RHI

APRIL 2022

PROJECT ID: 1590-12-74

WITH: N/A

COUNTY: ONEIDA

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 = 118

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

RHINELANDER - MONICO

CTH P TO USH 45 NORTH

USH 8

ONEIDA COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1590-12-74	WISC 2022354	1

STATE PROJECT NUMBER

1590-12-74

PROJECT LOCATION

39

N

DESIGN DESIGNATION

A.A.D.T.	(2022)	=	4,300
A.A.D.T.	(2042)	=	4,700
D.H.V.		=	578
D.D.		=	54/46
T.		=	15.7%
DESIGN SPEED		=	60MPH/50MPH
ESALS		=	1,500,000

CONVENTIONAL SYMBOLS

PLAN

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

PROFILE

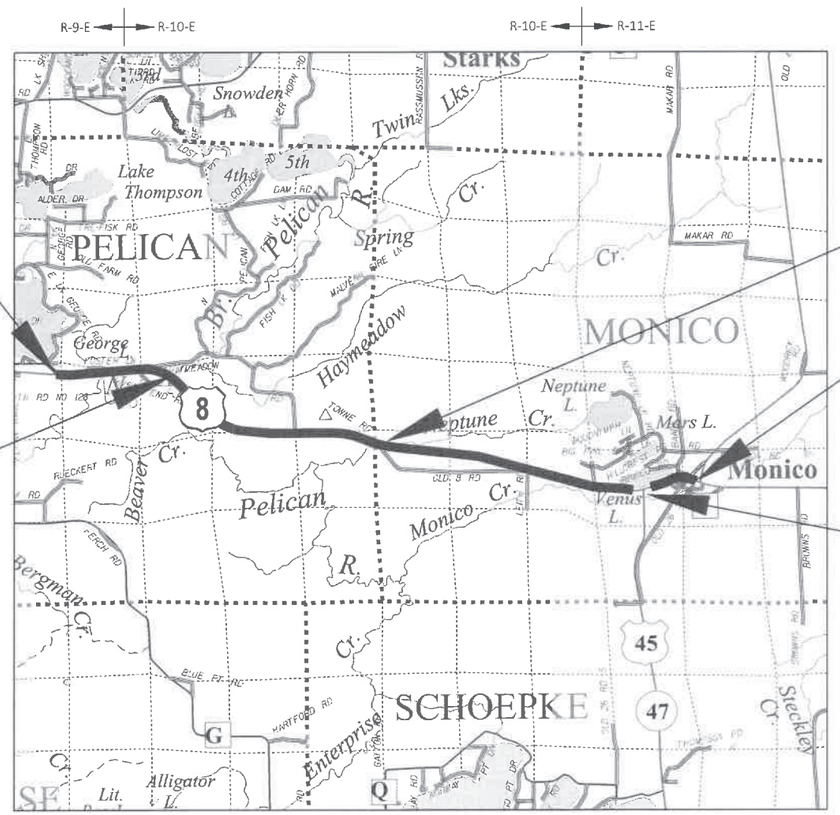
- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES

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

BEGIN PROJECT
STA 10+00
Y = 150,660.393
X = 286,824.122

NET EXCEPTION TO CL LENGTH
STA 76+80 TO 77+87
STRUCTURE B-43-16



STRUCTURE C-43-918
STA 250+54

END PROJECT
STA 474+50

NET EXCEPTION TO CL LENGTH
STA 427+00 TO 448+13.50

LAYOUT

SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 8.397 MI

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

ORIGINAL PLANS PREPARED BY
CORRE, INC.

CORRE ENGINEERING
MADISON | OCONOMOWOC | EAU CLAIRE | GREEN BAY | WITTENBERG

KEVIN L. MEYER E-38309-006 ELK MOUND WI — WISCONSIN — PROFESSIONAL ENGINEER

DATE: 4/15/21 (Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	CORRE, INC
Designer	CORRE, INC
Project Manager	NICK VOS
Regional Examiner	NC REGION
Regional Supervisor	ROBIN STAFFORD

APPROVED FOR THE DEPARTMENT

DATE: 4/19/2021 (Signature)

E

FILE NAME C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - NC REGION\1590-12-04_USH 8_ONEIDA CO\500_CADD\501_C3D_2018\15901204\SHEETSPLAN\010101-TI.DWG PLOT DATE : 4/15/2021 10:31 AM PLOT BY : BOBBY JONES PLOT NAME :

ORDER OF SECTION 2 SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS

GENERAL NOTES

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

-RIGHT OF WAY LINES SHOWN ON THE PLAN ARE APPROXIMATE. THIS DATA WAS COLLECTED FORM THE ONEIDA COUNTY GIS SYSTEM AND IS INCLUDED FOR INFORMATION USE ONLY.

-ALL DIMENSIONS ARE SHOWN TO THE EDGE OF PAVEMENT UNLESS NOTED OTHERWISE ON THE PLAN.

DNR CONTACT

DNR SERVICE CENTER
WENDY HENNIGES
107 SUTLIFF AVENUE
RHINELANDER, WI 54501
(715) 365-8916
WENDY.HENNIGES@WISCONSIN.GOV

WISCONSIN DOT RWIS PROGRAM
COMMUNICATION TOWER
TIM DAVIS
PO BOX 7986
MADISON, WI 53707
(231) 288-9940
TIMOTHY.M.DAVIS@FTR.COM

UTILITY CONTACTS

ANR PIPELINE COMPANY
GAS/PETROLEUM
TODD BRISTER
W 3925 PIPELINE LANE
EDEN, WI 53019
(920) 477-2235
TODD_BRISTER@TCENERGY.COM

ATC MANAGEMENT
ELECTRICITY - TRANSMISSION
DOUG VOSBERG
2489 RINDEN RD
COTTAGE GROVE, WI 53527
(608) 877-7650
DVOSBERG@ATCLLC.COM

CHARTER COMMUNICATIONS
COMMUNICATION LINE
STEVE BROWN
821 LINCOLN ST
RHINELANDER, WI 54501
(715) 519-0042
STEVE.BROWN@CHARTER.COM

FRONTIER COMMUNICATIONS
COMMUNICATION LINE
CALVIN KLADE
1851 N 14TH AVE
WAUSAU, WI 54401
(715) 847-1525
CALVIN.KLADE@FTR.COM

NSIGHT TELSERVICES
COMMUNICATION LINE
RICK VINCENT
470 SECURITY BLVD
GREEN BAY, WI 54304
(920) 617-7316
RICK.VINCENT@NSIGHT.COM

WISCONSIN PUBLIC SERVICE CORPORATION
ELECTRICITY
KEVIN TERMAAT
PO BOX 1166
WAUSAU, WI 54401-1166
(715) 848-7353
KEVIN.TERMAAT@WISCONSINPUBLICSERVICE.COM

WISCONSIN PUBLIC SERVICE CORPORATION
GAS
CHRIS GILMAN
2027 NAVAJO ST
PO BOX 160
RHINELANDER, WI 54501
(715) 369-7133
CHRIS.GILMAN@WISCONSINPUBLICSERVICE.COM

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 = 54 ACRES

TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 2.6 ACRES

2

TOWN

TOWN

2

N

BEGIN PROJECT
STA 10+00
Y = 150660.393
X = 286824.122

NET EXCEPTION TO CL LENGTH
STA 76+80 TO 77+87
STRUCTURE B-43-16

CULVERT REPLACEMENT
CP: 4300800311
STA 14+18

CULVERT REPLACEMENT
CP: 43008003117
STA 64+89

CULVERT REPLACEMENT
CP: 43008003112
STA 20+77

CULVERT REPLACEMENT
CP: 43008003118
STA 94+80

CULVERT REPLACEMENT
CP: 43008003119
STA 109+79

CULVERT REPLACEMENT
CP: 43008003120
STA 123+00

CULVERT REPLACEMENT
CP: 43008003121
STA 144+14

CULVERT REPLACEMENT
CP: 43008003124
STA 213+85

CULVERT REPLACEMENT
CP: 43008003123
STA 171+22

CULVERT REPLACEMENT
CP: 43008003122
STA 152+63

CULVERT REPLACEMENT
CP: 43008003125
STA 229+20

CULVERT REPLACEMENT
CP: 43008003126
STA 243+30

CULVERT REPLACEMENT
CP: 43008003127
STA 259+84

CULVERT REPLACEMENT
CP: 43008003129
STA 290+01

CULVERT REPLACEMENT
CP: 43008003131
STA 322+91

CULVERT REPLACEMENT
CP: 43008003132
STA 330+71

CULVERT REPLACEMENT
CP: 43008003133
STA 347+31

CULVERT REPLACEMENT
CP: 43008003134
STA 367+22

CULVERT REPLACEMENT
CP: 43008003135
STA 380+79

CULVERT REPLACEMENT
CP: 43008003136
STA 388+56

CULVERT REPLACEMENT
CP: 43008003139
STA 450+26

CULVERT PIPE LINER
CP: 43008003140
STA 467+87

STRUCTURE C-43-918
STA 250+54

NET EXCEPTION TO CL LENGTH
STA 427+00 TO 448+13.50

END PROJECT
STA 474+50

OF

OF

PELICAN

OF

TOWN

OF

ENTERPRISE

TOWN

OF

SCHOEPKE

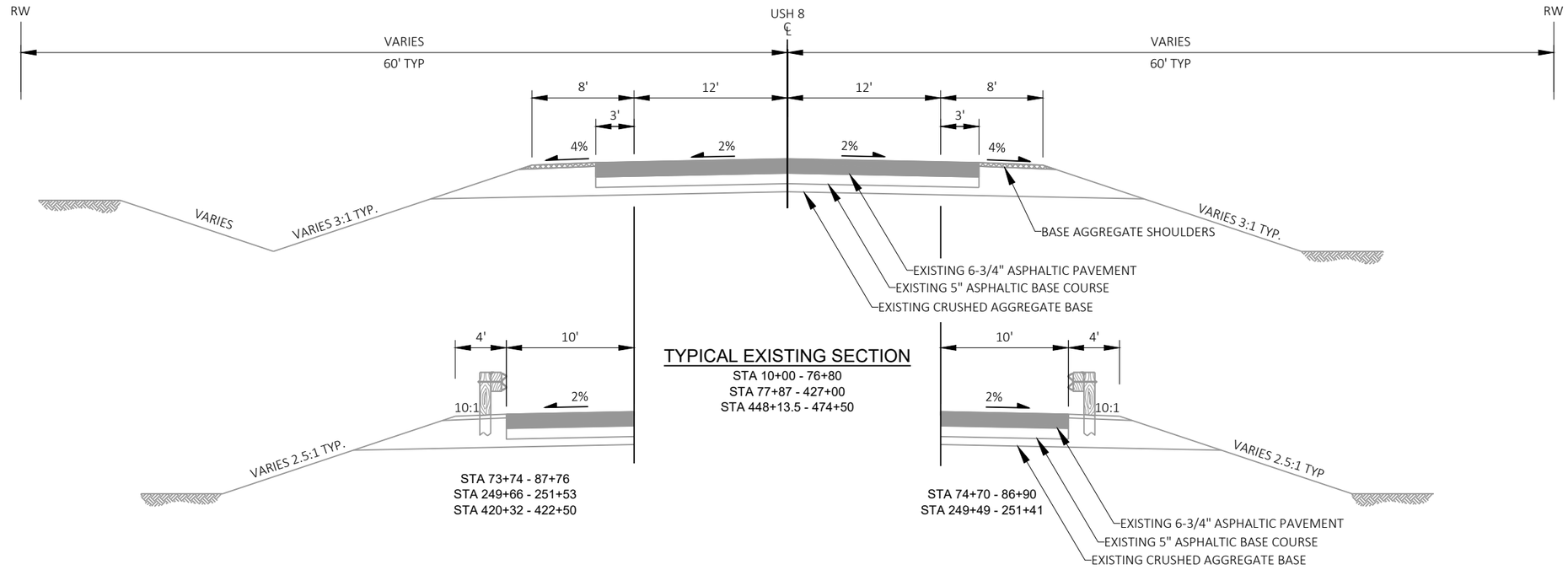
FOSTER LN
MORGAN LN
RIVERS END RD
BERQUIST RD
LAURA LN
BEAVER CREEK RD
FORD RD
DILLON DR
HAY MEADOW RD
N PELICAN LAKE RD
N BR PELICAN RIVER
FISH LAKE RD
MALVERN FIRE LN
HAY MEADOW CREEK
USH 8
TOWNE LN
OLD 8 RD
NEPTUNE CREEK
LEITH RD
LAKE RD
VENUS LAKE
NEPTUNE LAKE
MONICO
USH 45
C ST
B ST
OLD 26
MONICO CREEK
BEAVER CREEK
PELICAN RIVER

50 100 150 200 250 300 350 400 450

PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	PROJECT OVERVIEW	SHEET 3	E

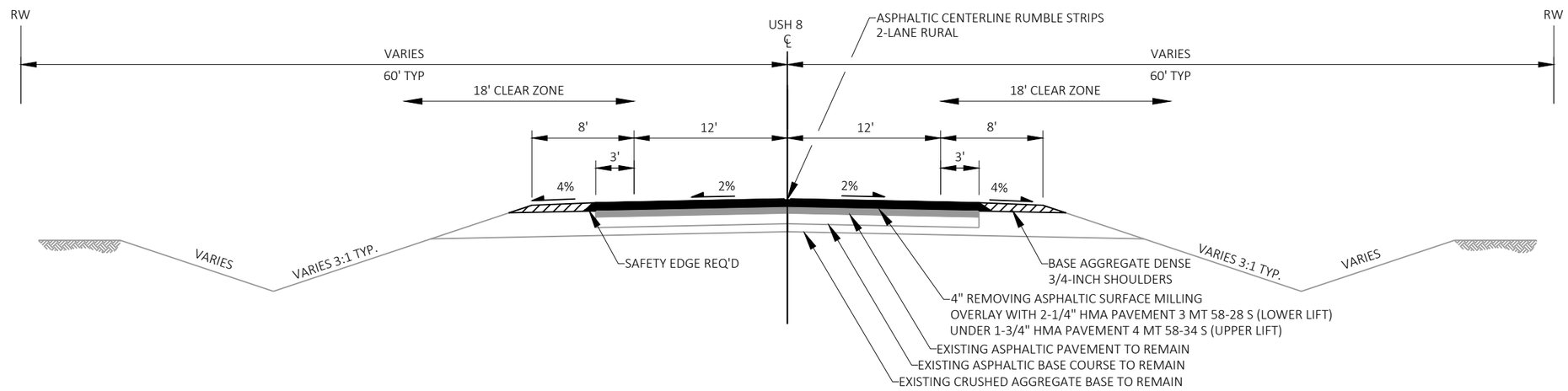
FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - NC REGION\1590-12-04_USH 8_ONEIDA CO\500_CADD\501_C3D_2018\15901204\SHEETSPLAN\020201-PO.DWG
LAYOUT NAME - 01
PLOT DATE : 2/14/2022 3:46 PM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : Custom
WISDOT/CADDS SHEET 42

2



TYPICAL EXISTING SECTION

STA 10+00 - 76+80
STA 77+87 - 427+00
STA 448+13.5 - 474+50

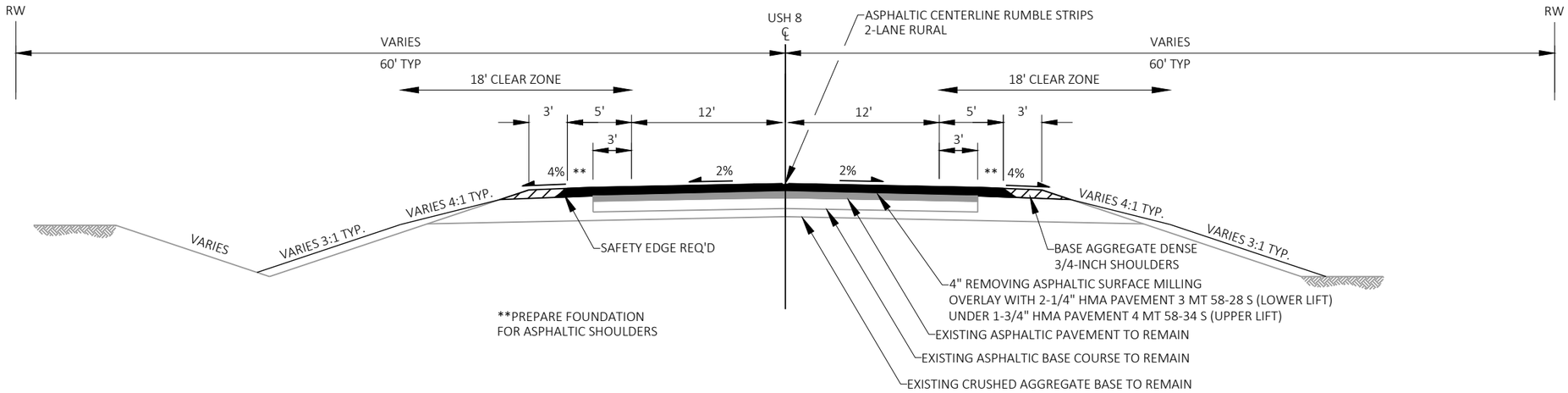


TYPICAL FINISHED SECTION

STA 10+00 - 76+80
STA 77+87 - 400+80

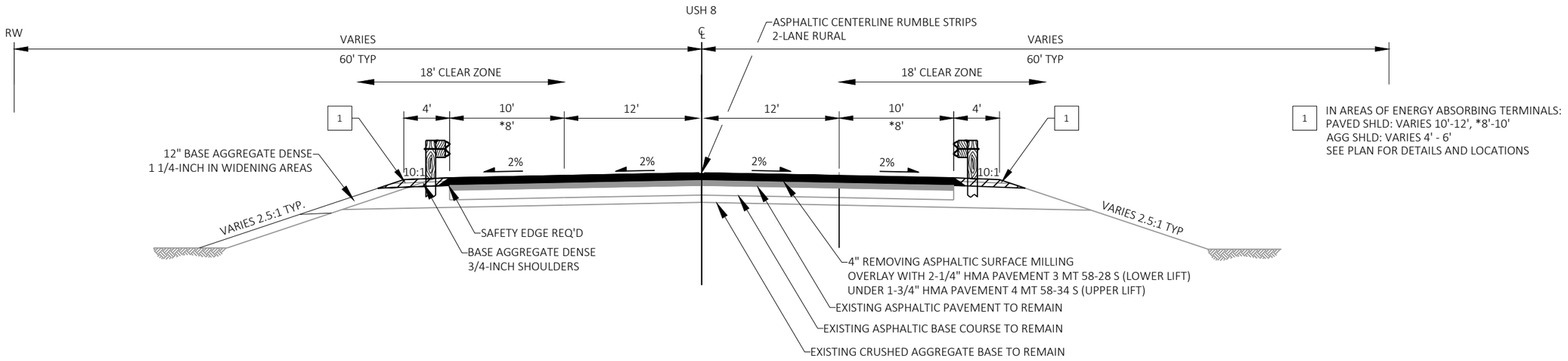
PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	TYPICAL SECTIONS	SHEET 4	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - NC REGION\1590-12-04_USH 8_ONEIDA CO\500_CADD\501_C3D_2018\15901204\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 01
PLOT DATE : 2/14/2022 3:49 PM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



TYPICAL FINISHED SECTION

STA 400+80 - 427+00
STA 448+13.5 - 474+50



TYPICAL FINISHED SECTION WITH BEAMGUARD - LEFT

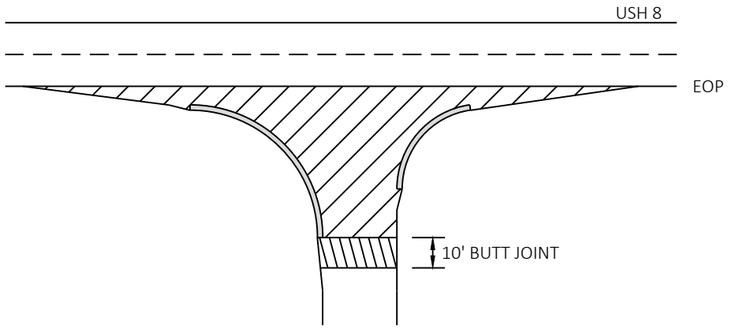
STA 73+75 - 87+87
*STA 249+12 - 252+19
STA 420+31 - 422+49

TYPICAL FINISHED SECTION WITH BEAMGUARD - RIGHT

STA 74+33 - 87+01
*STA 249+01 - 251+68

PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	TYPICAL SECTIONS	SHEET 5	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - NC REGION\1590-12-04_USH 8_ONEIDA CO\500_CADD\501_C3D_2018\15901204\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 02
PLOT DATE : 2/14/2022 3:49 PM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

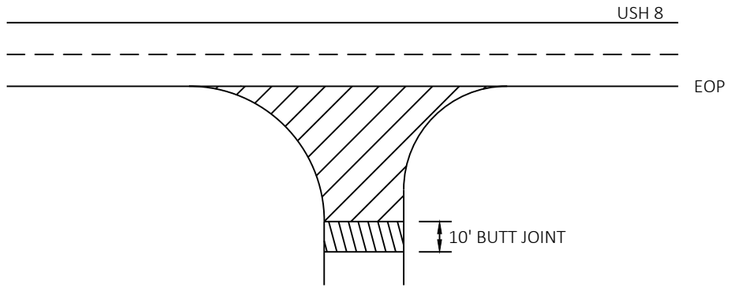


REMOVING ASPHALTIC SURFACE MILLING

REMOVING ASPHALTIC SURFACE BUTT JOINTS
SEE BUTT JOINT DETAIL

NOTE: WHEN MATCHING TO AN UNPAVED SURFACE
BUTT JOINT IS NOT REQUIRED

SIDEROADS
WITH CURB AND GUTTER

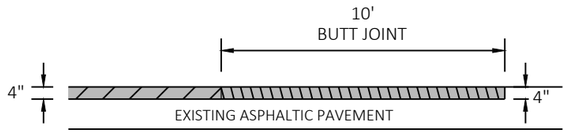


REMOVING ASPHALTIC SURFACE MILLING

REMOVING ASPHALTIC SURFACE BUTT JOINTS
SEE BUTT JOINT DETAIL

NOTE: WHEN MATCHING TO AN UNPAVED SURFACE
BUTT JOINT IS NOT REQUIRED

SIDEROADS
WITHOUT CURB AND GUTTER

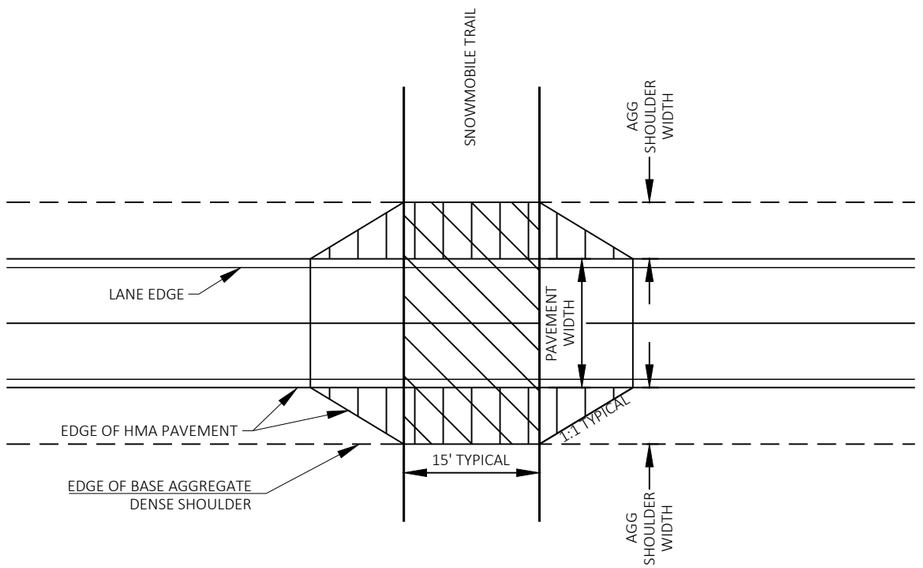


HMA PAVEMENT

REMOVING ASPHALTIC SURFACE MILLING

REMOVING ASPHALTIC SURFACE BUTT JOINTS

BUTT JOINTS
MAINLINE AND SIDE ROADS



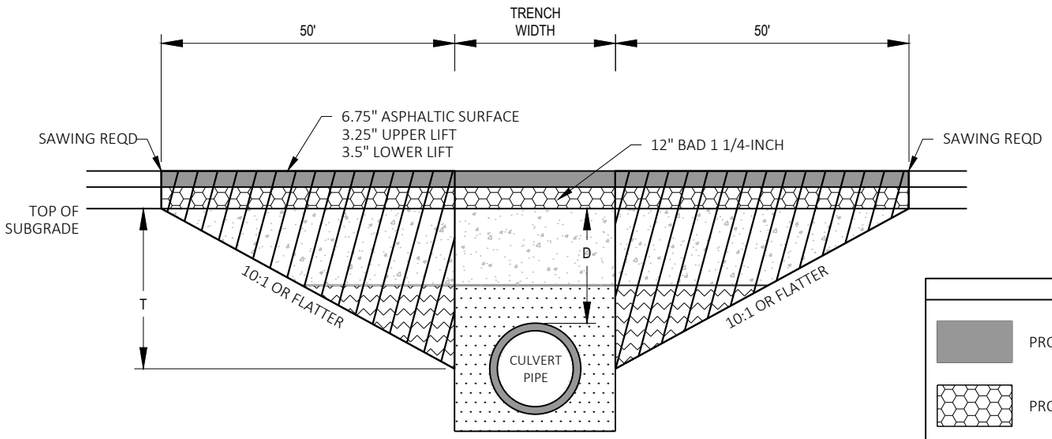
PROTECTIVE THERMOPLASTIC COATING
AT SNOWMOBILE TRAIL CROSSING

2-1/4" HMA PAVEMENT 3 MT 58-28 S (LOWER LIFT)
1-3/4" HMA PAVEMENT 4 MT 58-34 S (UPPER LIFT)
WIDENING FOR SNOWMOBILE TRAIL CROSSING

NOTE: PREPARATION FOR PAVEMENT WIDENING
INCIDENTAL TO PREPARE FOUNDATION
FOR ASPHALTIC SHOULDERS.

EXACT LOCATIONS TO BE MARKED IN FIELD
BY PROJECT PERSONNEL.

SNOWMOBILE TRAIL CROSSING

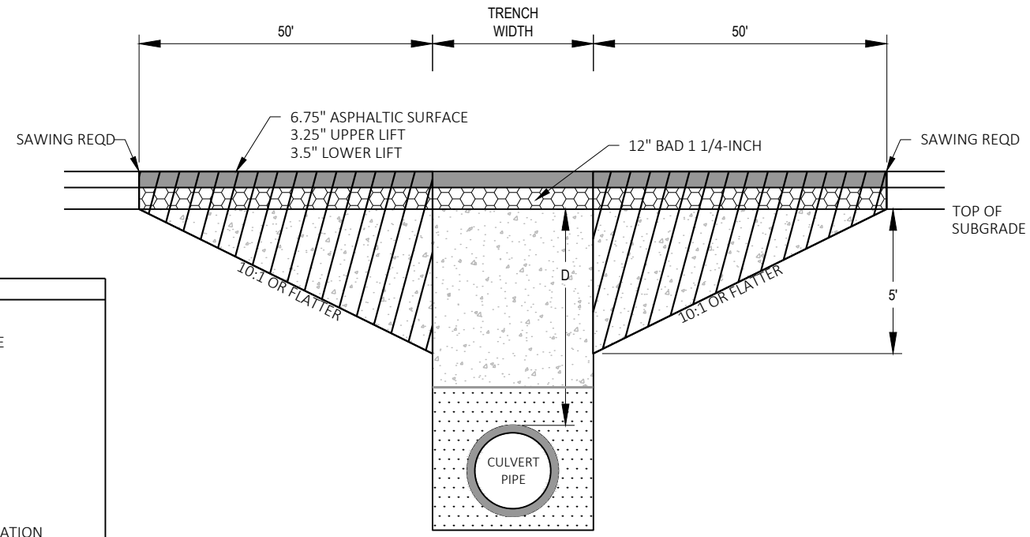


TRANSITION CUT DEPTH (T) = THE LESSER OF DEPTH TO CENTER OF PIPE OR 5 FT.
DO NOT EXTEND TRANSITION CUT BELOW HORIZONTAL CENTER OF PIPE.

DEPTH D < 6 FT

KEY

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



DEPTH D ≥ 6 FT

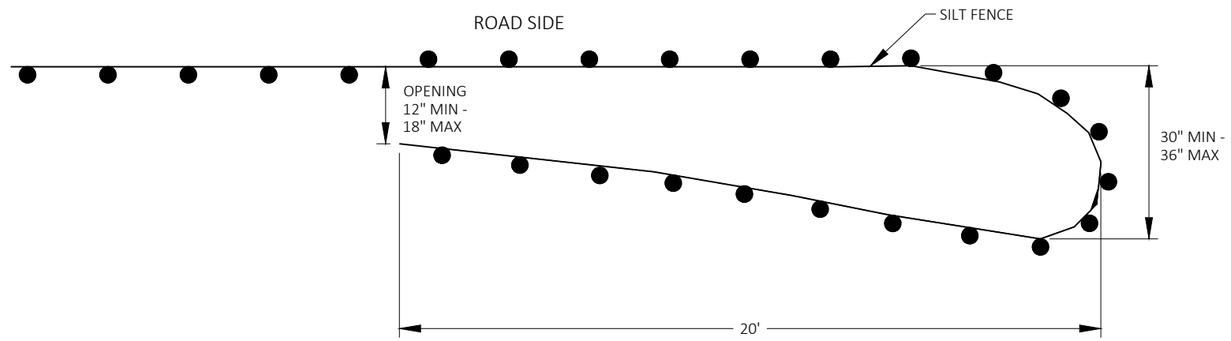
NOTES

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.
PLACE ASPHALTIC SURFACE AFTER CULVERT PIPE INSTALLATION AND BEFORE MAINLINE RESURFACING.
BUMP SIGNS (W8-1) REQUIRED.

CULVERT PIPE TRANSITION

STA 13+66 TO 14+71	D=4.5' AT CENTERLINE	STA 170+69 TO 171+75	D=3.2' AT CENTERLINE	STA 346+79 TO 347+83	D=4.7' AT CENTERLINE
STA 20+25 TO 21+30	D=3.5' AT CENTERLINE	STA 213+32 TO 214+38	D=5.1' AT CENTERLINE	STA 366+70 TO 367+74	D=5.4' AT CENTERLINE
STA 64+36 TO 65+33	D=2.3' AT CENTERLINE	STA 228+68 TO 229+73	D=1.6' AT CENTERLINE	STA 380+27 TO 381+32	D=2.0' AT CENTERLINE
STA 94+27 TO 95+32	D=4.0' AT CENTERLINE	STA 242+78 TO 243+82	D=5.0' AT CENTERLINE	STA 388+04 TO 389+09	D=4.3' AT CENTERLINE
STA 109+27 TO 110+32	D=3.6' AT CENTERLINE	STA 259+32 TO 260+36	D=2.9' AT CENTERLINE	STA 449+74 TO 450+79	D=2.4' AT CENTERLINE
STA 122+48 TO 123+53	D=2.9' AT CENTERLINE	STA 289+49 TO 290+54	D=2.0' AT CENTERLINE		
STA 143+62 TO 144+67	D=5.0' AT CENTERLINE	STA 322+39 TO 323+43	D=0.7' AT CENTERLINE		
STA 152+11 TO 153+16	D=4.6' AT CENTERLINE	STA 330+19 TO 331+23	D=1.9' AT CENTERLINE		

2



PLAN VIEW

TEMPORARY SMALL ANIMAL TURN-AROUND

GENERAL NOTES:
SILT FENCE POSTS FOR THE TURN-AROUND SHOULD BE ON THE OUTSIDE OF THE TURN-AROUND AND TRENCHED IN ACCORDING TO SILT FENCE REQUIREMENTS.

PLACE WHEN SILT FENCE TERMINATES WITHIN 200 LF OF WATERWAY OR AS DIRECTED BY THE ENGINEER.

2

N

BEGIN PROJECT
STA 10+00
Y = 150660.393
X = 286824.122

PC: 14+14.25
PT: 19+68.45
PC: 65+87.63
PI: 80+85.85
PT: 93+98.71
PI: 108+89.42
PC: 104+12.23
PT: 113+66.47
PC: 131+22.02
PCC: 141+15.37
PT: 157+44.67
PI: 16+91.84
PI: 136+25.09
PI: 149+42.81

CURVE 1
CURVE 2
CURVE 3
CURVE 4
CURVE 5
CP4

10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170

414.25'
S85° 42' 32"E

4619.19'
N85° 59' 15"E

1013.52'
S44° 57' 10"E

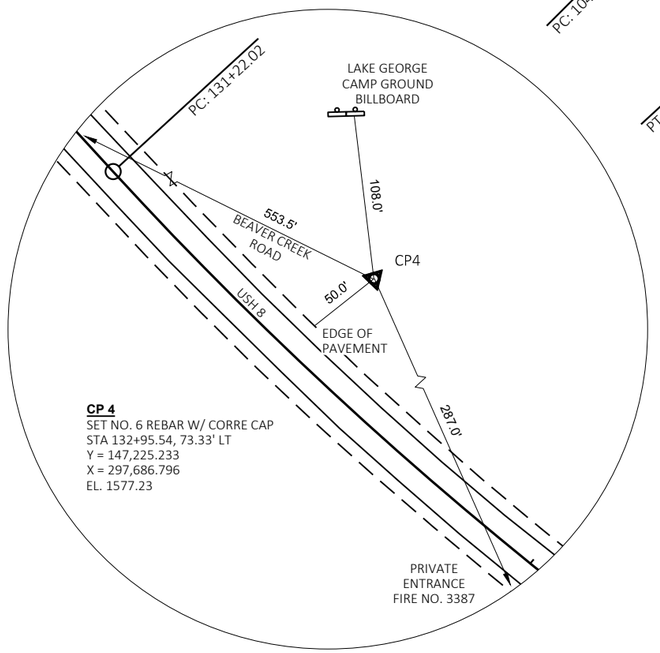
1755.55'
S42° 32' 30"E

5600.03'
S89° 31' 58"E

STA 175+00

MATCH LINE

CURVE 1	CURVE 2	CURVE 3	CURVE 4	CURVE 5
PI STA = 16+91.84	PI STA = 80+85.85	PI STA = 108+89.42	PI STA = 136+25.09	PI STA = 149+42.81
Y = 150608.626	Y = 151056.122	Y = 148940.889	Y = 146925.183	Y = 146360.706
X = 287514.019	X = 293893.328	X = 296005.070	X = 297854.830	X = 299059.663
DELTA = 8°18'14"	DELTA = 49°03'36"	DELTA = 2°24'39"	DELTA = 22°21'17"	DELTA = 24°38'11"
D = 1°29'54"	D = 1°44'43"	D = 0°15'10"	D = 2°15'02"	D = 1°30'44"
T = 277.58'	T = 1498.21'	T = 477.19'	T = 503.07'	T = 827.44'
L = 554.19'	L = 2811.08'	L = 954.24'	L = 993.35'	L = 1629.30'
R = 3823.91'	R = 3282.98'	R = 22677.60'	R = 2546.00'	R = 3789.17'
PC STA = 14+14.25	PC STA = 65+87.63	PC STA = 104+12.23	PC STA = 131+22.02	PC STA = 141+15.37
PT STA = 19+68.45	PT STA = 93+98.71	PT STA = 113+66.47	PT STA = 141+15.37	PT STA = 157+44.67
SE = 3.7% LT	SE = 4.1% RT	SE = NC	SE = 4.8% LT	SE = 4.8% LT



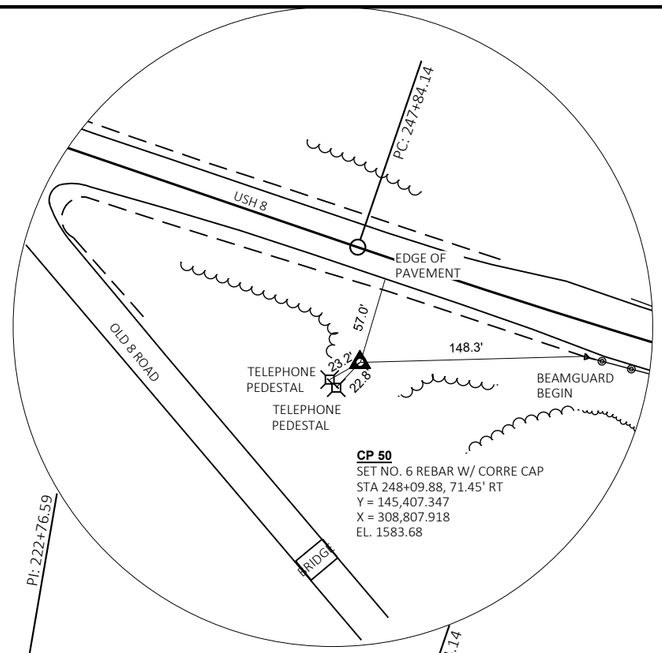
CP 4
SET NO. 6 REBAR W/ CORRE CAP
STA 132+95.54, 73.33' LT
Y = 147,225.233
X = 297,686.796
EL. 1577.23

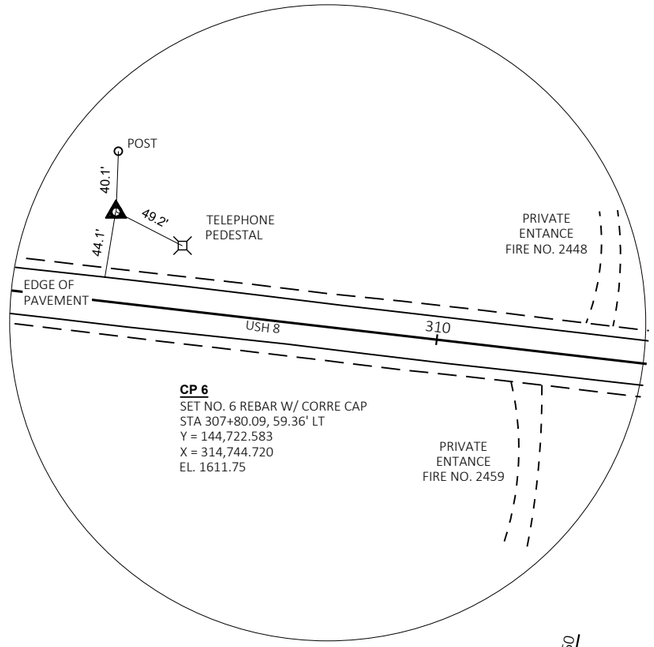
PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	ALIGNMENT DETAIL	SHEET 9	E

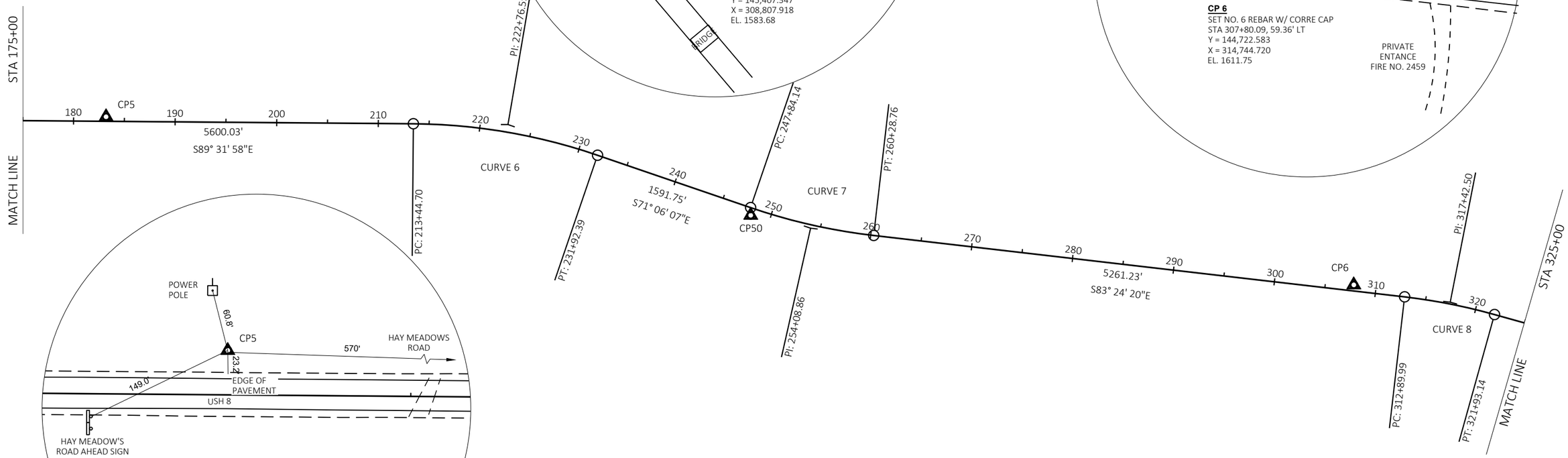
FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - NC REGION\1590-12-04_USH 8_ONEIDA CO\500_CADD\501_C3D_2018\15901204\SHEETSPLAN\027201-AD.DWG
LAYOUT NAME - 01
PLOT DATE : 2/14/2022 3:51 PM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:1000 FT

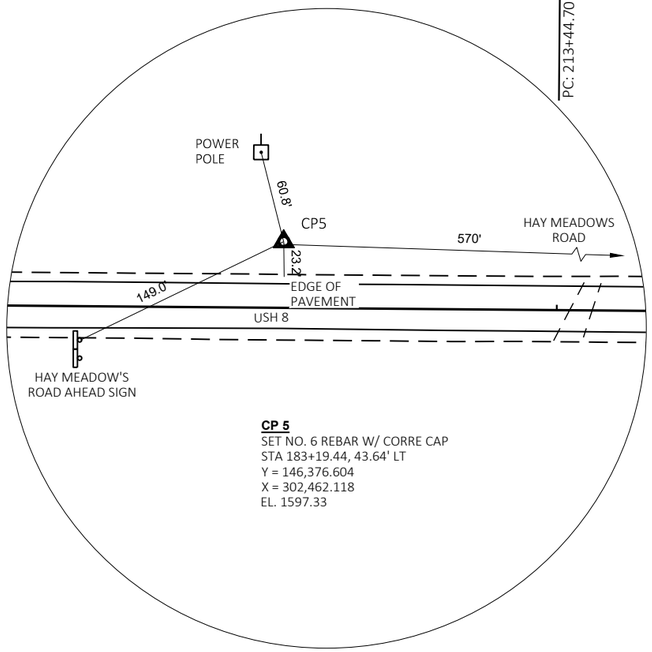
2

N









CURVE 6	CURVE 7	CURVE 8
PI STA = 222+76.59	PI STA = 254+08.86	PI STA = 317+42.50
Y = 146300.709	Y = 145280.995	Y = 144553.091
X = 306418.780	X = 309397.432	X = 315693.946
DELTA = 18°25'52"	DELTA = 12°18'14"	DELTA = 9°00'10"
D = 0°59'51"	D = 0°59'19"	D = 0°59'49"
T = 931.90'	T = 624.71'	T = 452.51'
L = 1847.69'	L = 1244.62'	L = 903.15'
R = 5743.84'	R = 5795.91'	R = 5747.82'
PC STA = 213+44.70	PC STA = 247+84.14	PC STA = 312+89.99
PT STA = 231+92.39	PT STA = 260+28.76	PT STA = 321+93.14
SE = 2.7% RT	SE = 2.7% LT	SE = 2.7% RT

PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	ALIGNMENT DETAIL	SHEET 10	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - NC REGION\1590-12-04_USH 8_ONEIDA CO\500_CADD\501_C3D_2018\15901204\SHEETSPLAN\027201-AD.DWG
LAYOUT NAME - 02
PLOT DATE : 2/14/2022 3:51 PM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:1000 FT
WISDOT/CADDS SHEET 42

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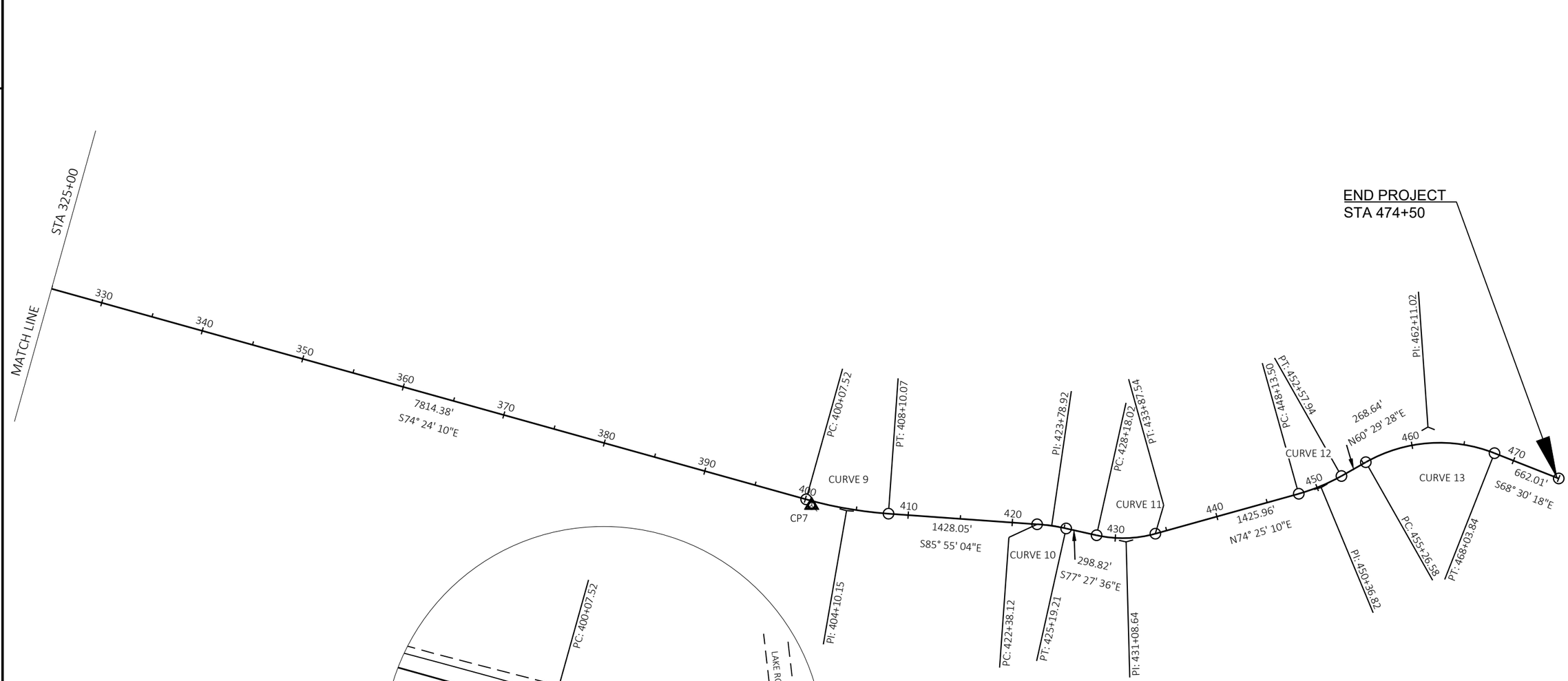

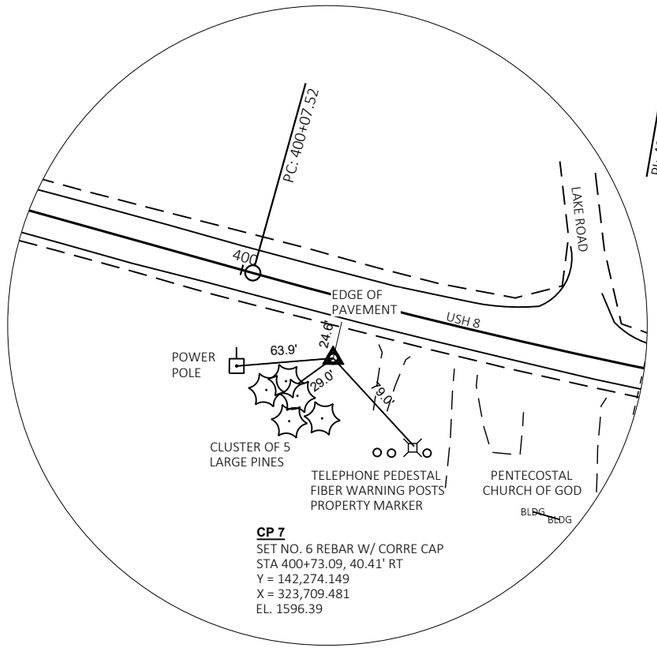

CURVE 9	CURVE 10	CURVE 11	CURVE 12	CURVE 13
PI STA = 404+10.15	PI STA = 423+78.92	PI STA = 431+08.64	PI STA = 450+36.82	PI STA = 462+11.02
Y = 142222.095	Y = 142081.746	Y = 141923.197	Y = 142444.237	Y = 143023.684
X = 324044.214	X = 326010.691	X = 326723.503	X = 328592.112	X = 329615.908
DELTA = 11°30'54"	DELTA = 8°27'28"	DELTA = 28°07'14"	DELTA = 13°55'42"	DELTA = 51°00'14"
D = 1°26'05"	D = 3°00'32"	D = 4°56'15"	D = 3°08'02"	D = 3°59'36"
T = 402.63'	T = 140.80'	T = 290.62'	T = 223.32'	T = 684.44'
L = 802.55'	L = 281.09'	L = 569.52'	L = 444.44'	L = 1277.26'
R = 3993.36'	R = 1904.20'	R = 1160.39'	R = 1828.24'	R = 1434.82'
PC STA = 400+07.52	PC STA = 422+38.12	PC STA = 428+18.02	PC STA = 448+13.50	PC STA = 455+26.58
PT STA = 408+10.07	PT STA = 425+19.21	PT STA = 433+87.54	PT STA = 452+57.94	PT STA = 468+03.84
SE = 3.9% LT	SE = 5.5% RT	SE = 6.0% LT	SE = 5.7% LT	SE = 6.0% RT

1590-12-74

Line	Item	Item Description	Unit	Total	Qty
0002	203.0100	Removing Small Pipe Culverts	EACH	21.000	21.000
0004	203.0220	Removing Structure (structure) 01. C-43-918	EACH	1.000	1.000
0006	204.0115	Removing Asphaltic Surface Butt Joints	SY	792.000	792.000
0008	204.0120	Removing Asphaltic Surface Milling	SY	154,360.000	154,360.000
0010	204.0150	Removing Curb & Gutter	LF	130.000	130.000
0012	204.0165	Removing Guardrail	LF	3,086.000	3,086.000
0014	205.0100	Excavation Common	CY	13,850.000	13,850.000
0016	206.2000	Excavation for Structures Culverts (structure) 01. C-43-918	LS	1.000	1.000
0018	208.0100	Borrow	CY	1,275.000	1,275.000
0020	208.1500.S	Temporary Lane Shift During Culvert Work	EACH	16.000	16.000
0022	210.2500	Backfill Structure Type B	TON	360.000	360.000
0024	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 1590-12-74	LS	1.000	1.000
0026	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	114.000	114.000
0028	213.0100	Finishing Roadway (project) 01. 1590-12-74	EACH	1.000	1.000
0030	305.0110	Base Aggregate Dense 3/4-Inch	TON	11,720.000	11,720.000
0032	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	8,345.000	8,345.000
0034	311.0110	Breaker Run	TON	90.000	90.000
0036	450.4000	HMA Cold Weather Paving	TON	3,910.000	3,910.000
0038	455.0605	Tack Coat	GAL	19,070.000	19,070.000
0040	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	2.000	2.000
0042	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	2.000	2.000
0044	460.2005	Incentive Density PWL HMA Pavement	DOL	26,420.000	26,420.000
0046	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	17,690.000	17,690.000
0048	460.2010	Incentive Air Voids HMA Pavement	DOL	35,700.000	35,700.000
0050	460.6223	HMA Pavement 3 MT 58-28 S	TON	20,060.000	20,060.000
0052	460.6244	HMA Pavement 4 MT 58-34 S	TON	15,640.000	15,640.000
0054	465.0105	Asphaltic Surface	TON	2,875.000	2,875.000
0056	465.0110	Asphaltic Surface Patching	TON	40.000	40.000
0058	465.0475	Asphalt Centerline Rumble Strips 2-Lane Rural	LF	35,748.000	35,748.000
0060	502.4204	Adhesive Anchors No. 4 Bar	EACH	28.000	28.000
0062	502.4205	Adhesive Anchors No. 5 Bar	EACH	28.000	28.000
0064	504.0100	Concrete Masonry Culverts	CY	50.000	50.000
0066	505.0400	Bar Steel Reinforcement HS Structures	LB	1,750.000	1,750.000
0068	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	6,840.000	6,840.000
0070	509.1500	Concrete Surface Repair	SF	20.000	20.000
0072	511.1200	Temporary Shoring (structure) 01. C-43-918	SF	800.000	800.000
0074	516.0500	Rubberized Membrane Waterproofing	SY	30.000	30.000
0076	520.1024	Apron Endwalls for Culvert Pipe 24-Inch	EACH	8.000	8.000
0078	520.1030	Apron Endwalls for Culvert Pipe 30-Inch	EACH	20.000	20.000
0080	520.1036	Apron Endwalls for Culvert Pipe 36-Inch	EACH	2.000	2.000
0082	520.3330	Culvert Pipe Class III-A 30-Inch	LF	102.000	102.000
0084	520.3424	Culvert Pipe Class III-A Non-metal 24-Inch	LF	302.000	302.000
0086	520.3430	Culvert Pipe Class III-A Non-metal 30-Inch	LF	796.000	796.000
0088	520.3436	Culvert Pipe Class III-A Non-metal 36-Inch	LF	88.000	88.000
0090	520.9700.S	Culvert Pipe Liners (size) 01. 36-Inch	LF	155.000	155.000
0092	520.9750.S	Cleaning Culvert Pipes for Liner Verification	EACH	1.000	1.000
0094	522.0124	Culvert Pipe Reinforced Concrete Class III 24-Inch	LF	246.000	246.000
0096	522.0130	Culvert Pipe Reinforced Concrete Class III 30-Inch	LF	126.000	126.000
0098	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	8.000	8.000

1590-12-74

Line	Item	Item Description	Unit	Total	Qty
0100	522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	EACH	4.000	4.000
0102	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	127.000	127.000
0104	606.0300	Riprap Heavy	CY	30.000	30.000
0106	614.2300	MGS Guardrail 3	LF	2,435.000	2,435.000
0108	614.2340	MGS Guardrail 3 L	LF	225.000	225.000
0110	614.2500	MGS Thrie Beam Transition	LF	158.000	158.000
0112	614.2610	MGS Guardrail Terminal EAT	EACH	10.000	10.000
0114	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1590-12-74	EACH	1.000	1.000
0116	619.1000	Mobilization	EACH	1.000	1.000
0118	624.0100	Water	MGAL	145.000	145.000
0120	625.0100	Topsoil	SY	15,340.000	15,340.000
0122	627.0200	Mulching	SY	6,115.000	6,115.000
0124	628.1504	Silt Fence	LF	7,650.000	7,650.000
0126	628.1520	Silt Fence Maintenance	LF	7,650.000	7,650.000
0128	628.1905	Mobilizations Erosion Control	EACH	2.000	2.000
0130	628.1910	Mobilizations Emergency Erosion Control	EACH	1.000	1.000
0132	628.2008	Erosion Mat Urban Class I Type B	SY	9,225.000	9,225.000
0134	628.7504	Temporary Ditch Checks	LF	320.000	320.000
0136	628.7555	Culvert Pipe Checks	EACH	135.000	135.000
0138	629.0210	Fertilizer Type B	CWT	11.300	11.300
0140	630.0120	Seeding Mixture No. 20	LB	427.000	427.000
0142	630.0500	Seed Water	MGAL	345.000	345.000
0144	633.5200	Markers Culvert End	EACH	42.000	42.000
0146	638.2102	Moving Signs Type II	EACH	17.000	17.000
0148	638.4000	Moving Small Sign Supports	EACH	17.000	17.000
0150	642.5001	Field Office Type B	EACH	1.000	1.000
0152	643.0300	Traffic Control Drums	DAY	600.000	600.000
0154	643.0900	Traffic Control Signs	DAY	1,260.000	1,260.000
0156	643.1000	Traffic Control Signs Fixed Message	SF	64.000	64.000
0158	643.5000	Traffic Control	EACH	1.000	1.000
0160	645.0105	Geotextile Type C	SY	130.000	130.000
0162	645.0120	Geotextile Type HR	SY	80.000	80.000
0164	646.1020	Marking Line Epoxy 4-Inch	LF	42,450.000	42,450.000
0166	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	85,790.000	85,790.000
0168	646.6464	Cold Weather Marking Epoxy 4-Inch	LF	128,240.000	128,240.000
0170	648.0100	Locating No-Passing Zones	MI	8.400	8.400
0172	649.0105	Temporary Marking Line Paint 4-Inch	LF	72,300.000	72,300.000
0174	649.0120	Temporary Marking Line Epoxy 4-Inch	LF	42,450.000	42,450.000
0176	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	127.000	127.000
0178	650.6000	Construction Staking Pipe Culverts	EACH	21.000	21.000
0180	650.8000	Construction Staking Resurfacing Reference	LF	44,230.000	44,230.000
0182	650.9910	Construction Staking Supplemental Control (project) 01. 1590-12-74	LS	1.000	1.000
0184	690.0150	Sawing Asphalt	LF	1,285.000	1,285.000
0186	715.0502	Incentive Strength Concrete Structures	DOL	500.000	500.000
0188	740.0440	Incentive IRI Ride	DOL	33,890.000	33,890.000
0190	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,000.000	2,000.000
0192	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	1,260.000	1,260.000
0194	SPV.0060	Special 01. Temporary Diversion Channel	EACH	1.000	1.000
0196	SPV.0180	Special 01. Protective Thermoplastic Coating at Snowmobile Trail Crossings	SY	359.000	359.000

3

203.0100
REMOVING
SMALL PIPE
CULVERTS

CATEGORY	STATION	LOCATION	EACH	REMARKS
0010	14+18	ML	1	30-INCH CPCS, 115 LF
0010	20+77	ML	1	30-INCH CPCS, 105 LF
0010	64+89	ML	1	30-INCH CPCS, 103 LF
0010	94+80	ML	1	30-INCH CPCS, 121 LF
0010	109+79	ML	1	30-INCH CPCS, 108 LF
0010	123+00	ML	1	30-INCH CPCS, 105 LF
0010	144+14	ML	1	30-INCH CPCS, 111 LF
0010	152+63	ML	1	30-INCH CPCS, 108 LF
0010	171+22	ML	1	30-INCH CPCS, 82 LF
0010	213+85	ML	1	36-INCH CPRC, 98 LF
0010	229+20	ML	1	30-INCH CPRC, 75 LF
0010	243+30	ML	1	24-INCH CPRC, 82 LF
0010	259+84	ML	1	24-INCH CPCS, 75 LF
0010	290+01	ML	1	30-INCH CPCS, 72 LF
0010	322+91	ML	1	24-INCH CPRC, 70 LF
0010	330+71	ML	1	24-INCH CPCS, 68 LF
0010	347+31	ML	1	24-INCH CPRC, 80 LF
0010	367+22	ML	1	24-INCH CPRC, 82 LF
0010	380+79	ML	1	24-INCH CPRC, 64 LF
0010	388+56	ML	1	30-INCH CPCS, 90 LF
0010	450+26	ML	1	24-INCH CPCS, 77 LF
		TOTAL 0010	21	

204.0115
REMOVING
ASPHALTIC
SURFACE BUTT
JOINTS

CATEGORY	STATION	TO	STATION	LOCATION	SY	REMARKS
0010	10+00	-	10+10	ML	34	BEGIN PROJECT
0010			26+00	LT	30	FOSTER LN W
0010			50+73	LT	28	FOSTER LN E
0010			65+91	RT	23	RIVERS END RD
0010			66+33	LT	59	HAY MEADOW RD W
0010	76+70	-	76+80	ML	49	B-43-16
0010	77+87	-	77+97	ML	49	B-43-16
0010			93+69	RT	21	BERQUIST RD
0010			105+15	RT	21	LAURA LN
0010			127+20	RT	21	BEAVER CREEK RD
0010			148+34	RT	24	FORD RD
0010			188+78	LT	19	HAY MEADOW RD E
0010			244+15	LT	29	TOWNE LN
0010			245+83	RT	26	OLD 8 RD W
0010			354+71	RT	33	OLD 8 RD E/LEITH RD
0010			402+24	LT	28	LAKE RD
0010	426+90	-	427+00	ML	38	EXCEPTION START
0010	448+13	-	448+24	ML	37	EXCEPTION END
0010			453+10	RT	40	B ST
0010			456+90	RT	56	DORR ST
0010			458+38	LT	27	4TH ST
0010			460+71	LT	23	C ST N
0010			461+85	RT	30	C ST S
0010	474+40	-	474+50	ML	47	END PROJECT
				TOTAL 0010	792	

204.0120
REMOVING ASPHALTIC
SURFACE MILLING

CATEGORY	STATION	TO	STATION	LOCATION	SY	REMARKS
0010	10+10	-	76+70	ML	24,010	BOP TO B-43-16
0010	77+97	-	426+90	ML	120,150	B-43-16 TO USH 45 S
0010	448+23	-	474+40	ML	10,200	USH 45 S TO EOP
				TOTAL 0010	154,360	

204.0150
REMOVING
CURB & GUTTER

CATEGORY	STATION	TO	STATION	LOCATION	LF
0010	452+48	-	452+93	RT	70
0010	453+26	-	453+62	RT	60
				TOTAL 0010	130

204.0165
REMOVING GUARDRAIL

CATEGORY	STATION	TO	STATION	LOCATION	LF
0010	73+74	-	77+00	LT	328
0010	74+70	-	77+00	RT	228
0010	77+67	-	87+76	LT	1,016
0010	77+67	-	86+90	RT	917
0010	249+49	-	251+41	RT	193
0010	249+66	-	251+53	LT	186
0010	420+32	-	422+50	LT	218
				TOTAL 0010	3,086

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)	UNEXPANDED FILL	EXPANDED FILL (13) FACTOR 1.25	MASS ORDINATE +/- (14)	(15) WASTE	(16) 208.0100 BORROW	COMMENT
DIVISION 1												
STA 72+38 TO 74+86	72+38.27/74+86.237	LT & RT	0	0	0	0	15	19	-19	0	19	
DIVISION 1 SUBTOTAL			0	0	0	0	15	19	-19	0	19	
DIVISION 2												
STA 86+47 TO 89+23	86+46.934/89+22.505	LT & RT	0	0	0	0	23	29	-29	0	29	
DIVISION 2 SUBTOTAL			0	0	0	0	23	29	-29	0	29	
DIVISION 3												
STA 247+65 TO 253+55	247+64.68/253+55.468	LT & RT	0	0	0	0	544	680	-680	0	680	
DIVISION 3 SUBTOTAL			0	0	0	0	544	680	-680	0	680	
DIVISION 4												
STA 419+77 TO 423+25	419+76.923/423+25	LT	0	0	0	0	120	150	-150	0	150	
DIVISION 4 SUBTOTAL			0	0	0	0	120	150	-150	0	150	
DIVISION 5												
CULVERTS (17)												
	STA 14+18	LT & RT	745	0	745	0	0	0	0	0	0	INDIVIDUAL
	STA 20+77	LT & RT	760	0	760	0	0	0	0	0	0	INDIVIDUAL
	STA 64+89	LT & RT	660	0	660	0	0	0	0	0	0	INDIVIDUAL
	STA 94+80	LT & RT	755	0	755	0	0	0	0	0	0	INDIVIDUAL
	STA 109+79	LT & RT	730	0	730	0	0	0	0	0	0	INDIVIDUAL
	STA 123+00	LT & RT	655	0	655	0	0	0	0	0	0	INDIVIDUAL
	STA 144+14	LT & RT	755	0	755	0	0	0	0	0	0	INDIVIDUAL
	STA 152+63	LT & RT	750	0	750	0	0	0	0	0	0	INDIVIDUAL
	STA 171+22	LT & RT	655	0	655	0	39	49	-49	0	49	INDIVIDUAL
	STA 213+85	LT & RT	725	0	725	0	21	26	-26	0	26	INDIVIDUAL
	STA 229+20	LT & RT	535	0	535	0	8	10	-10	0	10	INDIVIDUAL
	STA 243+30	LT & RT	725	0	725	0	57	71	-71	0	71	INDIVIDUAL
	STA 259+84	LT & RT	630	0	630	0	11	14	-14	0	14	INDIVIDUAL
	STA 290+01	LT & RT	560	0	560	0	20	25	-25	0	25	INDIVIDUAL
	STA 322+91	LT & RT	415	0	415	0	11	14	-14	0	14	INDIVIDUAL
	STA 330+71	LT & RT	525	0	525	0	10	13	-13	0	13	INDIVIDUAL
	STA 347+31	LT & RT	720	0	720	0	51	64	-64	0	64	INDIVIDUAL
	STA 367+22	LT & RT	720	0	720	0	66	83	-83	0	83	INDIVIDUAL
	STA 380+79	LT & RT	525	0	525	0	22	28	-28	0	28	INDIVIDUAL
	STA 388+56	LT & RT	725	0	725	0	0	0	0	0	0	INDIVIDUAL
	STA 450+26	LT & RT	580	0	580	0	0	0	0	0	0	INDIVIDUAL
DIVISION 5 SUBTOTAL			13,850	0	13,850	0	316	395	-397	0	397	
GRAND TOTAL			13,850	0	13,850	0	1,018	1,273	-1,275	0	1,275	
TOTAL COMMON EXC			13,850									

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. NOTE: THIS IS DESIGNERS CHOICE, CAN BE BACKFILLED WITH BORROW, OR CUT AS WELL.

