMBRANE WATERPROOFING ON BACK FACE.
- BATTER FRONT FACE OF WALL ¼" PER FOOT.
- UNDERCUT 1'-0". EXCAVATION TO BE INCLUDED IN EXCAVATION FOR STRUCTURES. BACKFILL WITH " BACKFILL STRUCTURE TYPE A". IN FILL SECTIONS, PROVIDE 1'-0" MINIMUM "BACKFILL STRUCTURE TYPE A"



SECTION D-D



SECTION E-E

BILL OF BARS

TOTAL COATED = 2,500 LBS

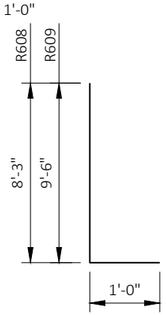
TOTAL UNCOATED = 3,720 LBS

BAR MARK	NO. REQ'D.	LENGTH	COAT	BENT	BAR SERIES ◥	LOCATION
R401	25	15'-2"				FOOTING - TRANS. - BTM.
R802	49	15'-2"				FOOTING - TRANS. - TOP
R403	22	24'-2"				FOOTING - LONG. - TOP & BTM.
R404	23	10'-5"				FOOTING - TRANS. - BTM.
R605	45	10'-5"				FOOTING - TRANS. - TOP
R406	8	23'-11"				FOOTING - LONG. - BTM.
R407	8	24'-5"				FOOTING - LONG. - TOP
R608	25	9'-1"	X	X		FOOTING DOWELS - B.F.
R609	24	10'-4"	X	X		FOOTING DOWELS - B.F.
R410	21	5'-7"	X	X		FOOTING DOWELS - F.F.
R511	22	6'-11"	X	X	X	FOOTING DOWELS - B.F.
R512	23	5'-11"	X	X		FOOTING DOWELS - B.F.
R413	19	4'-10"	X	X		FOOTING DOWELS - F.F.
R514	23	8'-11"	X		X	STEM - VERT. - B.F.
R515	22	7'-8"	X		X	STEM - VERT. - B.F.
R516	2	11'-11"	X			STEM - VERT. - B.F.
R517	2	10'-8"	X			STEM - VERT. - B.F.
R418	19	11'-2"	X		X	STEM - VERT. - F.F.
R419	2	14'-3"	X			STEM - VERT. - F.F.
R520	23	6'-9"	X		X	STEM - VERT. - B.F.
R421	19	5'-3"	X		X	STEM - VERT. - F.F.
R422	18	23'-1"	X			STEM - HORIZ.
R423	10	12'-8"	X		X	STEM - HORIZ.
R424	10	12'-8"	X		X	STEM - HORIZ.
R425	2	23'-10"	X	X		STEM - HORIZ. - TOP
R426	2	23'-11"	X			STEM - HORIZ. - TOP

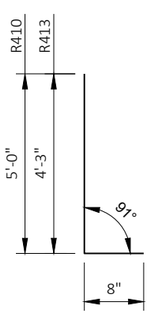
◥ LENGTH SHOWN FOR BAR IS AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

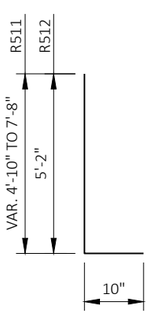
MARK	NO. REQ'D.	LENGTH
R511	1 SERIES OF 22	5'-6" TO 8'-4"
R514	1 SERIES OF 23	5'-11" TO 11'-10"
R515	1 SERIES OF 22	4'-10" TO 10'-5"
R418	1 SERIES OF 19	8'-3" TO 14'-0"
R520	1 SERIES OF 23	5'-3" TO 8'-2"
R421	1 SERIES OF 19	2'-3" TO 8'-2"
R423	2 SERIES OF 5	3'-3" TO 22'-0"
R424	2 SERIES OF 5	3'-3" TO 22'-0"
BUNDLE AND TAG EACH SERIES SEPARATELY.		



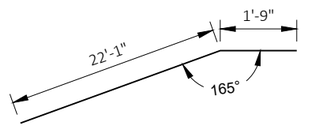
R608, R609



R410, R413



R511, R512



R425

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-21-35

DRAWN BY JAL | PLANS CK'D WAH

WING WALL 1 SECTIONS & REINFORCEMENT

SHEET 10 OF 22

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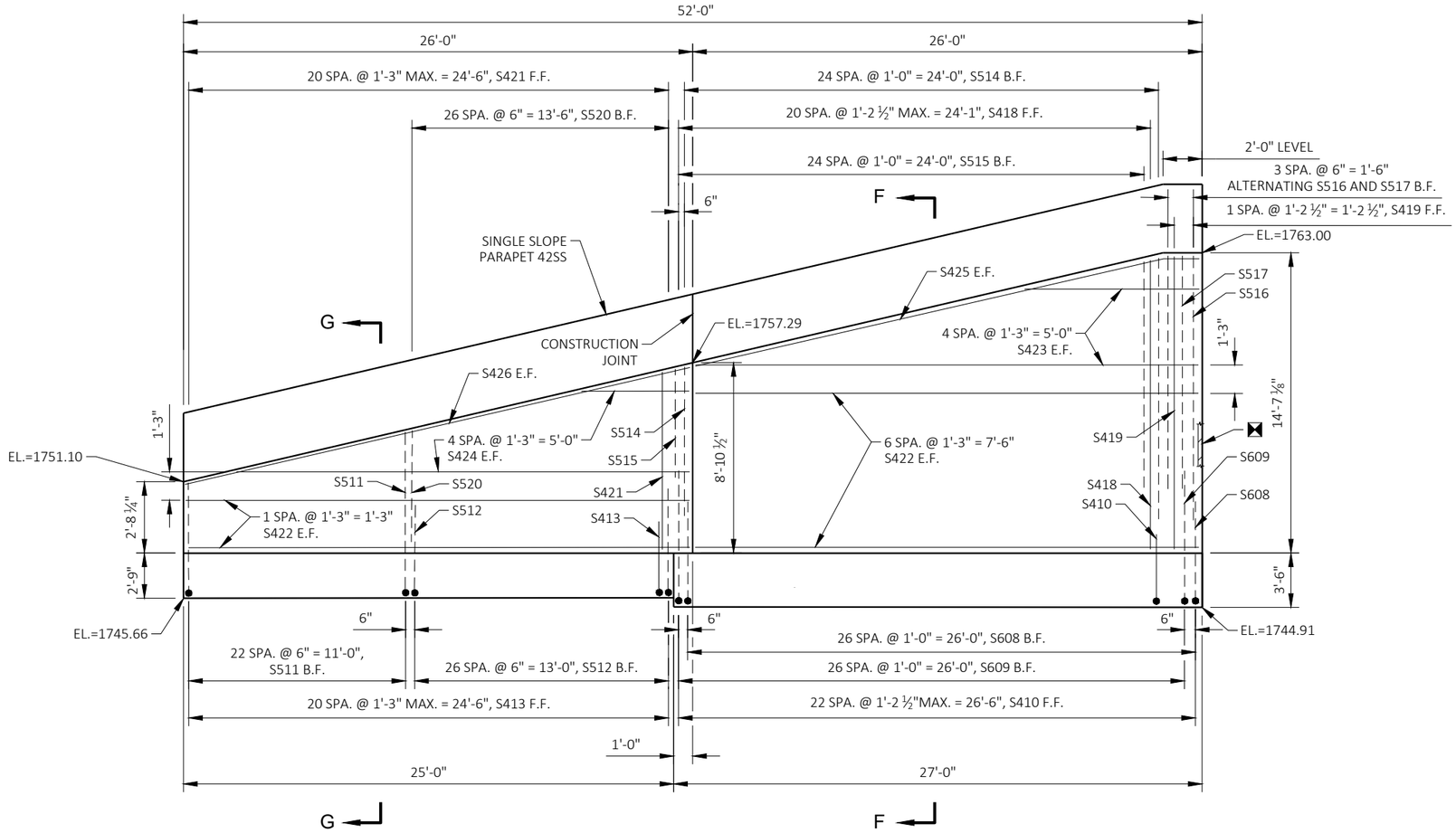
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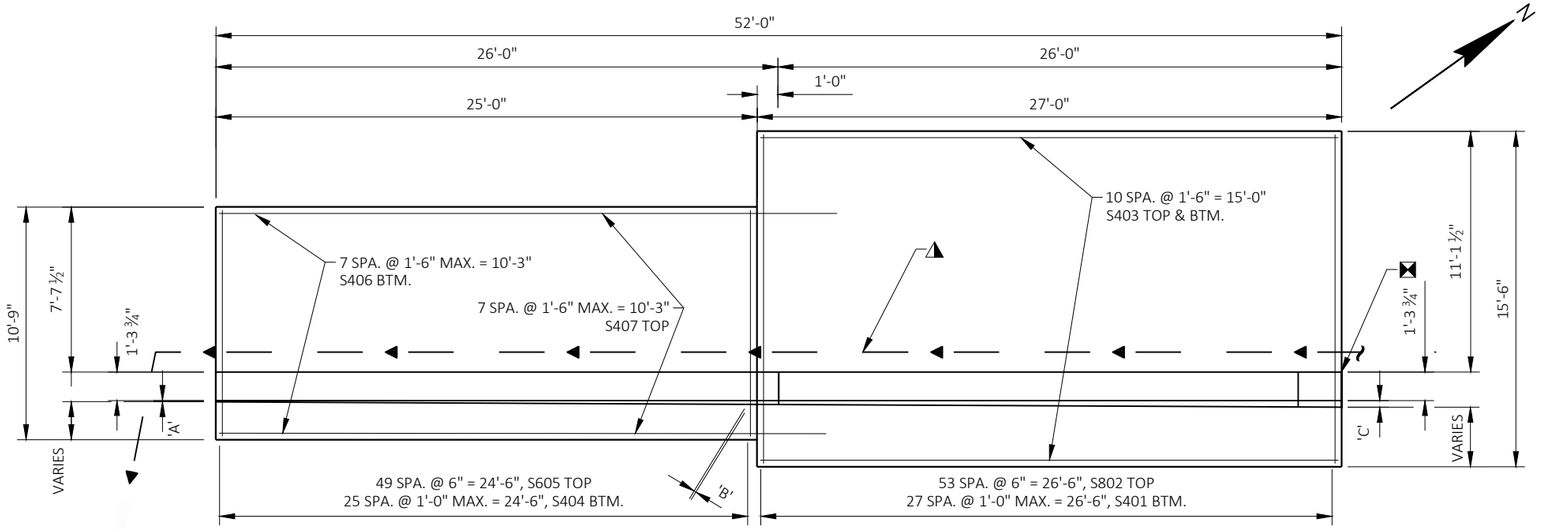
STATE PROJECT NUMBER

1590-18-82

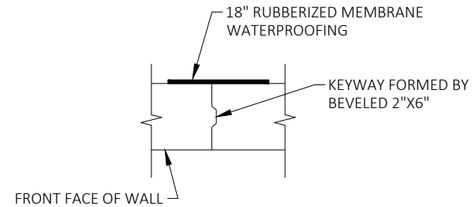


WING WALL 2

(F.F. ELEVATION LOOKING NORTH)



PLAN



VERTICAL CONSTRUCTION JOINT

(DO NOT RUN ANY BAR STEEL THRU JOINT)

LEGEND

⚠ PIPE UNDERDRAIN WRAPPED (6-INCH), SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT OUTLET ENDS OF PIPE UNDERDRAIN.

⊠ ¾" PREFORMED FILLER BETWEEN WALL AND CULVERT. SEAL HORIZ. & VERT. SURFACES WITH NON-STAINING (MATCH STAINING COLOR OF ADJACENT CONCRETE) NON-BITUMINOUS JOINT SEALER (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). RUBBERIZED MEMBRANE WATERPROOFING ON BACKFACE. FILLER IS INCLUDED IN TOTAL WALL LENGTH.

LOC	DIM.
A	⅝"
B	2 ¼"
C	3 ⅝"

DIMENSION AT TOP OF FOOTING.

BATTER WALL FRONT FACE ¼" PER FOOT.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-21-35

DRAWN BY JAL | PLANS CK'D WAH

WING WALL 2 DETAILS

SHEET 11 OF 22

96

SCALE =

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STATE PROJECT NUMBER

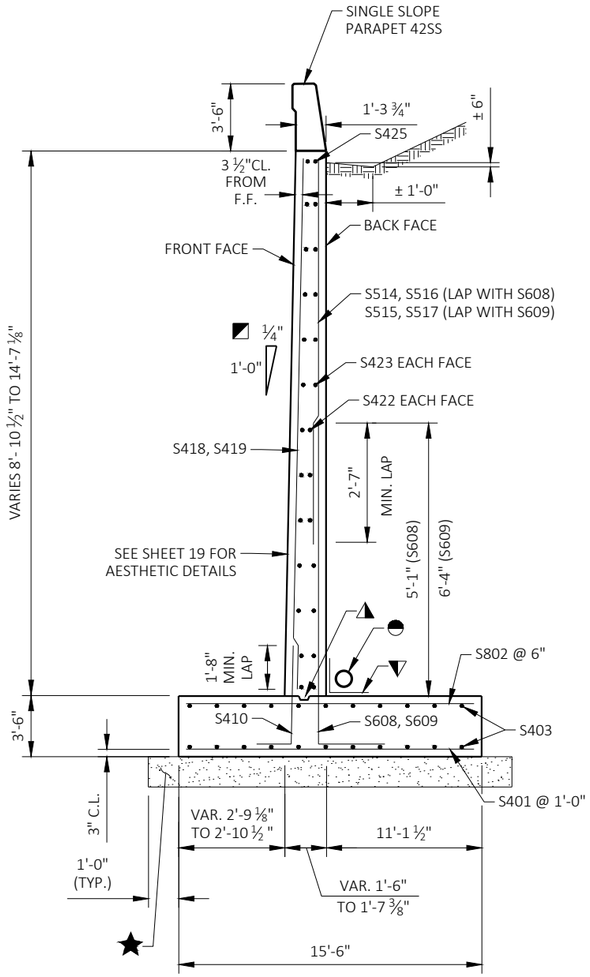
1590-18-82

NOTES

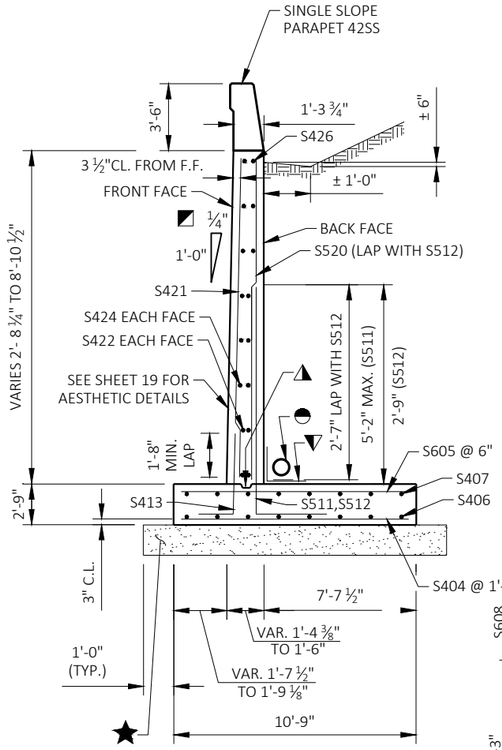
REINFORCEMENT SHALL HAVE A MINIMUM TWO INCH CLEAR DISTANCE FROM THE EDGE OF CONCRETE AND FROM THE EDGE OF ANY AESTHETIC DETAILS INSET INTO THE WING WALL UNLESS OTHERWISE NOTED.

LEGEND

- PIPE UNDERDRAIN WRAPPED (6-INCH), SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT OUTLET ENDS OF PIPE UNDERDRAIN.
- KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2"X6" .
- RUBBERIZED MEMBRANE WATERPROOFING ON BACK FACE.
- BATTER FRONT FACE OF WALL ¼" PER FOOT.
- UNDERCUT 1'-0". EXCAVATION TO BE INCLUDED IN EXCAVATION FOR STRUCTURES. BACKFILL WITH " BACKFILL STRUCTURE TYPE A". IN FILL SECTIONS, PROVIDE 1'-0" MINIMUM "BACKFILL STRUCTURE TYPE A"



SECTION F-F



SECTION G-G

BILL OF BARS

TOTAL COATED = 2,770 LBS

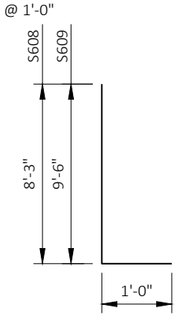
TOTAL UNCOATED = 4,120 LBS

BAR MARK	NO. REQ'D.	LENGTH	COAT	BENT	BAR ◥ SERIES	LOCATION
S401	28	15'-2"				FOOTING - TRANS. - BTM.
S802	54	15'-2"				FOOTING - TRANS. - TOP
S403	22	26'-8"				FOOTING - LONG. - TOP & BTM.
S404	26	10'-5"				FOOTING - TRANS. - BTM.
S605	50	10'-5"				FOOTING - TRANS. - TOP
S406	8	26'-5"				FOOTING - LONG. - BTM.
S407	8	26'-11"				FOOTING - LONG. - TOP
S608	27	9'-1"	X	X		FOOTING DOWELS - B.F.
S609	27	10'-4"	X	X		FOOTING DOWELS - B.F.
S410	23	5'-7"	X	X		FOOTING DOWELS - F.F.
S511	23	6'-11"	X	X	X	FOOTING DOWELS - B.F.
S512	27	5'-11"	X	X		FOOTING DOWELS - B.F.
S413	21	4'-10"	X	X		FOOTING DOWELS - F.F.
S514	25	9'-0"	X		X	STEM - VERT. - B.F.
S515	25	7'-8"	X		X	STEM - VERT. - B.F.
S516	2	11'-11"	X			STEM - VERT. - B.F.
S517	2	10'-8"	X			STEM - VERT. - B.F.
S418	21	11'-3"	X		X	STEM - VERT. - F.F.
S419	2	14'-3"	X			STEM - VERT. - F.F.
S520	27	6'-9"	X		X	STEM - VERT. - B.F.
S421	21	5'-4"	X		X	STEM - VERT. - F.F.
S422	18	25'-7"	X			STEM - HORIZ.
S423	10	14'-1"	X		X	STEM - HORIZ.
S424	10	14'-4"	X		X	STEM - HORIZ.
S425	2	26'-3"	X	X		STEM - HORIZ. - TOP
S426	2	26'-4"	X			STEM - HORIZ. - TOP

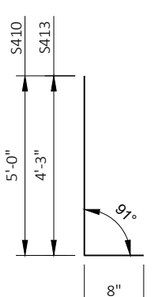
◥ LENGTH SHOWN FOR BAR IS AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

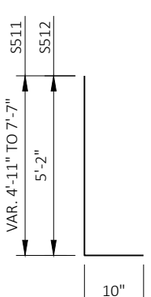
S511	1 SERIES OF 23	5'-7" TO 8'-3"
S514	1 SERIES OF 25	6'-2" TO 11'-10"
S515	1 SERIES OF 25	4'-10" TO 10'-6"
S418	1 SERIES OF 21	8'-4" TO 14'-1"
S520	1 SERIES OF 27	5'-2" TO 8'-3"
S421	1 SERIES OF 21	2'-4" TO 8'-3"
S423	2 SERIES OF 5 BARS	3'-7" TO 24'-7"
S424	2 SERIES OF 5 BARS	3'-10" TO 24'-10"
BUNDLE AND TAG EACH SERIES SEPARATELY.		



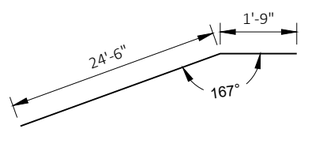
S608, S609



S410, S413



S511, S512



S425

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-21-35

DRAWN BY JAL | PLANS CK'D WAH

WING WALL 2 SECTIONS & REINFORCEMENT

SHEET 12 OF 22

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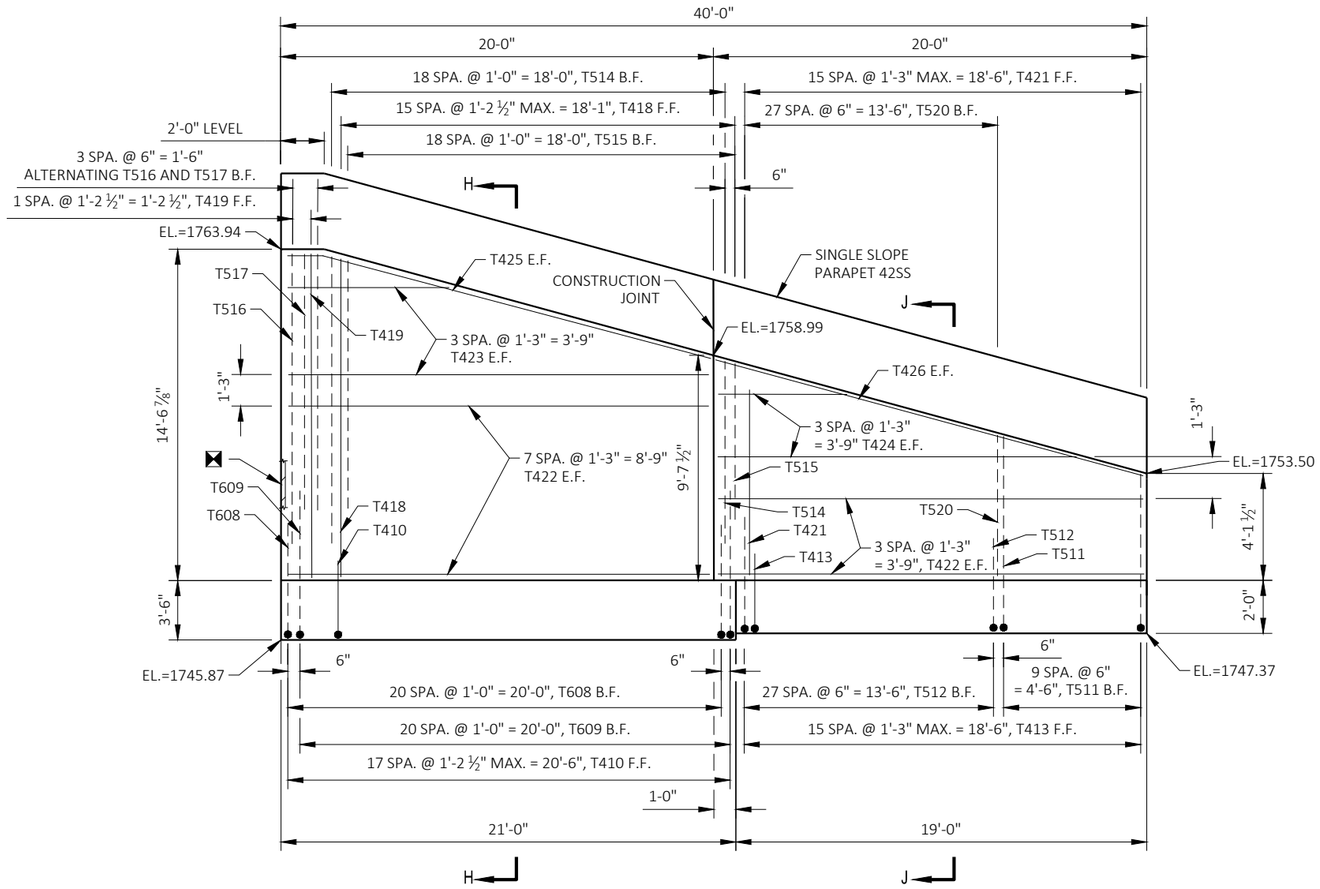
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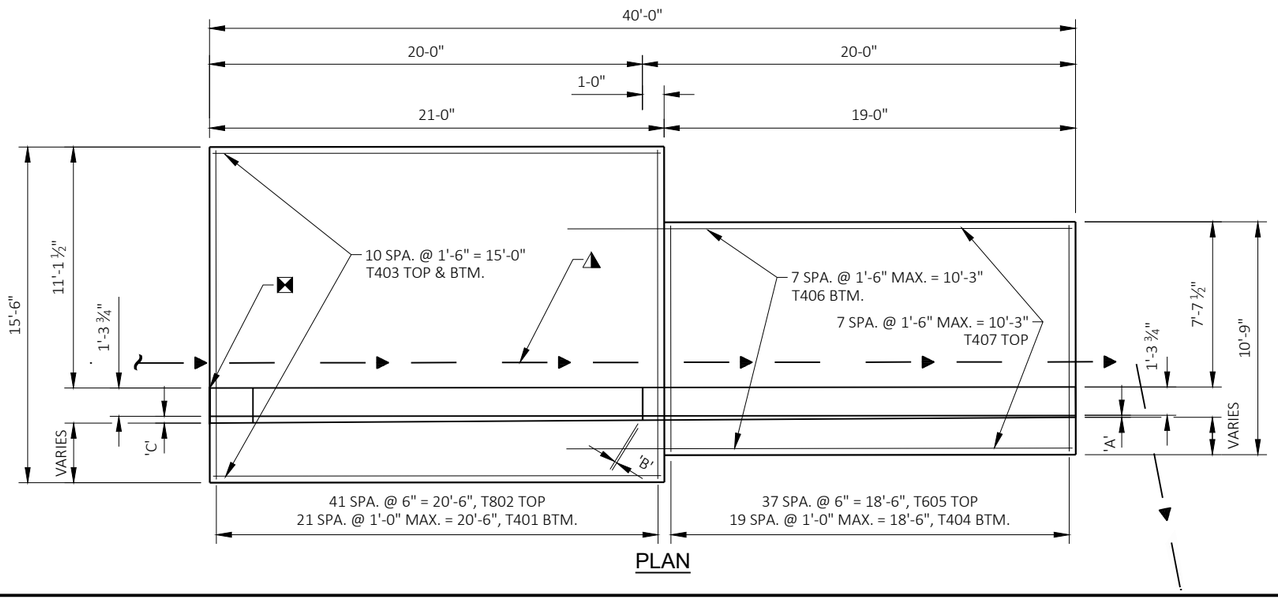
STATE PROJECT NUMBER

1590-18-82

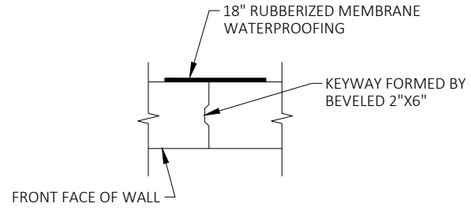


WING WALL 3

(F.F. ELEVATION LOOKING SOUTH)



PLAN



VERTICAL CONSTRUCTION JOINT

(DO NOT RUN ANY BAR STEEL THRU JOINT)

LEGEND

- ◭ PIPE UNDERDRAIN WRAPPED (6-INCH), SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT OUTLET ENDS OF PIPE UNDERDRAIN.
- ⧓ ¾" PREFORMED FILLER BETWEEN WALL AND CULVERT. SEAL HORIZ. & VERT. SURFACES WITH NON-STAINING (MATCH STAINING COLOR OF ADJACENT CONCRETE) NON-BITUMINOUS JOINT SEALER (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). RUBBERIZED MEMBRANE WATERPROOFING ON BACKFACE. FILLER IS INCLUDED IN TOTAL WALL LENGTH.

LOC	DIM.
A	1"
B	2 ⅜"
C	3 ⅝"

DIMENSION AT TOP OF FOOTING.
BATTER WALL FRONT FACE ¼" PER FOOT.

N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-21-35

DRAWN BY JAL | PLANS CK'D WAH

WING WALL 3 DETAILS

SHEET 13 OF 22

98

SCALE =

8

8

STATE PROJECT NUMBER

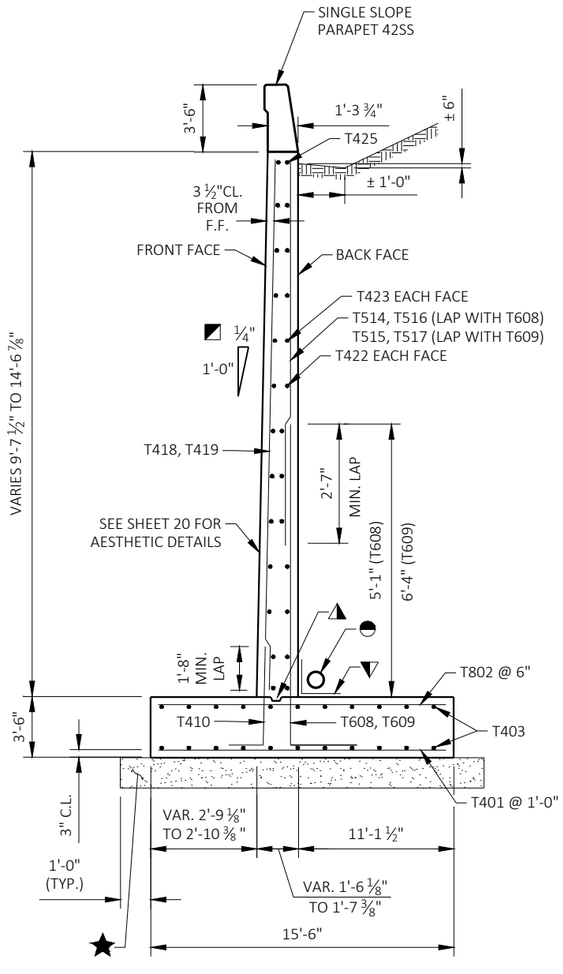
1590-18-82

NOTES

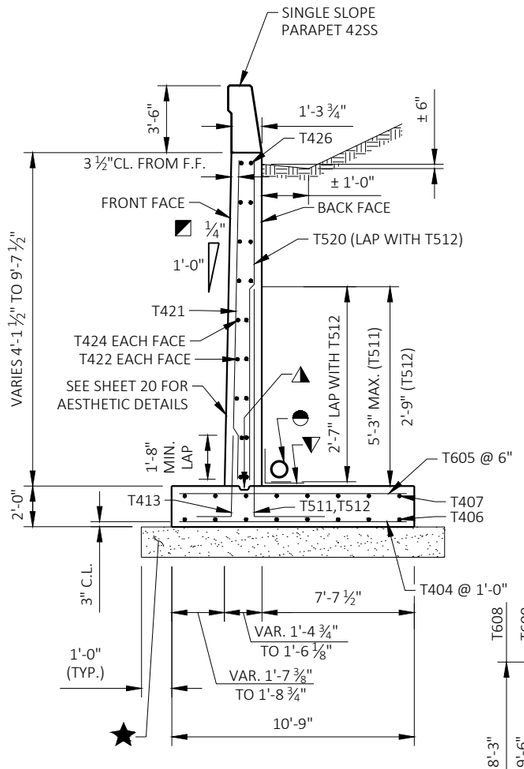
REINFORCEMENT SHALL HAVE A MINIMUM TWO INCH CLEAR DISTANCE FROM THE EDGE OF CONCRETE AND FROM THE EDGE OF ANY AESTHETIC DETAILS INSET INTO THE WING WALL UNLESS OTHERWISE NOTED.

LEGEND

- PIPE UNDERDRAIN WRAPPED (6-INCH), SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT OUTLET ENDS OF PIPE UNDERDRAIN.
- KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2"X6" .
- RUBBERIZED MEMBRANE WATERPROOFING ON BACK FACE.
- BATTER FRONT FACE OF WALL ¼" PER FOOT.
- UNDERCUT 1'-0". EXCAVATION TO BE INCLUDED IN EXCAVATION FOR STRUCTURES. BACKFILL WITH " BACKFILL STRUCTURE TYPE A". IN FILL SECTIONS, PROVIDE 1'-0" MINIMUM "BACKFILL STRUCTURE TYPE A"



SECTION H-H



SECTION J-J

BILL OF BARS

TOTAL COATED = 2,230 LBS

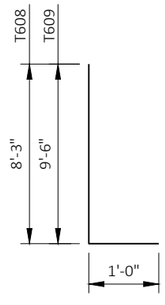
TOTAL UNCOATED = 3,190 LBS

BAR MARK	NO. REQ'D.	LENGTH	COAT	BENT	BAR ◪ SERIES	LOCATION
T401	22	15'-2"				FOOTING - TRANS. - BTM.
T802	42	15'-2"				FOOTING - TRANS. - TOP
T403	22	20'-8"				FOOTING - LONG. - TOP & BTM.
T404	20	10'-5"				FOOTING - TRANS. - BTM.
T605	38	10'-5"				FOOTING - TRANS. - TOP
T406	8	20'-5"				FOOTING - LONG. - BTM.
T407	8	20'-11"				FOOTING - LONG. - TOP
T608	21	9'-1"	X	X		FOOTING DOWELS - B.F.
T609	21	10'-4"	X	X		FOOTING DOWELS - B.F.
T410	18	5'-7"	X	X		FOOTING DOWELS - F.F.
T511	10	7'-0"	X	X	X	FOOTING DOWELS - B.F.
T512	28	5'-2"	X	X		FOOTING DOWELS - B.F.
T413	16	4'-1"	X	X		FOOTING DOWELS - F.F.
T514	19	9'-4"	X		X	STEM - VERT. - B.F.
T515	19	8'-0"	X		X	STEM - VERT. - B.F.
T516	2	11'-11"	X			STEM - VERT. - B.F.
T517	2	10'-8"	X			STEM - VERT. - B.F.
T418	16	11'-7"	X		X	STEM - VERT. - F.F.
T419	2	14'-3"	X			STEM - VERT. - F.F.
T520	28	7'-1"	X		X	STEM - VERT. - B.F.
T421	16	6'-5"	X		X	STEM - VERT. - F.F.
T422	24	19'-7"	X			STEM - HORIZ.
T423	8	10'-1"	X		X	STEM - HORIZ.
T424	8	8'-4"	X		X	STEM - HORIZ.
T425	2	20'-3"	X	X		STEM - HORIZ. - TOP
T426	2	20'-4"	X			STEM - HORIZ. - TOP

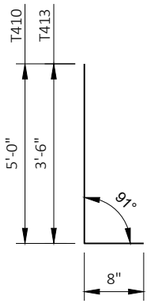
◪ LENGTH SHOWN FOR BAR IS AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

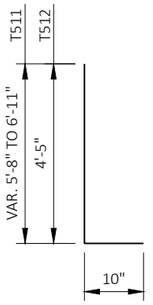
MARK	NO. REQ'D.	LENGTH
T511	1 SERIES OF 10	6'-3" TO 7'-7"
T514	1 SERIES OF 19	6'-10" TO 11'-10"
T515	1 SERIES OF 19	5'-6" TO 10'-5"
T418	1 SERIES OF 16 BARS	9'-1" TO 14'-0"
T520	1 SERIES OF 28 BARS	5'-3" TO 8'-11"
T421	1 SERIES OF 16 BARS	3'-10" TO 8'-11"
T423	2 SERIES OF 4 BARS	3'-3" TO 16'-11"
T424	2 SERIES OF 4 BARS	1'-6" TO 15'-1"
BUNDLE AND TAG EACH SERIES SEPARATELY.		



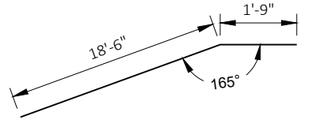
T608, T609



T410, T413



T511, T512



T425

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-21-35

DRAWN BY JAL | PLANS CK'D WAH

WING WALL 3 SECTIONS & REINFORCEMENT

SHEET 14 OF 22

99

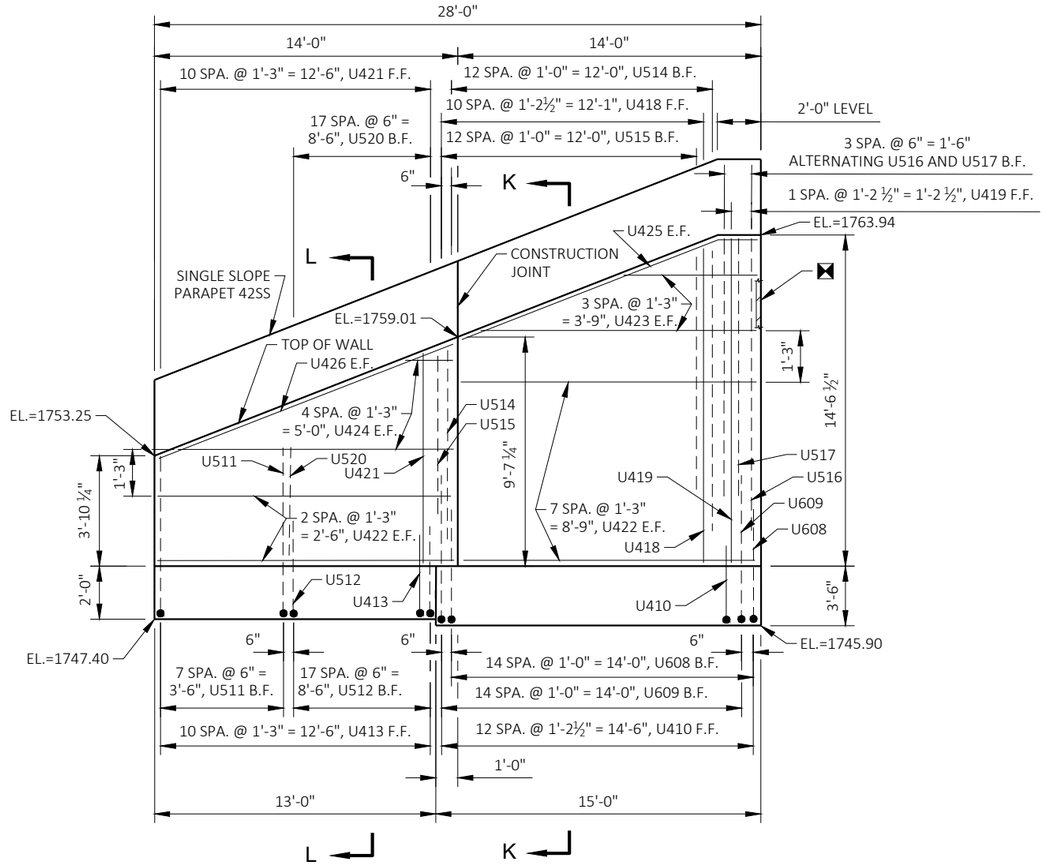
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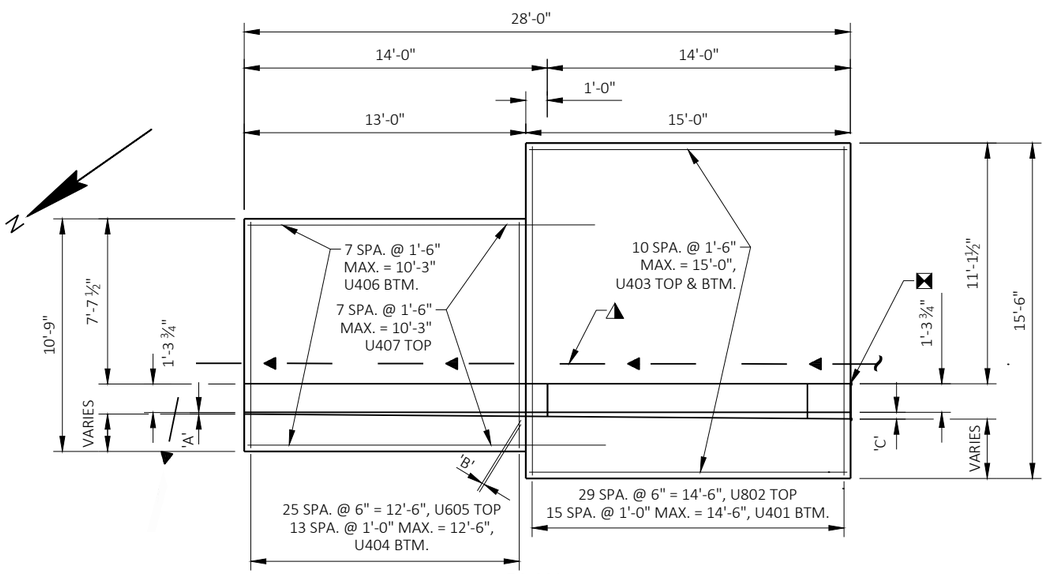
STATE PROJECT NUMBER

1590-18-82

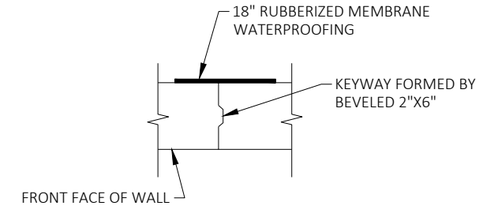


WING WALL 4

(F.F. ELEVATION LOOKING SOUTH)



PLAN



VERTICAL CONSTRUCTION JOINT

(DO NOT RUN ANY BAR STEEL THRU JOINT)

LEGEND

▲ PIPE UNDERDRAIN WRAPPED (6-INCH), SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT OUTLET ENDS OF PIPE UNDERDRAIN.

⋈ ¾" PREFORMED FILLER BETWEEN WALL AND CULVERT. SEAL HORIZ. & VERT. SURFACES WITH NON-STAINING (MATCH STAINING COLOR OF ADJACENT CONCRETE) NON-BITUMINOUS JOINT SEALER (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). RUBBERIZED MEMBRANE WATERPROOFING ON BACKFACE. FILLER IS INCLUDED IN TOTAL WALL LENGTH.

LOC	DIM.
A	1"
B	2 ⅜"
C	3 ⅝"

DIMENSION AT TOP OF FOOTING. BATTER WALL FRONT FACE ¼" PER FOOT.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-21-35

DRAWN BY JAL | PLANS CK'D WAH

WING WALL 4 DETAILS

SHEET 15 OF 22

100

SCALE =

8

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STATE PROJECT NUMBER

1590-18-82

TOTAL COATED = 1,560 LBS

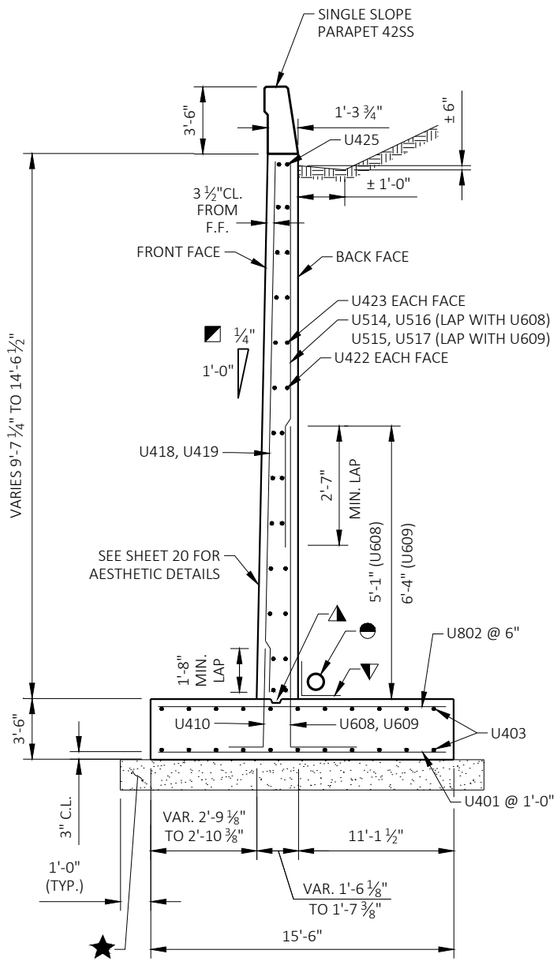
TOTAL UNCOATED = 2,260 LBS

NOTES

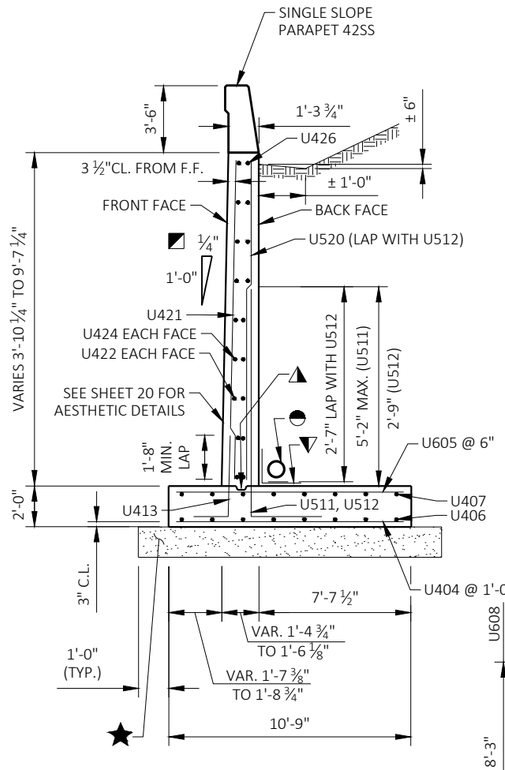
REINFORCEMENT SHALL HAVE A MINIMUM TWO INCH CLEAR DISTANCE FROM THE EDGE OF CONCRETE AND FROM THE EDGE OF ANY AESTHETIC DETAILS INSET INTO THE WING WALL UNLESS OTHERWISE NOTED.

LEGEND

- PIPE UNDERDRAIN WRAPPED (6-INCH), SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT OUTLET ENDS OF PIPE UNDERDRAIN.
- KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2"X6" .
- RUBBERIZED MEMBRANE WATERPROOFING ON BACK FACE.
- BATTER FRONT FACE OF WALL ¼" PER FOOT.
- UNDERCUT 1'-0". EXCAVATION TO BE INCLUDED IN EXCAVATION FOR STRUCTURES. BACKFILL WITH " BACKFILL STRUCTURE TYPE A". IN FILL SECTIONS, PROVIDE 1'-0" MINIMUM "BACKFILL STRUCTURE TYPE A"



SECTION K-K



SECTION L-L

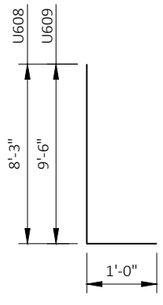
BILL OF BARS

BAR MARK	NO. REQ'D.	LENGTH	COAT	BENT	BAR ◹ SERIES	LOCATION
U401	16	15'-2"				FOOTING - TRANS. - BTM.
U802	30	15'-2"				FOOTING - TRANS. - TOP
U403	22	14'-8"				FOOTING - LONG. - TOP & BTM.
U404	14	10'-5"				FOOTING - TRANS. - BTM.
U605	26	10'-5"				FOOTING - TRANS. - TOP
U406	8	14'-5"				FOOTING - LONG. - BTM.
U407	8	14'-11"				FOOTING - LONG. - TOP
U608	15	9'-1"	X	X		FOOTING DOWELS - B.F.
U609	15	10'-4"	X	X		FOOTING DOWELS - B.F.
U410	13	5'-7"	X	X		FOOTING DOWELS - F.F.
U511	8	6'-10"	X	X	X	FOOTING DOWELS - B.F.
U512	18	5'-2"	X	X		FOOTING DOWELS - B.F.
U413	11	4'-1"	X	X		FOOTING DOWELS - F.F.
U514	13	9'-4"	X		X	STEM - VERT. - B.F.
U515	13	7'-11"	X		X	STEM - VERT. - B.F.
U516	2	11'-10"	X			STEM - VERT. - B.F.
U517	2	10'-8"	X			STEM - VERT. - B.F.
U418	11	11'-5"	X		X	STEM - VERT. - F.F.
U419	2	14'-2"	X			STEM - VERT. - F.F.
U520	18	7'-0"	X		X	STEM - VERT. - B.F.
U421	11	6'-2"	X		X	STEM - VERT. - F.F.
U422	22	13'-7"	X			STEM - HORIZ.
U423	8	7'-3"	X		X	STEM - HORIZ.
U424	10	6'-11"	X		X	STEM - HORIZ.
U425	2	14'-7"	X	X		STEM - HORIZ. - TOP
U426	2	14'-9"	X			STEM - HORIZ. - TOP

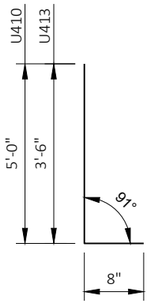
◹ LENGTH SHOWN FOR BAR IS AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

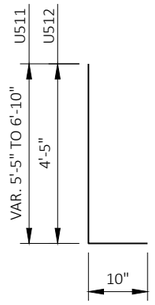
MARK	NO. REQ'D.	LENGTH
U511	1 SERIES OF 8	6'-1" TO 7'-6"
U514	1 SERIES OF 13	6'-10" TO 11'-9"
U515	1 SERIES OF 13	5'-5" TO 10'-4"
U418	1 SERIES OF 11	8'-11" TO 13'-11"
U520	1 SERIES OF 18	5'-3" TO 8'-9"
U421	1 SERIES OF 11	3'-6" TO 8'-9"
U423	2 SERIES OF 4	2'-8" TO 11'-10"
U424	2 SERIES OF 5	10" TO 13'-0"
BUNDLE AND TAG EACH SERIES SEPARATELY.		



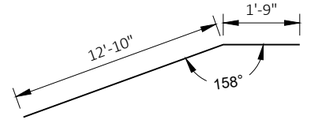
U608, U609



U410, U413



U511, U512



U425

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-21-35

DRAWN BY JAL | PLANS CK'D WAH

WING WALL 4 SECTIONS & REINFORCEMENT

SHEET 16 OF 22

101

SCALE =

8

8

STATE PROJECT NUMBER

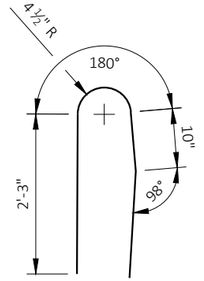
1590-18-82

BILL OF BARS

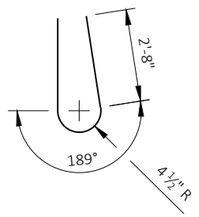
FOR WING WALL PARAPETS

TOTAL COATED = 4,740 LBS

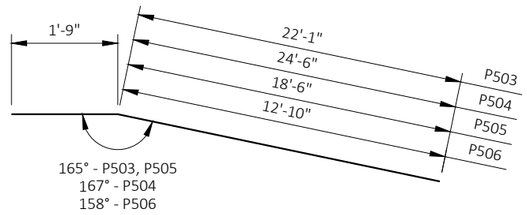
BAR MARK	WING 1 NO. REQ'D.	WING 2 NO. REQ'D.	WING 3 NO. REQ'D.	WING 4 NO. REQ'D.	LENGTH	COAT	BENT	LOCATION
P501	71	79	61	43	5'-10"	X	X	PARAPET - VERT.
P502	71	79	61	43	6'-8"	X	X	PARAPET - VERT.
P503	8				23'-10"	X	X	PARAPET - HORIZ.
P504		8			26'-3"	X	X	PARAPET - HORIZ.
P505			8		20'-3"	X	X	PARAPET - HORIZ.
P506				8	14'-7"	X	X	PARAPET - HORIZ.
P507	8				23'-11"	X		PARAPET - HORIZ.
P508		8			26'-4"	X		PARAPET - HORIZ.
P509			8		20'-4"	X		PARAPET - HORIZ.
P510				8	14'-9"	X		PARAPET - HORIZ.



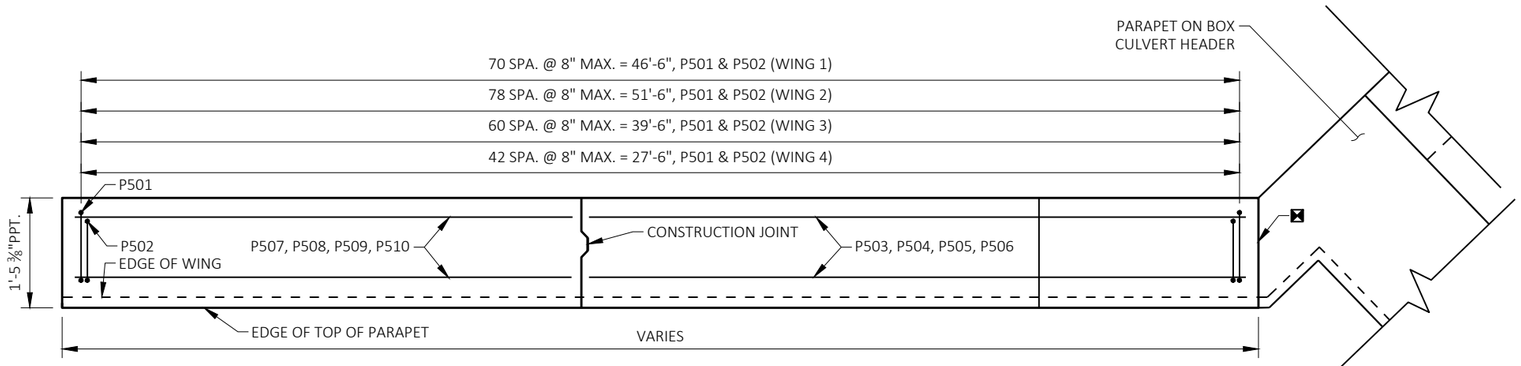
P501



P502

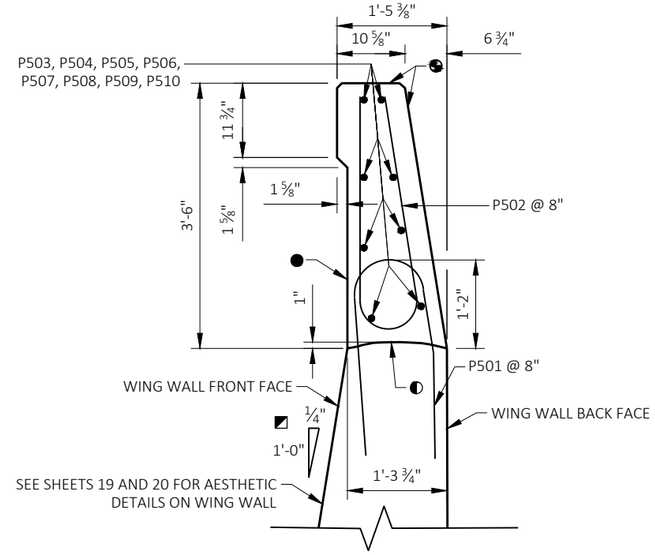


P503, P504, P505, P506

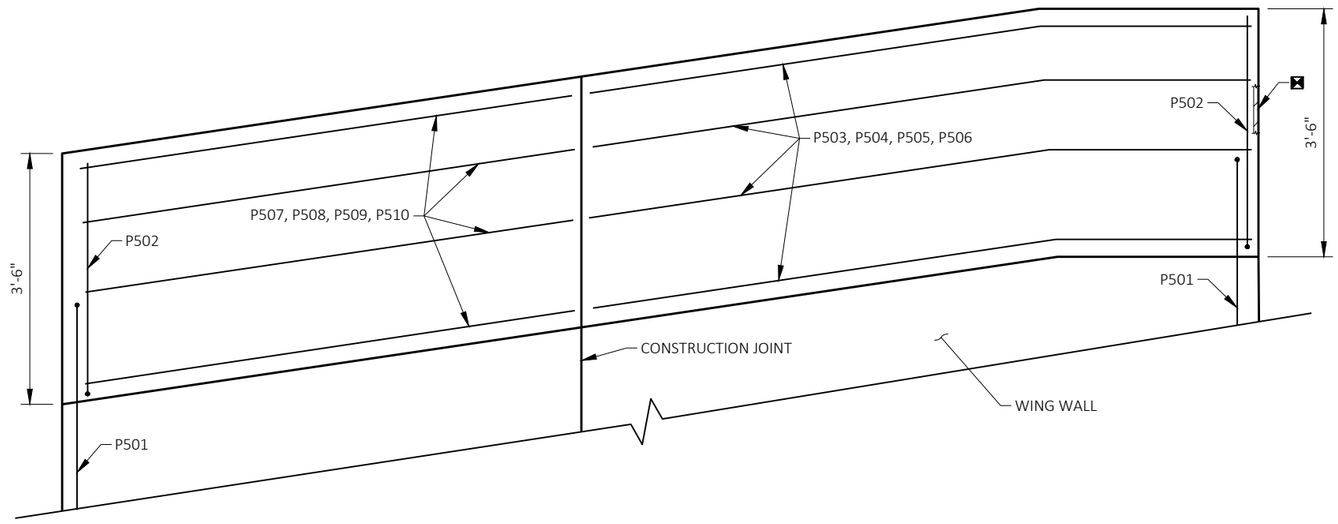


PLAN

(WING 2 OR WING 4 SHOWN, WINGS 1 & 3 SIMILAR)



SECTION THRU WING



ELEVATION OF PARAPET

LEGEND

- ● CONCRETE STAINING SHALL BE APPLIED TO BACK FACE OF PARAPET. SEE SHEETS 19 AND 20 FOR STAINING DETAILS.
- ◐ CONST. JOINT - STRIKE OFF AS SHOWN
- ◩ BATTER FRONT FACE OF WALL ¼" PER FOOT.
- ⊠ ¾" PREFORMED FILLER BETWEEN PARAPET ON WING WALL AND PARAPET ON BOX CULVERT HEADER. SEAL HORIZ. AND VERT. SURFACES WITH NON-STAINING (MATCH STAINING COLOR OF ADJACENT CONCRETE) NON-BITUMINOUS JOINT SEALER (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). FILLER IS INCLUDED IN TOTAL PARAPET LENGTH.
- ◓ PIGMENTED SURFACE SEALER SHALL BE APPLIED TO THE FRONT FACE AND TOP OF CONCRETE PARAPETS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-21-35

DRAWN BY JAL | PLANS CK'D WAH

WING WALL PARAPET SECTIONS & REINFORCEMENT

SHEET 17 OF 22

102

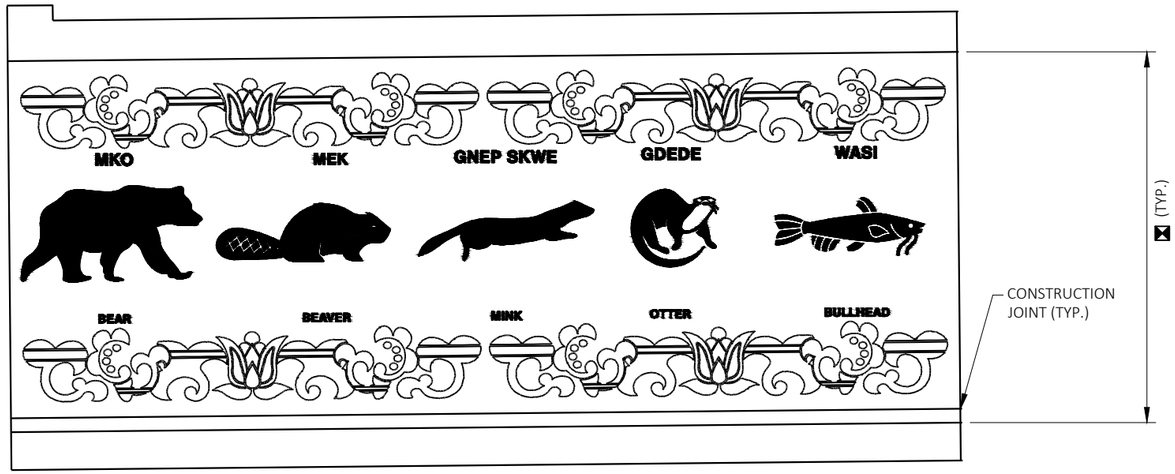
SCALE = 2.00

8

8

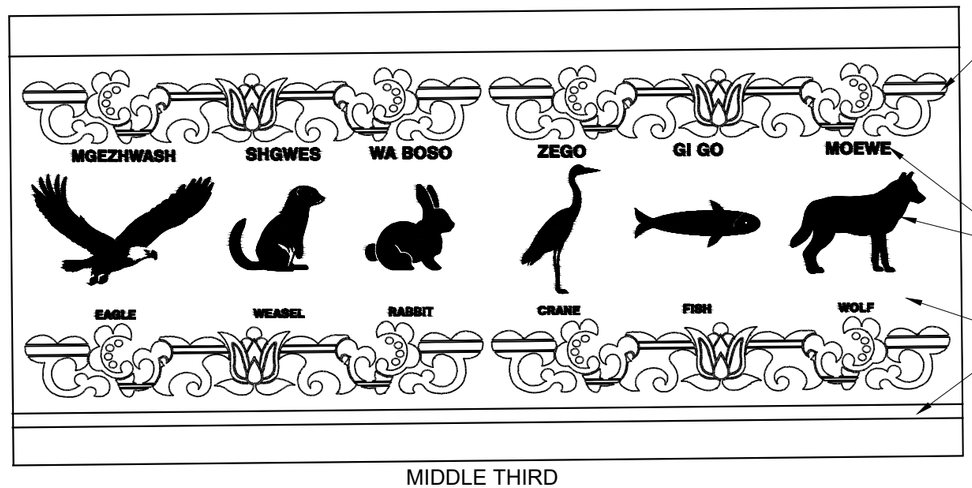
STATE PROJECT NUMBER

1590-18-82



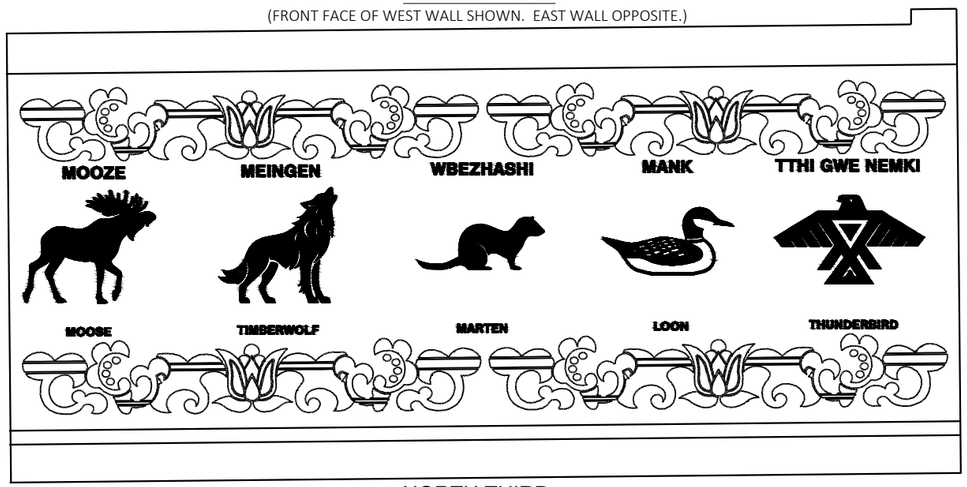
SOUTH THIRD

(FRONT FACE OF WEST WALL SHOWN. EAST WALL OPPOSITE.)



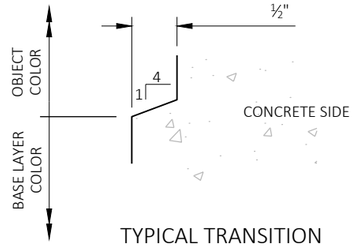
MIDDLE THIRD

(FRONT FACE OF WEST WALL SHOWN. EAST WALL OPPOSITE.)



NORTH THIRD

(FRONT FACE OF WEST WALL SHOWN. EAST WALL OPPOSITE.)



TYPICAL TRANSITION BETWEEN LEVELS

NOTES & LEGEND

BOX CULVERT WALLS AESTHETIC DETAILS TO BE PAID UNDER BID ITEM "CONCRETE STAINING MULTI-COLOR B-21-35" AND "ARCHITECTURAL SURFACE TREATMENT B-21-35".

FLOWER PATTERNS TO BE PLACED ALONG 1% SLOPE ALONG LENGTH OF BOX. ANIMAL PATTERNS AND TEXT TO BE PLACED LEVEL.

⧓ LIMITS OF BID ITEMS "CONCRETE STAINING MULTI-COLOR B-21-35" AND "ARCHITECTURAL SURFACE TREATMENT B-21-35".

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-21-35

DRAWN BY JAL | PLANS CK'D WAH

BOX CULVERT EXTERIOR WALL AESTHETIC DETAILS

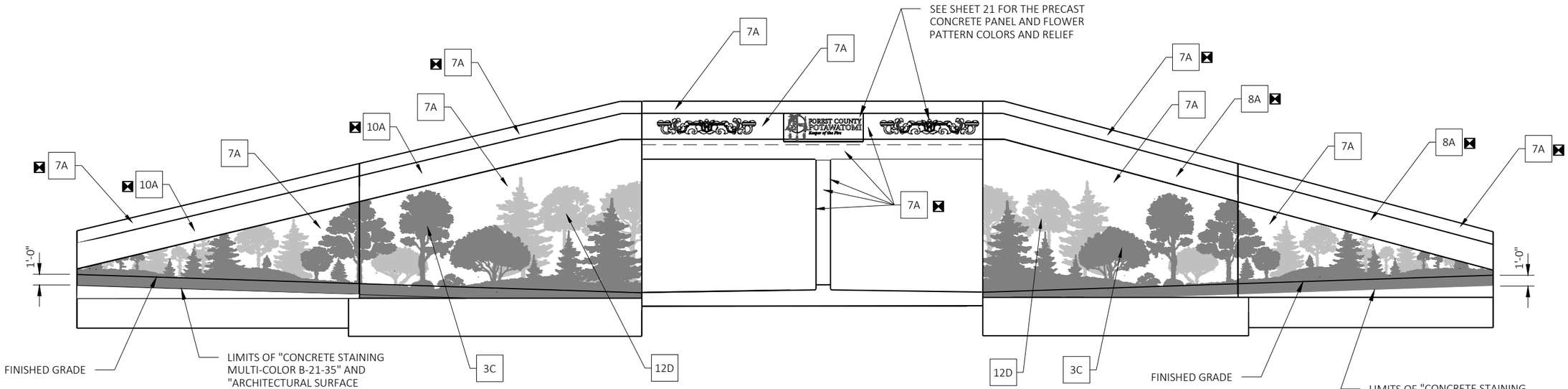
SHEET 18 OF 22

103

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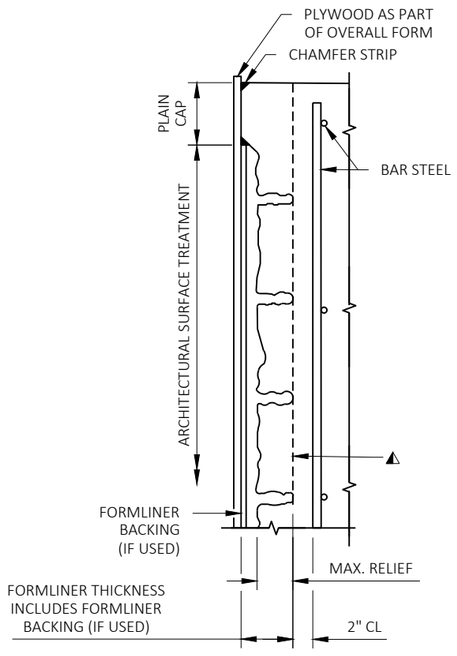
STATE PROJECT NUMBER

1590-18-82



WING 2
(F.F. ELEVATION LOOKING NORTH)

WING 1
(F.F. ELEVATION LOOKING NORTH)



SECTION THRU FORMLINER

CONCRETE STAINING TABLE

MARK	COLOR GROUP	AMS-STD
1	BLUE	35056
2	BLUE	35240
3	GREEN	34062
4	RED	31136
5	ORANGE	32473
6	PURPLE	37100
7	GRAY	36495
8	WHITE	37925
9	YELLOW	33655
10	BLACK	37038
11	ORANGE	32246
12	GREEN	34230

RELIEF TABLE

MARK	RELIEF DEPTH
A	0"
B	½"
C	¾"
D	1 ½"

⚠ STRUCTURAL CONCRETE ASSUMED TO THIS LINE.

NOTE: FORMLINER PATTERN SHOWN IN THIS DETAIL IS FOR ILLUSTRATION PURPOSES ONLY, SEE OTHER DETAILS FOR SPECIFIC FORMLINER PATTERNS.

NOTES & LEGEND

BOX CULVERT WALLS AND WING WALL AESTHETIC DETAILS TO BE PAID UNDER BID ITEM "CONCRETE STAINING MULTI-COLOR B-21-35" AND "ARCHITECTURAL SURFACE TREATMENT B-21-35".

"CONCRETE STAINING B-21-35" TO BE APPLIED TO FRONT OF HEADER AND TOP SLAB, BACK FACE OF PARAPETS, ENDS OF INTERIOR WALL AND ON BOTH FACES OF INTERIOR WALL FOR THE LENGTH OF BOX.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-21-35

DRAWN BY JAL | PLANS CK'D WAH

WING WALL 1 & 2 AESTHETIC DETAILS

SHEET 19 OF 22
104

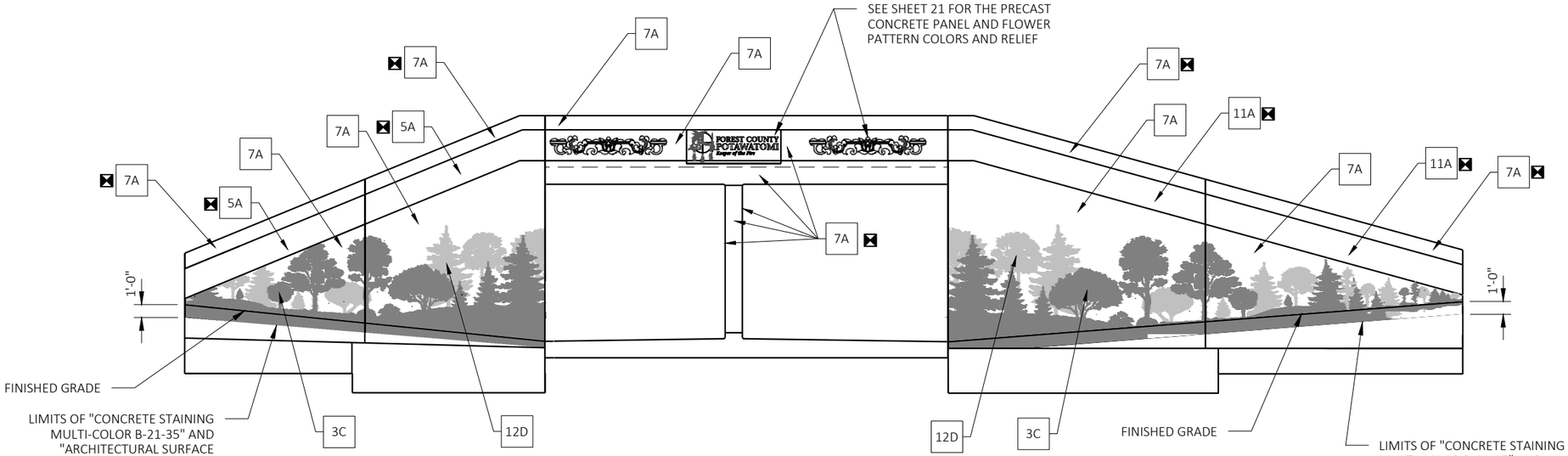
SCALE =

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STATE PROJECT NUMBER

1590-18-82



WING 4

(F.F. ELEVATION LOOKING SOUTH)

WING 3

(F.F. ELEVATION LOOKING SOUTH)

CONCRETE STAINING TABLE

MARK	COLOR GROUP	AMS-STD
1	BLUE	35056
2	BLUE	35240
3	GREEN	34062
4	RED	31136
5	ORANGE	32473
6	PURPLE	37100
7	GRAY	36495
8	WHITE	37925
9	YELLOW	33655
10	BLACK	37038
11	ORANGE	32246
12	GREEN	34230

RELIEF TABLE

MARK	RELIEF DEPTH
A	0"
B	½"
C	¾"
D	1 ½"

NOTES & LEGEND

BOX CULVERT WALLS AND WING WALL AESTHETIC DETAILS TO BE PAID UNDER BID ITEM "CONCRETE STAINING MULTI-COLOR B-21-35" AND "ARCHITECTURAL SURFACE TREATMENT B-21-35".

7A "CONCRETE STAINING B-21-35" TO BE APPLIED TO FRONT OF HEADER AND TOP SLAB, BACK FACE OF PARAPETS, ENDS OF INTERIOR WALL AND ON BOTH FACES OF INTERIOR WALL FOR THE LENGTH OF BOX.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-21-35

DRAWN BY JAL | PLANS CK'D WAH

WING WALL 3 & 4 AESTHETIC DETAILS

SHEET 20 OF 22

105

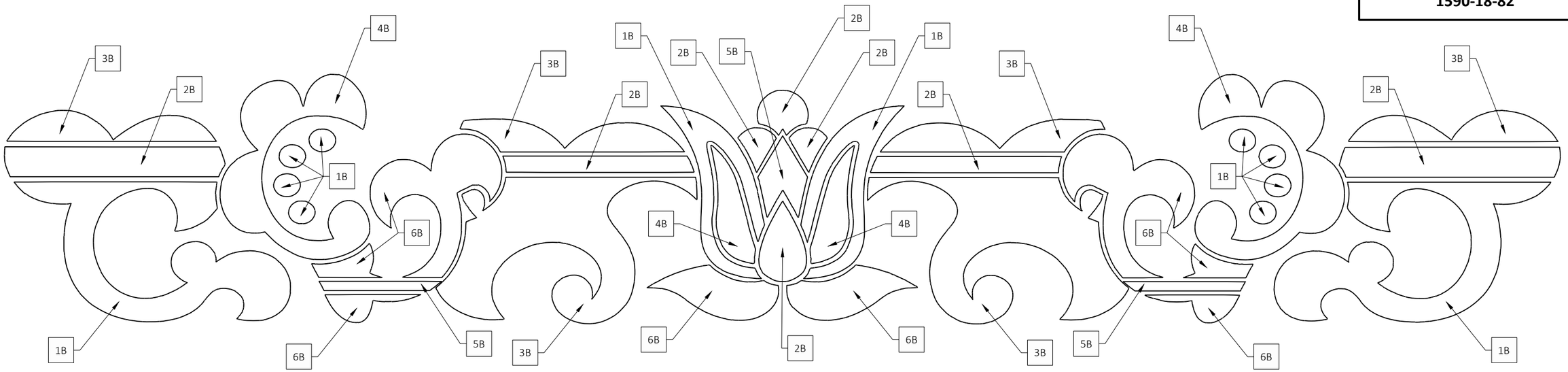
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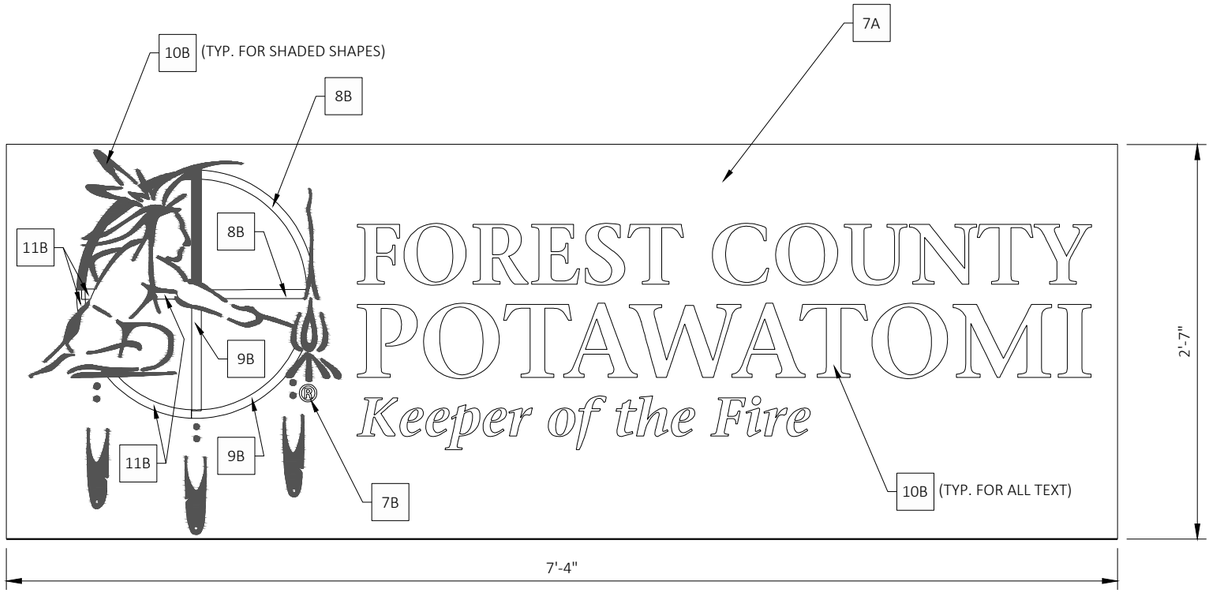
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STATE PROJECT NUMBER

1590-18-82



FLOWER PATTERN STAINING DETAIL



PRECAST CONCRETE PANEL STAINING DETAIL

CONCRETE STAINING TABLE

MARK	COLOR GROUP	AMS-STD
1	BLUE	35056
2	BLUE	35240
3	GREEN	34062
4	RED	31136
5	ORANGE	32473
6	PURPLE	37100
7	GRAY	36495
8	WHITE	37925
9	YELLOW	33655
10	BLACK	37038
11	ORANGE	32246
12	GREEN	34230

RELIEF TABLE

MARK	RELIEF DEPTH
A	0"
B	½"
C	¾"
D	1 ½"

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-21-35

DRAWN BY JAL | PLANS CK'D WAH

AESTHETIC DETAILS

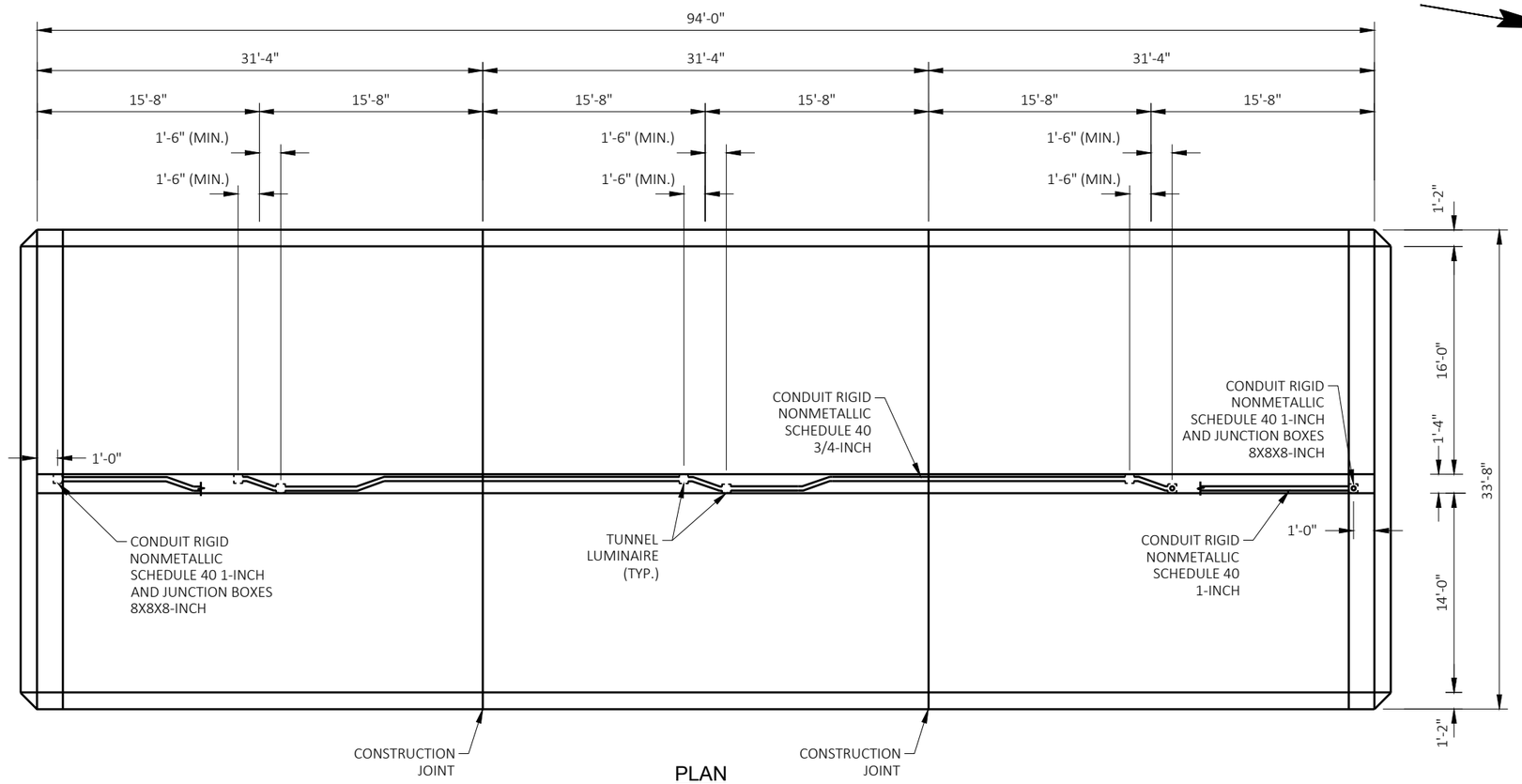
SHEET 21 OF 22

106

SCALE =

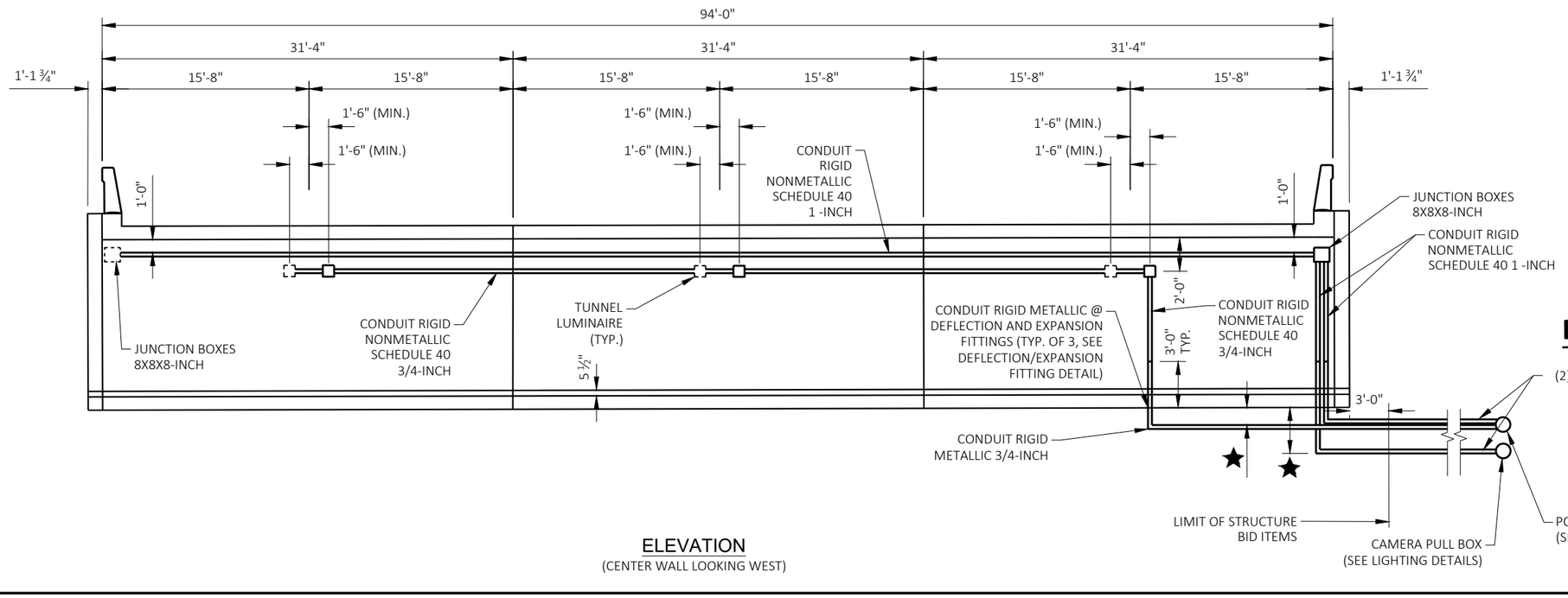
STATE PROJECT NUMBER

1590-18-82



PLAN

(2-CELL CONCRETE BOX CULVERT)



ELEVATION

(CENTER WALL LOOKING WEST)

NOTES &LEGEND

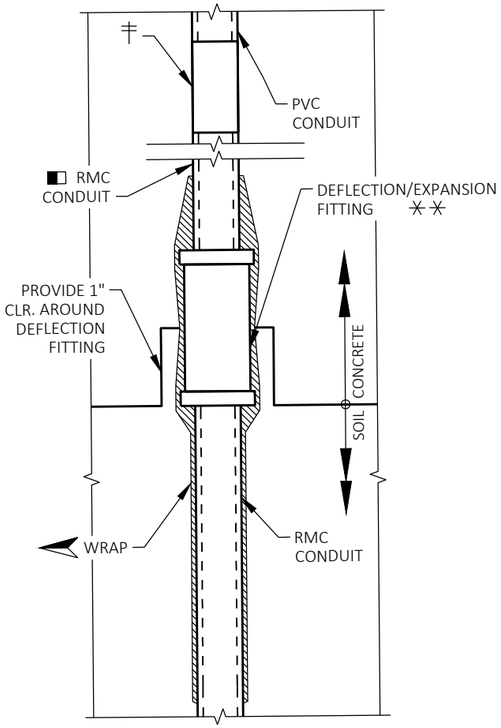
- USE 1" OR 3/4" DIA. RIGID METALLIC (RMC) CONDUIT AT FITTINGS. PROVIDE RMC FOR 3'-0" MIN. ON EACH SIDE OF JOINT OPENINGS UNLESS NOTED OTHERWISE.
- NONMETALLIC CONDUIT TO METALLIC CONDUIT ADAPTER FITTING (UL OR NRTL LISTED FOR ELECTRICAL USE SHALL BE USED)
- SPONGE RUBBER WRAP TO BE AASHTO M153, TYPE 1 OR EQUIVALENT - ¼" MINIMUM THICKNESS. PROVIDE WRAP FOR THE ENTIRE LENGTH OF THE FITTING OR AS SHOWN, SPONGE RUBBER WRAP INCIDENTAL TO "CONDUIT RIGID METALLIC 1-INCH" AND "CONDUIT RIGID METALLIC 3/4-INCH".
- ** DEFLECTION/EXPANSION FITTING REQUIREMENTS:
  UP TO ¾" CONDUIT CONTRACTION OR EXPANSION AND UP TO 30 DEGREES OF ANGULAR MISALIGNMENT IN ANY DIRECTION WITH BONDING JUMPER.
- ★ CONDUIT SHALL BE BURIED 1'-6" MIN. TO 3'-0" MAX.

CONDUIT SHALL BE EMBEDDED 2" CLEAR.

CONDUIT FITTINGS, CONDUIT BENDS, AND ADAPTER FITTINGS ARE INCIDENTAL TO CONDUIT WORK.

CONDUIT BENDS SHALL CONFORM TO THE NATIONAL ELECTRIC CODE.

PROVIDE JUNCTION BOXES FROM THE APPROVED PRODUCTS LIST.



DEFLECTION/EXPANSION FITTING

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-21-35

DRAWN BY JAL | PLANS CK'D WAH

LIGHTING AND SECURITY DETAILS

SHEET 22 OF 22

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SCALE =

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8

DIVISION - USH 8 ATV TRAIL

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	1.25	1.33	0.70	
							NOTE 1	NOTE 2	NOTE 3		NOTE 1		NOTE 5	NOTE 7	NOTE 8
100+20.00	10020.00	0.00	15.29	0.00	0.01	0.76	0	0	0	0	0	0	0	0	0
100+50.00	10050.00	30.00	0.00	0.00	25.40	0.00	8	0	14	0	8	18	0	0	-10
101+00.00	10100.00	50.00	10.72	0.00	7.33	0.54	10	0	30	0	18	55	0	0	-37
101+50.00	10150.00	50.00	0.00	0.00	32.59	0.00	10	0	37	0	28	101	0	0	-73
102+00.00	10200.00	50.00	0.00	0.00	33.56	0.00	0	0	61	0	28	178	0	0	-150
102+50.00	10250.00	50.00	0.00	0.00	51.31	0.00	0	0	79	0	28	276	0	0	-248
102+75.00	10275.00	25.00	0.00	0.00	49.67	0.00	0	0	47	0	28	335	0	0	-307
103+00.00	10300.00	25.00	0.00	0.00	50.74	0.00	0	0	46	0	28	393	0	0	-365
103+50.00	10350.00	50.00	0.00	0.00	23.18	0.00	0	0	68	0	28	478	0	0	-450
104+00.00	10400.00	50.00	0.00	0.00	14.14	0.00	0	0	35	0	28	521	0	0	-493
104+50.00	10450.00	50.00	6.75	0.00	0.62	0.34	6	0	14	0	34	539	0	0	-505
105+00.00	10500.00	50.00	14.33	0.00	0.23	0.72	20	0	1	1	54	540	1	1	-485
105+50.00	10550.00	50.00	10.26	0.00	2.10	0.51	23	0	2	1	77	543	3	1	-464
106+00.00	10600.00	50.00	0.51	0.00	5.67	0.03	10	0	7	0	87	551	3	1	-463
106+50.00	10650.00	50.00	0.00	0.00	26.05	0.00	0	0	29	0	87	588	3	1	-499
107+00.00	10700.00	50.00	0.00	0.00	8.02	0.00	0	0	32	0	87	628	3	1	-539
107+50.00	10750.00	50.00	43.30	0.00	0.00	2.17	40	0	7	2	127	636	5	3	-506
108+00.00	10800.00	50.00	130.80	0.00	0.00	6.54	161	0	0	8	288	636	16	8	-340
108+50.00	10850.00	50.00	163.53	0.00	0.00	8.18	273	0	0	14	561	636	35	18	-57
109+00.00	10900.00	50.00	214.14	0.00	0.00	10.71	350	0	0	17	911	636	57	30	305
109+50.00	10950.00	50.00	320.06	0.00	0.00	16.00	495	0	0	25	1,406	636	90	48	817
110+00.00	11000.00	50.00	312.79	0.00	0.00	15.64	586	0	0	29	1,992	636	129	68	1,424
110+50.00	11050.00	50.00	229.89	0.00	0.00	11.49	502	0	0	25	2,494	636	162	85	1,943
111+00.00	11100.00	50.00	246.77	0.00	0.00	12.34	441	0	0	22	2,935	636	192	101	2,400
111+50.00	11150.00	50.00	275.27	0.00	0.00	13.76	483	0	0	24	3,418	636	223	118	2,899
112+00.00	11200.00	50.00	214.17	0.00	0.00	10.71	453	0	0	23	3,871	636	254	134	3,368
112+50.00	11250.00	50.00	232.78	0.00	0.00	11.64	414	0	0	21	4,285	636	282	148	3,797
113+00.00	11300.00	50.00	210.68	0.00	0.00	10.53	411	0	0	21	4,696	636	310	163	4,223
113+50.00	11350.00	50.00	196.09	0.00	0.00	9.80	377	0	0	19	5,073	636	335	176	4,613
114+00.00	11400.00	50.00	146.20	0.00	0.00	7.31	317	0	0	16	5,390	636	356	188	4,941
114+50.00	11450.00	50.00	98.94	0.00	0.02	4.95	227	0	0	11	5,617	636	371	195	5,176
115+00.00	11500.00	50.00	92.92	0.00	0.03	4.65	178	0	0	9	5,795	636	383	202	5,360
115+50.00	11550.00	50.00	78.39	0.00	0.13	3.92	159	0	0	8	5,954	636	394	207	5,525
116+00.00	11600.00	50.00	22.52	0.00	10.73	1.13	93	0	10	5	6,047	649	400	211	5,609
116+50.00	11650.00	50.00	10.57	0.00	4.31	0.53	31	0	14	2	6,078	666	403	212	5,624
116+71.70	11671.70	71.70	10.56	0.00	0.03	0.53	44	0	14	2	6,122	684	406	214	5,652

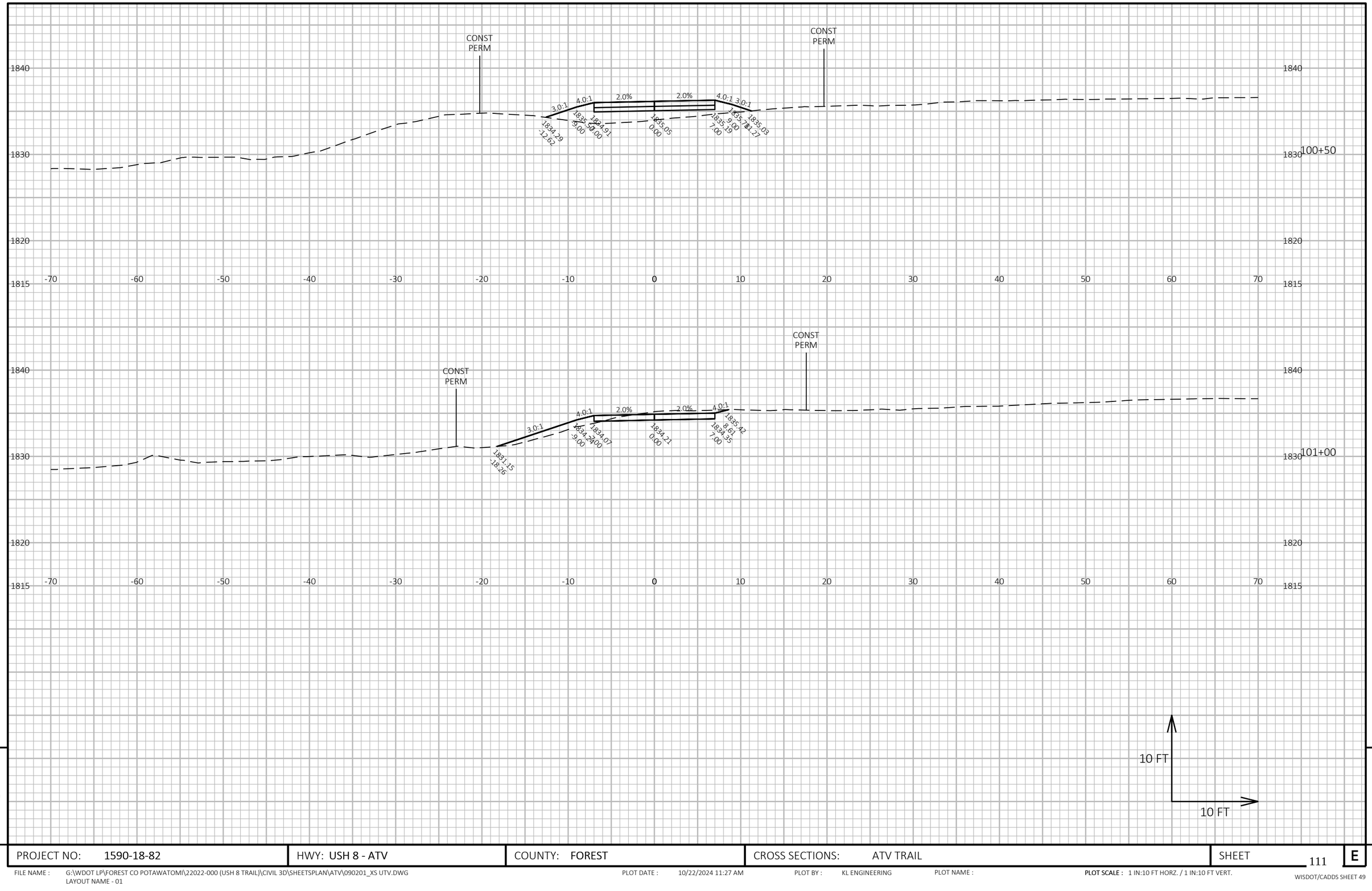
DIVISION - USH 8 ATV TRAIL (CONTINUED)

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	1.25	1.33 NOTE 5	0.70 NOTE 7	NOTE 8
117+07.34	11707.34	0.00	20.32	0.00	0.01	1.02	0	0	0	0	6,122	684	406	214	5,652
117+50.00	11750.00	42.66	29.98	0.00	0.00	1.50	40	0	0	2	6,162	684	408	215	5,693
118+00.00	11800.00	50.00	14.74	0.00	0.03	0.74	41	0	0	2	6,203	684	411	216	5,736
118+50.00	11850.00	50.00	3.28	0.00	2.20	0.16	17	0	2	1	6,220	686	412	217	5,751
119+00.00	11900.00	50.00	7.64	0.00	0.63	0.38	10	0	3	1	6,230	690	414	218	5,758
119+50.00	11950.00	50.00	37.56	0.00	0.01	1.88	42	0	1	2	6,272	691	416	219	5,800
120+00.00	12000.00	50.00	51.19	0.00	0.00	2.56	82	0	0	4	6,354	691	422	222	5,885
120+50.00	12050.00	50.00	77.65	0.00	0.00	3.88	119	0	0	6	6,473	691	430	226	6,008
121+00.00	12100.00	50.00	125.17	0.00	0.00	6.26	188	0	0	9	6,661	691	442	232	6,202
121+50.00	12150.00	50.00	156.20	0.00	0.00	7.81	261	0	0	13	6,922	691	459	242	6,472
122+00.00	12200.00	50.00	209.67	0.00	0.00	10.48	339	0	0	17	7,261	691	481	253	6,823
122+50.00	12250.00	50.00	289.25	0.00	0.00	14.46	462	0	0	23	7,723	691	512	270	7,301
123+00.00	12300.00	50.00	330.80	0.00	0.00	16.54	574	0	0	29	8,297	691	551	290	7,896
123+50.00	12350.00	50.00	383.59	0.00	0.00	19.18	661	0	0	33	8,958	691	595	313	8,580
124+00.00	12400.00	50.00	323.19	0.00	0.00	16.16	654	0	0	33	9,612	691	638	336	9,257
124+50.00	12450.00	50.00	231.88	0.00	0.00	11.59	514	0	0	26	10,126	691	673	354	9,789
125+00.00	12500.00	50.00	68.35	0.00	0.00	3.42	278	0	0	14	10,404	691	692	364	10,077
125+50.00	12550.00	50.00	0.00	0.00	68.69	0.00	63	0	64	3	10,467	771	696	366	10,062
126+00.00	12600.00	50.00	0.00	0.00	89.89	0.00	0	0	147	0	10,467	955	696	366	9,878
126+50.00	12650.00	50.00	0.00	0.00	46.77	0.00	0	0	127	0	10,467	1,114	696	366	9,719
127+00.00	12700.00	50.00	0.00	0.00	43.50	0.00	0	0	84	0	10,467	1,219	696	366	9,614
127+50.00	12750.00	50.00	0.00	0.00	36.76	0.00	0	0	74	0	10,467	1,311	696	366	9,522
128+00.00	12800.00	50.00	0.00	0.00	44.26	0.00	0	0	75	0	10,467	1,405	696	366	9,428
128+50.00	12850.00	50.00	0.00	0.00	45.12	0.00	0	0	83	0	10,467	1,509	696	366	9,324
129+00.00	12900.00	50.00	0.14	0.00	52.05	0.01	0	0	90	0	10,467	1,621	696	366	9,212
129+50.00	12950.00	50.00	0.33	0.00	67.24	0.02	0	0	110	0	10,467	1,759	696	366	9,074
130+00.00	13000.00	50.00	0.00	0.00	84.08	0.00	0	0	140	0	10,467	1,934	696	366	8,899
130+50.00	13050.00	50.00	0.00	0.00	151.78	0.00	0	0	218	0	10,467	2,206	696	366	8,627
131+00.00	13100.00	50.00	0.00	0.00	143.19	0.00	0	0	273	0	10,467	2,548	696	366	8,286
131+50.00	13150.00	50.00	0.00	0.00	82.01	0.00	0	0	209	0	10,467	2,809	696	366	8,024
131+91.53	13191.53	41.53	0.00	0.00	43.65	0.00	0	0	97	0	10,467	2,930	696	366	7,903

DIVISION - USH 8 ATV TRAIL (CONTINUED)

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	1.25	1.33 NOTE 5	0.70 NOTE 7	NOTE 8
136+04.00	13604.00	0.00	18.16	0.00	0.17	0.91	0	0	0	0	10,467	2,930	696	366	7,903
136+50.00	13650.00	46.00	155.65	0.00	0.00	7.78	148	0	0	7	10,615	2,930	705	371	8,056
137+00.00	13700.00	50.00	274.13	0.00	0.00	13.71	398	0	0	20	11,013	2,930	732	385	8,468
137+50.00	13750.00	50.00	455.48	0.00	0.00	22.77	676	0	0	34	11,689	2,930	777	409	9,168
138+00.00	13800.00	50.00	488.10	0.00	0.00	24.40	874	0	0	44	12,563	2,930	835	440	10,073
138+50.00	13850.00	50.00	645.92	0.00	0.00	32.30	1,050	0	0	53	13,613	2,930	906	477	11,160
139+00.00	13900.00	50.00	796.39	0.00	0.00	39.82	1,335	0	0	67	14,948	2,930	995	524	12,542
139+50.00	13950.00	50.00	912.77	0.00	0.00	45.64	1,583	0	0	79	16,531	2,930	1,100	579	14,180
140+00.00	14000.00	50.00	933.10	0.00	0.00	46.66	1,709	0	0	85	18,240	2,930	1,213	638	15,948
140+50.00	14050.00	50.00	815.07	0.00	0.00	40.75	1,619	0	0	81	19,859	2,930	1,321	695	17,624
141+00.00	14100.00	50.00	555.79	0.00	0.00	27.79	1,269	0	0	63	21,128	2,930	1,404	739	18,937
141+50.00	14150.00	50.00	321.63	0.00	0.00	16.08	812	0	0	41	21,940	2,930	1,459	768	19,778
142+00.00	14200.00	50.00	69.46	0.00	0.00	3.47	362	0	0	18	22,302	2,930	1,483	781	20,153
142+50.00	14250.00	50.00	44.03	0.00	0.00	2.20	105	0	0	5	22,407	2,930	1,490	784	20,261
143+00.00	14300.00	50.00	17.23	0.00	1.85	0.86	57	0	2	3	22,464	2,933	1,494	786	20,318
143+50.00	14350.00	50.00	57.60	0.00	0.00	2.88	69	0	2	3	22,533	2,935	1,498	788	20,386
144+00.00	14400.00	50.00	123.96	0.00	0.00	6.20	168	0	0	8	22,701	2,935	1,508	794	20,560
144+50.00	14450.00	50.00	116.16	0.00	0.00	5.81	222	0	0	11	22,923	2,935	1,523	802	20,790
145+00.00	14500.00	50.00	68.77	0.00	0.00	3.44	171	0	0	9	23,094	2,935	1,535	808	20,967
145+50.00	14550.00	50.00	8.37	0.00	0.00	0.42	71	0	0	4	23,165	2,935	1,540	811	21,041
146+00.00	14600.00	50.00	68.19	0.00	0.00	3.41	71	0	0	4	23,236	2,935	1,545	813	21,114
146+50.00	14650.00	50.00	122.51	0.00	0.00	6.13	177	0	0	9	23,413	2,935	1,557	820	21,298
147+00.00	14700.00	50.00	114.55	0.00	0.00	5.73	220	0	0	11	23,633	2,935	1,572	827	21,525
147+50.00	14750.00	50.00	94.85	0.00	0.00	4.74	194	0	0	10	23,827	2,935	1,585	834	21,726
148+00.00	14800.00	50.00	93.36	0.00	0.00	4.67	174	0	0	9	24,001	2,935	1,597	841	21,907
148+50.00	14850.00	50.00	127.99	0.00	0.00	6.40	205	0	0	10	24,206	2,935	1,611	848	22,119
149+00.00	14900.00	50.00	178.63	0.00	0.00	8.93	284	0	0	14	24,490	2,935	1,629	858	22,413
149+50.00	14950.00	50.00	167.52	0.00	0.00	8.38	321	0	0	16	24,811	2,935	1,651	869	22,745
150+00.00	15000.00	50.00	142.46	0.00	0.00	7.12	287	0	0	14	25,098	2,935	1,669	879	23,042
150+50.00	15050.00	50.00	126.74	0.00	0.00	6.34	249	0	0	12	25,347	2,935	1,685	887	23,299
151+00.00	15100.00	50.00	115.40	0.00	0.00	5.77	224	0	0	11	25,571	2,935	1,700	895	23,531
151+50.00	15150.00	50.00	102.51	0.00	0.00	5.13	202	0	0	10	25,773	2,935	1,713	902	23,740
152+00.00	15200.00	50.00	89.64	0.00	0.00	4.48	178	0	0	9	25,951	2,935	1,725	908	23,924
152+50.00	15250.00	50.00	31.16	0.00	2.07	1.56	112	0	2	6	26,063	2,938	1,733	912	24,038
153+00.00	15300.00	50.00	5.61	0.00	2.87	0.28	34	0	5	2	26,097	2,944	1,736	914	24,067
153+50.00	15350.00	50.00	0.00	0.00	10.70	0.00	5	0	13	0	26,102	2,960	1,736	914	24,056
154+00.00	15400.00	50.00	7.21	0.00	0.42	0.36	7	0	10	0	26,109	2,973	1,736	914	24,050
154+50.00	15450.00	50.00	0.00	0.00	6.88	0.00	7	0	7	0	26,116	2,981	1,736	914	24,048
155+00.00	15500.00	50.00	5.67	0.00	1.83	0.28	5	0	8	0	26,121	2,991	1,736	914	24,043
155+21.24	15521.24	21.24	14.75	0.00	0.36	0.74	8	0	1	0	26,129	2,993	1,736	914	24,050

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
5 - EXPANDED EBS	WILL BE BACKFILLED WITH SELECT BORROW
7 - REDUCED EBS IN FILL	REDUCED EBS EXCAVATION THAT CAN BE USED IN FILL
8 - MASS ORDINATE	CUT - EXPANDED FILL + REDUCED EBS IN FILL



9

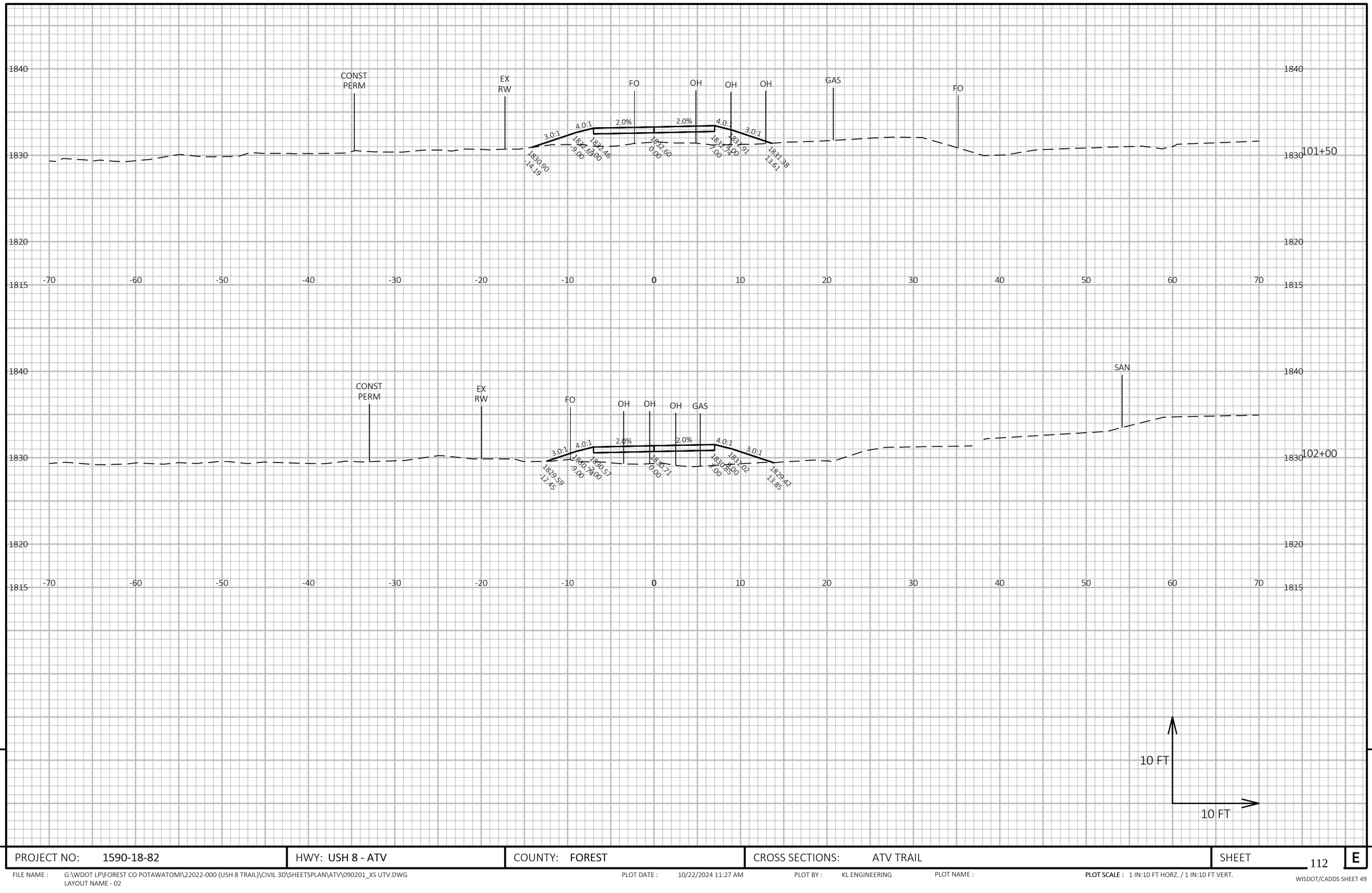
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PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 111	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 01

PLOT DATE : 10/22/2024 11:27 AM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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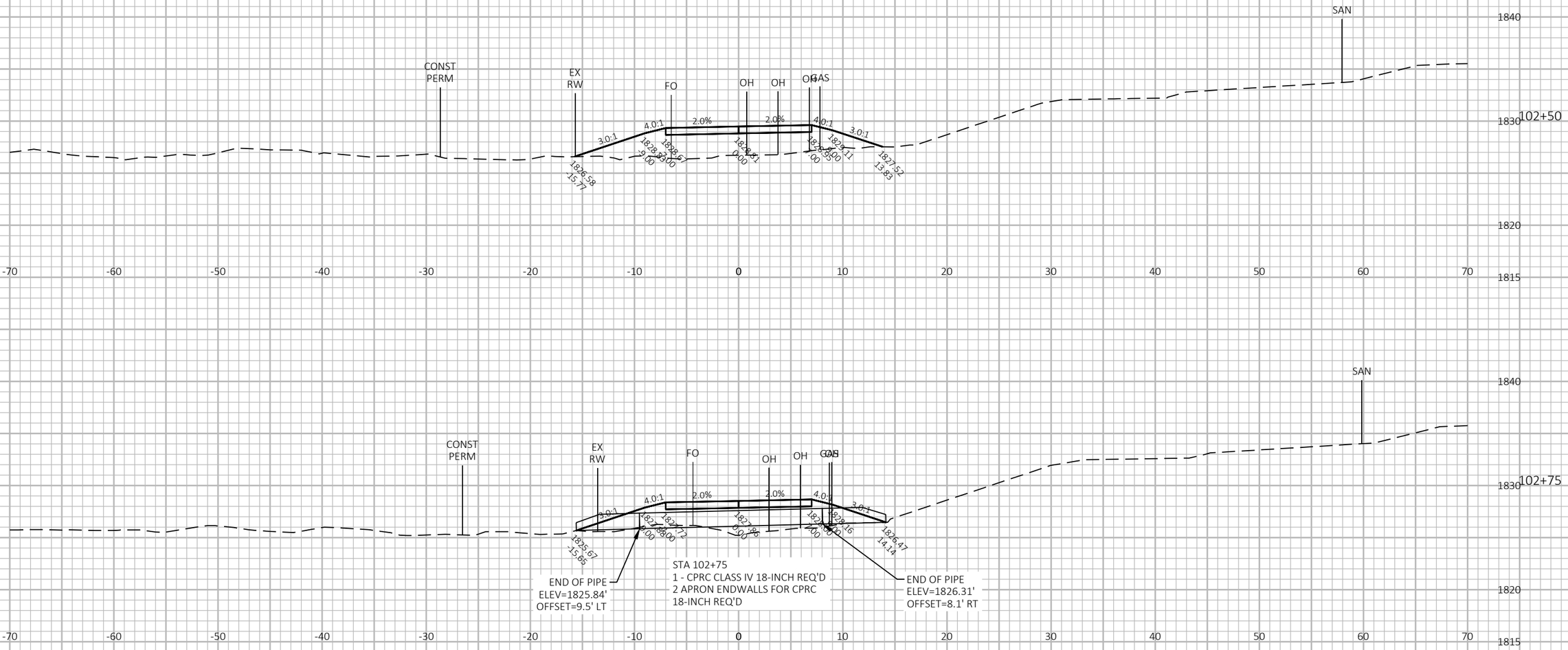
PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 112	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 02

PLOT DATE : 10/22/2024 11:27 AM PLOT BY : KL ENGINEERING PLOT NAME :

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

WISDOT/CADDS SHEET 49



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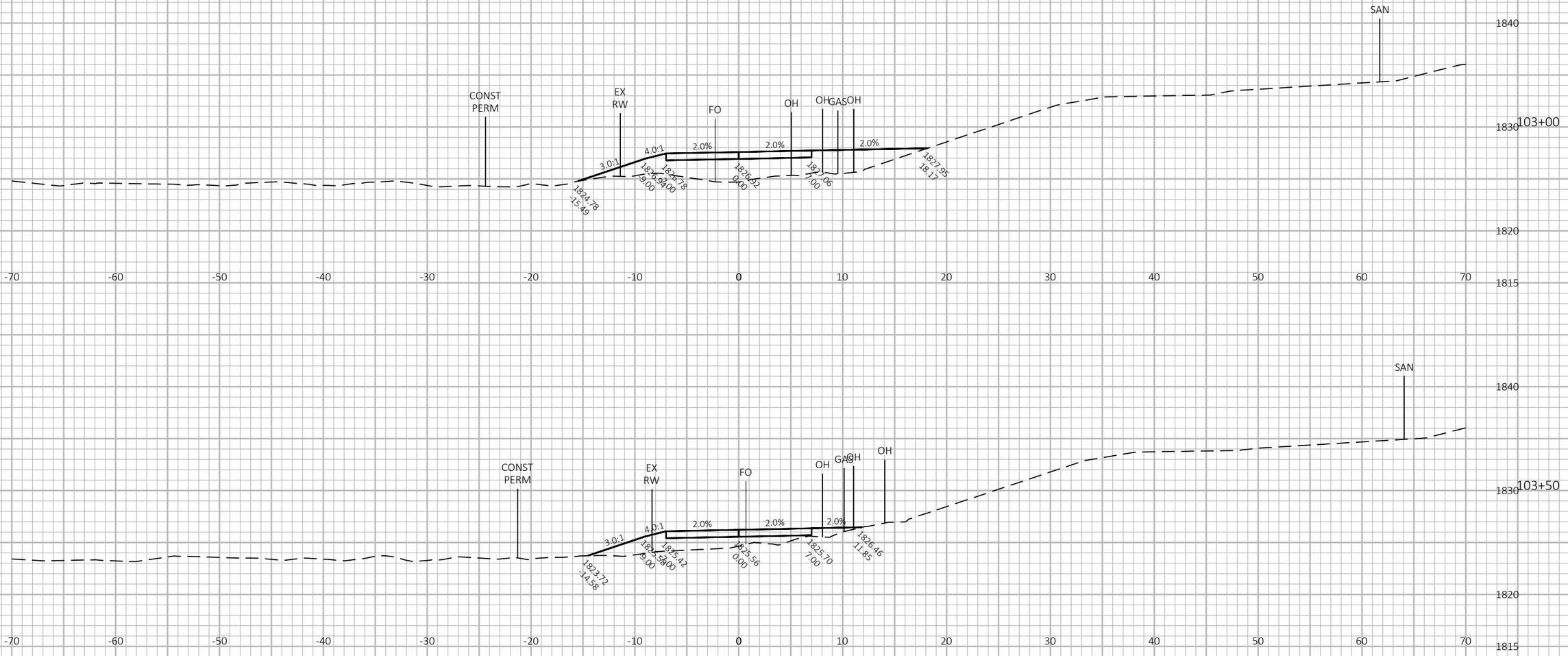
PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 113	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 03

PLOT DATE : 10/22/2024 11:27 AM PLOT BY : KL ENGINEERING PLOT NAME :

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

WISDOT/CADDS SHEET 49



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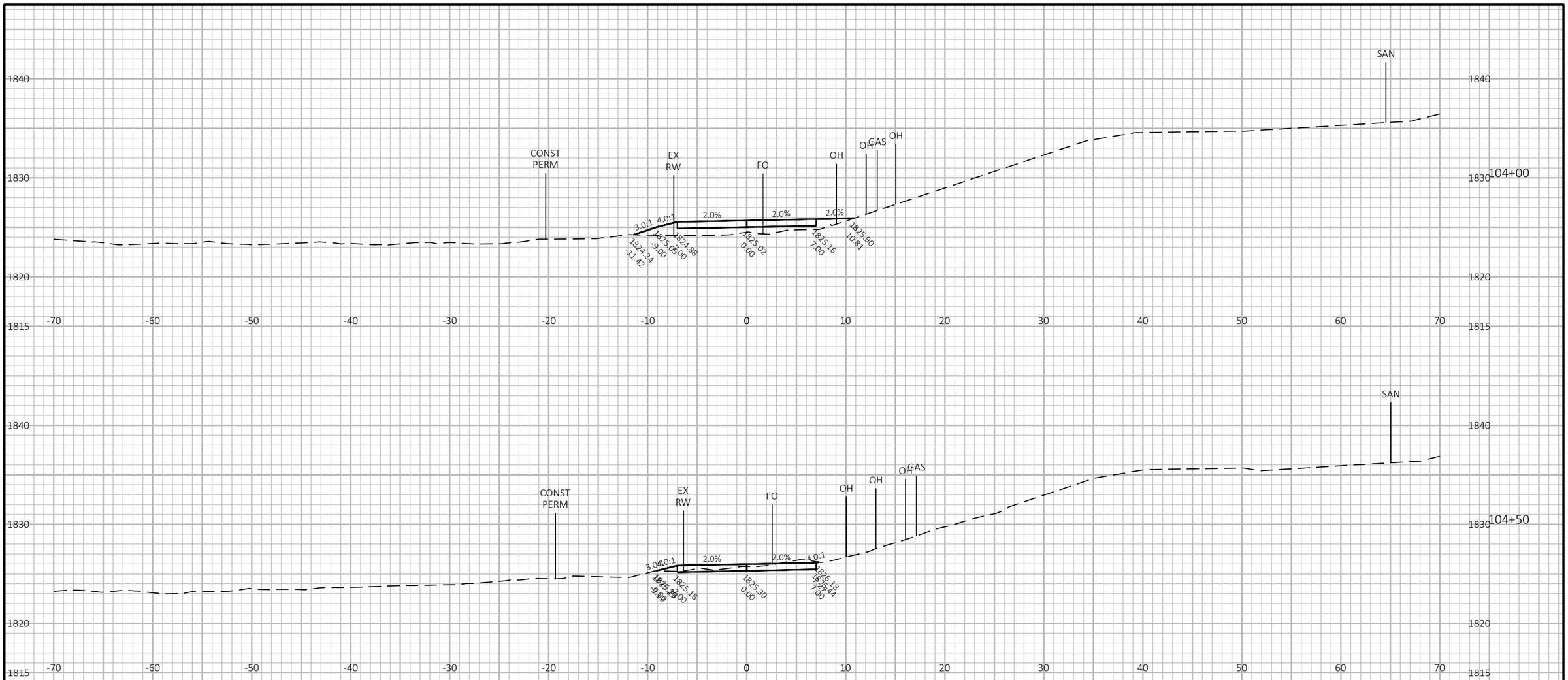
PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 114	E

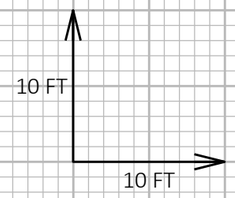
FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 04

PLOT DATE : 10/22/2024 11:27 AM PLOT BY : KL ENGINEERING PLOT NAME :

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

WISDOT/CADDS SHEET 49





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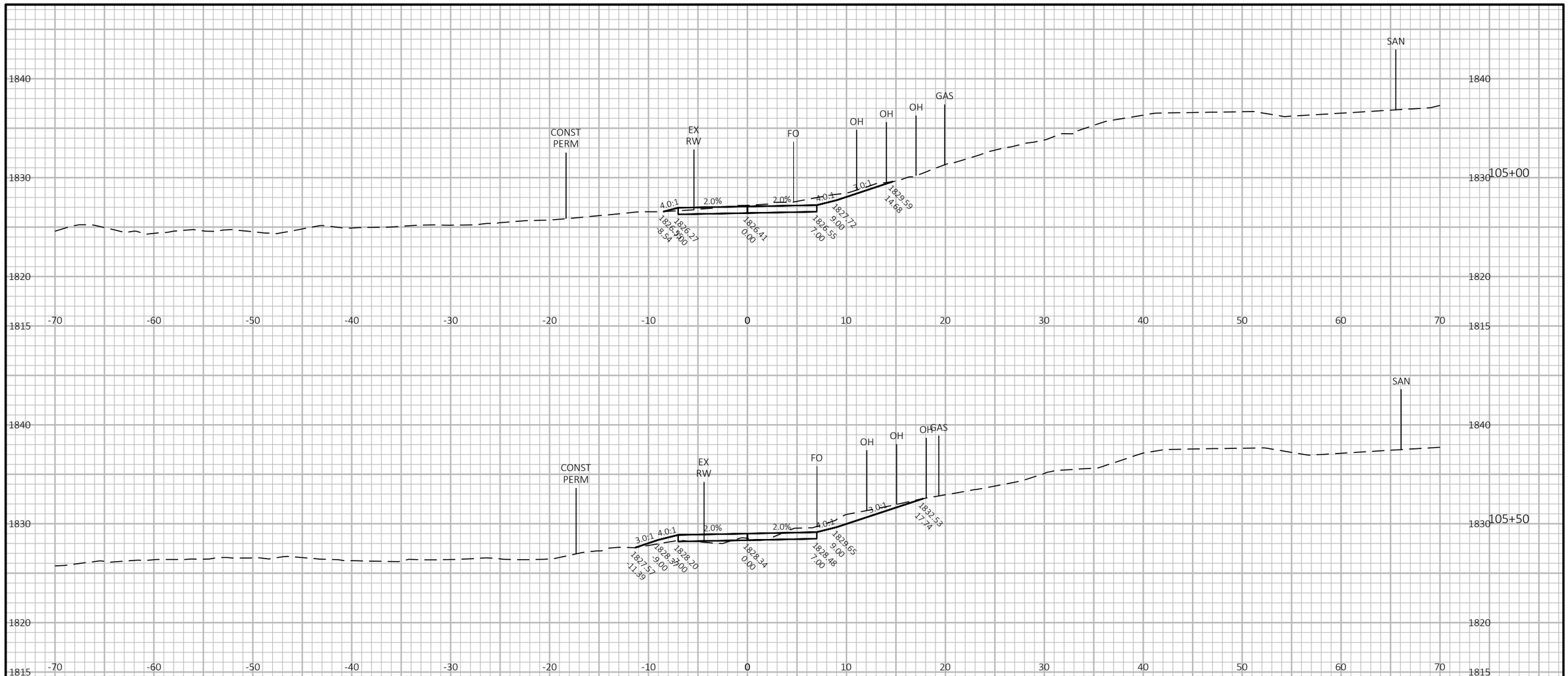
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PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 115	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 05

PLOT DATE : 10/22/2024 11:27 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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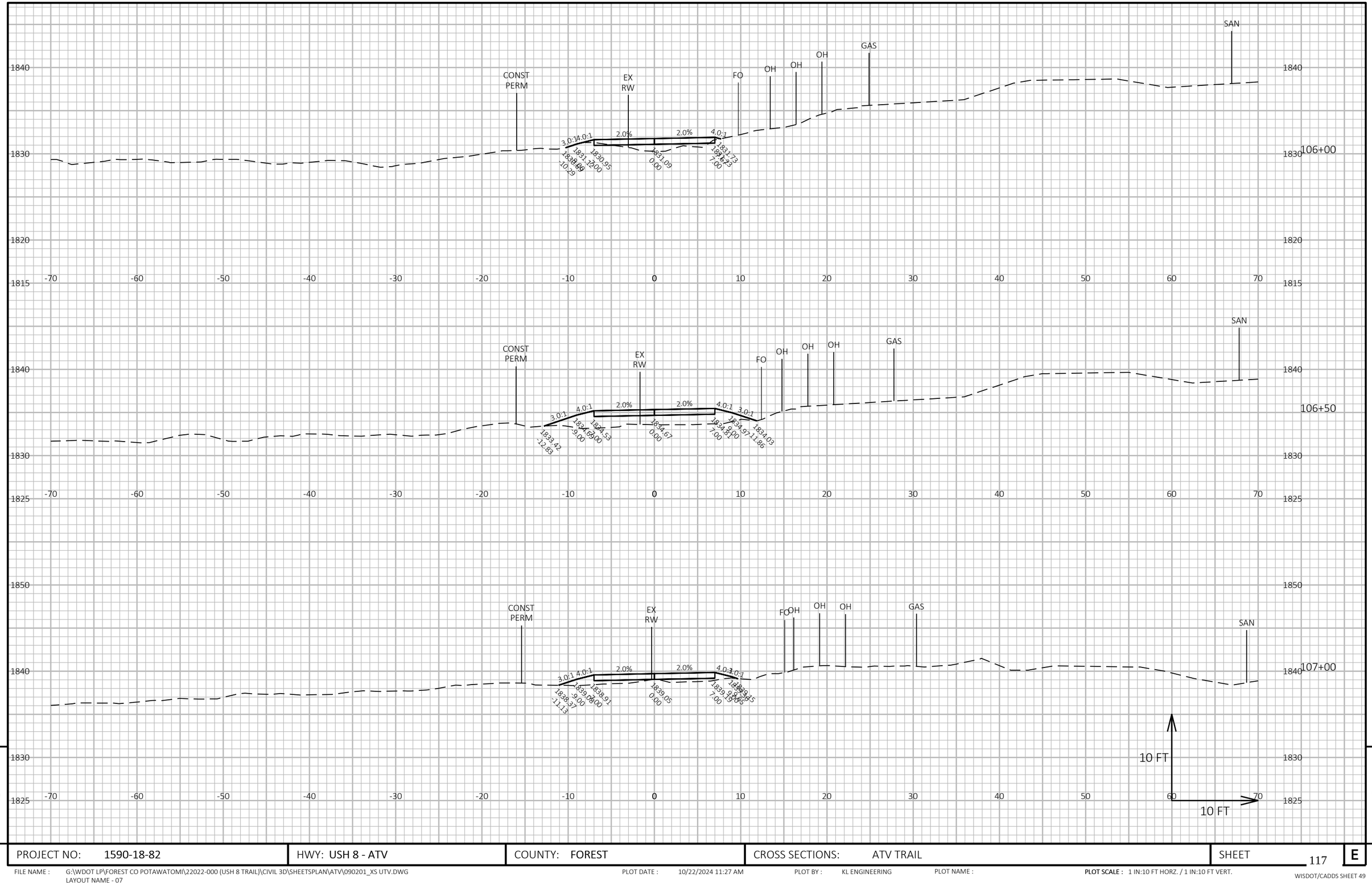
PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 116	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 06

