Section No.

Section No.

Section No.

Section No.

Section No.

Section No.

TOTAL SHEETS =

Miscellaneous Quantities

Standard Detail Drawings

Computer Earthwork Data

Cross Sections

Plan and Profile (Includes Erosion Control Plan)

PROJECT WITH: N/A 6-00-70 RE MP

Feb 09, 2021 STATE OF WISCONSIN ORDER OF SHEETS Section No. **DEPARTMENT OF TRANSPORTATION** Section No. Typical Sections and Details Section No. Estimate of Quantities

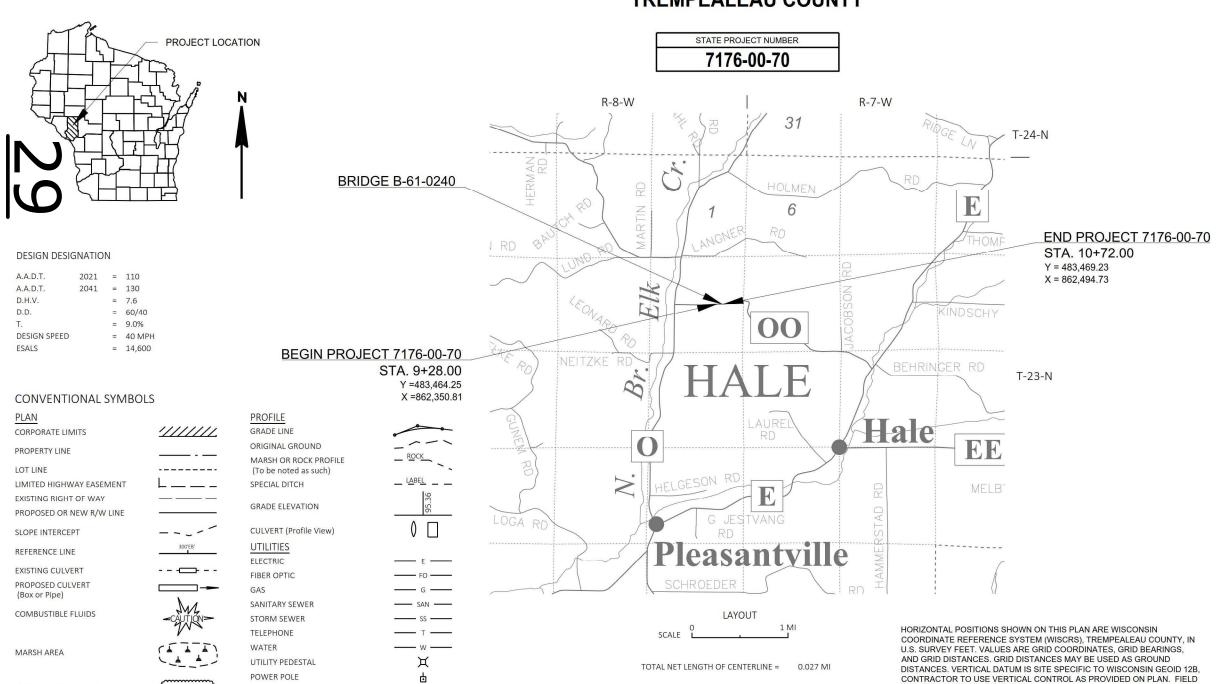
PLAN OF PROPOSED IMPROVEMENT

CTH E - STRUM

BR N BR ELK CREEK BRIDGE B-61-0240

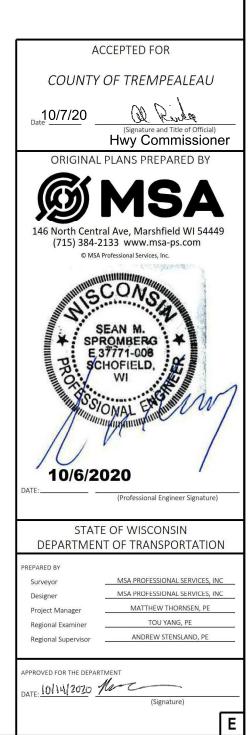
CTH OO

TREMPEALEAU COUNTY



Ø

TELEPHONE POLE



FEDERAL PROJECT

PROJECT

CONTRACT

STATE PROJECT

7176-00-70

FILE NAME: P:\8000\$\8020\$\8027\08027010\CADD\\$HEET\$PLAN\010101 TI.DWG

WOODED OR SHRUB AREA

10/6/2020 11:02 AM

PLOT NAME

WORK PERFORMED MAY 2019

JACK MARTZKE

GENERAL NOTES

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

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.

THE BRIDGE APPROACHES SHALL BE PLACED IN TWO LIFTS. THE 3.5" ASPHALTIC SURFACE SHALL CONSIST OF A 1 3/4" UPPER LAYER WITH NO. 4 (12.5 MM) NOMINAL SIZE AGGREGATE AND A 1 3/4" LOWER LAYER WITH NO. 4 (12.5 MM) NOMINAL SIZE AGGREGATE.

RIGHT-OF-WAY LOCATIONS ARE APPROXIMATE.

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED AND MULCHED AS DIRECTED BY THE ENGINEER.

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO USGS NAVD 88 (2012 ADJUSTED).

WETLANDS ARE PRESENT. AREAS OUTSIDE THE SLOPE INTERCEPTS SHALL NOT BE DISTURBED IN WETLAND AREA.

PLACE SILT FENCE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER AND IN PLACE PRIOR TO CONSTRUCTION OR BRIDGE REMOVAL.

DO NOT STORE CONSTRUCTION EQUIPMENT OR MATERIALS OUTSIDE OF SLOPE INTERCEPTS.

SECTION 2 ORDER

GENERAL NOTES TYPICAL SECTIONS CONSTRUCTION DETAILS

RUNOFF COEFFICIENT TABLE

						HYDROLOGIC S	SOIL GROUP					
	A SLOPE RANGE (PERCENT)				В		С		D			
				SLOPE RANGE (PERCENT)		SLOPE RANGE (PERCENT)		SLOPE RANGE (PERCENT)				
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08	.16	.22	.12	.20	.27	.15	.24	.33	.19	.28	.38
	.22	.30	.38	.26	.34	.44	.30	.37	.50	.34	.41	.56
MEDIAN STRIP-	.19	.20	.24	.19	.22	.26	.20	.23	.30	.20	.25	.30
TURF	.24	.26	.30	.25	.28	.33	.26	.30	.37	.27	.32	.40
SIDE SLOPE-			.25			.27			.28			.30
TURF			.32			.34			.36			.38
PAVEMENT:							•		•	•	•	•
ASPHALT						.7095						
CONCRETE						.8095						
BRICK	BRICK					.7080						
DRIVES, WALKS						.7585						
ROOFS						.7595						
GRAVEL ROADS,	SHOULDE	ERS				.4060						

HWY: CTH OO

TOTAL PROJECT AREA = 0.22 ACRES TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.18 ACRES UTILITIES

COMMUNICATIONS

TRI-COUNTY COMMUNICATIONS COOPERATIVE **BUCK WEBB** 417 5TH AVE N P.O. BOX 578 STRUM, WI 54770 PHONE: (715) 695-2691 EMAIL: bwebb@tccpro.net

ELECTRIC

RIVERLAND ENERGY COOPERATIVE TIM HOLTAN N28988 STATE ROAD 93 P.O. BOX 277 ARCADIA, WI 54612-0277 PHONE: (608) 323-3381 EMAILE: tholtan@riverlandenergy.com

DESIGN CONTACT

MSA PROFESSIONAL SERVICES, INC. 146 NORTH CENTRAL AVE MARSHFIELD, WI 54449 ATTN: SEAN SPROMBERG, PE PHONE: (715) 304-0451 sspromberg@msa-ps.com

COUNTY CONTACT

TREMPEALEAU COUNTY HIGHWAY DEPARTMENT 20699 STATE ROAD 121 P.O. BOX 97 WHITEHALL, WI 54773 ATTN: AL RINKA, COMMISSIONER PHONE: (715) 538-9402 al.rinka@co.trempealeau.wi.us

DNR CONTACT

WISCONSIN DEPARTMENT OF NATURAL RESOURCES 1300 WEST CLAIREMONT AVENUE EAU CLAIRE, WI 54701 ATTN: AMY LESIK PHONE: (715) 836-6571 amyl.lesik@wisconsin.gov

* - NOT A MEMBER OF DIGGERS HOTLINE



www.DiggersHotline.com

SHEET PLOT SCALE :

FILE NAME : LAYOUT NAME - 020101_gn

7176-00-70

PROJECT NO:

P:\8000\$\8020\$\8027\08027010\CADD\\$HEET\$PLAN\020101 GN.DWG

PLOT DATE :

COUNTY: TREMPEALEAU

PLOT BY:

GENERAL NOTES

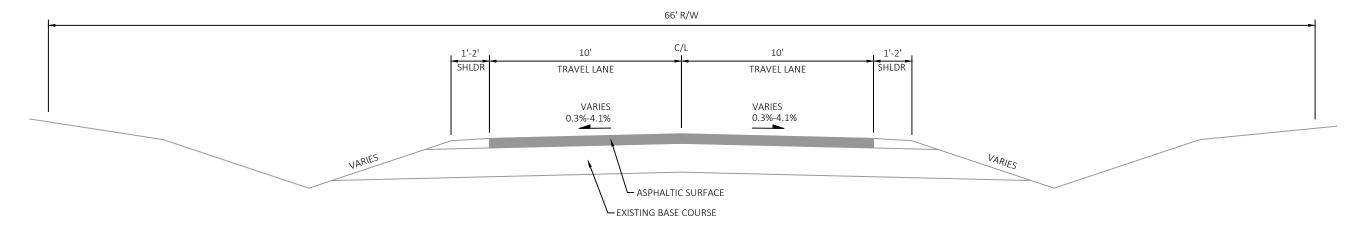
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WISDOT/CADDS SHEET 42

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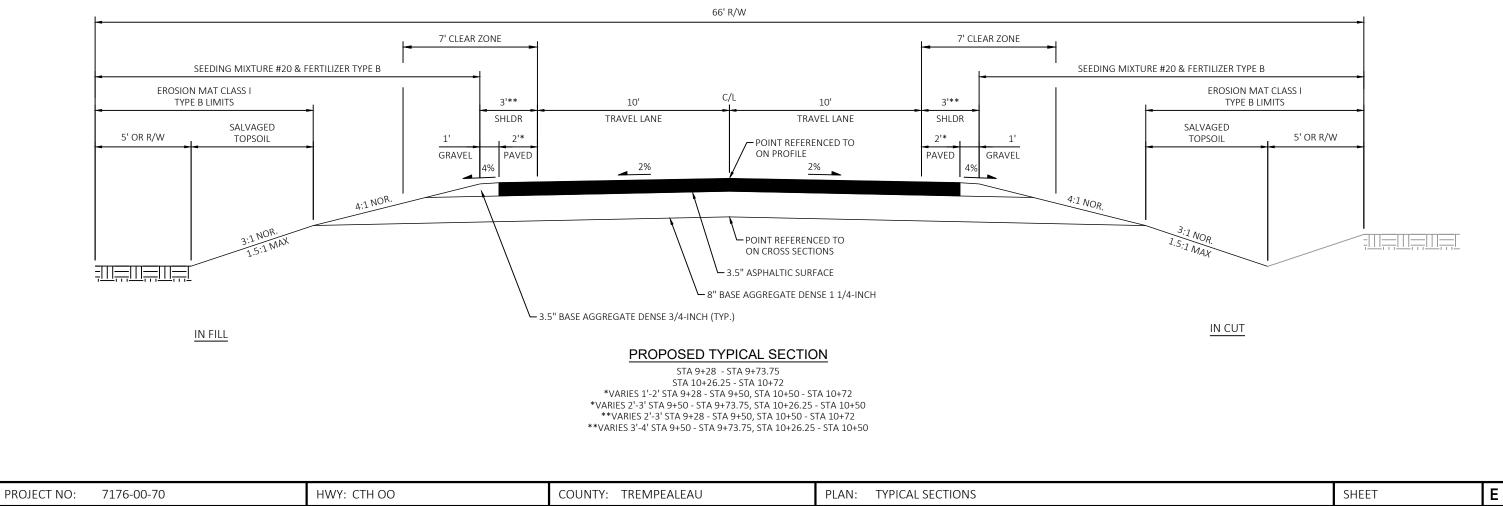
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EXISTING TYPICAL SECTION

STA 9+28 - STA 10+72



Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	2.000	2.000
0004	201.0205	Grubbing	STA	2.000	2.000
0006		· ·	LS	1.000	1.000
		Debris (station) 01. 10+00			
8000	205.0100	Excavation Common	CY	55.000	55.000
0010	206.1000	Excavation for Structures Bridges (structure) 01. B-61-0240	LS	1.000	1.000
0012	210.1500	Backfill Structure Type A	TON	260.000	260.000
0014	213.0100	Finishing Roadway (project) 01. 7176-00-70	EACH	1.000	1.000
0016	305.0110	Base Aggregate Dense 3/4-Inch	TON	16.000	16.000
0018	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	159.000	159.000
0020	455.0605	Tack Coat	GAL	12.000	12.000
0022	465.0105	Asphaltic Surface	TON	46.000	46.000
0024	502.0100	Concrete Masonry Bridges	CY	118.000	118.000
0024	502.3200	Protective Surface Treatment	SY	209.000	209.000
0028	503.0128	Prestressed Girder Type I 28-Inch	LF	204.000	204.000
0020	505.0400	Bar Steel Reinforcement HS Structures	LB	3,390.000	3,390.000
0030	505.0400	Bar Steel Reinforcement HS Coated Structures	LB	13,680.000	13,680.000
0032		Bearing Pads Elastomeric Non-Laminated	EACH	8.000	
	506.2605	-			8.000
0036	506.4000	Steel Diaphragms (structure) 01. B-61-0240	EACH LF	3.000	3.000
0038	513.4061	Railing Tubular Type M		158.000	158.000
0040	516.0500	Rubberized Membrane Waterproofing	SY	18.000	18.000
0042	550.0500	Pile Points	EACH	8.000	8.000
0044	550.1100	Piling Steel HP 10-Inch X 42 Lb	LF	460.000	460.000
0046	606.0300	Riprap Heavy	CY	284.000	284.000
0048	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	196.000	196.000
0050	618.0100	Maintenance And Repair of Haul Roads (project) 01. 7176-00-70	EACH	1.000	1.000
0052	619.1000	Mobilization	EACH	1.000	1.000
0054	624.0100	Water	MGAL	4.000	4.000
0056	625.0500	Salvaged Topsoil	SY	140.000	140.000
0058	628.1504	Silt Fence	LF	285.000	285.000
0060	628.1520	Silt Fence Maintenance	LF	285.000	285.000
0062	628.1905	Mobilizations Erosion Control	EACH	2.000	2.000
0064	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0066	628.2004	Erosion Mat Class I Type B	SY	140.000	140.000
0068	628.6005	Turbidity Barriers	SY	140.000	140.000
0070	628.7504	Temporary Ditch Checks	LF	10.000	10.000
0072	629.0210	Fertilizer Type B	CWT	0.500	0.500
0074	630.0120	Seeding Mixture No. 20	LB	6.000	6.000
0014	000.0120	Cooding Mixture No. 20	LD	0.000	0.000

