

GRE

PROJECT ID:

9140-13-71

COUNTY:

OCONTO

WITH: N/A

APRIL 2020

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 = 236



DESIGN DESIGNATION

A.A.D.T.	2020	=	1700
A.A.D.T.	2040	=	2000
D.H.V.		=	298
D.D.		=	61/39
T.		=	21.2
DESIGN SPEED		=	55 MPH
ESALS		=	1,200,000

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	
EXISTING CULVERT	
PROPOSED CULVERT (Box or Pipe)	
COMBUSTIBLE FLUIDS	
MARSH AREA	
WOODED OR SHRUB AREA	

PROFILE	
GRADE LINE	
ORIGINAL GROUND	
MARSH OR ROCK PROFILE (To be noted as such)	
SPECIAL DITCH	
GRADE ELEVATION	
CULVERT (Profile View)	
UTILITIES	
ELECTRIC	
FIBER OPTIC	
GAS	
SANITARY SEWER	
STORM SEWER	
TELEPHONE	
WATER	
UTILITY PEDESTAL	
POWER POLE	
TELEPHONE POLE	

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

LANGLADE - MOUNTAIN

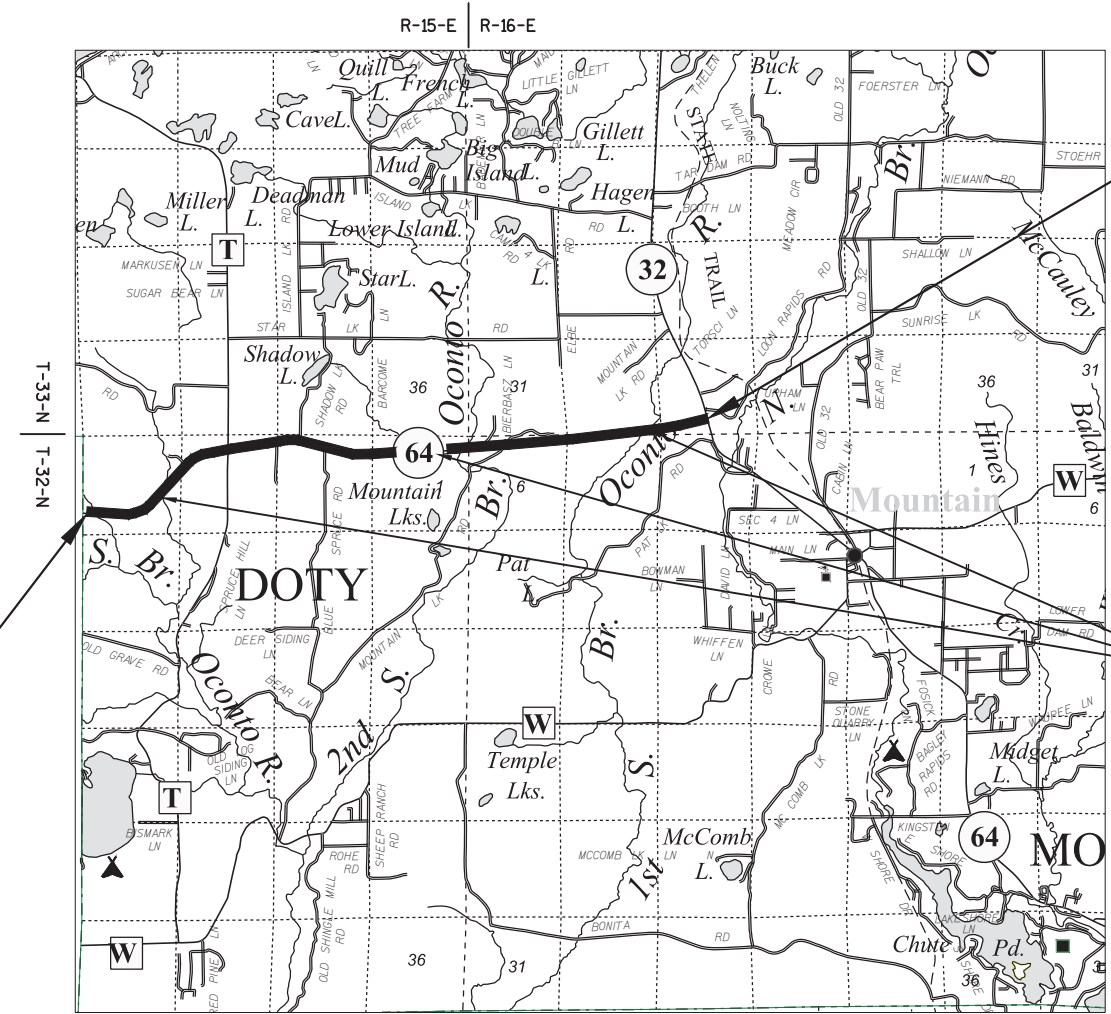
WEST COUNTY LINE - STH 32

STH 64

OCONTO COUNTY

STATE PROJECT NUMBER
9140-13-71

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
9140-13-71	WISC 2020147	1



BEGIN STATION
STA 22+48
X=411815.767
Y=291088.440

END STATION
STA 380+62

EXCEPTION TO NET C LENGTH
STA 73+48 TO 73+89
STA 244+41 TO 244+82
STA 345+58 TO 346+05

LAYOUT
SCALE 0 2 MILES
TOTAL NET LENGTH OF CENTERLINE = 6.759 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, OCONTO COUNTY, NAD83 (1991), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NATIONAL AMERICAN VERTICAL DATUM OF 1991 (NAVD 88)

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
PREPARED BY	
Surveyor	
Designer	K. BRADLEY
Project Manager	M. TERNES
Regional Examiner	
Regional Supervisor	D. SEGERSTROM
APPROVED FOR THE DEPARTMENT	
DATE: 10/31/2019	
E	

GENERAL NOTES

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

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

EROSION CONTROL FEATURES AS SHOWN ON THE PLANS ARE SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

DISTURBED AREAS, EXCEPT THE AREA WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED SEEDED AND MULCHED OR EMATTED, AS DIRECTED BY THE ENGINEER.

UTILITIES

PETE JOHNSON
CENTURYLINK - COMMUNICATION LINE
2425 MARY STREET
MARINETTE, WI 54143
(715) 735-0059, (715) 938-1480
Peter.s.Johnson@CENTURYLINK.COM

ANDY HEIGL
ASTREA - COMMUNICATION LINE
105 KENT ST
P.O. BOX 190
IRON MOUNTAIN, MI 49801
(906) 776-2609, (906) 221-7536
Andy.heigl@ASTREACONNECT.com

SCOTT ZELLNER
WISCONSIN PUBLIC SERVICE CORPORATION - ELECTRICITY
2850 S ASHLAND AVE
GREEN BAY, WI 54307
(920) 617-5068, (920) 680-2188
sjzellner@wisconsinpublicservice.com

RORY TAMMINGA
WISCONSIN PUBLIC SERVICE CORPORATION - GAS/PETROLEUM
1717 10TH AVENUE
MENOMONEE, MI 49858
(262) 909-0645, (906) 863-4328
Rory.tamminga@wisconsinpublicservice.com

DNR AREA LIAISON

JIM DOPERALSKI
DEPARTMENT OF NATURAL RESOURCES
NORTHEAST REGION
2984 SHAWANO AVE
GREEN BAY, WI 54313
920-662-5119
JAMES.DOPERALSKI@WISCONSIN.GOV

COUNTY SURVEYOR OR SURVEYS CONTACT PERSON

CONTACT: CORMAC MCINNIS
NORTHEAST REGIONAL SURVEY COORDINATOR
944 VANDERPERREN WAY
GREEN BAY, WI 54304
920-492-5638
CORMAC.MCINNIS@DOT.WI.GOV

WISDOT CONTACT PERSON

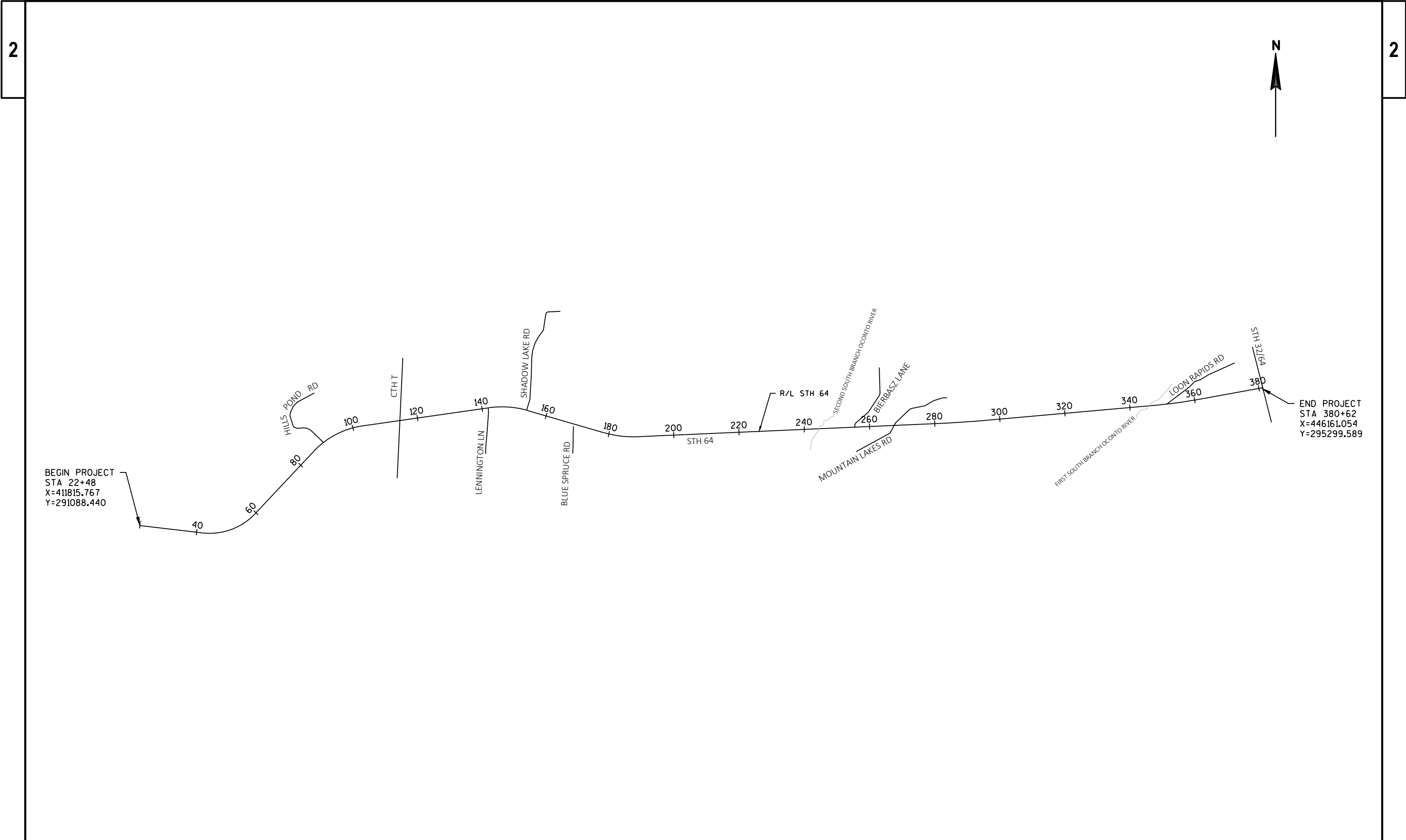
MATT TERNES
OCONTO COUNTY PROJECT MANAGER
944 VANDERPERREN WAY
GREEN BAY, WI 54304
PHONE: (920) 366-3028
EMAIL: MATTHEW.TERNES@DOT.WI.GOV

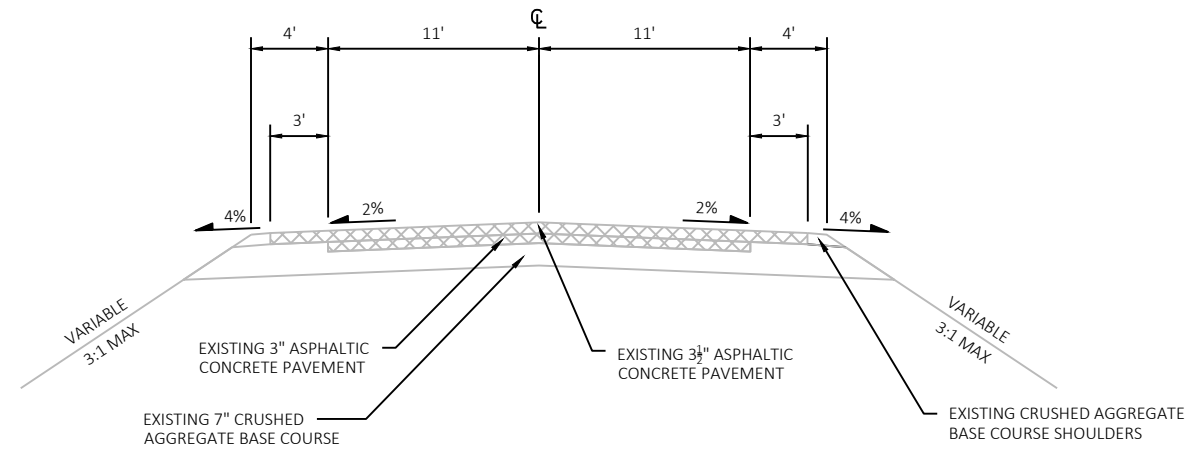
ORDER OF TYPICAL SECTION AND DETAIL SHEETS

- GENERAL NOTES
- PROJECT OVERVIEW
- TYPICAL SECTIONS
- SUPERELEVATION CORRECTION
- CONSTRUCTION DETAILS
- INTERSECTION CONSTRUCTION DETAIL
- DETOUR SIGNING DETAIL
- TRAFFIC CONTROL AT INTERSECTION RECONSTRUCTION
- ALIGNMENT PLAN



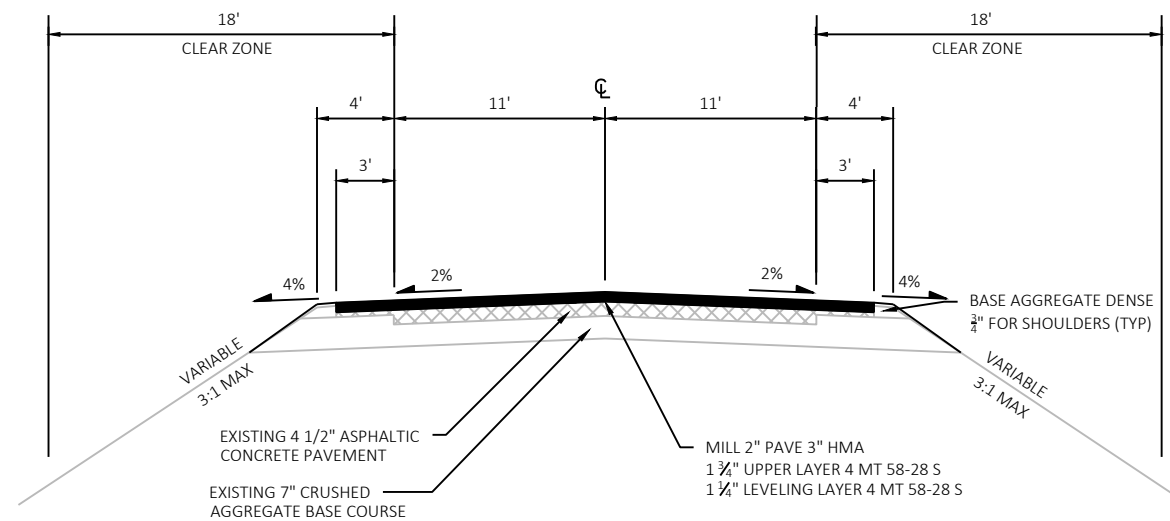
Dial 811 or (800)242-8511
www.DiggersHotline.com





EXISTING TYPICAL SECTION STH 64

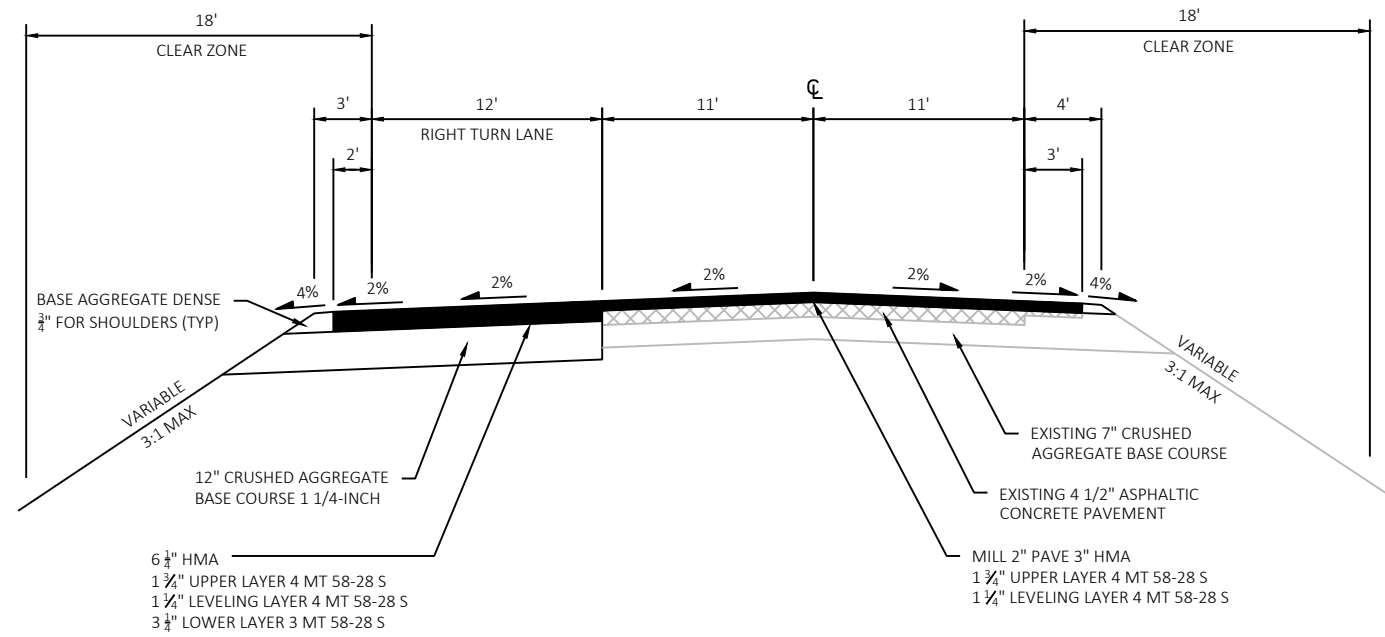
STA 22+48 TO STA 73+48
STA 73+89 TO STA 244+41
STA 244+82 TO STA 345+58
STA 346+05 TO STA 380+62



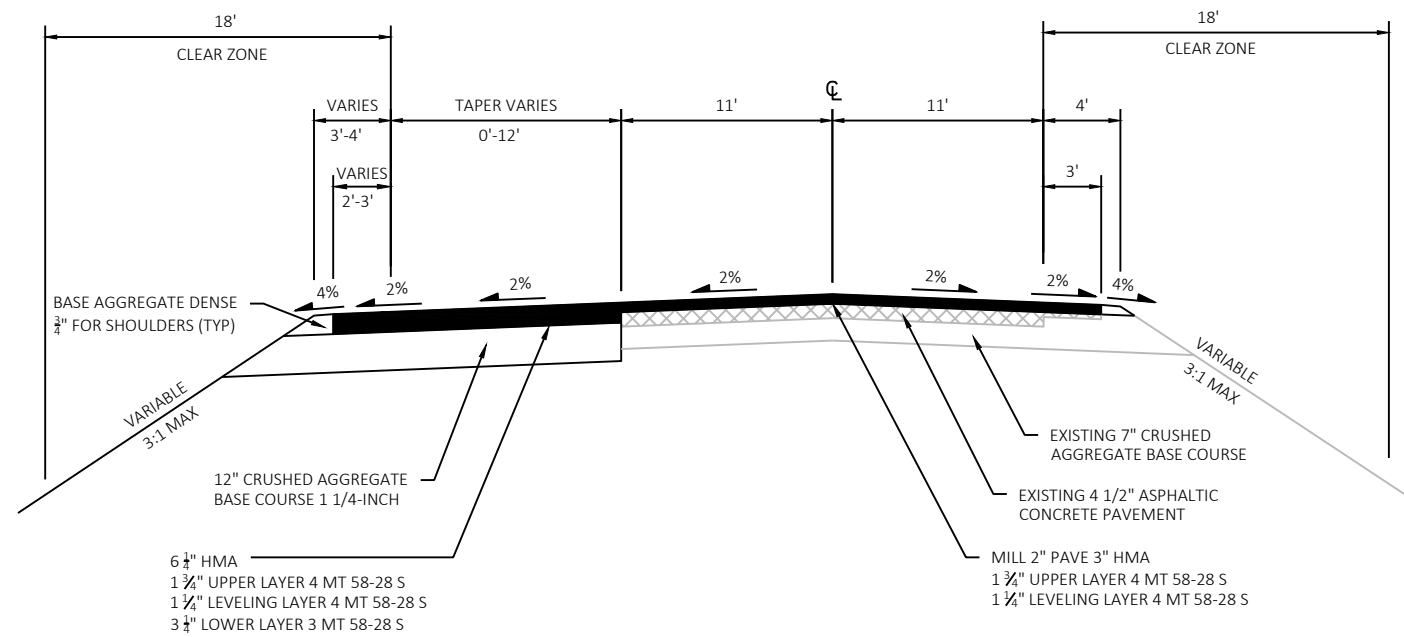
PROPOSED TYPICAL SECTION STH 64

STA 22+48 TO STA 73+48
STA 73+89 TO STA 110+36
STA 118+86 TO STA 244+41
STA 244+82 TO STA 345+58
STA 346+05 TO STA 380+62

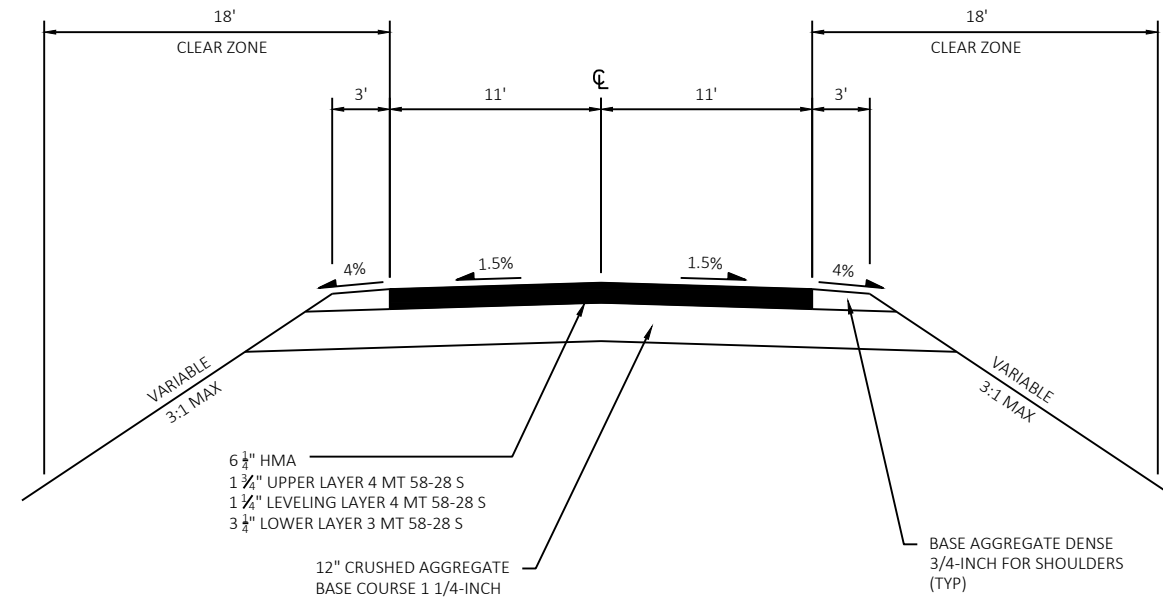
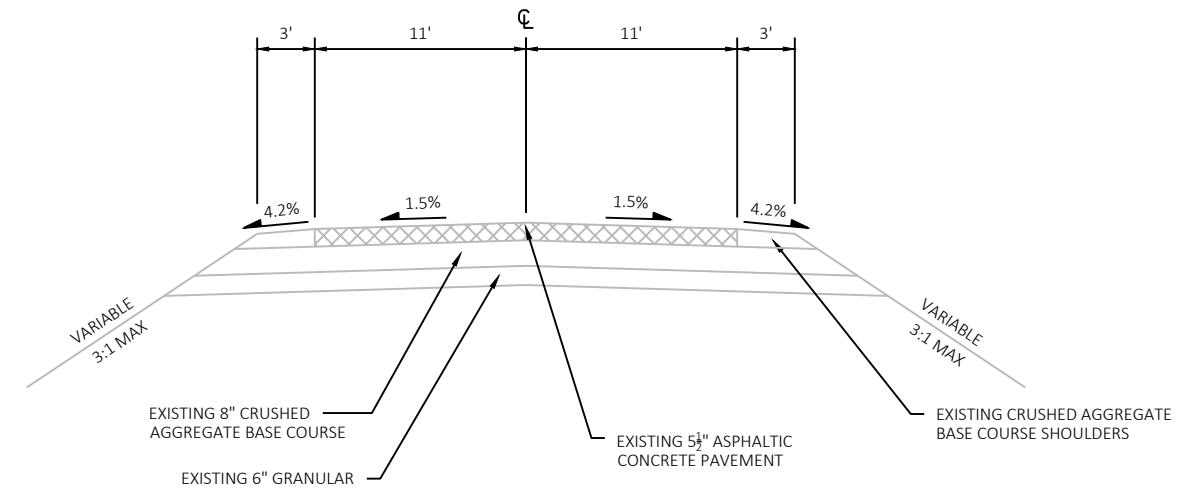




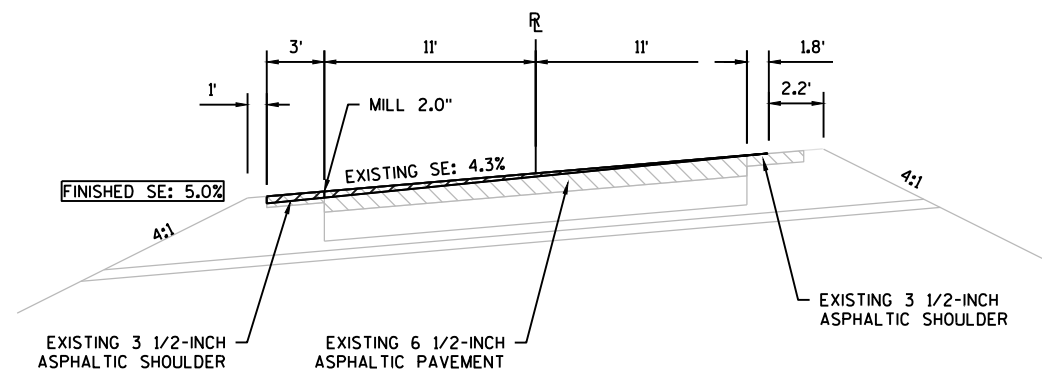
PROPOSED TYPICAL SECTION STH 64
STA 115+36 TO STA 117+36



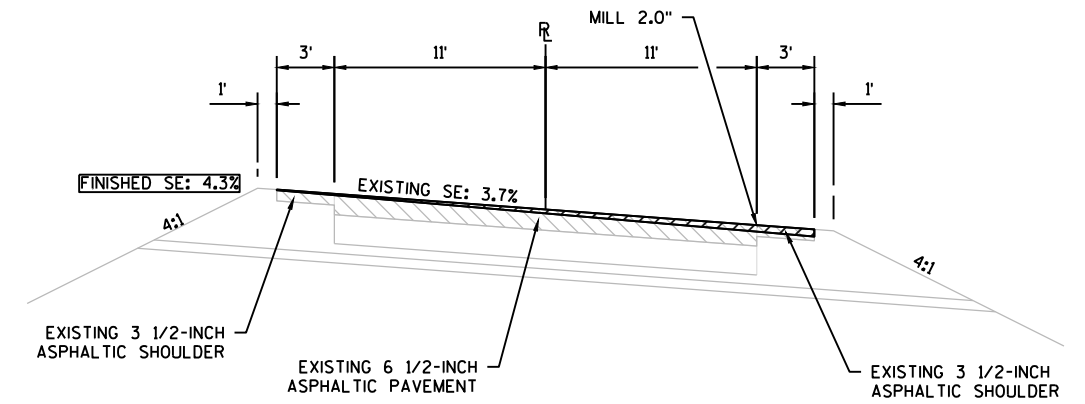
PROPOSED TYPICAL SECTION STH 64
STA 117+36 TO STA 118+86



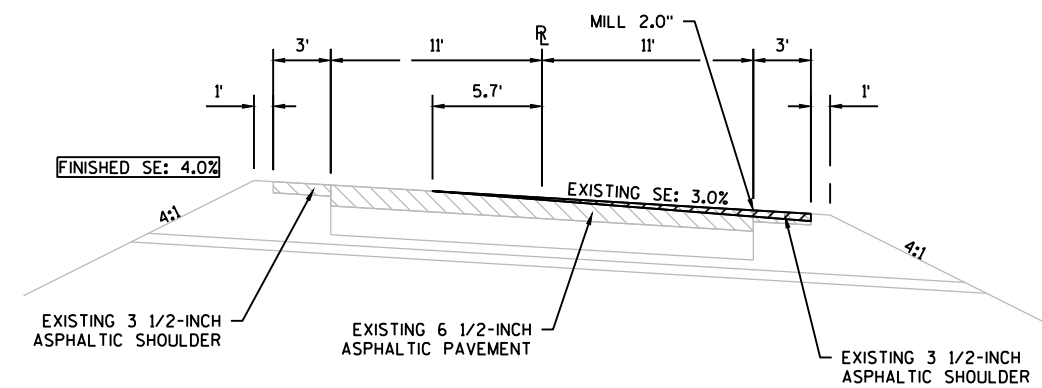
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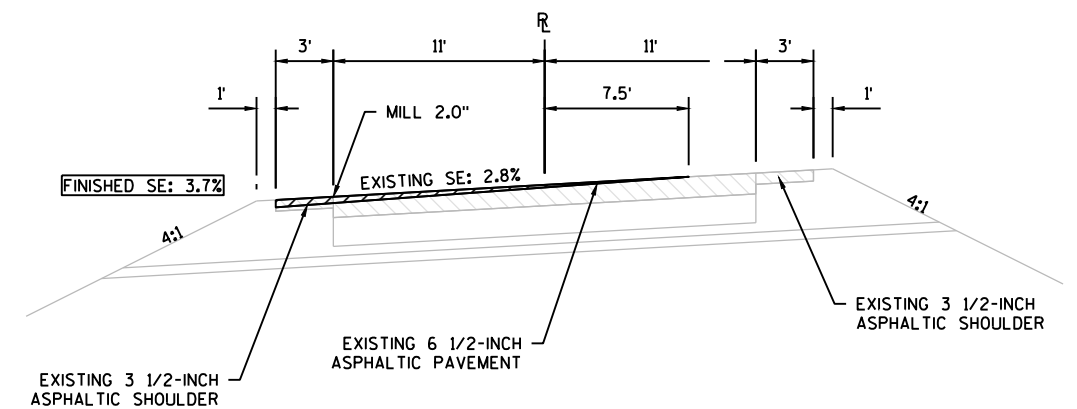
SUPERELEVATION CORRECTION: MILLING OPERATION
STA. 42+20 TO STA 59+19



SUPERELEVATION CORRECTION: MILLING OPERATION
STA. 86+20 TO STA 102+63



SUPERELEVATION CORRECTION: MILLING OPERATION
STA. 142+39 TO STA 153+87



SUPERELEVATION CORRECTION: MILLING OPERATION
STA. 178+68 TO STA 188+76

PROJECT NO:	9140-13-71
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HWY: STH 64

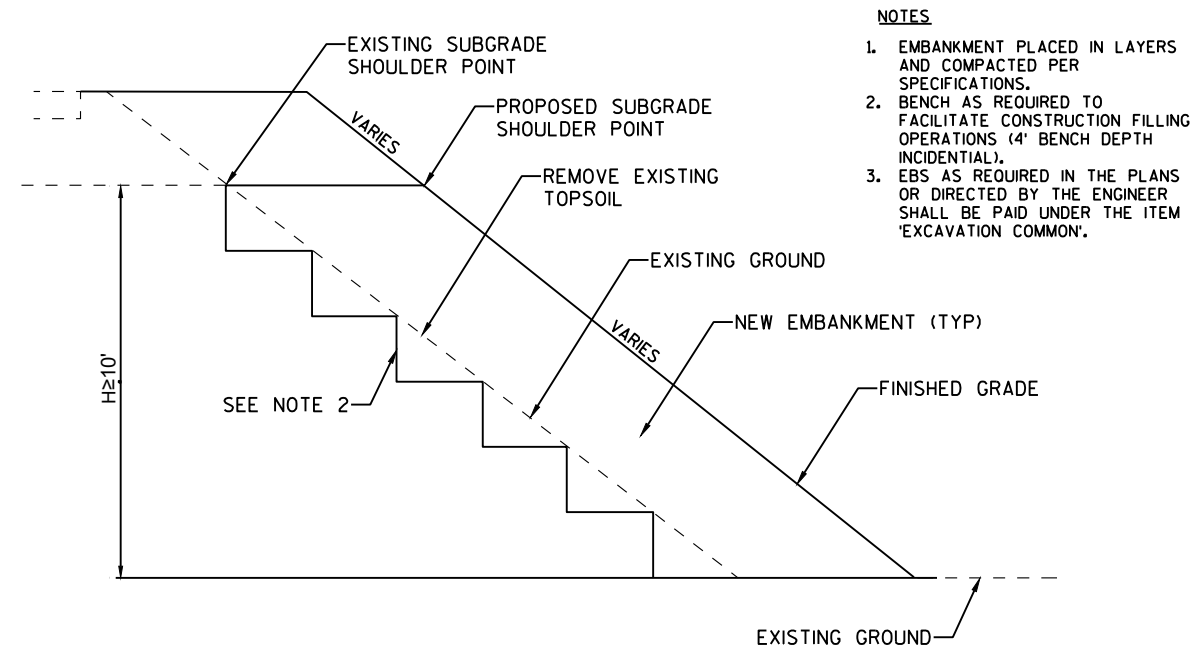
COUNTY: OCONTO

PLAN:	CONSTRUCTION DETAILS
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SHEET

3

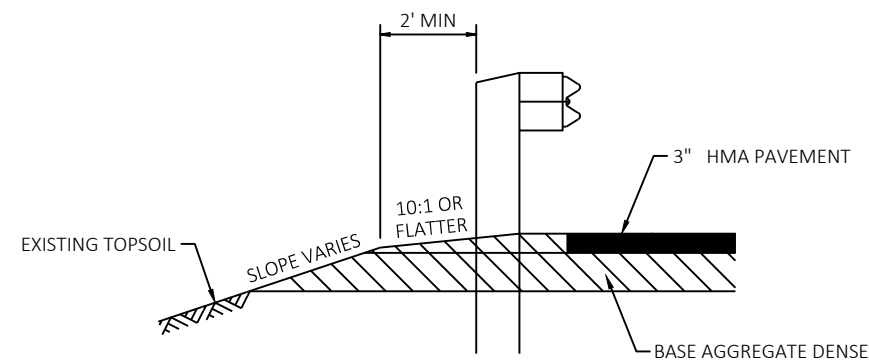
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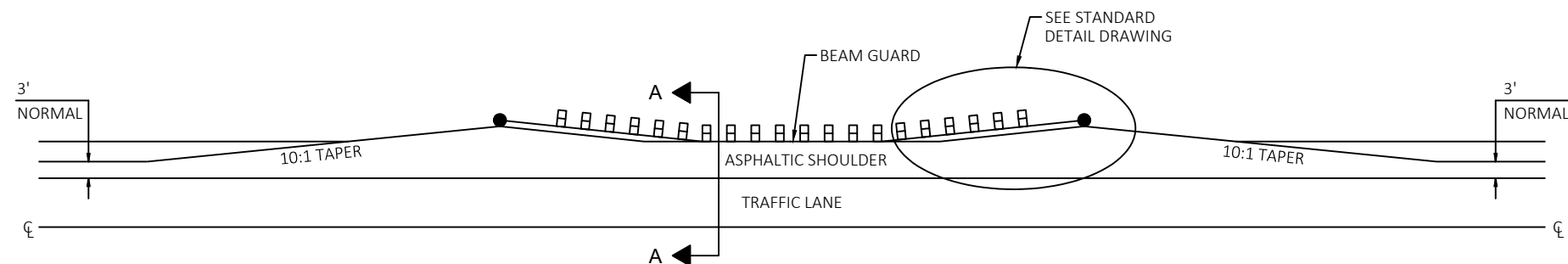
NOTES

1. EMBANKMENT PLACED IN LAYERS AND COMPACTED PER SPECIFICATIONS.
2. BENCH AS REQUIRED TO FACILITATE CONSTRUCTION FILLING OPERATIONS (4' BENCH DEPTH INCIDENTAL).
3. EBS AS REQUIRED IN THE PLANS OR DIRECTED BY THE ENGINEER SHALL BE PAID UNDER THE ITEM 'EXCAVATION COMMON'.

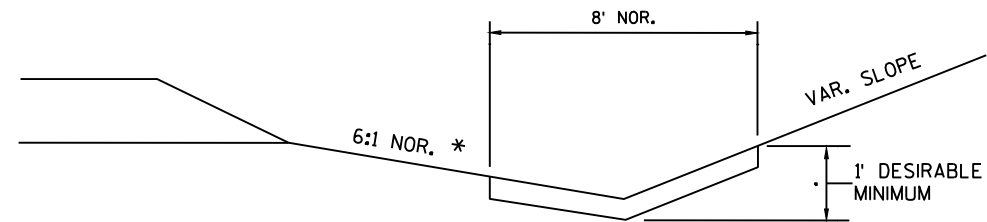
STEPPED EMBANKMENT



SECTION A-A

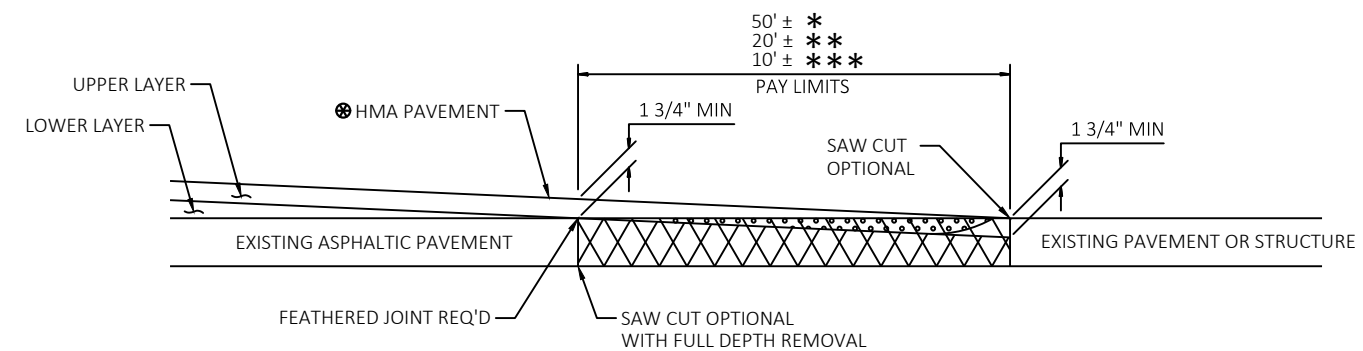


DETAIL FOR ASPHALTIC SHOULDER AT BEAM GUARD



* PLACE EROSION MAT UP TO SHOULDER POINT WHEN LOCATED ON LOWER SIDE OF SUPERELEVATED ROADWAY.

EROSION MAT DETAIL FOR DITCHES

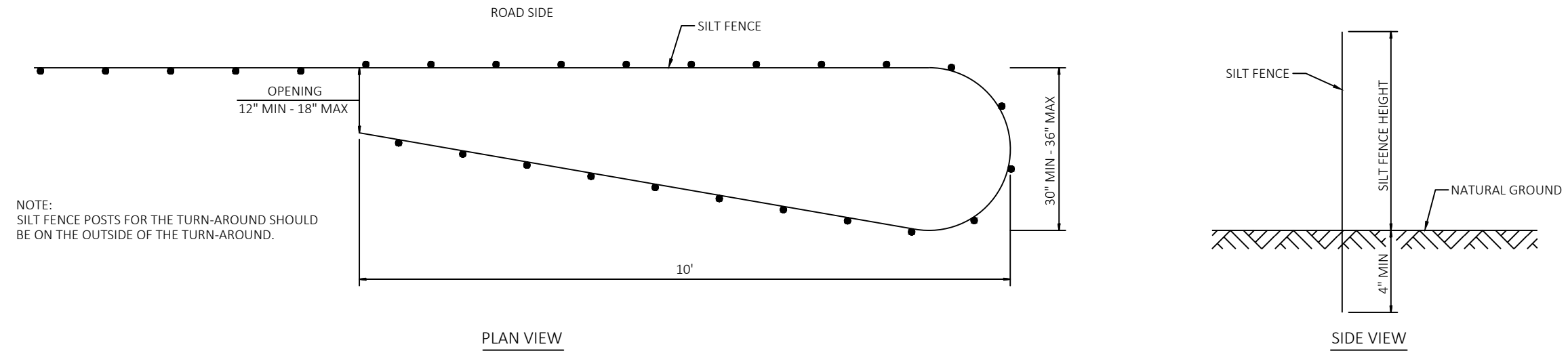
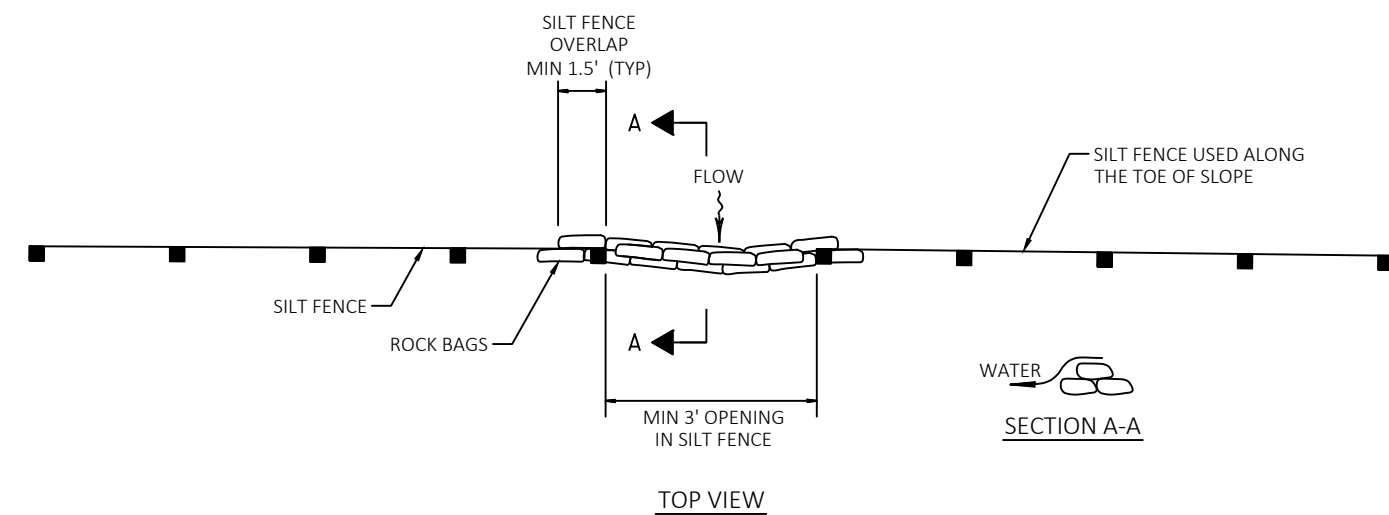


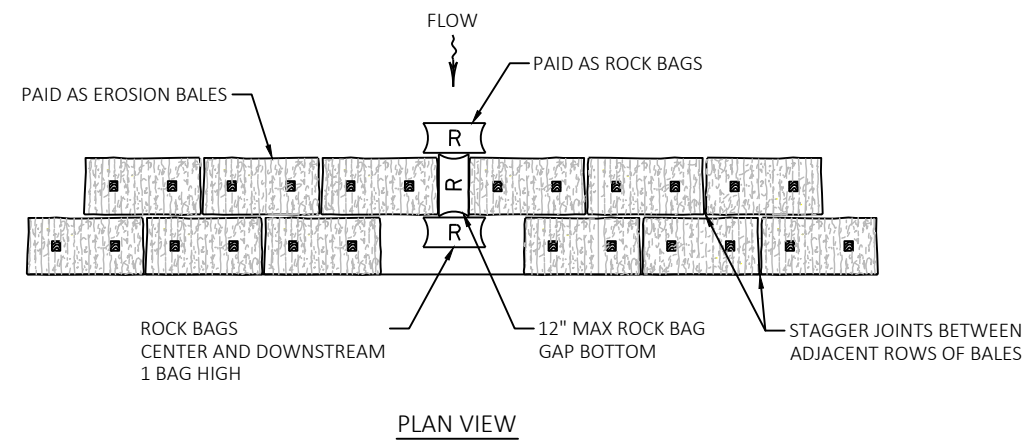
⊗ SEE TYPICAL CROSS SECTION FOR PAVEMENT TYPE AND THICKNESS OF INDIVIDUAL LAYERS

-  REMOVING ASPHALTIC SURFACE, BUTT JOINTS (FULL DEPTH REMOVAL OPTIONAL)
-  ASPHALTIC WEDGING (FULL DEPTH REMOVAL OPTION)
-  REMOVING ASPHALTIC SURFACE, BUTT JOINTS (MILLING OPTION)

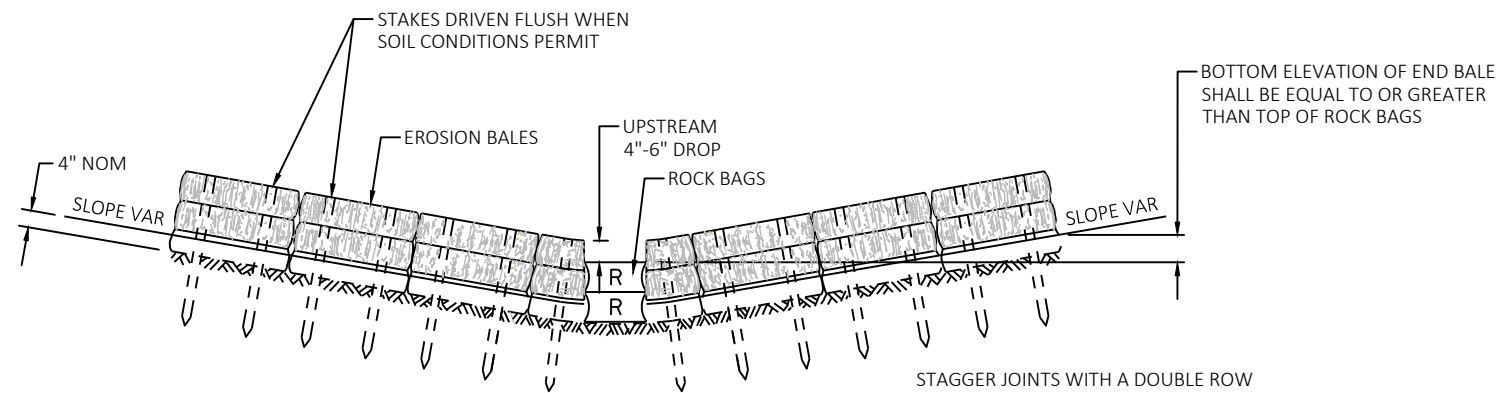
BUTT JOINT DETAIL FOR NON MILLED ASPHALTIC PAVEMENTS (PROFILE CHANGE)

* MAINLINE
** SIDEROADS
*** PRIVATE ENTRANCES

SILT FENCE TURN-AROUND DETAILROCK BAGS USED FOR SILT FENCE RELIEF DETAIL



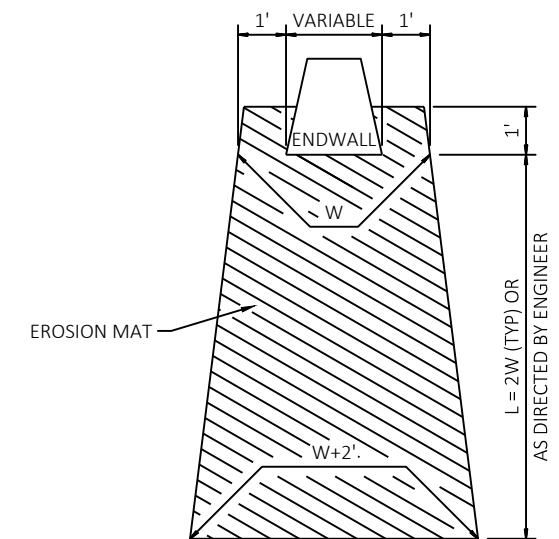
PLAN VIEW



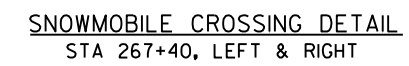
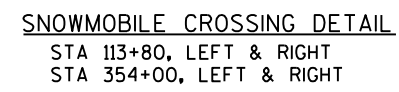
FRONT ELEVATION

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

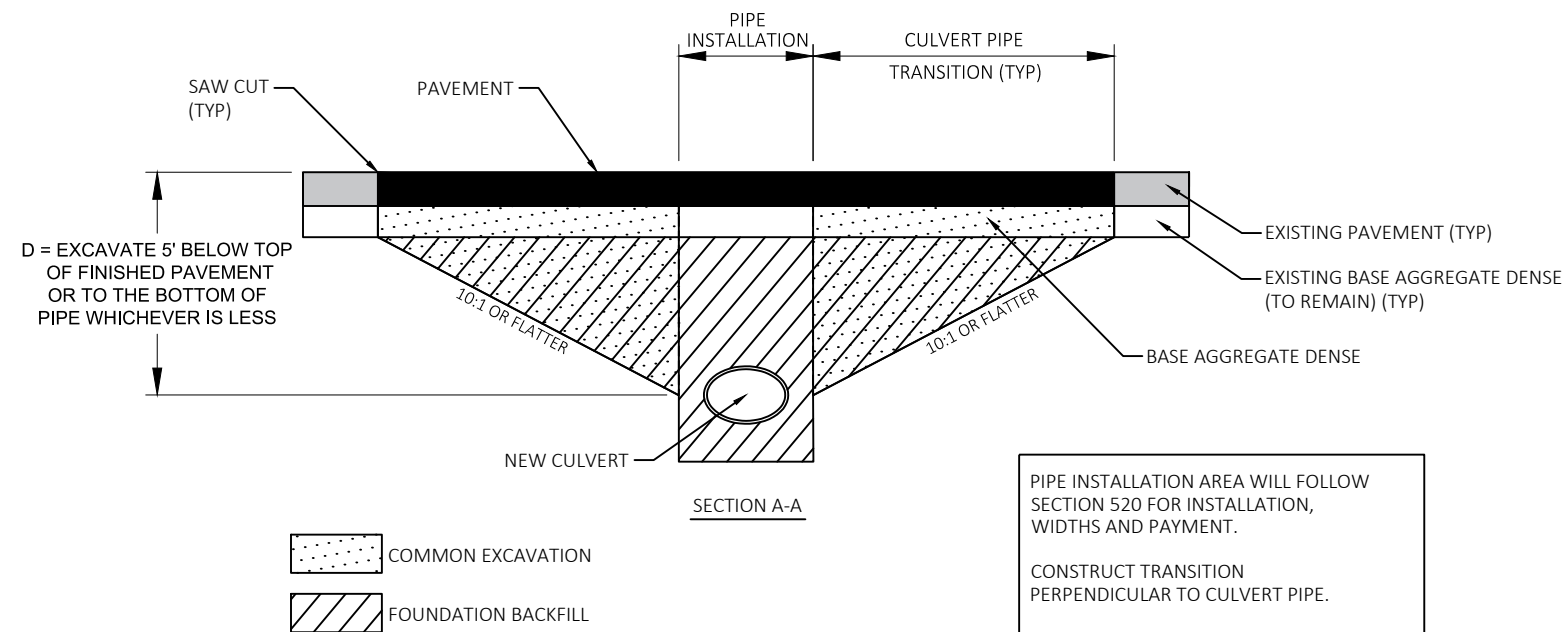
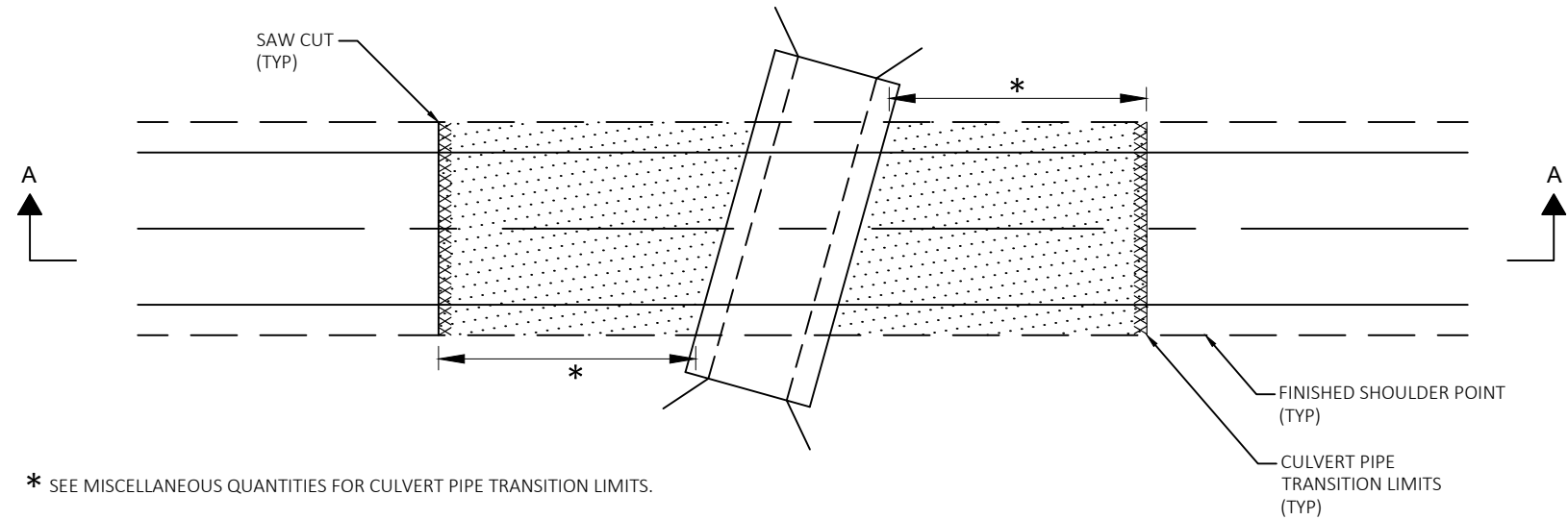
EROSION BALES WITH ROCK BAG RELIEF



EROSION MAT TREATMENT AT CULVERTS



*DIMENSIONS ARE APPROXIMATE
SEE NOTES TO CONSTRUCTION
STAFF



PIPE INSTALLATION AREA WILL FOLLOW SECTION 520 FOR INSTALLATION, WIDTHS AND PAYMENT.

CONSTRUCT TRANSITION PERPENDICULAR TO CULVERT PIPE.

CULVERT PIPE TRANSITION AREAS WILL BE PAID BY COMMON EXCAVATION & SPV FOUNDATION BACKFILL.

PAVEMENT SAW CUT TO BE PERPENDICULAR TO ROADWAY ALIGNMENT.

NEW CULVERT PIPES WITH TRANSITION

STA 29+20
STA 58+50
STA 213+60
STA 239+85

*NOTE: SURVEY IS TIED INTO
WISDOT BENCHMARKS ON SITE



PROJECT NAME

**SHADOW CREEK
CULVERT
REPLACMENT @ WI
STATE HIGHWAY 64**

**CHEQUAMEGON/NICOLET
NF**

**LAKEWOOD/LAONA RANGER
DISTRICT**

DRAWING TITLE

**STREAM PLAN AND
PROFILE**

DATE
11/28/17

ARCHIVE NO.

DESIGNER
E. LYNCH

DRAWN
E. LYNCH

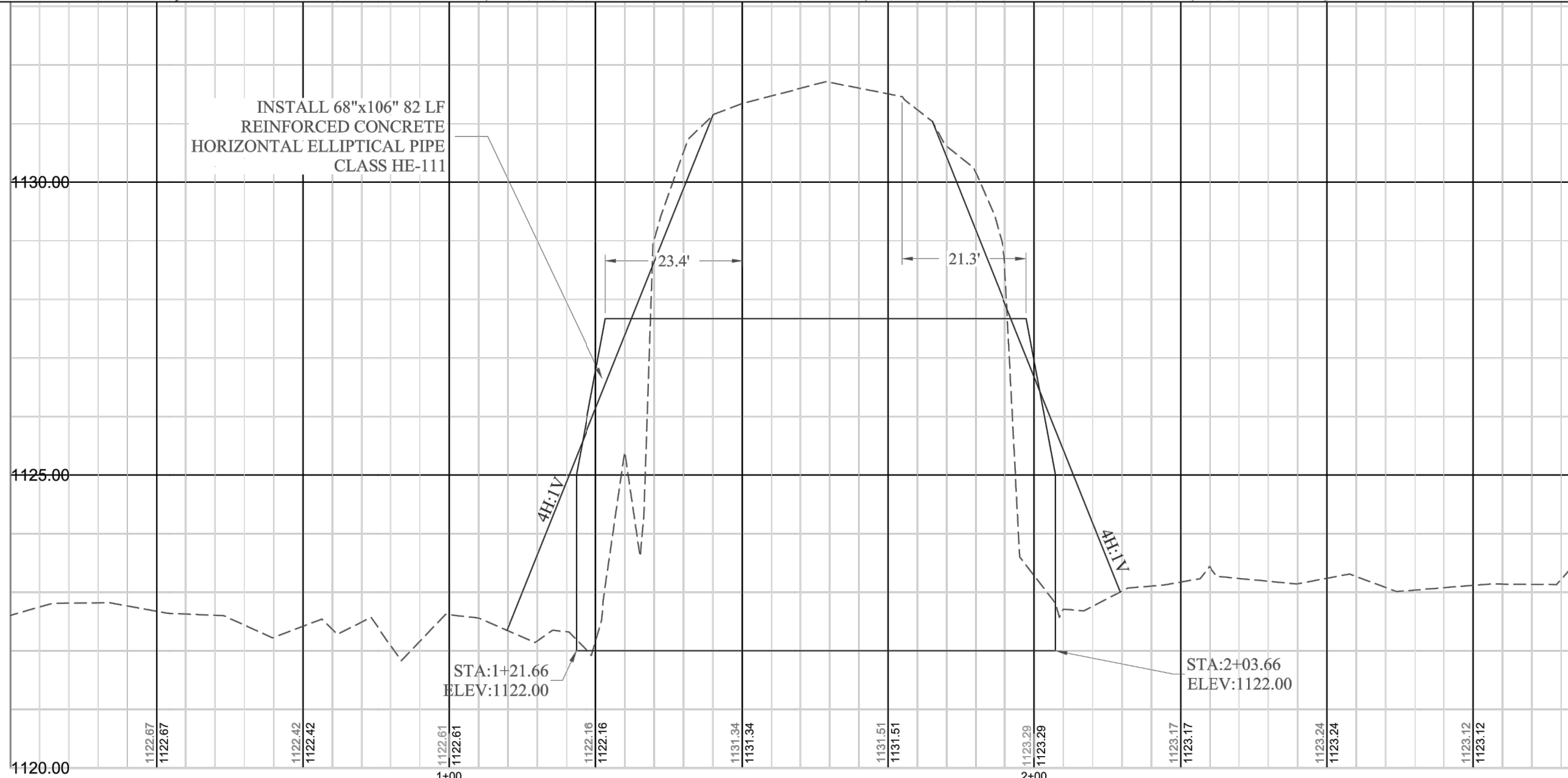
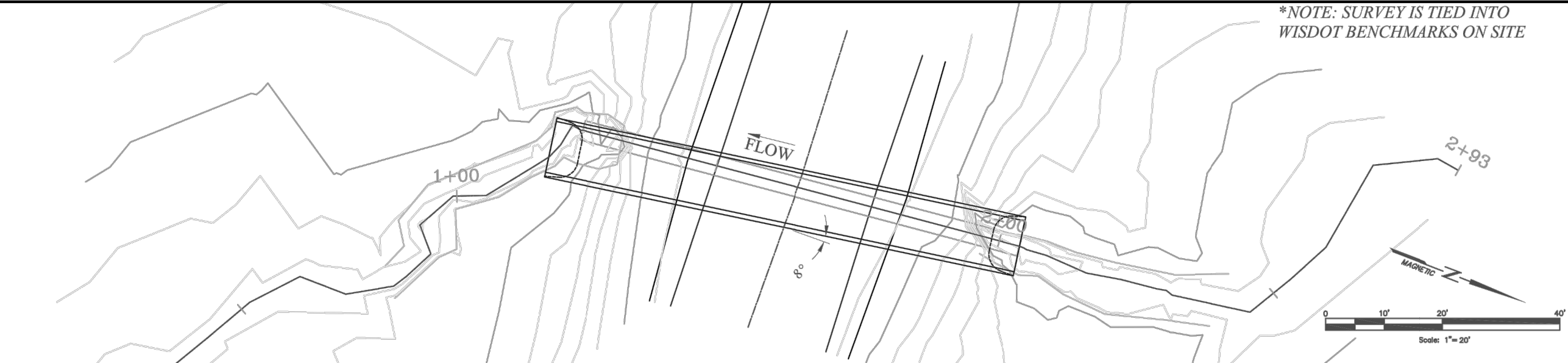
CHECKED
X.XXX

PROJECT NO.

DWG SHEET NO.

1

SHEET 1 of 1



PROJECT NO: 9140-13-71

HWY: STH 64

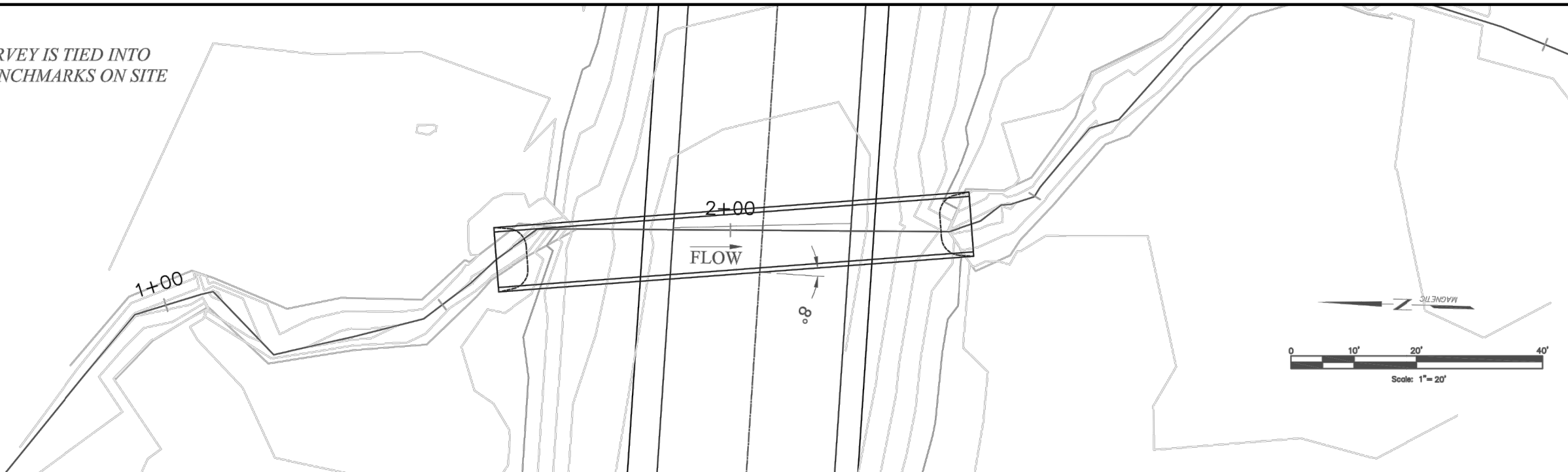
COUNTY: OCONTO

PLAN SHEETS

SHEET 15

E

*NOTE: SURVEY IS TIED INTO
WISDOT BENCHMARKS ON SITE



United States Department of Agriculture
Forest Service

R-09
EASTERN REGION

PROJECT NAME

UNT SOUTH BRANCH
OCONTO RIVER
CULVERT
REPLACEMENT @ WI
HWY 64
CHEQUAMEGON/NICOLET
NF

LAKEWOOD/LAONA
RANGER DISTRICT

DRAWING TITLE

CULVERT PLAN AND
PROFILE VIEWS

DATE

12/15/17

ARCHIVE NO.

DESIGNER

E. LYNCH

DRAWN

E. LYNCH

CHECKED

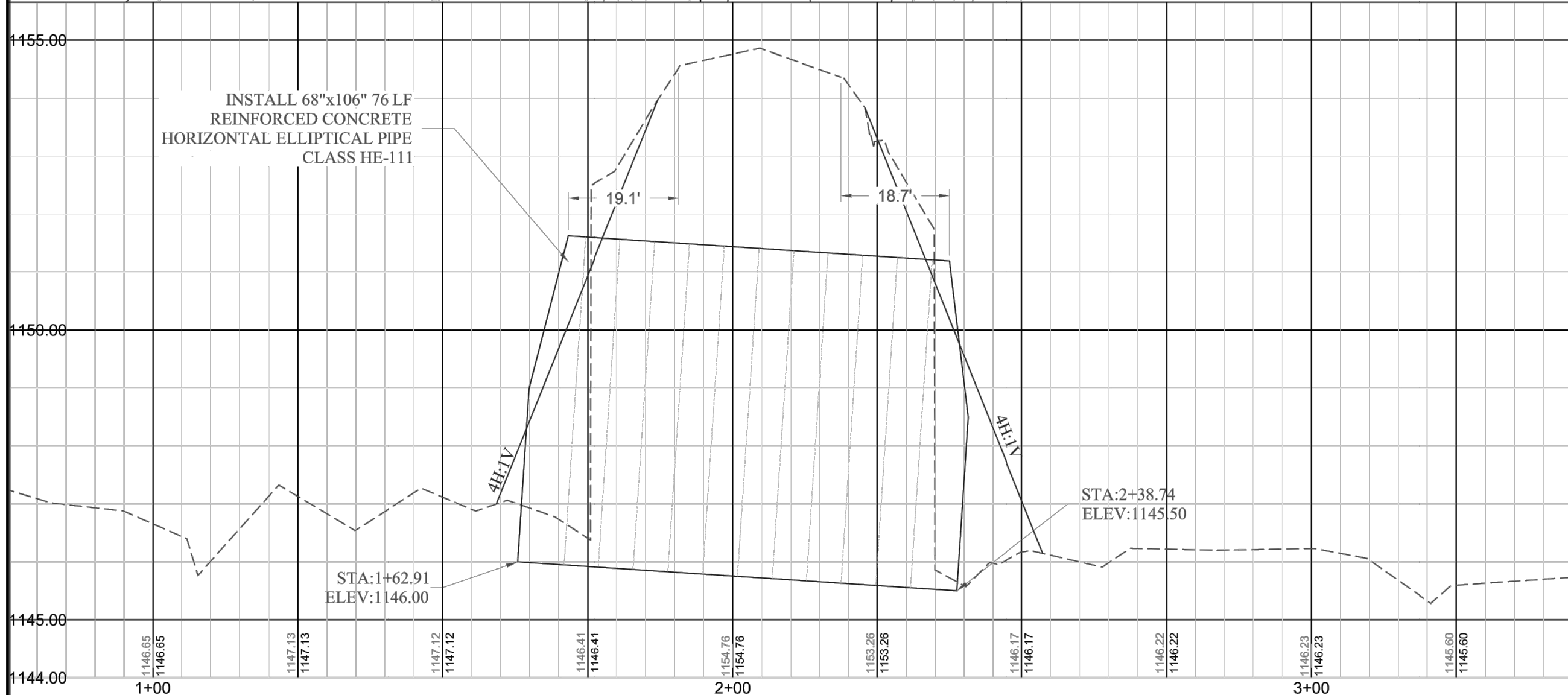
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PROJECT NO.

DWG SHEET NO.

1

SHEET 1 OF 1



PROJECT NO: 9140-13-71

HWY: STH 64

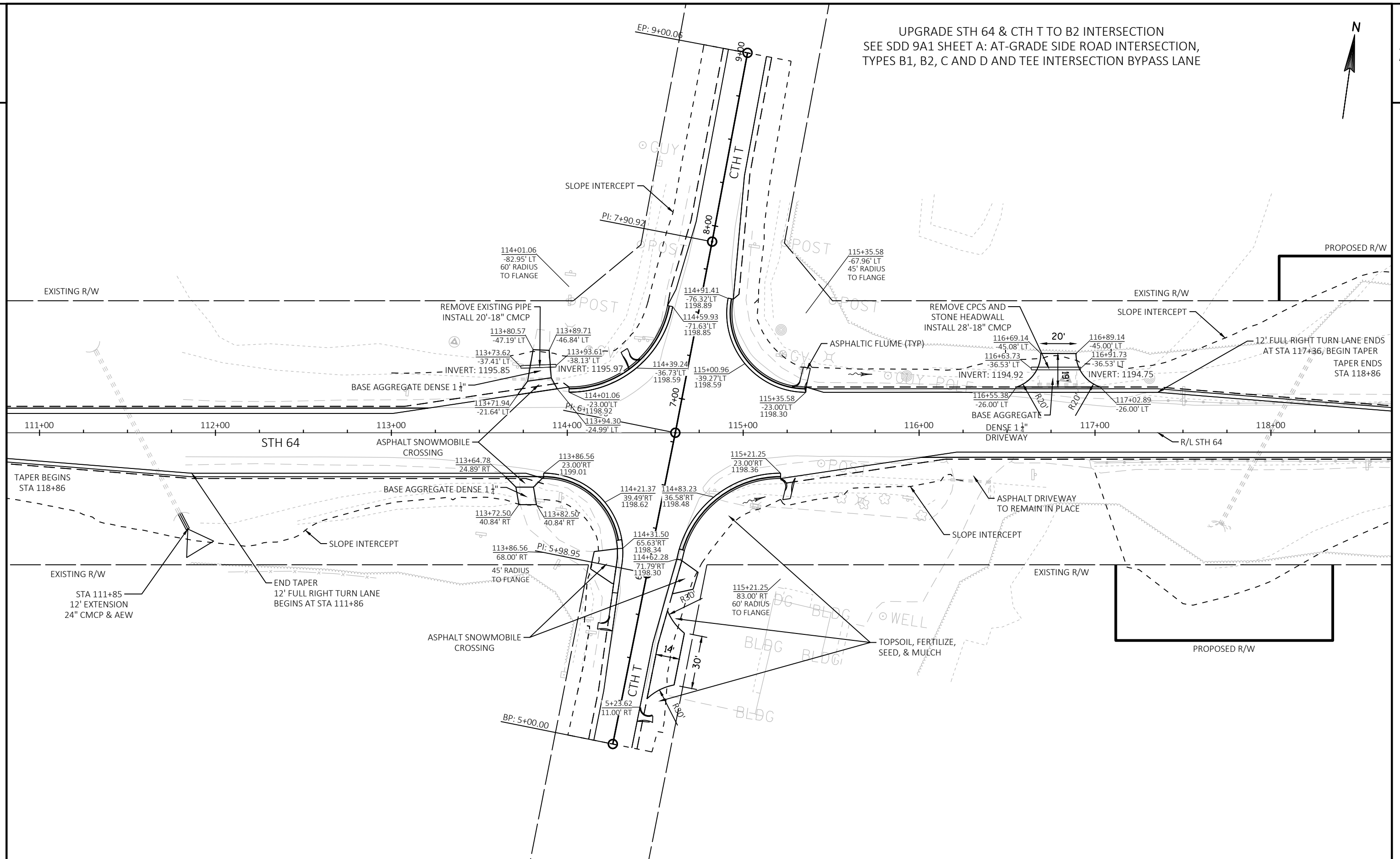
COUNTY: OCONTO

PLAN SHEETS

SHEET

16

E



PROJECT NO: 9140-13-71

HWY: STH 64

COUNTY: OCONTO

INTERSECTION DETAIL

SHEET

17

E

FILE NAME : N:\PDS\C3D\91401300\SHEETS\PLAN\021101-ID.DWG
LAYOUT NAME - 021101-id

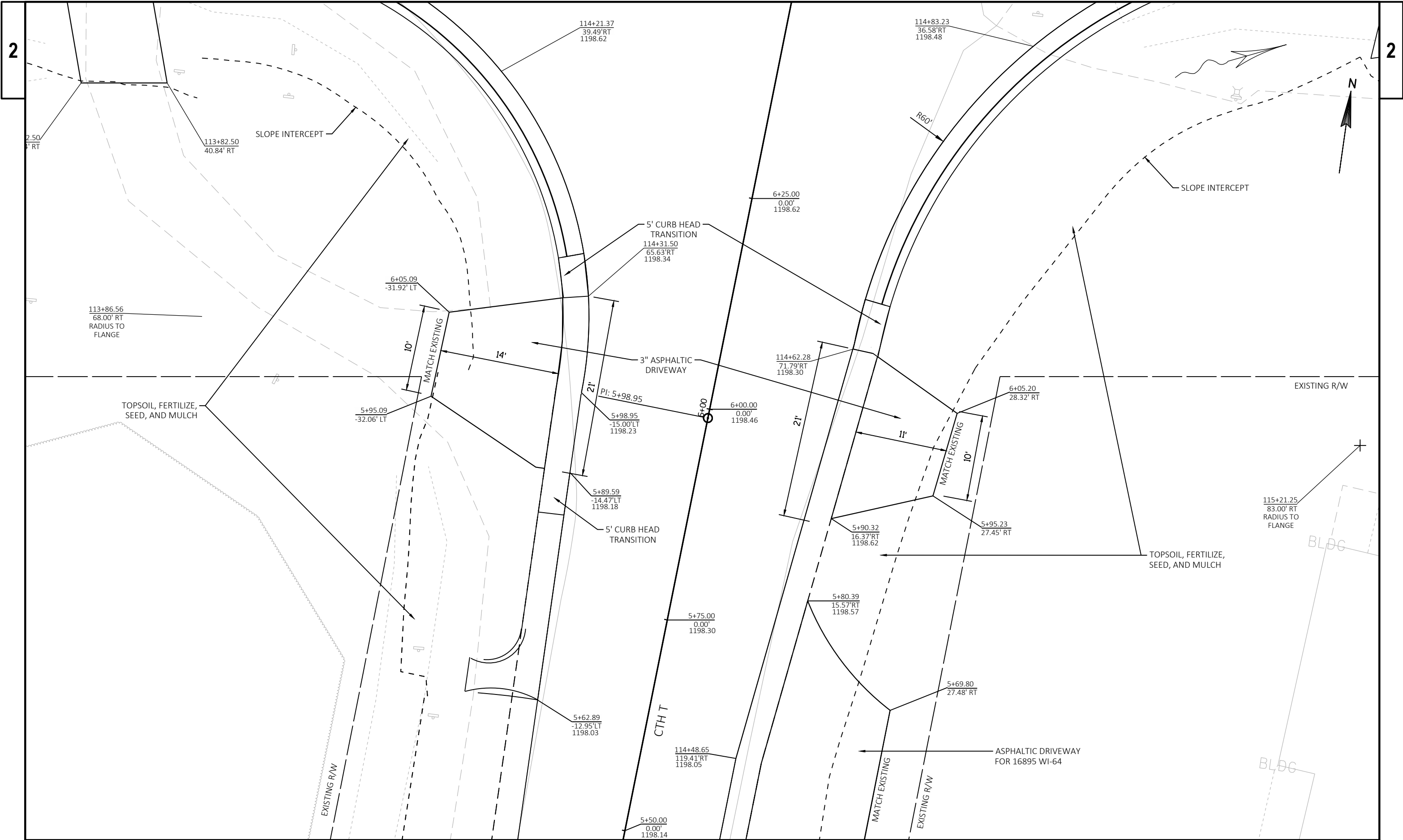
PLOT DATE : 10/2/2019 2:46 PM

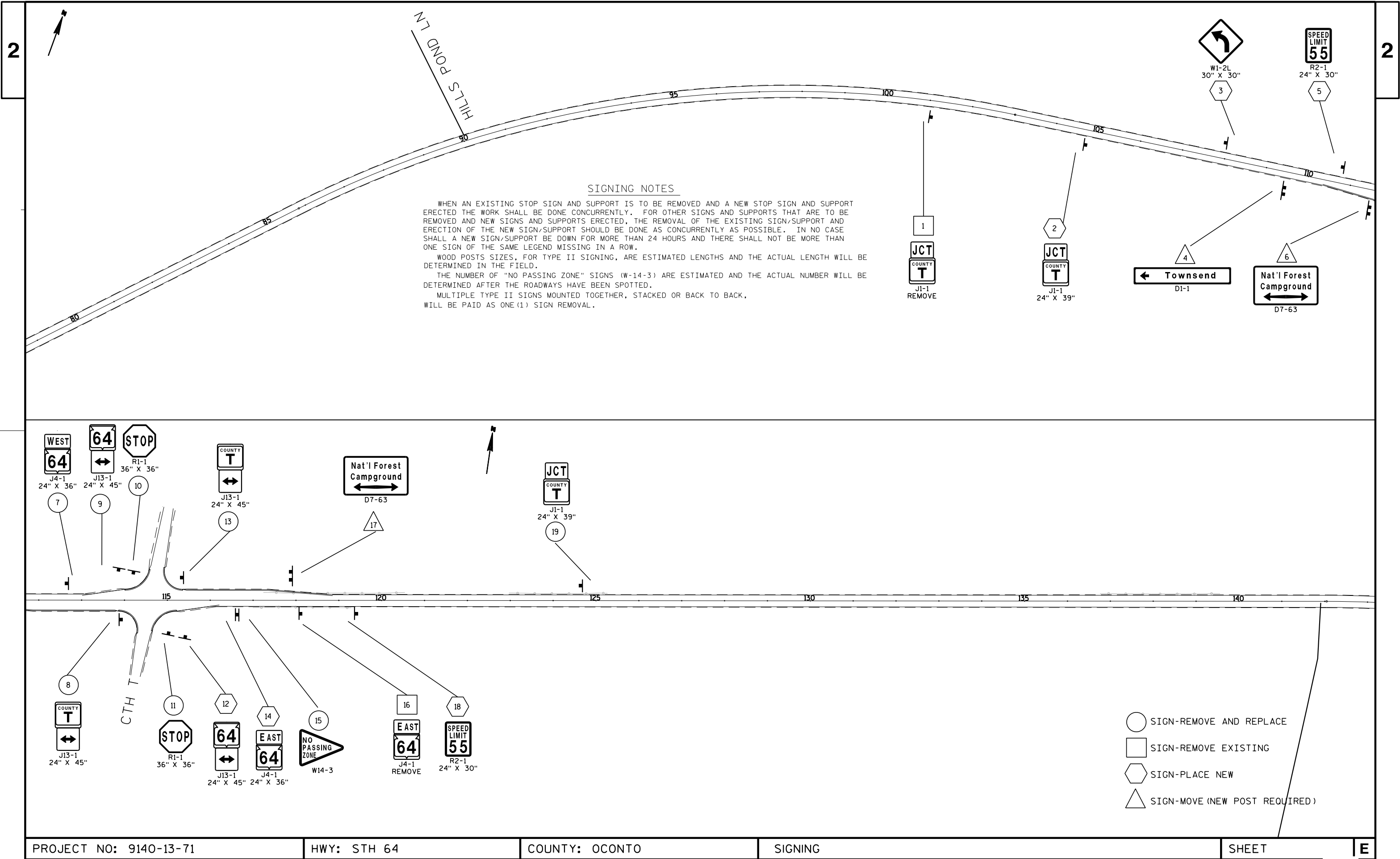
PLOT BY : BRADLEY, KIMBERLY L

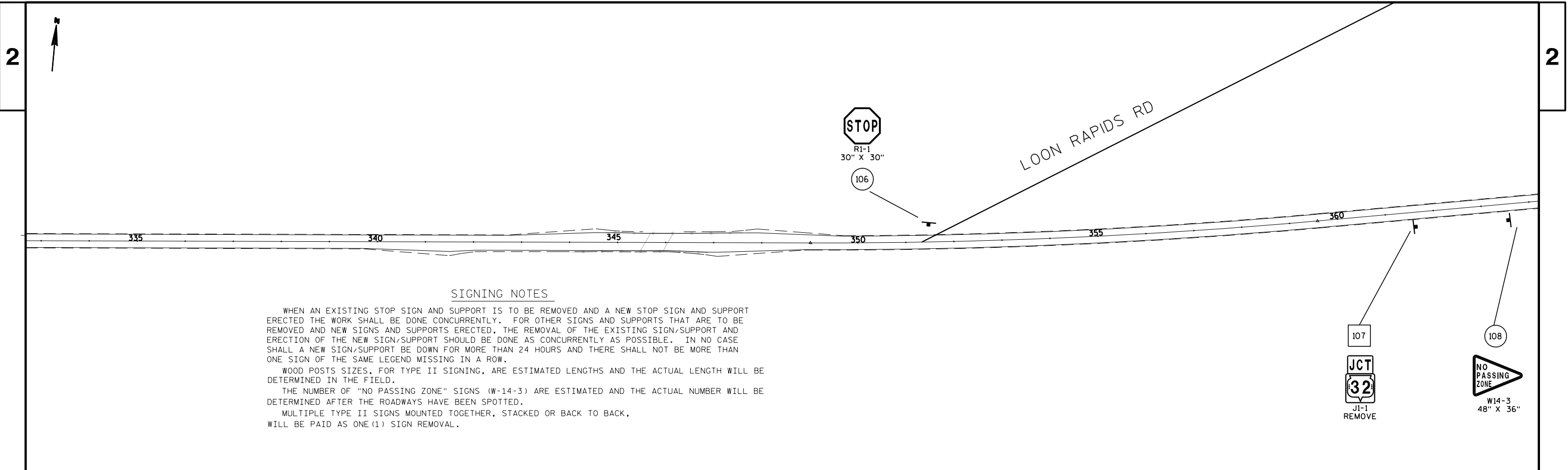
PLOT NAME :

PLOT SCALE : 1 IN:50 FT

WISDOT/CADDs SHEET 42







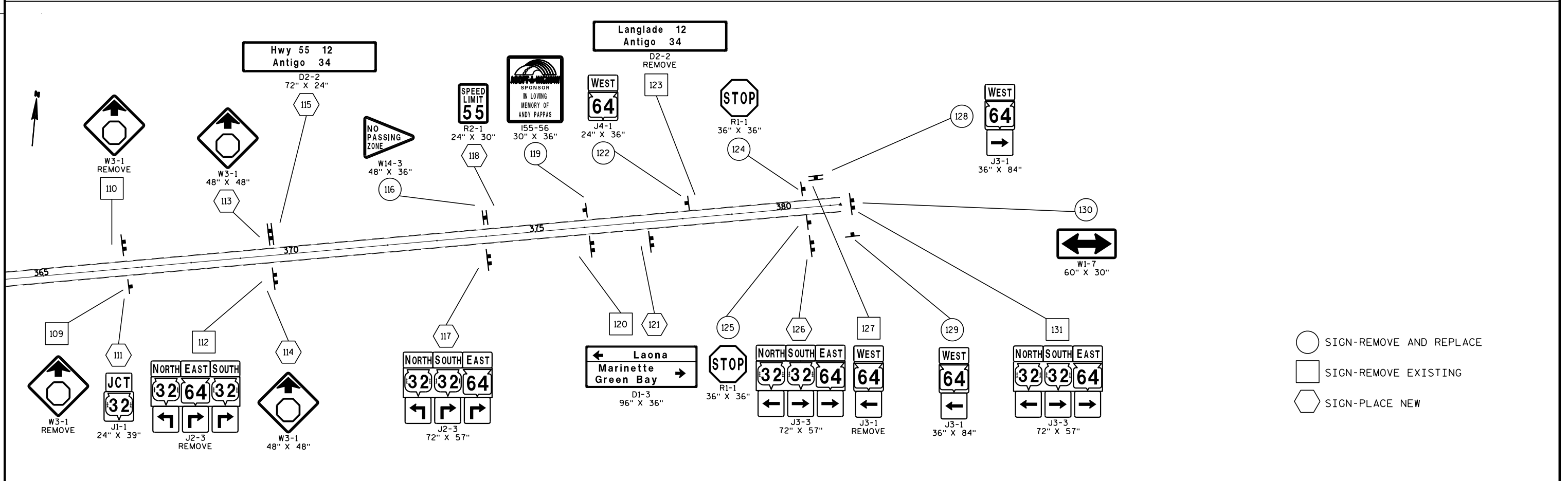
SIGNING NOTES

WHEN AN EXISTING STOP SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

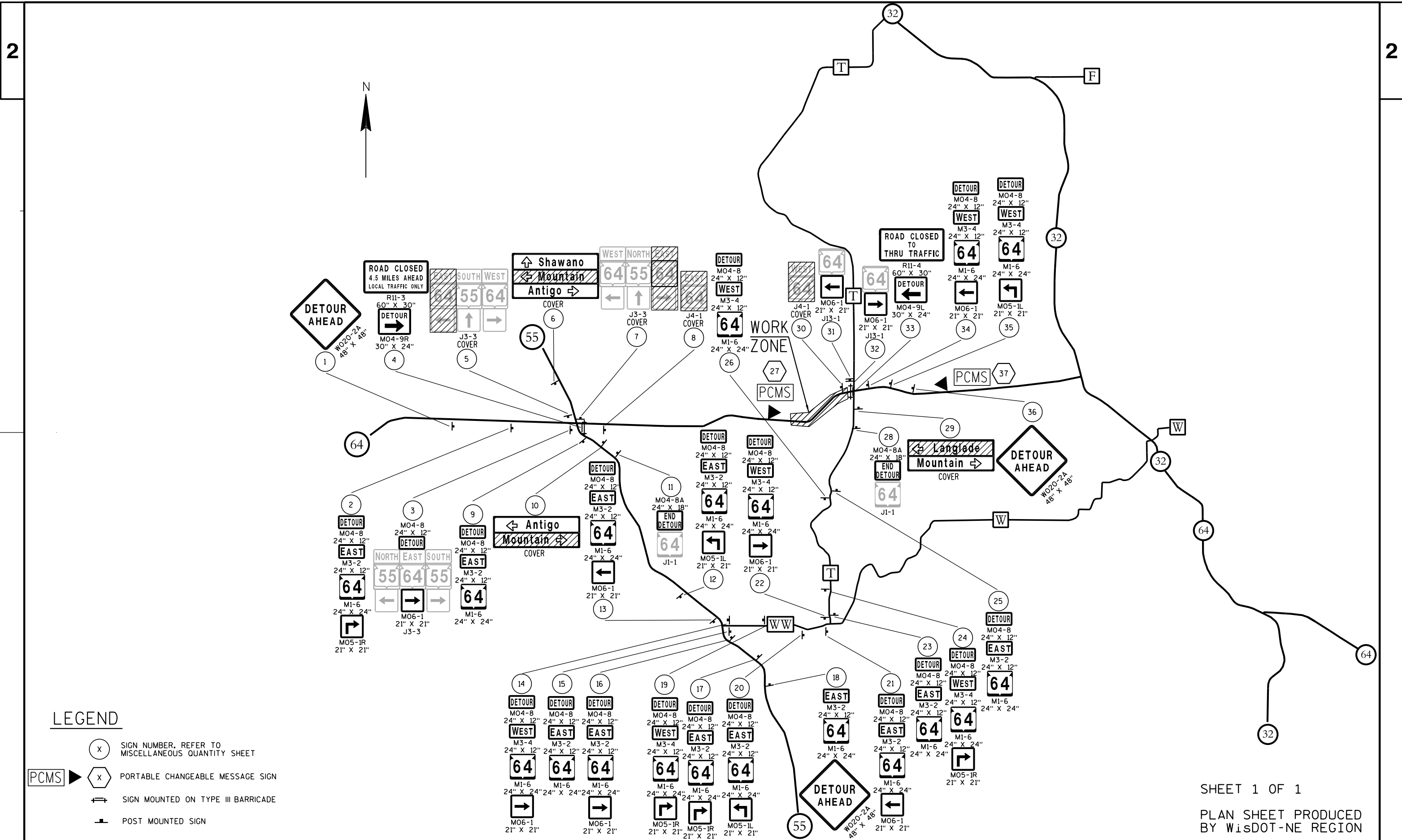
WOOD POSTS SIZES, FOR TYPE II SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

THE NUMBER OF "NO PASSING ZONE" SIGNS (W-14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.

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



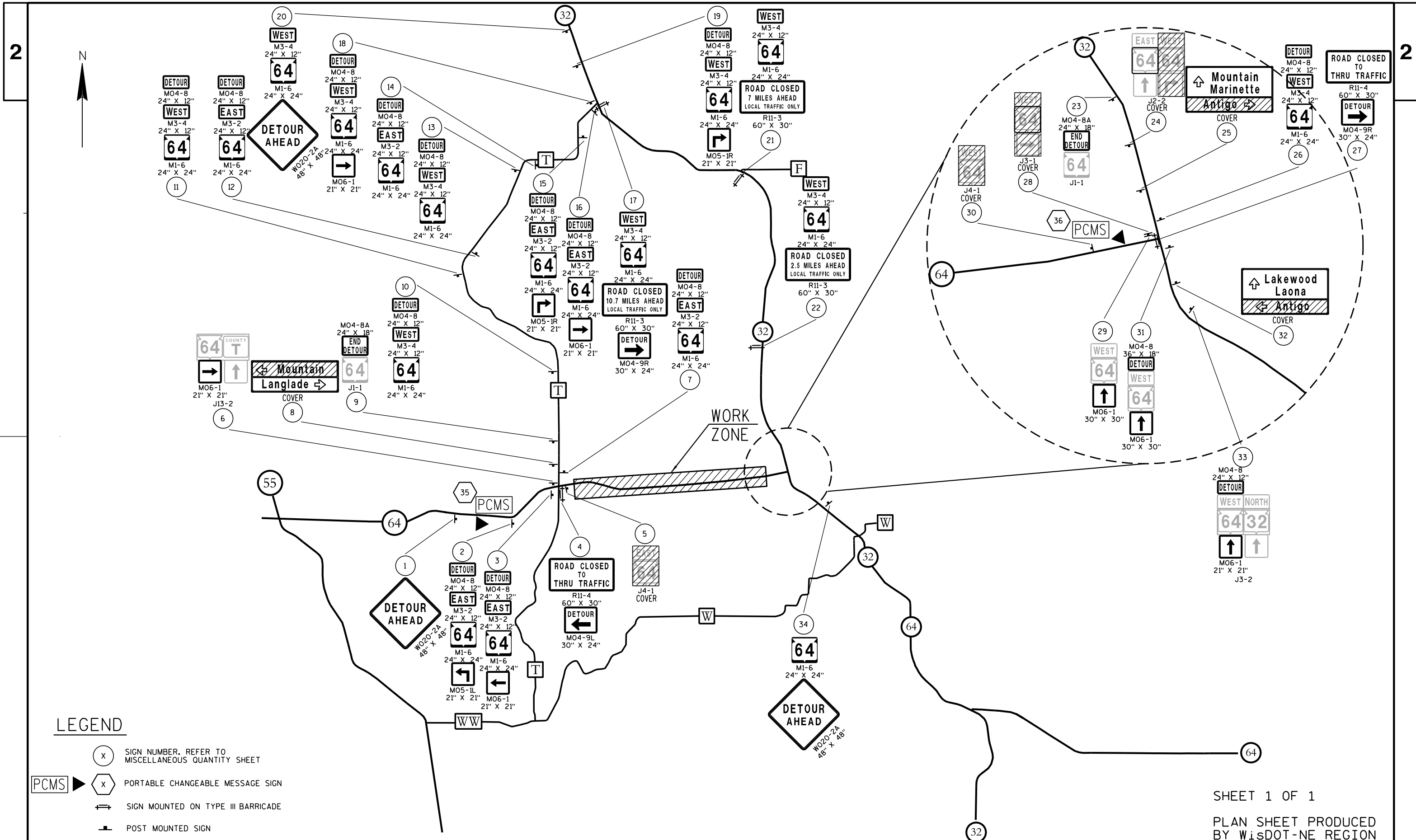
- SIGN-REMOVE AND REPLACE
- SIGN-REMOVE EXISTING
- SIGN-PLACE NEW



LEGEND

- (X) SIGN NUMBER, REFER TO MISCELLANEOUS QUANTITY SHEET
- PCMS (X) PORTABLE CHANGEABLE MESSAGE SIGN
- == SIGN MOUNTED ON TYPE III BARRICADE
- POST MOUNTED SIGN

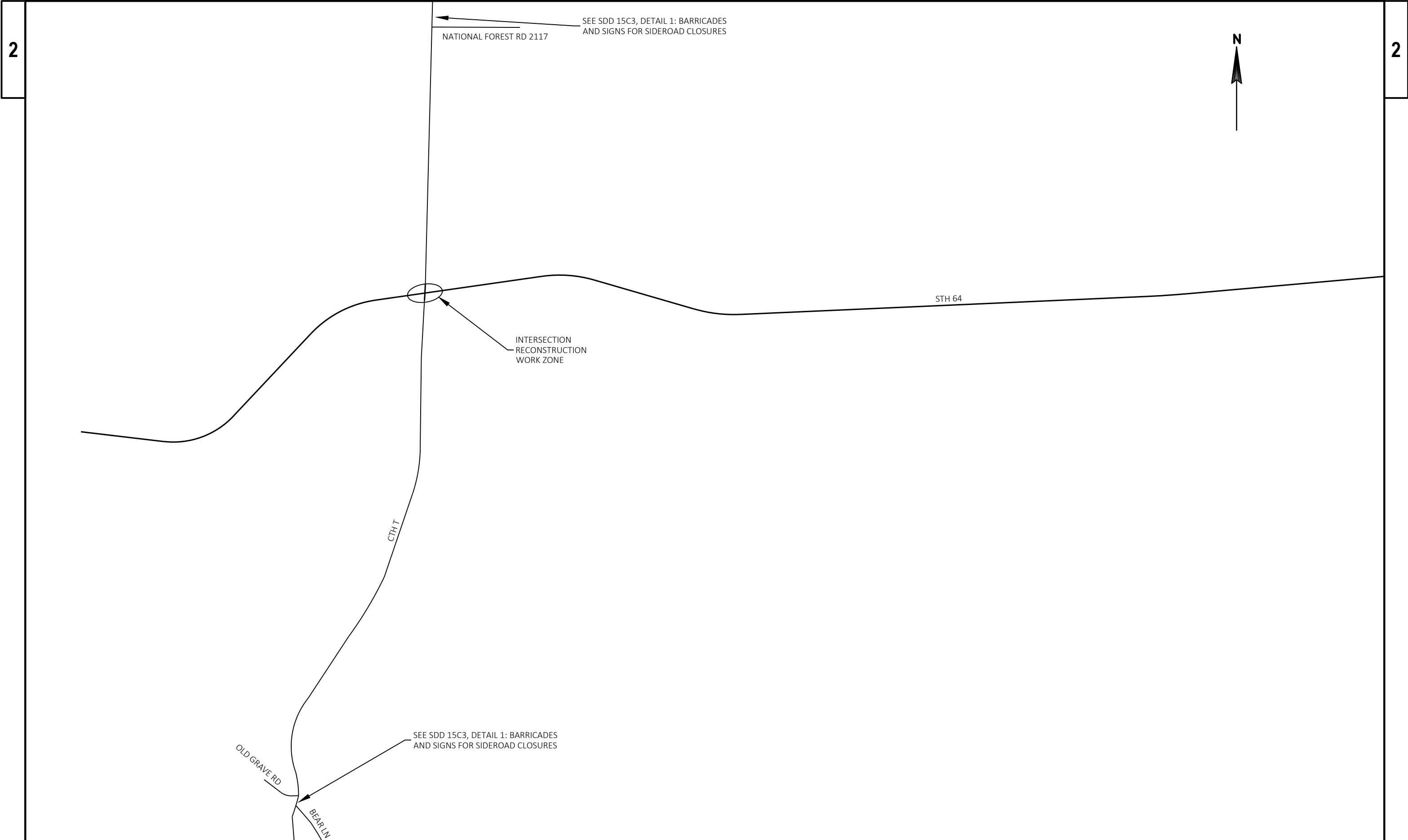
SHEET 1 OF 1
PLAN SHEET PRODUCED
BY WisDOT-NE REGION



LEGEND

- (X) SIGN NUMBER. REFER TO MISCELLANEOUS QUANTITY SHEET
- PCMS (X) PORTABLE CHANGEABLE MESSAGE SIGN
- SIGN MOUNTED ON TYPE III BARRICADE
- POST MOUNTED SIGN

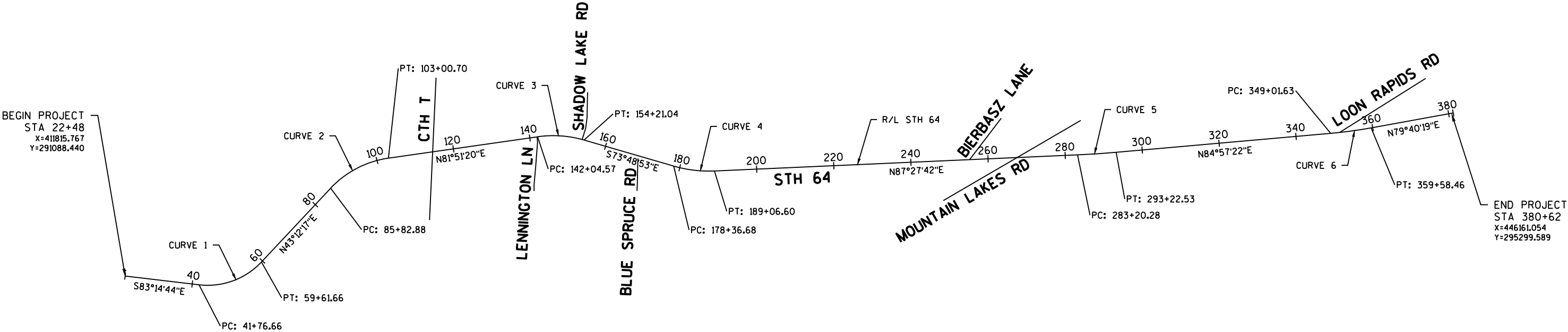
SHEET 1 OF 1
PLAN SHEET PRODUCED
BY WISDOT-NE REGION





SUPERELEVATION TABLE							
CURVE	END NORMAL CROWN	REVERSE CROWN	BEGIN FULL SUPERELEVATION	END FULL SUPERELEVATION	REVERSE CROWN	END RUN OFF	BEGIN NORMAL CROWN
CURVE 1	STA 40+41	STA 41+43	STA 42+20	STA 59+19	STA 59+19	STA 60+47	STA 60+98
CURVE 2	STA 84+59	STA 85+61	STA 86+20	STA 102+63	STA 103+22	STA 103+73	STA 104+24
CURVE 3	STA 140+86	STA 141+88	STA 142+39	STA 153+87	STA 154+38	STA 154+89	STA 155+40
CURVE 4	STA 177+23	STA 178+25	STA 178+68	STA 188+76	STA 189+19	STA 189+70	STA 190+21

CURVE 1 PI STA = 51+40.35 Y = 290748.417 X = 414686.659 DELTA = 53°32'59" D = 3°00'00" T = 963.69' L = 1784.99' R = 1909.86' PC STA = 41+76.66 PT STA = 59+61.66	CURVE 2 PI STA = 94+75.92 Y = 294012.446 X = 417752.297 DELTA = 38°39'03" D = 2°15'00" T = 893.03' L = 1717.82' R = 2546.48' PC STA = 85+82.88 PT STA = 103+00.70	CURVE 3 PI STA = 148+22.11 Y = 294779.499 X = 423112.132 DELTA = 24°19'46" D = 2°00'00" T = 617.55' L = 1216.48' R = 2864.79' PC STA = 142+04.57 PT STA = 154+21.04	CURVE 4 PI STA = 183+76.45 Y = 293783.564 X = 426543.477 DELTA = 18°43'25" D = 1°45'00" T = 539.77' L = 1069.92' R = 3274.04' PC STA = 178+36.68 PT STA = 189+06.60	CURVE 5 PI STA = 288+21.48 Y = 294246.578 X = 436987.874 DELTA = 2°30'20" D = 0°15'00" T = 501.21' L = 1002.26' R = 22918.31' PC STA = 283+20.28 PT STA = 293+22.53	CURVE 6 PI STA = 354+30.42 Y = 294827.652 X = 443571.379 DELTA = 5°17'03" D = 0°30'00" T = 528.79' L = 1056.83' R = 11459.16' PC STA = 349+01.63 PT STA = 359+58.46
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Estimate Of Quantities

9140-13-71					
Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	48.000	48.000
0004	201.0205	Grubbing	STA	48.000	48.000
0006	203.0100	Removing Small Pipe Culverts	EACH	13.000	13.000
0008	203.0200	Removing Old Structure (station) 01. STA 29+20	LS	1.000	1.000
0010	203.0200	Removing Old Structure (station) 02. STA 213+60	LS	1.000	1.000
0012	204.0110	Removing Asphaltic Surface	SY	261.000	261.000
0014	204.0115	Removing Asphaltic Surface Butt Joints	SY	1,419.000	1,419.000
0016	204.0120	Removing Asphaltic Surface Milling	SY	109,751.000	109,751.000
0018	204.0165	Removing Guardrail	LF	5,010.000	5,010.000
0020	204.9060.S	Removing (item description) 01. Removing Stone Endwalls	EACH	21.000	21.000
0022	205.0100	Excavation Common	CY	4,558.000	4,558.000
0024	208.0100	Borrow	CY	24,679.000	24,679.000
0026	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 9140-13-71	LS	1.000	1.000
0028	213.0100	Finishing Roadway (project) 01. 9140-13-71	EACH	1.000	1.000
0030	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,469.000	1,469.000
0032	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	2,435.000	2,435.000
0034	455.0605	Tack Coat	GAL	13,816.000	13,816.000
0036	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	1.000	1.000
0038	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	1.000	1.000
0040	460.2000	Incentive Density HMA Pavement	DOL	330.000	330.000
0042	460.2005	Incentive Density PWL HMA Pavement	DOL	9,267.000	9,267.000
0044	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	28,550.000	28,550.000
0046	460.2010	Incentive Air Voids HMA Pavement	DOL	19,850.000	19,850.000
0048	460.6223	HMA Pavement 3 MT 58-28 S	TON	506.000	506.000
0050	460.6224	HMA Pavement 4 MT 58-28 S	TON	20,372.000	20,372.000
0052	465.0110	Asphaltic Surface Patching	TON	136.000	136.000
0054	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	43.000	43.000
0056	465.0315	Asphaltic Flumes	SY	21.000	21.000
0058	465.0450	Asphaltic Intersection Rumble Strips	SY	66.000	66.000
0060	465.0475	Asphalt Centerline Rumble Strips 2-Lane Rural	LF	33,630.000	33,630.000
0062	521.1018	Apron Endwalls for Culvert Pipe Steel 18-Inch	EACH	4.000	4.000
0064	521.1024	Apron Endwalls for Culvert Pipe Steel 24-Inch	EACH	3.000	3.000
0066	521.1518	Apron Endwalls for Culvert Pipe Sloped Side Drains Steel 18-Inch 6 to 1	EACH	12.000	12.000
0068	521.1530	Apron Endwalls for Culvert Pipe Sloped Side Drains Steel 30-Inch 6 to 1	EACH	2.000	2.000
0070	521.3118	Culvert Pipe Corrugated Steel 18-Inch	LF	316.000	316.000
0072	521.3124	Culvert Pipe Corrugated Steel 24-Inch	LF	72.000	72.000
0074	521.3130	Culvert Pipe Corrugated Steel 30-Inch	LF	48.000	48.000

Estimate Of Quantities

9140-13-71

Line	Item	Item Description	Unit	Total	Qty
0076	522.0136	Culvert Pipe Reinforced Concrete Class III 36-Inch	LF	162.000	162.000
0078	522.0430	Culvert Pipe Reinforced Concrete Class IV 30-Inch	LF	194.000	194.000
0080	522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	EACH	2.000	2.000
0082	522.1036	Apron Endwalls for Culvert Pipe Reinforced Concrete 36-Inch	EACH	4.000	4.000
0084	522.2334	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 34x53-Inch	LF	64.000	64.000
0086	522.2368	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 68x106-Inch	LF	126.000	126.000
0088	522.2634	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 34x53-Inch	EACH	2.000	2.000
0090	522.2668	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 68x106-Inch	EACH	4.000	4.000
0092	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	444.000	444.000
0094	614.0010	Barrier System Grading Shaping Finishing	EACH	12.000	12.000
0096	614.0397	Guardrail Mow Strip Emulsified Asphalt	SY	778.000	778.000
0098	614.2300	MGS Guardrail 3	LF	500.000	500.000
0100	614.2500	MGS Thrie Beam Transition	LF	472.800	472.800
0102	614.2610	MGS Guardrail Terminal EAT	EACH	12.000	12.000
0104	616.0700.S	Fence Safety	LF	500.000	500.000
0106	618.0100	Maintenance And Repair of Haul Roads (project) 01. 9140-13-71	EACH	1.000	1.000
0108	619.1000	Mobilization	EACH	1.000	1.000
0110	624.0100	Water	MGAL	33.300	33.300
0112	625.0500	Salvaged Topsoil	SY	50,213.000	50,213.000
0114	627.0200	Mulching	SY	45,825.000	45,825.000
0116	628.1504	Silt Fence	LF	8,435.000	8,435.000
0118	628.1520	Silt Fence Maintenance	LF	8,435.000	8,435.000
0120	628.1905	Mobilizations Erosion Control	EACH	9.000	9.000
0122	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0124	628.2004	Erosion Mat Class I Type B	SY	9,264.000	9,264.000
0126	628.7504	Temporary Ditch Checks	LF	440.000	440.000
0128	628.7555	Culvert Pipe Checks	EACH	76.000	76.000
0130	628.7570	Rock Bags	EACH	310.000	310.000
0132	629.0210	Fertilizer Type B	CWT	31.630	31.630
0134	630.0170	Seeding Mixture No. 70	LB	184.000	184.000
0136	630.0200	Seeding Temporary	LB	18.000	18.000
0138	630.0500	Seed Water	MGAL	1,125.000	1,125.000
0140	633.5200	Markers Culvert End	EACH	17.000	17.000
0142	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	12.000	12.000

Estimate Of Quantities

9140-13-71

Line	Item	Item Description	Unit	Total	Qty
0144	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	30.000	30.000
0146	637.2210	Signs Type II Reflective H	SF	260.020	260.020
0148	637.2230	Signs Type II Reflective F	SF	68.750	68.750
0150	638.2102	Moving Signs Type II	EACH	3.000	3.000
0152	638.2602	Removing Signs Type II	EACH	26.000	26.000
0154	638.3000	Removing Small Sign Supports	EACH	32.000	32.000
0156	642.5001	Field Office Type B	EACH	1.000	1.000
0158	643.0300	Traffic Control Drums	DAY	761.000	761.000
0160	643.0420	Traffic Control Barricades Type III	DAY	450.000	450.000
0162	643.0705	Traffic Control Warning Lights Type A	DAY	654.000	654.000
0164	643.0900	Traffic Control Signs	DAY	4,980.000	4,980.000
0166	643.0920	Traffic Control Covering Signs Type II	EACH	13.000	13.000
0168	643.1050	Traffic Control Signs PCMS	DAY	42.000	42.000
0170	643.5000	Traffic Control	EACH	1.000	1.000
0172	646.1020	Marking Line Epoxy 4-Inch	LF	43,400.000	43,400.000
0174	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	71,945.000	71,945.000
0176	646.3040	Marking Line Grooved Wet Ref Epoxy 8-Inch	LF	400.000	400.000
0178	646.6120	Marking Stop Line Epoxy 18-Inch	LF	19.000	19.000
0180	648.0100	Locating No-Passing Zones	MI	6.780	6.780
0182	649.0120	Temporary Marking Line Epoxy 4-Inch	LF	85,600.000	85,600.000
0184	650.4500	Construction Staking Subgrade	LF	1,454.000	1,454.000
0186	650.5000	Construction Staking Base	LF	2,454.000	2,454.000
0188	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	444.000	444.000
0190	650.6000	Construction Staking Pipe Culverts	EACH	9.000	9.000
0192	650.8000	Construction Staking Resurfacing Reference	LF	35,806.000	35,806.000
0194	650.9910	Construction Staking Supplemental Control (project) 01. 9140-13-71	LS	1.000	1.000
0196	650.9920	Construction Staking Slope Stakes	LF	5,513.000	5,513.000
0198	690.0150	Sawing Asphalt	LF	1,703.000	1,703.000
0200	740.0440	Incentive IRI Ride	DOL	54,258.000	54,258.000
0202	SPV.0035	Special 01. Slurring Culvert Pipes	CY	37.000	37.000
0204	SPV.0035	Special 02. Foundation Backfill	CY	850.000	850.000
0206	SPV.0090	Special 01. Temporary Ditch Checks (Erosion Bales)	LF	80.000	80.000
0208	SPV.0105	Special 01. Temporary Water Diversion - Culvert at STA 29+20	LS	1.000	1.000
0210	SPV.0105	Special 02. Temporary Water Diversion - Culvert at STA 213+60	LS	1.000	1.000

Estimate Of Quantities

9140-13-71

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CLEARING AND GRUBBING

STATION	TO	STATION	LOCATION	201.0105	201.0205	REMARKS
				STA	STA	
116+00	-	125+00	STH 64, LEFT	9	9	
116+00	-	125+00	STH 64, RIGHT	9	9	
136+00	-	139+00	STH 64, LEFT	3	3	
174+00	-	178+00	STH 64, RIGHT	4	4	
178+00	-	180+00	STH 64, LEFT	2	2	
259+00	-	261+00	STH 64, LEFT	2	2	
257+00		265+00	STH 64, RIGHT	8	8	
272+00	-	275+00	STH 64, RIGHT	3	3	
278+00	-	281+00	STH 64, LEFT	3	3	
285+00	-	288+00	STH 64, LEFT	3	3	
284+00	-	286+00	STH 64, RIGHT	2	2	
TOTAL				48	48	

REMOVING CULVERT PIPE ITEMS

STATION	LOCATION	REMOVING SMALL PIPE CULVERTS 203.0100	REMOVING OLD STRUCTURE 203.0200	REMARKS
		EACH	LS	
29+20	STH 64	--	1	
58+50	STH 64	1		
90+00	STH 64, LEFT	1		
97+00	STH 64, RIGHT	1		
105+00	STH 64, RIGHT	1		
114+00	STH 64, LEFT	1		
117+00	STH 64, LEFT	1		
134+00	STH 64, LEFT	1		
169+00	STH 64, RIGHT	1		
213+56	STH 64	--	1	
239+84	STH 64	1		
266+30	STH 64	1		
286+01	STH 64	1		
300+50	STH 64, LEFT	1		
350+50	STH 64, RIGHT	1		
TOTAL		13	2	

ALL ITEMS ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

REMOVING ASPHALTIC SURFACE BUTT JOINTS

STATION	TO	STATION	LOCATION	204.0115	REMARKS
				SY	
22+48	-	22+98	STH 64	156	
72+98	-	73+48	STH 64	189	
73+89	-	74+39	STH 64	189	
	154+00		STH 64, LEFT	105	
243+91	-	244+41	STH 64	156	
244+82	-	245+32	STH 64	156	
345+08	-	345+58	STH 64	156	
346+05		346+55	STH 64	156	
380+04	-	380+54	STH 64	156	
TOTAL				1419	

REMOVING STONE ENDWALLS

STATION	LOCATION	204.9060.s	REMARKS
		EACH	
90+00	STH 64, LEFT	2	
97+00	STH 64, RIGHT	2	
105+00	STH 64, RIGHT	2	
111+85	STH 64, RIGHT	1	
134+00	STH 64, LEFT	2	
138+00	STH 64, LEFT	1	
168+50	STH 64, RIGHT	2	
266+30	STH 64	2	
273+50	STH 64, RIGHT	1	
286+00	STH 64	2	
300+50	STH 64, LEFT	2	
350+80	STH 64, RIGHT	2	
TOTAL		21	

REMOVING ASPHALTIC SURFACE

STATION	TO	STATION	LOCATION	204.0110	REMARKS
				SY	
5+25	-	6+50	CTH T, RIGHT	229	
116+00	-	116+50	STH 64, RIGHT	32	
TOTAL				261	

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EARTHWORK SUMMARY

Location		205.0100 Common Excavation (1)		Salvaged/Unusable Pavement Material (4)	Available Material (5)	Unexpanded Fill	Expanded Fill (13)	Mass Ordinate +/- (14)	Waste	208.0100 Borrow	Comment:
		Cut (2)	Excavation (3)				Factor				
	1.25										
STH 64	110+12 - 290+75	2,877	0	44	2,833	23,187	28,984	-26,151	0	26,151	
CTH T INT	5+00 - 9+00	514	0	141	373	54	68	305	305	0	
STH 64 29+20	PIPE REPLACEMENT	270	0	0	270	SEE SPV.0035.02		270	270	0	
STH 64 58+50	PIPE REPLACEMENT	264	0	0	264	SEE SPV.0035.02		264	264	0	
STH 64 213+60	PIPE REPLACEMENT	265	0	0	265	SEE SPV.0035.02		265	265	0	
STH 64 239+85	PIPE REPLACEMENT	368	0	0	368	SEE SPV.0035.02		368	368	0	
Subtotal		4,558	0	185	4,373	23,241	29,051	-24,679	1,472	26,151	
Grand Total		4,558	0	185	4,373	23,241	29,051	-24,679	1,472	24,679	

Total Common Exc 4,558

- Notes:
- (1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
 - (2) Salvaged/Unsuable Pavement Material is included in Cut.
 - (4) Salvaged/Unusable Pavement Material
 - 5) Available Material = Cut - Salvaged/Unusuable Pavement Material
 - (13) Expanded Fill Factor = 1.25
 - (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.

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REMOVING ASPHALTIC SURFACE MILLING

204.0120					REMARKS
STATION	TO	STATION	LOCATION	SY	
22+98	-	72+98	STH 64	15556	
74+39	-	243+91	STH 64	52740	
245+32	-	345+08	STH 64	31036	
346+55	-	380+04	STH 64	10419	
TOTAL				109751	

REMOVING GUARDRAIL

204.0165					REMARKS
STATION	TO	STATION	LOCATION	LF	
72+00	-	75+50	STH 64, LEFT	219	
72+00	-	75+50	STH 64, RIGHT	206	
117+00	-	126+00	STH 64, LEFT	559	
117+00	-	126+00	STH 64, RIGHT	230	
136+00	-	140+00	STH 64, LEFT	280	
174+00	-	180+00	STH 64, LEFT	168	
174+00	-	180+00	STH 64, RIGHT	405	
242+00	-	247+00	STH 64, LEFT	218	
242+00	-	247+00	STH 64, RIGHT	219	
257+00	-	261+00	STH 64, LEFT	352	
257+00	-	261+00	STH 64, RIGHT	354	
272+00	-	281+00	STH 64, LEFT	230	
272+00	-	281+00	STH 64, RIGHT	357	
283+00	-	289+00	STH 64, LEFT	404	
283+00	-	289+00	STH 64, RIGHT	379	
344+00	-	348+00	STH 64, LEFT	218	
344+00	-	348+00	STH 64, RIGHT	212	
TOTAL				5010	

PREPARE FOUNDATION FOR ASPHALTIC PAVING

211.0100					REMARKS
STATION	TO	STATION	LOCATION	LS	
22+48	-	73+48	STH 64		
73+89	-	244+41	STH 64		
244+82	-	345+58	STH 64		
346+05	-	381+00	STH 64		
5+00	-	9+00	CTH T		
TOTAL				1	

BASE AGGREGATE DENSE 3/4-INCH

				305.0110	WATER* 624.0100	REMARKS
STATION	TO	STATION	LOCATION	TON	MGAL	
22+48	-	73+48	STH 64, SHOULDERS	198	2.0	
73+89	-	244+41	STH 64, SHOULDERS	663	6.6	
244+82	-	345+58	STH 64, SHOULDERS	392	3.9	
346+05	-	381+00	STH 64, SHOULDERS	134	1.3	
5+00	-	9+00	CTH T, SHOULDERS	82	0.8	
TOTAL				1469	14.7	

*WATER LISTED ELSEWHERE IN PLAN

BASE AGGREGATE DENSE 1 1/4-INCH

				305.0120*	WATER* 624.0100	REMARKS
STATION	TO	STATION	LOCATION	TON	MGAL	
110+36	-	118+86	STH 64	1856	18.6	TOTAL
5+00	AND	9+00	AND			QUANTITY FOR
	-		CTH T			THE INTERSECTION
	29+20		STH 64	5		TEMP WIDENING
	58+50		STH 64	4		TEMP WIDENING
TOTAL				1865	18.6	

*QUANTITIES LISTED ELSEWHERE IN PLAN

ASPHALTIC SURFACE PATCHING

				465.0110	REMARKS
STATION	TO	STATION	LOCATION	TON	
PROJECT			STH 64	136	UNDISTRIBUTED
TOTAL				136	

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ASPHALT ITEMS

Station	To	Station	Location	455.0605 Tack Coat GAL	HMA Pavement 4 MT 58-28 S				HMA Pavement 3 MT 58-28 S				Remarks
					460.6224 Ton	PWL Density Incentive Ton*	PWL Air Voids Ton**	Incentive Density HMA Pavement Ton***	460.6223 Ton	PWL Density Incentive Ton*	PWL Air Voids Ton**	Incentive Density HMA Pavement Ton***	
22+48		73+48	STH 64	1904	2777	1325	2777	--	--	--	--	--	
29+20			STH 64	14	99	-	-	-	-	-	-	-	For pipe replacement
58+50			STH 64	13	95	-	-	-	-	-	-	-	For pipe replacement
73+89		110+36	STH 64	1362	1986	947	1986	--	--	--	--	--	
110+36		111+86	STH 64	74	98	39	98	--	27	--	--	27	
111+86		113+86	STH 64	124	158	52	158	--	59	--	--	59	
113+86		115+36	STH 64	345	374	39	374	--	334	--	--	334	
AND CTH T INTERSECTION													
115+36		117+36	STH 64	124	158	52	158	--	59	--	--	59	
117+36		118+86	STH 64	74	97	39	97	--	27	--	--	27	
118+86		244+41	STH 64	4687	6836	3261	6836	--	--	--	--	--	
213+60			STH 64	14	99	-	-	-	-	-	-	-	For pipe replacement
239+85			STH 64	21	155	-	-	-	-	-	-	-	For pipe replacement
244+82		345+58	STH 64	3762	5486	2617	5486	--	--	--	--	--	
266+30			STH 64	4	31	-	-	-	-	-	-	-	For pipe replacement
286+00			STH 64	6	45	-	-	-	-	-	-	-	For pipe replacement
346+05		380+54	STH 64	1288	1878	896	1878	--	--	--	--	--	
			Total	13816	20372	9267	19848	0	506	0	0	506	

* Tonnage is eligible for Incentive Density PWL 460.2005
** Tonnage is eligible for Incentive Air Voids 460.2010
*** Tonnage is eligible for HMA Density Incentive 460.2000

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ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

465.0120					
STATION	TO	STATION	LOCATION	TON	REMARKS
5+25	-	5+85	CTH T, RIGHT	10	
	6+00		CTH T, LEFT & RIGHT	4	SEE INTERSECTION DETAIL DRAWING
	113+80		STH 64, LEFT & RIGHT	4	SEE SNOWMOBILE CROSSING DETAIL
	267+40		STH 64, LEFT & RIGHT	21	SEE SNOWMOBILE CROSSING DETAIL
	354+00		STH 64, LEFT & RIGHT	4	SEE SNOWMOBILE CROSSING DETAIL
TOTAL				43	

ASPHALTIC FLUMES

465.0315			
STATION	LOCATION	SY	REMARKS
114+39	STH 64, LEFT	6	
115+20	STH 64, RIGHT	5	
115+30	STH 64, LEFT	4	
5+20	CTH T, RIGHT	4	
5+65	CTH T, LEFT	3	
TOTAL 0010		21	

ASPHALT RUMBLE STRIPS

				ASPHALT CENTER LINE RUMBLE STRIPS 2-LANE RURAL 465.0475	ASPHALT INTERSECTION RUMBLE STRIPS 465.0450	REMARKS
STATION	TO	STATION	LOCATION	LF	SY	
22+98	-	73+23	STH 64	5025	-	
74+14	-	89+00	STH 64	1486	-	
91+00	-	112+61	STH 64	2161	-	
117+36	-	140+90	STH 64	2354	-	
142+90	-	153+00	STH 64	1010	-	
155+00		167+85	STH 64	1285	-	
169+85	-	244+15	STH 64	7430	-	
245+07	-	254+52	STH 64	945	-	
256+52	-	266+24	STH 64	972	-	
268+48	-	345+33	STH 64	7685	-	
346+30	-	353+49	STH 64	719	-	
354+46	-	380+04	STH 64	2558	66	
TOTAL				33630	66	

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

601.0557					REMARKS
STATION	TO	STATION	LOCATION	LF	
114+01	-	7+51	STH 64 & CTH T INTERSECTION, NW QUAD	80	
113+86	-	5+63	STH 64 & CTH T INTERSECTION, SW QUAD	112	
7+61	-	115+36	STH 64 & CTH T INTERSECTION, NE QUAD	76	
5+16	-	115+21	STH 64 & CTH T INTERSECTION, SE QUAD	176	
TOTAL				444	

FENCE SAFETY

616.0700.s					REMARKS
STATION	TO	STATION	LOCATION	LF	
30+00	-	33+00	STH 64, RIGHT	300	PLACE AT THE R/W
142+00	-	144+00	STH 64, LEFT	200	PLACE AT THE R/W
TOTAL				500	

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APRON ENDWALLS FOR CULVERT PIPE SUMMARY									
		521.1018 APRON ENDWALLS FOR CULVERT PIPE STEEL, 18-INCH	521.1024 APRON ENDWALLS FOR CULVERT PIPE STEEL, 24-INCH	521.1518 APRON ENDWALLS FOR CULVERT PIPE SLOPED SIDE DRAINS STEEL 18-INCH 6:1	521.1530 APRON ENDWALLS FOR CULVERT PIPE SLOPED SIDE DRAINS STEEL 30-INCH 6:1	522.1030 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH	522.1036 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH	522.2634 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 34 X 53-INCH	*522.2668 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 68 X 106-INCH
STATION	LOCATION	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH
29+20	STH 64, LEFT & RIGHT								2
58+50	STH 64, LEFT & RIGHT							2	
90+00	STH 64, LEFT				2				
97+00	STH 64, RIGHT			2					
105+00	STH 64, RIGHT			2					
111+85	STH 64, RIGHT		1						
113+80	STH 64, LEFT	2							
116+75	STH 64, LEFT	2							
134+25	STH 64, LEFT			2					
138+00	STH 64, LEFT		1						
168+80	STH 64, RIGHT			2					
213+60	STH 64, LEFT & RIGHT								2
239+85	STH 64, LEFT & RIGHT						2		
266+30	STH 64, LEFT & RIGHT						2		
273+50	STH 64, RIGHT		1						
286+00	STH 64, LEFT & RIGHT					2			
300+40	STH 64, LEFT			2					
350+60	STH 64, RIGHT			2					
TOTAL		4	3	12	2	2	4	2	4

*Category 0020

CULVERT PIPE SUMMARY								
		521.3118 CULVERT PIPE CORRUGATED STEEL 18-INCH	521.3124 CULVERT PIPE CORRUGATED STEEL 24-INCH	521.3130 CULVERT PIPE CORRUGATED STEEL 30-INCH	522.0136 CULVERT PIPE REINFORCED CONCRETE CLASS III 36-INCH	522.0430 CULVERT PIPE REINFORCED CONCRETE CLASS IV 30-INCH	522.2334 CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 34 X 53-INCH	*522.2368 CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 68 X 106-INCH
STATION	LOCATION	LF	LF	LF	LF	LF	LF	LF
29+20	STH 64							60
58+50	STH 64						64	
90+00	STH 64, LEFT			48				
97+00	STH 64, RIGHT	72						
105+00	STH 64, RIGHT	38						
111+85	STH 64, RIGHT		12					
113+80	STH 64, LEFT	20						
116+75	STH 64, LEFT	28						
134+25	STH 64, LEFT	30						
138+00	STH 64, LEFT		28					
168+80	STH 64, RIGHT	52						
213+60	STH 64							66
239+85	STH 64				86			
266+30	STH 64				76			
273+50	STH 64, RIGHT		32					
286+00	STH 64					194		
300+40	STH 64, LEFT	36						
350+60	STH 64, RIGHT	40						
TOTAL		316	72	48	162	194	64	126

3

3

BARRIER SYSTEM GRADING SHAPING FINISHING

614.0010					*	*	*	*	*	*	*
					BORROW	EXCAVATION	SALVAGED TOPSOIL	FERTILIZER TYPE B	SEEDING MIXTURE	MULCH	CONSTRUCTION STAKING
STATION	TO	STATION	LOCATION	EACH	CY	CY	SY	CWT	NO. 70 LB	SY	LF
70+65	-	73+48	STH 64, LEFT	1							
70+65	-	73+25	STH 64, RIGHT	1	341	234	732	0.46	2.6	513	283
74+20	-	79+25	STH 64, LEFT	1			435	0.27	1.6	212	
73+94	-	77+00	STH 64, RIGHT	1	473	339	976	0.61	3.5	604	531
							489	0.31	1.8	142	
240+00	-	244+20	STH 64, RIGHT	1	522	350	915	0.58	3.3	609	425
240+00		244+25	STH 64, LEFT	1			685	0.43	2.5	504	
244+80	-	247+50	STH 64, RIGHT	1	189	593	296	0.19	1.1	-	
245+12	-	248+47	STH 64, LEFT	1			551	0.35	2.0	245	367
							633	0.40	2.3	425	
341+25	-	345+40	STH 64, RIGHT	1	587	295	421	0.27	1.5	269	432
342+75	-	345+57	STH 64, LEFT	1			307	0.19	1.1	-	
345+95	-	348+88	STH 64, RIGHT	1	487	286	528	0.33	1.9	141	405
346+50	-	350+00	STH 64, LEFT	1							
TOTAL				12	2599	2097	6968	4.39	25.1	3664	2443

* ITEMS AND QUANTITIES FOR BID INFORMATION ONLY

GUARDRAIL MOW STRIP EMULSIFIED ASPHALT

614.0397					
STATION	TO	STATION	LOCATION	SY	REMARKS
72+12	-	73+26	STH 64, RIGHT	55	
72+45	-	73+50	STH 64, LEFT	50	
73+95	-	74+93	STH 64, RIGHT	75	
74+13	-	75+88	STH 64, LEFT	85	
242+42	-	244+16	STH 64, RIGHT	83	
243+38		244+40	STH 64, LEFT	57	
244+85	-	245+86	STH 64, RIGHT	55	
245+05	-	246+68	STH 64, LEFT	71	
343+71	-	345+36	STH 64, RIGHT	68	
344+55	-	345+57	STH 64, LEFT	58	
346+04	-	347+08	STH 64, RIGHT	58	
346+50	-	347+91	STH 64, LEFT	63	
TOTAL				778	

GUARDRAIL ITEMS

614.2300					614.2500	614.2610
MGS GUARDRAIL 3					MGS THRIE BEAM TRANSITION	MGS GUARDRAIL TERMINAL EAT
STATION	TO	STATION	LOCATION	LF	LF	EACH
72+45	-	75+88	STH 64, LEFT	100.0	78.8	2
72+13	-	74+93	STH 64, RIGHT	37.5	78.8	2
243+38	-	246+68	STH 64, LEFT	87.5	78.8	2
242+42	-	245+86	STH 64, RIGHT	100.0	78.8	2
344+55	-	347+91	STH 64, LEFT	87.5	78.8	2
343+72		347+08	STH 64, RIGHT	87.5	78.8	2
TOTALS				500.0	472.8	12

3

3

STATION	TO	STATION	LOCATION	SALVAGED TOPSOIL	MULCH	FERTILIZER	SEEDING MIXTURE	SEEDING	SEED	REMARKS
				625.0500	627.0200	TYPE B	NO. 70	TEMPORARY	WATER	
				SY	SY	CWT	LB	LB	MGAL	
28+50	-	30+00	STH 64, LEFT & RIGHT	160	-	0.10	1	-	3.6	
58+00	-	59+00	STH 64, LEFT & RIGHT	147	-	0.09	1	-	3.3	
89+00	-	106+00	STH 64, LEFT & RIGHT	205	-	0.13	1	-	4.6	
110+00	-	126+00	STH 64, LEFT & RIGHT	7626	7080	4.80	27	-	170.8	
133+00	-	140+50	STH 64, LEFT	1669	1355	1.05	6	-	37.4	
168+00		181+00	STH 64, LEFT & RIGHT	3032	2756	1.91	11	-	67.9	
213+00	-	214+00	STH 64, LEFT & RIGHT	160	-	0.10	1	-	3.6	
256+00	-	267+00	STH 64, LEFT & RIGHT	4756	4396	3.00	17	-	106.5	
271+00	-	277+00	STH 64, RIGHT	2735	2517	1.72	10	-	61.3	
278+00	-	291+00	STH 64, LEFT & RIGHT	6337	5256	3.99	23	-	141.9	
300+00	-	301+00	STH 64, LEFT	43	-	0.03	1	-	1.0	
	BORROW SITE			13300	13300	8.38	48	-	297.9	
	UNDISTRIBUTED			10043	9165	6.33	37	18	225.0	
				50213	45825	31.63	184	18	1125	

				SILT FENCE 628.1504	SILT FENCE MAINTENANCE 628.1520
STATION	TO	STATION	LOCATION	LF	LF
70+00	-	80+00	STH 64, LEFT & RIGHT	1290	1290
110+00	-	126+00	STH 64, LEFT & RIGHT	841	841
133+00	-	140+50	STH 64, LEFT	101	101
168+00	-	181+00	STH 64, LEFT & RIGHT	297	297
239+00	-	249+00	STH 64, LEFT & RIGHT	1118	1118
256+00		267+00	STH 64, LEFT & RIGHT	1127	1127
271+00	-	277+00	STH 64, RIGHT	263	263
278+00	-	291+00	STH 64, LEFT & RIGHT	505	505
341+00	-	351+00	STH 64, LEFT & RIGHT	1206	1206
UNDISTRIBUTED				1687	1687
TOTAL				8435	8435

	MOBILIZATIONS EROSION CONTROL 628.1905	MOBILIZATIONS EROSION CONTROL 628.1910
LOCATION	EACH	EACH
PROJECT	9	3
TOTAL	9	3

		633.5200	
STATION	LOCATION	EACH	REMARKS
29+20	STH 64, LEFT & RIGHT	2	
58+50	STH 64, LEFT & RIGHT	2	
111+80	STH 64, LEFT & RIGHT	2	
138+00	STH 64, LEFT	1	
213+60	STH 64, LEFT & RIGHT	2	
239+80	STH 64, LEFT & RIGHT	2	
266+30	STH 64, LEFT & RIGHT	2	
273+50	STH 64, RIGHT	1	
286+00	STH 64, LEFT & RIGHT	2	
379+80	STH 64, LEFT	1	
TOTAL		17	

EROSION MAT CLASS I TYPE B

628.2004				
STATION	TO	STATION	LOCATION	SY
28+50	-	30+00	STH 64, LEFT & RIGHT	160
58+00	-	59+00	STH 64, LEFT & RIGHT	147
70+00	-	80+00	STH 64, LEFT & RIGHT	1161
89+00	-	106+00	STH 64, LEFT & RIGHT	205
110+00	-	126+00	STH 64, LEFT & RIGHT	546
133+00		140+50	STH 64, LEFT	314
168+00	-	181+00	STH 64, LEFT & RIGHT	764
213+00	-	214+00	STH 64, LEFT & RIGHT	160
239+00	-	249+00	STH 64, LEFT & RIGHT	1088
256+00	-	267+00	STH 64, LEFT & RIGHT	471
271+00	-	277+00	STH 64, RIGHT	218
278+00	-	291+00	STH 64, LEFT & RIGHT	1081
300+00	-	301+00	STH 64, LEFT	43
341+00	-	351+00	STH 64, LEFT & RIGHT	1053
UNDISTRIBUTED				1853
TOTAL				9264

LOCATING NO-PASSING ZONES

648.0100				
STATION	TO	STATION	LOCATION	MI
22+48	-	380+62	STH 64	6.78
TOTAL				6.78

CULVERT PIPE CHECKS, DITCH CHECKS, AND ROCK BAGS

				TEMPORARY DITCH CHECKS 628.7504	TEMPORARY DITCH CHECKS (EROSION BALES) SPV.0090.01	CULVERT PIPE CHECKS 628.7555	ROCK BAGS 628.7570	REMARKS
STATION	TO	STATION	LOCATION	LF	LF	EACH	EACH	
58+00	-	59+00	STH 64, LEFT	-		10	-	
70+00	-	80+00	STH 64, LEFT & RIGHT	-	16	-	40	
89+00	-	106+00	STH 64, LEFT & RIGHT	24		9	-	
110+00	-	126+00	STH 64, LEFT & RIGHT	64		7	40	
133+00		140+50	STH 64, LEFT	32		7	10	
168+00	-	181+00	STH 64, LEFT & RIGHT	40	16	2	20	
239+00	-	249+00	STH 64, LEFT & RIGHT	-	24	7	30	
256+00	-	267+00	STH 64, LEFT & RIGHT	56		7	20	
271+00	-	277+00	STH 64, RIGHT	16		3	10	
278+00	-	291+00	STH 64, LEFT & RIGHT	96		5	20	
300+00	-	301+00	STH 64, LEFT	8		2	-	
341+00	-	351+00	STH 64, LEFT & RIGHT	16	8	2	60	
UNDISTRIBUTED				88	16	15	60	
TOTAL				440	80	76	310	

ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE II

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE TYPE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE TYPE F S.F.	638.2102 MOVING SIGNS TYPE II EACH	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
1	STH 54, E. OF HILLS POND LANE	J1-1	---	---	---	---	---	---	1	1	
2	"	J1-1	24" X 39"	6.50	---	---	---	1	---	---	SEE PLAN SHEET
3	"	W1-2L	30" X 30"	---	6.25	---	1	---	---	---	
4	"	D1-1	---	---	---	1	2	---	---	---	REINSTALL ON NEW POSTS
5	"	R2-1	24" X 30"	5.00	---	---	1	---	---	---	55 MPH
6	"	D7-63	---	---	---	1	---	2	---	---	REINSTALL ON NEW POSTS
7	"	J4-1	24" X 36"	6.00	---	---	---	1	1	1	SEE PLAN SHEET
8	"	J13-1	24" X 45"	7.50	---	---	---	1	1	1	SEE PLAN SHEET
9	CTH T	J13-1	24" X 45"	7.50	---	---	---	1	1	1	SEE PLAN SHEET
10	"	R1-1	36" X 36"	7.46	---	---	1	---	1	1	
11	"	R1-1	36" X 36"	7.46	---	---	1	---	1	1	
12	"	J13-1	24" X 45"	7.50	---	---	---	1	1	1	SEE PLAN SHEET
13	STH 64, E. OF CTH T	J13-1	24" X 45"	7.50	---	---	---	1	1	1	SEE PLAN SHEET
14	"	J4-1	24" X 36"	6.00	---	---	---	1	---	---	SEE PLAN SHEET
15	"	W14-3	48" X 36"	---	6.00	---	---	1	1	1	
16	"	J4-1	---	---	---	---	---	---	1	1	
17	"	D7-63	---	---	---	1	---	2	---	---	REINSTALL ON NEW POSTS
18	"	R2-1	24" X 30"	5.00	---	---	1	---	---	---	55 MPH
19	"	J1-1	24" X 39"	6.50	---	---	---	1	1	1	SEE PLAN SHEET
PAGE SUBTOTALS				79.92	12.25	3	7	13	11	11	

ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE II

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE TYPE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE TYPE F S.F.	638.2102 MOVING SIGNS TYPE II EACH	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
106	LOON RAPIDS ROAD	R1-1	30" X 30"	5.18	---	---	1	---	1	1	
107	STH 64, E. OF LOON RAPIDS ROAD	J1-1	---	---	---	---	---	---	1	1	
108	"	W14-3	48" X 36"	---	6.00	---	---	1	1	1	
109	"	W3-1	---	---	---	---	---	---	1	2	
110	"	W3-1	---	---	---	---	---	---	1	2	
111	"	J1-1	24" X 39"	6.50	---	---	---	1	---	---	SEE PLAN SHEET
112	"	J2-3	---	---	---	---	---	---	1	2	
113	"	W3-1	48" X 48"	---	16.00	---	---	2	---	---	
114	"	W3-1	48" X 48"	---	16.00	---	---	2	---	---	
115	"	D2-2	72" X 24"	12.00	---	---	---	---	---	---	MOUNT TO BACK OF SIGN 113, SEE SIGN DETAILS
116	"	W14-3	48" X 36"	---	6.00	---	---	1	1	1	
117	"	J2-3	72" X 57"	28.50	---	---	---	2	---	---	SEE PLAN SHEET
118	"	R2-1	24" X 30"	5.00	---	---	---	---	---	---	MOUNT TO BACK OF SIGN 116, 55 MPH
119	"	I55-56	30" X 36"	7.50	---	---	---	1	1	1	IN LOVING MEMORY OF ANDY PAPPAS, INCLUDE BRACKET FROM SIGN PLATE I55-56B
120	"	D1-3	---	---	---	---	---	---	1	2	
121	"	D1-3	96" X 36"	24.00	---	---	---	2	---	---	SEE SIGN DETAILS
122	"	J4-1	24" X 36"	6.00	---	---	---	1	---	---	SEE PLAN SHEET
123	"	D2-2	---	---	---	---	---	---	1	2	
124	"	R1-1	36" X 36"	7.46	---	---	1	---	1	1	
125	"	R1-1	36" X 36"	7.46	---	---	1	---	1	1	
126	"	J3-3	72" X 57"	28.50	---	---	---	2	---	---	SEE PLAN SHEET
127	STH 32/STH 64 INTERSECTION	J3-1	---	---	---	---	---	---	---	---	
128	"	J3-1	36" X 84"	21.00	---	---	---	1	1	1	SEE PLAN SHEET
129	"	J3-1	36" X 84"	21.00	---	---	---	1	1	1	SEE PLAN SHEET
130	"	W1-7	60" X 30"	---	12.50	---	2	---	1	2	
131	"	J3-3	---	---	---	---	---	---	---	---	

PAGE SUBTOTALS

180.10

56.50

0

5

17

15

21

PROJECT TOTALS

260.02

68.75

3

12

30

26

32

643 - TRAFFIC CONTROL ITEMS									
STATION	TO	STATION	LOCATION	TRAFFIC	TRAFFIC CONTROL	TRAFFIC CONTROL	TRAFFIC	SIGNS	REMARKS
				CONTROL DRUMS	BARRICADES	WARNING LIGHTS	CONTROL SIGNS	PORTABLE CHANGEABLE	
				643.0300	TYPE III	TYPE A	643.0900*	MESSAGE	
				DAY	643.0420*	643.0705*	DAY	643.1050*	DAY
STAGE 1									
	PROJECT LENGTH		STH 64	23	75	90	75		Pipe Replacements
			SIDE ROADS	-	-	-	30		to the west of CTH T
			STAGE 1 TOTAL	23	75	90	105		
STAGE 2									
	PROJECT LENGTH		STH 64	54	180	216	180		Pipe Replacements
			SIDE ROADS	-	-	-	72		to the east of CTH T
			STAGE 2 TOTAL	54	180	216	252		and 4:1 grading at
									beamguard removals
STAGE 3									
	PROJECT LENGTH		STH 64	684	-	-	500	14	All other work
			SIDE ROADS	-	42	42	300		
			STAGE 3 TOTAL	684	42	42	800	14	
TOTAL				761	297	348	1157	14	

*LISTED ELSEWHERE IN PLAN

PAVEMENT MARKINGS									
STATION	TO	STATION	LOCATION	MARKING LINE	MARKING LINE	MARKING LINE	MARKING STOP	TEMPORARY MARKING	REMARKS
				EPOXY 4-INCH	GROOVED WET	GROOVED WET	LINE EPOXY	LINE EPOXY	
				646.1020*	REF EPOXY	REF EPOXY	18-INCH	4-INCH	
				LF	4-INCH	8-INCH	646.6120	649.0120**	
				646.1020*	646.1040***	646.3040	646.6120	649.0120**	
				LF	LF	LF	LF	LF	
22+48	-	380+62	STH 64	42800	71345	see below	see below	85600	
5+00	-	9+00	CTH T	600	600	-	-	-	
111+86	-	113+86	STH 64	-	-	200	-	-	
115+36	-	117+36	STH 64	-	-	200	-	-	
		380+62	STH 64	-	-	-	19	-	
TOTAL				43400	71945	400	19	85600	

* This is for the centerline along STH 64. To be applied after rumbles have been constructed.
** This is for the centerline along STH 64. To be applied after the first lift of asphalt and after the second lift of asphalt, before rumbles have been constructed.
*** These are for the edgeline markings.