PLOT DATE : 10/22/2024 11:27 AM PLOT BY : KL ENGINEERING PLOT NAME :

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

WISDOT/CADDS SHEET 49



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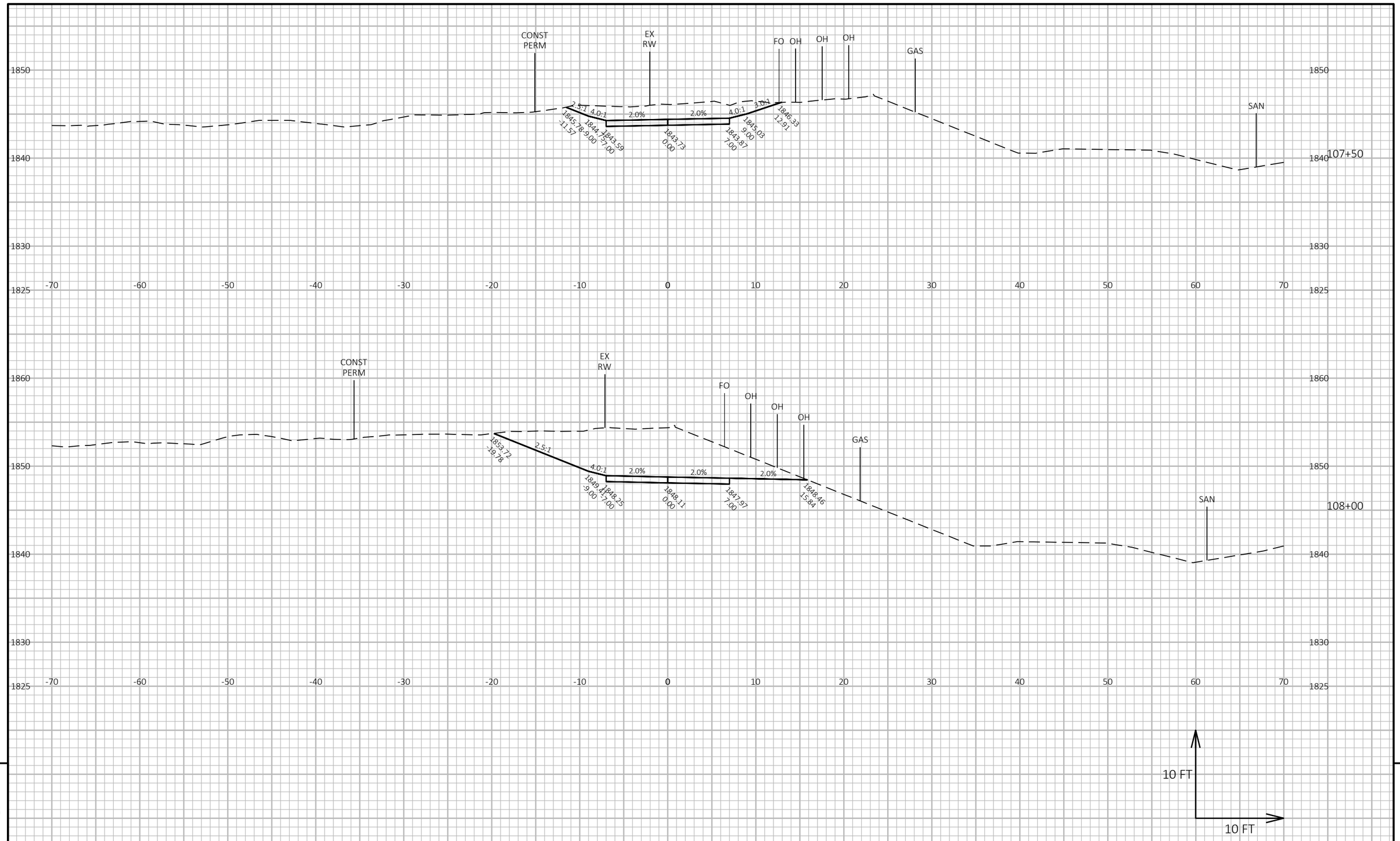
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PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 117	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 07

PLOT DATE : 10/22/2024 11:27 AM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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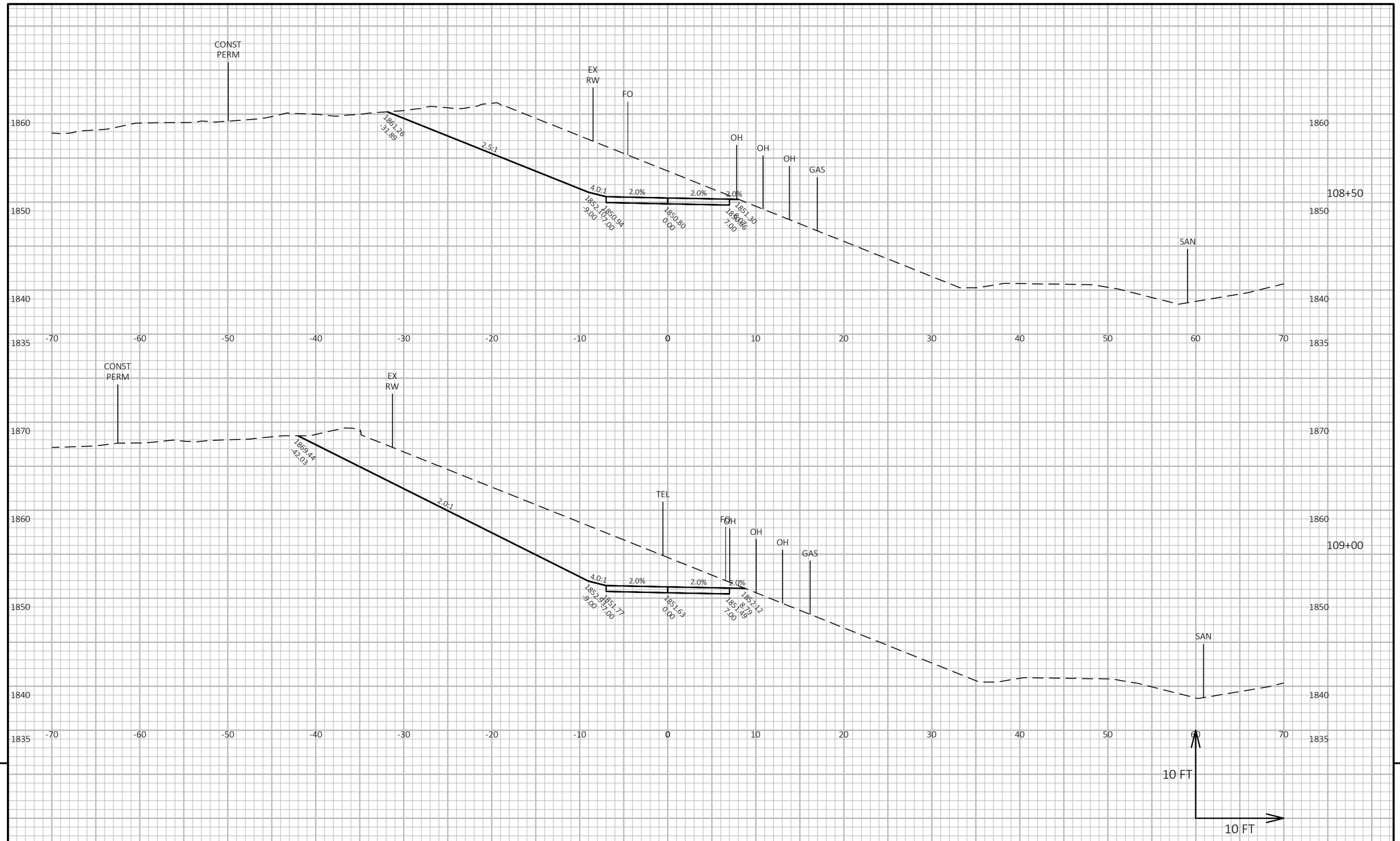
PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 118	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 08

PLOT DATE : 10/22/2024 11:27 AM PLOT BY : KL ENGINEERING PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

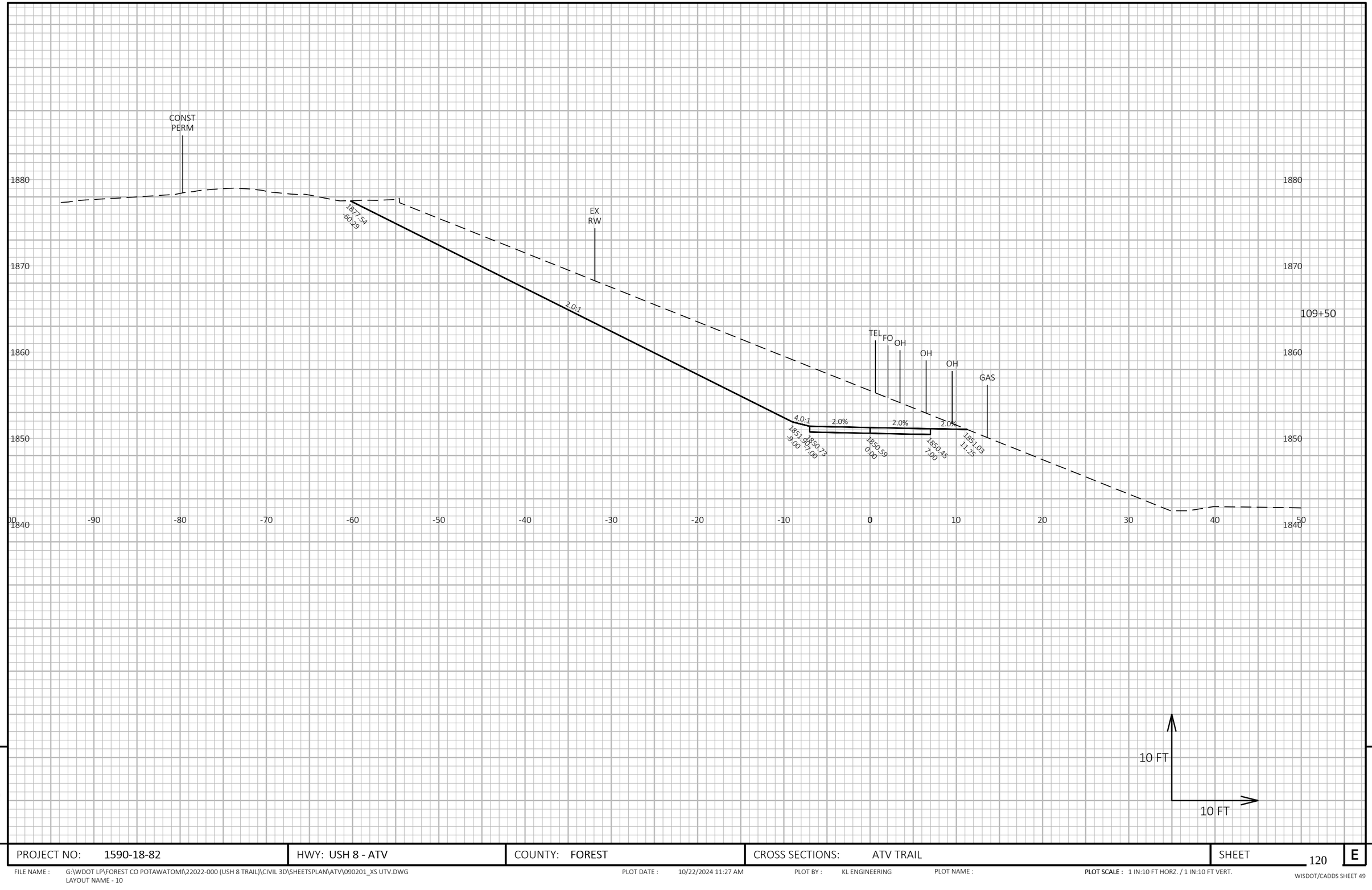
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PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 119	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 09

PLOT DATE : 10/22/2024 11:27 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

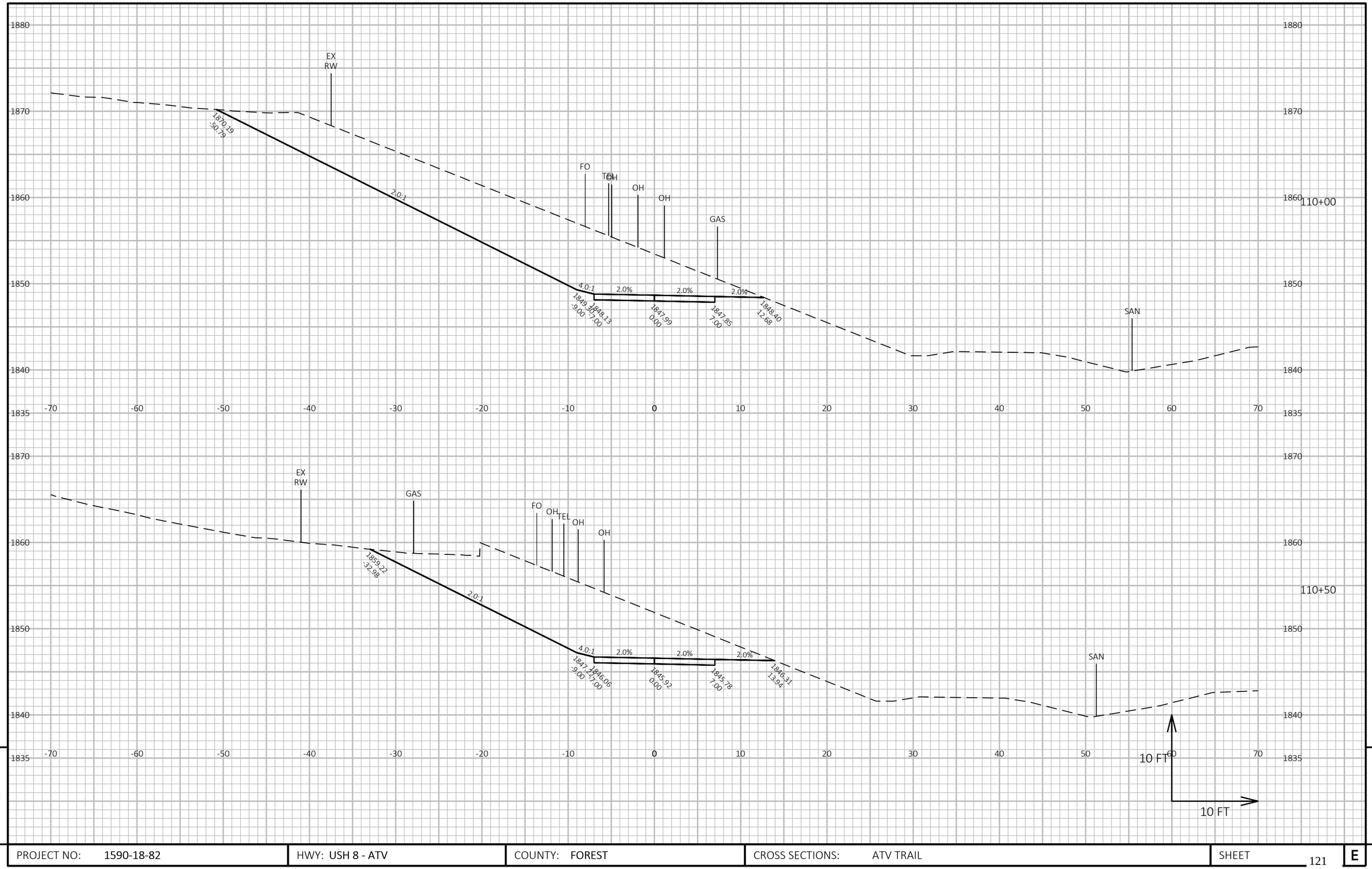
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PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 120	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 10

PLOT DATE : 10/22/2024 11:27 AM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

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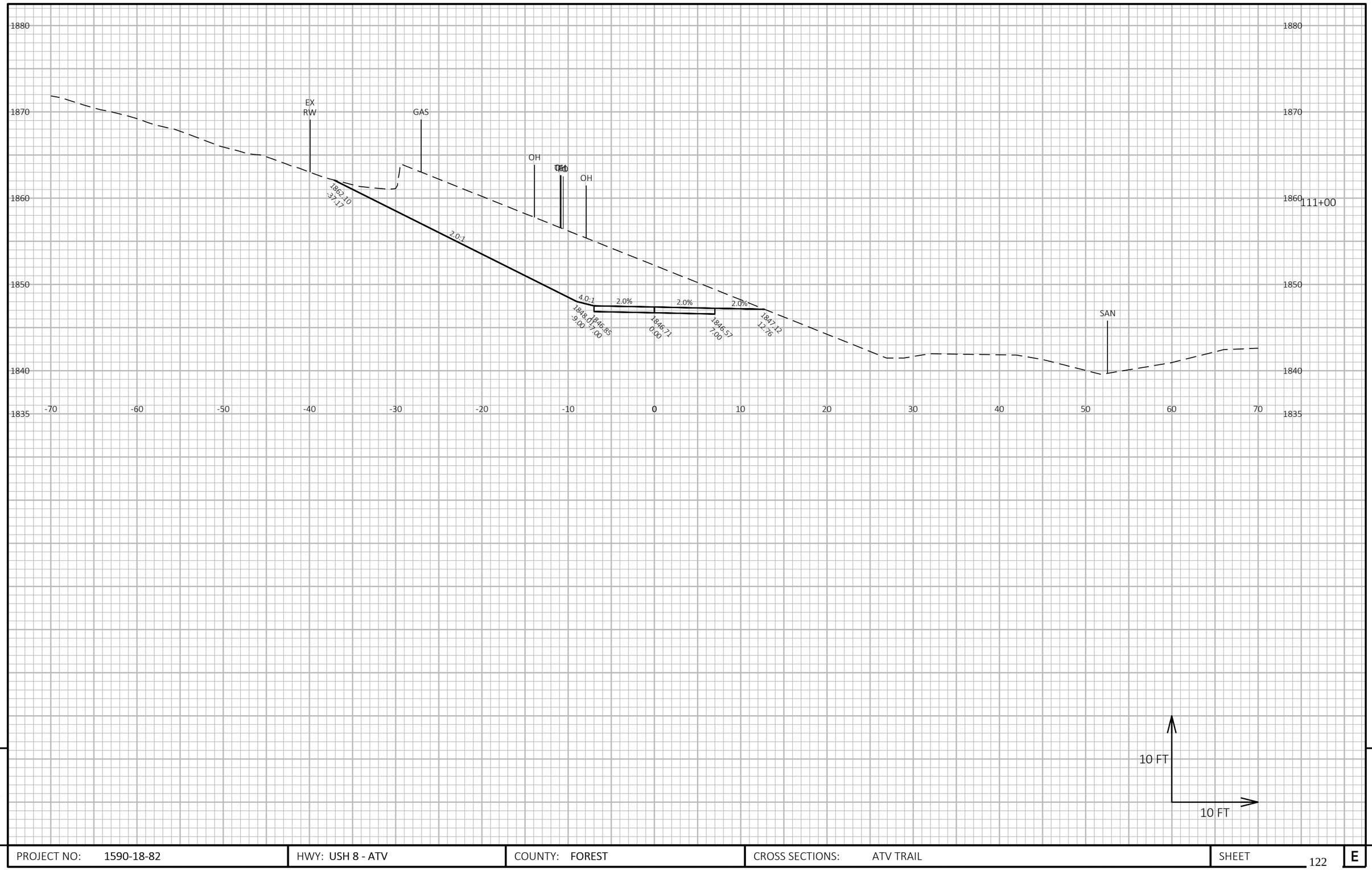
PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 121	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 11

PLOT DATE : 10/22/2024 11:27 AM PLOT BY : KL ENGINEERING PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 122	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 12

PLOT DATE : 10/22/2024 11:27 AM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

CONST
PERM

1880.38
-66.36

EX
RW

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2.0:1

4.0:1

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2.0%

1851.68
-9.00

1850.53
-7.00

1850.39
0.00

1850.25
7.00

1850.87
8.99

111+50

1880

1870

1860

1850

1840

1837

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10 FT

10 FT

9

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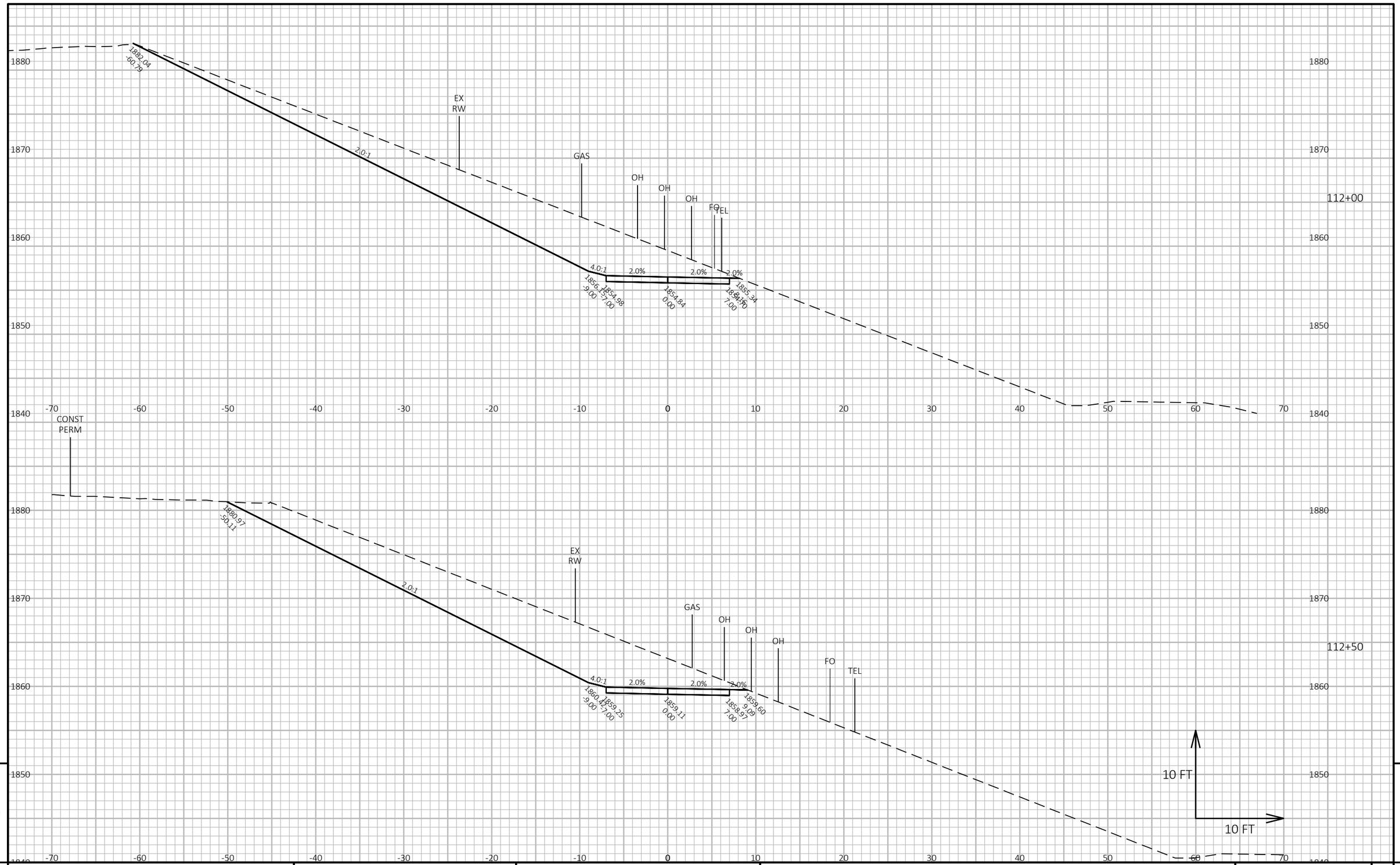
PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 123	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 13

PLOT DATE : 10/22/2024 11:27 AM PLOT BY : KL ENGINEERING PLOT NAME :

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

WISDOT/CADDS SHEET 49



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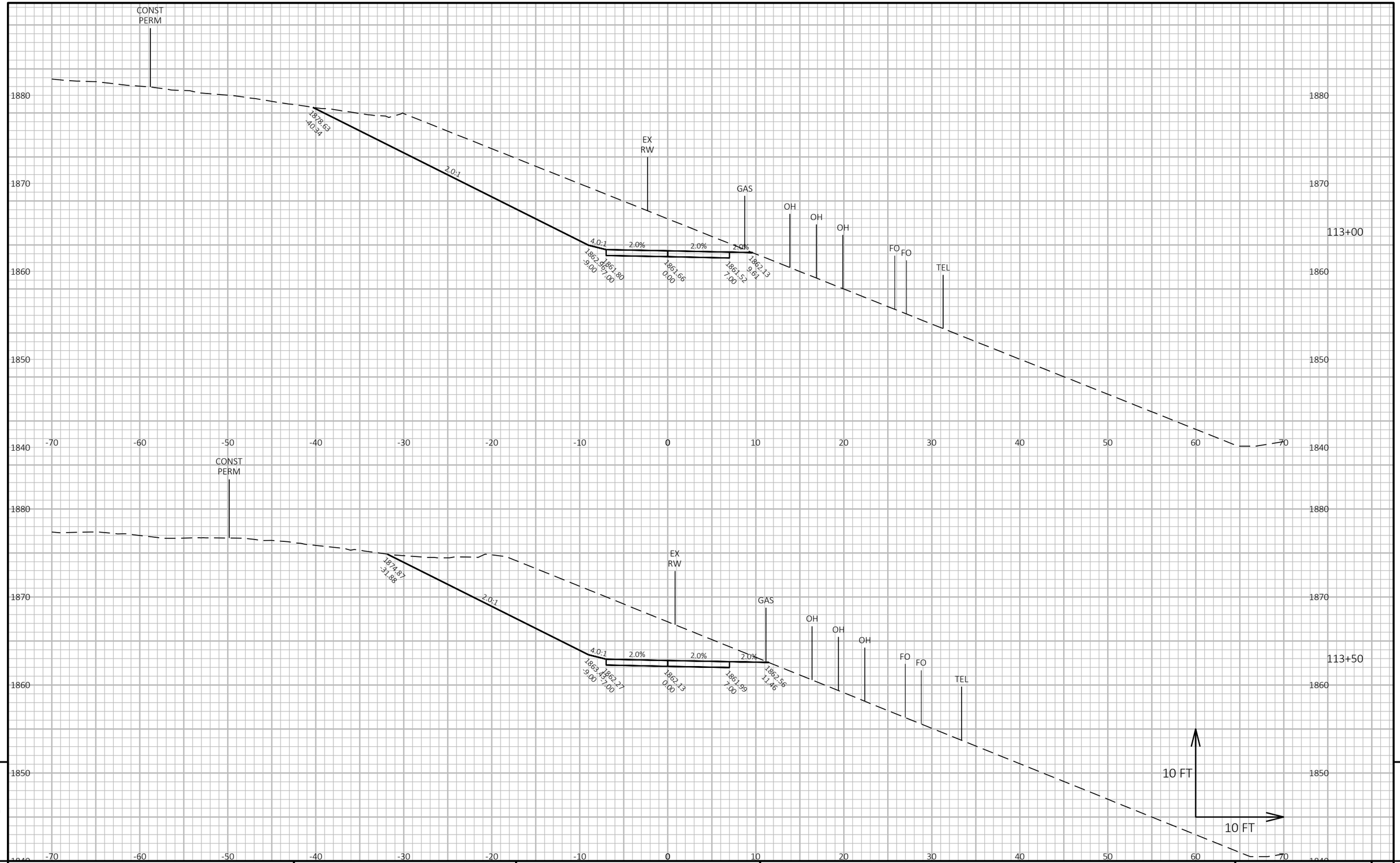
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PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 124	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 14

PLOT DATE : 10/22/2024 11:27 AM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

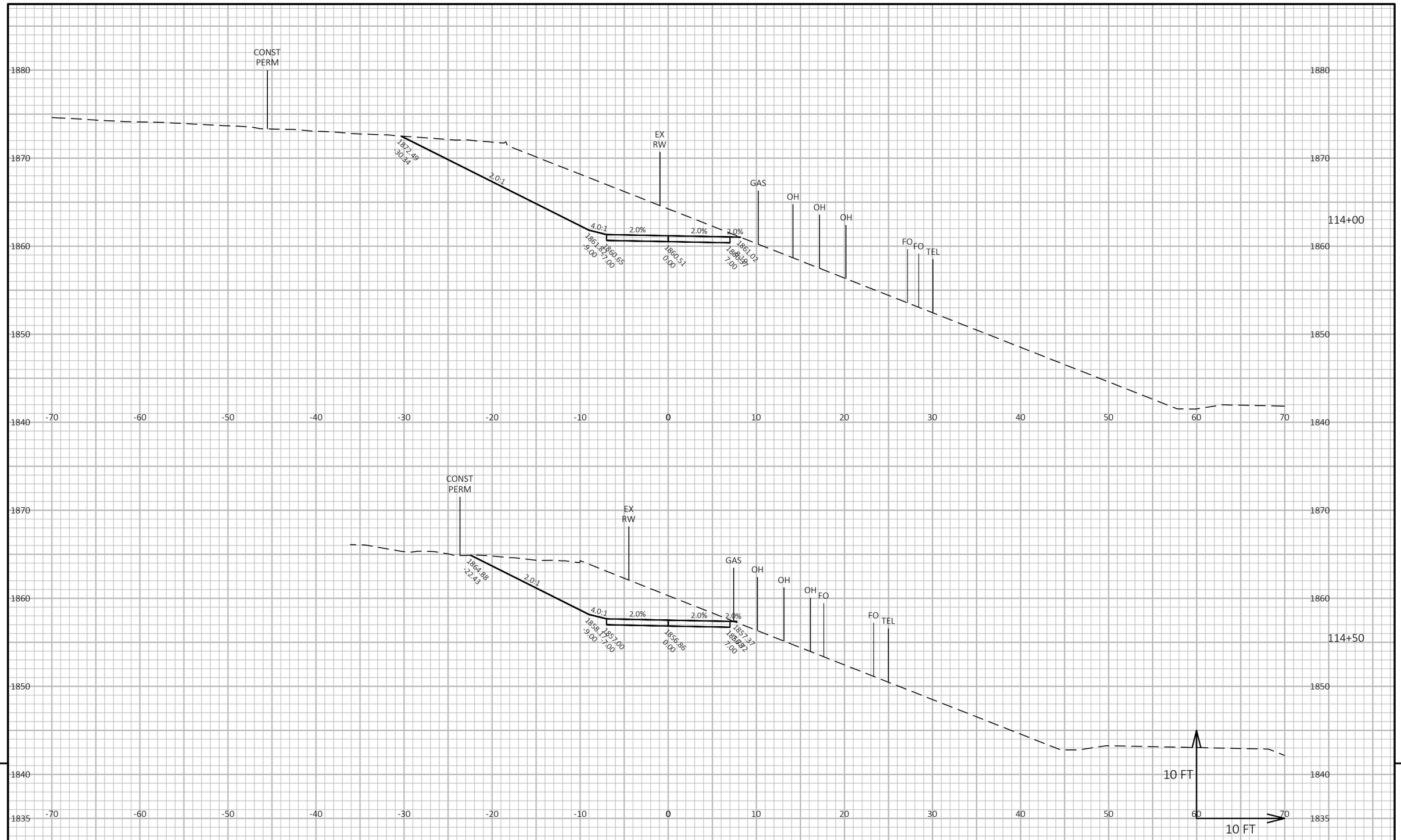
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PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 125	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 15

PLOT DATE : 10/22/2024 11:27 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

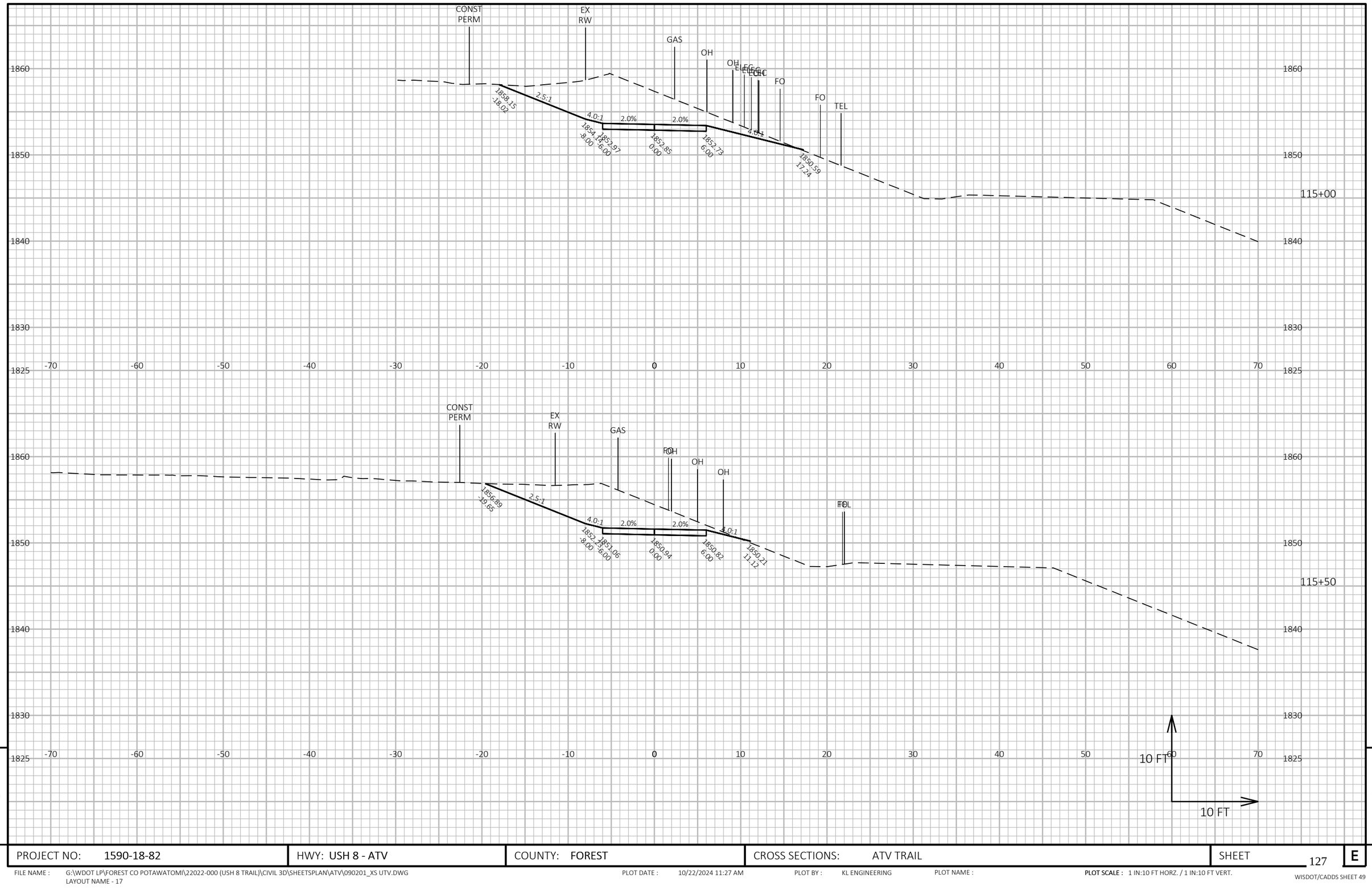
PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 126	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 16

PLOT DATE : 10/22/2024 11:27 AM PLOT BY : KL ENGINEERING PLOT NAME :

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

WISDOT/CADDS SHEET 49



PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 127	E

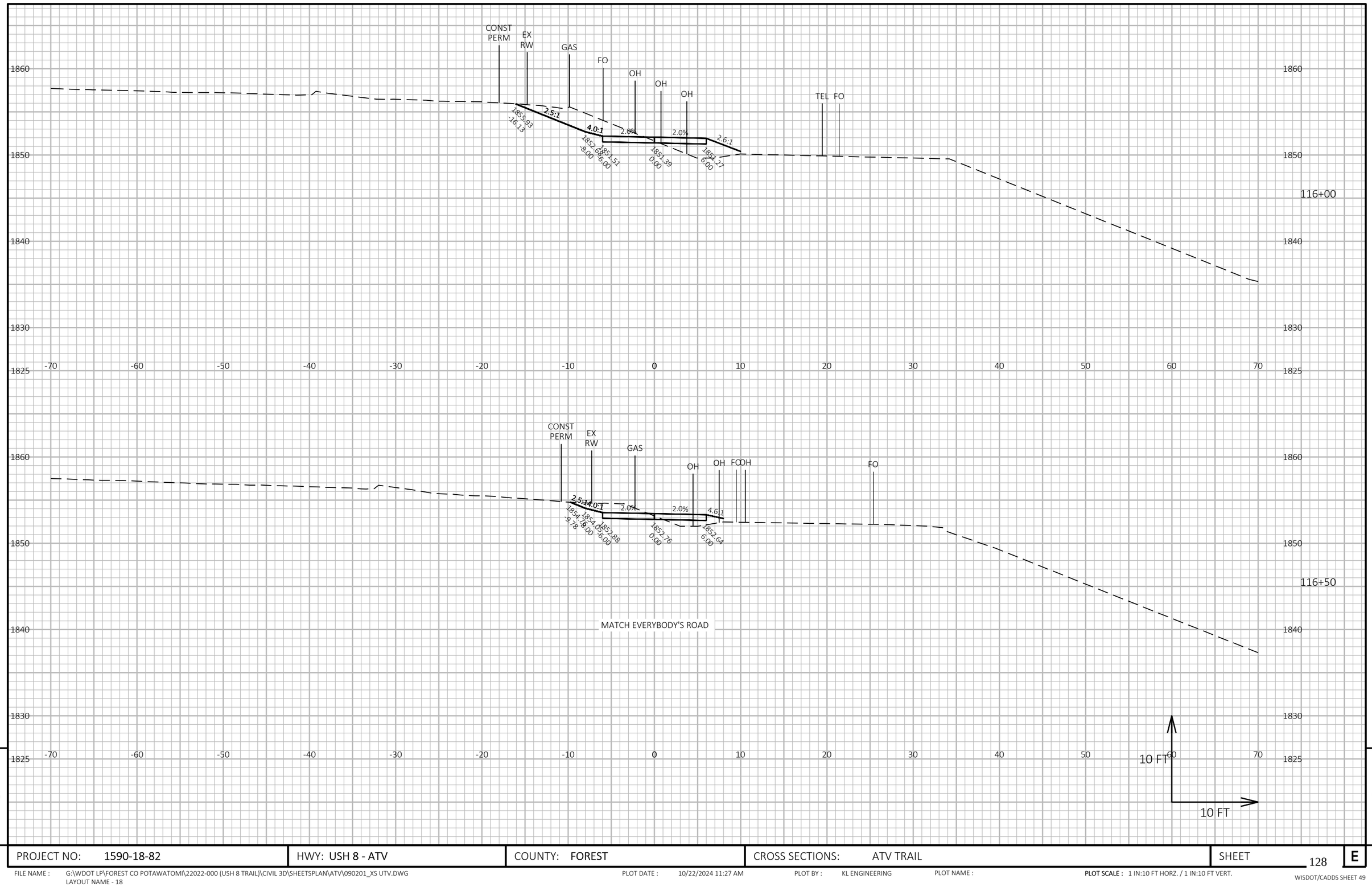
FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 17

PLOT DATE : 10/22/2024 11:27 AM PLOT BY : KL ENGINEERING PLOT NAME :

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

WISDOT/CADDS SHEET 49

9



9

9

PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 128	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 18

PLOT DATE : 10/22/2024 11:27 AM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

MATCH EVERYBODY'S ROAD

CONST PERM

EX RW

OH OH OH FO FO

2.5:1 4.0:1 2.0% 2.0% 4.0:1

1854.91 -11.35

1854.91 9.00

1853.98 7.00

1852.39

1852.25 0.00

1852.11 7.00

1853.62 8.72

1860 1850 1840 1830 1825

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

117+50

CONST PERM

EX RW

ELEC ELEC ELEC

OH OH FO OH FO

2.5:1 4.0:1 2.0% 2.0% 4.0:1

1854.86 -10.53

1854.86 9.00

1854.25 7.00

1853.08

1852.94 0.00

1853.33 7.00

1853.30 8.72

1860 1850 1840 1830 1825

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

118+00

10 FT

10 FT

9

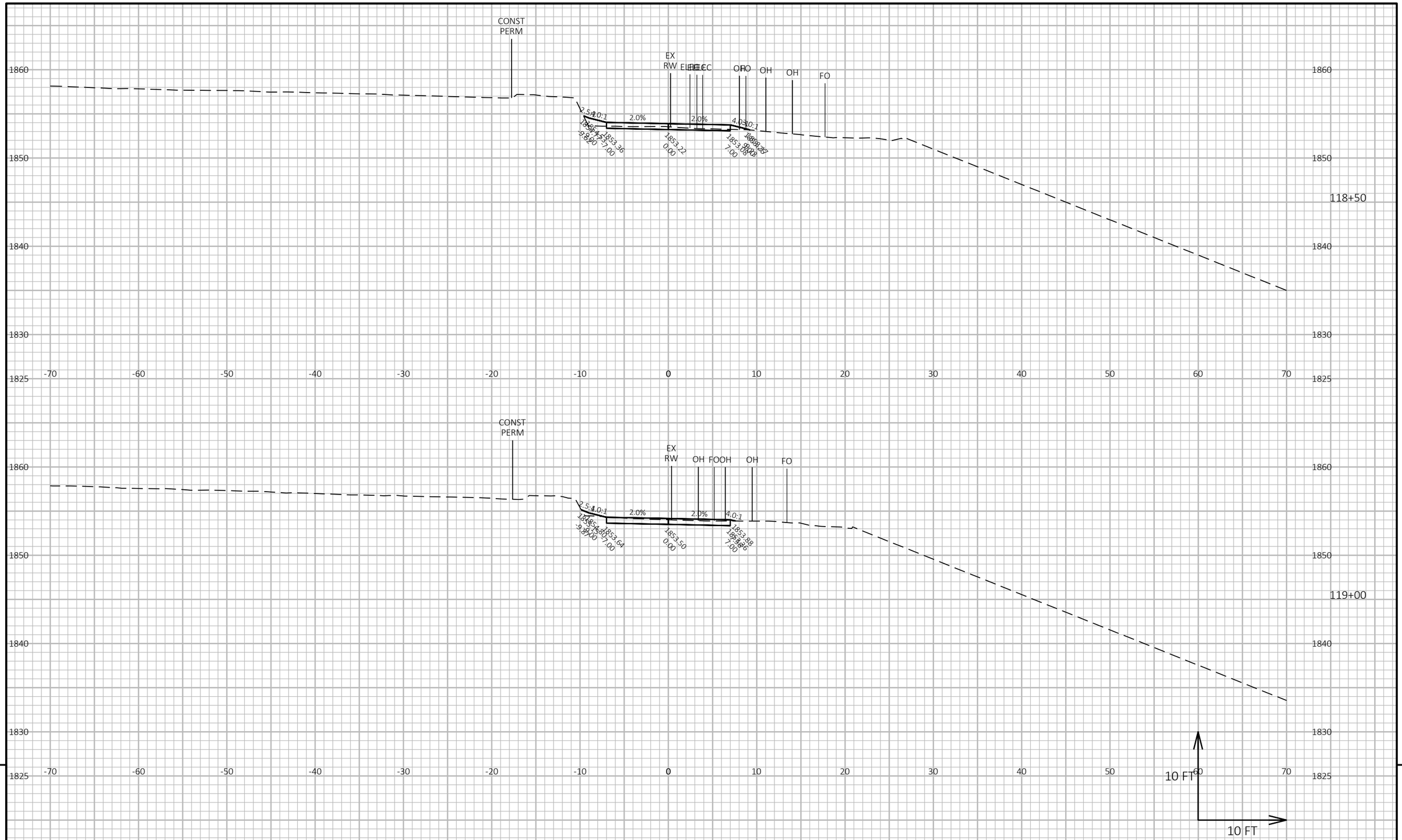
9

PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 129	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 19

PLOT DATE : 10/22/2024 11:27 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

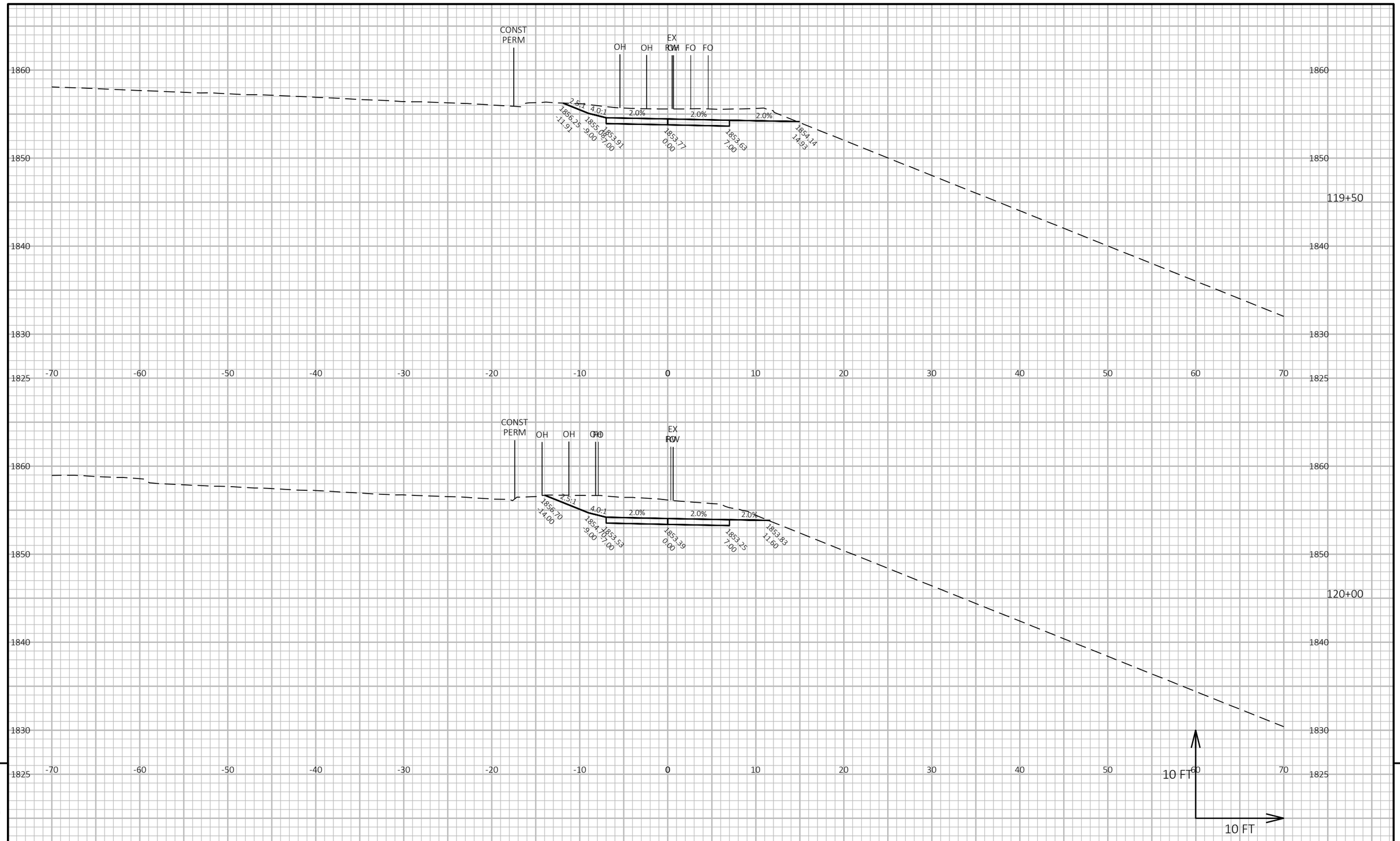


PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 130	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 20

PLOT DATE : 10/22/2024 11:27 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

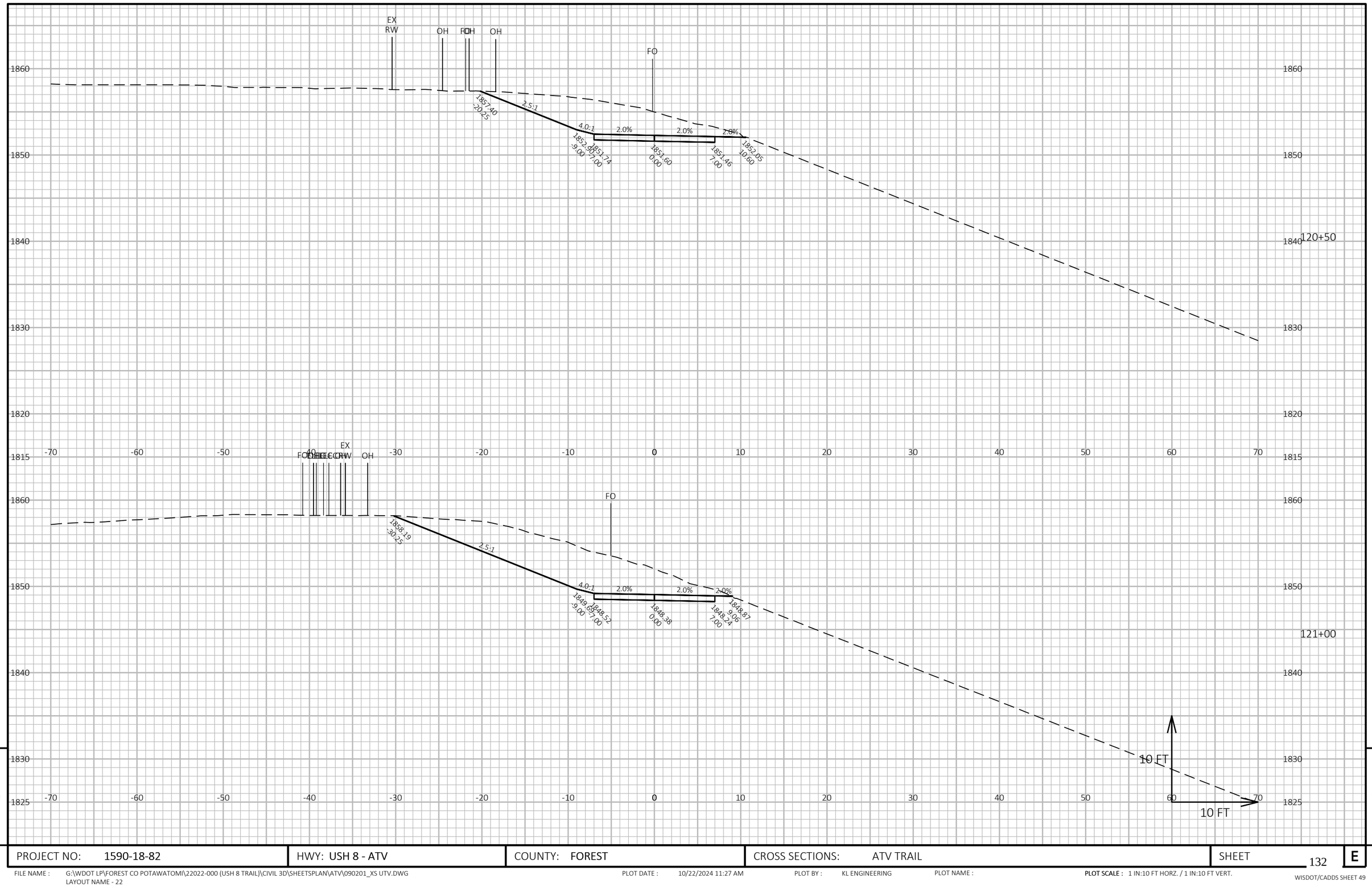
PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 131	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 21

PLOT DATE : 10/22/2024 11:27 AM PLOT BY : KL ENGINEERING PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

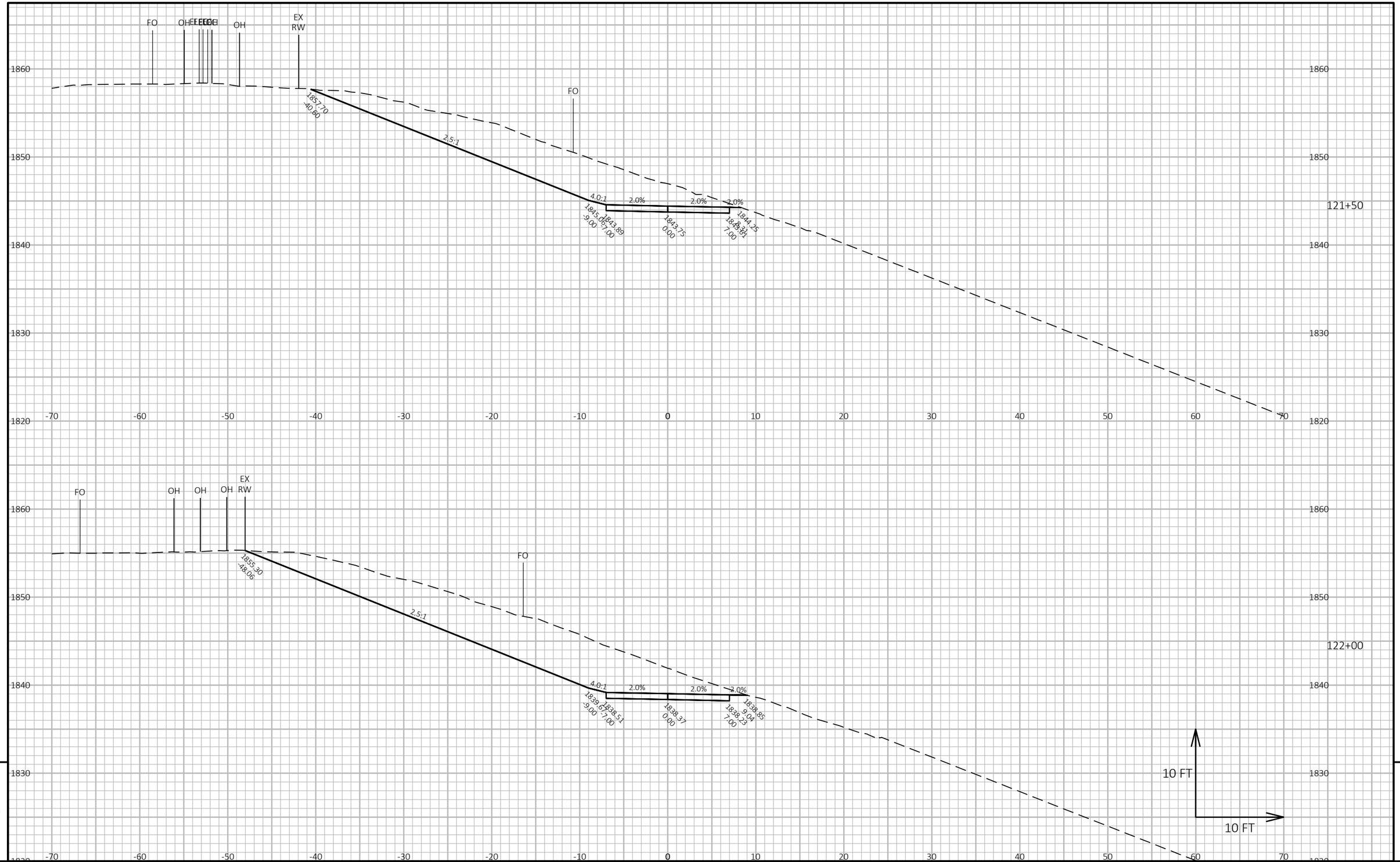
9

PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 132	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 22

PLOT DATE : 10/22/2024 11:27 AM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

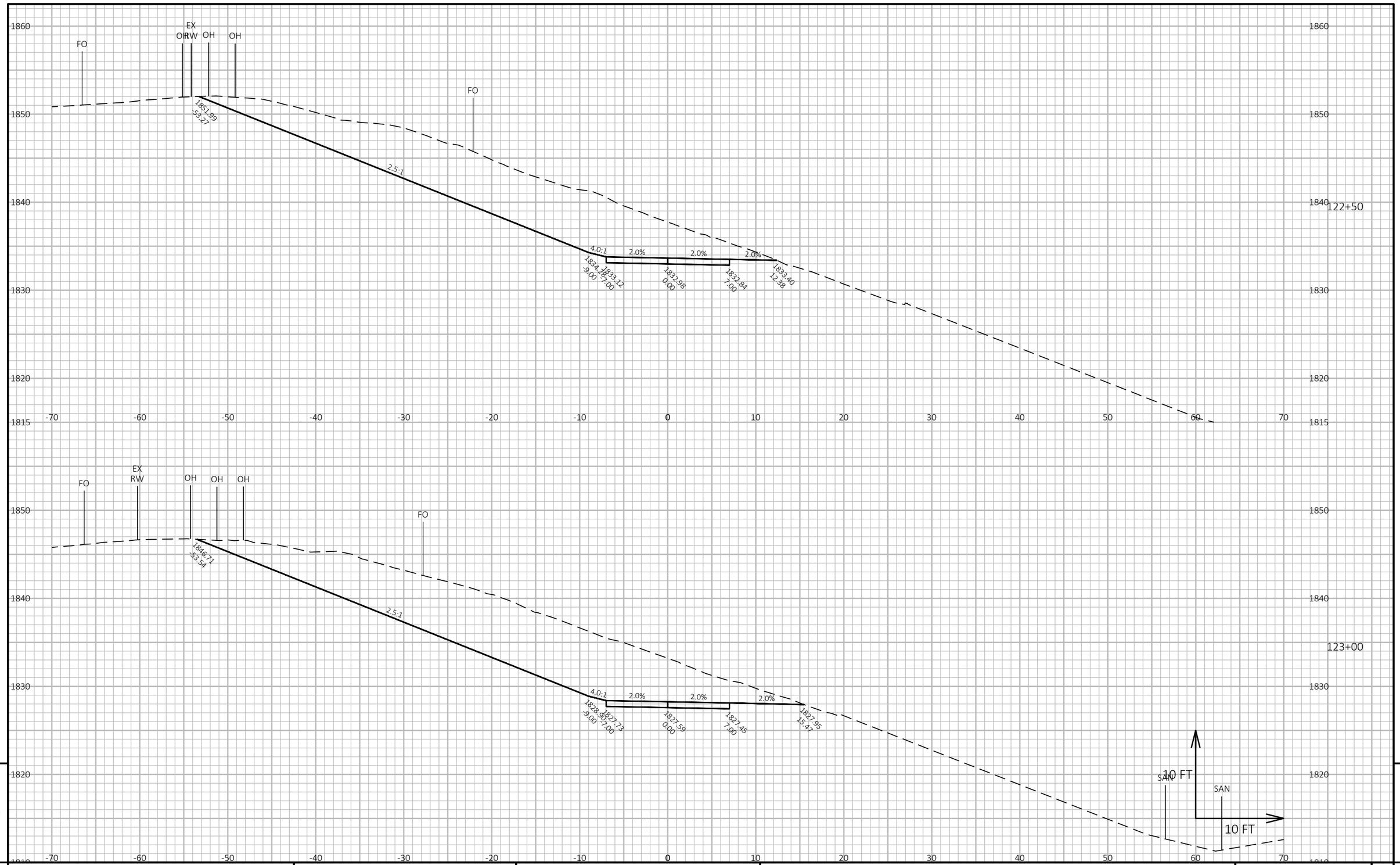


PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 133 E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 23

PLOT DATE : 10/22/2024 11:27 AM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

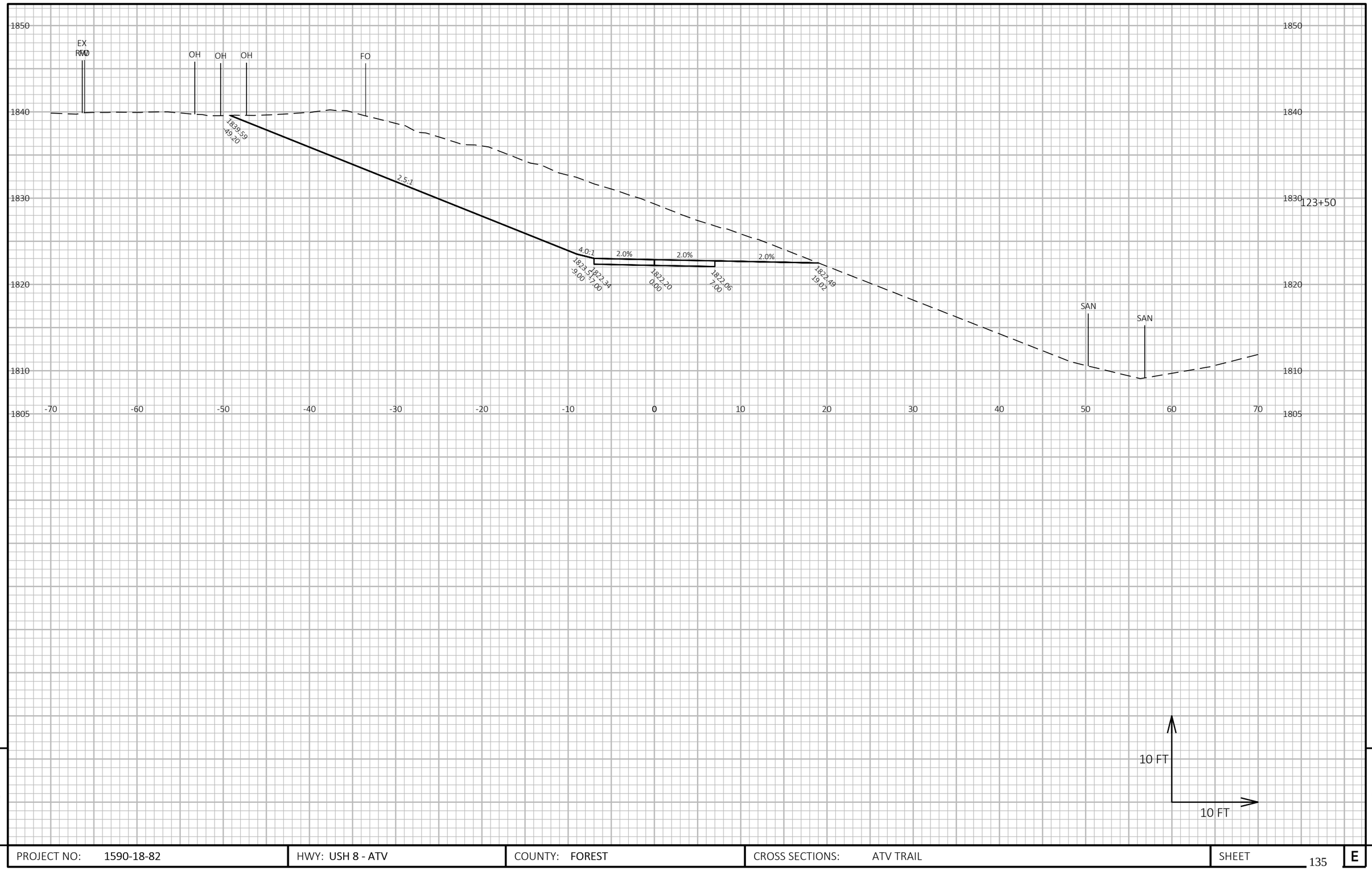
9

PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 134	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 24

PLOT DATE : 10/22/2024 11:27 AM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

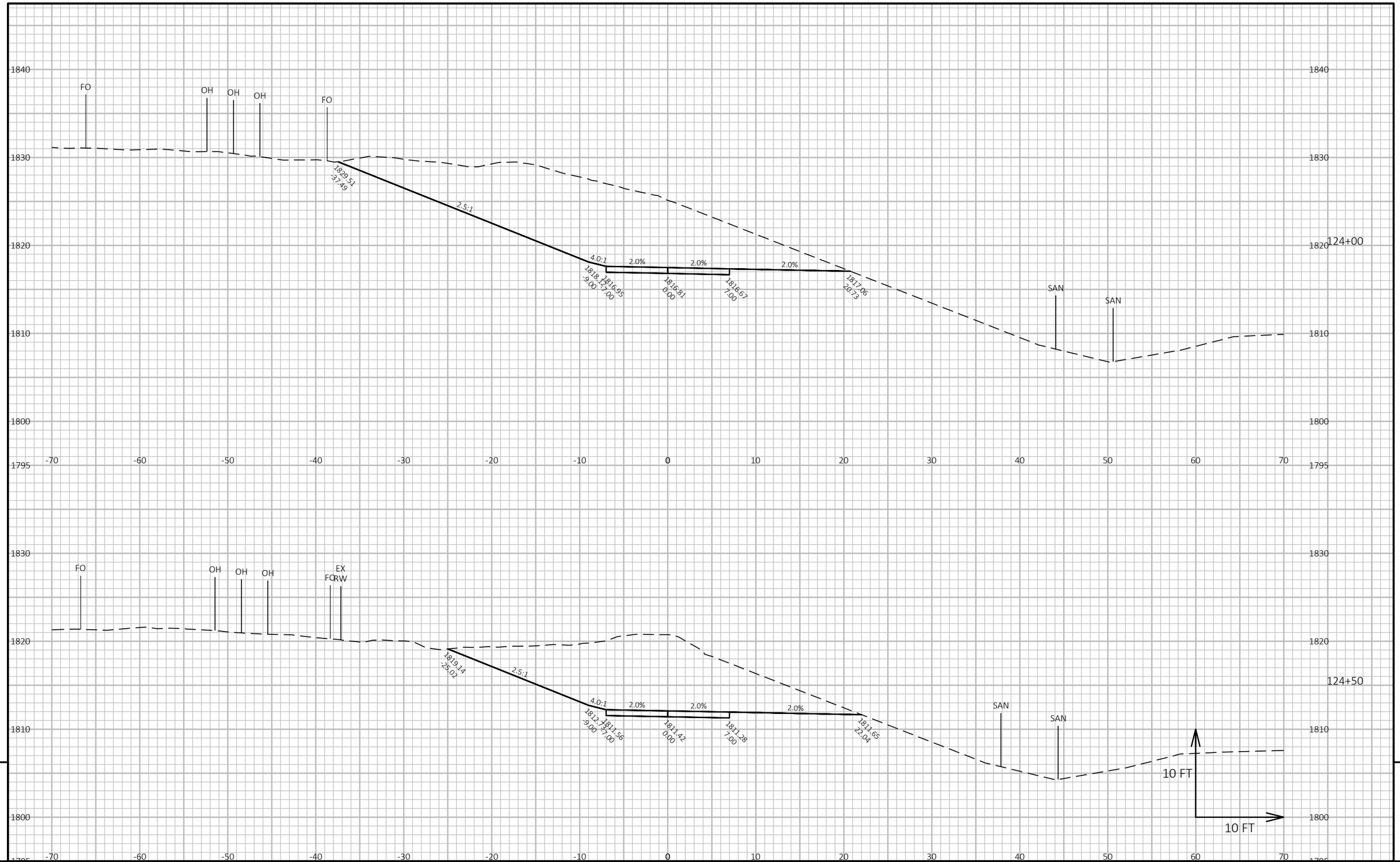
9

PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 135	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 25

PLOT DATE : 10/22/2024 11:27 AM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 136	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 26

PLOT DATE : 10/22/2024 11:27 AM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

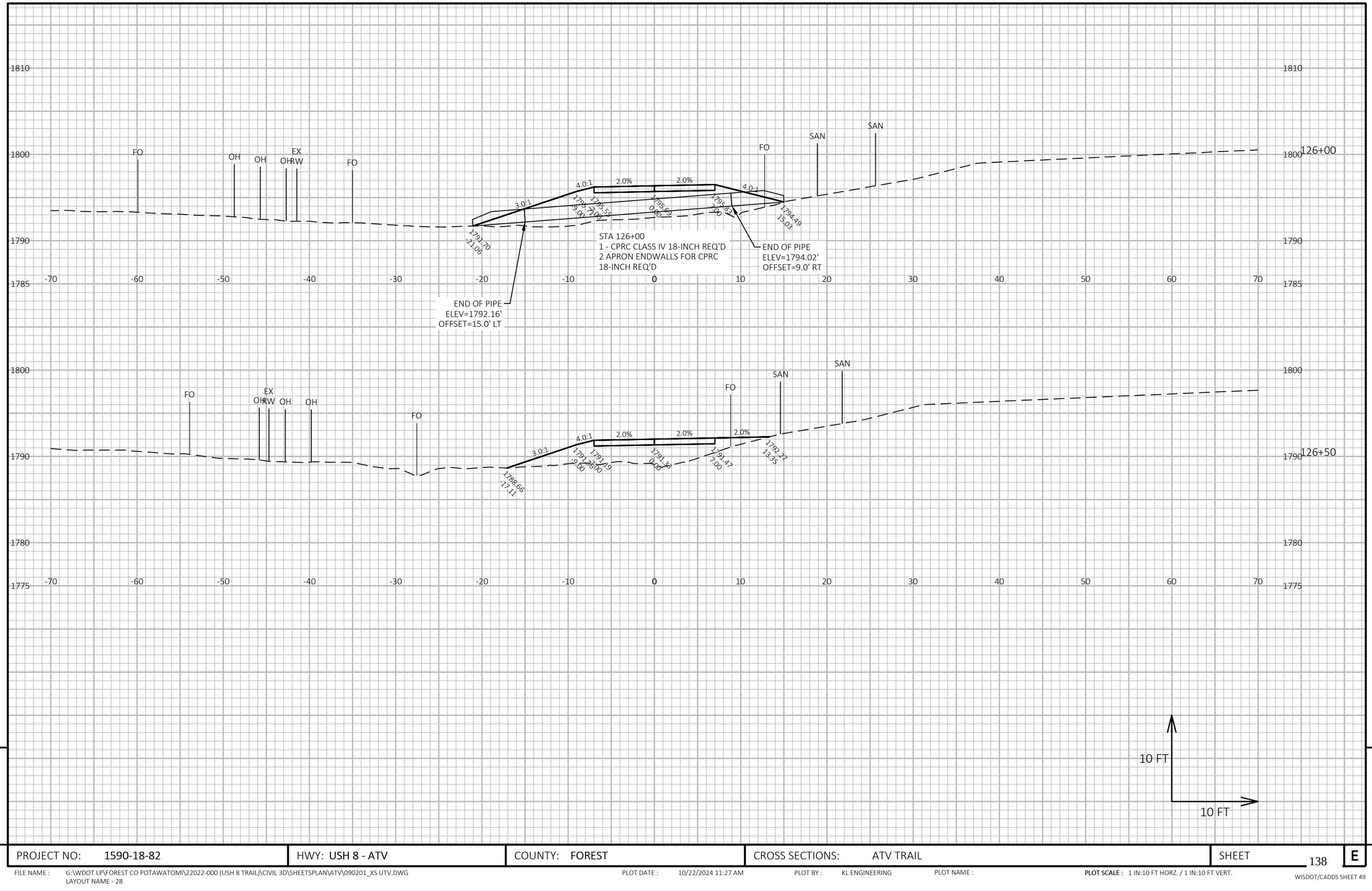
9

PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 137	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 27

PLOT DATE : 10/22/2024 11:27 AM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

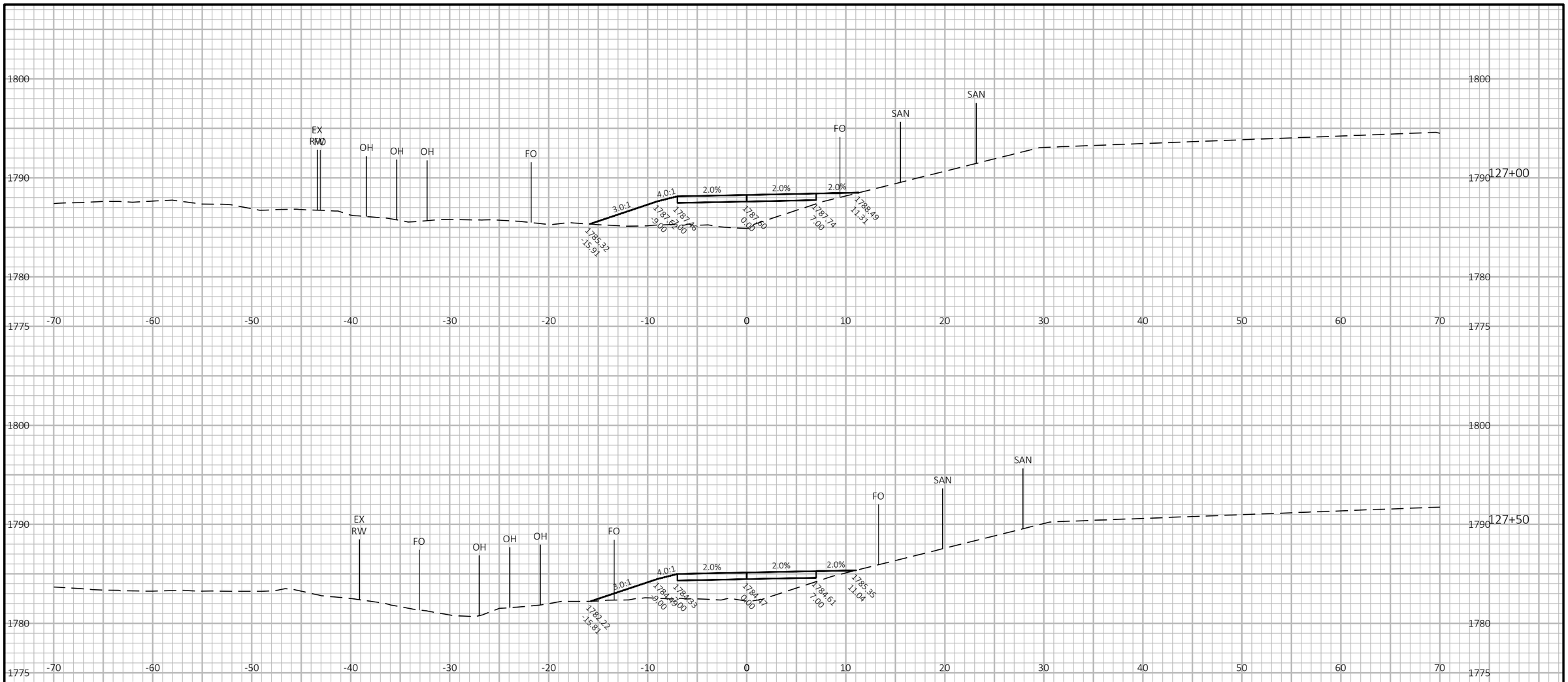


PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 138	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 28

PLOT DATE : 10/22/2024 11:27 AM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

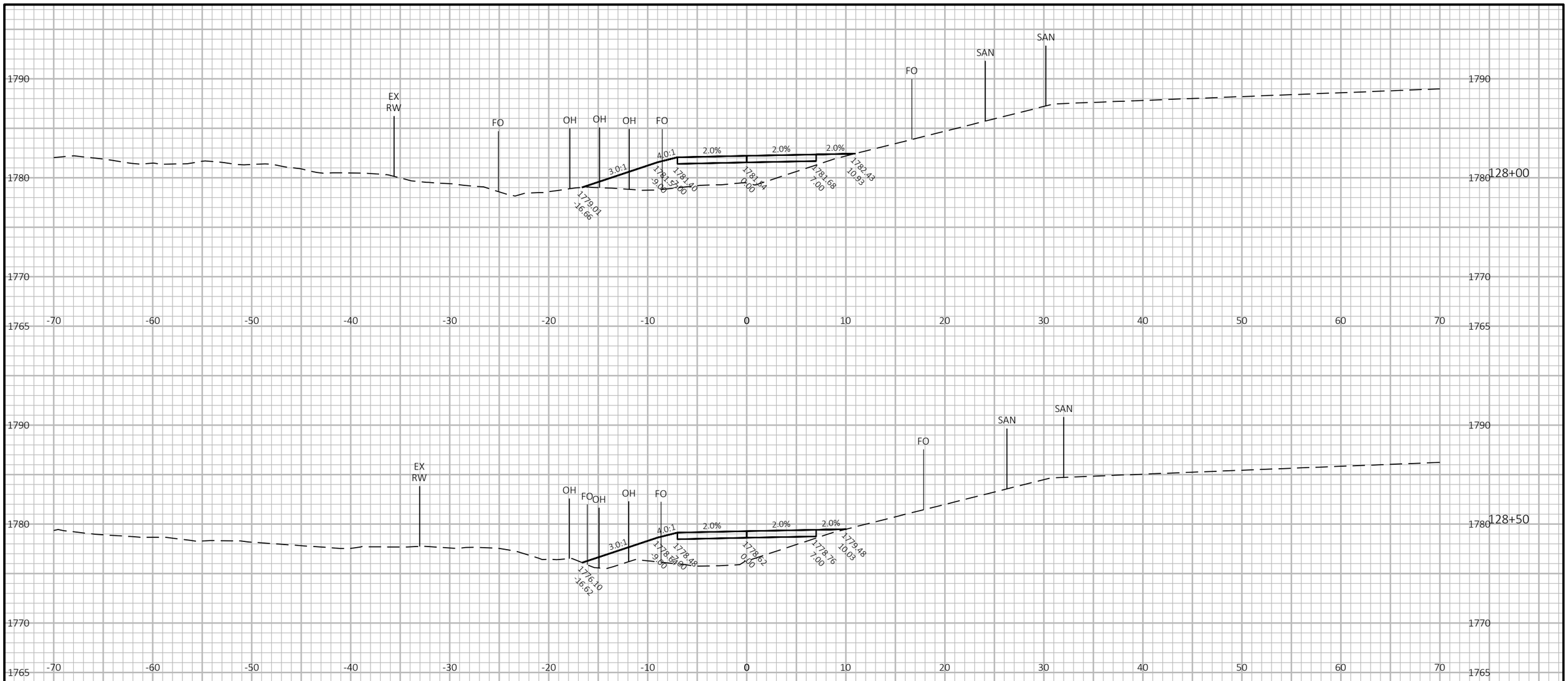
9

PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 139	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 29

PLOT DATE : 10/22/2024 11:27 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

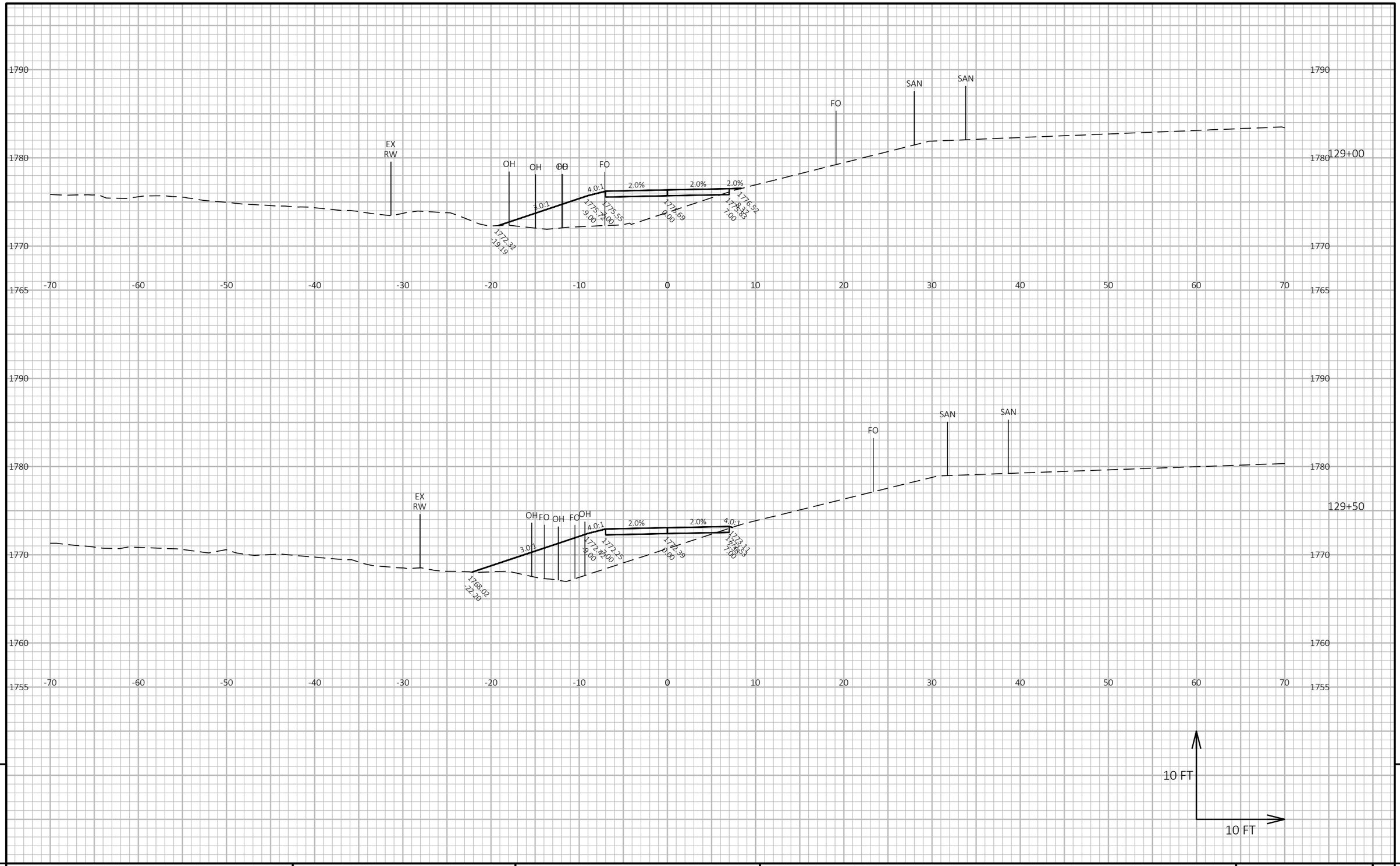
9

PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 140	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 30

PLOT DATE : 10/22/2024 11:27 AM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

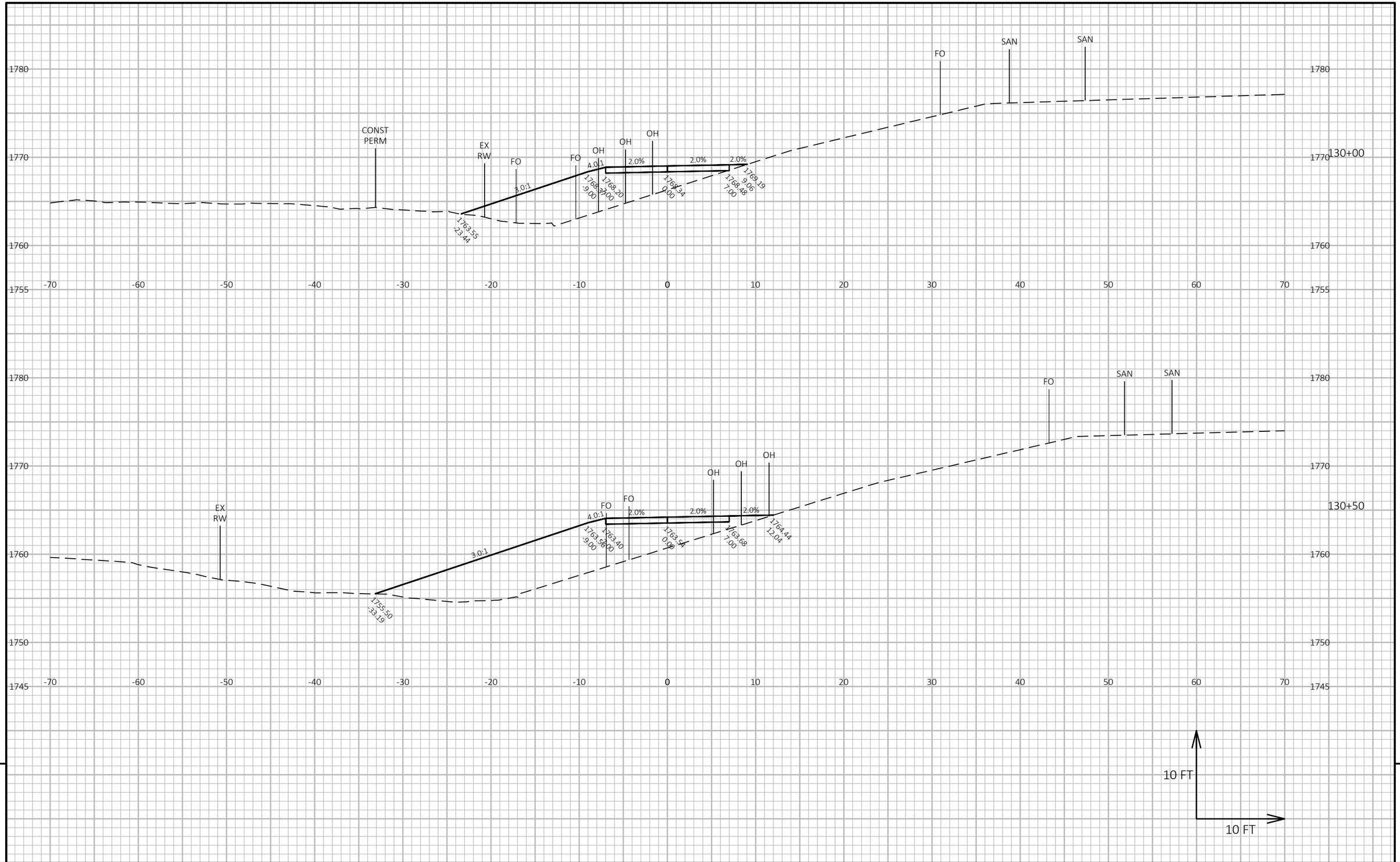
9

PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 141	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 31

PLOT DATE : 10/22/2024 11:27 AM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

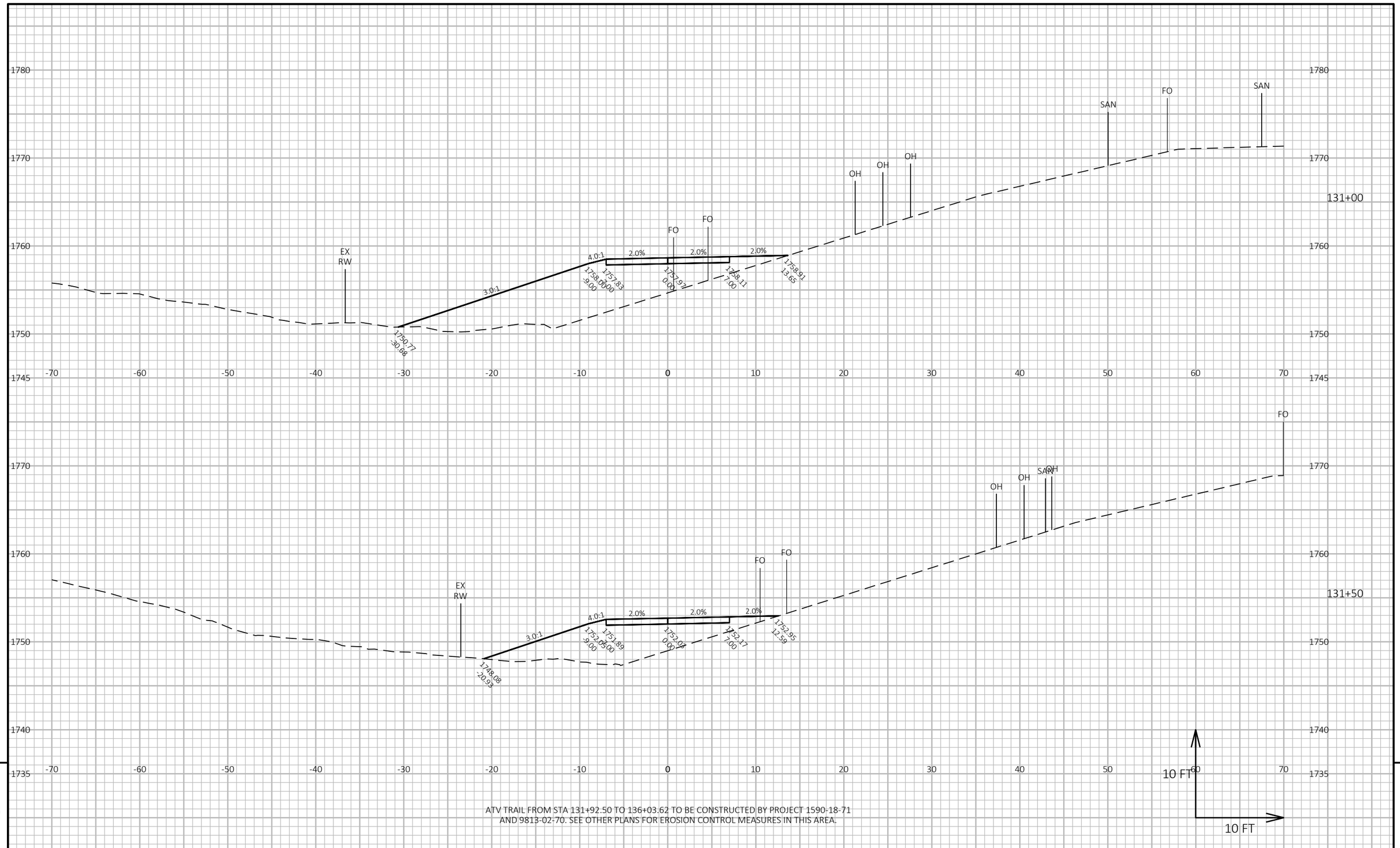
9

PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 142	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 32

PLOT DATE : 10/22/2024 11:28 AM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

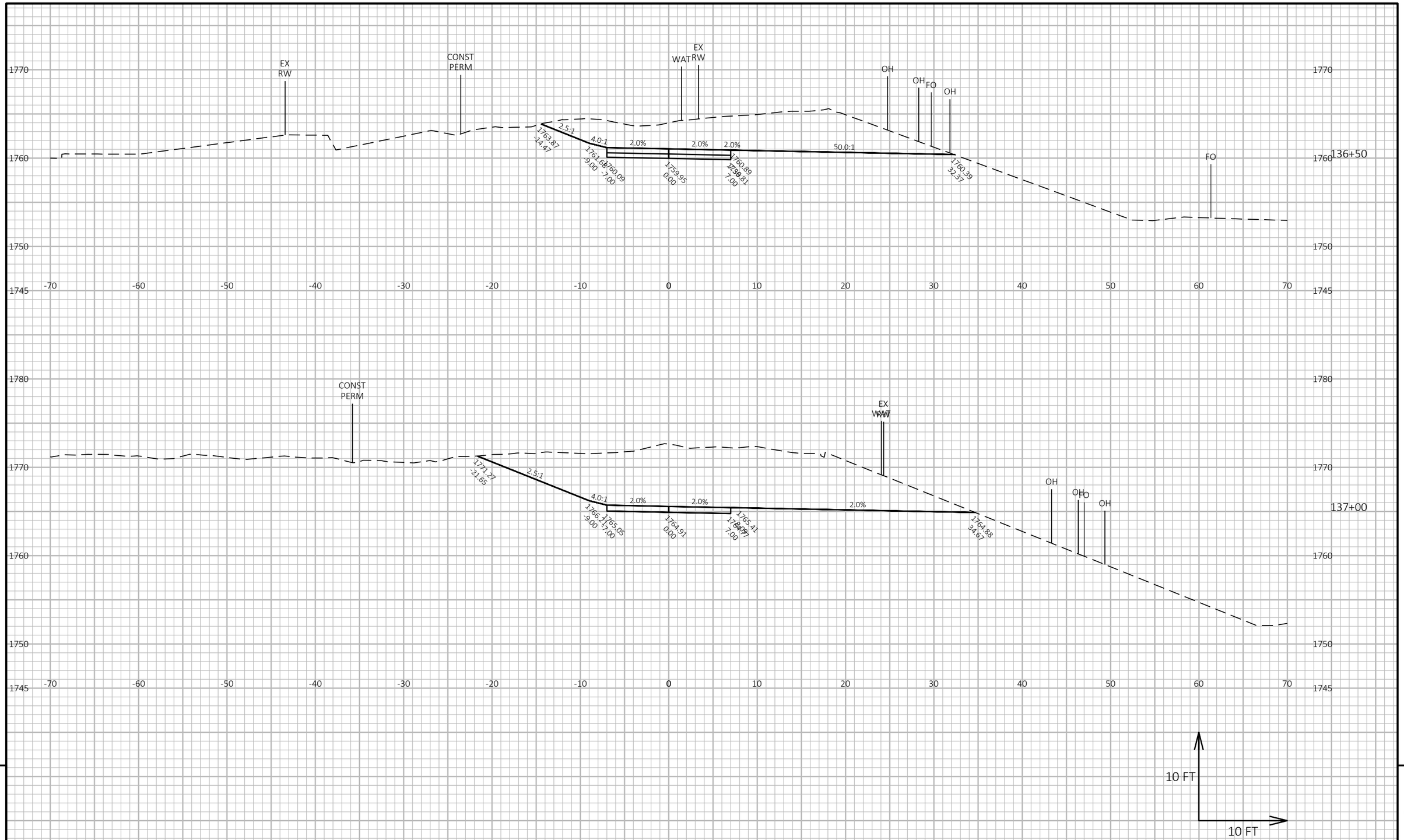


PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 143	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 33

PLOT DATE : 10/22/2024 11:28 AM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

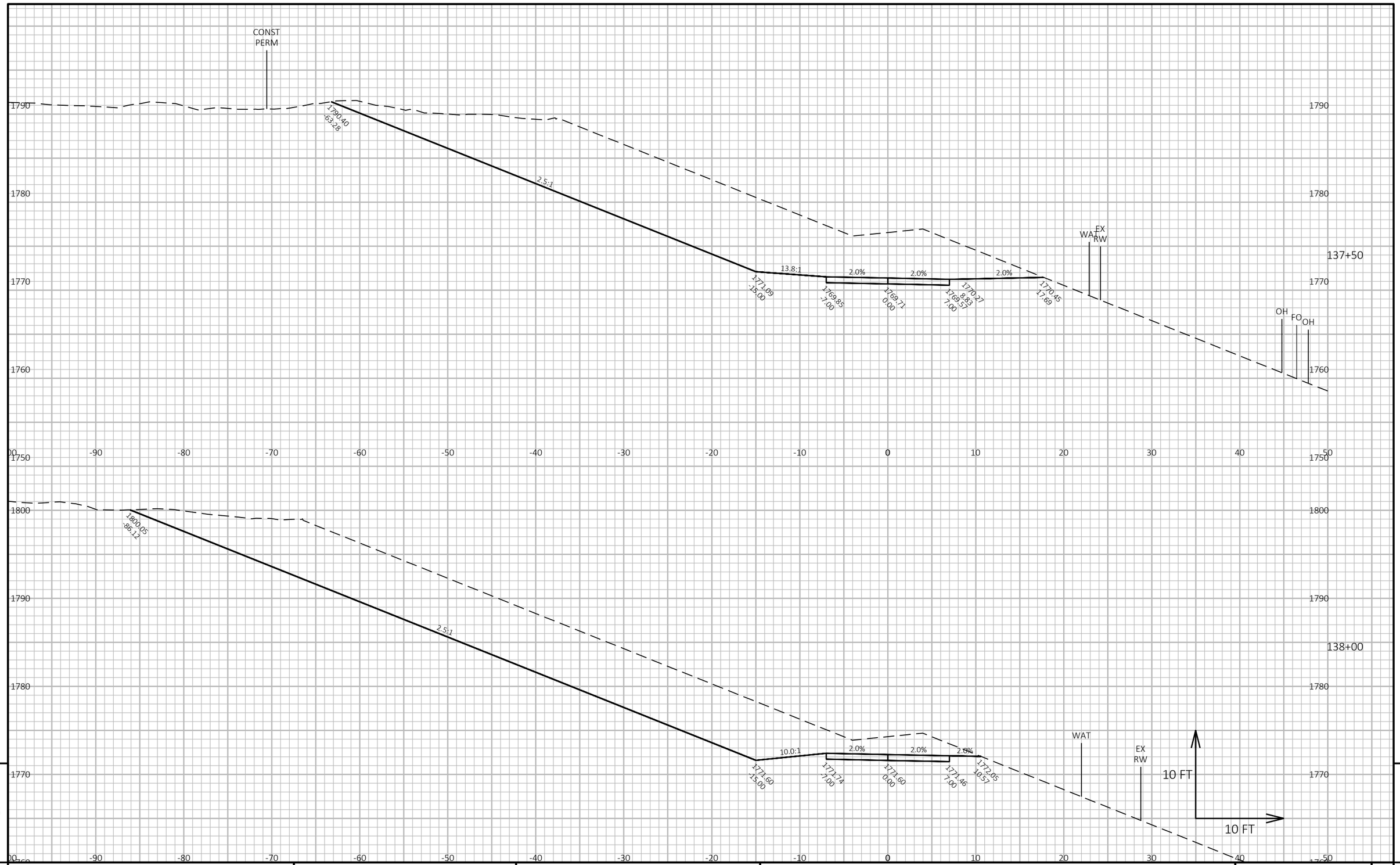


PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 144	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 34

PLOT DATE : 10/22/2024 11:28 AM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

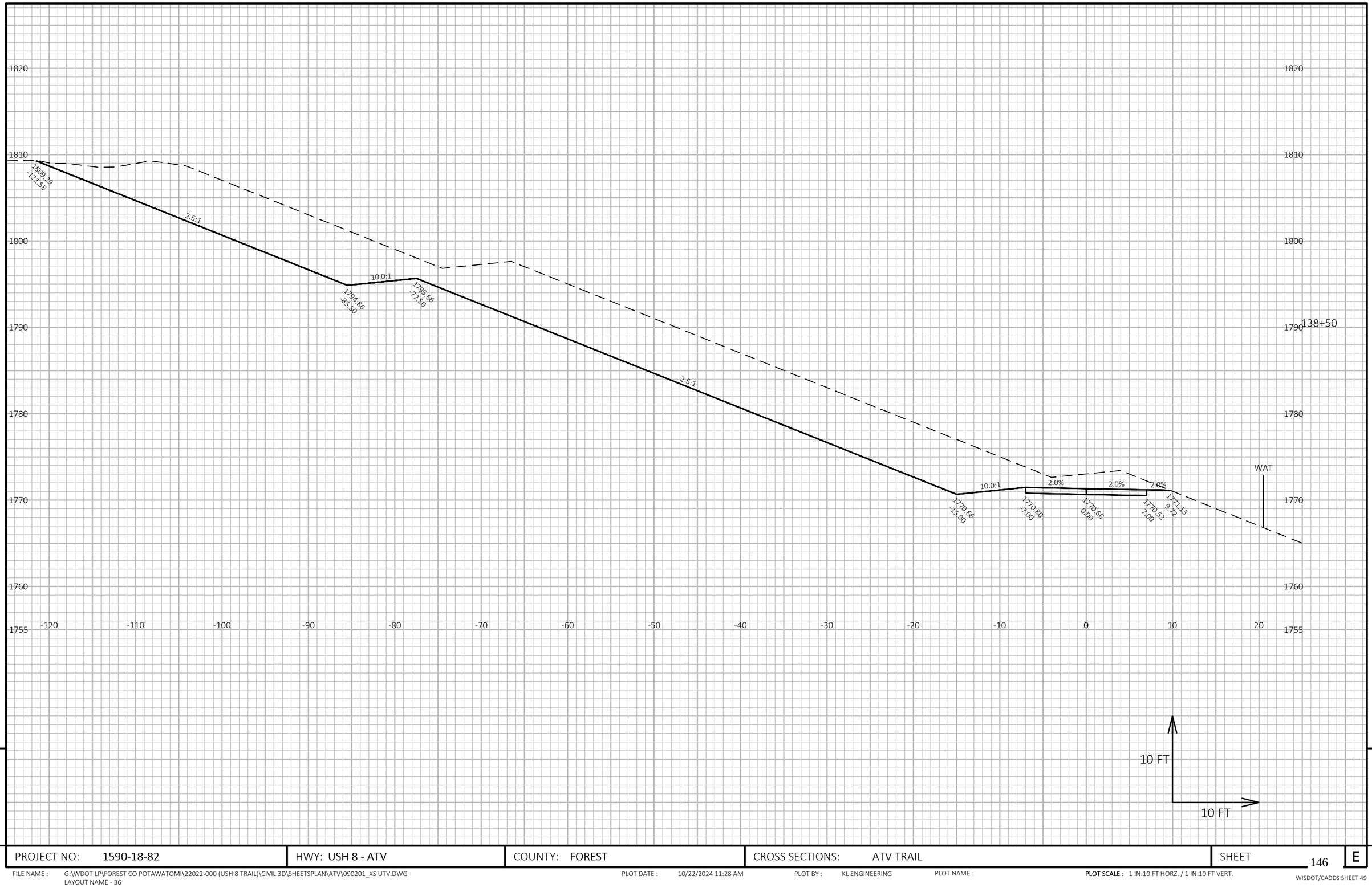
PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 145	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 35

PLOT DATE : 10/22/2024 11:28 AM PLOT BY : KL ENGINEERING PLOT NAME :

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

WISDOT/CADDS SHEET 49



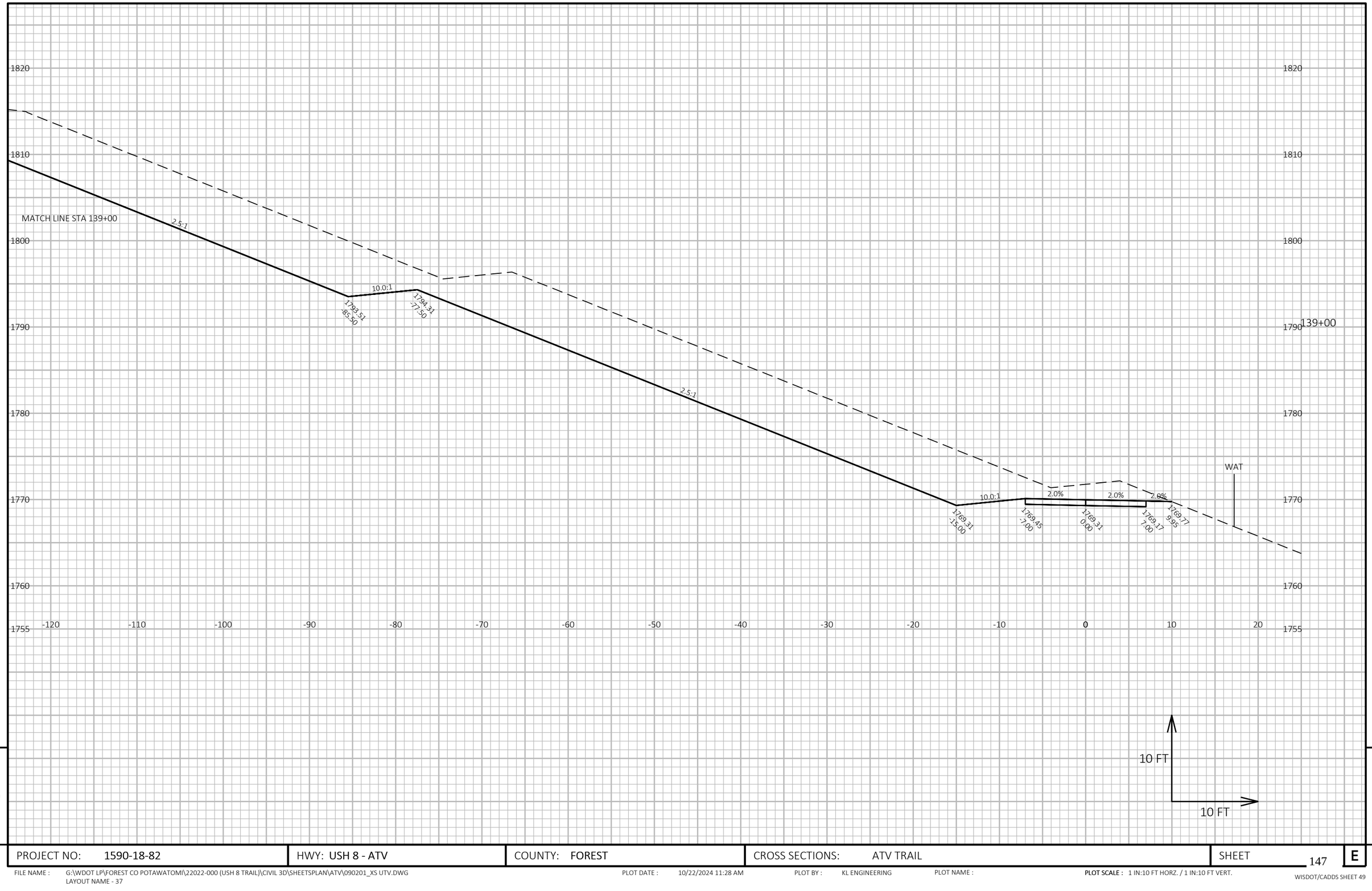
9 9

PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 146	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 36

PLOT DATE : 10/22/2024 11:28 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 147 E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 37

PLOT DATE : 10/22/2024 11:28 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

CONST
PERM

1820
1810
1800
1790
1780
1770
1760
1755

-270 -260 -250 -240 -230 -220 -210 -200 -190 -180 -170 -160 -150 -140 -130 -125

139+00

1816.67
-143.38

2.5:1

MATCH LINE STA 139+00

10 FT

10 FT

9

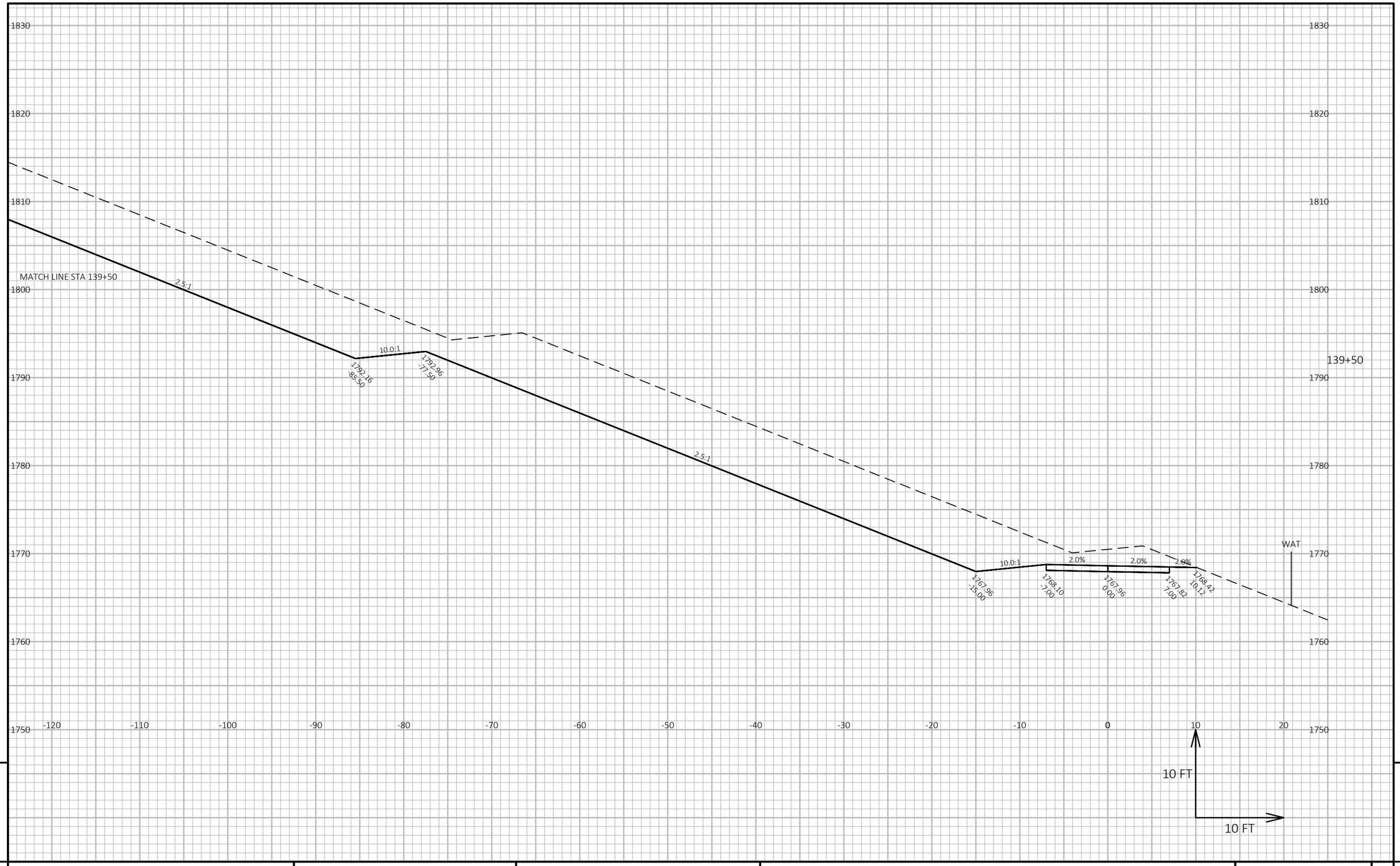
9

PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 148	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 38

PLOT DATE : 10/22/2024 11:28 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

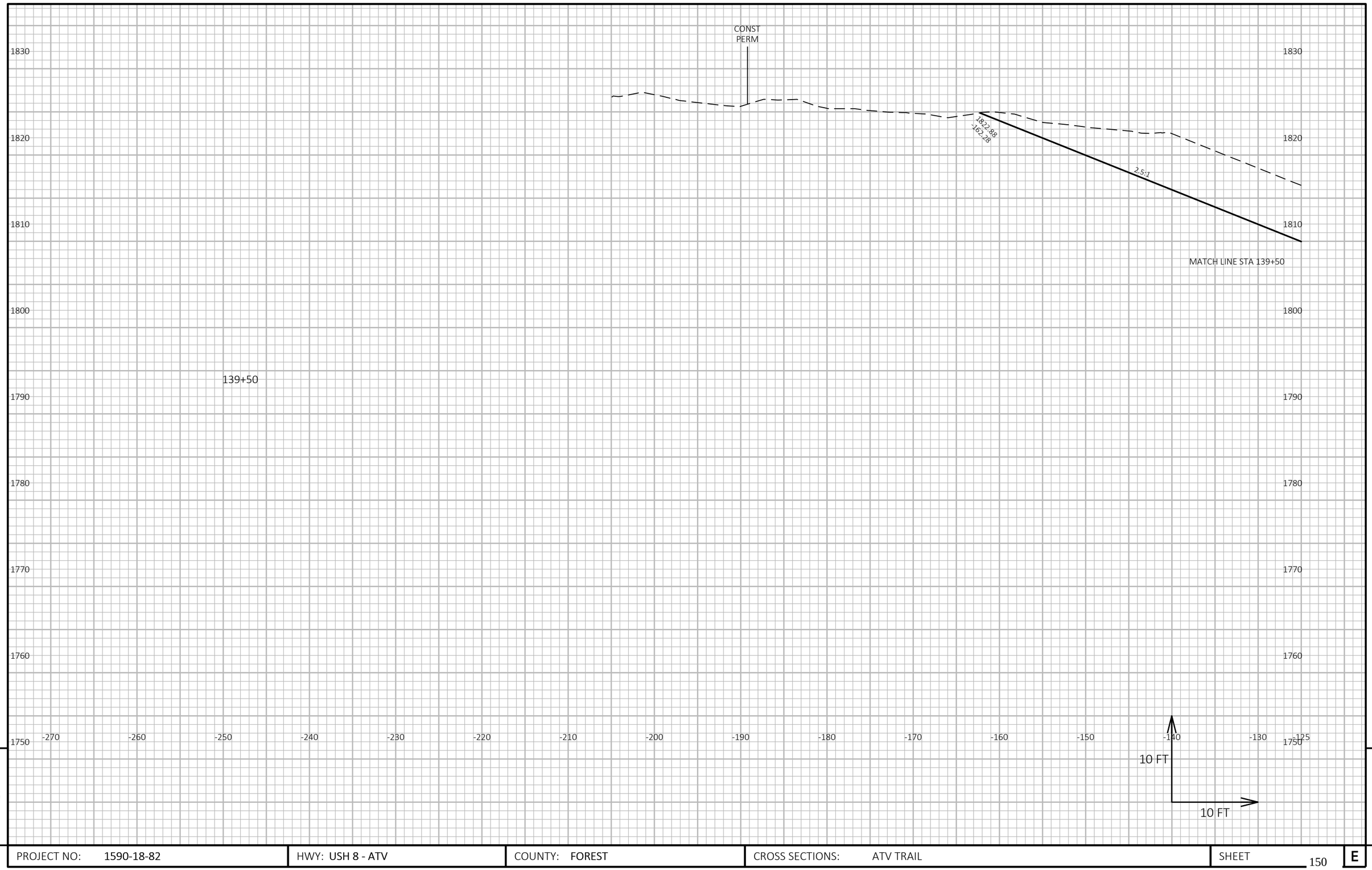
9

PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 149	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 39

PLOT DATE : 10/22/2024 11:28 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 150	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 40

PLOT DATE : 10/22/2024 11:28 AM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

MATCH LINE STA 140+00

2.5:1

10.0:1

1790.81
-85.50

1791.61
-77.50

2.5:1

1766.61
15.00

10.0:1

1766.75
7.00

2.0%

1766.61
0.00

2.0%

1766.47
7.00

2.0%

1767.07
10.00

140+00

1800
1790
1780
1770
1760
1750
1740
1735

-120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20

10 FT

10 FT

9

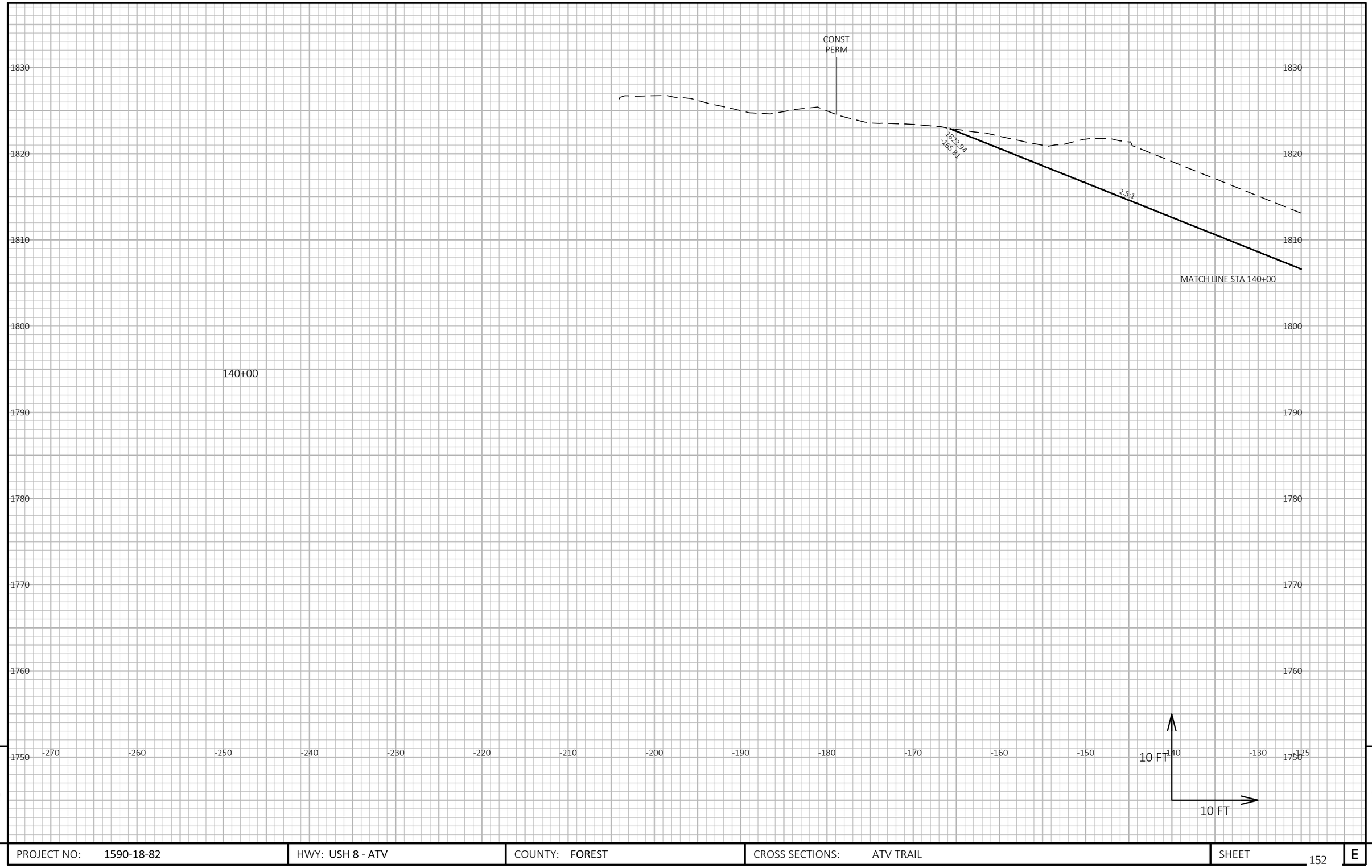
9

PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 151	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 41

PLOT DATE : 10/22/2024 11:28 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

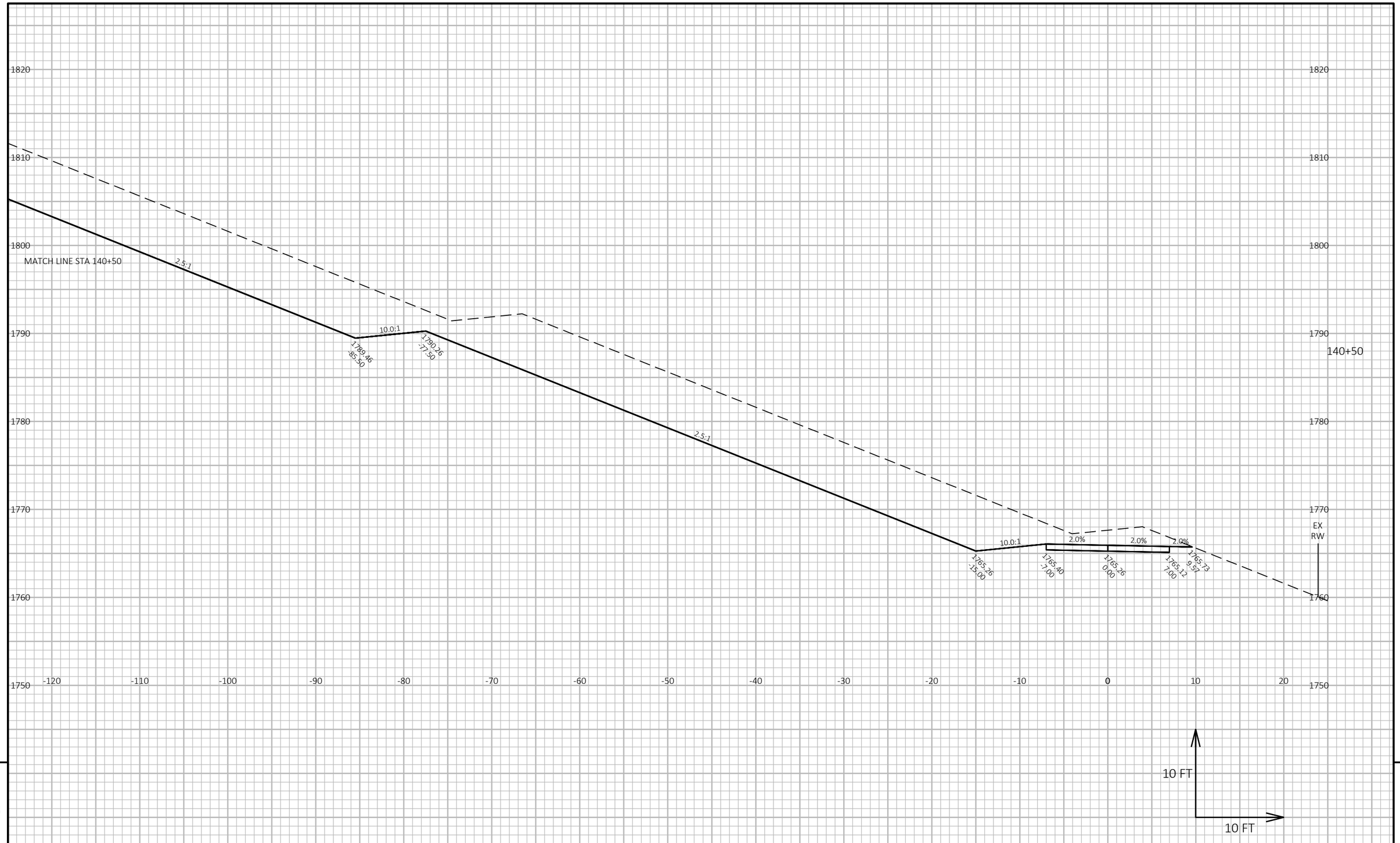
9

PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 152	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 42

PLOT DATE : 10/22/2024 11:28 AM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

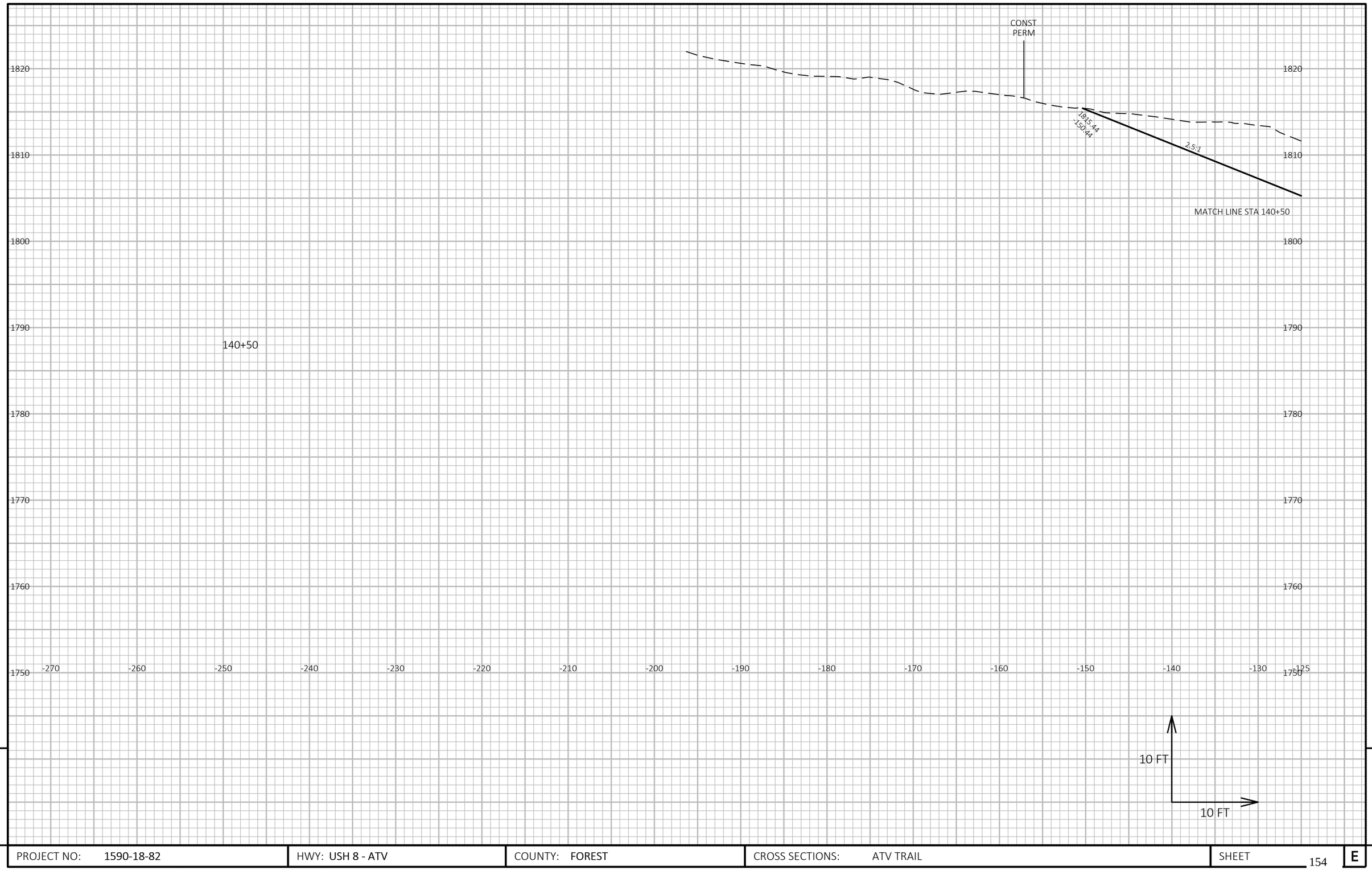
9

PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 153	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 43

PLOT DATE : 10/22/2024 11:28 AM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

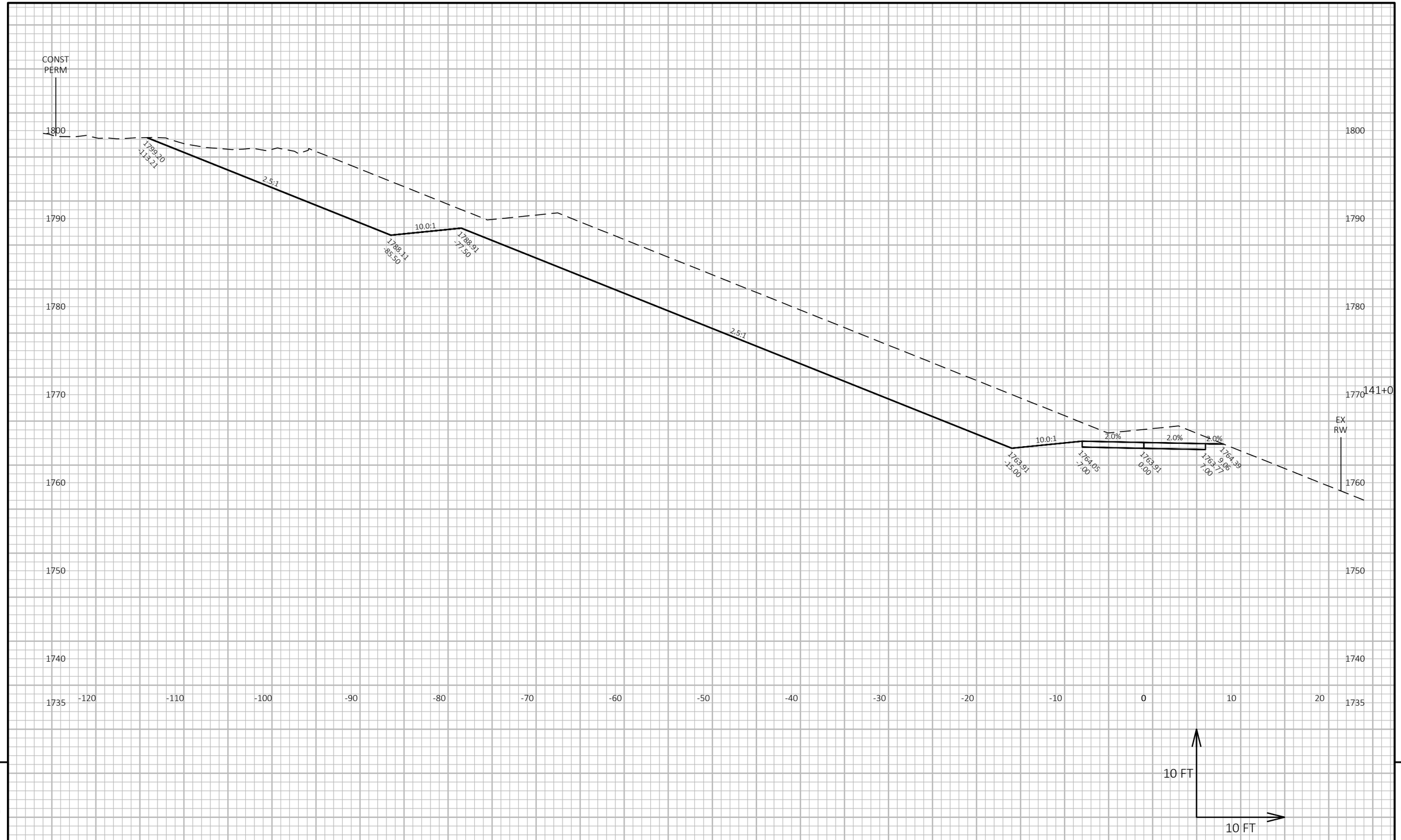
9

PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 154	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 44

