LAX

MARCH 2018

PROJECT ID: 5126-00-72

WITH: N/A

COUNTY: MONROE

ORDER OF SHEETS

TOTAL SHEETS = 42

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

CTH W - CTH A

(BR. LITTLE LEMONWEIR RIVER BRIDGE B-41-0310)

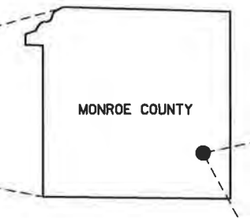
CTH N

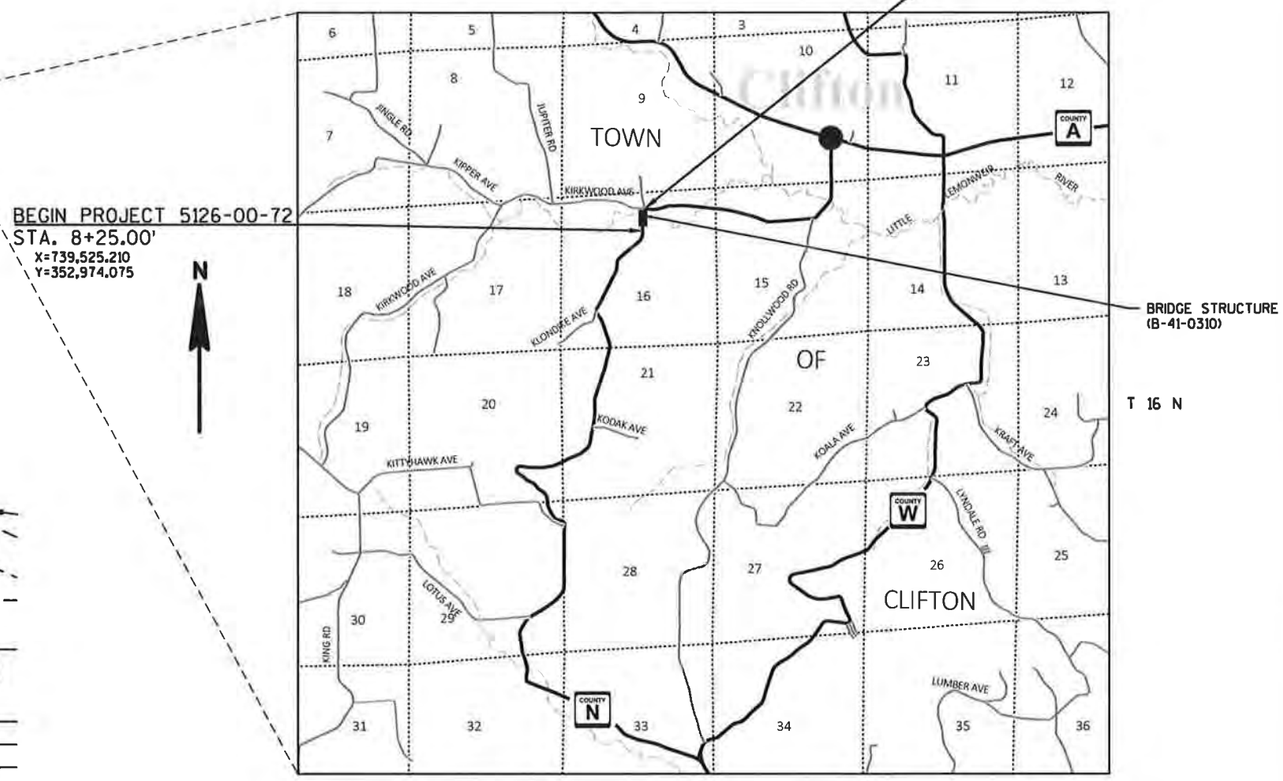
MONROE COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
5126-00-72	———	———

STATE PROJECT NUMBER

5126-00-72





LAYOUT

SCALE 0 1 MI

TOTAL NET LENGTH OF CENTERLINE = 0.057 MILES

DESIGN DESIGNATION CTH N

A.A.D.T.	(2018)	=	86
A.A.D.T.	(2038)	=	94
D.H.V.		=	6.4
D.D.		=	60/40
T.		=	7.6
DESIGN SPEED		=	15 MPH
ESALS		=	37,000

CONVENTIONAL SYMBOLS

PLAN		PROFILE	
CORPORATE LIMITS		GRADE LINE	
PROPERTY LINE		ORIGINAL GROUND	
LOT LINE		MARSH OR ROCK PROFILE (To be noted as such)	ROCK
LIMITED HIGHWAY EASEMENT		SPECIAL DITCH	LABEL
EXISTING RIGHT OF WAY		GRADE ELEVATION	95.36
PROPOSED OR NEW R/W LINE			
SLOPE INTERCEPT		CULVERT (Profile View)	
REFERENCE LINE	300'EB'	UTILITIES	
EXISTING CULVERT		ELECTRIC	E
PROPOSED CULVERT (Box or Pipe)		FIBER OPTIC	FO
COMBUSTIBLE FLUIDS	CAUTION	GAS	G
		SANITARY SEWER	SAN
MARSH AREA		STORM SEWER	SS
		TELEPHONE	T
WOODED OR SHRUB AREA		WATER	W
		UTILITY PEDESTAL	
		POWER POLE	
		TELEPHONE POLE	

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, MONROE COUNTY, NAD83 (2016), 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 NORTH AMERICAN VERTICAL DATUM OF 1988, DAVD88 (2012)

ACCEPTED FOR

COUNTY of MONROE

DATE: 10/19/17

(HIGHWAY COMMISSIONER)

ORIGINAL PLANS PREPARED BY

AYRES ASSOCIATES

WISCONSIN
KAREN L. WALDERA
E-39158
TAYLOR
WI
PROFESSIONAL ENGINEER

10/4/17

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor: AYRES ASSOCIATES

Designer: AYRES ASSOCIATES

Management Consultant: KL ENGINEERING, INC.

APPROVED FOR THE DEPARTMENT

DATE: 10/31/17

(Management Consultant Signature)

E

FILE NAME : V:\TRANS-MD\421051 CTH N (WEST)\C3D\SHEETSPLAN\0101_TI.DWG

PLOT DATE : 10/3/2017 2:29 PM

PLOT BY : RESHESKE, CARRIE

PLOT NAME :

GENERAL NOTES

NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK. ANY UTILITY WHICH IS NOT A MEMBER OF DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT LOCATION THAT ARE NOT SHOWN. THE CONTRACTOR IS RESPONSIBLE FOR FIELD LOCATING ALL UTILITIES.

MAINTAIN ACCESS TO ALL DRIVEWAYS AND ALL BUSINESSES AT ALL TIMES.

A SAWED JOINT WILL BE REQUIRED WHERE NEW PAVEMENT IS TO MEET AN EXISTING PAVED SURFACE.

TRAFFIC CONTROL LOCATIONS AS SHOWN IN THE PLAN ARE SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

ALL SIGN LOCATIONS SHALL BE REVIEWED BY THE ENGINEER PRIOR TO INSTALLATION.

NO TREES OR SHRUBS SHALL BE REMOVED UNLESS DESIGNATED FOR REMOVAL BY THE ENGINEER.

PROTECT FROM DAMAGE AND COMPLETE SHOULDER WORK AROUND ANY EXISTING SIGNS OR MAILBOXES THAT ARE TO REMAIN IN PLACE. THE EXACT LOCATION OF PRIVATE ENTRANCES IS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

RESTORATION OF EXPOSED SLOPES AND DITCHES SHALL TAKE PLACE WITHIN 7 CALENDAR DAYS AFTER FINISHED GRADING IS COMPLETE.

WETLANDS ARE PRESENT IN THE PROJECT AREA. DO NOT DISTURB WETLANDS OUTSIDE THE PROPOSED SLOPE INTERCEPTS.

CONTACT THE PROJECT ENGINEER AT LEAST TWO WEEKS PRIOR TO WORK NEAR ANY PUBLIC SURVEY MONUMENT.

IF AN EXISTING SIGN IS TO BE REMOVED AND REPLACED WITH A NEW SIGN, DO NOT REMOVE THE EXISTING SIGN PRIOR TO INSTALLATION OF THE NEW SIGN.

THE LOCATIONS OF EROSION CONTROL ITEMS SHALL BE DETERMINED BY THE ENGINEER. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL SUCH TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY.

ASPHALTIC SURFACE LAYERS:
- -UPPER: 1¾" (12.5 MM NOMINAL AGGREGATE SIZE)
- -LOWER: 2¼" (19.0 MM NOMINAL AGGREGATE SIZE)

ABBREVIATIONS

A.D.T.	AVERAGE DAILY TRAFFIC
ATMS	ARTERIAL TRAFFIC MANAGEMENT SYSTEM
BM	BENCHMARK
BOC	BACK OF CURB
BTWN	BETWEEN
C&G	CURB AND GUTTER
C.E.	COMMERCIAL ENTRANCE
CONST	CONSTRUCTION
CP	CONTROL POINT
CTR.	CENTER
D.D.	DIRECTIONAL DISTRIBUTION
D.H.V.	DESIGN HOURLY VOLUME
DMS	DYNAMIC MESSAGE SIGN
EB	EASTBOUND
EXIST	EXISTING
GALV.	GALVANIZED
HMA	HOT MIX ASPHALT
H.S.	HIGH STRENGTH
ITS	INTELLIGENT TRAFFIC SYSTEM
MAX	MAXIMUM
MIN	MINIMUM
NB	NORTHBOUND
NOR	NORMAL
PC	POINT OF CURVATURE
PCC	POINT OF COMMON CURVATURE
PGL	PROFILE GRADE LINE
PI	POINT OF INTERSECTION
PRC	POINT OF REVERSE CURVATURE
PT	POINT OF TANGENCY
PVT	PAVEMENT
R/L	REFERENCE LINE
REQ'D	REQUIRED
SB	SOUTHBOUND
SYM	SYMMETRICAL
T.	PERCENT TRUCKS
TCC	TRAFFIC CONDITION CAMERA
TYP	TYPICAL
VAR	VARIABLE EXISTING R/W
WB	WESTBOUND
Wt.	WEIGHT
X-WALK	CROSS WALK

PROJECT CONTACTS

MONROE COUNTY HIGHWAY DEPT.
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WISCONSIN DEPARTMENT OF NATURAL RESOURCES
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3550 MORMON COULEE ROAD
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DESIGNER
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AYRES ASSOCIATES
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EAU CLAIRE, WI 54701
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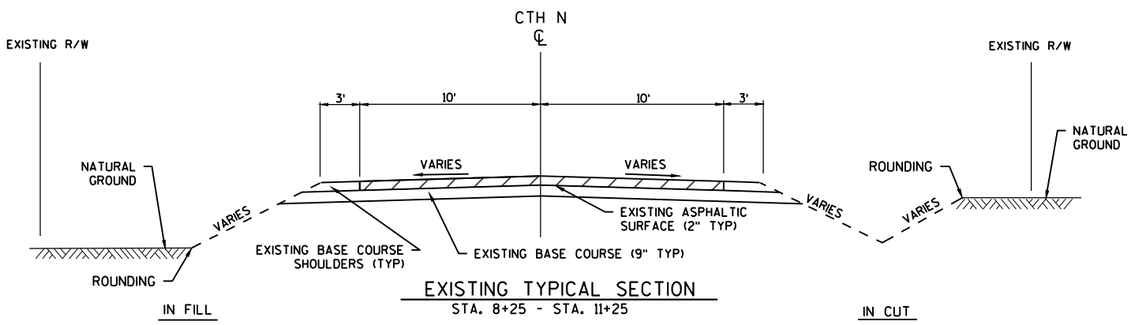
ROY BOYLES
489 NORTH OAKWOOD STREET
OAKDALE, WI 54649
P: (608) 372-4131
E: RBOYLES@OAKDALEREC.COM

LEMONWEIR VALLEY TELEPHONE COMPANY
KEVIN BARTH
127 US HWY 12
CAMP DOUGLAS, WI 54618
P: (608) 427-6410
E: KEVIN.BARTH@GETLYNXX.COM

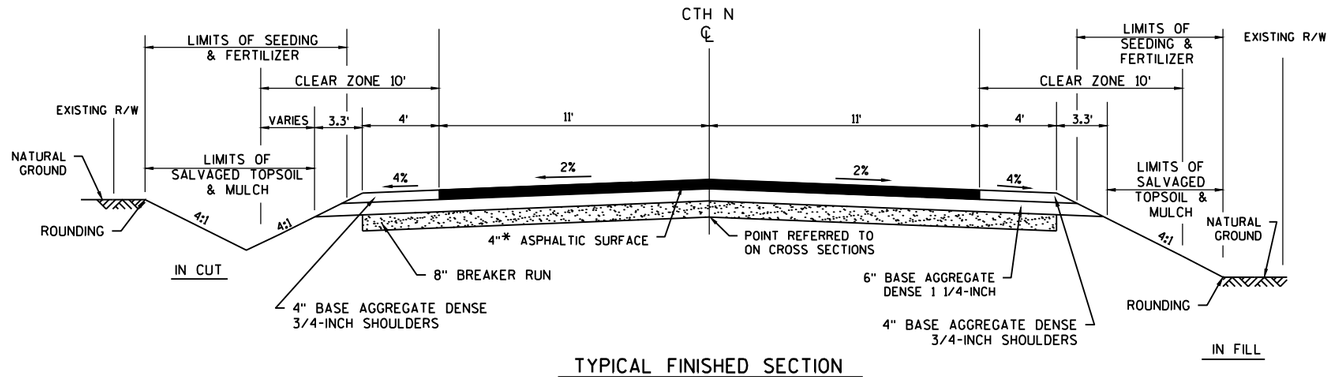
DAIRYLAND POWER COOPERATIVE
ROB MALY
3200 EAST AVENUE S
PO BOX 817
LA CROSSE, WI 54602
P: (608) 578-2633
E: ROB.MALY@DAIRYLANDPOWER.COM

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

** DENOTES UTILITIES THAT ARE NOT DIGGERS HOTLINE MEMBERS



EXISTING TYPICAL SECTION
STA. 8+25 - STA. 11+25



TYPICAL FINISHED SECTION
STA. 8+25 - STA. 11+25

*ASPHALT TO TAPER FROM BRIDGE WIDTH TO 22' AT 25' FROM BRIDGE ENDS

PROJECT NO: 5126-00-72	HWY: CTH N (west)	COUNTY: MONROE	TYPICAL SECTIONS & GENERAL NOTES	SHEET 2	E

Estimate Of Quantities

5126-00-72

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	3.000	3.000
0004	201.0205	Grubbing	STA	3.000	3.000
0006	203.0600.S	Removing Old Structure Over Waterway With Minimal Debris (station) 01. 10+00	LS	1.000	1.000
0008	205.0100	Excavation Common **p**	CY	530.000	530.000
0010	206.1000	Excavation for Structures Bridges (structure) 01. B-41-310	LS	1.000	1.000
0012	210.1500	Backfill Structure Type A	TON	190.000	190.000
0014	213.0100	Finishing Roadway (project) 01. 5126-00-72	EACH	1.000	1.000
0016	305.0110	Base Aggregate Dense 3/4-Inch	TON	65.000	65.000
0018	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	375.000	375.000
0020	311.0110	Breaker Run	TON	395.000	395.000
0022	455.0605	Tack Coat	GAL	54.000	54.000
0024	465.0105	Asphaltic Surface	TON	171.000	171.000
0026	502.0100	Concrete Masonry Bridges	CY	151.000	151.000
0028	502.3200	Protective Surface Treatment	SY	155.000	155.000
0030	505.0400	Bar Steel Reinforcement HS Structures	LB	3,680.000	3,680.000
0032	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	16,150.000	16,150.000
0034	513.4061	Railing Tubular Type M (structure) 01. B-41-310	LF	121.000	121.000
0036	516.0500	Rubberized Membrane Waterproofing	SY	18.000	18.000
0038	550.0500	Pile Points	EACH	10.000	10.000
0040	550.1100	Piling Steel HP 10-Inch X 42 Lb	LF	250.000	250.000
0042	606.0300	Riprap Heavy	CY	140.000	140.000
0044	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	142.000	142.000
0046	618.0100	Maintenance And Repair of Haul Roads (project) 01. 5126-00-72	EACH	1.000	1.000
0048	619.1000	Mobilization	EACH	1.000	1.000
0050	624.0100	Water	MGAL	6.600	6.600
0052	625.0500	Salvaged Topsoil **p**	SY	1,440.000	1,440.000
0054	627.0200	Mulching **p**	SY	1,440.000	1,440.000
0056	628.1504	Silt Fence	LF	150.000	150.000
0058	628.1520	Silt Fence Maintenance	LF	300.000	300.000
0060	628.1905	Mobilizations Erosion Control	EACH	4.000	4.000
0062	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	4.000
0064	628.6005	Turbidity Barriers	SY	270.000	270.000
0066	628.7504	Temporary Ditch Checks	LF	50.000	50.000
0068	629.0210	Fertilizer Type B **p**	CWT	1.000	1.000
0070	630.0120	Seeding Mixture No. 20 **p**	LB	42.000	42.000
0072	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	4.000	4.000
0074	637.2230	Signs Type II Reflective F	SF	12.000	12.000

5126-00-72

Line	Item	Item Description	Unit	Total	Qty
0076	638.2102	Moving Signs Type II	EACH	1.000	1.000
0078	638.2602	Removing Signs Type II	EACH	4.000	4.000
0080	638.3000	Removing Small Sign Supports	EACH	4.000	4.000
0082	638.4000	Moving Small Sign Supports	EACH	1.000	1.000
0084	642.5001	Field Office Type B	EACH	1.000	1.000
0086	643.0420	Traffic Control Barricades Type III	DAY	1,098.000	1,098.000
0088	643.0705	Traffic Control Warning Lights Type A	DAY	1,078.000	1,078.000
0090	643.0900	Traffic Control Signs	DAY	854.000	854.000
0092	643.5000	Traffic Control	EACH	1.000	1.000
0094	645.0111	Geotextile Type DF Schedule A	SY	80.000	80.000
0096	645.0120	Geotextile Type HR	SY	260.000	260.000
0098	650.4500	Construction Staking Subgrade	LF	265.000	265.000
0100	650.5000	Construction Staking Base	LF	265.000	265.000
0102	650.6500	Construction Staking Structure Layout (structure) 01. B-41-310	LS	1.000	1.000
0104	650.9910	Construction Staking Supplemental Control (project) 01. 5126-00-72	LS	1.000	1.000
0106	650.9920	Construction Staking Slope Stakes	LF	265.000	265.000
0108	690.0150	Sawing Asphalt	LF	90.000	90.000
0110	715.0502	Incentive Strength Concrete Structures	DOL	906.000	906.000

CTH N (west) EARTHWORK SUMMARY

From/To Station	Location	Common Excavation** (1) (item # 205.0100) Cut	Unexpanded Fill	Expanded Fill (2) Factor 1.30	Mass Ordinate +/- (3)	Waste	Borrow (item #208.0100)	Comment:
8+25 - 11+25	CTH N WEST	530	286	371	158	158		

1) Common Excavation is the Cut. Item number 205.0100.
2) Expanded Fill. Factor = 1.30; Expanded Fill = Unexpanded Fill * Fill Factor
3) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material on the project.
4) All quantities shown in CY.
**PAY PLAN QUANTITY

CLEARING AND GRUBBING

STATION	TO	STATION	OFFSET	201.0105 CLEARING STA	201.0205 GRUBBING STA
8+00	-	10+00	LT & RT	2	2
10+00	-	11+00	RT	1	1
TOTALS				3	3

PAVING AND BASE QUANTITIES

STA	TO	STA	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	311.0110 BREAKER RUN TON	455.0605 TACK COAT GAL	465.0105 ASPHALTIC SURFACE TON	624.0100 WATER MGAL
8+25	--	9+81	35	195	200	27	86	3.5
10+19	--	11+25	25	160	170	24	77	2.8
UNDISTRIBUTED			5	20	25	3	8	0.4
TOTALS			65	375	395	54	171	6.6

EROSION CONTROL ITEMS

STA	TO	STA	LOCATION	625.0500 SALVAGED** TOPSOIL SY	627.0200 MULCHING** SY	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	629.0210 FERTILIZER** TYPE B CWT	630.0120 SEEDING** MIXTURE NO. 20 LB
8+25	--	9+81	RT	370	370	--	--	0.3	11
8+25	--	9+81	LT	400	400	--	--	0.3	12
10+19	--	11+25	RT	170	170	60	120	0.1	5
10+19	--	11+25	LT	210	210	60	120	0.1	6
UNDISTRIBUTED				290	290	30	60	0.2	9
TOTALS				1,440	1,440	150	300	1.0	42

** PAY PLAN QUANTITY

EROSION CONTROL MOBILIZATION ITEMS

LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
ID 5126-00-72	4	4
TOTALS	4	4

ALL QUANTITIES CATEGORY 0010 UNLESS OTHERWISE NOTED

3

TURBIDITY BARRIERS

LOCATION	628.6005 SY
NORTH ABUT	105
SOUTH ABUT	110
UNDISTRIBUTED	55
TOTAL	270

TEMPORARY DITCH CHECKS

LOCATION	OFFSET	628.7504 LF
NORTH ABUT	LT	12.5
NORTH ABUT	RT	12.5
SOUTH ABUT	LT	12.5
SOUTH ABUT	RT	12.5
TOTAL		50

SIGNS

STATION	LOCATION	634.0612 POSTS WOOD 4X6-INCH X 12-FT EACH	637.2230 SIGNS TYPE II REFLECTIVE F SF	638.2102 MOVING SIGNS TYPE II EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	638.4000 MOVING SMALL SIGN SUPPORTS EACH	SIGNAGE TYPE
9+75	LT	1	3	--	1	1	--	W5-52L
9+75	RT	1	3	--	1	1	--	W5-52R
10+25	LT	1	3	--	1	1	--	W5-52R
10+25	RT	1	3	--	1	1	--	W5-52L
10+85	LT	--	--	1	--	--	1	ATV ROUTE & ARROW
TOTALS		4	12	1	4	4	1	

3

TRAFFIC CONTROL ITEMS

LOCATION	DURATION DAYS	643.0420 BARRICADES TYPE III NO.	643.0420 BARRICADES TYPE III DAY	643.0705 WARNING LIGHTS TYPE A NO.	643.0705 WARNING LIGHTS TYPE A DAY	643.0900 SIGNS NO.	643.0900 SIGNS DAY	643.5000 TRAFFIC CONTROL EACH
AS DIRECTED BY ENGINEER	61	18	1,098	28	1,708	14	854	--
CTH N	--	--	--	--	--	--	--	1
TOTALS			1,098		1,708		854	1

PLACE TRAFFIC CONTROL IN ACCORDANCE WITH SDD 15C2

MAINTENANCE AND REPAIR OF HAUL ROADS

CATEGORY	618.0100 EACH
0030	1
TOTAL	1

STAKING ITEMS

CATEGORY	LOCATION	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	650.6500.01 CONSTRUCTION STAKING STRUCTURE LAYOUT (B-41-0310) LS	650.9910.01 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (ID 5126-00-72) LS	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF
0010	8+25 - 11+25	265	265	--	1	265
0020	B-41-0310	--	--	1	--	--
TOTALS		265	265	1	1	265

SAWING ASPHALT

STATION	LOCATION	690.0150 LF
8+25	LT & RT	20
11+25	LT & RT	70
TOTAL		90

ALL QUANTITIES CATEGORY 0010 UNLESS OTHERWISE NOTED

R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
5126-00-02		
FEDERAL PROJECT NUMBER	4.01	2

PLAT OF RIGHT-OF-WAY REQUIRED FOR

CTH W - CTH A
(BR. LITTLE LEMONWEIR RIVER BRIDGE B-41-0310)

CTH N MONROE COUNTY

CONSTRUCTION PROJECT NUMBER
5126-00-72

NOTES:

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

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

ALL RIGHT-OF-WAY LINES ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

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

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

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

EXISTING HIGHWAY RIGHT OF WAY FOR CTH N SHOWN HEREIN IS BASED ON A PRESUMED 66' WIDTH CENTERED ON THE CENTERLINE OF THE TRAVELED ROADWAY PER STATE STATUTE 82.31 (2).

EXISTING HIGHWAY RIGHT OF WAY FOR KIRKWOOD AVENUE SHOWN HEREIN IS BASED ON A PRESUMED 66' WIDTH CENTERED ON THE CENTERLINE OF THE TRAVELED ROADWAY PER STATE STATUTE 82.31 (2).