(4) SALVAGED/UNUSABLE PAVEMENT MATERIAL. ASSUMES PAVEMENT STRUCTURE REPLACED PER TYPICAL SECTIONS AND UNDERLYING MATERIAL TO BE REUSED. EXISTING PAVEMENT STRUCTURE REMOVED AND DISPOSED OF ACCORDING TO STANDARD SPECIFICATIONS.

(5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL

(13) EXPANDED FILL FACTOR = 1.25

DEPENDING ON SELECTIONS: EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK - REDUCED MARSH - REDUCED EBS) * 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) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFORMATION ONLY.

(16) ADDITIONAL QUANITITY FOR POTENTIAL LANE SHIFT ITEM NOT INCLUDED

(17) SEE CONSTRUCTION DETAIL IN PLAN SET FOR CULVERT PIPE TRANSITION. EACH CULVERT IS AN ISOLATED LOCATION.

CATEGORY	STATION	LOCATION	208.1500.S TEMPORARY LANE SHIFT DURING CULVERT WORK EACH	* BORROW CY	* BASE AGGREGATE DENSE 1 1/4-INCH TONS	REMARKS
0010	14+18	ML	1	11	35	CULVERT PIPE REPLACEMENT
0010	20+77	ML	1	9	25	CULVERT PIPE REPLACEMENT
0010	144+14	ML	1	6	25	CULVERT PIPE REPLACEMENT
0010	152+63	ML	1	18	30	CULVERT PIPE REPLACEMENT
0010	171+22	ML	1	11	5	CULVERT PIPE REPLACEMENT
0010	213+85	ML	1	268	50	CULVERT PIPE REPLACEMENT
0010	229+20	ML	1	8	15	CULVERT PIPE REPLACEMENT
0010	243+30	ML	1	148	35	CULVERT PIPE REPLACEMENT
0010	259+84	ML	1	25	10	CULVERT PIPE REPLACEMENT
0010	290+01	ML	1	16	10	CULVERT PIPE REPLACEMENT
0010	330+71	ML	1	34	15	CULVERT PIPE REPLACEMENT
0010	347+31	ML	1	176	30	CULVERT PIPE REPLACEMENT
0010	367+22	ML	1	199	40	CULVERT PIPE REPLACEMENT
0010	380+79	ML	1	34	10	CULVERT PIPE REPLACEMENT
0010	388+56	ML	1	101	40	CULVERT PIPE REPLACEMENT
0010	450+26	ML	1	6	15	CULVERT PIPE REPLACEMENT
		TOTAL 0010	16			

*QUANTITIES ARE FOR INFORMATION ONLY AND ARE CONSIDERED INCIDENTAL TO LANE SHIFT BID ITEM.

CATEGORY	STATION	TO	STATION	LOCATION	211.0100.01 PREPARE FOUNDATION FOR ASPHALTIC PAVING (PROJECT) (01. 1590-12-74) LS
0010	10+00	-	474+50	ML	1
				TOTAL 0010	1

CATEGORY	STATION	TO	STATION	LOCATION	211.0400 PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS STA	REMARKS
0010	184+94	-	185+37	LT & RT	4	SNOWMOBILE CROSSING
0010	362+29	-	362+54	LT & RT	2	SNOWMOBILE CROSSING
0010	400+80	-	427+00	LT & RT	54	SHOULDER WIDENING
0010	448+13	-	474+50	LT & RT	54	SHOULDER WIDENING
				TOTAL 0010	114	

CATEGORY	STATION	TO	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	REMARKS
0010	10+00	-	76+80	LT & RT	1,820	BEGIN PROJECT TO B-43-16
0010	77+87	-	427+00	LT & RT	9,430	B-43-16 TO EXCEPTION
0010	448+13	-	474+50	LT & RT	470	EXCEPTION TO END PROJECT
				TOTAL 0010	11,720	

CATEGORY	STATION	TO	STATION	LOCATION	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	REMARKS
0010	13+66	-	14+71	ML	345	CULVERT REPLACEMENT
0010	20+25	-	21+30	ML	345	CULVERT REPLACEMENT
0010	64+36	-	65+33	ML	350	CULVERT REPLACEMENT
0010	73+47	-	74+50	RT	55	BG WIDENING
0010	86+47	-	88+33	LT	75	BG WIDENING
0010	86+47	-	88+33	RT	90	BG WIDENING
0010	94+27	-	95+32	ML	350	CULVERT REPLACEMENT
0010	109+27	-	110+32	ML	345	CULVERT REPLACEMENT
0010	122+48	-	123+53	ML	345	CULVERT REPLACEMENT
0010	143+62	-	144+67	ML	345	CULVERT REPLACEMENT
0010	152+11	-	153+16	ML	345	CULVERT REPLACEMENT
0010	170+70	-	171+75	ML	350	CULVERT REPLACEMENT
0010	213+32	-	214+38	ML	345	CULVERT REPLACEMENT
0010	228+68	-	229+73	ML	345	CULVERT REPLACEMENT
0010	242+78	-	243+82	ML	345	CULVERT REPLACEMENT
0010	247+65	-	253+55	LT	370	BG WIDENING
0010	248+41	-	252+56	RT	275	BG WIDENING
0010	259+32	-	260+36	ML	340	CULVERT REPLACEMENT
0010	289+49	-	290+54	ML	345	CULVERT REPLACEMENT
0010	322+39	-	323+43	ML	340	CULVERT REPLACEMENT
0010	330+19	-	331+23	ML	340	CULVERT REPLACEMENT
0010	346+79	-	347+83	ML	340	CULVERT REPLACEMENT
0010	366+70	-	367+74	ML	340	CULVERT REPLACEMENT
0010	380+27	-	381+32	ML	345	CULVERT REPLACEMENT
0010	388+04	-	389+09	ML	345	CULVERT REPLACEMENT
0010	419+77	-	423+25	LT	245	BG WIDENING
0010	449+74	-	450+79	ML	345	CULVERT REPLACEMENT
				TOTAL 0010	8,345	

CATEGORY	STATION	TO	STATION	LOCATION	450.4000 HMA COLD WEATHER PAVING TON	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	REMARKS
0010	10+00	-	76+80	ML	563	2,740	2,890	2,250	BOP TO B-43-16
0010			17+53	RT	8	35	40	30	MORGAN LN
0010			26+00	LT	10	40	40	40	FOSTER LN W
0010			50+73	LT	8	30	30	30	FOSTER LN E
0010			65+91	RT	8	40	40	30	RIVERS END RD
0010			66+33	LT	13	50	60	50	HAY MEADOW RD W
0010	77+87	-	427+00	ML	2,935	14,380	15,100	11,740	B-43-16 TO EXCEPTION
0010			93+69	RT	8	40	40	30	BERQUIST RD
0010			105+15	RT	8	30	30	30	LAURA LN
0010			127+20	RT	8	35	40	30	BEAVER CREEK RD
0010			148+34	RT	8	40	40	30	FORD RD
0010			155+73	LT	10	45	50	40	DILLON DR
0010			188+78	LT	5	25	30	20	HAY MEADOW RD E
0010			244+15	LT	10	40	40	40	TOWNE LN
0010			245+83	RT	10	45	50	40	OLD 8 RD W
0010			354+71	RT	8	35	40	30	OLD 8 RD E/LEITH RD
0010			402+24	LT	8	35	40	30	LAKE RD
0010	448+13	-	474+50	ML	250	1,220	1,280	1,000	EXCEPTION TO EOP
0010			453+10	RT	13	55	60	50	B ST
0010			456+90	RT	5	20	20	20	DORR ST
0010			458+38	LT	5	25	30	20	4TH ST
0010			460+71	LT	8	35	40	30	C ST N
0010			461+85	RT	8	30	30	30	C ST S
				TOTAL 0010	3,910	19,070	20,060	15,640	

CATEGORY	STATION	TO	STATION	LOCATION	465.0105 ASPHALTIC SURFACE TON	REMARKS
0010	13+66	-	14+71	ML	135	CULVERT REPLACEMENT
0010	20+25	-	21+30	ML	135	CULVERT REPLACEMENT
0010	64+36	-	65+33	ML	150	CULVERT REPLACEMENT
0010	94+27	-	95+32	ML	140	CULVERT REPLACEMENT
0010	109+27	-	110+32	ML	135	CULVERT REPLACEMENT
0010	122+48	-	123+53	ML	135	CULVERT REPLACEMENT
0010	143+62	-	144+67	ML	135	CULVERT REPLACEMENT
0010	152+11	-	153+16	ML	135	CULVERT REPLACEMENT
0010	170+69	-	171+75	ML	135	CULVERT REPLACEMENT
0010	213+32	-	214+38	ML	135	CULVERT REPLACEMENT
0010	228+68	-	229+73	ML	135	CULVERT REPLACEMENT
0010	242+78	-	243+82	ML	140	CULVERT REPLACEMENT
0010	259+32	-	260+36	ML	135	CULVERT REPLACEMENT
0010	289+49	-	290+54	ML	135	CULVERT REPLACEMENT
0010	322+39	-	323+43	ML	135	CULVERT REPLACEMENT
0010	330+19	-	331+23	ML	135	CULVERT REPLACEMENT
0010	346+79	-	347+83	ML	135	CULVERT REPLACEMENT
0010	366+70	-	367+74	ML	135	CULVERT REPLACEMENT
0010	380+27	-	381+32	ML	135	CULVERT REPLACEMENT
0010	388+04	-	389+09	ML	135	CULVERT REPLACEMENT
0010	449+74	-	450+79	ML	150	CULVERT REPLACEMENT
				TOTAL 0010	2,875	

CATEGORY	LOCATION	460.0105.S HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP VOLUMETRICS EACH	460.0110.S HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP DENSITY EACH
0010	PROJECT	2	2
	TOTAL 0010	2	2

PWL MIXTURE USE TABLE

THE FOLLOWING ACCEPTANCE CRITERIA ARE APPLICABLE TO THIS PROJECT:

LOCATION	STATION	MIXTURE USE:	UNDERLYING SURFACE	BID ITEM	TONS	THICKNESS	QUALITY MANAGEMENT PROGRAM TO BE USED FOR:	
							MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
12 FOOT DRIVING LANE	10+00 TO 427+00 448+13 TO 474+50	UPPER LAYER	3 MT 58-28 S	4 MT 58-34 S	11560	1.75-INCHES	INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVING LANE	10+00 TO 427+00 448+13 TO 474+50	LOWER LAYER	MILLED SURFACE	3 MT 58-28 S	14860	2.25-INCHES		
PAVED SHOULDERS	10+00 TO 427+00 448+13 TO 474+50	UPPER LAYER	3 MT 58-28 S	4 MT 58-34 S	3430	1.75-INCHES		ACCEPTANCE TESTING BY DEPARTMENT, NOT ELLIGIBLE FOR INCENTIVE.
PAVED SHOULDERS	10+00 TO 427+00 448+13 TO 474+50	LOWER LAYER	MILLED SURFACE	3 MT 58-28 S	4410	2.25-INCHES		
SIDE ROADS	VARIOUS	UPPER LAYER	3 MT 58-28 S	4 MT 58-34 S	650	1.75-INCHES		
SIDE ROADS	VARIOUS	LOWER LAYER	MILLED SURFACE	3 MT 58-28 S	790	2.25-INCHES		

CATEGORY	LOCATION	465.0110 ASPHALTIC SURFACE PATCHING TON	REMARKS
0010	UNDISTRIBUTED	40	POTHOLES, MISC. REPAIRS
	TOTAL 0010	40	

CATEGORY	STATION	TO	STATION	LOCATION	465.0475 ASPHALT CENTERLINE RUMBLE STRIPS 2-LANE RURAL LF
0010	10+00	-	15+53	CL	553
0010	19+53	-	24+00	CL	447
0010	28+00	-	48+81	CL	2,081
0010	52+81	-	63+91	CL	1,110
0010	68+33	-	76+55	CL	822
0010	78+12	-	91+60	CL	1,348
0010	95+60	-	103+16	CL	756
0010	107+16	-	125+20	CL	1,804
0010	129+20	-	146+34	CL	1,714
0010	150+34	-	153+80	CL	346
0010	157+80	-	186+78	CL	2,898
0010	190+78	-	242+35	CL	5,157
0010	247+55	-	352+71	CL	10,516
0010	356+71	-	400+24	CL	4,353
0010	408+57	-	427+00	CL	1,843
				TOTAL 0010	35,748

CATEGORY	STATION	LOCATION	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	520.3330 CULVERT PIPE CLASS III-A 30-INCH LF	520.3424 CULVERT PIPE CLASS III-A NON-METAL 24-INCH LF	520.3430 CULVERT PIPE CLASS III-A NON-METAL 30-INCH LF	520.3436 CULVERT PIPE CLASS III-A NON-METAL 36-INCH LF	520.9700.S.01 CULVERT PIPE LINERS (SIZE) (01. 36-INCH) LF	520.9750.S CLEANING CULVERT PIPES FOR LINER VERIFICATION EACH	522.0124 CULVERT PIPE REINFORCED CONCRETE CLASS III 24-INCH LF	522.0130 CULVERT PIPE REINFORCED CONCRETE CLASS III 30-INCH LF	522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	522.1030 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH EACH	633.5200 MARKERS CULVERT END EACH	REMARKS
0010	14+18	ML	-	2	-	-	-	96	-	-	-	-	-	-	-	2	
0010	20+77	ML	-	2	-	-	-	88	-	-	-	-	-	-	-	2	
0010	64+89	ML	-	2	-	-	-	80	-	-	-	-	-	-	-	2	
0010	94+80	ML	-	2	-	102	-	-	-	-	-	-	-	-	-	2	0.079 STEEL THICKNESS
0010	109+79	ML	-	2	-	-	-	90	-	-	-	-	-	-	-	2	
0010	123+00	ML	-	2	-	-	-	88	-	-	-	-	-	-	-	2	
0010	144+14	ML	-	2	-	-	-	100	-	-	-	-	-	-	-	2	
0010	152+63	ML	-	2	-	-	-	96	-	-	-	-	-	-	-	2	
0010	171+22	ML	-	2	-	-	-	78	-	-	-	-	-	-	-	2	
0010	213+85	ML	-	-	2	-	-	-	88	-	-	-	-	-	-	2	
0010	229+20	ML	-	-	-	-	-	-	-	-	-	-	64	-	2	2	
0010	243+30	ML	2	-	-	-	78	-	-	-	-	-	-	-	-	2	
0010	259+84	ML	2	-	-	-	68	-	-	-	-	-	-	-	-	2	
0010	290+01	ML	-	-	-	-	-	-	-	-	-	-	62	-	2	2	
0010	322+91	ML	-	-	-	-	-	-	-	-	-	60	-	2	-	2	
0010	330+71	ML	-	-	-	-	-	-	-	-	-	58	-	2	-	2	
0010	347+31	ML	2	-	-	-	76	-	-	-	-	-	-	-	-	2	
0010	367+22	ML	2	-	-	-	80	-	-	-	-	-	-	-	-	2	
0010	380+79	ML	-	-	-	-	-	-	-	-	-	60	-	2	-	2	
0010	388+56	ML	-	2	-	-	-	80	-	-	-	-	-	-	-	2	
0010	450+26	ML	-	-	-	-	-	-	-	-	-	68	-	2	-	2	
0010	467+87	ML	-	-	-	-	-	-	-	155	1	-	-	-	-	-	155 LF x 36-IN CPCS, S = 0.44%
		TOTAL 0010	8	20	2	102	302	796	88	155	1	246	126	8	4	42	

*CULVERT PIPE CLASS III-A NON-METAL PIPE LENGTH INFORMATION BASED UPON CULVERTE PIPE REINFORCED CONCRETE PIPE LENGTHS. IF ALTERNATIVE MATERIAL IS SELECTED, LENGTHS WILL DIFFER.

CATEGORY	STATION	TO	STATION	LOCATION	601.0557 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D LF
0010	452+48	-	452+93	RT	69
0010	453+26	-	453+62	RT	58
				TOTAL 0010	127

CATEGORY	STATION	TO	STATION	LOCATION	614.2300 MGS GUARDRAIL 3 LF	614.2340 MGS GUARDRAIL 3 L LF	614.2500 MGS THRIE BEAM TRANSITION LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH
0010	73+75	-	77+00	LT	237.5	-	39.5	1
0010	74+33	-	77+00	RT	172.5	-	39.5	1
0010	77+67	-	87+87	LT	937.5	-	39.5	1
0010	77+67	-	87+01	RT	837.5	-	39.5	1
0010	249+01	-	251+68	RT	50.0	112.5	-	2
0010	249+12	-	252+19	LT	87.5	112.5	-	2
0010	420+31	-	422+49	LT	112.5	-	-	2
				TOTAL 0010	2,435.0	225	158	10

CATEGORY	LOCATION	624.0100 WATER MGAL
0010	PROJECT	145
	TOTAL 0010	145

CATEGORY	STATION	TO	STATION	LOCATION	625.0100 TOPSOIL SY	627.0200 MULCHING SY	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECKS EACH	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0500 SEED WATER MGAL
0010	13+65	-	14+71	LT & RT	280	-	180	180	280	-	5	0.2	8	-
0010	20+24	-	21+30	LT & RT	255	-	180	180	255	-	5	0.2	7	-
0010	64+36	-	65+33	LT & RT	210	-	180	180	210	-	5	0.2	6	-
0010	72+38	-	74+86	LT & RT	270	-	525	525	270	-	-	0.2	8	-
0010	86+47	-	88+55	LT & RT	355	-	440	440	355	-	-	0.3	10	-
0010	94+27	-	95+33	LT & RT	300	-	180	180	300	-	5	0.2	9	-
0010	109+26	-	110+32	LT & RT	260	-	180	180	260	-	5	0.2	8	-
0010	122+47	-	123+53	LT & RT	255	-	180	180	255	-	5	0.2	7	-
0010	143+61	-	144+67	LT & RT	280	-	180	180	280	-	5	0.2	8	-
0010	152+10	-	153+16	LT & RT	280	-	180	180	280	-	5	0.2	8	-
0010	170+69	-	171+75	LT & RT	205	-	170	170	205	-	5	0.2	6	-
0010	213+32	-	214+38	LT & RT	280	-	180	180	280	-	5	0.2	8	-
0010	228+67	-	229+73	LT & RT	180	-	180	180	180	-	5	0.2	5	-
0010	242+77	-	243+83	LT & RT	235	-	180	180	235	-	5	0.2	7	-
0010	248+05	-	250+54	LT & RT	590	-	505	505	590	-	-	0.4	16	-
0010	250+54	-	253+25	LT & RT	890	-	520	520	890	-	-	0.6	25	-
0010	259+31	-	260+37	LT & RT	205	-	180	180	205	-	5	0.2	6	-
0010	289+48	-	290+54	LT & RT	180	-	180	180	180	-	5	0.2	5	-
0010	322+38	-	323+44	LT & RT	165	-	180	180	165	-	5	0.2	5	-
0010	330+18	-	331+24	LT & RT	170	-	180	180	170	-	5	0.2	5	-
0010	346+78	-	347+84	LT & RT	225	-	180	180	225	-	5	0.2	7	-
0010	366+69	-	367+75	LT & RT	235	-	180	180	235	-	5	0.2	7	-
0010	380+26	-	381+32	LT & RT	185	-	180	180	185	-	5	0.2	5	-
0010	388+03	-	389+09	LT & RT	240	-	180	180	240	-	5	0.2	7	-
0010	419+71	-	423+25	LT	370	-	370	370	370	-	-	0.3	10	-
0010	449+73	-	450+79	LT & RT	180	-	170	170	180	-	5	0.2	5	-
0010	452+48	-	452+93	RT	55	-	-	-	55	-	-	0.1	2	-
0010	453+26	-	453+62	RT	45	-	-	-	45	-	-	0.1	2	-
				UNDISTRIBUTED	7,960	6,115	1,530	1,530	1,845	320	30	5.1	215	345
				TOTAL 0010	15,340	6,115	7,650	7,650	9,225	320	135	11.3	427	345

CATEGORY	LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
0010	PROJECT	2	1
	TOTAL 0010	2	1

PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	MISCELLANEOUS QUANTITIES	SHEET 20	E

CATEGORY	LOCATION	638.2102 MOVING SIGNS TYPE II EACH	638.4000 MOVING SMALL SIGN SUPPORTS EACH	REMARKS
0010	PROJECT	17	17	NO PASSING ZONE
	TOTAL 0010	17	17	

CATEGORY	STATION	TO	STATION	LOCATION	643.0300 TRAFFIC CONTROL DRUMS DAY	643.0900 TRAFFIC CONTROL SIGNS DAY	643.1000 TRAFFIC CONTROL SIGNS FIXED MESSAGE SF	643.5000 TRAFFIC CONTROL EACH	REMARKS
0010	10+00	-	474+50	PROJECT	-	-	64	-	G20-57 PLACED 7 DAYS PRIOR AT TERMINI
0010	10+00	-	474+50	PROJECT	-	1,180	-	1	
0010	10+00	-	474+50	CULVERT REPLACEMENT	200	80	-	-	
0010	10+00	-	474+50	C-43-918	150	-	-	-	
0010	10+00	-	474+50	GUARDRAIL	250	-	-	-	
				TOTAL 0010	600	1,260	64	1	

CATEGORY	STATION	TO	STATION	LOCATION	648.0100 LOCATING NO-PASSING ZONES MI
0010	10+00	-	427+00	ML	7.90
0010	448+13	-	474+50	ML	0.50
				TOTAL 0010	8.40

CATEGORY	STATION	TO	STATION	LOCATION	646.1020 MARKING LINE EPOXY 4-INCH LF	646.1040 MARKING LINE GROOVED WET REF EPOXY 4-INCH LF	646.6464 COLD WEATHER MARKING EPOXY 4-INCH LF	649.0105 TEMPORARY MARKING LINE PAINT 4-INCH LF	649.0120 TEMPORARY MARKING LINE EPOXY 4-INCH LF	REMARKS
0010	10+00	-	474+50	CL	-	-		36,150	-	YELLOW CENTERLINE MILLED LAYER
0010	10+00	-	474+50	CL	-	-		36,150	-	YELLOW CENTERLINE LOWER LAYER
0010	10+00	-	474+50	CL	-	-		-	42,450	YELLOW CENTERLINE UPPER LAYER
0010	10+00	-	474+50	CL	42,450	-	42,450	-	-	YELLOW CENTERLINE AFTER RUMBLES
0010	10+00	-	474+50	RT	-	43,040	43,040	-	-	WHITE EDGELINE
0010	10+00	-	474+50	LT	-	42,750	42,750	-	-	WHITE EDGELINE
				TOTAL 0010	42,450	85,790	128,240	72,300	42,450	

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CATEGORY	STATION	TO	STATION	LOCATION	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF
0010	452+48	-	452+93	RT	69
0010	453+26	-	453+62	RT	58
				TOTAL 0010	127

CATEGORY	STATION	TO	STATION	LOCATION	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF	650.9910.01 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) (01. 1590-12-74) LS
0010	10+00	-	76+80	ML	6,680	-
0010	77+87	-	427+00	ML	34,913	-
0010	448+13	-	474+50	ML	2,637	
0010	10+00	-	474+50	PROJECT	-	1
				TOTAL 0010	44,230	1

CATEGORY	STATION	LOCATION	650.6000 CONSTRUCTION STAKING PIPE CULVERTS EACH
0010	14+18	ML	1
0010	20+77	ML	1
0010	64+89	ML	1
0010	94+80	ML	1
0010	109+79	ML	1
0010	123+00	ML	1
0010	144+14	ML	1
0010	152+63	ML	1
0010	171+22	ML	1
0010	213+85	ML	1
0010	229+20	ML	1
0010	243+30	ML	1
0010	259+84	ML	1
0010	290+01	ML	1
0010	322+91	ML	1
0010	330+71	ML	1
0010	347+31	ML	1
0010	367+22	ML	1
0010	380+79	ML	1
0010	388+56	ML	1
0010	450+26	ML	1
		TOTAL 0010	21

CATEGORY	STATION	LOCATION	SPV.0060.01 SPECIAL (01. TEMPORARY DIVERSION CHANNEL) EACH	REMARKS
0010	250+54	RT & LT	1	B-43-918
		TOTAL 0010	1	

CATEGORY	STATION	LOCATION	SPV.0180.01 SPECIAL (01. PROTECTIVE THERMOPLASTIC COATING AT SNOWMOBILE TRAIL CROSSINGS) SY
0010	185+16	ML	80
0010	245+00	ML	116
0010	362+41	ML	67
0010	456+64	ML	96
		TOTAL 0010	359

CATEGORY	STATION	LOCATION	690.0150 SAWING ASPHALT LF
0010	13+66	ML	30
0010	14+71	ML	30
0010	20+25	ML	30
0010	21+30	ML	30
0010	64+36	ML	30
0010	65+33	ML	39
0010	94+27	ML	35
0010	95+32	ML	30
0010	109+27	ML	30
0010	110+32	ML	30
0010	122+48	ML	30
0010	123+53	ML	30
0010	143+62	ML	30
0010	144+67	ML	30
0010	152+11	ML	30
0010	153+16	ML	30
0010	170+69	ML	30
0010	171+75	ML	30
0010	213+32	ML	30
0010	214+38	ML	30
0010	228+68	ML	30
0010	229+73	ML	30
0010	242+78	ML	30
0010	243+82	ML	33
0010	259+32	ML	30
0010	260+36	ML	30
0010	289+49	ML	30
0010	290+54	ML	30
0010	322+39	ML	30
0010	323+43	ML	30
0010	330+19	ML	30
0010	331+23	ML	30
0010	346+79	ML	30
0010	347+83	ML	30
0010	366+70	ML	30
0010	367+74	ML	30
0010	380+27	ML	30
0010	381+32	ML	30
0010	388+04	ML	30
0010	389+09	ML	30
0010	449+74	ML	34
0010	450+79	ML	34
		TOTAL 0010	1,285

3

CHRISTOPHER CRAIG

CP: 43008003111
STA 14+18
1 REMOVING SMALL PIPE CULVERTS
115 LF CPCS 30-INCH
PROPOSED CP: 43008003111
CP CLASS III-A NON-METAL 30-INCH
INVERT 1: 14+23.3, 46.8' LT, 1553.20'
INVERT 2: 14+12.2, 48.5' RT, 1553.40'
LENGTH: 96 LF
SLOPE: -0.21%
2 AEW CP CLASS III-A NON-METAL 30-INCH

WETLAND IMPACTS
TYPE: RIPARIAN WETLAND (RPE)
AREA: 66 SF = 0.002 ACRES

WETLAND IMPACTS
TYPE: RIPARIAN WETLAND (RPE)
AREA: 133 SF = 0.003 ACRES

CP: 43008003112
STA 20+77
1 REMOVING SMALL PIPE CULVERTS
105 LF CPCS 30-INCH
PROPOSED CP: 43008003112
CP CLASS III-A NON-METAL 30-INCH
INVERT 1: 20+73.1, 45.7' LT, 1552.80'
INVERT 2: 20+80.6, 42.0' RT, 1553.60'
LENGTH: 88 LF
SLOPE: -0.91%
2 AEW CP CLASS III-A NON-METAL 30-INCH

N

FRONTIER COMMUNICATIONS
EMAT URBAN CLASS I TYPE B
SILT FENCE
WETLAND BOUNDARY
R/W

STA 10+00
BEGIN ASPHALTIC CENTERLINE
RUMBLE STRIPS 2-LANE RURAL

REMOVING ASPHALTIC
SURFACE BUTT JOINTS
STA 10+00.0, 0.0'

BAD PE
11+49 LT

PC: 14+14.25

PT: 19+68.45

24+74.1
15.0' LT

MATCH LINE STA 24+75

15

40'

20

USH 8

15:1

10:1

12' TRAVEL LANES
3' PAVED SHLDS
5' BAD SHLDS

BEGIN PROJECT
STA 10+00
Y = 150660.393
X = 286824.122

EMAT URBAN CLASS I TYPE B
CULVERT PIPE CHECK
SILT FENCE
WETLAND BOUNDARY

15+92.4
15.0' RT

16+97.4
22.0' RT

PI: 16+91.84

MORGAN LN

17+95.4
22.0' RT

18+65.4
15.0' RT

17+53.2
50.0' RT

WETLAND BOUNDARY
CULVERT PIPE CHECK
SILT FENCE
EMAT URBAN CLASS I TYPE B

WETLAND IMPACTS
TYPE: RIPARIAN WETLAND (RPE)
AREA: 127 SF = 0.003 ACRES

5

5

R/W

JEFFREY & MARCIA BARKUS
CHRISTOPHER CRAIG

WETLAND IMPACTS
TYPE: RIPARIAN WETLAND (RPE)
AREA: 133 SF = 0.003 ACRES

JEFFREY & MARCIA BARKUS

R/W

JEFFREY & MARCIA BARKUS

N

REMOVING ASPHALTIC
SURFACE BUTT JOINTS
STA 25+99.7, 57.2' LT

FOSTER LN

R/W

25+44.1
22.0' LT

26+39.8
22.0' LT

27+44.8
15.0' LT

CP: 43008003113
STA 32+79
EXISTING CPRC 30-INCH
TO REMAIN

CP: 43008003114
STA 37+75
EXISTING CPRC 84-INCH
TO REMAIN

CP: 43008004270
STA 37+88
EXISTING CPRC 84-INCH
TO REMAIN

10:1

15:1

25

30

35

40'

USH 8

12' TRAVEL LANES
3' PAVED SHLDS
5' BAD SHLDS

MATCH LINE STA 24+75

MATCH LINE STA 39+50

R/W

PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	PLAN SHEETS	SHEET 23	E

RICHARD CARLSON

STEVEN & SUSAN WORRALL

RICHARD ST LOUIS

N

REMOVING ASPHALTIC SURFACE BUTT JOINTS
STA 50+73.4, 49.2' LT

R/W

CP: 43008003115
STA 45+44
EXISTING CPRC 30-INCH
TO REMAIN

FOSTER LN

49+78.1 15.0' LT

50+48.1 22.0' LT

51+20.0 22.0' LT

52+25.0 15.0' LT

10:1

15:1

MATCH LINE STA 39+50

40 45 50

USH 8

40'

12' TRAVEL LANES
3' PAVED SHLDS
5' BAD SHLDS

MATCH LINE STA 54+25

5

R/W

5

JESSE NEWMAN

PETER & JENNIFER THOMPSON

WETLAND IMPACTS
TYPE: RIPARIAN WETLAND (RPE)
AREA: 34 SF = 0.001 ACRES

N

REMOVING ASPHALTIC SURFACE BUTT JOINTS
STA 66+32.7, 50.1' LT

EMAT URBAN CLASS I TYPE B

CULVERT PIPE CHECK

SILT FENCE

CHARTER

HAY MEADOW RD

HAY MEADOW RIVER RD:
EXISTING CURB & GUTTER TO REMAIN

CP: 43008003116
STA 59+82
EXISTING CPRC 30-INCH
TO REMAIN

R/W

WETLAND BOUNDARY

64+54.0 15.0' LT

65+33.9 20.0' LT

PC: 65+87.63

66+92.2 20.0' LT

67+77.2 15.0' LT

BAD PE
54+79 LT

FRONTIER COMMUNICATIONS

10:1

15:1

MATCH LINE STA 54+25

55 60 65

USH 8

40'

BAD PE
59+09 RT

12' TRAVEL LANES
3' PAVED SHLDS
5' BAD SHLDS

64+44.3 15.0' RT

65+49.3 22.0' RT

66+35.9 22.0' RT

67+05.9 15.0' RT

RIVERS END RD

REMOVING ASPHALTIC SURFACE BUTT JOINTS
STA 65+91.2, 63.7' RT

WETLAND BOUNDARY

EMAT URBAN CLASS I TYPE B

SILT FENCE

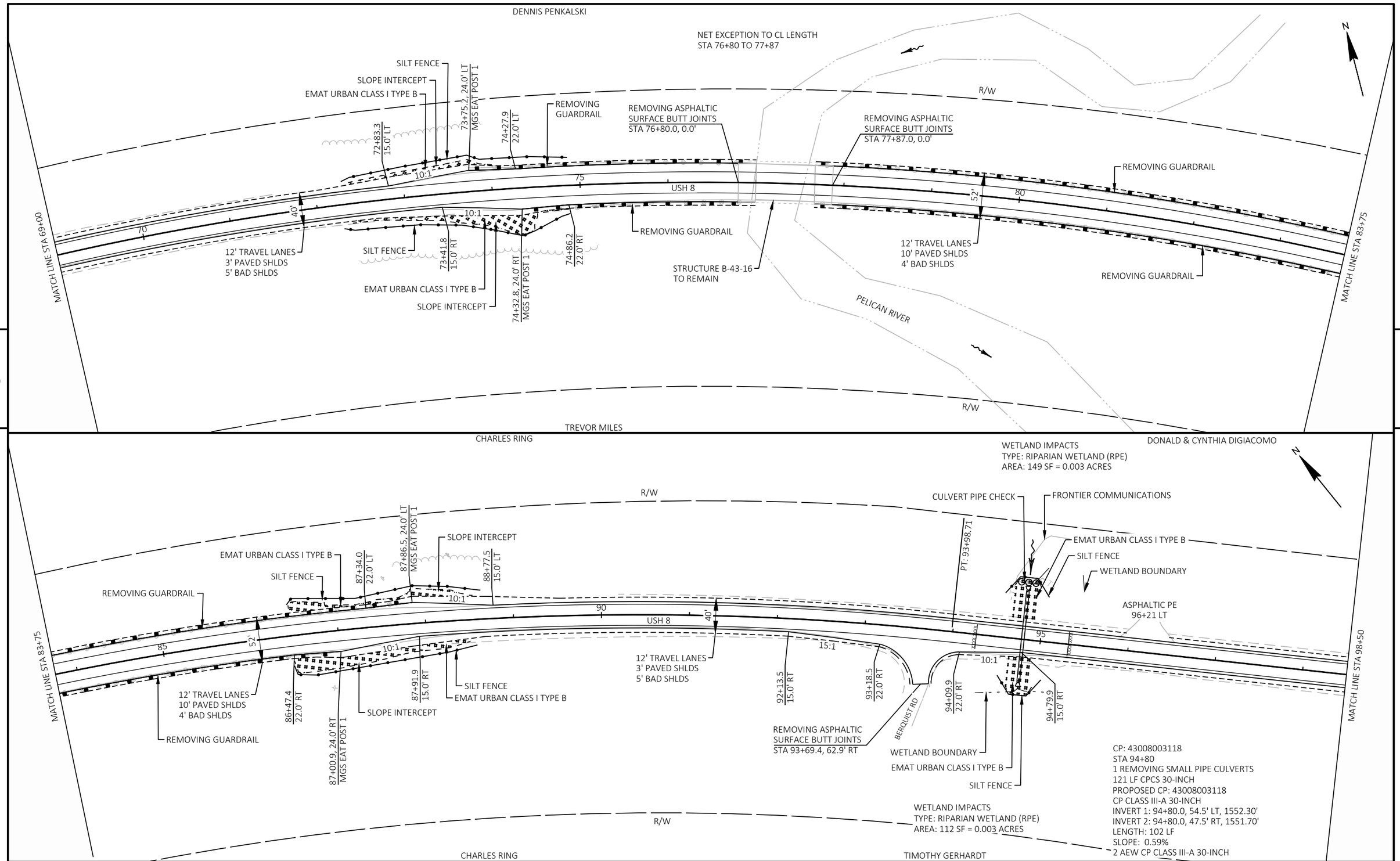
CP: 43008003117
STA 64+89
1 REMOVING SMALL PIPE CULVERTS
103 LF CPCS 30-INCH
PROPOSED CP: 43008003117
CP CLASS III-A NON-METAL 30-INCH
INVERT 1: 64+89.0, 40.6' LT, 1558.80'
INVERT 2: 64+89.0, 39.4' RT, 1558.70'
LENGTH: 80 LF
SLOPE: 0.12%
2 AEW CP CLASS III-A NON-METAL 30-INCH

WETLAND IMPACTS
TYPE: RIPARIAN WETLAND (RPE)
AREA: 22 SF = 0.001 ACRES

MATCH LINE STA 69+00

R/W

PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	PLAN SHEETS	SHEET 24	E



5

5

PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	PLAN SHEETS	SHEET 25	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - NC REGION\1590-12-04_USH 8_ONEIDA CO\500_CADD\501_C3D_2018\15901204\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 03
PLOT DATE : 2/14/2022 3:36 PM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

DONALD & CYNTHIA DIGIACOMO

JAMI LEIGHTON & THOMAS KINGSTON

N

WETLAND IMPACTS
TYPE: RIPARIAN WETLAND (RPE)
AREA: 129 SF = 0.003 ACRES

R/W

CULVERT PIPE CHECK
FRONTIER COMMUNICATIONS
EMAT URBAN CLASS I TYPE B
SILT FENCE
WETLAND BOUNDARY

PC: 104+12.23

ASPHALTIC PE
102+64 LT

MATCH LINE STA 98+50

100
105
110
USH 8

40'

12' TRAVEL LANES
3' PAVED SHLDS
5' BAD SHLDS

15:1
10:1

103+76.7
15.0' RT

104+81.7
22.0' RT

LAURA LN

105+42.0
22.0' RT

106+12.0
15.0' RT

REMOVING ASPHALTIC
SURFACE BUTT JOINTS
STA 105+15.3, 53.0' RT

WETLAND BOUNDARY
EMAT URBAN CLASS I TYPE B
SILT FENCE

WETLAND IMPACTS
TYPE: RIPARIAN WETLAND (RPE)
AREA: 120 SF = 0.003 ACRES

CP: 43008003119
STA 109+79
1 REMOVING SMALL PIPE CULVERTS
108 LF CPCS 30-INCH
PROPOSED CP: 43008003119
CP CLASS III-A NON-METAL 30-INCH
INVERT 1: 109+79.0, 45.8' LT, 1554.90'
INVERT 2: 109+79.0, 44.2' RT, 1554.80'
LENGTH: 90 LF
SLOPE: 0.11%
2 AEW CP CLASS III-A NON-METAL 30-INCH

MATCH LINE STA 113+25

5

5

R/W

ROBERT COHEN

JOSEPH DRAEGER

DONALD & CYNTHIA DIGIACOMO

N

WETLAND IMPACTS
TYPE: RIPARIAN WETLAND (RPF)
AREA: 214 SF = 0.005 ACRES

CP: 43008003120
STA 123+00
1 REMOVING SMALL PIPE CULVERTS
105 LF CPCS 30-INCH
PROPOSED CP: 43008003120
CP CLASS III-A NON-METAL 30-INCH
INVERT 1: 123+00.0, 43.8' LT, 1563.00'
INVERT 2: 123+00.0, 44.2' RT, 1562.80'
LENGTH: 88 LF
SLOPE: 0.23%
2 AEW CP CLASS III-A NON-METAL 30-INCH

R/W

CULVERT PIPE CHECK
FRONTIER COMMUNICATIONS
EMAT URBAN CLASS I TYPE B
SILT FENCE
WETLAND BOUNDARY

PT: 113+66.47

MATCH LINE STA 113+25

115
120
125
USH 8

40'

12' TRAVEL LANES
3' PAVED SHLDS
5' BAD SHLDS

15:1
10:1

125+74.4
15.0' RT

126+79.4
22.0' RT

127+59.8
22.0' RT

BEAVER CREEK RD

REMOVING ASPHALTIC
SURFACE BUTT JOINTS
STA 127+20.0, 60.9' RT

WETLAND BOUNDARY
SILT FENCE
EMAT URBAN CLASS I TYPE B

WETLAND IMPACTS
TYPE: RIPARIAN WETLAND (RPF)
AREA: 126 SF = 0.003 ACRES

MATCH LINE STA 128+00

R/W

PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	PLAN SHEETS	SHEET 26	E

MICHAEL & CHERI STRENZ

THOMAS & TAMMY KRUEGER

N

R/W

MATCH LINE STA 128+00

BAD PE
129+50 LT

PC: 131+22.02

CP4

PCC: 141+15.37

MATCH LINE STA 142+75

10:1

130

128+29.8
15.0' RT

135

140

BAD PE
140+23 LT

USH 8

40'

12' TRAVEL LANES
3' PAVED SHLDS
5' BAD SHLDS

5

5

R/W

MICHAEL SCHMELING

CP: 43008003121
STA 144+14
1 REMOVING SMALL PIPE CULVERTS
111 LF CPCS 30-INCH
PROPOSED CP: 43008003121
CP CLASS III-A NON-METAL 30-INCH
INVERT 1: 144+14.0, 44.0' LT, 1579.30'
INVERT 2: 144+14.0, 56.0' RT, 1578.60'
LENGTH: 100 LF
SLOPE: 0.70%
2 AEW CP CLASS III-A NON-METAL 30-INCH

RANDY JORDAN

CP: 43008003122
STA 152+63
1 REMOVING SMALL PIPE CULVERTS
108 LF CPCS 30-INCH
PROPOSED CP: 43008003122
CP CLASS III-A NON-METAL 30-INCH
INVERT 1: 152+63.0, 41.3' LT, 1586.80'
INVERT 2: 152+63.0, 54.7' RT, 1585.90'
LENGTH: 96 LF
SLOPE: 0.94%
2 AEW CP CLASS III-A NON-METAL 30-INCH

WETLAND IMPACTS
TYPE: RIPARIAN WETLAND (RPE)
AREA: 146 SF = 0.003 ACRES

WETLAND IMPACTS
TYPE: RIPARIAN WETLAND (RPF)
AREA: 174 SF = 0.004 ACRES

CULVERT PIPE CHECK
SILT FENCE
EMAT URBAN CLASS I TYPE B
WETLAND BOUNDARY

FRONTIER COMMUNICATIONS
CULVERT PIPE CHECK
SILT FENCE
WETLAND BOUNDARY
EMAT URBAN CLASS I TYPE B

MATCH LINE STA 142+75

145

USH 8

150

15:1

10:1

155

154+57.6
15.0' LT

155+27.6
22.0' LT

DILLON DR

155+72.6
64.1' LT

156+27.8
22.0' LT

157+32.8
15.0' LT

PT: 157+44.67

15:1

MATCH LINE STA 157+50

146+81.8
15.0' RT

147+86.8
22.0' RT

148+82.4
22.0' RT

149+52.4
15.0' RT

FORD RD

12' TRAVEL LANES
3' PAVED SHLDS
5' BAD SHLDS

EMAT URBAN CLASS I TYPE B
SILT FENCE
WETLAND BOUNDARY

REMOVING ASPHALTIC
SURFACE BUTT JOINTS
STA 148+34.0, 61.7' RT

SILT FENCE
EMAT URBAN CLASS I TYPE B
WETLAND BOUNDARY

WETLAND IMPACTS
TYPE: RIPARIAN WETLAND (RPF)
AREA: 132 SF = 0.003 ACRES

WETLAND IMPACTS
TYPE: RIPARIAN WETLAND (RPE)
AREA: 168 SF = 0.004 ACRES

DARWIN KIRKHAM

CHRISTOPHER & JODIE HANSEN

PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	PLAN SHEETS	SHEET 27	E

DAVID & BRENDA ROBINSON

CP: 43008003123
STA 171+22
1 REMOVING SMALL PIPE CULVERTS
82 LF CPCS 30-INCH
PROPOSED CP: 43008003123
CP CLASS III-A NON-METAL 30-INCH
INVERT 1: 171+39.1, 34.3' LT, 1579.70'
INVERT 2: 171+04.6, 35.7' RT, 1579.50'
LENGTH: 78 LF
SLOPE: 0.26%
2 AEW CP CLASS III-A NON-METAL 30-INCH

WETLAND IMPACTS
TYPE: RIPARIAN WETLAND (RPE)
AREA: 352 SF = 0.008 ACRES

N

R/W

SILT FENCE
CULVERT PIPE CHECK
FRONTIER COMMUNICATIONS
EMAT URBAN CLASS I TYPE B
WETLAND BOUNDARY
BAD PE 169+50 LT

MATCH LINE STA 157+50

160 165 USH 8 170

40'

BAD PE 158+70 RT

12' TRAVEL LANES
3' PAVED SHLDS
5' BAD SHLDS

WETLAND BOUNDARY
EMAT URBAN CLASS I TYPE B
SILT FENCE

R/W

MATCH LINE STA 172+25

WETLAND IMPACTS
TYPE: RIPARIAN WETLAND (RPE)
AREA: 400 SF = 0.009 ACRES

5

5

CHRISTOPHER & JODIE HANSEN

HEARTWOOD FORESTLAND FUND
RANDY & MARILYN TOWNE

N

R/W

WETLAND BOUNDARY

CP5

MATCH LINE STA 172+25

175 180 USH 8 185

40'

12' TRAVEL LANES
3' PAVED SHLDS
5' BAD SHLDS

STA 185+16
THERMOPLASTIC
SNOWMOBILE CROSSING

MATCH LINE STA 187+00

R/W

HEARTWOOD FORESTLAND FUND

PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	PLAN SHEETS	SHEET 28	E

RANDY & MARILYN TOWNE

VILAH DAVIS

RANDY & MARILYN TOWNE

N

R/W

HAY MEADOW RD

REMOVING ASPHALTIC
SURFACE BUTT JOINTS
STA 188+78.2, 46.2' LT

187+72.6
15.0' LT

188+42.6
22.0' LT

189+05.8
22.0' LT

190+10.8
15.0' LT

ASPHALTIC PE
195+79 LT

10:1

15:1

MATCH LINE STA 187+00

190

195

USH 8

200

40'

MATCH LINE STA 201+75

12' TRAVEL LANES
3' PAVED SHLDS
5' BAD SHLDS

R/W

5

5

TERRENCE & LINDA PIPGRAS

ERIC DAILEY

MELINDA BEHM

PAUL & MEDINA BAHR

CP: 43008003124
STA 213+85
1 REMOVING SMALL PIPE CULVERTS
98 LF CPRC 36-INCH
PROPOSED CP: 43008003124
CP CLASS III-A NON-METAL 36-INCH
INVERT 1: 213+85.0, 46.6' LT, 1580.50'
INVERT 2: 213+85.0, 41.4' RT, 1580.20'
LENGTH: 88 LF
SLOPE: 0.34%
2 AEW CP CLASS III-A NON-METAL 36-INCH

R/W

WETLAND IMPACTS
TYPE: RIPARIAN WETLAND (RPF)
AREA: 374 SF = 0.009 ACRES

N

WETLAND BOUNDARY

PC: 213+44.70

CULVERT PIPE CHECK

SILT FENCE

EMAT URBAN CLASS I TYPE B

ASPHALTIC PE
202+05 LT

BAD PE
207+96 LT

BAD PE
210+25 LT

MATCH LINE STA 201+75

205

USH 8

40'

210

215

MATCH LINE STA 216+50

12' TRAVEL LANES
3' PAVED SHLDS
5' BAD SHLDS

BAD PE
210+80 RT

WETLAND BOUNDARY

SILT FENCE

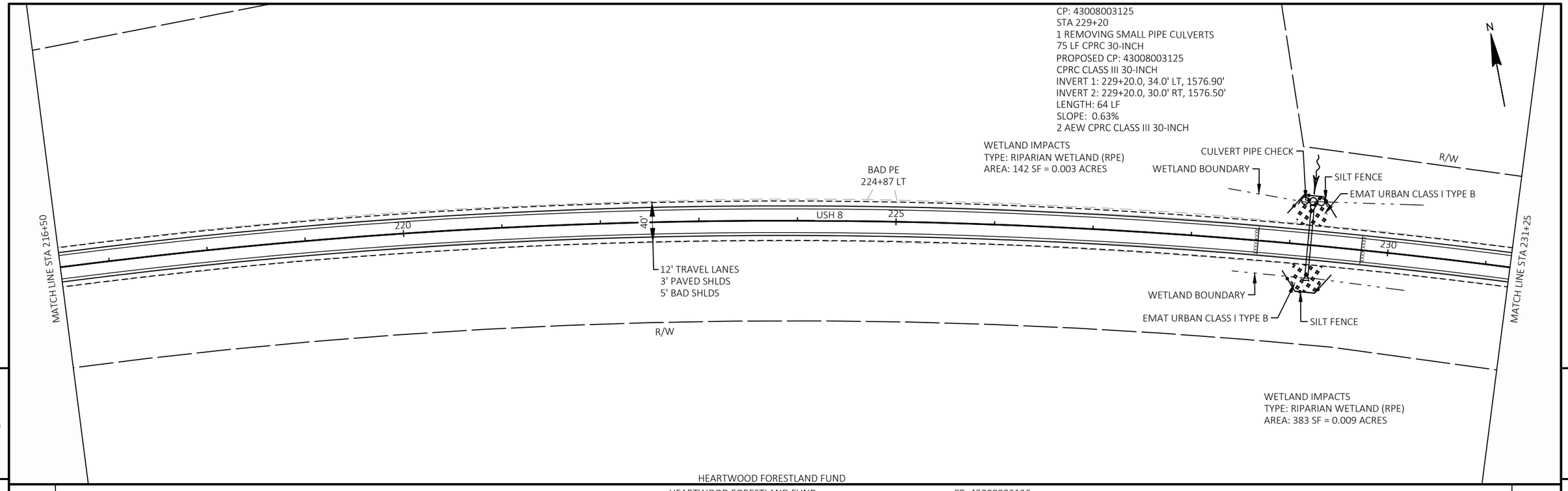
EMAT URBAN CLASS I TYPE B

R/W

WETLAND IMPACTS
TYPE: RIPARIAN WETLAND (RPF)
AREA: 362 SF = 0.008 ACRES

HENZLER FAMILY TRUST

PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	PLAN SHEETS	SHEET 29	E



PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	PLAN SHEETS	SHEET 30	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - NC REGION\1590-12-04_USH 8_ONEIDA CO\500_CADD\501_C3D_2018\15901204\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 08
PLOT DATE : 2/14/2022 3:36 PM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

HEARTWOOD FORESTLAND FUND

MGS LONG SPAN
TWO-WAY TRAFFIC
SPANS 14' WIDE BOX CULVERT

STRUCTURE C-43-918
SEE STRUCTURE PLANS

CP: 43008003127
STA 259+84
1 REMOVING SMALL PIPE CULVERTS
75 LF CPCS 24-INCH
PROPOSED CP: 43008003127
CP CLASS III-A NON-METAL 24-INCH
INVERT 1: 259+84.0, 32.8' LT, 1580.10'
INVERT 2: 259+84.0, 35.2' RT, 1580.50'
LENGTH: 68 LF
SLOPE: -0.59%
2 AEW CP CLASS III-A NON-METAL 24-INCH

WETLAND IMPACTS
TYPE: RIPARIAN WETLAND (RPE)
AREA: 431 SF = 0.010 ACRES

N

MATCH LINE STA 246+00

246+02.5
15.0' LT

PC: 247+84.14

248+41.1
15.0' LT

249+12.1, 22.0' LT
MGS EAT POST 1

249+65.4
20.0' LT

NEPTUNE CREEK

251+66.0
20.0' LT

252+19.3, 22.0' LT
MGS EAT POST 1

252+90.3
15.0' LT

SLOPE INTERCEPT (TYP)

R/W

SILT FENCE
EMAT URBAN CLASS I TYPE B
WETLAND BOUNDARY

PT: 260+28.76

MATCH LINE STA 260+75

10:1

250

255

260

40'

USH 8

246+64.4
15.0' RT

248+29.7
15.0' RT

CP50

249+00.7, 22.0' RT
MGS EAT POST 1

249+53.6
20.0' RT

251+15.5
20.0' RT

251+68.4, 22.0' RT
MGS EAT POST 1

252+39.4
15.0' RT

12' TRAVEL LANES
3' PAVED SHLDS
5' BAD SHLDS

WETLAND BOUNDARY
EMAT URBAN CLASS I TYPE B
CULVERT
PIPE CHECK
SILT FENCE

R/W

OLD 8 RD
BRIDGE
NEPTUNE CREEK

EMAT URBAN CLASS I TYPE B (TYP)

SILT FENCE (TYP)

MGS LONG SPAN
TWO-WAY TRAFFIC
SPANS 14' WIDE BOX CULVERT

WETLAND IMPACTS
TYPE: RIPARIAN WETLAND (RPE)
AREA: 319 SF = 0.007 ACRES

5

5

HEARTWOOD FORESTLAND FUND

HEARTWOOD FORESTLAND FUND

N

R/W

FRONTIER COMMUNICATIONS

CP: 43008003128
STA 273+84
EXISTING CPRC 24-INCH
TO REMAIN

MATCH LINE STA 260+75

265

270

275

40'

USH 8

12' TRAVEL LANES
3' PAVED SHLDS
5' BAD SHLDS

BAD PE
272+79 RT

R/W

MATCH LINE STA 275+50

HEARTWOOD FORESTLAND FUND

PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	PLAN SHEETS	SHEET 31	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - NC REGION\1590-12-04_USH 8_ONEIDA CO\500_CADD\501_C3D_2018\15901204\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 09

PLOT DATE : 2/14/2022 3:36 PM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:100 FT

HEARTWOOD FORESTLAND FUND

CP: 43008003129
STA 290+01
1 REMOVING SMALL PIPE CULVERTS
72 LF CPCS 30-INCH
PROPOSED CP: 43008003129
CPRC CLASS III 30-INCH
INVERT 1: 290+01.0, 31.5' LT, 1588.00'
INVERT 2: 290+01.0, 30.5' RT, 1588.30'
LENGTH: 62 LF
SLOPE: -0.48%
2 AEW CPRC CLASS III 30-INCH

WETLAND IMPACTS
TYPE: RIPARIAN WETLAND (RPF)
AREA: 291 SF = 0.007 ACRES

N

R/W

SILT FENCE
EMAT URBAN CLASS I TYPE B
WETLAND BOUNDARY

MATCH LINE STA 275+50

280 285 290

40'

USH 8

MATCH LINE STA 290+25

12' TRAVEL LANES
3' PAVED SHLDS
5' BAD SHLDS

WETLAND BOUNDARY
EMAT URBAN CLASS I TYPE B
SILT FENCE
CULVERT PIPE CHECK

R/W

WETLAND IMPACTS
TYPE: RIPARIAN WETLAND (RPF)
AREA: 331 SF = 0.008 ACRES

5

5

HEARTWOOD FORESTLAND FUND

HEARTWOOD FORESTLAND FUND

N

R/W

CP: 43008003130
STA 295+98
EXISTING CPRC 30-INCH
TO REMAIN

WETLAND BOUNDARY

MATCH LINE STA 290+25

295 300 30

40'

USH 8

MATCH LINE STA 305+00

12' TRAVEL LANES
3' PAVED SHLDS
5' BAD SHLDS

BAD PE
304+77 RT

WETLAND BOUNDARY

R/W

HEARTWOOD FORESTLAND FUND

PHILLIP & BETTY WALENTOWSKI

PATRICIA BELL

PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	PLAN SHEETS	SHEET 32	E

ELIZABETH KIEL

LEE HANSON & JACK KAUFMAN

WILSON ENGINEERING

PHILLIP & BETTY WALENTOWSKI

KALISA NAMPEL

N

R/W

PC: 312+89.99

STA 305+26
EXISTING CPCS 24-INCH
TO REMAIN

CP6

BAD PE
312+44 LT

MATCH LINE STA 305+00

310

315

40'

USH 8

MATCH LINE STA 319+75

12' TRAVEL LANES
3' PAVED SHLDS
5' BAD SHLDS

R/W

5

5

PHILLIP & BETTY WALENTOWSKI

JAMES SMITH

KALISA NAMPEL

CP: 43008003131
STA 322+91
1 REMOVING SMALL PIPE CULVERTS
70 LF CPRC 24-INCH
PROPOSED CP: 43008003131
CPRC CLASS III 24-INCH
INVERT 1: 322+91.0, 31.9' LT, 1599.70'
INVERT 2: 322+91.0, 28.1' RT, 1599.90'
LENGTH: 60 LF
SLOPE: -0.33%
2 AEW CPRC CLASS III 24-INCH

CP: 43008003132
STA 330+71
1 REMOVING SMALL PIPE CULVERTS
68 LF CPCS 24-INCH
PROPOSED CP: 43008003132
CPRC CLASS III 24-INCH
INVERT 1: 330+71.0, 29.1' LT, 1600.60'
INVERT 2: 330+71.0, 28.9' RT, 1600.80'
LENGTH: 58 LF
SLOPE: -0.34%
2 AEW CPRC CLASS III 24-INCH

N

WETLAND IMPACTS
TYPE: RIPARIAN WETLAND (RPE)
AREA: 171 SF = 0.004 ACRES

WETLAND IMPACTS
TYPE: SHRUB SWAMP (SS)
AREA: 306 SF = 0.007 ACRES

PT: 321+93.14

R/W

EMAT URBAN CLASS I TYPE B

SILT FENCE

WETLAND BOUNDARY

WETLAND BOUNDARY

SILT FENCE

EMAT URBAN CLASS I TYPE B

MATCH LINE STA 319+75

320

325

40'

USH 8

330

MATCH LINE STA 334+50

WETLAND BOUNDARY

CULVERT PIPE CHECK

EMAT URBAN CLASS I TYPE B

SILT FENCE

12' TRAVEL LANES
3' PAVED SHLDS
5' BAD SHLDS

WETLAND BOUNDARY

CULVERT PIPE CHECK

EMAT URBAN CLASS I TYPE B

SILT FENCE

R/W

WETLAND IMPACTS
TYPE: RIPARIAN WETLAND (RPE)
AREA: 371 SF = 0.009 ACRES

WETLAND IMPACTS
TYPE: SHRUB SWAMP (SS)
AREA: 366 SF = 0.008 ACRES

JAMES SMITH

PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	PLAN SHEETS	SHEET 33	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - NC REGION\1590-12-04_USH 8_ONEIDA CO\500_CADD\501_C3D_2018\15901204\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 11
PLOT DATE : 2/14/2022 3:37 PM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

KALISA NAMPEL

LAWRENCE REKOSKE

CP: 43008003133
STA 347+31
1 REMOVING SMALL PIPE CULVERTS
80 LF CPRC 24-INCH
PROPOSED CP: 43008003133
CP CLASS III-A NON-METAL 24-INCH
INVERT 1: 347+31.0, 38.5' LT, 1609.90'
INVERT 2: 347+31.0, 37.5' RT, 1610.10'
LENGTH: 76 LF
SLOPE: -0.26%
2 AEW CP CLASS III-A NON-METAL 24-INCH

WETLAND IMPACTS
TYPE: RIPARIAN WETLAND (RPF)
AREA: 328 SF = 0.008 ACRES

WETLAND BOUNDARY
EMAT URBAN CLASS I TYPE B
SILT FENCE

R/W

MATCH LINE STA 334+50

BAD PE
336+15 LT

BAD PE
343+65 LT

335 340 345

40'

USH 8

12' TRAVEL LANES
3' PAVED SHLDS
5' BAD SHLDS

ASPHALTIC PE
342+63 RT

WETLAND BOUNDARY
EMAT URBAN CLASS I TYPE B
SILT FENCE
CULVERT PIPE CHECK

R/W

MATCH LINE STA 349+25

WETLAND IMPACTS
TYPE: RIPARIAN WETLAND (RPF)
AREA: 510 SF = 0.012 ACRES

5

5

JAMES SMITH

RICHARD QUADE

HEARTWOOD FORESTLAND FUND

N

R/W

MATCH LINE STA 349+25

BAD PE
354+07 LT

STA 362+41
THERMOPLASTIC
SNOWMOBILE
CROSSING

350 355 360

40'

USH 8

15:1

10:1

353+28.6
15.0' RT

354+33.6
22.0' RT

OLD 8 RD

355+17.6
22.0' RT

355+87.6
15.0' RT

12' TRAVEL LANES
3' PAVED SHLDS
5' BAD SHLDS

REMOVING ASPHALTIC
SURFACE BUTT JOINTS
STA 354+71.4, 52.4' RT

R/W

MATCH LINE STA 364+00

HEARTWOOD FORESTLAND FUND

SCOTT BRADLEY

PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	PLAN SHEETS	SHEET 34	E

HEARTWOOD FORESTLAND FUND

CP: 43008003134
STA 367+22
1 REMOVING SMALL PIPE CULVERTS
82 LF CPRC 24-INCH
PROPOSED CP: 43008003134
CP CLASS III-A NON-METAL 24-INCH
INVERT 1: 367+22.0, 40.0' LT, 1599.60'
INVERT 2: 367+22.0, 40.0' RT, 1599.40'
LENGTH: 80 LF
SLOPE: 0.25%
2 AEW CP CLASS III-A NON-METAL 24-INCH

WETLAND IMPACTS
TYPE: RIPARIAN WETLAND (RPF)
AREA: 401 SF = 0.009 ACRES

SILT FENCE
CULVERT PIPE CHECK
R/W
FRONTIER COMMUNICATIONS
EMAT URBAN CLASS I TYPE B
WETLAND BOUNDARY

MATCH LINE STA 364+00

365
370
40'
USH 8
375

MATCH LINE STA 378+75

EMAT URBAN CLASS I TYPE B
SILT FENCE
12' TRAVEL LANES
3' PAVED SHLDS
5' BAD SHLDS
WETLAND BOUNDARY
R/W

WETLAND IMPACTS
TYPE: RIPARIAN WETLAND (RPF)
AREA: 281 SF = 0.006 ACRES

5

5

SCOTT BRADLEY
AMY RUNKLE

CP: 43008003135
STA 380+79
1 REMOVING SMALL PIPE CULVERTS
64 LF CPRC 24-INCH
PROPOSED CP: 43008003135
CPRC CLASS III 24-INCH
INVERT 1: 380+79.0, 28.0' LT, 1591.60'
INVERT 2: 380+79.0, 32.0' RT, 1590.40'
LENGTH: 60 LF
SLOPE: 2.00%
2 AEW CPRC CLASS III 24-INCH

WETLAND IMPACTS
TYPE: RIPARIAN WETLAND (RPF)
AREA: 405 SF = 0.009 ACRES

WETLAND IMPACTS
TYPE: RIPARIAN WETLAND (RPE)
AREA: 303 SF = 0.007 ACRES

CP: 43008003136
STA 388+56
1 REMOVING SMALL PIPE CULVERTS
90 LF CPCS 30-INCH
PROPOSED CP: 43008003136
CP CLASS III-A NON-METAL 30-INCH
INVERT 1: 388+56.0, 40.1' LT, 1585.70'
INVERT 2: 388+56.0, 39.9' RT, 1585.40'
LENGTH: 80 LF
SLOPE: 0.37%
2 AEW CP CLASS III-A NON-METAL 30-INCH