PLOT DATE : 10/22/2024 11:28 AM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

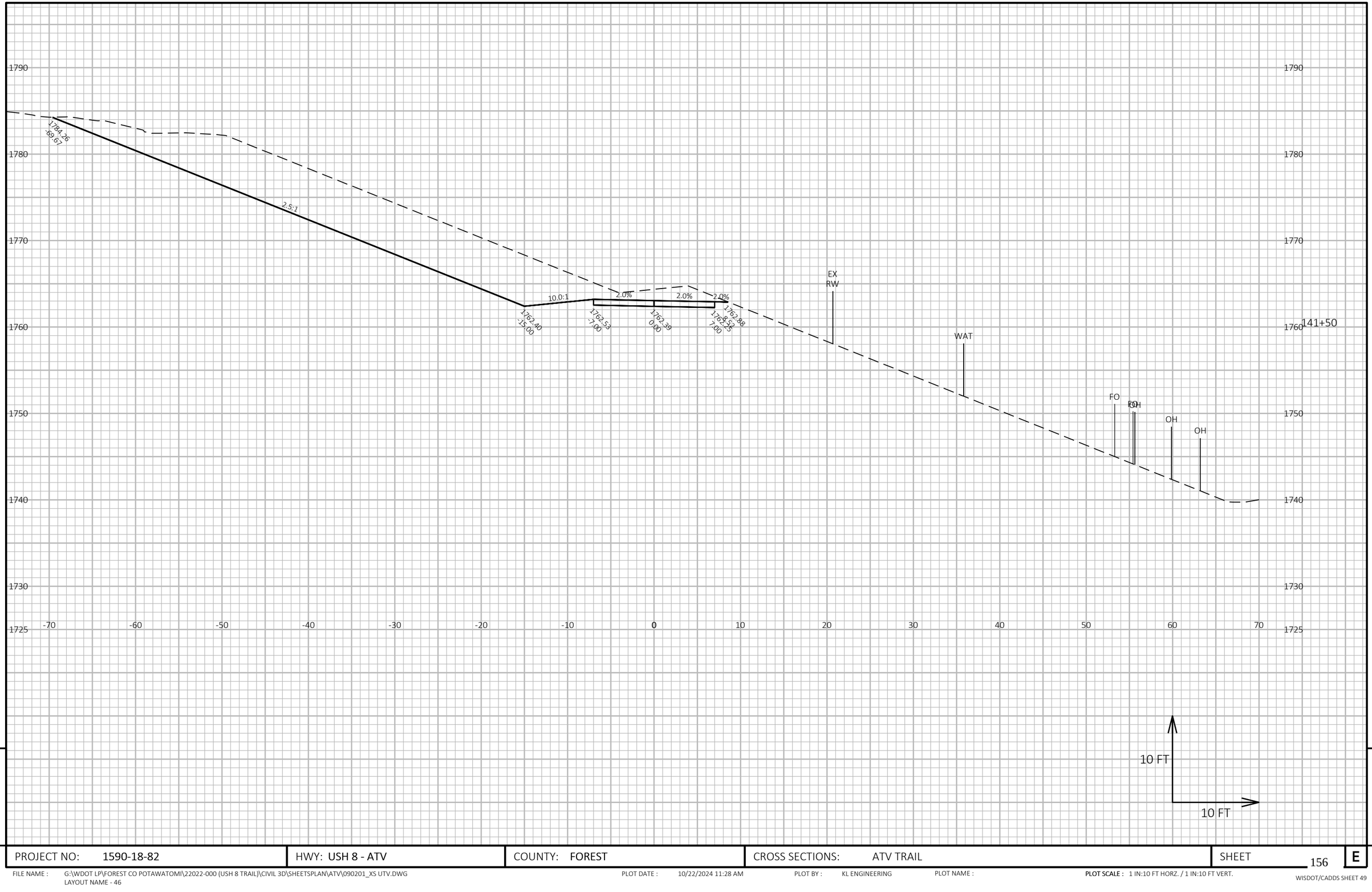
PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 155	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 45

PLOT DATE : 10/22/2024 11:28 AM PLOT BY : KL ENGINEERING PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 156	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 46

PLOT DATE : 10/22/2024 11:28 AM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

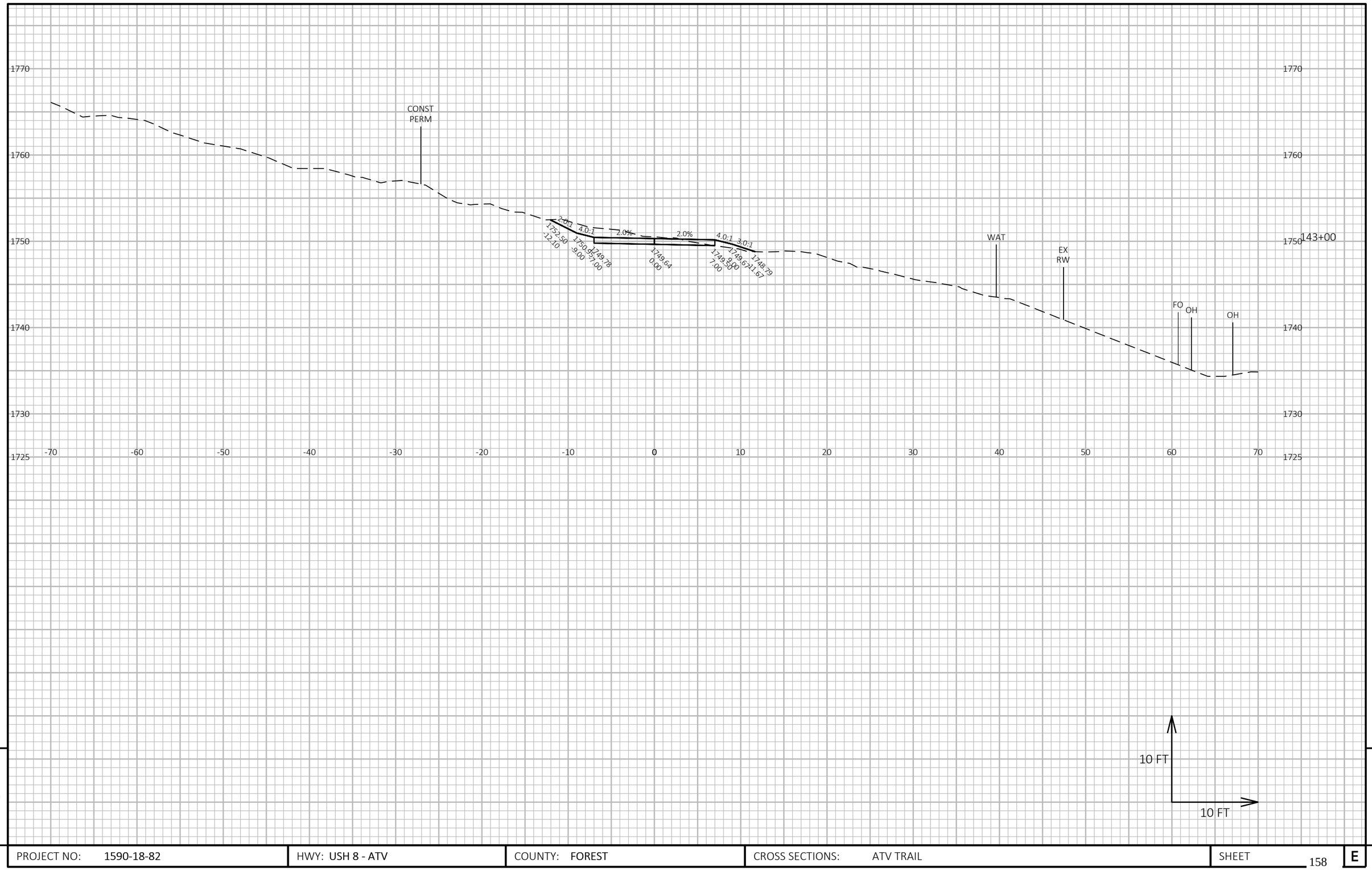
9

PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 157	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 47

PLOT DATE : 10/22/2024 11:28 AM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

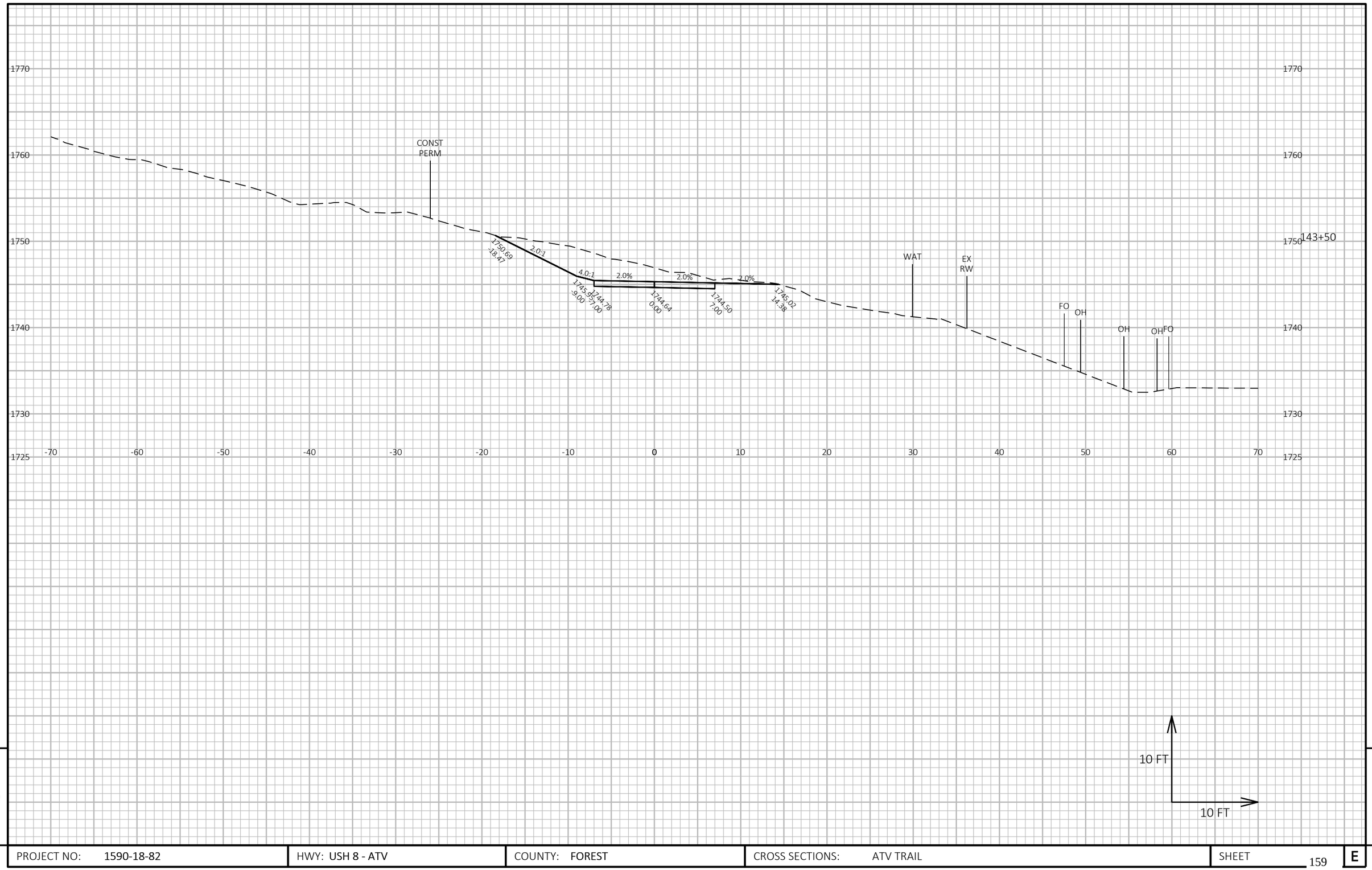
9

PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 158	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 48

PLOT DATE : 10/22/2024 11:28 AM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

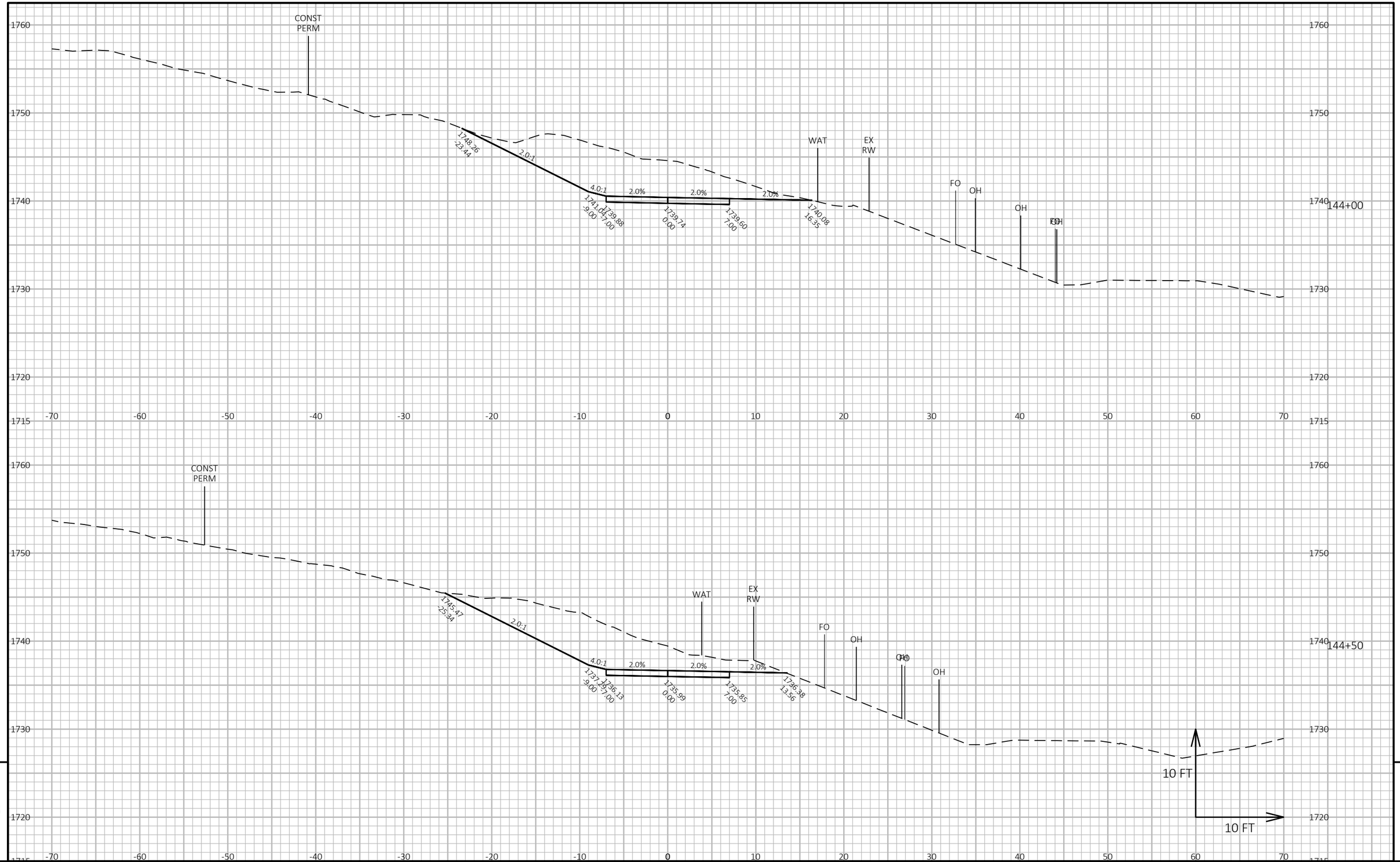
PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 159	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 49

PLOT DATE : 10/22/2024 11:28 AM PLOT BY : KL ENGINEERING PLOT NAME :

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

WISDOT/CADDS SHEET 49

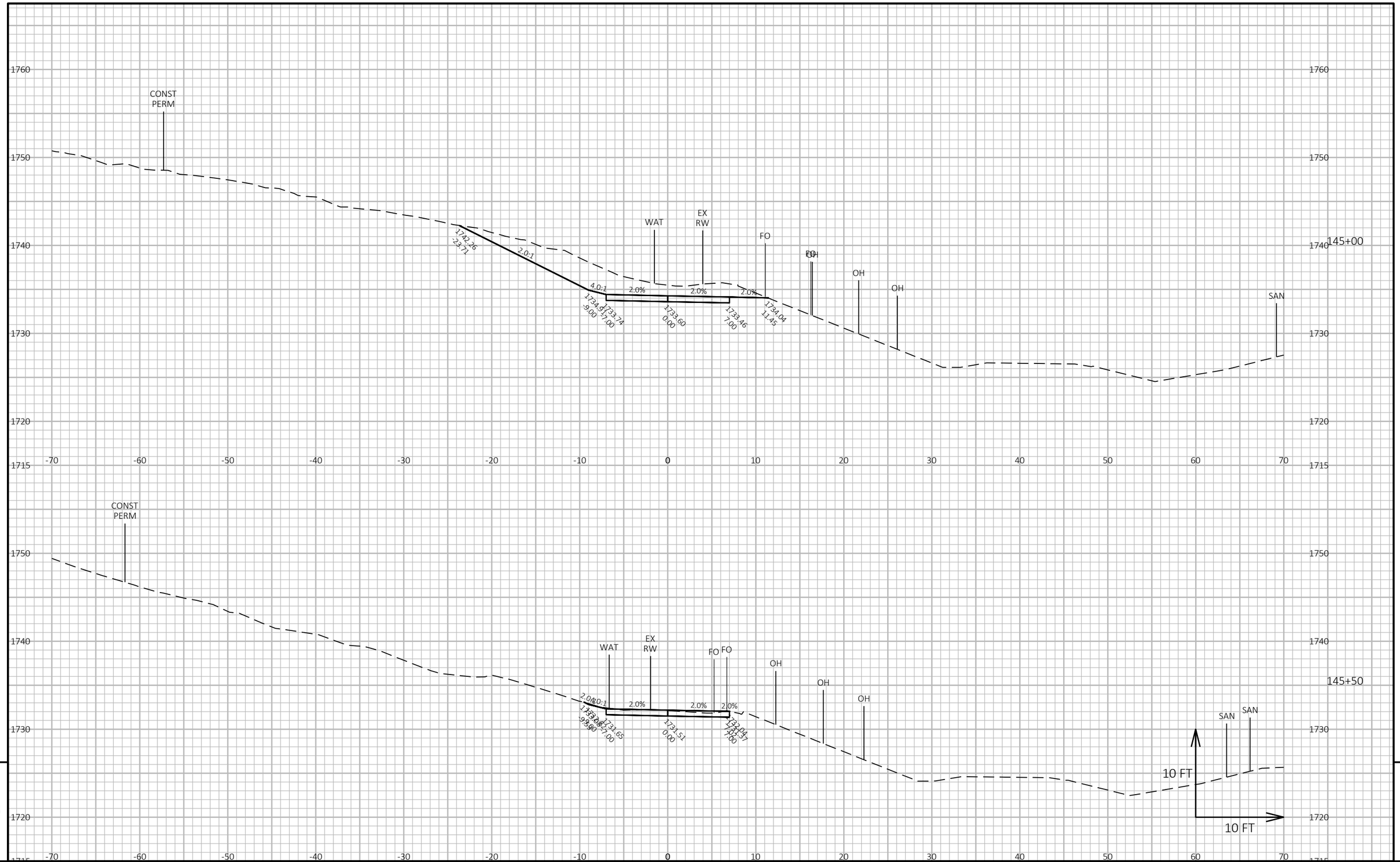


PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 160	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 50

PLOT DATE : 10/22/2024 11:29 AM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

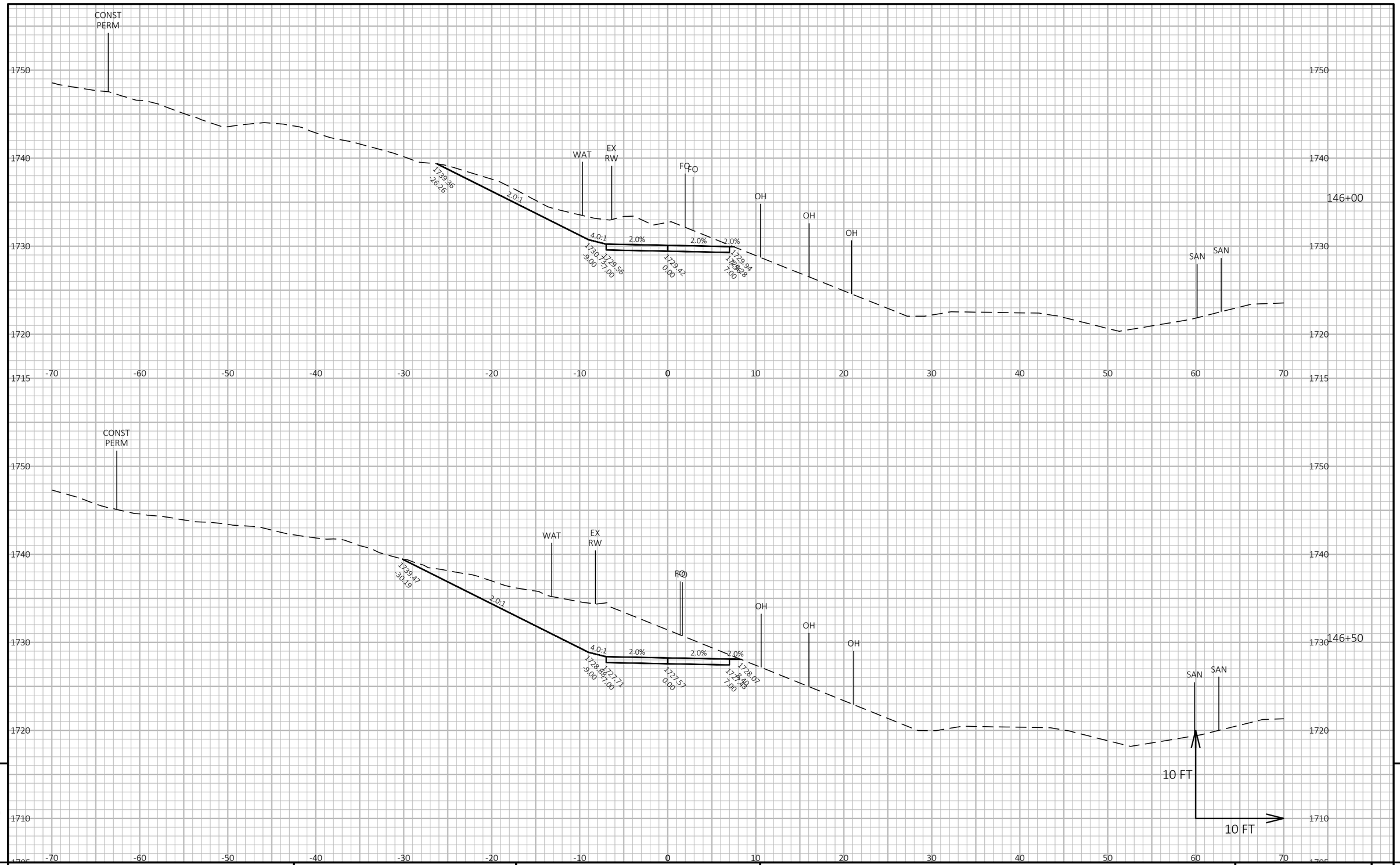
9

PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 161	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 51

PLOT DATE : 10/22/2024 11:29 AM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

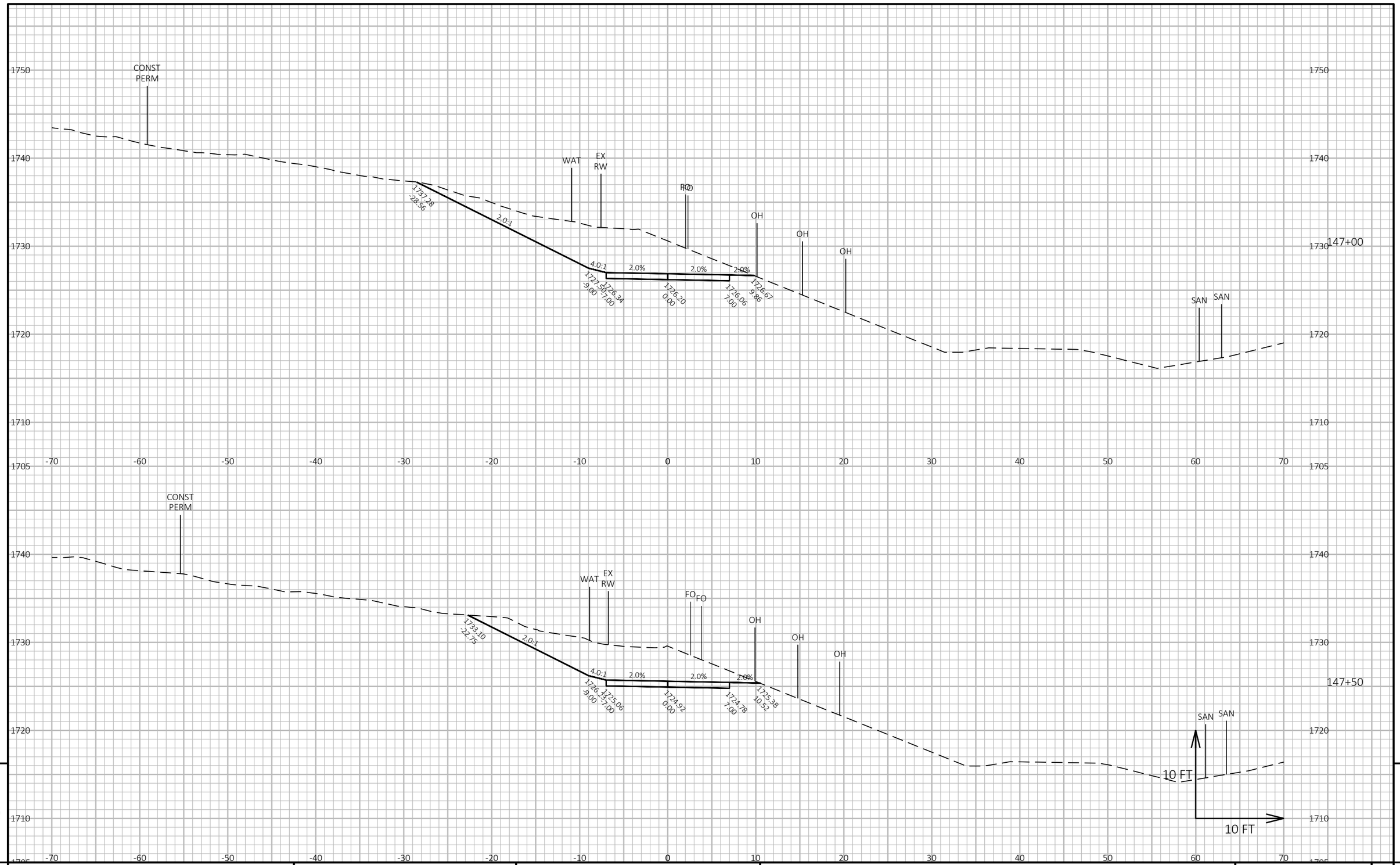


PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 162	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 52

PLOT DATE : 10/22/2024 11:29 AM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

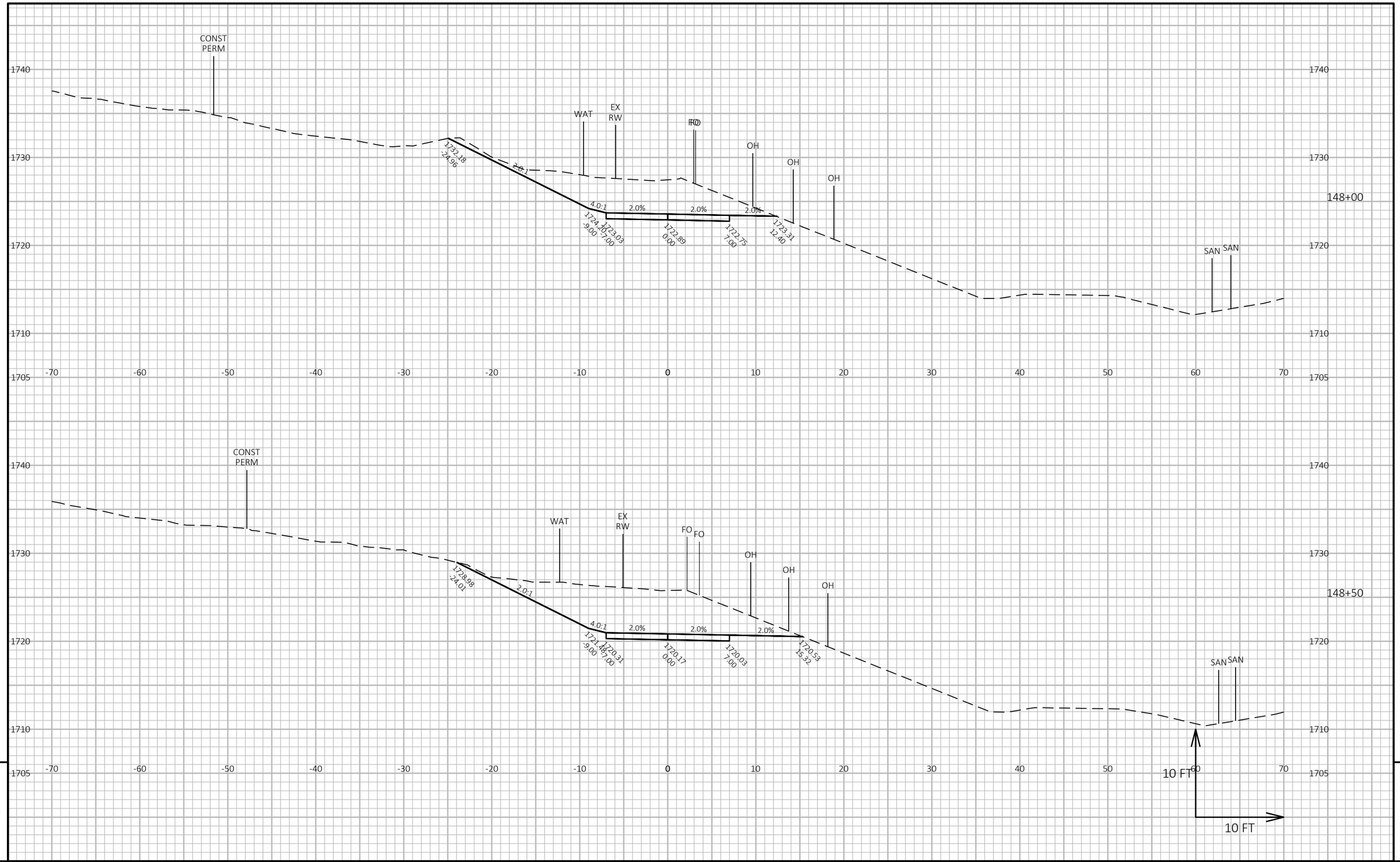
9

PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 163	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 53

PLOT DATE : 10/22/2024 11:29 AM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

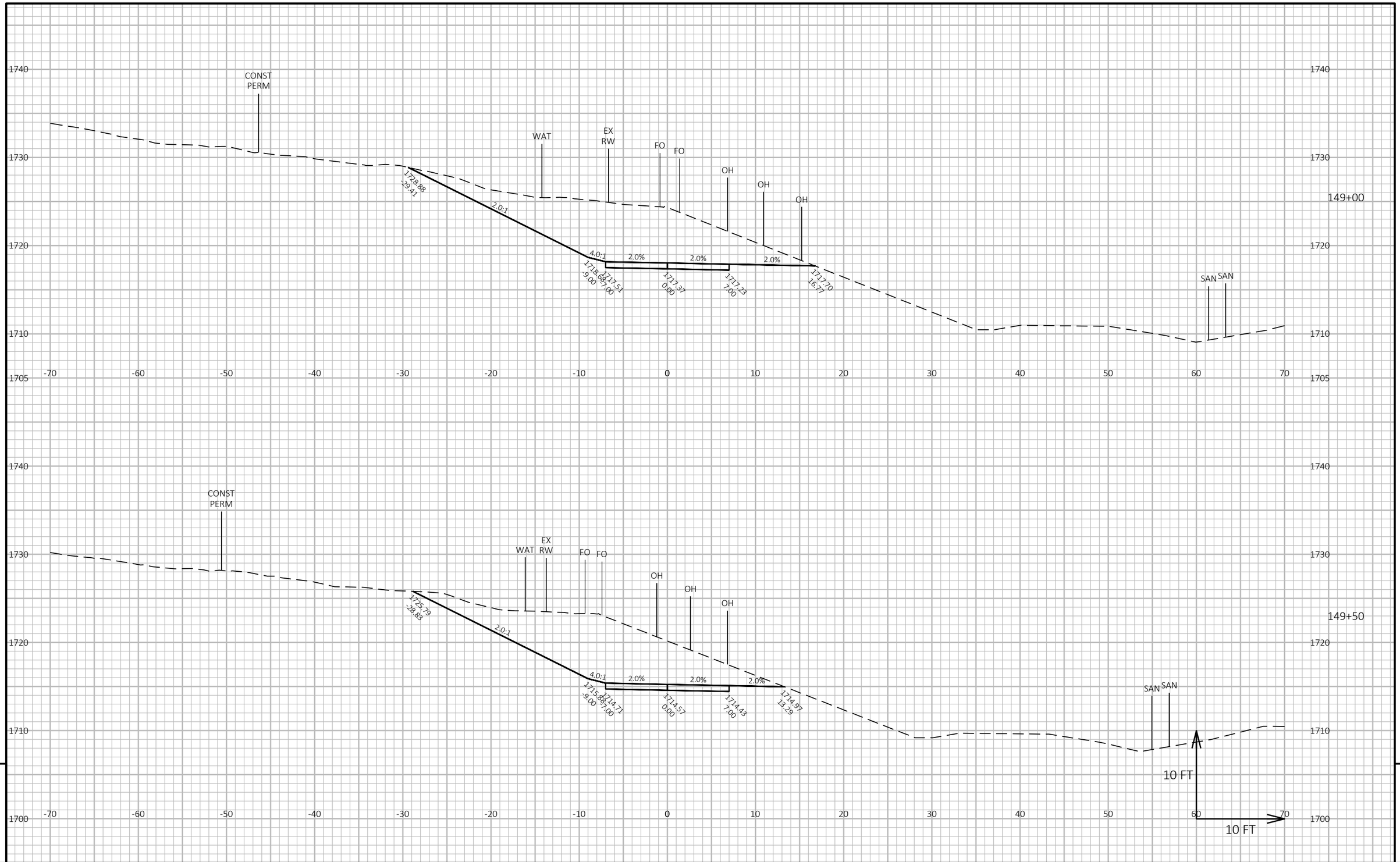
9

PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 164	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 54

PLOT DATE : 10/22/2024 11:29 AM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 165	E

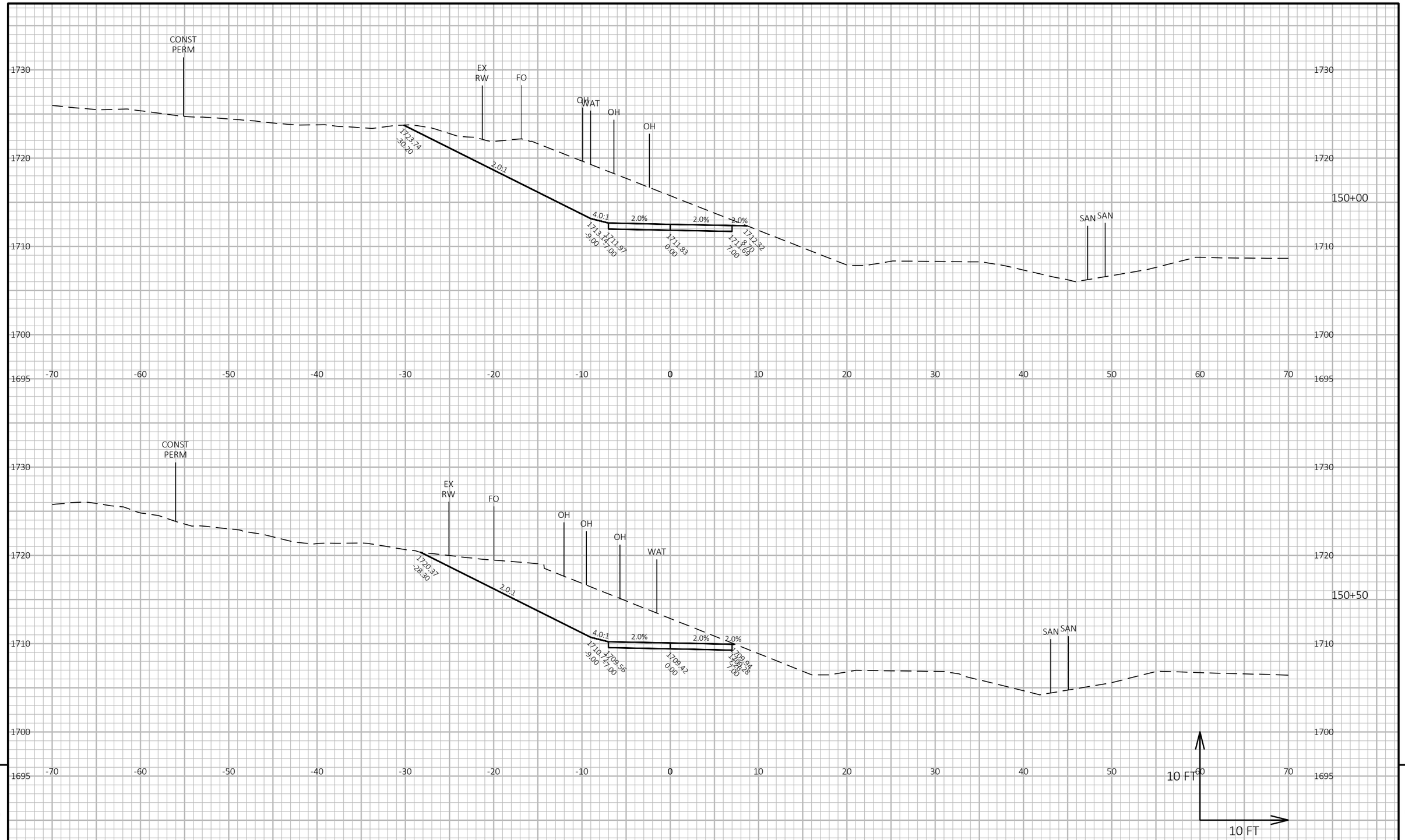
9

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 55

PLOT DATE : 10/22/2024 11:29 AM PLOT BY : KL ENGINEERING PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

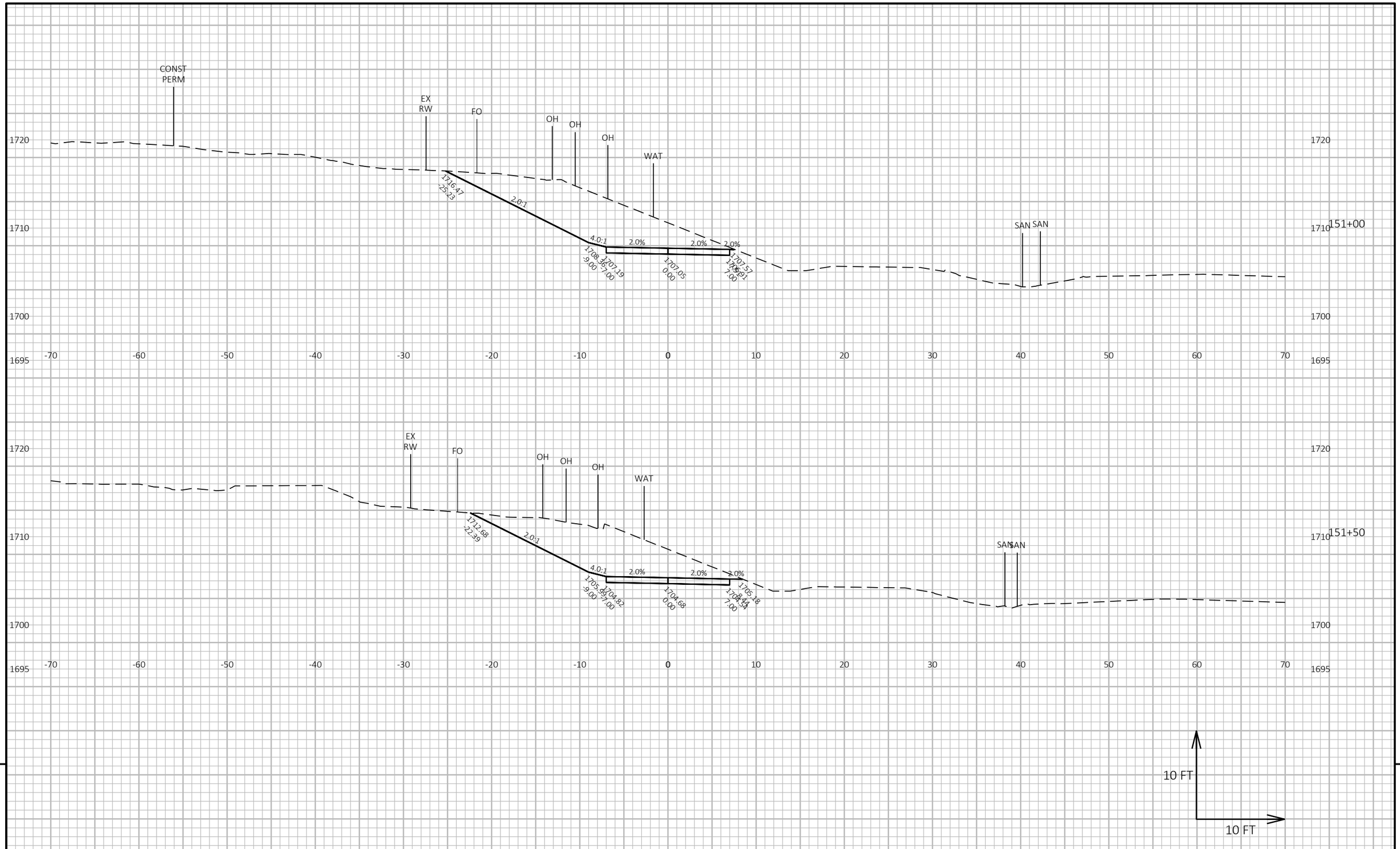
9

PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 166	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 56

PLOT DATE : 10/22/2024 11:29 AM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

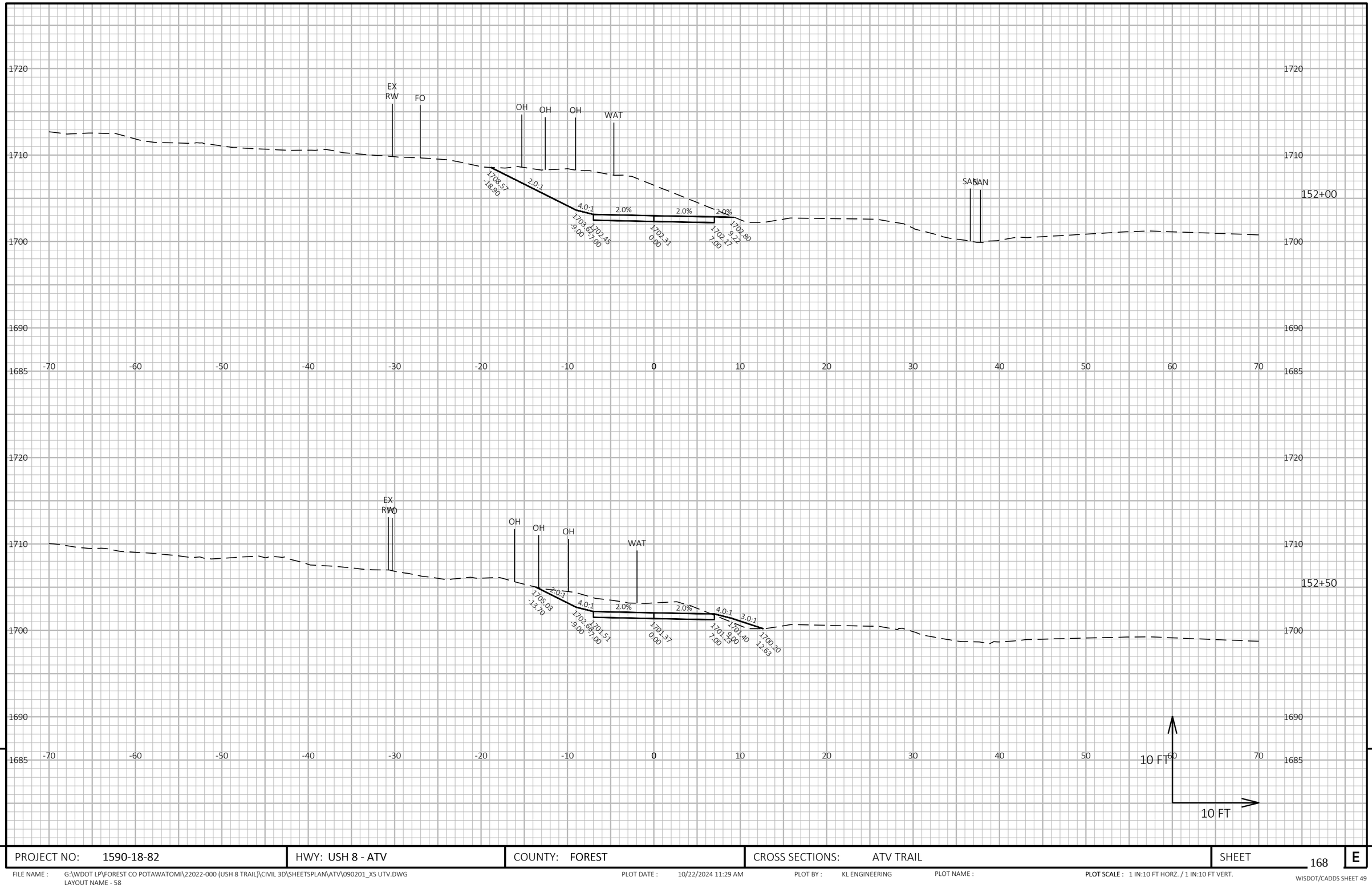


PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 167	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 57

PLOT DATE : 10/22/2024 11:29 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

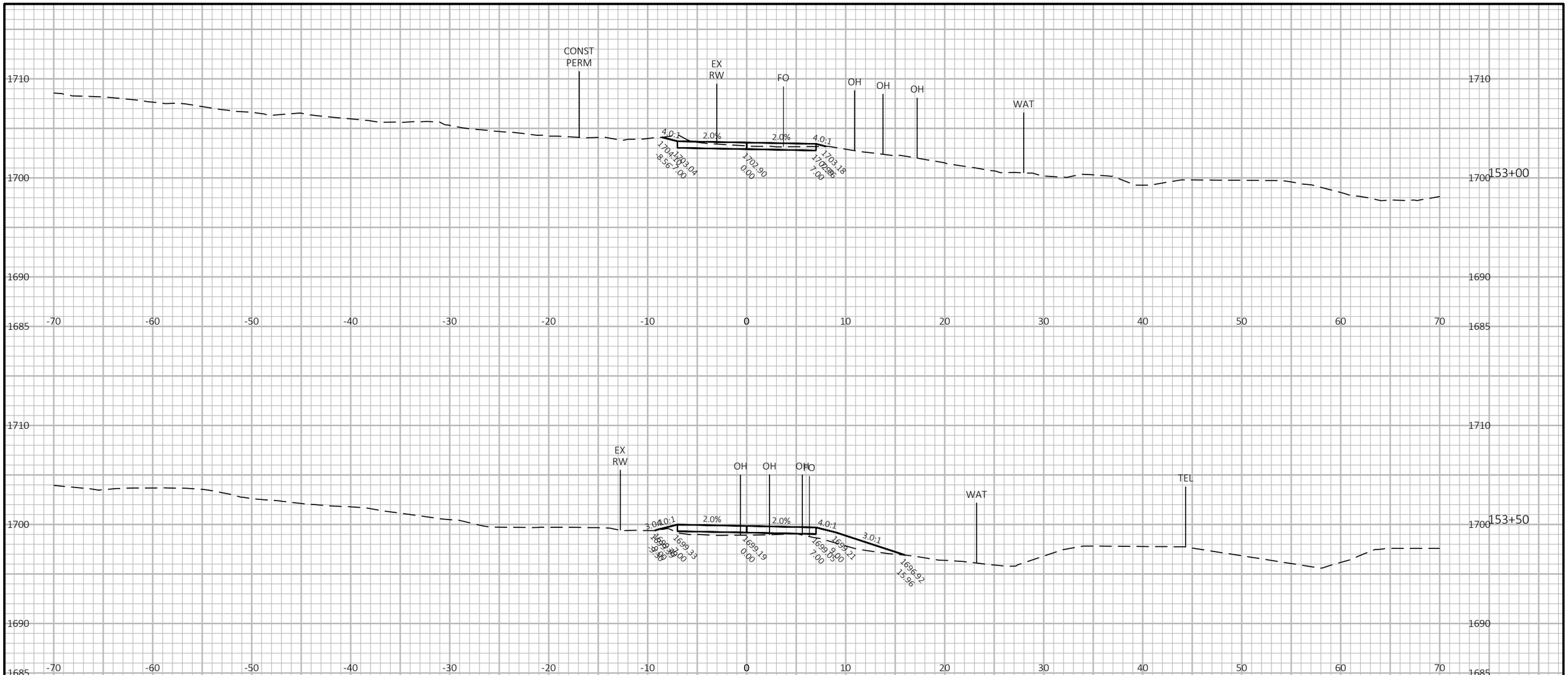
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PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 168	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 58

PLOT DATE : 10/22/2024 11:29 AM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

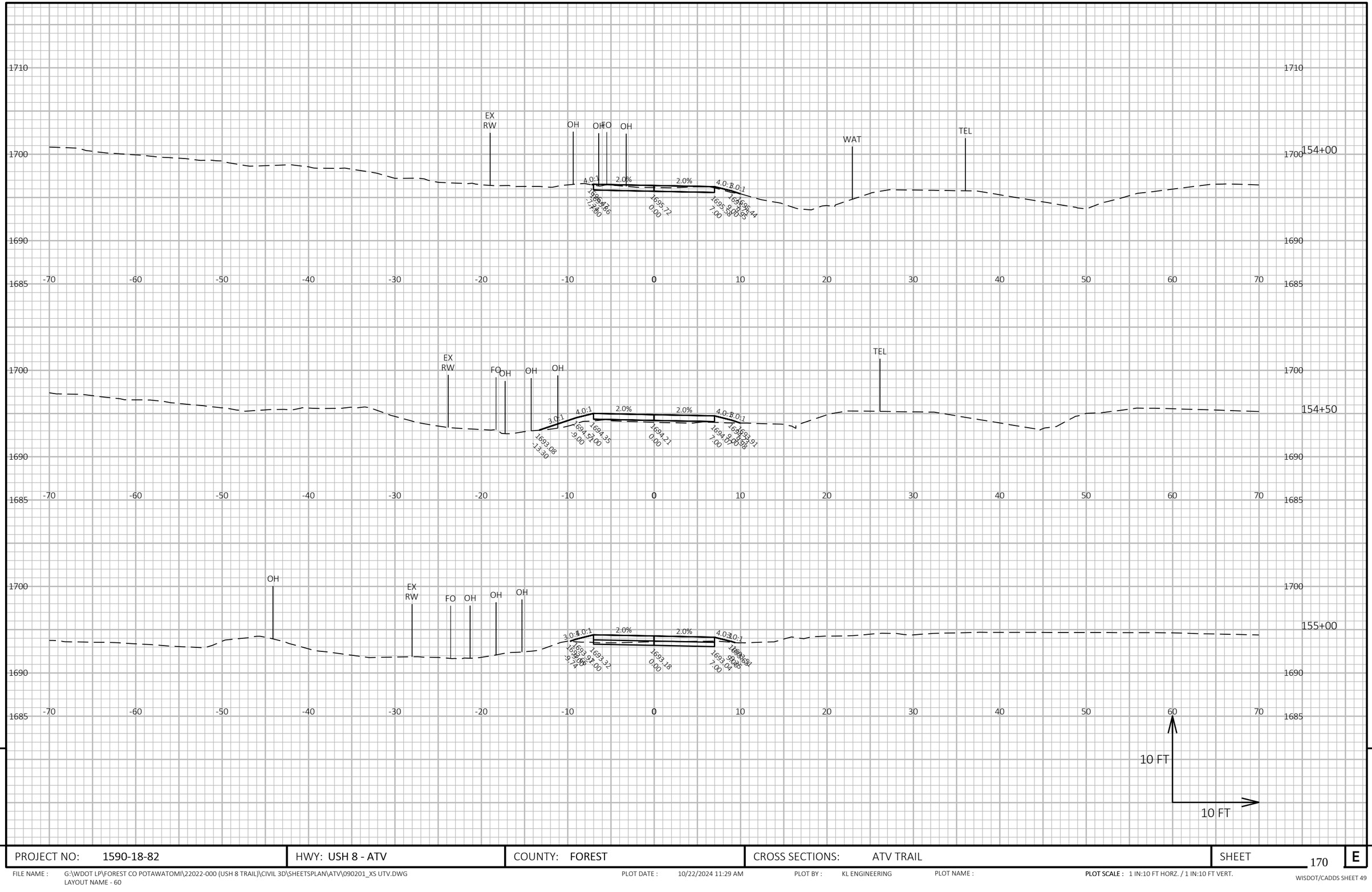
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PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 169	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 59

PLOT DATE : 10/22/2024 11:29 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1590-18-82	HWY: USH 8 - ATV	COUNTY: FOREST	CROSS SECTIONS: ATV TRAIL	SHEET 170	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\ATV\090201_XS UTV.DWG
LAYOUT NAME - 60

PLOT DATE : 10/22/2024 11:29 AM PLOT BY : KL ENGINEERING PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov

RHI

FEBRUARY 2025

PROJECT ID: 1590-18-83

WITH: 1590-18-71, 1590-18-82, 9813-02-70, & 9813-02-71

COUNTY: FOREST

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 = 74



33

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

MONICO - LAONA

FIRE KEEPER RD TO LOVE KNOT RD

USH 8

FOREST

STATE PROJECT NUMBER
1590-18-83

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1590-18-83		

DESIGN DESIGNATION

A.A.D.T.	=
A.A.D.T.	=
D.H.V.	=
D.D.	=
T.	=
DESIGN SPEED	=
ESALS	=

CONVENTIONAL SYMBOLS

PLAN

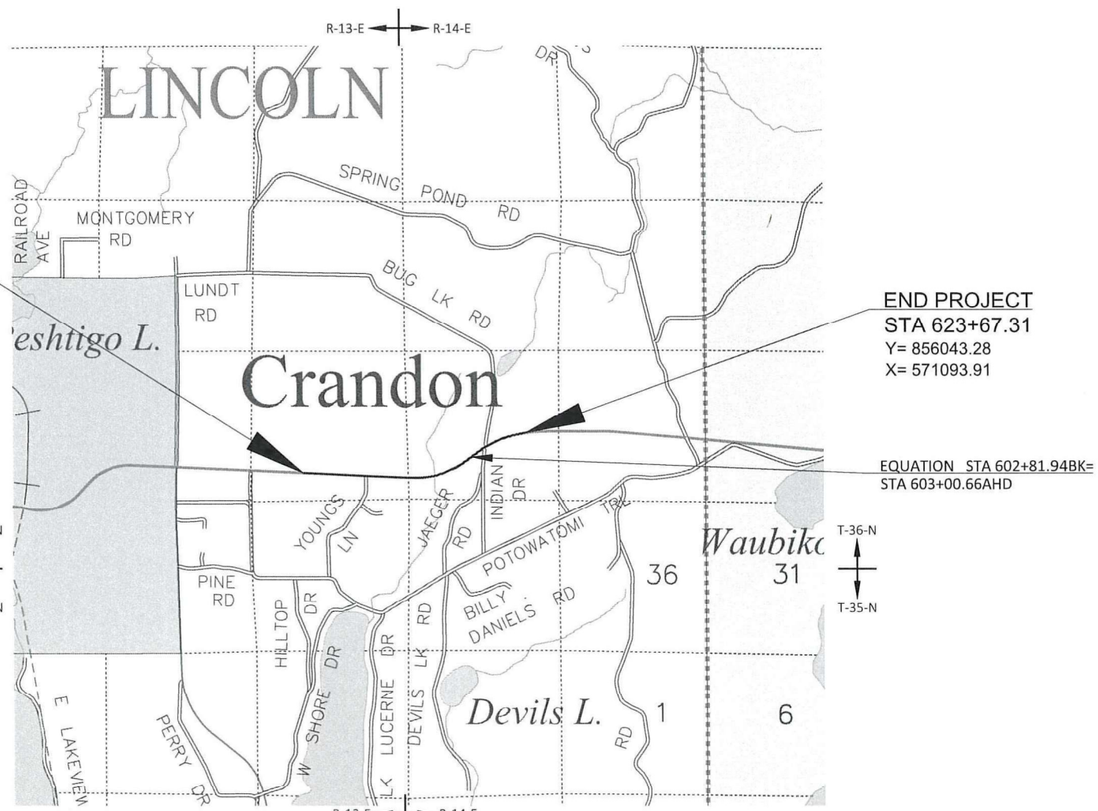
- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE (300'EB')
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

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



BEGIN PROJECT
STA 543+03.26
Y= 848360.43
X= 569708.48

END PROJECT
STA 623+67.31
Y= 856043.28
X= 571093.91

EQUATION STA 602+81.94BK=
STA 603+00.66AHD

LAYOUT

SCALE 0 1 MI

TOTAL NET LENGTH OF CENTERLINE = 1.53 MILES

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), FOREST COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES.

ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12B.

ACCEPTED FOR
FOREST COUNTY
POTAWATOMI COMMUNITY
10/30/2024
Date

Signed by:
James A Crawford
D1435F86C183475...
(Signature and Title of Official)

ORIGINAL PLANS PREPARED BY
MCMAHON ASSOCIATES, INC.
McMAHON ENGINEERS ARCHITECTS



DATE: 10/24/24
(Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	POINT OF BEGINNING
Designer	MCMAHON ASSOCIATES, INC.
Project Manager	STACY HAGENBUCHER, P.E.
Regional Examiner	FRED SCHUNKE, P.E.
Regional Supervisor	KAI KILEN, P.E.

APPROVED FOR THE DEPARTMENT

DATE: 10/30/2024
(Signature)

E

FILE NAME : W:\PROJECTS\F0954\092300403\CADD\CIVIL3D\PLAN SHEETS\USH 8 AREA WISDOT\USH 8 UTILITIES COVER SHEET.DWG

PLOT DATE : 10/24/2024 2:16 PM PLOT BY : JORDAN JELINSKI PLOT NAME :

GENERAL NOTES

1. TRAFFIC CONTROL FOR THIS PROJECT TO BE COMPLETED UNDER PROJECT 1590-18-71. SEE DETOUR AND TRAFFIC CONTROL CONSTRUCTION DETAILS

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

3. NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK. ANY LOCAL MUNICIPALITY WHICH IS NOT A MEMBER OF DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY. FOREST COUNTY POTAWATOMI COMMUNITY UTILITIES ARE NOT A MEMBER OF DIGGERS HOTLINE.

UTILITY CONTACTS

FOREST COUNTY POTAWATOMI UTILITY
DEPT - SEWER
JENNIFER SPENCER
8355 MISH KO SWEN DRIVE
P.O. BOX 340
CRANDON, WI 54520
PHONE: (715) 478-7398
EMAIL: JENNIFER.SPENCER@FCP-NSN.GOV

FOREST COUNTY POTAWATOMI UTILITY
DEPT - WATER
JENNIFER SPENCER
8355 MISH KO SWEN DRIVE
P.O. BOX 340
CRANDON, WI 54520
PHONE: (715) 478-7398
EMAIL: JENNIFER.SPENCER@FCP-NSN.GOV

SPECTRUM - COMMUNICATION LINE
ALAN ZARECKI
1201 MCCANN DRIVE
ALTOONA, WI 54720
PHONE: (715) 214-1175
EMAIL: CHRT_WI_CONST@CHARTER.COM

NSIGHT TELESERVICES - COMMUNICATION LINE
RICK VINCENT
470 SECURITY BLVD
P.O. BOX 19079
GREEN BAY, WI 54307-9079
PHONE: (920) 617-7316
EMAIL: RICK.VINCENT.COM

WISCONSIN PUBLIC SERVICE
CORPORATION - GAS/PETROLEUM
SHANE SARKKINEN
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WISCONSIN PUBLIC SERVICE
CORPORATION - ELECTRICITY
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DIGGERS HOTLINE
Dial 811 or (800)242-8511
www.DiggersHotline.com

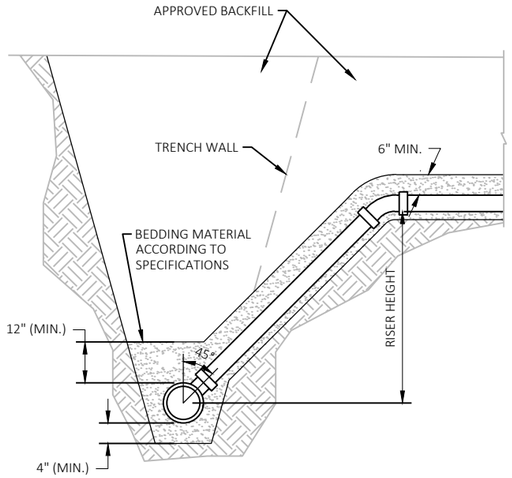
NOTE:
ALL MATERIALS AND COMPONENTS TO CONSTRUCT THIS PROJECT ARE TO COMPLY WITH BUY AMERICA REQUIREMENTS

STANDARD ABBREVIATIONS

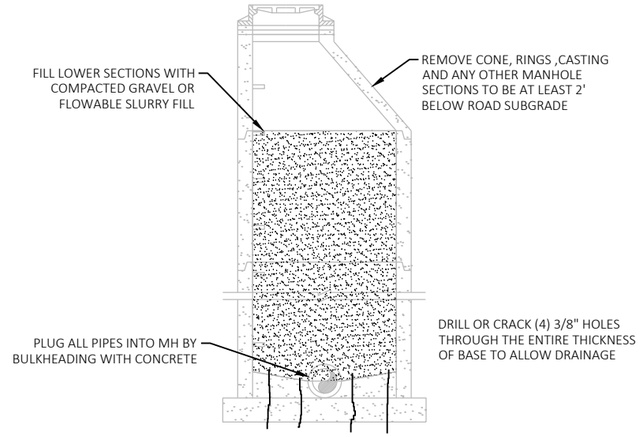
AC	ACRE
AGG	AGGREGATE
AH	AHEAD
ASPH	ASPHALT PAVEMENT
AVG	AVERAGE
B-B	BACK TO BACK
BEG	BEGIN
BIT	BITUMINOUS
BK	BACK
B/L	BASE LINE
BLDG	BUILDING
BM	BENCH MARK
BOC	BACK OF CURB
BRG	BEARING
C-C	CENTER TO CENTER
CY	CUBIC YARD
C&G	CURB AND GUTTER
CB	CATCH BASIN
CE	COMMERCIAL ENTRANCE
CHD	CHORD
C/L	CENTER LINE
CL	CLASS (FOR CONC PIPE)
CMP	CORRUGATED METAL PIPE
CO	CLEAN OUT
CONC	CONCRETE
CORR	CORRUGATED
CP	CONTROL POINT
CR	CRUSHED
CS	CURB STOP
CSW	CONCRETE SIDEWALK
CTH	COUNTY TRUNK HIGHWAY
CULV	CULVERT
D	DEPTH OR DELTA
DI	DUCTILE IRON
DIA	DIAMETER
DIS	DISCHARGE
EA	EACH
EB	EASTBOUND
EBS	EXCAVATION BELOW SUBGRADE
EFF	EFFLUENT
EG	EDGE OF GRAVEL
ELEV	ELEVATION
ELEC	ELECTRIC
EMB	EMBANKMENT
EMAT	EROSION MAT
ENT	ENTRANCE
EOR	END OF RADIUS
EP	EDGE OF PAVEMENT
EXC	EXCAVATION
EXIST	EXISTING
EW	ENDWALL
F-F	FACE TO FACE
FDN	FOUNDATION
FE	FIELD ENTRANCE
FERT	FERTILIZER
FG	FINISHED GRADE
F/L	FLOW LINE
FM	FORCE MAIN
FT	FOOT
FTG	FOOTING
GRAV	GRAVEL
GN	GRID NORTH
GV	GAS VALVE
HDPE	HIGH DENSITY POLYETHYLENE
HE	HIGHWAY EASEMENT
HMA	HOT MIX ASPHALT
HP	HIGH POINT
HT	HEIGHT
HYD	HYDRANT
ID	INSIDE DIAMETER
IN	INCH
INL	INLET
INV	INVERT
IP	IRON PIPE
JCT	JUNCTION
LB	POUND
LF	LINEAR FOOT
LP	LIGHT POLE
LST	LIFT STATION
LT	LEFT
LVC	LENGTH OF VERTICAL CURVE
MAINT	MAINTENANCE
MAT'L	MATERIAL
MAX	MAXIMUM
MIN	MINIMUM
MH	MANHOLE
MP	MILE POST
NB	NORTHBOUND
NO	NUMBER
NOR	NORMAL
OD	OUTSIDE DIAMETER
OBLIT	OBLITERATE
PAV'T	PAVEMENT
PC	POINT OF CURVATURE
PCC	PORTLAND CEMENT CONCRETE OR POINT OF COMPOUND CURVATURE
PE	PRIVATE ENTRANCE
PED	PEDESTAL
PGL	PROFILE GRADE LINE
PI	POINT OF INTERSECTION
P/L	PROPERTY LINE
PLE	PERMANENT LIMITED EASEMENT
PP	POWER POLE
PRC	POINT OF REVERSE CURVATURE
PROP	PROPOSED
PSD	PASSING SIGHT DISTANCE
PSI	POUNDS PER SQUARE INCH
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE OR POINT OF VERTICAL CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
REBAR	REINFORCEMENT ROD
REM	REMOVE
RECON	RECONSTRUCT
REQ'D	REQUIRED
R/L	REFERENCE LINE
RP	RADIUS POINT
RR	RAILROAD
RT	RIGHT
R/W	RIGHT-OF-WAY
SB	SOUTHBOUND
SE	SUPERELEVATION
SF	SQUARE FEET
SI	SLOPE INTERCEPT
STH	STATE TRUNK HIGHWAY
SY	SQUARE YARD
SALV	SALVAGED
SAN	SANITARY
SEC	SECTION
SHLDR	SHOULDER
S/L	SURVEY LINE
SQ	SQUARE
STA	STATION
STD	STANDARD
STO	STORM
SW	SIDEWALK
TC	TOP OF CURB
TEL	TELEPHONE
TEMP	TEMPORARY
TLE	TEMPORARY LIMITED EASEMENT
TV	TELEVISION
TYP	TYPICAL
UG	UNDERGROUND
USH	U.S. HIGHWAY
VAR	VARIES
VC	VERTICAL CURVE
VERT	VERTICAL
WB	WESTBOUND
WM	WATER MAIN
WV	WATER VALVE

2

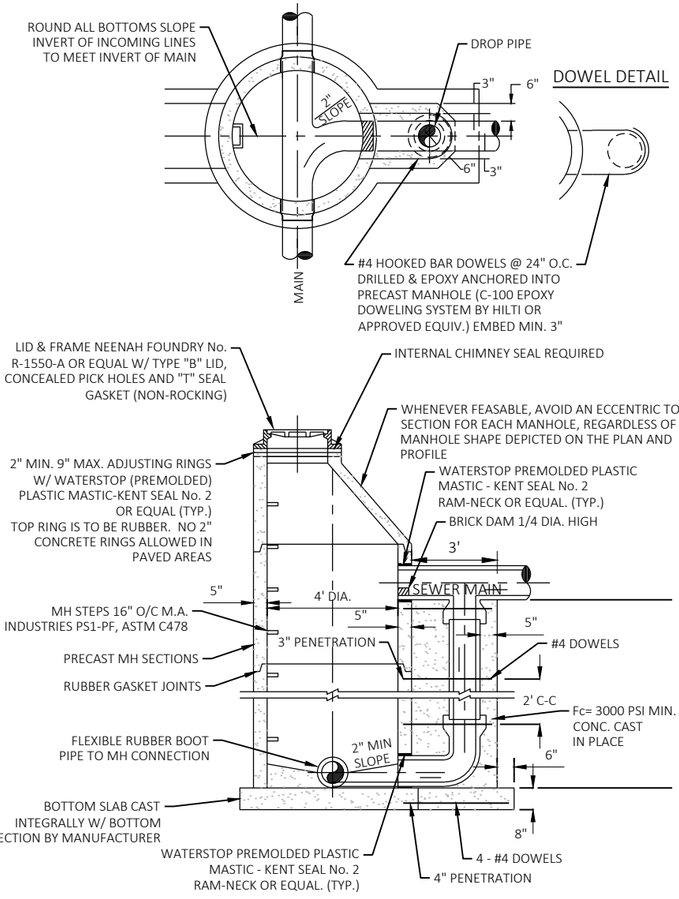
NOTE:
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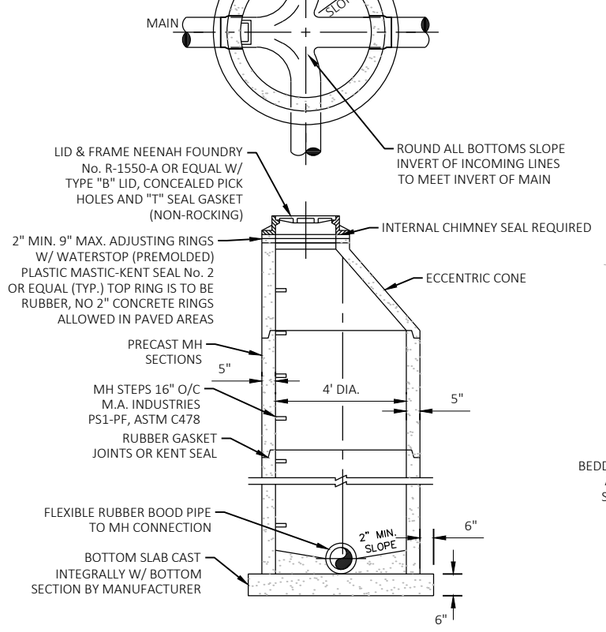
SEWER LATERAL RISER



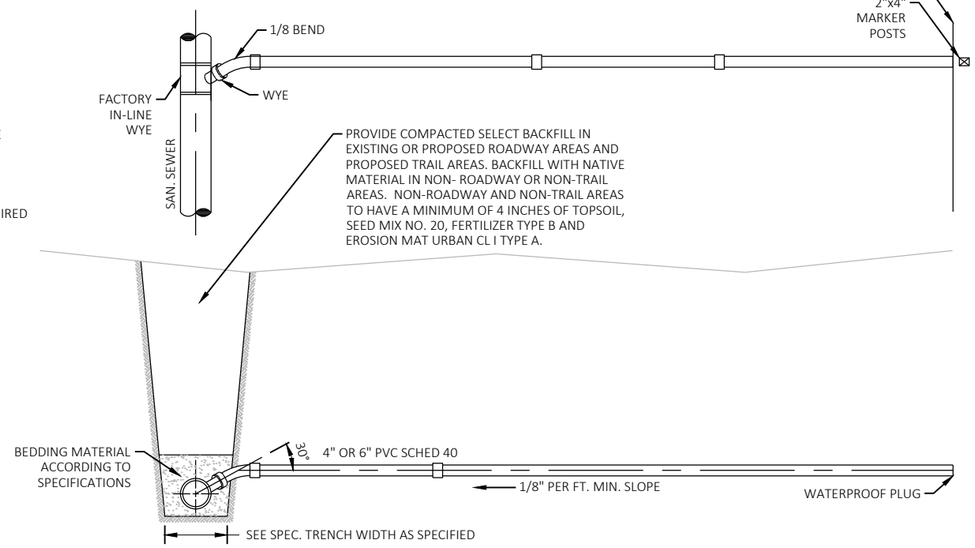
ABANDON MANHOLE



STANDARD PRECAST DROP MANHOLE



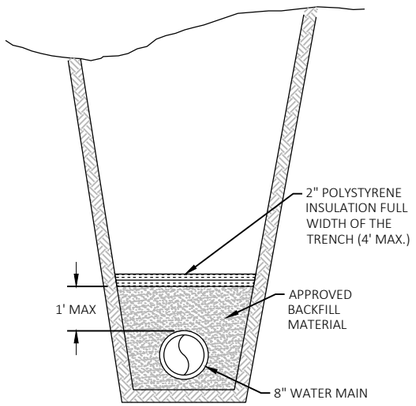
STANDARD PRECAST MANHOLE



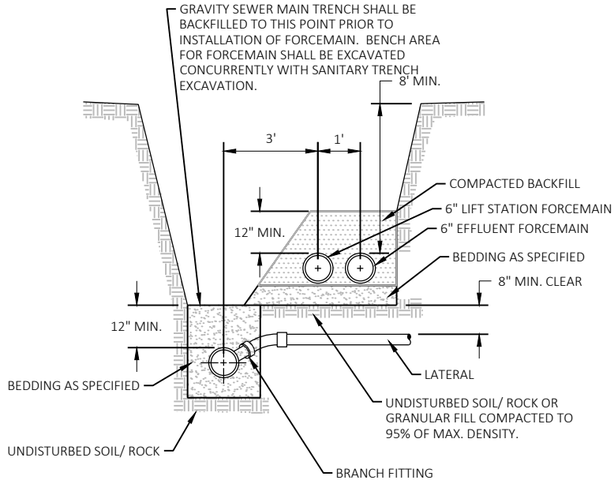
NEW SEWER LATERAL W/ NO CONNECTION DETAIL

PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	CONSTRUCTION DETAILS	SHEET ---- 3	E

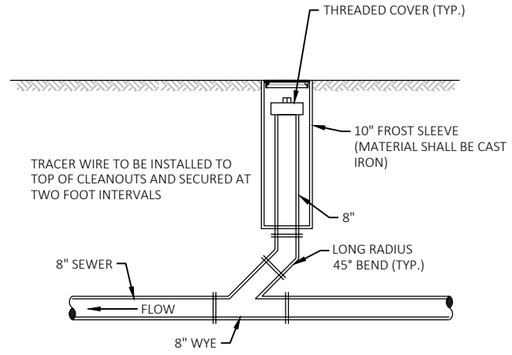
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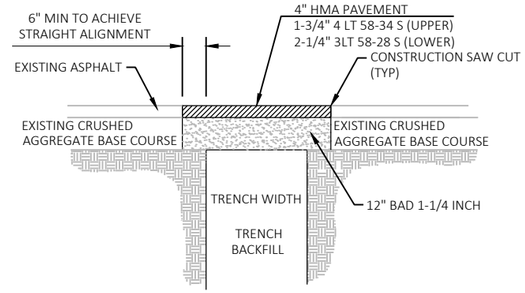
WATER MAIN INSULATION



TRENCH DETAIL
FORCEMAIN ON BENCH

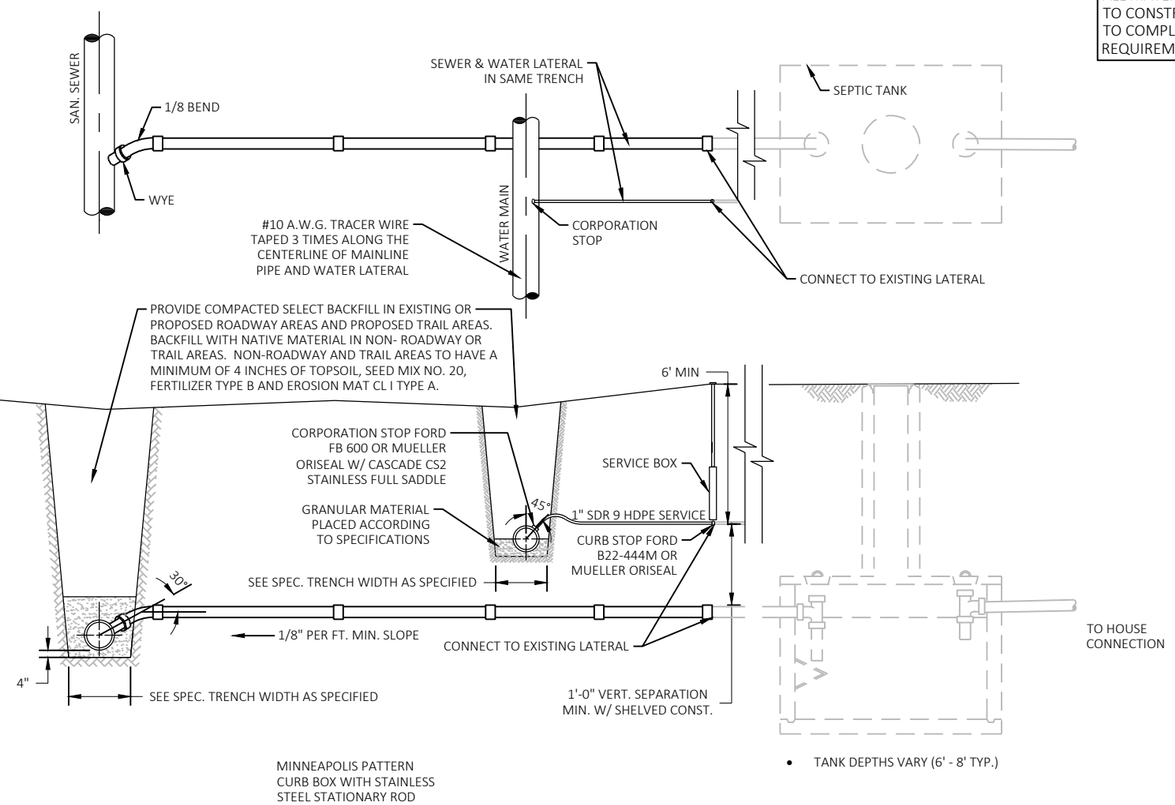


SANITARY SEWER MAIN
CLEANOUT DETAIL

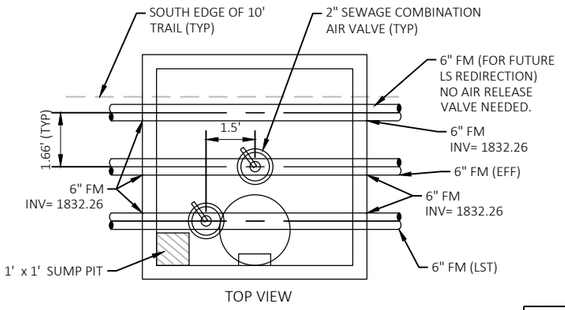


UTILITY TRENCH
PAVMENT REPAIR

NOTE:
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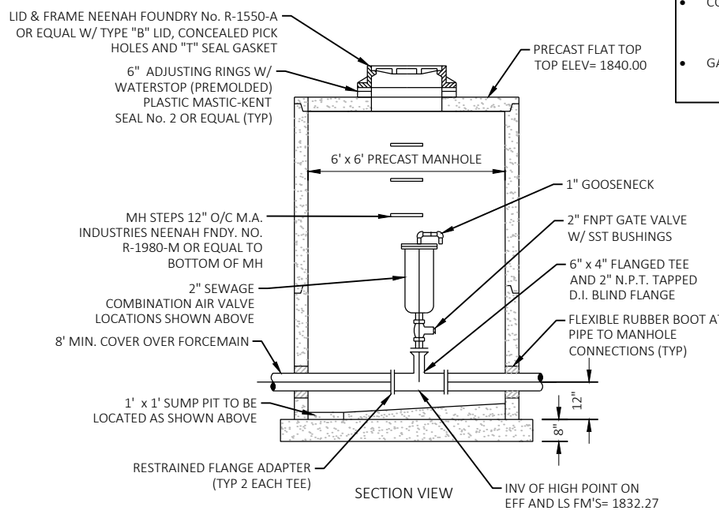


TYPICAL SEWER & WATER CONNECTION



TOP VIEW

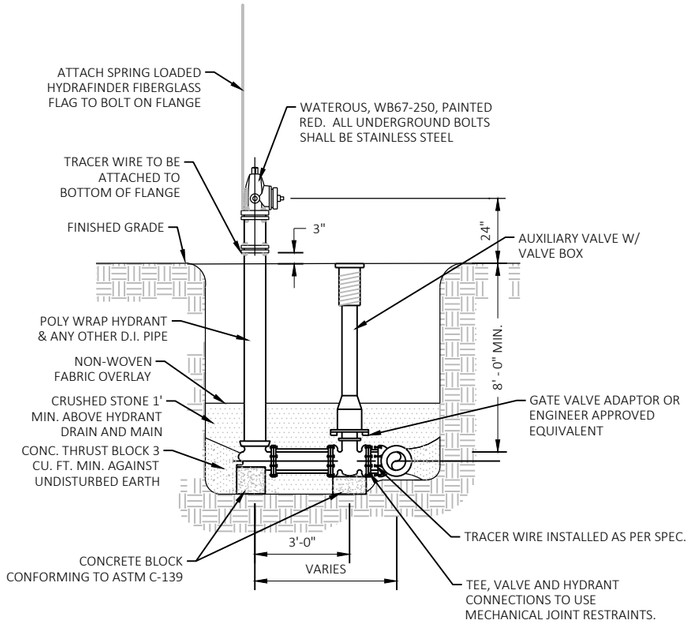
VALVE SPECIFICATIONS:
- COMBINATION AIR VALVE: DEZUNIK APCO ASU, 1.2 SCAV, T1, S2, R516, NBR, S2, S2, S2
- GATE VALVE: 316 SST, 200 PSI, ASTM A351, WHEEL HANDLE AND NON-RISING STEM.



SECTION VIEW

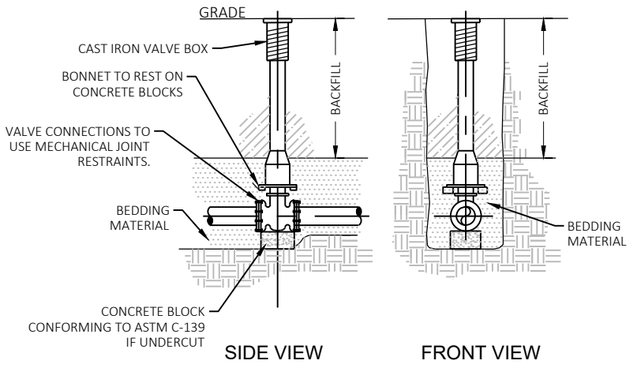
ARV MANHOLE DETAIL

PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	CONSTRUCTION DETAILS	SHEET ---- 4	E

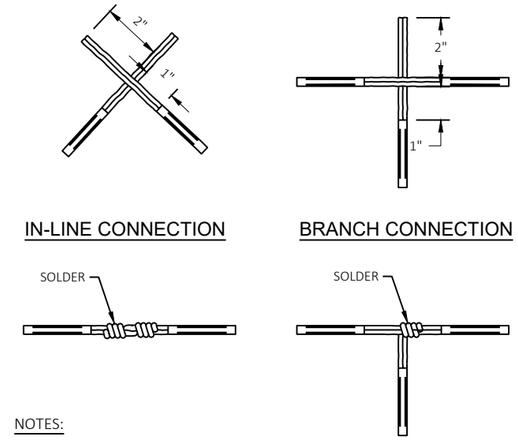


HYDRANT & VALVE INSTALLATION DETAIL

NOTE:
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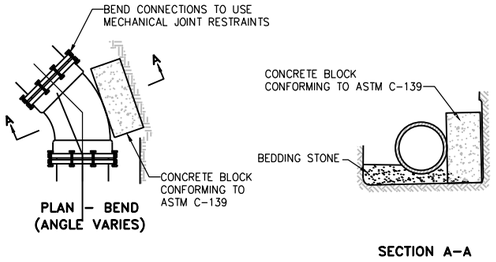
STANDARD VALVE & VALVE BOX SETTING



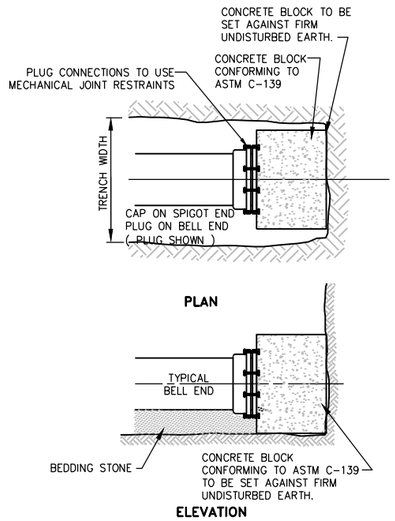
NOTES:

1. CUT OFF INSULATION FROM WIRE AS SHOWN I THE DRAWING, BUT DO NOT CUT THE COPPER WIRE
2. LOOP THE WIRE ENDS AT LEAST 4 TIMES ON BOTH SIDES OF THE CONNECTION.
3. USING A PROPANE NORCH, APPLY FLAME DIRECTLY TO JOINT (LOOPS) TO BE SOLDERED.
4. APPLY 62SN OR EQUIVALENT ROSIN CORE SOLDER TO THE SPLICE. SOLDER SHOULD FLOW INTO JOINT.
5. SOLDERING PASTE MUST BE APPLIED TO THE LOOPS BEFORE HEAT IS APPLIED IF ROSIN CORE SOLDER IS NOT USED.
6. WHEN COOLED, COVER SPLICE WITH 3M SCOTCHFILL™ ELECTRICAL INSULATION PUTTY OR EQUIVALENT. THEN COAT THE PUTTY WITH 3M SCOTCHKOTE™ ELECTRICAL COATING OR EQUIVALENT.

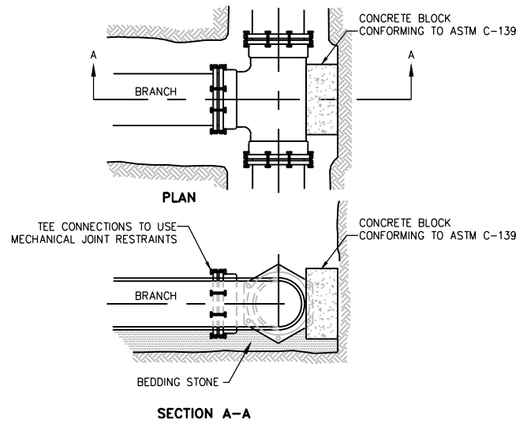
TRACER WIRE SPLICE DETAIL



BEND DETAIL
WATER MAIN AND FORCE MAIN



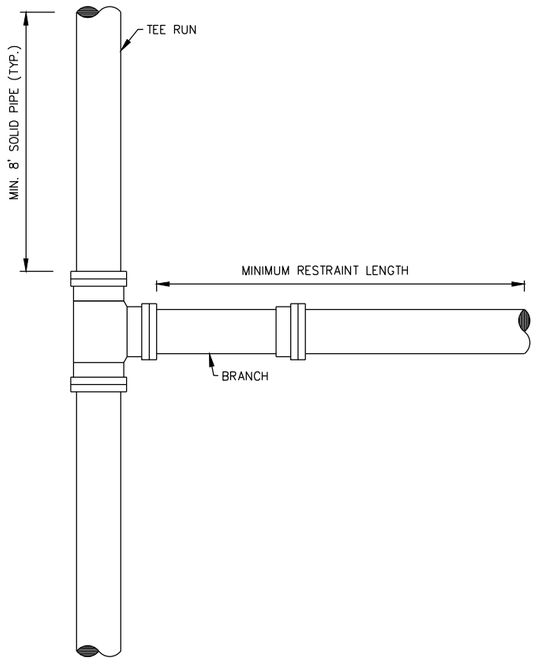
PLUG DETAIL
WATER MAIN AND FORCE MAIN



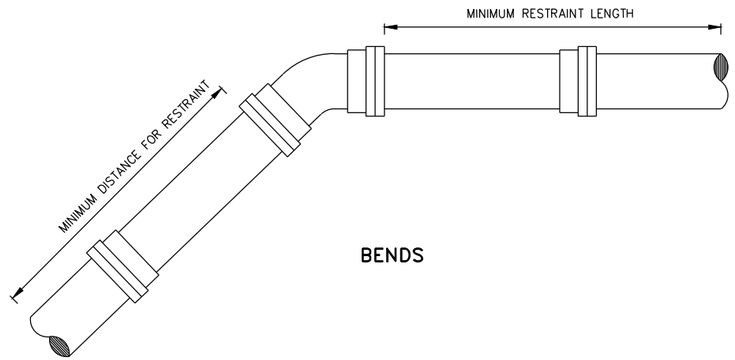
TEE DETAIL
WATER MAIN AND FORCE MAIN

NOTE:
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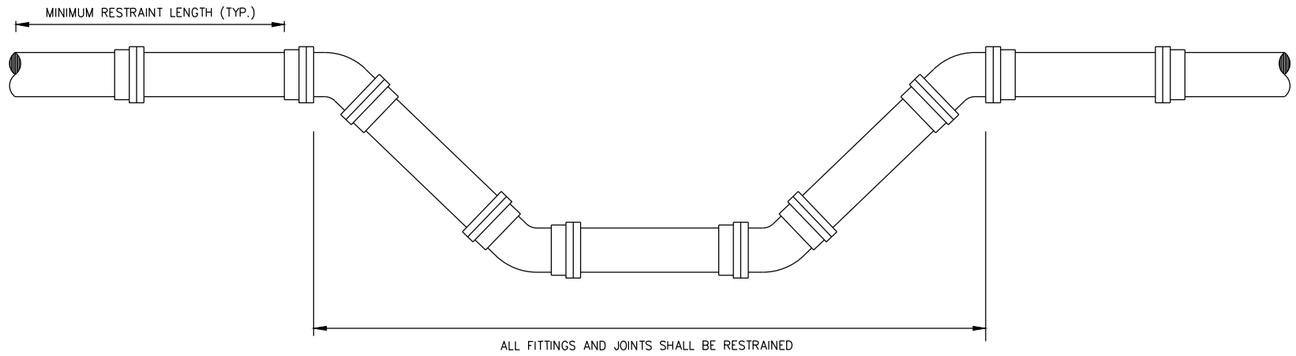
Minimum Restraint Length (ft) on both sides of the Fitting				
Fitting Type/Nominal Size	6"	8"	12"	16"
11 1/4° Bend	2	2	3	3
22 1/2° Bend	3	3	5	6
45° Bend	5	6	9	11
90° Bend	11	15	21	27
Dead End	30	40	56	73
Top Side of a Vertical Offset	13	17	24	31
Tee Run x Branch 6"BY	14			
Tee Run x Branch 8"BY	10	24		
Tee Run x Branch 12"BY	1	15	40	
Tee Run x Branch 16"BY	1	7	33	56



TEES



BENDS



VERTICAL OFFSET

RESTRAINT DETAIL

WATER MAIN AND FORCE MAIN

PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	CONSTRUCTION DETAILS	SHEET ---- 6	E

2

N

REMOVE AND RESET
GATE AND POST
STA 543+09.95, -80.75' LT

MOVING SIGN TYPE II &
MOVING SMALL SIGN SUPPORT
STA 543+35.93, -58.22' LT

SI

EXIST 18" CMP

538+00 539+00 540+00 541+00 542+00 543+00 544+00

USH 8

PAVEMENT REPLACEMENT KEY

= UTILITY TRENCH PAVEMENT REPAIR AREA (SEE DETAIL)

= 4 INCHES 3/4-INCH B.A.D. SHOULDER

EROSION CONTROL KEY

= SILT FENCE

= CULVERT PIPE CHECK

= GRUBBING

= EROSION MAT CLASS II TYPE B

UPPORT
' LT

SI

N

EXIST 36" RCP

544+00 545+00 546+00 547+00 548+00 549+00 550+00

USH 8

PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	EROSION CONTROL DETAILS	SHEET ---- 7	E

FILE NAME : W:\PROJECTS\F0954\092300403\CADD\CIVIL3D\PLAN SHEETS\USH 8 AREA WISDOT\USH 8 EROSION CONTROL.DWG
LAYOUT NAME - USH 8 Erosion Control - EC 01

PLOT DATE : 12/19/2024 10:11 AM PLOT BY : JORDAN JELINSKI PLOT NAME : PLOT SCALE : ##########

2

CONCRETE SURFACE DRAIN

SI

FIRE KEEPER RD

CONCRETE SURFACE DRAIN

PROJECT 1590-18-71 SI (TYP)

N

550+00 551+00 552+00 553+00 554+00 555+00 556+00

PROJECT 1590-18-71 SI (TYP)

PAVEMENT REPLACEMENT KEY	
	= UTILITY TRENCH PAVEMENT REPAIR AREA (SEE DETAIL)
	= 4 INCHES 3/4-INCH B.A.D. SHOULDER

EROSION CONTROL KEY	
	= SILT FENCE
	= CULVERT PIPE CHECK
	= GRUBBING
	= EROSION MAT CLASS II TYPE B

POST

10' TRAIL

PROJECT 1590-18-71 SI (TYP)

N

10' TRAIL

EXIST 30" CMP

556+00 557+00 558+00 559+00 560+00 561+00 562+00

USH 8

10' TRAIL

10' TRAIL

PROJECT 1590-18-71 SI (TYP)

2

PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	EROSION CONTROL DETAILS	SHEET ---- 8	E

FILE NAME : W:\PROJECTS\F0954\092300403\CADD\CIVIL3D\PLAN SHEETS\USH 8 AREA WISDOT\USH 8 EROSION CONTROL.DWG
LAYOUT NAME - USH 8 Erosion Control - EC 02

PLOT DATE : 12/19/2024 10:11 AM PLOT BY : JORDAN JELINSKI PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

N

EP: 119+02.68

119+00

562+00 563+00 564+00 565+00 566+00 567+00 568+00

USH 8

YOUNGS LANE

118+00

SAN

EROSION CONTROL KEY

= SILT FENCE

= CULVERT PIPE CHECK

= GRUBBING

= EROSION MAT CLASS II TYPE B

EVERYBODY'S RD

46+00

185.109

RIPRAP

PROJECT 1590-18-71 SI (TYP)

568+00 569+00 570+00 571+00 572+00 573+00 574+00

45+00

USH 8

EXIST 24" CMP

BP: 44+50.00

PROJECT 1590-18-71 SI (TYP)

10' TRAIL

GAS1I/WPS

GAS2/WPS

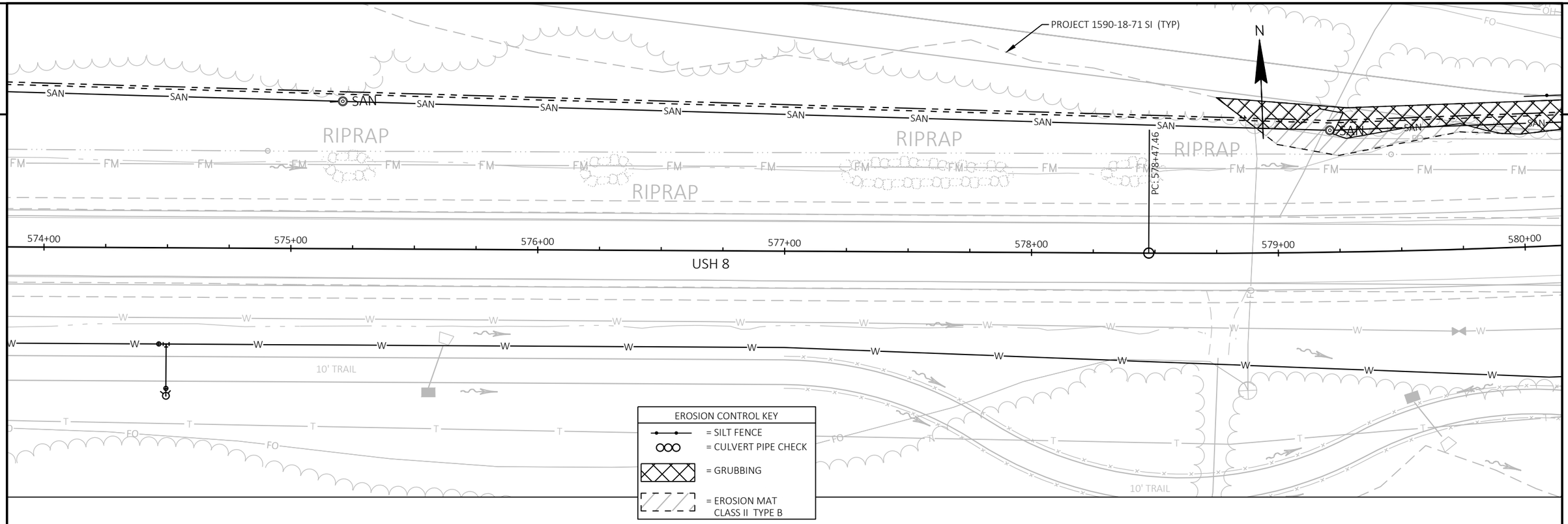
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PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	EROSION CONTROL DETAILS	SHEET ---- 9	E

FILE NAME : W:\PROJECTS\F0954\092300403\CADD\CIVIL3D\PLAN SHEETS\USH 8 AREA WISDOT\USH 8 EROSION CONTROL.DWG
LAYOUT NAME - USH 8 Erosion Control - EC 03

PLOT DATE : 12/19/2024 10:12 AM PLOT BY : JORDAN JELINSKI PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

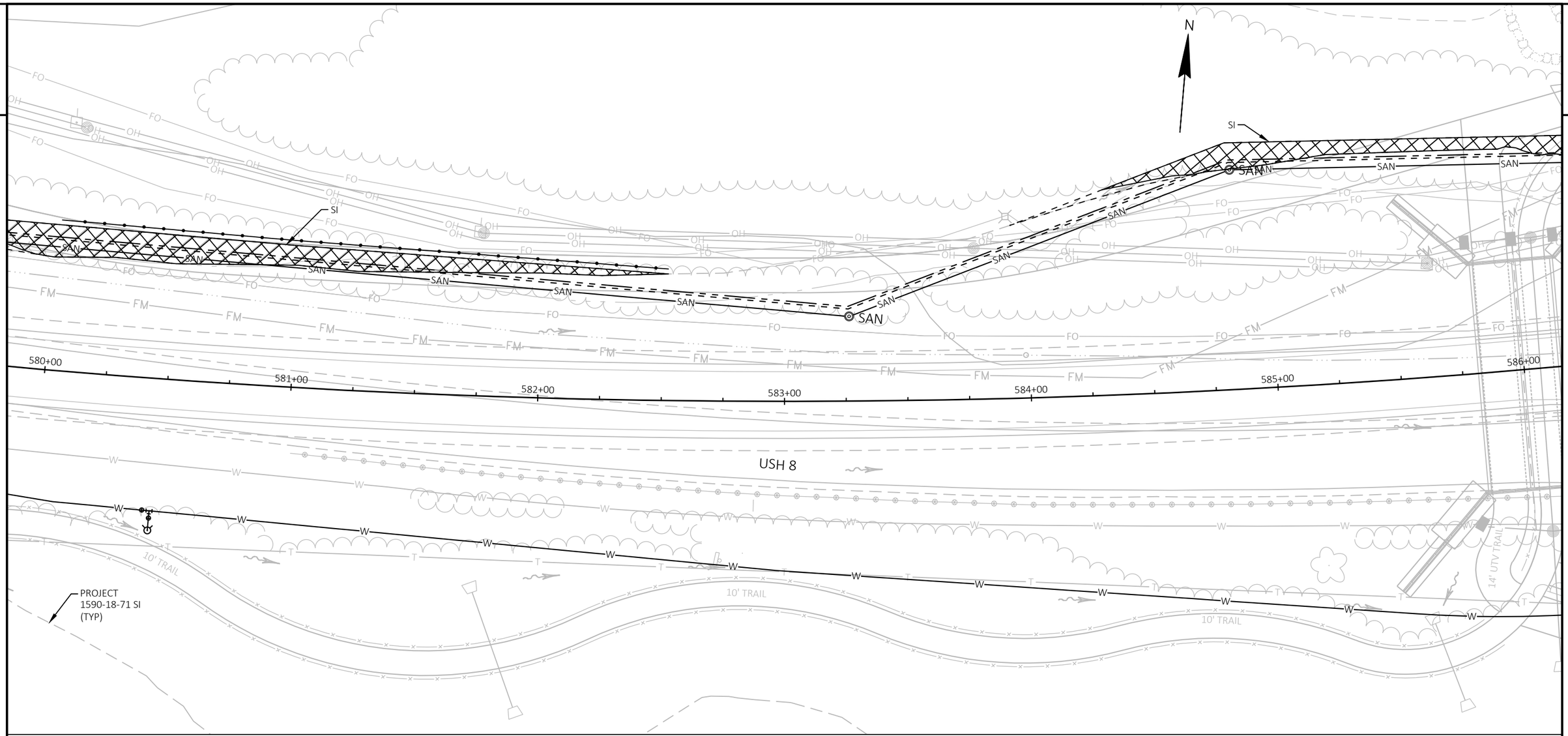


PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	EROSION CONTROL DETAILS	SHEET ---- 10	E

FILE NAME : W:\PROJECTS\F0954\092300403\CADD\CIVIL3D\PLAN SHEETS\USH 8 AREA WISDOT\USH 8 EROSION CONTROL.DWG
LAYOUT NAME - USH 8 Erosion Control - EC 04

PLOT DATE : 12/19/2024 10:12 AM PLOT BY : JORDAN JELINSKI PLOT NAME : PLOT SCALE : ##########

2


N
SI
SAN
SAN
SAN

2

EROSION CONTROL KEY

= SILT FENCE

= CULVERT PIPE CHECK

= GRUBBING

= EROSION MAT CLASS II TYPE B

PAVEMENT REPLACEMENT KEY

= UTILITY TRENCH PAVEMENT REPAIR AREA (SEE DETAIL)

= 4 INCHES 3/4-INCH B.A.D. SHOULDER

N

INL

RIPRAP

1757.65
18"CMP

1758.84
18"CPP

KWE DA KIK LN

SI

SAN

W

FM

FO

OH

14' UTV TRAIL

10' TRAIL

586+00

587+00

588+00

589+00

590+00

591+00

592+00

USH 8

PROJECT 1590-18-71 SI (TYP)

FLAG

FLAG

PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	EROSION CONTROL DETAILS	SHEET ---- 12	E

2

EROSION CONTROL KEY	
	= SILT FENCE
	= CULVERT PIPE CHECK
	= GRUBBING
	= EROSION MAT CLASS II TYPE B

N

PROJECT 1590-18-71 SI (TYP)

592+00 593+00 594+00 595+00 596+00 597+00 598+00

USH 8

10' TRAIL

PROJECT 1590-18-71 SI (TYP)

EXIST 18" CMP

10' TRAIL

PROJECT 1590-18-71 SI (TYP)

PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	EROSION CONTROL DETAILS	SHEET ---- 13	E

FILE NAME : W:\PROJECTS\F0954\092300403\CADD\CIVIL3D\PLAN SHEETS\USH 8 AREA WISDOT\USH 8 EROSION CONTROL.DWG
LAYOUT NAME - USH 8 Erosion Control - EC 07
PLOT DATE : 12/19/2024 10:12 AM PLOT BY : JORDAN JELINSKI PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

EROSION CONTROL KEY

= SILT FENCE

= CULVERT PIPE CHECK

= GRUBBING

= EROSION MAT CLASS II TYPE B

SI

PROJECT 1590-18-71 SI (TYP)

10' TRAIL

SAN

NVS

FM

598+00

599+00

600+00

601+00

602+00

604+00

USH 8

PT: 603+00.66

STA BACK = 602+81.94

STA AHEAD = 603+00.66

W

FO

OH

T

E

PROJECT 1590-18-71 SI (TYP)

PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	EROSION CONTROL DETAILS	SHEET ---- 14	E

FILE NAME : W:\PROJECTS\F0954\092300403\CADD\CIVIL3D\PLAN SHEETS\USH 8 AREA WISDOT\USH 8 EROSION CONTROL.DWG
LAYOUT NAME - USH 8 Erosion Control - EC 08

PLOT DATE : 12/19/2024 10:12 AM PLOT BY : JORDAN JELINSKI PLOT NAME : PLOT SCALE : ##########

NEW 4" SAN LAT CONNECTION TO GRAVITY SEWER

ABANDON EXIST 12" WM

PROJECT 1590-18-71 SI (TYP)

MOVING SIGNS (2) & MOVING SMALL SIGN SUPPORTS (2)

BUG LAKE RD

ABANDON EXIST 8" WM

CONCRETE CURB AND GUTTER 4" SLOPED 36-INCH CURB TYPE "T"

USH 8

604+00 605+00 606+00 607+00 608+00 609+00 610+00

137+00

EXIST 24" RCP

PROJECT 1590-18-71 SI (TYP)

INDIAN DR

135+00

134+00

MOVING SIGN TYPE II & MOVING SMALL SIGN SUPPORT STA 135+88.34, -18.72' LT

MOVING SIGN TYPE II & MOVING SMALL SIGN SUPPORT STA 134+97.13, -16.40' LT

SEPTANK

EROSION CONTROL KEY	
	= SILT FENCE
	= CULVERT PIPE CHECK
	= GRUBBING
	= EROSION MAT CLASS II TYPE B

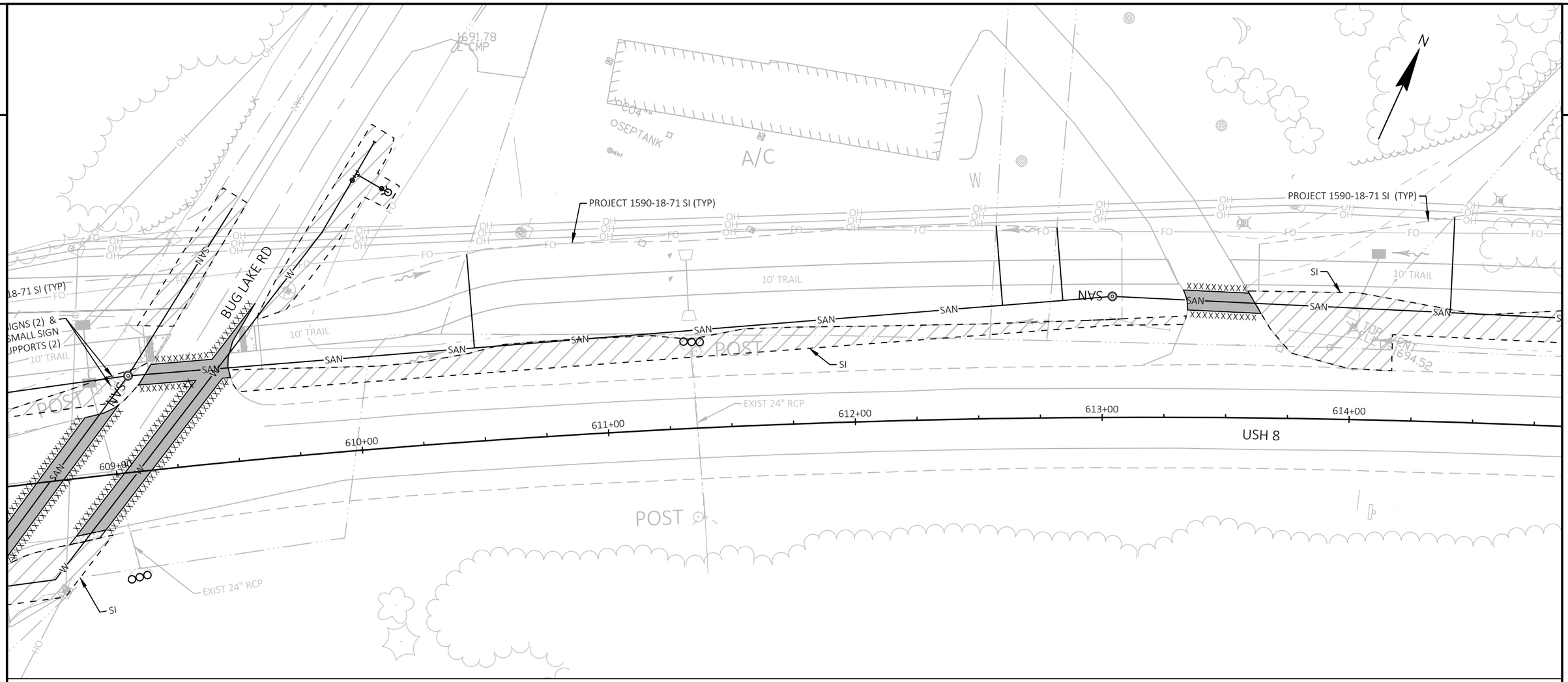
PAVEMENT REPLACEMENT KEY	
	= UTILITY TRENCH PAVEMENT REPAIR AREA (SEE DETAIL)
	= 4 INCHES 3/4-INCH B.A.D. SHOULDER

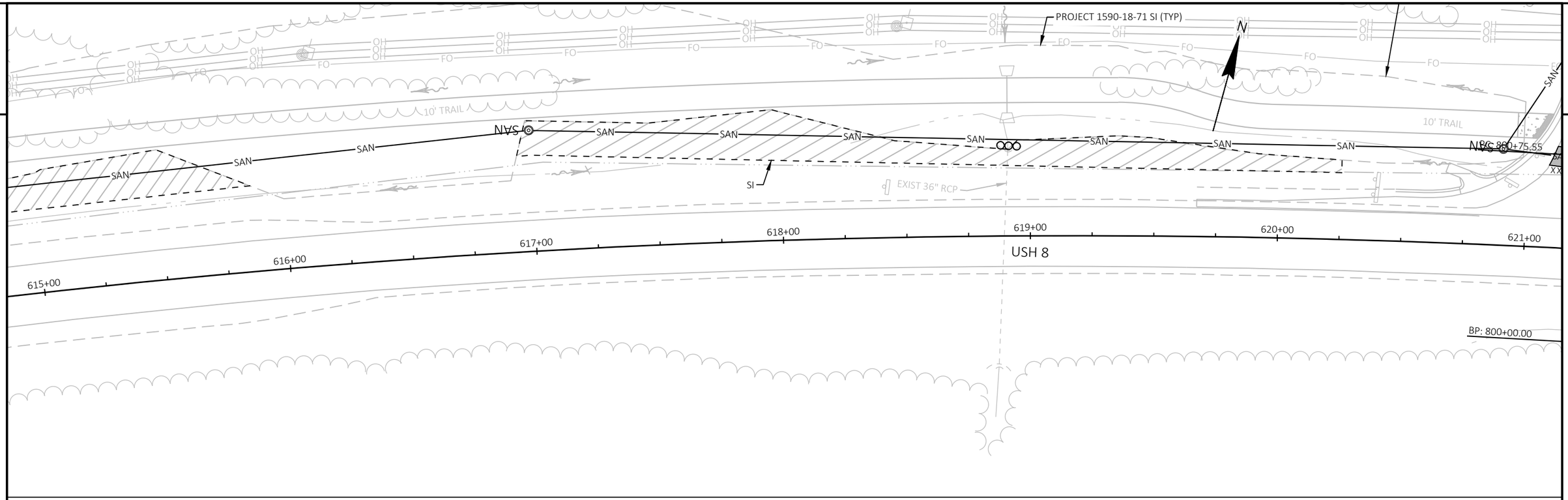
PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	EROSION CONTROL DETAILS	SHEET ---- 15	E

FILE NAME : W:\PROJECTS\F0954\092300403\CADD\CIVIL3D\PLAN SHEETS\USH 8 AREA WISDOT\USH 8 EROSION CONTROL.DWG
LAYOUT NAME - USH 8 Erosion Control - EC 09

PLOT DATE : 12/19/2024 10:12 AM PLOT BY : JORDAN JELINSKI PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42


1691.78
C.M.P.
OSEPTANK
A/C
W
N
PROJECT 1590-18-71 SI (TYP)
PROJECT 1590-18-71 SI (TYP)
18-71 SI (TYP)
IGNS (2) &
SMALL SIGN
UPPORTS (2)
BUG LAKE RD
10' TRAIL
10' TRAIL
10' TRAIL
SAN
SAN
SAN



EROSION CONTROL KEY

= SILT FENCE

= CULVERT PIPE CHECK

= GRUBBING

= EROSION MAT
CLASS II TYPE B

PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	EROSION CONTROL DETAILS	SHEET ---- 17	E

FILE NAME : W:\PROJECTS\F0954\092300403\CADD\CIVIL3D\PLAN SHEETS\USH 8 AREA WISDOT\USH 8 EROSION CONTROL.DWG
LAYOUT NAME - USH 8 Erosion Control - EC 11

PLOT DATE : 12/19/2024 10:12 AM PLOT BY : JORDAN JELINSKI PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

N

EROSION CONTROL KEY	
	= SILT FENCE
	= CULVERT PIPE CHECK
	= GRUBBING
	= EROSION MAT CLASS II TYPE B

PAVEMENT REPLACEMENT KEY	
	= UTILITY TRENCH PAVEMENT REPAIR AREA (SEE DETAIL)
	= 4 INCHES 3/4-INCH B.A.D. SHOULDER

PROJECT 1590-18-71 SI (TYP)

PT: 801+62.97

BP: 800+00.00

PC 800+75.55

LOVE KNOT RD

USH 8

803+00 802+00 801+00 620+00 621+00 622+00 623+00 624+00 625+00 626+00

SAN SI FO OH MB T 10' TRAIL XXXXXXXXX

PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	EROSION CONTROL DETAILS	SHEET ---- 18	E

FILE NAME : W:\PROJECTS\F0954\092300403\CADD\CIVIL3D\PLAN SHEETS\USH 8 AREA WISDOT\USH 8 EROSION CONTROL.DWG
LAYOUT NAME - USH 8 Erosion Control - EC 12

PLOT DATE : 12/19/2024 10:12 AM PLOT BY : JORDAN JELINSKI PLOT NAME : PLOT SCALE : ##########

2

N

PROJECT 1590-18-71 SI (TYP)

SI

SI

PT: 113+80.65

SI

ROADSIDE CLEARING

PROJECT 1590-18-71 SI (TYP)

113+00 114+00 115+00 116+00 117+00 118+00

563+00 564+00 565+00 566+00

YOUNGS LANE

USH 8

10' TRAIL

10' TRAIL

SAN

SAN

SAN

2

N

PROJECT 1590-18-71 SI (TYP)

BP: 44+50.00

EXIST 24" CMP

570+00

572+00

USH 8

EVERYBODY'S RD

45+00

46+00

47+00

48+00

49+00

50+

EVERYBODY'S RD

INLET PROTECTION TYPE "D"

RIPRAP

SAN

SI

PROJECT 1590-18-71 SI (TYP)

POST

A/C

SEPTANK PLASTIC

SEPTANK CONCRETE

SEPTANK

EROSION CONTROL KEY

= SILT FENCE

= CULVERT PIPE CHECK

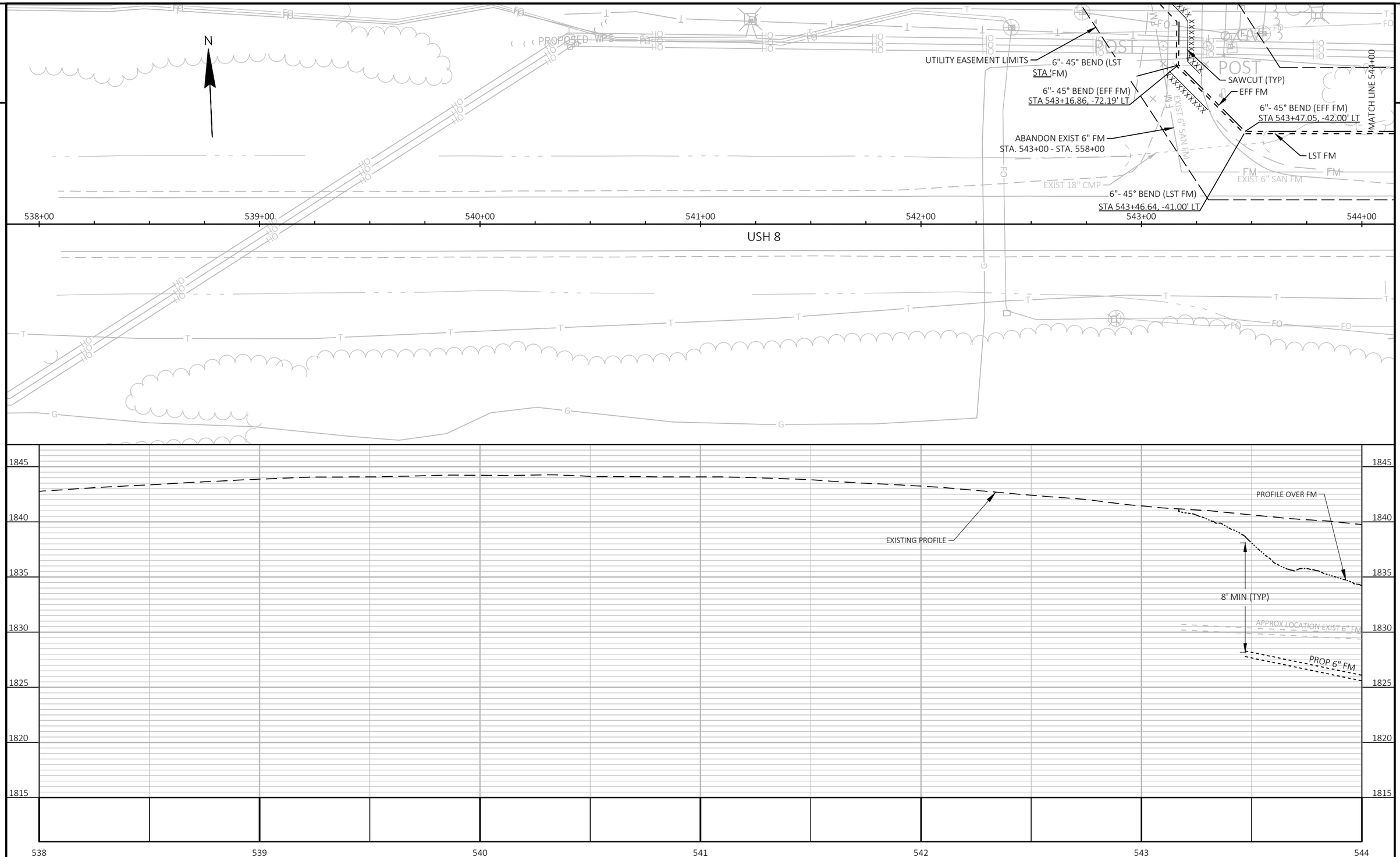
= GRUBBING

= EROSION MAT CLASS II TYPE B

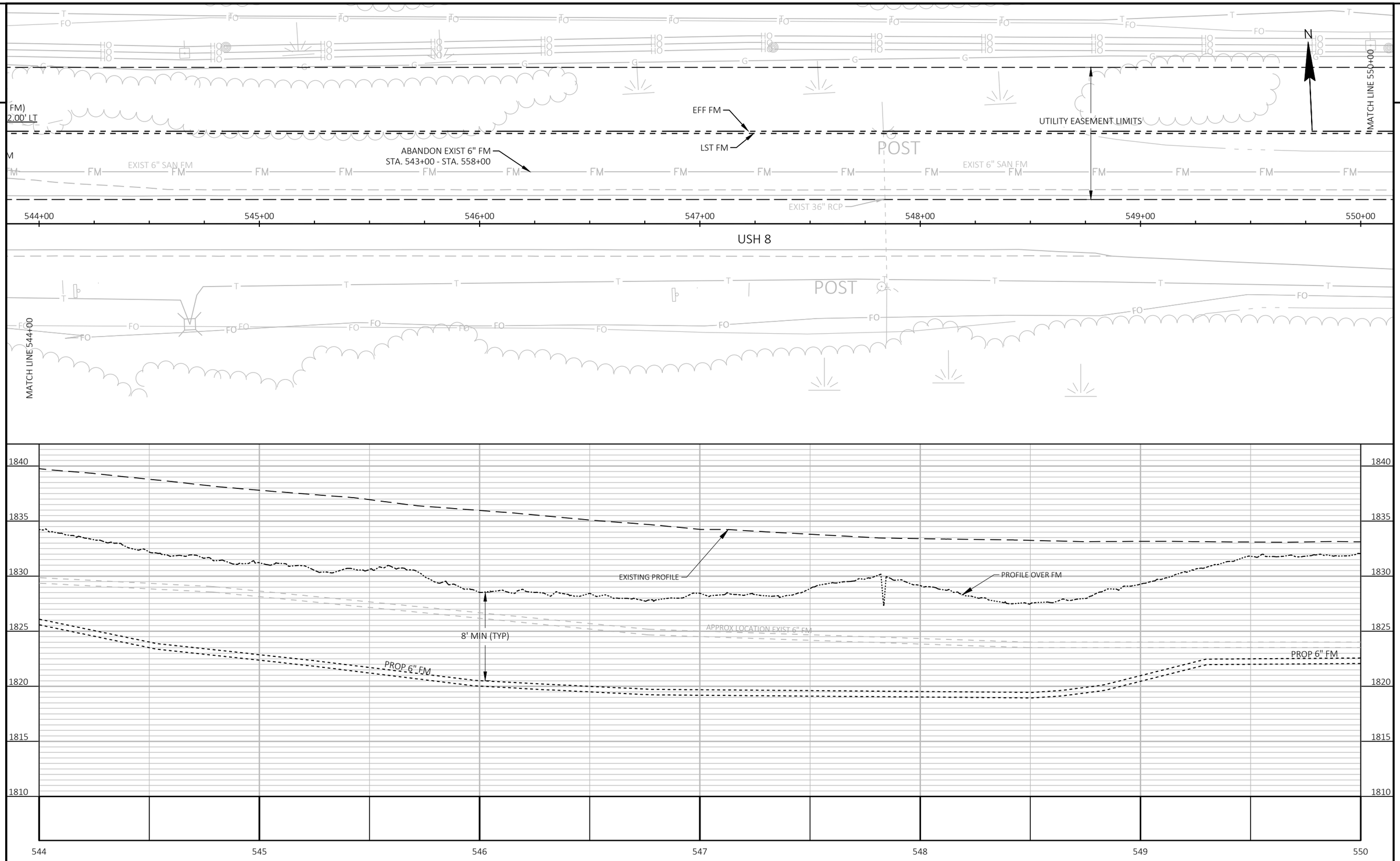
PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	EROSION CONTROL DETAILS	SHEET ---- 20	E

FILE NAME : W:\PROJECTS\F0954\092300403\CADD\CIVIL3D\PLAN SHEETS\USH 8 AREA WISDOT\USH 8 EROSION CONTROL.DWG
LAYOUT NAME - USH 8 Erosion Control - EC 14

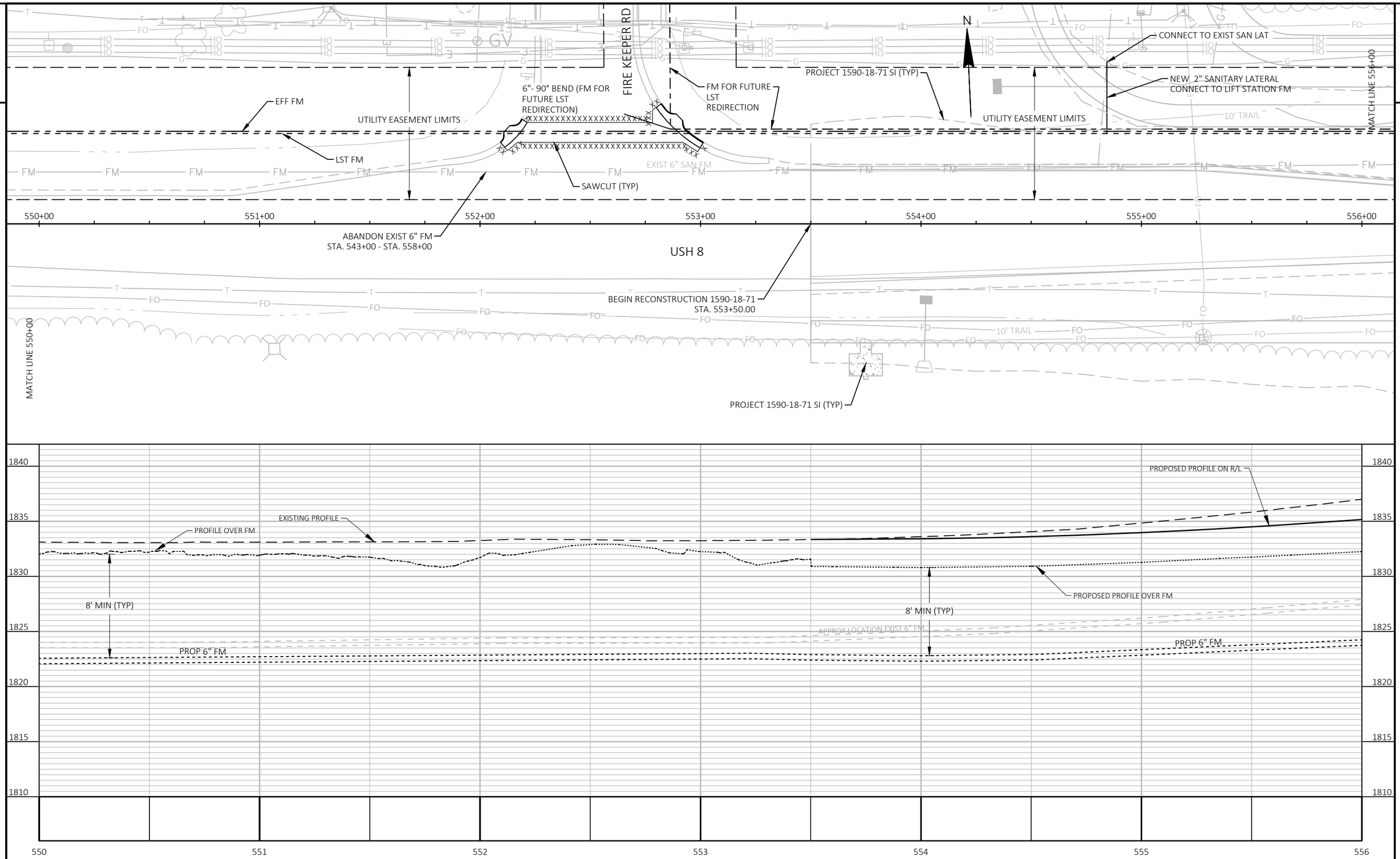
PLOT DATE : 12/19/2024 10:12 AM PLOT BY : JORDAN JELINSKI PLOT NAME : PLOT SCALE : ##########



PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	USH 8 SANITARY SEWER AND WATER MAIN	SHEET ---- 21	E



PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	USH 8 SANITARY SEWER AND WATER MAIN	SHEET ---- 22	E



PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	USH 8 SANITARY SEWER AND WATER MAIN	SHEET ---- 23	E

2

STA 557+64.84, -41.00' LT
6"- 22.5° BEND
(LST FM)- 41.00' LT
(EFF FM)-42.00' LT
(FM FOR FUTURE LST REDIRECTION) -43.00' LT

STA 557+56.15, -41.00' LT
6"- 22.5° BEND
(LST FM)- 41.00' LT
(EFF FM)-42.00' LT
(FM FOR FUTURE LST REDIRECTION) -43.00' LT

EFF FM

LST FM

STA 557+94.67, -41.00' LT
6"- 22.5° BEND
(LST FM)- 41.00' LT
(EFF FM)-42.00' LT
(FM FOR FUTURE LST REDIRECTION) -43.00' LT

CONTRACTOR TO DEFLECT FORCE MAIN'S PER THE MANUFACTURERS RECOMMENDATIONS TO GET AROUND NEW STORM STRUCTURE.