CONVENTIONAL SYMBOLS

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

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

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

ACCESS RESTRICTED BY ACQUISITION; NO ACCESS (BY STATUTORY AUTHORITY); ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL); NO ACCESS (NEW HIGHWAY)

PARCEL NUMBER (25); UTILITY NUMBER (40); TLE POINT NUMBER [25]; PARALLEL OFFSETS

CONVENTIONAL ABBREVIATIONS

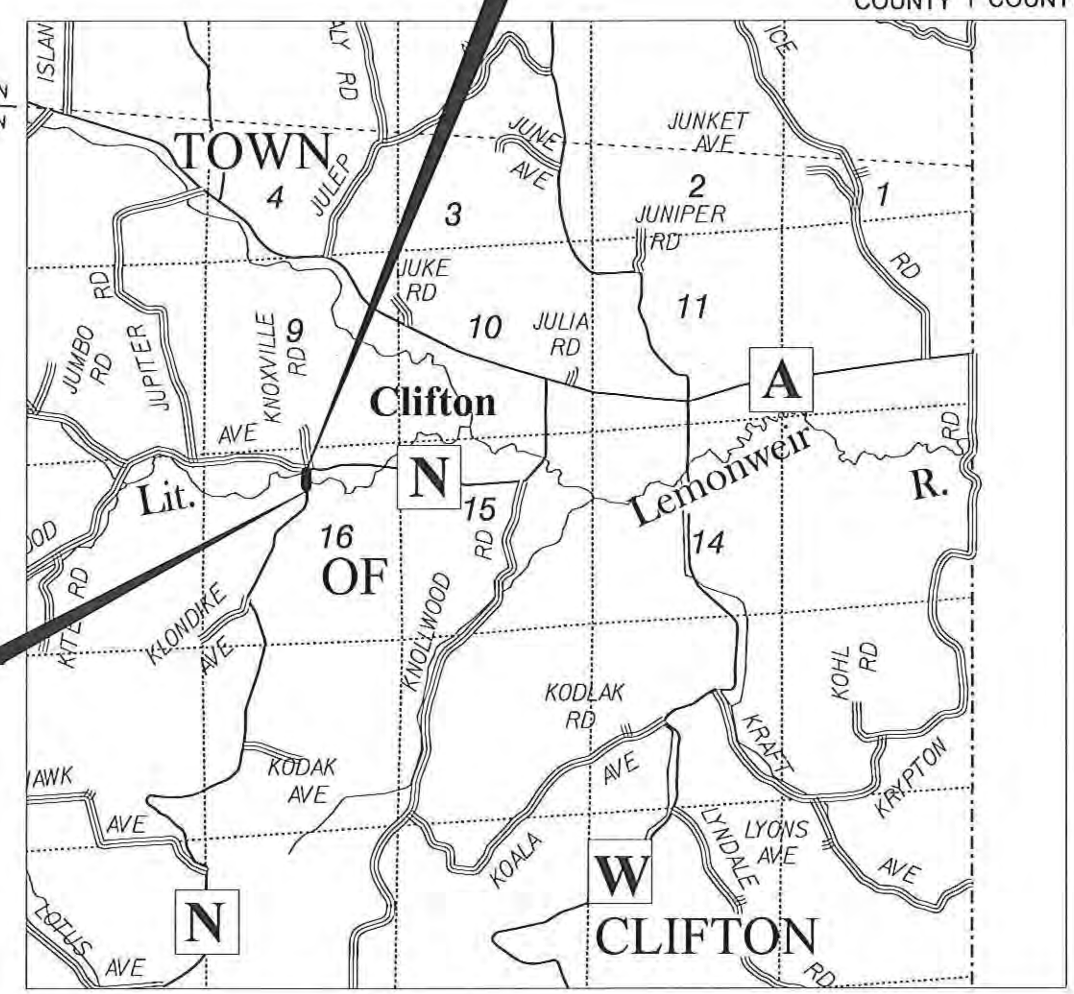
ACCESS RIGHTS	AR	POINT OF CURVATURE	PC
ACRES	AC	POINT OF COMPOUND CURVE	PCC
AHEAD	AH	POINT OF INTERSECTION	PI
ALUMINUM	ALUM	PROPERTY LINE	PL
AND OTHERS	ET AL	RECORDED AS	(100')
BACK	BK	REFERENCE LINE	R/L
BLDG	BLDG	REMAINING	REM
BLOCK	BLK	RIGHT	RT
CENTERLINE	C/L	RIGHT OF WAY	R/W
CERTIFIED SURVEY MAP	CSM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

CURVE DATA

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

END RELOCATION ORDER PROJECT 5126-00-02
STA. 11+15.77
Y = 353,263.740
X = 739,534.902
LOCATED 590.40' SOUTH AND 54.29' EAST OF THE NORTH QUARTER CORNER OF SECTION 16, T 16 N, R 1 E.

BEGIN RELOCATION ORDER PROJECT 5126-00-02
STA. 8+25.00
Y = 352,974.075
X = 739,525.210
LOCATED 880.07' SOUTH AND 44.60' EAST OF THE NORTH QUARTER CORNER OF SECTION 16, T 16 N, R 1 E.



LAYOUT
SCALE 0 1 MILE
TOTAL LENGTH = 0.055 MI.

ACCEPTED FOR MONROE COUNTY
09/18/17 (Date) [signature] County Highway Commissioner

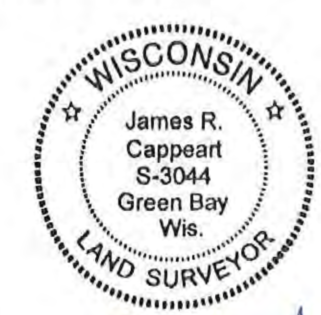
REVISION DATE

ORIGINAL PLAT PREPARED BY
AYRES ASSOCIATES

THIS SURVEY IS PREPARED AT THE REQUEST OF THE COUNTY OF MONROE.

THE FIELD SURVEY WAS PERFORMED IN SEPTEMBER 2016.

THIS SURVEY IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



(SIGNATURE) [signature]
DATE: 09/11/2017
(PRINTED NAME) JAMES R. CAPPEART
(REGISTRATION NUMBER) S-3044

SCHEDULE OF LANDS AND INTERESTS REQUIRED

PARCEL NO.	OWNERSHIP	INTEREST REQUIRED	R/W ACRES NEW	R/W ACRES EXISTING	R/W ACRES TOTAL	R/W ACRES TLE
1	DENVER FAMILY TRUST	FEE	0.08	0.12	0.20	---
2	JAMES H. BELCHER	FEE & TLE	0.10	0.32	0.42	0.02
50	LEMONWEIR VALLEY TELEPHONE COMPANY	RELEASE OF RIGHTS				
51	DAIRYLAND POWER COOPERATIVE	RELEASE OF RIGHTS				
52	OAKDALE COOPERATIVE ELECTRICAL ASSOCIATION	RELEASE OF RIGHTS				
53	WISCONSIN DEPARTMENT OF NATURAL RESOURCES	RELEASE OF RIGHTS				

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

TOWN OF CLIFTON

CTH N

KNOXVILLE ROAD

KIRKWOOD AVENUE

DERIVED FROM COUNTY RECORDS
Y=351,172.441
X=739,502.471

BEGIN RELOCATION ORDER PROJECT 5126-00-02
STA. 8+25.00
Y = 352,974.075
X = 739,525.210
LOCATED 880.07' SOUTH AND 44.60' EAST OF THE NORTH QUARTER CORNER OF SECTION 16, T 16 N, R 1 E.

POB STA 07+49.59
Y=352898.693
X=739527.069

QUARTER LINE S00°28'02"E 2681.79'

EXISTING R/W

R/L=N01°24'46"W

P.L.

1 DENVER FAMILY TRUST

NW-NE SECTION 16 T-16-N R-1-E

WISCONSIN DEPARTMENT OF NATURAL RESOURCES (53)
STREAM BANK CORRIDOR EASEMENT
VOL 216 OF RECORDS, PAGE 85 DOC #449433

OAKDALE COOPERATIVE ELECTRICAL ASSOCIATION (52)
50' WIDE EASEMENT
VOL 159 OF DEEDS, PAGE 127
DOC # 201210

SLOPE INTERCEPT

WATER ACRES 0.004

OAKDALE COOPERATIVE ELECTRICAL ASSOCIATION

LEMONWEIR VALLEY TELEPHONE COMPANY

STRUCTURE REQUIRED B-41-0310

PC C1 PI C1 PT C1 CURVE 1

PC C2 PI C2 CURVE 2

R/L=N00°54'12"E

EXISTING R/W

S00°28'02"E 586.82'

FOUND 1" REBAR
Y=353,854.142
X=739,480.607

P.L. QUARTER LINE

SECTION LINE N87°24'52"E 2709.14'

END RELOCATION ORDER PROJECT 5126-00-02
STA. 11+15.77
Y=353,263.740
X=739,534.902
LOCATED 590.40' SOUTH AND 54.29' EAST OF THE NORTH QUARTER CORNER OF SECTION 16, T 16 N, R 1 E.

R/L=N19°50'20"E

POE STA 11+71.57
Y=353,316.461
X=739,553.156

TLE - SLOPES
0.02 ACRES

BRANCH LITTLE LEMONWEIR RIVER

WATER ACRES 0.004

SLOPE INTERCEPT

LEMONWEIR VALLEY TELEPHONE COMPANY (50)
UNDERGROUND FACILITIES & PED
NO RECORD EASEMENT

53 WISCONSIN DEPARTMENT OF NATURAL RESOURCES
STREAM BANK CORRIDOR EASEMENT
VOL 224 OF RECORDS, PAGE 353 DOC #452905

2 JAMES H. BELCHER

NE-NE SECTION 16 T-16-N R-1-E

51 DAIRYLAND POWER COOPERATIVE
BLANKET EASEMENT
ELECTRIC TRANSMISSION EASEMENT
VOL 203 PG 365
DOC #259764

66'

DERIVED FROM COUNTY RECORDS
Y=353,976.358
X=742,186.985

R/W COURSE TABLE		
COURSE	BEARING	DISTANCE
101-102	S85°50'38"E	98.91'
102-103	S29°06'45"W	47.15'
103-104	S18°22'26"E	48.23'
104-105	S00°20'19"W	97.87'
105-106	S88°42'00"W	10.00'
106-107	S08°22'06"W	60.86'
107-108	S01°22'59"E	40.02'
108-109	S88°35'14"W	66.00'
109-110	S88°35'14"W	6.64'
110-111	N05°54'06"W	152.59'
111-112	N00°54'12"E	50.00'
112-113	N11°52'48"E	74.00'
113-101	N00°28'02"W	20.05'

R/W POINTS YX COORDINATES		
POINT	Y	X
101	353267.338	739485.391
102	353260.169	739584.046
103	353218.972	739561.103
104	353173.197	739576.307
105	353075.331	739575.729
106	353075.104	739565.731
107	353014.890	739556.874
108	352974.879	739557.840
109	352973.252	739491.860
110	352973.089	739485.222
111	353124.875	739469.532
112	353174.869	739470.320
113	353247.286	739485.555
114	352973.152	739487.790

CURVE 1
PI C1 STA = 9+49.92
Y = 353,098.960
X = 739,522.130
DELTA = 2°18'58"
D = 5°43'46"
T = 20.21'
L = 40.42'
R = 1000.00'
PC C1 STA = 9+29.71
PT C1 STA = 9+70.13

CURVE 2
PI C2 STA = 10+87.45
Y = 353,236.475
X = 739,524.298
DELTA = 18°56'08"
D = 19°05'55"
T = 50.03'
L = 99.15'
R = 300.00'
PC C2 STA = 10+37.42
PT C2 STA = 11+36.57

TLE COURSE TABLE		
COURSE	BEARING	DISTANCE
SEC-114	S00°28'02"E	881.02'
114-108	S88°35'14"W	70.07'
108-107	N01°22'59"W	40.02'
107-106	N08°22'06"E	60.86'
106-105	N88°42'00"E	10.00'
105-108	S10°05'52"W	101.18'

REVISION DATE	DATE 09/11/2017	SCALE: FEET 0 20 40	HWY: CTH N	R/W PROJECT NUMBER: 5126-00-02	PLAT SHEET 4.02
	GRID FACTOR N/A		COUNTY: MONROE	CONSTRUCTION PROJECT NUMBER: 5126-00-72	PS&E SHEET 8 E

FILE NAME : V:\SURVEY\EC\0SURVEY\0DGN\421052_MONROE P123\CADD\51260002_RWPL.DWG PLOT DATE : 9/11/2017 12:31 PM PLOT BY : CAPPEART, JAMES PLOT NAME :

WISDOT/CADDS SHEET 75

DENVER FAMILY TRUST

OAKDALE ELECTRIC COOPERATIVE

LEMONWEIR VALLEY TELEPHONE COMPANY

KIRKWOOD AVE

N

EXISTING R/W

.99

BP: 7+49.59'CTH N'

N1° 24' 46"W
180.11'

8+00'CTH N'
CTH N

9+00'CTH N'

PC: 9+29.71'CTH N'

PT: 9+70.13'CTH N'

10+00'CTH N'

N0° 54' 12"E
67.29'

PC: 10+37.42'CTH N'

11+00'CTH N'

PT: 11+36.57'CTH N'

EP: 11+71.57'CTH N'

N19° 50' 20"E
35.00'

EXISTING R/W

EXISTING R/W

SLOPE INTERCEPT

PROPOSED RIGHT-OF-WAY

DITCH FLOWLINE

PLACE IN SAME LOCATION AFTER CONSTRUCTION

WETLANDS

WETLANDS

WETLANDS

WETLANDS

DITCH FLOWLINE

TEMPORARY LIMITED EASEMENT

PROPOSED RIGHT-OF-WAY

TURBIDITY BARRIER (TYP)

SLOPE INTERCEPT

SILT FENCE (TYP)

EXISTING R/W

BRANCH LITTLE LEMONWEIR RIVER

JAMES H. BELCHER

OAKDALE ELECTRIC COOPERATIVE

KNOXVILLE RD

CTH N

BEGIN PROJECT
STA 8+25.00
(SAWCUT REQ'D)
Y = 352,974.075
X = 739,525.210

PI STA = 9+49.92
Y = 353098.960
X = 739522.130
DELTA = 2°18'58"
D = 5°43'46"
T = 20.21'
L = 40.42'
R = 1000.00'
PC STA = 9+29.71
PT STA = 9+70.13

PI STA = 10+87.45
Y = 353236.475
X = 739524.298
DELTA = 18°56'08"
D = 19°05'55"
T = 50.03'
L = 99.15'
R = 300.00'
PC STA = 10+37.42
PT STA = 11+36.57

END PROJECT
STA 11+25.00
(SAWCUT REQ'D)
Y = 353,272.582
X = 739,537.562

VCL = 90.00
K = 86.54

VCL = 90.00
K = 46.41

STA 8+25.00
EL 963.94

VPC STA 9+40.00
VPC EL 965.53

VPI STA 9+85.00
VPI EL 966.41

VPT STA 10+30.00
VPT EL 966.41

STA 11+25.00
EL 966.41

STA 11+50.00
EL 966.66

0.90%

1.94%

0.00%

1.00%

VPC STA 8+41.20
VPC EL 964.08

VPI STA 8+86.20
VPI EL 964.49

VPT STA 9+31.20
VPT EL 965.36

HIGH WATER (100 YR)
EL. 964.8

STA 10+00
REMOVE EXISTING STRUCTURE P-41-0121
SINGLE-SPAN STEEL DECK GIRDER
22.3' CLEAR WIDTH X 29.4' LONG
SKEW 0°

STA 10+00
STRUCTURE B-41-0310 REQ'D
SINGLE-SPAN CONCRETE FLAT SLAB
28.0' CLEAR WIDTH X 38.5' LONG
SKEW 0°

WATER EL. 958.2
(9-6-16)

STREAM BED
EL. 957.2

EXISTING PROFILE GRADE

PROPOSED PROFILE GRADE

970 968 966 964 962 960 958 956

964.29 964.10 963.93 963.94 963.94 963.93 964.17 964.22 964.45 964.50 964.81 965.13 965.24 965.76 965.72 966.12 966.08 957.21 966.31 966.16 966.40 966.06 966.41 966.05 966.41 966.13 966.41 966.41 966.41 966.66 966.66

6+50 6+75 7+00 7+25 7+50 7+75 8+00 8+25 8+50 8+75 9+00 9+25 9+50 9+75 10+00 10+25 10+50 10+75 11+00 11+25 11+50 11+75 12+00 12+25 12+50

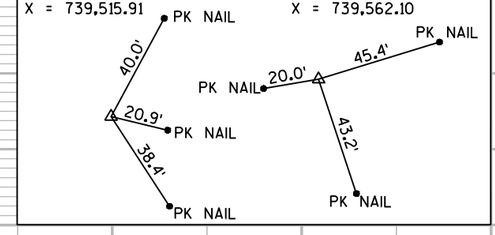
WETLAND IMPACT AREAS OCCUR WHERE SLOPE INTERCEPTS ASSOCIATES WITH GRADING ARE LOCATED WITHIN THE WETLAND BOUNDARY.

SILT FENCE IN WETLAND AREAS WILL BE INSTALLED AT THE TOE OF THE PROPOSED SLOPE AND TURBIDITY BARRIER WILL BE INSTALLED NO FURTHER THAN 3 FEET FROM THE TOE OF THE PROPOSED SLOPE.

REFER TO SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" FOR ROAD CLOSURE SIGNAGE DETAILS.

CP1 (SURVEY NAIL)
STA 7+50.28, 11.14' LT
EL 964.11'
Y = 352,899.10
X = 739,515.91

CP4 (SURVEY NAIL)
STA 11+70.48, 9.90' RT
EL 966.40'
Y = 353,312.07
X = 739,562.10



PROJECT NO: 5126-00-72	HWY: CTH N (WEST)	COUNTY: MONROE	PLAN AND PROFILE:	SHEET 9	E

FILE NAME : V:\TRANS-MD\421051 CTH N (WEST)\C3D\DESIGN\51260002 CTH N WEST_PROPOSED DESIGN.DWG
LAYOUT NAME - PlanProf 1 IN 40 FT

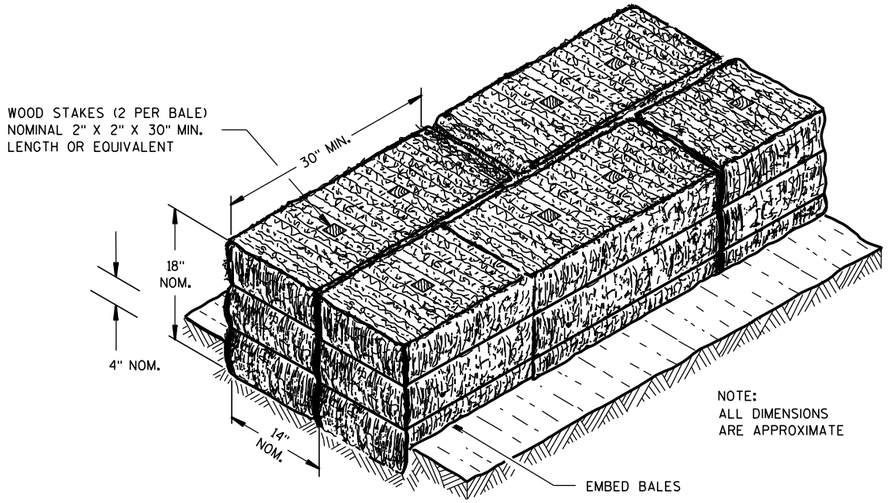
PLOT DATE : 9/18/2017 2:40 PM PLOT BY : RESHESKE, CARRIE PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 44

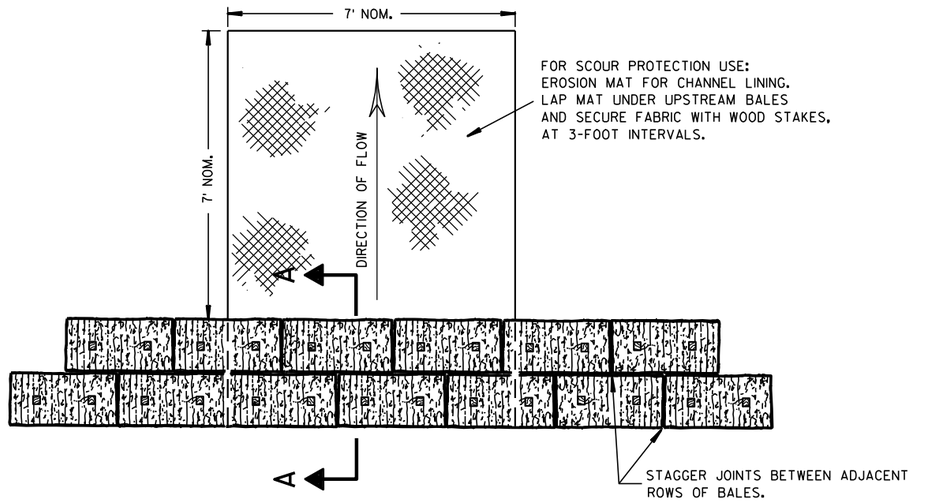
Standard Detail Drawing List

08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E11-02	TURBIDITY BARRIER
12A03-10	NAME PLATE (STRUCTURES)
15C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C06-09	SIGNING & MARKING FOR TWO LANE BRIDGES

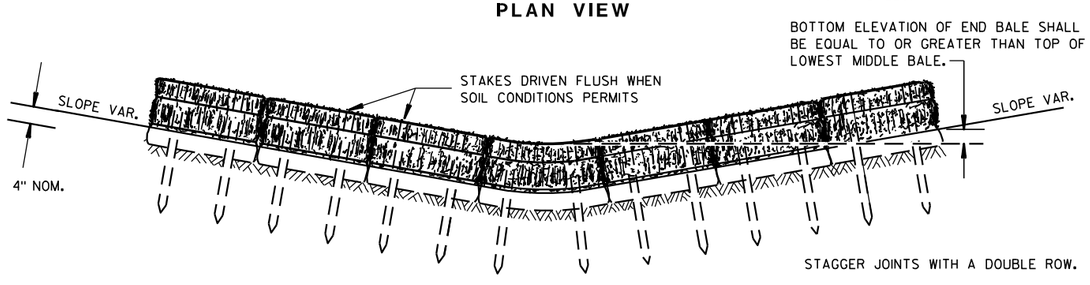
6



SECTION A-A



PLAN VIEW



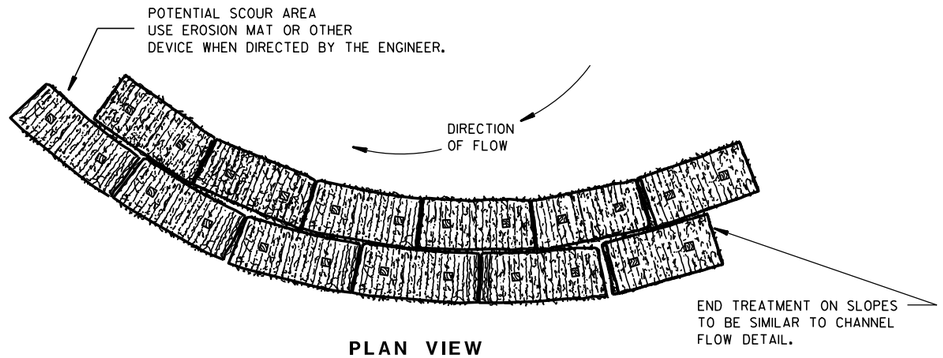
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

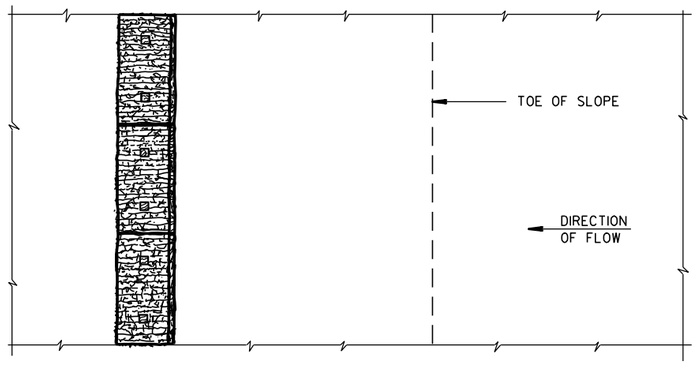
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

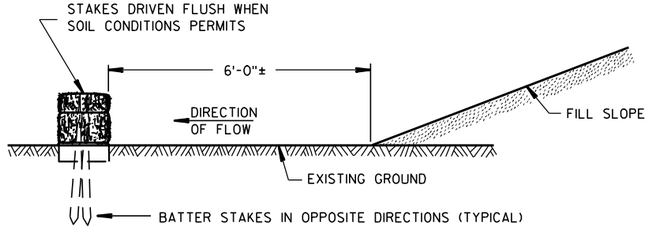


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

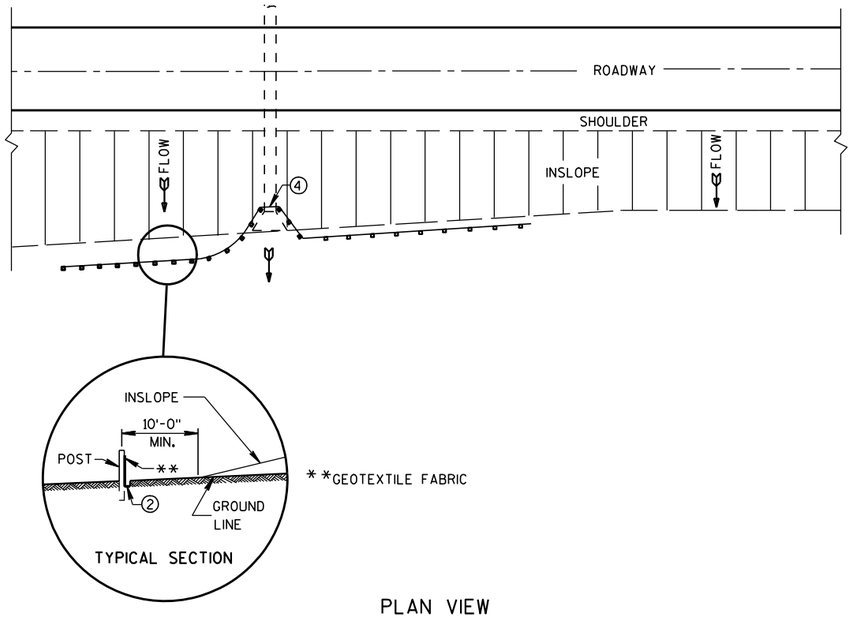
APPROVED
6/04/02 DATE
/S/ Beth Cannestra CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 8-3

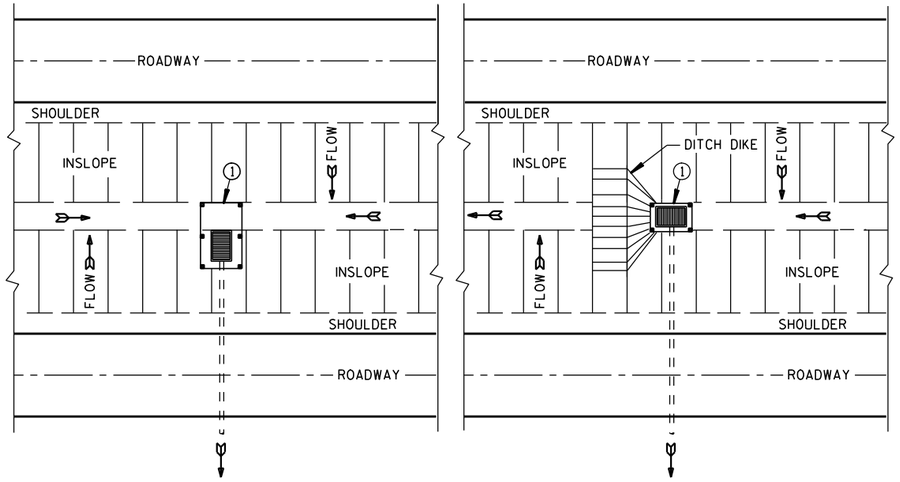
6

S.D.D. 8 E 8-3



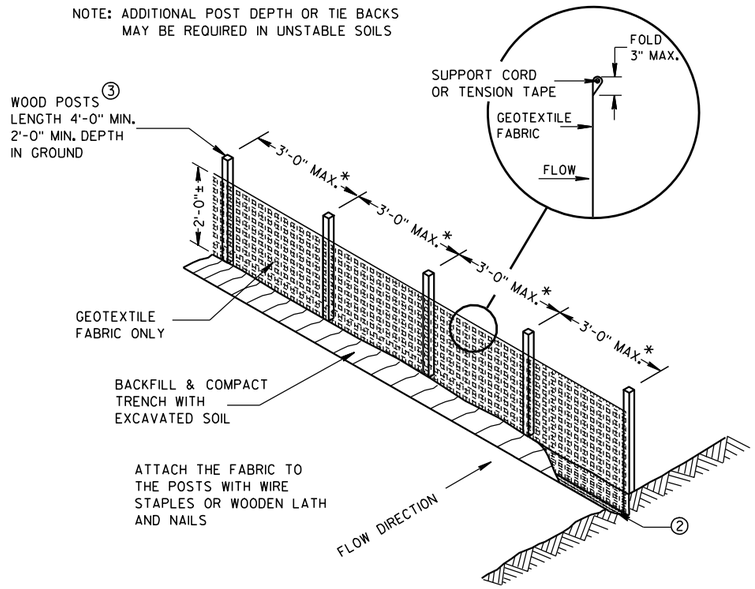
PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