R/W
CULVERT PIPE CHECK
EMAT URBAN CLASS I TYPE B
SILT FENCE
WETLAND BOUNDARY
BAD PE
382+84 LT

MATCH LINE STA 378+75

380
385
40'
USH 8
390

MATCH LINE STA 393+50

BAD PE
382+32 RT
ASPHALTIC PE
384+38 RT
12' TRAVEL LANES
3' PAVED SHLDS
5' BAD SHLDS
SILT FENCE
BAD PE
389+91 RT
BAD PE
392+23 RT
EMAT URBAN CLASS I TYPE B
SILT FENCE
WETLAND BOUNDARY
WETLAND BOUNDARY
EMAT URBAN CLASS I TYPE B
R/W

WETLAND IMPACTS
TYPE: RIPARIAN WETLAND (RPE)
AREA: 262 SF = 0.006 ACRES

WETLAND IMPACTS
TYPE: RIPARIAN WETLAND (RPF)
AREA: 314 SF = 0.007 ACRES

ORA DAILEY
AMY GEE
SCOTT BRADLEY
GERHARD ROBERTS
CATHERINE FISHER

PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	PLAN SHEETS	SHEET 35 E

MARIE THILL

ROBERT MEYER

CONFORT LLC

N

MATCH LINE STA 393+50

BAD PE
394+39 LT

R/W

BAD PE
396+23 LT

395

PC: 400+07.52

400

401+15.0
15.0' LT

401+85.0
22.0' LT

LAKE RD

REMOVING ASPHALTIC
SURFACE BUTT JOINTS
STA 402+23.7, 56.8' LT

402+60.1
22.0' LT

403+35.1
17.0' LT

ASPHALTIC PE
404+44 LT

ASPHALTIC PE
405+82 LT

PT: 408+10.07

MATCH LINE STA 408+25

10:1

15:1

USH 8

405

40'

BAD PE
407+57 RT

10:1

CP7

BAD PE
401+11 RT

BAD PE
401+65 RT

BAD PE
402+27 RT

12' TRAVEL LANES
5' PAVED SHLDS
3' BAD SHLDS

BAD PE
398+09 RT

R/W

400+79.6
15.0' RT

400+99.6
17.0' RT

CP: 43008003137
STA 402+73
EXISTING CPRC 24-INCH
TO REMAIN

PENTECOSTAL CHURCH OF GOD

ASPHALTIC CENTER LINE RUMBLE STRIPS 2-LANE RURAL
STA 408+57 TO 427+00

5

5

TODD ROBERTS

ERIK WHITESIDES

STORA ENSO NORTH AMERICA CORP

MARVIN PALUBICKI

RONALD LUNDT & PAMELA BARLOWSKI

ROXANNE RYDER

CHRISTOPHER SLATON

N

EMAT URBAN CLASS I TYPE B

SILT FENCE

SLOPE INTERCEPT

MGS GUARDRAIL

R/W

419+59.9
17.0' LT

420+30.9, 24.0' LT
MGS EAT POST 1

420+84.0
22.0' LT

421+96.5
22.0' LT

422+49.4, 24.0' LT
MGS EAT POST 1

MATCH LINE STA 408+25

BAD PE
409+44 LT

BAD PE
413+62 LT

ASPHALTIC PE
418+26 LT

10:1

10:1

MATCH LINE STA 423+00

410

415

40'

USH 8

420

12' TRAVEL LANES
5' PAVED SHLDS
3' BAD SHLDS

R/W

PC: 422+38.12

STORA ENSO NORTH AMERICA CORP

PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	PLAN SHEETS	SHEET 36	E

PAMELA IKERT & JANE POLLEY
ERIC STOCKDALE
NANCY GUZMAN
423+20.4
17.0' LT
SILT FENCE
SLOPE INTERCEPT
EMAT URBAN CLASS I TYPE B
R/W
JARED & HEATHER WICK
BAD PE 424+64 LT
BAD PE 425+05 LT
STEVEN & MARY BENASZESKI
MATCH LINE STA 423+00
10:1
425
PC: 428+18.02
PT: 433+87.54
MATCH LINE STA 437+75
ASPHALTIC PE 423+55 RT
USH 8
40'
435
USH 45 S
PT: 425+19.21
R/W
430
12' TRAVEL LANES
5' PAVED SHLDS
3' BAD SHLDS
REMOVING ASPHALTIC SURFACE BUTT JOINTS
STA 427+00.0, 0.0'
END ASPHALTIC CENTERLINE RUMBLE STRIPS 2-LANE RURAL
STA 427+00
NET EXCEPTION TO CL LENGTH
STA 427+00 TO 448+13.5
5
5
ROBERT BRIGGS
TAMMY SMITH
NANCY GUZMAN
KEVIN & THELMA HALVERSON
PAUL & MARIE HAGENY
CP: 43008003139
STA 450+26
1 REMOVING SMALL PIPE CULVERTS
77 LF CPCS 24-INCH
PROPOSED CP: 43008003139
CPRC CLASS III 24-INCH
INVERT 1: 450+31.4, 25.0' LT, 1594.50'
INVERT 2: 450+16.8, 41.4' RT, 1593.20'
LENGTH: 68 LF
SLOPE: 1.91%
2 AEW CPRC CLASS III 24-INCH
CP: 43008003138
STA 444+68
EXISTING CPRC 24-INCH
TO REMAIN
NET EXCEPTION TO CL LENGTH
STA 427+00 TO 448+13.5
EMAT URBAN CLASS I TYPE B
CULVERT PIPE CHECK
SILT FENCE
FRONTIER COMMUNICATIONS
ASPHALTIC PE 451+25 LT
PC: 448+13.50
12' TRAVEL LANES
5' PAVED SHLDS
3' BAD SHLDS
MATCH LINE STA 437+75
440
445
USH 8
R/W
450
40'
15:1
MATCH LINE STA 452+25
451+62.7
17.0' RT
THOMAS LIATSES
FO-FO
R/W
REMOVING ASPHALTIC SURFACE BUTT JOINTS
STA 448+13.5, 0.0'
WETLAND BOUNDARY
SILT FENCE
THE PASSION FOR CHRIST CHURCH
FRONTIER COMMUNICATIONS
EMAT URBAN CLASS I TYPE B
FRONTIER COMMUNICATIONS
WETLAND IMPACTS
TYPE: RIPARIAN WETLAND (RPE)
AREA: 190 SF = 0.004 ACRES
JEFFREY & MARY BALOGH

PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	PLAN SHEETS	SHEET 37	E

TOWN OF MONICO

DEBRA STEFONIK

REMOVING ASPHALTIC SURFACE BUTT JOINTS
STA 458+37.5, 46.5' LT

REMOVING ASPHALTIC SURFACE BUTT JOINTS
STA 460+70.6, 62.1' LT

STA 456+64
THERMOPLASTIC
SNOWMOBILE
CROSSING

PC: 455+26.58

457+18.9
17.0' LT

457+68.9
22.0' LT

4TH ST

458+46.4
22.0' LT

459+21.4
17.0' LT

460+00.0
17.0' LT

460+50.0
22.0' LT

C ST

461+38.0
22.0' LT

462+13.0
17.0' LT

N

12' TRAVEL LANES
5' PAVED SHLDS
3' BAD SHLDS

R/W

PT: 452+57.94

ASPHALTIC PE
453+44 LT

455

455+83.1
17.0' RT

456+58.1
22.0' RT

457+31.0
22.0' RT

457+81.0
17.0' RT

460+31.0
17.0' RT

461+06.0
22.0' RT

462+08.8
22.0' RT

462+58.8
17.0' RT

460

15:1

10:1

USH 8

40'

465

DORR ST

REMOVING ASPHALTIC SURFACE BUTT JOINTS
STA 456+90.3, 35.0' RT

REMOVING ASPHALTIC SURFACE BUTT JOINTS
STA 461+84.7, 47.9' RT

MATCH LINE STA 452+25

454+42.2
17.0' RT

CONC CURB & GUTTER 36-INCH TYPE D

EMAT URBAN CLASS I
TYPE B (TYP)

R40'

453+65.8
61.8' RT

R50'

452+43.7
71.8' RT

B ST

REMOVING ASPHALTIC SURFACE BUTT JOINTS
STA 453+10.0, 79.1' RT

REMOVING CURB & GUTTER
STA 452+48 TO 452+93
STA 453+26 TO 453+62

STATION & OFFSET TABLE			
POINT	STATION	OFFSET	ELEVATION
H	452+48.1	22.0'	1601.87'
I	452+79.5	37.4'	1601.59'
J	452+93.1	69.7'	1601.31'
K	453+25.9	63.4'	1601.57'
L	453+35.7	35.6'	1602.10'
M	453+61.9	22.0'	1602.63'

WISCONSIN DOT

TOWN OF MONICO

CP: 43008003140
STA 467+87
155 LF CPCS 36-INCH
1 CLEANING CULVERT PIPES FOR LINER VERIFICATION
155 LF CULVERT PIPE LINERS 36-INCH

N

R/W

12' TRAVEL LANES
5' PAVED SHLDS
3' BAD SHLDS

CP: 43008004630
STA 473+36
EXISTING C-43-9703
SPCP 96-INCH TO REMAIN

FRONTIER COMMUNICATIONS

USH 45 NORTH

REMOVING ASPHALTIC SURFACE BUTT JOINTS
STA 474+50.0, 0.0'

MATCH LINE STA 467+25

470

40'

USH 8

15:1

HMOD

472+01.1
17.0' RT

473+59.0
25.0' RT

END PROJECT
STA 474+50

PT: 468+03.84

R/W

TOWN OF MONICO

PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	PLAN SHEETS	SHEET 38	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - NC REGION\1590-12-04_USH 8_ONEIDA CO\500_CADD\501_C3D_2018\15901204\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 16

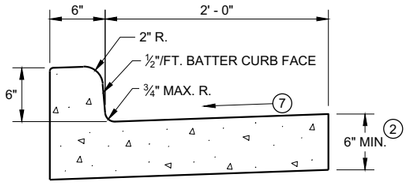
PLOT DATE : 2/14/2022 3:37 PM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

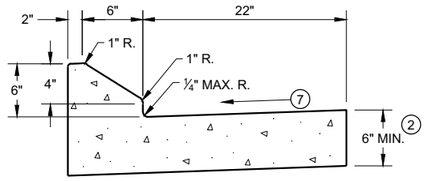
Standard Detail Drawing List

08D01-22A	CONCRETE CURB & GUTTER
08D01-22B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
12A03-10	NAME PLATE (STRUCTURES)
13A11-03A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-03B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13C19-03	HMA LONGITUDINAL JOINTS
14B29-01	SAFETY EDGE
14B42-07A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B43-04A	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
14B43-04B	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
14B43-04C	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-05A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05K	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05L	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-07	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C35-04A	PAVEMENT MARKING (INTERSECTIONS)
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES
15D45-03	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH LOOSE GRAVEL
15D48-01	TRAFFIC CONTROL, LANE SHIFT IN FLAGGING OPERATION

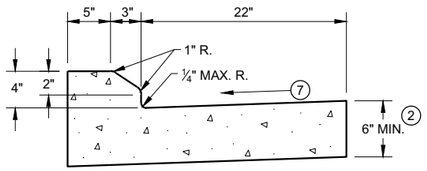
6



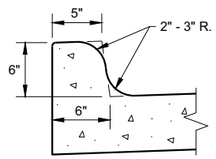
TYPES A (1) & D



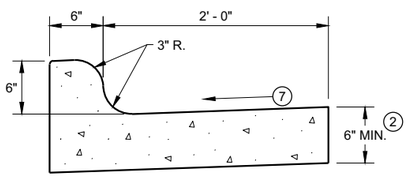
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

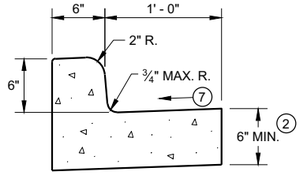


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



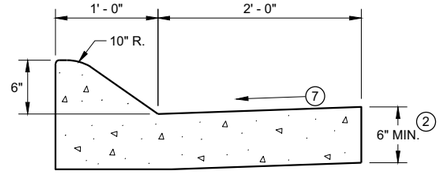
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"



TYPES A (1) & D

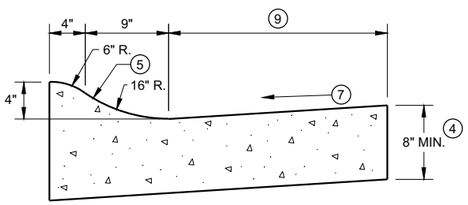
CONCRETE CURB AND GUTTER 18"



6" SLOPED CURB TYPES A (1) & D

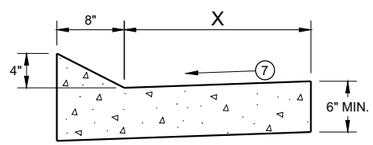
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

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

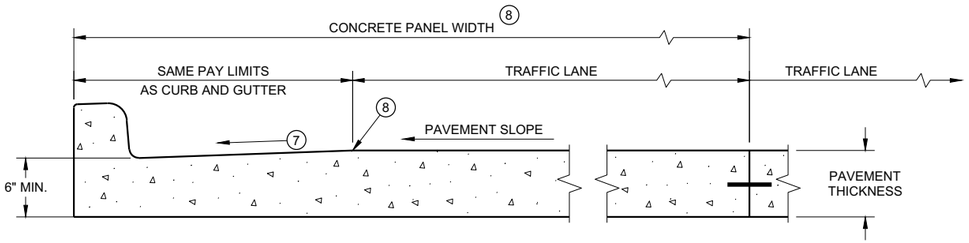


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

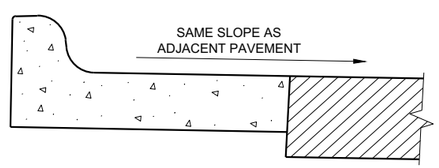
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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



PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



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

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

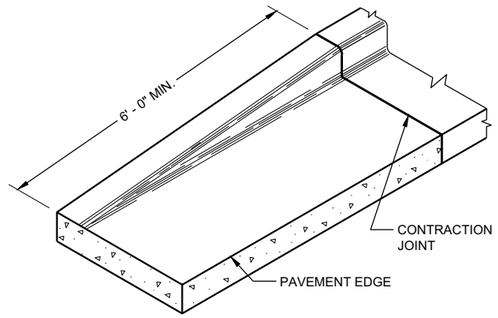
(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

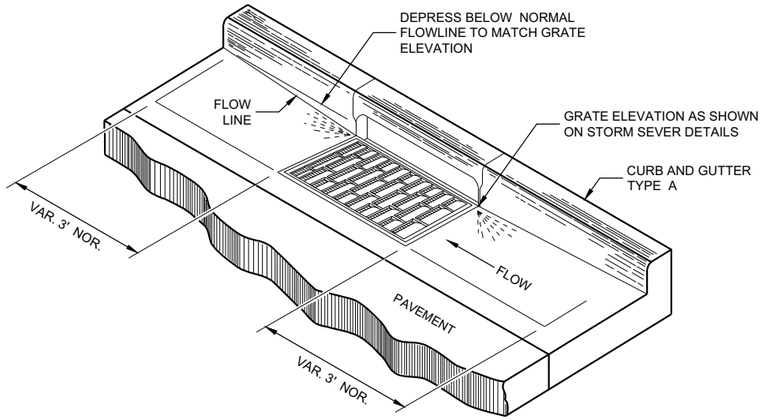
(9) CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

CONCRETE CURB AND GUTTER

SDD 08D01 - 22a
6



END SECTIONCURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS
(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

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

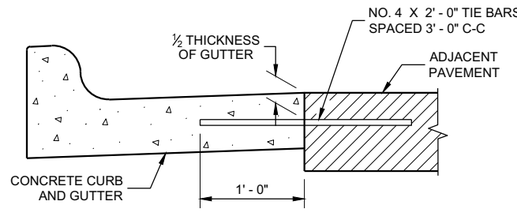
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

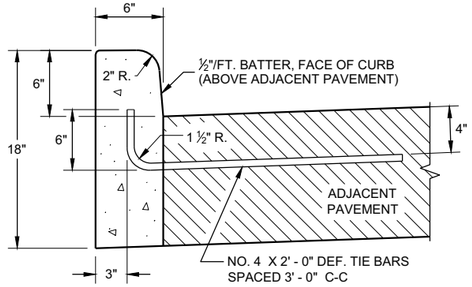
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

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

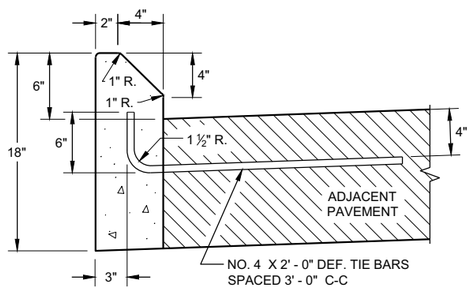
(9) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.



TYPICAL TIE BAR LOCATION (1)

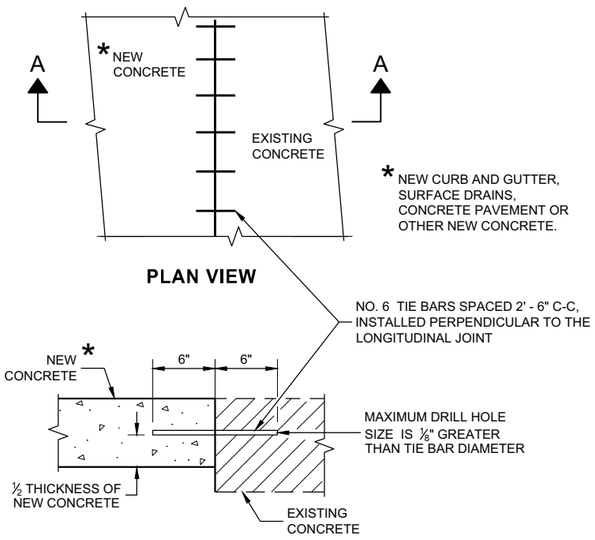


TYPES A (1) & D



TYPES G (1) & J

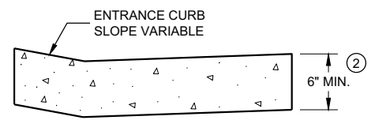
CONCRETE CURB



PLAN VIEW

SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



DRIVEWAY ENTRANCE CURB (9)
(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

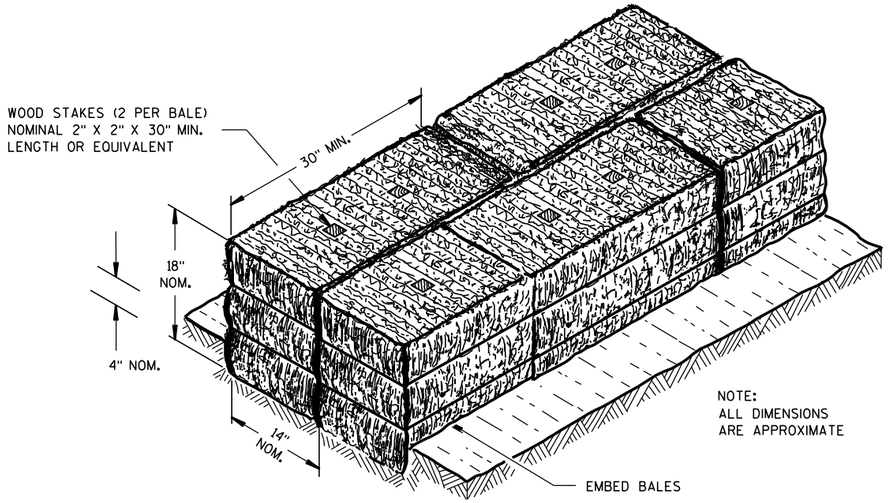
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

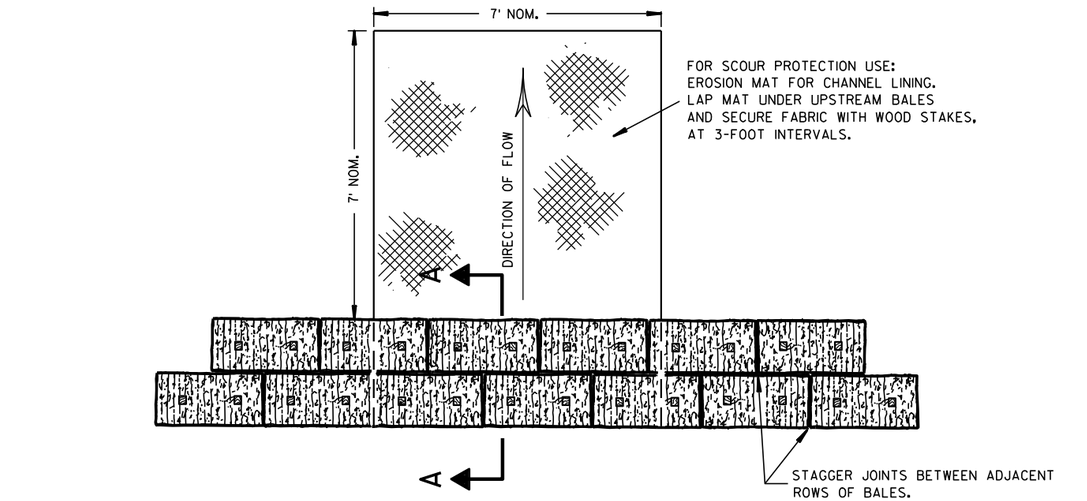
FHWA

6

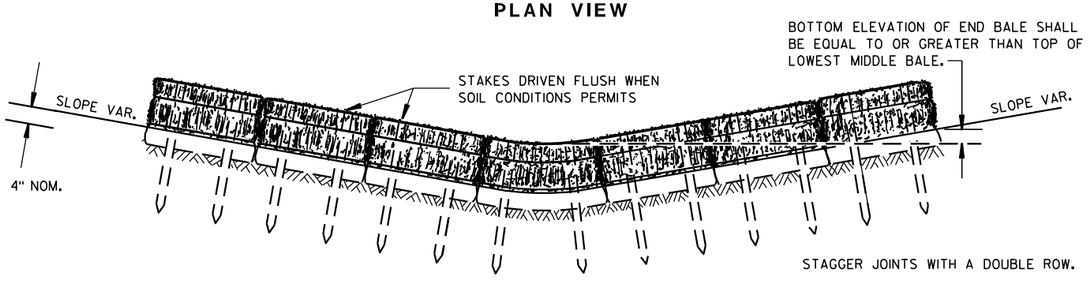
SDD08D01 - 22b



SECTION A-A



PLAN VIEW



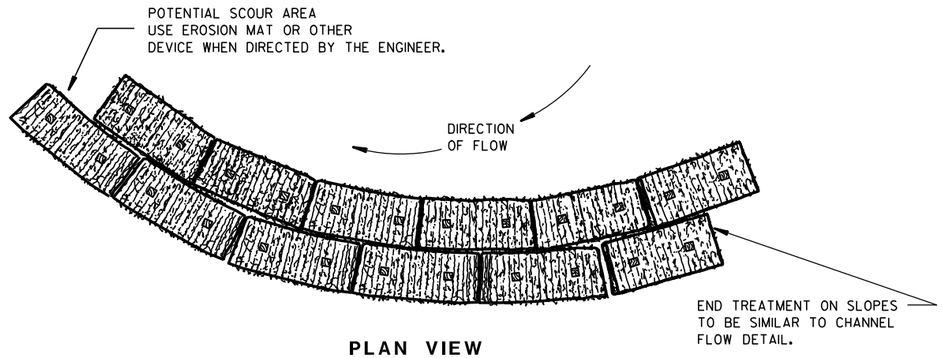
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

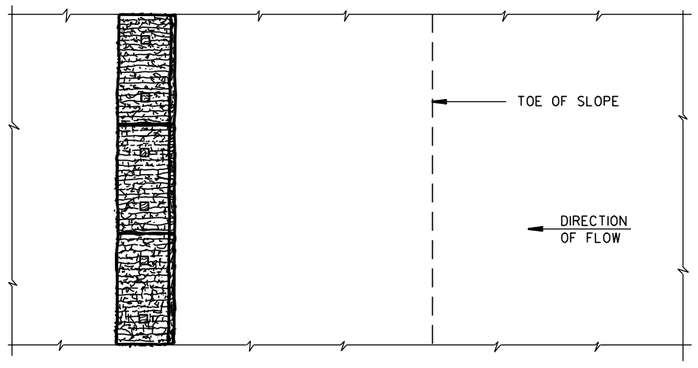
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

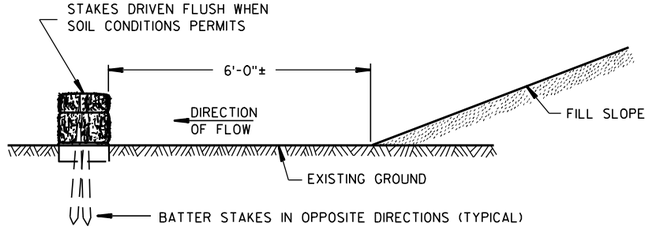


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

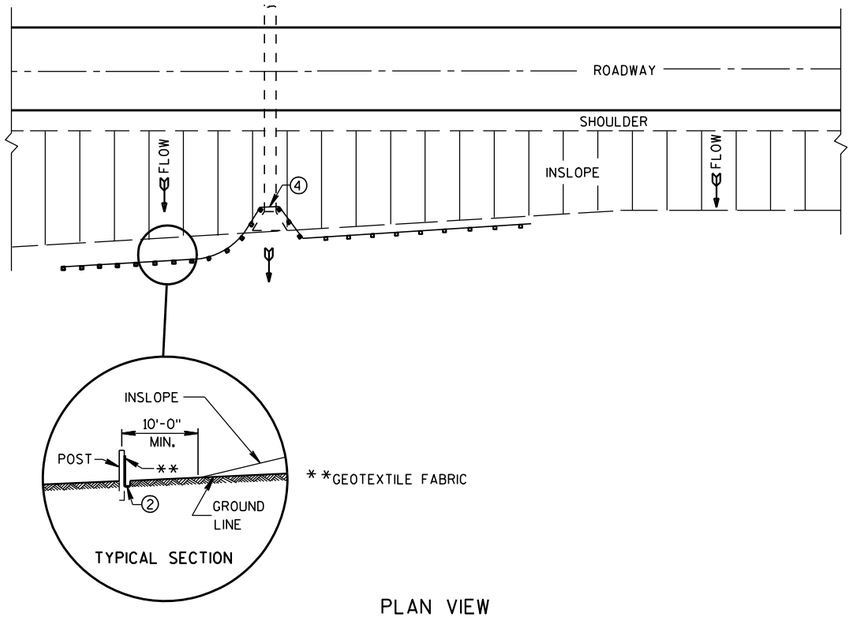
APPROVED

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

FHWA

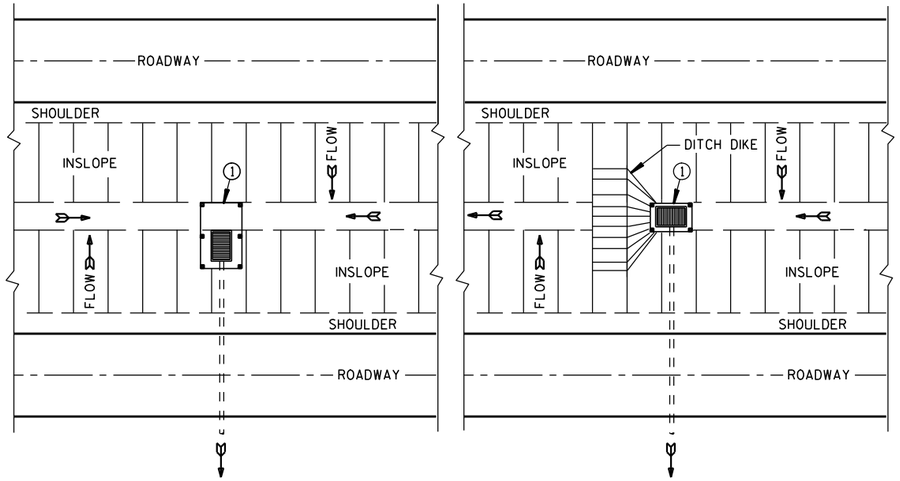
6

S.D.D. 8 E 8-3



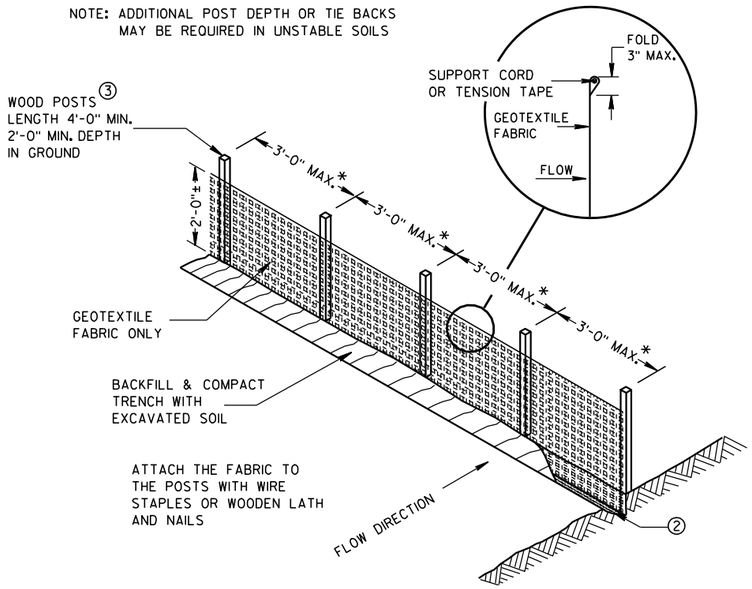
PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



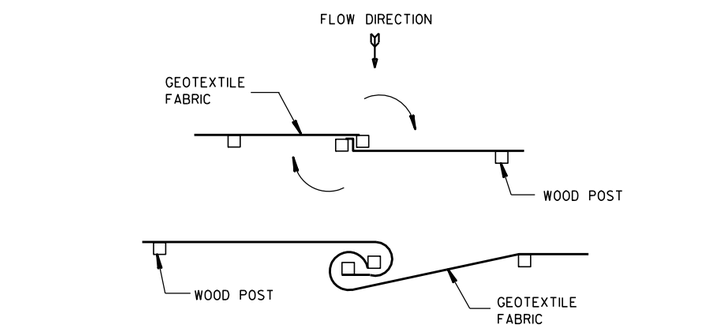
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

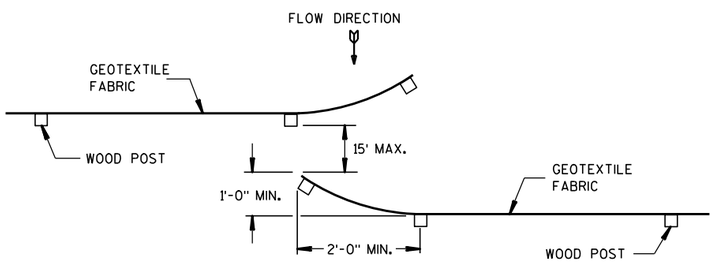


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE



TWIST METHOD



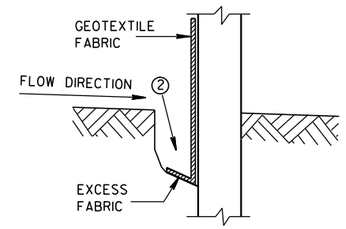
HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5

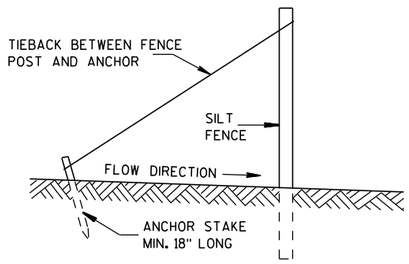
GENERAL NOTES

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 TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

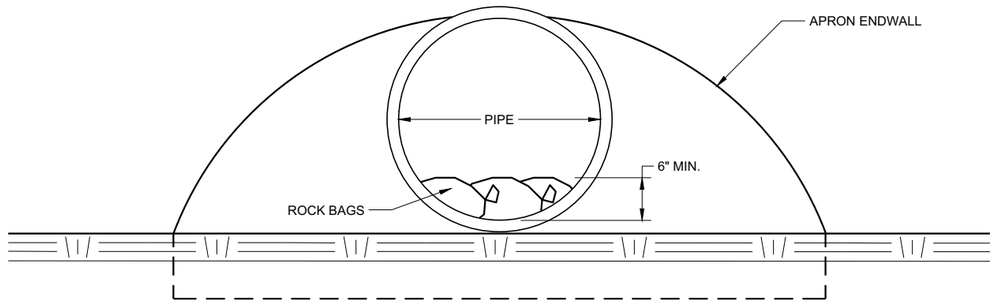
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

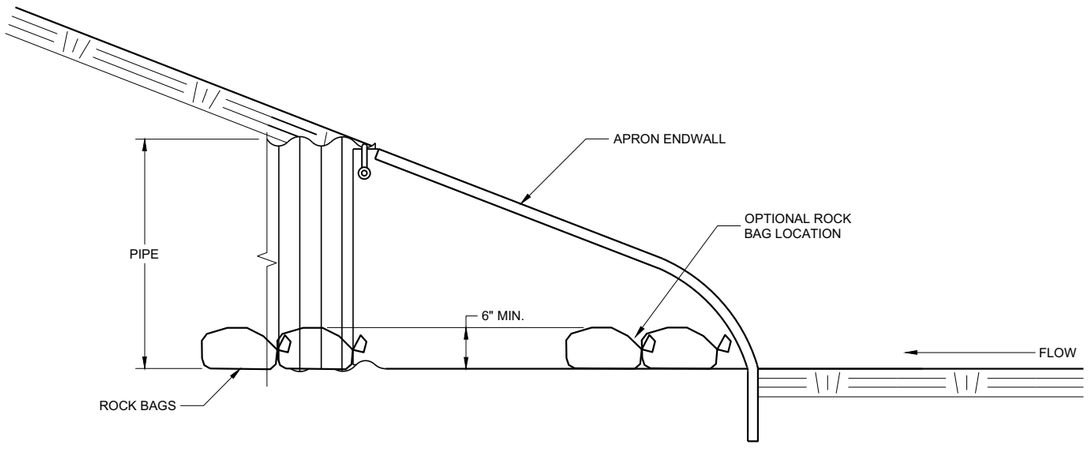
S.D.D. 8 E 9-6

6

S.D.D. 8 E 9-6



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

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SDD 08E15 - 01

METAL APRON ENDWALLS

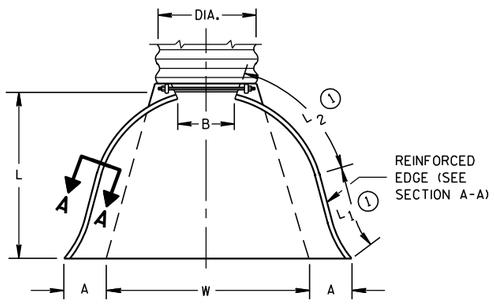
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4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

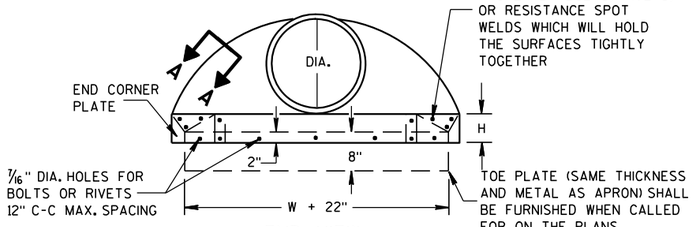
REINFORCED CONCRETE APRON ENDWALLS

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

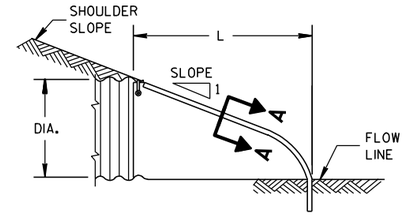
*MINIMUM
**MAXIMUM



PLAN VIEW

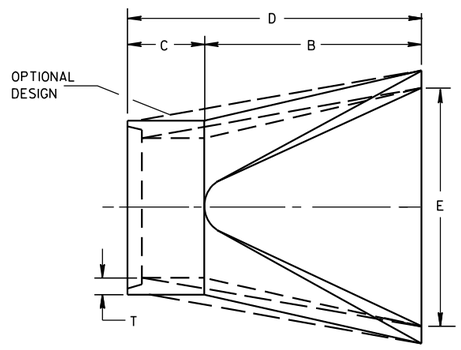


END VIEW

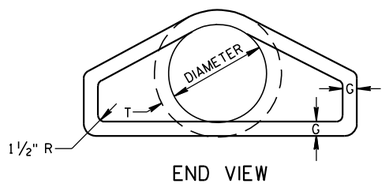


SIDE ELEVATION

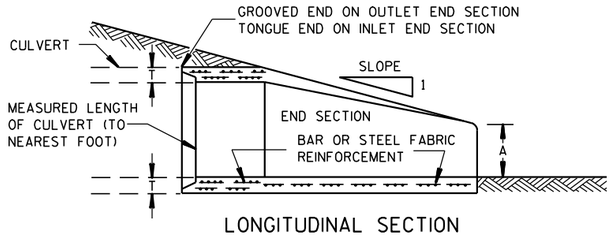
METAL ENDWALLS



PLAN

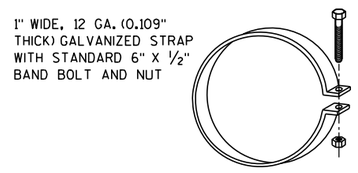


END VIEW



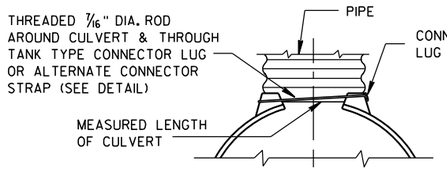
LONGITUDINAL SECTION

CONCRETE ENDWALLS

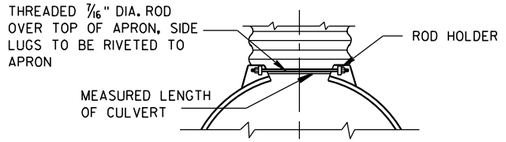


ALTERNATE FOR TYPE 1 CONNECTION

END SECTION CONNECTOR STRAP

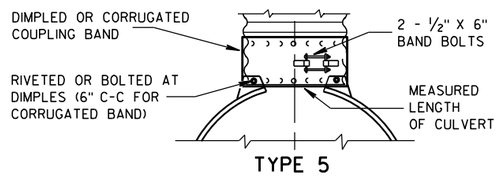


TYPE 1
FOR 12" THRU 24" CORR. PIPE



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

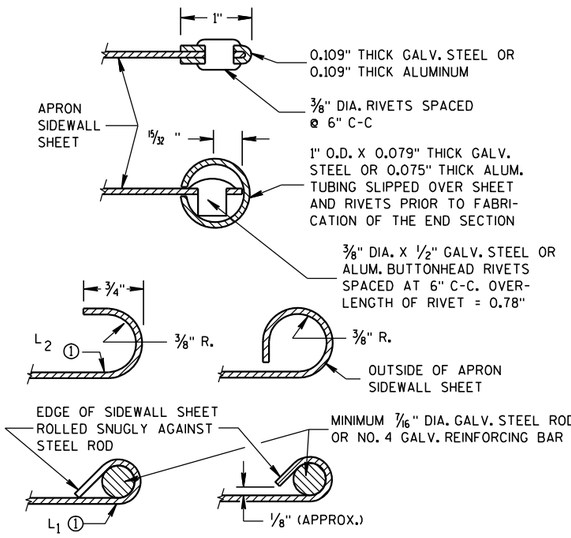
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

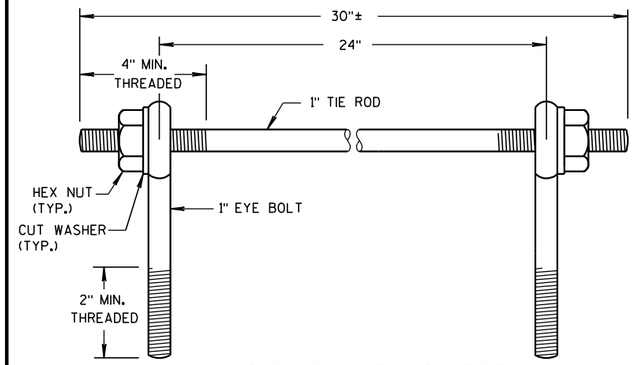
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

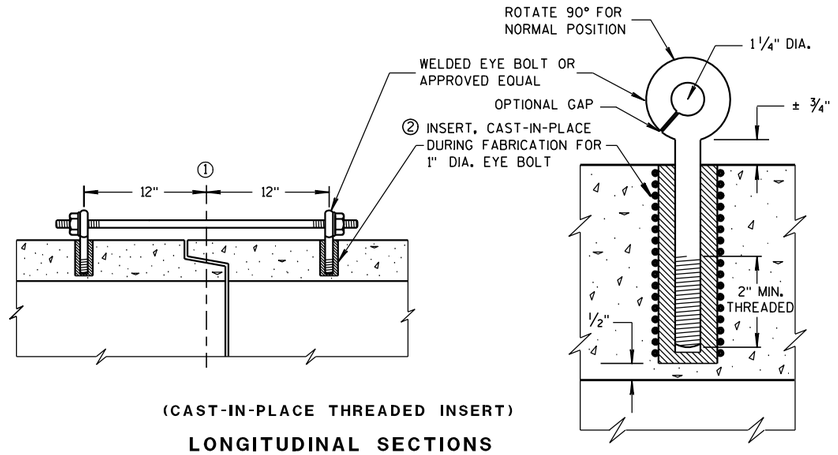
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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 ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

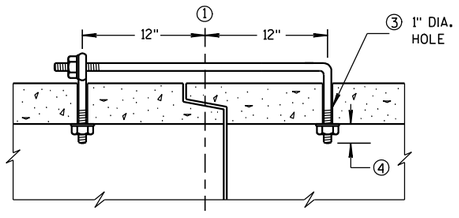
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

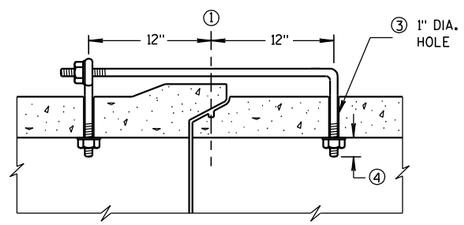
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.



(TONGUE & GROOVE PIPE)

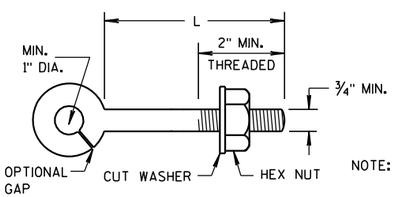


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

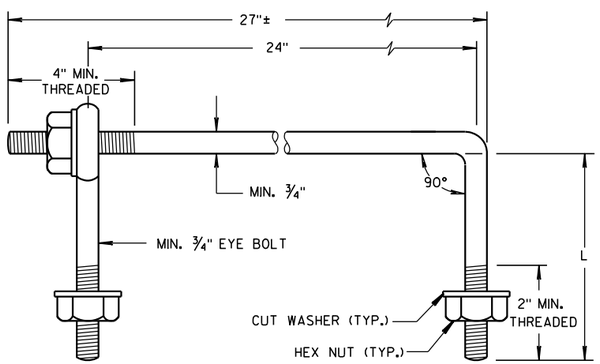
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

EYE BOLT

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



EYE BOLT AND TIE ROD

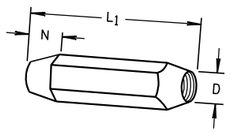
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 1/16

DIMENSIONS SHOWN ARE IN INCHES



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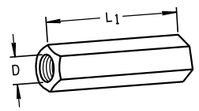
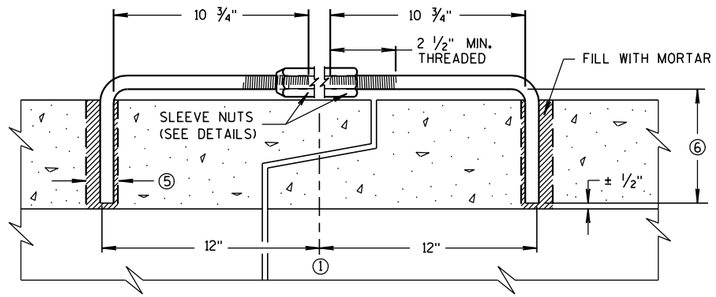


PLAIN

RIGHT AND LEFT THREADS

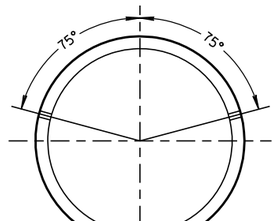
SLEEVE NUTS



LONGITUDINAL SECTION

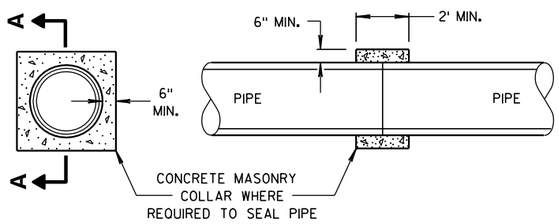
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

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
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

6

S.D.D. 8 F 4-7

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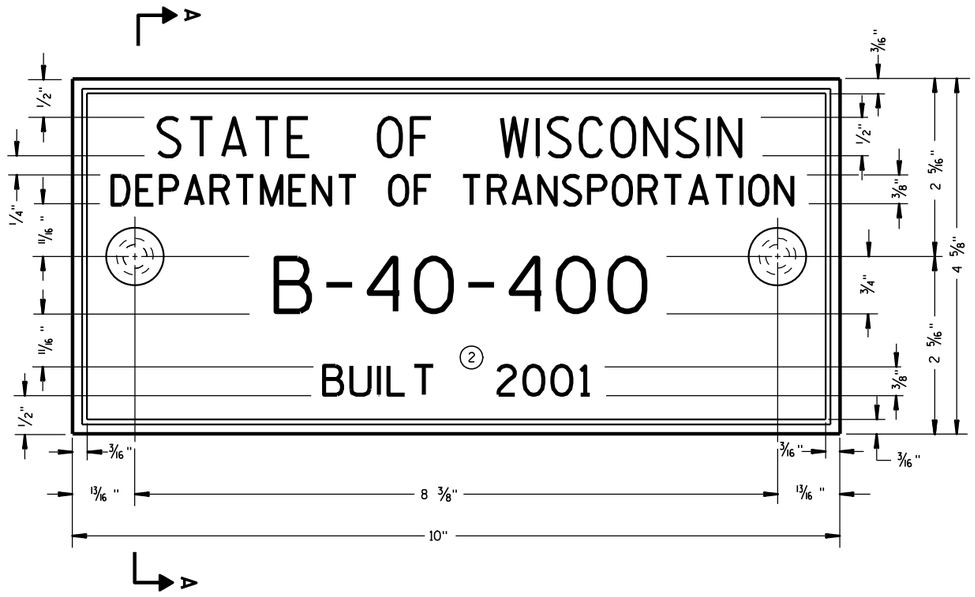
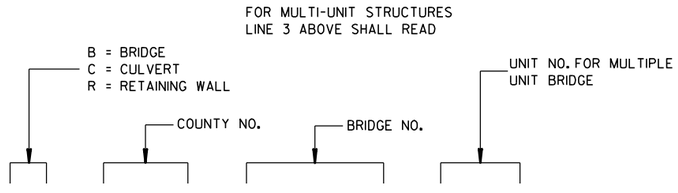
S.D.D. 8 F 4-7



TYPICAL NAME PLATE

(BRIDGES, CULVERTS, AND RETAINING WALLS)



NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES

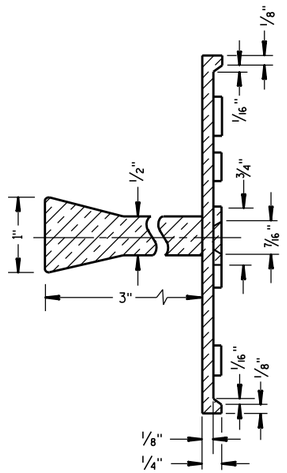
GENERAL NOTES

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.

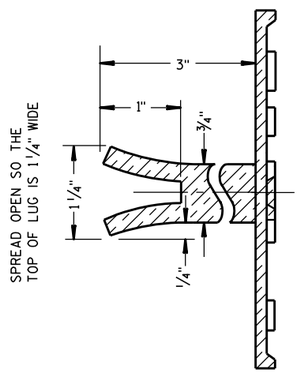
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

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

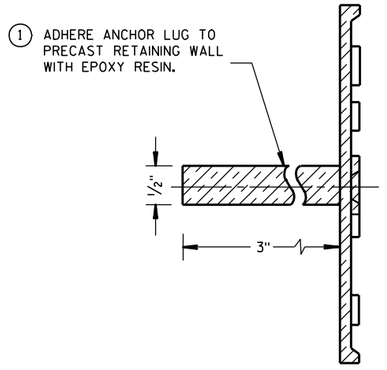
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG



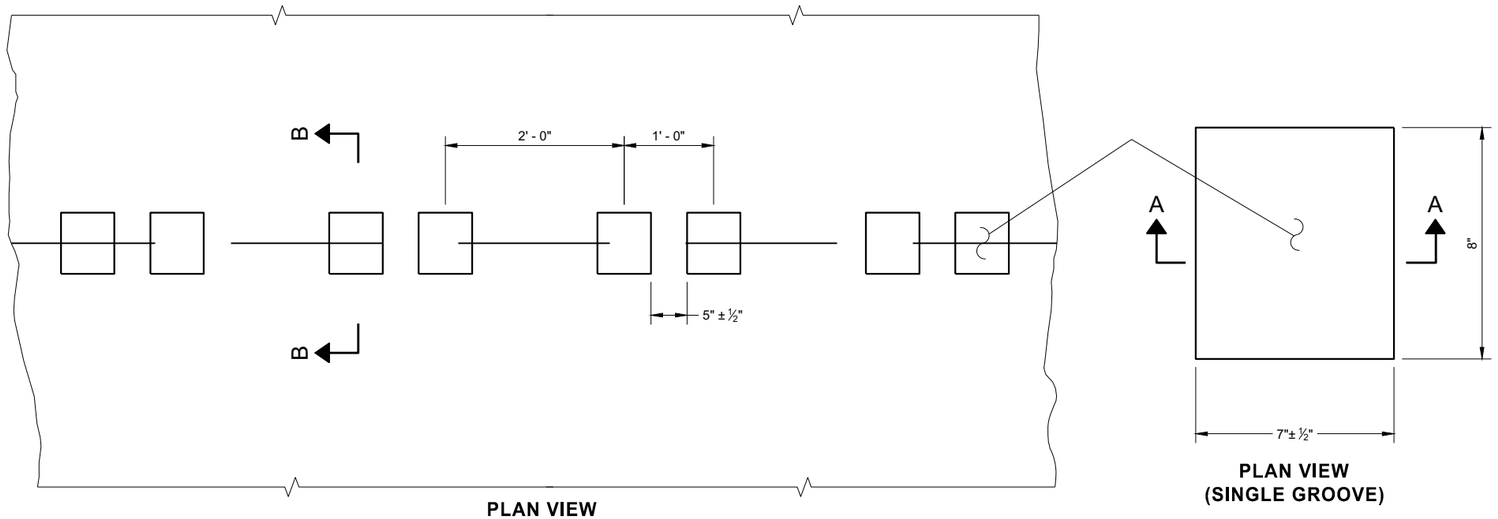
ALTERNATE LUG

(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
FHWA	

6

S.D.D. 12 A 3-10



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP

GENERAL NOTES

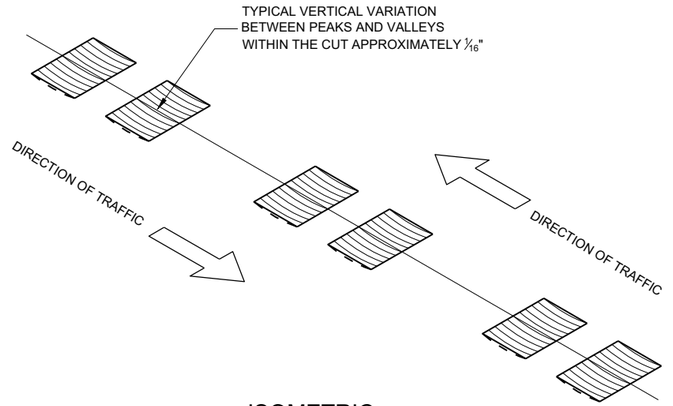
DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL CENTERLINE GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

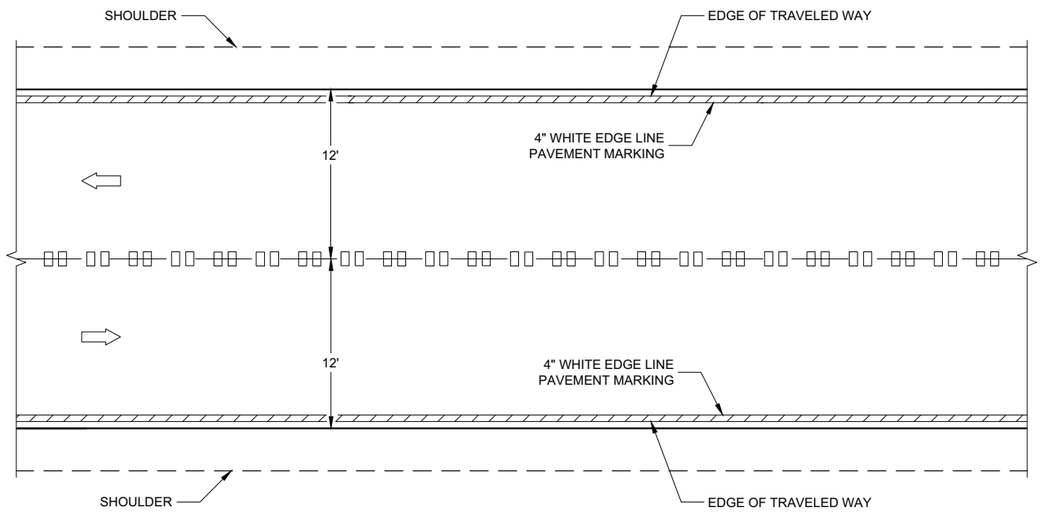
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

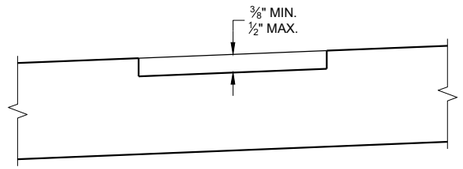
(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



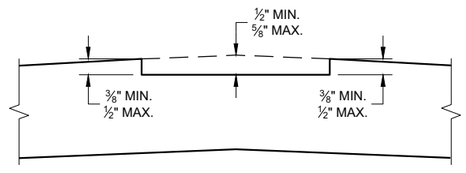
ISOMETRIC



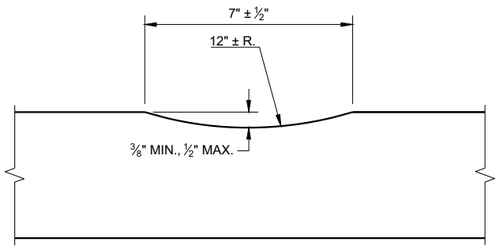
CENTERLINE GROOVES ON TWO-WAY ROADWAYS



SECTION B - B
SUPERELEVATED ROADWAY



SECTION B - B
CROWNED ROADWAY



SECTION A - A

2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13A11 - 03a

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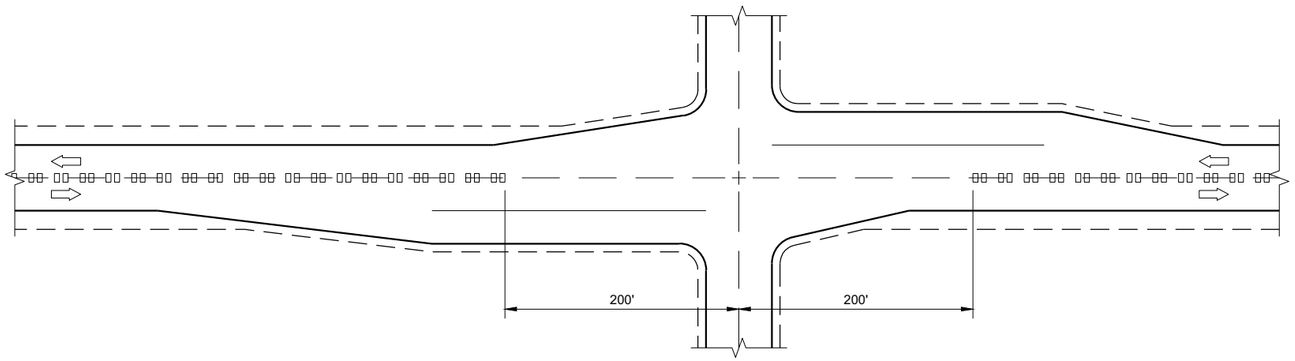
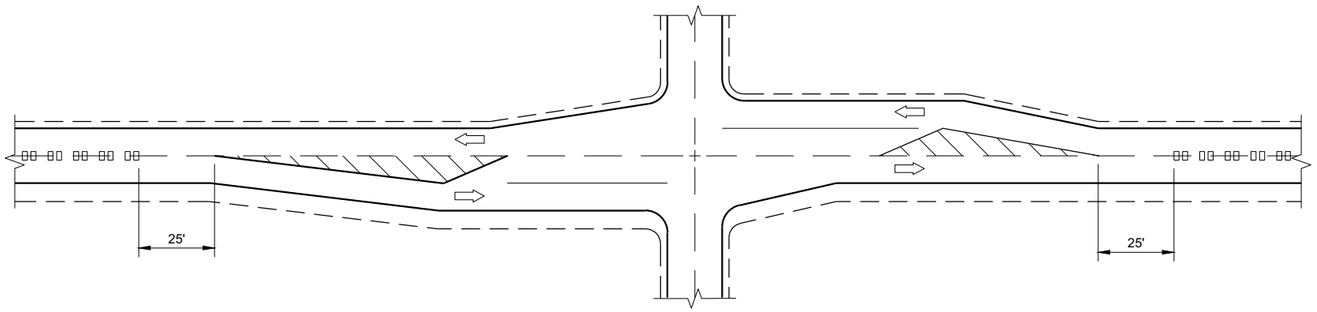
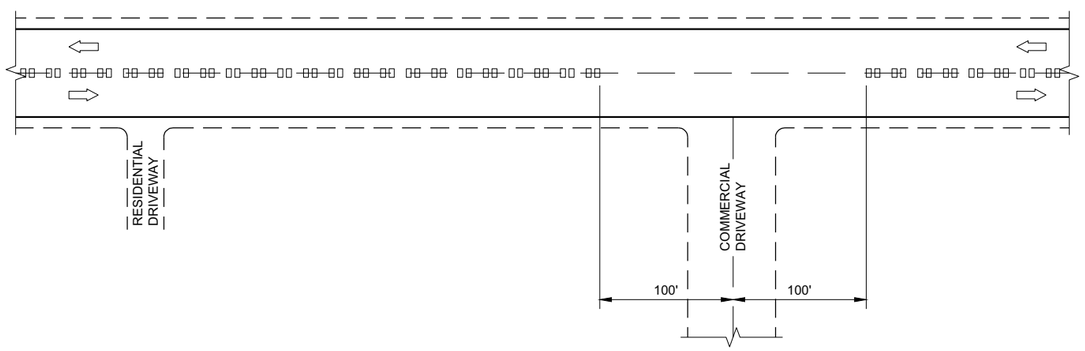
SDD 13A11 - 03a



CENTERLINE GROOVES AT INTERSECTIONS



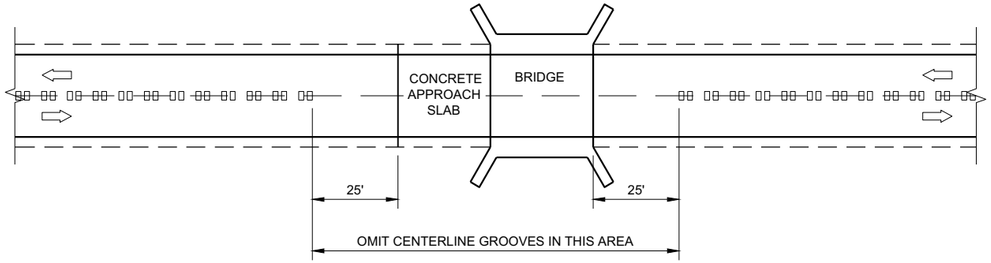
CENTERLINE GROOVES AT INTERSECTIONS (WITH LEFT TURN LANES)



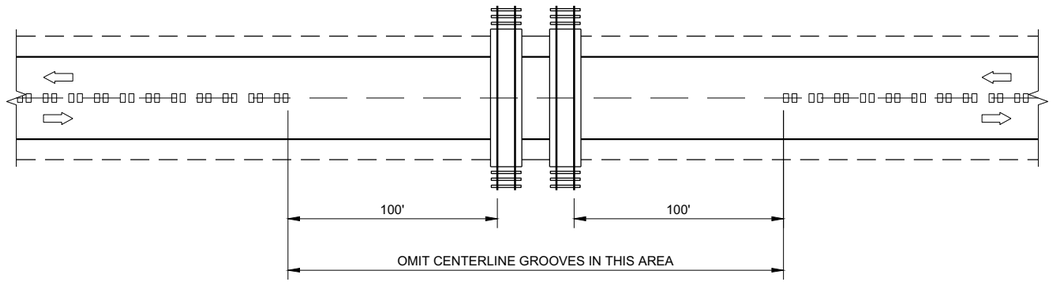
CENTERLINE GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

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



CENTERLINE GROOVES AT BRIDGES



CENTERLINE GROOVES AT RAILROADS

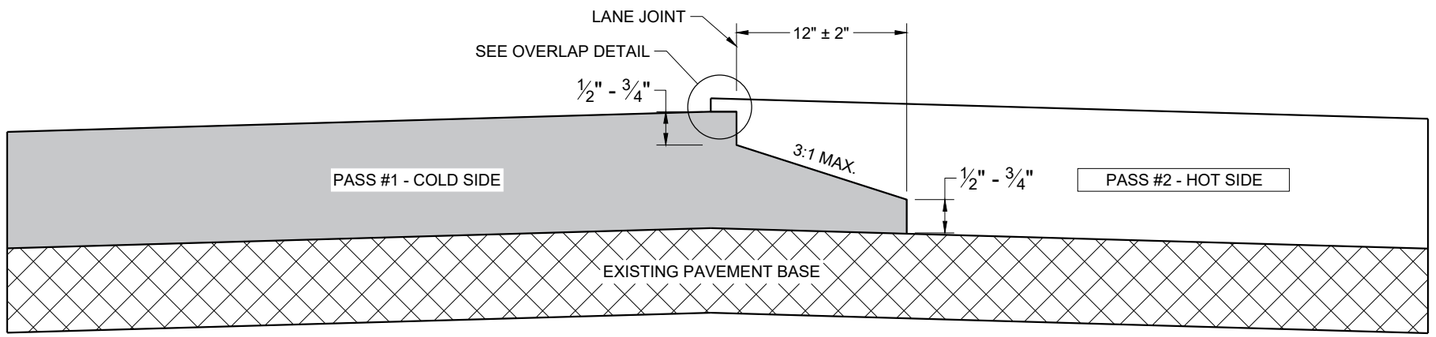
2-LANE RURAL CENTERLINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