FM FOR FUTURE LST REDIRECTION

PROJECT 1590-18-71 SI (TYP)

REMOVE EXIST 6" FM
STA. 558+00 - STA. 576+00

UTILITY EASEMENT LIMITS

N

MATCH LINE 562+00

EXIST 6" SAN FM

EXIST 30" CMP

10' TRAIL

556+00 | 557+00 | 558+00 | 559+00 | 560+00 | 561+00 | 562+00

USH 8

MATCH LINE 556+00

PROJECT 1590-18-71 SI (TYP)

EXISTING PROFILE

PROPOSED PROFILE ON R/L

PROPOSED PROFILE OVER FM

APPROX LOCATION EXIST 6" FM

8' MIN (TYP)

EXIST 30" CULVERT

PROP 6" FM

22.5° BENDS REQUIRED TO MAINTAIN 1.5' SEPERATION

1.5' MIN

1850 | 1845 | 1840 | 1835 | 1830 | 1825 | 1820

1850 | 1845 | 1840 | 1835 | 1830 | 1825 | 1820

1860 | 1855 | 1850 | 1845 | 1840 | 1835 | 1830

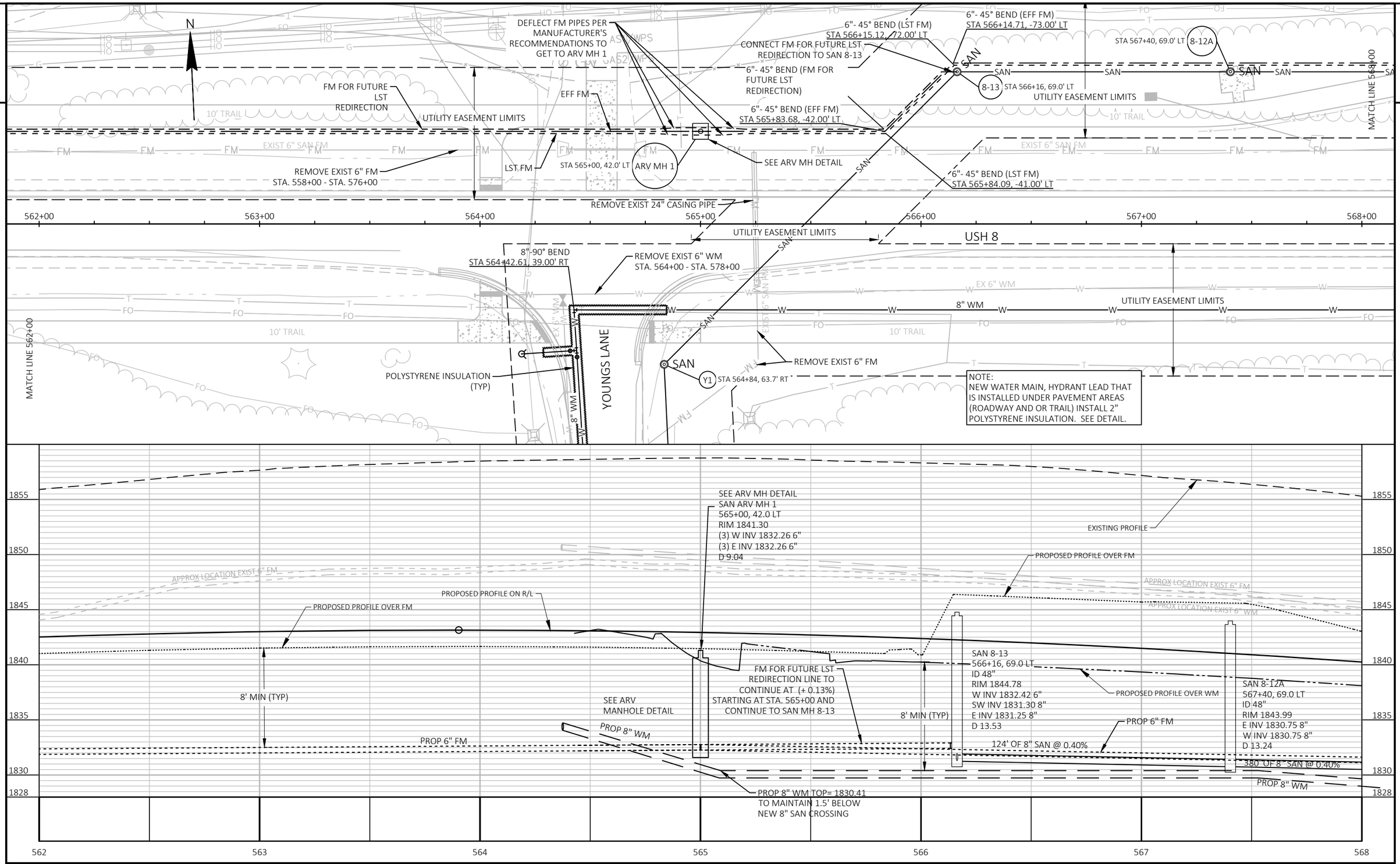
556 | 557 | 558 | 559 | 560 | 561 | 562

PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	USH 8 SANITARY SEWER AND WATER MAIN	SHEET ---- 24	E

FILE NAME : W:\PROJECTS\F0954\092300403\CADD\CIVIL3D\PLAN SHEETS\USH 8 AREA WISDOT\USH 8 DOT DRAWING.DWG
LAYOUT NAME - USH 8 04

PLOT DATE : 12/19/2024 10:13 AM PLOT BY : JORDAN JELINSKI PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42



PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	USH 8 SANITARY SEWER AND WATER MAIN	SHEET ---- 25	E

FILE NAME : W:\PROJECTS\F0954\092300403\CADD\CIVIL3D\PLAN SHEETS\USH 8 AREA WISDOT\USH 8 DOT DRAWING.DWG
LAYOUT NAME - USH 8 05

PLOT DATE : 12/19/2024 10:13 AM PLOT BY : JORDAN JELINSKI PLOT NAME : PLOT SCALE : 1 IN:40 FT

NEW 6" SAN LAT CONNECTION TO GRAVITY SEWER
EFF FM
LST FM
REMOVE EXIST 6" FM STA. 558+00 - STA. 576+00
EVERYBODY'S RD
RIPRAP
8" WM
SAN 8-12 STA 571+21, 69.0' LT
PROJECT 1590-18-71 SI (TYP)
UTILITY EASEMENT LIMITS
REMOVE EXIST 4" SAN STA. 571+00 - STA. 576+00
MATCH LINE 574+00
EX 4" SAN
EX 6" SAN FM
UTILITY EASEMENT LIMITS
POLYSTYRENE INSULATION (TYP)
REMOVE EXIST 6" FM STA. 558+00 - STA. 576+00
568+00 569+00 570+00 571+00 572+00 573+00 574+00
EXIST 24" CMP
USH 8
EXIST WM IN 24" CASING
REMOVE EXIST 6" WM STA. 564+00 - STA. 578+00
8" x 6" TEE STA 568+50.05, 39.00' RT 8" GV (W)
EXIST 6" WM
UTILITY EASEMENT LIMITS
8" WM
UTILITY EASEMENT LIMITS
MATCH LINE 568+00
10' TRAIL
HYDRANT STA 568+50.05, 60.00' RT 6" GV (N)
PROJECT 1590-18-71 SI (TYP)
8" x 8" TEE STA 570+97.78, 39.00' RT 8" GV (N)
NOTE:
NEW WATER MAIN, HYDRANT LEAD THAT IS INSTALLED UNDER PAVEMENT AREAS (ROADWAY AND OR TRAIL) INSTALL 2" POLYSTYRENE INSULATION. SEE DETAIL.

EXISTING PROFILE
PROPOSED PROFILE OVER FM
APPROX LOCATION EXIST 6" FM
APPROX LOCATION EXIST 6" WM
PROPOSED PROFILE ON R/L
PROPOSED PROFILE OVER WM
8' MIN (TYP)
PROP 6" FM
380' OF 8" SAN @ 0.40%
PROP 8" WM
EXIST 24" CULVERT
SAN 8-12
571+21, 69.0 LT
ID 48"
RIM 1843.34
W INV 1829.23 8"
N INV 1831.00 8"
E INV 1829.13 8"
D 13.45
PROP 6" FM
380' OF 8" SAN @ 0.40%
PROP 8" WM
APPROX LOCATION EXIST 6" WM
APPROX LOCATION EXIST 6" FM
PROPOSED PROFILE OVER FM
EXISTING PROFILE
8' MIN (TYP)
PROPOSED PROFILE ON R/L
PROPOSED PROFILE OVER WM
PROP 6" FM
400' OF 8" SAN @ 4.28%
8' MIN (TYP)
1855 1850 1845 1840 1835 1830 1825
1845 1840 1835 1830 1825 1820 1815
568 569 570 571 572 573 574

PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	USH 8 SANITARY SEWER AND WATER MAIN	SHEET ---- 26	E

FILE NAME : W:\PROJECTS\F0954\092300403\CADD\CIVIL3D\PLAN SHEETS\USH 8 AREA WISDOT\USH 8 DOT DRAWING.DWG
LAYOUT NAME - USH 8 06
PLOT DATE : 12/19/2024 10:13 AM PLOT BY : JORDAN JELINSKI PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

PROJECT 1590-18-71 SI (TYP)

N

STA 575+21, 59.6' LT 8-11

SAN

UTILITY EASEMENT LIMITS

EFF FM

LST FM

REMOVE SAN CLEANOUT
STA 574+90.40, -39.39' LT

RIPRAP

EXIST 4" SAN

EXIST 6" SAN FM

REMOVE EXIST 4" SAN
STA. 571+00 - STA. 576+00

REMOVE EXIST 6" FM
STA. 558+00 - STA. 576+00

ABANDON EXIST 6" FM
STA. 576+00 - STA. 591+00

ABANDON EXIST 4" SAN
STA. 576+00 - STA. 585+00

PC: 578+47.46

8-10 STA 579+22, 49.3' LT

MATCH LINE 580+00

574+00 575+00 576+00 577+00 578+00 579+00 580+00

USH 8

8" x 6" TEE
STA 574+49.68, 39.00' RT
8" GV (W)

EXIST 6" WM

8" WM

10' TRAIL

MATCH LINE 574+00

POLYSTYRENE INSULATION
(TYP)

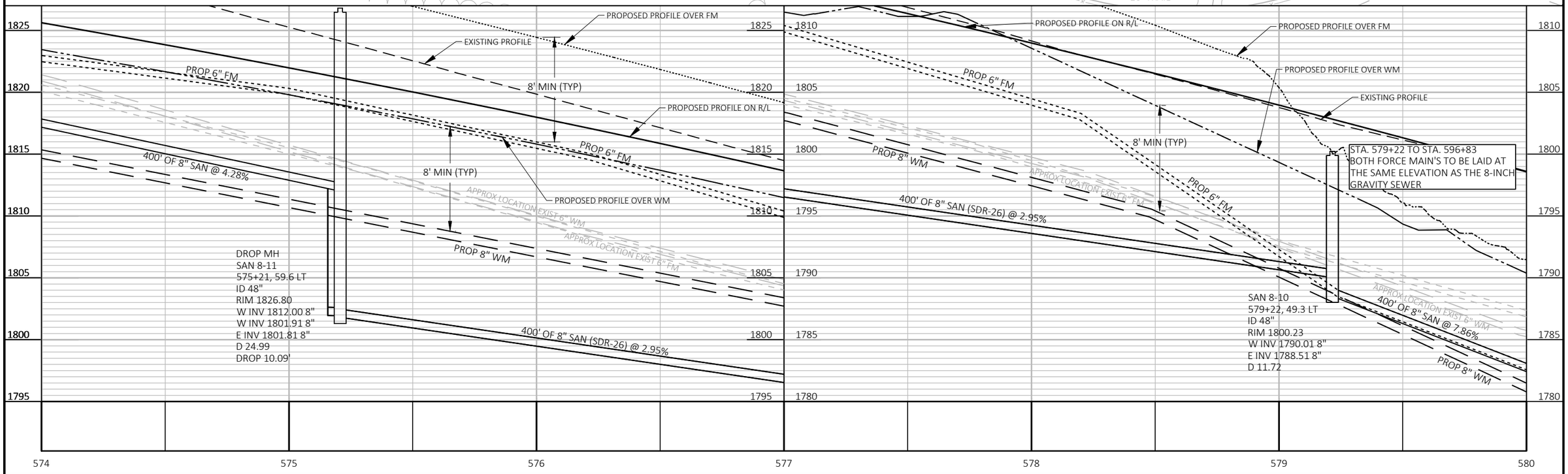
HYDRANT
~~STA 574+49.68, 60.00' RT~~
6" GV (N)

UTILITY EASEMENT LIMITS

REMOVE EXIST 6" WM
STA. 564+00 - STA. 578+00

ABANDON EXIST 6" WM
STA. 578+00 - STA. 582+00

NOTE:
NEW WATER MAIN, HYDRANT LEAD THAT IS INSTALLED UNDER PAVEMENT AREAS (ROADWAY AND OR TRAIL) INSTALL 2" POLYSTYRENE INSULATION. SEE DETAIL.



PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	USH 8 SANITARY SEWER AND WATER MAIN	SHEET ---- 27	E

FILE NAME : W:\PROJECTS\F0954\092300403\CADD\CIVIL3D\PLAN SHEETS\USH 8 AREA WISDOT\USH 8 DOT DRAWING.DWG
LAYOUT NAME - USH 8 07

PLOT DATE : 12/19/2024 10:13 AM PLOT BY : JORDAN JELINSKI PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

UTILITY EASEMENT LIMITS

6"- 22.5° BEND (EFF FM)
STA 584+84.27, -92.96' LT

6"- 22.5° BEND (LST ST.FM)

6"- 22.5° BEND (LST ST.FM)

EFF FM

8-8 STA 584+85, 88.9' LT

N

MATCH LINE 586+00

EFF FM

6"- 22.5° BEND (EFF FM)
STA 583+25.82, -38.34' LT

LST FM

LST FM

REMOVE EXIST 4" SAN
STA. 585+00 - STA. 587+00

REMOVE SAN CLEANOUT
STA 583+98.24, -17.32' LT

STA 583+26, 34.3' LT 8-9

ABANDON EXIST 6" FM
STA. 576+00 - STA. 591+00

ABANDON EXIST 4" SAN
STA. 576+00 - STA. 585+00

ABANDON EXIST 4" SAN
STA. 576+00 - STA. 585+00

580+00 581+00 582+00 583+00 584+00 585+00 586+00

USH 8

PROPOSED UNDERPASS

8" x 6" TEE
STA 580+46.23, 53.63' RT
8" GV (W)

DEFLECT 8" WM PER MANUFACTURERS RECOMMENDATIONS TO ACHIEVE ALIGNMENT

MATCH LINE 580+00

UTILITY EASEMENT LIMITS

HYDRANT
STA 580+46.06, 61.62' RT
6" GV (N)

ABANDON EXIST 6" WM
STA. 578+00 - STA. 582+00

8" WM

REMOVE EXIST 6" WM
STA. 582+00 - STA. 587+50

PROJECT
1590-18-71 SI
(TYP)

NOTE:
NEW WATER MAIN, HYDRANT LEAD THAT IS INSTALLED UNDER PAVEMENT AREAS (ROADWAY AND OR TRAIL) INSTALL 2" POLYSTYRENE INSULATION. SEE DETAIL.

STA. 579+22 TO STA. 596+83
BOTH FORCE MAIN'S TO BE LAID AT THE SAME ELEVATION AS THE 8-INCH GRAVITY SEWER

PROPOSED PROFILE ON R/L

EXISTING PROFILE

PROPOSED PROFILE OVER WM

PROPOSED PROFILE OVER FM

8' MIN (TYP)

400' OF 8" SAN @ 7.86%

PROP 8" WM

PROP 6" FM

EXISTING PROFILE

PROPOSED PROFILE ON R/L

PROPOSED PROFILE OVER FM

SAN 8-9
583+26, 34.3 LT
ID 48"
RIM 1776.18
W INV 1757.08 8"
NE INV 1756.98 8"
D 19.20

PROPOSED PROFILE OVER WM

8' MIN (TYP)

400' OF 8" SAN @ 7.86%

PROP 8" WM

PROP 6" FM

EXISTING PROFILE

PROPOSED PROFILE ON R/L

PROPOSED PROFILE OVER FM

8' MIN (TYP)

PROP 8" WM

PROP 6" FM

165' OF 8" SAN @ 8.90%

SAN 8-8
584+85, 88.9 LT
ID 48"
RIM 1750.79
SW INV 1742.29 8"
E INV 1741.79 8"
D 9.00

PROPOSED UNDERPASS

PROPOSED PROFILE OVER WM

PROP 6" FM

210' OF 8" SAN @ 0.40%

PROP 8" WM

580 581 582 583 584 585 586

PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	USH 8 SANITARY SEWER AND WATER MAIN	SHEET ---- 28	E

2

ABANDON EXIST 6" FM
STA. 576+00 - STA. 591+00

SEE SHEET ---- FOR EX WM REMOVALS

CONTRACTOR TO DEFLECT (2) FORCE MAIN PIPES PER THE MANUFACTURERS RECOMMENDATIONS TO GET AROUND NEW DROP MANHOLE 8-6.

8-7 STA 587+00, 76.1' LT

EFF FM

LST FM

REMOVE EXIST 4" SAN
STA. 585+00 - STA. 587+00

ABANDON EXIST 4" SAN
STA. 587+00 - STA. 591+00

CONTRACTOR TO DEFLECT (2) FORCE MAIN PIPES PER THE MANUFACTURERS RECOMMENDATIONS TO GET AROUND NEW DROP MANHOLE 8-6.

REMOVE SAN CLEANOUT
STA 589+28.09, -11.01' LT

KWE DA KIK LN

8-6 STA 589+78, 39.9' LT

ABANDON SAN MH
STA 589+91.92, -9.85' LT

REMOVE EXIST 6" FM
STA. 591+00 - STA. 594+00

REMOVE EXIST 4" SAN
STA. 591+00 - STA. 594+00

UTILITY EASEMENT LIMITS

MATCH LINE 592+00

586+00 587+00 588+00 589+00 590+00 591+00 592+00

UTILITY EASEMENT LIMITS

POLYSTYRENE INSULATION (TYP)

USH 8

ABANDON SAN MH
STA 589+78.66, 4.17' RT

DEFLECT PIPE PER MANUFACTURERS RECOMMENDATIONS

8" - 11.25° BEND
STA 590+82.30, 40.00' RT

UTILITY EASEMENT LIMITS

PROPOSED UNDERPASS

UTILITY EASEMENT LIMITS

8" x 6" TEE
STA 586+28.69, 100.73' RT
8" GV (W)

DEFLECT 8" WM PER MANUFACTURERS RECOMMENDATIONS TO ACHIEVE ALIGNMENT

REMOVE EXIST 6" GV
STA 588+27.88, 89.33' RT

8" - 22.5° BEND
STA 589+43.04, 83.65' RT

8" WM

8" x 6" TEE
STA 590+14.27, 63.40' RT

MATCH LINE 586+00

ABANDON EXIST 6" WM
STA. 587+50 - STA. 590+00

8" x 8" TEE
STA 589+43.70, 89.44' RT
8" GV (W)
8" - 22.5° BEND (N)

8" - 22.5° BEND
STA 589+22.07, 97.79' RT

REMOVE EXIST 6" WM
STA. 582+00 - STA. 587+50

HYDRANT
STA 586+28.72, 120.73' RT
6" GV (N)

HYDRANT
STA 590+16.21, 69.06' RT
6" GV (N)

PROJECT 1590-18-71 SI (TYP)

NOTE:
NEW WATER MAIN, HYDRANT LEAD THAT IS INSTALLED UNDER PAVEMENT AREAS (ROADWAY AND OR TRAIL) INSTALL 2" POLYSTYRENE INSULATION. SEE DETAIL.

PROPOSED PROFILE ON R/L

EXISTING PROFILE

PROPOSED PROFILE OVER FM

PROPOSED UNDERPASS

SAN 8-7
587+00, 76.1 LT
ID 48"
RIM 1752.45
W INV 1740.95 8"
E INV 1740.85 8"
D 11.60

PROPOSED PROFILE OVER WM

210' OF 8" SAN @ 0.40%

PROP 6" FM

PROP 8" WM

276' OF 8" SAN @ 0.40%

STA. 579+22 TO STA. 596+83
BOTH FORCE MAIN'S TO BE LAID AT THE SAME ELEVATION AS THE 8-INCH GRAVITY SEWER

EXIST 6'x6' BOX CULVERT
TOP ELEV= 1731.01±

PROPOSED PROFILE ON R/L

PROPOSED PROFILE OVER WM

EXISTING PROFILE

8' MIN (TYP)

PROP 8" WM

PROP 6" FM

276' OF 8" SAN @ 0.40%

SAN 8-6
589+78, 39.9 LT
ID 48"
RIM 1757.22
W INV 1739.74 8"
E INV 1739.64 8"
N INV 1743.15 8"
N INV 1739.84 8"
D 17.57

400' OF 8" SAN @ 1.00%

PROP 6" FM

PROPOSED PROFILE OVER FM

PROP 8" WM

STA. 579+22 TO STA. 596+83
BOTH FORCE MAIN'S TO BE LAID AT THE SAME ELEVATION AS THE 8-INCH GRAVITY SEWER

1765 1760 1755 1750 1745 1740 1735 1730

586 587 588 589 590 591 592

PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	USH 8 SANITARY SEWER AND WATER MAIN	SHEET ---- 29	E

SEE SHEET ---- FOR EX WM REMOVALS AND ABANDONMENT ITEMS

REMOVE EXIST 12" WM
STA. 589+82 - STA. 596+90

PROJECT 1590-18-71 SI (TYP)

ABANDON EXIST 12" WM
STA. 596+90 - STA. 608.21.33

MATCH LINE 598+00

UTILITY EASEMENT LIMITS

EFF FM

REMOVE EXIST 6" FM
STA. 591+00 - STA. 594+00

REMOVE EXIST 4" SAN
STA. 591+00 - STA. 594+00

LST FM

8-5 STA 593+83, 39.0' LT

ABANDON EXIST 4" SAN
STA. 594+00 - STA. 606+75

ABANDON EXIST 6" FM
STA. 594+00 - STA. 606+75

UTILITY EASEMENT LIMITS

STA 597+88, 39.0' LT 8-4

592+00 593+00 594+00 595+00 596+00 597+00 598+00

EXIST 6" SAN FM

EXIST SAN

USH 8

CONTRACTOR TO DEFLECT WATER MAIN PER THE MANUFACTURERS RECOMMENDATIONS TO GET AROUND NEW STORM STRUCTURE.

8" x 6" TEE
STA 596+06.75, 37.28' RT
8" GV (W)
6" GV (S)

8" WM

UTILITY EASEMENT LIMITS

MATCH LINE 592+00

UTILITY EASEMENT LIMITS

10' TRAIL

POLYSTYRENE INSULATION (TYP)

PROJECT 1590-18-71 SI (TYP)

NOTE:
NEW WATER MAIN, HYDRANT LEAD THAT IS INSTALLED UNDER PAVEMENT AREAS (ROADWAY AND OR TRAIL) INSTALL 2" POLYSTYRENE INSULATION. SEE DETAIL.

HYDRANT
STA 596+06.47, 56.50' RT

EXIST 18" CMP

PROJECT 1590-18-71 SI (TYP)

EXISTING PROFILE

PROPOSED PROFILE ON R/L

APPROX LOCATION EXIST 6" FM

PROPOSED PROFILE OVER FM

PROP 8" WM

8' MIN (TYP)

PROP 6" FM

400' OF 8" SAN @ 1.00%

STA. 579+22 TO STA. 596+83
BOTH FORCE MAIN'S TO BE LAID AT THE SAME ELEVATION AS THE 8-INCH GRAVITY SEWER

SAN 8-5
593+83, 39.0 LT
ID 48"
RIM 1744.64
NE INV 1735.54 8"
W INV 1735.64 8"
D 9.10

8' MIN (TYP)

PROPOSED PROFILE OVER WM

APPROX LOCATION EXIST 12" WM

APPROX LOCATION EXIST 6" FM

PROP 8" WM

400' OF 8" SAN @ 3.50%

PROP 6" FM

SAN 8-4
597+88, 39.0 LT
ID 48"
RIM 1730.59
NE INV 1721.44 8"
SW INV 1721.54 8"
D 9.15

1750 1745 1740 1735 1730 1725 1720

592 593 594 595 596 597 598

PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	USH 8 SANITARY SEWER AND WATER MAIN	SHEET ---- 30	E

SEE SHEET ---- FOR EX WM REMOVALS AND ABANDONMENT ITEMS

ABANDON EXIST 12" WM
STA. 596+90 - STA. 608.21.33

PROJECT 1590-18-71 SI (TYP)

EFF FM

LST FM

UTILITY EASEMENT LIMITS

ABANDON EXIST 6" FM
STA. 594+00 - STA. 606+75

ABANDON EXIST 4" SAN
STA. 594+00 - STA. 606+75

NVS

STA 601+93, 42.0' LT

8-3

PT: 603+00.66

MATCH LINE 604+00

598+00 599+00 600+00 601+00 602+00 604+00

USH 8

8" WM

UTILITY EASEMENT LIMITS

8" x 6" TEE
STA 601+98.11, 40.00' RT
8" GV (W)
6" GV (S)

POLYSTYRENE INSULATION (TYP)

STA BACK = 602+81.94
STA AHEAD = 603+00.66

MATCH LINE 598+00

NOTE:
NEW WATER MAIN, HYDRANT LEAD THAT IS INSTALLED UNDER PAVEMENT AREAS (ROADWAY AND OR TRAIL) INSTALL 2" POLYSTYRENE INSULATION. SEE DETAIL.

CONTRACTOR TO DEFLECT WATER MAIN PER THE MANUFACTURERS RECOMMENDATIONS TO GET AROUND NEW STORM STRUCTURE.

PROJECT 1590-18-71 SI (TYP)

HYDRANT
STA 601+98.11, 56.50' RT

10' TRAIL

EXIST 6" SAN FM

EXIST SAN

APPROX LOCATION EXIST 12" WM

PROPOSED PROFILE ON R/L

EXISTING PROFILE

PROPOSED PROFILE OVER FM

8' MIN (TYP)

PROP 6" FM

400' OF 8" SAN @ 4.00%

PROP 8" WM

PROPOSED PROFILE OVER WM

APPROX LOCATION EXIST 6" FM

400' OF 8" SAN @ 2.96%

SAN 8-3
601+93, 42.0 LT
ID 48"
RIM 1715.28
NE INV 1705.34 8"
SW INV 1705.44 8"
D 9.94

598 599 600 601 602 604

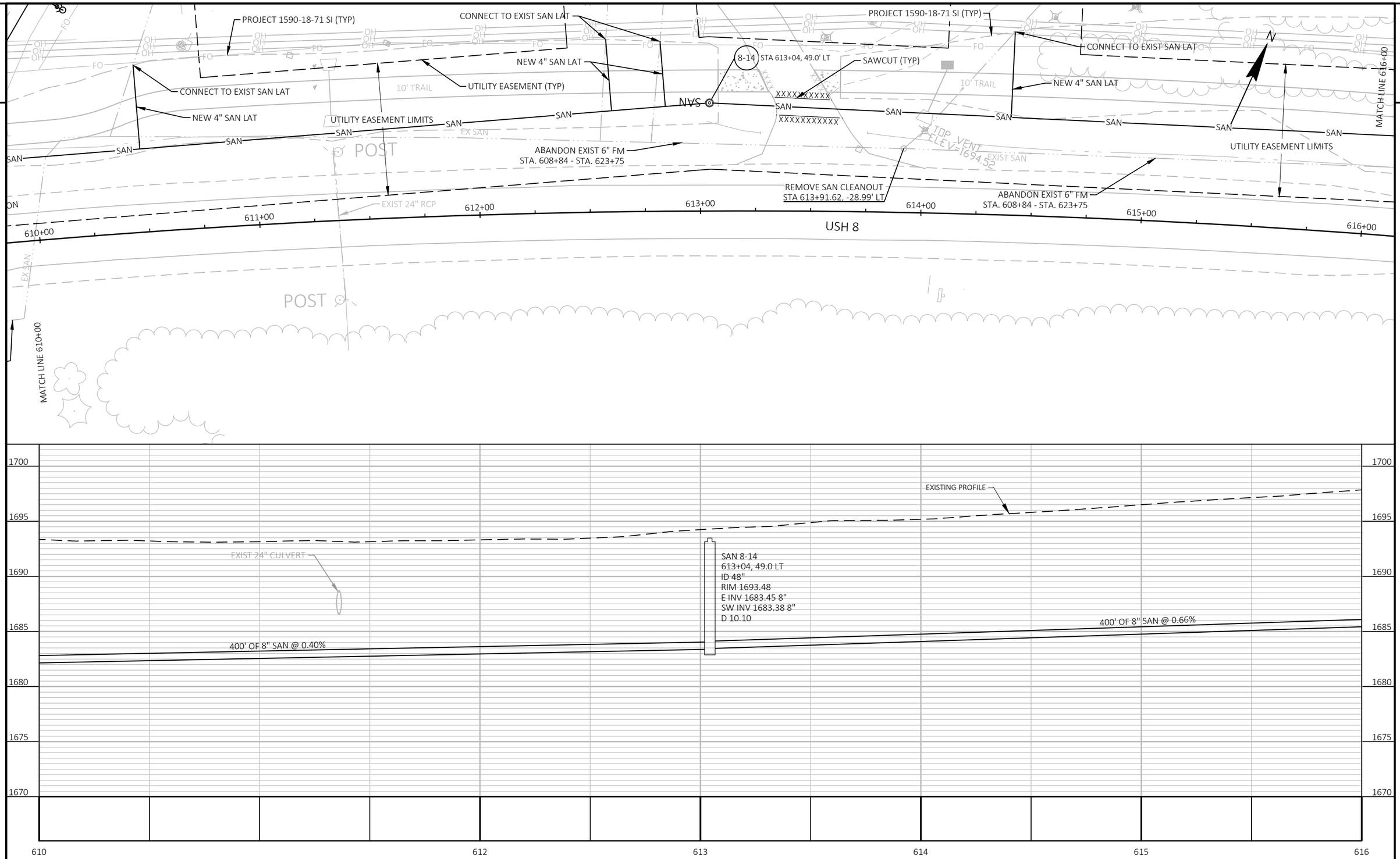
PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	USH 8 SANITARY SEWER AND WATER MAIN	SHEET ---- 31	E

CONNECT TO EXIST SAN LAT
NEW 4" SAN LAT CONNECTION TO GRAVITY SEWER
ABANDON EXIST 12" WM
STA. 596+90 - STA. 608.21.33
6"- 90° BEND (EFF FM)
STA 607+05.28, -42.50' LT
6"- 90° BEND (LST FM)
REMOVE 6" GV STACK
REMOVE 12" GV STACK
REMOVE HYDRANT
STA 608+21.33, -58.38' LT
PROJECT 1590-18-71 SI (TYP)
EFF FM
LST FM
UTILITY EASEMENT LIMITS
PC: 604+55.98
SAN 8-2
STA 606+11, 42.0' LT
8" WM 45° VERTICAL BEND
STA 606+88, 40.00' RT
8" WM 45° VERTICAL BEND
STA 607+09.18, 40.00' RT
ABANDON EX 8" WM
ABANDON EXIST 6" FM
STA. 594+00 - STA. 606+75
ABANDON EXIST 4" SAN
STA. 594+00 - STA. 606+75
USH 8
604+00
605+00
606+00
607+00
608+00
609+00
610+00
STA 609+09, 39.0' LT
4" SAN MH
8-1
BUG LAKE RD
MATCH LINE 610+00
POLYSTYRENE INSULATION (TYP)
SAWCUT (TYP)
8" x 8" TEE
STA 607+52.07, 40.00' RT
8" GV (W)
8" GV (E)
8" GV (S)
8" x 6" TEE
STA 607+63.98, 40.00' RT
6" GV (S)
8" WM 45° VERTICAL BEND
STA 606+86.25, 40.00' RT
END OF WisDOT RECONSTRUCTION LIMITS
STA. 605+26.72
8" WM
UTILITY EASEMENT LIMITS
MATCH LINE 604+00
8" WM 45° VERTICAL BEND
STA 607+08, 40.00' RT
HYDRANT
STA 607+63.96, 56.50' RT
INDIAN DR
PROJECT 1590-18-71 SI (TYP)
30'
EFF FM
EXIST 24" RCP
ABANDON EXIST 6" FM
STA. 608+84 - STA. 623+75
8" - 45° BEND
STA 608+70.28, 39.78' RT
UTILITY EASEMENT (TYP)
NOTE:
NEW WATER MAIN, HYDRANT LEAD THAT IS INSTALLED UNDER PAVEMENT AREAS (ROADWAY AND OR TRAIL) INSTALL 2" POLYSTYRENE INSULATION. SEE DETAIL.

SAN 8-2
606+11, 42.0 LT
ID 48"
RIM 1703.39
NE INV 1693.40 8"
SW INV 1693.50 8"
D 9.99

PROPOSED PROFILE OVER FM
PROPOSED PROFILE ON R/L
PROPOSED PROFILE OVER WM
APPROX LOCATION EXIST 12" WM
APPROX LOCATION EXIST 6" FM
8' MIN (TYP)
PROP 6" FM
400' OF 8" SAN @ 2.96%
PROP 8" WM
EXISTING PROFILE
301' OF 8" SAN @ 3.30%
APPROX LOCATION EXIST 12" WM
PROP 8" WM
45° BENDS TO GET UNDER NEW FM CROSSING
1.5' MIN CLEARANCE BETWEEN NEW FM CROSSING & 8" WM
45° BENDS TO GET UNDER NEW FM CROSSING
EXIST 8" WM CROSSING
TOP OF PIPE= 1684.61 ±
DEFLECT PIPE PER MANUFACTURERS RECOMMENDATIONS FROM EX WM CROSSING TO 45° BEND
8" WM 45° BEND
TOP OF PIPE= 1684.50
MAINTAIN SEPARATION TO PROVIDE BEDDING MATERIAL BELOW NEW WM & TOP OF EX WM
EXIST 24" CULVERT
SAN 8-1
609+09, 39.0 LT
ID 48"
RIM 1694.54
N INV 1683.36 8"
S INV 1681.68 8"
NE INV 1681.78 8"
SW INV 1683.46 8"
D 12.84
400' OF 8" SAN @ 0.40%
1710
1705
1700
1695
1690
1685
1680
604
605
606
607
608
609
610

PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	USH 8 SANITARY SEWER AND WATER MAIN	SHEET ---- 32	E

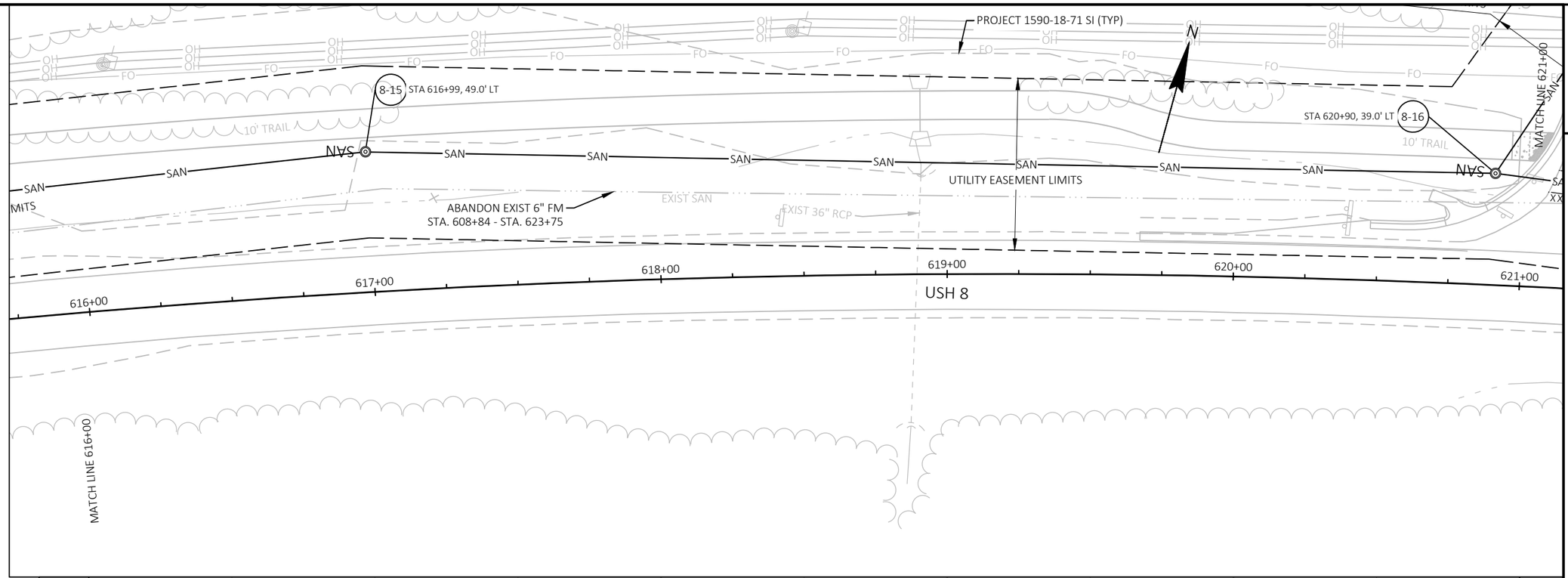


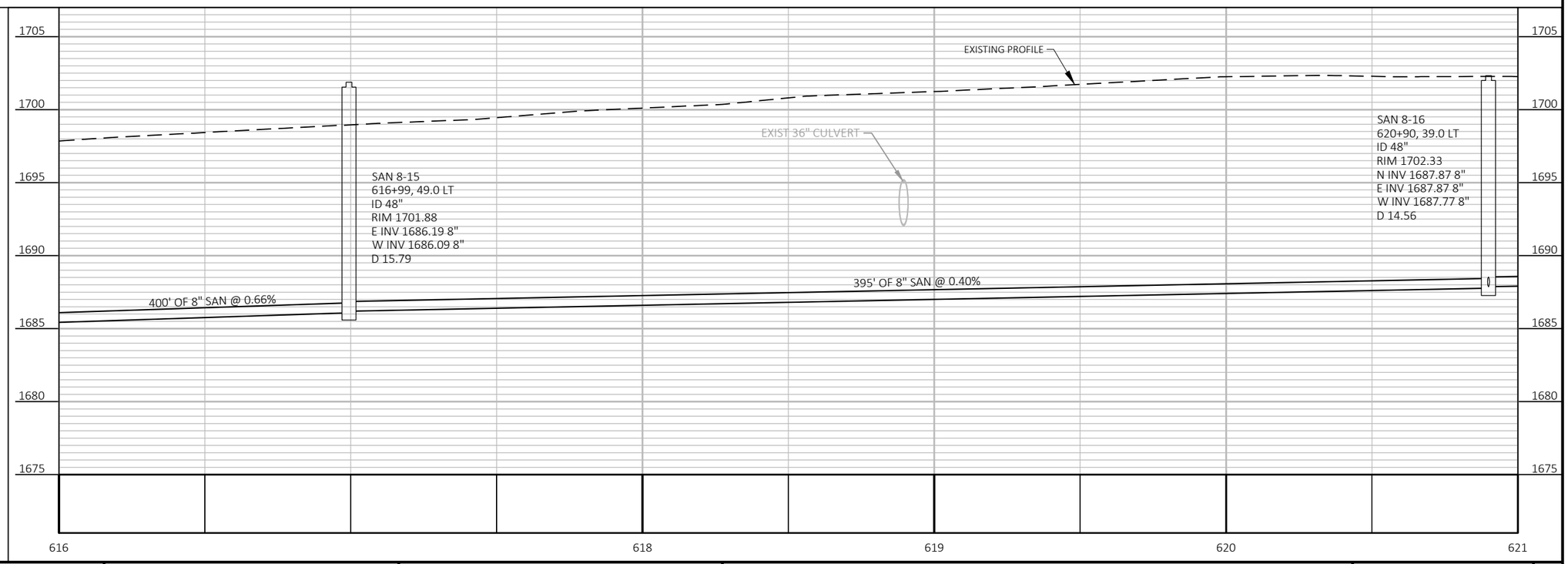
PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	USH 8 SANITARY SEWER AND WATER MAIN	SHEET ---- 33	E

FILE NAME : W:\PROJECTS\F0954\092300403\CADD\CIVIL3D\PLAN SHEETS\USH 8 AREA WISDOT\USH 8 DOT DRAWING.DWG
LAYOUT NAME - USH 8 13

PLOT DATE : 12/19/2024 10:14 AM PLOT BY : JORDAN JELINSKI PLOT NAME : PLOT SCALE : 1 IN:40 FT

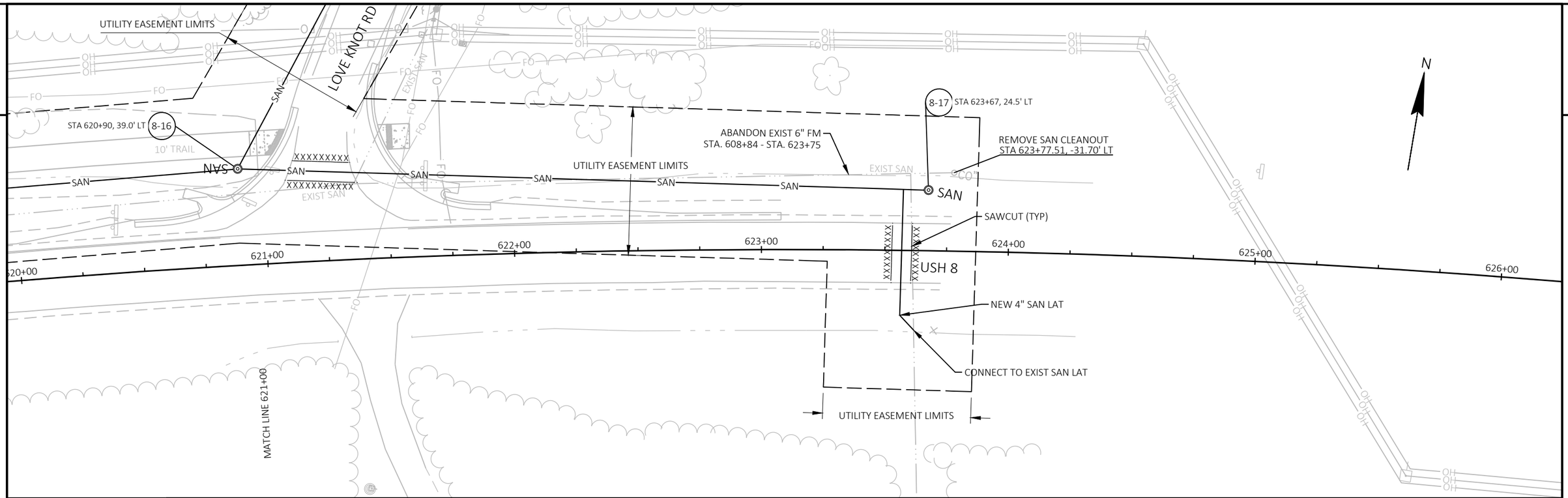
WISDOT/CADDS SHEET 42

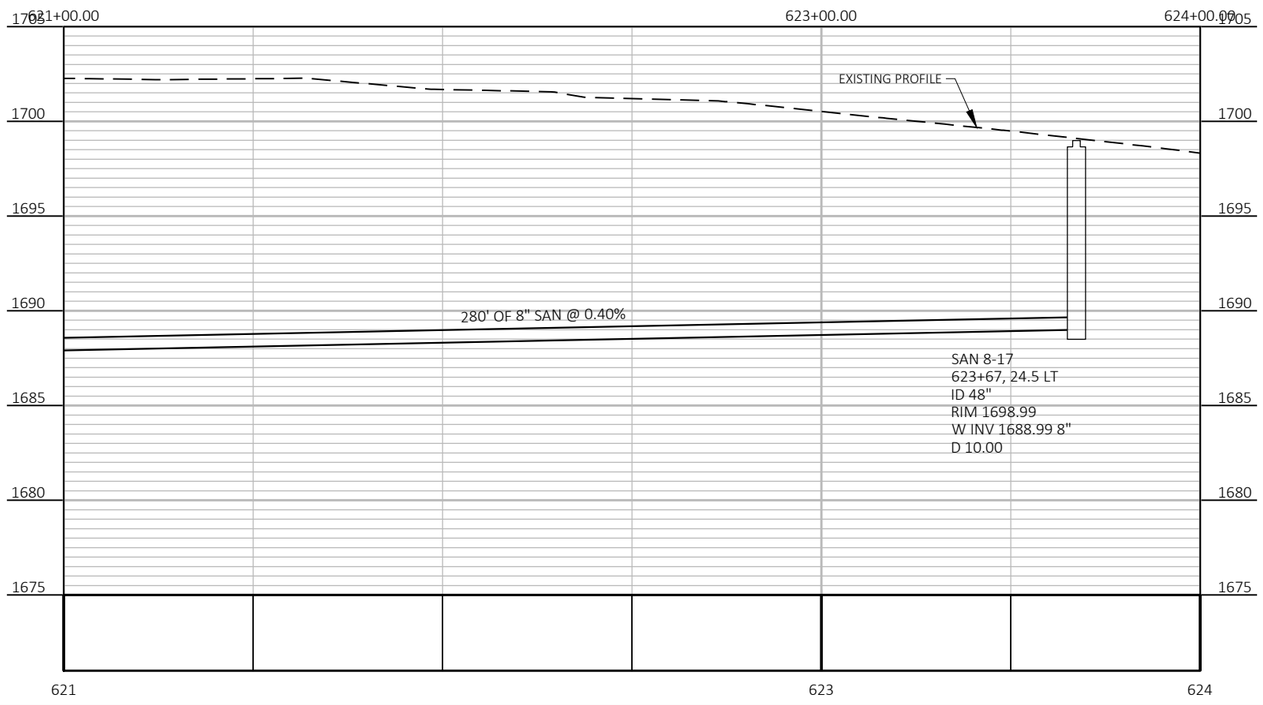




PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	USH 8 SANITARY SEWER AND WATER MAIN	SHEET ---- 34	E

2





PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	USH 8 SANITARY SEWER AND WATER MAIN	SHEET ---- 35	E

TEMPORARY WATER MAIN CONNECTION MAY BE NEEDED DUE TO CUTTING OF ROAD PROFILE AND SIDE SLOPES. STATION 589+82 TO STATION 596+00.

REMOVE EX 12" WM
STA. 589+82 - STA. 596+90

ABANDON EXIST 6" FM
STA. 576+00 - STA. 591+00

EFF FM

LST FM

REMOVE EXIST 4" SAN
STA. 585+00 - STA. 587+00

ABANDON EXIST 4" SAN
STA. 587+00 - STA. 591+00

CONTRACTOR TO DEFLECT (2) FORCE MAIN PIPES PER THE MANUFACTURERS RECOMMENDATIONS TO GET AROUND NEW DROP MANHOLE 8-6.

REMOVE SAN CLEANOUT
STA 589+28.09, -11.01' LT

8-7 STA 587+00, 76.1' LT

8-6 STA 589+78, 39.9' LT

ABANDON SAN MH
STA 589+91.92, -9.85' LT

KWE DA KIK LN

CONTRACTOR TO DEFLECT (2) FORCE MAIN PIPES PER THE MANUFACTURERS RECOMMENDATIONS TO GET AROUND NEW DROP MANHOLE 8-6.

REMOVE EXIST 6" FM
STA. 591+00 - STA. 594+00

REMOVE EXIST 4" SAN
STA. 591+00 - STA. 594+00

UTILITY EASEMENT LIMITS

MATCH LINE 592+00

586+00 587+00 588+00 589+00 590+00 591+00 592+00

UTILITY EASEMENT LIMITS

POLYSTYRENE INSULATION (TYP)

USH 8

ABANDON SAN MH
STA 589+78.66, 4.17' RT

DEFLECT PIPE PER MANUFACTURERS RECOMMENDATIONS

8" - 11.25° BEND
STA 590+82.30, 40.00' RT

8" x 6" TEE
STA 590+14.27, 63.40' RT

UTILITY EASEMENT LIMITS

PROPOSED UNDERPASS

UTILITY EASEMENT LIMITS

8" x 6" TEE
STA 586+28.69, 100.73' RT
8" GV (W)

DEFLECT 8" WM PER MANUFACTURERS RECOMMENDATIONS TO ACHIEVE ALIGNMENT

REMOVE EXIST 6" GV
STA 588+27.88, 89.33' RT

8" - 22.5° BEND
STA 589+43.04, 83.65' RT

ABANDON EXIST 6" WM
STA. 587+50 - STA. 590+00

8" x 8" TEE
STA 589+43.70, 89.44' RT
8" GV (W)

LINE 586+00

EXIST 6'x6' BOX CULVERT
TOP ELEV= 1731.01±

EXIST 6'x6' MIN 24" CASING

NOTE:
NEW WATER MAIN, HYDRANT LEAD THAT IS INSTALLED UNDER PAVEMENT AREAS (ROADWAY AND OR TRAIL) INSTALL 2" POLYSTYRENE INSULATION. SEE DETAIL.

PROPOSED PROFILE ON R/L

EXISTING PROFILE

PROPOSED PROFILE OVER FM

PROPOSED UNDERPASS

SAN 8-7
587+00, 76.1 LT
ID 48"
RIM 1752.45
W INV 1740.95 8"
E INV 1740.85 8"
D 11.60

PROPOSED PROFILE OVER WM

210' OF 8" SAN @ 0.40%

PROP 6" FM

PROP 8" WM

276' OF 8" SAN @ 0.40%

STA. 579+22 TO STA. 596+83
BOTH FORCE MAIN'S TO BE LAID AT THE SAME ELEVATION AS THE 8-INCH GRAVITY SEWER

APPROX LOCATION EXIST 6" FM

APPROX LOCATION EXIST 6" WM

PROPOSED PROFILE ON R/L

PROPOSED PROFILE OVER WM

EXISTING PROFILE

8' MIN (TYP)

PROP 8" WM

PROP 6" FM

276' OF 8" SAN @ 0.40%

APPROX LOCATION EXIST 6" WM

APPROX LOCATION EXIST 6" FM

APPROX LOCATION EXIST 12" WM

PROPOSED PROFILE OVER FM

APPROX LOCATION EXIST 6" FM

PROP 8" WM

400' OF 8" SAN @ 1.00%

PROP 6" FM

SAN 8-6
589+78, 39.9 LT
ID 48"
RIM 1757.22
W INV 1739.74 8"
E INV 1739.64 8"
N INV 1743.15 8"
N INV 1739.84 8"
D 17.57

STA. 579+22 TO STA. 596+83
BOTH FORCE MAIN'S TO BE LAID AT THE SAME ELEVATION AS THE 8-INCH GRAVITY SEWER

586 587 588 589 590 591 592

PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	USH 8 SANITARY SEWER AND WATER MAIN	SHEET ---- 36	E

REMOVE 12" GV
REMOVE 6" GV
REMOVE HYDRANT
STA 593+12.84, -109.29' LT

REMOVE EX 12" WM
STA. 589+82 - STA. 596+90

TEMPORARY WATER MAIN CONNECTION MAY BE NEEDED DUE TO CUTTING OF ROAD PROFILE AND SIDE SLOPES. STATION 589+82 TO STATION 596+00.

ABANDON EX 12" WM
STA. 596+90 - STA. 608.21.33

PROJECT 1590-18-71 SI (TYP)

EXIST 12" WM

UTILITY EASEMENT LIMITS

EFF FM

LST FM

REMOVE EXIST 6" FM
STA. 591+00 - STA. 594+00

REMOVE EXIST 4" SAN
STA. 591+00 - STA. 594+00

NAS 8-5 STA 593+83, 39.0' LT

ABANDON EXIST 4" SAN
STA. 594+00 - STA. 606+75

ABANDON EXIST 6" FM
STA. 594+00 - STA. 606+75

NAS 8-4 STA 597+88, 39.0' LT

MATCH LINE 598+00

UTILITY EASEMENT LIMITS

10' TRAIL

EXIST 6" SAN FM

EXIST SAN

USH 8

CONTRACTOR TO DEFLECT WATER MAIN PER THE MANUFACTURERS RECOMMENDATIONS TO GET AROUND NEW STORM STRUCTURE.

8" x 6" TEE
STA 596+06.75, 37.28' RT

8" WM

UTILITY EASEMENT LIMITS

NOTE:
NEW WATER MAIN, HYDRANT LEAD THAT IS INSTALLED UNDER PAVEMENT AREAS (ROADWAY AND OR TRAIL) INSTALL 2" POLYSTYRENE INSULATION. SEE DETAIL.

MATCH LINE 592+00

592+00 593+00 594+00 595+00 596+00 597+00 598+00

1750 1745 1740 1735 1730 1725 1720

EXISTING PROFILE

PROPOSED PROFILE ON R/L

PROPOSED PROFILE OVER FM

PROPOSED PROFILE OVER WM

APPROX LOCATION EXIST 6" FM

APPROX LOCATION EXIST 12" WM

PROP 8" WM

PROP 6" FM

400' OF 8" SAN @ 1.00%

400' OF 8" SAN @ 3.50%

8' MIN (TYP)

8' MIN (TYP)

STA. 579+22 TO STA. 596+83
BOTH FORCE MAIN'S TO BE LAID AT THE SAME ELEVATION AS THE 8-INCH GRAVITY SEWER

SAN 8-5
593+83, 39.0 LT
ID 48"
RIM 1744.64
NE INV 1735.54 8"
W INV 1735.64 8"
D 9.10

SAN 8-4
597+88, 39.0 LT
ID 48"
RIM 1730.59
NE INV 1721.44 8"
SW INV 1721.54 8"
D 9.15

592 593 594 595 596 597 598

PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	USH 8 SANITARY SEWER AND WATER MAIN	SHEET ---- 37	E

ABANDON EX 12" WM
STA. 596+90 - STA. 608.21.33

REMOVE HYDRANT
REMOVE 6" GV STACK
REMOVE 12" GV STACK
STA 600+71.86, -100.67' LT

ABANDON EX 12" WM
STA. 596+90 - STA. 608.21.33

MATCH LINE 604+00

EX 12" WM

PROJECT 1590-18-71 SI (TYP)

EFF FM

LST FM

UTILITY EASEMENT LIMITS

ABANDON EXIST 6" FM
STA. 594+00 - STA. 606+75

ABANDON EXIST 4" SAN
STA. 594+00 - STA. 606+75

EXIST 6" SAN FM

EXIST SAN

NVS

STA 601+93, 42.0' LT (8-3)

PT: 603+00.66

598+00 599+00 600+00 601+00 602+00 604+00

USH 8

8" WM

8"' x 6" TEE
STA 601+98.11, 40.00' RT
8" GV (W)
6" GV (S)

POLYSTYRENE INSULATION
(TYP)

STA BACK = 602+81.94
STA AHEAD = 603+00.66

10' TRAIL

MITS

CH LINE 598+00

NOTE:
NEW WATER MAIN, HYDRANT LEAD THAT IS INSTALLED UNDER PAVEMENT AREAS (ROADWAY AND OR TRAIL) INSTALL 2" POLYSTYRENE INSULATION. SEE DETAIL.

1735 1730 1725 1720 1715 1710 1705

PROPOSED PROFILE ON R/L

EXISTING PROFILE

APPROX LOCATION EXIST 12" WM

PROPOSED PROFILE OVER FM

8' MIN (TYP)

PROP 6" FM

400' OF 8" SAN @ 4.00%

PROP 8"' WM

APPROX LOCATION EXIST 6" FM

PROPOSED PROFILE OVER WM

8' MIN (TYP)

1735 1730 1725 1720 1715 1710 1705 1700 1695 1690

8' MIN (TYP)

PROPOSED PROFILE OVER WM

PROP 6" FM

400' OF 8" SAN @ 4.00%

PROP 8"' WM

SAN 8-3
601+93, 42.0 LT
ID 48"
RIM 1715.28
NE INV 1705.34 8"
SW INV 1705.44 8"
D 9.94

APPROX LOCATION EXIST 12" WM

EXISTING PROFILE

PROPOSED PROFILE OVER FM

PROPOSED PROFILE ON R/L

8' MIN (TYP)

400' OF 8" SAN @ 2.96%

APPROX LOCATION EXIST 6" FM

1720 1715 1710 1705 1700 1695 1690

598 599 600 601 602 604

PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	USH 8 SANITARY SEWER AND WATER MAIN	SHEET ---- 38	E

FILE NAME : W:\PROJECTS\F0954\092300403\CADD\CIVIL3D\PLAN SHEETS\USH 8 AREA WISDOT\USH 8 DOT DRAWING.DWG
LAYOUT NAME - USH 8 DOT Drawing - USH 8 18

PLOT DATE : 12/19/2024 10:14 AM PLOT BY : JORDAN JELINSKI PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

6"- 45° BEND (LST FM)
STA 1+04.07, -16.53' LT

6"- 45° BEND (LST FM)
STA 0+91.71, -3.95' LT

6"- 45° BEND (LST FM)
STA 0+71.71, -3.77' LT

6"- 45° BEND (EFF FM)
STA 0+72.14, -2.77' LT

CONNECT TO EXIST 6" (LST FM)
STA 1+07.01, -17.12' LT

PLUG & BLOCK 6" (EFF FM)
STA 0+91.70, -2.95' LT

LST FM

EFF FM

UTILITY EASEMENT LIMITS

BP: 0+50.00

PI: 2+18.76

EP: 4+43.51

0+00 1+00 2+00 3+00 4+00

543+00

544+00

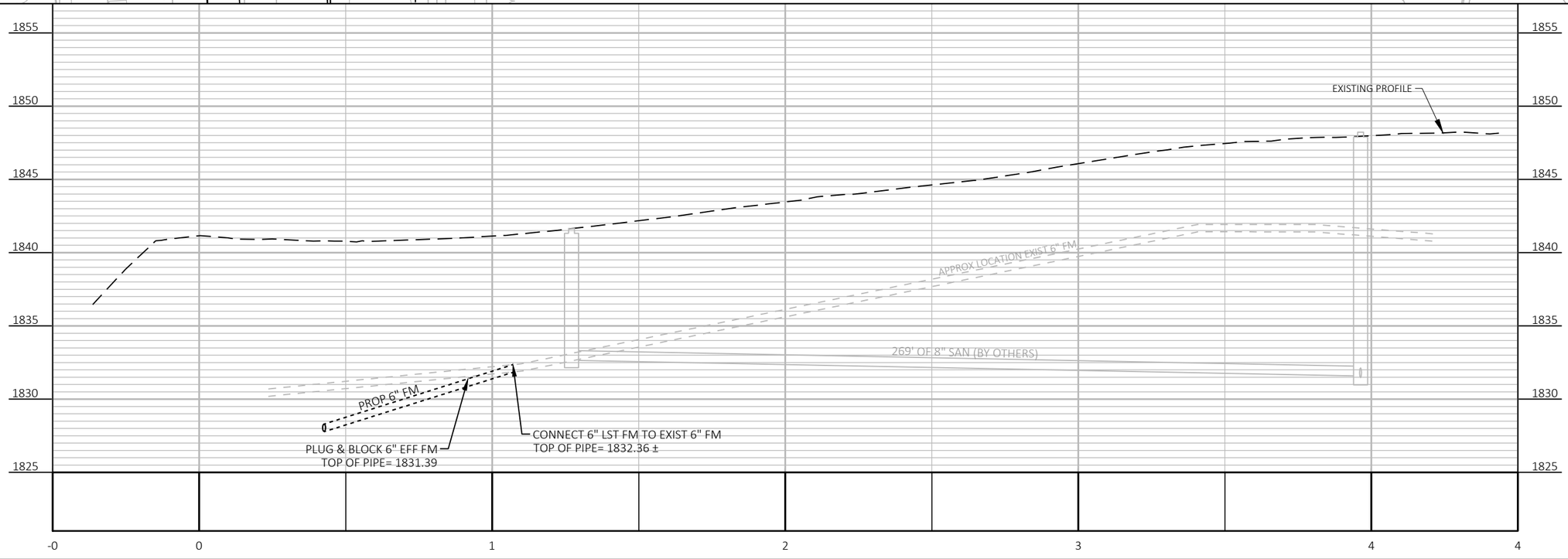
USH 8

EXIST TREATMENT PLANT ENTRANCE

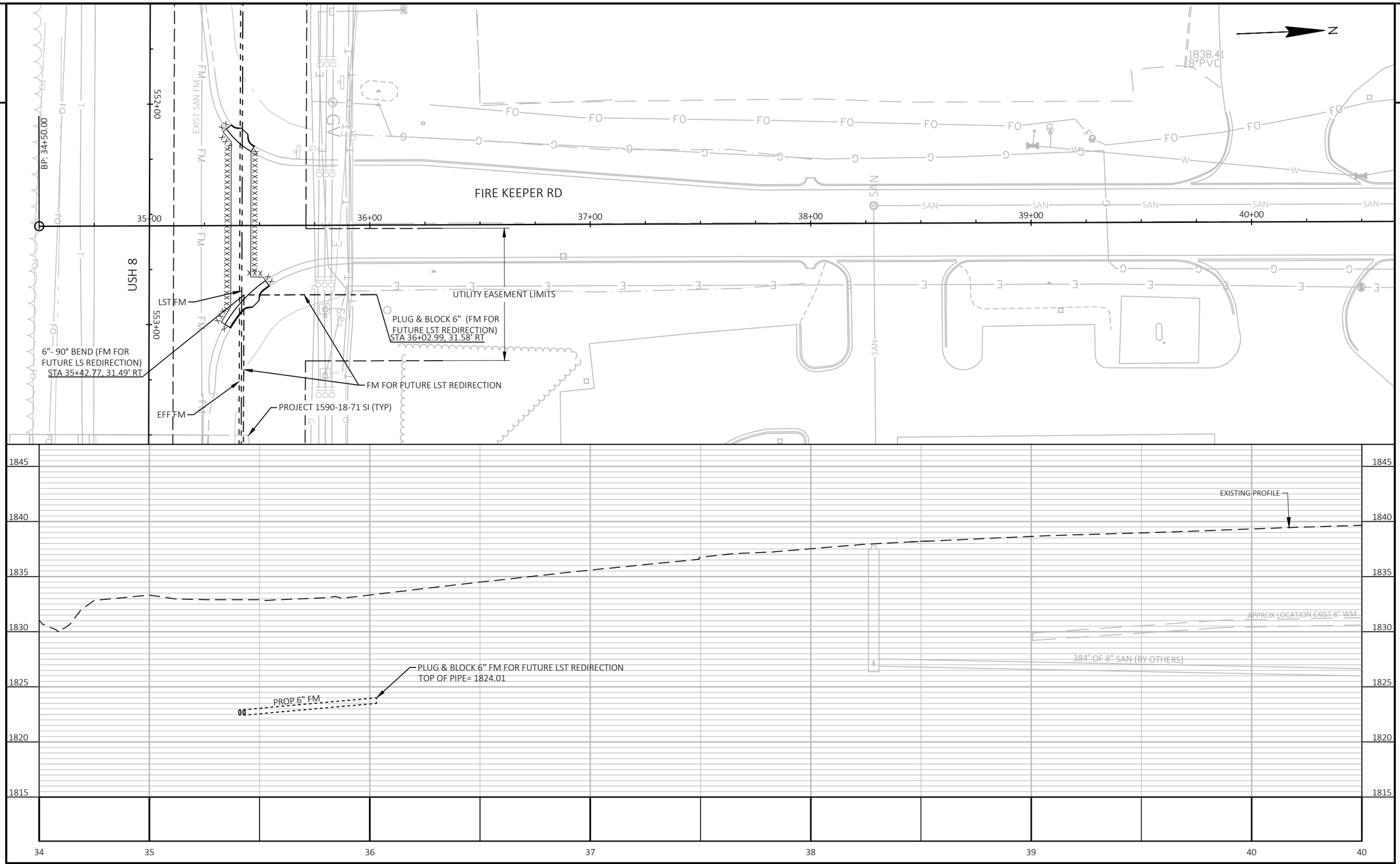
MISH KO SWEN DR

EXIST SAN FM

N



PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	EX TREATMENT ENTRANCE SANITARY SEWER AND WATER MAIN	SHEET ---- 39	E



PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	FIRE KEEPER RD SANITARY SEWER AND WATER MAIN	SHEET ---- 40	E

FILE NAME : W:\PROJECTS\F0954\092300403\CADD\CIVIL3D\PLAN SHEETS\USH 8 AREA WISDOT\USH 8 AREA SIDE STREET PP.DWG
LAYOUT NAME - FIRE KEEPER RD

PLOT DATE : 12/19/2024 10:15 AM PLOT BY : JORDAN JELINSKI PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

HYDRANT
STA 113+58.93, -25.70' LT

UTILITY EASEMENT LIMITS

PROJECT 150-18-71 SI (TYP)

CONNECT TO EXIST 6" WM
6" - 45° BEND
STA 112+82.78, -17.00' LT
3' -6" WM
8" x 6" REDUCER (N)

8" x 6" TEE
STA 113+58.93, -11.00' LT
6" GV (W)

CONNECT TO EXIST WATER CURB STOP

CONNECT TO EXIST SAN CLEANOUT

NEW 1" WATER SERVICE

REMOVE 6" GV
REMOVE HYDRANT
STA 113+58.45, -18.73' LT

8" - 45° BEND
STA 112+89.66, -11.00' LT

PT 113+80.65

NEW 4" SAN LAT

REMOVE EX 6" WM
STA. 112+83 - STA. 118+19

REMOVE 6" GV
STA 118+19.08, -15.76' LT

HYDRANT
STA 117+95.91, -36.00' LT

8" x 6" TEE
STA 117+95.91, -11.00' LT
8" GV (S)
6" GV (W)

N

USH 8

564+00

565+00

UTILITY EASEMENT LIMITS

8" WM

113+00 114+00 115+00 116+00 117+00 118+00

YOUNGS LANE

8"-90° BEND
STA 118+14.31, -11.00' LT

REMOVE EX 6" FM
STA. 113+31 - STA. 118+19

2-1/2" LST FM

6" LST FM

SAN

CONNECT TO EXIST
2-1/2" FM
STA 113+31, 14.12' RT

Y2 STA 114+22, 22.0' RT

CONNECT NEW 6" LST FM & 2-1/2" LST FM TO SAN MH Y2

PLUG & BLOCK 6" LST FM
STA 114+04.66, 22.35' RT

PROJECT 1590-18-71 SI (TYP)

STA 117+87, 28.2' RT Y1

NOTE:
NEW WATER MAIN, HYDRANT LEAD THAT IS INSTALLED UNDER PAVEMENT AREAS (ROADWAY AND OR TRAIL) TO HAVE INSULATION INSTALLED. SEE DETAIL.

1860 1855 1850 1845 1840 1835 1830

EXISTING PROFILE

APPROX LOCATION EX 6" WM

APPROX LOCATION EX 2-1/2" FM

APPROX LOCATION EX FM

PROPOSED PROFILE ON R/L

CONNECT NEW 2-1/2" LST FM TO SAN Y2

CONNECT TO EXIST 6" WM

8"x6" REDUCER

PROP 8" WM

PROP 2-1/2" LST FM

CONNECT NEW 2-1/2" LST FM TO EXIST 2-1/2" FM INV AT SAN Y2 TO BE 1848.55
CONNECT TO EX 2-1/2" FM SO INV OF CONNECTION POINT IS LOWER THAN 1848.55

PLUG & BLOCK 6" FM

CONNECT NEW 6" LST FM TO SAN Y2 INV 1848.05 6"

SAN Y2
114+22, 22.0 RT
ID 48"
RIM 1856.87
N INV 1846.75 8"
D 10.12

PROP 8" WM

365' OF 8" SAN @ 4.00%

SAN Y1
117+87, 28.2 RT
ID 48"
RIM 1842.99
S INV 1832.13 8"
NE INV 1832.05 8"
D 10.94

PROP 8" WM

188' OF 8" SAN @ 0.40%

112 113 114 115 116 117 118 118

PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	YOUNGS LN SANITARY SEWER AND WATER MAIN	SHEET ---- 41	E

FILE NAME : W:\PROJECTS\F0954\092300403\CADD\CIVIL3D\PLAN SHEETS\USH 8 AREA WISDOT\USH 8 AREA SIDE STREET PP.DWG
LAYOUT NAME - YOUNGS LANE 01
PLOT DATE : 12/19/2024 10:15 AM PLOT BY : JORDAN JELINSKI PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

N

BP: 44+50.00

570+00

UTILITY EASEMENT LIMITS

LST FM

EFF FM

8" WM - 22.5° VERTICAL BEND STA 46+09, 21.54' RT

CONNECT TO EXIST 8" WM STA 46+14, 21.59' RT

8" WM - 22.5° VERTICAL BEND STA 45+58, 20.97' RT

UTILITY EASEMENT LIMITS

45+00 46+00 47+00 48+00 49+00 50+00

REMOVE EXIST 8" WM STA. 44+72 - STA. 46+42

8" WM

EXIST 8" WM

EXIST WM

EVERYBODY'S RD

REMOVE EXIST SAN MH

CONNECT TO EXIST 8" SAN STA 46+18.78, 44.24' RT

SAN

USH 8

REMOVE EXIST 24" CASING PIPE

8-12 STA 571+21, 69.0' LT

E-1 STA 46+14, 44.2' RT

REMOVE 8" GV STA 44+72.10, 32.42' RT

PROJECT 1590-18-71 SI (TYP)

NOTE:
NEW WATER MAIN, HYDRANT LEAD THAT IS INSTALLED UNDER PAVEMENT AREAS (ROADWAY AND OR TRAIL) TO HAVE INSULATION INSTALLED. SEE DETAIL.

CONNECT TO EXIST 8" WM

EXISTING PROFILE

22.5° BEND

REMOVE EXIST 8" SAN

EXIST SAN MH
RIM 1849.81
N INV 1839.30 8"
SE IN 1839.30 4"
D 10.01

REMOVE EXIST SAN MH

PROPOSED PROFILE OVER PROPOSED WM

APPROX LOCATION EXIST 8" WM

PROP 8" WM

45° OF 8" SAN @ 10.00%

SAN 8-12
571+21, 69.0 LT
ID 48"
RIM 1843.34
W INV 1829.23 8"
N INV 1831.00 8"
E INV 1829.13 8"
D 13.45

8' MIN

PROP 8" WM

45° BEND

CONNECT TO EXIST 8" SANITARY

SAN E-1
46+14, 44.2 RT
ID 48"
RIM 1853.51
N INV 1841.76 8"
N INV 1835.60 8"
S INV 1835.50 8"
D 18.01
DROP 6.16'

EXISTING PROFILE

EXIST SAN MH
RIM 1863.64
N INV 1853.20 8"
SE IN 1853.20 8"
D 10.44

APPROX LOCATION EXIST 8" WM

APPROX LOCATION EXIST 8" SAN

1850 1845 1840 1835 1830 1825 1820

1870 1865 1860 1855 1850 1845 1840

44 45 46 46 47 48 49 50 50

PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	EVERYBODY'S RD SANITARY SEWER AND WATER MAIN	SHEET ---- 42	E

FILE NAME : W:\PROJECTS\F0954\092300403\CADD\CIVIL3D\PLAN SHEETS\USH 8 AREA WISDOT\USH 8 AREA SIDE STREET PP.DWG
LAYOUT NAME - EVERYBODY'S ROAD

PLOT DATE : 12/19/2024 10:15 AM PLOT BY : JORDAN JELINSKI PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

ABANDON EXIST 6" WM
STA. 589+20 - STA. 21+90

UTILITY EASEMENT LIMITS

8"x8" TEE
2- 8" WM VALVES
22.5° BEND NORTH OF TEE

DEFLECT PIPE PER
MANUFACTURERS
RECOMMENDATIONS

BP: 20+00.00

UTILITY
EASEMENT
LIMITS

REMOVE 12" GV
STA 21+04.54, -0.71' LT

8" - 45° BEND
STA 21+75, -20.00' LT
8" x 6" REDUCER

6" - 45° BEND
STA 21+90.10, -4.90' LT
CONNECT TO EXIST 6" WM

EP: 22+72.72

ABANDON SAN MH

8-6 STA 589+78, 39.9' LT

ABANDON SAN MH

UTILITY EASEMENT LIMITS

KWE DA KIK LN

RECONNECT EXIST 4" SAN TO NEW 8" SAN
STA 21+80.14, 0.48' RT

ABANDON EXIST 4" SAN
STA. 20+00 - STA. 21+80

LST FM

EFF FM

FUTURE ROADWAY TO BE
CONSTRUCTED BY OTHERS

STA 589+77.81, 143.26' RT
REMOVE 6" GV
REMOVE HYDRANT

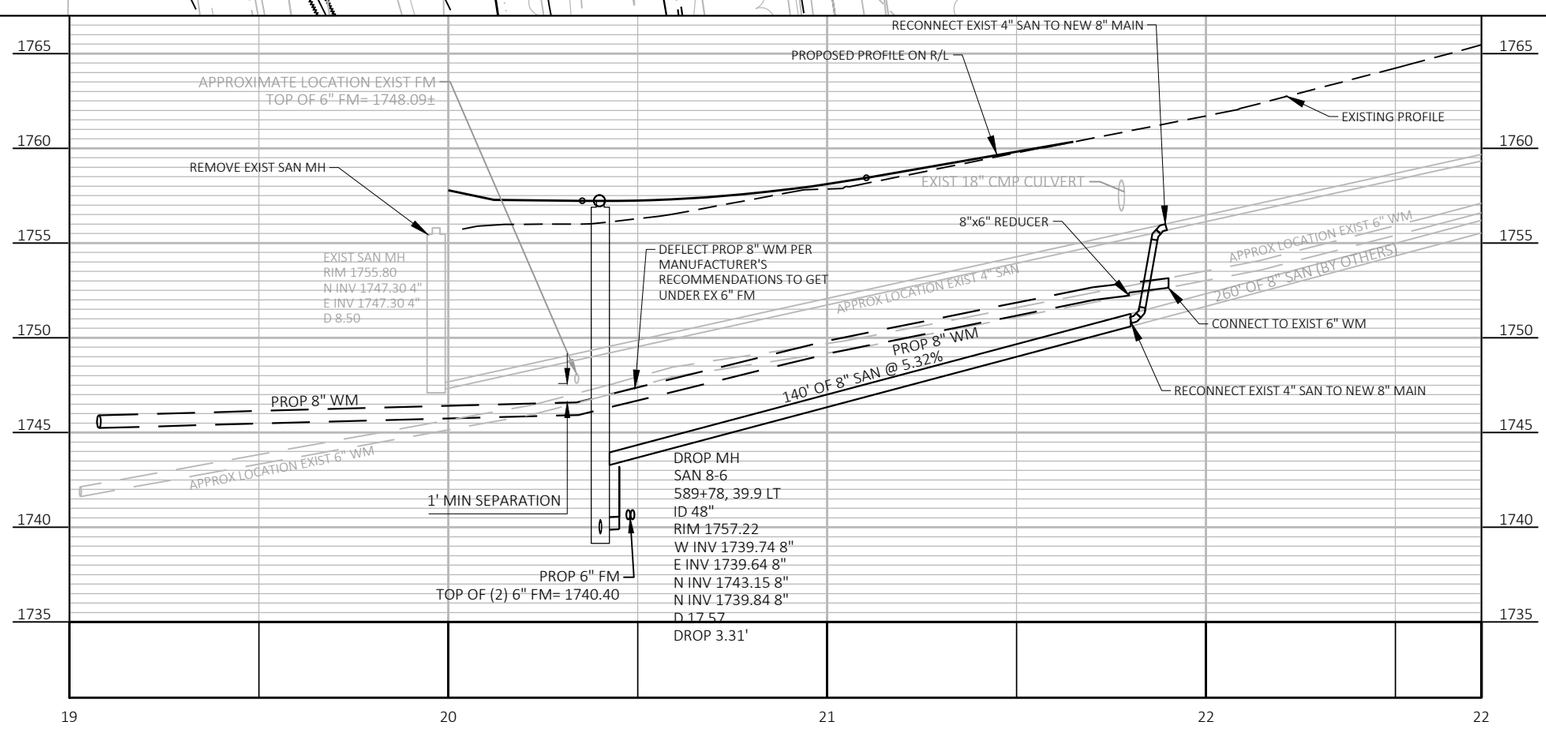
UTILITY EASEMENT LIMITS

USH 8

PROJECT 1590-18-71 SI (TYP)

PROJECT 1590-18-71 SI (TYP)

NOTE:
NEW WATER MAIN, HYDRANT LEAD THAT IS INSTALLED UNDER PAVEMENT AREAS (ROADWAY AND OR TRAIL) TO HAVE INSULATION INSTALLED. SEE DETAIL.



PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	KWE DA KIK LN SANITARY SEWER AND WATER MAIN	SHEET ---- 43	E

FILE NAME : W:\PROJECTS\F0954\092300403\CADD\CIVIL3D\PLAN SHEETS\USH 8 AREA WISDOT\USH 8 AREA SIDE STREET PP.DWG
LAYOUT NAME - KWE DA KIK
PLOT DATE : 12/19/2024 10:15 AM PLOT BY : JORDAN JELINSKI PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

8" - 45° BEND
STA 134+57.73, -54.75' LT

CONNECT TO EXIST 8" WM
STA 134+47.49, -44.72' LT

8" - 45° BEND

CONNECT 6"(LST FM)
TO EXIST 6" FM
STA 134+24.90, -36.36' LT

ABANDON EXIST 6" FM
ABANDON EXIST 4" SAN
USH 8 TO INDIAN DR

PROJECT 1590-18-71 SI (TYP)

LS FM

TOP OF 6" FM
ELEV= 1679.21
STA 135+25.92, -54.08' LT
TOP OF 8" WM
ELEV= 1677.00

EFF FM

30'

PT: 132+65.26

EXIST 12" WM

EXIST 8" WM

EXIST SAN FM

UTILITY EASEMENT LIMITS

PLUG & BLOCK 6" (EFF FM)
STA 134+33.79, -30.65' LT

133+00

134+00

135+00

136+00

137+00

608+00

6" - 45° BEND (EFF FM)
STA 134+87.30, -25.86' LT

CONNECT NEW 8" SAN
TO EX SAN MH

INDIAN DR

ARLYN ALLOWAY DR

6" - 45° BEND (LST FM)
STA 134+87.02, -26.89' LT

PC: 135+37.21

8" - 45° BEND
STA 136+29.01, -46.31' LT

ABANDON EXIST 8" WM
STA. 134+48 - STA. 137+75

PCC: 136+31.16

PT: 136+78.96

8" WM

USH 8

EP: 137+78.17

PROJECT
1590-18-71 SI (TYP)

UTILITY EASEMENT LIMITS

PC: 54+50.00

UTILITY
EASEMENT
LIMITS

STA 609+09, 39.0' LT

8-1

NEW 4" SAN LAT

CONNECT TO EXIST SAN LAT

8" WM 45° BEND

ABANDON EXIST 6" FM
STA. 134+46 - USH 8

UTILITY EASEMENT LIMITS

NOTE:
NEW WATER MAIN, HYDRANT LEAD THAT IS INSTALLED UNDER PAVEMENT AREAS (ROADWAY AND OR TRAIL) TO HAVE INSULATION INSTALLED. SEE DETAIL.

EXISTING PROFILE

CONNECT TO EXIST 8" WM
STA 134+48

EXIST SAN MH
RIM 1681.53
N INV 1670.78 8"
NE INV 1670.78 8"
S INV 1670.78 8"
D 10.75

6" FM 45° BEND TO USH 8
STA 134+87

8"x8" TEE AT USH 8

TOP OF 6" FM'S ELEV= 1679.21
TOP OF 8" WM ELEV= 1677.00
MAINTAIN 1.5' SEPARATION
BETWEEN NEW FM'S & 8" WM

APPROX LOCATION EXIST 8" WM

PLUG & BLOCK 6" EFF FM
TOP OF PIPE= 1674.35
STA 134+33

PROP 8" WM

363' OF 8" SAN @ 2.45%

CONNECT 6" LST FM TO EXIST 6" FM
TOP OF PIPE= 1673.05 ±
STA 134+25

PROP 6" FM

APPROX LOCATION EXIST 6" FM

APPROX LOCATION EXIST 8" WM

CONNECT TO EXIST SAN MH
N INV 1672.78

SAN 8-1
609+09, 39.0 LT
ID 48"
RIM 1694.52
N INV 1683.36 8"
S INV 1681.68 8"
NE INV 1681.78 8"
SW INV 1683.46 8"
D 12.84

1700
1695
1690
1685
1680
1675
1670

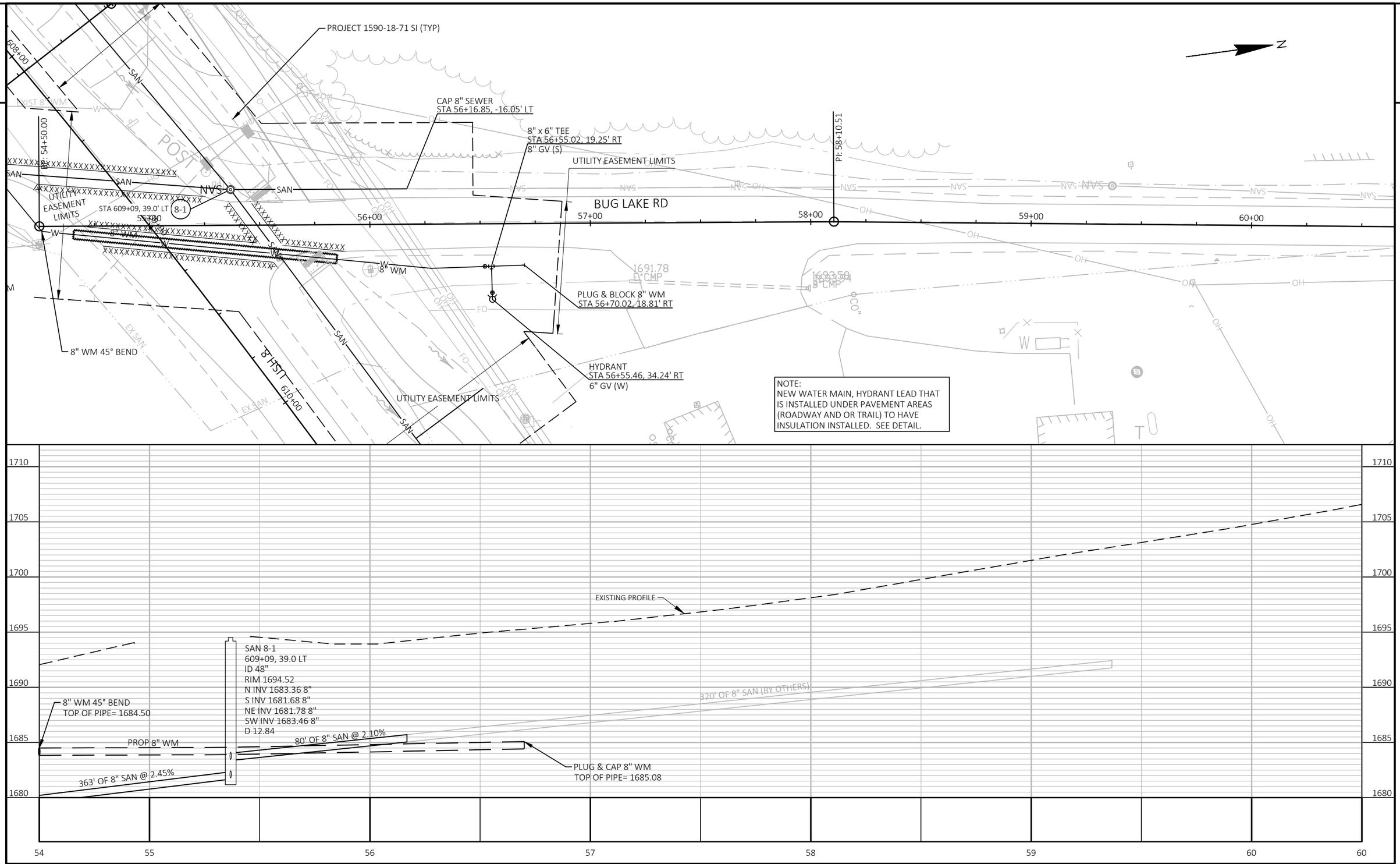
132 133 134 135 136 137 138

PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	INDIAN DR SANITARY SEWER AND WATER MAIN	SHEET ---- 44	E

FILE NAME : W:\PROJECTS\F0954\092300403\CADD\CIVIL3D\PLAN SHEETS\USH 8 AREA WISDOT\USH 8 AREA SIDE STREET PP.DWG
LAYOUT NAME - INDIAN DR

PLOT DATE : 12/19/2024 10:15 AM PLOT BY : JORDAN JELINSKI PLOT NAME : PLOT SCALE : 1 IN:40 FT

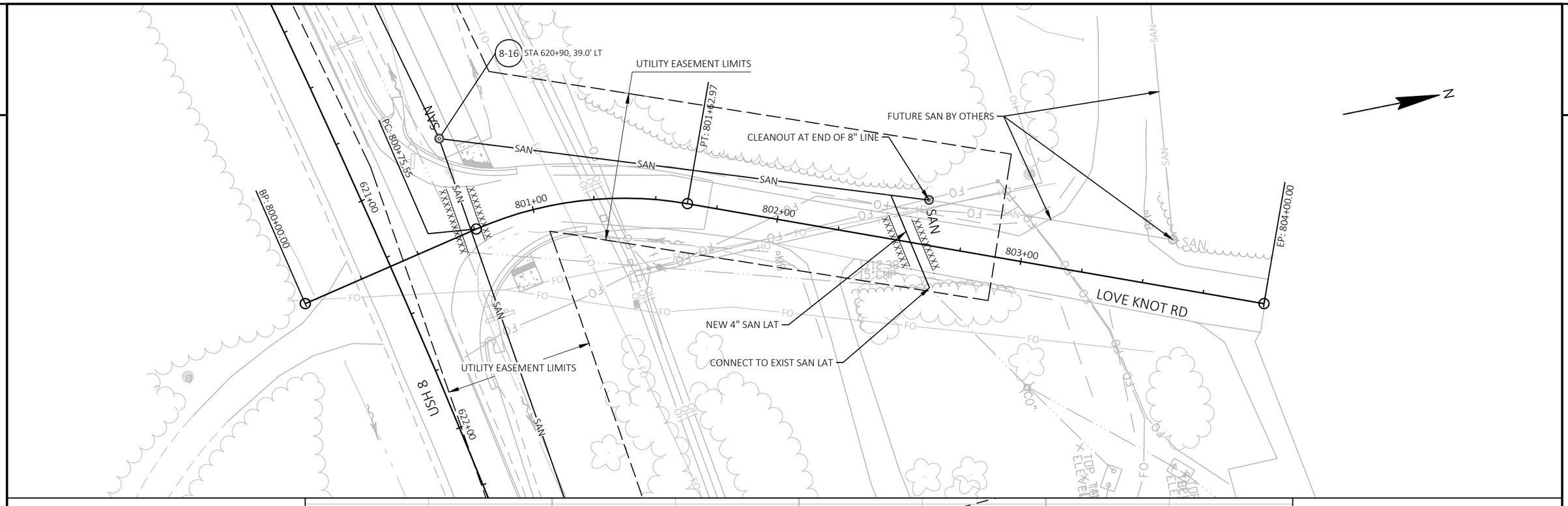
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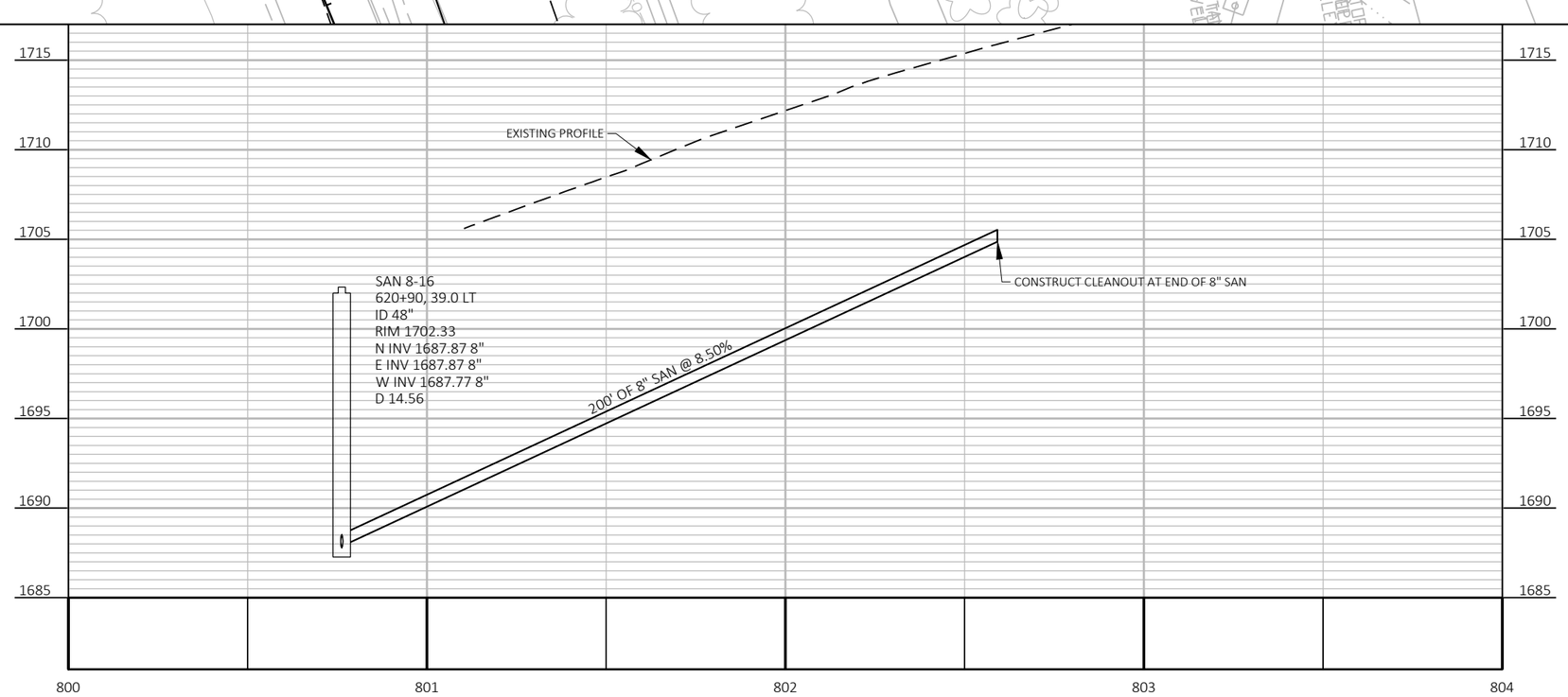


PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	BUG LAKE RD SANITARY SEWER AND WATER MAIN	SHEET ---- 45	E

FILE NAME : W:\PROJECTS\F0954\092300403\CADD\CIVIL3D\PLAN SHEETS\USH 8 AREA WISDOT\USH 8 AREA SIDE STREET PP.DWG
LAYOUT NAME - BUG LAKE RD
PLOT DATE : 12/19/2024 10:15 AM PLOT BY : JORDAN JELINSKI PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2





PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	LOVE KNOT SANITARY SEWER AND WATER MAIN	SHEET ---- 46	E

FILE NAME : W:\PROJECTS\F0954\092300403\CADD\CIVIL3D\PLAN SHEETS\USH 8 AREA WISDOT\USH 8 AREA SIDE STREET PP.DWG
LAYOUT NAME - LOVE KNOT RD

PLOT DATE : 12/19/2024 10:15 AM PLOT BY : JORDAN JELINSKI PLOT NAME : PLOT SCALE : 1 IN:40 FT

1590-18-83

Line	Item	Item Description	Unit	Total	Qty
0004	201.0215	Grubbing	ACRE	0.290	0.290
0006	202.0110	Roadside Clearing	SY	30.000	30.000
0012	204.0110	Removing Asphaltic Surface	SY	569.600	569.600
0018	204.0150	Removing Curb & Gutter	LF	88.000	88.000
0056	305.0110	Base Aggregate Dense 3/4-Inch	TON	18.000	18.000
0058	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	251.000	251.000
0070	455.0605	Tack Coat	GAL	34.000	34.000
0082	460.5223	HMA Pavement 3 LT 58-28 S	TON	77.000	77.000
0084	460.5244	HMA Pavement 4 LT 58-34 S	TON	60.000	60.000
0176	601.0582	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type T	LF	12.000	12.000
0190	602.3010	Concrete Surface Drains	CY	1.950	1.950
0240	612.0902.S	Insulation Board Polystyrene (inch) 001. 2 -Inch	SY	676.000	676.000
0246	619.1000	Mobilization	EACH	0.140	0.140
0248	624.0100	Water	MGAL	3.800	3.800
0250	625.0100	Topsoil	SY	8,159.000	8,159.000
0254	628.1504	Silt Fence	LF	487.000	487.000
0256	628.1520	Silt Fence Maintenance	LF	487.000	487.000
0264	628.2023	Erosion Mat Class II Type B	SY	8,019.000	8,019.000
0272	628.7020	Inlet Protection Type D	EACH	1.000	1.000
0278	628.7555	Culvert Pipe Checks	EACH	16.000	16.000
0286	629.0210	Fertilizer Type B	CWT	5.000	5.000
0288	630.0120	Seeding Mixture No. 20	LB	220.000	220.000
0290	630.0500	Seed Water	MGAL	272.000	272.000
0294	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	2.000	2.000
0302	638.2102	Moving Signs Type II	EACH	5.000	5.000
0308	638.4000	Moving Small Sign Supports	EACH	5.000	5.000
0426	690.0150	Sawing Asphalt	LF	1,237.000	1,237.000
0428	690.0250	Sawing Concrete	LF	12.000	12.000
0440	SPV.0035	Special 201. Utility Trench Rock Excavation	CY	500.000	500.000
0466	SPV.0060	Special 202. Removing Sanitary Manhole	EACH	1.000	1.000
0468	SPV.0060	Special 203. Removing Sanitary Cleanout	EACH	10.000	10.000
0470	SPV.0060	Special 204. Abandon Sanitary Manhole	EACH	2.000	2.000
0472	SPV.0060	Special 205. Remove Hydrant	EACH	5.000	5.000
0474	SPV.0060	Special 206. Remove 6-Inch Gate Valve	EACH	6.000	6.000
0476	SPV.0060	Special 207. Remove 8-Inch Gate Valve	EACH	1.000	1.000
0478	SPV.0060	Special 208. Remove 12-Inch Gate Valve	EACH	2.000	2.000
0480	SPV.0060	Special 209. Remove Valve Box	EACH	4.000	4.000
0482	SPV.0060	Special 210. Air Release Valve Manhole	EACH	1.000	1.000
0484	SPV.0060	Special 211. Connect To Existing Force Main	EACH	3.000	3.000
0486	SPV.0060	Special 212. Reconnect Existing Sanitary Lateral	EACH	10.000	10.000
0488	SPV.0060	Special 213. Temporary 4-Inch Sanitary Connection	EACH	5.000	5.000
0490	SPV.0060	Special 214. Temporary 6-Inch Force Main Connection	EACH	6.000	6.000
0492	SPV.0060	Special 215. Reconnect Existing Water Service Lateral	EACH	1.000	1.000
0494	SPV.0060	Special 216. Temporary Water Main Connection, 6-Inch	EACH	7.000	7.000
0496	SPV.0060	Special 217. Connect To Existing Water Main	EACH	4.000	4.000
0498	SPV.0060	Special 218. 6-Inch Gate Valve And Box	EACH	11.000	11.000
0500	SPV.0060	Special 219. 8-Inch Gate Valve And Box	EACH	14.000	14.000
0502	SPV.0060	Special 220. Fire Hydrant	EACH	11.000	11.000
0504	SPV.0060	Special 221. Remove And Reset Gate And Post	EACH	1.000	1.000

1590-18-83

Line	Item	Item Description	Unit	Total	Qty
0506	SPV.0060	Special 222. Utility Line Openings	EACH	10.000	10.000
0508	SPV.0060	Special 247. Construction Staking Sanitary Sewer And Force Main (Project) 1590-18-83	EACH	1.000	1.000
0510	SPV.0060	Special 248. Construction Staking Water Main (Project) 1590-18-83	EACH	1.000	1.000
0512	SPV.0060	Special 253. Sanitary Sewer 8-Inch Cleanout	EACH	1.000	1.000
0520	SPV.0090	Special 223. Remove Existing Sanitary Force Main 6-Inch Or Smaller	LF	3,648.000	3,648.000
0522	SPV.0090	Special 224. Remove Existing Casing Pipe	LF	60.000	60.000
0524	SPV.0090	Special 225. Remove Existing Water Main 12-Inch Or Smaller	LF	3,346.000	3,346.000
0526	SPV.0090	Special 226. Remove 24-Inch Steel Casing	LF	50.000	50.000
0528	SPV.0090	Special 227. Abandon 6-Inch Or Smaller Sanitary Or Force Main	LF	9,863.000	9,863.000
0530	SPV.0090	Special 228. Abandon 8-Inch Or Smaller Water Main	LF	1,287.000	1,287.000
0532	SPV.0090	Special 229. Abandon 12-Inch Water Main	LF	1,115.000	1,115.000
0534	SPV.0090	Special 230. 6-Inch Lift Station Force Main	LF	8,130.000	8,130.000
0536	SPV.0090	Special 231. 6-Inch Effluent Force Main	LF	6,682.000	6,682.000
0538	SPV.0090	Special 232. 8-Inch Sanitary Sewer Pipe	LF	6,516.000	6,516.000
0540	SPV.0090	Special 233. 8-Inch Sanitary Sewer SDR 26 Pipe	LF	400.000	400.000
0542	SPV.0090	Special 234. 2-Inch Sanitary Lateral	LF	33.000	33.000
0544	SPV.0090	Special 235. 4-Inch Sanitary LateralL	LF	435.000	435.000
0546	SPV.0090	Special 236. 6-Inch Sanitary Lateral	LF	54.000	54.000
0548	SPV.0090	Special 237. 1-Inch Water Service Lateral	LF	43.000	43.000
0550	SPV.0090	Special 238. 6-Inch Water Main (Includes Hydrant Leads)	LF	189.000	189.000
0552	SPV.0090	Special 239. 8-Inch Water Main	LF	5,862.000	5,862.000
0554	SPV.0090	Special 241. Over Excavation For Pipe Bedding 0.5-FT To 1.5-FT (Force Main)	LF	600.000	600.000
0556	SPV.0090	Special 242. Over Excavation For Pipe Bedding 1.6-FT To 3.0-FT (Force Main)	LF	600.000	600.000
0558	SPV.0090	Special 243. Over Excavation For Pipe Bedding 0.5-FT To 1.5-FT (San 9-FT - 14FT Deep)	LF	400.000	400.000
0560	SPV.0090	Special 244. Over Excavation For Pipe Bedding 1.6-FT To 3.0-FT (San 9-FT - 14FT Deep)	LF	400.000	400.000
0562	SPV.0090	Special 245. Over Excavation For Pipe Bedding 0.5-FT To 1.5-FT (San 14.1-FT - 25FT Deep)	LF	400.000	400.000
0564	SPV.0090	Special 246. Over Excavation For Pipe Bedding 1.6-FT To 3.0-FT (San 14.1-FT - 25FT Deep)	LF	400.000	400.000
0566	SPV.0090	Special 247. 2-1/2 - Inch Lift Station Force Main	LF	95.000	95.000
0570	SPV.0200	Special 249. 4-Inch Sanitary Lateral Riser	VF	3.000	3.000
0572	SPV.0200	Special 250. 6-Inch Sanitary Lateral Riser	VF	3.000	3.000
0574	SPV.0200	Special 251. Sanitary Sewer Manhole 4-FT Diameter	VF	274.840	274.840
0576	SPV.0200	Special 252. Sanitary Sewer Outside Drop Manhole	VF	19.560	19.560

ALL ITEMS ON THIS PAGE TO BE UNDER CATEGORY 10

3

GRUBBING

STATION	TO	STATION	LOCATION	201.0215 GRUBBING AC
543+89	-	546+18	USH 8, LT	0.04
548+73	-	549+58	USH 8, LT	0.01
578+74	-	582+60	USH 8, LT	0.12
584+29	-	586+37	USH 8, LT	0.07
135+03	-	135+68	INDIAN DR, LT	0.04
134+26	-	-	INDIAN DR, LT	0.00
802+59	-	-	LOVE KNOT RD, RT	0.00
801+72	-	802+66	LOVE KNOT RD, LT	0.01
PROJECT TOTALS				0.29

CULVERT PIPE CHECKS

STATION	LOCATION	CULVERT SIZE	628.7555 CULVERT PIPE CHECKS EACH
543+58	USH 8, LT	18"	3
609+05	USH 8, RT	24"	4
611+35	USH 8, LT	24"	4
618+88	USH 8, LT	36"	5
PROJECT TOTAL			16

SAWING PAVEMENT

STATION	LOCATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF	REMARKS
543+20	USH 8, LT	67	-	PE
552+15	USH 8, LT	-	6	CURB & GUTTER
552+54	USH 8, LT	170	-	ROAD
552+90	USH 8, LT	-	6	CURB & GUTTER
607+00	USH 8	52	-	ROAD
608+50	USH 8	677	-	ROAD
613+49	USH 8, LT	57	-	PE
621+24	USH 8, LT	52	-	ROAD
623+57	USH 8	48	-	ROAD
21+88	KWE DA KIK LN	64	-	ROAD
802+55	LOVE KNOT RD	50	-	ROAD
PROJECT TOTALS		1237	12	

ROADSIDE CLEARING

STATION	TO	STATION	LOCATION	202.0110 SY
114+25	-	114+80	YOUNGS LN, RT	30
PROJEC TOTALS				30

EROSION MAT

STATION	TO	STATION	LOCATION	628.2023 EROSION MAT CL II TYPE B SY
543+04	-	-	USH 8, LT	70
543+25	-	552+20	USH 8, LT	3115
552+82	-	555+28	USH 8, LT	171
570+94	-	571+28	USH 8, LT	118
578+75	-	582+58	USH 8, LT	395
583+93	-	586+32	USH 8, LT	142
589+75	-	-	USH 8, RT	28
590+05	-	-	USH 8, RT	80
600+76	-	-	USH 8, LT	37
605+26	-	609+07	USH 8, LT	362
607+00	-	-	USH 8, RT	22
608+20		-	USH 8, LT	17
608+34	-	608+99	USH 8, RT	86
609+46	-	613+32	USH 8, LT	308
613+40	-	615+83	USH 8, LT	405
616+88	-	620+25	USH 8, LT	442
621+88	-	623+78	USH 8, LT	397
623+56	-	-	USH 8, RT	40
114+29	-	-	YOUNGS LN, LT	30
113+59	-	-	YOUNGS LN, LT	9
113+65	-	114+80	YOUNGS LN, RT	74
112+87	-	-	YOUNGS LN, LT	16
21+65	-	21+91	KWE DA KIK LN, LT	46
134+14	-	136+38	INDIAN DR, LT	1239
55+66	-	56+17	BUG LAKE RD, LT	83
55+85	-	56+70	BUG LAKE RD, RT	128
801+71	-	802+59	LOVE KNOT RD, LT	146
802+62	-	-	LOVE KNOT RD, RT	12
PROJECT TOTALS				8019

TOPSOIL, FERTILZER, SEED AND WATER

STATION	TO	STATION	LOCATION	625.0100 TOPSOIL SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0500 SEED WATER MGAL
543+04	-	-	USH 8, LT	70	0.04	2	2
543+25	-	552+20	USH 8, LT	3115	1.96	84	104
552+82	-	555+28	USH 8, LT	171	0.11	5	6
570+94	-	571+28	USH 8, LT	118	0.07	3	4
578+75	-	582+58	USH 8, LT	395	0.25	11	13
583+93	-	586+32	USH 8, LT	142	0.09	4	5
589+75	-	-	USH 8, RT	28	0.02	1	1
590+05	-	-	USH 8, RT	80	0.05	2	3
590+49	-	-	USH 8,LT	140	0.09	4	5
600+76	-	-	USH 8, LT	37	0.02	1	1
605+26	-	609+07	USH 8, LT	362	0.23	10	12
607+00	-	-	USH 8, RT	22	0.01	1	1
608+20	-	-	USH 8, LT	17	0.01	0	1
608+34	-	608+99	USH 8, RT	86	0.05	2	3
609+46	-	613+32	USH 8, LT	308	0.19	8	10
613+40	-	615+83	USH 8, LT	405	0.26	11	14
616+88	-	620+25	USH 8, LT	442	0.28	12	15
621+88	-	623+78	USH 8, LT	397	0.25	11	13
623+56	-	-	USH 8, RT	40	0.03	1	1
114+29	-	-	YOUNGS LN, LT	30	0.02	1	1
113+59	-	-	YOUNGS LN, LT	9	0.01	0	0
113+65	-	114+80	YOUNGS LN, RT	74	0.05	2	2
112+87	-	-	YOUNGS LN, LT	16	0.01	0	1
21+65	-	21+91	KWE DA KIK LN, LT	46	0.03	1	2
134+14	-	136+38	INDIAN DR, LT	1239	0.78	33	41
55+66	-	56+17	BUG LAKE RD, LT	83	0.05	2	3
55+85	-	56+70	BUG LAKE RD, RT	128	0.08	3	4
801+71	-	802+59	LOVE KNOT RD, LT	146	0.09	4	5
802+62	-	-	LOVE KNOT RD, RT	12	0.01	0	0
PROJECT TOTALS				8159	5	220	272

3

SILT FENCE

STATION	TO	STATION	LOCATION	628.1504 QUANTITY LF	628.1520 MAINTENANCE LF
546+33	-	548+73	USH 8, LT	240	240
580+01	-	582+48	USH 8, LT	247	247
PROJECT TOTALS				487	487

INLET PROTECTION

STATION	LOCATION	628.7020 TYPE D EACH
570+92	USH 8, LT	1
PROJECT TOTAL		1

CONCRETE SURFACE DRAIN

STATION	LOCATION	602.3010 CONCRETE SURFACE DRAIN CY
552+15	USH 8	0.76
552+90	USH 8	1.19
PROJECT TOTAL		1.95

REMOVING CURB AND GUTTER

STATION	LOCATION	204.0150 REMOVING CURB AND GUTTER LF
552+15	USH 8, LT	15
552+90	USH 8, LT	27
607+83	USH 8, RT	12
608+39	USH 8, RT	34
PROJECT TOTAL		88

ASPHALTIC PAVEMENT

STATION	LOCATION	460.5244 HMA PAVEMENT 4LT 58-34S TON	460.5223 HMA PAVEMENT 3LT 58-28S TON	455.0605 TACK COAT GAL
543+20	USH 8, LT	4	6	2
552+50	USH 8, LT	8	11	5
21+84	KWE DA KIK	4	5	2
607+00	USH 8	3	4	2
608+32	USH 8	20	26	11
609+22	USH 8	11	14	6
613+49	USH 8, LT	3	3	1
621+22	USH 8, LT	2	3	1
623+58	USH 8	2	3	1
802+54	LOVE KNOT RD	2	3	1
PROJECT TOTALS		60	77	34

REMOVING ASPHALTIC SURFACE

STATION	LOCATION	204.0110 REMOVING ASPHALTIC SURFACE SY
543+20	USH 8, LT	41.20
552+50	USH 8, LT	77.70
21+84	KWE DA KIK	36.70
607+00	USH 8	26.00
608+32	USH 8	190.90
609+22	USH 8	106.00
613+49	USH 8, LT	24.80
621+22	USH 8, LT	23.00
623+58	USH 8	21.40
802+54	LOVE KNOT RD	21.90
PROJECT TOTAL		569.60

CONCRETE CURB AND GUTTER

STATION	LOCATION	601.0582 CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE T LF
607+83	USH 8, RT	12
PROJECT TOTAL		12

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BASE AGGREGATE DENSE

STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	624.0100 WATER MGAL
607+00	USH 8	3.5	-	-
607+85	USH 8, RT	11.5	-	-
608+88	USH 8, RT	0.8	-	-
623+58	USH 8	2.2	-	-
543+20	USH 8, LT	-	18.2	0.3
552+50	USH 8, LT	-	34.2	0.5
21+84	KWE DA KIK	-	16.2	0.2
607+00	USH 8	-	11.4	0.2
608+32	USH 8	-	84.0	1.3
609+22	USH 8	-	46.6	0.7
613+49	USH 8, LT	-	11.0	0.2
621+22	USH 8, LT	-	10.2	0.2
623+58	USH 8	-	9.5	0.1
802+54	LOVE KNOT RD	-	9.6	0.1
PROJECT TOTAL		18.0	251.0	3.8

UTILITY TRENCH ROCK EXCAVATION

LOCATION	SPV.0035.201 UTILITY TRENCH ROCK EXCAVATION CY
UNDISTRIBUTED	500
PROJECT TOTAL	500

UTILITY LINE OPENINGS

STATION	TO	STATION	LOCATION	SPV.0060.222 EACH
			UNDISTRIBUTED	10
			PROJECT TOTALS	10

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REMOVE EXISTING SANITARY FORCE MAIN AND CASING PIPE

STATION	TO	STATION	LOCATION	SPV.0090.223 REMOVE EXISTING SANITARY FORCE MAIN 6-INCH OR SMALLER LF	SPV.0090.224 REMOVE EXISTING CASING PIPE LF	REMARKS
564+72	-	565+26	USH 8	160	60	24-INCH CASING PIPE
571+00	-	576+00	USH 8	400	-	
558+00	-	576+00	USH 8	1800	-	
585+00	-	587+00	USH 8	200	-	
591+00	-	594+00	USH 8	600	-	
112+83	-	118+19	YOUNGS LN	488	-	
			PROJECT TOTALS	3648	60	

ABANDON EXISTING SANITARY AND FORCE MAIN

STATION	TO	STATION	LOCATION	SPV.0090.227 ABANDON 6-INCH OR SMALLER SANITARY OR FORCE MAIN LF
543+00	-	558+00	USH 8	1500
576+00	-	585+00	USH 8	900
576+00	-	591+00	USH 8	1400
587+00	-	591+00	USH 8	400
587+50	-	590+00	USH 8	250
594+00	-	606+75	USH 8	2550
606+70	-	-	USH 8	500
608+84	-	623+75	USH 8	1875
20+00	-	21+80	KWE DA KIK	180
134+46	-	136+92	INDIAN DR	308
			PROJECT TOTALS	9863

REMOVING SANITARY MANHOLES & CLEANOUTS/ ABANDON SANITARY MANHOLE

STATION	LOCATION	SPV.0060.202 REMOVING SANITARY MANHOLE EACH	SPV.0060.203 REMOVING SANITARY CLEANOUT EACH	SPV.0060.204 ABANDON SANITARY MANHOLE EACH
574+90, 39 LT	USH 8	-	1	-
583+98, 17 LT	USH 8	-	1	-
589+28, 11' LT	USH 8	-	1	-
589+78, 4' LT	USH 8	-	-	1
589+91, 10' LT	USH 8	-	-	1
613+92, 29' LT	USH 8	-	1	-
623+78, 32' LT	USH 8	-	1	-
45+63,43' RT	EVERYBODYS RD	1	-	-
	UNDISTRIBUTED	-	5	-
	PROJECT TOTALS	1	10	2

SANITARY LATERALS, RISERS AND RECONNECTIONS

MANHOLE	TO	MANHOLE	LOCATION	SPV.0060.212 RECONNECT EXISTING SANITARY LATERAL EACH	SPV.0090.234 2-INCH SANITARY LATERAL LF	SPV.0090.235 4-INCH SANITARY LATERAL LF	SPV.0090.236 6-INCH SANITARY LATERAL LF	SPV.0200.249 4-INCH SANITARY LATERAL RISER VF	SPV.0200.250 6-INCH SANITARY LATERAL RISER VF	REMARKS
	CONNECT TO LS FM		USH 8	1	33	-	-	-	-	SADDLE NEEDED TO CONNECT TO LS FM
Y-2	-	Y-1	YOUNGS LN	1	-	77	-	-	-	
8-12A	-	8-12	USH 8	-	-	-	54	-	3	
8-3	-	8-2	USH 8	1	-	54	-	-	-	
8-1	-	8-14	USH 8	3	-	100	-	-	-	
8-14	-	8-15	USH 8	1	-	39	-	-	-	
8-16	-	8-17	USH 8	1	-	59	-	-	-	
8-16		NORTH TIE-IN	LOVE KNOT RD	1	-	41	-	-	-	
8-1		SOUTH TIE-IN	INDIAN DR	1	-	65	-	-	-	
			UNDISTRIBUTED	-	-	-	-	3	-	
			PROJECT TOTALS	10	33	435	54	3	3	

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LIFT STATION/ EFFLUENT FORCE MAIN AND CONNECTIONS

STATION	TO	STATION	LOCATION	SPV.0060.211 CONNECT TO EXISTING FORCE MAIN EACH	SPV.0090.230 6-INCH LIFT STATION FORCE MAIN LF	SPV.0090.231 6-INCH EFFLUENT FORCE MAIN LF	SPV.0090.247 2-1/2-INCH LIFT STATION FORCE MAIN LF
543+10	-	552+52	USH 8	1	989	967	-
552+52	-	565+00	USH 8	-	1248	1248	-
552+88	-	566+20	USH 8	-	1401	-	-
565+00	-	570+79	USH 8	-	591	591	-
570+79	-	589+79	USH 8	-	1892	1892	-
589+79	-	607+02	USH 8	-	1693	1693	-
112+82	-	114+21	YOUNGS LN	1	17	-	95
134+30	-	137+65	INDIAN DR	1	299	291	-
			PROJECT TOTALS	3	8130	6682	95

TEMPORARY SANITARY CONNECTION

STATION	TO	STATION	LOCATION	SPV.0060.213 * TEMPORARY 4-INCH SANITARY CONNECTION EACH	SPV.0060.214 *TEMPORARY 6-INCH FORCE MAIN CONNECTION EACH	REMARKS
555+00	-	578+00	USH 8	-	1	* 2300 LF TEMPORARY PIPE NEEDED
571+00	-	576+00	USH 8	1	-	500 LF TEMPORARY PIPE NEEDED
585+00	-	587+00	USH 8	1	-	200 LF TEMPORARY PIPE NEEDED
114+50	-	118+85	YOUNGS LN	-	1	** 435 LF TEMPORARY PIPE NEEDED
			KWE DA KIK LN	1	1	200 LF TEMPORARY PIPE NEEDED
			INDIAN DR	-	1	200 LF TEMPORARY PIPE NEEDED
			UNDISTRIBUTED	2	2	
			PROJECT TOTALS	5	6	

* BID ITEM INCLUDES TWO (2) CONNECTION POINTS AND TEMPORARY PIPE BETWEEN CONNECTION POINTS. LF PROVIDED ARE ESTIMATED.