Estimate Of Quantities

7176-00-70

Page 2

Line	Item	Item Description	Unit	Total	Qty
0076	630.0500	Seed Water	MGAL	4.000	4.000
0078	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	4.000	4.000
0800	637.2230	Signs Type II Reflective F	SF	12.000	12.000
0082	638.2602	Removing Signs Type II	EACH	8.000	8.000
0084	638.3000	Removing Small Sign Supports	EACH	8.000	8.000
0086	642.5001	Field Office Type B	EACH	1.000	1.000
8800	643.0420	Traffic Control Barricades Type III	DAY	1,440.000	1,440.000
0090	643.0705	Traffic Control Warning Lights Type A	DAY	2,160.000	2,160.000
0092	643.0900	Traffic Control Signs	DAY	1,080.000	1,080.000
0094	643.5000	Traffic Control	EACH	1.000	1.000
0096	645.0111	Geotextile Type DF Schedule A	SY	88.000	88.000
0098	645.0120	Geotextile Type HR	SY	444.000	444.000
0100	650.4500	Construction Staking Subgrade	LF	92.000	92.000
0102	650.5000	Construction Staking Base	LF	92.000	92.000
0104	650.6500	Construction Staking Structure Layout (structure) 01. B-61-0240	LS	1.000	1.000
0106	650.9910	Construction Staking Supplemental Control (project) 01. 7176-00-70	LS	1.000	1.000
0108	650.9920	Construction Staking Slope Stakes	LF	92.000	92.000
0110	690.0150	Sawing Asphalt	LF	44.000	44.000
0112	715.0502	Incentive Strength Concrete Structures	DOL	726.000	726.000

CLEARING AND GRUBBING 201.0105 201.0205 CLEARING GRUBBING STATION - STATION LOCATION STA STA 9+28 - 10+72 RT & LT 2

			BASE AGGREGATE		
			305.0110	305.0120	624.0100
			BASE	BASE	WATER
			AGGREGATE	AGGREGATE	
			DENSE	DENSE	
			3/4-INCH	1 1/4-INCH	
STATION	-	STATION	TON	TON	MGAL
9+28	-	9+74	8	79	2
10+26	-	10+72	8	80	2
		TOTALS:	16	159	4

	TACK COAT & ASPHALTIC SURFACE							
			455.0605	465.0105				
			TACK COAT	ASPHALTIC				
				SURFACE				
STATION	-	STATION	GAL	TON				
9+28.00	-	9+74.00	6	23				
10+26.00	-	10+72.00	6	23				
		TOTALS:	12	46				

ROADWAY	EXCAVATION	AND BORROW

	205.0100 EXC. COMMON	FILL	EXPANDED FILL	WASTE
LOCATION	CY (3)	CY (1)	CY (2)	CY
STA 9+28 - STA. 9+74	27	4	6	21
STA 10+26 - STA 10+72	28	7	9	19
TOTALS:	55	11	15	40

(1) - NOT A BID ITEM - FOR INFORMATIONAL PURPOSES ONLY.

(2) - FILL EXPANSION 30%

(3) - EXISTING ASPHALTIC PAVEMENT IS INCLUDED IN COMMON EXCAVATION TOTALS. SEE EARTHWORK TABLE.

RIPRAP & GEOTEXTILE

				606.0300	645.0120
				RIPRAP	GEOTEXTILE
				HEAVY	TYPE HR
STATION	-	STATION	LOCATION	CY	SY
9+35	-	9+56	LT	20	47
			TOTALS:	20	47

					EROSION CONTI	ROL			
				625.0500	628.2004	628.7504	629.0210	630.0120	630.0500
				SALVAGED	EROSION MAT	TEMPORARY	FERTILIZER	SEEDING	SEED
				TOPSOIL	CLASS I	DITCH	TYPE B	MIXTURE NO. 20	WATER
					TYPE B	CHECKS			
STATION	-	STATION	LOCATION	SY	SY	LF	CWT	LB	MGAL
9+28	-	9+61.75	RT	30	30	0	0.05	1	1
9+28	-	9+61.75	LT	15	15	5	0.00	1	0
10+38	-	10+72	RT	35	35	0	0.05	1	1
10+38	-	10+72	LT	30	30	5	0.05	1	1
UNDIS	TRIE	BUTED		30	30	0	0.35	2	1
•		TOTALS:		140	140	10	0.50	6	4

COUNTY: TREMPEALEAU SHEET: Ε PROJECT NO: 7176-00-70 HWY: CTH OO MISCELLANEOUS QUANTITIES

PLOT NAME :

PLOT BY: JFM

			SILT FENC	E	
				628.1504	628.1520
				SILT FENCE	SILT FENCE
					MAINTENANCE
STATION	-	STATION	LOCATION	LF	LF
9+65	-	9+98	LT	35	35
9+28	-	9+94	RT	70	70
10+19	-	10+75	LT	57	57
10+12	-	10+70	RT	66	66
UNDIS	TRIE	BUTED	-	57	57
			TOTALS:	285	285

		TRAFFIC	CONTROL ITEMS	3			
			643.0420		643.0705		643.0900
		TRAFFIC	TRAFFIC	TRAFFIC	TRAFFIC	TRAFFIC	TRAFFIC
		CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
		BARRICADES	BARRICADES	WARNING	WARNING	SIGNS	SIGNS
		TYPE III	TYPE III	LIGHTS	LIGHTS		
				TYPE A	TYPE A		
LOCATION	DAYS	EACH	DAYS	EACH	DAYS	EACH	DAYS
CTH O INTERSECTION	72	2	144	4	288	5	360
BEGINNING OF PROJECT	72	7	504	10	720	2	144
END OF PROJECT	72	7	504	10	720	2	144
CTH E INTERSECTION	72	2	144	4	288	4	288
UNDISTRUBUTED	72	2	144	2	144	2	144
TOTALS:		•	1,440		2,160		1,080

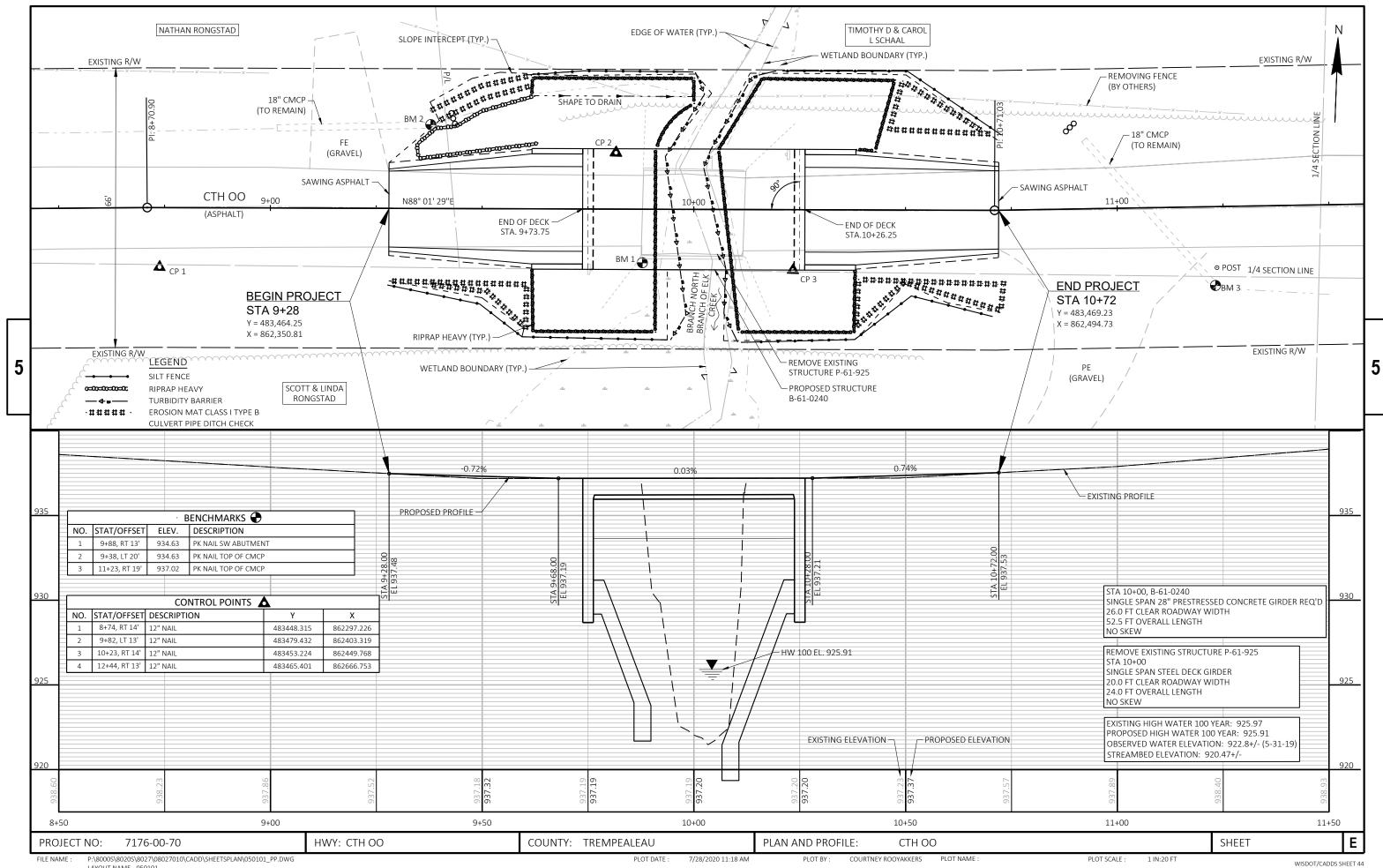
		628.6005
		TURBIDITY
		BARRIERS
STATION	LOCATION	SY
9+95	LT & RT	51
10+05	LT & RT	55
Undistributed	-	34
	TOTAL:	140

CONSTRUCTION STAKING						
			650.4500	650.5000	650.9920	650.9910
			SUBGRADE	BASE	SLOPE	SUPPLEMENTA
					STAKES	CONTROL
STATION	-	STATION	LF	LF	LF	LS
9+28	-	9+74	46	46	46	-
10+26	-	10+72	46	46	46	
		TOTALS:	92	92	92	1

					SIGNING	3		
				637.2230	634.0612	638.2602	638.3000	
				SIGNS TYPE II	WOOD	REMOVING	REMOVING SMALL	
		SIGN		REFLECTIVE F	POSTS	SIGNS TYPE II	SIGN SUPPORTS	
STATION	LOCATION	CODE	SIZE	SF	EACH	EACH	EACH	COMMENTS
0.5	MI WEST OF BRID	OGE				1	1	EXISTING WEIGHT LIMIT POSTING SIGN
9+76	RT	-	-	-	-	1	1	EXISTING WEIGHT LIMIT POSTING SIGN
9+70	LT	W5-52L	12"x36"	3	1	-	-	OBJECT MARKER
9+87	RT	-	-	-	-	1	1	EXISTING OBJECT MARKER
9+83	RT	W5-52R	12"x36"	3	1	-	-	OBJECT MARKER
9+87	LT	-	-	-	-	1	1	EXISTING OBJECT MARKER
10+23	LT	W5-52R	12"x36"	3	1	-	-	OBJECT MARKER
10+12	RT	-	-	-	-	1	1	EXISTING OBJECT MARKER
10+35	RT	W5-52L	12"x36"	3	1	-	-	OBJECT MARKER
10+12	LT	-	-	-	-	1	1	EXISTING OBJECT MARKER
10+20	LT	-	-	-	-	1	1	EXISTING WEIGHT LIMIT POSTING SIGN
0.5	MI EAST OF BRID	GE				1	1	EXISTING WEIGHT LIMIT POSTING SIGN
		TOTALS:		12	4	8	8	

SAWING ASPHALT			
	690.0150		
	SAWING		
	ASPHALT		
STATION	LF		
9+28	22		
10+72	22		
TOTAL:	44		

PROJECT NO: 7176-00-70 HWY: CTH OO COUNTY: TREMPEALEAU MISCELLANEOUS QUANTITIES SHEET: **E**



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)
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C06-09	SIGNING & MARKING FOR TWO LANE BRIDGES
15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS

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.

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.



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 /S/ Beth Connestro
CHIEF ROADWAY DEVELOPMENT ENGINEER

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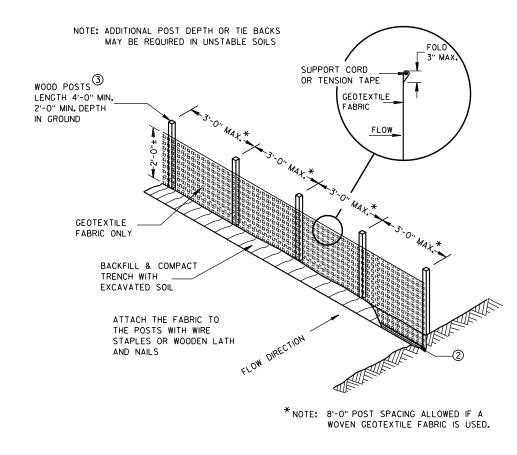
TYPICAL APPLICATION OF SILT FENCE

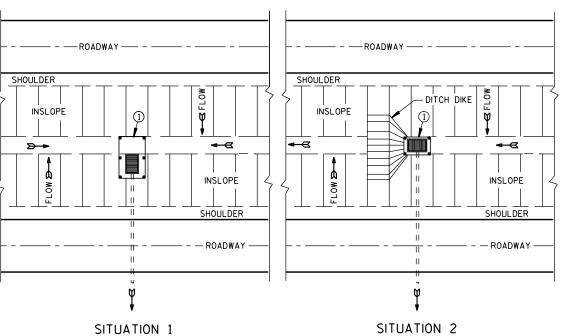
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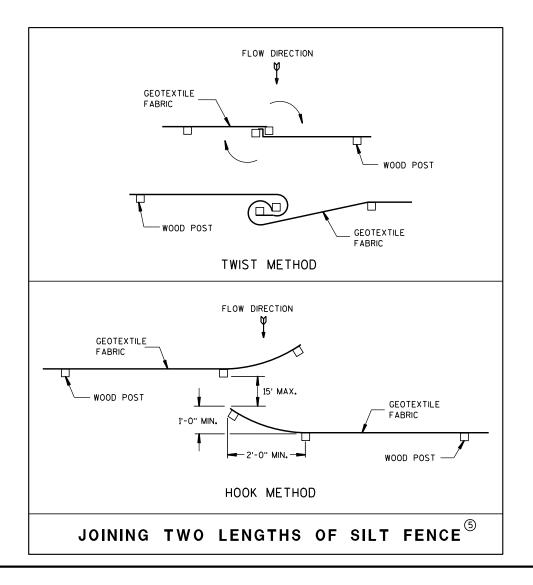
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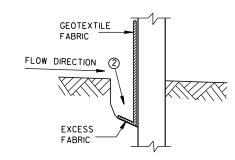
PLAN VIEW SILT FENCE AT MEDIAN SURFACE DRAINS



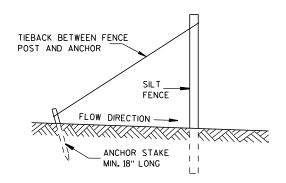
GENERAL NOTES

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

- \bigcirc 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 11/8" X 11/8" 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.