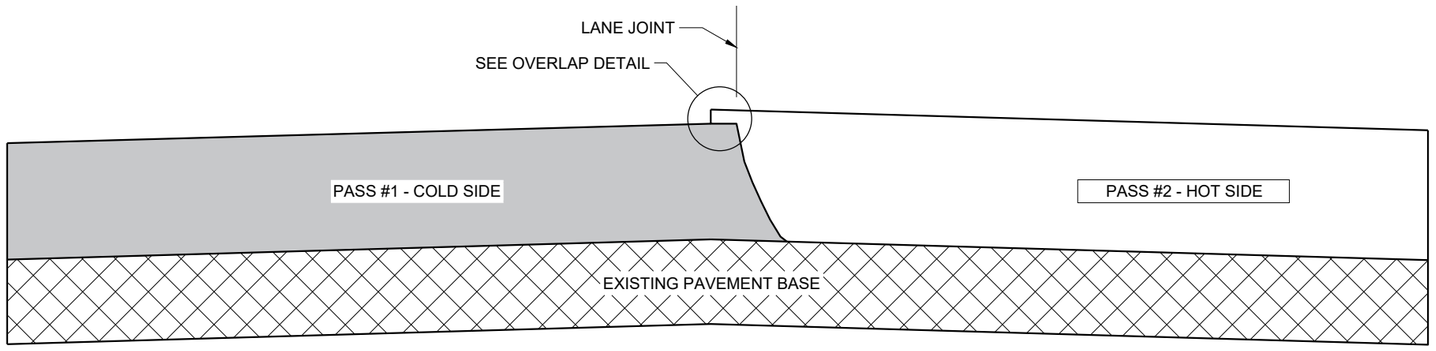
APPROVED
7/2018
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

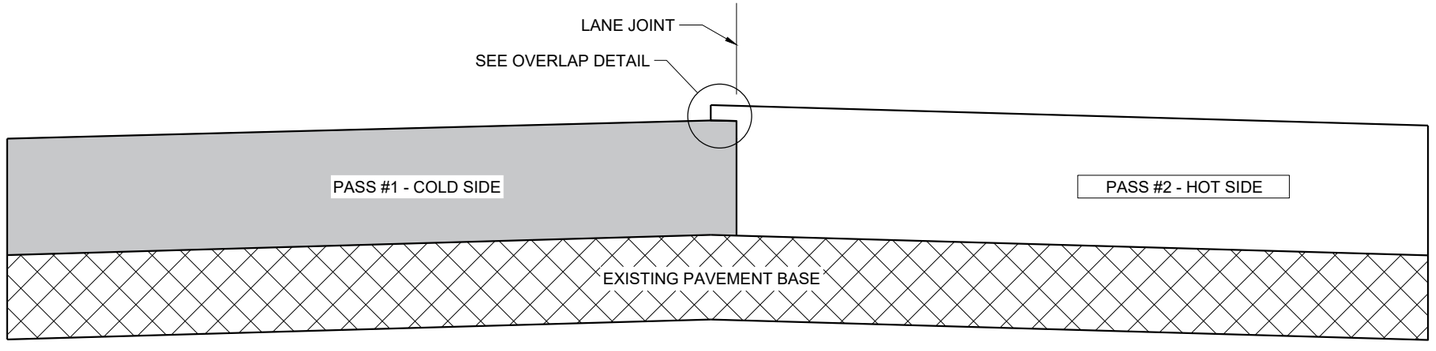
6
SDD 13A11 - 03b



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

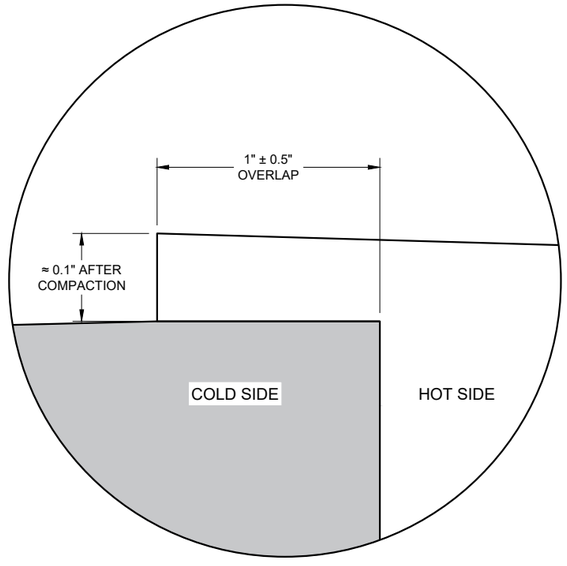
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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

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

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

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



OVERLAP DETAIL (TYPICAL)

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SDD 13C19 - 03

SDD 13C19 - 03

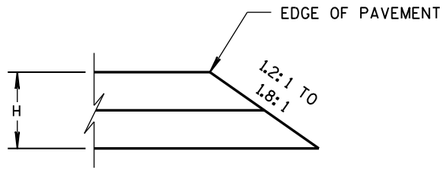
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

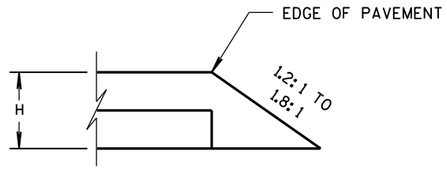
/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA



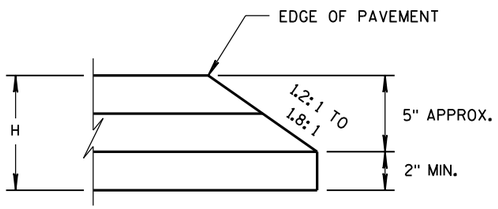
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



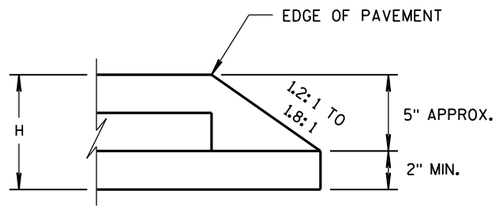
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

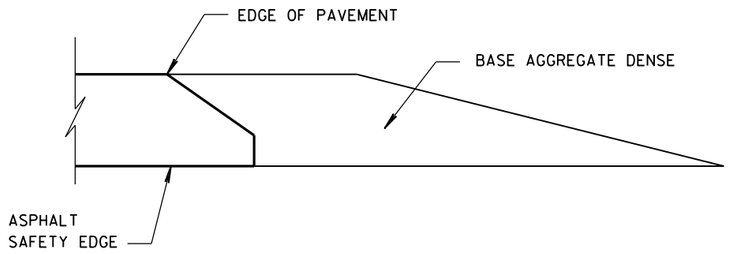
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

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

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

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

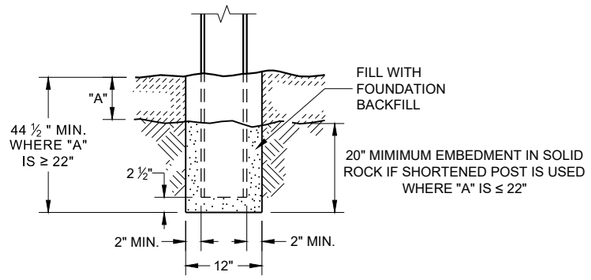
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL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

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

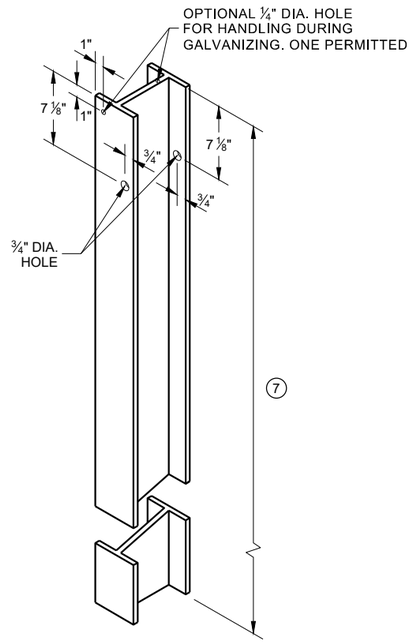
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

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

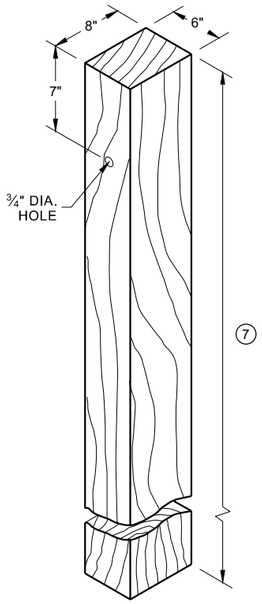
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



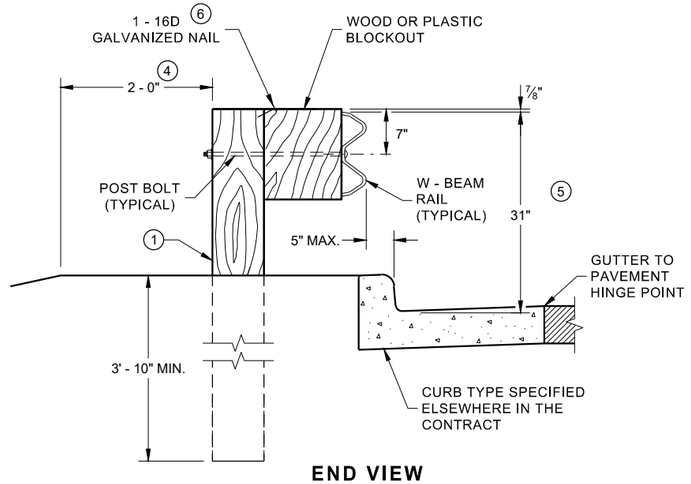
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



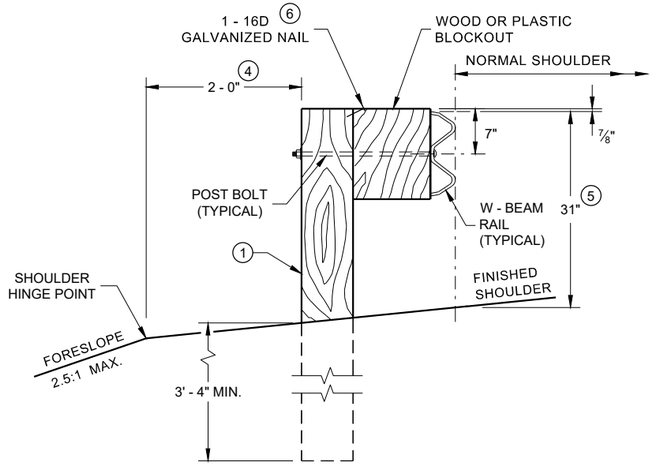
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



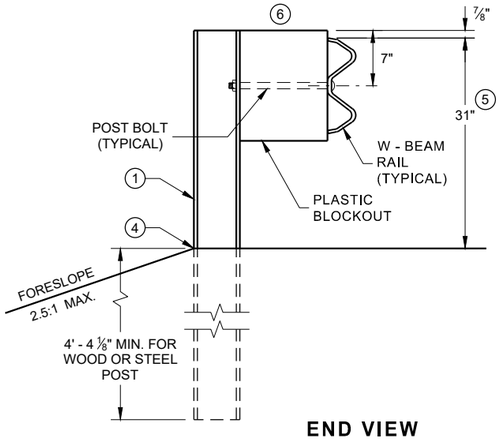
WOOD POST (6" X 8") NOMINAL (1)



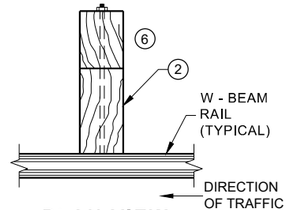
END VIEW
LOCATED ALONG A CURBED ROADWAY



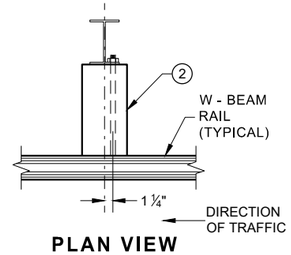
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



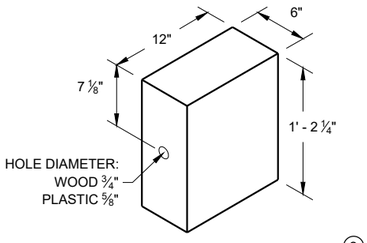
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



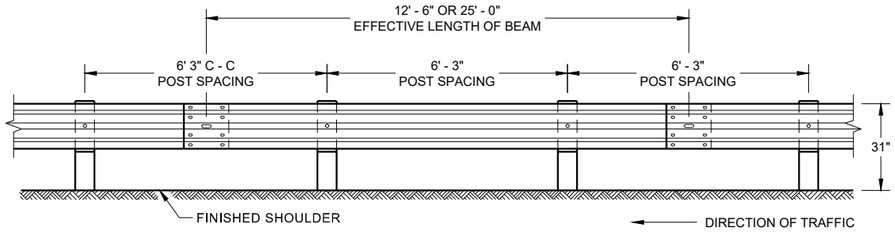
PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



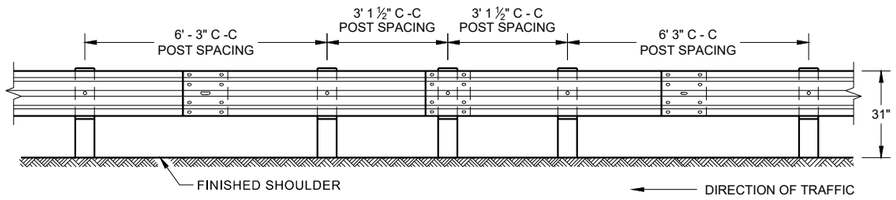
WOOD OR PLASTIC BLOCKOUT (2)

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

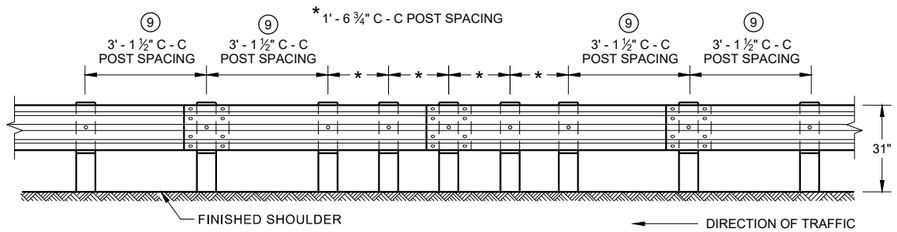
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



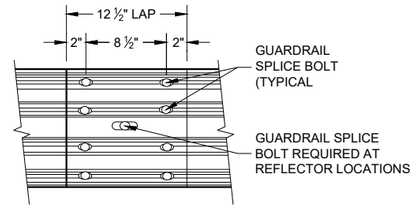
FRONT VIEW
POST SPACING STANDARD INSTALLATION



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



FRONT VIEW
QUARTER POST SPACING (QS)



FRONT VIEW
MID-SPAN BEAM SPLICE

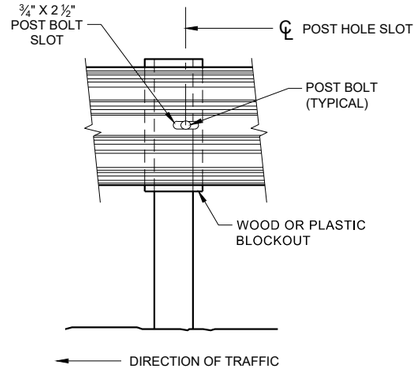
GENERAL NOTES

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

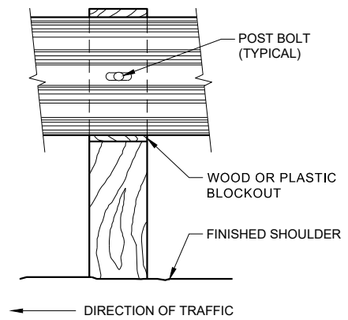
⑨ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

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

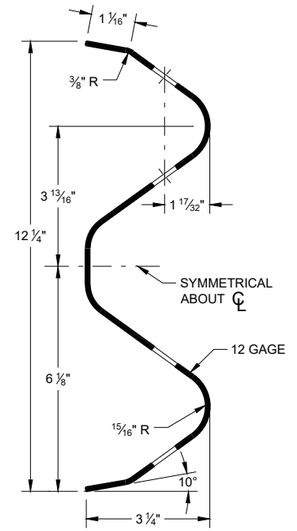
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



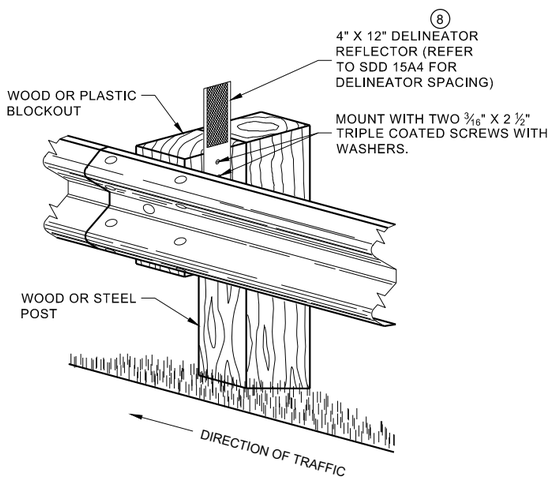
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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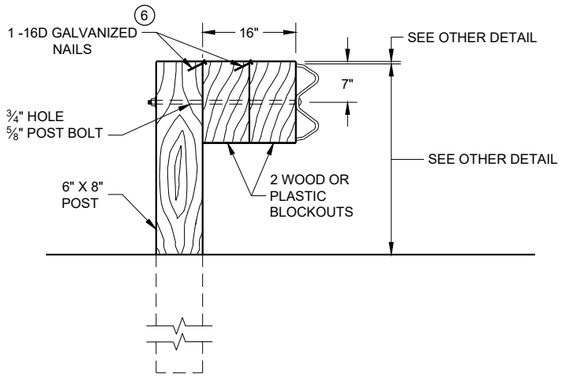
SDD 14B42 - 07b

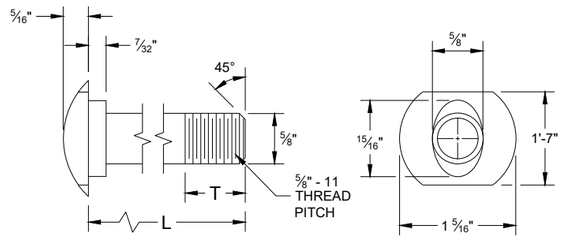


DETAIL FOR 16" BLOCKOUT DEPTH

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

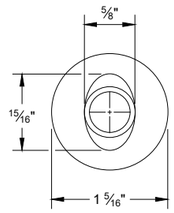
NOTE:

1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 3⁄16".
2. IF THE BOLT EXTENDS MORE THAN ¼" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

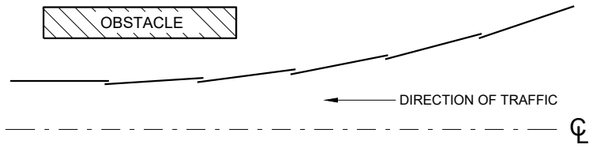


POST BOLT TABLE

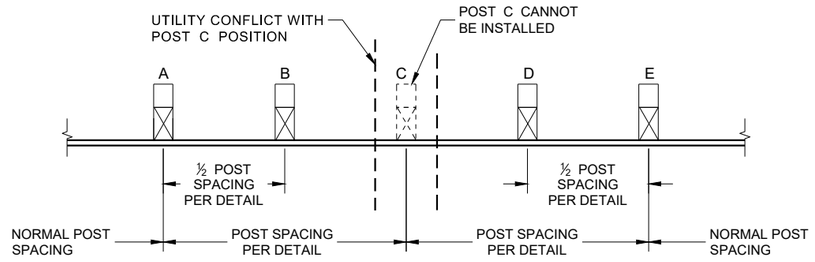
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1⁄16"
18"	4"
21"	4 1⁄16"
25"	4"



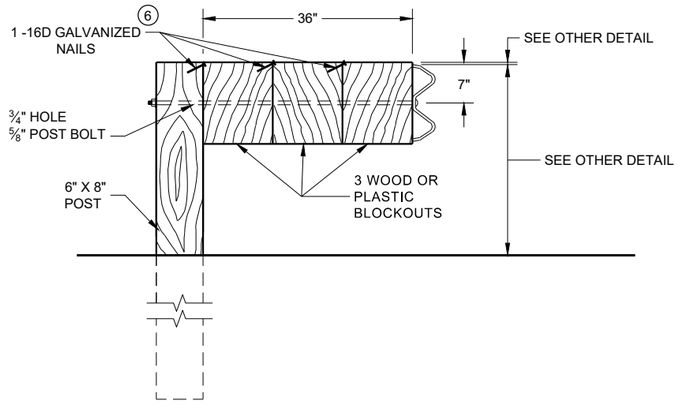
ALTERNATE BOLT HEAD



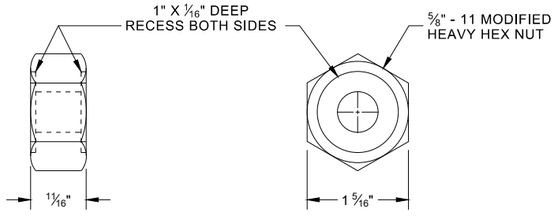
PLAN VIEW
BEAM LAPPING DETAIL



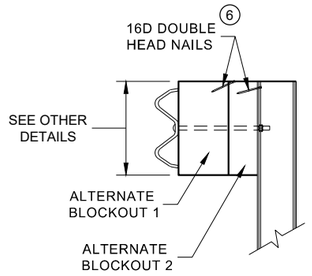
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



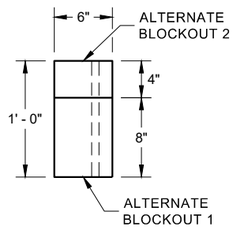
DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW



PLAN VIEW

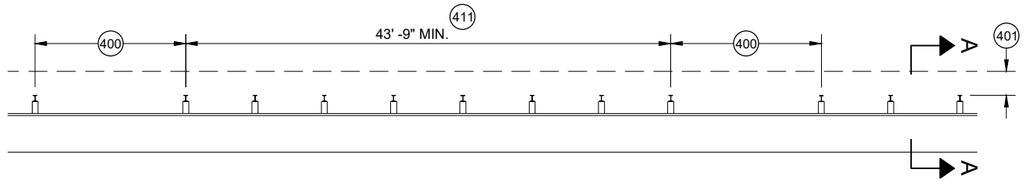
ALTERNATE WOOD BLOCKOUT DETAIL

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

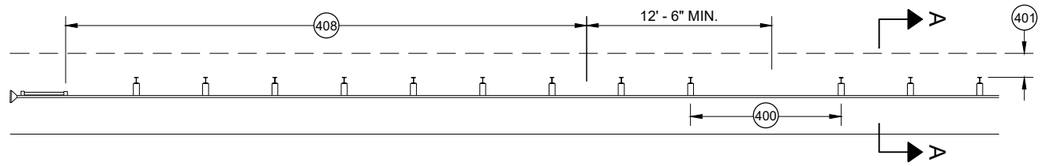
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

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

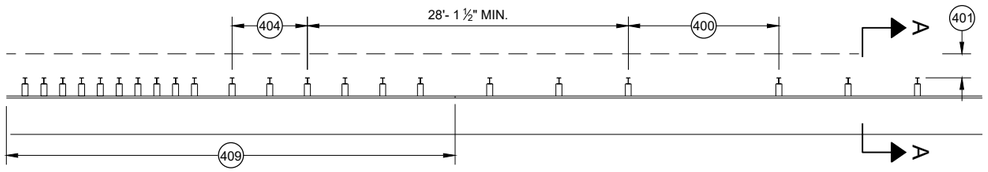
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL



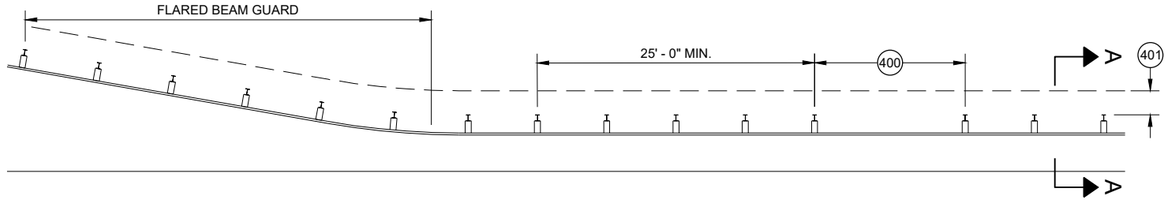
MISSING POST IN MGS GUARDRAIL



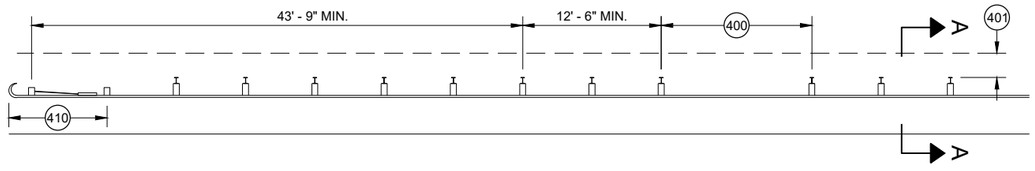
MISSING POST IN MGS GUARDRAIL NEAR EAT



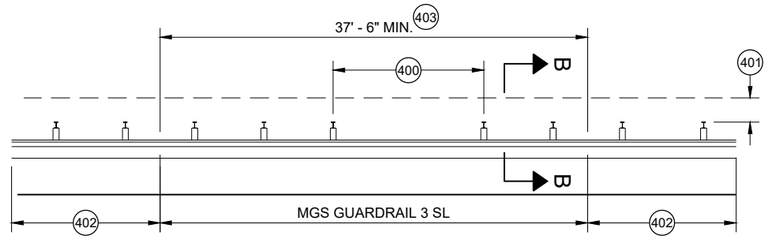
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

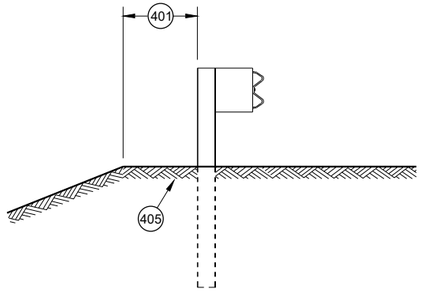


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

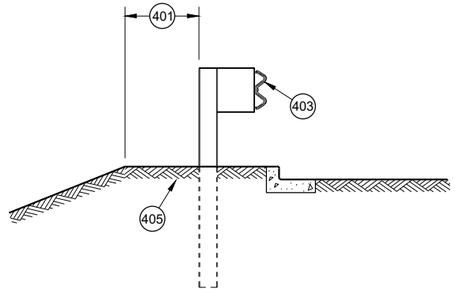


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

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



SECTION A - A 406



SECTION B - B 406

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

6

SDD 14B42 - 07d

SDD 14B42 - 07d

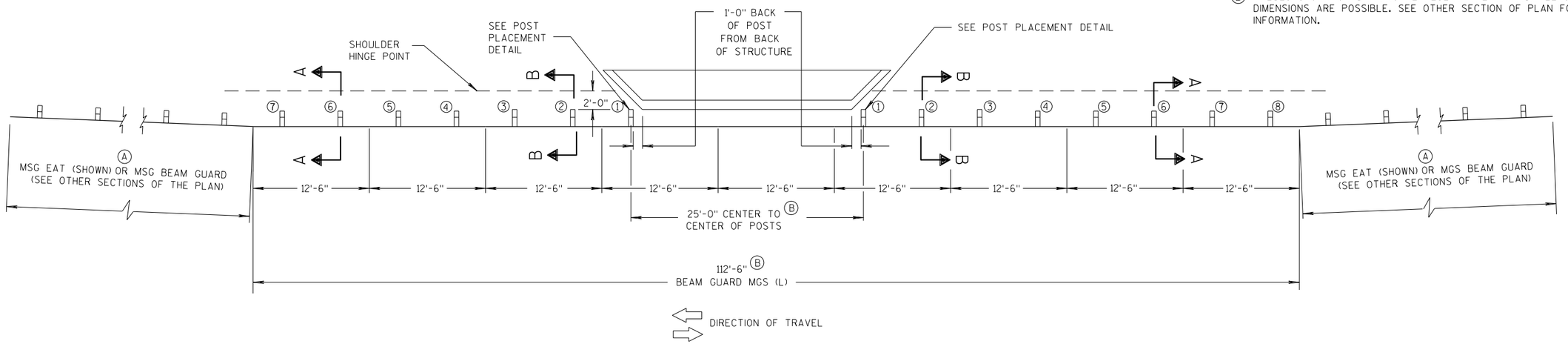
GENERAL NOTES

POSTS 1 THROUGH 3 ARE CRT POSTS.
ALL OTHER POSTS SHALL BE WOOD OR STEEL.

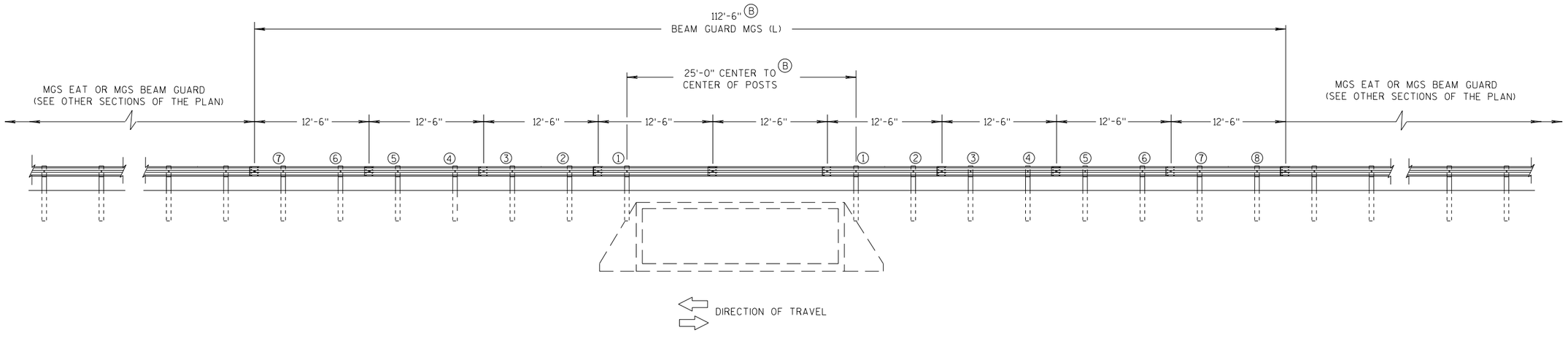
SEE SDD 14 B 42 FOR MORE DETAILS.

(A) FLARE FOR MGS EAT SHOWN. IF INSTALLING MGS NO FLARE NEEDED.

(B) VALUES SHOWN ON DRAWING REPRESENT THE MAXIMUM LENGTH. SHORTER DIMENSIONS ARE POSSIBLE. SEE OTHER SECTION OF PLAN FOR MORE INFORMATION.



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L) TWO-WAY TRAFFIC

MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 43-4a

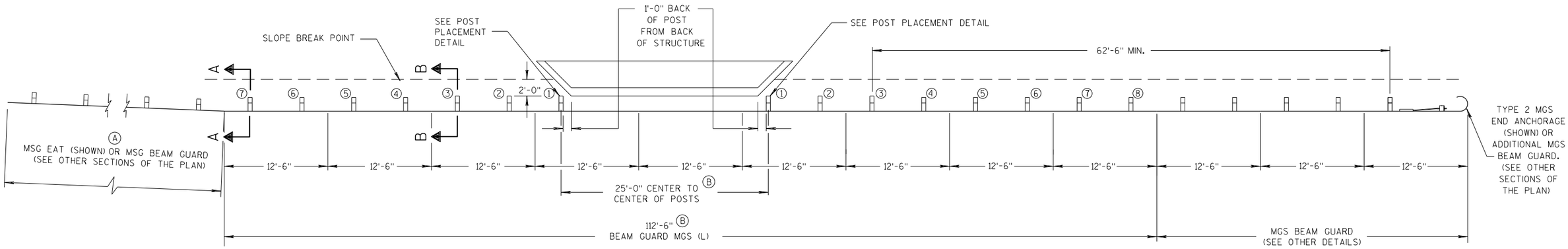
GENERAL NOTES

POSTS 1 THROUGH 3 ARE CRT POSTS.
ALL OTHER POSTS SHALL BE WOOD OR STEEL.

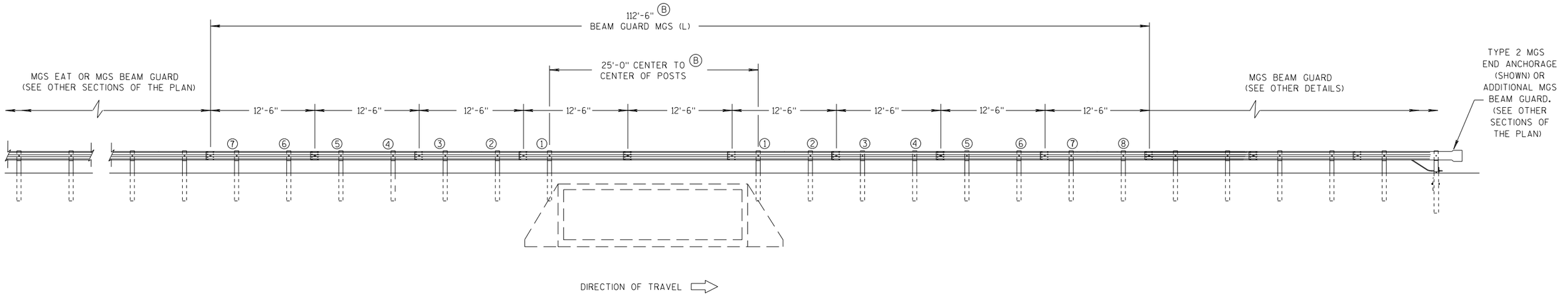
SEE SDD 14 B 42 FOR MORE DETAILS.

(A) FLARE FOR MGS EAT SHOWN. IF INSTALLING MGS NO FLARE NEEDED.

(B) VALUES SHOWN ON DRAWING REPRESENT THE MAXIMUM LENGTH. SHORTER DIMENSIONS ARE POSSIBLE. SEE OTHER SECTION OF PLAN FOR MORE INFORMATION.



PLAN VIEW



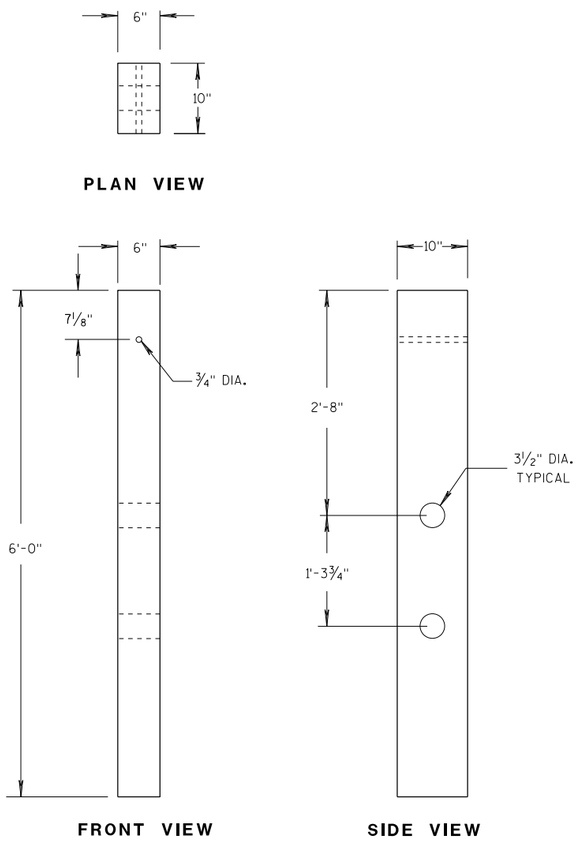
ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L) ONE-WAY TRAFFIC

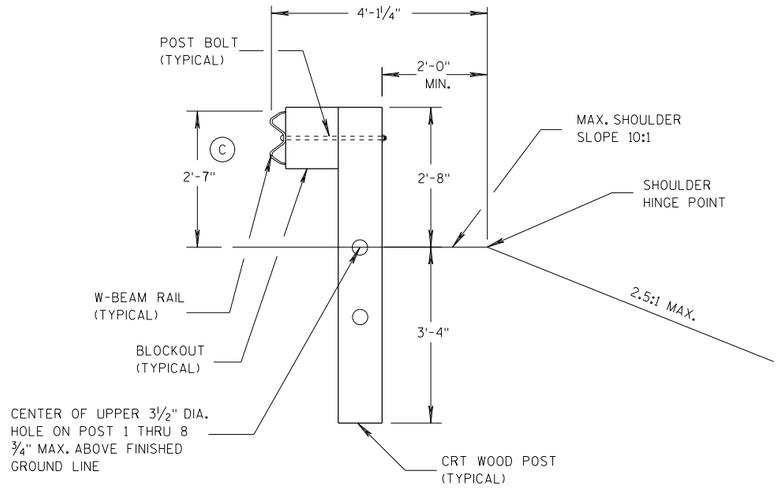
MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	57

6

S.D.D. 14 B 43-4b



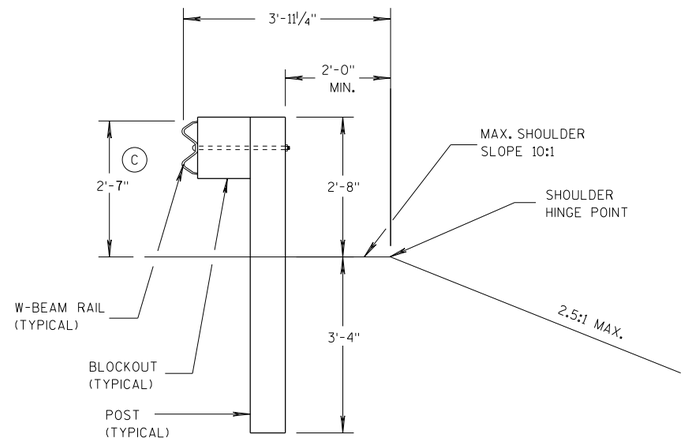
CRT WOOD POST



SECTION B-B

POSTS NO. 1-3

SEE OTHER DETAILS



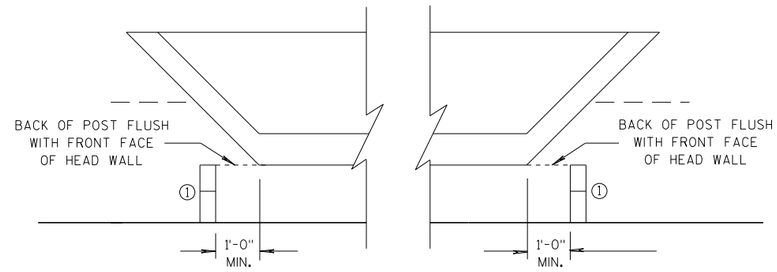
SECTION A-A

POSTS NO. 4-8

SEE OTHER DETAILS

GENERAL NOTES

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



POST PLACEMENT DETAIL

MIDWEST GUARDRAIL SYSTEM
LONG SPAN MGS (L)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS DIRECTOR
ENGINEER

58

NT

6

S.D.D. 14 B 43-4c

6

S.D.D. 14 B 43-4c

GENERAL NOTES

(A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL) AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED

(C) DIFFERENT MANUFACTURERS REQUIRE DIFFERENT PERFORATED W - BEAM RAIL END PANELS. SEE MANUFACTURER'S INFORMATION.

(D) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF - TAPPING SCREWS. ONE SCREW PER CORNER.

(E) HARDWARE MAY VARY BETWEEN MANUFACTURER. SEE MANUFACTURER'S DRAWING FOR INFORMATION.

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

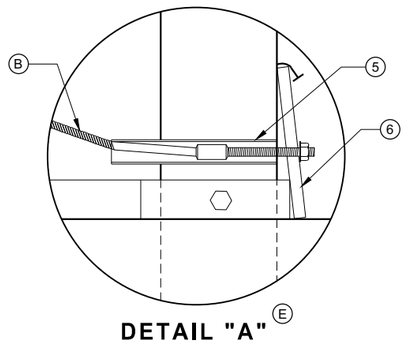
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

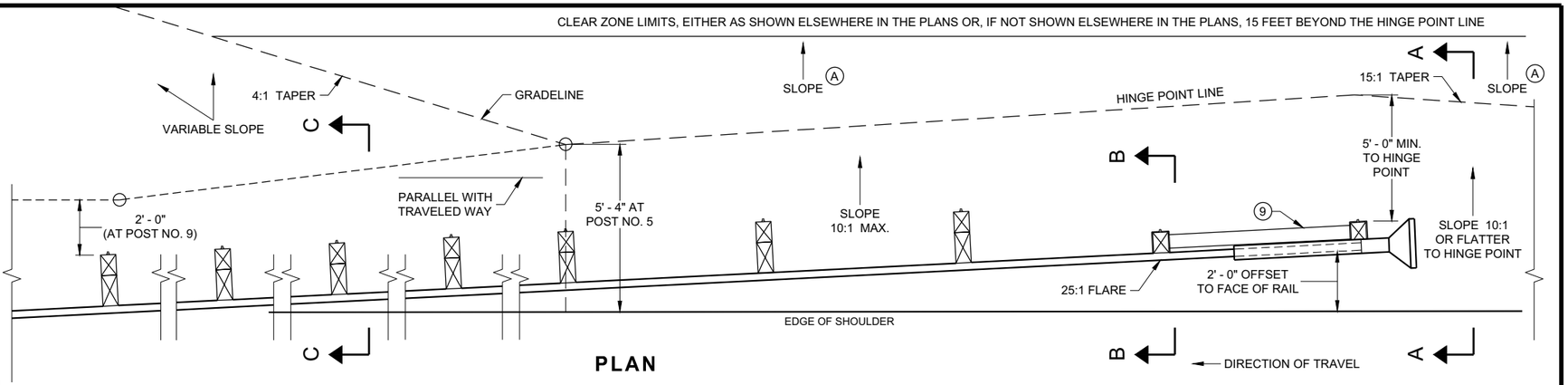
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

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

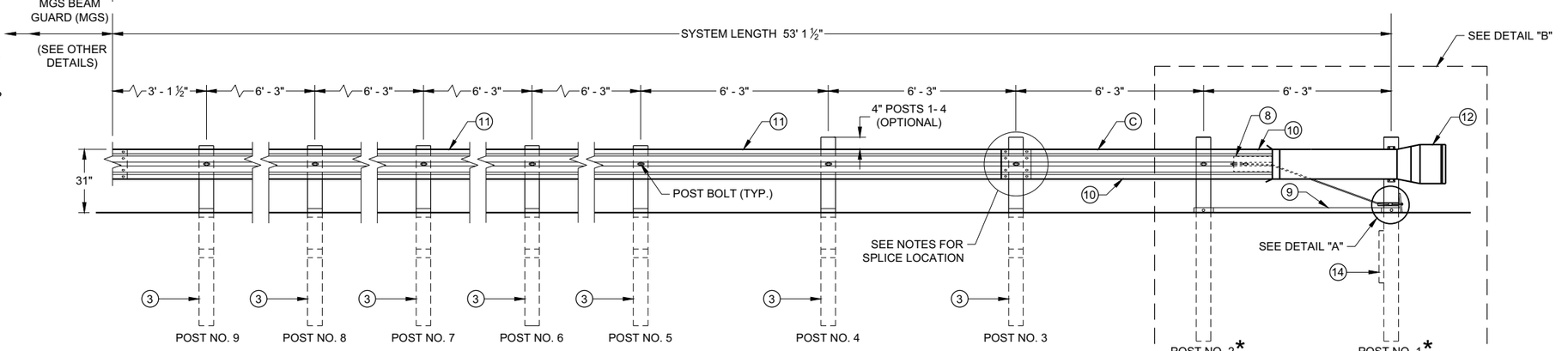
THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



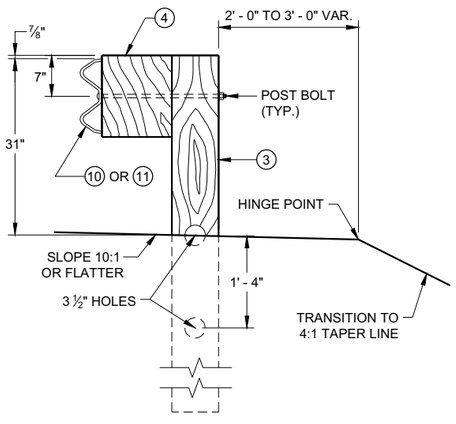
DETAIL "A" (E)



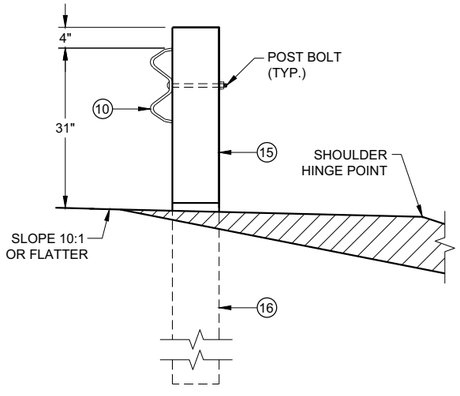
PLAN



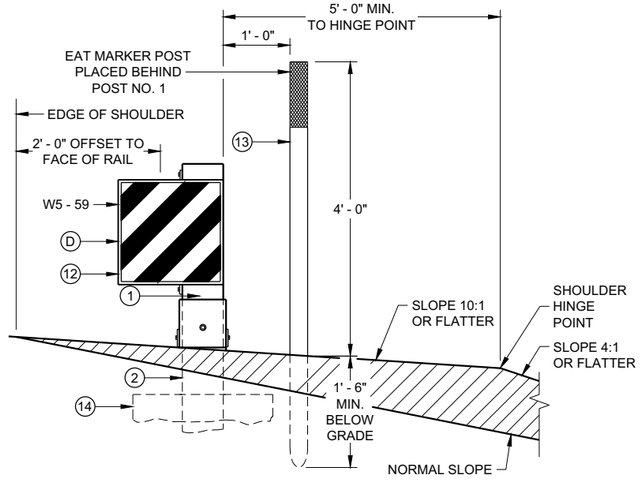
ELEVATION



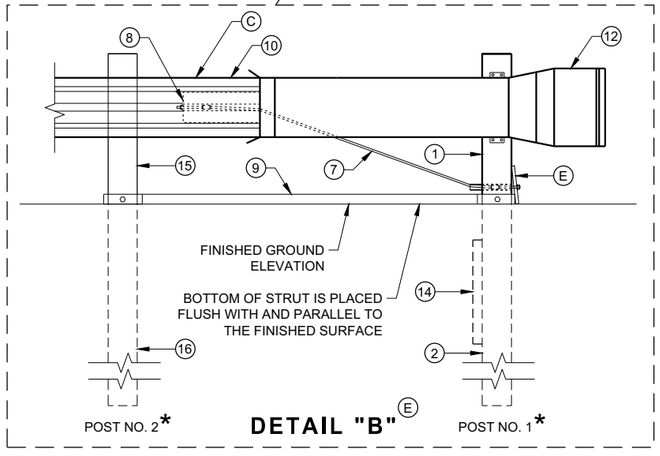
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

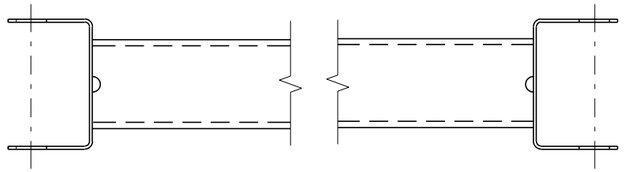
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B44 - 04a

6

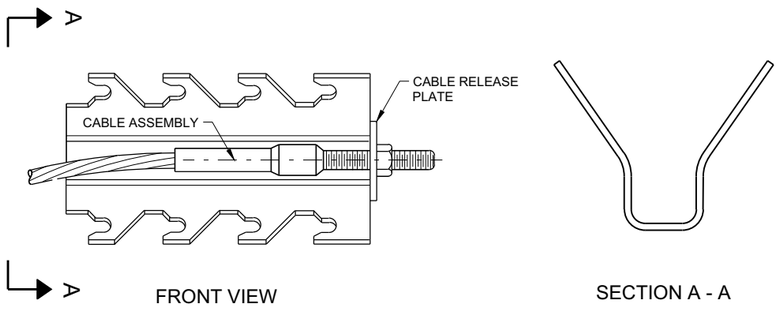
SDD 14B44 - 04a



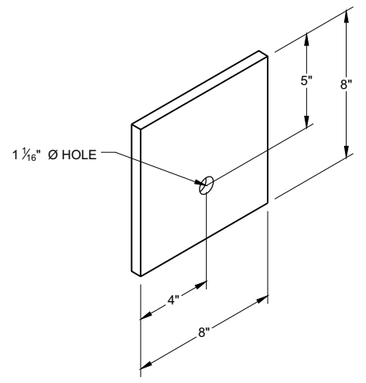
GENERIC GROUND STRUT ⑨ Ⓔ

BILL OF MATERIALS

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



GENERIC ANCHOR CABLE BOX ⑧ Ⓔ



BEARING PLATE ⑥ Ⓔ

6

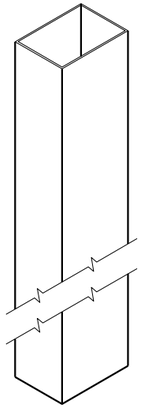
6

SDD 14B44 - 04b

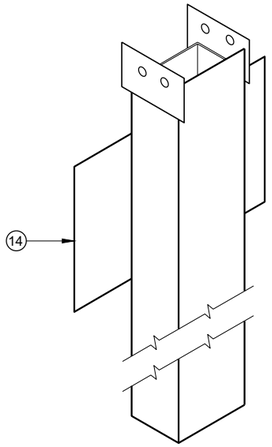
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

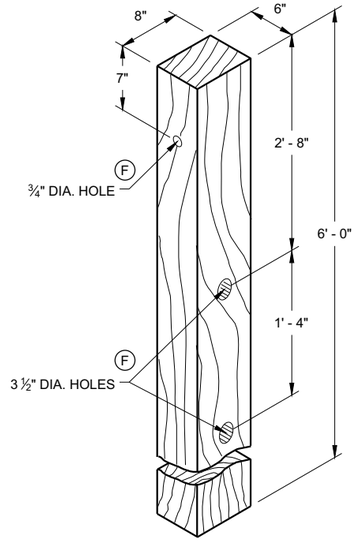
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



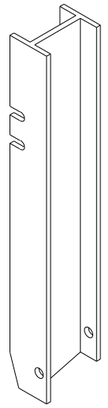
UPPER POST NO. 1 (1) (E)



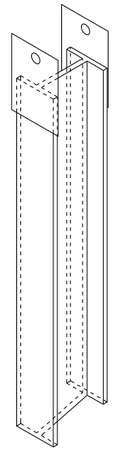
LOWER POST NO. 1 (2) (E)



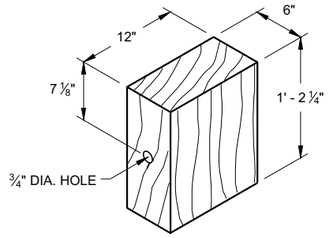
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



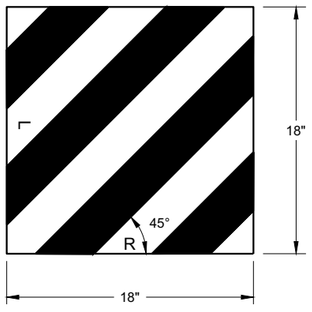
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

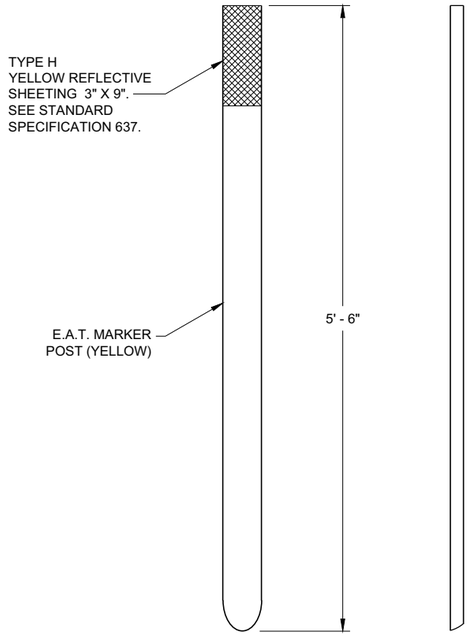


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



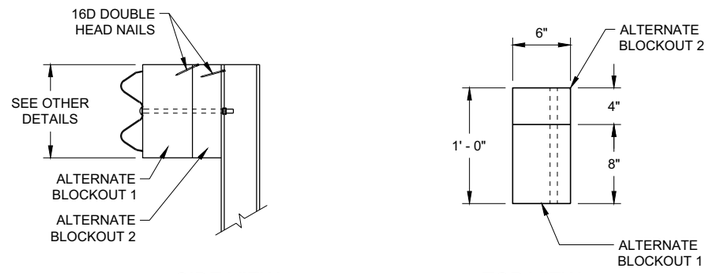
W5 - 59

REFLECTIVE SHEETING DETAIL (E)



FRONT VIEW SIDE VIEW

E.A.T. MARKER POST (13)



SIDE VIEW TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

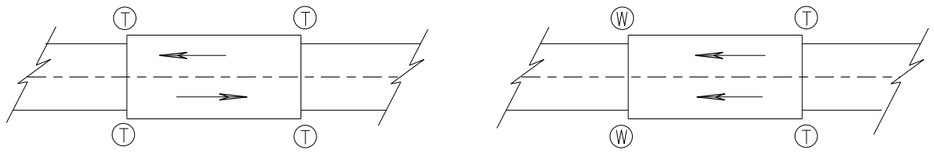
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

6

SDD 14B44 - 04c
SDD 14B44 - 04c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

(T) THRIE BEAM CONNECTION

(W) W-BEAM CONNECTION WHEN REQUIRED

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

GENERAL NOTES

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

TRANSITION USES STEEL POSTS ONLY.

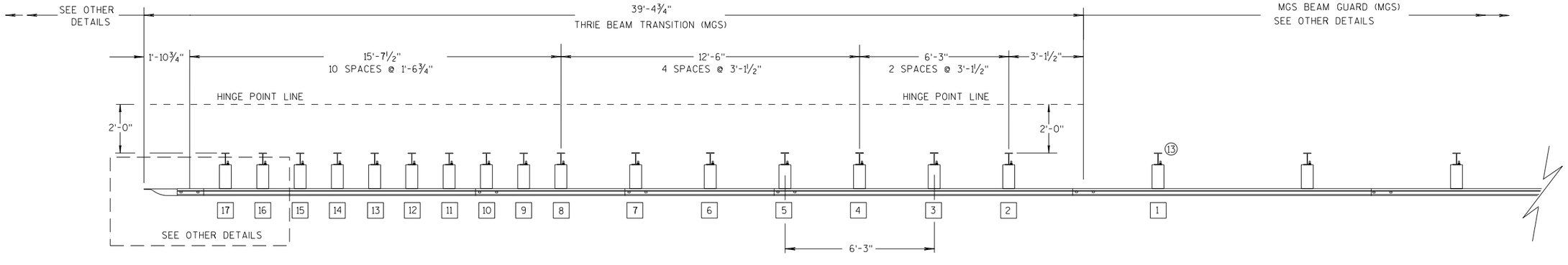
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

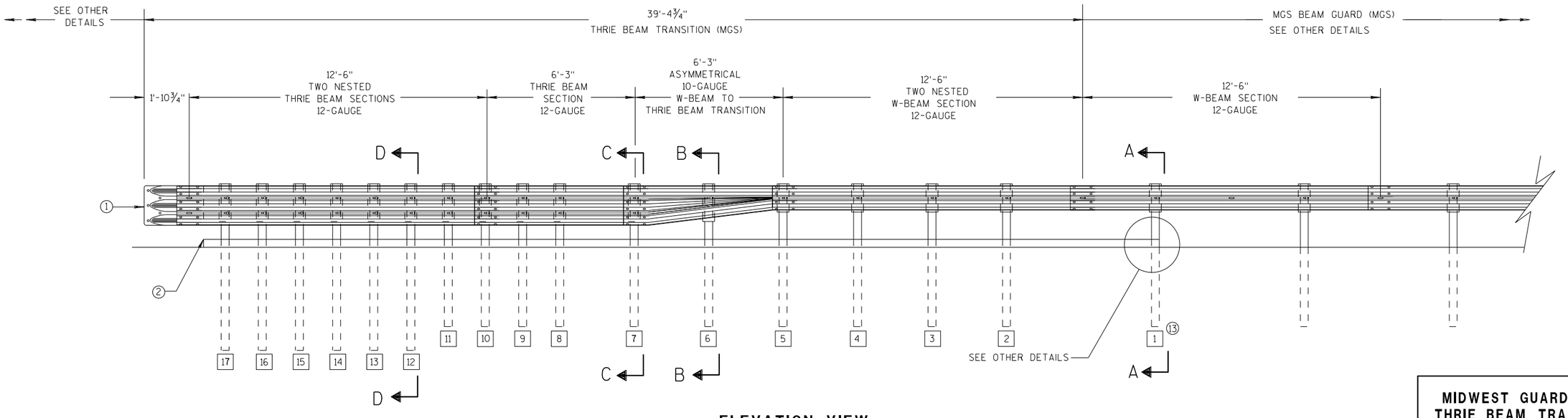
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

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

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



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

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

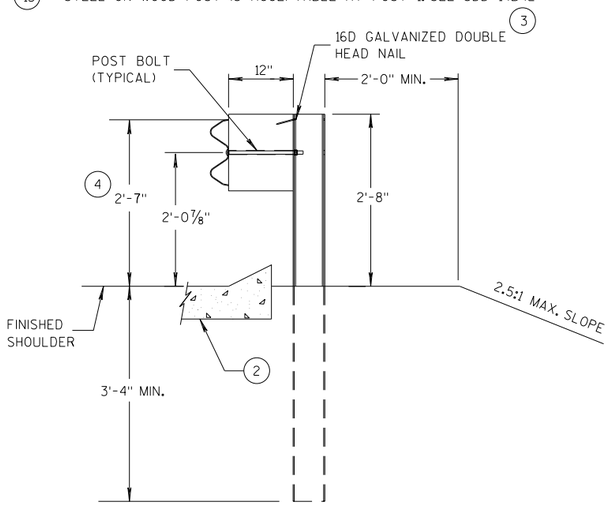
GENERAL NOTES

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

(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 10D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

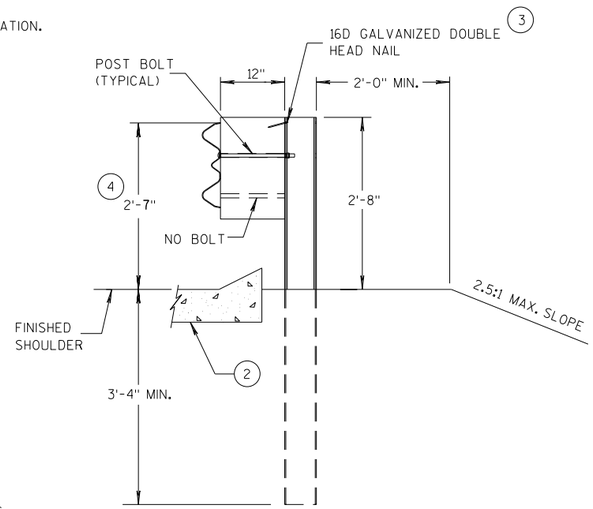
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

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



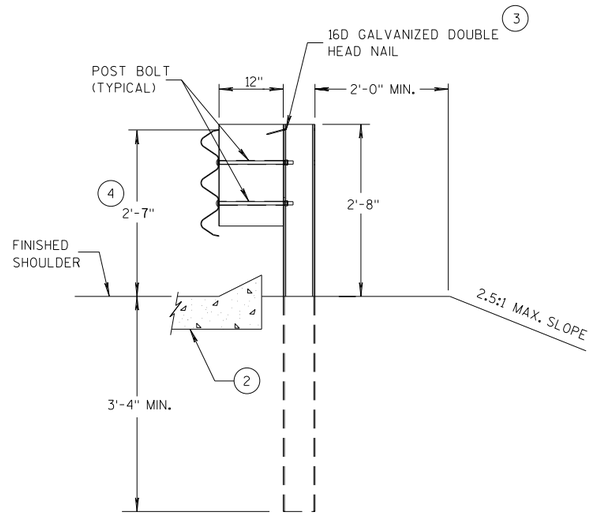
SECTION A-A (13)

POSTS 1-5



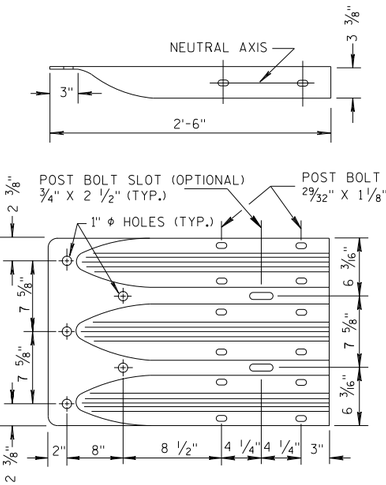
SECTION B-B

POST 6

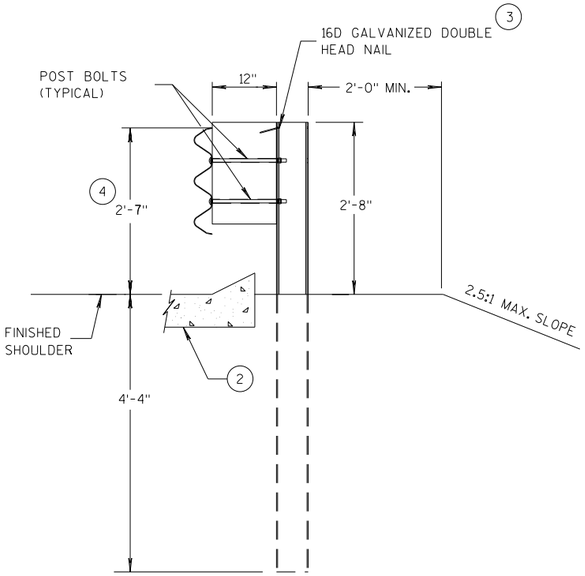


SECTION C-C

POSTS 7-11

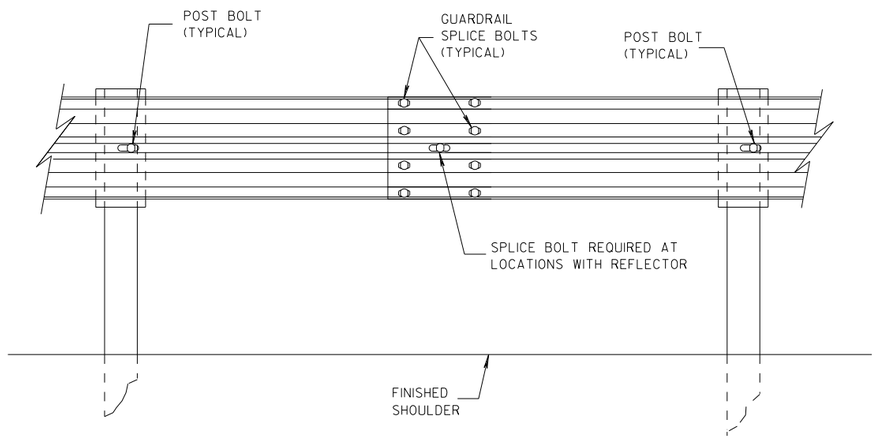


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-17



SPLICE DETAIL

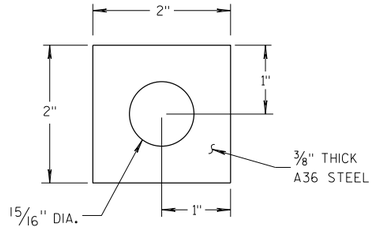
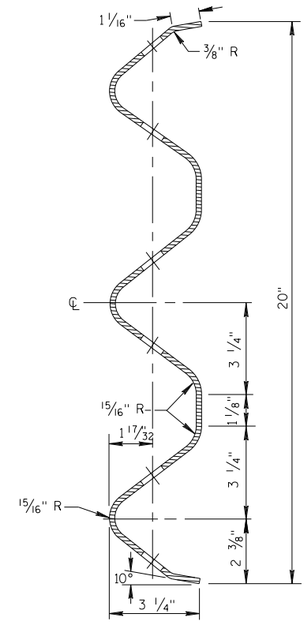


PLATE WASHER DETAIL



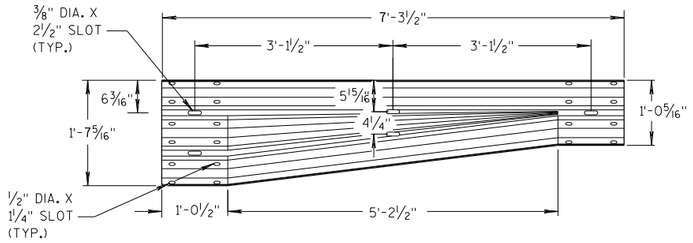
SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

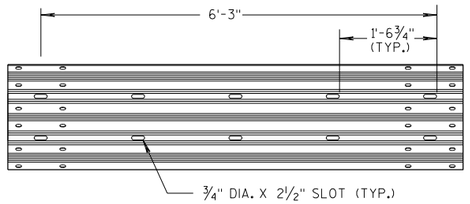
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

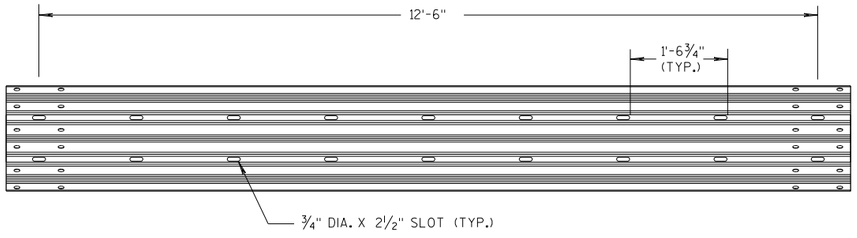
S.D.D. 14 B 45-5b



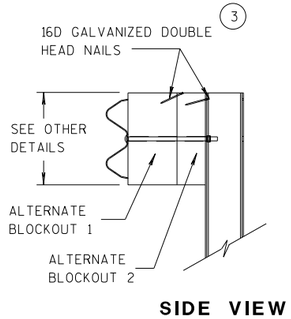
W-BEAM TO THRIE BEAM TRANSITION SECTION



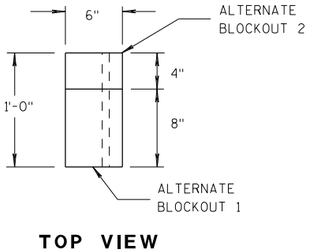
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

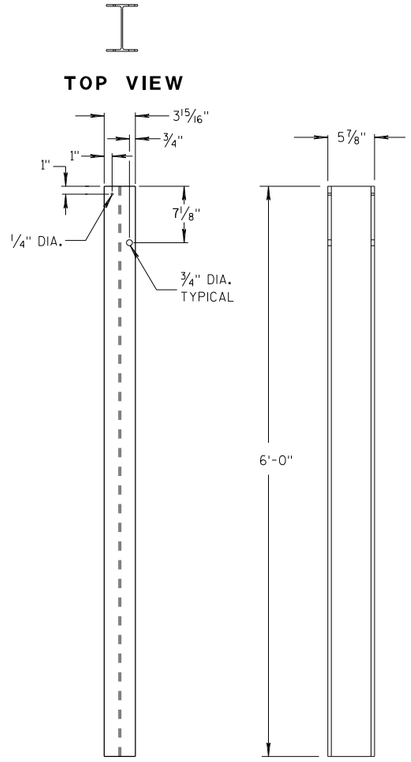


SIDE VIEW



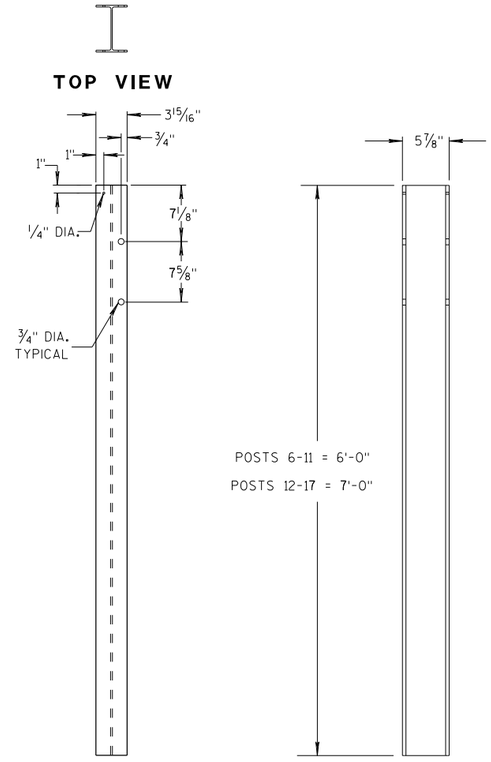
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



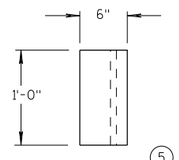
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

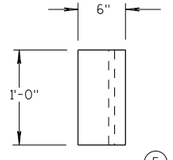


FRONT VIEW SIDE VIEW

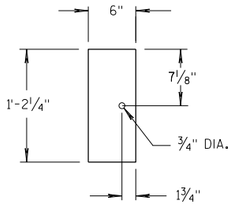
STEEL POSTS 6-17



TOP VIEW (5)

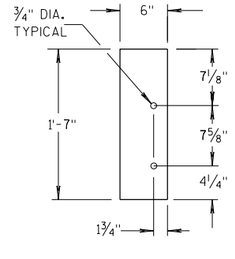


TOP VIEW (5)



FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-17

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

BOLT HOLES FOR POST ARE ON FRONT AND OF SIDE OF POST.