** BOTH OF THESE RUNS OF TEMPORARY PIPE TO BE CONNECTED TOGETHER DUE TO ROAD PROFILE CUTS

SANITARY SEWER PIPE

MANHOLE	TO	MANHOLE	LOCATION	SPV.0090.232 8-INCH SANITARY SEWER PIPE LF	SPV.0090.233 8-INCH SANITARY SEWER SDR 26 PIPE LF
Y-2	-	Y-1	YOUNGS LN	365	-
Y-1	-	8-13	USH 8	187	-
8-13	-	8-12A	USH 8	124	-
8-12A	-	8-12	USH 8	380	-
8-12	-	8-11	US H 8	400	-
8-12	-	E-1	EVERYBODYS RD	45	-
E-1	-	NORTH TIE-IN	EVERYBODYS RD	5	-
8-11	-	8-10	USH 8	-	400
8-10	-	8-9	USH 8	400	-
8-9	-	8-8	USH 8	165	-
8-8	-	8-7	USH 8	210	-
8-7	-	8-6	USH 8	276	-
8-6	-	8-5	USH 8	400	-
8-6	-	NORTH TIE-IN	KWE DA KIK LN	140	-
8-5	-	8-4	USH 8	400	-
8-4	-	8-3	USH 8	400	-
8-3	-	8-2	USH 8	400	-
8-2	-	8-1	USH 8	301	-
8-1	-	81	USH 8	400	-
8-1	-	NORTH TIE-IN	BUG LAKE RD	80	-
8-1	-	SOUTH TIE-IN	INDIAN DR	363	-
8-15	-	8-14	USH 8	400	-
8-16	-	8-15	USH 8	395	-
8-17	-	8-16	USH 8	280	-
			PROJECT TOTALS	6516	400

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SANITARY SEWER STRUCTURES

MANHOLE #	STATION	OFFSET*	LOCATION	SPV.0060.210 AIR RELEASE VALVE MANHOLE (ARV MH) EACH	SPV.00060.247 *** CONSTRUCTION STAKING SANITARY SEWER AND FORCE MAIN (PROJECT) 1590-18-83 EACH	SPV.0200.251 ** SANITARY SEWER MANHOLE 4-FT DIAMETER VF	SPV.0200.252 SANITARY SEWER OUTSIDE DROP MANHOLE VF	SPV.0060.253 SANITARY SEWER 8-INCH CLEANOUT EACH	RIM ELEVATION	**** INVERT ELEVATION	DEPTH FT
PROJECT 1590-18-83				-	1	-	-	-			
ARV MH 1	565+00	42.0 LT	USH 8	1	-	-	-	-	1841.30	1832.26	9.04
8-13	566+16	69.0' LT	USH 8	-	-	13.53	-	-	1844.78	1831.25	13.53
8-12A	567+40	69.0' LT	USH 8	-	-	13.24	-	-	1843.99	1830.75	13.24
8-12	571+21	69.0' LT	US H 8	-	-	13.45	-	-	1843.34	1829.13	13.45
8-11	575+21	59.6' LT	USH 8	-	-	24.99	10.09	-	1826.80	1801.81	24.99
8-10	579+22	49.3' LT	USH 8	-	-	11.72	-	-	1800.23	1788.51	11.72
8-9	583+26	34.3' LT	USH 8	-	-	19.20	-	-	1776.18	1756.98	19.20
8-8	584+85	88.9' LT	USH 8	-	-	9.00	-	-	1750.79	1741.79	9.00
8-7	587+00	76.1' LT	USH 8	-	-	11.60	-	-	1752.45	1740.85	11.60
8-6	589+78	39.9' LT	USH 8	-	-	17.57	3.31	-	1757.22	1739.64	17.57
8-5	593+83	39.0' LT	USH 8	-	-	9.10	-	-	1744.64	1735.54	9.10
8-4	597+88	39.0' LT	USH 8	-	-	9.15	-	-	1730.59	1721.44	9.15
8-3	601+93	42.0' LT	USH 8	-	-	9.94	-	-	1715.28	1705.34	9.94
8-2	606+11	42.0' LT	USH 8	-	-	9.99	-	-	1703.39	1693.40	9.99
8-1	609+09	39.0' LT	USH 8	-	-	12.84	-	-	1694.54	1681.68	12.84
8-14	613.+04	49.0 LT	USH 8	-	-	10.10	-	-	1693.48	1683.38	10.1
8-15	616+99	49.0 LT	USH 8	-	-	15.79	-	-	1701.88	1686.09	15.79
8-16	620+90	39.0 LT	USH 8	-	-	14.56	-	-	1702.33	1687.77	14.56
8-17	623-67	24.5 RT	USH 8	-	-	10.00	-	-	1698.99	1688.99	10
E-1	46+14	44.2 RT	EVERYBODYS RD	-	-	18.01	6.16	-	1853.51	1835.50	18.01
Y-2	114+22	22.0 RT	YOUNGS LN	-	-	10.12	-	-	1856.87	1846.75	10.12
Y-1	117+87	28.2 RT	YOUNGS LN	-	-	10.94	-	-	1842.99	1832.05	10.94
	802+59	18.2' LT	LOVE KNOT RD	-	-	-	-	1	1714.91	1704.87	10.04
	TOTALS			1	1	274.84	19.56	1			

REMARKS:
*STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE
** BID ITEM TO INCLUDE NEENAH CASTING AND LID No. R-1550-A WITH TYPE "B" LID, CONCEALED PICK HOLES AND "T" SEAL GASKET NON ROCKING. BID ITEM WILL ALSO INCLUDE AN INTERNAL CHIMNEY SEAL AND ADJUSTMENT RINGS
*** CONSTRUCTION STAKING FOR SANITARY SEWER TO INCLUDE STAKING FOR MANHOLES, MAINLINE, FORCE MAIN AND LATERALS
**** INVERT SHOWN IS TO THE LOWEST INVERT OF MANHOLE

OVER EXCAVATION FOR PIPE BEDDING

	LOCATION	SPV.0090.241 OVER EXCAVATION FOR PIPE BEDDING 0.5-FT TO 1.5-FT (FORCE MAIN) LF	SPV.0090.242 OVER EXCAVATION FOR PIPE BEDDING 1.6-FT TO 3.0-FT (FORCE MAIN) LF	SPV.0090.243 OVER EXCAVATION FOR PIPE BEDDING 0.5-FT TO 1.5-FT (SAN 9-FT - 14-FT DEEP) LF	SPV.0090.244 OVER EXCAVATION FOR PIPE BEDDING 1.6-FT TO 3.0-FT (SAN 9-FT - 14-FT DEEP) LF	SPV.0090.245 OVER EXCAVATION FOR PIPE BEDDING 0.5-FT TO 1.5-FT (SAN 14.1-FT - 25-FT DEEP) LF	SPV.0090.246 OVER EXCAVATION FOR PIPE BEDDING 1.6-FT TO 3.0-FT (SAN 14.1-FT - 25-FT DEEP) LF
UNDISTRIBUTED	USH 8	600	600	400	400	400	400
	PROJECT TOTALS	600	600	400	400	400	400

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REMOVE EXISTING WATER MAIN, AND 24-INCH CASING

STATION	TO	STATION	LOCATION	SPV.0090.225 REMOVE EXISTING WATER MAIN 12-INCH OR SMALLER LF	SPV.0090.226 REMOVE 24-INCH STEEL CASING LF
564+00	-	578+00	USH 8	1400	-
582+00	-	587+50	USH 8	550	-
589+82		596+90	USH8	690	-
112+83	-	118+19	YOUNGS LN	536	-
44+72	-	46+42	EVERYBODYS RD	170	50
			PROJECT TOTALS	3346	50

TEMPORARY WATER MAIN CONNECTION

STATION	TO	STATION	LOCATION	SPV.0060.216 * TEMPORARY WATER MAIN CONNECTION, 6-INCH EACH	REMARKS
116+03	-	118+25	YOUNGS LN, LT	1	222 LF TEMPORARY PIPE NEEDED
564+25	-	578+00	USH 8, RT	1	** 1375 LF TEMPORARY PIPE NEEDED
581+00	-	587+25	USH 8, RT	1	625 LF TEMPORARY PIPE NEEDED
589+82	-	596+90	USH 8, LT	1	708 LF TEMPORARY PIPE NEEDED
44+62	-	46+14	EVERYBODYS RD, RT	1	** 152 LF TEMPORARY PIPE NEEDED
			UNDISTRIBUTED	2	
			PROJECT TOTALS	7	

* BID ITEM INCLUDES TWO (2) CONNECTION POINTS AND TEMPORARY PIPE BETWEEN CONNECTION POINTS. LF PROVIDED ARE ESTIMATED

** BOTH OF THESE RUNS OF TEMPORARY PIPE TO BE CONNECTED TOGETHER DUE TO ROAD PROFILE CUTS

INSULATION BOARD

STATION	TO	STATION	LOCATION	612.0902.S INSULATION BOARD POLYSTYRENE, 2-INCH SY
112+83	-	118+41	YOUNGS LN, LT	236
118+14	-	-	YOUNGS LN, LT	6
564+42	-	564+85	USH 8, RT	20
568+50	-	-	USH 8, RT	8
570+98	-	-	US H 8	18
46+05	-	-	EVERYBODYS RD, RT	7
574+50	-	-	USH 8, RT	8
585+75	-	586+92	USH 8, RT	54
586+29	-	-	USH 8, RT	7
589+22	-	589+84	USH 8	30
19+08	-	21+90	KWE DA KIK LN, LT	128
590+36	-	590+75	USH 8, RT	18
593+90	-	594+54-	USH 8, RT	28
596+06	-	-	USH 8, RT	8
601+98	-	-	USH 8, RT	6
607+52	-	-	USH 8, RT	8
607+64	-	-	USH 8, RT	6
607+76	-	608+43	INDIAN DR	29
54+65	-	55+85	BUG LAKE RD, RT	53
			PROJECT TOTALS	676

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ABANDON EXISTING WATER MAIN

STATION	TO	STATION	LOCATION	SPV.0090.228 ABANDON 8-INCH OR SMALLER WATER MAIN LF	SPV.0090.229 ABANDON 12-INCH WATER MAIN LF
578+00	-	582+00	USH 8	400	-
587+50	-	590+00	USH 8	250	-
589+20	-	21+90	KWE DA KIK	310	-
134+48	-	137+75	INDIAN DR	327	-
596+90	-	608+21	USH 8	-	1115
			PROJECT TOTALS	1287	1115

REMOVE HYDRANTS, VALVES, AND VALVE BOXES

STATION	LOCATION	SPV.0060.205 REMOVE HYDRANT EACH	SPV.0060.206 REMOVE 6-INCH GATE VALVE EACH	SPV.0060.207 REMOVE 8-INCH GATE VALVE EACH	SPV.0060.208 REMOVE 12-INCH GATE VALVE EACH	SPV.0060.209 REMOVE VALVE BOX EACH
118+19	YOUNGS LN, LT	1	2	-	-	-
21+05	KWE DA KIK LN, LT	-	-	-	1	-
44+72	EVERYBODYS RD, RT	-	-	1	-	-
579+72	USH 8, RT	-	1	-	-	-
588+35	USH 8, RT	-	1	-	-	-
589+80	USH 8, RT	1	1	-	-	-
593+12	USH 8, LT	1	1	-	1	-
600+71	USH 8, LT	1	-	-	-	2
608+21	USH 8, LT	1	-	-	-	2
	PROJECT TOTALS	5	6	1	2	4

3

FIRE HYDRANT AND VALVE

STATION	LOCATION	SPV.0060.218 6-INCH GATE VALVE AND BOX EACH	SPV.0060.220 FIRE HYDRANT EACH
113+58	YOUNGS LN, LT	1	1
117+95	YOUNGS LN, LT	1	1
568+50	US H 8, RT	1	1
574+50	USH 8, RT	1	1
580+46	USH 8, RT	1	1
586+29	USH 8, RT	1	1
590+16	USH 8, RT	1	1
596+06	USH 8, RT	1	1
601+98	USH 8, RT	1	1
607+64	USH 8, RT	1	1
56+55	BUG LAKE ROAD, RT	1	1
	PROJECT TOTALS	11	11

GATE VALVE AND BOX

STATION	LOCATION	SPV.0060.219 8 - INCH GATE VALVE AND BOX EACH
117+92	YOUNGS LN, LT	1
568+47	USH 8, RT	1
570+98	US H 8, RT	1
574+47	USH 8, RT	1
580+43	USH 8, RT	1
586+29	USH 8, RT	1
589+41	USH 8, RT	1
589+43	USH 8, RT	1
596+04	USH 8, RT	1
601+95	USH 8, RT	1
607+49	USH 8, RT	1
607+52	USH 8, RT	1
607+55	USH 8, RT	1
56+52	BUG LAKE RD, RT	1
	PROJECT TOTALS	14

CONSTRUCTION STAKING WATER MAIN (PROJECT) 1590-18-83

PROJECT	LOCATION	SPV.0060.248 EACH
1590-18-83		1
	PROJECT TOTALS	1

WATER MAIN AND CONNECTIONS

STATION	TO	STATION	LOCATION	SPV.0060.217 CONNECT TO EXISTING WATER MAIN EACH	SPV.0090.238 6 - INCH WATER MAIN (INCLUDES HYDRANT LEADS) LF	SPV.0090.239 8 - INCH WATER MAIN LF
PROJECT 1590-18-83				-	-	-
112+83	-	112+83	YOUNGS LN, LT	1	3	-
112+83	-	113+59	YOUNGS LN, LT	-	15	77
113+59	-	117+96	YOUNGS LN, LT	-	25	436
117+96	-	118+14	YOUNGS LN, LT	-	-	18
564+43	-	568+50	USH 8, RT	-	21	407
568+50	-	570+98	USH 8, RT	-	-	248
570+98	-	574+50	USH 8, RT	-	21	352
574+50	-	580+46	USH 8, RT	-	8	600
580+46	-	586+29	USH 8, RT	-	20	597
586+29	-	589+44	USH 8, RT	-	-	325
589+44	-	590+14	USH 8, RT	-	-	77
590+14	-	590+82	USH 8, RT	-	6	73
590+82	-	596+07	USH 8, RT	-	19	530
596+07	-	601+98	USH 8, RT	-	16.5	598
601+98	-	607+52	USH 8, RT	-	16.5	533
607+52	-	608+71	USH 8, RT	-	-	117
54+51	-	56+70	BUG LAKE RD, RT	-	15	220
134+47	-	136+86	INDIAN DR, LT	1	-	211
20+00	-	21+90	KWE DA KIK LN, LT	1	3	290
44+61	-	46+14	EVERYBODYS RD, RT	1	-	153
			PROJECT TOTALS	4	189	5862

ALL ITEMS ON THIS PAGE TO BE UNDER CATEGORY 10

3

WATER SERVICE LATERAL

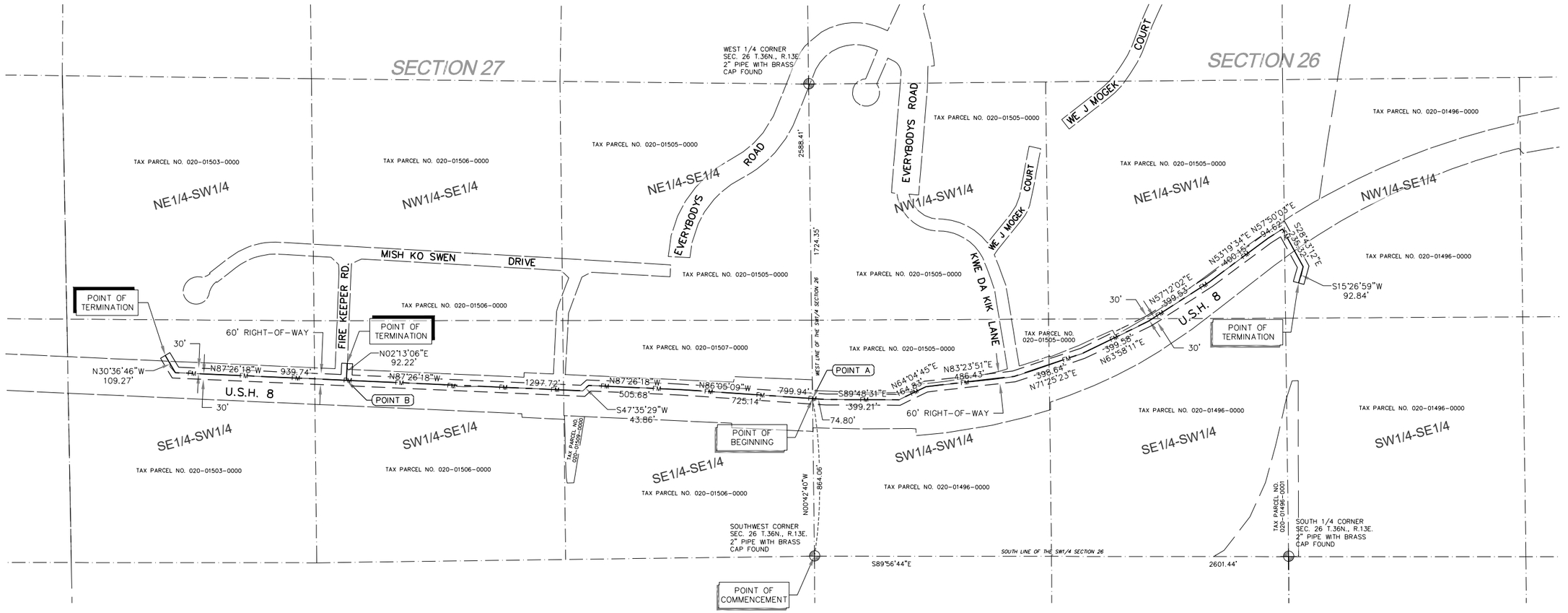
STATION	TO	STATION	LOCATION	SPV.0060.215 RECONNECT EXISTING WATER SERVICE LATERAL EACH	SPV.0090.237 1-INCH WATER SERVICE LATERAL LF
114+27	-	-	YOUNGS LN, LT	1	43
			PROJECT TOTALS	1	43

MOVING SIGNS AND SIGN SUPPORTS

STATION	LOCATION	634.0612 POSTS WOOD 4x6-INCH x 12-FT EACH	638.2102 MOVING SIGNS TYPE II EACH	638.4000 MOVING SMALL SIGN SUPPORTS EACH
543+35, 58' LT	USH 8	-	1	1
609+03, 39' LT	USH 8	-	2	2
135+87, 20' LT	INDIAN DR	-	1	1
134+96, 17' LT	INDIAN DR	-	1	1
UNDISTRIBUTED		2	-	-
PROJECT TOTALS		2	5	5

REMOVE AND RESET GATE AND POST

STATION	LOCATION	SPV.0060.221 REMOVE AND RESET GATE AND POST EACH
543+09, 81' LT	USH 8	-	1
PROJECT TOTALS			1



N

BEARINGS ARE REFERENCED TO THE WEST LINE OF THE SOUTHWEST 1/4, OF SECTION 26, TOWNSHIP 36 NORTH, RANGE 13 EAST, WHICH BEARS N00°42'40"W PER THE WISCONSIN COUNTY COORDINATE SYSTEM FOR FOREST COUNTY

300 150 0 300

SCALE – FEET

LEGEND

- ⊕ – SECTION CORNER
- — · — · — – SECTION LINE
- ——— ——— – EXISTING PARCEL LINE PER COUNTY GIS
- —— ——— —— – EXISTING RIGHT-OF-WAY LINE PER COUNTY GIS
- — FM ——— FM — – PROPOSED SANITARY SEWER FORCE MAIN AND EFFLUENT PIPE
- ——— – – ——— – CENTERLINE OF RIGHT-OF-WAY FOR SANITARY SEWER FORCE MAIN AND EFFLUENT PIPE
- — — — — – LIMITS OF 60' RIGHT-OF-WAY FOR SANITARY SEWER FORCE MAIN AND EFFLUENT PIPE

SANITARY SEWER FORCE MAIN AND EFFLUENT PIPE RIGHT-OF-WAY LEGAL DESCRIPTION:

Part of the Northwest 1/4 of the Southeast 1/4, Northeast 1/4 of the Southwest 1/4, Southeast 1/4 of the Southwest 1/4, and Southwest 1/4 of the Southwest 1/4 of Section 26; and part of the Southeast 1/4 of the Southeast 1/4, Southwest 1/4 of the Southeast 1/4, and Southeast 1/4 of the Southwest 1/4 of Section 27; all in Township 36 North, Range 13 East, Town of Lincoln, Forest County, Wisconsin, containing 409,774 square feet (9.407 acres) of land and more particularly described as follows:

Strips of land 60.00 feet in width, lying 30.00 feet on each side of the following described centerlines:

Commencing at the Southwest Corner of said Section 26; thence N00°42'40"W, 864.06 feet along the West line of the Southwest 1/4 of said Section 26 to the Point of Beginning of said centerline and a point hereinafter referred to as Point A; thence N86°05'09"W, 725.14 feet; thence N87°26'18"W, 505.68 feet; thence S47°35'29"W, 43.86 feet; thence N87°26'18"W, 1297.72 feet, to a point hereinafter referred to as Point B; thence N87°26'18"W, 939.74 feet; thence N30°36'46"W, 109.27 feet to a Point of Termination of the centerline of said 60' Right-of-Way.

and

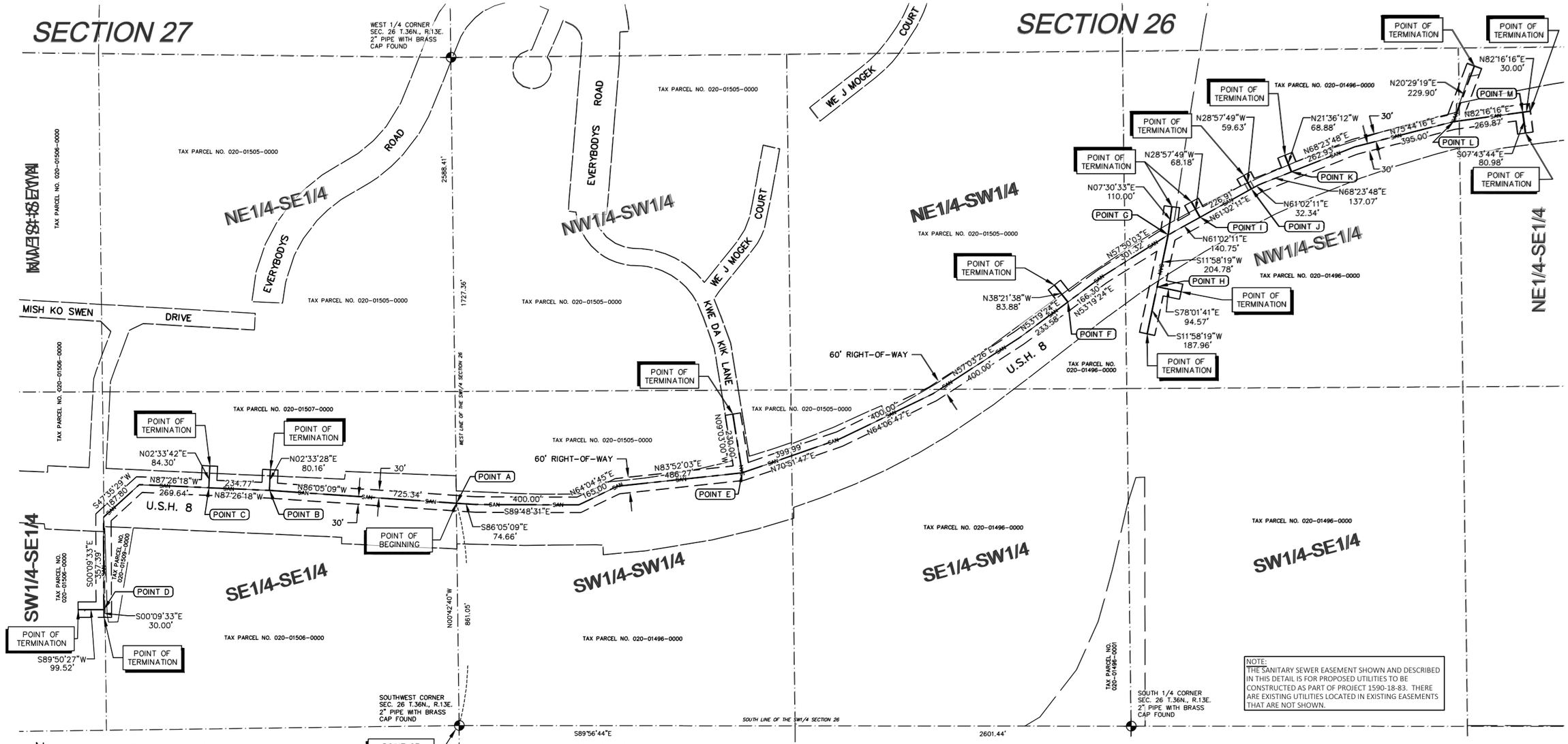
Beginning at previously described Point A; thence S86°05'09"E, 74.80 feet; thence S89°48'31"E, 399.21 feet; thence N64°04'45"E, 164.83 feet; thence N83°23'51"E, 486.43 feet; thence N71°25'23"E, 398.64 feet; thence N63°58'11"E, 399.58 feet; thence N57°12'02"E, 399.53 feet; thence N53°19'34"E, 400.15 feet; thence N57°50'03"E, 94.62 feet; thence S28°43'12"E, 235.32 feet; thence S15°26'59"W, 92.84 feet to a Point of Termination of the centerline of said 60' Right-of-Way.

and

Beginning at previously described Point B; thence N02°13'06"E, 92.22 feet to a Point of Termination of the centerline of said 60' Right-of-Way.

NOTE:
THE SANITARY SEWER FORCE MAIN AND EFFLUENT PIPE EASEMENT SHOWN AND DESCRIBED IN THIS DETAIL IS FOR PROPOSED UTILITIES TO BE CONSTRUCTED AS PART OF PROJECT 1590-18-83. THERE ARE EXISTING UTILITIES LOCATED IN EXISTING EASEMENTS THAT ARE NOT SHOWN.

PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	SANITARY SEWER FORCE MAIN AND EFFLUENT PIPE EASEMENT	SHEET 56	E



N

BEARINGS ARE REFERENCED TO THE WEST LINE OF THE SOUTHWEST 1/4, OF SECTION 26, TOWNSHIP 36 NORTH, RANGE 13 EAST, WHICH BEARS N00°42'40"W PER THE WISCONSIN COUNTY COORDINATE SYSTEM FOR FOREST COUNTY

200 100 0 200

SCALE – FEET

LEGEND

- SECTION CORNER
- SECTION LINE
- EXISTING PARCEL LINE PER COUNTY GIS
- EXISTING RIGHT-OF-WAY LINE PER COUNTY GIS
- SAN — SAN — PROPOSED SANITARY SEWER
- CENTERLINE OF RIGHT-OF-WAY FOR SANITARY SEWER
- LIMITS OF 60' RIGHT-OF-WAY FOR SANITARY SEWER

NOTE:
THE SANITARY SEWER EASEMENT SHOWN AND DESCRIBED IN THIS DETAIL IS FOR PROPOSED UTILITIES TO BE CONSTRUCTED AS PART OF PROJECT 1590-18-83. THERE ARE EXISTING UTILITIES LOCATED IN EXISTING EASEMENTS THAT ARE NOT SHOWN.

SANITARY SEWER RIGHT-OF-WAY LEGAL DESCRIPTION:

Part of the Northeast 1/4 of the Southeast 1/4, Northwest 1/4 of the Southeast 1/4, Northeast 1/4 of the Southwest 1/4, Southeast 1/4 of the Southwest 1/4, and Southwest 1/4 of the Southwest 1/4 of Section 26; and part of the Southeast 1/4 of the Southeast 1/4 and Southeast 1/4 of the Southeast 1/4 of Section 27; all in Township 36 North, Range 13 East, Town of Lincoln, Forest County, Wisconsin, containing 455,699 square feet (10.461 acres) of land and more particularly described as follows:

Strips of land 60.00 feet in width, lying 30.00 feet on each side of the following described centerlines:

Commencing at the Southwest Corner of said Section 26; thence N00°42'40"W, 861.05 feet along the West line of the Southwest 1/4 of said Section 26 to the Point of Beginning of said centerline and a point hereinafter referred to as Point A; thence N86°05'09"W, 725.34 feet, to a point hereinafter referred to as Point B; thence N87°26'18"W, 234.77 feet, to a point hereinafter referred to as Point C; thence continuing N87°26'18"W, 269.64 feet; thence S47°35'29"W, 187.80 feet; thence S00°09'33"E, 357.39 feet, to a point hereinafter referred to as Point D; thence continuing S00°09'33"E, 30.00 feet to a Point of Termination of the centerline of said 60' Right-of-Way.

and

Beginning at previously described Point A; thence S86°05'09"E, 74.66 feet; thence S89°48'31"E, 400.00 feet; thence N64°04'45"E, 165.00 feet; thence N83°52'03"E, 486.27 feet to a point hereinafter referred to as Point E; thence N70°51'47"E, 399.99 feet; thence N64°06'47"E, 400.00 feet; thence N57°03'26"E, 400.00 feet; thence N53°19'24"E, 233.58 feet, to a point hereinafter referred to as Point F; thence continuing N53°19'24"E, 166.30 feet; thence N57°50'03"E, 301.32 feet to a point hereinafter referred to as Point G; thence N61°02'11"E, 140.75 feet, to a point hereinafter referred to as Point I; thence continuing N61°02'11"E, 226.91 feet, to a point hereinafter referred to as Point J; thence continuing N61°02'11"E, 32.34 feet; thence N68°23'48"E, 137.07 feet, to a point hereinafter referred to as Point K; thence continuing N68°23'48"E, 262.93 feet; thence N75°44'16"E, 395.00 feet, to a point hereinafter referred to as Point L; thence N82°16'16"E, 269.87 feet to a point hereinafter referred to as Point M; thence continuing N82°16'16"E, 30.00 feet to a Point of Termination of the centerline of said 60' Right-of-Way.

and

Beginning at previously described Point B; thence N02°33'28"E, 80.16 feet to a Point of Termination of the centerline of said 60' Right-of-Way.

and

Beginning at previously described Point C; thence N02°33'42"E, 84.30 feet to a Point of Termination of the centerline of said 60' Right-of-Way.

and

Beginning at previously described Point D; thence S89°50'27"W, 99.52 feet to a Point of Termination of the centerline of said 60' Right-of-Way.

and

Beginning at previously described Point E; thence N09°03'00"W, 230.00 feet to a Point of Termination of the centerline of said 60' Right-of-Way.

and

Beginning at previously described Point F; thence N38°21'38"W, 83.88 feet to a Point of Termination of the centerline of said 60' Right-of-Way.

and

Beginning at previously described Point G; thence N07°30'33"E, 110.00 feet to a Point of Termination of the centerline of said 60' Right-of-Way.

and

Beginning at previously described Point G; thence S11°58'19"W, 204.78 feet, to a point hereinafter referred to as Point H; thence continuing S11°58'19"W, 187.96 feet to a Point of Termination of the centerline of said 60' Right-of-Way.

and

Beginning at previously described Point H; thence S78°01'41"E, 94.57 feet to a Point of Termination of the centerline of said 60' Right-of-Way.

and

Beginning at previously described Point I; thence N28°57'49"W, 68.18 feet to a Point of Termination of the centerline of said 60' Right-of-Way.

and

Beginning at previously described Point J; thence N28°57'49"W, 59.63 feet to a Point of Termination of the centerline of said 60' Right-of-Way.

and

Beginning at previously described Point K; thence N21°36'12"W, 68.88 feet to a Point of Termination of the centerline of said 60' Right-of-Way.

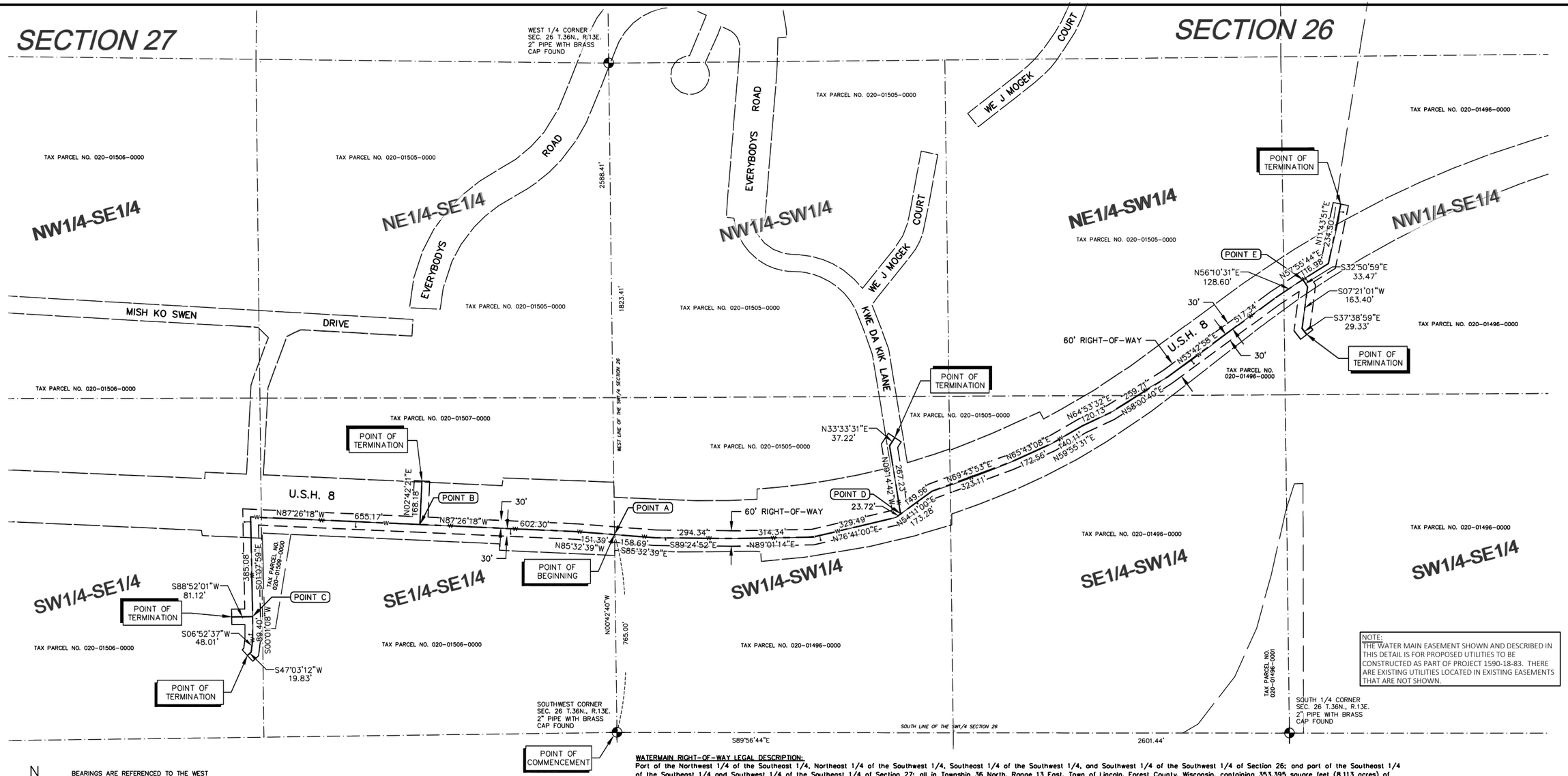
and

Beginning at previously described Point L; thence N20°29'19"E, 229.90 feet to a Point of Termination of the centerline of said 60' Right-of-Way.

and

Beginning at previously described Point M; thence S07°43'44"E, 80.98 feet to a Point of Termination of the centerline of said 60' Right-of-Way.

PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	SANITARY SEWER EASEMENT	SHEET 57	E



N

BEARINGS ARE REFERENCED TO THE WEST LINE OF THE SOUTHWEST 1/4, OF SECTION 26, TOWNSHIP 36 NORTH, RANGE 13 EAST, WHICH BEARS N00°42'40"W PER THE WISCONSIN COUNTY COORDINATE SYSTEM FOR FOREST COUNTY

200 100 0 200

SCALE – FEET

LEGEND

- SECTION CORNER
- SECTION LINE
- EXISTING PARCEL LINE PER COUNTY GIS
- EXISTING RIGHT-OF-WAY LINE PER COUNTY GIS
- PROPOSED WATERMAIN
- CENTERLINE OF RIGHT-OF-WAY FOR WATERMAIN
- LIMITS OF 60' RIGHT-OF-WAY FOR WATERMAIN

NOTE:
THE WATER MAIN EASEMENT SHOWN AND DESCRIBED IN THIS DETAIL IS FOR PROPOSED UTILITIES TO BE CONSTRUCTED AS PART OF PROJECT 1590-18-83. THERE ARE EXISTING UTILITIES LOCATED IN EXISTING EASEMENTS THAT ARE NOT SHOWN.

WISCONSIN
DOUGLAS E. WOELZ
S-2327
KAUKAUNA
WI
LAND SURVEYOR
08-09-2024

WATERMAIN RIGHT-OF-WAY LEGAL DESCRIPTION:

Part of the Northwest 1/4 of the Southeast 1/4, Northeast 1/4 of the Southwest 1/4, Southeast 1/4 of the Southwest 1/4, and Southwest 1/4 of the Southwest 1/4 of Section 26; and part of the Southeast 1/4 of the Southeast 1/4 and Southwest 1/4 of the Southeast 1/4 of Section 27; all in Township 36 North, Range 13 East, Town of Lincoln, Forest County, Wisconsin, containing 353,395 square feet (8.113 acres) of land and more particularly described as follows:

Strips of land 60.00 feet in width, lying 30.00 feet on each side of the following described centerlines:

Commencing at the Southwest Corner of said Section 26; thence N00°42'40"W, 765.00 feet along the West line of the Southwest 1/4 of said Section 26 to the Point of Beginning of said centerline and a point hereinafter referred to as Point A; thence N85°32'39"W, 151.39 feet; thence N87°26'18"W, 602.30 feet, to a point hereinafter referred to as Point B; thence continuing N87°26'18"W, 655.17 feet; thence S01°07'59"E, 385.08 feet, to a point hereinafter referred to as Point C; thence S00°01'08"W, 89.40 feet; thence S06°52'37"W, 48.01 feet; thence S47°03'12"W, 19.83 feet to a Point of Termination of the centerline of said 60' Right-of-Way.

and

Beginning at previously described Point A; thence S85°32'39"E, 158.69 feet; thence S89°24'52"E, 294.34 feet; thence N89°01'14"E, 314.34 feet; thence N76°41'00"E, 329.49 feet; thence N54°11'00"E, 23.72 feet, to a point hereinafter referred to as Point D; thence N54°11'00"E, 149.56 feet; thence N69°43'53"E, 323.11 feet; thence N65°43'08"E, 172.56 feet; thence N59°55'31"E, 140.11 feet; thence N64°53'32"E, 120.13 feet; thence N58°00'40"E, 259.71 feet; thence N53°42'58"E, 517.34 feet; thence N56°10'31"E, 128.60 feet, to a point hereinafter referred to as Point E; thence N57°55'44"E, 116.98 feet; thence N11°43'51"E, 234.50 feet to a Point of Termination of the centerline of said 60' Right-of-Way.

and

Beginning at previously described Point B; thence N02°42'21"E, 168.18 feet to a Point of Termination of the centerline of said 60' Right-of-Way.

and

Beginning at previously described Point C; thence S88°52'01"W, 81.12 feet to a Point of Termination of the centerline of said 60' Right-of-Way.

and

Beginning at previously described Point D; thence N09°14'42"W, 267.23 feet; thence N33°33'31"E, 37.22 feet to a Point of Termination of the centerline of said 60' Right-of-Way.

and

Beginning at previously described Point E; thence S32°50'59"E, 33.47 feet; thence S07°21'01"W, 163.40 feet; thence S37°38'59"E, 29.33 feet to a Point of Termination of the centerline of said 60' Right-of-Way.

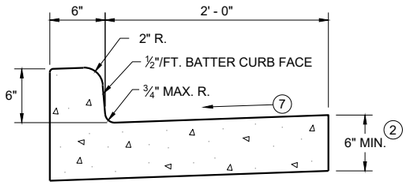
PROJECT NO: 1590-18-83	HWY: USH 8	COUNTY: FOREST	WATER MAIN EASEMENT	SHEET 58	E

Standard Detail Drawing List

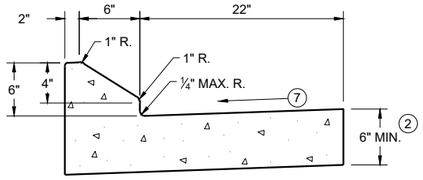
08D01-23A	CONCRETE CURB & GUTTER
08D01-23B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-07	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E15-01	CULVERT PIPE CHECK

6

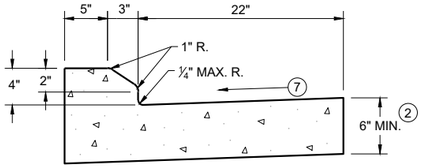
6



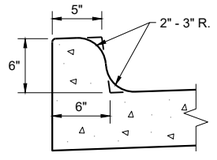
TYPES A (1) & D



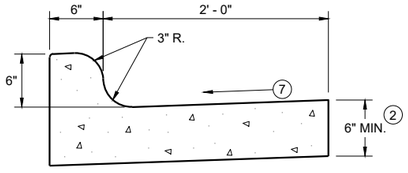
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

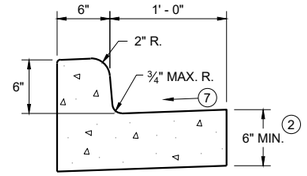


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



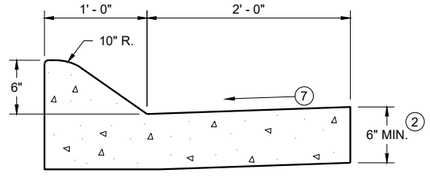
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

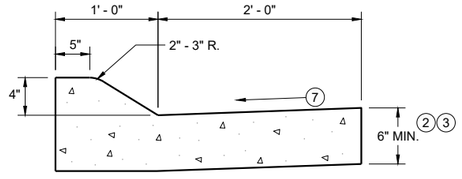


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

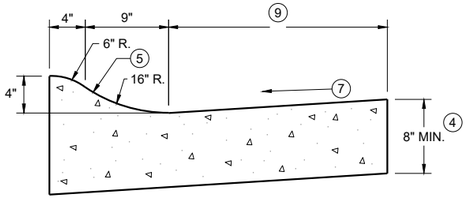


6" SLOPED CURB TYPES A (1) & D



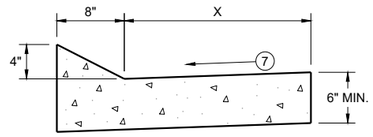
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

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

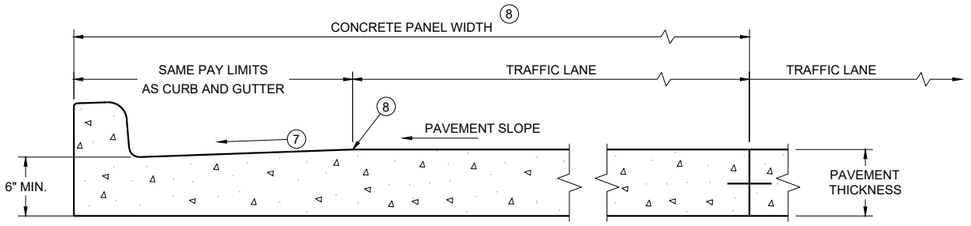


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

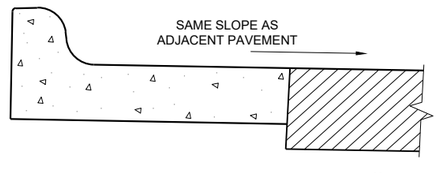
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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



PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



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

GENERAL NOTES

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

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

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

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

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

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

(3) USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

(4) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(5) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

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

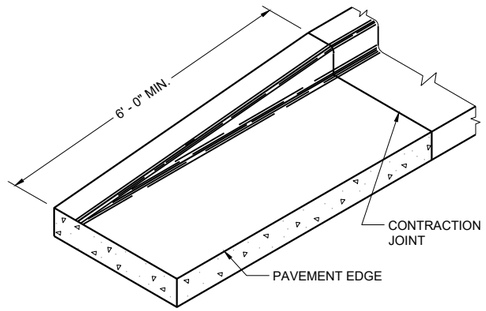
(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

(9) CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

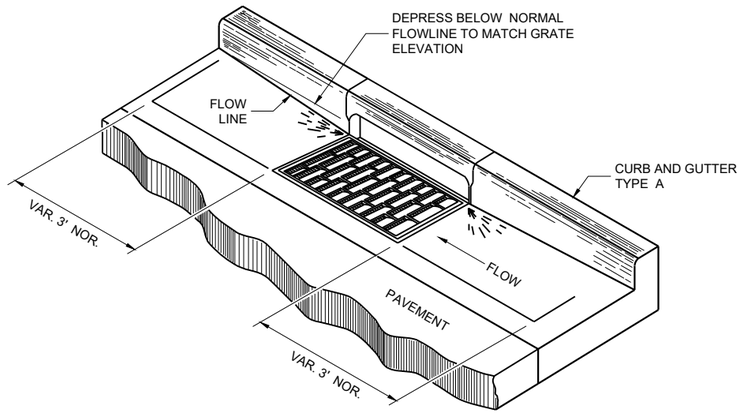
CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D01-23a



END SECTION CURB 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.

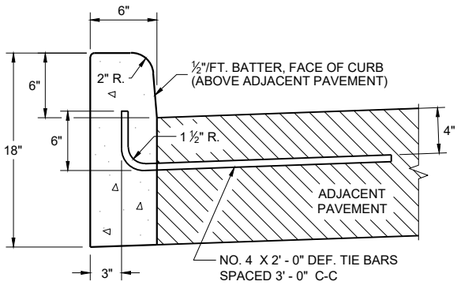
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

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

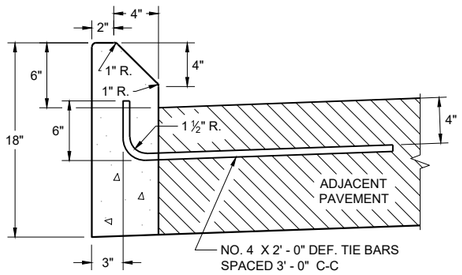
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

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

(11) PLACE 1" THICK EXPANSION JOINT MATERIAL BETWEEN VERTICAL FACE CURB TYPES EXTENDING FROM THE TOP OF CURB TO 1 INCH BELOW THE ADJOINING CONCRETE SURFACE. RIGID CONCRETE STRUCTURES INCLUDE RAISED CONCRETE MEDIANS, CONCRETE SAFETY ISLANDS, SPLITTER ISLANDS, OR LOCATIONS IDENTIFIED ON THE PLANS.

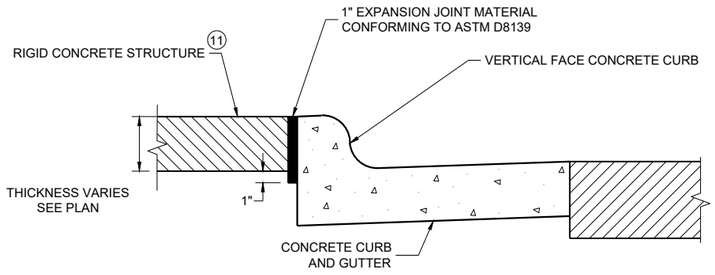


TYPES A (1) & D

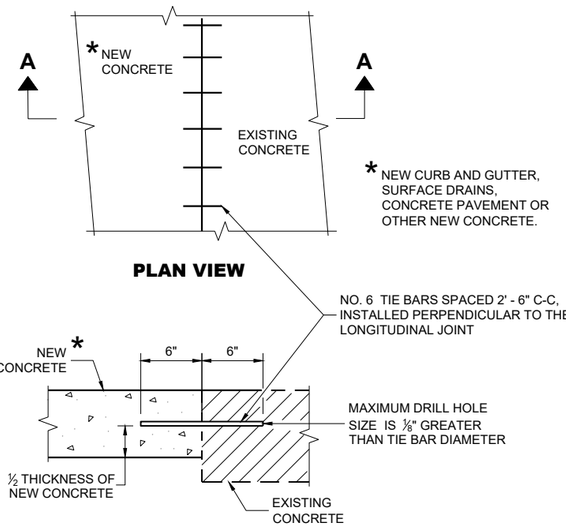


TYPES G (1) & J

CONCRETE CURB



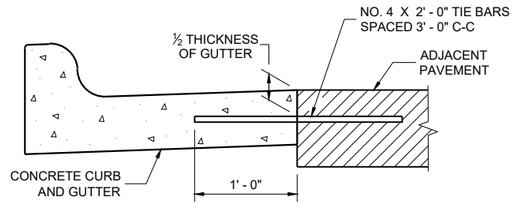
EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE (11)



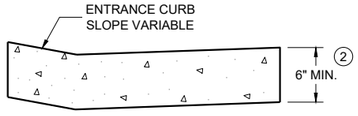
PLAN VIEW

SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (10)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

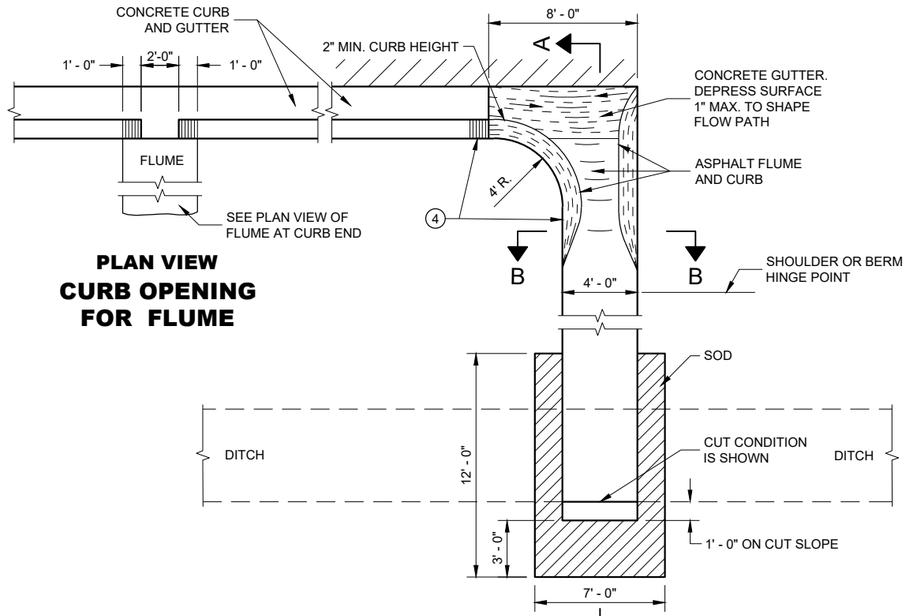
FHWA

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SDD 08D01-23b

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

ASPHALTIC FLUME

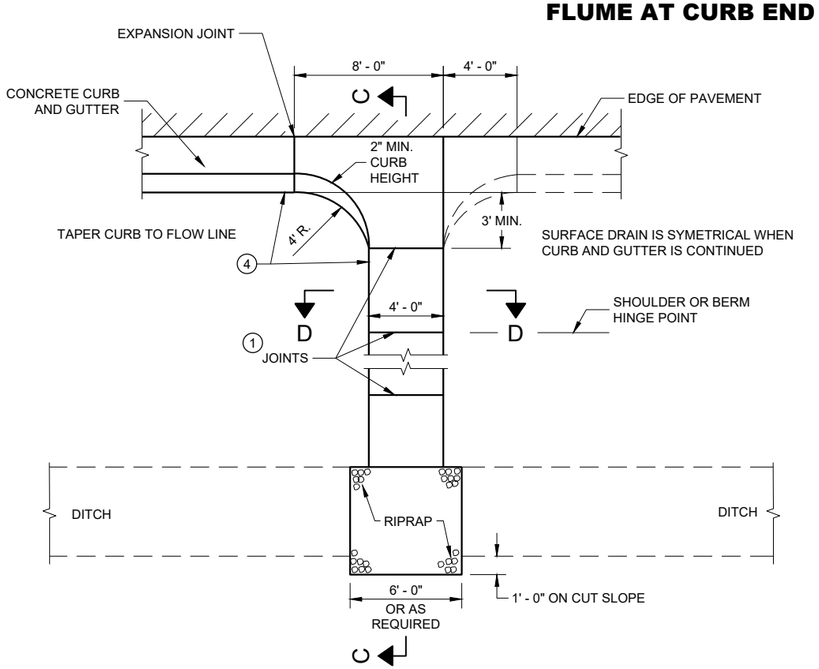


PLAN VIEW

CURB OPENING FOR FLUME

PLAN VIEW

FLUME AT CURB END



PLAN VIEW

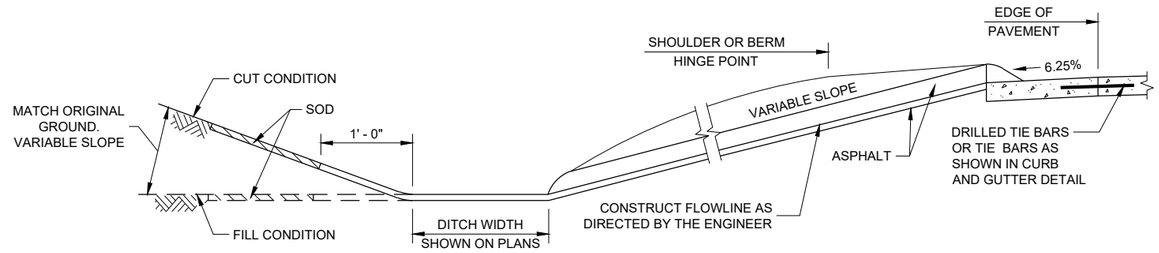
CONCRETE SURFACE DRAIN

GENERAL NOTES

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

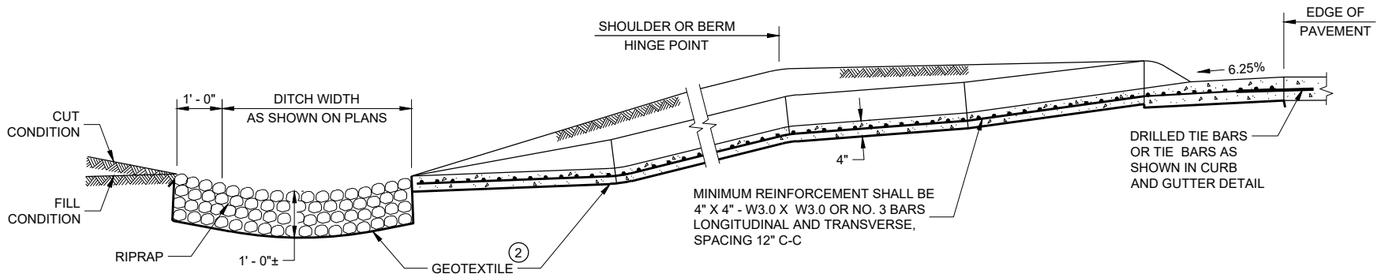
4" X 4" - W3.0 X W3.0 CONCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

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

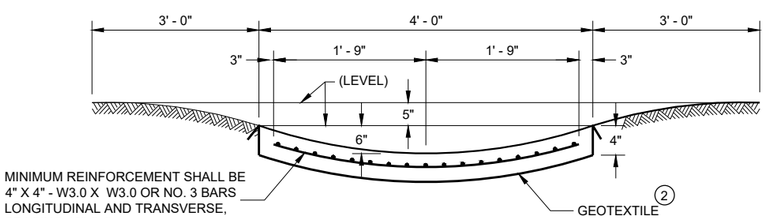


SECTION A - A

SECTION B - B



SECTION C - C



SECTION D - D

CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES

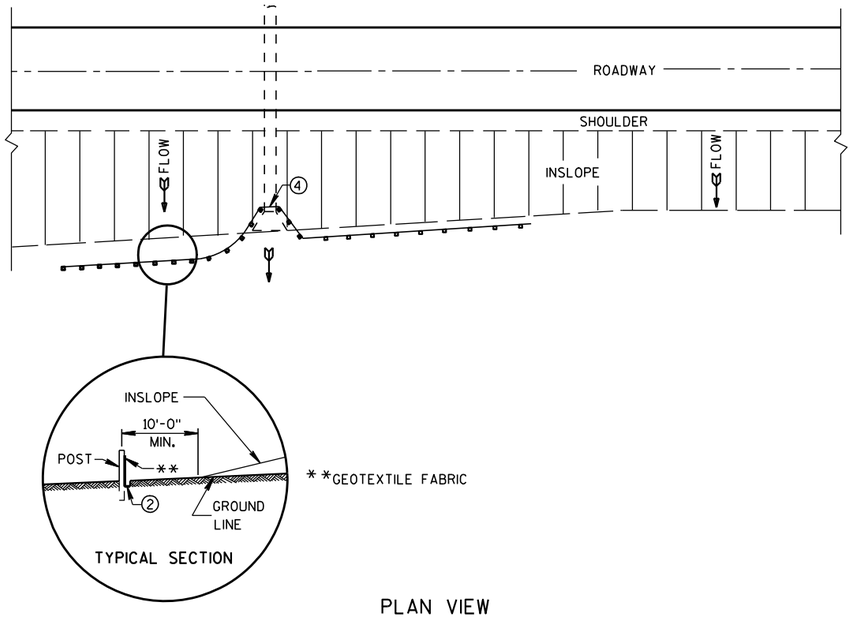
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

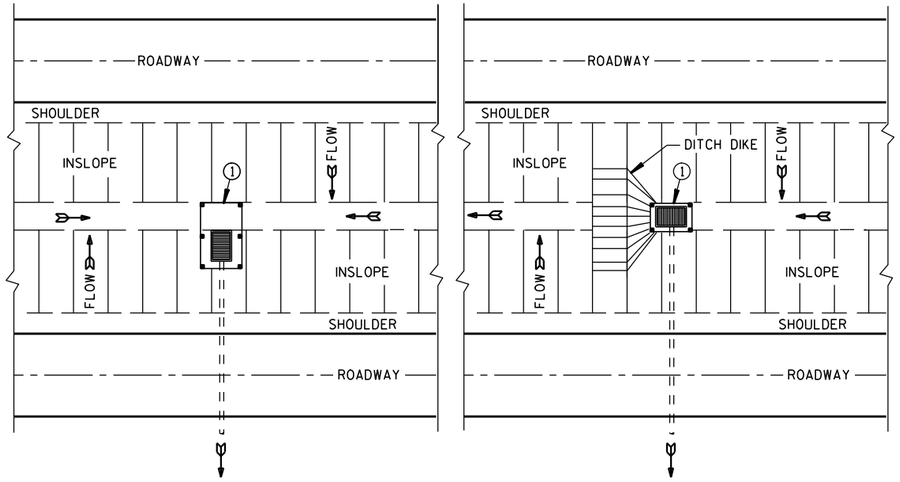
6

SDD 08D04 - 07



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

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

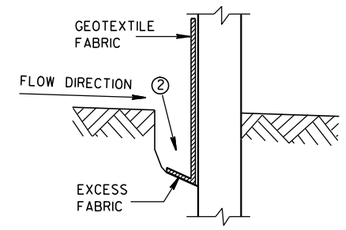
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

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

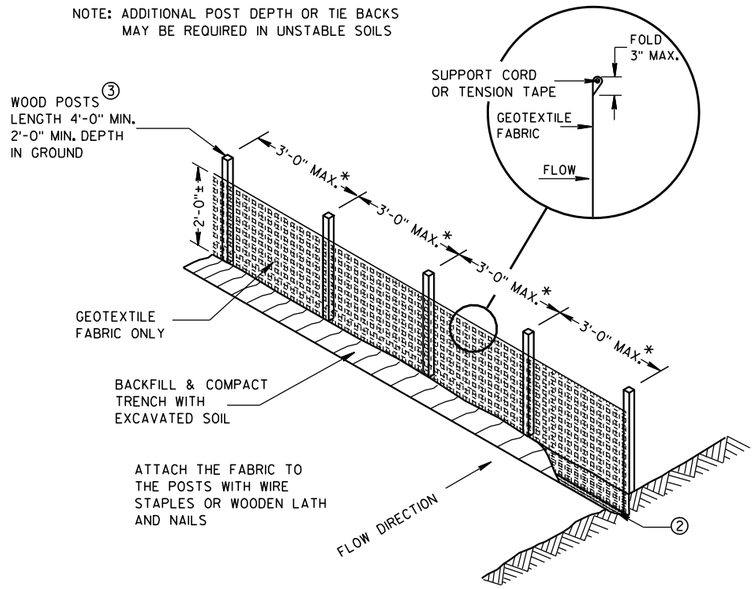
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

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

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

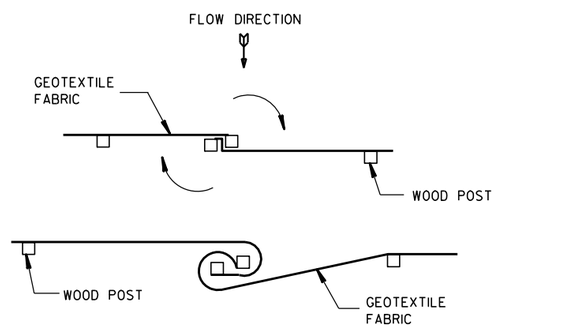


TRENCH DETAIL

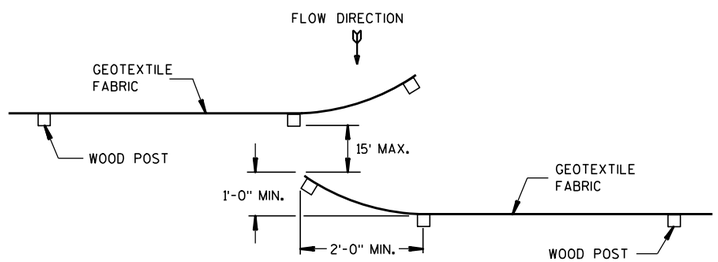


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

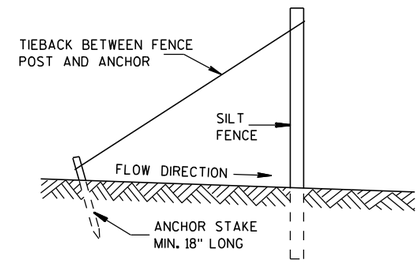


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

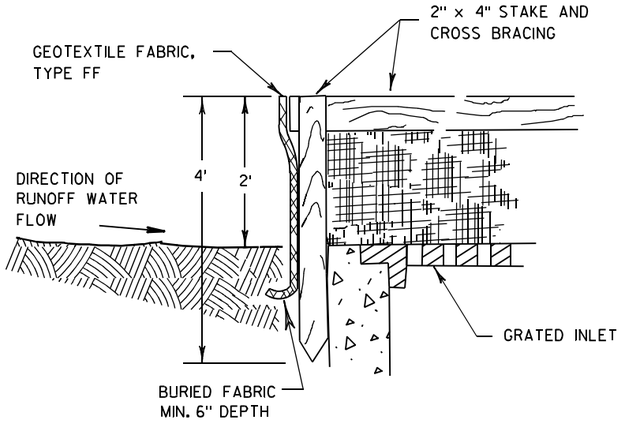
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

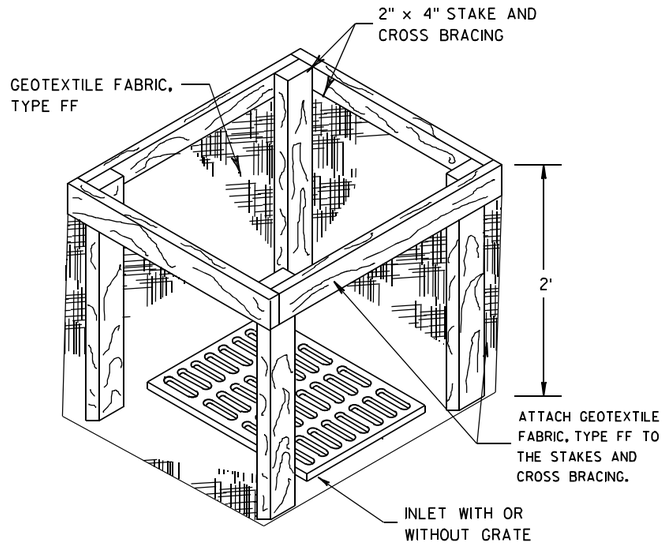
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S.D.D. 8 E 9-6

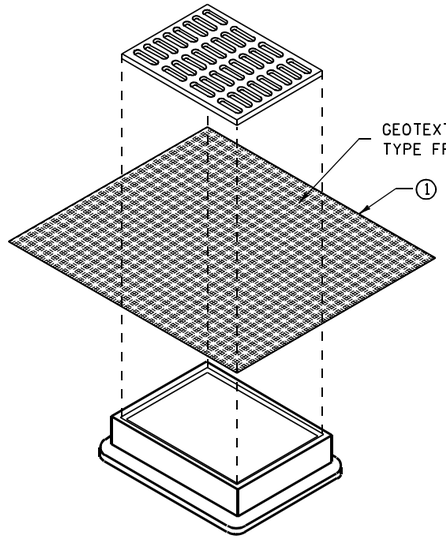
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S.D.D. 8 E 9-6



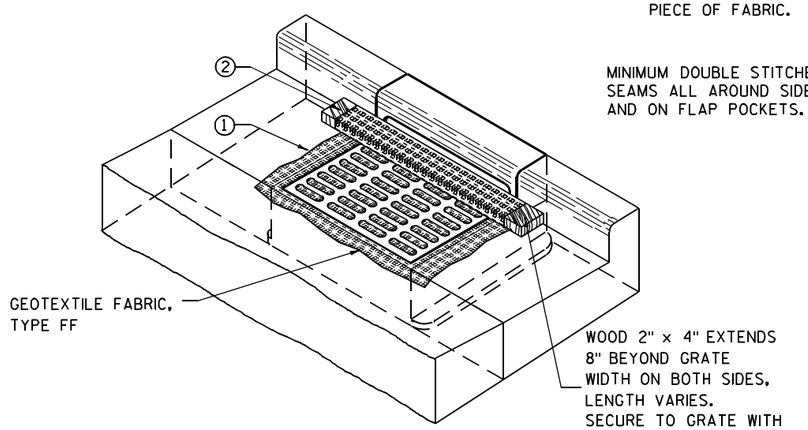


INLET PROTECTION, TYPE A

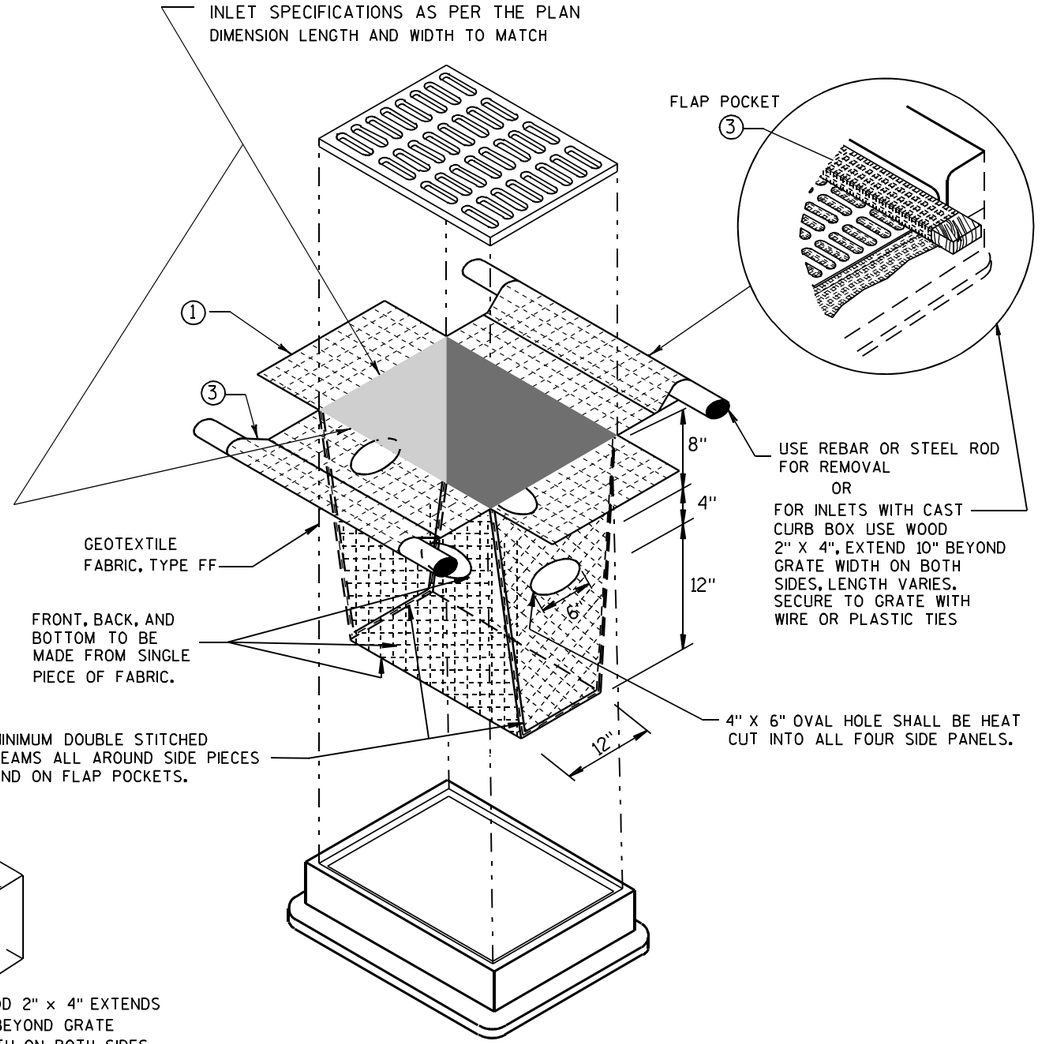


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(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.

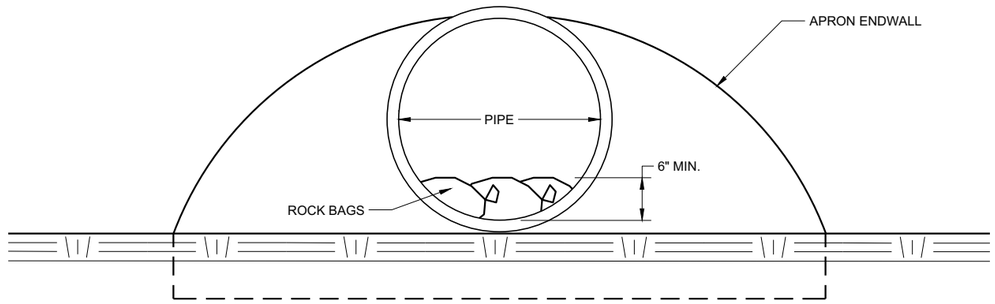
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE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

INLET PROTECTION
TYPE A, B, C, AND D

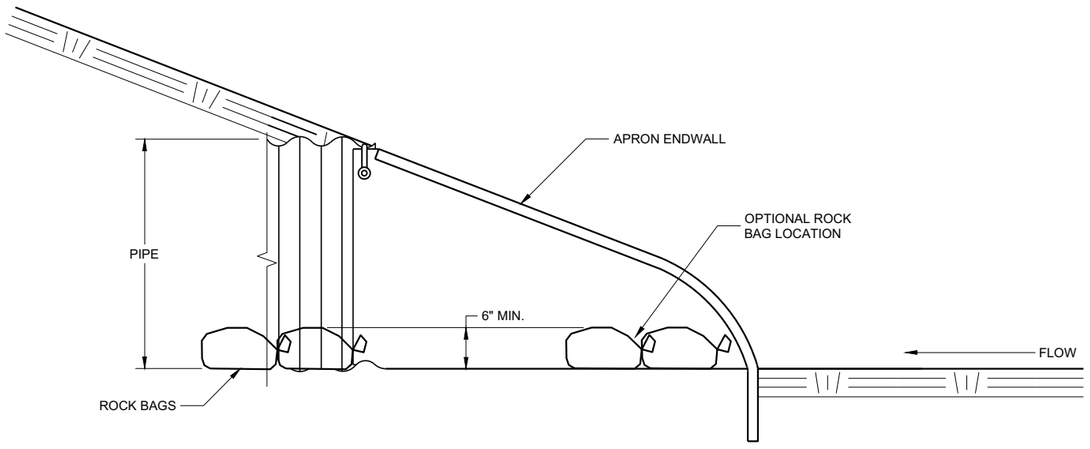
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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)

CULVERT PIPE CHECK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Daniel Schave
EROSION CONTROL ENGI

FHWA

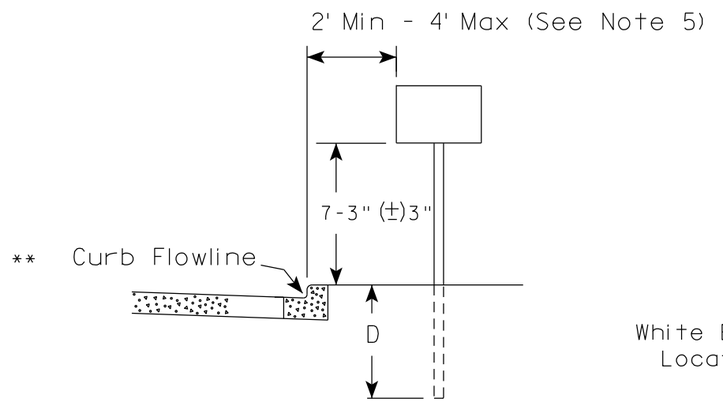
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SDD 08E15 - 01

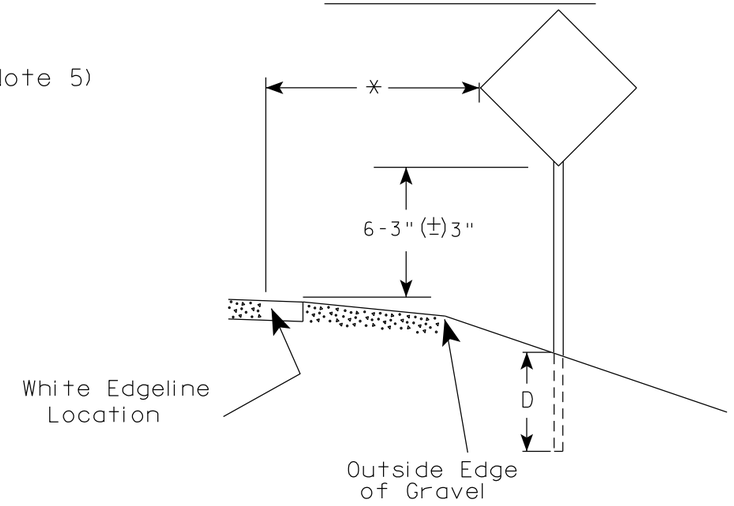
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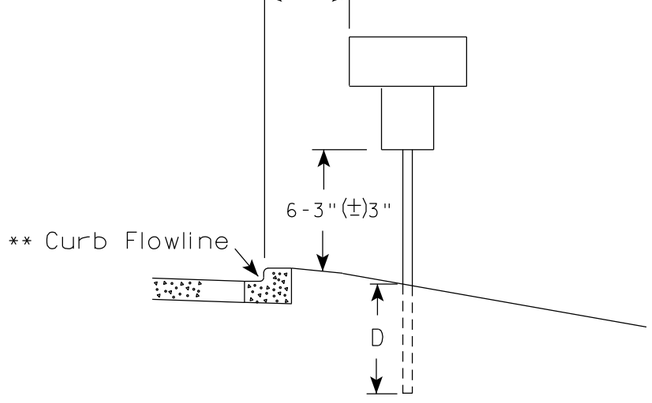
SDD 08E15 - 01

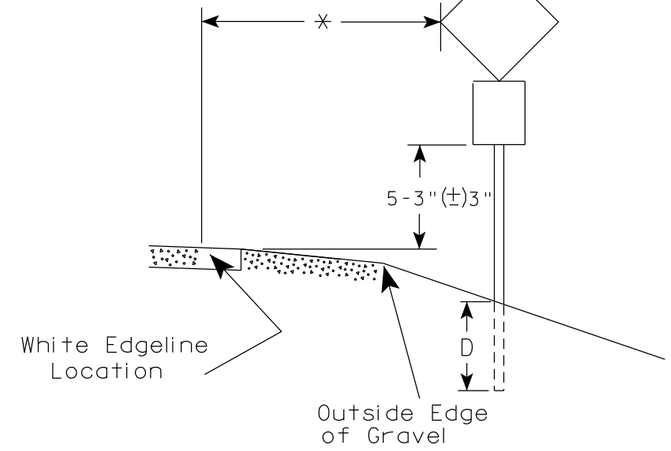
URBAN AREA



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" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±) 3".
3. For expressways and freeways, mounting height is 7'- 3" (±) 3" or 6'-3" (±) 3" depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±) 3".
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directd by the Engineer.

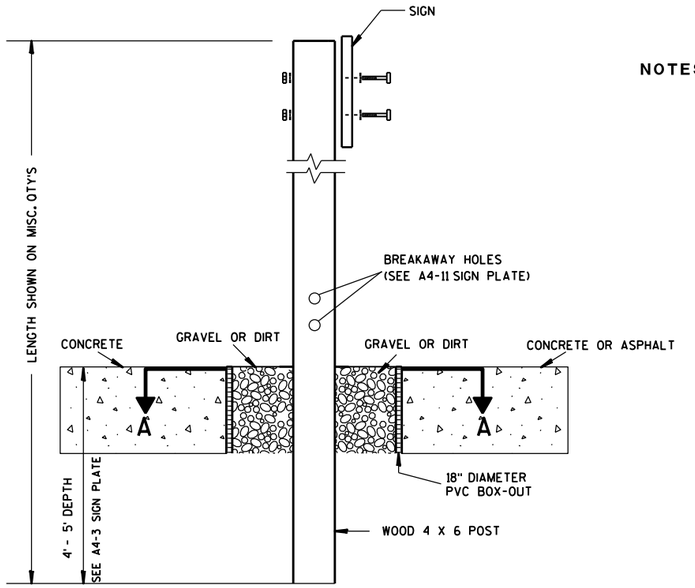
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

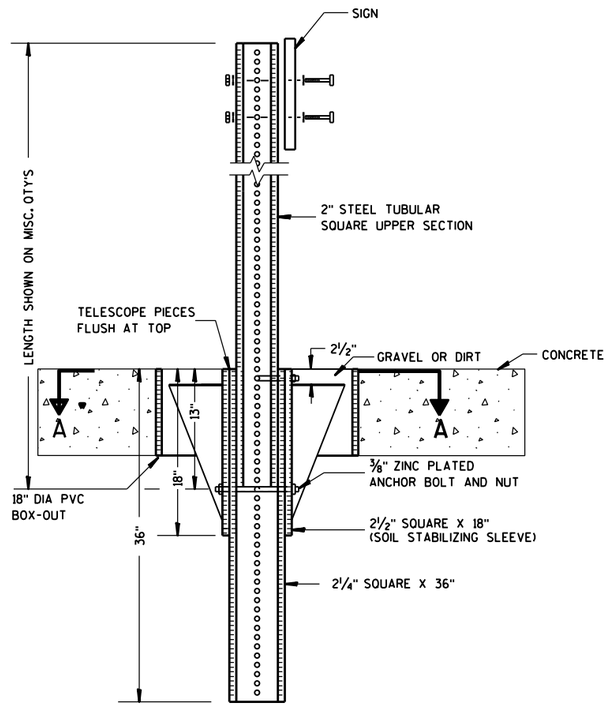
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 66	E



ELEVATION VIEW

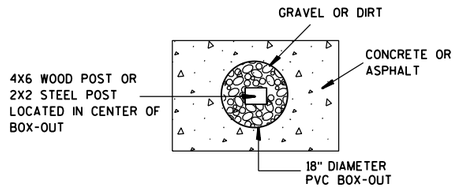
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

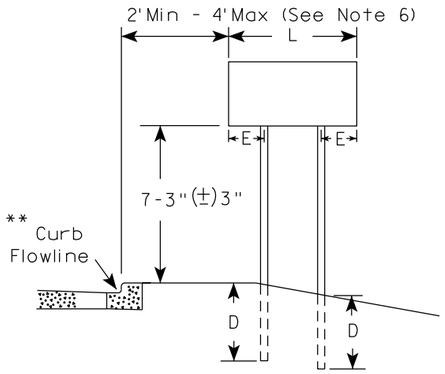
WISCONSIN DEPT OF TRANSPORTATION

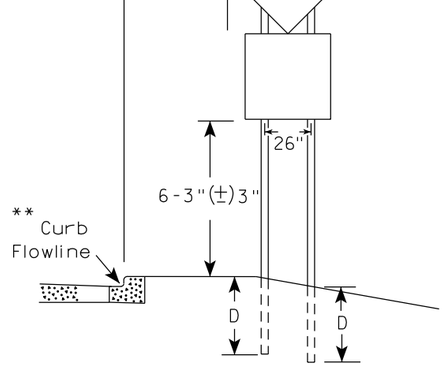
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

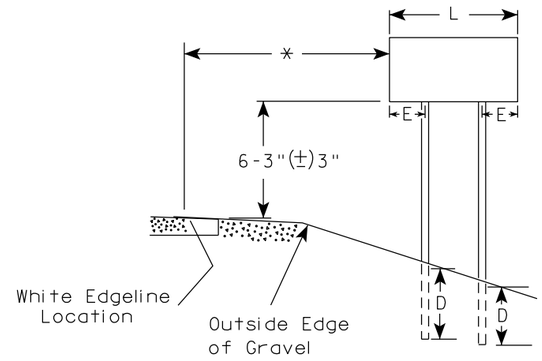
URBAN AREA

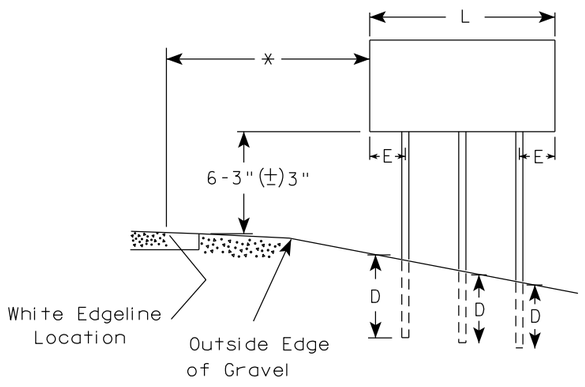


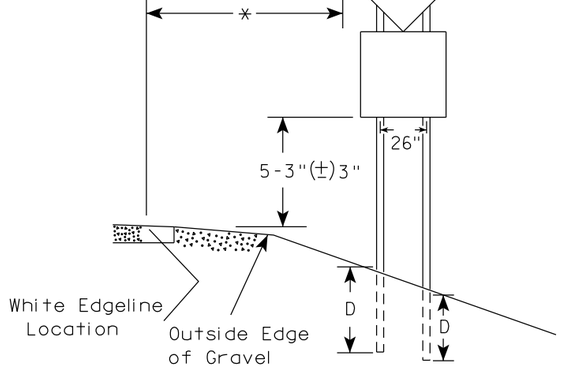


48" DIAMOND WARNING SIGN

RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN

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

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

GENERAL NOTES

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

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

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

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

POST EMBEDMENT DEPTH

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

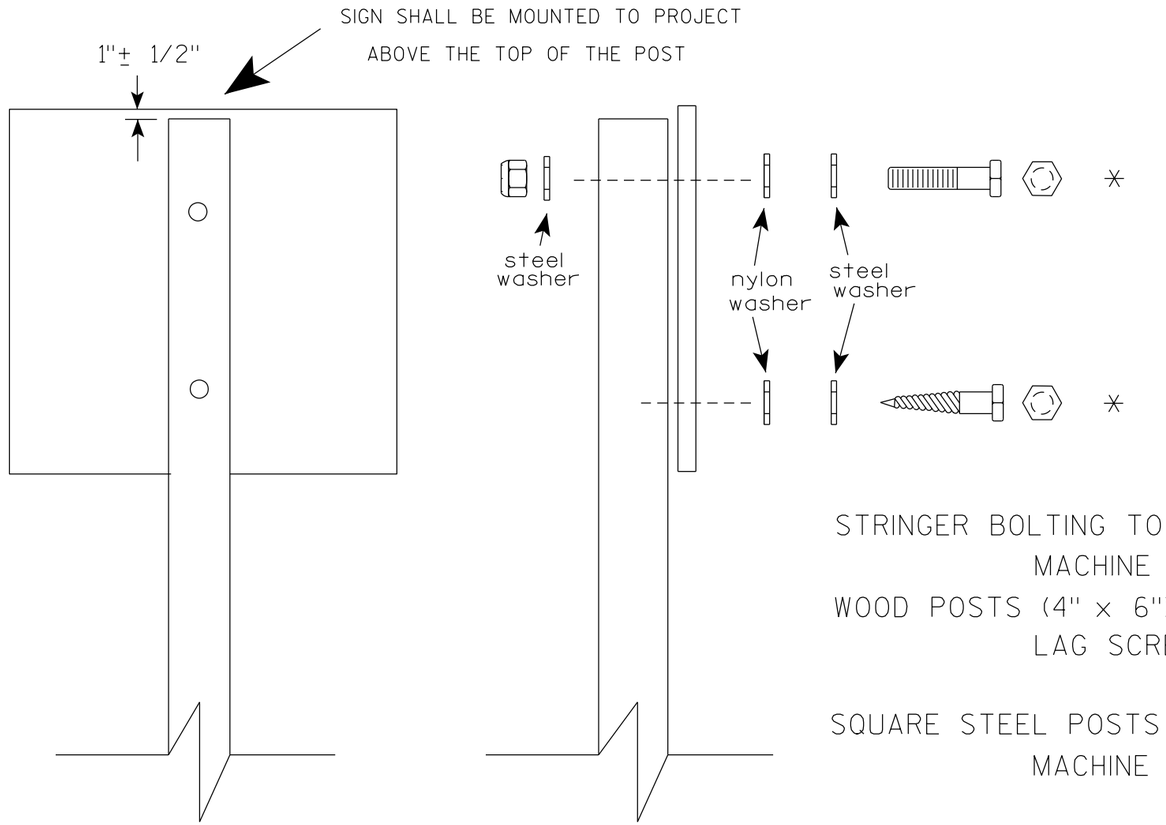
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 68	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

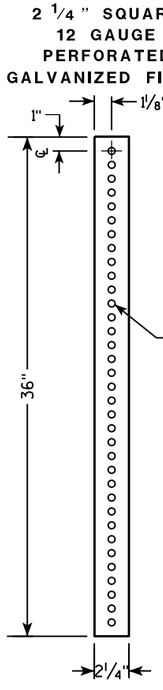
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

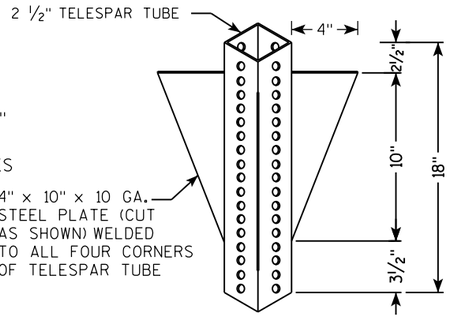
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

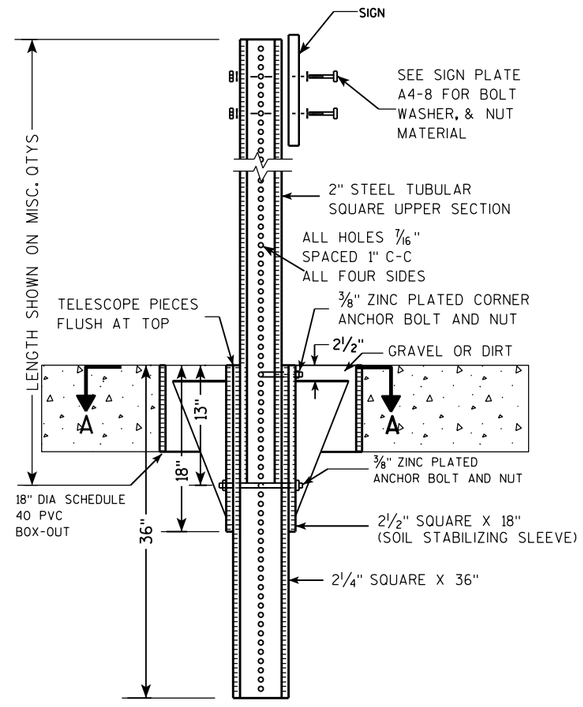
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



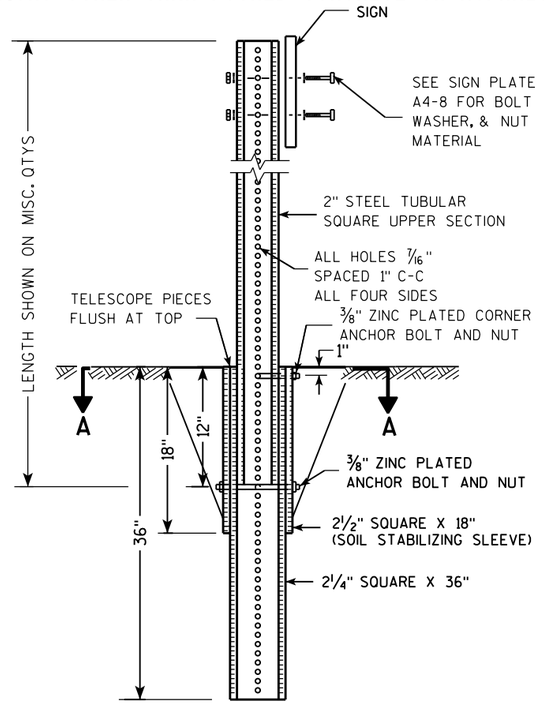
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

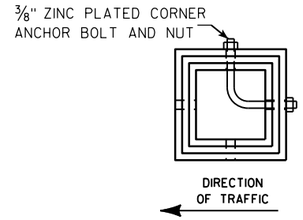


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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

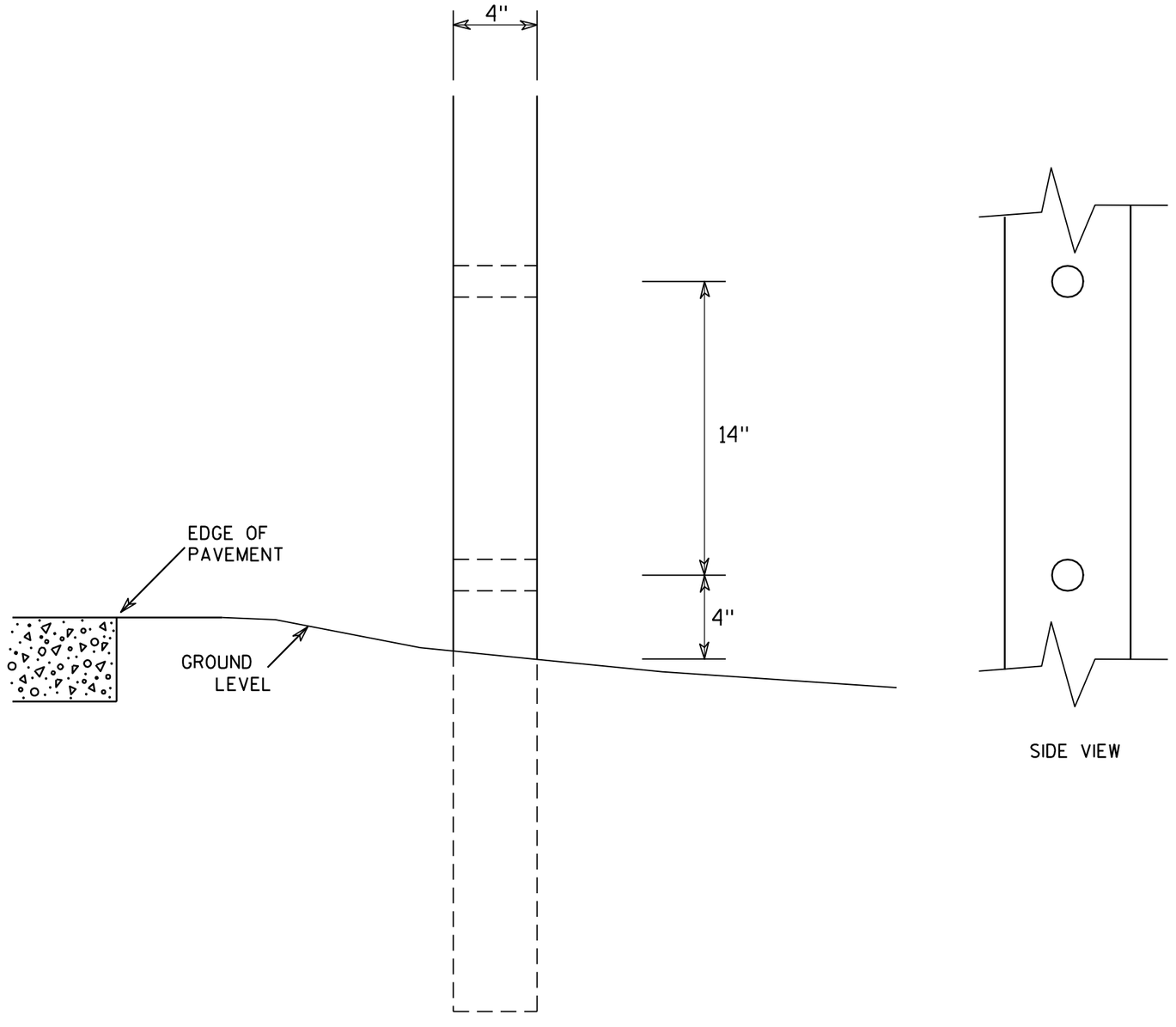
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 70 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.

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

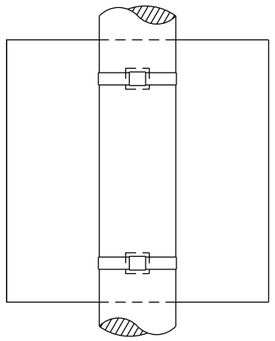
APPROVED Chester J Spang for State Traffic Engineer

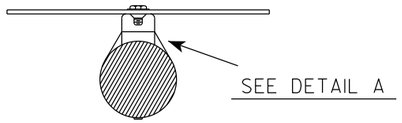
DATE 3/27/97 PLATE NO. A4-11.2

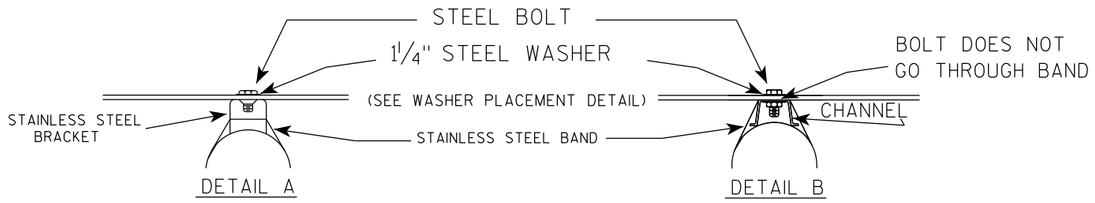
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 71	E

BANDING

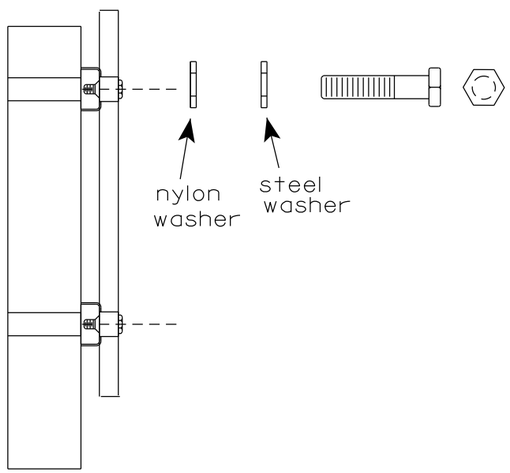
SINGLE SIGN







WASHER PLACEMENT

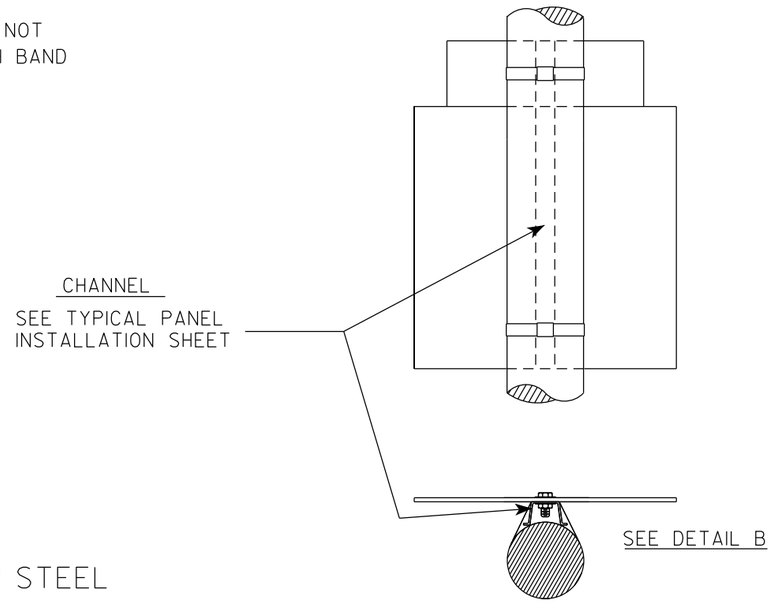


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

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

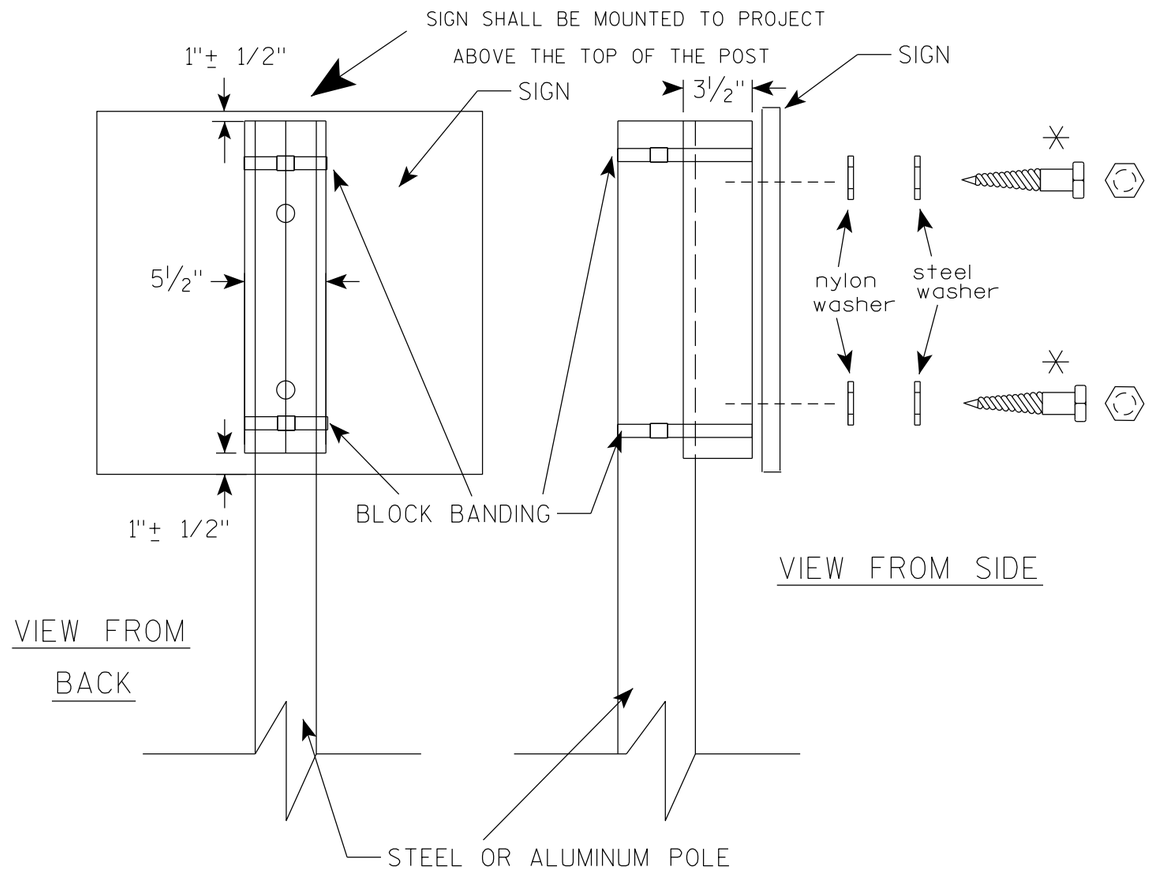
DATE 6/10/19 PLATE NO. A5-9.4

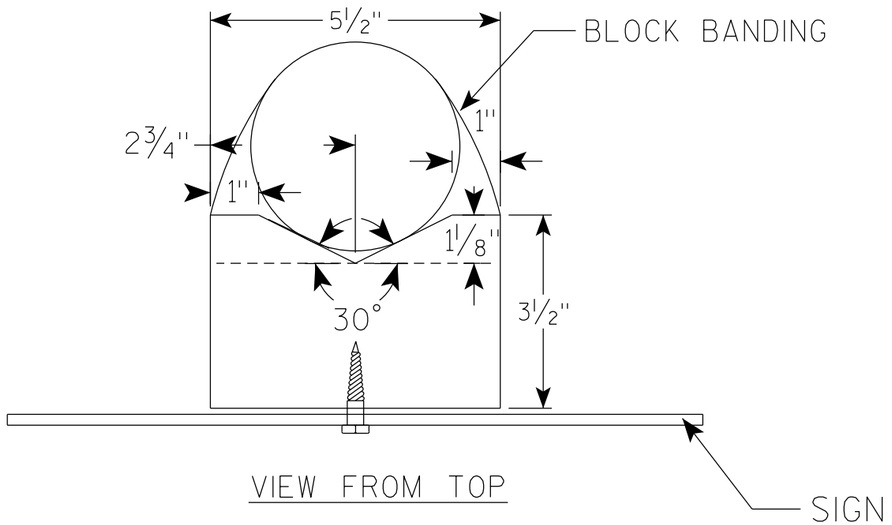
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 72	E

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 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

SHEET NO: 73 E

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov

RHI

FEBRUARY 2025

PROJECT ID: **9813-02-70**

WITH: 1590-18-71, 1590-18-82, 1590-18-83

COUNTY: **FOREST**

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 = 108



STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

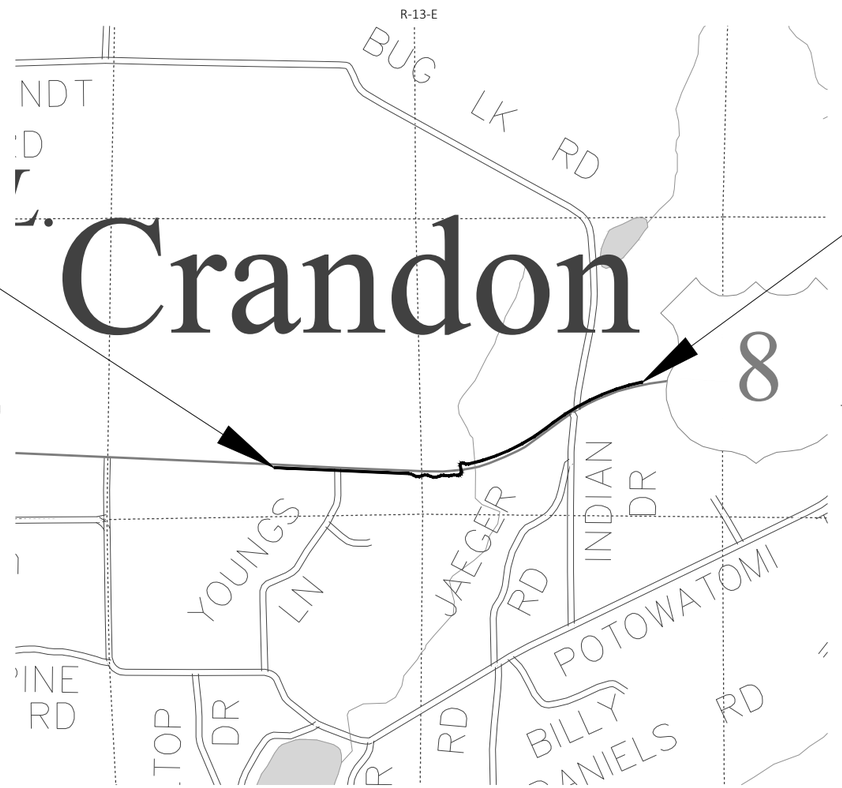
PLAN OF PROPOSED IMPROVEMENT

USH 8 SHARED PATHWAY: PHASE 1

FIREKEEPER ROAD TO LOVE KNOT LANE
NON HWY FOREST COUNTY

STATE PROJECT NUMBER
9813-02-70

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
9813-02-70	WISC 2025334	1



BEGIN PROJECT
STA 553+50.00
N = 569612.746
E = 849403.927

END PROJECT
STA 623+68.96
N = 571105.028
E = 855828.643

LAYOUT

SCALE 0 0.5 MI

TOTAL NET LENGTH OF CENTERLINE = 1.33 MI

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

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), FOREST COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES.

ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

ACCEPTED FOR
FOREST COUNTY
POTAWATOMI COMMUNITY
Date 10/28/24 (Signature and Title of Official)

ORIGINAL PLANS PREPARED BY
KL Engineering
[A] Better Experience

WISCONSIN PROFESSIONAL ENGINEER
JOSHUA MERCIER
44677-6
OREGON, WI

DATE: 10/29/2024 (Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	FOREST COUNTY POTAWATOMI COMMUNITY
Designer	KL ENGINEERING
Project Manager	NATHAN WAITE
Regional Examiner	REGIONAL EXAMINER
Regional Supervisor	DAN ERVA
Local	

ACCEPTED FOR THE DEPARTMENT

DATE: 10/30/2024 (Signature)

E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\010101-TI.DWG PLOT DATE : 10/29/2024 11:09 AM PLOT BY : JOSH MERCIER PLOT NAME :

GENERAL NOTES

THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN IN THE PLAN, ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. CONTACT DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO START OF WORK.

ASPHALTIC SURFACE AND HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LBS/SY/IN.

ALL RADII ARE MEASURED TO THE EDGE OF THE PAVEMENT UNLESS OTHERWISE SHOWN OR NOTED IN THE PLANS.

CURVE DATA IS BASED ON THE ARC DEFINITION.

INLET AND DISCHARGE ELEVATIONS FOR DRAINAGE STRUCTURES ARE APPROXIMATE AND SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.

BEARINGS SHOWN IN THE PLANS ARE GRID/GROUND/PROJECT BEARINGS TO THE NEAREST SECOND.

SEE PROJECT 1590-18-71 FOR SOIL BORING LOCATIONS. BASED ON FIELD CONDITIONS, PROJECT ENGINEER MAY MODIFY TYPICAL SECTION TO INCLUDE INCREASED EXCAVATION, GEOTEXTILE FABRIC OR GEOGRID, AND STONE.

SEE PROJECT 1590-18-71 FOR TRAFFIC CONTROL PLANS, EROSION CONTROL PLANS, STORM SEWER PLANS, LANDSCAPING PLANS, EARTHWORK DATA AND CROSS SECTIONS.

SEE PROJECT 1590-18-82 FOR STRUCTURE PLANS, LIGHTING PLANS, AND ATV PLANS.

UTILITY CONTACTS

COMMUNICATION LINE

NSIGHT TELESERVICES
RICK VINCENT (PRIMARY CONTACT)
450 SECURITY BLVD
P.O. BOX 19079
GREEN BAY, WI 54307-9079
PHONE: 920.617.7316
EMAIL: RICK.VINCENT@NSIGHT.COM

GAS/PETROLEUM

WISCONSIN PUBLIC SERVICE CORPORATION
WENDY CHRIST (PRIMARY CONTACT)
P.O. BOX 19001
GREEN BAY, WI 54307-9001
PHONE: 920.617.5173
EMAIL: UTILITIESRELOCATION@WISCONSINPUBLICSERVICE.COM

ELECTRICITY

WISCONSIN PUBLIC SERVICE CORPORATION
WENDY CHRIST (PRIMARY CONTACT)
P.O. BOX 19001
GREEN BAY, WI 54307-9001
PHONE: 920.617.5173
EMAIL: UTILITIESRELOCATION@WISCONSINPUBLICSERVICE.COM

SEWER

FOREST COUNTY POTAWATOMI UTILITY DEPT
BRUCE JOHNSON (PRIMARY CONTACT)
8355 MISH KO SWEN DRIVE
CRANDON, WI 54520
PHONE: 715.478.7398
EMAIL: BRUCE.JOHNSON@FCPOTAWATOMI-NSN.GOV

WATER

FOREST COUNTY POTAWATOMI UTILITY DEPT
BRUCE JOHNSON (PRIMARY CONTACT)
8355 MISH KO SWEN DRIVE
CRANDON, WI 54520
PHONE: 715.478.7398
EMAIL: BRUCE.JOHNSON@FCPOTAWATOMI-NSN.GOV

COMMUNICATION LINE

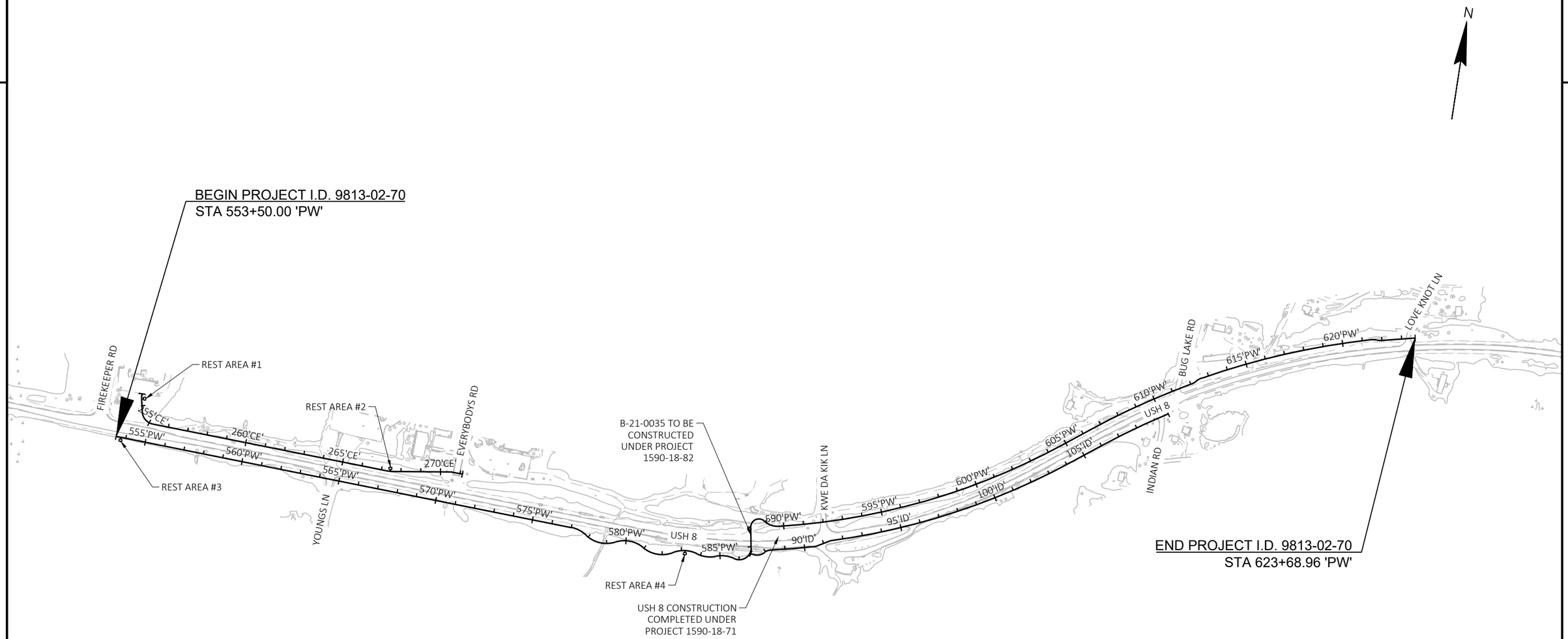
SPECTRUM
RYAN LUCKEN (PRIMARY CONTACT)
1201 McCANN Drive
ALTOONA, WI 54720
PHONE: 715.833.7390
EMAIL: CHTR_WI_CONST@CHARTER.COM

ORDER OF SECTION 2 SHEETS

PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
PLAN DETAILS
PERMANENT SIGNING AND PAVEMENT MARKING PLANS
CURB RAMP DETAILS
EROSION CONTROL PLANS
ALIGNMENT DIAGRAM

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

2

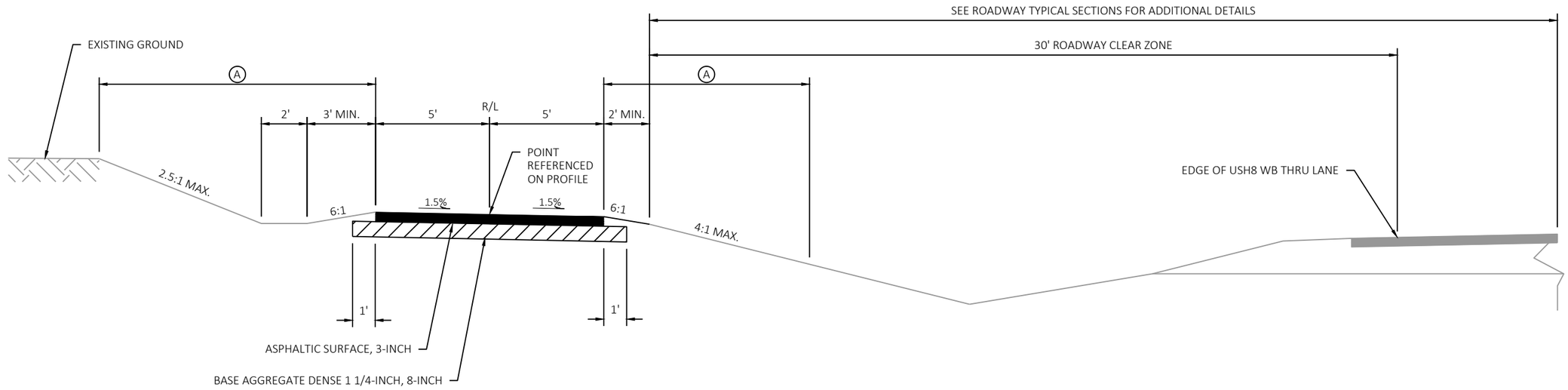


PROJECT NO: 9813-02-70	USH 8 SHARED PATHWAY PHASE 1	COUNTY: FOREST	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\020102-PO.DWG
LAYOUT NAME - 01

PLOT DATE : 10/21/2024 10:24 PM PLOT BY : ARIELLE LEWIEN PLOT NAME : PLOT SCALE : 1 IN:500 FT

2

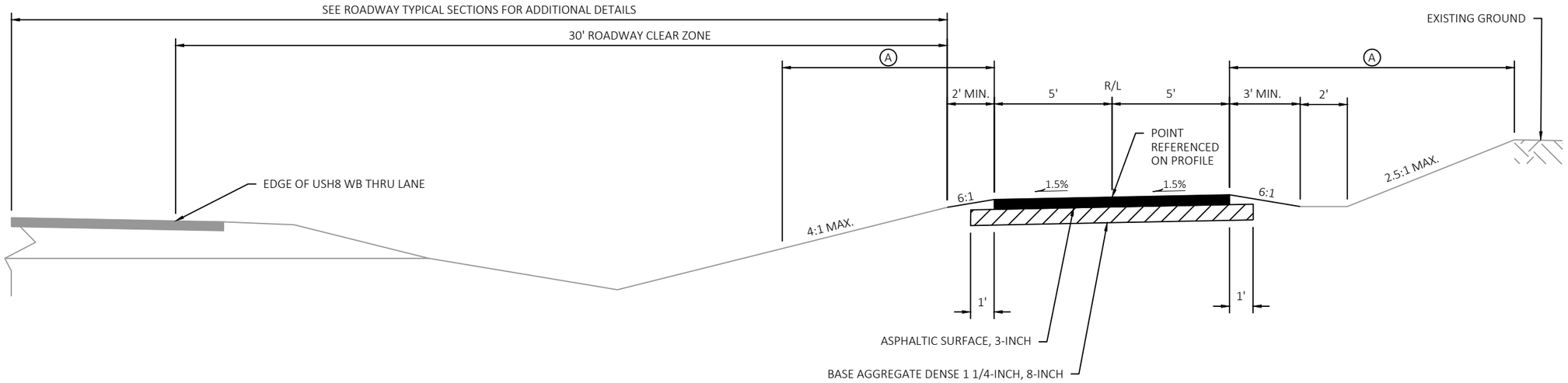


TYPICAL PROPOSED SECTION - PARALLEL TO ROAD (NORTH SIDE OF ROAD)

STA. 253+40.07 - 270+65.00 'CE'
STA. 592+00.00 - 623+65.75 'PW'*

Ⓐ LANDSCAPING AND EROSION CONTROL ITEMS TO BE INSTALLED AS INDICATED IN 1590-18-71 PLANS

Ⓑ BASE AGGREGATE DENSE 3/4-INCH, 3-INCH

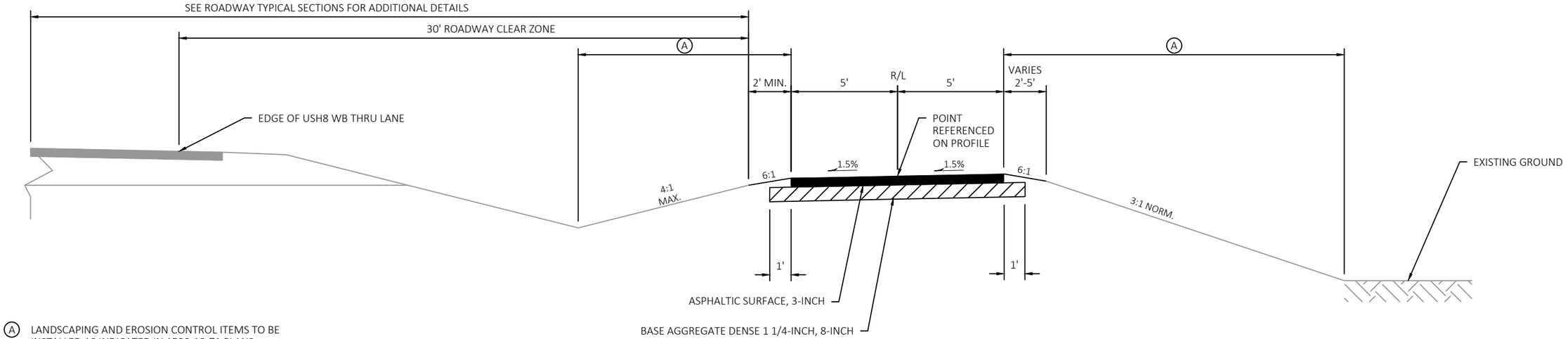


TYPICAL PROPOSED SECTION - PARALLEL TO ROAD (SOUTH SIDE OF ROAD)

STA. 553+50.00 - 563+91.00 'PW'*
STA. 91+38.00 - 95+18.00 'ID'

NOTE: GRADING FOR DATUM SURFACE TO BE COMPLETED UNDER PROJECT 1590-18-71

*SEE TYPICAL PROPOSED PAVEMENT SECTION - POOR SOILS LOCATIONS FOR CHANGE IN PAVEMENT SECTION AND EXPECTED LOCATIONS

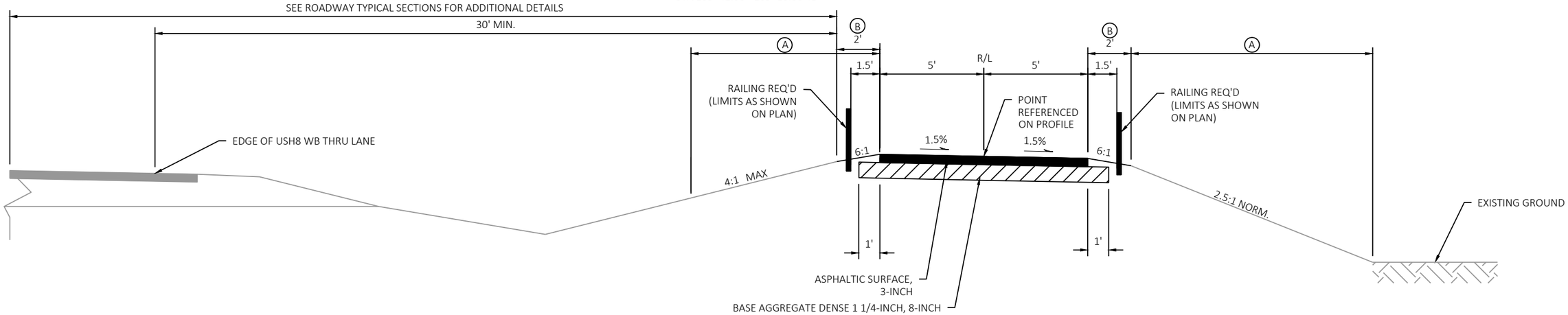


(A) LANDSCAPING AND EROSION CONTROL ITEMS TO BE INSTALLED AS INDICATED IN 1590-18-71 PLANS

(B) BASE AGGREGATE DENSE 3/4-INCH, 3-INCH

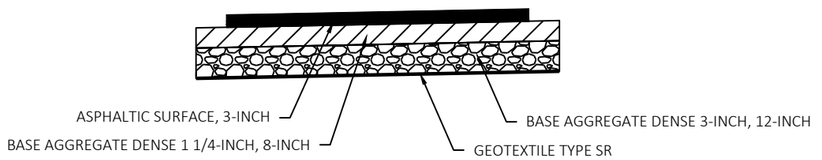
TYPICAL PROPOSED SECTION - PARALLEL TO ROAD (SOUTH SIDE)

STA. 565+00.00 - 577+00.00 'PW'
STA. 95+18.00 - 98+91.00 'ID'
STA 103+41.00 - 109+13.00 'ID'*



TYPICAL PROPOSED SECTION - OFF-ROAD WITH RAILING (NORTH AND SOUTH SIDES)

STA. 577+00 - 586+34.79 'PW'
STA. 98+91.00 - 103+41.00 'ID'



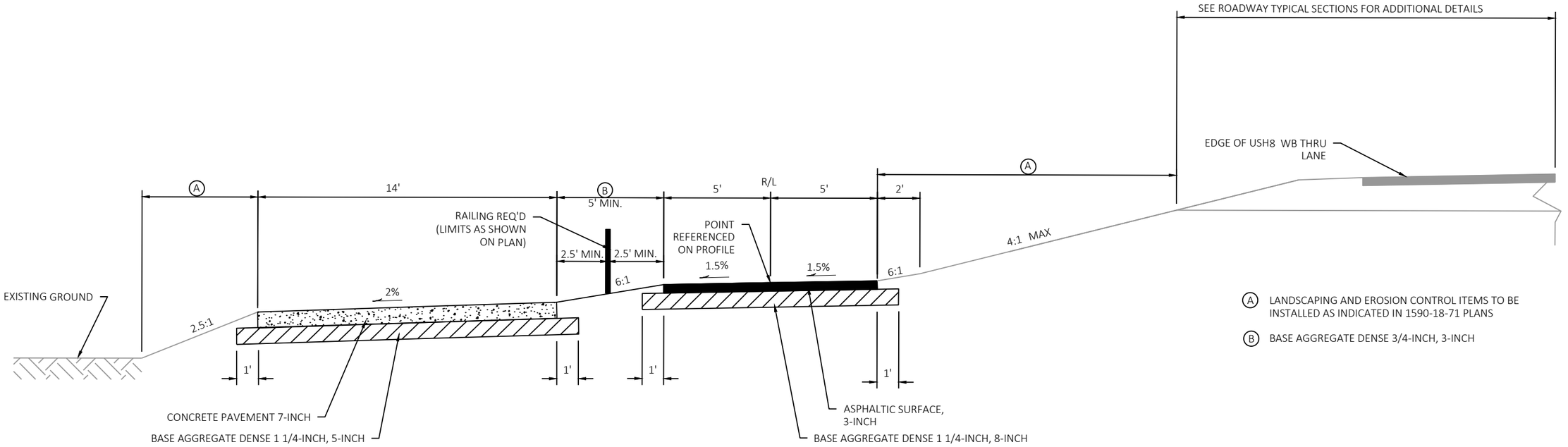
TYPICAL PAVEMENT SECTION - ANTICIPATED POOR SOIL LOCATIONS

STA. 553+50 - 555+50 'PW'
STA. 621+00 - 622+25 'PW'
STA. 108+18 - 108+88 'ID'
SEE TYPICAL PROPOSED SECTIONS FOR DETAILS NOT SHOWN

NOTE: GRADING FOR DATUM SURFACE TO BE COMPLETED UNDER PROJECT 1590-18-71

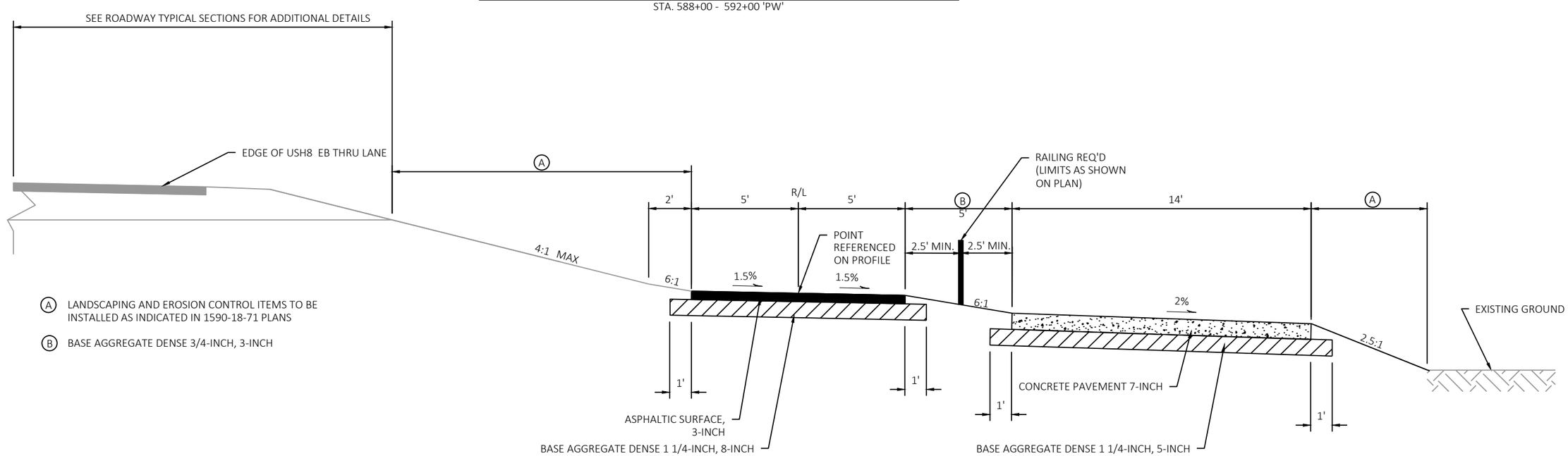
*SEE TYPICAL PROPOSED PAVEMENT SECTION - POOR SOILS LOCATIONS FOR CHANGE IN PAVEMENT SECTION AND EXPECTED LOCATIONS

PROJECT NO: 9813-02-70	USH 8 SHARED PATHWAY PHASE 1	COUNTY: FOREST	TYPICAL SECTIONS	SHEET 5	E



TYPICAL PROPOSED SECTION - OFF-ROAD WITH RAILING (NORTH SIDE)

STA. 588+00 - 592+00 'PW'

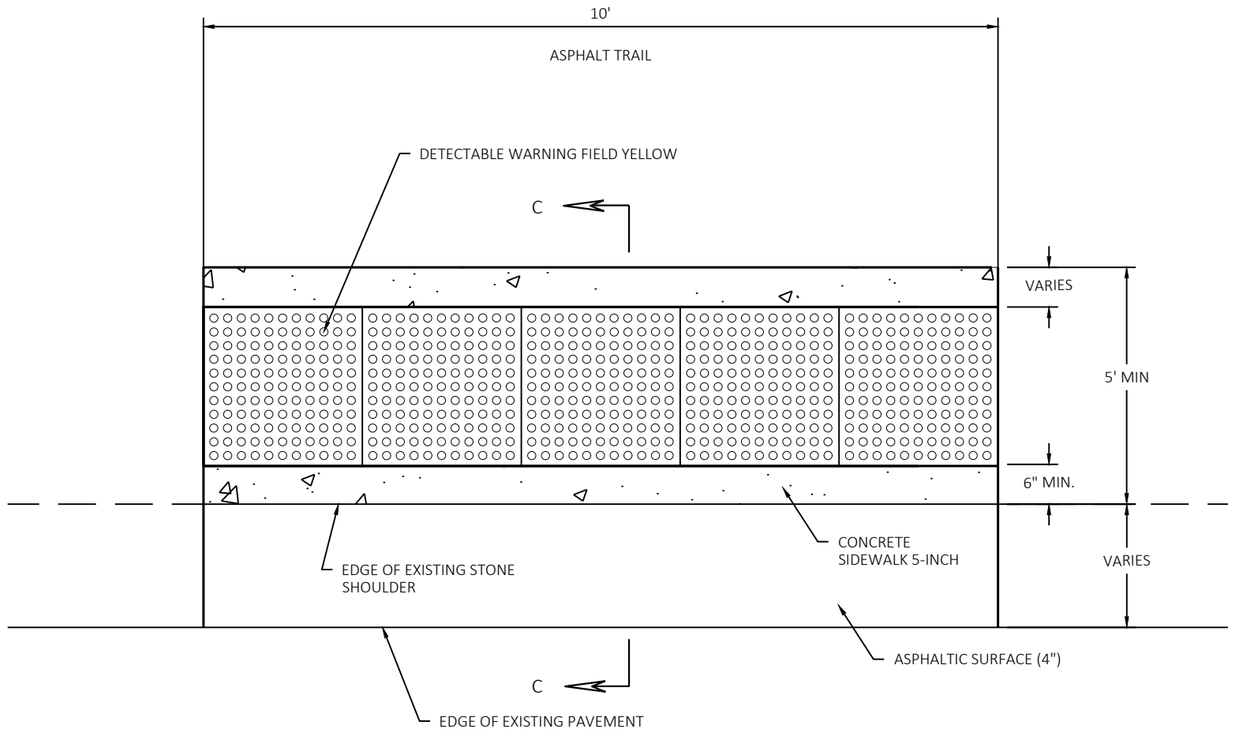


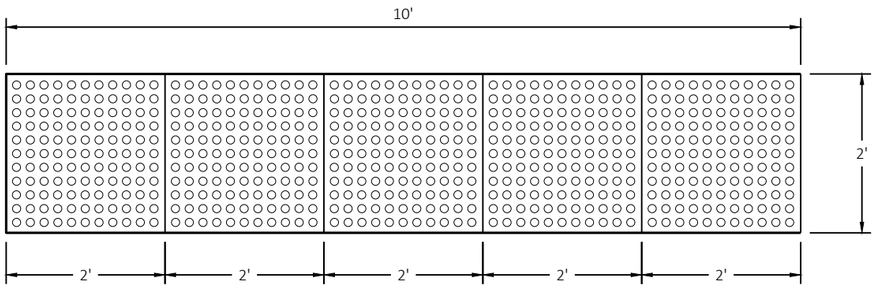
NOTE: GRADING FOR DATUM SURFACE TO BE COMPLETED UNDER PROJECT 1590-18-71

TYPICAL PROPOSED SECTION - OFF-ROAD WITH RAILING (SOUTH SIDE)

STA. 87+20.12 - 90+67.68 'ID'

PROJECT NO: 9813-02-70	USH 8 SHARED PATHWAY PHASE 1	COUNTY: FOREST	TYPICAL SECTIONS	SHEET 6	E





PLAN VIEW

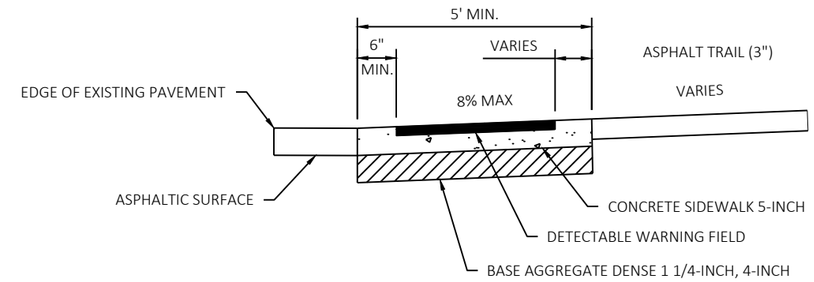
DETECTABLE WARNING FIELD (TYPICAL)

SEE CURB RAMP DETAIL SHEETS.

DETECTABLE WARNING FIELD (DWF) ORIENTATION SHOULD FOLLOW GUIDANCE PROVIDED IN WISDOT'S S.D.D. FOR CURB RAMPS. DWF ORIENTATION MAY DIFFER FROM LINEAR PATTERN DEPICTED IN THIS DETAIL TO ALIGN TO THE INTERSECTING ROADWAY.