3

CONSTRUCTION STAKING BASE					
				650.5000	
STATION	TO	STATION	LOCATION	LF	REMARKS
110+36	-	118+86	STH 64	1700	
5+00	-	6+69	CTH T	338	
6+92	-	9+00	CTH T	416	
TOTAL				2454	

CONSTRUCTION STAKING RESURFACING REFERENCE					
				650.8000	
STATION	TO	STATION	LOCATION	LF	REMARKS
22+48	-	380+54	STH 64	35806	
TOTAL				35806	

3

CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER					
				650.5500	
STATION	TO	STATION	LOCATION	LF	REMARKS
114+01	-	7+51	STH 64 & CTH T INTERSECTION, NW QUAD	80	
113+86	-	5+63	STH 64 & CTH T INTERSECTION, SW QUAD	112	
7+61	-	115+36	STH 64 & CTH T INTERSECTION, NE QUAD	76	
5+16	-	115+21	STH 64 & CTH T INTERSECTION, SE QUAD	176	
TOTAL				444	

CONSTRUCTION STAKING SLOPE STAKES					
				650.9920	
STATION	TO	STATION	LOCATION	LF	REMARKS
110+12	-	125+50	STH 64	1538	
136+00	-	140+50	STH 64	450	
174+65	-	180+00	STH 64	535	
256+00	-	265+00	STH 64	900	
272+00	-	277+00	STH 64	500	
278+00	-	290+75	STH 64	1275	
5+00	-	6+30	CTH T	130	
7+15	-	9+00	CTH T	185	
TOTAL				5513	

CONSTRUCTION STAKING PIPE CULVERTS			
STATION	LOCATION	EACH	REMARKS
29+20	STH 64	1	
58+50	STH 64	1	
111+85	STH 64	1	
138+00	STH 64	1	
213+60	STH 64	1	
239+85	STH 64	1	
266+30	STH 64	1	
273+50	STH 64	1	
286+00	STH 64	1	
TOTAL		9	

CONSTRUCTION STAKING SUBGRADE					
				650.4500	
STATION	TO	STATION	LOCATION	LF	REMARKS
110+36	-	113+86	STH 64, RIGHT	350	
115+36	-	118+86	STH 64, LEFT	350	
5+00	-	6+69	CTH T	338	
6+92	-	9+00	CTH T	416	
TOTAL				1454	

3

TRAFFIC CONTROL DETOUR SIGN SUMMARY

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 3 DAYS	643.0900 SIGNS DAYS	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A DAYS	643.1050 SIGNS PORTABLE CHANGEABLE MESSAGE DAYS	NO OF CYCLES	643.0920 COVERING SIGNS TYPE II EACH	REMARKS
	STAGE 1											
1	STH 64, PLACE 1500' W. OF STH 55 INTERSECTION	WO 20-2A	48"X48"	1	3	3						
2	STH 64, PLACE 750' W. OF STH 55 INTERSECTION	MO 4-8	24"X12"	1	3	3						
	"	M 3-2	24"X12"	1	3	3						
	"	M 1-6	24"X24"	1	3	3						64
	"	MO 5-1R	21"X21"	1	3	3						
3	STH 64, AT STH 55 INTERSECTION, MODIFY AS SHOWN	MO 4-8	24"X12"	1	3	3						
	"	MO 6-1	21"X21"	1	3	3						
4	STH 64, PLACE IN SE QUADRANT AT STH 55 INTERSECTION ON SHOULDER	R11-3	60"X30"	1	3	3	3	6				4.5 MILES
	"	MO 4-9R	30"X24"	1	3	3						
5	STH 55, AT STH 64 INTERSECTION, COVER AS SHOWN									1	1	COVER "EAST 64 LT"
6	STH 55, COVER EXISTING SIGN AS SHOWN									1	1	COVER "MOUNTAIN"
7	STH 64, AT STH 55 INTERSECTION, MODIFY AS SHOWN									1	1	COVER "EAST 64 RT"
8	STH 64, E. OF STH 55 INTERSECTION, COVER AS SHOWN									1	1	COVER "EAST 64"
9	STH 55, PLACE RIGHT OF EXISTING J4-1 REASSURANCE SIGN	MO 4-8	24"X12"	1	3	3						
	"	M 3-2	24"X12"	1	3	3						
	"	M 1-6	24"X24"	1	3	3						64
10	STH 55, S. OF STH 64 INTERSECTION, COVER EXISTING SIGN AS SHOWN											COVER "MOUNTAIN"
11	STH 55, MODIFY EXISTING SIGN AS SHOWN	MO 4-8A	24"X18"	1	3	3						
12	STH 55, PLACE 750' PRIOR TO CTH WW	MO 4-8	24"X12"	1	3	3						
	"	M 3-2	24"X12"	1	3	3						
	"	M 1-6	24"X24"	1	3	3						64
	"	MO 5-1L	21"X21"	1	3	3						
13	STH 55, AT CTH WW INTERSECTION	MO 4-8	24"X12"	1	3	3						
	"	M 3-2	24"X12"	1	3	3						
	"	M 1-6	24"X24"	1	3	3						64
	"	MO 6-1	21"X21"	1	3	3						LEFT
14	CTH WW, AT STH 55 INTERSECTION	MO 4-8	24"X12"	1	3	3						
	"	M 3-4	24"X12"	1	3	3						
	"	M 1-6	24"X24"	1	3	3						64
	"	MO 6-1	21"X21"	1	3	3						RIGHT
15	CTH WW, PLACE 50' E. OF STH 55	MO 4-8	24"X12"	1	3	3						
	"	M 3-2	24"X12"	1	3	3						
	"	M 1-6	24"X24"	1	3	3						64
16	STH 55, PLACE 100' S. OF CTH WW INTERSECTION	MO 4-8	24"X12"	1	3	3						
	"	M 3-2	24"X12"	1	3	3						
	"	M 1-6	24"X24"	1	3	3						64
	"	MO 6-1	21"X21"	1	3	3						RIGHT
17	STH 55, PLACE 750' S. OF CTH WW INTERSECTION	MO 4-8	24"X12"	1	3	3						
	"	M 3-2	24"X12"	1	3	3						
	"	M 1-6	24"X24"	1	3	3						64
	"	MO 5-1R	21"X21"	1	3	3						
18	STH 55, PLACE 1500' S. OF CTH WW INTERSECTION	M 3-2	24"X12"	1	3	3						
	"	M 1-6	24"X24"	1	3	3						64
	"	WO 20-2A	48"X48"	1	3	3						

PAGE SUBTOTALS

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117

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PLAN SHEET PRODUCED

BY WisDOT - NE REGION

PROJECT NUMBER: 9140-13-71

HWY: STH 64

COUNTY: OCONTO

MISCELLANEOUS QUANTITIES

SHEET 42

E

3

3

3

TRAFFIC CONTROL DETOUR SIGN SUMMARY

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 3 DAYS	643.0900 SIGNS DAYS	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A DAYS	643.1050 SIGNS PORTABLE CHANGEABLE MESSAGE DAYS	NO OF CYCLES	643.0920 COVERING SIGNS TYPE II EACH	REMARKS
19	CTH WW, PLACE 500' E. OF STH 55 INTERSECTION	MO 4-8	24"X12"	1	3	3						
	"	M 3-2	24"X12"	1	3	3						
	"	M 1-6	24"X24"	1	3	3						64
	"	MO 5-1R	21"X21"	1	3	3						
20	CTH W, PLACE 500' W. OF CTH T INTERSECTION	MO 4-8	24"X12"	1	3	3						
	"	M 3-2	24"X12"	1	3	3						
	"	M 1-6	24"X24"	1	3	3						64
	"	MO 5-1L	21"X21"	1	3	3						
21	CTH W, PLACE TO LEFT OF EXISTING J13-2 AT CTH T INTERSECTION	MO 4-8	24"X12"	1	3	3						
	"	M 3-2	24"X12"	1	3	3						
	"	M 1-6	24"X24"	1	3	3						64
	"	MO 6-1	21"X21"	1	3	3						LEFT
22	CTH T, PLACE TO RIGHT OF EXISTING STOP SIGN AT CTH W INTERSECTION	MO 4-8	24"X12"	1	3	3						
	"	M 3-4	24"X12"	1	3	3						
	"	M 1-6	24"X24"	1	3	3						64
	"	MO 6-1	21"X21"	1	3	3						RIGHT
23	CTH T, PLACE 100' N. OF CTH W INTERSECTION	MO 4-8	24"X12"	1	3	3						
	"	M 3-2	24"X12"	1	3	3						
	"	M 1-6	24"X24"	1	3	3						64
24	CTH T, PLACE 500' N. OF CTH W INTERSECTION	MO 4-8	24"X12"	1	3	3						
	"	M 3-4	24"X12"	1	3	3						
	"	M 1-6	24"X24"	1	3	3						64
	"	MO 5-1R	21"X21"	1	3	3						
25	CTH T, PLACE 50' N. OF OLD GRAVE RD	MO 4-8	24"X12"	1	3	3						
	"	M 3-2	24"X12"	1	3	3						
	"	M 1-6	24"X24"	1	3	3						64
26	CTH T, PLACE PLACE 50' S. OF OLD GRAVE RD	MO 4-8	24"X12"	1	3	3						
	"	M 3-4	24"X12"	1	3	3						
	"	M 1-6	24"X24"	1	3	3						64
27	STH 64, TO BE DETERMINED IN THE FIELD, FOR ADVANCED NOTIFICATION	PCMS							7			
28	CTH T, MODIFY EXISTING SIGN AS SHOWN	MO 4-8A	24"X18"	1	3	3						
29	CTH T, S. OF STH 64 INTERSECTION, MODIFY EXISTING SIGN AS SHOWN									1	1	COVER "LANGLADE"
30	STH 64, W. OF CTH T, COVER EXISTING J4-1 SIGN									1	1	COVER "WEST 64"
31	CTH T, N. OF STH 64 INTERSECTION	MO 6-1	21"X21"	1	3	3						LEFT
32	CTH T, N. OF STH 64 INTERSECTION	MO 6-1	21"X21"	1	3	3						RIGHT
33	STH 64, PLACE IN MIDDLE OF ROADWAY, IN FRONT OF FULL CLOSURE	R 11-4	60"X30"	1	3	3	3	6				
	"	MO 4-9L	30"X24"	1	3	3						
34	STH 64, PLACE 100' E. OF CTH T INTERSECTION	MO 4-8	24"X12"	1	3	3						
	"	M 3-4	24"X12"	1	3	3						
	"	M 1-6	24"X24"	1	3	3						64
	"	MO 6-1	21"X21"	1	3	3						LEFT
35	STH 64, PLACE 750' E. OF CTH T INTERSECTION	MO 4-8	24"X12"	1	3	3						
	"	M 3-4	24"X12"	1	3	3						
	"	M 1-6	24"X24"	1	3	3						64
	"	MO 5-1L	21"X21"	1	3	3						
36	STH 64, PLACE 1500' E. OF CTH T INTERSECTION	WO 20-2A	48"X48"	1	3	3						
37	STH 64, TO BE DETERMINED IN THE FIELD, FOR ADVANCED NOTIFICATION	PCMS							7			

TRAFFIC CONTROL DETOUR SIGN SUMMARY

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 49 DAYS	643.0900 SIGNS DAYS	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A DAYS	643.1050 SIGNS PORTABLE CHANGEABLE MESSAGE DAYS	NO OF CYCLES	643.0920 COVERING SIGNS TYPE II EACH	REMARKS
	STAGE 2											
1	STH 64, PLACE 1500' W. OF CTH T INTERSECTION	WO 20-2A	48"X48"	1	49	49						
2	STH 64, PLACE 750' W. OF CTH T INTERSECTION	MO 4-8	24"X12"	1	49	49						
	"	M 3-2	24"X12"	1	49	49						
	"	M 1-6	24"X24"	1	49	49						64
	"	MO 5-1L	21"X21"	1	49	49						
3	STH 64, PLACE TO RIGHT OF EXISTING J13-1 SIGN	MO 4-8	24"X12"	1	49	49						
	"	M 3-2	24"X12"	1	49	49						
	"	M 1-6	24"X24"	1	49	49						64
	"	MO 6-1	21"X21"	1	49	49						LEFT
4	STH 64, PLACE IN SE QUADRANT ON SHOULDER	R 11-4	60"X30"	1	49	49	49	98				
	"	MO 4-9L	30"X24"	1	49	49						
5	STH 64, E. OF CTH T INTERSECTION, COVER EXISTING SIGN AS SHOWN									1	1	COVER "EAST 64"
6	CTH T, AT STH 64 INTERSECTION, MODIFY EXISTING SIGN AS SHOWN	MO 6-1	21"X21"	1	49	49						
7	CTH T, PLACE 150' N. OF STH 64	MO 4-8	24"X12"	1	49	49						
	"	M 3-2	24"X12"	1	49	49						
	"	M 1-6	24"X24"	1	49	49						64
8	CTH T, N. OF STH 64 INTERSECTION, COVER EXISTING SIGN AS SHOWN									1	1	COVER "MOUNTAIN"
9	CTH T, MODIFY EXISTING J1-1 SIGN	MO 4-8A	24"X18"	1	49	49						
10	CTH T, PLACE 100' S. OF OLD T LN	MO 4-8	24"X12"	1	49	49						
	"	M 3-4	24"X12"	1	49	49						
	"	M 1-6	24"X24"	1	49	49						64
11	CTH T, PLACE 150' S. OF FANNY LAKE RD	MO 4-8	24"X12"	1	49	49						
	"	M 3-4	24"X12"	1	49	49						
	"	M 1-6	24"X24"	1	49	49						64
12	CTH T, PLACE 100' N. OF PINE RIDGE RD	MO 4-8	24"X12"	1	49	49						
	"	M 3-2	24"X12"	1	49	49						
	"	M 1-6	24"X24"	1	49	49						64
13	CTH T, PLACE 100' S. OF E. BURNT DAM RD	MO 4-8	24"X12"	1	49	49						
	"	M 3-4	24"X12"	1	49	49						
	"	M 1-6	24"X24"	1	49	49						64
14	CTH T, PLACE 200' N. OF E. BURNT DAM RD	MO 4-8	24"X12"	1	49	49						
	"	M 3-2	24"X12"	1	49	49						
	"	M 1-6	24"X24"	1	49	49						64
15	CTH T, PLACE 750' S. OF STH 32 INTERSECTION	MO 4-8	24"X12"	1	49	49						
	"	M 3-2	24"X12"	1	49	49						
	"	M 1-6	24"X24"	1	49	49						64
	"	MO 5-1R	21"X21"	1	49	49						
16	CTH T, AT STH 32 INTERSECTION, PLACE TO RIGHT OF EXISTING J13-1 SIGN	MO 4-8	24"X12"	1	49	49						
	"	M 3-2	24"X12"	1	49	49						
	"	M 1-6	24"X24"	1	49	49						64
	"	MO 6-1	21"X21"	1	49	49						RIGHT

PAGE SUBTOTALS

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PLAN SHEET PRODUCED
BY WisDOT - NE REGION

TRAFFIC CONTROL DETOUR SIGN SUMMARY

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 49 DAYS	643.0900 SIGNS DAYS	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A DAYS	643.1050 SIGNS PORTABLE CHANGEABLE MESSAGE DAYS	NO OF CYCLES	643.0920 COVERING SIGNS TYPE II EACH	REMARKS
17	STH 32, PLACE IN SW QUADRANT ON SHOULDER	M 3-4	24"X12"	1	49	49	49	98				
	"	M 1-6	24"X24"	1	49	49						64
	"	R 11-3	60"X30"	1	49	49						10.7 MILES
	"	MO 4-9R	30"X24"	1	49	49						
18	STH 32, PLACE TO RIGHT OF EXISTING J13-2 SIGN AT CTH T INTERSECTION	MO 4-8	24"X12"	1	49	49						
	"	M 3-4	24"X12"	1	49	49						
	"	M 1-6	24"X24"	1	49	49						64
	"	MO 6-1	21"X21"	1	49	49						RIGHT
19	STH 32, PLACE 750' N. OF CTH T INTERSECTION	MO 4-8	24"X12"	1	49	49						
	"	M 3-4	24"X12"	1	49	49						
	"	M 1-6	24"X24"	1	49	49						64
	"	MO 5-1R	21"X21"	1	49	49						
20	STH 32, PLACE 1500' N. OF CTH T INTERSECTION	M 3-4	24"X12"	1	49	49						
	"	M 1-6	24"X24"	1	49	49						64
	"	WO 20-2A	48"X48"	1	49	49						
21	STH 32, PLACE ON SHOULDER JUST S. OF CTH F INTERSECTION	M 3-4	24"X12"	1	49	49						
	"	M 1-6	24"X24"	1	49	49						64
	"	R 11-3	60"X30"	1	49	49						7 MILES
22	STH 32, PLACE ON SHOULDER JUST S. OF ISLAND LAKE RD	M 3-4	24"X12"	1	49	49						
	"	M 1-6	24"X24"	1	49	49						64
	"	R 11-3	60"X30"	1	49	49						2.5 MILES
23	STH 32, MODIFY EXISTING J1-1 SIGN AS SHOWN	MO 4-8A	24"X18"	1	49	49						
24	STH 32, COVER EXISTING J2-2 SIGN AS SHOWN									1	1	COVER "WEST 64 ADV RT"
25	STH 32, COVER EXISTING D1-2 SIGN AS SHOWN									1	1	COVER "ANTIGO"
26	STH 32, PLACE TO RIGHT OF EXISTING J4-1 SIGN, N. OF STH 64 INTERSECTION	MO 4-8	24"X12"	1	49	49						
	"	M 3-4	24"X12"	1	49	49						
	"	M 1-6	24"X24"	1	49	49						64
27	STH 64, AT STH 32 INTERSECTION, PLACE IN MIDDLE OF ROADWAY, IN FRONT OF FULL CLOSURE	R 11-4	60"X30"	1	49	49	49	98				
	"	MO 4-9R	30"X24"	1	49	49						
28	STH 32, COVER EXISTING J3-1 SIGN AT STH 64 INTERSECTION									1	1	COVER "WEST 64 RT"
29	STH 32, MODIFY EXISTING J3-1 AT STH 64 INTERSECTION AS SHOWN	MO 6-1	30"X30"	1	49	49						
30	STH 64, W. OF STH 32 INTERSECTION, COVER AS SHOWN									1	1	COVER "WEST 64"
31	STH 32/STH 64, AT INTERSECTION SPLIT, MODIFY EXISTING J3-1 AS SHOWN	MO 4-8	36"X18"	1	49	49						
	"	MO 6-1	30"X30"	1	49	49						
32	STH 32/STH 64, COVER EXISITNG D1-3 SIGN AS SHOWN									1	1	COVER "ANTIGO"
33	STH 32/STH 64, MODIFY EXISTING J3-2 AS SHOWN	MO 4-8	24"X12"	1	49	49						
	"	MO 6-1	21"X21"	1	49	49						
34	STH 32/STH 64, PLACE 1500' PRIOR TO INTERSECTION SPLIT	M 1-6	24"X24"	1	49	49						
	"	WO 20-2A	48"X48"	1	49	49						
35	STH 64, TO BE DETERMINED IN THE FIELD, FOR ADVANCED NOTIFICATION	PCMS							7			
36	STH 64, TO BE DETERMINED IN THE FIELD, FOR ADVANCED NOTIFICATION	PCMS							7			

PAGE SUBTOTALS

34

1,666

98

196

14

5

STAGE 2 TOTALS

73

3,577

147

294

14

7

PROJECT TOTALS

155

3,823

153

306

28

13

PLAN SHEET PRODUCED
BY WisDOT - NE REGION

3

SLURRING CULVERT PIPES

SPV.0035.01			
STATION	LOCATION	CY	REMARKS
118+00	STH 64	13	
258+60	STH 64	12	
279+40	STH 64	12	
TOTAL		37	

SAWING ASPHALT

690.0150*					
STATION	TO	STATION	LOCATION	LF	REMARKS
110+36	-	116+21	STH 64, RIGHT	585	
113+01	-	118+86	STH 64, LEFT	585	
	5+00		CTH T	22	
5+33	-	6+50	CTH T, Right	133	
	9+00		CTH T	22	
TOTAL				1347	

*Quantity listed elsewhere in plan

3

FOUNDATION BACKFILL

		SPV.0035.02	SAWING ASPHALT* 690.0150	BASE AGGREGATE DENSE 1 1/4" * 305.0120	
STATION	LOCATION	CY	LF	TON	REMARKS
29+20	STH 64	197	56	111	TRANSITION LIMITS: 40'
58+50	STH 64	192	56	102	TRANSITION LIMITS: 39'
213+60	STH 64	193	56	105	TRANSITION LIMITS: 39'
239+85	STH 64	268	56	173	TRANSITION LIMITS: 54'
266+30	STH 64	-	56	32	
286+00	STH 64	-	76	47	
		850	356	570	

*QUANTITIES LISTED ELSEWHERE IN PLAN

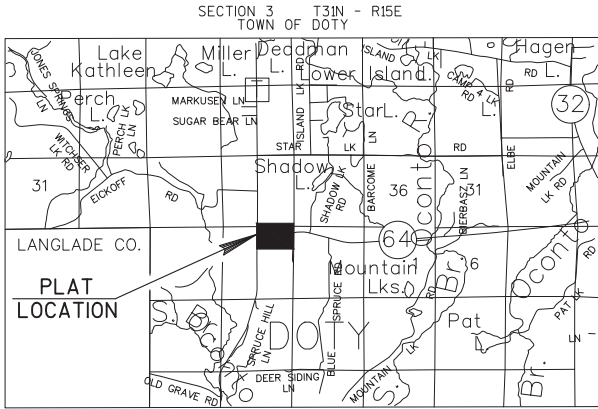
TRANSPORTATION PROJECT PLAT NO: 9140-13-21-4.01

BEING PART OF THE FRACTIONAL NW ¼ OF THE NE ¼ AND THE FRACTIONAL NE ¼ OF THE NE ¼ OF SECTION 3, TOWN OF DOTY, T31N-R15E, OCONTO COUNTY, WISCONSIN.

RELOCATION ORDER STH 64 OCONTO COUNTY
LANGLADE - MOUNTAIN
WEST COUNTY LINE - STH 32

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02 (3), 84.09 and 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.



NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, OCONTO COUNTY, NAD83 (97) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 MONUMENTS (TYPICALLY 1" X 24" IRON PIPE) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

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

EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 64 WAS ESTABLISHED UNDER PROJECT(S): T01910.

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

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

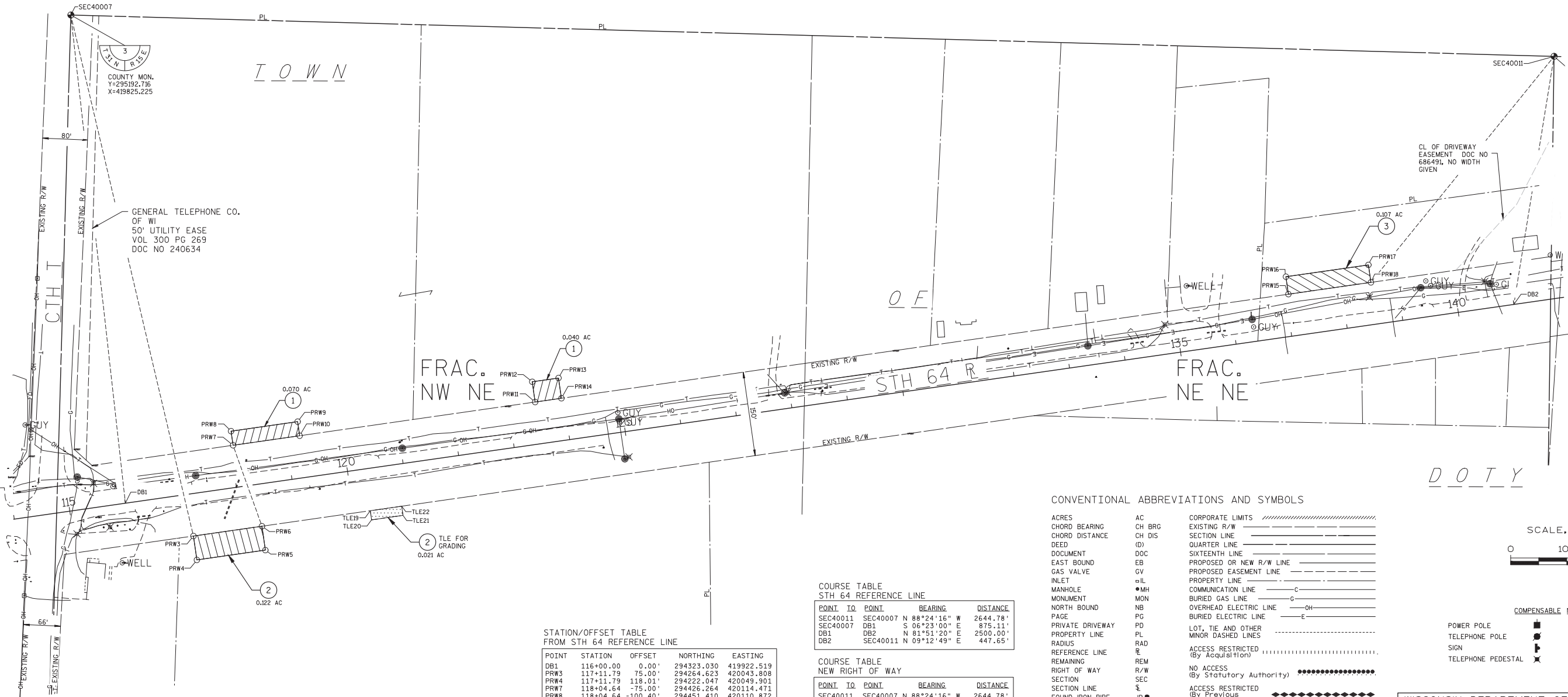
THE REFERENCE LINE SHOWN ON THIS PLAT MAY NOT BE THE SAME AS THE REFERENCE LINE SHOWN ON THE CONSTRUCTION PLAN.

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN OCONTO COUNTY, WISCONSIN AT

...M ON ... AS DOCUMENT # ... AND FILED IN ...

SIGNATURE OF REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 9140-13-21-4.01
AMENDMENT NO:



COURSE TABLE STH 64 REFERENCE LINE				
POINT	TO	POINT	BEARING	DISTANCE
SEC40011	SEC40007	N	88°24'16" W	2644.78'
SEC40007	DB1	S	06°23'00" E	875.11'
DB1	DB2	N	81°51'20" E	2500.00'
DB2	SEC40011	N	09°12'49" E	447.65'

STATION/OFFSET TABLE FROM STH 64 REFERENCE LINE				
POINT	STATION	OFFSET	NORTHING	EASTING
DB1	116+00.00	0.00'	294323.030	419922.519
PRW3	117+11.79	75.00'	294264.623	420043.808
PRW4	117+11.79	118.01'	294222.047	420049.901
PRW7	118+04.64	-75.00'	294426.264	420114.471
PRW8	118+04.64	-100.40'	294451.410	420110.872
PRW5	118+35.12	118.01'	294239.518	420171.984
PRW6	118+35.12	75.00'	294282.095	420165.981
PRW9	119+24.50	-100.43'	294468.414	420229.520
PRW10	119+24.51	-75.00'	294443.245	420233.127
TLE19	120+30.23	75.00'	294309.735	420359.031
TLE20	120+30.23	91.47'	294293.434	420361.364
TLE21	120+86.73	91.47'	294301.439	420417.299
TLE22	120+86.73	75.00'	294317.740	420414.966
PRW11	123+48.50	-75.00'	294503.312	420652.845
PRW12	123+48.50	-111.49'	294539.434	420647.676
PRW13	123+95.81	-111.49'	294546.137	420694.510
PRW14	123+95.81	-75.00'	294510.014	420699.679
PRW15	137+04.79	-75.00'	294695.454	421995.456
PRW16	137+04.79	-106.43'	294726.571	421991.003
PRW18	138+53.36	-75.00'	294716.501	422142.522
PRW17	138+53.36	-106.43'	294747.618	422138.069
DB2	141+00.00	0.00'	294677.199	422397.304

COURSE TABLE NEW RIGHT OF WAY				
POINT	TO	POINT	BEARING	DISTANCE
SEC40011	SEC40007	N	88°24'16" W	2644.78'
SEC40007	PRW3	S	13°15'10" E	953.48'
PRW3	PRW4	S	08°08'40" E	43.01'
PRW4	PRW5	N	81°51'20" E	123.33'
PRW5	PRW6	N	08°08'40" W	43.01'
PRW6	PRW7	N	19°37'47" W	153.06'
PRW7	PRW8	N	08°08'40" W	25.40'
PRW8	PRW9	N	81°50'40" E	119.86'
PRW9	PRW10	S	08°09'20" E	25.42'
PRW10	PRW11	N	81°51'20" E	423.99'
PRW11	PRW12	N	08°08'40" W	36.49'
PRW12	PRW13	N	81°51'20" E	47.31'
PRW13	PRW14	S	08°08'40" E	36.49'
PRW14	PRW15	N	81°51'20" E	1308.98'
PRW15	PRW16	N	08°08'40" W	31.43'
PRW16	PRW17	N	81°51'20" E	148.56'
PRW17	PRW18	S	08°08'40" E	31.43'
PRW18	SEC40011	N	39°02'24" E	518.30'

CONVENTIONAL ABBREVIATIONS AND SYMBOLS

ACRES	AC	CORPORATE LIMITS	////////////////////
CHORD BEARING	CH BRG	EXISTING R/W	-----
CHORD DISTANCE	CH DIS	SECTION LINE	-----
DEED	(D)	QUARTER LINE	-----
DOCUMENT	DOC	SIXTEENTH LINE	-----
EAST BOUND	EB	PROPOSED OR NEW R/W LINE	-----
GAS VALVE	GV	PROPOSED EASEMENT LINE	-----
INLET	IL	PROPERTY LINE	-----
MANHOLE	●MH	COMMUNICATION LINE	-----C-----
MONUMENT	MON	BURIED GAS LINE	-----G-----
NORTH BOUND	NB	OVERHEAD ELECTRIC LINE	-----OH-----
PAGE	PG	BURIED ELECTRIC LINE	-----E-----
PRIVATE DRIVEWAY	PD	LOT, TIE AND OTHER	-----
PROPERTY LINE	PL	MINOR DASHED LINES	-----
RADIUS	RAD	ACCESS RESTRICTED	
REFERENCE LINE	REF	(By Acquisition)	
REMAINING	REM	NO ACCESS	
RIGHT OF WAY	R/W	(By Statutory Authority)	
SECTION	SEC	ACCESS RESTRICTED	
SECTION LINE	§	(By Previous Project/Control)	
FOUND IRON PIPE	IP	LIMITED EASEMENT	
STATION	STA	(Temporary or Permanent)	
TIE POINT	DB1	PARCEL NUMBER	---
VOLUME	VOL	UTILITY PARCEL NUMBER	---
FEE ACQUISITION	VARIOUS	SECTION CORNER	●
ADJOINING LANDS WITH SAME OWNER	VARIOUS	SET R/W MONUMENT W/CAP	○
BUILDING TO BE RAZED	VARIOUS	(1"X 24" IRON PIPE, 113 LBS/FT)	○
PROPOSED R/W BOUNDARY POINT	PRW	SET P.K. NAIL	△
TEMPORARY LIMITED EASEMENT	TLE		
PERMANENT LIMITED EASEMENT	PLE		

SCALE, FEET



COMPENSABLE		NON-COMPENSABLE	
POWER POLE	■	TELEPHONE POLE	□
SIGN	●	TELEPHONE PEDESTAL	□

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	*OWNER	INTEREST REQUIRED	R/W ACRES REQUIRED			P.L.E. ACRES	T.L.E. ACRES
			NEW	EXISTING	TOTAL		
1	PATRICK & JENIFER O'BRIEN	FEE	0.110	0.000	0.110		
2	RAYMOND & MARGARET BLAIR	FEE, TLE	0.122	0.000	0.122		0.021
3	STEVEN & SUSAN KLANTE	FEE	0.107	0.000	0.107		

*OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

WISCONSIN DEPARTMENT OF TRANSPORTATION

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



SIGNATURE...*Jeffrey T. Bohritz*...DATE...11/09/2017
NAME...JEFFREY T. BOHRITZ, PLS-2229...

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION NORTHEAST REGION.
SIGNATURE...*Curt Van Erem*...DATE...11/09/2017
NAME...CURT VAN EREM...

TRANSPORTATION PROJECT PLAT NO: 9140-13-21-4.02

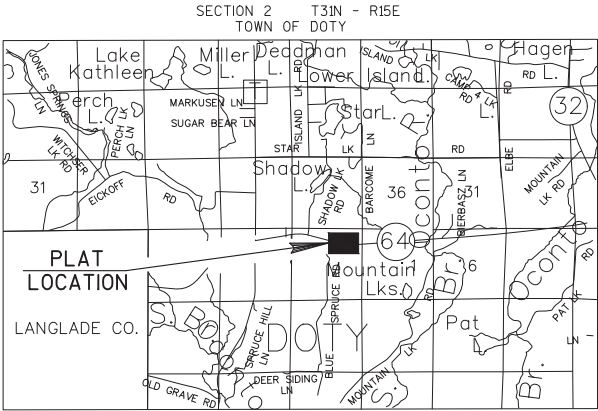
BEING PART OF THE FRACTIONAL NW ¼ OF THE NE ¼ OF SECTION 2,
TOWN OF DOTY, T31N-R15E, OCONTO COUNTY, WISCONSIN.

RELOCATION ORDER STH 64 OCONTO COUNTY
LANGLADE - MOUNTAIN
WEST COUNTY LINE - STH 32

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE,
THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND
INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02 (3), 84.09 and 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION
HEREBY ORDERS THAT:

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



CONVENTIONAL ABBREVIATIONS AND SYMBOLS

ACRES	AC	CORPORATE LIMITS
CHORD BEARING	CH BRG	EXISTING R/W
CHORD DISTANCE	CH DIS	SECTION LINE
DEED	(D)	QUARTER LINE
DOCUMENT	DOC	SIXTEENTH LINE
EAST BOUND	EB	PROPOSED OR NEW R/W LINE
GAS VALVE	GV	PROPOSED EASEMENT LINE
INLET	IL	PROPERTY LINE
MANHOLE	●MH	COMMUNICATION LINE
MONUMENT	MON	BURIED GAS LINE
NORTH BOUND	NB	OVERHEAD ELECTRIC LINE
PAGE	PG	BURIED ELECTRIC LINE
PRIVATE DRIVEWAY	PD	LOT, TIE AND OTHER
PROPERTY LINE	PL	MINOR DASHED LINES
RADIUS	RAD	ACCESS RESTRICTED (By Acquisition)
REFERENCE LINE	RL	NO ACCESS (By Statutory Authority)
REMAINING	REM	ACCESS RESTRICTED (By Previous Project/Control)
RIGHT OF WAY	R/W	LIMITED EASEMENT (Temporary or Permanent)
SECTION	SEC	HIGHWAY EASEMENT
SECTION LINE	SL	PARCEL NUMBER
FOUND IRON PIPE	IP ●	UTILITY PARCEL NUMBER
STATION	STA	SECTION CORNER
TIE POINT	DB1	SET R/W MONUMENT W/CAP (1" x 24" IRON PIPE, 113 LBS/FT)
VOLUME	VOL	SET P.K. NAIL
FEE ACQUISITION	VARIOUS	
ADJOINING LANDS WITH SAME OWNER		
BUILDING TO BE RAZED		
PROPOSED R/W BOUNDARY POINT	PRW	
TEMPORARY LIMITED EASEMENT	TLE	
PERMANENT LIMITED EASEMENT	PLE	
HIGHWAY EASEMENT	HE	

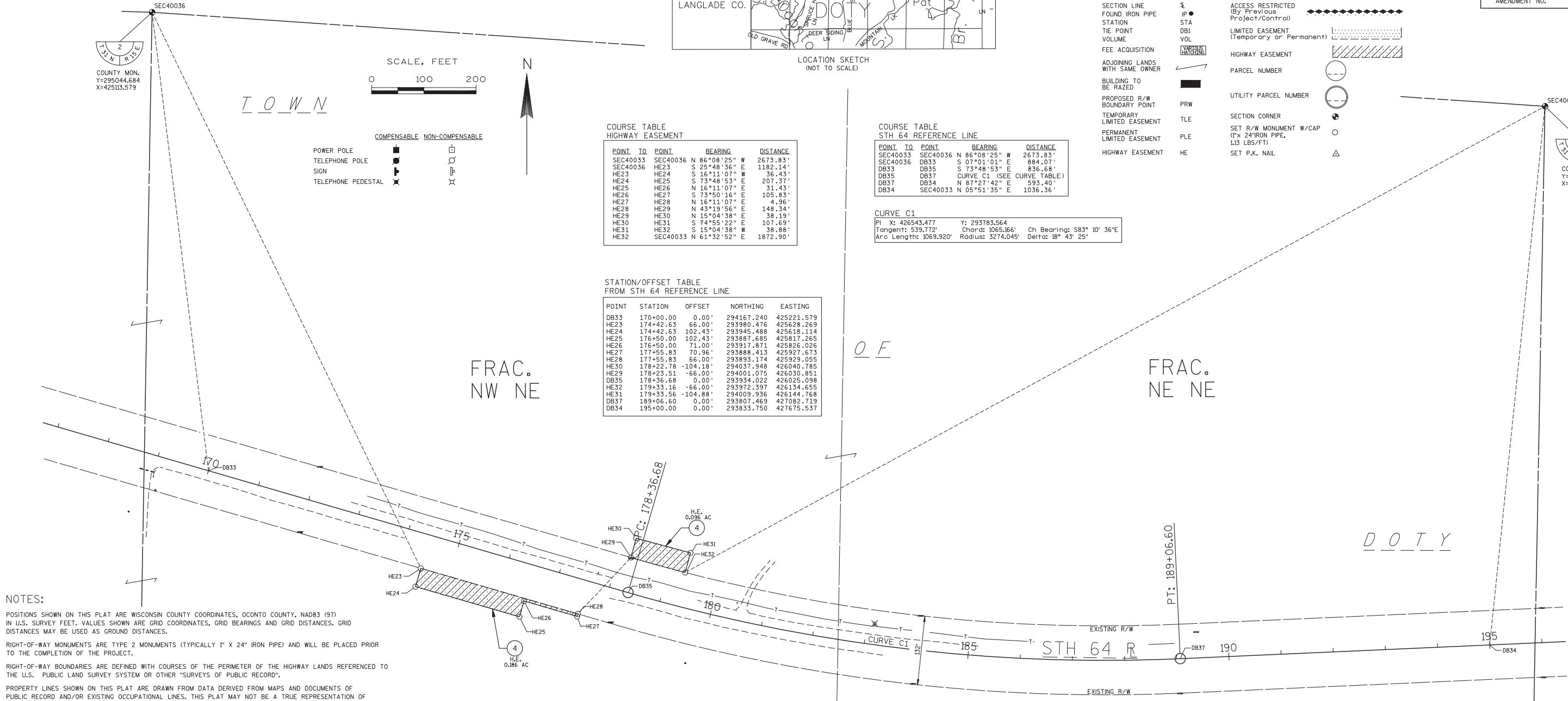
ACCEPTED FOR RECORDING AND FILING IN
THE OFFICE OF THE REGISTER OF DEEDS
IN OCONTO COUNTY, WISCONSIN AT
... M ON ...
AS DOCUMENT # ... AND
FILED IN ...

SIGNATURE OF REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 9140-13-21-4.02
AMENDMENT NO:

4

4



NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, OCONTO COUNTY, NAD83 (97)
IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS AND GRID DISTANCES. GRID
DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 MONUMENTS (TYPICALLY 1" X 24" IRON PIPE) AND WILL BE PLACED PRIOR
TO THE COMPLETION OF THE PROJECT.

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

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

EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 64 WAS ESTABLISHED UNDER PROJECT(S): T01910D.

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

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

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.
THE REFERENCE LINE SHOWN ON THIS PLAT MAY NOT BE THE SAME AS THE REFERENCE LINE
SHOWN ON THE CONSTRUCTION PLAN.

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	*OWNER	INTEREST REQUIRED	R/W ACRES REQUIRED			H.E. ACRES	T.L.E. ACRES
			NEW	EXISTING	TOTAL		
4	THE UNITED STATES OF AMERICA	HE		0.000		0.282	

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

WISCONSIN DEPARTMENT OF TRANSPORTATION

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



SIGNATURE... *Jeffrey T. Bohrtz* ...DATE... 11/09/2017
NAME... JEFFREY T. BOHRITZ, PLS-2223 ...

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE
WISCONSIN DEPARTMENT OF TRANSPORTATION NORTHEAST REGION.
SIGNATURE... *Curt Van Erem* ...DATE... 11/09/2017
NAME... CURT VAN EREM ...

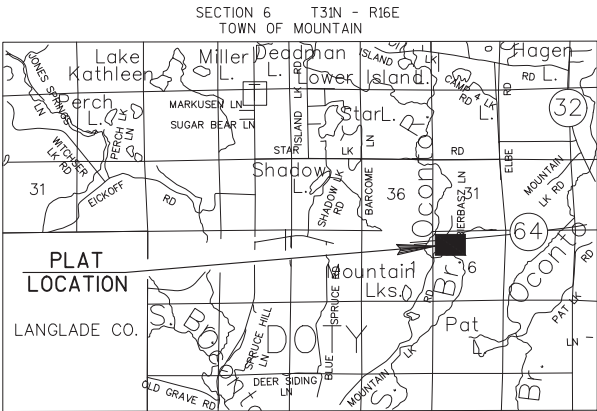
TRANSPORTATION PROJECT PLAT NO: 9140-13-21-4.03

BEING PART OF THE FRACTIONAL NW ¼ OF THE NW ¼, THE FRACTIONAL NE ¼ OF THE NW ¼ AND THE FRACTIONAL NW ¼ OF THE NE ¼ OF SECTION 6, TOWN OF MOUNTAIN, T31N-R16E, OCONTO COUNTY, WISCONSIN.

RELOCATION ORDER STH 64 OCONTO COUNTY
LANGLADE - MOUNTAIN
WEST COUNTY LINE - STH 32

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTIONS 84.02 (3), 84.09 and 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.



NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, OCONTO COUNTY, NAD83 (97) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 MONUMENTS (TYPICALLY 1" X 24" IRON PIPE) AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

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

EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 64 WAS ESTABLISHED UNDER PROJECT(S): T0191D.

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

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

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

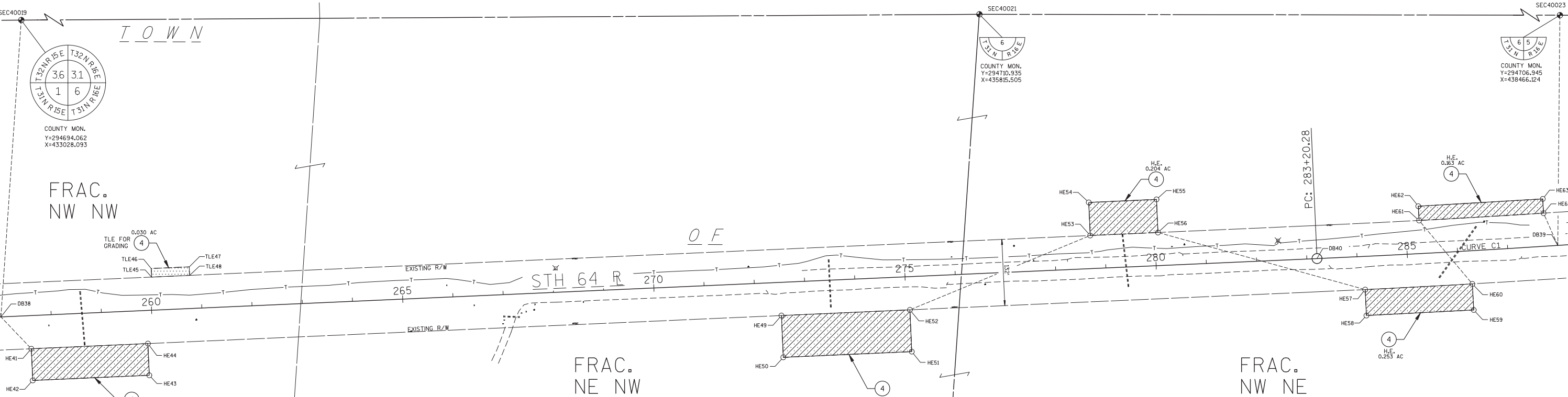
THE REFERENCE LINE SHOWN ON THIS PLAT MAY NOT BE THE SAME AS THE REFERENCE LINE SHOWN ON THE CONSTRUCTION PLAN.

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN OCONTO COUNTY, WISCONSIN AT _____ M ON _____

AS DOCUMENT # _____ AND FILED IN _____

SIGNATURE OF REGISTER OF DEEDS

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 9140-13-21-4.03
AMENDMENT NO:



SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	*OWNER	INTEREST REQUIRED	R/W ACRES REQUIRED			H.E. ACRES	T.L.E. ACRES
			NEW	EXISTING	TOTAL		
4	THE UNITED STATES OF AMERICA	HE, TLE		0.000		1.446	0.030

*OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

STATION/OFFSET TABLE
FROM STH 64 REFERENCE LINE

POINT	STATION	OFFSET	NORTHING	EASTING
DB38	257+00.00	0.00'	294108.334	433869.453
HE41	257+57.64	66.00'	294044.952	433929.960
HE42	257+57.64	129.21'	293981.809	433932.759
HE44	259+89.73	66.00'	294055.231	434161.825
HE43	259+89.73	129.21'	293992.087	434164.624
TLE45	260+03.00	-66.00'	294187.689	434169.237
TLE46	260+03.00	-83.02'	294204.694	434168.484
TLE47	260+78.63	-83.02'	294208.043	434244.034
TLE48	260+78.63	-66.00'	294191.038	434244.788
HE49	272+51.07	66.00'	294111.092	435421.922
HE50	272+51.07	149.31'	294027.860	435425.612
HE52	275+06.85	66.00'	294122.421	435677.457
HE51	275+06.85	149.31'	294039.188	435681.147
HE53	278+71.67	-66.00'	294270.448	436036.070
HE54	278+71.67	-131.94'	294336.323	436033.149
HE55	280+06.51	-131.94'	294342.295	436167.860
HE56	280+06.51	-66.00'	294276.420	436170.781
DB40	283+20.28	-0.30'	294224.681	436487.149
HE57	284+13.00	66.00'	294162.752	436582.977
HE58	284+13.00	117.76'	294111.056	436585.478
HE62	285+27.04	-94.41'	294328.746	436688.648
HE61	285+27.10	-66.00'	294300.379	436690.222
HE59	286+25.59	117.94'	294122.194	436798.870
HE60	286+25.88	66.00'	294174.060	436796.163
HE64	287+75.76	-66.00'	294314.937	436937.732
HE63	287+76.01	-94.41'	294343.305	436936.158
DB39	288+00.00	0.00'	294250.641	436966.154

COURSE TABLE
STH 64 REFERENCE LINE

POINT TO	POINT	BEARING	DISTANCE
SEC40023	SEC40021	N 89°54'50" W	2650.62'
SEC40021	SEC40019	S 89°39'11" W	2787.46'
SEC40019	DB38	S 55°09'20" E	1025.16'
DB38	DB40	N 87°27'18" E	2620.28'
DB40	DB39	CURVE C1 (SEE CURVE TABLE)	
DB39	SEC40023	N 73°04'47" E	1567.84'

CURVE C1			
PI X:	436726.800	Y:	294234.919
Tangent:	239.870'	Chord:	479.708'
Arc Length:	479.719'	Radius:	20951.69'
		Ch Bearing:	N86° 53' 52"E
		Delta:	1° 18' 43"

COURSE TABLE
HIGHWAY EASEMENT

POINT TO	POINT	BEARING	DISTANCE
SEC40023	SEC40021	N 89°54'50" W	2650.62'
SEC40021	SEC40019	S 89°39'11" W	2787.46'
SEC40019	DB38	S 55°09'20" E	1025.16'
DB38	HE41	S 43°40'12" E	87.62'
HE41	HE42	S 02°32'18" E	63.20'
HE42	HE43	N 87°27'42" E	232.09'
HE43	HE44	N 02°32'18" W	63.20'
HE44	HE49	N 87°27'42" E	1261.33'
HE49	HE50	S 02°32'18" E	83.31'
HE50	HE51	N 87°27'42" E	255.79'
HE51	HE52	N 02°32'18" W	83.31'
HE52	HE53	N 67°34'13" E	387.96'
HE53	HE54	N 02°32'18" W	65.94'
HE54	HE55	N 87°27'42" E	134.84'
HE55	HE56	S 02°32'18" E	65.94'
HE56	HE57	S 74°34'59" E	427.58'
HE57	HE58	S 02°46'13" E	51.75'
HE58	HE59	N 87°00'44" E	213.68'
HE59	HE60	N 02°59'16" W	51.93'
HE60	HE61	N 39°59'09" W	164.86'
HE61	HE62	N 03°10'31" W	28.41'
HE62	HE63	N 86°38'01" E	247.94'
HE63	HE64	S 03°10'31" E	28.41'
HE64	DB39	S 23°50'53" E	70.30'
DB39	SEC40023	N 73°04'47" E	1567.84'

CONVENTIONAL ABBREVIATIONS AND SYMBOLS

ACRES	AC	CORPORATE LIMITS	////////////////////
CHORD BEARING	CH BRG	EXISTING R/W	-----
CHORD DISTANCE	CH DIS	SECTION LINE	-----
DEED	(D)	QUARTER LINE	-----
DOCUMENT	DOC	SIXTEENTH LINE	-----
EAST BOUND	EB	PROPOSED OR NEW R/W LINE	-----
GAS VALVE	GV	PROPOSED EASEMENT LINE	-----
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MONUMENT	MON	BURIED GAS LINE	-----G-----
NORTH BOUND	NB	OVERHEAD ELECTRIC LINE	-----OH-----
PAGE	PG	BURIED ELECTRIC LINE	-----E-----
PRIVATE DRIVEWAY	PD	LOT, TIE AND OTHER MINOR DASHED LINES	-----
PROPERTY LINE	PL		
RADIUS	RAD		
REFERENCE LINE	REM		
REMAINING	REM		
RIGHT OF WAY	R/W		
SECTION	SEC		
SECTION LINE	§		
FOUND IRON PIPE	IP		
STATION	STA		
TIE POINT	TIE		
VOLUME	VOL		
FEE ACQUISITION	VARIOUS		
ADJOINING LANDS WITH SAME OWNER	PRW		
BUILDING TO BE RAZED	TLE		
PROPOSED R/W BOUNDARY POINT	PLE		
TEMPORARY LIMITED EASEMENT	HE		
PERMANENT LIMITED EASEMENT			
HIGHWAY EASEMENT			
		UTILITY PARCEL NUMBER	-----
		SECTION CORNER	●
		SET R/W MONUMENT W/CAP (1" X 24" IRON PIPE, 113 LBS/FT)	○
		SET P.K. NAIL	△

MOUNTAIN



COMPENSABLE NON-COMPENSABLE

POWER POLE	■	□
TELEPHONE POLE	●	○
SIGN	✱	✱
TELEPHONE PEDESTAL	✱	✱

WISCONSIN DEPARTMENT OF TRANSPORTATION

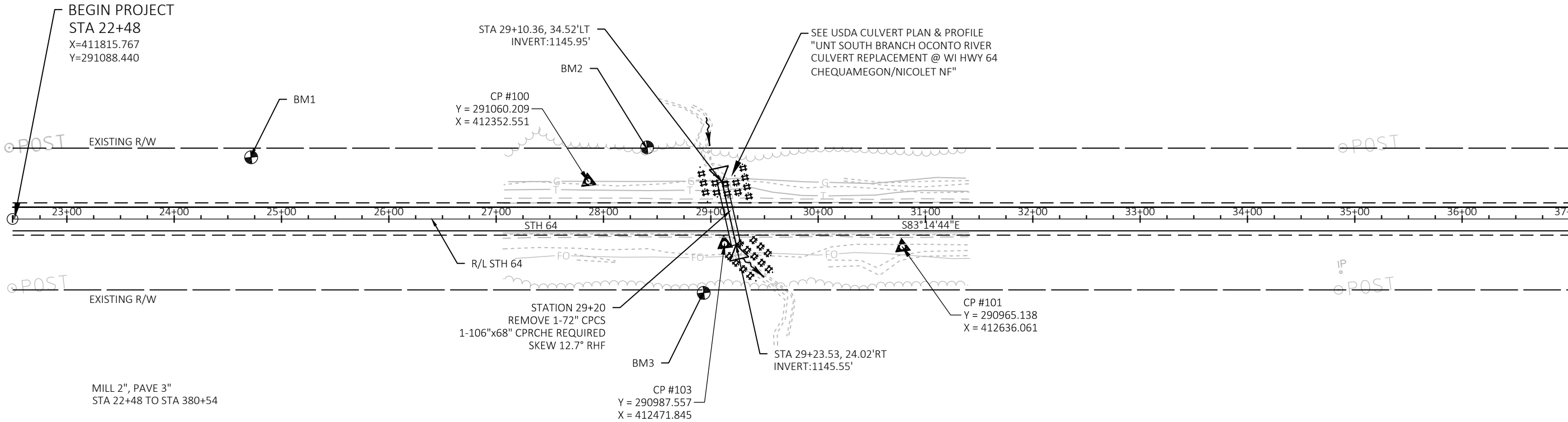
I, JEFFREY T. BOHRITZ, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE MAPPED THIS TRANSPORTATION PROJECT PLAT AND THAT SUCH PLAT CORRECTLY REPRESENTS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



SIGNATURE... *Jeffrey T. Bohritz* ...DATE: 11/09/2017
NAME... JEFFREY T. BOHRITZ, PLS-2223 ...

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION NORTHEAST REGION.
SIGNATURE... *Curt Van Erem* ...DATE: 11/09/2017
NAME... CURT VAN EREM ...

BENCHMARK TABLE			
POINT	ELEVATION	STATION, OFFSET	DESCRIPTION
BM1	1155.66'	24+72, 57'LT	RAILROAD SPIKE IN 12 INCH CONIFEROUS TREE, 43 FEET NORTH OF EDGE OF NORTH EDGE OF PAVEMENT OF STH 64, 122 FEET SOUTHEAST OF WEST END CULVERT AT GRAVEL DRIVEWAY, AND 224 FEET WEST OF GAS MARKER BY "LANGLADE COUNTY" SIGN.
BM2	1151.42'	28+41, 66'LT	RAILROAD SPIKE IN 12 INCH DECIDUOUS TREE, 51 FEET NORTH OF NORTH EDGE OF PAVEMENT OF STH 64, AND 83 FEET SOUTHEAST OF EXISTING 72 INCH CULVERT.
BM3	1150.22'	28+93, 68'RT	RAILROAD SPIKE IN 15 INCH DECIDUOUS TREE, 55 FEET SOUTH OF SOUTH EDGE OF PAVEMENT OF STH 64, AND 50 FEET NORTHEAST OF EXISTING 72 INCH CULVERT.



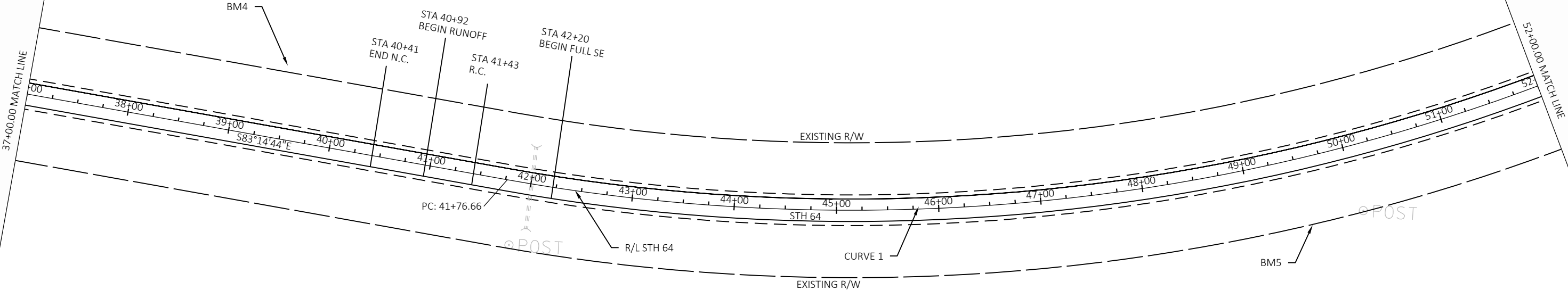
LEGEND	
#####	EROSION MAT CLASS I, TYPE B
—●—	SILT FENCE
△△△	TEMPORARY DITCH CHECK
▤▤▤	TEMPORARY DITCH CHECK (EROSION BALES)
∞∞∞	CULVERT PIPE DITCH CHECK
⊙	ROCK BAG
→	FLOW ARROW
- - -	SLOPE INTERCEPT

CURVE 1
PI STA = 51+40.35
Y = 290748.417
X = 414686.659
DELTA = 53°32'59"
D = 3°00'00"
T = 963.69'
L = 1784.99'
R = 1909.86'
PC STA = 41+76.66
PT STA = 59+61.66
RUNOFF = 128'
SI TRANSITION = 179'

BENCHMARK TABLE			
POINT	ELEVATION	STATION, OFFSET	DESCRIPTION
BM4	1134.03'	39+43, 69'LT	RAILROAD SPIKE IN 12 INCH DECIDUOUS TREE, 50 FEET NORTH OF NORTH EDGE OF PAVEMENT OF STH 64, AND 258 FEET WEST OF NORTH END OF CULVERT.
BM5	1137.84"	49+53, 67'RT	RAILROAD SPIKE IN 24 INCH CONIFEROUS TREE, 55 FEET SOUTH OF SOUTH EDGE OF PAVEMENT OF STH 64, AND 52 FEET EAST OF YELLOW RIGHT OF WAY MARKER WOOD POST.



5



5

LEGEND

- ##### EROSION MAT CLASS I, TYPE B
- SILT FENCE
- △△△ TEMPORARY DITCH CHECK
- ▢ TEMPORARY DITCH CHECK (EROSION BALES)
- ∞ CULVERT PIPE DITCH CHECK
- ⊙ ROCK BAG
- FLOW ARROW
- - - SLOPE INTERCEPT

PROJECT NO: 9140-13-71

HWY: STH 64

COUNTY: OCONTO

PLAN SHEETS

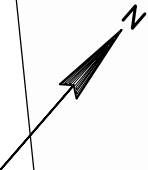
SHEET

51

E

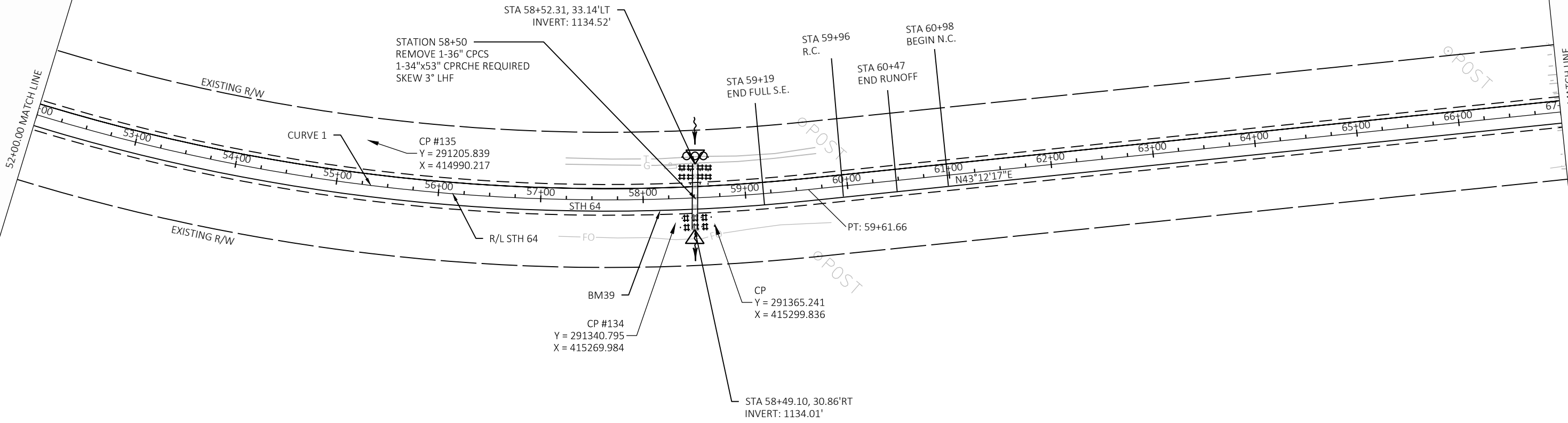
CURVE 1
PI STA = 51+40.35
Y = 290748.417
X = 414686.659
DELTA = 53°32'59"
D = 3°00'00"
T = 963.69'
L = 1784.99'
R = 1909.86'
PC STA = 41+76.66
PT STA = 59+61.66
RUNOFF = 128'
SE TRANSITION = 179'

BENCHMARK TABLE			
POINT	ELEVATION	STATION, OFFSET	DESCRIPTION
BM39	1141.78'	58+16, 12'RT	SET STEEL MAGNAIL IN PAVEMENT, 0.5 FEET NORTH OF SOUTH EDGE OF PAVEMENT OF STH 64, AND 38 FEET NORTHWEST OF EXISTING CULVERT ON SOUTH SIDE OF STH 64.

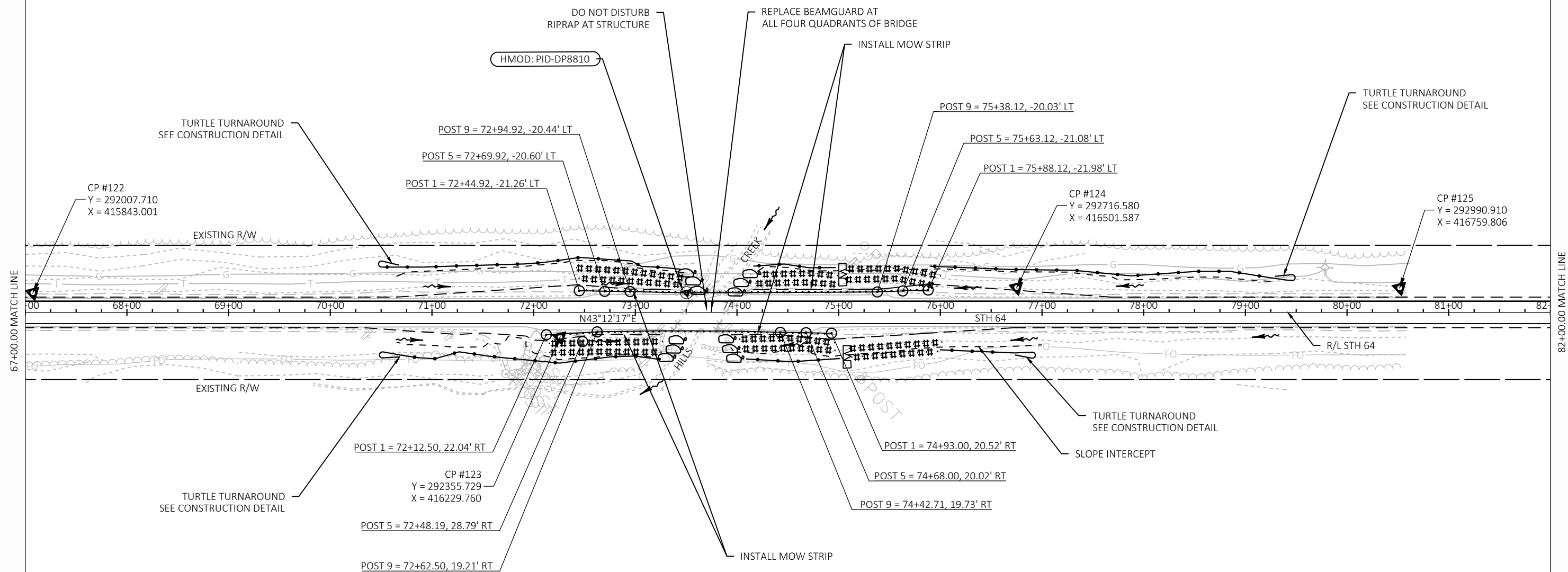


5

5



LEGEND	
#####	EROSION MAT CLASS I, TYPE B
—+—+—+—	SILT FENCE
△△△	TEMPORARY DITCH CHECK
▤▤▤	TEMPORARY DITCH CHECK (EROSION BALES)
∞∞∞	CULVERT PIPE DITCH CHECK
⊞	ROCK BAG
→	FLOW ARROW
- - -	SLOPE INTERCEPT

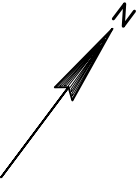


LEGEND

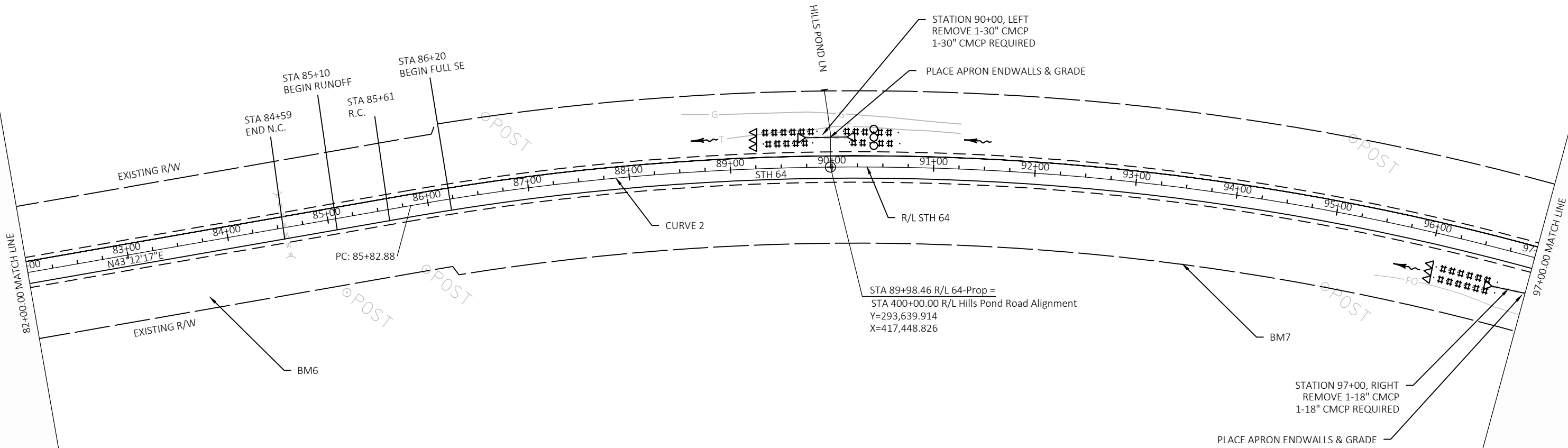
#####	EROSION MAT CLASS I, TYPE B
—●—●—●—	SILT FENCE
△△△	TEMPORARY DITCH CHECK
□□□	TEMPORARY DITCH CHECK (EROSION BALES)
○○○	CULVERT PIPE DITCH CHECK
○●	ROCK BAG
~→	FLOW ARROW
- - - /	SLOPE INTERCEPT

CURVE 2
PI STA = 94+75.92
Y = 294012.446
X = 417752.297
DELTA = 38°39'03"
D = 2°15'00"
T = 893.03'
L = 1717.82'
R = 2546.48'
PC STA = 85+82.88
PT STA = 103+00.70
RUNOFF = 110'
SE TRANSITION = 161'

BENCHMARK TABLE			
POINT	ELEVATION	STATION, OFFSET	DESCRIPTION
BM6	1141.90'	83+72, 55'RT	RAILROAD SPIKE IN 30 INCH DECIDUOUS TREE, 40 FEET SOUTH OF SOUTH EDGE OF PAVEMENT OF STH 64 AND 90 FEET WEST OF CULVERT ON SOUTH SIDE OF STH 64.
BM7	1161.55'	93+56, 75'RT	RAILROAD SPIKE IN 12 INCH DECIDUOUS TREE, 60 FEET SOUTH OF SOUTH EDGE OF PAVEMENT OF STH 64, AND 142 FEET WEST OF RIGHT OF WAY MARKER ON SOUTH SIDE OF STH 64.



5

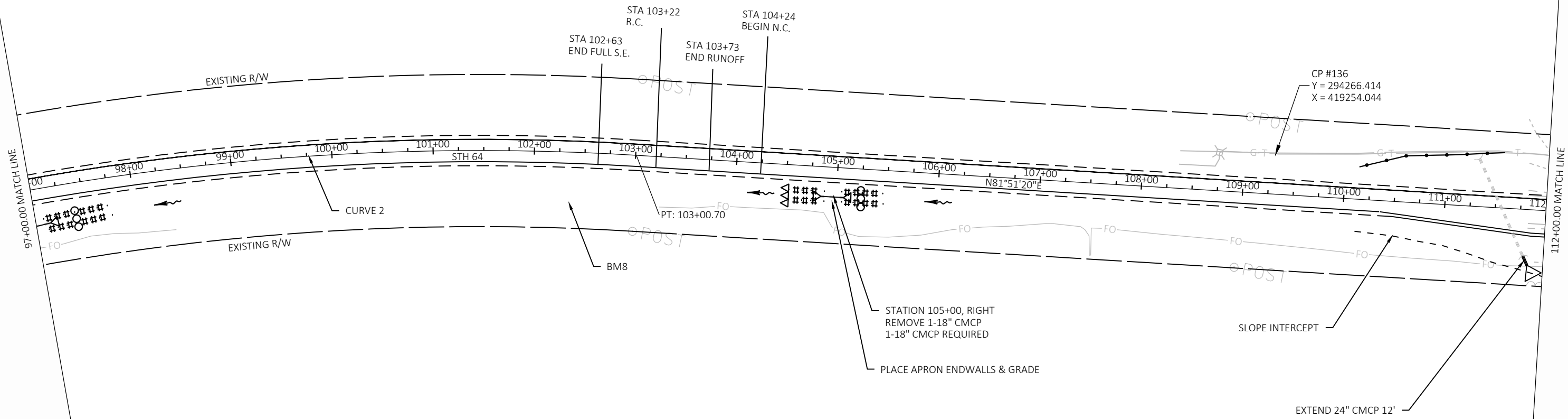


5

CURVE 2
PI STA = 94+75.92
Y = 294012.446
X = 417752.297
DELTA = 38°39'03"
D = 2°15'00"
T = 893.03'
L = 1717.82'
R = 2546.48'
PC STA = 85+82.88
PT STA = 103+00.70
RUNOFF = 110'
SE TRANSITION = 161'

BENCHMARK TABLE			
POINT	ELEVATION	STATION, OFFSET	DESCRIPTION
BM8	1194.30'	102+36, 50'RT	RAILROAD SPIKE IN 20 INCH DECIDUOUS TREE, 33 FEET SOUTH OF SOUTH EDGE OF PAVEMENT OF STH 64, AND 69 FEET WEST OF RIGHT OF WAY MARKER ON SOUTH SIDE OF STH 64.

5



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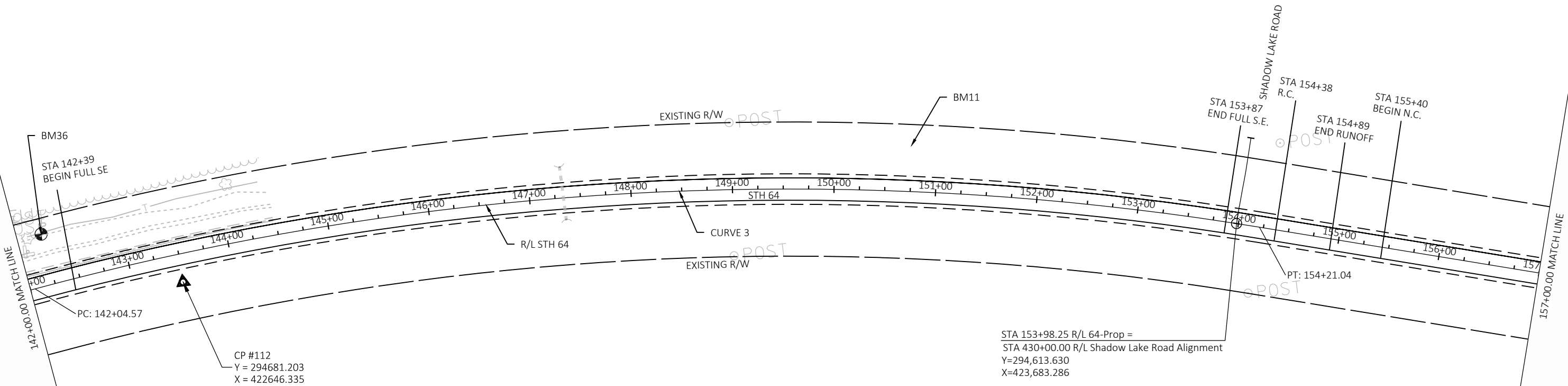
LEGEND	
#####	EROSION MAT CLASS I, TYPE B
—●—	SILT FENCE
△△△	TEMPORARY DITCH CHECK
▤▤▤	TEMPORARY DITCH CHECK (EROSION BALES)
∞	CULVERT PIPE DITCH CHECK
⊙	ROCK BAG
→	FLOW ARROW
- - -	SLOPE INTERCEPT

CURVE 3
PI STA = 148+22.11
Y = 294779.499
X = 423112.132
DELTA = 24°19'46"
D = 2°00'00"
T = 617.55'
L = 1216.48'
R = 2864.79'
PC STA = 142+04.57
PT STA = 154+21.04
RUNOFF = 102'
SE TRANSITION = 153'

BENCHMARK TABLE			
POINT	ELEVATION	STATION, OFFSET	DESCRIPTION
BM36	1188.39'	142+24, 50'LT	EXISTING CAPPED IRON PIPE (COUNTY CONTROL PNT# 48903), 37 FEET NORTH OF NORTH EDGE OF PAVEMENT OF STH 64, 145 FEET NORTHWEST OF "JCT 2287 NATIONAL FOREST" SIGN.
BM11	1185.97'	150+75, 45'LT	RAILROAD SPIKE IN 12 INCH DECIDUOUS TREE, 32 FEET NORTH OF NORTH EDGE OF STH 64, AND 314 FEET WEST OF WEST END OF CULVERT AT SHADOW LAKE ROAD.



5



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LEGEND

- ##### EROSION MAT CLASS I, TYPE B
- SILT FENCE
- △△△ TEMPORARY DITCH CHECK
- ▣▣ TEMPORARY DITCH CHECK (EROSION BALES)
- ∞ CULVERT PIPE DITCH CHECK
- ⊙ ROCK BAG
- FLOW ARROW
- - - SLOPE INTERCEPT

PROJECT NO: 9140-13-71

HWY: STH 64

COUNTY: OCONTO

PLAN SHEETS

SHEET

58

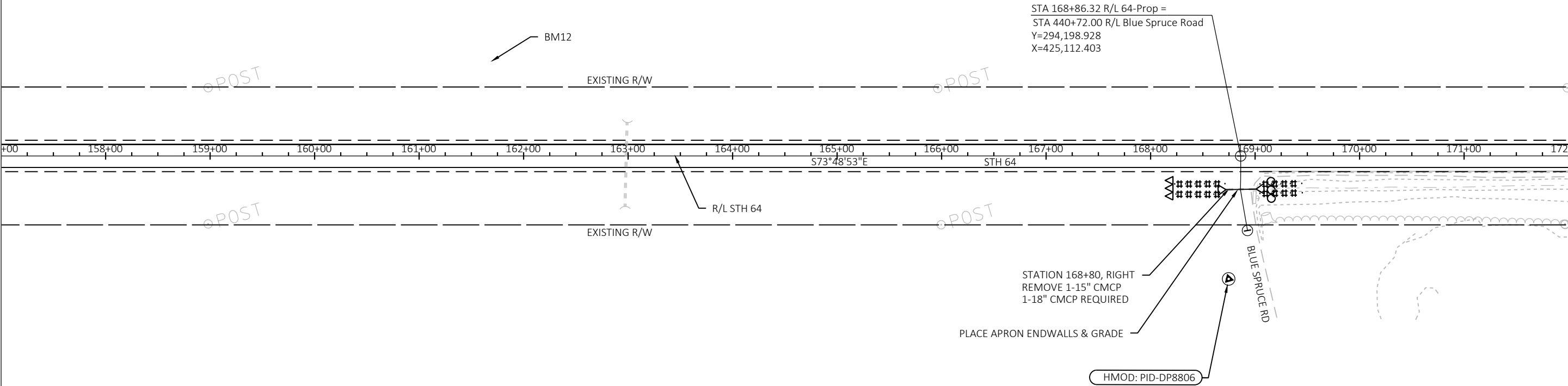
E

BENCHMARK TABLE			
POINT	ELEVATION	STATION, OFFSET	DESCRIPTION
BM12	1178.25'	161+70, 91'LT	RAILROAD SPIKE IN 20 INCH CONIFEROUS TREE, 77 FEET NORTH OF NORTH EDGE OF PAVEMENT OF STH 64, AND 142 FEET WEST OF NORTH SIDE CULVERT.



5

157+00.00 MATCH LINE



5

172+00.00 MATCH LINE

PROJECT NO: 9140-13-71

HWY: STH 64

COUNTY: OCONTO

PLAN SHEETS

SHEET

59

E

FILE NAME : N:\PDS\C3D\91401300\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050210-PN

PLOT DATE : 10/2/2019 2:49 PM

PLOT BY : BRADLEY, KIMBERLY L PLOT NAME :

PLOT SCALE : 1 IN:100 FT

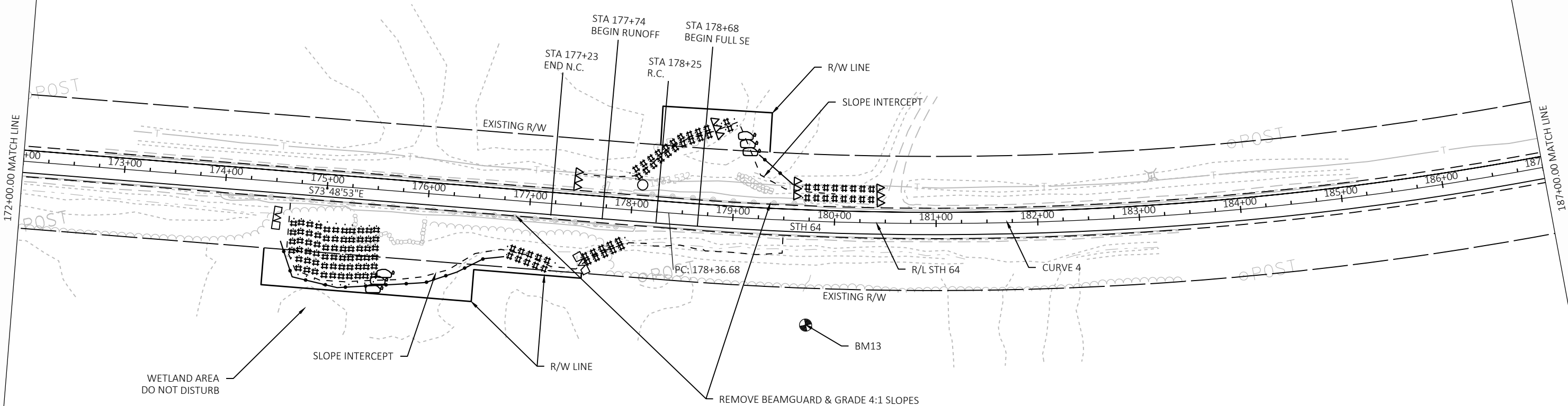
WISDOT/CADS SHEET 44

CURVE 4
PI STA = 183+76.45
Y = 293783.564
X = 426543.477
DELTA = 18°43'25"
D = 1°45'00"
T = 539.77'
L = 1069.92'
R = 3274.04'
PC STA = 178+36.68
PT STA = 189+06.60
RUNOFF = 94'
SE TRANSITION = 145'

BENCHMARK TABLE			
POINT	ELEVATION	STATION, OFFSET	DESCRIPTION
BM13	1190.08'	179+75, 91'RT	RAILROAD SPIKE IN 18 INCH DEAD TREE, 87 FEET SOUTH OF SOUTH EDGE OF PAVEMENT OF STH 64, AND 150 FEET SOUTHWEST OF "TRAIL STOP" SIGN AT MARKER 2047.



5



5

LEGEND

- ##### EROSION MAT CLASS I, TYPE B
- SILT FENCE
- △△△ TEMPORARY DITCH CHECK
- TEMPORARY DITCH CHECK (EROSION BALES)
- ∞∞∞ CULVERT PIPE DITCH CHECK
- ⊙ ROCK BAG
- FLOW ARROW
- - - SLOPE INTERCEPT

PROJECT NO: 9140-13-71

HWY: STH 64

COUNTY: OCONTO

PLAN SHEETS

SHEET

60

E

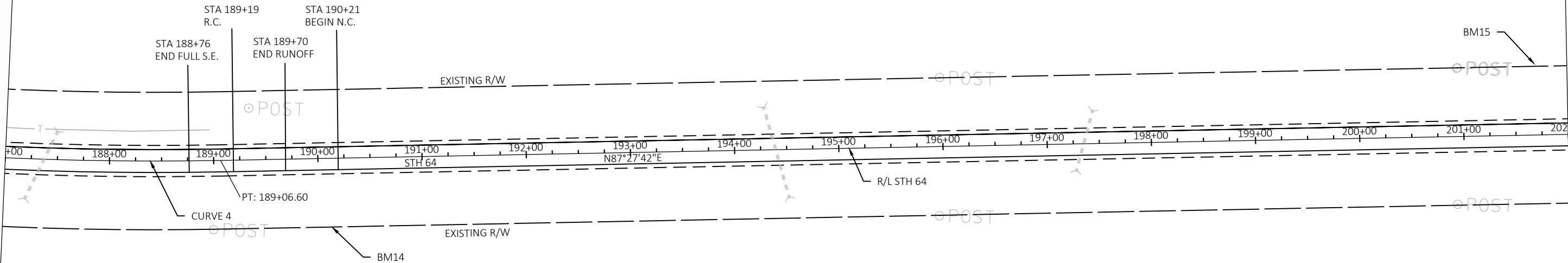
CURVE 4
PI STA = 183+76.45
Y = 293783.564
X = 426543.477
DELTA = 18°43'25"
D = 1°45'00"
T = 539.77'
L = 1069.92'
R = 3274.04'
PC STA = 178+36.68
PT STA = 189+06.60
RUNOFF = 94'
SE TRANSITION = 145'

BENCHMARK TABLE			
POINT	ELEVATION	STATION, OFFSET	DESCRIPTION
BM14	1189.72'	190+13, 66'RT	RAILROAD SPIKE IN 18 INCH DEAD TREE, 52 FEET SOUTH OF SOUTH EDGE OF PAVEMENT OF STH 64, AND 114 FEET EAST OF RIGHT OF WAY POST ON SOUTH SIDE OF STH 64.
BM15	1191.48'	201+69, 68'LT	RAILROAD SPIKE IN 12 INCH DECIDUOUS TREE, 55 FEET NORTH OF NORTH EDGE OF STH 64, AND 75 FEET EAST OF RIGHT OF WAY MARKER ON NORTH SIDE OF STH 64.



5

187+00.00 MATCH LINE



202+00.00 MATCH LINE

5

LEGEND

- ##### EROSION MAT CLASS I, TYPE B
- SILT FENCE
- △△△ TEMPORARY DITCH CHECK
- TEMPORARY DITCH CHECK (EROSION BALES)
- ∞∞∞ CULVERT PIPE DITCH CHECK
- ⊙ ROCK BAG
- FLOW ARROW
- - - SLOPE INTERCEPT

PROJECT NO: 9140-13-71

HWY: STH 64

COUNTY: OCONTO

PLAN SHEETS

SHEET

61

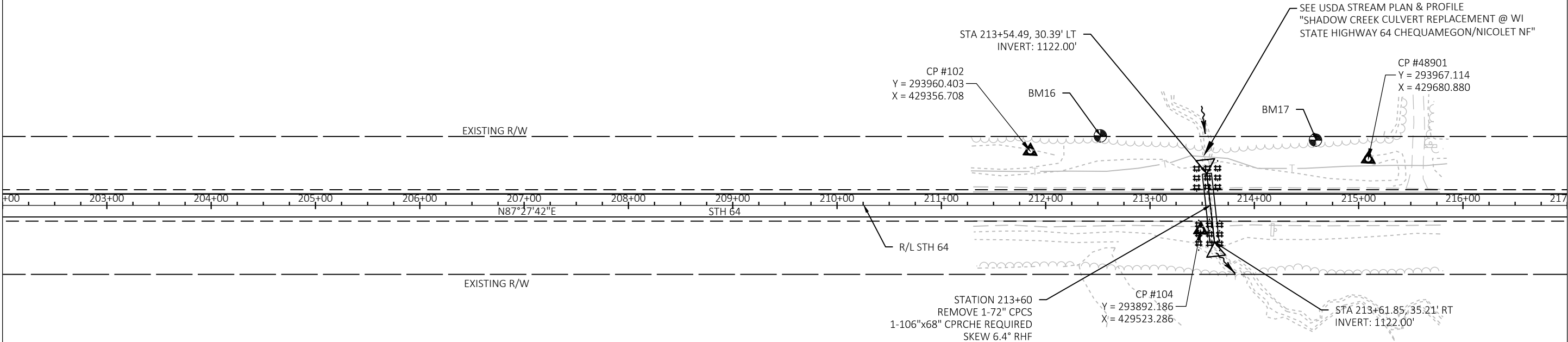
E

BENCHMARK TABLE			
POINT	ELEVATION	STATION, OFFSET	DESCRIPTION
BM16	1128.98'	212+52, 66'LT	RAILROAD SPIKE IN 18 INCH DECIDUOUS TREE, 55 FEET NORTH OF NORTH EDGE OF PAVEMENT OF STH 64, AND 107 FEET WEST OF NORTH END OF 72 INCH CULVERT.
BM17	1129.67'	214+58, 61'LT	RAILROAD SPIKE IN 18 INCH CONIFEROUS TREE, 50 FEET NORTH OF NORTH EDGE OF PAVEMENT OF STH 64, AND 55 FEET WEST OF A CAPPED IRON PIPE (COUNTY CONTROL PNT# 48901).



5

202+00.00 MATCH LINE



217+00.00 MATCH LINE

5

LEGEND

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—●—●—

EROSION MAT CLASS I, TYPE B

SILT FENCE

TEMPORARY DITCH CHECK

TEMPORARY DITCH CHECK (EROSION BALES)

CULVERT PIPE DITCH CHECK

ROCK BAG

FLOW ARROW

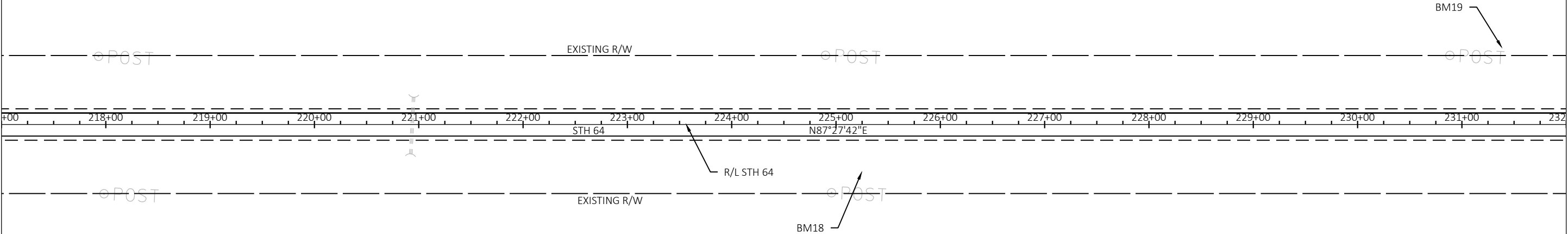
SLOPE INTERCEPT

BENCHMARK TABLE			
POINT	ELEVATION	STATION, OFFSET	DESCRIPTION
BM18	1120.46'	225+25, 46'RT	RAILROAD SPIKE ON TOP OF 18 INCH TREE STUMP, 30 FEET SOUTH OF SOUTH EDGE OF PAVEMENT OF STH 64, AND 35 FEET EAST OF RIGHT OF WAY MARKER.
BM19	1118.34'	231+38, 74'LT	RAILROAD SPIKE IN 24 INCH DECIDUOUS TREE, 60 FEET NORTH OF NORTH EDGE OF PAVEMENT OF STH 64, AND 50 FEET EAST OF RIGHT OF WAY MARKER.



5

217+00.00 MATCH LINE



232+00.00 MATCH LINE

5

LEGEND

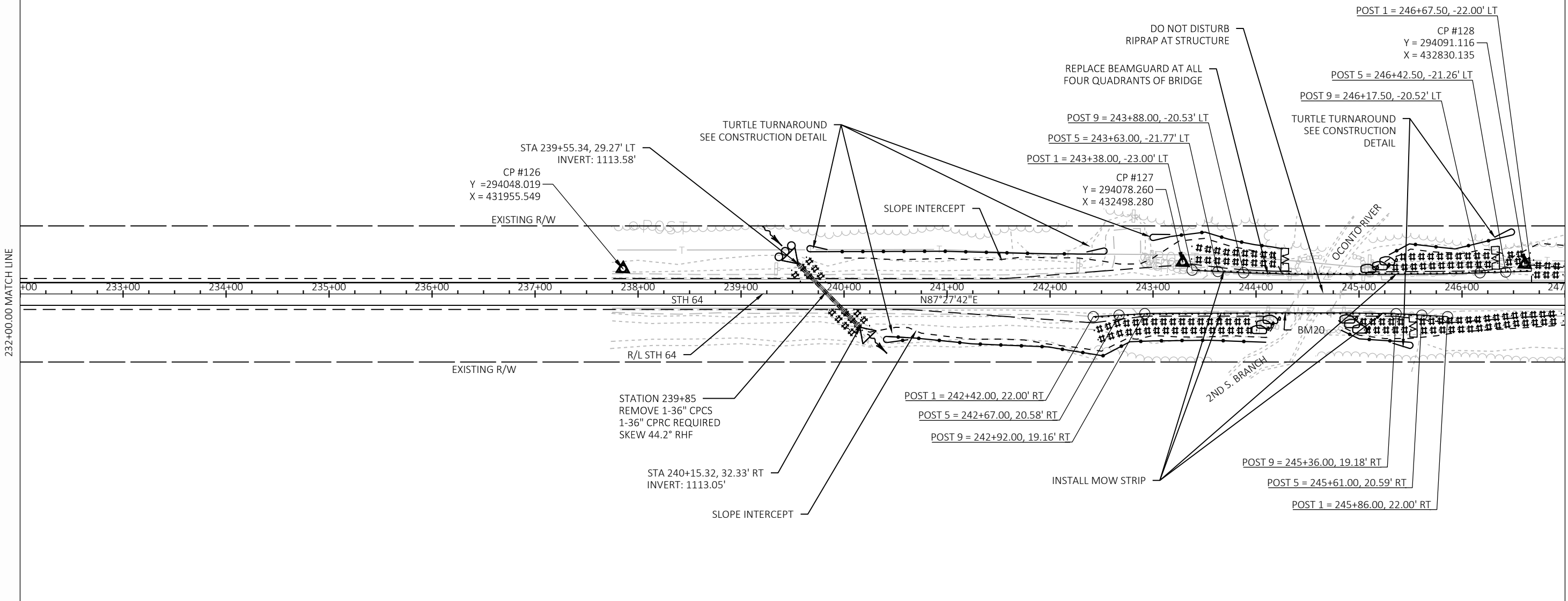
- ##### EROSION MAT CLASS I, TYPE B
- SILT FENCE
- △△ TEMPORARY DITCH CHECK
- ▣▣ TEMPORARY DITCH CHECK (EROSION BALES)
- ∞∞ CULVERT PIPE DITCH CHECK
- ⊞ ROCK BAG
- FLOW ARROW
- - / SLOPE INTERCEPT

BENCHMARK TABLE			
POINT	ELEVATION	STATION, OFFSET	DESCRIPTION
BM20	1120.09'	244+28, 74'RT	WISDOT CAP ON EXISTING STRUCTURE AT SOUTHWEST CORNER STH 64 AND SECOND SOUTH BRANCH OCONTO RIVER.



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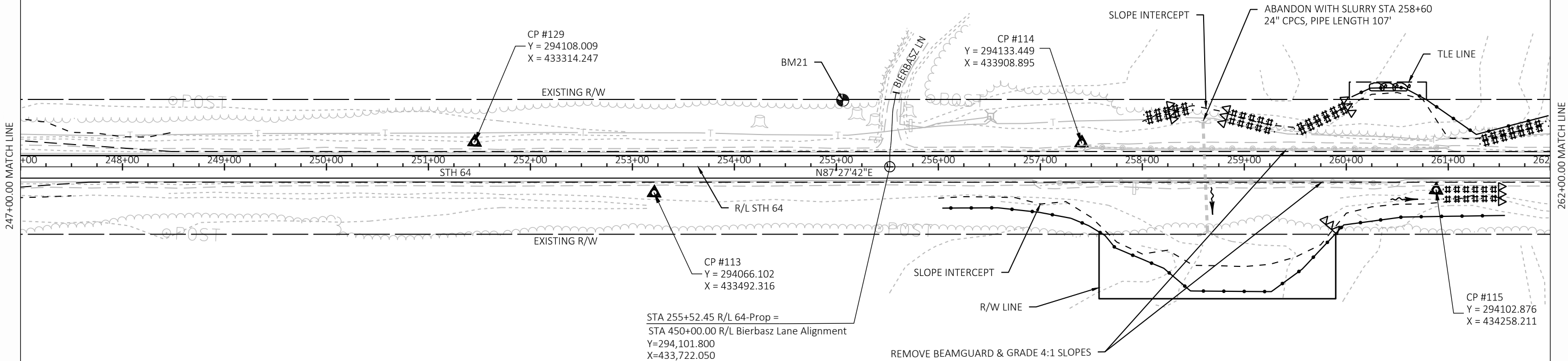


LEGEND	
#####	EROSION MAT CLASS I, TYPE B
—●—●—●—	SILT FENCE
△△△	TEMPORARY DITCH CHECK
▣▣▣	TEMPORARY DITCH CHECK (EROSION BALES)
∞∞∞	CULVERT PIPE DITCH CHECK
⊙	ROCK BAG
→	FLOW ARROW
- - -	SLOPE INTERCEPT

BENCHMARK TABLE			
POINT	ELEVATION	STATION, OFFSET	DESCRIPTION
BM21	1137.95'	255+06, 65'LT	RAILROAD SPIKE IN 12 INCH CONIFEROUS TREE, 51 FEET NORTH OF NORTH EDGE OF PAVEMENT OF STH 64, AND 52 FEET NORTHWEST OF "STOP" SIGN AT BIERBASZ LANE.



5

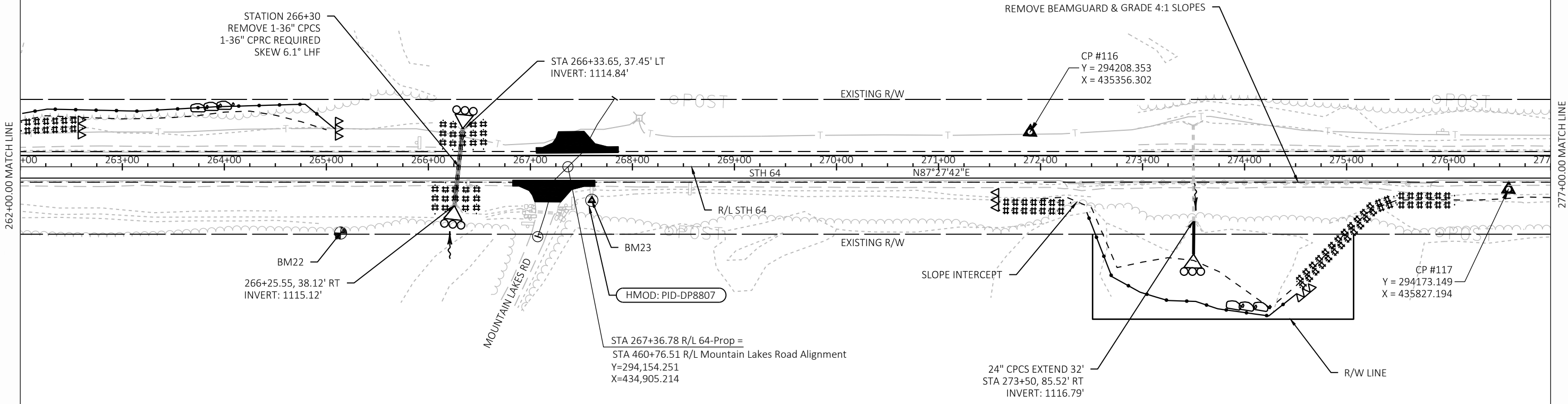


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LEGEND	
#####	EROSION MAT CLASS I, TYPE B
—●—	SILT FENCE
△△△	TEMPORARY DITCH CHECK
▤▤▤	TEMPORARY DITCH CHECK (EROSION BALES)
∞∞∞	CULVERT PIPE DITCH CHECK
⊙	ROCK BAG
→	FLOW ARROW
- - -	SLOPE INTERCEPT

BENCHMARK TABLE			
POINT	ELEVATION	STATION, OFFSET	DESCRIPTION
BM22	1115.23'	265+14, 64'RT	RAILROAD SPIKE IN 18 INCH DECIDUOUS TREE, 51 FEET SOUTH OF SOUTH EDGE OF PAVEMENT OF STH 64, AND 115 FEET SOUTHWEST OF EXISTING SOUTH SIDE OF CULVERT.
BM23	1127.62'	267+60, 33'RT	EXISTING CAP IN CONCRETE (HMOD PID-DP8807), 19 FEET SOUTH OF SOUTH EDGE OF PAVEMENT OF STH 64, AND 25 FEET EAST OF "STOP" SIGN AT SOUTH SIDE OF MOUNTAIN LAKE ROAD.

5



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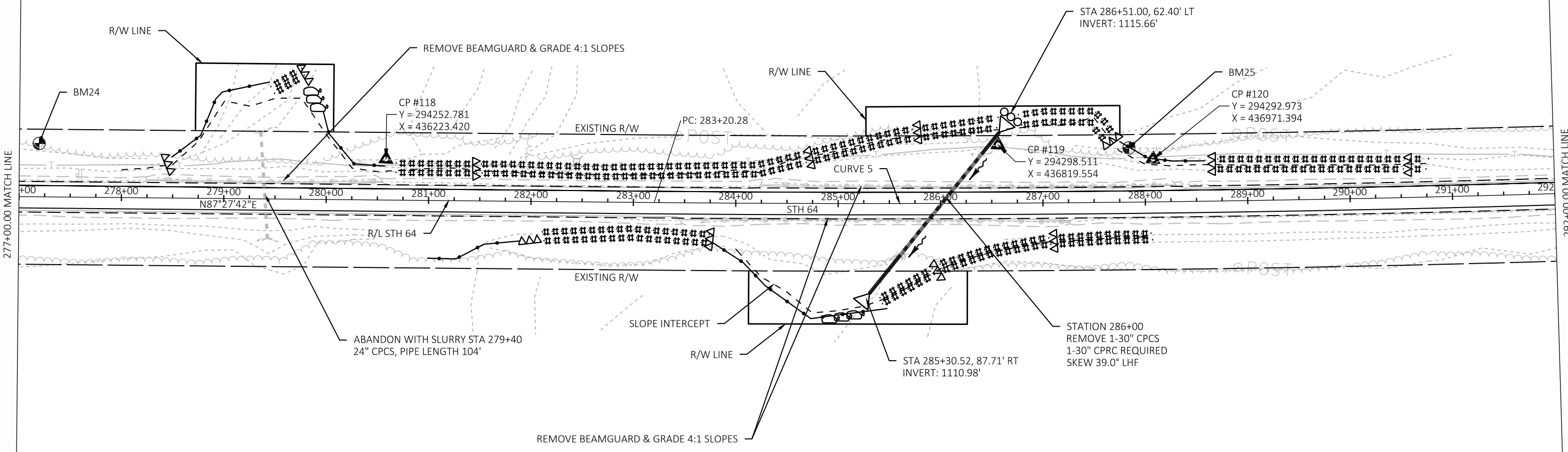
LEGEND	
#####	EROSION MAT CLASS I, TYPE B
—●—	SILT FENCE
△△△	TEMPORARY DITCH CHECK
▤▤▤	TEMPORARY DITCH CHECK (EROSION BALES)
∞∞∞	CULVERT PIPE DITCH CHECK
⊙	ROCK BAG
→	FLOW ARROW
- - -	SLOPE INTERCEPT

CURVE 5
PI STA = 288+21.48
Y = 294246.578
X = 436987.874
DELTA = 2°30'20"
D = 0°15'00"
T = 501.21'
L = 1002.26'
R = 22918.31'
PC STA = 283+20.28
PT STA = 293+22.53

BENCHMARK TABLE			
POINT	ELEVATION	STATION, OFFSET	DESCRIPTION
BM24	1148.10'	277+19, 53'LT	RAILROAD SPIKE IN 12 INCH DECIDUOUS TREE, 38 FEET NORTH OF NORTH EDGE OF PAVEMENT OF STH 64, AND 48 FEET NORTHWEST OF EXISTING "JCT 2314" SIGN AT NORTH SIDE OF STH 64.
BM25	1128.70'	287+85, 52'LT	RAILROAD SPIKE IN 8 INCH DECIDUOUS TREE, 38 FEET NORTH OF NORTH EDGE OF PAVEMENT OF STH 64, 56 FEET NORTHWEST OF EAST END OF NORTH SIDE BEAM GUARD.



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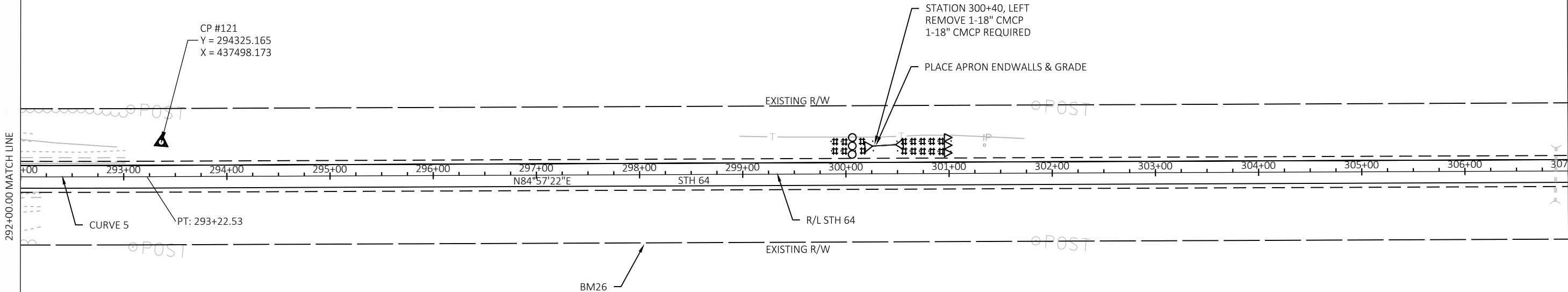
LEGEND	
#####	EROSION MAT CLASS I, TYPE B
—●—	SILT FENCE
△△△	TEMPORARY DITCH CHECK
▤▤▤	TEMPORARY DITCH CHECK (EROSION BALES)
∞∞∞	CULVERT PIPE DITCH CHECK
⊙	ROCK BAG
→	FLOW ARROW
- - -	SLOPE INTERCEPT

CURVE 5
PI STA = 288+21.48
Y = 294246.578
X = 436987.874
DELTA = 2°30'20"
D = 0°15'00"
T = 501.21'
L = 1002.26'
R = 22918.31'
PC STA = 283+20.28
PT STA = 293+22.53

BENCHMARK TABLE			
POINT	ELEVATION	STATION, OFFSET	DESCRIPTION
BM26	1146.04'	298+04, 68'RT	RAILROAD SPIKE IN 18 INCH DECIDUOUS TREE, 54 FEET SOUTH OF SOUTH EDGE STH 64, AND 344 FEET SOUTHWEST OF CAPPED IRON PIPE (COUNTY CONTROL PNT# 55906) ON NORTH SIDE OF STH 64.



5



5

LEGEND

- ##### EROSION MAT CLASS I, TYPE B
- SILT FENCE
- △△△ TEMPORARY DITCH CHECK
- ▣▣ TEMPORARY DITCH CHECK (EROSION BALES)
- ∞ CULVERT PIPE DITCH CHECK
- ⊙ ROCK BAG
- FLOW ARROW
- - - SLOPE INTERCEPT

PROJECT NO: 9140-13-71

HWY: STH 64

COUNTY: OCONTO

PLAN SHEETS

SHEET

68

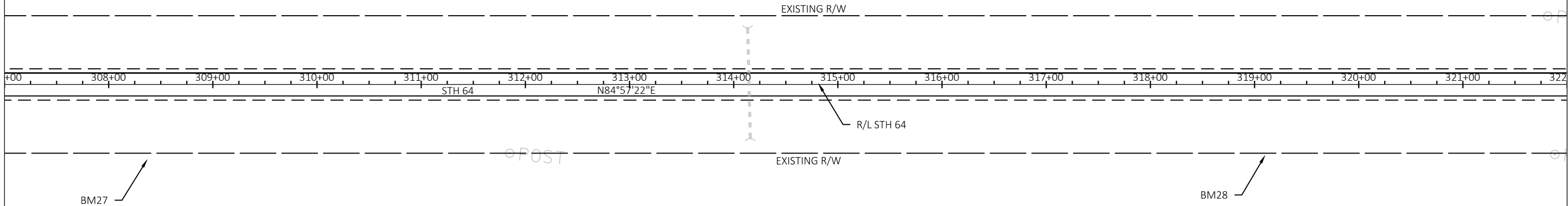
E

BENCHMARK TABLE			
POINT	ELEVATION	STATION, OFFSET	DESCRIPTION
BM27	1136.86'	308+37, 73'RT	RAILROAD SPIKE IN 24 INCH DECIDUOUS TREE, 58 FEET SOUTH OF SOUTH EDGE OF STH 64, AND 155 FEET EAST OF EXISTING CULVERT ON SOUTH SIDE OF STH 64.
BM28	1135.74'	319+10, 69'RT	RAILROAD SPIKE IN 18 INCH DECIDUOUS TREE, 54 FEET SOUTH OF SOUTH EDGE OF PAVEMENT OF STH 64, AND 278 FEET EAST OF RIGHT OF WAY MARKER ON SOUTH SIDE OF STH 64.



5

307+00.00 MATCH LINE



322+00.00 MATCH LINE

5

LEGEND

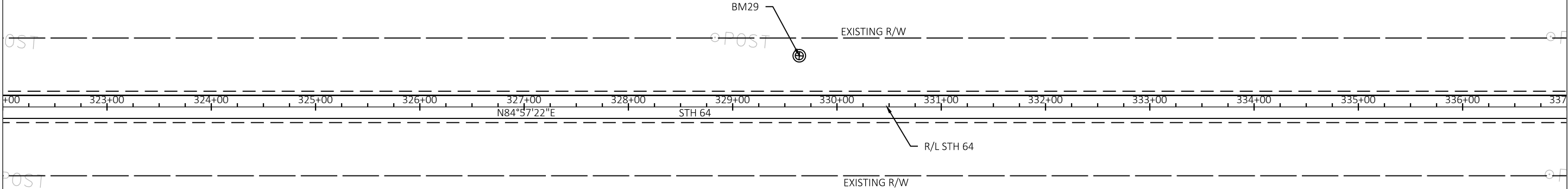
- ##### EROSION MAT CLASS I, TYPE B
- SILT FENCE
- △△△ TEMPORARY DITCH CHECK
- ▣▣ TEMPORARY DITCH CHECK (EROSION BALES)
- ∞∞ CULVERT PIPE DITCH CHECK
- ⊞ ROCK BAG
- FLOW ARROW
- - - SLOPE INTERCEPT

BENCHMARK TABLE			
POINT	ELEVATION	STATION, OFFSET	DESCRIPTION
BM29	1122.31'	329+64, 49'LT	EXISTING SURVEY MONUMENT(SECTION CORNER, SOUTH QUARTER CORNER OF SECTION 32-32-16), 34 FEET NORTH OF NORTH EDGE OF PAVEMENT OF STH 64, AND 198 FEET WEST OF EXISTING PEDESTAL.



5

322+00.00 MATCH LINE



337+00.00 MATCH LINE

5

LEGEND

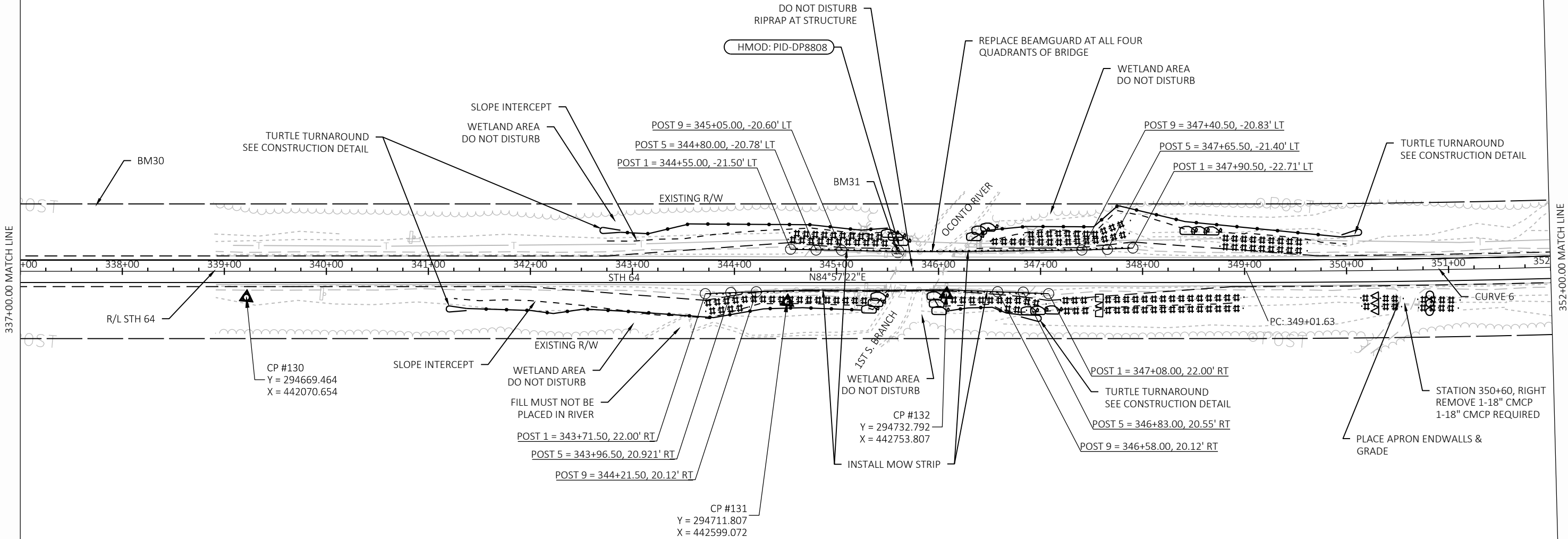
- ##### EROSION MAT CLASS I, TYPE B
- SILT FENCE
- ▲▲ TEMPORARY DITCH CHECK
- ▤ TEMPORARY DITCH CHECK (EROSION BALES)
- ∞ CULVERT PIPE DITCH CHECK
- ⊖ ROCK BAG
- FLOW ARROW
- - - SLOPE INTERCEPT

CURVE 6
PI STA = 354+30.42
Y = 294827.652
X = 443571.379
DELTA = 5°17'03"
D = 0°30'00"
T = 528.79'
L = 1056.83'
R = 11459.16'
PC STA = 349+01.63
PT STA = 359+58.46

BENCHMARK TABLE			
POINT	ELEVATION	STATION, OFFSET	DESCRIPTION
BM30	1082.24'	337+74, 65'LT	RAILROAD SPIKE IN 12 INCH DECIDUOUS TREE, 50 FEET NORTH OF NORTH EDGE OF PAVEMENT OF STH 64, AND 90 FEET EAST OF RIGHT OF WAY MARKER ON NORTH SIDE OF STH 64.
BM31	1066.72'	345+60, 19'LT	EXISTING CAP IN CONCRETE (HMOD PID-DP8808) AT NORTHWEST CORNER OF BRIDGE STRUCTURE OVER FIRST SOUTH BRANCH OF OCONTO RIVER AND STH 64.



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LEGEND	
#####	EROSION MAT CLASS I, TYPE B
—●—	SILT FENCE
△△△	TEMPORARY DITCH CHECK
□□□	TEMPORARY DITCH CHECK (EROSION BALES)
∞	CULVERT PIPE DITCH CHECK
⊙	ROCK BAG
→	FLOW ARROW
- - -	SLOPE INTERCEPT

PROJECT NO: 9140-13-71

HWY: STH 64

COUNTY: OCONTO

PLAN SHEETS

SHEET

71

E

FILE NAME : N:\PDS\C3D\91401300\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050222-PN

PLOT DATE : 10/2/2019 2:50 PM

PLOT BY : BRADLEY, KIMBERLY L PLOT NAME :

PLOT SCALE : 1 IN:100 FT

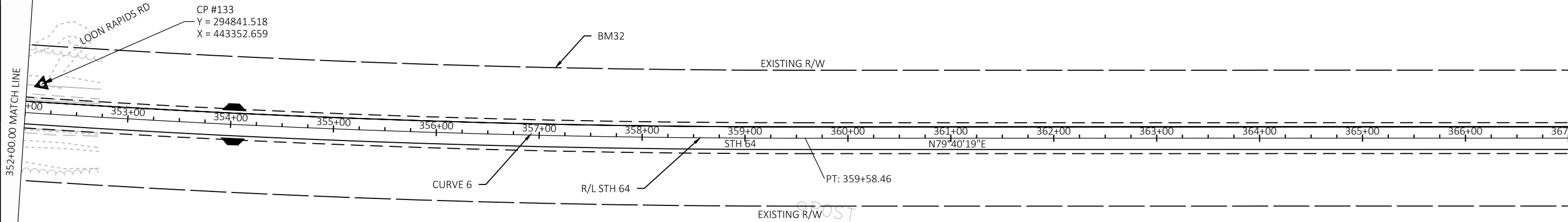
WISDOT/CADS SHEET 44

CURVE 6
PI STA = 354+30.42
Y = 294827.652
X = 443571.379
DELTA = 5°17'03"
D = 0°30'00"
T = 528.79'
L = 1056.83'
R = 11459.16'
PC STA = 349+01.63
PT STA = 359+58.46

BENCHMARK TABLE			
POINT	ELEVATION	STATION, OFFSET	DESCRIPTION
BM32	1097.67'	357+15, 66'LT	RAILROAD SPIKE IN 12 INCH CONIFEROUS TREE, 53 FEET NORTH OF NORTH EDGE OF PAVEMENT OF STH 64, AND 240 FEET WEST OF RIGHT OF WAY MARKER ON NORTH SIDE OF STH 64



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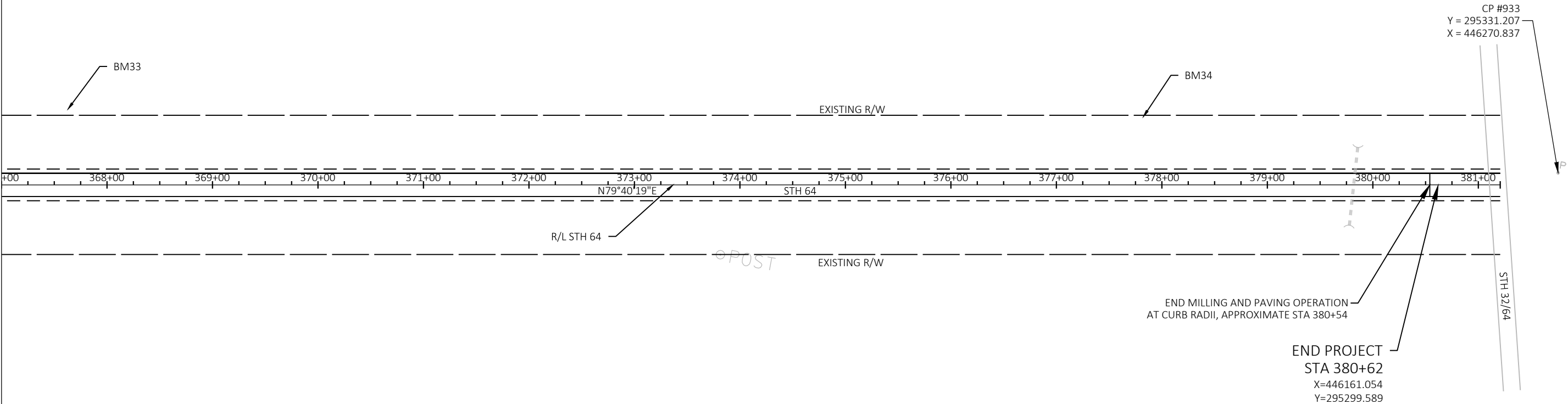
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BENCHMARK TABLE			
POINT	ELEVATION	STATION, OFFSET	DESCRIPTION
BM33	1099.03'	367+63, 72'LT	RAILROAD SPIKE IN 18 INCH CONIFEROUS TREE, 58 FEET NORTH OF NORTH EDGE OF PAVEMENT OF STH 64, AND 127 FEET WEST OF "STOP SIGN AHEAD" SIGN.
BM34	1087.62'	377+82, 64'LT	RAILROAD SPIKE IN 18 INCH OF CONIFEROUS TREE, 51 FEET NORTH OF NORTH EDGE OF PAVEMENT OF STH 64, AND 75 FEET WEST OF EXISTING "LANGLADE-ANTIGO" SIGN ON NORTH SIDE OF STH 64.