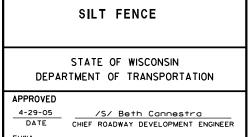


TRENCH DETAIL



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)



SILT FENCE

S.D.D. 8 E 9-6

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GENERAL NOTES

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

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 02 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.





SECTION C-C

TURBIDITY BARRIER DETAIL SHOWING TYPICAL PLACEMENT AT STRUCTURES

TURBIDITY BARRIER

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02 /S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER ∞

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TYPICAL NAME PLATE

(BRIDGES, CULVERTS, AND RETAINING WALLS)



NUMBERING DESIGNATION MULTI-UNIT STRUCTURES

GENERAL NOTES

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

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

- 1 EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- (2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SPREAD OPEN SO THE TOP OF LUG IS 11/4" WIDE

SECTION A-A

ALTERNATE LUG



ALTERNATE LUG

(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

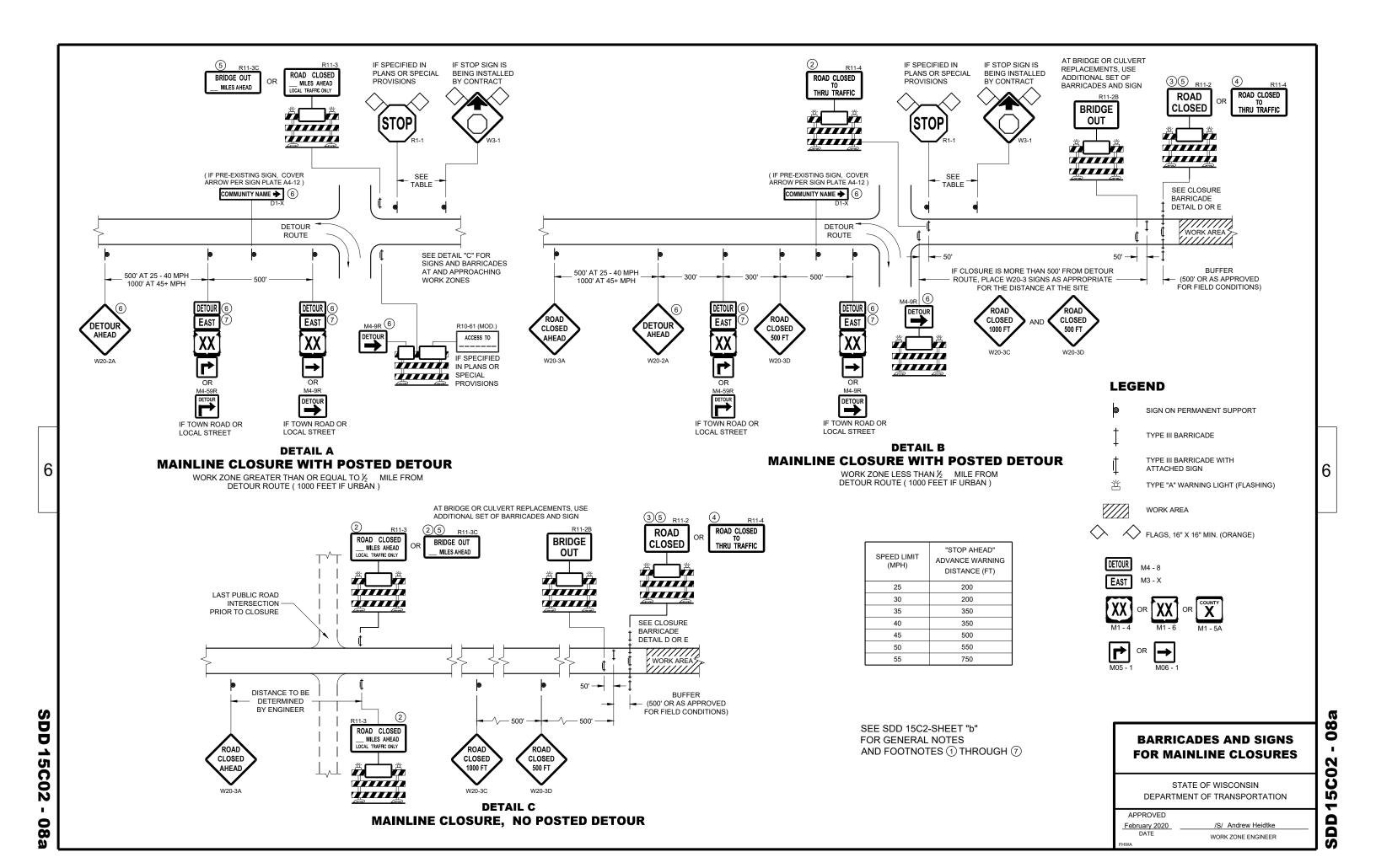
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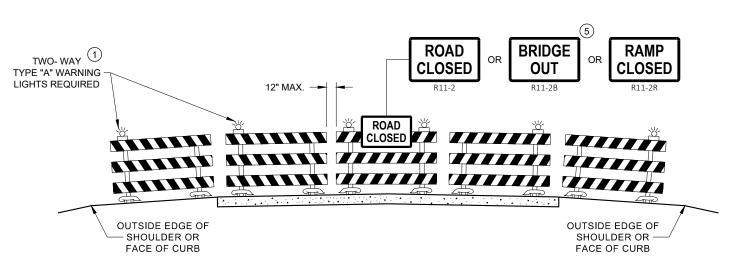
3/26/IO /S/ SCOT BECKET

CHIEF STRUCTURAL DEVELOPMENT ENGINEER

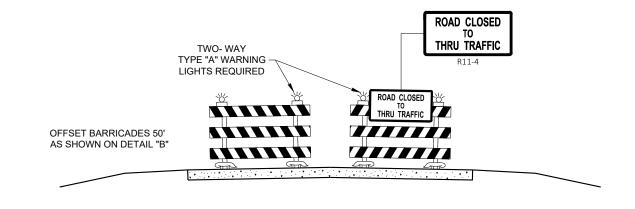
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3-10





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

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"

- 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**
- THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.
- (3) FOR ROAD CLOSURE <u>WITHOUT</u> 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
- "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR **VARIOUS CLOSURES**

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED

February 2020 DATE

WORK ZONE ENGINEER

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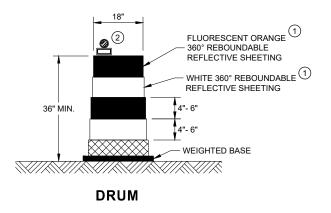
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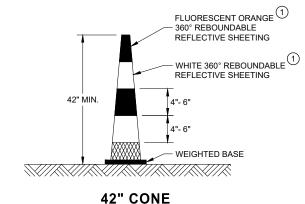


SDD 15C11

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.



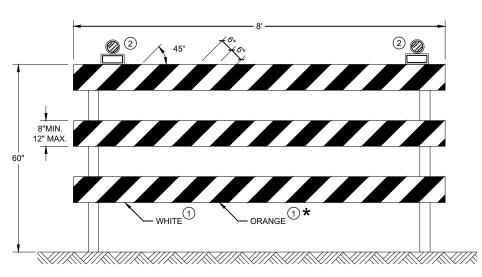


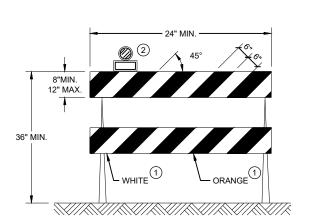


THE STRIPES SHALL SLOPE DOWNWARD TO

THE TRAFFIC SIDE FOR CHANNELIZATION.

DO NOT USE IN TAPERS ½ SPACING OF DRUMS





TYPE II BARRICADE

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

TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

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

07 Ŋ

SDD



TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SO. 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 SO.FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE). SIGNS LARGER THAN 27 SO.FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

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" X 6" WOOD POST

POST SPACING REQUIREM	NUMBER OF		
L	E	WOOD POSTS REQUIRED	
48" OR LESS AND LESS THAN 20 SO.FT.	-	1	
LESS THAN 60"	12"	2	٤
60" TO 120"	L/5	2	
GREATER THAN 120" LESS THAN 168"	12"	3	
168" AND GREATER	12"	4	

SEE NOTE (3)

RURAL AREA

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

-11

D 15 D ∞

6

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6

- 11/2" DIAMETER HOLES

Ω

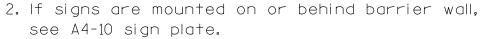
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STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

> /S/ Andrew Heidtke WORK ZONE ENGINEER

APPROVED

June 2017 DATE



The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (\pm). 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" (\pm).

- 3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
- 4. Minimum mounting height for signs mounted on traffic signal poles is $5'-3''(\frac{+}{2})$.
- 5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
- 6. The (±) tolerance for mounting height is 3 inches.
- 7. Folding signs shall be mounted at a height of 5'-3'' (\pm) or as directd by the Engineer.

2' Min - 4' Max (See Note 6)

** Curb Flowline

D
White Edgeline Location

*

6'-3"(±)

D |

Outside Edge

of Gravel

White Edgeline
Location

Outside Edge
of Gravel

d.

POST EMBEDMENT DEPTH

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

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.

HWY:

* 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

Matther & Rawk For State Traffic Engineer

DATE 5/13/2020 PLATE NO. _A4-3.22

SHEET NO:

Ε

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A43.dgn

PROJECT NO:

PLOT DATE: 13-MAY 2020 1:04

COUNTY:

PLOT BY : mscj9h

PLOT NAME :

PLOT SCALE: \$\$.....plo†scale.....\$\$ WISDOT/CADDS SHEET 42

APPROVED



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



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

HWY:



PLAN VIEW

COUNTY:

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

For State Traffic Engineer

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

SHEET NO:

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN

PROJECT NO:

PLOT DATE: 27-JAN-2014 09:48

PLOT NAME :

PLOT BY: mscsja

PLOT SCALE: 13.659812:1.000000

APPROVED

WISDOT/CADDS SHEET 42

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'' (\pm) or as directed by the engineer.
- 8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8). Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4''-3'' (±).
- * 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.
- ** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.
- ** * See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

POST EMBEDMENT DEPTH

D
(Min)
4'
5'

WISCONSIN DEPT OF TRANSPORTATION APPROVED For State Traffic Engineer DATE 8/21/17 PLATE NO. <u>A4-4.15</u>





	DIAMOND (
	L	E	
***	Greater than 48" Less than 60"	12"	
	60" to 108"	L/5	

HWY:

SIGN SHAPE OTHER THAN (THREE POSTS REQUIR	
L	E
Greater than 108" to 144"	12''

COUNTY:

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A44.DGN

PROJECT NO:

PLOT DATE: 21-AUG-2017 15:54

PLOT SCALE: 108.188297:1.000000

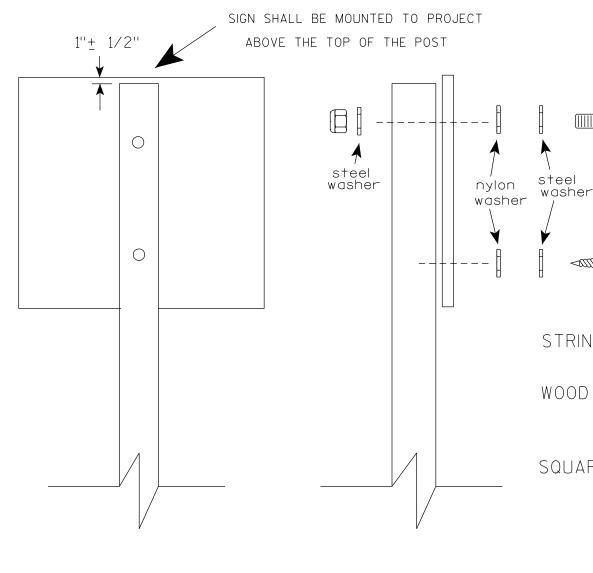
WISDOT/CADDS SHEET 42

OF TYPE II SIGNS ON MULTIPLE POSTS

TYPICAL INSTALLATION

SHEET NO:

PLOT BY: \$\$...plotuser...\$\$ PLOT NAME:



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 - $\frac{5}{16}$ " X 1-3/4" Length w/ lock nuts

WOOD POSTS $(4" \times 6")$

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 - $\frac{1}{32}$ " (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 $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ " STEEL 1-1/4" O.D. X $\frac{3}{8}$ " 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

For State Traffic Engineer

SHEET NO:

DATE <u>4/1/202</u>0

PLATE NO. <u>44-8.9</u>

PROJECT NO:

PLOT DATE: 01-APRIL-2020

PLOT BY : dotc4c

WISDOT/CADDS SHEET 42

Ε

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A48.DGN



PROJECT NO: HWY: COUNTY: SHEET NO: FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE: 05-FEB-2015 17:09 PLOT BY: mscsja PLOT NAME : PLOT SCALE: 13.659812:1.000000