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

(5) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOF

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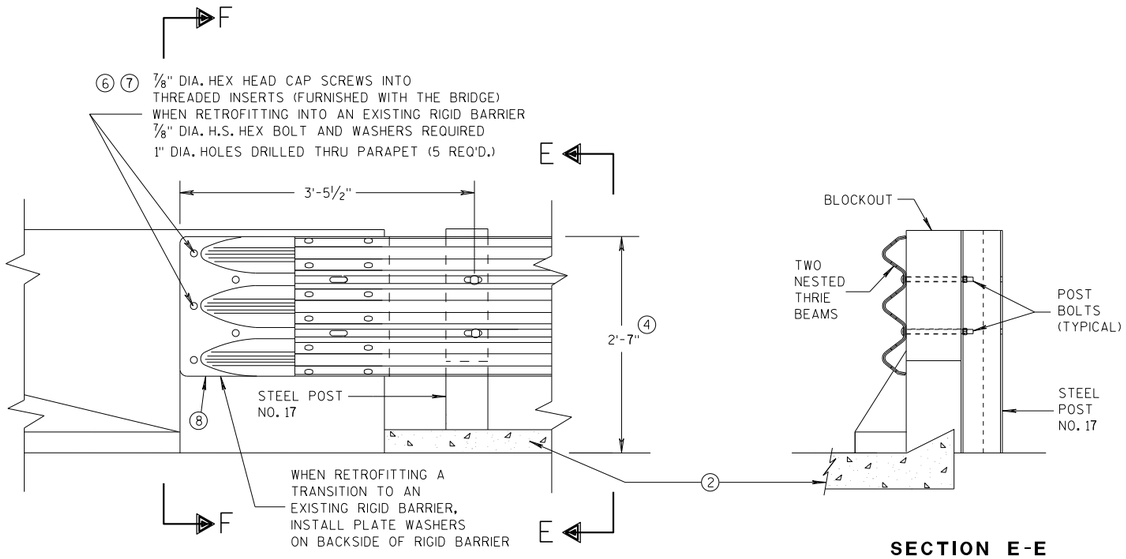
S.D.D. 14 B 45-5c



FRONT VIEW

SECTION E-E

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

GENERAL NOTES

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

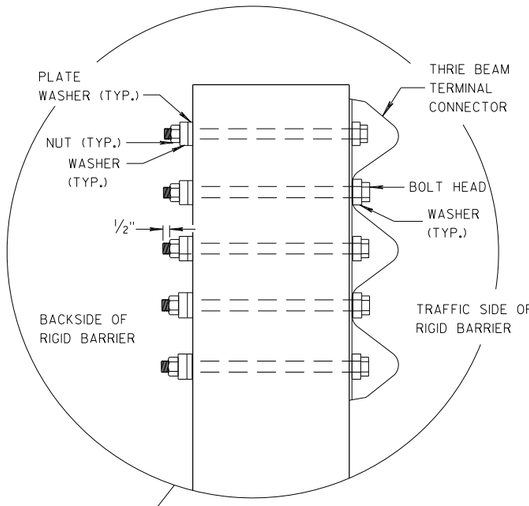
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

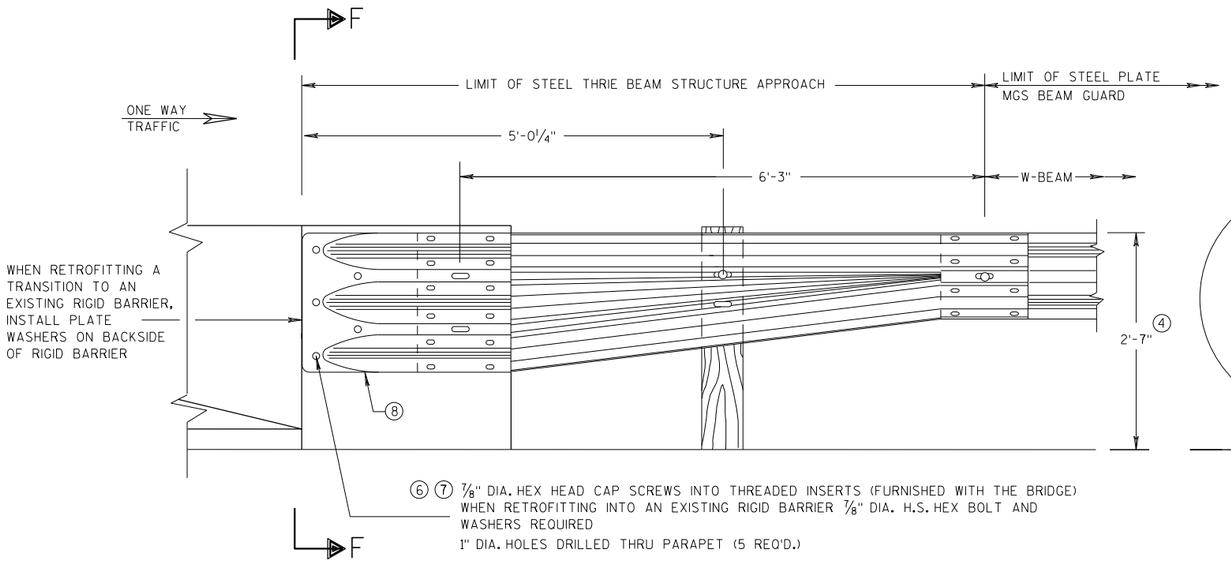
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

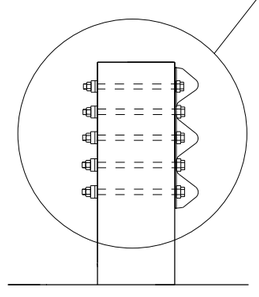
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE.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

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

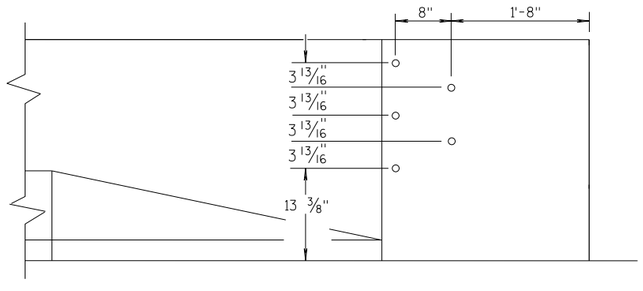




FRONT VIEW



SECTION F-F



DRILL HOLE LOCATION

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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GENERAL NOTES

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

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

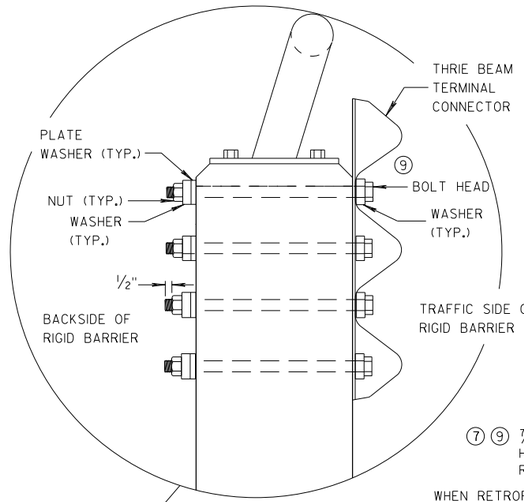
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

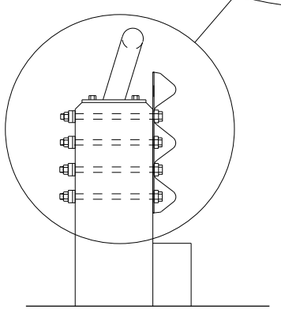
(6) DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

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

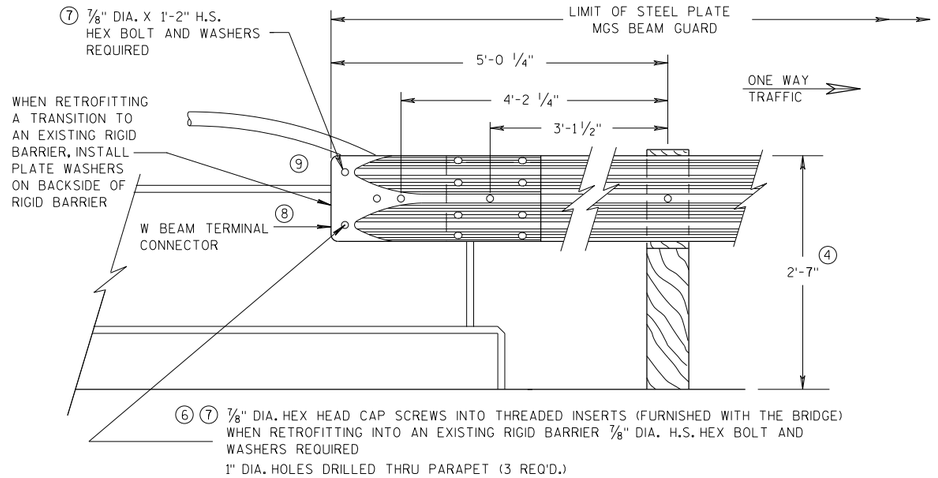
(8) THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 ½".

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





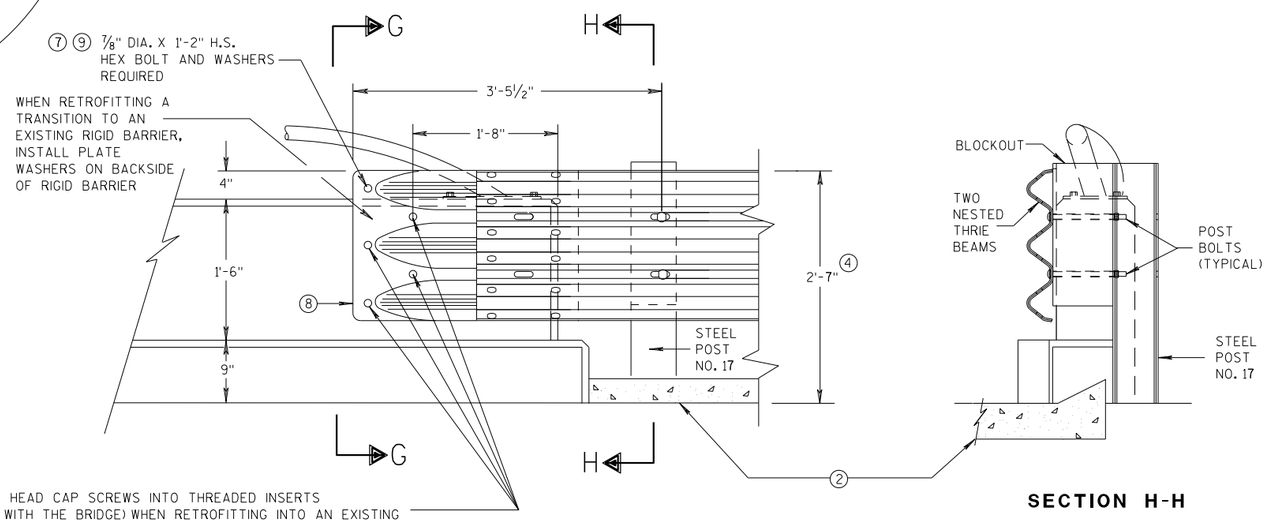
SECTION G-G



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

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



FRONT VIEW

SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
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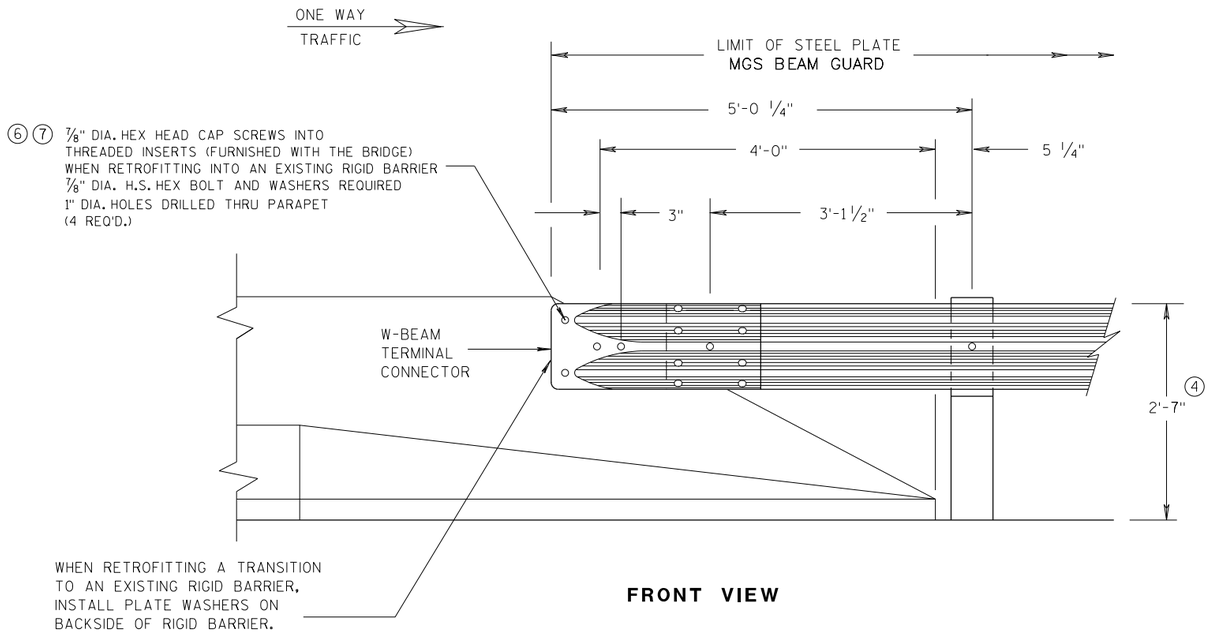


FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

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

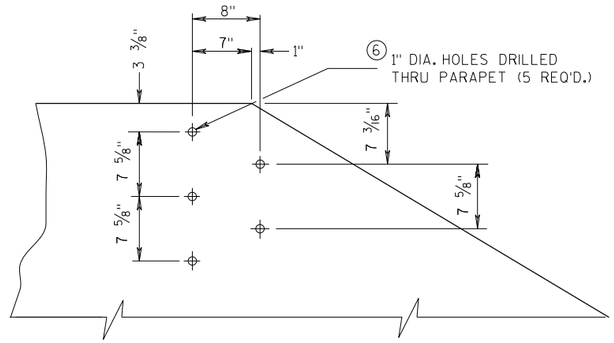
GENERAL NOTES

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

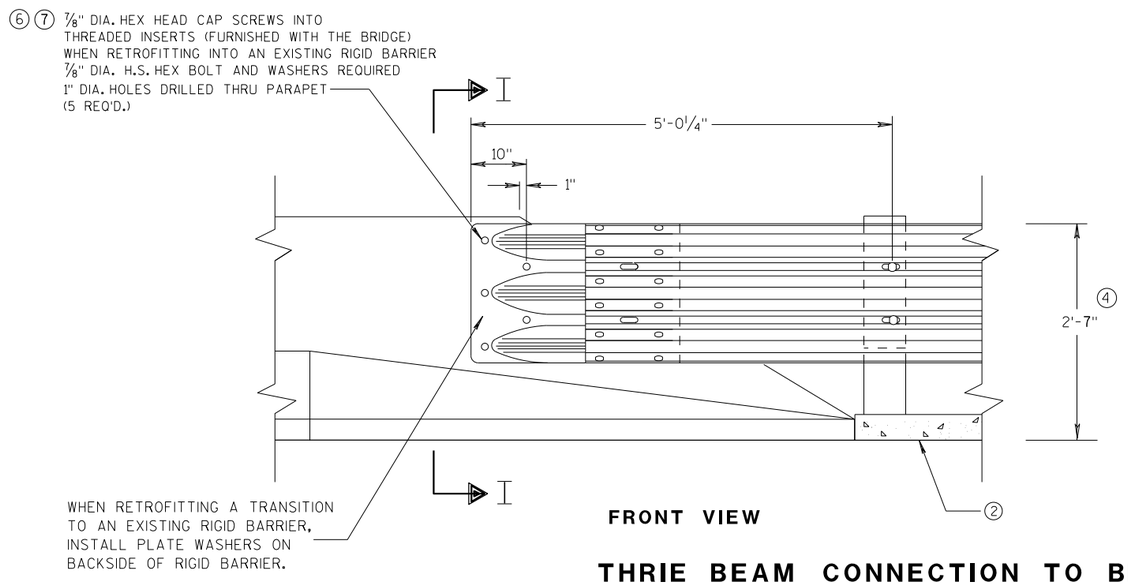
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

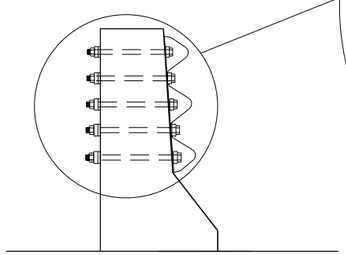
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE.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



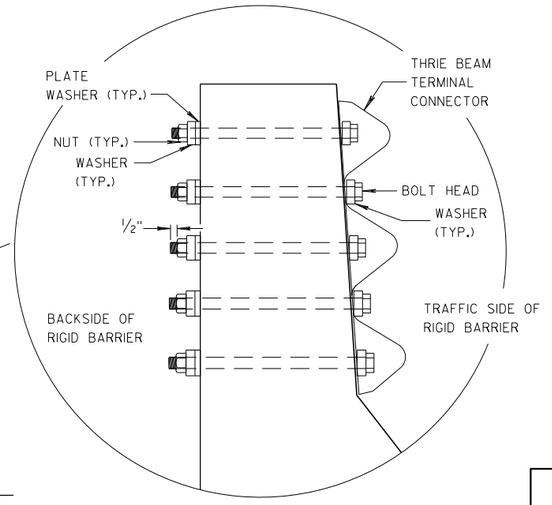
DRILL HOLE LOCATION AND PATTERN FOR THRIE BEAM CONNECTION



FRONT VIEW



SECTION I-I



THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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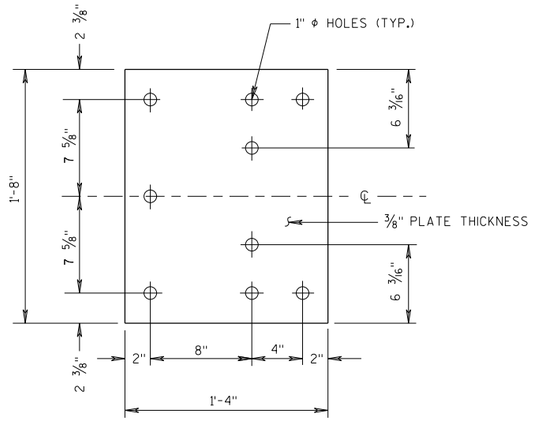
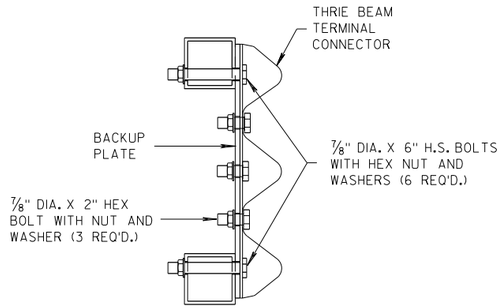
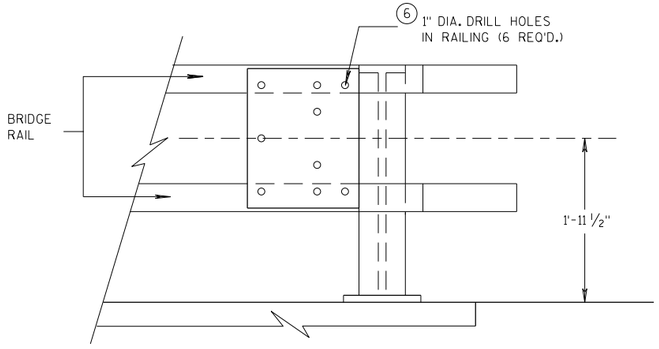


BACK-UP PLATE DETAIL



SECTION J-J

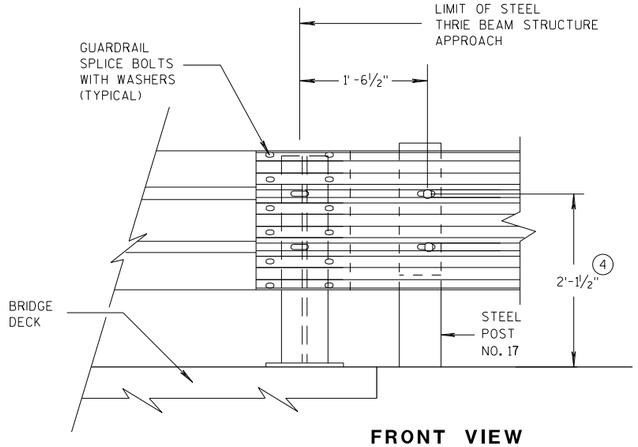


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

GENERAL NOTES

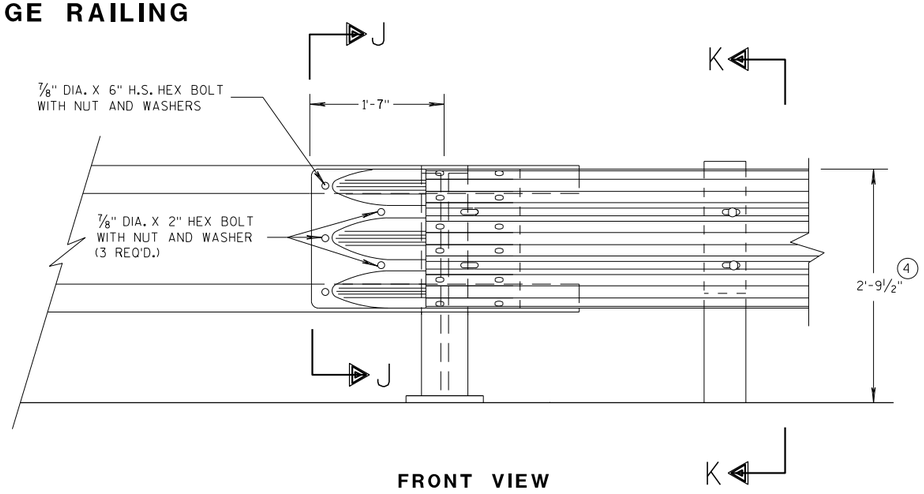
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

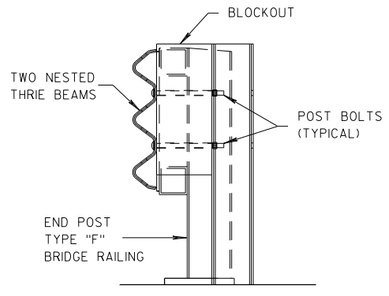


FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



FRONT VIEW



SECTION K-K

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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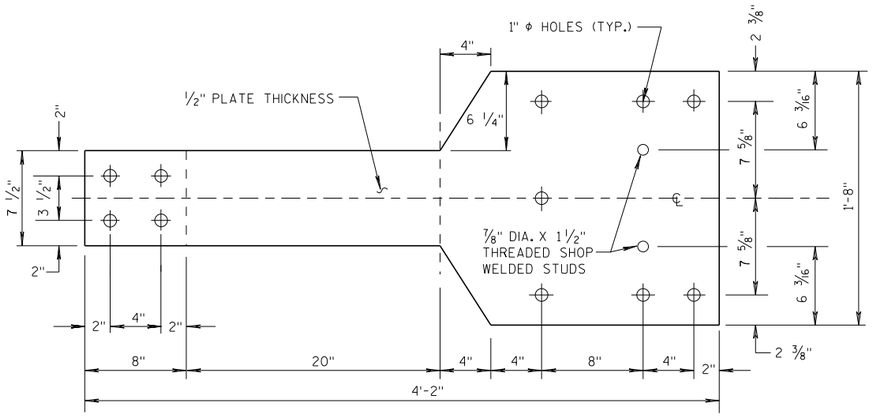
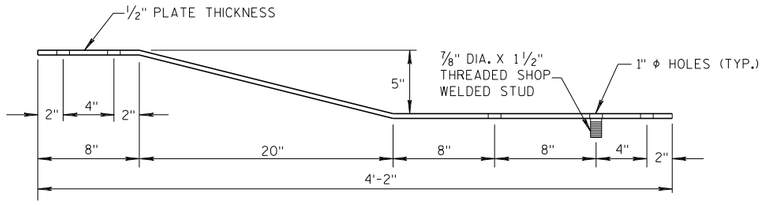
GENERAL NOTES

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

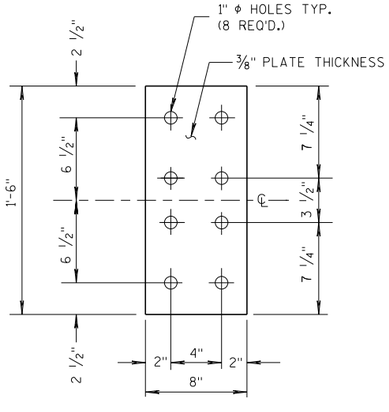


FRONT VIEW



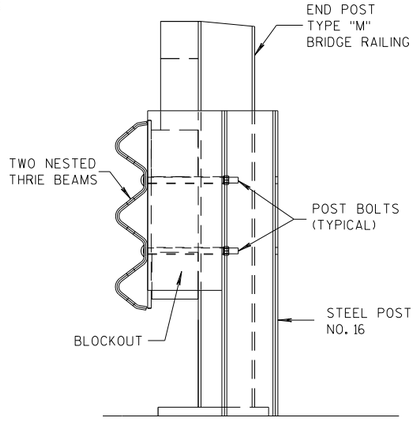
PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

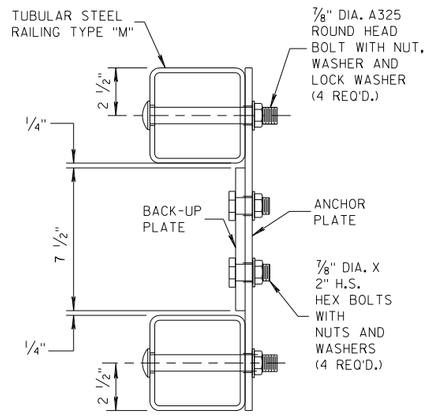


FRONT VIEW

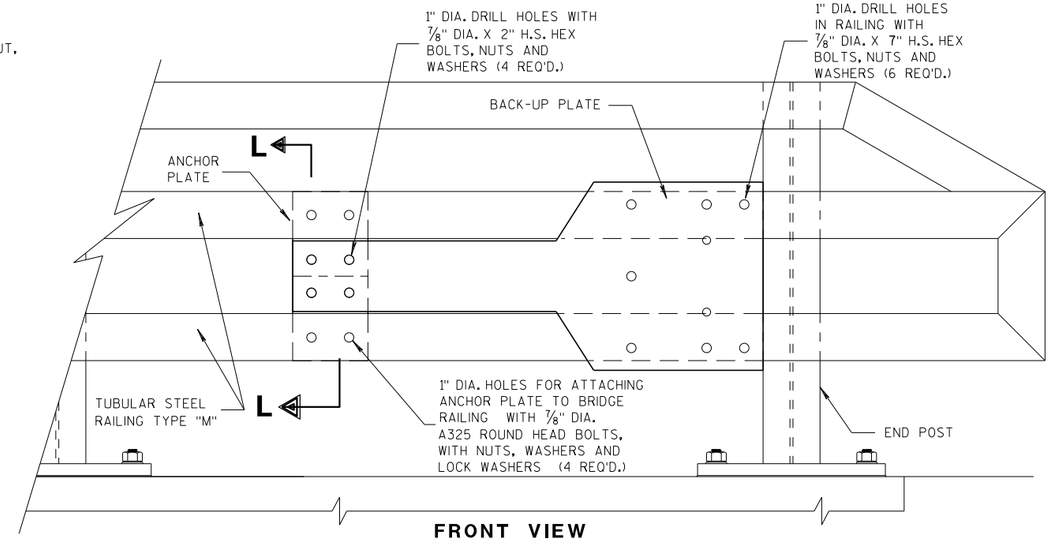
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M

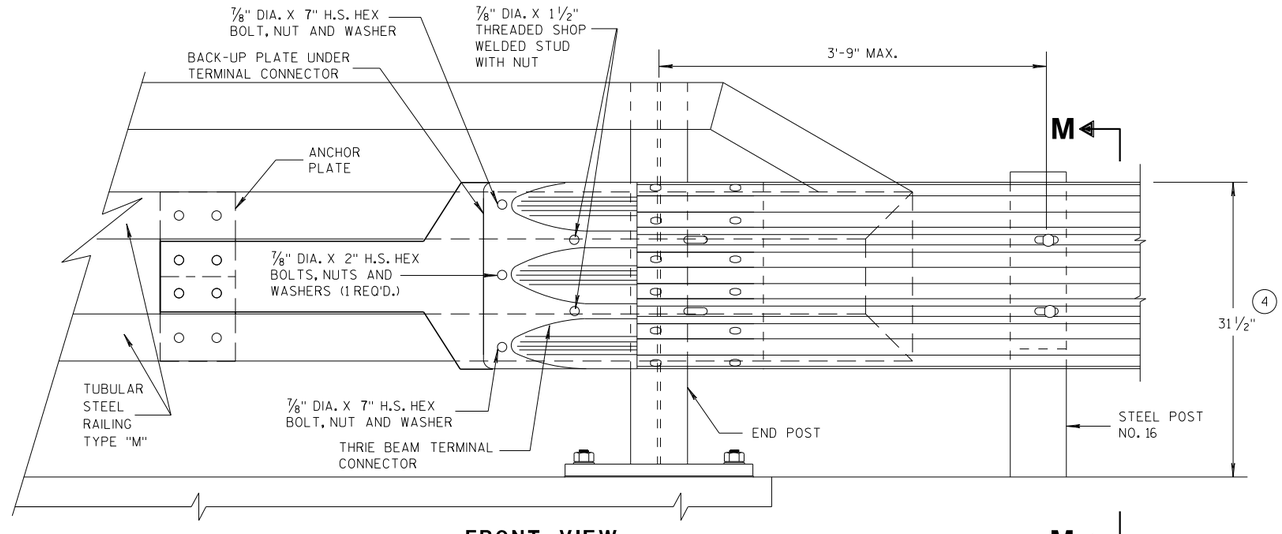


SECTION L-L

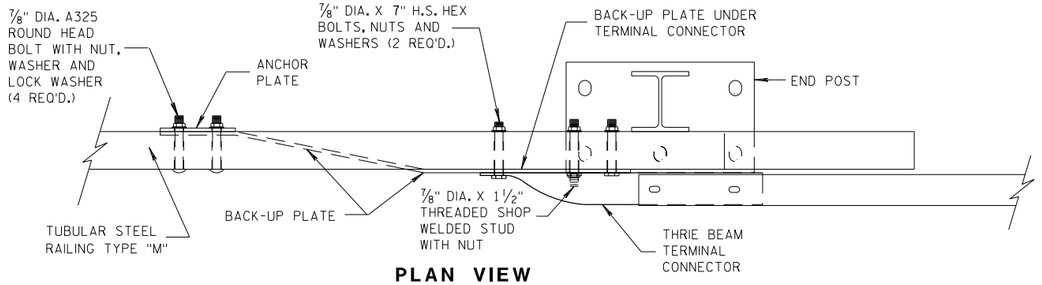


FRONT VIEW

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



FRONT VIEW



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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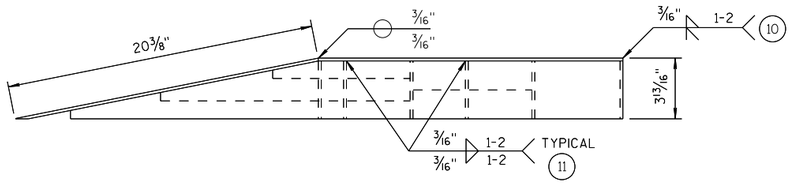

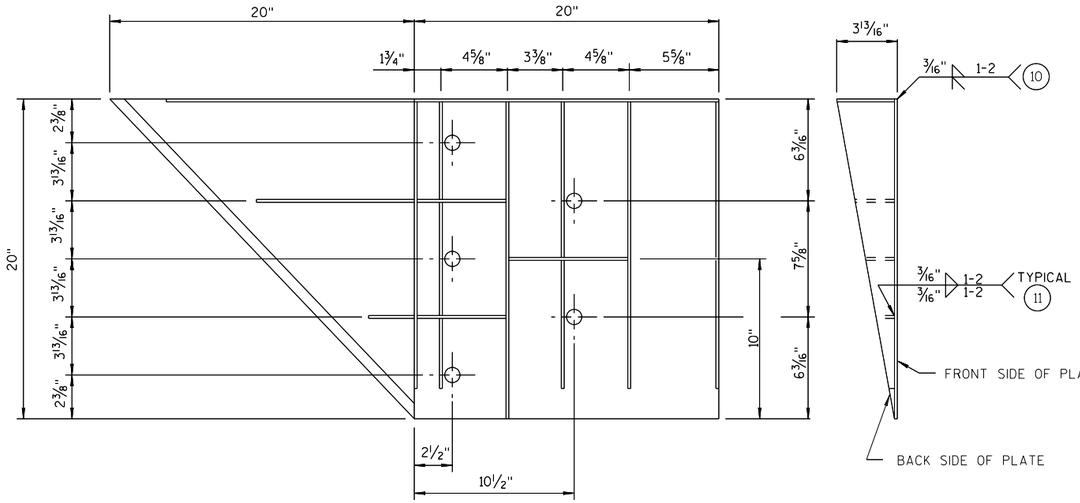

WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

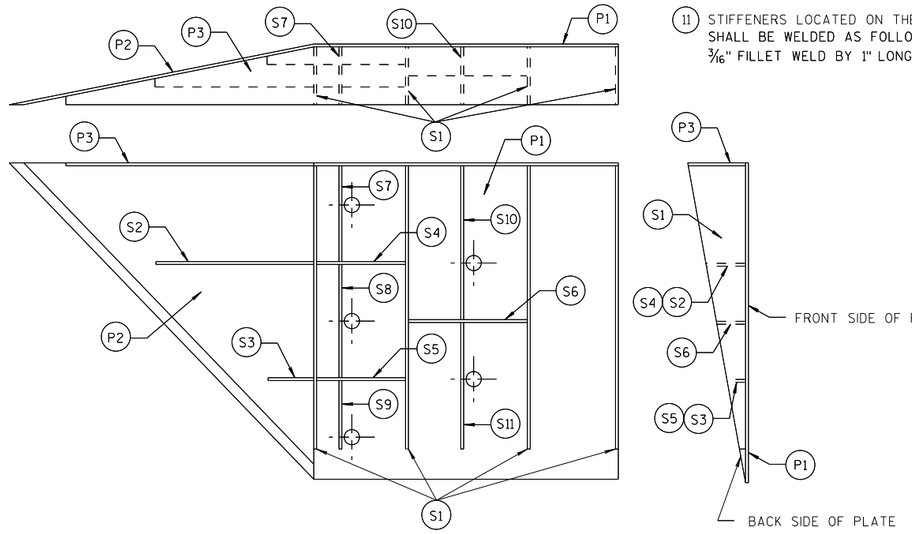

PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK.

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

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

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

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

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

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

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

SINGLE SLOPE CONNECTION PLATE

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
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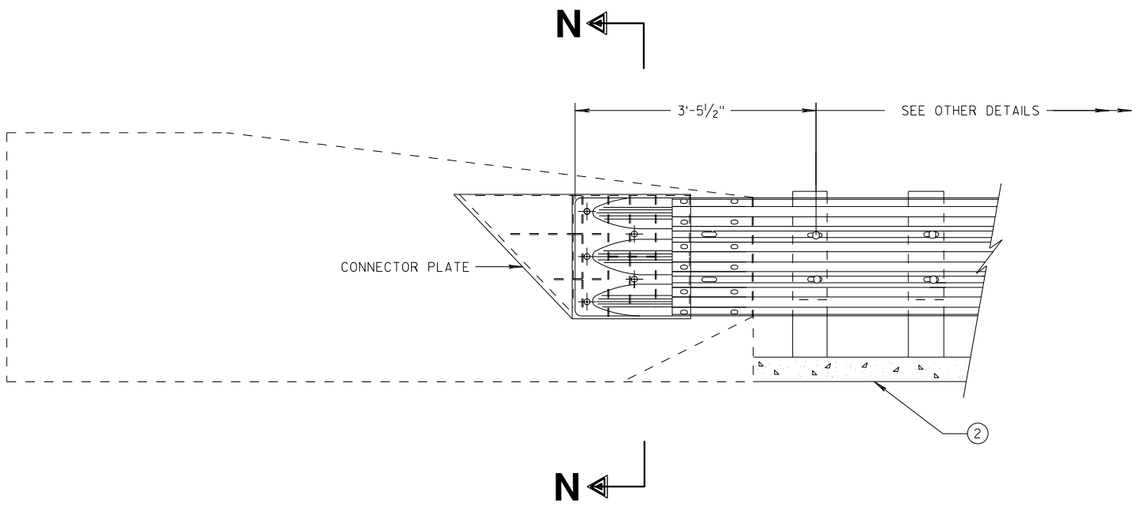
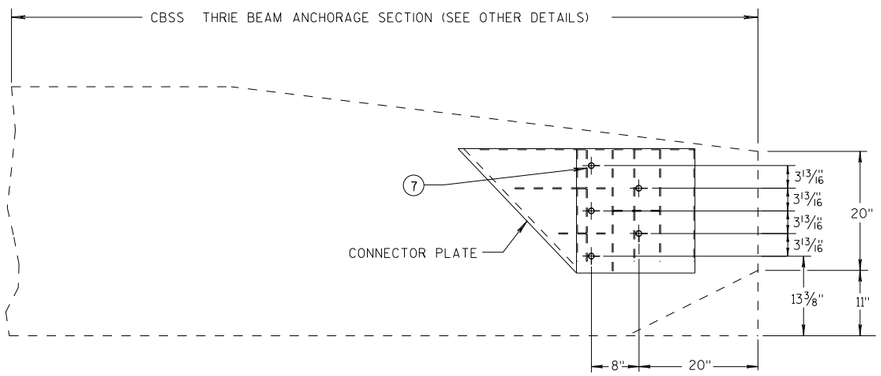


THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



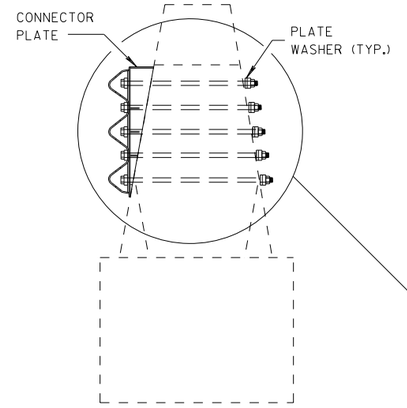
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

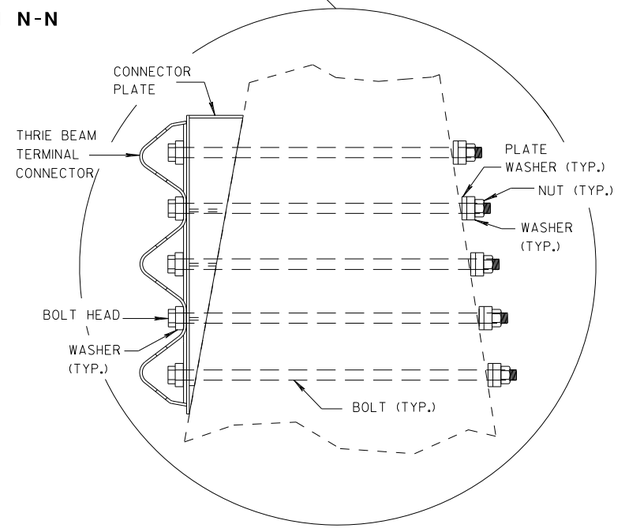
CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

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

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



SECTION N-N



MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
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S.D.D. 14 B 45-5j

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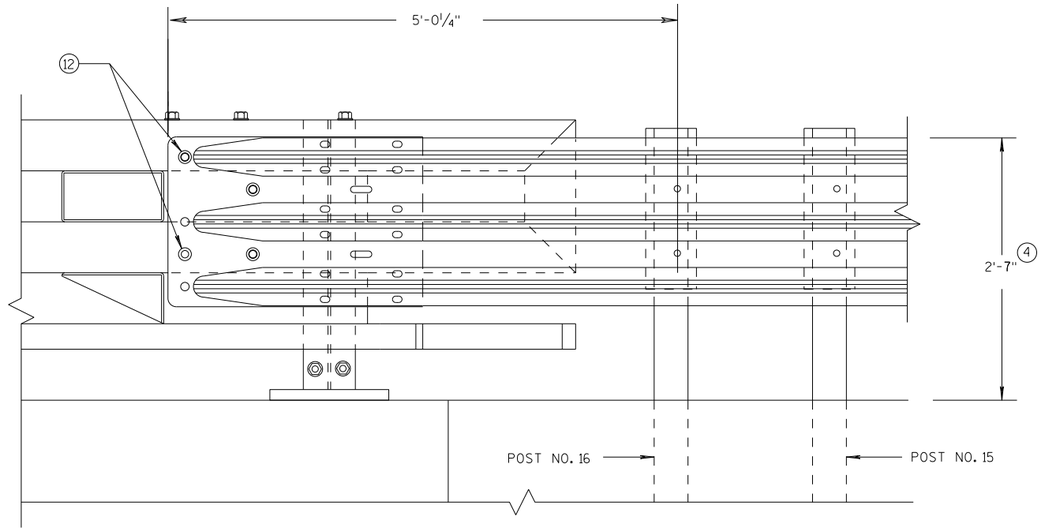
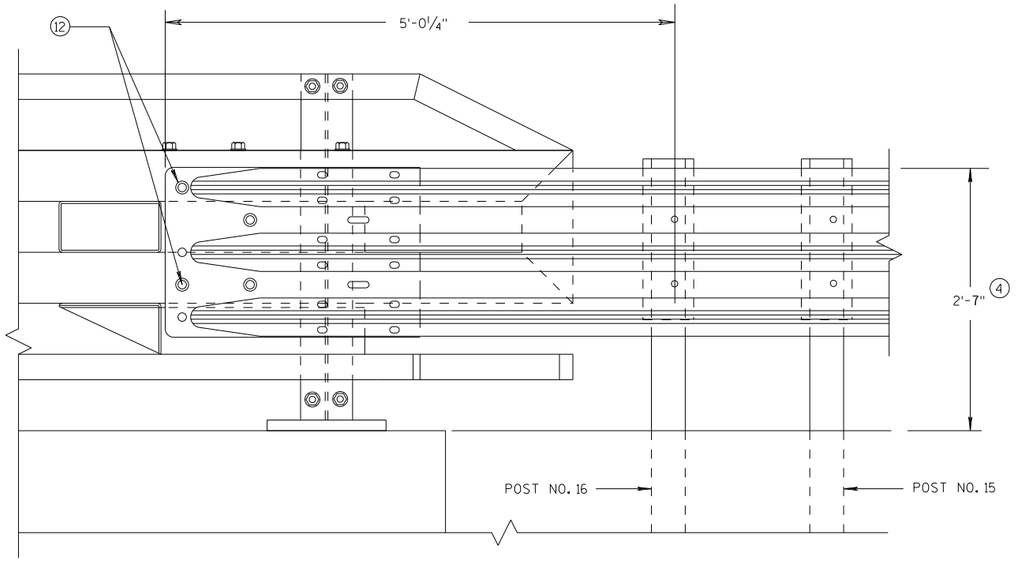
S.D.D. 14 B 45-5j



ELEVATION OF DETAIL AT NY3 END POST

THRIE BEAM RAIL ATTACHMENT



ELEVATION OF DETAIL AT NY4 END POST

THRIE BEAM RAIL ATTACHMENT

GENERAL NOTES

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

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

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

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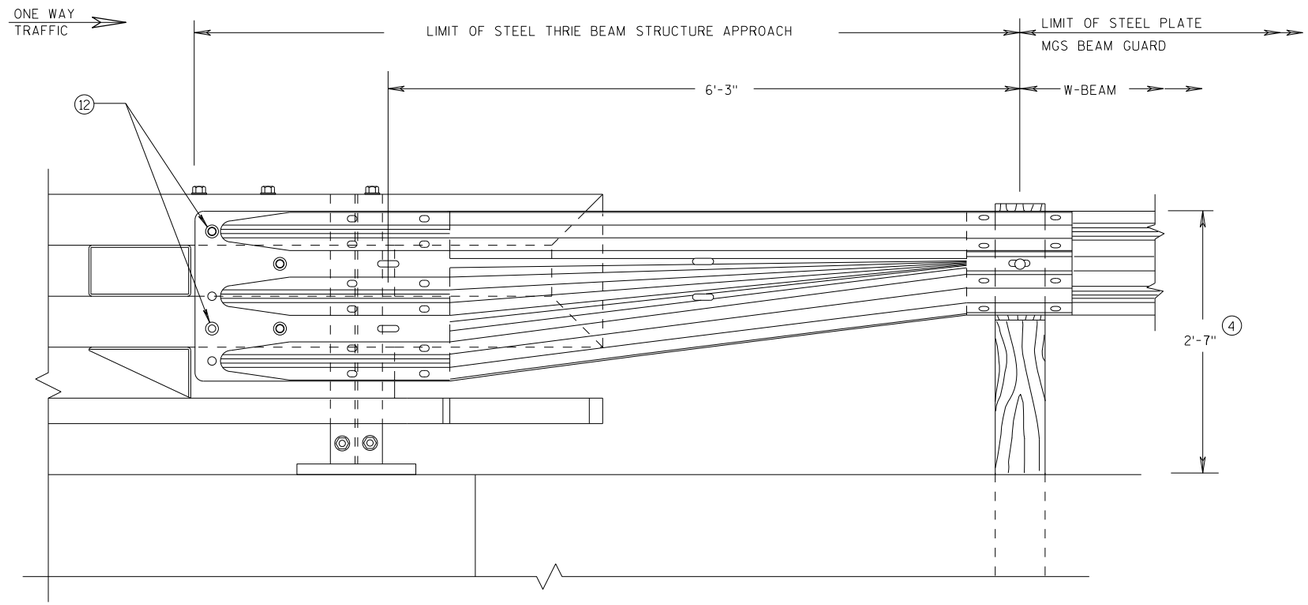
S.D.D. 14 B 45-5k



FRONT VIEW

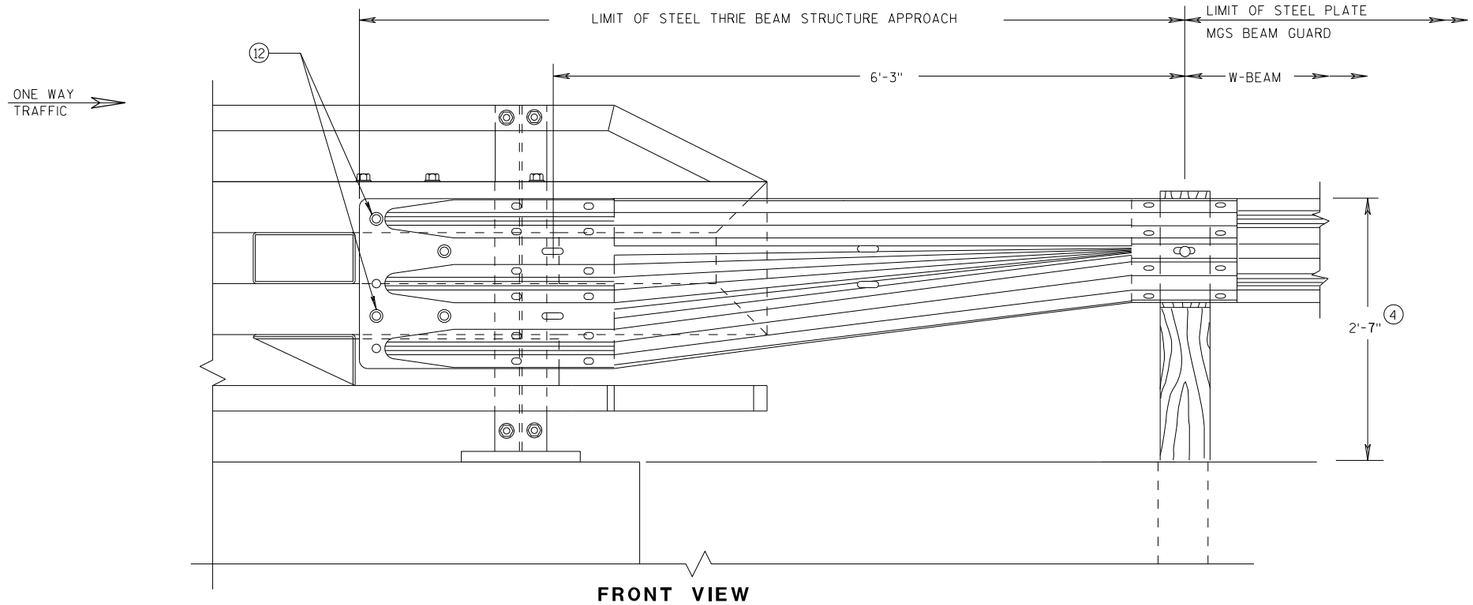
W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY3"

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

GENERAL NOTES

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

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



FRONT VIEW

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

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS D
UNIT SUPERVIS

NT

6

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

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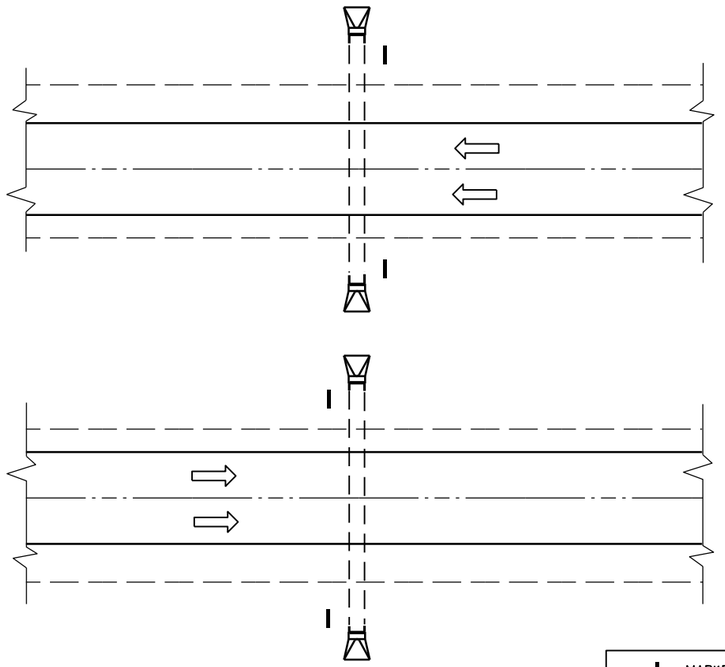
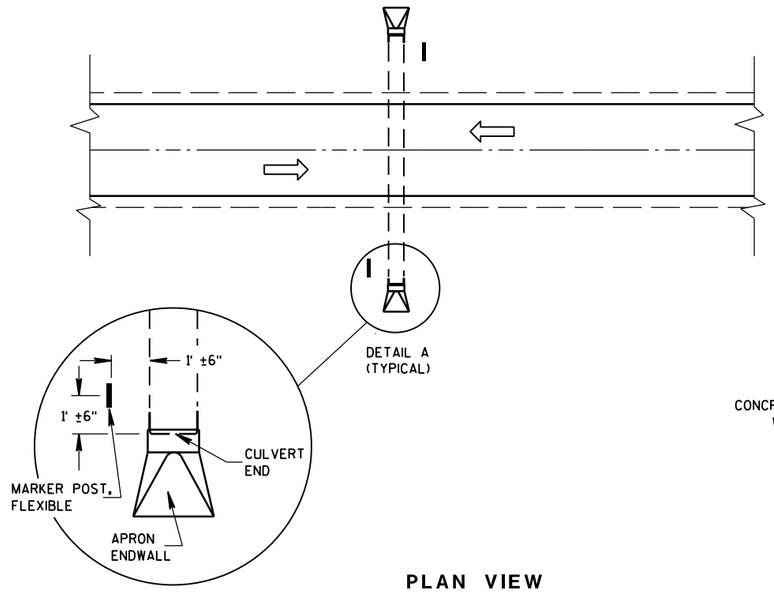
S.D.D. 14 B 45-5L



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

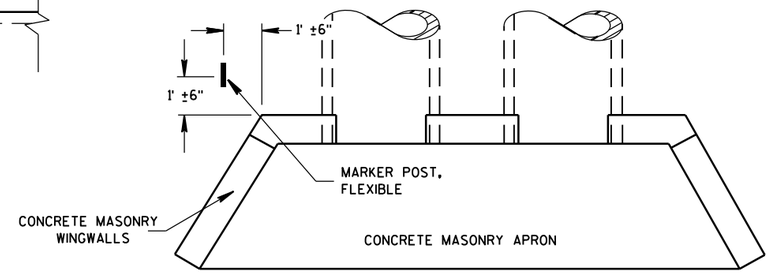
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

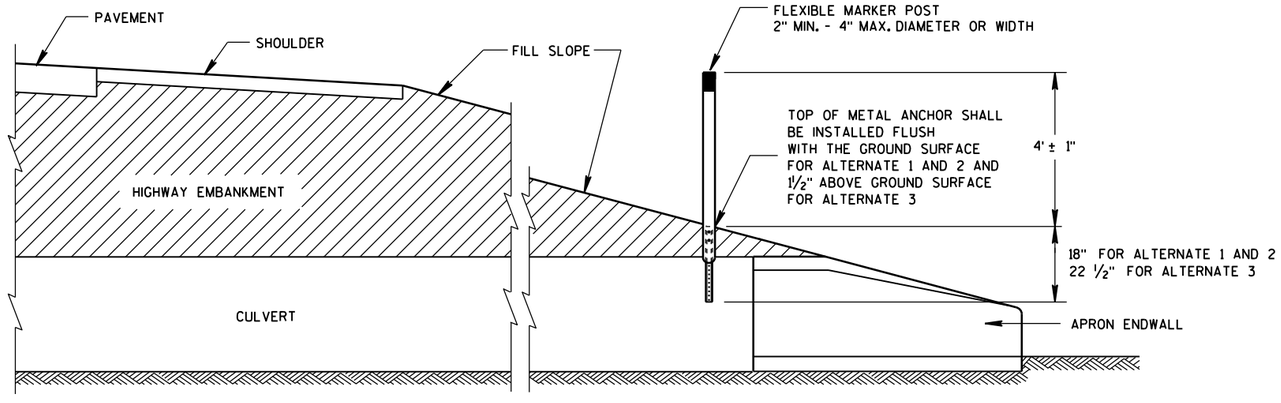
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



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

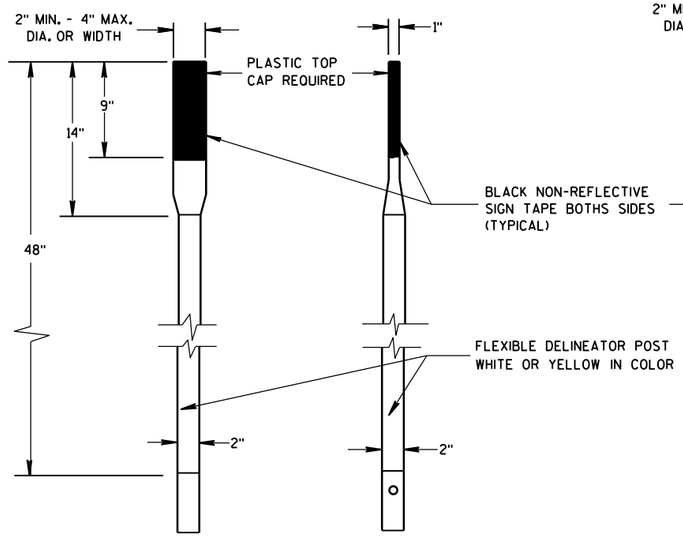
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

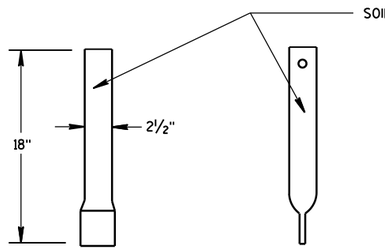
6

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

6

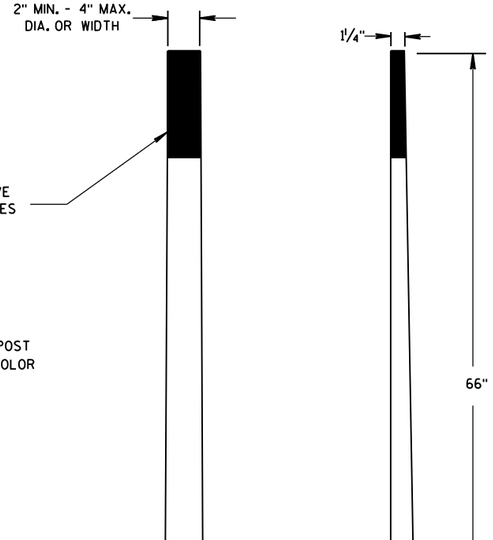
S.D.D. 15 A 3-2a





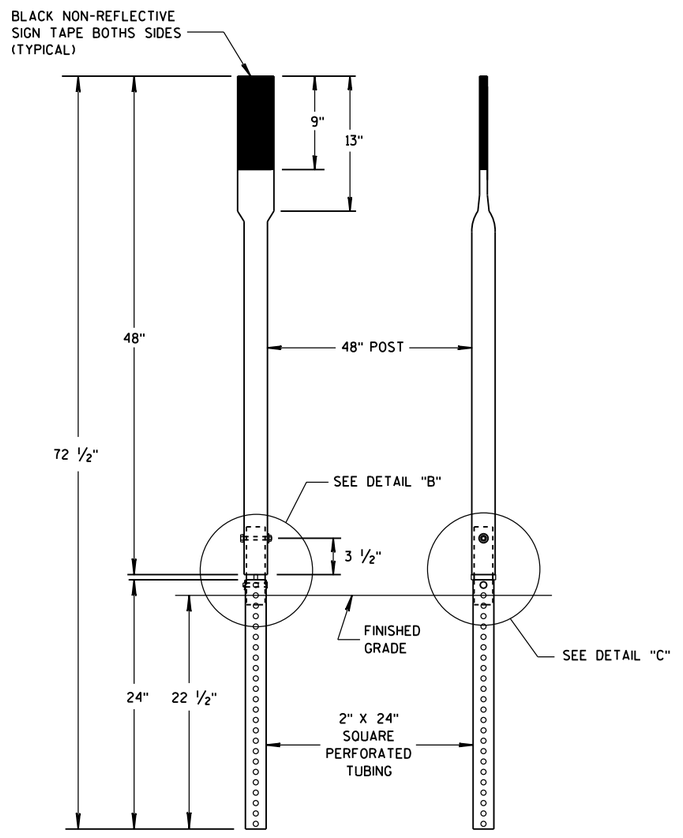
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

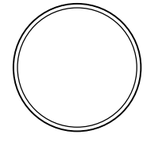
ALTERNATE 2



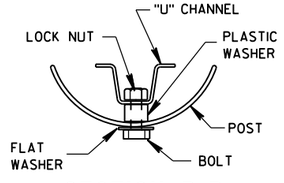
FRONT VIEW SIDE VIEW

ALTERNATE 3

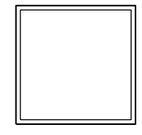
FLEXIBLE MARKER POSTS



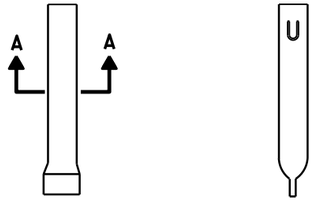
SECTION A-A



SECTION B-B

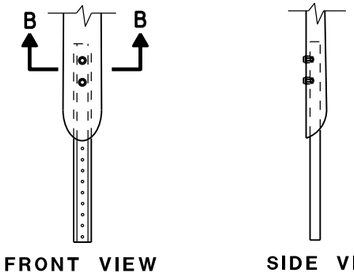


SECTION C-C



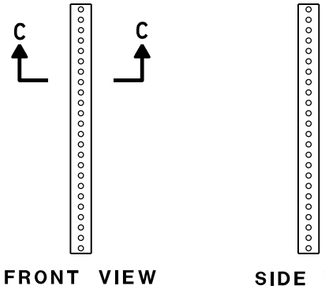
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

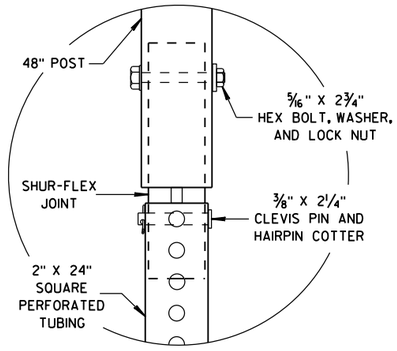
ALTERNATE 2



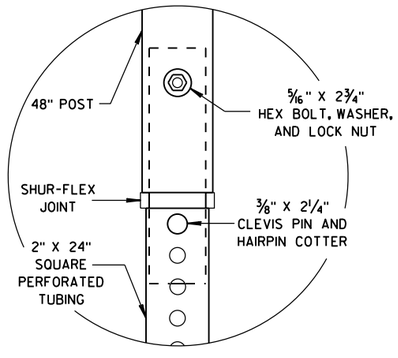
FRONT VIEW SIDE VIEW

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

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.