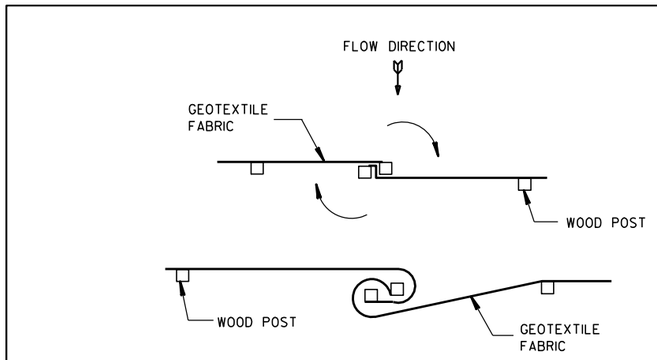
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS



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

SILT FENCE

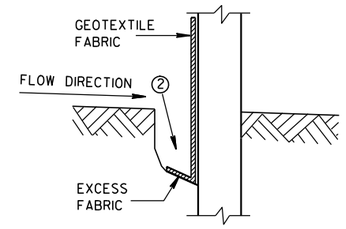


JOINING TWO LENGTHS OF SILT FENCE 5

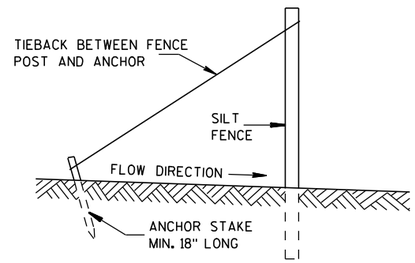
GENERAL NOTES

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

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



TRENCH DETAIL



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

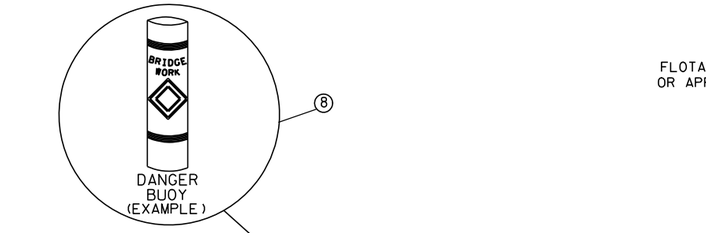
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

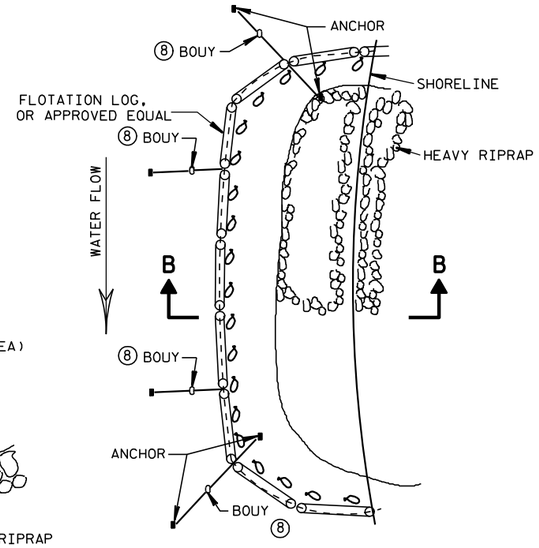
S.D.D. 8 E 9-6

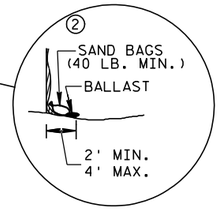
6

S.D.D. 8 E 9-6

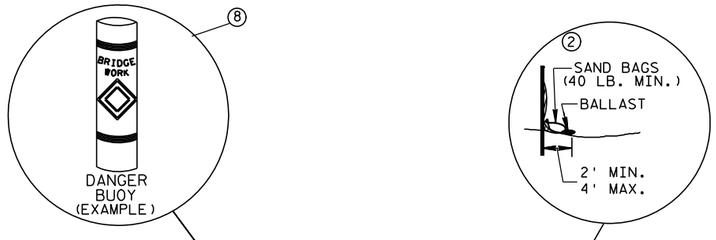


SECTION B-B

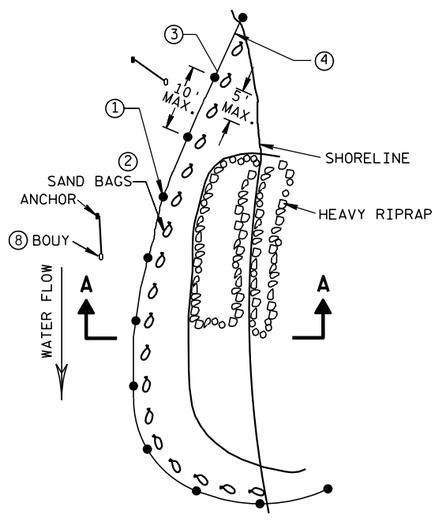




TURBIDITY BARRIER FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



SECTION A-A



PLAN VIEW

TURBIDITY BARRIER STANDARD POST INSTALLATION

TURBIDITY BARRIER PLACEMENT DETAILS

GENERAL NOTES

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

TURBIDITY BARRIER MAY BE REMOVED AT THE ENGINEERS DISCRETION, WHEN PERMANENT EROSION CONTROL MEASURES HAVE BEEN ESTABLISHED.

① DRIVEN STEEL POSTS, PIPES, OR CHANNELS. LENGTH SHALL BE SUFFICIENT TO SECURELY SUPPORT BARRIER AT HIGH WATER ELEVATIONS.

② SANDBAGS TO BE USED AS ADDITIONAL BALLAST WHEN ORDERED BY THE ENGINEER TO MEET ADVERSE FIELD CONDITIONS. SPACE AS APPROPRIATE FOR SITE CONDITIONS.

③ WHEN BARRIER HEIGHT, H, EXCEEDS 8 FT., POST SPACING MAY NEED TO BE DECREASED.

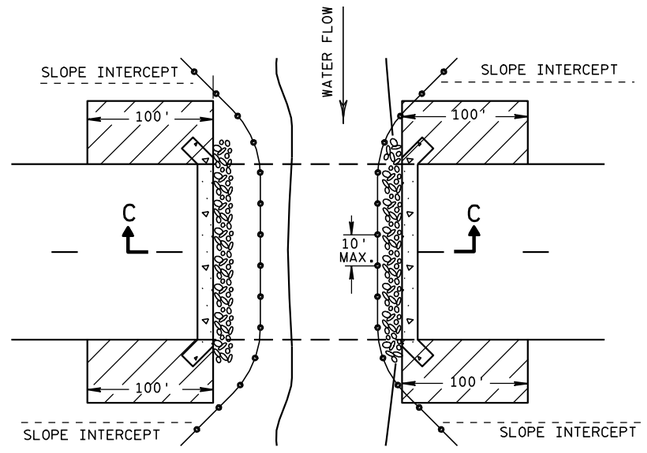
④ IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

⑤ ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MIMIMUM BARRIER HEIGHT SHALL BE 2'GREATER THAN EITHER THE O2 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WICHEVER IS GREATER.

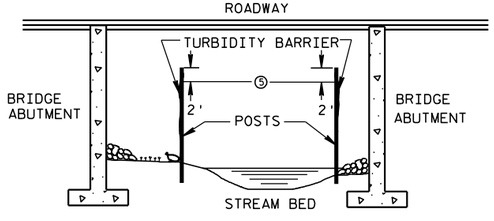
⑥ FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BED ROCK PREVENTS THE INSTALLATION OF POSTS.

⑦ ALLOW SUFFICIENT SLACK VERTICALLY AND HORIZONTALLY SO THAT SEDIMENT BUILD UP WILL NOT SEPARATE OR LOWER THE TURBIDITY BARRIER.

⑧ USE AS DIRECTED BY COAST GUARD OR DNR PERMIT WHEN WORKING IN NAVIGABLE WATERWAYS.



PLAN VIEW



SECTION C-C

TURBIDITY BARRIER DETAIL SHOWING TYPICAL PLACEMENT AT STRUCTURES

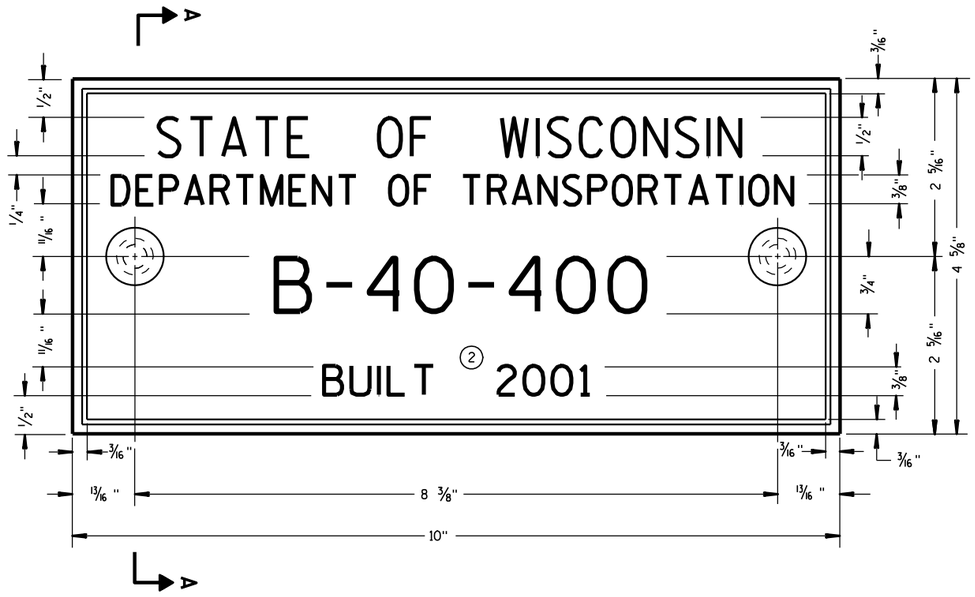
TURBIDITY BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

S.D.D. 8 E 11-2



TYPICAL NAME PLATE

(BRIDGES, CULVERTS, AND RETAINING WALLS)

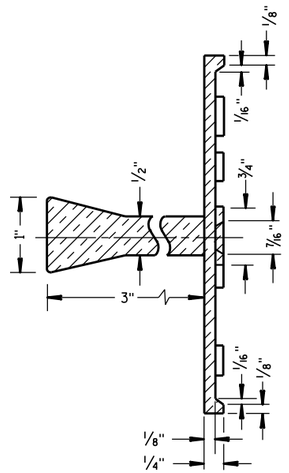
GENERAL NOTES

NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

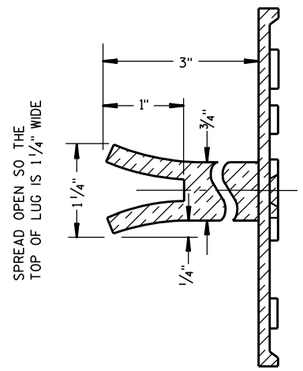
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

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

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



SECTION A-A



ALTERNATE LUG

FOR MULTI-UNIT STRUCTURES
LINE 3 ABOVE SHALL READ

B = BRIDGE
C = CULVERT
R = RETAINING WALL

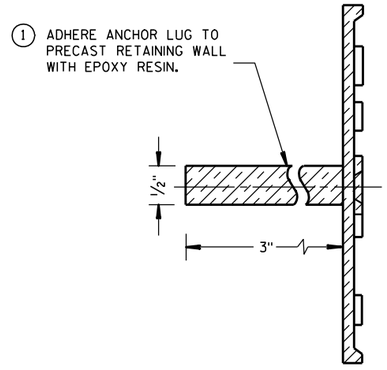
COUNTY NO.

BRIDGE NO.

UNIT NO. FOR MULTIPLE UNIT BRIDGE

B-40-400-1A

NUMBERING DESIGNATION MULTI-UNIT STRUCTURES



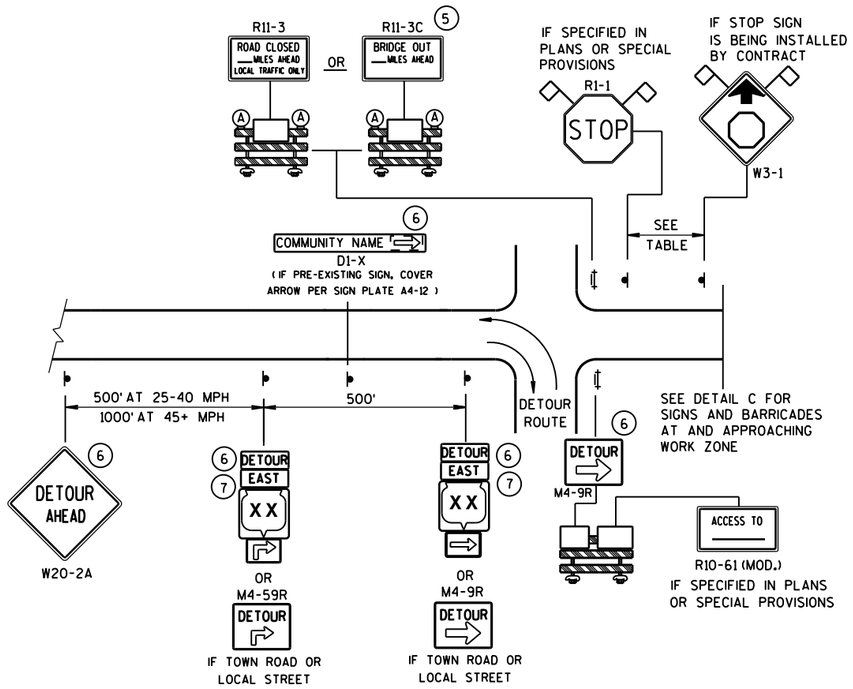
ALTERNATE LUG

(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
3/26/10 DATE	/S/ Scot Beck CHIEF STRUCTURAL DEVELOP ENGINEER
FHWA	

6

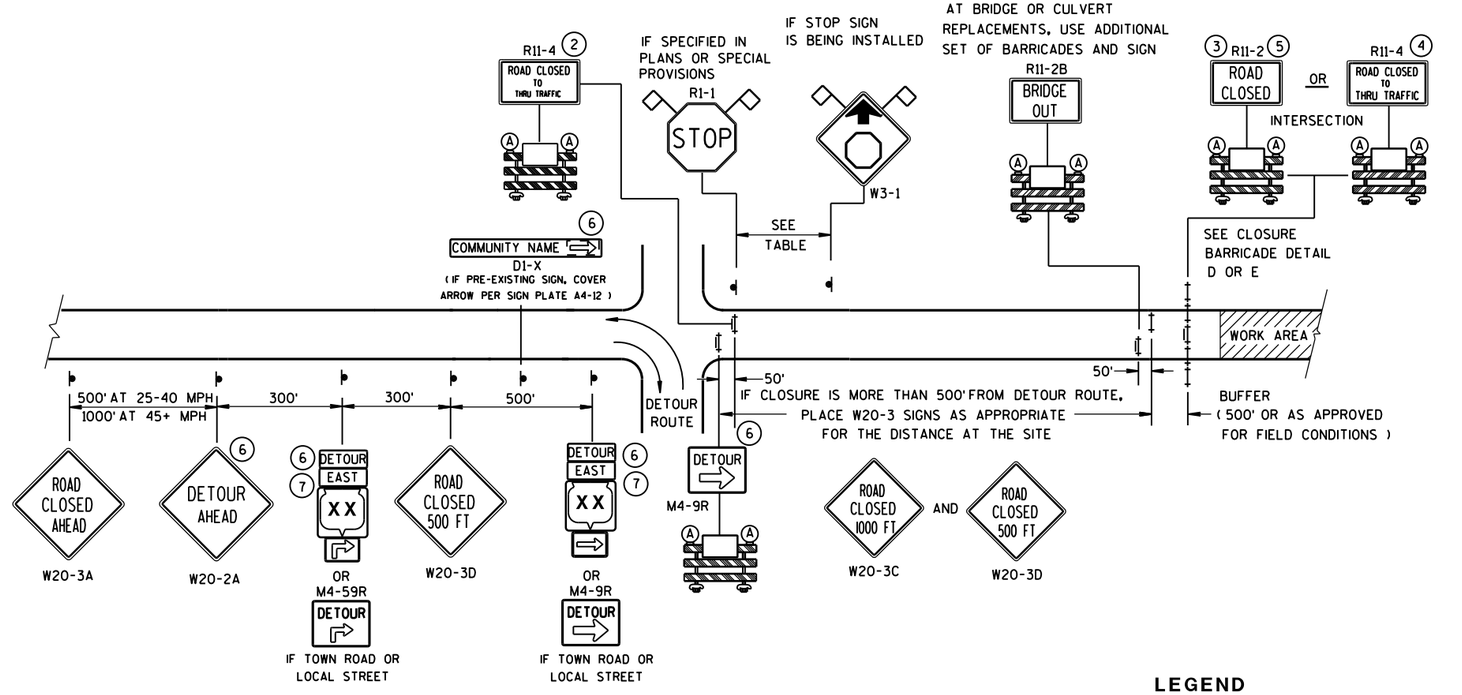
S.D.D. 12 A 3-10



DETAIL A

MAINLINE CLOSURE WITH POSTED DETOUR

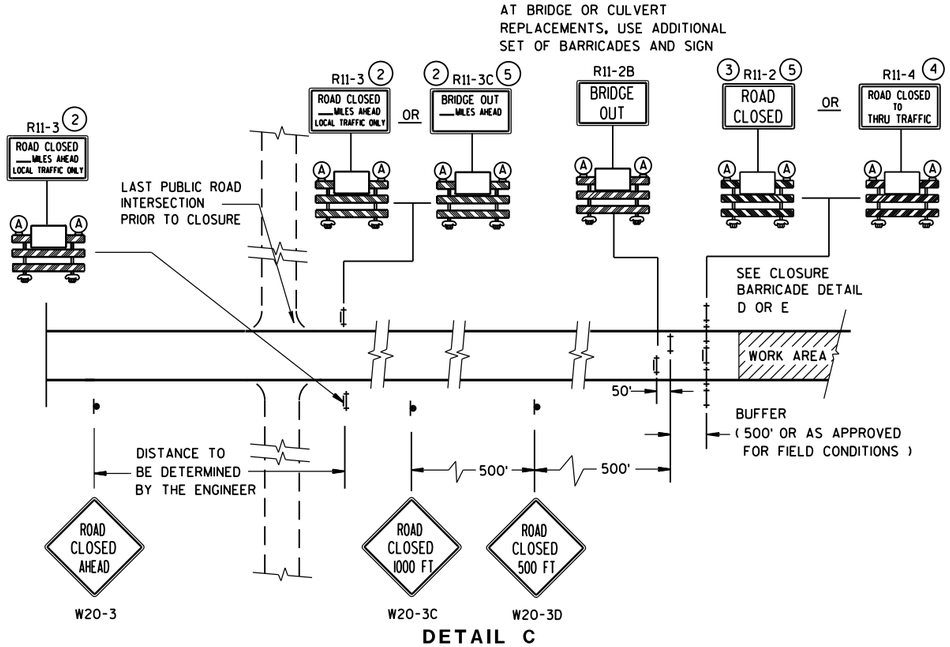
WORK ZONE GREATER THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B

MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL C

MAINLINE CLOSURE, NO POSTED DETOUR

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

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

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- DETOUR / EAST — M4-8 / M3-X
- XX — M1-4; COUNTY XX — M1-5A; XX — M1-6
- M05-1 OR M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

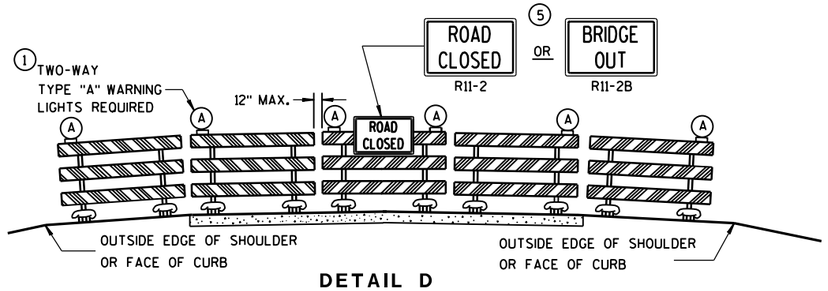
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA

6

S.D.D. 15 C 2-6a

6

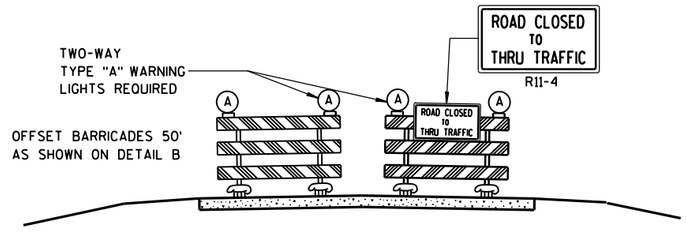
S.D.D. 15 C 2-6a



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 BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE 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, 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". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- 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 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 LANE 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 MAINLINE CLOSURES

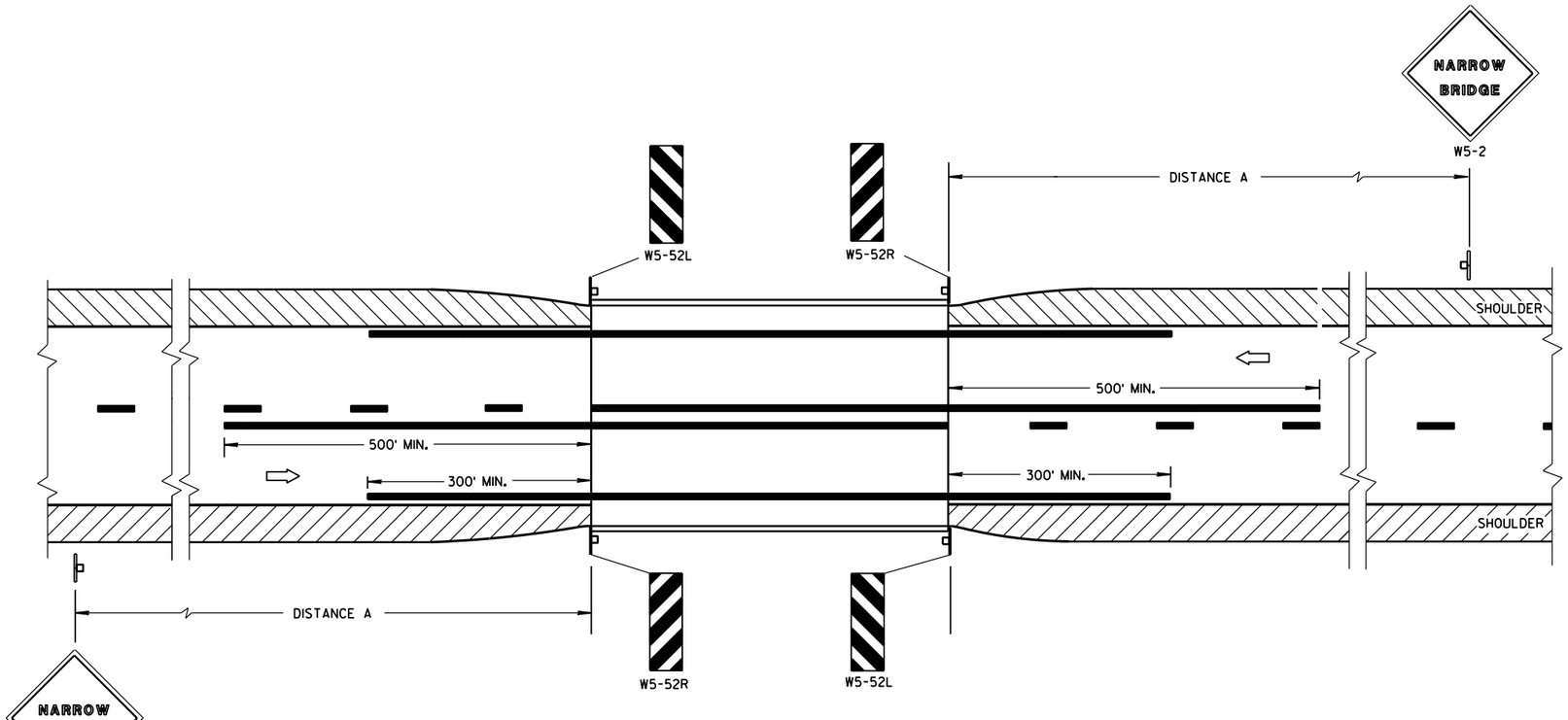
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible] SAFETY ENGI[illegible] — FHWA

6

S.D.D. 15 C 2-6b



SITUATION 1

WARRANTING CRITERIA:

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

DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
25	150'
30	200'
35	250'
40	300'
45	400'
50	550'
55	750'

GENERAL NOTES

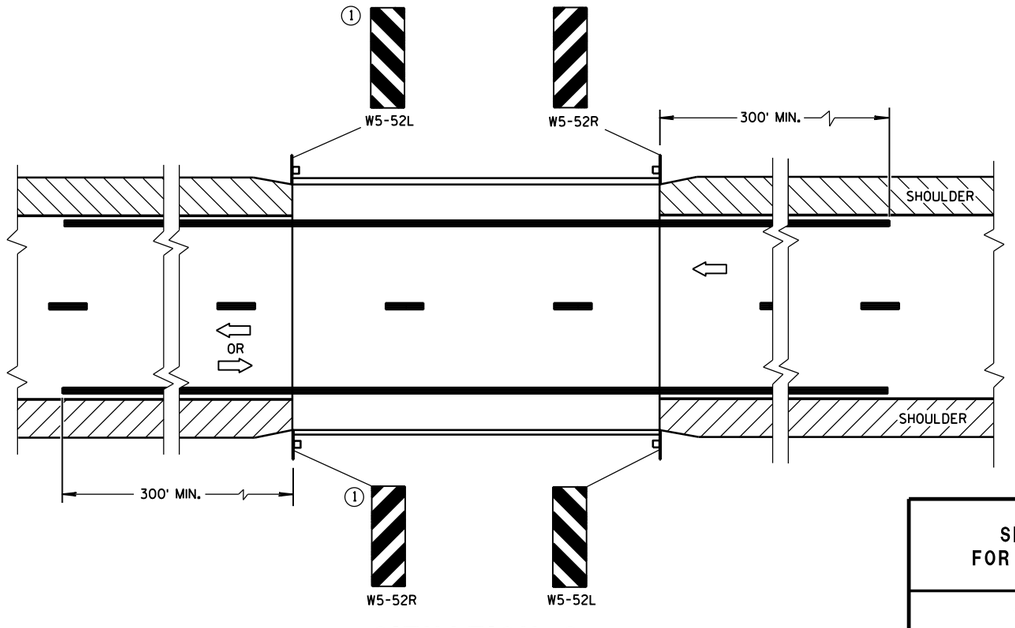
DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

LOCATE W5-52 SIGN POST(S) BEHIND GUARDRAIL WHEN PRESENT.