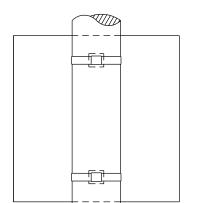
DATE 2/05/15

PLATE NO. <u>A4-9.9</u>

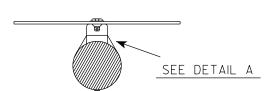
For State Traffic Engineer

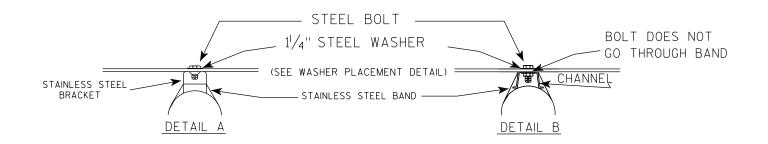


BANDING

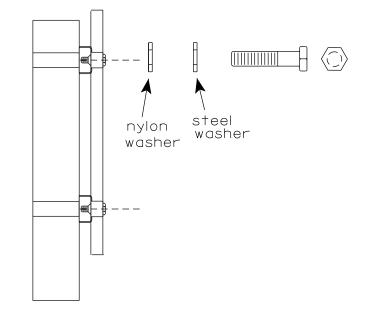


SINGLE SIGN





WASHER PLACEMENT



HWY:

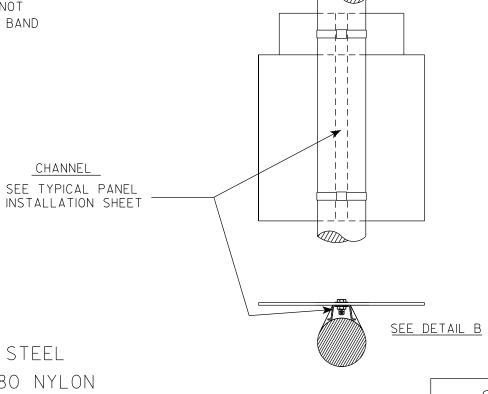
WASHERS (ALL POSTS) -

1-1/4" O.D. X³/₈" I.D. X¹/₁₆" STEEL 1-1/4" O.D. $\times \frac{3}{8}$ " I.D. \times .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 $\frac{3}{4}$ " 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



STANDARD SIGN SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

SHEET NO:

State Traffic Engineer

Ε

APPROVED

DATE 6/10/19 PLATE NO. A5-9.4

COUNTY:

PLOT DATE: 10-JUN 2019 4:10

PLOT NAME :

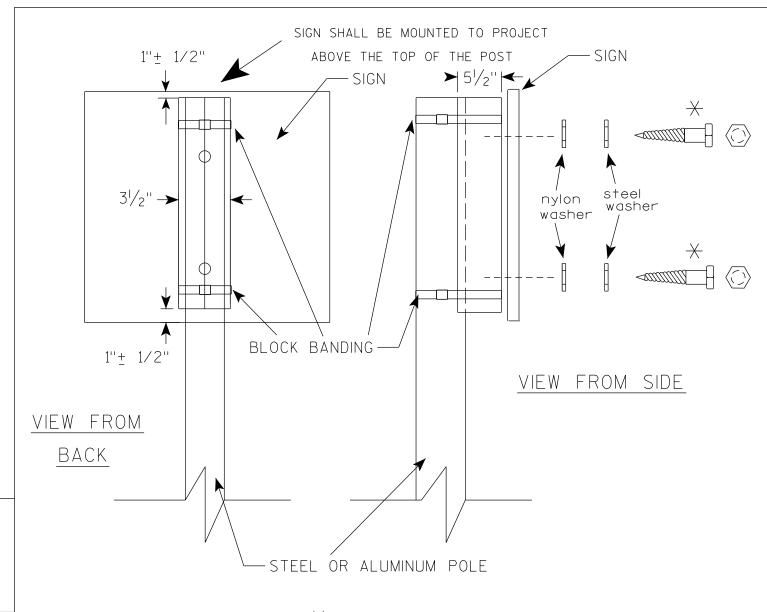
PLOT SCALE: \$\$.....plotscale.....\$\$ WISDOT/CADDS SHEET 42

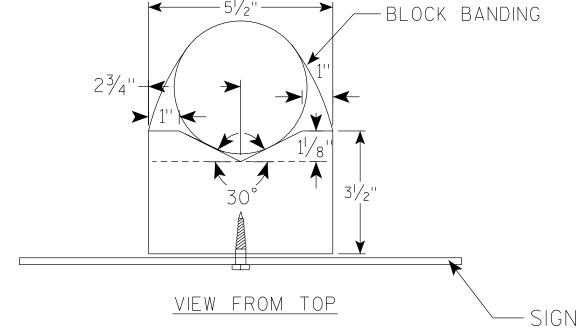
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn

PROJECT NO:

PLOT BY: mscj9h

CHANNEL





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 NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
- 5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
 - a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
 - b. Electro-galvanized in accordance with ASTM Designation: B 633, TYPE III, SC 3
- 6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
- 7. STEEL WASHERS SHALL BE $1\frac{1}{4}$ " O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ "
- 8. NYLON WASHERS SHALL BE $1^{1}/_{4}$ " O.D. X $\frac{3}{8}$ " I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

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

BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

| APPROVED

For State Traffic Engineer

SHEET NO:

Matthew R

DATE 6/10/19

PLATE NO. _A5-10.2

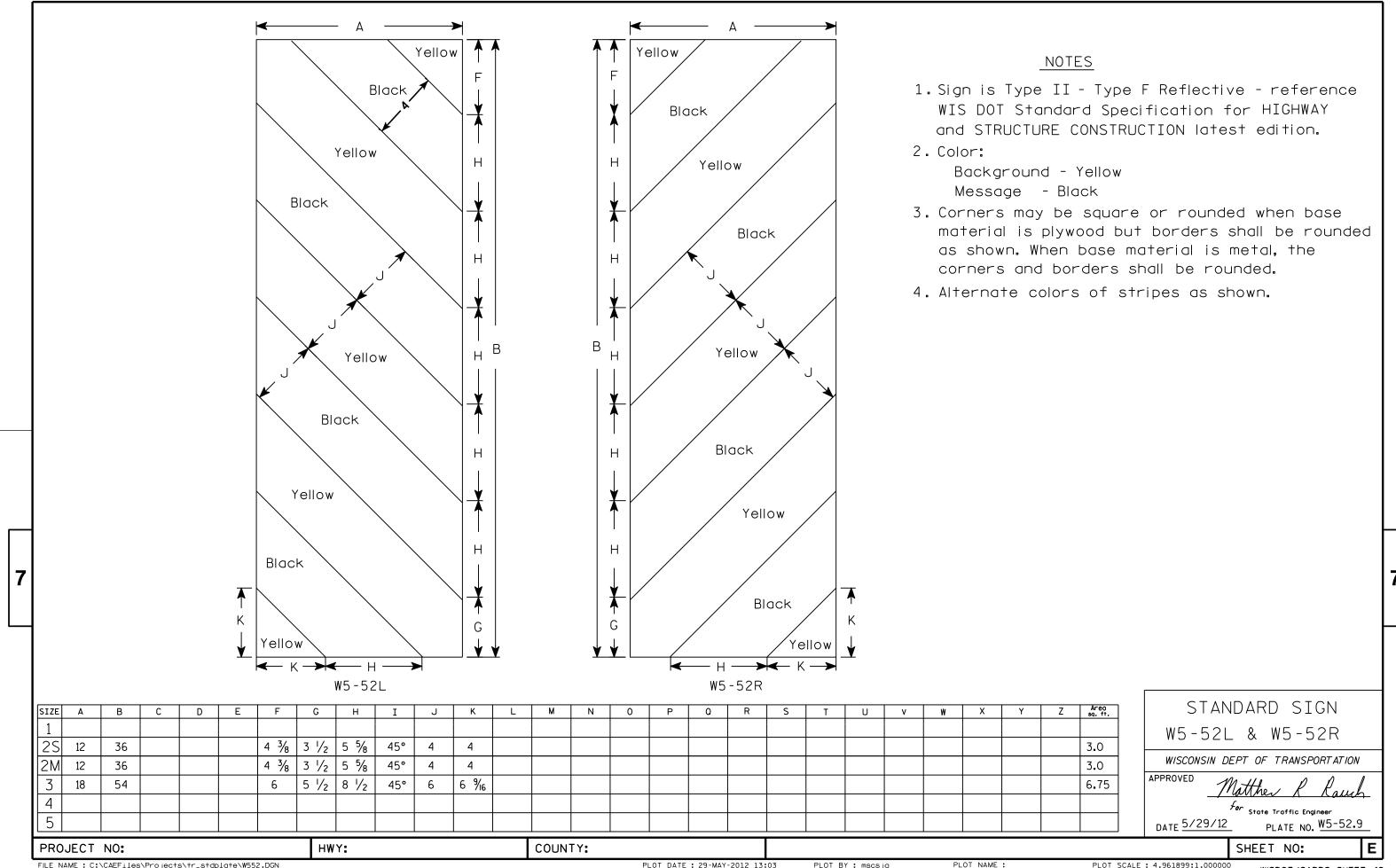
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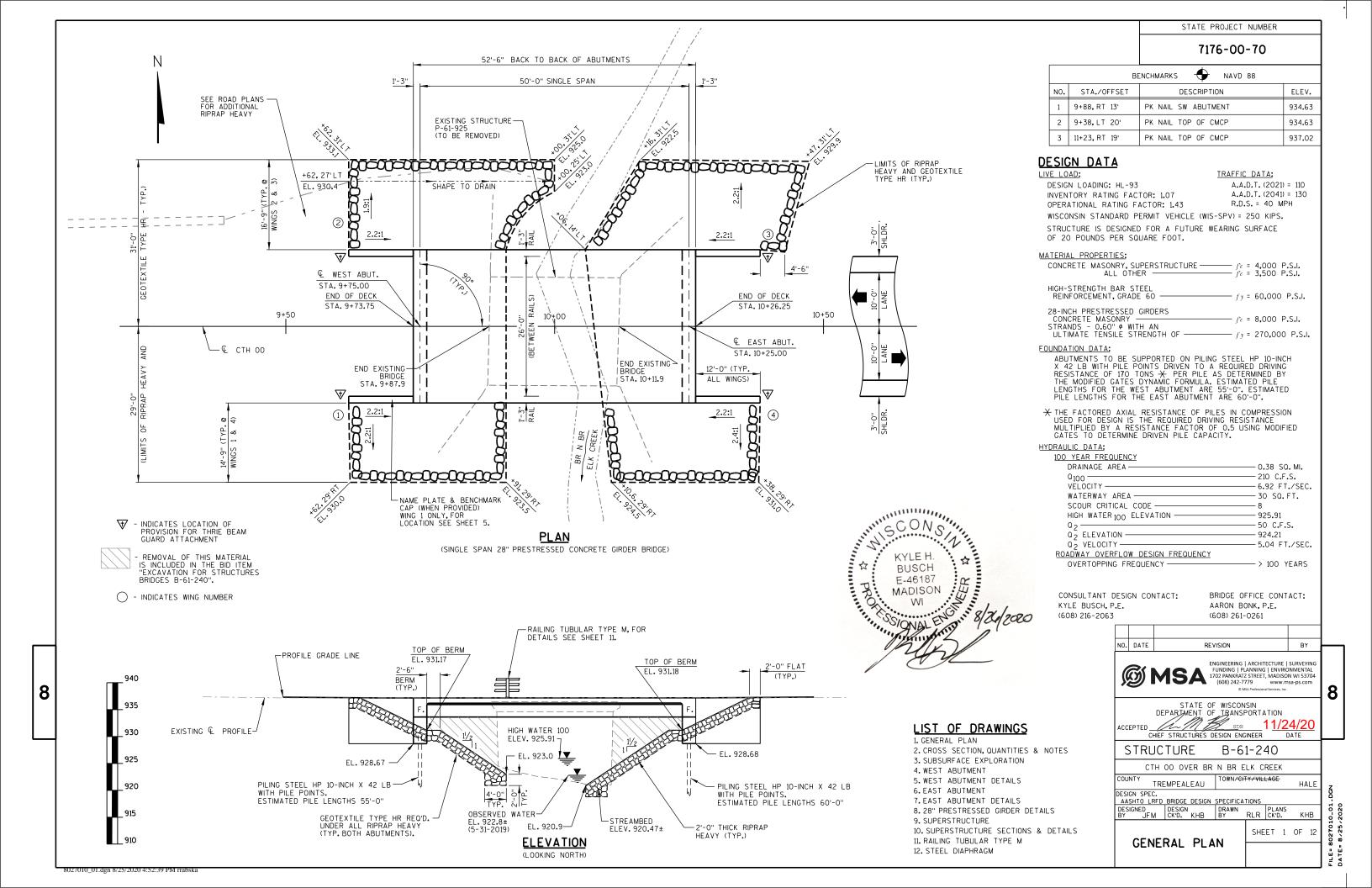
FILE NAME: C:\CAEfiles\Projects\tr_stdplate\A510.dgn

PLOT DATE: 10-JUN 2019 4:15

PLOT BY: mscj9h

WISDOT/CADDS SHEET 42





CROSS SECTION THRU BRIDGE

(LOOKING EAST)

IN SPAN

AT ABUTMENTS

ITEM NUMBER	BID ITEM	UNIT	WEST ABUT.	EAST ABUT.	SUPER	TOTAL	
203.0600.S.01	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STATION 10+00	LS	-	-	-	1	
206.1000.01	EXCAVATION FOR STRUCTURE BRIDGES B-61-240	LS	-	-	-	1	
210.1500	BACKFILL STRUCTURE TYPE A	TON	130	130	-	260	
502.0100	CONCRETE MASONRY BRIDGES	CY	32	32	54	118	
502.3200	PROTECTIVE SURFACE TREATMENT	SY	11	11	187	209	
503.0128	PRESTRESSED GIRDER TYPE I 28-INCH	LF	-	-	204	204	
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	1,695	1,695	-	3,390	
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	1,685	1,685	10,310	13,680	
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	-	-	8	8	
506.4000.01	STEEL DIAPHRAGMS B-61-240	EACH	-	-	3	3	
513.4061	RAILING TUBULAR TYPE M	LF	-	-	158	158	
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	9	9	-	18	
550.0500	PILE POINTS	EACH	4	4	-	8	
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	220	240	-	460	
606.0300	RIPRAP HEAVY	CY	130	134	-	264	
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	98	98	-	196	
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	44	44	-	88	
645.0120	GEOTEXTILE TYPE HR	SY	195	202	-	397	
	NON-BID ITEMS						
	PREFORMED FILLER	SIZE				1/2" & 3/4"	

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

THE FIRST DIGIT OF A THREE DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

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

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH RIPRAP HEAVY AND GEOTEXTILE TYPE HR TO THE LIMITS SHOWN ON SHEET 1 AND ON THE ABUTMENT SHEETS, OR AS DIRECTED BY THE ENGINEER.