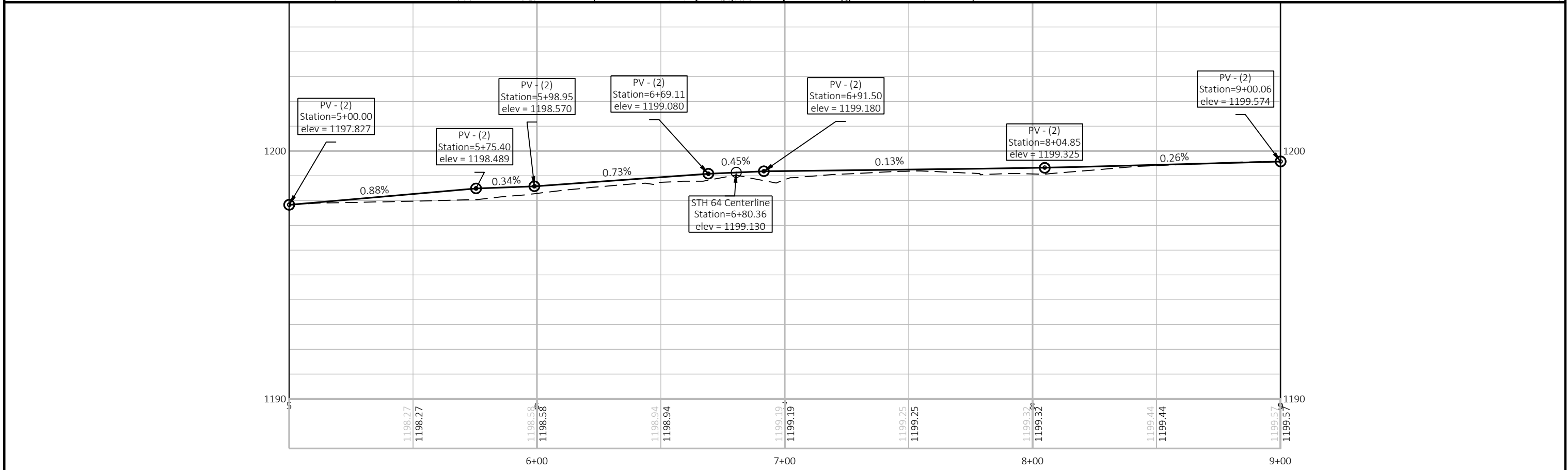
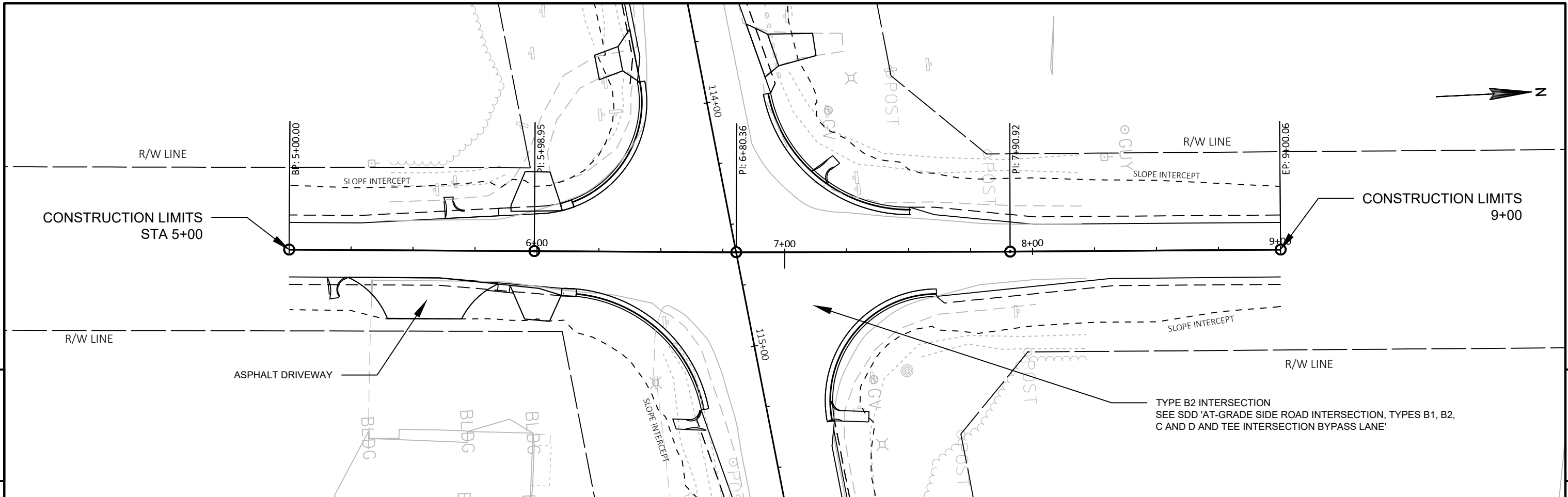


5

367+00.00 MATCH LINE

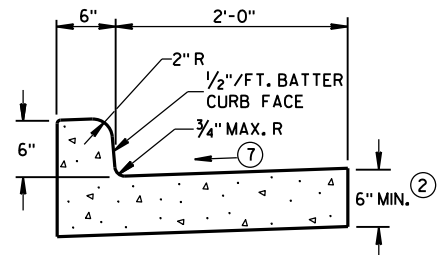


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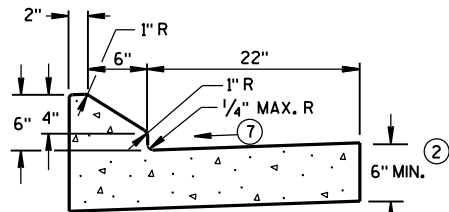


Standard Detail Drawing List

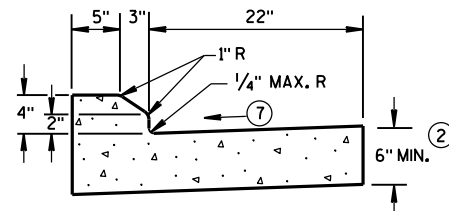
08D01-20A	CONCRETE CURB & GUTTER
08D01-20B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D21-01	DRIVEWAYS WITHOUT CURB & GUTTER
08D22-01	DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
08F07-05	STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED SIDE DRAINS
09A01-13A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
13A08-01	ASPHALTIC RUMBLE STRIPS AT INTERSECTION
13A11-03A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-03B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13C19-01	HMA LONGITUDINAL JOINTS
14B28-03	GUARDRAIL MOW STRIP
14B42-06A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-06B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-06C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-06D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-05A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-07A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-07B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-07C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-19A	LONGITUDINAL MARKING (MAINLINE)
15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-07	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C19-05A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C33-03	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-03A	PAVEMENT MARKING (INTERSECTIONS)
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
15D44-01	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES



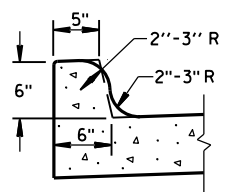
TYPES A^① & D



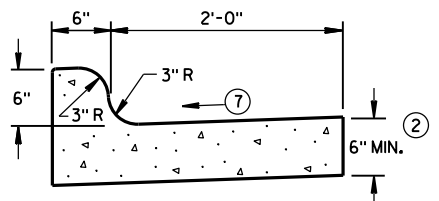
6" SLOPED CURB TYPES G^① & J



4" SLOPED CURB TYPES G^① & J

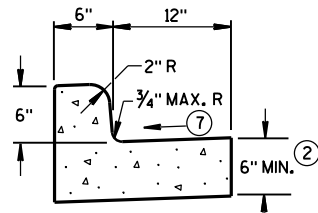


TYPES K^① & L
(OPTIONAL CURB SHAPE)



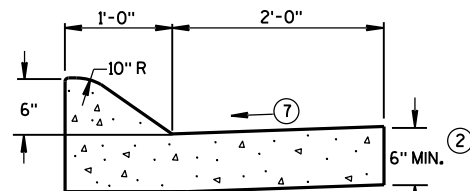
TYPES K^① & L

CONCRETE CURB & GUTTER 30"

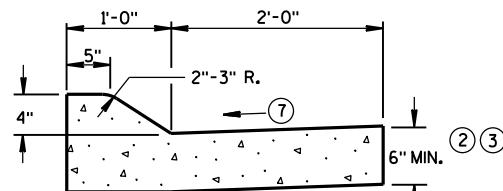


TYPES A^① & D

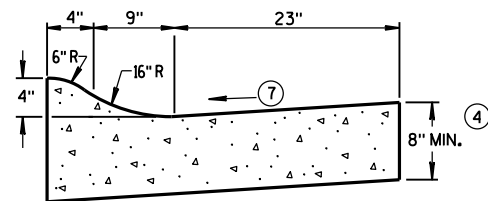
CONCRETE CURB & GUTTER 18"



6" SLOPED CURB TYPES A^① & D

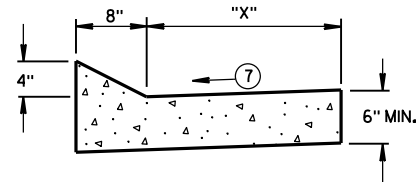


4" SLOPED CURB TYPES A^① & D



4" SLOPED CURB TYPES R^① & T^⑤

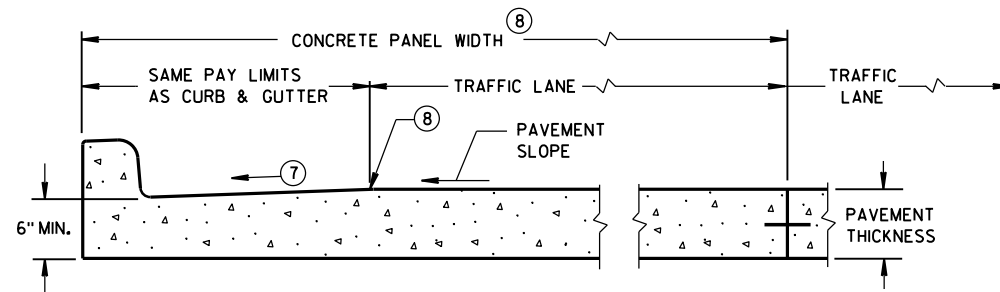
CONCRETE CURB & GUTTER 36"



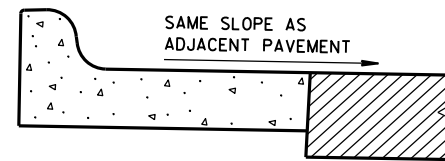
TYPES TBT & TBTT^①

CONCRETE CURB & GUTTER

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



PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER



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

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS 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 & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

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

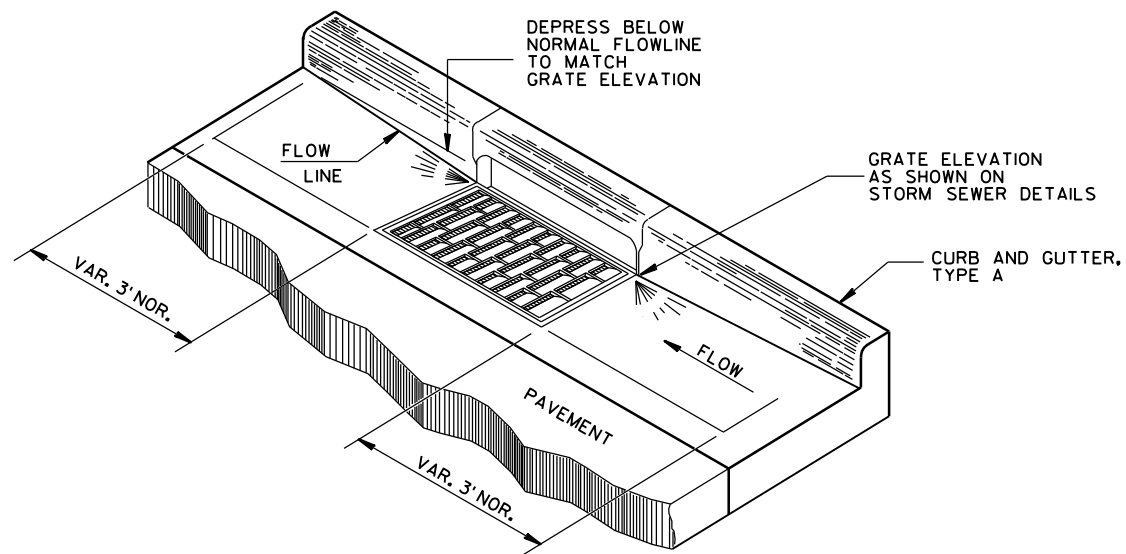
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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

* BIKE LANE IS NOT SHOWN.

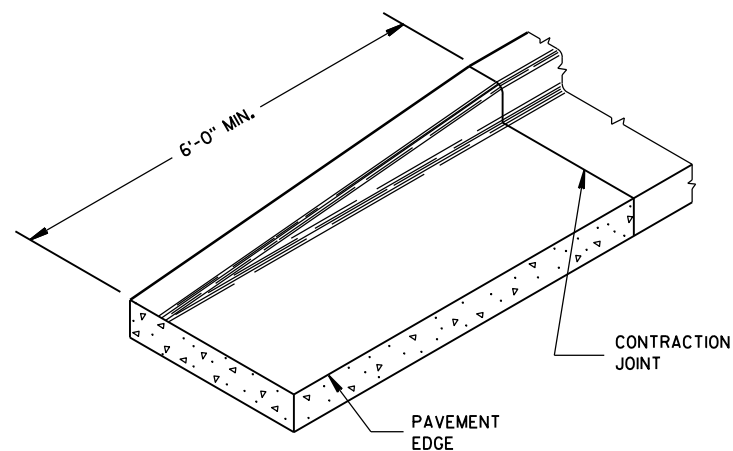
CONCRETE CURB & GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

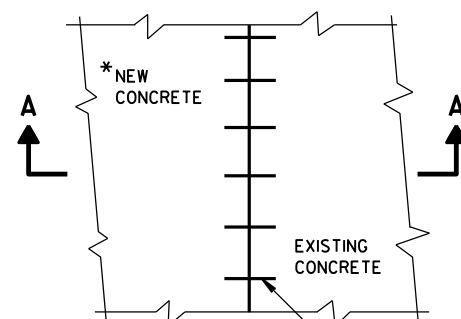


DETAIL OF CURB AND GUTTER AT INLETS

(TYPE H INLET COVER SHOWN)

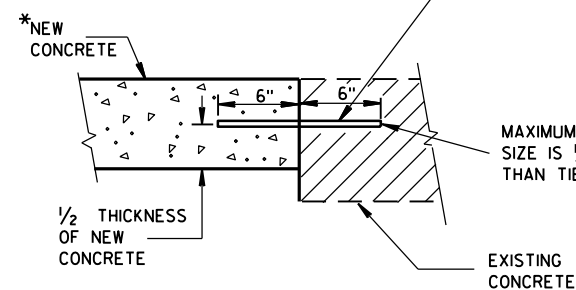


END SECTION CURB & GUTTER



PLAN VIEW

*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.



**SECTION A-A
TIE BARS DRILLED
INTO EXISTING PAVEMENT**

NO. 6 TIE BARS SPACED 2'-6" C-C, INSTALLED PERPENDICULAR TO THE LONGITUDINAL JOINT.

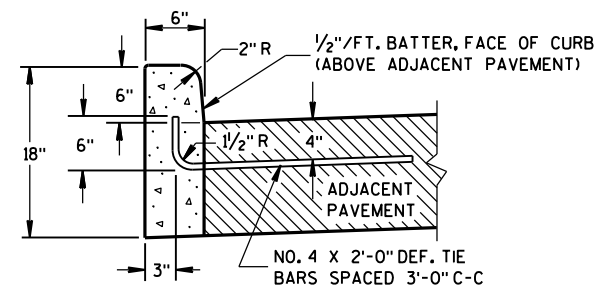
GENERAL NOTES

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

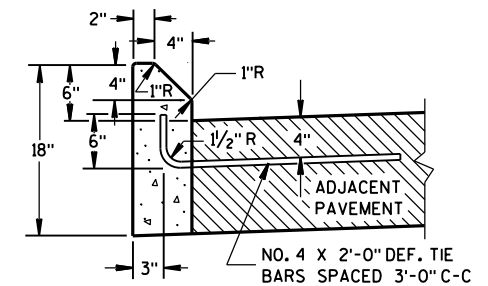
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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 GUTTER 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 8D18 AND SDD 8D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

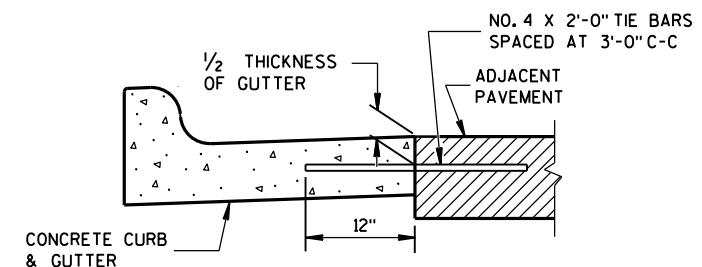


TYPES A^① & D

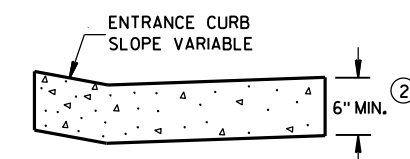


TYPES G^① & J

CONCRETE CURB



TYPICAL TIE BAR LOCATION^①



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

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June, 2017

DATE

FHWA

/S/ Rodney Taylor

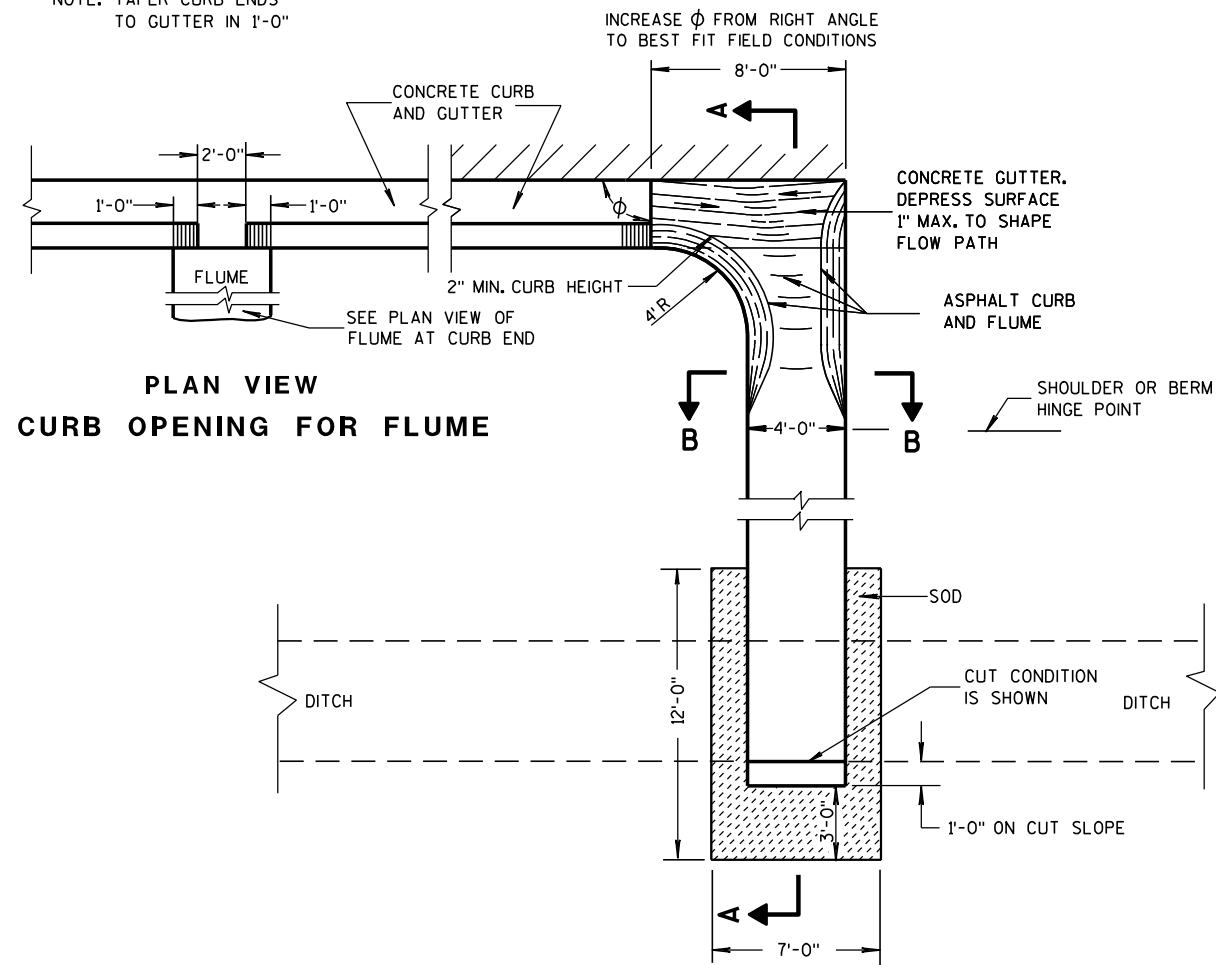
ROADWAY STANDARDS 77

UNIT SUPERVISOR

ENT

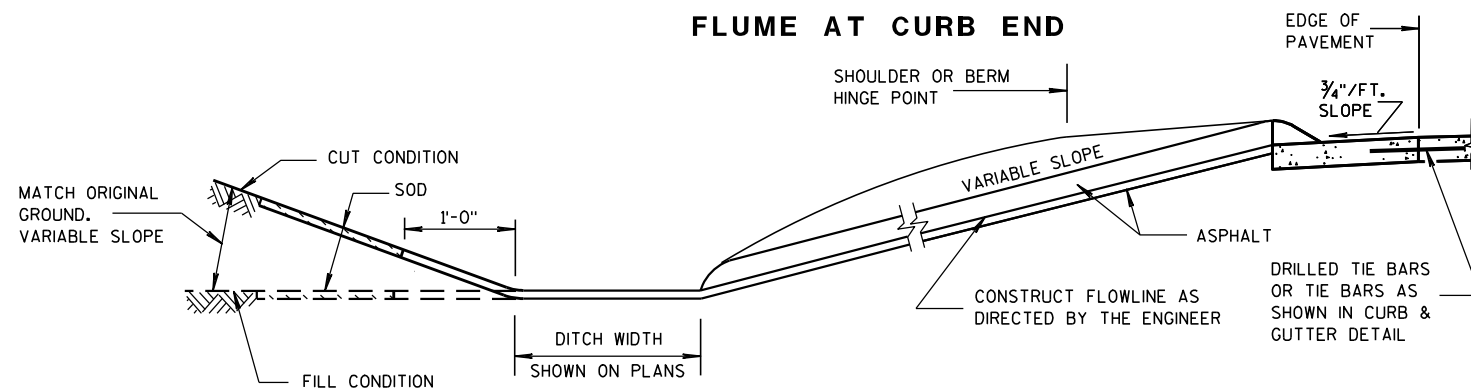
ASPHALTIC FLUME

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

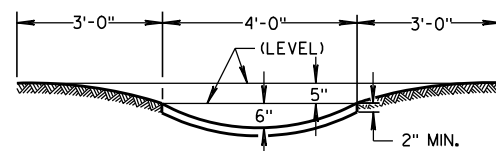


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

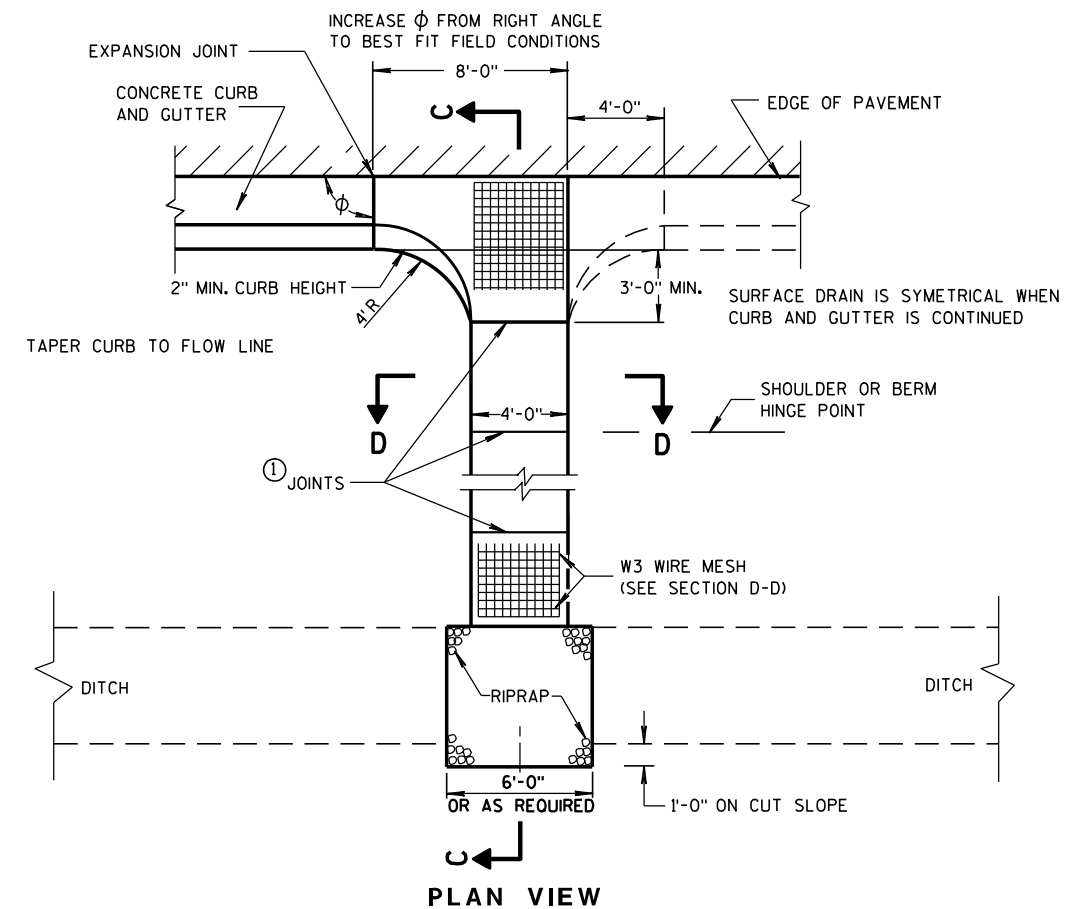
GENERAL NOTES

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

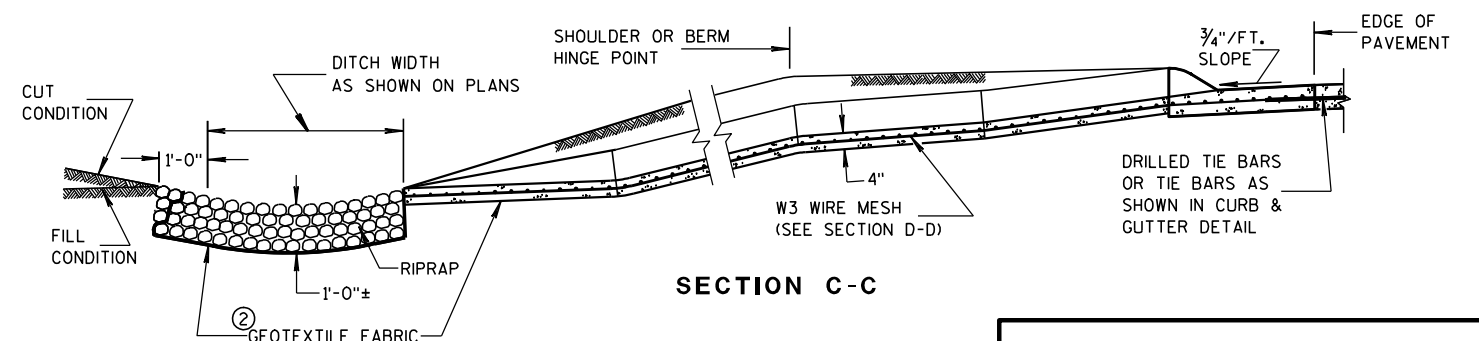
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

- ① JOINTS SHALL BE 1/8 TO 1/4 INCH WIDE BY 1 1/2 INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
- ② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
- ③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

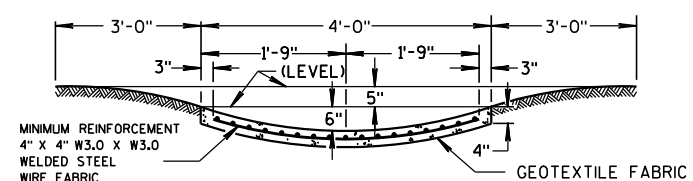
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9-4-08

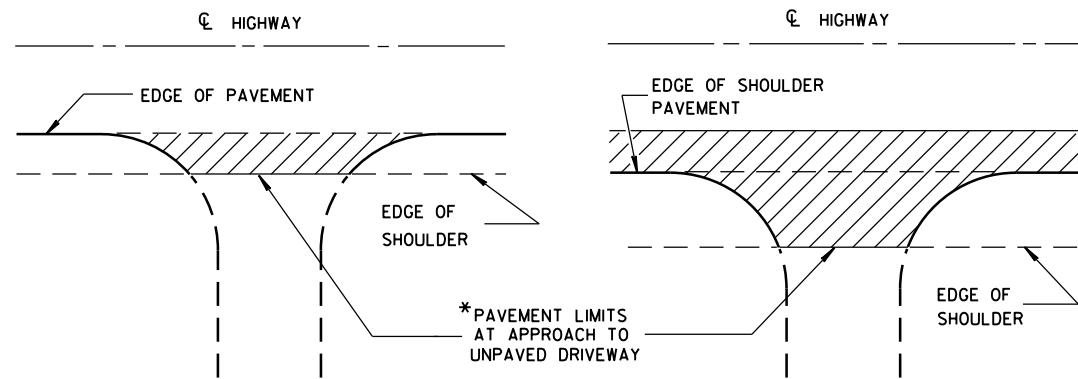
DATE

/S/ Jerry H. Zapp

ROADWAY STANDARDS 78

ENGINEER

FHWA

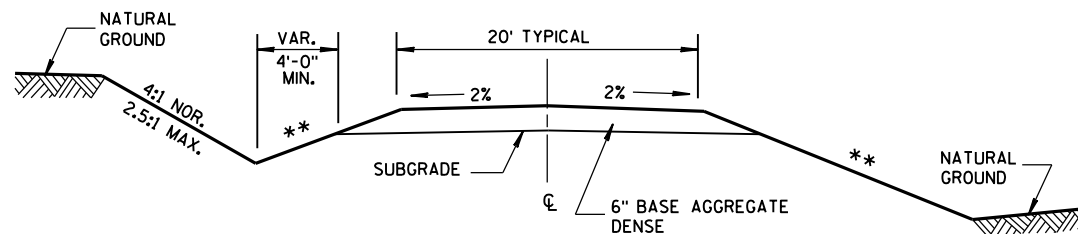


*WHERE DRIVEWAY IS PAVED, APPROACH PAVEMENT SHOULD BE EXTENDED TO MATCH DRIVEWAY PAVEMENT.

PLAN VIEW
(UNPAVED SHOULDER ON HIGHWAY)

PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

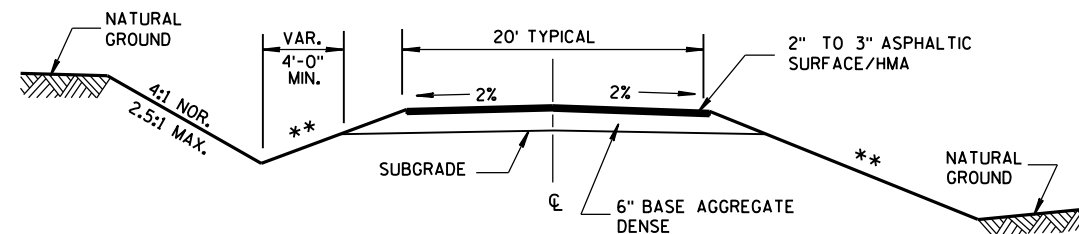
RURAL DRIVEWAY INTERSECTION DETAIL
(NO CURB & GUTTER OR SIDEWALK)



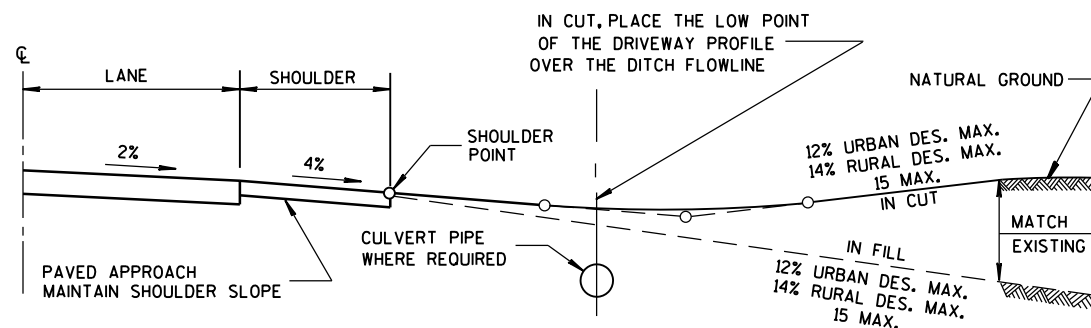
**TYPICAL CROSS SECTION FOR
PRIVATE DRIVE OR FIELD ENTRANCE
AGGREGATE SURFACE**

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

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

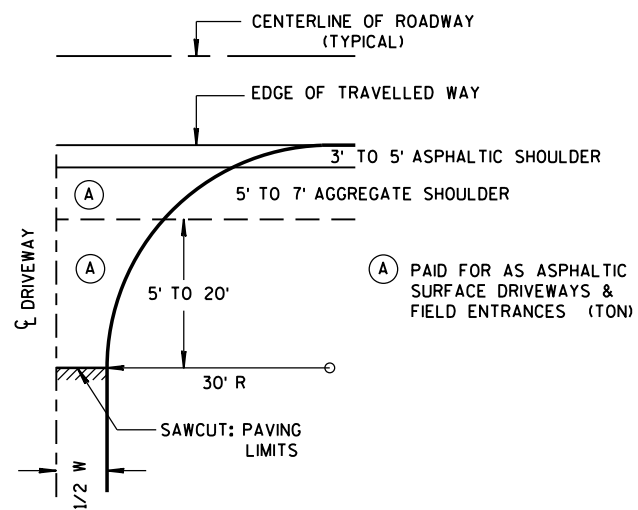


**TYPICAL CROSS SECTION FOR
PRIVATE DRIVE OR FIELD ENTRANCE
ASPHALTIC SURFACE**

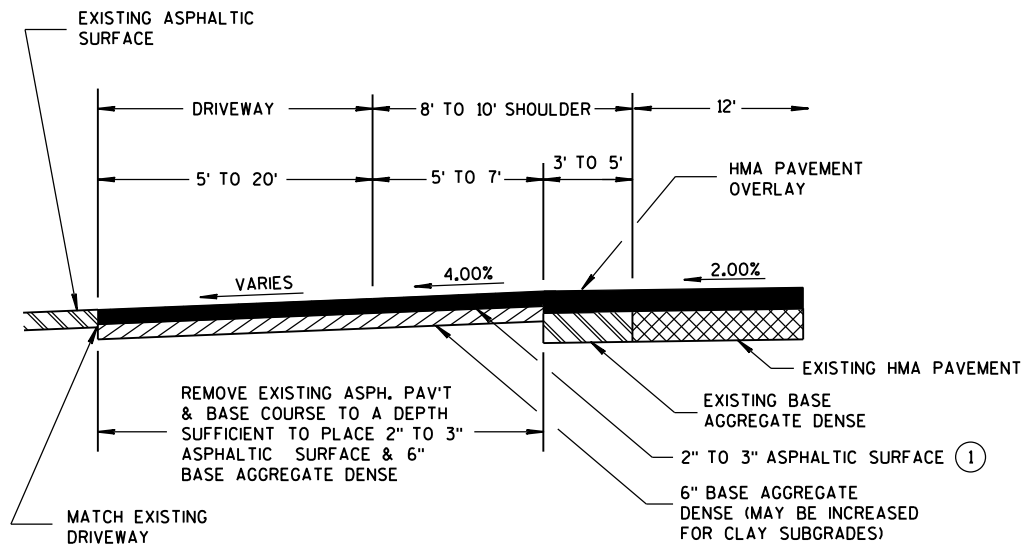


TYPICAL DRIVEWAY PROFILES

DRIVEWAYS WITHOUT CURB & GUTTER			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
APPROVED December, 2016	/S/ Rodney Taylor		
DATE	ROADWAY STANDARDS	79	ENT
FHWA	UNIT SUPERV		

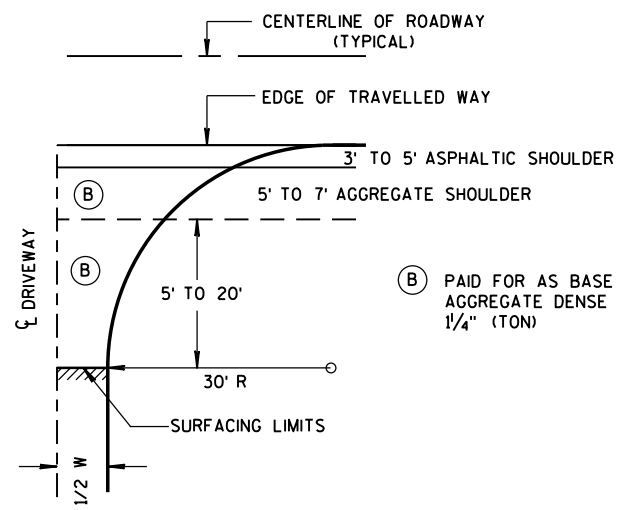


PLAN VIEW
HALF SECTION

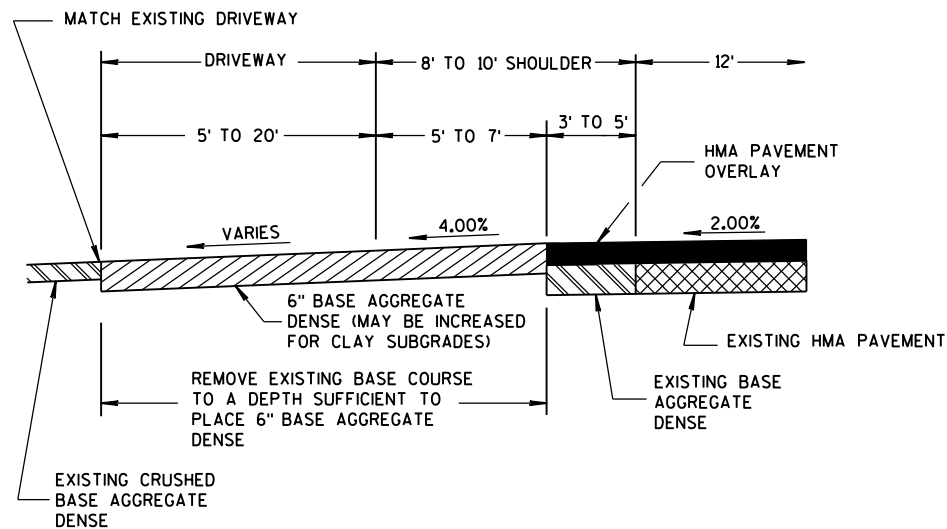


PROFILE VIEW
RURAL ENTRANCE
WITH ASPHALTIC SURFACE
RESURFACING PROJECTS

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



PLAN VIEW
HALF SECTION



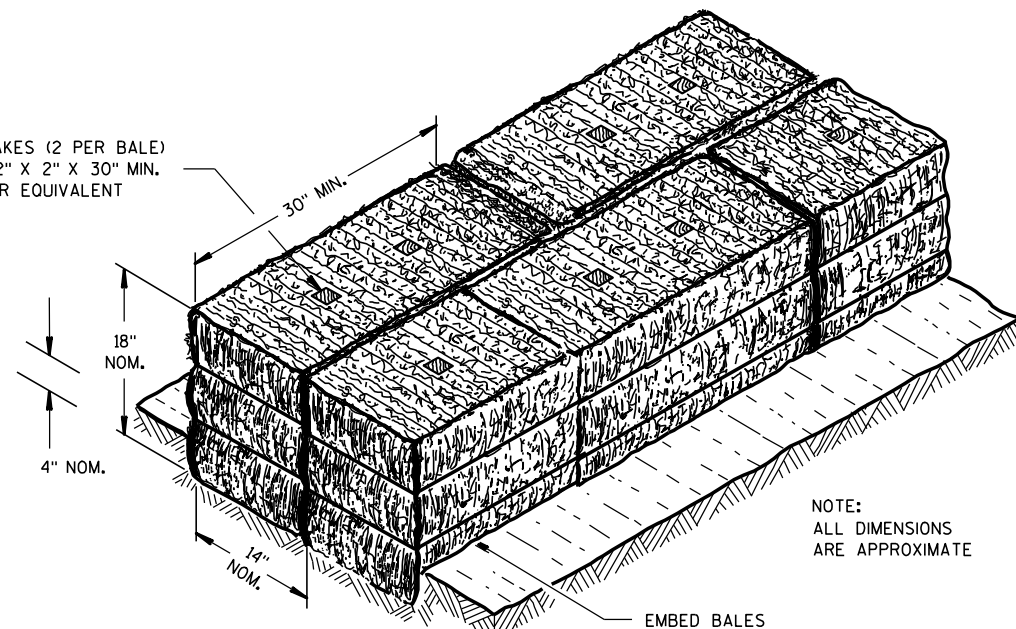
PROFILE VIEW
RURAL ENTRANCE
WITH AGGREGATE SURFACE
6" BASE AGGREGATE DENSE
RESURFACING PROJECTS

GENERAL NOTES

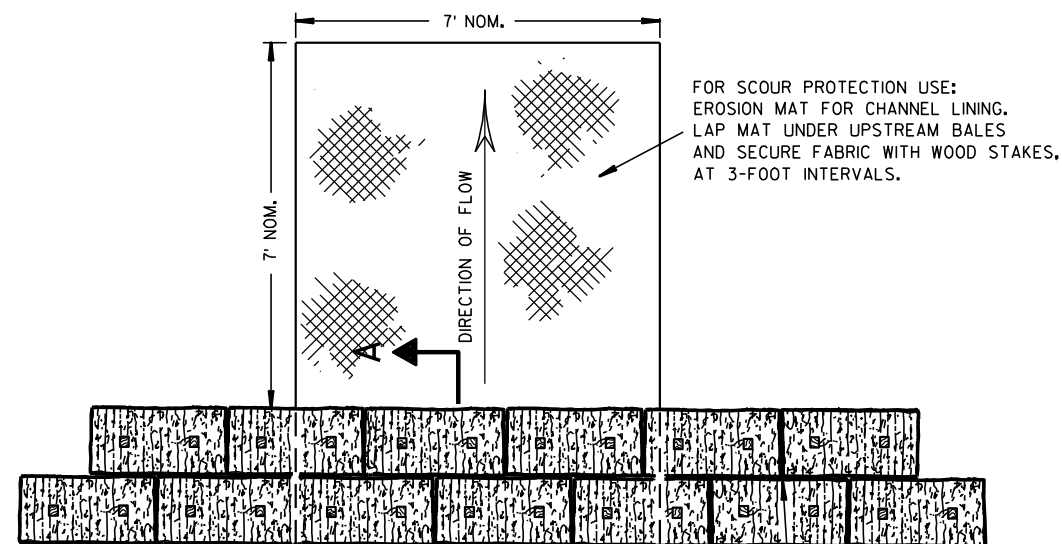
- ① DESIGN WILL DETERMINE FINAL DRIVEWAY ASPHALTIC THICKNESS BASED ON TYPE OF USAGE AND LOADINGS.

DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
APPROVED	/S/ Rodney Taylor		
December, 2016	DATE	ROADWAY STANDARDS	80 ENT
FHWA	UNIT SUPERV		

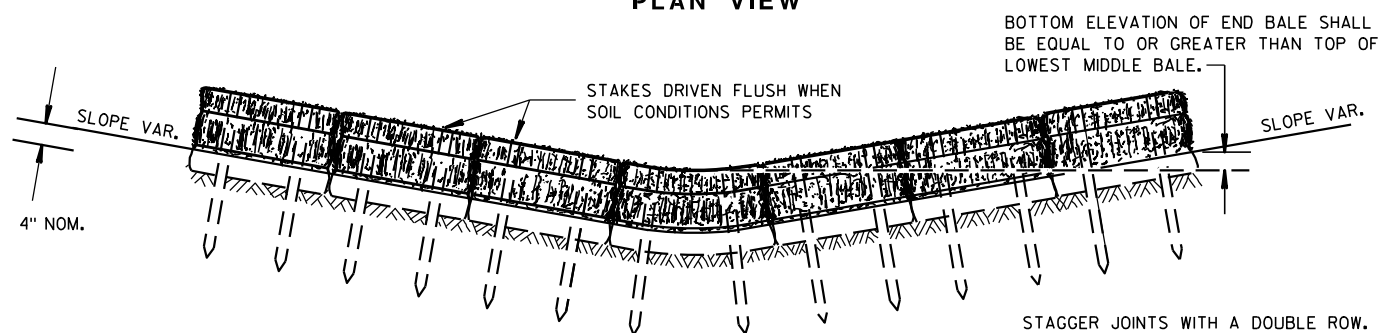
WOOD STAKES (2 PER BALE)
NOMINAL 2" X 2" X 30" MIN.
LENGTH OR EQUIVALENT



SECTION A-A



PLAN VIEW



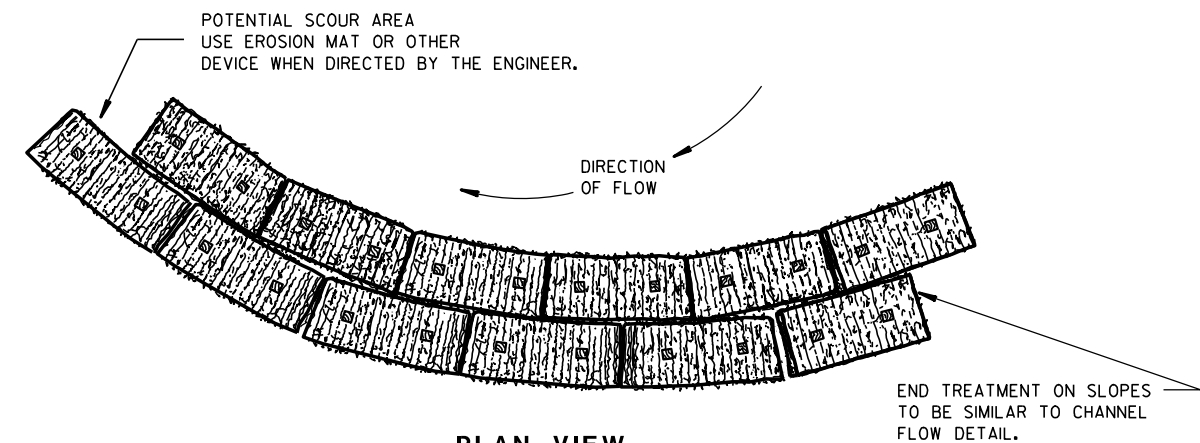
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

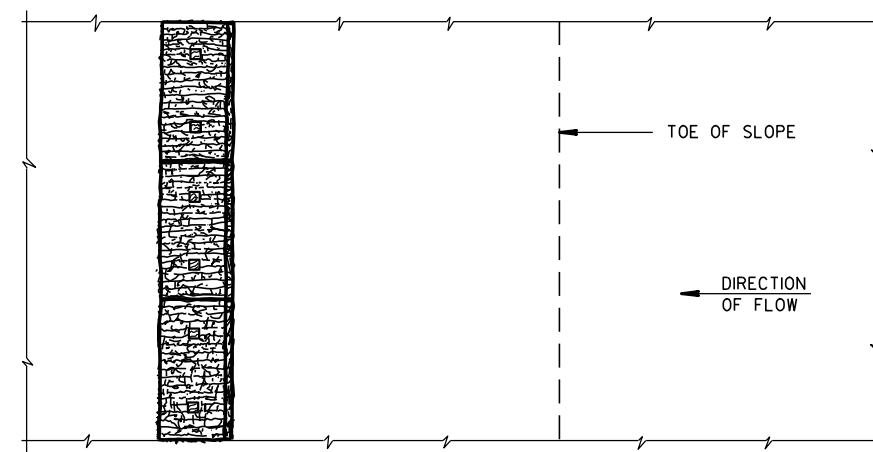
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

- 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.

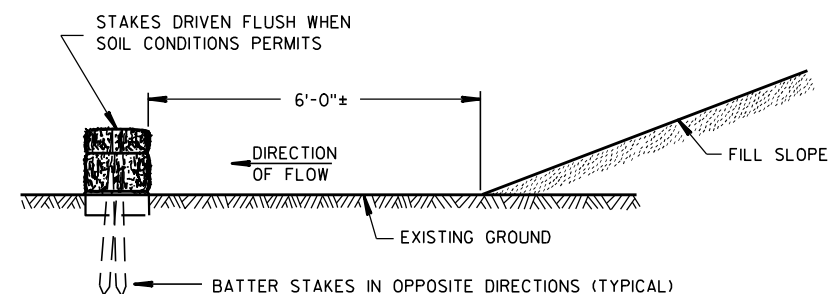


PLAN VIEW

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

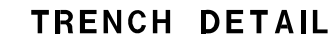
6/04/02
DATE

/S/ Beth Conn-----
CHIEF ROADWAY DEVELOPER 81 ENGINEER

FHWA



- 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 1½" X 1½" 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.

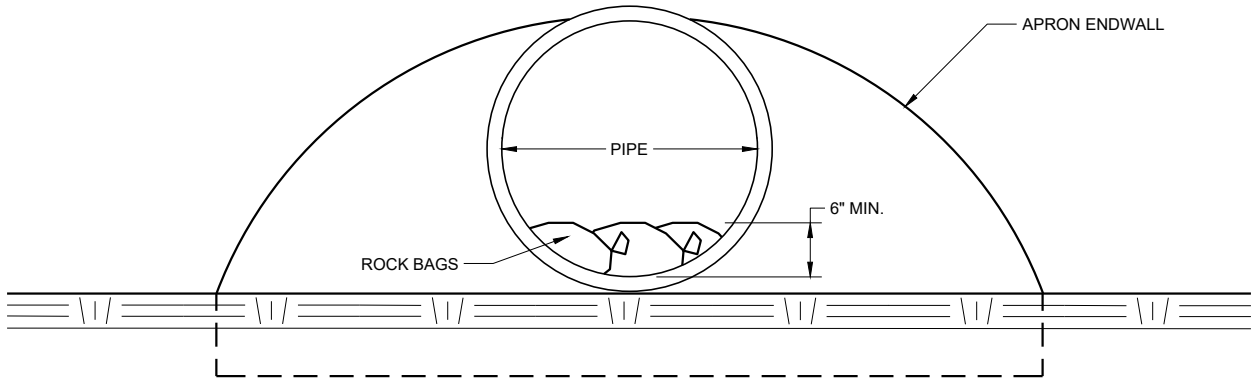


SILT FENCE

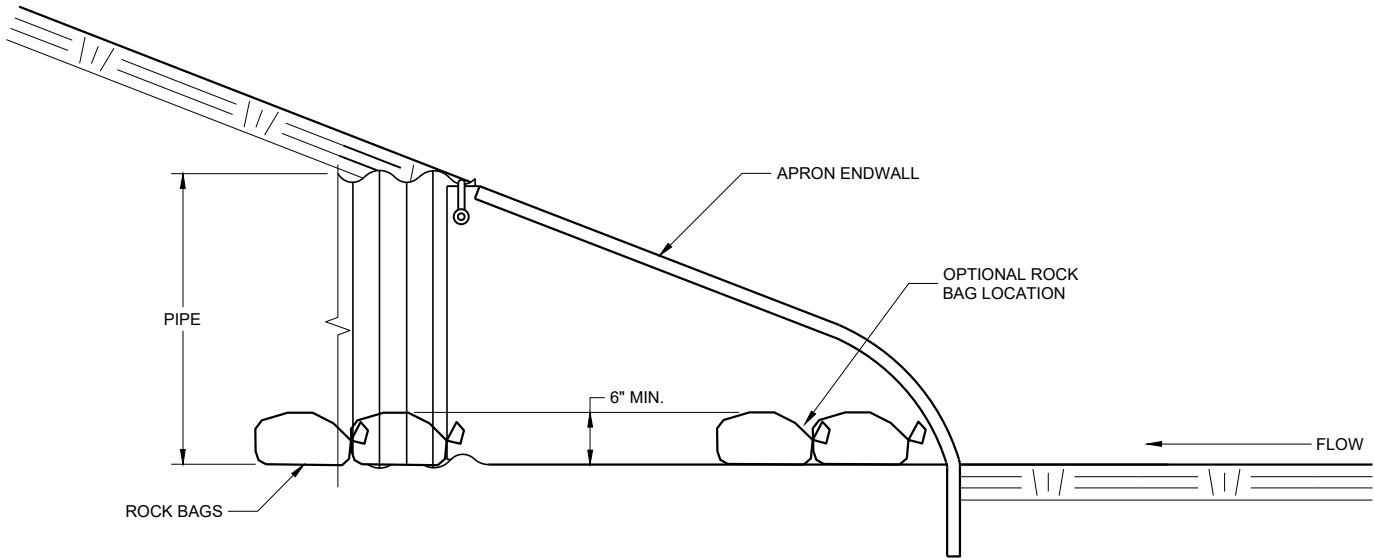
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-29-05
DATE /S/ Beth Cannata
CHIEF ROADWAY DEVELOP 82 INEER

FHWA



END VIEW



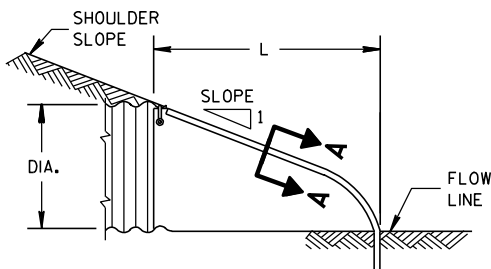
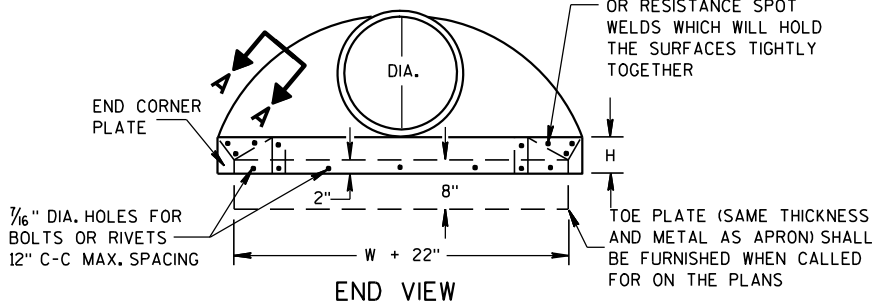
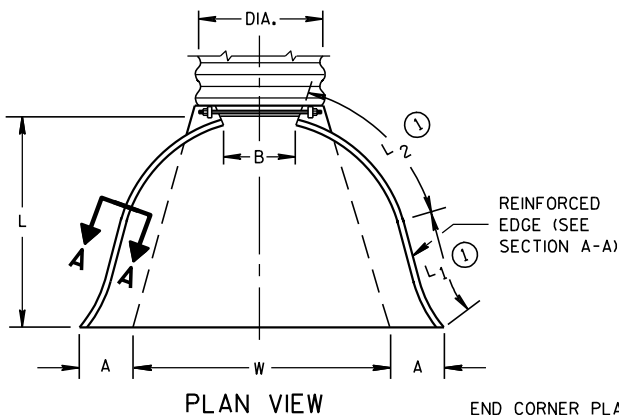
SIDE VIEW

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	83

METAL APRON ENDWALLS												
PIPE DIA. (IN.)	MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE		BODY
	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")			
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	.109x	.105x	18	33	12	87	—	—	114	2 to 1		3 Pc.
66	.109x	.105x	18	36	12	87	—	—	120	2 to 1		3 Pc.
72	.109x	.105x	18	39	12	87	—	—	126	2 to 1		3 Pc.
78	.109x	.105x	18	42	12	87	—	—	132	1 1/2 to 1		3 Pc.
84	.109x	.105x	18	45	12	87	—	—	138	1 1/2 to 1		3 Pc.
90	.109x	.105x	18	37	12	87	—	—	144	1 1/2 to 1		3 Pc.
96	.109x	.105x	18	35	12	87	—	—	150	1 1/2 to 1		3 Pc.

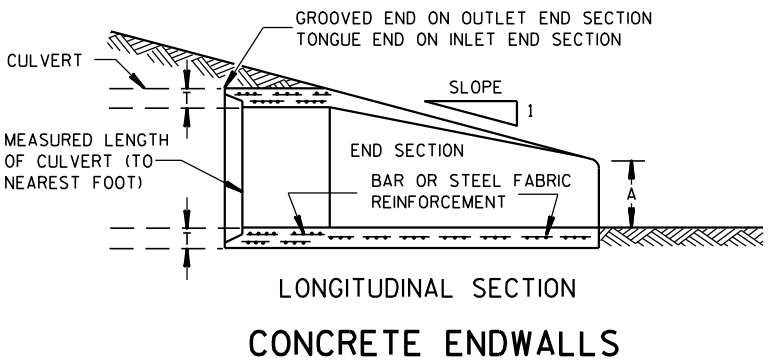
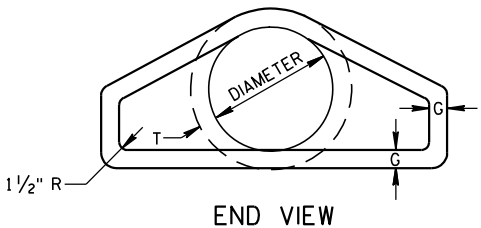
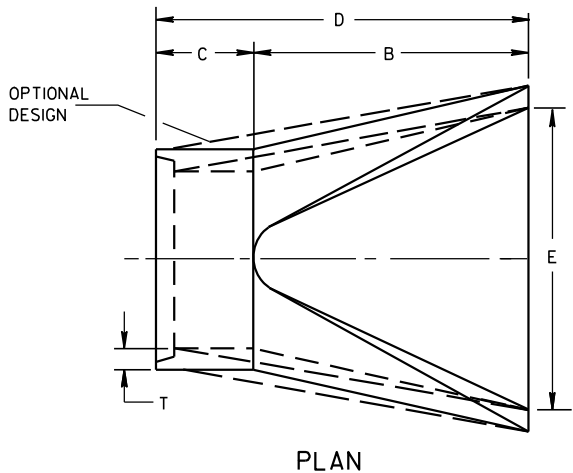
* EXCEPT CENTER PANEL
SEE GENERAL NOTES



SIDE ELEVATION
METAL ENDWALLS

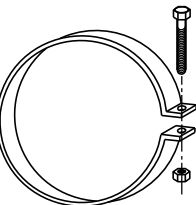
REINFORCED CONCRETE APRON ENDWALLS												
PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE				
	T	A	B	C	D	E	G					
12	2	4	24	48 7/8	72 7/8	24	2	3 to 1				
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1				
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1				
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1				
24	3	9 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 1/2 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

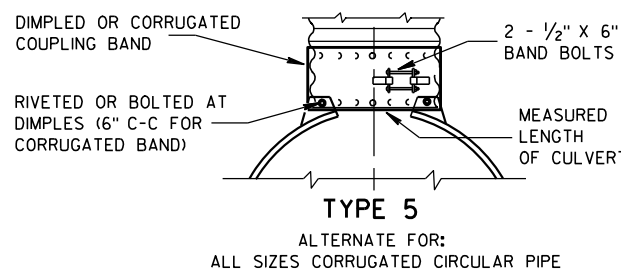
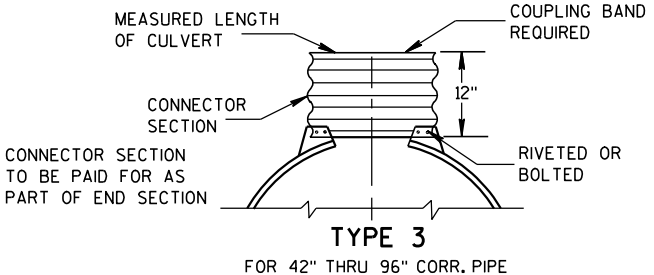
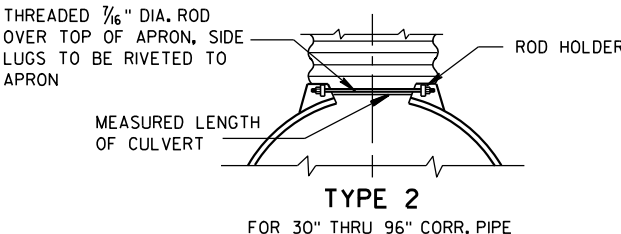
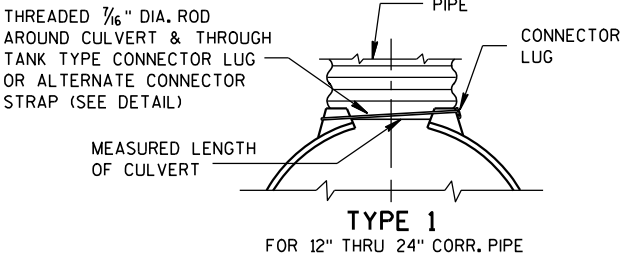


LONGITUDINAL SECTION
CONCRETE ENDWALLS

1" WIDE, 12 GA. (0.109" THICK) GALVANIZED STRAP WITH STANDARD 6" X 1/2" BAND BOLT AND NUT



ALTERNATE FOR TYPE 1 CONNECTION
END SECTION CONNECTOR STRAP



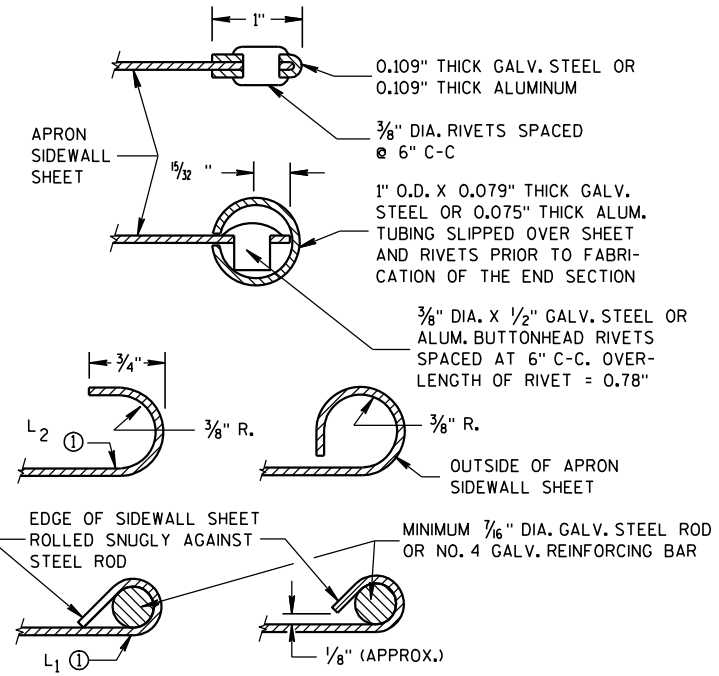
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

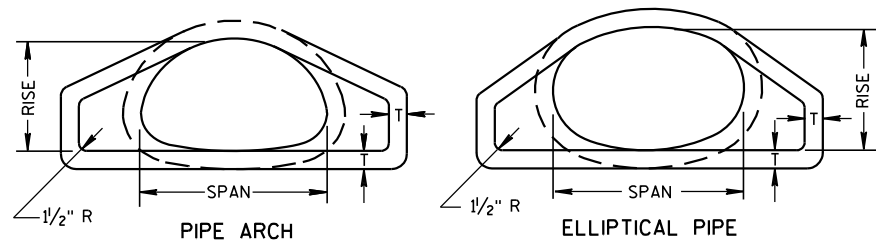
ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT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

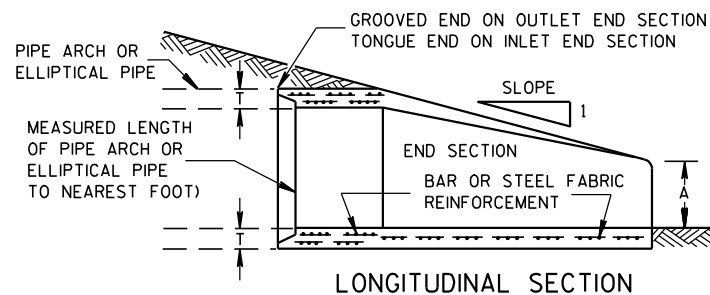
WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

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. Rhinehart CHIEF ROADWAY DEVELOP 84	NEER	
FHWA			

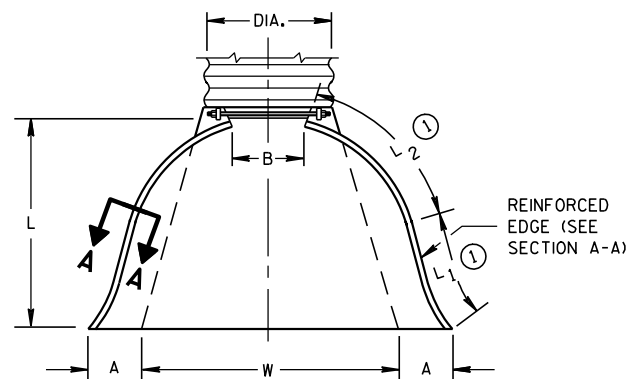


END VIEW



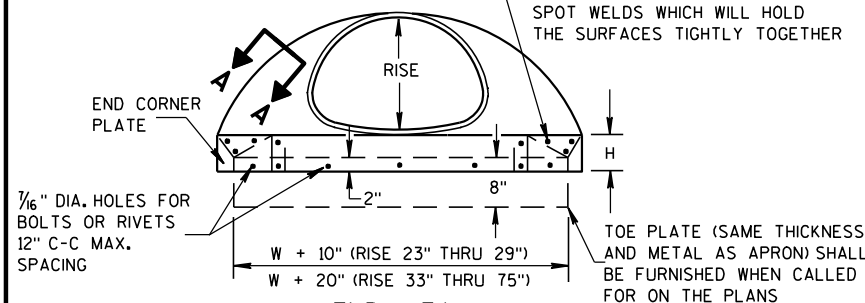
LONGITUDINAL SECTION

CONCRETE ENDWALLS

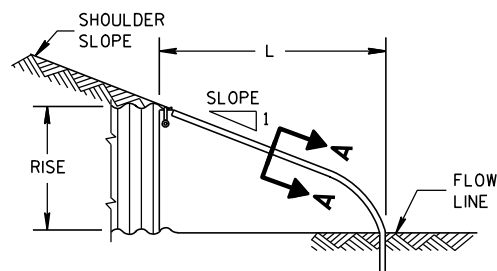
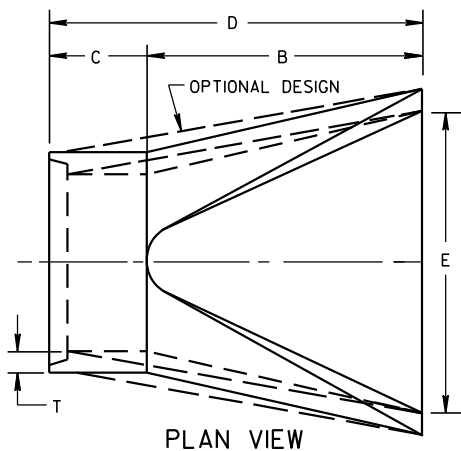


PLAN VIEW

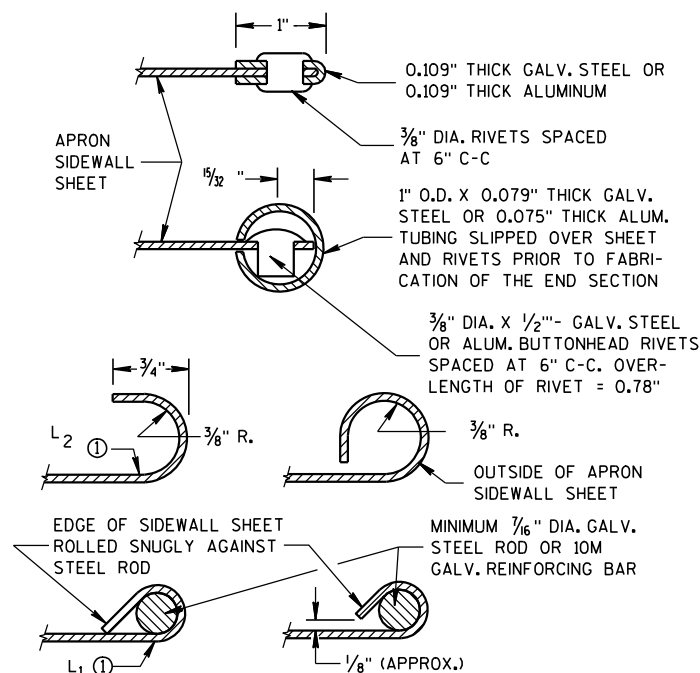
END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER



END VIEW

SIDE ELEVATION
METAL ENDWALLS

PLAN VIEW

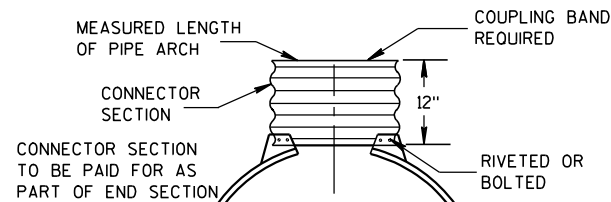


SECTION A-A



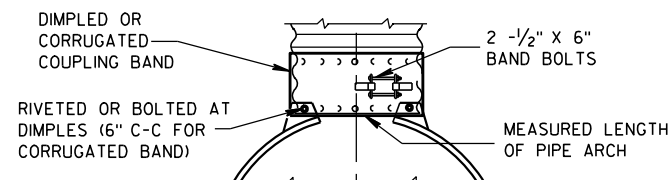
TYPE 2

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



TYPE 3

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



TYPE 5

ALTERNATE FOR:
ALL SIZES CORRUGATED PIPE ARCHESNOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL,
AND CORRUGATED BAND FITS INSIDE ENDWALL.

CONNECTION DETAILS

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

EQUIV. DIA. (Inches)	(Inches)		MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	SPAN	RISE	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")		
					(±1")	(MAX.)	(±1")	(±1 1/2")	①	①	(±2")		
15	17	13	.064	.060	7	9	6	19	14	16	30	2 1/2 to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19 3/8	36	2 1/2 to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21 3/4	42	2 1/2 to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27 1/2	48	2 1/2 to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37 5/8	60	2 1/2 to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45 3/8	75	2 1/2 to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54 3/4	85	2 1/2 to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	2 1/2 to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	72 3/4	102	2 1/4 to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82 1/4	114	2 1/4 to 1	3 Pc.
66	77	52	.109*	.105*	18	36	12	77	—	—	126	2 to 1	3 Pc.
72	83	57	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.

3" X 1" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches)		MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	SPAN	RISE	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")		
					(±1")	(MAX.)	(±1")	(±1 1/2")	①	①	(±2")		
48	53	41	.109	.105	18	26	12	63	24	72 3/4	90	2 1/2 to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82 1/4	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	1 1/2 to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1 1/2 to 1	3 Pc.
72	81	59	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.
78	87	63	.109*	.105*	22	38	12	77	—	—	148	1 1/2 to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1 1/2 to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1 1/2 to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1 1/2 to 1	3 Pc.

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL
SEE GENERAL NOTES

REINFORCED CONCRETE PIPE ARCH

EQUIV. DIA. (Inches)	DIMENSIONS (Inches)								APPROX. SLOPE
	** SPAN	** RISE	T	A	B	C	D	E	
24	29	18	3	8 1/2	39	33	72	48	3 to 1
30	36	22	3 1/2	9 1/2	50	46	96	60	3 to 1
36	44	27	4	11 1/8	60	36	96	72	3 to 1
42	51	31	4 1/2	15 1/16	60	36	96	78	3 to 1
48	58	36	5	21	60	36	96	84	3 to 1
54	65	40	5 1/2	25 1/2	60	36	96	90	3 to 1
60	73	45	6	31	60	36	96	96	3 to 1
72	88	54	7	31	60	39	99	120	2 to 1
84	102	62	8	28 1/2	83	19	102	144	2 to 1

REINFORCED CONCRETE ELLIPTICAL PIPE

EQUIV. DIA. (Inches)	DIMENSIONS (Inches)								APPROX. SLOPE
	** SPAN	** RISE	T	A	B	C	D	E	
24	30	19	3 1/4	8 1/2	39	33	72	48	3 to 1
30	38	24	3 3/4	9 1/2	54	18	72	60	3 to 1
36	45	29	4 1/2	11 1/8	60	24	84	72	2 1/2 to 1
42	53	34	5	15 1/4	60	36	96	78	2 1/2 to 1
48	60	38	5 1/2	21	60	36	96	84	2 1/2 to 1
54	68	43	6	25 1/2	60	36	96	90	2 1/2 to 1
60	76	48	6 1/2	30	60	36	96	96	2 1/2 to 1

**NOMINAL SIZE

GENERAL NOTES

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

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

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

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

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

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

APRON ENDWALLS FOR
PIPE ARCH AND
ELLIPTICAL PIPESTATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/94

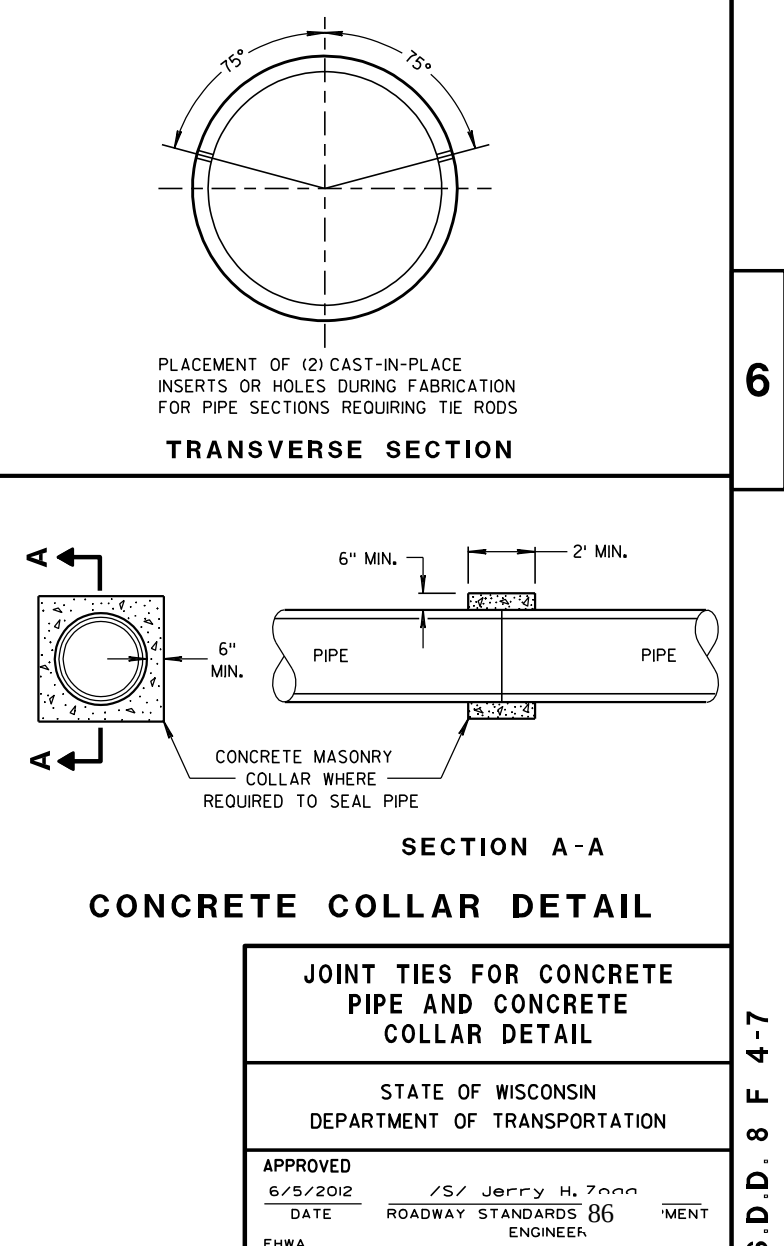
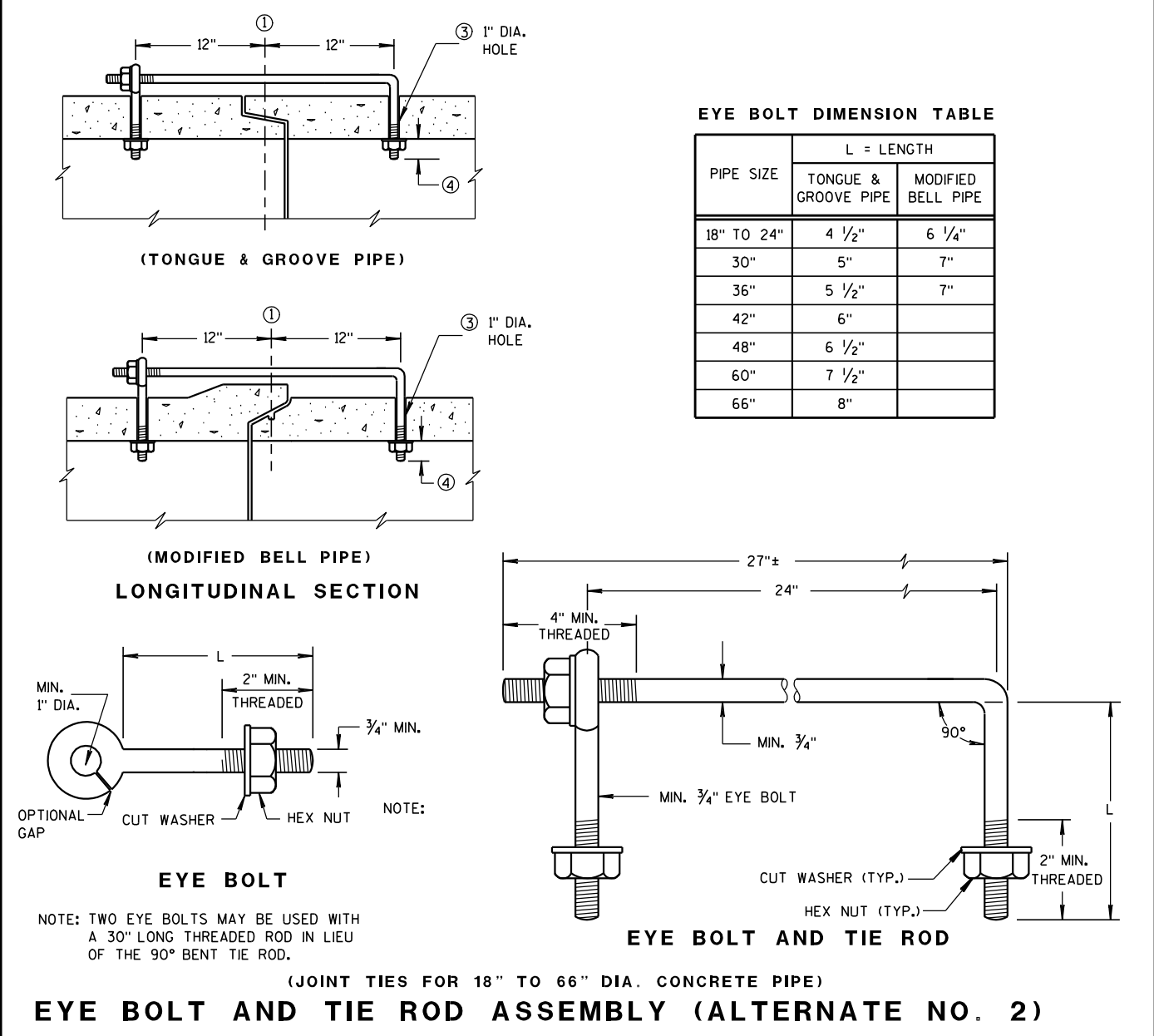
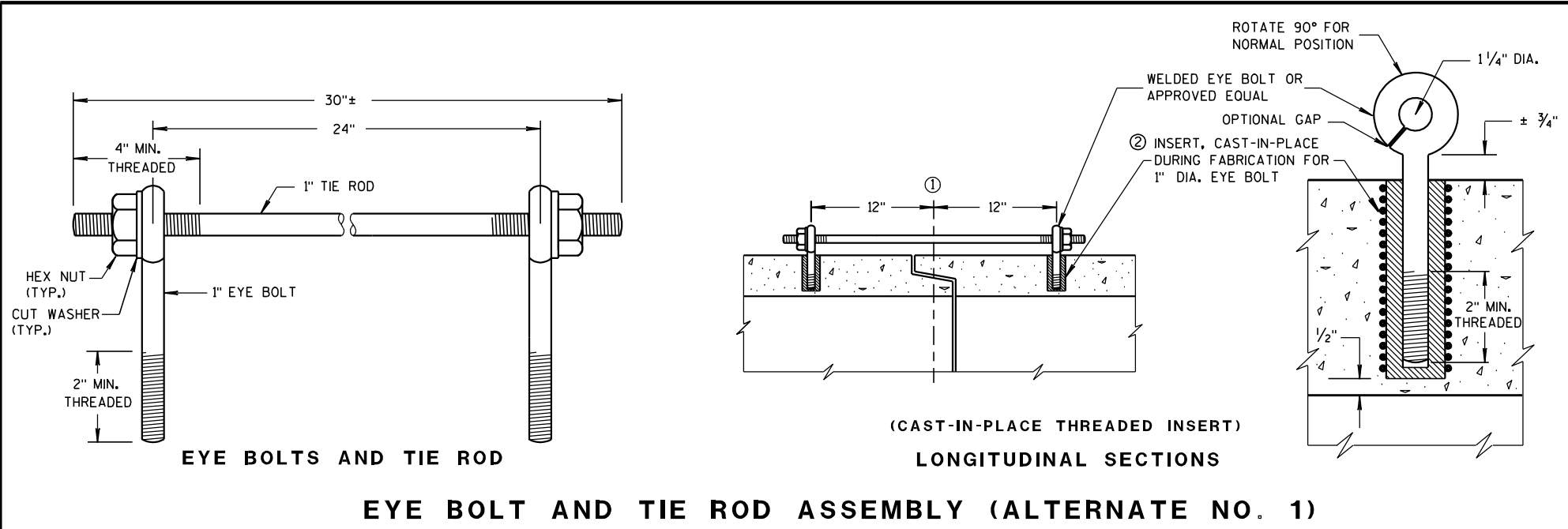
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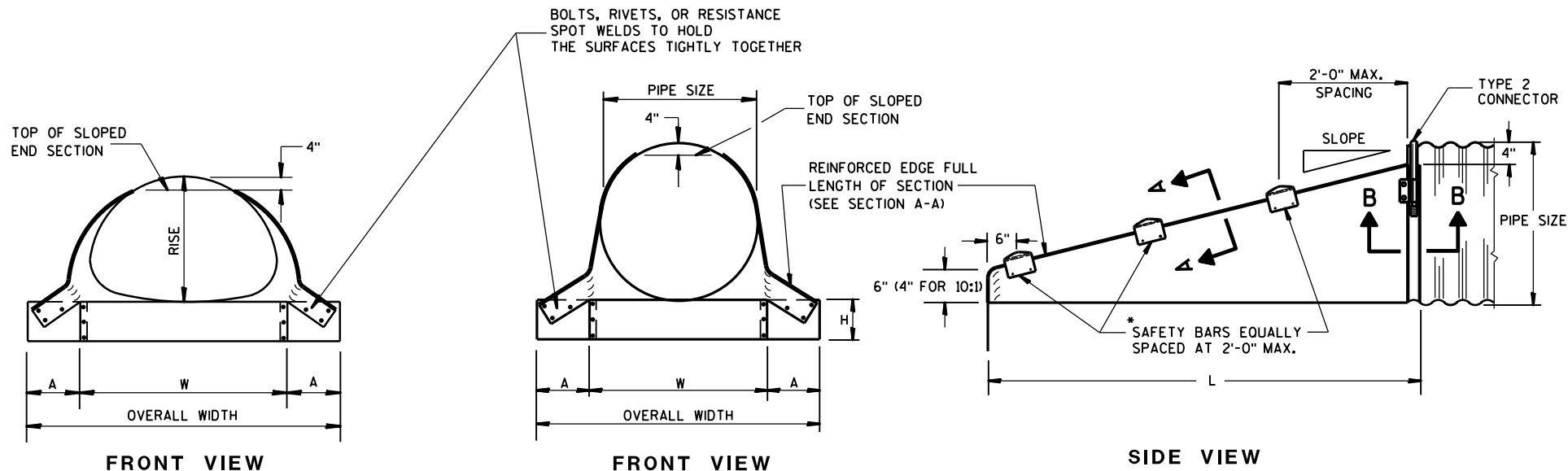
/S/ Rory L. Rhinehart

CHIEF ROADWAY DEVELOPER

ENGINEER

FHWA





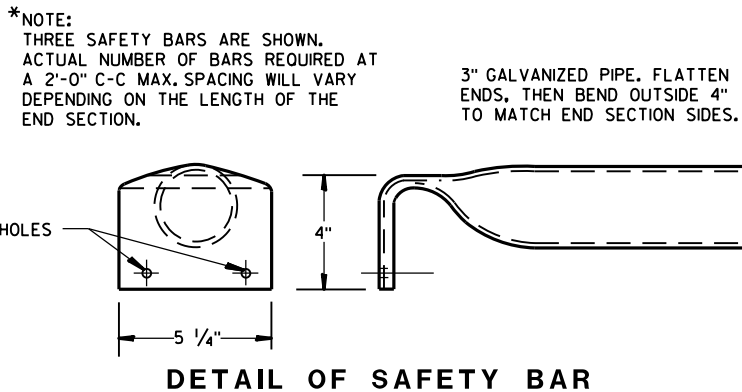
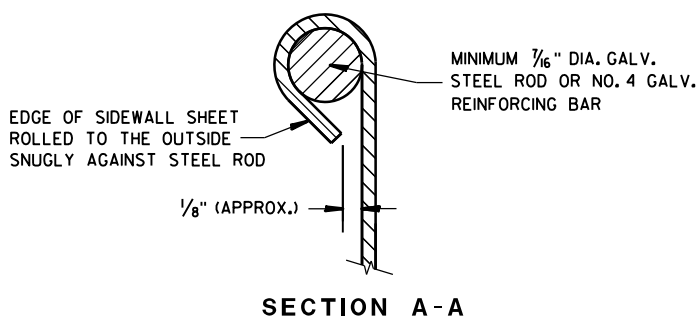
GENERAL NOTES

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.

SLOPED END SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS, SECTION 521 FOR STEEL APRON ENDWALLS.

SAFETY BARS SHALL BE FABRICATED FROM GALVANIZED STEEL PIPE MEETING THE REQUIREMENTS OF ASTM A-53, GRADE B, SCHEDULE 40 OR APPROVED EQUAL.

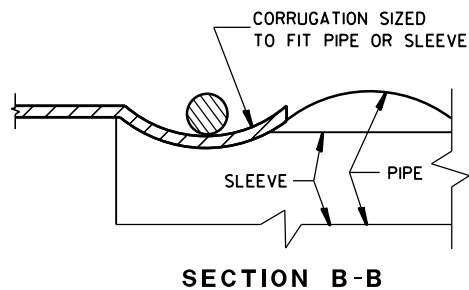
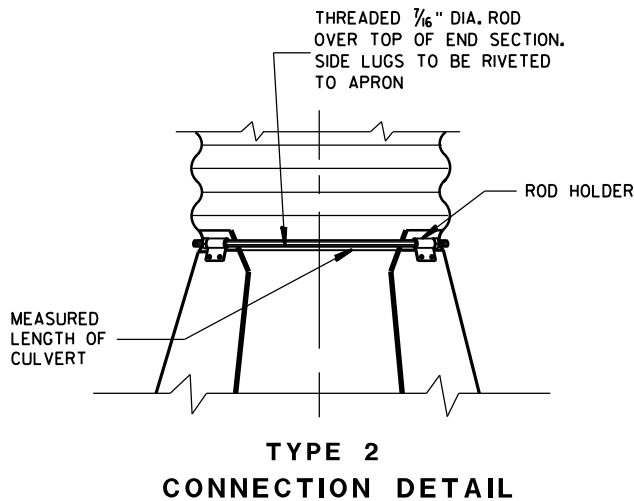
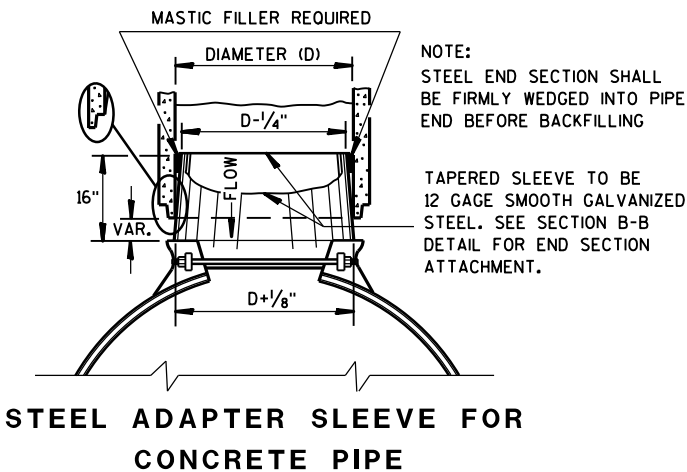
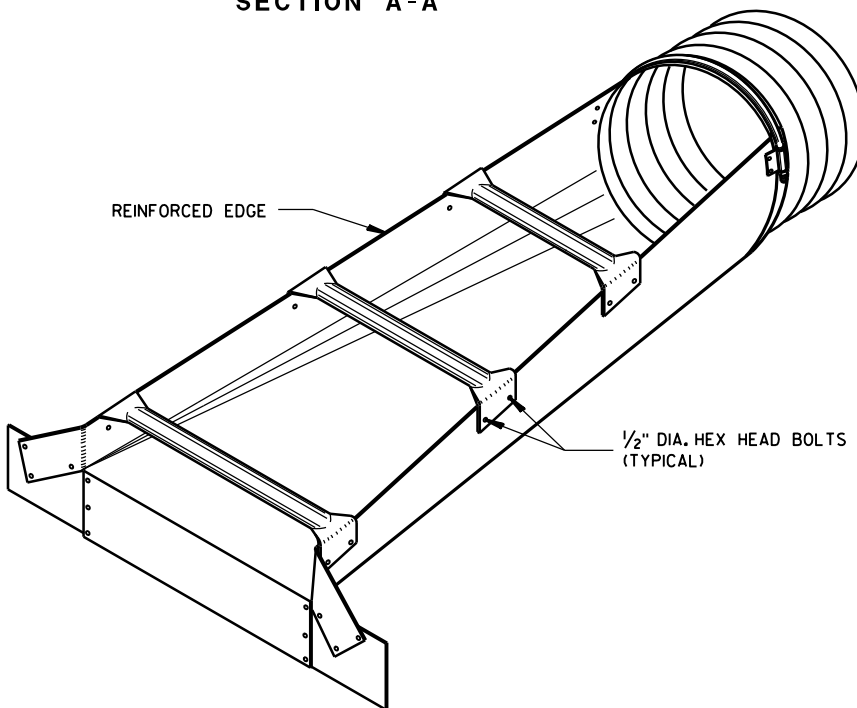
STEEL APRON ENDWALLS FOR CULVERT PIPE SLOPED SIDE DRAINS											
PIPE DIA. (IN.)	MIN. THICK. (Inches)	DIMENSIONS (Inches)				L DIMENSIONS					
		A	H	W	OVERALL WIDTH	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
15	.064	8	6	21	37	4:1	20	6:1	30	10:1	70
18	.064	8	6	24	40	4:1	32	6:1	48	10:1	100
21	.064	8	6	27	43	4:1	44	6:1	66	10:1	130
24	.064	8	6	30	46	4:1	56	6:1	84	10:1	160
30	.109	12	9	36	60	4:1	80	6:1	120	10:1	220
36	.109	12	9	42	66	4:1	104	6:1	156	10:1	280
42	.109	16	12	48	80	4:1	128	6:1	192	—	—
48	.109	16	12	54	86	4:1	152	6:1	228	—	—
54	.109	16	12	60	92	4:1	176	6:1	264	—	—
60	.109	16	12	66	98	4:1	200	6:1	300	—	—



STEEL APRON ENDWALLS FOR PIPE ARCH SLOPED SIDE DRAINS													
EQUIV. DIA. (Inches)	(Inches)		MIN. THICK. (Inches) ①	DIMENSIONS (Inches)				L DIMENSIONS					
	SPAN	RISE		A	H	W	OVERALL WIDTH	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
15	17	13	.064 *	7	6	30	44	4:1	19	6:1	30	10:1 ②	70
18	21	15	.064 *	8	6	27	43	4:1	20	6:1	30	10:1	70
21	24	18	.064 *	8	6	30	46	4:1	32	6:1	48	10:1	100
24	28	20	.064 *	8	6	34	50	4:1	40	6:1	60	10:1	120
30	35	24	.079 *	12	9	41	65	4:1	56	6:1	84	10:1	160
36	42	29	.109 *	12	9	48	72	4:1	76	6:1	114	10:1	210
42	49	33	.109	16	12	55	87	4:1	92	6:1	138	—	—
48	57	38	.109	16	12	63	95	4:1	112	6:1	168	—	—
54	64	43	.109	16	12	70	102	4:1	132	6:1	198	—	—

① * MINIMUM THICKNESS OF ALL 10:1 SLOPED SIDE DRAINS IS 0.109".

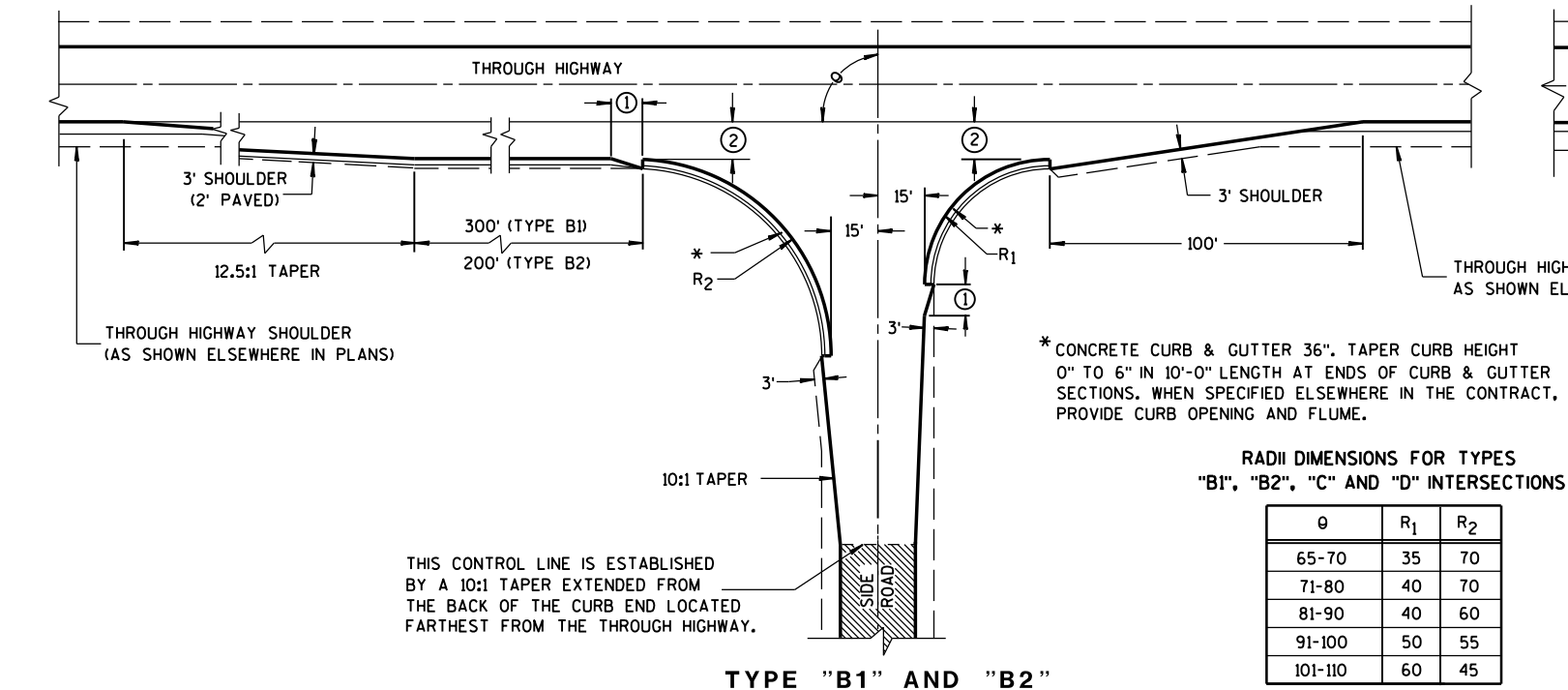
② ACTUAL SLOPE GREATER THAN 10:1.



STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED SIDE DRAINS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/14/2012
DATE
/S/ Jerry H. Zoog
ROADWAY STANDARDS ENGINEER
87 NT
FHWA



GENERAL NOTES

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

SIDE ROAD SURFACING NOTE

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

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

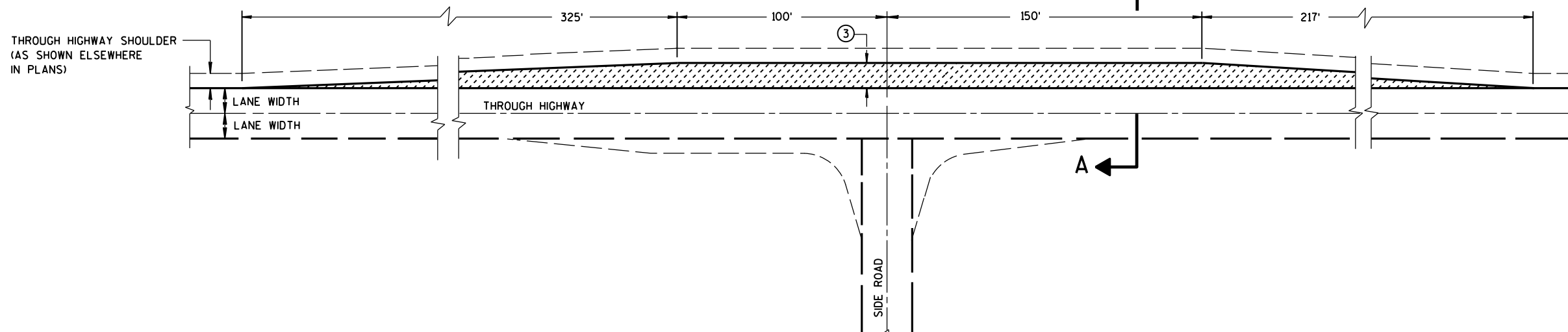
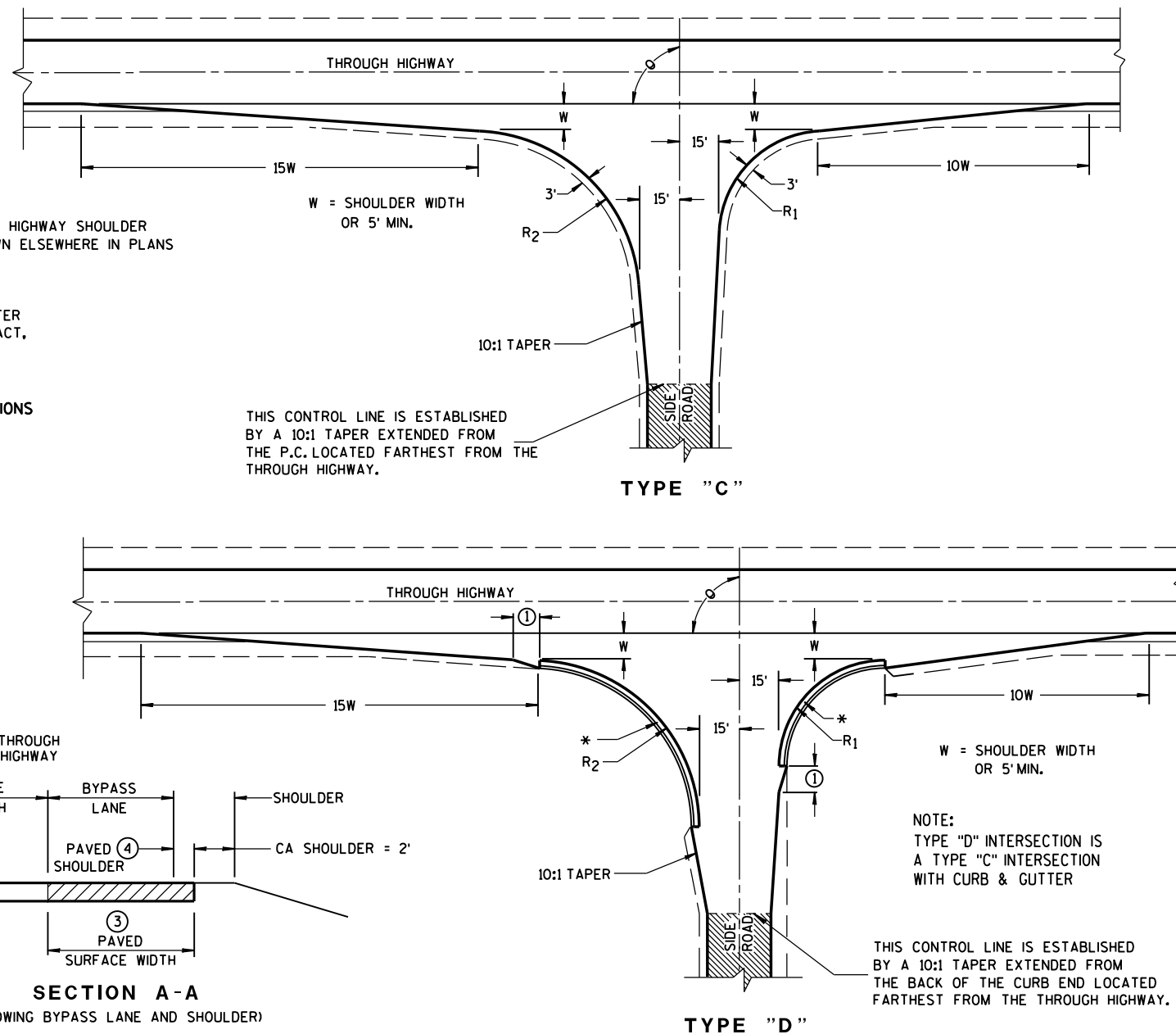
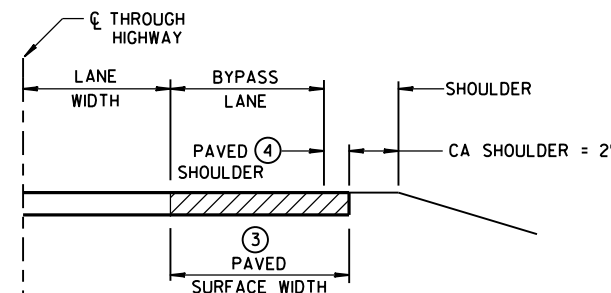
WHEN THE SIDE ROAD IS THE CONSTRUCTION PROJECT, THE INTERSECTION SURFACING SHALL BE THE SAME AS FOR THE PROJECT.

EXISTING PAVED SURFACE

BYPASS LANE

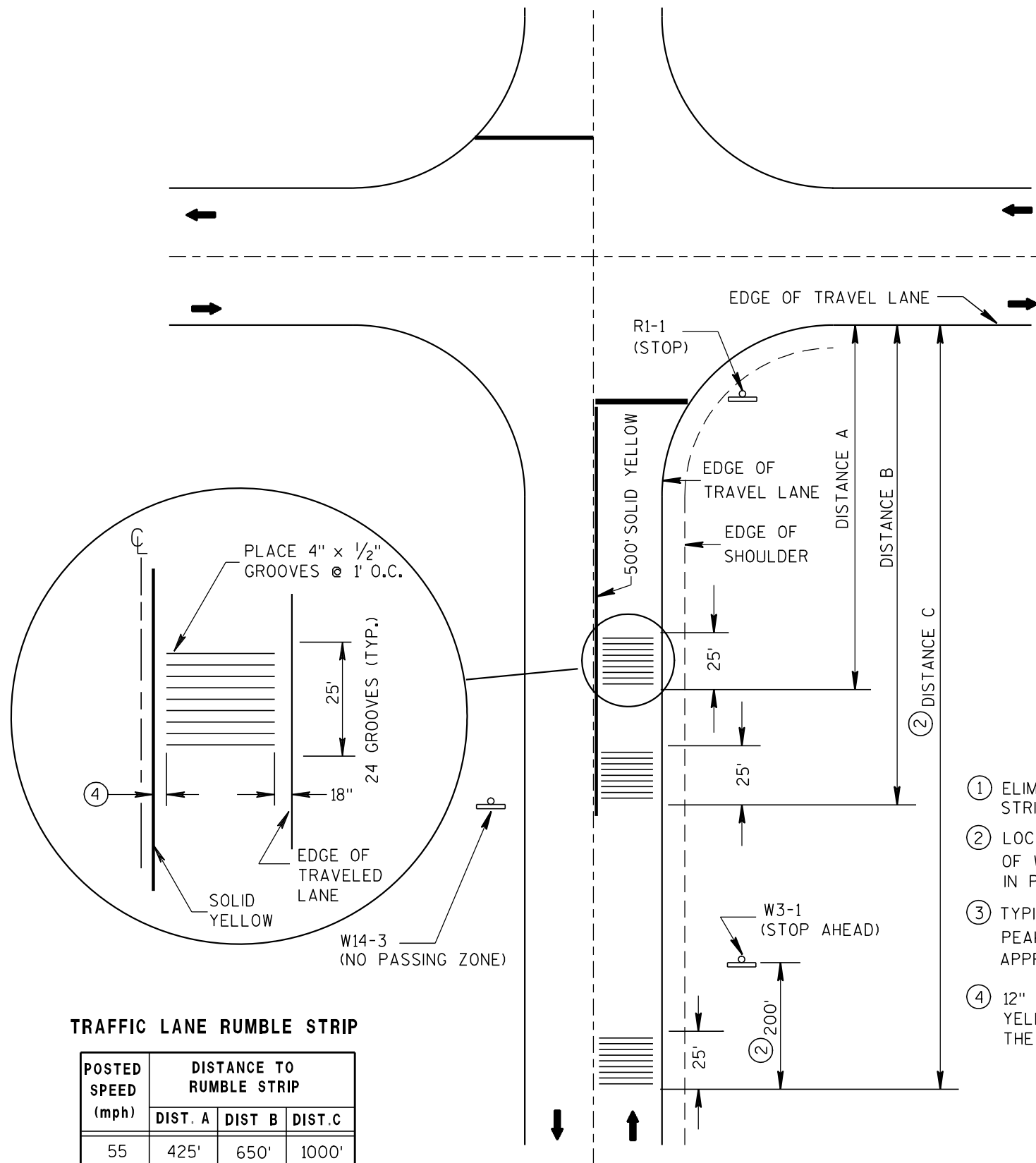
- 10-FT TYPICAL.
- 12-FT** PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLAN.

**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.
- BYPASS LANE PAVED SURFACE WIDTH OUTSIDE OF TRAVEL LANE
-ASPHALT = 12-FT PLUS PAVED SHOULDER WIDTH.
-PC CPNCRETE = 13-FT PLUS PAVED SHOULDER WIDTH.
- BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.



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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



TRAFFIC LANE RUMBLE STRIP

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

ARROW SYMBOL (➡) SHOWS DIRECTION OF TRAVEL

PLAN VIEW RUMBLE STRIP LOCATION

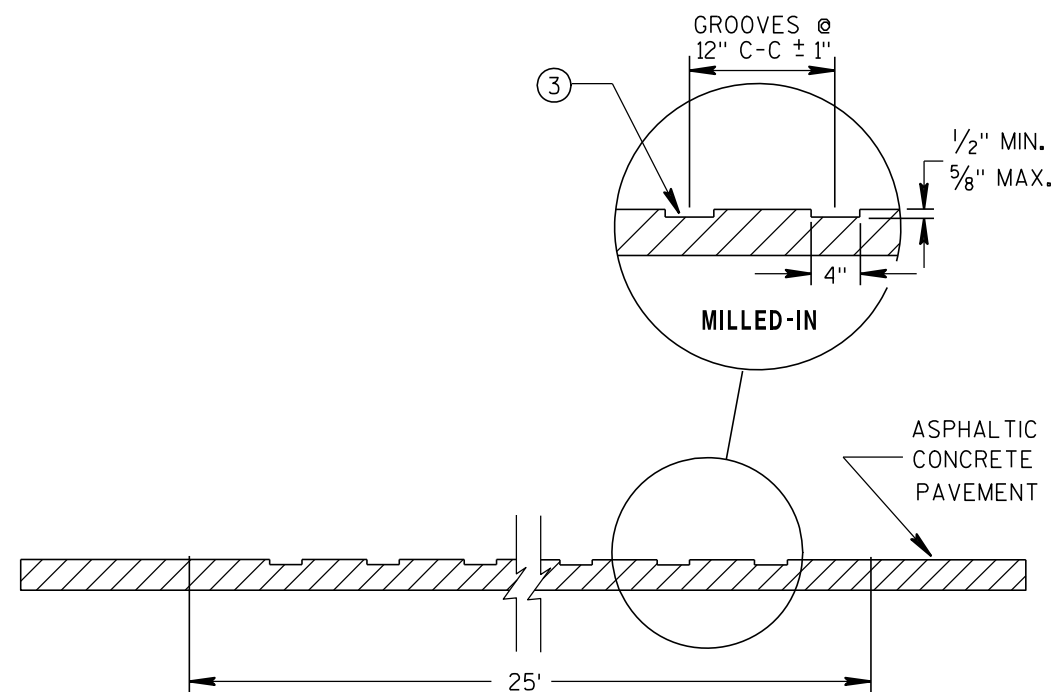
- ① ELIMINATE THE MIDDLE SET OF RUMBLE STRIPS.
- ② LOCATE RUMBLE STRIP 200' IN ADVANCE OF W3-1 SIGN AS SHOWN. IF W3-1 IS NOT IN PLACE, USE DISTANCE C.
- ③ TYPICAL VERTICAL VARIATION BETWEEN PEAKS AND VALLEYS WITHIN THE CUT APPROXIMATELY $\frac{1}{16}$ "
- ④ 12" CLEAR BETWEEN THE SOLID YELLOW LINE AND THE EDGE OF THE RUMBLE.

GENERAL NOTES

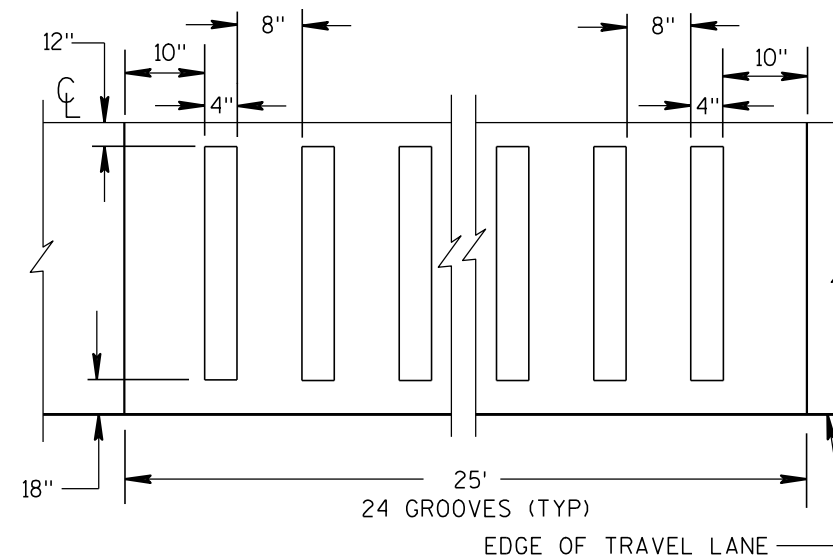
CONTRACTOR SHALL CONFIRM RUMBLE STRIP LOCATION WITH THE ENGINEER PRIOR TO INSTALLATION. THE ENGINEER MAY MODIFY THE RUMBLE STRIP LOCATION AS FIELD CONDITIONS DICTATE.

WHEN ASPHALTIC PAVEMENT IS NEW IN THE RUMBLE AREA THE CONTRACTOR SHALL ALLOW THE PAVEMENT TO CURE A MINIMUM OF 7 DAYS PRIOR TO RUMBLE INSTALLATION.

PAVEMENT MARKING AND SIGNING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.