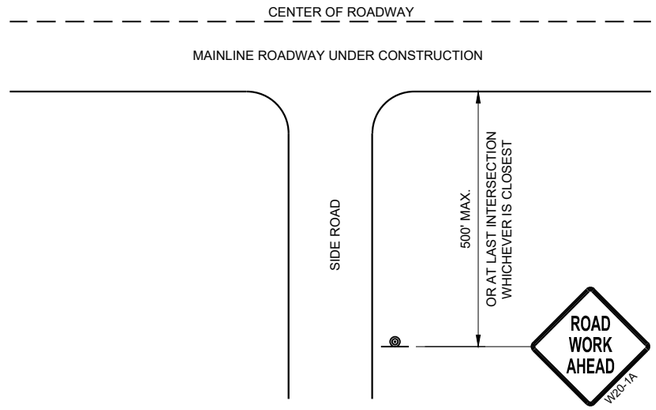
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

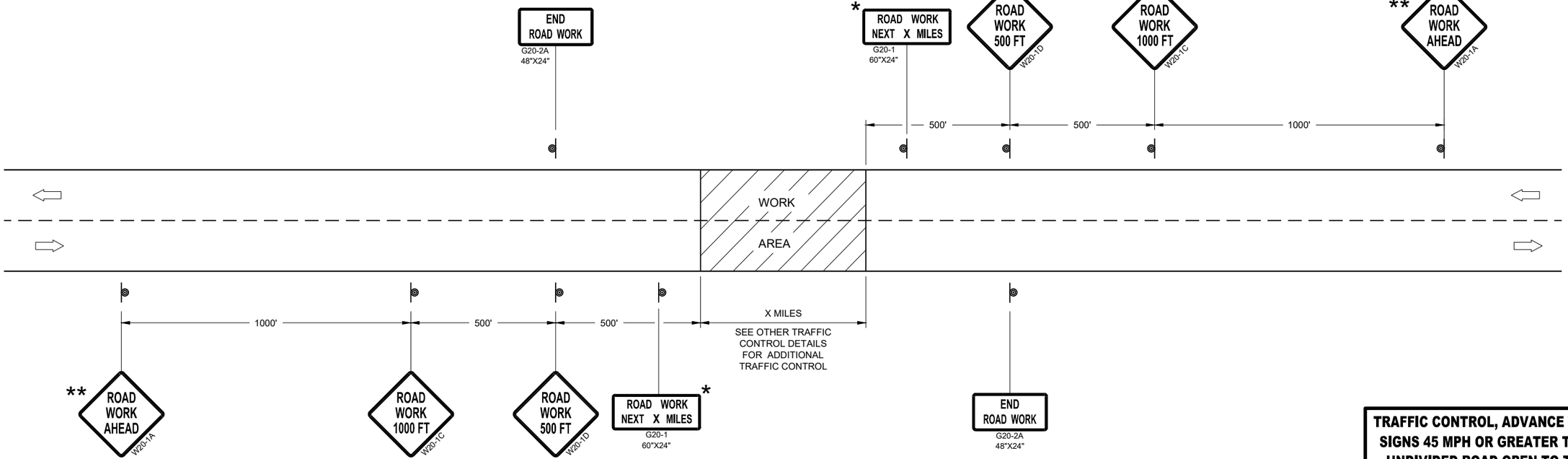
** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



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

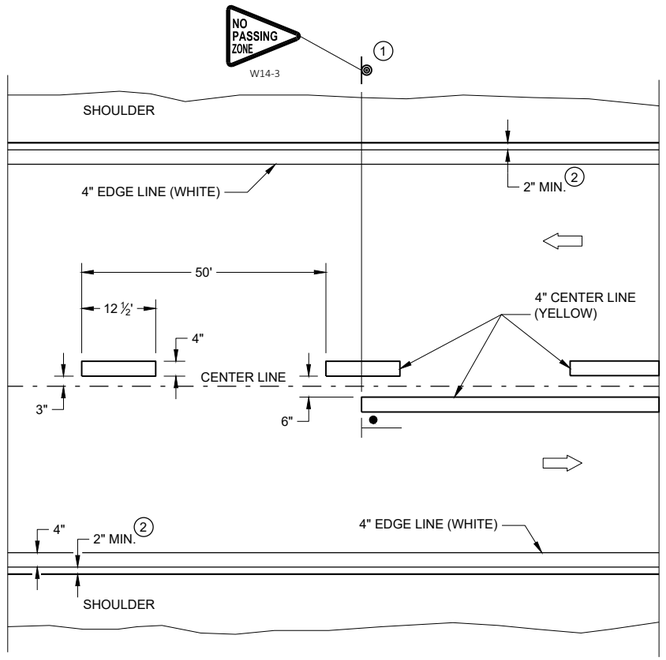
APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

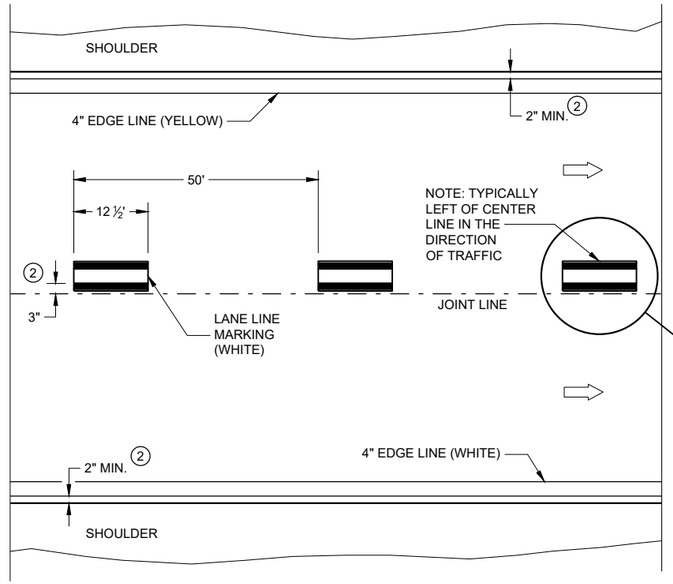
FHWA

6

SDD 15C04 - 05

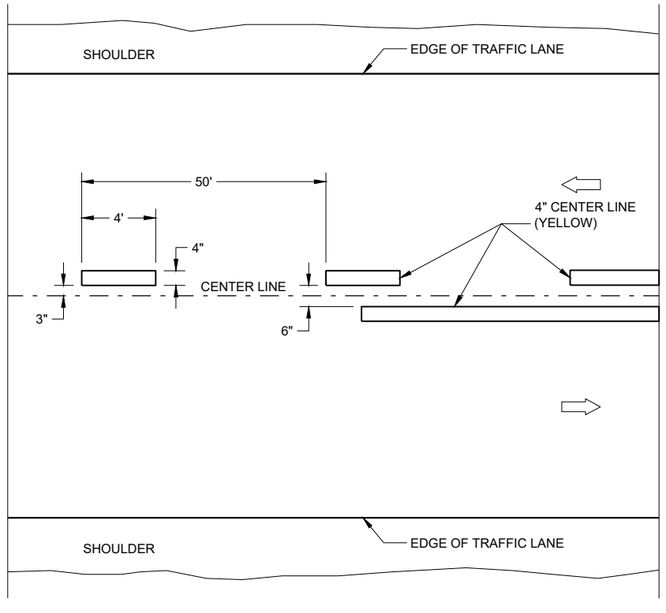


TWO WAY TRAFFIC

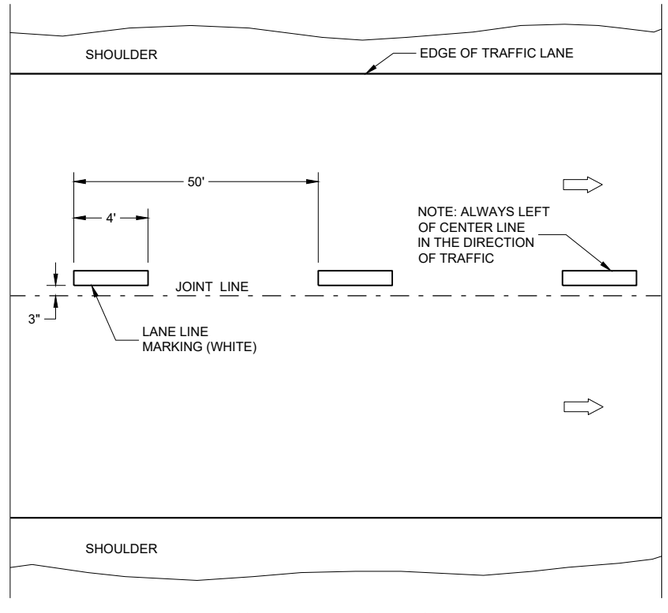


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

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

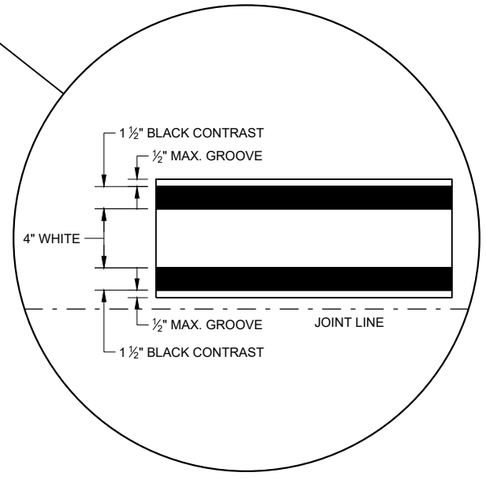
1. LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
2. MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

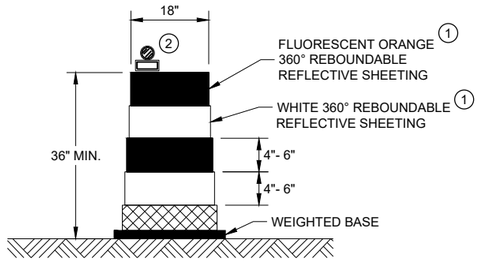
FHWA

SDD 15C08 - 20a

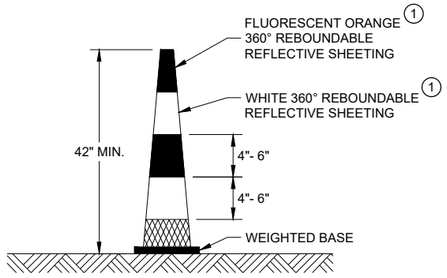
SDD 15C08 - 20a

GENERAL NOTES

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

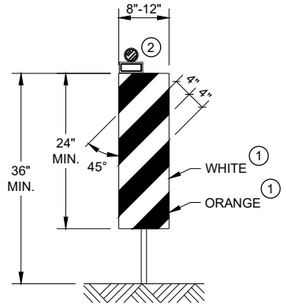


DRUM



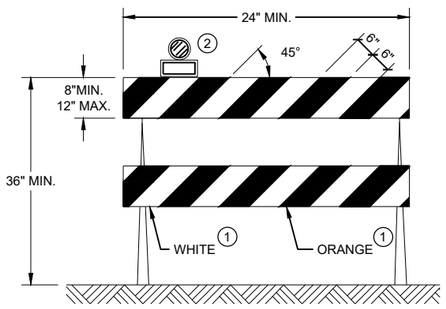
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



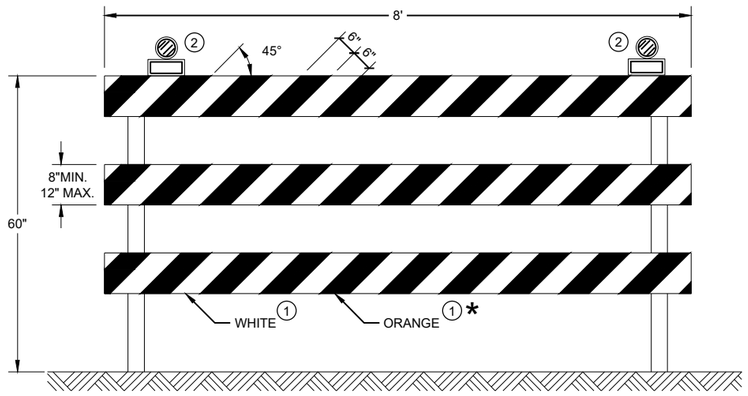
VERTICAL PANEL

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



TYPE II BARRICADE

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



TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C11 - 09b
SDD 15C11 - 09b

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.

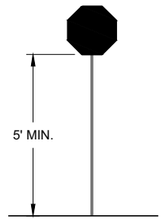
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.

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

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

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



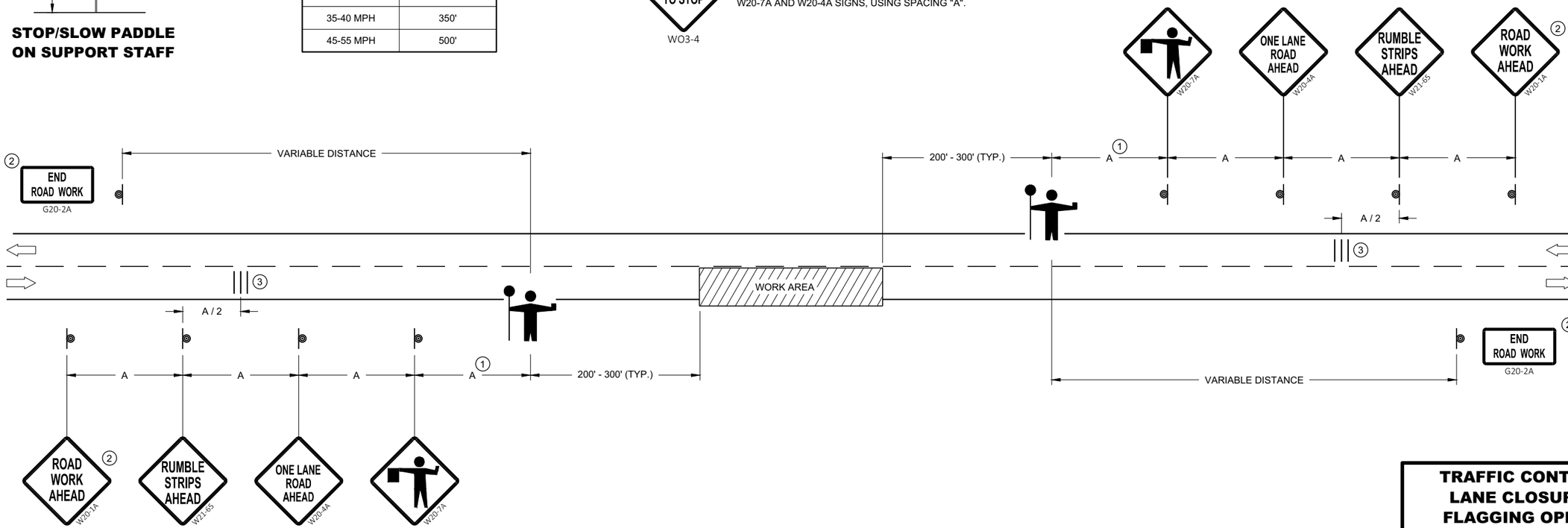
STOP/SLOW PADDLE ON SUPPORT STAFF

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

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

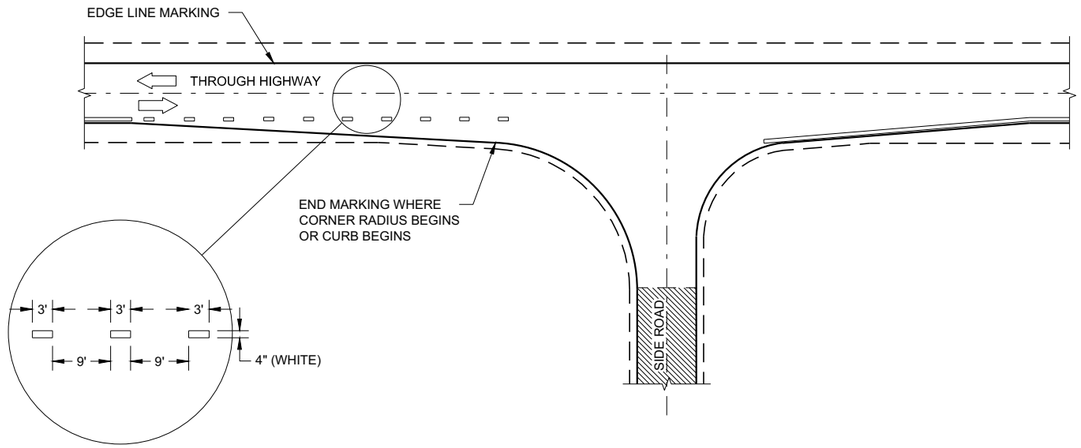
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

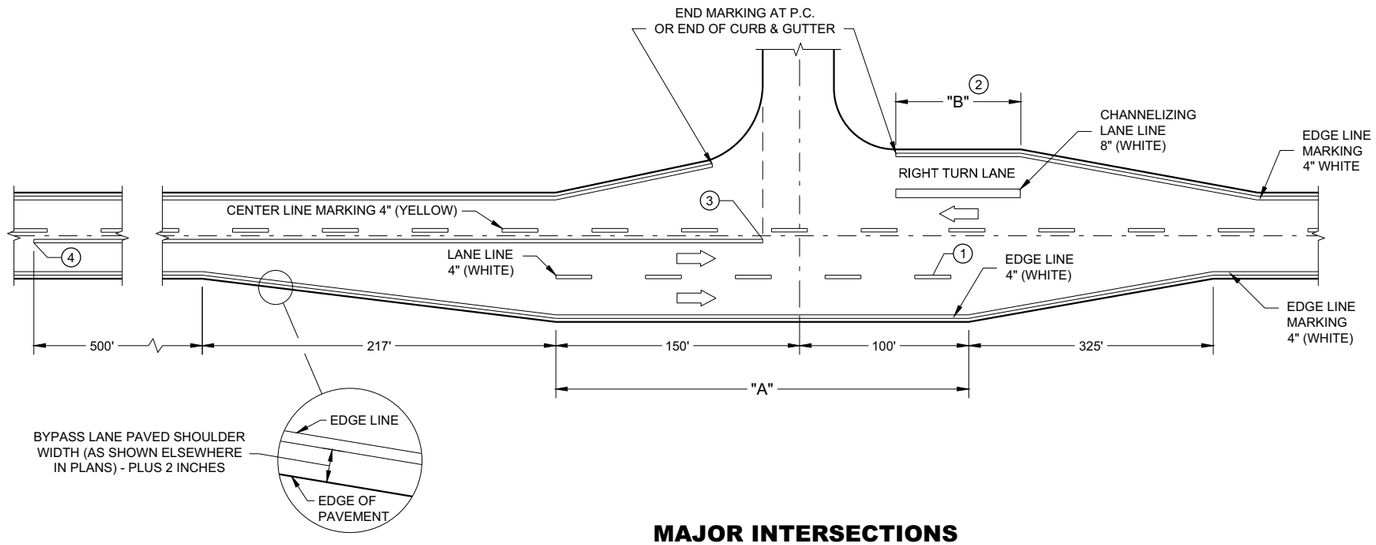
6

SDD 15C12 - 07

SDD 15C12 - 07



MINOR INTERSECTION



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

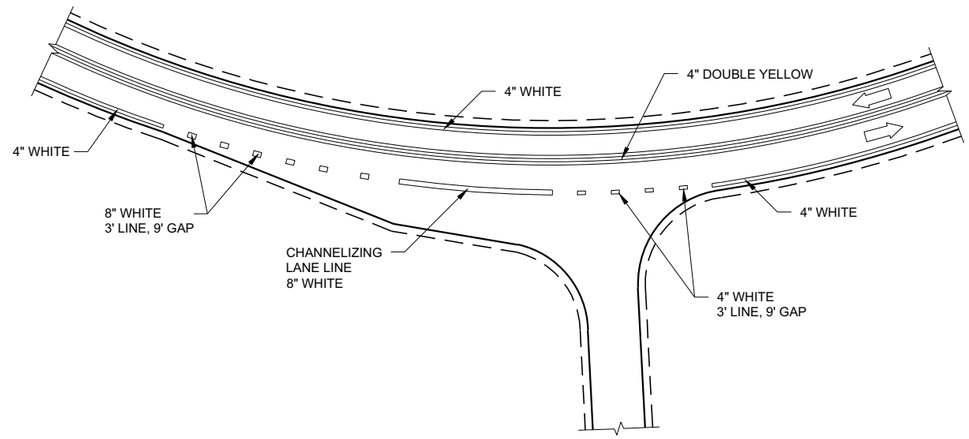
GENERAL NOTES

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.

LEGEND

DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE

PAVEMENT MARKING (INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C35 - 04a

GENERAL NOTES

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

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

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

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

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

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

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

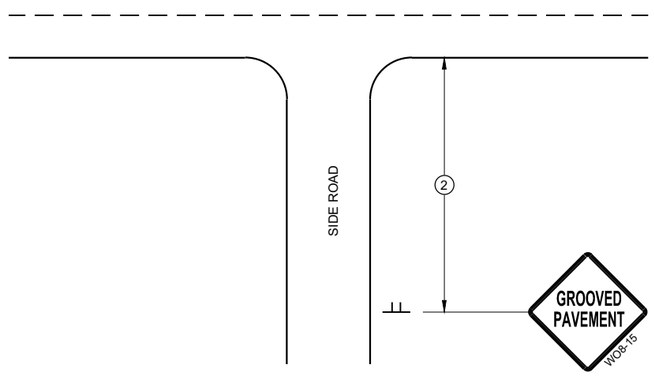
(1) PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

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

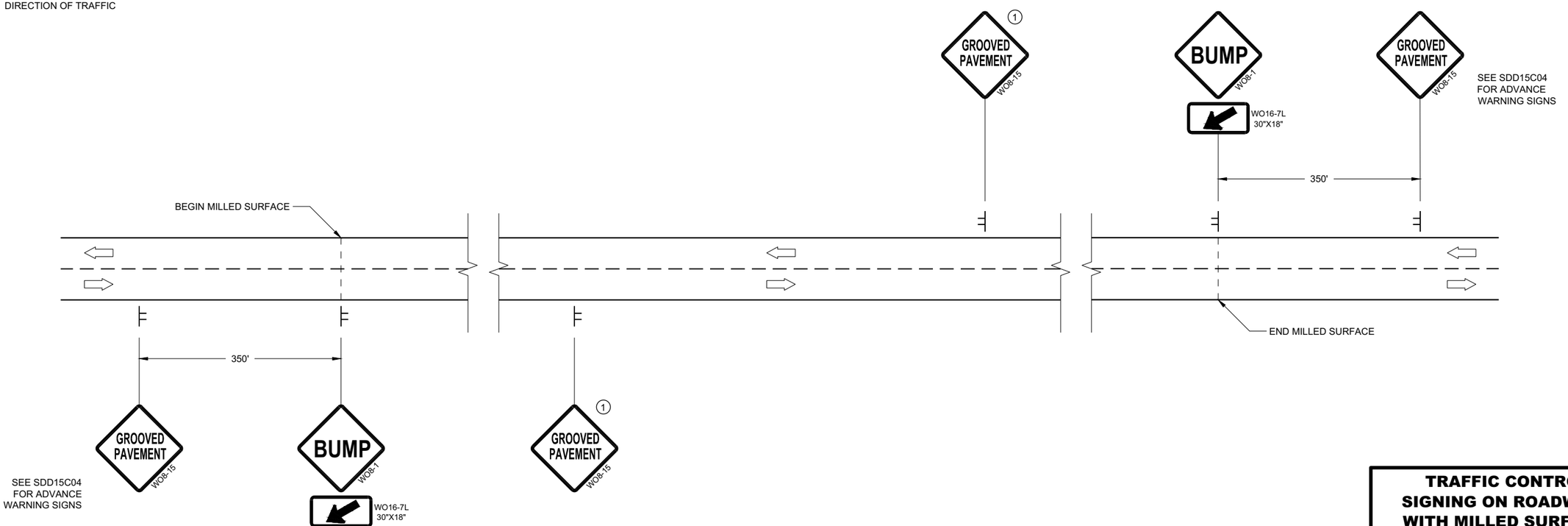
LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON MILLED SURFACES

TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

SDD 15D44 - 02

SDD 15D44 - 02

GENERAL NOTES

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

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

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

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

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

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

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

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

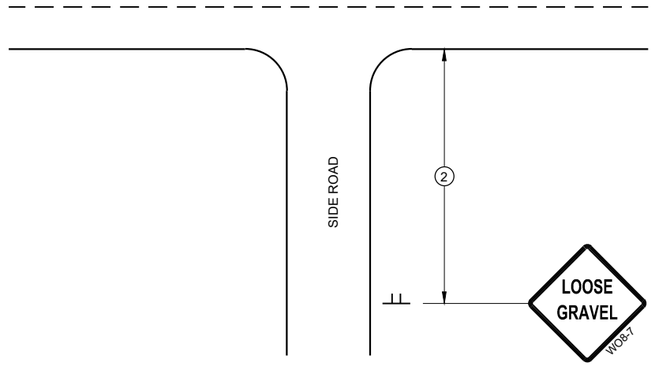
(2) PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

(3) ADD WO8-1 OR WO8-2 SIGN WHEN THE CONDITION IS PRESENT.

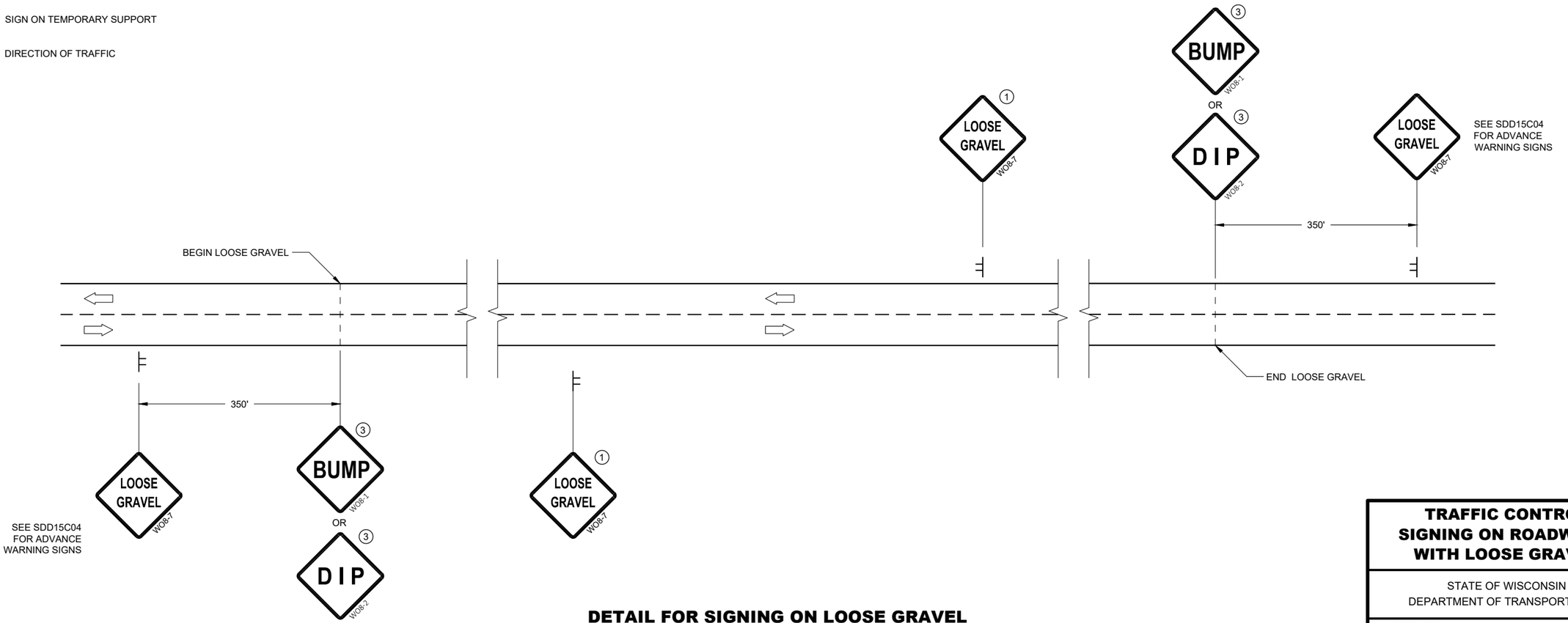
LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON LOOSE GRAVEL OR CHIP SEALED SURFACES

TRAFFIC CONTROL SIGNING ON ROADWAYS WITH LOOSE GRAVEL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

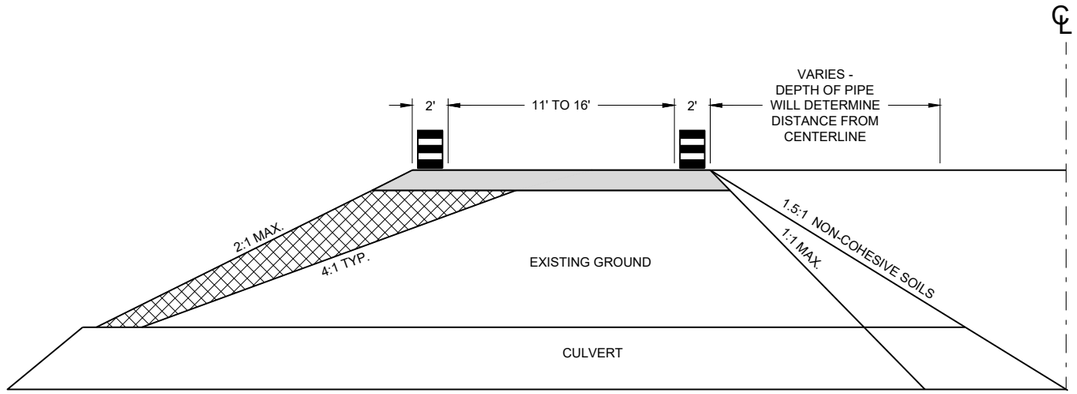
APPROVED
February 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D45 - 03



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.

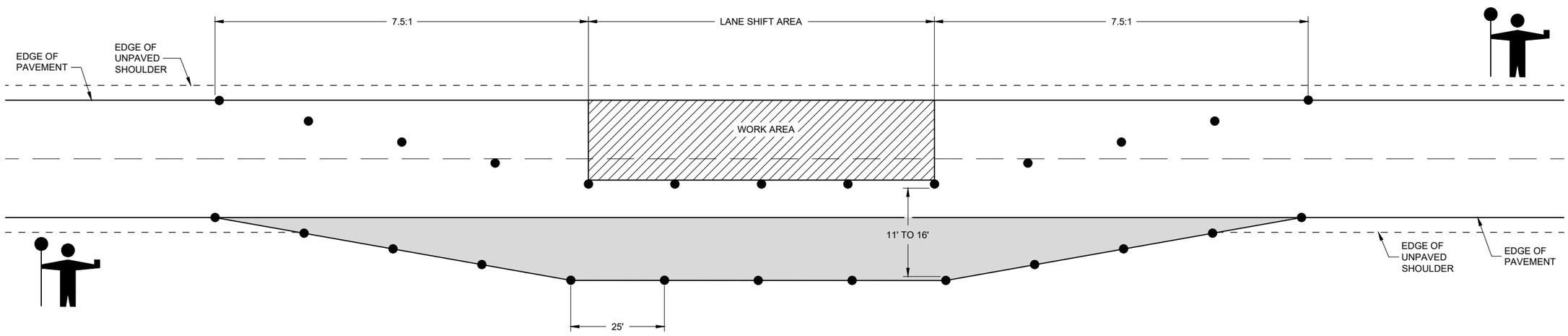
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

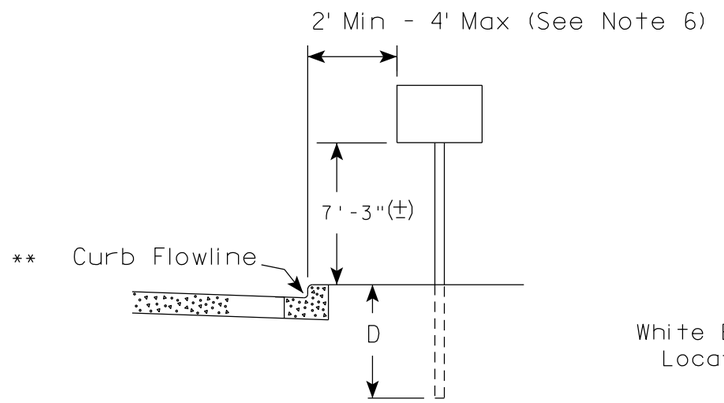
6

SDD 15D48 - 01

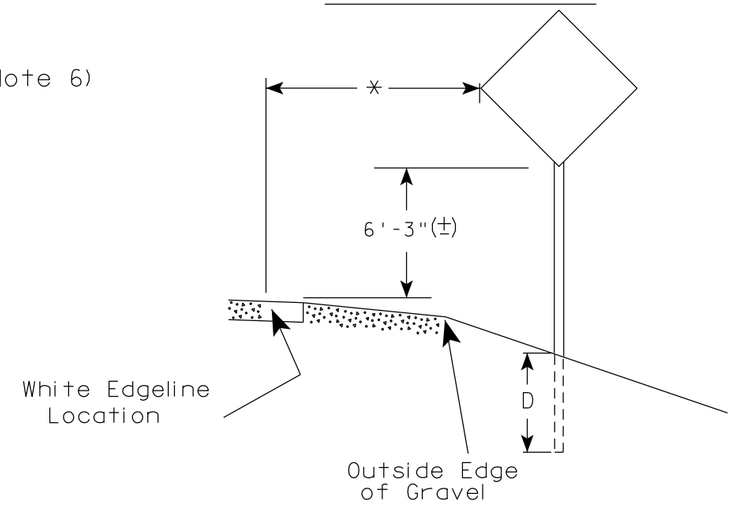
6

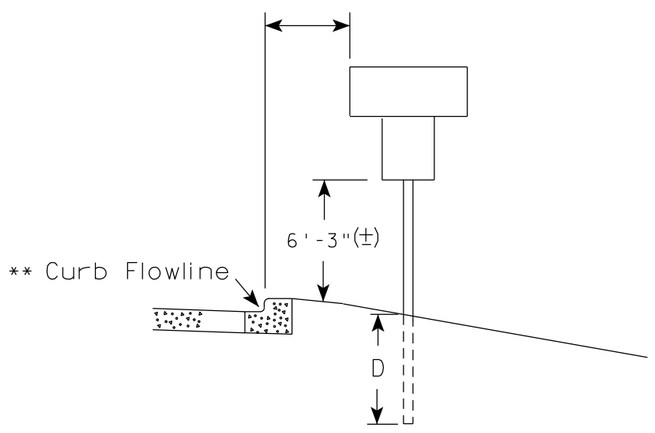
SDD 15D48 - 01

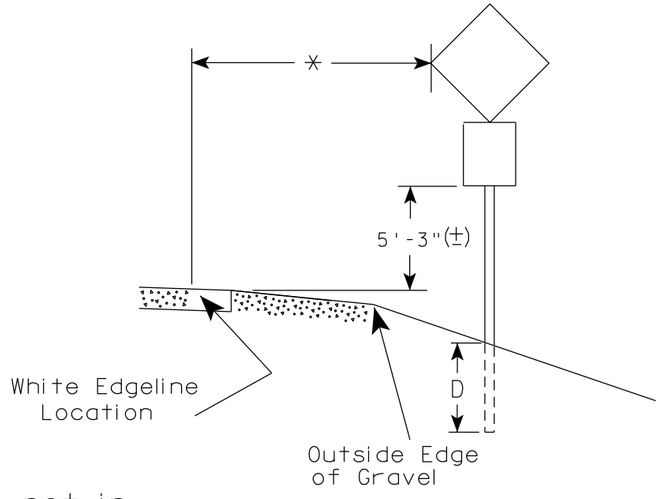
URBAN AREA



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" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.

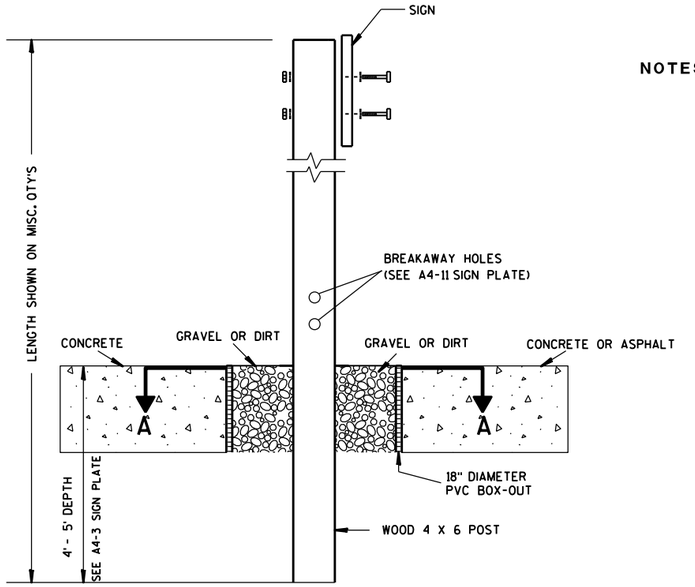
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/13/2020 PLATE NO. A4-3.22

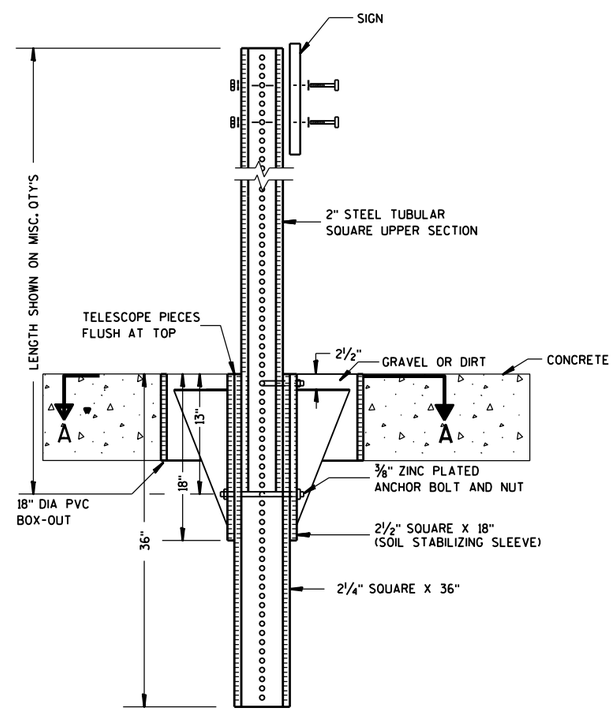
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 84	E



ELEVATION VIEW

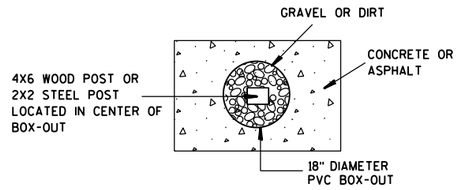
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

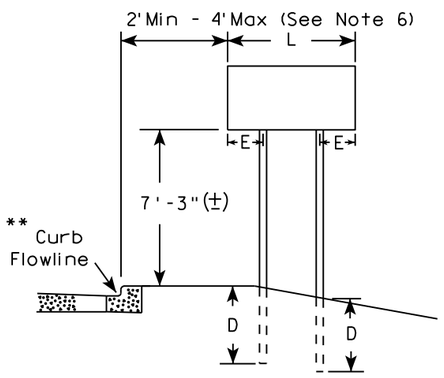
APPROVED Matthew R Rauch
for State Traffic Engineer

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

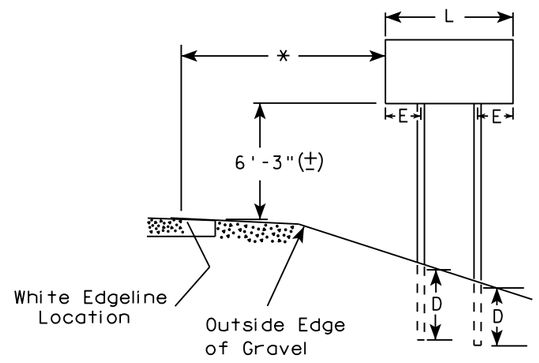
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

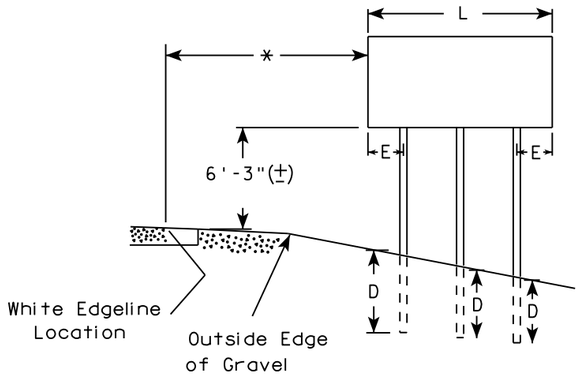
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

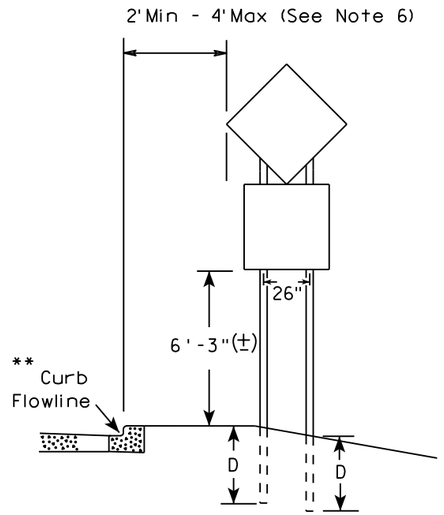
URBAN AREA



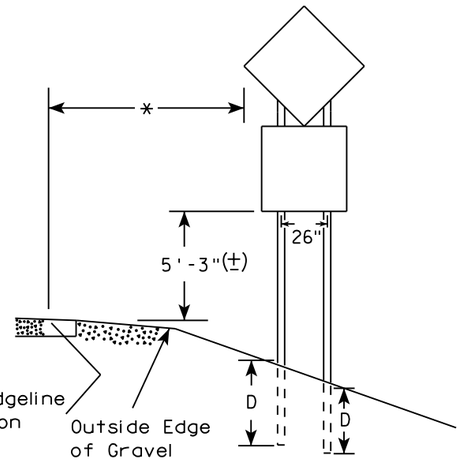
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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

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

GENERAL NOTES

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

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

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

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

POST EMBEDMENT DEPTH

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

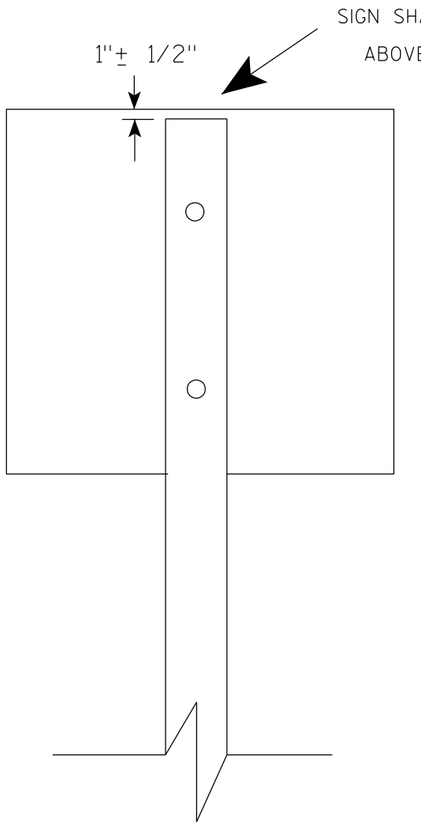
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

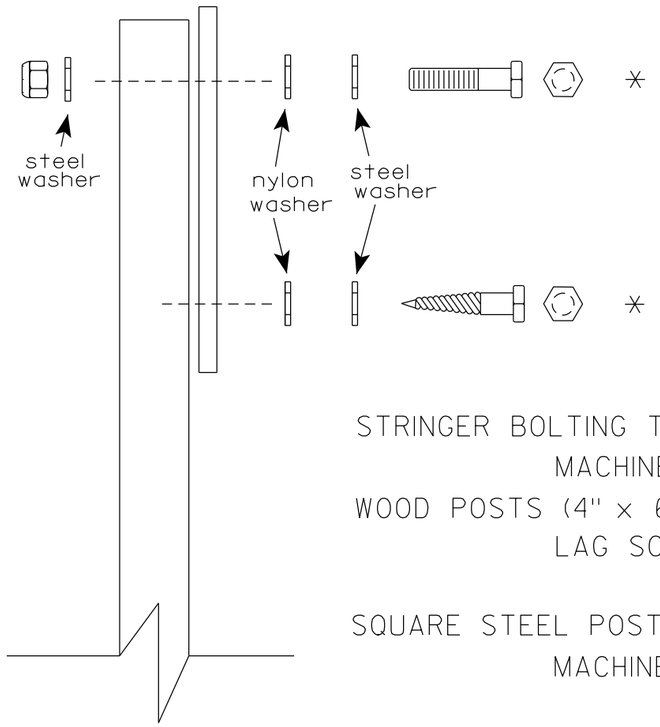
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 86	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

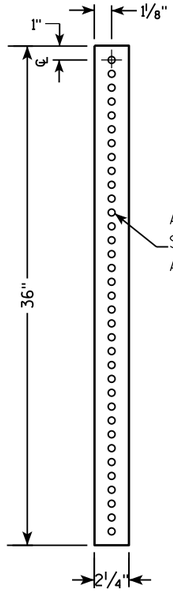
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

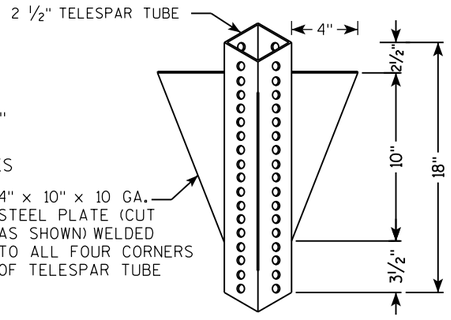
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

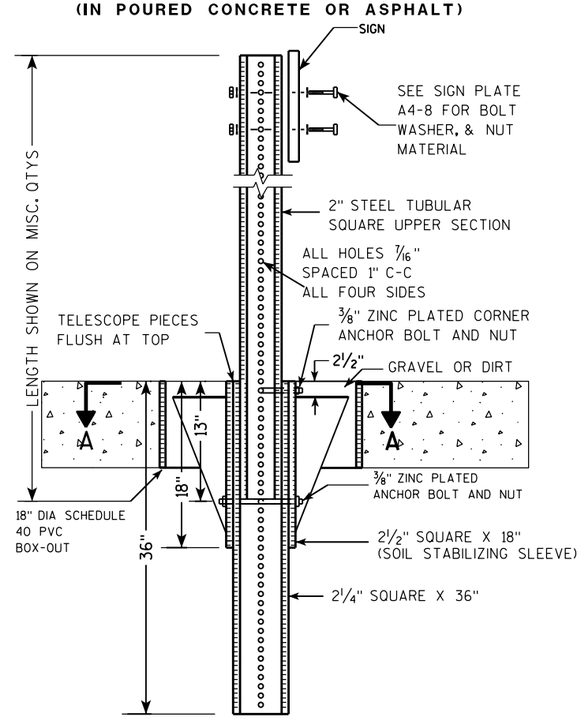
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



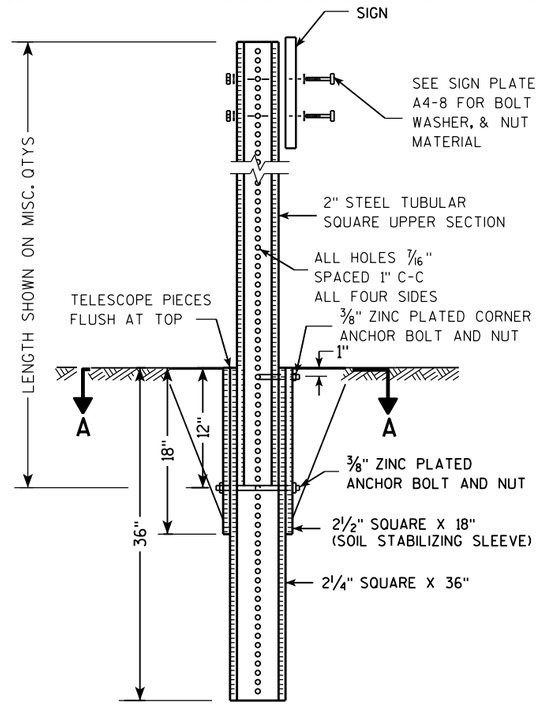
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

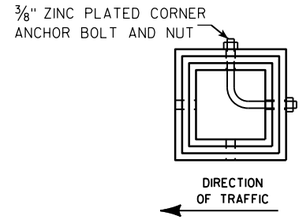


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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

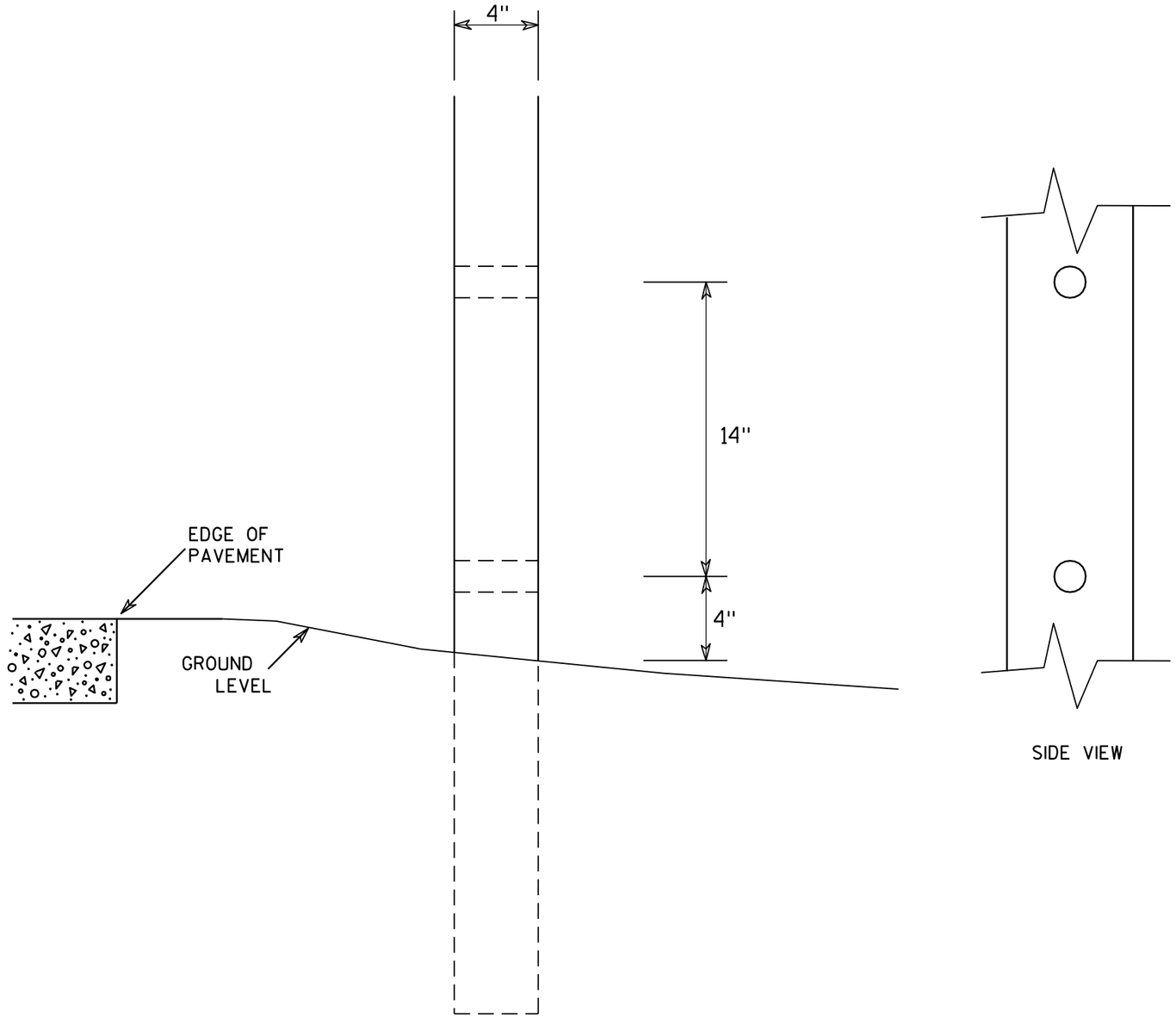
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 88 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000

WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

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

7

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

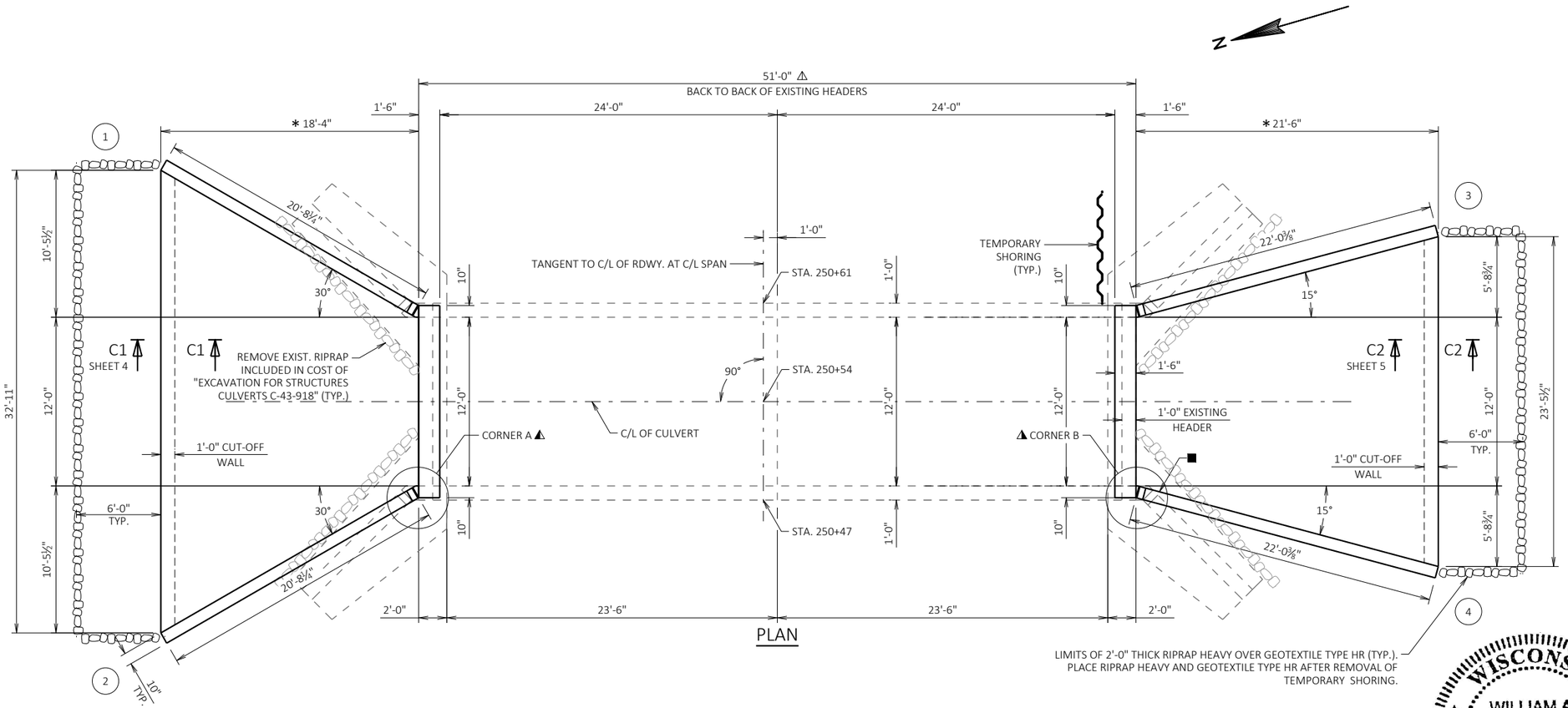
APPROVED Chester J Spang
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 89	E

STATE PROJECT NUMBER

1590-12-74



DESIGN DATA

MATERIAL PROPERTIES:
CONCRETE MASONRY ——— f'c = 3,500 PSI
HIGH STRENGTH BAR STEEL REINFORCEMENT ——— fy = 60,000 PSI

TRAFFIC DATA

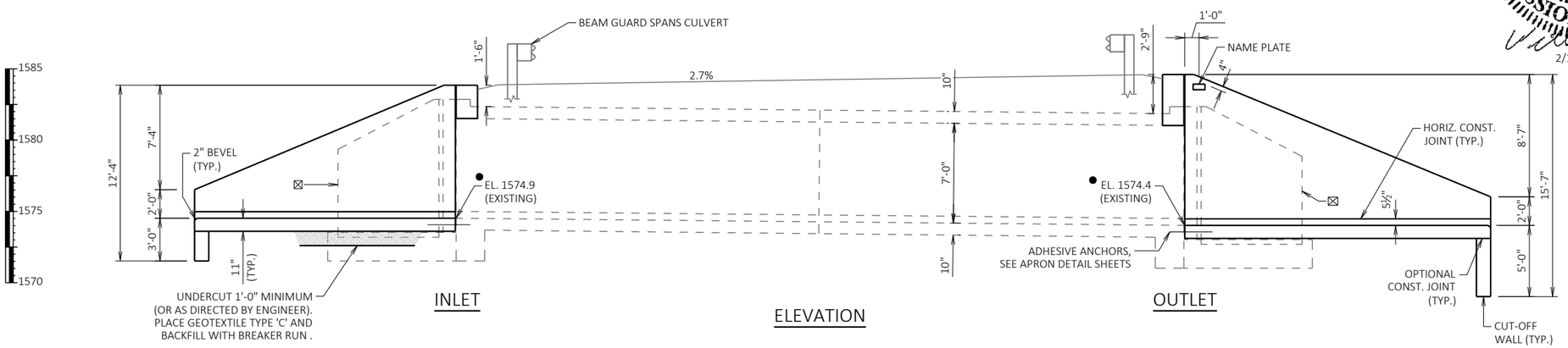
USH 8
ADT (2042) = 4,700
RDS = 60 MPH

LEGEND

- ⚠ SEE CORNER DETAILS ON SHEETS 4 & 5
- ■ NAME PLATE LOCATION
- ⚠ EXISTING BARREL TO REMAIN IN PLACE
- ✱ BUILD APRON AND END OF BOX LEVEL
- ☒ REMOVE EXISTING FOOTING AND WINGS. WHERE APPLICABLE, EXTEND EXISTING BAR STEEL REINFORCEMENT 24 BAR DIAMETERS INTO NEW WORK. (TYP.)
- ◯ INDICATES WING NUMBER
- ● ELEVATIONS BASED ON EXISTING PLANS. MATCH TOP OF BOTTOM SLAB WITH TOP OF APRON. BUILD APRONS LEVEL.

LIST OF DRAWINGS

1. GENERAL PLAN
2. APRON & HEADER DETAILS & GENERAL NOTES
3. SUBSURFACE EXPLORATION
4. INLET APRON DETAILS
5. OUTLET APRON DETAILS



BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
CP50	248+09.88	NO. 6 REBAR WITH CORRE CAP, 71.45' RT.	1583.68'

SCOPE OF WORK

1.) REMOVE EXISTING WINGWALLS AND PORTIONS OF FOOTING THAT WILL INTERFERE WITH NEW WORK. REMOVE EXISTING HEADER & PORTION OF TOP SLAB AS DETAILED.

2.) INSTALL NEW HEADERS, APRONS, AND WINGWALLS.

3.) PERFORM CONCRETE SURFACE REPAIRS AT LOCATIONS DESIGNATED BY ENGINEER.