THE EXISTING GROUNDLINE SHALL BE THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES" FOR THE ABUTMENTS.

THIS STRUCTURE WILL REPLACE THE EXISTING STRUCTURE, P-61-925, A 24.0 FT. LONG, 20.0 FT. CLEAR ROAD WIDTH, SINGLE SPAN STEEL DECK GIRDER BRIDGE SUPPORTED ON TIMBER BACKED, TIMBER PILE ABUTMENTS.

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

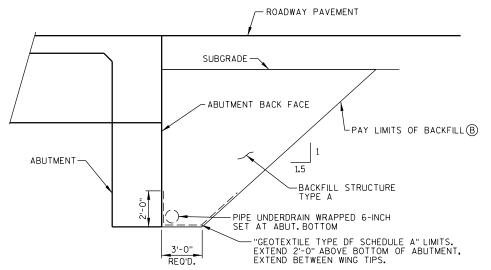
THE BACKFILL QUANTITIES ARE BASED ON THE PAY LIMITS SHOWN ON THE PLANS AND MAY NOT REFLECT ACTUAL PLACED QUANTITIES. "BACKFILL STRUCTURE TYPE A" REQUIRED DIRECTLY BEHIND ABUTMENTS AND ABUTMENT WINGS FOR 3 FEET.

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

PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE TOP AND EDGES OF THE DECK, TO THE OUTSIDE 1'-0" OF THE DECK UNDERSIDE, TO THE TOP AND EXTERIOR EXPOSED FACES OF WINGS, AND TO THE END 1'-O" OF THE FRONT FACE OF ABUTMENTS.

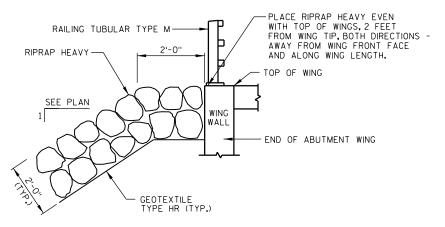
ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO USGS NAVD 88 (2012 ADJUSTED), BENCHMARK REFERENCES AT THE PROJECT SITE WERE SET BY THE CONSULTANT USING GPS TECHNOLOGY.

THE HAUNCH CONCRETE QUANTITIY IS BASED ON THE AVERAGE HAUNCH SHOWN ON THE SUPERSTRUCTURE SHEET.

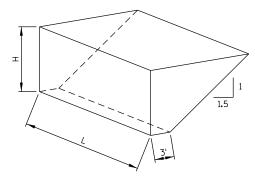


STRUCTURE BACKFILL DETAIL

AT ABUTMENT BACK FACE



TYPICAL FILL SECTION AT WING TIPS

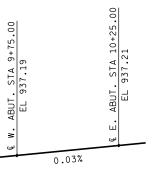


STATE PROJECT NUMBER

7176-00-70

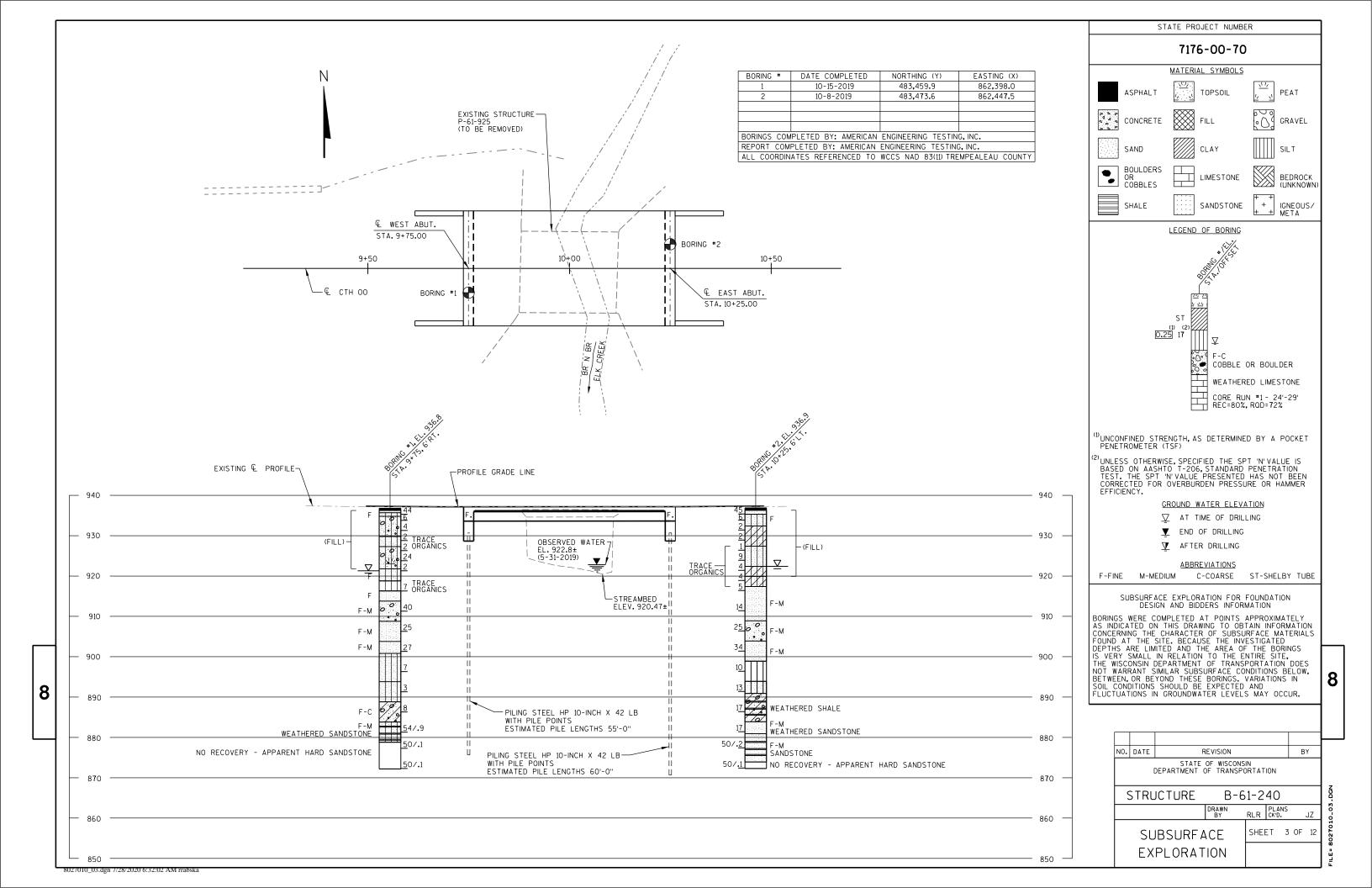
ABUTMENT BACKFILL DIAGRAM

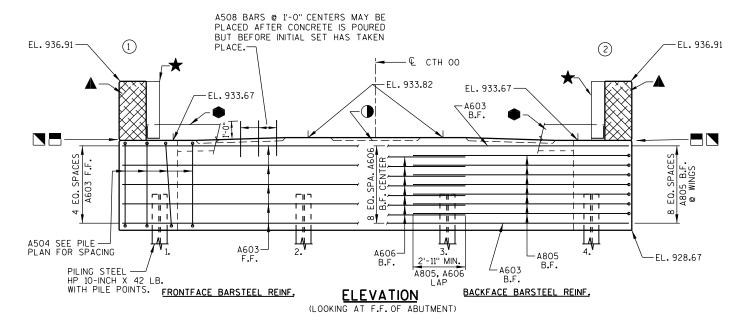
L = OUT-TO-OUT OF ABUTMENT H = AVERAGE ABUTMENT FILL HEIGHT V_{CF} = (L)(3.0)(H)+(L)(0.5)(1.5H)(H) $V_{TON} = V_{CF} (2.0)/27$

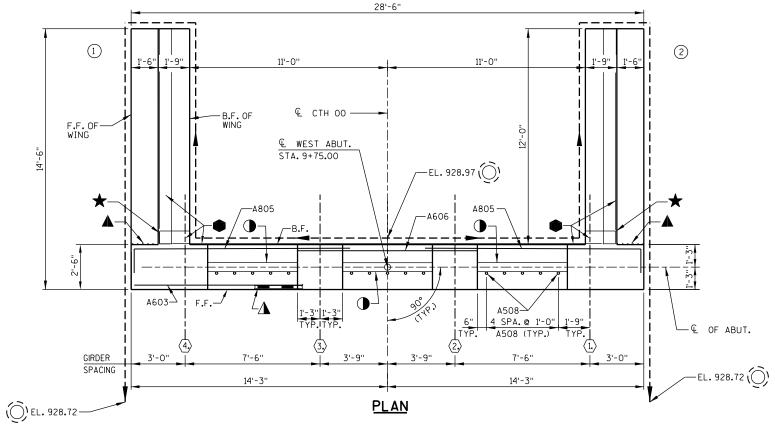


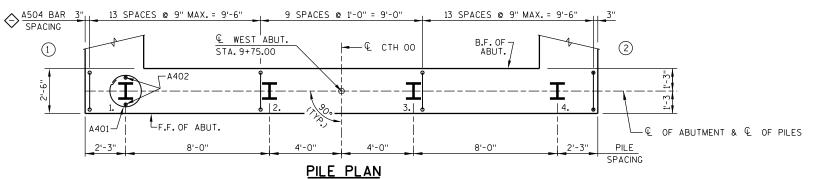
PROFILE GRADE LINE - CTH 00

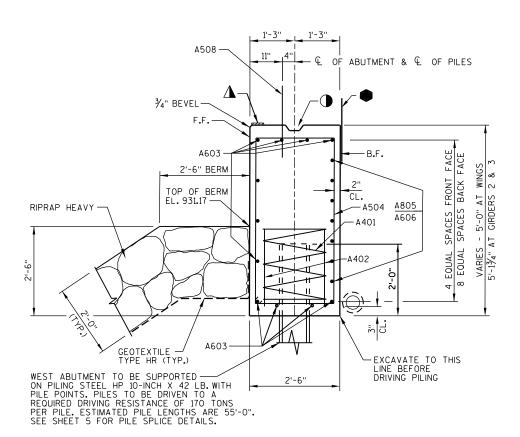
NO. DATE REVISION BY STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION STRUCTURE B-61-240 DRAWN BY RLR JΖ CROSS SECTION, SHEET 2 OF QUANTITIES & NOTES











TYPICAL SECTION THRU ABUTMENT

LEGEND

- KEYED CONSTRUCTION JOINT ON WING FORMED BY BEVELED 2x6. POUR CONCRETE ABOVE JOINT AFTER DECK IS IN PLACE AND PLACE ON B.F. OF WING.
- $\sqrt{-\frac{3}{4}}$ " "V" GROOVE ON FRONT FACE OF WING WALL.
- -KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2×6.
- ▲ -½" FILLER EXTEND AS SHOWN. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY, NON-BITUMINOUS JOINT SEALER. (1" DEEP & HOLD 1/8" BELOW SURFACE OF CONCRETE).
- \triangle -4"x $\frac{1}{2}$ " FILLER, EXTEND FULL LENGTH OF ABUTMENT.
- ★ VERTICAL 18" WIDE RUBBERIZED MEMBRANE WATERPROOFING. EXTEND FROM BRIDGE SEAT TO TOP OF WINGS.
- HORIZONTAL 18" WIDE RUBBERIZED MEMBRANE WATERPROOFING. EXTEND BETWEEN WINGS. PLACE BOTTOM HALF HORIZONTAL AT HAUNCHED AREA OF WINGS.
- PIPE UNDERDRAIN WRAPPED 6-INCH. EXTEND THRU GEOTEXTILE AT FACE OF RIPRAP HEAVY. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. PROVIDE RODENT PROTECTION AT ENDS OF PIPE, SEE RODENT SHIELD DETAIL, SHEET 7.
- -INDICATES WING NUMBER. F.F. FRONT FACE
- → A504 BARS TO BE PLACED TO MISS HP PILING.