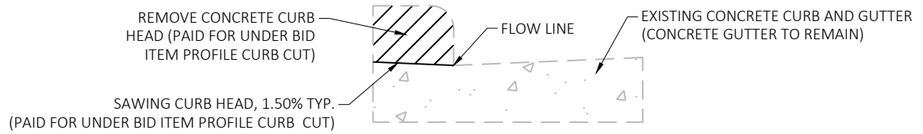
DWF PANELS SHOWN AS 2' X 2'. CONTRACTOR MAY USE ALTERNATE SIZES TO PROVIDE 10' (TYP.) OVERALL LENGTH.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

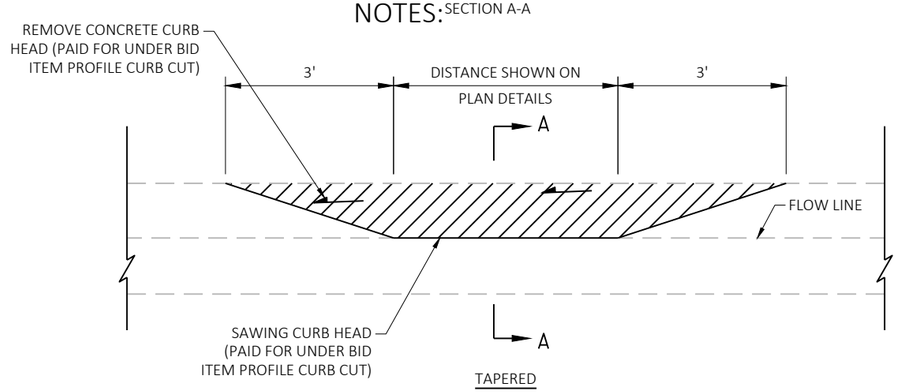


CROSS SECTION C-C

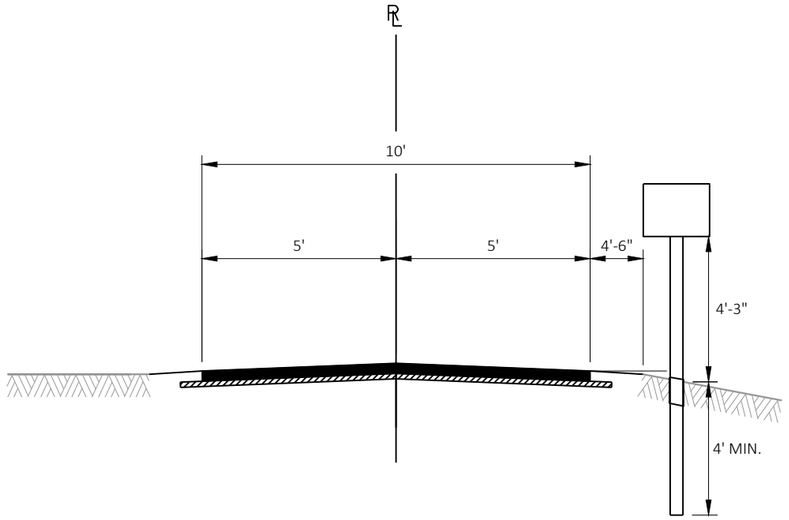
CROSSING APPROACH WITH NO CURB & GUTTER



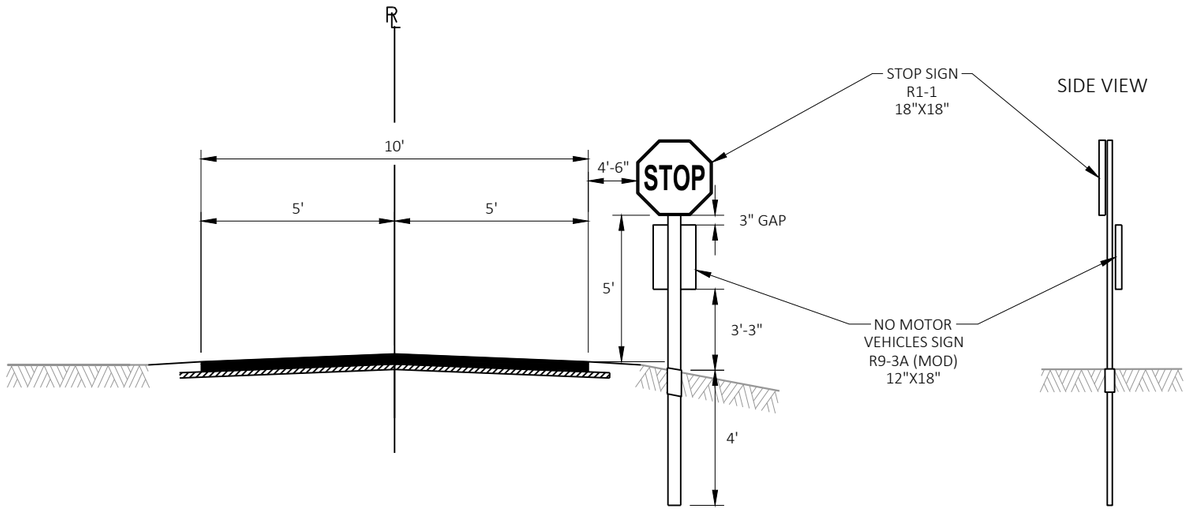
NOTES:



PROFILE CURB CUT DETAIL



TYPICAL TRAIL SIGNAGE LAYOUT



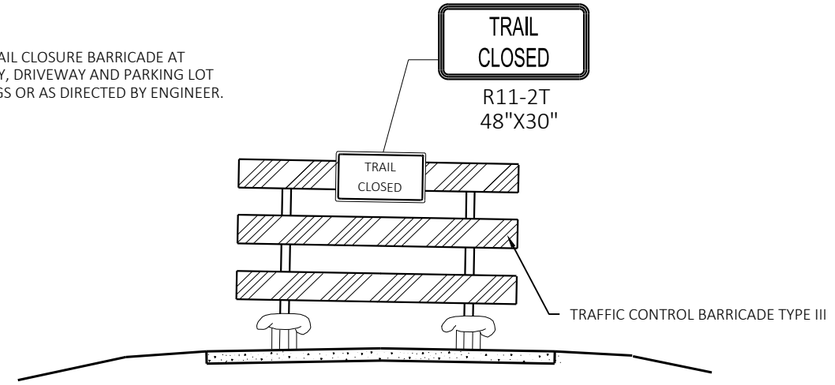
TRAIL ENTRY SIGNAGE DETAIL

GENERAL NOTES

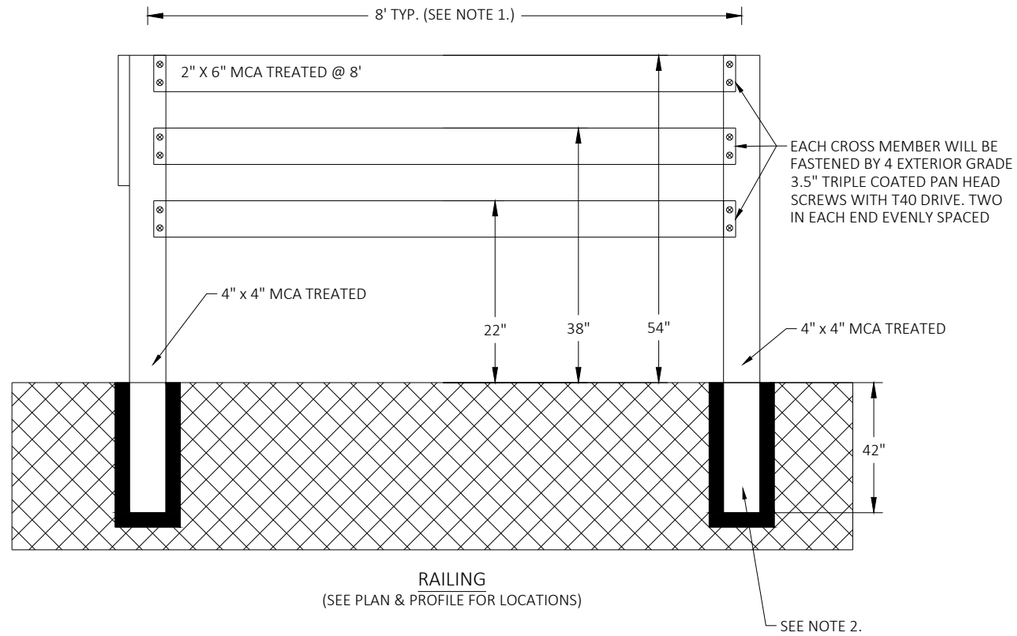
1. ALL UPPER CASE MESSAGES SHALL BE "SERIES E. MODIFIED"
2. DO NOT SCALE.
3. FOR ROADWAY SIGNAGE SEE TYPICAL WISDOT INSTALLATION FOR PERMANENT TYPE II SIGNS ON SINGLE POSTS.
4. TRAIL STOP SIGNS BACKED WITH "NO MOTORIZED VEHICLES" SIGNS SHALL BE INSTALLED PER TRAIL ENTRY SIGNAGE DETAIL.
5. SCREWS FOR SIGNS SHALL BE TAMPER RESISTANT TORX HEAD INSTALLATIONS.

NOTES:

1. PLACE TRAIL CLOSURE BARRICADE AT ROADWAY, DRIVEWAY AND PARKING LOT CROSSINGS OR AS DIRECTED BY ENGINEER.



TRAIL CLOSURE BARRICADE DETAIL

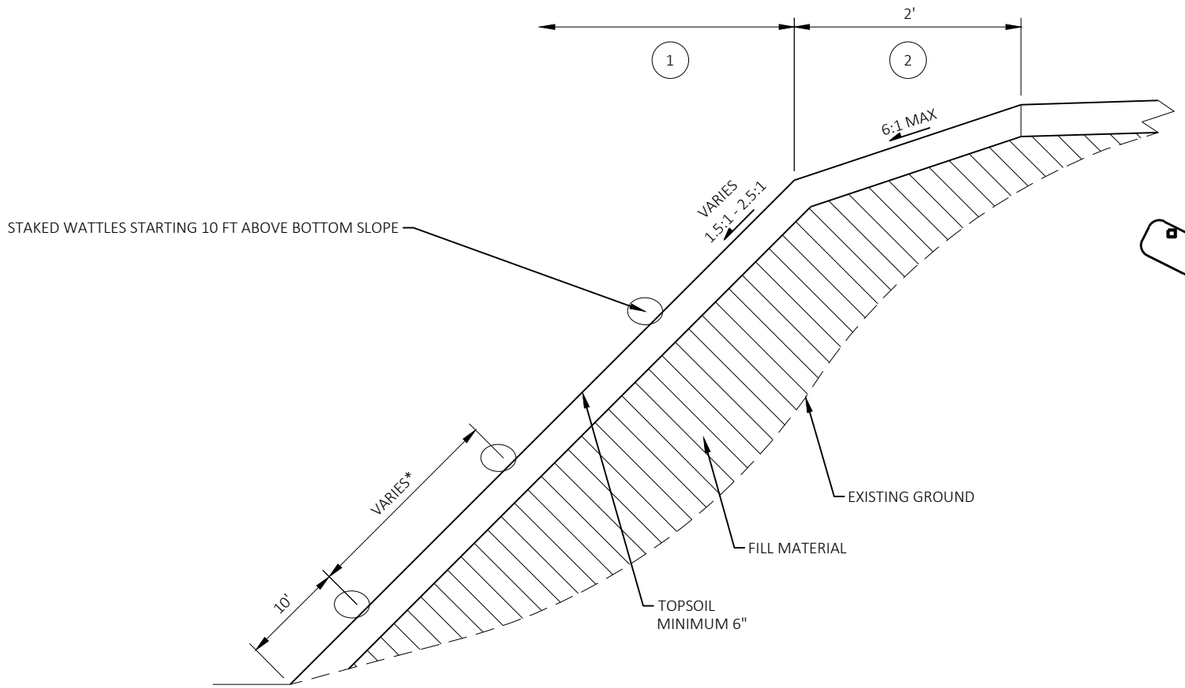


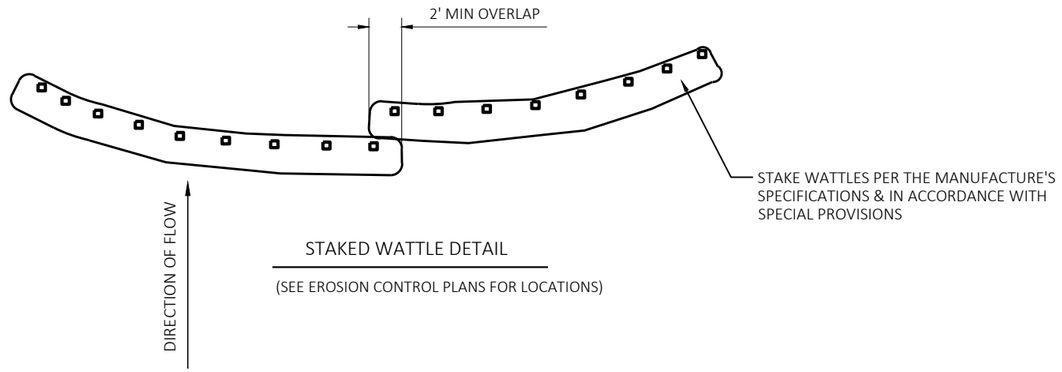
RAILING
(SEE PLAN & PROFILE FOR LOCATIONS)

NOTES:

1. IF REQUIRED BY FIELD CONDITIONS, EXTEND POST SPACING UP TO 10' WIDTH. PLACE POSTS IN CONCRETE. LOCATIONS AS APPROVED BY THE ENGINEER.

2. IF FIELD CONDITIONS DO NOT ALLOW FOR REQUIRED 3.5' INSTALLATION DEPTH, CONTRACTOR SHALL FILL WITH CONCRETE UPON APPROVAL BY THE ENGINEER. ADDITIONAL CONCRETE SHALL BE PAID AS SPV.0060.108 CONCRETE FOOTINGS (CONCRETE BASE).





STAKED WATTLE DETAIL

(SEE EROSION CONTROL PLANS FOR LOCATIONS)

EROSION CONTROL DETAIL FOR STEEP SLOPE AREAS

(1) TOPSOIL, EROSION MAT CLASS II TYPE B, SOIL STABILIZER TYPE B, AND NO. 20 SEED MIXTURE, AT RATE SPECIFIED IN THE SPECIAL PROVISIONS.

(2) TOPSOIL, MULCH, AND NO. 20 SEED MIXTURE AT RATE SPECIFIED IN THE SPECIAL PROVISIONS.

NOTES:

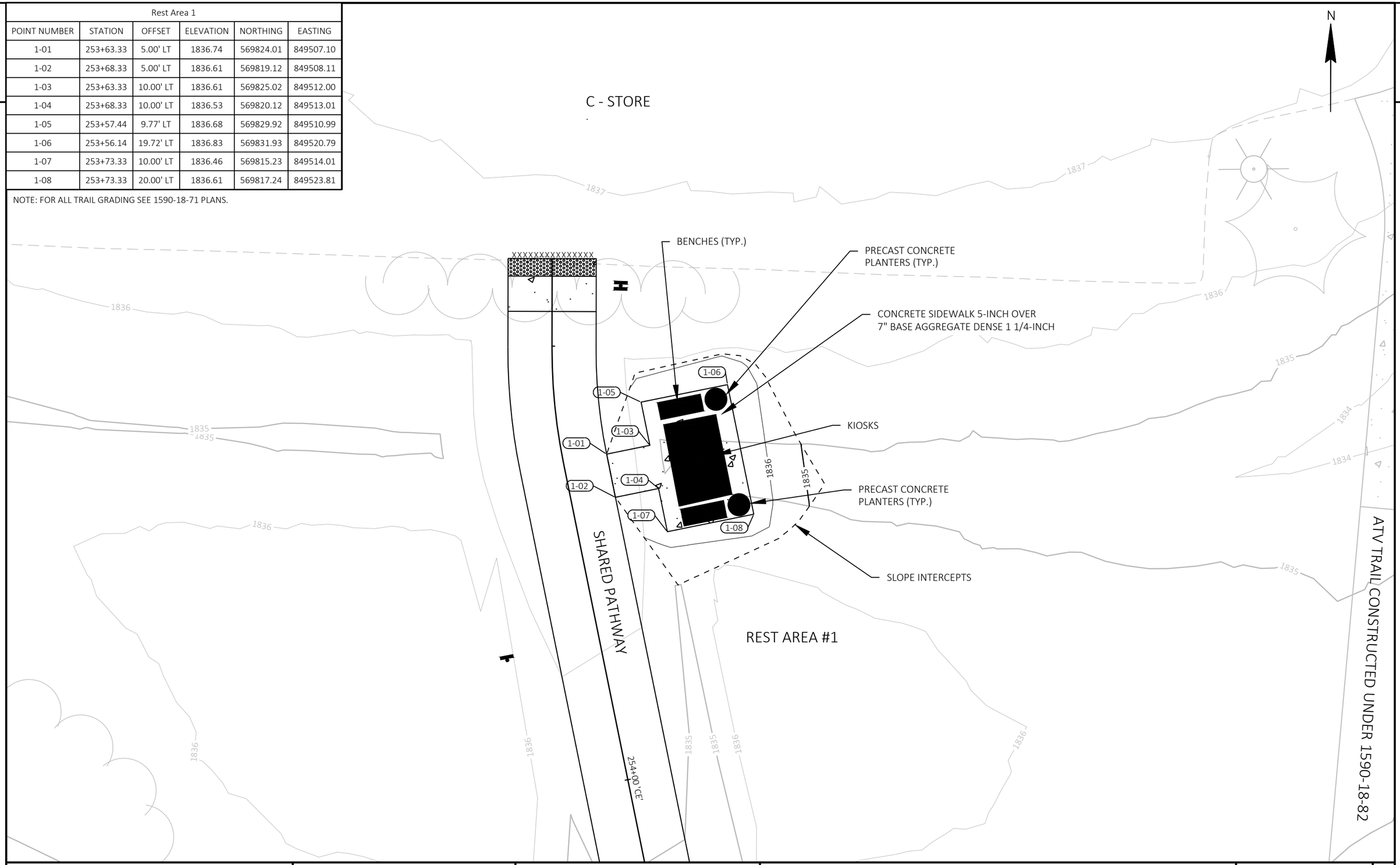
TOPSOIL SHALL NOT BE SCREENED

*SEE 12" DIAMETER MINIMUM STAKED WATTLE SPACING TABLE FOR STAKED WATTLE INTERVALS

12" DIAMETER MINIMUM STAKED WATTLE SPACING TABLE	
SLOPE	MAXIMUM SPACING
1H : 1V	5' - 0"
1.5H : 1V	7' - 6"
2H : 1V	10' - 0"
2.5H : 1V	12' - 6"
3H : 1V	15' - 0"

Rest Area 1					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1-01	253+63.33	5.00' LT	1836.74	569824.01	849507.10
1-02	253+68.33	5.00' LT	1836.61	569819.12	849508.11
1-03	253+63.33	10.00' LT	1836.61	569825.02	849512.00
1-04	253+68.33	10.00' LT	1836.53	569820.12	849513.01
1-05	253+57.44	9.77' LT	1836.68	569829.92	849510.99
1-06	253+56.14	19.72' LT	1836.83	569831.93	849520.79
1-07	253+73.33	10.00' LT	1836.46	569815.23	849514.01
1-08	253+73.33	20.00' LT	1836.61	569817.24	849523.81

NOTE: FOR ALL TRAIL GRADING SEE 1590-18-71 PLANS.



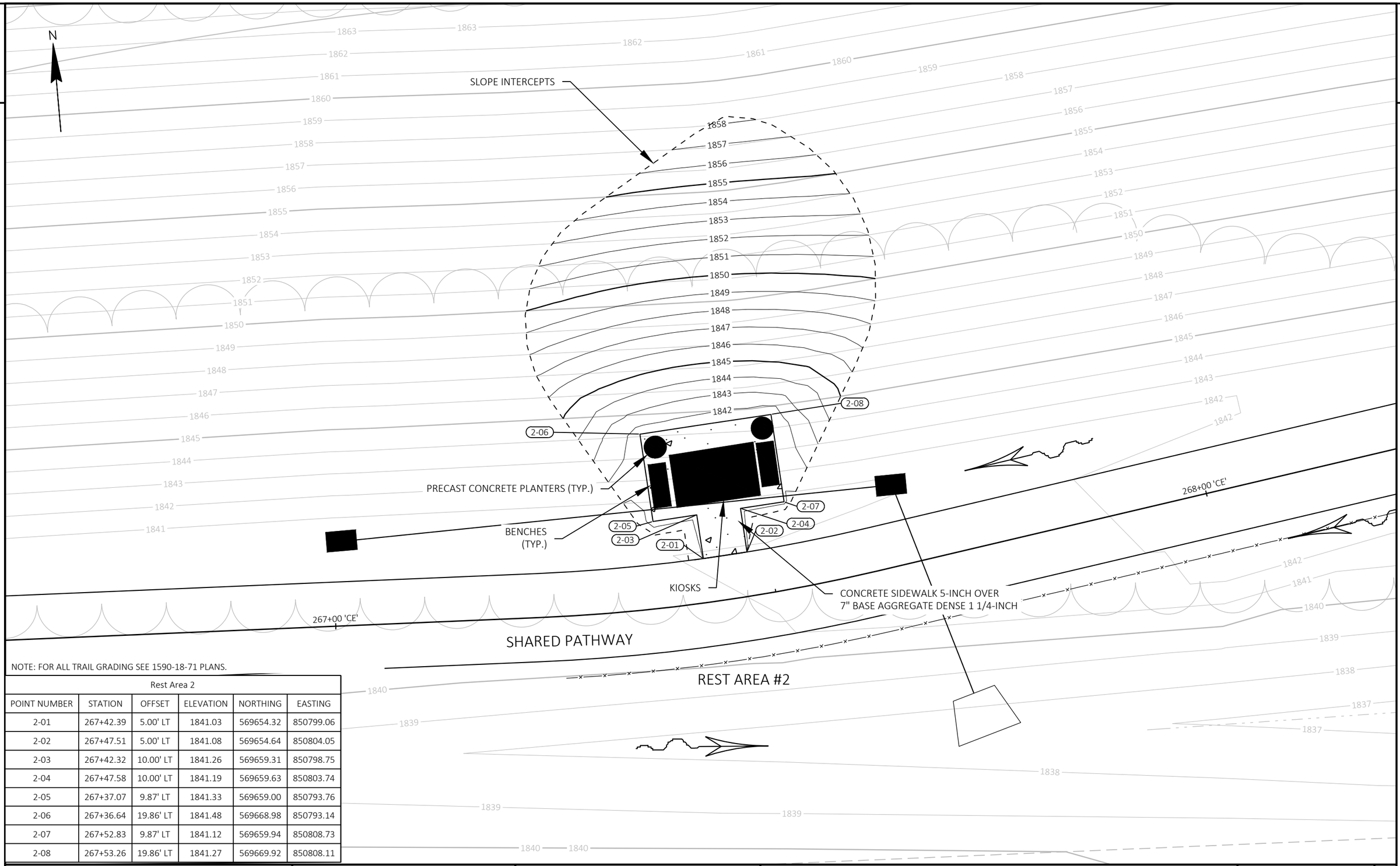
PROJECT NO: 9813-02-70	USH 8 SHARED USE PATHWAY PHASE 1	COUNTY: FOREST	GRADING - SCENIC BYWAYS	SHEET 10	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\022001-GRADING SCENIC BYWAYS.DWG
LAYOUT NAME - 01

PLOT DATE : 12/19/2024 11:21 AM PLOT BY : ARIELLE LEWIEN PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 44

2



NOTE: FOR ALL TRAIL GRADING SEE 1590-18-71 PLANS.

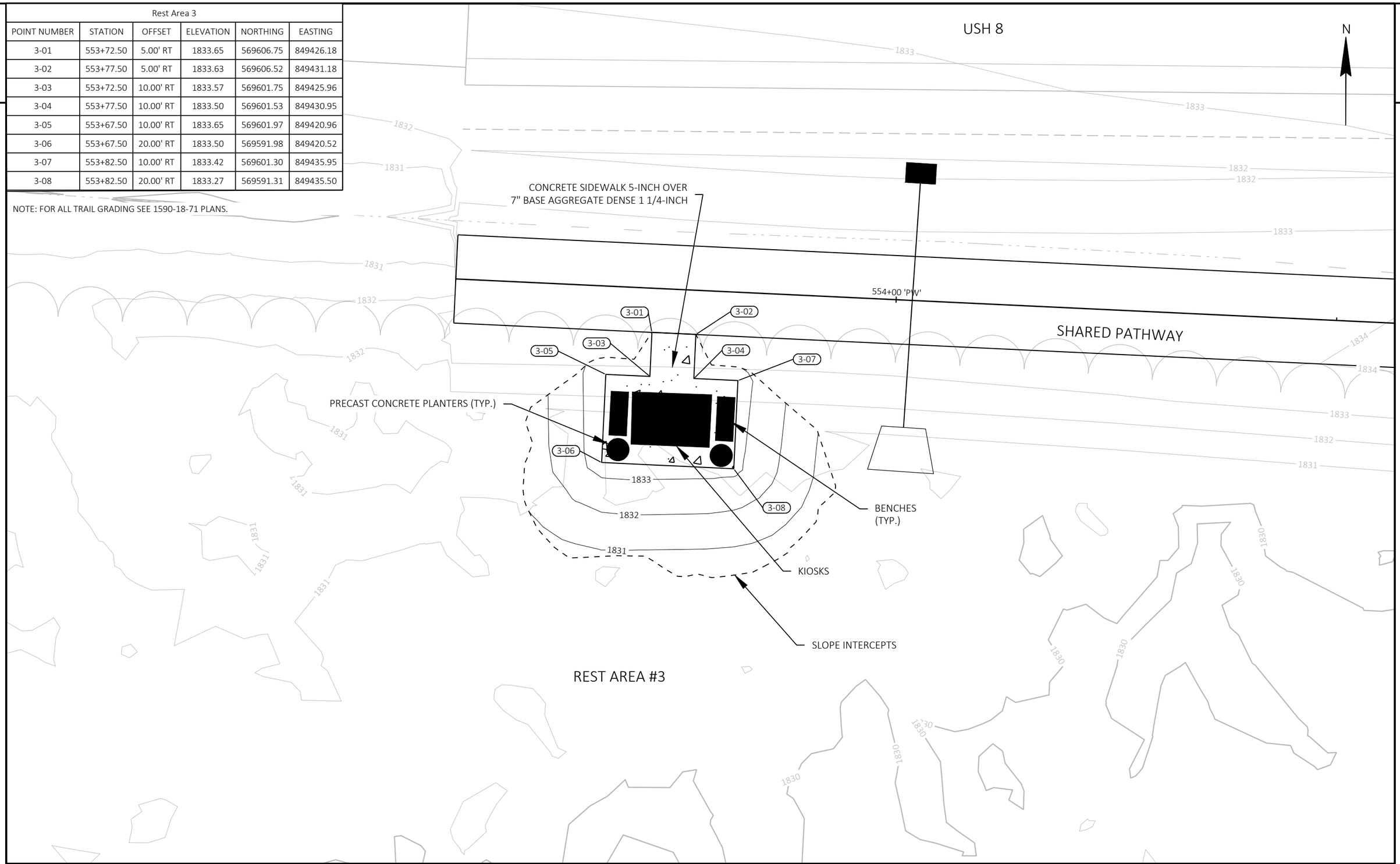
Rest Area 2

POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
2-01	267+42.39	5.00' LT	1841.03	569654.32	850799.06
2-02	267+47.51	5.00' LT	1841.08	569654.64	850804.05
2-03	267+42.32	10.00' LT	1841.26	569659.31	850798.75
2-04	267+47.58	10.00' LT	1841.19	569659.63	850803.74
2-05	267+37.07	9.87' LT	1841.33	569659.00	850793.76
2-06	267+36.64	19.86' LT	1841.48	569668.98	850793.14
2-07	267+52.83	9.87' LT	1841.12	569659.94	850808.73
2-08	267+53.26	19.86' LT	1841.27	569669.92	850808.11

PROJECT NO: 9813-02-70	USH 8 SHARED USE PATHWAY PHASE 1	COUNTY: FOREST	GRADING - SCENIC BYWAYS	SHEET 11	E

Rest Area 3					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
3-01	553+72.50	5.00' RT	1833.65	569606.75	849426.18
3-02	553+77.50	5.00' RT	1833.63	569606.52	849431.18
3-03	553+72.50	10.00' RT	1833.57	569601.75	849425.96
3-04	553+77.50	10.00' RT	1833.50	569601.53	849430.95
3-05	553+67.50	10.00' RT	1833.65	569601.97	849420.96
3-06	553+67.50	20.00' RT	1833.50	569591.98	849420.52
3-07	553+82.50	10.00' RT	1833.42	569601.30	849435.95
3-08	553+82.50	20.00' RT	1833.27	569591.31	849435.50

NOTE: FOR ALL TRAIL GRADING SEE 1590-18-71 PLANS.



REST AREA #3

PROJECT NO: 9813-02-70	USH 8 SHARED USE PATHWAY PHASE 1	COUNTY: FOREST	GRADING - SCENIC BYWAYS	SHEET 12	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\022001-GRADING SCENIC BYWAYS.DWG
LAYOUT NAME - 03

PLOT DATE : 12/19/2024 11:14 AM PLOT BY : ARIELLE LEWIEN PLOT NAME : PLOT SCALE : 1 IN:10 FT

2

Rest Area 4					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
4-01	583+14.90	5.04' RT	1770.85	569474.47	852336.28
4-02	583+20.09	5.00' RT	1770.78	569475.04	852341.26
4-03	583+14.82	10.17' RT	1770.78	569469.37	852336.83
4-04	583+20.18	10.17' RT	1770.71	569469.90	852341.81
4-05	583+09.46	9.99' RT	1770.86	569468.85	852331.86
4-06	583+08.84	19.98' RT	1770.71	569458.90	852332.91
4-07	583+25.54	9.99' RT	1770.63	569470.43	852346.78
4-08	583+26.16	19.98' RT	1770.48	569460.48	852347.83
4-09	583+20.13	7.50' RT	1770.75	569472.56	852341.53
4-10	583+22.67	5.00' RT	1770.70	569475.24	852343.76
4-11	583+22.76	7.46' RT	1770.67	569472.80	852344.02

NOTE: FOR ALL TRAIL GRADING SEE 1590-18-71 PLANS.

2

N

CONCRETE SIDEWALK 5-INCH OVER
7" BASE AGGREGATE DENSE 1 1/4-INCH

SHARED PATHWAY

583+00 'PW'

584+00 'PW'

4-01 4-02 4-03 4-04 4-05 4-06 4-07 4-08 4-09 4-10 4-11

RAILING

BENCHES (TYP.)

PRECAST CONCRETE PLANTERS (TYP.)

KIOSKS

REST AREA #4

1770

1769

1768

1767

1766

1765

1764

1763

1762

1761

1760

1759

1758

1757

1756

1755

1754

PROJECT NO: 9813-02-70	USH 8 SHARED USE PATHWAY PHASE 1	COUNTY: FOREST	GRADING - SCENIC BYWAYS	SHEET 13	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\022001-GRADING SCENIC BYWAYS.DWG
LAYOUT NAME - 04

PLOT DATE : 12/19/2024 11:08 AM PLOT BY : ARIELLE LEWIEN PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 44

2

2

N

FIREKEEPER RD

EXISTING
R/W (TYP.)

R/W (TYP.)

CONSTRUCTION PERMIT
NO ACCESS BEYOND THIS LINE

REST AREA #1

254+00 'CF'

WISCONSIN PUBLIC
SERVICE ELECTRIC

SLOPE INTERCEPT
(TYP.)

WISCONSIN PUBLIC SERVICE
GAS/PETROLEUM

FRONTIER
COMMUNICATIONS

FRONTIER
COMMUNICATIONS

1830.12

1830.32

1830.52

1830.61

1831.00

1830.92

255+00 'CF'

256+00 'CF'

257+00 'CF'

258+00 'CF'

10' ASPHALT
PATH (TYP.)

FOREST COUNTY
POTAWATOMI - STORM

552+00

553+00

554+00

555+00

556+00

557+00

558+00

USH 8/STH 32 CONSTRUCTED UNDER 1590-18-71

554+00 'PW'

555+00 'PW'

556+00 'PW'

557+00 'PW'

558+00 'PW'

REST AREA #3

FRONTIER
COMMUNICATIONS

WETLAND
BOUNDARY
(TYP.)

PROJECT NO: 9813-02-70	USH 8 SHARED PATHWAY PHASE 1	COUNTY: FOREST	FIREKEEPER DRAINAGE GRADING	SHEET 14	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\FIREKEEPER DRAINAGE GRADING.DWG
LAYOUT NAME - FIREKEEPER DRAINAGE GRADING

PLOT DATE : 10/22/2024 11:41 PM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

2

LEGEND

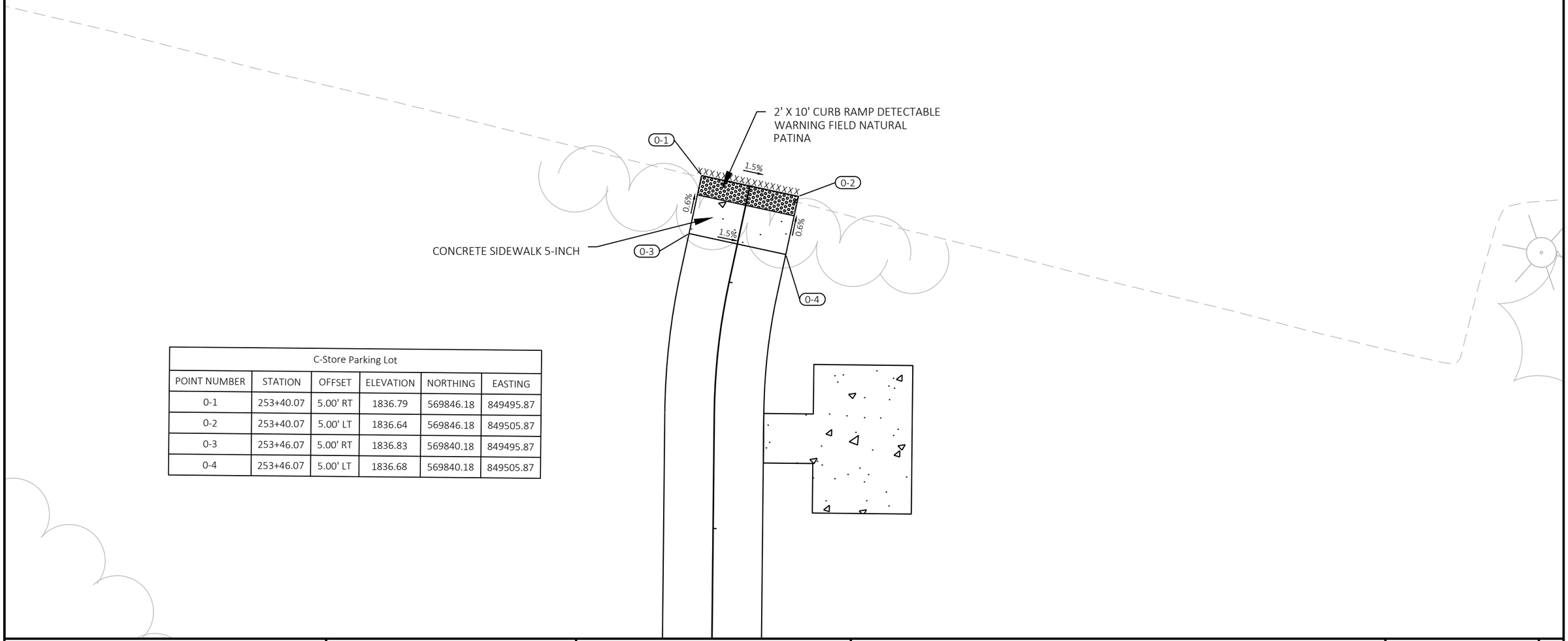
XXXXXX SAWING ASPHALT

XXXXXX SAWING CONCRETE

PROFILE CURB CUT

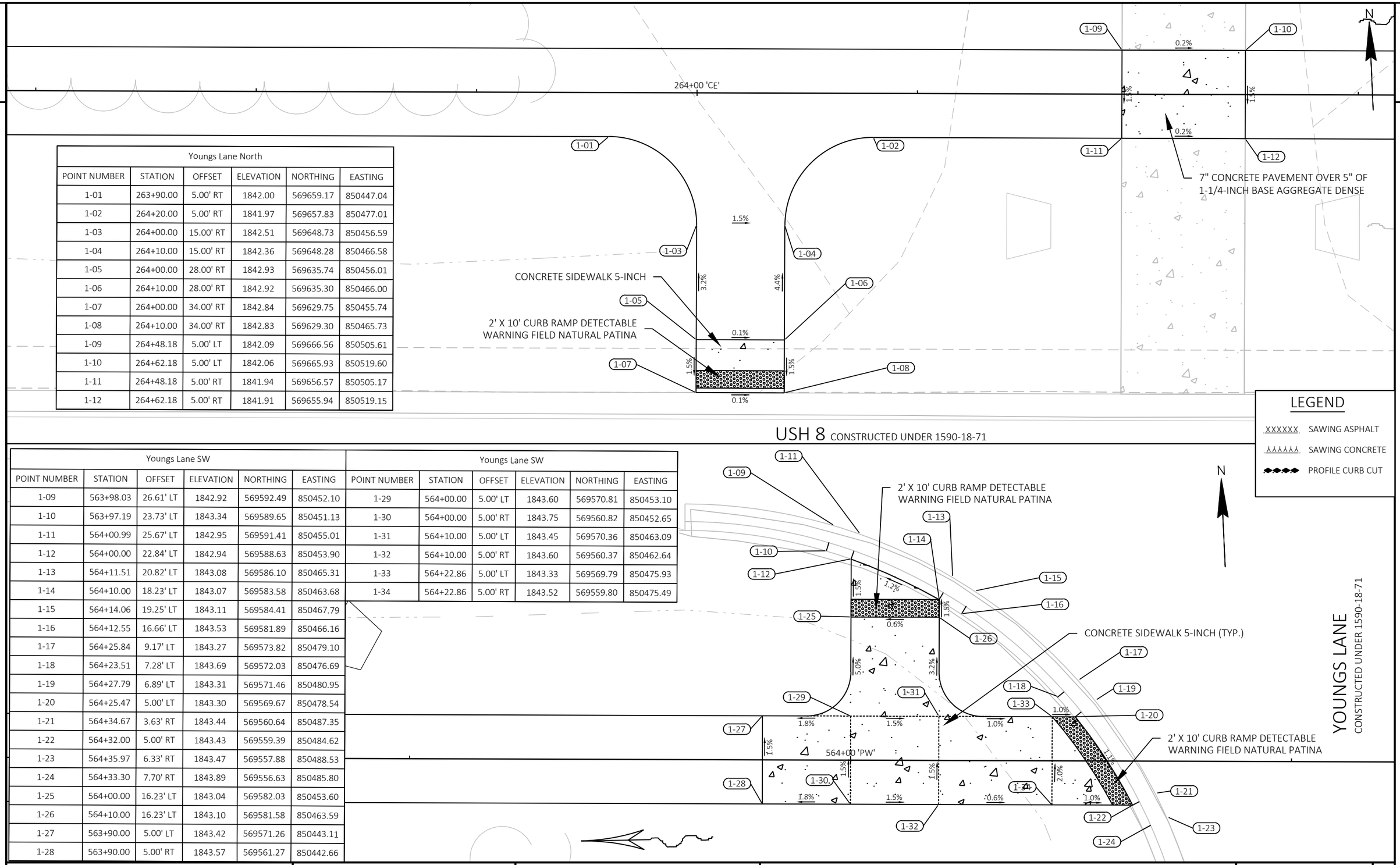
2

C-STORE
PARKING LOT



C-Store Parking Lot					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
0-1	253+40.07	5.00' RT	1836.79	569846.18	849495.87
0-2	253+40.07	5.00' LT	1836.64	569846.18	849505.87
0-3	253+46.07	5.00' RT	1836.83	569840.18	849495.87
0-4	253+46.07	5.00' LT	1836.68	569840.18	849505.87

Youngs Lane North					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1-01	263+90.00	5.00' RT	1842.00	569659.17	850447.04
1-02	264+20.00	5.00' RT	1841.97	569657.83	850477.01
1-03	264+00.00	15.00' RT	1842.51	569648.73	850456.59
1-04	264+10.00	15.00' RT	1842.36	569648.28	850466.58
1-05	264+00.00	28.00' RT	1842.93	569635.74	850456.01
1-06	264+10.00	28.00' RT	1842.92	569635.30	850466.00
1-07	264+00.00	34.00' RT	1842.84	569629.75	850455.74
1-08	264+10.00	34.00' RT	1842.83	569629.30	850465.73
1-09	264+48.18	5.00' LT	1842.09	569666.56	850505.61
1-10	264+62.18	5.00' LT	1842.06	569665.93	850519.60
1-11	264+48.18	5.00' RT	1841.94	569656.57	850505.17
1-12	264+62.18	5.00' RT	1841.91	569655.94	850519.15



Youngs Lane SW					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1-09	563+98.03	26.61' LT	1842.92	569592.49	850452.10
1-10	563+97.19	23.73' LT	1843.34	569589.65	850451.13
1-11	564+00.99	25.67' LT	1842.95	569591.41	850455.01
1-12	564+00.00	22.84' LT	1842.94	569588.63	850453.90
1-13	564+11.51	20.82' LT	1843.08	569586.10	850465.31
1-14	564+10.00	18.23' LT	1843.07	569583.58	850463.68
1-15	564+14.06	19.25' LT	1843.11	569584.41	850467.79
1-16	564+12.55	16.66' LT	1843.53	569581.89	850466.16
1-17	564+25.84	9.17' LT	1843.27	569573.82	850479.10
1-18	564+23.51	7.28' LT	1843.69	569572.03	850476.69
1-19	564+27.79	6.89' LT	1843.31	569571.46	850480.95
1-20	564+25.47	5.00' LT	1843.30	569569.67	850478.54
1-21	564+34.67	3.63' RT	1843.44	569560.64	850487.35
1-22	564+32.00	5.00' RT	1843.43	569559.39	850484.62
1-23	564+35.97	6.33' RT	1843.47	569557.88	850488.53
1-24	564+33.30	7.70' RT	1843.89	569556.63	850485.80
1-25	564+00.00	16.23' LT	1843.04	569582.03	850453.60
1-26	564+10.00	16.23' LT	1843.10	569581.58	850463.59
1-27	563+90.00	5.00' LT	1843.42	569571.26	850443.11
1-28	563+90.00	5.00' RT	1843.57	569561.27	850442.66

Youngs Lane SW					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1-29	564+00.00	5.00' LT	1843.60	569570.81	850453.10
1-30	564+00.00	5.00' RT	1843.75	569560.82	850452.65
1-31	564+10.00	5.00' LT	1843.45	569570.36	850463.09
1-32	564+10.00	5.00' RT	1843.60	569560.37	850462.64
1-33	564+22.86	5.00' LT	1843.33	569569.79	850475.93
1-34	564+22.86	5.00' RT	1843.52	569559.80	850475.49

LEGEND

- XXXXXX SAWING ASPHALT
- XXXXXX SAWING CONCRETE
- PROFILE CURB CUT

PROJECT NO: 9813-02-70	USH 8 SHARED PATHWAY PHASE 1	COUNTY: FOREST	CURB RAMPS	SHEET 16	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\021301_CR.DWG
LAYOUT NAME - 01

PLOT DATE : 10/21/2024 10:18 PM PLOT BY : ARIELLE LEWIEN PLOT NAME : PLOT SCALE : 1 IN:10 FT

2

LEGEND

XXXXXX SAWING ASPHALT

SAWING CONCRETE

PROFILE CURB CUT

USH 8

CONSTRUCTED UNDER 1590-18-71

1566+00

N

1-36
1-35
1-38
1-37
1-44
1-46
1-48

2' X10' CURB RAMP
DETECTABLE
WARNING FIELD
NATURAL PATINA

1.5%
4.5%
0.5%
1.5%
2.0%
1.5%
1.5%
1.5%
3.1%
1.5%
0.5%
1.5%

565+00 'PW'

1-40
1-39
1-41
1-43
1-45
1-47
1-49
1-42

CONCRETE SIDEWALK 5-INCH

566+00 'PW'

YOUNGS LANE

CONSTRUCTED UNDER 1590-18-71

Youngs Lane SE					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1-35	564+75.56	8.95' LT	1843.08	569571.38	850528.76
1-36	564+78.27	7.65' LT	1843.50	569569.96	850531.42
1-37	564+74.16	6.30' LT	1843.12	569568.79	850527.25
1-38	564+76.87	5.00' LT	1843.11	569567.37	850529.89
1-39	564+70.76	4.51' RT	1843.28	569558.14	850523.37
1-40	564+73.72	5.00' RT	1843.27	569557.52	850526.30
1-41	564+70.39	7.49' RT	1843.33	569555.19	850522.86
1-42	564+73.36	7.97' RT	1843.75	569554.58	850525.80
1-43	564+76.87	5.00' RT	1843.32	569557.39	850529.45
1-44	564+78.87	5.00' LT	1843.14	569567.28	850531.89
1-45	564+78.87	5.00' RT	1843.35	569557.29	850531.44
1-46	564+82.87	5.00' LT	1843.32	569567.11	850535.89
1-47	564+82.87	5.00' RT	1843.47	569557.12	850535.44
1-48	565+00.00	5.00' LT	1843.23	569566.34	850553.00
1-49	565+00.00	5.00' RT	1843.38	569556.35	850552.55

PROJECT NO: 9813-02-70	USH 8 SHARED PATHWAY PHASE 1	COUNTY: FOREST	CURB RAMPS	SHEET 17	E

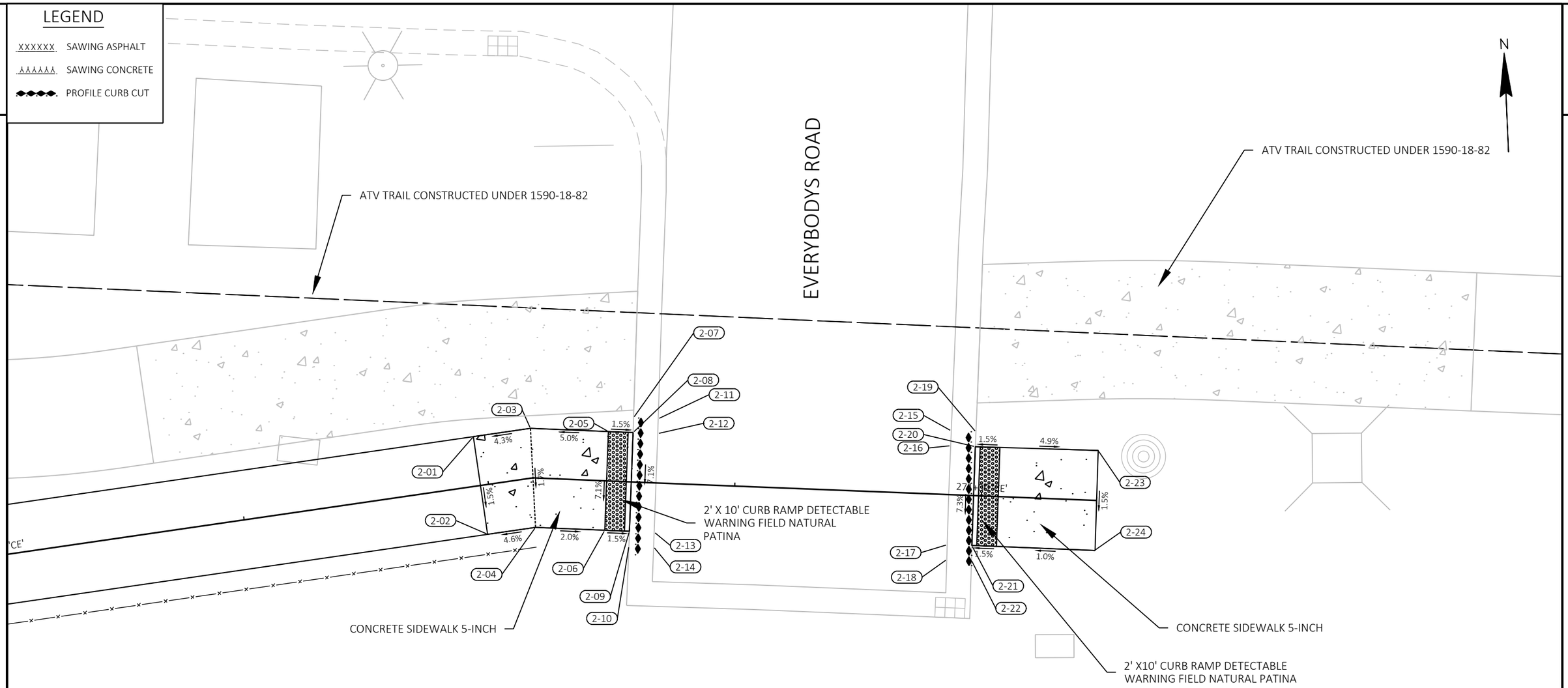
FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\021301_CR.DWG
LAYOUT NAME - 02
PLOT DATE : 10/21/2024 10:06 PM PLOT BY : ARIELLE LEWIEN PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 44

LEGEND

XXXXXX SAWING ASPHALT

SAWING CONCRETE

PROFILE CURB CUT



Everybodys Road West						Everybodys Road West						Everybodys Road East						Everybodys Road East					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
2-01	270+49.18	5.00' LT	1853.11	569697.55	851102.29	2-08	270+64.49	5.00' LT	1853.72	569697.96	851118.46	2-15	270+96.69	6.45' LT	1852.97	569698.13	851150.68	2-20	270+99.18	4.96' LT	1852.82	569696.54	851153.11
2-02	270+49.18	5.00' RT	1852.96	569687.66	851103.73	2-09	270+64.54	5.00' RT	1853.01	569687.97	851118.09	2-16	270+96.69	4.95' RT	1852.89	569696.63	851150.62	2-21	270+99.22	5.06' RT	1852.09	569686.53	851152.76
2-03	270+54.55	5.02' LT	1853.36	569698.40	851108.06	2-10	270+64.54	6.50' RT	1853.41	569686.47	851118.04	2-17	270+96.73	5.07' RT	1852.17	569686.61	851150.27	2-22	270+99.24	6.55' RT	1852.46	569685.04	851152.71
2-04	270+54.08	5.00' RT	1853.19	569688.37	851108.58	2-11	270+66.97	6.50' LT	1853.75	569699.36	851121.00	2-18	270+96.75	6.57' RT	1852.05	569685.11	851150.22	2-23	271+11.63	5.07' LT	1852.38	569696.15	851165.55
2-05	270+61.99	5.00' LT	1853.76	569698.07	851115.96	2-12	270+66.99	5.00' LT	1853.64	569697.86	851120.96	2-19	270+99.18	6.45' LT	1853.39	569698.03	851153.17	2-24	271+11.67	5.05' RT	1852.22	569686.04	851165.19
2-06	270+62.04	5.00' RT	1853.05	569688.07	851115.59	2-13	270+67.03	4.99' RT	1852.93	569687.88	851120.59												
2-07	270+64.47	6.50' LT	1854.33	569699.46	851118.51	2-14	270+67.03	6.49' RT	1852.83	569686.38	851120.54												

PROJECT NO: 9813-02-70	USH 8 SHARED PATHWAY PHASE 1	COUNTY: FOREST	CURB RAMPS	SHEET 18	E

2

LEGEND

XXXXXX SAWING ASPHALT

SAWING CONCRETE

PROFILE CURB CUT

KWE DA KIK LANE
CONSTRUCTED UNDER 1590-18-71

ATV TRAIL CONSTRUCTED UNDER 1590-18-82

N

CONCRETE SIDEWALK 5-INCH

3-01 3-02 3-03 3-04 3-05 3-06 3-07 3-08 3-09 3-10 3-11 3-12 3-13 3-14

1.9% 7.0% 1.5% 2.0%

592+00 'PW'

2' X 10' CURB RAMP
DETECTABLE
WARNING FIELD
NATURAL PATINA

CONCRETE SIDEWALK 5-INCH

3-15 3-16 3-17 3-18 3-19 3-20 3-21 3-22 3-23 3-24 3-25 3-26

4.0% 3.6% 0.8% 1.5%

2' X 10' CURB RAMP
DETECTABLE
WARNING FIELD
NATURAL PATINA

Kwe Da Kik West					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
3-01	591+52.34	5.00' LT	1756.20	569720.87	852960.09
3-02	591+52.34	4.99' RT	1756.35	569711.23	852962.70
3-03	591+57.34	5.00' LT	1756.29	569722.18	852964.91
3-04	591+57.33	5.00' RT	1756.44	569712.53	852967.53
3-05	591+72.93	5.00' LT	1757.38	569726.31	852979.92
3-06	591+72.94	5.00' RT	1757.54	569716.68	852982.60
3-07	591+81.41	7.79' LT	1757.64	569731.28	852987.32

Kwe Da Kik West					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
3-08	591+84.29	6.92' LT	1757.22	569731.22	852990.32
3-09	591+80.48	5.00' LT	1757.27	569728.34	852987.18
3-10	591+83.30	3.96' LT	1757.28	569728.10	852990.17
3-11	591+75.37	5.00' RT	1756.73	569717.34	852984.94
3-12	591+77.85	6.67' RT	1757.51	569716.39	852987.79
3-13	591+73.62	7.43' RT	1757.98	569714.52	852983.91
3-14	591+76.11	9.11' RT	1757.56	569713.58	852986.76

Kwe Da Kik East					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
3-15	592+21.94	6.54' LT	1756.71	569741.22	853026.54
3-16	592+24.68	7.77' LT	1757.14	569743.18	853028.82
3-17	592+23.10	3.77' LT	1756.64	569738.89	853028.43
3-18	592+25.84	5.00' LT	1756.63	569740.85	853030.70
3-19	592+29.35	6.80' RT	1756.32	569730.52	853037.42
3-20	592+31.74	5.00' RT	1756.31	569732.93	853039.20

Kwe Da Kik East					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
3-21	592+31.22	9.15' RT	1756.24	569728.80	853039.88
3-22	592+33.61	7.34' RT	1756.66	569731.22	853041.66
3-23	592+34.27	5.00' LT	1756.29	569743.23	853038.78
3-24	592+34.27	5.00' RT	1756.21	569733.65	853041.63
3-25	592+50.00	5.00' LT	1755.72	569747.74	853053.83
3-26	592+50.00	5.00' RT	1755.57	569738.17	853056.72

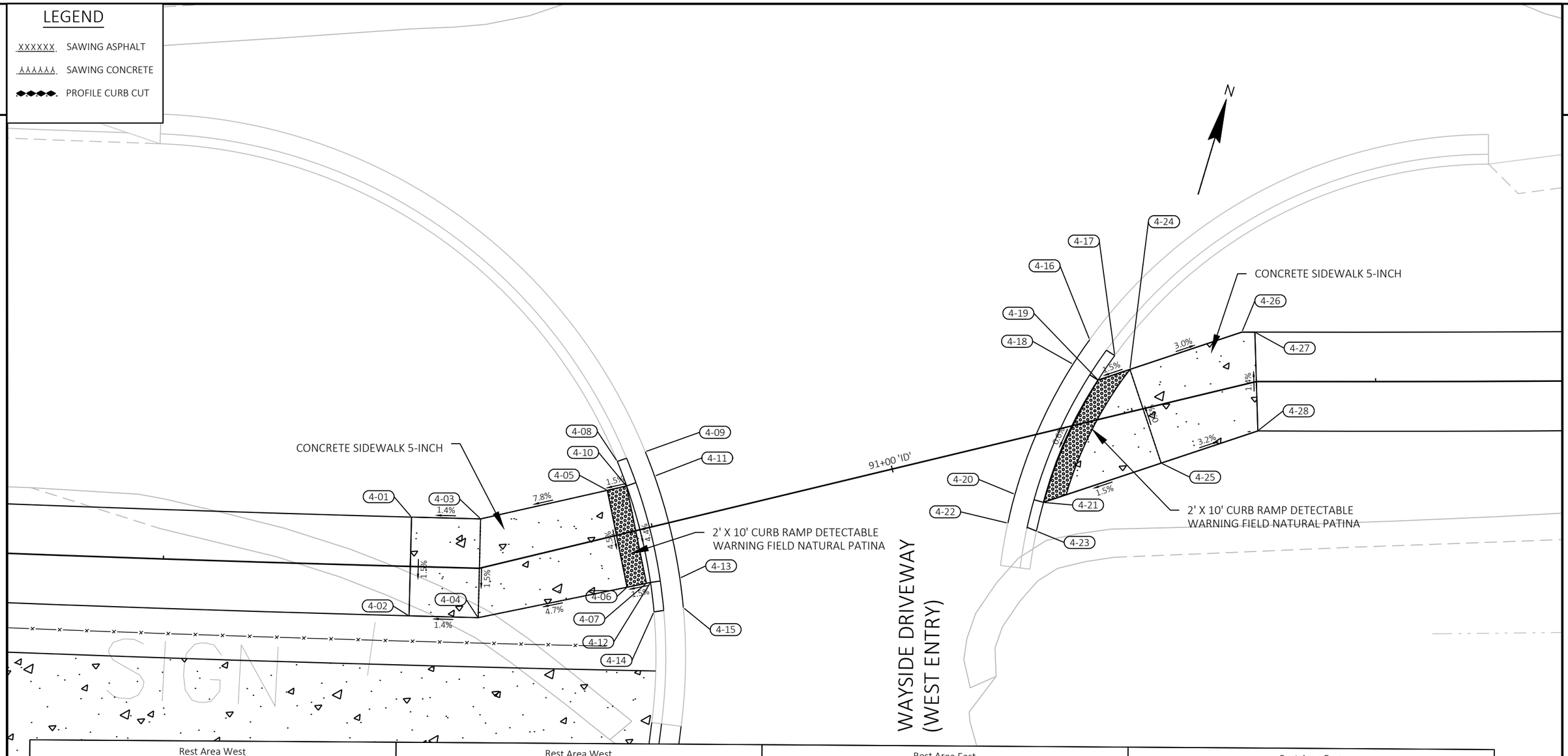
2

LEGEND

XXXXXX SAWING ASPHALT

XXXXXX SAWING CONCRETE

PROFILE CURB CUT



Rest Area West					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
4-01	90+50.00	5.00' LT	1756.74	569604.45	852981.60
4-02	90+50.00	5.00' RT	1756.59	569594.80	852984.19
4-03	90+58.30	4.83' LT	1756.84	569606.28	852988.36
4-04	90+56.99	4.99' RT	1756.69	569596.62	852990.95
4-05	90+71.45	4.65' LT	1757.86	569612.71	852999.83
4-06	90+71.10	5.36' RT	1757.41	569603.87	853004.55
4-07	90+73.10	5.43' RT	1757.44	569604.81	853006.31
4-08	90+73.11	7.25' LT	1758.43	569615.80	852999.96

Rest Area West					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
4-09	90+76.10	7.55' LT	1758.01	569617.55	853002.40
4-10	90+73.45	4.58' LT	1757.91	569613.65	853001.59
4-11	90+76.43	4.93' LT	1757.90	569615.45	853004.00
4-12	90+73.52	5.45' RT	1757.45	569605.01	853006.68
4-13	90+76.50	5.72' RT	1757.46	569606.27	853009.40
4-14	90+73.16	8.42' RT	1757.76	569602.26	853007.86
4-15	90+76.15	8.70' RT	1757.34	569603.52	853010.59

Rest Area East					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
4-16	91+22.50	8.06' LT	1757.10	569641.25	853042.30
4-17	91+24.59	5.91' LT	1757.52	569640.44	853045.18
4-18	91+20.28	6.04' LT	1757.09	569638.39	853041.39
4-19	91+22.37	3.89' LT	1757.08	569637.57	853044.27
4-20	91+11.49	5.40' RT	1757.01	569624.09	853039.51
4-21	91+14.11	6.86' RT	1757.00	569624.13	853042.51
4-22	91+10.11	8.06' RT	1757.00	569621.09	853039.65

Rest Area East					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
4-23	91+12.73	9.52' RT	1756.42	569621.14	853042.65
4-24	91+25.76	4.18' LT	1757.13	569639.52	853047.06
4-25	91+26.62	5.78' RT	1757.19	569631.34	853052.80
4-26	91+37.67	5.21' LT	1756.77	569646.39	853056.85
4-27	91+37.92	5.00' LT	1756.73	569646.76	853058.11
4-28	91+36.90	4.90' RT	1756.86	569637.25	853061.25

SIGN

PROJECT NO: 9813-02-70	USH 8 SHARED PATHWAY PHASE 1	COUNTY: FOREST	CURB RAMPS	SHEET 20	E

2

LEGEND

XXXXXX SAWING ASPHALT

SAWING CONCRETE

PROFILE CURB CUT

1594+00

15

USH 8

CONSTRUCTED UNDER 1590-18-71

N

5-01 5-02 5-03 5-04 5-05 5-06 5-07 5-08 5-09 5-10 5-11 5-12 5-13 5-14

1.5% 1.0% 1.5% 1.5% 0.9% 1.5% 2.5% 1.5% 0.3%

95+00 'ID'

2' X 10' CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA

CONCRETE SIDEWALK 5-INCH

WAYSIDE DRIVEWAY (EAST ENTRY)

5-15 5-16 5-17 5-18 5-19 5-20 5-21 5-22 5-23 5-24 5-25 5-26 5-27

5.0% 1.5% 1.0% 0.2% 1.5% 1.8% 5.0% 5.0%

2' X 10' CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA

CONCRETE SIDEWALK 5-INCH

96+00 'ID'

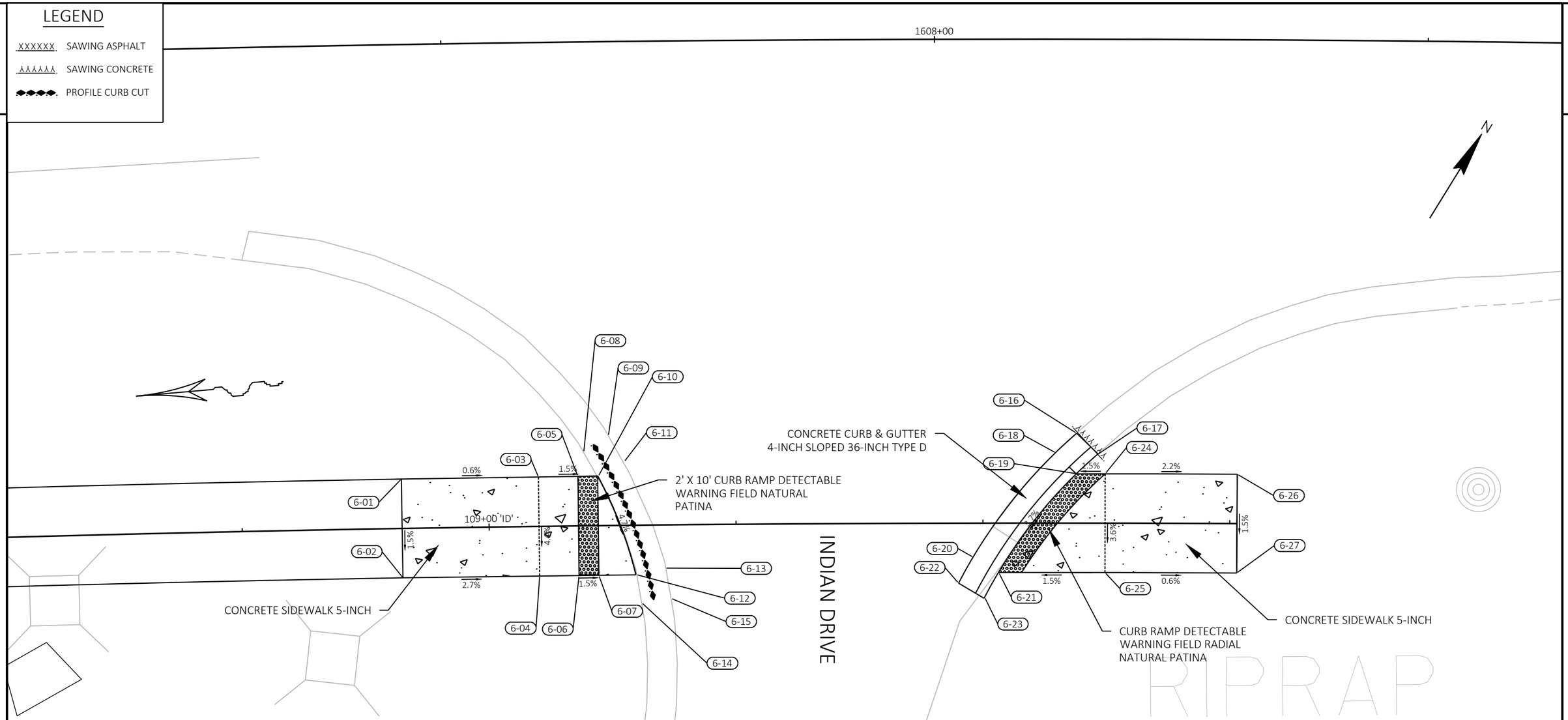
2

RA DW West						RA DW West						RA DW East						RA DW East					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
5-01	95+17.82	5.00' LT	1749.31	569773.18	853415.77	5-08	95+36.42	9.04' LT	1749.07	569784.07	853431.34	5-15	95+83.56	9.10' LT	1746.88	569802.66	853474.53	5-22	95+78.48	7.83' RT	1747.87	569785.11	853476.63
5-02	95+17.84	5.00' RT	1749.46	569763.95	853419.62	5-09	95+35.39	5.00' LT	1749.07	569779.94	853431.95	5-16	95+86.07	7.45' LT	1747.30	569802.15	853477.48	5-23	95+84.35	5.00' RT	1747.25	569790.06	853480.89
5-03	95+29.38	5.00' LT	1749.14	569777.62	853426.42	5-10	95+38.00	6.48' LT	1749.08	569782.32	853433.78	5-17	95+81.83	6.64' LT	1747.24	569799.72	853473.93	5-24	95+86.35	5.00' LT	1747.13	569800.02	853478.72
5-04	95+29.39	5.00' RT	1749.29	569768.40	853430.30	5-11	95+39.48	5.00' RT	1749.10	569772.32	853439.61	5-18	95+84.34	5.00' LT	1747.23	569799.21	853476.88	5-25	95+86.35	5.00' RT	1747.29	569790.85	853482.73
5-05	???	???' ???	1749.10	569779.17	853430.11	5-12	95+42.38	4.23' RT	1749.11	569774.15	853441.98	5-19	95+76.56	4.00' RT	1747.35	569787.85	853473.34	5-26	95+91.35	5.00' LT	1747.05	569802.02	853483.30
5-06	???	???' ???	1749.19	569769.95	853433.99	5-13	95+40.13	7.86' RT	1747.72	569769.94	853441.32	5-20	95+79.38	5.00' RT	1747.34	569788.06	853476.33	5-27	95+91.33	5.00' RT	1746.90	569792.86	853487.30
5-07	95+33.81	7.55' LT	1749.49	569781.68	853429.52	5-14	95+43.07	7.30' RT	1749.12	569771.60	853443.82	5-21	95+75.62	6.92' RT	1747.45	569784.81	853473.65						

PROJECT NO: 9813-02-70	USH 8 SHARED PATHWAY PHASE 1	COUNTY: FOREST	CURB RAMPS	SHEET 21	E

LEGEND

- XXXXXX SAWING ASPHALT
- SAWING CONCRETE
- PROFILE CURB CUT



Indian Drive West					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
6-01	108+91.19	5.00' LT	1694.61	570495.68	854577.66
6-02	108+91.19	5.00' RT	1694.46	570487.27	854583.05
6-03	109+05.06	5.00' LT	1694.53	570503.16	854589.36
6-04	109+05.05	5.00' RT	1694.09	570494.71	854594.72
6-05	609+69.49	92.99' RT	1694.47	570505.31	854592.73
6-06	609+69.48	103.03' RT	1694.03	570496.83	854598.10
6-07	609+71.53	103.03' RT	1694.00	570497.90	854599.79
6-08	109+09.67	7.43' LT	1695.03	570507.69	854591.95

Indian Drive West					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
6-09	109+12.18	9.06' LT	1694.61	570510.41	854593.21
6-10	109+11.11	5.00' LT	1694.44	570506.41	854594.48
6-11	109+13.74	6.44' LT	1694.45	570509.03	854595.93
6-12	109+14.85	5.00' RT	1693.94	570499.96	854602.99
6-13	109+17.79	4.37' RT	1693.95	570502.06	854605.13
6-14	109+15.36	7.85' RT	1694.24	570497.82	854604.94
6-15	109+18.34	7.44' RT	1693.82	570499.76	854607.23

Indian Drive East					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
6-16	109+59.48	9.10' LT	1693.82	570535.56	854633.40
6-17	109+61.47	6.86' LT	1694.05	570534.71	854636.27
6-18	109+57.37	7.11' LT	1693.76	570532.76	854632.64
6-19	109+59.50	5.00' LT	1693.75	570532.08	854635.56
6-20	109+49.03	3.46' RT	1693.28	570519.38	854631.10
6-21	109+51.60	5.00' RT	1693.28	570519.43	854634.10

Indian Drive East					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
6-22	109+47.52	6.08' RT	1693.24	570516.37	854631.20
6-23	109+50.17	7.50' RT	1693.32	570516.55	854634.20
6-24	109+62.37	5.00' LT	1693.79	570533.59	854638.01
6-25	109+62.37	5.00' RT	1693.44	570525.07	854643.25
6-26	109+75.73	5.00' LT	1693.51	570540.58	854649.42
6-27	109+75.73	5.00' RT	1693.36	570532.04	854654.63

2

LEGEND

XXXXXX SAWING ASPHALT

XXXXXX SAWING CONCRETE

PROFILE CURB CUT

ATV TRAIL CONSTRUCTED UNDER 1590-18-82

BUG LAKE ROAD

N

CONCRETE SIDEWALK 5-INCH

7-03

7-01

3.5%

3.5%

7-05

611+00 'PW'

1.5%

1.3%

1.3%

2.7%

CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA

7-02

3.5%

7-06

7-04

7-07

1.8%

1.8%

7-09

CONCRETE SIDEWALK 5-INCH

7-11

1.4%

0.6%

1.5%

612+00 'PW'

7-08

7-12

1.8%

1.8%

7-10

CURB RAMP DETECTABLE WARNING FIELD RADIAL NATURAL PATINA

POST

1609+00

Bug Lake Road West					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
7-01	611+03.80	5.00' LT	1694.75	570658.12	854655.01
7-02	611+03.80	5.00' RT	1694.60	570649.50	854660.07
7-03	611+06.16	5.00' LT	1694.66	570659.31	854657.04
7-04	611+06.15	5.00' RT	1694.53	570650.68	854662.09
7-05	611+17.27	5.00' LT	1694.27	570664.93	854666.64
7-06	611+08.78	5.00' RT	1694.44	570652.01	854664.35

Bug Lake Road East					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
7-07	611+44.38	5.00' LT	1693.84	570678.51	854690.15
7-08	611+39.71	5.00' RT	1694.00	570667.51	854691.08
7-09	611+46.38	5.00' LT	1693.81	570679.50	854691.89
7-10	611+46.38	5.00' RT	1693.88	570670.82	854696.86
7-11	611+52.74	5.00' LT	1693.92	570682.66	854697.42
7-12	611+52.77	5.00' RT	1693.77	570673.99	854702.40

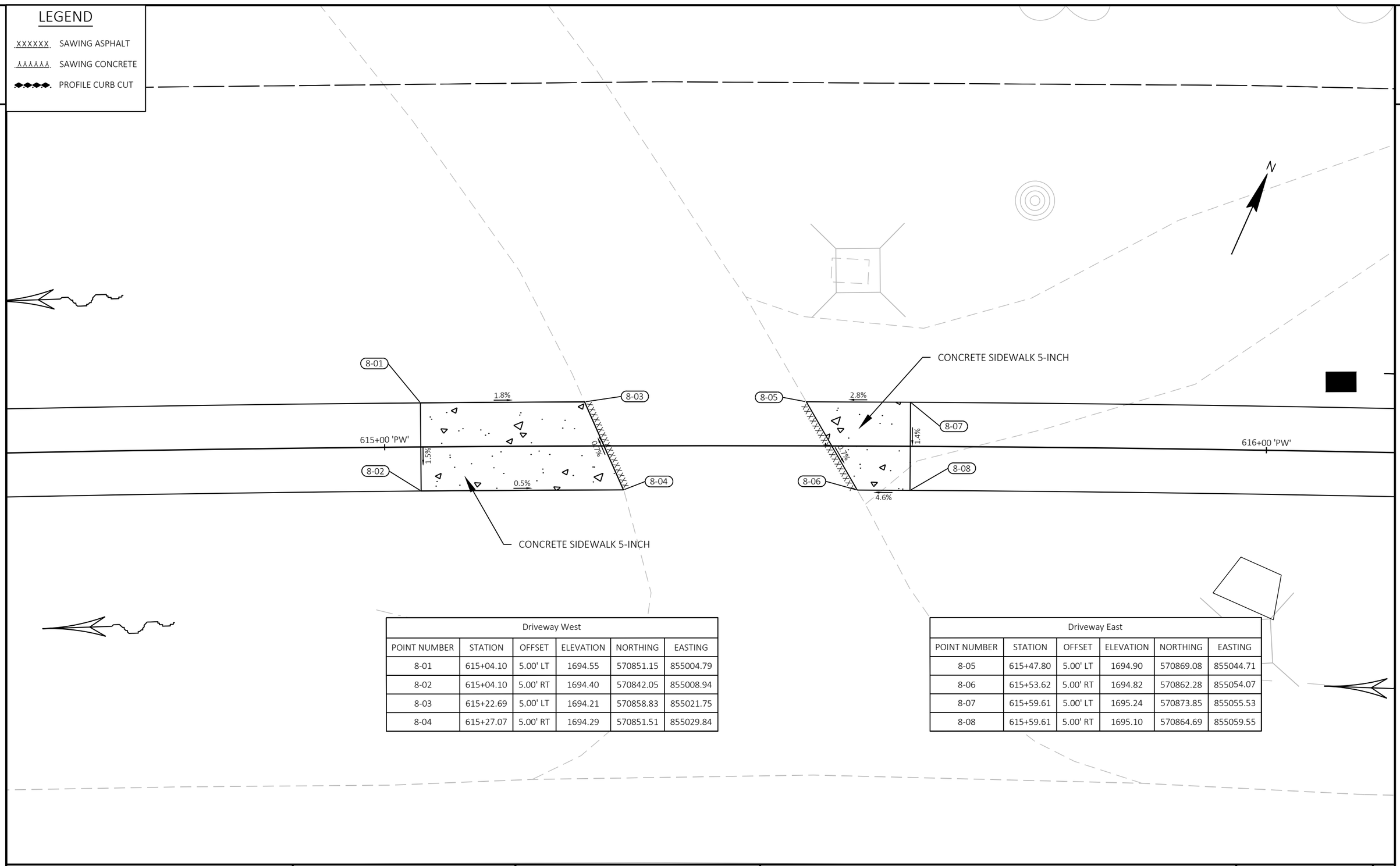
2

LEGEND

XXXXXX SAWING ASPHALT

SAWING CONCRETE

PROFILE CURB CUT



Driveway West					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
8-01	615+04.10	5.00' LT	1694.55	570851.15	855004.79
8-02	615+04.10	5.00' RT	1694.40	570842.05	855008.94
8-03	615+22.69	5.00' LT	1694.21	570858.83	855021.75
8-04	615+27.07	5.00' RT	1694.29	570851.51	855029.84

Driveway East					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
8-05	615+47.80	5.00' LT	1694.90	570869.08	855044.71
8-06	615+53.62	5.00' RT	1694.82	570862.28	855054.07
8-07	615+59.61	5.00' LT	1695.24	570873.85	855055.53
8-08	615+59.61	5.00' RT	1695.10	570864.69	855059.55

LEGEND

- XXXXXX SAWING ASPHALT
- XXXXXX SAWING CONCRETE
- PROFILE CURB CUT

LOVE KNOT LANE
CONSTRUCTED UNDER 1590-18-71

N

CONCRETE SIDEWALK 5-INCH

9-03

9-01

9-02

9-04

9-05

9-06

623+00 'PW'

1.0%

1.5%

1.5%

1.5%

1.5%

1.5%

1.2%

1.8%

CURB RAMP DETECTABLE
WARNING FIELD RADIAL
NATURAL PATINA

2' X 10' CURB RAMP DETECTABLE
WARNING FIELD NATURAL
PATINA

CONCRETE SIDEWALK 5-INCH

9-09

9-07

9-08

9-11

9-10

9-12

1.5%

1.5%

1.5%

1.5%

1.96%

2.5%

1.5%

3.0%

SIGN

Love Knot Lane West						Love Knot Lane East					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
9-01	623+04.14	5.00' LT	1703.61	571096.28	855764.17	9-07	623+56.15	5.00' LT	1703.71	571107.39	855815.05
9-02	623+04.17	5.00' RT	1703.46	571086.54	855766.40	9-08	623+59.74	5.00' RT	1703.51	571098.35	855820.62
9-03	623+10.18	5.00' LT	1703.67	571097.61	855770.07	9-09	623+61.73	5.00' LT	1703.79	571108.54	855820.52
9-04	623+10.17	5.00' RT	1703.55	571087.85	855772.24	9-10	623+61.74	5.00' RT	1703.54	571098.76	855822.58
9-05	623+18.54	5.00' LT	1703.80	571099.43	855778.25	9-11	623+68.96	5.10' LT	1703.90	571110.05	855827.76
9-06	623+12.68	5.00' RT	1703.59	571088.39	855774.69	9-12	623+68.96	4.90' RT	1703.75	571100.20	855829.49

2

FIREKEEPER RD

SIGN

SIGN

SIGN

XXX

NO MOTOR VEHICLES
R9-3 (MOD)
12"X18"
1-02

W1-2L
18"X18"
1-01

50' MIN TO PC

STOP
R1-1
18"X18"
1-03

W1-2R
18"X18"
1-17

ATV TRAIL CONSTRUCTED UNDER 1590-18-82

50' MIN TO PT

253+00 'CE'

254+00 'CE'

256+00 'CE'

257+00 'CE'

258+00 'CE'

N

2

MATCH LINE 559+00 'PW'

USH 8/STH 32 CONSTRUCTED UNDER 1590-18-71

554+00 'PW'

555+00 'PW'

556+00 'PW'

557+00 'PW'

558+00 'PW'

LEGEND

1 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)

2 MARKING CROSSWALK EPOXY BLOCK STYLE 24-INCH (WHITE)

PROPOSED SIGN MOUNTED ON POST(S)

EXISTING SIGN TO BE MOVED OR REMOVED

X-XX POST NUMBER
R - REMOVING
M - MOVING

PROPOSED RAILING

ATV TRAIL CONSTRUCTED UNDER 1590-18-82

W3-1
36"X36"
1-05

W11-15
30"X30"
W16-7L
24"X12"
1-06

STOP
R1-1
18"X18"
1-07

SIGN

NO MOTOR VEHICLES
R9-3 (MOD)
12"X18"
1-08

W11-15
30"X30"
W16-7L
24"X12"
1-09

NO MOTOR VEHICLES
R9-3 (MOD)
12"X18"
1-10

W11-15
30"X30"
AHEAD
W16-9P
24"X12"
1-11

N

MATCH LINE 559+00 'PW'

1-04

W11-15
30"X30"
AHEAD
W16-9P
24"X12"

USH 8/STH 32 CONSTRUCTED UNDER 1590-18-71

460' MIN

460' MIN

2

STOP
R1-1
18"X18"
1-14

1

1-16

STOP
R1-1
18"X18"

260+00 'CE'

261+00 'CE'

262+00 'CE'

263+00 'CE'

264+00 'CE'

265+00 'CE'

560+00 'PW'

561+00 'PW'

562+00 'PW'

563+00 'PW'

564+00 'PW'

565+00 'PW'

200'

1-13

STOP
R1-1
18"X18"
1-12

NO MOTOR VEHICLES
R9-3 (MOD)
12"X18"

YOUNGS LN

NO MOTOR VEHICLES
R9-3 (MOD)
12"X18"
1-15

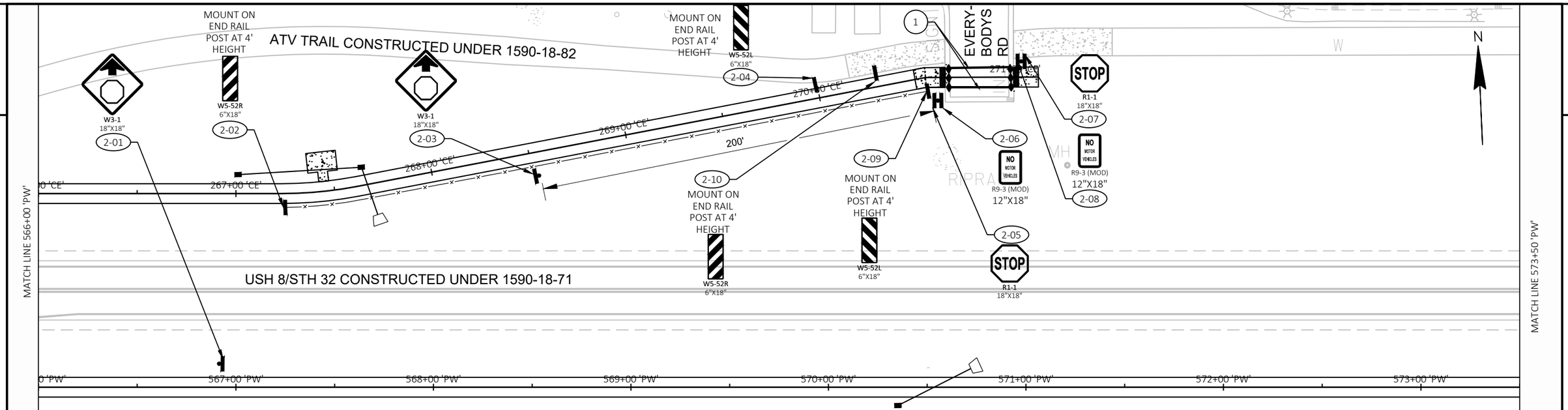
MATCH LINE 566+00 'PW'

PROJECT NO: 9813-02-70	USH 8 SHARED PATHWAY PHASE 1	COUNTY: FOREST	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET 26	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 01

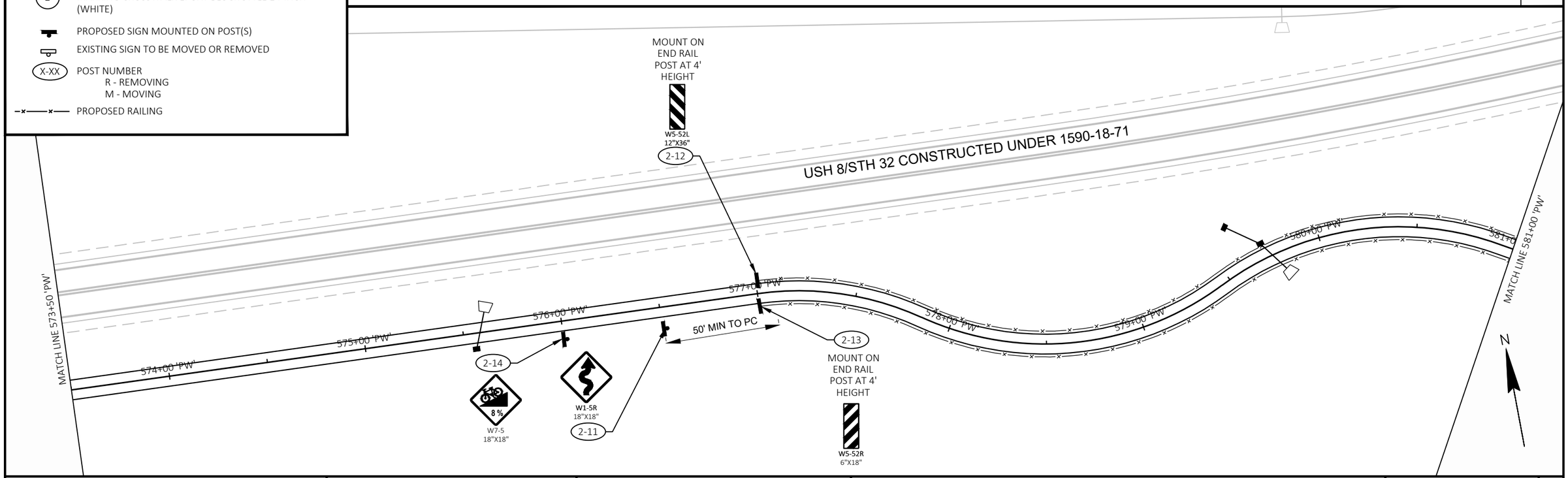
PLOT DATE : 10/31/2024 9:54 AM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44



LEGEND

- (1) MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
- (2) MARKING CROSSWALK EPOXY BLOCK STYLE 24-INCH (WHITE)
- PROPOSED SIGN MOUNTED ON POST(S)
- EXISTING SIGN TO BE MOVED OR REMOVED
- (X-XX) POST NUMBER
  - R - REMOVING
  - M - MOVING
- PROPOSED RAILING



PROJECT NO: 9813-02-70	USH 8 SHARED PATHWAY PHASE 1	COUNTY: FOREST	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET 27	E

2

ATV TRAIL CONSTRUCTED UNDER 1590-18-82

USH 8/STH 32 CONSTRUCTED UNDER 1590-18-71

MATCH LINE 581+00 'PW'

MATCH LINE 589+50

MATCH LINE 589+50

MATCH LINE 594+50

KWE DA KIK LN

50' MIN TO PC

200'

SIGN

N

MOUNT ON END RAIL POST AT 4' HEIGHT

W5-52L 6"X18"

W5-52R 6"X18"

R9-3 (MOD) 12"X18"

R1-1 18"X18"

W1-5R 18"X18"

W3-1 18"X18"

3-01 3-02 3-03 3-04 3-05 3-06 3-07 3-08 3-09 3-10 3-11 3-12 3-13 3-14 3-15 3-16 3-17 3-18 3-19 3-20 3-21 3-22 3-23 3-24 3-25 3-26 3-27 3-28 3-29 3-30 3-31

582+00 'PW' 583+00 'PW' 584+00 'PW' 585+00 'PW' 586+00 'PW' 587+00 'PW' 588+00 'PW' 589+00 'PW'

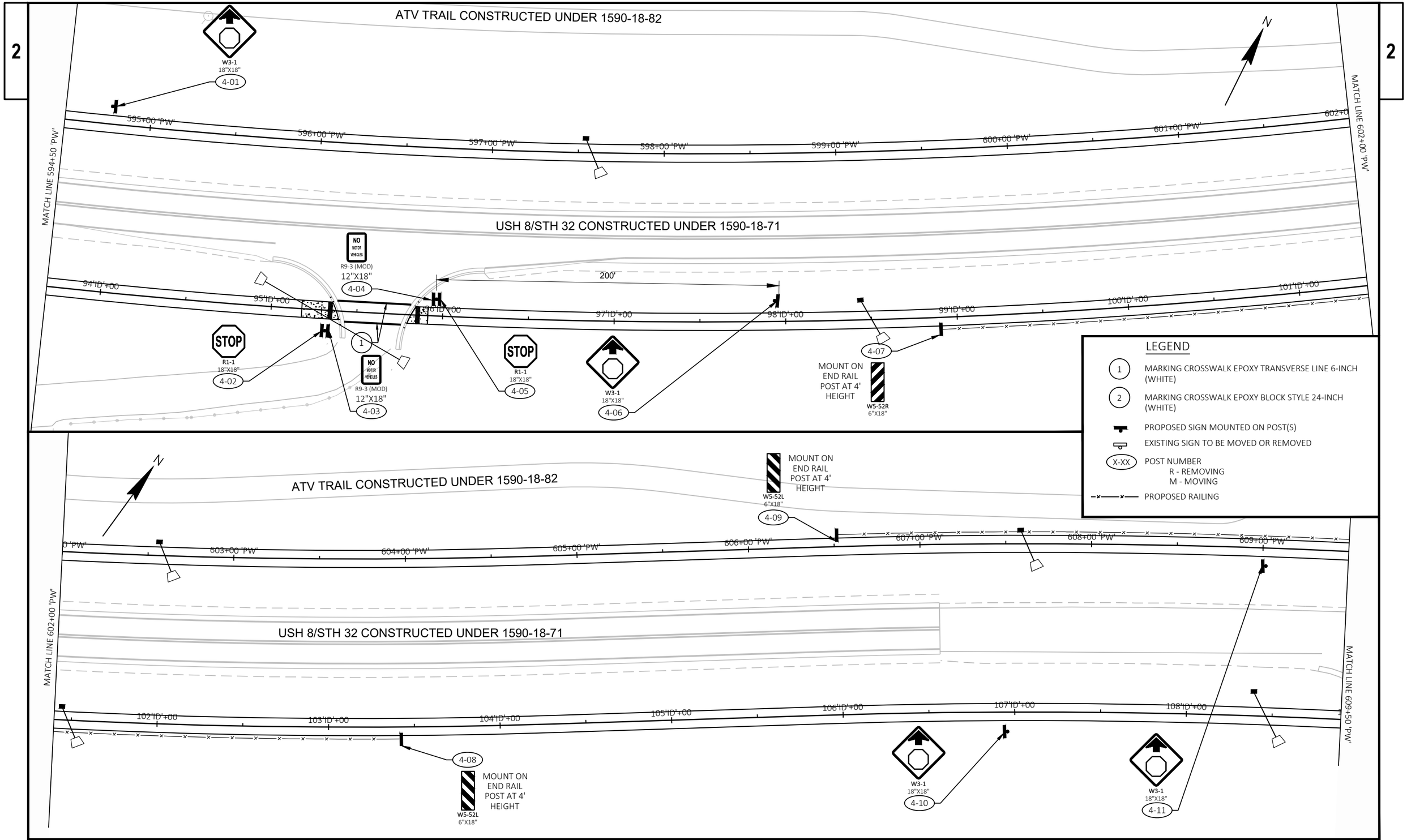
590+00 'PW' 591+00 'PW' 592+00 'PW' 593+00 'PW' 594+00 'PW'

89'ID'+00 90'ID'+00 91'ID'+00 92'ID'+00 93'ID'+00

LEGEND

1	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
2	MARKING CROSSWALK EPOXY BLOCK STYLE 24-INCH (WHITE)
	PROPOSED SIGN MOUNTED ON POST(S)
	EXISTING SIGN TO BE MOVED OR REMOVED
X-XX	POST NUMBER R - REMOVING M - MOVING
	PROPOSED RAILING

PROJECT NO: 9813-02-70	USH 8 SHARED PATHWAY PHASE 1	COUNTY: FOREST	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET 28	E

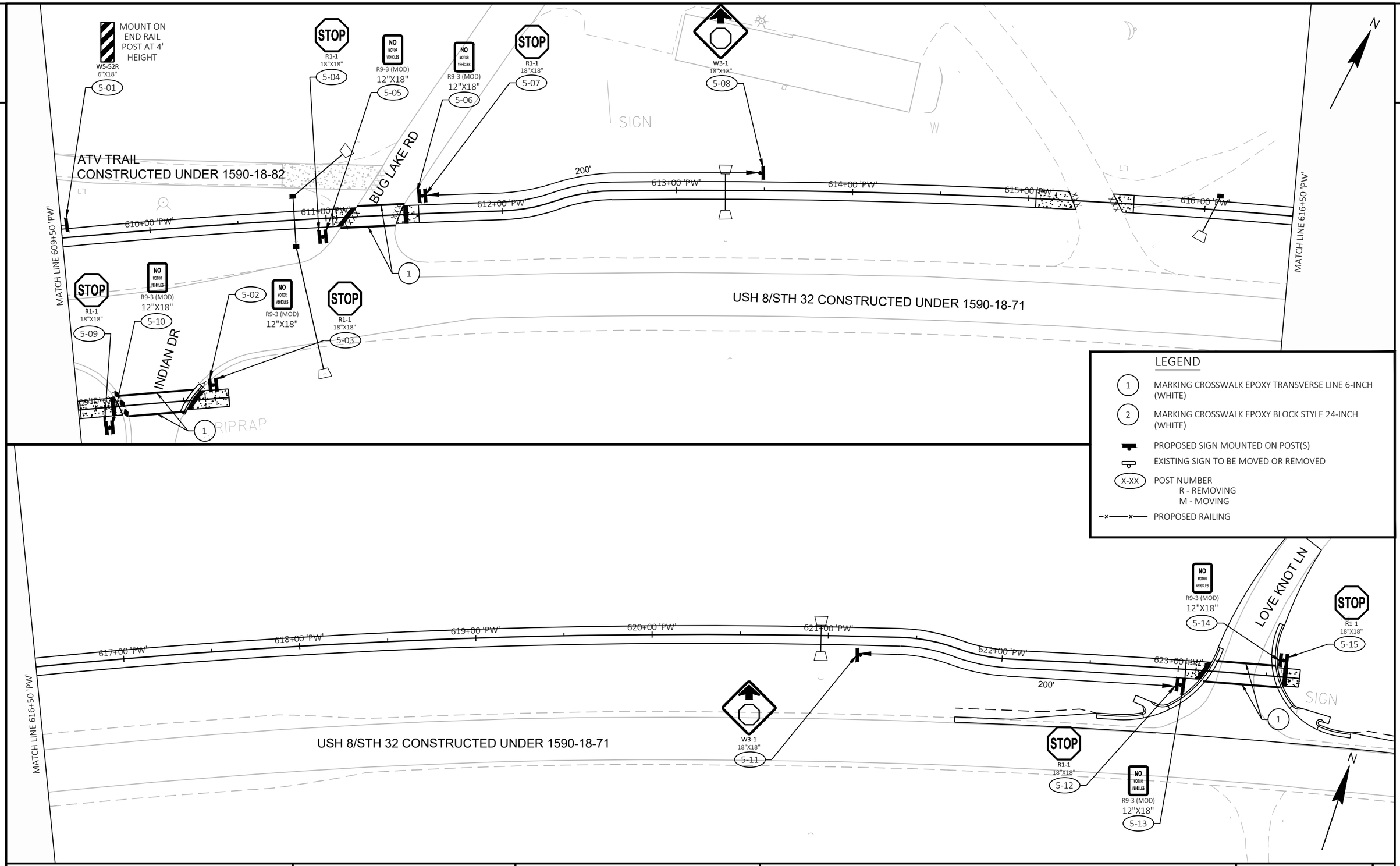


PROJECT NO: 9813-02-70	USH 8 SHARED PATHWAY PHASE 1	COUNTY: FOREST	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET 29	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 04

PLOT DATE : 10/31/2024 9:54 AM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44



PROJECT NO: 9813-02-70	USH 8 SHARED PATHWAY PHASE 1	COUNTY: FOREST	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET 30	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 05
PLOT DATE : 10/31/2024 9:54 AM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44

2

2

C-STORE

N

SLOPE INTERCEPT (TYP.)

SHARED PATHWAY

254+00 'CE'

REST AREA #1

ATV TRAIL CONSTRUCTED UNDER
1590-18-82

LEGEND

EROSION MAT CLASS II TYPE B

SILT FENCE

STAKED WATTLES

SEE 1590-18-71 AND 1590-18-82 PLANS
FOR OTHER EROSION CONTROL PLANS.

PROJECT NO: 9813-02-70	USH 8 SHARED USE PATHWAY PHASE 2	COUNTY: FOREST	EROSION CONTROL - SCENIC BYWAYS	SHEET 31	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\022001-EC SCENIC BYWAYS.DWG
LAYOUT NAME - 01

PLOT DATE : 10/28/2024 1:07 PM PLOT BY : NATHAN RULLMAN PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 44

2

2

N

REST AREA #2

SLOPE INTERCEPT (TYP.)

268+00 'CE'

267+00 'CE'

SHARED PATHWAY

LEGEND

EROSION MAT CLASS II TYPE B

SILT FENCE

STAKED WATTLES

SEE 1590-18-71 AND 1590-18-82 PLANS FOR OTHER EROSION CONTROL PLANS.

PROJECT NO: 9813-02-70	USH 8 SHARED USE PATHWAY PHASE 1	COUNTY: FOREST	EROSION CONTROL - SCENIC BYWAYS	SHEET 32	E

2

USH 8

N

2

WETLAND BOUNDARY (TYP.)

554+00 'PW'

SHARED PATHWAY

SLOPE INTERCEPT (TYP.)

REST AREA #3

LEGEND

EROSION MAT CLASS II TYPE B

SILT FENCE

STAKED WATTLES

SEE 1590-18-71 AND 1590-18-82 PLANS
FOR OTHER EROSION CONTROL PLANS.

PROJECT NO: 9813-02-70	USH 8 SHARED USE PATHWAY PHASE 1	COUNTY: FOREST	EROSION CONTROL - SCENIC BYWAYS	SHEET 33	E

2

2

N

SHARED PATHWAY

583+00 'PW'

584+00 'PW'

SLOPE INTERCEPT (TYP.)

LEGEND

EROSION MAT CLASS II TYPE B

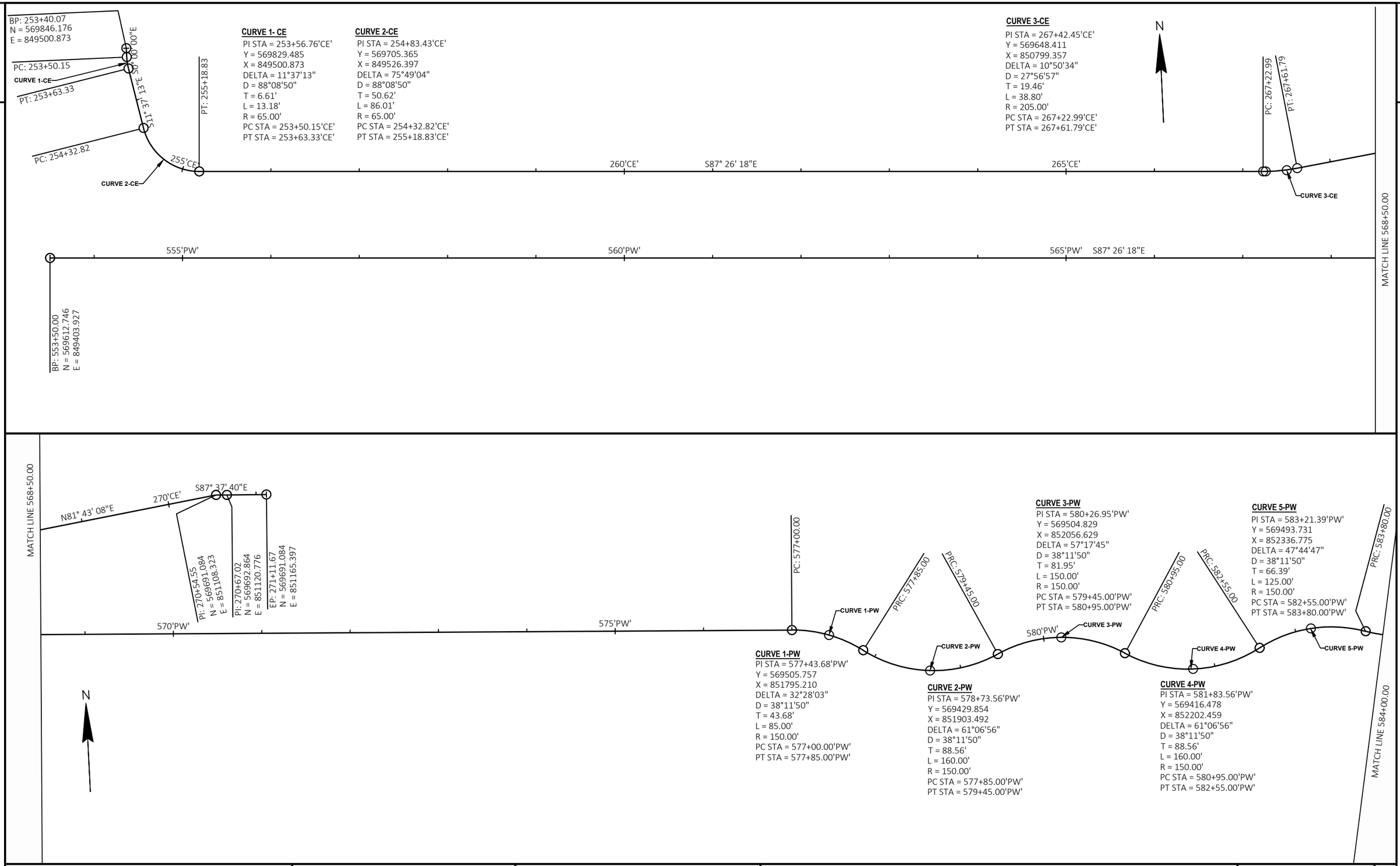
SILT FENCE

STAKED WATTLES

SEE 1590-18-71 AND 1590-18-82 PLANS FOR OTHER EROSION CONTROL PLANS.

REST AREA #4

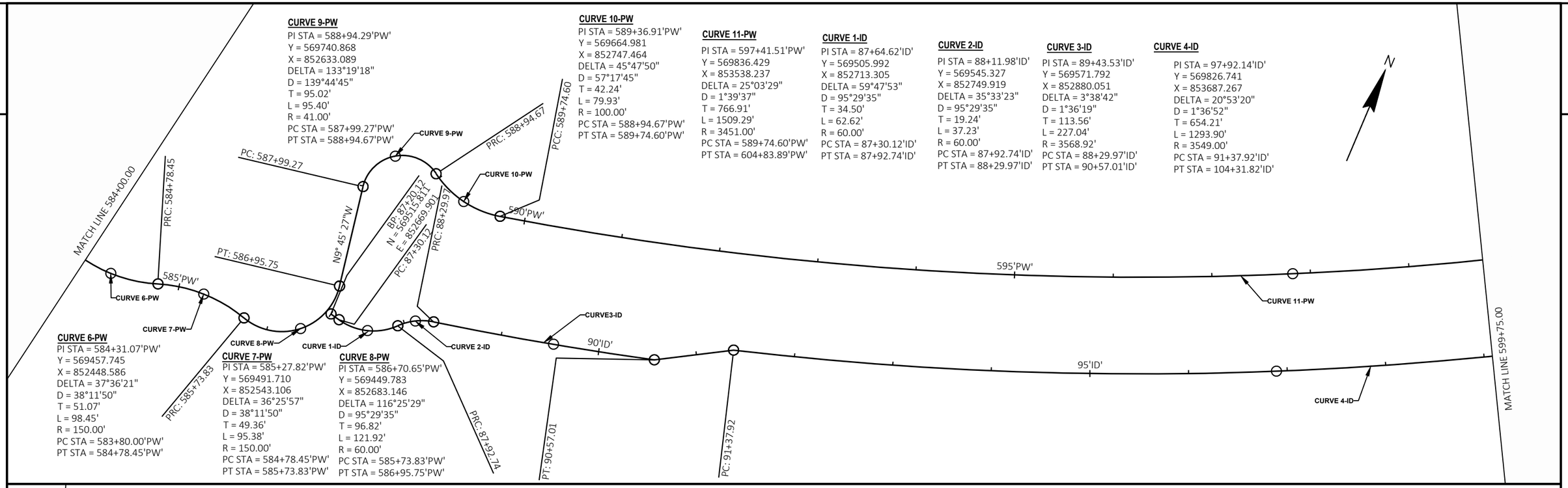
PROJECT NO: 9813-02-70	USH 8 SHARED USE PATHWAY PHASE 1	COUNTY: FOREST	EROSION CONTROL - SCENIC BYWAYS	SHEET 34	E



2

PROJECT NO: 9813-02-70	USH 8 SHARED PATHWAY PHASE 1	COUNTY: FOREST	ALIGNMENT DIAGRAM	SHEET 35	E

2



CURVE 6-PW
PI STA = 584+31.07'PW'
Y = 569457.745
X = 852448.586
DELTA = 37°36'21"
D = 38°11'50"
T = 51.07'
L = 98.45'
R = 150.00'
PC STA = 583+80.00'PW'
PT STA = 584+78.45'PW'

CURVE 7-PW
PI STA = 585+27.82'PW'
Y = 569491.710
X = 852543.106
DELTA = 36°25'57"
D = 38°11'50"
T = 49.36'
L = 95.38'
R = 150.00'
PC STA = 584+78.45'PW'
PT STA = 585+73.83'PW'

CURVE 8-PW
PI STA = 586+70.65'PW'
Y = 569449.783
X = 852683.146
DELTA = 116°25'29"
D = 95°29'35"
T = 96.82'
L = 121.92'
R = 60.00'
PC STA = 585+73.83'PW'
PT STA = 586+95.75'PW'

CURVE 9-PW
PI STA = 588+94.29'PW'
Y = 569740.868
X = 852633.089
DELTA = 133°19'18"
D = 139°44'45"
T = 95.02'
L = 95.40'
R = 41.00'
PC STA = 587+99.27'PW'
PT STA = 588+94.67'PW'

CURVE 10-PW
PI STA = 589+36.91'PW'
Y = 569664.981
X = 852747.464
DELTA = 45°47'50"
D = 57°17'45"
T = 42.24'
L = 79.93'
R = 100.00'
PC STA = 588+94.67'PW'
PT STA = 589+74.60'PW'

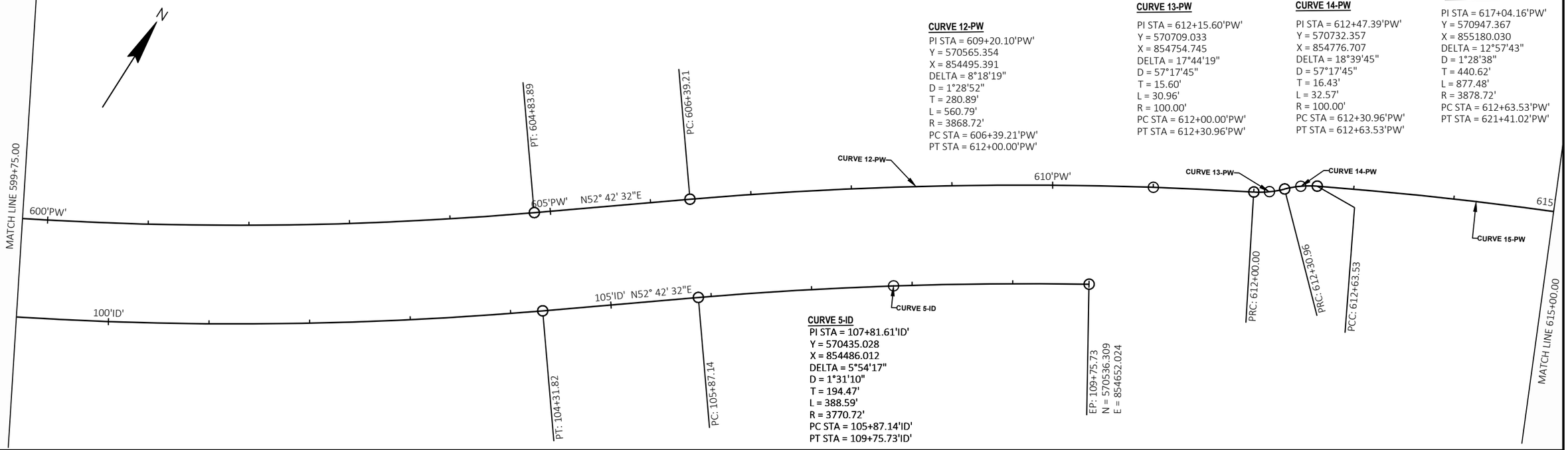
CURVE 11-PW
PI STA = 597+41.51'PW'
Y = 569836.429
X = 853538.237
DELTA = 25°03'29"
D = 1°39'37"
T = 766.91'
L = 1509.29'
R = 3451.00'
PC STA = 589+74.60'PW'
PT STA = 604+83.89'PW'

CURVE 1-ID
PI STA = 87+64.62'ID'
Y = 569505.992
X = 852713.305
DELTA = 59°47'53"
D = 95°29'35"
T = 34.50'
L = 62.62'
R = 60.00'
PC STA = 87+30.12'ID'
PT STA = 87+92.74'ID'

CURVE 2-ID
PI STA = 88+11.98'ID'
Y = 569545.327
X = 852749.919
DELTA = 35°33'23"
D = 95°29'35"
T = 19.24'
L = 37.23'
R = 60.00'
PC STA = 87+92.74'ID'
PT STA = 88+29.97'ID'

CURVE 3-ID
PI STA = 89+43.53'ID'
Y = 569571.792
X = 852880.051
DELTA = 3°38'42"
D = 1°36'19"
T = 113.56'
L = 227.04'
R = 3568.92'
PC STA = 88+29.97'ID'
PT STA = 90+57.01'ID'

CURVE 4-ID
PI STA = 97+92.14'ID'
Y = 569826.741
X = 853687.267
DELTA = 20°53'20"
D = 1°36'52"
T = 654.21'
L = 1293.90'
R = 3549.00'
PC STA = 91+37.92'ID'
PT STA = 104+31.82'ID'



CURVE 12-PW
PI STA = 609+20.10'PW'
Y = 570565.354
X = 854495.391
DELTA = 8°18'19"
D = 1°28'52"
T = 280.89'
L = 560.79'
R = 3868.72'
PC STA = 606+39.21'PW'
PT STA = 612+00.00'PW'

CURVE 13-PW
PI STA = 612+15.60'PW'
Y = 570709.033
X = 854754.745
DELTA = 17°44'19"
D = 57°17'45"
T = 15.60'
L = 30.96'
R = 100.00'
PC STA = 612+00.00'PW'
PT STA = 612+30.96'PW'

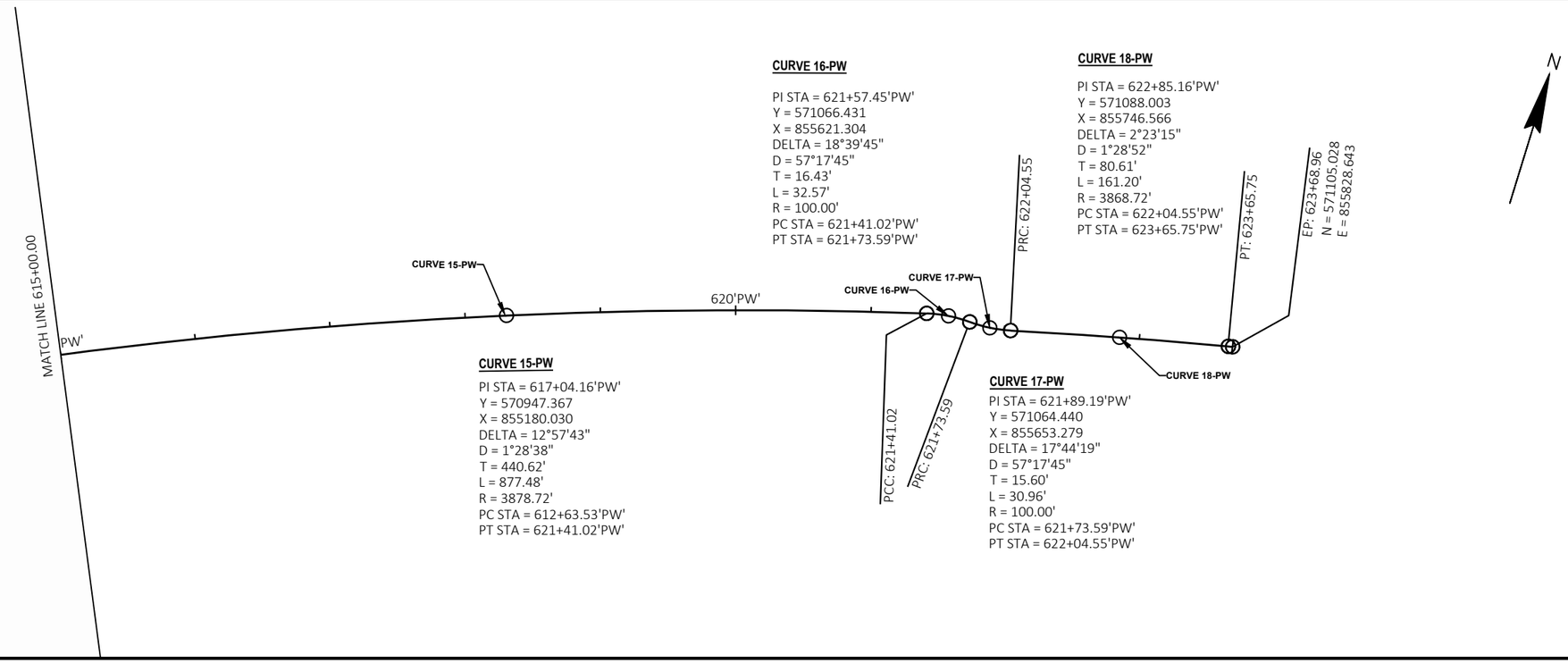
CURVE 14-PW
PI STA = 612+47.39'PW'
Y = 570732.357
X = 854776.707
DELTA = 18°39'45"
D = 57°17'45"
T = 16.43'
L = 32.57'
R = 100.00'
PC STA = 612+30.96'PW'
PT STA = 612+63.53'PW'

CURVE 15-PW
PI STA = 617+04.16'PW'
Y = 570947.367
X = 855180.030
DELTA = 12°57'43"
D = 1°28'38"
T = 440.62'
L = 877.48'
R = 3878.72'
PC STA = 612+63.53'PW'
PT STA = 621+41.02'PW'

CURVE 5-ID
PI STA = 107+81.61'ID'
Y = 570435.028
X = 854486.012
DELTA = 5°54'17"
D = 1°31'10"
T = 194.47'
L = 388.59'
R = 3770.72'
PC STA = 105+87.14'ID'
PT STA = 109+75.73'ID'

PROJECT NO: 9813-02-70	USH 8 SHARED PATHWAY PHASE 1	COUNTY: FOREST	ALIGNMENT DIAGRAM	SHEET 36	E

2



CURVE 15-PW

PI STA = 617+04.16'PW'
Y = 570947.367
X = 855180.030
DELTA = 12°57'43"
D = 1°28'38"
T = 440.62'
L = 877.48'
R = 3878.72'
PC STA = 612+63.53'PW'
PT STA = 621+41.02'PW'

CURVE 16-PW

PI STA = 621+57.45'PW'
Y = 571066.431
X = 855621.304
DELTA = 18°39'45"
D = 57°17'45"
T = 16.43'
L = 32.57'
R = 100.00'
PC STA = 621+41.02'PW'
PT STA = 621+73.59'PW'

CURVE 17-PW

PI STA = 621+89.19'PW'
Y = 571064.440
X = 855653.279
DELTA = 17°44'19"
D = 57°17'45"
T = 15.60'
L = 30.96'
R = 100.00'
PC STA = 621+73.59'PW'
PT STA = 622+04.55'PW'

CURVE 18-PW

PI STA = 622+85.16'PW'
Y = 571088.003
X = 855746.566
DELTA = 2°23'15"
D = 1°28'52"
T = 80.61'
L = 161.20'
R = 3868.72'
PC STA = 622+04.55'PW'
PT STA = 623+65.75'PW'

PROJECT NO: 9813-02-70	USH 8 SHARED PATHWAY PHASE 1	COUNTY: FOREST	ALIGNMENT DIAGRAM	SHEET 37	E

9813-02-70

Line	Item	Item Description	Unit	Total	Qty
0032	205.0100	Excavation Common	CY	80.000	80.000
0056	305.0110	Base Aggregate Dense 3/4-Inch	TON	110.000	110.000
0058	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	7,144.000	7,144.000
0060	305.0130	Base Aggregate Dense 3-Inch	TON	357.000	357.000
0066	415.0070	Concrete Pavement 7-Inch	SY	1,314.000	1,314.000
0090	465.0105	Asphaltic Surface	TON	1,916.000	1,916.000
0148	522.0418	Culvert Pipe Reinforced Concrete Class IV 18-Inch	LF	84.000	84.000
0150	522.0424	Culvert Pipe Reinforced Concrete Class IV 24-Inch	LF	68.000	68.000
0152	522.0436	Culvert Pipe Reinforced Concrete Class IV 36-Inch	LF	15.000	15.000
0156	522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	EACH	2.000	2.000
0158	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	6.000	6.000
0160	522.1036	Apron Endwalls for Culvert Pipe Reinforced Concrete 36-Inch	EACH	2.000	2.000
0164	522.2414	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 14x23-Inch	LF	16.000	16.000
0166	522.2614	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 14x23-Inch	EACH	2.000	2.000
0172	601.0553	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type D	LF	20.000	20.000
0180	602.0410	Concrete Sidewalk 5-Inch	SF	4,272.000	4,272.000
0184	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	260.000	260.000
0188	602.0615	Curb Ramp Detectable Warning Field Radial Natural Patina	SF	145.000	145.000
0246	619.1000	Mobilization	EACH	0.100	0.100
0248	624.0100	Water	MGAL	384.000	384.000
0250	625.0100	Topsoil	SY	492.000	492.000
0252	627.0200	Mulching	SY	89.000	89.000
0254	628.1504	Silt Fence	LF	189.000	189.000
0256	628.1520	Silt Fence Maintenance	LF	306.000	306.000
0264	628.2023	Erosion Mat Class II Type B	SY	387.000	387.000
0266	628.6510	Soil Stabilizer Type B	ACRE	0.090	0.090
0284	629.0205	Fertilizer Type A	CWT	1.000	1.000
0288	630.0120	Seeding Mixture No. 20	LB	47.000	47.000
0292	633.5200	Markers Culvert End	EACH	12.000	12.000
0296	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	4.000	4.000
0298	637.2210	Signs Type II Reflective H	SF	82.000	82.000
0300	637.2230	Signs Type II Reflective F	SF	112.000	112.000
0314	643.0420	Traffic Control Barricades Type III	DAY	2,091.000	2,091.000
0322	643.0900	Traffic Control Signs	DAY	2,091.000	2,091.000
0334	643.5000	Traffic Control	EACH	0.010	0.010
0350	645.0135	Geotextile Type SR	SY	528.000	528.000
0368	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	596.000	596.000
0370	646.7520	Marking Crosswalk Epoxy Block Style 24-Inch	LF	90.000	90.000
0380	650.5000	Construction Staking Base	LF	10,475.000	10,475.000
0382	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	20.000	20.000
0384	650.6000	Construction Staking Pipe Culverts	EACH	6.000	6.000
0390	650.7000	Construction Staking Concrete Pavement	LF	833.000	833.000
0394	650.9000	Construction Staking Curb Ramps	EACH	20.000	20.000
0398	650.9500	Construction Staking Sidewalk (project) 003. 9813-02-70	EACH	1.000	1.000
0406	650.9911	Construction Staking Supplemental Control (project) 004. 9813-02-70	EACH	1.000	1.000
0426	690.0150	Sawing Asphalt	LF	58.000	58.000
0428	690.0250	Sawing Concrete	LF	3.000	3.000
0432	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	500.000	500.000
0436	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,100.000	2,100.000

9813-02-70

Line	Item	Item Description	Unit	Total	Qty
0438	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	4,800.000	4,800.000
0450	SPV.0060	Special 102. Posts Wood 4X4-Inch X 12-FT	EACH	23.000	23.000
0452	SPV.0060	Special 103. Posts Wood 4X4-Inch X 14-FT	EACH	21.000	21.000
0458	SPV.0060	Special 106. Precast Concrete Planter	EACH	8.000	8.000
0460	SPV.0060	Special 107. Kiosks	EACH	4.000	4.000
0462	SPV.0060	Special 108. Concrete Footing (Concrete Base)	EACH	35.000	35.000
0464	SPV.0060	Special 109. Benches	EACH	8.000	8.000
0514	SPV.0090	Special 101. Railing	LF	3,550.000	3,550.000
0516	SPV.0090	Special 102. Profile Curb Cut	LF	46.000	46.000
0518	SPV.0090	Special 103. Staked Wattles	LF	248.000	248.000

3

CATEGORY	DIVISION	205.0100 COMMON EXCAVATION (1)		SALVAGED/UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	REDUCED EBS IN FILL (9)	UNEXPANDED FILL	EXPANDED FILL (13)	MASS ORDINATE +/- (14)(15)	WASTE	FILL (16)	COMMENT
		CUT (2)	EBS EXCAVATION (3)			FACTOR 0.70		FACTOR 1.25				
0020	Rest Area 1	7	0	0	7	0	15	18	-12	-12	12	
0020	Rest Area 2	59	0	0	59	0	1	1	57	57	0	
0020	Rest Area 3	7	0	0	7	0	30	38	-31	-31	31	
0020	Rest Area 4	7	0	0	7	0	254	318	-312	-312	312	
0020	GRAND TOTAL	80	0								354	
0020	TOTAL COMMON EXC	80										

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.