ELEVATION VIEW



PLAN VIEW
ASPHALTIC PAVEMENT
MILLED-IN

ASPHALTIC RUMBLE STRIPS AT INTERSECTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/17/2011

DATE

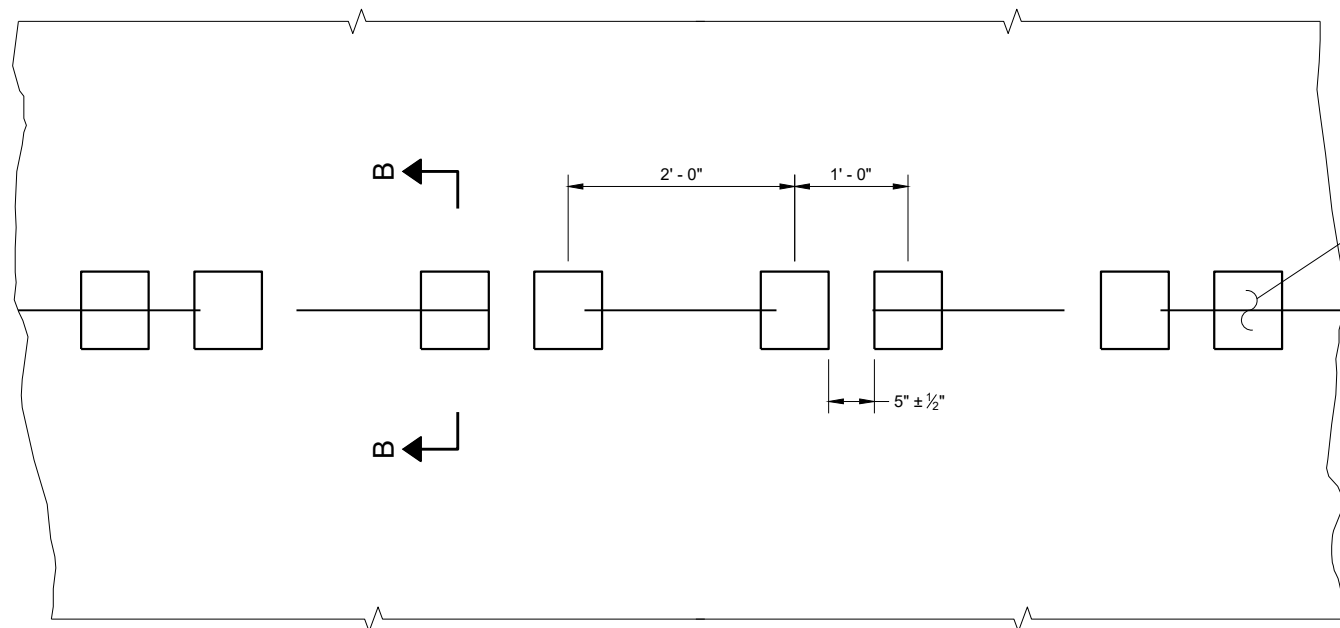
FHWA

/s/ Jerry H. Zogg

ROADWAY STANDARDS 189

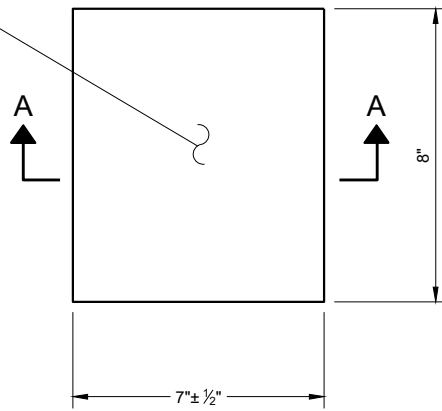
ENGINEER

ENT



PLAN VIEW
SHOULDER WITH GROOVES

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP



PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

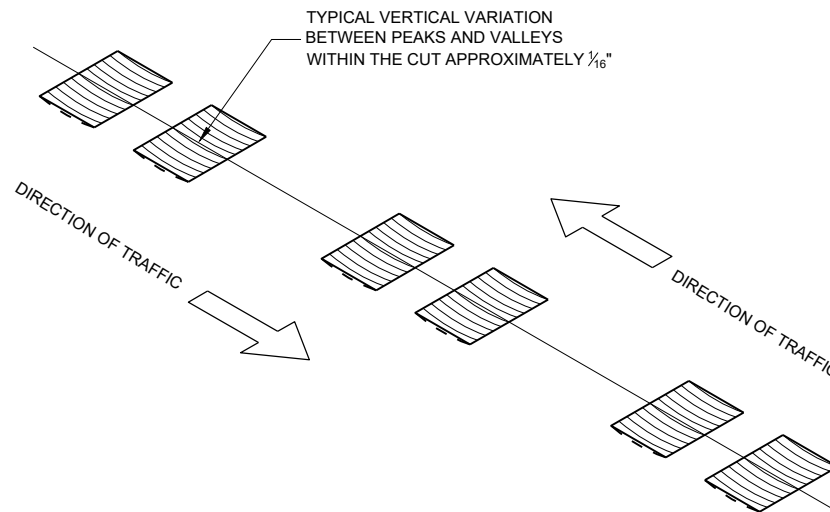
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

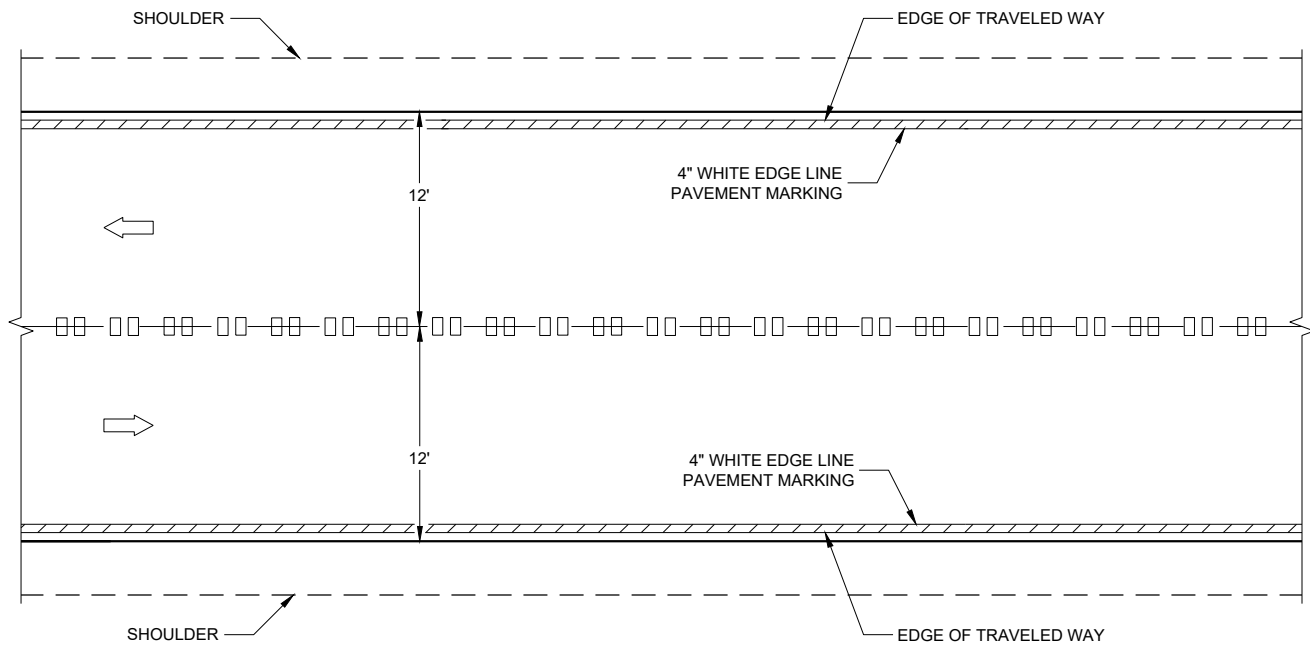
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

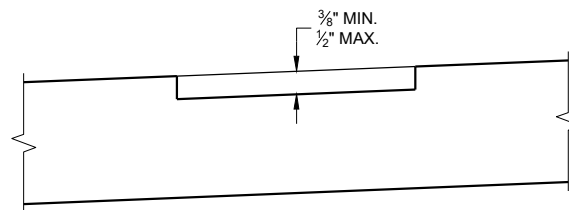
- ① CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



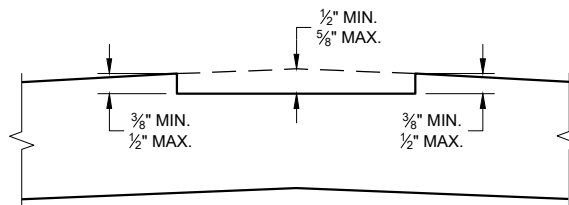
ISOMETRIC



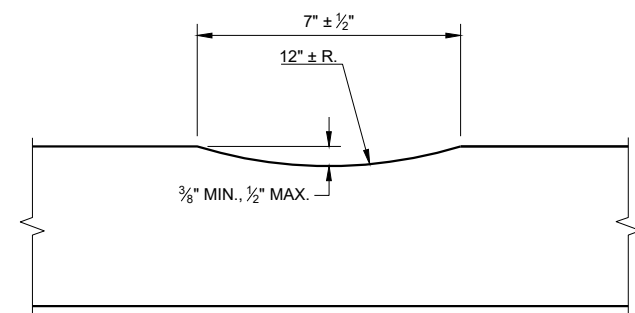
CENTERLINE GROOVES ON TWO-WAY ROADWAYS



SECTION B - B
SUPERELEVATED ROADWAY



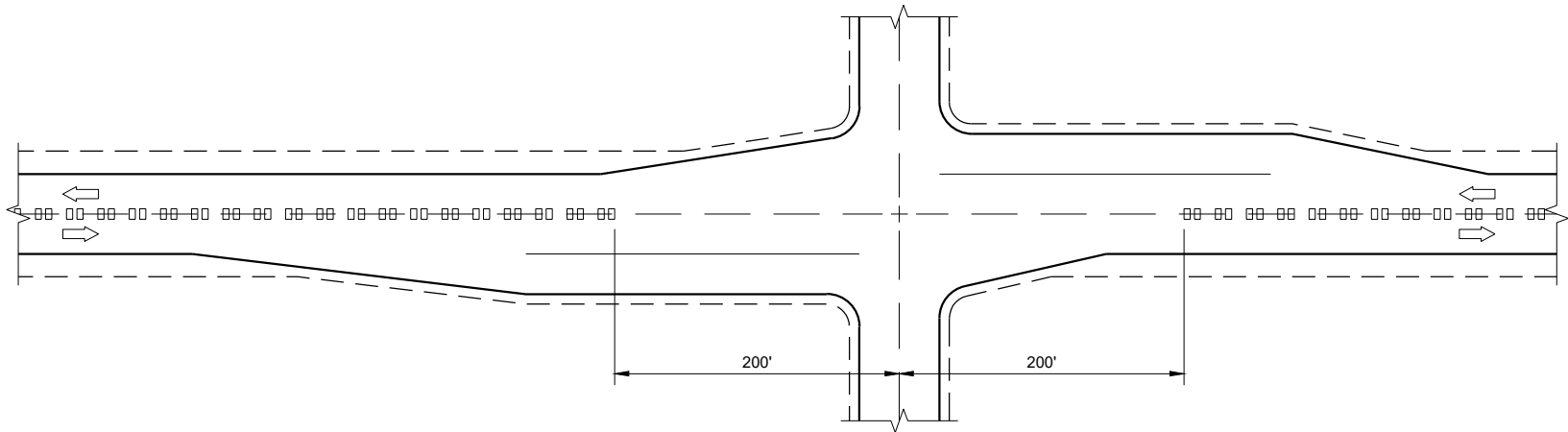
SECTION B - B
CROWNED ROADWAY



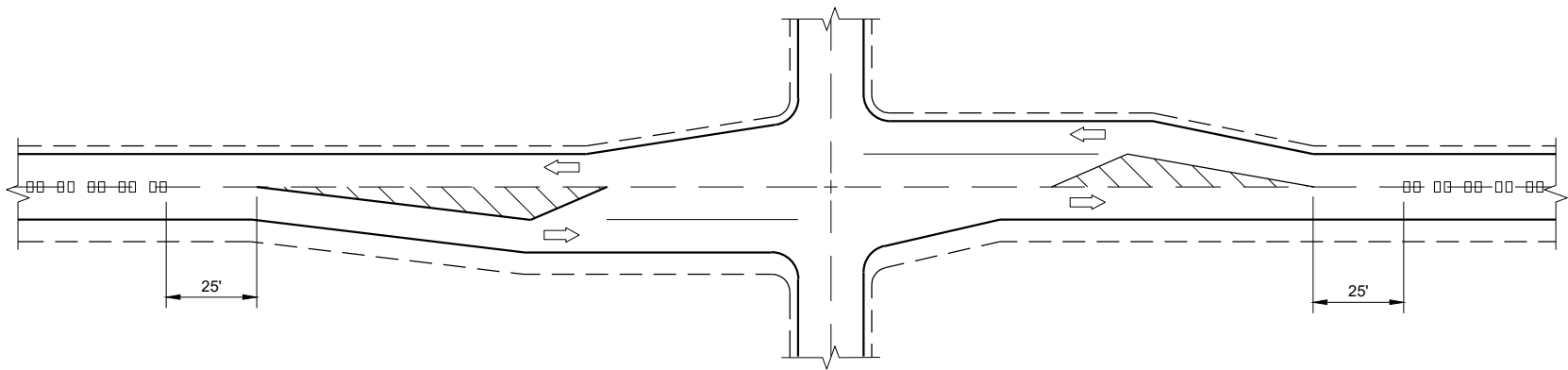
SECTION A - A

**2-LANE RURAL
CENTER LINE RUMBLE STRIP,
MILLING**

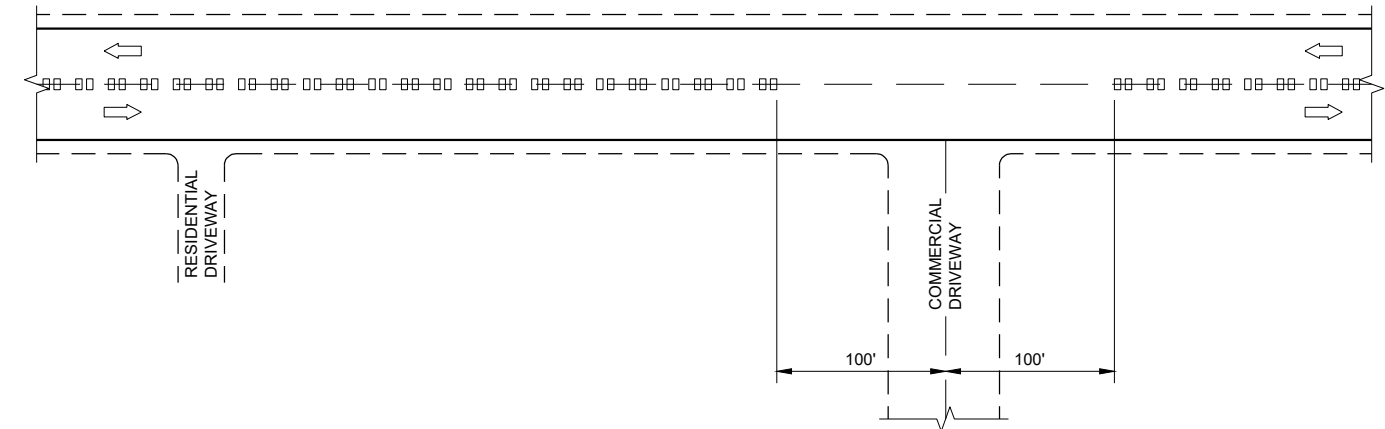
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CENTERLINE GROOVES AT INTERSECTIONS



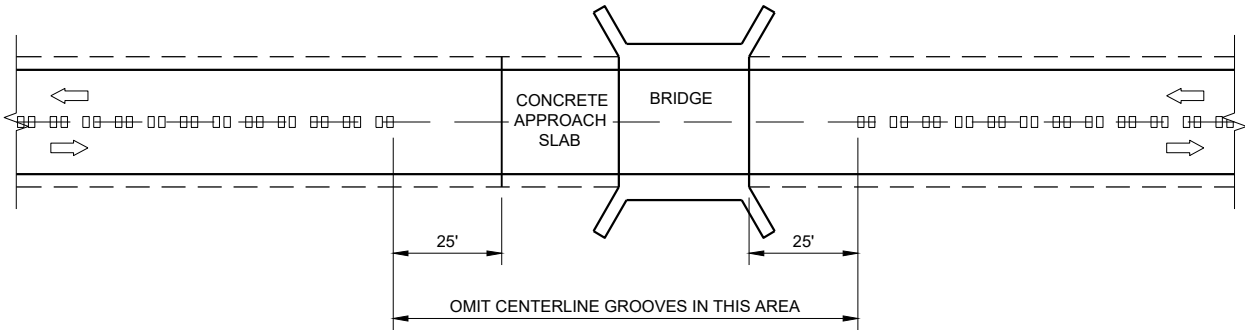
CENTERLINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)



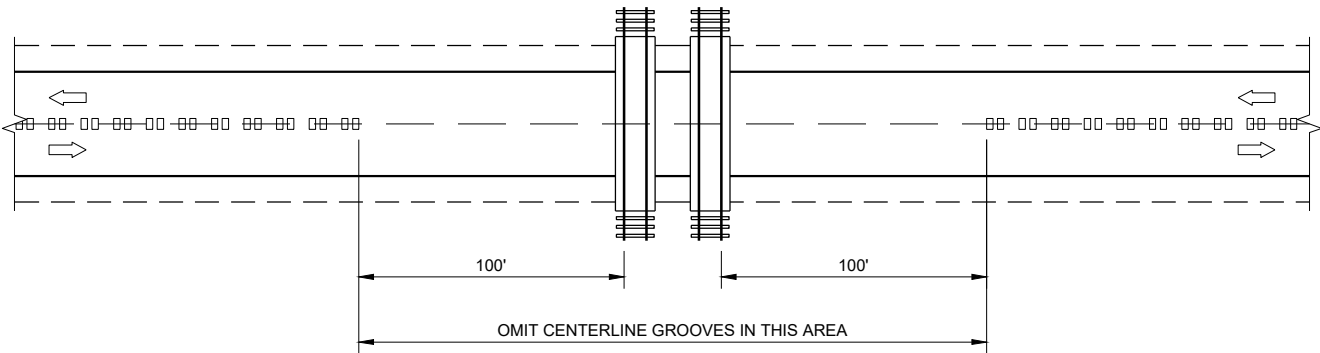
CENTERLINE GROOVES AT DRIVEWAYS^①

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

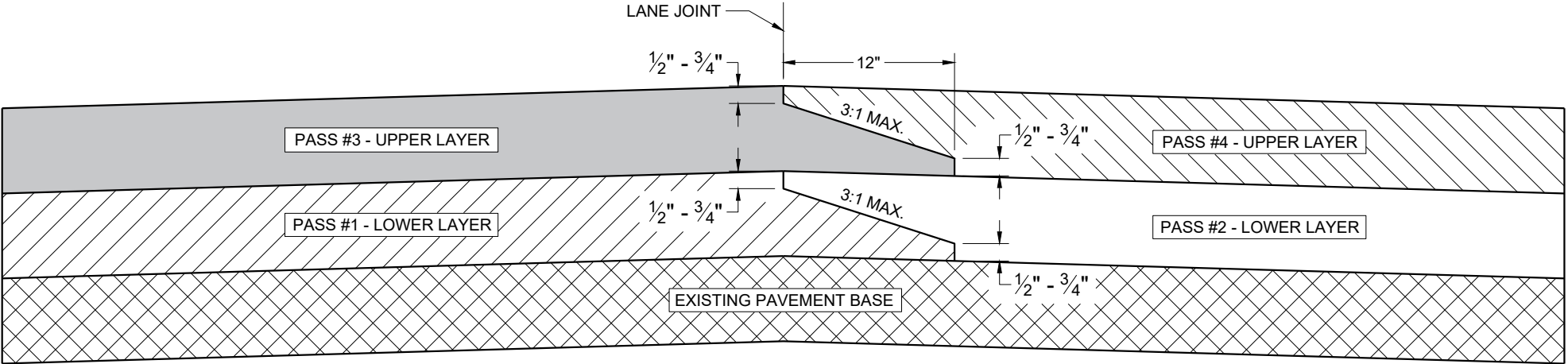
2-LANE RURAL
CENTERLINE RUMBLE STRIP,
MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

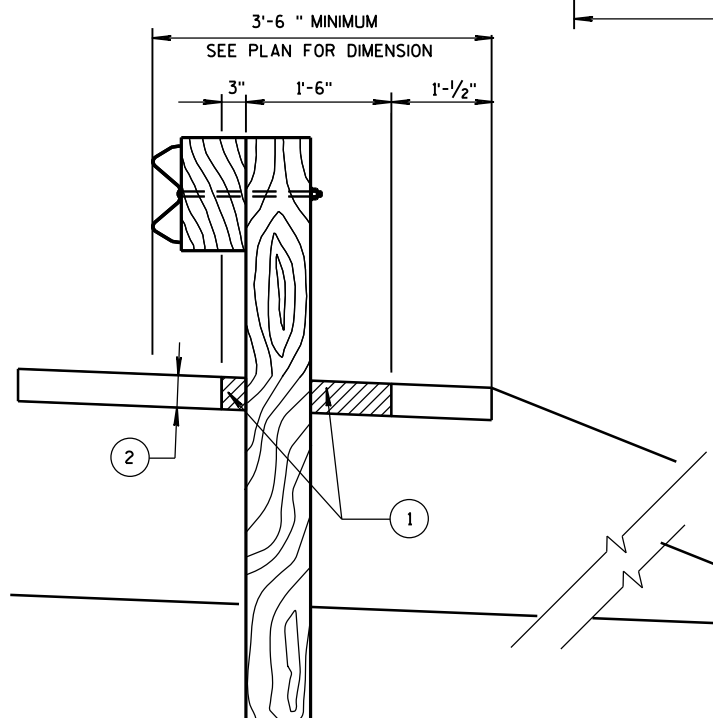
FHWA

GENERAL NOTES
CONFORM TO STANDARD SPECIFICATION 450.3.2.8

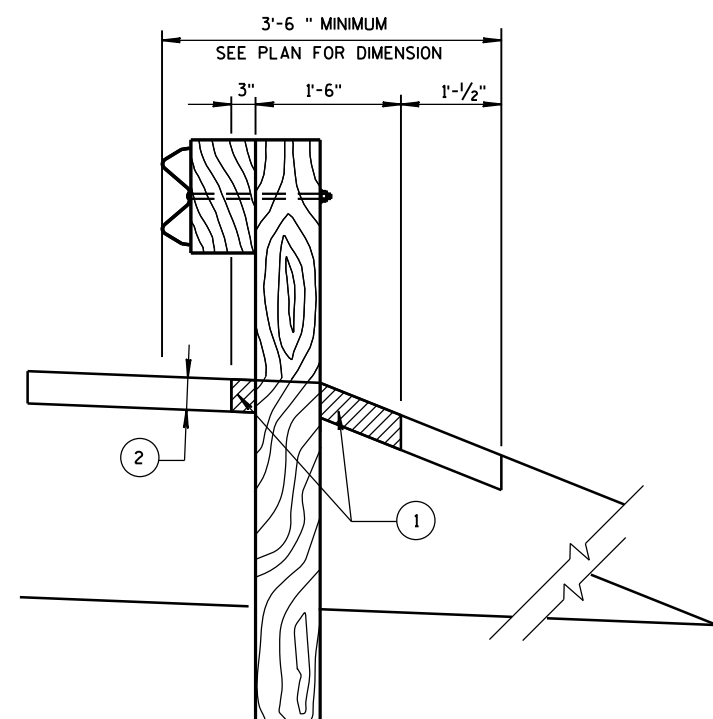


**TYPICAL PAVEMENT CROSS SECTION
OF NOTCHED WEDGE LONGITUDINAL JOINTS**

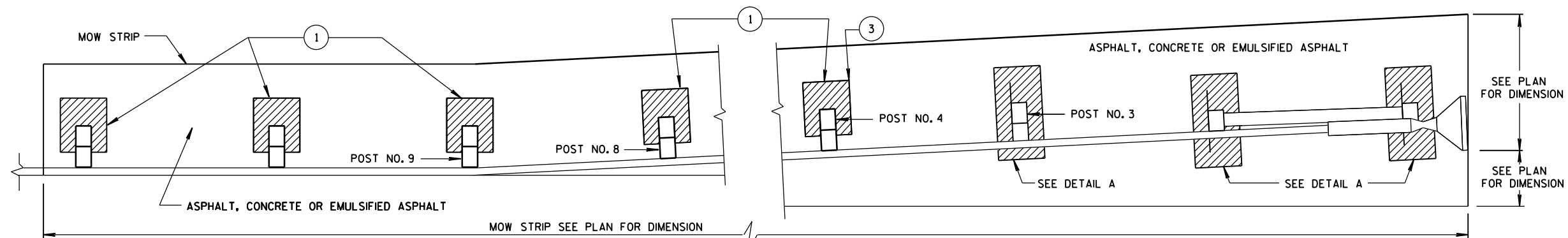
HMA LONGITUDINAL JOINTS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2019 DATE	/S/ Steven Hefel HMA PAVEMENT ENGIN 92
FHWA	



SECTION A-A

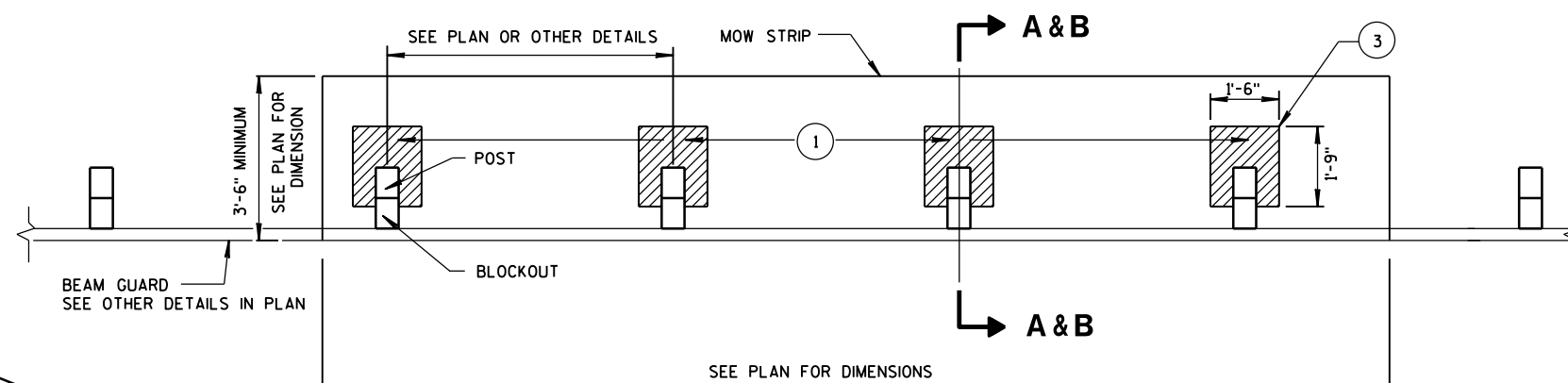


SECTION B-B



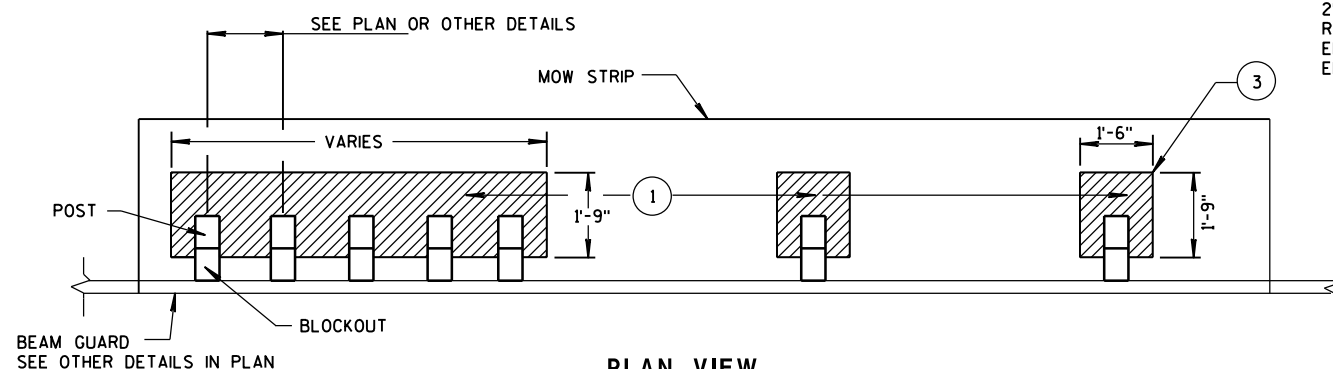
PLAN VIEW

MOW STRIP LAYOUT FOR ENERGY ABSORBING TERMINAL



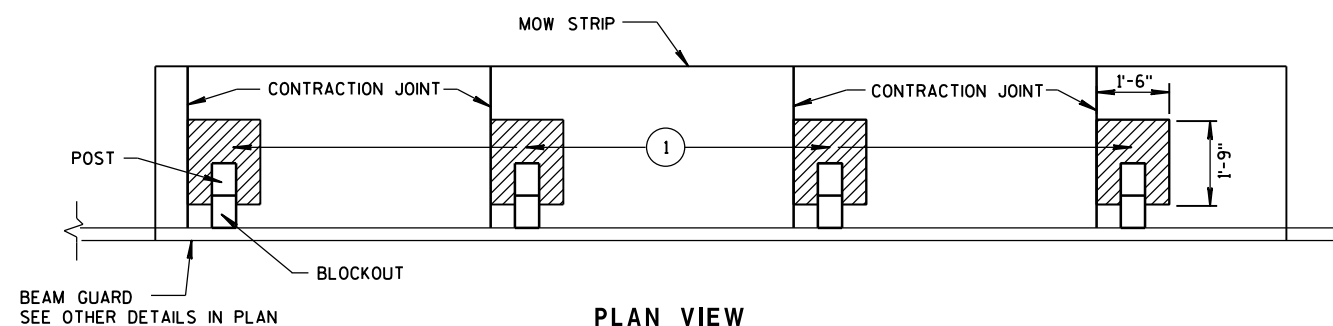
PLAN VIEW

MOW STRIP FOR TYPICAL BLOCKOUT LAYOUT



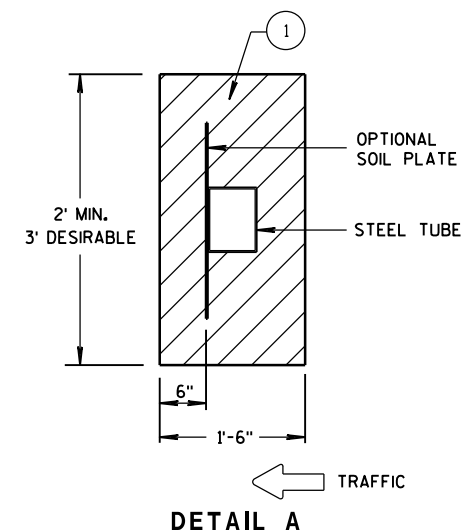
PLAN VIEW

MOW STRIP FOR TIGHT SPACING LAYOUT

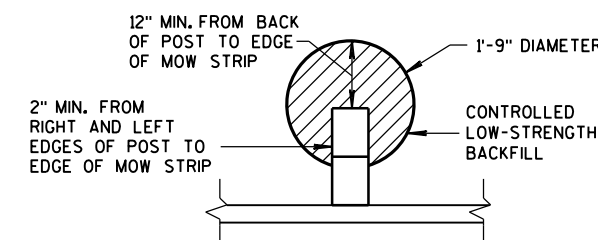


PLAN VIEW

JOINT PLACEMENT FOR CONCRETE MOW STRIP



DETAIL A

ALTERNATIVE HMA
MOW STRIP DESIGN

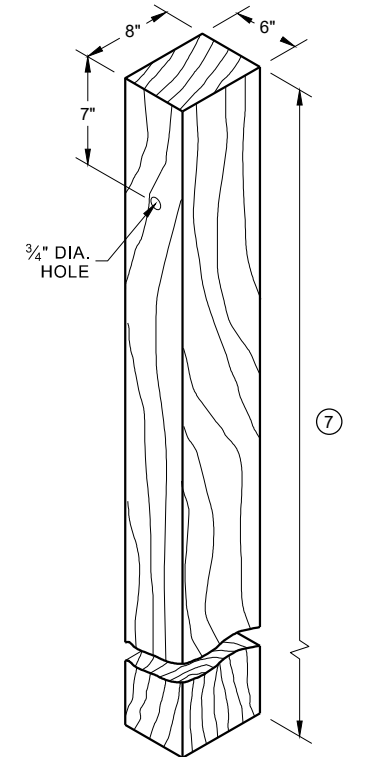
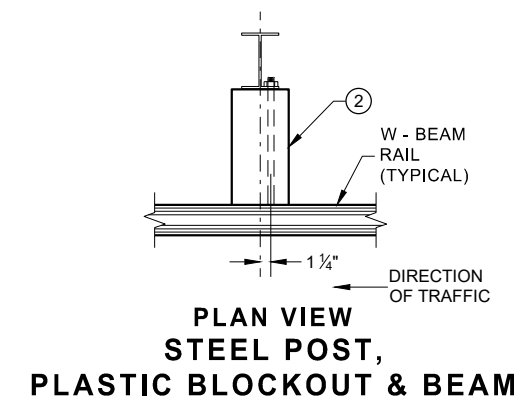
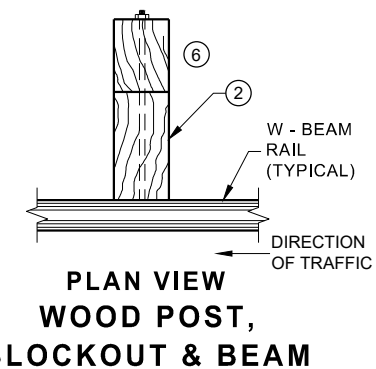
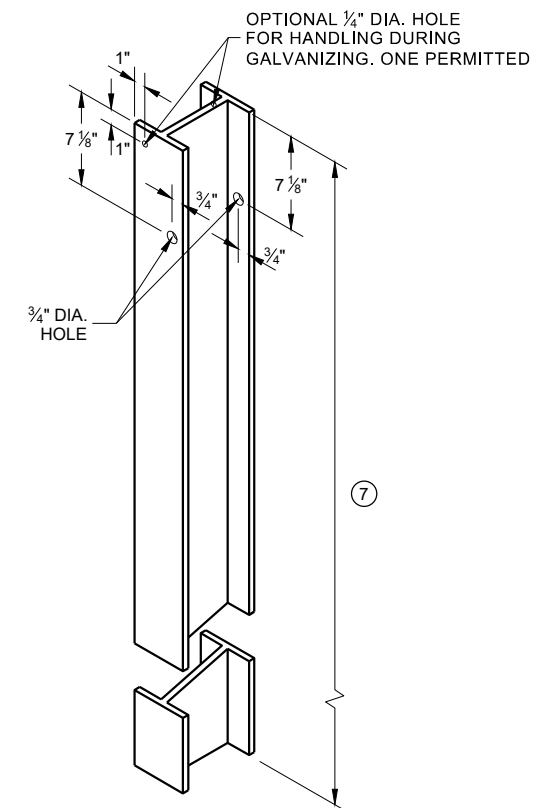
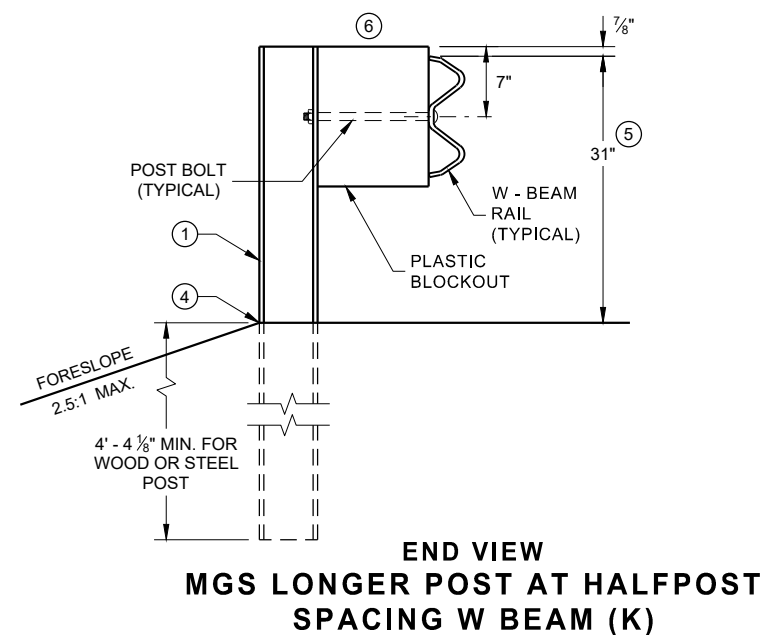
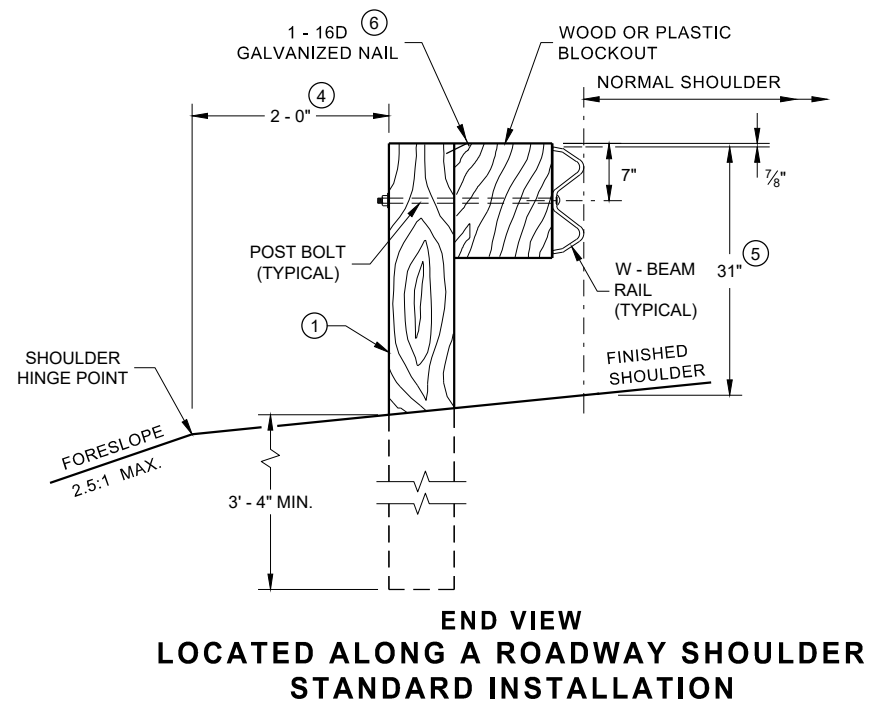
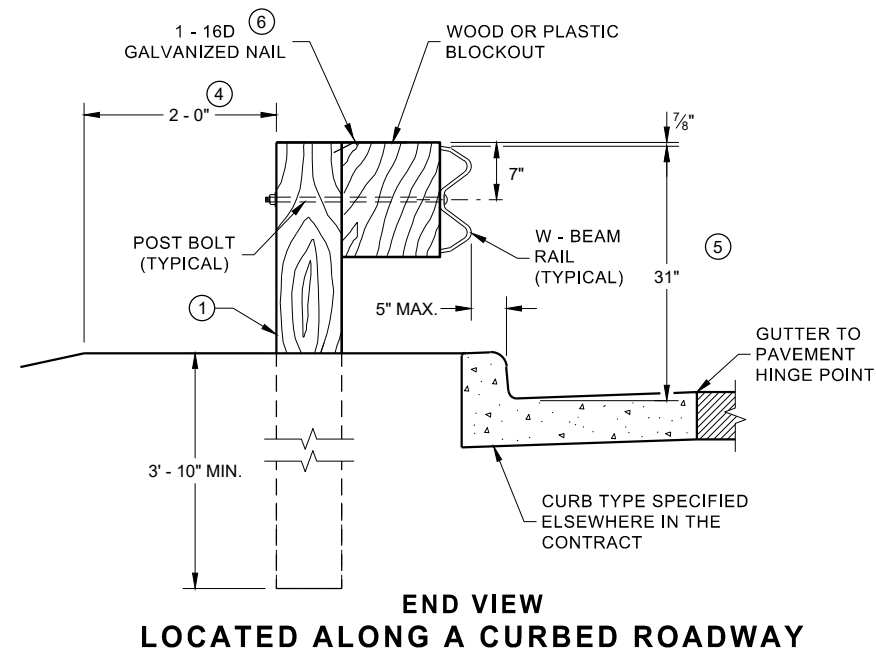
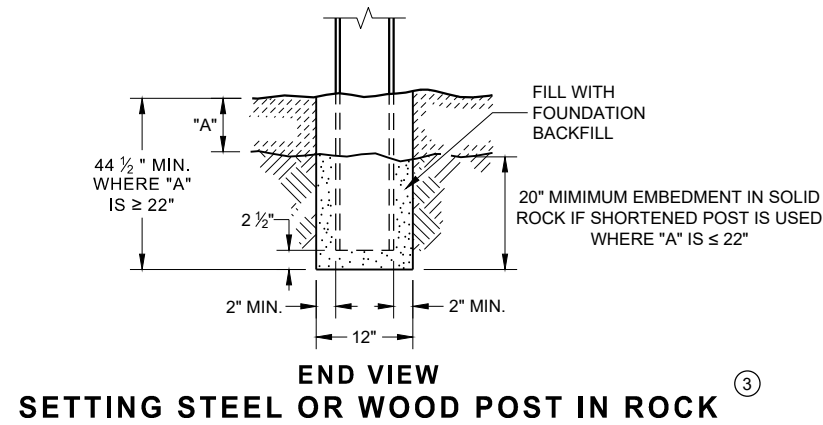
- ① CONTROLLED LOW-STRENGTH BACKFILL OR EMULSIFIED ASPHALT.
- ② DEPTH OF MOW STRIP:
ASPHALT - 4"
CONCRETE - 4"
EMULSIFIED ASPHALT - 1" OR LESS
- ③ FOR EMULSIFIED ASPHALT MOW STRIP LEAVE OUTS NOT REQUIRED. (TYPICAL FOR ALL POSTS.)

GUARDRAIL MOW STRIP

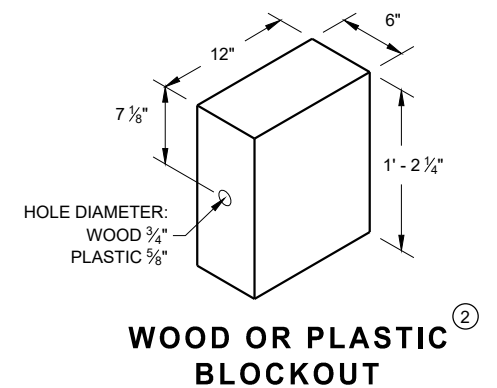
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS 93 NT
FHWA ENGINEER

- 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 TO LENGTH AND 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 3/4" 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".



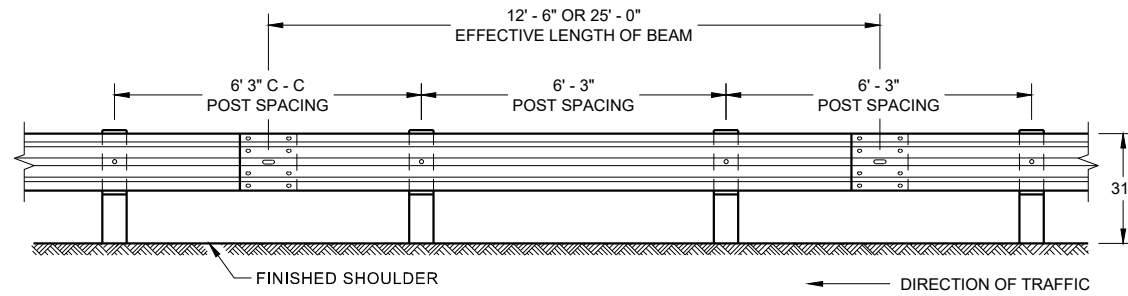
WOOD POST (6" X 8") NOMINAL ⁽¹⁾



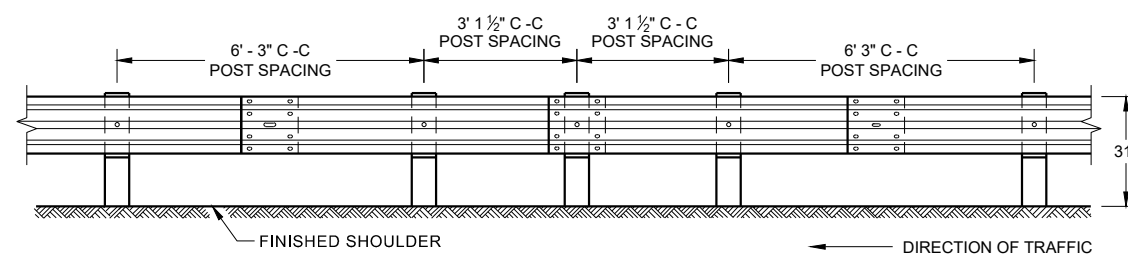
**WOOD OR PLASTIC
BLOCKOUT**

**MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL**

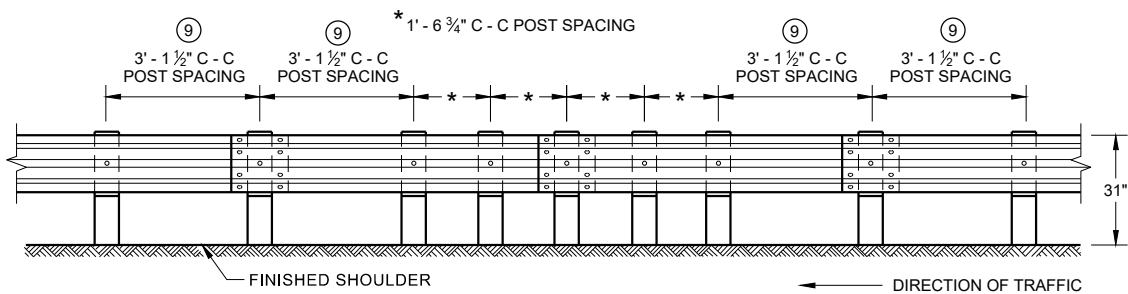
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 94



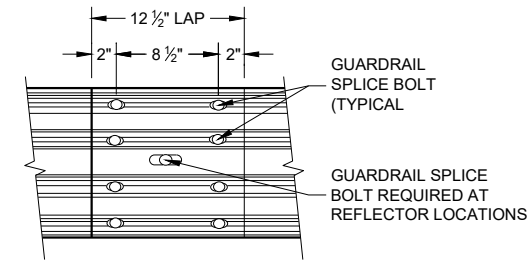
**FRONT VIEW
POST SPACING STANDARD INSTALLATION**



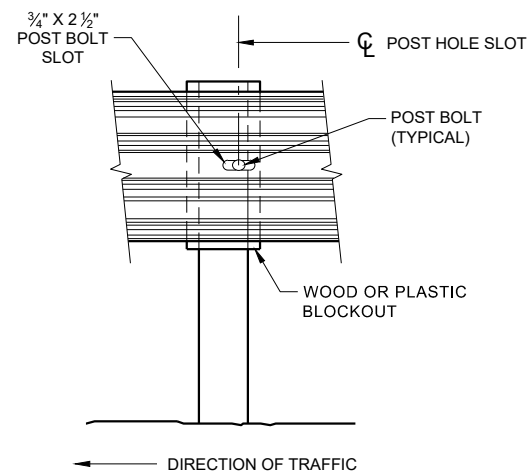
**FRONT VIEW
HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)**



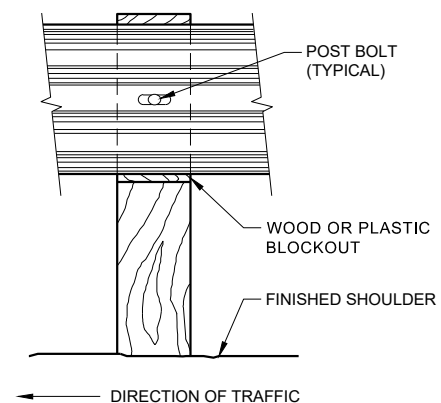
**FRONT VIEW
QUARTER POST SPACING (QS)**



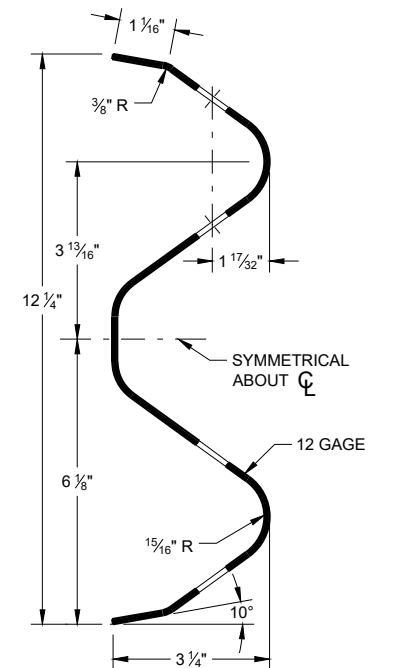
**FRONT VIEW
MID-SPAN BEAM SPLICE**



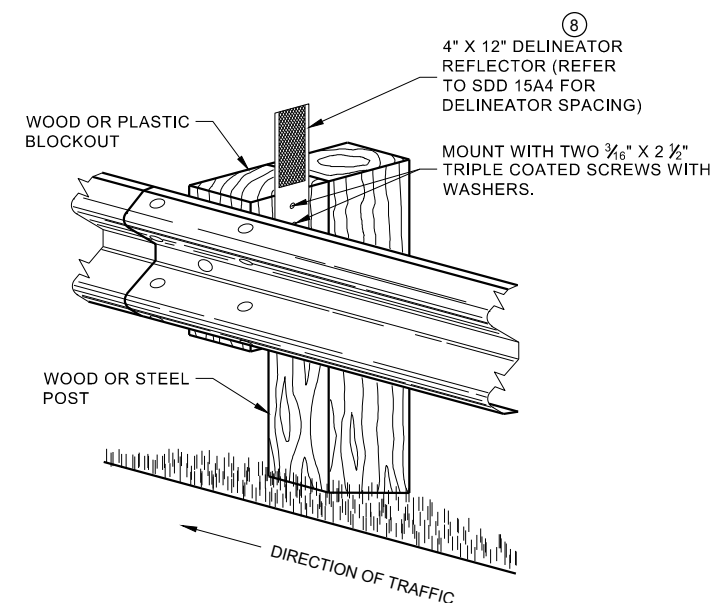
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



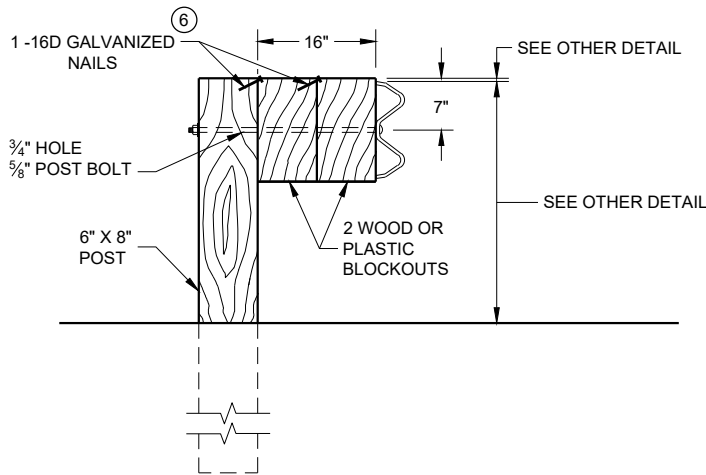
SECTION THRU W-BEAM RAIL



**ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION**

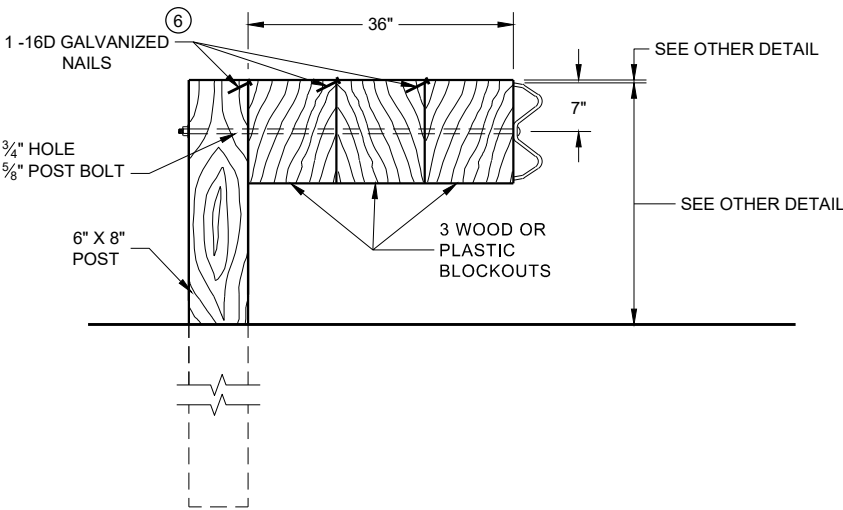
GENERAL NOTES

- 8 DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL. RAIL SPLICE LOCATIONS ARE THE ONLY ACCEPTABLE LOCATIONS FOR REFLECTORS.
 - 9 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.
- POST BOLTS ARE A 3/8" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES 3/4" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND 3/4" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.
- GUARD RAIL SPLICE BOLTS ARE A 3/8" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES 3/4" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



DETAIL FOR 16" BLOCKOUT DEPTH

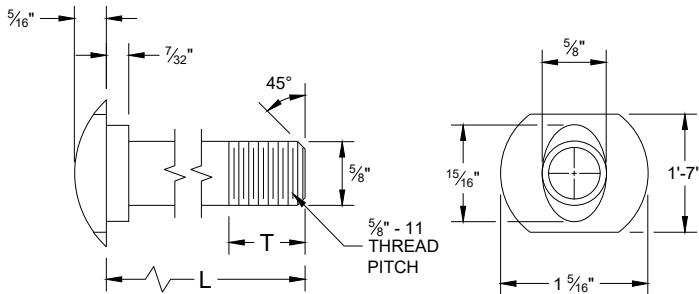
IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.



DETAIL FOR 36" BLOCKOUT DEPTH

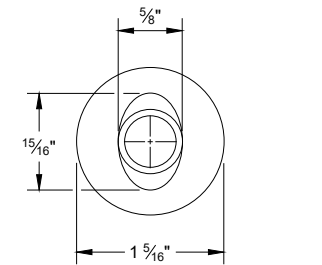
NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

- NOTE:
- 1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 3/16".
 - 2. IF THE BOLT EXTENDS MORE THAN 1/4" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

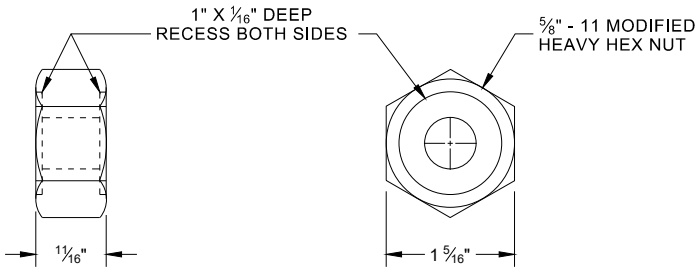


POST BOLT TABLE

L	T (MIN.)
1 1/4"	1 1/8"
2"	1 3/4"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"

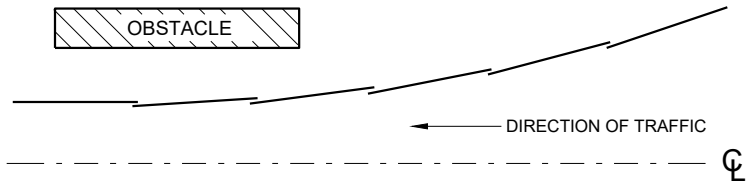


ALTERNATE BOLT HEAD

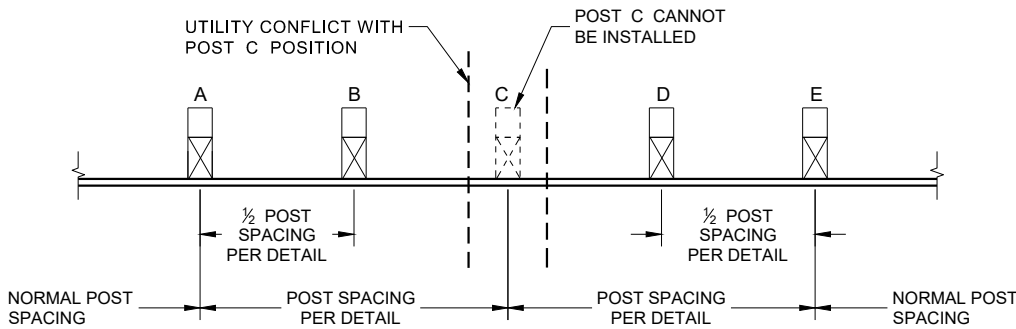


POST BOLT, SPLICE BOLT AND RECESS NUT

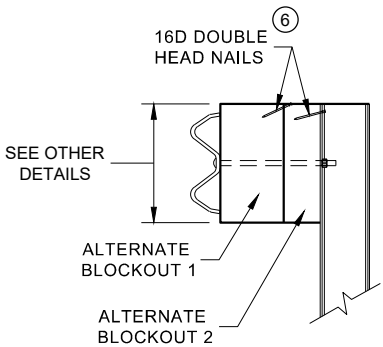
- 6 WHEN USING STEEL POST AD WOOD BLOCKOUTS, INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.



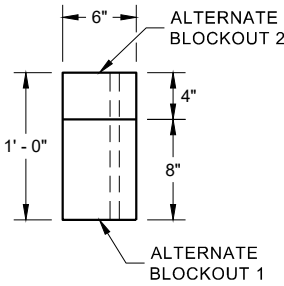
PLAN VIEW
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS
UNDERGROUND OBSTRUCTION



SIDE VIEW

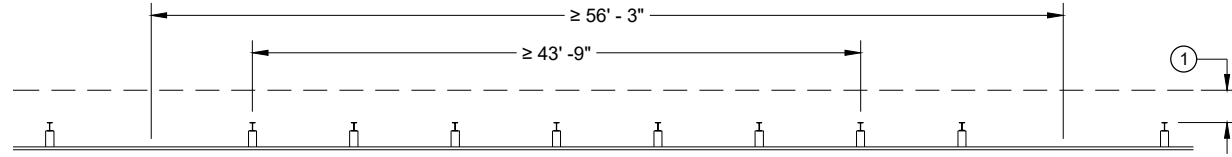


PLAN VIEW

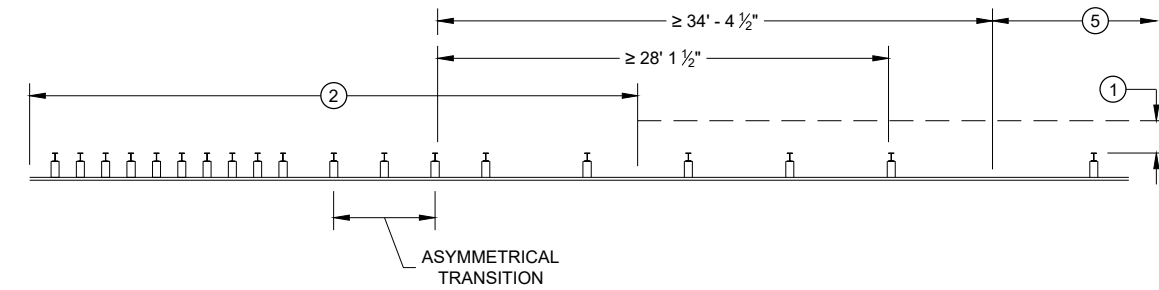
ALTERNATE WOOD
BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

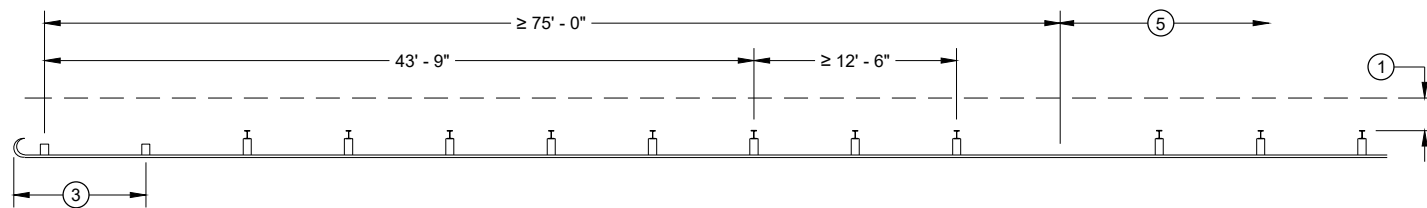
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



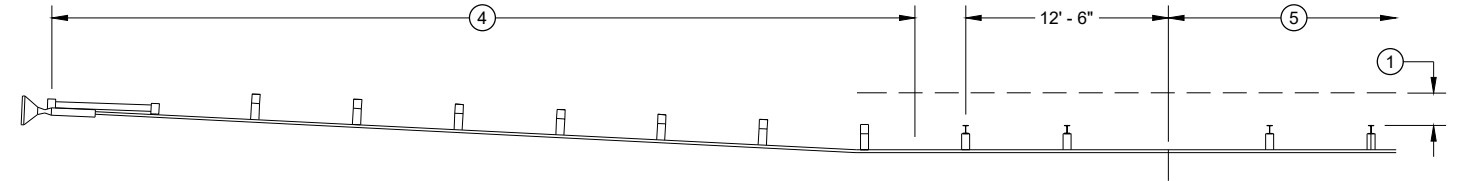
MISSING POST IN NORMAL BEAM GUARD RUN



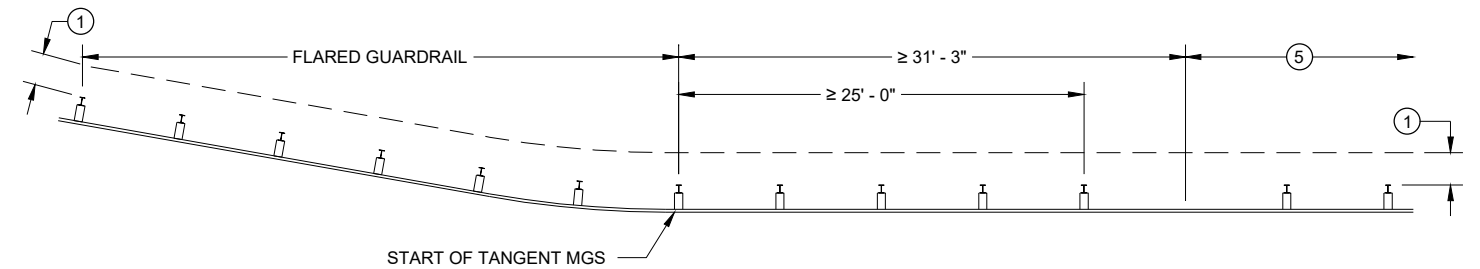
MISSING POST NEAR APPROACH THRIE BEAM TRANSITION



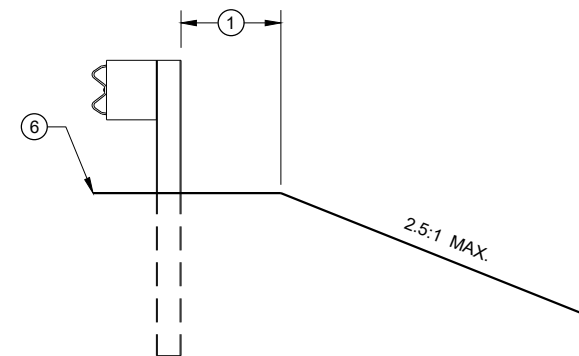
MISSING POST IN NORMAL BEAM GUARD RUN
NEAR TYPE 2 TERMINAL



MISSING POST IN NORMAL BEAM GUARD RUN NEAR EAT



MISSING POST IN NORMAL BEAM GUARD RUN
NEAR FLARED BEAM GUARD



CROSS SECTION VIEW

- (1) MINIMUM OF 2 FEET OF GRADING BEHIND POST.
- (2) SEE SDD 14B45 FOR MORE DETAILS.
- (3) SEE SDD 14B47 FOR MORE DETAILS.
- (4) SEE SDD 14B44 FOR MORE DETAILS.
- (5) SEE MISSING POST IN NORMAL BEAM GUARD RUN FOR DISTANCE TO NEXT MISSING POST AND AREA FOR WELL DRAINED, COMPACTED SOILS.
- (6) SEE PLAN FOR SHOULDER DESIGN.

**MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR
97
FHWA

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.

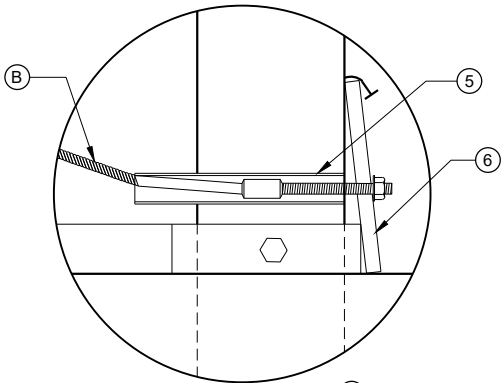
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

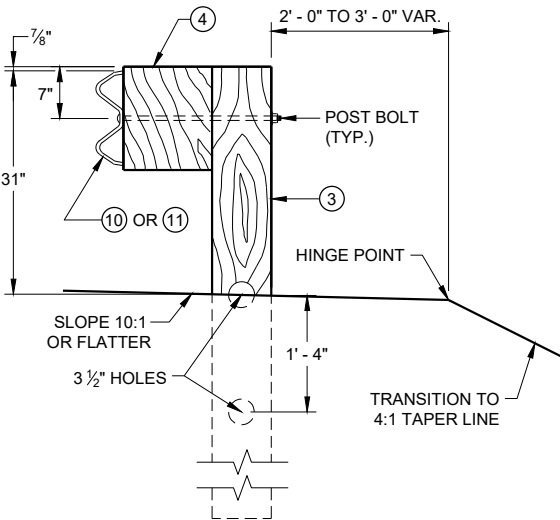
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

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

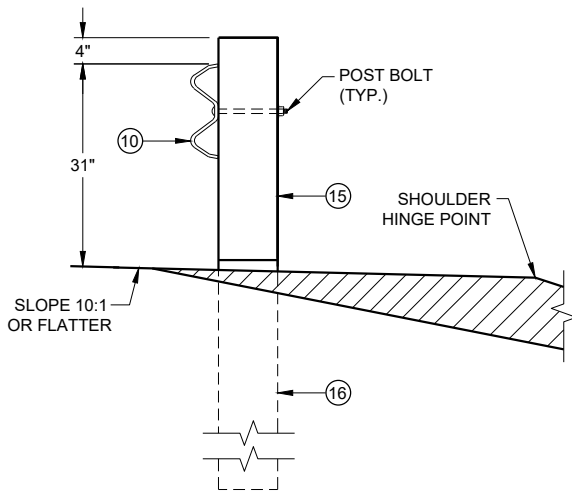
THE CENTER OF THE UPPER 3 1/2" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



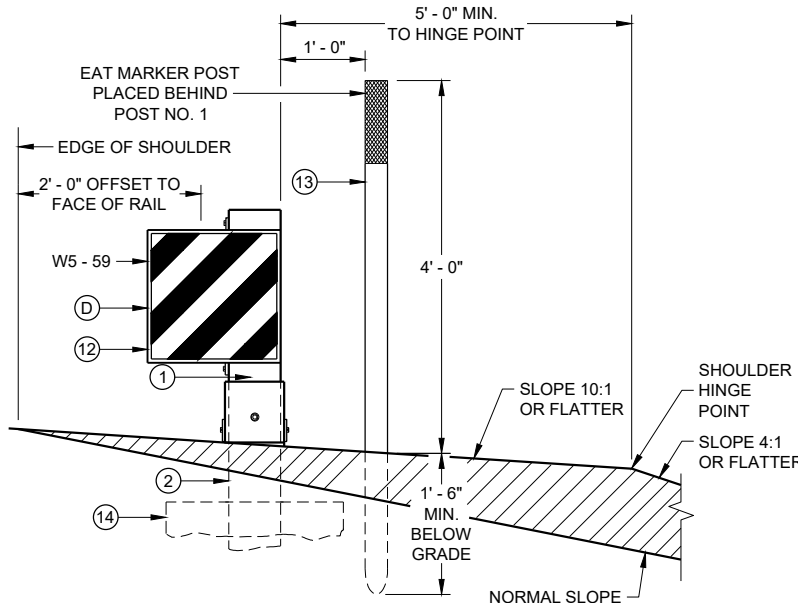
DETAIL "A"



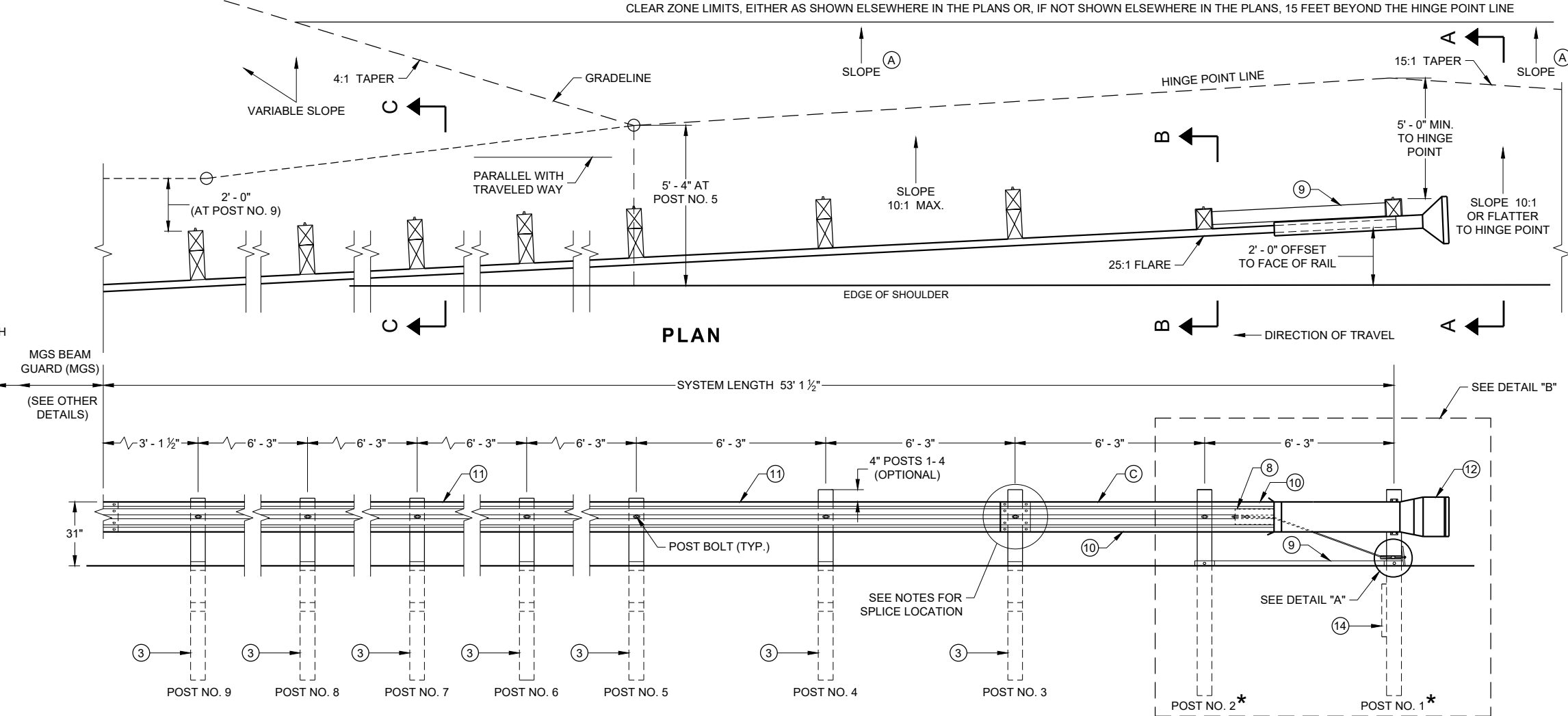
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*

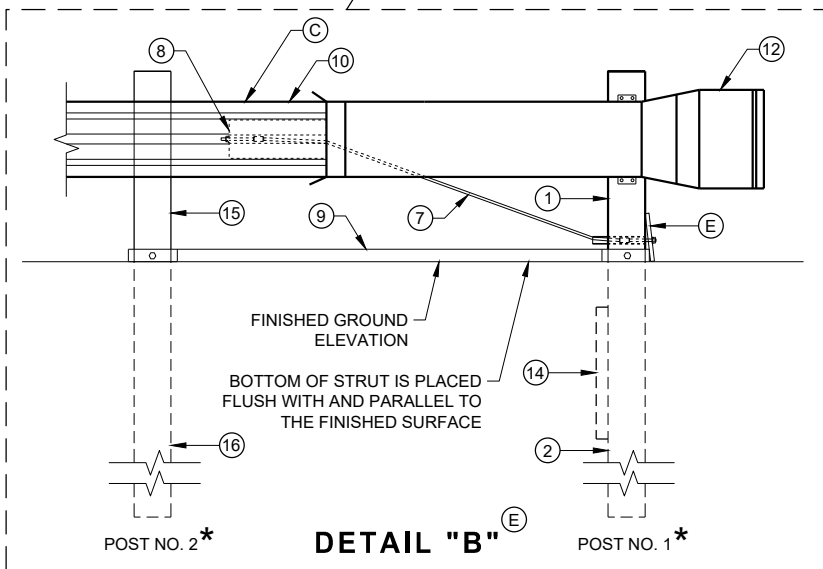


SECTION A - A
TYPICAL AT POST NO. 1*



PLAN

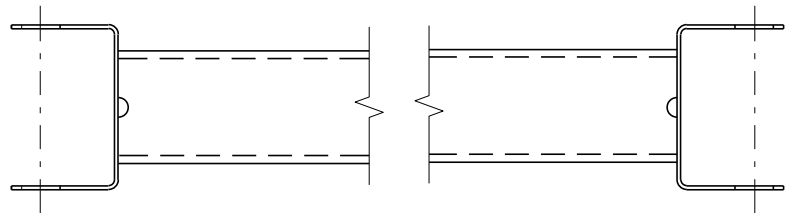
ELEVATION



DETAIL "B"

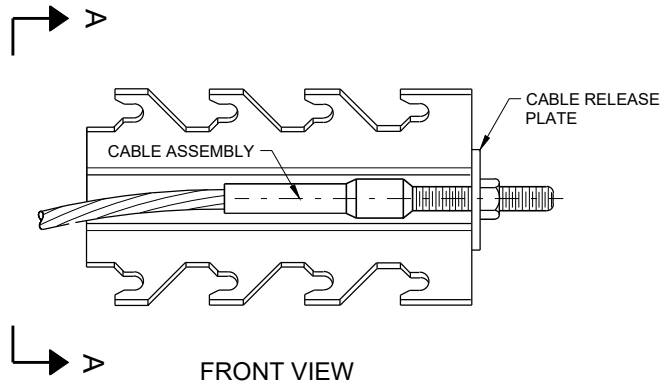
**MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

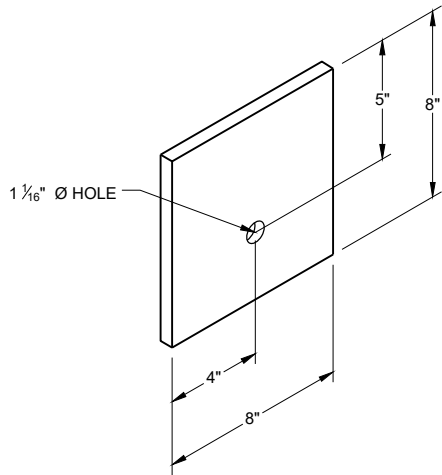
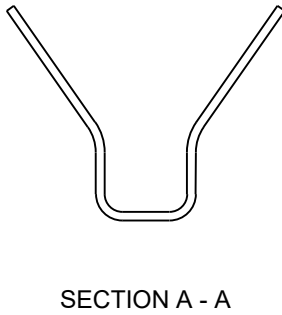


GENERIC GROUND STRUT⁹ ^E

BILL OF MATERIALS	
PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'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



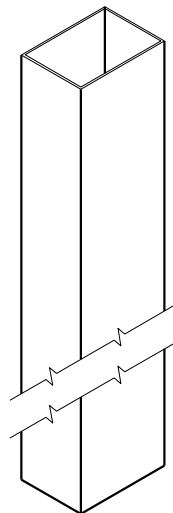
GENERIC ANCHOR CABLE BOX⁹ ^E



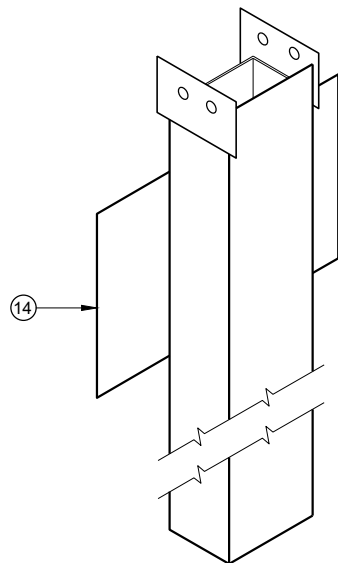
BEARING PLATE⁶ ^E

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

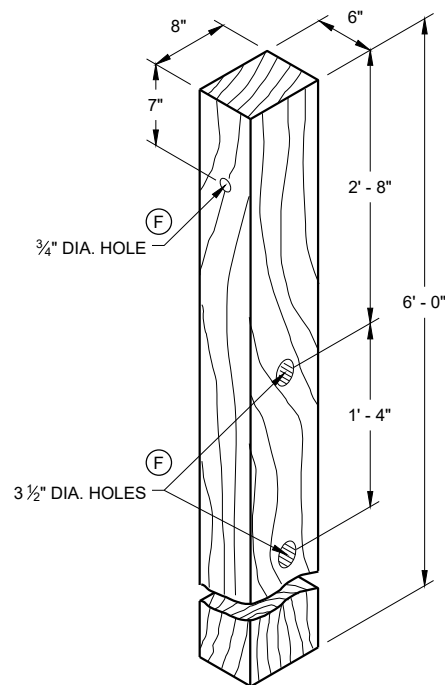
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



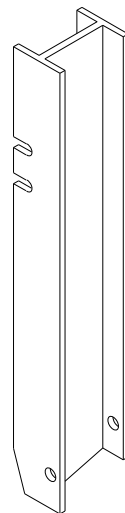
UPPER POST NO. 1 ⁽¹⁾ (E)



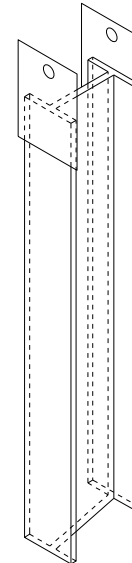
LOWER POST NO. 1 ⁽²⁾ (E)



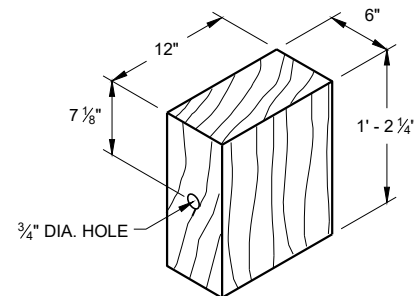
WOOD CRT POST ⁽³⁾ (E)
POSTS NUMBER 3-9



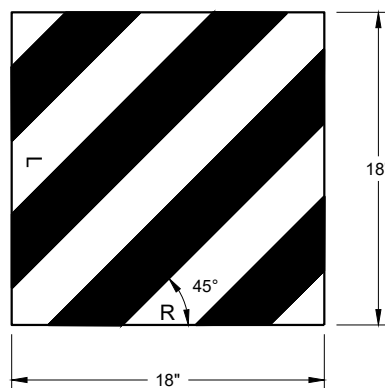
UPPER POST NO. 2 ⁽¹⁵⁾ (E)



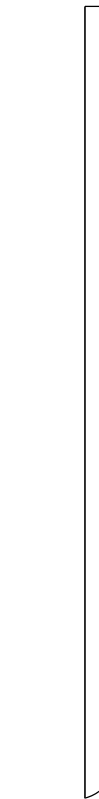
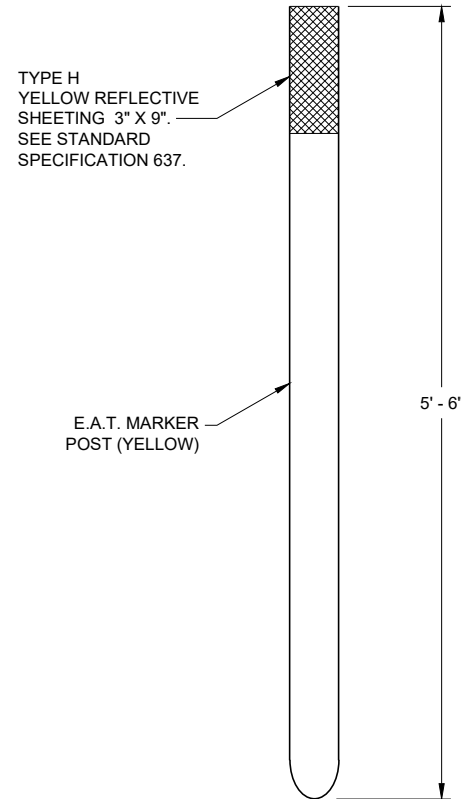
LOWER POST NO. 2 ⁽¹⁶⁾ (E)



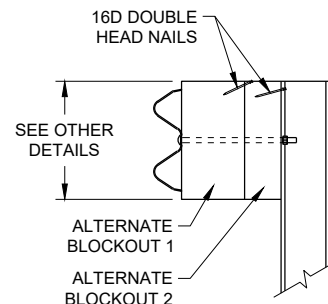
WOOD BLOCKOUT ⁽⁴⁾
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



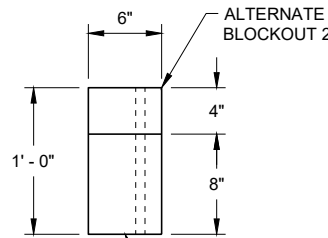
REFLECTIVE SHEETING DETAIL ^(E)



E.A.T. MARKER POST ⁽¹³⁾



SIDE VIEW



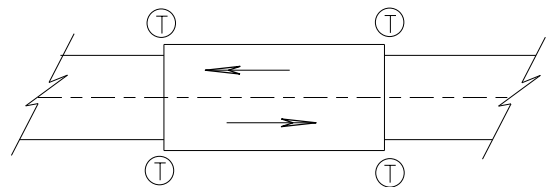
TOP VIEW

ALTERNATE WOOD
BLOCKOUT DETAIL

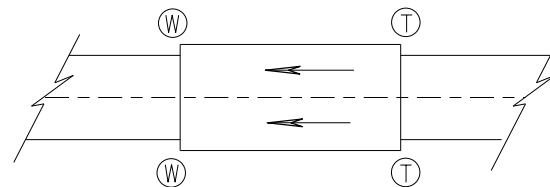
**MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR 100
FHWA



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

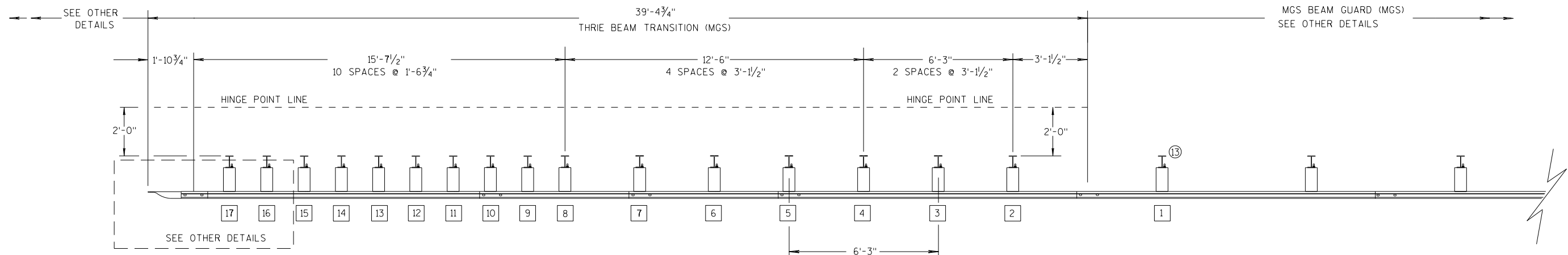
IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2 1/2", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

TRANSITION USES STEEL POSTS ONLY.

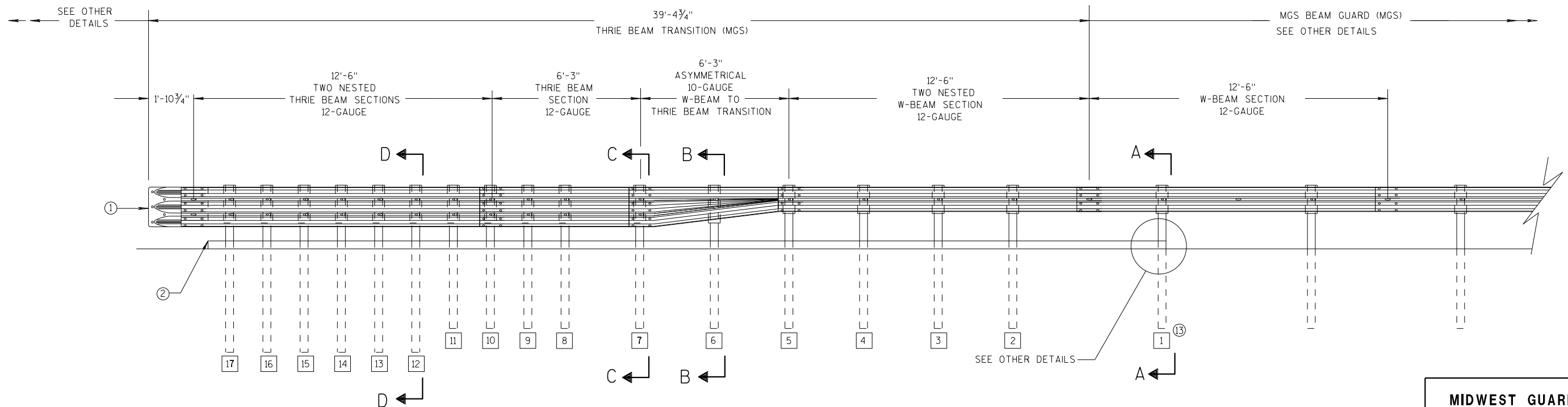
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

- ① BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.
- ② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.
- ⑬ STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD14B42



PLAN VIEW



ELEVATION VIEW

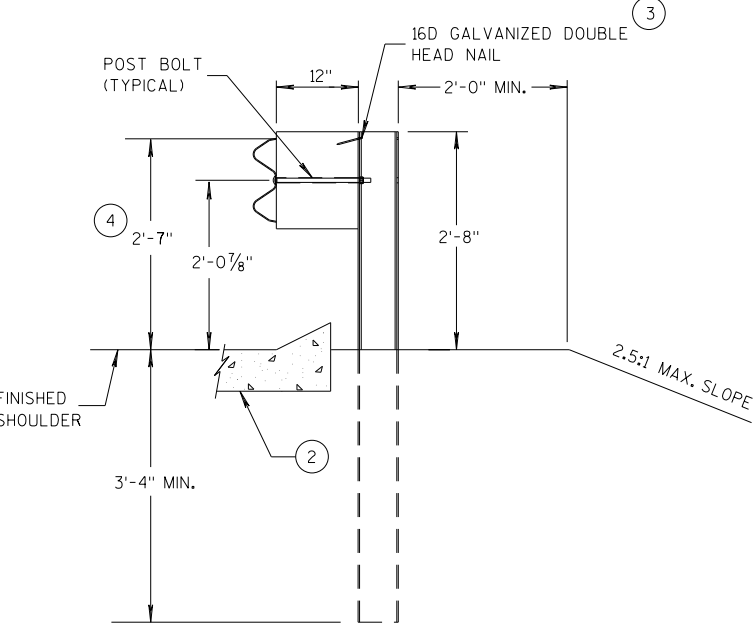
MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

**MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)**

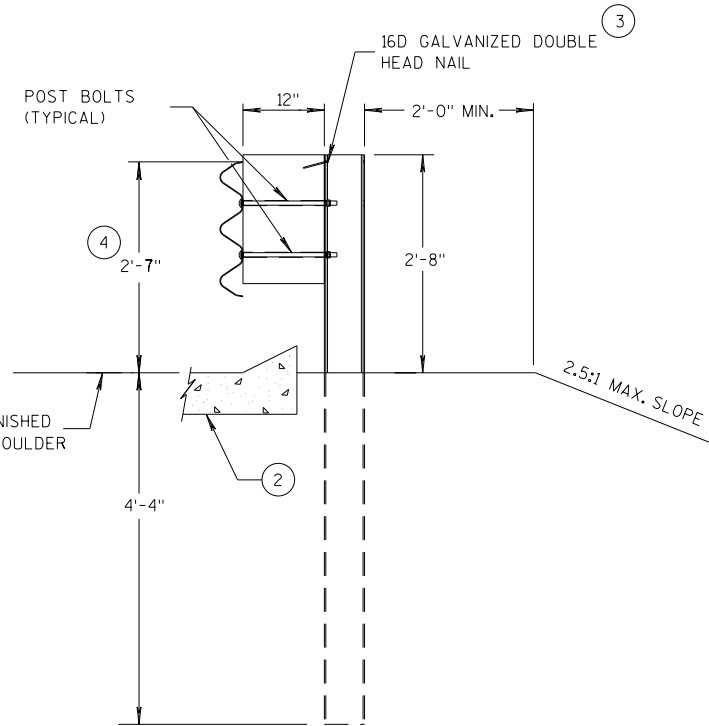
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 101

GENERAL NOTES

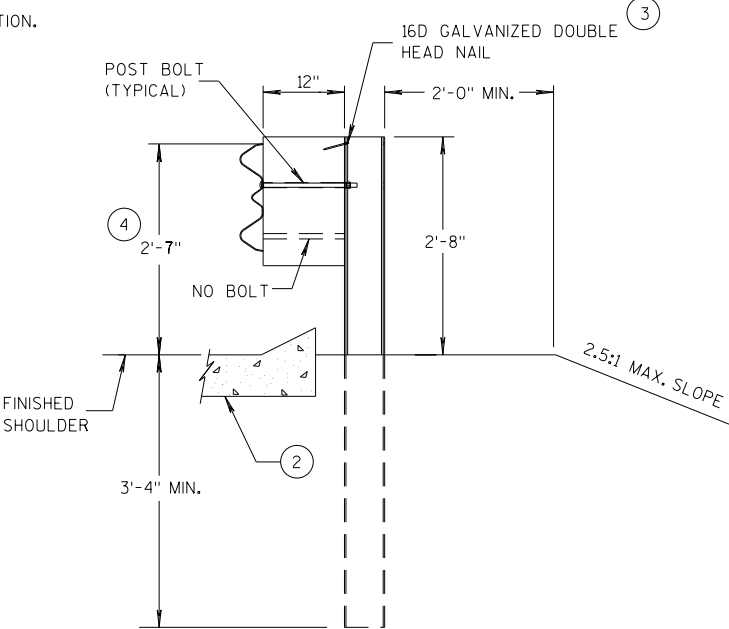
- 2 OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.
- 3 WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 10D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.
- 4 TOLERANCE FOR TOP OF W-BEAM RAIL IS $\pm 1"$.
- 13 STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42



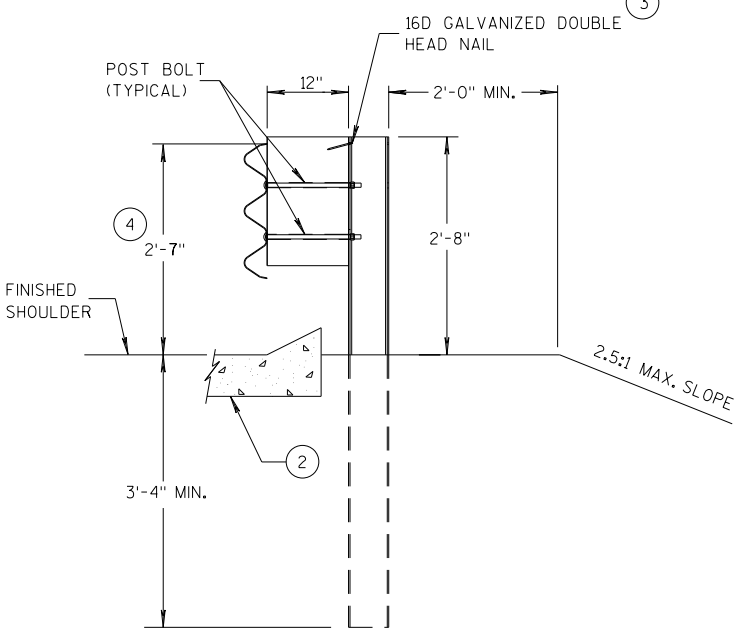
SECTION A-A
POSTS 1-5



SECTION D-D
POSTS 12-17



SECTION B-B
POST 6



SECTION C-C
POSTS 7-11

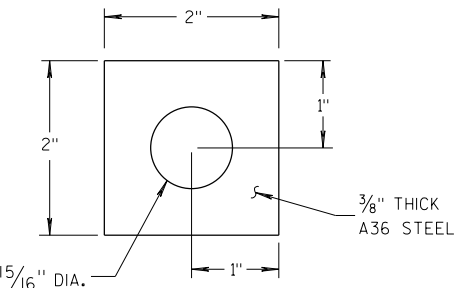
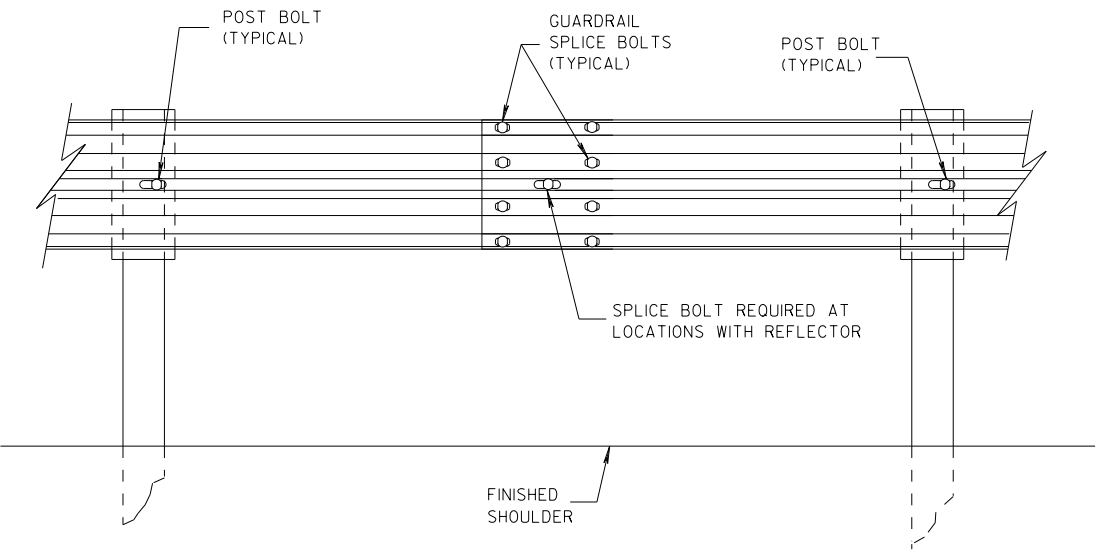
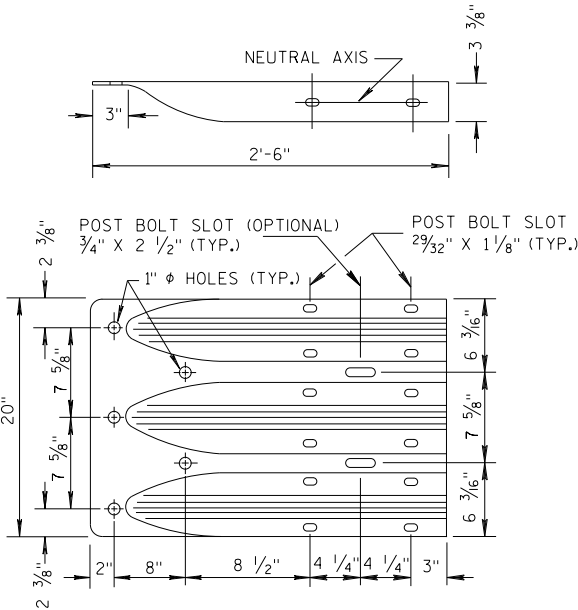


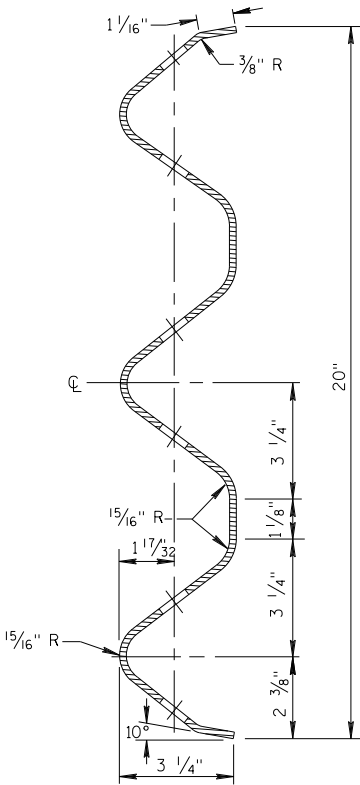
PLATE WASHER DETAIL



SPLICE DETAIL



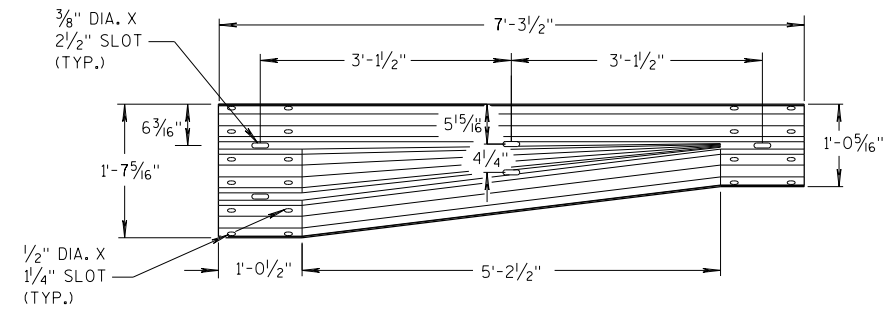
THRIE BEAM
TERMINAL CONNECTOR



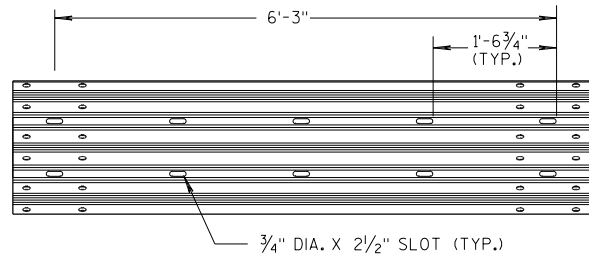
SECTION THRU THRIE
BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

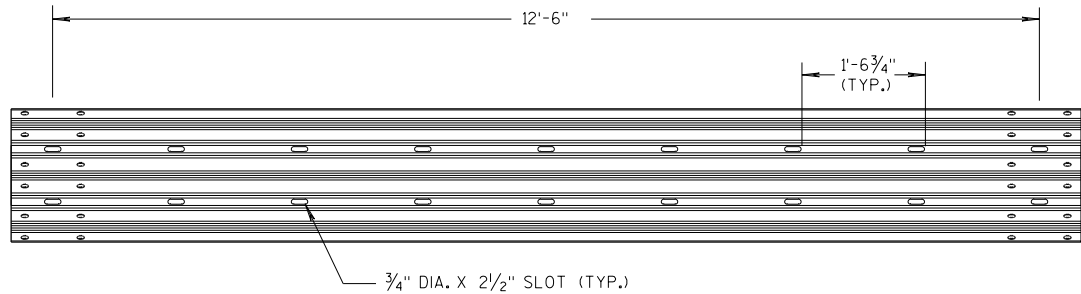
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



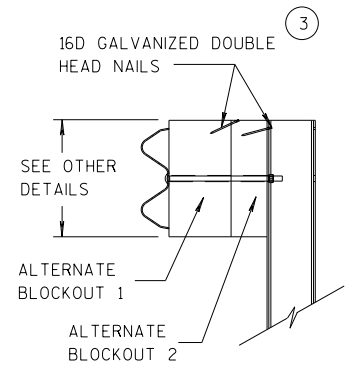
W-BEAM TO THRIE BEAM TRANSITION SECTION



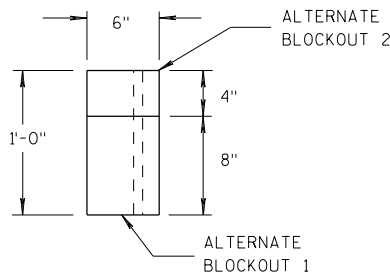
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

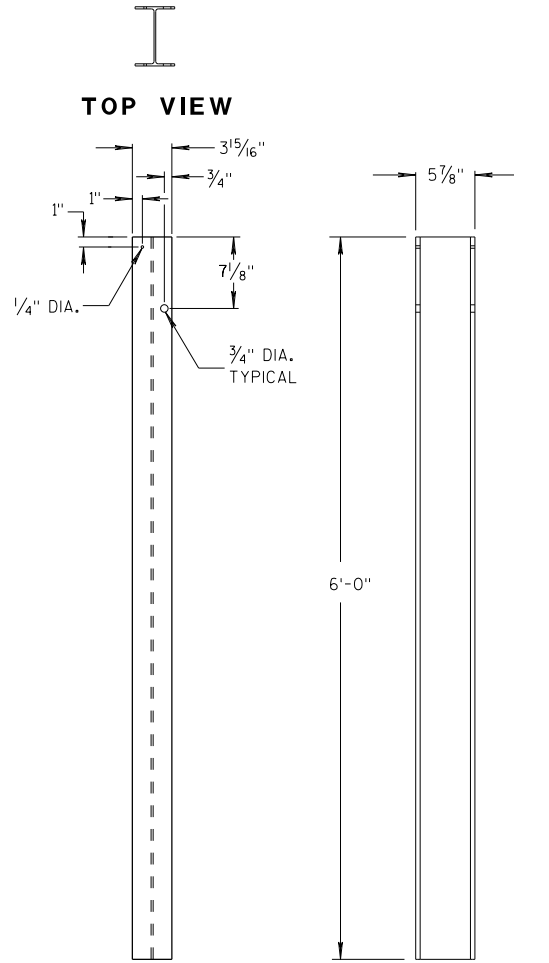


SIDE VIEW



TOP VIEW

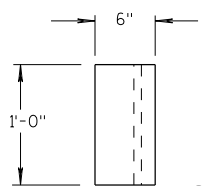
ALTERNATE WOOD BLOCKOUT DETAIL



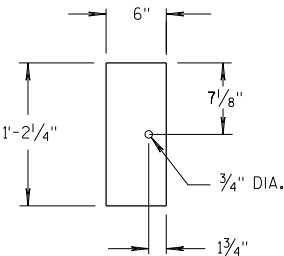
FRONT VIEW

SIDE VIEW

STEEL POSTS 1-5

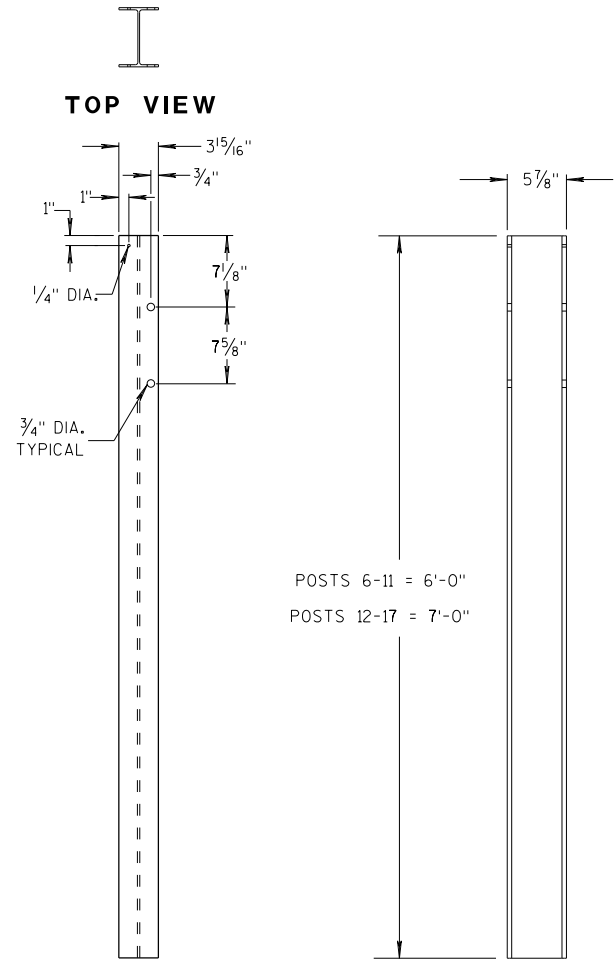


TOP VIEW



FRONT VIEW

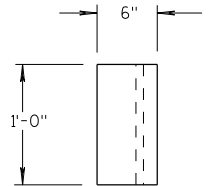
BLOCKOUT POSTS 1-5



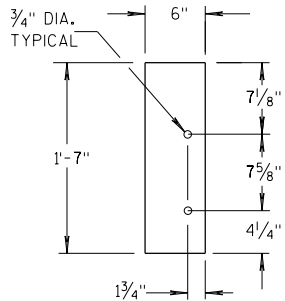
FRONT VIEW

SIDE VIEW

STEEL POSTS 6-17



TOP VIEW



FRONT VIEW

BLOCKOUT POSTS 6-17

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

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

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

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

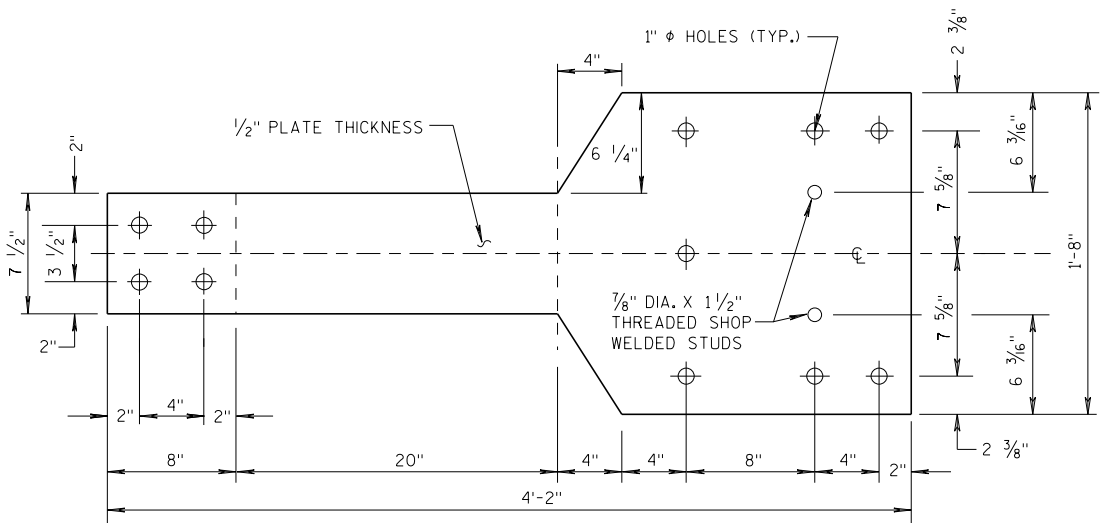
(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

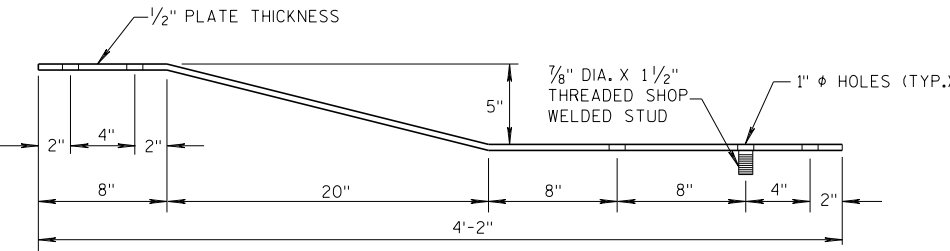
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

④ TOLERANCE FOR TOP OF W-BEAM RAIL IS $\pm 1"$.

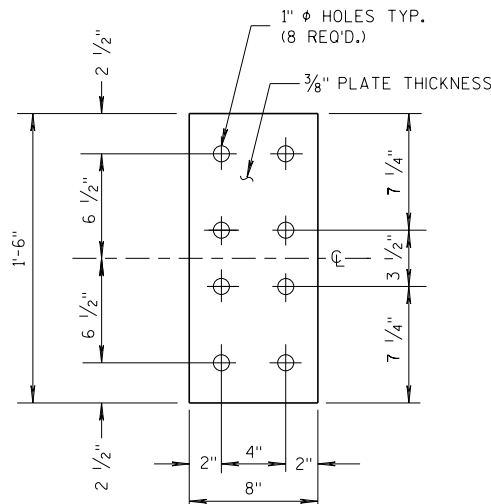


FRONT VIEW



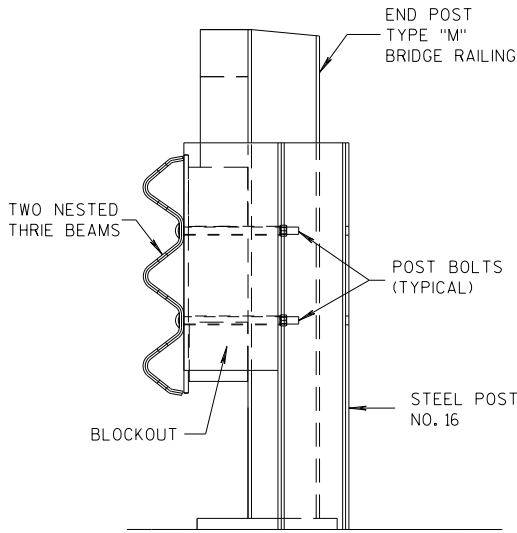
PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

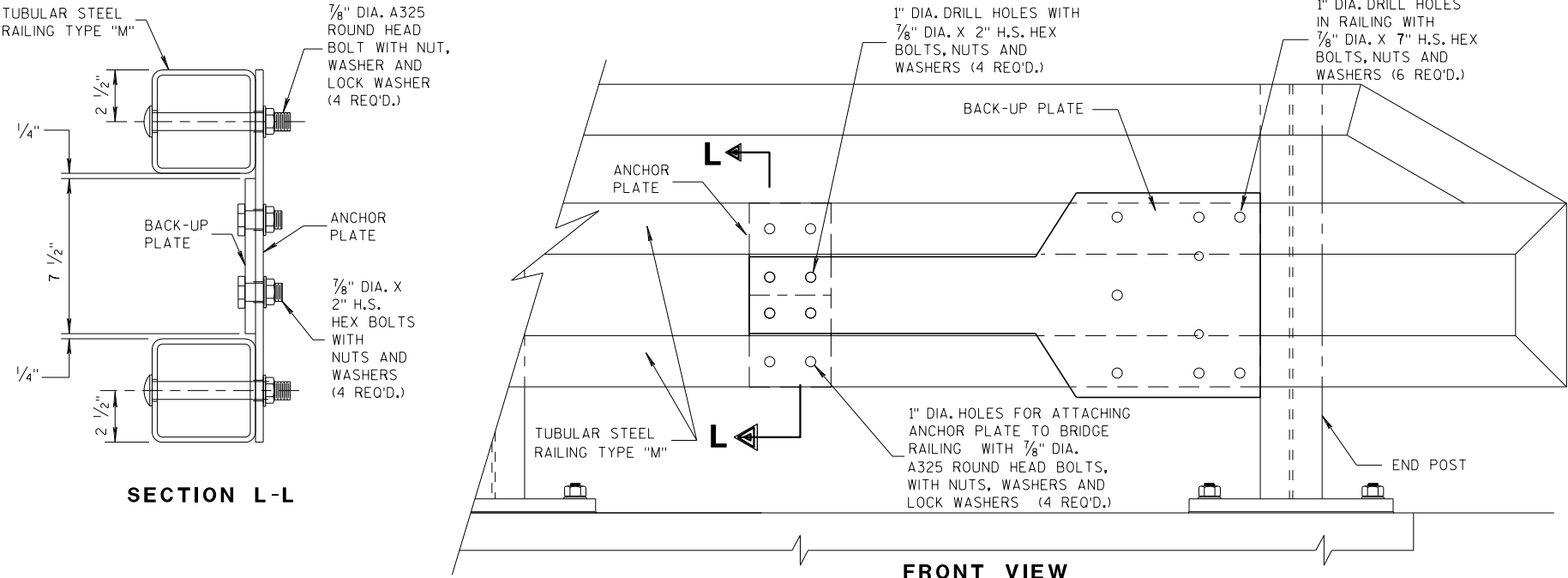


FRONT VIEW

ANCHOR PLATE DETAIL, TYPE "M"



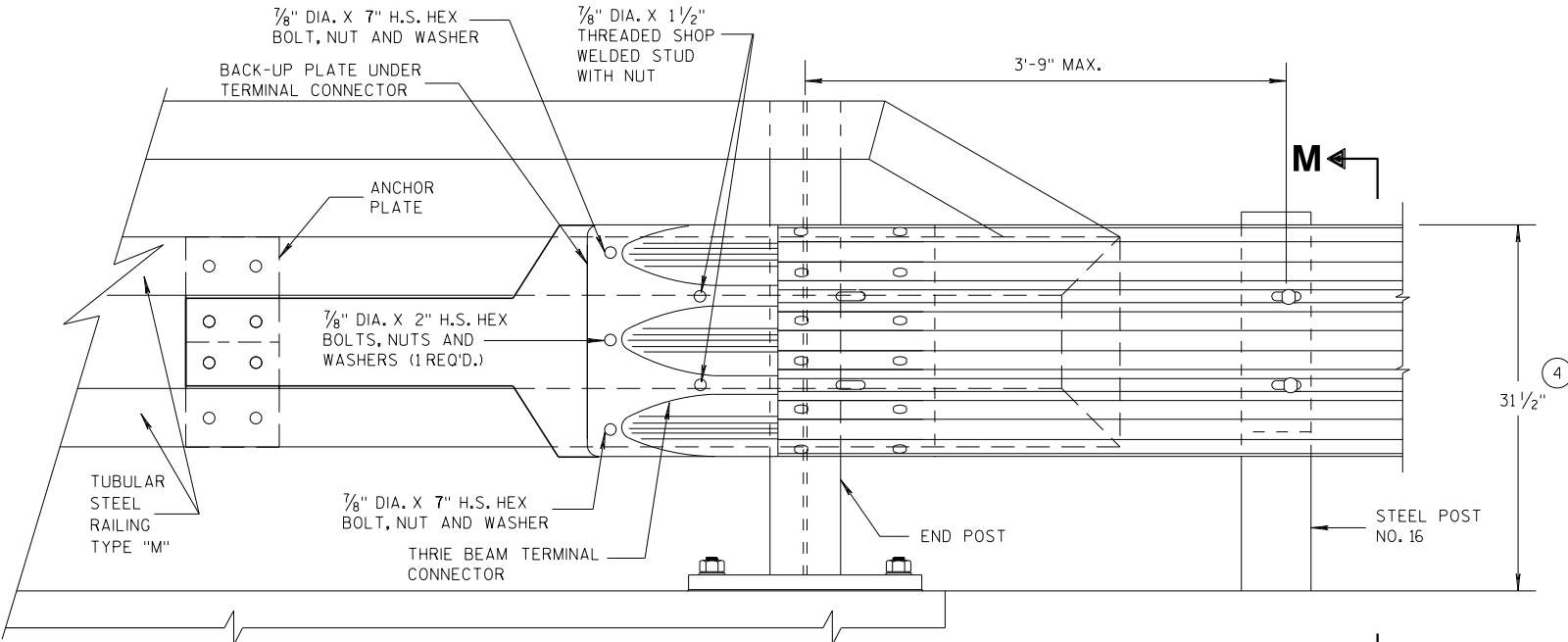
SECTION M-M



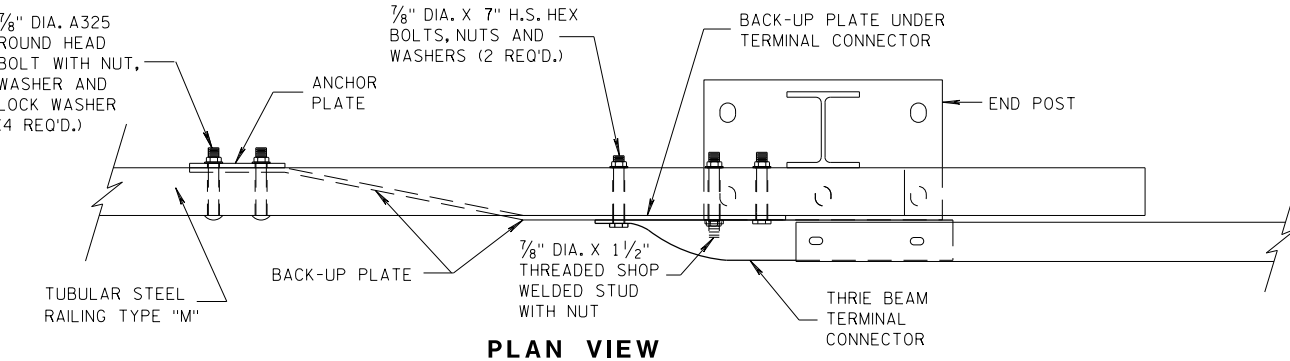
SECTION L-L

FRONT VIEW

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



FRONT VIEW



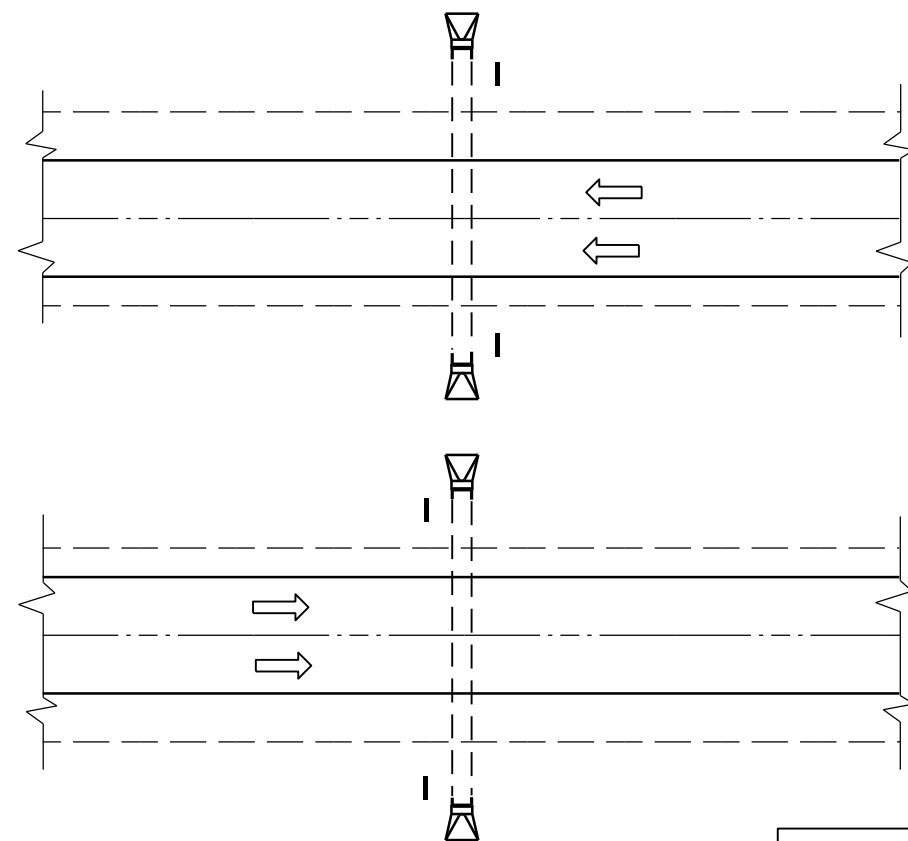
PLAN VIEW

THREE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

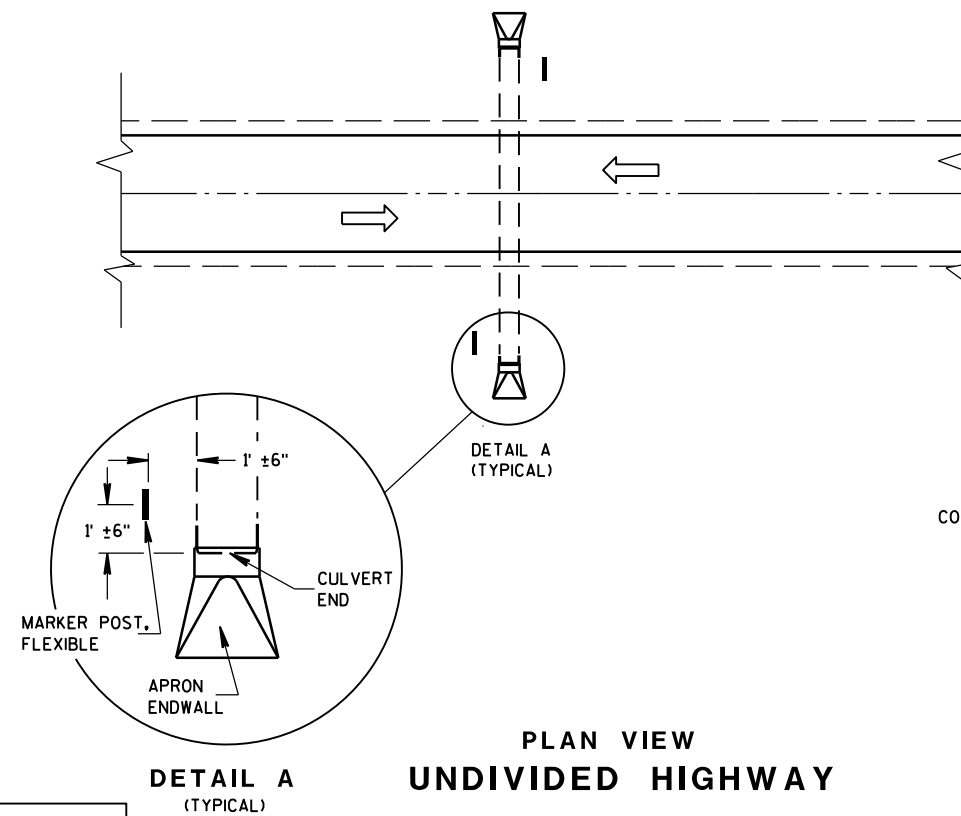
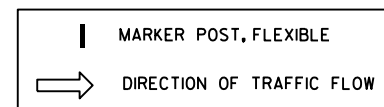
MIDWEST GUARDRAIL SYSTEM
THREE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018 /S/ Rodney Taylor
DATE ROADWAY STANDARDS UNIT SUPERVISOR
FHWA 104 ENT



PLAN VIEW
DIVIDED HIGHWAY

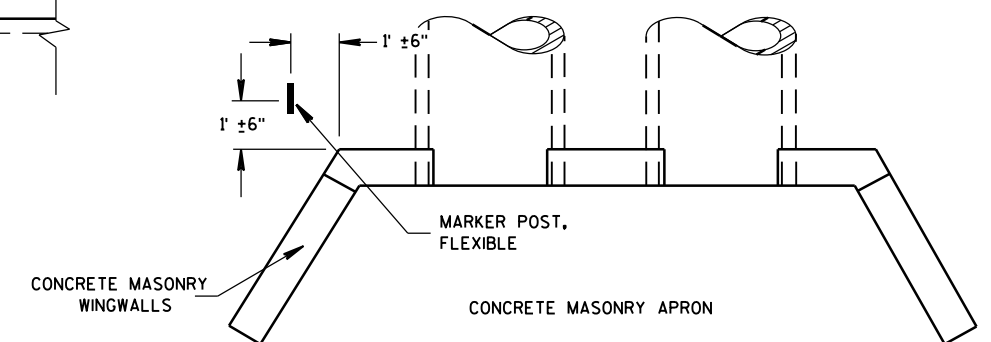


PLAN VIEW
UNDIVIDED HIGHWAY

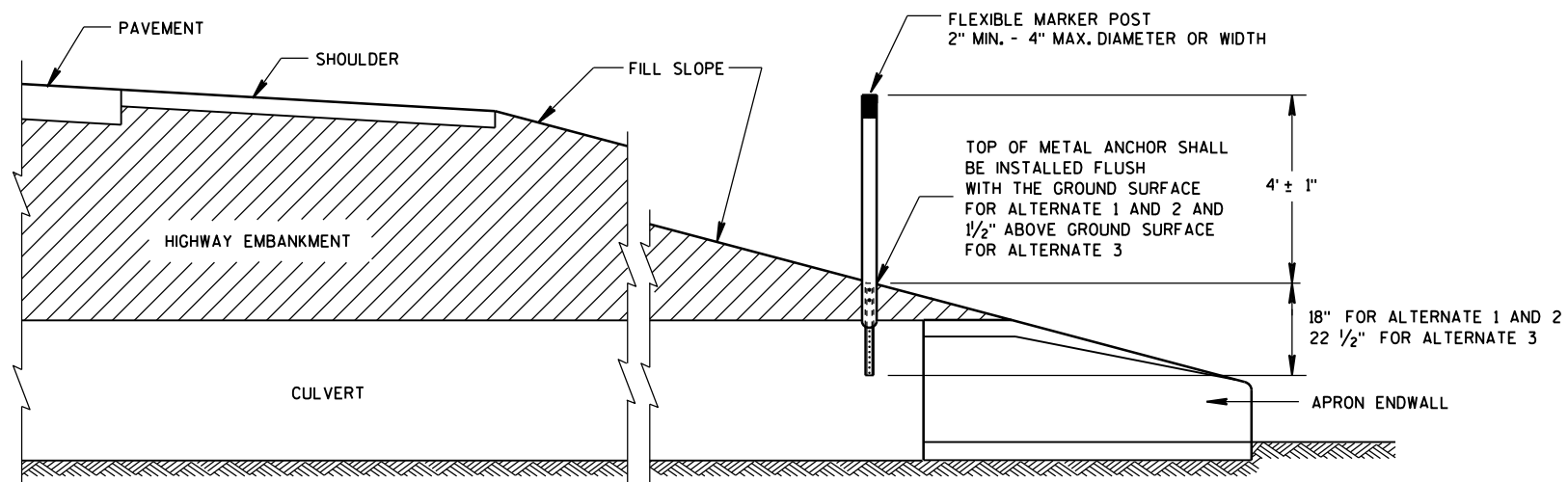
FLEXIBLE MARKER POST LOCATION

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.



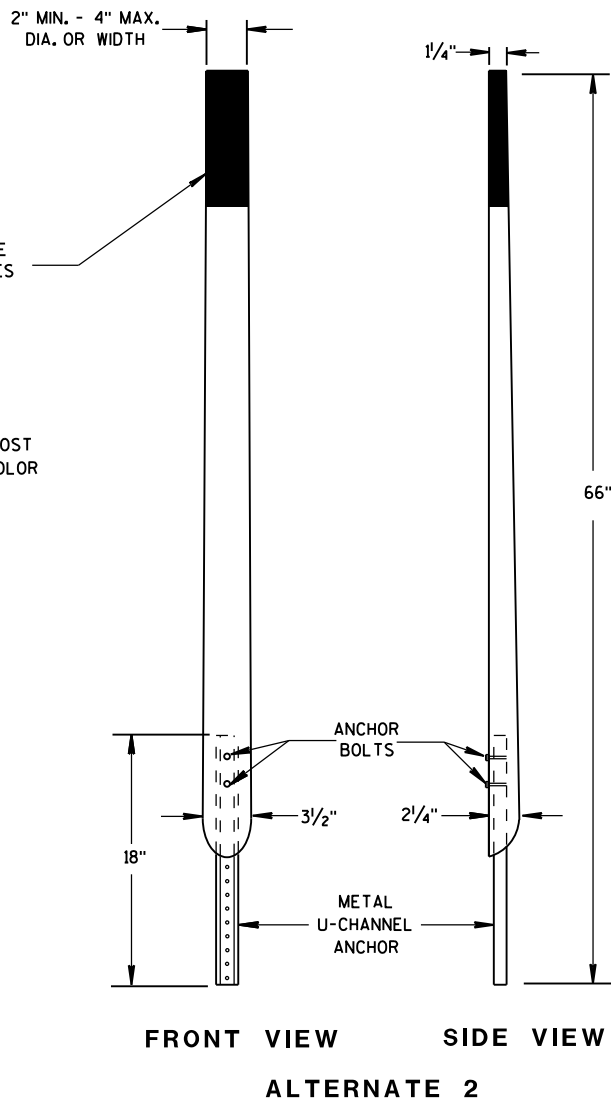
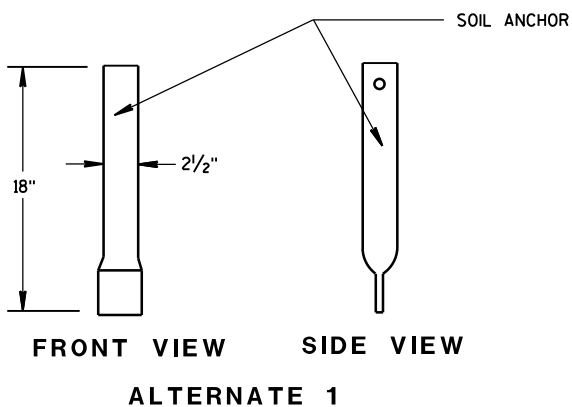
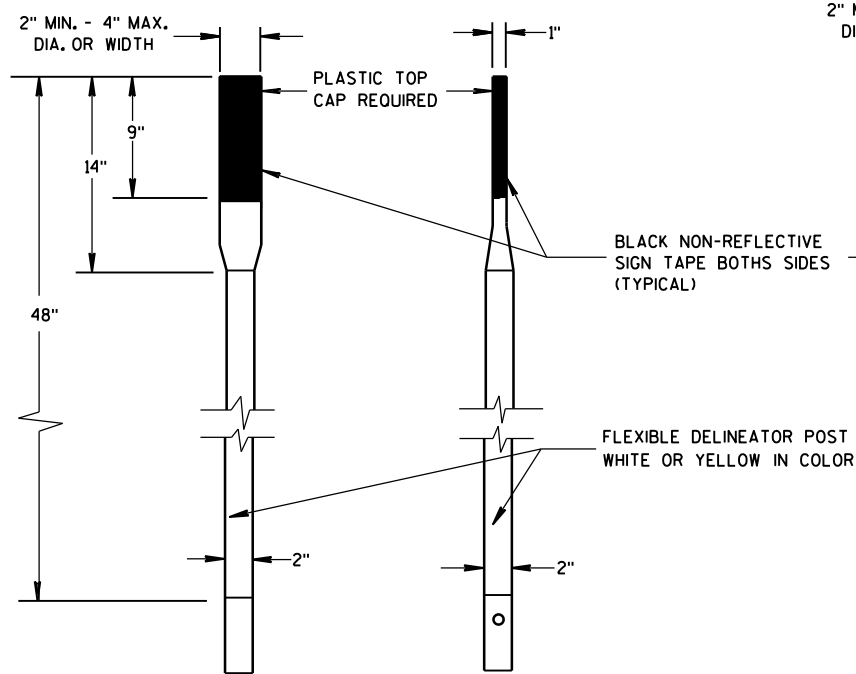
PLAN VIEW
CONCRETE MASONRY ENDWALLS FOR
CULVERT PIPE AND PIPE ARCH



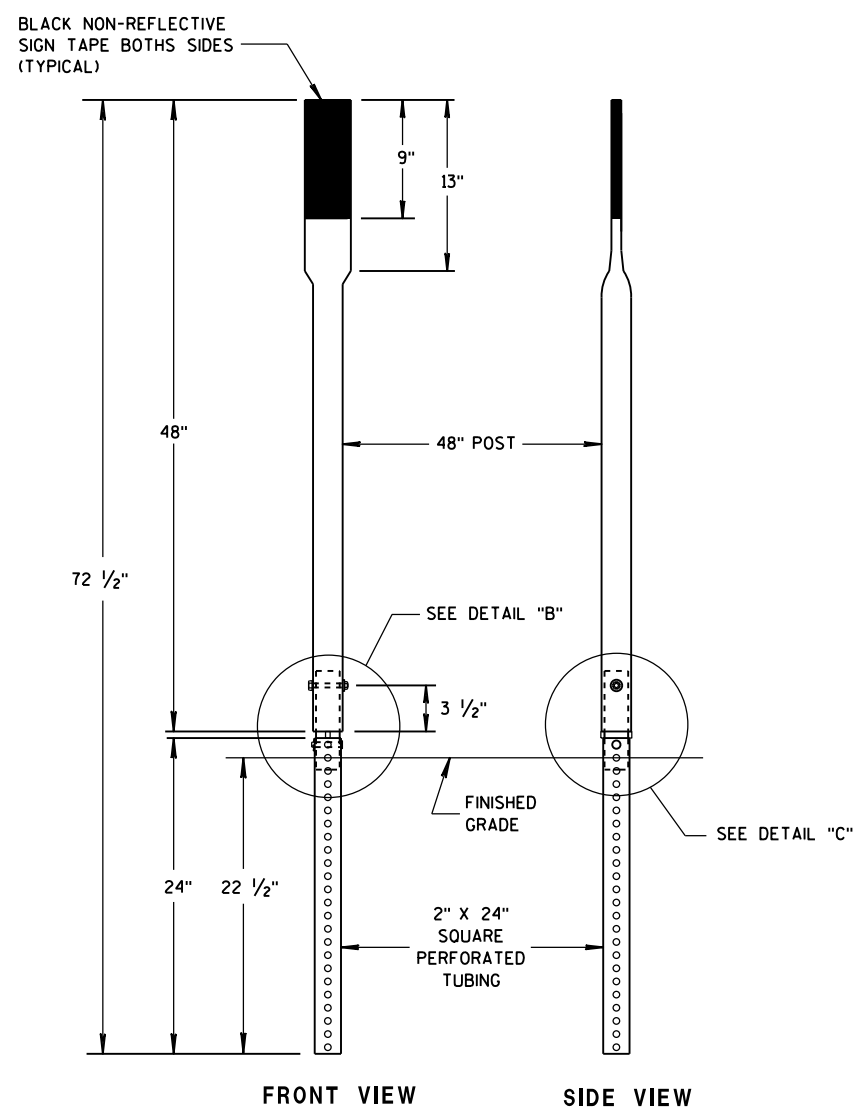
CROSS SECTION
FLEXIBLE MARKER POST

FLEXIBLE MARKER POST
FOR CULVERT END

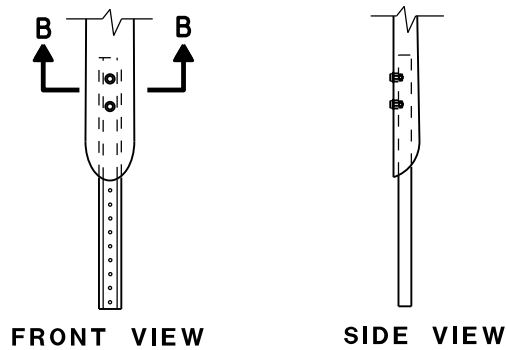
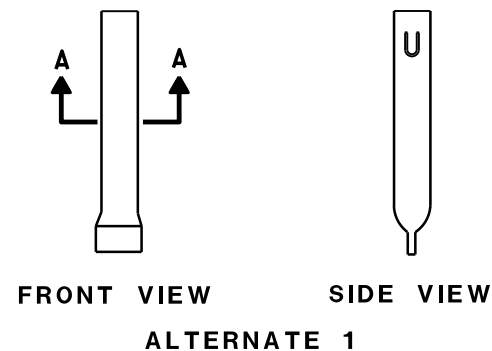
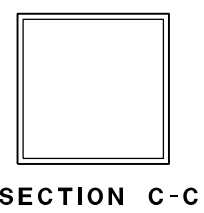
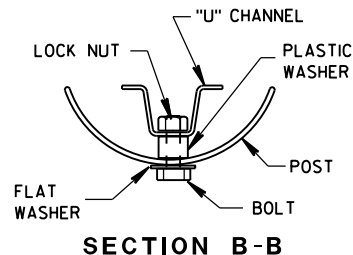
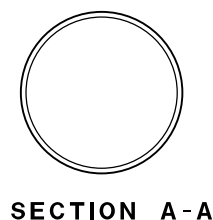
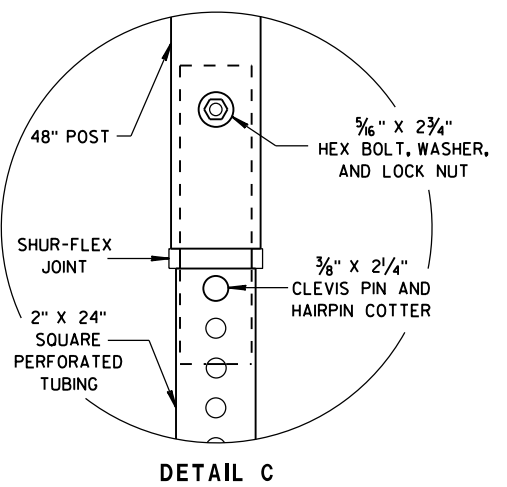
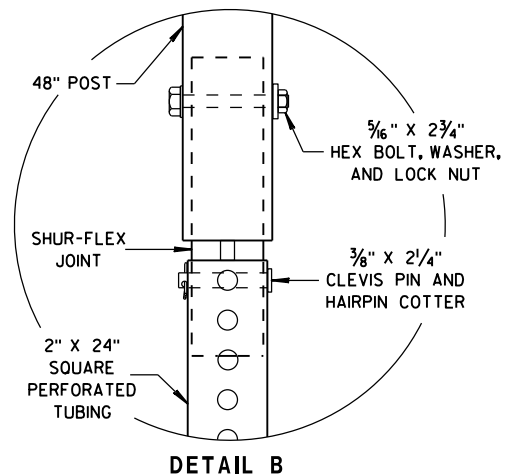
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 105



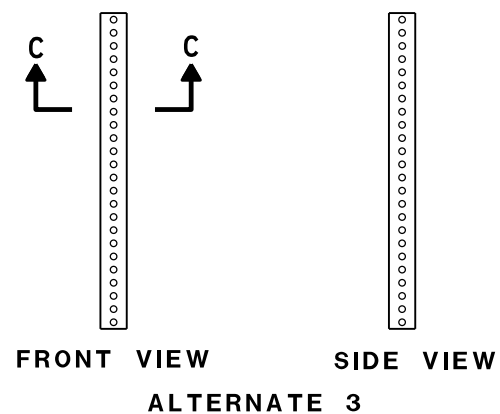
FLEXIBLE MARKER POSTS



ALTERNATE 3

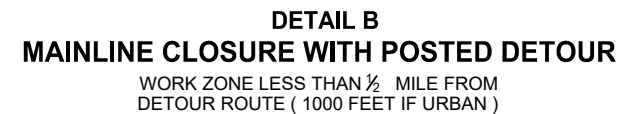
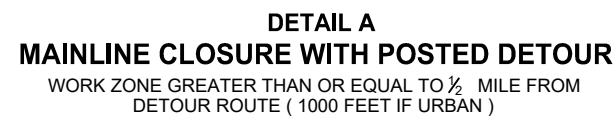


FLEXIBLE MARKER POST ANCHORS



ALTERNATE 3

FLEXIBLE MARKER POST FOR CULVERT END		
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION		
APPROVED 10/1/2012 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEER 106	IGN
FHWA		

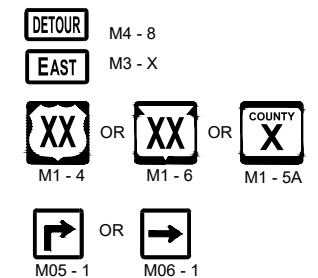


SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

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



	SIGN ON PERMANENT SUPPORT
	TYPE III BARRICADE
	TYPE III BARRICADE WITH ATTACHED SIGN
	TYPE "A" WARNING LIGHT (FLASHING)
	WORK AREA
	FLAGS, 16" X 16" MIN. (ORANGE)



BARRICADES AND SIGNS FOR MAINLINE CLOSURES

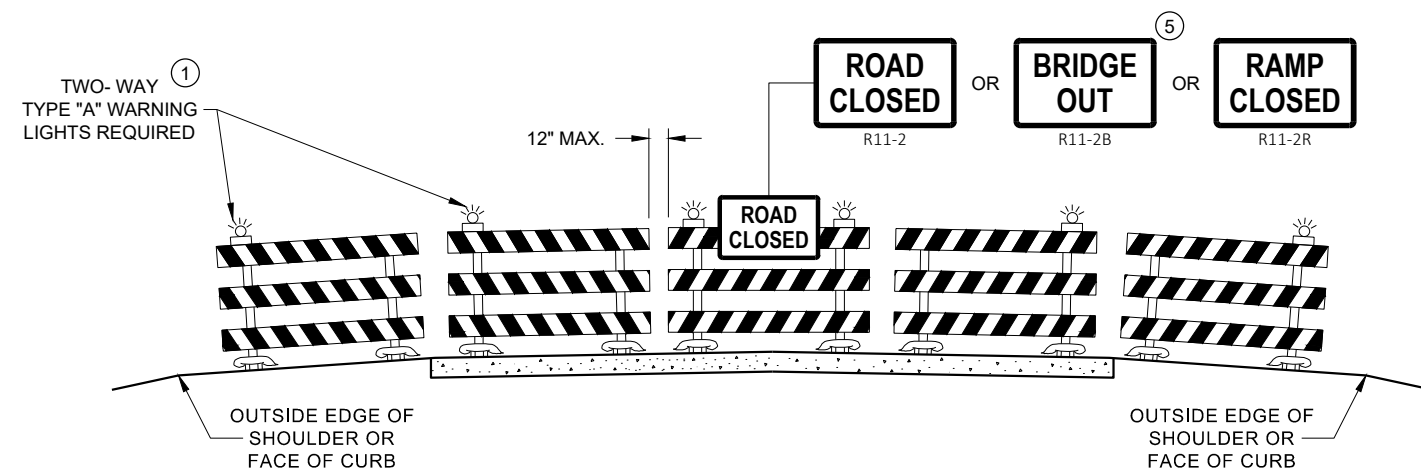
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

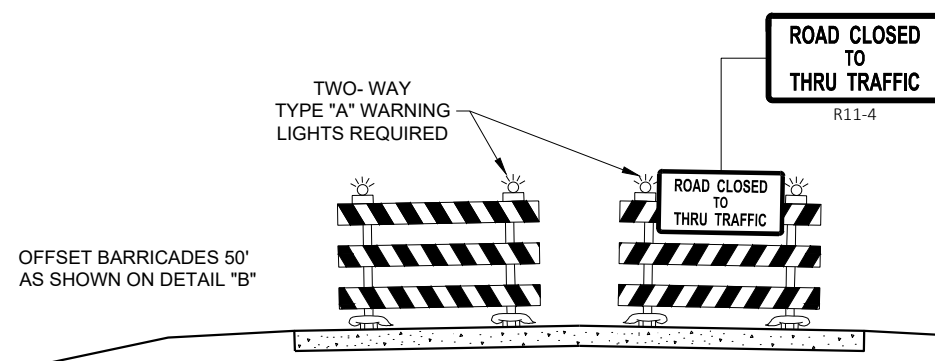
/S/ Andrew Heidtke
WORK ZONE ENGINEER

107

FHWA



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

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

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

R11 - 2 SHALL BE 48" X 30"

R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"

M4 - 9 SHALL BE 30" X 24"

M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)

M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)

M1 - 4. M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)

MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)

D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

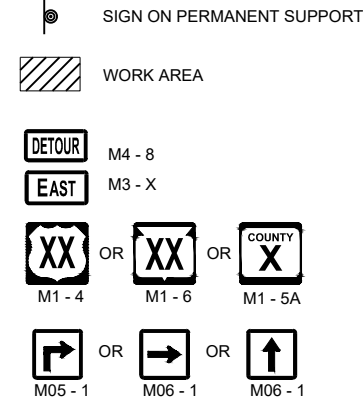
R1 - 1 SHALL BE 36" X 36"

- ① TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING).
- ② THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.
- ③ FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".
- ④ FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".
- ⑤ FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.
- ⑥ INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.
- ⑦ "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 108



WORK AREA

DETOUR M4 - 8

EAST M3 - X



XX

COUNTY
X

M05 -

 M06 -

R  M06 -

GENERAL NOTES

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

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

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

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

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

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

SIGN SIZES SHALL BE AS FOLLOWS:

M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)

M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)

M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)

M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)

M4-9 AND M4-59 SHALL BE 30" X 24"

M4-8a SHALL BE 24" X 18"

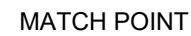
G20-51 SHALL BE 60" X 24"

W20-2A SHALL BE 48" X 48"

D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

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

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



STATE OF WISCONSIN
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November 2018 /S/ Andrew Heidtke
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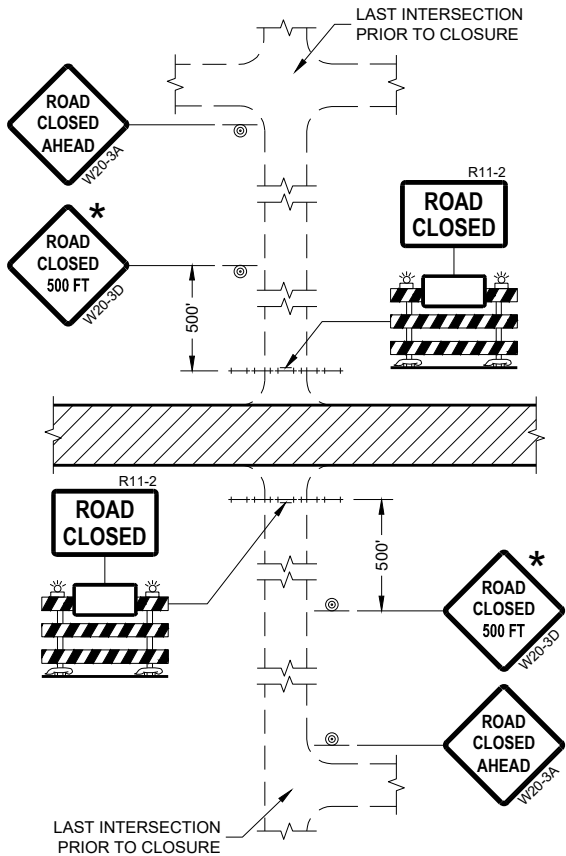
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6

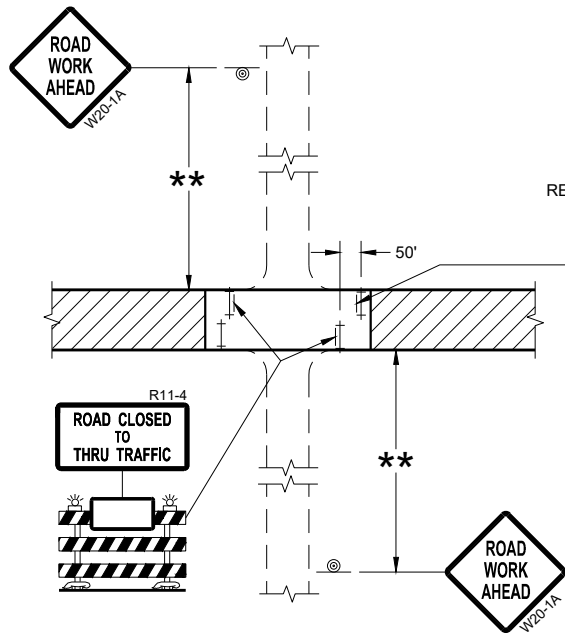
SDD 15C02 - 07c

SDD15C02 - 07c

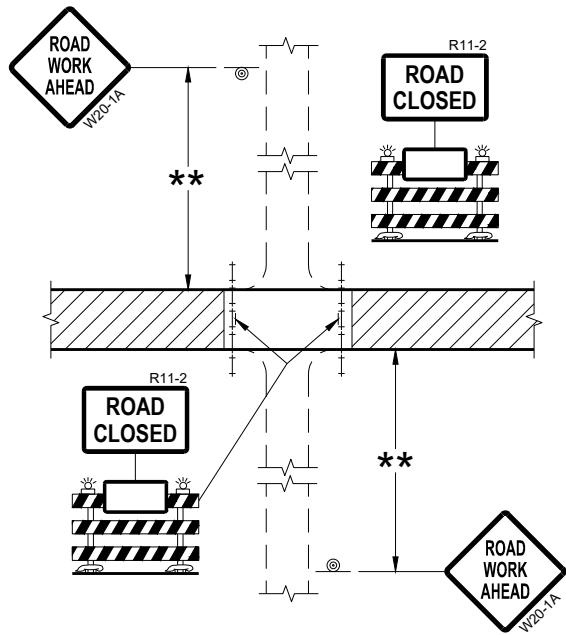
SEE SPECIFIC PROJECT DETOUR
SIGNING DETAIL SHEETS AND
DETAIL A OR B ON SDD SHEET 15C02 - SHEET "a"



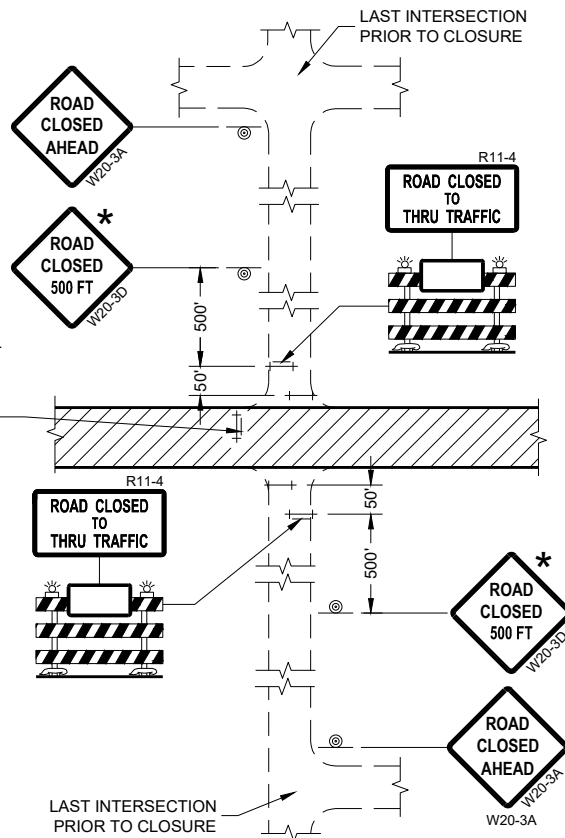
DETAIL 1
(NO ACCESS TO PROJECT)



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



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



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

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

- * OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.
- ** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.