B.F. - BACK FACE CL. - CLEAR

NO. DATE REVISION BY

STATE OF WISCONSIN

DEPARTMENT OF TRANSPORTATION

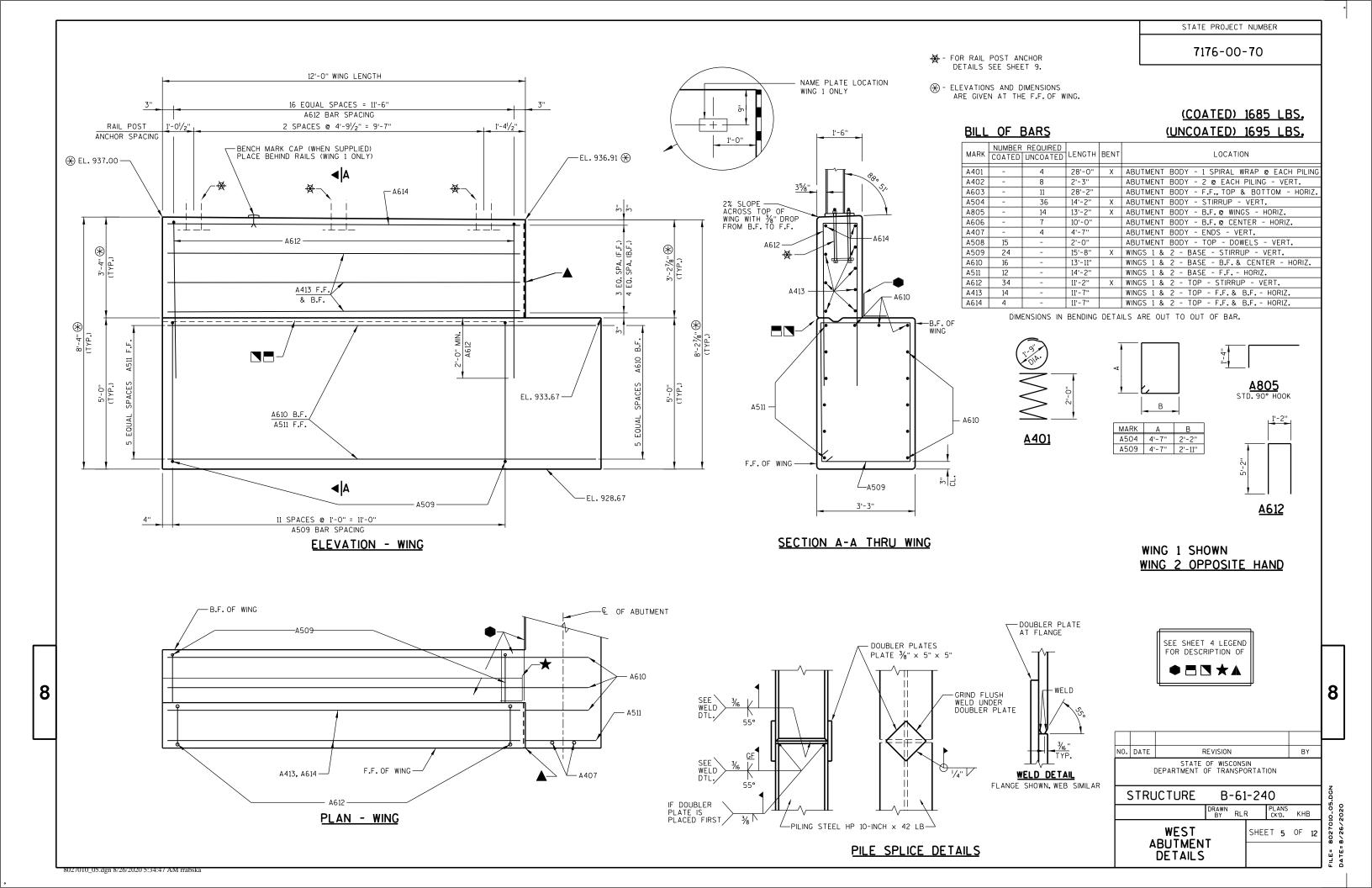
STRUCTURE B-61-240

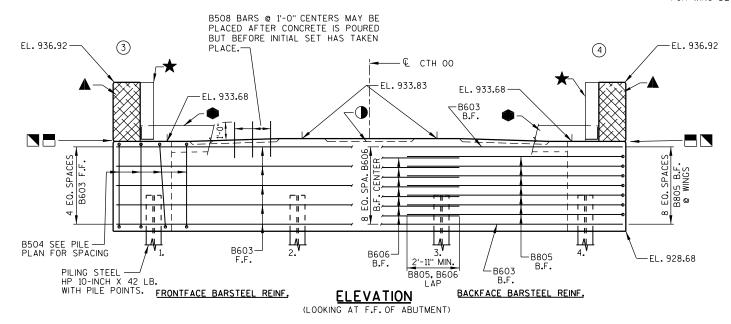
| DRAWN | RLR | PLANS | KHB |
| CK'D. | KHB |
| SHEET 4 | OF 12

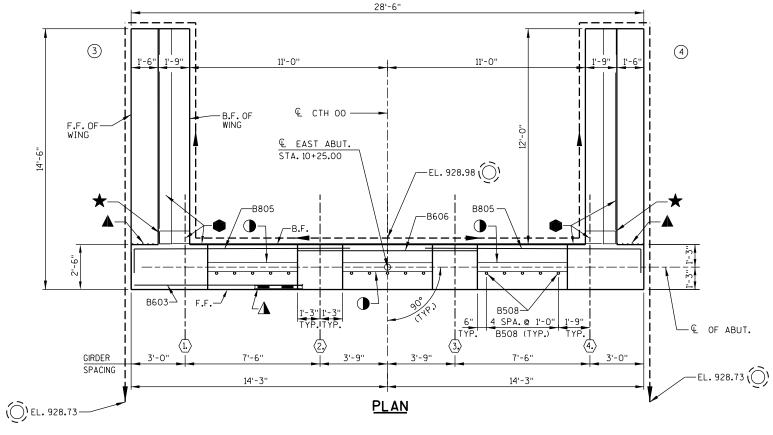
WEST ABUTMENT E= 8027010_04.DGN

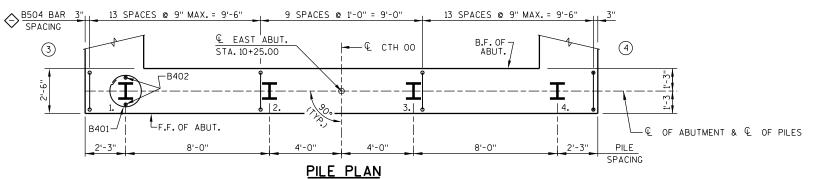
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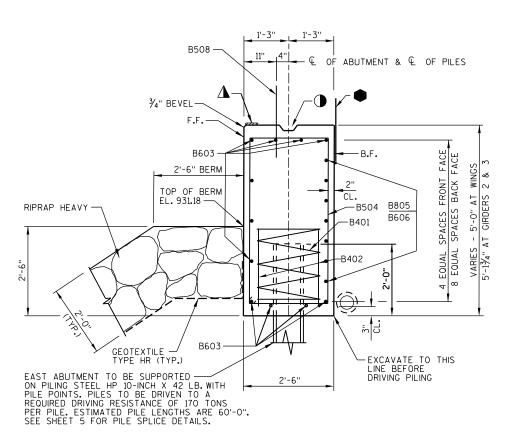
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TYPICAL SECTION THRU ABUTMENT

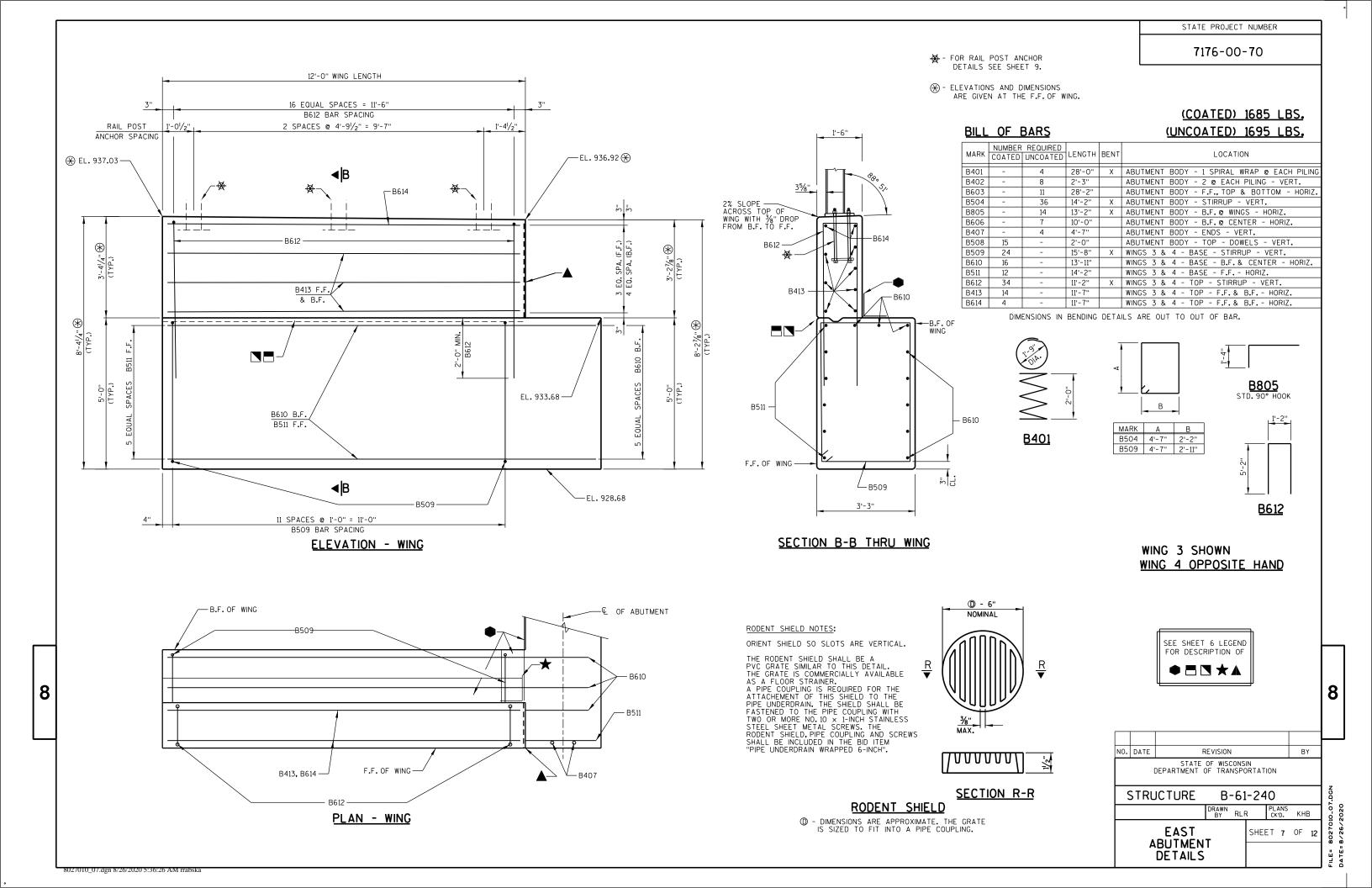
- KEYED CONSTRUCTION JOINT ON WING FORMED BY BEVELED 2x6. POUR CONCRETE ABOVE JOINT AFTER DECK IS IN PLACE AND PLACE ON B.F. OF WING.
- $-\frac{3}{4}$ " "V" GROOVE ON FRONT FACE OF WING WALL.
- KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2x6.
- -1/2" FILLER EXTEND AS SHOWN. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY, NON-BITUMINOUS JOINT SEALER. (1" DEEP & HOLD $^{\prime}$ 8" BELOW SURFACE OF CONCRETE).
- \triangle -4"x $\frac{1}{2}$ " FILLER, EXTEND FULL LENGTH OF ABUTMENT.
- VERTICAL 18" WIDE RUBBERIZED MEMBRANE WATERPROOFING. EXTEND FROM BRIDGE SEAT TO
- -HORIZONTAL 18" WIDE RUBBERIZED MEMBRANE WATERPROOFING. EXTEND BETWEEN WINGS. PLACE BOTTOM HALF HORIZONTAL AT HAUNCHED AREA OF WINGS.
- PIPE UNDERDRAIN WRAPPED 6-INCH. EXTEND THRU GEOTEXTILE AT FACE OF RIPRAP HEAVY. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. PROVIDE RODENT PROTECTION AT ENDS OF PIPE, SEE RODENT SHIELD DETAIL, SHEET 7.
- -INDICATES WING NUMBER. F.F. - FRONT FACE
- → B504 BARS TO BE PLACED TO MISS HP PILING.

B.F. - BACK FACE CL. - CLEAR

REVISION STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-61-240 DRAWN BY RLR KHB SHEET 6 OF

EAST ABUTMENT



NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY, EXCEPT THE OUTSIDE 2" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH, AN APPROVED CONCRETE SEALER SHALL BE APPLIED TO ALL SMOOTH SURFACES INCLUDING THE OUTSIDE 2" OF THE TOP FLANGE.

THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS.

PRESTRESSING STRANDS SHALL BE 0.6" DIA. - 7 WIRE LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 270,000 psi.

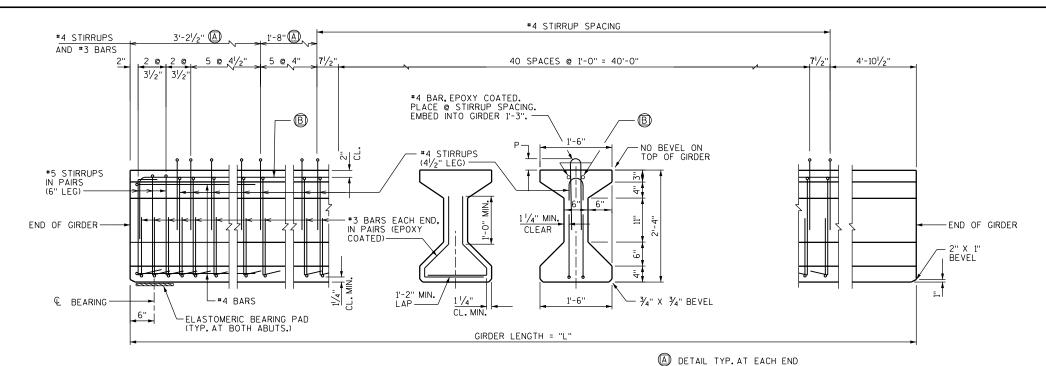
STRANDS SHALL BE FLUSH WITH THE END OF GIRDER. ENDS OF STRANDS SHALL BE COATED WITH NON-BITUMINOUS JOINT SEALER.

FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "STEEL DIAPHRAGM" SHEET.

ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

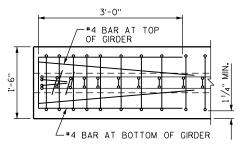
SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60

AN EQUIVALENT OF WELDED WIRE FABRIC (WWF)
ASTM A1064 MAY BE SUBSTITUTED FOR THE STIRRUP
REINFORCEMENT SHOWN, UPON APPROVAL OF THE ENGINEER.

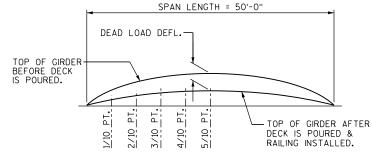


SIDE VIEW & TYP. SECTION

(B) 2-#5 BARS BEND DOWN 16 BAR DIA. AT ENDS



TOP VIEW OF GIRDER ENDS

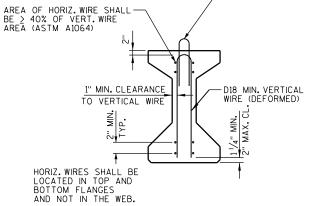


DEAD LOAD DEFLECTION DIAGRAM

THE THEORETICAL INITIAL CAMBER VALUE AT THE TIME OF STRAND RELEASE AT MIDSPAN. VALUES INCLUDE A MAGNIFICATION FACTOR OF 1.4 TO ACCOUNT FOR CREEP BETWEEN RELEASE AND INSTALLATION.

SPAN	CAMBER (IN.	
1	1.5	
		7

THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T', USE ACTUAL GIRDER SHOTS. THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.