PLACE THE EDGE OF THE W5-52 SIGN IN LINE WITH FACE OF CURB OR PARAPET.

(1) OMIT ON ONE-WAY TRAVELLED WAYS.

⇨ DIRECTION OF TRAFFIC



SITUATION 2

WARRANTING CRITERIA:

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

SIGNING & MARKING FOR TWO LANE BRIDGES

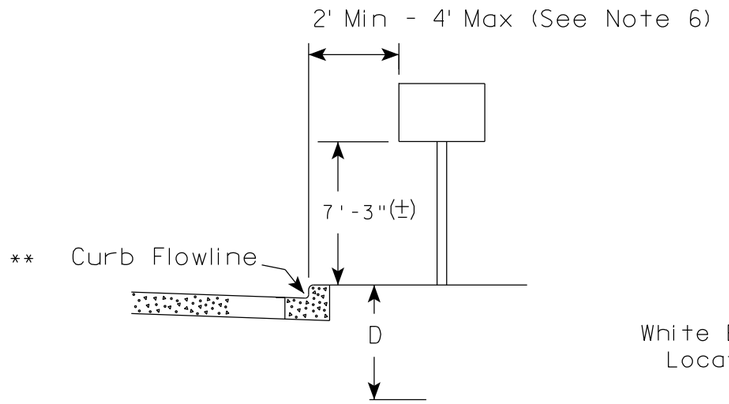
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MAR[illegible]EER
FHWA

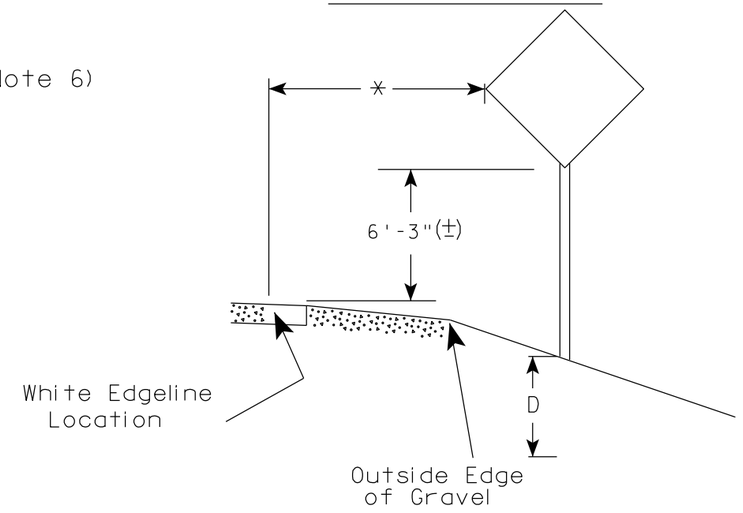
6

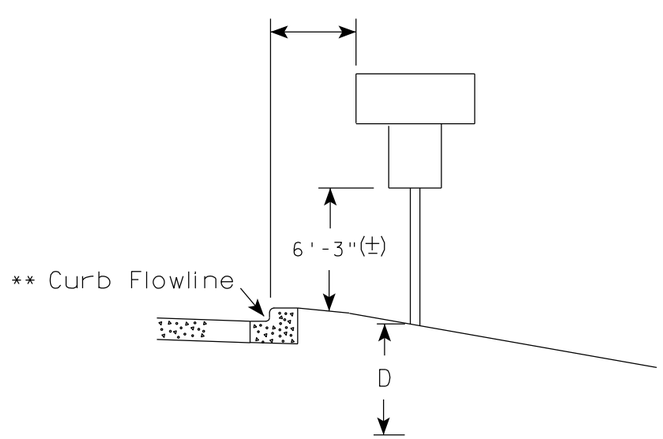
S.D.D. 15 C 6-9

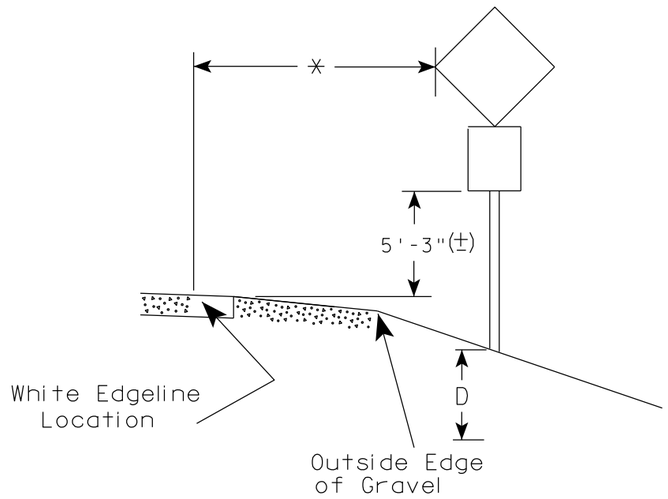
URBAN AREA



RURAL AREA (See Note 2)







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

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

POST EMBEDMENT DEPTH

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

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on 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. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
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 directd 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" (±).

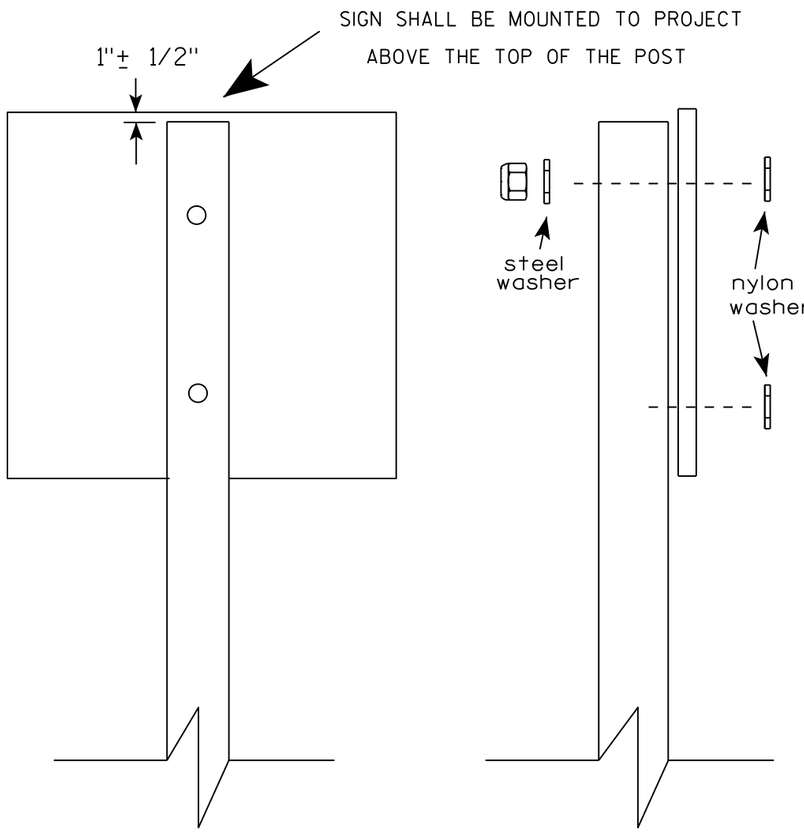
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

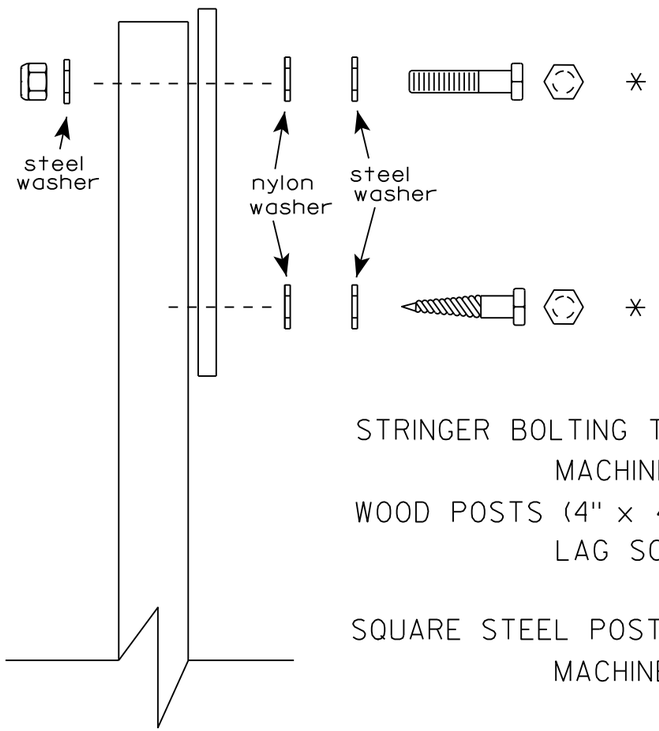
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-3.20

PROJECT NO: 5126-00-72	HWY: CTH M	COUNTY: MONROE		SHEET NO:	E





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

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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

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

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

WOOD POSTS (4" x 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.

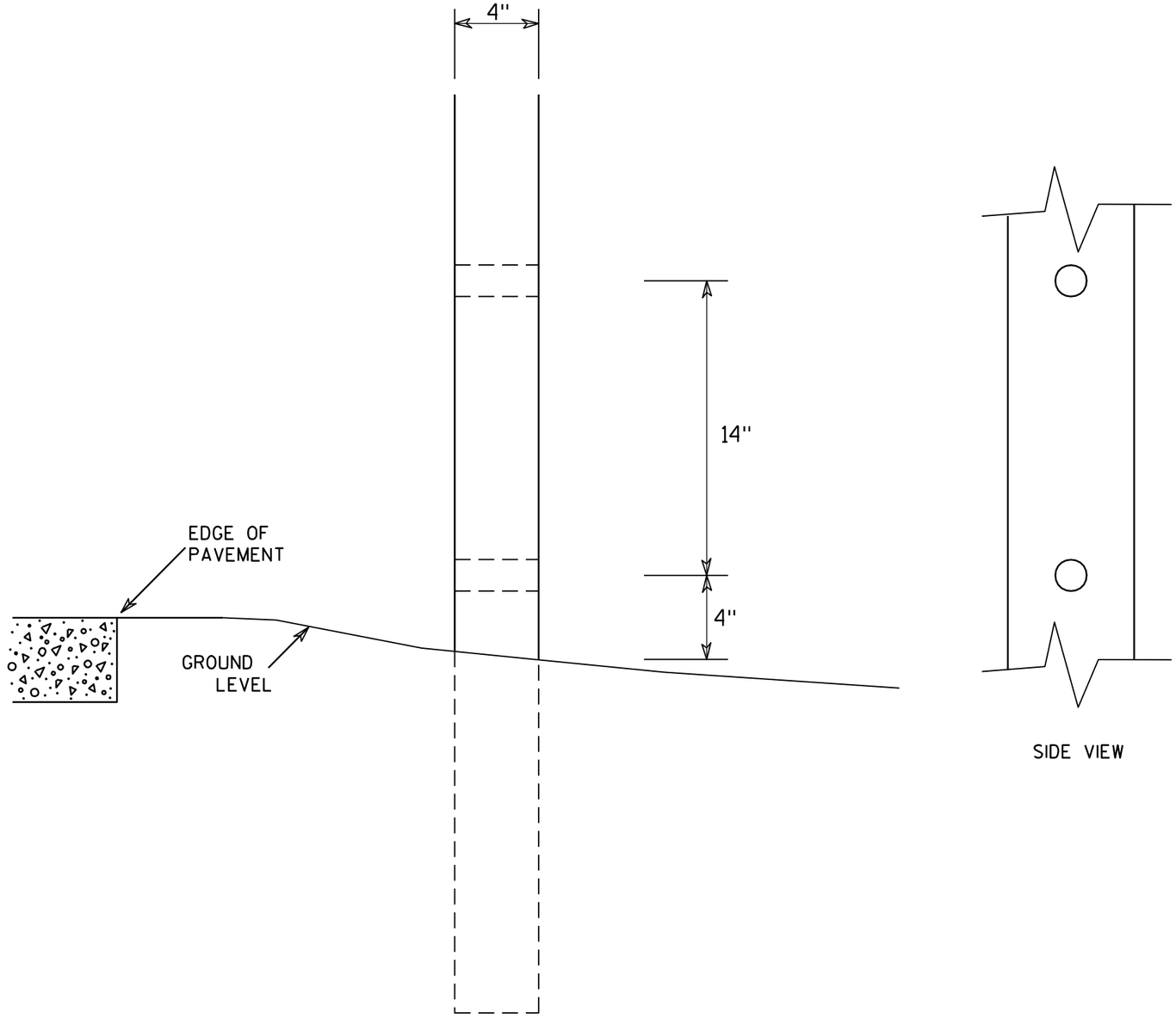
ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/11/16 PLATE NO A4-8.8

PROJECT NO: 5126-00-72	HWY: CTH M	COUNTY: MONROE		SHEET NO:	E



SIDE VIEW

GENERAL NOTES

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

7

7

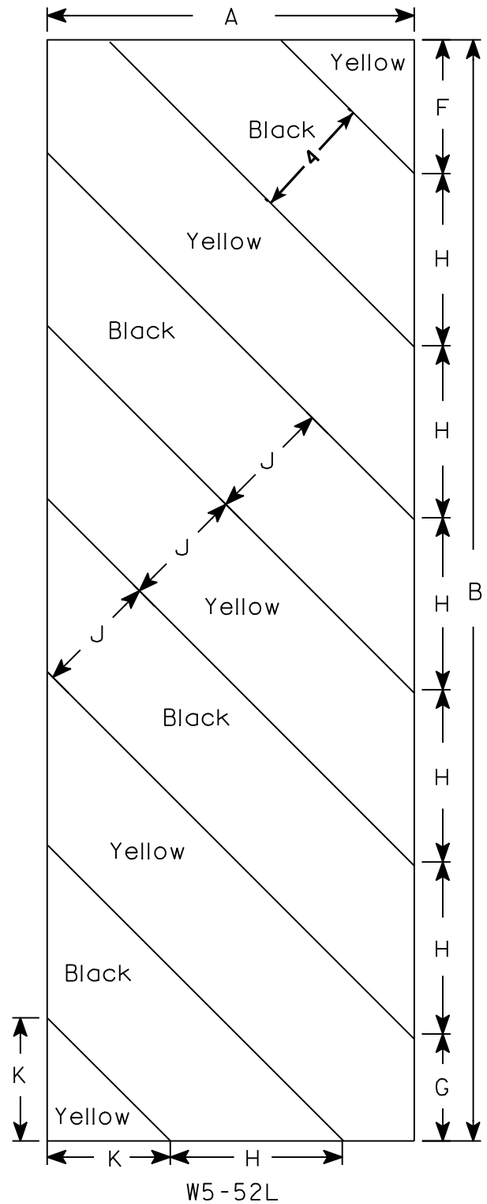
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

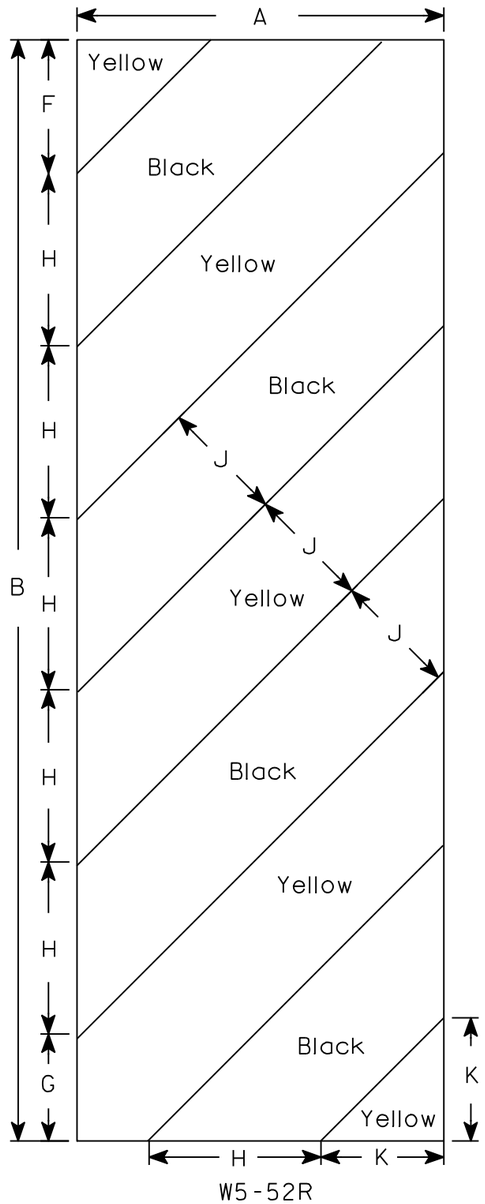
APPROVED Chester J Spang for State Traffic Engineer

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

PROJECT NO: 5126-00-72	HWY: CTH M	COUNTY: MONROE		SHEET NO: 20	E



W5-52L



W5-52R

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. Alternate colors of stripes as shown.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
2M	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
3	18	54				6	5 1/2	8 1/2	45°	6	6 9/16																6.75
4																											
5																											

STANDARD SIGN

W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

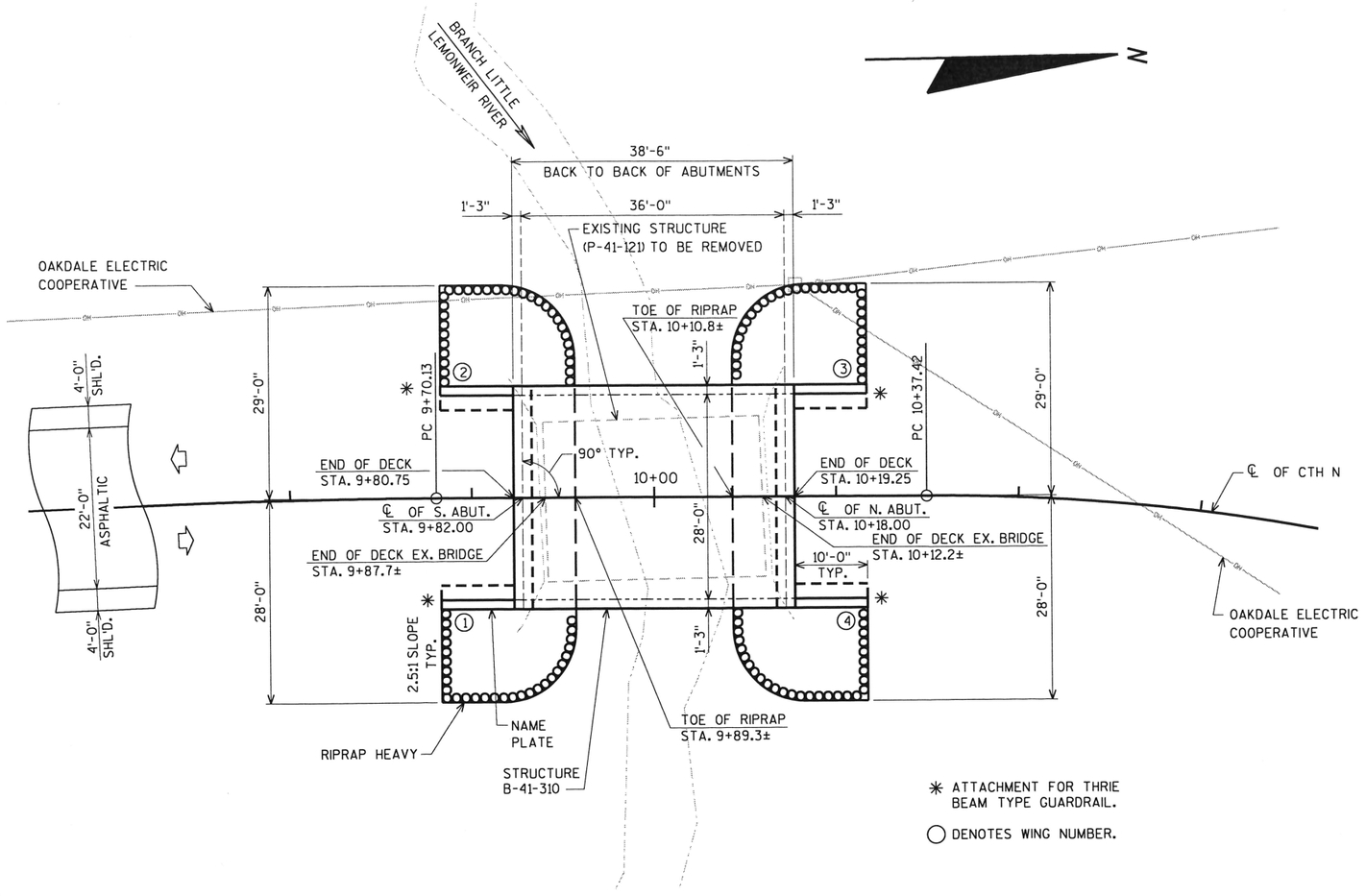
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W5-52.9

PROJECT NO: 5126-00-72 | HWY: CTH M | COUNTY: MONROE | SHEET NO: 21 | E

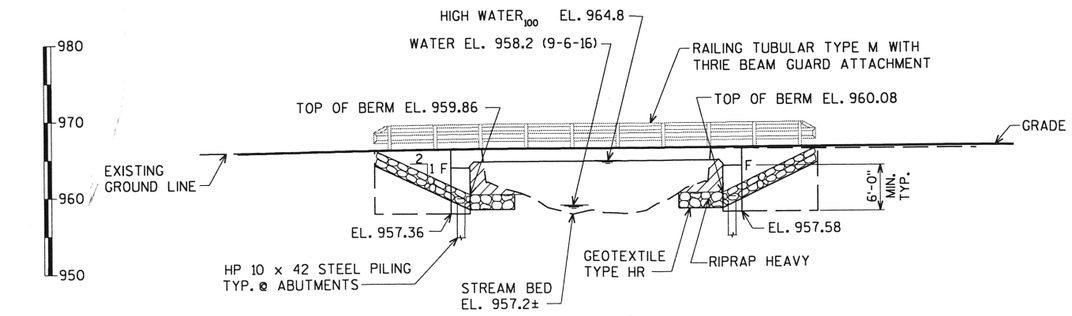
STATE PROJECT NUMBER

5126-00-72



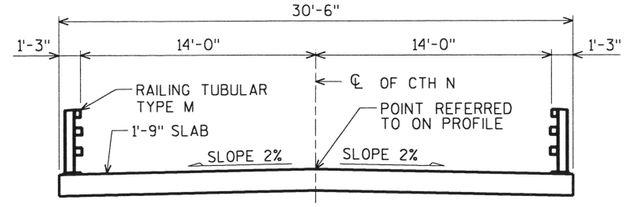
PLAN

SINGLE SPAN, CONCRETE FLAT SLAB



ELEVATION

COST OF EXCAVATION IN THE HATCHED AREAS SHALL BE INCLUDED IN THE CONTRACT LUMP SUM PRICE FOR "EXCAVATION FOR STRUCTURES BRIDGES B-41-310".



TYPICAL SECTION THRU BRIDGE

(LOOKING NORTH)

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: 1.09
OPERATING RATING FACTOR : 1.41
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 250 KIPS

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 #/S.F.

MATERIAL PROPERTIES:

CONCRETE MASONRY { SUPERSTRUCTURE ——— f'_c = 4,000 p.s.i.
ALL OTHER ——— f'_c = 3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT (GRADE 60) ——— f_y = 60,000 p.s.i.

HYDRAULIC DATA:

100 YEAR FREQUENCY

Q_{100} = 1,100 c.f.s. { BRIDGE = 787 c.f.s. / OVERFLOW = 313 c.f.s.
VEL.= 4.6 f.p.s.
HW_{100} = EL. 964.8
WATERWAY AREA = 173 sq. ft.
DRAINAGE AREA = 5.9 sq. mi.
SCOUR CRITICAL CODE = 8
DATUM = NAVD88 (2012)

2 YEAR FREQUENCY

Q_2 = 225 c.f.s.
VEL.= 2.3 f.p.s.
HW_2 = EL. 962.1

ROAD OVERTOPPING FREQUENCY

FREQUENCY = 8 YEARS
Q_8 = 525 c.f.s.
HW_8 = EL. 963.9

FOUNDATION DATA:

SOUTH ABUTMENT TO BE SUPPORTED ON HP 10 x 42 STEEL PILING (WITH PILE POINTS) WITH A REQUIRED DRIVING RESISTANCE OF 140 TONS ‡ PER PILE. ESTIMATED LENGTH OF 30'-0".