(13) EXPANDED FILL FACTOR = 1.25

EXPANDED FILL = UNEXPANDED FILL * FILL FACTOR

(14) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

(15) MASS ORDINATE = AVAILABLE MATERIAL + REDUCED EBS IN FILL - EXPANDED FILL

(16) FILL TO BE TAKEN FROM WASTE FROM PROJECT 1590-18-71

BASE AGGREGATE

CATEGORY	STATION	TO	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	305.0130 BASE AGGREGATE DENSE 3-INCH TON	624.0100 WATER MGAL	REMARKS
0010	553+50 'PW'	-	564+30 'PW'	BEGIN - YOUNG'S LN	--	640	169	40	
0010	564+74 'PW'	-	587+00 'PW'	YOUNG'S LN - TUNNEL	47	1,346	--	70	
0010	588+00 'PW'	-	591+79 'PW'	TUNNEL - KWE DA KIK LN	--	474	--	24	INCLUDES ATV BASE
0010	592+27 'PW'	-	611+13 'PW'	KWE DA KIK LN - BUG LAKE RD	--	1,118	--	56	INCLUDES ATV BASE
0010	611+41 'PW'	-	615+25 'PW'	BUG LAKE RD - DRIVEWAY	--	228	106	17	
0010	615+50 'PW'	-	623+16 'PW	DRIVEWAY- LOVE KNOT LANE	--	454	--	23	
0010	623+57 'PW'	-	623+69 'PW'	LOVE KNOT LANE - END	--	8	--	1	
0010	253+40 'CE'	-	270+65 'CE'	FIRE KEEPER RD - EVERYBODY'S RD	--	1,023	--	51	
0010	87+20 'ID'	-	90+74 'ID'	TUNNEL - REST AREA	17	429	--	22	INCLUDES ATV BASE
0010	91+19 'ID'	-	95+38 'ID'	REST AREA - DRIVEWAY	--	248	--	12	
0010	95+81 'ID'	-	109+13 'ID'	DRIVEWAY - INDIAN DR	40	791	64	45	
0010	109+51 'ID'	-	109+76 'ID'	INDIAN DR - END	--	13	--	1	
0010				UNDISTRIBUTED	6	340	18	18	
				TOTAL 0010	110	7,112	357	380	
0020	253+60 'CE'		--	REST AREA 1	--	8	--	1	
0020	267+45 'CE'		--	REST AREA 2	--	8	--	1	
0020	553+75 'PW'		--	REST AREA 3	--	8	--	1	
0020	583+17 'PW'		--	REST AREA 4	--	8	--	1	
				TOTAL 0020	0	32	0	4	
				PROJECT TOTAL	110	7144	357	384	

CONCRETE PAVEMENT

CATEGORY	STATION	TO	STATION	LOCATION	415.0070 CONCRETE PAVEMENT 7-INCH SY	REMARKS
0010	586+42	-	587+00	PW	72	FOR ATV TRAIL
0010	587+95	-	591+88	PW	655	FOR ATV TRAIL
0010	87+20	-	90+74	ID	571	FOR ATV TRAIL
0010	264+48	-	264+62	CE	16	FOR ATV TRAIL
				PROJECT TOTAL	1,314	

3

ASPHALT ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	465.0105 ASPHALTIC SURFACE TON	REMARKS
0010	553+50 'PW'	-	563+90 'PW'	BEING - YOUNG'S LN	192	
0010	565+00 'PW'	-	587+00 'PW'	YOUNG'S LN - TUNNEL	411	
0010	588+00 'PW'	-	591+52 'PW'	TUNNEL - K	66	
0010	592+50 'PW'	-	611+03 'PW'	K - BUG LAKE RD	346	
0010	611+53 'PW'	-	615+04 'PW'	DRIVEWAY	66	
0010	615+60 'PW'	-	623+04 'PW'	DRIVEWAY-LOVE KNOT	139	
0010	253+40 'CE'	-	270+49 'CE'	FIRE KEEPER RD - EVERYBODY'S RD	320	
0010	87+20 'ID'	-	90+74 'ID'	TUNNEL - REST AREA	62	
0010	91+19 'ID'	-	95+38 'ID'	REST AREA - DRIVEWAY	71	
0010	95+81 'ID'	-	109+13 'ID'	DRIVEWAY - INDIAN DR	243	
0010		-				
				PROJECT TOTAL	1,916	

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CULVERT PIPE

CATEGORY	STATION	SIDE	LOCATION	522.0418 CULVERT PIPE REINFORCED CONCRETE CLASS IV 18-INCH LF	522.0424 CULVERT PIPE REINFORCED CONCRETE CLASS IV 24-INCH LF	522.0436 CULVERT PIPE REINFORCED CONCRETE CLASS IV 36-INCH LF	522.1018 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH EACH	522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	522.1036 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH EACH	522.2414 CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 14X23-INCH LF	522.2614 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 14X23-INCH EACH	633.5200 MARKERS CULVERT END EACH	650.6000 CONSTRUCTION STAKING PIPE CULVERTS EACH	*INLET ELEVATION	*OUTLET ELEVATION	SLOPE FT/FT	REMARKS
0010	563+70 'PW'	LT/RT	PATH	84	--	--	2	--	--	--	--	2	1	1841.80	1839.70	0.025	
0010	564+90 'PW'	LT/RT	PATH	--	--	--	-	--	--	16	2	2	1	1841.15	1840.91	0.150	
0010	582+17 'PW'	LT/RT	PATH	--	36	--	-	2	--	--	--	2	1	1770.36	1770.00	0.010	
0010	586+13 'PW'	LT/RT	PATH	--	16	--	-	2	--	--	--	2	1	1747.50	1746.99	0.032	
0010	613+27 'PW'	LT/RT	PATH	--	16	--	-	2	--	--	--	2	1	1689.36	1688.62	0.040	
0010	620+95 'PW'	LT/RT	PATH	--	--	15	-	--	2	--	--	2	1	1696.20	1695.59	0.040	
			PROJECT TOTAL	84	68	15	2	6	2	16	2	12	6				

*INLET AND OUTLET ELVEATIONS ARE TO END OF PIPE

3

CURB & GUTTER ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	601.0553 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D LF	REMARKS
0010	109+51 'ID'	-	109+76 'ID'	INDIAN DRIVE	20	
				PROJECT TOTAL	20	

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SIDEWALK ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	602.0410 CONCRETE SIDEWALK 5-INCH SF	602.0515 CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA SF	602.0615 CURB RAMP DETECTABLE WARNING FIELD RADIAL NATURAL PATINA SF	REMARKS
0010	563+90 'PW'	-	564+29 'PW'	YOUNG'S LN	558	20	24	
0010	564+75 'PW'	-	565+00 'PW'	YOUNG'S LN	250	20	--	
0010	253+40 'CE'	-	253+46 'CE'	PARKING LOT	60	20	--	
0010	264+00 'CE'	-	264+10 'CE'	USH 8 CROSSWALK	60	20	--	
0010	270+49 'CE'	-	270+65 'CE'	EVERYBODY'S RD	153	20	--	
0010	270+99 'CE'	-	271+12 'CE'	EVERYBODY'S RD	125	20	--	
0010	90+50 'ID'	-	90+74 'ID'	KWE DA KIK LN	235	20	--	
0010	91+19 'ID'	-	91+38 'ID'	KWE DA KIK LN	202	20	--	
0010	591+52 'PW'	-	591+78 'PW'	KWE DA KIK LN	258	--	23	
0010	592+28 'PW'	-	592++50 'PW'	KWE DA KIK LN	215	--	23	
0010	95+18 'ID'	-	95+38 'ID'	DRIVEWAY	199	20	--	
0010	95+81 'ID'	-	95+91 'ID'	DRIVEWAY	97	20	--	
0010	108+91 'ID'	-	109+13 'ID'	INDIAN DRIVE	220	20	--	
0010	109+55 'ID'	-	109+75 'ID'	INDIAN DRIVE	205	--	26	
0010	611+04 'PW'	-	611+13 'PW'	BUG LAKE RD	92	--	26	
0010	611+42 'PW'	-	611+53 'PW'	BUG LAKE RD	109	20	--	
0010	615+04 'PW'		615+25 'PW'	DRIVEWAY	208	--	--	
0010	615+60 'PW'		615+60 'PW'	DRIVEWAY	89	--	--	
0010	623+04 'PW'	-	623+16 'PW'	LOVE KNOT LN	117	--	23	
0010	623+58 'PW'	-	623+69 'PW'	LOVE KNOT LN	113	20	--	
				TOTAL 0010	3,565	260	145	
0020		253+60 'CE'		REST AREA 1	175	--	--	
0020		267+45 'CE'		REST AREA 2	175	--	--	
0020		553+75 'PW'		REST AREA 3	175	--	--	
0020		583+17 'PW'		REST AREA 4	182	--	--	
				TOTAL 0020	707	0	0	
				PROJECT TOTAL	4272	260	145	

3

3

LANDSCAPING

CATEGORY	STATION	LOCATION	625.0100 TOPSOIL SY	627.0200 MULCHING SY	629.0205 FERTILIZER TYPE A CWT	630.0120 SEEDING MIXTURE NO. 20 LB	REMARKS
0020	253+60 'CE'	REST AREA 1	27	27	0.02	3	
0020	267+45 'CE'	REST AREA 2	145	--	0.10	14	
0020	553+75 'PW'	REST AREA 3	60	60	0.04	6	
0020	583+17 'PW'	REST AREA 4	260	2	0.17	24	
		PROJECT TOTAL	492	89	1.00	47	

EROSION CONTROL

CATEGORY	STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.2023 EROSION MAT CLASS II TYPE B SY	628.6510 SOIL STABILIZER TYPE B ACRE	SPV.0090.103 SPECIAL (103.STAKED WATTLES) LF	REMARKS
0020	253+60 'CE'	REST AREA 1	31	62	--	--	--	
0020	267+45 'CE'	REST AREA 2	--	--	129	.03	88	
0020	553+75 'PW'	REST AREA 3	72	72	--	--	--	
0020	583+17 'PW'	REST AREA 4	86	172	258	.06	160	
		PROJECT TOTAL	189	306	387	0.09	248	

PERMANENT SIGNING (1 OF 3)

CATEGORY	SIGN #	SIGN CODE	SIGN SIZE WxH (IN)	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	SPV.0060.102 SPECIAL (POSTS WOOD 4X4-INCH X 12-FT) EACH	SPV.0060.103 SPECIAL (POSTS WOOD 4X4-INCH X 14-FT) EACH	SIGN MOUNTED ON SAME POST AS	REMARKS
0010	1-01	W1-2L	18x18	--	--	9.00	---	1	--	LEFT CURVE
0010	1-02	R9-3	12X18	--	1.50	--	1	---	--	NO MOTOR VEHICLES
0010	1-03	R1-1	18X18	--	2.25	--	--	---	1-02	STOP SIGN
0010	1-04	W11-15	30X30	1	--	6.25	---	---	--	TRAIL CROSSING (BIKE AND PED SYMBOL) - ON USH 8
0010		W16-9P	24X12	--	--	2.00	---	---	--	AHEAD PLAQUE (YELLOW) - ON USH 8
0010	1-05	W3-1	18X18	--	--	2.25	---	1	--	STOP AHEAD
0010	1-06	W11-15	30X30	1	--	6.25	---	---	--	TRAIL CROSSING (BIKE AND PED SYMBOL) - ON USH 8
0010		W16-7L	24X12	--	--	2.00	---	---	--	LEFT DIAGONAL DOWNWARD POINTING ARROW (YELLOW) - ON USH 8
0010	1-07	R1-1	18X18	--	2.25	--	1	---	--	STOP SIGN
0010	1-08	R9-3	12X18	--	1.50	--	---	---	1-07	NO MOTOR VEHICLES
0010	1-09	W11-15	30X30	1	--	6.25	---	---	--	TRAIL CROSSING (BIKE AND PED SYMBOL) - ON USH 8
0010		W16-7L	24X12	--	--	2.00	---	---	--	LEFT DIAGONAL DOWNWARD POINTING ARROW (YELLOW) - ON USH 8
0010	1-10	R9-3	12X18	--	1.50	--	---	---	--	NO MOTOR VEHICLES
0010	1-11	W11-15	30X30	1	--	6.25	---	---	--	TRAIL CROSSING (BIKE AND PED SYMBOL) - ON USH 8
0010		W16-9P	24X12	--	--	2.00	---	---	--	AHEAD PLAQUE (YELLOW) - ON USH 8
0010	1-12	R1-1	18X18	--	2.25	--	1	---	--	STOP SIGN
0010	1-13	R9-3	12X18	--	1.50	--	---	---	1-12	NO MOTOR VEHICLES
0010	1-14	R1-1	18X18	--	2.25	--	1	---	1-10	STOP SIGN
0010	1-15	R9-3	12X18	--	1.50	--	---	---	--	NO MOTOR VEHICLES
0010	1-16	R1-1	18X18	--	2.25	--	1	---	1-15	STOP SIGN
0010	1-17	W1-2R	18x18	--	--	9.00	--	1	--	RIGHT CURVE
0010	2-01	W3-1	18X18	--	--	2.25	---	1	--	STOP AHEAD
0010	2-02	W5-52R	6X18	--	--	.75	---	---	RAILING	CLEARANCE STRIPER DOWN RIGHT
0010	2-03	W3-1	18X18	--	--	2.25	---	1	--	STOP AHEAD
0010	2-04	W5-52L	6X18	--		.75	---	---	RAILING	CLEARANCE STRIPER DOWN LEFT
0010	2-05	R1-1	18X18	--	2.25	--	1	---	--	STOP SIGN
0010	2-06	R9-3	12X18	--	1.50	--	---	---	2-05	NO MOTOR VEHICLES
0010	2-07	R1-1	18X18	--	2.25	--	1	---	--	STOP SIGN
0010	2-08	R9-3	12X18	--	1.50	--	---	---	2-07	NO MOTOR VEHICLES
0010	2-09	W5-52L	6X18	--	--	.75	---	---	RAILING	CLEARANCE STRIPER DOWN LEFT
0010	2-10	W5-52R	6X18	--	--	.75	---	---	RAILING	CLEARANCE STRIPER DOWN RIGHT
0010	2-11	W1-5R	18X18	--	--	2.25	---	1		ROAD SHARP CURVES RIGHT
0010	2-12	W5-52L	12X36	--	--	.75	---	---	RAILING	CLEARANCE STRIPER DOWN LEFT
0010	2-13	W5-52R	6X18	--	--	.75	---	---	RAILING	CLEARNACE STIRPER DOWN RIGHT
0010	2-14	W7-5	18X18	--	--	2.25	---	1		BICYCLE HILL [8%]
0010	3-01	W5-52L	6X18	--	--	.75	---	---	RAILING	CLEARANCE STRIPER DOWN LEFT
0010	3-02	W5-52R	6X18	--	--	.75	---	---	RAILING	CLEARANCE STRIPER DOWN RIGHT
0010	3-03	R9-3	12X18	--	1.50	--	1	---	--	NO MOTOR VEHICLES
0010	3-04	W5-52R	6X18	--	--	.75	---	---	RAILING	CLEARANCE STRIPER DOWN RIGHT
0010	3-05	W5-52R	6X18	--	--	.75	---	---	RAILING	CLEARANCE STRIPER DOWN RIGHT
0010	3-06	R1-1	18X18	--	2.25	--	1	---	--	STOP SIGN
0010	3-07	R1-1	18X18	--	2.25	--	--	---	3-03	STOP SIGN
0010	3-08	R1-1	18X18	--	2.25	--	1	---	--	STOP SIGN
0010	3-09	W5-52L	6X18	--	--	.75	---	---	RAILING	CLEARANCE STRIPER DOWN LEFT
0010	3-10	W3-1	18X18	--	--	2.25	---	1	--	STOP AHEAD
			SUBTOTAL	4	35	73	10	8		

3

PERMANENT SIGNING (2 OF 3)

	SIGN #	SIGN CODE	SIGN SIZE WxH (IN)	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	SPV.0060.102 SPECIAL (POSTS WOOD 4X4-INCH X 12-FT) EACH	SPV.0060.103 SPECIAL (POSTS WOOD 4X4-INCH X 14-FT) EACH	SIGN MOUNTED ON SAME POST AS	REMARKS
PREVIOUS SUBTOTAL				4	35	73	10	8	--	
0010	3-11	W1-5R	24X24	--	--	4.00	---	1	--	RIGHT WINDING ROAD
0010	3-12	R1-1	18X18	--	2.25	--	1	---	--	STOP SIGN
0010	3-13	R9-3	12X18	--	1.50	--	---	---	3-12	NO MOTOR VEHICLES
0010	3-14	R9-3	12X18	--	1.50	--	1	---	--	NO MOTOR VEHICLES
0010	3-15	R1-1	18X18	--	2.25	--	--	---	3-14	STOP SIGN
0010	3-16	W3-1	18X18	--	--	2.25	---	1	--	STOP AHEAD
0010	3-17	W3-1	18X18	--	--	2.25	---	1	--	STOP AHEAD
0010	3-18	W3-1	18X18	--	--	2.25	---	1	--	STOP AHEAD
0010	3-19	W3-1	18X18	--	--	2.25	---	1	--	STOP AHEAD
0010	3-20	R1-1	18X18	--	2.25	--	1	---	--	STOP SIGN
0010	3-21	R9-3	12X18	--	1.50	--	1	---	--	NO MOTOR VEHICLES
0010	3-22	R1-1	18X18	--	2.25	--	--	---	3-21	STOP SIGN
0010	3-23	W5-52R	6X18	--	--	.75	---	---	RAILING	CLEARANCE STRIPER DOWN RIGHT
0010	3-24	R9-3	12X18	--	1.50	--	1	---	--	NO MOTOR VEHICLES
0010	3-25	R1-1	18X18	--	2.25	--	--	---	3-24	STOP SIGN
0010	3-26	W3-1	18X18	--	--	2.25	---	1	--	STOP AHEAD
0010	3-27	W3-1	18X18	--	--	2.25	---	1	--	STOP AHEAD
0010	3-28	W5-52L	6X18	--	--	.75	---	---	RAILING	CLEARANCE STRIPER DOWN LEFT
0010	3-29	W5-52R	6X18	--	--	.75	---	---	RAILING	CLEARANCE STRIPER DOWN RIGHT
0010	3-30	W5-52R	6X18	--	--	.75	---	----	RAILING	CLEARANCE STRIPER DOWN RIGHT
0010	3-31	W5-52L	6X18	--	--	.75	---	---	RAILING	CLEARANCE STRIPER DOWN LEFT
0010	4-01	W3-1	18X18	--	--	2.25	---	1	--	STOP AHEAD
0010	4-02	R1-1	18X18	--	2.25	--	1	---	--	STOP SIGN
0010	4-03	R9-3	12X18	--	1.50	--	---	---	4-02	NO MOTOR VEHICLES
0010	4-04	R9-3	12X18	--	1.50	--	1	---	--	NO MOTOR VEHICLES
0010	4-05	R1-1	18X18	--	2.25	--	--	---	4-04	STOP SIGN
0010	4-06	W3-1	18X18	--	--	2.25	---	1	--	STOP AHEAD
0010	4-07	W5-52R	6X18	--	--	0.75	---	---	RAILING	CLEARANCE STRIPER DOWN RIGHT
0010	4-08	W5-52L	6X18	--	--	0.75	---	---	RAILING	CLEARANCE STRIPER DOWN LEFT
0010	4-09	W5-52L	6x18	--	--	0.75	---	---	RAILING	CLEARANCE STIRPER DOWN LEFT
0010	4-10	W3-1	18X18	--	--	2.25	---	1	--	STOP AHEAD
0010	4-11	W3-1	18X18	--	--	2.25	---	1	--	STOP AHEAD
			SUBTOTAL	4	59	106	17	19		

3

PERMANENT SIGNING (3 OF 3)

	SIGN #	SIGN CODE	SIGN SIZE WxH (IN)	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	SPV.0060.102 SPECIAL (POSTS WOOD 4X4-INCH X 12-FT) EACH	SPV.0060.103 SPECIAL (POSTS WOOD 4X4-INCH X 14-FT) EACH	SIGN MOUNTED ON SAME POST AS	REMARKS
PREVIOUS SUBTOTAL				4	59	106	17	19		
0010	5-01	W5-52R	6X18	--	--	.75	---	---	RAILING	CLEARANCE STRIPER DOWN RIGHT
0010	5-02	R9-3	12X18	--	1.50	--	1	--	--	NO MOTOR VEHICLES
0010	5-03	R1-1	18X18	--	2.25	--	--	--	5-02	STOP SIGN
0010	5-04	R1-1	18X18	--	2.25	--	1	--	--	STOP SIGN
0010	5-05	R9-3	12X18	--	1.50	--	---	---	5-04	NO MOTOR VEHICLES
0010	5-06	R9-3	12X18	--	1.50	--	1	--	--	NO MOTOR VEHICLES
0010	5-07	R1-1	18X18	--	2.25	--	--	--	5-06	STOP SIGN
0010	5-08	W3-1	18X18	--	--	2.25	---	1	--	STOP AHEAD
0010	5-09	R1-1	18X18	--	2.25	--	1	--	--	STOP SIGN
0010	5-10	R9-3	12X18	--	1.50		---	---	5-09	NO MOTOR VEHICLES
0010	5-11	W3-1	18X18	--	--	2.25	---	1	--	STOP AHEAD
0010	5-12	R1-1	18X18	--	2.25	--	1	--	--	STOP SIGN
0010	5-13	R9-3	12X18	--	1.50	--	---	---	5-13	NO MOTOR VEHICLES
0010	5-14	R9-3	12X18	--	1.50	--	1	--	--	NO MOTOR VEHICLES
0010	5-15	R1-1	18X18	--	2.25	--	--	--	5-15	STOP SIGN
			PROJECT TOTAL	4	82	112	23	21		
			TOTAL 0010	4	82	112	23	21		

3

TRAFFIC CONTROL

CATEGORY	STATION	LOCATION	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	643.0900 TRAFFIC CONTROL SIGNS DAY	REMARKS
0010	563+75 'PW'	WEST SIDE OF YOUNGS LANE INTERSECTION	123	123	
0010	565+05 'PW'	EAST SIDE OF YOUNGS LANE INTERSECTION	123	123	
0010	591+50 'PW'	WEST SIDE OF KWE DA KIK LANE	123	123	
0010	592+55 'PW'	EAST SIDE OF KWE DA KIK LANE	123	123	
0010	611+00 'PW'	WEST SIDE OF BUG LAKE ROAD	123	123	
0010	611+55 'PW'	EAST SIDE OF BUG LAKE ROAD	123	123	
0010	615+00 'PW'	WEST SIDE OF DRIVEWAY	123	123	
0010	615+60 'PW'	EAST SIDE FO DRIVEWAY	123	123	
0010	623+00 'PW'	EAST SIDE OF LOVE KNOT LANE	123	123	
0010	253+50 'CE'	C STORE PARKING LOT	123	123	
0010	264+00 'CE'	TRAIL CONNECTION TO USH 8	123	123	
0010	270+50 'CE'	WEST SIDE OF EVERYBODYS ROAD INTERSECTION	123	123	
0010	90+60 'ID'	WEST SIDE OF REST AREA ENTRANCE	123	123	
0010	91+40 'ID'	EAST SIDE OF REST AREA ENTRANCE	123	123	
0010	95+25 'ID'	WEST SIDE OF DRIVEWAY	123	123	
0010	96+00 'ID'	EAST SIDE OF DRIVEWAY	123	123	
0010	108+95 'ID'	WEST SIDE OF INDIAN DRIVE	123	123	
		PROJECT TOTAL	2,091	2,091	

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\030201-MQ.DWG
LAYOUT NAME - 09
PLOT DATE : 10/28/2024 1:44 PM PLOT BY : NATHAN RULLMAN PLOT NAME : PLOT SCALE : 1" = 1'
WISDOT/CADDS SHEET 42

3

3

GEOTEXTILE

CATEGORY	STATION	TO	STATION	LOCATION	645.0135 GEOTEXTILE TYPE SR SY	REMARKS
0010	553+50 'PW'	-	555+50 'PW'		267	
0010	621+00 'PW'	-	622+25 'PW'		167	
0010	108+18 'ID'	-	108+88'ID'		94	
				PROJECT TOTAL	528	

PAVEMENT MARKING

CATEGORY	STATION	TO	STATION	LOCATION	646.7420 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH LF	646.7520 MARKING CROSSWALK EPOXY BLOCK STYLE 24-INCH LF	REMARKS
0010	264+00 'PW'	-	264+00 'PW'	USH 8 CROSSING	--	90	
0010	564+32.25 'PW'	-	564+71.63 'PW'	YOUNGS LANE	80	--	
0010	591+69.35 'PW'	-	592+06.67 'PW'	DRIVEWAY	76	--	
0010	591+82.18 'PW'	-	592+24.36 'PW'	KWE DA KIK LANE	89	--	
0010	270+67.02 'CE'	-	271+00.00 'CE'	EVERYBODY'S RD	60	--	
0010	95+41.03 'ID'	-	95+78.17'ID'	DRIVEWAY	76	--	
0010	109+16.57 'ID'	-	109+51.25 'ID'	INDIAN DRIVE	79	--	
0010	611+13.57 'PW'		611+41.62 'PW'	BUG LAKE ROAD	58	--	
0010	623+19.63 'PW'		623+54.31 'PW'	LOVE KNOT LANE	78	--	
				PROJECT TOTAL	596	90	

STAKING

CATEGORY	STATION	TO	STATION	LOCATION	650.5000 CONSTRUCTION STAKING BASE LF	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF	650.7000 CONSTRUCTION STAKING CONCRETE PAVEMENT LF	650.9000 CONSTRUCTION STAKING CURB RAMPS EACH	REMARKS
0010	553+50 'PW'	-	564+30 'PW'	BEGIN - YOUNG'S LN	1,080	--	--	1	
0010	564+74 'PW'	-	587+00 'PW'	YOUNG'S LN - TUNNEL	2,226	--	45	1	
0010	588+00 'PW'	-	591+79 'PW'	TUNNEL - KWE DA KIK LN	379	--	420	1	
0010	592+27 'PW'	-	611+13 'PW'	KWE DA KIK LN - BUG LAKE RD	1,886	--	--	2	
0010	611+41 'PW'	-	622+13 'PW'	BUG LAKE RD - LOVE KNOT LN	1,072	--	--	5	
0010	253+40 'CE'	-	270+65 'CE'	FIRE KEEPER RD - EVERYBODY'S RD	1,725	--	--	4	
0010	87+20 'ID'	-	90+74 'ID'	TUNNEL - REST AREA	355	--	368	1	
0010	91+19 'ID'	-	95+38 'ID'	REST AREA - DRIVEWAY	418	--	--	2	
0010	95+81 'ID'	-	109+76 'ID'	DRIVEWAY - INDIAN DR	1,334	20	--	3	
				PROJECT TOTAL	10,475	20	833	20	

SAWING

CATEGORY	STATION	LOCATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF	SPV.0090.102 SPECIAL (PROFILE CURB CUT) LF	REMARKS
0010	611+13 'PW'	CURB RAMP	13	--	--	
0010	611+42 'PW'	CURB RAMP	12	--	--	
0010	615+25 'PW'	CURB RAMP	11	--	--	
0010	615+50 'PW'	CURB RAMP	12	--	--	
0010	253+40 'CE'	CURB RAMP	10	--	--	
0010	270+65 'CE'	CURB RAMP	--	--	14	
0010	271+00 'CE'	CURB RAMP	--	--	14	
0010	109+14 'ID'	CURB RAMP	--	--	18	
0010	109+60 'ID'	CURB RAMP	--	3	--	
		PROJECT TOTAL	58	3	46	

RAILING ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	SPV.0060.108 SPECIAL (108. CONCRETE FOOTING) EACH	SPV.0090.101 SPECIAL (101. RAILING) LF	REMARKS
0010	577+00 'PW'	-	586+35 'PW'	LEFT	--	930	
0010	577+00 'PW'	-	583+08 'PW'	RIGHT	--	608	
0010	583+27 'PW'	-	586+35 'PW'	RIGHT	--	312	
0010	586+63 'PW'	-	587+00 'PW'	LEFT	--	32	
0010	587+94 'PW'	-	589+00 'PW'	LEFT	--	131	
0010	606+52 'PW'	-	609+52 'PW'	LEFT	--	301	
0010	267+26 'CE'	-	270+55 'CE'	RIGHT	--	329	
0010	87+22 'ID'	-	90+68 'ID'	RIGHT	--	352	
0010	87+70 'ID'	-	88+30 'ID'	LEFT	--	61	
0010	98+91 'ID'	-	103+41 'ID'	RIGHT	--	451	
				UNDISTRIBUTED	35	--	
				TOTAL 0010	35	3,507	
0020		253+60 'CE'		REST AREA 1	--	--	
0020		267+45 'CE'		REST AREA 2	--	--	
0020		553+75 'PW'		REST AREA 3	--	--	
0020		583+17 'PW'		REST AREA 4	--	43	
				TOTAL 0020	0	43	
				PROJECT TOTAL	35	3550	

FURNISHINGS

CATEGORY	STATION	LOCATION	SPV.0060.106 SPECIAL (PRECAST CONCRETE PLANTER) EACH	SPV.0060.107 SPECIAL (107. KIOSKS) EACH	SPV.0060.109 SPECIAL (109. BENCHES) EACH	REMARKS
0020	253+60 'CE'	REST AREA 1	2	1	2	
0020	267+45 'CE'	REST AREA 2	2	1	2	
0020	553+75 'PW'	REST AREA 3	2	1	2	
0020	583+17 'PW'	REST AREA 4	2	1	2	
		PROJECT TOTAL	8	4	8	

FRONTIER COMMUNICATIONS

WISCONSIN PUBLIC SERVICE ELECTRIC

WISCONSIN PUBLIC SERVICE GAS/PETROLEUM

R/W

FIREKEEPER RD

EXISTING R/W (TYP.)

254+00 'CE'

255+00 'CE'

FRONTIER COMMUNICATIONS

ATV TRAIL CONSTRUCTED UNDER 1590-18-82

FOREST COUNTY POTAWATOMI - STORM

256+00 'CE'

257+00 'CE'

258+00 'CE'

MATCH LINE 559+00

N

552+00 553+00 554+00 555+00 556+00 557+00 558+00 559

USH 8/STH 32 CONSTRUCTED UNDER 1590-18-71

554+00 'PW' 555+00 'PW' 556+00 'PW' 557+00 'PW' 558+00 'PW' 559+0

BEGIN CONSTRUCTION
STA 553+50.00

REST AREA #3

10' ASPHALT PATH (TYP.)

FRONTIER COMMUNICATIONS

WETLAND BOUNDARY (TYP.)

5

5

VCL = 50.00

K = 33.03

STA 553+50.00
EL 1833.69

LP STA 553+91.73
LP EL 1833.52

PROPOSED PROFILE

1.01%

-0.50%

EXISTING PROFILE

VPC STA 553+75.22
VPC EL 1833.56

VPI STA 554+00.22
VPI EL 1833.43

VPT STA 554+25.22
VPT EL 1833.69

EXISTING ELEVATION

PROPOSED ELEVATION

1850 1845 1840 1835 1830 1825 1820 1815 1813

1831.29 1831.09 1830.93 1830.16 1830.28 1831.06 1831.81 1831.40 1833.20 1835.16 1837.29 1838.96

553 554 555 556 557 558 559

NOTE: USH 8 ROADWAY CONSTRUCTION, GRADING FOR ROADWAY AND PATHWAY, CLEARING AND GRUBBING, AND OTHER ITEMS NOT NOTED IN THESE PLANS ARE TO BE COMPLETED UNDER PROJECT 1590-18-71

PROJECT NO: 9813-02-70	USH 8 SHARED PATHWAY PHASE 1	COUNTY: FOREST	PLAN AND PROFILE: PATH 'PW'	SHEET 52	E

MATCH LINE 559+00

MATCH LINE 566+00

N

ATV TRAIL CONSTRUCTED UNDER 1590-18-82

WISCONSIN PUBLIC SERVICE
GAS/PETROLEUM

FRONTIER
COMMUNICATIONS

WETLAND
BOUNDARY (TYP.)

FOREST COUNTY
POTAWATOMI - STORM

CONCRETE
CURB RAMP
(TYP.)

260+00 'CE' 261+00 'CE' 262+00 'CE' 263+00 'CE' 264+00 'CE' 265+00 'CE'

560+00 561+00 562+00 563+00 564+00 565+00

USH 8/STH 32 CONSTRUCTED UNDER 1590-18-71

560+00 'PW' 561+00 'PW' 562+00 'PW' 563+00 'PW' 564+00 'PW' 565+00 'PW'

FRONTIER
COMMUNICATIONS

10' ASPHALT
TRAIL (TYP.)

YOUNGS LN

EXISTING R/W (TYP.)

FOREST COUNTY
POTAWATOMI - WATER

STA. 563+70 'PW'
1-18" CPRC-IV REQ'D.
2-APRON ENDWALLS REQ'D., LT. & RT.
SKEW 63° RHF

STA. 564+90 'PW'
1-14" x 23" CPRC HE-IV REQ'D.
2-APRON ENDWALLS REQ'D., LT. & RT.
SKEW 34° LHF

EXISTING PROFILE

VCL = 20.00
K = 78.01

VPC STA 560+24.06
VPC EL 1839.81

VPI STA 561+64.06
VPI EL 1841.59

VCL = 20.00
K = 10.75

VPT STA 563+04.06
VPT EL 1842.02

STA 563+90.00
EL 1843.50

STA 565+00.00
EL 1843.31

VCL = 20.00
K = 12.38

1.27%

0.31%

2.17%

-2.39%

PROPOSED PROFILE

18" CPRC
INV 840.53

MATCH PROPOSED CURB RAMP
(SEE CURB RAMP DETAILS)

YOUNGS
LN

14" x 23" CPRC HE-IV
INV 1841.01

VPC STA 559+93.11
VPC EL 1839.44
VPI STA 560+03.11
VPI EL 1839.55
VPT STA 560+13.11
VPT EL 1839.67

VPC STA 563+15.00
VPC EL 1842.06
VPI STA 563+25.00
VPI EL 1842.09
VPT STA 563+35.00
VPT EL 1842.31

VPC STA 565+63.51
VPC EL 1841.79
VPT STA 565+83.51
VPT EL 1841.47

EXISTING ELEVATION
PROPOSED ELEVATION
VCL = 280.00
K = 291.67

1860 1855 1850 1845 1840 1835 1830 1825

1838.96 1840.64 1841.97 1843.59 1847.35 1855.62 1859.28 1859.77 1860.23 1860.85 1860.60 1858.49 1860.54 1843.31 1862.05 1842.11 1861.74 1841.34

560 561 562 563 564 565 566

5 5

PROJECT NO: 9813-02-70	USH 8 SHARED PATHWAY PHASE 1	COUNTY: FOREST	PLAN AND PROFILE: PATH 'PW'	SHEET 53	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - PW 2

PLOT DATE : 12/19/2024 10:53 AM PLOT BY : ARIELLE LEWIEN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

ATV TRAIL CONSTRUCTED UNDER 1590-18-82

FRONTIER COMMUNICATIONS

WISCONSIN PUBLIC SERVICE GAS/PETROLEUM

267+00 'CE'

268+00 'CE'

269+00 'CE'

270+00 'CE'

271+00 'CE'

EVERY-BODY'S RD

CONCRETE CURB RAMP (TYP.)

FRONTIER COMMUNICATIONS

FOREST COUNTY POTAWATOMI - FIBER

WISCONSIN PUBLIC SERVICE ELECTRIC

N

RIPRAP

MH

SAN

FOREST COUNTY POTAWATOMI - SEWER

WETLAND BOUNDARY (TYP.)

567+00

568+00

569+00

570+00

571+00

572+00

573+00

USH 8/STH 32 CONSTRUCTED UNDER 1590-18-71

567+00 'PW'

568+00 'PW'

569+00 'PW'

570+00 'PW'

571+00 'PW'

572+00 'PW'

573+00 'PW'

FRONTIER COMMUNICATIONS

FOREST COUNTY POTAWATOMI - WATER

CENTURYLINK

10' ASPHALT PATH (TYP.)

EXISTING R/W (TYP.)

MATCH LINE 566+00

MATCH LINE 573+50

5

5

VPC STA 566+23.10
VPC EL 1841.16

-0.78%

VPI STA 571+60.27
VPI EL 1836.98

EXISTING PROFILE

PROPOSED PROFILE

EXISTING ELEVATION

PROPOSED ELEVATION

VCL = 1074.34

K = 290.00

1861.74	1841.34	1860.94	1840.94	1860.53	1840.46	1859.23	1839.90	1858.52	1839.25	1856.17	1838.51	1852.22	1837.69
566		567		568		569		570		571		572	573

1849.20	1836.78	1846.66	1835.78	1843.36	1834.70	1843.84	1833.53	1844.78	1832.28	1843.74	1830.94	1841.57	1829.51	1838.84	1828.00	1836.24	1826.40
																	573

PROJECT NO: 9813-02-70	USH 8 SHARED PATHWAY PHASE 1	COUNTY: FOREST	PLAN AND PROFILE: PATH 'PW'	SHEET 54	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - PW 3

PLOT DATE : 10/21/2024 9:33 PM PLOT BY : ARIELLE LEWIEN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

USH 8/STH 32 CONSTRUCTED UNDER 1590-18-82

USH 8/STH 32 CONSTRUCTED UNDER 1590-18-71

N

FOREST COUNTY
POTAWATOMI - SANITARY

PC: 578+47.46

574+00
575+00
576+00
577+00
578+00
579+00
580+00
581+00

574+00 'PW'
575+00 'PW'
576+00 'PW'
577+00 'PW'
578+00 'PW'
579+00 'PW'
580+00 'PW'
581+00

MATCH LINE 573+50

MATCH LINE 581+00

10' ASPHALT
PATH (TYP.)

CURVE 1-PW

CURVE 2-PW

CURVE 3-PW

BEGIN RAILING
STA: 577+00 'PW'

FOREST COUNTY
POTAWATOMI - WATER

FRONTIER
COMMUNICATIONS

CENTURYLINK

EXISTING R/W (TYP.)

RIPRAP

5

5

STA 577+00.00
EL 1812.79

STA 577+10.00
EL 1812.64

VPI STA 577+05.00
VPI EL 1812.71

VPC STA 577+05.00
VPC EL 1812.71

VPT STA 577+15.00
VPT EL 1812.25

VCL = 1074.34
K = 290.00

-1.50%

VCL = 10.00
K = 1.57

EXISTING ELEVATION
PROPOSED ELEVATION

EXISTING PROFILE

PROPOSED PROFILE

-7.85%

VCL = 10.00
K = 1.57

VPC STA 578+95.00
VPC EL 1798.12

VPI STA 579+10.00
VPI EL 1797.57

VPC STA 579+10.00
VPC EL 1797.57

VPI STA 579+15.00
VPI EL 1797.50

-1.50%

VPT STA 579+05.00
VPT EL 1797.65

VPT STA 579+20.00
VPT EL 1797.11

-7.85%

VCL = 10.00
K = 1.57

1835 1830 1825 1820 1815 1810 1805 1800

1815 1810 1805 1800 1795 1790 1785 1780

1805 1800 1795 1790 1785 1780 1775 1770

1836.24 1826.40
1833.50 1824.71
1831.22 1822.94
1827.96 1821.08
1825.09 1819.14
1822.36 1817.11
1819.91 1814.99
1817.85 1812.79
1818.37 1809.50
1821.87 1805.57
1810.28 1801.65
1804.54 1797.80
1797.64 1794.75
1786.15 1790.83
1778.20 1786.90
1770.07 1782.98

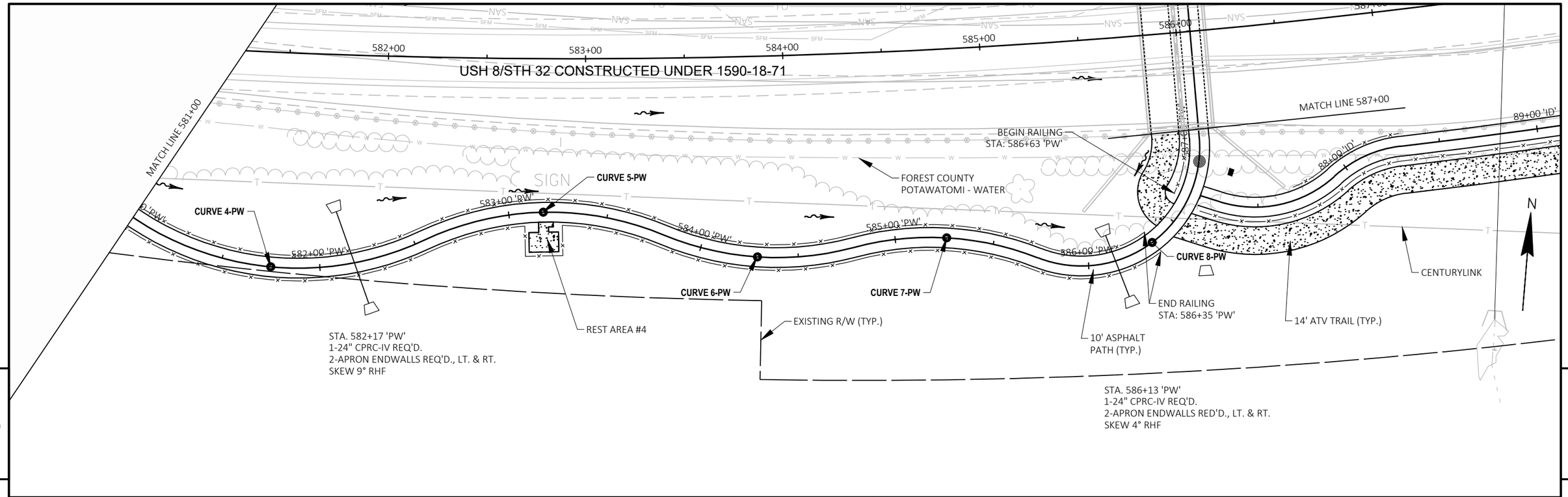
573 575 576 577 578 579 580 581

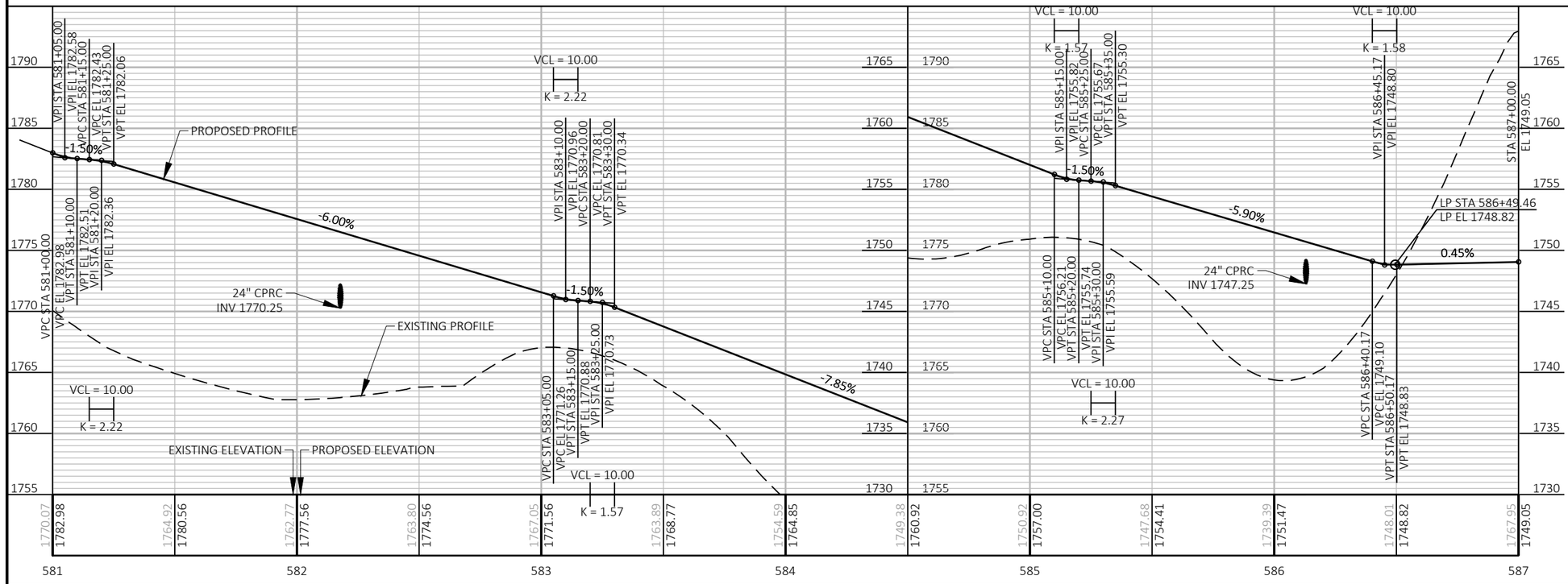
PROJECT NO: 9813-02-70	USH 8 SHARED PATHWAY PHASE 1	COUNTY: FOREST	PLAN AND PROFILE: PATH 'PW'	SHEET 55	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - PW 4

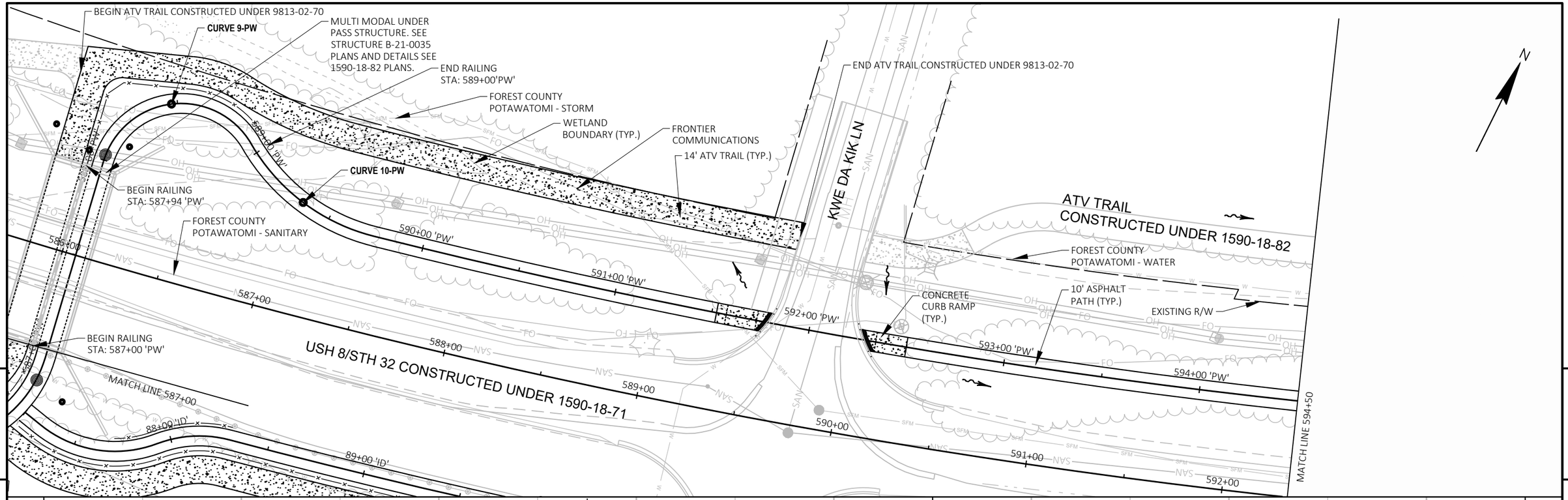
PLOT DATE : 10/31/2024 10:03 AM PLOT BY : JOSH MERCIER PLOT NAME : PLOT SCALE : 1 IN:50 FT

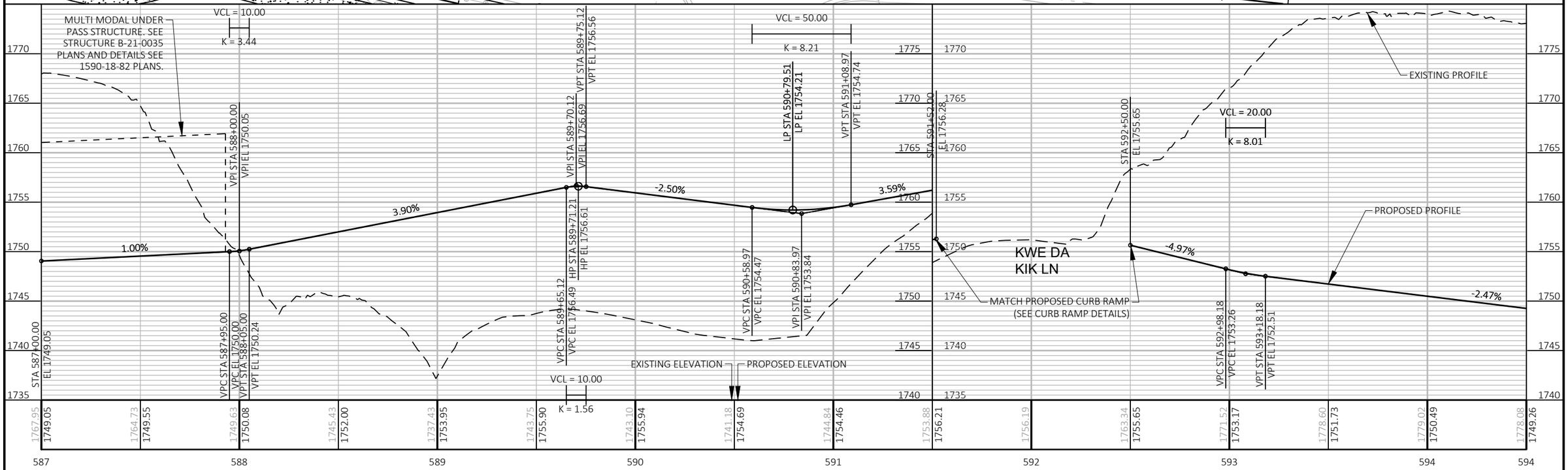
WISDOT/CADDS SHEET 44



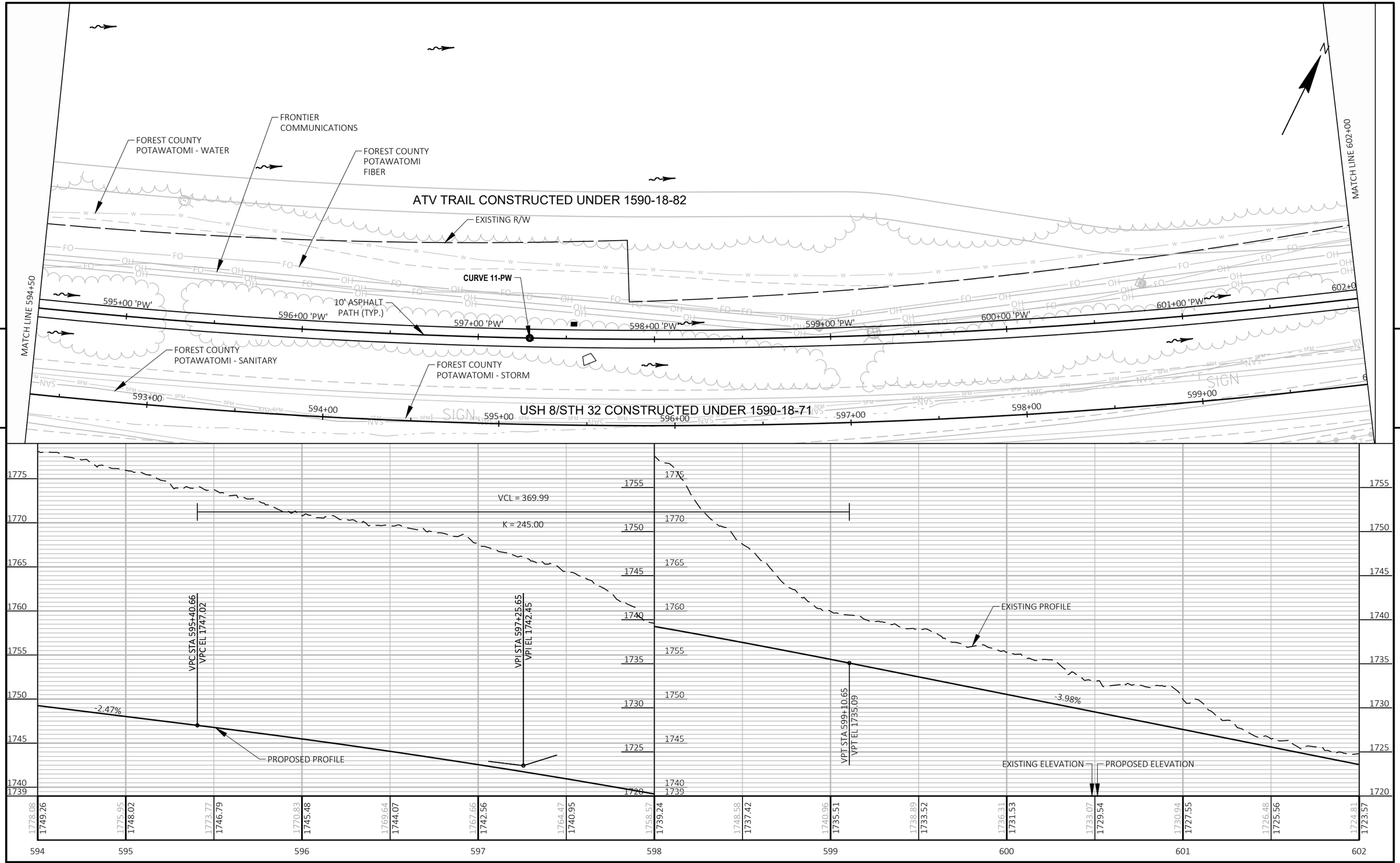


PROJECT NO: 9813-02-70	USH 8 SHARED PATHWAY PHASE 1	COUNTY: FOREST	PLAN AND PROFILE: PATH 'PW'	SHEET 56	E





PROJECT NO: 9813-02-70	USH 8 SHARED PATHWAY PHASE 1	COUNTY: FOREST	PLAN AND PROFILE: PATH 'PW'	SHEET 57	E



PROJECT NO: 9813-02-70	USH 8 SHARED PATHWAY PHASE 1	COUNTY: FOREST	PLAN AND PROFILE: PATH 'PW'	SHEET 58	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - PW 7

PLOT DATE : 10/21/2024 9:34 PM PLOT BY : ARIELLE LEWIEN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

FOREST COUNTY POTAWATOMI - SANITARY

FOREST COUNTY POTAWATOMI - STORM

FOREST COUNTY POTAWATOMI - WATER

FOREST COUNTY POTAWATOMI FIBER

FRONTIER COMMUNICATIONS

EXISTING R/W

FRONTIER COMMUNICATIONS

ATV TRAIL CONSTRUCTED UNDER 1590-18-82

10' ASPHALT PATH (TYP.)

CURVE 12-PW

BEGIN RAILING
STA: 606+52 'PW'

PC: 606+51.98

PT: 603+00.66

0 'PW'

603+00 'PW'

604+00 'PW'

605+00 'PW'

606+00 'PW'

607+00 'PW'

608+00 'PW'

609+00 'PW'

00+00

601+00

602+00

604+00

605+00

606+00

607+00

USH 8/STH 32 CONSTRUCTED UNDER 1590-18-71

FRONTIER COMMUNICATIONS

MATCH LINE 602+00

MATCH LINE 609+50

5

5

102+00 'ID'

103+00 'ID'

104+00 'ID'

STA BACK = 602+81.94

STA AHEAD = 603+00.66

105+00 'ID'

106+00 'ID'

107+00 'ID'

108+00 'ID'

1730

1725

1720

1715

1710

1705

1700

1695

1693

VCL = 100.00

K = 74.59

-3.98%

EXISTING PROFILE

PROPOSED PROFILE

-2.64%

-3.87%

VPC STA 604+52.34
VPC EL 1713.53

VPI STA 605+02.34
VPI EL 1711.54

VPT STA 605+52.34
VPT EL 1710.22

VPC STA 607+52.34
VPC EL 1704.94

VPI STA 608+02.34
VPI EL 1703.62

VPT STA 608+52.34
VPT EL 1701.68

VCL = 100.00

K = 80.99

EXISTING ELEVATION

PROPOSED ELEVATION

1724.81	1723.57	1726.67	1721.58	1724.92	1719.59	1721.86	1717.60	1718.51	1715.61	1716.13	1713.62	1714.54	1711.78	1713.10	1710.28	1710.89	1708.96	1710.01	1707.64
1708.98	1706.32	1707.43	1705.00	1705.27	1703.54	1703.75	1701.77	1700.10	1699.83	1696.12	1697.90								

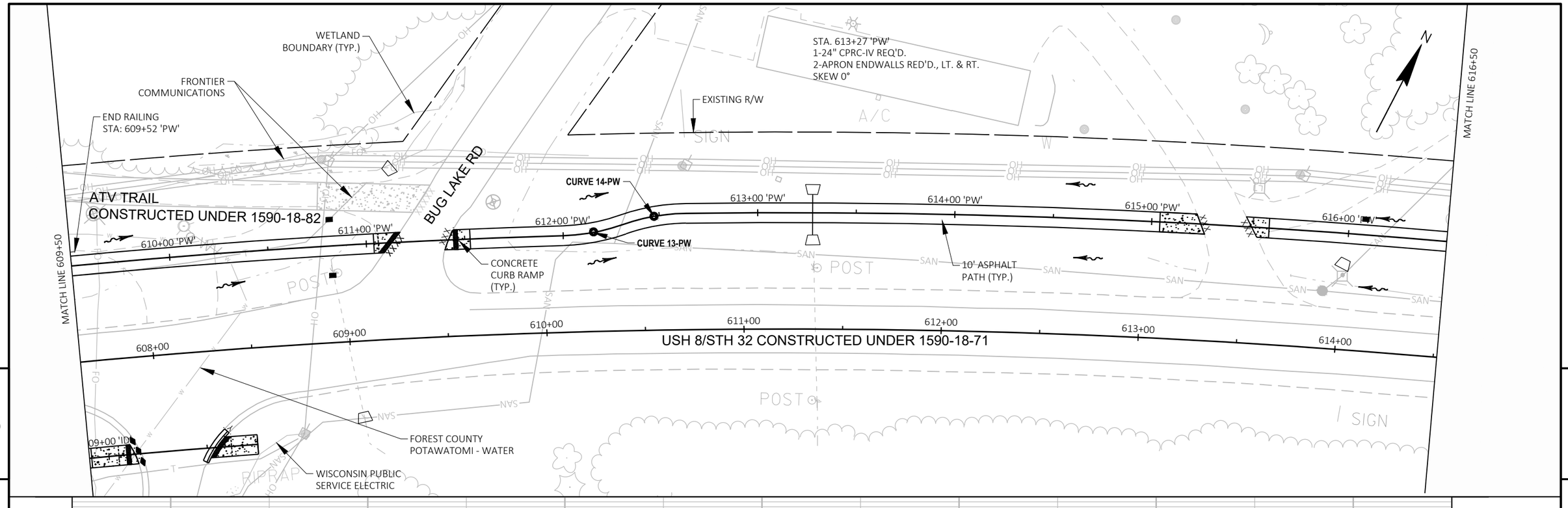
602 603 604 605 606 607 608 609 609

PROJECT NO: 9813-02-70	USH 8 SHARED PATHWAY PHASE 1	COUNTY: FOREST	PLAN AND PROFILE: PATH 'PW'	SHEET 59 E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - PW 8

PLOT DATE : 10/21/2024 9:34 PM PLOT BY : ARIELLE LEWIEN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

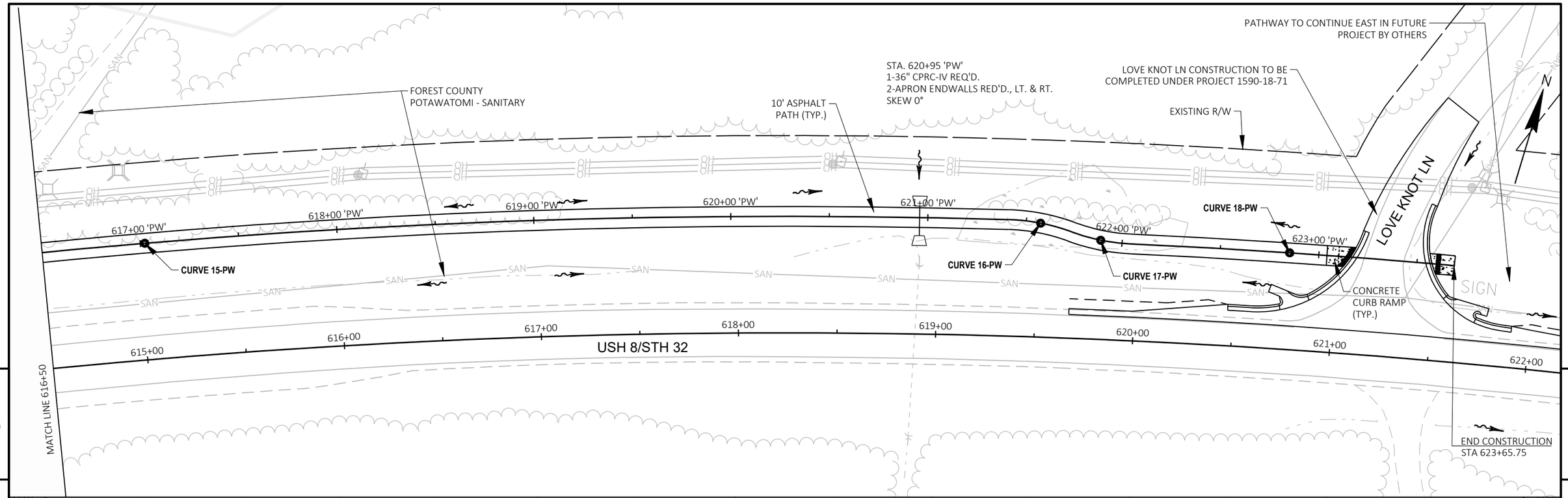


PROJECT NO: 9813-02-70	USH 8 SHARED PATHWAY PHASE 1	COUNTY: FOREST	PLAN AND PROFILE: PATH 'PW'	SHEET 60	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - PW 9

PLOT DATE : 12/19/2024 10:56 AM PLOT BY : ARIELLE LEWIEN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

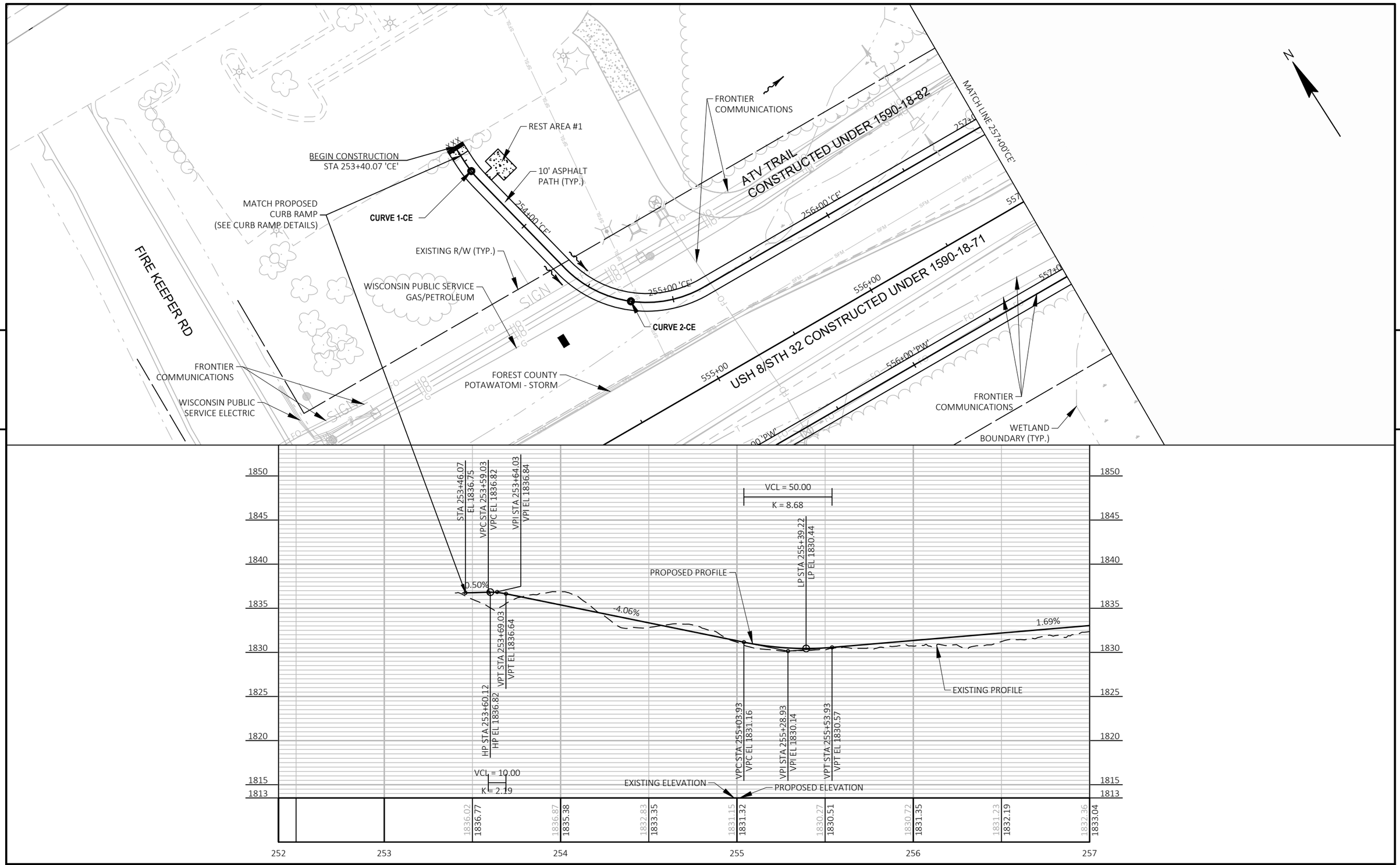


PROJECT NO: 9813-02-70	USH 8 SHARED PATHWAY PHASE 1	COUNTY: FOREST	PLAN AND PROFILE: PATH 'PW'	SHEET 61 E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - PW 10

PLOT DATE : 12/19/2024 10:58 AM PLOT BY : ARIELLE LEWIEN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44



5

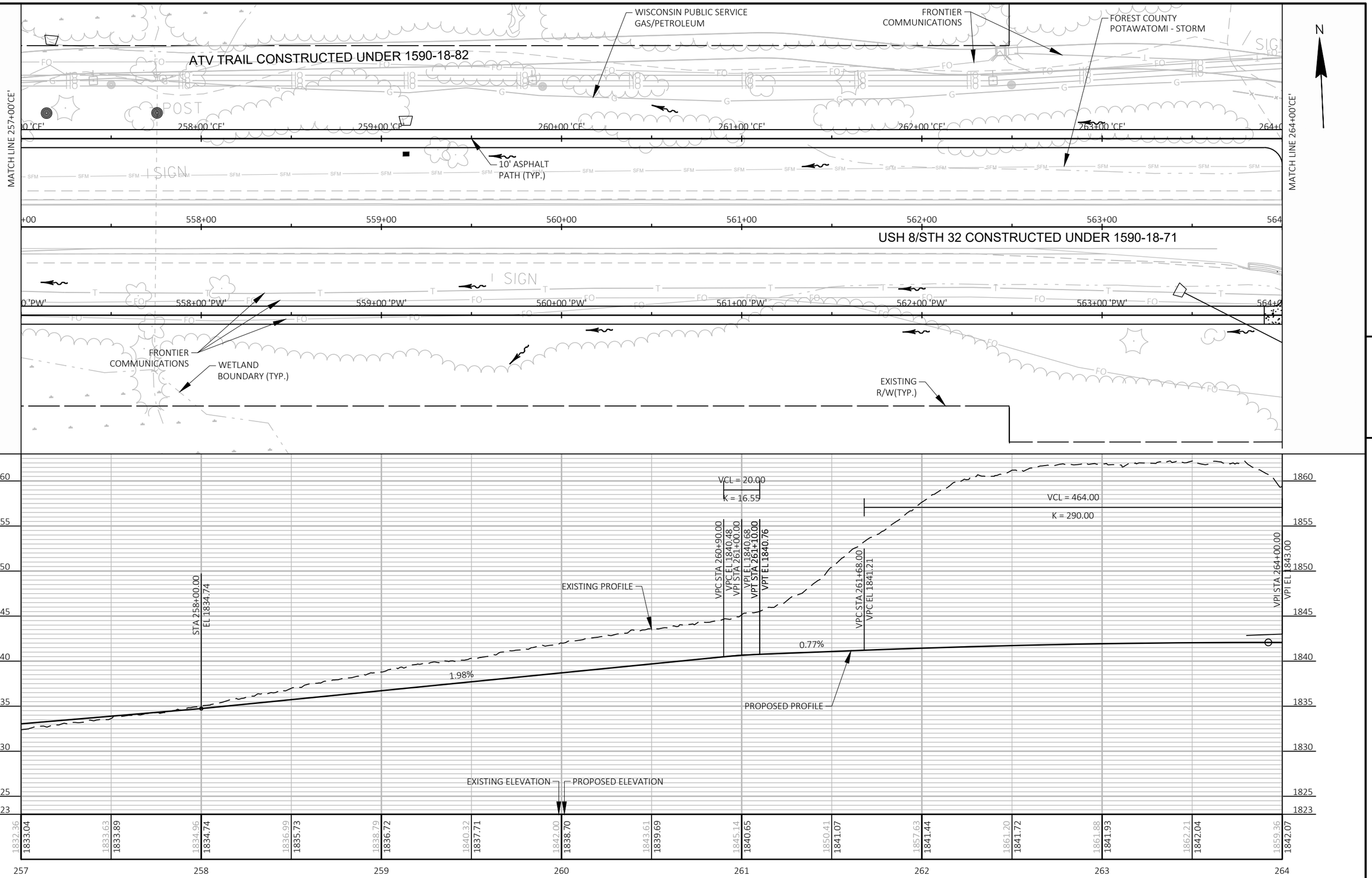
5

PROJECT NO: 9813-02-70	USH 8 SHARED PATHWAY PHASE 1	COUNTY: FOREST	PLAN AND PROFILE: PATH 'CE'	SHEET 62	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\050102-PP_CE.DWG
LAYOUT NAME - CE 1

PLOT DATE : 10/21/2024 9:41 PM PLOT BY : ARIELLE LEWIEN PLOT NAME : PLOT SCALE : 1 IN:50 FT

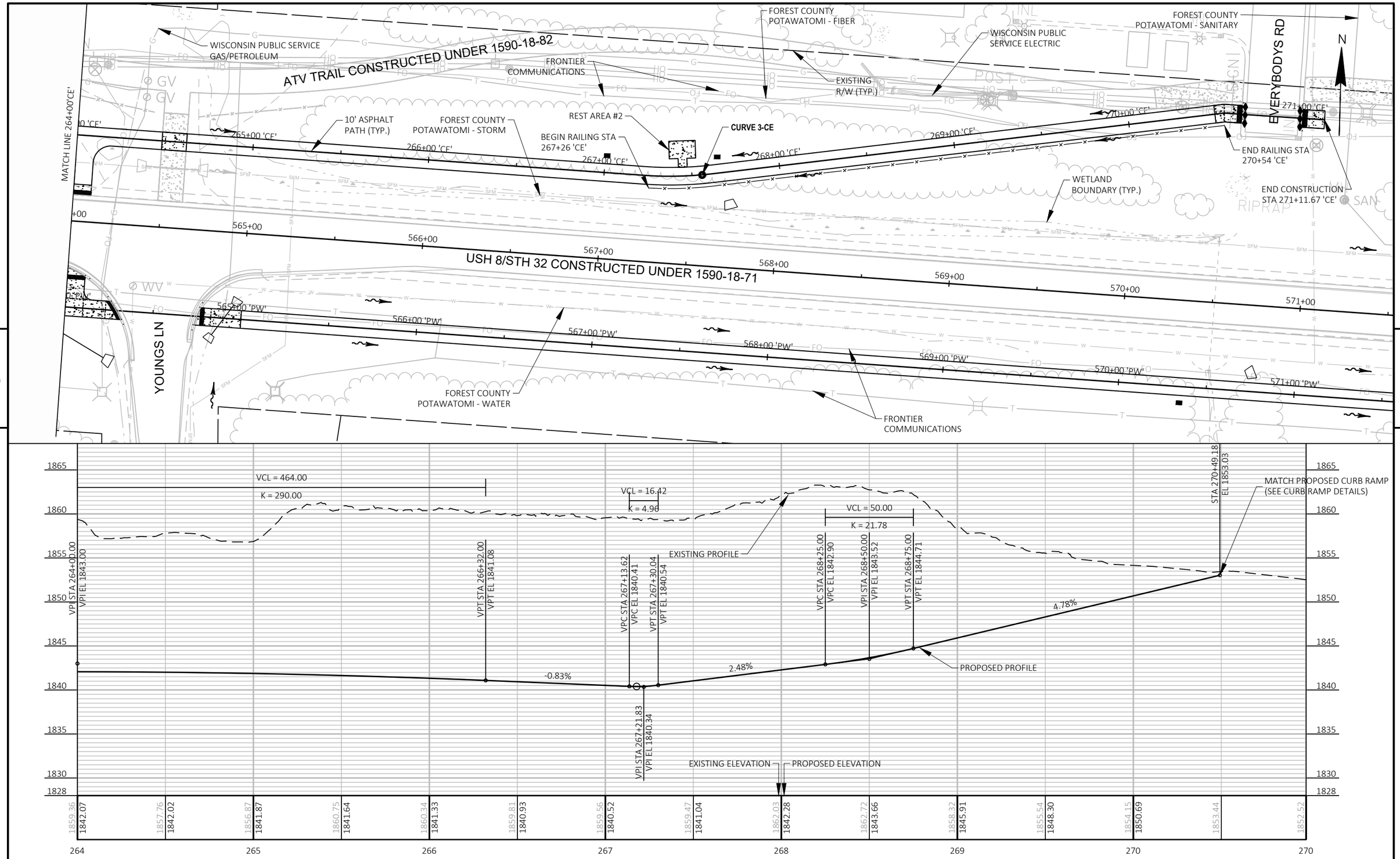
WISDOT/CADDS SHEET 44



PROJECT NO: 9813-02-70	USH 8 SHARED PATHWAY PHASE 1	COUNTY: FOREST	PLAN AND PROFILE: PATH 'CE'	SHEET 63 E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\050102-PP_CE.DWG
LAYOUT NAME - CE 2

PLOT DATE : 10/21/2024 9:41 PM PLOT BY : ARIELLE LEWIEN PLOT NAME : PLOT SCALE : 1 IN:50 FT



PROJECT NO: 9813-02-70	USH 8 SHARED PATHWAY PHASE 1	COUNTY: FOREST	PLAN AND PROFILE: PATH 'CE'	SHEET 64 E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\050102-PP_CE.DWG
LAYOUT NAME - CE 3

PLOT DATE : 10/21/2024 9:42 PM PLOT BY : ARIELLE LEWIEN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

EXISTING R/W (TYP.)
FRONTIER COMMUNICATIONS
ATV TRAIL CONSTRUCTED UNDER 1590-18-82
14' ATV TRAIL (TYP.)
WETLAND BOUNDARY (TYP.)
DEPRESSED CURB
FOREST COUNTY POTAWATOMI - SANITARY
FOREST COUNTY POTAWATOMI - STORM
FOREST COUNTY POTAWATOMI FIBER
KWE DA KIK LN
MATCH LINE 92+00
N
584+00
585+00
586+00
587+00
588+00
589+00
590+00
591+00 'PW'
592+00 'PW'
589+90 'PW'
USH 8/STH 32 CONSTRUCTED UNDER 1590-18-71
MULTI MODAL UNDER PASS STRUCTURE. SEE STRUCTURE PLANS AND DETAILS SEE 1590-18-82 PLANS.
FOREST COUNTY POTAWATOMI - WATER
584+00 'PW'
585+00 'PW'
586+00 'PW'
BEGIN RAILING STA: 87+70 'ID'
END RAILING STA: 88+30 'ID'
10' ASPHALT PATH (TYP.)
88+00 'ID'
89+00 'ID'
90+00 'ID'
91+00 'ID'
92+0
BEGIN RAILING STA: 87+22 'ID'
CURVE 1-ID
CURVE 2-ID
CURVE 3-ID
14' ATV TRAIL (TYP.)
DEPRESSED CURB
END RAILING 90+68 'ID'
FRONTIER COMMUNICATIONS
5
5

1775
1770
1765
1760
1755
1750
1745
1740
1737

VCL = 10.00
K = 1.93
BEGIN CONSTRUCTION STA 87+20.12
STA 87+20.12 EL 1748.60
VPI STA 87+29.35 VPI EL 1748.48
VPC STA 87+24.35 VPC EL 1748.54 VPT STA 87+34.35 VPT EL 1748.68
-1.24%
3.93%
VPI STA 88+29.98 VPI EL 1752.44
VPC STA 88+19.98 VPC EL 1752.04
VPT STA 88+39.98 VPT EL 1752.48
VCL = 20.00
K = 5.83
0.50%
EXISTING PROFILE
VCL = 20.00
K = 8.15
PROPOSED PROFILE
VPC STA 89+12.36 VPC EL 1752.85 VPI STA 89+22.36 VPI EL 1752.90 VPT STA 89+32.36 VPT EL 1753.19
2.95%
STA 90+50.01 EL 1756.67
KWE DA KIK LN
MATCH PROPOSED CURB RAMP ELEVATION (SEE CURB RAMP DETAILS)
EXISTING ELEVATION
PROPOSED ELEVATION
STA 91+37.92 EL 1756.80
4.28%
VPC STA 91+86.69 VPC EL 1754.71
VCL = 10.00
K = 3.08
VPI STA 91+91.69 VPI EL 1754.44
VPT STA 91+96.69 VPT EL 1754.18

1749.16 1749.29
1756.25 1751.26
1760.77 1752.54
1760.00 1752.78
1758.75 1753.71
1758.16 1755.19
1757.80 1756.67
1757.71
1756.87 1756.28
1756.06 1754.41

85 86 87 88 89 90 91 92

PROJECT NO: 9813-02-70	USH 8 SHARED PATHWAY PHASE 1	COUNTY: FOREST	PLAN AND PROFILE: PATH 'ID'	SHEET 65	E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\050103-PP_ID.DWG
LAYOUT NAME - 14
PLOT DATE : 10/21/2024 9:50 PM
PLOT BY : ARIELLE LEWIEN
PLOT NAME :
PLOT SCALE : 1 IN:50 FT

ATV TRAIL CONSTRUCTED UNDER 1590-18-82

EXISTING R/W

FOREST COUNTY POTAWATOMI - FIBER

FRONTIER COMMUNICATIONS

FOREST COUNTY POTAWATOMI - WATER

593+00 'PW'

594+00 'PW'

595+00 'PW'

596+00 'PW'

597+00 'PW'

598+00 'PW'

MATCH LINE 98+00

FOREST COUNTY POTAWATOMI - STORM

FOREST COUNTY POTAWATOMI - SANITARY

591+00

592+00

593+00

594+00

595+00

596+00

USH 8/STH 32 CONSTRUCTED UNDER 1590-18-71

MATCH LINE 92+00

0 'ID'

93+00 'ID'

94+00 'ID'

95+00 'ID'

96+00 'ID'

97+00 'ID'

98+0

CURVE 4-ID

10' ASPHALT PATH (TYP.)

FRONTIER COMMUNICATIONS

DRIVEWAY

WISCONSIN PUBLIC SERVICE ELECTRIC

N

5

5

1775

1770

1765

1760

1755

1750

1745

1740

1736

VPC STA 92+66.69
VPC EL 1753.71

VPI STA 92+91.69
VPI EL 1753.45

VPT STA 93+16.69
VPT EL 1753.00

STA 95+17.81
EL 1749.39

STA 95+91.34
EL 1746.98

EXISTING PROFILE

-1.04%

-1.80%

PROPOSED PROFILE

DRIVEWAY

MATCH PROPOSED CURB RAMP ELEVATION
(SEE CURB RAMP DETAILS)

-4.98%

VCL = 50.00

K = 65.90

EXISTING ELEVATION

PROPOSED ELEVATION

| | | |

FRONTIER COMMUNICATIONS
FOREST COUNTY POTAWATOMI - FIBER
FOREST COUNTY POTAWATOMI - WATER
ATV TRAIL CONSTRUCTED UNDER 1590-18-82
MATCH LINE 104+50
599+00 'PW'
600+00 'PW'
601+00 'PW'
602+00 'PW'
603+00 'PW'
604+00 'PW'
605+00
FOREST COUNTY POTAWATOMI - STORM
FOREST COUNTY POTAWATOMI - SANITARY
597+00
598+00
599+00
600+00
601+00
602+00
USH 8/STH 32 CONSTRUCTED UNDER 1590-18-71
MATCH LINE 98+00
99+00 'ID'
100+00 'ID'
101+00 'ID'
102+00 'ID'
103+00 'ID'
104+00 'ID'
BEGIN RAILING STA 98+91 'ID'
WISCONSIN PUBLIC SERVICE ELECTRIC
10' ASPHALT PATH (TYP.)
END RAILING STA 103+41 'ID'
EXISTING R/W (TYP.)
N
5
5

VCL = 20.00
K = 31.40
EXISTING PROFILE
PROPOSED PROFILE
-4.35%
VCL = 100.00
K = 48.60
-2.29%
VCL = 100.00
K = 41.90
VPC STA 98+81.19
VPC EL 1732.53
VPT STA 99+01.19
VPT EL 1731.60
VPI STA 98+91.19
VPI EL 1732.03
VPC STA 102+41.19
VPC EL 1716.81
VPI STA 102+91.19
VPI EL 1714.64
VPT STA 103+41.19
VPT EL 1713.50
VPC STA 104+41.19
VPC EL 1711.20
EXISTING ELEVATION
PROPOSED ELEVATION

1739.66	1737.46	1734.13	1730.89	1727.80
1736.58	1734.08	1731.65	1729.47	1727.30
1724.64	1721.57	1718.39	1715.04	1711.66
1725.13	1722.95	1720.78	1718.60	1716.44
1708.58	1710.70	1711.70	1711.52	
1714.61	1713.29	1712.15	1710.99	

98 99 100 101 102 103 104 104

PROJECT NO: 9813-02-70	USH 8 SHARED PATHWAY PHASE 1	COUNTY: FOREST	PLAN AND PROFILE: PATH 'ID'	SHEET 67 E

FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\050103-PP_ID.DWG
LAYOUT NAME - 16
PLOT DATE : 10/21/2024 9:50 PM PLOT BY : ARIELLE LEWIEN PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44

FOREST COUNTY POTAWATOMI - FIBER

FOREST COUNTY POTAWATOMI - WATER

FRONTIER COMMUNICATIONS

ATV TRAIL CONSTRUCTED 1590-18-82

'PW' 606+00 'PW' 607+00 'PW' 608+00 'PW' 609+00 'PW' 610+00 'PW' 611+00 'PW' 612+00 'PW'

BUG LAKE RD

N

604+00 605+00 606+00 607+00 608+00 609+00 610+00

USH 8/STH 32 CONSTRUCTED 1590-18-71

FRONTIER COMMUNICATIONS

105+00 'ID' 106+00 'ID' 107+00 'ID' 108+00 'ID' 109+00 'ID'

END CONSTRUCTION STA 109+75.73

CURVE 5-ID

FOREST COUNTY POTAWATOMI - STORM

10' ASPHALT PATH (TYP.)

FOREST COUNTY POTAWATOMI - SANITARY

FOREST COUNTY POTAWATOMI - SANITARY

WETLAND BOUNDARY (TYP.)

INDIAN DR

EXISTING R/W (TYP.)

WISCONSIN PUBLIC SERVICE ELECTRIC

MATCH LINE 104+50

5

5

VPI STA 104+91.19
VPI EL 1710.06

VPT STA 105+41.19
VPT EL 1707.72

EXISTING PROFILE

VCL = 100.00
K = 31.48

-4.68%

PROPOSED PROFILE

STA 108+91.19
EL 1694.53

MATCH PROPOSED CURB RAMP ELEVATION
(SEE CURB RAMP DETAILS)

VCL = 100.00
K = 41.90

-1.50%

INDIAN DRIVE

VPC STA 107+41.19
VPC EL 1698.37

VPI STA 107+91.19
VPI EL 1696.03

VPT STA 108+41.19
VPT EL 1695.28

EXISTING ELEVATION

PROPOSED ELEVATION

1720 1715 1710 1705 1700 1695 1690 1685 1682

1711.52	1710.99	1710.05	1709.45	1707.20	1707.31	1705.72	1704.97	1703.85	1702.63	1700.22	1700.30	1696.77	1697.97	1692.86	1696.17	1691.25	1695.15	1692.56	1693.38

104 105 106 107 108 109 110

PROJECT NO: 9813-02-70	USH 8 SHARED PATHWAY PHASE 1	COUNTY: FOREST	PLAN AND PROFILE: PATH 'ID'	SHEET 68 E

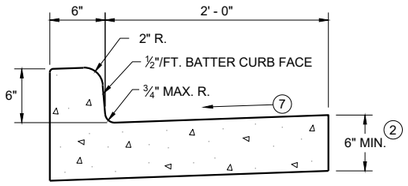
FILE NAME : G:\WDOT LP\FOREST CO POTAWATOMI\22022-000 (USH 8 TRAIL)\CIVIL 3D\SHEETSPLAN\050103-PP_ID.DWG
LAYOUT NAME - 17

PLOT DATE : 10/21/2024 9:51 PM PLOT BY : ARIELLE LEWIEN PLOT NAME : PLOT SCALE : 1 IN:50 FT

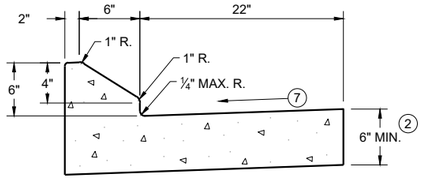
WISDOT/CADDS SHEET 44

Standard Detail Drawing List

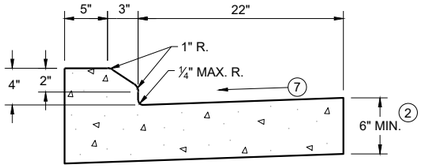
08D01-23A	CONCRETE CURB & GUTTER
08D01-23B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D05-21A	CURB RAMPS TYPES 1 AND 1-A
08D05-21B	CURB RAMPS TYPES 2 AND 3
08D05-21C	CURB RAMPS TYPES 4A AND 4A1
08D05-21D	CURB RAMPS TYPE 4B AND 4B1
08D05-21E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-21F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-21G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08E09-06	SILT FENCE
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C11-14A	RURAL DOWELED CONCRETE PAVEMENT
13C11-14B	RURAL DOWELED CONCRETE PAVEMENT
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C33-05	STOP LINE AND CROSSWALK PAVEMENT MARKING



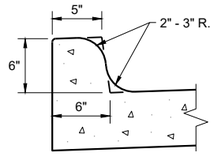
TYPES A (1) & D



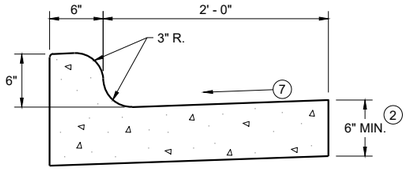
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

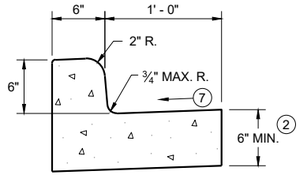


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



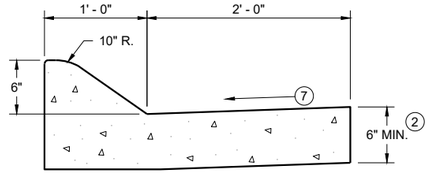
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

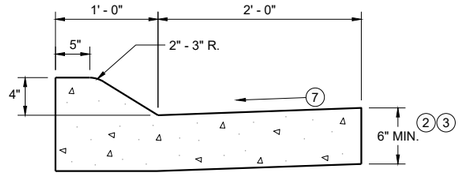


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

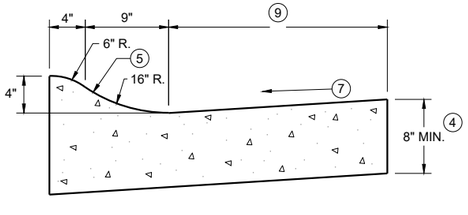


6" SLOPED CURB TYPES A (1) & D



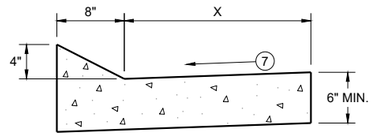
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

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

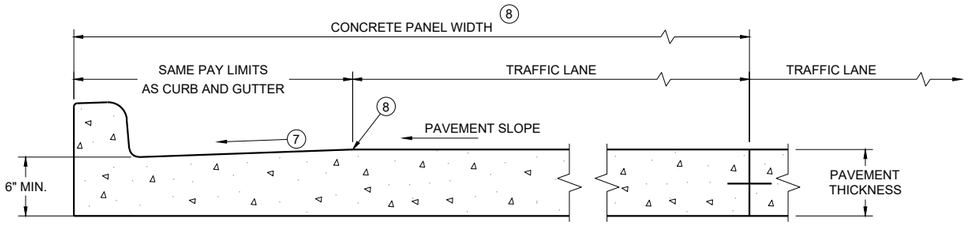


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

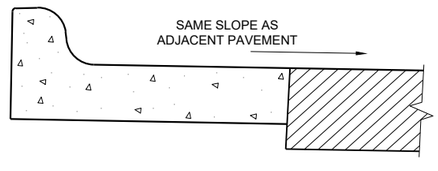
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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



PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



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

GENERAL NOTES

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

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

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

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

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

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

(3) USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

(4) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(5) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

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

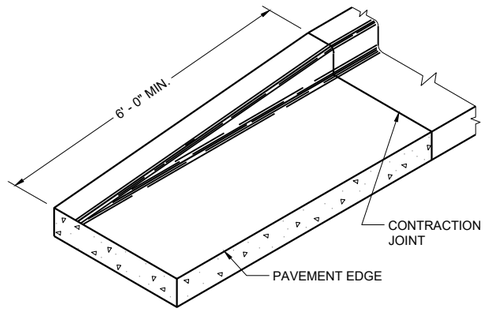
(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

(9) CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

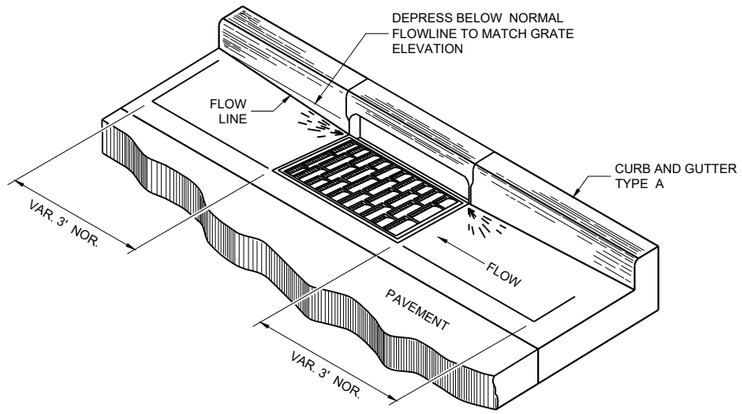
CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D01-23a



END SECTION CURB 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.

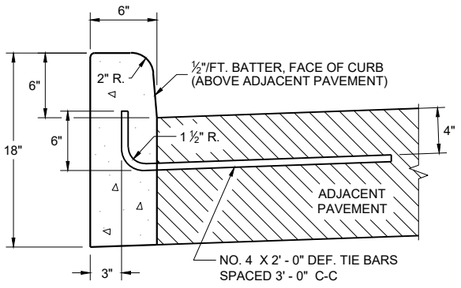
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

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

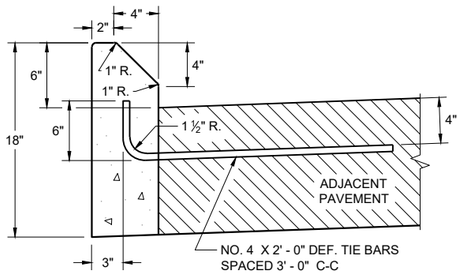
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

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

(11) PLACE 1" THICK EXPANSION JOINT MATERIAL BETWEEN VERTICAL FACE CURB TYPES EXTENDING FROM THE TOP OF CURB TO 1 INCH BELOW THE ADJOINING CONCRETE SURFACE. RIGID CONCRETE STRUCTURES INCLUDE RAISED CONCRETE MEDIANS, CONCRETE SAFETY ISLANDS, SPLITTER ISLANDS, OR LOCATIONS IDENTIFIED ON THE PLANS.

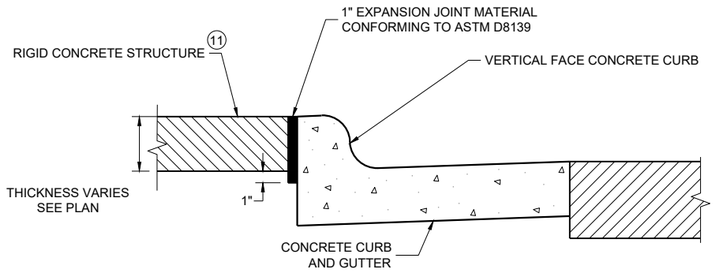


TYPES A (1) & D

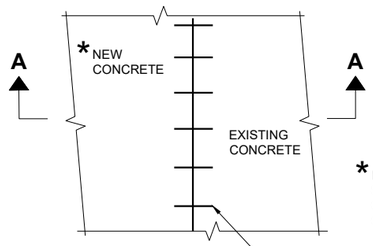


TYPES G (1) & J

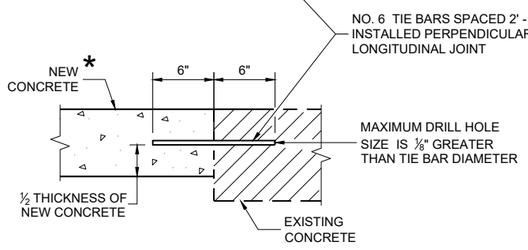
CONCRETE CURB



EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE (11)

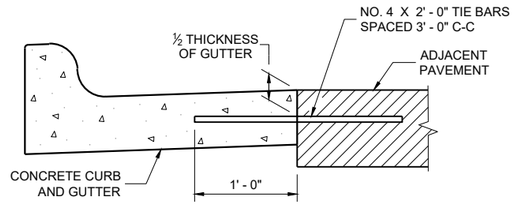


PLAN VIEW

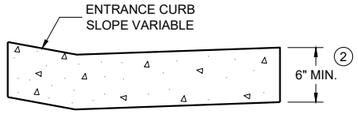


SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (10)

(WHEN DIRECTED BY THE ENGINEER)

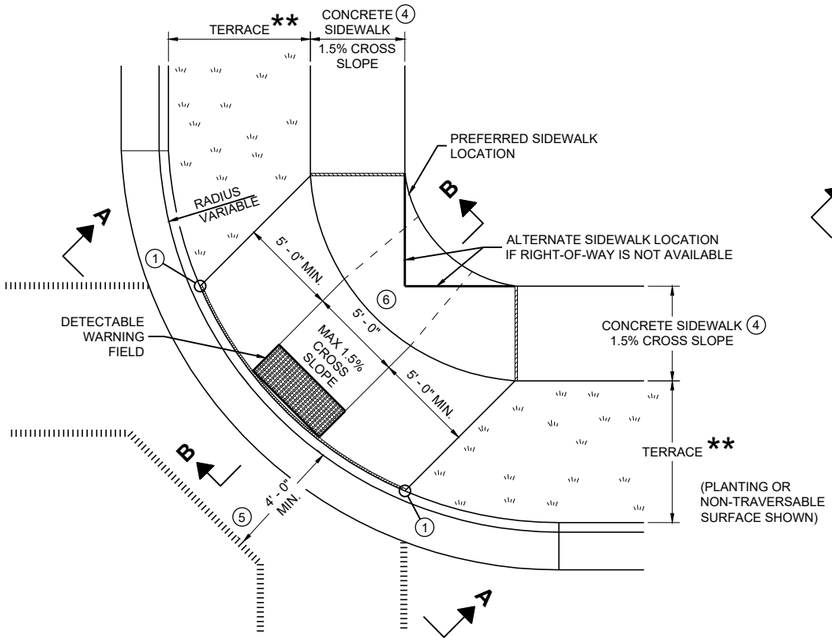
CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

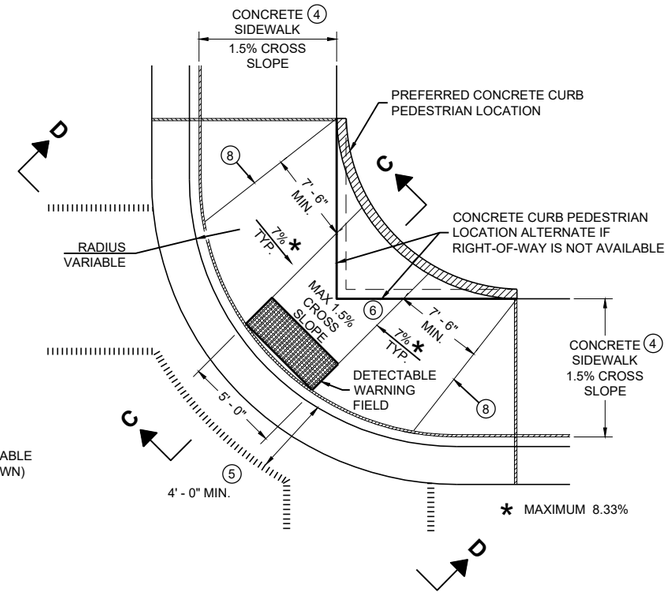
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SDD 08D01-23b



PLAN VIEW

CURB RAMP TYPE 1

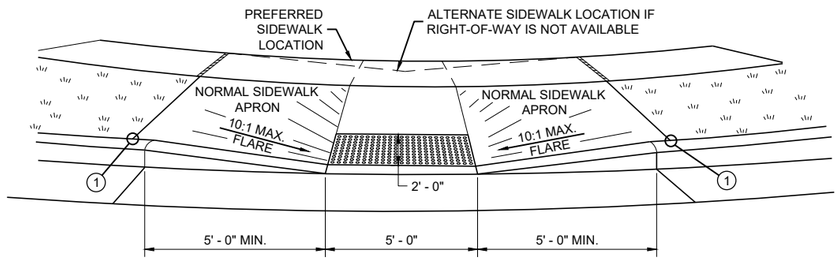
(CENTER OF CORNER RADIUS)



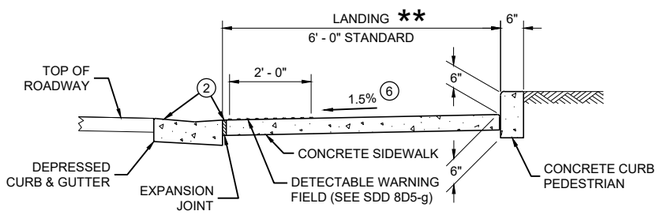
PLAN VIEW

CURB RAMP TYPE 1 - A

(NO TERRACE)

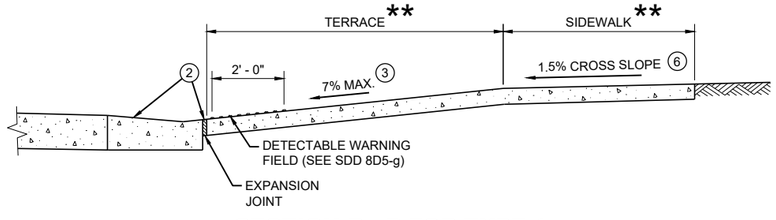


VIEW A - A FOR TYPE 1

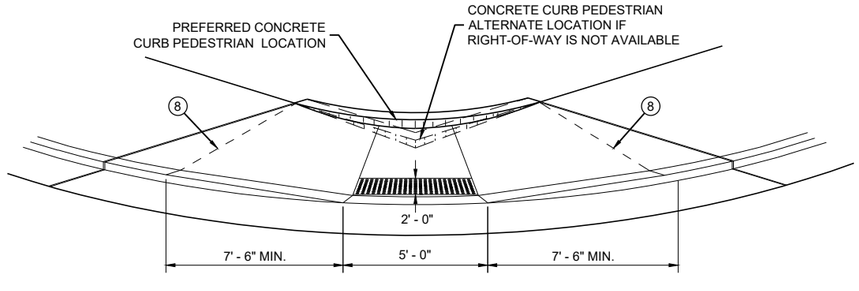


SECTION C - C FOR TYPE 1 - A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B - B FOR TYPE 1



VIEW D - D FOR TYPE 1 - A

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 CURB RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FILED SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAR FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD"

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ½ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA. 4 FOOT WIDTH IS MEASURED FROM THE FLANGE LINE

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

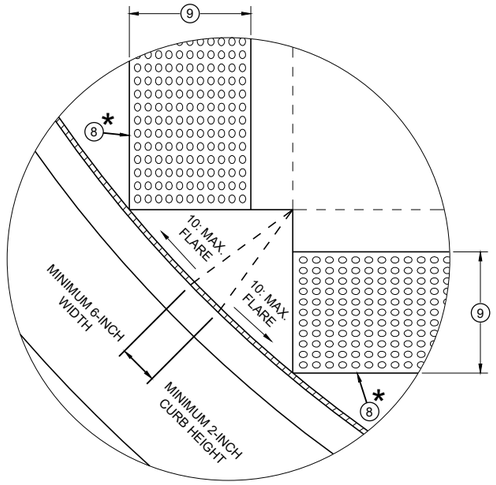
LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

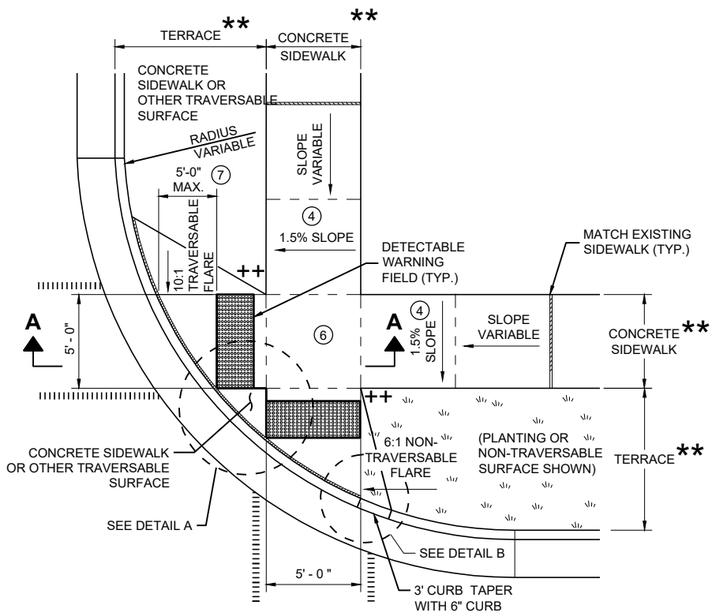
CURB RAMPS TYPE 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

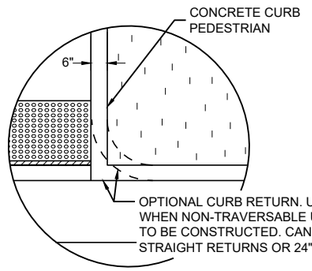
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SDD 08D05-21a



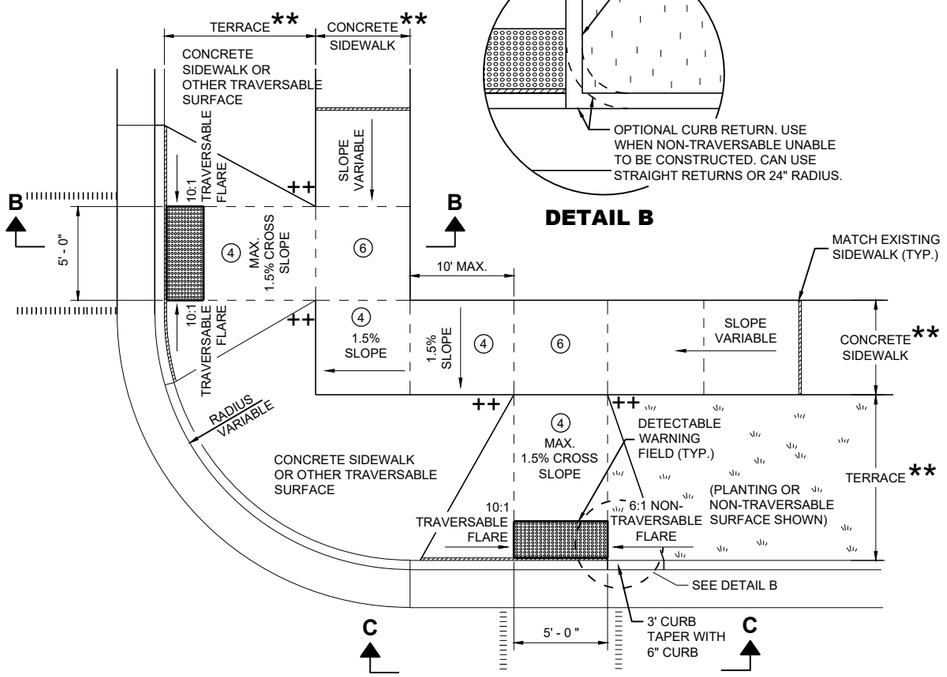
DETAIL A



PLAN VIEW
CURB RAMP TYPE 2
(CENTER OF CORNER RADIUS)



DETAIL B



PLAN VIEW
CURB RAMP TYPE 3
(OUTSIDE OF CROSSWALK AREA)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE (2.67% OR LESS) AND NOT TO EXCEED 11% GRADE CHANGE.

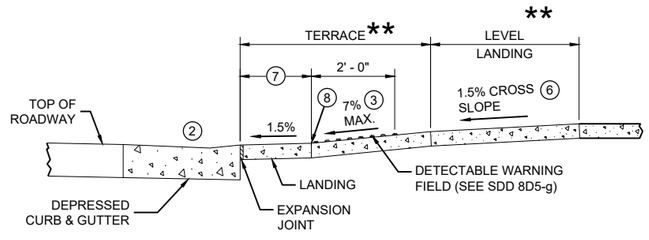
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET X 5 FEET.

(7) WHEN GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(9) WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.

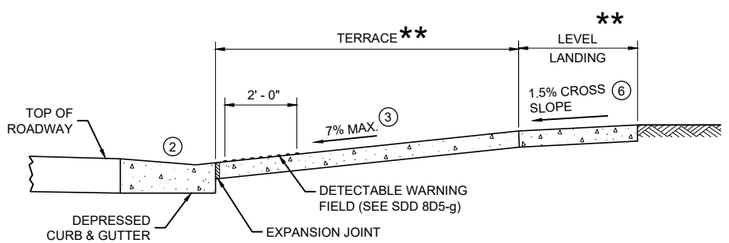


SECTION A - A FOR TYPE 2

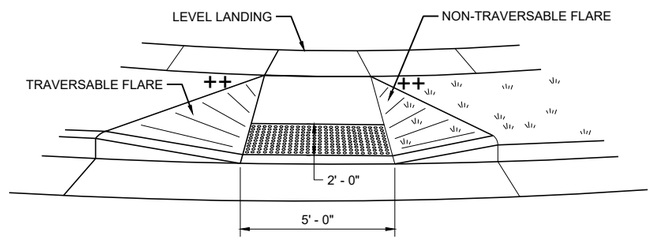
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE



SECTION B - B FOR TYPE 3



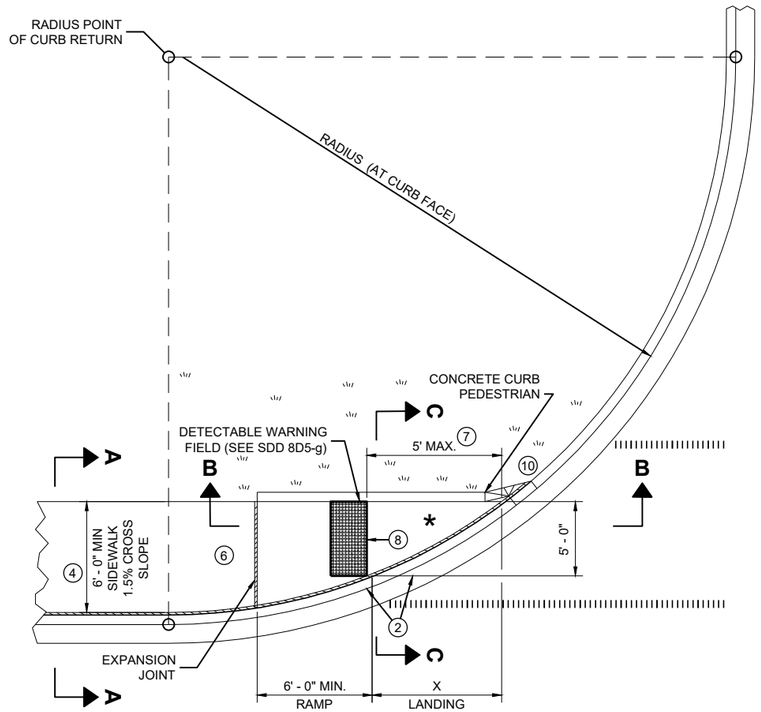
VIEW C - C FOR TYPE 3

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPE 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

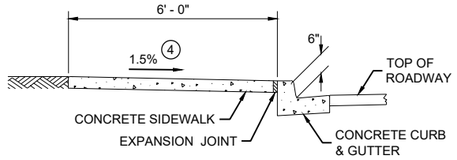


PLAN VIEW

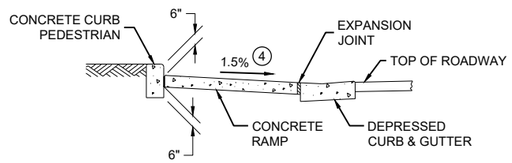
CURB RAMP TYPE 4A

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"

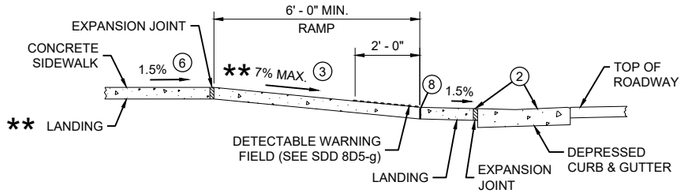
INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A - A FOR TYPE 4A

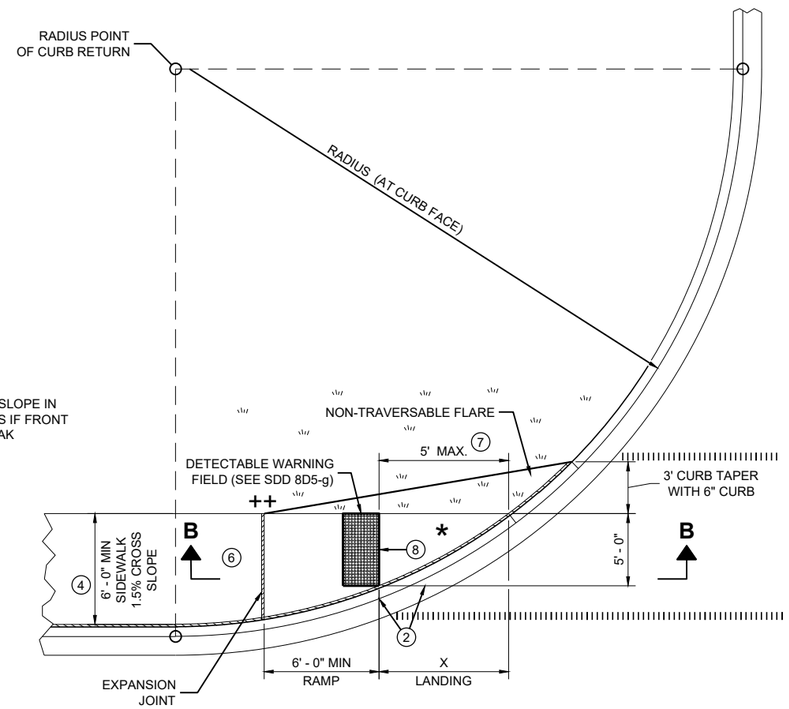


SECTION C - C FOR TYPE 4A



SECTION B - B FOR TYPE 4A AND TYPE 4A1

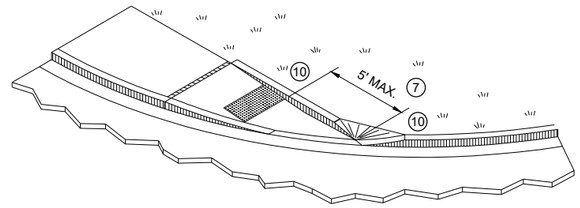
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED



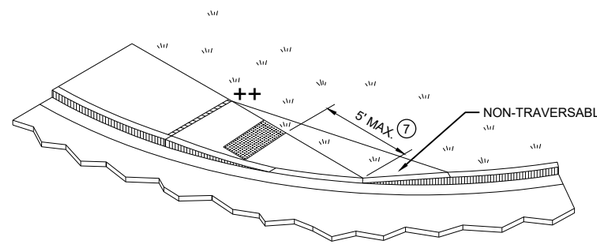
PLAN VIEW

CURB RAMP TYPE 4A1

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE



ISOMETRIC VIEW FOR TYPE 4A



ISOMETRIC VIEW FOR TYPE 4A1

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

LEGEND

½" EXPANSION JOINT SIDEWALK

CONTRACTION JOINT SIDEWALK

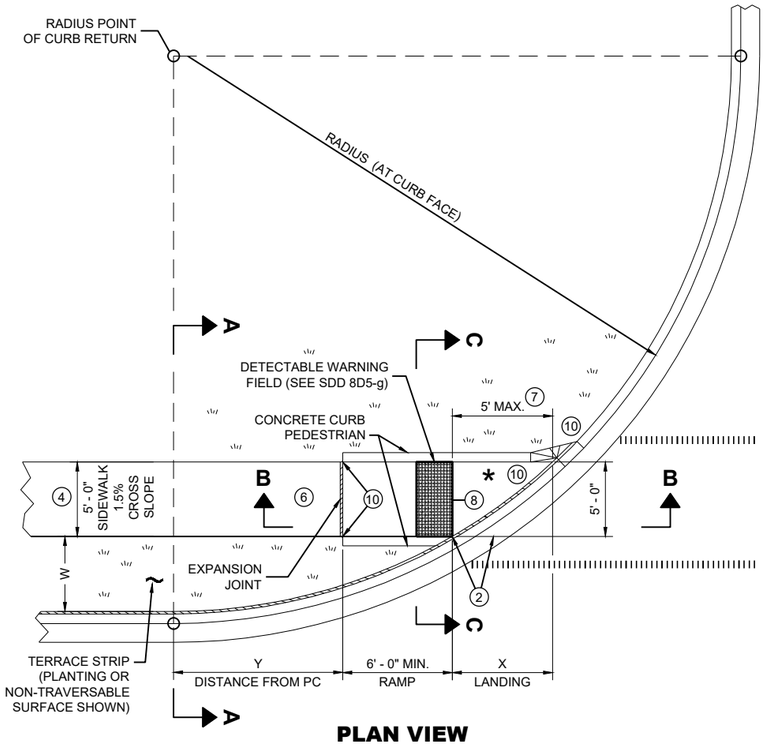
PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPE 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05-21c



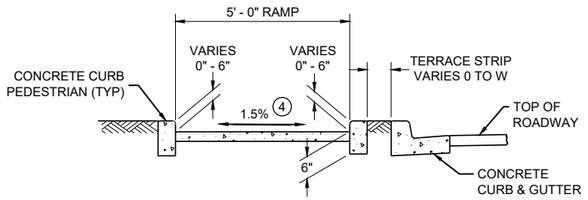
PLAN VIEW
CURB RAMP TYPE 4B

RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"		W = 8' - 0"		W = 9' - 0"		W = 10' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2' - 10 1/4"	0' - 5"	2' - 1"	1' - 4 1/2"	1' - 5"	2' - 1"	0' - 10"	2' - 7 1/2"	0' - 3 1/4"	3' - 0 1/4"						
15 FEET	4' - 6 3/4"	2' - 1 3/4"	3' - 9"	3' - 5 3/4"	3' - 1 1/4"	4' - 6"	2' - 6 3/4"	5' - 4 1/2"	2' - 1"	6' - 1"	1' - 8"	6' - 8 1/2"	1' - 3 1/4"	7' - 2 1/2"	0' - 10 3/4"	7' - 7 1/4"
20 FEET			4' - 11 1/2"	5' - 1 3/4"	4' - 3 1/4"	6' - 5 1/2"	3' - 8 3/4"	7' - 7"	3' - 3"	8' - 6 1/2"	2' - 10"	9' - 4 1/2"	2' - 5 1/2"	10' - 1 1/4"	2' - 1 1/4"	10' - 9"
30 FEET									4' - 10 3/4"	12' - 5 3/4"	4' - 5 1/2"	13' - 7 3/4"	4' - 0 3/4"	14' - 8 1/2"	3' - 8 1/2"	15' - 8 1/4"
40 FEET															4' - 10 3/4"	19' - 8 1/4"

INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)



SECTION C - C FOR TYPE 4B

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

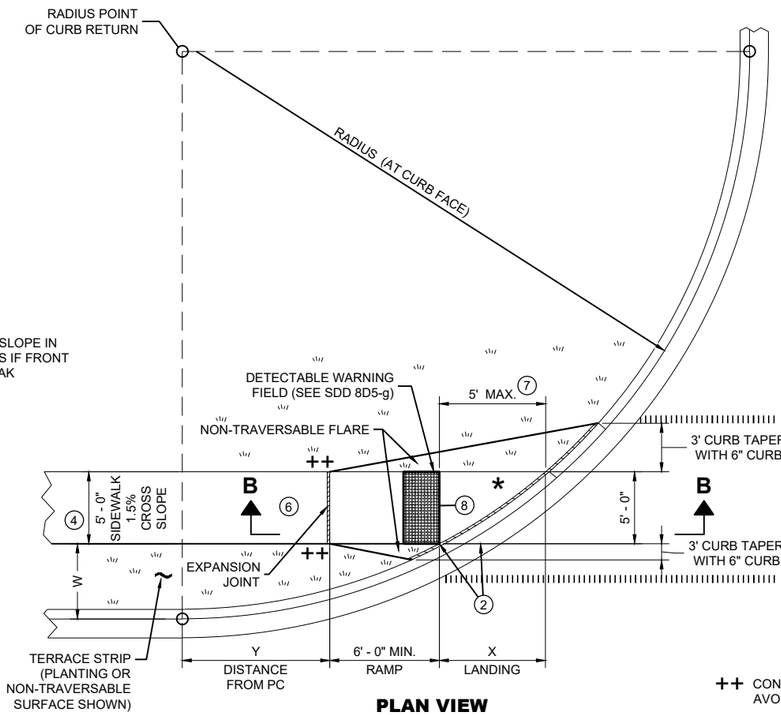
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

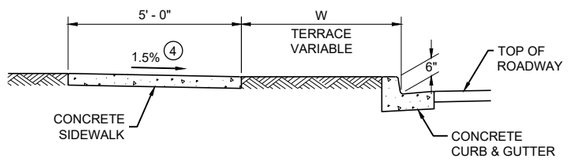
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

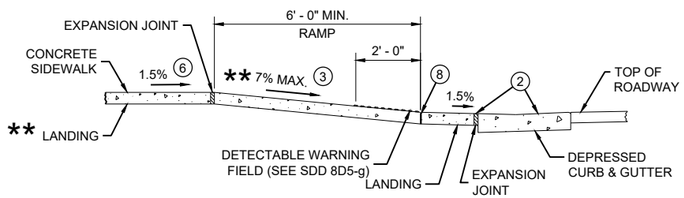
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



PLAN VIEW
CURB RAMP TYPE 4B1



SECTION A - A FOR TYPE 4B

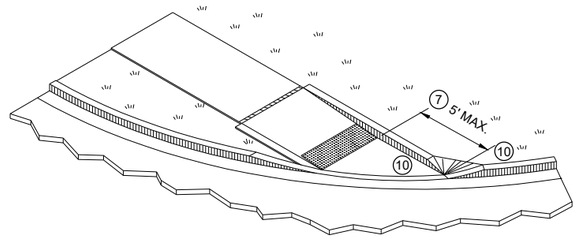


SECTION B - B FOR TYPE 4B AND TYPE 4B1

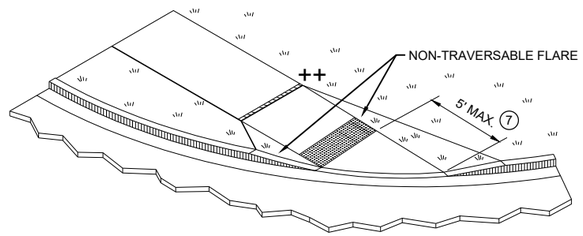
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE



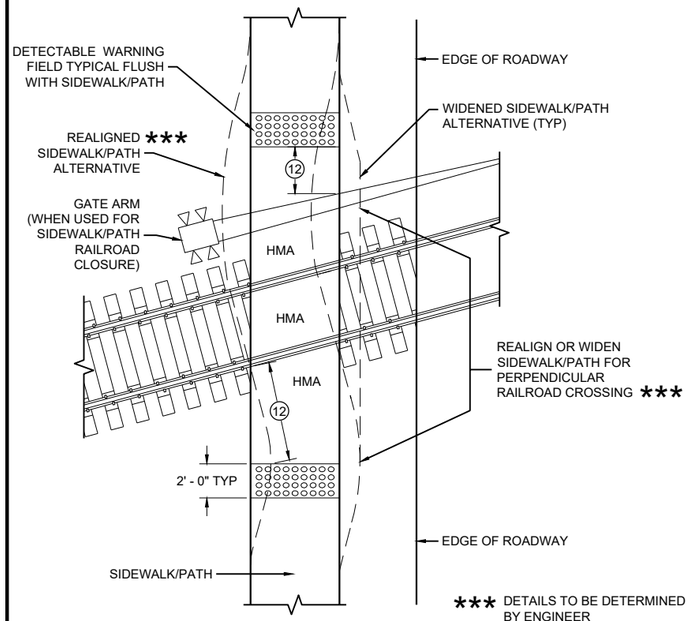
ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1

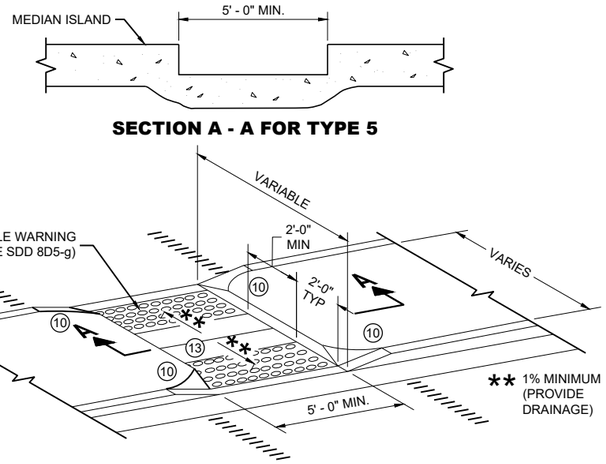
CURB RAMPS
TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CURB RAMP TYPE 8

DETECTABLE WARNINGS FOR SIDEWALKS OR SHARED USE PATHS AT RAILROAD CROSSINGS



SECTION A - A FOR TYPE 5

CURB RAMP TYPE 5

MEDIAN ISLAND NON-ELEVATED PEDESTRIAN CROSSING

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

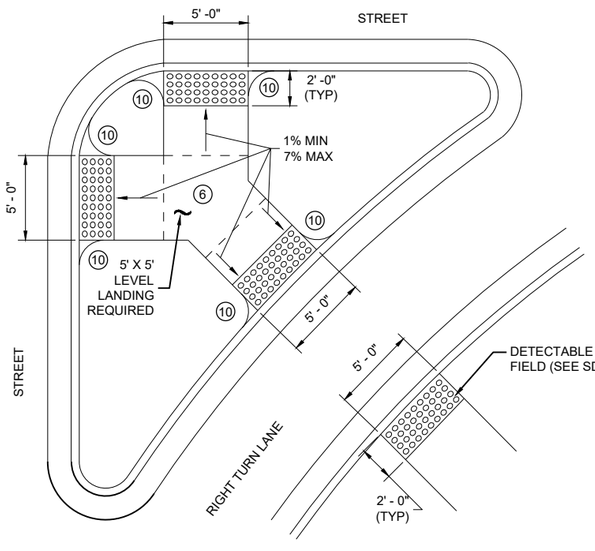
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ±0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK/PATH. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD TRACK IS 15 FEET MAXIMUM AND 12 FEET MINIMUM, 15 FEET TYPICAL FROM THE NEAREST RAIL.

(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STEET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

LEGEND

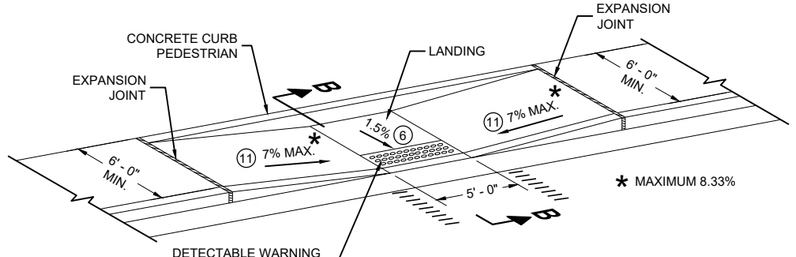
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



CURB RAMP TYPE 6

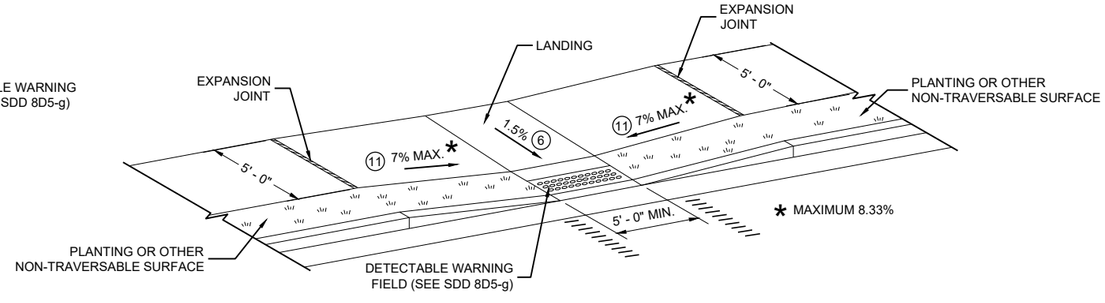
DETECTABLE WARNING AT ISLANDS

REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS



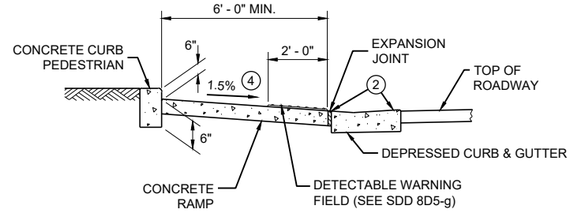
CURB RAMP TYPE 7A

FOR INTERSECTIONS AND MID BLOCK CROSSINGS



CURB RAMP TYPE 7B

FOR INTERSECTIONS AND MID BLOCK CROSSINGS



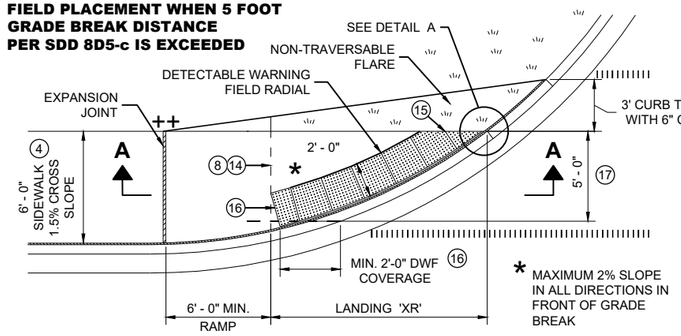
SECTION B - B FOR TYPE 7A

CURB RAMPS TYPE 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

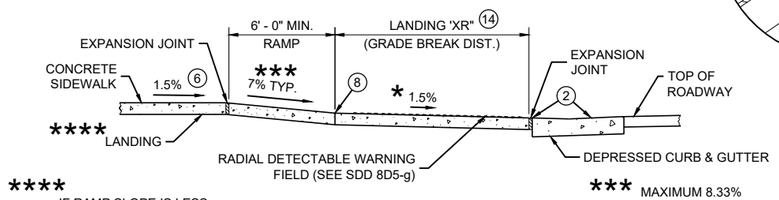
SDD 08D05-21e

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED



PLAN VIEW

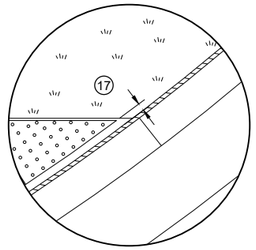
CURB RAMP TYPE 4A1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

SECTION A - A FOR TYPE 4A1



DETAIL A

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.

REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AD ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

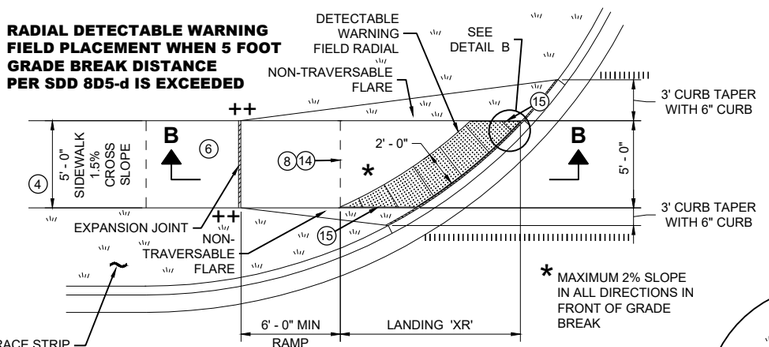
(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

(16) USE 1' X 2" RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2' - 0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.