LEGEND

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

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 110

FHWA

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.

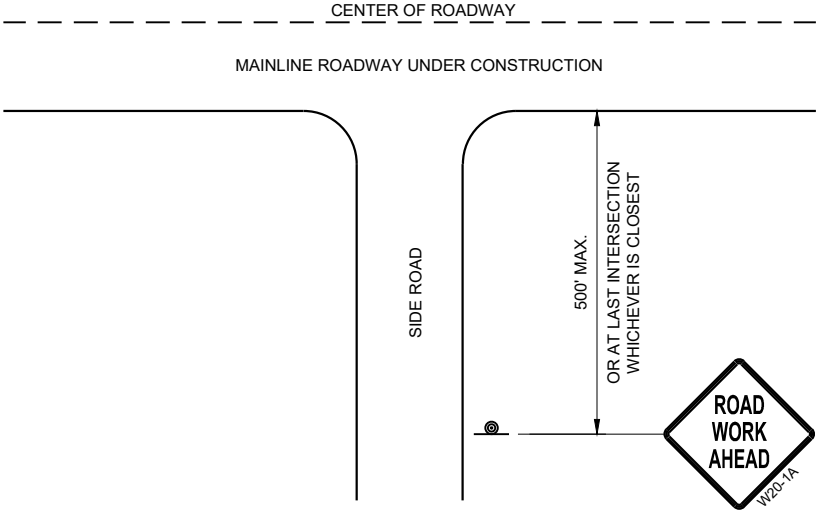
SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

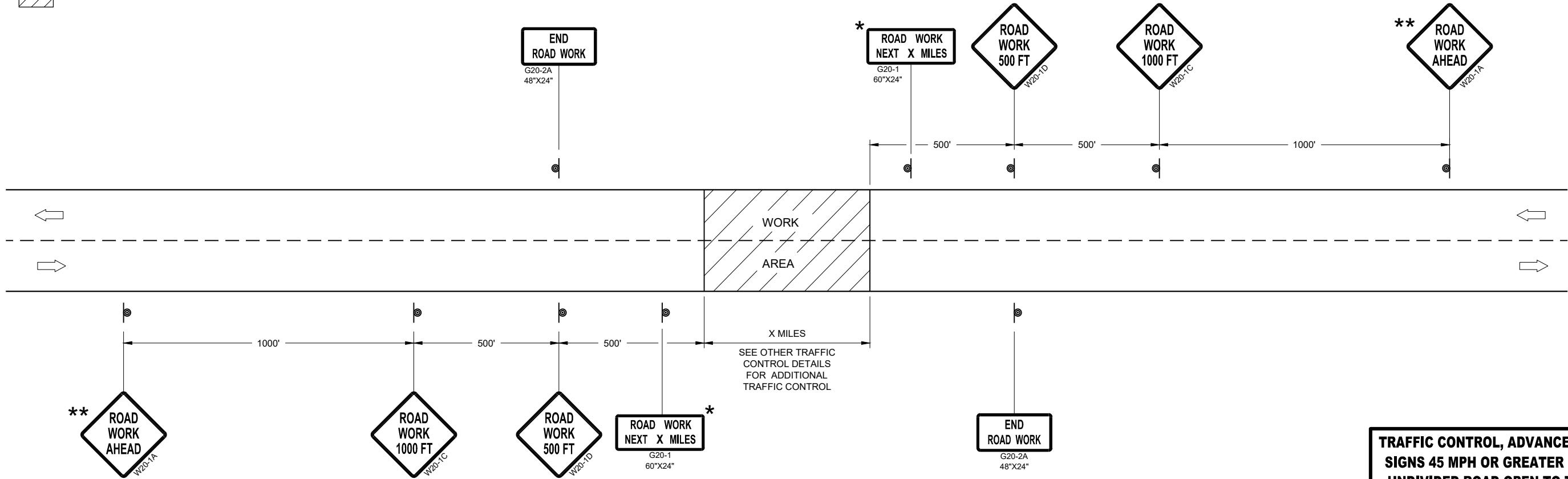
- * OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS
- ** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.

LEGEND

-  SIGN ON PERMANENT SUPPORT
-  DIRECTION OF TRAFFIC
-  WORK AREA



TYPICAL SIDE ROAD APPROACH
WARNING SIGN DETAIL

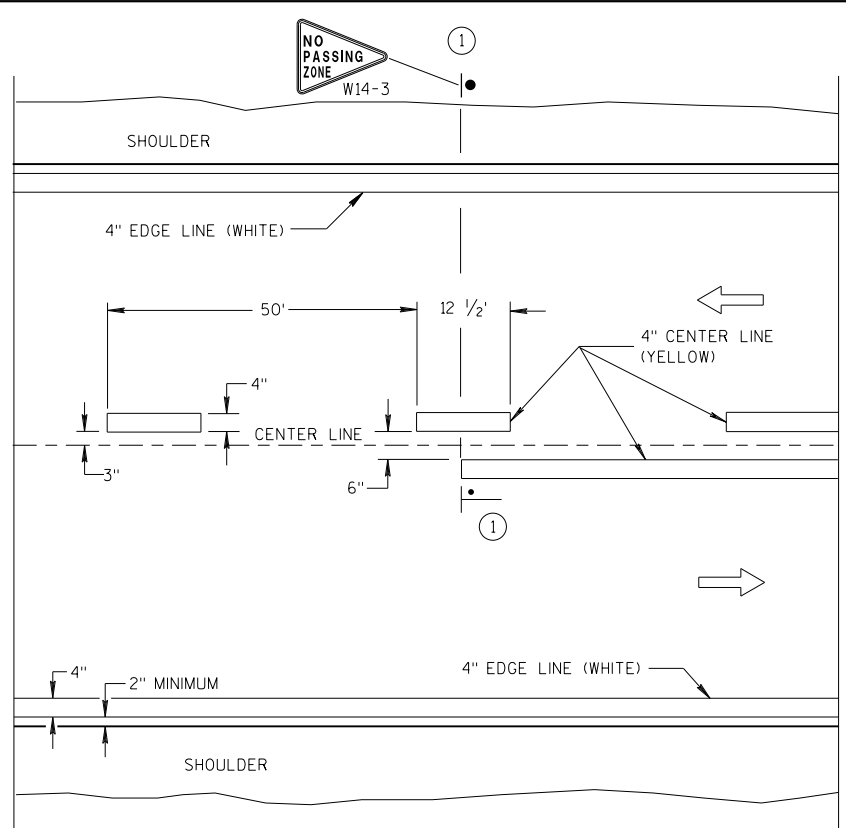


TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

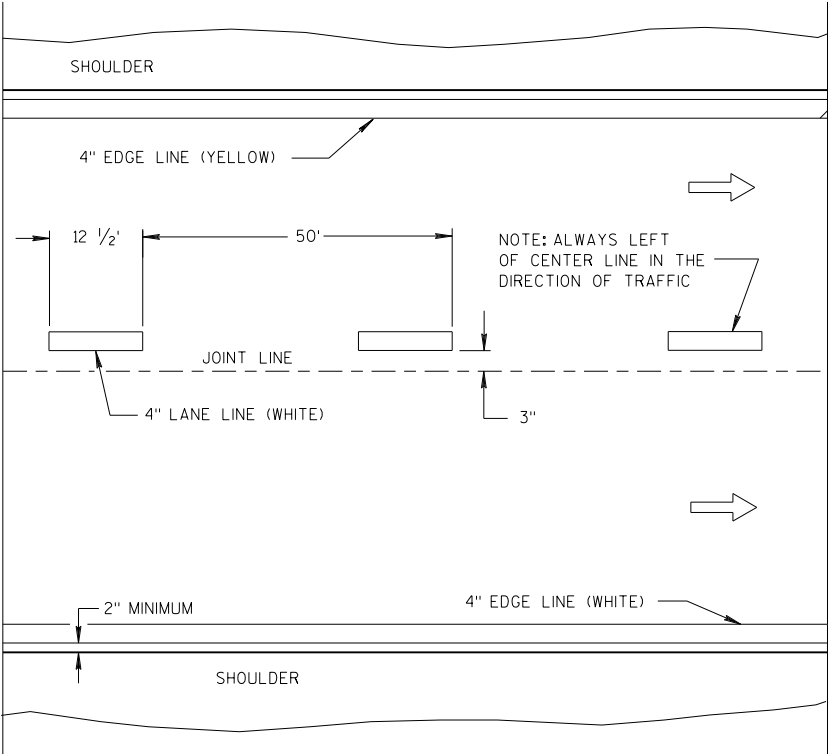
TRAFFIC CONTROL, ADVANCE WARNING
SIGNS 45 MPH OR GREATER TWO-WAY
UNDIVIDED ROAD OPEN TO TRAFFICE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 111
FHWA

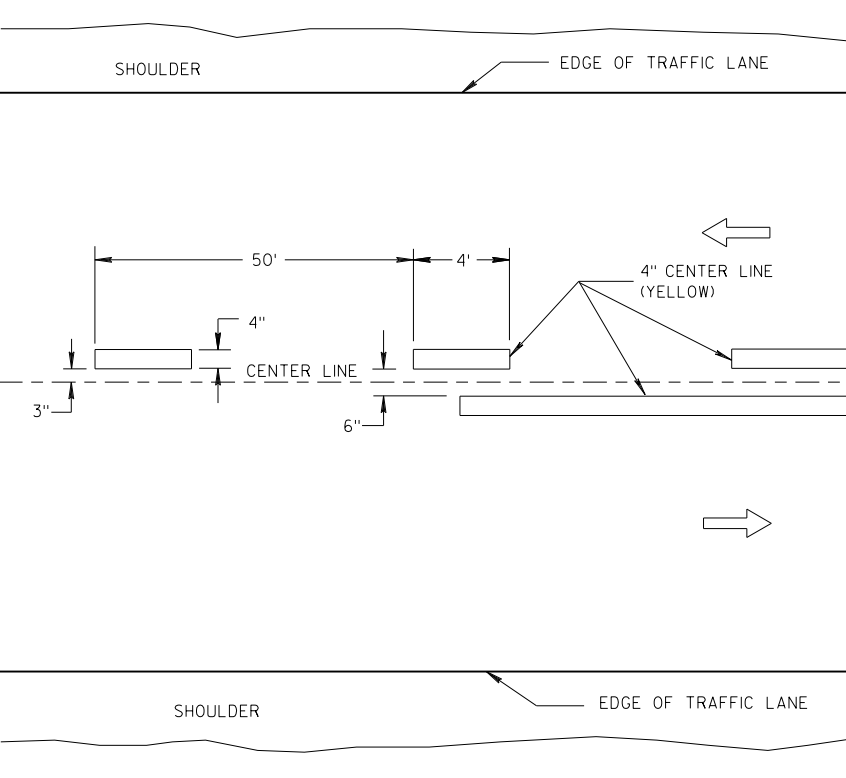


TWO WAY TRAFFIC

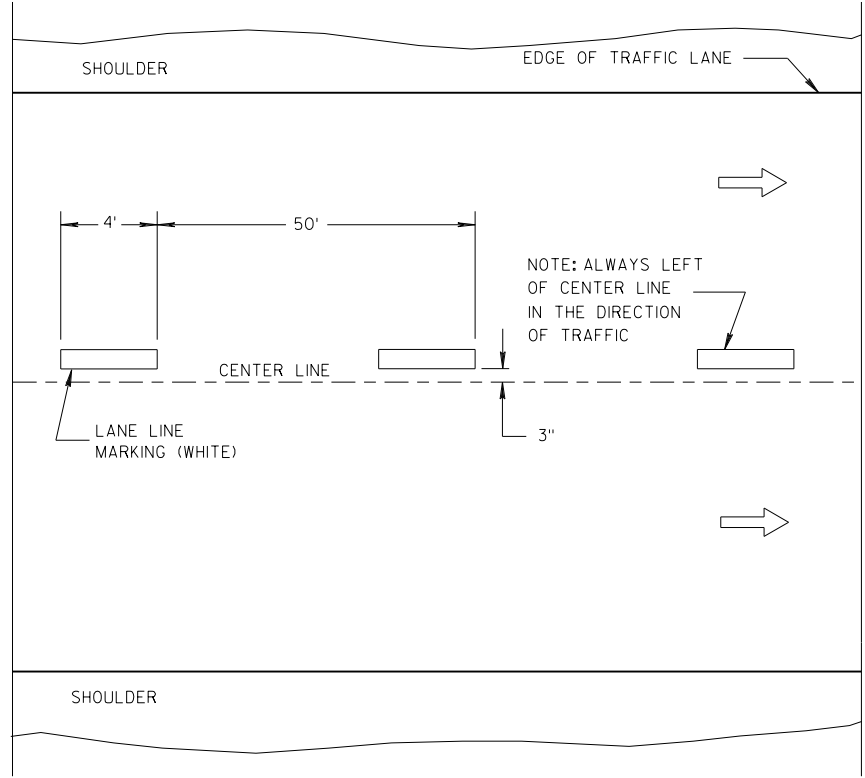


ONE WAY TRAFFIC

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.

NOTE

ARROW SYMBOL (➡) SHOWS DIRECTION OF TRAVEL

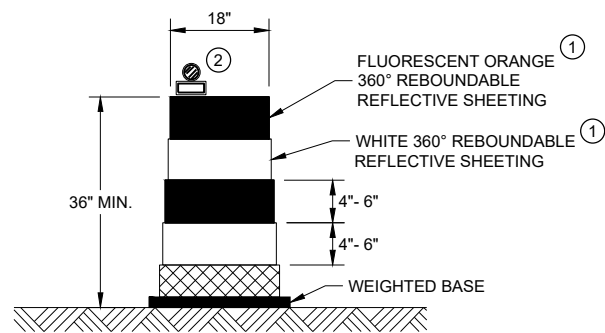
LEGEND

- "T" MARKING
- POST MOUNTED SIGN

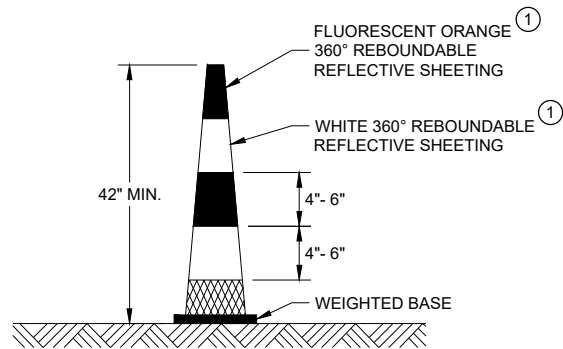
LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 /S/ Matthew R. Rauch
DATE STATE SIGNING AND MAR 112 INEER
FHWA

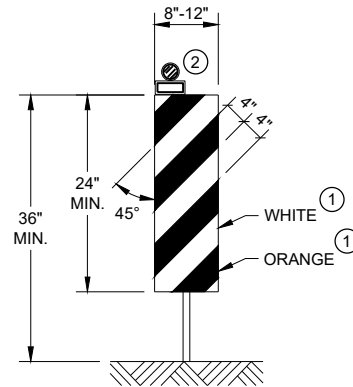


DRUM



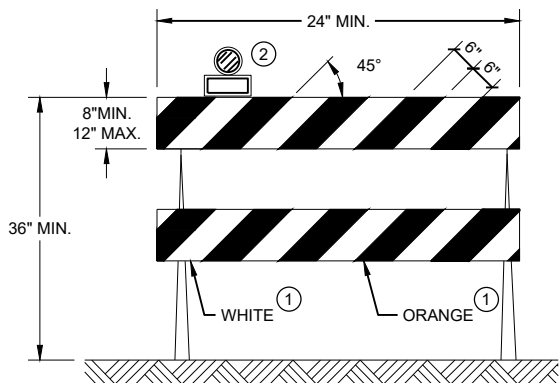
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



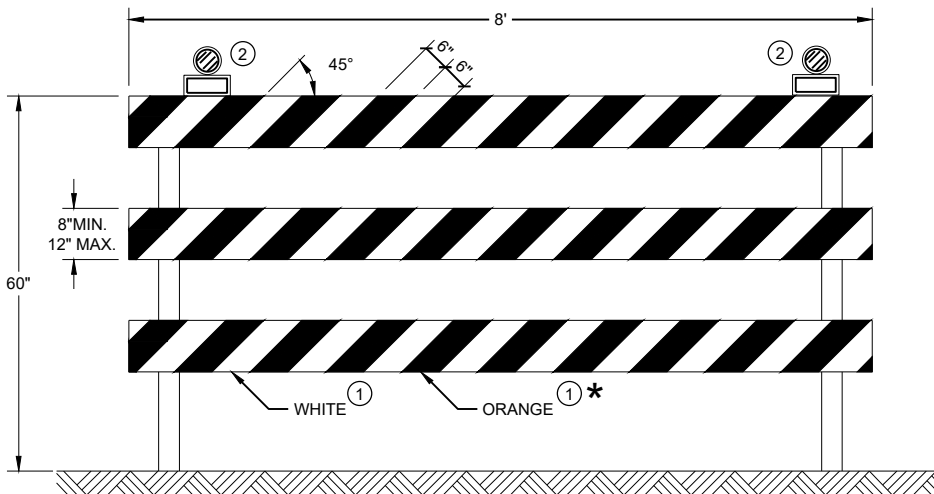
VERTICAL PANEL

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.

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.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 113
FHWA

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.

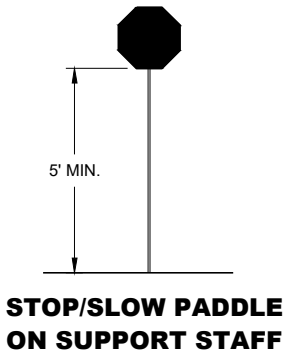
THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS, DEVICES, AND LOCATION OF ALL FLAGGERS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

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.

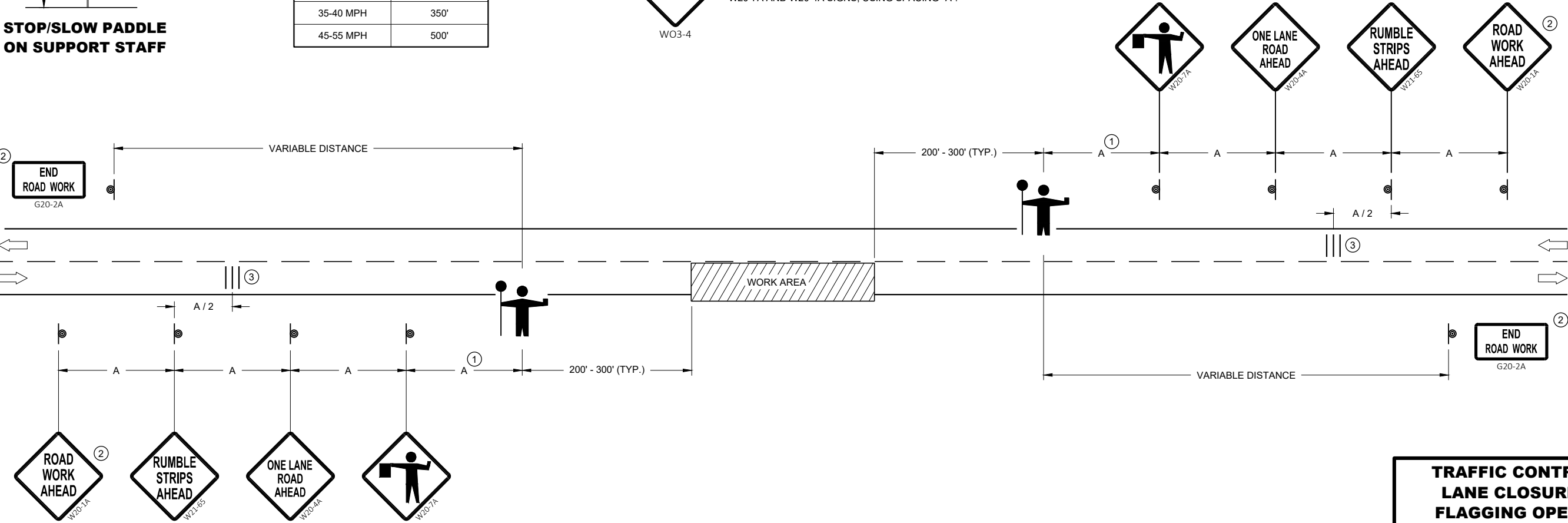


SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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



USE OF W03-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



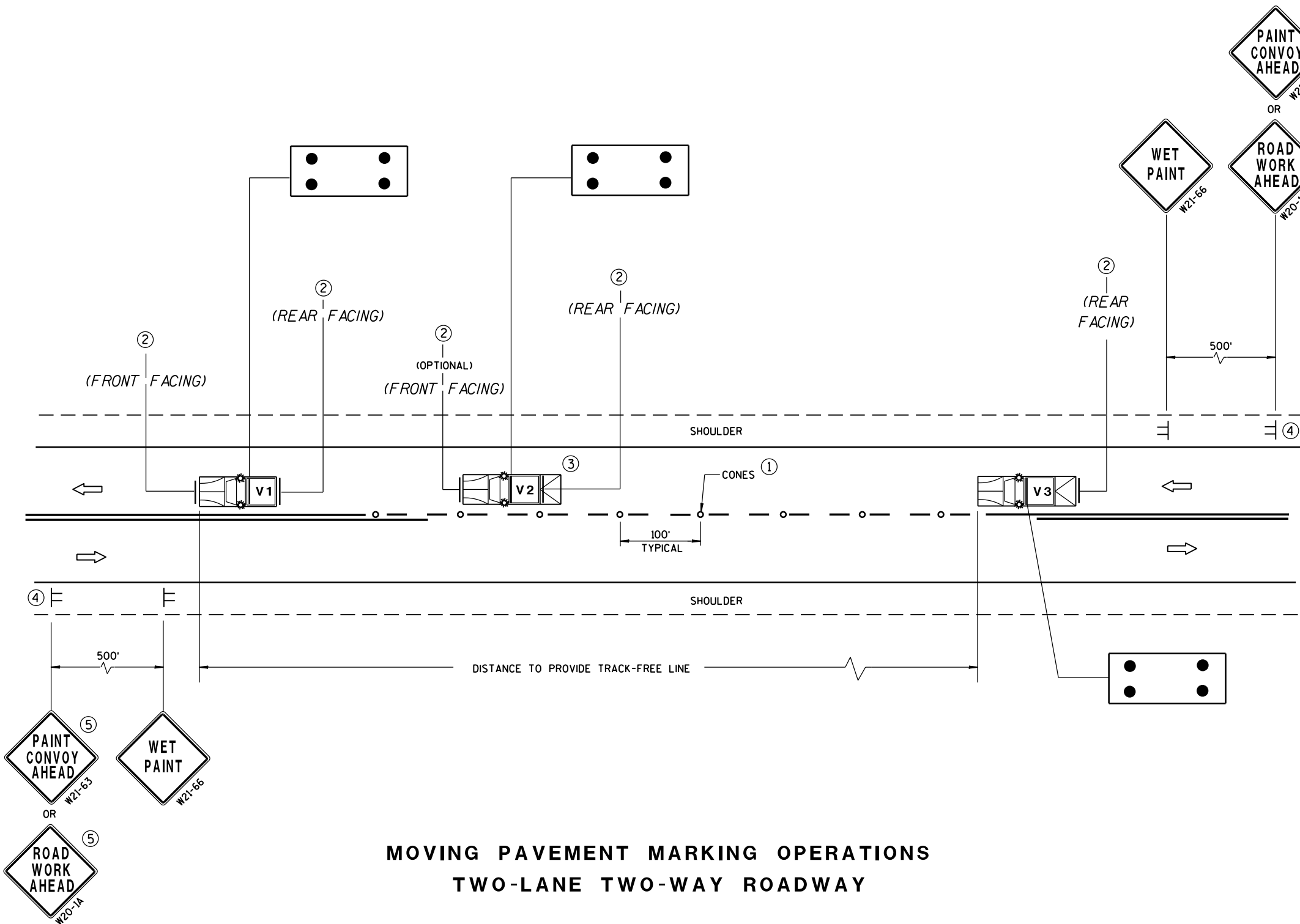
TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 114

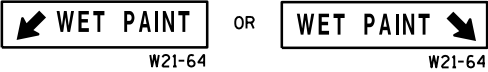
FHWA



MOVING PAVEMENT MARKING OPERATIONS
TWO-LANE TWO-WAY ROADWAY

GENERAL NOTES

- ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.
- VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE SPECIFIED.
- IF SPEED LIMIT IS 40 MPH OR LESS STATIONARY SIGNS MAY BE OMITTED IF CONES ARE USED.
- ALTERNATE SIGN MESSAGES, SUCH AS "PAINT CREW AHEAD" OR "ROAD PAINTING AHEAD" MAY BE USED.
- DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.
- THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.
- THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE MARKING.
- WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR TURN THE STATIONARY WARNING SIGNS AWAY FROM TRAFFIC.
- ① CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.
- ② USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.
- ③ OPTIONAL TRUCK-MOUNTED ATTENUATOR.
- ④ SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.
- ⑤ IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.



OR



LEGEND

- V1** LEAD VEHICLE
- V2** SHADOW VEHICLE
- V3** TRAIL VEHICLE WITH TMA
- TMA** TRUCK-MOUNTED ATTENUATOR

≡ SIGN ON TEMPORARY SUPPORT

➡ DIRECTION OF TRAFFIC

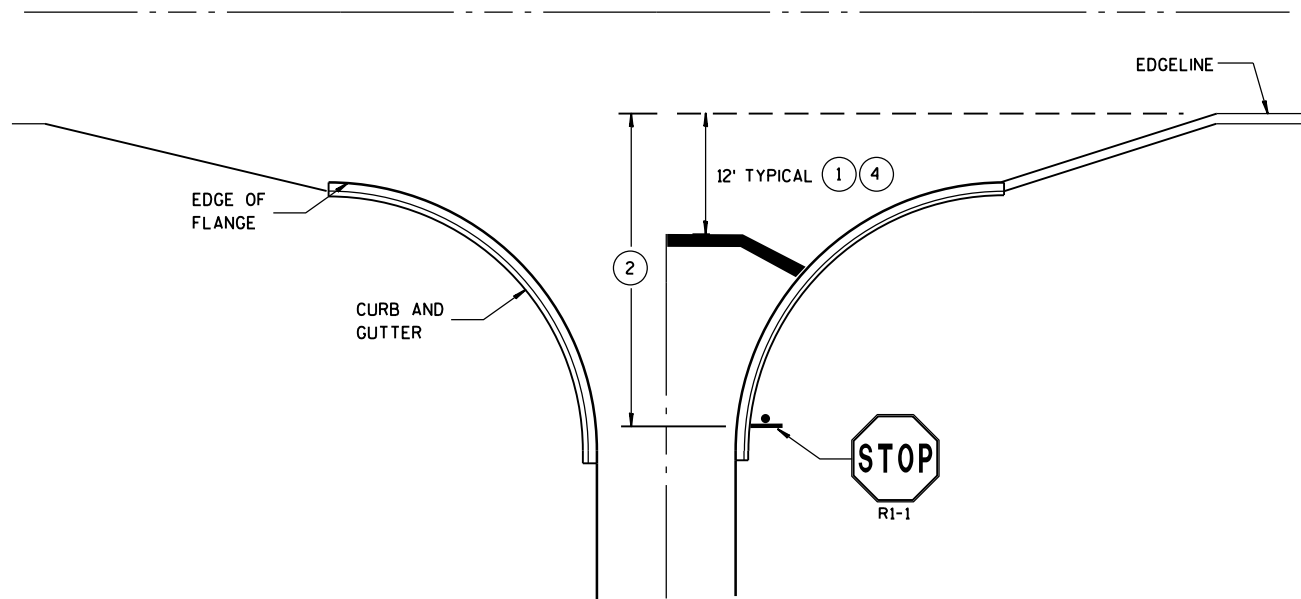
○ CONES

⬢ FLASHING ARROW PANEL (CAUTION)

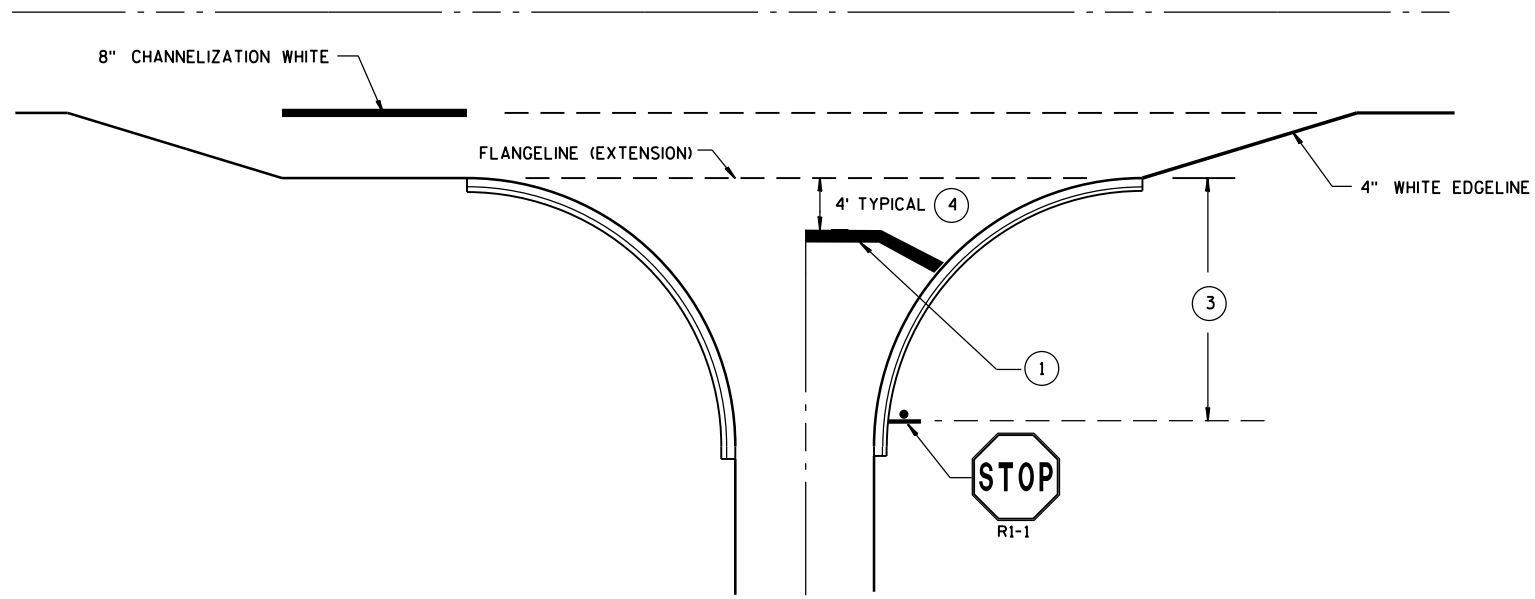
MOVING PAVEMENT MARKING
OPERATION
TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

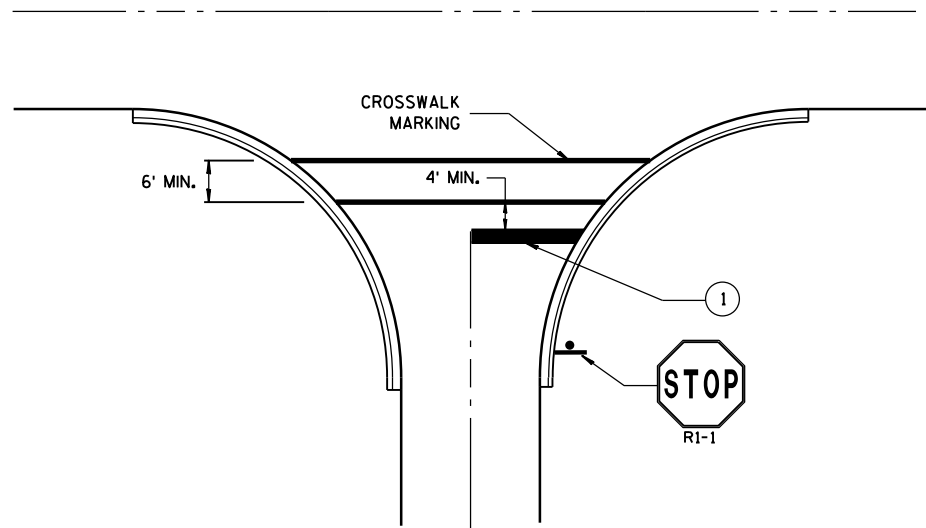
APPROVED
Sept., 2017 /S/ Andrew Heidtke
DATE WORK ZONE ENGR 115
FHWA



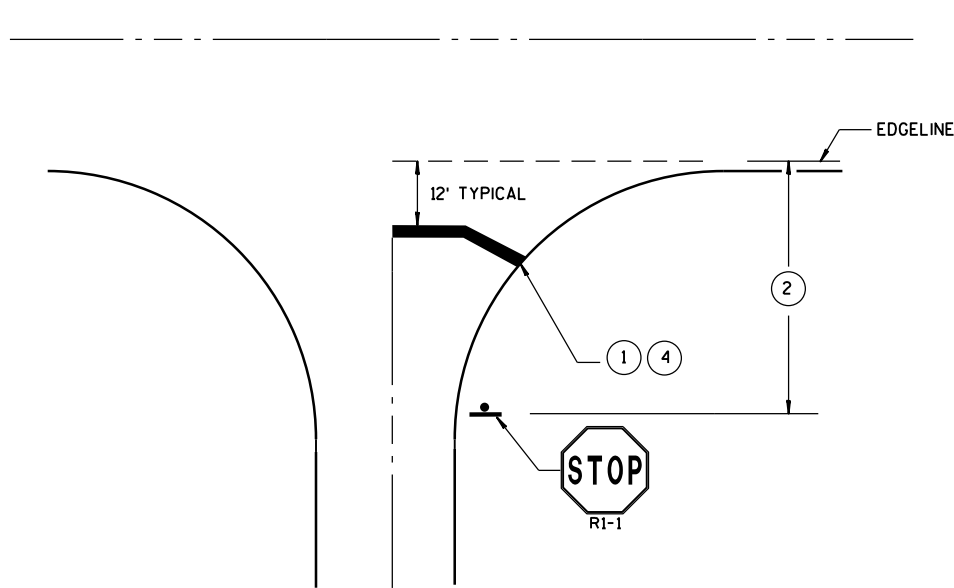
TYPICAL STOP LINE PAVEMENT MARKING
WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDEROADS WITH CROSSWALK MARKING



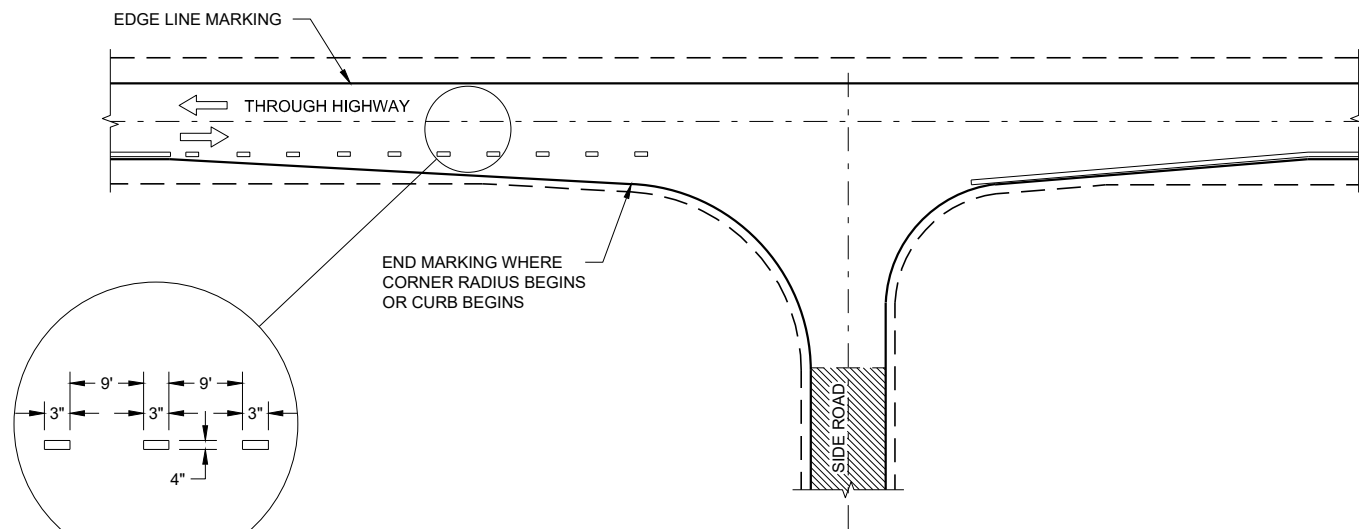
TYPICAL STOP LINE PAVEMENT MARKING
WITHOUT CURB AND GUTTER

GENERAL NOTES

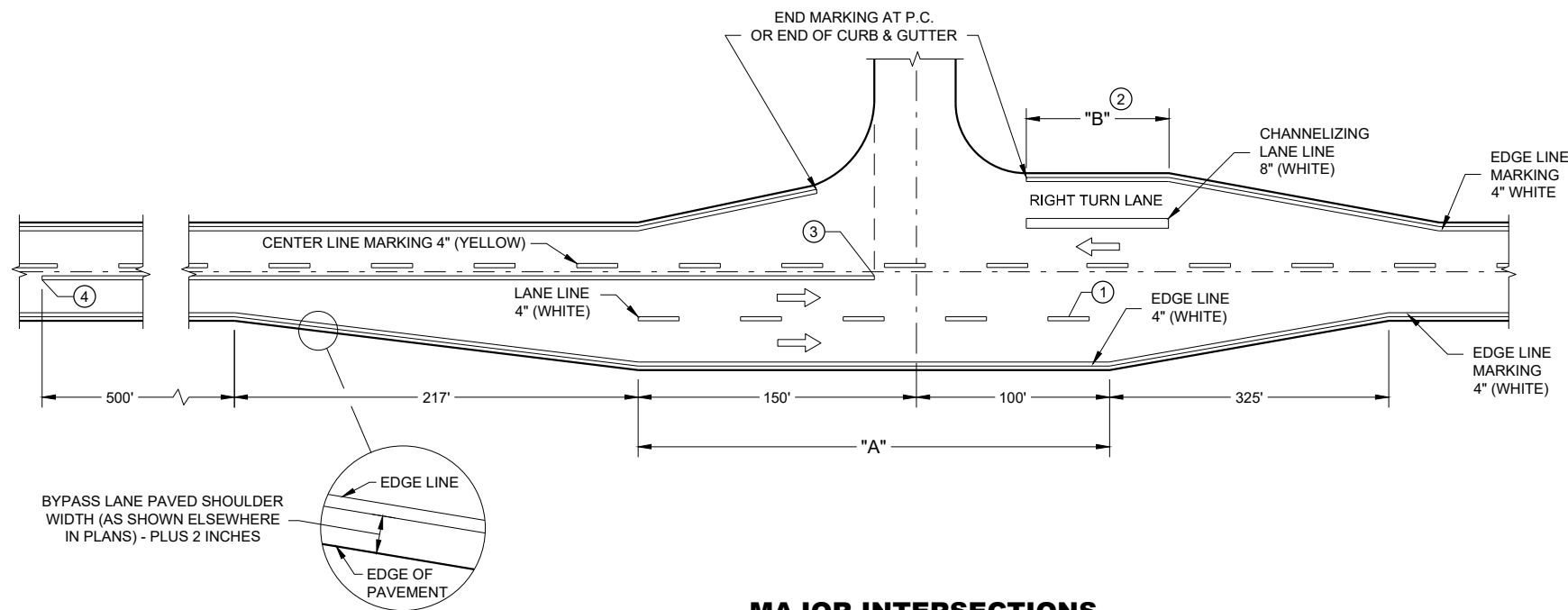
STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGE LINE LOCATION.

- 1 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
- 2 IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGE LINE THAN NO STOP LINE IS REQUIRED.
- 3 IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.
- 4 MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES. (NO CLOSER THAN 4 FEET).

STOP LINE AND CROSSWALK PAVEMENT MARKING			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
APPROVED			
DATE	Sept., 2017	/S/ Matthew R. Rauch	VEER
FHWA	STATE SIGNING AND MAR 116		



MINOR INTERSECTION



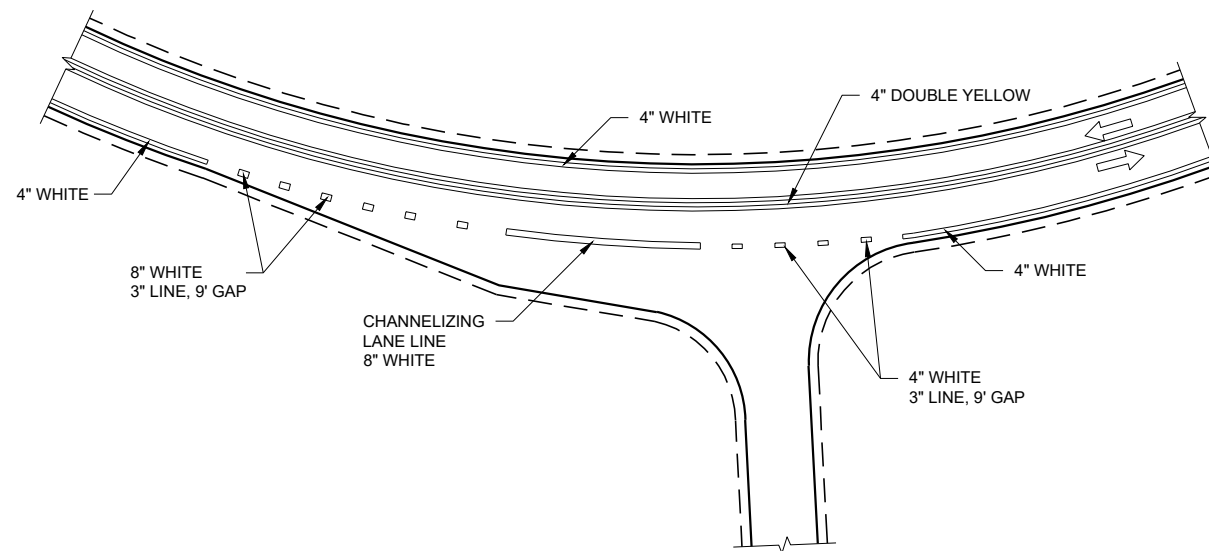
MAJOR INTERSECTIONS
(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

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

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE

PAVEMENT MARKING
(INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 117

LEGEND

-  SIGN ON PERMANENT SUPPORT
-  TRAFFIC CONTROL DRUM
-  DIRECTION OF TRAFFIC
-  WORK ZONE

TABLE A

SHOULDER TAPER LENGTH (FEET)					BUFFER SPACE (FEET)
S \ W	4	6	8	10	
30	20	30	40	50	200
35	30	45	55	70	250
40	40	55	75	90	305
45	60	90	120	150	360
50	70	100	135	170	425
55	75	110	150	185	495

W = SHOULDER WIDTH (FEET)
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

TAPER LENGTH

L = WS AT 45 MPH OR GREATER
L = WS² / 60 AT 40 MPH OR LESS

SHOULDER TAPER LENGTH = 1/3L

GENERAL NOTES

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

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

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

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

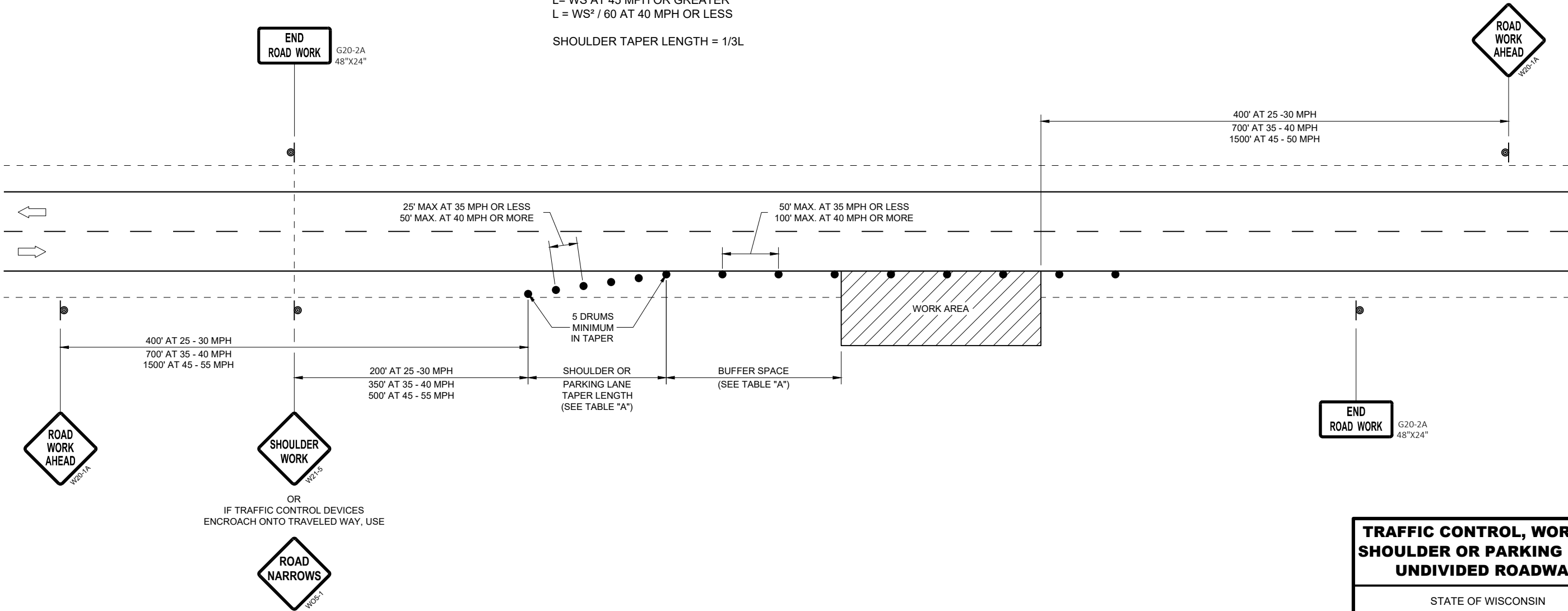
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

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

6

SDD 15D28 - 03



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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2019
DATE

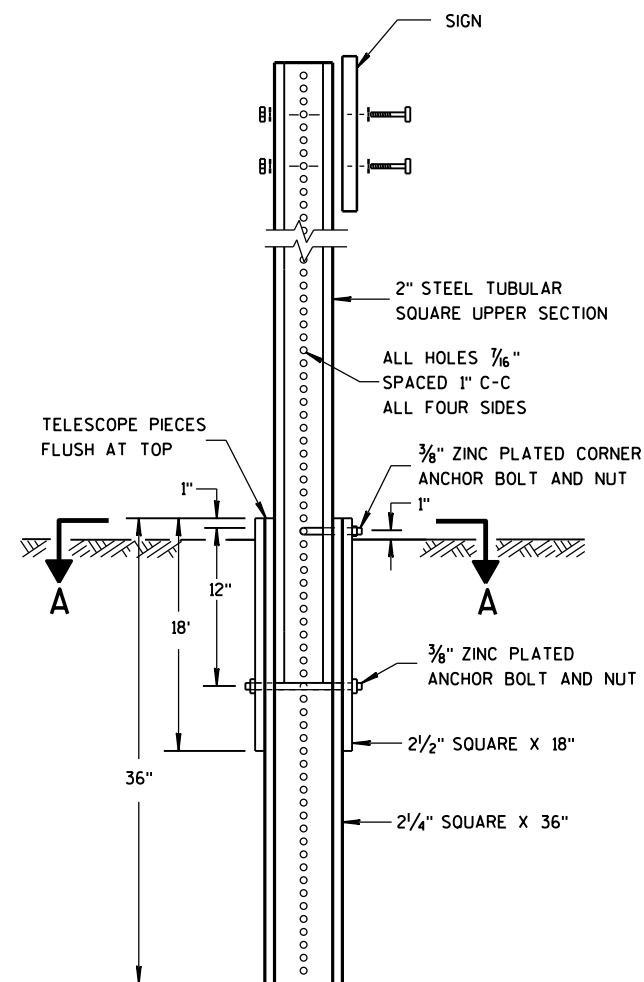
/S/ Andrew Heidtke
STATEWIDE WORK ZONE T
SAFETY ENGINEER

FHWA

118

6

SDD 15D28 - 03



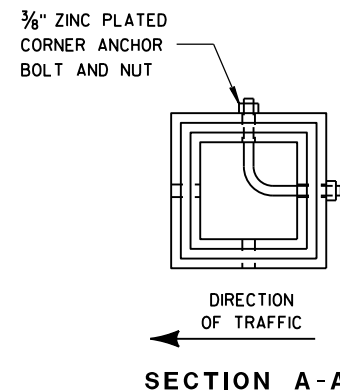
DETAIL OF TUBULAR
STEEL SIGN POST

TUBULAR STEEL POSTS

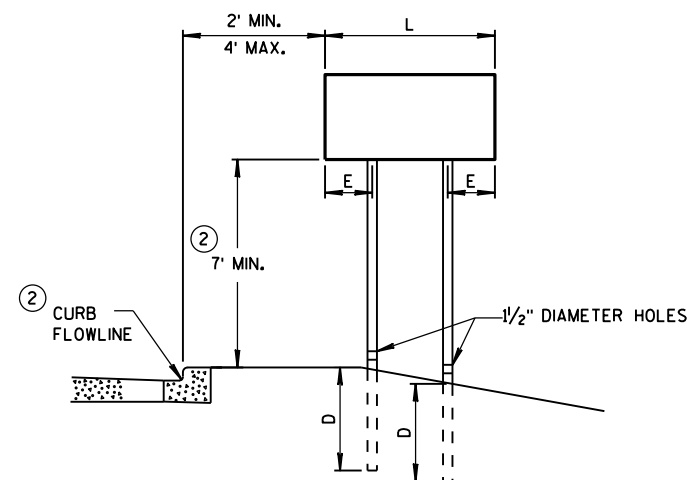
AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL
BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED
ON TUBULAR STEEL POSTS.



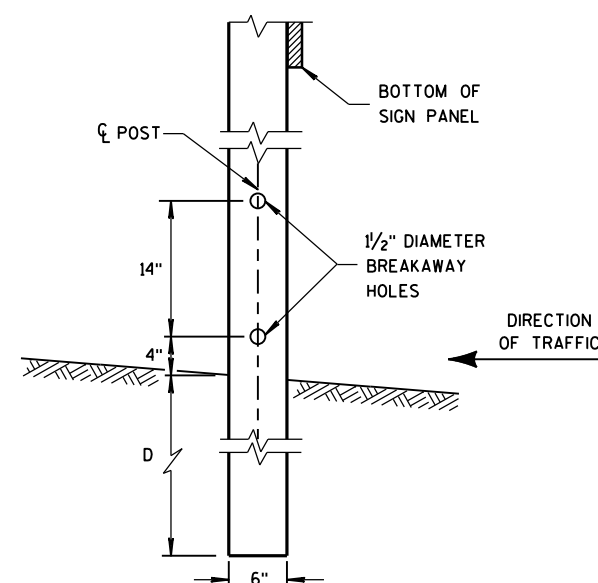
SECTION A-A



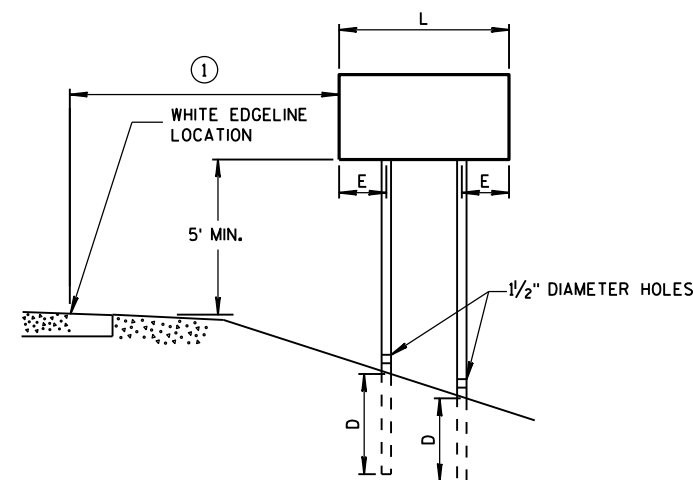
URBAN AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

WOOD POST EMBEDMENT DEPTH	
AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'



4"X6" WOOD POST
MODIFICATION



RURAL AREA

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

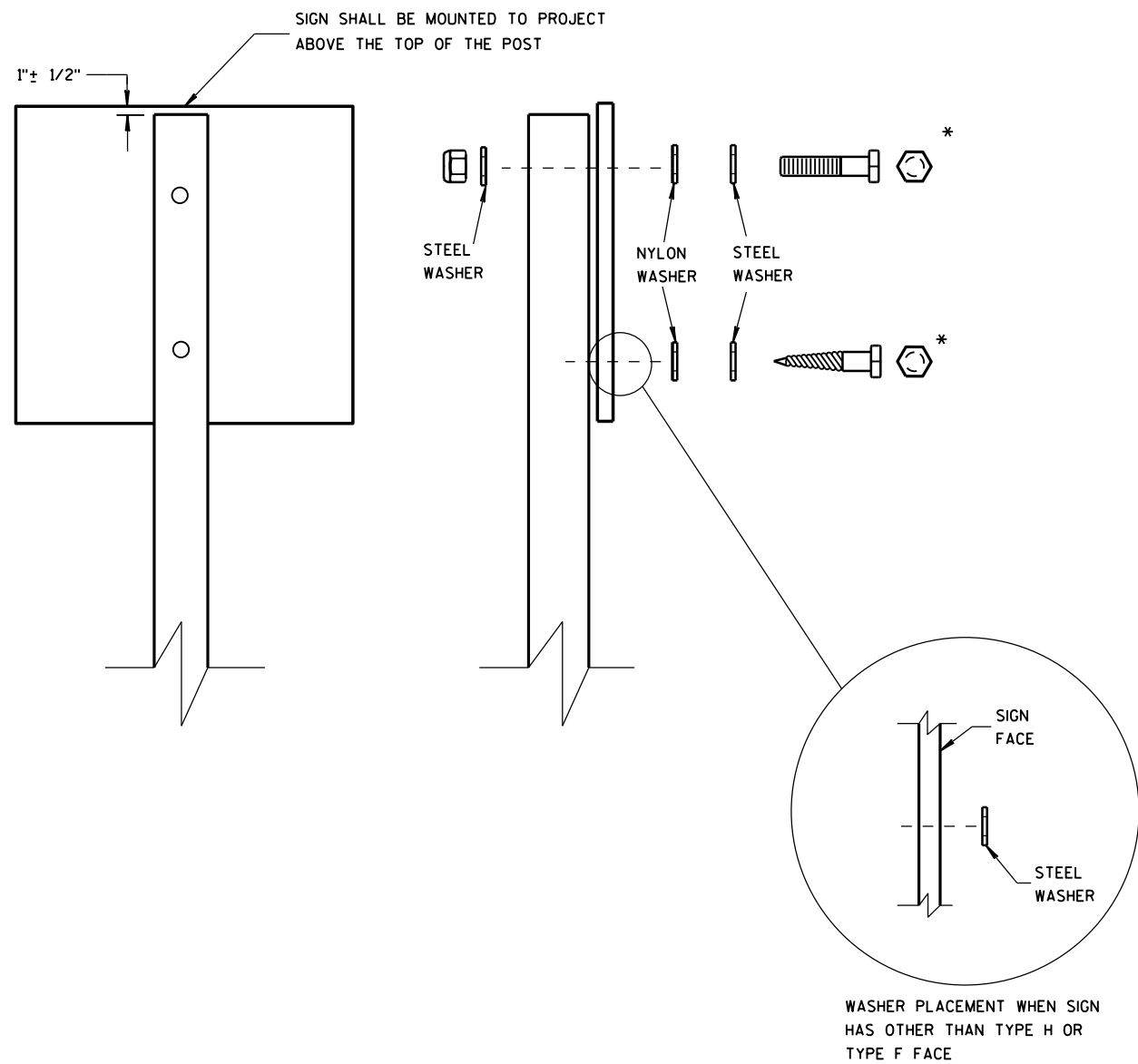
SEE NOTE ③

GENERAL NOTES

- ① 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.
- ② THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.
- ③ FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.

TEMPORARY TRAFFIC CONTROL
SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



NUTS, BOLTS AND LAGS USED FOR MOUNTING SIGNS SHALL HAVE HEXAGONAL HEADS AND SHALL BE EITHER:

- A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3
- B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC 3

THREADS ON BOLTS AND NUTS SHALL BE MANUFACTURED WITH SUFFICIENT ALLOWANCE FOR THE CADMIUM PLATE OR GALVANIZED COATING TO PERMIT THE NUTS TO RUN FREELY ON THE BOLTS.

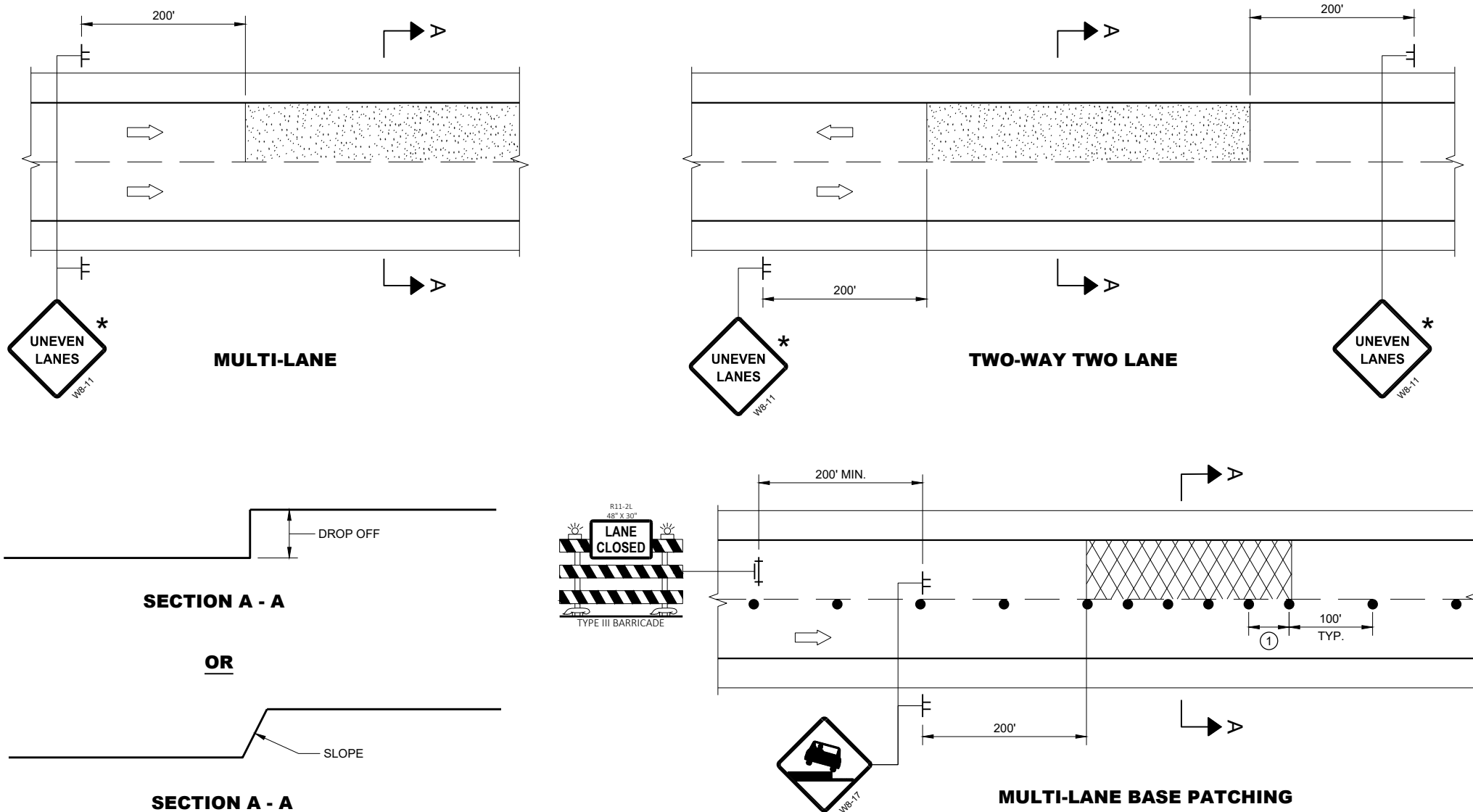
- WOOD POSTS (4" x 4" or 4" x 6")
- LAG SCREWS - 3/8" x 3"
 - MACHINE BOLTS - 5/16" x 6-1/2" OR 7" LENGTH W/ NUTS

- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - 3/8" x 3-1/4" LENGTH W/ NUTS
 - 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 FOR ALL TYPE H SIGNS

* TWO DIFFERENT FASTENING SYSTEMS ARE SHOWN FOR ILLUSTRATION PURPOSES. ON ANY INDIVIDUAL SIGN, EITHER ONE OR THE OTHER SYSTEM SHALL BE USED. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

ATTACHMENT OF SIGNS TO POSTS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2017 DATE	/S/ Andrew Heidtke WORK ZONE EN 120 FHWA



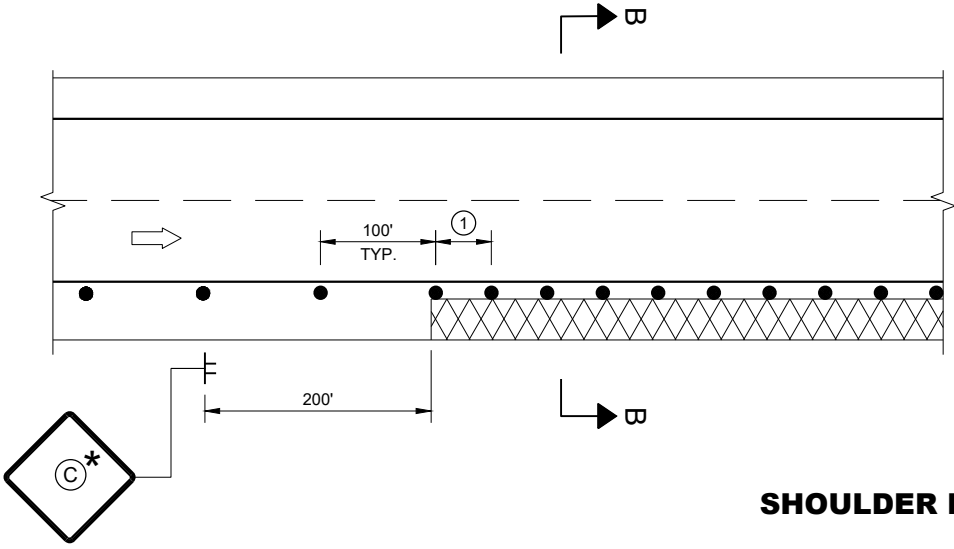
ADJACENT LANE DROP-OFFS

GENERAL NOTES

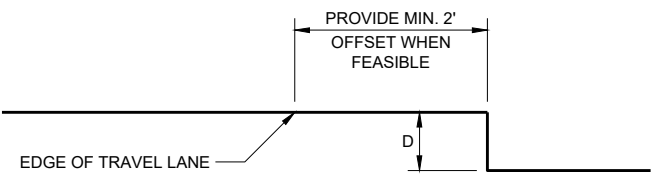
- FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
- "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
- WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.
- * IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY 1 MILE AND AFTER EVERY ENTRANCE RAMP.
- ① USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

LEGEND

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



SHOULDER DROP-OFFS



SECTION B - B

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

TRAFFIC CONTROL,
DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 121

FHWA

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.

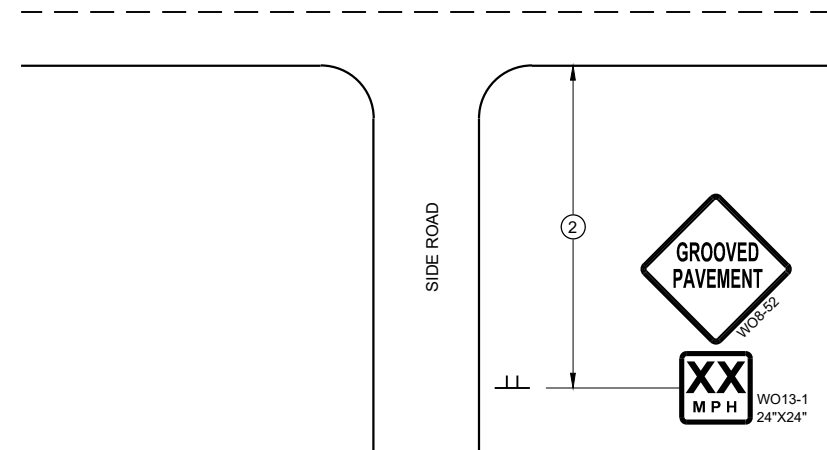
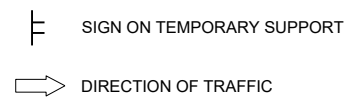
THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

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.

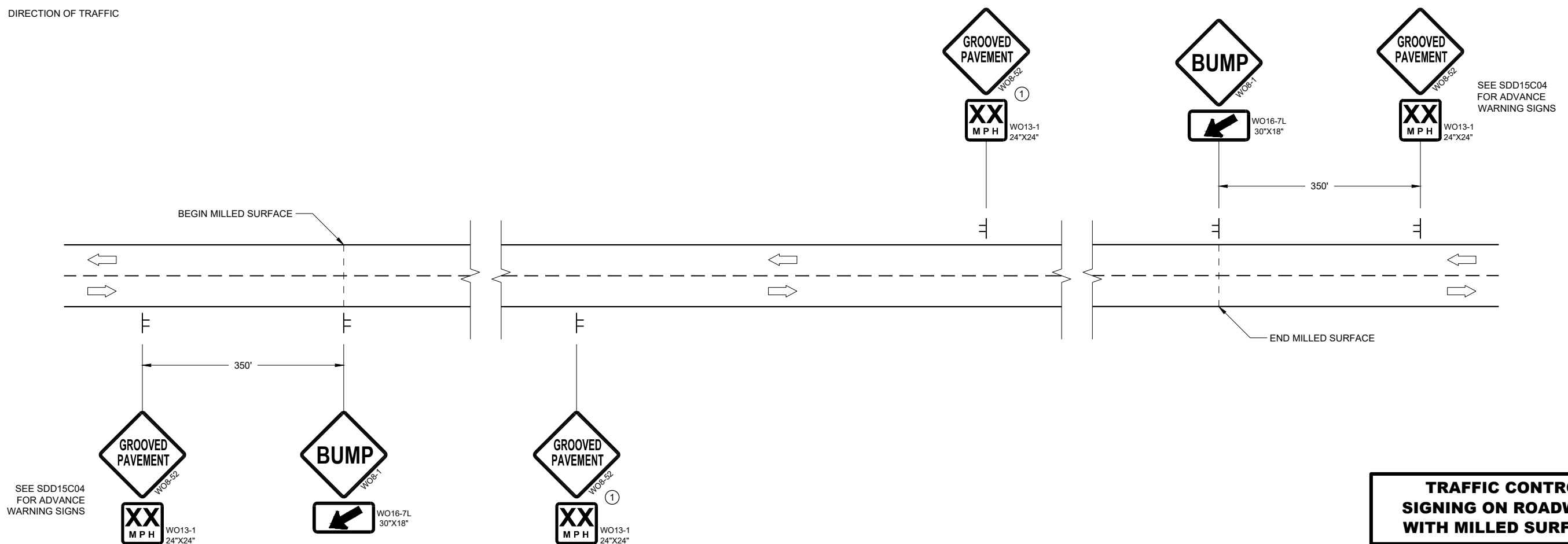
SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

- 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



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

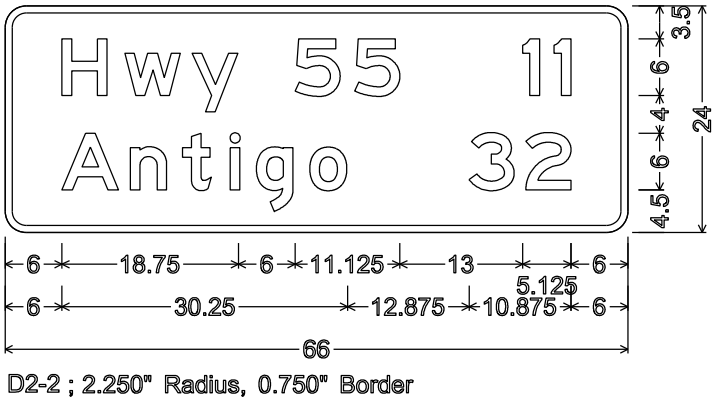
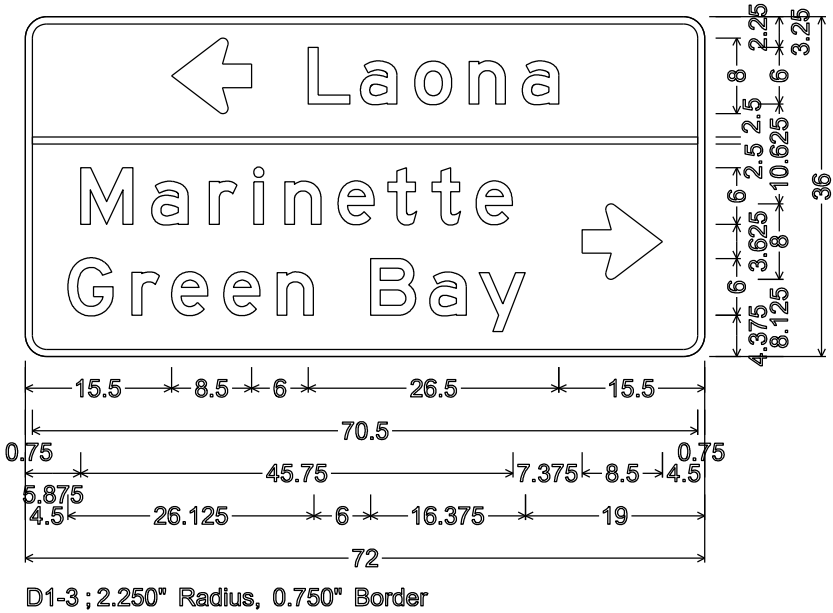
APPROVED
August 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER 122

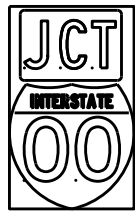
FHWA

NOTES

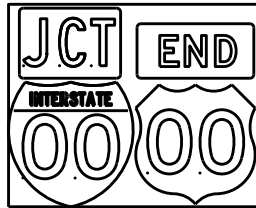
- 1. All Signs Type II - Type H Reflective
- 2. Color:
Background - Green
Message - White
- 3. Message Series - E



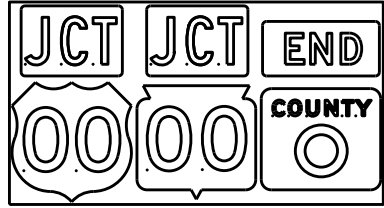
TYPICAL ASSEMBLIES



J1-1



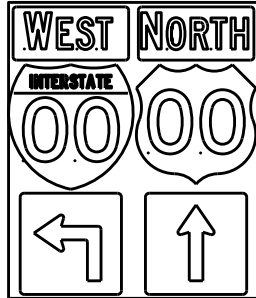
J1-2



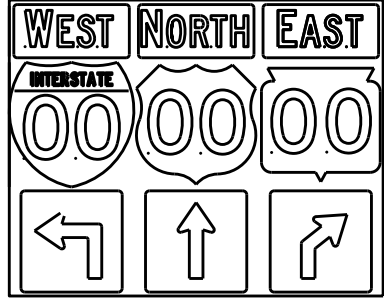
J1-3



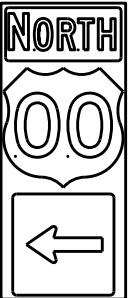
J2-1



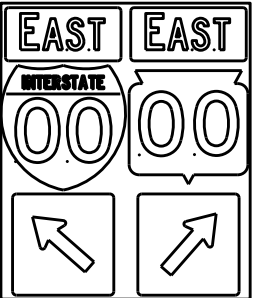
J2-2



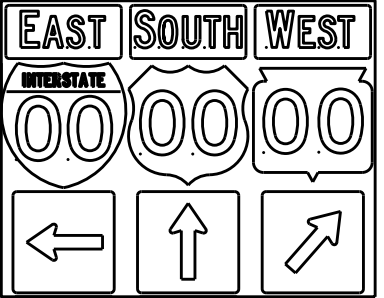
J2-3



J3-1



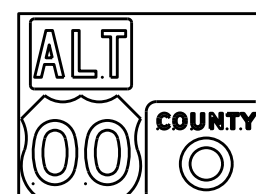
J3-2



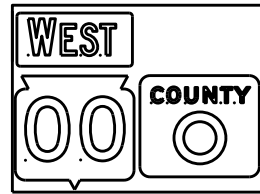
J3-3



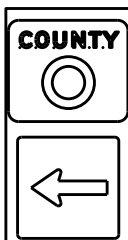
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1



J23-1

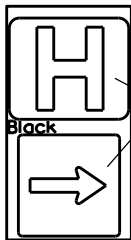


J22-1



JV

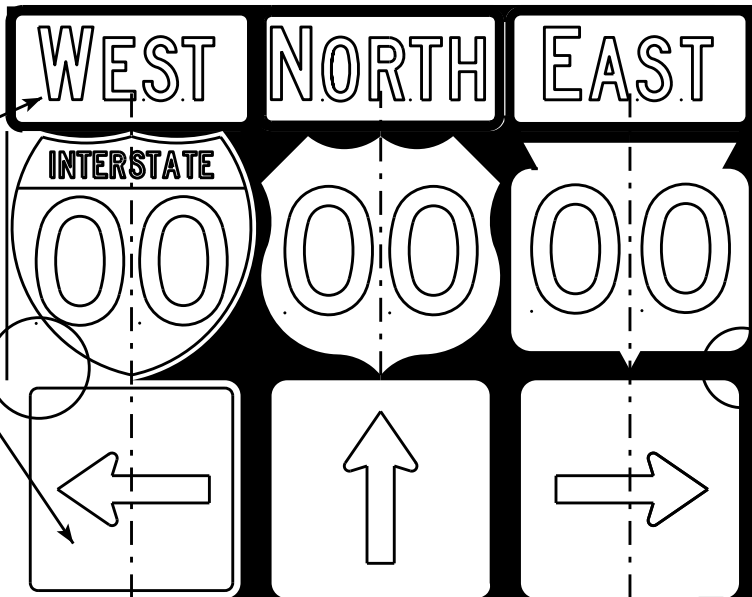
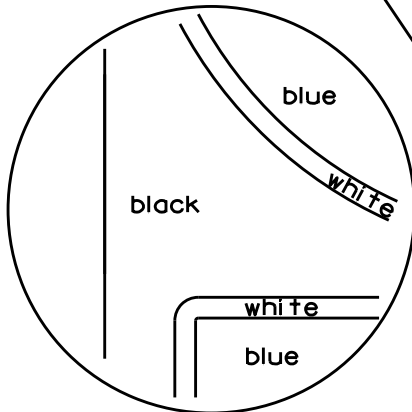
(Typical Vertical J-Assembly
See Note 10 and 11)



JH-1

Blue Background

[blue background
with interstate]



[black background]

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 2/06/14 PL 124 A2-1S.8

SHEET NO: E

NOTES

- Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - Black Non-reflective
Message - see Note 5
- Message Series - See Note 5
- Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
- The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
- Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
- Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
- Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
- Route assemblies that have 36 inch shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
- All Vertical J Assemblies are given a Sign Code of JV
- For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

PROJECT NO:

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN

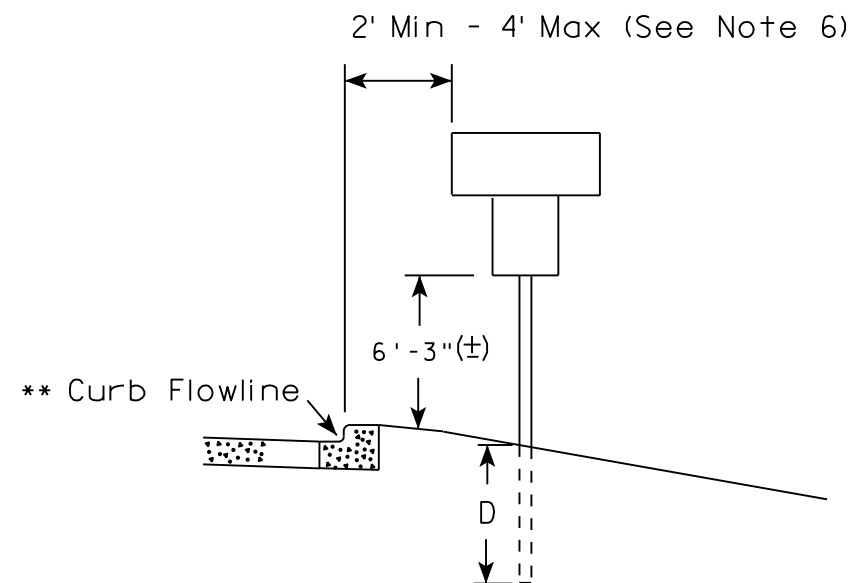
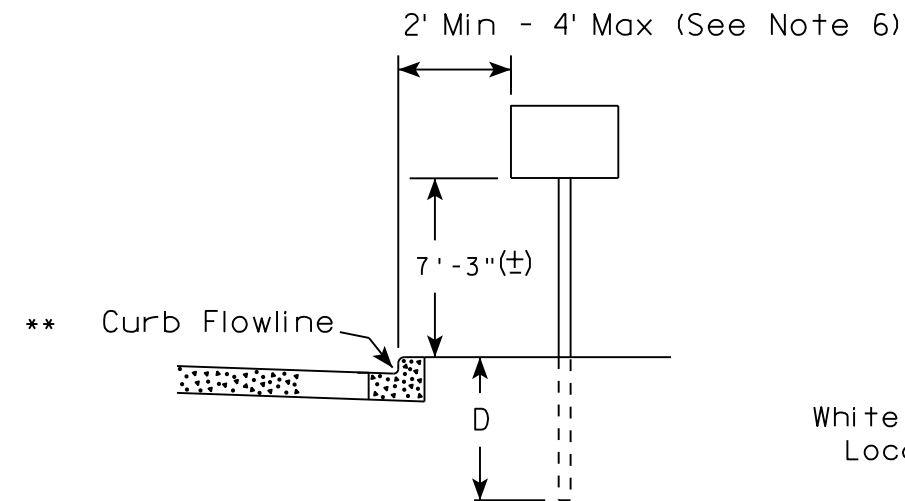
PLOT DATE : 06-FEB-2014 14:10

PLOT BY : mscs.ja

PLOT NAME :

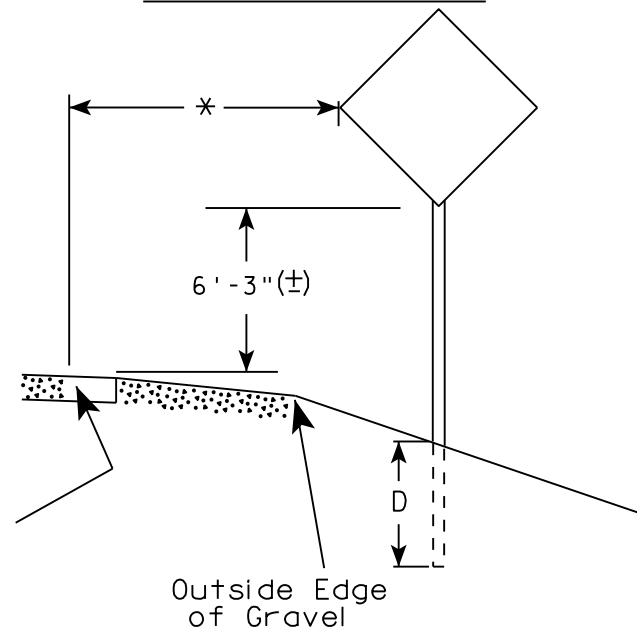
WISDOT/CADDs SHEET 42

URBAN AREA

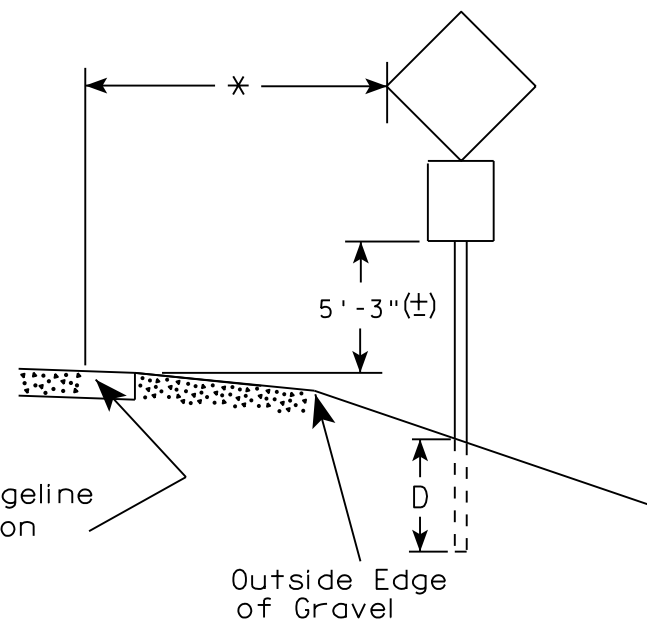


White Edgeline
Location

RURAL AREA (See Note 2)



White Edgeline
Location



Outside Edge
of Gravel

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 barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. J-Assemblies are considered to be one sign for mounting height.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
9. 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), 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" (±).

✱✱ 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.

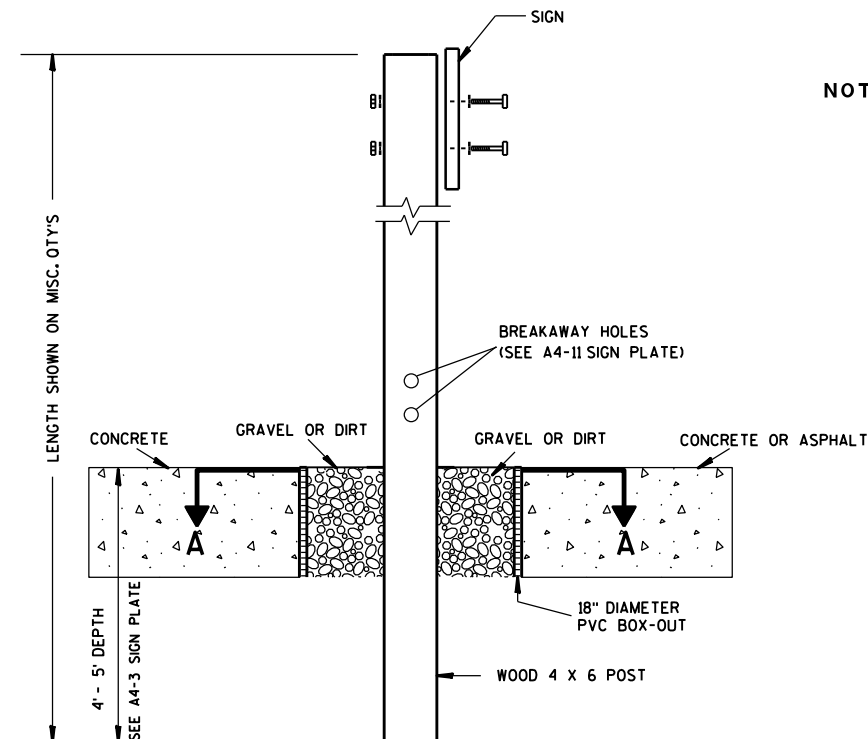
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

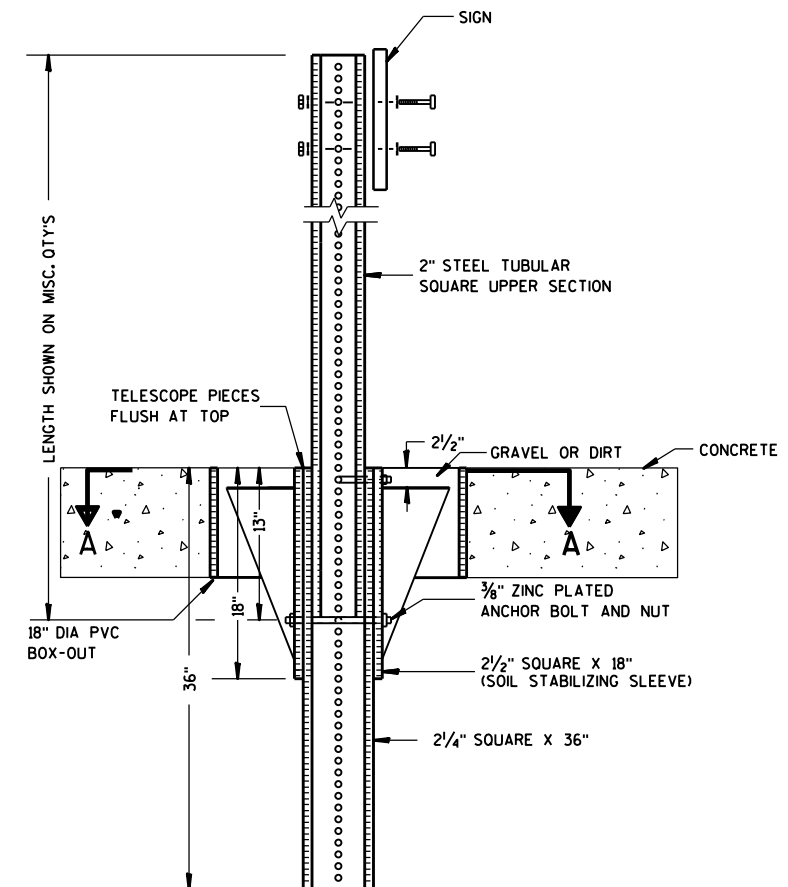
DATE 8/21/17 PLATE NO. A4-3.21



ELEVATION VIEW

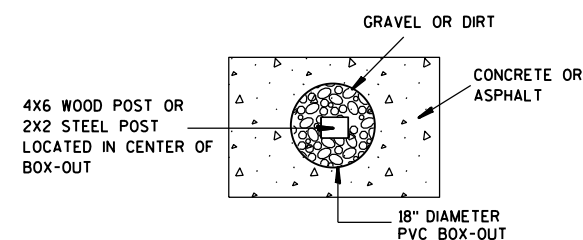
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

- 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 PLAT 126 A4-3B.1

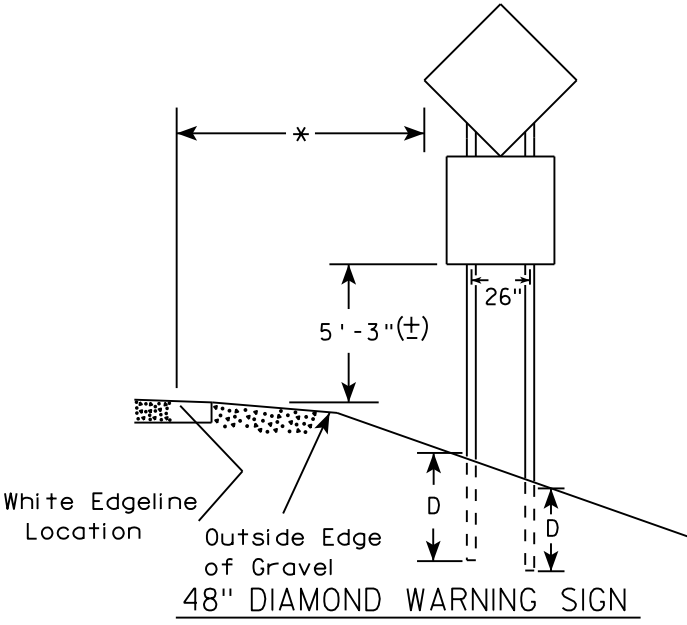
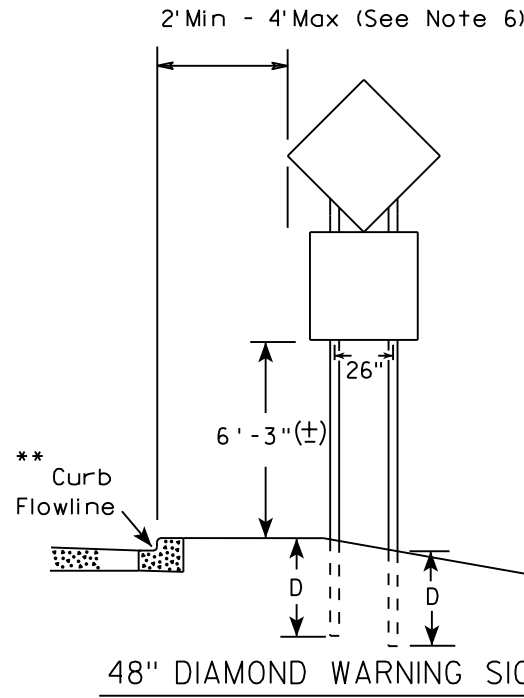
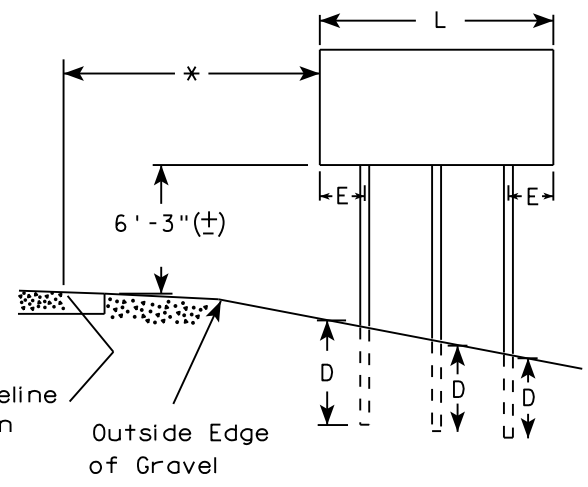
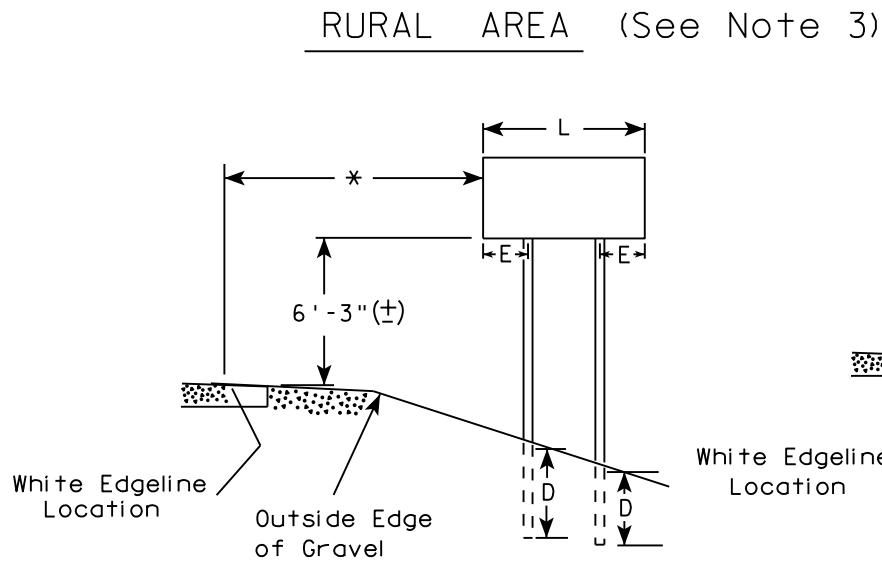
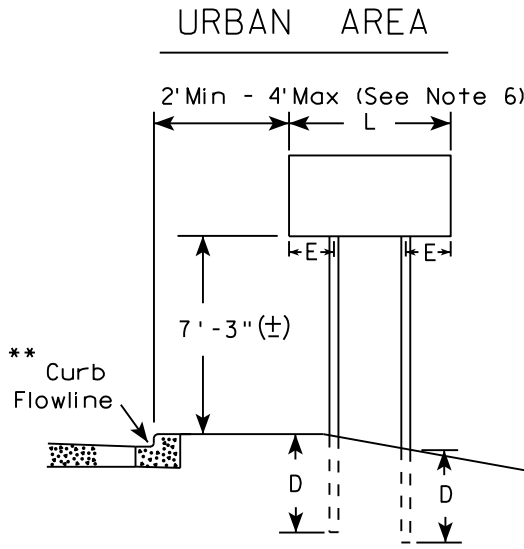
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



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"

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

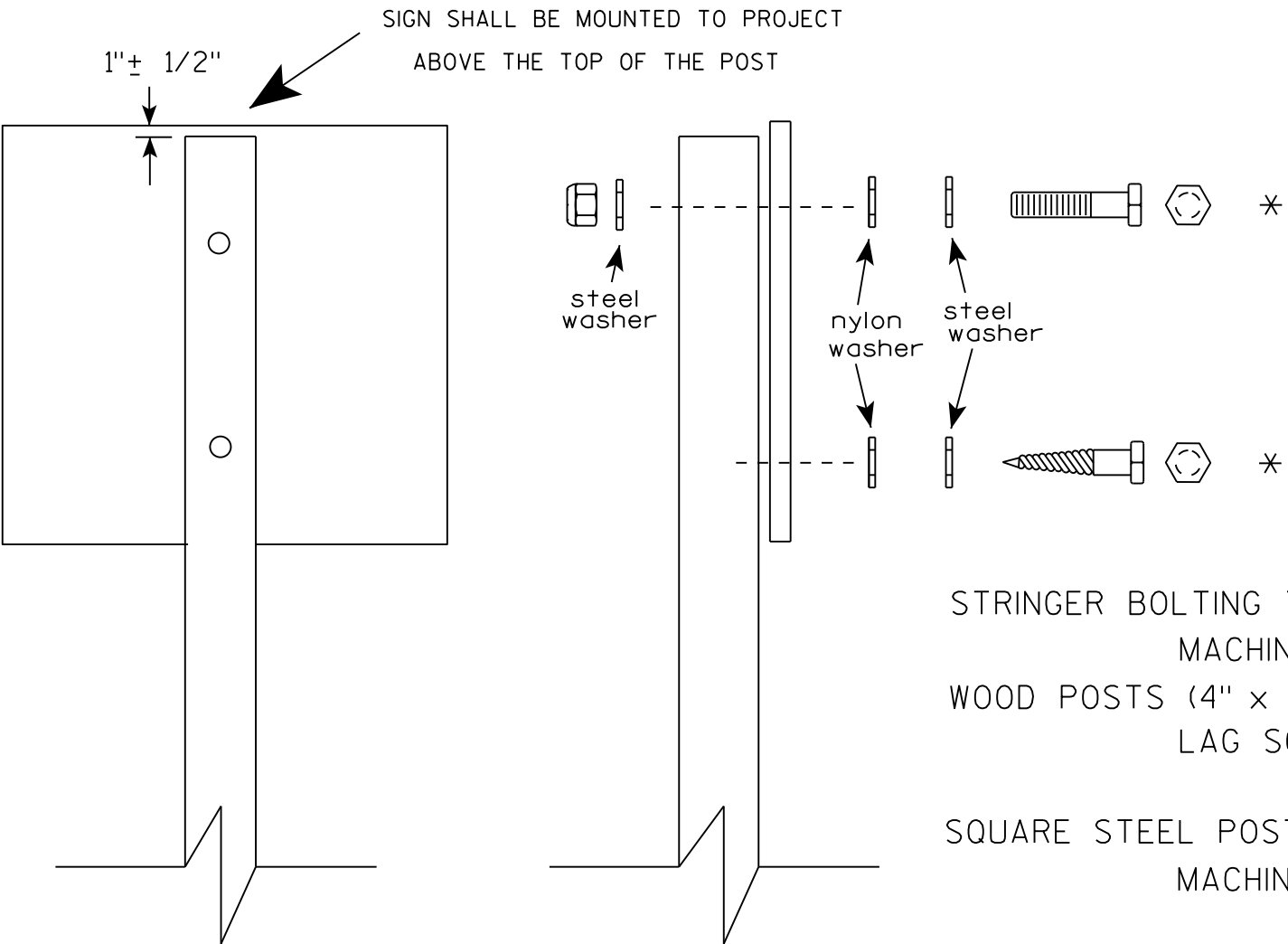
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

- 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.



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.

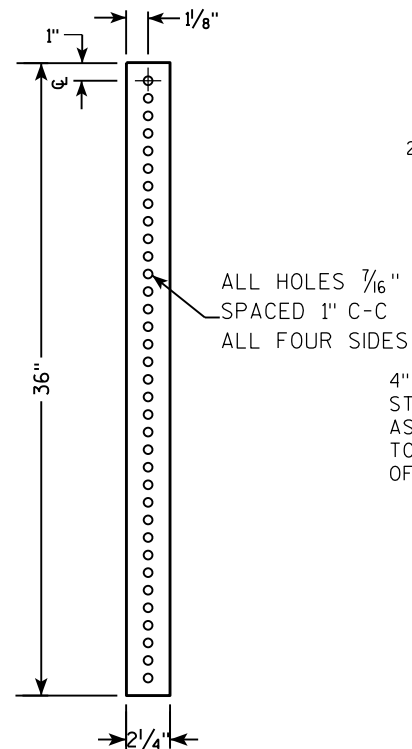
Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

- 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 4" or 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

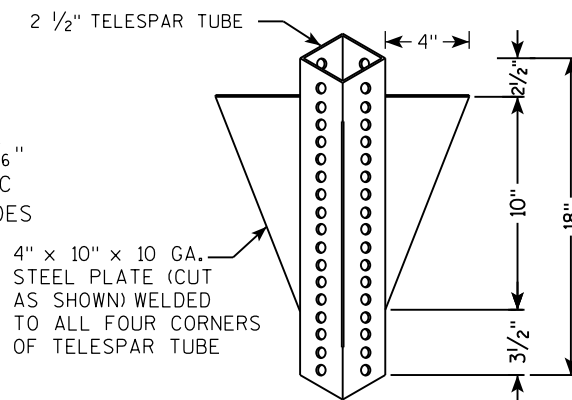
* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require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

ATTACHMENT OF SIGNS TO POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 8/11/16	PLATE NO. A4-8.8 128

**2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH**



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



LENGTH SHOWN ON MISC. QTY'S
 18" DIA SCHEDULE 40 PVC BOX-OUT
 TELESCOPE PIECES FLUSH AT TOP
 36"
 18"
 13"
 2 1/2"
 2 1/4" SQUARE X 36"
 2 1/2" SQUARE X 18" (SOIL STABILIZING SLEEVE)
 3/8" ZINC PLATED ANCHOR BOLT AND NUT
 2 1/2" GRAVEL OR DIRT
 3/8" ZINC PLATED CORNER ANCHOR BOLT AND NUT
 ALL HOLES 7/16" SPACED 1" C-C ALL FOUR SIDES
 2" STEEL TUBULAR SQUARE UPPER SECTION
 SEE SIGN PLATE A4-8 FOR BOLT WASHER, & NUT MATERIAL
 SIGN

LENGTH SHOWN ON MISC. QTY'S

TELESCOPE PIECES FLUSH AT TOP

2" STEEL TUBULAR SQUARE UPPER SECTION

ALL HOLES $\frac{7}{16}$ " SPACED 1" C-C ALL FOUR SIDES

$\frac{3}{8}$ " ZINC PLATED CORNER ANCHOR BOLT AND NUT

1"

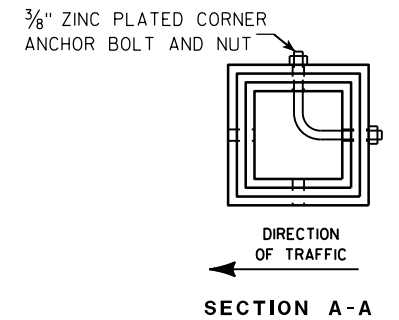
$\frac{3}{8}$ " ZINC PLATED ANCHOR BOLT AND NUT

2 1/2" SQUARE X 18" (SOIL STABILIZING SLEEVE)

2 1/4" SQUARE X 36"

SEE SIGN PLATE A4-8 FOR BOLT WASHER, & NUT MATERIAL

SIGN



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

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthieu R. Rauch

for State Traffic Engineer

DATE 2/05/15 PLATI 129 14-9.9

SHEET NO: E

PROJECT NO:

HWY:

COUNTY:

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN

PLOT DATE : 05-FEB-2015 17:09

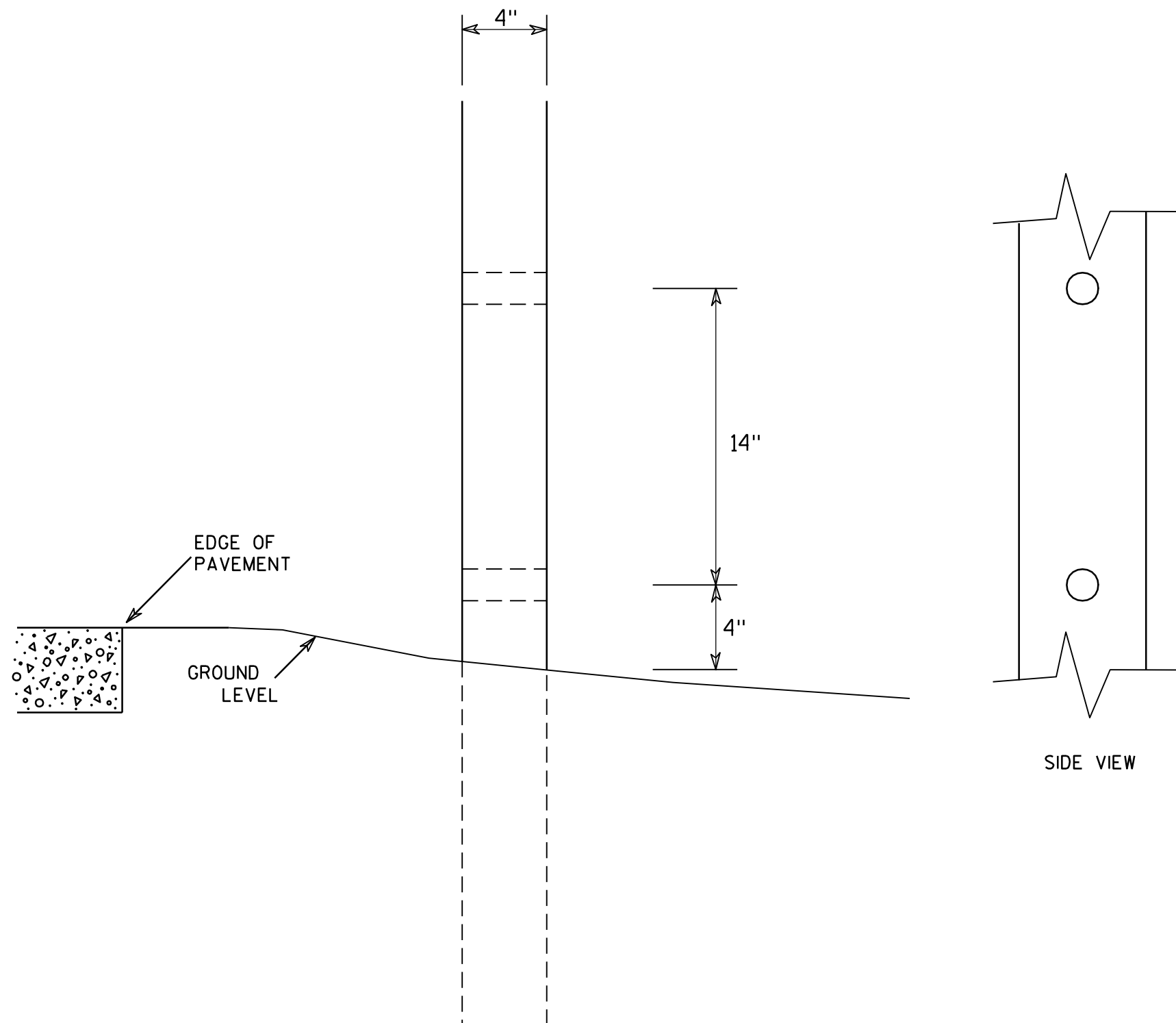
PLOT BY : mscs_ja

PLOT NAME :

PLOT SCALE : 13.659812:1.000000

WISDOT/CADDS SHEET 42

7



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

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:

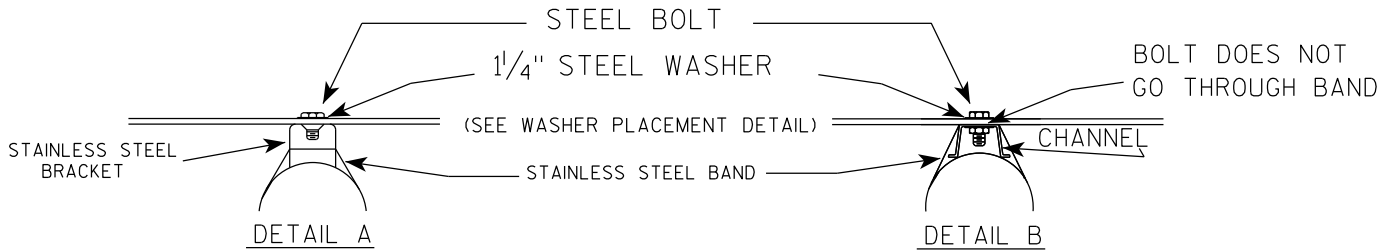
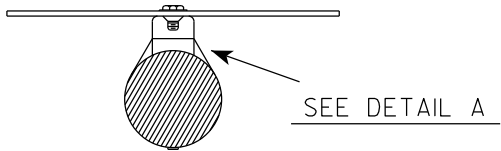
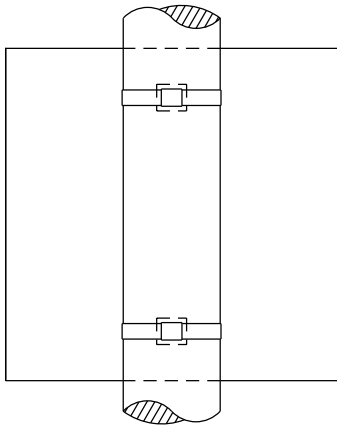
COUNTY:

SHEET NO: 130

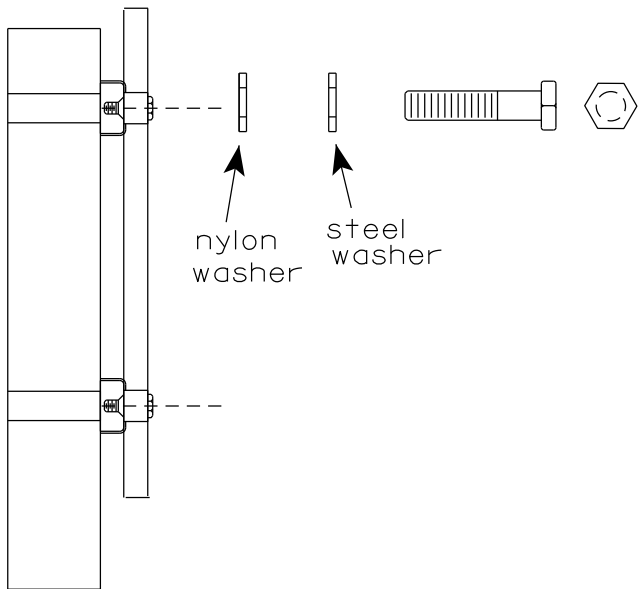
E

BANDING

SINGLE SIGN



WASHER PLACEMENT

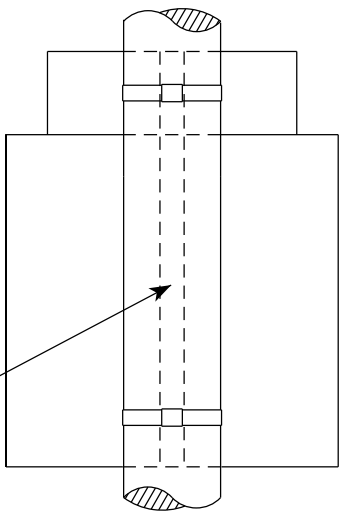


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

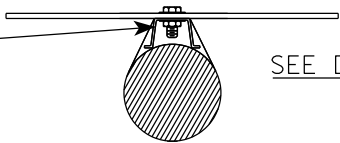
GENERAL NOTES

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

"J" ASSEMBLY



CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET

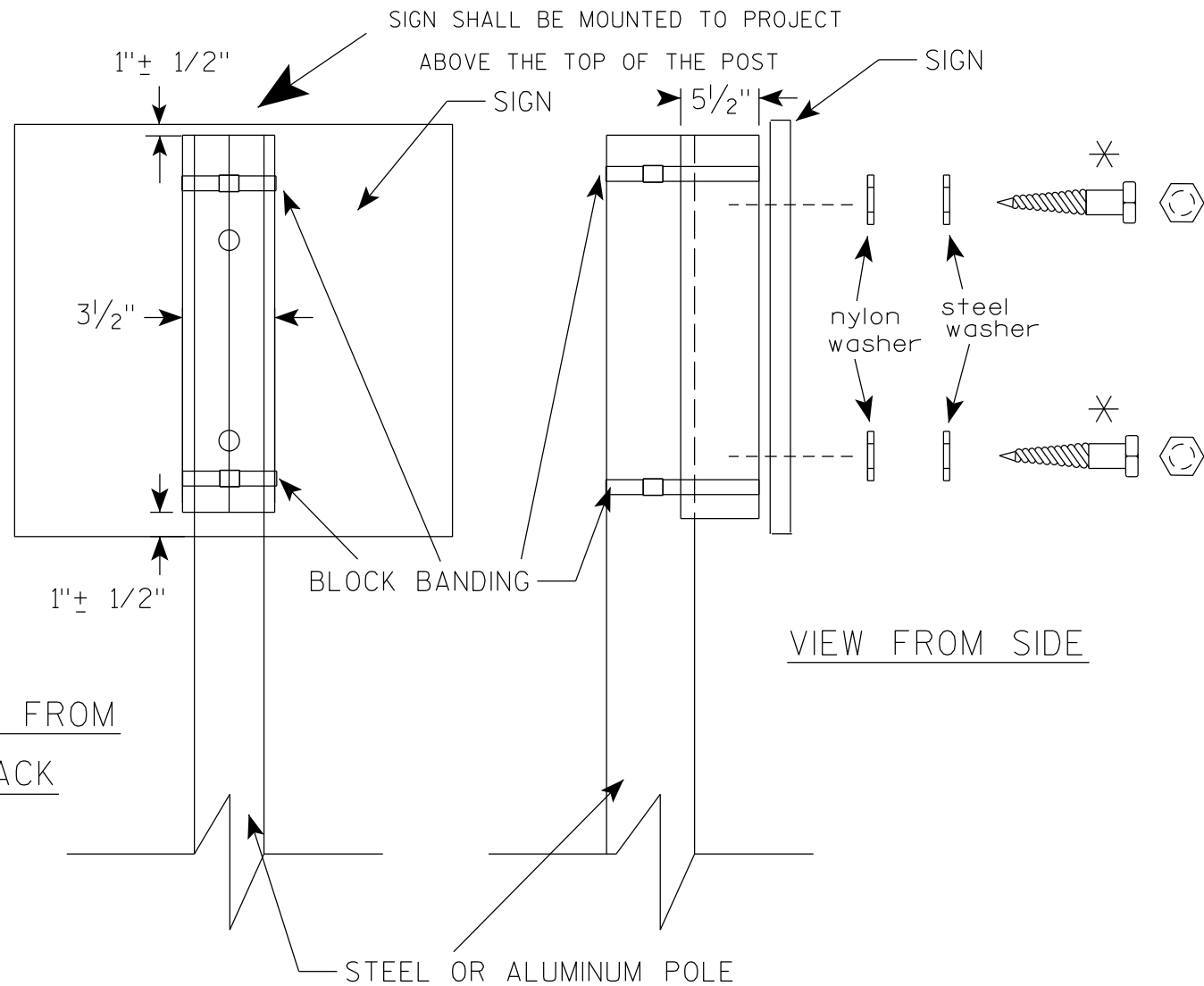


STANDARD SIGN
SIGN BANDING DETAILS

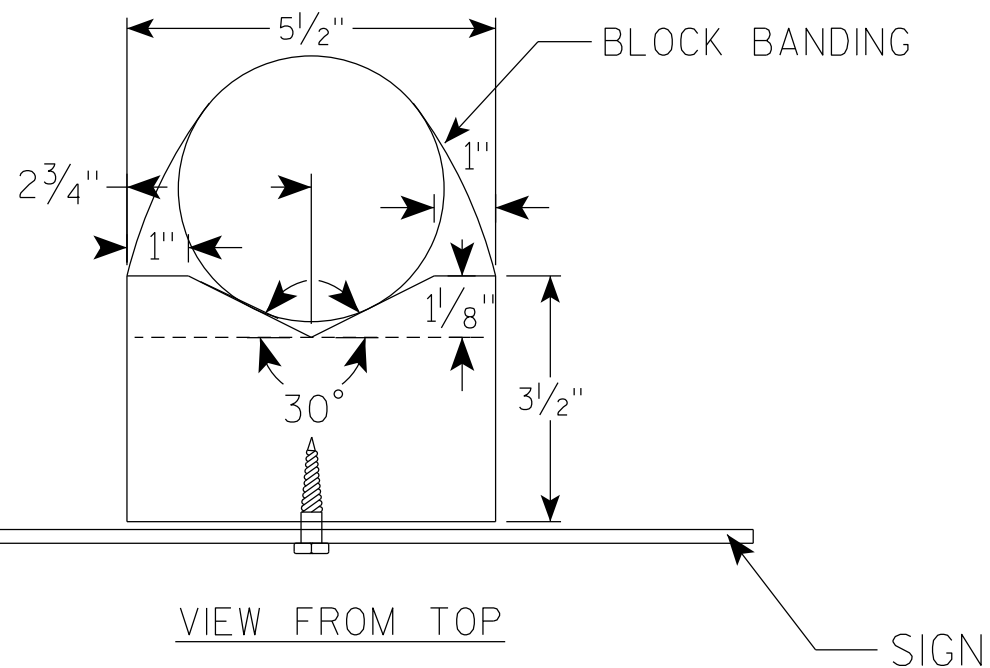
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 6/10/19 PLATE NO. A5-9.4

VIEW FROM
BACK



VIEW FROM SIDE



GENERAL NOTES

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

✱ LAG BOLTS SHALL BE $\frac{3}{8}$ " X $2\frac{1}{2}$ "

BLOCK BANDING DETAIL
(V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

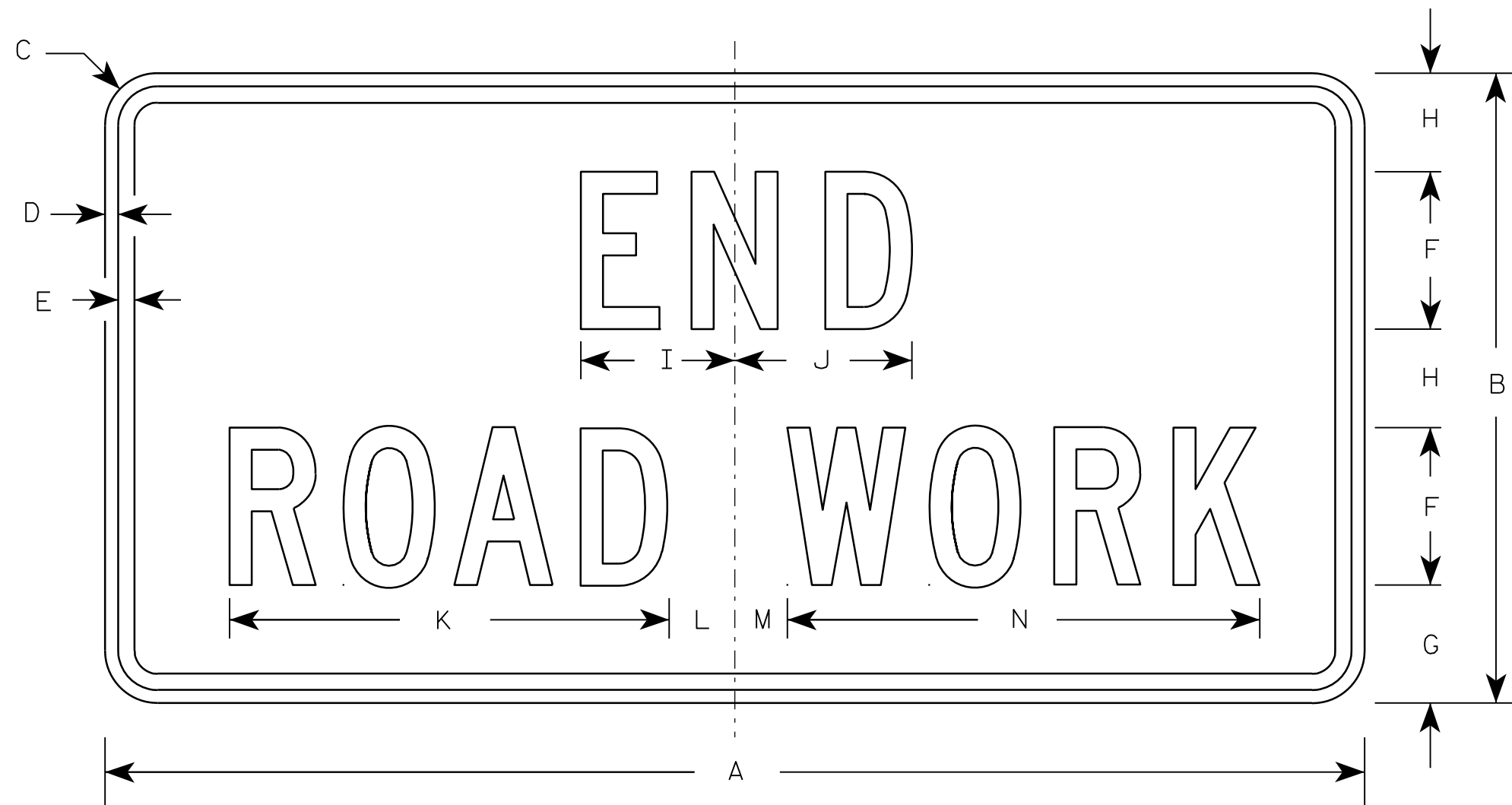
DATE 6/10/19 PLATE NO. A5-10.2

PROJECT NO:

SHEET NO: 132

E

7



G20-2A

Metric equivalent
for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

NOTES

- Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - Orange
Message - Black
- Message Series - C
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

7

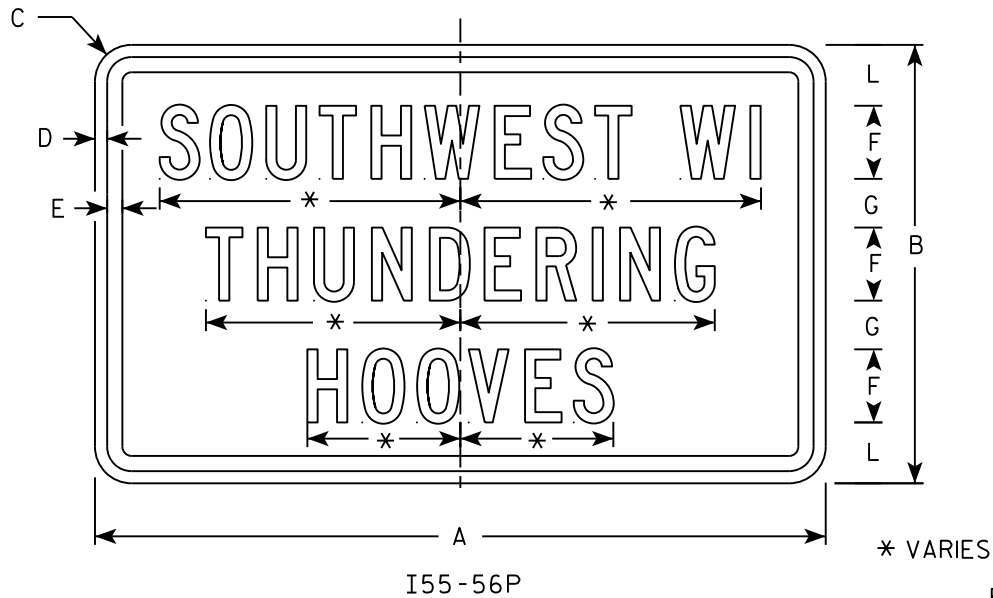
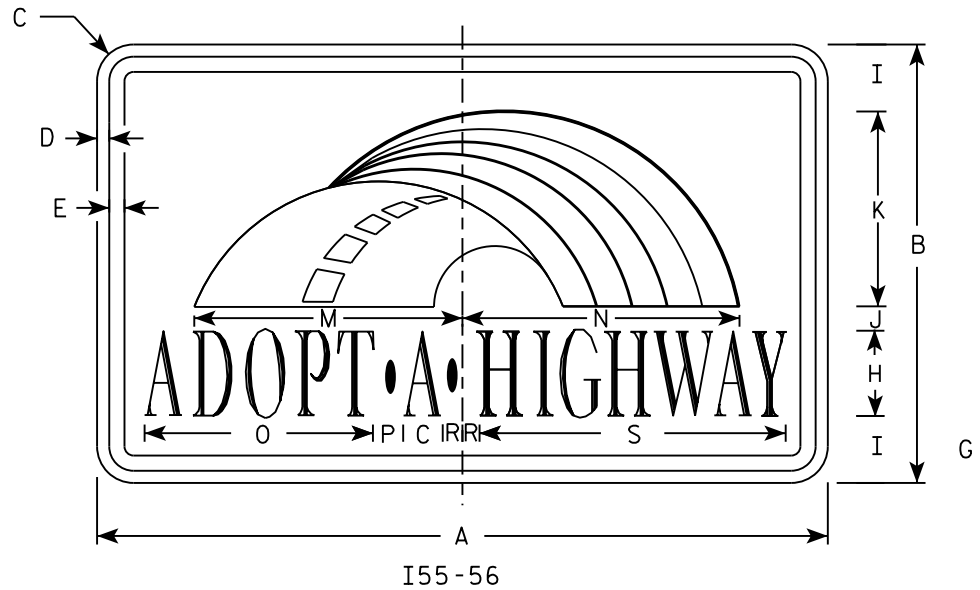
PROJECT NO:

HWY:

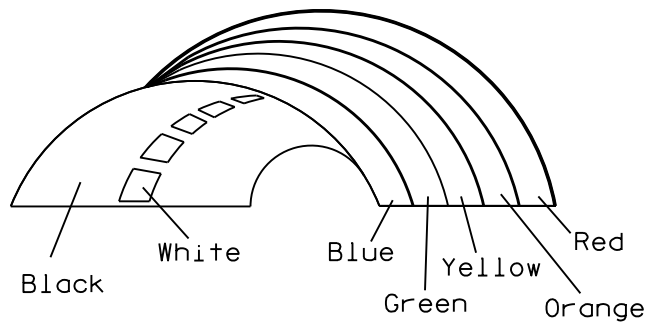
COUNTY:

SHEET NO: 133

E



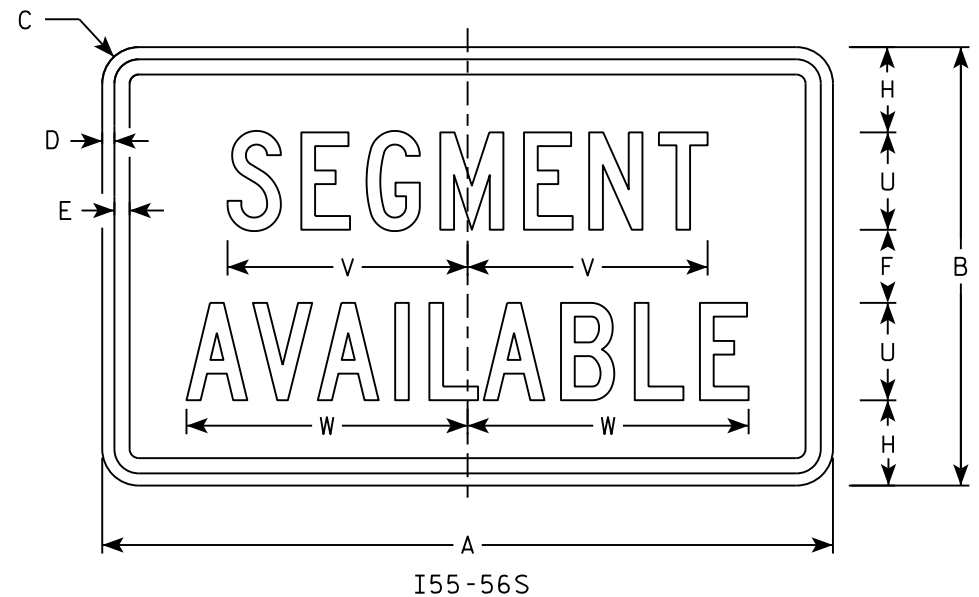
Background Colors of Symbol*



*1/4" Black Border between each color of rainbow and border of rainbow

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
Background - White
Message - (See Note 4)
3. Message Series - (See Note 5)
4. Border - Blue
Adopt a Highway - Red
All other Text - Blue
5. Adopt a Highway - Dutch 8011L
All other Text - Series C
6. Contractor shall provide and install a new post bracket in accordance with the I55-56B sign detail.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	v	W	X	Y	Z	Area sq. ft.
1																											
2	30	18	1 1/2	1/2	5/8	3	2	3 1/2	2 3/4	1	8	2 1/2	11 1/4	11 1/8	9 3/8	1 1/4		3/4	12 5/8	7 1/2	4	9 7/8	11 1/2				3.75
3																											
4																											
5																											

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 134

E

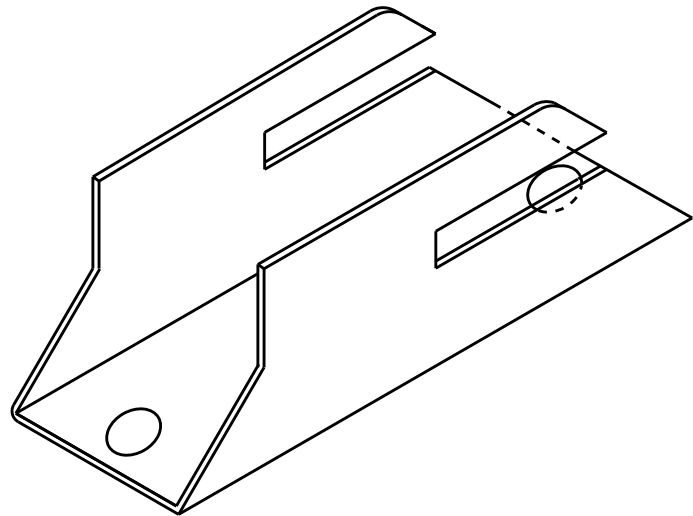
STANDARD SIGN
I55-56

WISCONSIN DEPT OF TRANSPORTATION

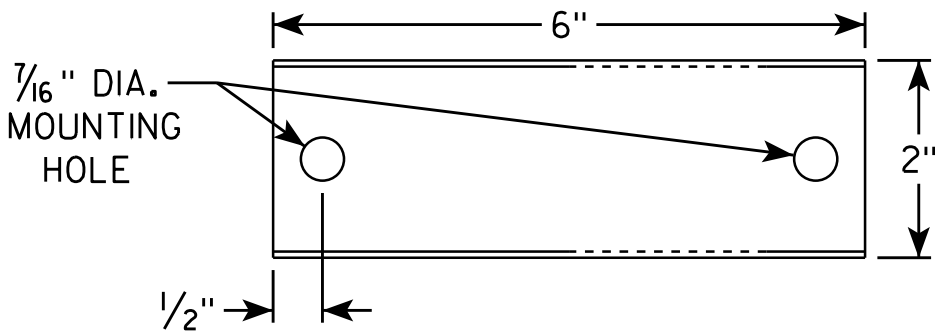
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/20/18 PLATE NO. I55-56.4

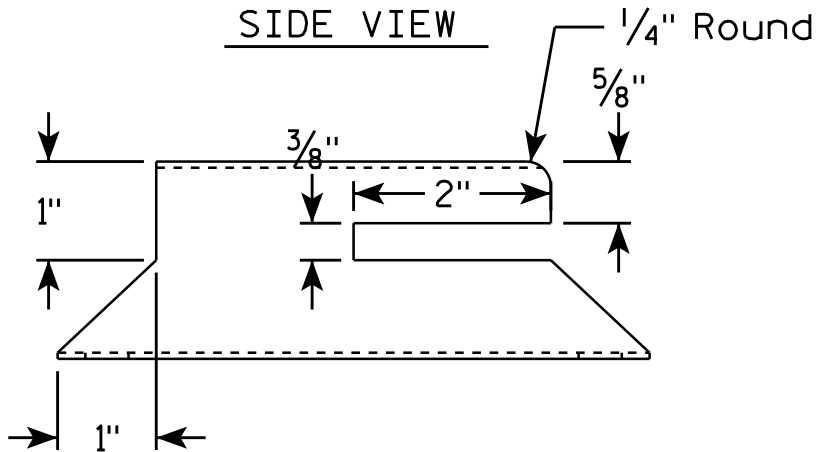
ISOMETRIC VIEW



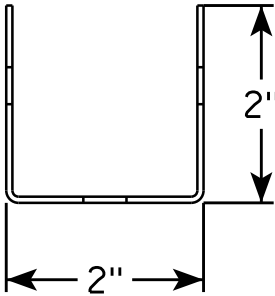
TOP VIEW



SIDE VIEW



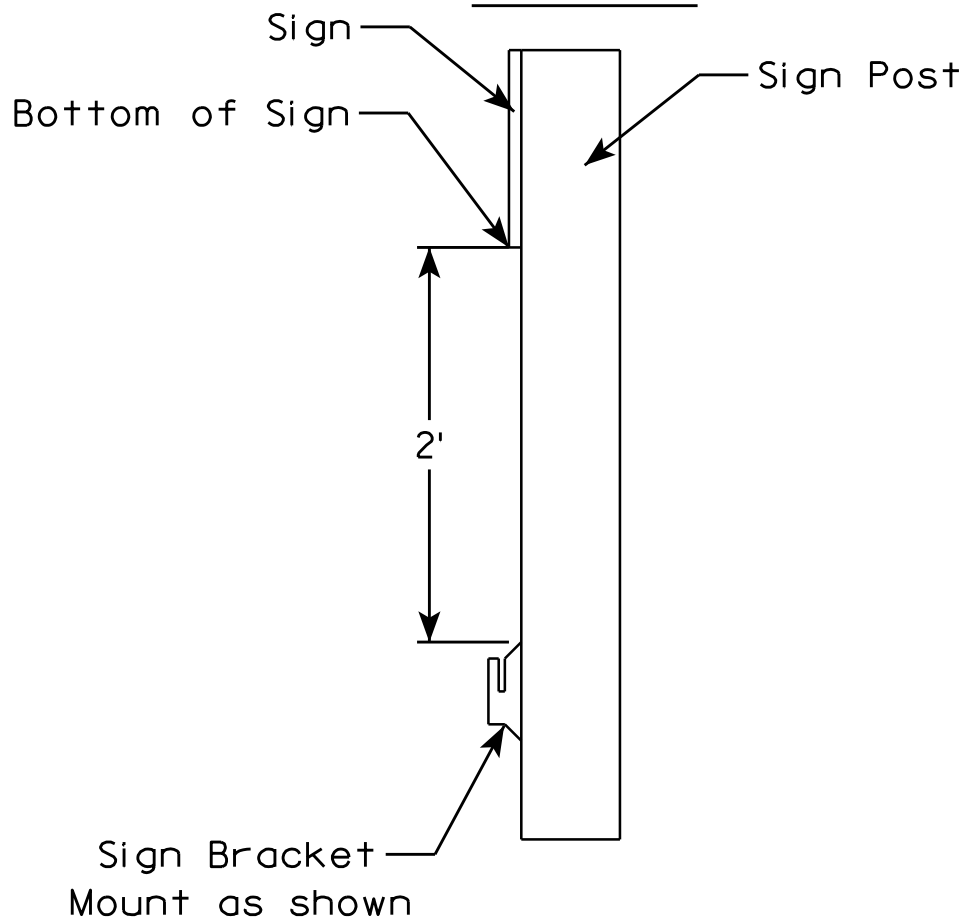
END VIEW



NOTES

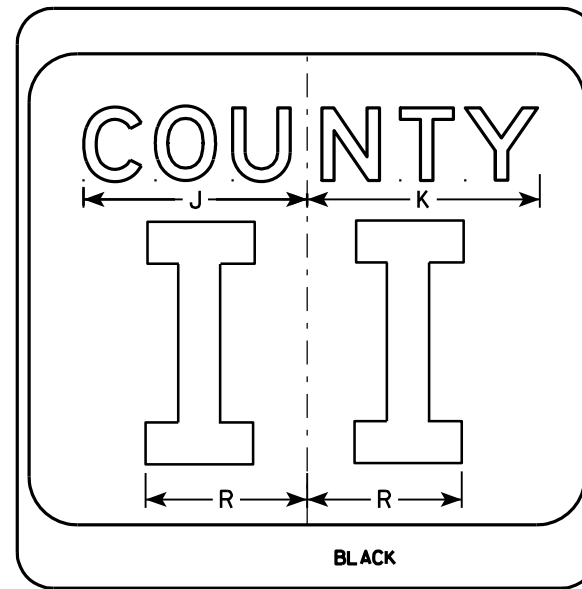
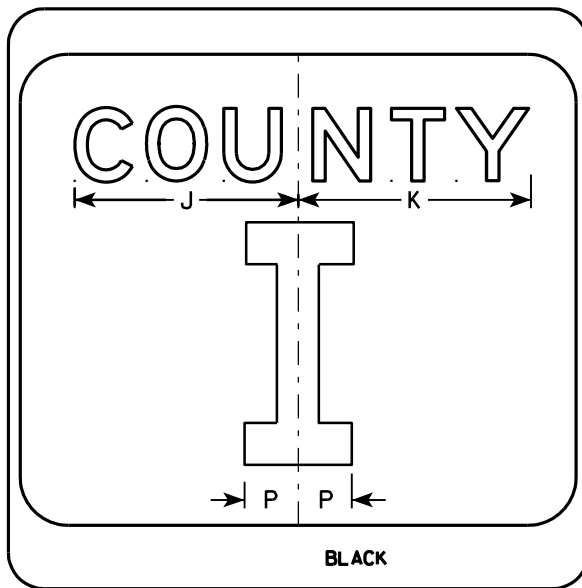
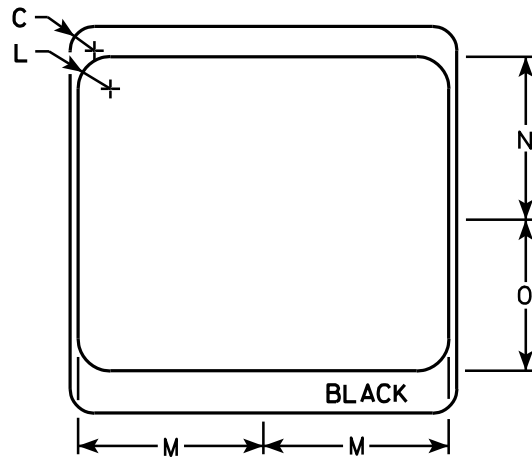
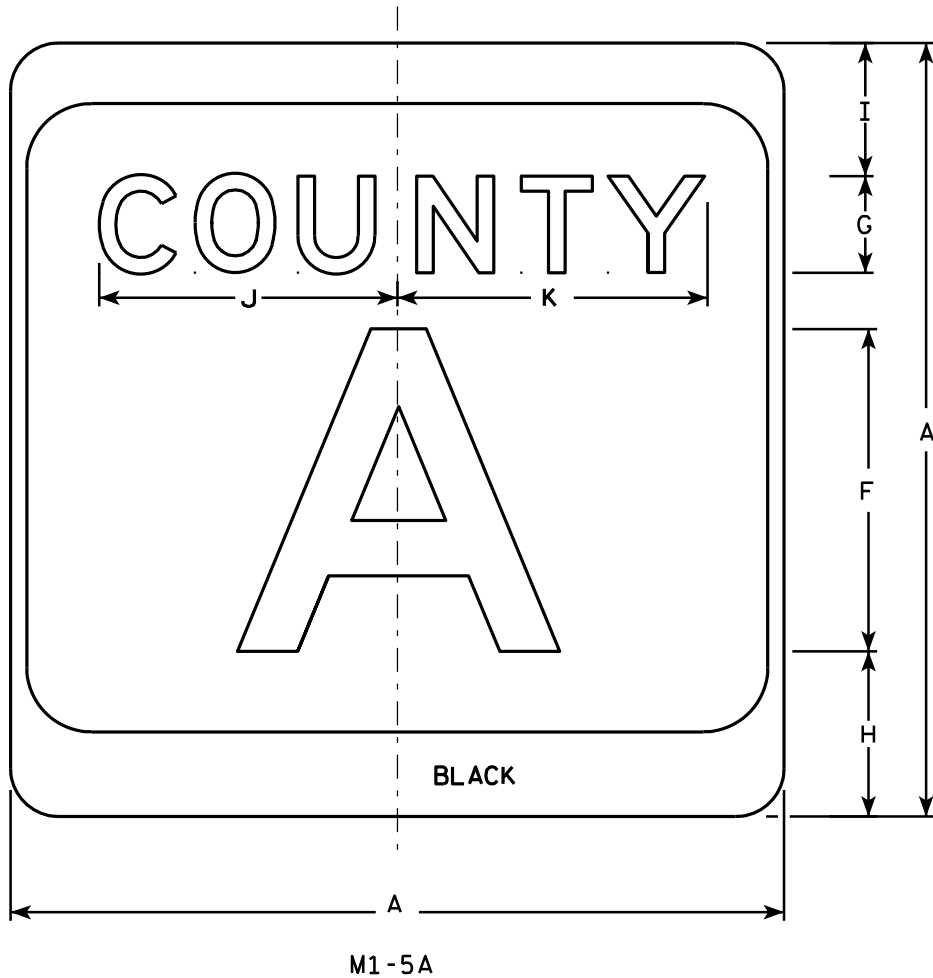
1. Must be capable of permanent attachment to a wood or steel channel sign post utilizing the fastening hardware specified on the A4-8 sign plate.
2. Shall be entirely primed and painted with two coats of a black powder coated enamel paint.
3. Shall be made with 12 gauge steel, and incorporate no welds, no hinged components, no threaded lock-type components, and no parts which are loose or can be separated from the main body.
4. Shall have rounded edges with at least 1/8" radii.
5. Shall not have unrounded and uncoated metal edges which can contact the back surface of the roll-up sign.
6. Top of bracket shall be mounted 2' below the bottom of the I55-56 sign.
7. Cost of bracket and fastening hardware shall be incidental to the I55-56 sign.