NORTH ABUTMENT TO BE SUPPORTED ON HP 10 x 42 STEEL PILING (WITH PILE POINTS) WITH A REQUIRED DRIVING RESISTANCE OF 140 TONS ‡ PER PILE. ESTIMATED LENGTH OF 20'-0".

‡ THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

TRAFFIC DATA:

A.D.T. = <100 (2018)
A.D.T. = <100 (2038)
R.D.S. = 30 M.P.H.

WISCONSIN
DANIEL N. SYDOW
E-38363
WI
PROFESSIONAL ENGINEER
8/29/2017

LIST OF DRAWINGS

BRIDGE OFFICE CONTACT:
WILLIAM DREHER
(608)-266-8489

CONSULTANT CONTACT:
DAN SYDOW
(715)-834-3161

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
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Eau Claire, WI 54701
www.AyresAssociates.com

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher SDR — CHIEF STRUCTURES DESIGN ENGINEER — 11/09/17 DATE

STRUCTURE B-41-310

CTH N OVER BRANCH LITTLE LEMONWEIR RIVER

COUNTY	TOWN/~~CITY/VILLAGE~~
MONROE	CLIFTON

DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
JLB	JWZ	CJM/JWZ	DWS

GENERAL PLAN

SHEET 1 OF 12
22

DATE: DATE: DATE:
CHECKED BY: BACK CHECKED BY: CORRECTED BY:

8

8

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	S. ABUT.	N. ABUT.	SUPER.	TOTAL
203.0600.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STATION 10+00	LS	-----	-----	-----	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-41-310	LS	-----	-----	-----	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	95	95	-----	190
502.0100	CONCRETE MASONRY BRIDGES	CY	35	35	81	151
502.3200	PROTECTIVE SURFACE TREATMENT	SY	-----	-----	155	155
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	1,840	1,840	-----	3,680
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	1,380	1,380	13,390	16,150
513.4060	RAILING TUBULAR TYPE M B-41-310	LF	22	22	77	121
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	9	9	-----	18
550.0500	PILE POINTS	EACH	5	5	-----	10
550.1100	PILING STEEL HP 10-INCH x 42 LB	LF	150	100	-----	250
606.0300	RIPRAP HEAVY	CY	70	70	-----	140
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	71	71	-----	142
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	40	40	-----	80
645.0120	GEOTEXTILE TYPE HR	SY	125	135	-----	260
	NON-BID ITEMS					
	FILLER	SIZE	-----	-----	-----	½" & ¾"

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

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

JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O. DESIGNATION M 153, TYPE I, II OR III OR A.A.S.H.T.O. DESIGNATION M 213.

THE SLOPE OF FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH RIPRAP HEAVY AND GEOTEXTILE TYPE HR AS SHOWN ON THE GENERAL PLAN SHEET AND IN THE ABUTMENT DETAILS.

SLAB FALSEWORK SHALL BE SUPPORTED ON PILES OR THE SUBSTRUCTURE UNLESS AN ALTERNATIVE METHOD IS APPROVED BY THE ENGINEER.

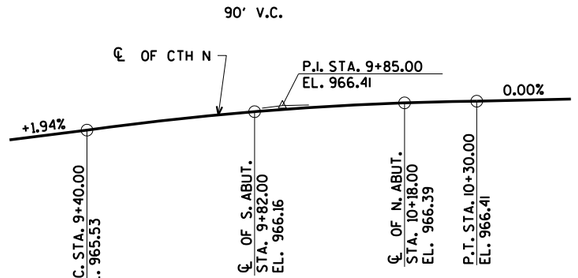
THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES BRIDGES B-41-310" SHALL BE THE EXISTING GROUNDLINE.

THE EXISTING STRUCTURE, P-41-121, TO BE REMOVED, IS A SINGLE SPAN STEEL DECK GIRDER BRIDGE ON TIMBER ABUTMENTS, 27.8 FOOT LONG WITH A 22.7 FOOT CLEAR ROADWAY WIDTH.

AT THE BACK FACE OF ABUTMENTS, ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH BACKFILL STRUCTURE TYPE A.

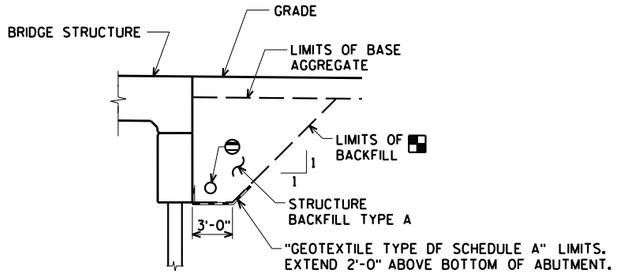
PROTECTIVE SURFACE TREATMENT IS TO BE APPLIED AS SHOWN IN DETAIL ON THIS SHEET.

EXCAVATION BELOW THE ABUTMENT AND ABUTMENT BEDDING MATERIALS REQUIRES ENGINEER APPROVAL. GEOTEXTILE SHALL BE SET AT THE BOTTOM OF EXCAVATION AND EXTEND 2'-0" ABOVE BOTTOM OF ABUTMENT.



PROFILE GRADE LINE
(CTH N)

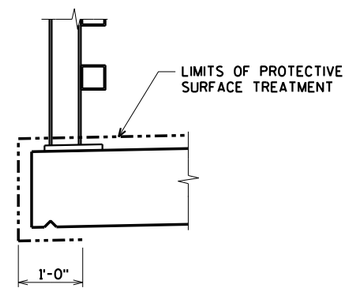
BENCH MARK:
60d SPIKE IN PILING OF SW WINGWALL
STA. 9+82.13' LT.
EL. 962.63



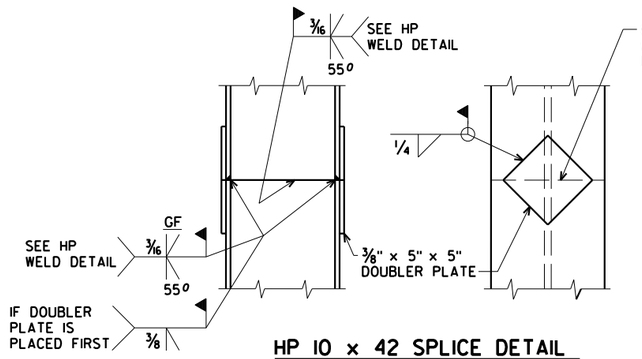
BACKFILL STRUCTURE LIMITS

BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

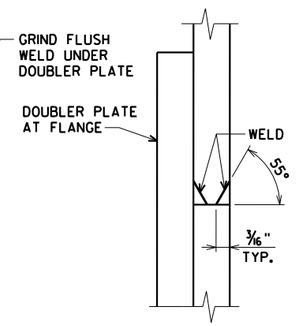
PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON SHEET 5.



PROTECTIVE SURFACE TREATMENT DETAIL



HP 10 x 42 SPLICE DETAIL



HP WELD DETAIL
FLANGE SHOWN, WEB SIMILAR

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-41-310

DRAWN BY CJM/JWZ | PLANS CK'D. JLB

QUANTITIES AND NOTES

SHEET 2 OF 12
23

ORIGINAL PLANS PREPARED BY
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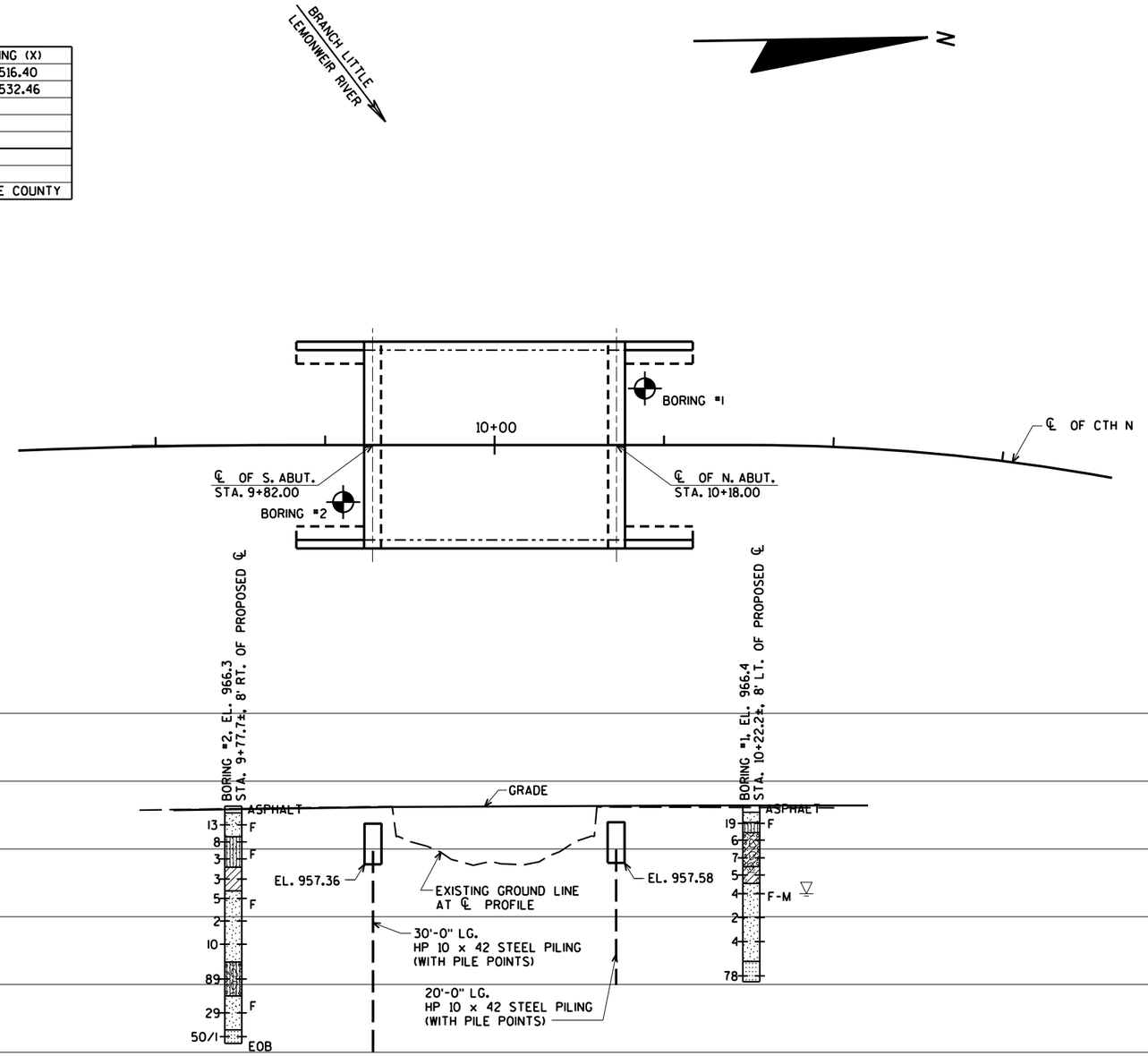
www.AyresAssociates.com

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	1/24/2017	353172.05	739516.40
2	1/24/2017	353127.28	739532.46
BORINGS COMPLETED BY: CHOSEN VALLEY TESTING, INC.			
REPORT COMPLETED BY: CHOSEN VALLEY TESTING, INC.			
ALL COORDINATES REFERENCED TO WCCS NAVD 88(11) MONROE COUNTY			



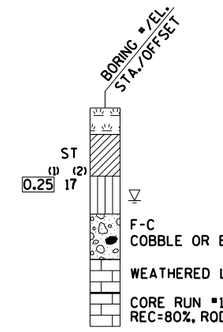
STATE PROJECT NUMBER

5126-00-72

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/ META

LEGEND OF BORING



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

- ▽ AT TIME OF DRILLING
- ▼ END OF DRILLING
- ▽ AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-41-310

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SUBSURFACE EXPLORATION

SHEET 3 OF 12
24

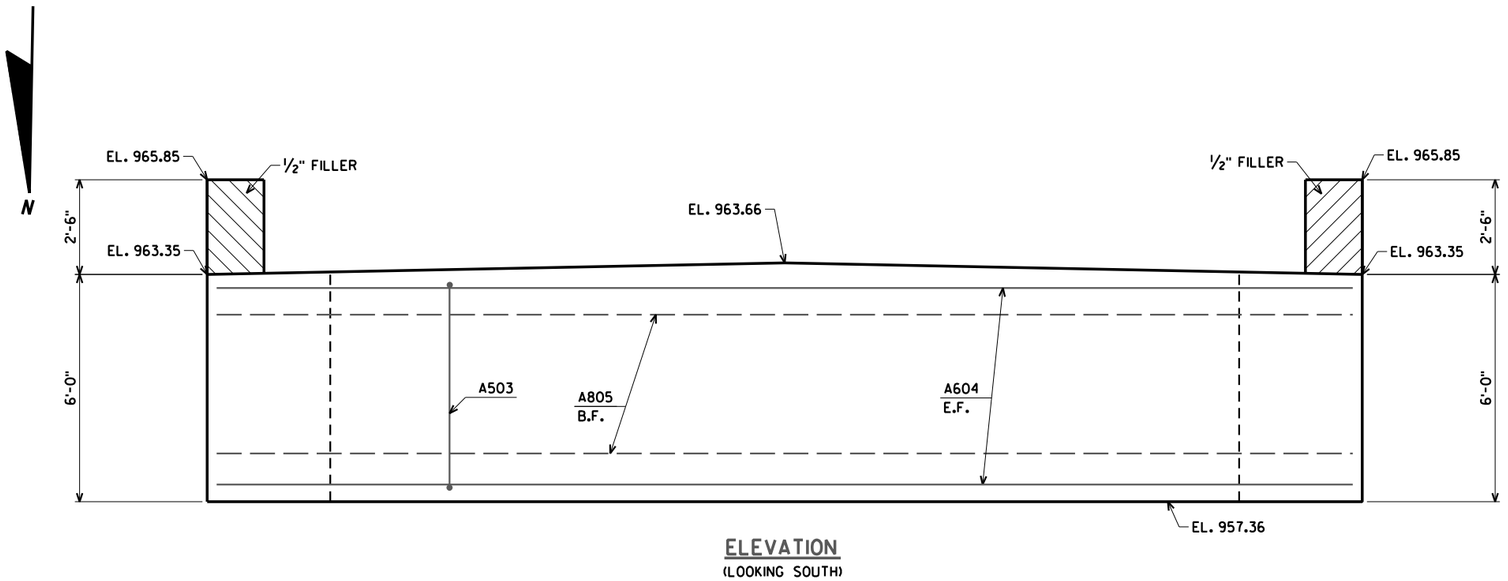
8

8

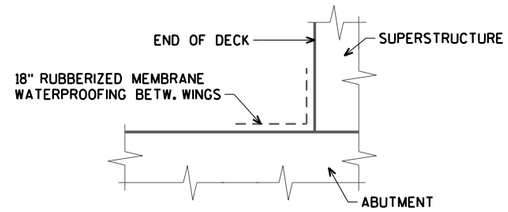
$PRFNAME$
U:\42-1051.00 - Monroe Co. CTH N (West) over Br. Little Lemonweir River\Structures\FINAL\421051soil.dgn

6/29/2017

PENTABLE:BReau_shd_util.tbl

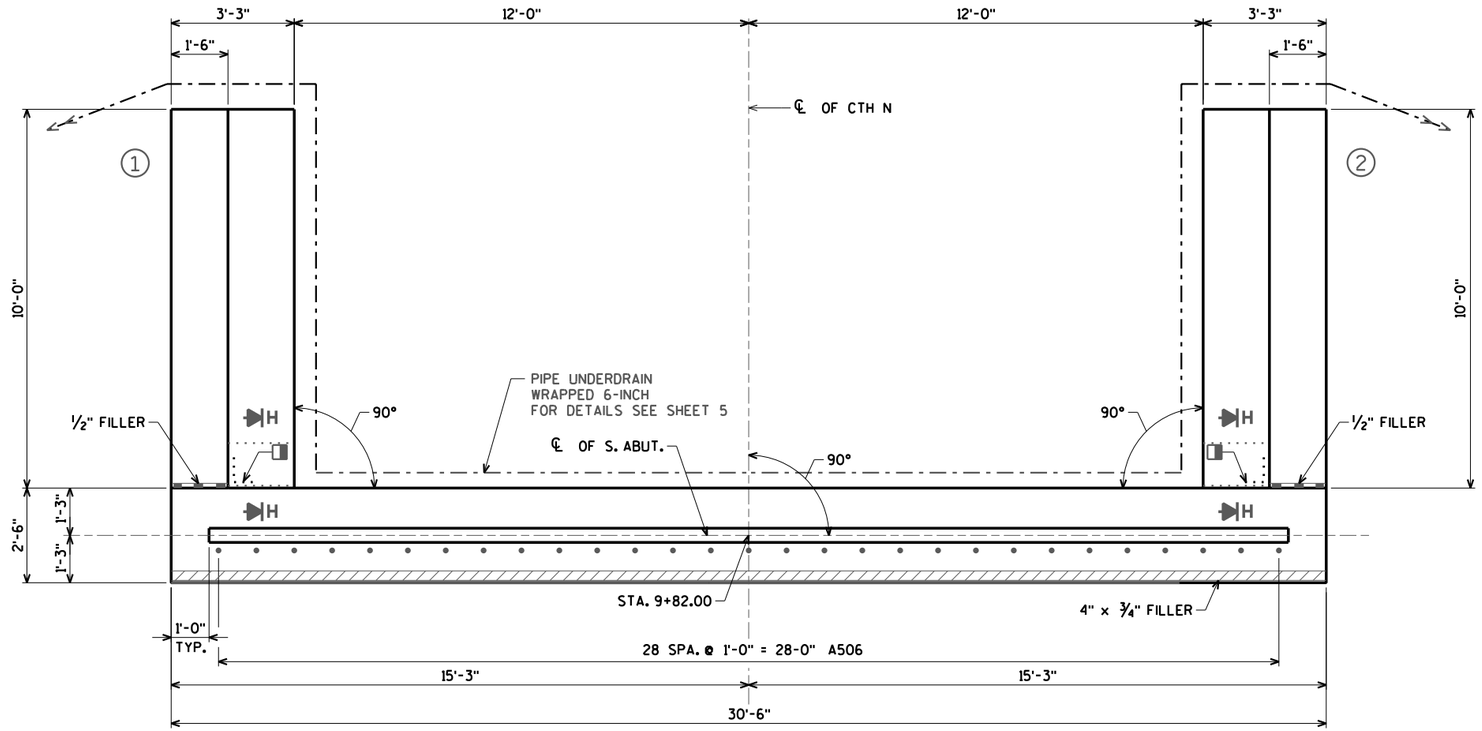


ELEVATION
(LOOKING SOUTH)



SECTION H

VERTICAL 18" RUBBERIZED MEMBRANE WATERPROOFING TO EXTEND FROM BRIDGE SEAT TO TOP OF WING WALL.



PLAN

B.F. DENOTES BACK FACE
E.F. DENOTES EACH FACE
F.F. DENOTES FRONT FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-41-310

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SOUTH ABUTMENT

SHEET 4 OF 12
25

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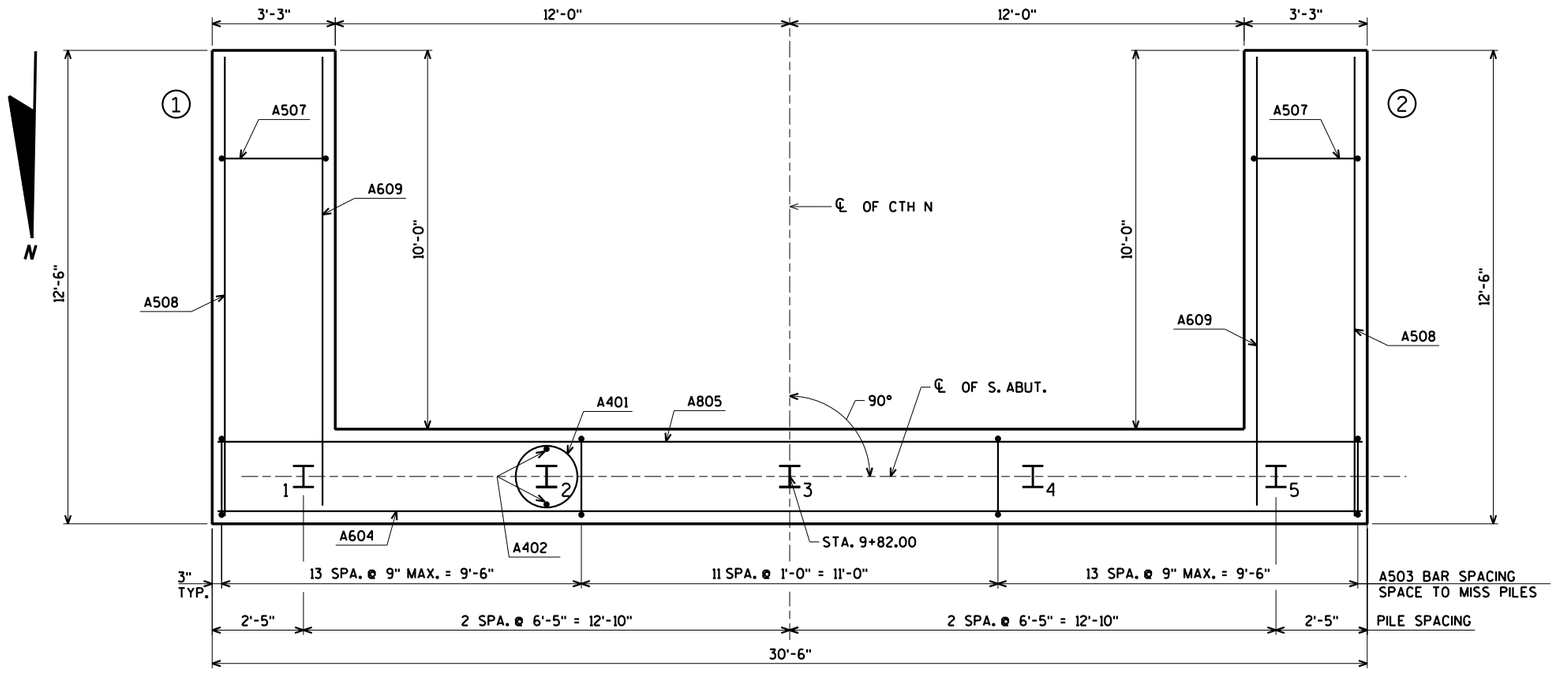
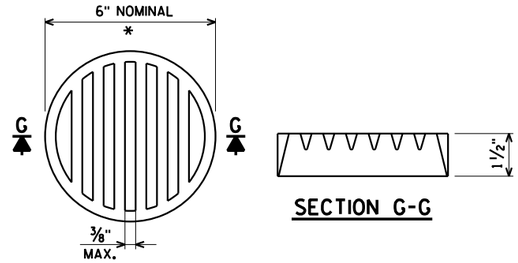


PILE LAYOUT



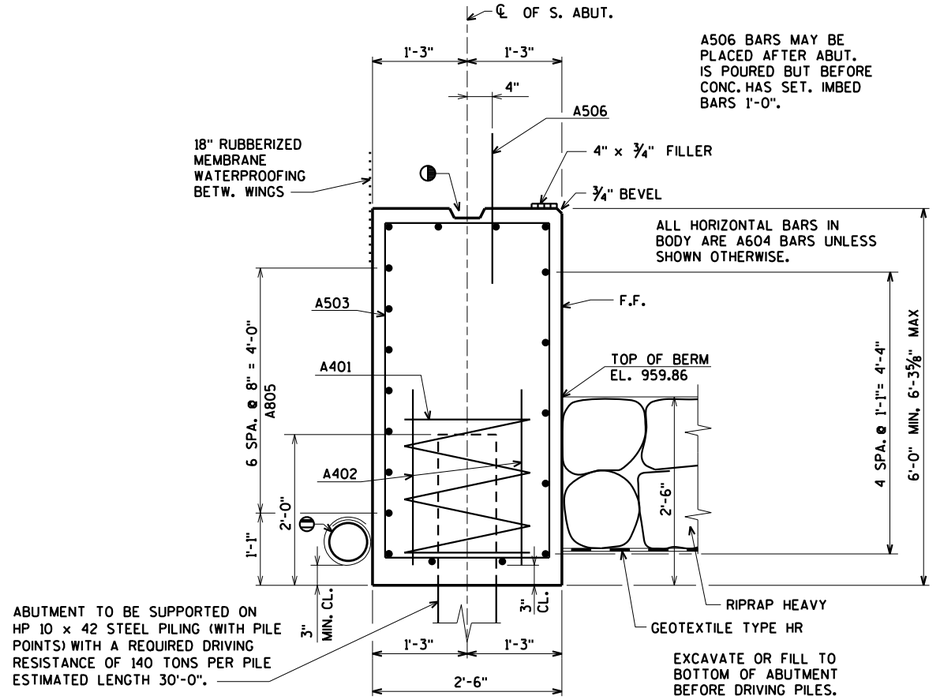
SECTION G-G

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 x 1-INCH SHEET METAL SCREWS.

RODENT SHIELD DETAIL



TYPICAL SECTION THRU BODY

⊖ PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON THIS SHEET. RODENT SHIELD TO BE INCLUDED IN BID PRICE OF "PIPE UNDERDRAIN WRAPPED 6-INCH".

◑ KEYED CONST. JOINT - FORMED BY A BEVELED 2" x 6".

FOR PILE SPLICE DETAIL SEE SHEET 2.