BRIDGE OFFICE CONTACT
AARON BONK, P.E.
TELEPHONE: (608) 261-0261

CONSULTANT CONTACT
BILL HOVE, P.E.
TELEPHONE: (262) 393-1260

WISCONSIN PROFESSIONAL ENGINEER
WILLIAM A. HOVE
E-33600
MADISON, WI
2/18/2022

NO.	DATE	REVISION	BY

CORRE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED SDR 02/21/22
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE C-43-918

USH 8 OVER NEPTUNE CREEK

COUNTY	TOWN/~~CITY/VILLAGE~~
ONEIDA	MONICO

DESIGN SPEC. REHABILITATION N/A

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
BH	KR	PKF	BH

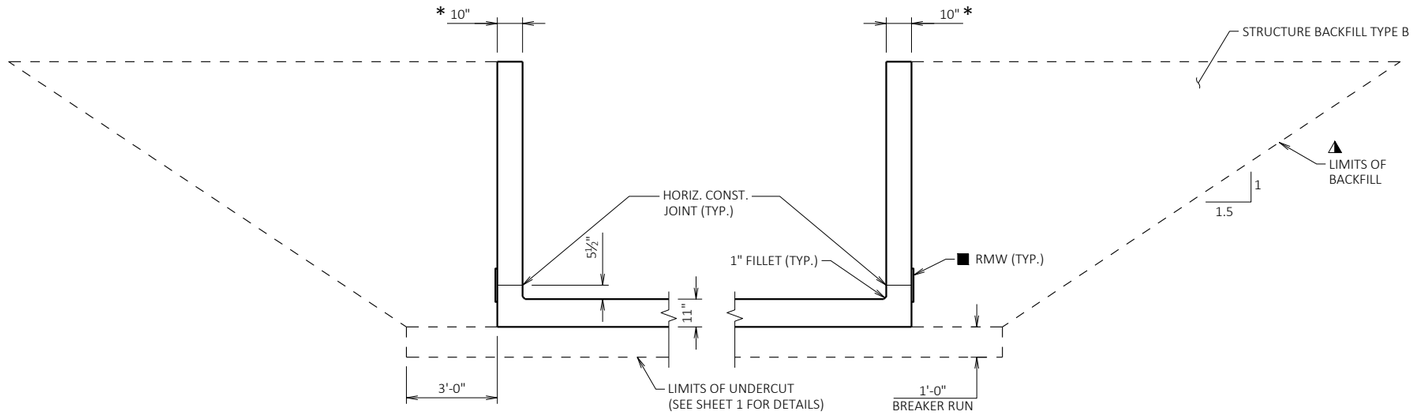
GENERAL PLAN

SHEET 1 OF 5

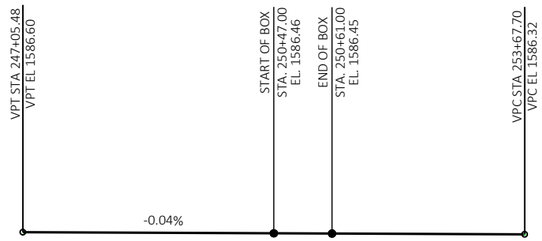
90

8

8



SECTION THRU WINGWALLS



PROFILE GRADE LINE - USH 8

TOTAL ESTIMATED QUANTITIES

BID ITEMS

203.0220	REMOVING STRUCTURE C-43-918	1	EACH
206.2000	EXCAVATION FOR STRUCTURES CULVERTS C-43-918	1	LS
210.2500	BACKFILL STRUCTURE TYPE B	360	TON
311.0110	BREAKER RUN	90	TON
502.4204	ADHESIVE ANCHORS NO. 4 BAR	28	EACH
502.4205	ADHESIVE ANCHORS NO. 5 BAR	28	EACH
504.0100	CONCRETE MASONRY CULVERTS	50	CY
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	1,750	LB
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	6,840	LB
● 509.1500	CONCRETE SURFACE REPAIR	20	SF
511.1200	TEMPORARY SHORING C-43-918	800	SF
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	30	SY
606.0300	RIPRAP HEAVY	30	CY
645.0105	GEOTEXTILE TYPE C	130	SY
645.0120	GEOTEXTILE TYPE HR	80	SY

NON-BID ITEMS

FILLER	3/4"	SIZE

STATE PROJECT NUMBER

1590-12-74

GENERAL NOTES

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

DRAWINGS SHALL NOT BE SCALED.

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

THE FIRST DIGIT OF A THREE DIGIT BAR NO. AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR NO. SIGNIFIES THE BAR SIZE.

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1-INCH DEEP SAW CUT.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES CULVERTS C-43-918" SHALL BE THE EXISTING GROUNDLINE.

THE BACKFILL QUANTITIES ARE BASED ON THE PAY LIMITS SHOWN ON THE PLANS AND MAY NOT REFLECT ACTUAL PLACED QUANTITIES. "BACKFILL STRUCTURE TYPE B" REQUIRED ON THE BOX CULVERT SIDES AND BEHIND APRON WINGS FOR 3 FEET. BACKFILL PLACED BEYOND PAY LIMITS OR EXCEEDING PLAN QUANTITIES SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES.

ALL VOLUME WHICH CANNOT BE PLACED BEFORE CULVERT CONSTRUCTION AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH BACKFILL STRUCTURE TYPE B.

THE ALTERNATE CUTOFF WALL MAY BE USED IN LIEU OF THE CAST-IN-PLACE CONCRETE CUTOFF WALLS. PAYMENT SHALL BE BASED ON CONCRETE CUTOFF WALLS.

THE CONCRETE IN THE CUTOFF WALLS MAY BE PLACED UNDERWATER IF THE EXCAVATION CANNOT BE DEWATERED.

SEE ROADWAY PLANS FOR TEMPORARY STREAM DIVERSION DETAILS.

PLACE AN 18" (MIN.) WIDE SHEET OF 'RUBBERIZED MEMBRANE WATERPROOFING' OVER ALL CONSTRUCTION JOINTS.

CONTRACTOR MAY ELECT TO SUBSTITUTE #1 OR #2 CONCRETE COARSE AGGREGATE, SELECT CRUSHED MATERIAL OR OTHER GRANULAR MATERIAL AS APPROVED BY THE FIELD ENGINEER. IN LIEU OF THE BREAKER RUN, TO BE UTILIZED AS A CONSTRUCTION PLATFORM FOR THE APRON. THE CONTRACTOR IS RESPONSIBLE FOR BASE STABILITY WITH ANY SUBSTITUTED MATERIAL.

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, 1938.

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK, UNLESS SPECIFIED OTHERWISE.

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.

* EXISTING WALL THICKNESS IS 12", PROPOSED WING THICKNESS IS 10". MATCH INSIDE SURFACES.

■ 18" MIN. RUBBERIZED MEMBRANE WATERPROOFING AT ALL HORIZONTAL AND VERTICAL JOINTS.

● "CONCRETE SURFACE REPAIR" QUANTITIES ARE APPROXIMATE. CONTRACTOR SHALL COORDINATE THE FIELD IDENTIFICATION AND DETERMINATION OF ALL REPAIR LOCATIONS WITH THE ENGINEER.

8

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-43-918

DRAWN BY PKF | PLANS CK'D. BH

ORIGINAL PLAN PREPARED BY
CORRE

APRON & HEADER DETAILS & GENERAL NOTES

SHEET 2 OF 5

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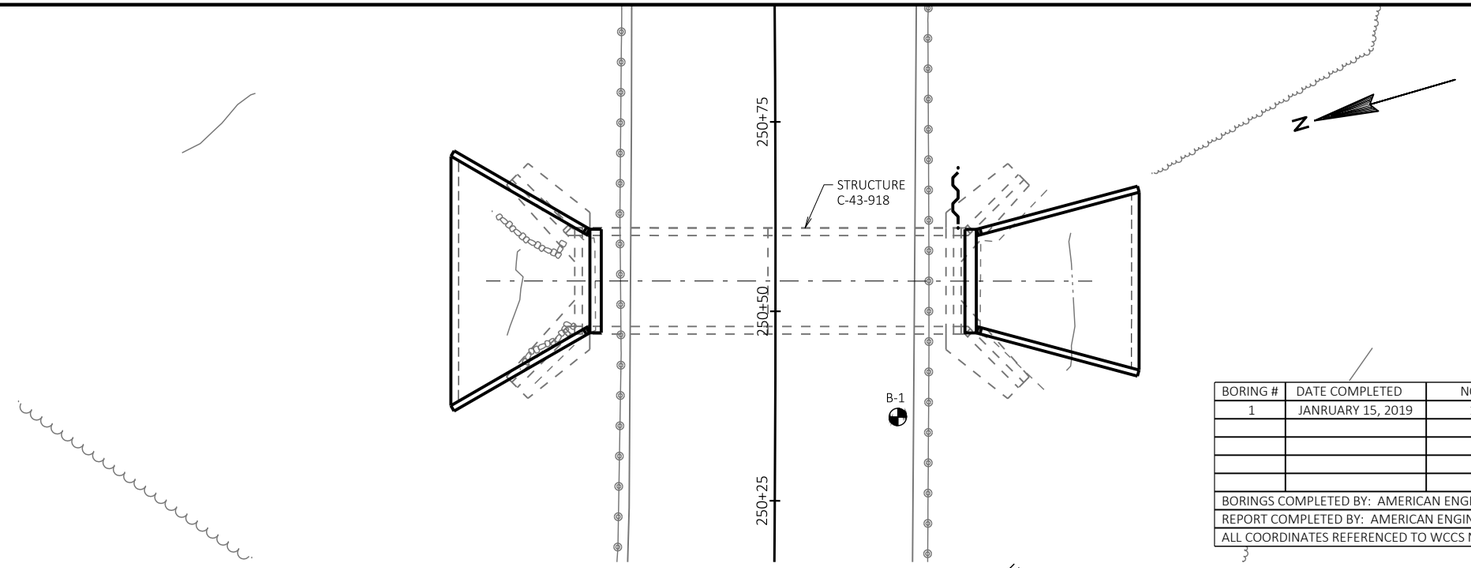
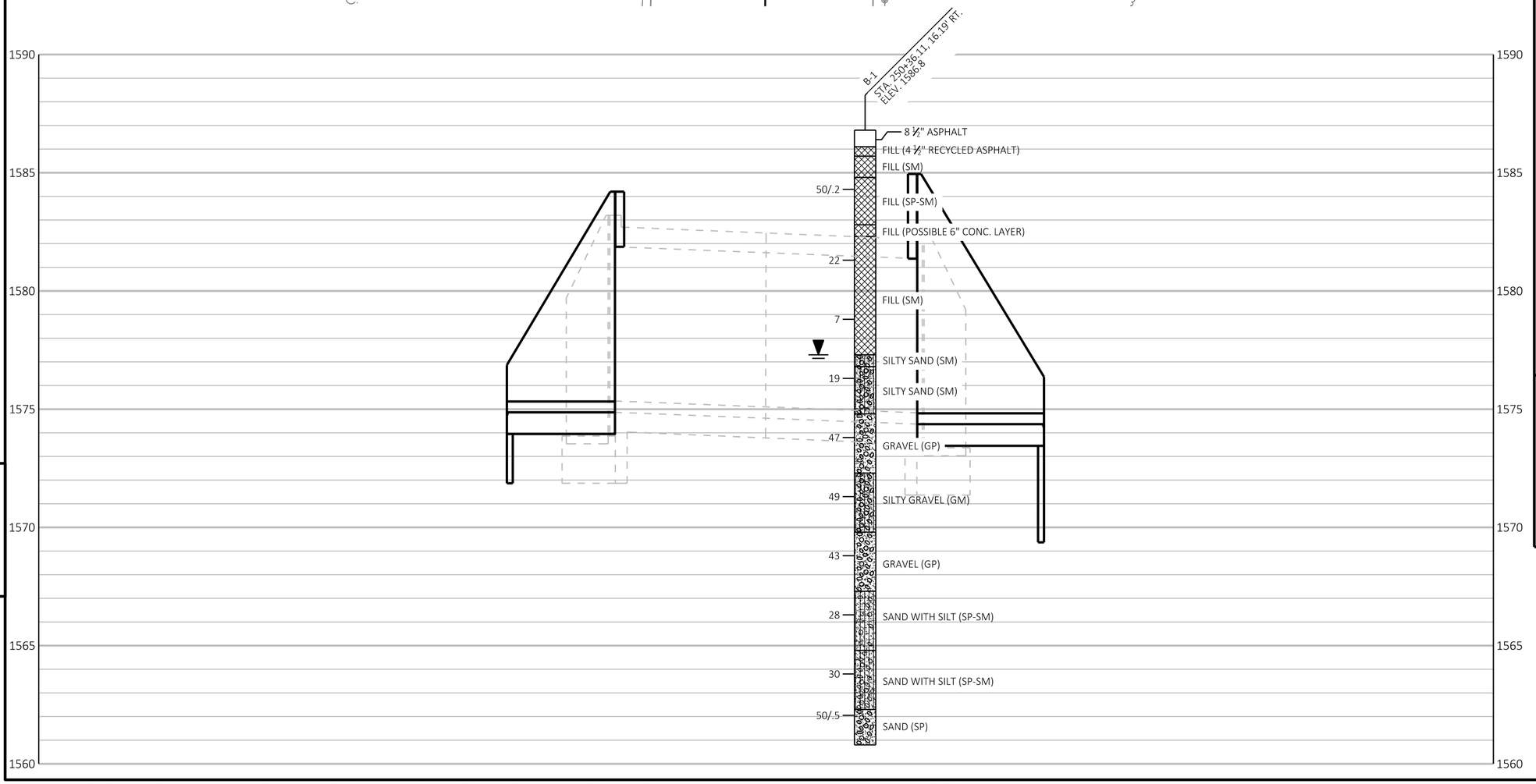


BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	JANRUARY 15, 2019	145391.4	309041.9
BORINGS COMPLETED BY: AMERICAN ENGINEERING TESTING, INC.			
REPORT COMPLETED BY: AMERICAN ENGINEERING TESTING, INC.			
ALL COORDINATES REFERENCED TO WCCS NAD 83 (2011) ONEIDA COUNTY			



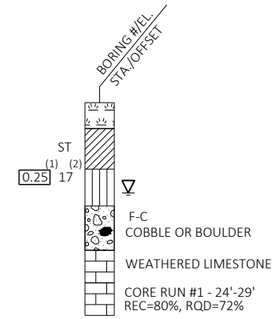
STATE PROJECT NUMBER

1590-12-74

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-43-918

DRAWN BY PKF | PLANS CK'D. BH

SUBSURFACE EXPLORATION

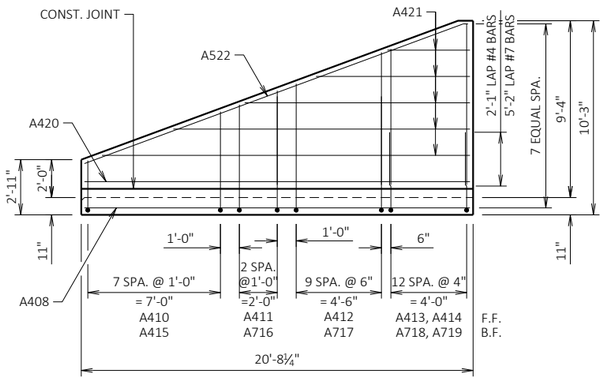
SHEET 3 OF 5

92

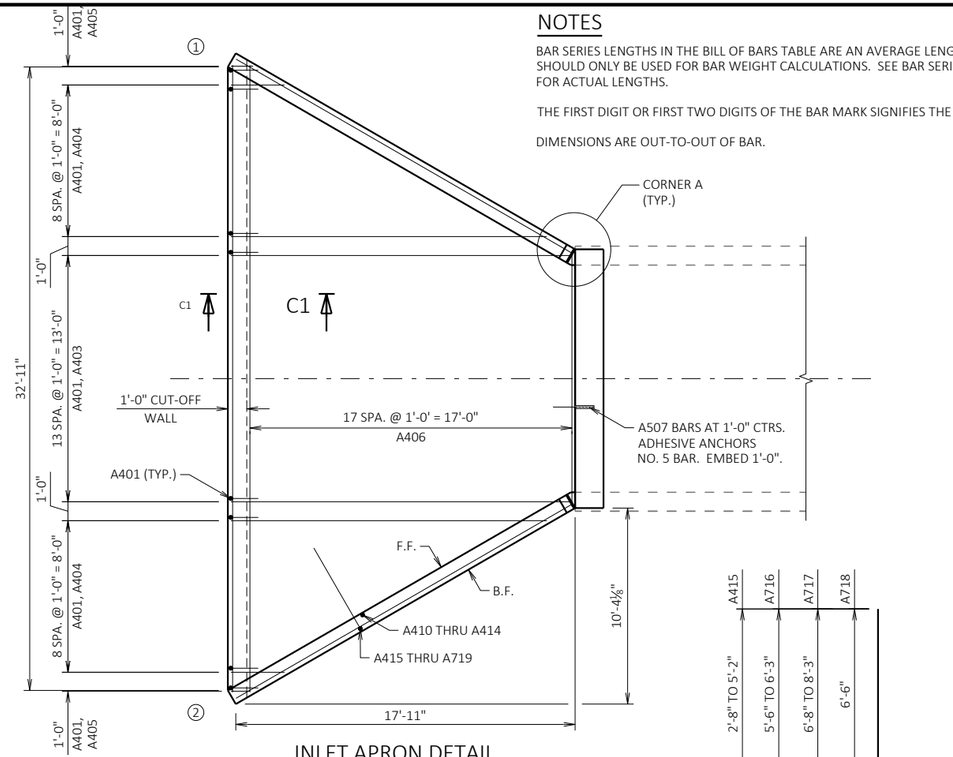
8

8

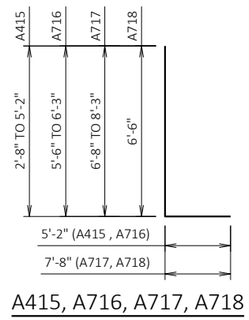
FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - NC REGION\1590-12-04_USH 8_ONEIDA CO\500_CADD\503_STRUCTURES\502.4_FINAL\080301 SX_USH 8.DWG PLOT DATE : 2/17/2022 4:23 PM PLOT BY : PAULETTE FENSKE



WINGS 1 & 2 ELEVATION

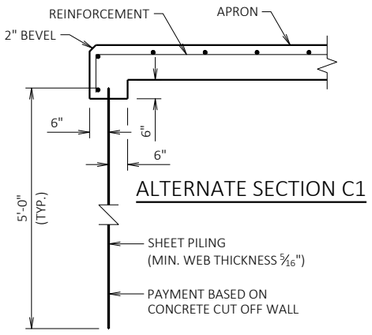


INLET APRON DETAIL



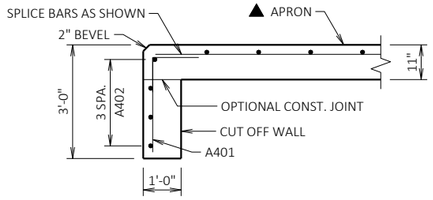
A401, A432

A415, A716, A717, A718

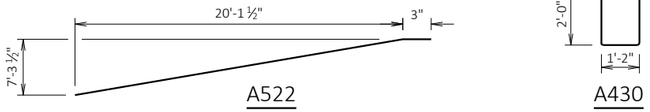


ALTERNATE SECTION C1

ALTERNATE CUTOFF WALL



SECTION C1



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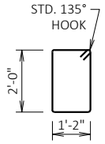

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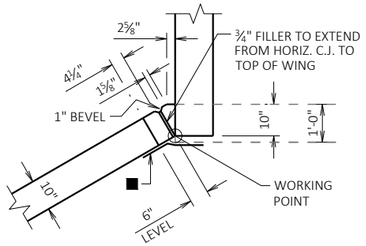
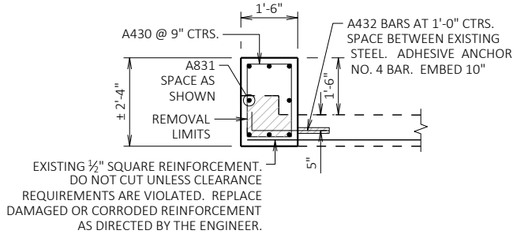
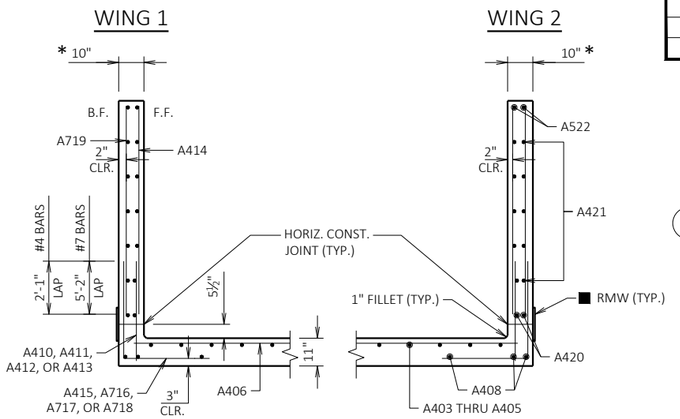


CORNER "A"



INLET HEADER DETAIL



TYPICAL SECTION THRU WINGS

NOTES

BAR SERIES LENGTHS IN THE BILL OF BARS TABLE ARE AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

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

DIMENSIONS ARE OUT-TO-OUT OF BAR.

STATE PROJECT NUMBER

1590-12-74

BILL OF BARS - INLET

BAR MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	
NON-COATED BARS					TOTAL WEIGHT = 880 LBS	
A401	34	3'-11"	X		INLET CUT-OFF WALL	VERT.
A402	4	33'-1"			INLET CUT-OFF WALL	HORIZ.
A403	14	18'-0"			APRON	LONG.
A404	18	9'-9"		X	APRON	LONG.
A405	2	1'-0"			APRON	LONG.
A406	18	23'-3"		X	APRON	TRANS.
A507	14	3'-0"			APRON TO BOX, BTM SLAB	LONG.
A408	12	11'-1"			APRON - BTM. & BELOW WINGS	LONG.
COATED BARS					TOTAL WEIGHT = 3,080 LBS	
A410	16	3'-11"		X	WINGS - F.F.	VERT.
A411	6	5'-11"		X	WINGS - F.F.	VERT.
A412	20	7'-6"		X	WINGS - F.F.	VERT.
A413	26	3'-5"			WINGS - F.F.	VERT.
A414	26	7'-11"		X	WINGS - F.F.	VERT.
A415	16	8'-11"	X	X	WINGS - B.F.	VERT.
A716	6	10'-11"	X	X	WINGS - B.F.	VERT.
A717	20	15'-0"	X	X	WINGS - B.F.	VERT.
A718	26	14'-0"	X		WINGS - B.F.	VERT.
A719	26	7'-11"		X	WINGS - B.F.	VERT.
A420	4	20'-4"			WINGS	HORIZ.
A421	20	11'-11"		X	WINGS	HORIZ.
A522	4	21'-7"	X		WINGS	HORIZ.
A430	19	6'-10"	X		INLET HEADER	VERT.
A831	8	13'-4"			INLET HEADER	HORIZ.
A432	14	2'-9"	X		INLET HEADER - ANCHORS	HORIZ.

BAR SERIES TABLE

BAR MARK	NO. REQ'D.	LENGTH
A404	2 SERIES OF 9	2'-10" TO 16'-8"
A406	1 SERIES OF 18	13'-5" TO 33'-1"
A410	2 SERIES OF 8	2'-8" TO 5'-2"
A411	2 SERIES OF 3	5'-6" TO 6'-3"
A412	2 SERIES OF 10	6'-8" TO 8'-3"
A414	2 SERIES OF 13	7'-2" TO 8'-7"
A415	2 SERIES OF 8	7'-8" TO 10'-2"
A716	2 SERIES OF 3	10'-6" TO 11'-3"
A717	2 SERIES OF 10	14'-2" TO 15'-9"
A719	2 SERIES OF 13	7'-2" TO 8'-7"
A421	4 SERIES OF 5	4'-2" TO 19'-7"

LEGEND

* EXISTING WALL THICKNESS IS 12", PROPOSED WING THICKNESS IS 10". MATCH INSIDE SURFACES.

■ 18" MIN. RUBBERIZED MEMBRANE WATERPROOFING AT ALL HORIZONTAL AND VERTICAL JOINTS.

◯ INDICATES WING NUMBER

● LAPPED BARS. MIN. LAP = 1'-8"

▲ TOP OF APRON TO MATCH TOP OF EXISTING BOTTOM SLAB. BUILD APRON LEVEL.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-43-918

DRAWN BY PKF | PLANS CK'D. BH

ORIGINAL PLAN PREPARED BY
CORRE

INLET APRON DETAILS

SHEET 4 OF 5

93

8

8

STATE PROJECT NUMBER

1590-12-74

NOTES

BAR SERIES LENGTHS IN THE BILL OF BARS TABLE ARE AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

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

DIMENSIONS ARE OUT-TO-OUT OF BAR.

BILL OF BARS - OUTLET

BAR MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	
NON-COATED BARS					TOTAL WEIGHT = 870 LBS	
B401	24	5'-11"	X		OUTLET CUT-OFF WALL	VERT.
B402	6	24'-0"			OUTLET CUT-OFF WALL	HORIZ.
B403	14	21'-2"			APRON	LONG.
B404	10	10'-9"		X	APRON	LONG.
B405	21	18'-10"		X	APRON	TRANS.
B506	14	3'-0"			APRON TO BOX, BTM SLAB	LONG.
B407	12	11'-10"			APRON - BTM. & BELOW WINGS	LONG.
COATED BARS					TOTAL WEIGHT = 3,760 LBS	
B410	20	4'-4"		X	WINGS - F.F.	VERT.
B411	6	6'-9"		X	WINGS - F.F.	VERT.
B412	46	3'-5"			WINGS - F.F.	VERT.
B413	20	7'-3"		X	WINGS - F.F.	VERT.
B414	26	7'-11"		X	WINGS - F.F.	VERT.
B415	20	9'-4"	X	X	WINGS - B.F.	VERT.
B716	6	12'-8"	X	X	WINGS - B.F.	VERT.
B717	46	14'-4"	X		WINGS - B.F.	VERT.
B718	20	7'-3"		X	WINGS - B.F.	VERT.
B719	26	9'-1"		X	WINGS - B.F.	VERT.
B420	4	21'-8"			WINGS	HORIZ.
B421	24	12'-5"		X	WINGS	HORIZ.
B522	4	23'-4"	X		WINGS	HORIZ.
B530	19	9'-6"	X		OUTLET HEADER	VERT.
B831	10	13'-4"			OUTLET HEADER	HORIZ.
B432	14	2'-9"	X		OUTLET HEADER - ANCHORS	HORIZ.

BAR SERIES TABLE

BAR MARK	NO. REQ'D.	LENGTH
B404	2 SERIES OF 5	3'-3" TO 18'-2"
B405	1 SERIES OF 21	13'-5" TO 24'-3"
B410	2 SERIES OF 10	2'-7" TO 6'-0"
B411	2 SERIES OF 3	6'-4" TO 7'-2"
B413	2 SERIES OF 10	6'-4" TO 8'-1"
B414	2 SERIES OF 13	8'-4" TO 9'-10"
B415	2 SERIES OF 10	7'-7" TO 11'-0"
B716	2 SERIES OF 3	12'-3" TO 13'-1"
B718	2 SERIES OF 10	6'-4" TO 8'-1"
B719	2 SERIES OF 13	8'-4" TO 9'-10"
B421	4 SERIES OF 6	3'-9" TO 21'-1"

LEGEND

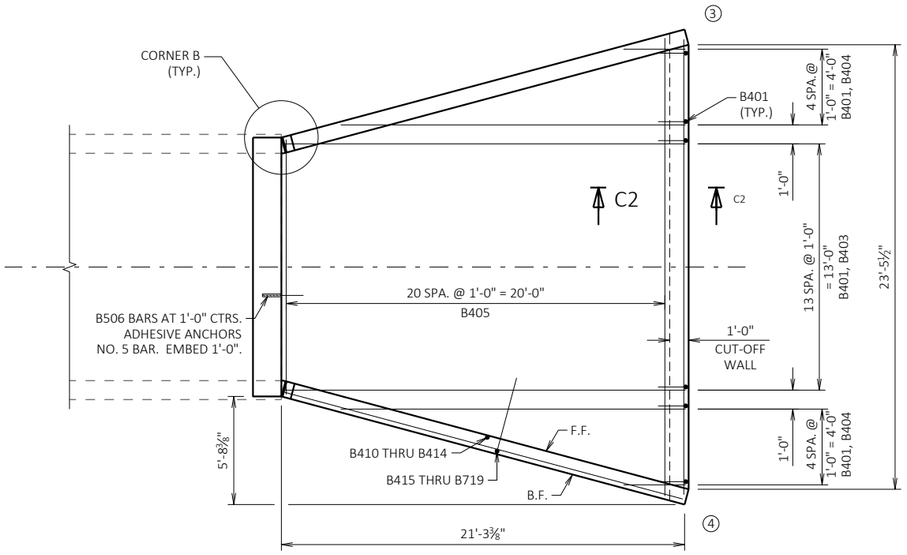
* EXISTING WALL THICKNESS IS 12", PROPOSED WING THICKNESS IS 10". MATCH INSIDE SURFACES.

■ 18" RUBBERIZED MEMBRANE WATERPROOFING AT ALL HORIZONTAL AND VERTICAL JOINTS.

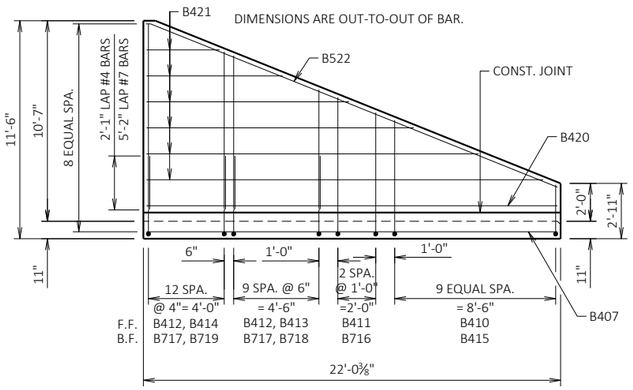
◯ INDICATES WING NUMBER

● LAPPED BARS. MIN. LAP = 1'-8"

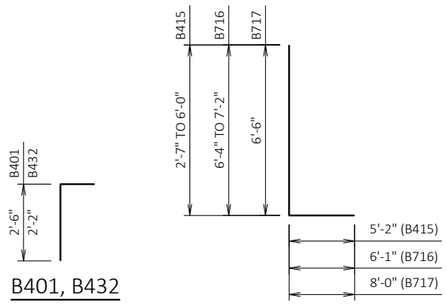
▲ TOP OF APRON TO MATCH TOP OF EXISTING BOTTOM SLAB. BUILD APRON LEVEL.



OUTLET APRON DETAIL

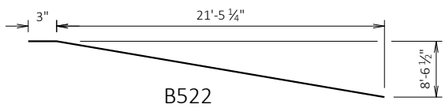


WINGS 3 & 4 ELEVATION



B401, B432

B415, B716, B717



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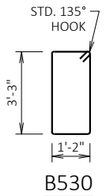

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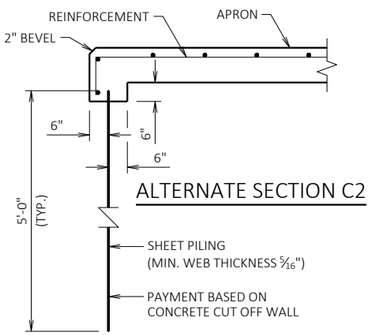
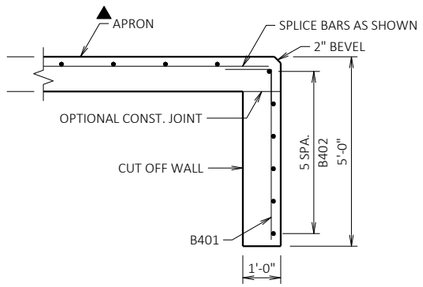
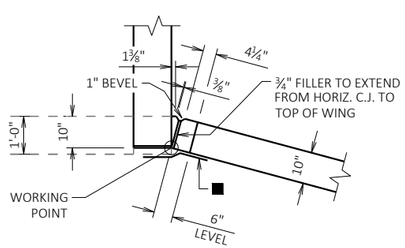


ALTERNATE SECTION C2

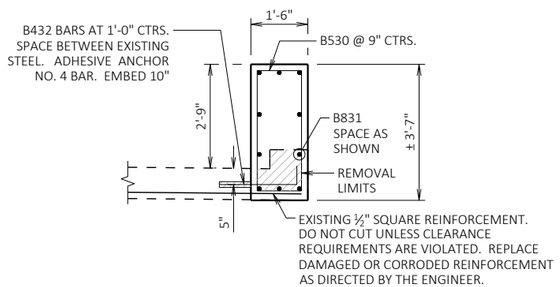
ALTERNATE CUTOFF WALL



SECTION C2

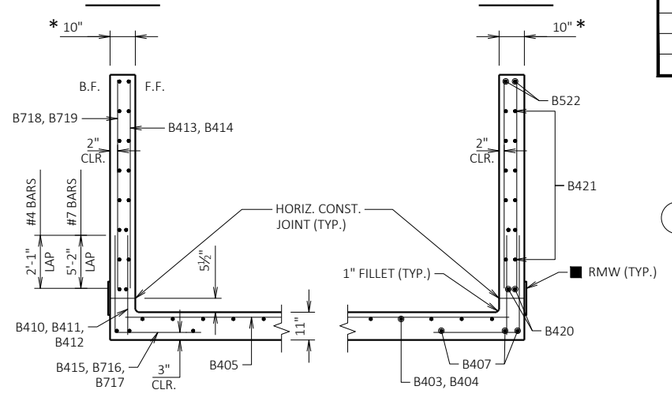


CORNER "B"



OUTLET HEADER DETAIL

WING 3



WING 4

TYPICAL SECTION THRU WINGS

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-43-918

DRAWN BY PKF | PLANS CK'D. BH

ORIGINAL PLAN PREPARED BY CORRE

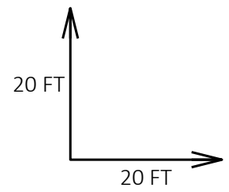
OUTLET APRON DETAILS

SHEET 5 OF 5

94

DIVISION 1 - STA 72+38 TO 74+86												
STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
72+38.27	7238.27	0.00	0.00	0.00	0.00	0	0	0	0	0	0
72+50	7250.00	11.73	0.00	0.00	0.00	0	0	0	0	0	0
73+00	7300.00	50.00	0.00	0.00	0.00	0	0	0	0	0	0
73+46.5	7346.50	46.50	0.00	0.00	0.00	0	0	0	0	0	0
73+46.94	7346.94	0.44	0.00	0.00	0.59	0	0	0	0	0	0
73+50	7350.00	3.06	0.00	0.00	0.24	0	0	0	0	0	0
73+75.195	7375.20	25.20	0.00	0.00	0.76	0	0	0	0	0	0
74+00	7400.00	24.80	0.00	0.00	2.59	0	0	2	0	3	-3
74+01.546	7401.55	1.55	0.00	0.00	2.84	0	0	0	0	3	-3
74+27.914	7427.91	26.37	0.00	0.00	11.48	0	0	7	0	11	-11
74+32.775	7432.77	4.86	0.00	0.00	12.82	0	0	2	0	14	-14
74+50	7450.00	17.23	0.00	0.00	0.11	0	0	4	0	19	-19
74+50.5	7450.50	0.50	0.00	0.00	0.00	0	0	0	0	19	-19
74+59.514	7459.51	9.01	0.00	0.00	0.00	0	0	0	0	19	-19
74+76.193	7476.19	16.68	0.00	0.00	0.00	0	0	0	0	19	-19
74+86.237	7486.24	10.04	0.00	0.00	0.02	0	0	0	0	19	-19

DIVISION 2 - STA 86+47 TO 89+23												
STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
86+46.934	8646.93	0.00	0.00	0.00	3.61	0	0	0	0	0	0
86+50	8650.00	3.07	0.00	0.00	9.02	0	0	1	0	1	-1
86+74.142	8674.14	24.14	0.00	0.00	8.25	0	0	8	0	11	-11
86+86.579	8686.58	12.44	0.00	0.00	6.70	0	0	3	0	15	-15
86+87	8687.00	0.42	0.00	0.00	5.02	0	0	0	0	15	-15
87+00	8700.00	13.00	0.00	0.00	5.38	0	0	3	0	19	-19
87+00.881	8700.88	0.88	0.00	0.00	5.38	0	0	0	0	19	-19
87+33.969	8733.97	33.09	0.00	0.00	2.60	0	0	5	0	25	-25
87+50	8750.00	16.03	0.00	0.00	1.30	0	0	1	0	26	-26
87+60.245	8760.24	10.24	0.00	0.00	0.65	0	0	0	0	26	-26
87+84	8784.00	23.76	0.00	0.00	0.01	0	0	0	0	26	-26
87+84.798	8784.80	0.80	0.00	0.00	0.54	0	0	0	0	26	-26
87+86.505	8786.50	1.71	0.00	0.00	2.03	0	0	0	0	26	-26
88+00	8800.00	13.50	0.01	0.00	1.64	0	0	1	0	28	-28
88+32.505	8832.50	32.50	0.06	0.00	0.63	0	0	1	0	29	-29
88+33	8833.00	0.50	0.00	0.00	0.00	0	0	0	0	29	-29
88+50	8850.00	17.00	0.00	0.00	0.00	0	0	0	0	29	-29
89+00	8900.00	50.00	0.00	0.00	0.00	0	0	0	0	29	-29
89+22.505	8922.50	22.50	0.00	0.00	0.00	0	0	0	0	29	-29



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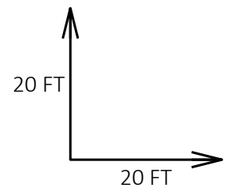
PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	EARTHWORK DATA USH 8	SHEET 95	E

DIVISION 3 - STA 247+65 TO 253+55												
STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	1.00 NOTE 1	1.25	NOTE 8
247+64.68	24764.68	0.00	0.00	0.00	1.33	0	0	0	0	0	0
248+00	24800.00	35.32	0.00	0.00	4.24	0	0	4	0	5	-5
248+10.343	24810.34	10.34	0.00	0.00	5.34	0	0	2	0	8	-8
248+40	24840.00	29.66	0.00	0.00	5.89	0	0	6	0	15	-15
248+41.07	24841.07	1.07	0.00	0.00	6.22	0	0	0	0	15	-15
248+50	24850.00	8.93	0.00	0.00	8.33	0	0	2	0	18	-18
248+76.08	24876.08	26.08	0.00	0.00	20.72	0	0	14	0	35	-35
249+00	24900.00	23.92	0.00	0.00	27.59	0	0	21	0	61	-61
249+00.662	24900.66	0.66	0.00	0.00	27.70	0	0	1	0	63	-63
249+12.076	24912.08	11.41	0.00	0.00	23.34	0	0	11	0	76	-76
249+27.105	24927.11	15.03	0.00	0.00	11.19	0	0	10	0	89	-89
249+28	24928.00	0.89	0.00	0.00	9.21	0	0	0	0	89	-89
249+38.721	24938.72	10.72	0.00	0.00	5.32	0	0	3	0	93	-93
249+50	24950.00	11.28	0.00	0.00	1.79	0	0	1	0	94	-94
249+53.557	24953.56	3.56	0.00	0.00	0.00	0	0	0	0	94	-94
249+55.8	24955.80	2.24	0.00	0.00	0.00	0	0	0	0	94	-94
249+65.357	24965.36	9.56	0.00	0.00	14.16	0	0	3	0	98	-98
250+00	25000.00	34.64	0.00	0.00	25.02	0	0	25	0	129	-129
250+20	25020.00	20.00	0.00	0.00	42.55	0	0	25	0	160	-160
250+20.18	25020.18	0.18	0.00	0.00	49.12	0	0	0	0	160	-160
250+34.528	25034.53	14.35	0.00	0.00	83.07	0	0	35	0	204	-204
250+35	25035.00	0.47	0.00	0.00	66.53	0	0	1	0	205	-205
250+41.65	25041.65	6.65	0.00	0.00	24.34	0	0	11	0	219	-219
250+50	25050.00	8.35	0.00	0.00	81.32	0	0	16	0	239	-239
250+65	25065.00	15.00	0.00	0.00	22.62	0	0	29	0	275	-275
250+65.703	25065.70	0.70	0.00	0.00	68.17	0	0	1	0	276	-276
250+74.5	25074.50	8.80	0.00	0.00	51.63	0	0	20	0	301	-301
250+75	25075.00	0.50	0.00	0.00	64.52	0	0	1	0	303	-303
251+00	25100.00	25.00	0.00	0.00	14.14	0	0	36	0	348	-348
251+00.5	25100.50	0.50	0.00	0.00	7.37	0	0	0	0	348	-348
251+06.04	25106.04	5.54	0.00	0.00	0.31	0	0	1	0	349	-349
251+07	25107.00	0.96	0.00	0.00	0.00	0	0	0	0	349	-349
251+15.499	25115.50	8.50	0.00	0.00	0.00	0	0	0	0	349	-349
251+35	25135.00	19.50	0.00	0.00	0.00	0	0	0	0	349	-349
251+35.32	25135.32	0.32	0.00	0.00	0.00	0	0	0	0	349	-349
251+41.951	25141.95	6.63	0.00	0.00	2.83	0	0	0	0	349	-349
251+50	25150.00	8.05	0.00	0.00	11.76	0	0	2	0	351	-351
251+66.049	25166.05	16.05	0.00	0.00	33.50	0	0	13	0	368	-368
251+68.395	25168.39	2.35	0.00	0.00	36.32	0	0	3	0	371	-371
251+89	25189.00	20.61	0.00	0.00	33.53	0	0	27	0	405	-405
251+89.51	25189.51	0.51	0.00	0.00	33.37	0	0	1	0	406	-406
251+92.685	25192.68	3.17	0.00	0.00	53.20	0	0	5	0	413	-413
252+00	25200.00	7.32	0.00	0.00	55.28	0	0	15	0	431	-431
252+19.33	25219.33	19.33	0.00	0.00	57.55	0	0	40	0	481	-481
252+36.895	25236.89	17.56	0.00	0.00	50.06	0	0	35	0	525	-525
252+50	25250.00	13.11	0.00	0.00	43.65	0	0	23	0	554	-554
252+56.24	25256.24	6.24	0.00	0.00	41.74	0	0	10	0	566	-566
252+56.5	25256.50	0.26	0.00	0.00	36.31	0	0	0	0	566	-566
253+00	25300.00	43.50	0.00	0.00	29.88	0	0	53	0	633	-633
253+26.855	25326.86	26.86	0.00	0.00	26.49	0	0	28	0	668	-668
253+42.076	25342.08	15.22	0.00	0.00	6.36	0	0	9	0	679	-679
253+50	25350.00	7.92	0.00	0.00	0.56	0	0	1	0	680	-680
253+55.468	25355.47	5.47	0.00	0.00	0.00	0	0	0	0	680	-680



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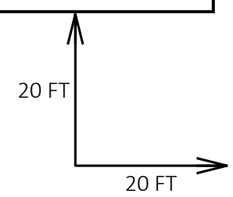
PROJECT NO: 1590-12-74 | HWY: USH 8 | COUNTY: ONEIDA | EARTHWORK DATA USH 8 | SHEET 96 | E

DIVISION 4 - STA 419+77 TO 423+25												
STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	1.00 NOTE 1	1.25	NOTE 8
419+76.923	41976.92	0.00	0.00	0.00	16.29	0	0	0	0	0	0
420+00	42000.00	23.08	0.00	0.00	23.54	0	0	17	0	21	-21
420+30.899	42030.90	30.90	0.00	0.00	0.36	0	0	14	0	39	-39
420+50	42050.00	19.10	0.00	0.00	1.21	0	0	1	0	40	-40
420+57.442	42057.44	7.44	0.00	0.00	0.54	0	0	0	0	40	-40
420+83.986	42083.99	26.54	0.00	0.00	3.10	0	0	2	0	43	-43
421+00	42100.00	16.01	0.00	0.00	10.96	0	0	4	0	48	-48
421+50	42150.00	50.00	0.00	0.00	4.98	0	0	15	0	66	-66
421+96.486	42196.49	46.49	0.00	0.00	10.83	0	0	14	0	84	-84
422+00	42200.00	3.51	0.00	0.00	11.32	0	0	1	0	85	-85
422+23.03	42223.03	23.03	0.00	0.00	10.45	0	0	9	0	96	-96
422+49.432	42249.43	26.40	0.00	0.00	13.58	0	0	12	0	111	-111
422+50	42250.00	0.57	0.00	0.00	13.60	0	0	0	0	111	-111
423+00	42300.00	50.00	0.00	0.00	9.49	0	0	21	0	138	-138
423+25	42325.00	25.00	0.00	0.00	12.65	0	0	10	0	150	-150

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
4 - EXPANDED MARSH BACKFILL	WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORROW)
5 - EXPANDED EBS	WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORROW)
6 - REDUCED MARSH IN FILL	REDUCED MARSH EXCAVATION THAT CAN BE USED IN FILL
7 - REDUCED EBS IN FILL	REDUCED EBS EXCAVATION THAT CAN BE USED IN FILL
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAVT - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - EXPANDED ROCK) * FILL FACTOR)]
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAVT - ((FILL - EXPANDED ROCK) * FILL FACTOR)]



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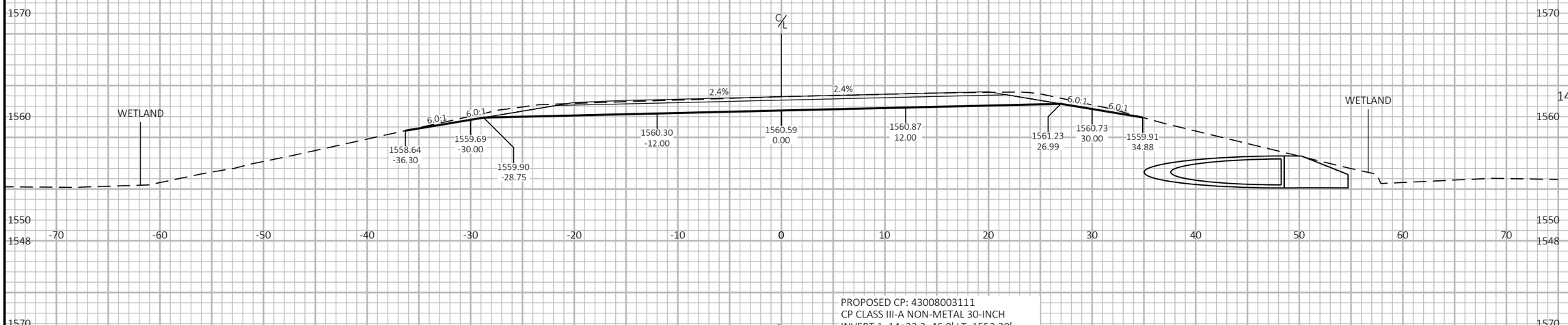
PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	EARTHWORK DATA USH 8	SHEET 97	E

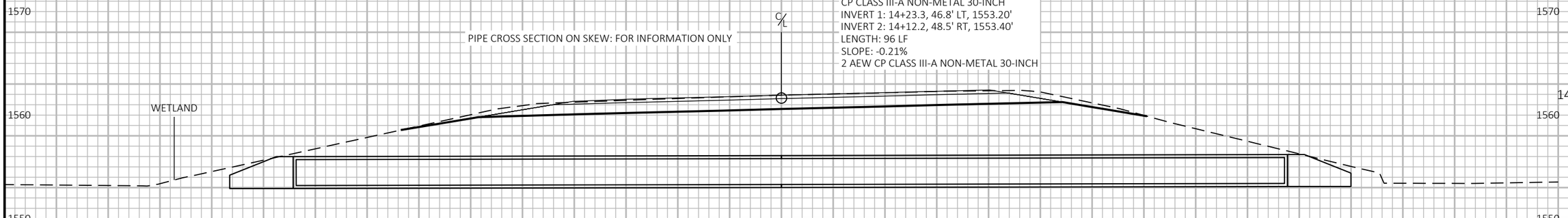
14+12



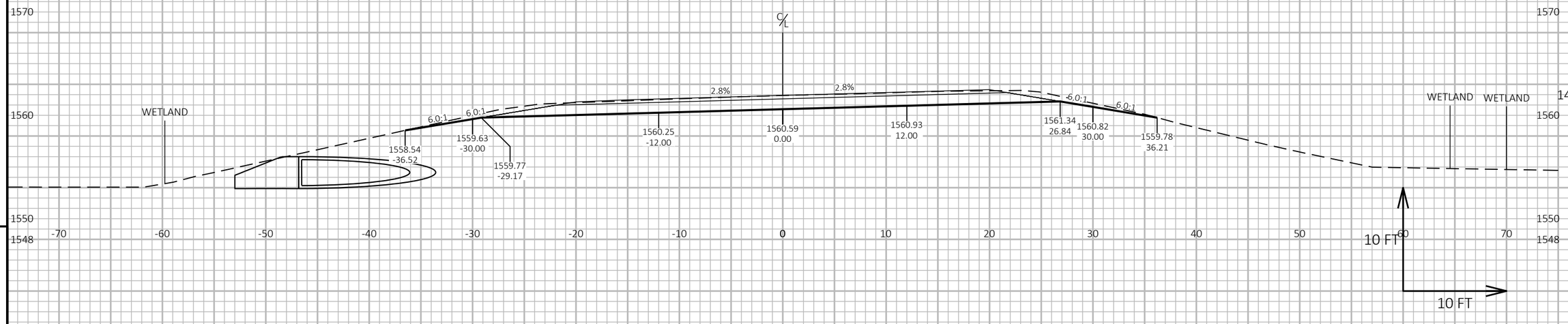
14+18

PROPOSED CP: 43008003111
CP CLASS III-A NON-METAL 30-INCH
INVERT 1: 14+23.3, 46.8' LT, 1553.20'
INVERT 2: 14+12.2, 48.5' RT, 1553.40'
LENGTH: 96 LF
SLOPE: -0.21%
2 AEW CP CLASS III-A NON-METAL 30-INCH

PIPE CROSS SECTION ON SKEW: FOR INFORMATION ONLY



14+23



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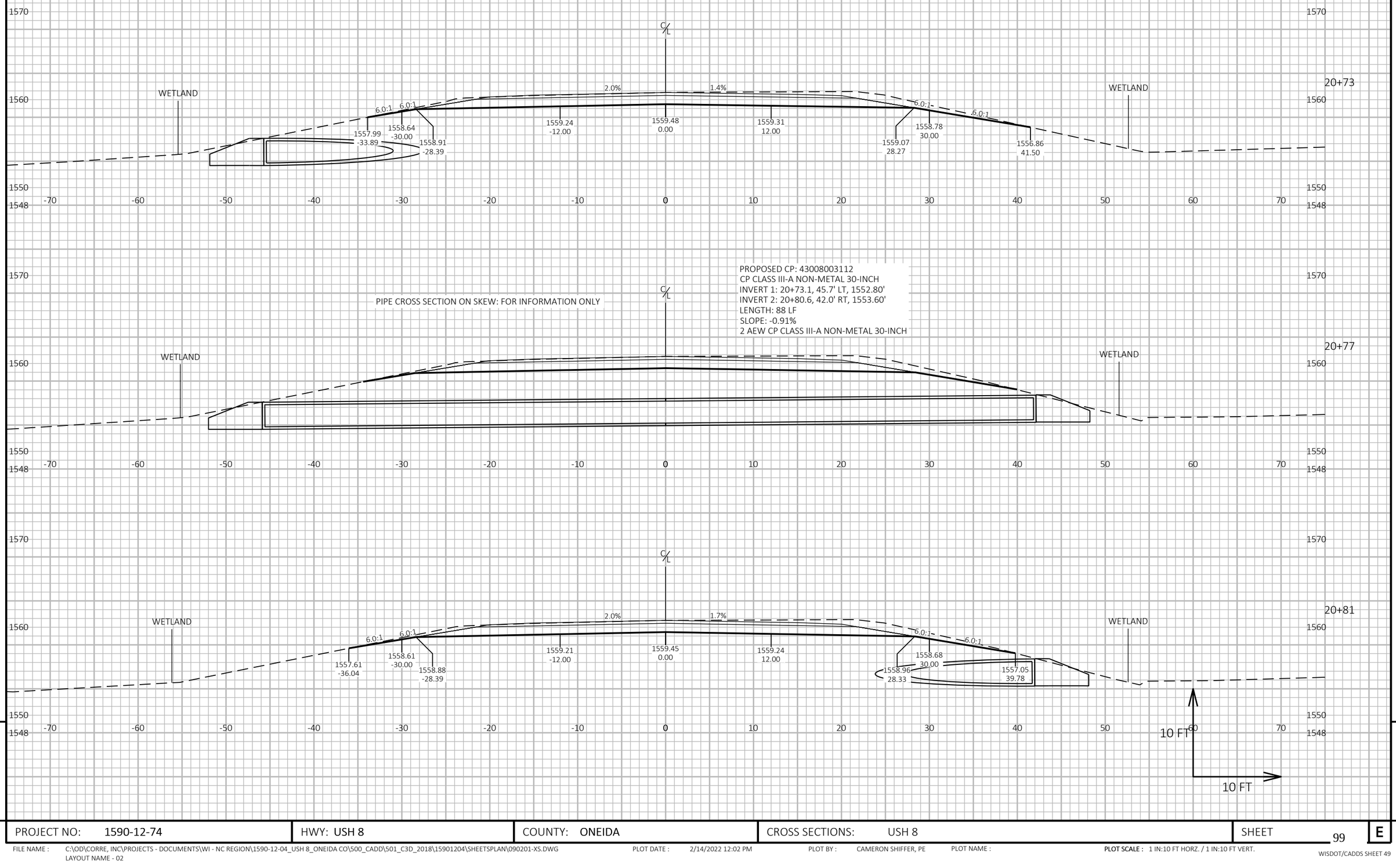
PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	CROSS SECTIONS: USH 8	SHEET 98	E



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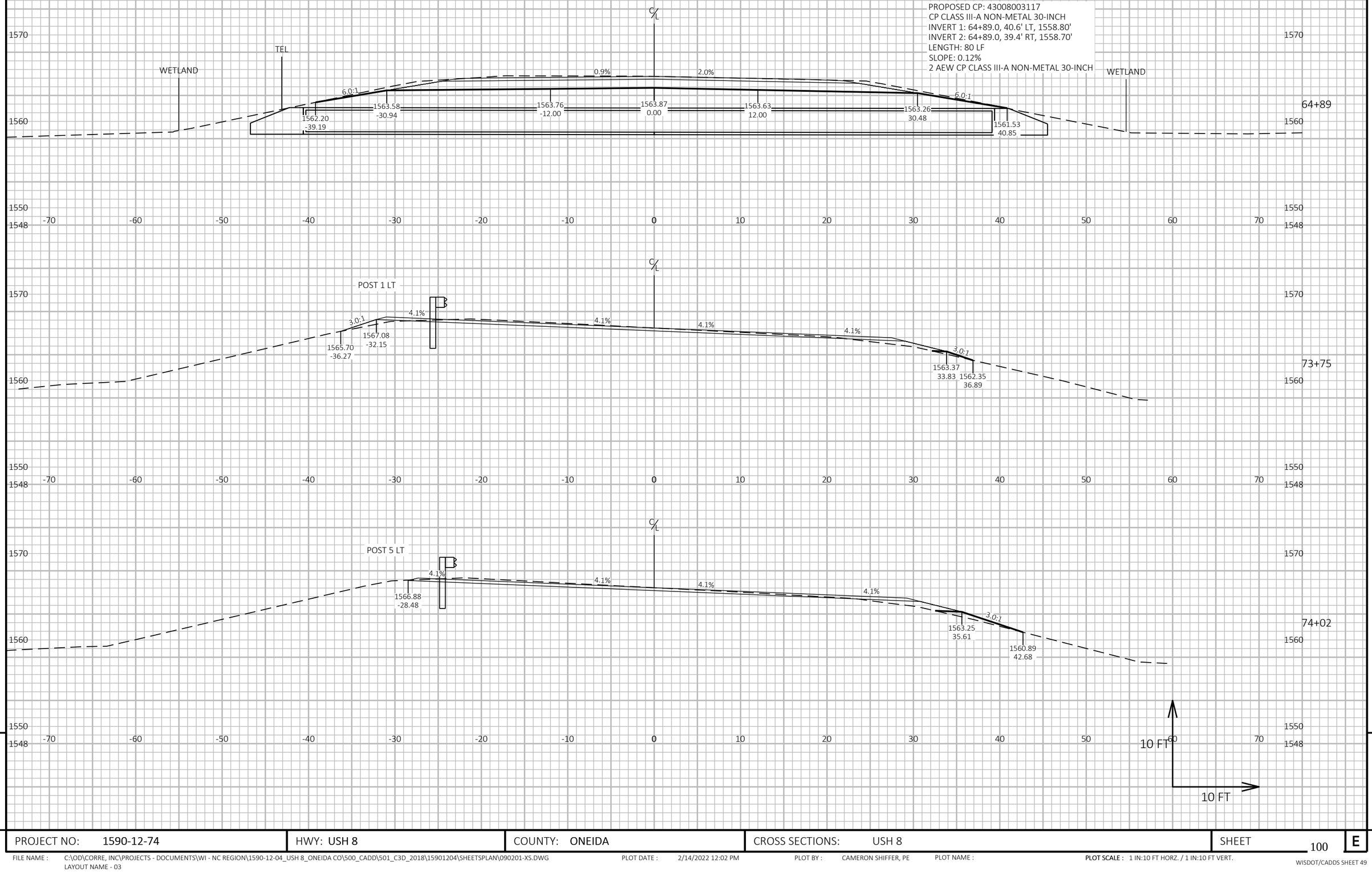
PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	CROSS SECTIONS: USH 8	SHEET 99	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - NC REGION\1590-12-04_USH 8_ONEIDA CO\500_CADD\501_C3D_2018\15901204\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 02

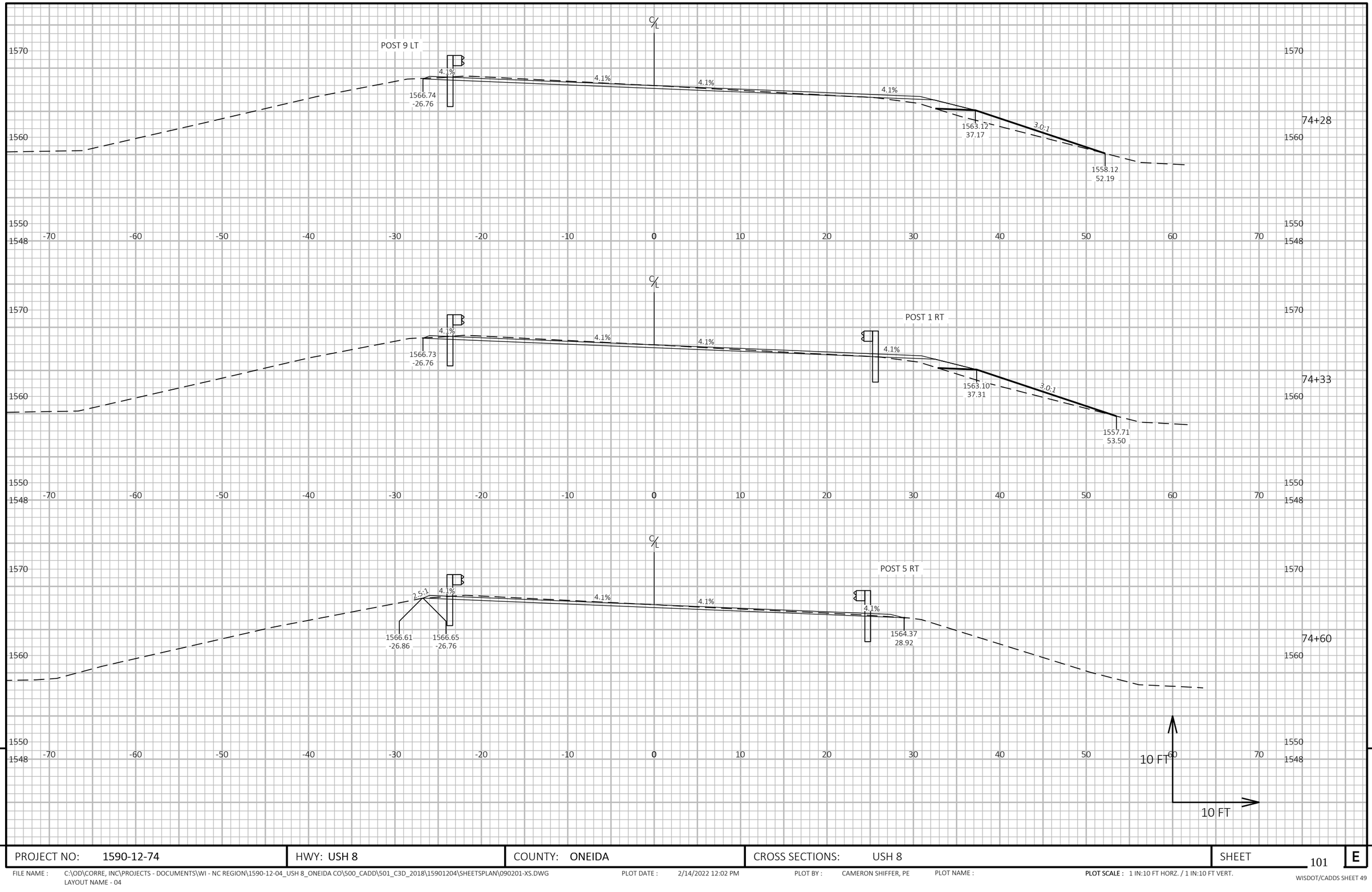
PLOT DATE : 2/14/2022 12:02 PM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

PROPOSED CP: 43008003117
CP CLASS III-A NON-METAL 30-INCH
INVERT 1: 64+89.0, 40.6' LT, 1558.80'
INVERT 2: 64+89.0, 39.4' RT, 1558.70'
LENGTH: 80 LF
SLOPE: 0.12%
2 AEW CP CLASS III-A NON-METAL 30-INCH



PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	CROSS SECTIONS: USH 8	SHEET 100	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - NC REGION\1590-12-04_USH 8_ONEIDA CO\500_CADD\501_C3D_2018\15901204\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 03
PLOT DATE : 2/14/2022 12:02 PM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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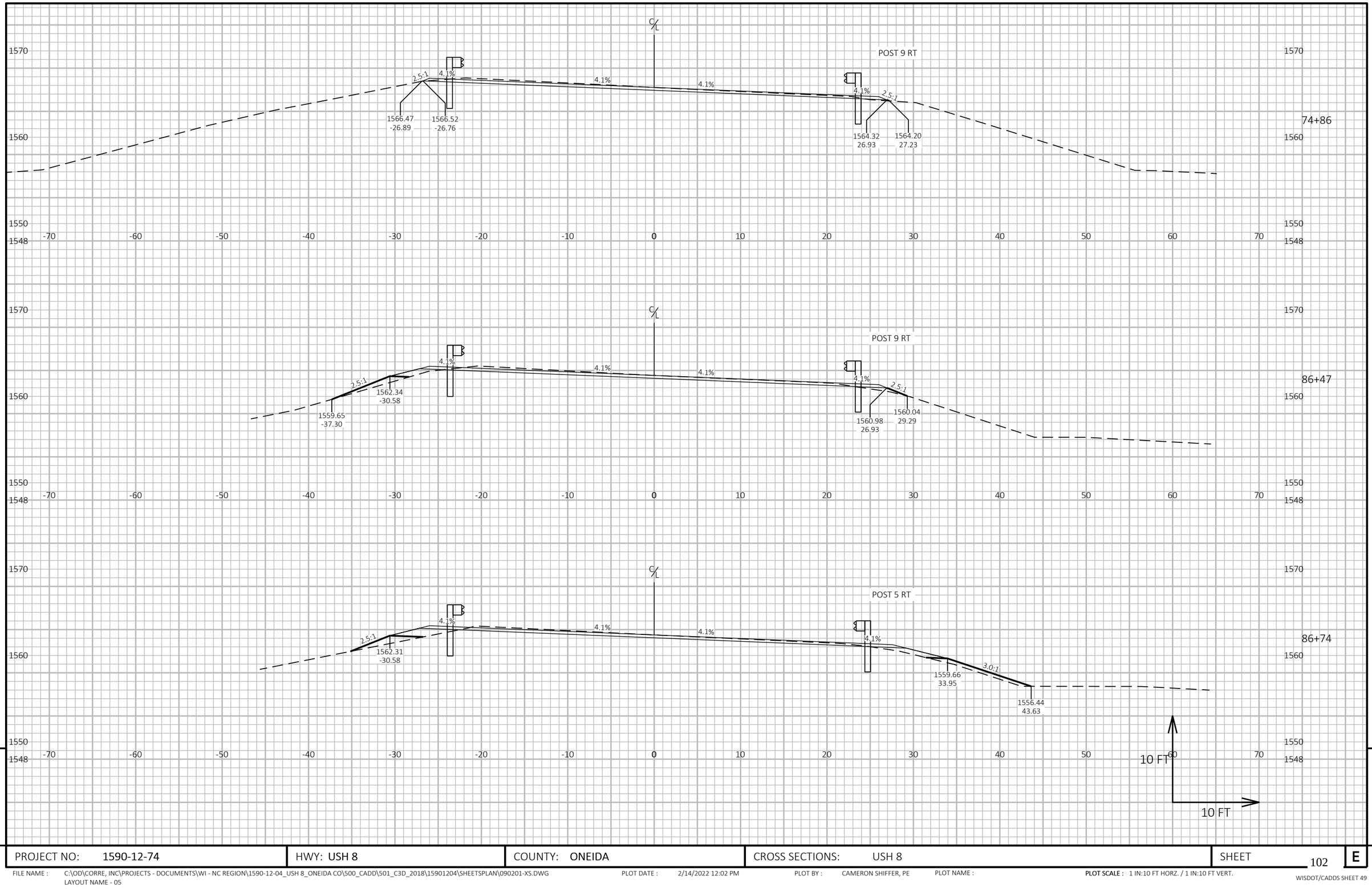
PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	CROSS SECTIONS: USH 8	SHEET 101	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - NC REGION\1590-12-04_USH 8_ONEIDA CO\500_CADD\501_C3D_2018\15901204\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 04