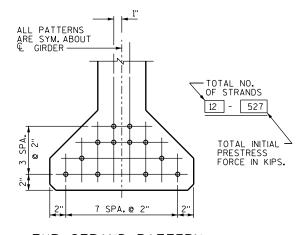


NO. 4 BAR, EPOXY COATED. PLACE AT STIRRUP SPACING REQUIRED FOR NON WWF STIRRUPS. EMBED INTO GIRDER 1-3".-

SECTION THRU GIRDER

SHOWING WELDED WIRE FABRIC (WWF) STIRRUPS ASTM A1064 (Fy = 70 Ksi)

REVISION



TYP. STRAND PATTERN

												GIRE	DER C	ATA										
		GIRDER			DE	AD LO	DAD DE	EFL. (I	N.)			CONC. STRGTH.	"P"	"P"	"P"	DIA OF		DRAP	ED PA	TTERN			UNDRAPED F	PATTERN
SPAN		LENGTH	1/10	2/10	3/10	1/10	5/10	5/10	⅓ 10	8/ ₁₀	9/10	f'c (p.s.i.)	OF GIRDER	MID 1/3 OF GIRDER	OF	DIA. OF STRAND (IN.)	TOTAL NO.OF STRANDS	f'ci (P.S.I.) X	"A"	"B"	N.) "B" MAX.	"C"	TOTAL NO.OF STRANDS	f'ci (P.S.I.) X
1	1-4	51'-0"	0.2	0.4	0.5	0.6	0.6	0.6	0.5	0.4	0.2	8000	7.5"	6.5"	7.5"	0.6	-	-	-	-	-	-	12	6800

* MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

NO. DATE STRUCTURE

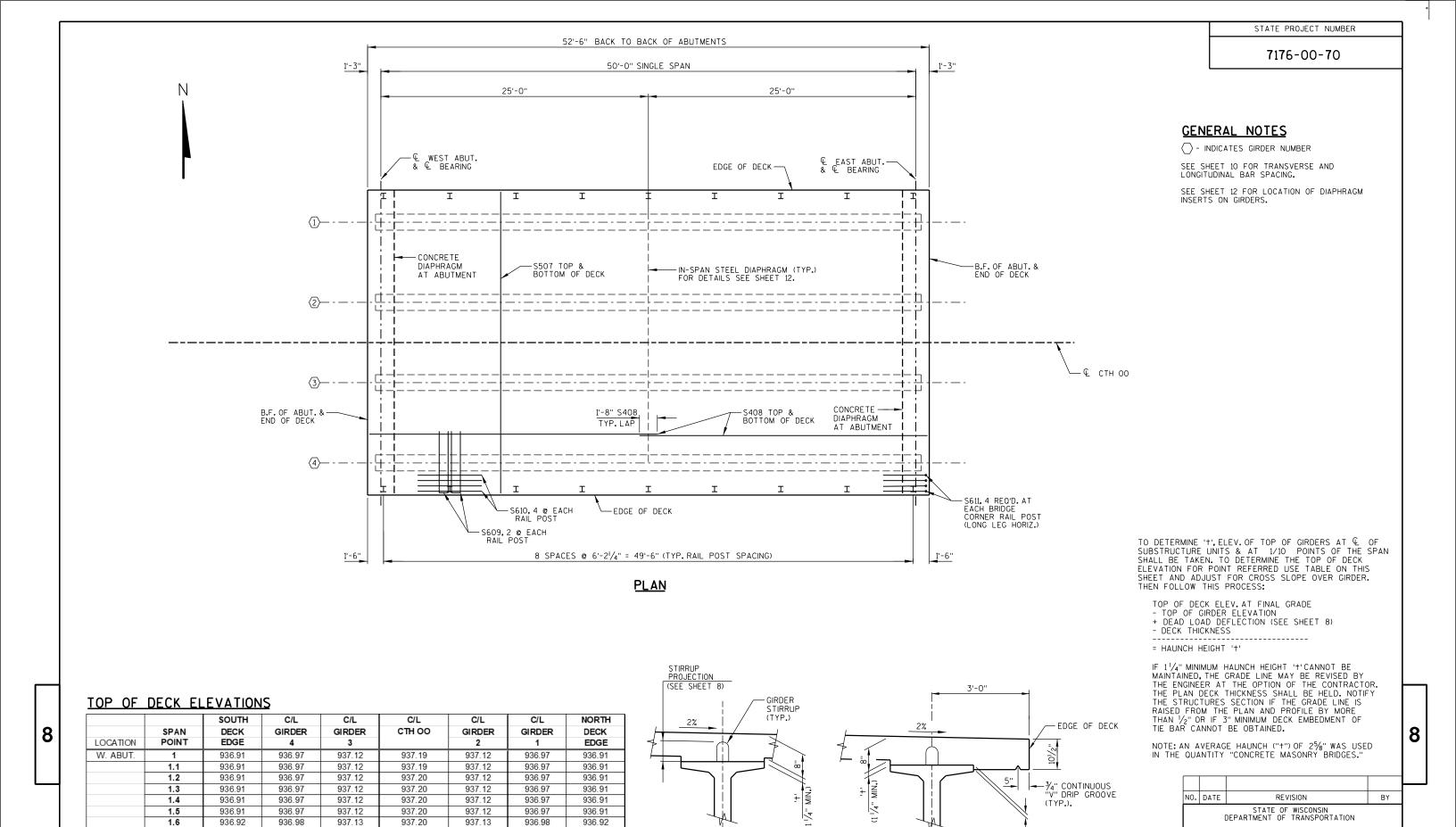
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION B-61-240

> DRAWN BY RLR KHB SHEET 8 OF 12

28" PRESTRESSED GIRDER DETAILS

8

BY



- £ INT. GIRDERS ② & ③

 \mathbb{Q} EXT. GIRDERS \longrightarrow

DECK HAUNCH DETAIL

STRUCTURE

SUPERSTRUCTURE

B-61-240

PLANS CK'D. KHB

SHEET 9 OF 12

DRAWN BY RLR

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E. ABUT.

936 92

936.92

936.92

936.92

1.7

1.8

1.9

936.98

936.98

936.98

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937.13

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937.13

937.13

937.13

937.13

936 98

936.98

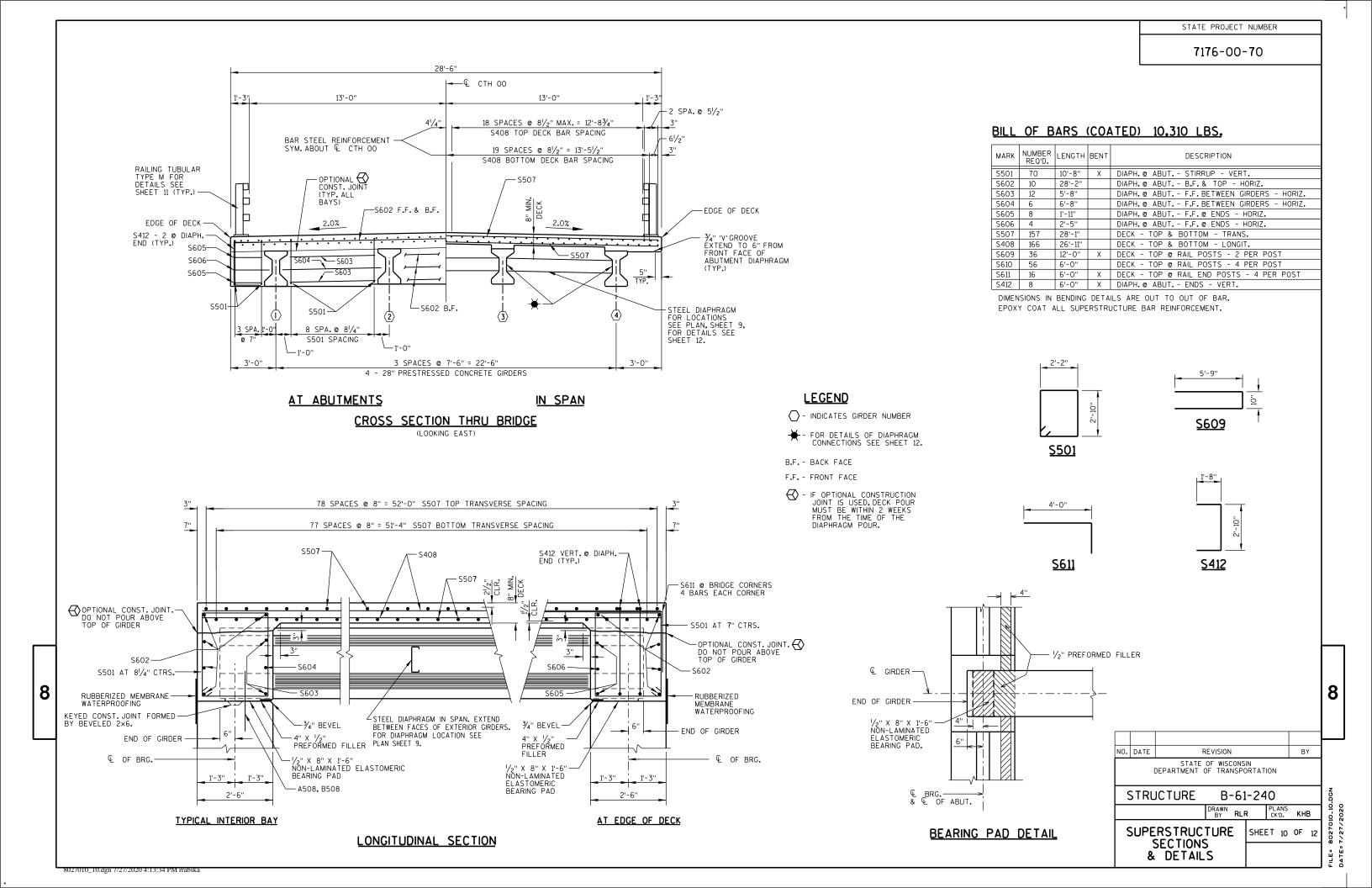
936.98

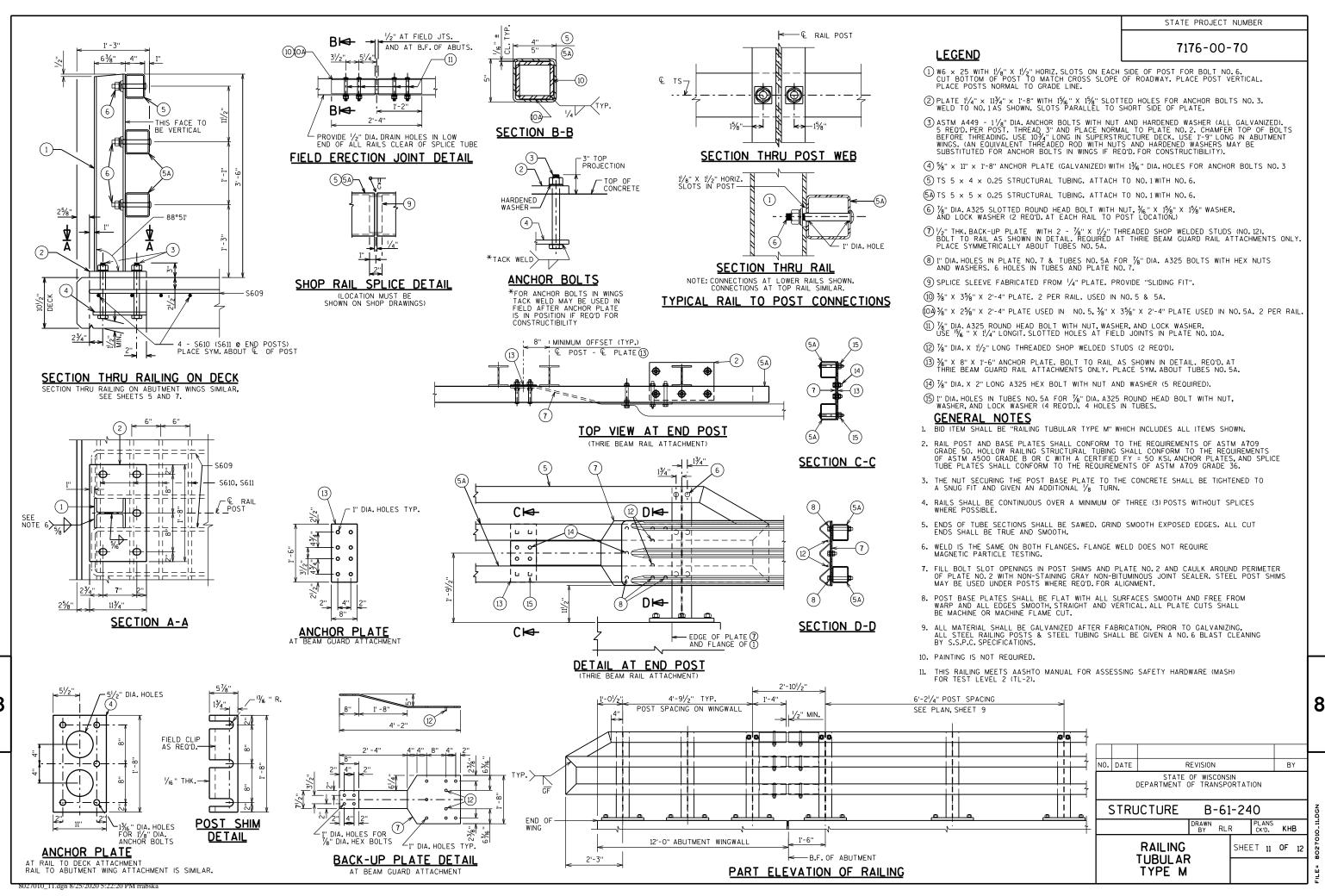
936.92

936.92

936.92

936.92





<u>NOTES</u>

ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-61-240", EACH.

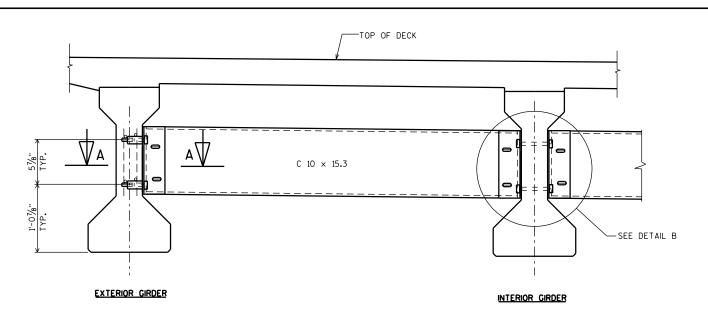
EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36.

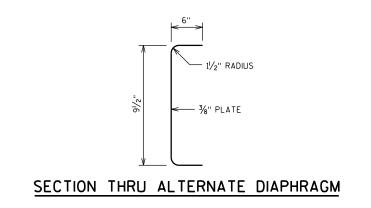
ALL DIAPHRAGM MATERIAL INCLUDING BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED AFTER FABRICATION.