B.F. DENOTES BACK FACE

E.F. DENOTES EACH FACE

F.F. DENOTES FRONT FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-41-310

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SOUTH ABUTMENT DETAILS

SHEET 5 OF 12
26

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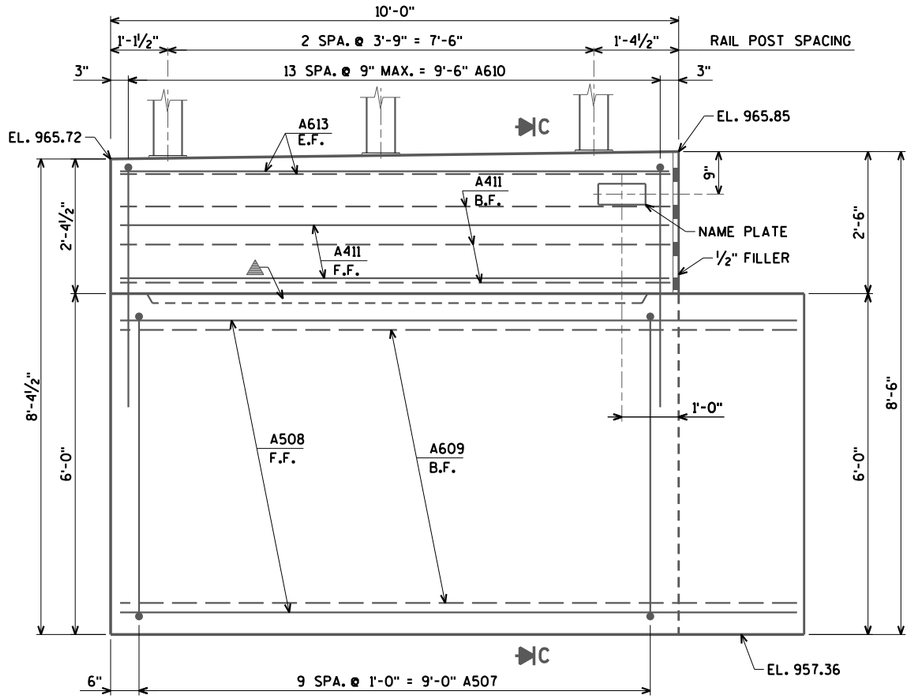
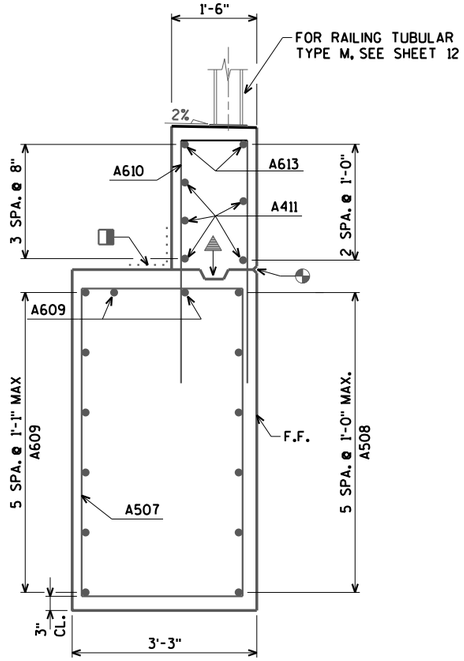
STATE PROJECT NUMBER
5126-00-72



ELEVATION - WING 1

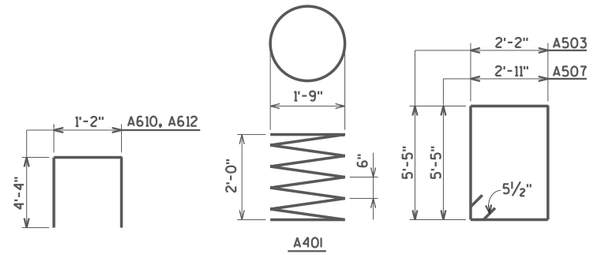


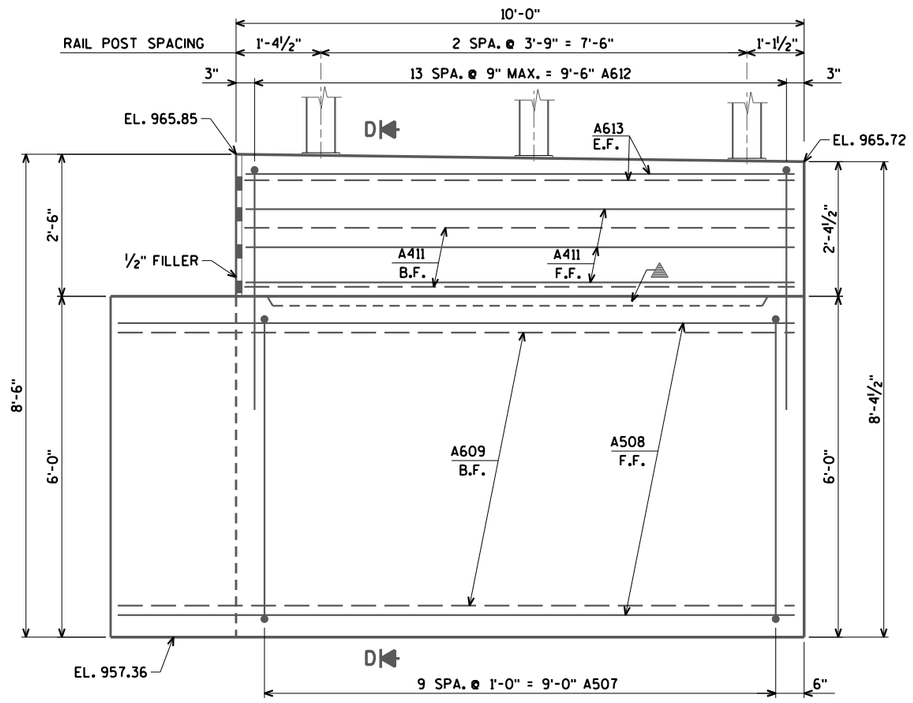
SECTION C

BILL OF BARS

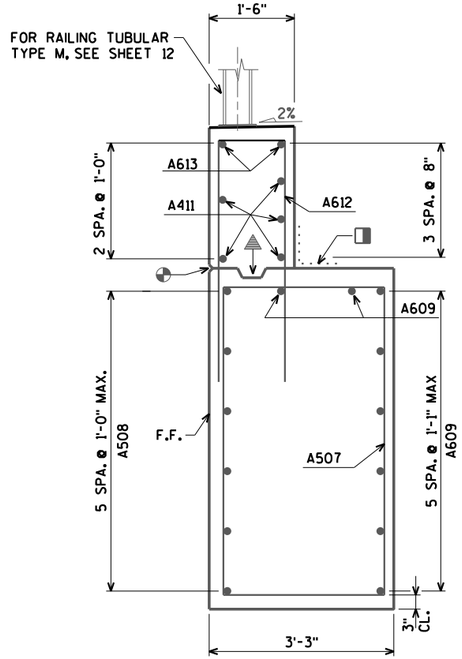
BAR. NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED BAR SERIES	1,840# UNCOATED 1,380# COATED LOCATION
A401		5	28-0	X		BODY @ PILES
A402		10	2-3			BODY @ PILES
A503		38	15-9	X		BODY VERTS.
A604		12	30-2			BODY HORIZ. E.F.
A805		7	30-2			BODY HORIZ. B.F.
A506	X	29	2-0			BODY DOWELS
A507	X	20	17-3	X		WINGS 1 & 2 VERT.
A508	X	12	12-2			WINGS 1 & 2 HORIZ. F.F.
A609	X	16	11-11			WINGS 1 & 2 HORIZ. B.F. AND TOP
A610	X	14	9-6	X		WING 1 VERT.
A411	X	10	9-7			WINGS 1 & 2 HORIZ. E.F.
A612	X	14	9-6	X		WING 2 VERT.
A613	X	4	9-7			WINGS 1 & 2 HORIZ. TOP

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.





ELEVATION - WING 2



SECTION D

18" RUBBERIZED MEMBRANE WATERPROOFING ON BACK FACE. NOT REQUIRED IF CONST. JOINT IS NOT USED.

OPT. CONST. JOINT FORMED BY BEVELED 2" x 6" KEYWAY.

¾" V-GROOVE ON FRONT FACE ONLY.

F.F. DENOTES FRONT FACE

E.F. DENOTES EACH FACE

B.F. DENOTES BACK FACE

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-41-310

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SOUTH ABUTMENT DETAILS AND BILL OF BARS

SHEET 6 OF 12
27

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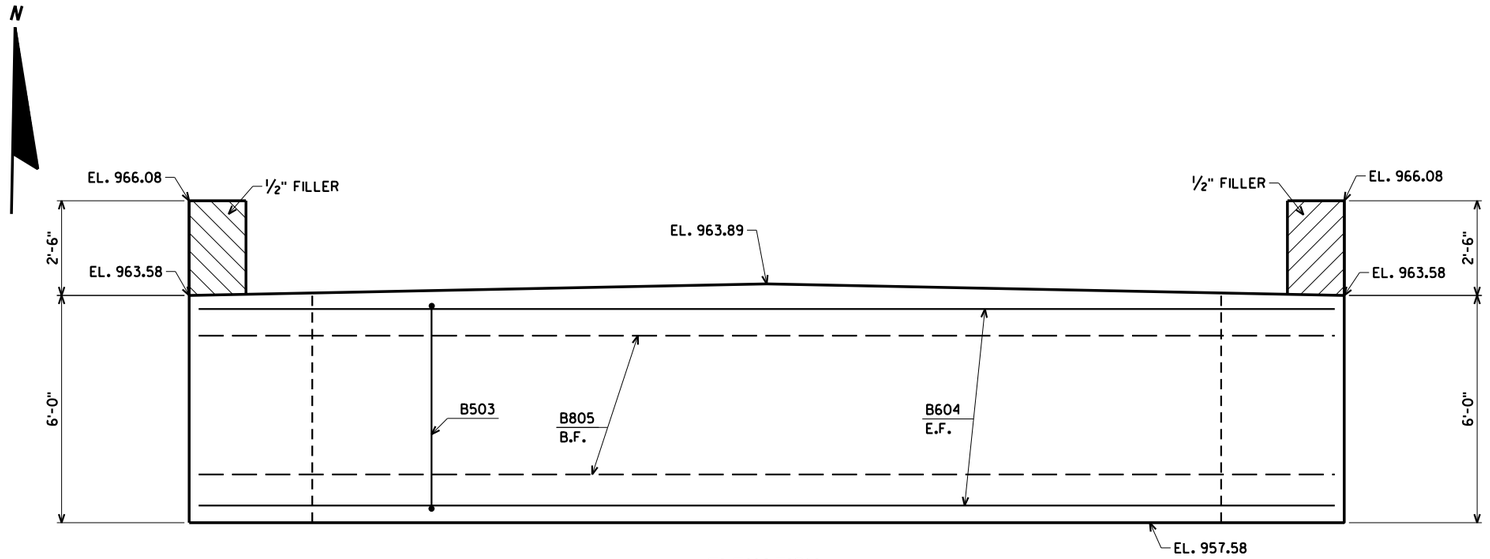
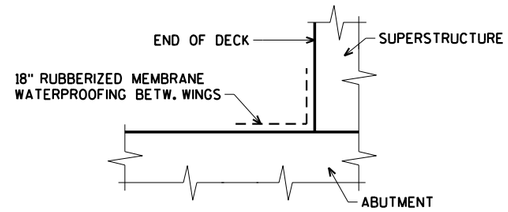
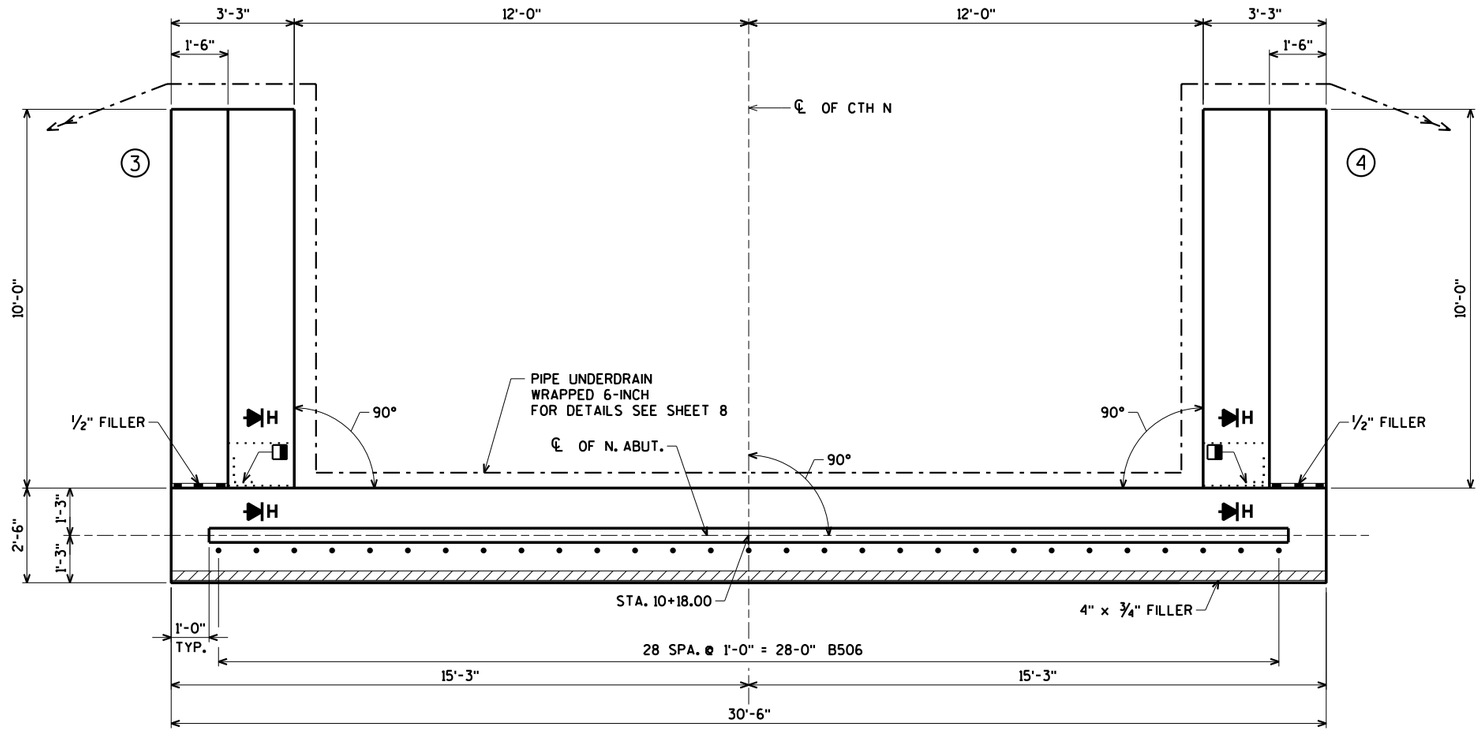


ELEVATION
(LOOKING NORTH)



SECTION H

◨ VERTICAL 18" RUBBERIZED MEMBRANE WATERPROOFING TO EXTEND FROM BRIDGE SEAT TO TOP OF WING WALL.



PLAN

B.F. DENOTES BACK FACE
E.F. DENOTES EACH FACE
F.F. DENOTES FRONT FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-41-310

DRAWN BY CJM | PLANS CK'D. JLB

NORTH ABUTMENT

SHEET 7 OF 12
28

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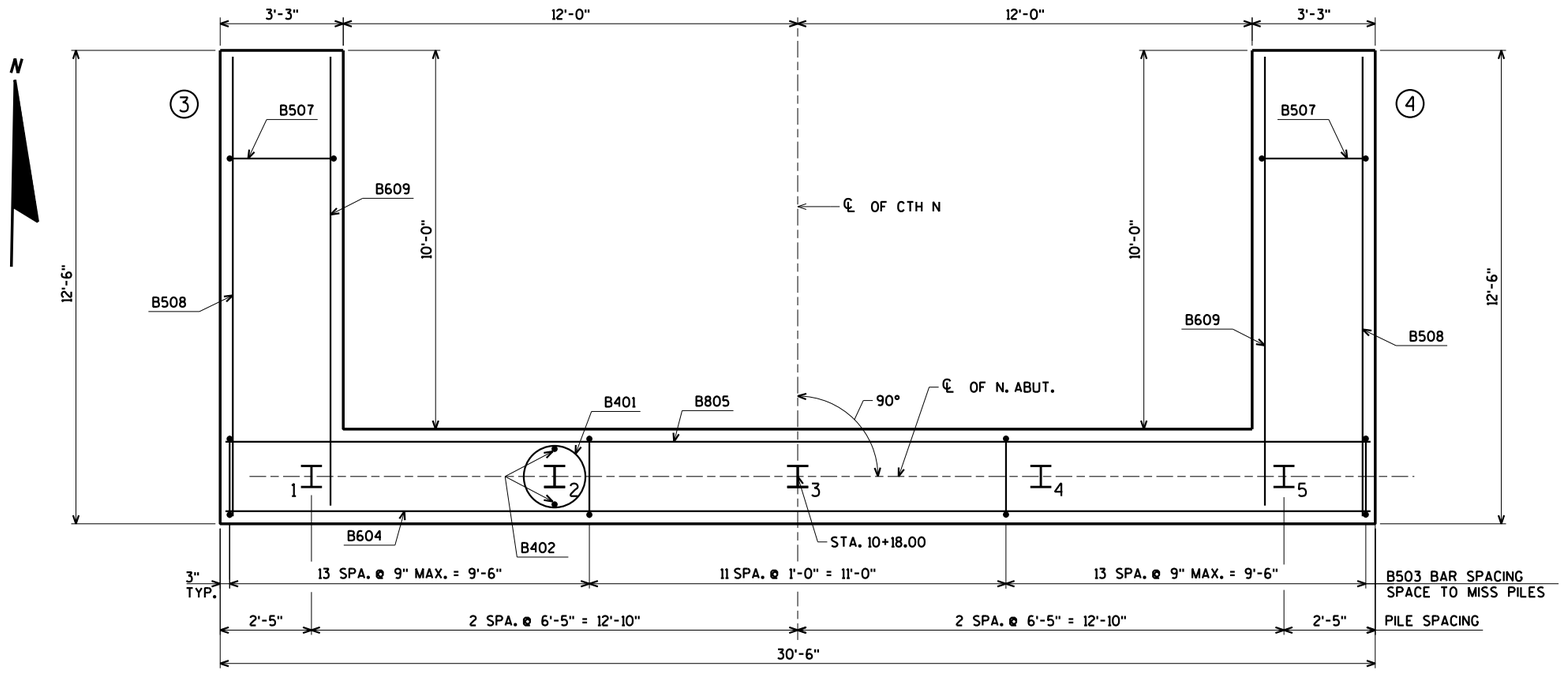
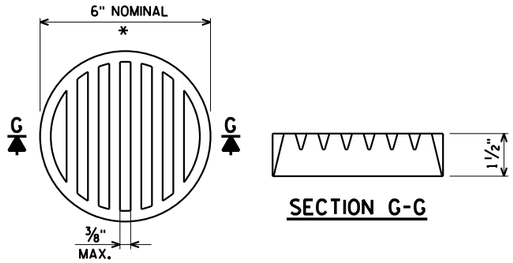
8

8



PILE LAYOUT



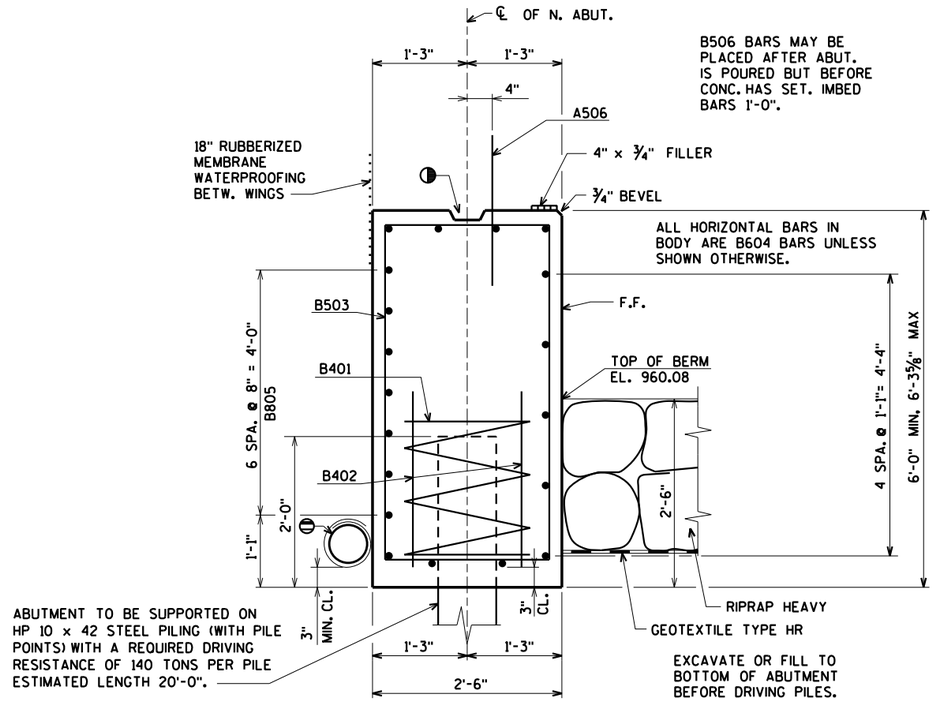
SECTION G-G

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 x 1-INCH SHEET METAL SCREWS.

RODENT SHIELD DETAIL



TYPICAL SECTION THRU BODY

⊖ PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON THIS SHEET. RODENT SHIELD TO BE INCLUDED IN BID PRICE OF "PIPE UNDERDRAIN WRAPPED 6-INCH".

◑ KEYED CONST. JOINT - FORMED BY A BEVELED 2" x 6".

FOR PILE SPLICE DETAIL SEE SHEET 2.

B.F. DENOTES BACK FACE

E.F. DENOTES EACH FACE

F.F. DENOTES FRONT FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-41-310

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NORTH ABUTMENT DETAILS

SHEET 8 OF 12
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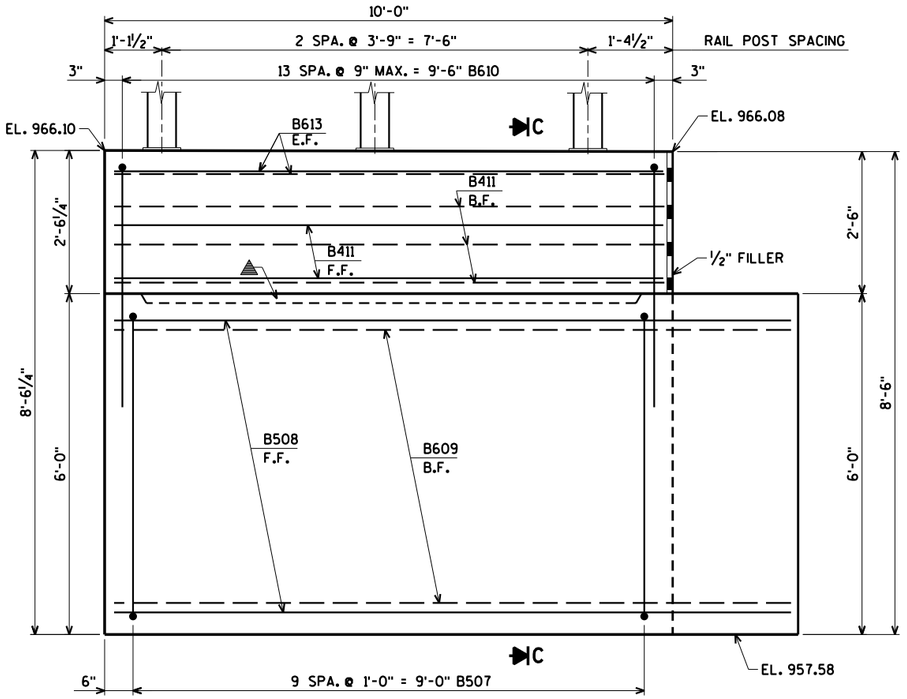
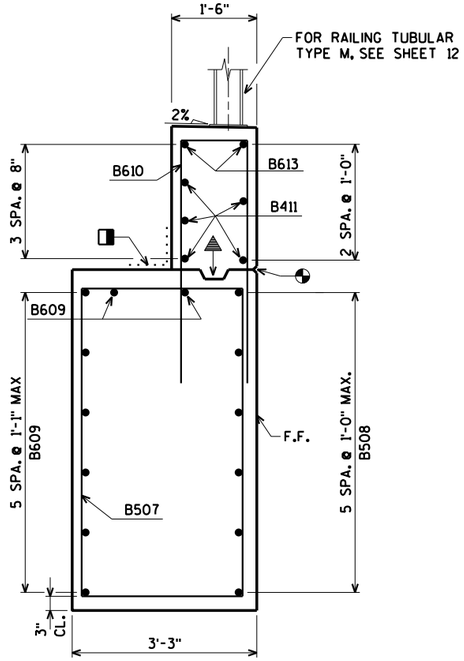


ELEVATION - WING 3

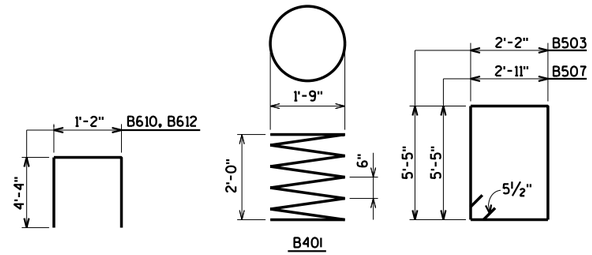


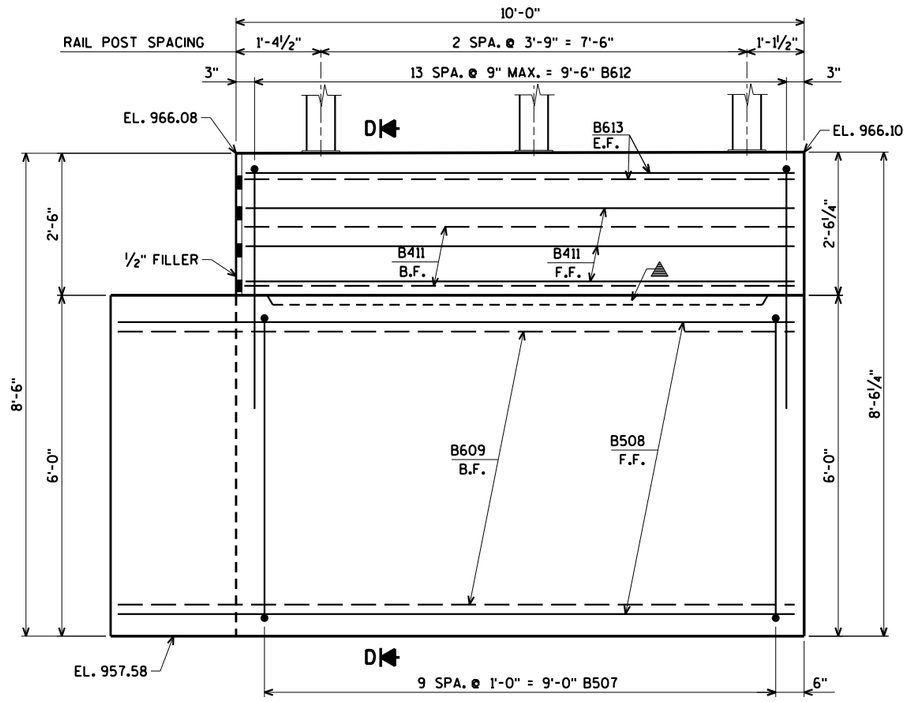
SECTION C

BILL OF BARS

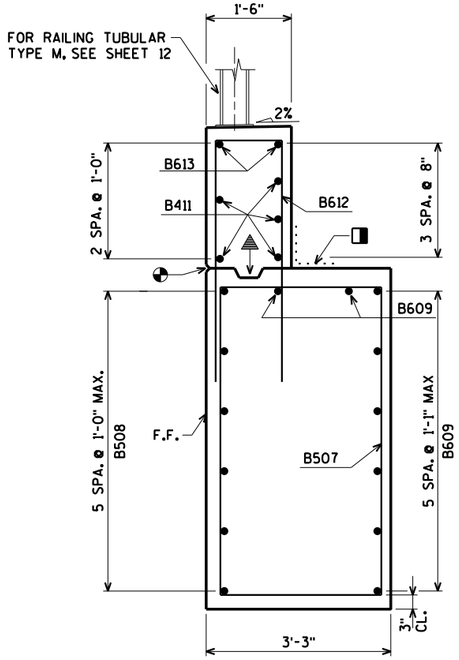
BAR. NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED BAR SERIES	1,840# UNCOATED 1,380# COATED LOCATION
B401		5	28-0	X		BODY @ PILES
B402		10	2-3			BODY @ PILES
B503		38	15-9	X		BODY VERTS.
B604		12	30-2			BODY HORIZ. E.F.
B805		7	30-2			BODY HORIZ. B.F.
B506	X	29	2-0			BODY DOWELS
B507	X	20	17-3	X		WINGS 1 & 2 VERT.
B508	X	12	12-2			WINGS 1 & 2 HORIZ. F.F.
B609	X	16	11-11			WINGS 1 & 2 HORIZ. B.F. AND TOP
B610	X	14	9-6	X		WING 1 VERT.
B411	X	10	9-7			WINGS 1 & 2 HORIZ. E.F.
B612	X	14	9-6	X		WING 2 VERT.
B613	X	4	9-7			WINGS 1 & 2 HORIZ. TOP

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.