SIDE VIEW



ROLLUP SIGN BRACKET I55-56B	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 4/26/16	PLA 135 I55-56B.2

7



NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White & Black - See Note 7
Message - Black
3. Message Series - see Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Message Series E for 1 letter.
Message Series D for 2 letters unless message is too big then Series C.
Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
Background - Type H Reflective
Detour or temporary Signs
Background - Reflective

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 136	E
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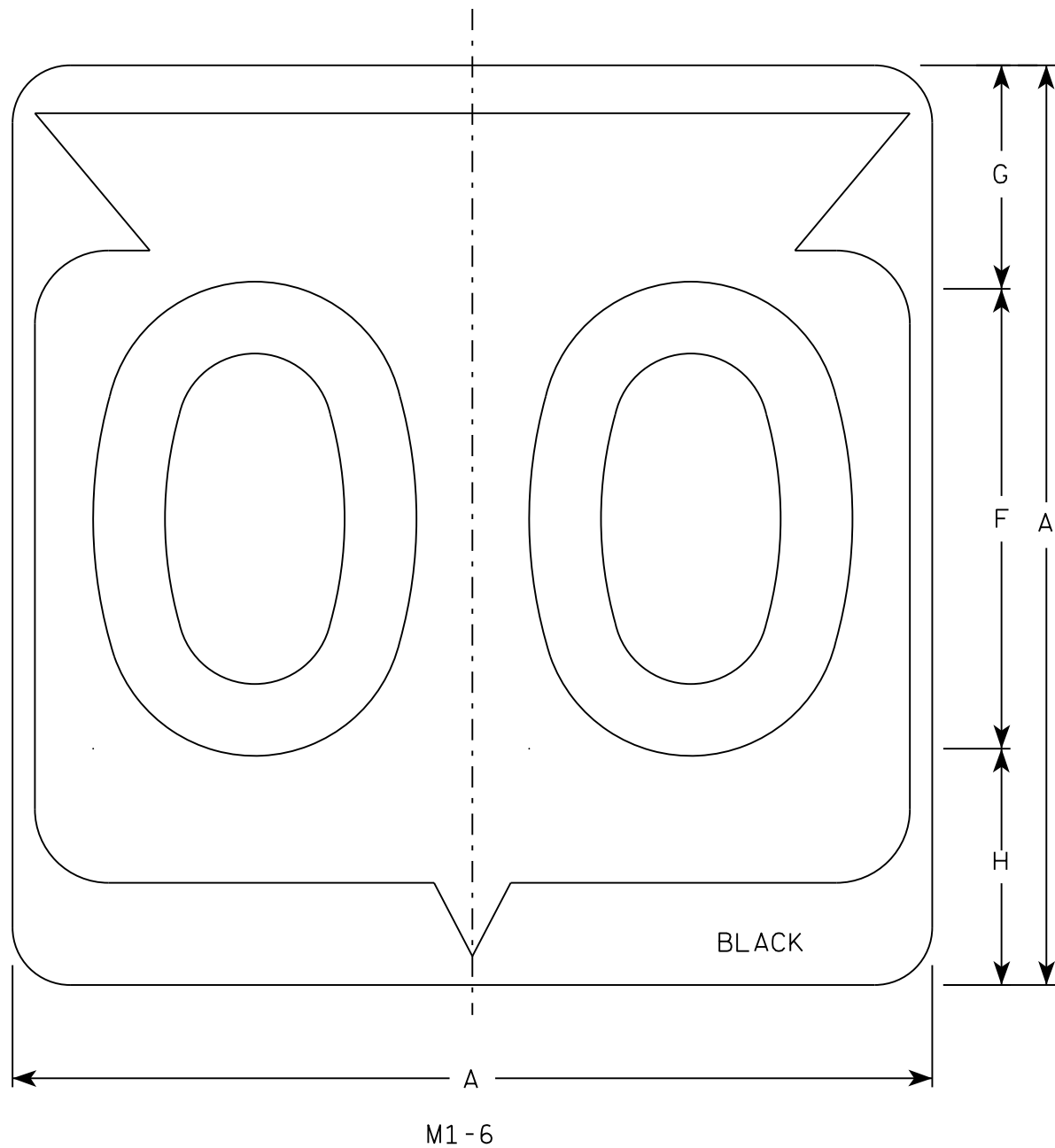
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

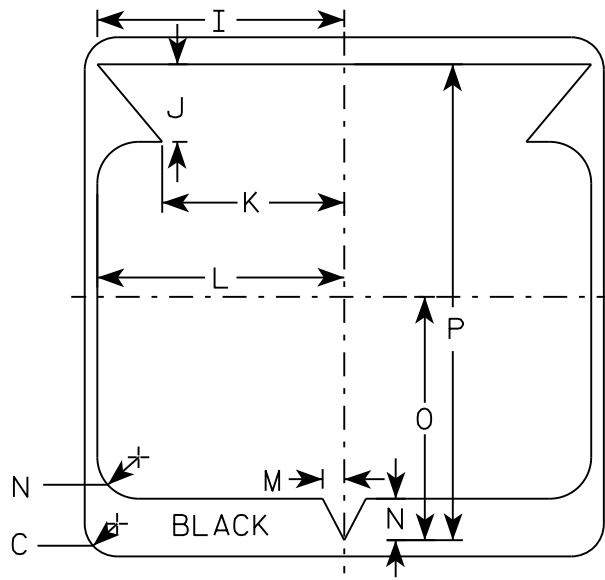
DATE 9/27/11 PLATE NO. M1-5A.8

7



NOTES

- 1. Sign is Type II - Type H Reflective
- 2. Color:
Background - White
Message - Black
- 3. Message Series - D except 3 number signs Series C
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



7

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

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 137

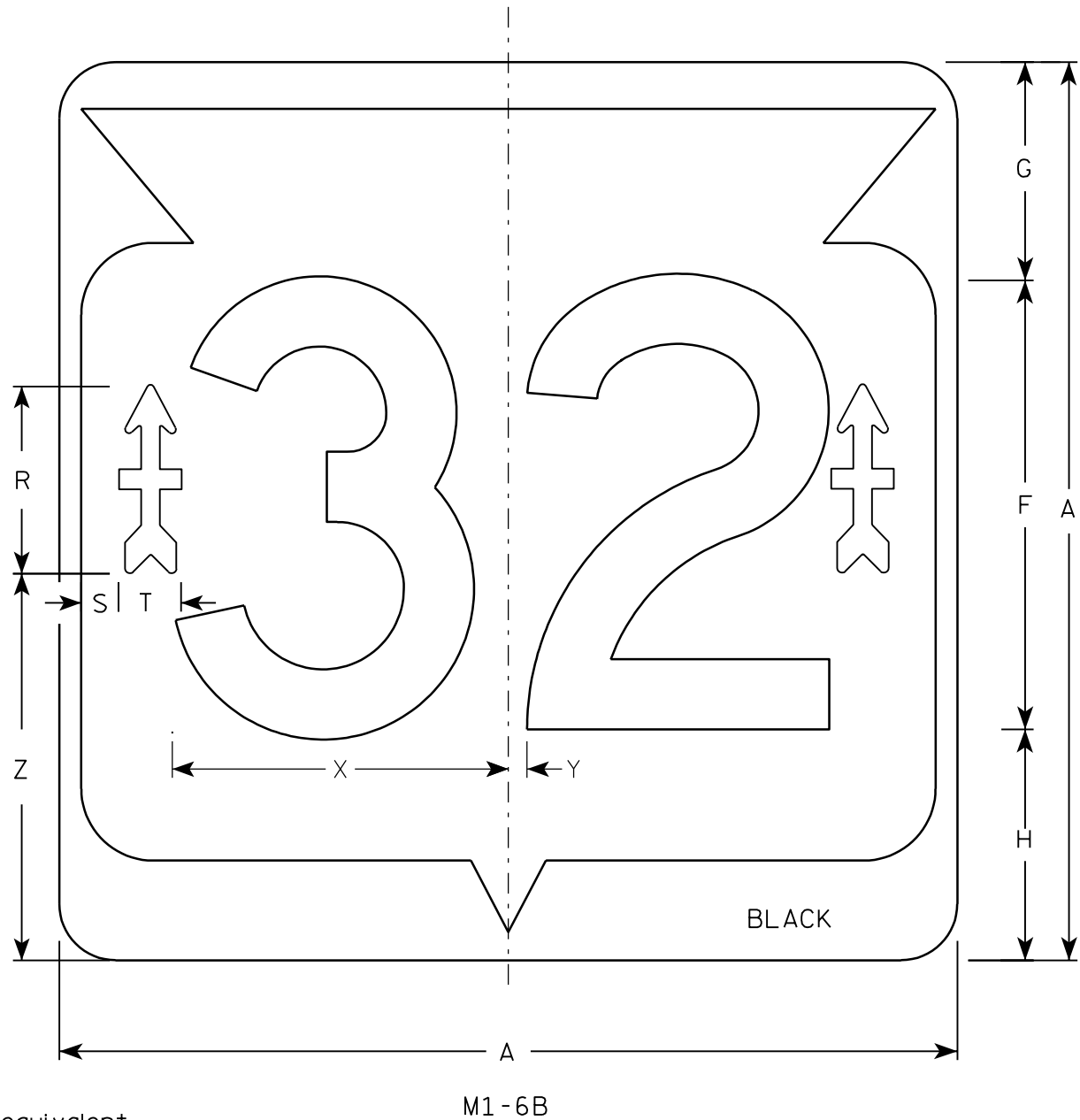
E

STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-6.10

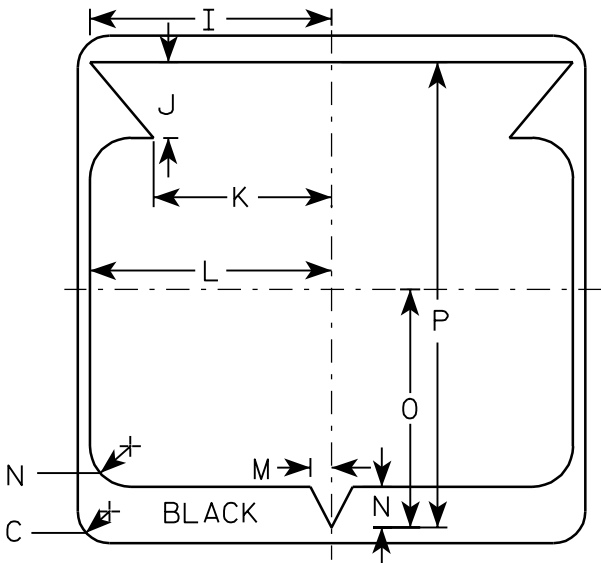


SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

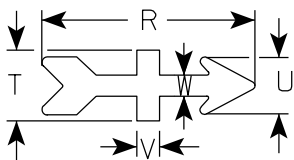
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8		5 1/8	3/4	1 7/8	1 1/2	5/8	5/8	9	1/2	10 1/2	4.0	.36
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33		7 1/2	1 1/2	2 1/2	2	7/8	3/4	13 1/2	3/4	15 1/2	9.0	.81
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33		7 1/2	1 1/2	2 1/2	2	7/8	3/4	13 1/2	3/4	15 1/2	9.0	.81
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33		7 1/2	1 1/2	2 1/2	2	7/8	3/4	13 1/2	3/4	15 1/2	9.0	.81

NOTES

- 1. Sign is Type II - Type H - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
 - Background - White & Black
 - Message - Black
 - Arrow - Type H Reflective Red
- 3. Message Series - D
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



32nd DIVISION ARROW
ACTUAL SIZE

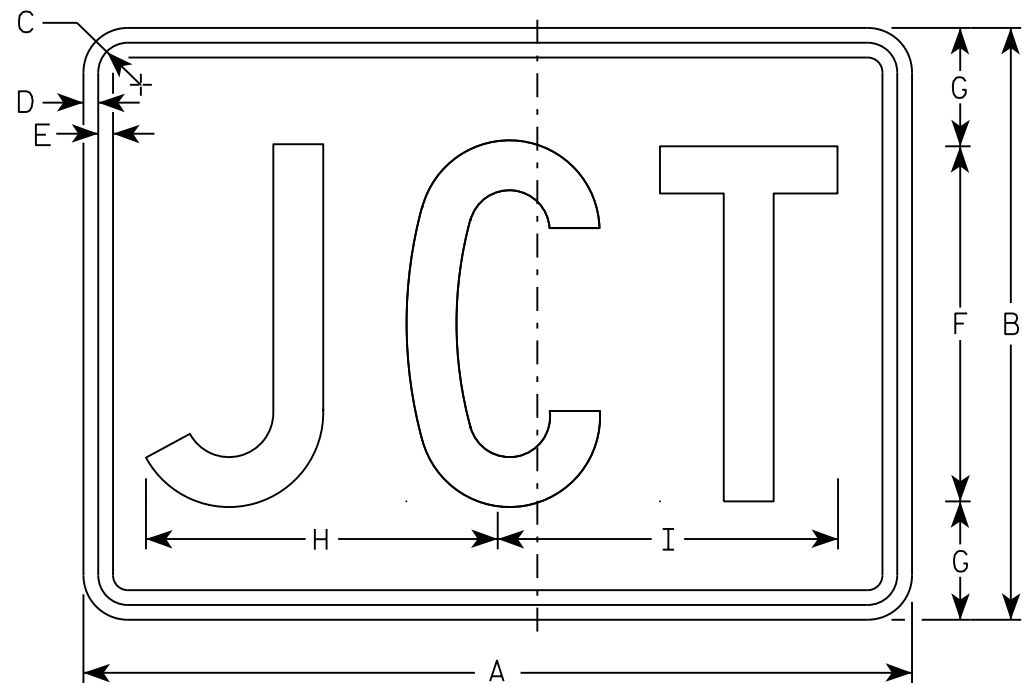


STATE ROUTE MARKER "32"
M1-6B FOR ASSEMBLIES

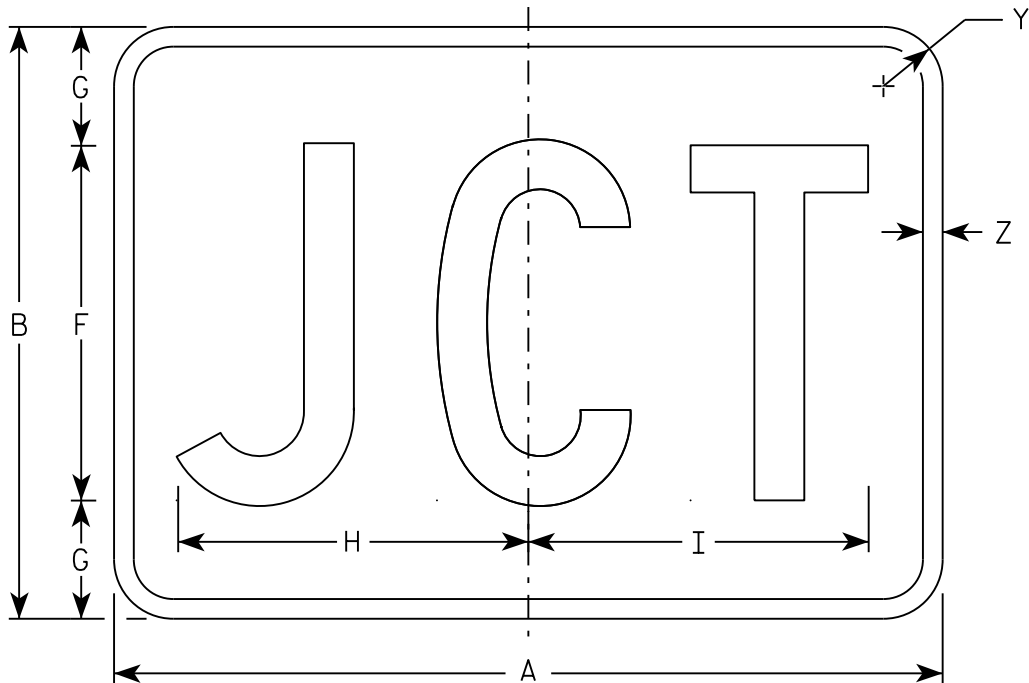
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/5/05 PLATE NO. M1-6B.2



M2-1
MM2-1
MP2-1



MB2-1
MK2-1
MN2-1
MR2-1

NOTES

- 1. Sign is Type II - Type H
- 2. Color:
 - Background - See note 5
 - Message - See note 5
- 3. Message Series - C
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 5. M2-1 Background - White
 Message - Black
 MB2-1 Background - Blue
 Message - White
 MK2-1 Background - Green
 Message - White
 MM2-1 Background - White
 Message - Green
 MN2-1 Background - Brown
 Message - White
 MP2-1 Background - White
 Message - Blue
 MR2-1 Background - Brown
 Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40

STANDARD SIGN

M2 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

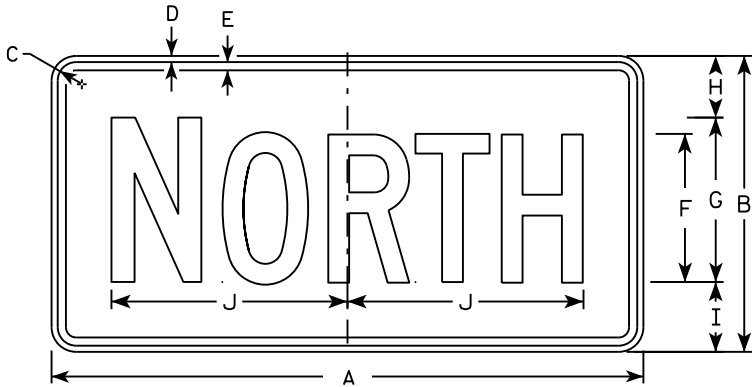
Matthew R. Rauch

For State Traffic Engineer

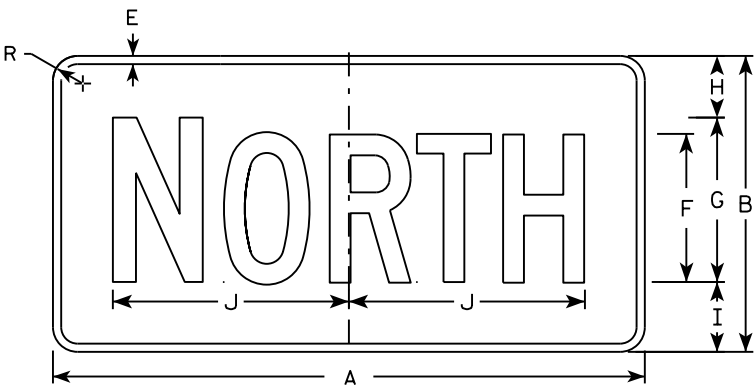
DATE 10/15/15

PLATE 139

'2-1.12



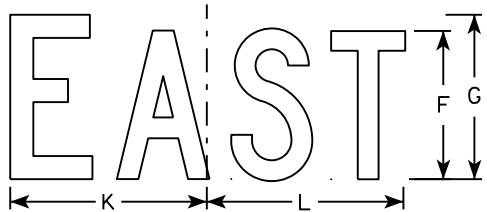
M3-1
MM3-1
MP3-1



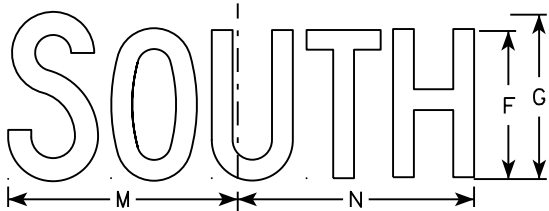
MB3-1
MK3-1
MN3-1



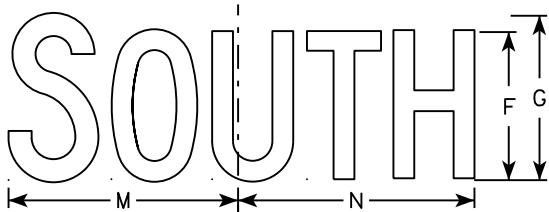
M3-2
MM3-2
MP3-2



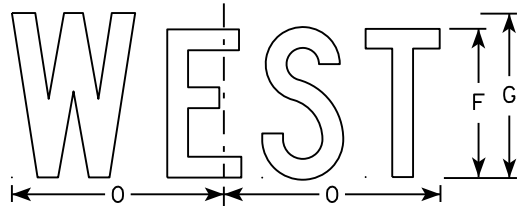
MB3-2
MK3-2
MN3-2



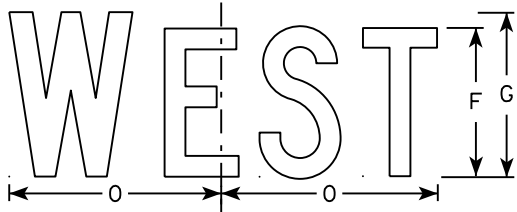
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

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

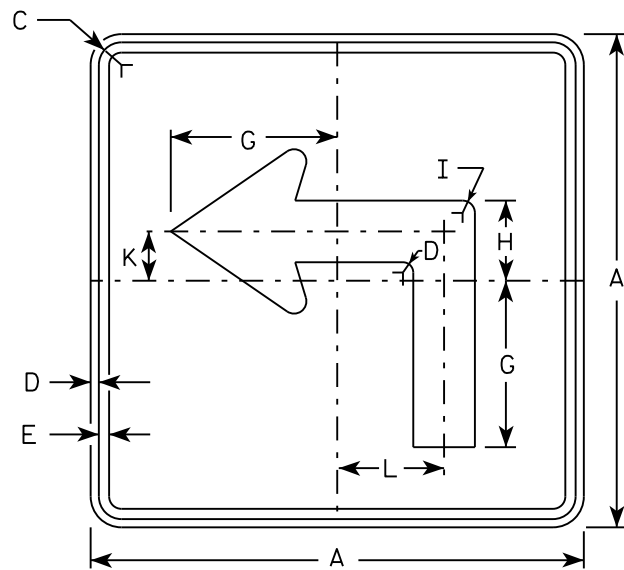
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8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

STANDARD SIGNS
M3-1 thru M3-4
SERIES

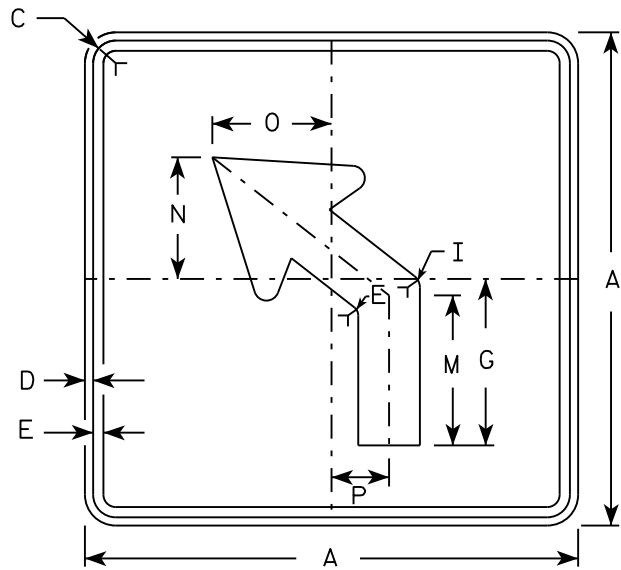
WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

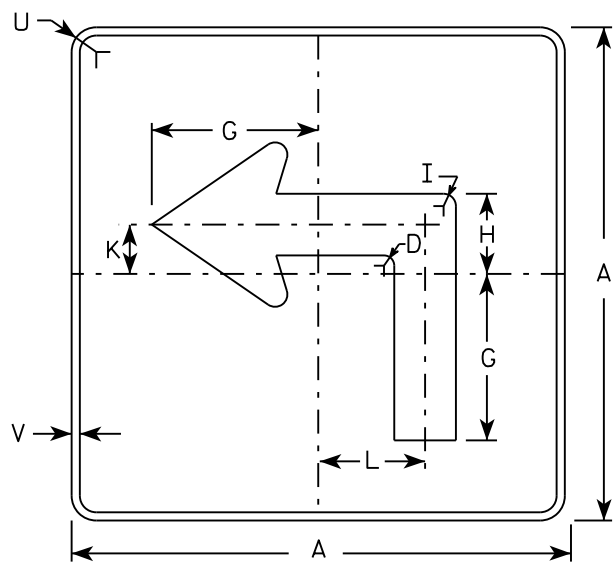
DATE 10/15/15 PLATE NO. 140 M3-1.14



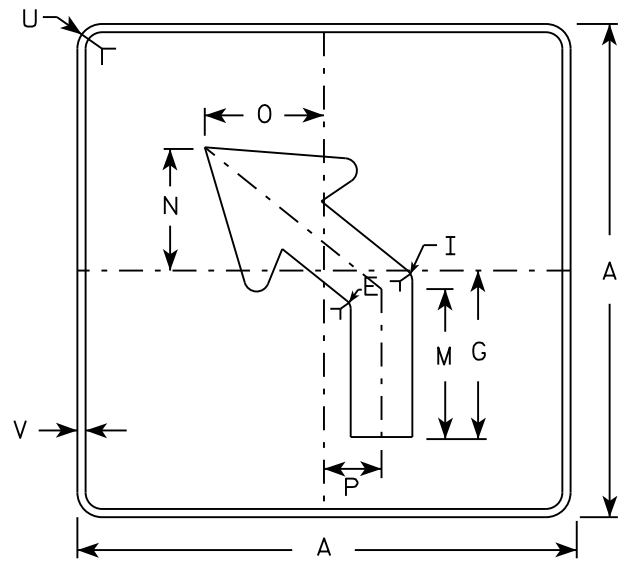
M5-1L
MM5-1L
M05-1L
MP5-1L



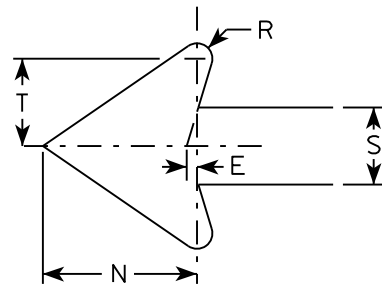
M5-2L
MM5-2L
M05-2L
MP5-2L



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



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



NOTES

- Signs are Type II - Type H reflective except as shown
- Color:
Background - See note 4
Message - See note 4
- CornerRadius may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- | | |
|-----------------|---|
| M5-1 and M5-2 | Background - White |
| | Message - Black |
| MB5-1 and MB5-2 | Background - Blue |
| | Message - White |
| MK5-1 and MK5-2 | Background - Green |
| | Message - White |
| MM5-1 and MM5-2 | Background - White |
| | Message - Green |
| MN5-1 and MN5-2 | Background - Brown |
| | Message - White |
| M05-1 and M05-2 | Background - Orange - Type F Reflective |
| | Message - Black |
| MP5-1 and MP5-2 | Background - White - Type H Reflective |
| | Message - Blue |
| MR5-1 and MR5-2 | Background - Brown |
| | Message - Yellow |
- M5-1R same as M5-1L except arrow points right.
- M5-2R same as M5-2L except arrow tilts right.

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

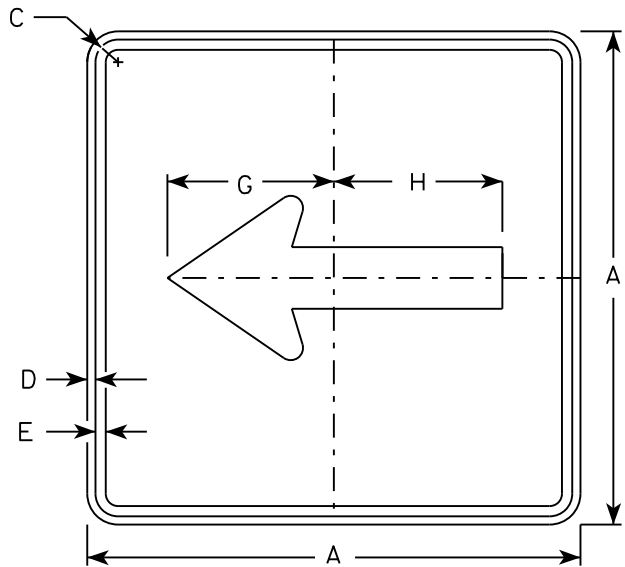
PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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STANDARD SIGN
M5-1 & M5-2

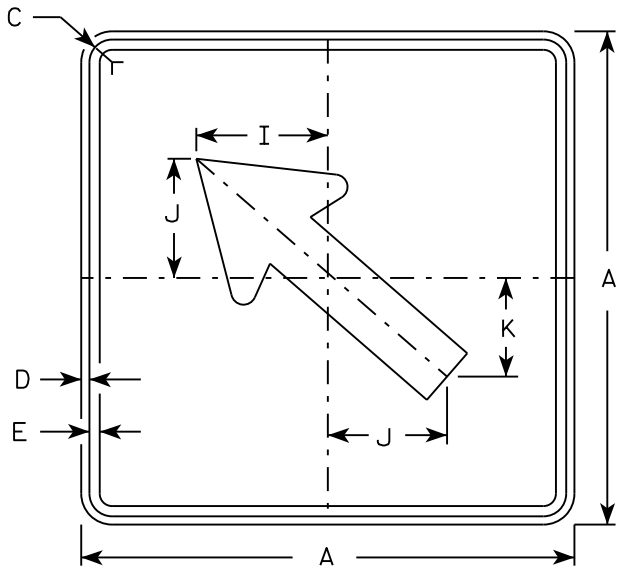
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

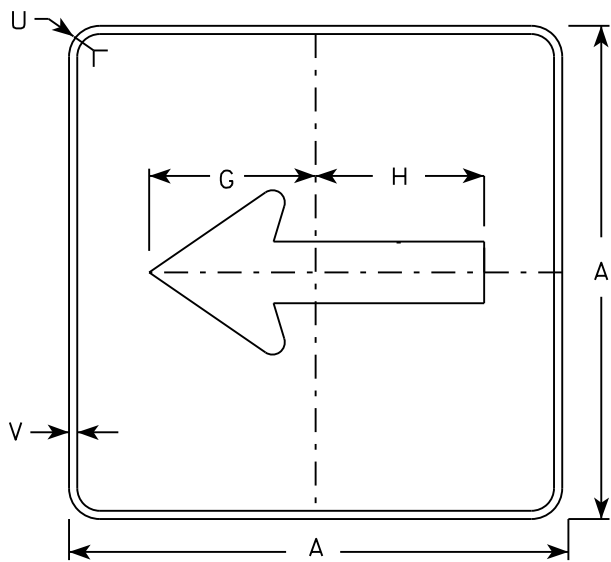
DATE 10/15/15 PLATF 141 M5-1.13



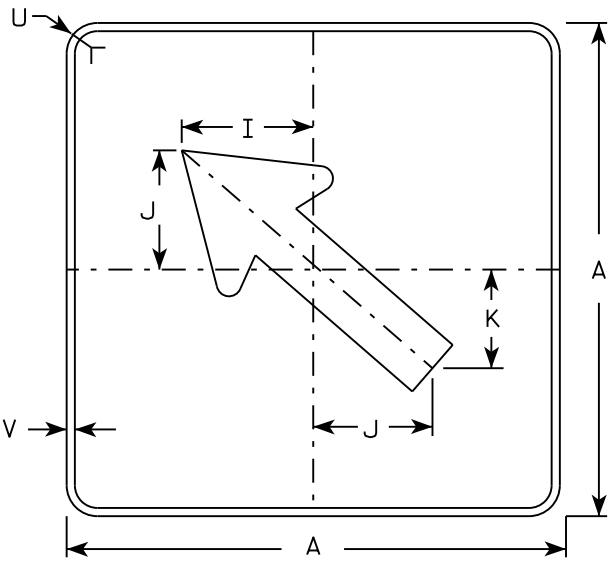
M6 - 1
MM6 - 1
M06 - 1
MP6 - 1



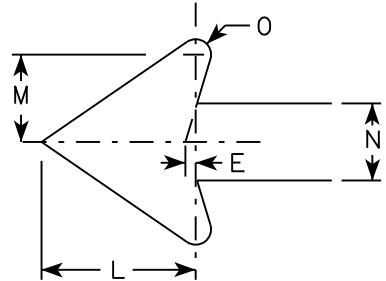
M6 - 2
MM6 - 2
M06 - 2
MP6 - 2



MB6 - 1
MK6 - 1
MN6 - 1
MR6 - 1



MB6 - 2
MK6 - 2
MN6 - 2
MR6 - 2



NOTES

- Signs are Type II - Type H except as Shown
- Color:
Background - See note 4
Message - See note 4
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- M6-1 and M6-2 Background - White
Message - Black
MB6-1 and MB6-2 Background - Blue
Message - White
MK6-1 and MK6-2 Background - Green
Message - White
MM6-1 and MM6-2 Background - White
Message - Green
MN6-1 and MN6-2 Background - Brown
Message - White
M06-1 and M06-2 Background - Orange - Type F Reflective
Message - Black
MP6-1 and MP6-2 Background - White
Message - Blue
MR6-1 and MR6-2 Background - Brown
Message - Yellow

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

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

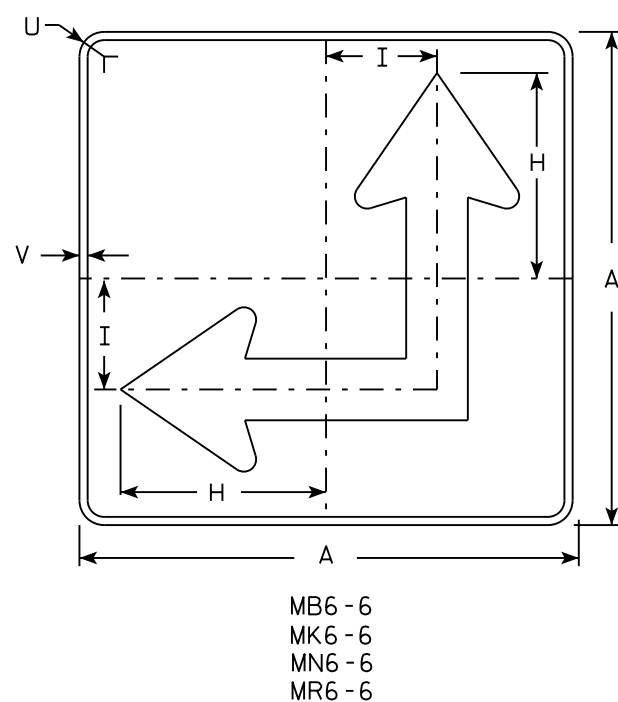
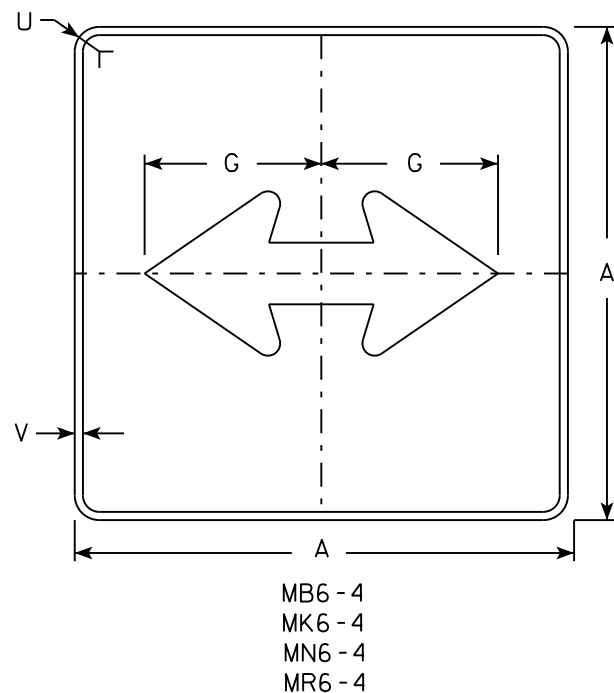
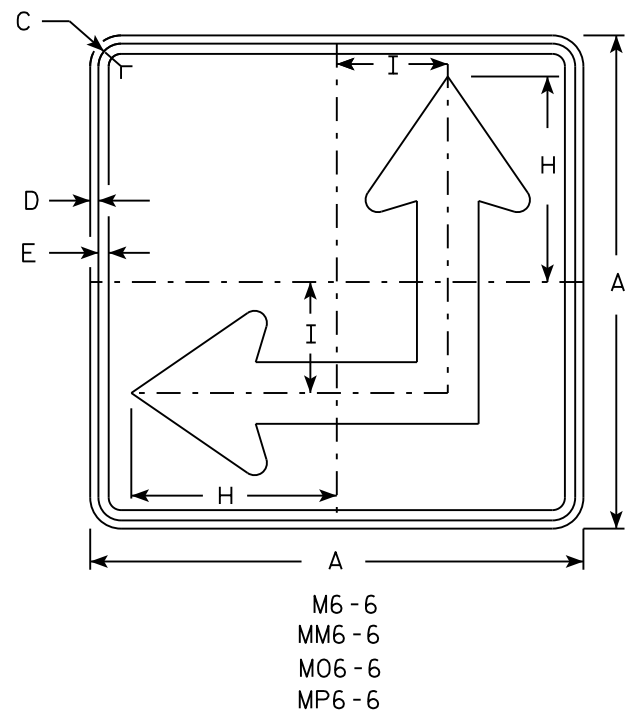
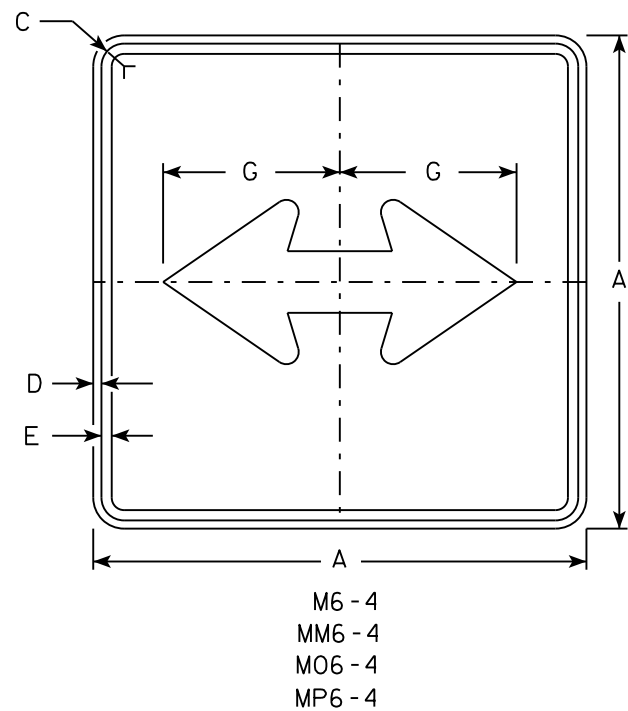
E

STANDARD SIGN
M6 - 1 & M6 - 2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

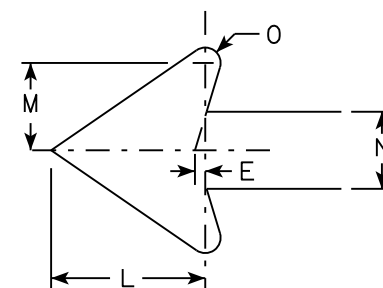
APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 10/15/15 PLAT 142 M6-1.15



NOTES

- Signs are Type II - Type H except as Shown
- Color:
Background - See Note 4
Message - See Note 4
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- M6-4 and M6-6 Background - White
Message - Black
MB6-4 and MB6-6 Background - Blue
Message - White
MK6-4 and MK6-6 Background - Green
Message - White
MM6-4 and MM6-6 Background - White
Message - Green
MN6-4 and MN6-6 Background - Brown
Message - White
M06-4 and M06-6 Background - Orange - Type F Reflective
Message - Black
MP6-4 and MP6-6 Background - White
Message - Blue
MR6-4 and MR6-6 Background - Brown
Message - Yellow
- M6-6R same as M6-6L except arrow points ahead and right.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

PROJECT NO:	HWY:	COUNTY:	PLAT 143	SHEET NO:	E
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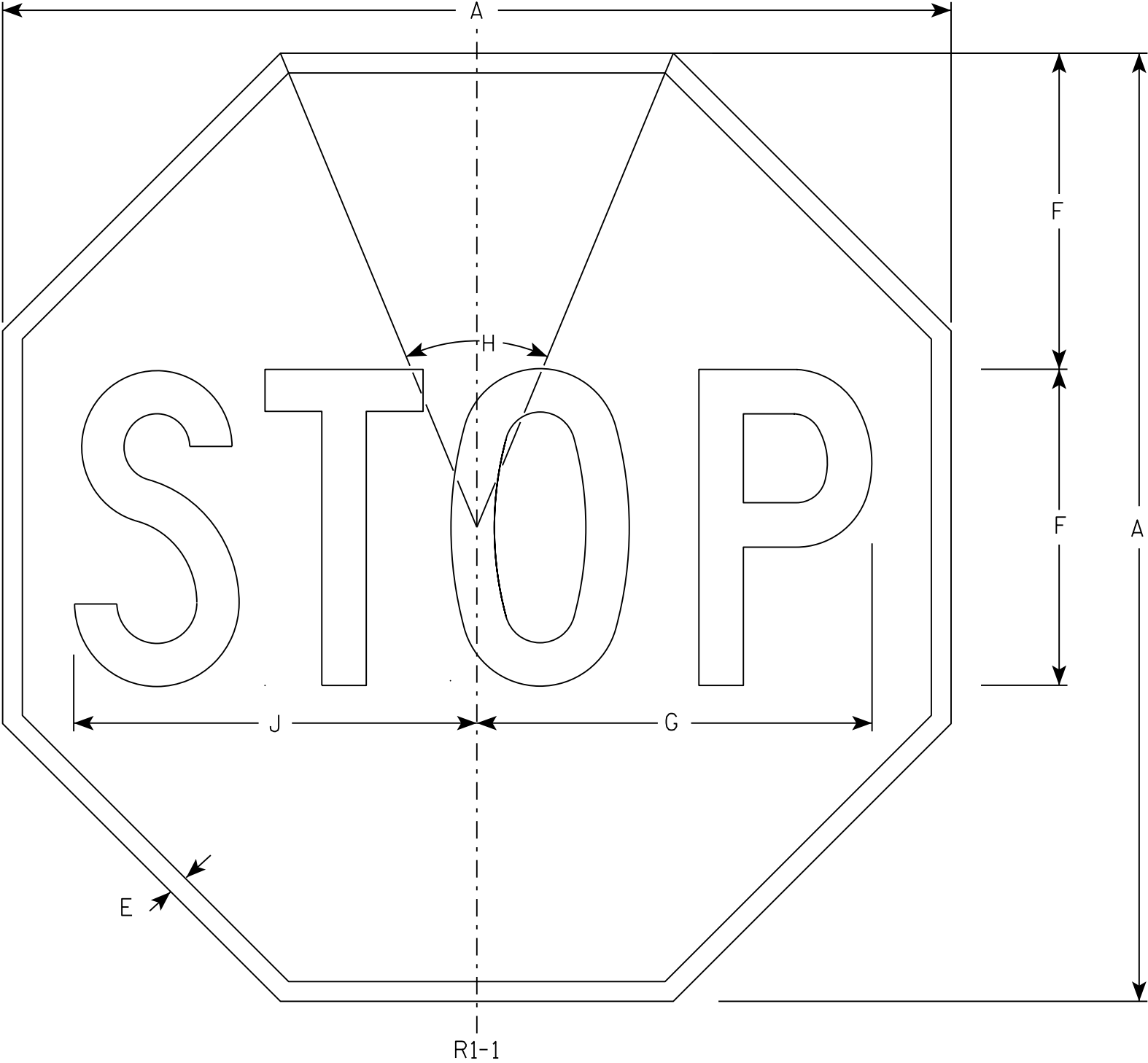
STANDARD SIGN
M6 - 4 & M6 - 6
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 10/15/15 PLAT 143 M6-4.10

7



NOTES

- 1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Red
Message - White
- 3. Message Series - C

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

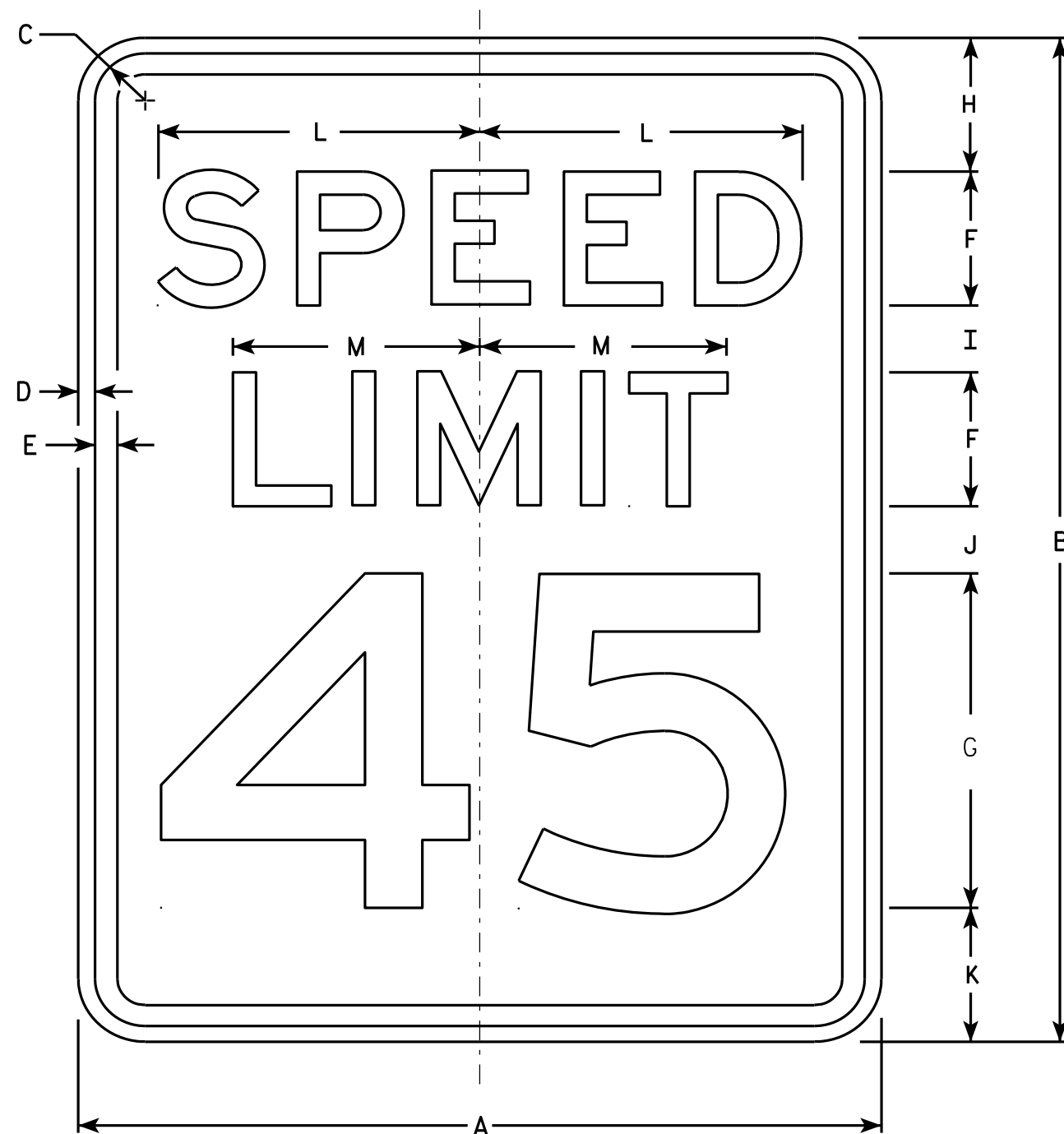
STANDARD SIGN

R1 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13



R2-1

NOTES

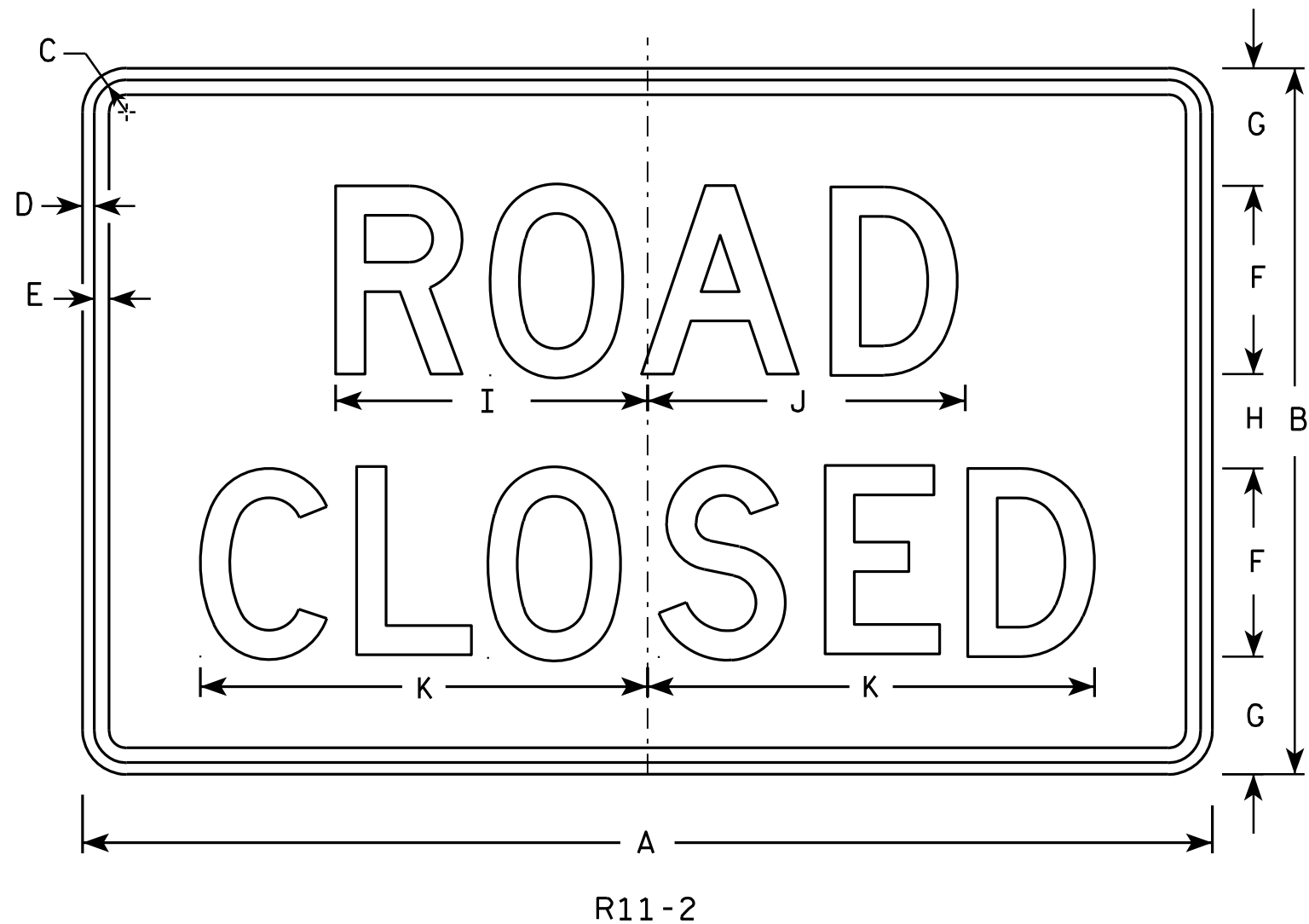
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

STANDARD SIGN
R2-1

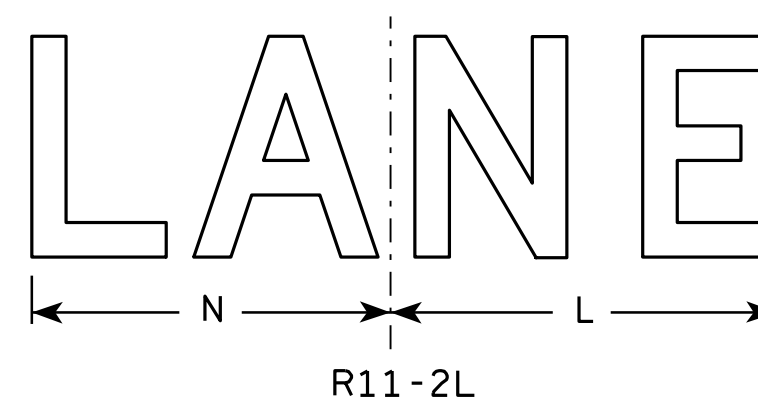
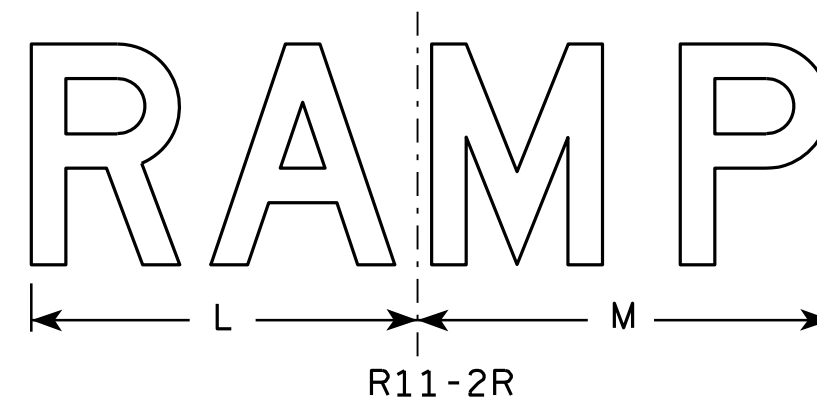
WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
For State Traffic Engineer
DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: HWY: COUNTY: SHEET NO: 145 E



NOTES

- Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - White
Message - Black
- Message Series - D
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- Modify the message as required.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0
2M	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0
3	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0
4	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0
5	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0

STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 4/1/11 PLATE NO. R11-2.10

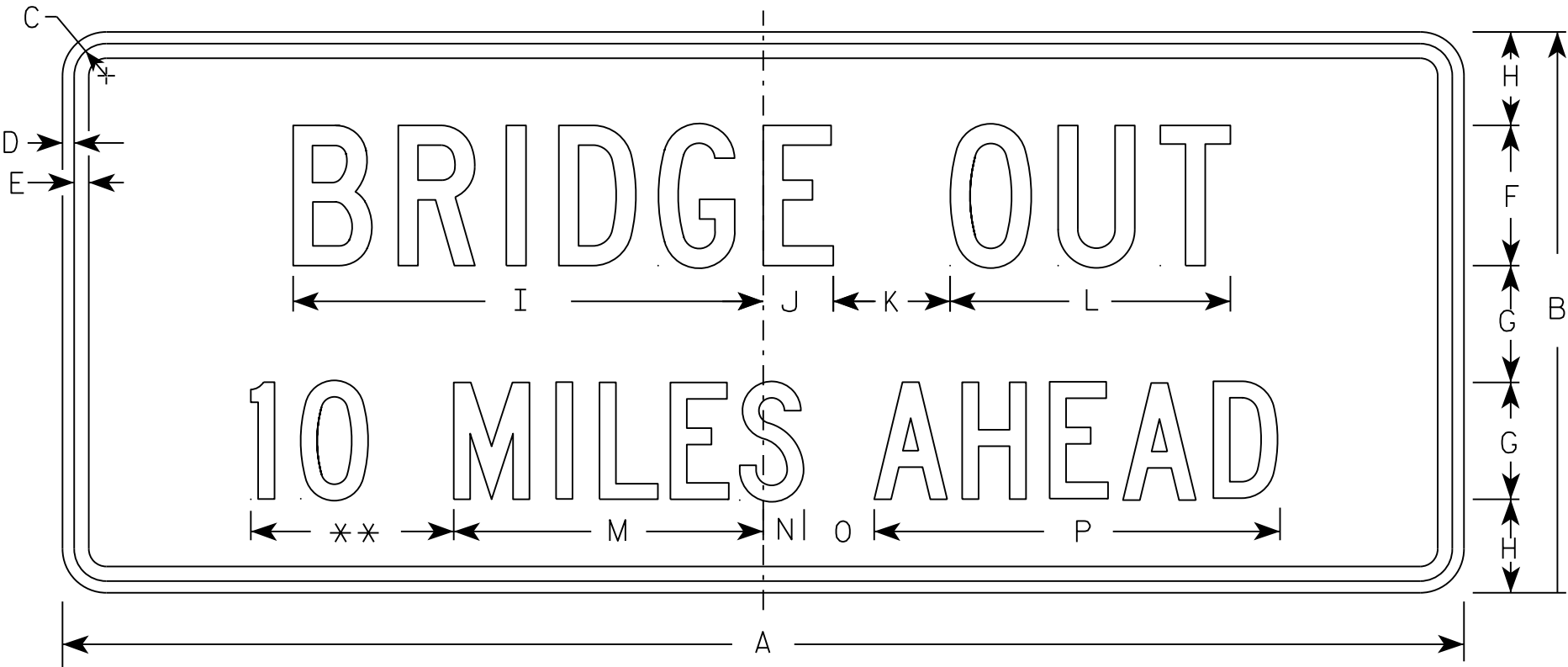
PROJECT NO: HWY: COUNTY: SHEET NO: 146 E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:

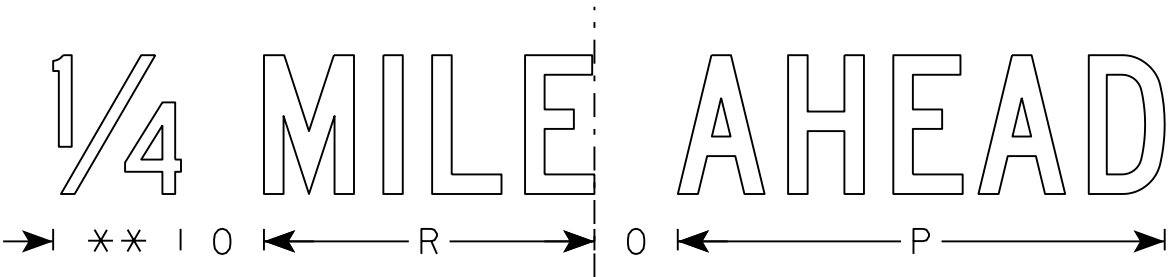
Background - White

Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.



R11-3C

** See Note 5



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	15	1 3/8	1/2	5/8	4	3	2 1/2	13 1/4	2 1/4	3	8	8	1 1/2	2	10 3/4		7 1/8									3.75
2S	60	24	1 3/8	1/2	5/8	6	5	4	20 1/8	3	5	12	13 1/4	1 3/4	3	17 3/8		11 7/8									10.0
2M	60	24	1 3/8	1/2	5/8	6	5	4	20 1/8	3	5	12	13 1/4	1 3/4	3	17 3/8		11 7/8									10.0
3																											
4																											
5																											

STANDARD SIGN
R11-3C

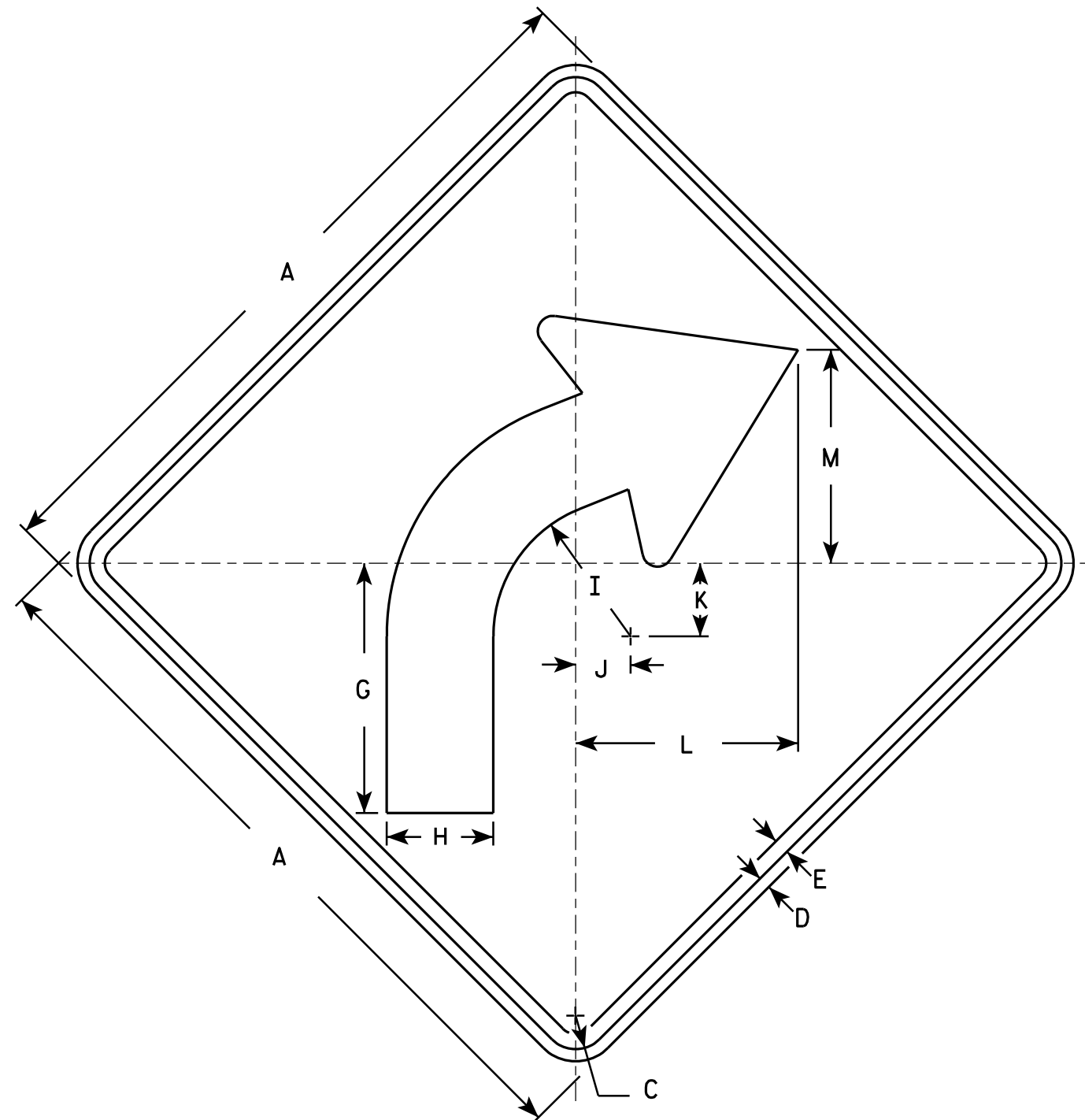
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

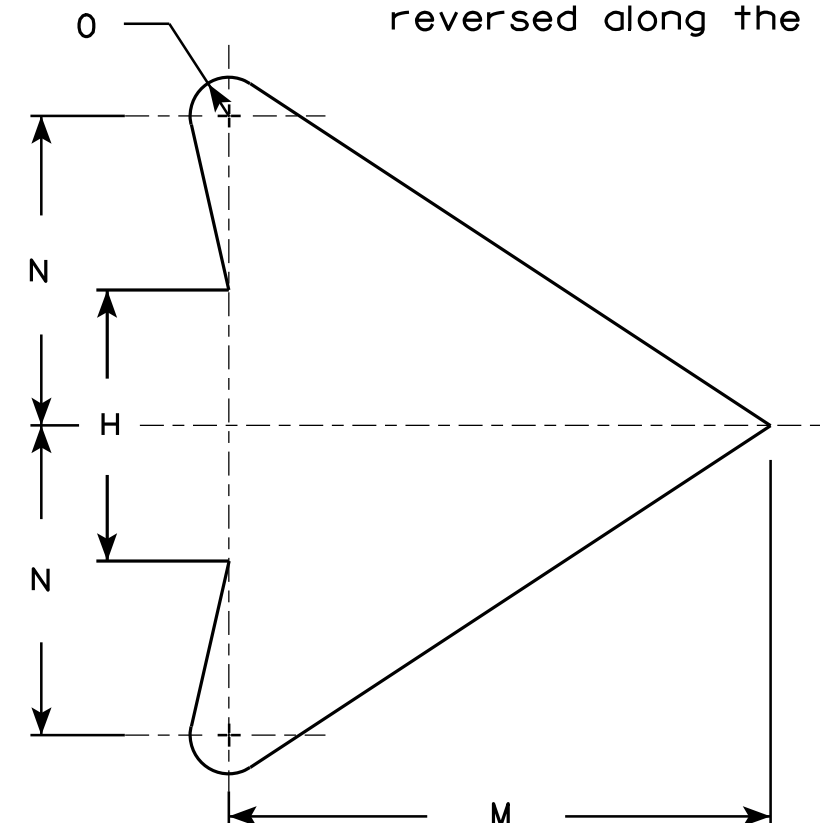
DATE 7/28/16 PLATE NO. R11-3C.3

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W1-2L is the same as W1-2R except the arrow is reversed along the vertical centerline.



W1-2R



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		8 1/4	3 1/2	4 1/2	1 3/4	2 3/8	7 1/4	7	4	1/2												4.0
2S	30		1 3/8	1/2	5/8		10 1/4	4 3/8	5 5/8	2 1/4	3	9 1/8	8 3/4	5	5/8												6.25
2M	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
3	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
4	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
5	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0

STANDARD SIGN

W1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/15/12 PLATE NO. W1-2.10

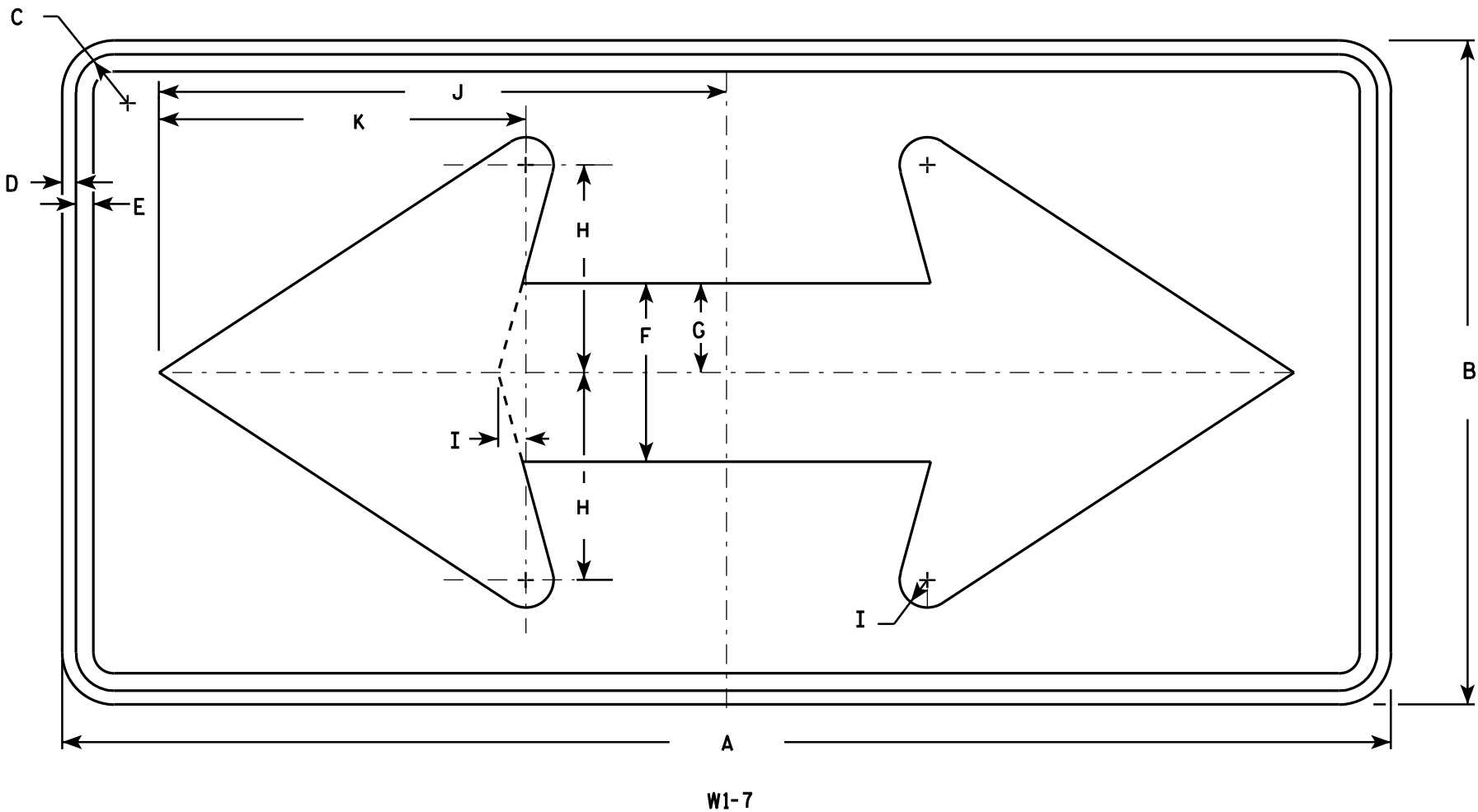
PROJECT NO:

HWY:

COUNTY:

SHEET NO: 148

E



NOTES

- 1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Yellow
Message - Black
- 3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/8	3/8	1/2	5	2 1/2	5 3/4	3/4	15 5/8	10 1/8																4.5
2S	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
2M	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
3	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
4	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
5	96	48	2 1/4	3/4	1	13	6 1/2	15	2	41	26 1/2																32.0

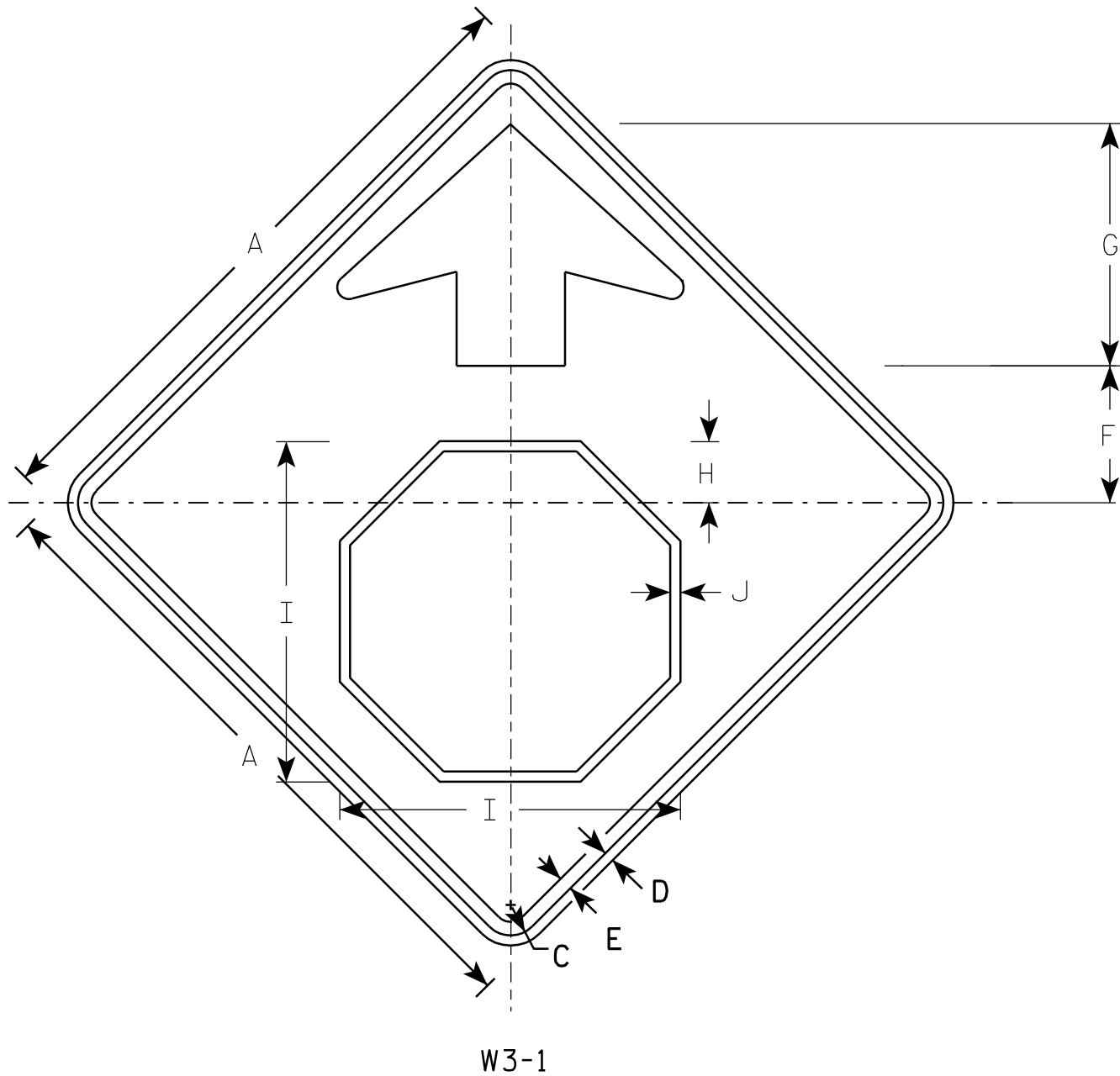
STANDARD SIGN

W1 - 7

WISCONSIN DEPT OF TRANSPORTATION

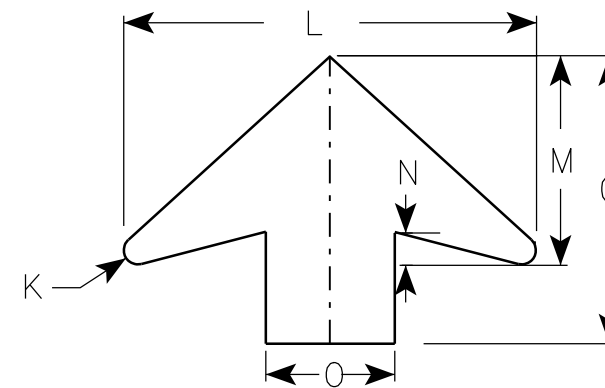
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-7.7



NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - YELLOW
Arrow & Border - BLACK
Stop Symbol - WHITE BORDER ON RED BACKGROUND



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	6 1/4	11 1/4	2 7/8	15 3/4	1/2	1/2	16	8	1 1/4	5												6.25
2S	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
2M	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
3	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0

PROJECT NO:

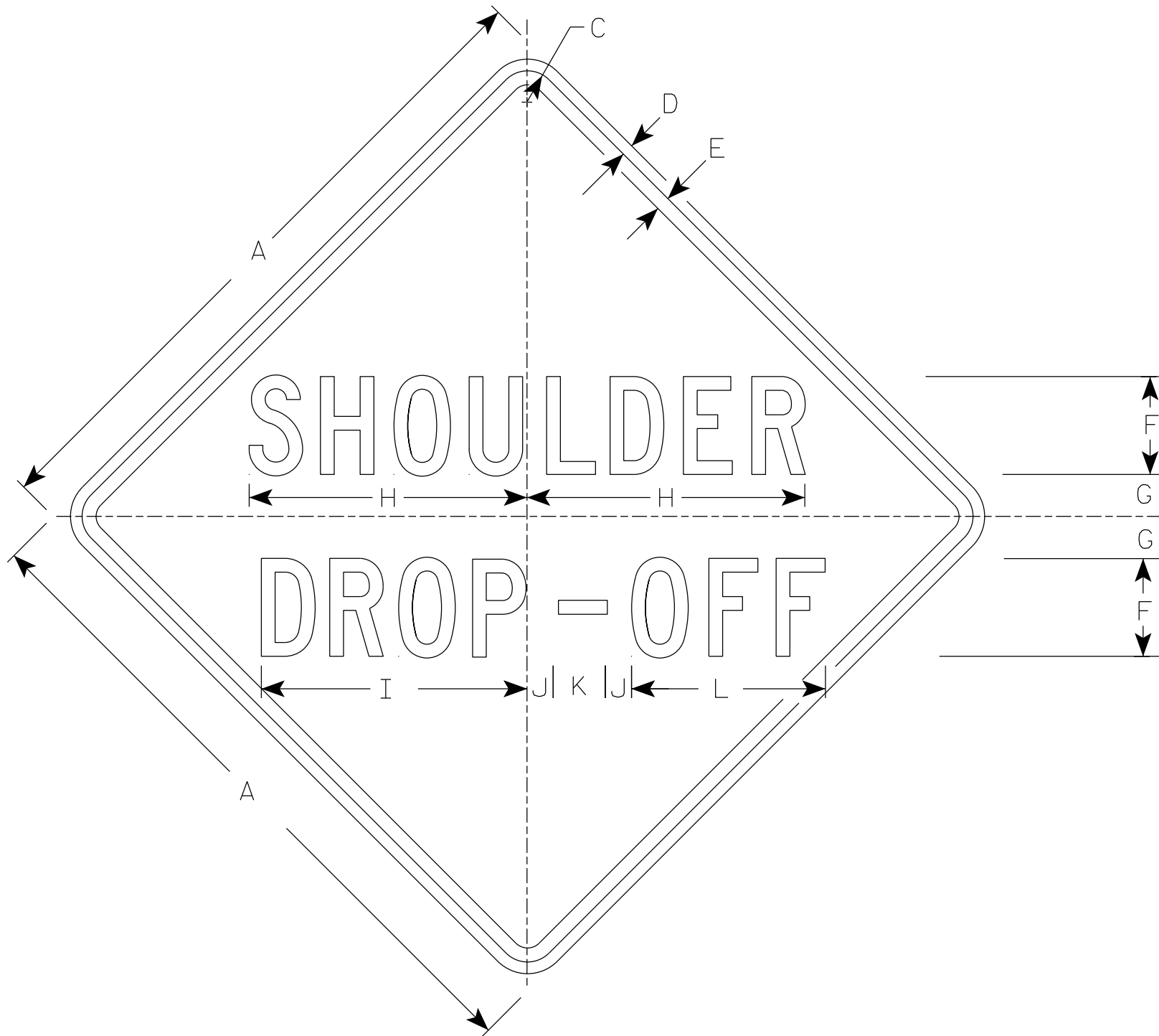
STANDARD SIGN
W3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 6/7/10 PLATE NO. W3-1.12

SHEET NO: 150

E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

W8-9A

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48		2 1/4	3/4	1	7	3	19 7/8	19	1 7/8	3 3/4																16.0
2M	48		2 1/4	3/4	1	7	3	19 7/8	19	1 7/8	3 3/4																16.0
3	48		2 1/4	3/4	1	7	3	19 7/8	19	1 7/8	3 3/4																16.0
4	48		2 1/4	3/4	1	7	3	19 7/8	19	1 7/8	3 3/4																16.0
5	48		2 1/4	3/4	1	7	3	19 7/8	19	1 7/8	3 3/4																16.0

STANDARD SIGN
W8-9A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

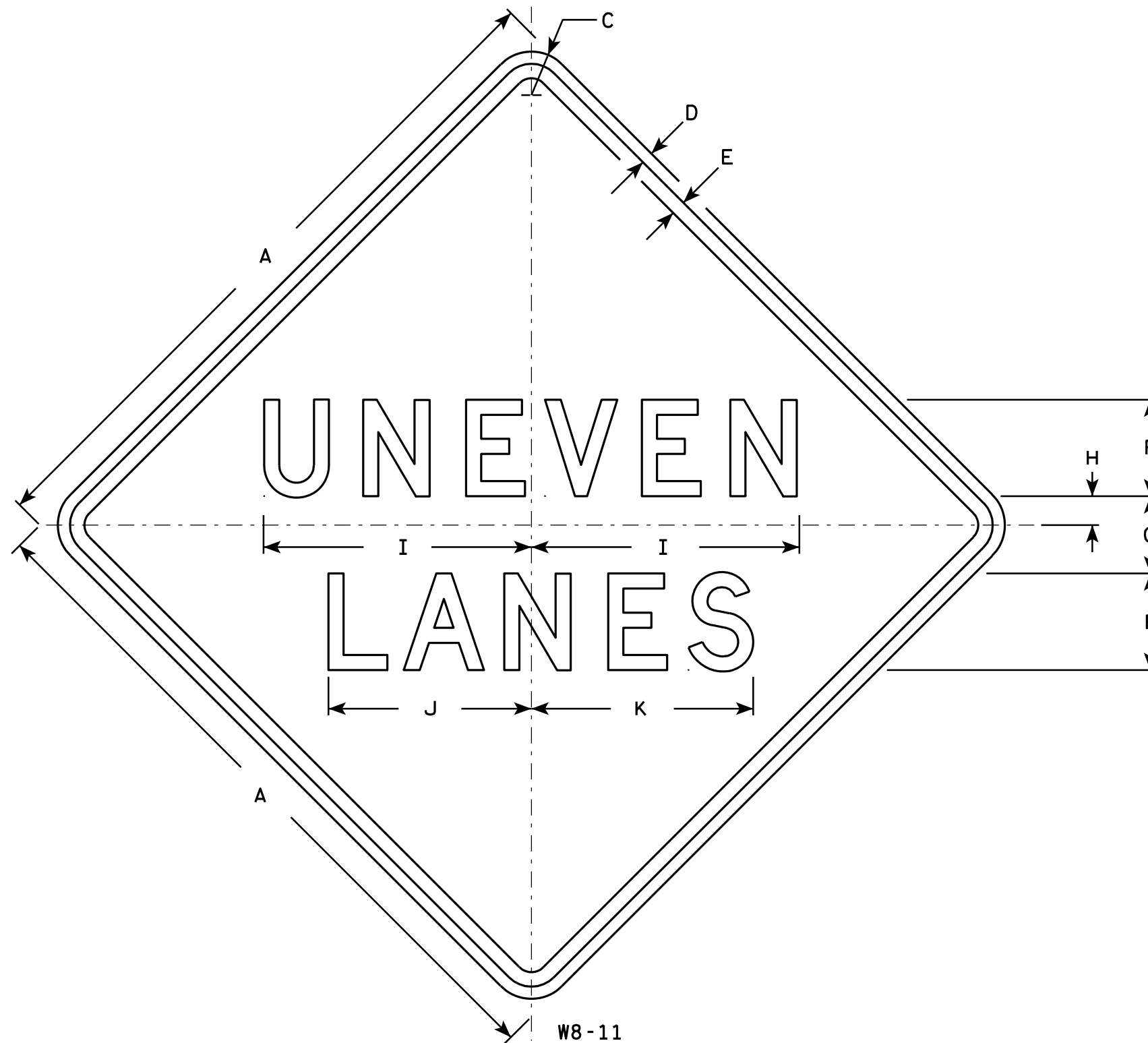
DATE 3/23/11 PLATE NO. W8-9A.3

PROJECT NO:

SHEET NO:

151

E



NOTES

- Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - Orange
Message - Black
- Message Series - D
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36		1 5⁄8	5⁄8	3⁄4	5	4	1 1⁄2	13 7⁄8	10 1⁄2	11 1⁄2																9.0
2M	36		1 5⁄8	5⁄8	3⁄4	5	4	1 1⁄2	13 7⁄8	10 1⁄2	11 1⁄2																9.0
3																											
4	36		1 5⁄8	5⁄8	3⁄4	5	4	1 1⁄2	13 7⁄8	10 1⁄2	11 1⁄2																9.0
5	48		2 1⁄4	3⁄4	1	7	5	2	18 1⁄2	14	15 3⁄8																16.0

STANDARD SIGN

W8-11

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/22/11 PLATE NO. W8-11.4

PROJECT NO:

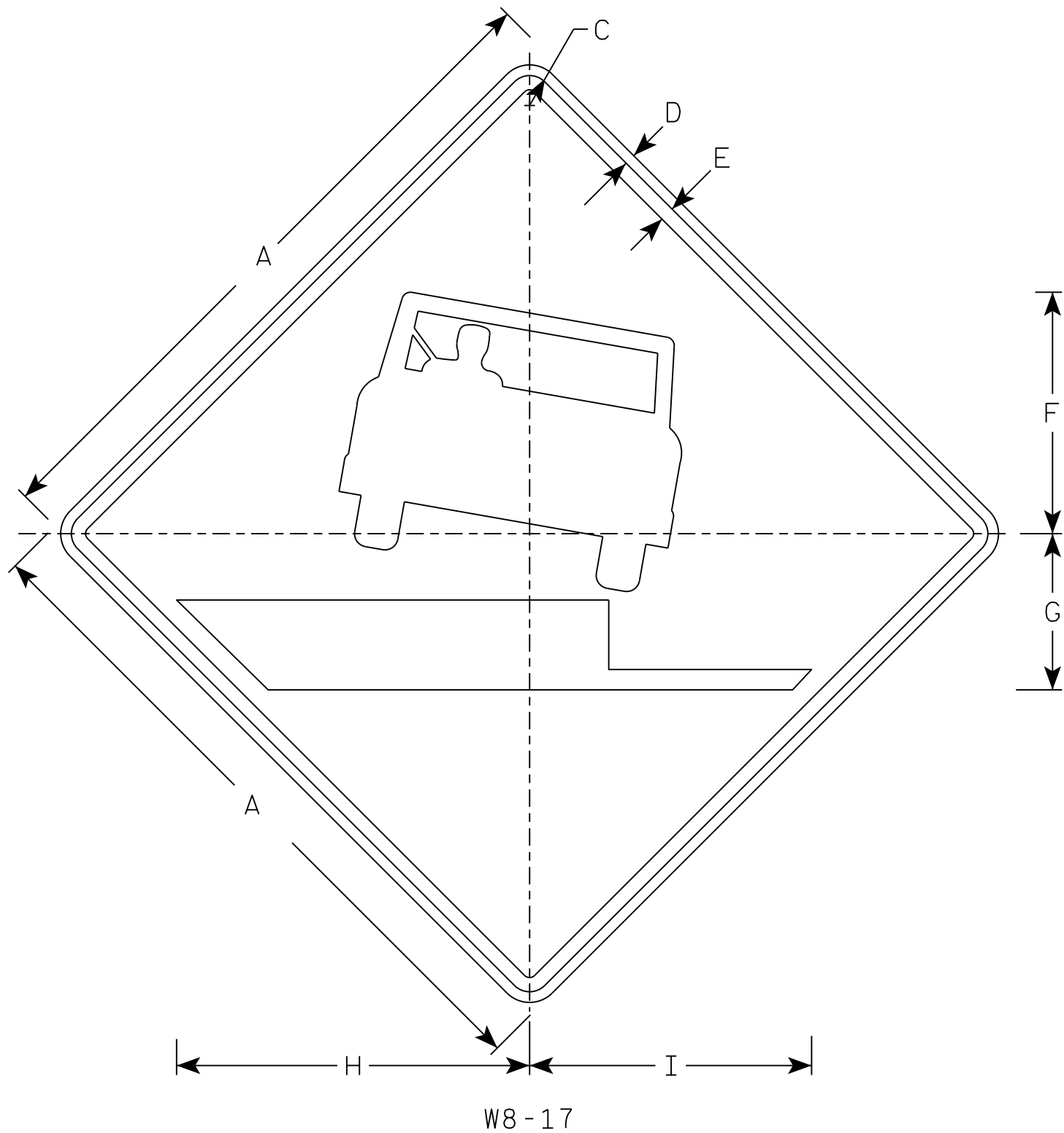
HWY:

COUNTY:

SHEET NO: 152

E

7



NOTES

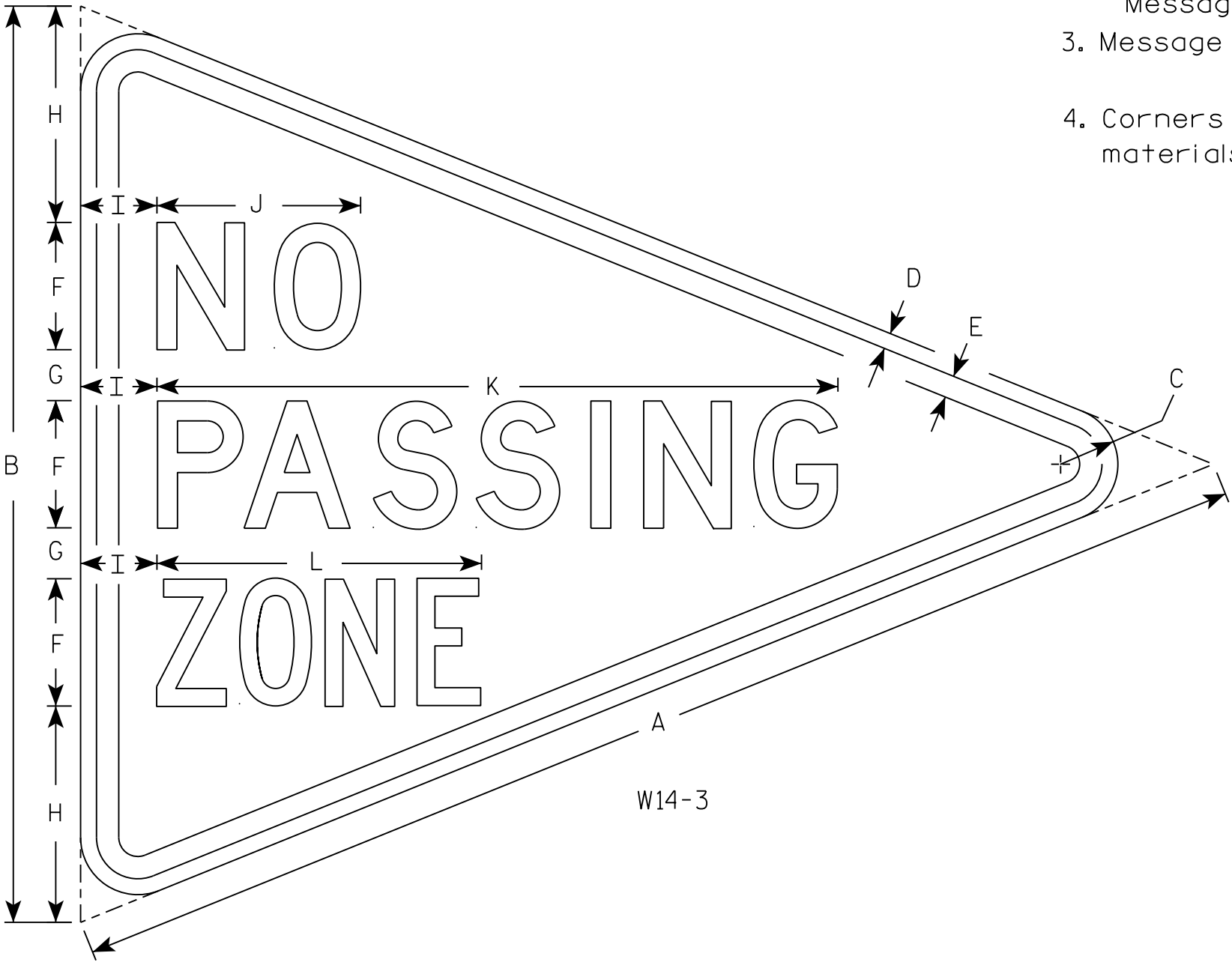
- 1. Sign is Type II - Type F Reflective
- 2. Color:
 - Background - Orange
 - Message - Black
- 3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48		2 1/4	3/4	1	17	11	24 7/8	19 7/8																		16.0
2M	48		2 1/4	3/4	1	17	11	24 7/8	19 7/8																		16.0
3	48		2 1/4	3/4	1	17	11	24 7/8	19 7/8																		16.0
4	48		2 1/4	3/4	1	17	11	24 7/8	19 7/8																		16.0
5	48		2 1/4	3/4	1	17	11	24 7/8	19 7/8																		16.0

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
Background - Yellow
Message - Black
- 3. Message Series - Lines 1 and 2 are Series D.
Line 3 is series C.
- 4. Corners and borders shall be rounded on all base materials for this sign.



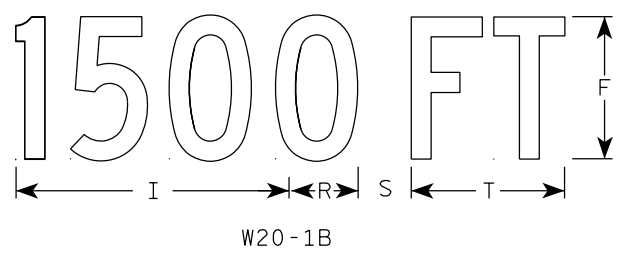
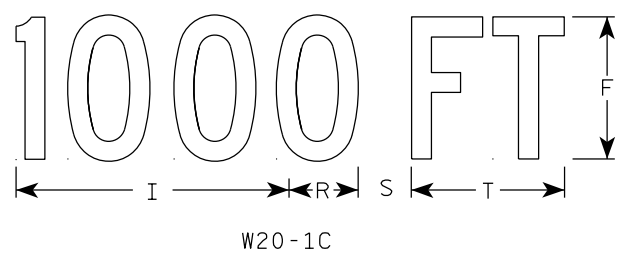
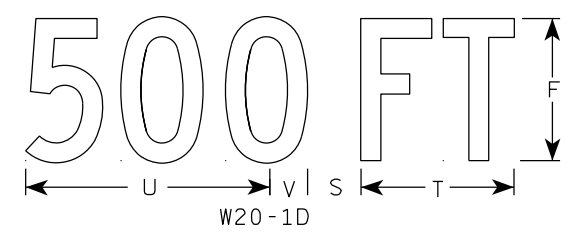
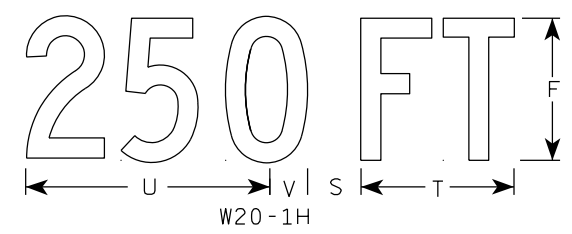
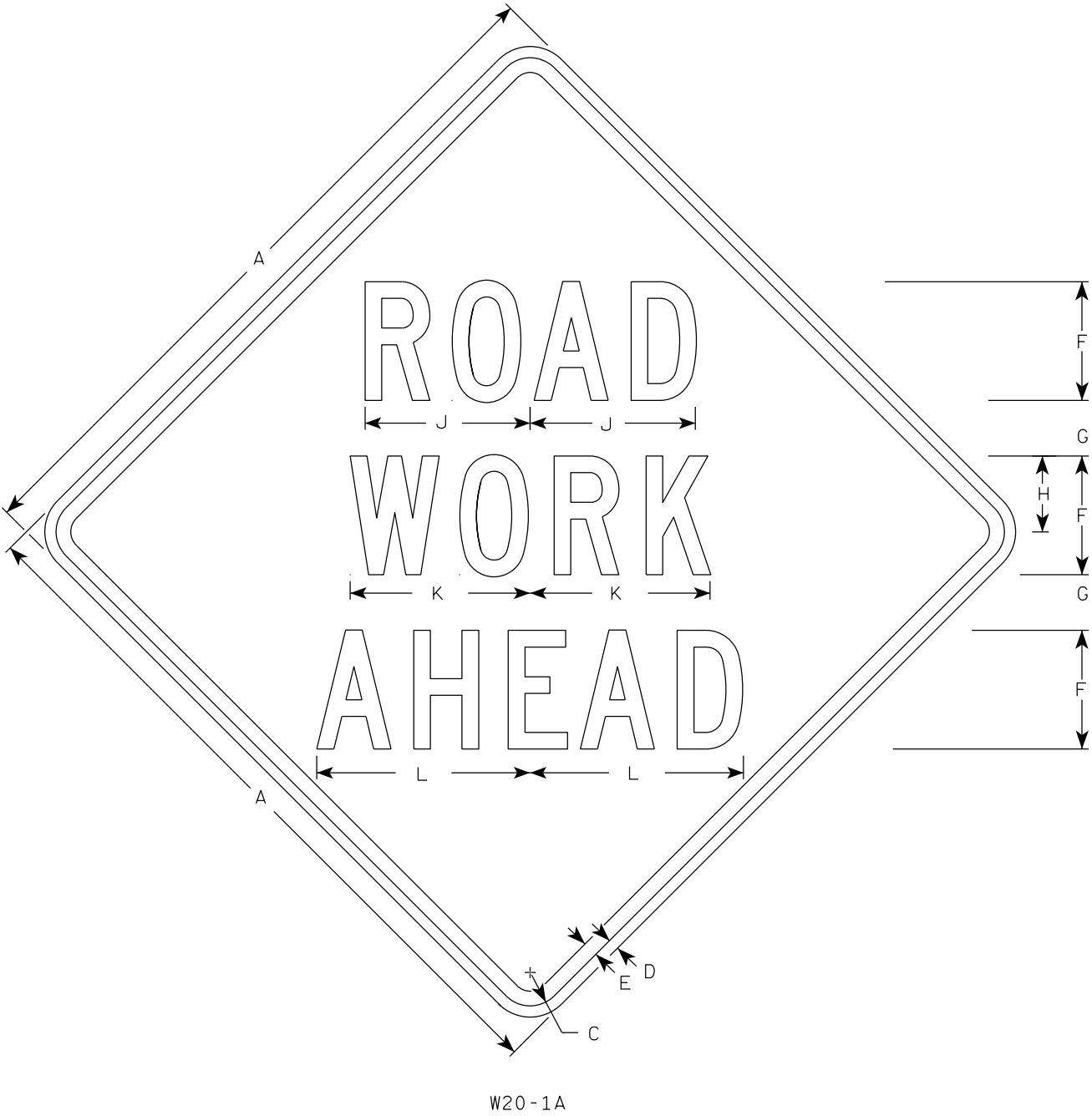
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															5.56
2M																											
3																											
4																											
5																											

STANDARD SIGN
W14-3

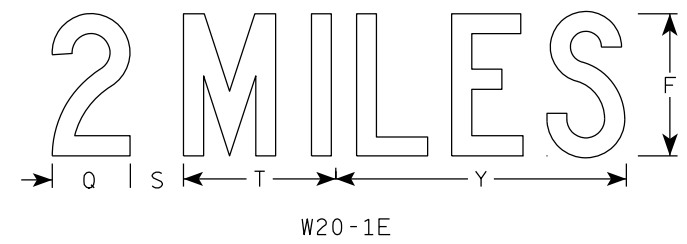
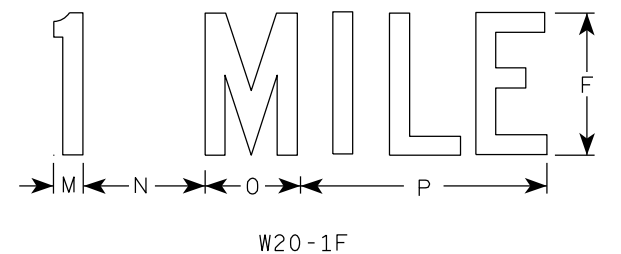
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/21/17 PLATE NO. W14-3.10



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



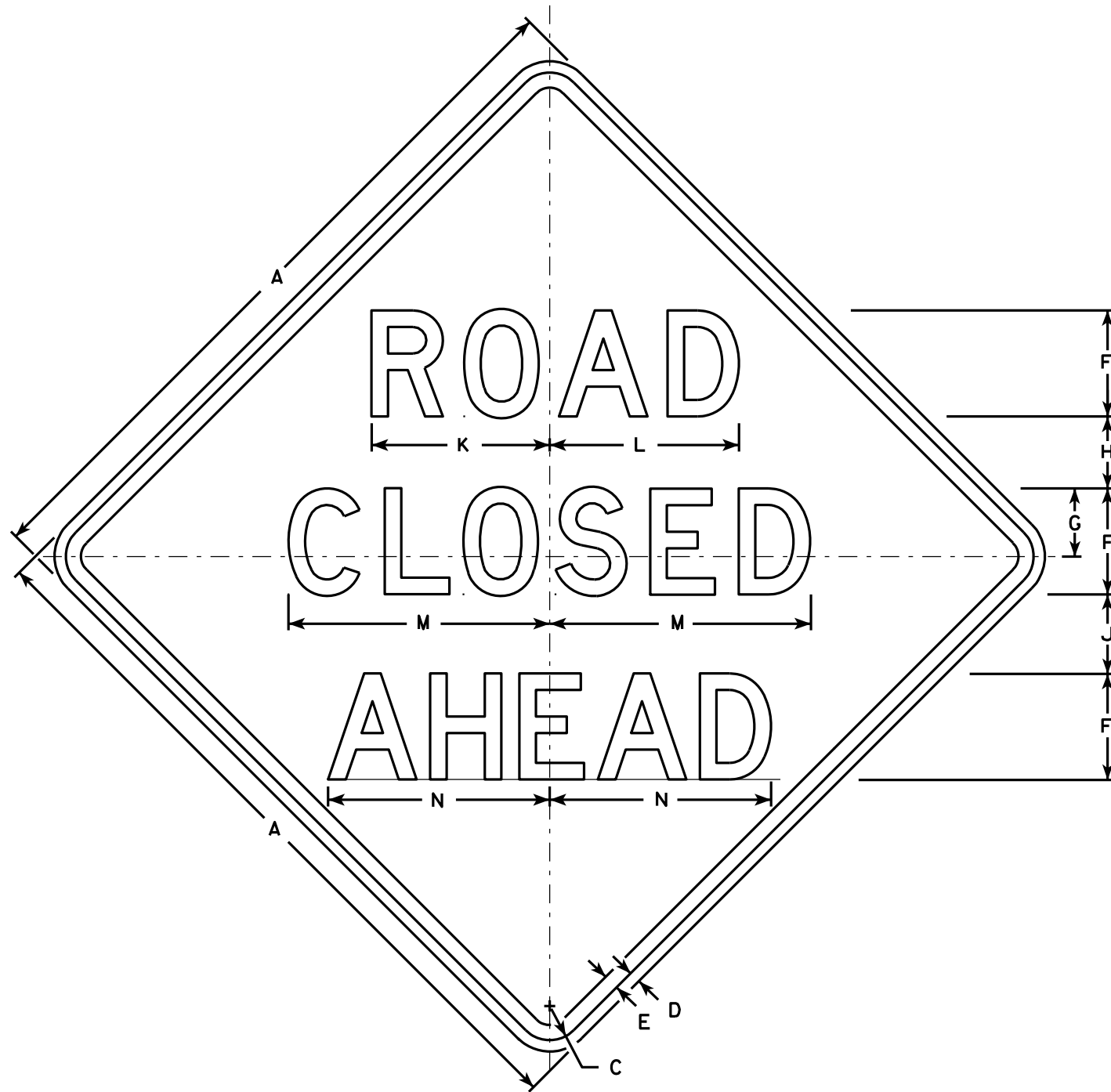
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	v	W	X	Y	Z	Area sq. ft.
1	36		1 3/8	1/2	5/8	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9		2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, F & G

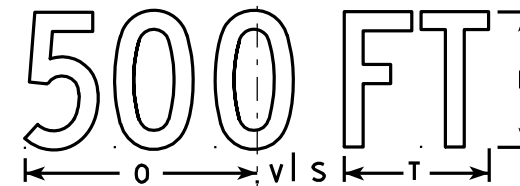
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

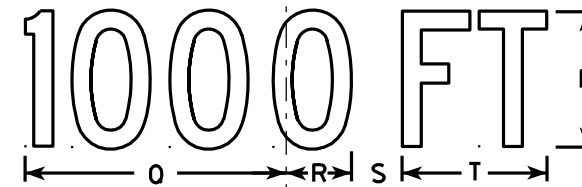
DATE 9/25/19 PLATE NO. W20-1.11



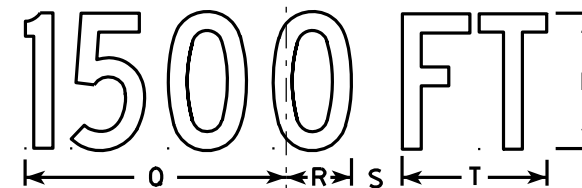
W20-3A



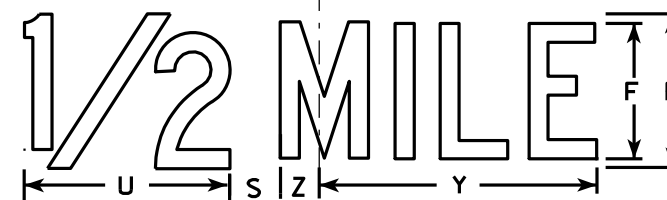
W20-3D



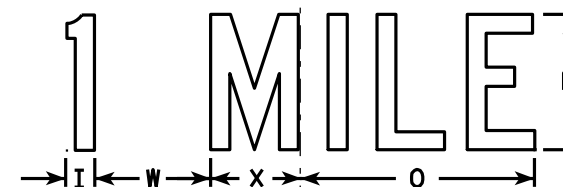
W20-3C



W20-3B



W20-3G



W20-3F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
Line 3 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-3.7

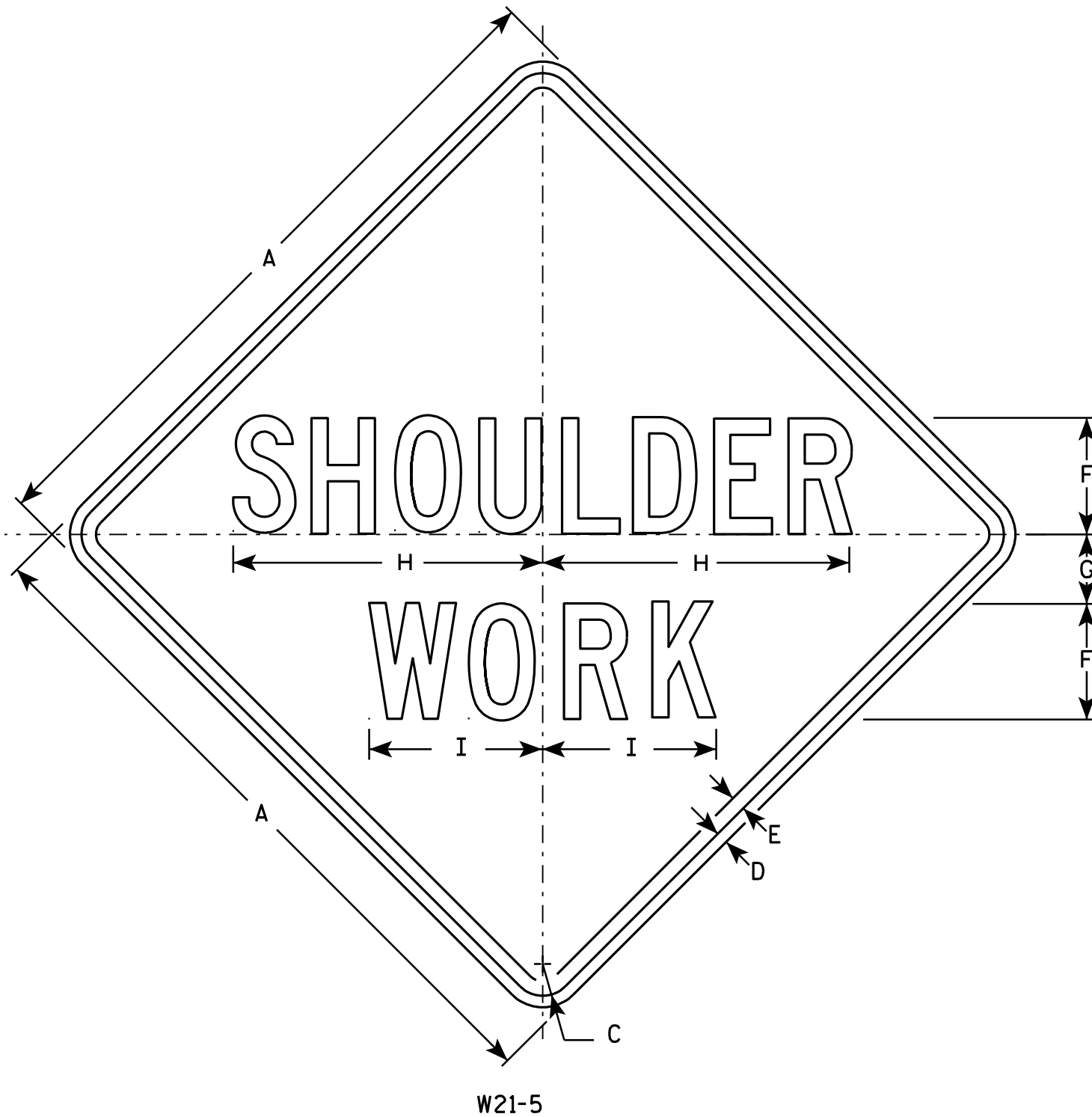
PROJECT NO:

HWY:

COUNTY:

SHEET NO: 156

E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	4	2 1/2	10 3/4	6																		4.0
2S	30		1 3/8	1/2	5/8	5	3	13 3/8	7 1/2																		6.25
2M	30		1 3/8	1/2	5/8	5	3	13 3/8	7 1/2																		6.25
3	36		1 5/8	5/8	3/4	6	3 1/2	16	9																		9.0
4	48		2 1/4	3/4	1	8	5	21 3/8	11 1/4																		16.0
5	48		2 1/4	3/4	1	8	5	21 3/8	11 1/4																		16.0

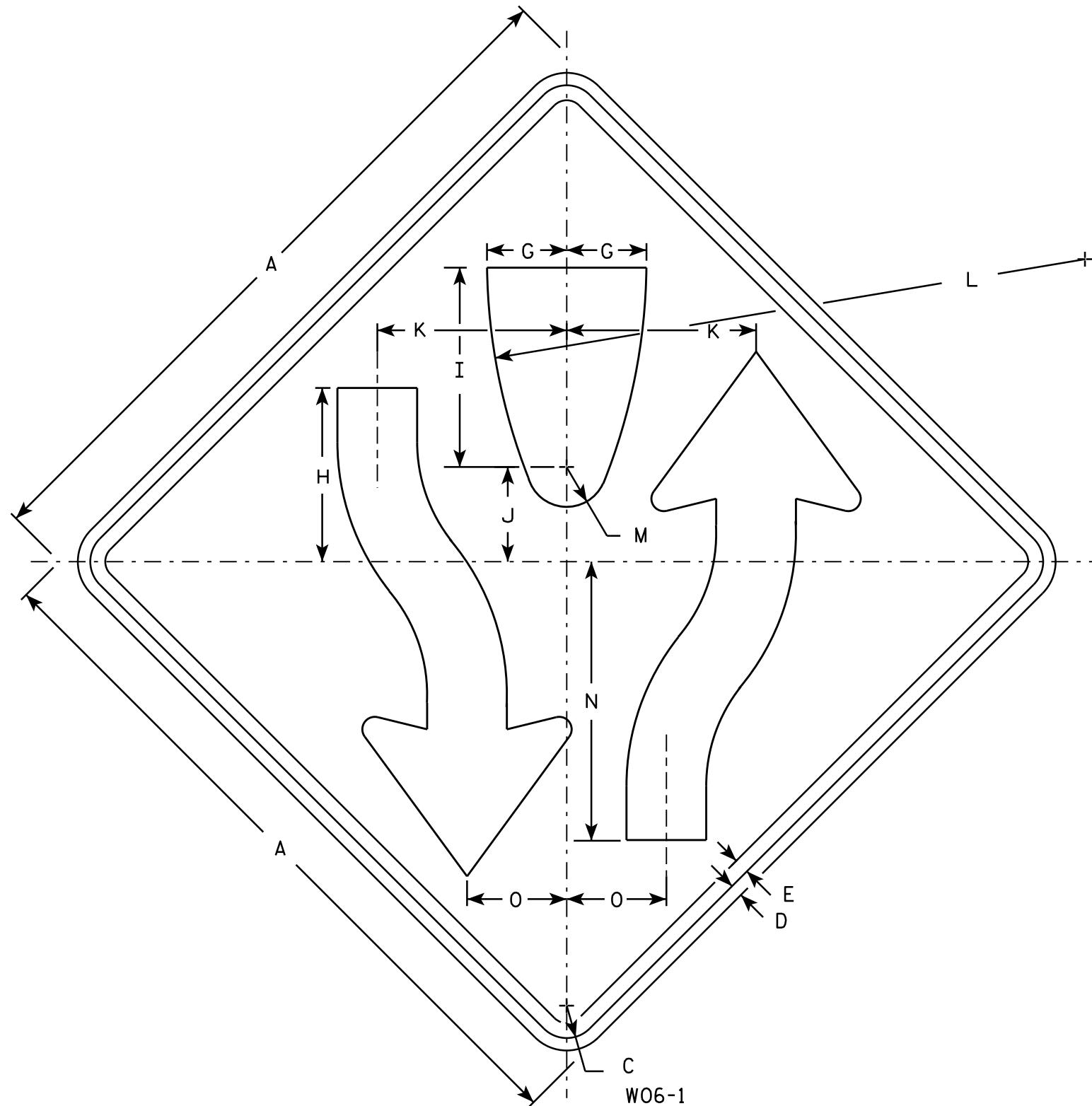
STANDARD SIGN

W21-5

WISCONSIN DEPT OF TRANSPORTATION

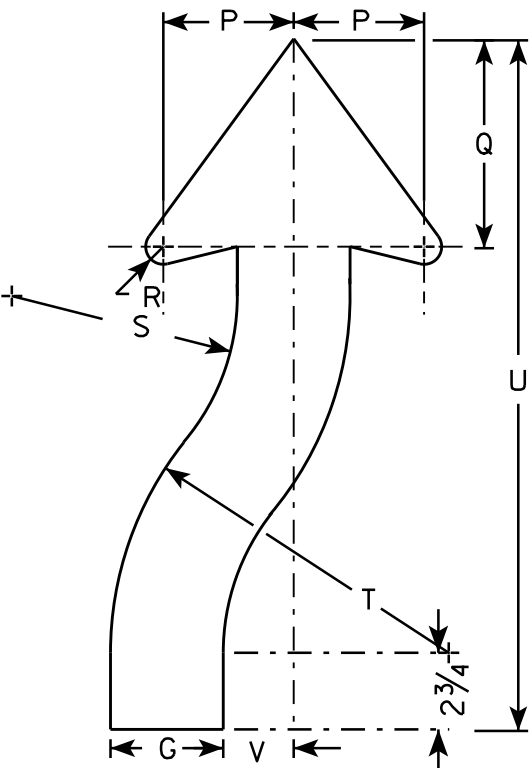
APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 3/21/11 PLATE NO. W21-5.5

PROJECT NO: HWY: COUNTY: SHEET NO: 157 E



NOTES

- 1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Orange
Message - Black
- 3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 4. W06-2 same as W06-1 but is rotated 180° when mounted.