PLOT DATE : 2/14/2022 12:02 PM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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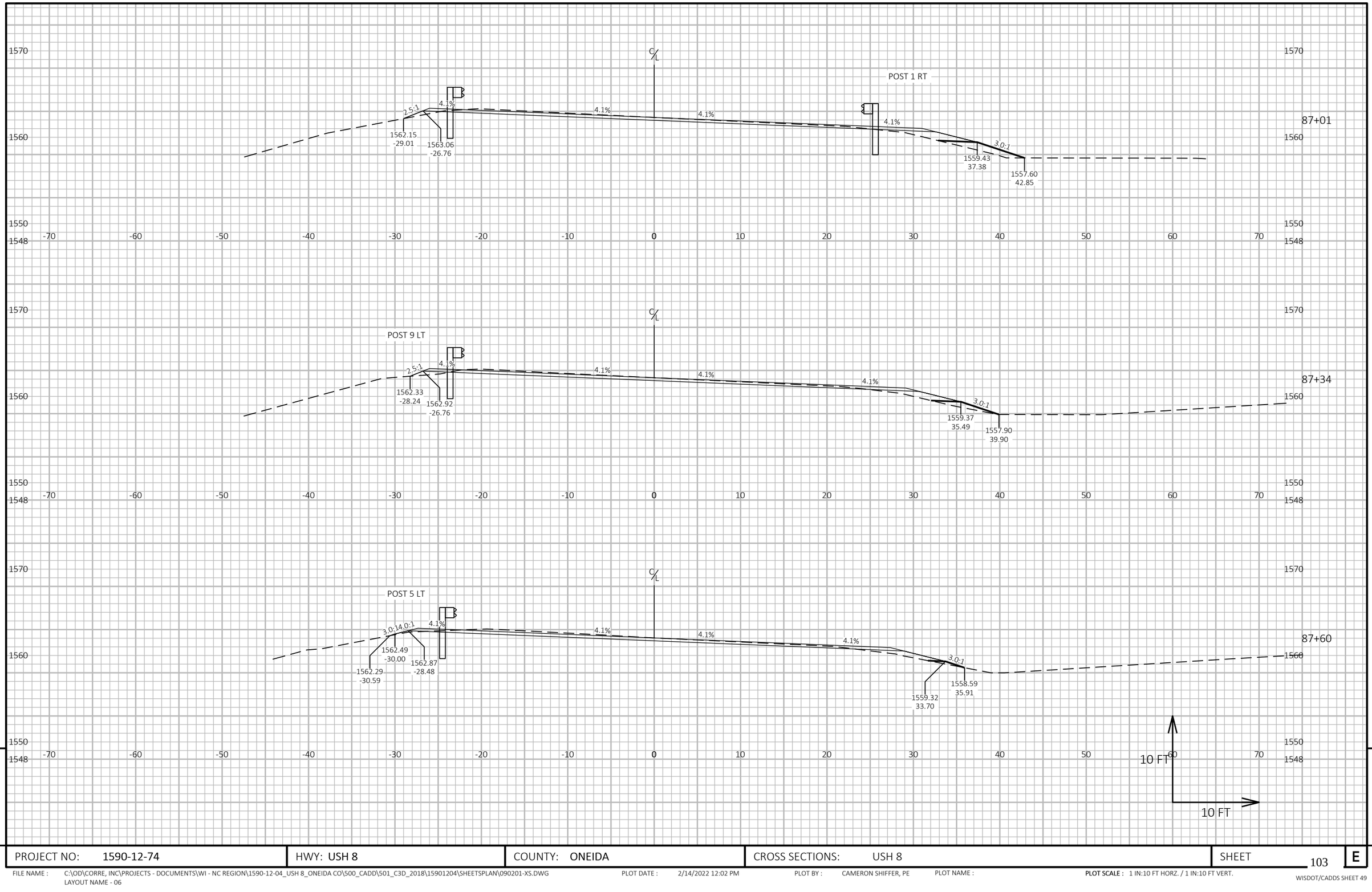
PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	CROSS SECTIONS: USH 8	SHEET 102	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - NC REGION\1590-12-04_USH 8_ONEIDA CO\500_CADD\501_C3D_2018\15901204\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 05
PLOT DATE : 2/14/2022 12:02 PM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

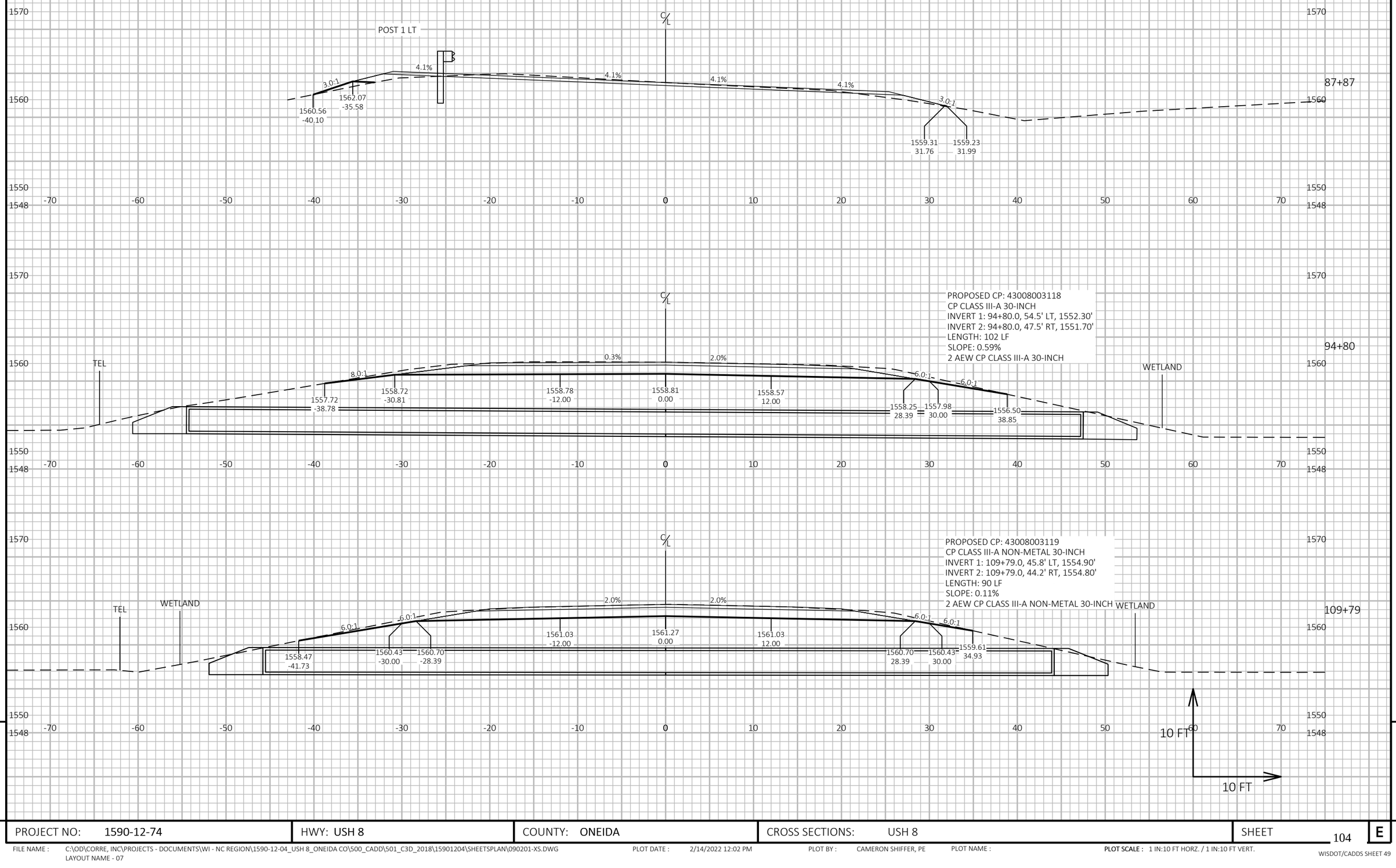


PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	CROSS SECTIONS: USH 8	SHEET 103	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - NC REGION\1590-12-04_USH 8_ONEIDA CO\500_CADD\501_C3D_2018\15901204\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 06

PLOT DATE : 2/14/2022 12:02 PM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	CROSS SECTIONS: USH 8	SHEET 104	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - NC REGION\1590-12-04_USH 8_ONEIDA CO\500_CADD\501_C3D_2018\15901204\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 07

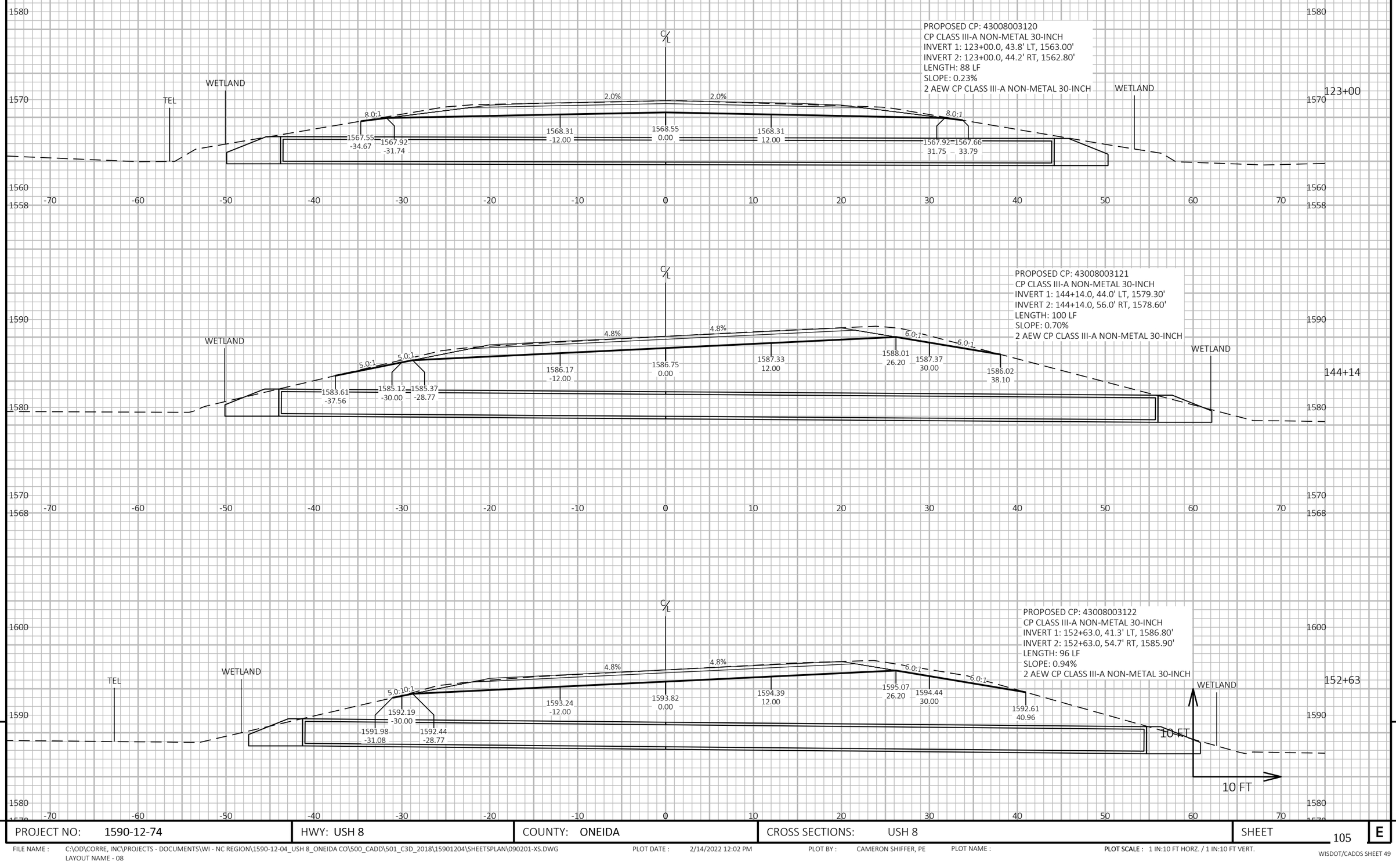
PLOT DATE : 2/14/2022 12:02 PM

PLOT BY : CAMERON SHIFFER, PE

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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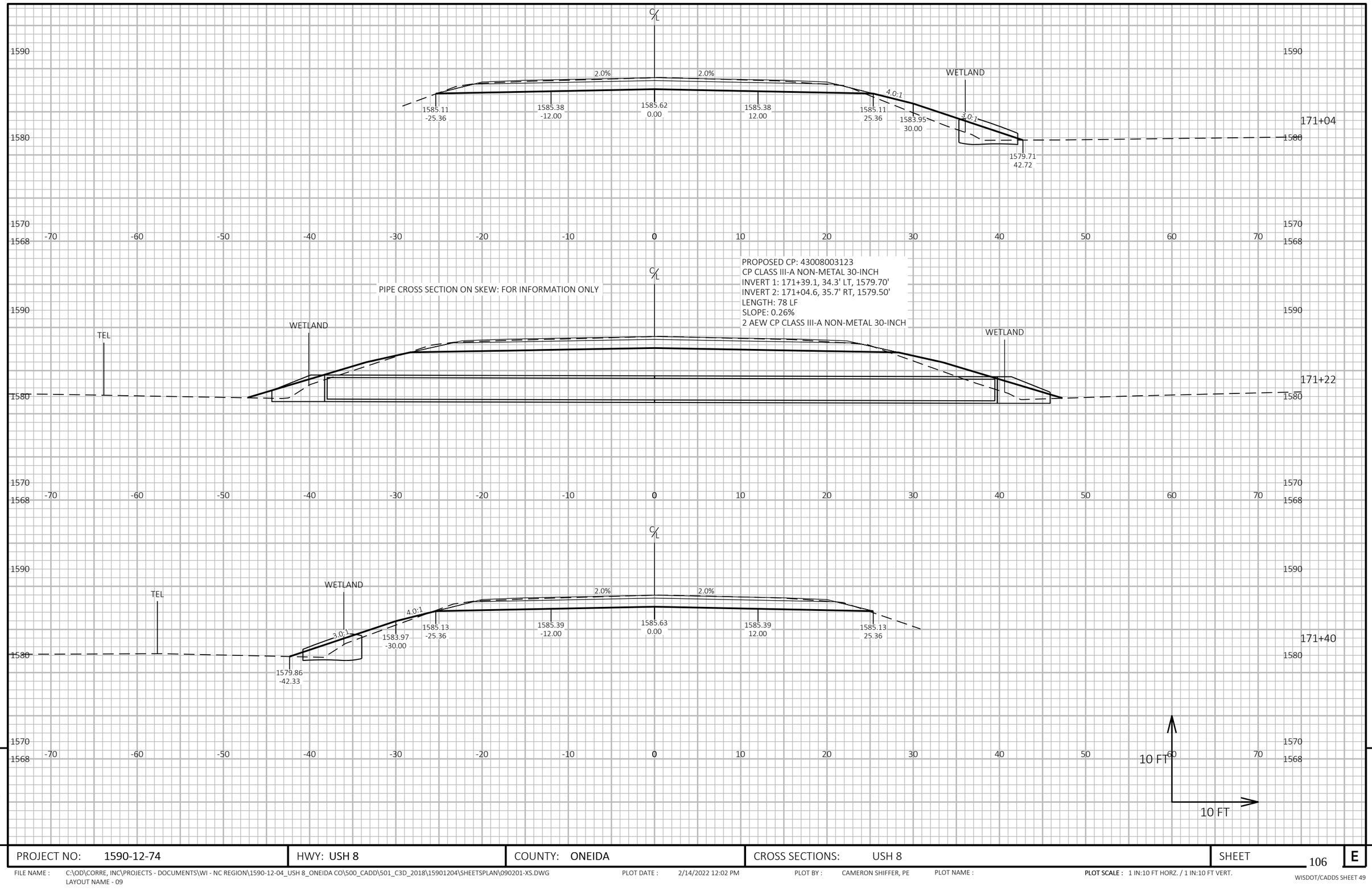
PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	CROSS SECTIONS: USH 8	SHEET 105	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - NC REGION\1590-12-04_USH 8_ONEIDA CO\500_CADD\501_C3D_2018\15901204\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 08

PLOT DATE : 2/14/2022 12:02 PM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

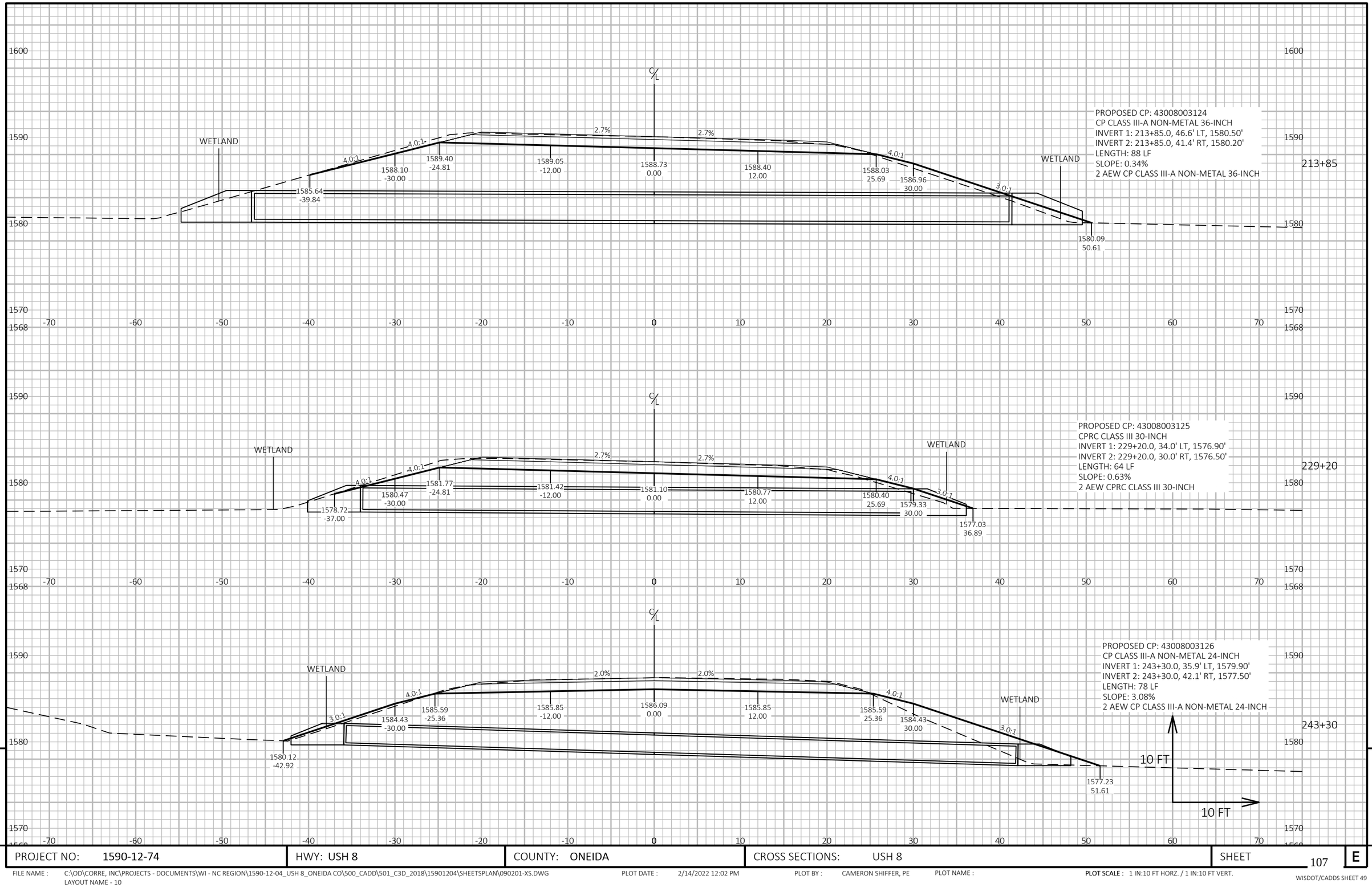


PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	CROSS SECTIONS: USH 8	SHEET 106	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - NC REGION\1590-12-04_USH 8_ONEIDA CO\500_CADD\501_C3D_2018\15901204\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 09

PLOT DATE : 2/14/2022 12:02 PM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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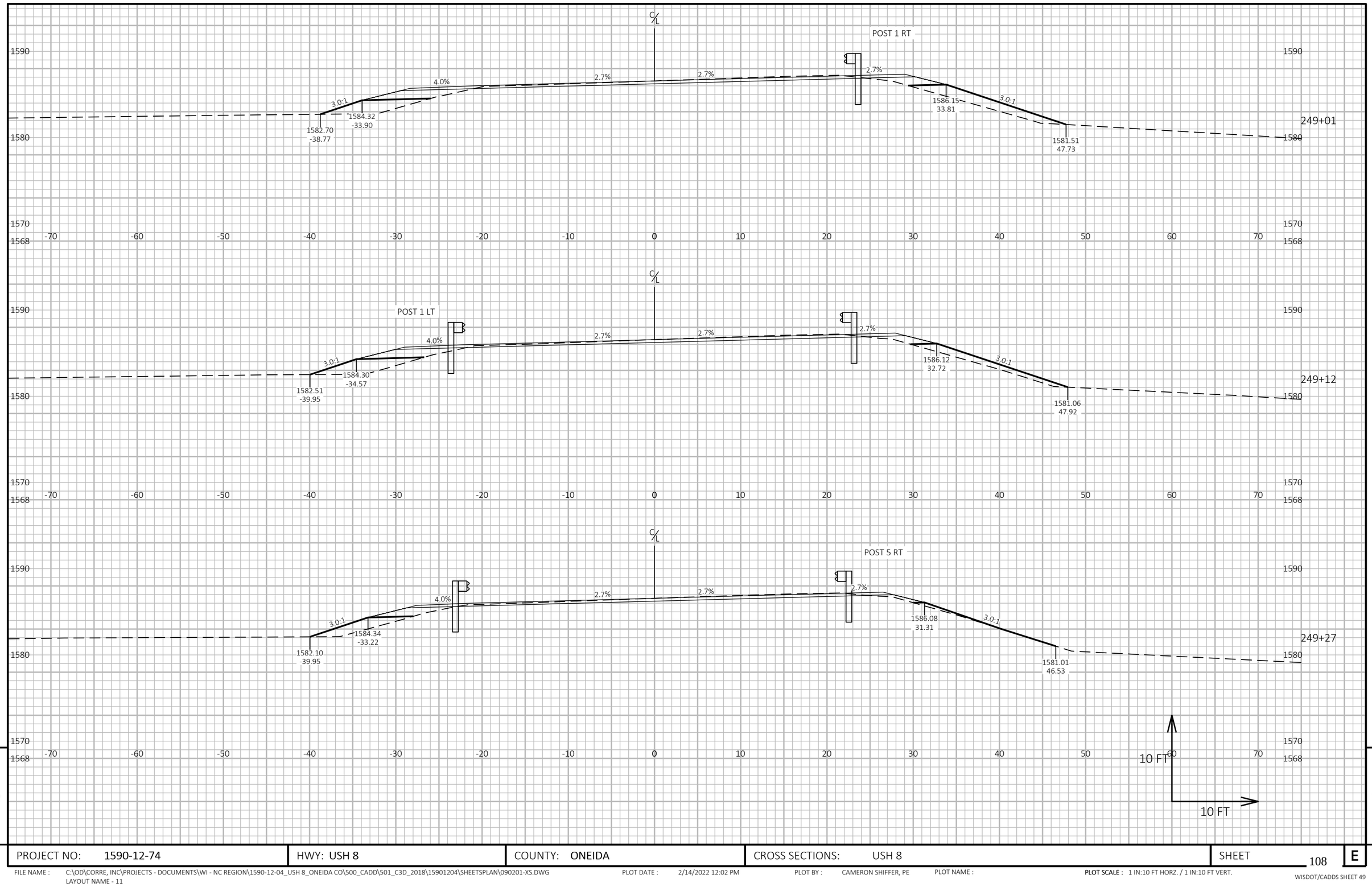
PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	CROSS SECTIONS: USH 8	SHEET 107	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - NC REGION\1590-12-04_USH 8_ONEIDA CO\500_CADD\501_C3D_2018\15901204\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 10

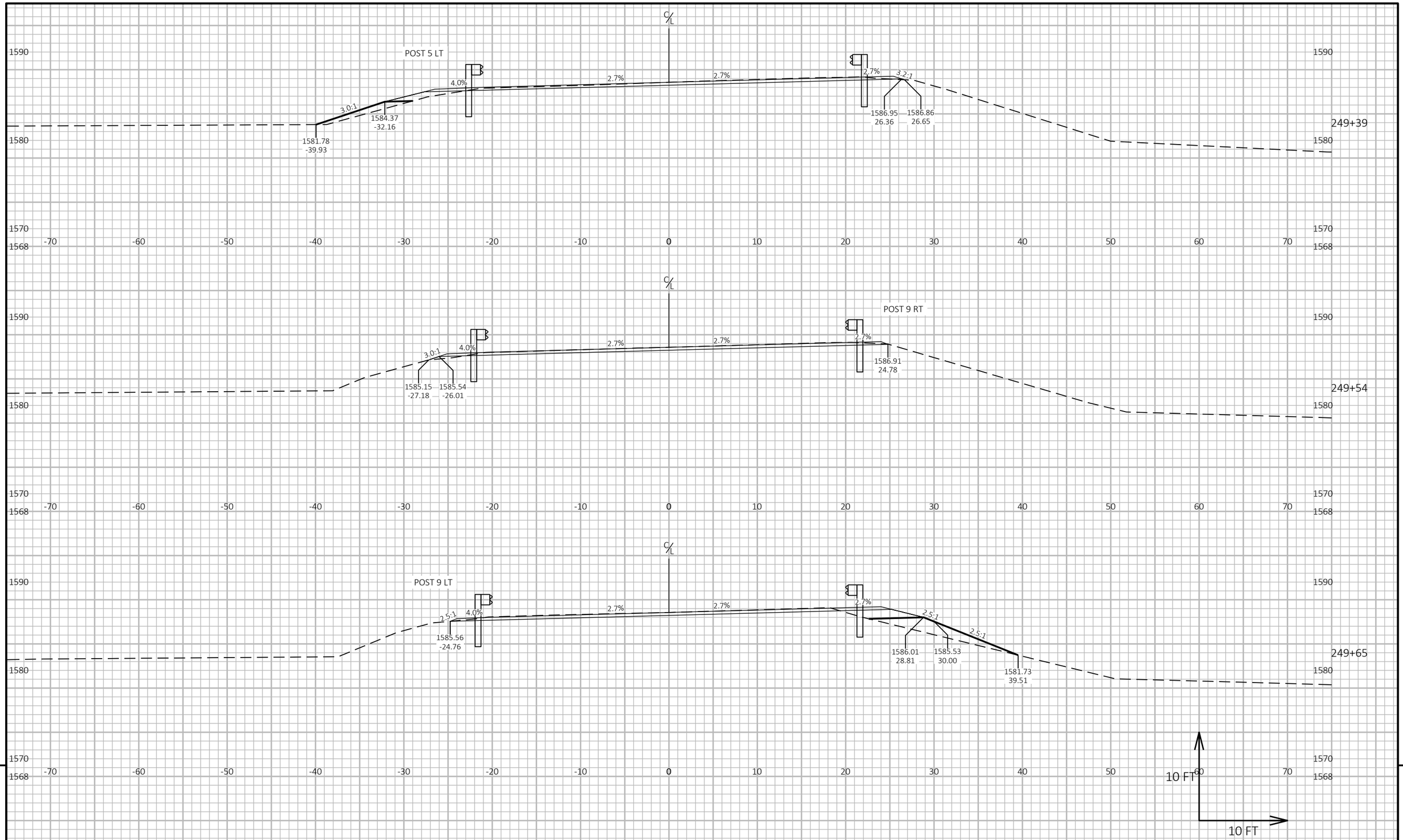
PLOT DATE : 2/14/2022 12:02 PM PLOT BY : CAMERON SHIFFER, PE PLOT NAME :

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

WISDOT/CADDS SHEET 49



PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	CROSS SECTIONS: USH 8	SHEET 108	E

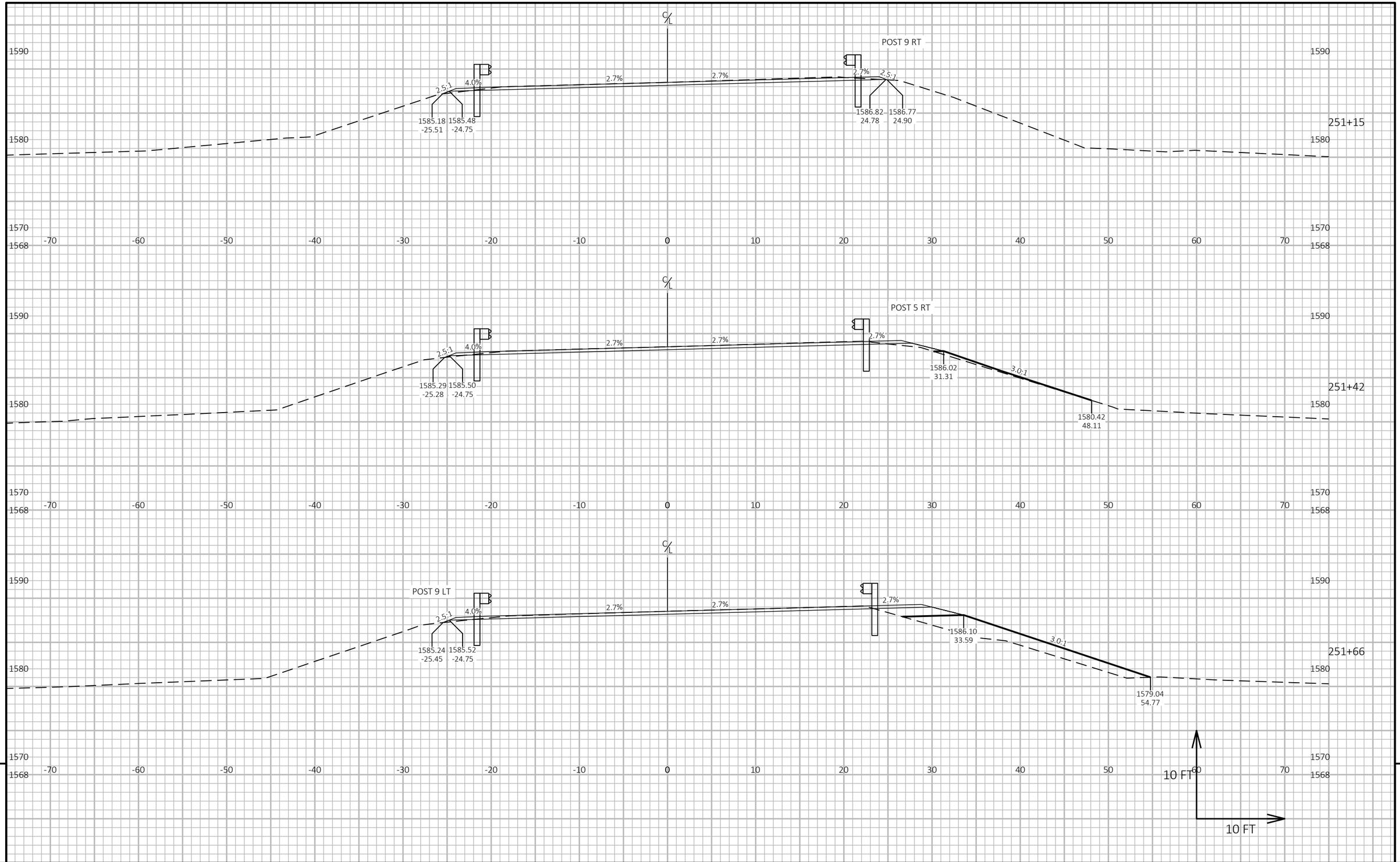


PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	CROSS SECTIONS: USH 8	SHEET 109	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - NC REGION\1590-12-04_USH 8_ONEIDA CO\500_CADD\501_C3D_2018\15901204\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 12

PLOT DATE : 2/14/2022 12:02 PM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

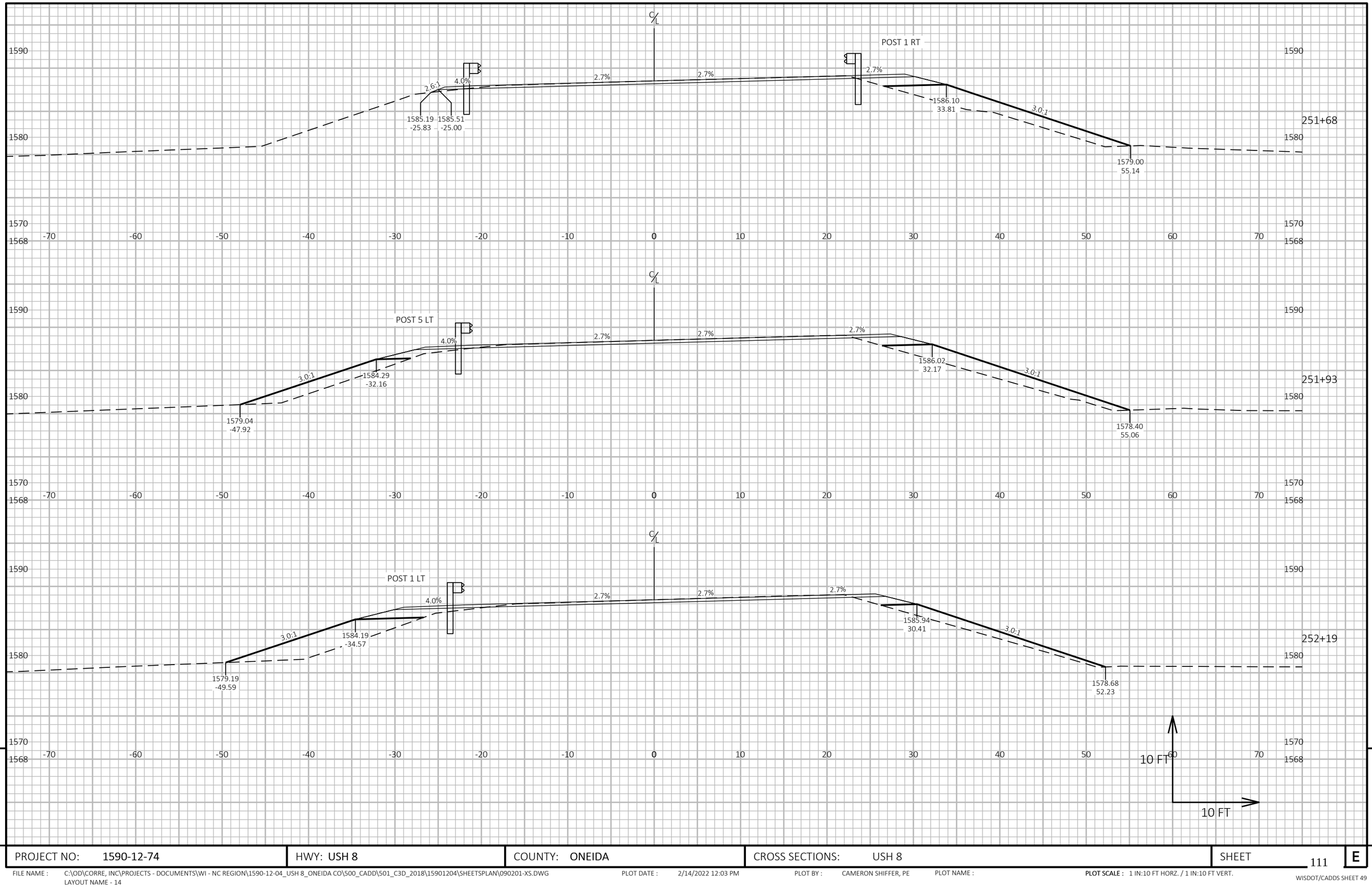


PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	CROSS SECTIONS: USH 8	SHEET 110	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - NC REGION\1590-12-04_USH 8_ONEIDA CO\500_CADD\501_C3D_2018\15901204\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 13

PLOT DATE : 2/14/2022 12:03 PM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



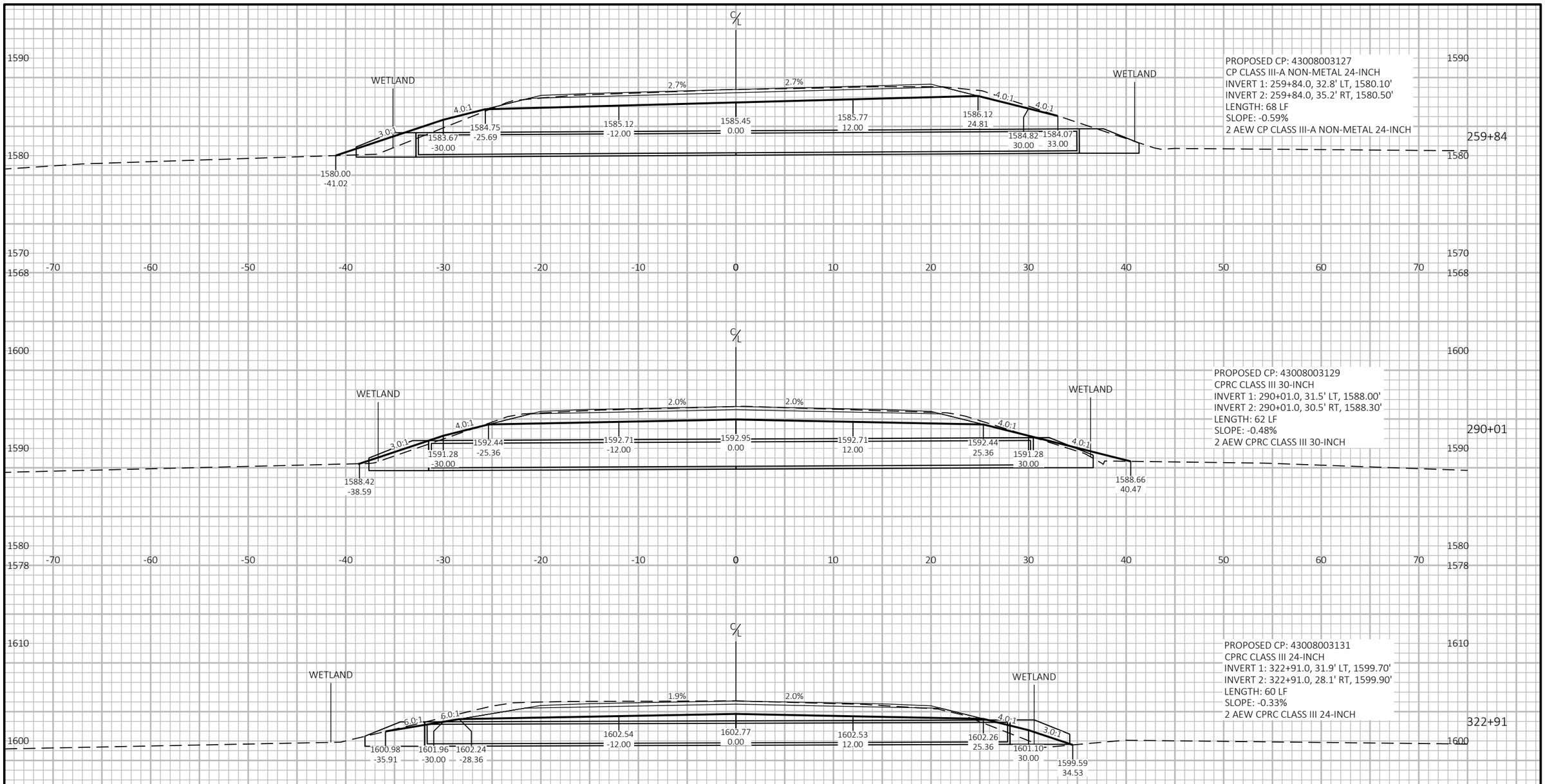
PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	CROSS SECTIONS: USH 8	SHEET 111	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - NC REGION\1590-12-04_USH 8_ONEIDA CO\500_CADD\501_C3D_2018\15901204\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 14

PLOT DATE : 2/14/2022 12:03 PM PLOT BY : CAMERON SHIFFER, PE PLOT NAME :

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

WISDOT/CADDS SHEET 49



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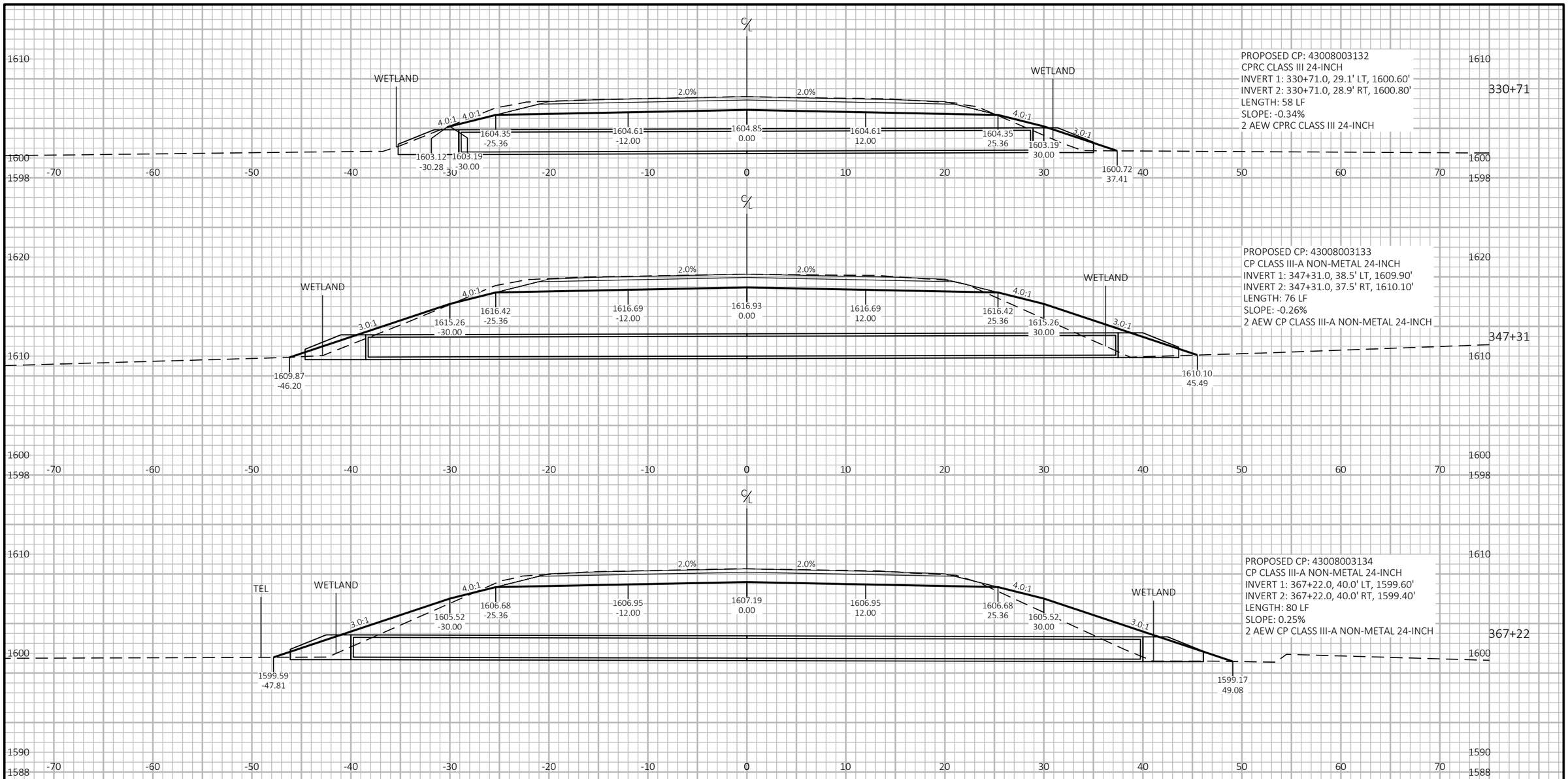
PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	CROSS SECTIONS: USH 8	SHEET 112	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - NC REGION\1590-12-04_USH 8_ONEIDA CO\500_CADD\501_C3D_2018\15901204\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 15
PLOT DATE : 2/14/2022 12:03 PM
PLOT BY : CAMERON SHIFFER, PE
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



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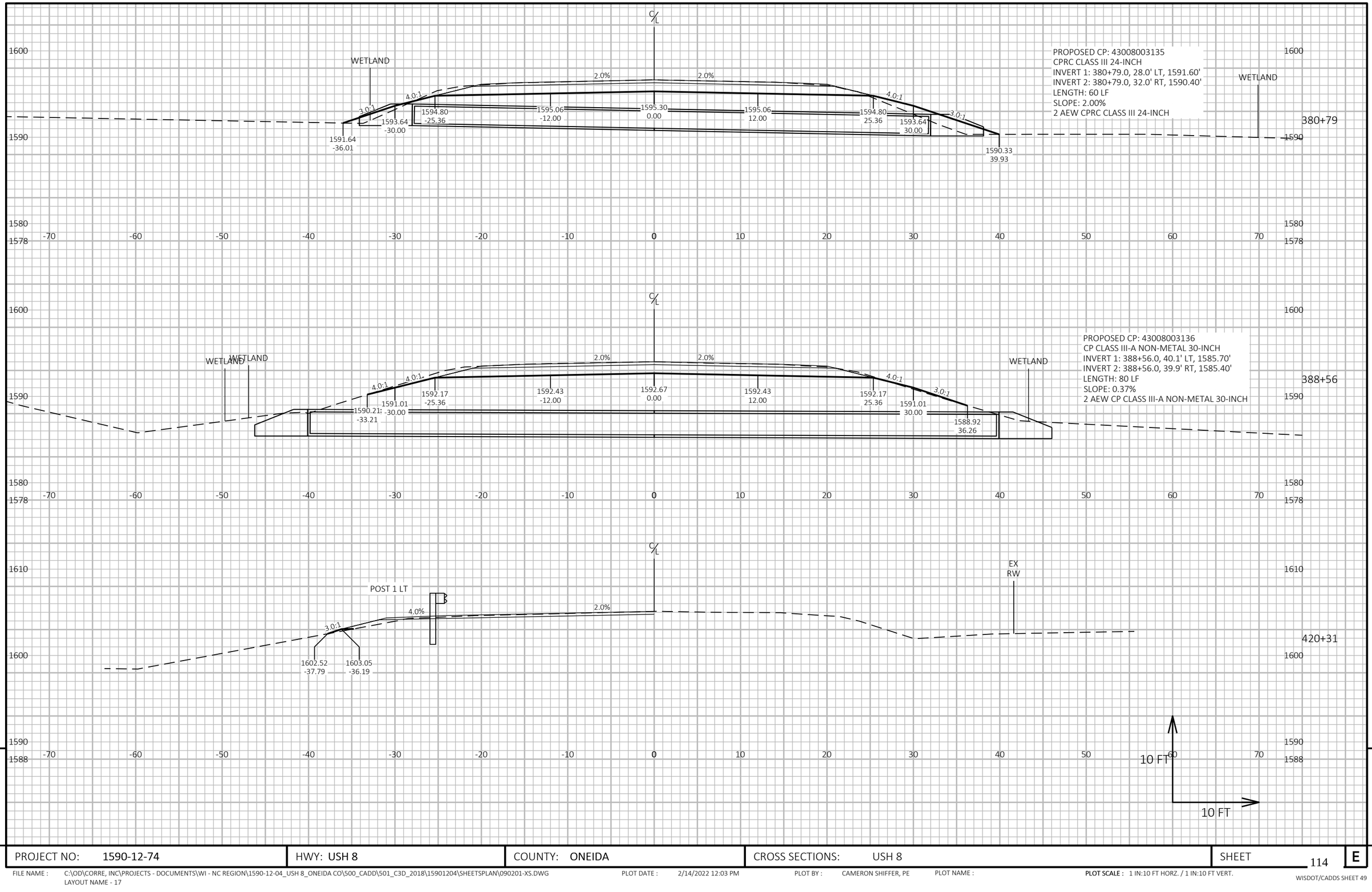
PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	CROSS SECTIONS: USH 8	SHEET 113	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - NC REGION\1590-12-04_USH 8_ONEIDA CO\500_CADD\501_C3D_2018\15901204\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 16

PLOT DATE : 2/14/2022 12:03 PM PLOT BY : CAMERON SHIFFER, PE PLOT NAME :

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

WISDOT/CADDS SHEET 49



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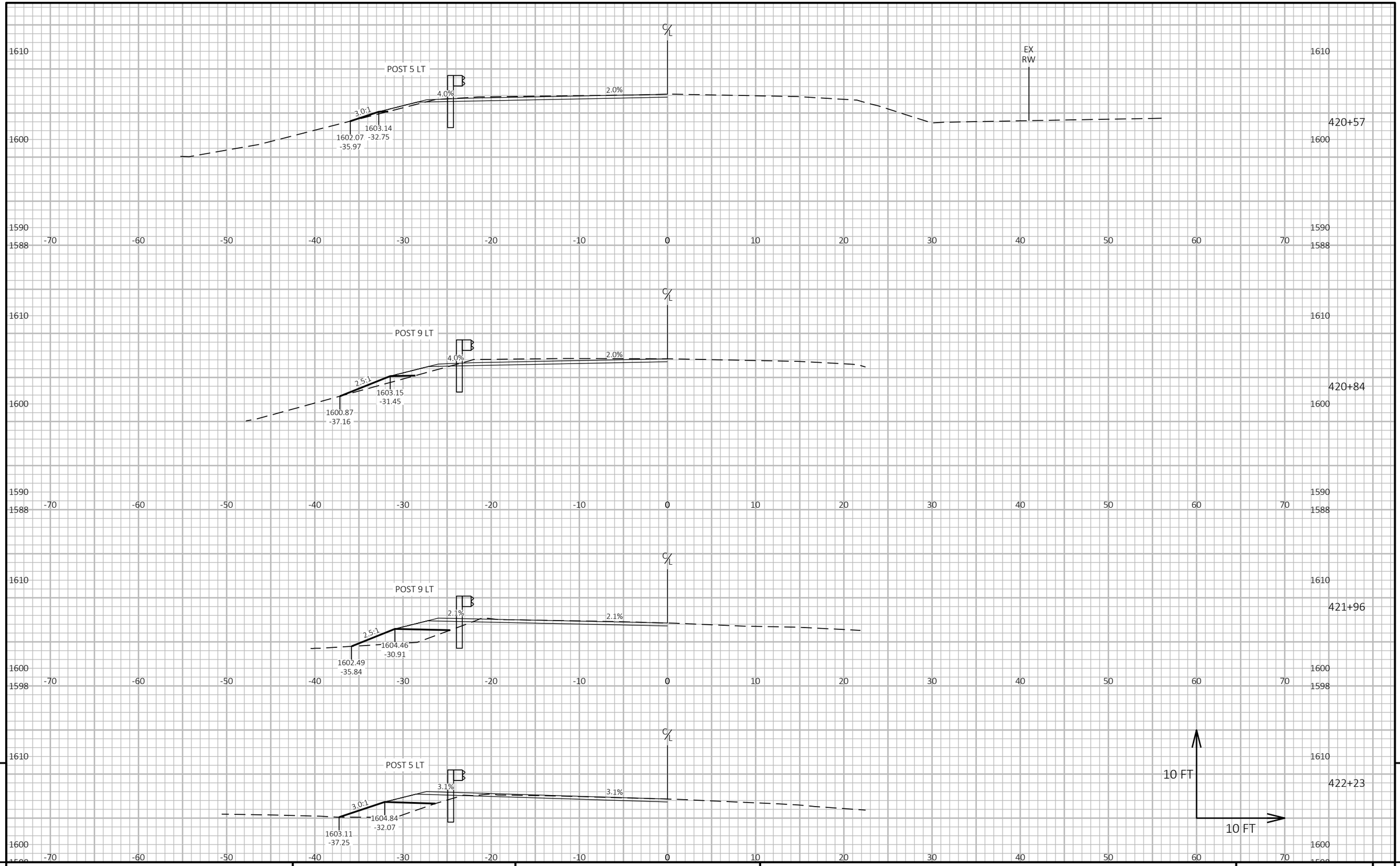
PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	CROSS SECTIONS: USH 8	SHEET 114	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - NC REGION\1590-12-04_USH 8_ONEIDA CO\500_CADD\501_C3D_2018\15901204\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 17

PLOT DATE : 2/14/2022 12:03 PM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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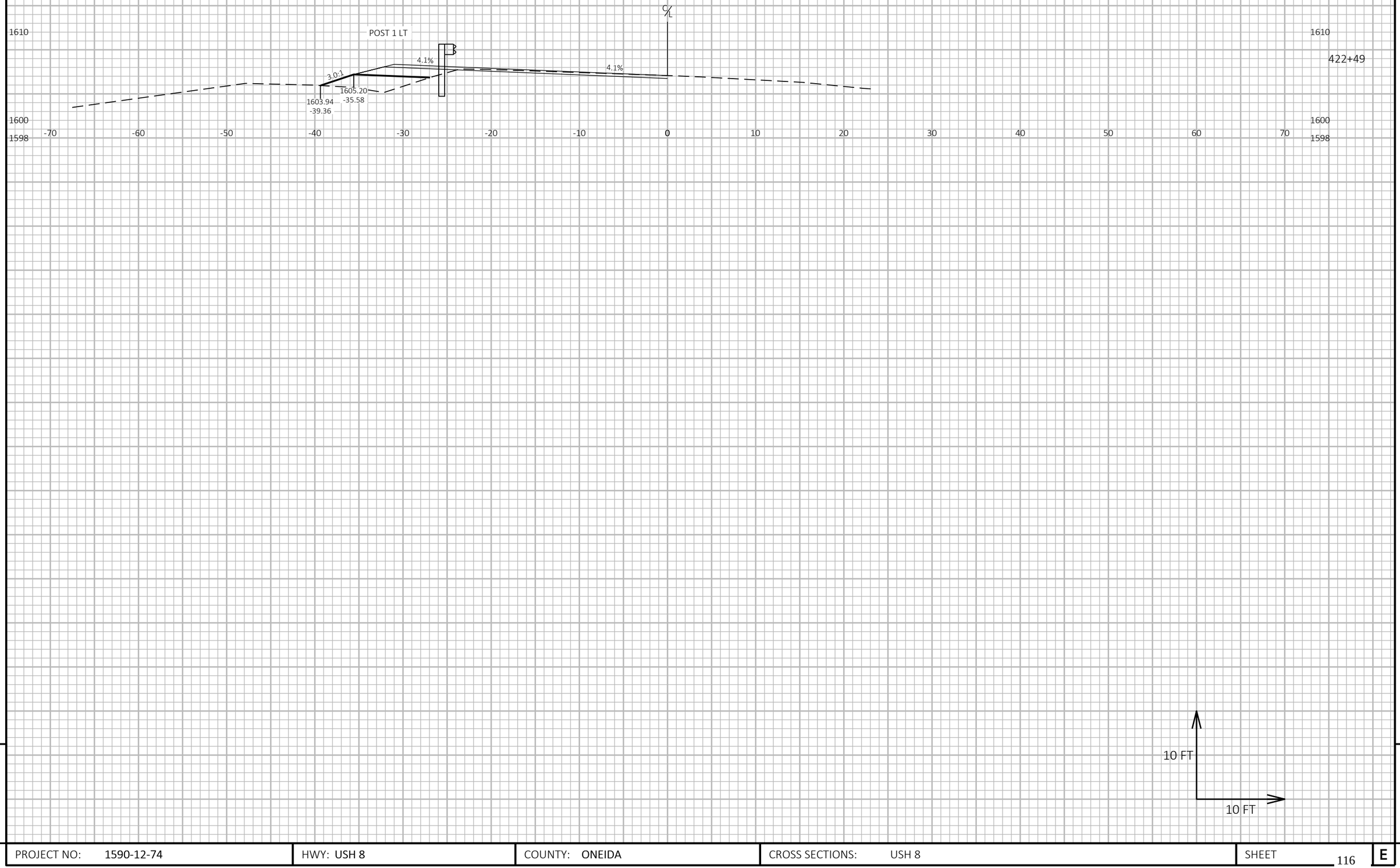
PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	CROSS SECTIONS: USH 8	SHEET 115	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - NC REGION\1590-12-04_USH 8_ONEIDA CO\500_CADD\501_C3D_2018\15901204\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 18

PLOT DATE : 2/14/2022 12:03 PM PLOT BY : CAMERON SHIFFER, PE PLOT NAME :

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

WISDOT/CADDS SHEET 49



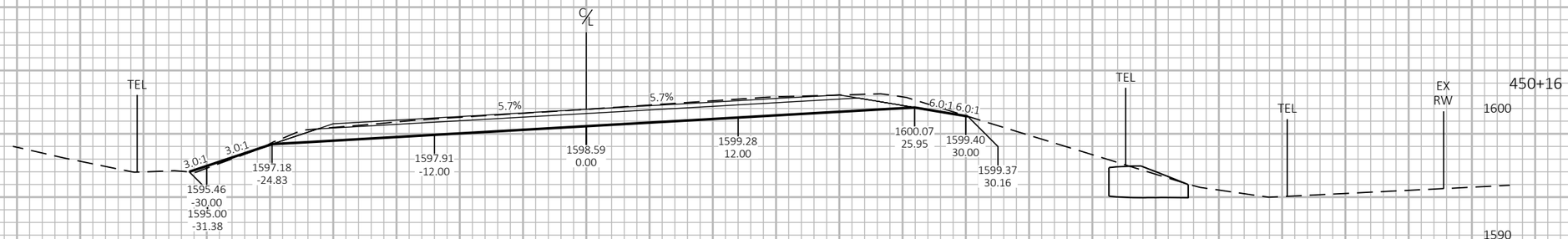
PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	CROSS SECTIONS: USH 8	SHEET 116	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - NC REGION\1590-12-04_USH 8_ONEIDA CO\500_CADD\501_C3D_2018\15901204\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 19

PLOT DATE : 2/14/2022 12:03 PM PLOT BY : CAMERON SHIFFER, PE PLOT NAME :

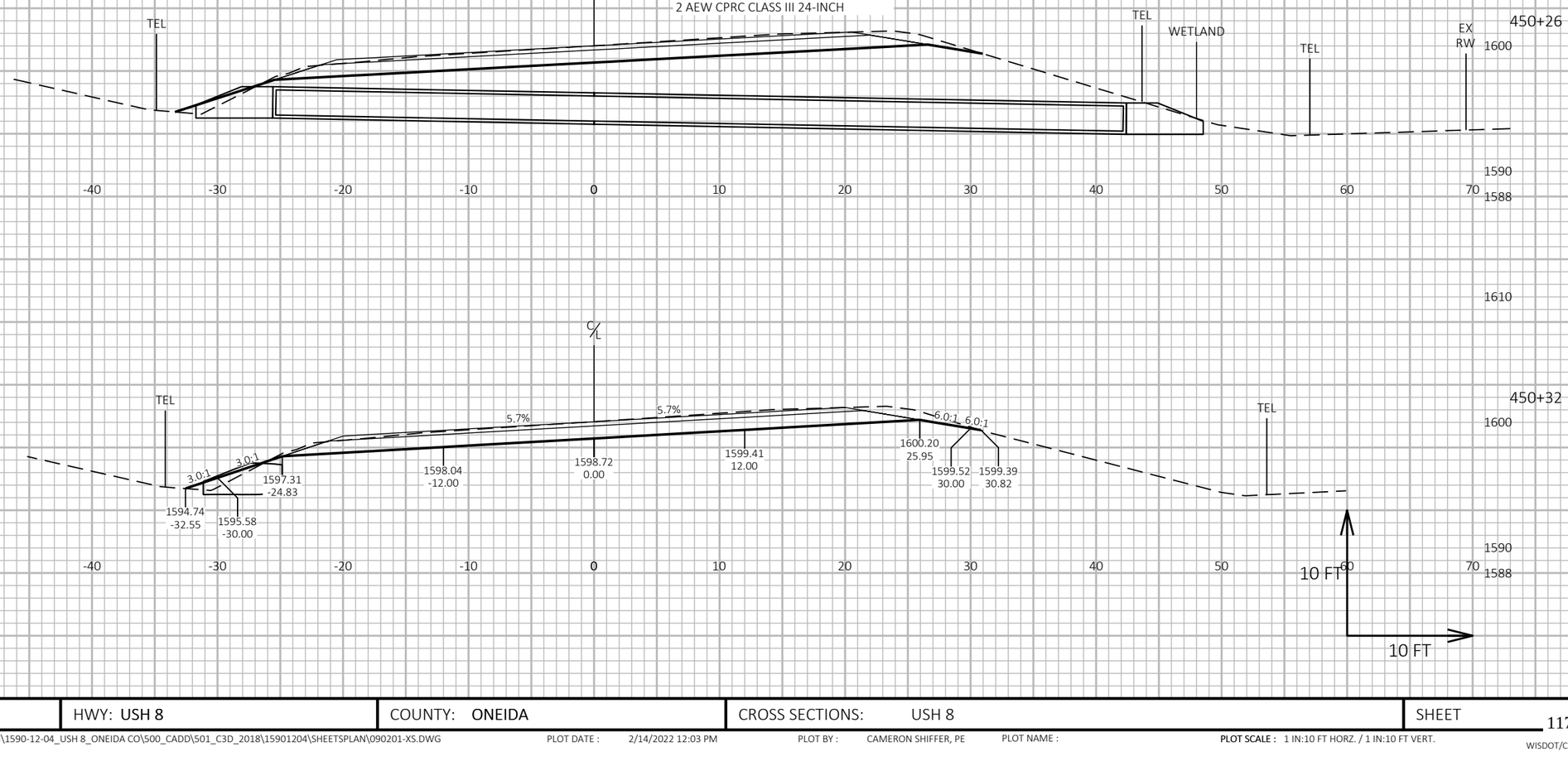
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PIPE CROSS SECTION ON SKEW: FOR INFORMATION ONLY

PROPOSED CP: 43008003139
CPRC CLASS III 24-INCH
INVERT 1: 450+31.4, 25.0' LT, 1594.50'
INVERT 2: 450+16.8, 41.4' RT, 1593.20'
LENGTH: 68 LF
SLOPE: 1.91%
2 AEW CPRC CLASS III 24-INCH



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PROJECT NO: 1590-12-74	HWY: USH 8	COUNTY: ONEIDA	CROSS SECTIONS: USH 8	SHEET 117	E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - NC REGION\1590-12-04_USH 8_ONEIDA CO\500_CADD\501_C3D_2018\15901204\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 20

PLOT DATE : 2/14/2022 12:03 PM PLOT BY : CAMERON SHIFFER, PE PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

Wisconsin Department of Transportation

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