ELEVATION - WING 4



SECTION D

◨ 18" RUBBERIZED MEMBRANE WATERPROOFING ON BACK FACE. NOT REQUIRED IF CONST. JOINT IS NOT USED.

▲ OPT. CONST. JOINT FORMED BY BEVELED 2" x 6" KEYWAY.

◔ ¾" V-GROOVE ON FRONT FACE ONLY.

F.F. DENOTES FRONT FACE

E.F. DENOTES EACH FACE

B.F. DENOTES BACK FACE

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STRUCTURE B-41-310

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NORTH ABUTMENT DETAILS AND BILL OF BARS

SHEET 9 OF 12
30

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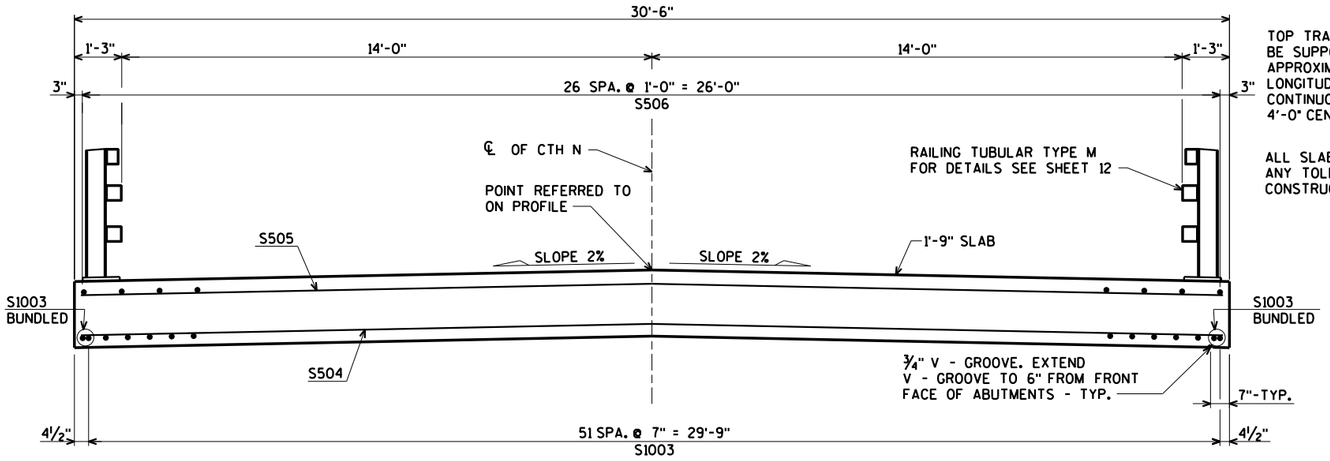
8



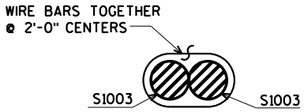
TOP TRANSVERSE BARS IN SLAB SHALL BE SUPPORTED BY INDIVIDUAL BAR CHAIRS AT APPROXIMATELY 3'-0" CENTERS EACH WAY. BOTTOM LONGITUDINAL BARS SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS AT APPROXIMATELY 4'-0" CENTERS.

ALL SLAB THICKNESS DIMENSIONS ARE MINIMUM. ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).

BILL OF BARS

BAR. NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED BAR SERIES	13,390# COATED LOCATION
S501	X	62	5-6	X		SLAB @ ABUT.
S502	X	62	3-6	X		SLAB @ ABUT.
S1003	X	54	33-5			SLAB LONG. BOT.
S504	X	55	30-2			SLAB TRANS. BOT.
S505	X	39	30-2			SLAB TRANS. TOP
S506	X	27	38-2			SLAB LONG. TOP
S607	X	28	12-0	X		SLAB @ RAIL POSTS
S608	X	40	6-0			SLAB @ INT. RAIL POSTS
S609	X	16	6-0	X		SLAB @ END RAIL POSTS

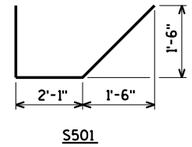
BENDING DIMENSIONS ARE OUT TO OUT OF BARS.



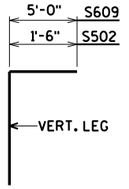
BUNDLING DETAIL

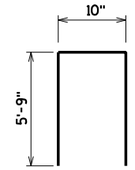
CROSS SECTION THRU BRIDGE

(LOOKING NORTH)

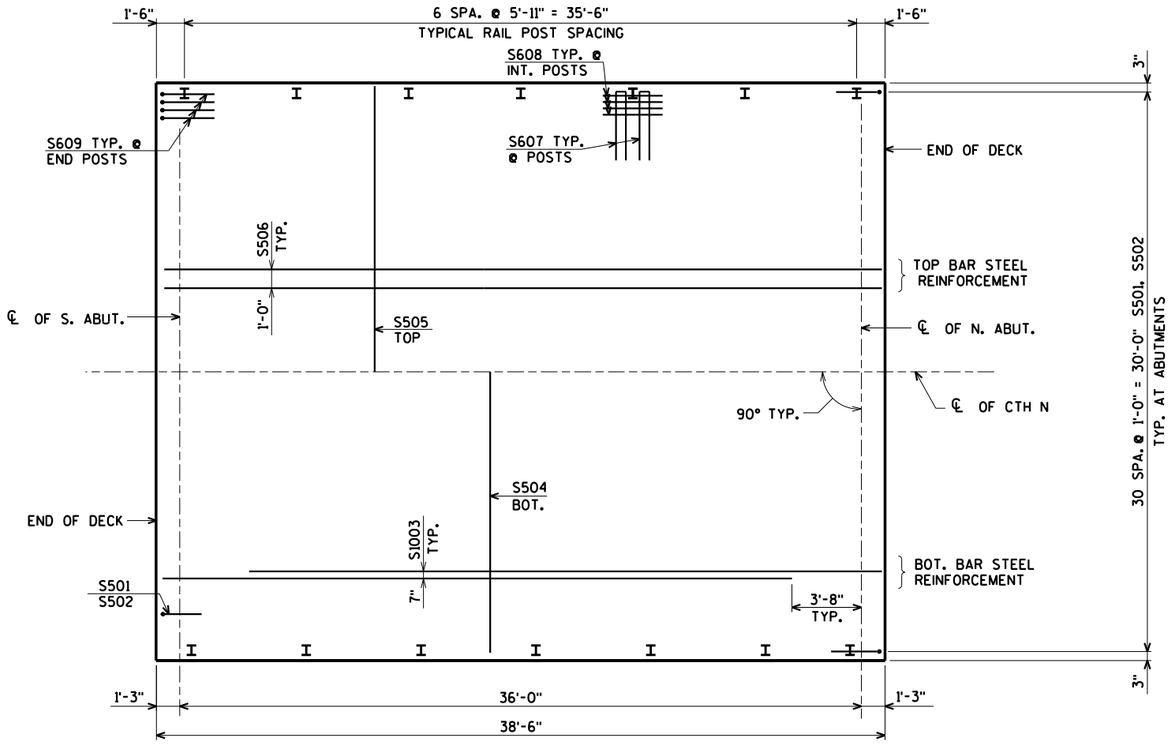


S501





S607



PLAN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-41-310

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SUPERSTRUCTURE

SHEET 10 OF 12
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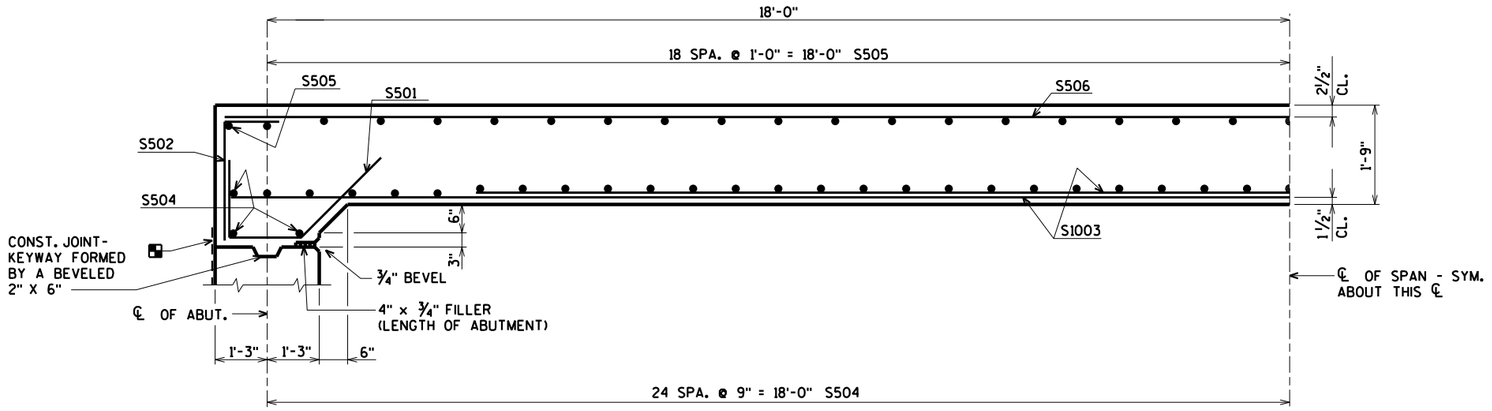
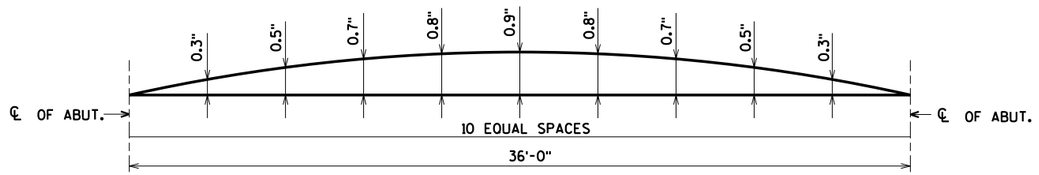


PART LONGITUDINAL SECTION

■ 18" RUBBERIZED MEMBRANE WATERPROOFING BETWEEN WINGS



CAMBER DIAGRAM

CAMBER SPANS AS SHOWN TO PROVIDE FOR DEAD LOAD DEFLECTION & FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT.

PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF SLAB ELEVATIONS AT THE ℄ OF ABUTMENTS, AND AT ½ PT. TO VERIFY CAMBER. TAKE ELEVATIONS ALONG EDGE OF SLAB AND CROWN OR ℄.

TOP OF DECK ELEVATIONS

LOCATION	℄ OF S. ABUT.	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	℄ OF N. ABUT.
W. EDGE OF SLAB	965.85	965.89	965.92	965.95	965.98	966.00	966.02	966.04	966.06	966.07	966.08
℄ OF STRUCTURE	966.16	966.19	966.22	966.25	966.28	966.31	966.33	966.35	966.36	966.38	966.39
E. EDGE OF SLAB	965.85	965.89	965.92	965.95	965.98	966.00	966.02	966.04	966.06	966.07	966.08

ELEVATIONS SHOWN ARE FINISHED DECK AND DO NOT INCLUDE ALLOWANCES OF DEAD LOAD DEFLECTION AND FUTURE CREEP.

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SUPERSTRUCTURE DETAILS

SHEET 11 OF 12
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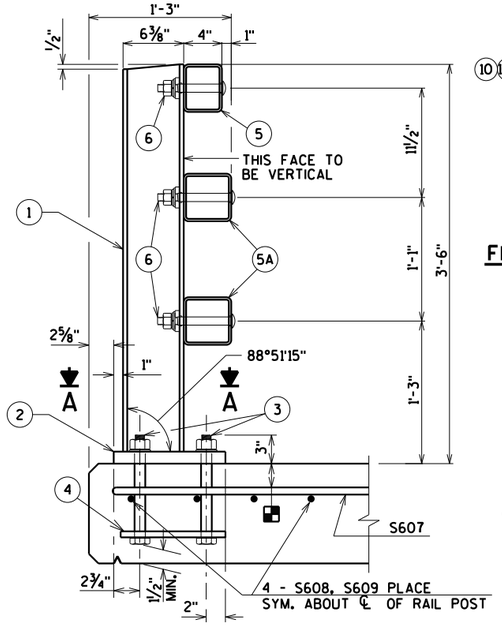
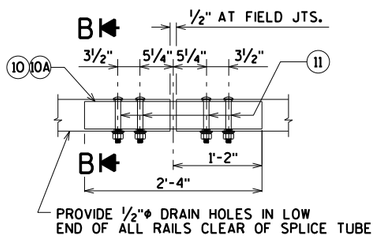
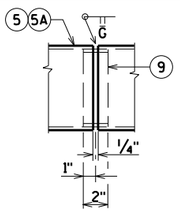


SECTION THRU RAILING ON DECK

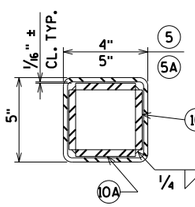


FIELD ERECTION JOINT DETAIL

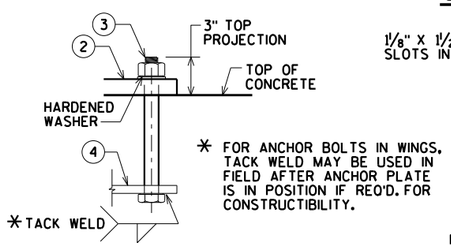


SHOP RAIL SPLICE DETAIL

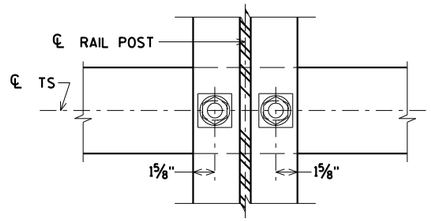
(LOCATION MUST BE SHOWN ON THE SHOP DRAWINGS)



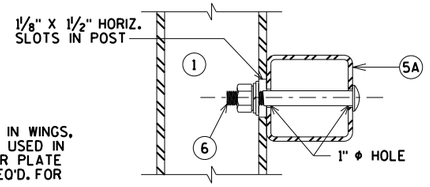
SECTION B



ANCHOR BOLTS



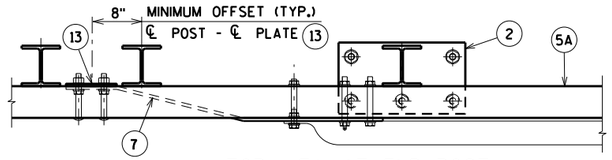
SECTION THRU POST WEB



SECTION THRU RAIL

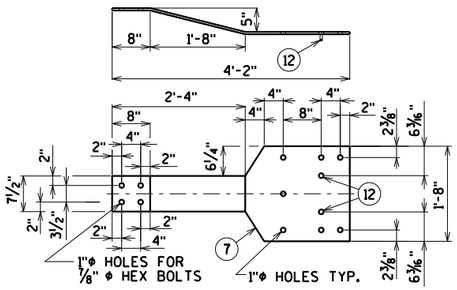
NOTE: CONNECTIONS AT LOWER RAILS SHOWN. CONNECTIONS AT TOP RAIL SIMILAR.

TYPICAL RAIL TO POST CONNECTIONS



TOP VIEW AT END POST

(THRIE BEAM RAIL ATTACHMENT)

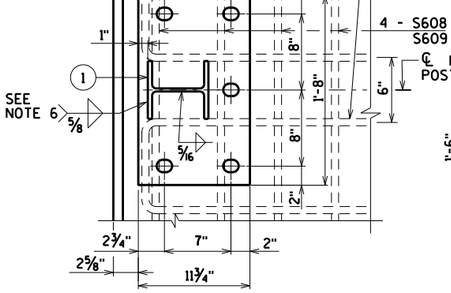


BACK-UP PLATE DETAIL

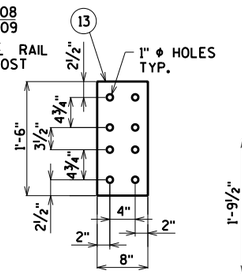
(AT BEAM GUARD ATTACHMENT)

LEGEND

1. W6 x 25 WITH 1⅛" X 1½" HORIZ. SLOTS ON EACH SIDE OF POST FOR BOLT NO. 6. CUT BOTTOM OF POST TO MATCH CROSS SLOPE OF ROADWAY. PLACE POST VERTICAL. PLACE POSTS NORMAL TO GRADE LINE.
2. PLATE 1¼" x 11¾" x 1'-8" WITH 1⅝" X 1⅝" SLOTTED HOLES FOR ANCHOR BOLTS NO. 3. WELD TO NO. 1 AS SHOWN. SLOTS PARALLEL TO SHORT SIDE OF PLATE.
3. ASTM A449 - 1⅛" DIA. ANCHOR BOLTS WITH NUT AND HARDENED WASHER (ALL GALVANIZED). 5 REQ'D. PER POST. THREAD 3" AND PLACE NORMAL TO PLATE NO. 2. CHAMFER TOP OF BOLTS BEFORE THREADING. USE 1'-9" LONG IN ABUTMENT WINGS. AT POSTS ON CONCRETE SLAB SUPERSTRUCTURES WHERE THE SLAB THICKNESS IS > 16" USE 1'-3" LONG. ~~USE 10¾" LONG AT ALL OTHER LOCATIONS.~~ (AN EQUIVALENT THREADED ROD WITH NUTS AND HARDENED WASHERS MAY BE SUBSTITUTED FOR ANCHOR BOLTS IN WINGS IF REQ'D. FOR CONSTRUCTIBILITY.)
4. ⅝" x 11" x 1'-8" ANCHOR PLATE (GALVANIZED) WITH 1³⁄₁₆" DIA. HOLES FOR ANCHOR BOLTS NO. 3
5. TS 5 x 4 x 0.25 STRUCTURAL TUBING. ATTACH TO NO. 1 WITH NO. 6.
5A. TS 5 x 5 x 0.25 STRUCTURAL TUBING. ATTACH TO NO. 1 WITH NO. 6.
6. ⅞" DIA. A325 SLOTTED ROUND HEAD BOLT WITH NUT, ³⁄₁₆" X 1⅝" X 1⅝" WASHER, AND LOCK WASHER (2 REQ'D. AT EACH RAIL TO POST LOCATION.)
7. ½" THK. BACK-UP PLATE WITH 2 - ⅞" X 1½" THREADED SHOP WELDED STUDS (NO. 12). BOLT TO RAIL AS SHOWN IN DETAIL. REQUIRED AT THRIE BEAM GUARD RAIL ATTACHMENTS ONLY. PLACE SYMMETRICALLY ABOUT TUBES NO. 5A.
8. 1" DIA. HOLES IN PLATE NO. 7 & TUBES NO. 5A FOR ⅞" DIA. A325 BOLTS WITH HEX NUTS AND WASHERS. 6 HOLES IN TUBES AND PLATE NO. 7.
9. SPLICE SLEEVE FABRICATED FROM ¼" PLATE. PROVIDE "SLIDING FIT".
10. ⅜" X 3⅝" X 2'-4" PLATE. 2 PER RAIL. USED IN NO. 5 & 5A.
10A. ⅜" X 2⅝" X 2'-4" PLATE USED IN NO. 5, ⅜" X 3⅝" X 2'-4" PLATE USED IN NO. 5A. 2 PER RAIL.
11. ⅞" Φ A325 ROUND HEAD BOLT WITH NUT, WASHER, AND LOCK WASHER. USE 1⅛" X 1¼" LONGIT. SLOTTED HOLES AT FIELD JOINTS ~~AND 1⅛" X 2¼" MIN. LONGIT. SLOTTED HOLES AT EXP. JOINTS~~ IN PLATE NO. 10A.
12. ⅞" DIA. X 1½" LONG THREADED SHOP WELDED STUDS (2 REQ'D).
13. ⅜" X 8" X 1'-6" PLATE. BOLT TO RAIL AS SHOWN IN DETAIL. REQ'D. AT THRIE BEAM GUARD RAIL ATTACHMENTS ONLY. PLACE SYM. ABOUT TUBES NO. 5A.
14. ⅞" DIA. X 2" LONG A325 HEX BOLT WITH NUT AND WASHER (5 REQ'D.).
15. 1" Φ HOLES IN TUBES NO. 5A FOR ⅞" DIA. A325 ROUND HEAD BOLT WITH NUT, WASHER AND LOCK WASHER (4 REQ'D.). 4 HOLES IN TUBES.