ARROW DETAIL

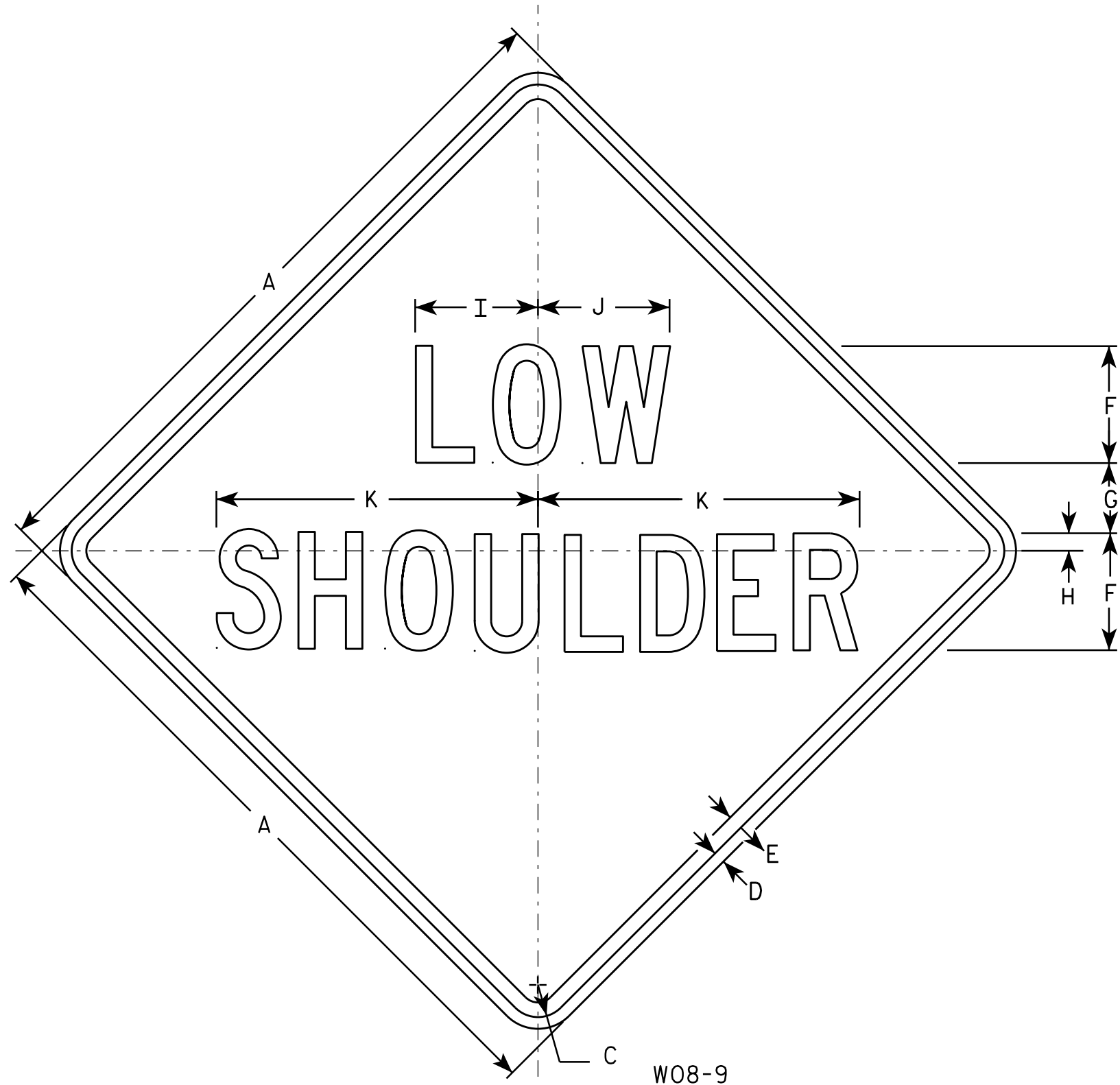
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0
2S	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0
2M	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0
3	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0
4	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0
5	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0

STANDARD SIGN
W06-1 & W06-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE NO. W06-1.1
158



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	3 1/2	1	6 1/4	6 3/4	16 1/2																9.0
2S	48		2 1/4	3/4	1	8	5	1 1/4	8 1/4	9	21 7/8																16.0
2M	48		2 1/4	3/4	1	8	5	1 1/4	8 1/4	9	21 7/8																16.0
3	48		2 1/4	3/4	1	8	5	1 1/4	8 1/4	9	21 7/8																16.0
4	48		2 1/4	3/4	1	8	5	1 1/4	8 1/4	9	21 7/8																16.0
5	48		2 1/4	3/4	1	8	5	1 1/4	8 1/4	9	21 7/8																16.0

STANDARD SIGN W08-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 11/20/13 PLATE W08-9.1
159

PROJECT NO: HWY: COUNTY: SHEET NO: E

		Cut	Fill	Cut	Fill	Cut	Expanded Fill	Mass Ordinate
STATION	Distance			Note 1	Note 3	Note 1	1.25	Note 8
110+12.57	0.00	19.86	5.20	0	0	0	0	0
110+50	37.43	25.86	11.85	32	12	32	15	17
111+00	50.00	25.04	33.91	47	42	79	68	11
111+50	50.00	19.28	68.16	41	95	120	186	-66
112+00	50.00	19.66	124.34	36	178	156	409	-253
112+50	50.00	16.99	68.10	34	178	190	631	-442
113+00	50.00	31.50	32.60	45	93	235	748	-513
113+50	50.00	27.96	24.68	55	53	290	814	-524
113+77.31	27.31	31.04	1.23	30	13	320	831	-511
113+87.35	10.04	31.21	12.85	12	3	331	834	-503
113+95	7.65	32.82	24.30	9	5	340	840	-500
114+00	5.00	37.64	23.84	7	4	347	846	-499
114+01.11	1.11	37.93	21.03	2	1	348	847	-499
114+05	3.89	40.99	20.26	6	3	354	851	-497
114+10	5.00	41.74	20.12	8	4	362	856	-494
114+15	5.00	43.25	19.28	8	4	370	860	-491
114+20	5.00	45.80	16.61	8	3	378	864	-486
114+25	5.00	43.22	19.47	8	3	386	868	-482
114+30	5.00	41.45	18.46	8	4	394	873	-479
114+35	5.00	40.57	11.40	8	3	402	876	-475
114+40	5.00	38.74	0.00	7	1	409	878	-469
114+45	5.00	34.86	0.00	7	0	416	878	-462
114+50	5.00	26.84	0.00	6	0	421	878	-456
114+55	5.00	16.65	0.00	4	0	425	878	-452
114+60	5.00	9.03	0.00	2	0	428	878	-450
114+65	5.00	11.30	0.00	2	0	430	878	-448
114+70	5.00	19.74	0.00	3	0	433	878	-445
114+75	5.00	29.08	0.00	5	0	437	878	-441
114+80	5.00	36.24	0.01	6	0	443	878	-435
114+85	5.00	38.44	1.35	7	0	450	878	-428
114+90	5.00	34.44	5.63	7	1	457	879	-422
114+95	5.00	39.52	4.55	7	1	464	880	-416
115+00	5.00	40.34	9.40	7	1	471	881	-410
115+05	5.00	39.58	16.76	7	2	478	884	-406
115+10	5.00	35.49	22.85	7	4	485	889	-404
115+15	5.00	32.58	22.77	6	4	492	894	-403
115+21.23	6.23	34.58	23.77	8	5	499	901	-402
115+25	3.77	32.95	22.88	5	3	504	905	-401
115+29.15	4.15	32.22	19.85	5	3	509	909	-400
115+35.28	6.12	35.97	17.78	8	4	517	915	-398
115+50	14.72	40.84	10.96	21	8	538	924	-386
116+00	50.00	31.75	5.16	67	15	605	943	-338
116+50	50.00	24.55	3.24	52	8	657	953	-296
117+00	50.00	29.58	24.94	50	26	707	985	-278
117+49.16	49.16	32.81	358.45	57	349	764	1,422	-657
118+00	50.84	74.50	494.58	101	803	865	2,426	-1,560

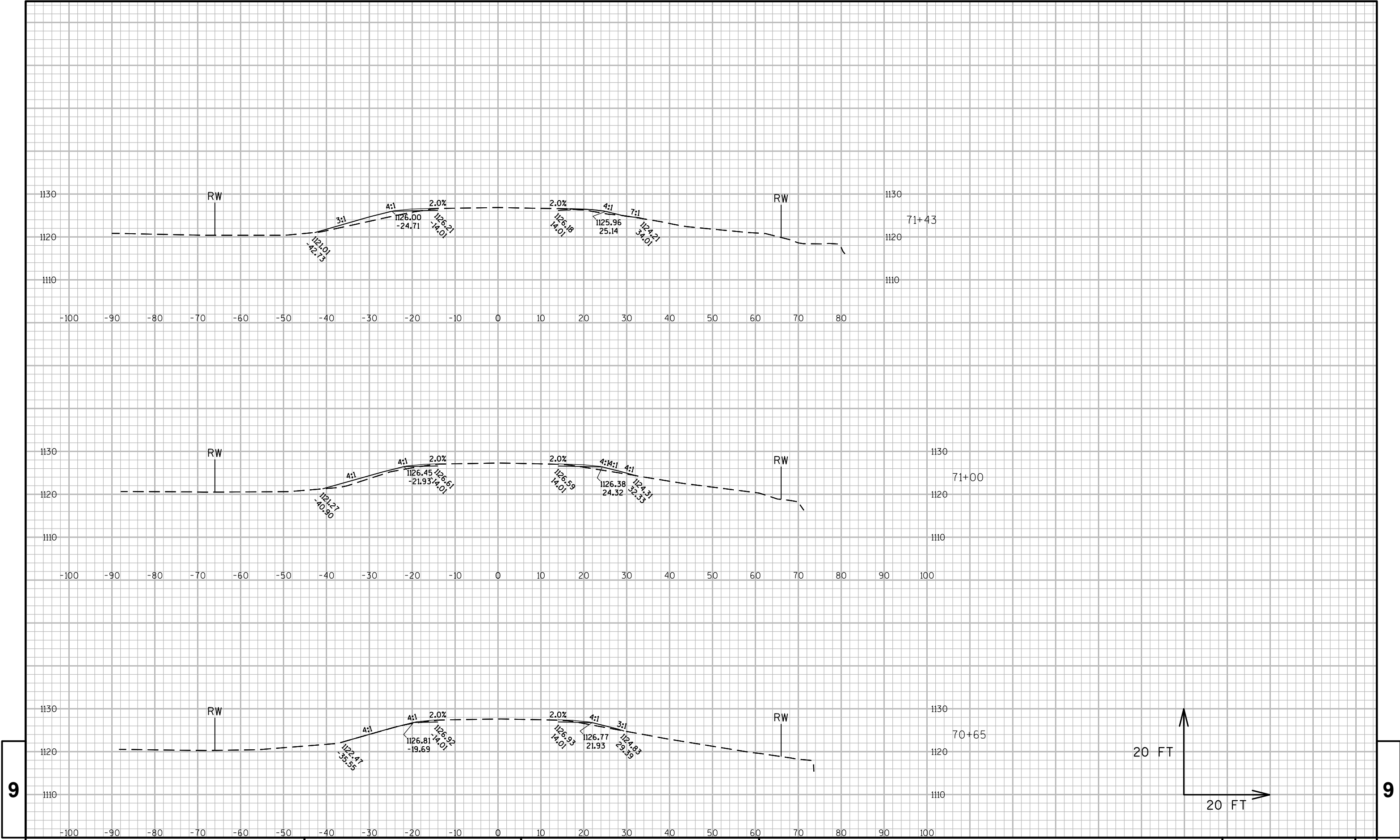
Notes:

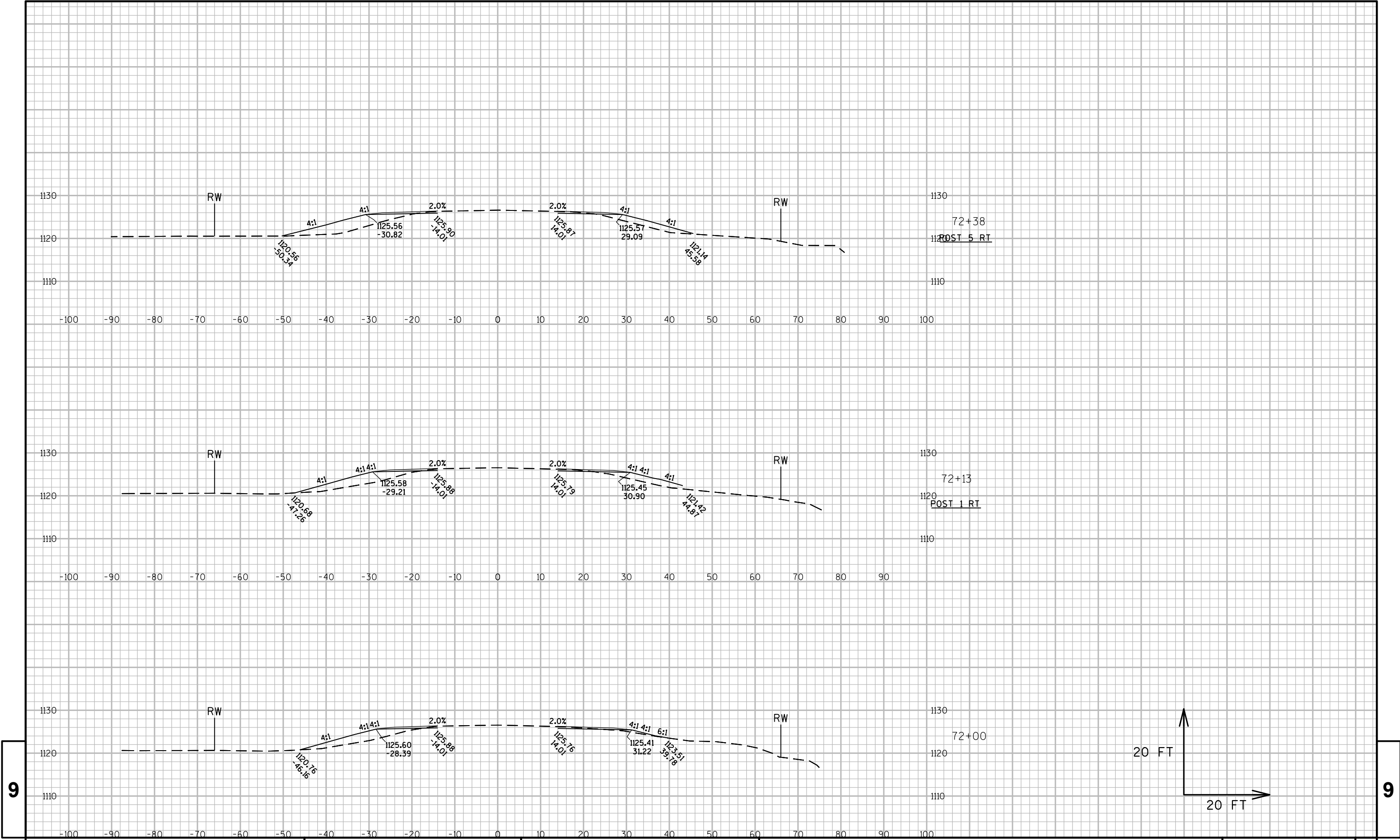
- (1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
- (2) Salvaged/Unsuable Pavement Material is included in Cut.
- (4) Salvaged/Unusable Pavement Material
- 5) Available Material = Cut - Salvaged/Unusuable Pavement Material
- (13) Expanded Fill Factor = 1.25
- (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.

		Cut	Fill	Cut	Fill	Expanded		
STATION	Distance					Cut	Fill	Mass Ordinate
				Note 1	Note 3	1.00	1.00	
						Note 1		Note 8
118+50	50.00	20.46	493.02	88	914	953	3,569	-2,616
119+00	50.00	30.74	283.21	47	719	1,000	4,467	-3,467
119+50	50.00	45.93	87.42	71	343	1,071	4,896	-3,825
120+00	50.00	20.22	121.89	61	194	1,133	5,138	-4,006
120+50	50.00	28.03	192.66	45	291	1,177	5,502	-4,325
121+00	50.00	18.78	11.92	43	189	1,221	5,739	-4,518
121+50	50.00	6.79	5.04	24	16	1,244	5,759	-4,514
122+00	50.00	6.75	3.67	13	8	1,257	5,769	-4,512
122+50	50.00	7.34	2.30	13	6	1,270	5,776	-4,506
123+00	50.00	14.23	0.19	20	2	1,290	5,779	-4,489
123+50	50.00	8.12	49.84	21	46	1,311	5,836	-4,526
124+00	50.00	8.08	203.76	15	235	1,326	6,130	-4,804
124+49.98	49.98	8.08	23.76	15	211	1,341	6,393	-5,053
124+99.98	50.00	8.66	4.56	15	26	1,356	6,426	-5,070
125+50	50.02	17.79	0.00	24	4	1,381	6,431	-5,051
126+00	50.00	7.24	1.91	23	2	1,404	6,433	-5,030
135+74.92	0.00	0.00	0.00	0	0	1,404	6,433	-5,030
136+00	25.08	8.19	2.22	4	1	1,408	6,435	-5,027
136+50	50.00	10.78	2.12	18	4	1,425	6,440	-5,015
137+00	50.00	9.84	101.71	19	96	1,444	6,560	-5,116
137+50	50.00	7.86	334.21	16	404	1,461	7,064	-5,604
138+00	50.00	8.58	243.98	15	535	1,476	7,734	-6,258
138+50	50.00	8.76	129.83	16	346	1,492	8,166	-6,674
139+00	50.00	8.79	32.76	16	151	1,508	8,354	-6,846
139+50	50.00	17.90	0.00	25	30	1,533	8,392	-6,860
140+00	50.00	20.98	0.00	36	0	1,569	8,392	-6,824
140+50	50.00	7.85	0.37	27	0	1,596	8,393	-6,797
141+00	50.00	0.00	0.00	7	0	1,603	8,393	-6,790
141+50	50.00	0.00	0.00	0	0	1,603	8,393	-6,790
142+00	50.00	0.00	0.00	0	0	1,603	8,393	-6,790
172+00	0.00	0.00	0.00	0	0	1,603	8,393	-6,790
172+50	50.00	0.00	0.00	0	0	1,603	8,393	-6,790
173+00	50.00	0.00	0.00	0	0	1,603	8,393	-6,790
173+50	50.00	0.00	0.00	0	0	1,603	8,393	-6,790
174+64.41	114.41	0.00	0.00	0	0	1,603	8,393	-6,790
174+74.83	10.42	7.20	90.61	1	17	1,604	8,415	-6,811
175+00	25.17	8.05	204.52	7	138	1,611	8,587	-6,976
175+50	50.00	8.10	282.95	15	451	1,626	9,151	-7,525
176+00	50.00	8.23	243.31	15	487	1,641	9,760	-8,119
176+50.02	50.02	8.37	46.43	15	268	1,657	10,096	-8,439
177+00	49.98	8.02	45.66	15	85	1,672	10,202	-8,530
177+50	50.00	16.22	87.90	22	124	1,694	10,357	-8,663
178+00	50.00	30.41	3.24	43	84	1,737	10,462	-8,725
178+50	50.00	13.30	225.21	40	212	1,778	10,727	-8,949
179+00	50.00	14.93	292.96	26	480	1,804	11,327	-9,522
179+50	50.00	14.81	9.08	28	280	1,832	11,676	-9,845
255+00	0.00	0.00	0.00	0	0	0	0	0
255+50	50.00	0.00	0.00	0	0	0	0	0
256+00	50.00	6.05	3.46	6	3	6	4	2
256+50	50.00	6.32	1.43	11	5	17	10	7
257+00	50.00	14.23	0.00	19	1	36	11	25
257+50	50.00	5.98	37.61	19	35	55	55	0
258+00	50.00	15.19	279.78	20	294	74	422	-348

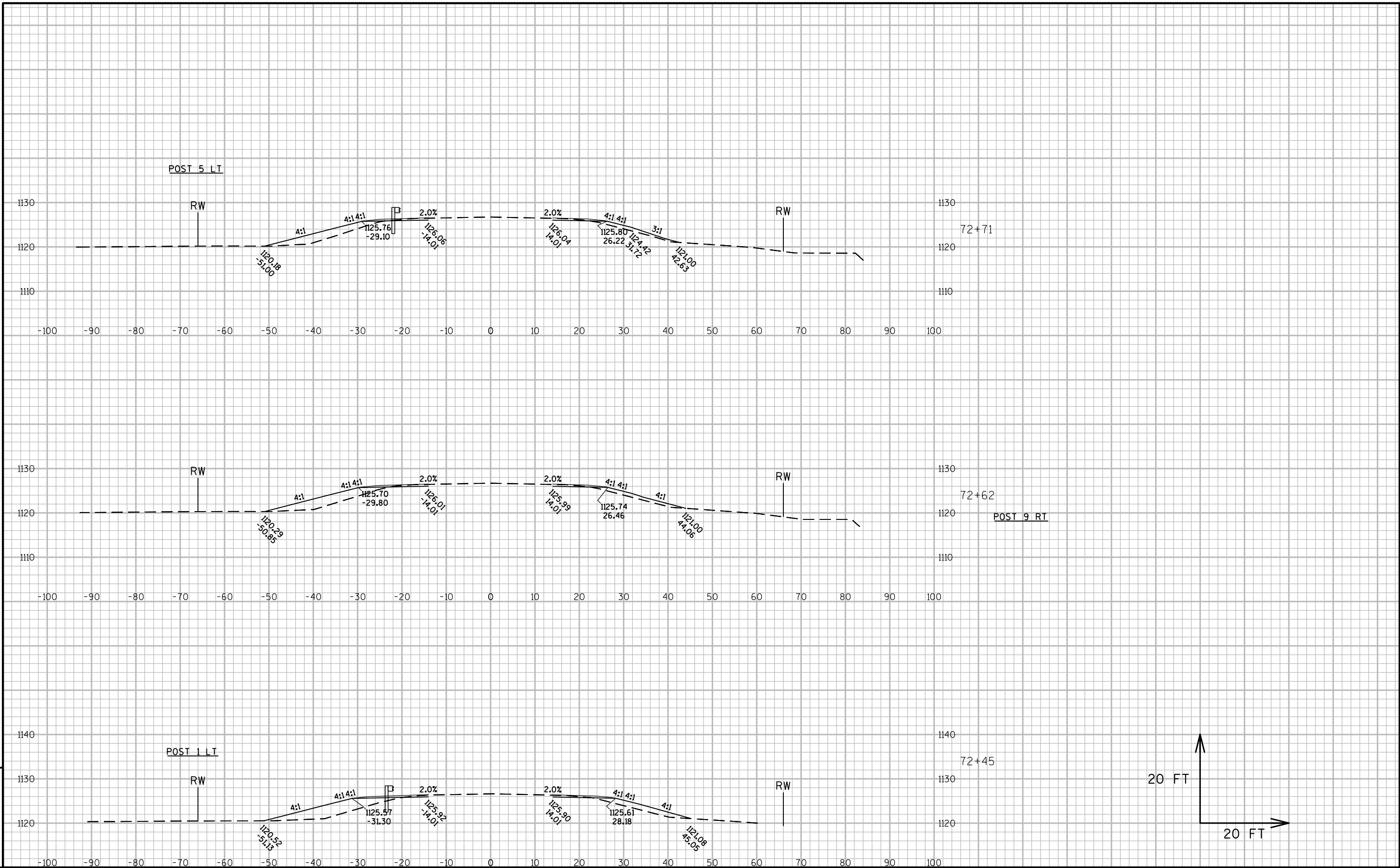
STATION	Distance	Cut	Fill	Cut	Fill	Expanded		Mass Ordinate
						Cut	Fill	
				Note 1	Note 3	1.00 Note 1	1.00 Note 8	
258+50	50.00	15.20	571.48	28	788	103	1,407	-1,305
258+59.58	9.58	8.82	107.62	4	120	107	1,558	-1,451
258+66.02	6.44	6.39	513.17	2	74	109	1,651	-1,542
259+00	33.98	14.87	551.77	13	670	122	2,488	-2,366
259+50	50.00	14.45	394.07	27	876	149	3,583	-3,434
260+00	50.00	15.07	144.38	27	499	176	4,206	-4,030
260+50	50.00	19.02	83.98	32	211	208	4,470	-4,262
261+00	50.00	20.33	3.27	36	81	244	4,571	-4,327
261+50	50.00	15.05	6.27	33	9	277	4,582	-4,305
262+00	50.00	7.56	35.71	21	39	298	4,631	-4,333
262+50	50.00	7.22	34.51	14	65	312	4,712	-4,400
263+00	50.00	6.93	41.82	13	71	325	4,801	-4,476
263+50	50.00	6.67	41.91	13	78	338	4,898	-4,560
264+00	50.00	6.86	63.08	13	97	350	5,019	-4,669
264+50	50.00	7.08	52.73	13	107	363	5,153	-4,790
264+99.88	49.88	6.80	3.71	13	52	376	5,218	-4,842
272+00	0.00	8.19	1.33	0	0	376	5,218	-4,842
272+50	50.00	8.65	9.26	16	10	391	5,231	-4,839
273+00	50.00	6.75	151.91	14	149	406	5,417	-5,011
273+50	50.00	6.22	321.86	12	439	418	5,965	-5,548
274+00	50.00	5.85	682.81	11	930	429	7,128	-6,699
274+25	25.00	5.98	762.61	5	669	434	7,965	-7,530
274+50	25.00	6.06	688.05	6	672	440	8,804	-8,364
275+00	50.00	6.64	108.42	12	737	452	9,726	-9,274
275+50	50.00	8.75	4.49	14	105	466	9,857	-9,391
276+00	50.00	6.01	3.38	14	7	480	9,866	-9,386
276+50	50.00	5.74	5.65	11	8	490	9,876	-9,386
276+99.01	49.01	6.38	1.64	11	7	501	9,885	-9,383
278+00	100.99	7.82	0.90	27	5	528	9,891	-9,362
278+50	50.00	9.02	6.10	16	6	544	9,899	-9,355
279+00	50.00	7.39	318.78	15	301	559	10,275	-9,716
279+32.59	32.59	8.27	521.90	9	507	568	10,909	-10,341
279+44.65	12.06	8.00	563.23	4	242	572	11,212	-10,640
279+50	5.35	7.87	583.09	2	114	573	11,354	-10,780
280+00	50.00	7.83	41.66	15	578	588	12,077	-11,489
280+50	50.00	15.25	0.00	21	39	609	12,125	-11,516
281+00	50.00	14.59	0.00	28	0	637	12,125	-11,488
281+50	50.00	9.73	0.00	23	0	660	12,125	-11,466
282+00	50.00	7.95	0.00	16	0	676	12,125	-11,449
282+50	50.00	7.68	0.00	14	0	690	12,125	-11,435
283+00	50.00	7.59	0.36	14	0	704	12,125	-11,421
283+50	50.00	7.43	2.39	14	3	718	12,129	-11,410
284+00	50.00	16.22	17.33	22	18	740	12,151	-11,411
284+50	50.00	18.22	147.56	32	153	772	12,342	-11,570
285+00	50.00	14.97	412.55	31	519	803	12,991	-12,188
285+30.49	30.49	14.50	451.96	17	488	820	13,601	-12,781
285+50	19.51	14.57	451.77	11	327	830	14,009	-13,179
286+58.75	108.75	15.40	286.43	60	1,487	890	15,867	-14,977
287+00	41.25	15.91	299.24	24	447	914	16,426	-15,512
287+50	50.00	14.91	192.49	29	455	943	16,996	-16,053
288+00	50.00	15.35	13.15	28	190	971	17,234	-16,263
288+50	50.00	8.68	5.56	22	17	993	17,255	-16,262
289+00	50.00	6.17	6.96	14	12	1,007	17,270	-16,263
289+50	50.00	5.79	5.48	11	12	1,018	17,284	-16,266
290+00	50.00	5.66	3.74	11	9	1,029	17,295	-16,266
290+50	50.00	6.24	4.00	11	7	1,040	17,304	-16,264
290+75	25.00	6.27	2.95	6	3	1,045	17,308	-16,262
				2,877	23,187			

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		
		Cut	Fill	Cut	Fill	Cut	Expanded Fill	Mass Ordinate
				Note 1	Note 3	Note 1		Note 8
05+00.31	0.00	41.94	0.27	0	0	0	0	0
05+45	44.69	36.37	2.07	65	2	65	2	62
05+50	5.00	34.11	2.33	7	0	71	3	68
05+65	15.00	30.29	2.64	18	1	89	5	85
05+99.24	34.24	24.84	2.59	35	3	124	9	115
06+04.2	4.96	28.13	10.18	5	1	129	10	119
06+05	0.80	29.20	10.76	1	0	130	11	119
06+11.93	6.93	37.58	7.08	9	2	138	13	125
06+15	3.07	43.86	6.81	5	1	143	14	129
06+20	5.00	49.80	6.86	9	1	152	16	136
06+25	5.00	54.43	6.59	10	1	161	18	144
06+30	5.00	60.89	2.23	11	1	172	19	153
06+35	5.00	65.10	1.63	12	0	184	19	165
06+40	5.00	57.40	2.05	11	0	195	20	176
06+45	5.00	58.03	0.73	11	0	206	20	186
06+50	5.00	40.55	0.00	9	0	215	20	195
06+55	5.00	34.58	0.00	7	0	222	20	202
06+60	5.00	18.22	0.00	5	0	227	20	207
06+65	5.00	8.51	0.00	2	0	229	20	209
06+65.05	0.05	8.42	0.00	0	0	229	20	209
06+95	29.95	6.21	0.00	8	0	237	20	217
07+00	5.00	16.19	0.00	2	0	239	20	220
07+05	5.00	26.96	0.00	4	0	243	20	224
07+10	5.00	35.93	0.00	6	0	249	20	229
07+15	5.00	41.05	0.25	7	0	256	20	236
07+20	5.00	45.04	13.98	8	1	264	22	243
07+25	5.00	48.10	17.36	9	3	273	25	248
07+30	5.00	50.10	15.46	9	3	282	29	253
07+35	5.00	46.25	20.55	9	3	291	33	258
07+40	5.00	42.93	20.99	8	4	299	38	261
07+45	5.00	40.14	20.55	8	4	307	43	264
07+50.23	5.23	25.29	19.32	6	4	313	48	266
07+55	4.77	22.66	6.62	4	2	318	50	267
07+60.95	5.95	28.05	3.19	6	1	323	52	271
08+00	39.05	31.11	3.85	43	5	366	58	308
08+50	50.00	41.97	2.11	68	6	434	65	368
09+00	50.00	44.40	0.00	80	2	514	68	446
				514	54			

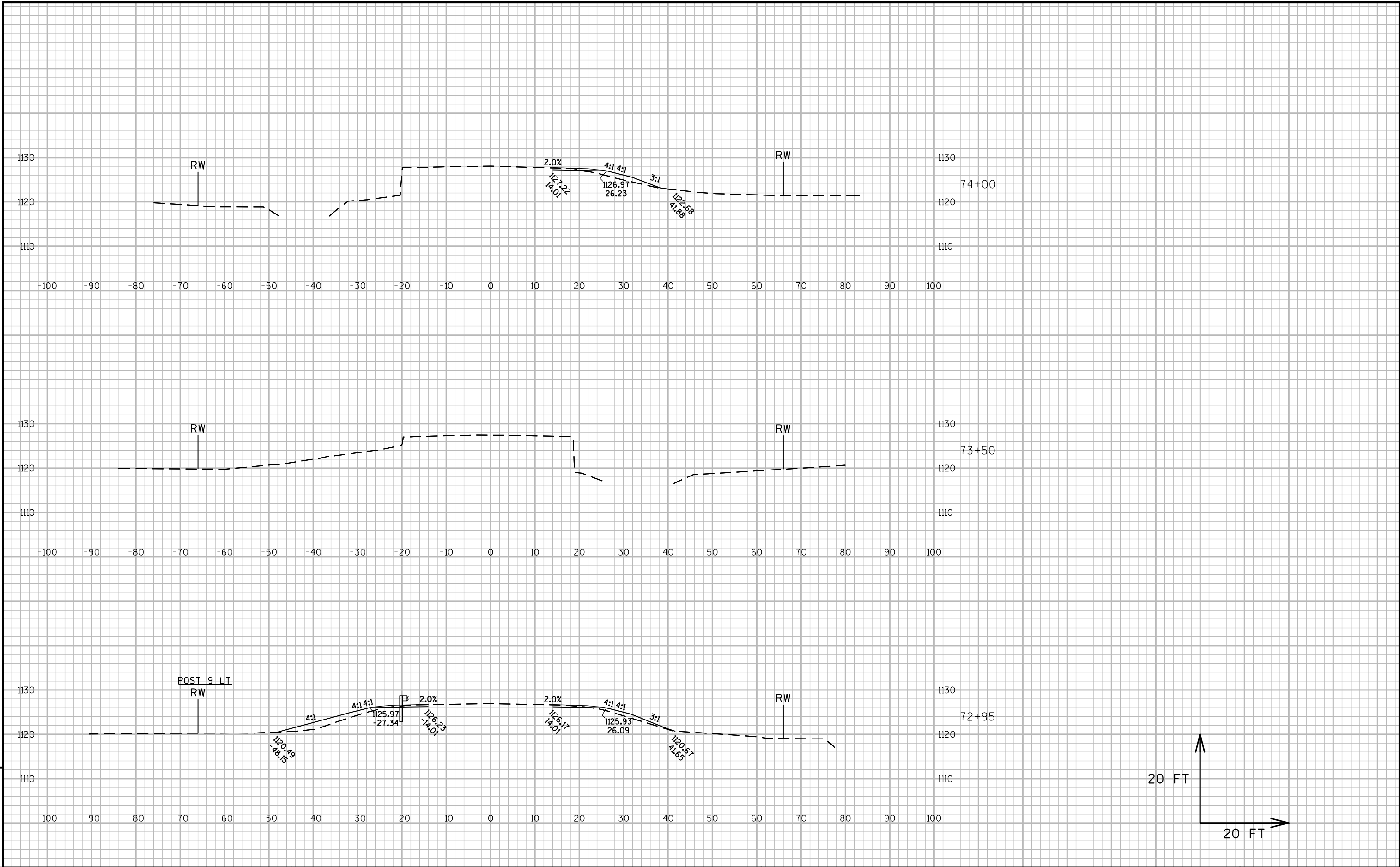


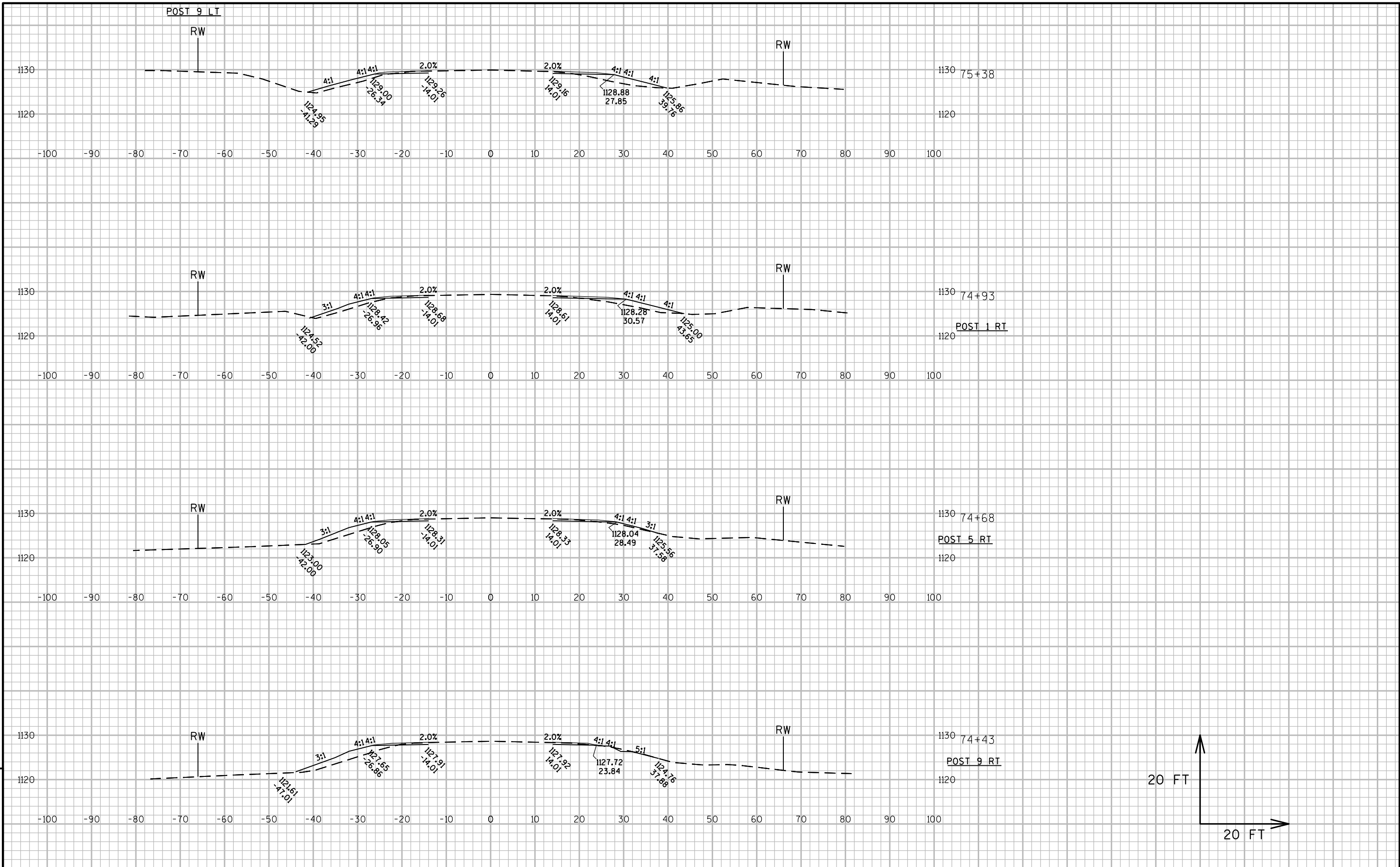


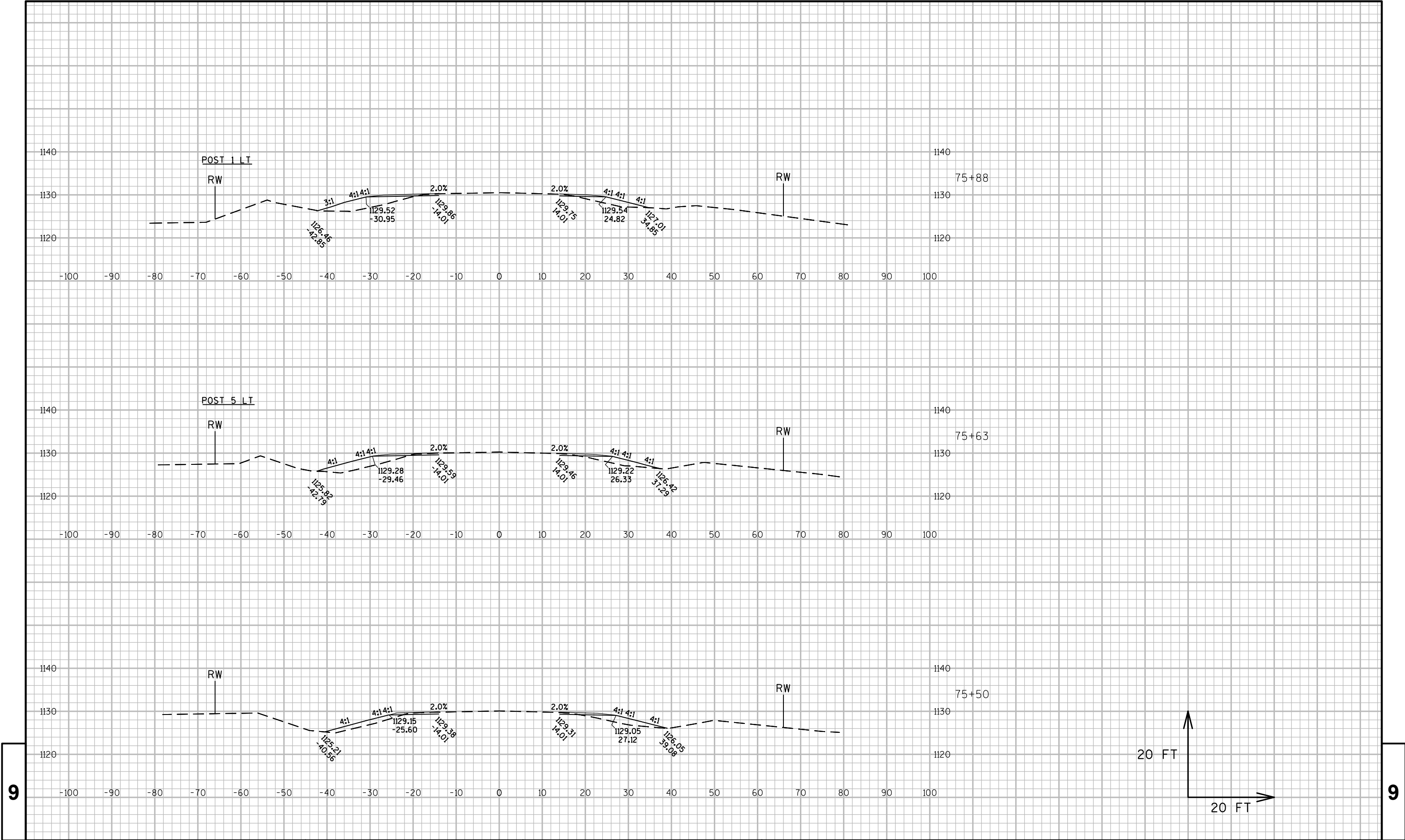
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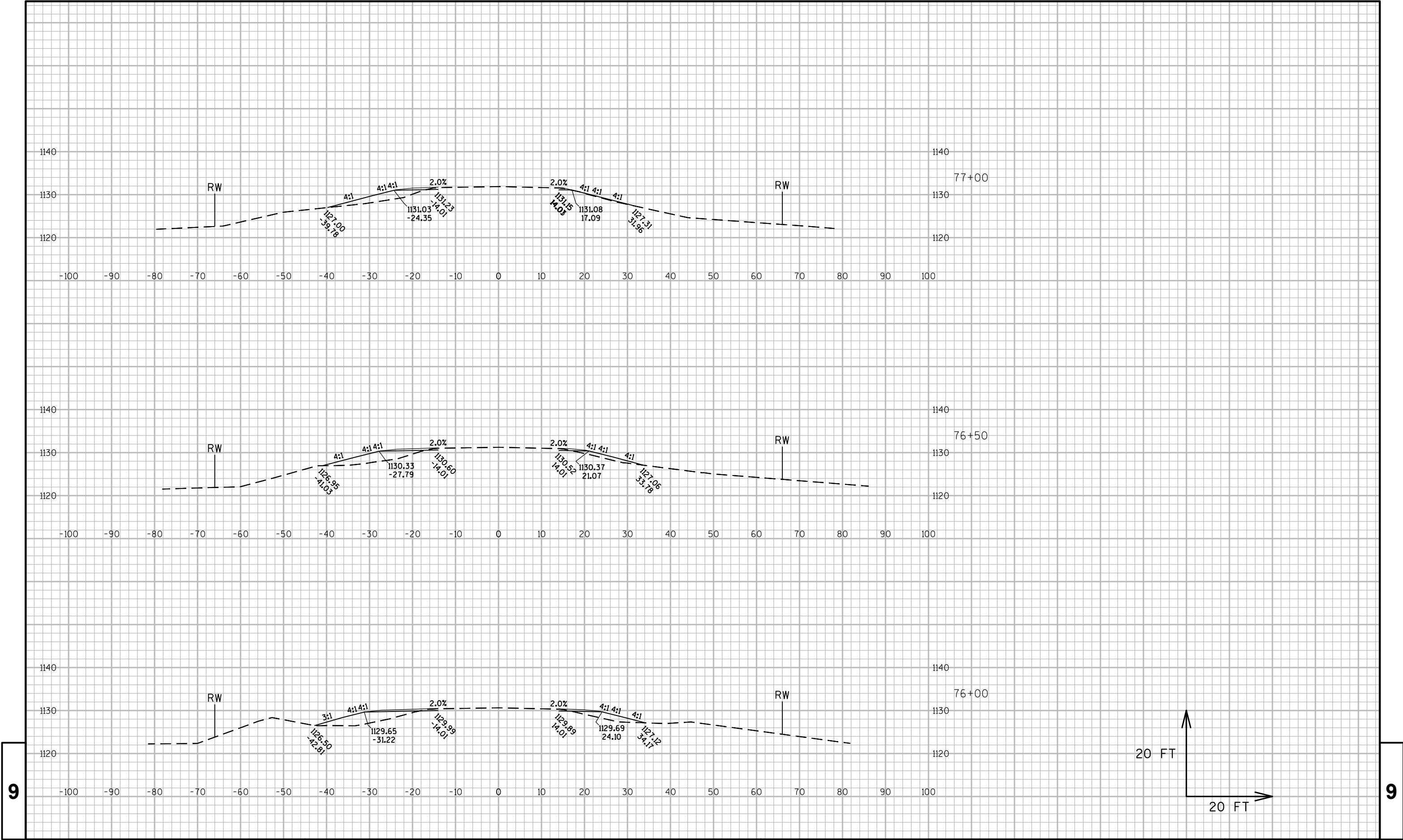


9









PROJECT NO: 9140-13-71

HWY: STH 64

COUNTY: OCONTO

CROSS SECTIONS: STH 64

SHEET

170

E

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LAYOUT NAME - GROUP 1 - (5)

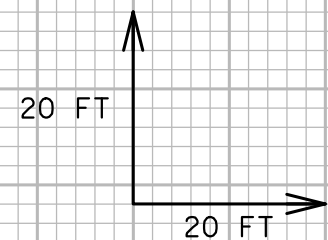
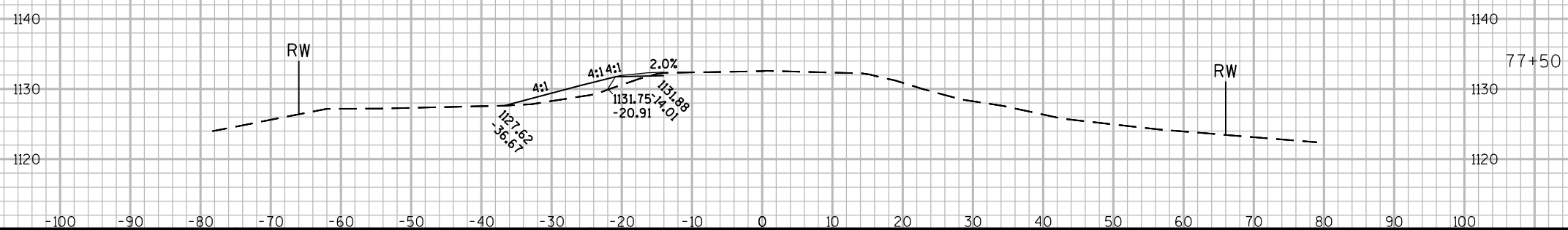
PLOT DATE : 4/30/2019 3:26 PM

PLOT BY : CREAPAU, QUINTON

PLOT NAME :

PLOT SCALE : 1 IN:20 FT

WISDOT/CADDs SHEET 49



PROJECT NO: 9140-13-71

HWY: STH 64

COUNTY: OCONTO

CROSS SECTIONS: STH 64

SHEET 171

E

FILE NAME : N:\PDS\C3D\91401300\SHEETSP\STH 64_CROSS SECTIONS.DWG
LAYOUT NAME - GROUP 1 - (6)

PLOT DATE : 4/30/2019 3:26 PM

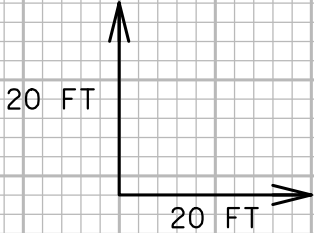
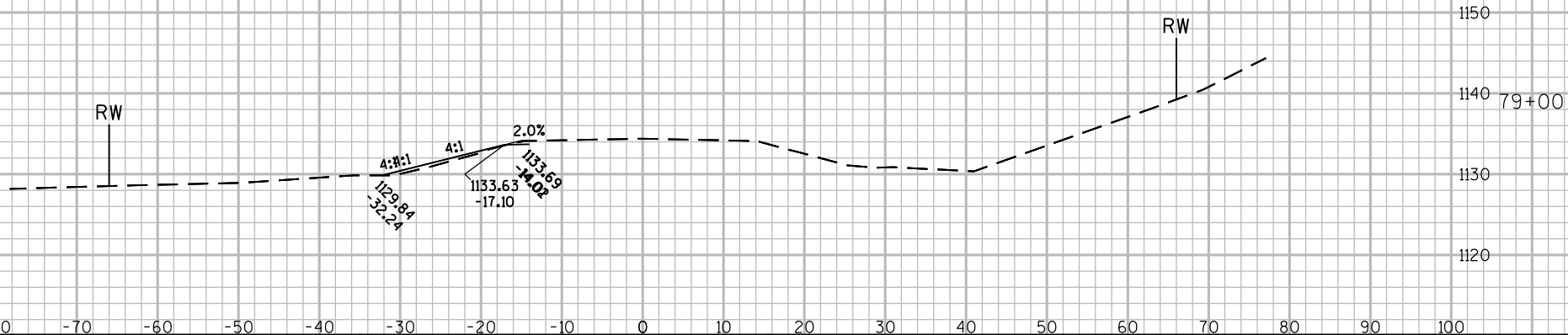
PLOT BY : CREAPEAU, QUINTON

PLOT NAME :

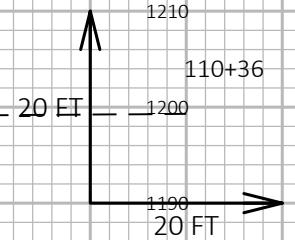
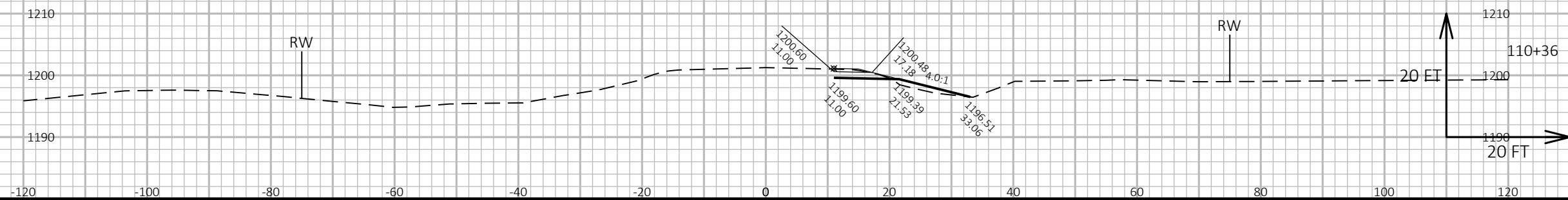
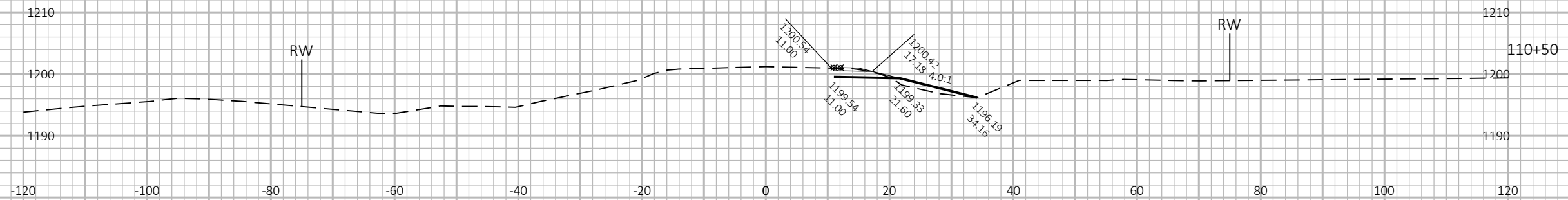
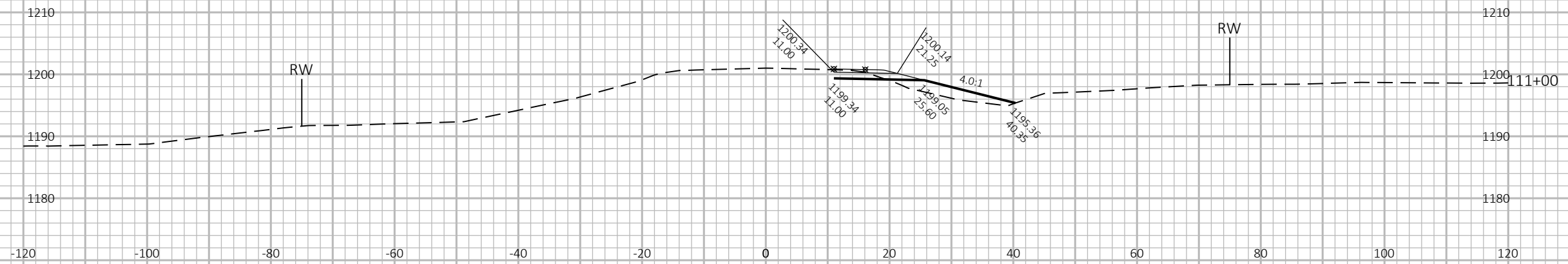
PLOT SCALE : 1 IN:20 FT

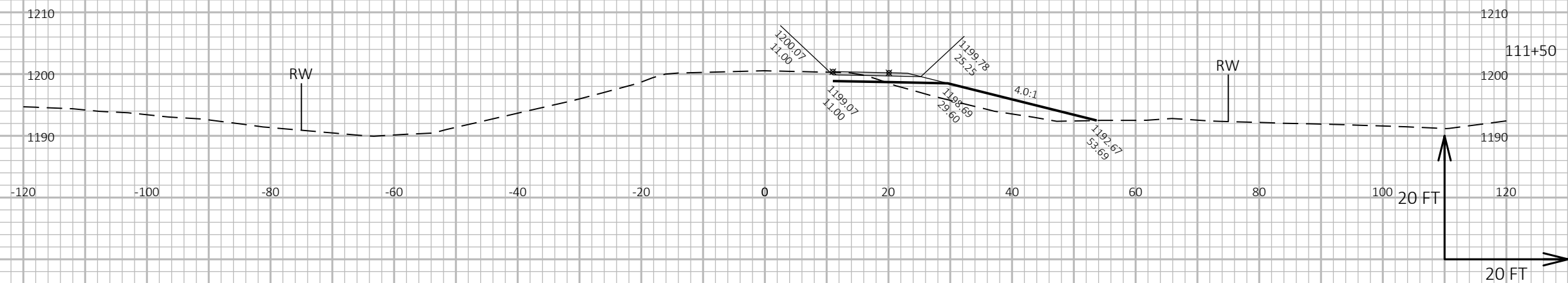
WISDOT/CADDs SHEET 49

9



9





PROJECT NO: 9140-13-71

HWY: STH 64

COUNTY: OCONTO

CROSS SECTIONS: STH 64

SHEET 174

E

FILE NAME : N:\PDS\C3D\91401300\SHEETSPLAN\090202-XS(INTERSECTION).DWG
LAYOUT NAME - 090202-xs

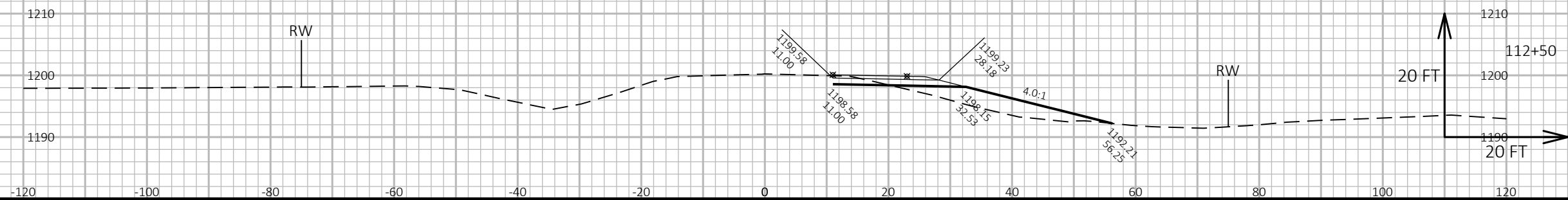
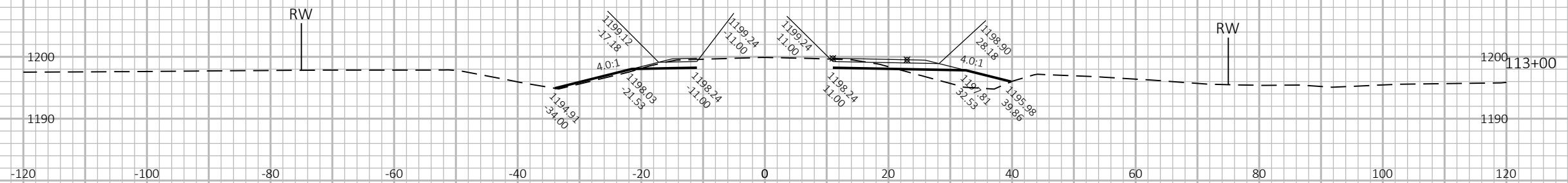
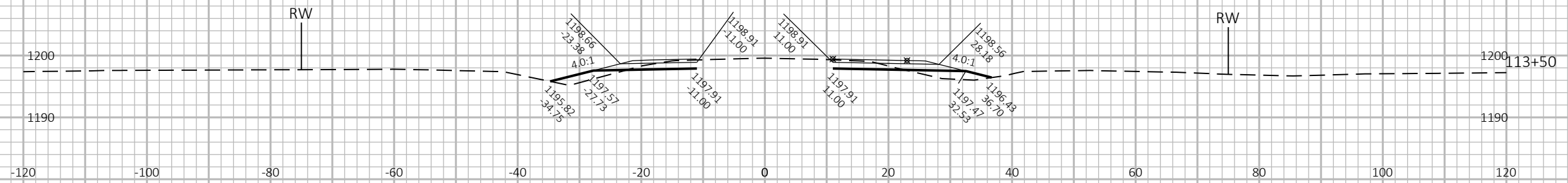
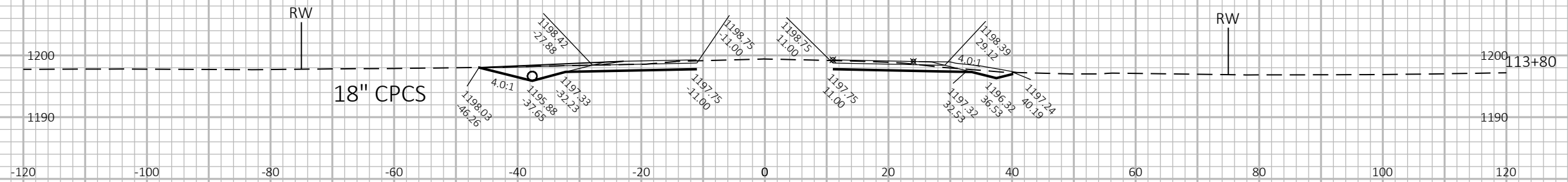
PLOT DATE : 8/5/2019 9:47 AM

PLOT BY : BRADLEY, KIMBERLY L

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDs SHEET 49



PROJECT NO:	9140-13-71
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HWY: STH 64

COUNTY: OCONTO

CROSS SECTIONS: STH 64

SHEET
175

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FILE NAME : N:\PDS\C3D\91401300\SHEETSPLAN\090202-XS(INTERSECTION).DWG
LAYOUT NAME - 090203-xs

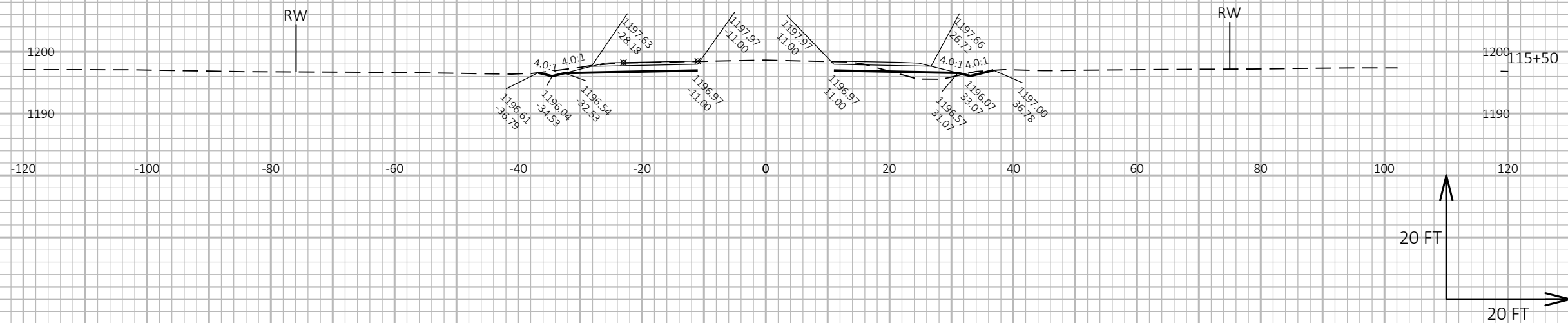
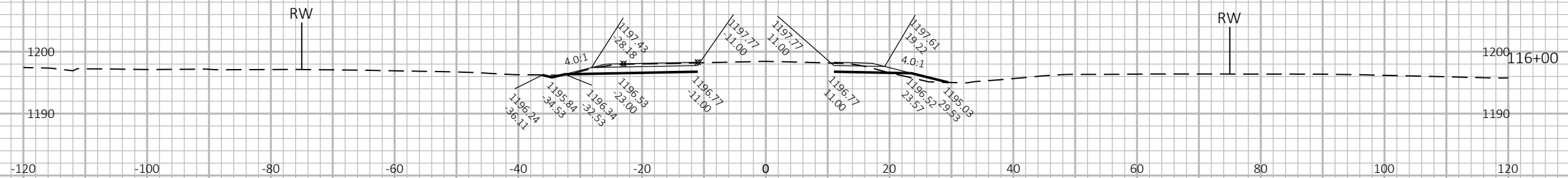
PLOT DATE : 8/5/2019 9:47 AM

PLOT BY : BRADLEY, KIMBERLY L

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 9140-13-71

HWY: STH 64

COUNTY: OCONTO

CROSS SECTIONS: STH 64

SHEET 176

E

FILE NAME : N:\PDS\C3D\91401300\SHEETSPLAN\090202-XS(INTERSECTION).DWG
LAYOUT NAME - 090204-xs

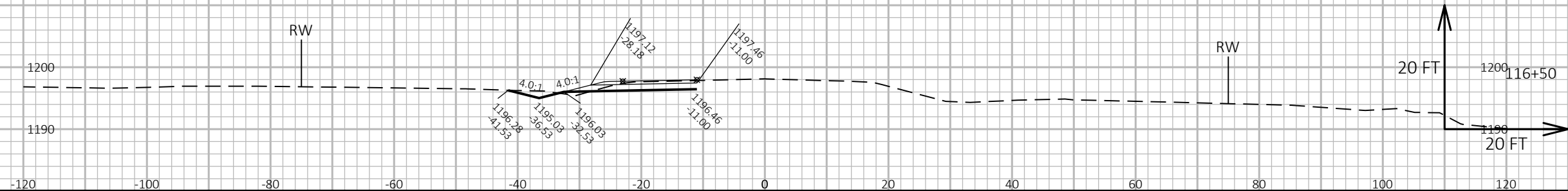
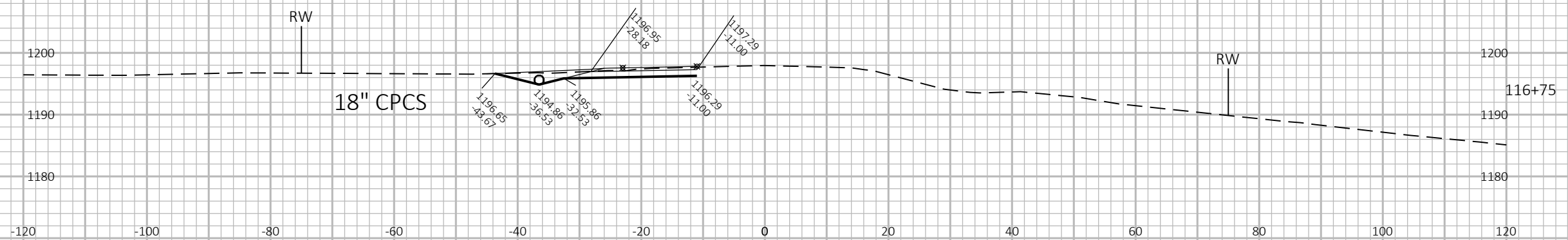
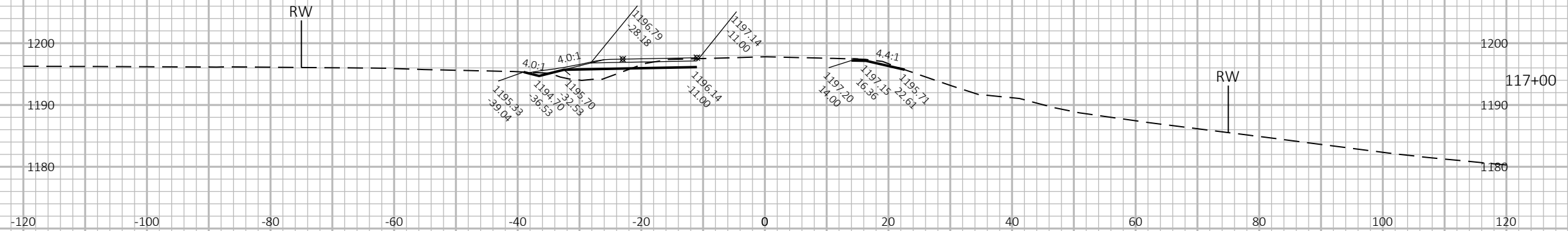
PLOT DATE : 8/5/2019 9:47 AM

PLOT BY : BRADLEY, KIMBERLY L

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDs SHEET 49



PROJECT NO: 9140-13-71

HWY: STH 64

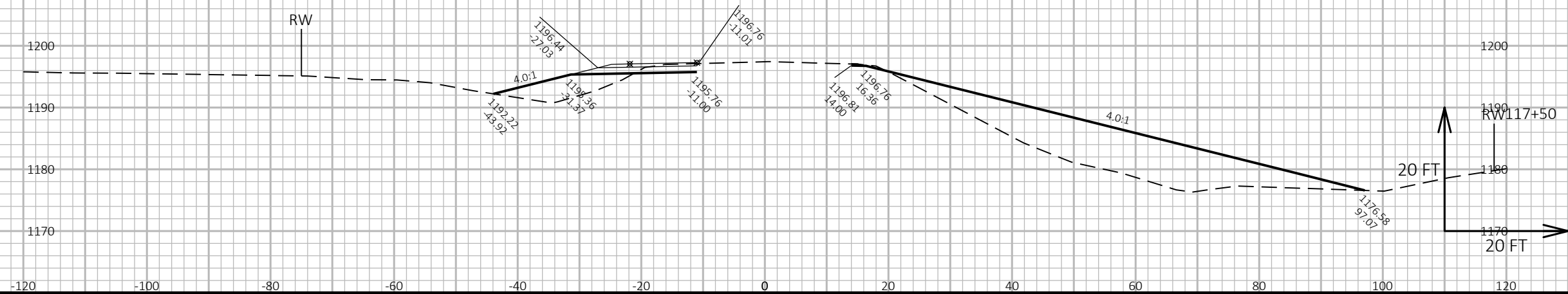
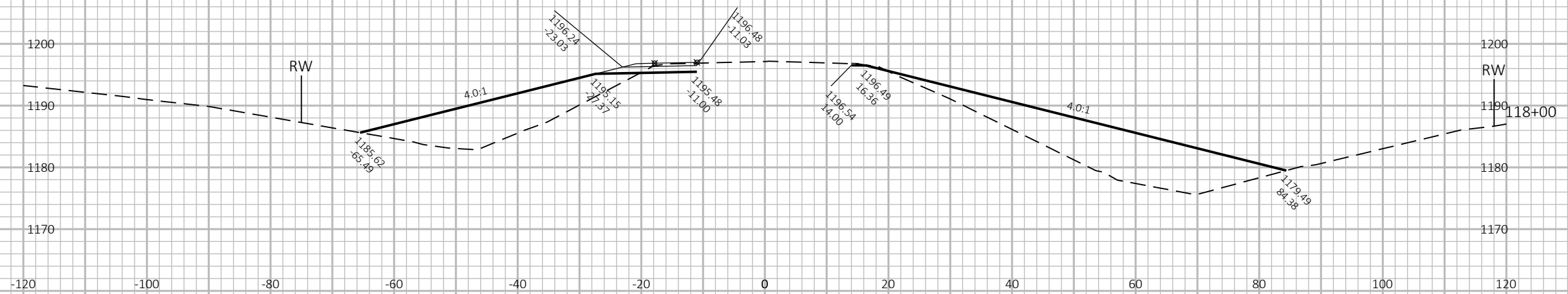
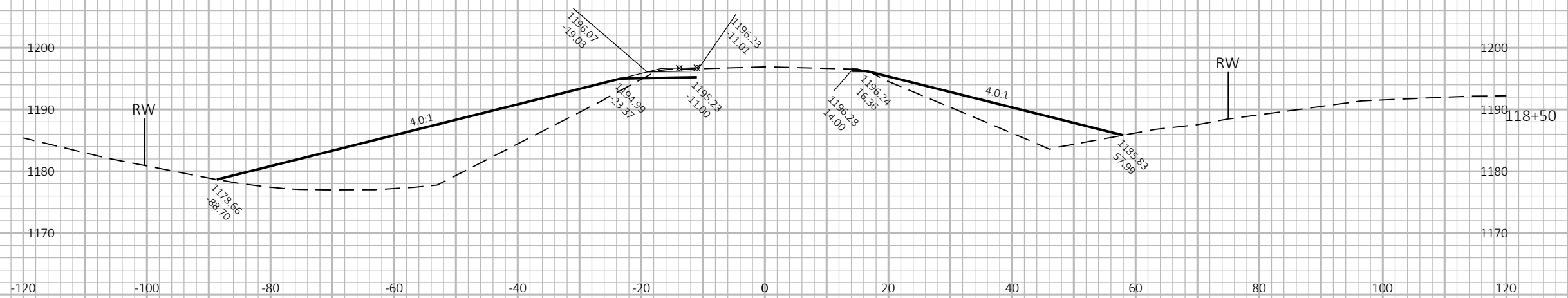
COUNTY: OCONTO

CROSS SECTIONS: STH 64

SHEET

177

E



PROJECT NO:	9140-13-71
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HWY: STH 64

COUNTY: OCONTO

CROSS SECTIONS: STH 64

SHEET 178

FILE NAME : N:\PDS\C3D\91401300\SHEETSPLAN\090202-XS(INTERSECTION).DWG
LAYOUT NAME - 090206-xs

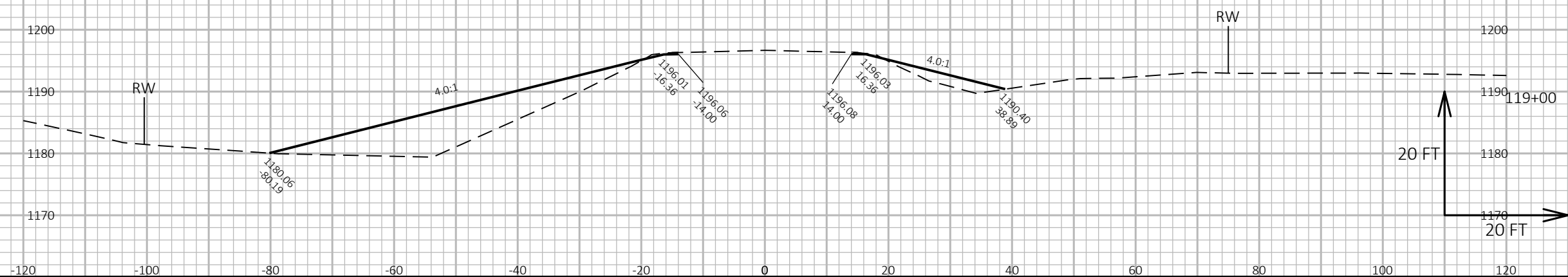
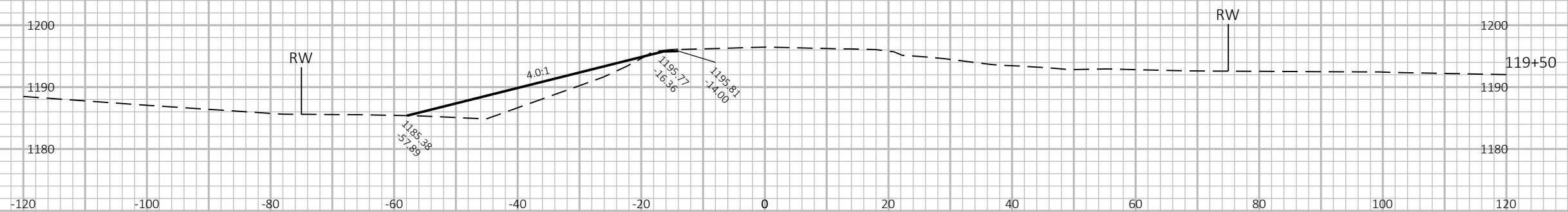
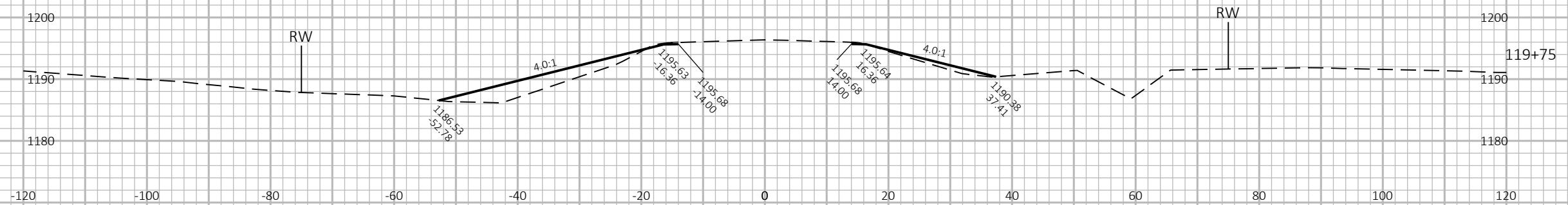
PLOT DATE : 8/5/2019 9:47 AM

PLOT BY : BRADLEY, KIMBERLY L

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO:	9140-13-71
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HWY: STH 64

COUNTY: OCONTO

CROSS SECTIONS: STH 64

SHEET 179

FILE NAME : N:\PDS\C3D\91401300\SHEETSPLAN\090202-XS(INTERSECTION).DWG
LAYOUT NAME - 090207-xs

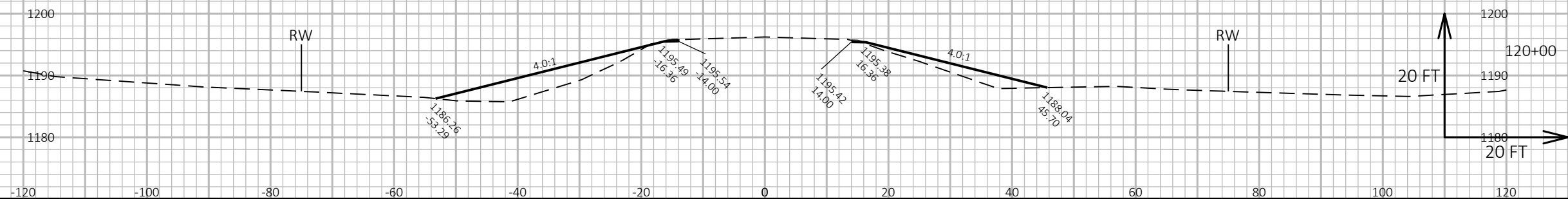
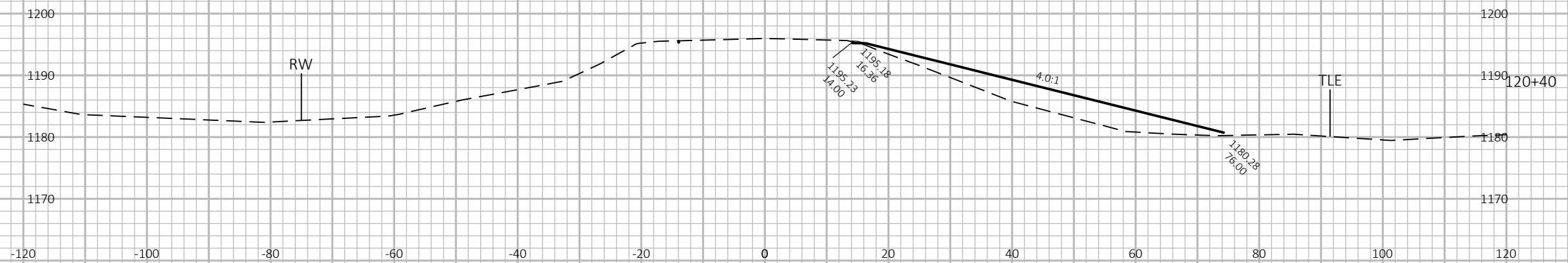
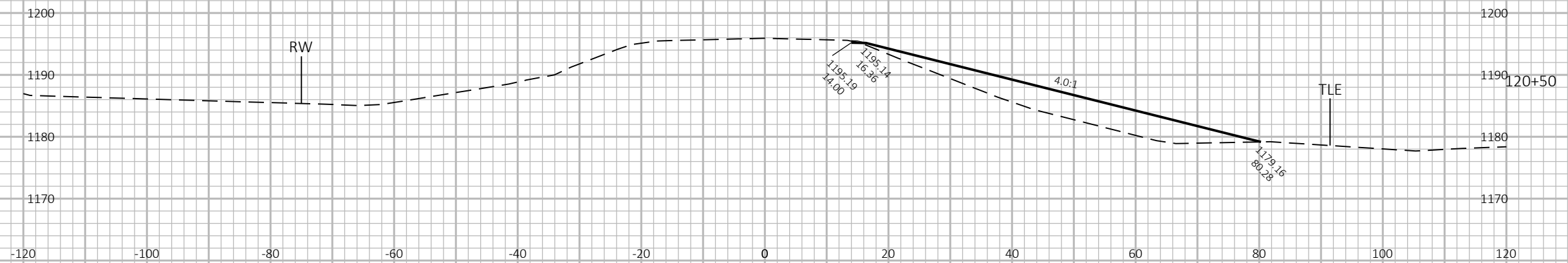
PLOT DATE : 8/5/2019 9:48 AM

PLOT BY : BRADLEY, KIMBERLY L

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO:	9140-13-71
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HWY: STH 64

COUNTY: OCONTO

CROSS SECTIONS: STH 64

SHEET	180
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FILE NAME : N:\PDS\C3D\91401300\SHEETSP\090202-XS(INTERSECTION).DWG
LAYOUT NAME - 090208-xs

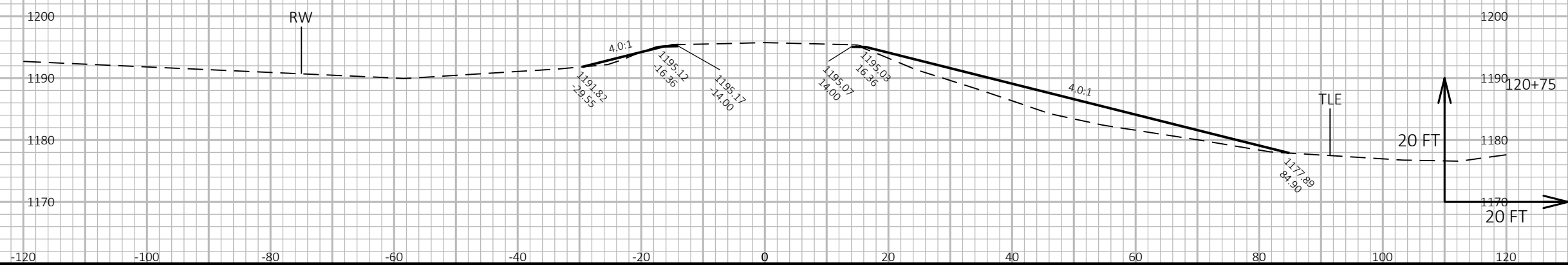
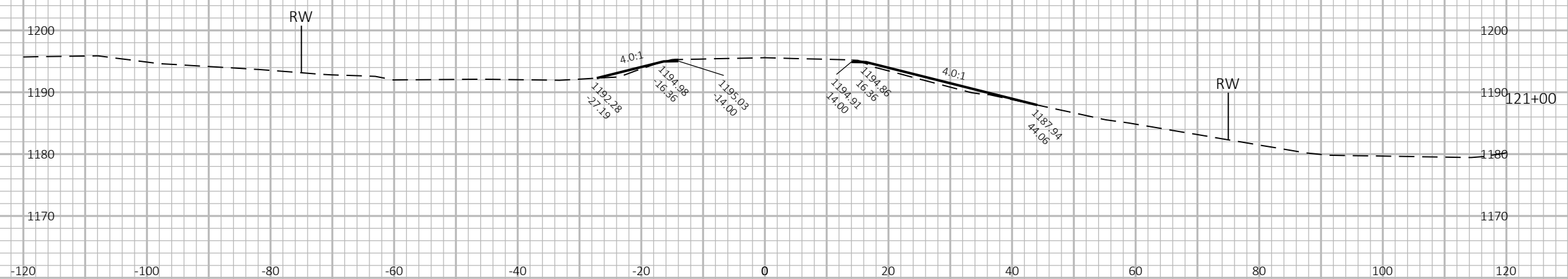
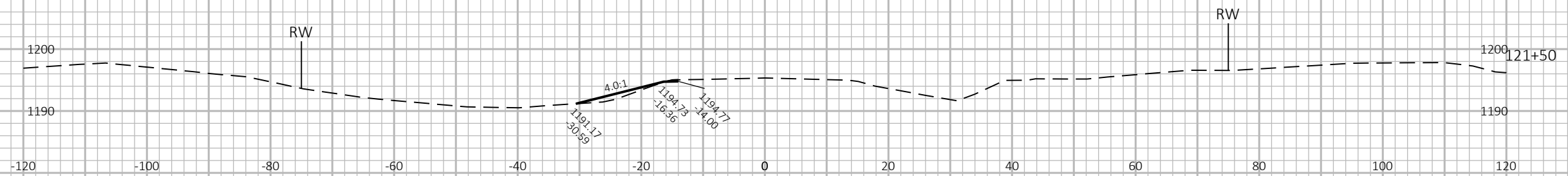
PLOT DATE : 8/5/2019 9:48 AM

PLOT BY : BRADLEY, KIMBERLY L

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO:	9140-13-71
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HWY: STH 64

COUNTY: OCONTO

CROSS SECTIONS: STH 64

SHEET
181

FILE NAME : N:\PDS\C3D\91401300\SHEETSPLAN\090202-XS(INTERSECTION).DWG
LAYOUT NAME - 090209-xs

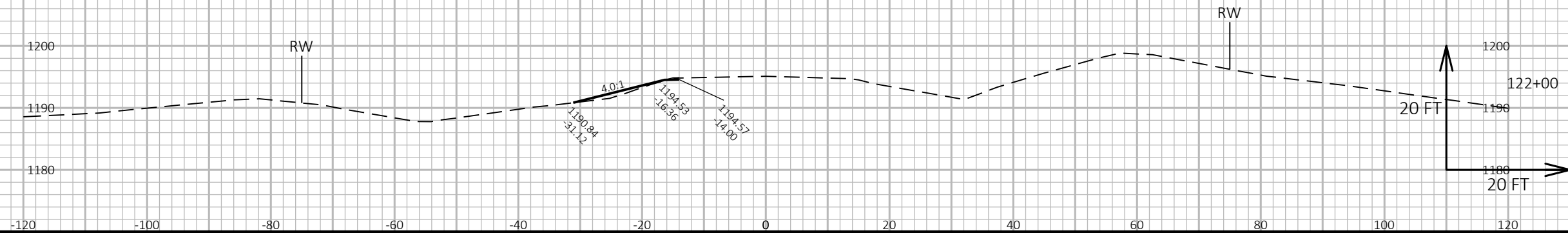
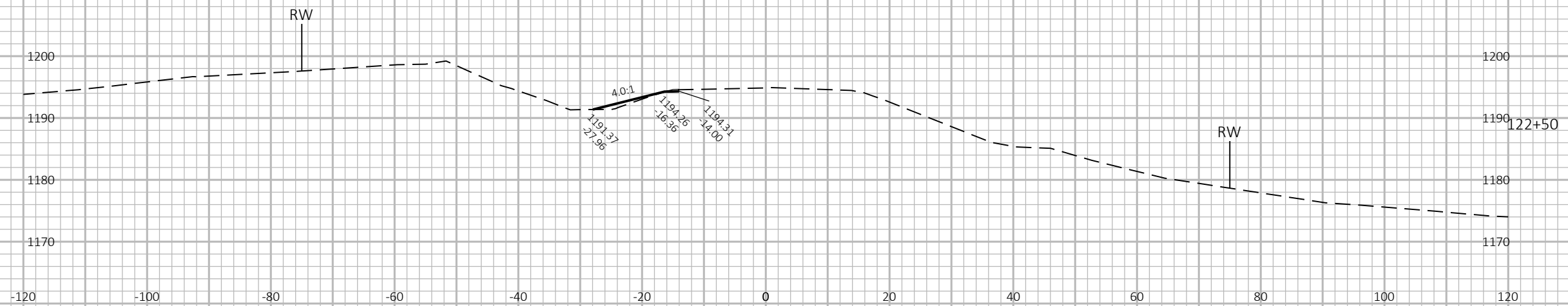
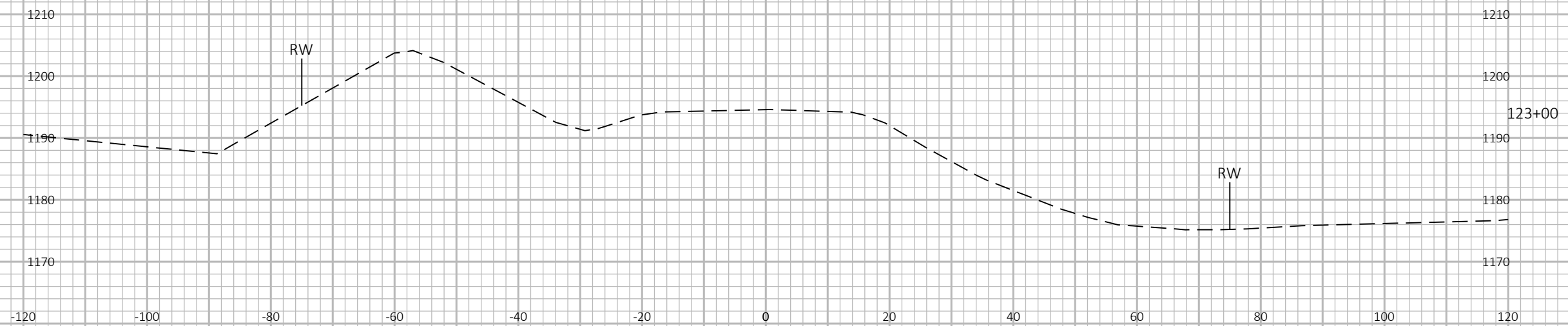
PLOT DATE : 8/5/2019 9:48 AM

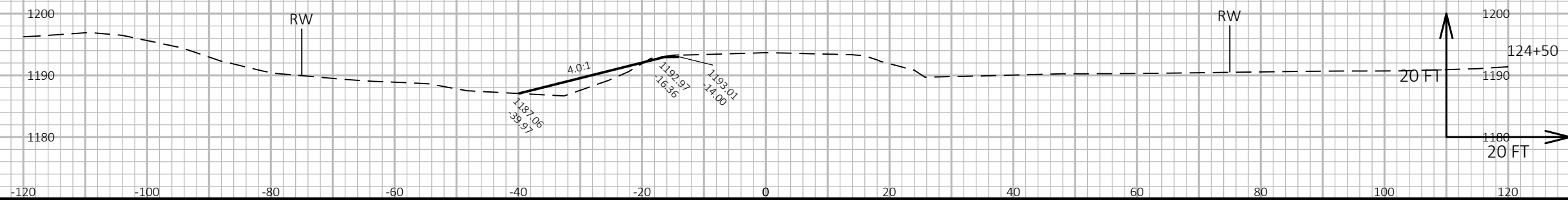
PLOT BY : BRADLEY, KIMBERLY L

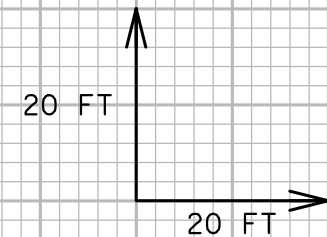
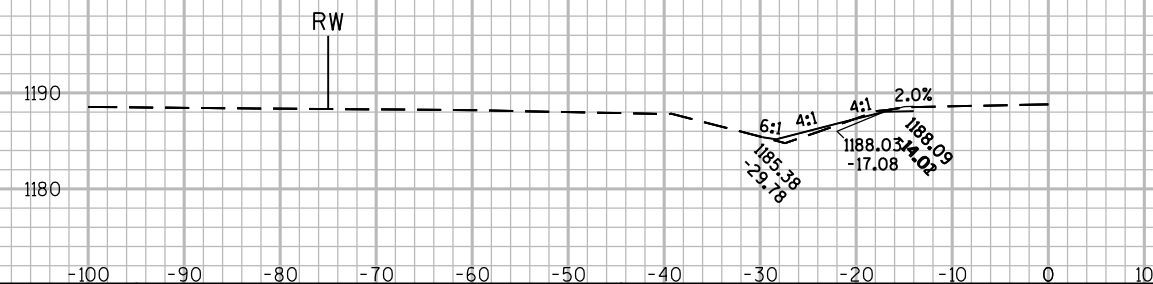
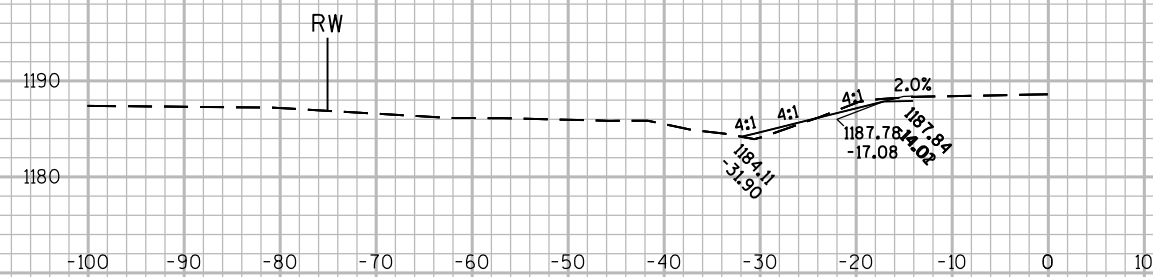
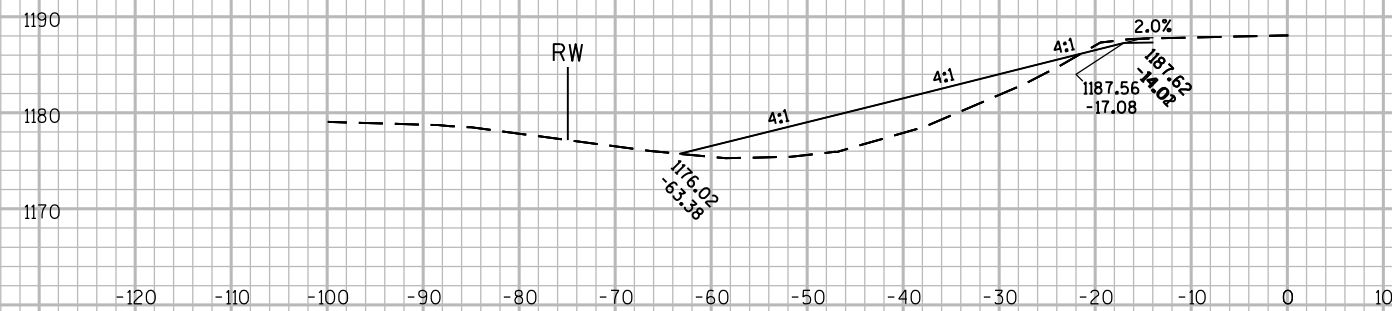
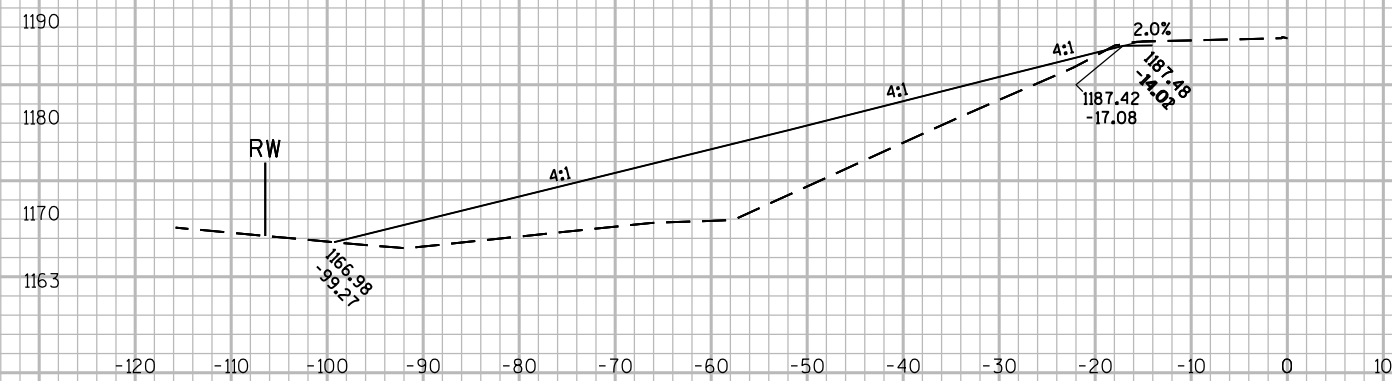
PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49







PROJECT NO: 9140-13-71

HWY: STH 64

COUNTY: OCONTO

CROSS SECTIONS: STH 64

SHEET 185

E

FILE NAME : N:\PDS\C3D\91401300\SHEETSPLAN\STH 64_CROSS SECTIONS.DWG
LAYOUT NAME - GROUP 3 - (23)

PLOT DATE : 4/30/2019 3:47 PM

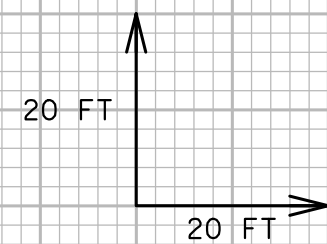
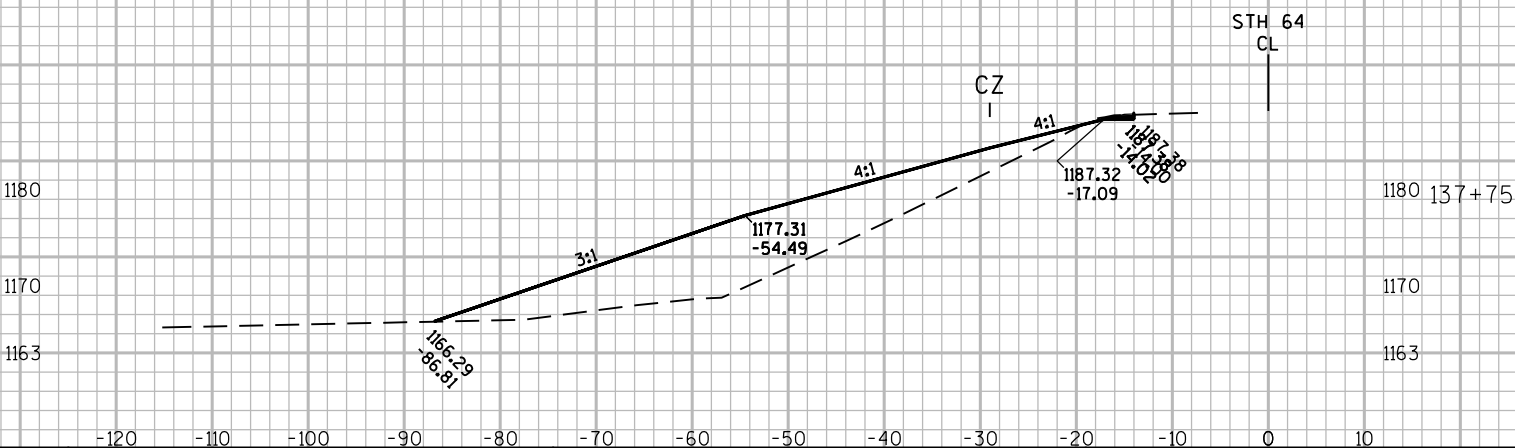
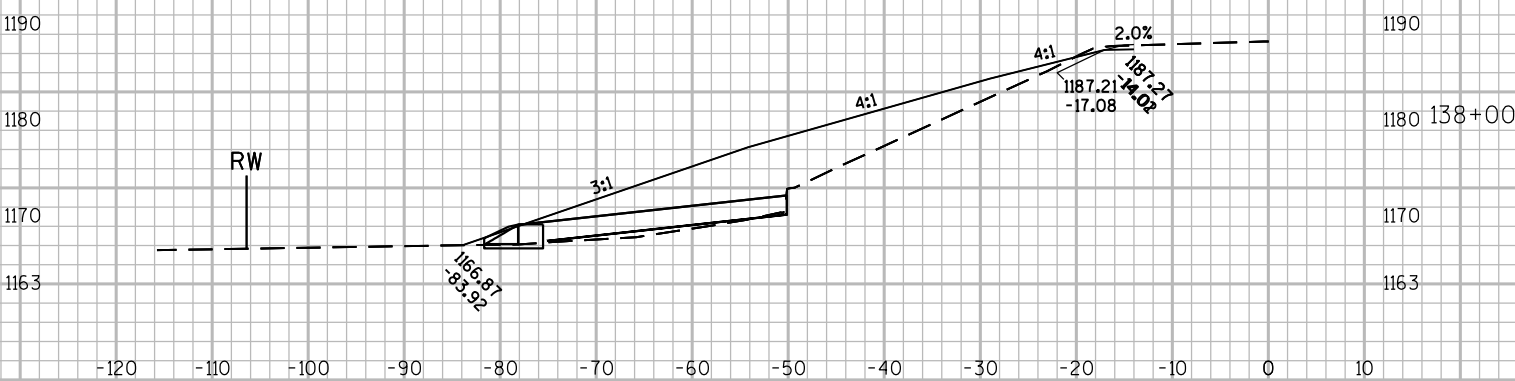
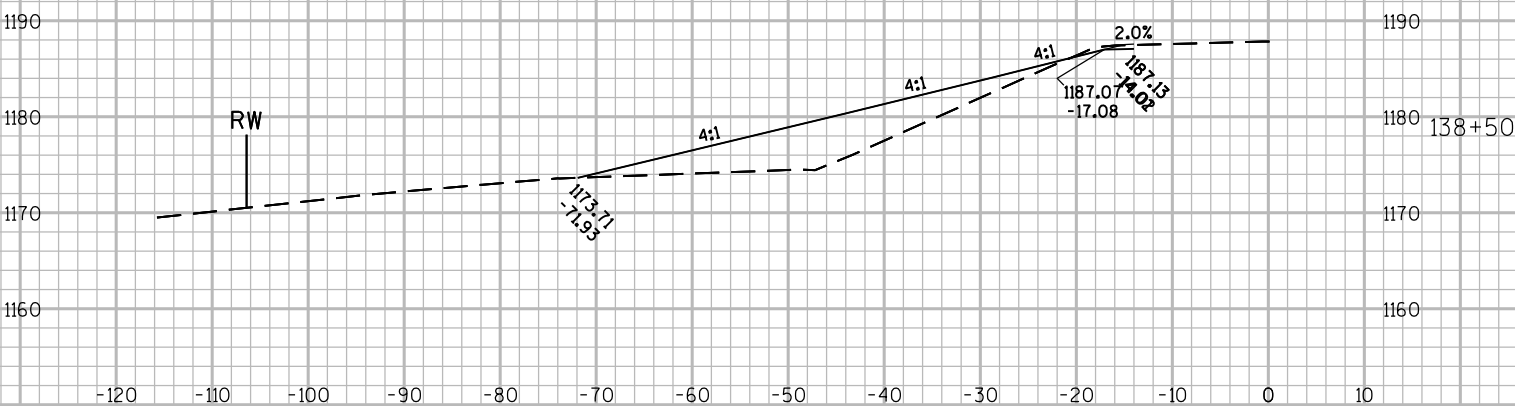
PLOT BY : CREAPAU, QUINTON

PLOT NAME :

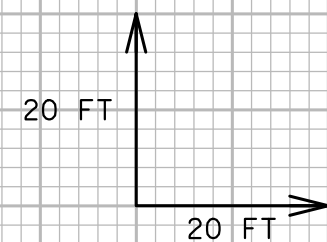
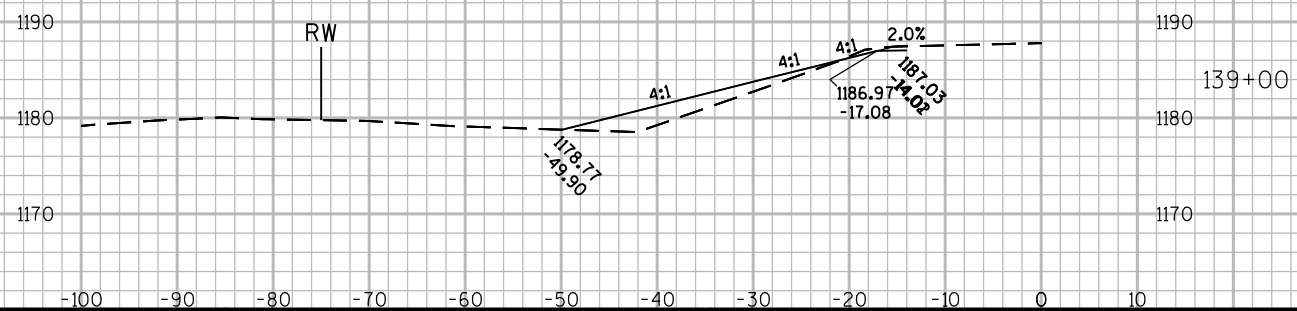
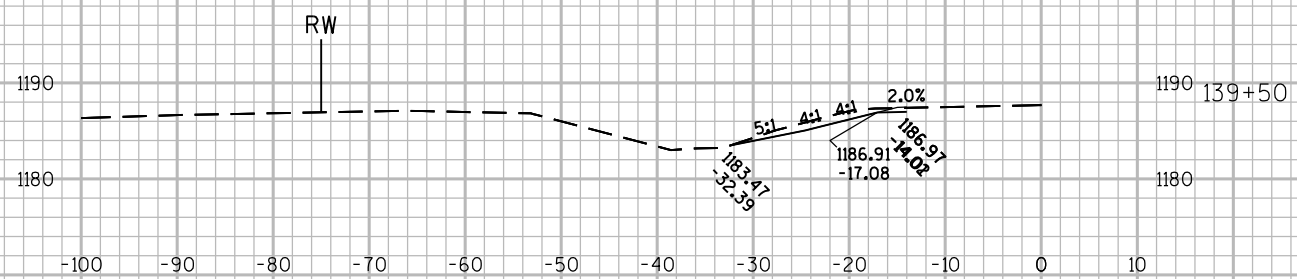
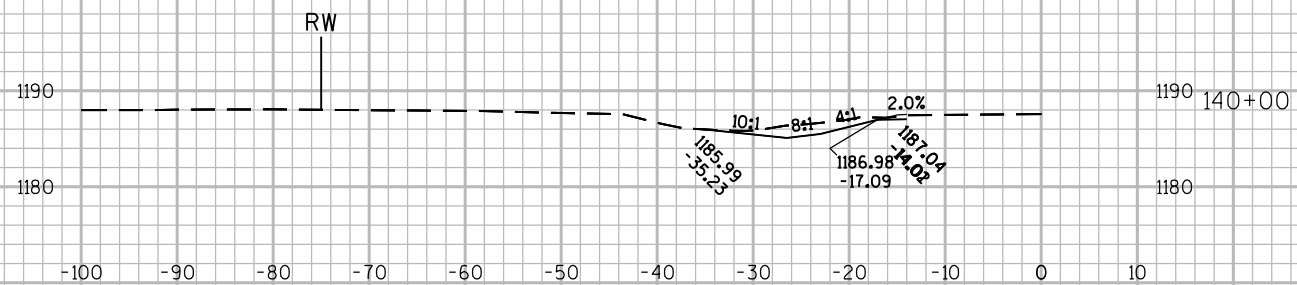
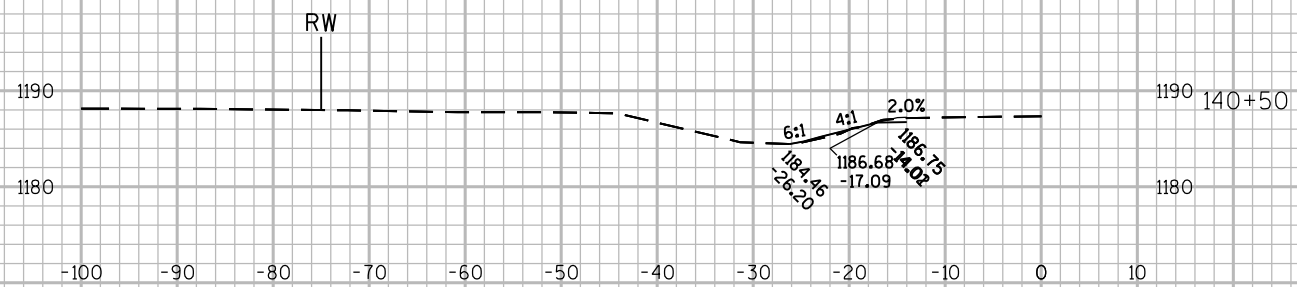
PLOT SCALE : 1 IN:20 FT

WISDOT/CADDs SHEET 49

9



9



PROJECT NO: 9140-13-71

HWY: STH 64

COUNTY: OCONTO

CROSS SECTIONS: STH 64

SHEET 187

E

FILE NAME : N:\PDS\C3D\91401300\SHEETSP\STH 64_CROSS SECTIONS.DWG
LAYOUT NAME - GROUP 3 - (25)

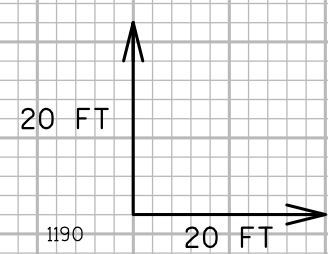
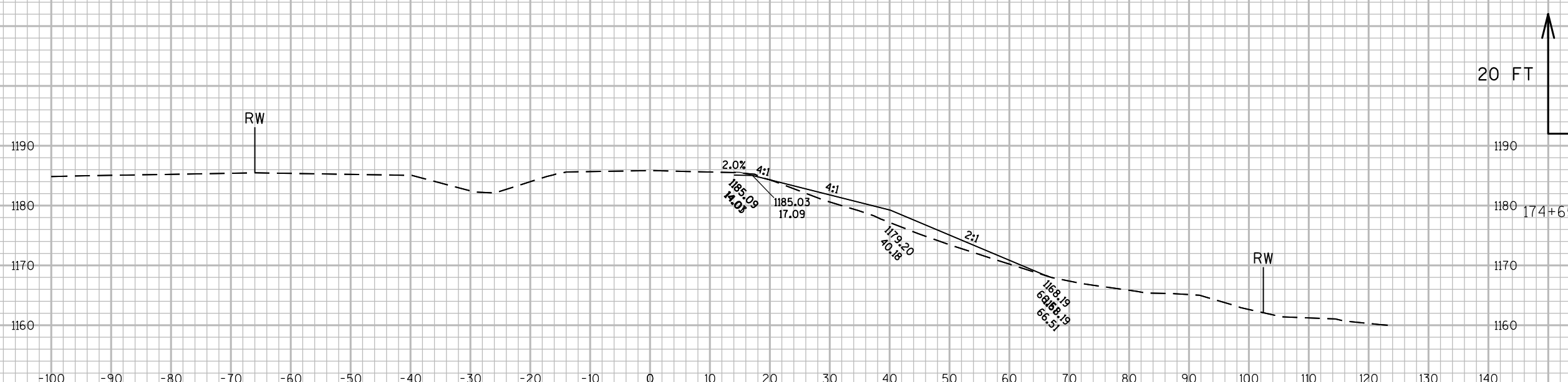
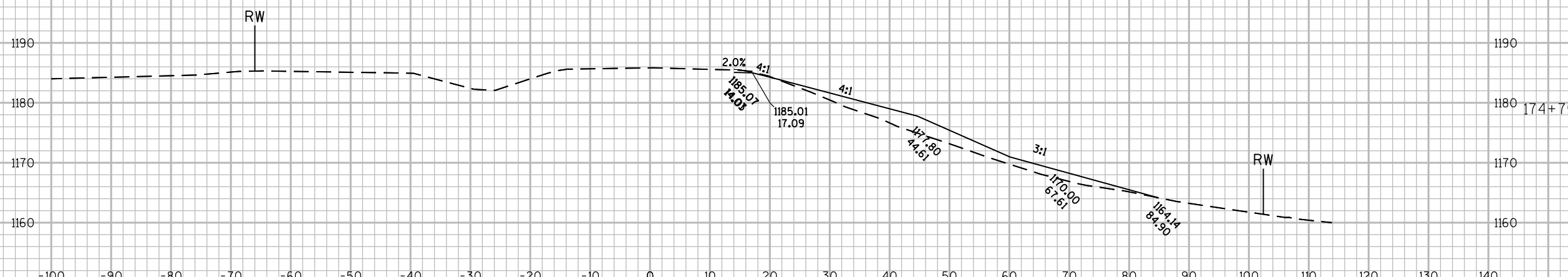
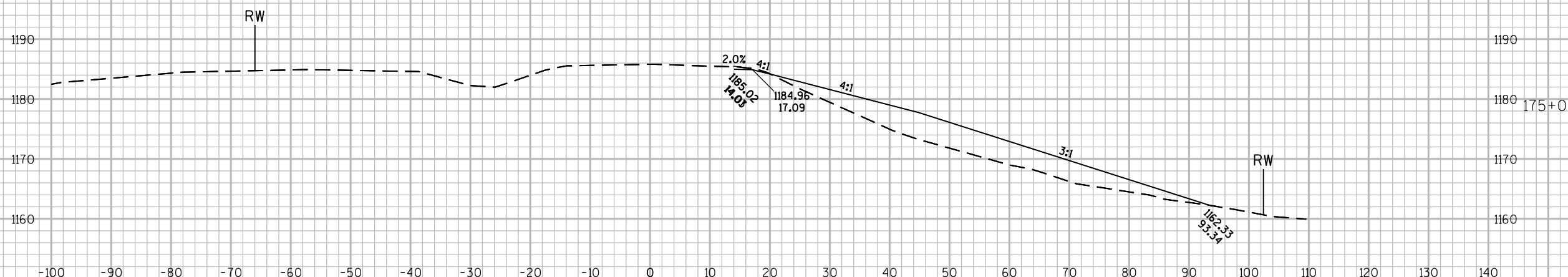
PLOT DATE : 4/30/2019 3:47 PM

PLOT BY : CREAPEAU, QUINTON

PLOT NAME :

PLOT SCALE : 1 IN:20 FT

WISDOT/CADDs SHEET 49



PROJECT NO: 9140-13-71

HWY: STH 64

COUNTY: OCONTO

CROSS SECTIONS: STH 64

SHEET 188

E

FILE NAME : N:\PDS\C3D\91401300\SHEETSPLAN\STH 64_CROSS SECTIONS.DWG
LAYOUT NAME - GROUP 4 - (28)

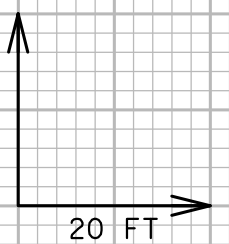
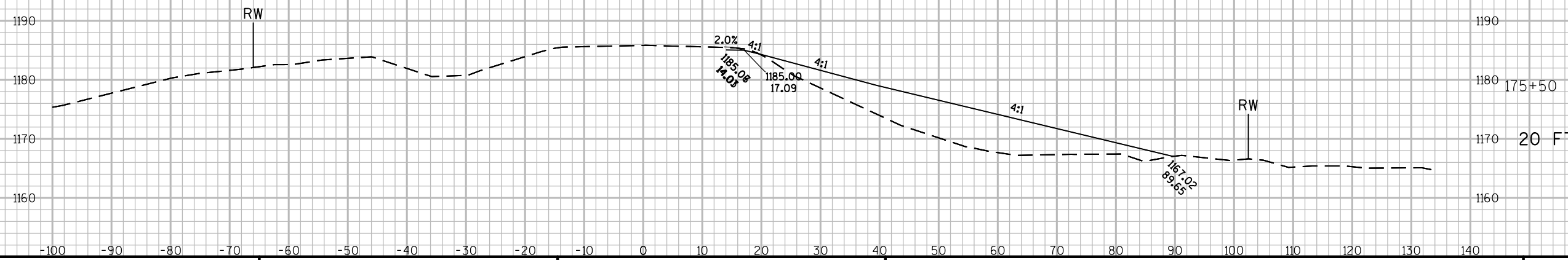
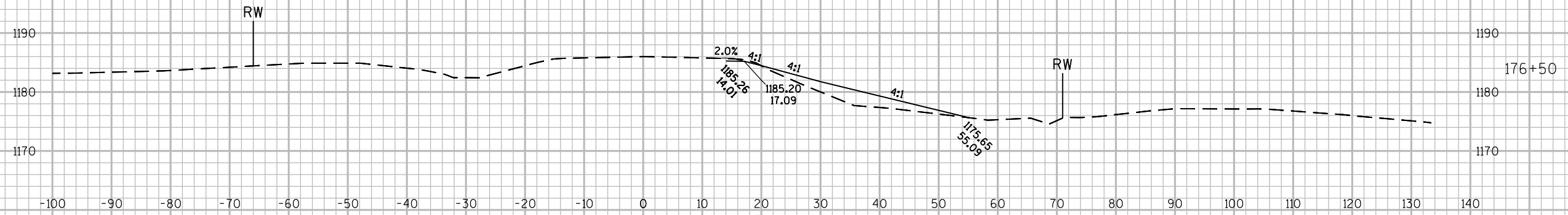
PLOT DATE : 4/30/2019 4:01 PM

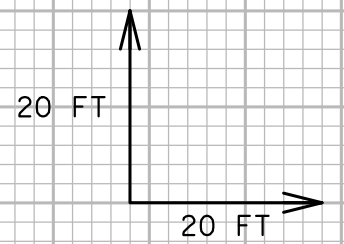
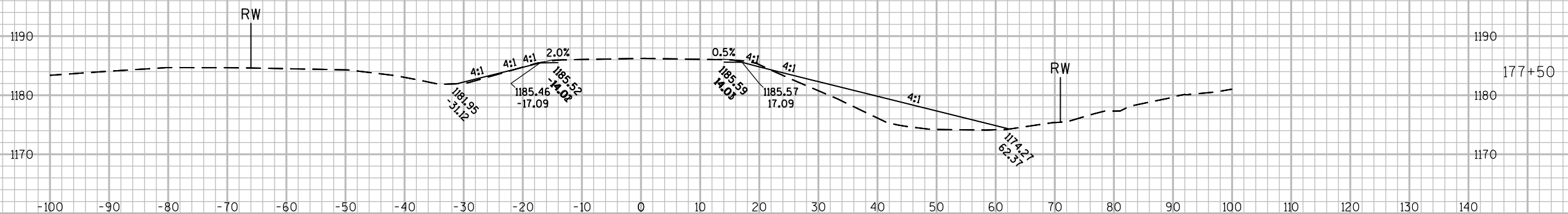
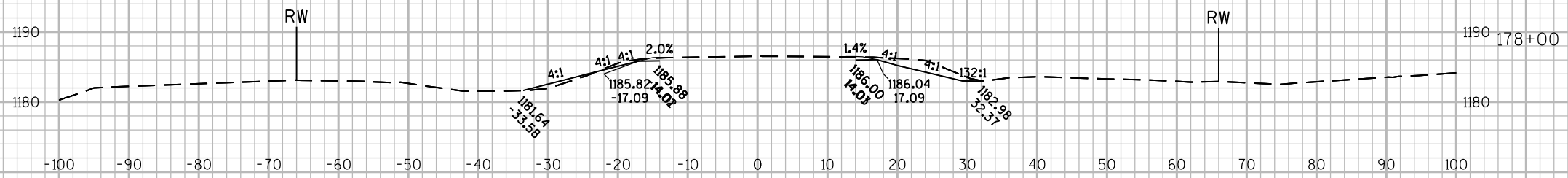
PLOT BY : CREAPEAU, QUINTON

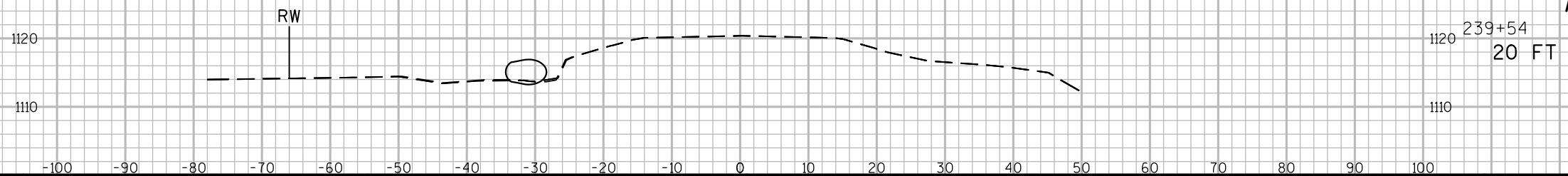
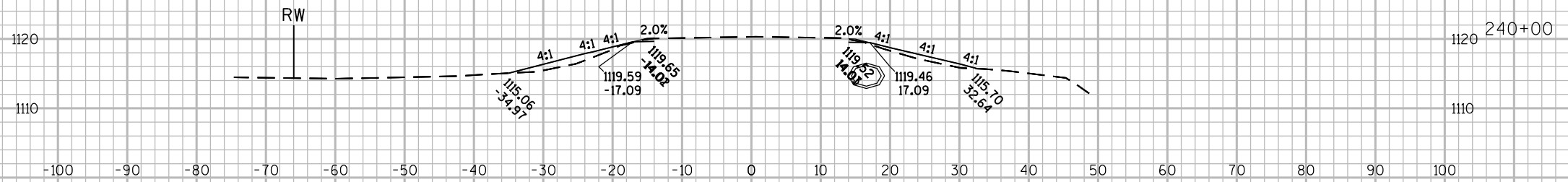
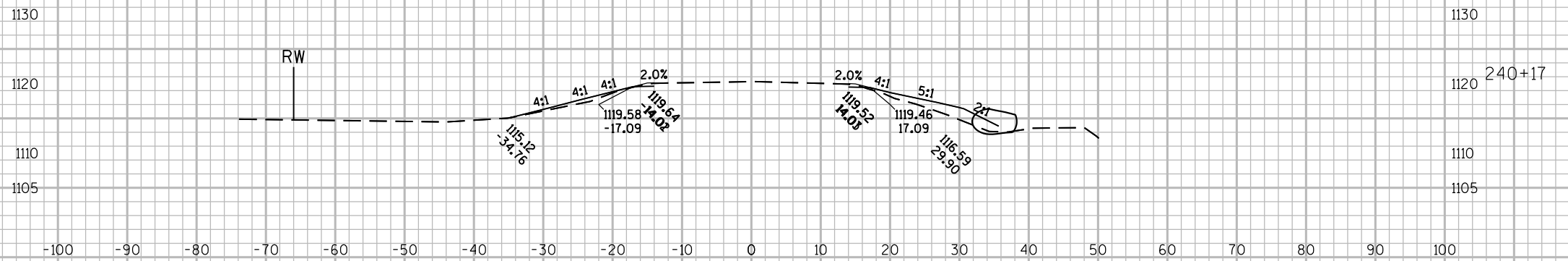
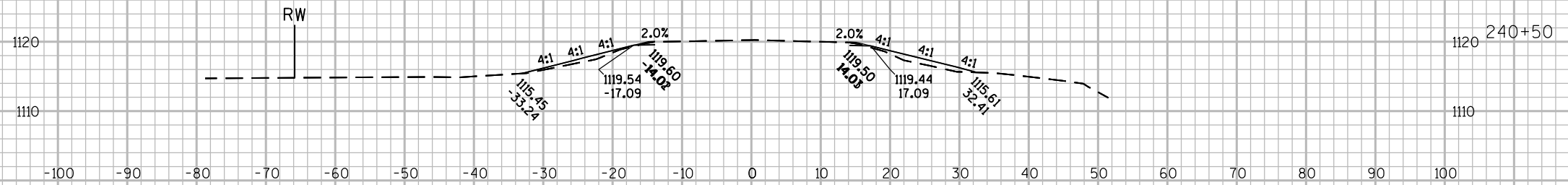
PLOT NAME :

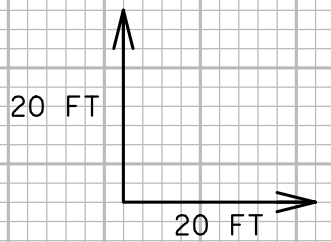
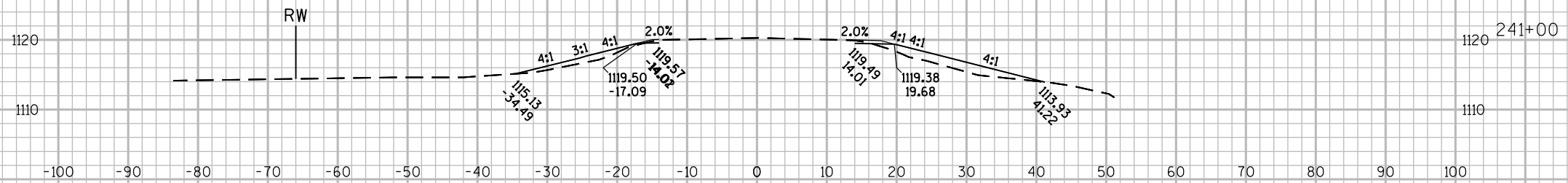
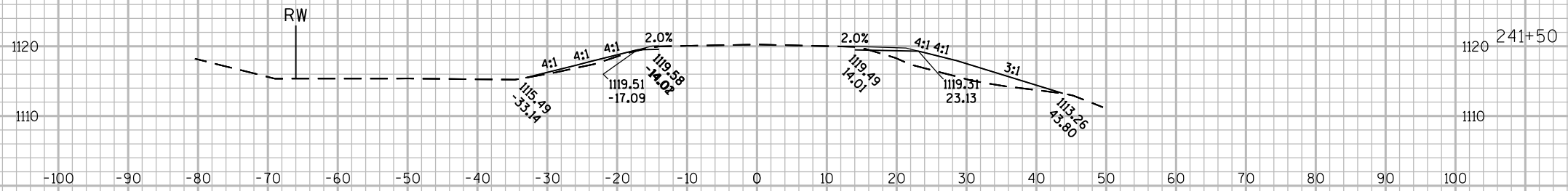
PLOT SCALE : 1 IN:20 FT

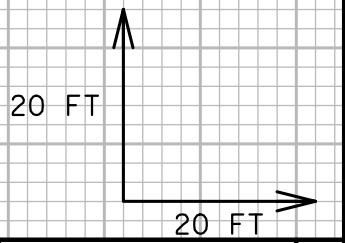
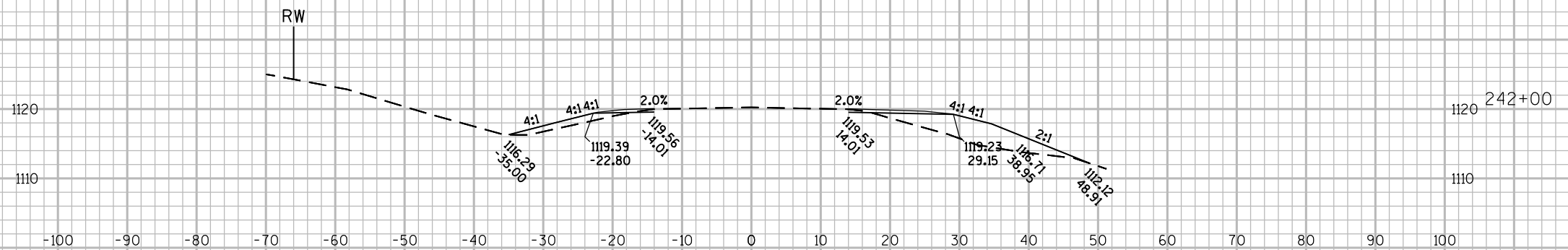
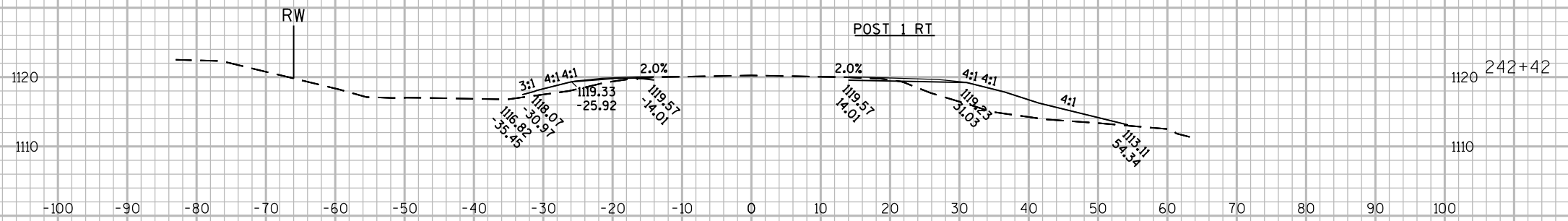
WISDOT/CADDs SHEET 49

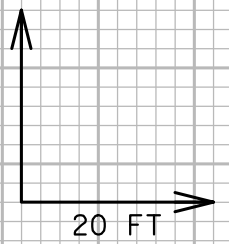
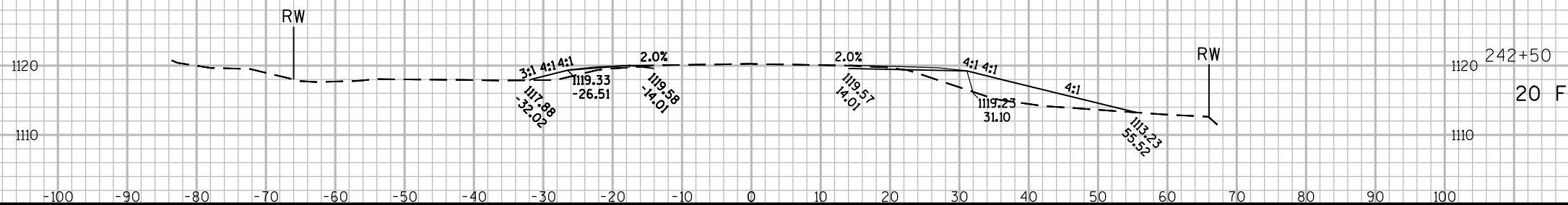


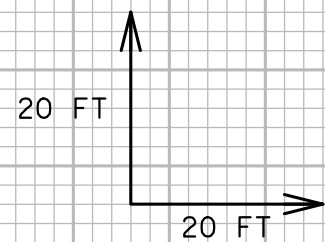
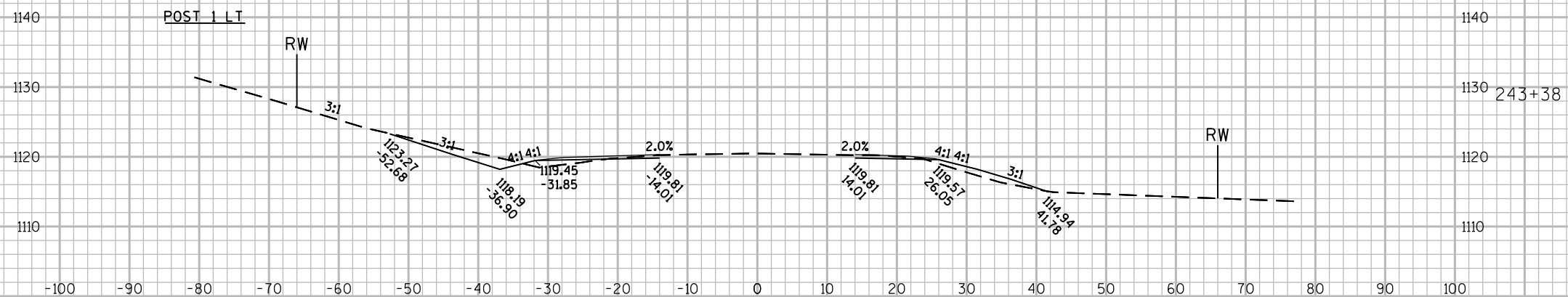
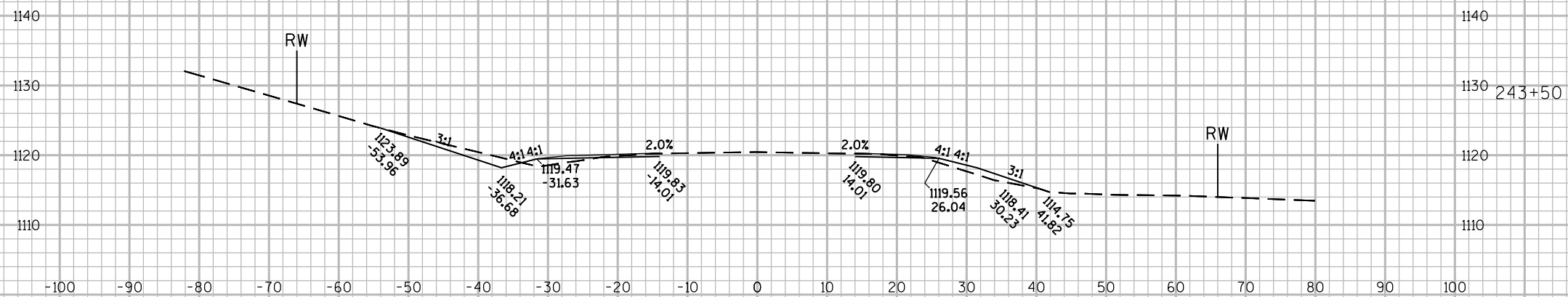


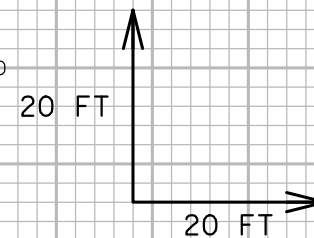
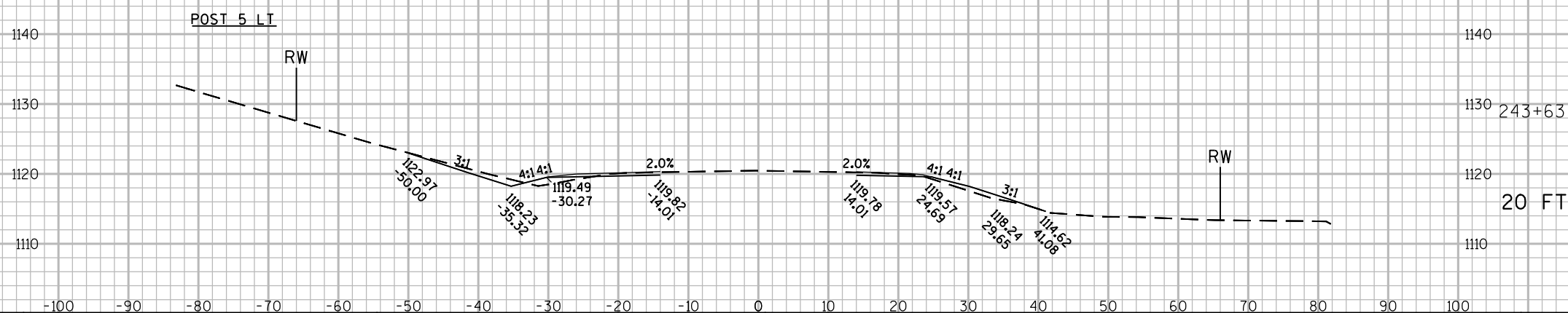
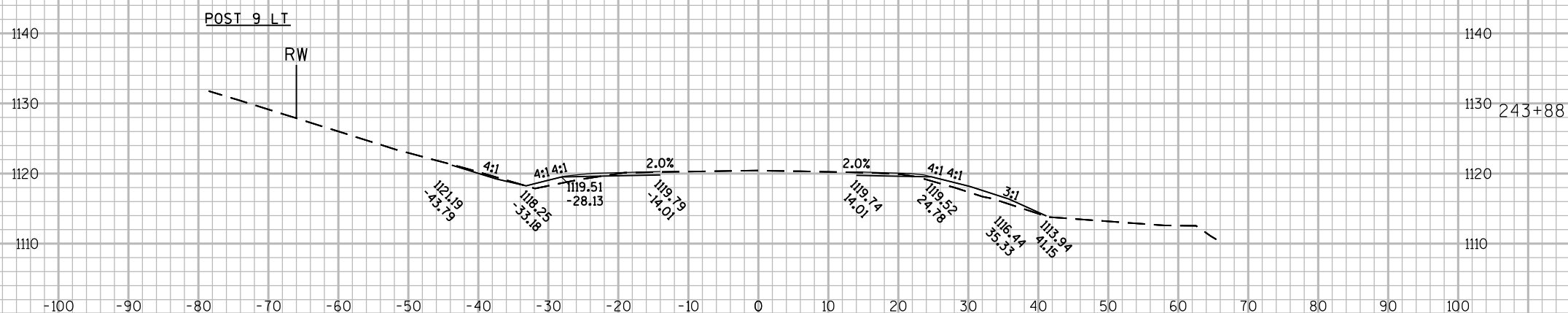
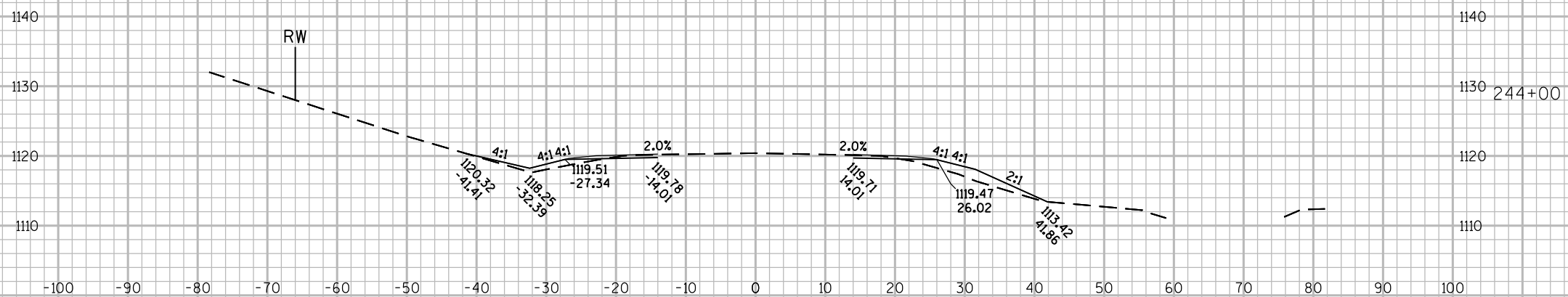