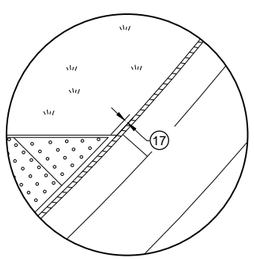
(17) A MAXIMUM 3 INCH CONCRETE BORDER WIDTH IS ALLOWABLE IN FRONT OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED

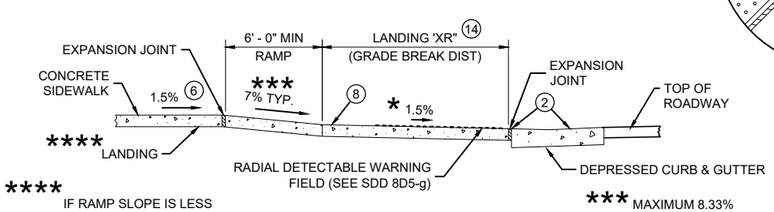


PLAN VIEW

CURB RAMP TYPE 4B1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL B

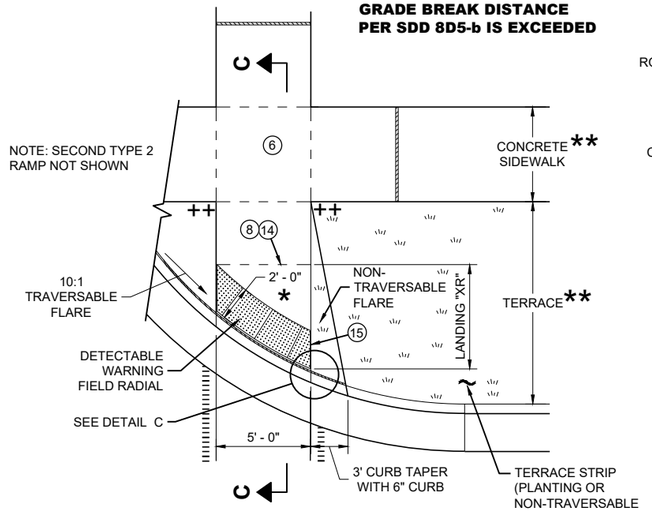


**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

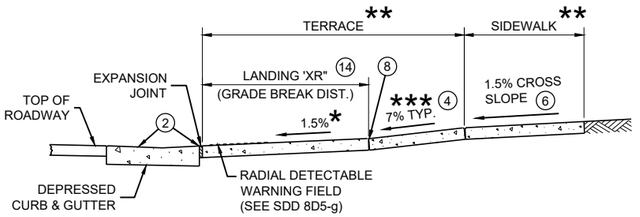
SECTION B - B FOR TYPE 4B1

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-b IS EXCEEDED

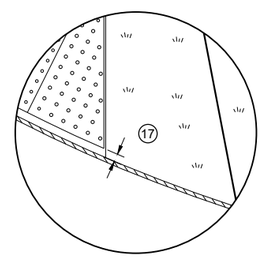


PLAN VIEW

CURB RAMP TYPE 2
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)
(ON LINE WITH SIDEWALK)



SECTION C - C FOR TYPE 2



DETAIL C

* MAXIMUM 2% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** MAXIMUM 8.33%

++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

CURB RAMPS
RADIAL DETECTABLE WARNING

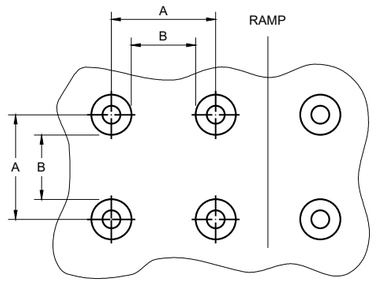
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

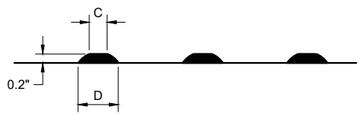
SDD 08D05-21f

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

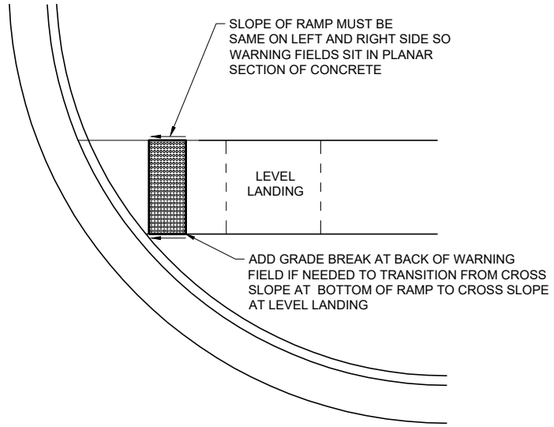
* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



PLAN VIEW



ELEVATION VIEW



DETECTABLE WARNING FIELD
PLANAR INSTALLATION

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AT A CURB RAMP SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

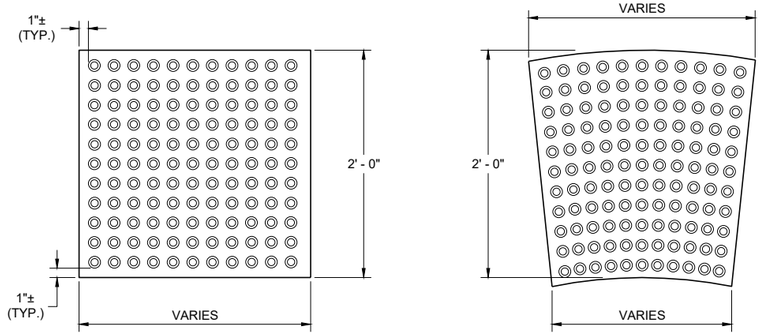
FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

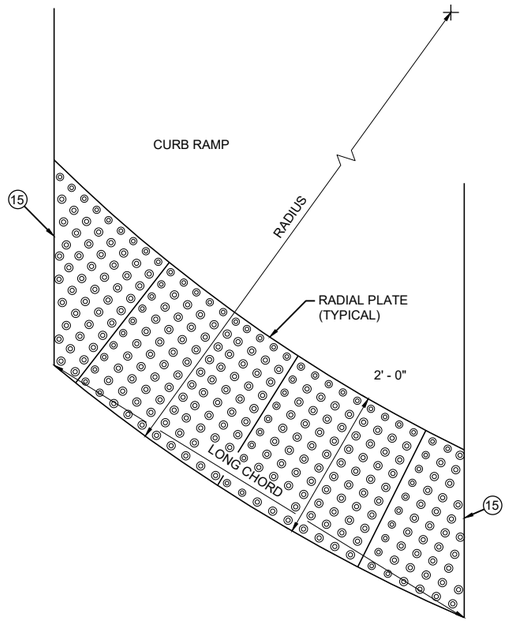
TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



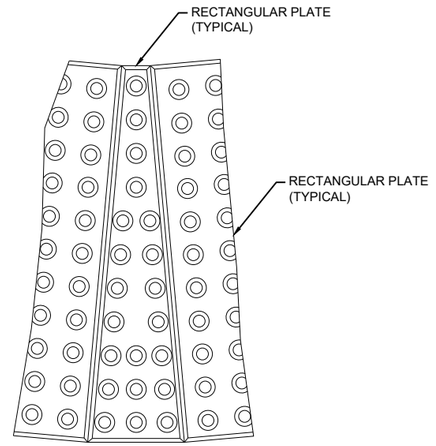
RECTANGULAR PLATES

RADIAL PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)



PLAN VIEW
RADIAL DETECTABLE WARNING FIELD ATTRIBUTES



PLAN VIEW
RADIAL WEDGE PLATE CONNECTION DETAIL

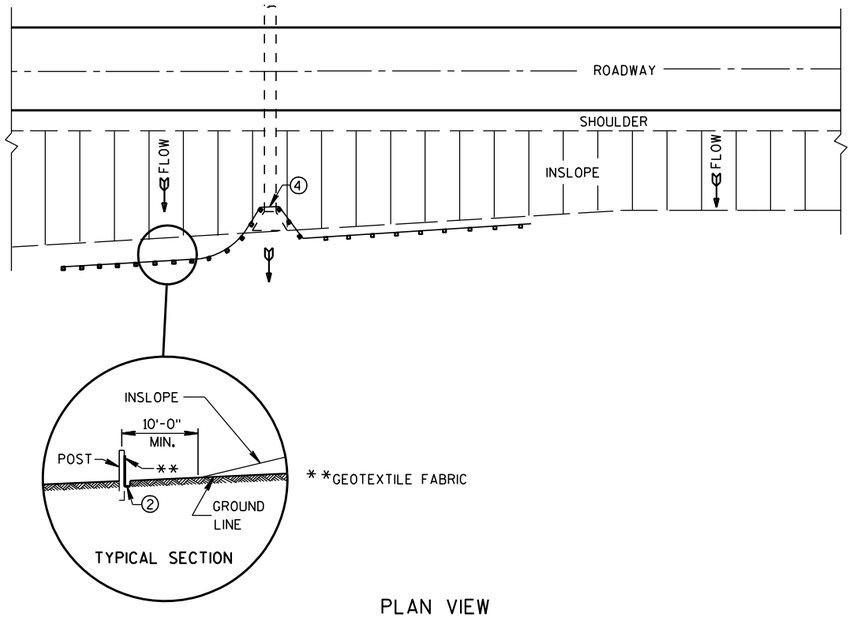
CURB RAMPS
RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

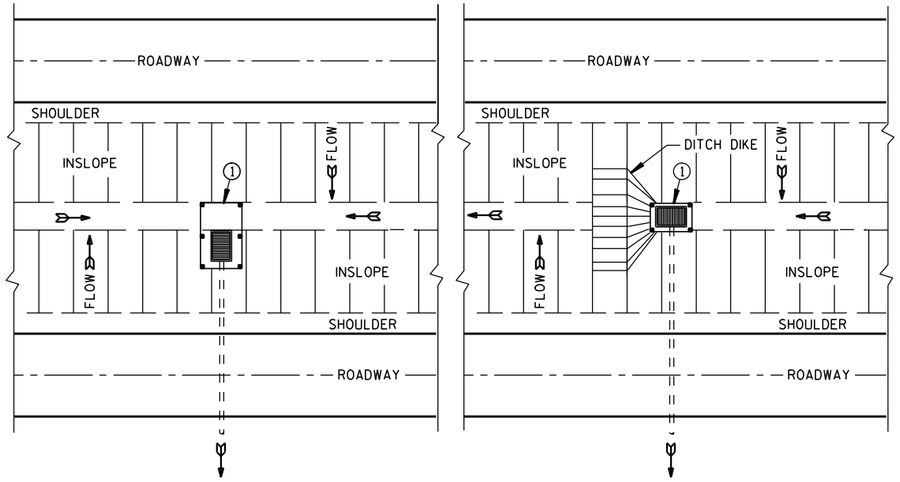
FHWA

6
SDD 08D05-21g



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



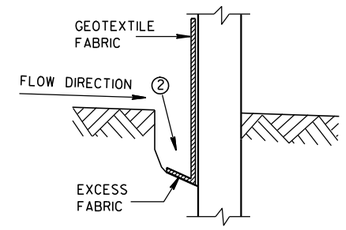
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

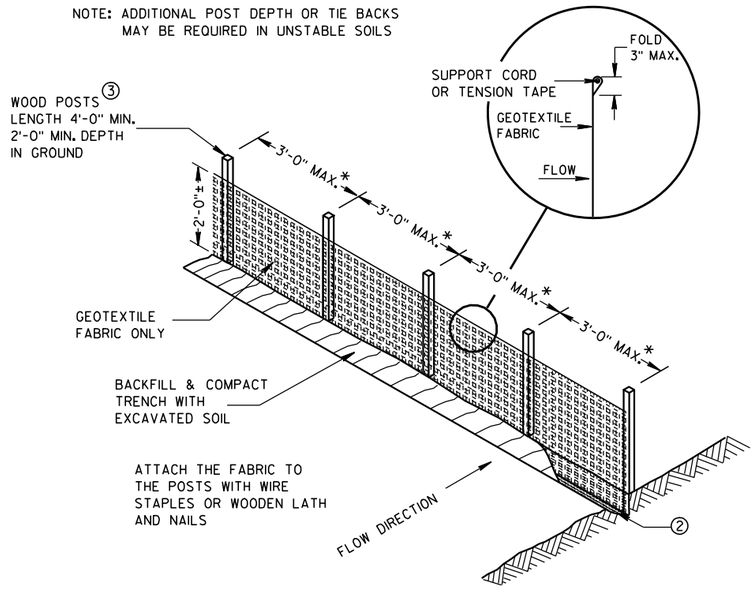
GENERAL NOTES

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

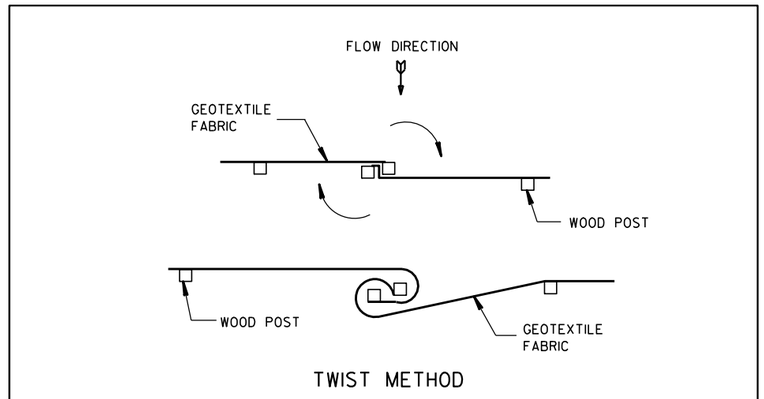
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL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



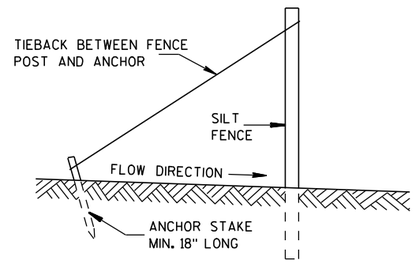
TRENCH DETAIL



SILT FENCE



JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

S.D.D. 8 E 9-6

6

S.D.D. 8 E 9-6

METAL APRON ENDWALLS

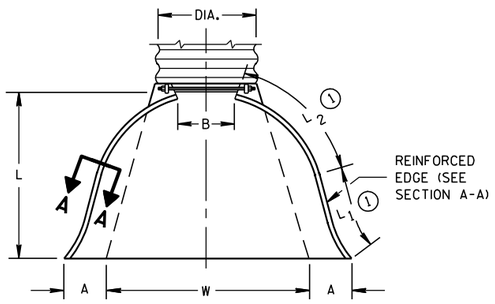
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4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

× EXCEPT CENTER PANEL SEE GENERAL NOTES

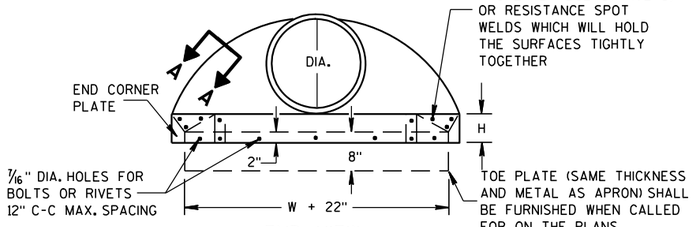
REINFORCED CONCRETE APRON ENDWALLS

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

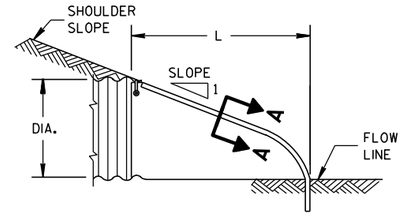
*MINIMUM
**MAXIMUM



PLAN VIEW

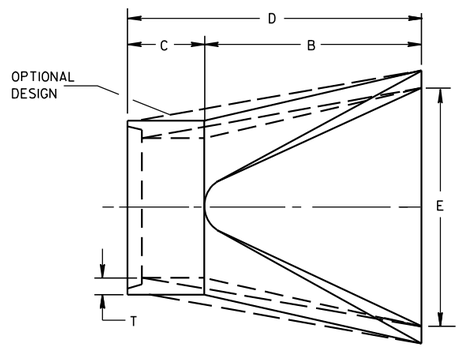


END VIEW

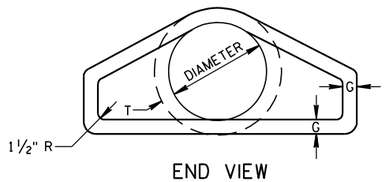


SIDE ELEVATION

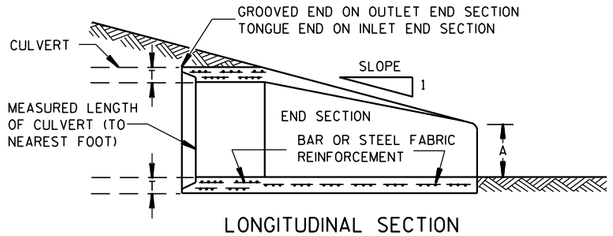
METAL ENDWALLS



PLAN

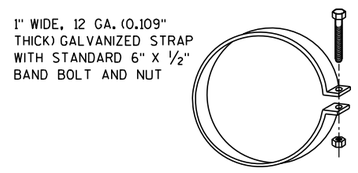


END VIEW



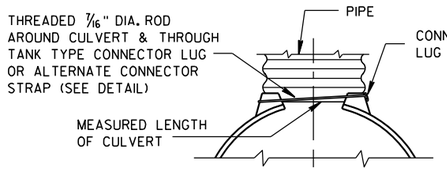
LONGITUDINAL SECTION

CONCRETE ENDWALLS

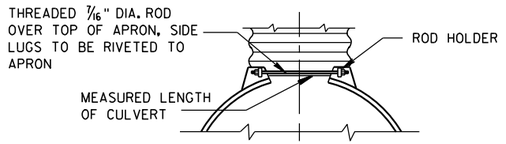


ALTERNATE FOR TYPE 1 CONNECTION

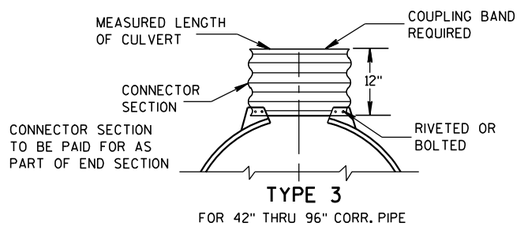
END SECTION CONNECTOR STRAP



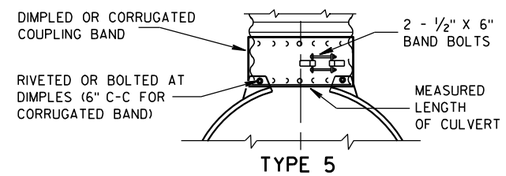
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

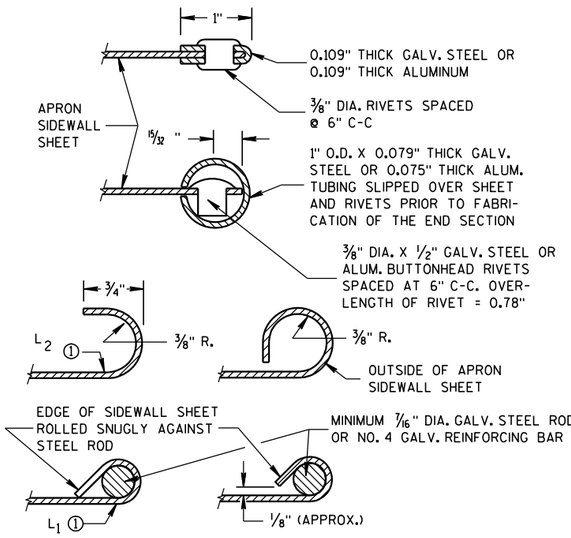
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

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

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

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

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

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

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

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

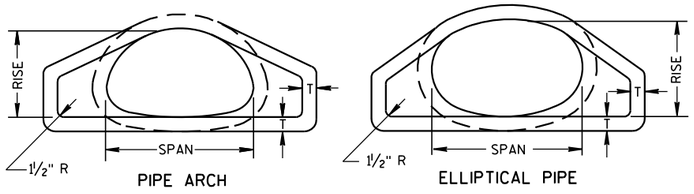
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

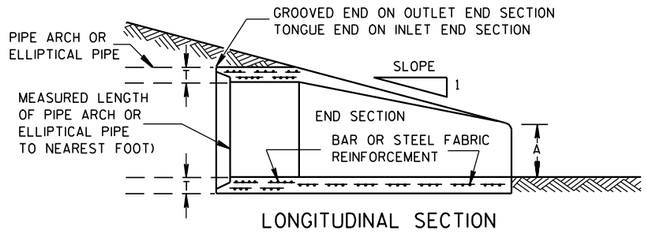
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

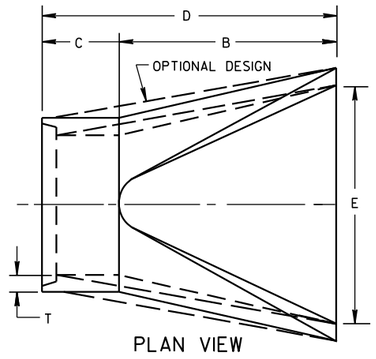
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END VIEW

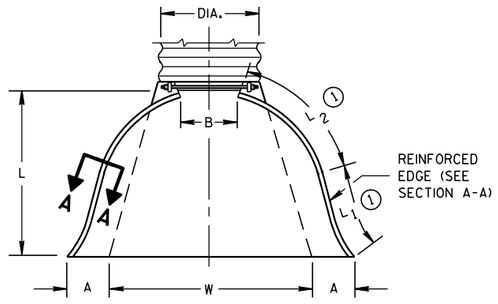


LONGITUDINAL SECTION

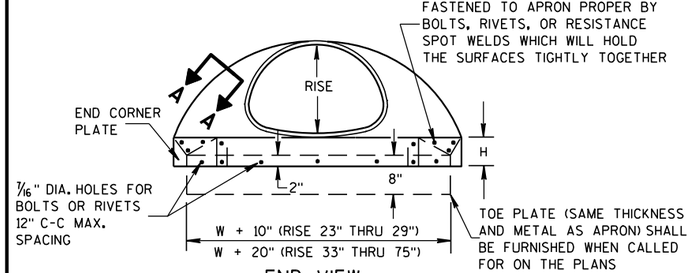


PLAN VIEW

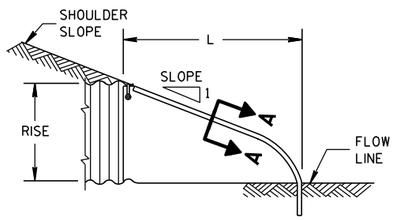
CONCRETE ENDWALLS



PLAN VIEW

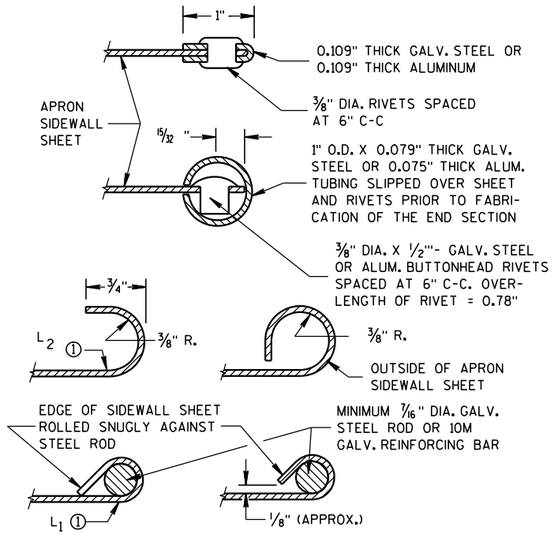


END VIEW



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

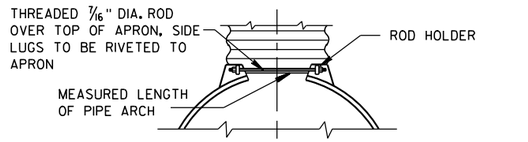
REINFORCED CONCRETE PIPE ARCH

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

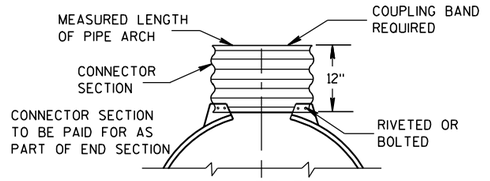
EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48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

**NOMINAL SIZE



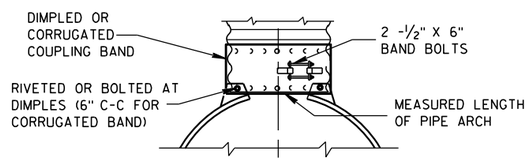
TYPE 2

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

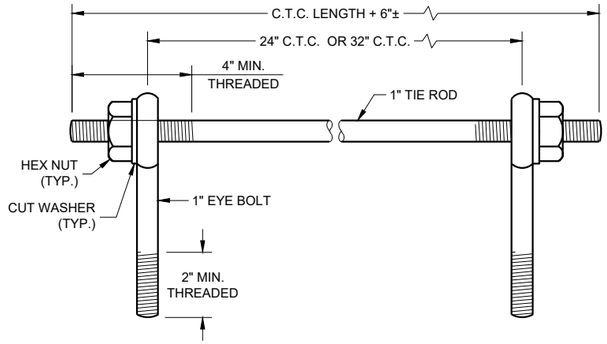
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

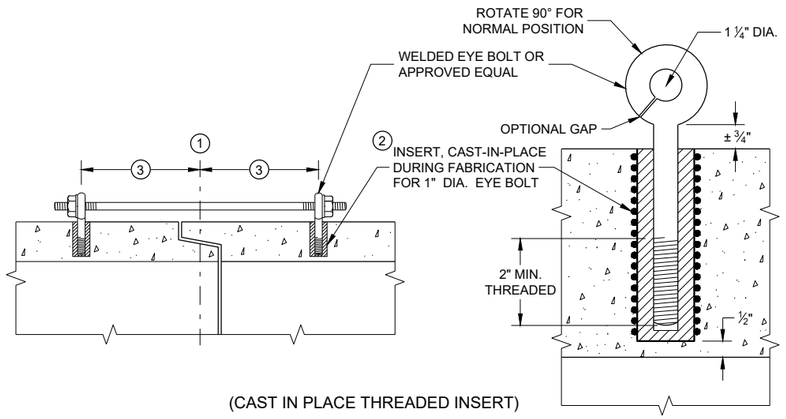
11/30/94 — DATE

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

FHWA



EYE BOLTS AND TIE ROD



(CAST IN PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

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

GENERAL NOTES

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

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

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

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

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

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

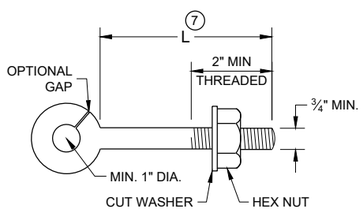
(3) HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.

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

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

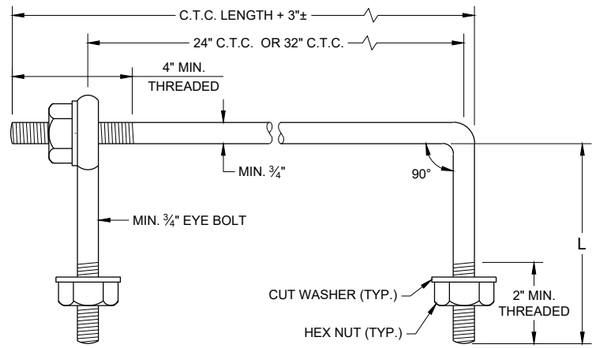
(6) LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.

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

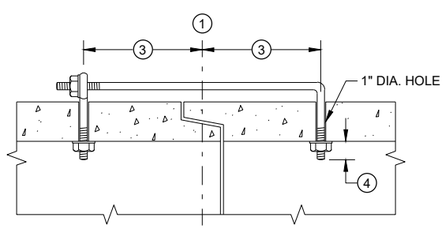


EYE BOLT (7)

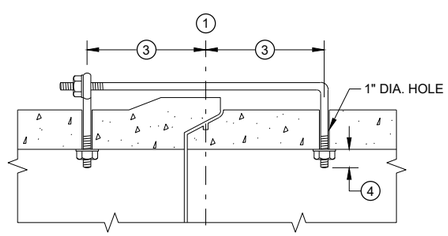
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD



(TONGUE AND GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

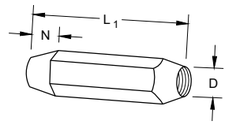
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

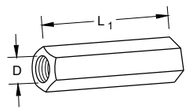
ADJUSTABLE TIE ROD TABLE

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

DIMENSIONS SHOWN ARE IN INCHES



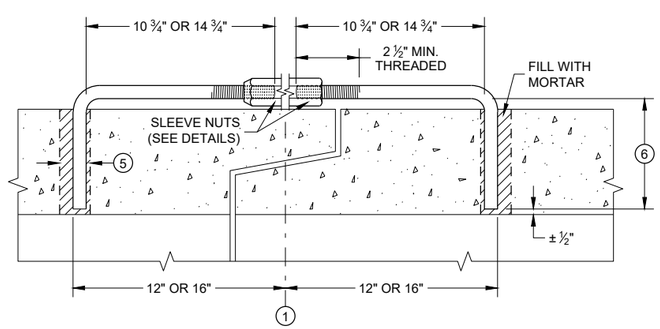
TAPERED



PLAIN

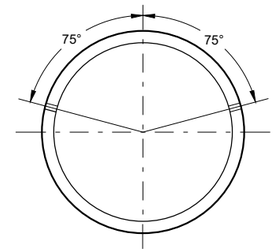
RIGHT AND LEFT THREADS

SLEEVE NUTS



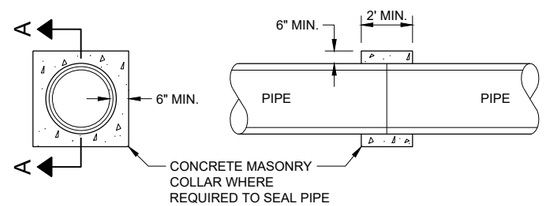
LONGITUDINAL SECTION

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



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

TRANSVERSE SECTION



SECTION A - A

CONCRETE COLLAR DETAIL

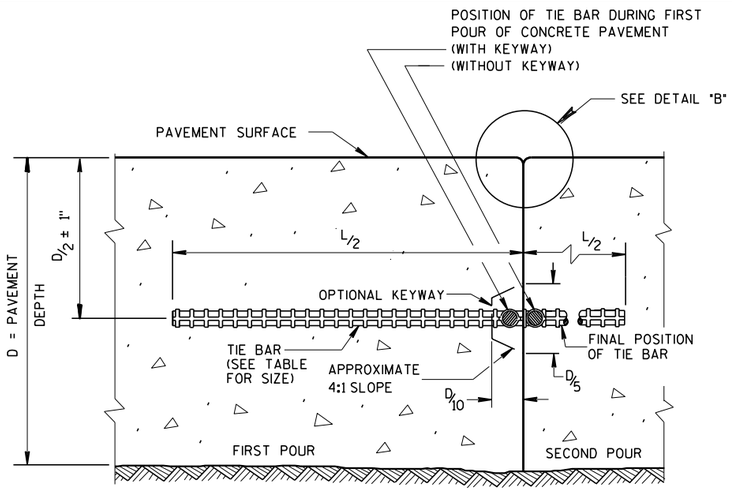
JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

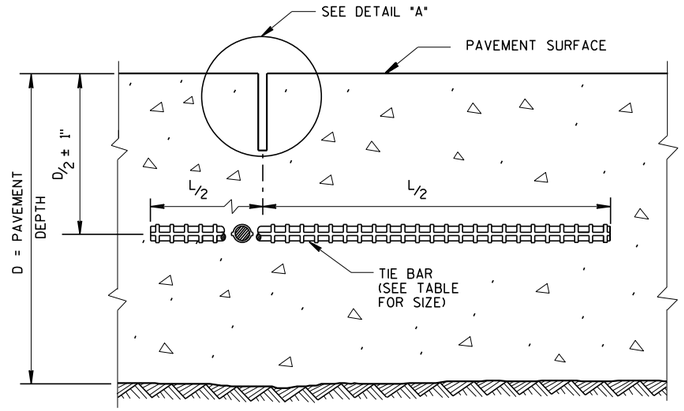
APPROVED
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

SDD 08F04 - 08

SDD 08F04 - 08



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.

PLAN VIEW

SECTION A-A

LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT

DETAIL "A"

DETAIL "B"

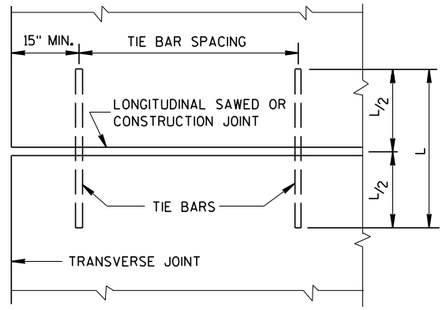
DETAIL "C"

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.



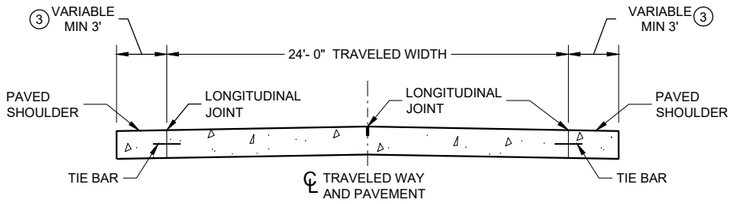
PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

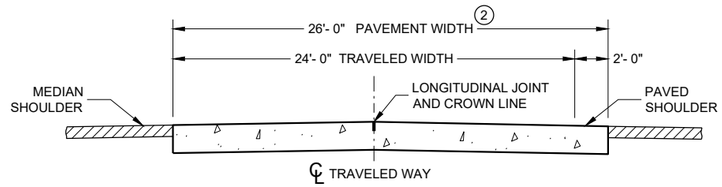
APPROVED
March 2018 — DATE
/S/ Peter Kemp — PAVEMENT SUPE
FHWA

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S.D.D. 13 C 1-19

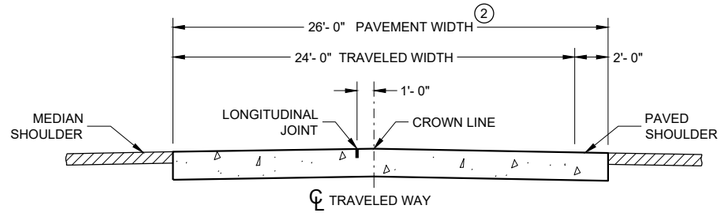


SECTION A - A

TWO-LANE TWO-WAY HIGHWAY (1)



SECTION B - B



ALTERNATIVE SECTION B - B

DIVIDED HIGHWAY (1)

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 FROM 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 THE CONTRACTION JOINTS.

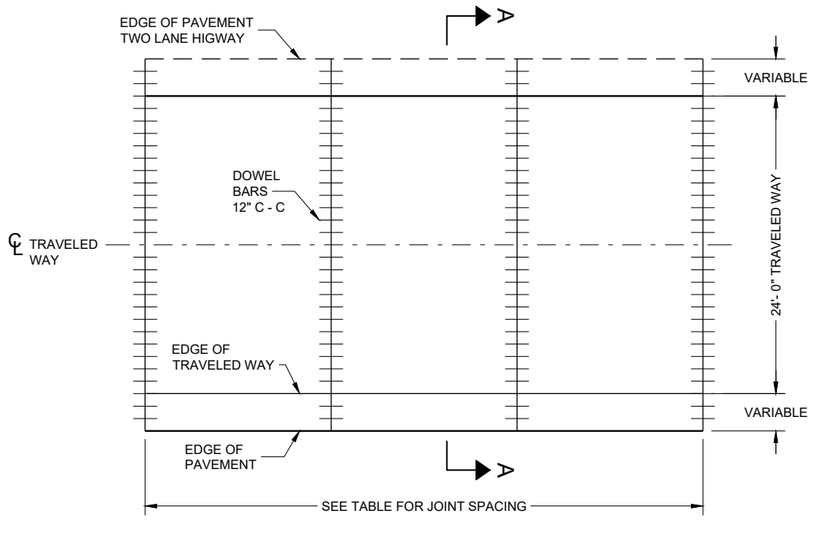
(1) REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.

(2) MEASURE THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED "PAVED SHOULDER" AS CONCRETE PAVEMENT.

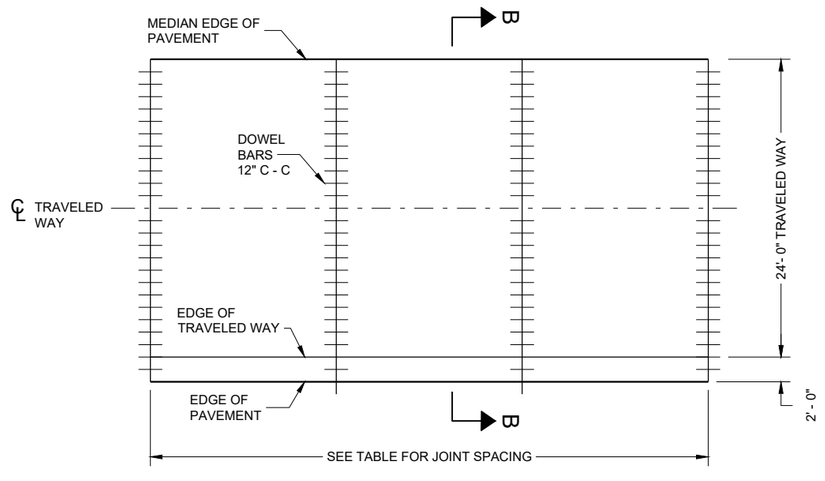
(3) SHOULDER WIDTHS LESS THAN 3 FEET SHALL BE PAVED INTEGRAL TO THE MAINLINE CONCRETE PAVEMENT, SEE SECTION B-B.

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

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



CONTRACTION JOINT LAYOUT FOR TWO-LANE TWO-WAY HIGHWAY



CONTRACTION JOINT LAYOUT FOR DIVIDED HIGHWAY

RURAL DOWELED CONCRETE PAVEMENT

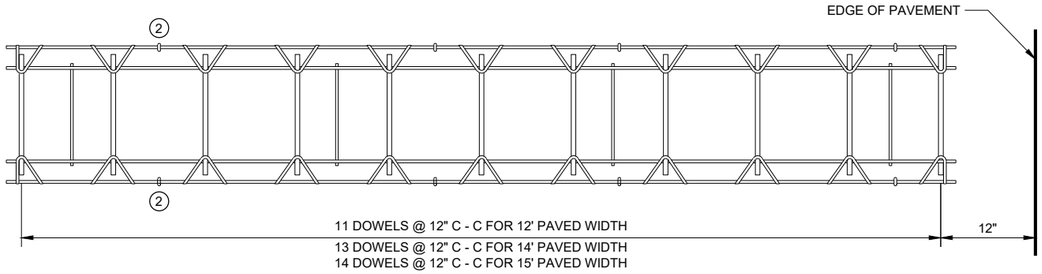
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13C11 - 14a

6

SDD13C11 - 14a



PLAN VIEW



SIDE VIEW

(NORMAL TO CENTERLINE)

CONTRACTION JOINT DOWEL ASSEMBLY (1)

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 CONSTRUCTION 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.

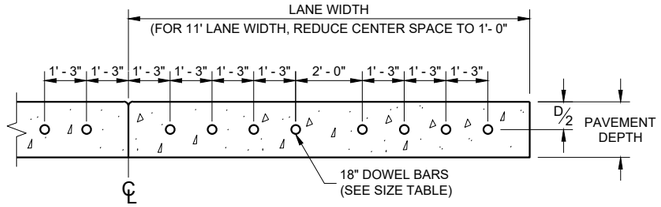
(3) FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼" RADIUS AT FORMED JOINTS.

(4) PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

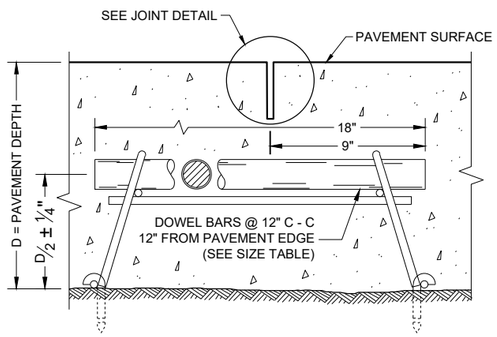
(5) INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C - C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO THE "DRILLED DOWEL BAR CONSTRUCTION JOINT" DETAIL.

(6) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

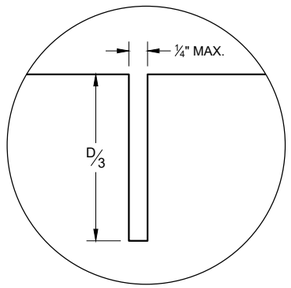
(7) ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛" GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



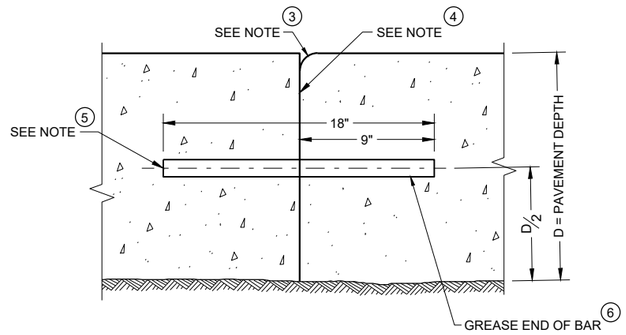
DRILLED DOWEL BAR CONSTRUCTION JOINT (7)



DOWELED CONTRACTION JOINT



JOINT DETAIL



TRANSVERSE CONSTRUCTION JOINT

RURAL DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVISOR

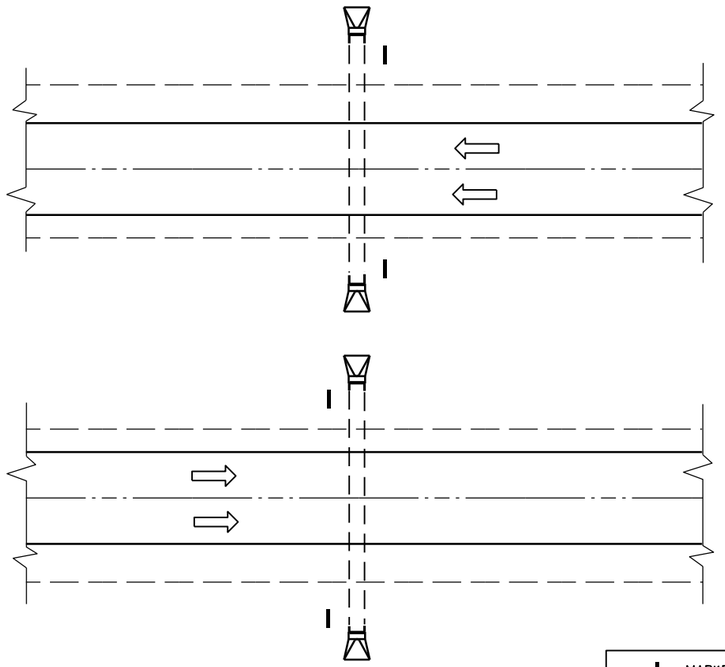
FHWA

6

SDD 13C11 - 14b

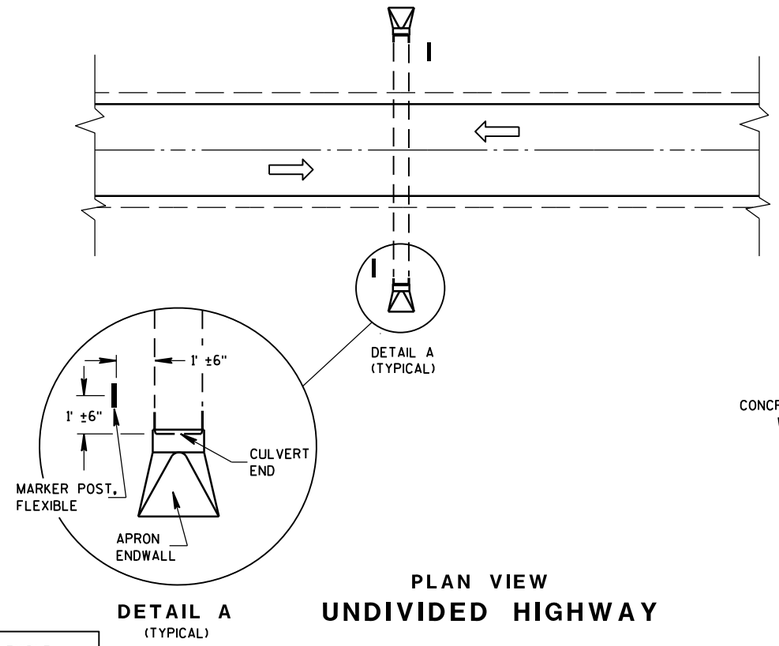
6

SDD 13C11 - 14b



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

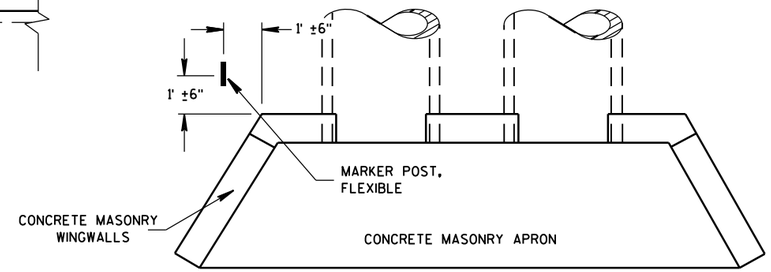
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

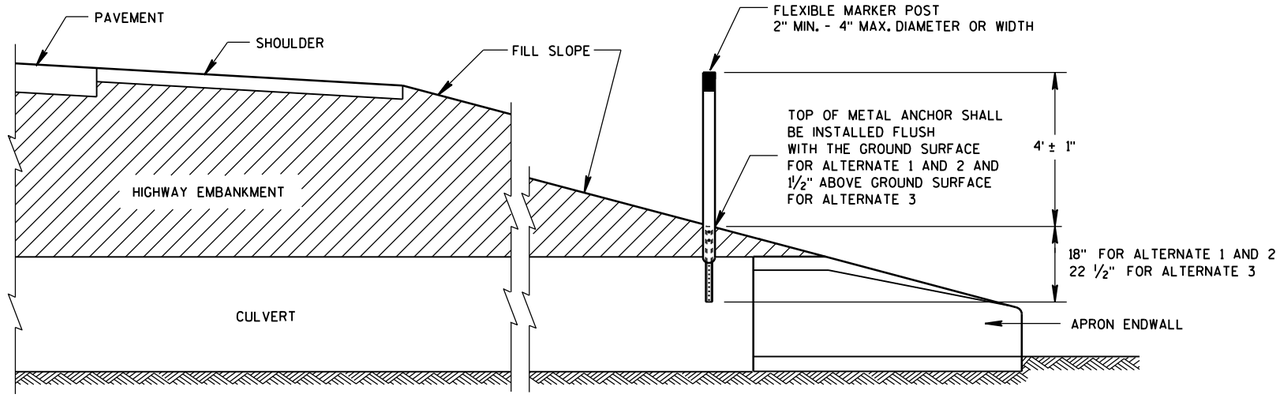
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



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

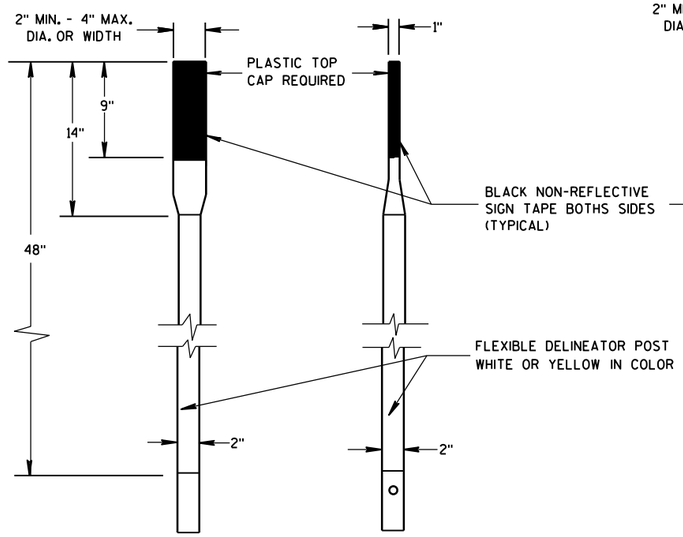
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

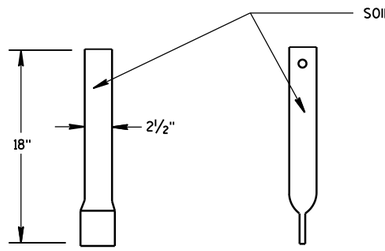
6

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

6

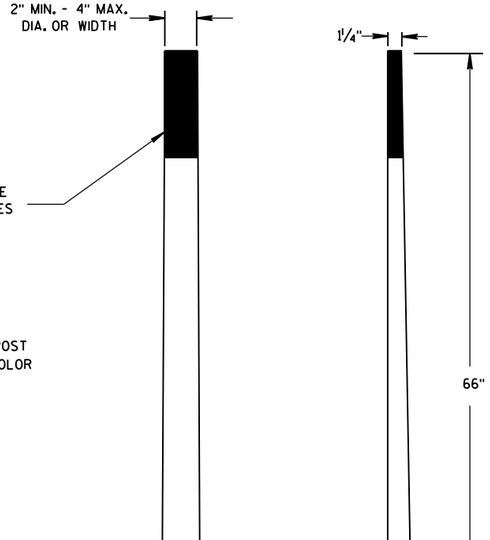
S.D.D. 15 A 3-2a





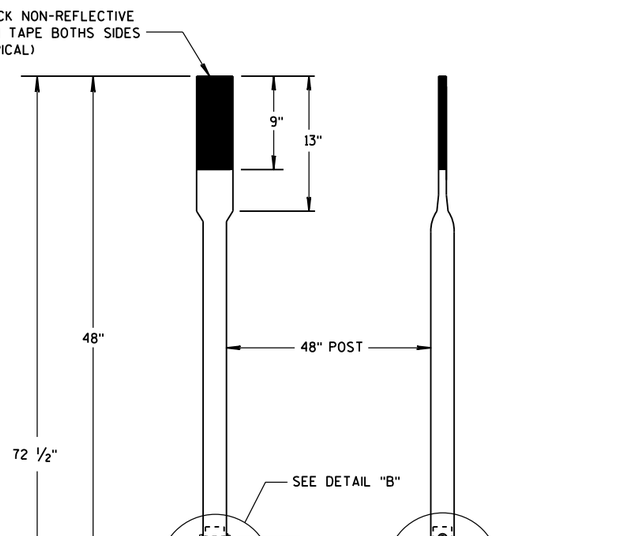
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

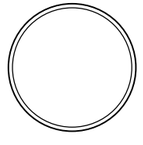
ALTERNATE 2



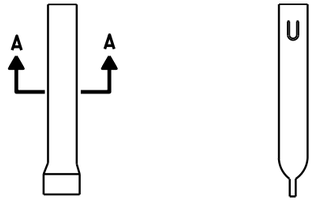
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POSTS

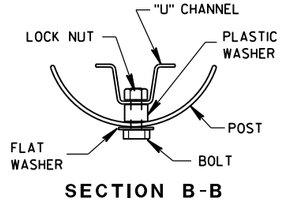


SECTION A-A

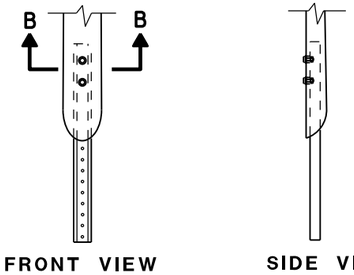


FRONT VIEW SIDE VIEW

ALTERNATE 1

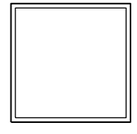


SECTION B-B

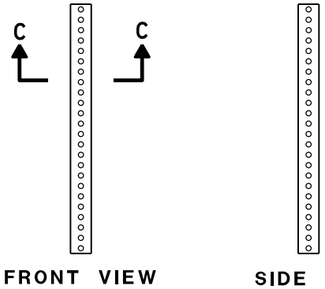


FRONT VIEW SIDE VIEW

ALTERNATE 2



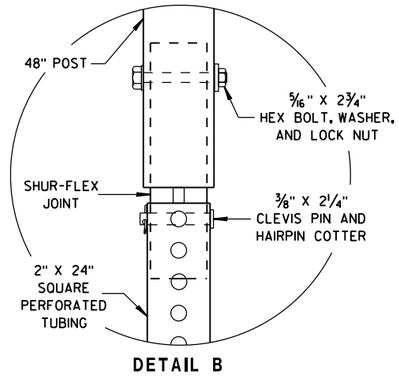
SECTION C-C



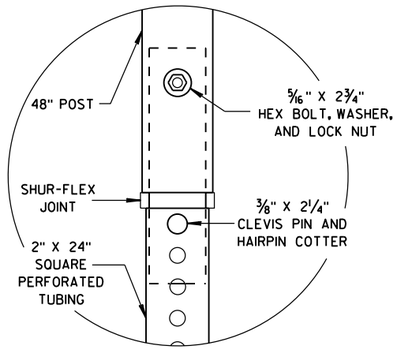
FRONT VIEW SIDE VIEW

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

6

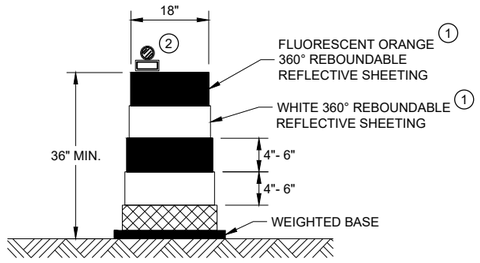
S.D.D. 15 A 3-2b

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

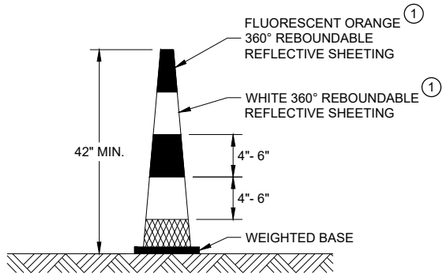
GENERAL NOTES

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



DRUM

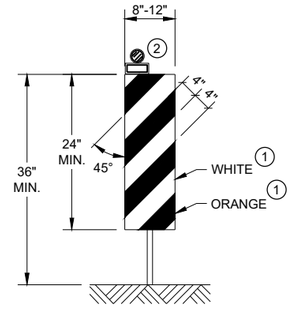
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

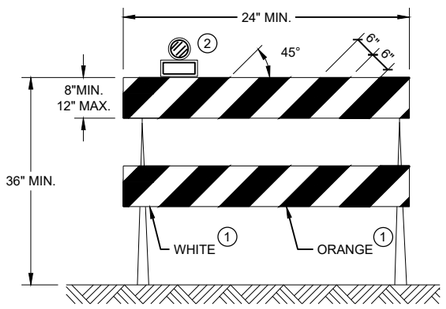
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



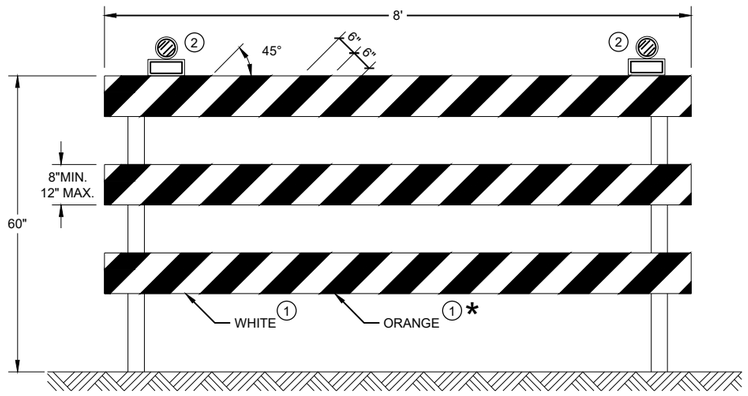
VERTICAL PANEL

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



TYPE II BARRICADE

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



TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C11 - 10b

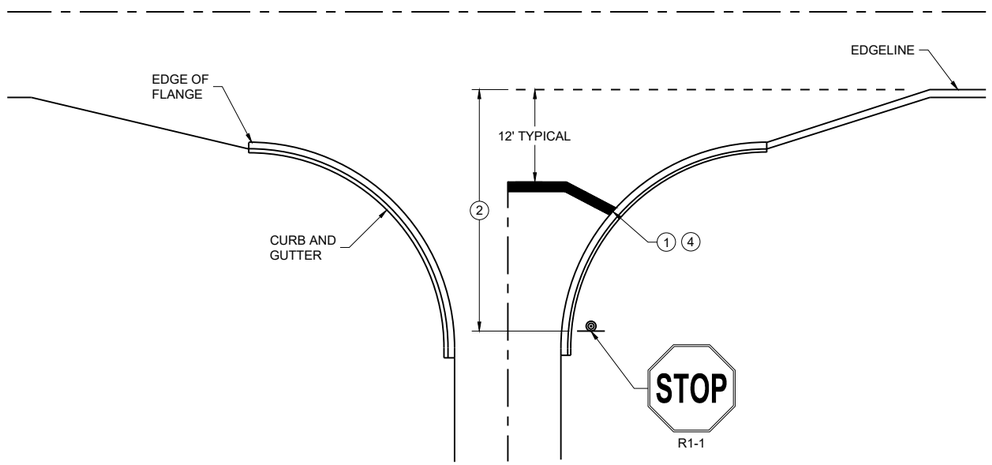
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SDD 15C11 - 10b

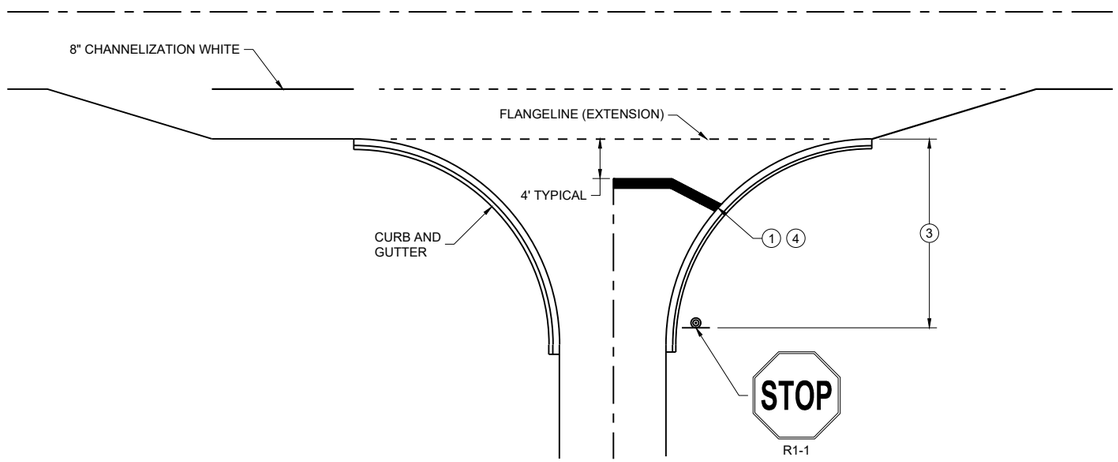
GENERAL NOTES

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

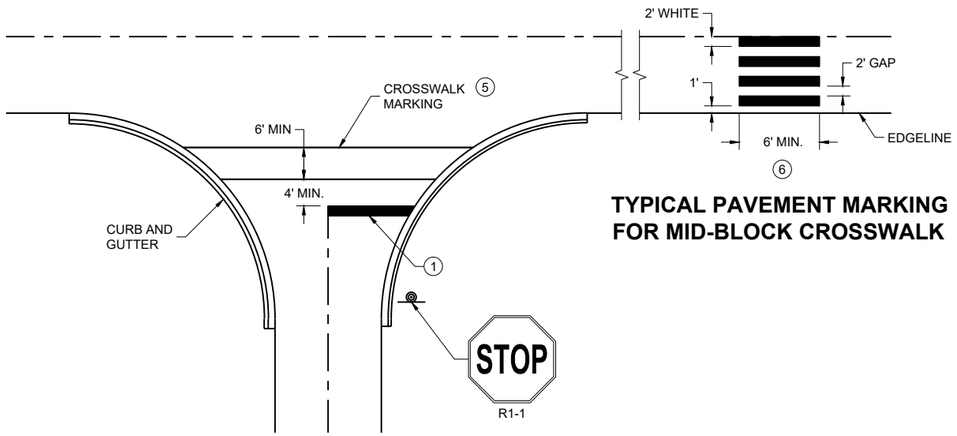
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGE LINE EXTENSION.
4. MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
5. LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES.
6. POSTED SPEED LIMITS OF 40 MPH OR GREATER USE A MINIMUM WIDTH OF 8' FOR MIDBLOCK CROSSWALKS



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

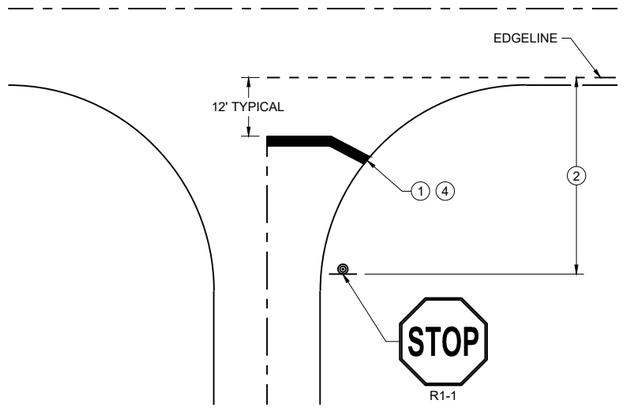


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDE ROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK (5)

TYPICAL STOP LINE PAVEMENT MARKING FOR SIDE ROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

March 2024 — DATE

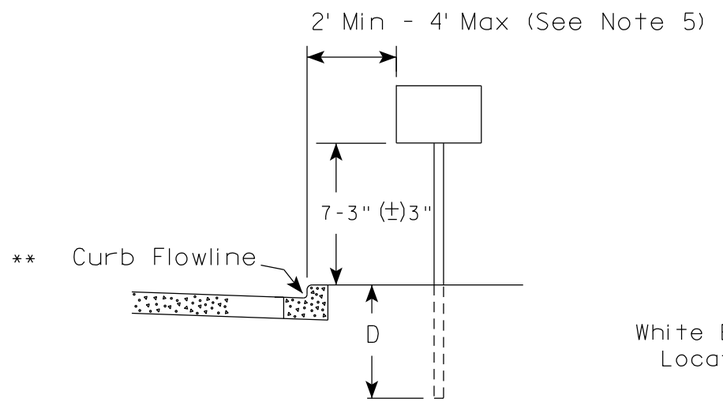
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER

FHWA

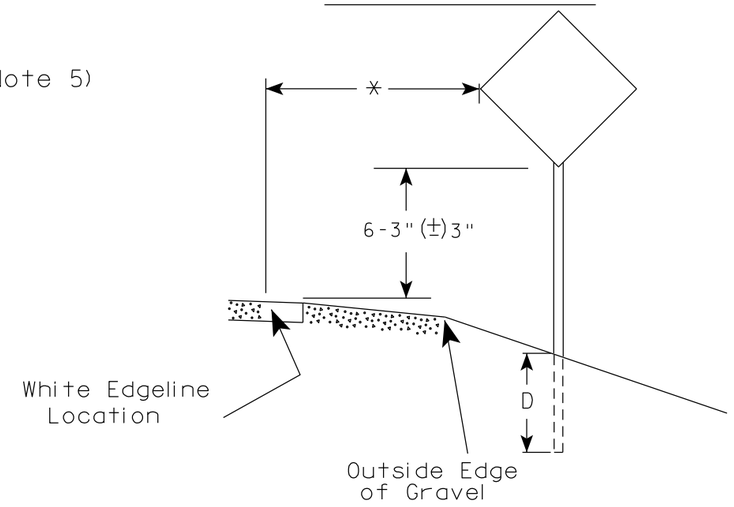
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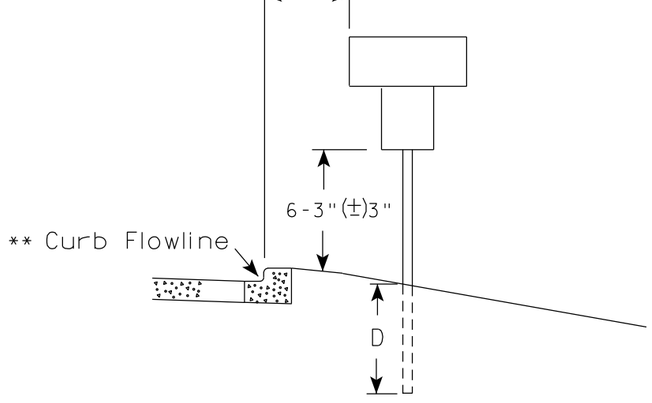
SDD 15C33-05

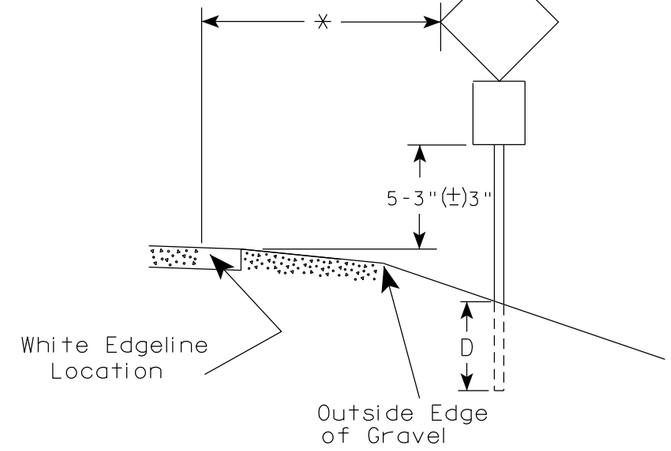
URBAN AREA



RURAL AREA (See Note 2)







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

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

GENERAL NOTES

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

POST EMBEDMENT DEPTH

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

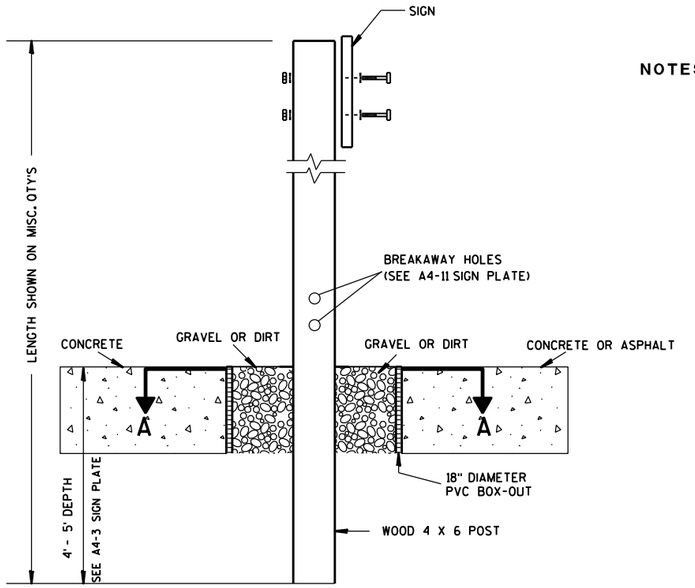
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

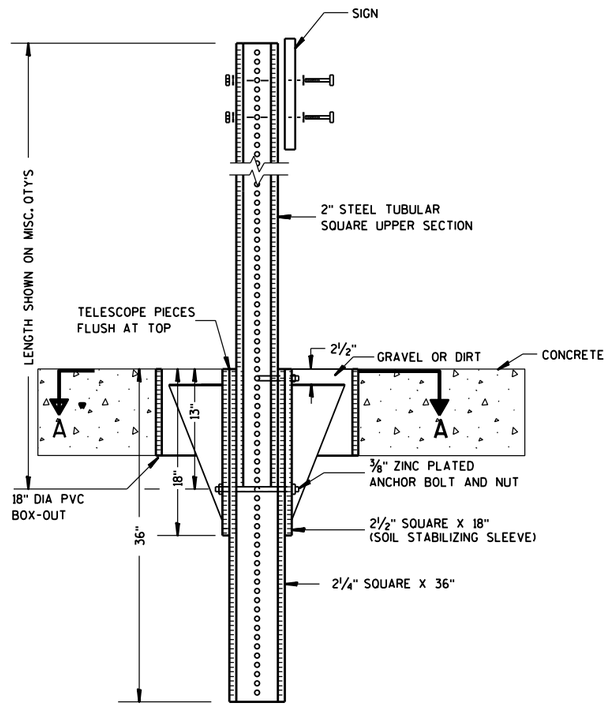
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 90	E



ELEVATION VIEW

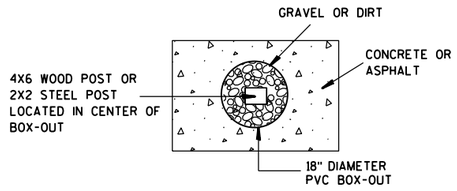
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

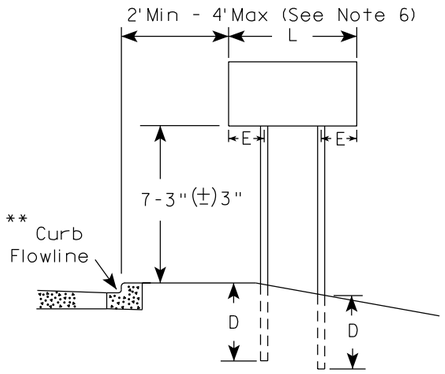
APPROVED Matthew R Rauch
for State Traffic Engineer

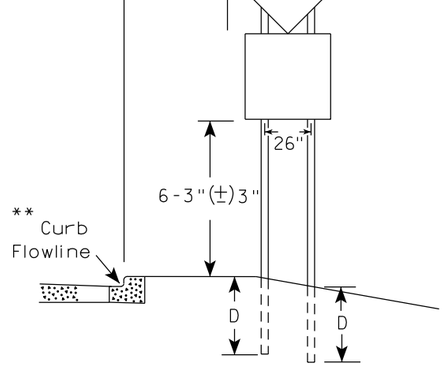
DATE 1/27/14 PLATE NO. A4-3B.1

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

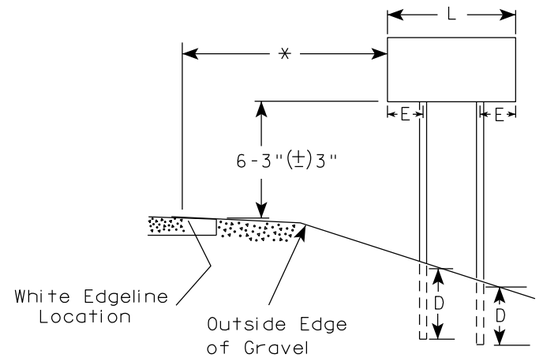
URBAN AREA

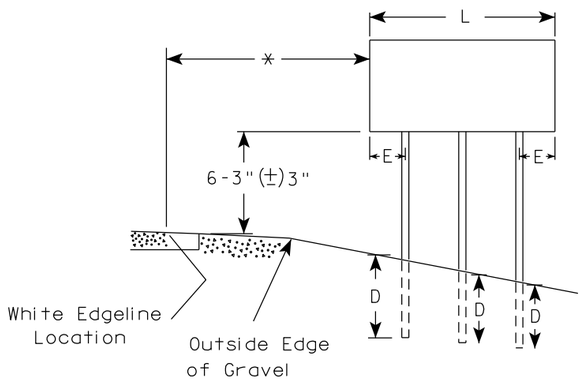


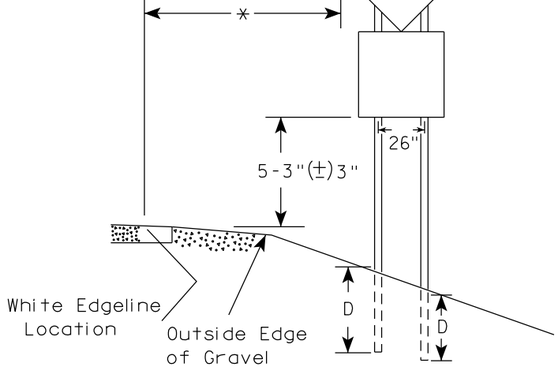


48" DIAMOND WARNING SIGN

RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN

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

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

GENERAL NOTES

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

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

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

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

POST EMBEDMENT DEPTH

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

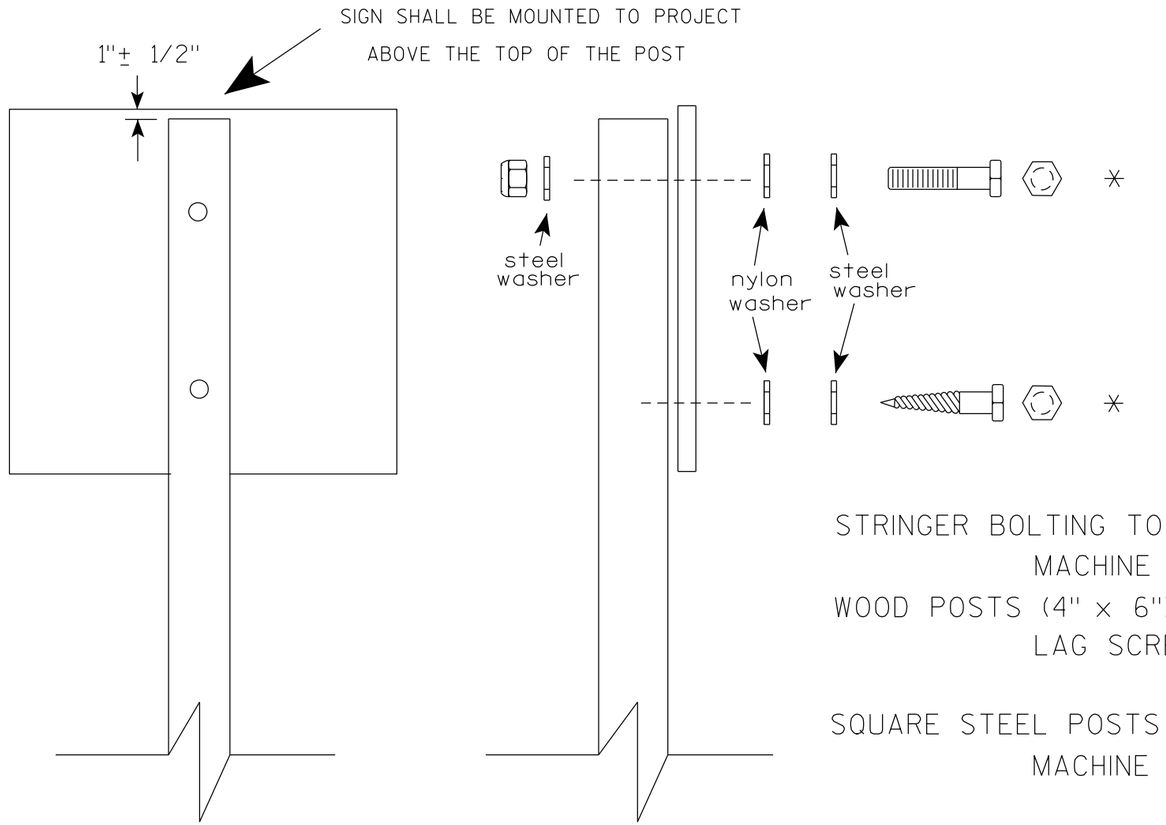
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 92	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

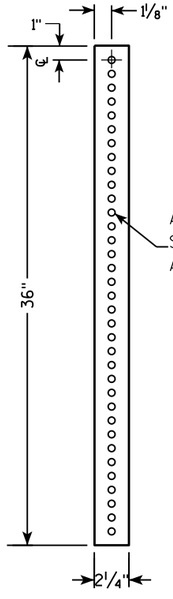
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

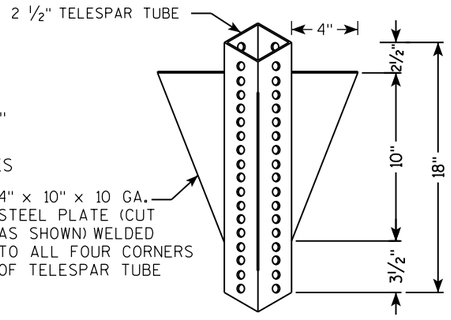
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

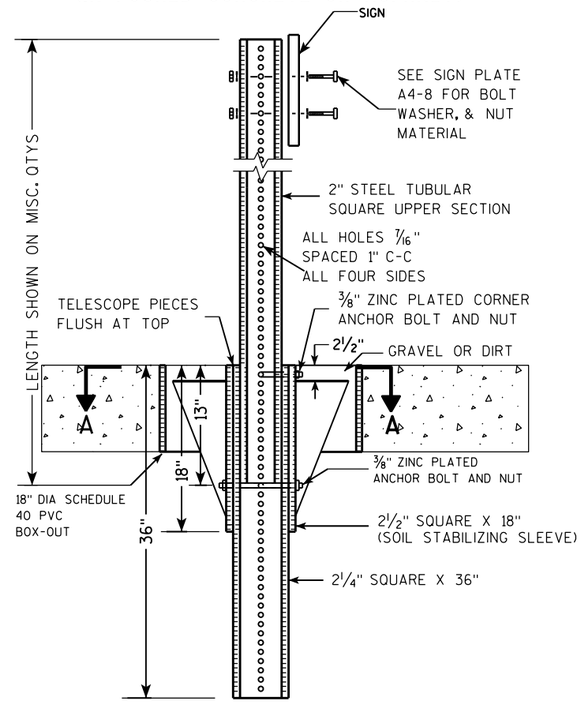
2 ¼ " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



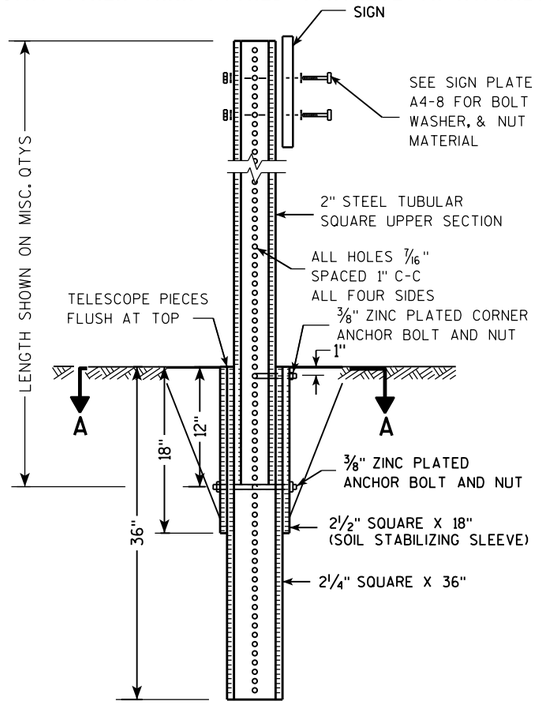
2 ½ " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

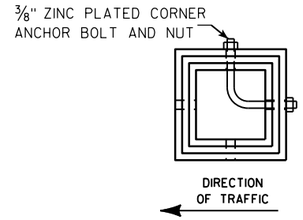


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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).

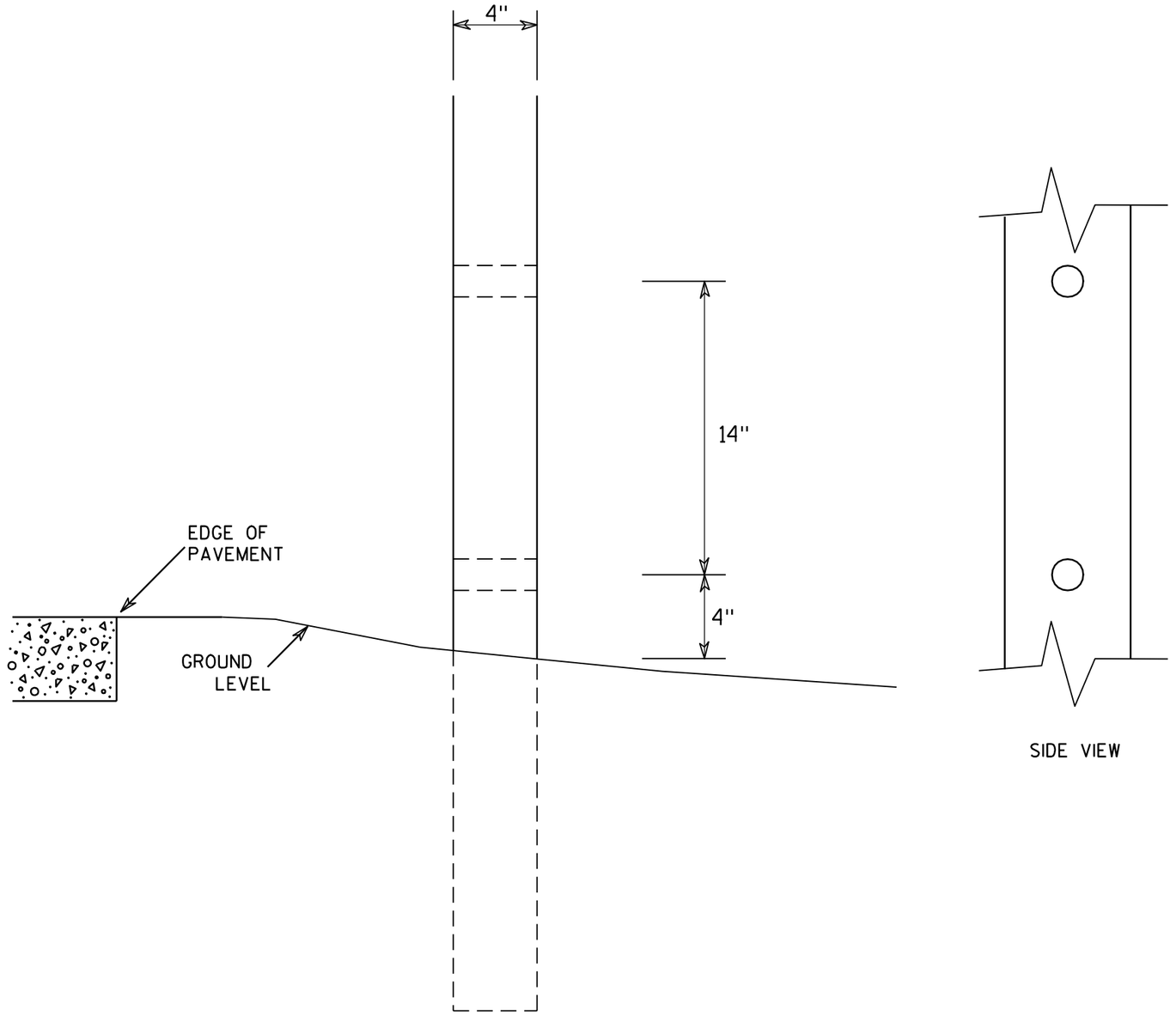
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 94 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



SIDE VIEW

GENERAL NOTES

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

7

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

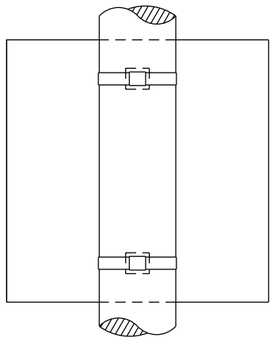
APPROVED Chester J Spang
for State Traffic Engineer

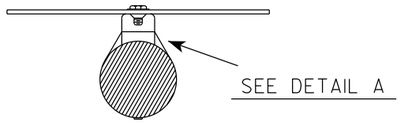
DATE 3/27/97 PLATE NO. A4-11.2

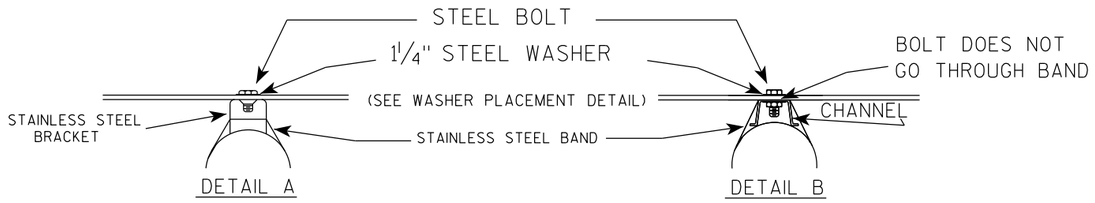
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 95	E

BANDING

SINGLE SIGN



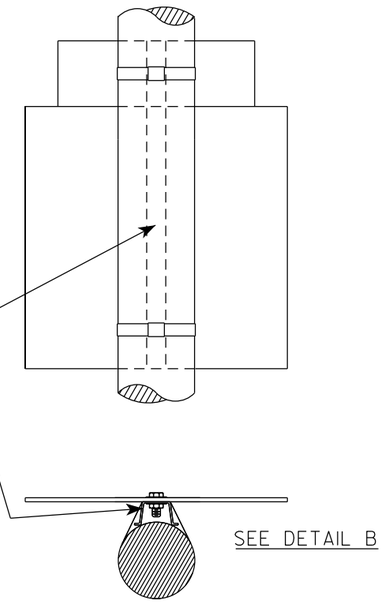




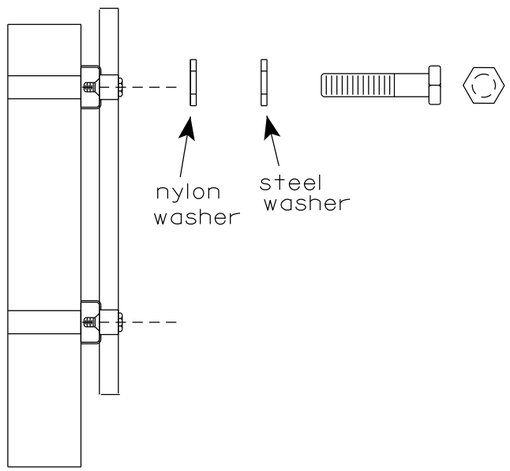
GENERAL NOTES

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



WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X ⅜" I.D. X 1/16" STEEL
1-1/4" O.D. X ⅜" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

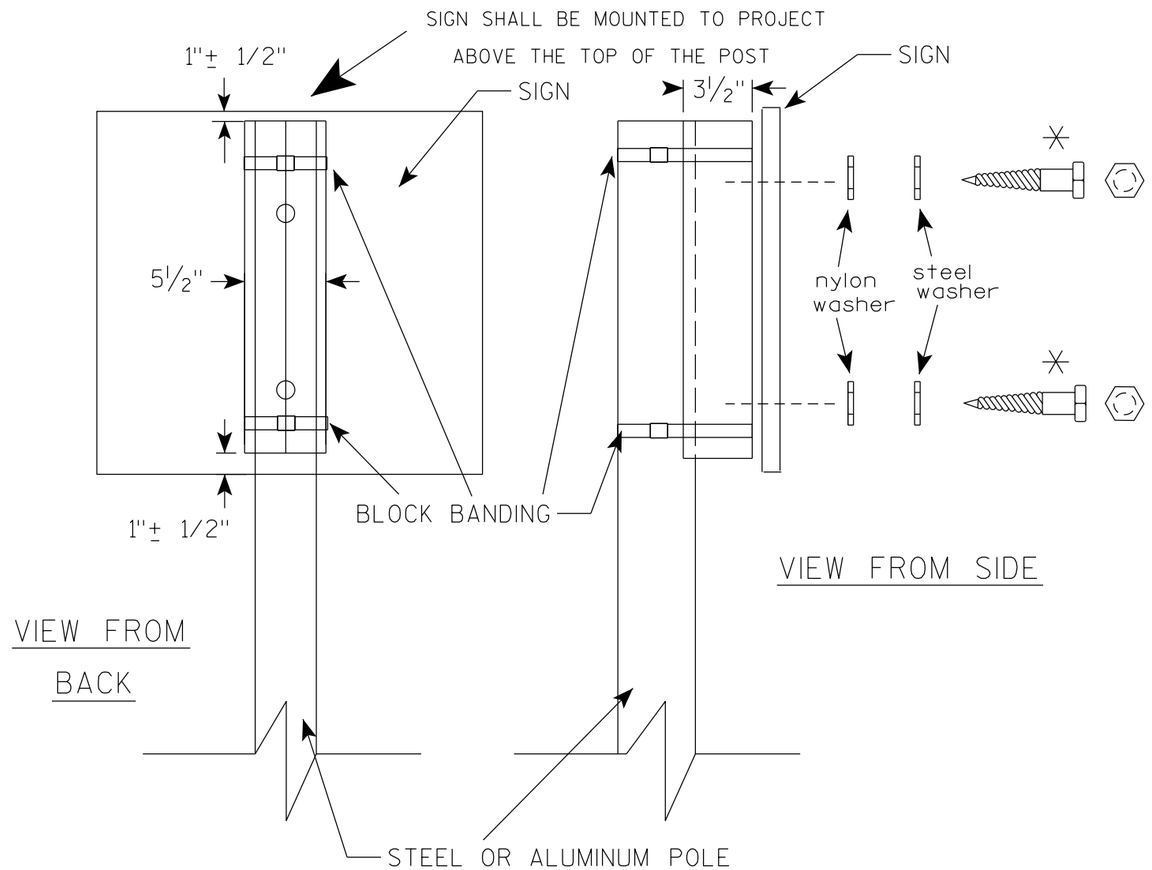
WISCONSIN DEPT OF TRANSPORTATION

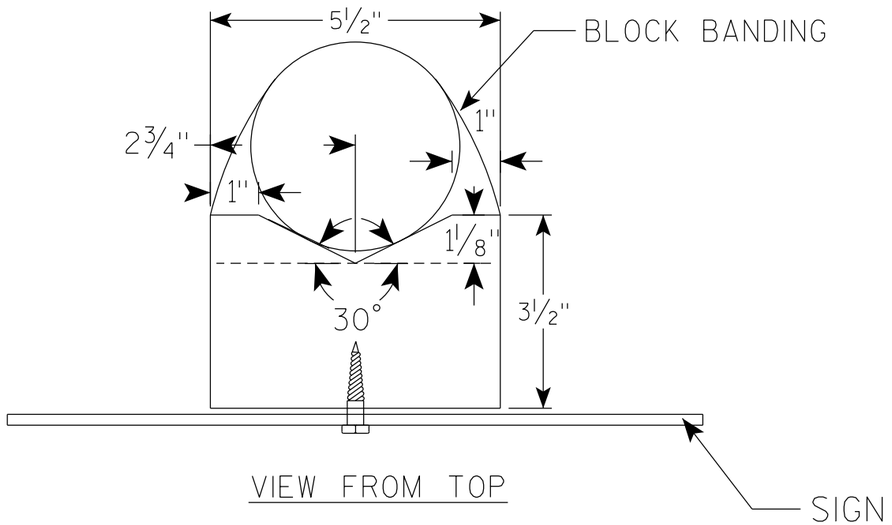
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 96	E

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





GENERAL NOTES

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

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

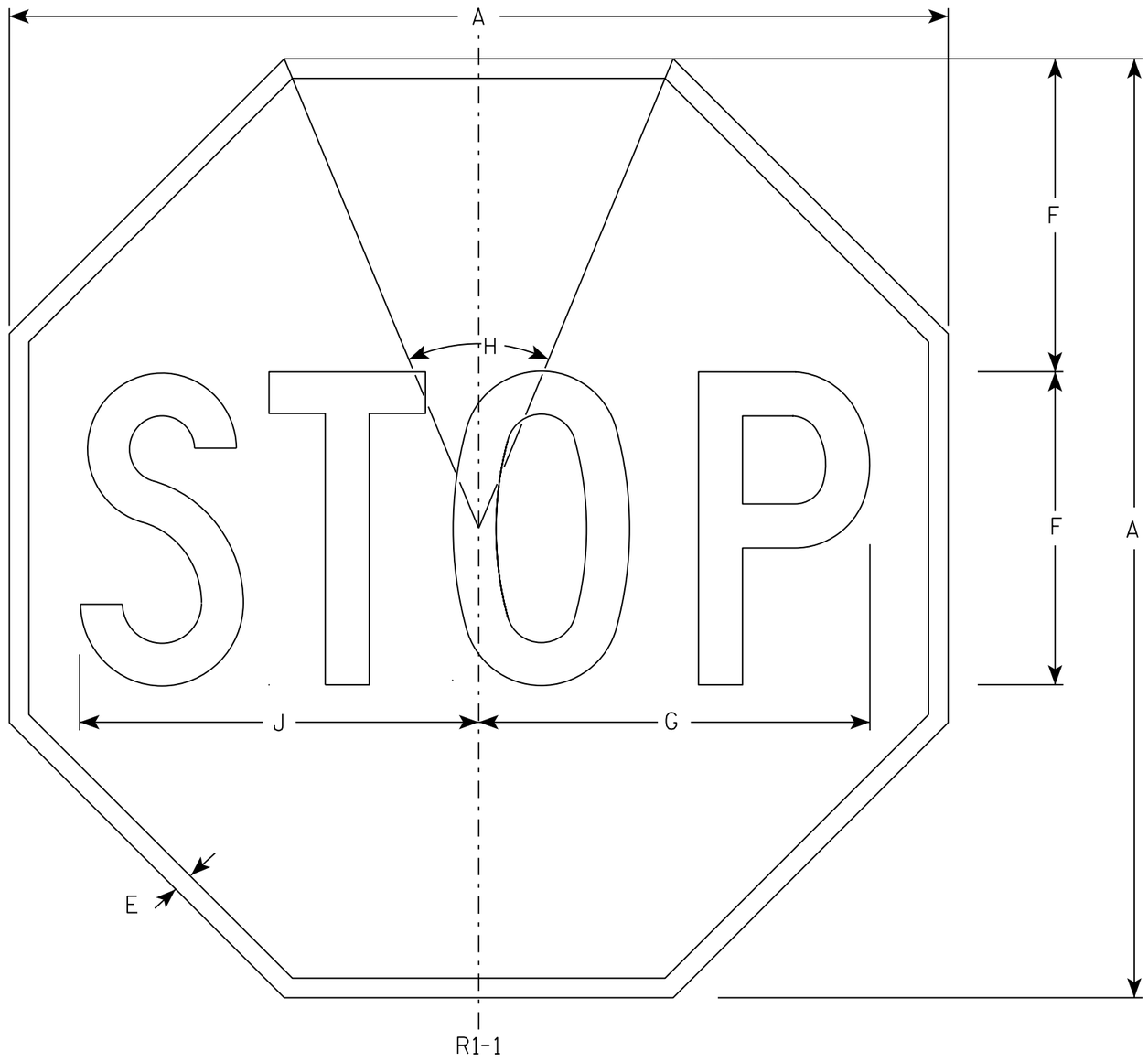
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:

SHEET NO: 97 E



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

STANDARD SIGN

R1-1

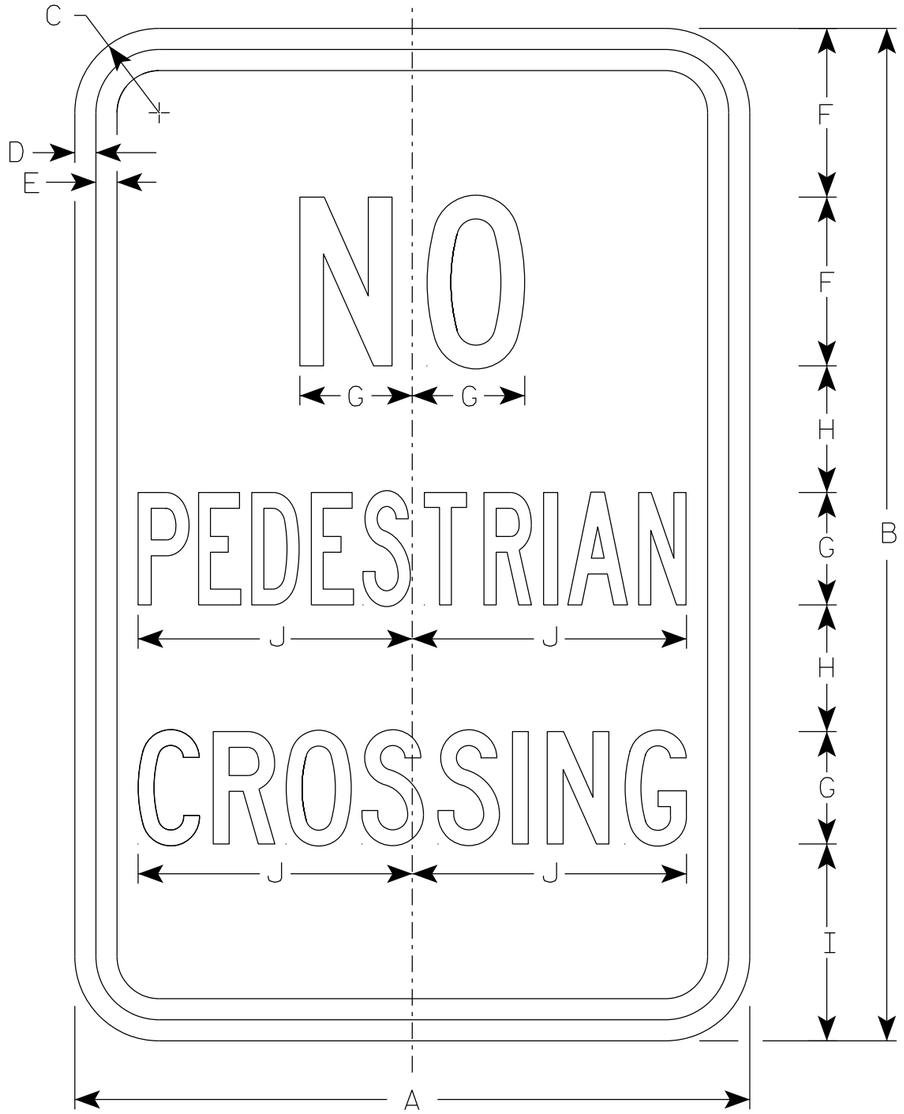
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 98	E



R9-3

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - Lines 1 & 3 are Series C
   Line 2 is Series B

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	12	18	1 1/2	3/8	3/8	3	2	2 1/4	3 1/2	4 7/8																	1.5
2M	12	18	1 1/2	3/8	3/8	3	2	2 1/4	3 1/2	4 7/8																	1.5
3																											
4																											
5																											

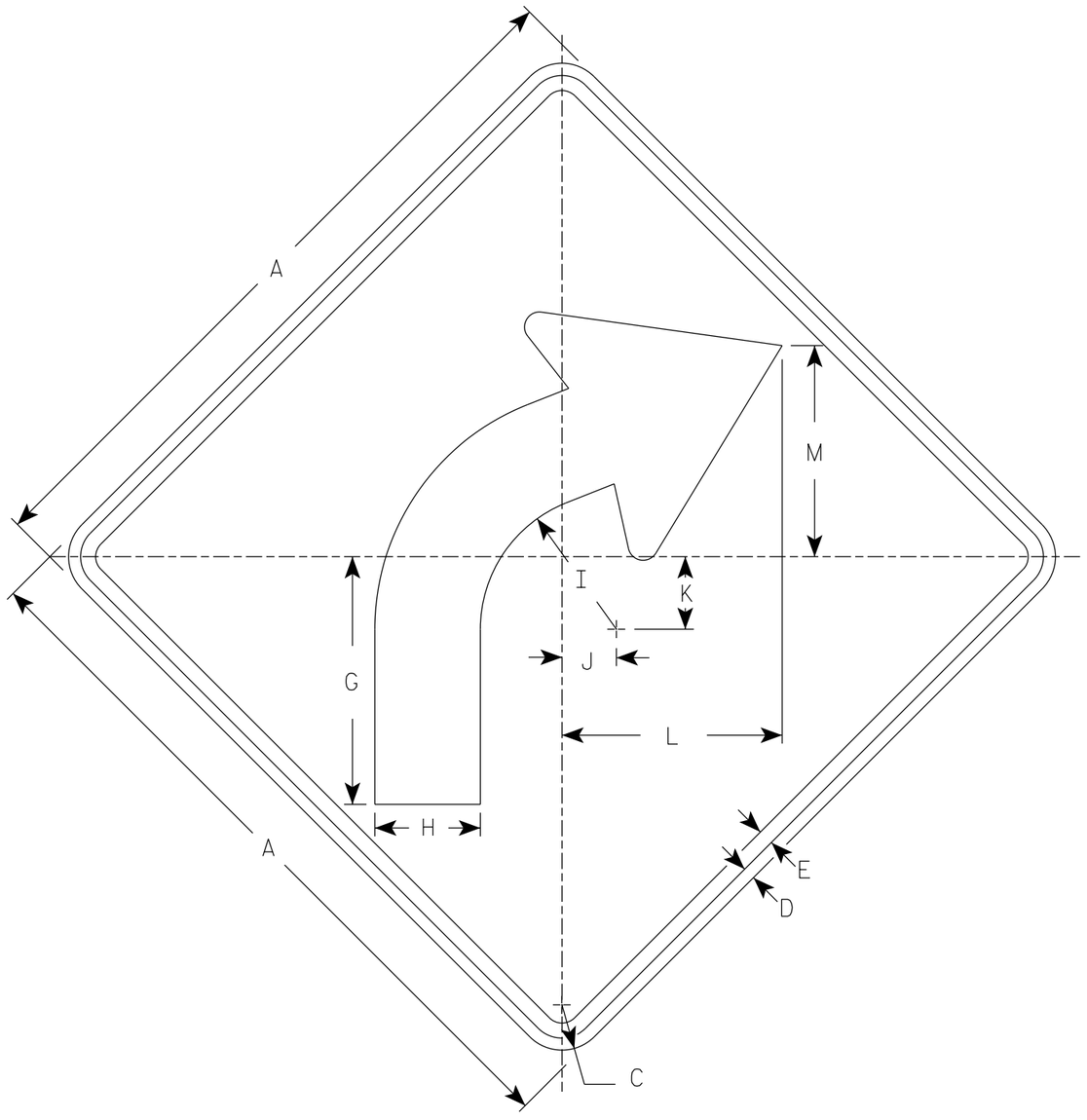
STANDARD SIGN
R9-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/23/24 PLATE NO. R9-3.7

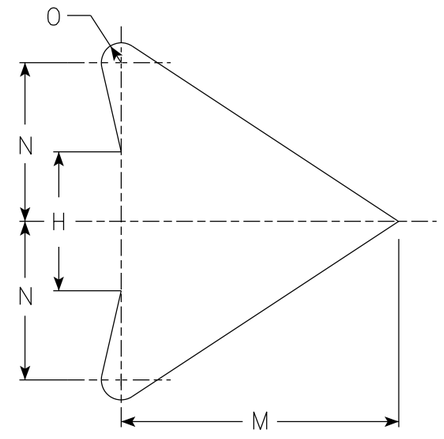
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 99 | E



W1-2R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. W1-2L is the same as W1-2R except the arrow is reversed along the vertical centerline.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/2	3/8	1/2		8 1/4	3 1/2	4 1/2	1 3/4	2 3/8	7 1/4	7	4	1/2												4.0
2S	30		1 7/8	1/2	5/8		10 1/4	4 3/8	5 5/8	2 1/4	3	9 1/8	8 3/4	5	5/8												6.25
2M	36		2 1/4	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
3	36		2 1/4	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
4	36		2 1/4	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
5	48		3	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0

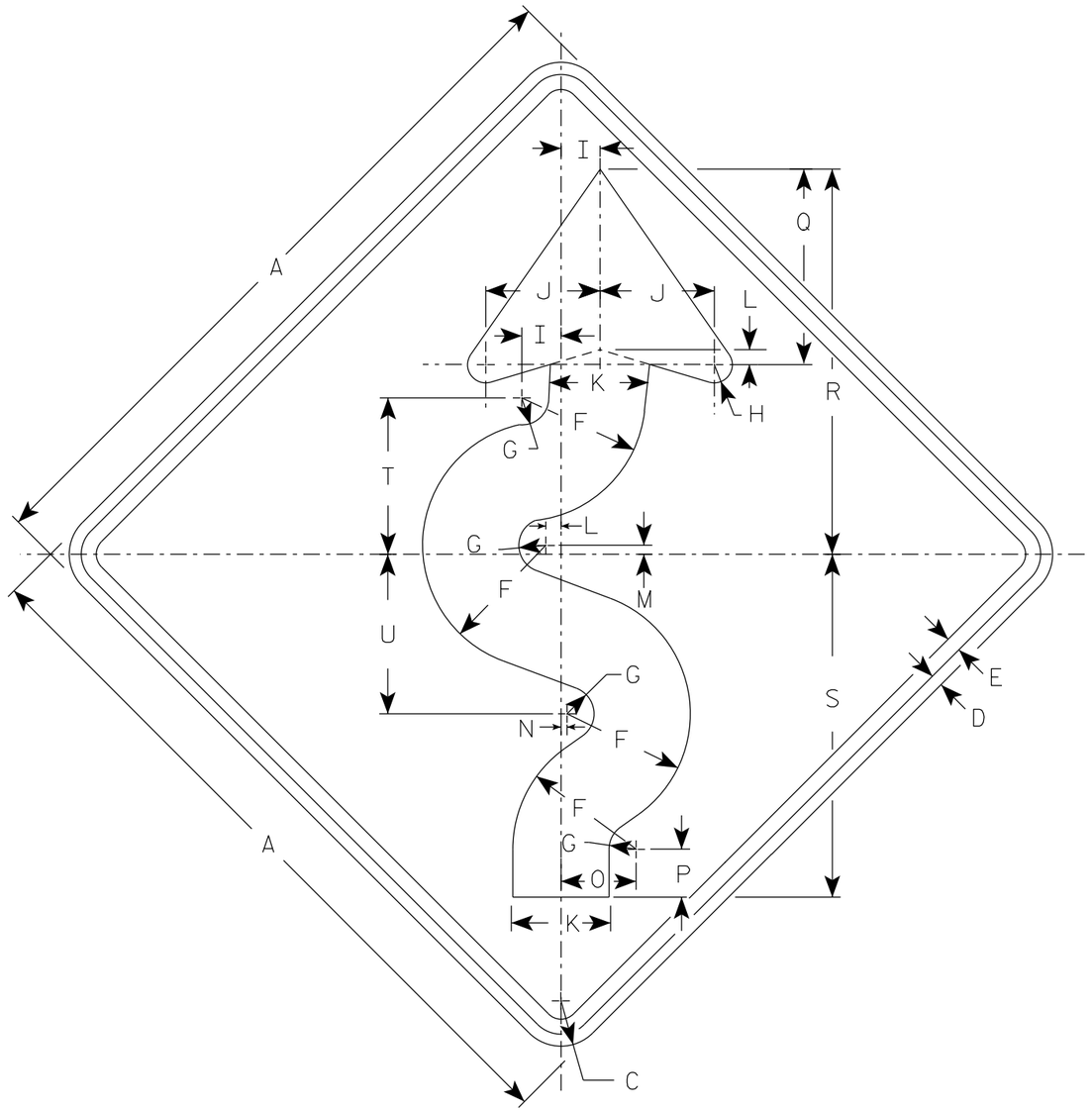
STANDARD SIGN
W1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/23/2023 PLATE NO. W1-2.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 100	E



W1-5R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. W1-5L is the same as W1-5R except the arrow is reversed along the vertical centerline.
4. If used with W13-1 of 30 MPH or less, use 36" sign for Size 2S.

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	24		1 1/2	3/8	1/2	4 1/8	7/8	5/8	1 1/4	3 3/4	3 1/4	1/2	1/4	1/8	2 1/2	1 5/8	6 1/2	12 3/4	11 3/8	5 1/4	5 1/4						4.0
2S	30		1 7/8	1/2	5/8	5 1/8	1 1/8	3/4	1 5/8	4 3/4	4 1/8	5/8	3/8	1/4	3 1/8	2	8 1/8	16	14 1/4	6 1/2	6 5/8						6.25
2M	36		2 1/4	5/8	3/4	6 1/4	1 3/8	1	1 7/8	5 5/8	4 7/8	3/4	3/8	1/4	3 3/4	2 7/8	9 3/4	19 1/8	17 1/8	7 3/4	7 7/8						9.0
3	36		2 1/4	5/8	3/4	6 1/4	1 3/8	1	1 7/8	5 5/8	4 7/8	3/4	3/8	1/4	3 3/4	2 7/8	9 3/4	19 1/8	17 1/8	7 3/4	7 7/8						9.0
4	36		2 1/4	5/8	3/4	6 1/4	1 3/8	1	1 7/8	5 5/8	4 7/8	3/4	3/8	1/4	3 3/4	2 7/8	9 3/4	19 1/8	17 1/8	7 3/4	7 7/8						9.0
5	48		3	3/4	1	8 1/4	1 3/4	1 1/4	2 1/2	7 1/2	6 1/2	1	1/2	3/8	5	3 1/4	13	25 1/2	22 3/4	10 3/8	10 1/2						16.0

STANDARD SIGN
W1-5

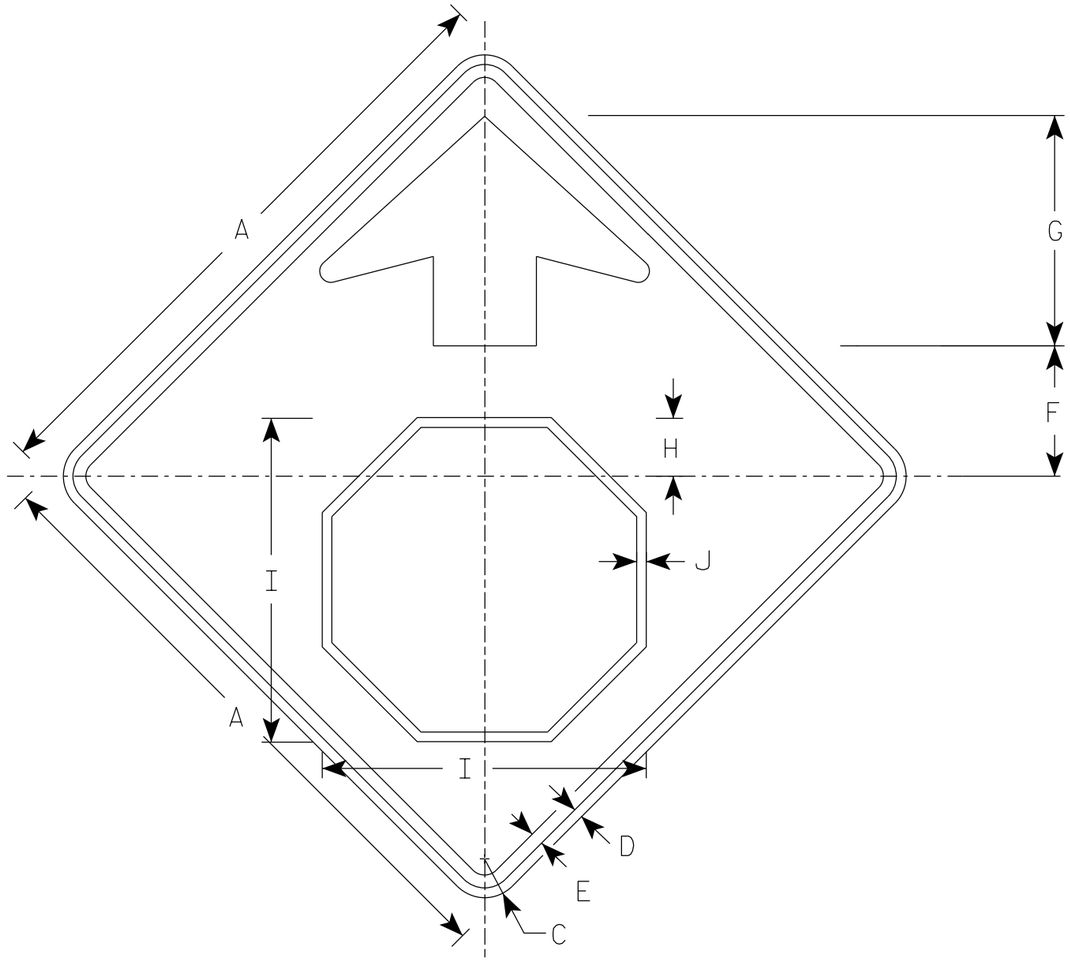
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/11/2023 PLATE NO. W1-5.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 101 | E

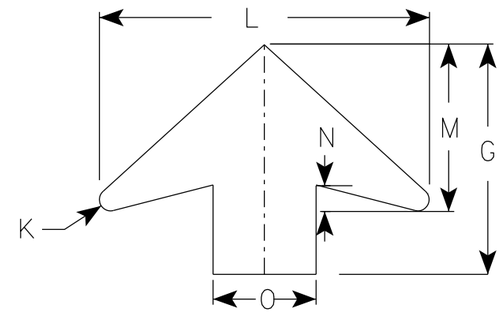
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W15.dgn PLOT DATE : 30-OCT 2023 10:04 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



W3-1

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Arrow & Border - Black
   Stop Symbol - White Border on Red Background



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 7/8	1/2	5/8	6 1/4	11 1/4	2 7/8	15 3/4	1/2	1/2	16	8	1 1/4	5												6.25
2S	36		2 1/4	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
2M	36		2 1/4	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
3	36		2 1/4	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
4	48		3	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
5	48		3	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0

STANDARD SIGN
W3-1

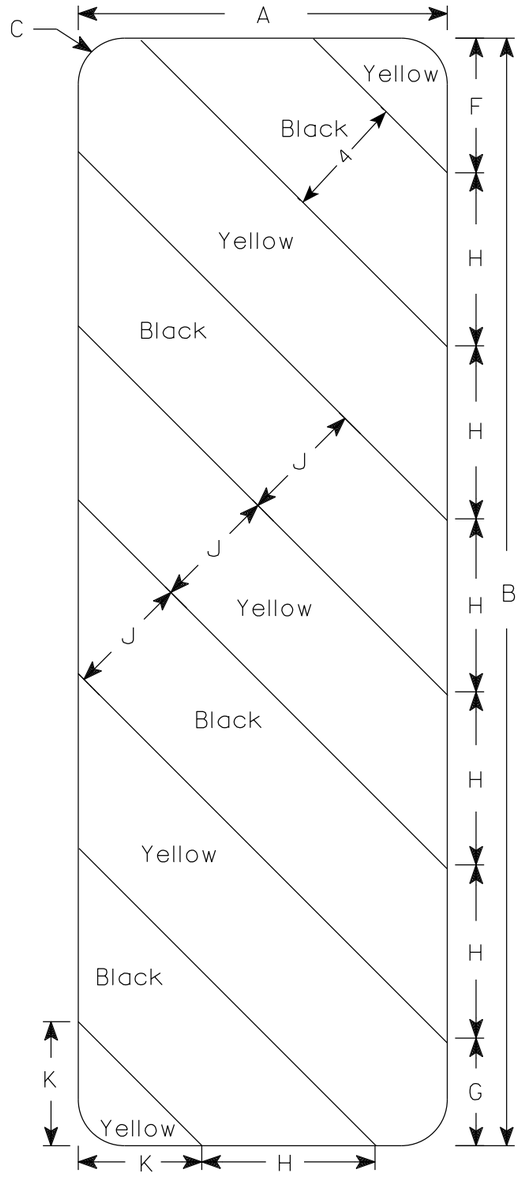
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

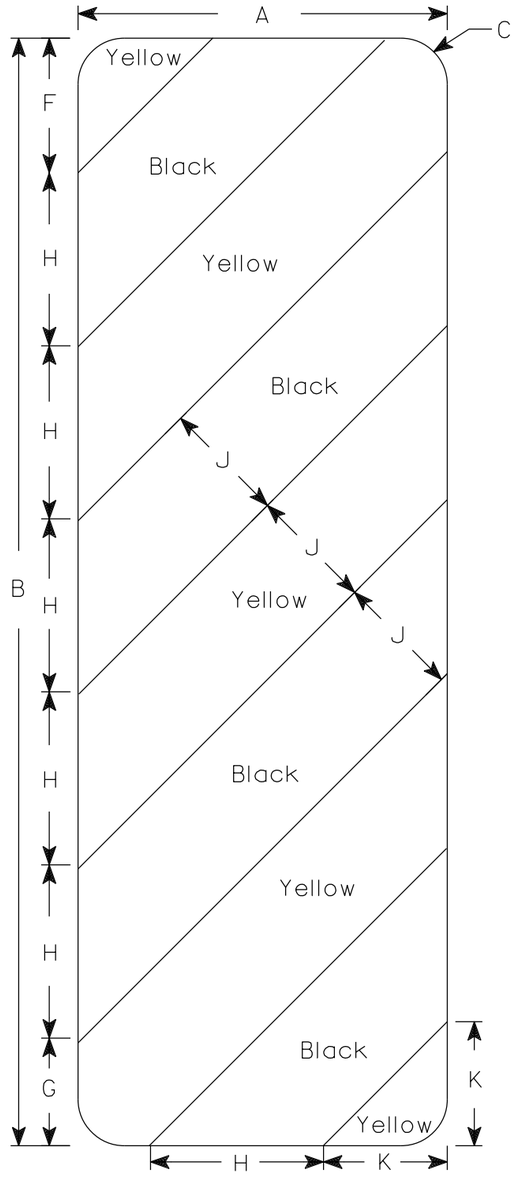
DATE 8/17/2023 PLATE NO. W3-1.13

PROJECT NO:

SHEET NO: 102 E



W5-52L



W5-52R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Alternate colors of stripes as shown.

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	12	36	1 1/2			4 3/8	3 1/2	5 5/8	45°	4	4																3.0
2M	12	36	1 1/2			4 3/8	3 1/2	5 5/8	45°	4	4																3.0
3	18	54	1 1/2			6	5 1/2	8 1/2	45°	6	6 9/16																6.75
4																											
5																											

STANDARD SIGN

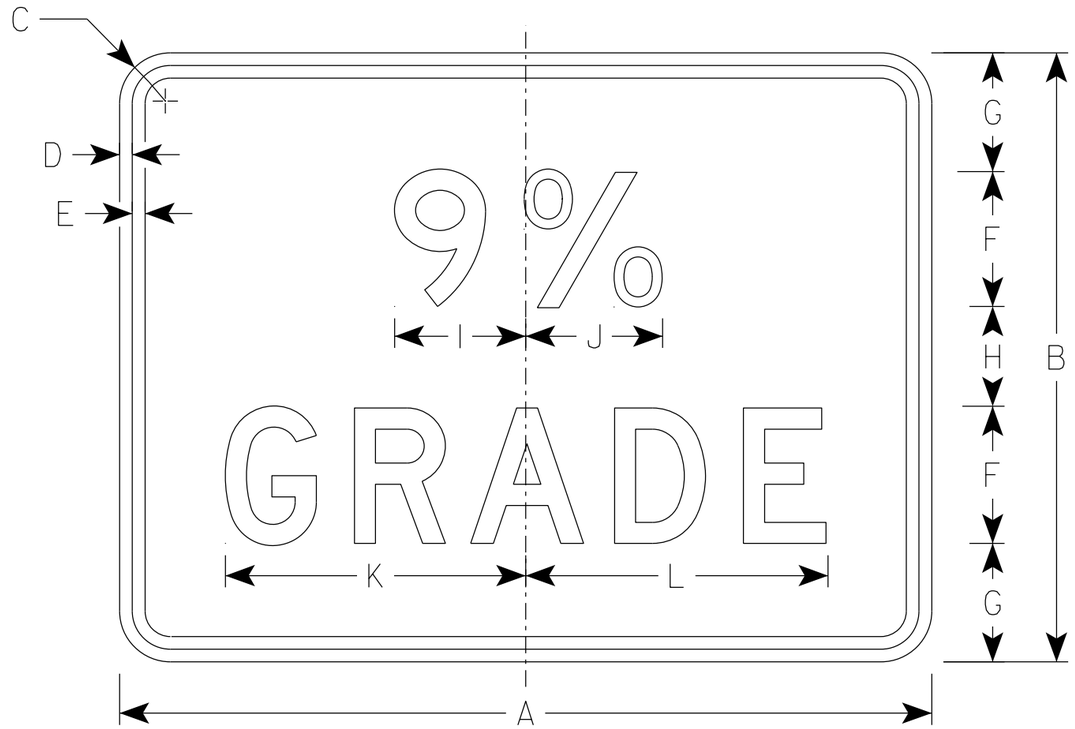
W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 3/4/2024 PLATE NO. W5-52.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 103 E



W7-3

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - D
4. Substitute appropriate numeral and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	18	1 1/2	3/8	3/8	4	3 1/2	3	3 7/8	4	8 7/8	9															3.0
2M	24	18	1 1/2	3/8	3/8	4	3 1/2	3	3 7/8	4	8 7/8	9															3.0
3																											
4																											
5																											

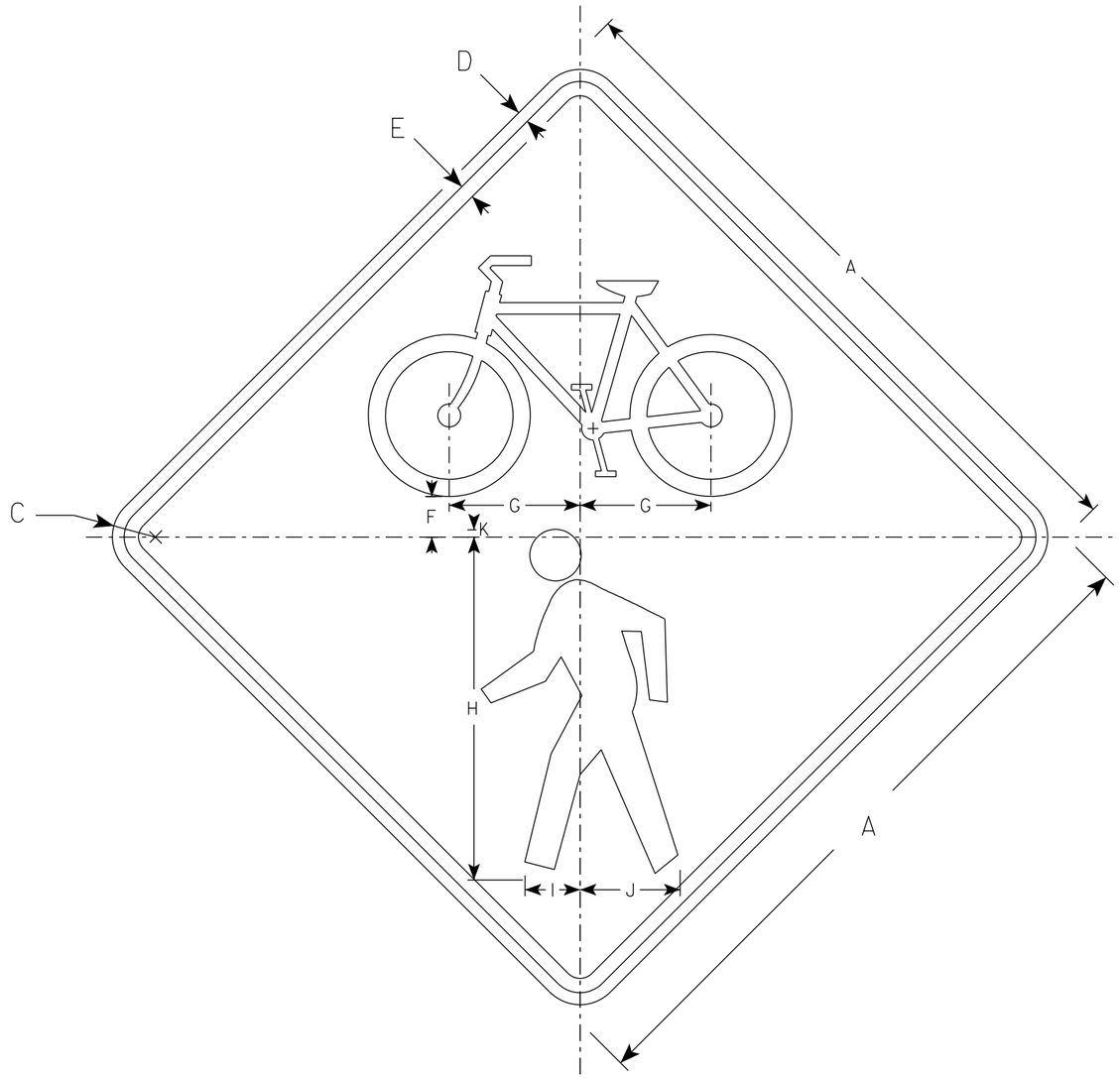
STANDARD SIGN
W7-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/19/2023 PLATE NO. W7-3.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 104 E



W11-15

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   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	24		1 1/2	3/8	1/2	1 3/8	4 5/8	12	1 7/8	3 1/2	1/4																4.0
2S	30		1 7/8	1/2	5/8	1 3/4	5 3/4	15	2 3/8	4 3/8	3/8																6.25
2M	36		2 1/4	5/8	3/4	2 1/8	6 7/8	18	2 7/8	5 1/4	3/8																9.0
3	36		2 1/4	5/8	3/4	2 1/8	6 7/8	18	2 7/8	5 1/4	3/8																9.0
4	48		3	3/4	1	2 7/8	9 1/8	24	3 7/8	7	1/2																16.0
5																											

STANDARD SIGN
W11-15

WISCONSIN DEPT OF TRANSPORTATION

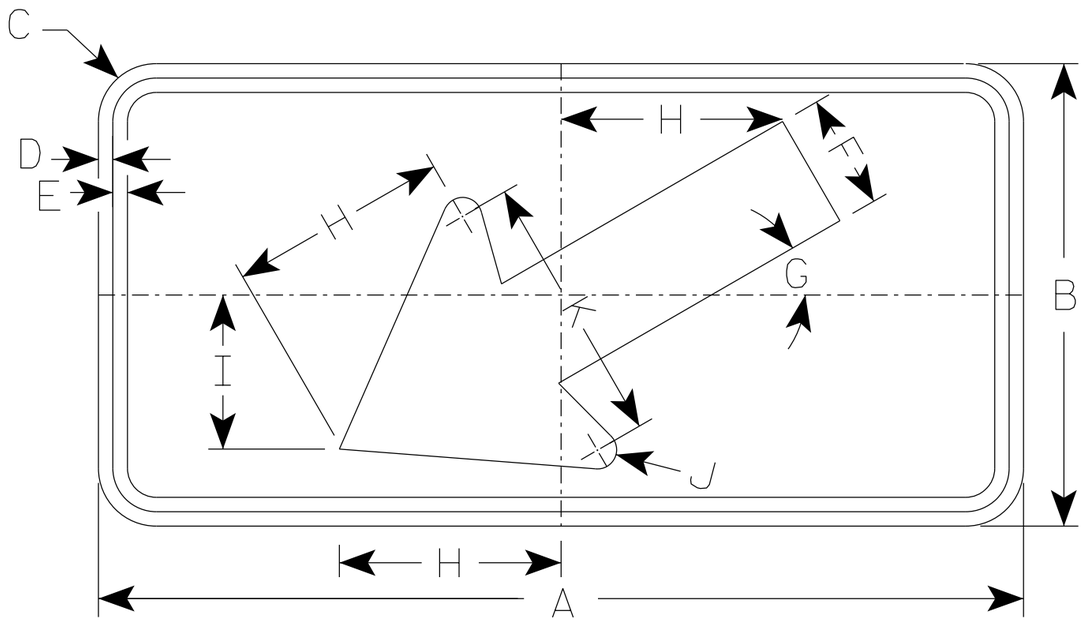
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/21/2023 PLATE NO. W11-15.5

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 105 | E

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. W16-7R is the same as W16-7L
   except the arrow is reversed along the vertical centerline.



W16-7L

* For 36" x 36" Warning Signs, use 30" x 18" W16-7L signs.
* For 48" x 48" Warning Signs, use 48" x 24" W16-7L signs.

	SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
	1																											
	2S	24	12	1 ½	⅜	⅜	3	30°	5 ¾	4	½	7																2.0
*	2M	30	18	1 ½	⅜	½	4 ½	30°	8 ½	6	⅝	10 ¼																3.75
*	3	30	18	1 ½	⅜	½	4 ½	30°	8 ½	6	⅝	10 ¼																3.75
*	4	48	24	1 ⅞	½	⅝	6	30°	11 ½	8	1	14																8.0
	5																											

STANDARD SIGN
W16-7

WISCONSIN DEPT OF TRANSPORTATION

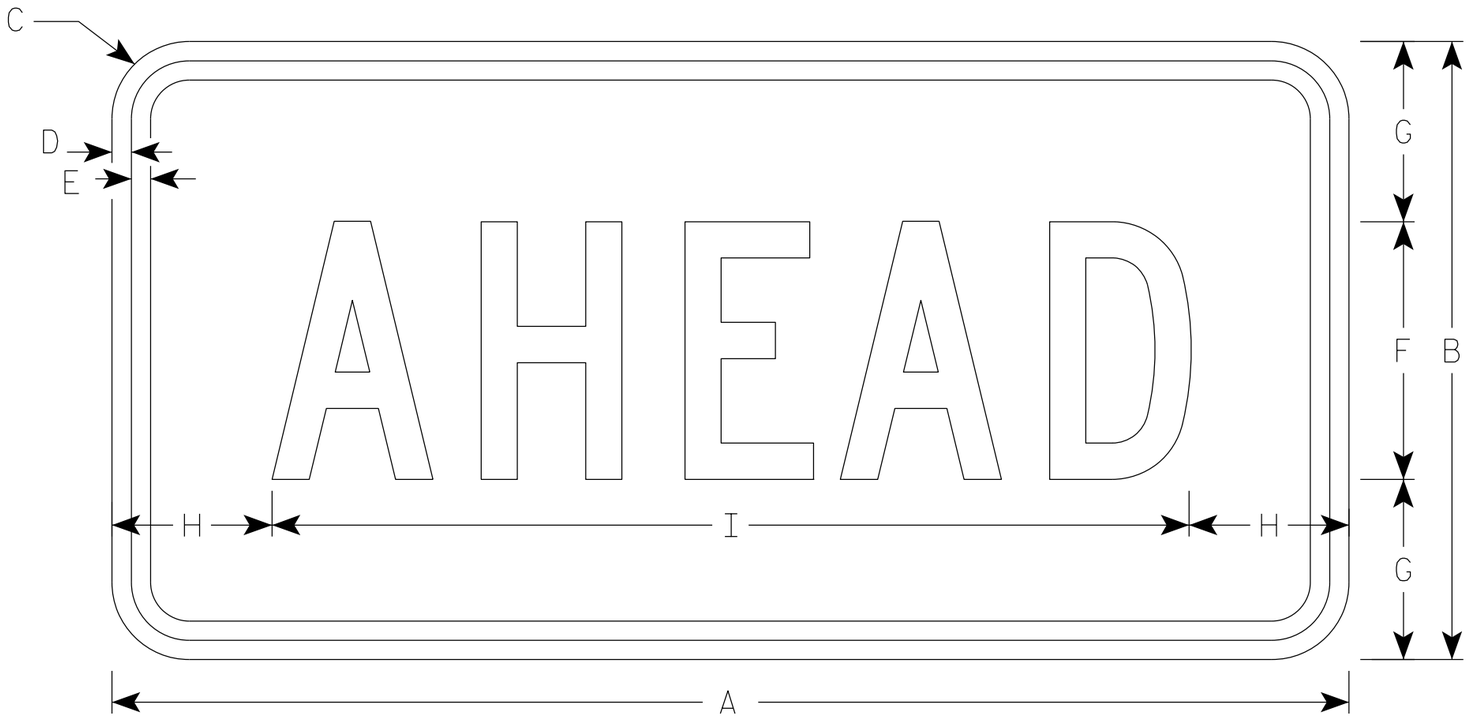
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/9/2024 PLATE NO. W16-7.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 106 E

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - C



W16-9P

* For 36" x 36" Warning Signs, use 30" x 18" W16-9P signs.
* For 48" x 48" Warning Signs, use 48" x 24" W16-9P signs.

	SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
	1																											
	2S	24	12	1 1/2	3/8	3/8	5	3 1/2	3 1/8	17 3/4																		2.0
*	2M	30	18	1 1/2	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
*	3	30	18	1 1/2	3/8	1/2	7	3 1/2	2 3/4	24 1/2																		3.75
*	4	48	24	1 7/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
	5																											

STANDARD SIGN
W16-9P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/9/2024 PLATE NO. W16-9P.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 107 E

Wisconsin Department of Transportation

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