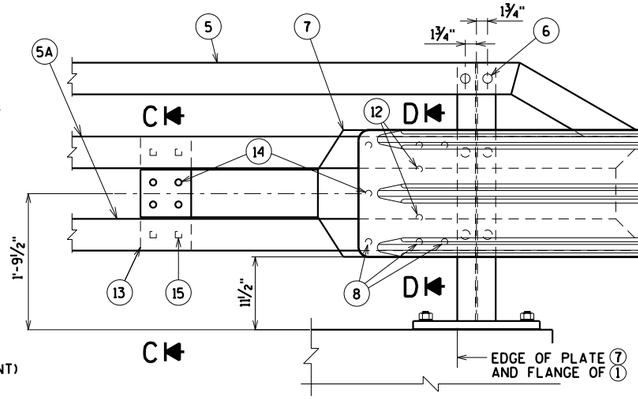


SECTION A



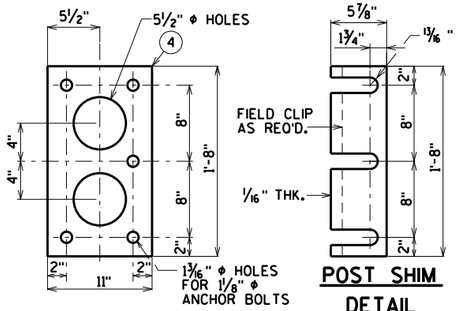
ANCHOR PLATE

(AT BEAM GUARD ATTACHMENT)



DETAIL AT END POST

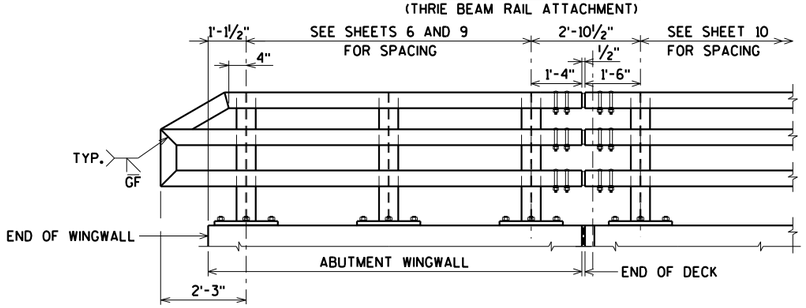
(THRIE BEAM RAIL ATTACHMENT)



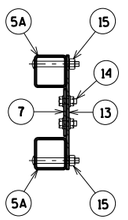
ANCHOR PLATE

(AT RAIL TO DECK CONNECTION)

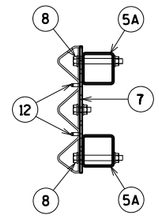
POST SHIM DETAIL



PART ELEVATION OF RAILING



SECTION C



SECTION D

GENERAL NOTES

1. BID ITEM SHALL BE "RAILING TUBULAR TYPE M B-41-310" WHICH INCLUDES ALL ITEMS SHOWN.
2. RAIL POST AND BASE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 50. HOLLOW RAILING STRUCTURAL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A500 GRADE B OR C WITH A CERTIFIED FY = 50 KSI. ANCHOR PLATES, AND SPLICE TUBE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A709 GRADE 36.
3. THE NUT SECURING THE POST BASE PLATE TO THE CONCRETE SHALL BE TIGHTENED TO A SNUG FIT AND GIVEN AN ADDITIONAL ⅛ TURN.
4. RAILS SHALL BE CONTINUOUS OVER A MINIMUM OF THREE (3) POSTS WITHOUT SPLICES WHERE POSSIBLE. ~~RAILS SHALL BE SPLICED IN A PANEL OVER EXPANSION JOINTS.~~
5. ENDS OF TUBE SECTIONS SHALL BE SAWED. GRIND SMOOTH EXPOSED EDGES. ALL CUT ENDS SHALL BE TRUE AND SMOOTH.
6. WELD IS THE SAME ON BOTH FLANGES. FLANGE WELD DOES NOT REQUIRE MAGNETIC PARTICLE TESTING.
7. FILL BOLT SLOT OPENINGS IN POST SHIMS AND PLATE NO. 2 AND CAULK AROUND PERIMETER OF PLATE NO. 2 WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. STEEL POST SHIMS MAY BE USED UNDER POSTS WHERE REQ'D. FOR ALIGNMENT.
8. POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.
9. ALL MATERIAL SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, ALL STEEL RAILING POSTS & STEEL TUBING SHALL BE GIVEN A NO. 6 BLAST CLEANING BY S.S.P.C. SPECIFICATIONS.
10. ~~WHEN PAINTING IS REQUIRED, ALL MATERIAL EXCEPT ANCHORAGE DETAIL (NO. 3 & 4) SHALL BE PAINTED OVER GALVANIZING WITH APPROVED TIE COAT AND TOP COAT.~~
11. THIS RAILING MEETS NCHRP REPORT 350 EVALUATION CRITERIA FOR TEST LEVEL 4 (TL-4).
12. PLACE FIRST BOTTOM LONGITUDINAL BAR CLEAR OF DRIP GROOVE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-41-310

DRAWN BY	PLANS CK'D.
CJM	JLB

RAILING TUBULAR TYPE M

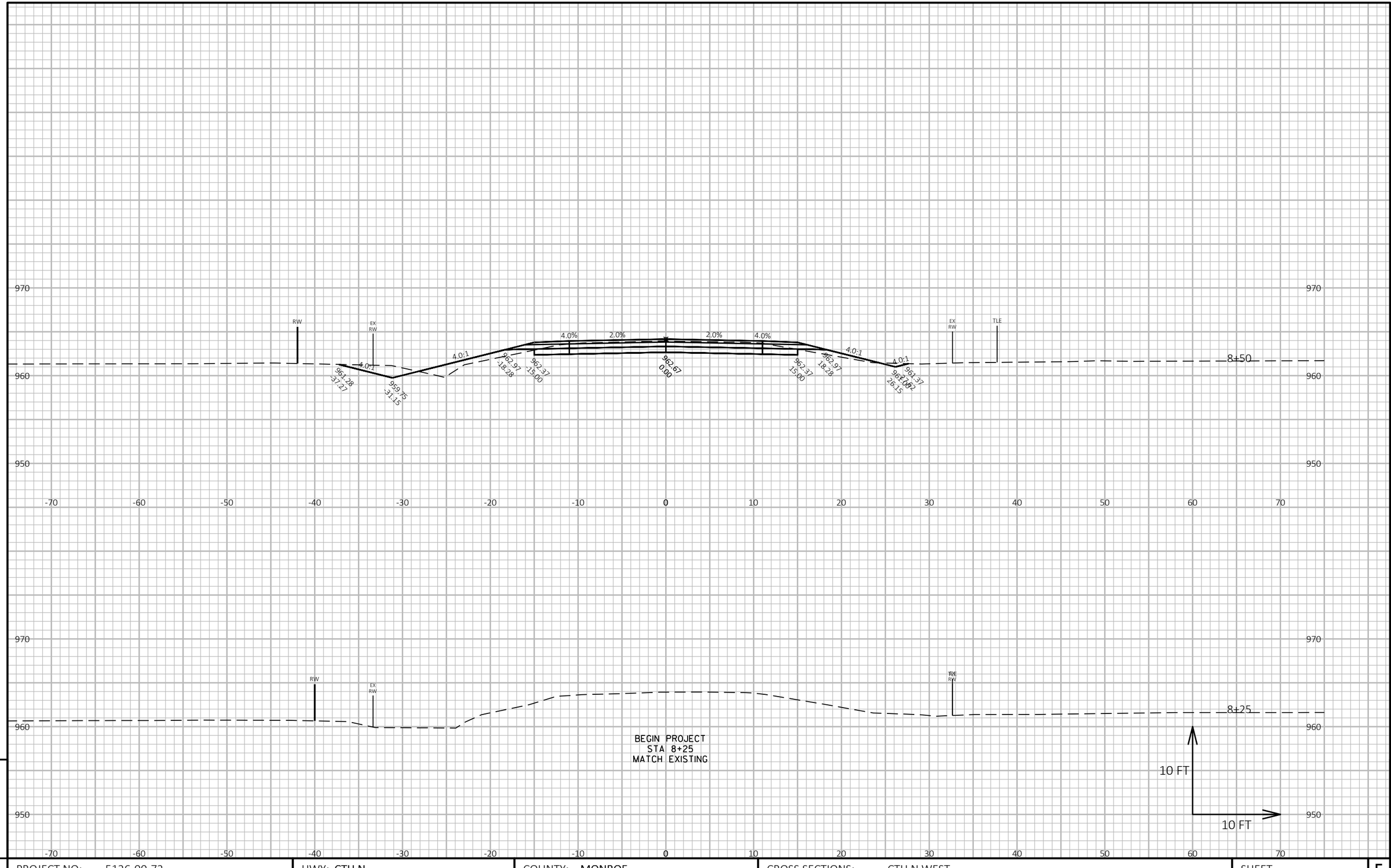
SHEET 12 OF 12
33

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

CTH N (west) COMPUTER EARTHWORK

Station	Distance	Area (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut	Expanded Fill	
						1.00	1.30	
				Note 1	Note 2	Note 1		Note 3
8+25	--	42.3	11.9					
8+50	25	42.3	11.9	39	11	39	14	25
8+75	25	47.0	17.9	41	14	81	32	48
9+00	25	51.3	27.1	46	21	126	59	67
9+25	25	66.3	32.8	54	28	181	95	85
9+50	25	111.0	39.2	82	33	263	139	124
9+75	25	86.6	57.5	91	45	354	197	157
9+81	6	86.6	57.5	19	13	373	214	160
NEW BRIDGE	--	--	--	--	--	--	--	--
10+19	--	50.1	77.3	--	--	--	--	--
10+25	6	50.1	77.3	11	17	385	236	149
10+50	25	37.9	42.4	41	55	425	308	117
10+75	25	31.4	19.6	32	29	457	345	112
11+00	25	41.7	8.0	34	13	491	362	129
11+25	25	41.7	8.0	39	7	530	371	158
				530	286			

Note 1 - Cut	Cut includes existing asphalt pavement. Assumed to be reused as fill outside the 1:1 road core.
Note 2 - Fill	Volume needed to be filled.
Note 3 - Mass Ordinate	(Cut) - (Fill * 1.30)

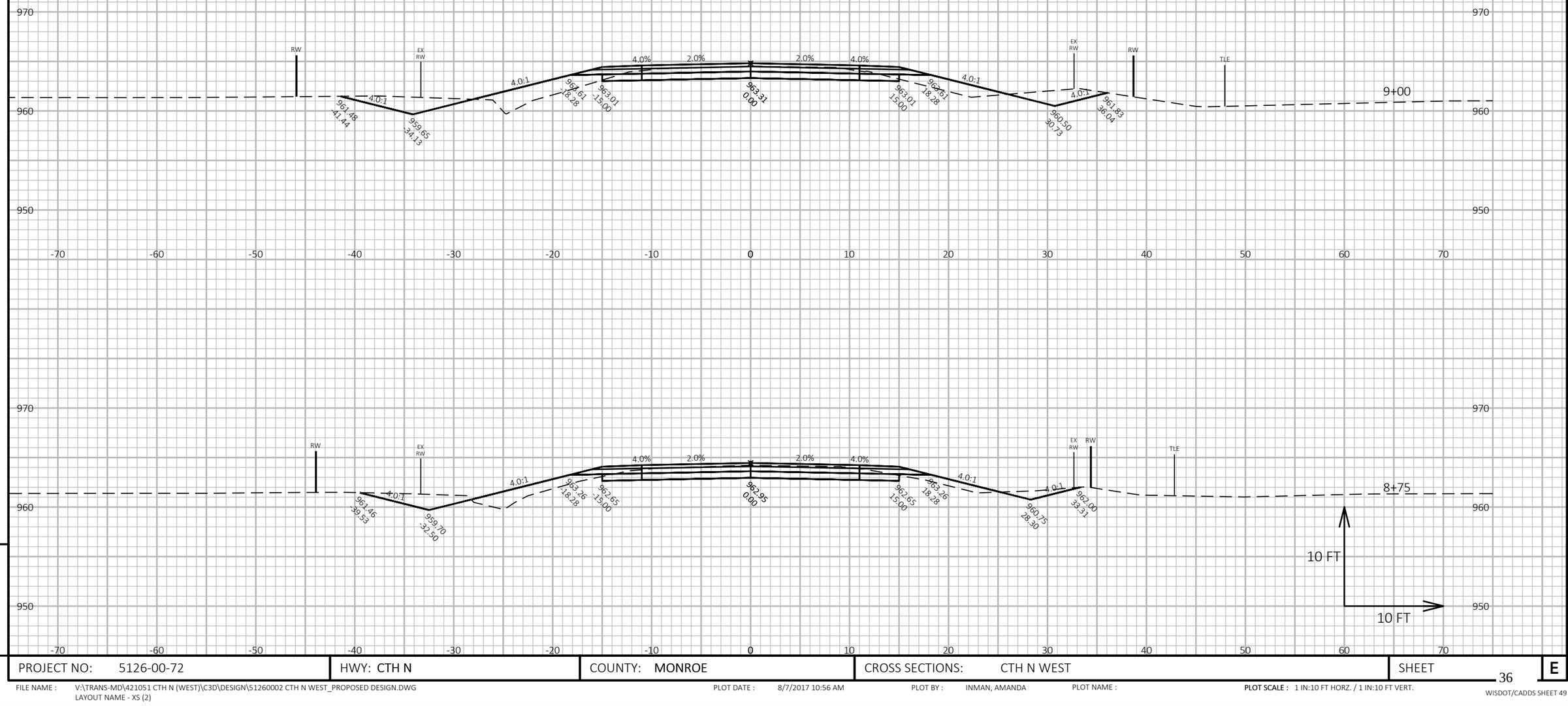


PROJECT NO: 5126-00-72	HWY: CTH N	COUNTY: MONROE	CROSS SECTIONS: CTH N WEST	SHEET 35	E

FILE NAME : V:\TRANS-MD\421051 CTH N (WEST)\C3D\DESIGN\51260002 CTH N WEST_PROPOSED DESIGN.DWG
LAYOUT NAME - XS (1)

PLOT DATE : 8/7/2017 10:56 AM PLOT BY : INMAN, AMANDA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



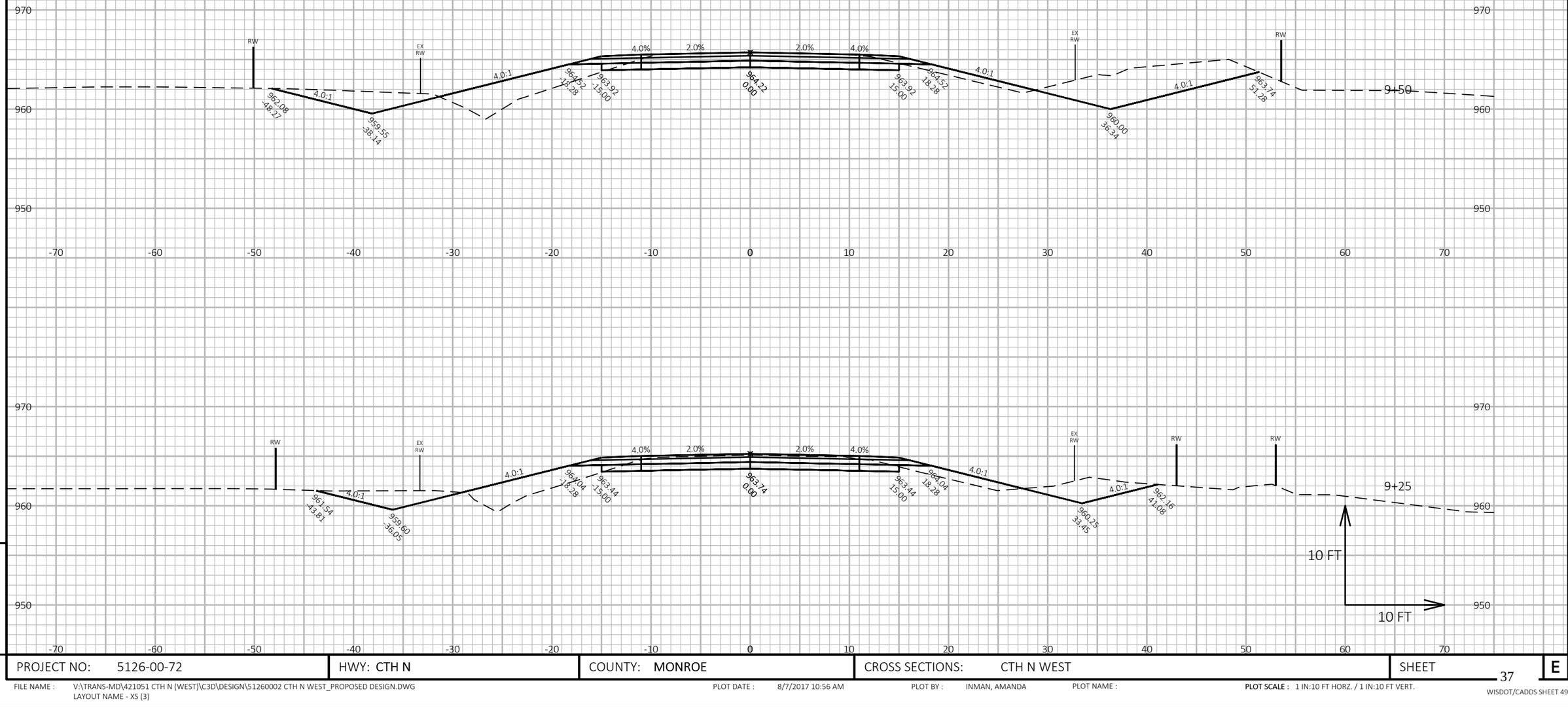
9

9

PROJECT NO: 5126-00-72	HWY: CTH N	COUNTY: MONROE	CROSS SECTIONS: CTH N WEST	SHEET 36	E

FILE NAME : V:\TRANS-MD\421051 CTH N (WEST)\C3D\DESIGN\51260002 CTH N WEST_PROPOSED DESIGN.DWG
LAYOUT NAME - XS (2)

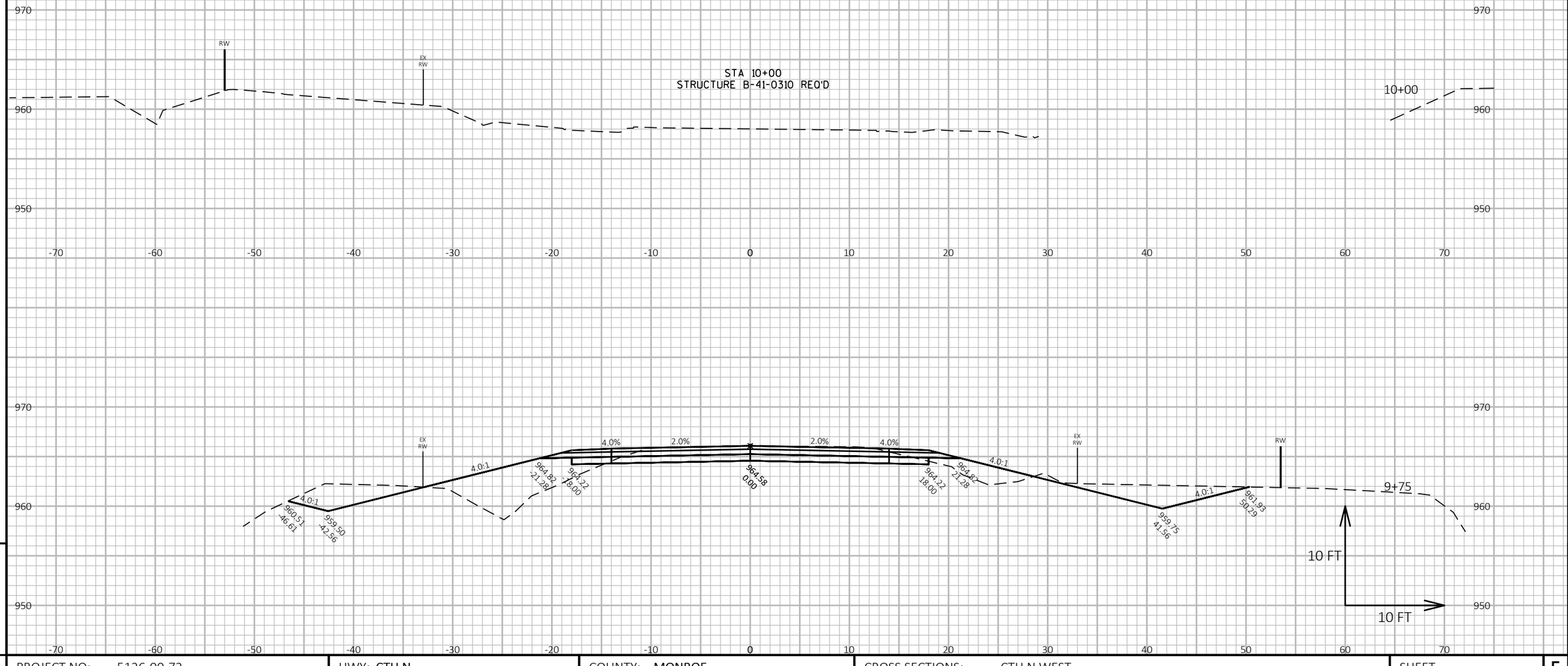
PLOT DATE : 8/7/2017 10:56 AM PLOT BY : INMAN, AMANDA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 5126-00-72	HWY: CTH N	COUNTY: MONROE	CROSS SECTIONS: CTH N WEST	SHEET 37

FILE NAME : V:\TRANS-MD\421051 CTH N (WEST)\C3D\DESIGN\51260002 CTH N WEST_PROPOSED DESIGN.DWG
LAYOUT NAME - XS (3)

PLOT DATE : 8/7/2017 10:56 AM PLOT BY : INMAN, AMANDA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

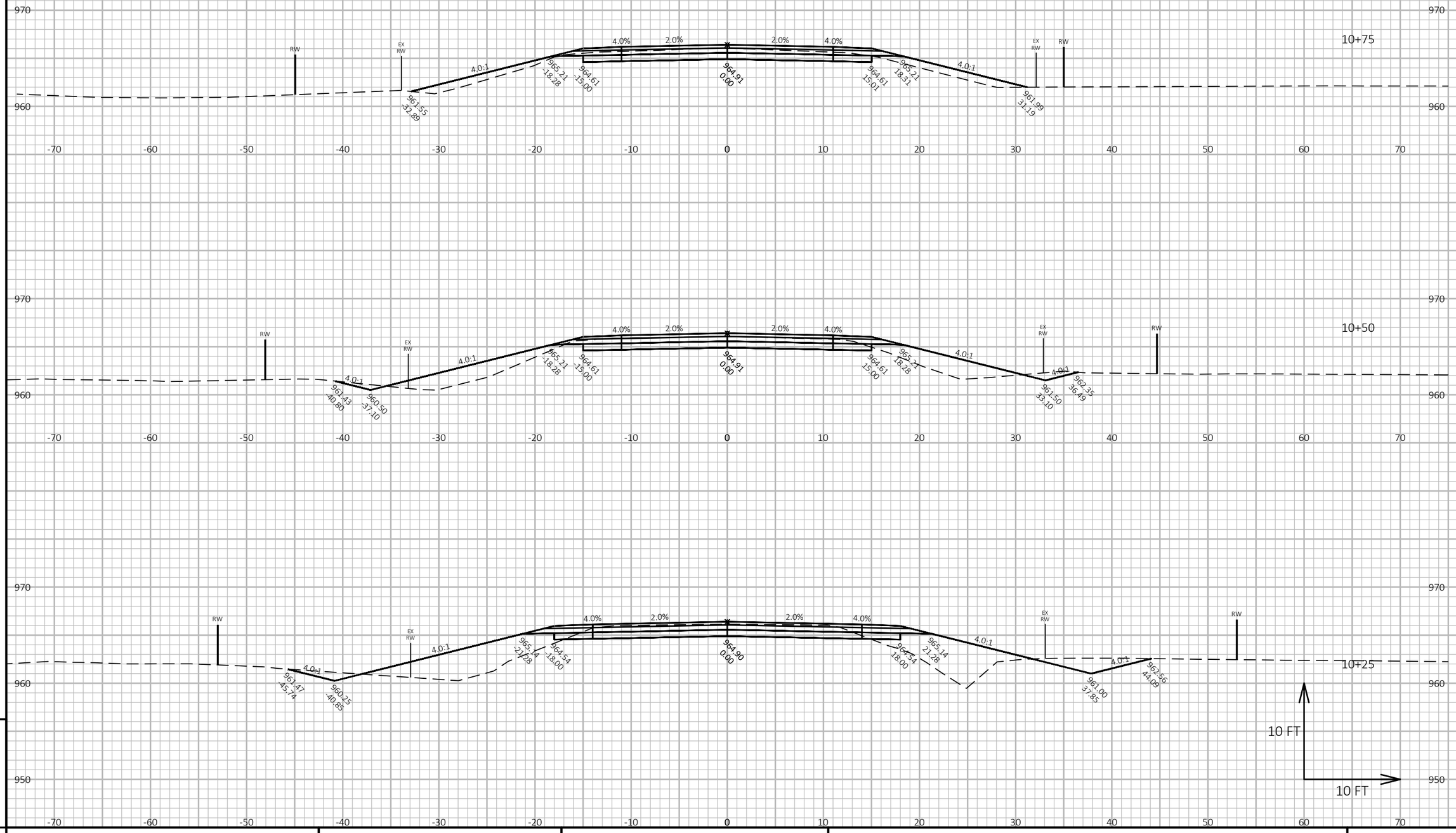


PROJECT NO: 5126-00-72	HWY: CTH N	COUNTY: MONROE	CROSS SECTIONS: CTH N WEST	SHEET 38 E

FILE NAME : V:\TRANS-MD\421051 CTH N (WEST)\C3D\DESIGN\51260002 CTH N WEST_PROPOSED DESIGN.DWG
LAYOUT NAME - XS (4)

PLOT DATE : 8/7/2017 10:56 AM PLOT BY : INMAN, AMANDA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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9

PROJECT NO: 5126-00-72	HWY: CTH N	COUNTY: MONROE	CROSS SECTIONS: CTH N WEST	SHEET	E

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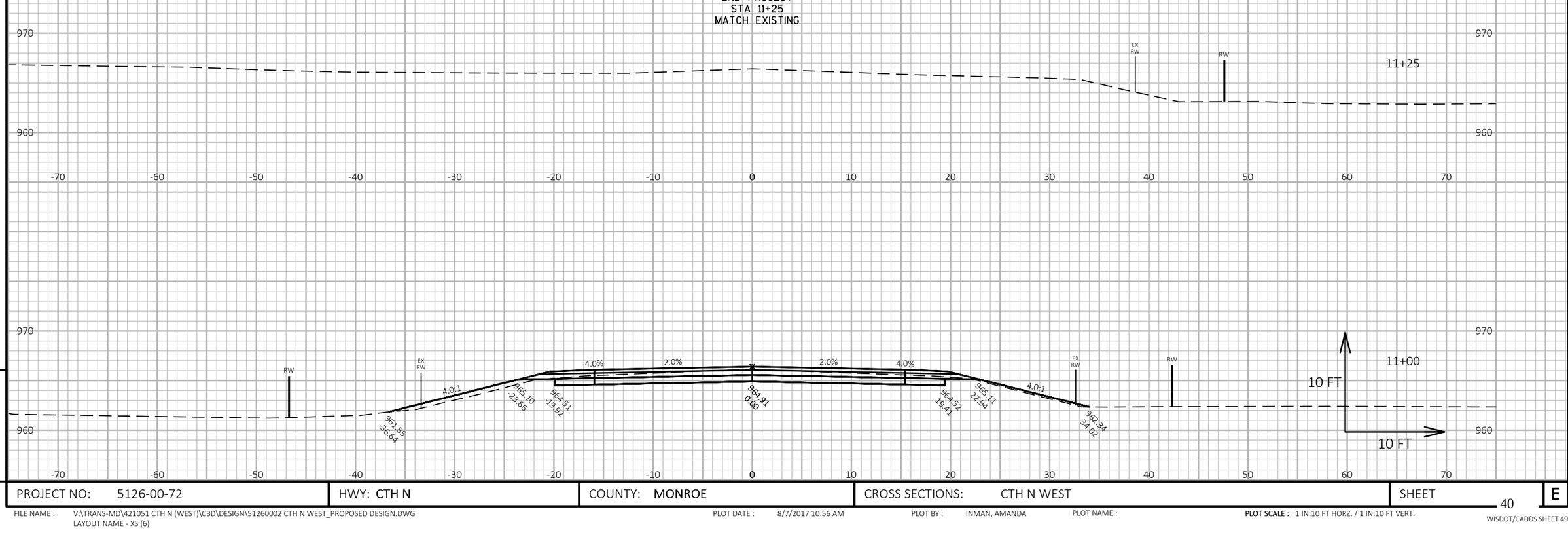
FILE NAME : V:\TRANS-MD\421051 CTH N (WEST)\C3D\DESIGN\51260002 CTH N WEST_PROPOSED DESIGN.DWG
LAYOUT NAME - XS (5)

PLOT DATE : 8/7/2017 10:56 AM PLOT BY : INMAN, AMANDA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

END PROJECT
STA 11+25
MATCH EXISTING



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PROJECT NO: 5126-00-72	HWY: CTH N	COUNTY: MONROE	CROSS SECTIONS: CTH N WEST	SHEET 40	E

FILE NAME : V:\TRANS-MD\421051 CTH N (WEST)\C3D\DESIGN\51260002 CTH N WEST_PROPOSED DESIGN.DWG
LAYOUT NAME - XS (6)

PLOT DATE : 8/7/2017 10:56 AM PLOT BY : INMAN, AMANDA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

Notes

Wisconsin Department of Transportation

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through innovation and exceptional service.

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