PROJECT NO: 9140-13-71

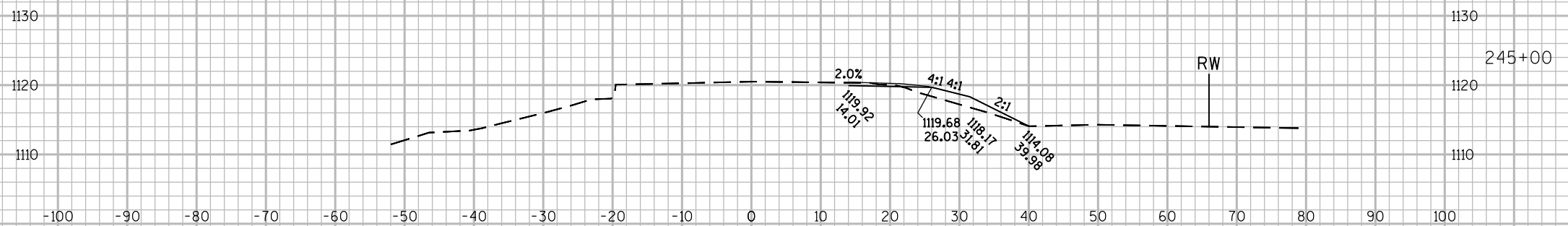
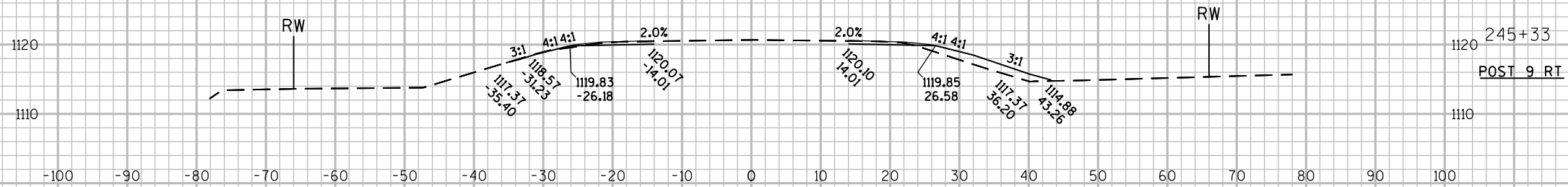
HWY: STH 64

COUNTY: OCONTO

CROSS SECTIONS: STH 64

SHEET 197

E



PROJECT NO: 9140-13-71

HWY: STH 64

COUNTY: OCONTO

CROSS SECTIONS: STH 64

SHEET 198

E

FILE NAME : N:\PDS\C3D\91401300\SHEETSPLAN\STH 64_CROSS SECTIONS.DWG
LAYOUT NAME - GROUP 5 - (40)

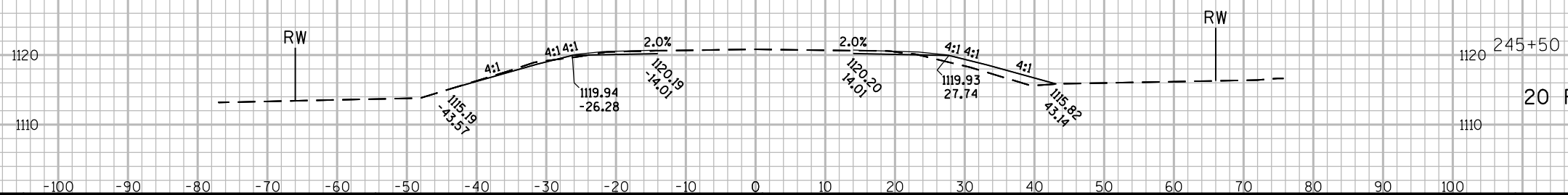
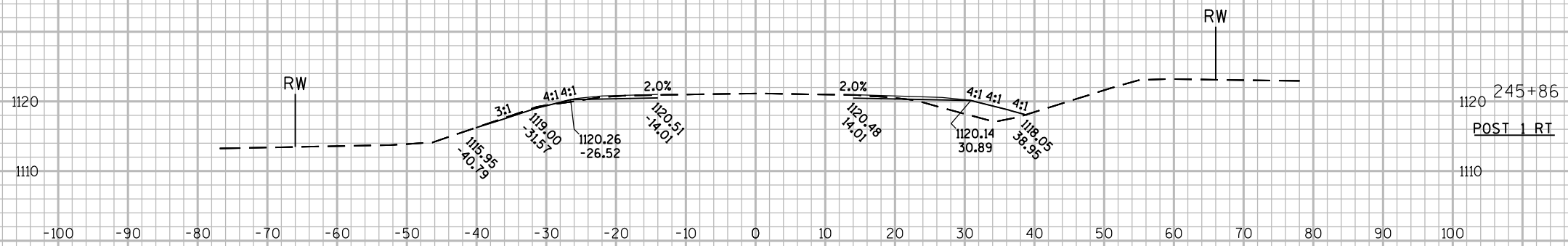
PLOT DATE : 5/1/2019 10:08 AM

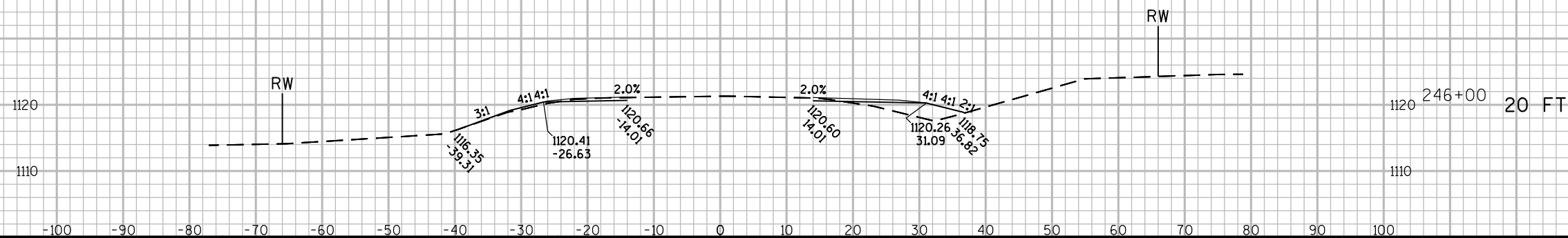
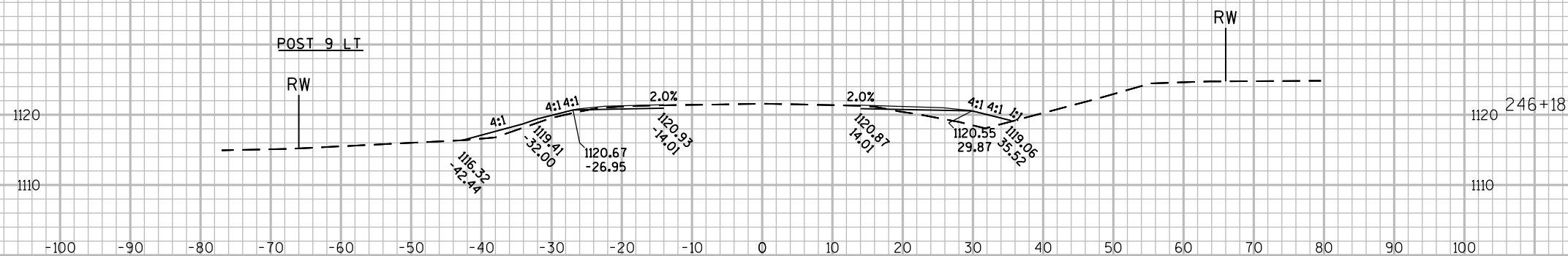
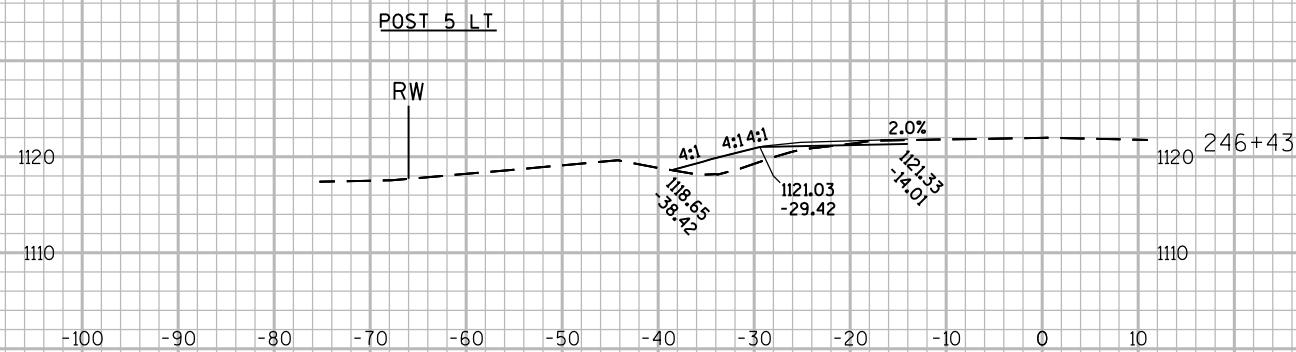
PLOT BY : CREAPAU, QUINTON

PLOT NAME :

PLOT SCALE : 1 IN:20 FT

WISDOT/CADDs SHEET 49





PROJECT NO: 9140-13-71

HWY: STH 64

COUNTY: OCONTO

CROSS SECTIONS: STH 64

SHEET 200

E

FILE NAME : N:\PDS\C3D\91401300\SHEETSPLAN\STH 64_CROSS SECTIONS.DWG
LAYOUT NAME - GROUP 5 - (42)

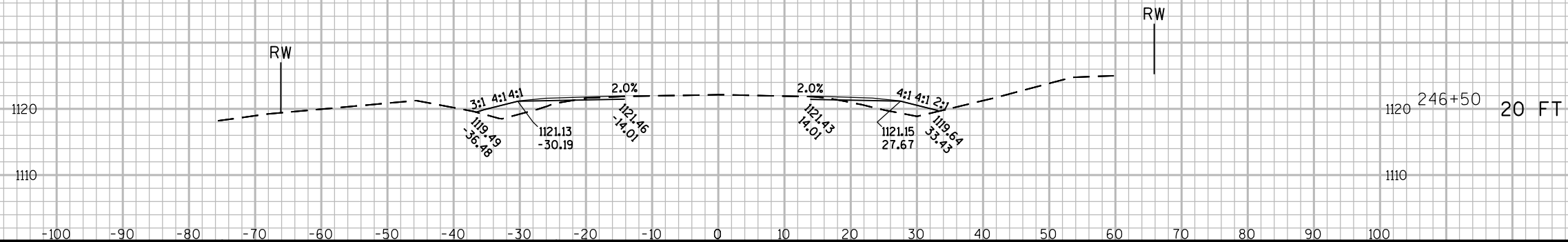
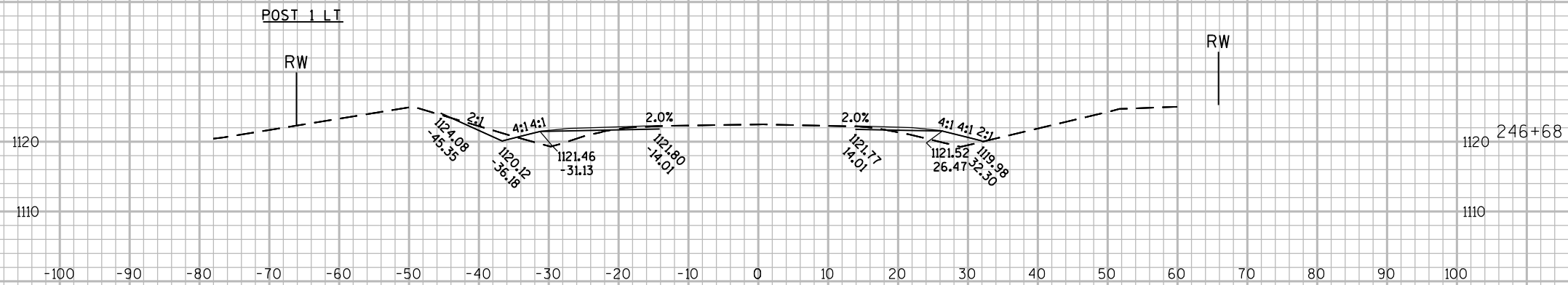
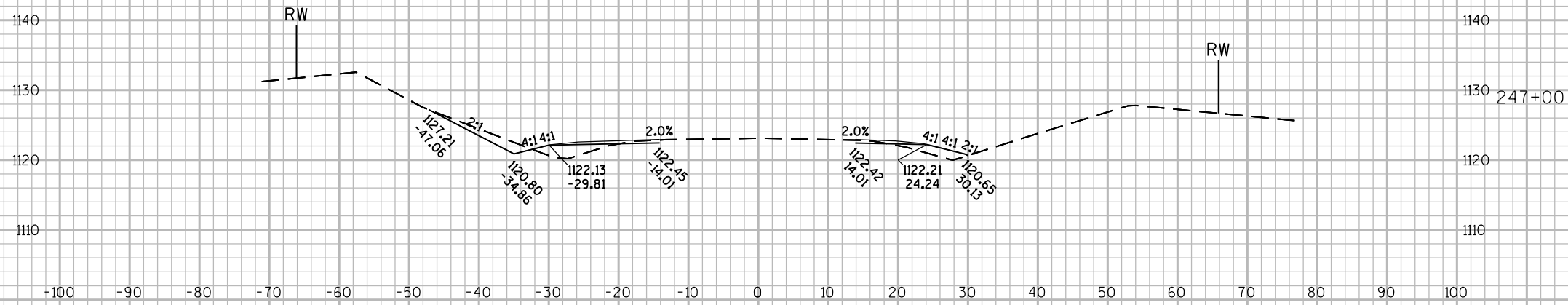
PLOT DATE : 5/1/2019 10:08 AM

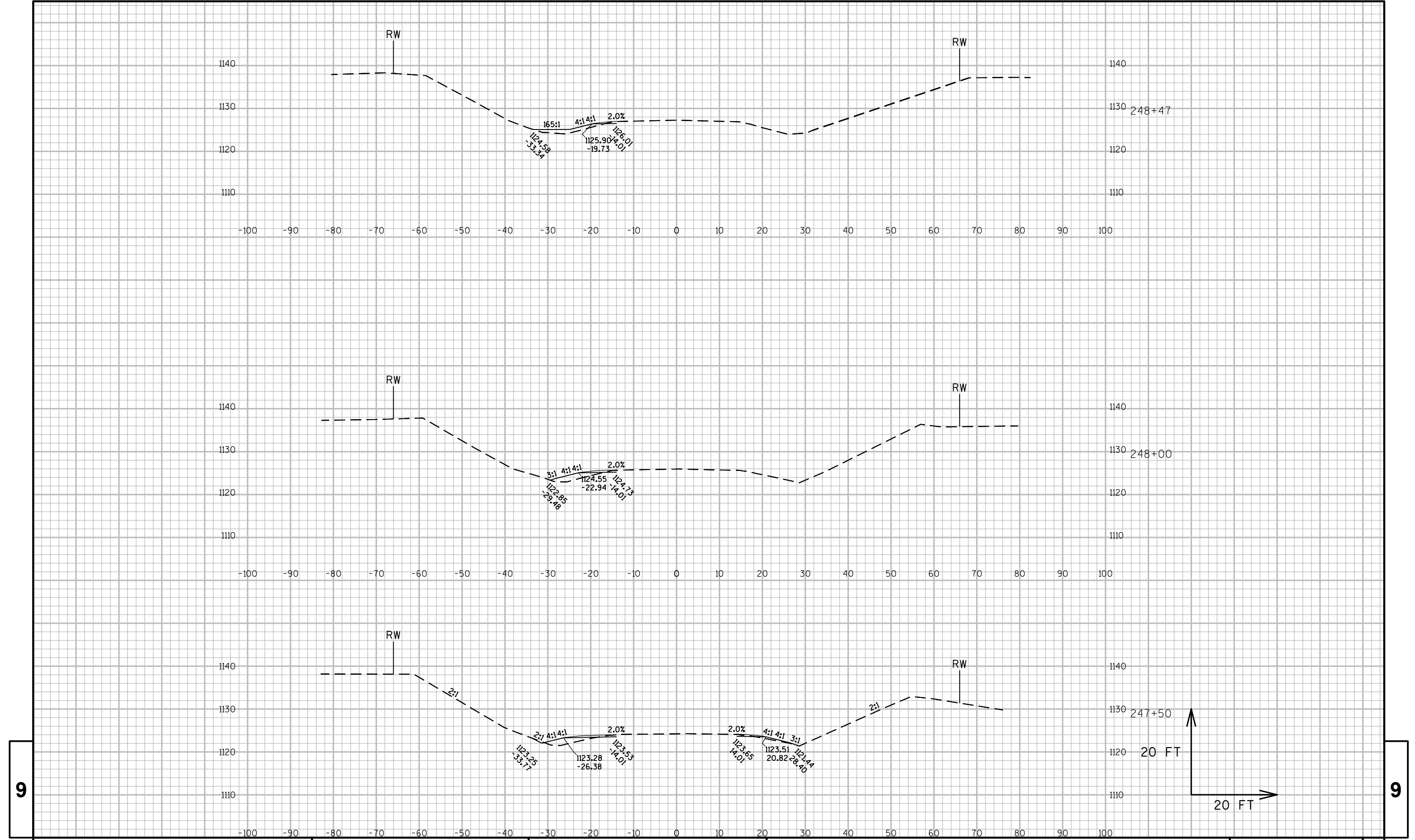
PLOT BY : CREAPEAU, QUINTON

PLOT NAME :

PLOT SCALE : 1 IN:20 FT

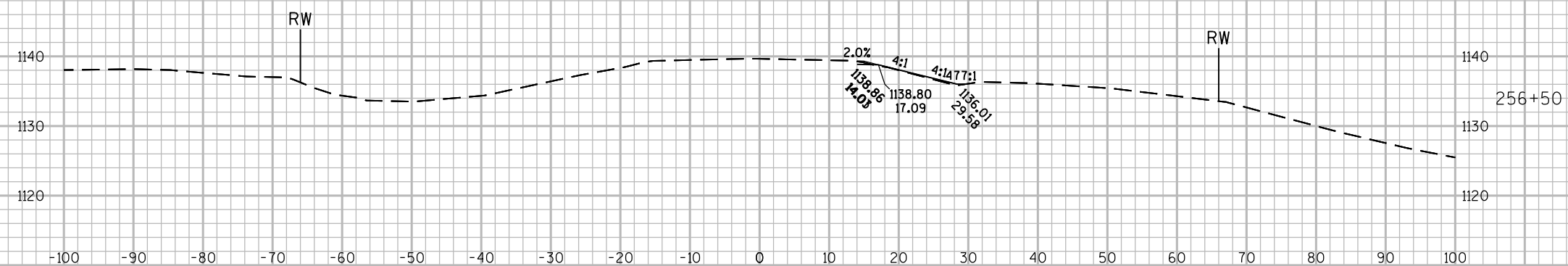
WISDOT/CADDs SHEET 49





9

9



PROJECT NO: 9140-13-71

HWY:STH 64

COUNTY: OCONTO

CROSS SECTIONS: STH 64

SHEET	203
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FILE NAME : N:\PDS\C3D\91401300\SHEETSP\PLAN\STH 64_CROSS SECTIONS.DWG
LAYOUT NAME - GROUP 6 - (46)

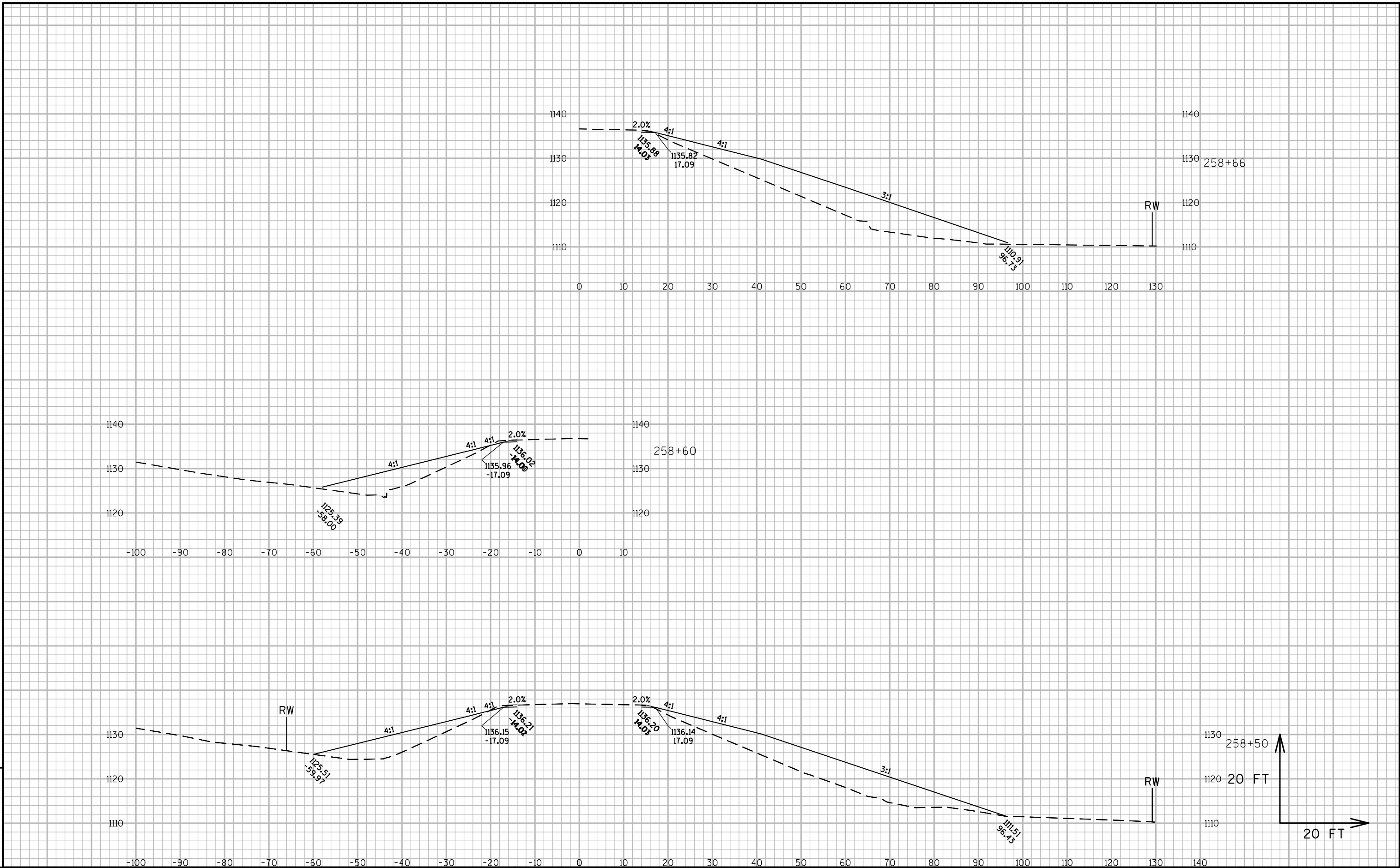
PLOT DATE : 5/1/2019 10:22 AM

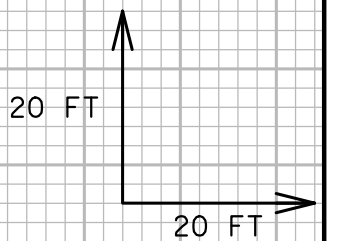
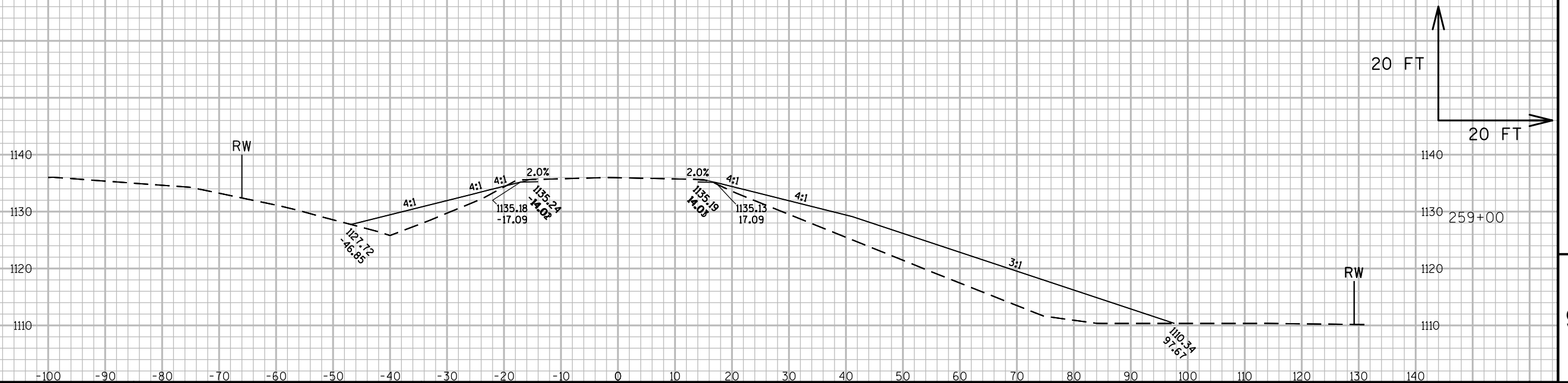
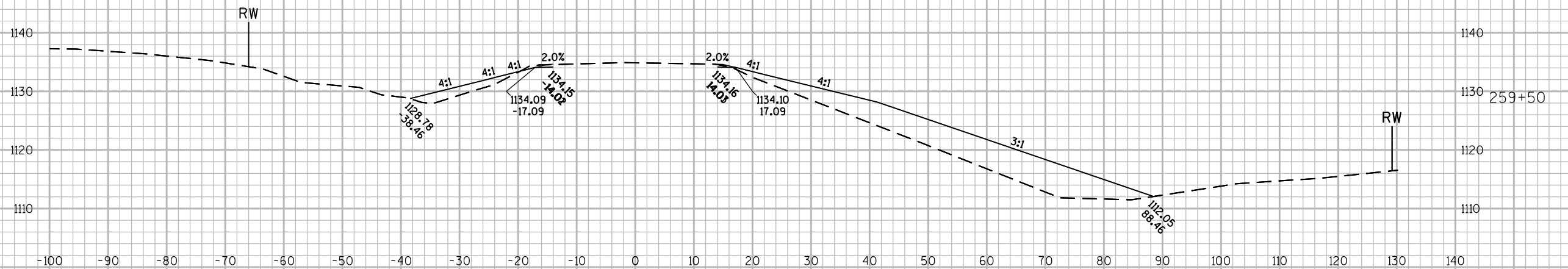
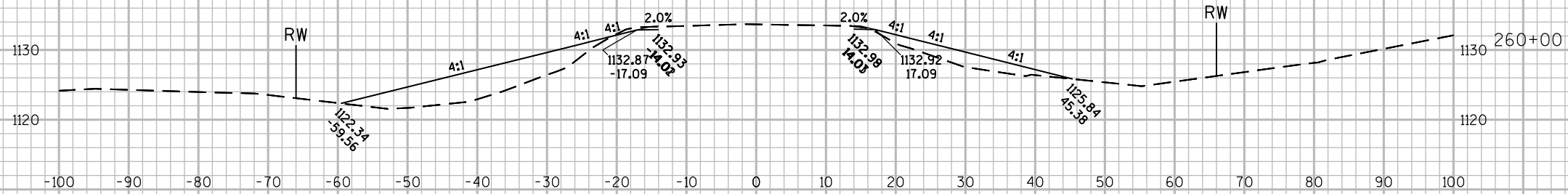
PLOT BY : CREAPEAU,QUINTON

PLOT NAME :

PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49





PROJECT NO: 9140-13-71

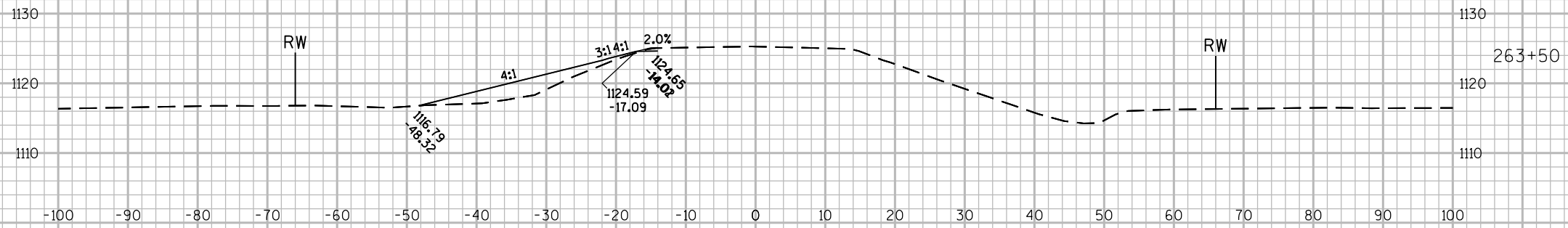
HWY: STH 64

COUNTY: OCONTO

CROSS SECTIONS: STH 64

SHEET 206

E



PROJECT NO: 9140-13-71

HWY: STH 64

COUNTY: OCONTO

CROSS SECTIONS: STH 64

SHEET 208

E

FILE NAME : N:\PDS\C3D\91401300\SHEETSPLAN\STH 64_CROSS SECTIONS.DWG
LAYOUT NAME - GROUP 6 - (51)

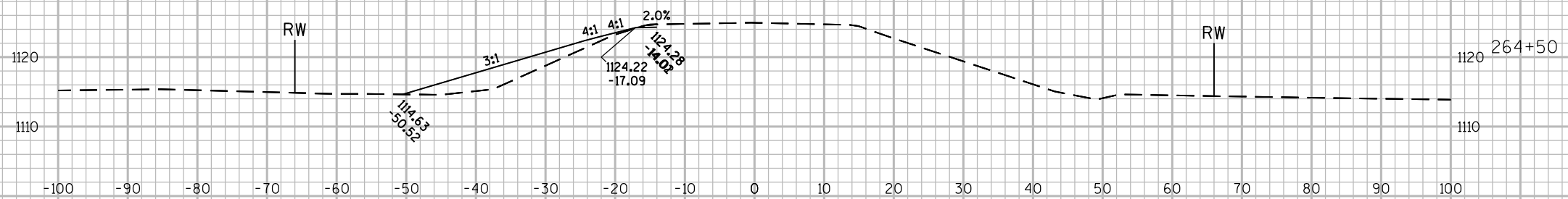
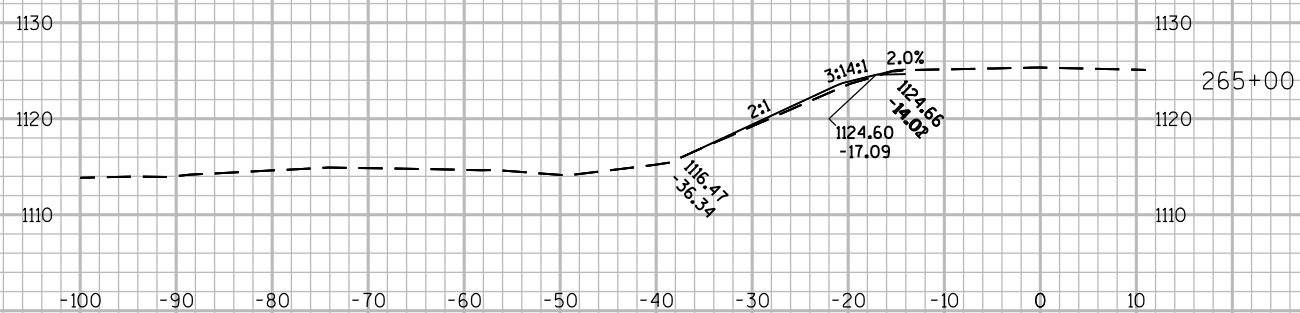
PLOT DATE : 5/1/2019 10:23 AM

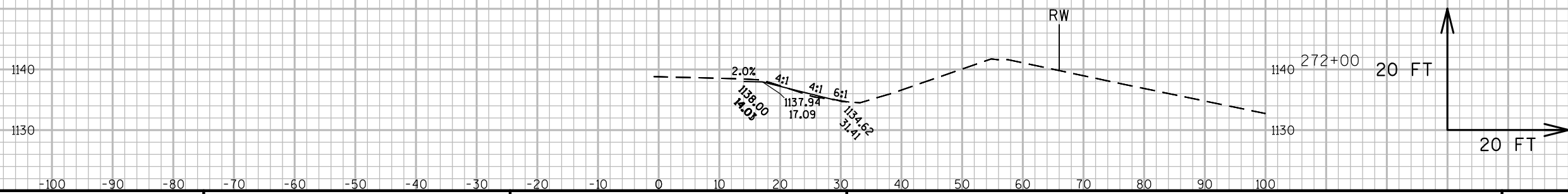
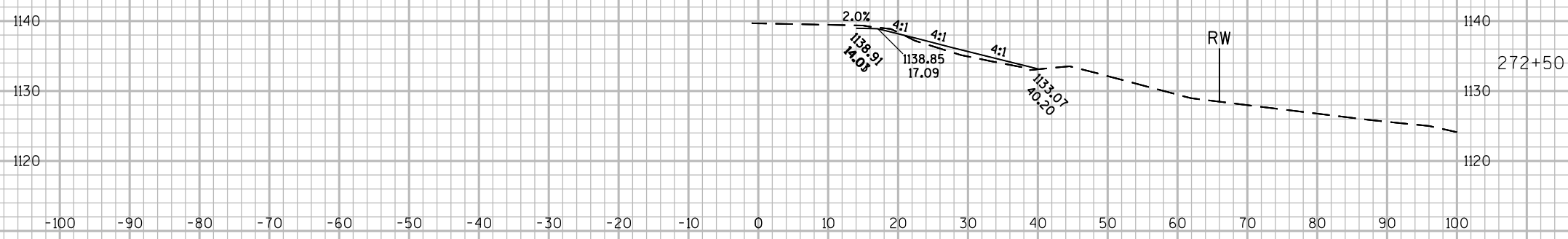
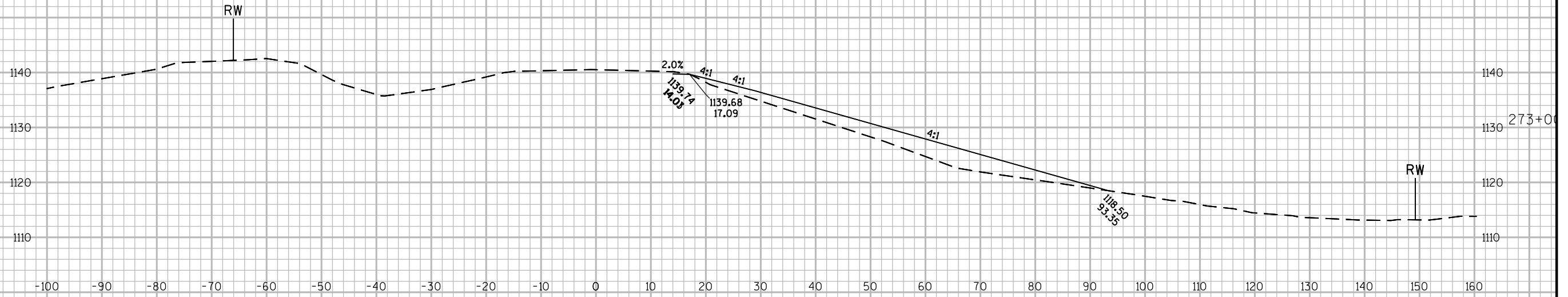
PLOT BY : CREAPAU, QUINTON

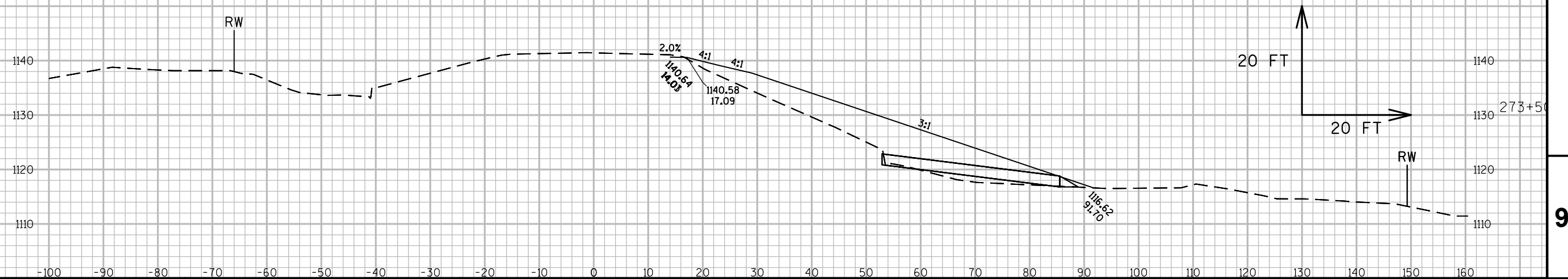
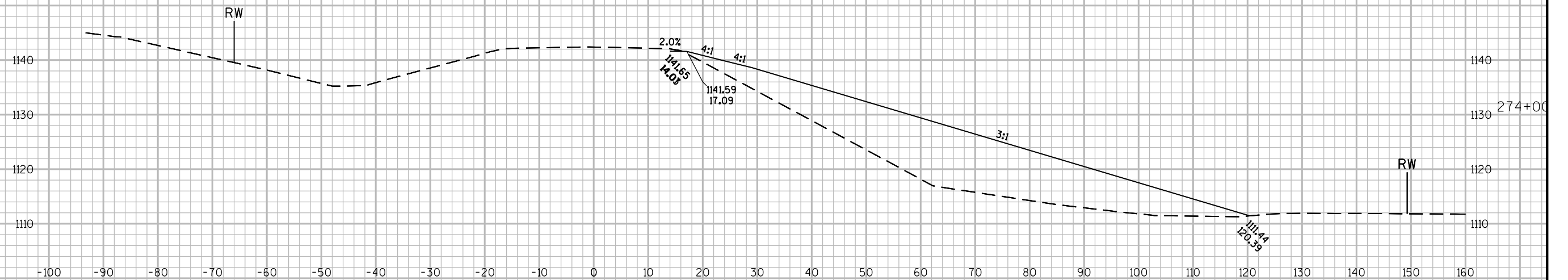
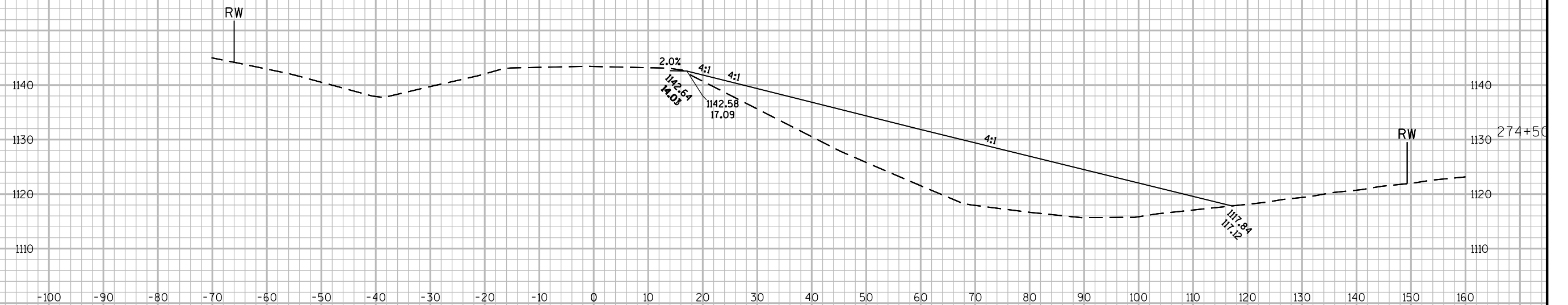
PLOT NAME :

PLOT SCALE : 1 IN:20 FT

WISDOT/CADDs SHEET 49







PROJECT NO: 9140-13-71

HWY:STH 64

COUNTY: OCONTO

CROSS SECTIONS: STH 64

SHEET	211
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FILE NAME : N:\PDS\C3D\91401300\SHEETSPLAN\STH 64_CROSS SECTIONS.DWG
LAYOUT NAME - GROUP 7 - (56)

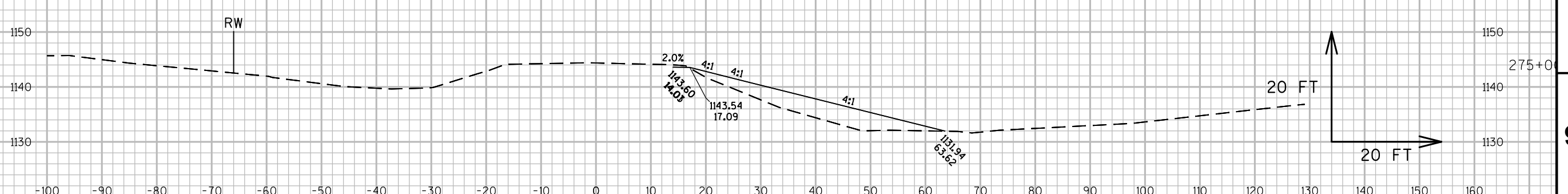
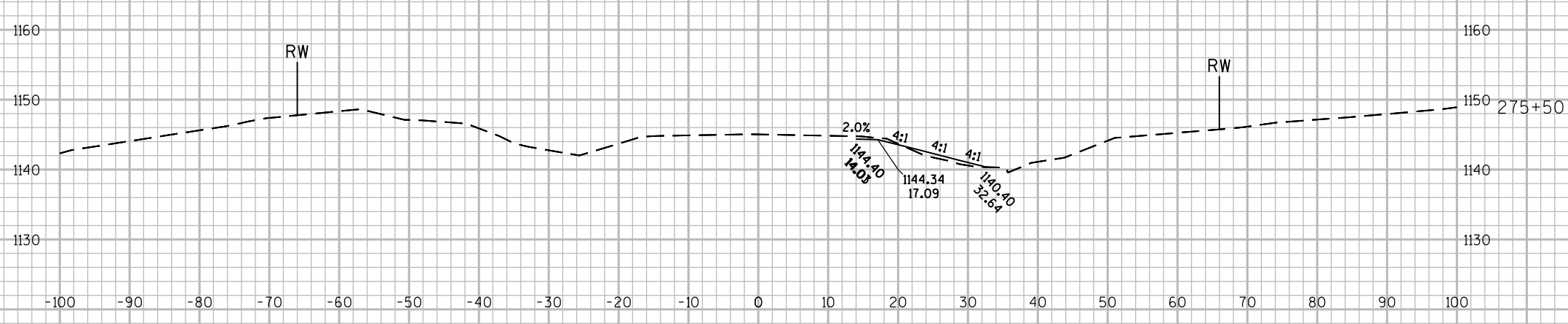
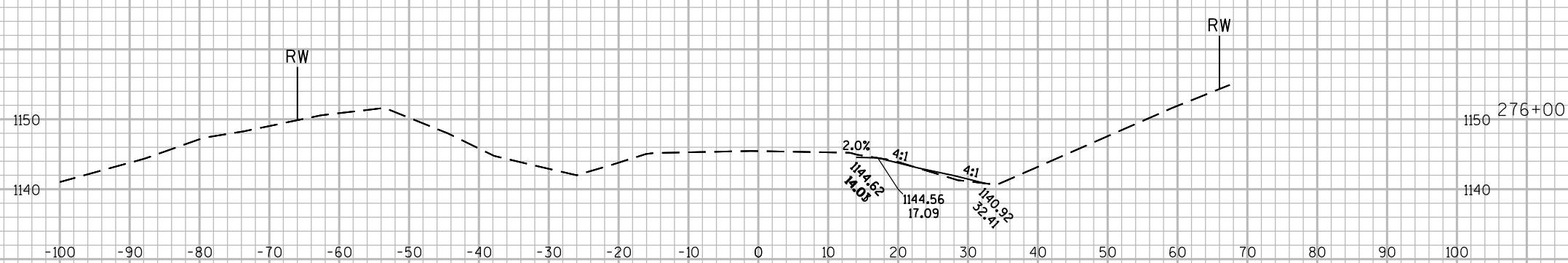
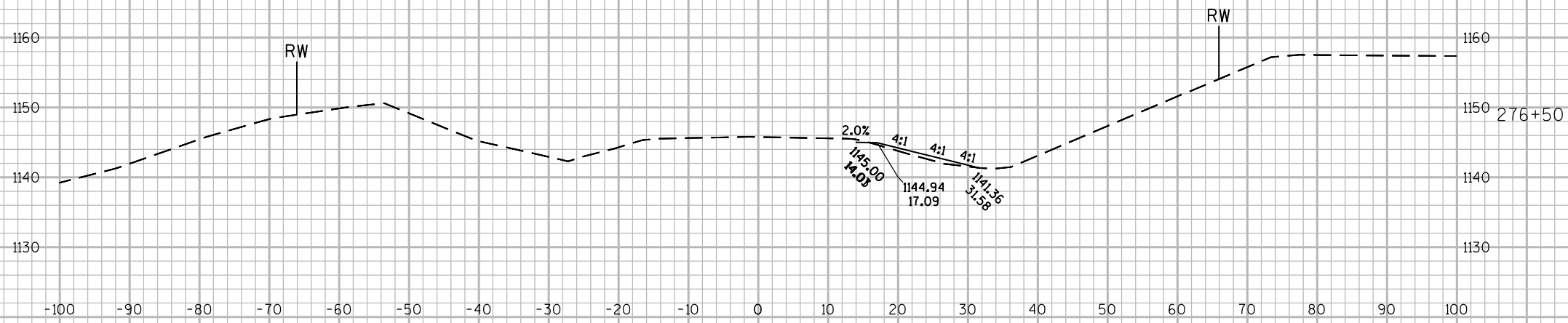
PLOT DATE : 5/1/2019 10:44 AM

PLOT BY : CREAPEAU,QUINTON

PLOT NAME :

PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



PROJECT NO: 9140-13-71

HWY: STH 64

COUNTY: OCONTO

CROSS SECTIONS: STH 64

SHEET 212

E

FILE NAME : N:\PDS\C3D\91401300\SHEETPLAN\STH 64_CROSS SECTIONS.DWG
LAYOUT NAME - GROUP 7 - (57)

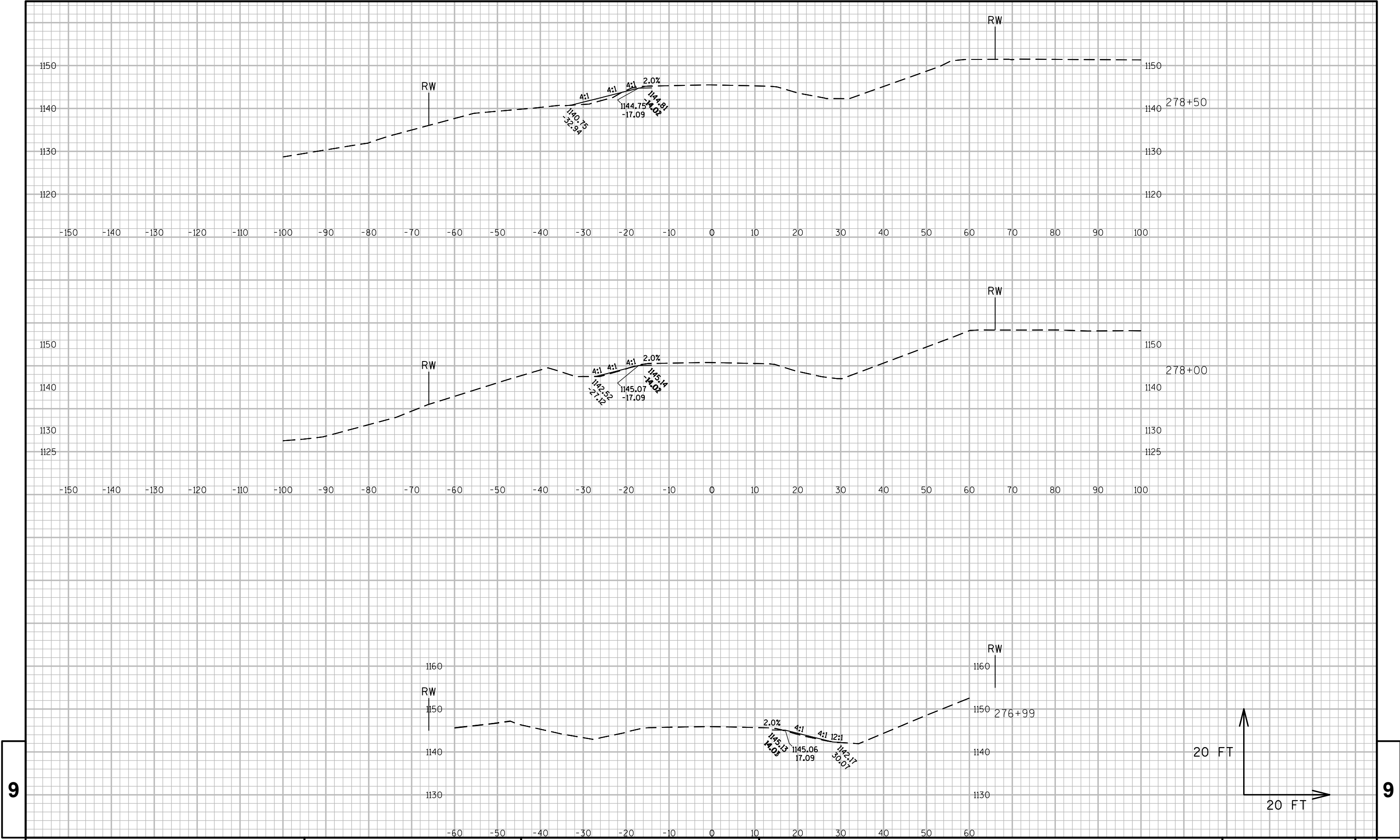
PLOT DATE : 5/1/2019 10:44 AM

PLOT BY : CREAPEAU, QUINTON

PLOT NAME :

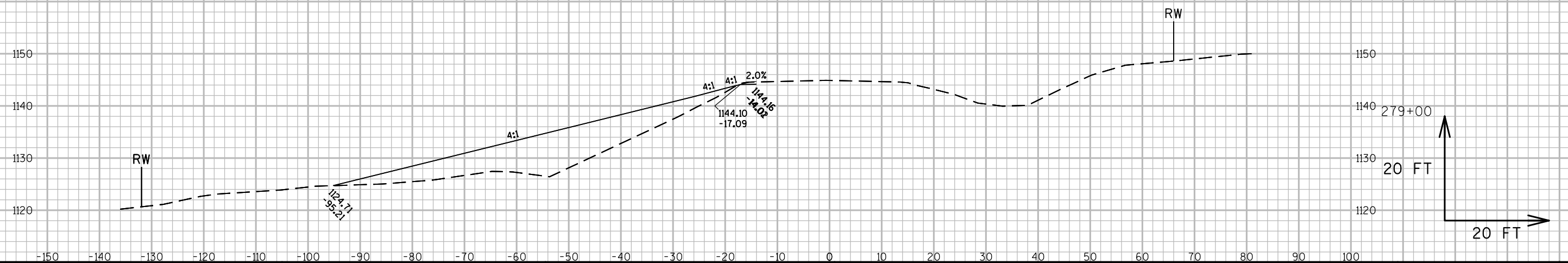
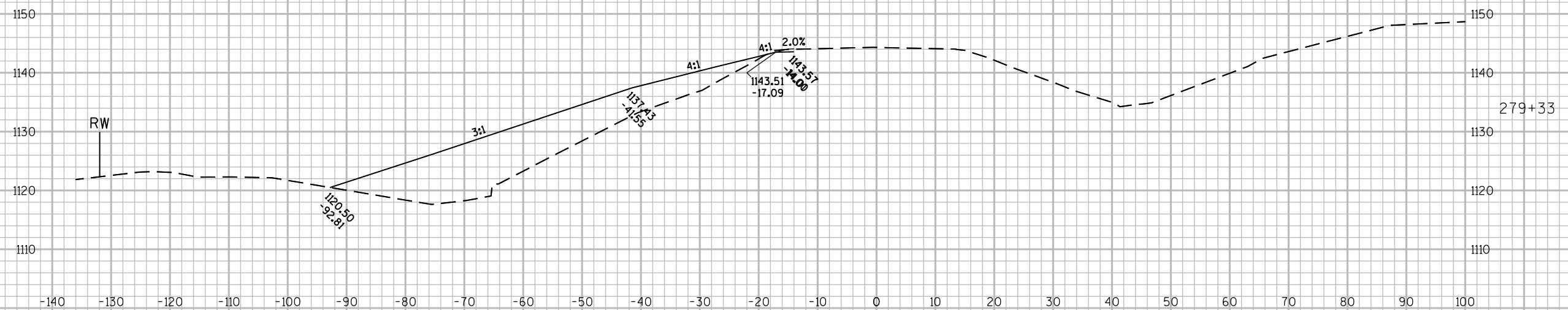
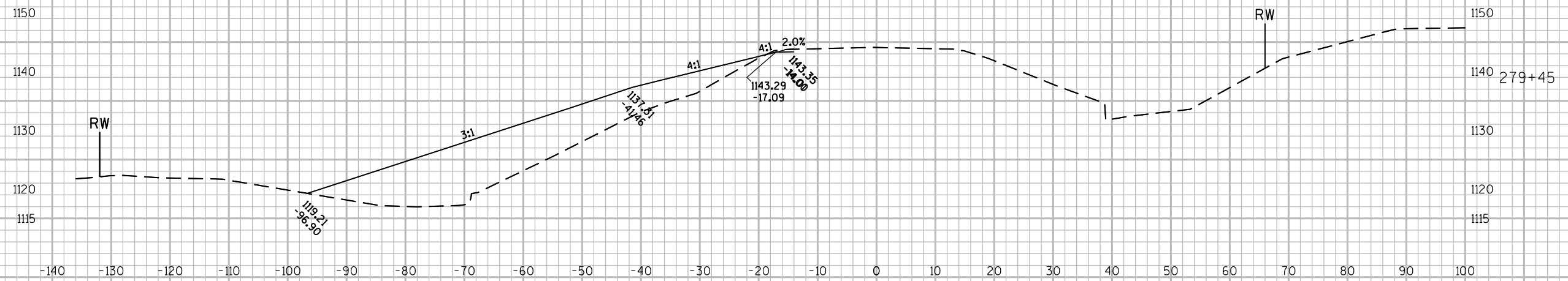
PLOT SCALE : 1 IN=20 FT

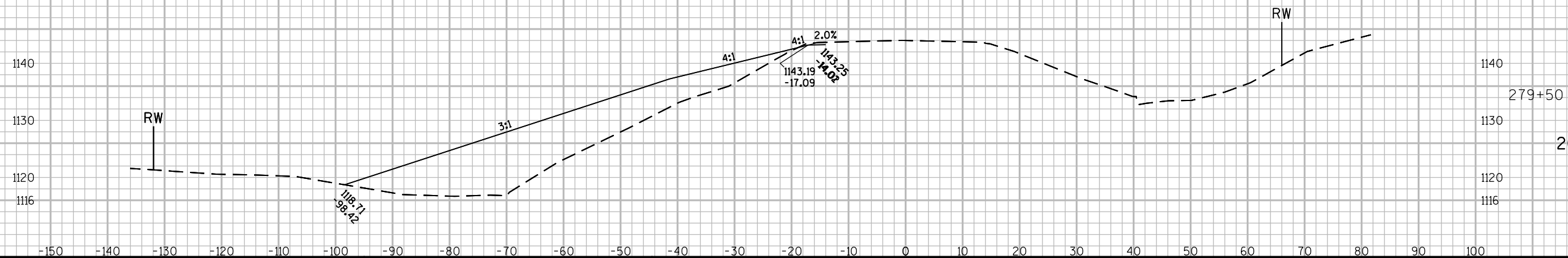
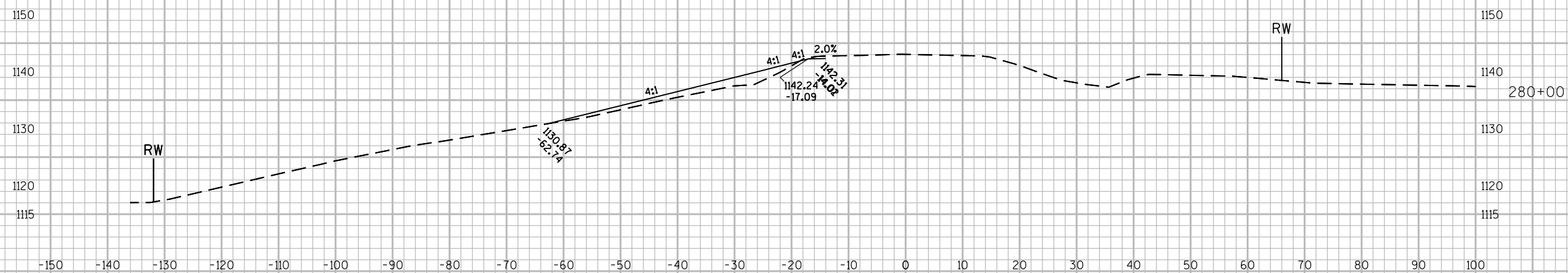
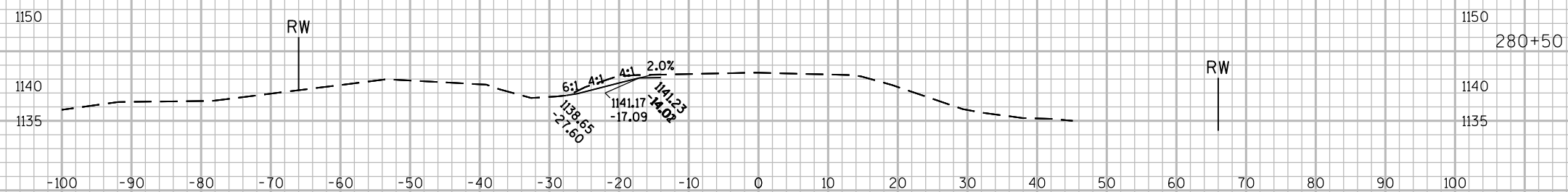
WISDOT/CADDs SHEET 49

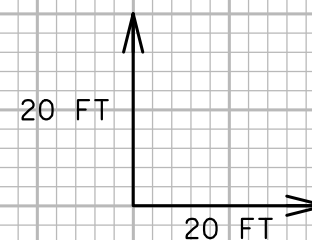
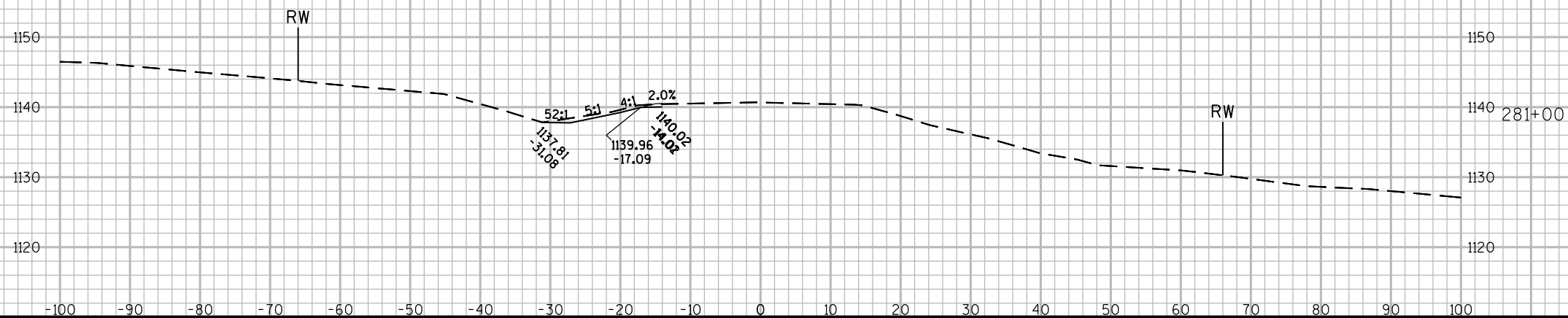
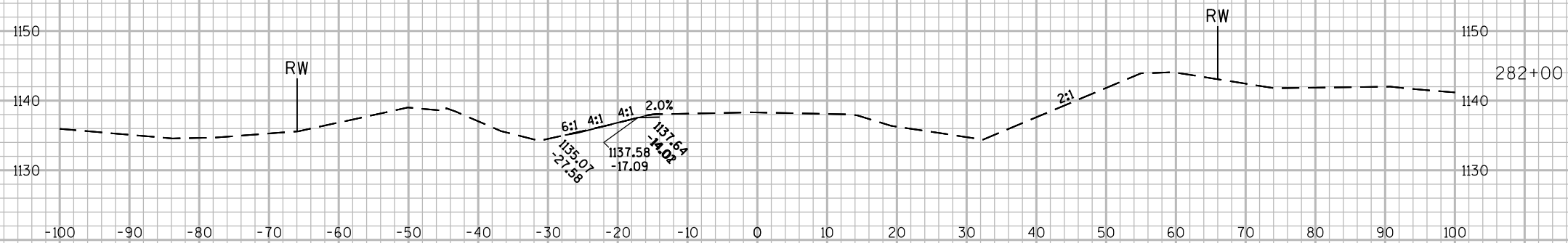


9

9







PROJECT NO: 9140-13-71

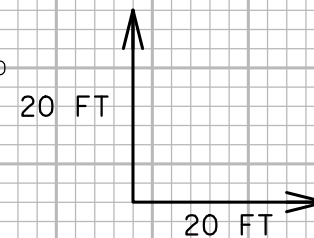
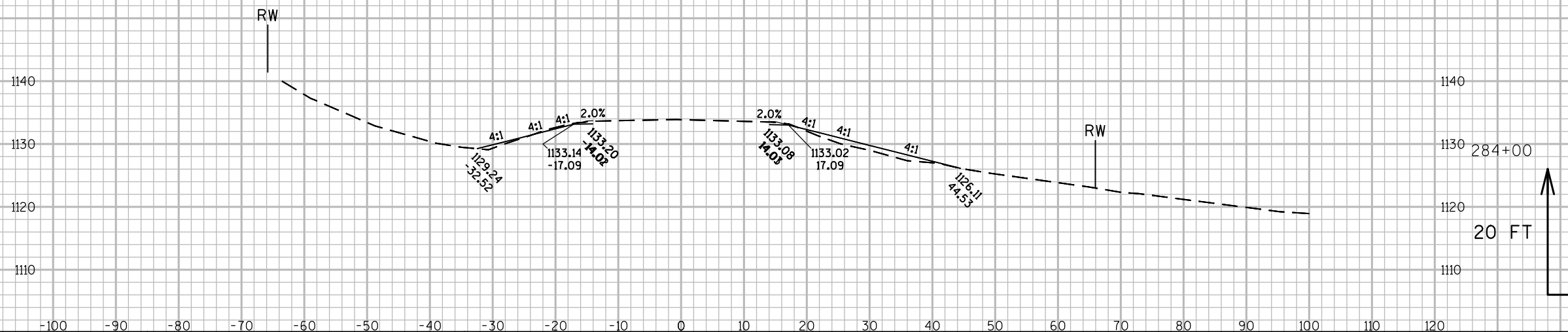
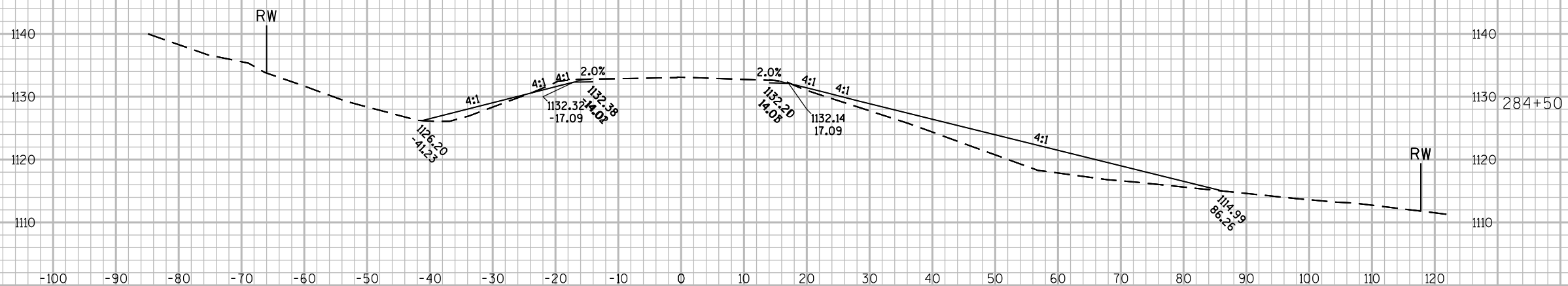
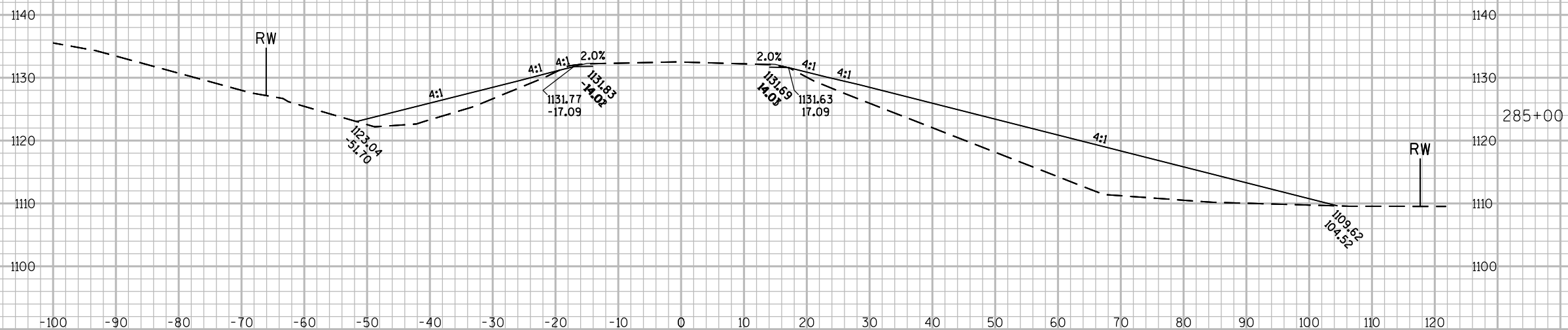
HWY: STH 64

COUNTY: OCONTO

CROSS SECTIONS: STH 64

SHEET 216

E



PROJECT NO: 9140-13-71

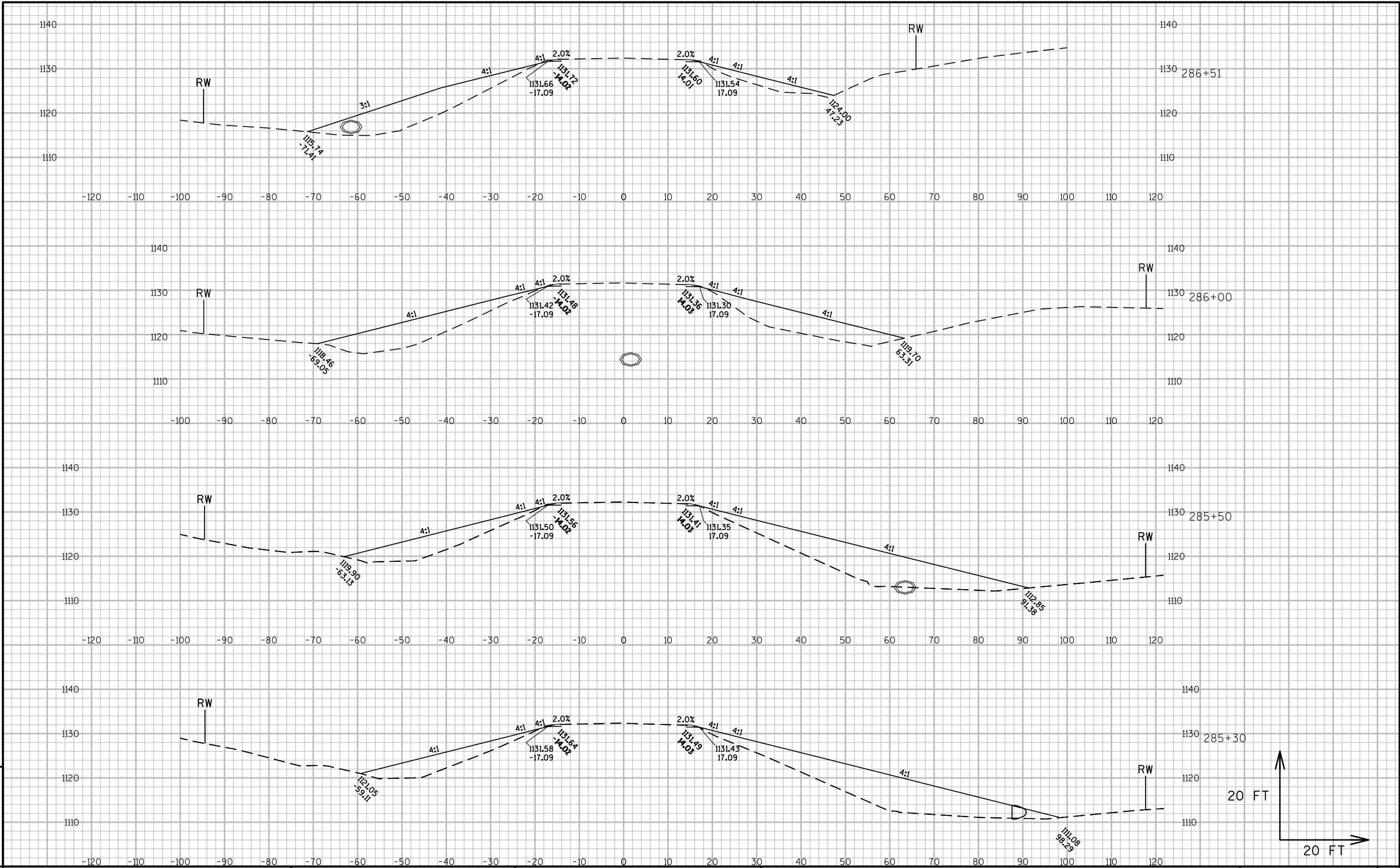
HWY: STH 64

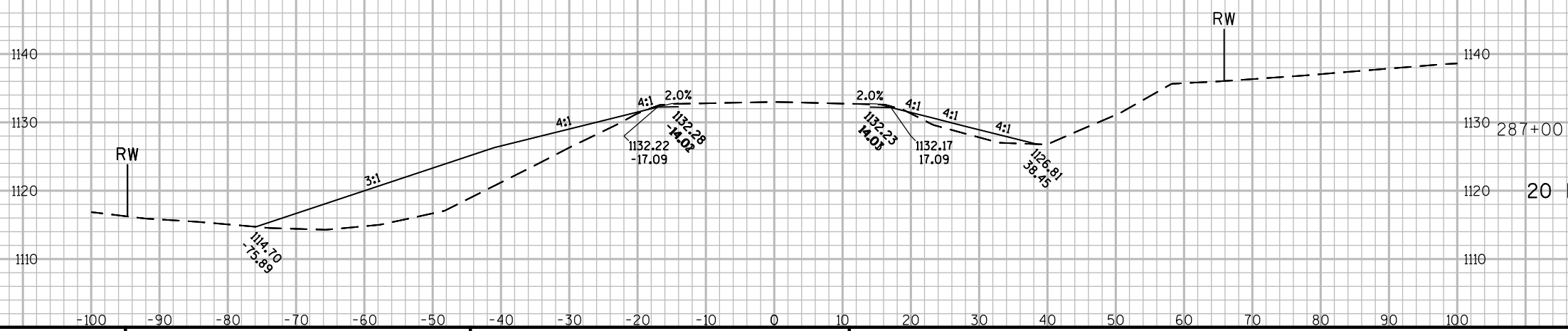
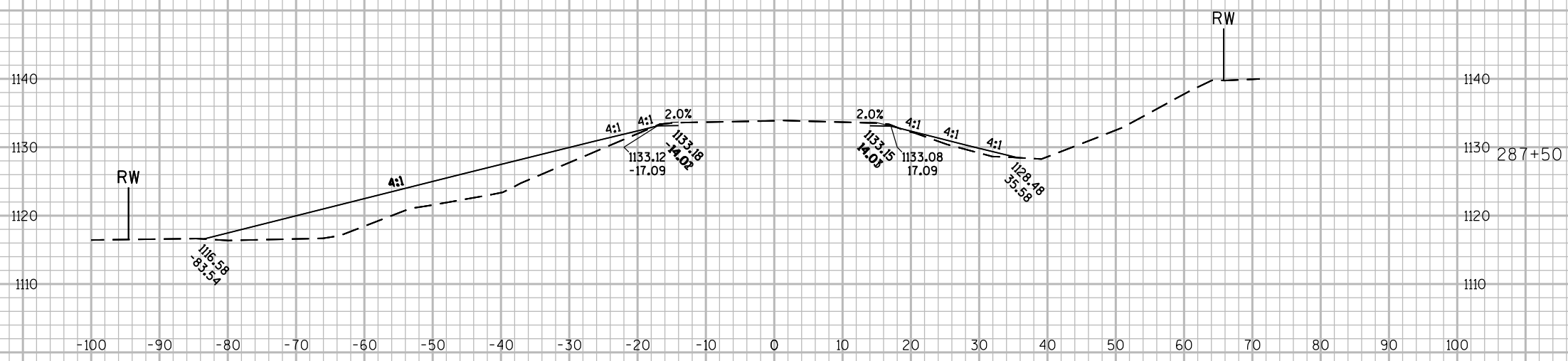
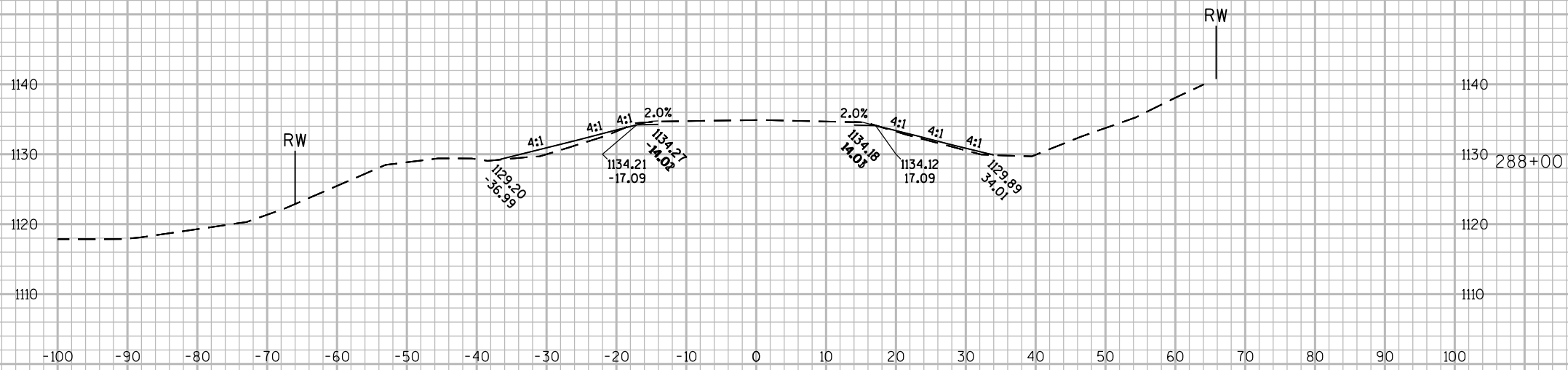
COUNTY: OCONTO

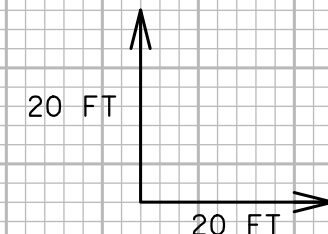
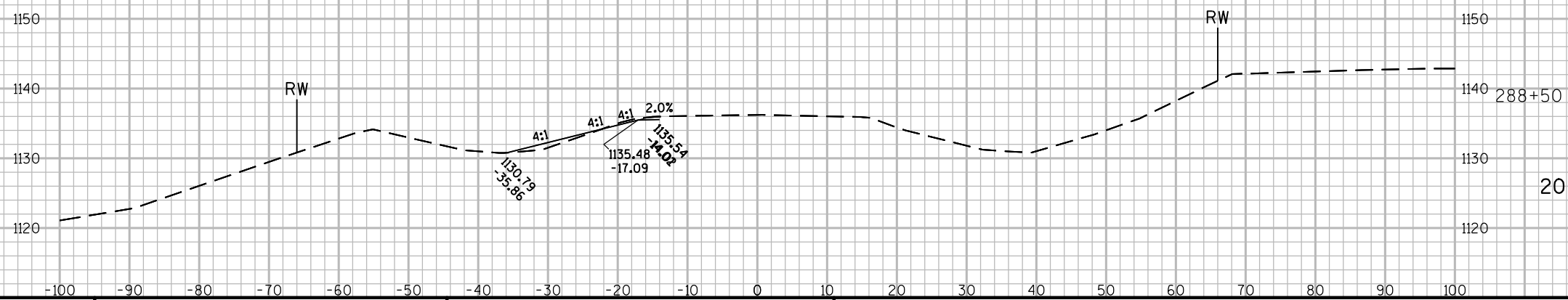
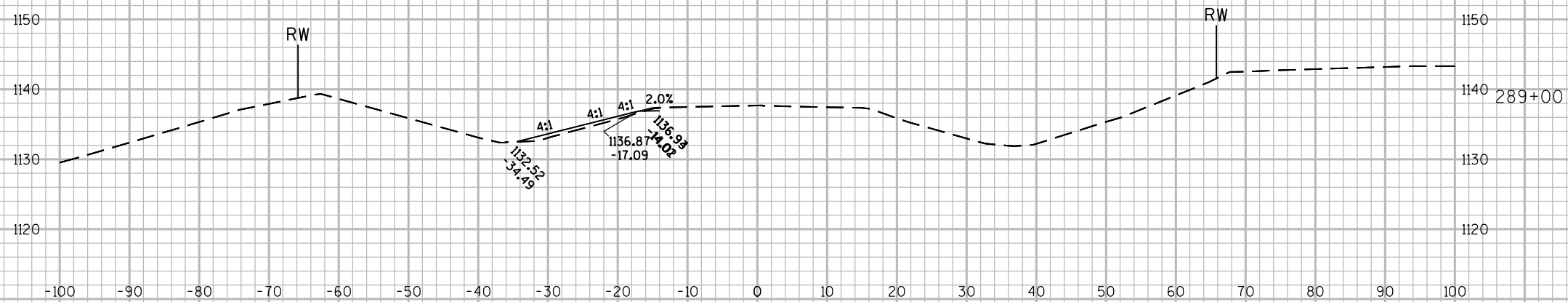
CROSS SECTIONS: STH 64

SHEET 218

E







PROJECT NO: 9140-13-71

HWY: STH 64

COUNTY: OCONTO

CROSS SECTIONS: STH 64

SHEET

221

E

FILE NAME : N:\PDS\C3D\91401300\SHEETSPLAN\STH 64_CROSS SECTIONS.DWG
LAYOUT NAME - GROUP 7 - (66)

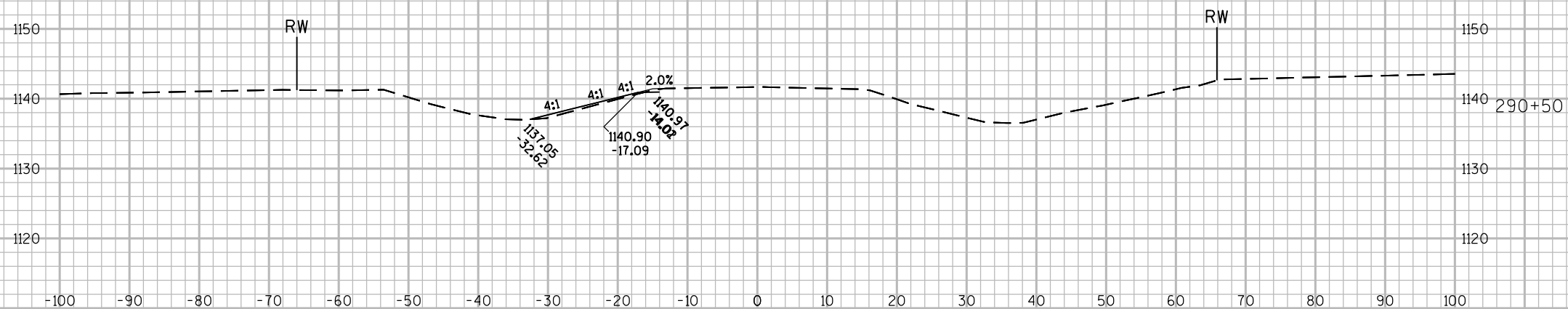
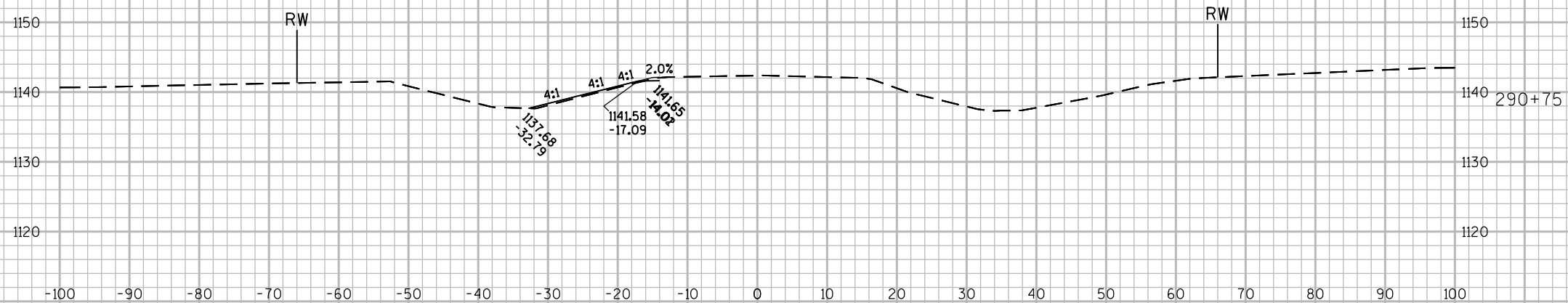
PLOT DATE : 5/1/2019 10:46 AM

PLOT BY : CREAPEAU, QUINTON

PLOT NAME :

PLOT SCALE : 1 IN:20 FT

WISDOT/CADDs SHEET 49



PROJECT NO: 9140-13-71

HWY: STH 64

COUNTY: OCONTO

CROSS SECTIONS: STH 64

SHEET 222

E

FILE NAME : N:\PDS\C3D\91401300\SHEETSPLAN\STH 64_CROSS SECTIONS.DWG
LAYOUT NAME - GROUP 7 - (67)

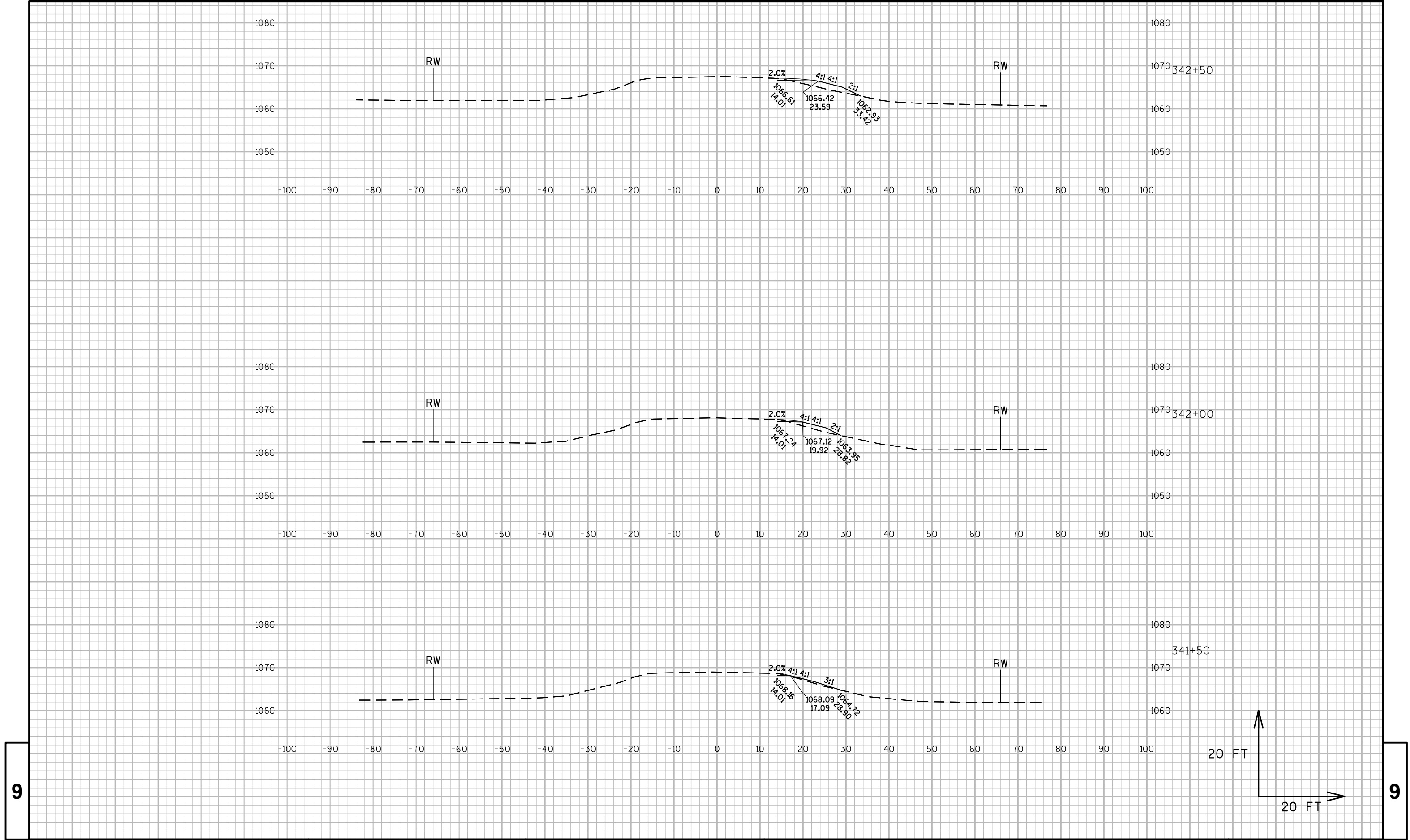
PLOT DATE : 5/1/2019 10:46 AM

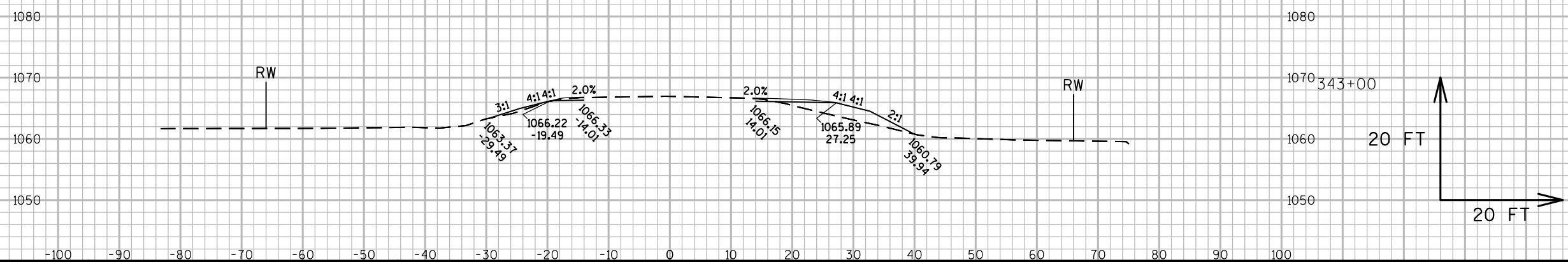
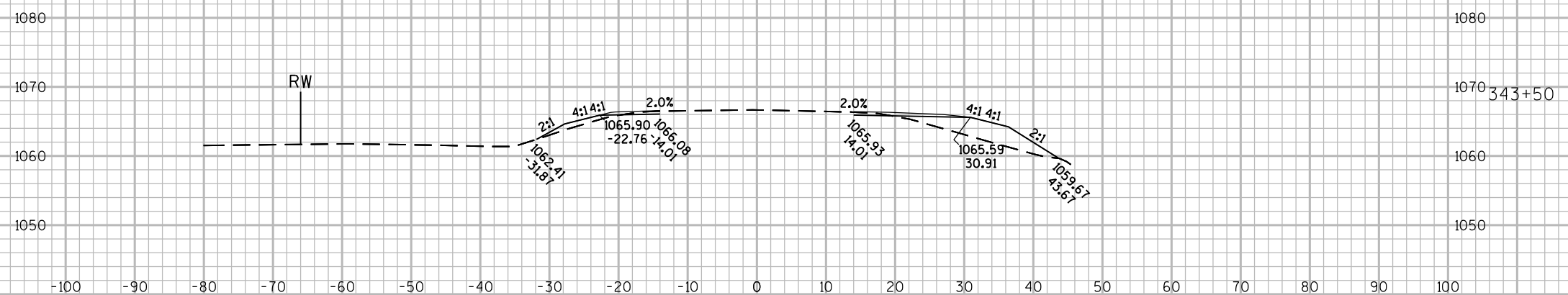
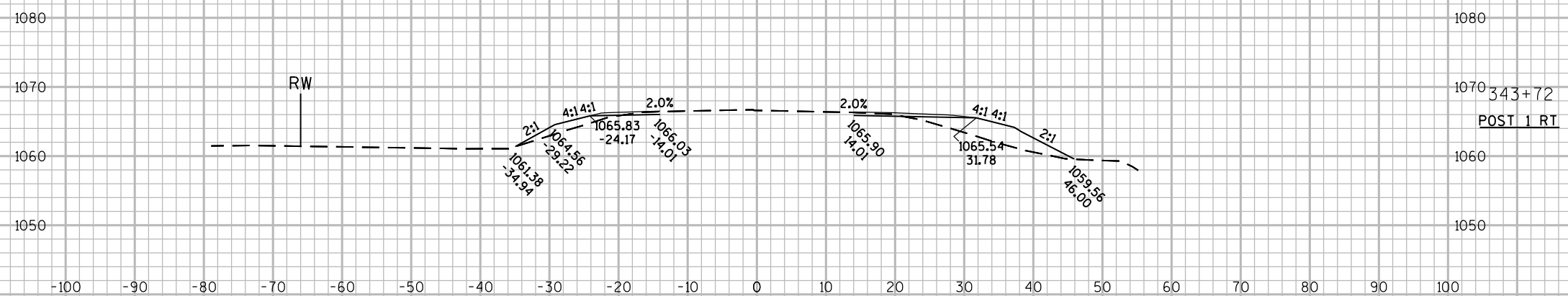
PLOT BY : CREAPEAU, QUINTON

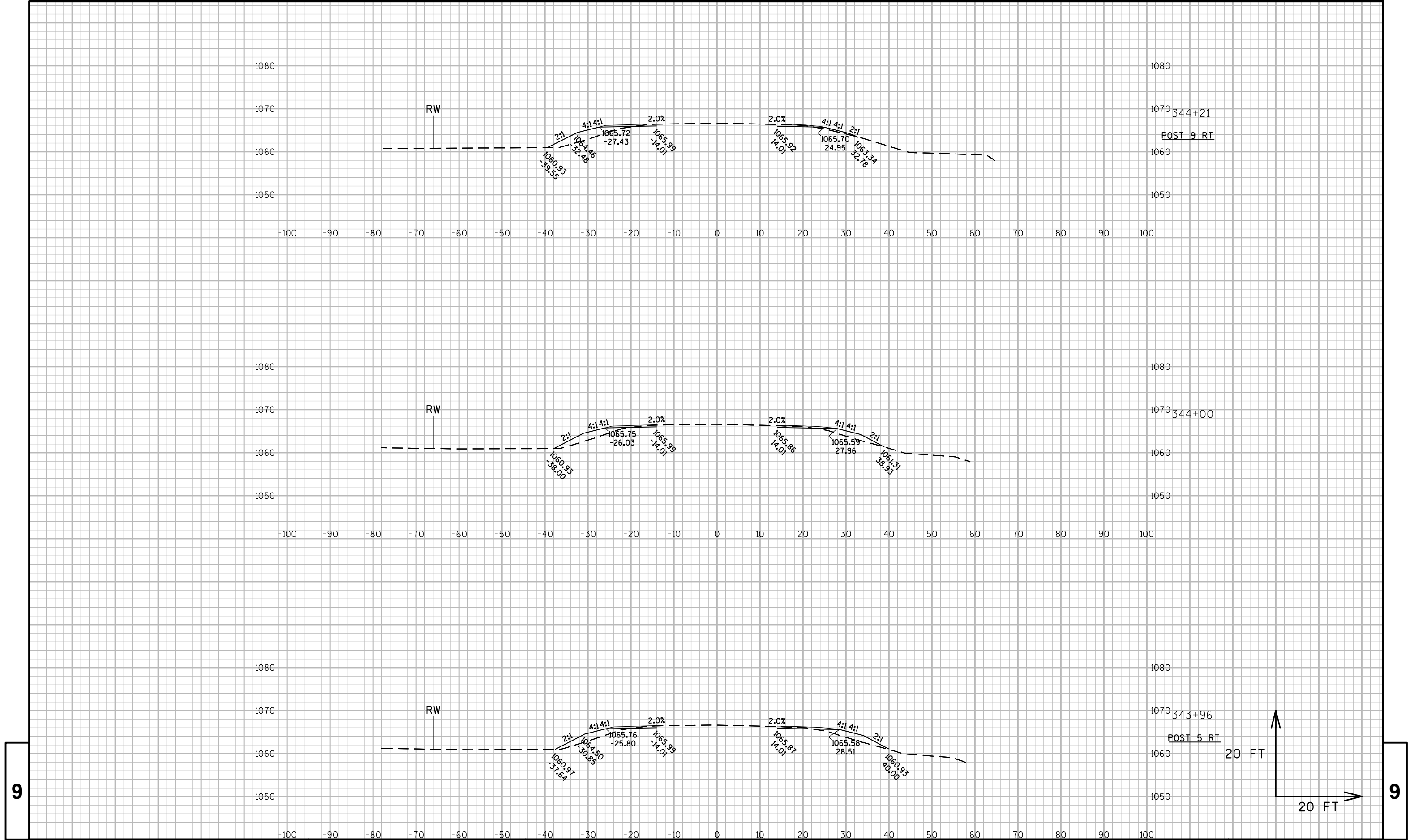
PLOT NAME :

PLOT SCALE : 1 IN:20 FT

WISDOT/CADDs SHEET 49







PROJECT NO: 9140-13-71

HWY: STH 64

COUNTY: OCONTO

CROSS SECTIONS: STH 64

SHEET

225

E

FILE NAME : N:\PDS\C3D\91401300\SHEETSP\STH 64_CROSS SECTIONS.DWG
LAYOUT NAME - GROUP 8- (71)

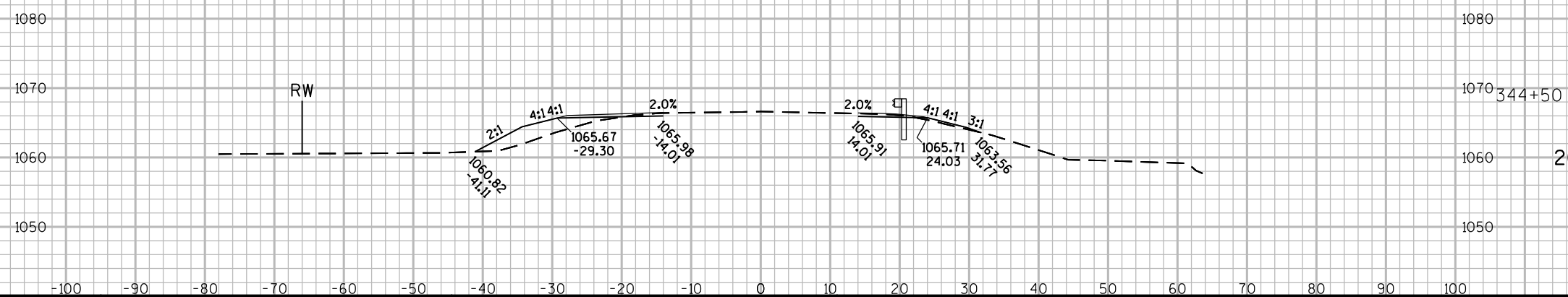
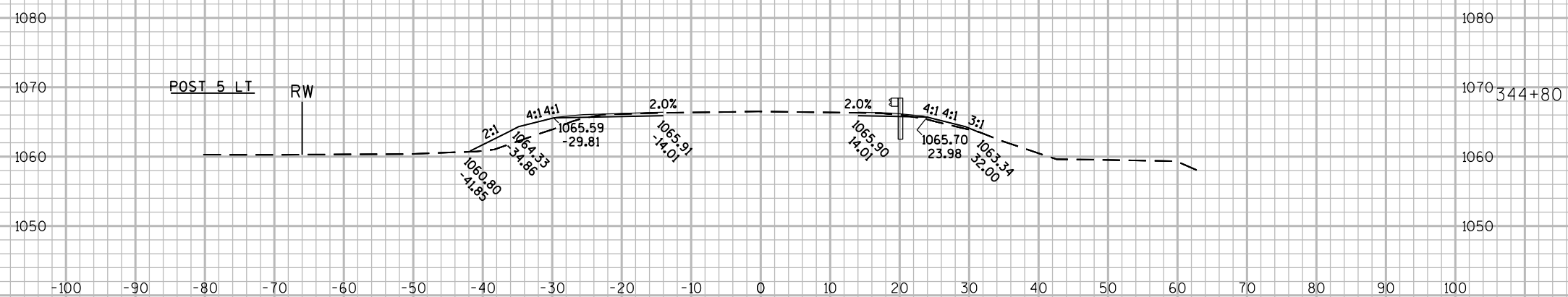
PLOT DATE : 5/1/2019 10:55 AM

PLOT BY : CREAPEAU, QUINTON

PLOT NAME :

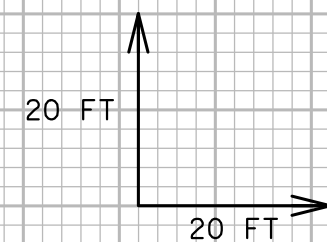
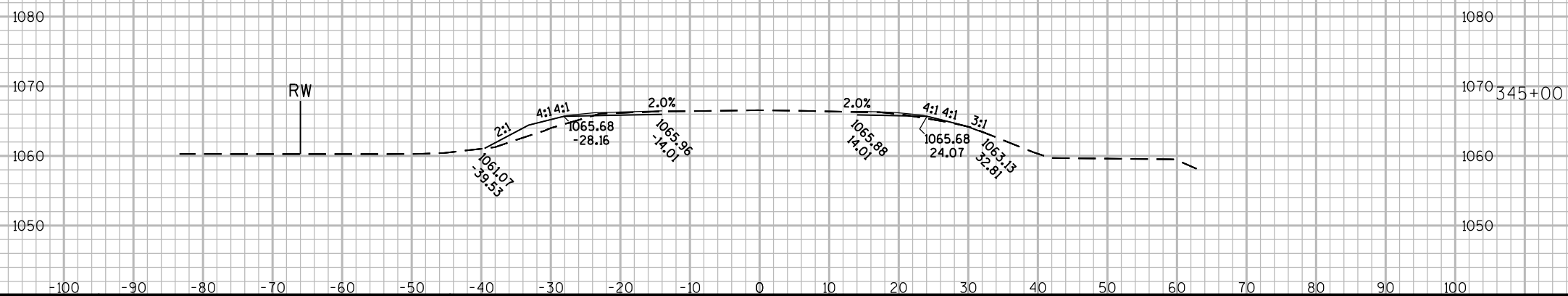
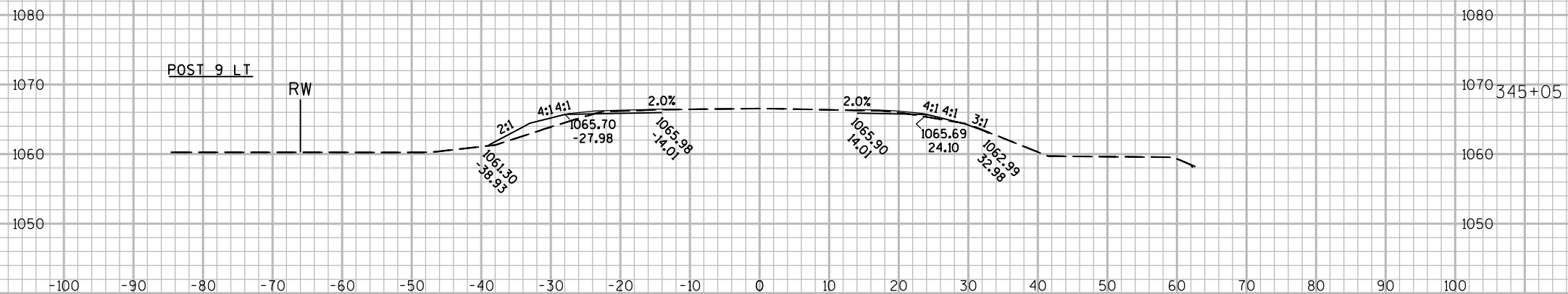
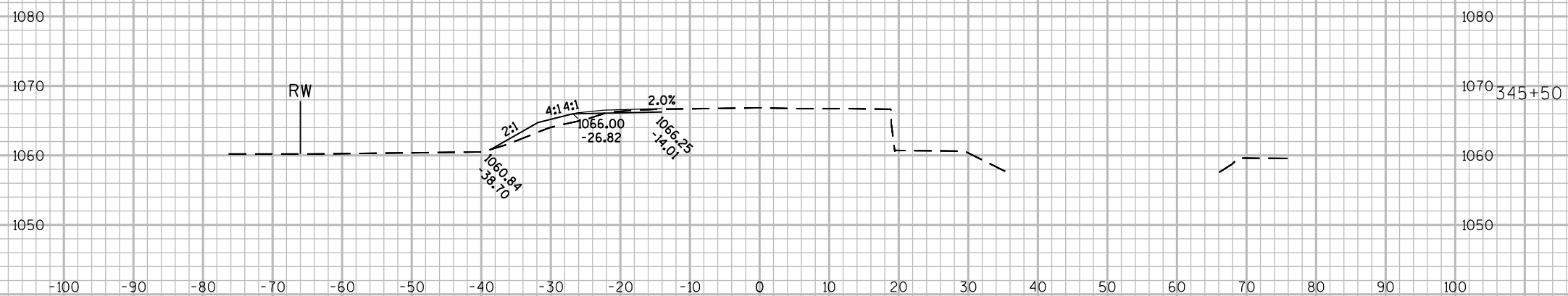
PLOT SCALE : 1 IN:20 FT

WISDOT/CADDs SHEET 49



20 FT

20 FT



PROJECT NO: 9140-13-71

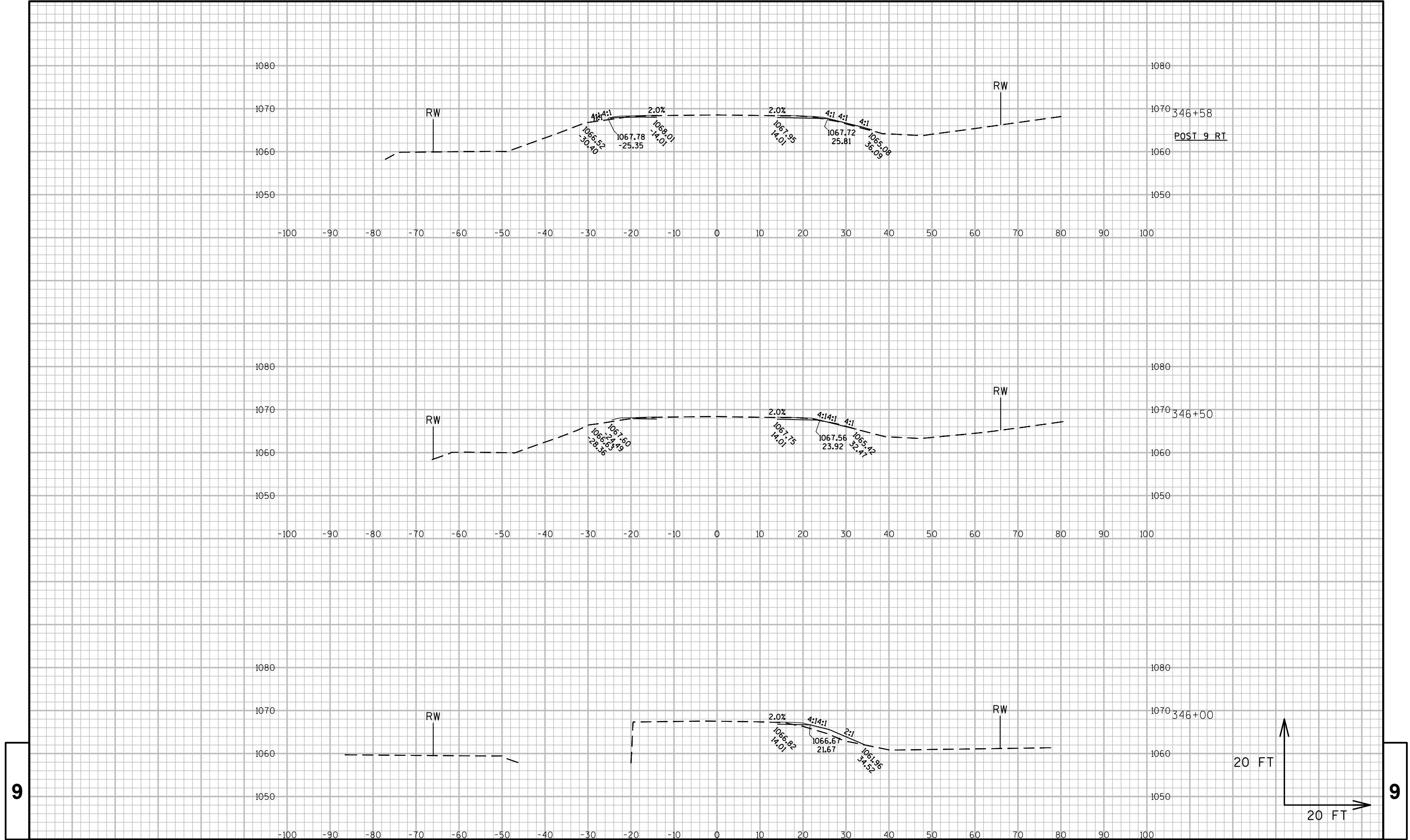
HWY: STH 64

COUNTY: OCONTO

CROSS SECTIONS: STH 64

SHEET 227

E



PROJECT NO: 9140-13-71

HWY: STH 64

COUNTY: OCONTO

CROSS SECTIONS: STH 64

SHEET

228

E

FILE NAME : N:\PDS\C3D\91401300\SHEETSPLAN\STH 64_CROSS SECTIONS.DWG
LAYOUT NAME - GROUP 8 - (74)

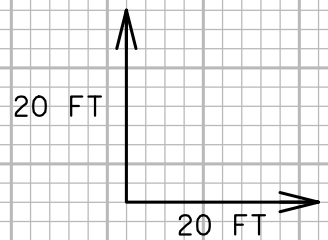
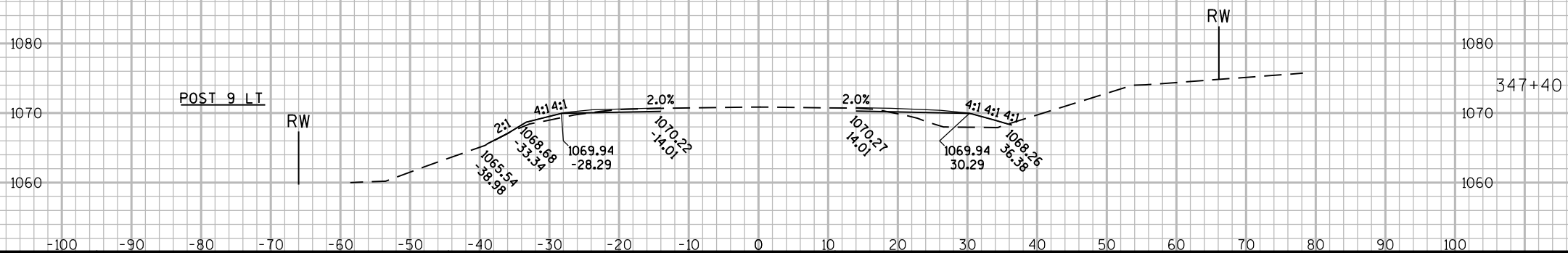
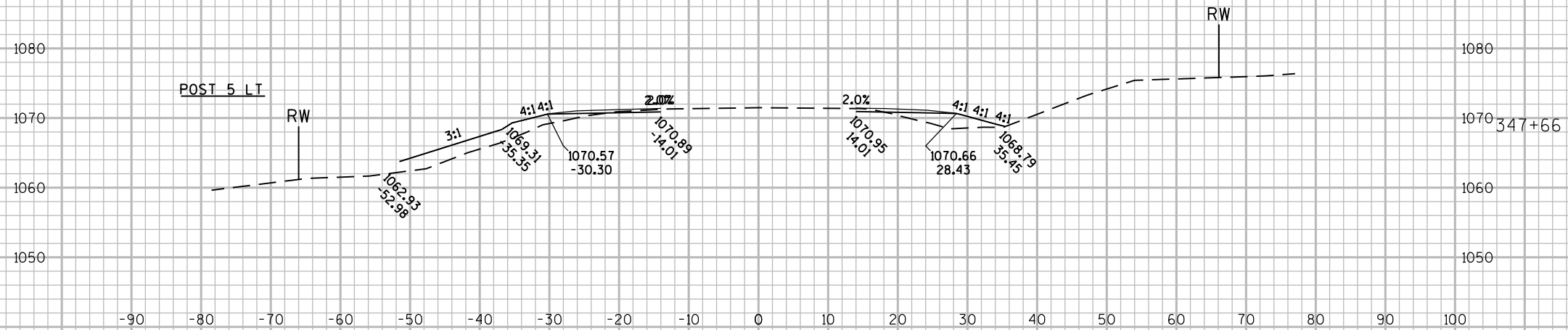
PLOT DATE : 5/1/2019 10:56 AM

PLOT BY : CREAPEAU, QUINTON

PLOT NAME :

PLOT SCALE : 1 IN:20 FT

WISDOT/CADDs SHEET 49



PROJECT NO: 9140-13-71

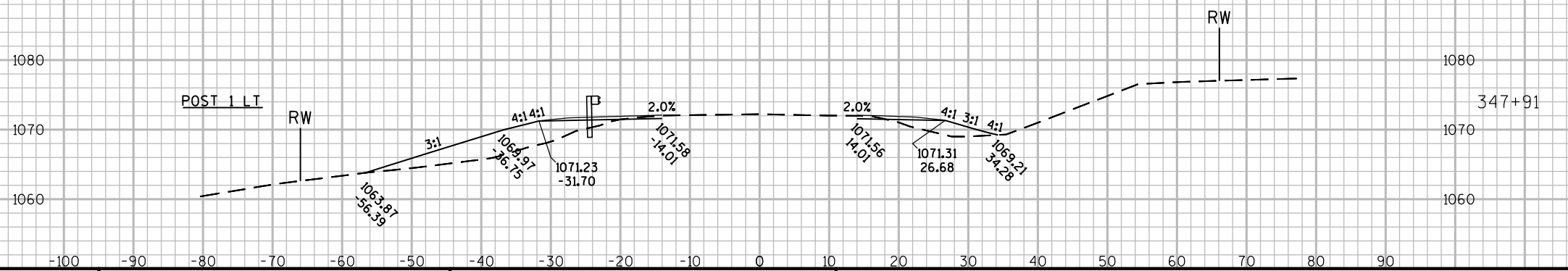
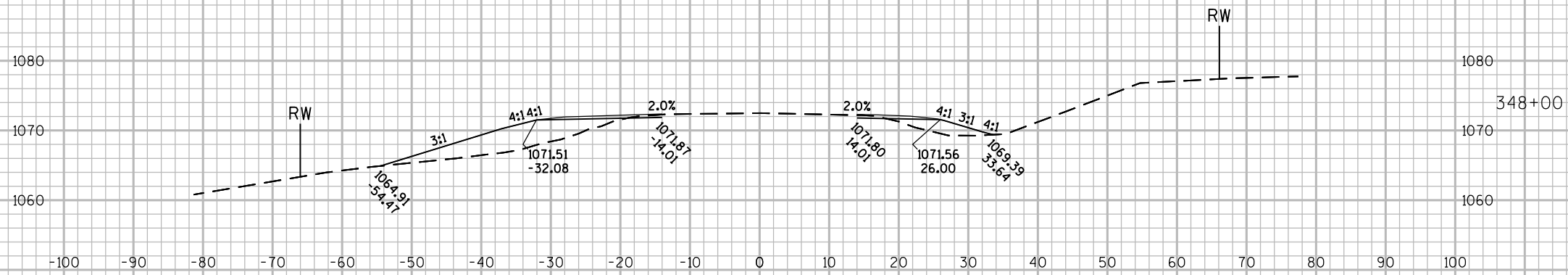
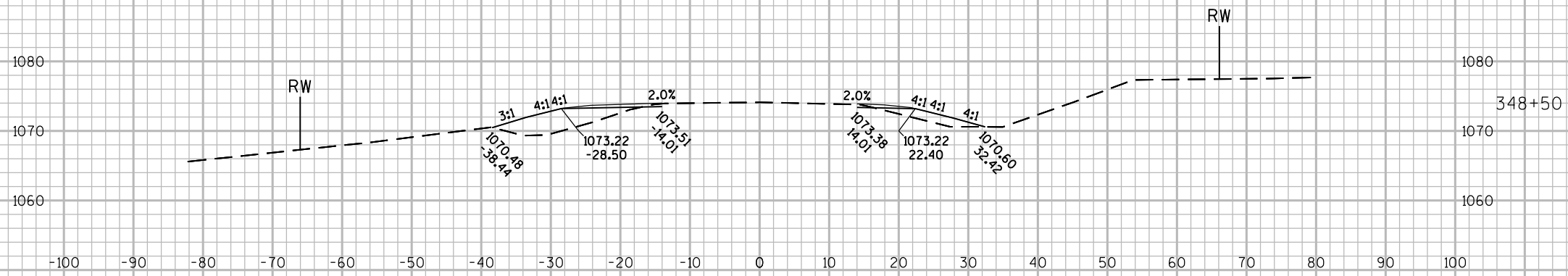
HWY: STH 64

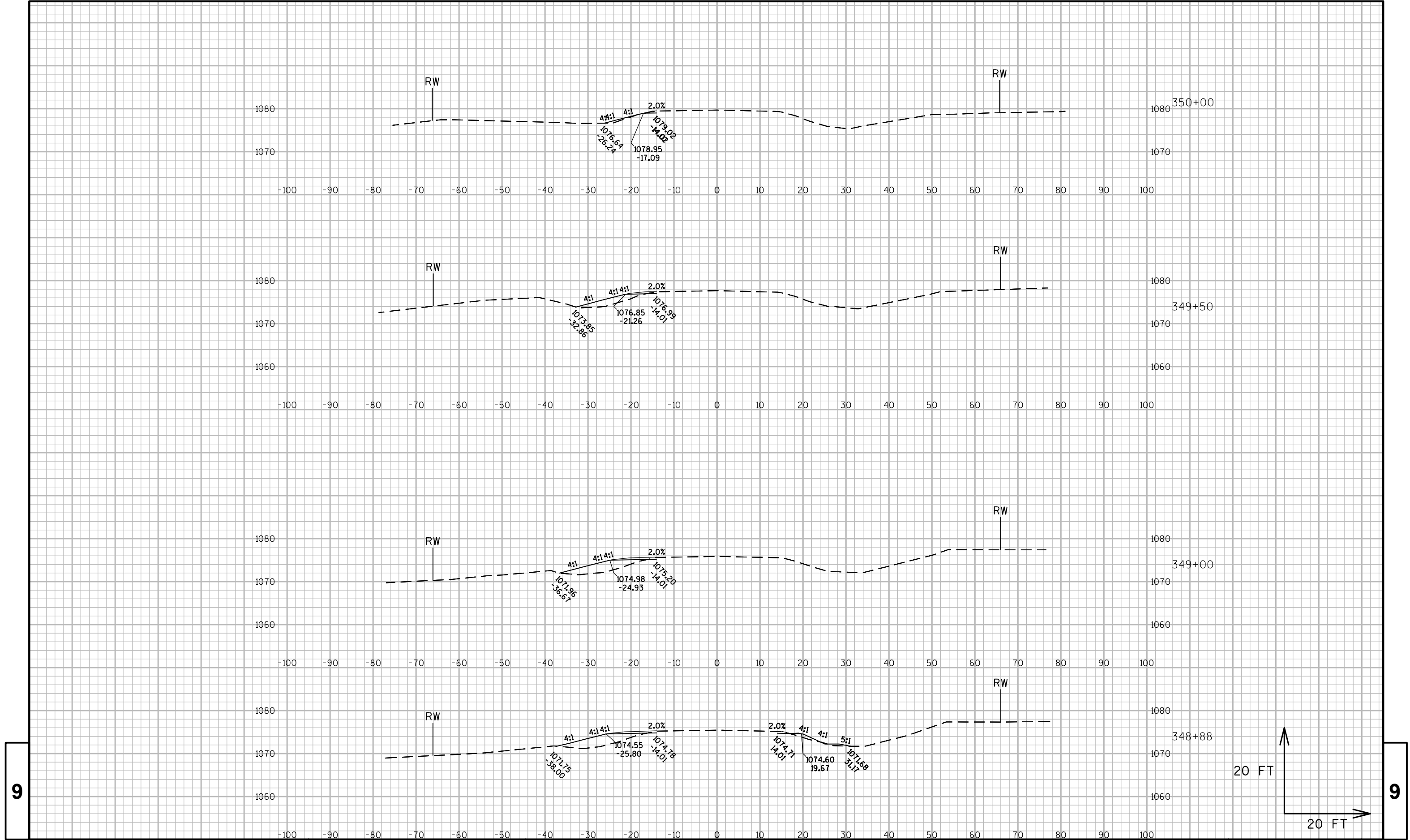
COUNTY: OCONTO

CROSS SECTIONS: STH 64

SHEET 230

E





PROJECT NO: 9140-13-71

HWY: STH 64

COUNTY: OCONTO

CROSS SECTIONS: STH 64

SHEET

232

E

FILE NAME : N:\PDS\C3D\91401300\SHEETSPLAN\STH 64_CROSS SECTIONS.DWG
LAYOUT NAME - GROUP 8 - (78)

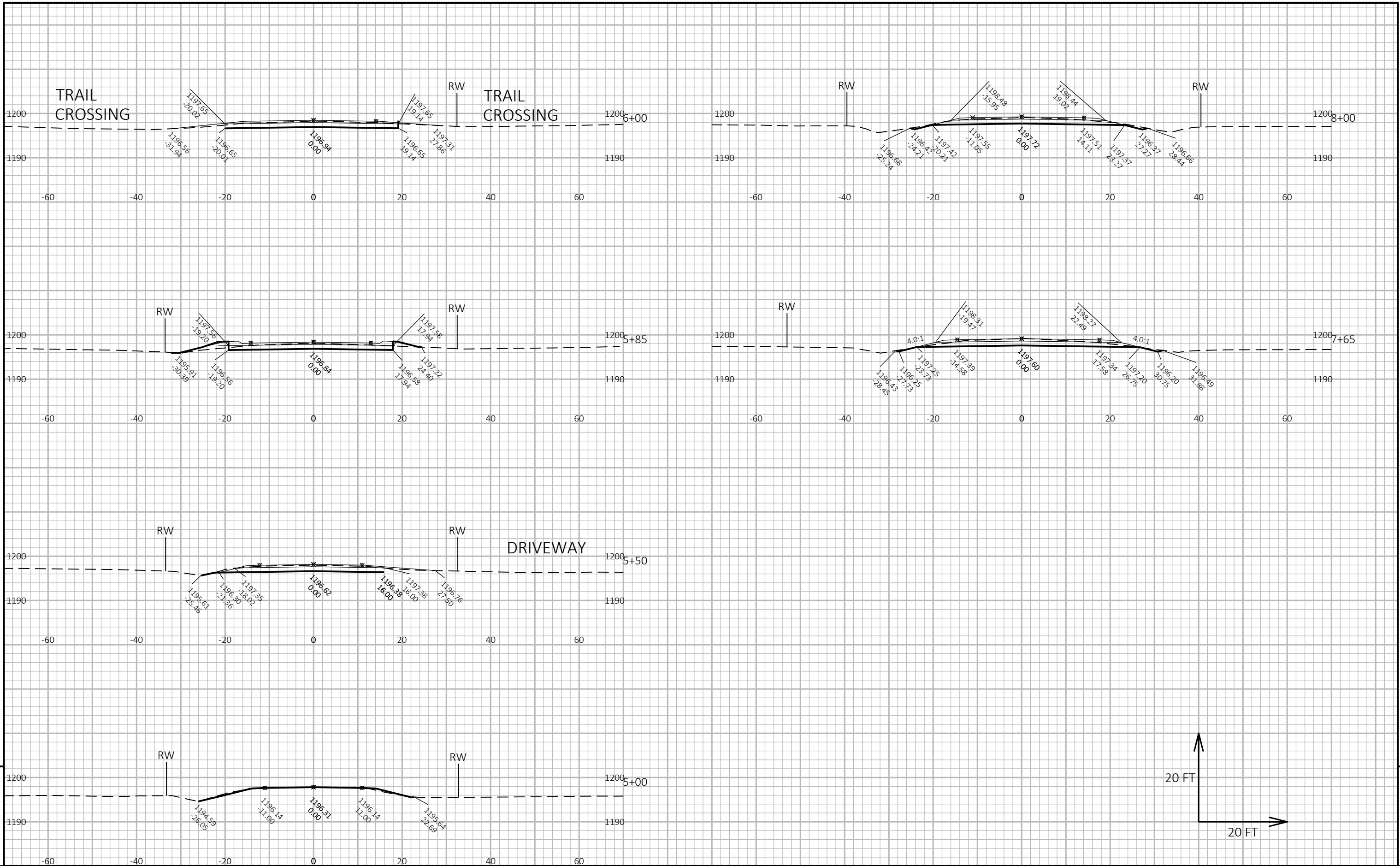
PLOT DATE : 5/1/2019 10:57 AM

PLOT BY : CREAPEAU, QUINTON

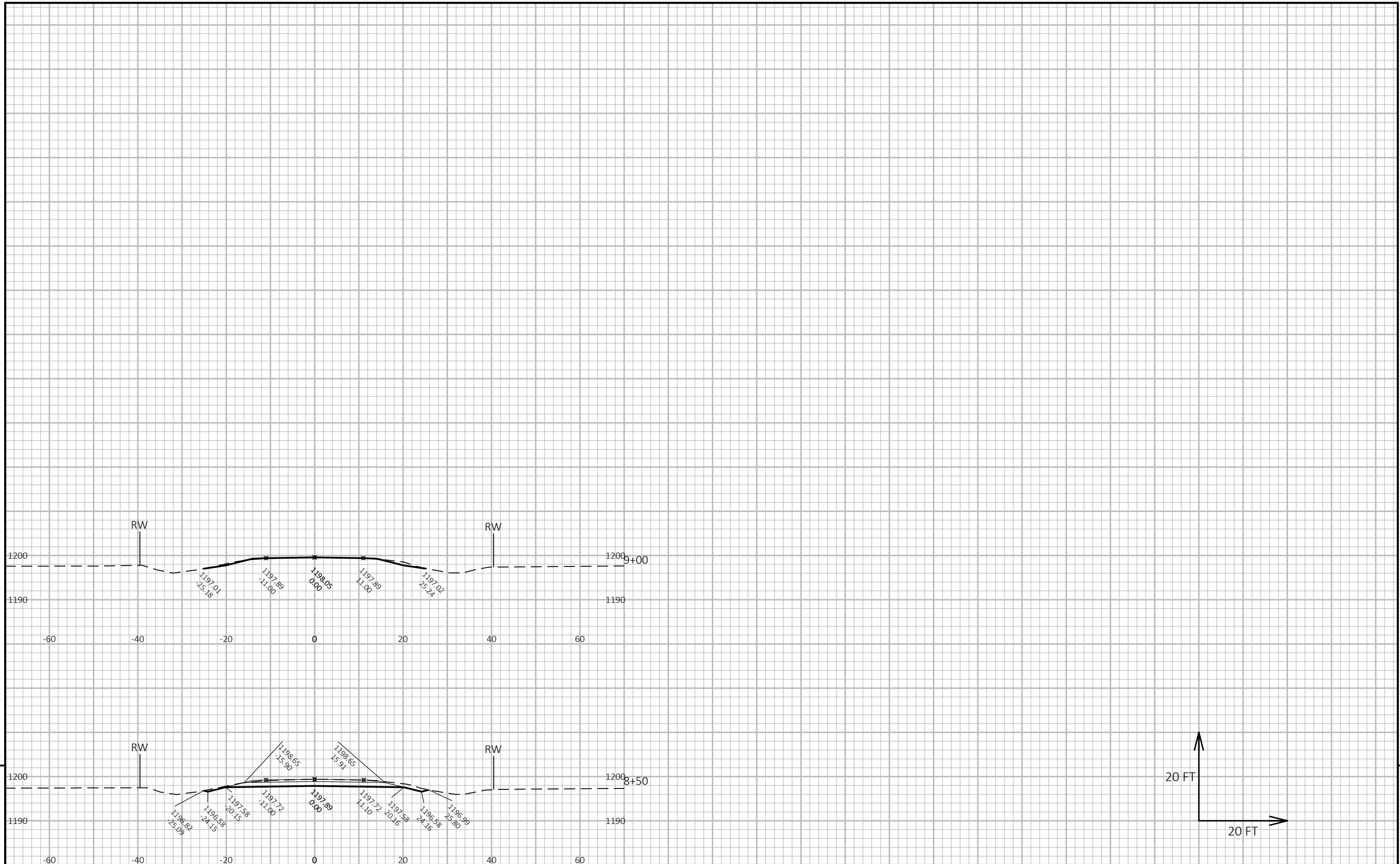
PLOT NAME :

PLOT SCALE : 1 IN:20 FT

WISDOT/CADDs SHEET 49

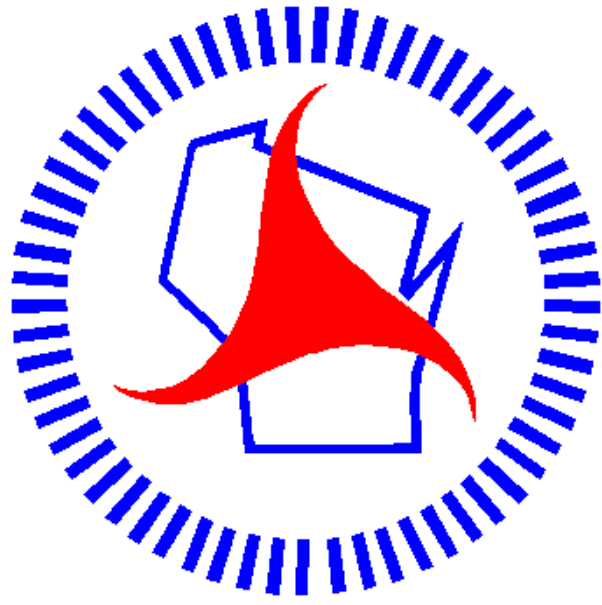


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Notes



Wisconsin Department of Transportation

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