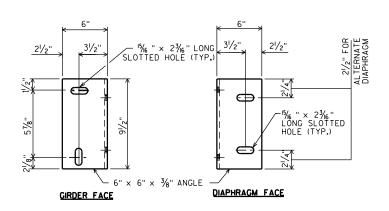
STEEL DIAPHRAGM TO CONCRETE WEB CONNECTION SHALL BE SNUG-TIGHT PLUS 1/4 TURN, UNLESS NOTED OTHERWISE. HIGH STRENGTH BOLTS FOR WEB CONNECTION SHALL MEET THE REQUIREMENTS FOR ASTM A325 OR ASTM A449.

SEE SHEET 9 FOR LOCATION OF DIAPHRAGMS.

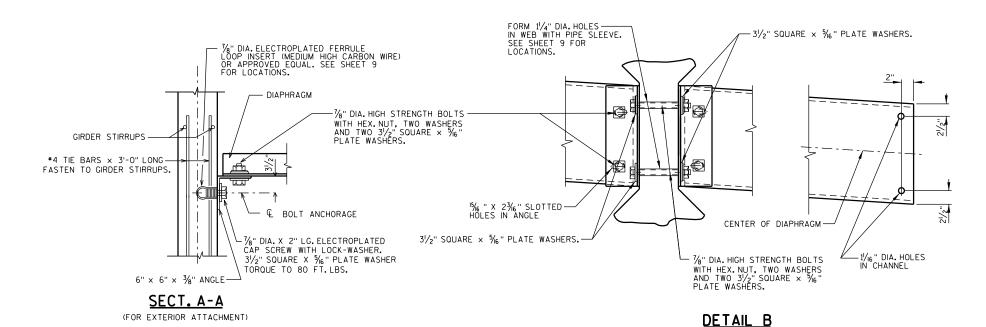


TRANSVERSE SECTION AT DIAPHRAGM





DIAPHRAGM SUPPORT



NO. DATE REVISION BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STEEL DIAPHRAGM

SHEET 12 OF 12

8

| 8

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PROJECT I.D. 7176-00-70 EARTHWORK SUMMARY

	EXCAVATION		EXPANDED	
	COMMON	FILL (1)	FILL (2)	WASTE
STA	CY	CY	CY	CY
9+28.00				
	19	2	3	16
9+50.00				
	8	2	3	5
9+60.00				
	5	2	3	2
9+74.00				
	STRUCTURE E	3-62-240		
10+26.00				
	5	1	1	4
10+40.00				
	8	3	4	4
10+50.00				
	20	4	5	15
10+72.00				
SUBTOTALS				
W. APPROACH	27	4	6	21
E. APPROACH	28	7	9	19
TOTALS	55	11	15	40

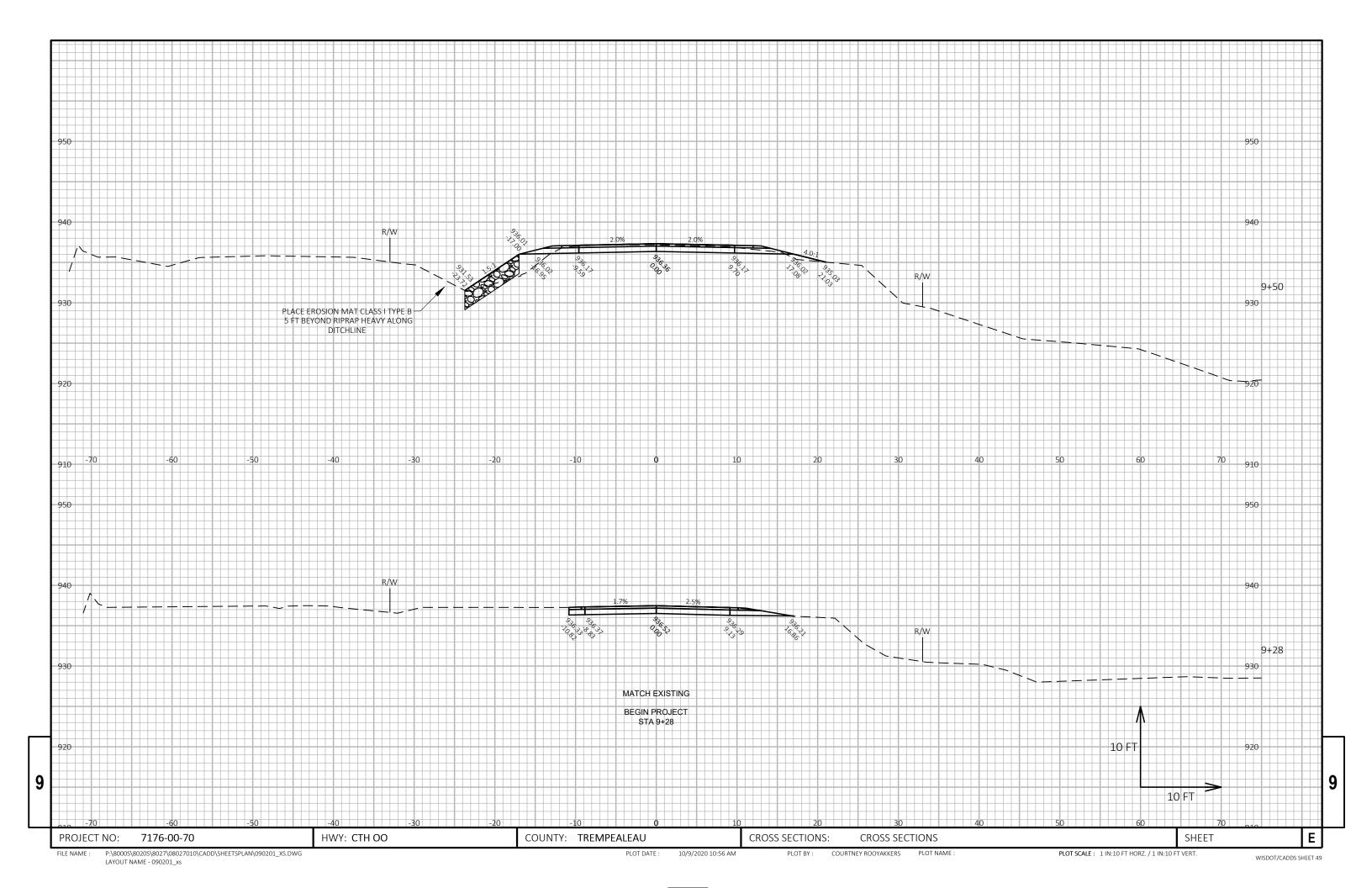
^{(1) -} NOT A BID ITEM - FOR INFORMATIONAL PURPOSES ONLY.

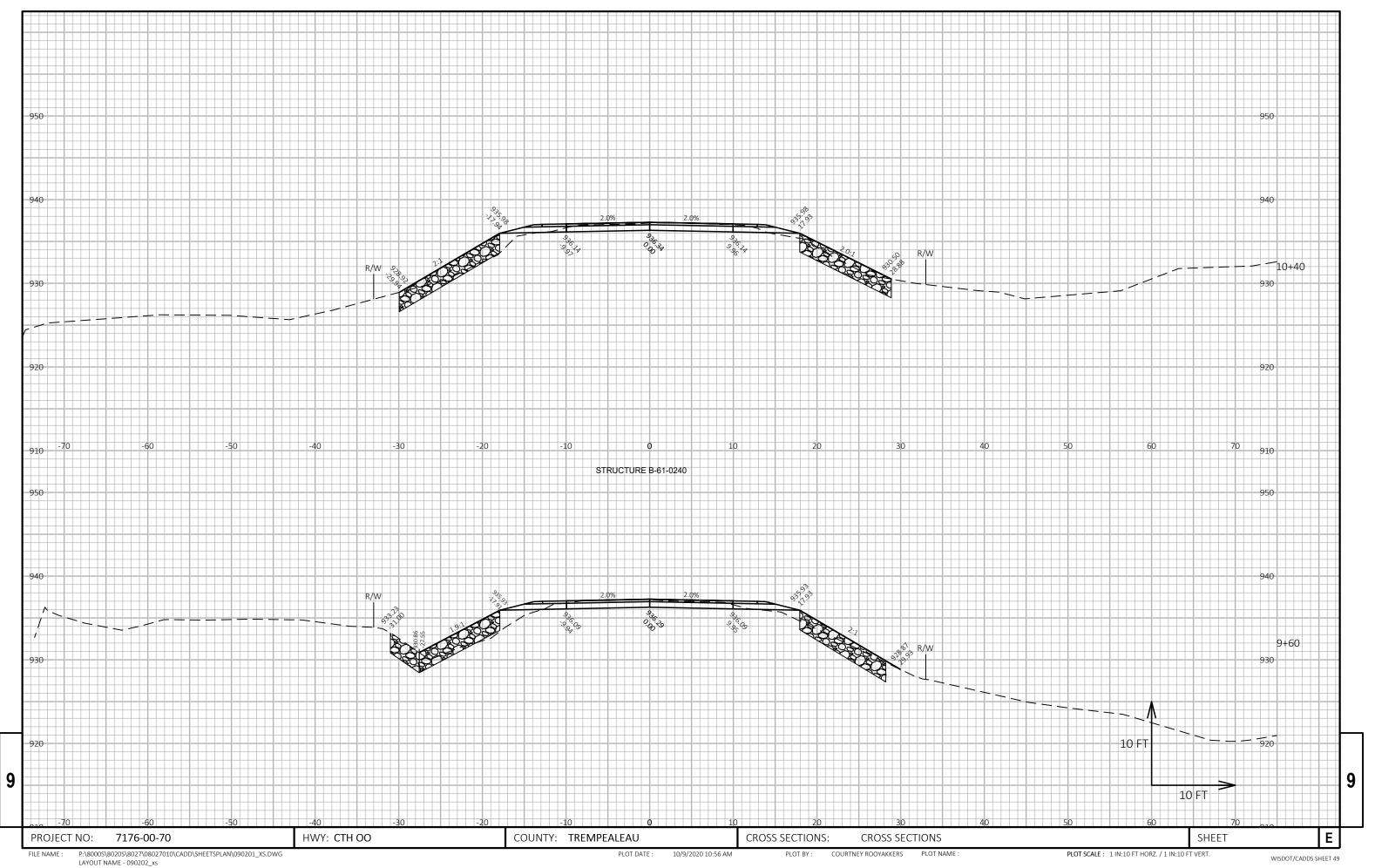
9

PROJECT NO: 7176-00-70 HWY: CTH OO COUNTY: TREMPEALEAU EARTHWORK SHEET E

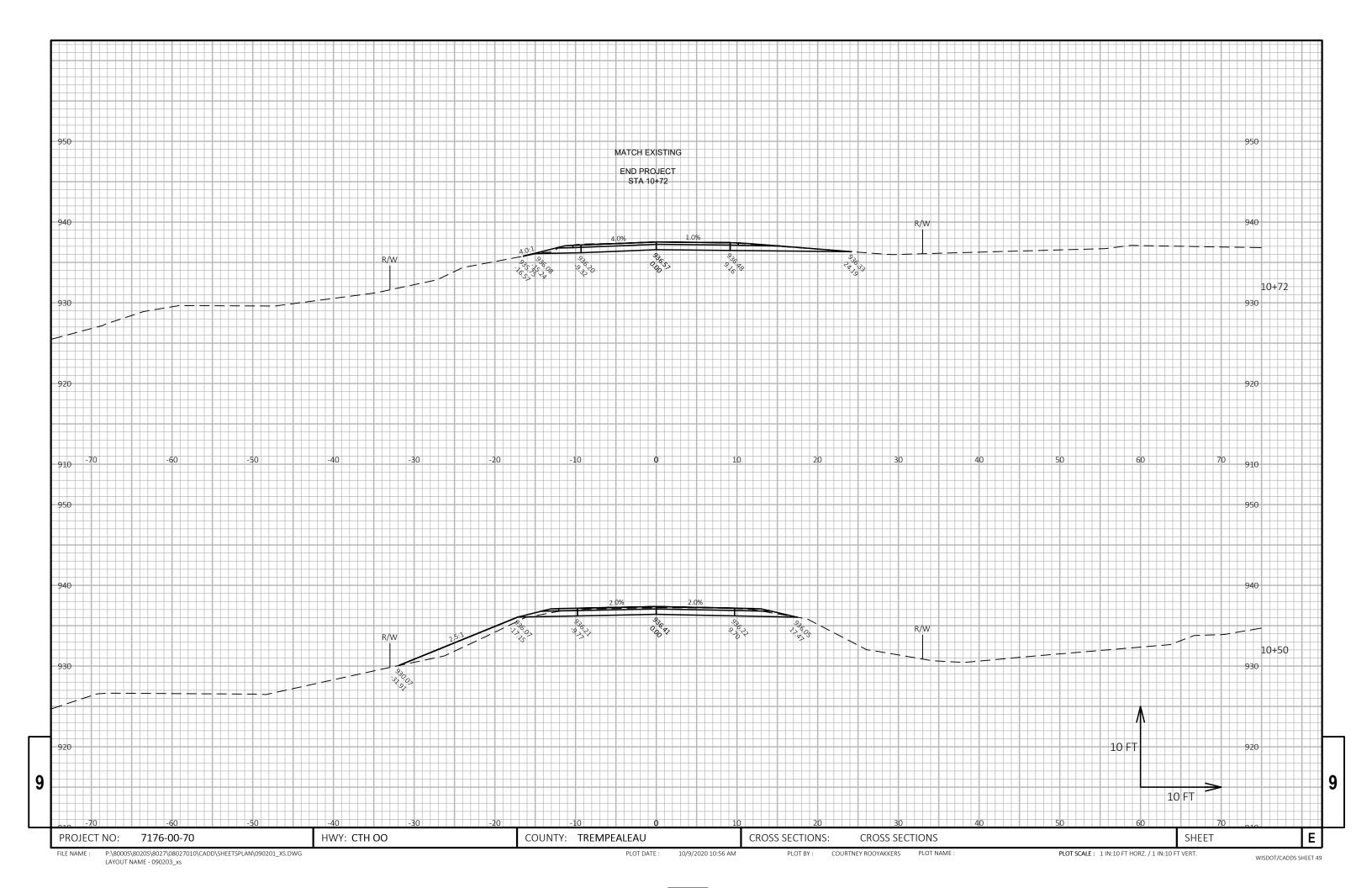
FILE NAME: P:\80005\8027\08027

^{(2) -} FILL EXPANSION 30%





LAYOUT NAME - 090202_xs



Notes



Wisconsin Department of Transportation

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